



ESHID-603741



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Symbol: EPC-DO: 22-345

Date: January 31, 2023

LA-UR: 23-20036

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 4th Quarter 2022

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, 2023. The following permit conditions are addressed in Attachment 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 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

Please contact Karen E. Armijo at (505) 665-7314 or karen.armijo@nnsa.doe.gov, or contact Brian M. Iacona at (505) 500-6038 or biacona@lanl.gov if you have questions regarding this monitoring report submission.

Sincerely,

**STEVEN
STORY
(Affiliate)**

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Steve Story
Group Leader
Environmental Compliance Programs
Triad National Security, LLC

Sincerely,

**KAREN
ARMIJO**

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Karen E. Armijo
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Attachments: Attachment 1 RLWTF Monitoring Report – Fourth Quarter 2022 and Annual Update
Attachment 2 Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF
Attachment 3 RLWTF Daily Influent and Effluent Volumes
Attachment 4 Monthly Treated Effluent Sampling Results
Attachment 5 Groundwater Monitoring Report – Fourth Quarter 2022 and Annual Reporting
Attachment 6 Monitoring Well Location Map
Attachment 7 All Major Structures at the RLWTF – Updated Schematic
Attachment 8 Treatment Units to be Stabilized at the RLWTF - Schematic
Attachment 9 Current Treatment Process Overview at the RLWTF – Flow Chart
Attachment 10 Detailed View of the Current Treatment Process at the RLWTF – Flow Chart
Attachment 11 RLWTF Systems and Treatment Units – Narrative Description
Attachment 12 Groundwater Flow Direction Report
Attachment 13 Water Tightness Test Report

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Attachment 1

RLWTF Monitoring Report – Fourth Quarter 2022 and Annual Update

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

Condition No. 24: Monitoring Reports

Pursuant to Permit Condition Numbers (Nos.) 1 and 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, 2023, for the monitoring period of October 1, 2022, through December 31, 2022 (fourth quarter). The following permit conditions are addressed in Attachments 1 through 13 of this report.

- Quarterly and Annual 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 Nos. 25 and 26: Radioactive Liquid Waste Treatment Facility (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 RLWTF during the fourth quarter 2022 monitoring period.

Condition No. 25: Influent Volumes: Low-Level Radioactive Waste Water

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 2022 monitoring period.
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Condition No. 26: Influent Volumes: Transuranic Waste Water

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 2022 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 the National Pollutant Discharge Elimination System (NPDES) Outfall 051 during the fourth quarter 2022 monitoring period.
- ✓ No treated effluent was discharged to either the Mechanical Evaporator System (MES) or the Solar Evaporative Tank System (SET) during the fourth quarter 2022 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 on the following dates:
 - October 19th
 - November 8th
 - December 8th and 20th

Monthly sampling for all water contaminants listed in 20.6.2.3103 NMAC and all toxic pollutants as defined in 20.6.2.7.T(2) NMAC was completed on October 19th, November 8th, and December 8th, 2022. These analytical results are provided in **Attachment 4, Tables 1, 2, and 3.**

All sample results from NPDES Outfall 051 this quarter 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 analytes.

- ✓ **MES Sampling.** No treated effluent was discharged to the MES during the reporting period. Therefore, no effluent sampling from the MES was completed during the fourth quarter 2022 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 2022 monitoring period.

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

- ✓ No treated effluent was discharged to the SET during the fourth quarter 2022 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, for review.
- ✓ Baseline monitoring of all SET moisture monitoring boreholes continued in the fourth quarter with quarterly monitoring completed in October and December 2022.
- ✓ Baseline monitoring of the boreholes will continue on a quarterly basis until the Volumetric Moisture Content Action Level is approved by NMED and after the SET is put into operation.

Condition No. 36: Quarterly 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 including the required quarterly sampling. Perched/intermediate ground water monitoring well MCOI-6 was sampled this monitoring period on November 7, 2022, and alluvial ground water monitoring well MCA-RLW-2 was sampled on November 16, 2022. A quarterly sample was not collected from MCA-RLW-1 during this period because there was insufficient water in the well when visited on November 3, 2022.

Quarterly sample results from MCA-RLW-2 and MCOI-6 for TKN, NO₃+NO₂-N, TDS, Cl, F, and ClO₄ are provided in **Attachment 5, Tables 1 and 3**. These samples were submitted to GEL Laboratories, LLC for analysis. All results from these quarterly sampling events were below 20.6.2.3103 NMAC standards and 20.6.2.7.T NMAC guidance, with the exception of the following parameters at MCOI-6:

- NO₃+NO₂-N was detected at a concentration of 12.8 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 2016 through 2021 was 10.9 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 support of DP-1132 and pursuant to the Compliance Order on Consent, June 2016 (Consent Order).

- ClO₄ was detected at a concentration of 83.9 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 2016 through 2021 was 87.5 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 support of DP-1132 and pursuant to the Consent Order.
- ✓ A quarterly sample was not collected from MCA-RLW-1 due to insufficient water in the well.
- ✓ **Attachment 5** provides the complete ground water monitoring report for the sampling events completed in the fourth quarter of 2022.
- ✓ 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.

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

- ✓ **Clarifier #1**
 - Stabilization activities for Clarifier #1 are being 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.
 - Removal of excess chemicals and process solids was completed during 2019, with notifications to NMED submitted as previously reported.
 - The chemical feed system was dismantled in May 2021.
 - A Request for an Extension of Time to complete stabilization activities at Clarifier #1 was submitted to NMED on July 28, 2022 (EPC-DO: 22-193). NMED approved the request for extension on August 22, 2022.
 - Removal of solids from the clarifier continued during the fourth quarter of 2022.
 - No additional stabilization milestones were due during the reporting period for this unit.

✓ **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 during 2019 reporting periods with notifications to NMED completed as previously reported.
- The chemical feed system was dismantled in May 2021.
- No additional stabilization milestones were due during the reporting period for this unit.

✓ **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 during the fourth quarter 2019 reporting period.
- The 75K Tank will remain available for use as emergency storage.
- A Request for an Extension of Time to complete stabilization activities was submitted to NMED on September 28, 2020 (EPC-DO: 20-255). Details related to the extension request were provided in that submittal. NMED approved the request for extension on November 13, 2020.
- No additional stabilization milestones were due during the reporting period for this unit.

✓ **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 during the fourth quarter 2019 reporting period.

- A Request for an Extension of Time to complete stabilization activities was submitted to NMED on September 28, 2020 (EPC-DO: 20-255). Details related to the extension request were provided in that submittal. NMED approved the request for extension on November 13, 2020.
- No additional stabilization milestones were due during the reporting period for this unit.

✓ **Gravity Filter**

- Stabilization activities for the Gravity Filter are being completed under the Stabilization Plan for Gravity Filter Tank submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- A Request for an Extension of Time to complete stabilization activities was submitted to NMED on September 28, 2020 (EPC-DO: 20-255). NMED approved the request for extension on November 13, 2020.
- Stabilization of the Gravity Filter has been initiated with the removal of unused chemicals and the chemical feed system.

✓ **WM2-North/South Tanks**

- Stabilization activities for the WM2-North/South Tanks are being completed under the Stabilization Plan for the Low-Level 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.
 - A Request for an Extension of Time to complete stabilization activities was submitted to NMED on September 28, 2020 (EPC-DO: 20-255). Details related to the extension request were provided in that submittal. NMED approved the request for extension on November 13, 2020.
 - Stabilization activities were initiated for the WM2-North/South Tanks on October 12, 2020.
 - No additional stabilization milestones were due during the reporting period for this unit.
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2022 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.

2022 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, 2022, monitoring period.
- ✓ Maintenance and repair activities conducted at the RLWTF during previous quarters in 2022 were previously submitted as follows:
 - January 1 – March 31 activities were submitted to NMED on April 25, 2022 (EPC-DO-22-109) in **Attachment 2**.
 - April 1 – June 30 activities were submitted to NMED on July 28, 2022 (EPC-DO-22-186) in **Attachment 2**.

- July 1 – September 30 activities were submitted to NMED on October 31, 2022 (EPC-DO-22-285) 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 2022. On June 15, 2021, 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: 21-173) for 15 months after re-issuance of DP-1132. NMED approved this request on June 29, 2021. DP-1132 was re-issued by NMED on May 5, 2022.

The SET will be placed into service after replacement of the leak detection alarm system and the primary liner, and after NMED approval of the SET Moisture Monitoring System.

- ✓ **RLWTF to NPDES Outfall 051 Pipeline.** Water tightness testing of the pipeline from the RLWTF to NPDES Outfall 051 was required by November 1, 2022. This testing was successfully completed in June 2022 and is included in **Attachment 13** of this report.

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 2022.

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 and 2022 ground water monitoring well 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 ground water 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 2022 because there was insufficient water in the well when visited throughout the year.

- ✓ **Alluvial Well MCA-RLW-2**
 - **Attachment 5** provides the complete groundwater monitoring report collected from annual sampling at MCA-RLW-2 on November 16, 2022. 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 2022 at MCA-RLW-2 are included in **Attachment 5, Table 2**. All results in **Table 2** are below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance.

- ✓ **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 2022 at MCOI-6 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 in **Table 4** are 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 six samples analyzed in 2022 with concentrations ranging from 51.6 to 58.2 µg/L. The 20.6.2.3103 NMAC standard for chromium is 50 µg/L.

The average chromium concentration detected at MCOI-6 from 2016 through 2021 was 67.3 µg/L. The maximum chromium concentration during the referenced period was 86.6 µg/L. The presence of chromium at elevated concentrations in the perched/intermediate groundwater at MCOI-6 is documented in the LANL 2021 Annual Site Environmental Report.

Monitoring well MCOI-6 will continue to be routinely sampled for chromium in support of RLWTF and pursuant to the Compliance Order on Consent (Consent Order, June 2016) requirements for the Chromium Investigation Monitoring Group.

- Dioxane[1,4-] was detected above the screening level in five samples analyzed in 2022 with concentrations ranging from 9.47 to 31.1 µg/L. EPA approved method SW-846:8270E and the modified method, SW-846:8270E-SIM - utilized to achieve lower method detection levels, were used for dioxane [1,4-] analysis in 2022. 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 2016 through 2021 was 14.6 µg/L. The maximum dioxane[1,4-] concentration during the referenced period was 30.5 µg/L.

The presence of dioxane[1,4-] in the perched/intermediate groundwater at MCOI-6 has been documented in the LANL 2021 Annual Site Environmental Report.

- NO₃+NO₂-N and ClO₄ exceedances detected at MCOI-6 are discussed above on pages 3 and 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 2022 at R-1 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 in **Table 5** are 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 2022 at R-14 Screen 1 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 in **Table 6** are below 20.6.2.3103 NMAC standards and the 20.6.2.7.T NMAC guidance.

✓ **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 2022 at R-1 are included in **Attachment 5, Table 7**. 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 in **Table 7** are 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 2022 at R-60 are included in **Attachment 5, Table 8**. 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 in **Table 8** are 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: 22-345

LA-UR-23-20036

Date: January 31, 2023

DP-1132 Report: Fourth Quarter 2022 RLWTF Maintenance

Structures	Description	Built	Task Type						Total
			PM	CO	MD	SR	UP		
Building 1	Original treatment bldg.	1963	35	1	1	3	0	40	
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 248	Low-level bottoms storage	1996	1	0	0	0	0	1	
Building 250	Low-level influent storage	2009	15	0	0	0	0	15	
Building 257	Mechanical Evaporator System	2010	1	0	0	0	0	1	
TA52	Solar Evaporation Tank	2011	11	0	0	0	0	11	
Totals			63	1	1	3	0	68	

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

DP-1132 Report: Fourth Quarter 2022 RLWTF Maintenance

TA-50-0001 Work Completion Report (10-01-2022 to 12-31-2022)

Unit	Work Order	WO	WO Type	Task Title
500001	00468808	01	MD	500250 PAVE THE EAST SIDE OF WMRM
500001	00728156	01	PM	500001 3MO ELEVATOR ELECT/MECH MAINT, THYSSEN-KRUPP
500001	00732988	01	PM	500001 DAD 6MO PM
500001	00731099	01	PM	50-1 FEEXT (1M) PM
500001	00731043	01	PM	50-1 EMERGENCY LIGHTS (M) PM
500001	00731041	01	PM	50-1 TRITIUM EXIT LIGHTS (M) PM
500001	00731017	01	PM	50-1 PH ANALYZER 3MO VERIFICATION 2 EA
500001	00730997	01	PM	500001 BHW 1YR PM, (START UP) AFTER LAY-UP
500001	00730626	01	PM	500001 TCA 6MO PM, AUTO DUMP
500001	00728228	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00731110	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00731016	01	PM	500001 MICROFILTER 3 MONTH PUMP MAINTENANCE
500001	00730985	01	PM	50-1 SPW/SPH (A) FIRE SUPPRESSION SYSTEMS PM
500001	00730621	01	PM	500001 & 248 LPT 3YR PM, ELECTRICAL INSPECTION
500001	00730015	01	PM	500001 BHW 1YR PM, INSPECTION & MAINTENANC
500001	00725884	01	PM	500001 FAR 3MO PM (9 EA)
500001	00716711	01	PM	500001 ELECTRICAL EQUIPMENT 5YR PM GROUP 1
500001	00731103	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00730992	01	PM	50-1 DRUM TUMBLER (A) PM
500001	00735223	01	PM	50-1 CA (6M) MECHANICAL PM
500001	00733334	01	PM	50-1 EMERGENCY LIGHTS (M) PM
500001	00733332	01	PM	50-1 TRITIUM EXIT LIGHTS (M) PM
500001	00733311	01	PM	500001 CA-4 (3 MONTH) AIR COMPRESSOR PM
500001	00732987	01	PM	500001 ANNUAL PRO PUMP MAINTENANCE PM
500001	00732979	01	PM	500001 ASE 1 YR PM, EXHAUST STACK PUMP 3 EA
500001	00733317	01	PM	50-1 FEEXT (1M) PM
500001	00733365	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00732985	01	PM	500001 (A) SAFETY SHOWER PM (32 EA)
500001	00730623	01	PM	50001 & 248 LPT 1YR PM VISUAL
500001	00733370	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00736351	01	PM	50-1 TRITIUM EXIT LIGHTS (M) PM
500001	00736333	01	PM	50-1 EMERGENCY LIGHTS (M) PM
500001	00736270	01	PM	500001 LUBE 6MO PM, OPS EQUIPMENT LUBRICATION
500001	00736266	01	PM	500001 GFCL (6M) SERVICE INSPECTIONS
500001	00736264	01	PM	500001 PV 3MO PM, (MECHANICAL)
500001	00732990	01	PM	500001 (6M) DEIONIZED WATER BOTTLE CHANGE OUT
500001	00722013	01	SR	PICKUP IPCM'S FROM TA-36-0046 AND DELIVER TO RLW/CRRF
500001	00712206	01	SR	500001 TROUBLESHOOT AND REPAIR OF TA55 PIDAD VAULTS
500001	00629776	01	SR	500001 TS AND REPAIR RLWCS VAULT ALARMS
500001	00724051	01	CO	500001 Repair Small Leak on the South Frac Tank (Belizona Repairs)

DP-1132 Report: Fourth Quarter 2022 RLWTF Maintenance

TA-50-0250 Work Completion Report (10-01-2022 to 12-31-2022)

Unit	Work Order	WO	WO Type	Task Title
500250	00731094	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00731075	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00731053	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00731051	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00731007	01	PM	500250 SHS 3MO PM, SAFETY SHOWER
500250	00733400	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00733341	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00733339	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00732986	01	PM	500250 BACKFLOW PREVENTER MAINTENANCE PM
500250	00733412	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00727828	01	PM	50-250 SPW (A) PM
500250	00736368	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00736350	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00736347	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00736334	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT

DP-1132 Report: Fourth Quarter 2022 RLWTF Maintenance

TA-52-0181 Work Completion Report (10-01-2022 to 12-31-2022)

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

TA-52-0182 Work Completion Report (10-01-2022 to 12-31-2022)

Unit	Work Order	WO	WO Type	Task Title
520182	00731102	01	PM	520182 (M) FEXT PM
520182	00731031	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00731029	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00733369	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00733362	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00733301	01	PM	520182 (3M) FENCE LINE VERIFICATION
520182	00733300	01	PM	520182 (3M) SIGNAGE VERIFICATION FOR FENCE LINE
520182	00733361	01	PM	520182 (M) FEXT PM
520182	00736377	01	PM	520182 (M) FEXT PM
520182	00736305	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00736303	01	PM	520182 (M) EMERGENCY LIGHTS PM

TA-52-0183 Work Completion Report (10-01-2022 to 12-31-2022)

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

DP-1132 Report: Fourth Quarter 2022 RLWTF Maintenance

TA-50-0002 Work Completion Report (10-01-2022 to 12-31-2022)

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

TA-50-0090 Work Completion Report (10-01-2022 to 12-31-2022)

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

TA-50-0066 Work Completion Report (10-01-2022 to 12-31-2022)

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

TA-50-0201 Work Completion Report (10-01-2022 to 12-31-2022)

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

TA-50-0248 Work Completion Report (10-01-2022 to 12-31-2022)

Unit	Work Order	WO	WO Type	Task Title
500248	00733309	01	PM	500248 PUMPS 3MO PM

TA-50-0257 Work Completion Report (10-01-2022 to 12-31-2022)

Unit	Work Order	WO	WO Type	Task Title
500257	00730622	01	PM	50-257 1YR MECHANICAL EVAPORATOR FAN PM

DP-1132 Report: Fourth Quarter 2022 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	dessiccant 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: 22-345

LA-UR-23-20036

Date: January 31, 2023

**DP-1132 Report: Fourth Quarter 2022
RLWTF Daily Influent and Effluent**

Date	Low-level Influent	Effluent MES	Effluent Outfall	Effluent SET	Transuranic Influent
Totals, 2022-Q4	284,670	0	242,743	0	528
Sub-total, Oct.	71,537	0	62,422	0	126
Sub-total, Nov.	102,157	0	56,241	0	292
Sub-total, Dec.	110,976	0	124,080	0	110

All flows are in Liters.

