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Symbol: EPC-DO: 25-001

Date: January 31, 2025

LA-UR: 25-20412

Locates Action No.: U2200542

Justin Ball, Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, Room N2261
Santa Fe, NM 87502

Subject: DP-1132, Monitoring Report, Radioactive Liquid Waste Treatment Facility, Annual Update and Fourth Quarter 2024

Dear Mr. Ball:

On May 5, 2022, the New Mexico Environment Department (NMED) issued Discharge Permit DP-1132 to the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) for discharges of treated effluent from the Technical Area 50 Radioactive Liquid Waste Treatment Facility (RLWTF). Pursuant to Permit Condition Numbers (Nos.) 1 and 24, NNSA and Triad are required to submit a quarterly monitoring report and annual update by February 1, 2025. The following permit conditions are addressed in Attachments 1 through 13 of this report.

- Condition No. 1: Annual Update
- Condition No. 8: Water tightness Testing Results
- Condition No. 10: Settled Solids Measurements
- Condition No. 13: Maintenance and Repair
- Condition No. 14: Damage to Structural Integrity
- Condition Nos. 25 and 26: RLWTF Influent Volumes
- Condition No. 27: Discharge Volumes
- Condition No. 29: Effluent Sampling
- Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporative Tank System
- Condition No. 36: Groundwater Monitoring
- Condition No. 41: Stabilization of Specific Units and Systems that have Ceased

Please contact Robert A. Gallegos at (505) 901-3824 or robert.gallegos@nnsa.doe.gov or contact Brian M. Iacona at (505) 500-6038 or biacona@lanl.gov if you have questions regarding this monitoring report.

Sincerely,

**SARAH
HOLCOMB
(Affiliate)**

Digitally signed by SARAH
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-07'00'

Sarah S. Holcomb
Group Leader
Environmental Compliance Programs
Triad National Security, LLC

Sincerely,

**ROBERT
GALLEGOS**

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Robert A. Gallegos
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Attachment: Attachment 1 RLWTF Monitoring Report – Fourth Quarter 2024 and 2024 Annual Update
Attachment 2 Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF
Attachment 3 RLWTF Daily Influent and Effluent Volumes
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Attachment 13 Water Tightness Test Report

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Attachment 1

RLWTF Monitoring Report – Fourth Quarter 2024 and Annual Update

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

Condition No. 24: Monitoring Reports

Pursuant to Permit Condition Number (No.) 24, the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) are required to submit a quarterly monitoring report and annual update by February 1, 2025, for the monitoring period of October 1, 2024, through December 31, 2024 (fourth quarter). The following permit conditions are addressed in Attachments 1 through 13 of this report.

- Quarterly Monitoring Report
 - Condition No. 1: Annual Update
 - Condition No. 8: Water Tightness Testing Results
 - Condition No. 10: Settled Solids Measurements
 - Condition No. 13: Maintenance and Repair
 - Condition No. 14: Damage to Structural Integrity
 - Condition Nos. 25 and 26: RLWTF Influent Volumes
 - Condition No. 27: Discharge Volumes
 - Condition No. 29: Effluent Sampling
 - Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporation Tank System
 - Condition No. 32: Ground Water Flow Report
 - Condition No. 36: Groundwater Monitoring
 - Condition No. 41: Stabilization of Specific Units and Systems that have Ceased

Condition No. 13: Maintenance and Repair

The Permittees shall submit to NMED a summary and description of the maintenance and repair activities performed on the Facility as part of the quarterly monitoring reports.

- **Attachment 2** provides a summary of the maintenance and repair activities conducted at the Radioactive Liquid Waste Treatment Facility (RLWTF) during the fourth quarter 2024 monitoring period.

Condition No. 14: Damage to Structural Integrity

In the event that an inspection reveals damage likely to affect the structural integrity of a unit or system the Permittees shall take the affected unit out of service as quickly as possible, notify NMED orally within 24 hours, and shall propose the repair or replacement of the treatment system or its associated components.

- On August 31, 2022, NMED was notified that the south treated effluent tank at the RLWTF was taken out of service when treated effluent was discovered to have wept onto the exterior surface of the tank. Corrective Action Plans were submitted to NMED on September 30, 2022 (EPC-DO:22-264), and November 21, 2022 (EPC-DO: 22-315). A Corrective Action Plan Implementation Extension Request (EPC-DO: 23-274) was submitted to NMED on August 30, 2023. NMED approved this request on October 3, 2023.

- An epoxy resin patch and an additional welded patch were applied to the thinning area of the tank in January and February 2023.
 - Fabrication of the replacement effluent tanks by the manufacturer continued this quarter. The tanks are expected to be delivered to LANL by May 2025.
-

Condition No. 25: Influent Volumes: Low-Level Radioactive Wastewater

The total daily and monthly volumes of RLW influent conveyed to the Facility shall be submitted to NMED in the quarterly monitoring reports.

- **Attachment 3** provides the total daily and monthly volumes of low-level radioactive wastewater (RLW) received by the RLWTF during the fourth quarter 2024 monitoring period.
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Condition No. 26: Influent Volumes: Transuranic Wastewater

The total daily and monthly volumes of TRU influent received by the Facility shall be submitted to NMED in the quarterly monitoring reports.

- **Attachment 3** provides the total daily and monthly volumes of transuranic (TRU) influent wastewater received by the RLWTF during the fourth quarter 2024 monitoring period.
-

Condition No. 27: Discharge Volumes

The Permittees shall measure and record the volume of treated wastewater discharged to the SET, MES, and Outfall 051 on a daily basis.

- **Attachment 3** provides the daily volume of treated effluent discharged to National Pollutant Discharge Elimination System (NPDES) Outfall 051 during the fourth quarter 2024 monitoring period.
 - No treated effluent was discharged to the Mechanical Evaporator System (MES) or the Solar Evaporative Tank System (SET) during the fourth quarter 2024 monitoring period.
-

Condition No. 29: Effluent Sampling

The Permittees shall sample and analyze effluent waste streams discharged to Outfall 051, the SET, and the MES.

- **NPDES Outfall 051 Sampling.** Treated effluent from the RLWTF was discharged to NPDES Outfall 051 this quarter during the months of October, November, and December. Monthly sampling for all water contaminants listed in 20.6.2.3103 NMAC, all toxic pollutants as defined in 20.6.2.7.T(2) NMAC, and total kjeldahl nitrogen (TKN) was completed on October 2nd, November 6th, and December 11th, 2024. All sample results were

either not detected or less than 20.6.2.3103 NMAC standards and tap water screening levels for 20.6.2.7.T(2) NMAC with the exception of aldrin.

The sample collected on November 6th, 2024, had an aldrin detection of .00668 µg/L which is above the NMED Risk Assessment Guidance, Table A-1, Tap Water Limit of .00198 µg/L. In accordance with Permit Condition No.18, *Effluent Exceedance*, a subsequent aldrin sample was collected from the November 20, 2024, discharge to NPDES Outfall 051 and was non-detect. The analytical results collected from NPDES Outfall 051 in the fourth quarter of 2024 are included in **Attachment 4, Tables 1-3**.

- **MES Sampling.** No treated effluent from the RLWTF was discharged to the MES this reporting period. Therefore, no effluent sampling from the MES was completed during the fourth quarter 2024 monitoring period.
- **SET Sampling.** No treated effluent was discharged to the SET during the reporting period. Therefore, no effluent sampling from the SET was completed during the fourth quarter 2024 monitoring period.

Condition No. 30: Soil Moisture Monitoring System for the SET

The permittees shall perform quarterly soil moisture monitoring in the moisture monitoring boreholes and shall provide this information in the quarterly reports.

- No treated effluent was discharged to the SET during the fourth quarter 2024 monitoring period.
- In accordance with Permit Condition No. 30, the SET-Soil Moisture Monitoring System Completion Report (EPC-DO: 22-132) was submitted to NMED on June 29, 2022. NMED approved the report on May 18, 2023.
- Baseline monitoring of all SET moisture monitoring boreholes continued in the fourth quarter with quarterly monitoring completed in October 2024.

Condition No. 36: Ground Water Monitoring

The Permittees shall collect ground water samples from the following ground water monitoring wells: MCA-RLW-1, MCA-RLW-2, and MCOI-6 on a quarterly basis and analyze the samples for TKN, NO3-N, TDS, Cl, F, and perchlorate.

- **Attachment 5** provides the complete ground water monitoring report from the quarterly sampling of perched/intermediate ground water monitoring well MCOI-6 on November 12, 2024.

Sample results from MCOI-6 for TKN, NO₃+NO₂-N, TDS, Cl, F, and ClO₄ are provided in **Attachment 5, Table 1**. These samples were submitted to GEL Laboratories, LLC for analysis. All results from the November 12, 2024, sampling event at MCOI-6 were either not

detected or below 20.6.2.3103 NMAC standards and 20.6.2.7.T NMAC screening levels, with the exception of the following:

- NO₃+NO₂-N was detected at a concentration of 15 mg/L. The 20.6.2.3103 NMAC standard for NO₃-N is 10 mg/L. The average NO₃+NO₂-N concentration at MCOI-6 during the 5-yr period from 2020 through 2024 was 14.3 mg/L with multiple exceedances of the 10 mg/L standard. Detections of NO₃+NO₂-N at MCOI-6 at concentrations greater than the ground water standard were previously identified and reported to NMED. Monitoring well MCOI-6 will continue to be routinely sampled for NO₃+NO₂-N in accordance with DP-1132 and pursuant to the Compliance Order on Consent (Consent Order).
- ClO₄ was detected at a concentration of 130 µg/L. The 20.6.2.7.T NMAC guidance for ClO₄ is 13.8 µg/L. The average ClO₄ concentration at MCOI-6 during the 5-yr period from 2020 through 2024 was 106.7 µg/L. Detections of ClO₄ at MCOI-6 at concentrations greater than the 20.6.2.7.T NMAC guidance screening levels were previously identified and reported to NMED. Monitoring well MCOI-6 will continue to be routinely sampled for ClO₄ in accordance with DP-1132 and pursuant to the Consent Order.

Quarterly samples were not collected from alluvial monitoring wells MCA-RLW-1 or MCA-RLW-2 during this period due to insufficient water in the wells. **Attachment 5** provides the ground water monitoring report for these alluvial wells collected on October 30, 2024.

A map showing the location of ground water monitoring wells MCA-RLW-1, MCA-RLW-2, MCOI-6, R-1, R-14, R-46 and R-60 is provided in **Attachment 6**.

Condition No. 41: Stabilization of Specific Units and Systems That Have Ceased

The Permittees shall provide NMED quarterly progress reports describing stabilization activities for each quarter in accordance with the time periods and submittal dates required for monitoring reports in Condition 24.

On September 26, 2023, a Revised Integrated Schedule of Stabilization Activities at the RLWTF (EPC-DO: 23-294) was submitted to NMED for review. NMED approval was received on May 6th, 2024.

The current status of each unit and system listed in Permit Condition No. 41 is listed below.

Clarifier #1

- Stabilization activities for Clarifier #1 were completed under the Stabilization Plan for the Low-Level Clarifier #1 submitted to NMED on December 4, 2018 (EPC-DO: 18-428). This workplan was approved by NMED on December 27, 2018.

- Stabilization of Clarifier #1 was completed on June 10, 2024. The required Clarifier #1 Stabilization Completion Report (EPC-24-085) was submitted to NMED on July 2, 2024.

Clarifier #2

- Stabilization activities for Clarifier #2 are being completed under the Stabilization Plan for Low-Level Clarifier #2 Tank submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- Removal of excess chemicals was completed in 2019.
- The chemical feed system was dismantled in May 2021.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of Clarifier #2 is September 2026.

75K Tank

- Stabilization activities for the 75K Tank are being completed under the Stabilization Plan for 75K Tank submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- The 75K Tank was operationally emptied in 2019.
- The 75K Tank will remain available for use as emergency storage.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the 75K Tank is September 2030.

100K Tank

- Stabilization activities for the 100K Tank are being completed under the Stabilization Plan for the 100K Tank submitted to NMED on December 4, 2018 (EPC-DO: 18-428). This workplan was approved by NMED on December 27, 2018. Requests for Extensions of Time to complete mobilization for 100K Tank Stabilization (EPC-DO: 19-372 and EPC-DO: 19-470) were previously submitted to and approved by NMED as previously reported.
- The 100K Tank was emptied of all process liquids in 2019.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the 100K Tank is September 2030.

Gravity Filter

- Stabilization activities for the Gravity Filter are being completed under the Stabilization Plan for Gravity Filter submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- Stabilization of the Gravity Filter has been initiated with the removal of unused chemicals and the chemical feed system.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the Gravity Filter is September 2029.

WM2-North/South Tanks

- Stabilization activities for the WM2-North/South Tanks are being completed under the Stabilization Plan for the WM2-North/South Tanks submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
 - During the third quarter of 2024, the inlet and outline lines for both the north and south effluent tanks were isolated.
 - The process liquids and solids contained within each tank were removed during this reporting period. The process piping and interior tank surfaces of each tank were then rinsed and the Stabilization Plan criteria of less than 10 nanocuries per liter of radioactivity in the rinsate was met.
 - The established completion date for stabilization of the WM2-North/South Tanks is September 2025.
-

2024 ANNUAL UPDATE

Condition No. 1: Annual Update - Annual Facility Process Description

The Permittees shall submit to NMED an updated Facility Process Description annually by February 1 of each year in conjunction with the February Quarterly Report. The annual Facility Process Description shall include the following:

a. A schematic of all major structures associated with the Facility, including all influent lines, buildings, exterior tanks, effluent lines, outfall, and discharge locations identified in this Discharge Permit.

- **Attachment 7** provides a schematic of all major structures at the RLWTF.
- **Attachment 8** provides a schematic showing treatment units to be stabilized.

b. A comprehensive flow chart demonstrating the most current processes in operation for the collection, treatment, and disposal of wastewater for the Facility. The flow chart shall indicate any processes which have been by-passed, decommissioned, or are no longer used for the collection, treatment, or final disposal of the wastewater.

- **Attachment 9** provides an overview flow chart of current treatment processes.
- **Attachment 10** provides a detailed flow chart of current treatment processes.

c. An associated narrative describing each of the systems and treatment units outlined in the flow chart. This narrative shall include the collection system, primary treatment units, secondary treatment units and any systems used in the disposition of any associated waste streams at the Facility.

- **Attachment 11** provides a narrative describing systems and treatment units at the RLWTF.

2024 Facility Maintenance and Repair Activities

- **Attachment 2** provides a summary of the maintenance and repair activities conducted at the RLWTF during the October 1 – December 31, 2024, monitoring period.
- Maintenance and repair activities conducted at the RLWTF during previous quarters in 2024 were previously submitted as follows:
 - January 1 – March 31 activities were submitted to NMED on April 29, 2024 (EPC-DO-24-098) in **Attachment 2**.
 - April 1 – June 30 activities were submitted to NMED on July 30, 2024 (EPC-DO-24-171) in **Attachment 2**.

- July 1 – September 30 activities were submitted to NMED on October 29, 2024 (EPC-DO-24-288) in **Attachment 2**.

Condition No. 8: Water Tightness Testing

The Permittees shall demonstrate that each unit and system intended to convey, store, treat or dispose of a liquid or semi-liquid waste stream without secondary containment is not leaking and is otherwise fit for use. The Permittees shall submit to NMED the procedures and findings of the evaluation in the Annual Update (Condition 1) by February 1 of each year immediately following the date when the water tightness test was performed.

- **RLWTF to SET Pipeline.** The TA-52 SET is not currently operational and did not receive any treated wastewater from the RLWTF in 2024. On June 29, 2023, the U.S. Department of Energy, National Nuclear Security Administration (DOE/NNSA) and Triad National Security, LLC (Triad) submitted a request to NMED for an extension of time to complete water tightness testing of the pipeline from the RLWTF to the SET (EPC-DO: 23-206) until December 31, 2024. NMED approved this request on August 1, 2023.

Water tightness testing of the pipeline from the RLWTF to the SET was successfully completed in May 2024 and a report of the testing is included in **Attachment 13**. The SET will be placed into service after facility upgrades are completed.

- **RLWTF to NPDES Outfall 051 Pipeline.** Water tightness testing of the pipeline from the RLWTF to NPDES Outfall 051 was successfully completed in July 2024 and a report of the testing is included in **Attachment 13**.

Condition No. 10: Settled Solids; Settled Solids Removal

The Permittees shall inspect and measure the thickness of the settled solids in the SET on an annual basis. The Permittees shall submit a summary report of all settled solids activities to NMED in the Annual Report submitted by February 1 of each year as well as the Quarterly Report for the period during which the activity occurs.

- The SET has not been placed in service. No treated effluent was discharged to the SET during the monitoring period. Based on these factors, measurements and/or removal of settled solids did not occur during 2024.

Condition No. 32: Ground Water Flow

The Permittees shall submit a ground water flow direction report to NMED in the Annual Report in conjunction with the Quarterly Report due February 1.

- **Attachment 12** provides an updated ground water flow direction report based on the hydrogeological conditions of the Pajarito Plateau incorporating regional groundwater monitoring well water level data.

Condition No. 36: Annual Ground Water Monitoring: MCA-RLW-1, MCA-RLW-2, MCOI-6, R-1, R-14, R-46, R-60

The Permittees shall collect ground water samples from ground water monitoring wells on an annual basis and analyze the samples for all water contaminants listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2). The Permittees shall prepare ground water monitoring reports describing, in detail, the sampling and analytical methods used. The ground water monitoring report shall be submitted to NMED with the quarterly monitoring report required in this Discharge Permit.

Attachment 5 provides the complete groundwater monitoring report from annual sampling of alluvial ground water monitoring wells MCA-RLW-1 and MCA-RLW-2; perched/ intermediate ground water monitoring well MCOI-6; regional ground water monitoring wells R-1, R-14, R-46, and R-60. This report includes information collected from each well prior to sampling, analytical results, and sample chain of custodies.

○ **Alluvial Well MCA-RLW-1**

- **Attachment 5** provides the complete groundwater monitoring report including information related to MCA-RLW-1. Annual sampling of alluvial well MCA-RLW-1 was not completed in 2024 because there was insufficient water in the well to enable sampling when visited throughout the year.

○ **Alluvial Well MCA-RLW-2**

- **Attachment 5** provides the complete groundwater monitoring report including information related to MCA-RLW-2. Annual sampling of alluvial well MCA-RLW-2 was not completed in 2024 because there was insufficient water in the well to enable sampling when visited throughout the year.

○ **Perched/Intermediate Well MCOI-6**

- **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at MCOI-6. All analytical results of constituents listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2) from 2024 at MCOI-6 are included in **Attachment 5, Table 2**. This well is routinely sampled pursuant to the Consent Order as part of the Chromium Investigation Monitoring Group and results from Consent Order related sampling events within the reporting period are included in this table. All results were either not detected or below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance with the exception of the following:
 - Chromium was detected above the standard in three samples analyzed in 2024. Chromium concentrations ranged from 47.6 to 52.9 µg/L. The 20.6.2.3103 NMAC standard for chromium is 50 µg/L.

The average chromium concentration detected at MCOI-6 from 2020 through 2024 was 55.1 µg/L. The maximum chromium concentration during the referenced period was 62.4 µg/L. The presence of chromium at elevated concentrations in the perched/intermediate groundwater at MCOI-6 is documented in the LANL 2023 Annual Site Environmental Report.

Monitoring well MCOI-6 will continue to be routinely sampled for chromium in support of RLWTF and pursuant to Consent Order requirements for the Chromium Investigation Monitoring Group.

- Dioxane[1,4-] was detected above the screening level in two samples analyzed in 2024 with concentrations ranging from 26.9 to 33.1 µg/L. The 20.6.2.7.T NMAC guidance for dioxane[1,4-] is 4.59 µg/L.

The average dioxane[1,4-] concentration detected at MCOI-6 from 2020 through 2024 was 27.2 µg/L. The maximum dioxane[1,4-] concentration during the referenced period was 33.1 µg/L.

The presence of dioxane[1,4-] in the perched/intermediate groundwater at MCOI-6 has been documented in the LANL 2023 Annual Site Environmental Report.

- NO₃+NO₂-N and ClO₄ exceedances detected at MCOI-6 in 2024 are discussed above on page 4 of this Attachment.

- **Regional Well R-1**

- **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at R-1. All analytical results of constituents listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2) from 2024 at R-1 are included in **Attachment 5, Table 3**. This well is routinely sampled pursuant to the Consent Order as part of the Chromium Investigation Monitoring Group and results from Consent Order related sampling events within the reporting period are included in this table. All results were either not detected or below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance.

- **Regional Well R-14 Screen 1**

- **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at R-14 Screen 1. R-14 was originally constructed as a two-screen well but the bottom screen was abandoned in 2008. All analytical results of constituents listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2) from 2024 at R-14 Screen 1 are included in **Attachment 5, Table 4**. This well is routinely sampled pursuant to the Consent Order as part of the Chromium Investigation Monitoring Group and results from Consent Order related sampling events within the reporting period are included in this table. All results were either

not detected or below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance with the exception of aldrin.

Aldrin was detected above the screening level in a sample analyzed in 2024 at 0.0224 µg/L. The 20.6.2.7.T NMAC guidance for aldrin is 0.00198 µg/L. Aldrin has never been previously detected at R-14 Screen 1. Aldrin will continue to be monitored at R-14 Screen 1 in 2025 in accordance with DP-1132.

- **Regional Well R-46**

- **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at R-46. All analytical results of constituents listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2) from 2024 at R-46 are included in **Attachment 5, Table 5**. This well is routinely sampled pursuant to the Consent Order as part of the Chromium Investigation Monitoring Group and results from Consent Order related sampling events within the reporting period are included in this table. All results were either not detected or below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance.

- **Regional Well R-60**

- **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at R-60. All analytical results of constituents listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.T(2) from 2024 at R-60 are included in **Attachment 5, Table 6**. This well is routinely sampled pursuant to the Consent Order as part of the Chromium Investigation Monitoring Group and results from Consent Order related sampling events within the reporting period are included in this table. All results were either not detected or below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance.
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Attachment 2

Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

Structures	Description	Built	Task Type					Total
			PM	CO	MD	SR	UP	
Building 1	Original treatment bldg.	1963	36	45	3	0	0	84
Building 2	Original influent storage bldg.	1963	0	0	0	0	0	0
Building 66	TRU influent storage	1982	0	0	0	0	0	0
Building 90	100K Influent Storage tank	1982	0	0	0	0	0	0
Building 201	RLW Influent Valve Station	1994	0	0	0	0	0	0
Building 248	Low-level bottoms storage	1996	1	2	0	0	0	3
Building 250	Low-level influent storage	2009	15	2	0	0	0	17
Building 257	Mechanical Evaporator System	2010	2	1	0	0	0	3
TA52	Solar Evaporation Tank	2011	11	0	0	0	0	11
Totals			65	50	3	0	0	118

Task Types: PM - preventive maintenance MD - modification UP= Unplanned
CO - corrective maintenance SR - service request

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00752855	01	CO	500001 TROUBLE SHOOT AND REPAIR CA-004
500001	00714536	01	CO	500001 REPAIR EXHAUST/SUPPLY FAN ISSUES FE-17
500001	00710522	01	CO	500001 REPAIR LEAKING PRV'S ON THE SRO UNIT
500001	00796363	01	CO	500001 EVALUATE AND REPAIR OUTSIDE LIGHT
500001	00804925	03	CO	50-0001 EVALUATE AND REPAIR OR REPLACE HUE'S
500001	00697534	01	CO	500001 TROUBLESHOOT/RESTORE POWER TO LP-27 RECEPTACLES
500001	00691966	01	CO	500001 TS/REPAIR OF NORTH & SOUTH FRAC TANK LEVEL INDICATOR
500001	00666499	01	CO	500001 REPAIR/REPLACE THE CL-2 SLUDGE TRANSFER PUMP
500001	00664018	01	CO	500001 T-SHOOT AND RESTORE POWER TO RECEPTACLE IN ROOM 24
500001	00657749	01	CO	500001 REPLACE 70A-CV-V12
500001	00655372	01	CO	500001 MICROFILTER SINK BACKING UP
500001	00648862	01	CO	500001 REPLACE FILTERS ON EB-17
500001	00648526	01	CO	500001 REPLACE HEPA FILTERS ON EB-24 IN ROOM 62
500001	00645154	01	CO	500001 PV-007 INTRUSIVE SCOPE
500001	00640329	01	CO	500001 TS/REPAIR OF CST-2 LEVEL TRANSMITTER
500001	00634846	01	CO	500001 REPLACE 36-PRO-P03
500001	00634684	01	CO	500001 CLEAN UP & REPAIR LEAK ON CAP NEAR 24-EDR-V44
500001	00632335	01	CO	500001 REPAIR RM. 60 TK-1 PH TRANSMITTER
500001	00627640	01	CO	500001 RLW AS BUILT PLC-5
500001	00621690	01	CO	500001 TS&R FEED PUMP P101-1
500001	00620800	01	CO	500001 RLW MICROFILTER EMERGENCY STOP REPLACEMENT
500001	00616095	01	CO	500001 REPAIR CRANE CM-010
500001	00615488	01	CO	500001 TROUBLESHOOT AND REPAIR/REPLACE THE TK9 FEED METER
500001	00612697	01	CO	500001 RESTORE FIRE LANE MARKINGS
500001	00610762	01	CO	500001 REPLACE THE HIGH PRESSURE RO PUMP WITH LIKE-FOR-LIKE
500001	00606035	01	CO	500001 MCC-D COMPT. A3 SUPPORT FOR P102-2 REPLACEMENT.
500001	00603285	01	CO	500001 TEST/TS ELECT CONTROLS FOR 016-CTL-P01
500001	00600728	01	CO	500001 REPLACE DEFECTIVE GFCI'S
500001	00598534	01	CO	500001 REQUEST SEALING OF WM-66 EXTERIOR VAULT COVER
500001	00591148	01	CO	500001 AS BUILT CONTROL WIRING IN GMC-A.
500001	00591056	01	CO	500001 TROUBLESHOOT LEAK ALARM IN ROOM 34B
500001	00586048	01	CO	500001 REPLACE PRE & HEPA FILTERS ON EB-17 & EB-25
500001	00579189	01	CO	500001 T-SHOOT & REPAIR FLOAT ON THE TK-75 SEAL WATER TANK
500001	00578249	01	CO	500001 REPLACE PUMP AND VALVES UNDER TK-8
500001	00573627	01	CO	500001 REPLACE PIPING AND GAUGE ON VALVE 70-MCRFLT-P1

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00566340	01	CO	500001 TROUBLE SHOOT TK- 74 HIGH LEVEL PROBES
500001	00731990	01	CO	500001 REQUEST TROUBLESHOOT/ REPAIR DRUM TUMBLER LOCAL DIS
500001	00729218	01	CO	500001 TROUBLE SHOOT AND REPAIR FE-32
500001	00729216	01	CO	500001 TROUBLE SHOOT AND REPAIR FE-23
500001	00793176	01	CO	500001 REPAIR EFFLUENT LINE VALVE BOX SUMP PUMP CHECK VALVE
500001	00805384	01	CO	50-0001 REPLACE HEATER RM 59
500001	00762940	01	CO	500001 WASTE LINE SECONDARY CONTAINMENT IN ROOM 34.
500001	00623838	01	CO	500001 FLUSH 14-VAC-007. TROUBLE SHOOT AND REPAIR
500001	00578805	01	CO	500001 VALIDATE CORRECT BREAKER / LABELING ON RUA-2 & 3.
500001	00739879	01	CO	500001 REPAIR OR REPLACE SPRINKLER HEADS
500001	00605724	01	MD	500001 REPLACE THE RO FEED PUMP
500001	00750685	01	MD	500001 CORRECTIONS TO RLWTF COMPRESSED AIR SYSTEM
500001	00771243	01	MD	500001 REPLACE NORTH FRAC TANK MIXER
500001	00794306	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00801562	01	PM	500001 GFCI (6M) SERVICE INSPECTIONS
500001	00797321	01	PM	50-1 SPW/SPH (A) FIRE SUPPRESSION SYSTEMS PM
500001	00794586	01	PM	50-0001 (M) AED
500001	00794287	01	PM	50-1 FEXT (1M) PM
500001	00794111	01	PM	500001 TCA 6MO PM, AUTO DUMP
500001	00794327	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00794950	01	PM	50-1 PH ANALYZER 3MO VERIFICATION 2 EA
500001	00788862	01	PM	500001 FAR 3MO PM
500001	00796648	01	PM	500001 DAD 6MO PM
500001	00794944	01	PM	500001 MICROFILTER 3 MONTH PUMP MAINTENANCE
500001	00797320	01	PM	500001 BHW 1YR PM, (START UP) AFTER LAY-UP
500001	00794309	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00795039	01	PM	50001 & 248 LPT 1YR PM VISUAL
500001	00797705	01	PM	500001 (A) SAFETY SHOWER PM (32 EA)
500001	00797278	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00797243	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00797268	01	PM	50-1 FEXT (1M) PM
500001	00685875	01	PM	500001 5 YR PRO RM 36 PRESSURE RELIEF VALVE PM, 7 EA
500001	00797714	01	PM	500001 ANNUAL PRO PUMP MAINTENANCE PM
500001	00797694	01	PM	500001 ASE-004 1 YR PM, EXHAUST STACK PUMP
500001	00797411	01	PM	50-0001 (M) AED

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00799797	01	PM	50-1 CA (6M) MECHANICAL PM
500001	00797289	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00797284	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00799981	01	PM	50-0001 (M) TRITIUM EXIT LIGHTS
500001	00799964	01	PM	50-0001 (M) EMERGENCY LIGHTS
500001	00802261	01	PM	50-1 SPW/SPH (Q) FIRE SUPPRESSION SYSTEMS PM
500001	00800753	01	PM	50-1 DRUM TUMBLER (3M) PM
500001	00799935	01	PM	50-0001 (6M) OPS EQUIPMENT LUBRICATION
500001	00799934	01	PM	50-0001 (Q) PV-008 MECHANICAL
500001	00800261	01	PM	50-0001 (M) AED
500001	00801028	01	PM	50-0001 EH-001 (A) ELEVATOR MECH/ELECT THYSSEN-KRUPP
500001	00799968	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00802262	01	PM	50-0001 (A) FEXT
500001	00799937	01	PM	50-0001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-50-0250 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500250	00783337	01	CO	500250 REPLACE RDI SINK DRAIN LINE AND RDI SINK HOSE
500250	00807671	01	CO	50-0250 EVALUATE AND REPAIR OR REPLACE HUE HEATERS
500250	00801561	01	PM	50-250 GFCI (6M) SERVICE INSPECTIONS
500250	00794330	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00794329	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00794271	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00794953	01	PM	500250 SHS 3MO PM, SAFETY SHOWER
500250	00794303	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00797260	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00797249	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00797248	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00797266	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00799959	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00799984	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00799983	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00799933	01	PM	50-250 SPW (3M) PM
500250	00799996	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-52-0181 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-52-0182 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
520182	00794315	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00794314	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00794308	01	PM	520182 (M) FEXT PM
520182	00797233	01	PM	520182 (3M) FENCE LINE VERIFICATION
520182	00797225	01	PM	520182 (3M) SIGNAGE VERIFICATION FOR FENCE LINE
520182	00797288	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00797254	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00797253	01	PM	520182 (M) FEXT PM
520182	00800004	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00800005	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00800003	01	PM	520182 (M) FEXT PM

TA-52-0183 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

TA-50-0002 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0090 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0066 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0201 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0248 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500248	00803337	01	CO	500248 REPAIR OR REPLACE HUE-003
500248	00804504	01	CO	TS AND REPAIR 120V POWER FOR PLC4 AND VALVE ACTUATOR CABINET
500248	00797222	01	PM	500248 PUMPS 3MO PM

TA-50-0257 Work Completion Report (10-01-2024 to 12-31-2024)

Unit	Work Order	WO	WO Type	Task Title
500257	00796279	01	CO	500257 REPAIR THE EFFLUENT EVAPORATOR CONTAINMENT LEAK
500257	00795041	01	PM	50-257 1YR MECHANICAL EVAPORATOR FAN PM
500257	00800736	01	PM	50-257 EVAP BOILER (3M) PM

Attachment 2

DP-1132 Report: Fourth Quarter 2024 RLWTF Maintenance

Acronyms used by LANL Maintenance:

ASE	air sampler, exhaust	LPT	lightning protection
BHW	boiler, hot water	LTE	lights, emergency
CA	compressed air	LTET	lights, emergency, tritium
DAD	dessicant air dryer	LTNT	lights, non-tritium
EB	exhaust bank	PRV	pressure reducing valve
EH	exhaust heater	PV	pump, vacuum
FAR	filter, air replaceable	RCA	radiological control area
FE	fan, exhaust	SHS	shower, safety
FEXT	fire extinguisher	SPH	sprinkler pipe, dry
HEPA	high-efficiency particulate air	SPW	sprinkler pipe, wet
HUE	heater unit, electric	TCA	tank, compressed air

Attachment 3

RLWTF Daily Influent and Effluent Volumes

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

DP-1132 Report: Fourth Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
Totals, 2024-Q4	280,529	0	250,435	0	0
Sub-total, Oct.	96,574	0	78,952	0	0
Sub-total, Nov.	92,275	0	92,097	0	0
Sub-total, Dec.	91,680	0	79,387	0	0

All flows are in Liters.

