ESHID-603772

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Symbol: EPC-DO-23-183
Date: June 26, 2023
LA-UR: 23-25942

Mr. Ricardo Maestas, Acting Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

Subject: Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, April 2023, Los Alamos National Laboratory, EPA ID# NM0890010515

Dear Mr. Maestas:

The United States Department of Energy National Nuclear Security Administration, Los Alamos Field Office (NA-LA) and Triad National Security, LLC (Triad) submit the enclosed report entitled *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, April 2023* in accordance with the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit) Part 3, Section 3.14.3 to the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB).

Starting with this quarter, reports will be referenced by four quarters per year with the month and year to simplify and standardize the reference to quarters rather than name each quarter in sequential order. This submittal is the twenty-third quarter and will now be referred to as Quarter 2, April 2023 or 2023 Quarter 2.

The Permit requires that the soil vapor monitoring system at the LANL Technical Area 63 Transuranic Waste Facility be sampled and evaluated for designated volatile organic compounds on a quarterly basis to ensure protection of environmental health and safety, including that of onsite workers. The enclosed report provides the results of Calendar Year 2023 Quarter 2 sampling conducted on April 26, 2023. The sampling results indicate that vapor concentrations at the site do not exceed the soil gas screening levels established by the Permit.

In compliance with Permit Section 1.9.16, a report certification is included with this submittal. A compact disc with copies of the report and the analytical data in an Excel format is also included to facilitate the review of the monitoring results.

If you have any questions or comments concerning this report, please contact Robert A. Gallegos (NA-LA), at 208-569-0377 or by email at robert.gallegos@nnsa.doe.gov or Jessica Moseley (Triad) at 505-412-9362 or by email at jmoseley@lanl.gov.

Sincerely,

JESSICA MOSELEY (Affiliate) Digitally signed by JESSICA MOSELEY (Affiliate) Date: 2023.06.14 14:04:09 -06'00'

Jessica L. Moseley
Acting Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC
Los Alamos National Laboratory

Sincerely,

Robert A. Gallegos Digitally signed by Robert A. Gallegos Date: 2023.06.23 16:57:02 -06'00'

Robert A. Gallegos
Environmental Permitting and Compliance Program Manager
National Nuclear Security Administration
Los Alamos Field Office
U.S. Department of Energy

JLM/RAG

Enclosure: *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, April 2023, Los Alamos National Laboratory, EPA ID# NM0890010515*

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Mr. Ricardo Maestas, Acting Chief
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Starting with this quarter, reports will be referenced by four quarters per year with the month and year to simplify and standardize the reference to quarters rather than name each quarter in sequential order. This submittal is the twenty-third quarter and will now be referred to as Quarter 2, April 2023 or 2023 Quarter 2.

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In compliance with Permit Section 1.9.16, a report certification is included with this submittal. A compact disc with copies of the report and the analytical data in an Excel format is also included to facilitate the review of the monitoring results.

ENCLOSURE

Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, April 2023

Los Alamos National Laboratory,

EPA ID# NM0890010515

Date: June 26, 2023

EPC-DO-23-183
LA-UR-23-25942

U.S. Department of Energy,
National Nuclear Security Administration Los Alamos Field Office, and
Triad National Security, LLC

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CERTIFICATION

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Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

JESSICA MOSELEY (Affiliate) Digitally signed by JESSICA MOSELEY (Affiliate) Date: 2023.06.14 14:04:34 -06'00'

Jessica L. Moseley
Acting Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC
Los Alamos National Laboratory

Date Signed

Robert A. Gallegos Digitally signed by Robert A. Gallegos Date: 2023.06.23 16:57:28 -06'00'

Robert A. Gallegos
Environmental Permitting and Compliance Program Manager
National Nuclear Security Administration
Los Alamos Field Office
U.S. Department of Energy

Date Signed

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Technical Area 63 Transuranic Waste Facility
Soil Vapor Monitoring System Report, Quarter 2, April 2023
Los Alamos National Laboratory, EPA ID# NM0890010515

I Introduction

This report provides the Calendar Year 2023 Quarter 2, April 2023 (2023 Quarter 2) soil vapor sampling results from the Technical Area 63 (TA-63) Transuranic Waste Facility (TWF) soil vapor monitoring network at Los Alamos National Laboratory (LANL). The TWF soil vapor monitoring wells evaluate vapor-phase contaminants that potentially migrate from TA-50, Material Disposal Area (MDA) C, Solid Waste Management Unit 50-009. MDA C is managed under the Compliance Order on Consent. The TWF is located southeast of MDA C. Quarterly sampling is required by the LANL Hazardous Waste Facility Permit (Permit) Part 3, Section 3.14.3, Subsurface Vapor Monitoring, to prevent worker exposure to potentially harmful levels of volatile organic compounds (VOCs) at the site.

Sampling and laboratory analytical results for 2023 Quarter 2 confirm that VOC concentrations in the soil gas at the site are stable and do not exceed the screening levels established by the Permit. This report also presents a statistical analysis of the soil vapor data as part of an ongoing review to determine the need for continued sampling on a quarterly basis.

II Background

On December 23, 2013, the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) approved a Permit modification for the construction of the TWF. The approved modification, Permit Part 3, Section 3.14.3, required completion of vapor monitoring well construction and at least one vapor sample collected from each well before the start of operations at the TWF. Soil vapor monitoring wells were installed in August 2015. Baseline soil vapor monitoring samples were collected in September 2015. The initial report was submitted on October 29, 2015 (LANL 2015) and approved with modifications in February 2016 (NMED 2016). The first quarterly sampling event coincides with commencement of waste activities at the site in December 2017. Quarterly reports for the last twenty-two quarters are listed in the references section (LANL 2017 through LANL 2023a).

The TWF soil vapor monitoring network consists of five soil vapor monitoring wells located in or near the permitted storage area at the TWF. The vapor monitoring wells were installed as specified in Permit Attachment A, Section A.6.10, Subsurface Vapor Monitoring. Figure 1. Soil vapor monitoring well locations at TA-63 TWF, depicts the locations of the five soil vapor monitoring wells that comprise the TWF soil vapor monitoring network. Vapor monitoring well (VMW)-1 (LANL Structure Number 63-2009) and VMW-2 (63-2010) are located proximal to the TWF storage building foundations and adjacent to the unit boundary that faces the utility corridor on Puye Road and MDA C. A third vapor monitoring well, VMW-3 (63-2011), is located within the permitted unit at a point on the western edge of the unit and close to the utility corridor on Pajarito Road. The sampling ports for VMW-1, VMW-2, and VMW-3 are located at a 5-foot (ft) nominal depth below the concrete pad of the TWF permitted storage unit. Two vapor monitoring wells, VMW-4 (63-2012) and VMW-5 (63-2013), are located outside the permitted unit, across Puye Road to the north and closer to MDA C. There are two sampling ports in both VMW-4 and VMW-5 at depths of 25 and 60 ft below the ground surface. Each vapor monitoring well and vapor monitoring port are sampled during quarterly sampling events, for a total of seven (7) vapor samples.

The Permit presents action levels within Permit Part 3, Tables 3.14.3.1, 3.14.3.2, and 3.14.3.3 (Permit Tables) for VOC constituents of concern. Each Permit Table presents soil gas screening levels (SGSLs)

for each of the vapor monitoring well sample ports at 5 ft, 25 ft, and 60 ft. The SGSLs are based on U.S. Environmental Protection Agency (EPA) guidance. References to the guidance and an explanation of the calculations used to develop the SGSLs are presented in Permit Part 3, Section 3.14.3, Subsurface Vapor Monitoring. All VOC laboratory analytical sampling results are compared with the SGSLs where listed. The primary constituent of concern at the site is trichloroethylene (TCE).

NMED-HWB correspondence, dated May 23, 2018 (NMED 2018), requires reporting of current and previous sampling results. Table 3, Current and Previous Analytical Results for Eight Quarters, presents the current and previous quarterly soil gas laboratory analytical results for comparison and tracking.

III Soil Vapor

Field work for the 2023 Quarter 2 sampling event occurred on April 26, 2023. Soil vapor gases were extracted from the monitoring well sample ports through stainless steel tubing into stainless steel SUMMA canisters and submitted for laboratory analysis of VOCs using the EPA TO-15 method as required by Permit Section 3.14.3. Field personnel collected a total of nine (9) samples, including one field duplicate from VMW-5, 60-ft port and one field blank sample. The samples were analyzed for the constituents identified in the Permit Tables. There were no variances in the sampling procedures from the Permit requirements.

IV Analytical Results

Several constituents of concern are regularly detected in the soil vapor monitoring network. TCE is regularly detected in all of the vapor monitoring wells. Chloroform, dichlorodifluoromethane, tetrachloroethylene, and carbon tetrachloride are also routinely detected in the vapor monitoring wells VMW-4 and VMW-5. The analytical data are discussed below.

LANL's Sample Management Office processes laboratory analytical data for quality assurance/quality control; these data are presented as an Excel file included on the disc submitted with this report. Results are also presented in Table 2, Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility – 2023 Quarter 2. These data include all detect and non-detect analytical results.

Table 1, Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility – 2023 Quarter 2, presents a summary of the detected laboratory VOCs analytical results. The table provides results for both non-qualified and estimated (J-qualified) detections. Each well port depth and constituent of concern have an associated SGSL, presented in Table 1, for comparison with the analytical results. One column presents a calculated percentage of the analytical results to the SGSLs to demonstrate the relative constituent concentrations. The data continue to demonstrate that detected concentrations of TCE and other VOCs do not exceed the respective SGSLs in the Permit Tables and continue to be detected well below the SGSLs.