1-Oct	1,211	0	0	0	0
2-Oct	1,438	0	0	0	0
3-Oct	3,520	0	0	0	0
4-Oct	4,277	0	0	0	0
5-Oct	2,082	0	0	0	0
6-Oct	2,536	0	0	0	0
7-Oct	1,665	0	0	0	0
8-Oct	1,552	0	0	0	0
9-Oct	871	0	0	0	0
10-Oct	3,861	0	0	0	0
11-Oct	1,968	0	0	0	0
12-Oct	2,006	0	0	0	126
13-Oct	3,331	0	0	0	0
14-Oct	2,725	0	0	0	0
15-Oct	341	0	0	0	0
16-Oct	984	0	0	0	0
17-Oct	2,650	0	0	0	0
18-Oct	2,271	0	0	0	0
19-Oct	3,785	0	62,422	0	0
20-Oct	4,693	0	0	0	0
21-Oct	3,899	0	0	0	0
22-Oct	1,741	0	0	0	0
23-Oct	1,779	0	0	0	0
24-Oct	3,407	0	0	0	0
25-Oct	5,375	0	0	0	0
26-Oct	1,968	0	0	0	0
27-Oct	1,325	0	0	0	0
28-Oct	1,665	0	0	0	0
29-Oct	416	0	0	0	0
30-Oct	643	0	0	0	0
31-Oct	1,552	0	0	0	0

DP-1132 Report: Fourth Quarter 2022
RLWTF Daily Influent and Effluent

1-Nov	2,082	0	0	0	0
2-Nov	2,157	0	0	0	136
3-Nov	2,233	0	0	0	0
4-Nov	4,239	0	0	0	0
5-Nov	946	0	0	0	0
6-Nov	946	0	0	0	0
7-Nov	2,233	0	0	0	0
8-Nov	7,646	0	56,241	0	0
9-Nov	5,375	0	0	0	0
10-Nov	3,293	0	0	0	0
11-Nov	2,914	0	0	0	0
12-Nov	2,801	0	0	0	0
13-Nov	2,574	0	0	0	0
14-Nov	3,671	0	0	0	0
15-Nov	4,126	0	0	0	0
16-Nov	4,731	0	0	0	0
17-Nov	3,936	0	0	0	0
18-Nov	4,769	0	0	0	0
19-Nov	3,558	0	0	0	0
20-Nov	2,650	0	0	0	0
21-Nov	4,201	0	0	0	0
22-Nov	3,558	0	0	0	0
23-Nov	3,520	0	0	0	0
24-Nov	2,498	0	0	0	0
25-Nov	2,460	0	0	0	0
26-Nov	2,725	0	0	0	0
27-Nov	2,612	0	0	0	0
28-Nov	4,315	0	0	0	0
29-Nov	4,088	0	0	0	0
30-Nov	5,299	0	0	0	156

DP-1132 Report: Fourth Quarter 2022
RLWTF Daily Influent and Effluent

1-Dec	4,731	0	0	0	0
2-Dec	3,671	0	0	0	0
3-Dec	2,687	0	0	0	0
4-Dec	3,066	0	0	0	0
5-Dec	4,958	0	0	0	0
6-Dec	4,201	0	0	0	0
7-Dec	6,283	0	0	0	0
8-Dec	5,261	0	62,135	0	0
9-Dec	3,558	0	0	0	0
10-Dec	2,498	0	0	0	0
11-Dec	2,422	0	0	0	0
12-Dec	4,618	0	0	0	0
13-Dec	4,088	0	0	0	0
14-Dec	3,785	0	0	0	110
15-Dec	4,088	0	0	0	0
16-Dec	3,028	0	0	0	0
17-Dec	2,271	0	0	0	0
18-Dec	2,271	0	0	0	0
19-Dec	3,142	0	0	0	0
20-Dec	3,634	0	61,945	0	0
21-Dec	9,046	0	0	0	0
22-Dec	2,914	0	0	0	0
23-Dec	3,671	0	0	0	0
24-Dec	2,120	0	0	0	0
25-Dec	2,422	0	0	0	0
26-Dec	2,612	0	0	0	0
27-Dec	2,574	0	0	0	0
28-Dec	3,255	0	0	0	0
29-Dec	2,612	0	0	0	0
30-Dec	2,650	0	0	0	0
31-Dec	2,839	0	0	0	0

Attachment 4
Monthly Treated Effluent Sampling
Results

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

Attachment 4

Table 1. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 19, 2022. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-23-260474	NPDES Outfall 051	10/19/2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	1.67	0.0415
NP051-23-260474	NPDES Outfall 051	10/19/2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	1.67	0.523
NP051-23-260474	NPDES Outfall 051	10/19/2022	309-00-2	Aluminum	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	0.00198
NP051-23-260474	NPDES Outfall 051	10/19/2022	Al	Aluminum	19.3	ug/L	U	N	F	2023-69	REG	EPA:200.8	19.3	5.000
NP051-23-260474	NPDES Outfall 051	10/19/2022	120-12-7	Anthracene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	1,721.28
NP051-23-260500	NPDES Outfall 051	10/19/2022	Sb	Antimony	1	ug/L	U	N	F	2023-69	REG	EPA:200.8	1	6
NP051-23-260474	NPDES Outfall 051	10/19/2022	12674-11-2	Aroclor-1016	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	11104-28-2	Aroclor-1221	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	11141-16-5	Aroclor-1232	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	53469-21-9	Aroclor-1242	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	12672-29-6	Aroclor-1248	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	11097-69-1	Aroclor-1254	0.0335	ug/L	U	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	11096-82-5	Aroclor-1260	0.0335	ug/L	UJ	N	UF	2023-69	REG	SW-846:8082A	0.03	5
NP051-23-260500	NPDES Outfall 051	10/19/2022	As	Arsenic	2	ug/L	U	N	F	2023-69	REG	EPA:200.8	2	10
NP051-23-260474	NPDES Outfall 051	10/19/2022	1912-24-9	Atrazine	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	3
NP051-23-260474	NPDES Outfall 051	10/19/2022	103-33-3	Azobenzene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.7
NP051-23-260500	NPDES Outfall 051	10/19/2022	Ba	Barium	0.67	ug/L	U	N	F	2023-69	REG	EPA:200.8	0.67	2,000
NP051-23-260474	NPDES Outfall 051	10/19/2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	92-87-5	Benzidine	3.9	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3.9	0.001
NP051-23-260474	NPDES Outfall 051	10/19/2022	50-32-8	Benzol(a)pyrene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	0.2
NP051-23-260474	NPDES Outfall 051	10/19/2022	205-99-2	Benzol(b)fluoranthene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	0.343
NP051-23-260474	NPDES Outfall 051	10/19/2022	207-08-9	Benzol(k)fluoranthene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	3.43
NP051-23-260500	NPDES Outfall 051	10/19/2022	Be	Beryllium	0.2	ug/L	U	N	F	2023-69	REG	EPA:200.8	0.2	4
NP051-23-260474	NPDES Outfall 051	10/19/2022	319-84-6	BHC(alpha)-	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	0.07
NP051-23-260474	NPDES Outfall 051	10/19/2022	319-85-7	BHC(beta)-	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	0.24
NP051-23-260474	NPDES Outfall 051	10/19/2022	58-89-9	BHC(gamma)-	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	0.42
NP051-23-260474	NPDES Outfall 051	10/19/2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.14
NP051-23-260474	NPDES Outfall 051	10/19/2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	0.3	55.64
NP051-23-260500	NPDES Outfall 051	10/19/2022	B	Boron	30.1	ug/L	J	Y	F	2023-69	REG	EPA:200.7	15	750
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	1.34
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	32.85
NP051-23-260474	NPDES Outfall 051	10/19/2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.337	7.54
NP051-23-260500	NPDES Outfall 051	10/19/2022	Cd	Cadmium	0.3	ug/L	U	N	F	2023-69	REG	EPA:200.8	0.3	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	57-74-9	Chloroethane(alpha/gamma)	0.0765	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.0765	0.45
NP051-23-260500	NPDES Outfall 051	10/19/2022	C(-)	Chloride	53.7	mg/L	NQ	Y	F	2023-69	REG	EPA:300.0	0.7	250
NP051-23-260474	NPDES Outfall 051	10/19/2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	77.57
NP051-23-260474	NPDES Outfall 051	10/19/2022	67-66-3	Chloroform	3.45	ug/L	NQ	Y	UF	2023-69	REG	SW-846:8260D	0.33	100
NP051-23-260474	NPDES Outfall 051	10/19/2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.33	20.32
NP051-23-260500	NPDES Outfall 051	10/19/2022	Cr	Chromium	3	ug/L	U	N	F	2023-69	REG	EPA:200.8	3	50
NP051-23-260500	NPDES Outfall 051	10/19/2022	Co	Cobalt	0.311	ug/L	J	Y	F	2023-69	REG	EPA:200.8	0.30	50
NP051-23-260500	NPDES Outfall 051	10/19/2022	Cu	Copper	2.03	ug/L	NQ	Y	F	2023-69	REG	EPA:200.8	0.30	1,000
NP051-23-260500	NPDES Outfall 051	10/19/2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	F	2023-69	REG	EPA:335.4	0.00167	0.2
NP051-23-260474	NPDES Outfall 051	10/19/2022	50-29-3	DDT[4,4-]	0.01	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.01	2.29
NP051-23-260474	NPDES Outfall 051	10/19/2022	106-93-4	Dibromomethane	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	0.05
NP051-23-260474	NPDES Outfall 051	10/19/2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	7.997
NP051-23-260474	NPDES Outfall 051	10/19/2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	600
NP051-23-260474	NPDES Outfall 051	10/19/2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	75
NP051-23-260474	NPDES Outfall 051	10/19/2022	91-94-1	Dichlorobenzene[3,3-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1.25
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.355	197.20
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	25
NP051-23-260474	NPDES Outfall 051	10/19/2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	7
NP051-23-260474	NPDES Outfall 051	10/19/2022	156-59-2	Dichloroethene[is-1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	70
NP051-23-260474	NPDES Outfall 051	10/19/2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	100
NP051-23-260474	NPDES Outfall 051	10/19/2022	120-83-2	Dichlorophenol[2,4-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	45.3
NP051-23-260474	NPDES Outfall 051	10/19/2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5

Attachment 4

Table 1. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 19, 2022. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-23-260474	NPDES Outfall 051	10/19/2022	542-75-6	Dichloropropene[is/trans-1,3-]	0.5	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.5	4.71
NP051-23-260474	NPDES Outfall 051	10/19/2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.01	0.0175
NP051-23-260474	NPDES Outfall 051	10/19/2022	84-66-2	Diethylphthalate	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	14,800.5
NP051-23-260474	NPDES Outfall 051	10/19/2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	611.6
NP051-23-260474	NPDES Outfall 051	10/19/2022	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	0.3	884.8
NP051-23-260474	NPDES Outfall 051	10/19/2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	1.52
NP051-23-260474	NPDES Outfall 051	10/19/2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	5	38.67
NP051-23-260474	NPDES Outfall 051	10/19/2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	2.37
NP051-23-260474	NPDES Outfall 051	10/19/2022	606-20-2	Dinitrotoluene[1,6-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.49
NP051-23-260474	NPDES Outfall 051	10/19/2022	123-91-1	Dioxane[1,4-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	4.59
NP051-23-260474	NPDES Outfall 051	10/19/2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	122
NP051-23-260474	NPDES Outfall 051	10/19/2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	98.7
NP051-23-260474	NPDES Outfall 051	10/19/2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.01	98.7
NP051-23-260474	NPDES Outfall 051	10/19/2022	77-20-8	Endrin	0.01	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.01	2.23
NP051-23-260474	NPDES Outfall 051	10/19/2022	100-41-4	Ethylbenzene	0.333	ug/L	UJ	N	UF	2023-69	REG	SW-846:8260D	0.333	700
NP051-23-260474	NPDES Outfall 051	10/19/2022	206-44-0	Fluoranthrene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	802.2
NP051-23-260474	NPDES Outfall 051	10/19/2022	86-73-7	Fluorene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	287.64
NP051-23-260500	NPDES Outfall 051	10/19/2022	F(-1)	Fluoride	0.033	mg/L	U	N	F	2023-69	REG	EPA:300.0	0.03	1.6
NP051-23-260474	NPDES Outfall 051	10/19/2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.00665	0.022
NP051-23-260474	NPDES Outfall 051	10/19/2022	118-74-1	Hexachlorobenzene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.098
NP051-23-260474	NPDES Outfall 051	10/19/2022	87-68-3	Hexachlorobutadiene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1.39
NP051-23-260474	NPDES Outfall 051	10/19/2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.41
NP051-23-260474	NPDES Outfall 051	10/19/2022	67-72-1	Hexachloroethane	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	3.28
NP051-23-260474	NPDES Outfall 051	10/19/2022	2691-41-0	HMX	0.0803	ug/L	U	N	UF	2023-69	REG	SW-846:8330B	0.0803	1,001.11
NP051-23-260500	NPDES Outfall 051	10/19/2022	Fe	Iron	30	ug/L	U	N	F	2023-69	REG	EPA:200.7	30	1,000
NP051-23-260474	NPDES Outfall 051	10/19/2022	78-59-1	Isophorone	3.5	ug/L	UJ	N	F	2023-69	REG	SW-846:8270E	3.5	780.63
NP051-23-260500	NPDES Outfall 051	10/19/2022	Pb	Lead	0.5	ug/L	U	N	F	2023-69	REG	EPA:200.8	0.5	15
NP051-23-260474	NPDES Outfall 051	10/19/2022	Mn	Manganese	2	ug/L	U	N	F	2023-69	REG	EPA:200.7	2	200
NP051-23-260474	NPDES Outfall 051	10/19/2022	Hg	Mercury	0.067	ug/L	U	N	UF	2023-69	REG	EPA:245.2	0.067	2
NP051-23-260500	NPDES Outfall 051	10/19/2022	Hg	Mercury	0.067	ug/L	U	N	F	2023-69	REG	EPA:245.2	0.067	2
NP051-23-260474	NPDES Outfall 051	10/19/2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	100
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-09-2	Methylene Chloride	2.16	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.5	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	30
NP051-23-260474	NPDES Outfall 051	10/19/2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	30
NP051-23-260500	NPDES Outfall 051	10/19/2022	Mo	Molybdenum	0.394	ug/L	J	Y	F	2023-69	REG	EPA:200.8	0.2	1,000
NP051-23-260474	NPDES Outfall 051	10/19/2022	91-20-3	Naphthalene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	30
NP051-23-260500	NPDES Outfall 051	10/19/2022	Ni	Nickel	0.6	ug/L	UJ	N	F	2023-69	REG	EPA:200.8	0.6	200
NP051-23-260669	NPDES Outfall 051	10/19/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	1.01	mg/L	NQ	Y	F	2023-69	REG	EPA:353.2	0.17	10
NP051-23-260488	NPDES Outfall 051	10/19/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	1.03	mg/L	NQ	Y	F	2023-69	FD	EPA:353.2	0.17	10
NP051-23-260474	NPDES Outfall 051	10/19/2022	NO2	Nitrite	0.655	mg/L	NQ	Y	F	2023-69	REG	EPA:300.0	0.033	1
NP051-23-260474	NPDES Outfall 051	10/19/2022	98-95-3	Nitrobenzene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1.4
NP051-23-260474	NPDES Outfall 051	10/19/2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.00167
NP051-23-260474	NPDES Outfall 051	10/19/2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.0049
NP051-23-260474	NPDES Outfall 051	10/19/2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.0273
NP051-23-260474	NPDES Outfall 051	10/19/2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	0.3696
NP051-23-260474	NPDES Outfall 051	10/19/2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	9.81
NP051-23-260474	NPDES Outfall 051	10/19/2022	608-93-5	Pentachlorobenzene	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	3.068
NP051-23-260474	NPDES Outfall 051	10/19/2022	87-86-5	Pentachlorophenol	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1
NP051-23-260474	NPDES Outfall 051	10/19/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-69	REG	SW-846:6850	0.05	13.82
NP051-23-260667	NPDES Outfall 051	10/19/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-69	FD	SW-846:6850	0.05	13.82
NP051-23-260474	NPDES Outfall 051	10/19/2022	355-46-4	Perfluorohexanesulfonic acid	0.69	ng/L	U	N	UF	2023-69	REG	EPA:537M	0.69	401.1
NP051-23-260474	NPDES Outfall 051	10/19/2022	1763-23-1	Perfluorooctanesulfonic acid	0.83	ng/L	U	N	UF	2023-69	REG	EPA:537M	0.83	60.16
NP051-23-260474	NPDES Outfall 051	10/19/2022	335-67-1	Perfluorooctanoic acid	0.83	ng/L	U	N	UF	2023-69	REG	EPA:537M	0.83	60.16
NPDES Outfall 051		10/19/2022	pH	pH	7.4	SU								6-9
NP051-23-260474	NPDES Outfall 051	10/19/2022	85-01-8	Phenanthrene	0.3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	0.3	170.41
NP051-23-260474	NPDES Outfall 051	10/19/2022	108-95-2	Phenol	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	249.93

Attachment 4

Table 1. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on October 19, 2022. 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
NP051-23-260474	NPDES Outfall 051	10/19/2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	0.3	117.42
NP051-23-260474	NPDES Outfall 051	10/19/2022	Ra-226+228	Radium-226 and Radium-228	1.27	pCi/L	UJ	Y	UF	2023-69	REG	Generic Radium by Calculation	-	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	121-82-4	RDX	0.0803	ug/L	U	N	UF	2023-69	REG	SW-846:8330B	0.0803	9.66
NP051-23-260500	NPDES Outfall 051	10/19/2022	Se	Selenium	1.5	ug/L	U	N	F	2023-69	REG	EPA:200.8	1.5	50
NP051-23-260500	NPDES Outfall 051	10/19/2022	Ag	Silver	0.3	ug/L	U	N	F	2023-69	REG	EPA:200.8	0.3	50
NP051-23-260474	NPDES Outfall 051	10/19/2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	100
NP051-23-260500	NPDES Outfall 051	10/19/2022	SO4(-2)	Sulfate	0.513	mg/L	NQ	Y	F	2023-69	REG	EPA:300.0	0.133	600
NP051-23-260474	NPDES Outfall 051	10/19/2022	126-33-0	Sulfonamide	3	ug/L	U	N	UF	2023-69	REG	SW-846:8270E	3	20.03
NP051-23-260474	NPDES Outfall 051	10/19/2022	95-94-3	Tetrachlorobenzene[1,1,2,4,5]	0.333	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1.66
NP051-23-260474	NPDES Outfall 051	10/19/2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	10
NP051-23-260474	NPDES Outfall 051	10/19/2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260500	NPDES Outfall 051	10/19/2022	TI	Thallium	0.643	ug/L	J	Y	F	2023-69	REG	EPA:200.8	0.600	2
NP051-23-260474	NPDES Outfall 051	10/19/2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	1,000
NP051-23-260500	NPDES Outfall 051	10/19/2022	TDS	Total Dissolved Solids	148	mg/L	NQ	Y	F	2023-69	REG	EPA:160.1	2.38	1,000
NP051-23-260500	NPDES Outfall 051	10/19/2022	TKN	Total Kjeldahl Nitrogen	0.216	mg/L	J	Y	F	2023-69	REG	EPA:351.2	0.033	15
NP051-23-260669	NPDES Outfall 051	10/19/2022	TKN	Total Kjeldahl Nitrogen	0.321	mg/L	J	Y	F	2023-69	FD	EPA:351.2	0.033	15
NP051-23-260474	NPDES Outfall 051	10/19/2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2023-69	REG	SW-846:8081B	0.15	0.158
NP051-23-260474	NPDES Outfall 051	10/19/2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	70
NP051-23-260474	NPDES Outfall 051	10/19/2022	71-55-6	Trichloroethene[1,1,1-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	200
NP051-23-260474	NPDES Outfall 051	10/19/2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	5
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-69-4	Trichloroethane	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	1,136.82
NP051-23-260474	NPDES Outfall 051	10/19/2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	1,165.98
NP051-23-260474	NPDES Outfall 051	10/19/2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	UJ	N	UF	2023-69	REG	SW-846:8270E	3	11.88
NP051-23-260474	NPDES Outfall 051	10/19/2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0803	ug/L	U	N	UF	2023-69	REG	SW-846:8330B	0.0803	9.8
NP051-23-260500	NPDES Outfall 051	10/19/2022	U	Uranium	0.081	ug/L	J	Y	F	2023-69	REG	EPA:200.8	0.067	30
NP051-23-260474	NPDES Outfall 051	10/19/2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	2
NP051-23-260474	NPDES Outfall 051	10/19/2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	1	620
NP051-23-260474	NPDES Outfall 051	10/19/2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.333	193
NP051-23-260474	NPDES Outfall 051	10/19/2022	Xylene[m+p]	Xylene[1,3-]Xylene[1,4-]	0.5	ug/L	U	N	UF	2023-69	REG	SW-846:8260D	0.5	396
NP051-23-260500	NPDES Outfall 051	10/19/2022	Zn	Zinc	3.3	ug/L	U	N	F	2023-69	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.

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.

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

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

⁴UF - In the detected column means the analyte was detected.

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 NMAC 20.6.2.3103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Total Kjeldahl Nitrogen does not contain either a NMAC 20.6.2.3103 standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit. DP-1132 Permit Condition No. 16, Table 1, establishes a Total Nitrogen limit of 15 mg/L.