1-Oct	10,787	0	0	0	0
2-Oct	8,213	0	47,536	0	0
3-Oct	2,233	0	0	0	0
4-Oct	1,287	0	0	0	0
5-Oct	1,400	0	0	0	0
6-Oct	757	0	0	0	0
7-Oct	3,482	0	0	0	0
8-Oct	4,164	0	0	0	0
9-Oct	3,671	0	0	0	0
10-Oct	2,498	0	0	0	0
11-Oct	1,400	0	0	0	0
12-Oct	1,476	0	0	0	0
13-Oct	757	0	0	0	0
14-Oct	2,044	0	0	0	0
15-Oct	3,558	0	0	0	0
16-Oct	3,634	0	31,416	0	0
17-Oct	4,391	0	0	0	0
18-Oct	2,460	0	0	0	0
19-Oct	1,703	0	0	0	0
20-Oct	530	0	0	0	0
21-Oct	2,612	0	0	0	0
22-Oct	3,709	0	0	0	0
23-Oct	2,952	0	0	0	0
24-Oct	4,315	0	0	0	0
25-Oct	2,763	0	0	0	0
26-Oct	1,211	0	0	0	0
27-Oct	1,173	0	0	0	0
28-Oct	2,233	0	0	0	0
29-Oct	3,709	0	0	0	0
30-Oct	9,103	0	0	0	0
31-Oct	2,347	0	0	0	0

DP-1132 Report: Fourth Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-Nov	3,293	0	0	0	0
2-Nov	2,343	0	0	0	0
3-Nov	1,287	0	0	0	0
4-Nov	6,699	0	0	0	0
5-Nov	7,494	0	0	0	0
6-Nov	4,845	0	46,200	0	0
7-Nov	871	0	0	0	0
8-Nov	76	0	0	0	0
9-Nov	757	0	0	0	0
10-Nov	1,249	0	0	0	0
11-Nov	1,022	0	0	0	0
12-Nov	3,747	0	0	0	0
13-Nov	2,195	0	0	0	0
14-Nov	5,072	0	0	0	0
15-Nov	6,699	0	0	0	0
16-Nov	1,400	0	0	0	0
17-Nov	1,817	0	0	0	0
18-Nov	4,315	0	0	0	0
19-Nov	3,709	0	0	0	0
20-Nov	6,094	0	45,897	0	0
21-Nov	3,142	0	0	0	0
22-Nov	2,801	0	0	0	0
23-Nov	2,877	0	0	0	0
24-Nov	2,536	0	0	0	0
25-Nov	4,958	0	0	0	0
26-Nov	3,785	0	0	0	0
27-Nov	3,785	0	0	0	0
28-Nov	1,022	0	0	0	0
29-Nov	1,400	0	0	0	0
30-Nov	984	0	0	0	0

DP-1132 Report: Fourth Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-Dec	946	0	0	0	0
2-Dec	2,763	0	0	0	0
3-Dec	4,542	0	0	0	0
4-Dec	3,331	0	0	0	0
5-Dec	4,428	0	0	0	0
6-Dec	4,618	0	0	0	0
7-Dec	4,201	0	0	0	0
8-Dec	3,861	0	0	0	0
9-Dec	7,154	0	0	0	0
10-Dec	4,693	0	0	0	0
11-Dec	2,952	0	32,275	0	0
12-Dec	3,142	0	0	0	0
13-Dec	6,397	0	0	0	0
14-Dec	1,817	0	0	0	0
15-Dec	1,438	0	0	0	0
16-Dec	2,801	0	0	0	0
17-Dec	3,823	0	0	0	0
18-Dec	4,164	0	47,112	0	0
19-Dec	4,239	0	0	0	0
20-Dec	3,142	0	0	0	0
21-Dec	2,195	0	0	0	0
22-Dec	1,893	0	0	0	0
23-Dec	2,339	0	0	0	0
24-Dec	2,877	0	0	0	0
25-Dec	1,060	0	0	0	0
26-Dec	1,287	0	0	0	0
27-Dec	984	0	0	0	0
28-Dec	961	0	0	0	0
29-Dec	1,249	0	0	0	0
30-Dec	1,136	0	0	0	0
31-Dec	1,249	0	0	0	0

Attachment 4

Treated Effluent Sampling Results

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

Attachment 4

Table 1. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 2, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339069	NPDES Outfall 051	10/02/2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	1.67	0.0415
NP051-25-339069	NPDES Outfall 051	10/02/2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	1.67	0.523
NP051-25-339069	NPDES Outfall 051	10/02/2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	0.00198
NP051-25-339068	NPDES Outfall 051	10/02/2024	Al	Aluminum	19.3	ug/L	U	N	F	2025-21	REG	EPA:200.8	19.3	5,000
NP051-25-339069	NPDES Outfall 051	10/02/2024	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	1,720
NP051-25-339068	NPDES Outfall 051	10/02/2024	Sb	Antimony	1	ug/L	U	N	F	2025-21	REG	EPA:200.8	1	6
NP051-25-339069	NPDES Outfall 051	10/02/2024	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339069	NPDES Outfall 051	10/02/2024	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2025-21	REG	SW-846:8082A	0.0333	0.5
NP051-25-339068	NPDES Outfall 051	10/02/2024	As	Arsenic	2	ug/L	U	N	F	2025-21	REG	EPA:200.8	2	10
NP051-25-339069	NPDES Outfall 051	10/02/2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	3
NP051-25-339069	NPDES Outfall 051	10/02/2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.78
NP051-25-339068	NPDES Outfall 051	10/02/2024	Ba	Barium	0.67	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.67	2,000
NP051-25-339069	NPDES Outfall 051	10/02/2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	92-87-5	Benidine	3.9	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3.9	0.00109
NP051-25-339069	NPDES Outfall 051	10/02/2024	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	0.2
NP051-25-339069	NPDES Outfall 051	10/02/2024	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	0.343
NP051-25-339069	NPDES Outfall 051	10/02/2024	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	3.432
NP051-25-339068	NPDES Outfall 051	10/02/2024	Be	Beryllium	0.2	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.2	4
NP051-25-339069	NPDES Outfall 051	10/02/2024	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	0.0693
NP051-25-339069	NPDES Outfall 051	10/02/2024	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	0.243
NP051-25-339069	NPDES Outfall 051	10/02/2024	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	0.415
NP051-25-339069	NPDES Outfall 051	10/02/2024	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.137
NP051-25-339069	NPDES Outfall 051	10/02/2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	55.6
NP051-25-339068	NPDES Outfall 051	10/02/2024	B	Boron	15.9	ug/L	J	Y	F	2025-21	REG	EPA:200.7	15	750
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	1.34
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	32.9
NP051-25-339069	NPDES Outfall 051	10/02/2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.337	7.54
NP051-25-339068	NPDES Outfall 051	10/02/2024	Cd	Cadmium	0.3	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.3	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.0765	0.448
NP051-25-339068	NPDES Outfall 051	10/02/2024	Cl(-1)	Chloride	52.2	mg/L	NQ	Y	F	2025-21	REG	EPA:300.0	0.670	250
NP051-25-339069	NPDES Outfall 051	10/02/2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	77.6
NP051-25-339069	NPDES Outfall 051	10/02/2024	67-66-3	Chloroform	5.28	ug/L	NQ	Y	UF	2025-21	REG	SW-846:8260D	0.333	100
NP051-25-339069	NPDES Outfall 051	10/02/2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	20.3
NP051-25-339068	NPDES Outfall 051	10/02/2024	Cr	Chromium	3	ug/L	U	N	F	2025-21	REG	EPA:200.8	3	50
NP051-25-339068	NPDES Outfall 051	10/02/2024	Co	Cobalt	0.3	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.3	50
NP051-25-339068	NPDES Outfall 051	10/02/2024	Cu	Copper	0.3	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.3	1,000
NP051-25-339068	NPDES Outfall 051	10/02/2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2025-21	REG	EPA:335.4	0.00167	0.2
NP051-25-339069	NPDES Outfall 051	10/02/2024	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.01	2.29
NP051-25-339069	NPDES Outfall 051	10/02/2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	0.05
NP051-25-339069	NPDES Outfall 051	10/02/2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	600
NP051-25-339069	NPDES Outfall 051	10/02/2024	106-46-7	Dichlorobenzene[3,3']	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	75
NP051-25-339069	NPDES Outfall 051	10/02/2024	91-94-1	Dichlorobenzidine[3,3']	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1.25
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.355	197
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	25
NP051-25-339069	NPDES Outfall 051	10/02/2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	7
NP051-25-339069	NPDES Outfall 051	10/02/2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	70
NP051-25-339069	NPDES Outfall 051	10/02/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	100

Attachment 4

Table 1. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 2, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339069	NPDES Outfall 051	10/02/2024	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	45.3
NP051-25-339069	NPDES Outfall 051	10/02/2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	542-75-6	Dichloropropene[cis/trans-1,3-]	0.5	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.5	4.71
NP051-25-339069	NPDES Outfall 051	10/02/2024	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.01	0.0175
NP051-25-339069	NPDES Outfall 051	10/02/2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	14,800
NP051-25-339069	NPDES Outfall 051	10/02/2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	612
NP051-25-339069	NPDES Outfall 051	10/02/2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	885
NP051-25-339069	NPDES Outfall 051	10/02/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1.52
NP051-25-339069	NPDES Outfall 051	10/02/2024	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	5	38.7
NP051-25-339069	NPDES Outfall 051	10/02/2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	2.37
NP051-25-339069	NPDES Outfall 051	10/02/2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.485
NP051-25-339069	NPDES Outfall 051	10/02/2024	123-91-1	Dioxane[1,4-]	3	ug/L	UJ	N	UF	2025-21	REG	SW-846:8270E	3	4.59
NP051-25-339069	NPDES Outfall 051	10/02/2024	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	122
NP051-25-339069	NPDES Outfall 051	10/02/2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	98.7
NP051-25-339069	NPDES Outfall 051	10/02/2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.01	98.7
NP051-25-339069	NPDES Outfall 051	10/02/2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.01	2.23
NP051-25-339069	NPDES Outfall 051	10/02/2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	700
NP051-25-339069	NPDES Outfall 051	10/02/2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	802
NP051-25-339069	NPDES Outfall 051	10/02/2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	288
NP051-25-339068	NPDES Outfall 051	10/02/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2025-21	REG	EPA:300.0	0.033	1.6
NP051-25-339069	NPDES Outfall 051	10/02/2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.00665	0.02211
NP051-25-339069	NPDES Outfall 051	10/02/2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.0976
NP051-25-339069	NPDES Outfall 051	10/02/2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1.39
NP051-25-339069	NPDES Outfall 051	10/02/2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	UJ	N	UF	2025-21	REG	SW-846:8270E	3	0.411
NP051-25-339069	NPDES Outfall 051	10/02/2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	3.28
NP051-25-339069	NPDES Outfall 051	10/02/2024	2691-41-0	HMX	0.081	ug/L	U	N	UF	2025-21	REG	SW-846:8330B	0.081	1,000
NP051-25-339068	NPDES Outfall 051	10/02/2024	Fe	Iron	30	ug/L	U	N	F	2025-21	REG	EPA:200.7	30	1,000
NP051-25-339069	NPDES Outfall 051	10/02/2024	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3.5	781
NP051-25-339068	NPDES Outfall 051	10/02/2024	Pb	Lead	0.5	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.5	15
NP051-25-339068	NPDES Outfall 051	10/02/2024	Mn	Manganese	2	ug/L	U	N	F	2025-21	REG	EPA:200.7	2	200
NP051-25-339068	NPDES Outfall 051	10/02/2024	Hg	Mercury	0.067	ug/L	J	Y	F	2025-21	REG	EPA:245.2	0.067	2
NP051-25-339069	NPDES Outfall 051	10/02/2024	Hg	Mercury	0.067	ug/L	U	N	UF	2025-21	REG	EPA:245.2	0.067	2
NP051-25-339148	NPDES Outfall 051	10/02/2024	Hg	Mercury	0.067	ug/L	U	N	UF	2025-21	FD	EPA:245.2	0.067	2
NP051-25-339069	NPDES Outfall 051	10/02/2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	100
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-09-2	Methylene Chloride	1.24	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.5	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	11.4
NP051-25-339069	NPDES Outfall 051	10/02/2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	35.1
NP051-25-339068	NPDES Outfall 051	10/02/2024	Mo	Molybdenum	0.2	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.2	1,000
NP051-25-339069	NPDES Outfall 051	10/02/2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	30
NP051-25-339068	NPDES Outfall 051	10/02/2024	Ni	Nickel	0.6	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.6	200
NP051-25-339068	NPDES Outfall 051	10/02/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.506	mg/L	NQ	Y	F	2025-21	REG	EPA:353.2	0.017	10
NP051-25-339125	NPDES Outfall 051	10/02/2024	NO2-N	Nitrite as Nitrogen	0.0658	mg/L	J	Y	F	2025-7	REG	EPA:300.0	0.033	1
NP051-25-339147	NPDES Outfall 051	10/02/2024	NO2-N	Nitrite as Nitrogen	0.062	mg/L	J	Y	F	2025-7	FD	EPA:300.0	0.033	1
NP051-25-339069	NPDES Outfall 051	10/02/2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1.4
NP051-25-339069	NPDES Outfall 051	10/02/2024	55-18-5	Nitrosodiethylamine[N-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.00167
NP051-25-339069	NPDES Outfall 051	10/02/2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.00491
NP051-25-339069	NPDES Outfall 051	10/02/2024	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.0273
NP051-25-339069	NPDES Outfall 051	10/02/2024	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	0.37
NP051-25-339069	NPDES Outfall 051	10/02/2024	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	9.81
NP051-25-339069	NPDES Outfall 051	10/02/2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	3.07
NP051-25-339069	NPDES Outfall 051	10/02/2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1
NP051-25-339069	NPDES Outfall 051	10/02/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2025-21	REG	SW-846:6850	0.05	13.8
NP051-25-339069	NPDES Outfall 051	10/02/2024	355-46-4	Perfluorohexanesulfonic acid	0.621	ng/L	U	N	UF	2025-21	REG	EPA:537M	0.621	401
NP051-25-339069	NPDES Outfall 051	10/02/2024	1763-23-1	Perfluorooctanesulfonic acid	0.752	ng/L	U	N	UF	2025-21	REG	EPA:537M	0.752	60.2

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Table 1. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 2, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339069	NPDES Outfall 051	10/02/2024	335-67-1	Perfluorooctanoic acid	0.752	ng/L	U	N	UF	2025-21	REG	EPA:537M	0.752	60.2
	NPDES Outfall 051	10/02/2024	pH	pH	7	SU								6-9
NP051-25-339069	NPDES Outfall 051	10/02/2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	170
NP051-25-339069	NPDES Outfall 051	10/02/2024	108-95-2	Phenol	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	1610-18-0	Prometon	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	250
NP051-25-339069	NPDES Outfall 051	10/02/2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	0.3	117
NP051-25-339069	NPDES Outfall 051	10/02/2024	Ra-226+228	Radium-226 and Radium-228	1.03	pCi/L	UJ	N	UF	2025-21	REG	Generic:Radium by Calculation	-	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	121-82-4	RDX	0.081	ug/L	U	N	UF	2025-21	REG	SW-846:8330B	0.081	9.66
NP051-25-339068	NPDES Outfall 051	10/02/2024	Se	Selenium	1.5	ug/L	U	N	F	2025-21	REG	EPA:200.8	1.5	50
NP051-25-339068	NPDES Outfall 051	10/02/2024	Ag	Silver	0.3	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.3	50
NP051-25-339069	NPDES Outfall 051	10/02/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	100
NP051-25-339068	NPDES Outfall 051	10/02/2024	504(-2)	Sulfate	0.35	mg/L	J	Y	F	2025-21	REG	EPA:300.0	0.133	600
NP051-25-339069	NPDES Outfall 051	10/02/2024	126-33-0	Sulfolane	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	20
NP051-25-339069	NPDES Outfall 051	10/02/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1.66
NP051-25-339069	NPDES Outfall 051	10/02/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	10
NP051-25-339069	NPDES Outfall 051	10/02/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339068	NPDES Outfall 051	10/02/2024	TI	Thallium	0.6	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.6	2
NP051-25-339069	NPDES Outfall 051	10/02/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	1,000
NP051-25-339068	NPDES Outfall 051	10/02/2024	TDS	Total Dissolved Solids	140	mg/L	J	Y	F	2025-21	REG	EPA:160.1	2.38	1,000
NP051-25-339068	NPDES Outfall 051	10/02/2024	TKN	Total Kjeldahl Nitrogen	2.65	mg/L	NQ	Y	F	2025-21	REG	EPA:351.2	0.033	15
NP051-25-339069	NPDES Outfall 051	10/02/2024	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2025-21	REG	SW-846:8081B	0.15	0.158
NP051-25-339069	NPDES Outfall 051	10/02/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	70
NP051-25-339069	NPDES Outfall 051	10/02/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	200
NP051-25-339069	NPDES Outfall 051	10/02/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	5
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	1,140
NP051-25-339069	NPDES Outfall 051	10/02/2024	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	1,170
NP051-25-339069	NPDES Outfall 051	10/02/2024	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2025-21	REG	SW-846:8270E	3	11.9
NP051-25-339069	NPDES Outfall 051	10/02/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.081	ug/L	U	N	UF	2025-21	REG	SW-846:8330B	0.081	9.8
NP051-25-339068	NPDES Outfall 051	10/02/2024	U	Uranium	0.067	ug/L	U	N	F	2025-21	REG	EPA:200.8	0.067	30
NP051-25-339069	NPDES Outfall 051	10/02/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	2
NP051-25-339069	NPDES Outfall 051	10/02/2024	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	1	620
NP051-25-339069	NPDES Outfall 051	10/02/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.333	193
NP051-25-339069	NPDES Outfall 051	10/02/2024	Xylene(m+p)	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2025-21	REG	SW-846:8260D	0.5	386
NP051-25-339068	NPDES Outfall 051	10/02/2024	Zn	Zinc	3.3	ug/L	U	N	F	2025-21	REG	EPA:200.7	3.3	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

Attachment 4

Table 1. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 2, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purposes	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
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⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit;The DP-1132 standard for Total Nitrogen is 15 mg/L (Condition No. 16)
Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 6 and 20, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339070	NPDES Outfall 051	11/06/2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	1.67	0.0415
NP051-25-339070	NPDES Outfall 051	11/06/2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	1.67	0.523
NP051-25-339070	NPDES Outfall 051	11/06/2024	309-00-2	Aldrin	0.00668	ug/L	J	Y	UF	2025-99	REG	SW-846:8081B	0.00665	0.00198
NP051-25-344796	NPDES Outfall 051	11/20/2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2025-199	REG	SW-846:8081B	0.00665	0.00198
NP051-25-339071	NPDES Outfall 051	11/06/2024	Al	Aluminum	19.3	ug/L	U	N	F	2025-99	REG	EPA:200.8	19.3	5,000
NP051-25-339070	NPDES Outfall 051	11/06/2024	120-12-7	Anthracene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	1,720
NP051-25-339071	NPDES Outfall 051	11/06/2024	Sb	Antimony	1.00	ug/L	U	N	F	2025-99	REG	EPA:200.8	1.00	6
NP051-25-339070	NPDES Outfall 051	11/06/2024	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339070	NPDES Outfall 051	11/06/2024	Tot Aroclor	Total Aroclors for sum of all aroclors	0.0333	ug/L	U	N	UF	2025-99	REG	SW-846:8082A	0.0333	0.5
NP051-25-339071	NPDES Outfall 051	11/06/2024	As	Arsenic	2.00	ug/L	U	N	F	2025-99	REG	EPA:200.8	2.00	10
NP051-25-339070	NPDES Outfall 051	11/06/2024	1912-24-9	Atrazine	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	3
NP051-25-339070	NPDES Outfall 051	11/06/2024	103-33-3	Azobenzene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.78
NP051-25-339071	NPDES Outfall 051	11/06/2024	Ba	Barium	0.670	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.670	2,000
NP051-25-339070	NPDES Outfall 051	11/06/2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	92-87-5	Benztidine	4.23	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	4.23	0.00109
NP051-25-339070	NPDES Outfall 051	11/06/2024	50-32-8	Benzo(a)pyrene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	0.2
NP051-25-339070	NPDES Outfall 051	11/06/2024	205-99-2	Benzo(b)fluoranthene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	0.343
NP051-25-339070	NPDES Outfall 051	11/06/2024	207-08-9	Benzo(k)fluoranthene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	3.432
NP051-25-339071	NPDES Outfall 051	11/06/2024	Be	Beryllium	0.200	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.200	4
NP051-25-339070	NPDES Outfall 051	11/06/2024	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.00665	0.0693
NP051-25-339070	NPDES Outfall 051	11/06/2024	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.00665	0.243
NP051-25-339070	NPDES Outfall 051	11/06/2024	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.00665	0.415
NP051-25-339070	NPDES Outfall 051	11/06/2024	111-44-4	Bis(2-chloroethyl)ether	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.137
NP051-25-339070	NPDES Outfall 051	11/06/2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	55.6
NP051-25-339071	NPDES Outfall 051	11/06/2024	B	Boron	22.0	ug/L	J	Y	F	2025-99	REG	EPA:200.7	15.0	750
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	1.34
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	32.9
NP051-25-339070	NPDES Outfall 051	11/06/2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.337	7.54
NP051-25-339071	NPDES Outfall 051	11/06/2024	Cd	Cadmium	0.300	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.300	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.0765	0.448
NP051-25-339071	NPDES Outfall 051	11/06/2024	Cl(-1)	Chloride	52.1	mg/L	NQ	Y	F	2025-99	REG	EPA:300.0	0.670	250
NP051-25-339070	NPDES Outfall 051	11/06/2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	77.6
NP051-25-339070	NPDES Outfall 051	11/06/2024	67-66-3	Chloroform	8.85	ug/L	NQ	Y	UF	2025-99	REG	SW-846:8260D	0.333	100
NP051-25-339070	NPDES Outfall 051	11/06/2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	20.3
NP051-25-339071	NPDES Outfall 051	11/06/2024	Cr	Chromium	3.00	ug/L	U	N	F	2025-99	REG	EPA:200.8	3.00	50
NP051-25-339071	NPDES Outfall 051	11/06/2024	Co	Cobalt	0.300	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.300	50
NP051-25-339071	NPDES Outfall 051	11/06/2024	Cu	Copper	0.300	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.300	1,000
NP051-25-339071	NPDES Outfall 051	11/06/2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	F	2025-99	REG	EPA:335.4	0.00167	0.2
NP051-25-339070	NPDES Outfall 051	11/06/2024	50-29-3	DDT[4,4'-]	0.0100	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.0100	2.29
NP051-25-339070	NPDES Outfall 051	11/06/2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	600
NP051-25-339070	NPDES Outfall 051	11/06/2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	600
NP051-25-339070	NPDES Outfall 051	11/06/2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	75
NP051-25-339070	NPDES Outfall 051	11/06/2024	91-94-1	Dichlorobenzidine[3,3'-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1.25
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.355	197
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	25
NP051-25-339070	NPDES Outfall 051	11/06/2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	7

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 6 and 20, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339070	NPDES Outfall 051	11/06/2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	70
NP051-25-339070	NPDES Outfall 051	11/06/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	100
NP051-25-339070	NPDES Outfall 051	11/06/2024	120-83-2	Dichlorophenol[2,4-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	45.3
NP051-25-339070	NPDES Outfall 051	11/06/2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	542-75-6	Dichloropropene[cis/trans-1,3-]	0.500	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.500	4.71
NP051-25-339070	NPDES Outfall 051	11/06/2024	60-57-1	Dieldrin	0.0106	ug/L	J	Y	UF	2025-99	REG	SW-846:8081B	0.0100	0.0175
NP051-25-339070	NPDES Outfall 051	11/06/2024	84-66-2	Diethylphthalate	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	14,800
NP051-25-339070	NPDES Outfall 051	11/06/2024	131-11-3	Dimethyl Phthalate	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	612
NP051-25-339070	NPDES Outfall 051	11/06/2024	84-74-2	Di-n-butylphthalate	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	885
NP051-25-339070	NPDES Outfall 051	11/06/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1.52
NP051-25-339070	NPDES Outfall 051	11/06/2024	51-28-5	Dinitrophenol[2,4-]	5.43	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	5.43	38.7
NP051-25-339070	NPDES Outfall 051	11/06/2024	121-14-2	Dinitrotoluene[2,4-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	2.37
NP051-25-339070	NPDES Outfall 051	11/06/2024	606-20-2	Dinitrotoluene[2,6-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.485
NP051-25-339070	NPDES Outfall 051	11/06/2024	123-91-1	Dioxane[1,4-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	4.59
NP051-25-339070	NPDES Outfall 051	11/06/2024	122-39-4	Diphenylamine	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	122
NP051-25-339070	NPDES Outfall 051	11/06/2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.00665	98.7
NP051-25-339070	NPDES Outfall 051	11/06/2024	33213-65-9	Endosulfan II	0.0113	ug/L	J	Y	UF	2025-99	REG	SW-846:8081B	0.0100	98.7
NP051-25-339070	NPDES Outfall 051	11/06/2024	72-20-8	Endrin	0.0108	ug/L	J	Y	UF	2025-99	REG	SW-846:8081B	0.0100	2.23
NP051-25-339070	NPDES Outfall 051	11/06/2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	700
NP051-25-339070	NPDES Outfall 051	11/06/2024	206-44-0	Fluoranthene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	802
NP051-25-339070	NPDES Outfall 051	11/06/2024	86-73-7	Fluorene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	288
NP051-25-339071	NPDES Outfall 051	11/06/2024	Fi-1)	Fluoride	0.0330	mg/L	U	N	F	2025-99	REG	EPA:300.0	0.0330	1.6
NP051-25-339070	NPDES Outfall 051	11/06/2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.00665	0.02211
NP051-25-339070	NPDES Outfall 051	11/06/2024	118-74-1	Hexachlorobenzene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.0976
NP051-25-339070	NPDES Outfall 051	11/06/2024	87-68-3	Hexachlorobutadiene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1.39
NP051-25-339070	NPDES Outfall 051	11/06/2024	77-47-4	Hexachlorocyclopentadiene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.411
NP051-25-339070	NPDES Outfall 051	11/06/2024	67-72-1	Hexachloroethane	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	3.28
NP051-25-339070	NPDES Outfall 051	11/06/2024	2691-41-0	HMX	0.320	ug/L	U	N	UF	2025-99	REG	SW-846:8330B	0.320	1,000
NP051-25-339071	NPDES Outfall 051	11/06/2024	Fe	Iron	30.0	ug/L	U	N	F	2025-99	REG	EPA:200.7	30.0	1,000
NP051-25-339070	NPDES Outfall 051	11/06/2024	78-59-1	Isophorone	3.80	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.80	781
NP051-25-339071	NPDES Outfall 051	11/06/2024	Pb	Lead	0.500	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.500	15
NP051-25-339071	NPDES Outfall 051	11/06/2024	Mn	Manganese	2.00	ug/L	U	N	F	2025-99	REG	EPA:200.7	2.00	200
NP051-25-339070	NPDES Outfall 051	11/06/2024	Hg	Mercury	0.0670	ug/L	U	N	UF	2025-99	REG	EPA:245.2	0.0670	2
NP051-25-339071	NPDES Outfall 051	11/06/2024	Hg	Mercury	0.117	ug/L	J	Y	F	2025-99	REG	EPA:245.2	0.0670	2
NP051-25-339149	NPDES Outfall 051	11/06/2024	Hg	Mercury	0.125	ug/L	J	Y	UF	2025-99	FD	EPA:245.2	0.0670	2
NP051-25-339070	NPDES Outfall 051	11/06/2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	100
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-09-2	Methylene Chloride	0.530	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.500	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	90-12-0	Methylnaphthalene[1-]	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	11.4
NP051-25-339070	NPDES Outfall 051	11/06/2024	91-57-6	Methylnaphthalene[2-]	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	35.1
NP051-25-339071	NPDES Outfall 051	11/06/2024	Mo	Molybdenum	0.200	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.200	1,000
NP051-25-339070	NPDES Outfall 051	11/06/2024	91-20-3	Naphthalene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	30
NP051-25-339071	NPDES Outfall 051	11/06/2024	Ni	Nickel	0.600	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.600	200
NP051-25-339071	NPDES Outfall 051	11/06/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.629	mg/L	NQ	Y	F	2025-99	REG	EPA:353.2	0.0170	10
NP051-25-339126	NPDES Outfall 051	11/06/2024	NO2-N	Nitrite as Nitrogen	0.0960	mg/L	J-	Y	F	2025-99	REG	EPA:300.0	0.0330	1
NP051-25-339150	NPDES Outfall 051	11/06/2024	NO2-N	Nitrite as Nitrogen	0.0960	mg/L	J-	Y	F	2025-99	FD	EPA:300.0	0.0330	1
NP051-25-339070	NPDES Outfall 051	11/06/2024	98-95-3	Nitrobenzene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1.4
NP051-25-339070	NPDES Outfall 051	11/06/2024	55-18-5	Nitrosodiethylamine[N-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.00167
NP051-25-339070	NPDES Outfall 051	11/06/2024	62-75-9	Nitrosodimethylamine[N-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.00491
NP051-25-339070	NPDES Outfall 051	11/06/2024	924-16-3	Nitroso-di-n-butylamine[N-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.0273
NP051-25-339070	NPDES Outfall 051	11/06/2024	930-55-2	Nitrosopyrrolidine[N-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	0.37
NP051-25-339070	NPDES Outfall 051	11/06/2024	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	9.81
NP051-25-339070	NPDES Outfall 051	11/06/2024	608-93-5	Pentachlorobenzene	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	3.07
NP051-25-339070	NPDES Outfall 051	11/06/2024	87-86-5	Pentachlorophenol	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1
NP051-25-339070	NPDES Outfall 051	11/06/2024	ClO4	Perchlorate	0.0500	ug/L	U	N	UF	2025-99	REG	SW-846:6850	0.0500	13.8

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 6 and 20, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-25-339070	NPDES Outfall 051	11/06/2024	355-46-4	Perfluorohexanesulfonic acid	0.607	ng/L	U	N	UF	2025-99	REG	EPA:537M	0.607	401
NP051-25-339070	NPDES Outfall 051	11/06/2024	1763-23-1	Perfluorooctanesulfonic acid	0.735	ng/L	U	N	UF	2025-99	REG	EPA:537M	0.735	60.2
NP051-25-339070	NPDES Outfall 051	11/06/2024	335-67-1	Perfluorooctanoic acid	0.735	ng/L	U	N	UF	2025-99	REG	EPA:537M	0.735	60.2
	NPDES Outfall 051	11/06/2024	pH	pH	7.4	SU								6-9
NP051-25-339070	NPDES Outfall 051	11/06/2024	85-01-8	Phenanthrene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	170
NP051-25-339070	NPDES Outfall 051	11/06/2024	108-95-2	Phenol	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	1610-18-0	Prometon	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	250
NP051-25-339070	NPDES Outfall 051	11/06/2024	129-00-0	Pyrene	0.326	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	0.326	117
NP051-25-339070	NPDES Outfall 051	11/06/2024	Ra-226+228	Radium-226 and Radium-228	1.10	pCi/L	UJ	N	UF	2025-99	REG	Generic:Radium by Calculation	-	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	121-82-4	RDX	0.320	ug/L	U	N	UF	2025-99	REG	SW-846:8330B	0.320	9.66
NP051-25-339071	NPDES Outfall 051	11/06/2024	Se	Selenium	1.50	ug/L	U	N	F	2025-99	REG	EPA:200.8	1.50	50
NP051-25-339071	NPDES Outfall 051	11/06/2024	Ag	Silver	0.300	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.300	50
NP051-25-339070	NPDES Outfall 051	11/06/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	100
NP051-25-339071	NPDES Outfall 051	11/06/2024	SO4(-2)	Sulfate	0.356	mg/L	J	Y	F	2025-99	REG	EPA:300.0	0.133	600
NP051-25-339070	NPDES Outfall 051	11/06/2024	126-33-0	Sulfolane	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	20
NP051-25-339070	NPDES Outfall 051	11/06/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1.66
NP051-25-339070	NPDES Outfall 051	11/06/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	10
NP051-25-339070	NPDES Outfall 051	11/06/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339071	NPDES Outfall 051	11/06/2024	TI	Thallium	0.600	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.600	2
NP051-25-339070	NPDES Outfall 051	11/06/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	1,000
NP051-25-339071	NPDES Outfall 051	11/06/2024	TDS	Total Dissolved Solids	150	mg/L	J	Y	F	2025-99	REG	EPA:160.1	2.38	1,000
NP051-25-339071	NPDES Outfall 051	11/06/2024	TKN	Total Kjeldahl Nitrogen	3.97	mg/L	J-	Y	F	2025-99	REG	EPA:351.2	0.132	15
NP051-25-339070	NPDES Outfall 051	11/06/2024	8001-35-2	Toxaphene (Technical Grade)	0.150	ug/L	U	N	UF	2025-99	REG	SW-846:8081B	0.150	0.158
NP051-25-339070	NPDES Outfall 051	11/06/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	70
NP051-25-339070	NPDES Outfall 051	11/06/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	200
NP051-25-339070	NPDES Outfall 051	11/06/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	5
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	1,140
NP051-25-339070	NPDES Outfall 051	11/06/2024	95-95-4	Trichlorophenol[2,4,5-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	1,170
NP051-25-339070	NPDES Outfall 051	11/06/2024	88-06-2	Trichlorophenol[2,4,6-]	3.26	ug/L	U	N	UF	2025-99	REG	SW-846:8270E	3.26	11.9
NP051-25-339070	NPDES Outfall 051	11/06/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.320	ug/L	U	N	UF	2025-99	REG	SW-846:8330B	0.320	9.8
NP051-25-339071	NPDES Outfall 051	11/06/2024	U	Uranium	0.0670	ug/L	U	N	F	2025-99	REG	EPA:200.8	0.0670	30
NP051-25-339070	NPDES Outfall 051	11/06/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	2
NP051-25-339070	NPDES Outfall 051	11/06/2024	1330-20-7	Xylene (Total)	1.00	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	1.00	620
NP051-25-339070	NPDES Outfall 051	11/06/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.333	193
NP051-25-339070	NPDES Outfall 051	11/06/2024	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.500	ug/L	U	N	UF	2025-99	REG	SW-846:8260D	0.500	386
NP051-25-339071	NPDES Outfall 051	11/06/2024	Zn	Zinc	3.30	ug/L	U	N	F	2025-99	REG	EPA:200.7	3.30	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

J- - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 6 and 20, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
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⁵REG - In the Sample Purpose column means the sample was a regular sample
FD - In the Sample Purpose column means the sample was a field duplicate
⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated
⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit; The DP-1132 standard for Total Nitrogen is 15 mg/L (Condition No. 16)
Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 11, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier	Detected	Field Preparation Code	COC #	Sample Purpose	Lab Method	Report Method Detection Limit	Groundwater Limit
NP051-25-339073	NPDES Outfall 051	12/11/2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	1.67	0.0415
NP051-25-339073	NPDES Outfall 051	12/11/2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	1.67	0.523
NP051-25-339073	NPDES Outfall 051	12/11/2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	0.00198
NP051-25-339072	NPDES Outfall 051	12/11/2024	Al	Aluminum	19.3	ug/L	U	N	F	2025-253	REG	EPA:200.8	19.3	5,000
NP051-25-339073	NPDES Outfall 051	12/11/2024	120-12-7	Anthracene	0.300	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	1,720
NP051-25-339072	NPDES Outfall 051	12/11/2024	Sb	Antimony	1	ug/L	U	N	F	2025-253	REG	EPA:200.8	1	6
NP051-25-339073	NPDES Outfall 051	12/11/2024	12674-11-2	Aroclor-1016	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	11104-28-2	Aroclor-1221	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	11141-16-5	Aroclor-1232	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	53469-21-9	Aroclor-1242	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	12672-29-6	Aroclor-1248	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	11097-69-1	Aroclor-1254	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	11096-82-5	Aroclor-1260	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339073	NPDES Outfall 051	12/11/2024	Tot Aroclor	Total Aroclors for sum of all aroclors	0.0348	ug/L	U	N	UF	2025-253	REG	SW-846:8082A	0.0348	.5
NP051-25-339072	NPDES Outfall 051	12/11/2024	As	Arsenic	2	ug/L	U	N	F	2025-253	REG	EPA:200.8	2	10
NP051-25-339073	NPDES Outfall 051	12/11/2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	3
NP051-25-339073	NPDES Outfall 051	12/11/2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.78
NP051-25-339072	NPDES Outfall 051	12/11/2024	Ba	Barium	0.67	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.67	2,000
NP051-25-339073	NPDES Outfall 051	12/11/2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3.9	0.00109
NP051-25-339073	NPDES Outfall 051	12/11/2024	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	0.2
NP051-25-339073	NPDES Outfall 051	12/11/2024	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	0.343
NP051-25-339073	NPDES Outfall 051	12/11/2024	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	3.432
NP051-25-339072	NPDES Outfall 051	12/11/2024	Be	Beryllium	0.2	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.2	4
NP051-25-339073	NPDES Outfall 051	12/11/2024	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	0.0693
NP051-25-339073	NPDES Outfall 051	12/11/2024	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	0.243
NP051-25-339073	NPDES Outfall 051	12/11/2024	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	0.415
NP051-25-339073	NPDES Outfall 051	12/11/2024	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.137
NP051-25-339073	NPDES Outfall 051	12/11/2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.300	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	55.6
NP051-25-339072	NPDES Outfall 051	12/11/2024	B	Boron	120	ug/L	NQ	Y	F	2025-253	REG	EPA:200.7	15	750
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	1.34
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	32.9
NP051-25-339073	NPDES Outfall 051	12/11/2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.337	7.54
NP051-25-339072	NPDES Outfall 051	12/11/2024	Cd	Cadmium	0.3	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.3	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.0765	0.448
NP051-25-339072	NPDES Outfall 051	12/11/2024	Cl(-1)	Chloride	54.6	mg/L	J+	Y	F	2025-253	REG	EPA:300.0	0.67	250
NP051-25-339073	NPDES Outfall 051	12/11/2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	77.6
NP051-25-339073	NPDES Outfall 051	12/11/2024	67-66-3	Chloroform	3.22	ug/L	NQ	Y	UF	2025-253	REG	SW-846:8260D	0.333	100
NP051-25-339073	NPDES Outfall 051	12/11/2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	20.3
NP051-25-339072	NPDES Outfall 051	12/11/2024	Cr	Chromium	3	ug/L	U	N	F	2025-253	REG	EPA:200.8	3	50
NP051-25-339072	NPDES Outfall 051	12/11/2024	Co	Cobalt	0.3	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.3	50
NP051-25-339072	NPDES Outfall 051	12/11/2024	Cu	Copper	0.3	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.3	1,000
NP051-25-339072	NPDES Outfall 051	12/11/2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2025-253	REG	EPA:335.4	0.00167	.2
NP051-25-339073	NPDES Outfall 051	12/11/2024	50-29-3	DDT[4,4'-]	0.01	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.01	2.29
NP051-25-339073	NPDES Outfall 051	12/11/2024	106-93-4	Dibromomethane[1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	600
NP051-25-339073	NPDES Outfall 051	12/11/2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	600
NP051-25-339073	NPDES Outfall 051	12/11/2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	75
NP051-25-339073	NPDES Outfall 051	12/11/2024	91-94-1	Dichlorodibenzidine[3,3'-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1.25
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.355	197
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	25

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 11, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier	Detected	Field Preparation Code	COC #	Sample Purpose	Lab Method	Report Method Detection Limit	Groundwater Limit
NP051-25-339073	NPDES Outfall 051	12/11/2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	7
NP051-25-339073	NPDES Outfall 051	12/11/2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	70
NP051-25-339073	NPDES Outfall 051	12/11/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	100
NP051-25-339073	NPDES Outfall 051	12/11/2024	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	45.3
NP051-25-339073	NPDES Outfall 051	12/11/2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	542-75-6	Dichloropropene[cis/trans-1,3-]	0.5	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.5	4.71
NP051-25-339073	NPDES Outfall 051	12/11/2024	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.01	0.0175
NP051-25-339073	NPDES Outfall 051	12/11/2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	14,800
NP051-25-339073	NPDES Outfall 051	12/11/2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	612
NP051-25-339073	NPDES Outfall 051	12/11/2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	885
NP051-25-339073	NPDES Outfall 051	12/11/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1.52
NP051-25-339073	NPDES Outfall 051	12/11/2024	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	5	38.7
NP051-25-339073	NPDES Outfall 051	12/11/2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	2.37
NP051-25-339073	NPDES Outfall 051	12/11/2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.485
NP051-25-339073	NPDES Outfall 051	12/11/2024	123-91-1	Dioxane[1,4-]	4.11	ug/L	J	Y	UF	2025-253	REG	SW-846:8270E	3	4.59
NP051-25-339073	NPDES Outfall 051	12/11/2024	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	122
NP051-25-339073	NPDES Outfall 051	12/11/2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	98.7
NP051-25-339073	NPDES Outfall 051	12/11/2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.01	98.7
NP051-25-339073	NPDES Outfall 051	12/11/2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.01	2.23
NP051-25-339073	NPDES Outfall 051	12/11/2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	700
NP051-25-339073	NPDES Outfall 051	12/11/2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	802
NP051-25-339073	NPDES Outfall 051	12/11/2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	288
NP051-25-339072	NPDES Outfall 051	12/11/2024	FI-1	Fluoride	0.0330	mg/L	U	N	F	2025-253	REG	EPA:300.0	0.033	1.6
NP051-25-339073	NPDES Outfall 051	12/11/2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.00665	0.02211
NP051-25-339073	NPDES Outfall 051	12/11/2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.0976
NP051-25-339073	NPDES Outfall 051	12/11/2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1.39
NP051-25-339073	NPDES Outfall 051	12/11/2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.411
NP051-25-339073	NPDES Outfall 051	12/11/2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	3.28
NP051-25-339073	NPDES Outfall 051	12/11/2024	2691-41-0	HMX	0.0817	ug/L	U	N	UF	2025-253	REG	SW-846:8330B	0.0817	1,000
NP051-25-339072	NPDES Outfall 051	12/11/2024	Fe	Iron	30	ug/L	U	N	F	2025-253	REG	EPA:200.7	30	1,000
NP051-25-339073	NPDES Outfall 051	12/11/2024	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3.5	781
NP051-25-339072	NPDES Outfall 051	12/11/2024	Pb	Lead	0.5	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.5	15
NP051-25-339072	NPDES Outfall 051	12/11/2024	Mn	Manganese	2	ug/L	U	N	F	2025-253	REG	EPA:200.7	2	200
NP051-25-339072	NPDES Outfall 051	12/11/2024	Hg	Mercury	0.067	ug/L	U	N	F	2025-253	REG	EPA:245.2	0.067	2
NP051-25-339073	NPDES Outfall 051	12/11/2024	Hg	Mercury	0.067	ug/L	U	N	UF	2025-253	REG	EPA:245.2	0.067	2
NP051-25-339156	NPDES Outfall 051	12/11/2024	Hg	Mercury	0.067	ug/L	U	N	UF	2025-253	FD	EPA:245.2	0.067	2
NP051-25-339073	NPDES Outfall 051	12/11/2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	100
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.5	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	11.4
NP051-25-339073	NPDES Outfall 051	12/11/2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	35.1
NP051-25-339072	NPDES Outfall 051	12/11/2024	Mo	Molybdenum	0.2	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.2	1,000
NP051-25-339073	NPDES Outfall 051	12/11/2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	30
NP051-25-339072	NPDES Outfall 051	12/11/2024	Ni	Nickel	0.6	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.6	200
NP051-25-339072	NPDES Outfall 051	12/11/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.76	mg/L	NQ	Y	F	2025-253	REG	EPA:353.2	0.085	10
NP051-25-339127	NPDES Outfall 051	12/11/2024	NO2-N	Nitrite as Nitrogen	0.147	mg/L	NQ	Y	F	2025-245	REG	EPA:300.0	0.033	1
NP051-25-339155	NPDES Outfall 051	12/11/2024	NO2-N	Nitrite as Nitrogen	0.148	mg/L	NQ	Y	F	2025-245	FD	EPA:300.0	0.033	1
NP051-25-339073	NPDES Outfall 051	12/11/2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1.4
NP051-25-339073	NPDES Outfall 051	12/11/2024	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.00167
NP051-25-339073	NPDES Outfall 051	12/11/2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.00491
NP051-25-339073	NPDES Outfall 051	12/11/2024	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.0273
NP051-25-339073	NPDES Outfall 051	12/11/2024	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	0.37

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Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 11, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier	Detected	Field Preparation Code	COC #	Sample Purpose	Lab Method	Report Method Detection Limit	Groundwater Limit
NP051-25-339073	NPDES Outfall 051	12/11/2024	108-60-1	Oxybis[1-chloropropane][2,2']	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	9.81
NP051-25-339073	NPDES Outfall 051	12/11/2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	3.07
NP051-25-339073	NPDES Outfall 051	12/11/2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1
NP051-25-339073	NPDES Outfall 051	12/11/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2025-253	REG	SW-846:6850	0.05	13.8
NP051-25-339073	NPDES Outfall 051	12/11/2024	355-46-4	Perfluorohexanesulfonic acid	0.599	ng/L	U	N	UF	2025-253	REG	EPA:537M	0.599	401
NP051-25-339073	NPDES Outfall 051	12/11/2024	1763-23-1	Perfluorooctanesulfonic acid	0.726	ng/L	U	N	UF	2025-253	REG	EPA:537M	0.726	60.2
NP051-25-339073	NPDES Outfall 051	12/11/2024	335-67-1	Perfluorooctanoic acid	0.726	ng/L	U	N	UF	2025-253	REG	EPA:537M	0.726	60.2
	NPDES Outfall 051	12/11/2024	pH	pH	7.1	SU								6-9
NP051-25-339073	NPDES Outfall 051	12/11/2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	170
NP051-25-339073	NPDES Outfall 051	12/11/2024	108-95-2	Phenol	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	1610-18-0	Prometon	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	250
NP051-25-339073	NPDES Outfall 051	12/11/2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	0.3	117
NP051-25-339073	NPDES Outfall 051	12/11/2024	Ra-226+228	Radium-226 and Radium-228	1.26	pCi/L	U	N	UF	2025-253	REG	Generic:Radium by Calculation	-	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	RDX	RDX	0.0817	ug/L	U	N	UF	2025-253	REG	SW-846:8330B	0.0817	9.66
NP051-25-339072	NPDES Outfall 051	12/11/2024	Se	Selenium	1.5	ug/L	U	N	F	2025-253	REG	EPA:200.8	1.5	50
NP051-25-339072	NPDES Outfall 051	12/11/2024	Ag	Silver	0.3	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.3	50
NP051-25-339073	NPDES Outfall 051	12/11/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	100
NP051-25-339072	NPDES Outfall 051	12/11/2024	SO4(-2)	Sulfate	0.384	mg/L	J	Y	F	2025-253	REG	EPA:300.0	0.133	600
NP051-25-339073	NPDES Outfall 051	12/11/2024	126-33-0	Sulfolane	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	20
NP051-25-339073	NPDES Outfall 051	12/11/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1.66
NP051-25-339073	NPDES Outfall 051	12/11/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	10
NP051-25-339073	NPDES Outfall 051	12/11/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339072	NPDES Outfall 051	12/11/2024	TI	Thallium	0.6	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.6	2
NP051-25-339073	NPDES Outfall 051	12/11/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	1,000
NP051-25-339072	NPDES Outfall 051	12/11/2024	TDS	Total Dissolved Solids	710	mg/L	J	Y	F	2025-253	REG	EPA:160.1	2.38	1,000
NP051-25-339072	NPDES Outfall 051	12/11/2024	TKN	Total Kjeldahl Nitrogen	2.34	mg/L	NQ	Y	F	2025-253	REG	EPA:351.2	0.165	15
NP051-25-339073	NPDES Outfall 051	12/11/2024	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2025-253	REG	SW-846:8081B	0.15	0.158
NP051-25-339073	NPDES Outfall 051	12/11/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	70
NP051-25-339073	NPDES Outfall 051	12/11/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	200
NP051-25-339073	NPDES Outfall 051	12/11/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	5
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	1,140
NP051-25-339073	NPDES Outfall 051	12/11/2024	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	1,170
NP051-25-339073	NPDES Outfall 051	12/11/2024	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2025-253	REG	SW-846:8270E	3	11.9
NP051-25-339073	NPDES Outfall 051	12/11/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0817	ug/L	U	N	UF	2025-253	REG	SW-846:8330B	0.0817	9.8
NP051-25-339072	NPDES Outfall 051	12/11/2024	U	Uranium	0.067	ug/L	U	N	F	2025-253	REG	EPA:200.8	0.067	30
NP051-25-339073	NPDES Outfall 051	12/11/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	2
NP051-25-339073	NPDES Outfall 051	12/11/2024	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	1	620
NP051-25-339073	NPDES Outfall 051	12/11/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.333	193
NP051-25-339073	NPDES Outfall 051	12/11/2024	Xylene(m+p)	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2025-253	REG	SW-846:8260D	0.5	386
NP051-25-339072	NPDES Outfall 051	12/11/2024	Zn	Zinc	3.3	ug/L	U	N	F	2025-253	REG	EPA:200.7	3.3	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 11, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier	Detected	Field Preparation Code	COC #	Sample Purpose	Lab Method	Report Method Detection Limit	Groundwater Limit
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UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit; The DP-1132 standard for Total Nitrogen is 15 mg/L (Condition No. 16)

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Attachment 5

Groundwater Monitoring Report - Fourth Quarter 2024 and Annual Reporting

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

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MCA-RLW-1, Fourth Quarter 2024

a	Sample Date	10/30/2024
b	Sample Time	0934
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCA-RLW-1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,864.4
g	Total depth of the well (ft below ground surface (bgs))	22.2
h	Total volume of water in the monitoring well prior to sample collection (gal)	N/A
i	Total volume of water purged prior to sample collection (gal)	N/A
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): N/A Oxidation/Reduction Potential (MV): N/A Temp (deg C): N/A pH (SU): N/A Turbidity (NTU): N/A Specific Conductance (μ S/cm): N/A
k	Description of sample methods	N/A
l	Chain-of-Custody	N/A
m	Location Map	Attachment 6
	Analytical Results	N/A

Notes:

N/A – Not applicable. Well was not sampled when visited on October, 30 2024, due to insufficient water in the well. The well only contained 0.13 ft of standing water.

MCA-RLW-2, Fourth Quarter 2024

a	Sample Date	10/30/2024
b	Sample Time	0946
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCA-RLW-2
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,806.
g	Total depth of the well (ft below ground surface (bgs))	40.4
h	Total volume of water in the monitoring well prior to sample collection (gal)	N/A
i	Total volume of water purged prior to sample collection (gal)	N/A
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): N/A Oxidation/Reduction Potential (MV): N/A Temp (deg C): N/A pH (SU): N/A Turbidity (NTU): N/A Specific Conductance (μ S/cm): N/A
k	Description of sample methods	N/A
l	Chain-of-Custody	N/A
m	Location Map	Attachment 6
	Analytical Results	N/A

Notes:

N/A – Not applicable. Well was not sampled when visited on October 30, 2024, due to insufficient water in the well. The well only contained 0.26 ft of standing water.

MCOI-6, Fourth Quarter 2024

a	Sample Date	11/12/2024
b	Sample Time	1107
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,138.98
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	29.22
i	Total volume of water purged prior to sample collection (gal)	132.2
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.43 Oxidation/Reduction Potential (MV): 142.6 Temp (deg C): 16.7 pH (SU): 7.42 Turbidity (NTU): 2.37 Specific Conductance (μS/cm): 514
k	Description of sample methods	Attachment 5 Page 21
l	Chain-of-Custody	Attachment 5 Page 21
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 1

Attachment 5

Table 1. Analytical Results from Quarterly Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 on November 12, 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit	Groundwater Limit ⁶
CAMO-25-340787	MCOI-6	11-12-2024	Cl(-1)	Chloride	43.9	mg/L	NQ	Y	F	N3B-2025-405	REG	SW-846:9056A	0.67	250
CAMO-25-340787	MCOI-6	11-12-2024	F(-1)	Fluoride	0.52	mg/L	NQ	Y	F	N3B-2025-405	REG	SW-846:9056A	0.033	1.6
CAMO-25-340787	MCOI-6	11-12-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	15	mg/L	NQ	Y	F	N3B-2025-405	REG	EPA:353.2	0.17	10
CAMO-25-340787	MCOI-6	11-12-2024	ClO4	Perchlorate	130	ug/L	NQ	Y	F	N3B-2025-405	REG	SW-846:6850	5	13.8
CAMO-25-340787	MCOI-6	11-12-2024	TDS	Total Dissolved Solids	402	mg/L	NQ	Y	F	N3B-2025-405	REG	EPA:160.1	2.38	1,000
CAMO-25-340786	MCOI-6	11-12-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N3B-2025-405	REG	EPA:351.2	0.033	-

Notes:

¹mg/L - milligrams per liter.

ug/L - micrograms per liter.

²NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected.

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

³Y - In the detected column means the analyte was detected.

N - In the detected column means the analyte was not detected.

⁴F - In the Field Preparation Code column means the sample was filtered.

UF - In the Field Preparation Code column means the sample was not filtered.

⁵REG - In the sample purpose column means the sample was a regular sample.

⁶Groundwater Limit represents standards for groundwater as identified in NMAC 20.6.2.3103 where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

MCOI-6, First Quarter 2024

a	Sample Date	1/25/2024
b	Sample Time	1209
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,139.36
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	3.75
i	Total volume of water purged prior to sample collection (gal)	105
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.46 Oxidation/Reduction Potential (MV): 196.2 Temp (deg C): 15.5 pH (SU): 7.25 Turbidity (NTU): 0.49 Specific Conductance (μS/cm): 50
k	Description of sample methods	Attachment 5, Page 15
l	Chain-of-Custody	Attachment 5, Page 15
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 2

MCOI-6, Second Quarter 2024

a	Sample Date	5/16/2024
b	Sample Time	1005
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,137.89
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	2.54
i	Total volume of water purged prior to sample collection (gal)	97.85
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.19 Oxidation/Reduction Potential (MV): 179.9 Temp (deg C): 15.7 pH (SU): 7.11 Turbidity (NTU): 5.22 Specific Conductance (μS/cm): 5 6
k	Description of sample methods	Attachment 5, Pages 16-19
l	Chain-of-Custody	Attachment 5, Pages 16-19
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 2

MCOI-6, Third Quarter 2024

a	Sample Date	7/18/2024
b	Sample Time	1136
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,136.62
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	29.88
i	Total volume of water purged prior to sample collection (gal)	127.06
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.42 Oxidation/Reduction Potential (MV): 188.3 Temp (deg C): 17.9 pH (SU): 7.41 Turbidity (NTU): 1.9 Specific Conductance (μS/cm): 5 3
k	Description of sample methods	Attachment 5, Page 20
l	Chain-of-Custody	Attachment 5, Page 20
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 2

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-313260	MCOI-6	05-16-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	1.67	0.0415
CAMO-25-340786	MCOI-6	11-12-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	1.67	0.0415
CAMO-24-313260	MCOI-6	05-16-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	1.67	.523
CAMO-25-340786	MCOI-6	11-12-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	1.67	.523
CAMO-24-300756	MCOI-6	05-16-2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846-8081B	0.00665	.00198
CAMO-24-305073	MCOI-6	01-25-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	19.3	5,000
CAMO-24-313261	MCOI-6	05-16-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	19.3	5,000
CAMO-24-331124	MCOI-6	07-18-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	19.3	5,000
CAMO-25-340786	MCOI-6	11-12-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-6020B	19.3	5,000
CAMO-25-340787	MCOI-6	11-12-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	19.3	5,000
CAMO-24-313260	MCOI-6	05-16-2024	120-12-7	Anthracene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	1,720
CAMO-25-340786	MCOI-6	11-12-2024	120-12-7	Anthracene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	1,720
CAMO-24-305073	MCOI-6	01-25-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	1	6
CAMO-24-313261	MCOI-6	05-16-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	1	6
CAMO-24-331124	MCOI-6	07-18-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	1	6
CAMO-25-340787	MCOI-6	11-12-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	1	6
CAMO-24-300756	MCOI-6	05-16-2024	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-300756	MCOI-6	05-16-2024	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2024-1070	REG	SW-846-8082A	0.0333	.5
CAMO-24-305073	MCOI-6	01-25-2024	As	Arsenic	2	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	2	10
CAMO-24-313261	MCOI-6	05-16-2024	As	Arsenic	2	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	2	10
CAMO-24-331124	MCOI-6	07-18-2024	As	Arsenic	2	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	2	10
CAMO-25-340787	MCOI-6	11-12-2024	As	Arsenic	2	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	2	10
CAMO-24-313260	MCOI-6	05-16-2024	1912-24-9	Atrazine	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	3
CAMO-25-340786	MCOI-6	11-12-2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	3
CAMO-24-313260	MCOI-6	05-16-2024	103-33-3	Azobenzene	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.78
CAMO-25-340786	MCOI-6	11-12-2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.78
CAMO-24-305073	MCOI-6	01-25-2024	Ba	Barium	38.4	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6010D	1	2,000
CAMO-24-313261	MCOI-6	05-16-2024	Ba	Barium	39.6	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6010D	1	2,000
CAMO-24-331124	MCOI-6	07-18-2024	Ba	Barium	34.2	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-6010D	1	2,000
CAMO-25-340787	MCOI-6	11-12-2024	Ba	Barium	35.6	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-6010D	1	2,000
CAMO-24-313260	MCOI-6	05-16-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	.5
CAMO-25-340786	MCOI-6	11-12-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	.5
CAMO-24-313260	MCOI-6	05-16-2024	92-87-5	Benzidine	3.96	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.96	.00109
CAMO-25-340786	MCOI-6	11-12-2024	92-87-5	Benzidine	3.9	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3.9	.00109
CAMO-24-313260	MCOI-6	05-16-2024	50-32-8	Benzo(a)pyrene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	.2
CAMO-24-313260	MCOI-6	05-16-2024	50-32-8	Benzo(a)pyrene	0.0305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E SIM	0.0305	.2
CAMO-25-340786	MCOI-6	11-12-2024	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	.2
CAMO-25-340786	MCOI-6	11-12-2024	50-32-8	Benzo(a)pyrene	0.03	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E SIM	0.03	.2
CAMO-24-313260	MCOI-6	05-16-2024	205-99-2	Benzo(b)fluoranthene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	.343
CAMO-25-340786	MCOI-6	11-12-2024	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	.343
CAMO-24-313260	MCOI-6	05-16-2024	207-08-9	Benzo(k)fluoranthene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	.343
CAMO-25-340786	MCOI-6	11-12-2024	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	.343
CAMO-24-305073	MCOI-6	01-25-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	0.2	4
CAMO-24-313261	MCOI-6	05-16-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	0.2	4
CAMO-24-331124	MCOI-6	07-18-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	0.2	4
CAMO-25-340787	MCOI-6	11-12-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	0.2	4
CAMO-24-300756	MCOI-6	05-16-2024	319-84-6	BHC(alpha-)	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846-8081B	0.00665	.0693
CAMO-24-300756	MCOI-6	05-16-2024	319-85-7	BHC(beta-)	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846-8081B	0.00665	.243
CAMO-24-300756	MCOI-6	05-16-2024	58-89-9	BHC(gamma-)	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846-8081B	0.00665	.415
CAMO-24-313260	MCOI-6	05-16-2024	111-44-4	Bis(2-chloroethyl)ether	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.137
CAMO-25-340786	MCOI-6	11-12-2024	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.137
CAMO-24-313260	MCOI-6	05-16-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	55.6
CAMO-25-340786	MCOI-6	11-12-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	55.6
CAMO-24-305073	MCOI-6	01-25-2024	B	Boron	51.3	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6010D	15	750
CAMO-24-313261	MCOI-6	05-16-2024	B	Boron	51.8	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6010D	15	750
CAMO-24-331124	MCOI-6	07-18-2024	B	Boron	48.3	ug/L	J	Y	F	N38-2024-4056	REG	SW-846-6010D	15	750
CAMO-25-340787	MCOI-6	11-12-2024	B	Boron	56.4	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-6010D	15	750
CAMO-24-313260	MCOI-6	05-16-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	1.34
CAMO-25-340786	MCOI-6	11-12-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	1.34
CAMO-24-313260	MCOI-6	05-16-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	32.9
CAMO-25-340786	MCOI-6	11-12-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	32.9
CAMO-24-313260	MCOI-6	05-16-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.337	7.54
CAMO-25-340786	MCOI-6	11-12-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.337	7.54

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-305073	MCOI-6	01-25-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2024-1443	REG	SW-846-60208	0.3	5
CAMO-24-313261	MCOI-6	05-16-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2024-3006	REG	SW-846-60208	0.3	5
CAMO-24-331124	MCOI-6	07-18-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2024-4056	REG	SW-846-60208	0.3	5
CAMO-25-340787	MCOI-6	11-12-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2025-405	REG	SW-846-60208	0.3	5
CAMO-24-313260	MCOI-6	05-16-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	5
CAMO-24-300756	MCOI-6	05-16-2024	57-74-9	Chlordane[alpha/gamma]	0.0765	ug/L	U	N	UF	2024-1070	REG	SW-846-80818	0.0765	.448
CAMO-24-305073	MCOI-6	01-25-2024	Cl(-3)	Chloride	47.5	mg/L	NQ	Y	F	N38-2024-1443	REG	SW-846-9056A	0.67	250
CAMO-24-313261	MCOI-6	05-16-2024	Cl(-3)	Chloride	45.1	mg/L	J	Y	F	N38-2024-3006	REG	SW-846-9056A	0.67	250
CAMO-24-331124	MCOI-6	07-18-2024	Cl(-3)	Chloride	44.6	mg/L	NQ	Y	F	N38-2024-4056	REG	SW-846-9056A	0.67	250
CAMO-25-340787	MCOI-6	11-12-2024	Cl(-3)	Chloride	43.9	mg/L	NQ	Y	F	N38-2025-405	REG	SW-846-9056A	0.67	250
CAMO-24-313260	MCOI-6	05-16-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	77.6
CAMO-25-340786	MCOI-6	11-12-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	77.6
CAMO-24-313260	MCOI-6	05-16-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	100
CAMO-25-340786	MCOI-6	11-12-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	100
CAMO-24-313260	MCOI-6	05-16-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	20.3
CAMO-25-340786	MCOI-6	11-12-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	20.3
CAMO-24-305073	MCOI-6	01-25-2024	Cr	Chromium	52.9	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-60208	3	50
CAMO-24-313261	MCOI-6	05-16-2024	Cr	Chromium	51.2	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-60208	3	50
CAMO-24-331124	MCOI-6	07-18-2024	Cr	Chromium	47.6	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-60208	3	50
CAMO-25-340787	MCOI-6	11-12-2024	Cr	Chromium	50.1	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-60208	3	50
CAMO-24-305073	MCOI-6	01-25-2024	Co	Cobalt	0.39	ug/L	J	Y	F	N38-2024-1443	REG	SW-846-60208	0.3	50
CAMO-24-313261	MCOI-6	05-16-2024	Co	Cobalt	0.642	ug/L	J	Y	F	N38-2024-3006	REG	SW-846-60208	0.3	50
CAMO-24-331124	MCOI-6	07-18-2024	Co	Cobalt	0.3	ug/L	U	N	F	N38-2024-4056	REG	SW-846-60208	0.3	50
CAMO-25-340787	MCOI-6	11-12-2024	Co	Cobalt	0.3	ug/L	U	N	F	N38-2025-405	REG	SW-846-60208	0.3	50
CAMO-24-305073	MCOI-6	01-25-2024	Cu	Copper	5.66	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-60208	0.3	1,000
CAMO-24-313261	MCOI-6	05-16-2024	Cu	Copper	4.6	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-60208	0.3	1,000
CAMO-24-331124	MCOI-6	07-18-2024	Cu	Copper	3.81	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-60208	0.3	1,000
CAMO-25-340787	MCOI-6	11-12-2024	Cu	Copper	4.13	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-60208	0.3	1,000
CAMO-24-305072	MCOI-6	01-25-2024	CNT(TOTAL)	Cyanide [Total]	0.00169	mg/L	J	Y	UF	N38-2024-1443	REG	SW-846-90128	0.00167	2
CAMO-24-313260	MCOI-6	05-16-2024	CNT(TOTAL)	Cyanide [Total]	0.00167	mg/L	U	N	UF	N38-2024-3006	REG	SW-846-90128	0.00167	2
CAMO-24-331123	MCOI-6	07-18-2024	CNT(TOTAL)	Cyanide [Total]	0.00195	mg/L	J	Y	UF	N38-2024-4056	REG	SW-846-90128	0.00167	2
CAMO-25-340786	MCOI-6	11-12-2024	CNT(TOTAL)	Cyanide [Total]	0.00167	mg/L	UJ	N	UF	N38-2025-405	REG	SW-846-90128	0.00167	2
CAMO-24-300756	MCOI-6	05-16-2024	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2024-1070	REG	SW-846-80818	0.01	2.29
CAMO-24-313260	MCOI-6	05-16-2024	106-93-4	Dibromomethane[1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	.05
CAMO-25-340786	MCOI-6	11-12-2024	106-93-4	Dibromomethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	.05
CAMO-24-313260	MCOI-6	05-16-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	600
CAMO-24-313260	MCOI-6	05-16-2024	95-50-1	Dichlorobenzene[1,2-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	600
CAMO-25-340786	MCOI-6	11-12-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	600
CAMO-25-340786	MCOI-6	11-12-2024	95-50-1	Dichlorobenzene[1,2-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	600
CAMO-24-313260	MCOI-6	05-16-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	75
CAMO-24-313260	MCOI-6	05-16-2024	106-46-7	Dichlorobenzene[1,4-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	75
CAMO-25-340786	MCOI-6	11-12-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	75
CAMO-25-340786	MCOI-6	11-12-2024	106-46-7	Dichlorobenzene[1,4-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	75
CAMO-24-313260	MCOI-6	05-16-2024	91-94-1	Dichlorobenzidine[3,3'-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	1.25
CAMO-25-340786	MCOI-6	11-12-2024	91-94-1	Dichlorobenzidine[3,3'-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	1.25
CAMO-24-313260	MCOI-6	05-16-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.355	197
CAMO-25-340786	MCOI-6	11-12-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.355	197
CAMO-24-313260	MCOI-6	05-16-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	25
CAMO-25-340786	MCOI-6	11-12-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	25
CAMO-24-313260	MCOI-6	05-16-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	5
CAMO-24-313260	MCOI-6	05-16-2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	7
CAMO-25-340786	MCOI-6	11-12-2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	7
CAMO-24-313260	MCOI-6	05-16-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	70
CAMO-25-340786	MCOI-6	11-12-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	70
CAMO-24-313260	MCOI-6	05-16-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	100
CAMO-25-340786	MCOI-6	11-12-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	100
CAMO-24-313260	MCOI-6	05-16-2024	120-83-2	Dichlorophenol[2,4-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	45.3
CAMO-25-340786	MCOI-6	11-12-2024	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	45.3
CAMO-24-313260	MCOI-6	05-16-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	5
CAMO-24-313260	MCOI-6	05-16-2024	10061-01-5	Dichloropropene[cis-1,3-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	4.7
CAMO-25-340786	MCOI-6	11-12-2024	10061-01-5	Dichloropropene[cis-1,3-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	4.7
CAMO-24-313260	MCOI-6	05-16-2024	10061-02-6	Dichloropropene[trans-1,3-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-82600	0.333	4.7
CAMO-25-340786	MCOI-6	11-12-2024	10061-02-6	Dichloropropene[trans-1,3-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-82600	0.333	4.7
CAMO-24-300756	MCOI-6	05-16-2024	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2024-1070	REG	SW-846-80818	0.01	.0175
CAMO-24-313260	MCOI-6	05-16-2024	84-66-2	Diethylphthalate	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	14,800