TCE consistently exhibits the highest concentration levels among the detected VOCs at the site. TCE is detected in all five of the vapor sampling wells at all port depths. The detected concentrations are highest closer to MDA C. Vapor monitoring wells VMW-4 and VMW-5 are the closest vapor monitoring wells to MDA C. The TCE concentration measured in VMW-4 (at the 25-ft port depth) is 2100 micrograms per cubic meter ($\mu g/m^3$) (1.3% of the SGSL) and 5000 $\mu g/m^3$ at the 60-ft port depth (5.4% of the SGSL). The TCE concentration measured in VMW-5 at the 25-ft port depth is 290 $\mu g/m^3$ (0.2% of the SGSL) and 1000 $\mu g/m^3$ at the 60-ft port depth (1.1% of the SGSL). Vapor monitoring wells VMW-1, VMW-2, and VMW-3 are closest to the TWF permitted unit and demonstrate TCE concentrations that are a fraction of a percent of the SGSL: 0.2%, 0.5%, and 0.4%, respectively.

Chloroform is routinely present in soil gas samples collected from vapor monitoring wells VMW-4 and VMW-5. The concentrations of chloroform in vapor monitoring well VMW-4 are 83 μg/m^3 (0.4% of the SGSL) and 170 μg/m^3 (0.4% of the SGSL) in the 25-ft and 60-ft sampling ports, respectively. The concentrations of chloroform in vapor monitoring well VMW-5 are 50 μg/m^3 (0.2% of the SGSL) and 22 μg/m^3 (J-qualified or estimated) (<0.1% of the SGSL) in the 25-ft and 60-ft sampling ports, respectively.

Vapor monitoring wells VMW-4 and VMW-5 also consistently demonstrate concentrations above the laboratory report detection limits for dichlorodifluoromethane, tetrachloroethylene, and carbon tetrachloride. The concentrations for these VOCs are very low at 0.1% or less of the relevant SGSLs.

In this quarter, acetone is detected in VMW-3 at 12 μg/m3 (J) (<0.1% of the SGSL). Acetone was previously detected in this vapor monitoring well in Quarter 4 (2018 Quarter 4) and Quarter 7 (2019 Quarter 2).

Additional Analytic Results Discussion

Occasionally additional VOCs are detected in the vapor monitoring wells. The Permit Part 3, Section 3.14.3, requires notification to the NMED-HWB when a constituent is detected that has not previously been detected, when a detection exceeds half of the SGSL, and when the detected concentration that exceeds half of the SGSL increases for the third consecutive sampling event. Notifications submitted to date have been for newly detected constituents.

A field duplicate sample for vapor monitoring well VMW-5, 60-ft port in Quarter 10 (2020 Quarter 1) (LANL 2020c) required a notification of additional constituents. The newly detected VOCs included tetrahydrofuran, ethanol, propanol[2-] (isopropyl alcohol), and 2-butanone. The Permit Tables list 2-butanone (methylethylketone) but do not list the other constituents. In Quarter 16 (2021 Quarter 3), the field duplicate for VMW-5, 60-ft port demonstrated a detection of ethanol at 30 μg/m^3 (J-qualified). The note for this sample indicated that the laboratory control sample percent recovery was less than the lower acceptable limit but greater than or equal to the rejection limit. In 2023 Quarter 2, there are no detects of any of these constituents in any of the vapor monitoring wells.

On December 16, 2021, notification of a newly detected constituent was made to NMED-HWB (LANL 2021e), as required by Permit Section 3.14.3. The analytical results for the sample collected from VMW-1 indicated the detection of a new constituent, xylene[1,3-]+xylene[1,4-] (m-xylene and p-xylene), below the laboratory report detection limit. Review of the analytical laboratory data did not indicate a data-quality error. In correspondence dated August 29, 2022 [NMED 2022], the NMED-HWB indicated that the lack of detection in the Quarter 18 (2022 Quarter 1) and Quarter 19 (2022 Quarter 2) sampling events does not rule out the presence of xylene isomers; therefore, continued monitoring for the constituents is required. Data confirm that there are no detections for xylene isomers at VMW-1 for 2023 Quarter 2.

VOCs that are not listed in the Permit tables are also sometimes detected. The detections are reported in the quarterly reports and the constituents are noted in the paragraphs below for continuity and tracking.

Ethanol and propanol[2-] (isopropyl alcohol) have been detected at estimated (J-qualified) concentrations in vapor monitoring wells VMW-1 and VMW-4 in previous sampling events. Neither of these constituents are listed in the Permit Tables, so there are no associated Permit SGSLs for comparison. In Quarter 12 (LANL 2020e), vapor monitoring well VMW-1, 5-ft port and VMW-4, 25-ft port analytical results indicated the presence of ethanol and propanol[2-] (isopropyl alcohol). Quarter 14 (2021 Quarter 1) (LANL 2021b) analytical results for vapor monitoring well VMW-4, 60-ft port demonstrated the presence of propanol[2-] (isopropyl alcohol) at 19 μg/m^3. The 2023 Quarter 2 sampling results do not indicate the presence of these constituents in any of the vapor monitoring wells.

A faulty nitrogen tank resulted in field blank sample issues for several quarters. Field blank sample analytical results starting in Quarter 6 through Quarter 14 (2019 Quarter 1 through 2021 Quarter 1) (LANL 2019a through LANL 2021b) indicated the presence of ethylbenzene and xylene isomers. These constituents are listed in the Permit tables; however, the constituents were not present in any samples collected directly from the five soil vapor monitoring wells. Field blanks are collected onsite during sampling events to detect and identify contaminants from the sampling site. An ultra-high pure nitrogen tank is used as the vapor source for the field blank. The nitrogen tank is connected to a SUMMA canister, which is then sent to the analytical laboratory, along with the other samples, for analysis. In correspondence dated March 26, 2021 (NMED 2021), the NMED-HWB required that the source of the field blank contamination be identified. Before the Quarter 15 (2021 Quarter 2) sampling event, a new ultra-high pure nitrogen tank was purchased and used for field blank sample collection, which resulted in no detectable amounts of ethylbenzene or xylene isomers. The field blank issue appears to be resolved.

V Statistics

Statistics that focus on TCE, which is the primary soil vapor constituent detected during the TWF operating period, are calculated to analyze constituent concentrations and potential data trends. Table 4, Statistical Analyses, presents the mean and standard deviation for the TCE concentrations over time to determine whether the concentrations of TCE can be described statistically within a defined range.

The detected concentrations of TCE to date remain within the limits of a two standard deviation interval of the sample above and below the statistical mean values, with a confidence probability of 95%. Two near-range exceptions are associated with the data from the 25-ft ports of vapor monitoring wells VMW-4 and VMW-5. A three standard deviation calculation for these wells (see Table 4) demonstrates that the concentrations for data exceptions fall within a range with a confidence probability of 99%. This result means that no significant deviations are observed for the average TCE concentrations for each well and sampling port to that approximate level of confidence.

Figure 2, Data plots for TA-63 TWF soil vapor monitoring wells inside the permitted unit, and Figure 3, Data plots for TA-63 TWF soil vapor monitoring wells outside the permitted unit, present data plots of the last eight quarters of TCE data for each well and port to evaluate whether any significant data trends over time are discernable. The trend line plots for each well and port depth are relatively flat. There also does not appear to be a relationship between well results that would indicate seasonal variations or indicate plume concentration changes within these wells.

The concentrations detected are also significantly below the permitted maximum SGSL constituent concentrations for TCE (by at least one order of magnitude). The TCE concentrations for the sampling quarters collected to date appear relatively stable.

The data suggest that the constituent concentrations are stable and that any increase in VOC concentrations, which are of concern according to the Permit conditions for reporting, will likely occur slowly over time and will be identified easily without approaching the SGSL action levels.

VI References

LANL 2015. “TA-63 Transuranic Waste Facility Soil Vapor Monitoring System Report,” (ENV-DO-15-0305), October 29, 2015. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2017. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 1, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:17-560), December 21, 2017. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2018a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:18-139) of March 30, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2018b. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 3, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:18-245) of June 28, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2018c. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 4, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:18-349) of September 26, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2018d. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 5, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:18-448) of December 27, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2019a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 6, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:19-103) of April 4, 2019. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2019b. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 7, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:19-203) of June 26, 2019. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2019c. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 8, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:19-343) of September 30, 2019. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2020a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 9, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:19-467) of January 10, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2020b. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Additional Information, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:20-121) of March 26, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2020c. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 10, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:20-121) of March 30, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2020d. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 11, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:20-196) of June 30, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2020e. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 12, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:20-302) of October 2, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2021a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 13, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO:20-417) of January 11, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2021b. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 14, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO-21-135) of May 3, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2021c. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, Los Alamos National Laboratory EPA ID# NM0890010515,” (EPC-DO-21-181) of June 28, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2021d. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, November 2021 (Quarter 16) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-21-295) of October 4, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2021e. 15-Day Notification of Newly Detected Constituent in Vapor Monitoring Well, Technical Area 63, Transuranic Waste Facility, Los Alamos National Laboratory, EPA ID# 0890010515,” (EPC-DO-21-394) of December 16, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2022a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, November 2021 (Quarter 17) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-21-404) of January 3, 2022. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2022b. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, February 2022 (Quarter 18) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-22-093) of March 29, 2022. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2022c. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, May 2022 (Quarter 19) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-22-169) of July 5, 2022. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2022d. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, July 2022 (Quarter 20) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-22-251) of September 26, 2022. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2022e. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, October 2022 (Quarter 21) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-22-342) of December 20, 2022. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL 2023a. “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, January 2023 (Quarter 22) Los Alamos National Laboratory, EPA ID# NM0890010515,” (EPC-DO-23-103) of March 27, 2023. Los Alamos National Laboratory, Los Alamos, New Mexico.