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

Attachment 4

Table 2. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 8, 2022. 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
NP051-23-260475	NPDES Outfall 051	11/08/2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	1.67	0.04
NP051-23-260475	NPDES Outfall 051	11/08/2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	1.67	0.52
NP051-23-260475	NPDES Outfall 051	11/08/2022	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	0.00198
NP051-23-260501	NPDES Outfall 051	11/08/2022	Al	Aluminum	19.3	ug/L	U	N	F	2023-164	REG	EPA-200.8	19.3	5.00
NP051-23-260475	NPDES Outfall 051	11/08/2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	1.721.3
NP051-23-260501	NPDES Outfall 051	11/08/2022	Sb	Antimony	1	ug/L	U	N	F	2023-164	REG	EPA-200.8	1	6
NP051-23-260475	NPDES Outfall 051	11/08/2022	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2023-164	REG	SW-846:8082A	0.0333	5
NP051-23-260501	NPDES Outfall 051	11/08/2022	As	Arsenic	2	ug/L	U	N	F	2023-164	REG	EPA-200.8	2	10
NP051-23-260475	NPDES Outfall 051	11/08/2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	3
NP051-23-260475	NPDES Outfall 051	11/08/2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.7
NP051-23-260501	NPDES Outfall 051	11/08/2022	Ba	Barium	0.67	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.67	2.000
NP051-23-260475	NPDES Outfall 051	11/08/2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3.9	0.001
NP051-23-260475	NPDES Outfall 051	11/08/2022	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	0.2
NP051-23-260475	NPDES Outfall 051	11/08/2022	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	0.343
NP051-23-260475	NPDES Outfall 051	11/08/2022	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	3.432
NP051-23-260501	NPDES Outfall 051	11/08/2022	Be	Beryllium	0.2	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.2	4
NP051-23-260475	NPDES Outfall 051	11/08/2022	319-84-6	BHC(alpha)	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	0.06930
NP051-23-260475	NPDES Outfall 051	11/08/2022	319-85-7	BHC(beta)	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	0.24253
NP051-23-260475	NPDES Outfall 051	11/08/2022	58-89-9	BHC(gamma)	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	0.41512
NP051-23-260475	NPDES Outfall 051	11/08/2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.14
NP051-23-260475	NPDES Outfall 051	11/08/2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	55.64
NP051-23-260501	NPDES Outfall 051	11/08/2022	B	Boron	33.7	ug/L	J	Y	F	2023-164	REG	EPA-200.7	15	750
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	1.34
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-25-2	Bromofrom	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	32.85
NP051-23-260475	NPDES Outfall 051	11/08/2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.337	7.54
NP051-23-260501	NPDES Outfall 051	11/08/2022	Cd	Cadmium	0.3	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.3	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	56-23-5	Carbon tetrachloride	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.0765	0.4484
NP051-23-260501	NPDES Outfall 051	11/08/2022	Cl(-1)	Chloride	52.5	mg/L	NQ	Y	F	2023-164	REG	EPA-300.0	0.67	250
NP051-23-260475	NPDES Outfall 051	11/08/2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	77.57
NP051-23-260475	NPDES Outfall 051	11/08/2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	100
NP051-23-260475	NPDES Outfall 051	11/08/2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	20.321
NP051-23-260501	NPDES Outfall 051	11/08/2022	Cr	Chromium	3	ug/L	U	N	F	2023-164	REG	EPA-200.8	3	50
NP051-23-260501	NPDES Outfall 051	11/08/2022	Co	Cobalt	0.3	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.3	50
NP051-23-260501	NPDES Outfall 051	11/08/2022	Cu	Copper	0.487	ug/L	J	Y	F	2023-164	REG	EPA-200.8	0.3	1.000
NP051-23-260501	NPDES Outfall 051	11/08/2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2023-164	REG	EPA:335.4	0.00167	0.2
NP051-23-260475	NPDES Outfall 051	11/08/2022	50-29-3	DDT(4,4-)	0.01	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.01	2.2911
NP051-23-260475	NPDES Outfall 051	11/08/2022	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	0.915
NP051-23-260475	NPDES Outfall 051	11/08/2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	7.997
NP051-23-260475	NPDES Outfall 051	11/08/2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	600
NP051-23-260475	NPDES Outfall 051	11/08/2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	75
NP051-23-260475	NPDES Outfall 051	11/08/2022	91-94-1	Dichlorobenzidine[3,3-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1.25
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.355	197.202
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	25
NP051-23-260475	NPDES Outfall 051	11/08/2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	7
NP051-23-260475	NPDES Outfall 051	11/08/2022	156-59-2	Dichloroethene[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	70
NP051-23-260475	NPDES Outfall 051	11/08/2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	100
NP051-23-260475	NPDES Outfall 051	11/08/2022	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	45.3
NP051-23-260475	NPDES Outfall 051	11/08/2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5

Attachment 4

Table 2. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 8, 2022. 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
NP051-23-260475	NPDES Outfall 051	11/08/2022	542-75-6	Dichloropropene[is/trans-1,3-]	0.5	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.5	4.7
NP051-23-260475	NPDES Outfall 051	11/08/2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.01	0.0175
NP051-23-260475	NPDES Outfall 051	11/08/2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	14.801
NP051-23-260475	NPDES Outfall 051	11/08/2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	611.6
NP051-23-260475	NPDES Outfall 051	11/08/2022	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	884.8
NP051-23-260475	NPDES Outfall 051	11/08/2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1.52
NP051-23-260475	NPDES Outfall 051	11/08/2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	5	38.67
NP051-23-260475	NPDES Outfall 051	11/08/2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	2.37
NP051-23-260475	NPDES Outfall 051	11/08/2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	4.59
NP051-23-260475	NPDES Outfall 051	11/08/2022	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.49
NP051-23-260475	NPDES Outfall 051	11/08/2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	122
NP051-23-260475	NPDES Outfall 051	11/08/2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	98.7
NP051-23-260475	NPDES Outfall 051	11/08/2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.01	98.7
NP051-23-260475	NPDES Outfall 051	11/08/2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.01	2.23
NP051-23-260475	NPDES Outfall 051	11/08/2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	700
NP051-23-260475	NPDES Outfall 051	11/08/2022	206-44-0	Fluoranthene	0.33	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.33	802.198
NP051-23-260475	NPDES Outfall 051	11/08/2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	287.642
NP051-23-260501	NPDES Outfall 051	11/08/2022	F(-1)	Fluoride	0.033	mg/L	U	N	F	2023-164	REG	EPA-300.0	0.033	1.6
NP051-23-260475	NPDES Outfall 051	11/08/2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.00665	0.02211
NP051-23-260475	NPDES Outfall 051	11/08/2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.1
NP051-23-260475	NPDES Outfall 051	11/08/2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1.39
NP051-23-260475	NPDES Outfall 051	11/08/2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.41
NP051-23-260475	NPDES Outfall 051	11/08/2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	3.28
NP051-23-260475	NPDES Outfall 051	11/08/2022	2691-41-0	HMX	0.0804	ug/L	U	N	UF	2023-164	REG	SW-846:8330B	0.0804	1001.1067
NP051-23-260501	NPDES Outfall 051	11/08/2022	Fe	Iron	30	ug/L	U	N	F	2023-164	REG	EPA-200.7	30	1.000
NP051-23-260475	NPDES Outfall 051	11/08/2022	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3.5	780.6
NP051-23-260501	NPDES Outfall 051	11/08/2022	Pb	Lead	0.5	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.5	15
NP051-23-260501	NPDES Outfall 051	11/08/2022	Mn	Manganese	2	ug/L	U	N	F	2023-164	REG	EPA-200.7	2	200
NP051-23-260475	NPDES Outfall 051	11/08/2022	Hg	Mercury	0.067	ug/L	U	N	UF	2023-164	REG	EPA-245.2	0.067	2
NP051-23-260501	NPDES Outfall 051	11/08/2022	Hg	Mercury	0.067	ug/L	U	N	F	2023-164	REG	EPA-245.2	0.067	2
NP051-23-260475	NPDES Outfall 051	11/08/2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	100
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-09-2	Methylene Chloride	0.33	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.33	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	30
NP051-23-260475	NPDES Outfall 051	11/08/2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	30
NP051-23-260501	NPDES Outfall 051	11/08/2022	Mo	Molybdenum	0.2	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.2	1.000
NP051-23-260475	NPDES Outfall 051	11/08/2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	30
NP051-23-260501	NPDES Outfall 051	11/08/2022	Ni	Nickel	0.6	ug/L	U	N	F	2023-164	REG	EPA-200.8	0.6	200
NP051-23-260501	NPDES Outfall 051	11/08/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.717	mg/L	NQ	Y	F	2023-164	REG	EPA-353.2	0.017	10
NP051-23-260718	NPDES Outfall 051	11/08/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.720	mg/L	NQ	Y	F	2023-164	FD	EPA-353.2	0.017	10
NP051-23-260489	NPDES Outfall 051	11/08/2022	NO2	Nitrite	0.0965	mg/L	J	Y	F	2023-153	REG	EPA-300.0	0.033	1
NP051-23-260475	NPDES Outfall 051	11/08/2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1.4
NP051-23-260475	NPDES Outfall 051	11/08/2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.002
NP051-23-260475	NPDES Outfall 051	11/08/2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.005
NP051-23-260475	NPDES Outfall 051	11/08/2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.03
NP051-23-260475	NPDES Outfall 051	11/08/2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	0.37
NP051-23-260475	NPDES Outfall 051	11/08/2022	108-60-1	Oxypis[1-chloropropane][2,2-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	9.81
NP051-23-260475	NPDES Outfall 051	11/08/2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	3.07
NP051-23-260475	NPDES Outfall 051	11/08/2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1
NP051-23-260475	NPDES Outfall 051	11/08/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-164	REG	SW-846:6850	0.05	13.82
NP051-23-260714	NPDES Outfall 051	11/08/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-164	FD	SW-846:6850	0.05	13.82
NP051-23-260475	NPDES Outfall 051	11/08/2022	355-46-4	Perfluorohexanesulfonic acid	0.632	ng/L	U	N	UF	2023-158	REG	EPA-537M	0.632	401.1
NP051-23-260475	NPDES Outfall 051	11/08/2022	1763-23-1	Perfluorooctanesulfonic acid	0.766	ng/L	U	N	UF	2023-158	REG	EPA-537M	0.766	60.165
NP051-23-260475	NPDES Outfall 051	11/08/2022	335-67-1	Perfluorotoluene sulfonic acid	0.766	ng/L	U	N	UF	2023-158	REG	EPA-537M	0.766	60.165
NP051-23-260475	NPDES Outfall 051	11/08/2022	pH	pH	7.5	SU							6-9	
NP051-23-260475	NPDES Outfall 051	11/08/2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	170.4
NP051-23-260475	NPDES Outfall 051	11/08/2022	108-95-2	Phenol	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	249.93

Attachment 4

Table 2. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on November 8, 2022. 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
NP051-23-260475	NPDES Outfall 051	11/08/2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	0.3	117.4
NP051-23-260475	NPDES Outfall 051	11/08/2022	Ra-226+228	Radium-226 and Radium-228	0.473	pCi/L	J	Y	UF	2023-164	REG	Generic:Radium by Calculation	-	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	121-82-4	RDX	0.0804	ug/L	U	N	UF	2023-164	REG	SW-846:8330B	0.0804	9.6577
NP051-23-260501	NPDES Outfall 051	11/08/2022	Se	Selenium	1.5	ug/L	U	N	F	2023-164	REG	EPA:200.8	1.5	50
NP051-23-260501	NPDES Outfall 051	11/08/2022	Ag	Silver	0.33	ug/L	U	N	F	2023-164	REG	EPA:200.8	0.3	50
NP051-23-260475	NPDES Outfall 051	11/08/2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	100
NP051-23-260501	NPDES Outfall 051	11/08/2022	S04(-2)	Sulfate	0.65	mg/L	NQ	Y	F	2023-164	REG	EPA:300.0	0.13	600
NP051-23-260475	NPDES Outfall 051	11/08/2022	126-33-0	Sulfonate	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	20.03
NP051-23-260475	NPDES Outfall 051	11/08/2022	95-94-3	Tetrachlorobenzene[1,1,2,4,5]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	16
NP051-23-260475	NPDES Outfall 051	11/08/2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	1.00
NP051-23-260475	NPDES Outfall 051	11/08/2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260501	NPDES Outfall 051	11/08/2022	TI	Thallium	0.6	ug/L	U	N	F	2023-164	REG	EPA:200.8	0.6	2
NP051-23-260475	NPDES Outfall 051	11/08/2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	1,000
NP051-23-260501	NPDES Outfall 051	11/08/2022	TDS	Total Dissolved Solids	137	mg/L	NQ	Y	F	2023-164	REG	EPA:160.1	2.38	1,000
NP051-23-260501	NPDES Outfall 051	11/08/2022	TKN	Total Kjeldahl Nitrogen	0.878	mg/L	NQ	Y	F	2023-164	REG	EPA:351.2	0.0330	15
NP051-23-260718	NPDES Outfall 051	11/08/2022	TKN	Total Kjeldahl Nitrogen	0.788	mg/L	NQ	Y	F	2023-164	FD	EPA:351.2	0.0330	15
NP051-23-260475	NPDES Outfall 051	11/08/2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2023-164	REG	SW-846:8081B	0.15	0.16
NP051-23-260475	NPDES Outfall 051	11/08/2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	70
NP051-23-260475	NPDES Outfall 051	11/08/2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	200
NP051-23-260475	NPDES Outfall 051	11/08/2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	5
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	1136.825
NP051-23-260475	NPDES Outfall 051	11/08/2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	1165.98
NP051-23-260475	NPDES Outfall 051	11/08/2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2023-164	REG	SW-846:8270E	3	11.88
NP051-23-260475	NPDES Outfall 051	11/08/2022	118-96-7	Trinitroethene[2,4,6-]	0.0804	ug/L	U	N	UF	2023-164	REG	SW-846:8330B	0.0804	9.8
NP051-23-260501	NPDES Outfall 051	11/08/2022	U	Uranium	0.067	ug/L	U	N	F	2023-164	REG	EPA:200.8	0.067	30
NP051-23-260475	NPDES Outfall 051	11/08/2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	2
NP051-23-260475	NPDES Outfall 051	11/08/2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	1	620
NP051-23-260475	NPDES Outfall 051	11/08/2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.333	192.995
NP051-23-260475	NPDES Outfall 051	11/08/2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2023-164	REG	SW-846:8260D	0.5	396
NP051-23-260501	NPDES Outfall 051	11/08/2022	Zn	Zinc	3.3	ug/L	U	N	F	2023-164	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.
- pc/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.

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

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

⁴UF - Unfiltered.

F - 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 NMAC 20.6.2.3103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Total Kjeldahl Nitrogen does not contain either a NMAC 20.6.2.3103 standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit. DP-1132 Permit Condition No. 16, Table 1, establishes a Total Nitrogen limit of 15 mg/L.

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

Attachment 4

Table 3. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 8, 2022. 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
NP051-23-260476	NPDES Outfall 051051	12/08/2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	1.67	0.0415
NP051-23-260476	NPDES Outfall 051051	12/08/2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	1.67	0.523
NP051-23-260476	NPDES Outfall 051051	12/08/2022	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.00665	0.00198
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Al	Aluminum	19.3	ug/L	U	N	F	2023-270	REG	EPA-200.8	19.3	5.000
NP051-23-260476	NPDES Outfall 051051	12/08/2022	120-12-7	Anthracene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	0.301	1,721.28
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Sb	Antimony	1	ug/L	U	N	F	2023-270	REG	EPA-200.8	1	6
NP051-23-260476	NPDES Outfall 051051	12/08/2022	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	53469-21-9	Aroclor-1242	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2023-270	REG	SW-846-8082A	0.0333	5
NP051-23-260502	NPDES Outfall 051051	12/08/2022	As	Arsenic	2	ug/L	U	N	F	2023-270	REG	EPA-200.8	2	10
NP051-23-260476	NPDES Outfall 051051	12/08/2022	1912-24-9	Atrazine	3.01	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.01	3
NP051-23-260476	NPDES Outfall 051051	12/08/2022	103-33-3	Azobenzene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.01	0.7
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Ba	Barium	0.67	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.67	2,000
NP051-23-260476	NPDES Outfall 051051	12/08/2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	92-87-5	Benzidine	3.92	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.92	0.001
NP051-23-260476	NPDES Outfall 051051	12/08/2022	50-32-8	Benzofluoranthene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	0.301	0.2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	205-99-2	Benzofluoranthene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	0.301	0.343
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Be	Beryllium	0.2	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.2	4
NP051-23-260476	NPDES Outfall 051051	12/08/2022	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.00665	0.07
NP051-23-260476	NPDES Outfall 051051	12/08/2022	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.00665	0.24
NP051-23-260476	NPDES Outfall 051051	12/08/2022	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.00665	0.42
NP051-23-260476	NPDES Outfall 051051	12/08/2022	111-44-4	Bis(2-chloroethyl)ether	3.01	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.01	0.14
NP051-23-260476	NPDES Outfall 051051	12/08/2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.301	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	0.301	55.64
NP051-23-260502	NPDES Outfall 051051	12/08/2022	B	Boron	21.8	ug/L	J	Y	F	2023-270	REG	EPA-200.7	15	750
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	1.34
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-25-2	Bromofom	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	32.85
NP051-23-260476	NPDES Outfall 051051	12/08/2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.337	7.54
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Cd	Cadmium	0.3	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.3	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	57-74-9	Chlordane[alpha/gamma]	0.0765	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.0765	0.45
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Cl(-1)	Chloride	54.8	mg/L	NQ	Y	F	2023-270	REG	EPA-300.0	0.67	250
NP051-23-260476	NPDES Outfall 051051	12/08/2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	77.57
NP051-23-260476	NPDES Outfall 051051	12/08/2022	67-66-3	Chloroform	2.84	ug/L	NQ	Y	UF	2023-270	REG	SW-846-8260D	0.333	100
NP051-23-260476	NPDES Outfall 051051	12/08/2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	20.32
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Cr	Chromium	3	ug/L	U	N	F	2023-270	REG	EPA-200.8	3	50
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Co	Cobalt	0.3	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.3	50
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Cu	Copper	0.3	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.3	1,000
NP051-23-260502	NPDES Outfall 051051	12/08/2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2023-270	REG	EPA-335.4	0.00167	0.2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2023-270	REG	SW-846-8081B	0.01	2.29
NP051-23-260476	NPDES Outfall 051051	12/08/2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	0.05
NP051-23-260476	NPDES Outfall 051051	12/08/2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	7.997
NP051-23-260476	NPDES Outfall 051051	12/08/2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	600
NP051-23-260476	NPDES Outfall 051051	12/08/2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	75
NP051-23-260476	NPDES Outfall 051051	12/08/2022	91-94-1	Dichlorobenzidine[3,3']	3.01	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.01	1.25
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.355	197.20
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	25
NP051-23-260476	NPDES Outfall 051051	12/08/2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-35-4	Dichloroethene[1,1]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	7
NP051-23-260476	NPDES Outfall 051051	12/08/2022	156-59-2	Dichloroethene[cis-1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	70
NP051-23-260476	NPDES Outfall 051051	12/08/2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	100
NP051-23-260476	NPDES Outfall 051051	12/08/2022	120-83-2	Dichlorophenol[2,4]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846-8270E	3.01	45.3
NP051-23-260476	NPDES Outfall 051051	12/08/2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846-8260D	0.333	5

Attachment 4

Table 3. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on December 8, 2022. 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
NP051-23-260476	NPDES Outfall 051051	12/08/2022	542-75-6	Dichloropropene[<i>cis</i> /trans-1,3-]	0.5	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.5	4.71
NP051-23-260476	NPDES Outfall 051051	12/08/2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.01	0.0175
NP051-23-260476	NPDES Outfall 051051	12/08/2022	84-66-2	Diethylphthalate	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	14,800.5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	13-11-3	Dimethyl Phthalate	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	611.6
NP051-23-260476	NPDES Outfall 051051	12/08/2022	84-74-2	Di-n-butylphthalate	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	884.8
NP051-23-260476	NPDES Outfall 051051	12/08/2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	1.52
NP051-23-260476	NPDES Outfall 051051	12/08/2022	51-28-5	Dinitrophenol[2,4-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	38.67
NP051-23-260476	NPDES Outfall 051051	12/08/2022	121-14-2	Dinitrotoluene[2,4-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	2.37
NP051-23-260476	NPDES Outfall 051051	12/08/2022	606-20-2	Dinitrotoluene[2,6-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.49
NP051-23-260476	NPDES Outfall 051051	12/08/2022	123-91-1	Dioxane[1,4-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	4.59
NP051-23-260476	NPDES Outfall 051051	12/08/2022	122-39-4	Diphenylamine	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	122
NP051-23-260476	NPDES Outfall 051051	12/08/2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.00665	98.7
NP051-23-260476	NPDES Outfall 051051	12/08/2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.01	98.7
NP051-23-260476	NPDES Outfall 051051	12/08/2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.01	2.23
NP051-23-260476	NPDES Outfall 051051	12/08/2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	700
NP051-23-260476	NPDES Outfall 051051	12/08/2022	206-44-0	Fluoranthene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	802.2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	86-73-7	Fluorene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	287.64
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Fl-1)	Fluoride	0.033	mg/L	U	N	F	2023-270	REG	EPA-300.0	0.033	1.6
NP051-23-260476	NPDES Outfall 051051	12/08/2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.00665	0.022
NP051-23-260476	NPDES Outfall 051051	12/08/2022	118-74-1	Hexachlorobenzene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.098
NP051-23-260476	NPDES Outfall 051051	12/08/2022	87-68-3	Hexachlorobutadiene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	1.39
NP051-23-260476	NPDES Outfall 051051	12/08/2022	77-47-4	Hexachlorocyclopentadiene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.41
NP051-23-260476	NPDES Outfall 051051	12/08/2022	67-72-1	Hexachloroethane	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	3.28
NP051-23-260476	NPDES Outfall 051051	12/08/2022	2691-41-0	HMX	0.0799	ug/L	U	N	UF	2023-270	REG	SW-846.8330B	0.0799	1,001.11
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Fe	Iron	30	ug/L	U	N	F	2023-270	REG	EPA-200.7	30	1,000
NP051-23-260476	NPDES Outfall 051051	12/08/2022	78-59-1	Isophorone	3.52	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.52	780.63
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Pb	Lead	0.5	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.5	15
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Mn	Manganese	2	ug/L	U	N	F	2023-270	REG	EPA-200.7	2	200
NP051-23-260476	NPDES Outfall 051051	12/08/2022	Hg	Mercury	0.067	ug/L	U	N	UF	2023-270	REG	EPA-245.2	0.067	2
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Hg	Mercury	0.067	ug/L	U	N	F	2023-270	REG	EPA-245.2	0.067	2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	100
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-09-2	Methylene Chloride	1.03	ug/L	J	Y	UF	2023-270	REG	SW-846.8260D	0.5	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	90-12-0	Methylnaphthalene[1-]	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	30
NP051-23-260476	NPDES Outfall 051051	12/08/2022	91-57-6	Methylnaphthalene[2-]	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	30
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Mo	Molybdenum	0.2	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.2	1,000
NP051-23-260476	NPDES Outfall 051051	12/08/2022	91-20-3	Naphthalene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	30
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Ni	Nickel	0.6	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.6	200
NP051-23-260502	NPDES Outfall 051051	12/08/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.4	mg/L	NQ	Y	F	2023-270	REG	EPA-353.2	0.017	10
NP051-23-260719	NPDES Outfall 051051	12/08/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.391	mg/L	NQ	Y	F	2023-270	FD	EPA-353.2	0.017	10
NP051-23-260490	NPDES Outfall 051051	12/08/2022	NO2	Nitrite	0.0611	mg/L	J	Y	F	2023-262	REG	EPA-300.0	0.033	1
NP051-23-260476	NPDES Outfall 051051	12/08/2022	98-95-3	Nitrobenzene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	1.4
NP051-23-260476	NPDES Outfall 051051	12/08/2022	55-18-5	Nitrosodimethylamine[N-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.00167
NP051-23-260476	NPDES Outfall 051051	12/08/2022	62-75-9	Nitrosodimethylamine[N-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.0049
NP051-23-260476	NPDES Outfall 051051	12/08/2022	92-4-16-3	Nitroso-di-n-butylamine[N-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.0273
NP051-23-260476	NPDES Outfall 051051	12/08/2022	930-55-2	Nitrosopyrrolidine[N-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	0.3696
NP051-23-260476	NPDES Outfall 051051	12/08/2022	108-60-1	Oxybis[1-chloropropane][2,2-]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	9.81
NP051-23-260476	NPDES Outfall 051051	12/08/2022	608-93-5	Pentachlorobenzene	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	3.068
NP051-23-260476	NPDES Outfall 051051	12/08/2022	87-86-5	Pentachlorophenol	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	1
NP051-23-260476	NPDES Outfall 051051	12/08/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-270	REG	SW-846.6850	0.05	13.82
NP051-23-260715	NPDES Outfall 051051	12/08/2022	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2023-270	FD	SW-846.6850	0.05	13.82
NP051-23-260476	NPDES Outfall 051051	12/08/2022	355-46-4	Perfluorohexanesulfonic acid	0.694	ng/L	U	N	UF	2023-270	REG	EPA-537M	0.694	401.1
NP051-23-260476	NPDES Outfall 051051	12/08/2022	1763-23-1	Perfluorooctanesulfonic acid	0.841	ng/L	U	N	UF	2023-270	REG	EPA-537M	0.841	60.16
NP051-23-260476	NPDES Outfall 051051	12/08/2022	335-67-1	Perfluorooctanoic acid	0.841	ng/L	U	N	UF	2023-270	REG	EPA-537M	0.841	6.9
NP051-23-260476	NPDES Outfall 051051	12/08/2022	pH	pH	7.2	SU	U	N	UF	2023-270	REG			6-9
NP051-23-260476	NPDES Outfall 051051	12/08/2022	85-01-8	Phenanthrene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	170.41
NP051-23-260476	NPDES Outfall 051051	12/08/2022	108-95-2	Phenol	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	1610-18-0	Prometon	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	249.93