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-340786	MCOI-6	11-12-2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	0.3	14,800
CAMO-24-313260	MCOI-6	05-16-2024	131-11-3	Dimethyl Phthalate	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	0.305	612
CAMO-25-340786	MCOI-6	11-12-2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	0.3	612
CAMO-24-313260	MCOI-6	05-16-2024	84-74-2	Di-n-butylphthalate	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	0.305	885
CAMO-25-340786	MCOI-6	11-12-2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	0.3	885
CAMO-24-313260	MCOI-6	05-16-2024	534-52-1	Dinitro-2-methylpheno[4,6-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	1.52
CAMO-25-340786	MCOI-6	11-12-2024	534-52-1	Dinitro-2-methylpheno[4,6-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	1.52
CAMO-24-313260	MCOI-6	05-16-2024	51-20-5	Dinitrophenol[2,4-]	5.08	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	5.08	38.7
CAMO-25-340786	MCOI-6	11-12-2024	51-20-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	5	38.7
CAMO-24-313260	MCOI-6	05-16-2024	121-14-2	Dinitrotoluene[2,4-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	2.37
CAMO-24-313262	MCOI-6	05-16-2024	121-14-2	Dinitrotoluene[2,4-]	0.522	ug/L	NQ	Y	UF	N38-2024-3008	REG	SW-846:8321B	0.0272	2.37
CAMO-25-340786	MCOI-6	11-12-2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	2.37
CAMO-25-341235	MCOI-6	11-12-2024	121-14-2	Dinitrotoluene[2,4-]	0.0269	ug/L	UJ	N	UF	N38-2025-402	REG	SW-846:8321B	0.0269	2.37
CAMO-24-313260	MCOI-6	05-16-2024	606-20-2	Dinitrotoluene[2,6-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	.485
CAMO-24-313262	MCOI-6	05-16-2024	606-20-2	Dinitrotoluene[2,6-]	0.0252	ug/L	UJ	N	UF	N38-2024-3008	REG	SW-846:8321B	0.0252	.485
CAMO-25-340786	MCOI-6	11-12-2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	.485
CAMO-25-341235	MCOI-6	11-12-2024	606-20-2	Dinitrotoluene[2,6-]	0.0249	ug/L	UJ	N	UF	N38-2025-402	REG	SW-846:8321B	0.0249	.485
CAMO-24-313260	MCOI-6	05-16-2024	123-91-1	Dioxane[1,4-]	33.1	ug/L	J+	Y	UF	N38-2024-3006	REG	SW-846:8270E SIM	0.4	4.59
CAMO-25-340786	MCOI-6	11-12-2024	123-91-1	Dioxane[1,4-]	26.9	ug/L	NQ	Y	UF	N38-2025-405	REG	SW-846:8270E SIM	0.2	4.59
CAMO-24-313260	MCOI-6	05-16-2024	123-94-4	Diphenylamine	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	122
CAMO-25-340786	MCOI-6	11-12-2024	123-94-4	Diphenylamine	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	122
CAMO-25-340786	MCOI-6	05-16-2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846:8081B	0.00665	98.7
CAMO-24-300756	MCOI-6	05-16-2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2024-1070	REG	SW-846:8081B	0.01	98.7
CAMO-25-340756	MCOI-6	05-16-2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2024-1070	REG	SW-846:8081B	0.01	2.23
CAMO-24-313260	MCOI-6	05-16-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8260D	0.333	700
CAMO-25-340786	MCOI-6	11-12-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8260D	0.333	700
CAMO-24-313260	MCOI-6	05-16-2024	206-44-0	Fluoranthene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	0.305	802
CAMO-25-340786	MCOI-6	11-12-2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	0.3	802
CAMO-24-313260	MCOI-6	05-16-2024	86-73-7	Fluorene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	0.305	288
CAMO-25-340786	MCOI-6	11-12-2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	0.3	288
CAMO-24-305073	MCOI-6	01-25-2024	F(-)	Fluoride	0.682	mg/L	NQ	Y	F	N38-2024-1443	REG	SW-846:9056A	0.033	1.6
CAMO-24-313261	MCOI-6	05-16-2024	F(-)	Fluoride	0.578	mg/L	NQ	Y	F	N38-2024-3006	REG	SW-846:9056A	0.033	1.6
CAMO-24-331124	MCOI-6	07-18-2024	F(-)	Fluoride	0.523	mg/L	NQ	Y	F	N38-2024-4056	REG	SW-846:9056A	0.033	1.6
CAMO-25-340787	MCOI-6	11-12-2024	F(-)	Fluoride	0.52	mg/L	NQ	Y	F	N38-2025-405	REG	SW-846:9056A	0.033	1.6
CAMO-24-300756	MCOI-6	05-16-2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2024-1070	REG	SW-846:8081B	0.00665	.02211
CAMO-24-313260	MCOI-6	05-16-2024	118-74-1	Hexachlorobenzene	0.00634	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8081B	0.00634	.0976
CAMO-24-313260	MCOI-6	05-16-2024	118-74-1	Hexachlorobenzene	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	.0976
CAMO-25-340786	MCOI-6	11-12-2024	118-74-1	Hexachlorobenzene	0.00625	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8081B	0.00625	.0976
CAMO-25-340786	MCOI-6	11-12-2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	.0976
CAMO-24-313260	MCOI-6	05-16-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8260D	0.333	1.39
CAMO-24-313260	MCOI-6	05-16-2024	87-68-3	Hexachlorobutadiene	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	1.39
CAMO-25-340786	MCOI-6	11-12-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8260D	0.333	1.39
CAMO-25-340786	MCOI-6	11-12-2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	1.39
CAMO-24-313260	MCOI-6	05-16-2024	77-47-4	Hexachlorocyclopentadiene	3.05	ug/L	UJ	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	.411
CAMO-25-340786	MCOI-6	11-12-2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	UJ	N	UF	N38-2025-405	REG	SW-846:8270E	3	.411
CAMO-24-313260	MCOI-6	05-16-2024	67-72-1	Hexachloroethane	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.05	3.28
CAMO-25-340786	MCOI-6	11-12-2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3	3.28
CAMO-24-300756	MCOI-6	05-16-2024	2691-41-0	HMX	0.0766	ug/L	U	N	UF	2024-1070	REG	SW-846:8330B	0.0766	1.000
CAMO-24-305073	MCOI-6	01-25-2024	Fe	Iron	30	ug/L	U	N	F	N38-2024-1443	REG	SW-846:6010D	30	1,000
CAMO-24-313261	MCOI-6	05-16-2024	Fe	Iron	30	ug/L	U	N	F	N38-2024-3006	REG	SW-846:6010D	30	1,000
CAMO-24-313124	MCOI-6	07-18-2024	Fe	Iron	30	ug/L	U	N	F	N38-2024-4056	REG	SW-846:6010D	30	1,000
CAMO-25-340787	MCOI-6	11-12-2024	Fe	Iron	30	ug/L	U	N	F	N38-2025-405	REG	SW-846:6010D	30	1,000
CAMO-24-313260	MCOI-6	05-16-2024	78-59-1	Isoophorone	3.56	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:8270E	3.56	781
CAMO-25-340786	MCOI-6	11-12-2024	78-59-1	Isoophorone	3.5	ug/L	U	N	UF	N38-2025-405	REG	SW-846:8270E	3.5	781
CAMO-24-305073	MCOI-6	01-25-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2024-1443	REG	SW-846:6020B	0.5	15
CAMO-24-313261	MCOI-6	05-16-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2024-3006	REG	SW-846:6020B	0.5	15
CAMO-24-331124	MCOI-6	07-18-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2024-4056	REG	SW-846:6020B	0.5	15
CAMO-25-340787	MCOI-6	11-12-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2025-405	REG	SW-846:6020B	0.5	15
CAMO-24-305073	MCOI-6	01-25-2024	Mn	Manganese	2.7	ug/L	J	Y	F	N38-2024-1443	REG	SW-846:6010D	2	200
CAMO-24-313261	MCOI-6	05-16-2024	Mn	Manganese	8.38	ug/L	J	Y	F	N38-2024-3006	REG	SW-846:6010D	2	200
CAMO-24-331124	MCOI-6	07-18-2024	Mn	Manganese	2	ug/L	U	N	F	N38-2024-4056	REG	SW-846:6010D	2	200
CAMO-25-340787	MCOI-6	11-12-2024	Mn	Manganese	2.15	ug/L	J	Y	F	N38-2025-405	REG	SW-846:6010D	2	200
CAMO-24-305072	MCOI-6	01-25-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2024-1443	REG	SW-846:7470A	0.067	2
CAMO-24-305073	MCOI-6	01-25-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2024-1443	REG	SW-846:7470A	0.067	2
CAMO-24-313260	MCOI-6	05-16-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2024-3006	REG	SW-846:7470A	0.067	2
CAMO-24-313261	MCOI-6	05-16-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2024-3006	REG	SW-846:7470A	0.067	2
CAMO-24-331123	MCOI-6	07-18-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2024-4056	REG	SW-846:7470A	0.067	2
CAMO-24-331124	MCOI-6	07-18-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2024-4056	REG	SW-846:7470A	0.067	2

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-340786	MCOI-6	11-12-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2025-405	REG	SW-846-7470A	0.067	2
CAMO-25-340787	MCOI-6	11-12-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2025-405	REG	SW-846-7470A	0.067	2
CAMO-24-313260	MCOI-6	05-16-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	100
CAMO-25-340786	MCOI-6	11-12-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	100
CAMO-24-313260	MCOI-6	05-16-2024	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.5	5
CAMO-25-340786	MCOI-6	11-12-2024	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.5	5
CAMO-24-313260	MCOI-6	05-16-2024	90-12-0	Methylnaphthalene[1-]	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	11.4
CAMO-25-340786	MCOI-6	11-12-2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	11.4
CAMO-24-313260	MCOI-6	05-16-2024	91-57-6	Methylnaphthalene[2-]	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	35.1
CAMO-25-340786	MCOI-6	11-12-2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	35.1
CAMO-24-305073	MCOI-6	01-25-2024	Mo	Molybdenum	2.13	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6020B	0.2	1,000
CAMO-24-313261	MCOI-6	05-16-2024	Mo	Molybdenum	2.26	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6020B	0.2	1,000
CAMO-24-331124	MCOI-6	07-18-2024	Mo	Molybdenum	1.89	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-6020B	0.2	1,000
CAMO-25-340787	MCOI-6	11-12-2024	Mo	Molybdenum	1.97	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-6020B	0.2	1,000
CAMO-24-313260	MCOI-6	05-16-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	30
CAMO-24-313260	MCOI-6	05-16-2024	91-20-3	Naphthalene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	30
CAMO-25-340786	MCOI-6	11-12-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	30
CAMO-25-340786	MCOI-6	11-12-2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	30
CAMO-24-305073	MCOI-6	01-25-2024	Ni	Nickel	21	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6020B	0.6	200
CAMO-24-313261	MCOI-6	05-16-2024	Ni	Nickel	14.6	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6020B	0.6	200
CAMO-24-331124	MCOI-6	07-18-2024	Ni	Nickel	6.07	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-6020B	0.6	200
CAMO-25-340787	MCOI-6	11-12-2024	Ni	Nickel	8.03	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-6020B	0.6	200
CAMO-24-305073	MCOI-6	01-25-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	14.9	mg/L	NQ	Y	F	N38-2024-1443	REG	EPA-353.2	0.425	10
CAMO-24-313261	MCOI-6	05-16-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	16.4	mg/L	NQ	Y	F	N38-2024-3006	REG	EPA-353.2	0.425	10
CAMO-24-331124	MCOI-6	07-18-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	15.1	mg/L	NQ	Y	F	N38-2024-4056	REG	EPA-353.2	0.425	10
CAMO-25-340787	MCOI-6	11-12-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	15	mg/L	NQ	Y	F	N38-2025-405	REG	EPA-353.2	0.17	10
CAMO-24-300758	MCOI-6	05-16-2024	NO2-N	Nitrite as Nitrogen	0.033	mg/L	U	N	F	2024-1065	REG	EPA-300.0	0.033	1
CAMO-24-313260	MCOI-6	05-16-2024	98-95-3	Nitrobenzene	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	1.4
CAMO-24-313262	MCOI-6	05-16-2024	98-95-3	Nitrobenzene	0.0282	ug/L	U	N	UF	N38-2024-3008	REG	SW-846-8321B	0.0282	1.4
CAMO-25-340786	MCOI-6	11-12-2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	1.4
CAMO-25-341235	MCOI-6	11-12-2024	98-95-3	Nitrobenzene	0.0279	ug/L	UJ	N	UF	N38-2025-402	REG	SW-846-8321B	0.0279	1.4
CAMO-24-313260	MCOI-6	05-16-2024	55-18-5	Nitrosodimethylamine[N-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.00167
CAMO-24-313263	MCOI-6	05-16-2024	55-18-5	Nitrosodimethylamine[N-]	0.00033	ug/L	U	N	UF	N38-2024-3007	REG	Nitrosamines:HRMS	0.00033	.00167
CAMO-25-340786	MCOI-6	11-12-2024	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.00167
CAMO-25-340788	MCOI-6	11-12-2024	55-18-5	Nitrosodimethylamine[N-]	0.00033	ug/L	U	N	UF	N38-2025-404	REG	Nitrosamines:HRMS	0.00033	.00167
CAMO-24-313260	MCOI-6	05-16-2024	62-75-9	Nitrosodimethylamine[N-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.00491
CAMO-24-313263	MCOI-6	05-16-2024	62-75-9	Nitrosodimethylamine[N-]	0.00034	ug/L	U	N	UF	N38-2024-3007	REG	Nitrosamines:HRMS	0.00034	.00491
CAMO-25-340786	MCOI-6	11-12-2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.00491
CAMO-25-340788	MCOI-6	11-12-2024	62-75-9	Nitrosodimethylamine[N-]	0.00169	ug/L	Jr	Y	UF	N38-2025-404	REG	Nitrosamines:HRMS	0.00034	.00491
CAMO-24-313260	MCOI-6	05-16-2024	924-16-3	Nitroso-di-n-butylamine[N-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.0273
CAMO-24-313263	MCOI-6	05-16-2024	924-16-3	Nitroso-di-n-butylamine[N-]	0.00039	ug/L	U	N	UF	N38-2024-3007	REG	Nitrosamines:HRMS	0.00039	.0273
CAMO-25-340786	MCOI-6	11-12-2024	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.0273
CAMO-25-340788	MCOI-6	11-12-2024	924-16-3	Nitroso-di-n-butylamine[N-]	0.00039	ug/L	U	N	UF	N38-2025-404	REG	Nitrosamines:HRMS	0.00039	.0273
CAMO-24-313260	MCOI-6	05-16-2024	930-55-2	Nitrosopyrrolidine[N-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	.37
CAMO-24-313263	MCOI-6	05-16-2024	930-55-2	Nitrosopyrrolidine[N-]	0.00027	ug/L	U	N	UF	N38-2024-3007	REG	Nitrosamines:HRMS	0.00027	.37
CAMO-25-340786	MCOI-6	11-12-2024	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	.37
CAMO-25-340788	MCOI-6	11-12-2024	930-55-2	Nitrosopyrrolidine[N-]	0.00027	ug/L	U	N	UF	N38-2025-404	REG	Nitrosamines:HRMS	0.00027	.37
CAMO-24-313260	MCOI-6	05-16-2024	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	9.81
CAMO-25-340786	MCOI-6	11-12-2024	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	9.81
CAMO-24-313260	MCOI-6	05-16-2024	608-93-5	Pentachlorobenzene	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	3.07
CAMO-25-340786	MCOI-6	11-12-2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	3.07
CAMO-24-313260	MCOI-6	05-16-2024	87-86-5	Pentachlorophenol	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	1
CAMO-25-340786	MCOI-6	11-12-2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	1
CAMO-24-305073	MCOI-6	01-25-2024	ClO4	Perchlorate	124	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6850	1	13.8
CAMO-24-313261	MCOI-6	05-16-2024	ClO4	Perchlorate	126	ug/L	J-	Y	F	N38-2024-3006	REG	SW-846-6850	1	13.8
CAMO-24-331124	MCOI-6	07-18-2024	ClO4	Perchlorate	139	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-6850	2.5	13.8
CAMO-25-340787	MCOI-6	11-12-2024	ClO4	Perchlorate	130	ug/L	NQ	Y	F	N38-2025-4056	REG	SW-846-6850	5	13.8
CAMO-24-300756	MCOI-6	05-16-2024	355-46-4	Perfluorohexanesulfonic acid	0.556	ng/L	U	N	UF	2024-1070	REG	EPA-537M	0.556	401
CAMO-24-300796	MCOI-6	05-16-2024	355-46-4	Perfluorohexanesulfonic acid	0.622	ng/L	J	Y	UF	2024-1070	FD	EPA-537M	0.589	401
CAMO-25-340790	MCOI-6	11-12-2024	355-46-4	Perfluorohexanesulfonic acid	0.554	ng/L	U	N	UF	N38-2025-405	REG	EPA-1633	0.554	401
CAMO-24-300756	MCOI-6	05-16-2024	1763-23-1	Perfluorooctanesulfonic acid	0.674	ng/L	U	N	UF	2024-1070	REG	EPA-537M	0.674	60.2
CAMO-24-300796	MCOI-6	05-16-2024	1763-23-1	Perfluorooctanesulfonic acid	0.713	ng/L	U	N	UF	2024-1070	FD	EPA-537M	0.713	60.2
CAMO-25-340790	MCOI-6	11-12-2024	1763-23-1	Perfluorooctanesulfonic acid	0.563	ng/L	U	N	UF	N38-2025-405	REG	EPA-1633	0.563	60.2
CAMO-24-300756	MCOI-6	05-16-2024	335-67-1	Perfluorooctanoic acid	0.674	ng/L	U	N	UF	2024-1070	REG	EPA-537M	0.674	60.2
CAMO-24-300796	MCOI-6	05-16-2024	335-67-1	Perfluorooctanoic acid	0.713	ng/L	U	N	UF	2024-1070	FD	EPA-537M	0.713	60.2
CAMO-25-340790	MCOI-6	11-12-2024	335-67-1	Perfluorooctanoic acid	0.606	ng/L	U	N	UF	N38-2025-405	REG	EPA-1633	0.606	60.2
	MCOI-6	01-25-2024	pH	pH	7.25	SU								6-9
	MCOI-6	05-16-2024	pH	pH	7.11	SU								6-9

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
	MCOI-6	07-18-2024	pH	pH	7.41	SU								6-9
	MCOI-6	11-12-2024	pH	pH	7.42	SU								6-9
CAMO-24-313260	MCOI-6	05-16-2024	85-01-8	Phenanthrene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	170
CAMO-25-340786	MCOI-6	11-12-2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	170
CAMO-24-313260	MCOI-6	05-16-2024	108-95-2	Phenol	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	5
CAMO-25-340786	MCOI-6	11-12-2024	108-95-2	Phenol	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	5
CAMO-24-313260	MCOI-6	05-16-2024	1610-18-0	Prometon	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	250
CAMO-25-340786	MCOI-6	11-12-2024	1610-18-0	Prometon	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	250
CAMO-24-313260	MCOI-6	05-16-2024	129-00-0	Pyrene	0.305	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	0.305	117
CAMO-25-340786	MCOI-6	11-12-2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	0.3	117
CAMO-25-340786	MCOI-6	11-12-2024	Ra-226+228	Radium-226 and Radium-228	0.536	pCi/L	UJ	N	UF	N38-2025-405	REG	Generic:Radium by Calculation	-	5
CAMO-24-300756	MCOI-6	05-16-2024	121-82-4	RDX	0.0766	ug/L	U	N	UF	2024-1070	REG	SW-846-8330B	0.0766	9.66
CAMO-24-305073	MCOI-6	01-25-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	1.5	50
CAMO-24-313261	MCOI-6	05-16-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	1.5	50
CAMO-24-313124	MCOI-6	07-18-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	1.5	50
CAMO-25-340786	MCOI-6	11-12-2024	Se	Selenium	1.5	ug/L	U	N	UF	N38-2025-405	REG	SW-846-6020B	1.5	50
CAMO-25-340787	MCOI-6	11-12-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	1.5	50
CAMO-24-305073	MCOI-6	01-25-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	0.3	50
CAMO-24-313261	MCOI-6	05-16-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	0.3	50
CAMO-24-313124	MCOI-6	07-18-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	0.3	50
CAMO-25-340787	MCOI-6	11-12-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	0.3	50
CAMO-24-313260	MCOI-6	05-16-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	100
CAMO-25-340786	MCOI-6	11-12-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	100
CAMO-24-305073	MCOI-6	01-25-2024	SO4(-2)	Sulfate	44.9	mg/L	NQ	Y	F	N38-2024-1443	REG	SW-846-9056A	1.33	600
CAMO-24-313261	MCOI-6	05-16-2024	SO4(-2)	Sulfate	44.9	mg/L	NQ	Y	F	N38-2024-3006	REG	SW-846-9056A	1.33	600
CAMO-24-313124	MCOI-6	07-18-2024	SO4(-2)	Sulfate	42.7	mg/L	NQ	Y	F	N38-2024-4056	REG	SW-846-9056A	1.33	600
CAMO-25-340787	MCOI-6	11-12-2024	SO4(-2)	Sulfate	42.6	mg/L	NQ	Y	F	N38-2025-405	REG	SW-846-9056A	1.33	600
CAMO-24-313260	MCOI-6	05-16-2024	126-33-0	Sulfonate	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	20
CAMO-25-340786	MCOI-6	11-12-2024	126-33-0	Sulfonate	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	20
CAMO-24-313260	MCOI-6	05-16-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	1.66
CAMO-25-340786	MCOI-6	11-12-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	1.66
CAMO-24-313260	MCOI-6	05-16-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	10
CAMO-25-340786	MCOI-6	11-12-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	10
CAMO-24-313260	MCOI-6	05-16-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	5
CAMO-24-305073	MCOI-6	01-25-2024	TI	Thallium	0.6	ug/L	U	N	F	N38-2024-1443	REG	SW-846-6020B	0.6	2
CAMO-24-313261	MCOI-6	05-16-2024	TI	Thallium	0.6	ug/L	U	N	F	N38-2024-3006	REG	SW-846-6020B	0.6	2
CAMO-24-313124	MCOI-6	07-18-2024	TI	Thallium	0.6	ug/L	U	N	F	N38-2024-4056	REG	SW-846-6020B	0.6	2
CAMO-25-340787	MCOI-6	11-12-2024	TI	Thallium	0.6	ug/L	U	N	F	N38-2025-405	REG	SW-846-6020B	0.6	2
CAMO-24-313260	MCOI-6	05-16-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	1,000
CAMO-25-340786	MCOI-6	11-12-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	1,000
CAMO-24-305073	MCOI-6	01-25-2024	TDS	Total Dissolved Solids	393	mg/L	NQ	Y	F	N38-2024-1443	REG	EPA:160.1	2.38	1,000
CAMO-24-313260	MCOI-6	05-16-2024	TDS	Total Dissolved Solids	444	mg/L	NQ	Y	F	N38-2024-3006	REG	EPA:160.1	2.38	1,000
CAMO-24-313124	MCOI-6	07-18-2024	TDS	Total Dissolved Solids	387	mg/L	NQ	Y	F	N38-2024-4056	REG	EPA:160.1	2.38	1,000
CAMO-25-340787	MCOI-6	11-12-2024	TDS	Total Dissolved Solids	402	mg/L	NQ	Y	F	N38-2025-405	REG	EPA:160.1	2.38	1,000
CAMO-24-305072	MCOI-6	01-25-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N38-2024-1443	REG	EPA:351.2	0.033	-
CAMO-24-313260	MCOI-6	05-16-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N38-2024-3006	REG	EPA:351.2	0.033	-
CAMO-24-313123	MCOI-6	07-18-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N38-2024-4056	REG	EPA:351.2	0.033	-
CAMO-25-340786	MCOI-6	11-12-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N38-2025-405	REG	EPA:351.2	0.033	-
CAMO-24-300756	MCOI-6	05-16-2024	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2024-1070	REG	SW-846-8081B	0.15	.158
CAMO-24-313260	MCOI-6	05-16-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	70
CAMO-24-313260	MCOI-6	05-16-2024	120-82-1	Trichlorobenzene[1,2,4-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	70
CAMO-25-340786	MCOI-6	11-12-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	70
CAMO-25-340786	MCOI-6	11-12-2024	120-82-1	Trichlorobenzene[1,2,4-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	70
CAMO-24-313260	MCOI-6	05-16-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	200
CAMO-25-340786	MCOI-6	11-12-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	200
CAMO-24-313260	MCOI-6	05-16-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	5
CAMO-24-313260	MCOI-6	05-16-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	5
CAMO-25-340786	MCOI-6	11-12-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	5
CAMO-24-313260	MCOI-6	05-16-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	1,140
CAMO-25-340786	MCOI-6	11-12-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	1,140
CAMO-24-313260	MCOI-6	05-16-2024	95-95-4	Trichlorophenol[2,4,6-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	1,170
CAMO-25-340786	MCOI-6	11-12-2024	95-95-4	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	1,170
CAMO-24-313260	MCOI-6	05-16-2024	88-06-2	Trichlorophenol[2,4,6-]	3.05	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8270E	3.05	11.9
CAMO-25-340786	MCOI-6	11-12-2024	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8270E	3	11.9
CAMO-24-300756	MCOI-6	05-16-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0766	ug/L	U	N	UF	2024-1070	REG	SW-846-8330B	0.0766	9.8

Attachment 5

Table 2. Analytical Results from Annual Ground Water Sampling of Perched/Intermediate Monitoring Well MCOI-6 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-305073	MCOI-6	01-25-2024	U	Uranium	0.736	ug/L	NQ	Y	F	N38-2024-1443	REG	SW-846-6020B	0.067	30
CAMO-24-313261	MCOI-6	05-16-2024	U	Uranium	0.729	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6020B	0.067	30
CAMO-24-331124	MCOI-6	07-18-2024	U	Uranium	0.672	ug/L	NQ	Y	F	N38-2024-4056	REG	SW-846-6020B	0.067	30
CAMO-25-340787	MCOI-6	11-12-2024	U	Uranium	0.686	ug/L	NQ	Y	F	N38-2025-405	REG	SW-846-6020B	0.067	30
CAMO-24-313260	MCOI-6	05-16-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	2
CAMO-25-340786	MCOI-6	11-12-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	2
CAMO-24-313260	MCOI-6	05-16-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.333	193
CAMO-25-340786	MCOI-6	11-12-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.333	193
CAMO-24-313260	MCOI-6	05-16-2024	Xylene(m+p)	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N38-2024-3006	REG	SW-846-8260D	0.5	386
CAMO-25-340786	MCOI-6	11-12-2024	Xylene(m+p)	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N38-2025-405	REG	SW-846-8260D	0.5	386
CAMO-24-305073	MCOI-6	01-25-2024	Zn	Zinc	35.3	ug/L	J+	Y	F	N38-2024-1443	REG	SW-846-6010D	3.3	10,000
CAMO-24-313261	MCOI-6	05-16-2024	Zn	Zinc	31.6	ug/L	NQ	Y	F	N38-2024-3006	REG	SW-846-6010D	3.3	10,000
CAMO-24-331124	MCOI-6	07-18-2024	Zn	Zinc	7.28	ug/L	J	Y	F	N38-2024-4056	REG	SW-846-6010D	3.3	10,000
CAMO-25-340787	MCOI-6	11-12-2024	Zn	Zinc	9.69	ug/L	J	Y	F	N38-2025-405	REG	SW-846-6010D	3.3	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

J+ - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

J- -The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

LA-UR-25-20412

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General Engineering Laboratories, Inc., Charleston, SC. Charleston SC				Chain of Custody/Analysis Request																COC/Lab Request #: N3B-2024-3006 Page 1 of 1							
Client Contact:				Lab Agreement #:				Site Name: N3B LANL																Rad Screening Info: Sample type has no DOT hazard classification Lab Reporting Limit Type: Method Detection Limit			
				Project Number: N3B				EPA350.1_NH3-353.2_N03N02-385.4_PO4 EPA351.2_TKN-SW-846890_TOC EPA353_PH_TDS_Ah-SW-846C104_Ammonia SW-846-7470_Hg SW-846-8081_HCB_LL SW-846-8260_IFGMP_VOA SW-846-8270-SIM_1,4-Dioxane SW-846-8270_IFGMP_SVOA+IFGMP_SVOA_SIM SW-846-8330_Tracers SW-846-9012_CNT SW-846-IFGMP_Metals																			
				Analysis Turnaround Time:																							
24 Hour - ☐ Other - ☐																											
7 Days - ☐				14 Days - ☐																							
Total # of bottles: 33				21 Days - ☐																							
Event ID: 16039				28 Days - ☒																							
Field Sample ID				Sample Date		Sample Time		Sample Matrix																			
CAMO-24-313260				05/16/2024		10:05		W		1		1		2		3		3		1							
CAMO-24-313261				05/16/2024		10:05		W		1		1								1							
CAMO-24-313264				05/16/2024		10:05		W						1													
CAMO-24-313339				05/16/2024		09:59		W		1		1								1							
CAMO-24-313340				05/16/2024		09:59		W		1		1								1							
CAMO-24-313341				05/16/2024		09:59		W										2									
CAMO-24-313354				05/16/2024		13:21		W		1		1								1							
CAMO-24-313355				05/16/2024		13:21		W		1		1								1							
CAMO-24-313356				05/16/2024		13:21		W										2									

[illegible]

LA-UR-25-20412

Attachment 5

[illegible]

R-1, 2024 Annual Sampling

a	Sample Date	5/9/2024
b	Sample Time	1138
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,871.84
g	Total depth of the well (ft below ground surface (bgs))	1,080.1
h	Total volume of water in the monitoring well prior to sample collection (gal)	44.28
i	Total volume of water purged prior to sample collection (gal)	222.18
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.3 Oxidation/Reduction Potential (MV): 118.3 Temp (deg C): 21.6 pH (SU): 7.79 Turbidity (NTU): 0.02 Specific Conductance (µS/cm): 138.3
k	Description of sample methods	Attachment 5, Pages 29- 0
l	Chain-of-Custody	Attachment 5, Pages 29- 0
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e

R-1, 2024 Annual Sampling

a	Sample Date	11/5/2024
b	Sample Time	1037
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,872.01
g	Total depth of the well (ft below ground surface (bgs))	1,080.1
h	Total volume of water in the monitoring well prior to sample collection (gal)	44.28
i	Total volume of water purged prior to sample collection (gal)	224.36
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.2 Oxidation/Reduction Potential (MV): 96.3 Temp (deg C): 20.5 pH (SU): 7.77 Turbidity (NTU): 0.71 Specific Conductance (µS/cm): 134
k	Description of sample methods	Attachment 5, Page 1
l	Chain-of-Custody	Attachment 5, Page 1
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e

Attachment 5

Table 3. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-300759	R-1	05-09-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	1.67	0.0415
CAMO-24-300759	R-1	05-09-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	1.67	0.523
CAMO-24-300759	R-1	05-09-2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	0.00198
CAMO-25-340803	R-1	11-05-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	19.3	5.000
CAMO-25-340802	R-1	11-05-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N38-2025-380	REG	SW-846:6020B	19.3	5.000
CAMO-24-313280	R-1	05-09-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	19.3	5.000
CAMO-24-313278	R-1	05-09-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	19.3	5.000
CAMO-24-300759	R-1	05-09-2024	120-12-7	Anthracene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	1.721
CAMO-24-313280	R-1	05-09-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	1	6
CAMO-24-313278	R-1	05-09-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	1	6
CAMO-25-340803	R-1	11-05-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	1	6
CAMO-24-300759	R-1	05-09-2024	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-300759	R-1	05-09-2024	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2024-1015	REG	SW-846:8082A	0.0333	0.5
CAMO-24-313278	R-1	05-09-2024	As	Arsenic	2	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	2	10
CAMO-24-313280	R-1	05-09-2024	As	Arsenic	2	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	2	10
CAMO-25-340803	R-1	11-05-2024	As	Arsenic	2.3	ug/L	J	Y	F	N38-2025-380	REG	SW-846:6020B	2	10
CAMO-24-300759	R-1	05-09-2024	1912-24-9	Atrazine	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	3
CAMO-24-300759	R-1	05-09-2024	103-33-3	Azobenzene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.78
CAMO-24-313278	R-1	05-09-2024	Ba	Barium	11.8	ug/L	NQ	Y	F	N38-2024-2815	REG	SW-846:6010D	1	2,000
CAMO-24-313280	R-1	05-09-2024	Ba	Barium	10.9	ug/L	NQ	Y	F	N38-2024-2815	FD	SW-846:6010D	1	2,000
CAMO-25-340803	R-1	11-05-2024	Ba	Barium	12.8	ug/L	NQ	Y	F	N38-2025-380	REG	SW-846:6010D	1	2,000
CAMO-24-300759	R-1	05-09-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	92-87-5	Benzidine	4.13	ug/L	UJ	N	UF	2024-1015	REG	SW-846:8270E	4.13	0.00109
CAMO-24-300759	R-1	05-09-2024	50-32-8	Benzo(a)pyrene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	0.2
CAMO-24-300759	R-1	05-09-2024	205-99-2	Benzo(b)fluoranthene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	0.343
CAMO-24-300759	R-1	05-09-2024	207-08-9	Benzo(k)fluoranthene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	3.432
CAMO-25-340803	R-1	11-05-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	0.2	4
CAMO-24-313280	R-1	05-09-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	0.2	4
CAMO-24-313278	R-1	05-09-2024	Be	Beryllium	0.2	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	0.2	4
CAMO-24-300759	R-1	05-09-2024	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	0.0693
CAMO-24-300759	R-1	05-09-2024	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	0.243
CAMO-24-300759	R-1	05-09-2024	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	0.415
CAMO-24-300759	R-1	05-09-2024	111-44-4	Bis(2-chloroethyl)ether	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.137
CAMO-24-300759	R-1	05-09-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	55.6
CAMO-25-340803	R-1	11-05-2024	B	Boron	15	ug/L	U	N	F	N38-2025-380	REG	SW-846:6010D	15	750
CAMO-24-313280	R-1	05-09-2024	B	Boron	15	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6010D	15	750
CAMO-24-313278	R-1	05-09-2024	B	Boron	15	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6010D	15	750
CAMO-24-300759	R-1	05-09-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	1.34
CAMO-24-300759	R-1	05-09-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	32.9
CAMO-24-300759	R-1	05-09-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.337	7.54
CAMO-25-340803	R-1	11-05-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	0.3	5
CAMO-24-313278	R-1	05-09-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	0.3	5
CAMO-24-313280	R-1	05-09-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	0.3	5
CAMO-24-300759	R-1	05-09-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.0765	0.448
CAMO-24-313280	R-1	05-09-2024	Cl(-1)	Chloride	1.86	mg/L	J+	Y	F	N38-2024-2815	FD	SW-846:9056A	0.067	250
CAMO-25-340803	R-1	11-05-2024	Cl(-1)	Chloride	1.86	mg/L	J+	Y	F	N38-2025-377	REG	SW-846:9056A	0.067	250
CAMO-24-313278	R-1	05-09-2024	Cl(-1)	Chloride	1.82	mg/L	J+	Y	F	N38-2024-2815	REG	SW-846:9056A	0.067	250
CAMO-24-300759	R-1	05-09-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	77.6
CAMO-24-300759	R-1	05-09-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	100
CAMO-24-300759	R-1	05-09-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	20.3
CAMO-25-340803	R-1	11-05-2024	Cr	Chromium	5.49	ug/L	J	Y	F	N38-2025-380	REG	SW-846:6020B	3	50