NMED 2010. *Los Alamos National Laboratory Hazardous Waste Facility Permit*, issued by New Mexico Environment Department, Hazardous Waste Bureau, November 30, 2010, and subsequent revisions.

NMED 2016. Letter: “Approval with Modifications Transuranic Waste Facility Soil Vapor Monitoring System Report, Los Alamos National Laboratory EPA ID# NM0890010515, HWB-LANL-15-058,” dated February 29, 2016. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

NMED 2018. Letter: “Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2, Los Alamos National Laboratory EPA ID# NM0890010515, HWB-LANL-18-016,” dated May 23, 2018. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

NMED 2021. Letter: “Review Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 13, Los Alamos National Laboratory EPA ID# NM0890010515, HWB-LANL-18-016,” dated March 26, 2021. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

NMED 2022. Letter: “Review Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, May 2022 (Quarter 19), Los Alamos National Laboratory EPA ID# NM0890010515, HWB-LANL-22-041,” dated August 29, 2022. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

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FIGURES AND TABLES

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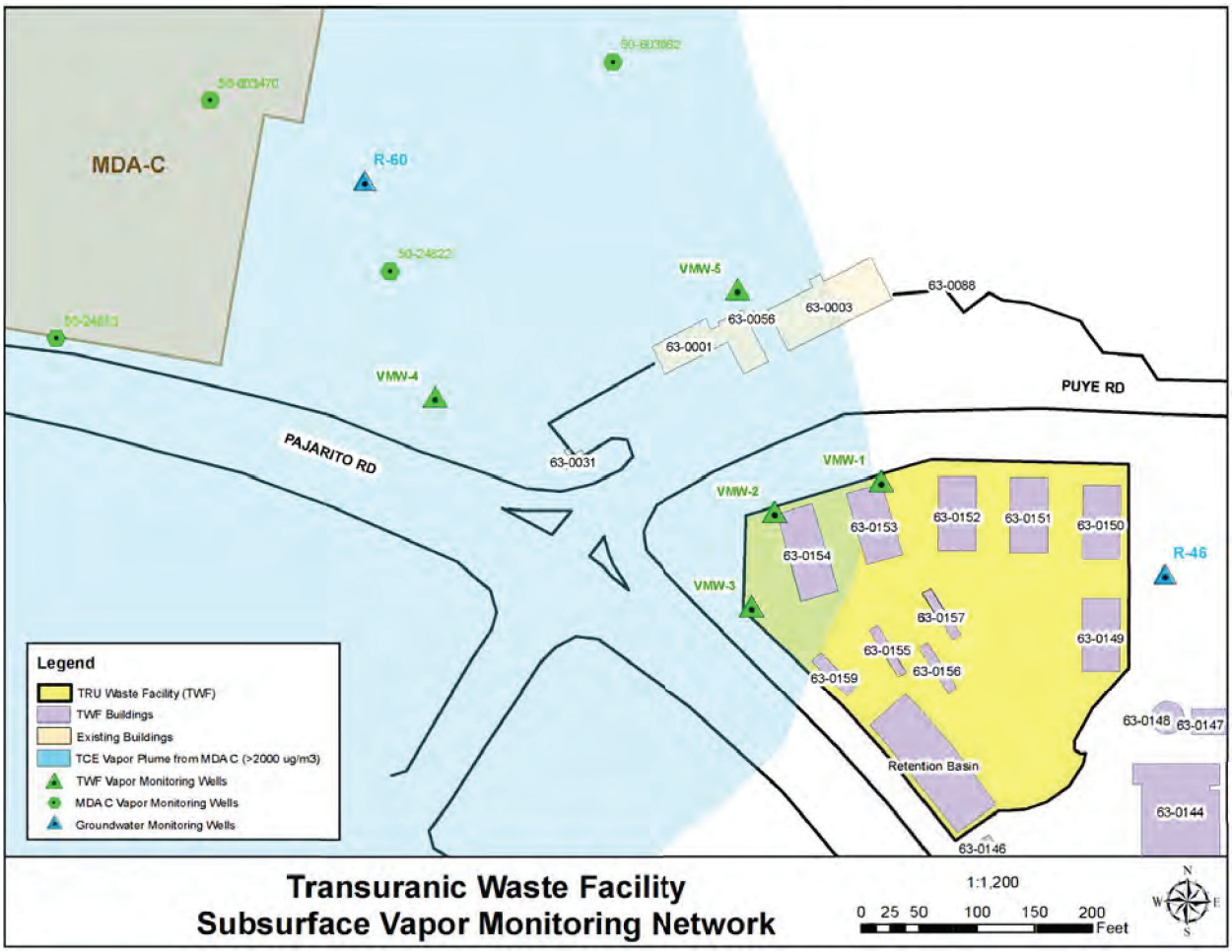
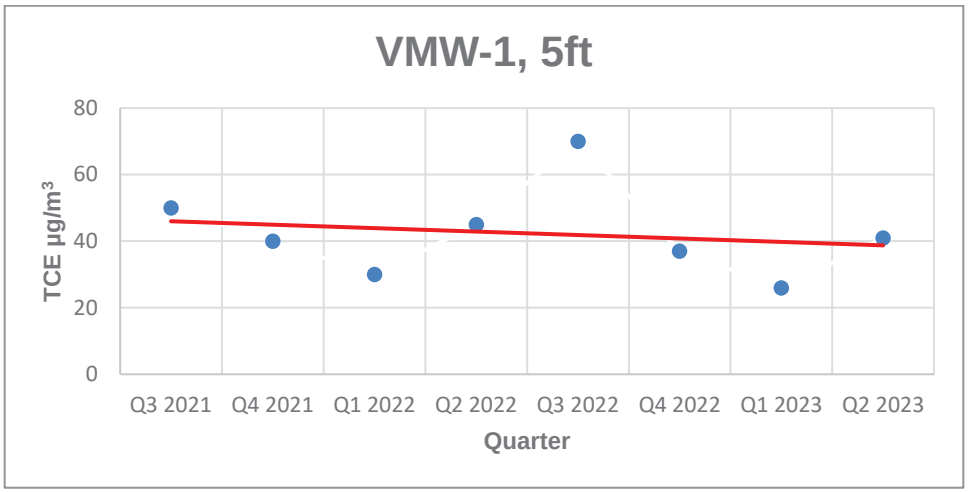
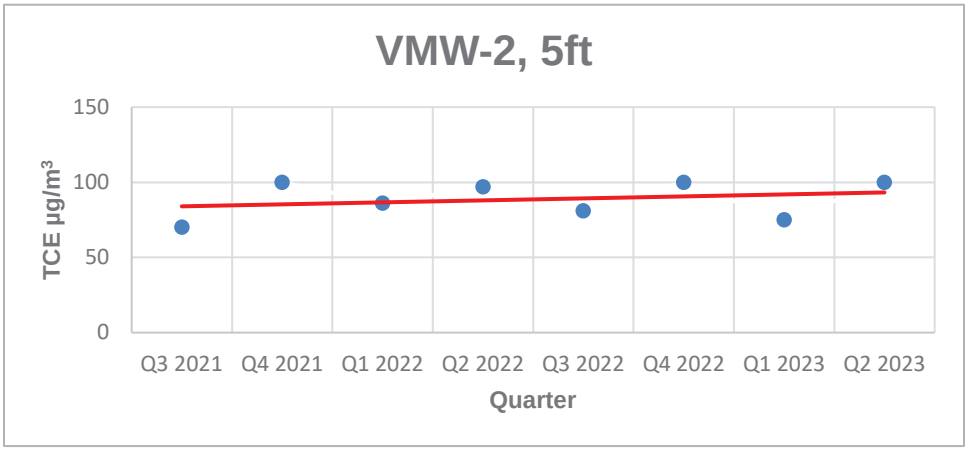


Figure 1. Soil vapor monitoring well locations at TA-63 TWF.





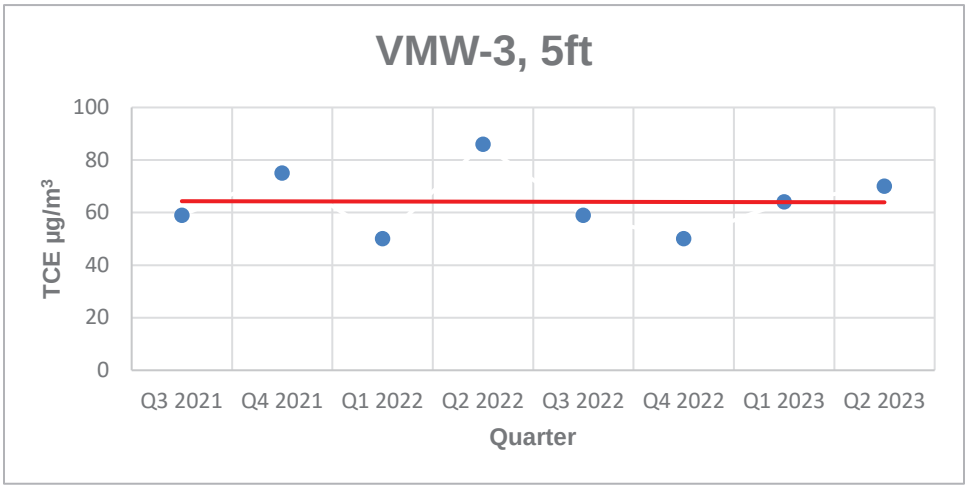


Figure 2. Data plots for TA-63 TWF soil vapor monitoring wells inside the permitted unit.