Attachment 4

Table 3. Analytical Results from the Monthly Sampling of RLWTF Treated Effluent/Discharged to NPDES Outfall 051 on December 8, 2022. 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
NP051-23-260476	NPDES Outfall 051051	12/08/2022	129-00-0	Pyrene	0.301	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.301	117.42
NP051-23-260476	NPDES Outfall 051051	12/08/2022	Ra-226+228	Radium-226 and Radium-228	0.79	pc/L	U	N	UF	2023-270	REG	Generic:Radium by Calculation		5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	121-82-4	RDX	0.0799	ug/L	U	N	UF	2023-270	REG	SW-846.8330B	0.0799	9.66
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Se	Selenium	1.5	ug/L	U	N	F	2023-270	REG	EPA-200.8	1.5	50
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Ag	Silver	0.3	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.3	50
NP051-23-260476	NPDES Outfall 051051	12/08/2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	100
NP051-23-260502	NPDES Outfall 051051	12/08/2022	504(-2)	Sulfate	0.754	mg/L	NQ	Y	F	2023-270	REG	EPA-300.0	0.133	600
NP051-23-260476	NPDES Outfall 051051	12/08/2022	126-33-0	Sulfolane	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	20.03
NP051-23-260476	NPDES Outfall 051051	12/08/2022	95-94-3	Tetrahydrofuran[1,2,4,5]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	0.333	1.66
NP051-23-260476	NPDES Outfall 051051	12/08/2022	79-34-5	Tetrachloroethane[1,1,2,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	10
NP051-23-260476	NPDES Outfall 051051	12/08/2022	127-18-4	Tetrachloroethane[1,1,1,1]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	5
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Tl	Thallium	0.6	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.6	2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	1,000
NP051-23-260502	NPDES Outfall 051051	12/08/2022	TDS	Total Dissolved Solids	138	mg/L	NQ	Y	F	2023-270	REG	EPA-160.1	2.38	1,000
NP051-23-260502	NPDES Outfall 051051	12/08/2022	TKN	Total Kjeldahl Nitrogen	1.25	mg/L	Y	Y	F	2023-270	REG	EPA-351.2	0.033	15
NP051-23-260719	NPDES Outfall 051051	12/08/2022	TKN	Total Kjeldahl Nitrogen	1.3	mg/L	J+	Y	F	2023-270	FD	EPA-351.2	0.033	15
NP051-23-260476	NPDES Outfall 051051	12/08/2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2023-270	REG	SW-846.8081B	0.150	0.158
NP051-23-260476	NPDES Outfall 051051	12/08/2022	120-82-1	Trichlorobenzene[1,2,4]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	70
NP051-23-260476	NPDES Outfall 051051	12/08/2022	71-55-6	Trichloroethane[1,1,1]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	200
NP051-23-260476	NPDES Outfall 051051	12/08/2022	79-00-5	Trichloroethane[1,1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	5
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	1,136.82
NP051-23-260476	NPDES Outfall 051051	12/08/2022	95-95-4	Trichlorophenol[2,4,5]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	1,165.98
NP051-23-260476	NPDES Outfall 051051	12/08/2022	88-06-2	Trichlorophenol[2,4,6]	3.01	ug/L	U	N	UF	2023-270	REG	SW-846.8270E	3.01	11.88
NP051-23-260476	NPDES Outfall 051051	12/08/2022	118-96-7	Trinitrotoluene[2,4,6]	0.0799	ug/L	U	N	UF	2023-270	REG	SW-846.8330B	0.0799	9.8
NP051-23-260502	NPDES Outfall 051051	12/08/2022	U	Uranium	0.067	ug/L	U	N	F	2023-270	REG	EPA-200.8	0.067	30
NP051-23-260476	NPDES Outfall 051051	12/08/2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	2
NP051-23-260476	NPDES Outfall 051051	12/08/2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	1	620
NP051-23-260476	NPDES Outfall 051051	12/08/2022	95-47-6	Xylene[1,2]	0.333	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.333	193
NP051-23-260476	NPDES Outfall 051051	12/08/2022	Xylenem+p	Xylene[1,3+Xylenel[1,4]	0.5	ug/L	U	N	UF	2023-270	REG	SW-846.8260D	0.5	396
NP051-23-260502	NPDES Outfall 051051	12/08/2022	Zn	Zinc	4.52	ug/L	U	N	F	2023-270	REG	EPA-200.7	3.3	10,000

Notes:

- ¹ ug/L - micrograms per liter.
- mg/L - milligrams per liter.
- ug/L - nanograms per liter.
- SU - standard units.
- pc/L - picocuries per liter.

² U - 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.

U - 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.

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

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

⁴ UF - Unfiltered.

F - Filtered.

⁵ REG - 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 NMAC 20.6.2.3.103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Total Kjeldahl Nitrogen does not contain either a NMAC 20.6.2.3.103 standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit. DP-1132 Permit Condition No. 16, Table 1, establishes a Total Nitrogen limit of 15 mg/L.

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 ug/L, which represents the NMAC 20.6.2.3.103 Groundwater Standard.

Attachment 5

Groundwater Monitoring Report - Fourth Quarter 2022 and Annual Reporting

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

ATTACHMENT 5

TABLE OF CONTENTS

MCA-RLW-1, Fourth Quarter 2022 – November 3, 2022	1
MCA-RLW-2, 2022 Fourth Quarter and 2022 Annual Sampling – November 16, 2022	2
MCOI-6, Fourth Quarter 2022 – November 7, 2022	9
MCOI-6, Annual 2022 – May 31, 2022.....	10
R-1, Annual 2022 – May 26, 2022	30
R-1, Annual 2022 – November 21, 2022	31
R-14 Screen 1, Annual 2022 – April 26, 2022	42
R-14 Screen 1, Annual 2022 – November 16, 2022.....	43
R-46, Annual 2022 – April 26, 2022.....	53
R-46, Annual 2022 – November 15, 2022	54
R-60, Annual 2022 – April 27, 2022.....	68
R-60, Annual 2022 – November 21, 2022	69

MCA-RLW-1, Fourth Quarter 2022 – November 3, 2022

a	Sample Date	11/3/2022
b	Sample Time	0901
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 November 3, 2022, due to insufficient water in the well. Well contained .11 ft of standing water.

MCA-RLW-2, 2022 Fourth Quarter and 2022 Annual Sampling – November 16, 2022

a	Sample Date	11/16/2022
b	Sample Time	1004
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))	6,809.88
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)	2.25
i	Total volume of water purged prior to sample collection (gal)	2.25
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.44 Oxidation/Reduction Potential (MV): 120.1 Temp (deg C): 10.0 pH (SU): 6.82 Turbidity (NTU): 131.63 Specific Conductance (μ S/cm): 607
k	Description of sample methods	Attachment 5, Pages 8-9
l	Chain-of-Custody	Attachment 5, Pages 8-9
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 2

Table 1. Analytical Results from Quarterly Sampling of Alluvial Aquifer Monitoring Well MCA-RLW-2 on November 16, 2022, 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-23-260901	MCA-RLW-2	11/16/2022	Cl(-1)	Chloride	105	mg/L	NQ	Y	F	2023-187	REG	EPA:300.0	1.68	250
CAMO-23-260901	MCA-RLW-2	11/16/2022	F(-1)	Fluoride	1.04	mg/L	NQ	Y	F	2023-187	REG	EPA:300.0	0.330	1.6
CAMO-23-260901	MCA-RLW-2	11/16/2022	NO3-NO2-N	Nitrate-Nitrite as Nitrogen	0.164	mg/L	NQ	Y	F	2023-187	REG	EPA:353.2	0.0170	10
CAMO-23-260893	MCA-RLW-2	11/16/2022	ClO4	Perchlorate	5.61	ug/L	NQ	Y	UF	2023-187	REG	SW-846:6850	0.0500	13.8
CAMO-23-260901	MCA-RLW-2	11/16/2022	TDS	Total Dissolved Solids	341	mg/L	NQ	Y	F	2023-187	REG	EPA:160.1	2.38	1,000
CAMO-23-260901	MCA-RLW-2	11/16/2022	TKN	Total Kjeldahl Nitrogen	0.118	mg/L	NQ	Y	F	2023-187	REG	EPA:351.2	0.0330	-

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.

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

⁴F - Filtered.

UF - Unfiltered.

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

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

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

Attachment 5

Table 2. Analytical Results from Ground Water Sampling at MCA-RLW-2 on November 16, 2022. 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
CAM0-23-261364	MCA-RLW-2	11/16/2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	1.67	0.04
CAM0-23-261364	MCA-RLW-2	11/16/2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	1.67	0.52
CAM0-23-261364	MCA-RLW-2	11/16/2022	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	0.00198
CAM0-23-261303	MCA-RLW-2	11/16/2022	Al	Aluminum	113	ug/L	NQ	Y	F	2023-188	REG	EPA200.8	19.3	5,000
CAM0-23-261364	MCA-RLW-2	11/16/2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	1721.281
CAM0-23-261303	MCA-RLW-2	11/16/2022	Sb	Antimony	1	ug/L	U	N	F	2023-188	REG	EPA200.8	1	6
CAM0-23-261364	MCA-RLW-2	11/16/2022	12674-11-2	Aroclor-1016	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	11104-28-2	Aroclor-1221	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	11141-16-5	Aroclor-1232	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	53469-21-9	Aroclor-1242	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	12672-29-6	Aroclor-1248	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	11097-69-1	Aroclor-1254	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	11096-82-5	Aroclor-1260	0.0337	ug/L	U	N	UF	2023-188	REG	SW-846-8082A	0.0337	5
CAM0-23-261303	MCA-RLW-2	11/16/2022	As	Arsenic	2	ug/L	U	N	F	2023-188	REG	EPA200.8	2	10
CAM0-23-261364	MCA-RLW-2	11/16/2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	3
CAM0-23-261364	MCA-RLW-2	11/16/2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.7
CAM0-23-261303	MCA-RLW-2	11/16/2022	Ba	Barium	169	ug/L	NQ	Y	F	2023-188	REG	EPA200.8	0.670	2,000
CAM0-23-261364	MCA-RLW-2	11/16/2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3.9	0.001
CAM0-23-261364	MCA-RLW-2	11/16/2022	50-32-8	Benzo(b)pyrene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	0.2
CAM0-23-261364	MCA-RLW-2	11/16/2022	205-99-2	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	0.343
CAM0-23-261364	MCA-RLW-2	11/16/2022	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	3.432
CAM0-23-261303	MCA-RLW-2	11/16/2022	Be	Beryllium	0.2	ug/L	U	N	F	2023-188	REG	EPA200.8	0.2	4
CAM0-23-261364	MCA-RLW-2	11/16/2022	319-84-6	BHC(alpha)	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	0.069
CAM0-23-261364	MCA-RLW-2	11/16/2022	319-85-7	BHC(beta)	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	0.243
CAM0-23-261364	MCA-RLW-2	11/16/2022	58-89-9	BHC(gamma)	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	0.415
CAM0-23-261364	MCA-RLW-2	11/16/2022	111-44-4	Bis(2-chloroethoxy)ether	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.14
CAM0-23-261364	MCA-RLW-2	11/16/2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.51	ug/L	U	Y	UF	2023-188	REG	SW-846-8270E	0.30	55.64
CAM0-23-261303	MCA-RLW-2	11/16/2022	B	Boron	58.3	ug/L	NQ	Y	F	2023-188	REG	EPA200.7	15.0	750
CAM0-23-261364	MCA-RLW-2	11/16/2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	1.34
CAM0-23-261364	MCA-RLW-2	11/16/2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	32.85
CAM0-23-261364	MCA-RLW-2	11/16/2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.337	7.54
CAM0-23-261303	MCA-RLW-2	11/16/2022	Cd	Cadmium	0.3	ug/L	U	N	F	2023-188	REG	EPA200.8	0.3	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.0765	0.45
CAM0-23-260901	MCA-RLW-2	11/16/2022	C(-1)	Chloride	105	mg/L	NQ	Y	F	2023-187	REG	EPA300.0	1.68	250
CAM0-23-261364	MCA-RLW-2	11/16/2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	77.6
CAM0-23-261364	MCA-RLW-2	11/16/2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	100
CAM0-23-261364	MCA-RLW-2	11/16/2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	20.3
CAM0-23-261303	MCA-RLW-2	11/16/2022	Cr	Chromium	3	ug/L	U	N	F	2023-188	REG	EPA200.8	3	50
CAM0-23-261303	MCA-RLW-2	11/16/2022	Cu	Cobalt	0.3	ug/L	U	N	F	2023-188	REG	EPA200.8	0.3	50
CAM0-23-261303	MCA-RLW-2	11/16/2022	Co	Copper	0.89	ug/L	J	Y	F	2023-188	REG	EPA200.8	0.30	1,000
CAM0-23-261303	MCA-RLW-2	11/16/2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2023-188	REG	EPA335.4	0.00167	0.2
CAM0-23-261364	MCA-RLW-2	11/16/2022	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.01	2.29
CAM0-23-261364	MCA-RLW-2	11/16/2022	106-93-4	Dibromomethane	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	0.05
CAM0-23-261364	MCA-RLW-2	11/16/2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	7.997
CAM0-23-261364	MCA-RLW-2	11/16/2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	600
CAM0-23-261364	MCA-RLW-2	11/16/2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	75
CAM0-23-261364	MCA-RLW-2	11/16/2022	91-94-1	Dichlorobenzidine[3,3']	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1.25
CAM0-23-261364	MCA-RLW-2	11/16/2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.355	197.2
CAM0-23-261364	MCA-RLW-2	11/16/2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	25
CAM0-23-261364	MCA-RLW-2	11/16/2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAM0-23-261364	MCA-RLW-2	11/16/2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	7
CAM0-23-261364	MCA-RLW-2	11/16/2022	156-59-2	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	70
CAM0-23-261364	MCA-RLW-2	11/16/2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	100
CAM0-23-261364	MCA-RLW-2	11/16/2022	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	45.3
CAM0-23-261364	MCA-RLW-2	11/16/2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5

Table 2. Analytical Results from Ground Water Sampling at MCA-RLW-2 on November 16, 2022. 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-23-261364	MCA-RLW-2	11/16/2022	542-75-6	Dichloropropene(cis/trans-1,3-)	0.5	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.5	4.708
CAMO-23-261364	MCA-RLW-2	11/16/2022	60-57-1	Diethylphthalate	0.01	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.01	0.0175
CAMO-23-261364	MCA-RLW-2	11/16/2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	14.800.5
CAMO-23-261364	MCA-RLW-2	11/16/2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	611.56
CAMO-23-261364	MCA-RLW-2	11/16/2022	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	884.8
CAMO-23-261364	MCA-RLW-2	11/16/2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1.52
CAMO-23-261364	MCA-RLW-2	11/16/2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	5	38.67
CAMO-23-261364	MCA-RLW-2	11/16/2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	2.37
CAMO-23-261364	MCA-RLW-2	11/16/2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.49
CAMO-23-261364	MCA-RLW-2	11/16/2022	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	4.59
CAMO-23-261364	MCA-RLW-2	11/16/2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	122
CAMO-23-261364	MCA-RLW-2	11/16/2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	98.7
CAMO-23-261364	MCA-RLW-2	11/16/2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.01	98.7
CAMO-23-261364	MCA-RLW-2	11/16/2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.01	2.23
CAMO-23-261364	MCA-RLW-2	11/16/2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	700
CAMO-23-261364	MCA-RLW-2	11/16/2022	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	802.2
CAMO-23-261364	MCA-RLW-2	11/16/2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	287.64
CAMO-23-260901	MCA-RLW-2	11/16/2022	F(-1)	Fluoride	1.04	mg/L	NQ	Y	F	2023-187	REG	EPA-300.0	0.33	1.6
CAMO-23-261364	MCA-RLW-2	11/16/2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.00665	0.022
CAMO-23-261364	MCA-RLW-2	11/16/2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.1
CAMO-23-261364	MCA-RLW-2	11/16/2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1.39
CAMO-23-261364	MCA-RLW-2	11/16/2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.41
CAMO-23-261364	MCA-RLW-2	11/16/2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	3.28
CAMO-23-261364	MCA-RLW-2	11/16/2022	2691-41-0	HMX	0.0824	ug/L	U	N	UF	2023-188	REG	SW-846-8330B	0.0824	1001.11
CAMO-23-261303	MCA-RLW-2	11/16/2022	Fe	Iron	54	ug/L	J	Y	F	2023-188	REG	EPA-200.7	30	1,000
CAMO-23-261303	MCA-RLW-2	11/16/2022	78-59-1	Isothorone	3.5	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3.5	780.63
CAMO-23-261303	MCA-RLW-2	11/16/2022	Pb	Lead	0.5	ug/L	U	N	F	2023-188	REG	EPA-200.8	0.5	15
CAMO-23-261303	MCA-RLW-2	11/16/2022	Mn	Manganese	2	ug/L	U	N	F	2023-188	REG	EPA-200.7	2	200
CAMO-23-261303	MCA-RLW-2	11/16/2022	Hg	Mercury	0.067	ug/L	U	N	F	2023-188	REG	EPA-245.2	0.067	2
CAMO-23-261364	MCA-RLW-2	11/16/2022	Hg	Mercury	0.067	ug/L	U	N	UF	2023-188	REG	EPA-245.2	0.067	2
CAMO-23-261364	MCA-RLW-2	11/16/2022	1694-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	100
CAMO-23-261364	MCA-RLW-2	11/16/2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.5	5
CAMO-23-261364	MCA-RLW-2	11/16/2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	30
CAMO-23-261364	MCA-RLW-2	11/16/2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	30
CAMO-23-261303	MCA-RLW-2	11/16/2022	Mo	Molybdenum	2.8	ug/L	NQ	Y	F	2023-188	REG	EPA-200.8	0.2	1,000
CAMO-23-261364	MCA-RLW-2	11/16/2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	30
CAMO-23-261303	MCA-RLW-2	11/16/2022	Ni	Nickel	0.654	ug/L	J	Y	F	2023-188	REG	EPA-200.8	0.6	200
CAMO-23-260901	MCA-RLW-2	11/16/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.164	mg/L	NQ	Y	F	2023-187	REG	EPA-353.2	0.017	10
CAMO-23-261303	MCA-RLW-2	11/16/2022	NO2	Nitrite	0.033	mg/L	U	N	F	2023-188	REG	EPA-300.0	0.033	1
CAMO-23-261364	MCA-RLW-2	11/16/2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1.4
CAMO-23-261364	MCA-RLW-2	11/16/2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.002
CAMO-23-261364	MCA-RLW-2	11/16/2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.005
CAMO-23-261364	MCA-RLW-2	11/16/2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.03
CAMO-23-261364	MCA-RLW-2	11/16/2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	0.37
CAMO-23-261364	MCA-RLW-2	11/16/2022	108-60-1	Oxibis(L-chloropropane)[2,2-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	9.81
CAMO-23-261364	MCA-RLW-2	11/16/2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	3.07
CAMO-23-261364	MCA-RLW-2	11/16/2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1
CAMO-23-260893	MCA-RLW-2	11/16/2022	ClO4	Perchlorate	5.61	ug/L	NQ	Y	UF	2023-187	REG	SW-846-6850	0.0500	13.82
CAMO-23-261364	MCA-RLW-2	11/16/2022	355-46-4	Perfluorohexanesulfonic acid	6.81	ng/L	NQ	Y	UF	2023-188	REG	EPA-537M	0.655	401.1
CAMO-23-261364	MCA-RLW-2	11/16/2022	1763-23-1	Perfluorooctanesulfonic acid	28.8	ng/L	NQ	Y	UF	2023-188	REG	EPA-537M	0.794	60.16
CAMO-23-261364	MCA-RLW-2	11/16/2022	335-67-1	Perfluorooctanoic acid	23.6	ng/L	NQ	Y	UF	2023-188	REG	EPA-537M	0.794	60.16
CAMO-23-261364	MCA-RLW-2	11/16/2022	pH	pH	6.8	SU	U	N						6.9
CAMO-23-261364	MCA-RLW-2	11/16/2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	170.4
CAMO-23-261364	MCA-RLW-2	11/16/2022	108-95-2	Phenol	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	5
CAMO-23-261364	MCA-RLW-2	11/16/2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	249.93
CAMO-23-261364	MCA-RLW-2	11/16/2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	0.3	117.4
CAMO-23-261364	MCA-RLW-2	11/16/2022	Re-226+228	Radium-226 and Radium-228	3.88	pCi/L	J	Y	UF	2023-188	REG	Generic:Radium by Calculation	-	5