Attachment 5

Table 3. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-313280	R-1	05-09-2024	Cr	Chromium	5.92	ug/L	J	Y	F	N38-2024-2815	FD	SW-846:6020B	3	50
CAMO-24-313278	R-1	05-09-2024	Cr	Chromium	5.76	ug/L	J	Y	F	N38-2024-2815	REG	SW-846:6020B	3	50
CAMO-24-313280	R-1	05-09-2024	Co	Cobalt	0.3	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	0.3	50
CAMO-25-340803	R-1	11-05-2024	Co	Cobalt	0.3	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	0.3	50
CAMO-24-313278	R-1	05-09-2024	Co	Cobalt	0.3	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	0.3	50
CAMO-25-340803	R-1	11-05-2024	Cu	Copper	1.41	ug/L	J	Y	F	N38-2025-380	REG	SW-846:6020B	0.3	1,000
CAMO-24-313278	R-1	05-09-2024	Cu	Copper	1.1	ug/L	J	Y	F	N38-2024-2815	REG	SW-846:6020B	0.3	1,000
CAMO-24-313280	R-1	05-09-2024	Cu	Copper	1.2	ug/L	J	Y	F	N38-2024-2815	FD	SW-846:6020B	0.3	1,000
CAMO-24-313279	R-1	05-09-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N38-2024-2815	FD	SW-846:9012B	0.00167	0.2
CAMO-24-313277	R-1	05-09-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N38-2024-2815	REG	SW-846:9012B	0.00167	0.2
CAMO-25-340802	R-1	11-05-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	UF	N38-2025-380	REG	SW-846:9012B	0.00167	0.2
CAMO-24-300759	R-1	05-09-2024	50-29-3	DDT[4,4'-]	0.01	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.01	2.29
CAMO-24-300759	R-1	05-09-2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	0.05
CAMO-24-300759	R-1	05-09-2024	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	7.997
CAMO-24-300759	R-1	05-09-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	600
CAMO-24-300759	R-1	05-09-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	75
CAMO-24-300759	R-1	05-09-2024	91-94-1	Dichlorobenzidine[3,3'-]	3.17	ug/L	UJ	N	UF	2024-1015	REG	SW-846:8270E	3.17	1.25
CAMO-24-300759	R-1	05-09-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.355	197
CAMO-24-300759	R-1	05-09-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	25
CAMO-24-300759	R-1	05-09-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	7
CAMO-24-300759	R-1	05-09-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	70
CAMO-24-300759	R-1	05-09-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	100
CAMO-24-300759	R-1	05-09-2024	120-83-2	Dichlorophenol[2,4-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	45.3
CAMO-24-300759	R-1	05-09-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	542-75-6	Dichloropropene[cis/trans-1,3-]	0.5	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.5	4.71
CAMO-24-300759	R-1	05-09-2024	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.01	0.0175
CAMO-24-300759	R-1	05-09-2024	84-66-2	Diethylphthalate	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	14,800
CAMO-24-300759	R-1	05-09-2024	131-11-3	Dimethyl Phthalate	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	612
CAMO-24-300759	R-1	05-09-2024	84-74-2	Di-n-butylphthalate	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	885
CAMO-24-300759	R-1	05-09-2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1.52
CAMO-24-300759	R-1	05-09-2024	51-28-5	Dinitrophenol[2,4-]	5.29	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	5.29	38.7
CAMO-24-300759	R-1	05-09-2024	121-14-2	Dinitrotoluene[2,4-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	2.37
CAMO-24-300759	R-1	05-09-2024	606-20-2	Dinitrotoluene[2,6-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.485
CAMO-24-300759	R-1	05-09-2024	123-91-1	Dioxane[1,4-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	4.59
CAMO-25-340802	R-1	11-05-2024	123-91-1	Dioxane[1,4-]	0.04	ug/L	U	N	UF	N38-2025-377	REG	SW-846:8270E SIM	0.04	4.59
CAMO-24-300759	R-1	05-09-2024	122-39-4	Diphenylamine	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	122
CAMO-24-300759	R-1	05-09-2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	98.7
CAMO-24-300759	R-1	05-09-2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.01	98.7
CAMO-24-300759	R-1	05-09-2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.01	2.23
CAMO-24-300759	R-1	05-09-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	700
CAMO-24-300759	R-1	05-09-2024	206-44-0	Fluoranthene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	802
CAMO-24-300759	R-1	05-09-2024	86-73-7	Fluorene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	288
CAMO-24-313280	R-1	05-09-2024	F(-1)	Fluoride	0.405	mg/L	NQ	Y	F	N38-2024-2815	FD	SW-846:9056A	0.033	1.6
CAMO-24-313278	R-1	05-09-2024	F(-1)	Fluoride	0.401	mg/L	NQ	Y	F	N38-2024-2815	REG	SW-846:9056A	0.033	1.6
CAMO-25-340803	R-1	11-05-2024	F(-1)	Fluoride	0.11	mg/L	NQ	Y	F	N38-2025-377	REG	SW-846:9056A	0.033	1.6
CAMO-24-300759	R-1	05-09-2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.00665	0.02211
CAMO-24-300759	R-1	05-09-2024	118-74-1	Hexachlorobenzene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.0976
CAMO-24-300759	R-1	05-09-2024	87-68-3	Hexachlorobutadiene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1.39
CAMO-24-300759	R-1	05-09-2024	77-47-4	Hexachlorocyclopentadiene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.411
CAMO-24-300759	R-1	05-09-2024	67-72-1	Hexachloroethane	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	3.28
CAMO-24-300759	R-1	05-09-2024	2691-41-0	HMX	0.086	ug/L	U	N	UF	2024-1015	REG	SW-846:8330B	0.086	1,000
CAMO-25-340803	R-1	11-05-2024	Fe	Iron	30	ug/L	U	N	F	N38-2025-380	REG	SW-846:6010D	30	1,000
CAMO-24-313278	R-1	05-09-2024	Fe	Iron	30	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6010D	30	1,000
CAMO-24-313280	R-1	05-09-2024	Fe	Iron	30	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6010D	30	1,000
CAMO-24-300759	R-1	05-09-2024	78-59-1	Isophorone	3.7	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.7	781
CAMO-24-313278	R-1	05-09-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	0.5	15

Attachment 5

Table 3. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purposes	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-313280	R-1	05-09-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	0.5	15
CAMO-25-340803	R-1	11-05-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	0.5	15
CAMO-24-313278	R-1	05-09-2024	Mn	Manganese	2	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6010D	2	200
CAMO-24-313280	R-1	05-09-2024	Mn	Manganese	2	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6010D	2	200
CAMO-25-340803	R-1	11-05-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2025-380	REG	SW-846:7470A	0.067	2
CAMO-24-313279	R-1	05-09-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2024-2815	FD	SW-846:7470A	0.067	2
CAMO-24-313277	R-1	05-09-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2024-2815	REG	SW-846:7470A	0.067	2
CAMO-25-340802	R-1	11-05-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2025-380	REG	SW-846:7470A	0.067	2
CAMO-24-313280	R-1	05-09-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2024-2815	FD	SW-846:7470A	0.067	2
CAMO-24-313278	R-1	05-09-2024	Hg	Mercury	0.067	ug/L	U	N	F	N38-2024-2815	REG	SW-846:7470A	0.067	2
CAMO-24-300759	R-1	05-09-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	100
CAMO-24-300759	R-1	05-09-2024	75-09-2	Methylene Chloride	2.06	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.5	5
CAMO-24-300759	R-1	05-09-2024	90-12-0	Methylnaphthalene[1-]	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	11.4
CAMO-24-300759	R-1	05-09-2024	91-57-6	Methylnaphthalene[2-]	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	35.1
CAMO-24-313280	R-1	05-09-2024	Mo	Molybdenum	0.995	ug/L	J	Y	F	N38-2024-2815	FD	SW-846:6020B	0.2	1,000
CAMO-24-313278	R-1	05-09-2024	Mo	Molybdenum	0.988	ug/L	J	Y	F	N38-2024-2815	REG	SW-846:6020B	0.2	1,000
CAMO-25-340803	R-1	11-05-2024	Mo	Molybdenum	1.09	ug/L	NQ	Y	F	N38-2025-380	REG	SW-846:6020B	0.2	1,000
CAMO-24-300759	R-1	05-09-2024	91-20-3	Naphthalene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	30
CAMO-25-340803	R-1	11-05-2024	Ni	Nickel	2.79	ug/L	NQ	Y	F	N38-2025-380	REG	SW-846:6020B	0.6	200
CAMO-24-313278	R-1	05-09-2024	Ni	Nickel	1.35	ug/L	J	Y	F	N38-2024-2815	REG	SW-846:6020B	0.6	200
CAMO-24-313280	R-1	05-09-2024	Ni	Nickel	1.5	ug/L	J	Y	F	N38-2024-2815	FD	SW-846:6020B	0.6	200
CAMO-25-340803	R-1	11-05-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.344	mg/L	J-	Y	F	N38-2025-380	REG	EPA:353.2	0.017	10
CAMO-24-313280	R-1	05-09-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.331	mg/L	NQ	Y	F	N38-2024-2815	FD	EPA:353.2	0.017	10
CAMO-24-313278	R-1	05-09-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.329	mg/L	NQ	Y	F	N38-2024-2815	REG	EPA:353.2	0.017	10
CAMO-24-300761	R-1	05-09-2024	NO2-N	Nitrite as Nitrogen	0.033	mg/L	U	N	F	2024-1015	REG	EPA:300.0	0.033	1
CAMO-24-300759	R-1	05-09-2024	98-95-3	Nitrobenzene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1.4
CAMO-24-300759	R-1	05-09-2024	55-18-5	Nitrosodiethylamine[N-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.00167
CAMO-24-300759	R-1	05-09-2024	62-75-9	Nitrosodimethylamine[N-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.00491
CAMO-24-300759	R-1	05-09-2024	924-16-3	Nitroso-di-n-butylamine[N-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.0273
CAMO-24-300759	R-1	05-09-2024	930-55-2	Nitrosopyrrolidine[N-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	0.37
CAMO-24-300759	R-1	05-09-2024	108-60-1	Oxybis[1-chloropropane][2,2']	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	9.81
CAMO-24-300759	R-1	05-09-2024	608-93-5	Pentachlorobenzene	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	3.07
CAMO-24-300759	R-1	05-09-2024	87-86-5	Pentachlorophenol	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1
CAMO-25-340803	R-1	11-05-2024	ClO4	Perchlorate	0.354	ug/L	NQ	Y	F	N38-2025-377	REG	SW-846:6850	0.05	13.8
CAMO-24-313280	R-1	05-09-2024	ClO4	Perchlorate	0.419	ug/L	NQ	Y	F	N38-2024-2815	FD	SW-846:6850	0.05	13.8
CAMO-24-313278	R-1	05-09-2024	ClO4	Perchlorate	0.418	ug/L	NQ	Y	F	N38-2024-2815	REG	SW-846:6850	0.05	13.8
CAMO-24-300759	R-1	05-09-2024	355-46-4	Perfluorohexanesulfonic acid	0.628	ng/L	U	N	UF	2024-1015	REG	EPA:537M	0.628	401
CAMO-24-300759	R-1	05-09-2024	1763-23-1	Perfluorooctanesulfonic acid	0.762	ng/L	U	N	UF	2024-1015	REG	EPA:537M	0.762	60.2
CAMO-24-300759	R-1	05-09-2024	335-67-1	Perfluorooctanoic acid	0.762	ng/L	U	N	UF	2024-1015	REG	EPA:537M	0.762	60.2
	R-1	05-09-2024	pH	pH	7.79	SU								6-9
	R-1	11-05-2024	pH	pH	7.77	SU								6-9
CAMO-24-300759	R-1	05-09-2024	85-01-8	Phenanthrene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	170
CAMO-24-300759	R-1	05-09-2024	108-95-2	Phenol	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	5
CAMO-24-300759	R-1	05-09-2024	1610-18-0	Prometon	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	250
CAMO-24-300759	R-1	05-09-2024	129-00-0	Pyrene	0.317	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	0.317	117
CAMO-24-300759	R-1	05-09-2024	Ra-226+228	Radium-226 and Radium-228	0.429	pCi/L	J	Y	UF	2024-1015	REG	Generic:Radium by Calculation	-	5
CAMO-24-300759	R-1	05-09-2024	121-82-4	RDX	0.086	ug/L	U	N	UF	2024-1015	REG	SW-846:8330B	0.086	9.66
CAMO-25-340803	R-1	11-05-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	1.5	50
CAMO-25-340802	R-1	11-05-2024	Se	Selenium	1.5	ug/L	U	N	UF	N38-2025-380	REG	SW-846:6020B	1.5	50
CAMO-24-313278	R-1	05-09-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	1.5	50
CAMO-24-313280	R-1	05-09-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	1.5	50
CAMO-24-313278	R-1	05-09-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2024-2815	REG	SW-846:6020B	0.3	50
CAMO-24-313280	R-1	05-09-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2024-2815	FD	SW-846:6020B	0.3	50
CAMO-25-340803	R-1	11-05-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2025-380	REG	SW-846:6020B	0.3	50
CAMO-24-300759	R-1	05-09-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	100
CAMO-24-313280	R-1	05-09-2024	SO4(-2)	Sulfate	2.09	mg/L	NQ	Y	F	N38-2024-2815	FD	SW-846:9056A	0.13	600

Attachment 5

Table 3. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-24-313278	R-1	05-09-2024	SO4(-2)	Sulfate	2.12	mg/L	NQ	Y	F	N3B-2024-2815	REG	SW-846:9056A	0.13	600
CAMO-25-340803	R-1	11-05-2024	SO4(-2)	Sulfate	2.14	mg/L	NQ	Y	F	N3B-2025-377	REG	SW-846:9056A	0.13	600
CAMO-24-300759	R-1	05-09-2024	126-33-0	Sulfolane	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	20
CAMO-24-300759	R-1	05-09-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1.66
CAMO-24-300759	R-1	05-09-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	10
CAMO-24-300759	R-1	05-09-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-25-340803	R-1	11-05-2024	TI	Thallium	0.6	ug/L	U	N	F	N3B-2025-380	REG	SW-846:6020B	0.6	2
CAMO-24-313278	R-1	05-09-2024	TI	Thallium	0.6	ug/L	U	N	F	N3B-2024-2815	REG	SW-846:6020B	0.6	2
CAMO-24-313280	R-1	05-09-2024	TI	Thallium	0.6	ug/L	U	N	F	N3B-2024-2815	FD	SW-846:6020B	0.6	2
CAMO-24-300759	R-1	05-09-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	1,000
CAMO-24-313278	R-1	05-09-2024	TDS	Total Dissolved Solids	128	mg/L	J	Y	F	N3B-2024-2815	REG	EPA:160.1	2.38	1,000
CAMO-24-313280	R-1	05-09-2024	TDS	Total Dissolved Solids	123	mg/L	J	Y	F	N3B-2024-2815	FD	EPA:160.1	2.38	1,000
CAMO-25-340803	R-1	11-05-2024	TDS	Total Dissolved Solids	149	mg/L	J	Y	F	N3B-2025-377	REG	EPA:160.1	2.38	1,000
CAMO-24-313279	R-1	05-09-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N3B-2024-2815	FD	EPA:351.2	0.033	-
CAMO-24-313277	R-1	05-09-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N3B-2024-2815	REG	EPA:351.2	0.033	-
CAMO-25-340802	R-1	11-05-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	J-	Y	UF	N3B-2025-380	REG	EPA:351.2	0.033	-
CAMO-24-300759	R-1	05-09-2024	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2024-1015	REG	SW-846:8081B	0.15	0.158
CAMO-24-300759	R-1	05-09-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	70
CAMO-24-300759	R-1	05-09-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	200
CAMO-24-300759	R-1	05-09-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	5
CAMO-24-300759	R-1	05-09-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	1,140
CAMO-24-300759	R-1	05-09-2024	95-95-4	Trichlorophenol[2,4,5-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	1,170
CAMO-24-300759	R-1	05-09-2024	88-06-2	Trichlorophenol[2,4,6-]	3.17	ug/L	U	N	UF	2024-1015	REG	SW-846:8270E	3.17	11.9
CAMO-24-300759	R-1	05-09-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.086	ug/L	U	N	UF	2024-1015	REG	SW-846:8330B	0.086	9.8
CAMO-25-340803	R-1	11-05-2024	U	Uranium	0.674	ug/L	NQ	Y	F	N3B-2025-380	REG	SW-846:6020B	0.067	30
CAMO-24-313280	R-1	05-09-2024	U	Uranium	0.729	ug/L	NQ	Y	F	N3B-2024-2815	FD	SW-846:6020B	0.067	30
CAMO-24-313278	R-1	05-09-2024	U	Uranium	0.69	ug/L	NQ	Y	F	N3B-2024-2815	REG	SW-846:6020B	0.067	30
CAMO-24-300759	R-1	05-09-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	2
CAMO-24-300759	R-1	05-09-2024	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	1	620
CAMO-24-300759	R-1	05-09-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.333	193
CAMO-24-300759	R-1	05-09-2024	Xylene[m+p]	Xylene[1,3-+Xylene[1,4-]	0.5	ug/L	U	N	UF	2024-1015	REG	SW-846:8260D	0.5	386
CAMO-24-313280	R-1	05-09-2024	Zn	Zinc	3.3	ug/L	U	N	F	N3B-2024-2815	FD	SW-846:6010D	3.3	10,000
CAMO-24-313278	R-1	05-09-2024	Zn	Zinc	3.3	ug/L	U	N	F	N3B-2024-2815	REG	SW-846:6010D	3.3	10,000
CAMO-25-340803	R-1	11-05-2024	Zn	Zinc	3.89	ug/L	J	Y	F	N3B-2025-380	REG	SW-846:6010D	3.3	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

J+ - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias

J- - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Attachment 5

Table 3. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purposes	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
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Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Relinquished by: <u>Sh. Sherwood</u>	Print Name: <u>Sherril Sherwood</u>	Date/Time: <u>5/10/24 15:00</u>	Received by: <u>ZTA</u>	Print Name: <u>A. Gathers</u>	Date/Time: <u>5/14/24</u>
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

LA-UR-25-20412

Attachment 5

694878

General Engineering Laboratories, Inc., Charleston, SC. Charleston SC		Chain of Custody/Analysis Request															COC/Lab Request #: N3B-2025-377 Page 1 of 2																																																																																																								
Client Contact:		Lab Agreement #:			Site Name: N3B LANL															Rad Screening Info: Sample type has no DOT hazard classification Lab Reporting Limit Type: Method Detection Limit																																																																																																					
		Project Number:			EPA/SC PI_1058_Analytical COC_Analysis EPA/SC PI_1058_Analytical COC_Analysis <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr> </table>																	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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		Analysis Turnaround Time:																																																																																																																							
		24 Hour - ☐ Other - ☐ 7 Days - ☐ 14 Days - ☐ 21 Days - ☐ 28 Days - ☒																																																																																																																							
Total # of bottles: 41																																																																																																																									
Event ID: 16571																																																																																																																									
Field Sample ID	Sample Date	Sample Time	Sample Matrix																																																																																																																						
CAMO-25-340802	11/05/2024	10:37	W																																																																																																																						
CAMO-25-340803	11/05/2024	10:37	W																																																																																																																						
CAMO-25-340806	11/05/2024	11:50	W																																																																																																																						
CAMO-25-340807	11/05/2024	11:50	W																																																																																																																						
CAMO-25-340808	11/05/2024	11:50	W																																																																																																																						
CAMO-25-340809	11/05/2024	11:50	W																																																																																																																						
CAMO-25-340810	11/05/2024	11:50	W																																																																																																																						
CASA-25-340884	11/05/2024	09:06	W																																																																																																																						
CASA-25-340885	11/05/2024	09:06	W																																																																																																																						
CASA-25-340886	11/05/2024	09:06	W																																																																																																																						
CASA-25-340887	11/05/2024	09:06	W																																																																																																																						
CASA-25-340888	11/05/2024	09:06	W																																																																																																																						
CASA-25-340889	11/06/2024	12:14	W																																																																																																																						
CASA-25-340890	11/06/2024	12:14	W																																																																																																																						
CAMO-25-341072	11/06/2024	08:58	W																																																																																																																						
CAMO-25-341076	11/06/2024	08:58	W																																																																																																																						
CAMO-25-341077	11/06/2024	08:58	W																																																																																																																						
Special Instructions:																																																																																																																									
Relinquished by: <i>John Knight</i>	Print Name: John Knight	Date/Time: 11/08/2024 1200	Received by: <i>Chris Mahan</i>	Print Name: Chris Mahan	Date/Time: 11/9/24 0930																																																																																																																				
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R-14 Screen 1, 2024 Annual Sampling

a	Sample Date	11/12/2024
b	Sample Time	1029
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-14 S1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,872.85
g	Total depth of the well (ft below ground surface (bgs))	1,244.7
h	Total volume of water in the monitoring well prior to sample collection (gal)	51.03
i	Total volume of water purged prior to sample collection (gal)	208
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 5.08 Oxidation/Reduction Potential (MV): 193.1 Temp (deg C): 23.3 pH (SU): 7.91 Turbidity (NTU): 1.11 Specific Conductance (µS/cm): 123.3
k	Description of sample methods	Attachment 5, Pages 6- 8
l	Chain-of-Custody	Attachment 5 , Pages 6- 8
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 4

Attachment 5

Table 4. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-14 Screen 1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341061	R-14 S1	11-12-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	1.67	.0415
CAMO-25-341061	R-14 S1	11-12-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	1.67	.523
CAMO-25-340440	R-14 S1	11-12-2024	309-00-2	Aldrin	0.0224	ug/L	NQ	Y	UF	2025-111	REG	SW-846-8081B	0.00691	.00198
CAMO-25-341061	R-14 S1	11-12-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-6020B	19.3	5,000
CAMO-25-341062	R-14 S1	11-12-2024	Al	Aluminum	19.3	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	19.3	5,000
CAMO-25-340440	R-14 S1	11-12-2024	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	1,720
CAMO-25-341062	R-14 S1	11-12-2024	Sb	Antimony	1	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	1	6
CAMO-25-340440	R-14 S1	11-12-2024	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-340440	R-14 S1	11-12-2024	Tot Aroclor	Total Aroclors for sum of all aroclors	0.0333	ug/L	U	N	UF	2025-111	REG	SW-846-8082A	0.0333	.5
CAMO-25-341062	R-14 S1	11-12-2024	As	Arsenic	2.43	ug/L	J	Y	F	N3B-2025-399	REG	SW-846-6020B	2	10
CAMO-25-340440	R-14 S1	11-12-2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	3
CAMO-25-340440	R-14 S1	11-12-2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.78
CAMO-25-341062	R-14 S1	11-12-2024	Ba	Barium	24.9	ug/L	NQ	Y	F	N3B-2025-399	REG	SW-846-6010D	1	2,000
CAMO-25-341061	R-14 S1	11-12-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	5
CAMO-25-340440	R-14 S1	11-12-2024	92-87-5	Benidine	3.9	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3.9	.00109
CAMO-25-340440	R-14 S1	11-12-2024	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	2
CAMO-25-340440	R-14 S1	11-12-2024	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	.343
CAMO-25-340440	R-14 S1	11-12-2024	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	3,432
CAMO-25-341062	R-14 S1	11-12-2024	Be	Beryllium	0.2	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.2	4
CAMO-25-340440	R-14 S1	11-12-2024	319-84-6	BHC(alpha-)	0.00691	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.00691	.0693
CAMO-25-340440	R-14 S1	11-12-2024	319-85-7	BHC(beta-)	0.00691	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.00691	.243
CAMO-25-340440	R-14 S1	11-12-2024	58-89-9	BHC(gamma-)	0.00691	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.00691	.415
CAMO-25-340440	R-14 S1	11-12-2024	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.137
CAMO-25-340440	R-14 S1	11-12-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	55.6
CAMO-25-341062	R-14 S1	11-12-2024	B	Boron	15	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6010D	15	750
CAMO-25-341061	R-14 S1	11-12-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	1.34
CAMO-25-341061	R-14 S1	11-12-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	32.9
CAMO-25-341061	R-14 S1	11-12-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.337	7.54
CAMO-25-341062	R-14 S1	11-12-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.3	5
CAMO-25-341061	R-14 S1	11-12-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	5
CAMO-25-340440	R-14 S1	11-12-2024	57-74-9	Chlordane(alpha/gamma)	0.0795	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.0795	.448
CAMO-25-341062	R-14 S1	11-12-2024	Cl(-)	Chloride	1.63	mg/L	NQ	Y	F	N3B-2025-399	REG	SW-846-9056A	0.067	250
CAMO-25-341061	R-14 S1	11-12-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	77.6
CAMO-25-341061	R-14 S1	11-12-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	100
CAMO-25-341061	R-14 S1	11-12-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	20.3
CAMO-25-341062	R-14 S1	11-12-2024	Cr	Chromium	5.41	ug/L	J	Y	F	N3B-2025-399	REG	SW-846-6020B	3	50
CAMO-25-341062	R-14 S1	11-12-2024	Co	Cobalt	0.3	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.3	50
CAMO-25-341062	R-14 S1	11-12-2024	Cu	Copper	0.337	ug/L	J	Y	F	N3B-2025-399	REG	SW-846-6020B	0.3	1,000
CAMO-25-341061	R-14 S1	11-12-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	UF	N3B-2025-399	REG	SW-846-9012B	0.00167	.2
CAMO-25-340440	R-14 S1	11-12-2024	50-29-3	DDT[4,4'-]	0.0104	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.0104	2.29
CAMO-25-341061	R-14 S1	11-12-2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	600
CAMO-25-341061	R-14 S1	11-12-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	600
CAMO-25-341061	R-14 S1	11-12-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	75
CAMO-25-340440	R-14 S1	11-12-2024	91-94-1	Dichlorobenzidine[3,3'-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1.25
CAMO-25-341061	R-14 S1	11-12-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.355	197
CAMO-25-341061	R-14 S1	11-12-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	25
CAMO-25-341061	R-14 S1	11-12-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	5
CAMO-25-341061	R-14 S1	11-12-2024	75-35-4	Dichloroethene[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	7
CAMO-25-341061	R-14 S1	11-12-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	70
CAMO-25-341061	R-14 S1	11-12-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	100
CAMO-25-340440	R-14 S1	11-12-2024	120-83-2	Dichloropheno[2,4-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	45.3
CAMO-25-341061	R-14 S1	11-12-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	5
CAMO-25-341061	R-14 S1	11-12-2024	10061-01-5	Dichloropropene[cis-1,3-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	4.7
CAMO-25-341061	R-14 S1	11-12-2024	10061-02-6	Dichloropropene[trans-1,3-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-82600	0.333	4.7
CAMO-25-340440	R-14 S1	11-12-2024	60-57-1	Dieldrin	0.0104	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.0104	0.0175
CAMO-25-340440	R-14 S1	11-12-2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	14,800
CAMO-25-340440	R-14 S1	11-12-2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	612
CAMO-25-340440	R-14 S1	11-12-2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	885

Attachment 5

Table 4. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-14 Screen 1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-340440	R-14 S1	11-12-2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1.52
CAMO-25-340440	R-14 S1	11-12-2024	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	5	38.7
CAMO-25-340440	R-14 S1	11-12-2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	2.37
CAMO-25-341061	R-14 S1	11-12-2024	121-14-2	Dinitrotoluene[2,4-]	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	2.37
CAMO-25-340440	R-14 S1	11-12-2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.485
CAMO-25-341061	R-14 S1	11-12-2024	606-20-2	Dinitrotoluene[2,6-]	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	.485
CAMO-25-340440	R-14 S1	11-12-2024	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	4.59
CAMO-25-341061	R-14 S1	11-12-2024	123-91-1	Dioxane[1,4-]	0.04	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8270E_SIM	0.04	4.59
CAMO-25-340440	R-14 S1	11-12-2024	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	122
CAMO-25-340440	R-14 S1	11-12-2024	959-98-8	Endosulfan I	0.00691	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.00691	98.7
CAMO-25-340440	R-14 S1	11-12-2024	33213-65-9	Endosulfan II	0.0104	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.0104	98.7
CAMO-25-340440	R-14 S1	11-12-2024	72-20-8	Endrin	0.0104	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.0104	2.23
CAMO-25-341061	R-14 S1	11-12-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	700
CAMO-25-340440	R-14 S1	11-12-2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	802
CAMO-25-340440	R-14 S1	11-12-2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	288
CAMO-25-341062	R-14 S1	11-12-2024	F(-1)	Fluoride	0.103	mg/L	NQ	Y	F	N3B-2025-399	REG	SW-846-9056A	0.033	1.6
CAMO-25-340440	R-14 S1	11-12-2024	76-44-8	Heptachlor	0.00691	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.00691	.02211
CAMO-25-340440	R-14 S1	11-12-2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.0976
CAMO-25-340440	R-14 S1	11-12-2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1.39
CAMO-25-341061	R-14 S1	11-12-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	1.39
CAMO-25-340440	R-14 S1	11-12-2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.0411
CAMO-25-340440	R-14 S1	11-12-2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	3.28
CAMO-25-341061	R-14 S1	11-12-2024	2691-41-0	HMX	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	1,000
CAMO-25-341062	R-14 S1	11-12-2024	Fe	Iron	30	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6010D	30	1,000
CAMO-25-340440	R-14 S1	11-12-2024	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3.5	781
CAMO-25-341062	R-14 S1	11-12-2024	Pb	Lead	0.5	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.5	15
CAMO-25-341062	R-14 S1	11-12-2024	Mn	Manganese	2.42	ug/L	J	Y	F	N3B-2025-399	REG	SW-846-6010D	2	200
CAMO-25-341061	R-14 S1	11-12-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-7470A	0.067	2
CAMO-25-341062	R-14 S1	11-12-2024	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2025-399	REG	SW-846-7470A	0.067	2
CAMO-25-341061	R-14 S1	11-12-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	100
CAMO-25-341061	R-14 S1	11-12-2024	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.5	5
CAMO-25-340440	R-14 S1	11-12-2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	11.4
CAMO-25-340440	R-14 S1	11-12-2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	35.1
CAMO-25-341062	R-14 S1	11-12-2024	Mo	Molybdenum	1.23	ug/L	NQ	Y	F	N3B-2025-399	REG	SW-846-6020B	0.2	1,000
CAMO-25-340440	R-14 S1	11-12-2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	30
CAMO-25-341061	R-14 S1	11-12-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	30
CAMO-25-341062	R-14 S1	11-12-2024	Ni	Nickel	1.16	ug/L	J	Y	F	N3B-2025-399	REG	SW-846-6020B	0.6	200
CAMO-25-341062	R-14 S1	11-12-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.315	mg/L	NQ	Y	F	N3B-2025-399	REG	EPA-353.2	0.085	10
CAMO-25-340441	R-14 S1	11-12-2024	NO2-N	Nitrite as Nitrogen	0.033	mg/L	U	N	F	2025-110	REG	EPA-300.0	0.033	1
CAMO-25-340440	R-14 S1	11-12-2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1.4
CAMO-25-341061	R-14 S1	11-12-2024	98-95-3	Nitrobenzene	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	1.4
CAMO-25-340440	R-14 S1	11-12-2024	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.00167
CAMO-25-340440	R-14 S1	11-12-2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.00491
CAMO-25-340440	R-14 S1	11-12-2024	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.0273
CAMO-25-340440	R-14 S1	11-12-2024	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	.37
CAMO-25-340440	R-14 S1	11-12-2024	108-60-1	Oxybis[1-chloropropane][2,2'-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	9.81
CAMO-25-340440	R-14 S1	11-12-2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	3.07
CAMO-25-340440	R-14 S1	11-12-2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1
CAMO-25-341062	R-14 S1	11-12-2024	ClO4	Perchlorate	0.349	ug/L	NQ	Y	F	N3B-2025-399	REG	SW-846-6850	0.05	13.8
CAMO-25-341063	R-14 S1	11-12-2024	355-46-4	Perfluorohexanesulfonic acid	0.557	ng/L	U	N	UF	N3B-2025-399	REG	EPA-1633	0.557	401
CAMO-25-341063	R-14 S1	11-12-2024	1763-23-1	Perfluorooctanesulfonic acid	0.566	ng/L	U	N	UF	N3B-2025-399	REG	EPA-1633	0.566	60.2
CAMO-25-341063	R-14 S1	11-12-2024	335-67-1	Perfluorooctanoic acid	0.609	ng/L	U	N	UF	N3B-2025-399	REG	EPA-1633	0.609	60.2
	R-14 S1	11-12-2024	pH	pH	7.91	SU								6-9
CAMO-25-340440	R-14 S1	11-12-2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	170
CAMO-25-340440	R-14 S1	11-12-2024	108-95-2	Phenol	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	5
CAMO-25-340440	R-14 S1	11-12-2024	1610-18-0	Prometon	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	250
CAMO-25-340440	R-14 S1	11-12-2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	0.3	117
CAMO-25-340440	R-14 S1	11-12-2024	Ra-226+228	Radium-226 and Radium-228	3.86	pCi/L	J	Y	UF	2025-111	REG	Generic Radium by Calculation	-	5
CAMO-25-340447	R-14 S1	11-12-2024	Ra-226+228	Radium-226 and Radium-228	4.22	pCi/L	NQ	Y	UF	2025-111	FD	Generic Radium by Calculation	-	5
CAMO-25-341061	R-14 S1	11-12-2024	121-82-4	RDX	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	9.66
CAMO-25-341061	R-14 S1	11-12-2024	Se	Selenium	1.5	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-6020B	1.5	50
CAMO-25-341062	R-14 S1	11-12-2024	Se	Selenium	1.5	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	1.5	50