Figure 3. Data plots for TA-63 TWF soil vapor monitoring wells outside the permitted unit.

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Table 1: Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility – 2023 Quarter 2

Well ID	Field Sample ID	Port Depth	Sample Purpose	Analyte Name	Analyte Listing in Permit	Report Result (µg/m³)	EPA Data Qualifier	Report Detection Limit (µg/m³)	SGSL (µg/m³)	% SGSL
VMW-1 (63-2009)	TWF63-23-280826	5	REG	Trichloroethene	Trichloroethylene	41	NQ	41	1.94E+04	0.2
VMW-2 (63-2010)	TWF63-23-280827	5	REG	Trichloroethene	Trichloroethylene	100	NQ	40	1.94E+04	0.5
VMW-3 (63-2011)	TWF63-23-280828	5	REG	Trichloroethene	Trichloroethylene	70	NQ	40	1.94E+04	0.4
	TWF63-23-280828	5	REG	Acetone	Acetone	12	J	70	2.73E+08	<0.1
VMW-4 (63-2012)	TWF63-23-280829	25	REG	Trichloroethene	Trichloroethylene	2100	NQ	42	1.57E+05	1.3
	TWF63-23-280829	25	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	64	NQ	39	2.61E+06	<0.1
	TWF63-23-280829	25	REG	Tetrachloroethene	Tetrachloroethylene	31	J	53	2.63E+06	<0.1
	TWF63-23-280829	25	REG	Carbon Tetrachloride	Carbon Tetrachloride	38	J	49	1.06E+05	<0.1
	TWF63-23-280829	25	REG	Chloroform	Chloroform	83	NQ	38	2.30E+04	0.4
VMW-4 (63-2012)	TWF63-23-280830	60	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	130	NQ	39	5.38E+06	<0.1
	TWF63-23-280830	60	REG	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	22	J	60	1.38E+09	<0.1
	TWF63-23-280830	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	11	J	43	2.34E+08	<0.1
	TWF63-23-280830	60	REG	Trichloroethene	Trichloroethylene	5000	NQ	42	9.27E+04	5.4
	TWF63-23-280830	60	REG	Chloroform	Chloroform	170	NQ	38	4.44E+04	0.4
	TWF63-23-280830	60	REG	Tetrachloroethene	Tetrachloroethylene	57	NQ	53	2.05E+06	<0.1
	TWF63-23-280830	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	88	NQ	49	2.13E+05	<0.1
	TWF63-23-280830	60	REG	Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	15	J	31	2.91E+06	<0.1
VMW-5 (63-2013)	TWF63-23-280831	25	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	13	J	43	1.16E+08	<0.1
	TWF63-23-280831	25	REG	Chloroform	Chloroform	50	NQ	38	2.30E+04	0.2
	TWF63-23-280831	25	REG	Dichlorodifluoromethane	Dichlorodifluoromethane	31	J	39	2.61E+06	<0.1
	TWF63-23-280831	25	REG	Trichloroethene	Trichloroethylene	290	NQ	42	1.57E+05	0.2
VMW-5 (63-2013)	TWF63-23-280832	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	11	J	48	2.13E+05	<0.1
	TWF63-23-280832	60	REG	Chloroform	Chloroform	22	J	37	4.44E+04	<0.1
	TWF63-23-280832	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	25	J	41	2.34E+08	<0.1
	TWF63-23-280832	60	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	54	NQ	38	5.38E+06	<0.1
	TWF63-23-280832	60	REG	Trichloroethene	Trichloroethylene	1000	NQ	41	9.27E+04	1.1
VMW-5 (63-2013) Field Duplicate	TWF63-23-280833	60	FD	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	9.2	J	58	1.38E+09	<0.1
	TWF63-23-280833	60	FD	Carbon Tetrachloride	Carbon Tetrachloride	13	J	48	2.13E+05	<0.1
	TWF63-23-280833	60	FD	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	26	J	41	2.34E+08	<0.1
	TWF63-23-280833	60	FD	Chloroform	Chloroform	20	J	37	4.44E+04	<0.1
	TWF63-23-280833	60	FD	Dichlorodifluoromethane	Dichlorodiflouromethane	50	NQ	38	5.38E+06	<0.1
	TWF63-23-280833	60	FD	Tetrachloroethene	Tetrachloroethylene	9.5	J	52	2.05E+06	<0.1
	TWF63-23-280833	60	FD	Trichloroethene	Trichloroethylene	970	NQ	41	9.27E+04	1.0

Notes: EPA Data Qualifier "J" indicates analytes that are detected but results are estimated as less than the report detection limit
EPA Data Qualifier "NQ" indicates analytes that are detected above the report detection limit with no data qualifiers
REG = regular sample
FD = field duplicate
SGSL = Soil Gas Screening Level from Permit Part 3, Tables 3.14.3.1 through 3.14.3.3

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Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility – 2023 Quarter 2

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	33	U	6.9	33	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	32	U	4.7	32	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	39	U	5.1	39	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	8.6	34	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	7.7	34	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	37	U	9.3	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	46	U	6	46	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	58	U	5	58	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	38.0	100	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	25.0	60	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	15.0	80	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	8.2	19	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	16.0	100	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	12.0	90	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	79	U	10	79	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	51	U	9	51	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	72	U	20.0	72	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	93	U	19	93	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	70	U	8	70	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	37	U	7.3	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	3	24	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	41	U	8.2	41	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	6.8	27	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	35	U	4.1	35	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	46	U	5.1	46	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	48	U	8.8	48	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	13.0	100	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	37	U	17	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	31	U	7	31	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	30	U	6	30	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	43	U	9.0	43	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	38	U	12.0	38	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	58	U	8.4	58	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	53	U	9	53	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	35	U	8.8	35	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	18	90	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	41	U	14	41	N
63-2009	**5**	**TWF63-23-280826**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**41**	**NQ**	**10**	**41**	**Y**
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	52	U	6.0	52	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	170	300	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	23	90	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	31	U	10	31	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	100	U	15.0	100	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	37	U	8	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	29	U	4	29	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	35	U	6.4	35	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	6.2	22	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	27	U	6.0	27	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	26	U	5.2	26	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	100.0	200	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	27.0	100	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	65	U	12.0	65	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	5.5	17	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	30	U	8.3	30	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	30	U	8.3	30	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	52	U	7.5	52	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	31	U	8.6	31	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	33	U	5.2	33	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	46	U	11	46	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	37	U	3.7	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	37	U	3.8	37	N
63-2009	5	TWF63-23-280826	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	33	U	5.2	33	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	32	U	7	32	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	32	U	4.7	32	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	38	U	5.0	38	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	8	34	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	7.3	34	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	36	U	9.3	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	44	U	6.0	44	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	57	U	4.5	57	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	16	U	5.5	16	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	22.0	90	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	30	U	9.7	30	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	100	U	15.0	100	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	36	U	7.4	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	28	U	4.1	28	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	34	U	6.4	34	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	6.2	22	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	26	U	6	26	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	25	U	5.2	25	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	100	200	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	26.0	100	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	63	U	12.0	63	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	50	U	6.8	50	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	30	U	8.6	30	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	29	U	8.3	29	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	29	U	8.3	29	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	7	27	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	35	U	4	35	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	44	U	5	44	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	47	U	8.8	47	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	12.0	100	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	36	U	16.0	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	70	U	20.0	70	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	91	U	19.0	91	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	70	U	7.8	70	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	36	U	6.8	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	2.7	24	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	40	U	8	40	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	38	100	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	23	60	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	15	80	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	7.9	19	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	15.0	100	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	12.0	90	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	76	U	10.0	76	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	50	U	9	50	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	30	U	7	30	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	29	U	6	29	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	42	U	8.4	42	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	37	U	12	37	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	57	U	8	57	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	52	U	9	52	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	34	U	8.8	34	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	17.0	90	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	40	U	14.0	40	N
63-2010	**5**	**TWF63-23-280827**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**100**	**NQ**	**9.7**	**40**	**Y**
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	51	U	5.9	51	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	170.0	300	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	32	U	5.2	32	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	44	U	10	44	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	36	U	4	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	36	U	3.7	36	N
63-2010	5	TWF63-23-280827	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	32	U	5	32	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	32	U	7	32	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	32	U	4.7	32	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	38	U	5.0	38	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	8.2	34	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	7.3	34	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	37	U	12.0	37	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	57	U	8.4	57	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	52	U	9.1	52	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	34	U	8.8	34	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	17.0	90	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	40	U	14	40	N
63-2011	**5**	**TWF63-23-280828**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**70**	**NQ**	**10**	**40**	**Y**
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	51	U	5.9	51	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	170	300	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	32	U	5.2	32	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	44	U	10	44	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	36	U	3.7	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	36	U	9.3	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	44	U	6.0	44	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	57	U	4.5	57	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	16	U	5.5	16	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	22	90	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	30	U	9.7	30	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	100	U	15	100	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	36	U	7.4	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	28	U	4.1	28	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	34	U	6.4	34	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	6.2	22	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	26	U	5.6	26	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	25	U	5.2	25	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	100	200	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	26	100	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	63	U	12	63	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	50	U	6.8	50	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	30	U	8.6	30	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	29	U	8.3	29	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	29	U	8.3	29	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	6.8	27	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	35	U	4.0	35	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	44	U	5.0	44	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	47	U	8.8	47	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	12	100	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	36	U	16	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	70	U	20	70	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	91	U	19	91	N
63-2011	**5**	**TWF63-23-280828**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-64-1**	**Acetone**	**12**	**J**	**7.8**	**70**	**Y**