Table 2. Analytical Results from Ground Water Sampling at MCA-RW-2 on November 16, 2022. 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-23-261364	MCA-RW-2	11/16/2022	121-82-4	RDX	0.0824	ug/L	U	N	UF	2023-188	REG	SW-846-8330B	0.0824	9.66
CAMO-23-261303	MCA-RW-2	11/16/2022	Se	Selenium	1.72	ug/L	J	Y	F	2023-188	REG	EPA.200.8	1.50	50
CAMO-23-261303	MCA-RW-2	11/16/2022	Ag	Silver	0.3	ug/L	U	N	F	2023-188	REG	EPA.200.8	0.3	50
CAMO-23-261364	MCA-RW-2	11/16/2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	100
CAMO-23-261303	MCA-RW-2	11/16/2022	504(-2)	Sulfate	13.4	mg/L	NQ	Y	F	2023-188	REG	EPA.300.0	0.266	600
CAMO-23-261364	MCA-RW-2	11/16/2022	126-33-0	Sulfolane	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	20.03
CAMO-23-261364	MCA-RW-2	11/16/2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1.66
CAMO-23-261364	MCA-RW-2	11/16/2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	10
CAMO-23-261364	MCA-RW-2	11/16/2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAMO-23-261303	MCA-RW-2	11/16/2022	Tl	Thallium	0.6	ug/L	U	N	F	2023-188	REG	EPA.200.8	0.6	2
CAMO-23-261364	MCA-RW-2	11/16/2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	1,000
CAMO-23-260901	MCA-RW-2	11/16/2022	TDS	Total Dissolved Solids	34T	mg/L	NQ	Y	F	2023-187	REG	EPA.160.1	2.38	1,000
CAMO-23-260901	MCA-RW-2	11/16/2022	TKN	Total Kjeldahl Nitrogen	0.118	mg/L	NQ	Y	F	2023-187	REG	EPA.351.2	0.0330	-
CAMO-23-261364	MCA-RW-2	11/16/2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2023-188	REG	SW-846-8081B	0.15	0.158
CAMO-23-261364	MCA-RW-2	11/16/2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	70
CAMO-23-261364	MCA-RW-2	11/16/2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	200
CAMO-23-261364	MCA-RW-2	11/16/2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAMO-23-261364	MCA-RW-2	11/16/2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	5
CAMO-23-261364	MCA-RW-2	11/16/2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	1136.82
CAMO-23-261364	MCA-RW-2	11/16/2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	1165.98
CAMO-23-261364	MCA-RW-2	11/16/2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2023-188	REG	SW-846-8270E	3	11.88
CAMO-23-261364	MCA-RW-2	11/16/2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0824	ug/L	U	N	UF	2023-188	REG	SW-846-8330B	0.0824	9.8
CAMO-23-261303	MCA-RW-2	11/16/2022	U	Uranium	0.353	ug/L	NQ	Y	F	2023-188	REG	EPA.200.8	0.0670	30
CAMO-23-261364	MCA-RW-2	11/16/2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	2
CAMO-23-261364	MCA-RW-2	11/16/2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	1	620
CAMO-23-261364	MCA-RW-2	11/16/2022	95-47-6	Xylenes[1,2-]	0.333	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.333	193
CAMO-23-261364	MCA-RW-2	11/16/2022	Xylene[m+p]	Xylenes[1,3-+Xylene[1,4-]	0.5	ug/L	U	N	UF	2023-188	REG	SW-846-8260D	0.5	396
CAMO-23-261303	MCA-RW-2	11/16/2022	Zn	Zinc	3.3	ug/L	U	N	F	2023-188	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.

pc/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.

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 - Unfiltered.

F - Filtered.

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

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 NMAC 20.6.2.3103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

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

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

601308

General Engineering Laboratories, Inc., Charleston, SC.	<h2>Chain of Custody/Analysis Request</h2>		COC/Lab Request #: 2023-187 Page 1 of 1
Client Contact:	Lab Agreement #: # 620266 Project Number: LANL	Site Name: Los Alamos National Laboratory	

Analysis Turnaround Time: 24 Hour - <input type="checkbox"/> Other - <input type="checkbox"/> 7 Days - <input checked="" type="checkbox"/> 14 Days - <input type="checkbox"/> 21 Days - <input type="checkbox"/> 28 Days - <input type="checkbox"/>	Sample Date 11/16/2022 11/16/2022	Sample Time 10:04 10:04	Sample Matrix W W	DP-C104 DP-N03N02+TKN DP-TDS+Cl+F	Rad Screening Info: Acceptable knowledge identifies no DOT hazard classification Lab Reporting Limit Type: Method Detection Limit
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Field Sample ID	Sample Date	Sample Time	Sample Matrix		
CAMO-23-260893	11/16/2022	10:04	W	1	
CAMO-23-260901	11/16/2022	10:04	W	1	1

Special Instructions:					
Relinquished by: Sheri Sherwood	Print Name: Sheri Sherwood	Date/Time: 11/17/22 15:00	Received by: [Signature]	Print Name: [Signature]	Date/Time: 11/18/22
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

601398

COC/Lab Request #: 2023-188
Page 1 of 1

Chain of Custody/Analysis Request

General Engineering Laboratories,
Inc., Charleston, SC.
Charleston SC

Client Contact:

Lab Agreement #: # 620266

Site Name: Los Alamos National Laboratory

Project Number: LANL

Analysis Turnaround Time:

24 Hour - Other -

7 Days -

14 Days -

21 Days -

28 Days -

Event ID: 14813

Field Sample ID

Sample Date	Sample Time	Sample Matrix
11/16/2022	10:04	W
11/16/2022	10:04	W
11/16/2022	10:04	W
11/16/2022	13:48	W

DP-8082-PCBS	DP-CN(TOTAL)	DP-Hg	DP-Metals	DP-NO2	DP-Ra226+228	DP-SO4	DP-TP-8081-PEST	DP-TP-8260-VOCs	DP-TP-8270-SVOCs	DP-TP-8330-HEXP	DP-TP-PFAS (subset) unpreserved
1		1				1					
			1								
2		1		4			3	2	2	3	4
											4

Rad Screening Info:
Acceptable knowledge identifies no DOT hazard classification
Lab Reporting Limit Type:
Method Detection Limit

SHIP SAME DAY

7-day TAT

Special Instructions:

Relinquished by: <i>Shen Howard</i>	Print Name:	<i>Shen Howard</i>	Date/Time: 11/17/22 15:00	Received by: <i>Mat</i>	Print Name:	<i>Mat</i>	Date/Time: 11/18/22
Relinquished by:	Print Name:		Date/Time:	Received by:	Print Name:		Date/Time:
Relinquished by:	Print Name:		Date/Time:	Received by:	Print Name:		Date/Time:

MCOI-6, Fourth Quarter 2022 – November 7, 2022

a	Sample Date	11/7/2022
b	Sample Time	1150
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))	6140.47
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)	34.67
i	Total volume of water purged prior to sample collection (gal)	110.1
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.52 Oxidation/Reduction Potential (MV): 158.8 Temp (deg C): 16.3 pH (SU): 7.25 Turbidity (NTU): 3.01 Specific Conductance (μ S/cm): 552
k	Description of sample methods	Attachment 5, Pages 29-30
l	Chain-of-Custody	Attachment 5, Pages 29-30
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 3

MCOI-6, Annual 2022 – May 31, 2022

a	Sample Date	5/31/2022
b	Sample Time	1151
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))	6,139.95
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)	34.24
i	Total volume of water purged prior to sample collection (gal)	105.8
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.99 Oxidation/Reduction Potential (MV): 179.3 Temp (deg C): 16.6 pH (SU): 6.95 Turbidity (NTU): 1.02 Specific Conductance (μ S/cm): 526
k	Description of sample methods	Attachment 5, Pages 24-28
l	Chain-of-Custody	Attachment 5, Pages 24-28
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 4

Table 3. Analytical Results from Quarterly Groundwater Sampling of Perched/Intermediate Aquifer Monitoring Well MCOI-6 on November 7, 2022. 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-23-260971	MCOI-6	11/07/2022	Cl(-1)	Chloride	46.0	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:300.0	0.670	250
CAMO-23-260971	MCOI-6	11/07/2022	F(-1)	Fluoride	0.672	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:300.0	0.0330	1.6
CAMO-23-260971	MCOI-6	11/07/2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	12.8	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:353.2	0.170	10
CAMO-23-260971	MCOI-6	11/07/2022	ClO4	Perchlorate	83.9	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6850	0.500	13.8
CAMO-23-260971	MCOI-6	11/07/2022	TDS	Total Dissolved Solids	352	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:160.1	2.38	1,000
CAMO-23-260970	MCOI-6	11/07/2022	TKN	Total Kjeldahl Nitrogen	0.0330	mg/L	U	N	UF	N3B-2023-355	REG	EPA:351.2	0.0330	-

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.

U - The analyte is classified as not detected.

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

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

⁴F - Filtered.

UF - Unfiltered.

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 NMAC 20.6.2.3103 standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235944	MCOI-6	05-31-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	1.67
CAMO-22-235966	MCOI-6	05-31-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	1.67
CAMO-22-249306	MCOI-6	05-31-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	1.67
CAMO-22-235944	MCOI-6	05-31-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	1.67
CAMO-22-235966	MCOI-6	05-31-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	1.67
CAMO-22-249306	MCOI-6	05-31-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	1.67
CAMO-22-235944	MCOI-6	05-31-2022	309-00-2	Aldrin	0.0067	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235966	MCOI-6	05-31-2022	309-00-2	Aldrin	0.0067	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.00672
CAMO-22-235944	MCOI-6	05-31-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-588	REG	EPA:200.8	19.3
CAMO-22-235981	MCOI-6	05-31-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-588	FD	EPA:200.8	19.3
CAMO-22-238531	MCOI-6	01-18-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6010D	68
CAMO-22-249307	MCOI-6	05-31-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6010D	68
CAMO-22-251944	MCOI-6	07-20-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6010D	68
CAMO-23-260971	MCOI-6	11-07-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6010D	68
CAMO-22-235944	MCOI-6	05-31-2022	120-12-7	Anthracene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	120-12-7	Anthracene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235945	MCOI-6	05-31-2022	Sb	Antimony	1	ug/L	U	N	F	2022-588	REG	EPA:200.8	1
CAMO-22-235981	MCOI-6	05-31-2022	Sb	Antimony	1	ug/L	U	N	F	2022-588	FD	EPA:200.8	1
CAMO-22-238531	MCOI-6	01-18-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	1
CAMO-22-249307	MCOI-6	05-31-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	1
CAMO-22-251944	MCOI-6	07-20-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	1
CAMO-23-260971	MCOI-6	11-07-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	1
CAMO-22-235944	MCOI-6	05-31-2022	12674-11-2	Aroclor-1016	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	12674-11-2	Aroclor-1016	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	11104-28-2	Aroclor-1221	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	11104-28-2	Aroclor-1221	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	11141-16-5	Aroclor-1232	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	11141-16-5	Aroclor-1232	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	53469-21-9	Aroclor-1242	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	53469-21-9	Aroclor-1242	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	12672-29-6	Aroclor-1248	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	11097-69-1	Aroclor-1254	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	11097-69-1	Aroclor-1254	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235966	MCOI-6	05-31-2022	11096-82-5	Aroclor-1260	0.0377	ug/L	U	N	UF	2022-588	REG	SW-846:8082A	5
CAMO-22-235944	MCOI-6	05-31-2022	11096-82-5	Aroclor-1260	0.0381	ug/L	U	N	UF	2022-588	FD	SW-846:8082A	5
CAMO-22-235945	MCOI-6	05-31-2022	As	Arsenic	2	ug/L	U	N	F	2022-588	REG	EPA:200.8	2
CAMO-22-235981	MCOI-6	05-31-2022	As	Arsenic	2	ug/L	U	N	F	2022-588	FD	EPA:200.8	2
CAMO-22-238531	MCOI-6	01-18-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	2
CAMO-22-249307	MCOI-6	05-31-2022	As	Arsenic	2.26	ug/L	J	Y	F	N3B-2022-1594	REG	SW-846:6020B	2
CAMO-22-251944	MCOI-6	07-20-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	2
CAMO-23-260971	MCOI-6	11-07-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	2
CAMO-22-235944	MCOI-6	05-31-2022	1912-24-9	Atrazine	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	1912-24-9	Atrazine	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	103-33-3	Azobenzene	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	103-33-3	Azobenzene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235945	MCOI-6	05-31-2022	Ba	Barium	36.3	ug/L	U	NQ	F	2022-588	REG	EPA:200.8	0.67
CAMO-22-235981	MCOI-6	05-31-2022	Ba	Barium	35.9	ug/L	U	NQ	F	2022-588	FD	EPA:200.8	0.67