Attachment 5

Table 4. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-14 Screen 1 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341062	R-14 S1	11-12-2024	Ag	Silver	0.3	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.3	50
CAMO-25-341061	R-14 S1	11-12-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	100
CAMO-25-341062	R-14 S1	11-12-2024	SO4-2)	Sulfate	1.79	mg/L	NQ	Y	F	N3B-2025-399	REG	SW-846-9056A	0.133	600
CAMO-25-340440	R-14 S1	11-12-2024	126-33-0	Sulfate	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	20
CAMO-25-340440	R-14 S1	11-12-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1.66
CAMO-25-341061	R-14 S1	11-12-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	10
CAMO-25-341061	R-14 S1	11-12-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	5
CAMO-25-341062	R-14 S1	11-12-2024	TI	Thallium	0.6	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6020B	0.6	2
CAMO-25-341061	R-14 S1	11-12-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	2
CAMO-25-341062	R-14 S1	11-12-2024	TDS	Total Dissolved Solids	144	mg/L	NQ	Y	F	N3B-2025-399	REG	EPA-160.1	2.38	1,000
CAMO-25-341061	R-14 S1	11-12-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N3B-2025-399	REG	EPA-351.2	0.033	-
CAMO-25-340440	R-14 S1	11-12-2024	8001-35-2	Toxaphene (Technical Grade)	0.156	ug/L	U	N	UF	2025-111	REG	SW-846-8081B	0.156	.158
CAMO-25-341061	R-14 S1	11-12-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	70
CAMO-25-341061	R-14 S1	11-12-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	200
CAMO-25-341061	R-14 S1	11-12-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	5
CAMO-25-341061	R-14 S1	11-12-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	5
CAMO-25-341061	R-14 S1	11-12-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	1,140
CAMO-25-340440	R-14 S1	11-12-2024	95-95-4	Trichloropheno[2,4,5-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	1,170
CAMO-25-340440	R-14 S1	11-12-2024	88-06-2	Trichloropheno[2,4,6-]	3	ug/L	U	N	UF	2025-111	REG	SW-846-8270E	3	11.9
CAMO-25-341061	R-14 S1	11-12-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0862	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8330B	0.0862	9.8
CAMO-25-341062	R-14 S1	11-12-2024	U	Uranium	0.656	ug/L	NQ	Y	F	N3B-2025-399	REG	SW-846-6020B	0.067	30
CAMO-25-341061	R-14 S1	11-12-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	2
CAMO-25-341061	R-14 S1	11-12-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.333	193
CAMO-25-341061	R-14 S1	11-12-2024	Xylene(m+p)	Xylene[1,3-]-Xylene[1,4-]	0.5	ug/L	U	N	UF	N3B-2025-399	REG	SW-846-8260D	0.5	386
CAMO-25-341062	R-14 S1	11-12-2024	Zn	Zinc	3.3	ug/L	U	N	F	N3B-2025-399	REG	SW-846-6010D	3.3	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

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R-46, 2024 Annual Sampling

a	Sample Date	11/6/2024
b	Sample Time	0858
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-46
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,878.69
g	Total depth of the well (ft below ground surface (bgs))	1,382.2
h	Total volume of water in the monitoring well prior to sample collection (gal)	56.67
i	Total volume of water purged prior to sample collection (gal)	248.98
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.13 Oxidation/Reduction Potential (MV): 88.1 Temp (deg C): 20.5 pH (SU): 7.38 Turbidity (NTU): 0.85 Specific Conductance (µS/cm): 119
k	Description of sample methods	Attachment 5, Pages 44-49
l	Chain-of-Custody	Attachment 5, Pages 44-49
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 5

Attachment 5

Table 5. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-46 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341072	R-46	11-06-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	1.67	0.0415
CAMO-25-341076	R-46	11-06-2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	1.67	0.0415
CAMO-25-341072	R-46	11-06-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	1.67	0.523
CAMO-25-341076	R-46	11-06-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	1.67	0.523
CAMO-25-340444	R-46	11-06-2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	0.00198
CAMO-25-341072	R-46	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N38-2025-381	REG	SW-846-60208	19.3	5,000
CAMO-25-341073	R-46	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2025-381	REG	SW-846-60208	19.3	5,000
CAMO-25-341076	R-46	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N38-2025-381	FD	SW-846-60208	19.3	5,000
CAMO-25-341077	R-46	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2025-381	FD	SW-846-60208	19.3	5,000
CAMO-25-340444	R-46	11-06-2024	120-12-7	Anthracene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	1,720
CAMO-25-341073	R-46	11-06-2024	Sb	Antimony	1.73	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60208	1.00	6
CAMO-25-341077	R-46	11-06-2024	Sb	Antimony	1.49	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60208	1.00	6
CAMO-25-340444	R-46	11-06-2024	12674-11-2	Aroclor-1016	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	11104-28-2	Aroclor-1221	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	11141-16-5	Aroclor-1232	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	53469-21-9	Aroclor-1242	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	12672-29-6	Aroclor-1248	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	11097-69-1	Aroclor-1254	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	11096-82-5	Aroclor-1260	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	.5
CAMO-25-340444	R-46	11-06-2024	Tot Aroclor	Total Aroclors for sum of all aroclors	0.0339	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.0339	0.5
CAMO-25-341073	R-46	11-06-2024	As	Arsenic	2.03	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60208	2.00	10
CAMO-25-341077	R-46	11-06-2024	As	Arsenic	2.07	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60208	2.00	10
CAMO-25-340444	R-46	11-06-2024	1912-24-9	Atrazine	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	3
CAMO-25-340444	R-46	11-06-2024	103-33-3	Azobenzene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	0.78
CAMO-25-341073	R-46	11-06-2024	Ba	Barium	23.8	ug/L	NQ	Y	F	N38-2025-381	REG	SW-846-60100	1.00	2,000
CAMO-25-341077	R-46	11-06-2024	Ba	Barium	23.4	ug/L	NQ	Y	F	N38-2025-381	FD	SW-846-60100	1.00	2,000
CAMO-25-341072	R-46	11-06-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-340444	R-46	11-06-2024	92-87-5	Benzidine	4.05	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	4.05	0.00109
CAMO-25-340444	R-46	11-06-2024	50-32-8	Benzo(a)pyrene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	0.2
CAMO-25-340444	R-46	11-06-2024	205-99-2	Benzo(b)fluoranthene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	0.343
CAMO-25-340444	R-46	11-06-2024	207-08-9	Benzo(k)fluoranthene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	3.42
CAMO-25-341073	R-46	11-06-2024	Be	Beryllium	0.200	ug/L	U	N	F	N38-2025-381	REG	SW-846-60208	0.200	4
CAMO-25-341077	R-46	11-06-2024	Be	Beryllium	0.200	ug/L	U	N	F	N38-2025-381	FD	SW-846-60208	0.200	4
CAMO-25-340444	R-46	11-06-2024	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	0.0693
CAMO-25-340444	R-46	11-06-2024	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	0.243
CAMO-25-340444	R-46	11-06-2024	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	0.415
CAMO-25-340444	R-46	11-06-2024	111-44-4	Bis(2-chloroethyl)ether	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	0.137
CAMO-25-340444	R-46	11-06-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	55.6
CAMO-25-341073	R-46	11-06-2024	B	Boron	21.9	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60100	15.0	750
CAMO-25-341077	R-46	11-06-2024	B	Boron	18.2	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60100	15.0	750
CAMO-25-341072	R-46	11-06-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	1.34
CAMO-25-341076	R-46	11-06-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	1.34
CAMO-25-341072	R-46	11-06-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	32.9
CAMO-25-341076	R-46	11-06-2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	32.9
CAMO-25-341072	R-46	11-06-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.337	7.54
CAMO-25-341076	R-46	11-06-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.337	7.54
CAMO-25-341073	R-46	11-06-2024	Cd	Cadmium	0.300	ug/L	U	N	F	N38-2025-381	REG	SW-846-60208	0.300	5
CAMO-25-341077	R-46	11-06-2024	Cd	Cadmium	0.300	ug/L	U	N	F	N38-2025-381	FD	SW-846-60208	0.300	5
CAMO-25-341072	R-46	11-06-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-340444	R-46	11-06-2024	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.0765	0.448
CAMO-25-341073	R-46	11-06-2024	Cl(-1)	Chloride	1.72	mg/L	J+	Y	F	N38-2025-378	REG	SW-846-9056A	0.0670	250
CAMO-25-341077	R-46	11-06-2024	Cl(-1)	Chloride	1.72	mg/L	J+	Y	F	N38-2025-377	FD	SW-846-9056A	0.0670	250
CAMO-25-341072	R-46	11-06-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	77.6
CAMO-25-341076	R-46	11-06-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	77.6
CAMO-25-341072	R-46	11-06-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	100
CAMO-25-341076	R-46	11-06-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	100
CAMO-25-341072	R-46	11-06-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	20.3
CAMO-25-341076	R-46	11-06-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	20.3
CAMO-25-341073	R-46	11-06-2024	Cr	Chromium	4.33	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60208	3.00	50
CAMO-25-341077	R-46	11-06-2024	Cr	Chromium	4.46	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60208	3.00	50
CAMO-25-341073	R-46	11-06-2024	Co	Cobalt	0.300	ug/L	U	N	F	N38-2025-381	REG	SW-846-60208	0.300	50
CAMO-25-341077	R-46	11-06-2024	Co	Cobalt	0.300	ug/L	U	N	F	N38-2025-381	FD	SW-846-60208	0.300	50
CAMO-25-341073	R-46	11-06-2024	Cu	Copper	0.869	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60208	0.300	1,000
CAMO-25-341077	R-46	11-06-2024	Cu	Copper	0.770	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60208	0.300	1,000
CAMO-25-341072	R-46	11-06-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	UF	N38-2025-381	REG	SW-846-90128	0.00167	0.2

Attachment 5

Table 5. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-46 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341076	R-46	11-06-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	UF	N38-2025-381	FD	SW-846-90128	0.00167	0.2
CAMO-25-340444	R-46	11-06-2024	50-29-3	DDT[4,4']	0.0100	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.0100	2.29
CAMO-25-341072	R-46	11-06-2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	600
CAMO-25-341076	R-46	11-06-2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	600
CAMO-25-341072	R-46	11-06-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	600
CAMO-25-341076	R-46	11-06-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	600
CAMO-25-341072	R-46	11-06-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	75
CAMO-25-341076	R-46	11-06-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	75
CAMO-25-340444	R-46	11-06-2024	91-94-1	Dichlorobenzidine[3,3']	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	1.25
CAMO-25-341072	R-46	11-06-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.355	197
CAMO-25-341076	R-46	11-06-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.355	197
CAMO-25-341072	R-46	11-06-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	25
CAMO-25-341076	R-46	11-06-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	25
CAMO-25-341072	R-46	11-06-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-341072	R-46	11-06-2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	7
CAMO-25-341076	R-46	11-06-2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	7
CAMO-25-341072	R-46	11-06-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	70
CAMO-25-341076	R-46	11-06-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	70
CAMO-25-341072	R-46	11-06-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	100
CAMO-25-341076	R-46	11-06-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	100
CAMO-25-340444	R-46	11-06-2024	120-83-2	Dichlorophenol[2,4-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	45.3
CAMO-25-341072	R-46	11-06-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-340444	R-46	11-06-2024	60-57-1	Dieldrin	0.0100	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.0100	0.0175
CAMO-25-340444	R-46	11-06-2024	84-66-2	Diethylphthalate	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	14,800
CAMO-25-340444	R-46	11-06-2024	131-11-3	Dimethyl Phthalate	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	612
CAMO-25-340444	R-46	11-06-2024	84-74-2	Di-n-butylphthalate	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	885
CAMO-25-340444	R-46	11-06-2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	1.52
CAMO-25-340444	R-46	11-06-2024	51-28-5	Dinitrophenol[2,4-]	5.20	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	5.20	38.7
CAMO-25-340444	R-46	11-06-2024	121-14-2	Dinitrotoluene[2,4-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	2.37
CAMO-25-341072	R-46	11-06-2024	121-14-2	Dinitrotoluene[2,4-]	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846-83308	0.0842	2.37
CAMO-25-341076	R-46	11-06-2024	121-14-2	Dinitrotoluene[2,4-]	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846-83308	0.0821	2.37
CAMO-25-340444	R-46	11-06-2024	606-20-2	Dinitrotoluene[2,6-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	0.485
CAMO-25-341072	R-46	11-06-2024	606-20-2	Dinitrotoluene[2,6-]	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846-83308	0.0842	0.485
CAMO-25-341076	R-46	11-06-2024	606-20-2	Dinitrotoluene[2,6-]	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846-83308	0.0821	0.485
CAMO-25-340444	R-46	11-06-2024	123-91-1	Dioxane[1,4-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	4.59
CAMO-25-341072	R-46	11-06-2024	123-91-1	Dioxane[1,4-]	0.0400	ug/L	U	N	UF	N38-2025-377	REG	SW-846-8270E SIM	0.0400	4.59
CAMO-25-341076	R-46	11-06-2024	123-91-1	Dioxane[1,4-]	0.0400	ug/L	U	N	UF	N38-2025-377	FD	SW-846-8270E SIM	0.0400	4.59
CAMO-25-340444	R-46	11-06-2024	122-39-4	Diphenylamine	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	122
CAMO-25-340444	R-46	11-06-2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	98.7
CAMO-25-340444	R-46	11-06-2024	33213-65-9	Endosulfan II	0.0100	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.0100	98.7
CAMO-25-340444	R-46	11-06-2024	72-20-8	Endrin	0.0100	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.0100	2.23
CAMO-25-341072	R-46	11-06-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	700
CAMO-25-341076	R-46	11-06-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	700
CAMO-25-340444	R-46	11-06-2024	206-44-0	Fluoranthene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	802
CAMO-25-340444	R-46	11-06-2024	86-73-7	Fluorene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.312	288
CAMO-25-341073	R-46	11-06-2024	F(-1)	Fluoride	0.0882	mg/L	J	Y	F	N38-2025-378	REG	SW-846-9056A	0.0330	1.6
CAMO-25-341077	R-46	11-06-2024	F(-1)	Fluoride	0.0808	mg/L	J	Y	F	N38-2025-377	FD	SW-846-9056A	0.0330	1.6
CAMO-25-340444	R-46	11-06-2024	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2025-103	REG	SW-846-80818	0.00665	0.0211
CAMO-25-340444	R-46	11-06-2024	118-74-1	Hexachlorobenzene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	0.0976
CAMO-25-340444	R-46	11-06-2024	87-68-3	Hexachlorobutadiene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	1.39
CAMO-25-341072	R-46	11-06-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	1.39
CAMO-25-341076	R-46	11-06-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	1.39
CAMO-25-340444	R-46	11-06-2024	77-47-4	Hexachlorocyclopentadiene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	0.0411
CAMO-25-340444	R-46	11-06-2024	67-72-1	Hexachloroethane	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	3.28
CAMO-25-341072	R-46	11-06-2024	2691-41-0	HMX	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846-83308	0.0842	1,000
CAMO-25-341076	R-46	11-06-2024	2691-41-0	HMX	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846-83308	0.0821	1,000
CAMO-25-341073	R-46	11-06-2024	Fe	Iron	30.0	ug/L	U	N	F	N38-2025-381	REG	SW-846-60100	30.0	1,000
CAMO-25-341077	R-46	11-06-2024	Fe	Iron	30.0	ug/L	U	N	F	N38-2025-381	FD	SW-846-60100	30.0	1,000
CAMO-25-340444	R-46	11-06-2024	78-59-1	Isothiophene	3.64	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.64	781
CAMO-25-341073	R-46	11-06-2024	Pb	Lead	0.500	ug/L	U	N	F	N38-2025-381	REG	SW-846-60208	0.500	15
CAMO-25-341077	R-46	11-06-2024	Pb	Lead	0.500	ug/L	U	N	F	N38-2025-381	FD	SW-846-60208	0.500	15
CAMO-25-341073	R-46	11-06-2024	Mn	Manganese	6.21	ug/L	J	Y	F	N38-2025-381	REG	SW-846-60100	2.00	200
CAMO-25-341077	R-46	11-06-2024	Mn	Manganese	5.90	ug/L	J	Y	F	N38-2025-381	FD	SW-846-60100	2.00	200
CAMO-25-341072	R-46	11-06-2024	Hg	Mercury	0.0670	ug/L	U	N	UF	N38-2025-381	REG	SW-846-7470A	0.0670	2
CAMO-25-341073	R-46	11-06-2024	Hg	Mercury	0.0670	ug/L	U	N	F	N38-2025-381	REG	SW-846-7470A	0.0670	2

Attachment 5

Table 5. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-46 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341076	R-46	11-06-2024	Hg	Mercury	0.0670	ug/L	U	N	UF	N38-2025-381	FD	SW-846:7470A	0.0670	2
CAMO-25-341077	R-46	11-06-2024	Hg	Mercury	0.0670	ug/L	U	N	F	N38-2025-381	FD	SW-846:7470A	0.0670	2
CAMO-25-341072	R-46	11-06-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	100
CAMO-25-341076	R-46	11-06-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	100
CAMO-25-341072	R-46	11-06-2024	75-09-2	Methylene Chloride	0.500	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.500	5
CAMO-25-341076	R-46	11-06-2024	75-09-2	Methylene Chloride	0.500	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.500	5
CAMO-25-340444	R-46	11-06-2024	90-12-0	Methylnaphthalene[1-]	0.312	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	0.312	11.4
CAMO-25-340444	R-46	11-06-2024	91-57-6	Methylnaphthalene[2-]	0.312	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	0.312	35.1
CAMO-25-341073	R-46	11-06-2024	Mo	Molybdenum	1.03	ug/L	NQ	Y	F	N38-2025-381	REG	SW-846:6020B	0.200	1,000
CAMO-25-341077	R-46	11-06-2024	Mo	Molybdenum	1.04	ug/L	NQ	Y	F	N38-2025-381	FD	SW-846:6020B	0.200	1,000
CAMO-25-340444	R-46	11-06-2024	91-20-3	Naphthalene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	0.312	30
CAMO-25-341072	R-46	11-06-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	30
CAMO-25-341076	R-46	11-06-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	30
CAMO-25-341073	R-46	11-06-2024	Ni	Nickel	0.664	ug/L	J	Y	F	N38-2025-381	REG	SW-846:6020B	0.600	200
CAMO-25-341077	R-46	11-06-2024	Ni	Nickel	0.891	ug/L	J	Y	F	N38-2025-381	FD	SW-846:6020B	0.600	200
CAMO-25-341073	R-46	11-06-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.362	mg/L	NQ	Y	F	N38-2025-381	REG	EPA-353.2	0.0170	10
CAMO-25-341077	R-46	11-06-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.360	mg/L	NQ	Y	F	N38-2025-381	FD	EPA-353.2	0.0170	10
CAMO-25-340442	R-46	11-06-2024	NO2-N	Nitrite as Nitrogen	0.0330	mg/L	UJ	N	F	2025-102	REG	EPA-300.0	0.0330	1
CAMO-25-340444	R-46	11-06-2024	98-95-3	Nitrobenzene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	1.4
CAMO-25-341072	R-46	11-06-2024	98-95-3	Nitrobenzene	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846:8330B	0.0842	1.4
CAMO-25-341076	R-46	11-06-2024	98-95-3	Nitrobenzene	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846:8330B	0.0821	1.4
CAMO-25-340444	R-46	11-06-2024	55-18-5	Nitrosodiethylamine[N-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	0.00167
CAMO-25-340444	R-46	11-06-2024	62-75-9	Nitrosodimethylamine[N-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	0.00491
CAMO-25-340444	R-46	11-06-2024	924-16-3	Nitroso-di-n-butylamine[N-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	0.0273
CAMO-25-340444	R-46	11-06-2024	930-55-2	Nitrosopyrrolidine[N-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	0.37
CAMO-25-340444	R-46	11-06-2024	108-60-1	Oxybis[1-chloropropane][2,2']	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	9.81
CAMO-25-340444	R-46	11-06-2024	608-93-5	Pentachlorobenzene	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	3.07
CAMO-25-340444	R-46	11-06-2024	87-86-5	Pentachlorophenol	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	1
CAMO-25-341073	R-46	11-06-2024	CIO4	Perchlorate	0.352	ug/L	NQ	Y	F	N38-2025-378	REG	SW-846:6850	0.0500	13.8
CAMO-25-341077	R-46	11-06-2024	CIO4	Perchlorate	0.342	ug/L	NQ	Y	F	N38-2025-377	FD	SW-846:6850	0.0500	13.8
CAMO-25-340444	R-46	11-06-2024	355-46-4	Perfluorohexanesulfonic acid	0.609	ng/L	U	N	UF	2025-103	REG	EPA-537M	0.609	401
CAMO-25-340444	R-46	11-06-2024	1763-23-1	Perfluorooctanesulfonic acid	0.738	ng/L	U	N	UF	2025-103	REG	EPA-537M	0.738	60.2
CAMO-25-340444	R-46	11-06-2024	335-67-1	Perfluorooctanoic acid	0.738	ng/L	U	N	UF	2025-103	REG	EPA-537M	0.738	60.2
CAMO-25-340444	R-46	11-06-2024	pH	pH	7.38	SU								6.9
CAMO-25-340444	R-46	11-06-2024	85-01-8	Phenanthrene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	0.312	170
CAMO-25-340444	R-46	11-06-2024	108-95-2	Phenol	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	5
CAMO-25-340444	R-46	11-06-2024	1610-18-0	Prometon	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	250
CAMO-25-340444	R-46	11-06-2024	129-00-0	Pyrene	0.312	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	0.312	117
CAMO-25-340444	R-46	11-06-2024	Ra-226+228	Radium-226 and Radium-228	0.345	pCi/L	UJ	N	UF	2025-103	REG	Generic-Radium by Calculation	-	5
CAMO-25-341072	R-46	11-06-2024	121-82-4	RDx	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846:8330B	0.0842	9.66
CAMO-25-341076	R-46	11-06-2024	121-82-4	RDx	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846:8330B	0.0821	9.66
CAMO-25-341072	R-46	11-06-2024	Se	Selenium	1.50	ug/L	U	N	UF	N38-2025-381	REG	SW-846:6020B	1.50	50
CAMO-25-341073	R-46	11-06-2024	Se	Selenium	1.50	ug/L	U	N	F	N38-2025-381	REG	SW-846:6020B	1.50	50
CAMO-25-341076	R-46	11-06-2024	Se	Selenium	1.50	ug/L	U	N	UF	N38-2025-381	FD	SW-846:6020B	1.50	50
CAMO-25-341077	R-46	11-06-2024	Se	Selenium	1.50	ug/L	U	N	F	N38-2025-381	FD	SW-846:6020B	1.50	50
CAMO-25-341073	R-46	11-06-2024	Ag	Silver	0.300	ug/L	U	N	F	N38-2025-381	REG	SW-846:6020B	0.300	50
CAMO-25-341077	R-46	11-06-2024	Ag	Silver	0.300	ug/L	U	N	F	N38-2025-381	FD	SW-846:6020B	0.300	50
CAMO-25-341072	R-46	11-06-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	100
CAMO-25-341076	R-46	11-06-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	100
CAMO-25-341073	R-46	11-06-2024	5041-2	Sulfate	1.87	mg/L	NQ	Y	F	N38-2025-378	REG	SW-846:9056A	0.133	600
CAMO-25-341077	R-46	11-06-2024	5041-2	Sulfate	1.83	mg/L	NQ	Y	F	N38-2025-377	FD	SW-846:9056A	0.133	600
CAMO-25-340444	R-46	11-06-2024	126-33-0	Sulfone	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	20
CAMO-25-340444	R-46	11-06-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846:8270E	3.12	1.66
CAMO-25-341072	R-46	11-06-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	10
CAMO-25-341076	R-46	11-06-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	10
CAMO-25-341072	R-46	11-06-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	5
CAMO-25-341073	R-46	11-06-2024	Tl	Thallium	0.600	ug/L	U	N	F	N38-2025-381	REG	SW-846:6020B	0.600	2
CAMO-25-341077	R-46	11-06-2024	Tl	Thallium	0.600	ug/L	U	N	F	N38-2025-381	FD	SW-846:6020B	0.600	2
CAMO-25-341072	R-46	11-06-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846:82600	0.333	1,000
CAMO-25-341076	R-46	11-06-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846:82600	0.333	1,000
CAMO-25-341073	R-46	11-06-2024	TDS	Total Dissolved Solids	129	mg/L	J	Y	F	N38-2025-378	REG	EPA-160.1	2.38	1,000
CAMO-25-341077	R-46	11-06-2024	TDS	Total Dissolved Solids	126	mg/L	NQ	Y	F	N38-2025-377	FD	EPA-160.1	2.38	1,000
CAMO-25-341072	R-46	11-06-2024	TKN	Total Kjeldahl Nitrogen	0.0330	mg/L	UJ	N	UF	N38-2025-381	REG	EPA-351.2	0.0330	-
CAMO-25-341076	R-46	11-06-2024	TKN	Total Kjeldahl Nitrogen	0.0330	mg/L	UJ	N	UF	N38-2025-381	FD	EPA-351.2	0.0330	-
CAMO-25-340444	R-46	11-06-2024	8001-35-2	Toxaphene (Technical Grade)	0.150	ug/L	U	N	UF	2025-103	REG	SW-846:8081B	0.150	0.158

Attachment 5

Table 5. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-46 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁶	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁴	Groundwater Limit ⁷
CAMO-25-341072	R-46	11-06-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	70
CAMO-25-341076	R-46	11-06-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	70
CAMO-25-341072	R-46	11-06-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	200
CAMO-25-341076	R-46	11-06-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	200
CAMO-25-341072	R-46	11-06-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-341072	R-46	11-06-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	5
CAMO-25-341076	R-46	11-06-2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	5
CAMO-25-341072	R-46	11-06-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	1,140
CAMO-25-341076	R-46	11-06-2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	1,140
CAMO-25-340444	R-46	11-06-2024	95-95-4	Trichlorophenol[2,4,5-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	1,170
CAMO-25-340444	R-46	11-06-2024	88-06-2	Trichlorophenol[2,4,6-]	3.12	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.12	11.9
CAMO-25-341072	R-46	11-06-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0842	ug/L	U	N	UF	N38-2025-381	REG	SW-846-83308	0.0842	9.8
CAMO-25-341076	R-46	11-06-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0821	ug/L	U	N	UF	N38-2025-381	FD	SW-846-83308	0.0821	9.8
CAMO-25-341073	R-46	11-06-2024	U	Uranium	0.415	ug/L	NQ	Y	F	N38-2025-381	REG	SW-846-60208	0.0670	30
CAMO-25-341077	R-46	11-06-2024	U	Uranium	0.432	ug/L	NQ	Y	F	N38-2025-381	FD	SW-846-60208	0.0670	30
CAMO-25-341072	R-46	11-06-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	2
CAMO-25-341076	R-46	11-06-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	2
CAMO-25-341072	R-46	11-06-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	193
CAMO-25-341076	R-46	11-06-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.333	193
CAMO-25-341072	R-46	11-06-2024	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.500	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.500	386
CAMO-25-341076	R-46	11-06-2024	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.500	ug/L	U	N	UF	N38-2025-379	FD	SW-846-82600	0.500	386
CAMO-25-341073	R-46	11-06-2024	Zn	Zinc	3.30	ug/L	U	N	F	N38-2025-381	REG	SW-846-60100	3.30	10,000
CAMO-25-341077	R-46	11-06-2024	Zn	Zinc	3.30	ug/L	U	N	F	N38-2025-381	FD	SW-846-60100	3.30	10,000

Notes:

¹ug/L - micrograms per liter

mg/L - milligrams per liter

ng/L - nanograms per liter

SU - standard units

pCi/L - picocuries per liter

²U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

J+ - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias

UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

General Engineering Laboratories, Inc., Charleston, SC.				Chain of Custody/Analysis Request																COC/Lab Request #: 694878 N3B-2025-377 Page 1 of 2					
Client Contact:				Lab Agreement #:				Site Name: N3B LANL																	
Project Number:				EPA/SC PL 108, JW-9W-646, COM, Arsenic EPA-646-270-SM, 1, 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100				Rad Screening Info: Sample type has no DOT hazard classification Lab Reporting Limit Type: Method Detection Limit																	
Analysis Turnaround Time:																									
24 Hour - ☐ Other - ☐																									
7 Days - ☐																									
14 Days - ☐																									
Total # of bottles: 41				21 Days - ☐																					
Event ID: 16571				28 Days - ☒																					
Field Sample ID				Sample Date		Sample Time		Sample Matrix																	
CAMO-25-340802				11/05/2024		10:37		W																	
CAMO-25-340803				11/05/2024		10:37		W		1															
CAMO-25-340806				11/05/2024		11:50		W		2															
CAMO-25-340807				11/05/2024		11:50		W		1															
CAMO-25-340808				11/05/2024		11:50		W		2															
CAMO-25-340809				11/05/2024		11:50		W		1															
CAMO-25-340810				11/05/2024		11:50		W		1 2															
CASA-25-340884				11/05/2024		09:06		W		2															
CASA-25-340885				11/05/2024		09:06		W		1															
CASA-25-340886				11/05/2024		09:06		W		2															
CASA-25-340887				11/05/2024		09:06		W		1															
CASA-25-340888				11/05/2024		09:06		W		1 2															
CASA-25-340889				11/06/2024		12:14		W		2															
CASA-25-340890				11/06/2024		12:14		W		1															
CAMO-25-341072				11/06/2024		08:58		W		2															
CAMO-25-341076				11/06/2024		08:58		W		2															
CAMO-25-341077				11/06/2024		08:58		W		1															
Special Instructions:																									
Relinquished by: <i>John Knight</i>				Print Name: John Knight				Date/Time: 11/06/2024 12:00				Received by: <i>John Knight</i>				Print Name: John Knight				Date/Time: 11/06/2024 09:30					
Relinquished by:				Print Name:				Date/Time:				Received by:				Print Name:				Date/Time:					
Relinquished by:				Print Name:				Date/Time:				Received by:				Print Name:				Date/Time:					

[illegible]

[illegible]

[illegible]

LA-UR-25-20412

R-60, 2024 Annual Sampling

a	Sample Date	11/6/2024
b	Sample Time	1047
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-60
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,904.23
g	Total depth of the well (ft below ground surface (bgs))	1,360.9
h	Total volume of water in the monitoring well prior to sample collection (gal)	55.8
i	Total volume of water purged prior to sample collection (gal)	182.82
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.41 Oxidation/Reduction Potential (MV): 101 Temp (deg C): 22.8 pH (SU): 8.2 Turbidity (NTU): 1.49 Specific Conductance (µS/cm): 120.6
k	Description of sample methods	Attachment 5, Pages 54-57
l	Chain-of-Custody	Attachment 5 , Pages 54-57
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, a e 6

Attachment 5

Table 6. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-60 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341078	R-60	11-06-2024	107-02-8	Aroclen	1.67	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	1.67	0.0415
CAMO-25-341078	R-60	11-06-2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	1.67	0.323
CAMO-25-340445	R-60	11-06-2024	309-00-2	Aldrin	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	0.00198
CAMO-25-340477	R-60	11-06-2024	309-00-2	Aldrin	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	0.00198
CAMO-25-341078	R-60	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	UF	N38-2025-381	REG	SW-846-6020B	19.3	5.000
CAMO-25-341079	R-60	11-06-2024	Al	Aluminum	19.3	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	19.3	5.000
CAMO-25-340445	R-60	11-06-2024	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	1.721
CAMO-25-341079	R-60	11-06-2024	Sb	Antimony	1	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	1	6
CAMO-25-340445	R-60	11-06-2024	12674-11-2	Aroclor-1016	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	11104-28-2	Aroclor-1221	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	11141-16-5	Aroclor-1232	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	13469-21-9	Aroclor-1242	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	12672-29-6	Aroclor-1248	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	11097-69-1	Aroclor-1254	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	11096-82-5	Aroclor-1260	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-340445	R-60	11-06-2024	Tot Aroclor	Total Aroclors for sum of all aroclors	0.036	ug/L	U	N	UF	2025-103	REG	SW-846-8082A	0.036	0.5
CAMO-25-341079	R-60	11-06-2024	As	Arsenic	2.09	ug/L	J	Y	F	N38-2025-381	REG	SW-846-6020B	2	10
CAMO-25-340445	R-60	11-06-2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	3
CAMO-25-340445	R-60	11-06-2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.78
CAMO-25-341079	R-60	11-06-2024	Ba	Barium	24.2	ug/L	NQ	Y	F	N38-2025-381	REG	SW-846-6010D	1	2,000
CAMO-25-341078	R-60	11-06-2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	
CAMO-25-340445	R-60	11-06-2024	92-87-5	Benztidine	3.9	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.9	0.00109
CAMO-25-340445	R-60	11-06-2024	50-32-8	Benzo[a]pyrene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	0.2
CAMO-25-340445	R-60	11-06-2024	205-99-2	Benzo[k]fluoranthene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	0.343
CAMO-25-340445	R-60	11-06-2024	207-08-9	Benzo[k]fluoranthene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	3.432
CAMO-25-341079	R-60	11-06-2024	Be	Beryllium	0.2	ug/L	U	N	UF	N38-2025-381	REG	SW-846-6020B	0.2	
CAMO-25-340445	R-60	11-06-2024	319-84-6	BHC[alpha-]	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	0.0693
CAMO-25-340477	R-60	11-06-2024	319-84-6	BHC[alpha-]	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	0.0693
CAMO-25-340445	R-60	11-06-2024	319-85-7	BHC[beta-]	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	0.243
CAMO-25-340477	R-60	11-06-2024	319-85-7	BHC[beta-]	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	0.243
CAMO-25-340445	R-60	11-06-2024	58-89-9	BHC[gamma-]	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	0.415
CAMO-25-340477	R-60	11-06-2024	58-89-9	BHC[gamma-]	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	0.415
CAMO-25-340445	R-60	11-06-2024	111-44-4	Blk(2-chloroethyl)ether	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.137
CAMO-25-340445	R-60	11-06-2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	55.6
CAMO-25-341079	R-60	11-06-2024	B	Boron	15	ug/L	U	N	F	N38-2025-381	REG	SW-846-6010D	15	750
CAMO-25-341078	R-60	11-06-2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	1.34
CAMO-25-341078	R-60	11-06-2024	75-25-2	Bromoforn	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	32.9
CAMO-25-341078	R-60	11-06-2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.337	7.54
CAMO-25-341079	R-60	11-06-2024	Cd	Cadmium	0.3	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	0.3	5
CAMO-25-341078	R-60	11-06-2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	5
CAMO-25-340445	R-60	11-06-2024	57-74-9	Chlordane[alpha/gamma]	0.0833	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.0833	0.448
CAMO-25-340477	R-60	11-06-2024	57-74-9	Chlordane[alpha/gamma]	0.0835	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.0835	0.448
CAMO-25-341079	R-60	11-06-2024	Cl-1]	Chloride	1.78	mg/L	J+	Y	F	N38-2025-377	REG	SW-846-9056A	0.067	250
CAMO-25-341078	R-60	11-06-2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	77.6
CAMO-25-341078	R-60	11-06-2024	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	100
CAMO-25-341078	R-60	11-06-2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	20.5
CAMO-25-341079	R-60	11-06-2024	Cr	Chromium	5.63	ug/L	J	Y	F	N38-2025-381	REG	SW-846-6020B	3	50
CAMO-25-341079	R-60	11-06-2024	Co	Cobalt	0.31	ug/L	J	Y	F	N38-2025-381	REG	SW-846-6020B	0.3	50
CAMO-25-341079	R-60	11-06-2024	Cu	Copper	0.33	ug/L	J	Y	F	N38-2025-381	REG	SW-846-6020B	0.3	1,000
CAMO-25-341078	R-60	11-06-2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	UF	N38-2025-381	REG	SW-846-9012B	0.00167	0.2
CAMO-25-340445	R-60	11-06-2024	50-29-3	DDT[4,4-]	0.0108	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.0108	2.29
CAMO-25-340477	R-60	11-06-2024	50-29-3	DDT[4,4-]	0.0109	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.0109	2.29
CAMO-25-341078	R-60	11-06-2024	106-93-4	Dibromomethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	0.05
CAMO-25-341078	R-60	11-06-2024	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	7.997
CAMO-25-341078	R-60	11-06-2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	600
CAMO-25-341078	R-60	11-06-2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	75
CAMO-25-340445	R-60	11-06-2024	91-94-1	Dichlorobenzidine[3,3'-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1.25
CAMO-25-341078	R-60	11-06-2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.355	197
CAMO-25-341078	R-60	11-06-2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	25
CAMO-25-341078	R-60	11-06-2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	5
CAMO-25-341078	R-60	11-06-2024	75-35-4	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	7
CAMO-25-341078	R-60	11-06-2024	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	70
CAMO-25-341078	R-60	11-06-2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	100
CAMO-25-340445	R-60	11-06-2024	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	45.3
CAMO-25-341078	R-60	11-06-2024	78-67-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	5
CAMO-25-341078	R-60	11-06-2024	10051-01-5	Dichloropropene[cis-1,3-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	4.71
CAMO-25-340445	R-60	11-06-2024	60-57-1	Dieldrin	0.0108	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.0108	0.0175
CAMO-25-340477	R-60	11-06-2024	60-57-1	Dieldrin	0.0109	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.0109	0.0175
CAMO-25-340445	R-60	11-06-2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	14.800
CAMO-25-340445	R-60	11-06-2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	612
CAMO-25-340445	R-60	11-06-2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	885
CAMO-25-340445	R-60	11-06-2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1.52
CAMO-25-340445	R-60	11-06-2024	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	5	38.7
CAMO-25-340445	R-60	11-06-2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	2.37
CAMO-25-341078	R-60	11-06-2024	121-14-2	Dinitrotoluene[2,4-]	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-8330B	0.0841	2.37
CAMO-25-340445	R-60	11-06-2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.485
CAMO-25-341078	R-60	11-06-2024	606-20-2	Dinitrotoluene[2,6-]	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-8330B	0.0841	0.485
CAMO-25-340445	R-60	11-06-2024	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-827		