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	36	U	6.8	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	2.7	24	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	40	U	8.2	40	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	38	100	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	23	60	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	15	80	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	7.9	19	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	15	100	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	12	90	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	76	U	10	76	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	50	U	9.4	50	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	30	U	6.5	30	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	29	U	5.9	29	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	42	U	8.4	42	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	36	U	3.7	36	N
63-2011	5	TWF63-23-280828	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	32	U	5.2	32	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	34	U	7.4	34	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	33	U	5.1	33	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	40	U	5.2	40	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	35	U	9	35	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	35	U	7.7	35	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	38	U	9.8	38	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	47	U	6.0	47	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	60	U	4.8	60	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	5.7	17	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	97	U	23.0	97	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	32	U	10.0	32	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	130	U	16.0	130	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	38	U	7.9	38	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	29	U	4.1	29	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	36	U	6.9	36	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	23	U	7	23	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	27	U	6.0	27	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	27	U	6	27	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	230	U	110.0	230	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	110	U	27.0	110	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	66	U	13.0	66	N
63-2012	**25**	**TWF63-23-280829**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**127-18-4**	**Tetrachloroethene**	**31**	**J**	**7.5**	**53**	**Y**
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	32	U	9.0	32	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	31	U	8.7	31	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	31	U	9	31	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	28	U	7	28	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	36	U	4	36	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	47	U	5.3	47	N
63-2012	**25**	**TWF63-23-280829**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**38**	**J**	**9.4**	**49**	**Y**
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	13.0	130	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	38	U	17.0	38	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	73	U	20.0	73	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	96	U	19.0	96	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	74	U	8	74	N
63-2012	**25**	**TWF63-23-280829**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**83**	**NQ**	**7**	**38**	**Y**
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	25	U	3	25	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	43	U	9	43	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	40.0	120	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	64	U	25.0	64	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	82	U	15.0	82	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	20	U	8	20	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	16	110	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	96	U	12	96	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	81	U	10.0	81	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	52	U	9	52	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	32	U	7	32	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	31	U	6.3	31	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	44	U	9.0	44	N
63-2012	**25**	**TWF63-23-280829**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**64**	**NQ**	**13.0**	**39**	**Y**
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	60	U	8.4	60	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	54	U	9.1	54	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	36	U	9.2	36	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	91	U	18.0	91	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	43	U	14	43	N
63-2012	**25**	**TWF63-23-280829**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**2100**	**NQ**	**10**	**42**	**Y**
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	54	U	6.2	54	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	330	U	180	330	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	34	U	5.2	34	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	47	U	11.0	47	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	38	U	3.8	38	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	38	U	3.9	38	N
63-2012	25	TWF63-23-280829	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	34	U	5.2	34	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	34	U	7.4	34	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	33	U	5.1	33	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	40	U	5.2	40	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	35	U	9	35	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	35	U	7.7	35	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	38	U	9.8	38	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	47	U	6	47	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	60	U	5	60	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	6	17	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	97	U	23	97	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	32	U	10	32	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	130	U	16.0	130	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	38	U	8	38	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	29	U	4	29	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	36	U	7	36	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	23	U	6.5	23	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	27	U	6.0	27	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	27	U	5.5	27	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	230	U	110.0	230	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	110	U	27	110	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	40.0	120	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	64	U	25.0	64	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	82	U	15.0	82	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	20	U	8.4	20	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	16.0	110	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	96	U	12.0	96	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	81	U	10	81	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	52	U	9	52	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	32	U	7	32	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	31	U	6	31	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	44	U	9.0	44	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	66	U	13.0	66	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**127-18-4**	**Tetrachloroethene**	**57**	**NQ**	**7.5**	**53**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	32	U	9.0	32	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**156-59-2**	**Dichloroethene[cis-1,2-]**	**15**	**J**	**8.7**	**31**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	31	U	9	31	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	28	U	7	28	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	36	U	4.2	36	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	47	U	5	47	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**88**	**NQ**	**9.4**	**49**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	13	130	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	38	U	17.0	38	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	73	U	20.0	73	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	96	U	19.0	96	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	74	U	8.1	74	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**170**	**NQ**	**7.3**	**38**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	25	U	2.8	25	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**11**	**J**	**8.7**	**43**	**Y**
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**130**	**NQ**	**13.0**	**39**	**Y**
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**76-13-1**	**Trichloro-1,2,2-trifluoroethane[1,1,2-]**	**22**	**J**	**8.4**	**60**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	54	U	9.1	54	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	36	U	9.2	36	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	91	U	18.0	91	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	43	U	14	43	N
63-2012	**60**	**TWF63-23-280830**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**5000**	**NQ**	**10.0**	**42**	**Y**
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	54	U	6	54	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	330	U	180.0	330	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	34	U	5.2	34	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	47	U	11.0	47	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	38	U	3.8	38	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	38	U	3.9	38	N
63-2012	60	TWF63-23-280830	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	34	U	5.2	34	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	34	U	7.4	34	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	33	U	5.1	33	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	40	U	5	40	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	35	U	9	35	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	35	U	8	35	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	38	U	9.8	38	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	47	U	6	47	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	60	U	5	60	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	5.7	17	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	97	U	23.0	97	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	32	U	10.0	32	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	130	U	16.0	130	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	38	U	7.9	38	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	29	U	4.1	29	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	36	U	6.9	36	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	23	U	6.5	23	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	27	U	6	27	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	27	U	6	27	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	230	U	110.0	230	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	110	U	27	110	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	66	U	13.0	66	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	53	U	8	53	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	32	U	9.0	32	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	31	U	8.7	31	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	31	U	8.7	31	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	28.0	U	7.2	28	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	36	U	4.2	36	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	47	U	5.3	47	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	49	U	9	49	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	13.0	130	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	38	U	17.0	38	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	73	U	20.0	73	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	96	U	19.0	96	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	74	U	8.1	74	N
63-2013	**25**	**TWF63-23-280831**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**50**	**NQ**	**7.3**	**38**	**Y**
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	25	U	2.8	25	N
63-2013	**25**	**TWF63-23-280831**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**13**	**J**	**8.7**	**43**	**Y**
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	40.0	120	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	64	U	25.0	64	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	82	U	15	82	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	20	U	8.4	20	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	16	110	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	96	U	12.0	96	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	81	U	10.0	81	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	52	U	9.4	52	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	32	U	6.5	32	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	31	U	6.3	31	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	44	U	9.0	44	N
63-2013	**25**	**TWF63-23-280831**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**31**	**J**	**13**	**39**	**Y**
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	60	U	8	60	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	54	U	9	54	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	36	U	9.2	36	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	91	U	18.0	91	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	43	U	14.0	43	N
63-2013	**25**	**TWF63-23-280831**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**290**	**NQ**	**10.0**	**42**	**Y**
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	54	U	6.2	54	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	330	U	180.0	330	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	34	U	5.2	34	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	47	U	11	47	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	38	U	4	38	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	38	U	4	38	N
63-2013	25	TWF63-23-280831	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	34	U	5	34	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	33	U	6.9	33	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	32	U	5	32	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	39	U	5	39	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	8.6	34	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	8	34	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	37	U	9.3	37	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	46	U	6	46	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	58	U	4.6	58	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	5.5	17	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	23.0	90	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	31	U	9.7	31	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	100	U	15.0	100	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	37	U	7.9	37	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	29	U	4.1	29	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	35	U	6.4	35	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	6.2	22	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	27	U	6.0	27	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	26	U	5.2	26	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	100.0	200	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	27	100	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	65	U	12.0	65	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	52	U	8	52	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	31	U	8.6	31	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	30	U	8.3	30	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	30	U	8.3	30	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	6.8	27	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	35	U	4.1	35	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	46	U	5.1	46	N
63-2013	**60**	**TWF63-23-280832**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**11**	**J**	**9**	**48**	**Y**
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	13	100	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	37	U	17	37	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	72	U	20.0	72	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	93	U	19.0	93	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	70	U	8.1	70	N
63-2013	**60**	**TWF63-23-280832**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**22**	**J**	**7.3**	**37**	**Y**
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	2.8	24	N
63-2013	**60**	**TWF63-23-280832**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**25**	**J**	**8.2**	**41**	**Y**
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	38	100	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	25	60	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	15	80	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	8	19	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	16.0	100	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	12.0	90	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	79	U	10	79	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	51	U	9	51	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	31	U	7	31	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	30	U	6.3	30	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	43	U	9	43	N
63-2013	**60**	**TWF63-23-280832**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**54**	**NQ**	**12**	**38**	**Y**
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	58	U	8	58	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	53	U	9.1	53	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	35	U	8.8	35	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	18.0	90	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	41	U	14.0	41	N
63-2013	**60**	**TWF63-23-280832**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**1000**	**NQ**	**9.7**	**41**	**Y**
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	52	U	6.0	52	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	170.0	300	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	33	U	5.2	33	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	46	U	11.0	46	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	37	U	4	37	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	37	U	3.8	37	N
63-2013	60	TWF63-23-280832	04/26/2023	05/18/2023	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	33	U	5.2	33	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	100-41-4	Ethylbenzene	33	U	6.9	33	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	100-42-5	Styrene	32	U	4.7	32	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	100-44-7	Benzyl Chloride	39	U	5.1	39	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	8.6	34	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	7.7	34	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	103-65-1	Propylbenzene[1-]	37	U	9.3	37	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	106-46-7	Dichlorobenzene[1,4-]	46	U	6.0	46	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	106-93-4	Dibromoethane[1,2-]	58	U	4.6	58	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	106-99-0	Butadiene[1,3-]	17	U	5.5	17	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	107-05-1	Chloro-1-propene[3-]	90	U	23	90	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	107-06-2	Dichloroethane[1,2-]	31	U	9.7	31	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	108-10-1	Methyl-2-pentanone[4-]	100	U	15	100	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	108-67-8	Trimethylbenzene[1,3,5-]	37	U	7.9	37	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	108-88-3	Toluene	29	U	4.1	29	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	108-90-7	Chlorobenzene	35	U	6.4	35	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	109-99-9	Tetrahydrofuran	22	U	6.2	22	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	110-54-3	Hexane	27	U	6.0	27	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	110-82-7	Cyclohexane	26	U	5.2	26	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	100	200	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	123-91-1	Dioxane[1,4-]	100	U	27	100	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	124-48-1	Chlorodibromomethane	65	U	12	65	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**127-18-4**	**Tetrachloroethene**	**9.5**	**J**	**7.5**	**52**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	142-82-5	n-Heptane	31	U	8.6	31	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	156-59-2	Dichloroethene[cis-1,2-]	30	U	8.3	30	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	156-60-5	Dichloroethene[trans-1,2-]	30	U	8.3	30	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	6.8	27	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	540-84-1	Isooctane	35	U	4.1	35	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	541-73-1	Dichlorobenzene[1,3-]	46	U	5.1	46	N
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**13**	**J**	**9**	**48**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	591-78-6	Hexanone[2-]	100	U	13	100	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	622-96-8	Ethyltoluene[4-]	37	U	17	37	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	64-17-5	Ethanol	72	U	20	72	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	67-63-0	Propanol[2-]	93	U	19.0	93	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	67-64-1	Acetone	70	U	8.1	70	N
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**67-66-3**	**Chloroform**	**20**	**J**	**7**	**37**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	71-43-2	Benzene	24	U	3	24	N
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**26**	**J**	**8**	**41**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	74-83-9	Bromomethane	100	U	38.0	100	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	74-87-3	Chloromethane	60	U	25	60	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-00-3	Chloroethane	80	U	15	80	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-01-4	Vinyl Chloride	19	U	8	19	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-09-2	Methylene Chloride	100	U	16.0	100	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-15-0	Carbon Disulfide	90	U	12.0	90	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-25-2	Bromoform	79	U	10.0	79	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-27-4	Bromodichloromethane	51	U	9.4	51	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-34-3	Dichloroethane[1,1-]	31	U	6.5	31	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-35-4	Dichloroethene[1,1-]	30	U	6.3	30	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	75-69-4	Trichlorofluoromethane	43	U	9	43	N
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**50**	**NQ**	**12**	**38**	**Y**
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**76-13-1**	**Trichloro-1,2,2-trifluoroethane[1,1,2-]**	**9.2**	**J**	**8.4**	**58**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	53	U	9	53	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	78-87-5	Dichloropropane[1,2-]	35	U	8.8	35	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	78-93-3	Butanone[2-]	90	U	18	90	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	79-00-5	Trichloroethane[1,1,2-]	41	U	14.0	41	N
63-2013	**60**	**TWF63-23-280833**	**04/26/2023**	**05/18/2023**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**79-01-6**	**Trichloroethene**	**970**	**NQ**	**9.7**	**41**	**Y**
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	52	U	6.0	52	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	87-68-3	Hexachlorobutadiene	300	U	170.0	300	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	95-47-6	Xylene[1,2-]	33	U	5	33	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	95-50-1	Dichlorobenzene[1,2-]	46	U	11.0	46	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	95-63-6	Trimethylbenzene[1,2,4-]	37	U	3.7	37	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	98-82-8	Isopropylbenzene	37	U	3.8	37	N
63-2013	60	TWF63-23-280833	04/26/2023	05/18/2023	VOC	EPA:TO15	FD	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	33	U	5.2	33	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	74-83-9	Bromomethane	140	U	43	140	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	74-87-3	Chloromethane	72	U	27	72	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-00-3	Chloroethane	92	U	17	92	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-01-4	Vinyl Chloride	22	U	9.5	22	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-09-2	Methylene Chloride	120	U	18	120	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-15-0	Carbon Disulfide	110	U	14	110	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-25-2	Bromoform	91	U	12	91	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-27-4	Bromodichloromethane	59	U	11.0	59	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-34-3	Dichloroethane[1,1-]	36	U	7.3	36	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	100-41-4	Ethylbenzene	38	U	8.2	38	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	100-42-5	Styrene	37	U	5.5	37	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	100-44-7	Benzyl Chloride	46	U	5.7	46	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	10061-01-5	Dichloropropene[cis-1,3-]	40	U	10.0	40	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	10061-02-6	Dichloropropene[trans-1,3-]	40	U	8.6	40	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	103-65-1	Propylbenzene[1-]	43	U	11.0	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	106-46-7	Dichlorobenzene[1,4-]	53	U	7.2	53	N