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235831	MCOI-6	01-18-2022	Ba	Barium	34.9	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6010D	1
CAMO-22-249307	MCOI-6	05-31-2022	Ba	Barium	35.7	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6010D	1
CAMO-22-251944	MCOI-6	07-20-2022	Ba	Barium	34.9	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6010D	1
CAMO-23-260971	MCOI-6	11-07-2022	Ba	Barium	33.6	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6010D	1
CAMO-22-235944	MCOI-6	05-31-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	92-87-5	Benzidine	4.39	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	4.39
CAMO-22-235966	MCOI-6	05-31-2022	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3.90
CAMO-22-249306	MCOI-6	05-31-2022	92-87-5	Benzidine	3.79	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	3.79
CAMO-23-260970	MCOI-6	11-07-2022	92-87-5	Benzidine	3.9	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3.9
CAMO-22-235944	MCOI-6	05-31-2022	50-32-8	Benzo(a)pyrene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	50-32-8	Benzo(a)pyrene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235981	MCOI-6	05-31-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.2
CAMO-22-235981	MCOI-6	05-31-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.2
CAMO-22-238531	MCOI-6	01-18-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6010D	1
CAMO-22-249307	MCOI-6	05-31-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6010D	1
CAMO-22-251944	MCOI-6	07-20-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6010D	1
CAMO-23-260971	MCOI-6	11-07-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6010D	1
CAMO-22-235944	MCOI-6	05-31-2022	319-84-6	BHC(alpha-)	0.00665	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235966	MCOI-6	05-31-2022	319-84-6	BHC(alpha-)	0.00672	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.00672
CAMO-22-235944	MCOI-6	05-31-2022	319-85-7	BHC(beta-)	0.00665	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235966	MCOI-6	05-31-2022	319-85-7	BHC(beta-)	0.00672	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.00672
CAMO-22-235944	MCOI-6	05-31-2022	58-89-9	BHC(gamma-)	0.00665	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235966	MCOI-6	05-31-2022	58-89-9	BHC(gamma-)	0.00672	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.00672
CAMO-22-235944	MCOI-6	05-31-2022	111-44-4	Bis(2-chloroethyl)ether	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	111-44-4	Bis(2-chloroethyl)ether	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235944	MCOI-6	05-31-2022	B	Boron	49.5	ug/L	J	Y	F	2022-588	REG	EPA:200.7	15
CAMO-22-235981	MCOI-6	05-31-2022	B	Boron	48.2	ug/L	J	Y	F	2022-588	FD	EPA:200.7	15
CAMO-22-238531	MCOI-6	01-18-2022	B	Boron	51.5	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6010D	15
CAMO-22-249307	MCOI-6	05-31-2022	B	Boron	52	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6010D	15
CAMO-22-251944	MCOI-6	07-20-2022	B	Boron	57	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6010D	15
CAMO-23-260971	MCOI-6	11-07-2022	B	Boron	50.8	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6010D	15
CAMO-22-235944	MCOI-6	05-31-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-249306	MCOI-6	05-31-2022	75-25-2	Bromoforn	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.337
CAMO-22-235966	MCOI-6	05-31-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.337
CAMO-22-249306	MCOI-6	05-31-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.337
CAMO-22-235945	MCOI-6	05-31-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.3
CAMO-22-235981	MCOI-6	05-31-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.3
CAMO-22-238531	MCOI-6	01-18-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	0.3
CAMO-22-249307	MCOI-6	05-31-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	0.3
CAMO-22-251944	MCOI-6	07-20-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	0.3
CAMO-23-260971	MCOI-6	11-07-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	0.3
CAMO-22-235944	MCOI-6	05-31-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.0765
CAMO-22-235966	MCOI-6	05-31-2022	57-74-9	Chlordane(alpha/gamma)	0.0773	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.0773
CAMO-22-238531	MCOI-6	01-18-2022	Cl(-1)	Chloride	46.4	mg/L	NQ	Y	F	N3B-2022-736	REG	EPA:300.0	0.67
CAMO-22-249307	MCOI-6	05-31-2022	Cl(-1)	Chloride	46.7	mg/L	NQ	Y	F	N3B-2022-1594	REG	EPA:300.0	0.67
CAMO-22-251944	MCOI-6	07-20-2022	Cl(-1)	Chloride	47.5	mg/L	NQ	Y	F	N3B-2022-2345	REG	EPA:300.0	0.67
CAMO-23-260971	MCOI-6	11-07-2022	Cl(-1)	Chloride	46	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:300.0	0.67
CAMO-22-235944	MCOI-6	05-31-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235945	MCOI-6	05-31-2022	Cr	Chromium	58.2	ug/L	NQ	Y	F	2022-588	REG	EPA:200.8	3
CAMO-22-235981	MCOI-6	05-31-2022	Cr	Chromium	57.2	ug/L	NQ	Y	F	2022-588	FD	EPA:200.8	3
CAMO-22-249307	MCOI-6	01-18-2022	Cr	Chromium	51.6	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6020B	3
CAMO-22-238531	MCOI-6	05-31-2022	Cr	Chromium	53.7	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6020B	3
CAMO-22-251944	MCOI-6	07-20-2022	Cr	Chromium	54.2	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6020B	3
CAMO-23-260971	MCOI-6	11-07-2022	Cr	Chromium	53.3	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6020B	3
CAMO-22-235945	MCOI-6	05-31-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.3
CAMO-22-235981	MCOI-6	05-31-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.3
CAMO-22-238531	MCOI-6	01-18-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6010D	1
CAMO-22-249307	MCOI-6	05-31-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6010D	1
CAMO-22-251944	MCOI-6	07-20-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6010D	1
CAMO-23-260971	MCOI-6	11-07-2022	Co	Cobalt	11.1	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6010D	1
CAMO-22-235945	MCOI-6	05-31-2022	Cu	Copper	10.7	ug/L	NQ	Y	F	2022-588	REG	EPA:200.8	0.3
CAMO-22-235981	MCOI-6	05-31-2022	Cu	Copper	10.7	ug/L	NQ	Y	F	2022-588	FD	EPA:200.8	0.3
CAMO-22-238531	MCOI-6	01-18-2022	Cu	Copper	8.74	ug/L	J	Y	F	N3B-2022-736	REG	SW-846:6010D	3
CAMO-22-249307	MCOI-6	05-31-2022	Cu	Copper	11.4	ug/L	J	Y	F	N3B-2022-1594	REG	SW-846:6010D	3
CAMO-22-251944	MCOI-6	07-20-2022	Cu	Copper	7.49	ug/L	J	Y	F	N3B-2022-2345	REG	SW-846:6010D	3
CAMO-23-260971	MCOI-6	11-07-2022	Cu	Copper	4.66	ug/L	J	Y	F	N3B-2023-355	REG	SW-846:6010D	3
CAMO-22-235944	MCOI-6	05-31-2022	CN(TOTAL)	Cyanide (Total)	0.00238	mg/L	J	Y	UF	2022-588	REG	EPA:335.4	0.00167
CAMO-22-235966	MCOI-6	05-31-2022	CN(TOTAL)	Cyanide (Total)	0.00246	mg/L	J	Y	UF	2022-588	FD	EPA:335.4	0.00167
CAMO-22-238531	MCOI-6	01-18-2022	CN(TOTAL)	Cyanide (Total)	0.00258	mg/L	J	Y	UF	N3B-2022-736	REG	EPA:335.4	0.00167
CAMO-22-249306	MCOI-6	05-31-2022	CN(TOTAL)	Cyanide (Total)	0.00243	mg/L	J	Y	UF	N3B-2022-1594	REG	EPA:335.4	0.00167
CAMO-22-251943	MCOI-6	07-20-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N3B-2022-2345	REG	EPA:335.4	0.00167
CAMO-23-260970	MCOI-6	11-07-2022	CN(TOTAL)	Cyanide (Total)	0.00282	mg/L	J	Y	UF	N3B-2023-355	REG	EPA:335.4	0.00167
CAMO-22-235944	MCOI-6	05-31-2022	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.01
CAMO-22-235966	MCOI-6	05-31-2022	50-29-3	DDT[4,4']	0.0101	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.0101
CAMO-22-235944	MCOI-6	05-31-2022	106-93-4	Dibromomethane[1,2]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	106-93-4	Dibromomethane[1,2]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	106-93-4	Dibromomethane[1,2]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235944	MCOI-6	05-31-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	95-50-1	Dichlorobenzene[1,2-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	95-50-1	Dichlorobenzene[1,2-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	106-46-7	Dichlorobenzene[1,4-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	106-46-7	Dichlorobenzene[1,4-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	91-94-1	Dichlorobenzidine[3,3'-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	91-94-1	Dichlorobenzidine[3,3'-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	91-94-1	Dichlorobenzidine[3,3'-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	91-94-1	Dichlorobenzidine[3,3'-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.355
CAMO-22-235966	MCOI-6	05-31-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.355
CAMO-22-249306	MCOI-6	05-31-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.355
CAMO-22-235944	MCOI-6	05-31-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	156-59-2	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	156-59-2	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	156-59-2	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	120-83-2	Dichloropheno[2,4-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	120-83-2	Dichloropheno[2,4-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	120-83-2	Dichloropheno[2,4-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	120-83-2	Dichloropheno[2,4-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	542-75-6	Dichloropropene[trans-1,3-]	0.5	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.5
CAMO-22-235966	MCOI-6	05-31-2022	542-75-6	Dichloropropene[trans-1,3-]	0.5	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.5
CAMO-22-235944	MCOI-6	05-31-2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.01
CAMO-22-235966	MCOI-6	05-31-2022	60-57-1	Dieldrin	0.0101	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.0101
CAMO-22-249306	MCOI-6	05-31-2022	84-66-2	Diethylphthalate	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235944	MCOI-6	05-31-2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	84-66-2	Diethylphthalate	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235944	MCOI-6	05-31-2022	131-11-3	Dimethyl Phthalate	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	131-11-3	Dimethyl Phthalate	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235944	MCOI-6	05-31-2022	84-74-2	Din-butylphthalate	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	84-74-2	Din-butylphthalate	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	84-74-2	Din-butylphthalate	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	84-74-2	Din-butylphthalate	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235944	MCOI-6	05-31-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	51-28-5	Dinitrophenol[2,4-]	5.63	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	5.63
CAMO-22-235966	MCOI-6	05-31-2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	5
CAMO-22-249306	MCOI-6	05-31-2022	51-28-5	Dinitrophenol[2,4-]	4.86	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	4.86
CAMO-23-260970	MCOI-6	11-07-2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	5
CAMO-22-235944	MCOI-6	05-31-2022	121-14-2	Dinitrotoluene[2,4-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	121-14-2	Dinitrotoluene[2,4-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	606-20-2	Dinitrotoluene[2,6-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	11-07-2022	606-20-2	Dinitrotoluene[2,6-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	14	ug/L	NQ	Y	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	14.2	ug/L	NQ	Y	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	9.47	ug/L	J	Y	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	28.4	ug/L	NQ	Y	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	31.1	ug/L	NQ	Y	UF	2022-588	REG	SW-846:8270E_SIM	1
CAMO-22-235966	MCOI-6	05-31-2022	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E_SIM	1
CAMO-22-249306	MCOI-6	05-31-2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-23-260970	MCOI-6	11-07-2022	122-39-4	Diphenylamine	2.92	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-22-235966	MCOI-6	05-31-2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235944	MCOI-6	05-31-2022	959-98-8	Endosulfan I	0.00672	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.00672
CAMO-22-235966	MCOI-6	05-31-2022	33213-65-9	Endosulfan II	0.0101	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.0101
CAMO-23-260970	MCOI-6	11-07-2022	33213-65-9	Endosulfan II	0.0101	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.0101
CAMO-22-235944	MCOI-6	05-31-2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.01
CAMO-22-235966	MCOI-6	05-31-2022	72-20-8	Endrin	0.0101	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.0101
CAMO-22-249306	MCOI-6	05-31-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-23-260970	MCOI-6	11-07-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	100-41-4	Ethylbenzene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-249306	MCOI-6	05-31-2022	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-23-260970	MCOI-6	11-07-2022	206-44-0	Fluoranthene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-22-235944	MCOI-6	05-31-2022	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235966	MCOI-6	05-31-2022	86-73-7	Fluorene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-23-260970	MCOI-6	11-07-2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-235944	MCOI-6	05-31-2022	86-73-7	Fluorene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-22-235966	MCOI-6	05-31-2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	01-18-2022	F(-1)	Fluoride	0.508	mg/L	NQ	Y	F	N3B-2022-736	REG	EPA:300.0	0.033
CAMO-22-238531	MCOI-6	05-31-2022	F(-1)	Fluoride	0.589	mg/L	NQ	Y	F	N3B-2022-1594	REG	EPA:300.0	0.033
CAMO-22-249307	MCOI-6	05-31-2022	F(-1)	Fluoride	0.602	mg/L	NQ	Y	F	N3B-2022-2345	REG	EPA:300.0	0.033
CAMO-22-251944	MCOI-6	07-20-2022	F(-1)	Fluoride	0.672	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:300.0	0.033
CAMO-23-260971	MCOI-6	11-07-2022	F(-1)	Fluoride	0.00665	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00665
CAMO-22-235944	MCOI-6	05-31-2022	76-44-8	Heptachlor	0.00672	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.00672
CAMO-22-235966	MCOI-6	05-31-2022	76-44-8	Heptachlor	3.38	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3.38
CAMO-22-235944	MCOI-6	05-31-2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3
CAMO-22-235966	MCOI-6	05-31-2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-249306	MCOI-6	05-31-2022	118-74-1	Hexachlorobenzene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	87-68-3	Hexachlorobutadiene	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235936	MCOI-6	05-31-2022	87-68-3	Hexachlorobutadiene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	77-47-4	Hexachlorocyclopentadiene	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	77-47-4	Hexachlorocyclopentadiene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	67-72-1	Hexachloroethane	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	67-72-1	Hexachloroethane	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	2691-41-0	HMX	0.093	ug/L	U	N	UF	2022-588	REG	SW-846:8330B	0.093
CAMO-22-235966	MCOI-6	05-31-2022	2691-41-0	HMX	0.0816	ug/L	U	N	UF	2022-588	FD	SW-846:8330B	0.0816
CAMO-22-235944	MCOI-6	05-31-2022	Fe	Iron	30	ug/L	U	N	F	2022-588	REG	EPA:200.7	30
CAMO-22-235966	MCOI-6	05-31-2022	Fe	Iron	30	ug/L	U	N	F	2022-588	FD	EPA:200.7	30
CAMO-22-249306	MCOI-6	05-31-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6010D	30
CAMO-22-249307	MCOI-6	05-31-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6010D	30
CAMO-22-251944	MCOI-6	07-20-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6010D	30
CAMO-23-260971	MCOI-6	11-07-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6010D	30
CAMO-22-235944	MCOI-6	05-31-2022	78-59-1	Isophorone	3.94	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.94
CAMO-22-235966	MCOI-6	05-31-2022	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3.5
CAMO-22-249306	MCOI-6	05-31-2022	78-59-1	Isophorone	3.4	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	3.4
CAMO-23-260970	MCOI-6	11-07-2022	78-59-1	Isophorone	3.5	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3.5
CAMO-22-235945	MCOI-6	05-31-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.5
CAMO-22-235981	MCOI-6	05-31-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.5
CAMO-22-235931	MCOI-6	01-18-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	0.5
CAMO-22-249307	MCOI-6	05-31-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	0.5
CAMO-22-251944	MCOI-6	07-20-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	0.5
CAMO-23-260971	MCOI-6	11-07-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	0.5
CAMO-22-235945	MCOI-6	05-31-2022	Mn	Manganese	2	ug/L	U	N	F	2022-588	REG	EPA:200.7	2
CAMO-22-235981	MCOI-6	05-31-2022	Mn	Manganese	2	ug/L	U	N	F	2022-588	FD	EPA:200.7	2
CAMO-22-238531	MCOI-6	01-18-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6010D	2
CAMO-22-249307	MCOI-6	05-31-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6010D	2
CAMO-22-251944	MCOI-6	07-20-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6010D	2
CAMO-23-260971	MCOI-6	11-07-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6010D	2
CAMO-22-235944	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-588	REG	EPA:245.2	0.067
CAMO-22-235945	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-588	REG	EPA:245.2	0.067
CAMO-22-235966	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-588	FD	EPA:245.2	0.067
CAMO-22-235981	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-588	FD	EPA:245.2	0.067
CAMO-22-238531	MCOI-6	01-18-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2022-736	REG	SW-846:7470A	0.067
CAMO-22-238532	MCOI-6	01-18-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2022-736	REG	SW-846:7470A	0.067
CAMO-22-249306	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:7470A	0.067
CAMO-22-249307	MCOI-6	05-31-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:7470A	0.067
CAMO-22-251943	MCOI-6	07-20-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2022-2345	REG	SW-846:7470A	0.067
CAMO-22-251944	MCOI-6	07-20-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:7470A	0.067
CAMO-23-260970	MCOI-6	11-07-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:7470A	0.067
CAMO-23-260971	MCOI-6	11-07-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:7470A	0.067
CAMO-22-235944	MCOI-6	05-31-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235944	MCOI-6	05-31-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.5
CAMO-22-235966	MCOI-6	05-31-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.5
CAMO-22-249306	MCOI-6	05-31-2022	75-09-2	Methylene Chloride	0.55	ug/L	J	Y	UF	N3B-2022-1594	REG	SW-846:8260D	0.5
CAMO-22-235944	MCOI-6	05-31-2022	90-12-0	Methylnaphthalene[1-]	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	30
CAMO-22-235966	MCOI-6	05-31-2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	30
CAMO-22-249306	MCOI-6	05-31-2022	90-12-0	Methylnaphthalene[1-]	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	30
CAMO-23-260970	MCOI-6	11-07-2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	30
CAMO-22-235944	MCOI-6	05-31-2022	91-57-6	Methylnaphthalene[2-]	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	30
CAMO-22-235966	MCOI-6	05-31-2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	30
CAMO-22-249306	MCOI-6	05-31-2022	91-57-6	Methylnaphthalene[2-]	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	30
CAMO-23-260970	MCOI-6	11-07-2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	30
CAMO-22-235945	MCOI-6	05-31-2022	Mo	Molybdenum	2.21	ug/L	NQ	Y	F	2022-588	REG	EPA:200.8	0.2
CAMO-22-235981	MCOI-6	05-31-2022	Mo	Molybdenum	1.97	ug/L	NQ	Y	F	2022-588	FD	EPA:200.8	0.2
CAMO-22-238531	MCOI-6	01-18-2022	Mo	Molybdenum	2.1	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6020B	0.2
CAMO-22-249307	MCOI-6	05-31-2022	Mo	Molybdenum	1.98	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6020B	0.2
CAMO-22-251944	MCOI-6	07-20-2022	Mo	Molybdenum	1.91	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6020B	0.2
CAMO-22-260971	MCOI-6	11-07-2022	Mo	Molybdenum	1.96	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6020B	0.2
CAMO-22-235944	MCOI-6	05-31-2022	91-20-3	Naphthalene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	91-20-3	Naphthalene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235945	MCOI-6	05-31-2022	Ni	Nickel	16.4	ug/L	NQ	Y	F	2022-588	REG	EPA:200.8	0.6
CAMO-22-235981	MCOI-6	05-31-2022	Ni	Nickel	15.6	ug/L	NQ	Y	F	2022-588	FD	EPA:200.8	0.6
CAMO-22-238531	MCOI-6	01-18-2022	Ni	Nickel	17.4	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6020B	0.6
CAMO-22-249307	MCOI-6	05-31-2022	Ni	Nickel	14.7	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6020B	0.6
CAMO-22-251944	MCOI-6	07-20-2022	Ni	Nickel	11.9	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6020B	0.6
CAMO-23-260971	MCOI-6	11-07-2022	Ni	Nickel	11.1	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6020B	0.6
CAMO-22-238531	MCOI-6	01-18-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	13.2	mg/L	NQ	Y	F	N3B-2022-736	REG	EPA:353.2	0.425
CAMO-22-249307	MCOI-6	05-31-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	27.7	mg/L	NQ	Y	F	N3B-2022-1594	REG	EPA:353.2	0.85
CAMO-22-251944	MCOI-6	07-20-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	13.4	mg/L	NQ	Y	F	N3B-2022-2345	REG	EPA:353.2	0.85
CAMO-23-260971	MCOI-6	11-07-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	12.8	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:353.2	0.17
CAMO-22-235946	MCOI-6	05-31-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-584	REG	EPA:300.0	0.033
CAMO-22-235983	MCOI-6	05-31-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-584	FD	EPA:300.0	0.033
CAMO-22-235944	MCOI-6	05-31-2022	98-95-3	Nitrobenzene	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	98-95-3	Nitrobenzene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	55-18-5	Nitrosodimethylamine[N-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	55-18-5	Nitrosodimethylamine[N-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-23-260972	MCOI-6	11-07-2022	55-18-5	Nitrosodimethylamine[N-]	0.000657	ug/L	U	N	UF	N3B-2023-354	REG	Nitrosamines:HRMS	0.00034
CAMO-22-235944	MCOI-6	05-31-2022	62-75-9	Nitrosodimethylamine[N-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	62-75-9	Nitrosodimethylamine[N-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-23-260972	MCOI-6	11-07-2022	62-75-9	Nitrosodimethylamine[N-]	0.00035	ug/L	UJ	N	UF	N3B-2023-354	REG	Nitrosamines:HRMS	0.00035
CAMO-22-235944	MCOI-6	05-31-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	924-16-3	Nitroso-di-n-butylamine[N-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-23-260972	MCOI-6	11-07-2022	924-16-3	Nitroso-di-n-butylamine[N-]	0.0004	ug/L	U	N	UF	N3B-2023-354	REG	Nitrosamines:HRMS	0.0004
CAMO-22-235944	MCOI-6	05-31-2022	930-55-2	Nitrosopyrrolidine[N-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235966	MCOI-6	05-31-2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	930-55-2	Nitrosopyrrolidine[N-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-23-260972	MCOI-6	11-07-2022	930-55-2	Nitrosopyrrolidine[N-]	0.00028	ug/L	U	N	UF	N3B-2023-354	REG	Nitrosamines:HRMS	0.00028
CAMO-22-235944	MCOI-6	05-31-2022	108-60-1	Oxybis[1-chloropropane][2,2-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-249306	MCOI-6	05-31-2022	108-60-1	Oxybis[1-chloropropane][2,2-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	108-60-1	Oxybis[1-chloropropane][2,2-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	108-60-1	Oxybis[1-chloropropane][2,2-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	608-93-5	Pentachlorobenzene	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	608-93-5	Pentachlorobenzene	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	87-86-5	Pentachlorophenol	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	87-86-5	Pentachlorophenol	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-238531	MCOI-6	01-18-2022	ClO4	Perchlorate	63.3	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6850	2.5
CAMO-22-249307	MCOI-6	05-31-2022	ClO4	Perchlorate	137	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6850	5
CAMO-22-251944	MCOI-6	07-20-2022	ClO4	Perchlorate	105	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6850	1
CAMO-23-260971	MCOI-6	11-07-2022	ClO4	Perchlorate	83.9	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6850	0.5
CAMO-22-235944	MCOI-6	05-31-2022	355-46-4	Perfluorohexanesulfonic acid	0.605	ng/L	U	N	UF	2022-588	REG	EPA:537M	0.605
CAMO-22-235966	MCOI-6	05-31-2022	355-46-4	Perfluorohexanesulfonic acid	0.58	ng/L	U	N	UF	2022-588	FD	EPA:537M	0.58
CAMO-23-260970	MCOI-6	11-07-2022	355-46-4	Perfluorohexanesulfonic acid	0.626	ng/L	U	N	UF	N3B-2023-355	REG	EPA:537M	0.626
CAMO-22-235944	MCOI-6	05-31-2022	1763-23-1	Perfluorooctanesulfonic acid	0.905	ng/L	J	Y	UF	2022-588	REG	EPA:537M	0.733
CAMO-22-235966	MCOI-6	11-07-2022	1763-23-1	Perfluorooctanesulfonic acid	0.703	ng/L	U	N	UF	2022-588	FD	EPA:537M	0.703
CAMO-23-260970	MCOI-6	11-07-2022	1763-23-1	Perfluorooctanesulfonic acid	0.758	ng/L	U	N	UF	N3B-2023-355	REG	EPA:537M	0.758
CAMO-22-235944	MCOI-6	05-31-2022	335-67-1	Perfluorooctanoic acid	0.733	ng/L	U	N	UF	2022-588	REG	EPA:537M	0.733
CAMO-22-235966	MCOI-6	05-31-2022	335-67-1	Perfluorooctanoic acid	0.703	ng/L	U	N	UF	2022-588	FD	EPA:537M	0.703
CAMO-23-260970	MCOI-6	11-07-2022	335-67-1	Perfluorooctanoic acid	0.979	ng/L	J	Y	UF	N3B-2023-355	REG	EPA:537M	0.758
CAMO-6			pH	pH	6.95	SU		Y					6-9
CAMO-6			pH	pH	7.25	SU							6-9
CAMO-22-235944	MCOI-6	05-31-2022	85-01-8	Phenanthrene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-22-249306	MCOI-6	05-31-2022	85-01-8	Phenanthrene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-23-260970	MCOI-6	11-07-2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	0.3
CAMO-22-235944	MCOI-6	05-31-2022	108-95-2	Phenol	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-249306	MCOI-6	05-31-2022	108-95-2	Phenol	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	108-95-2	Phenol	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	108-95-2	Phenol	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	1610-18-0	Prometon	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	1610-18-0	Prometon	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	1610-18-0	Prometon	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	129-00-0	Pyrene	0.338	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.338
CAMO-22-235966	MCOI-6	05-31-2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	0.3
CAMO-23-260970	MCOI-6	11-07-2022	129-00-0	Pyrene	0.292	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	0.292
CAMO-22-235944	MCOI-6	05-31-2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	0.3
CAMO-22-235966	MCOI-6	05-31-2022	129-00-0	Pyrene	1.88	pCi/L	J	Y	UF	2022-588	REG	Generic:Radium by Calculation	-
CAMO-23-260970	MCOI-6	11-07-2022	129-00-0	Pyrene	1.88	pCi/L	J	Y	UF	2022-588	REG	Generic:Radium by Calculation	-
CAMO-22-235944	MCOI-6	05-31-2022	121-82-4	RDX	0.093	ug/L	U	N	UF	N3B-2023-355	REG	Generic:Radium by Calculation	0.093
CAMO-22-235966	MCOI-6	05-31-2022	121-82-4	RDX	0.0816	ug/L	U	N	UF	2022-588	FD	SW-846:8330B	0.0816
CAMO-22-235944	MCOI-6	05-31-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-588	REG	EPA:200.8	1.5
CAMO-22-235981	MCOI-6	05-31-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-588	FD	EPA:200.8	1.5