Attachment 5

Table 6. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-60 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341078	R-60	11-06-2024	123-91-1	Dioxane[1,4-]	0.04	ug/L	U	N	UF	N38-2025-377	REG	SW-846-8270E_S1M	0.04	4.59
CAMO-25-340445	R-60	11-06-2024	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	122
CAMO-25-340445	R-60	11-06-2024	959-98-8	Endosulfan I	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	98.7
CAMO-25-340477	R-60	11-06-2024	959-98-8	Endosulfan I	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	98.7
CAMO-25-340445	R-60	11-06-2024	33213-65-9	Endosulfan II	0.0108	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.0108	98.7
CAMO-25-340477	R-60	11-06-2024	33213-65-9	Endosulfan II	0.0109	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.0109	98.7
CAMO-25-340445	R-60	11-06-2024	72-20-8	Endrin	0.0108	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.0108	2.23
CAMO-25-340477	R-60	11-06-2024	72-20-8	Endrin	0.0109	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.0109	2.23
CAMO-25-341078	R-60	11-06-2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	700
CAMO-25-340445	R-60	11-06-2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	802
CAMO-25-340445	R-60	11-06-2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	288
CAMO-25-341079	R-60	11-06-2024	FI-1	Fluoride	0.0742	mg/L	J	Y	F	N38-2025-377	REG	SW-846-9056A	0.033	1.6
CAMO-25-340445	R-60	11-06-2024	76-44-8	Heptachlor	0.00716	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.00716	0.02211
CAMO-25-340477	R-60	11-06-2024	76-44-8	Heptachlor	0.00726	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.00726	0.02211
CAMO-25-340445	R-60	11-06-2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.0976
CAMO-25-340445	R-60	11-06-2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1.39
CAMO-25-341078	R-60	11-06-2024	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	1.39
CAMO-25-340445	R-60	11-06-2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.411
CAMO-25-340445	R-60	11-06-2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	3.28
CAMO-25-341078	R-60	11-06-2024	2691-41-0	HMX	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-8330B	0.0841	1,000
CAMO-25-341079	R-60	11-06-2024	Fe	Iron	30	ug/L	U	N	F	N38-2025-381	REG	SW-846-6010D	30	1,000
CAMO-25-340445	R-60	11-06-2024	78-59-1	Isothophene	3.5	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3.5	781
CAMO-25-341079	R-60	11-06-2024	Pb	Lead	0.5	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	0.5	15
CAMO-25-341079	R-60	11-06-2024	Mn	Manganese	2	ug/L	U	N	F	N38-2025-381	REG	SW-846-6010D	2	200
CAMO-25-341078	R-60	11-06-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2025-381	REG	SW-846-7470A	0.067	2
CAMO-25-341079	R-60	11-06-2024	Hg	Mercury	0.067	ug/L	U	N	UF	N38-2025-381	REG	SW-846-7470A	0.067	2
CAMO-25-341078	R-60	11-06-2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	100
CAMO-25-341078	R-60	11-06-2024	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.5	5
CAMO-25-340445	R-60	11-06-2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	11.4
CAMO-25-340445	R-60	11-06-2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	35.1
CAMO-25-341079	R-60	11-06-2024	Mo	Molybdenum	1.08	ug/L	U	NQ	Y	N38-2025-381	REG	SW-846-6020B	0.2	1,000
CAMO-25-340445	R-60	11-06-2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	30
CAMO-25-341078	R-60	11-06-2024	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	30
CAMO-25-341079	R-60	11-06-2024	Ni	Nickel	0.6	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	0.6	200
CAMO-25-341079	R-60	11-06-2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.339	mg/L	NQ	Y	F	N38-2025-381	REG	EPA 353.2	0.017	30
CAMO-25-340443	R-60	11-06-2024	NO2-N	Nitrite as Nitrogen	0.333	mg/L	U	N	F	2025-102	REG	EPA-300.0	0.033	1,000
CAMO-25-340445	R-60	11-06-2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1.4
CAMO-25-341078	R-60	11-06-2024	98-95-3	Nitrobenzene	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-8330B	0.0841	1.4
CAMO-25-340445	R-60	11-06-2024	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.00167
CAMO-25-340445	R-60	11-06-2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.00491
CAMO-25-340445	R-60	11-06-2024	924-18-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.0273
CAMO-25-340445	R-60	11-06-2024	930-55-2	Nitrosopropylamine[N-]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	0.37
CAMO-25-340445	R-60	11-06-2024	108-60-1	Oxybis[1-chloropropane][2,2']	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	9.81
CAMO-25-340445	R-60	11-06-2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	3.07
CAMO-25-340445	R-60	11-06-2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1
CAMO-25-341079	R-60	11-06-2024	CO4	Perchlorate	0.348	ug/L	U	NQ	F	N38-2025-377	REG	SW-846-8650	0.05	REG
CAMO-25-340445	R-60	11-06-2024	355-46-4	Perfluorooctanesulfonic acid	0.661	ng/L	U	N	UF	2025-103	REG	EPA 537M	0.661	401
CAMO-25-340445	R-60	11-06-2024	1763-23-1	Perfluorooctanesulfonic acid	0.802	ng/L	U	N	UF	2025-103	REG	EPA 537M	0.802	60.2
CAMO-25-340445	R-60	11-06-2024	335-67-1	Perfluorooctanoic acid	0.802	ng/L	U	N	UF	2025-103	REG	EPA 537M	0.802	60.2
CAMO-25-340445	R-60	11-06-2024		pH	8.2	SU								6.9
CAMO-25-340445	R-60	11-06-2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	170
CAMO-25-340445	R-60	11-06-2024	108-95-2	Phenol	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	5
CAMO-25-340445	R-60	11-06-2024	1610-18-0	Prometon	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	250
CAMO-25-340445	R-60	11-06-2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	0.3	117
CAMO-25-341078	R-60	11-06-2024	Ra-226+228	Radium-226 and Radium-228	1.08	pCi/L	U	N	UF	N38-2025-381	REG	Generic Radium by Calculation		5
CAMO-25-341078	R-60	11-06-2024	121-82-4	ROX	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-8330B	0.0841	9.66
CAMO-25-341078	R-60	11-06-2024	Se	Selenium	1.5	ug/L	U	N	UF	N38-2025-381	REG	SW-846-6020B	1.5	50
CAMO-25-341079	R-60	11-06-2024	Se	Selenium	1.5	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	1.5	50
CAMO-25-341079	R-60	11-06-2024	Ag	Silver	0.3	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	0.3	50
CAMO-25-341078	R-60	11-06-2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	100
CAMO-25-341079	R-60	11-06-2024	SO4[2-]	Sulfate	1.9	mg/L	NQ	Y	F	N38-2025-377	REG	SW-846-9056A	0.133	600
CAMO-25-340445	R-60	11-06-2024	126-33-0	Sulfolane	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	20
CAMO-25-340445	R-60	11-06-2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2025-103	REG	SW-846-8270E	3	1.66
CAMO-25-341078	R-60	11-06-2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	10
CAMO-25-341078	R-60	11-06-2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	5
CAMO-25-341079	R-60	11-06-2024	Tl	Thallium	0.6	ug/L	U	N	F	N38-2025-381	REG	SW-846-6020B	0.6	2
CAMO-25-341078	R-60	11-06-2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	1,000
CAMO-25-341079	R-60	11-06-2024	TDS	Total Dissolved Solids	131	mg/L	J+	Y	F	N38-2025-377	REG	EPA-160.1	2.38	1,000
CAMO-25-341078	R-60	11-06-2024	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N38-2025-381	REG	EPA-351.2	0.033	-
CAMO-25-340445	R-60	11-06-2024	8001-35-2	Toxaphene (Technical Grade)	0.161	ug/L	U	N	UF	2025-103	REG	SW-846-8081B	0.161	0.158
CAMO-25-340477	R-60	11-06-2024	8001-35-2	Toxaphene (Technical Grade)	0.164	ug/L	U	N	UF	2025-103	FD	SW-846-8081B	0.164	0.158
CAMO-25-341078	R-60	11-06-2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	70
CAMO-25-341078	R-60	11-06-2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-8260D	0.333	200
CAMO-25-341078	R-60	11-06-2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L								

Attachment 5

Table 6. Analytical Results from Annual Ground Water Sampling of Regional Monitoring Well R-60 in 2024. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-25-341078	R-60	11-06-2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0841	ug/L	U	N	UF	N38-2025-381	REG	SW-846-83308	0.0841	9.8
CAMO-25-341079	R-60	11-06-2024	U	Uranium	0.489	ug/L	NQ	Y	F	N38-2025-381	REG	SW-846-60208	0.067	30
CAMO-25-341078	R-60	11-06-2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	2
CAMO-25-341078	R-60	11-06-2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.333	193
CAMO-25-341078	R-60	11-06-2024	Xylene[m-p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N38-2025-379	REG	SW-846-82600	0.5	386
CAMO-25-341079	R-60	11-06-2024	Zn	Zinc	3.3	ug/L	U	N	F	N38-2025-381	REG	SW-846-60100	3.3	10,000

Notes:

¹ug/L - micrograms per liter
mg/L - milligrams per liter
ng/L - nanograms per liter
SU - standard units
pCi/L - picocuries per liter

²U - The analyte is classified as not detected
J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual
NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected
J+ - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias
UI - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

³N - In the Detected column means the analyte was not detected
Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered
F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample
FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

[illegible]

[illegible]

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2025-103
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Method Detection Limit

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Attachment 6

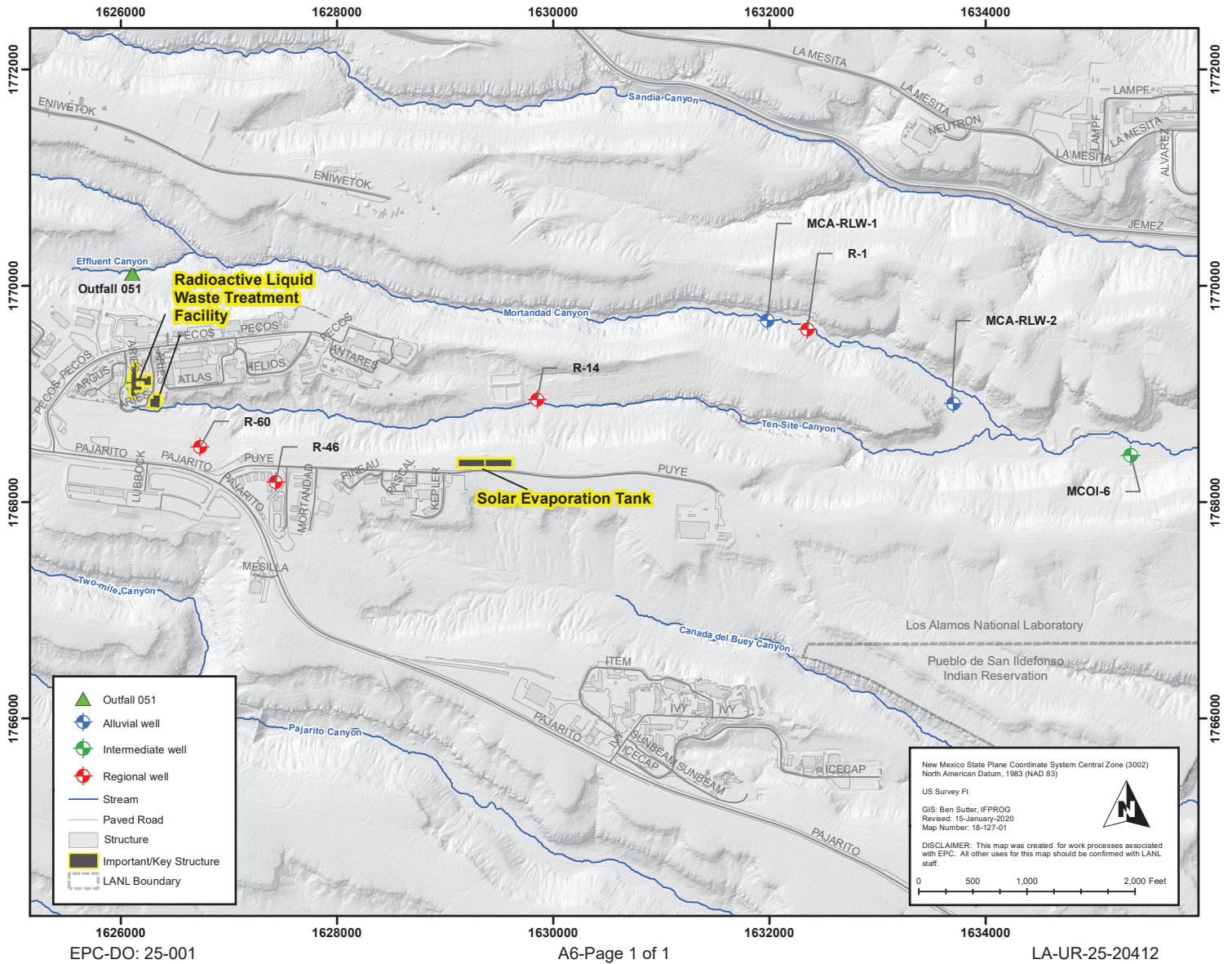
Monitoring Well Location Map

EPC-DO: 25-001

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Date: January 31, 2025

ATTACHMENT 6



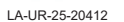
Attachment 7

All Major Structures at the RLWTF - Updated Schematic

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025



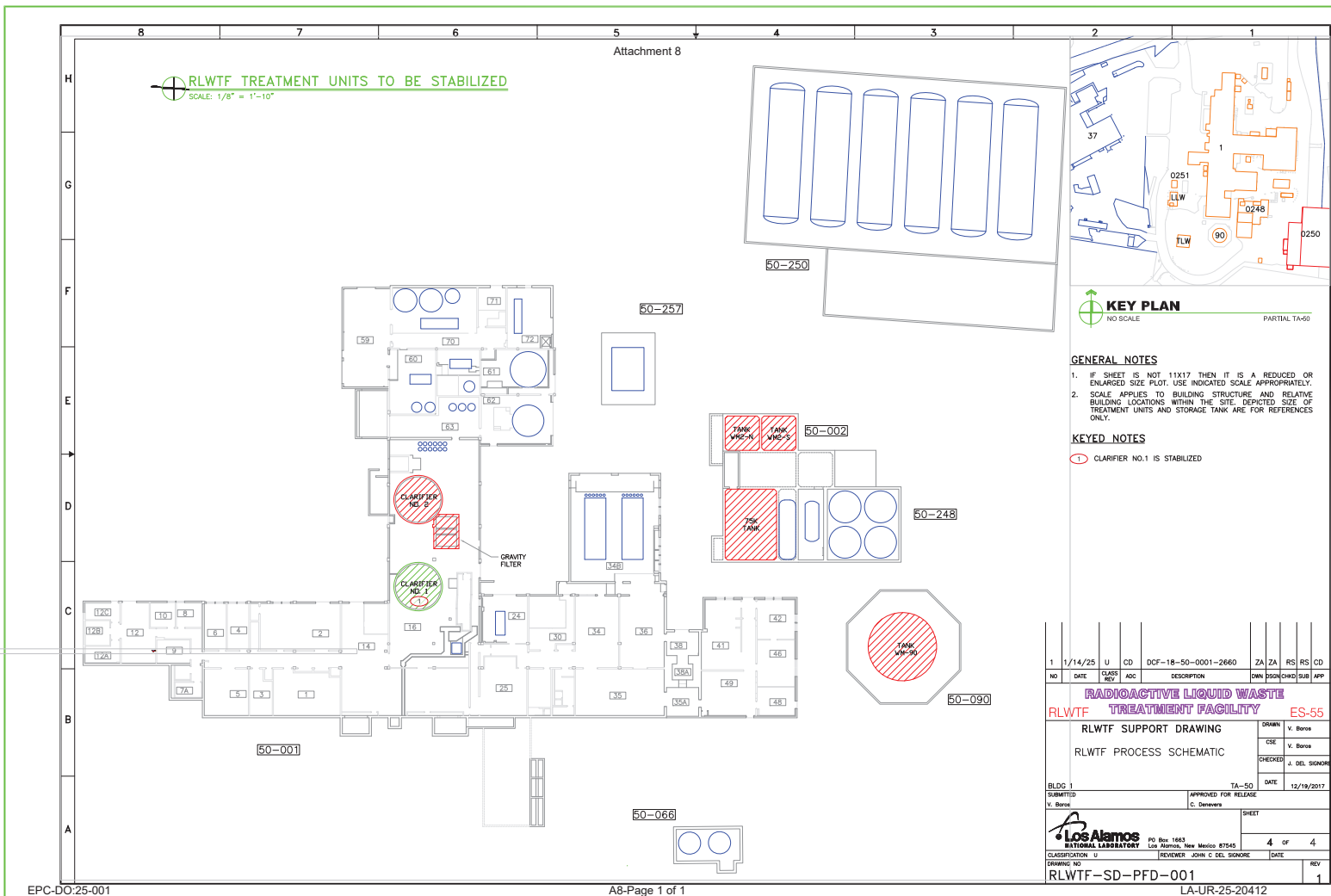
Attachment 8

Treatment Units to be Stabilized at the RLWTF - Schematic

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025



Attachment 9

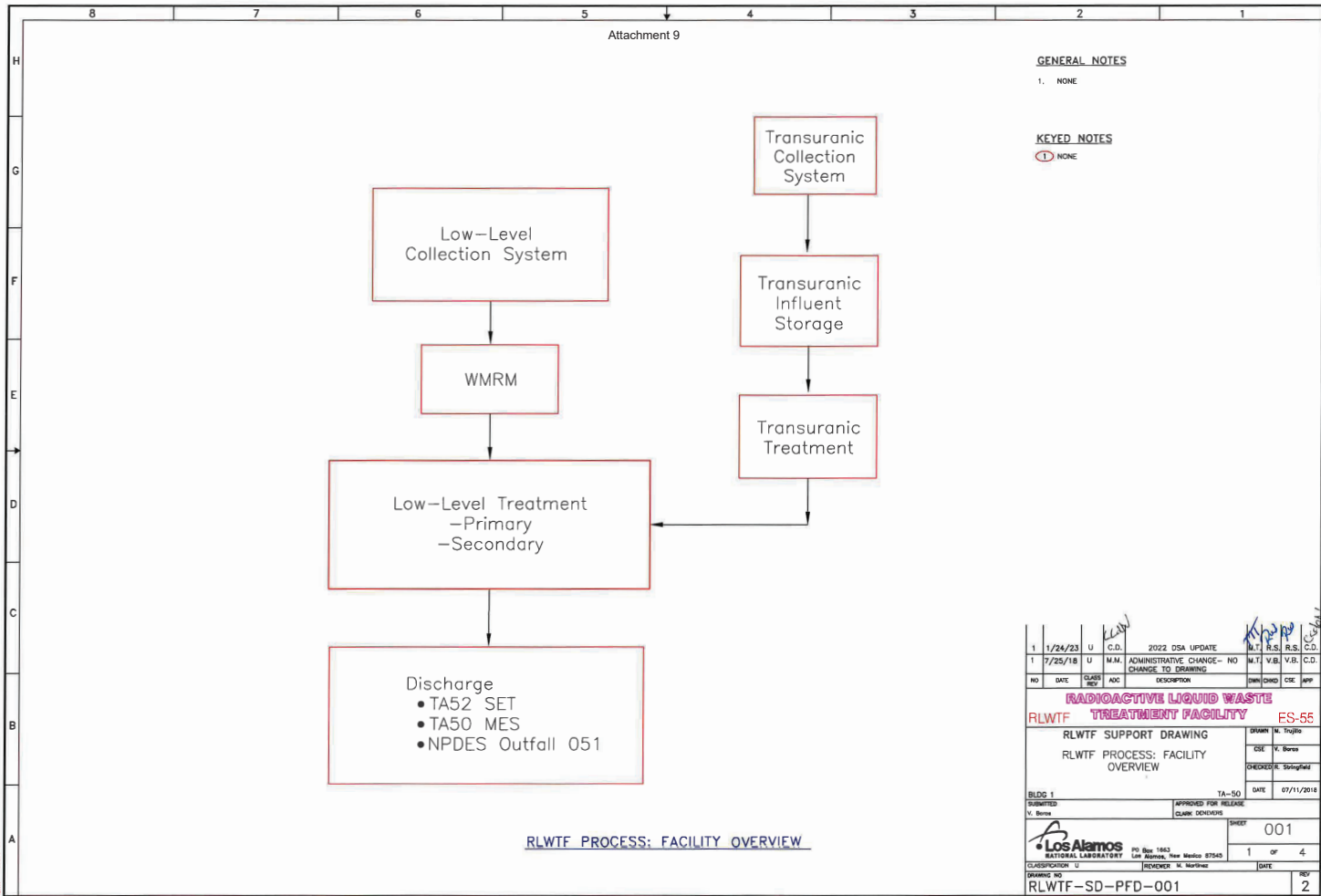
Current Treatment Process Overview at the RLWTF - Flow Chart

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

Revised: 10/2011
Original: 10/2011
Revised: 10/2011
Original: 10/2011



Attachment 10

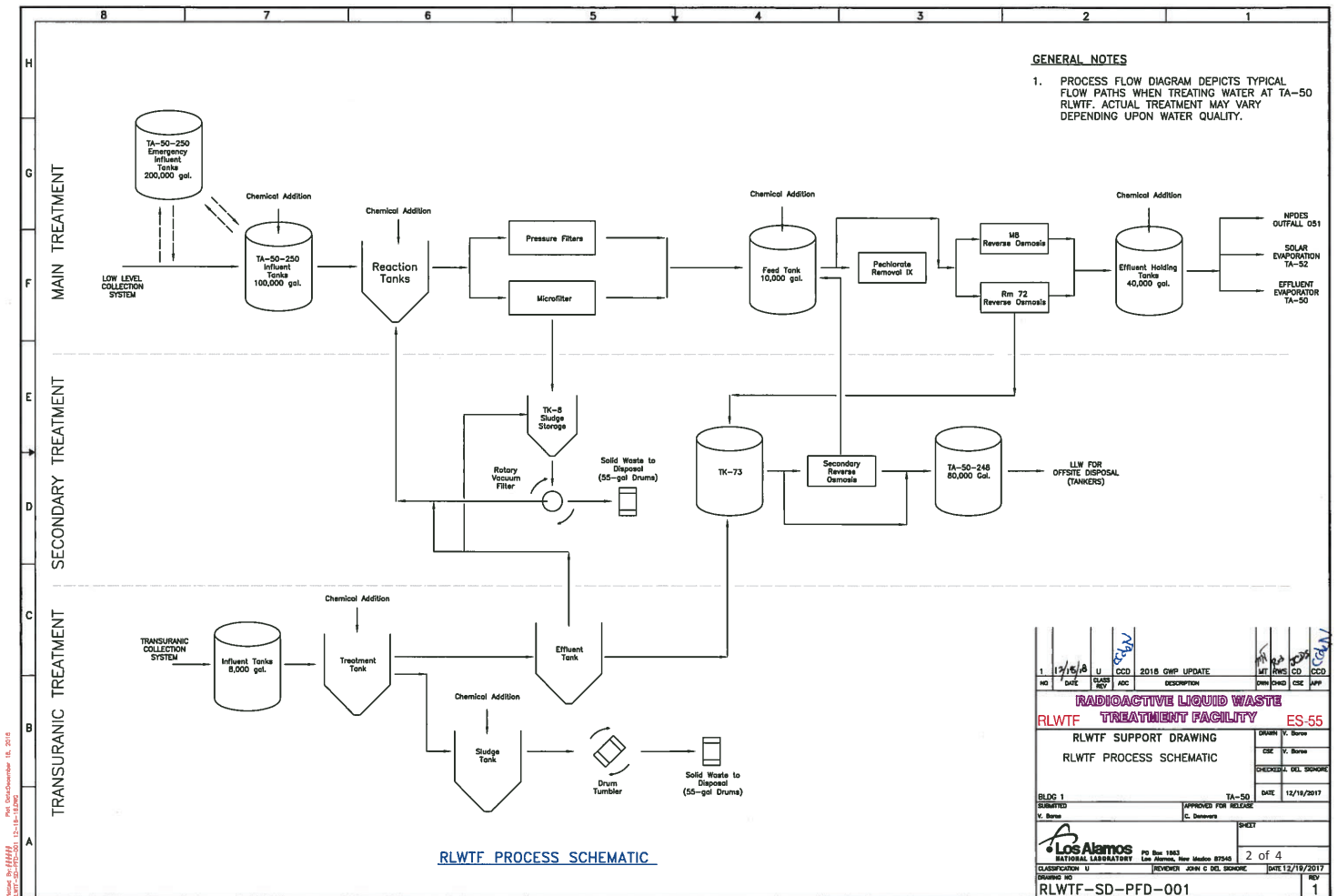
Detailed View of the Current Treatment Process at the RLWTF - Flow Chart

EPC-DO: 25-001

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Date: January 31, 2025

Attachment 10



Attachment 11

RLWTF Systems and Treatment Units - Narrative Description

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

RLWTF Processes and Units

OVERVIEW

The Radioactive Liquid Waste Treatment Facility (RLWTF) includes (a) two underground collection systems that convey water to Technical Area (TA) 50 from generators at Los Alamos National Laboratory (LANL), (b) structures at TA-50, and (c) solar evaporation tanks at TA-52. At TA-50, Building 50-01 is the primary structure; it houses treatment equipment, process tanks, analytical laboratories, and offices. Adjacent TA-50 structures provide for storage of influent and wastewater, but not treatment: 50-66 (transuranic influent), 50-248 (secondary waters), and 50-250 (low-level influent).

The RLWTF receives and treats radioactive liquid waste (RLW) from generators at LANL. Treatment units have been grouped into a main treatment process for low-level RLW, a process for treating transuranic RLW, and a secondary treatment process for waste streams from both the low-level and transuranic processes. The units within each of these process lines are summarized in Table 1 and described in the paragraphs that follow. Table 2 provides additional information for each unit, including location, vessels, construction materials, capacity, and secondary containment.

TABLE 1: SUMMARY OF RLWTF TREATMENT UNITS

Unit Operation	Tanks	Location
Main Treatment:		
M1 Collection system	----	TA-03, 35, 48, 50, 55, 59
M2 Influent storage	W5, W6	50-250
M3 Emergency influent storage	WMRM tanks (4)	50-250
M4 Reaction tanks	TK71, TK72	50-01
M5 Microfilter	----	50-01
M6 Pressure filters	---	50-01
M7 Perchlorate ion exchange	TK09	50-01
M8 Primary reverse osmosis	----	50-01
M9 Reserved	----	----
M10 Effluent storage	N.Frac, S.Frac	50-01
M11 Mechanical evaporator	----	50-257
M11 Solar evaporation	----	TA52
M11 NPDES Outfall #051	----	Effluent Canyon ^A
Transuranic:		
T1 TRU Collection system	----	TA50, 55
T2 TRU Influent storage	Acid tank, Caustic tank	50-66
T3 TRU Treatment	TK1, TK2	50-01
T4 TRU Solids	TK-7A	50-01
T5 TRU Effluent	TK3	50-01
Secondary Treatment:		
S1 Secondary reverse osmosis	TK73, TK25	50-01
S2 Vacuum filter	TK8	50-01
S3 Bottoms storage	17K, TK-NE,SE,SW,NW	50-248

^A Effluent Canyon is a tributary of Mortandad Canyon.

MAIN TREATMENT PROCESS

The main treatment process consists of the collection, storage, and treatment of low-level RLW, and the discharge of treated effluent to the environment. Process steps include treatment with chemicals in a reaction tank, filtration, ion exchange, and reverse osmosis. Discharge to the environment is via NPDES outfall, solar evaporation, or evaporation using natural gas. Two secondary streams are generated by primary treatment, low-level solids and reverse osmosis concentrate; they are sent to the secondary treatment process.

M1. RADIOACTIVE LIQUID WASTE COLLECTION SYSTEM

The majority of RLW is transferred by direct pipeline between generator facilities and the RLWTF^B. The pipeline system, installed in 1982, connects the TA-50 RLWTF to buildings in six TAs using approximately four miles of underground, double-walled (pipeline within a pipeline) piping. Primary piping is six- or eight-inch-diameter polyethylene encased within 10- or 12-inch polyethylene secondary piping. The primary piping transitions to stainless steel in each of 63 underground valve stations (also referred to as vaults), then transitions back to polyethylene upon exit. Vaults are equipped with leak detection sensors that are linked electronically to the RLWTF operations center.

M2. INFLUENT STORAGE

Influent flows by gravity from the collection system into storage tanks in Building 50-250. Two influent tanks in the basement of the building are dedicated to daily influent activities. Both are fiberglass, and each has a capacity of 50,000 gallons. After a tank is sampled, influent is fed to the low-level main treatment process in Building 50-01 via another underground, double-walled pipe.

M3. EMERGENCY INFLUENT STORAGE

Building 50-250, the Waste Management and Risk Mitigation (WMRM) facility, is located about 50 meters southeast of Building 50-01. WMRM houses six influent storage tanks with a capacity of 50,000 gallons each; four of these are held in reserve for emergencies. WMRM is a steel frame structure designed to withstand seismic, wind, and snow load criteria. The concrete basement houses the two influent and four emergency storage tanks and acts as secondary containment. Tanks receive influent by gravity flow from the collection system.

M4. REACTION TANKS

Influent is mixed with treatment chemicals in reaction tanks TK71 and TK72 to remove insoluble constituents, including more than 90% of the radioactivity. The two reaction tanks are aboveground, carbon-steel vessels, ~10,000 gallons each. Influent and chemicals enter from above; the tank mixer brings the streams into contact. Chemicals such as sodium hydroxide and ferric sulfate are added to adjust pH, precipitate metals, and promote particle growth. Contaminants precipitate as solids, which are kept in suspension by the tank mixer. The solids-water mixture is fed to the next treatment step, the microfilter.

M5. MICROFILTER

From the reaction tanks, treated influent is pumped to a microfilter to remove solids from water. The microfilter employs polyvinylidene fluoride, or PVDF, membranes to separate the solids. The membranes can withstand pH ranges from 0-14, are non-plugging, and are chlorine resistant; they remove

^B The remaining RLW, typically less than 2,000 gallons per month, is transferred from small generators via truck.

particles as small as 0.1 micron, and can handle feed streams with up to 5% solids. A periodic backpulse of air sends a reverse flow of filtrate across the membrane, dislodging contaminants and moving solids to the concentrate tank. A clean-in-place system enables periodic cleaning of membranes using chemicals such as acids, bases, or bleach.

Filtrate (water) from the microfilter is fed to TK9, and from TK9 to either perchlorate ion exchange or the primary reverse osmosis unit. Solids from the microfilter are periodically removed to TK8 for subsequent treatment in the vacuum filter.

M6. PRESSURE FILTERS

Three pressure media filters, which operate in parallel or singly, can also be used to remove suspended solids from water in the reaction tanks. Water is pumped from either TK71 or TK72, through the media in an enclosed steel vessel at a pressure of about 30 pounds per square gauge (psig). Pressure filters are 30 inches in diameter and approximately five feet high, and are constructed of carbon steel lined with plasite (an epoxy). The media in the pressure filter consists of coarse and fine particles of sand, garnet, coal, and gravel, and can remove particles as small as 10 microns. Backwashing is periodically necessary, to remove solids and to reconstitute the bed. Each filter can process up to 50 gallons per minute (gpm).