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (µg/m³)	Validation Qualifier	Report Method Detection Limit (µg/m³)	Report Detection Limit (µg/m³)	Detected
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	106-93-4	Dibromoethane[1,2-]	68	U	5.4	68	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	106-99-0	Butadiene[1,3-]	19	U	6.4	19	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	107-05-1	Chloro-1-propene[3-]	110	U	26.0	110	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	107-06-2	Dichloroethane[1,2-]	36	U	11	36	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	108-10-1	Methyl-2-pentanone[4-]	140	U	17.0	140	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	108-67-8	Trimethylbenzene[1,3,5-]	43	U	9	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	108-88-3	Toluene	33	U	4.9	33	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	108-90-7	Chlorobenzene	40	U	7.8	40	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	109-99-9	Tetrahydrofuran	26	U	7.4	26	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	110-54-3	Hexane	31	U	6.7	31	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	110-82-7	Cyclohexane	30	U	6.2	30	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	120-82-1	Trichlorobenzene[1,2,4-]	260	U	120.0	260	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	123-91-1	Dioxane[1,4-]	130	U	31	130	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	64-17-5	Ethanol	83	U	23	83	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	67-63-0	Propanol[2-]	110	U	22	110	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	67-64-1	Acetone	83	U	9	83	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	67-66-3	Chloroform	43	U	8.3	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	71-43-2	Benzene	28	U	3.2	28	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	71-55-6	Trichloroethane[1,1,1-]	48	U	9.8	48	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	124-48-1	Chlorodibromomethane	75	U	14.0	75	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	127-18-4	Tetrachloroethene	60	U	8	60	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	142-82-5	n-Heptane	36	U	10.0	36	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	156-59-2	Dichloroethene[cis-1,2-]	35	U	9.9	35	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	156-60-5	Dichloroethene[trans-1,2-]	35	U	9.5	35	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	1634-04-4	Methyl tert-Butyl Ether	32	U	7.9	32	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	540-84-1	Isooctane	41	U	4.7	41	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	541-73-1	Dichlorobenzene[1,3-]	53	U	5.9	53	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	56-23-5	Carbon Tetrachloride	55	U	11.0	55	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	591-78-6	Hexanone[2-]	140	U	15.0	140	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	622-96-8	Ethyltoluene[4-]	43	U	20	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-35-4	Dichloroethene[1,1-]	35	U	7	35	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-69-4	Trichlorofluoromethane	49	U	10.0	49	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	75-71-8	Dichlorodifluoromethane	43	U	14.0	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	67	U	10.0	67	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	61	U	10.0	61	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	78-87-5	Dichloropropane[1,2-]	41	U	10.0	41	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	78-93-3	Butanone[2-]	100	U	20	100	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	79-00-5	Trichloroethane[1,1,2-]	48	U	16	48	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	79-01-6	Trichloroethene	47	U	11.0	47	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	60	U	6.9	60	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	87-68-3	Hexachlorobutadiene	370	U	200	370	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	95-47-6	Xylene[1,2-]	38	U	6.1	38	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	95-50-1	Dichlorobenzene[1,2-]	53	U	12.0	53	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	95-63-6	Trimethylbenzene[1,2,4-]	43	U	4.4	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	98-82-8	Isopropylbenzene	43	U	4.4	43	N
63-2013		TWF63-23-280834	04/26/2023	05/18/2023	VOC	EPA:TO15	FB	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	38	U	6.1	38	N