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-238531	MCOI-6	01-18-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	1.5
CAMO-22-249307	MCOI-6	05-31-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	1.5
CAMO-22-251944	MCOI-6	07-20-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	1.5
CAMO-23-260971	MCOI-6	11-07-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	1.5
CAMO-22-235945	MCOI-6	05-31-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.3
CAMO-22-235981	MCOI-6	05-31-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.3
CAMO-22-238531	MCOI-6	01-18-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	0.3
CAMO-22-249307	MCOI-6	05-31-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	0.3
CAMO-22-251944	MCOI-6	07-20-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	0.3
CAMO-23-260971	MCOI-6	11-07-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	0.3
CAMO-22-235944	MCOI-6	05-31-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235945	MCOI-6	05-31-2022	SO4(-2)	Sulfate	45.6	mg/L	NQ	Y	F	2022-588	REG	EPA:300.0	1.33
CAMO-22-235981	MCOI-6	05-31-2022	SO4(-2)	Sulfate	48.2	mg/L	NQ	Y	F	2022-588	FD	EPA:300.0	1.33
CAMO-22-238531	MCOI-6	01-18-2022	SO4(-2)	Sulfate	46.9	mg/L	NQ	Y	F	N3B-2022-736	REG	EPA:300.0	1.33
CAMO-22-249307	MCOI-6	05-31-2022	SO4(-2)	Sulfate	45.4	mg/L	NQ	Y	F	N3B-2022-1594	REG	EPA:300.0	1.33
CAMO-22-251944	MCOI-6	07-20-2022	SO4(-2)	Sulfate	47.4	mg/L	NQ	Y	F	N3B-2022-2345	REG	EPA:300.0	1.33
CAMO-23-260971	MCOI-6	11-07-2022	SO4(-2)	Sulfate	45.7	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:300.0	1.33
CAMO-22-235944	MCOI-6	05-31-2022	126-33-0	Sulfolane	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	126-33-0	Sulfolane	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	126-33-0	Sulfolane	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	126-33-0	Sulfolane	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	630-20-6	Tetrachloroethane[1,1,1,2]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	79-34-5	Tetrachloroethane[1,1,2,2]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	79-34-5	Tetrachloroethane[1,1,2,2]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	79-34-5	Tetrachloroethane[1,1,2,2]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235945	MCOI-6	05-31-2022	Tl	Thallium	0.6	ug/L	U	N	F	2022-588	REG	EPA:200.8	0.6
CAMO-22-235981	MCOI-6	05-31-2022	Tl	Thallium	0.6	ug/L	U	N	F	2022-588	FD	EPA:200.8	0.6
CAMO-22-238531	MCOI-6	01-18-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2022-736	REG	SW-846:6020B	0.6
CAMO-22-249307	MCOI-6	05-31-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2022-1594	REG	SW-846:6020B	0.6
CAMO-22-251944	MCOI-6	07-20-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2022-2345	REG	SW-846:6020B	0.6
CAMO-23-260971	MCOI-6	11-07-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2023-355	REG	SW-846:6020B	0.6
CAMO-22-235944	MCOI-6	05-31-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	108-88-3	Toluene	11.5	ug/L	J	Y	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-238531	MCOI-6	01-18-2022	TDS	Total Dissolved Solids	366	mg/L	NQ	Y	UF	N3B-2022-736	REG	EPA:160.1	3.4
CAMO-22-249307	MCOI-6	05-31-2022	TDS	Total Dissolved Solids	401	mg/L	NQ	Y	F	N3B-2022-1594	REG	EPA:160.1	3.4
CAMO-22-251944	MCOI-6	07-20-2022	TDS	Total Dissolved Solids	351	mg/L	NQ	Y	F	N3B-2022-2345	REG	EPA:160.1	3.4
CAMO-23-260971	MCOI-6	11-07-2022	TDS	Total Dissolved Solids	362	mg/L	NQ	Y	F	N3B-2023-355	REG	EPA:160.1	3.4
CAMO-22-238532	MCOI-6	01-18-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N3B-2022-736	REG	EPA:351.2	0.033
CAMO-22-249306	MCOI-6	05-31-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N3B-2022-1594	REG	EPA:351.2	0.033
CAMO-22-251943	MCOI-6	07-20-2022	TKN	Total Kjeldahl Nitrogen	0.154	mg/L	U	N	UF	N3B-2022-2345	REG	EPA:351.2	0.033
CAMO-23-260970	MCOI-6	11-07-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N3B-2023-355	REG	EPA:351.2	0.033
CAMO-22-235944	MCOI-6	05-31-2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2022-588	REG	SW-846:8081B	0.15
CAMO-22-235966	MCOI-6	05-31-2022	8001-35-2	Toxaphene (Technical Grade)	0.152	ug/L	U	N	UF	2022-588	FD	SW-846:8081B	0.152
CAMO-22-235944	MCOI-6	05-31-2022	120-82-1	Trichlorobenzene[1,2,4]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333

Table 4. Analytical Results from Ground Water Sampling at MCOI-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
CAMO-22-235966	MCOI-6	05-31-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	120-82-1	Trichlorobenzene[1,2,4-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	120-82-1	Trichlorobenzene[1,2,4-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	95-95-4	Trichlorophenol[2,4,5-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	95-95-4	Trichlorophenol[2,4,5-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	88-06-2	Trichlorophenol[2,4,6-]	3.38	ug/L	U	N	UF	2022-588	REG	SW-846:8270E	3.38
CAMO-22-235966	MCOI-6	05-31-2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2022-588	FD	SW-846:8270E	3
CAMO-22-249306	MCOI-6	05-31-2022	88-06-2	Trichlorophenol[2,4,6-]	2.92	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8270E	2.92
CAMO-23-260970	MCOI-6	11-07-2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	N3B-2023-355	REG	SW-846:8270E	3
CAMO-22-235944	MCOI-6	05-31-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.093	ug/L	U	N	UF	2022-588	REG	SW-846:8330B	0.093
CAMO-22-235966	MCOI-6	05-31-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0816	ug/L	U	N	UF	2022-588	FD	SW-846:8330B	0.0816
CAMO-22-235944	MCOI-6	05-31-2022	U	Uranium	0.739	ug/L	NQ	Y	F	2022-588	REG	EPA:200.8	0.067
CAMO-22-235981	MCOI-6	05-31-2022	U	Uranium	0.698	ug/L	NQ	Y	F	2022-588	FD	EPA:200.8	0.067
CAMO-22-238531	MCOI-6	01-18-2022	U	Uranium	0.661	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6020B	0.067
CAMO-22-249307	MCOI-6	05-31-2022	U	Uranium	0.66	ug/L	NQ	Y	F	N3B-2022-1594	REG	SW-846:6020B	0.067
CAMO-22-249306	MCOI-6	07-20-2022	U	Uranium	0.742	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6020B	0.067
CAMO-23-260971	MCOI-6	11-07-2022	U	Uranium	0.707	ug/L	NQ	Y	F	N3B-2023-355	REG	SW-846:6020B	0.067
CAMO-22-235944	MCOI-6	05-31-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	1
CAMO-22-235966	MCOI-6	05-31-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	1
CAMO-22-235944	MCOI-6	05-31-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.333
CAMO-22-235966	MCOI-6	05-31-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.333
CAMO-22-249306	MCOI-6	05-31-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.333
CAMO-22-235944	MCOI-6	05-31-2022	Xylene[m+p]	Xylene[1,3-HXylene[1,4-]	0.5	ug/L	U	N	UF	2022-588	REG	SW-846:8260D	0.5
CAMO-22-235966	MCOI-6	05-31-2022	Xylene[m+p]	Xylene[1,3-HXylene[1,4-]	0.5	ug/L	U	N	UF	2022-588	FD	SW-846:8260D	0.5
CAMO-22-249306	MCOI-6	05-31-2022	Xylene[m+p]	Xylene[1,3-HXylene[1,4-]	0.5	ug/L	U	N	UF	N3B-2022-1594	REG	SW-846:8260D	0.5
CAMO-22-235944	MCOI-6	05-31-2022	Zinc	Zinc	41.4	ug/L	NQ	Y	F	2022-588	REG	EPA:200.7	3.3
CAMO-22-235981	MCOI-6	05-31-2022	Zn	Zinc	40.2	ug/L	NQ	Y	F	2022-588	FD	EPA:200.7	3.3
CAMO-22-238531	MCOI-6	01-18-2022	Zn	Zinc	32.8	ug/L	NQ	Y	F	N3B-2022-736	REG	SW-846:6010D	3.3
CAMO-22-249307	MCOI-6	05-31-2022	Zn	Zinc	42.1	ug/L	J+	Y	F	N3B-2022-1594	REG	SW-846:6010D	3.3
CAMO-22-251944	MCOI-6	07-20-2022	Zn	Zinc	23.5	ug/L	NQ	Y	F	N3B-2022-2345	REG	SW-846:6010D	3.3
CAMO-23-260971	MCOI-6	11-07-2022	Zn	Zinc	14.6	ug/L	J	Y	F	N3B-2023-355	REG	SW-846:6010D	3.3

Notes:

¹ug/L - micrograms per liter.

mg/L - milligrams per liter.

ng/L - nanograms per liter.

SU - standard units.

Table 4. Analytical Results from Ground Water Sampling at MCOL-6 in 2022. 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 ⁶	Lab Method	Report Method Detection Limit ⁷
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µCi/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 - Unfiltered.

F - 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 NMAC 20.6.2.3103 where available, otherwise the value 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 NMAC 20.6.2.3103 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.

R-1, Annual 2022 – May 26, 2022

a	Sample Date	5/26/2022
b	Sample Time	1048
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))	5,873.17
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)	59.52
i	Total volume of water purged prior to sample collection (gal)	193.8
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.16 Oxidation/Reduction Potential (MV): 165.6 Temp (deg C): 22.0 pH (SU): 7.79 Turbidity (NTU): 1.48 Specific Conductance (μ S/cm): 138.2
k	Description of sample methods	Attachment 5, Pages 39-41
l	Chain-of-Custody	Attachment 5, Pages 39-41
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 5

R-1, Annual 2022 – November 21, 2022

a	Sample Date	11/21/2022
b	Sample Time	1417
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))	5,872.73
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)	59.16
i	Total volume of water purged prior to sample collection (gal)	184.25
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.22 Oxidation/Reduction Potential (MV): 49.6 Temp (deg C): 21.1 pH (SU): 7.79 Turbidity (NTU): 0.47 Specific Conductance (μ S/cm): 137.2
k	Description of sample methods	Attachment 5, Page 42
l	Chain-of-Custody	Attachment 5, Page 42
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 5

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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-22-235947	R-1	05-26-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	1.67	0.0415
CAMO-22-235947	R-1	05-26-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	1.67	0.5232
CAMO-22-235947	R-1	05-26-2022	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	0.00198
CAMO-22-235947	R-1	05-26-2022	309-00-2	Aldrin	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	0.00198
CAMO-22-235951	R-1	05-26-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-579	REG	EPA.200.8	19.3	5.000
CAMO-22-249374	R-1	05-26-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	68	5.000
CAMO-23-261036	R-1	11-21-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	68	5.000
CAMO-22-235947	R-1	05-26-2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	1721.28
CAMO-22-235951	R-1	05-26-2022	Sb	Antimony	1	ug/L	U	N	F	2022-579	REG	EPA.200.8	1	6
CAMO-22-249374	R-1	05-26-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	1	6
CAMO-23-261036	R-1	11-21-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	1	6
CAMO-22-235947	R-1	05-26-2022	12674-11-2	Aroclor-1016	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	11104-28-2	Aroclor-1221	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	11141-16-5	Aroclor-1232	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	53469-21-9	Aroclor-1242	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	12672-29-6	Aroclor-1248	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	11097-69-1	Aroclor-1254	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235947	R-1	05-26-2022	11096-82-5	Aroclor-1260	0.0349	ug/L	U	N	UF	2022-579	REG	SW-846:8082A	0.0349	5
CAMO-22-235951	R-1	05-26-2022	As	Arsenic	2	ug/L	U	N	F	2022-579	REG	EPA.200.8	2	10
CAMO-22-249374	R-1	05-26-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	2	10
CAMO-23-261036	R-1	11-21-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	2	10
CAMO-22-235947	R-1	05-26-2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	3
CAMO-22-235947	R-1	05-26-2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.7
CAMO-22-235951	R-1	05-26-2022	Ba	Barium	12.4	ug/L	NQ	Y	F	2022-579	REG	EPA.200.8	0.670	2.000
CAMO-22-249374	R-1	05-26-2022	Ba	Barium	13.4	ug/L	NQ	Y	F	N3B-2022-1552	REG	SW-846:6010D	1.00	2.000
CAMO-23-261036	R-1	11-21-2022	Ba	Barium	13.3	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6010D	1.00	2.000
CAMO-22-235947	R-1	05-26-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	92-87-5	Benizidine	3.89	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3.89	0.001
CAMO-22-235947	R-1	05-26-2022	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	0.2
CAMO-22-235947	R-1	05-26-2022	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	0.343
CAMO-22-235947	R-1	05-26-2022	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	3.43
CAMO-22-235951	R-1	05-26-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-579	REG	EPA.200.8	0.2	4
CAMO-22-249374	R-1	05-26-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	1	4
CAMO-23-261036	R-1	11-21-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	1	4
CAMO-22-235947	R-1	05-26-2022	319-84-6	BHC(alpha-)]	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	0.069
CAMO-22-235947	R-1	05-26-2022	319-84-6	BHC(alpha-)]	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	0.069
CAMO-22-235947	R-1	05-26-2022	319-85-7	BHC(beta-)]	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	0.243
CAMO-22-235947	R-1	05-26-2022	319-85-7	BHC(beta-)]	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	0.243
CAMO-22-235947	R-1	05-26-2022	58-89-9	BHC(gamma-)]	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	0.415
CAMO-22-235947	R-1	05-26-2022	58-89-9	BHC(gamma-)]	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	0.415
CAMO-22-235947	R-1	05-26-2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.137
CAMO-22-235947	R-1	05-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	55.64
CAMO-22-235951	R-1	05-26-2022	B	Boron	15	ug/L	U	N	F	2022-579	REG	EPA.200.7	15	750
CAMO-22-249374	R-1	05-26-2022	B	Boron	15	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	15	750
CAMO-23-261036	R-1	11-21-2022	B	Boron	15.9	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6010D	15	750
CAMO-22-235947	R-1	05-26-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	1.34
CAMO-22-235947	R-1	05-26-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	32.85

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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-22-235947	R-1	05-26-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.337	7.54
CAMO-22-235951	R-1	05-26-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-579	REG	EPA:200.8	0.3	5
CAMO-22-249374	R-1	05-26-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	0.3	5
CAMO-23-261036	R-1	11-21-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.3	5
CAMO-22-235947	R-1	05-26-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0765	0.45
CAMO-22-235947	R-1	05-26-2022	57-74-9	Chlordane(alpha/gamma)	0.0771	ug/L	UJ	N	UF	2022-579	REG	SW-846:8081B	0.0771	0.45
CAMO-22-249374	R-1	05-26-2022	Cl(-1)	Chloride	2.15	mg/L	J+	Y	F	N3B-2022-1552	REG	EPA:300.0	0.0670	250
CAMO-23-261036	R-1	11-21-2022	Cl(-1)	Chloride	1.86	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.0670	250
CAMO-22-235947	R-1	05-26-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	77.57
CAMO-22-235947	R-1	05-26-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	100
CAMO-22-235947	R-1	05-26-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	20.32
CAMO-22-235951	R-1	05-26-2022	Cr	Chromium	5.68	ug/L	J	Y	F	2022-579	REG	EPA:200.8	3	50
CAMO-22-249374	R-1	05-26-2022	Cr	Chromium	5.86	ug/L	J	Y	F	N3B-2022-1552	REG	SW-846:6020B	3	50
CAMO-23-261036	R-1	11-21-2022	Cr	Chromium	5.68	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6020B	3	50
CAMO-22-235951	R-1	05-26-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-579	REG	EPA:200.8	0.3	50
CAMO-22-249374	R-1	05-26-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	1	50
CAMO-23-261036	R-1	11-21-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	1	50
CAMO-22-235951	R-1	05-26-2022	Cu	Copper	1.74	ug/L	J	Y	F	2022-579	REG	EPA:200.8	0.300	1,000
CAMO-22-249374	R-1	05-26-2022	Cu	Copper	3	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	3	1,000
CAMO-23-261036	R-1	11-21-2022	Cu	Copper	3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	3	1,000
CAMO-22-235947	R-1	05-26-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	2022-579	REG	EPA:335.4	0.00167	0.2
CAMO-22-249373	R-1	05-26-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N3B-2022-1552	REG	EPA:335.4	0.00167	0.2
CAMO-23-261035	R-1	11-21-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N3B-2023-502	REG	EPA:335.4	0.00167	0.2
CAMO-22-235947	R-1	05-26-2022	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.01	2.29
CAMO-22-235947	R-1	05-26-2022	50-29-3	DDT[4,4']	0.0101	ug/L	UJ	N	UF	2022-579	REG	SW-846:8081B	0.0101	2.29
CAMO-22-235947	R-1	05-26-2022	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	0.05
CAMO-22-235947	R-1	05-26-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	7.997
CAMO-22-235947	R-1	05-26-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	600
CAMO-22-235947	R-1	05-26-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	75
CAMO-22-235947	R-1	05-26-2022	91-94-1	Dichlorobenzidine[3,3']	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1.25
CAMO-22-235947	R-1	05-26-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.355	197.202
CAMO-22-235947	R-1	05-26-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	25
CAMO-22-235947	R-1	05-26-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	7
CAMO-22-235947	R-1	05-26-2022	156-59-2	Dichloroethene(cis-1,2-)	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	70
CAMO-22-235947	R-1	05-26-2022	156-60-5	Dichloroethene(trans-1,2-)	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	100
CAMO-22-235947	R-1	05-26-2022	120-83-2	Dichloropheno[2,4-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	45.3
CAMO-22-235947	R-1	05-26-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	542-75-6	Dichloropropene(cis/trans-1,3-)	0.5	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.5	4.71
CAMO-22-235947	R-1	05-26-2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.01	0.0175
CAMO-22-235947	R-1	05-26-2022	60-57-1	Dieldrin	0.0101	ug/L	UJ	N	UF	2022-579	REG	SW-846:8081B	0.0101	0.0175
CAMO-22-235947	R-1	05-26-2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	14,800.52

Attachment 5

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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-22-235947	R-1	05-26-2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	611.56
CAMO-22-235947	R-1	05-26-2022	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	884.80
CAMO-22-235947	R-1	05-26-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1.52
CAMO-22-235947	R-1	05-26-2022	51-28-5	Dinitrophenol[2,4-]	4.99	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	4.99	38.67
CAMO-22-235947	R-1	05-26-2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	2.37
CAMO-22-235947	R-1	05-26-2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.49
CAMO-22-235947	R-1	05-26-2022	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	4.59
CAMO-22-235947	R-1	05-26-2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1.22
CAMO-22-235947	R-1	05-26-2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	98.7
CAMO-22-235947	R-1	05-26-2022	959-98-8	Endosulfan I	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	98.7
CAMO-22-235947	R-1	05-26-2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.01	98.7
CAMO-22-235947	R-1	05-26-2022	33213-65-9	Endosulfan II	0.0101	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0101	98.7
CAMO-22-235947	R-1	05-26-2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.01	2.23
CAMO-22-235947	R-1	05-26-2022	72-20-8	Endrin	0.0101	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0101	2.23
CAMO-22-235947	R-1	05-26-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	700
CAMO-22-235947	R-1	05-26-2022	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	802.198
CAMO-22-235947	R-1	05-26-2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	287.642
CAMO-22-249374	R-1	05-26-2022	F(-1)	Fluoride	0.283	mg/L	NQ	Y	F	N3B-2022-1552	REG	EPA:300.0	0.0330	1.6
CAMO-23-261036	R-1	11-21-2022	F(-1)	Fluoride	0.242	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.0330	1.6
CAMO-22-235947	R-1	05-26-2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.00665	0.022
CAMO-22-235947	R-1	05-26-2022	76-44-8	Heptachlor	0.0067	ug/L	U	N	UF	2022-579	REG	SW-846:8081B	0.0067	0.022
CAMO-22-235947	R-1	05-26-2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.098
CAMO-22-235947	R-1	05-26-2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1.39
CAMO-22-235947	R-1	05-26-2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.41
CAMO-22-235947	R-1	05-26-2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	3.28
CAMO-22-235947	R-1	05-26-2022	2691-41-0	HMX	0.08	ug/L	U	N	UF	2022-579	REG	SW-846:8330B	0.08	1001.11
CAMO-22-235951	R-1	05-26-2022	Fe	Iron	30	ug/L	U	N	F	2022-579	REG	EPA:200.7	30	1,000
CAMO-22-249374	R-1	05-26-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	30	1,000
CAMO-23-261036	R-1	11-21-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	30	1,000
CAMO-22-235947	R-1	05-26-2022	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3.5	780.63
CAMO-22-235951	R-1	05-26-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-579	REG	EPA:200.8	0.5	15
CAMO-22-249374	R-1	05-26-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	0.5	15
CAMO-23-261036	R-1	11-21-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.5	15
CAMO-22-235951	R-1	05-26-2022	Mn	Manganese	2	ug/L	U	N	F	2022-579	REG	EPA:200.7	2	200
CAMO-22-249374	R-1	05-26-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6010D	2	200
CAMO-23-261036	R-1	11-21-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	2	200
CAMO-22-235947	R-1	05-26-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-579	REG	EPA:245.2	0.067	2
CAMO-22-235951	R-1	05-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-579	REG	EPA:245.2	0.067	2
CAMO-22-249373	R-1	05-26-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2022-1552	REG	SW-846:7470A	0.067	2
CAMO-22-249374	R-1	05-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:7470A	0.067	2
CAMO-23-261035	R-1	11-21-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:7470A	0.067	2
CAMO-23-261036	R-1	11-21-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-502	REG	SW-846:7470A	0.067	2
CAMO-22-235947	R-1	05-26-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	100
CAMO-22-235947	R-1	05-26-2022	75-09-2	Methylene Chloride	4.75	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.5	5
CAMO-22-235947	R-1	05-26-2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	30
CAMO-22-235947	R-1	05-26-2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	30