M7. PERCHLORATE ION EXCHANGE

Ion-exchange columns located in Room 16 are used to remove perchlorates. Three of the eight fiberglass reinforced plastic ion exchange vessels are typically in service. Vessels range in size to nine cubic feet of ion exchange resin, and can treat up to 60 gallons of water per minute. The columns are installed downstream of TK9, and prior to treatment by the reverse osmosis. TK9 is a 9000-gallon, carbon-steel, aboveground vessel located in Room 61. Resins are not re-generated. Instead, columns are drained of water, then disposed as solid radioactive waste.

M8. PRIMARY REVERSE OSMOSIS

The double-pass reverse osmosis unit in Room 36 (referred to as the M8 unit) began operation in late 2018 in order to assure that treated water meets DP-1132 effluent limits.

Reverse osmosis units remove soluble contaminants and produce a high-quality effluent that approaches and sometimes meets EPA drinking water standards. The reverse osmosis units use commercially available high-rejection membranes, typically rated at nominal NaCl rejection of 90-99%. The M8 unit has three 8-inch-diameter pressure vessels (first pass) and six 4-inch-diameter pressure vessels (second pass). Permeate from the M8 unit is sent to storage tanks in Room 34B; concentrate is processed through the secondary treatment process. The M8 unit has a capacity of 30 gpm.

M9. RESERVED

The copper-zinc ion exchange treatment unit, described in the application for DP-1132, was removed from service in 2014.

M10. EFFLUENT STORAGE

Two tanks are available for the storage of treated water, referred as the north frac tank and the south frac tank. Frac tanks are horizontal carbon steel tanks located in Room 34B; each has a capacity of ~20,000 gallons. The two tanks are operated in tandem. When the north tank is filled, the flow of reverse osmosis permeate is directed to the south tank. While the south tank is filling, water in the north tank is sampled, adjusted if necessary (e.g., pH adjustment), and then discharged to the environment. This practice helps to assure that treated water will meet effluent limits imposed by regulatory agencies.

M11. DISCHARGE OF TREATED WATER TO THE ENVIRONMENT**11A. DISCHARGE VIA MECHANICAL EVAPORATION**

Treated water may be discharged to the environment via an effluent evaporator located outside Room 34 of Building 50-01. Water is heated using natural gas in a 4.5 million BTU/hr low NO_x gas burner that can evaporate up to 400 gallons of water per hour. The unit is constructed of stainless steel, and has received a No Permit Required Determination from the NMED Air Quality Bureau.

11B. DISCHARGE VIA SOLAR EVAPORATION

A solar evaporation tank system (SET) is located at TA-52 of LANL. The site is approximately one acre in size, and about two-thirds of a mile from the TA-50 RLWTF. The SET has two cells. Each cell has concrete walls approximately four feet high, and a double liner with leak detection. Each cell is approximately 70 feet by 250 feet in size, with a usable capacity of about 380,000 gallons. The SET pump house has the capability of returning the contents of either cell to the TA-50 RLWTF for storage and retreatment, if necessary. Approximately 3,500 feet of high-density polyethylene (HDPE) transfer piping connect the SET and the TA-50 RLWTF.

11C. DISCHARGE VIA NPDES OUTFALL 051

Treated water that meets NPDES, NMED, and DOE discharge standards can be discharged to the environment via permitted NPDES Outfall 051 in Effluent Canyon, a tributary of Mortandad Canyon. Water is pumped to the outfall through approximately 1,400 feet of three-inch-diameter, carbon steel pipe. NPDES and DP-1132 compliance samples are collected at TA-50 while water is discharging to the canyon.

TRANSURANIC TREATMENT PROCESS

The RLWTF receives and treats two separate influent streams, low-level RLW, and transuranic RLW. Each influent stream has its own underground collection system, its own influent storage tanks, and its own treatment equipment. The two streams differ in several important ways, however:

- Volumes: Approximately 99% of influent volume received at the RLWTF is low-level RLW.
- Radioactivity: Typically, 90% comes from transuranic RLW.
- Effluent: Treated transuranic RLW cannot be, and is not, directly discharged to the environment.

Two secondary streams are generated by the treatment of transuranic RLW, transuranic solids and low-level liquids. Solids are solidified as part of the transuranic treatment process. The liquid stream receives additional treatment in either the main treatment process or the secondary treatment process.

T1. TRANSURANIC COLLECTION SYSTEM

The transuranic collection system runs from Building 55-04 through below-grade, double-walled transfer lines, through a valve pit at 50-201, and into influent storage tanks at Building 50-66. One transfer line is dedicated for acid waste, and a second for caustic waste. Both are two-inch-diameter pipes. The acid waste lines are constructed of PVDF; the caustic lines are constructed of polypropylene (PP).

TA-55 and RLWTF personnel coordinate batch transfers of transuranic RLW. Once a transfer is coordinated, a batch of known volume, typically less than 100 gallons, is transferred through the collection system, flowing by gravity to the transuranic (TRU) influent storage tanks in Building 50-66. Transuranic influent is not trucked.

T2. TRANSURANIC INFLUENT STORAGE

Two influent storage tanks are located in Building 50-66, one for acid material (~3,900 gallons) and the other for caustic material (~3,000 gallons). Each tank has enough capacity to hold more than one year of transuranic influent. Both tanks are cylindrical, cone-bottomed tanks, and each has a mixer and a high efficiency particulate air (HEPA) filtered vent. The sump in Building 50-66 has a leak detection probe that communicates to the RLWTF operations center.

T3. TRANSURANIC TREATMENT

Acid or caustic material is pumped from Building 50-66 into TK1 in Room 60. Acid material is neutralized by mixing with liquid sodium hydroxide (nominal 25%); other chemicals (ferric sulfate or polymer) may be added to promote particle growth. Caustic material requires less sodium hydroxide, and is also treated with ferric or polymer that will promote particle growth. Solids that form in the reaction tank TK1 are allowed to settle, and are then pumped to the solids storage tank, TK-7A. Supernatant is pumped through a pressure filter into the effluent storage tank, TK3.

T4. TRANSURANIC SOLIDS

Solids collect in TK-7A, a 900-gallon carbon steel tank in Room 60. In order to facilitate particle growth, TK-7A may first be seeded with solids from a previous treatment campaign. Excess water is then decanted from TK-7A, and transferred to the effluent storage tank, TK3. Solids remaining in TK-7A are added to drums containing cement, zeolite and sodium silicate, then tumbled and allowed to cure. After curing, drums of cemented solids are transported to a storage facility at TA-63 to await shipment to and disposal at Waste Isolation Pilot Plant (WIPP) as a solid transuranic waste.

T5. TRANSURANIC EFFLUENT

Effluent from the transuranic treatment process is collected in TK3 in Room 60, a 1,000-gallon, horizontal fiberglass tank. Having been treated, effluent is no longer transuranic waste. Effluent is not clean enough, however, to be discharged to the environment. Instead, the effluent receives additional treatment through the low-level process.

SECONDARY TREATMENT PROCESSES

The secondary process treats wastes from the primary and transuranic treatment lines. It consists of a vacuum filter to treat solids from the main process, a secondary reverse osmosis unit to treat reverse osmosis concentrate from the main process and/or effluent from the transuranic process, and a bottoms disposal step. Wastes from secondary treatment process are disposed as low-level radioactive solid waste.

S1. SECONDARY REVERSE OSMOSIS

The secondary reverse osmosis unit reduces the volume of secondary radioactive liquid waste that must be shipped offsite to a subcontractor for further treatment. Feed to the unit consists of either concentrate from primary reverse osmosis or treated transuranic RLW. Treatment at the S1 unit splits the feed stream into two streams. Permeate is sent to the main treatment process for additional treatment; concentrate is sent to storage tanks in Building 50-248 to await shipment as bottoms.

The S1 unit is capable of producing 10 gpm permeate with 70% recovery; it has a maximum operating pressure of 1,000 pounds per square inch. The unit contains nine commercially available high-rejection membranes (8 inch by 40 inch), within three fiberglass pressure vessels.

S2. VACUUM FILTER

Solids from the microfilter (or pressure filters) are separated from water and then disposed as low-level radioactive solid waste. This solids filtration operation includes the TK8 storage tank (capacity of 8,000 gallons) in Room 61 and a rotary vacuum filter in Room 116. The solids contain more than 90% of the radioactivity present in low-level influent. Solids do not contain hazardous chemical constituents above RCRA limits, and are disposed as low-level radioactive waste.

S3. BOTTOMS STORAGE

RLWTF bottoms are stored in tanks in Building 50-248 until shipped to a commercial waste treatment facility using a commercial tanker truck. Shipments typically range from 4,000 - 5,000 gallons each. The commercial waste treatment facility processes bottoms to a solid form, and disposes of the solids as low-level radioactive waste at a DOE or commercial disposal site.

Attachment 11

TABLE 2: VESSEL INFORMATION FOR RLWTF TREATMENT UNITS

			Vessel			Secondary Containment			
Treatment Unit		Vessel(s)	Location	Capacity	Category	Material	Structure	Material	Leak Detection
Main Treatment:									
M1	Collection system	Piping (~ 4 miles)	Six TAs	---	Inground	Polyethylene	Pipe	Polyethylene	63 alarms
		Vaults (63)	Six TAs	---	Inground	Concrete	Floor	Concrete	63 alarms
M2	Influent storage	WMRM tanks (2)	50-250-003	50,000 ea.	Aboveground	Fiberglass	Floor	Concrete	250_SMP3
		Xfer piping	50-250-004	---	Inground	Polyethylene	Pipe	Polyethylene	250_Inf, 250_Eff
		Xfer pump room	50-250-001	---	Aboveground	Steel	Floor	Concrete	PLC250_SMP1
M3	Emergency influent storage	WMRM tanks (4)	50-250-003	50,000 ea.	Aboveground	Fiberglass	Floor	Concrete	250_SMP3
M4	Reaction Tanks	TK71, TK72	50-01-70	10,000 ea.	Aboveground	Steel	Floor	Concrete	RUF_71A_A1
M5	Microfilter	Filter	50-01-70	40	Aboveground	Steel	Floor	Concrete	RUF_71A_A1
		Concentrate tank	50-01-70	500	Onground	Polyethylene	Floor	Concrete	RUF_71A_A1
		Cleaning tanks (2)	50-01-70	400	Onground	Polyethylene	Floor	Concrete	RUF_71A_A1
M6	Pressure filters	Filters (3)	50-01-63	300	Aboveground	Lined Steel	Floor	Concrete	SMP_16_A2
M7	Perchlorate ion exchange	IX vessels (8)	50-01-16	400	Aboveground	Fiberglass	Floor	Concrete	SMP_16_A2
		TK09	50-01-62	10,000	Aboveground	Steel	Floor	Concrete	ID
M8	Primary reverse osmosis	R72 RO unit	50-01-72	40	Aboveground	Steel	Floor	Concrete	RUF_71A_A1
		R72 CIP tank	50-01-72	500	Aboveground	Polyethylene	Floor	Concrete	RUF_71A_A1
		M8 RO unit	50-01-36	60	Aboveground	Fiberglass	Floor	Concrete	ID
		M8 CIP tank	50-01-36	300	Aboveground	Polyethylene	Floor	Concrete	ID
M9	Reserved								
M10	Effluent storage	N.Frac, S.Frac	50-01-34B	20,000	Aboveground	Steel	Floor	Concrete	SMP_34B_A1
M11	Effluent evaporator	----	50-257	1,200	Aboveground	S.Steel	Floor	Hypalon,	--
M11	Solar evaporation	E.Tank, W.Tank	TA52	380,000	Inground	HDPE	Liner	HDPE,	ID
M11	NPDES Outfall #051	----	Canyon	---	Inground	---	---	---	--
Transuranic:									
T1	TRU Collection system	Piping (~1 mile)	TA50, TA55	---	Inground	PVDF, PP	Pipe	PVDF, PP	CTL_WM57_A1
		Vaults (1)	50-201	---	Inground	Concrete	Floor	Concrete	CTL_WM57_A1
T2	TRU Influent storage	Acid tank	50-66	3,900	Aboveground	Steel	Floor	Concrete	CTL_WM66_A4
		Caustic tank	50-66	3,000	Aboveground	Steel	Floor	Concrete	CTL_WM66_A4
T3	TRU Treatment	TK1	50-01-60	900	Aboveground	Steel	Floor	Concrete	ID
		TK2	50-01-60	800	Aboveground	Fiberglass	Floor	Concrete	ID
T4	TRU Solids	TK-7A	50-01-60A	900	Aboveground	Steel	Floor	Concrete	ID
T5	TRU Effluent	TK3	50-01-60	1,000	Aboveground	Fiberglass	Floor	Concrete	ID

Attachment 11

TABLE 2: VESSEL INFORMATION FOR RLWTF TREATMENT UNITS (CONTINUED)

Treatment Unit	Vessel(s)	Location	Vessel			Secondary Containment		
			Capacity	Category	Material	Structure	Material	Leak Detection
Secondary Treatment: S1 Secondary reverse osmosis	RO vessel	50-01-24	10	Aboveground	Fiberglass	Floor	Concrete	ID
	TK25	50-01-24	300	Aboveground	Polyethylene	Floor	Concrete	ID
	TK73	50-01-70	3,700	Aboveground	Steel	Floor	Concrete	RUF_71A_A1
S2 Vacuum filter	Vacuum filter	50-01-116	150	Aboveground	S.Steel	Floor	Concrete	SMP_16_A2
	TK14, TK15	50-01-116	800	Aboveground	Steel	Floor	Concrete	SMP_16_A2
	TK08	50-01-61	8,000	Aboveground	Steel	Floor	Concrete	ID
S3 Bottoms storage	TK-NE, SE, SW, NW	50-248	20,000 ea.	Aboveground	Steel	Floor	Concrete	SMP_TKF_A2
	3K tank	50-248	3,000	Aboveground	Steel	Floor	Concrete	SMP_TKF_A2
	17K tank	50-02	17,000	Aboveground	Steel	Floor	Concrete	SMP_WM2_A2

Notes:

1. Location: Technical Area-Bldg-Room
2. Vessel category per definition CC of DP-1132: Aboveground, On-ground, In-ground.
3. Collection systems: Each access vault is equipped with a sump and leak detection probe-alarm
4. Leak detection: ID means in design, as committed in LANL correspondence EPC-DO-18-402, 11-19-2018.

Attachment 12

Groundwater Flow Direction Report

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

DP-1132 Condition No. 32: 2024 Groundwater Flow Direction Report

Overview

Los Alamos National Laboratory (LANL) is underlain by a thick zone of primarily unsaturated volcanic and sedimentary materials. Groundwater beneath the Pajarito Plateau occurs in three modes: (1) water in the near-surface sediments in the bottoms of some canyons (alluvial groundwater), (2) water in porous rock layers underlain by a more solid rock layer and therefore perched above the regional aquifer (perched-intermediate groundwater), and (3) the regional aquifer in the saturated Santa Fe Group sediments.

Alluvial Groundwater

- Alluvial groundwater is a limited area of saturated rocks and sediments directly below canyon bottoms. Surface water percolates through the alluvium until the downward flow is disrupted by less permeable rock layers, resulting in shallow perched bodies of groundwater. Most of the canyons on the Pajarito Plateau have infrequent surface water flow and, therefore, little, or no alluvial groundwater.
- Two alluvial wells (MCA-RLW-1 and MCA-RLW-2) were installed in 2019 in Mortandad Canyon for groundwater monitoring associated with DP-1132. MCA-RLW-1 was dry during installation, while MCA-RLW-2 showed limited water during installation.
- MCA-RLW-1 did not have sufficient water to enable collection of a sample in 2020 - 2023. This well was visited quarterly in 2024, and similar to previous years, did not have enough water present to collect a sample.
- MCA-RLW-2 did not have sufficient water to enable collection of a sample in 2020 or 2021. Sufficient water at MCA-RLW-2 was present in the fourth quarter of 2022 and quarterly and annual samples were collected. However, in 2023 and 2024, sufficient water was not present to enable sample collection.

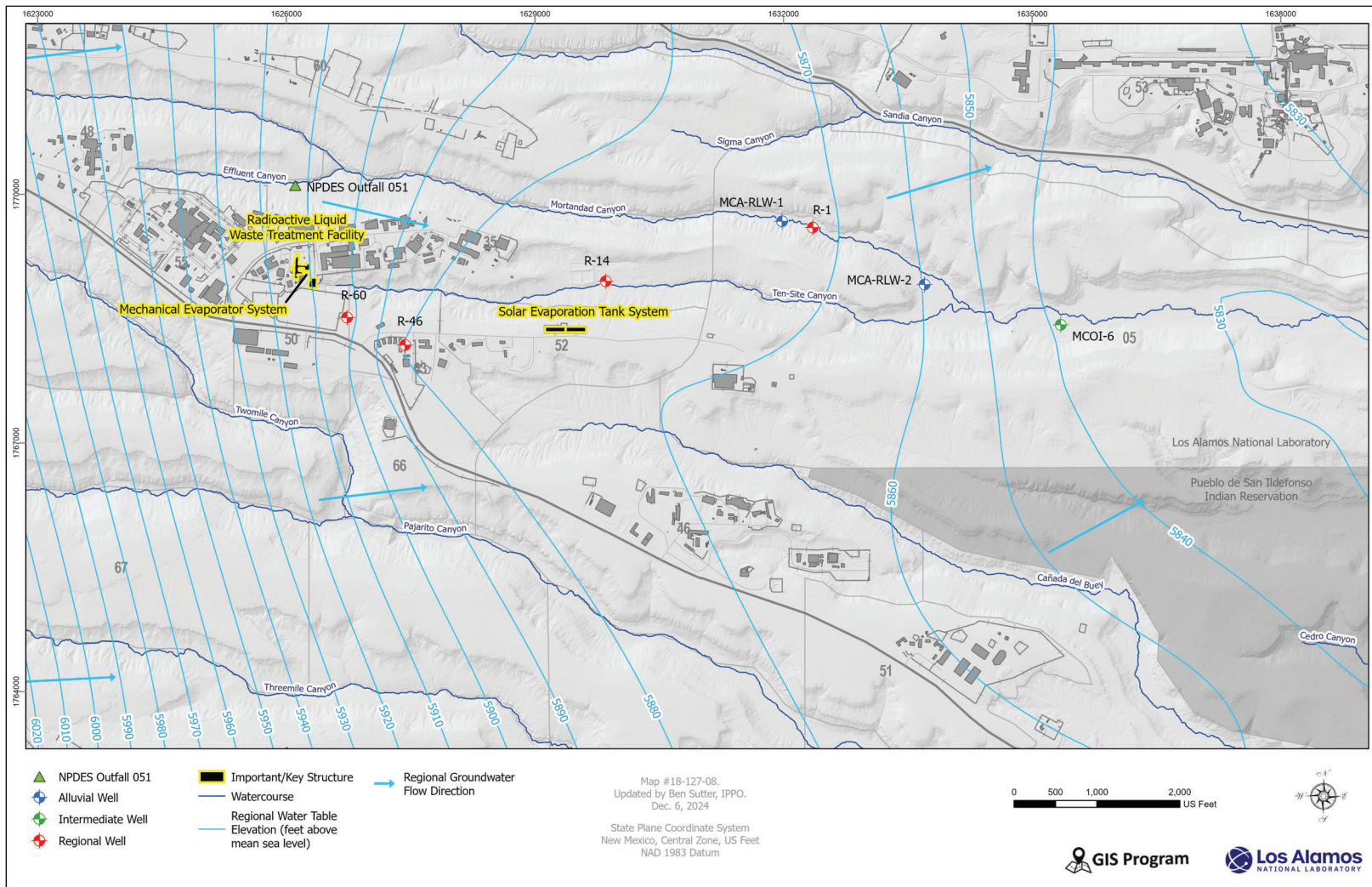
Perched-Intermediate Aquifer

- Perched-intermediate groundwater occurs within the lower part of the Bandelier Tuff and within the underlying Puye Formation and Cerros del Rio basalt beneath some canyons. These intermediate-depth groundwater zones are formed in part by water moving downward from alluvial groundwater until the water reaches another relatively impermeable rock layer. Depths of the perched-intermediate groundwater zones vary across the Pajarito Plateau, but the depth to perched-intermediate groundwater beneath Mortandad Canyon is approximately 500 to 750 feet. Perched-intermediate groundwater monitoring well MCOI-6 is monitored in accordance with DP-1132. The groundwater-surface elevation recorded at MCOI-6 during 2024 quarterly sample events ranged from 6,136.6 to 6,139.3 feet above mean sea level with corresponding depths to water of 674.5 and 671.7 feet below ground surface, respectively.

Regional Aquifer

- The regional aquifer beneath LANL is a complex hydrogeological system comprised primarily of saturated sands and gravels that provide the water supply for Los Alamos County and LANL. The uppermost water levels in the regional aquifer (known as the water table) are predominantly under phreatic conditions. The regional aquifer generally flows east or southeast and occurs at depths ranging from approximately 1,200 feet below ground surface along the western edge of the Pajarito Plateau to approximately 600 feet below ground surface along the eastern edge. The groundwater flow velocity varies but is typically around 30 feet per year.
- Groundwater flow directions and fluxes that control groundwater flow and transport in the aquifer are largely dictated by the shape of the regional water table. The general shape of the regional water table beneath Pajarito Plateau is predominantly controlled by the areas of regional recharge to the west (the flanks of Sierra de los Valles and the Pajarito fault zone) and regional discharge to the east (the Rio Grande and the White Rock Canyon Springs). The regional aquifer is separated from alluvial and perched-intermediate groundwater by layers of unsaturated tuff, basalt, and sediment with generally low moisture content.
- At more local scales, the structure of the regional phreatic flow is also expected to be influenced by (1) local infiltration zones (e.g., beneath canyons); (2) heterogeneity and anisotropy in the aquifer properties; and (3) discharge zones (municipal water-supply wells, springs). Injection and extraction wells within the chromium contamination area also influence groundwater flow. A long-term water level decline of about 0.5-1 foot per year is observed in the regional aquifer beneath the Pajarito Plateau. The decline may reflect long-term changes in aquifer recharge and discharge conditions (including water-supply pumping).
- A groundwater elevation contour map has been prepared only for the regional aquifer due to the discontinuous nature of alluvial and perched-intermediate groundwater beneath the Pajarito Plateau. Because of the long-term declines and pumping transients described above, the water-level data and the respective water-table maps are time-dependent and representative of specific periods of time. The attached water-table map (Attachment 12, Figure 1) includes regional groundwater contours included in the Monitoring Year 2025 Interim Facility-Wide Groundwater Monitoring Plan.
- In 2024, the regional groundwater elevation recorded during sampling events for DP-1132 ranged from 5,871.8 feet above mean sea level at R-1 to 5,904.2 feet above mean sea level at R-60 with corresponding depths to water of 1,009.4 and 1,323.9 feet below ground surface, respectively.

Attachment 12



Attachment 13

Water Tightness Test Report

EPC-DO: 25-001

LA-UR-25-20412

Date: January 31, 2025

WATER TIGHTNESS TEST REPORT

Radioactive Liquid Waste Treatment Facility Effluent to Solar Evaporative Tank System

J.P. Hernandez-Quintero
May 2024

Purpose

This report documents the water tightness testing of the single-walled pipe that discharges treated water (effluent) from the Radioactive Liquid Waste Treatment Facility to the Solar Evaporative Tank System (SET).

Requirements

The New Mexico Environment Department (NMED) is one regulator of activities at the RLWTF; NMED requirements are set forth in Ground Water Discharge Permit DP-1132. Condition 8 of DP-1132 has the following requirements:

- LANL shall demonstrate that each unit.... without secondary containment is not leaking and is otherwise fit for use. To make the demonstration, LANL shall conduct both a visual test and a quantifiable test, as applicable.
- The quantifiable assessment for piping shall be determined through passive testing for leakage exfiltration and infiltration.
- Prior to testing for infiltration, the conveyance lines shall be isolated and evacuated.
- Prior to testing for exfiltration, the conveyance lines shall be isolated and filled with water to a level that produces, at minimum, two feet of hydrologic head above the uppermost point of the section being tested.
- Infiltration and exfiltration rate shall not exceed 50 gallons per mile per consecutive 24-hour period for any section of the piping.

Configuration

The pipeline for discharging effluent exits Building 50-01 Room 34B, elevation 7,250-ft, runs through a trench where it then branches South to SET in Structure 52-182 elevation 7,165-ft. A portion of the pipeline branches to Building 50-02, where it dead ends. Another separate branch connects 50-0261 to the pipeline. The SET line makes its way South through the trench beneath Aries Drive, it then continues underground along and around South of Building 50-0250. The SET line then continues the northern border of TA-52 where it follows the terrain of the land over a length of 4,692 feet to Structure 52-182. Total elevation change is 85-ft. Piping is three-inch diameter high density polyethylene (HDPE) from 50-0261 until it connects to the main discharge line where it then converts to four-inch diameter HDPE to the SET.

Testing Method

Testing is performed in accordance with Work document #785027-01. Testing is done for the entire length of the effluent piping, from Buildings 50-0261 and 50-01 Room 34B to SET.

Procedural steps are as follows:

1. Isolate line at Structure 52-182 (i.e., plug for SET), and exfiltration tank at 50-0261.
2. Document pre-test valve positions in Building 50-02, Structure 50-250, and between Building 50-02 and SET.
3. Install spool piece and exfiltration tank
4. Perform exfiltration test.
5. Perform infiltration test.
6. Remove spool piece and exfiltration tank.
7. Restore valve alignment to pre-test configuration.

For the exfiltration test, a collection tank and measuring tube were constructed at 50-0261, which at 7,255-ft, is the high point of the effluent line. The top of the tank was equipped with a measuring tube (2" diameter) of clear poly that enabled personnel (a) to confirm that the piping was filled with water, (b) to confirm that a minimum of two feet of head was established, and (c) to measure water loss over the 24-hour test period. The measuring tube also served as a vent for air displaced as the pipe was filled with water. Valves were aligned to fill the piping with industrial water, and to vent air from within the piping.

The test period was 24 hours, from 1245 on 05/14/2024 until 1245 on 05/15/2024. Water level in the measuring tube dropped 3.7 inches, which indicates a water loss of 0.05 gallon over the 4,692 feet of piping. Approximately 6.4 oz. of water was lost during the 24-hour exfiltration test. (Most likely, this water loss was caused by water expansion due to changes in ambient temperature.)

For the infiltration test, the exfiltration test water was drained at the low points: into Building 52-182, and into a tank at SET. Drain valves were then closed at both ends of the SET pipe, i.e., in Building 50-0261, Building 50-02, and at the SET.

The test period was > 24 hours, from 0900 on 05/16/2024 until 0900 on 05/20/2024. Valves were opened at the end of the test period, and drain buckets were positioned at both low points to collect water. Total water drained from the 4,692 feet of piping was 0.1 gallon.

Test Results

Water tightness testing of the single-walled pipe to SET occurred on May 14 through 20 2024. Results are summarized in the below table:

	Exfiltration	Infiltration
Start Date	05/14/2024	05/16/2024
End Date	05/15/2024	05/20/2024
Duration (hrs)	24	>24
Water loss-gain (gals)	0.05	0.1
Leakage rate (gals per day)	0.05	0.1
Leakage rate (GPD per mile) *	0.04	0.09
Requirement (GPD per mile)	<44	<44

*Total length of SET piping: ~4,692 feet

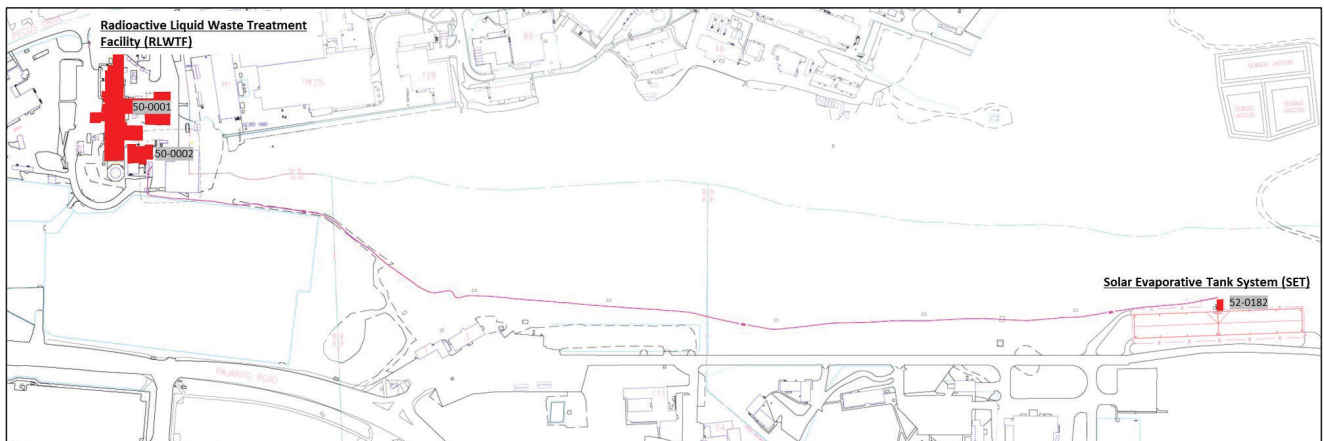
Both tests, infiltration and exfiltration, demonstrated that the single-walled pipe for conveyance of effluent from the RLWTF to SET has infiltration and exfiltration rates lower than the leak rate of 50 gallons per mile per 24-hour period required by DP-1132.

Attachments

A. Location Map for Effluent Pipe to SET

Attachment 13

Attachment A. Location Map for SET



WATER TIGHTNESS TEST REPORT

Radioactive Liquid Waste Treatment Facility Effluent to Outfall 051

J.P. Hernandez-Quintero
July 2024

Purpose

This report documents the water tightness testing of the single-walled pipe that sends treated water (effluent) from the Radioactive Liquid Waste Treatment Facility to Outfall 051 in Mortandad Canyon.

Requirements

The New Mexico Environment Department (NMED) is one regulator of activities at the RLWTF; NMED requirements are set forth in Ground Water Discharge Permit DP-1132. Condition 8 of DP-1132 has the following requirements:

- LANL shall demonstrate that each unit.... without secondary containment is not leaking and is otherwise fit for use. To make the demonstration, LANL shall conduct both a visual test and a quantifiable test, as applicable.
- The quantifiable assessment for piping shall be determined through passive testing for leakage exfiltration and infiltration.
- Prior to testing for infiltration, the conveyance lines shall be isolated and evacuated.
- Prior to testing for exfiltration, the conveyance lines shall be isolated and filled with water to a level that produces, at minimum, two feet of hydrologic head above the uppermost point of the section being tested.
- Infiltration and exfiltration rate shall not exceed 50 gallons per mile per consecutive 24-hour period for any section of the piping.

Configuration

The pipeline for discharging effluent exits Building 50-01 Room 34B, runs through a trench where it then branches north to Outfall 051 in Mortandad Canyon. A portion of the pipeline branches to Building 50-02, where it dead ends. The outfall pipe follows the terrain of the land, rising approximately 20 feet over a length of 400 feet to its high point beneath Pecos Drive, then dropping approximately 115 feet over a length of 900 feet to Outfall 051. Piping is three-inch diameter carbon steel for the majority of its length, changing to six-inch-diameter carbon steel approximately 150-ft from the discharge end at Mortandad Canyon.

Testing Method

Testing is performed in accordance with Work document #785025-01. Testing is done for the entire length of the outfall piping, from Building 50-01 Room 34B to Outfall 051, not in segments. Procedural steps are as follows:

1. Install spool piece in Mortandad Canyon (i.e., plug for Outfall 051), and exfiltration tank at Pecos Road.
2. Document pre-test valve positions in Building 50-02, and between Building 50-02 and Outfall 051.
3. Perform exfiltration test.
4. Perform infiltration test.
5. Remove spool piece and exfiltration tank.
6. Restore valve alignment to pre-test configuration.

For the exfiltration test, a collection tank and measuring tube were constructed at Pecos Road, which is the high point of the effluent line. The top of the tank was equipped with a measuring tube (2" diameter) of clear poly that enabled personnel (a) to confirm that the piping was filled with water, (b) to confirm that a minimum of two feet of head was established, and (c) to measure water loss over the 24-hour test period. The measuring tube also served as a vent for air displaced as the pipe was filled with water.

Valves were aligned to fill the piping with industrial water, and to vent air from within the piping. Pressure gauges were installed at the two low points in the line to assure that air bubbles had not formed, and the line was filled with water. The gauge in 50-02 registered 9 psig as expected for the approximate 21-foot elevation difference. The gauge at Outfall 051 registered 49 psig, as expected for the approximate 136-foot drop from Pecos Road to the outfall.

The test period was 24 hours, from 0609 on 07/16/2024 until 0609 on 07/17/2024. Water level in the measuring tube decreased 6 inches, which indicates a water loss of 0.09 gallons over the

1300 feet of piping. Approximately 11.5 oz. of water was gained during the 24-hour exfiltration test. (Most likely, this water gain was caused by water expansion due to changes in ambient temperature.)

For the infiltration test, the exfiltration test water was drained at the low points: into Building 50-02, and into a tank at Outfall 051. Drain valves were then closed at both ends of the outfall pipe, i.e., in Building 50-02 and at the outfall in Mortandad Canyon.

The test period was 24 hours, from 1309 on 07/17/2024 until 1312 on 07/18/2024. Valves were opened at the end of the test period, and drain buckets were positioned at both low points to collect water. Total water drained from the 1300 feet of piping was 0.0 gallon.

Test Results

Water tightness testing of the single-walled pipe to Outfall 051 occurred on July 16th through 18th 2024. Results are summarized in the below table:

	Exfiltration	Infiltration
Start Date	07/16/2024	07/17/2024
End Date	07/17/2024	07/18/2024
Duration (hrs)	24	24
Water loss-gain (gals)	0.09	0.0
Leakage rate (gals per day)	0.09	0.0
Leakage rate (GPD per mile) *	0.02	0.0
Requirement (GPD per mile)	<12	<12

*Total length of outfall piping: ~1300 feet

Both tests, infiltration and exfiltration, demonstrated that the single-walled pipe for conveyance of effluent from the RLWTF to Outfall 051 has infiltration and exfiltration rates lower than the leak rate of 50 gallons per mile per 24-hour period required by DP-1132.

Attachments

A. Location Map for Effluent Pipe to Outfall 051

Attachment A. Location Map for Outfall 051