Notes: Rows in **Bold** font indicate the analyte is detected.
FD = Field Duplicate
FB = Field Blank
U = Non-detect
J = Estimated Value
NQ = no data qualifier

Table 3: Current and Previous Analytical Results for Eight Quarters

Well ID (Port(ft))	Constituent	Soil Gas Screening Level (µg/m3)	Q3 2021		Q4 2021		Q1 2022		Q2 2022		Q3 2022		Q4 2022		Q1 2023		Q2 2023	
			Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)
VMW-1 (5) 63-2009	Trichloroethylene	1.94E+04	50	0.3	40	0.2	30	0.2	45	0.2	70	0.4	37	0.2	26	0.1	41	0.2
	Toluene	4.70E+07	-	-	-	-	-	-	-	-	-	-	3.5	<0.1	-	-	-	-
	Tetrachloroethylene	4.08E+05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	cis-1,2-Dichloroethylene	5.85E+05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acetone	2.73E+08	-	-	-	-	-	-	-	-	81	<0.1	-	-	-	-	-	-
	1,1,1-Trichloroethane	4.86E+07	-	-	3.8	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-Dichloroethane	1.73E+05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1-Dichloroethylene	1.86E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	1.03E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Methylene chloride	5.34E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	1.08E+04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	m-Xylene	1.01E+06	-	-	10	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
	p-Xylene	9.77E+05	-	-	10	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
VMW-2 (5) 63-2010	Trichloroethylene	1.94E+04	70	0.4	100	0.5	86	0.4	97	0.5	81	0.4	100	0.5	75	0.4	100	0.5
	Dichlorodifluoromethane	1.03E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acetone	2.73E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	4.86E+07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Toluene	4.70E+07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VMW-3 (5) 63-2011	Trichloroethylene	1.94E+04	59	0.3	75	0.4	50	0.3	86	0.4	59	0.3	50	0.3	64	0.3	70	0.4
	Toluene	4.70E+07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acetone	2.73E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	<0.1
	Dichlorodifluoromethane	1.03E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VMW-4 (25) 63-2012	Trichloroethylene	1.57E+05	2100	1.3	2200	1.4	2200	1.4	2000	1.3	2000	1.3	2000	1.3	2400	1.5	2100	1.3
	Tetrachloroethylene	2.63E+06	37	<0.1	33	<0.1	30	<0.1	33	<0.1	24	<0.1	31	<0.1	31	<0.1	31	<0.1
	Carbon tetrachloride	1.06E+05	40	<0.1	36	<0.1	40	<0.1	33	<0.1	32	<0.1	33	<0.1	47	<0.1	38	<0.1
	Chloroform	2.30E+04	78	0.3	78	0.3	68	0.3	78	0.3	78	0.3	73	0.3	78	0.3	83	0.4
	Dichlorodifluoromethane	2.61E+06	50	<0.1	54	<0.1	54	<0.1	54	<0.1	48	<0.1	44	<0.1	69	<0.1	64	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	6.86E+08	-	-	-	-	-	-	-	-	-	-	15	<0.1	19	<0.1	-	-
	1,1,1-Trichloroethane	1.16E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VMW-4 (60) 63-2012	Trichloroethylene	9.27E+04	6400	6.9	6400	6.9	6400	6.9	5900	6.4	4100	4.4	5900	6.4	3100	3.3	5000	5.4
	Tetrachloroethylene	2.05E+06	75	<0.1	64	<0.1	70	<0.1	75	<0.1	33	<0.1	81	<0.1	37	<0.1	57	<0.1
	cis-1,2-Dichloroethylene	2.91E+06	18	<0.1	14	<0.1	14	<0.1	18	<0.1	-	-	15	<0.1	-	-	15	<0.1
	Carbon tetrachloride	2.13E+05	82	0.2	94	<0.1	100	<0.1	88	<0.1	60	<0.1	82	<0.1	45	<0.1	88	<0.1
	Chloroform	4.44E+04	160	0.4	170	0.4	170	0.4	160	0.4	130	0.3	160	0.4	88	0.2	170	0.4
	1,1,1-Trichloroethane	2.34E+08	8.7	<0.1	9.8	<0.1	-	-	-	-	-	-	-	-	-	-	11	<0.1
	Dichlorodifluoromethane	5.38E+06	130	<0.1	130	<0.1	120	<0.1	120	<0.1	89	<0.1	110	<0.1	69	<0.1	130	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.38E+09	25	<0.1	24	<0.1	25	<0.1	28	<0.1	19	<0.1	31	<0.1	11	<0.1	22	<0.1
	Toluene	2.14E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acetone	1.02E+09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	3.01E+07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethylene	1.57E+05	310	0.2	300	0.2	350	0.2	300	0.2	310	0.2	300	0.2	280	0.2	290	0.2

Well ID (Port(ft))	Constituent	Soil Gas Screening Level (µg/m3)	Q3 2021		Q4 2021		Q1 2022		Q2 2022		Q3 2022		Q4 2022		Q1 2023		Q2 2023	
			Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)
VMW-5 (25)63-2013	Chloroform	2.30E+04	35	0.2	36	0.2	32	0.1	32	0.1	38	0.2	42	0.2	45	0.2	50	0.2
	1,1,1-Trichloroethane	1.16E+08	17	<0.1	16	<0.1	12	<0.1	19	<0.1	-	-	13	<0.1	14	<0.1	13	<0.1
	Dichlorodifluoromethane	2.61E+06	31	<0.1	39	<0.1	34	<0.1	31	<0.1	50	<0.1	31	<0.1	34	<0.1	31	<0.1
	Tetrachloroethylene	2.63E+06	-	-	-	-	-	-	-	-	-	-	-	-	8.8	<0.1	-	-
	Acetone	5.44E+08	-	-	-	-	-	-	-	-	62	<0.1	-	-	-	-	-	-
	Carbon tetrachloride	1.06E+05	-	-	-	-	-	-	-	-	-	-	14	<0.1	-	-	-	-
VMW-5 (60) 63-2013	Trichloroethylene	9.27E+04	1200	1.3	1200	1.3	1200	1.3	1200	1.3	1200	1.3	1200	1.3	1000	1.1	1000	1.1
	Tetrachloroethylene	2.05E+06	-	-	12	<0.1	-	-	-	-	-	-	-	-	12	<0.1	-	-
	Chloroform	4.44E+04	21	<0.1	19	<0.1	16	<0.1	23	<0.1	21	<0.1	21	<0.1	20	<0.1	22	<0.1
	1,1,1-Trichloroethane	2.34E+08	36	<0.1	29	<0.1	35	<0.1	29	<0.1	31	<0.1	28	<0.1	28	<0.1	25	<0.1
	Dichlorodifluoromethane	5.38E+06	59.0	<0.1	59.0	<0.1	50.0	<0.1	54.0	<0.1	50.0	<0.1	54.0	<0.1	50.0	<0.1	54	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.38E+09	-	-	-	-	-	-	-	-	-	-	15	<0.1	11	<0.1	-	-
	Toluene	2.14E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Carbon tetrachloride	2.13E+05	15	<0.1	14	<0.1	14	<0.1	16	<0.1	14	<0.1	-	-	15	<0.1	11	<0.1
	Acetone	1.02E+09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Field Duplicates:

Well ID (Port(ft))	Constituent	Soil Gas Screening Level (µg/m3)	Q3 2021		Q4 2021		Q1 2022		Q2 2022		Q3 2022		Q4 2022		Q1 2023		Q2 2023	
			Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)
VMW-1 (5) 63-2009(FD)	Trichloroethylene	1.94E+04	-	-	-	-	37	0.2	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	1.03E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VMW-3 (5) 63-2011(FD)	Trichloroethylene	1.94E+04	-	-	-	-	-	-	-	-	-	-	-	-				
VMW-4 (25) 63-2012(FD)	Trichloroethylene	1.57E+05	-	-	-	-	-	-	2000	1.3	-	-	-	-	-	-	-	-
	Tetrachloroethylene	2.63E+06	-	-	-	-	-	-	33	<0.1	-	-	-	-	-	-	-	-
	Carbon tetrachloride	1.06E+05	-	-	-	-	-	-	36	<0.1	-	-	-	-	-	-	-	-
	Chloroform	2.30E+04	-	-	-	-	-	-	73	0.3	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	1.16E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorofluoromethane	2.61E+06	-	-	-	-	-	-	54	<0.1	-	-	-	-	-	-	-	-
VWM-4 (60) 23-2012(FD)	Trichloroethylene	9.27E+04	-	-	-	-	-	-	-	-	4400	4.7	-	-	-	-	-	-
	Tetrachloroethylene	2.05E+06	-	-	-	-	-	-	-	-	45	<0.1	-	-	-	-	-	-
	cis-1,2-Dichloroethylene	2.91E+06	-	-	-	-	-	-	-	-	12	<0.1	-	-	-	-	-	-
	Carbon tetrachloride	2.13E+05	-	-	-	-	-	-	-	-	59	<0.1	-	-	-	-	-	-
	Chloroform	4.44E+04	-	-	-	-	-	-	-	-	140	0.3	-	-	-	-	-	-
	Dichlorodifluoromethane	5.38E+06	-	-	-	-	-	-	-	-	94	<0.1	-	-	-	-	-	-
	Acetone	1.02E+09	-	-	-	-	-	-	-	-	38	<0.1	-	-	-	-	-	-
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.38E+09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VMW-5 (25) 63-2013(FD)	Trichloroethylene	1.57E+05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethylene	2.63E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloroform	2.30E+04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	1.16E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dichlorodifluoromethane	2.61E+06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichloroethylene	9.27E+04	1200	1.3	1200	1.3	-	-	-	-	-	-	1200	1.3	1000	1.1	970	1.0

Well ID (Port(ft))	Constituent	Soil Gas Screening Level (µg/m3)	Q3 2021		Q4 2021		Q1 2022		Q2 2022		Q3 2022		Q4 2022		Q1 2023		Q2 2023	
			Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)	Result (µg/m^3)	Percent of SGSL (%)
VMW-5 (60) 63-2013(FD)	Carbon tetrachloride	2.13E+05	14	<0.1	15	<0.1	-	-	-	-	-	-	16	<0.1	18	<0.1	13	<0.1
	1,1,1-Trichloroethane	2.34E+08	30	<0.1	31	<0.1	-	-	-	-	-	-	28	<0.1	25	<0.1	26	<0.1
	Dichlorodifluoromethane	5.38E+06	54	<0.1	54	<0.1	-	-	-	-	-	-	54	<0.1	64	<0.1	50	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.38E+09	-	-	-	-	-	-	-	-	-	-	15	<0.1	12	<0.1	9.2	<0.1
	Chloroform	4.44E+04	19	<0.1	22	<0.1	-	-	-	-	-	-	21	<0.1	22	<0.1	20	<0.1
	Methylethylketone (2-butanone)	2.27E+08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethylene	2.63E+06	14	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	9.5	<0.1
	1,2,4-Trimethylbenzene	4.12E+05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes: FD = Field Duplicate
"-" = Non-Detect
SGSL = Soil Gas Screening Level

Table 4: Statistical Analyses

	VMW-1 5ft (µg/m^3)	VMW-2 5ft (µg/m^3)	VMW-3 5ft (µg/m^3)	VMW-4 25ft (µg/m^3)	VMW-4 60ft (µg/m^3)	VMW-5 25ft (µg/m^3)	VMW-5 60ft (µg/m^3)
2017 Quarter 1	64.4	134	69.8	3810	8060	483	1340
2018 Quarter 1	31.1	80.6	64.4	2793	6982	258	1343
2018 Quarter 2	48.3	129	96.7	3437	8593	414	1557
2018 Quarter 3	53.7	85.9	59.1	2954	8056	344	1504
2018 Quarter 4	43.5	107	75.2	2900	8056	365	1396
2019 Quarter 1	36	113	85.9	2900	7520	360	1400
2019 Quarter 2	44	118	107	2790	7520	360	1560
2019 Quarter 3	59.1	102	85.9	3010	8590	424	1500
2019 Quarter 4	40.3	96.7	64.4	2790	6980	338	1400
2020 Quarter 1	41.9	102	75.2	2740	7520	392	1500
2020 Quarter 2	41	97	97	2800	7500	380	1400
2020 Quarter 3	59	86	75	2600	7500	390	1400
2020 Quarter 4	44	130	86	2600	7500	400	1300
2021 Quarter 1	43	97	75	2600	7000	360	1300
2021 Quarter 2	41	100	97	2500	7500	360	1300
2021 Quarter 3	50	70	59	2100	6400	310	1200
2021 Quarter 4	40	100	75	2200	6400	300	1200
2022 Quarter 1	30	86	50	2200	6400	350	1200
2022 Quarter 2	45	97	86	2000	5900	300	1200
2022 Quarter 3	70	81	59	2000	4100	310	1200
2022 Quarter 4	37	100	50	2000	5900	300	1200
2023 Quarter 1	26	75	64	2400	3100	280	1000
2023 Quarter 2	41	100	70	2100	5000	290	1000
Mean (M)	44.8	99.4	75.1	2618.4	6872.9	350.8	1321.7
Standard Deviation (SD)[n−1]	10.8	17.0	15.6	464.6	1364.8	53.3	156.2
Lower Limit (95%=M−2×SD)	23.2	65.5	43.9	1689.2	4143.3	244.2	1009.3
Upper Limit (95%=M+2×SD)	66.3	133.4	106.3	3547.7	9602.6	457.4	1634.2
Lower Limit (99%=M−3×SD)				1224.6		190.9	
Upper Limit (99%=M+3×SD)				4012.3		510.7	

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SAMPLE COLLECTION LOGS

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Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280826 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		0945	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2009		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # 0356

FIELD PARAMETERS:

Sample Time 0945 HH:MM

CH_4 = 0 % CO_2 = 9000 ppm O_2 = 20.1 % VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Shendo **REVIEWED BY (PRINT):**

	Date/Time		Date/Time
RELINQUISHED BY (Printed Name) Melissa Statham (Signature)	04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	4/26/23 1340
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280827 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1005	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2010		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # 33974

FIELD PARAMETERS:

Sample Time 1005 HH:MM

CH_4 = 0 % CO_2 = 5800 ppm O_2 = 20.4 % VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Shenold **REVIEWED BY (PRINT):**

RELINQUISHED BY (Printed Name) Melissa Stasny (Signature)	Date/Time 04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	Date/Time 4/26/2023 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280828 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1025	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2011		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5 ft		EXCAVATED:		YES / (NO) / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # N1752

FIELD PARAMETERS:

Sample Time 1025 HH:MM

CH_4 = 0 % CO_2 = 3800 PPM O_2 = 20.8 % VOC = 0.0 PPM

COLLECTED BY (PRINT): M. Shenado **REVIEWED BY (PRINT):**

RELINQUISHED BY (Printed Name) Melissa Sharp (Signature)	Date/Time 04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	Date/Time 4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280829 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1109	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	24 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # 6024

FIELD PARAMETERS:

Sample Time 1109 HH:MM

CH_4 = 0 %CO_2 = 10800 ppm O_2 = 19.7 % VOC = 0.0 ppm

COLLECTED BY (PRINT):

REVIEWED BY (PRINT):

RELINQUISHED BY (Printed Name) Melissa Stastny (Signature)	Date/Time 04/26/2023 1700	RECEIVED BY (Printed Name) (Signature)	Date/Time 4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280830 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1128	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	59 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 2

LOCATION COMMENTS: Summa # 04025

FIELD PARAMETERS:

Sample Time 1128 HH:MM

CH_4 = 0 % CO_2 = 13000 ppm O_2 = 19.2 % VOC = 0.4 ppm

COLLECTED BY (PRINT): M. Sherow **REVIEWED BY (PRINT):**

RELINQUISHED BY (Printed Name) Marilla Sherow (Signature)	Date/Time 04/26/2023 1300	RECEIVED BY (Printed Name) Melissa Mayo (Signature)	Date/Time 4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280831 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1151	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	24 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # 7642

FIELD PARAMETERS:

Sample Time 1151 HH:MM

CH_4 = 0 % CO_2 = 24800 ppm O_2 = 18.8 % VOC = 0.0 PPM

COLLECTED BY (PRINT): M. Shenado **REVIEWED BY (PRINT):**

	Date/Time		Date/Time
RELINQUISHED BY (Printed Name) Melissa Stastny (Signature)	04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280832 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1208	MEDIA:	GAS	
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	59 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60 ft		EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
nt	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 2

LOCATION COMMENTS: Summa # 00277

FIELD PARAMETERS:

Sample Time 1208 HH:MM

CH_4 = 0 % CO_2 = 19200 ppm O_2 = 19.4 % VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Shenoro **REVIEWED BY (PRINT):**

	Date/Time		Date/Time
RELINQUISHED BY (Printed Name) Melissa Stastny (Signature)	04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280833 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	0 IC
TIME COLLECTED (HH:MM):		12 12	MEDIA:	GAS	
SWMU/AOC:			SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	63-2013	FIELD PREP:	NA	
LOCATION TYPE:	BHover10ft	BHover 10ft	FIELD QC TYPE:	FD	
TOP DEPTH:		50 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:		60 ft	EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 2

LOCATION COMMENTS: Summa # 0205

FIELD PARAMETERS:

Sample Time 1212 HH:MM

CH_4 = 0 % CO_2 = 19200 ppm O_2 = 19.4 % VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Shendo **REVIEWED BY (PRINT):**

RELINQUISHED BY (Printed Name) Melissa Shendo (Signature)	Date/Time 04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	Date/Time 4/26/23 1300
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 15204 **EVENT NAME:** CY 23 - April - Poregas Sampling - TWF - TA-63

SAMPLE ID: TWF63-23-280834 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY):		04/26/2023	FIELD MATRIX:	GAS	Nitrogen
TIME COLLECTED (HH:MM):		1240	MEDIA:		Nitrogen
SWMU/AOC:		ok	SAMPLE TECH CODE:	VOST	ok
LOCATION ID:	UNK		FIELD PREP:	NA	
LOCATION TYPE:	BHover10ft		FIELD QC TYPE:	FB	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEPTH:			EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
N/A	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: ~~QC~~ QC Sample of TWF63-23-280833

LOCATION COMMENTS: Summa # 0247

FIELD PARAMETERS:

Sample Time ~~N/A~~ HH:MM

None

COLLECTED BY (PRINT): M. Shendo **REVIEWED BY (PRINT):**

RELINQUISHED BY (Printed Name) Melissa Stamm (Signature)	Date/Time 04/26/2023 1300	RECEIVED BY (Printed Name) (Signature)	Date/Time 4/26/23 1600
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 04/03/2023