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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-22-235951	R-1	05-26-2022	Mo	Molybdenum	1.07	ug/L	NQ	Y	F	2022-579	REG	EPA:200.8	0.2	1,000
CAMO-22-249374	R-1	05-26-2022	Mo	Molybdenum	1.09	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	0.2	1,000
CAMO-23-261036	R-1	11-21-2022	Mo	Molybdenum	1.08	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6020B	0.2	1,000
CAMO-22-235947	R-1	05-26-2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	30
CAMO-22-235951	R-1	05-26-2022	Ni	Nickel	0.657	ug/L	J	Y	F	2022-579	REG	EPA:200.8	0.6	200
CAMO-22-249374	R-1	05-26-2022	Ni	Nickel	1.08	ug/L	J	Y	F	N3B-2022-1552	REG	SW-846:6020B	0.6	200
CAMO-23-261036	R-1	11-21-2022	Ni	Nickel	1.18	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6020B	0.6	200
CAMO-22-249374	R-1	05-26-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.347	mg/L	NQ	Y	F	N3B-2022-1552	REG	EPA:353.2	0.017	10
CAMO-23-261036	R-1	11-21-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.347	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:353.2	0.017	10
CAMO-22-235955	R-1	05-26-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-578	REG	EPA:300.0	0.033	1
CAMO-22-235947	R-1	05-26-2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1,404
CAMO-22-235947	R-1	05-26-2022	55-18-5	Nitrosodiethylamine[N-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.0017
CAMO-22-235947	R-1	05-26-2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.0049
CAMO-22-235947	R-1	05-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.0273
CAMO-22-235947	R-1	05-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	0.37
CAMO-22-235947	R-1	05-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	9.81
CAMO-22-235947	R-1	05-26-2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	3.07
CAMO-22-235947	R-1	05-26-2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1
CAMO-22-249374	R-1	05-26-2022	ClO4	Perchlorate	0.34	ug/L	NQ	Y	F	N3B-2022-1552	REG	SW-846:6850	0.05	13.82
CAMO-23-261036	R-1	11-21-2022	ClO4	Perchlorate	0.28	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6850	0.05	13.82
CAMO-22-235947	R-1	05-26-2022	355-46-4	Perfluorohexanesulfonic acid	0.565	ng/L	U	N	UF	2022-579	REG	EPA:537M	0.565	401.1
CAMO-22-235947	R-1	05-26-2022	1763-23-1	Perfluorooctanesulfonic acid	0.684	ng/L	U	N	UF	2022-579	REG	EPA:537M	0.684	60.16
CAMO-22-235947	R-1	05-26-2022	335-67-1	Perfluorooctanoic acid	0.684	ng/L	U	N	UF	2022-579	REG	EPA:537M	0.684	60.16
	R-1	05-26-2022	pH	pH	7.8	SU								6-9
	R-1	11-21-2022	pH	pH	7.8	SU								6-9
CAMO-22-235947	R-1	05-26-2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	170.41
CAMO-22-235947	R-1	05-26-2022	108-95-2	Phenol	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	5
CAMO-22-235947	R-1	05-26-2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	249.93
CAMO-22-235947	R-1	05-26-2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	0.3	117.42
CAMO-22-235947	R-1	05-26-2022	Ra-226+228	Radium-226 and Radium-228	0.63	pCi/L	UJ	N	UF	2022-579	REG	Generic:Radium by Calculation	-	5
CAMO-22-235947	R-1	05-26-2022	121-82-4	RDX	0.08	ug/L	U	N	UF	2022-579	REG	SW-846:8330B	0.08	9.66
CAMO-22-235951	R-1	05-26-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-579	REG	EPA:200.8	1.5	50
CAMO-22-249374	R-1	05-26-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	1.5	50
CAMO-23-261036	R-1	11-21-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	1.5	50
CAMO-22-235951	R-1	05-26-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-579	REG	EPA:200.8	0.3	50
CAMO-22-249374	R-1	05-26-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	0.3	50
CAMO-23-261036	R-1	11-21-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.3	50
CAMO-22-235947	R-1	05-26-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	100
CAMO-22-235951	R-1	05-26-2022	SO4(-2)	Sulfate	2.28	mg/L	NQ	Y	F	2022-579	REG	EPA:300.0	0.133	600

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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-22-249374	R-1	05-26-2022	SO4(-2)	Sulfate	2.23	mg/L	NQ	Y	F	N3B-2022-1552	REG	EPA:300.0	0.133	600
CAMO-23-261036	R-1	11-21-2022	SO4(-2)	Sulfate	2.15	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.133	600
CAMO-22-235947	R-1	05-26-2022	126-33-0	Sulfolane	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	20.03
CAMO-22-235947	R-1	05-26-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1.66
CAMO-22-235947	R-1	05-26-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	10
CAMO-22-235947	R-1	05-26-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235951	R-1	05-26-2022	TI	Thallium	0.6	ug/L	U	N	F	2022-579	REG	EPA:200.8	0.6	2
CAMO-22-249374	R-1	05-26-2022	TI	Thallium	0.6	ug/L	U	N	F	N3B-2022-1552	REG	SW-846:6020B	0.6	2
CAMO-23-261036	R-1	11-21-2022	TI	Thallium	0.6	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.6	2
CAMO-22-235947	R-1	05-26-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	1,000
CAMO-22-249374	R-1	05-26-2022	TDS	Total Dissolved Solids	146	mg/L	NQ	Y	F	N3B-2022-1552	REG	EPA:160.1	3.40	1,000
CAMO-23-261036	R-1	11-21-2022	TDS	Total Dissolved Solids	174	mg/L	J	Y	F	N3B-2023-502	REG	EPA:160.1	2.38	1,000
CAMO-22-235947	R-1	05-26-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	2022-579	REG	EPA:351.2	0.033	-
CAMO-22-249373	R-1	05-26-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	U	N	UF	N3B-2022-1552	REG	EPA:351.2	0.033	-
CAMO-23-261035	R-1	11-21-2022	TKN	Total Kjeldahl Nitrogen	0.0381	mg/L	U	N	UF	N3B-2023-502	REG	EPA:351.2	0.033	-
CAMO-22-235947	R-1	05-26-2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	R	N	UF	2022-579	REG	SW-846:8081B	0.15	0.158
CAMO-22-235947	R-1	05-26-2022	8001-35-2	Toxaphene (Technical Grade)	0.151	ug/L	UJ	N	UF	2022-579	REG	SW-846:8081B	0.151	0.158
CAMO-22-235947	R-1	05-26-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	70
CAMO-22-235947	R-1	05-26-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	200
CAMO-22-235947	R-1	05-26-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	5
CAMO-22-235947	R-1	05-26-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	1,136.82
CAMO-22-235947	R-1	05-26-2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1,165.98
CAMO-22-235947	R-1	05-26-2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2022-579	REG	SW-846:8270E	3	1,188
CAMO-22-235947	R-1	05-26-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.08	ug/L	U	N	UF	2022-579	REG	SW-846:8330B	0.08	9.8
CAMO-22-235951	R-1	05-26-2022	U	Uranium	0.773	ug/L	NQ	Y	F	2022-579	REG	EPA:200.8	0.067	30
CAMO-22-249374	R-1	05-26-2022	U	Uranium	0.793	ug/L	NQ	Y	F	N3B-2022-1552	REG	SW-846:6020B	0.067	30
CAMO-23-261036	R-1	11-21-2022	U	Uranium	0.773	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6020B	0.067	30
CAMO-22-235947	R-1	05-26-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	2
CAMO-22-235947	R-1	05-26-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	1	620
CAMO-22-235947	R-1	05-26-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.333	192.995
CAMO-22-235947	R-1	05-26-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2022-579	REG	SW-846:8260D	0.5	396
CAMO-22-235951	R-1	05-26-2022	Zn	Zinc	3.3	ug/L	U	N	F	2022-579	REG	EPA:200.7	3.3	10,000
CAMO-22-249374	R-1	05-26-2022	Zn	Zinc	3.84	ug/L	J	Y	F	N3B-2022-1552	REG	SW-846:6010D	3.3	10,000
CAMO-23-261036	R-1	11-21-2022	Zn	Zinc	3.3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	3.3	10,000

Notes:

¹ug/L - micrograms per liter.
²mg/L - milligrams per liter.
³ng/L - nanograms per liter.
⁴SU - standard units.
⁵pCi/L - picocuries per liter.

⁶U - The analyte is classified as not detected.
⁷UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

Attachment 5

Table 5. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-1 in 2022. 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
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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.

R - The reported sample result is classified as rejected due to serious noncompliances regarding quality control acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.

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

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

⁴UF - Unfiltered.

F - Filtered.

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

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 NMAC 20.6.2.3103 where available, otherwise the value 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 NMAC 20.6.2.3103 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.
 Charleston SC

Chain of Custody Analysis Request

COC/Lab Request #:

2022-578

Page 1 of 1

Client Contact:

Site Name: Los Alamos National Laboratory

Lab Agreement #: 620266

Project Number: LANL

Analysis Turnaround Time:

24 Hour -

7 Days -

14 Days -

21 Days -

28 Days -

Other -

Event ID: 14048

Sample Date

Sample Time

Sample Matrix

05/26/2022

10:48

W

DPNO2

1

Rad Screening Info:

Acceptable knowledge
 identifies no DOT hazard
 classification

Lab Reporting Limit Type:

Method Detection Limit

SHIP SAME DAY

Special Instructions:

Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*

Date/Time:

Print Name:

Received by:

Date/Time:

Print Name:

Received by:

Date/Time:

Print Name:

Received by:

Date/Time:

Print Name:

General Engineering Laboratories,
 Inc., Charleston, SC,
 Charleston SC

Attachment 5
Chain of Custody/Analysis Request
 COC/Lab Request #: 2022-579
 Page 1 of 1

Client Contact: Lab Agreement #: # 620266 Site Name: Los Alamos National Laboratory
 Project Number: LANL
 Analysis Turnaround Time: 24 Hour - Other -
 7 Days - 14 Days - 21 Days - 28 Days -
 Event ID: 14048

Rad Screening Info:
 Acceptable knowledge identifies no DOT hazard classification
 Lab Reporting Limit Type:
 Method Detection Limit

Field Sample ID	Sample Date	Sample Time	Sample Matrix	DPO82PCBs	DPCN(TOTAL)	DPHg	DPMetals	DPRA226+228	DPSO4	DPTKN	DPTP8081PEST	DPTP8260VOCs	DPTP8270SVOCs	DPTP8330HEXP	DPTPFAS (subst) unreserved
CAMO-22-235947	05/26/2022	10:48	W	2	1	1	1	4	1	1	3	2	2	3	4
CAMO-22-235951	05/26/2022	10:48	W						1						
CAMO-22-235959	05/26/2022	10:48	W									2			
CAMO-22-235963	05/26/2022	10:48	W											4	

Special Instructions:
 Relinquished by: *Sheri Howard* Date/Time: 21/15:00 Received by: *Sheri Howard* Date/Time: 21/15:00
 Relinquished by: *Sheri Howard* Date/Time: 21/15:00 Received by: *Sheri Howard* Date/Time: 21/15:00
 Relinquished by: *Sheri Howard* Date/Time: 21/15:00 Received by: *Sheri Howard* Date/Time: 21/15:00

Field Sample ID	Lab Agreement #:		Site Name:		Rad Screening Info:	
	Project Number:	Analysis Turnaround Time:	EPA:335.4 CN(T)	EPA:350.1, NH3+353.2, NO3/NO2+965.4, P	SW846:7470_Hg	SW846:8330_Tracers
CAMO-22-249373	24 Hour - <input type="checkbox"/>	7 Days - <input type="checkbox"/>	1	1	1	1
CAMO-22-249374	14 Days - <input type="checkbox"/>	21 Days - <input type="checkbox"/>	1	1	1	1
CAMO-22-249375	28 Days - <input checked="" type="checkbox"/>	Other - <input type="checkbox"/>	1	1	1	1
CAMO-22-249318			1	1	1	1
CAMO-22-249319			1	1	1	1
CAMO-22-249320			1	1	2	1
CAMO-22-249322			1	1	1	1
CAMO-22-249323			1	1	1	1
CAMO-22-249324			1	1	2	1

Special Instructions:

Relinquished by: *Diana Jara* Print Name: *Lisa Tower* Date/Time: *5/31/2022 11:54* Received by: _____ Date/Time: _____

Relinquished by: _____ Print Name: _____ Date/Time: _____ Received by: _____ Date/Time: _____

Relinquished by: _____ Print Name: _____ Date/Time: _____ Received by: _____ Date/Time: _____

General Engineering Laboratories,
 Inc., Charleston, SC.
 Charleston SC

Chain of Custody/Analysis Request

COC/Lab Request #:
 N3B-2023-502
 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		
Event ID: 14800	Project Number: N3B Analysis Turnaround Time: 24 Hour - <input type="checkbox"/> Other - <input type="checkbox"/> 7 Days - <input type="checkbox"/> 14 Days - <input type="checkbox"/> 21 Days - <input type="checkbox"/> 28 Days - <input checked="" type="checkbox"/>															
		EPA:335.4_CN(T)	EPA:350.1_NH3-353.2_NO3NO2+365.4_PO4	EPA:351.2_TKN+SW-846:9060_TOC	EPA:803.1_Ra226+904_Ra228_900.0_GrossAB	EPA:CO_GS+905.0_S90+HASL300_Am+PU+U	EPA:SC_pH_TDS_Anion_Alk+SW-846:ClO4	SW-846:7470_Hg	SW-846:8260_IFGMP_VOA	SW-846:8330_CO_HEXP	SW-846:CO_Metals					
		Field Sample ID	Sample Date	Sample Time	Sample Matrix											
		CAMO-23-261035	11/21/2022	14:17	W	1		1			1					
		CAMO-23-261036	11/21/2022	14:17	W		1			1			1			
		CAMO-23-261039	11/21/2022	11:55	W	1		1			1					
CAMO-23-261040	11/21/2022	11:55	W		1			1			1					
CAMO-23-261139	11/21/2022	10:27	W	1		1	1	1		1	2	3				
CAMO-23-261140	11/21/2022	10:27	W		1			1				1				
CAMO-23-261141	11/21/2022	10:27	W							1						

Special Instructions:

Relinquished by: <i>Lisa Tower</i>	Print Name: <i>Lisa Tower</i>	Date/Time: <i>11/22/2022 1138</i>	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

R-14 Screen 1, Annual 2022 – April 26, 2022

a	Sample Date	4/26/2022
b	Sample Time	1309
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-14 Screen 1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,873.79
g	Total depth of the well (ft below ground surface (bgs))	1,244.70
h	Total volume of water in the monitoring well prior to sample collection (gal)	46.59
i	Total volume of water purged prior to sample collection (gal)	144.90
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 5.85 Oxidation/Reduction Potential (MV): 83.8 Temp (deg C): 23.6 pH (SU): 8.08 Turbidity (NTU): 0.06 Specific Conductance (μ S/cm): 127.2
k	Description of sample methods	Attachment 5, Pages 51-52
l	Chain-of-Custody	Attachment 5, Pages 51-52
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 6

R-14 Screen 1, Annual 2022 – November 16, 2022

a	Sample Date	11/16/2022
b	Sample Time	1231
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	R-14 Screen 1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	5,873.51
g	Total depth of the well (ft below ground surface (bgs))	1,244.70
h	Total volume of water in the monitoring well prior to sample collection (gal)	46.41
i	Total volume of water purged prior to sample collection (gal)	150
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 5.89 Oxidation/Reduction Potential (MV): 52.9 Temp (deg C): 22.1 pH (SU): 8.04 Turbidity (NTU): 2.73 Specific Conductance (μ S/cm): 128.8
k	Description of sample methods	Attachment 5, Page 53
l	Chain-of-Custody	Attachment 5, Page 53
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 6

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-22-235948	R-14 S1	04-26-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	1.67	0.04
CAMO-23-261133	R-14 S1	11-16-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	1.67	0.04
CAMO-22-235948	R-14 S1	04-26-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	1.67	0.52
CAMO-23-261133	R-14 S1	11-16-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	1.67	0.52
CAMO-22-235948	R-14 S1	04-26-2022	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	0.00198
CAMO-22-235952	R-14 S1	04-26-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	19.3	5,000
CAMO-23-261134	R-14 S1	11-16-2022	Al	Aluminum	68	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	68	5,000
CAMO-22-235948	R-14 S1	04-26-2022	120-12-7	Anthracene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	1,721.28
CAMO-22-235948	R-14 S1	04-26-2022	120-12-7	Anthracene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	1,721.28
CAMO-22-235952	R-14 S1	04-26-2022	Sb	Antimony	1	ug/L	U	N	F	2022-489	REG	EPA:200.8	1	6
CAMO-23-261134	R-14 S1	11-16-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	1	6
CAMO-22-235948	R-14 S1	04-26-2022	12674-11-2	Aroclor-1016	0.0353	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	11104-28-2	Aroclor-1221	0.0353	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	11141-16-5	Aroclor-1232	0.0353	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	53469-21-9	Aroclor-1242	0.22	ug/L	NQ	Y	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	12672-29-6	Aroclor-1248	0.0353	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	11097-69-1	Aroclor-1254	0.0740	ug/L	J	Y	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235948	R-14 S1	04-26-2022	11096-82-5	Aroclor-1260	0.0353	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	0.0353	5
CAMO-22-235952	R-14 S1	04-26-2022	As	Arsenic	2	ug/L	U	N	F	2022-489	REG	EPA:200.8	2	10
CAMO-23-261134	R-14 S1	11-16-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	2	10
CAMO-22-235948	R-14 S1	04-26-2022	1912-24-9	Atrazine	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	3
CAMO-22-235948	R-14 S1	04-26-2022	1912-24-9	Atrazine	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	3
CAMO-22-235948	R-14 S1	04-26-2022	103-33-3	Azobenzene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.7
CAMO-22-235948	R-14 S1	04-26-2022	103-33-3	Azobenzene	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	0.7
CAMO-22-235952	R-14 S1	04-26-2022	Ba	Barium	25.5	ug/L	NQ	Y	F	2022-489	REG	EPA:200.8	0.670	2,000
CAMO-23-261134	R-14 S1	11-16-2022	Ba	Barium	23.5	ug/L	NQ	Y	F	N3B-2023-457	REG	SW-846:6010D	1	2,000
CAMO-22-235948	R-14 S1	04-26-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235948	R-14 S1	04-26-2022	92-87-5	Benzidine	4.22	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	4.22	0.001
CAMO-22-235948	R-14 S1	04-26-2022	92-87-5	Benzidine	3.86	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.86	0.001
CAMO-22-235948	R-14 S1	04-26-2022	50-32-8	Benzo(a)pyrene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	0.2
CAMO-22-235948	R-14 S1	04-26-2022	50-32-8	Benzo(a)pyrene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	0.2
CAMO-22-235948	R-14 S1	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	0.343
CAMO-22-235948	R-14 S1	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	0.343
CAMO-22-235948	R-14 S1	04-26-2022	207-08-9	Benzo(k)fluoranthene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	3.432
CAMO-22-235948	R-14 S1	04-26-2022	207-08-9	Benzo(k)fluoranthene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	3.432
CAMO-22-235952	R-14 S1	04-26-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.2	4
CAMO-23-261134	R-14 S1	11-16-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	1	4
CAMO-22-235948	R-14 S1	04-26-2022	319-84-6	BHC[alpha-]	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	0.0693
CAMO-22-235948	R-14 S1	04-26-2022	319-85-7	BHC[beta-]	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	0.243
CAMO-22-235948	R-14 S1	04-26-2022	58-89-9	BHC[gamma-]	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	0.415
CAMO-22-235948	R-14 S1	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.14
CAMO-22-235948	R-14 S1	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	0.14
CAMO-22-235948	R-14 S1	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	55.64
CAMO-22-235948	R-14 S1	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	55.64
CAMO-22-235952	R-14 S1	04-26-2022	B	Boron	15	ug/L	U	N	F	2022-489	REG	EPA:200.7	15	750
CAMO-23-261134	R-14 S1	11-16-2022	B	Boron	15	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	15	750
CAMO-22-235948	R-14 S1	04-26-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1.34
CAMO-23-261133	R-14 S1	11-16-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	1.34
CAMO-22-235948	R-14 S1	04-26-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	32.85

Attachment 5

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-23-261133	R-14 S1	11-16-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	32.85
CAMO-22-235948	R-14 S1	04-26-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.337	7.54
CAMO-23-261133	R-14 S1	11-16-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.337	7.54
CAMO-22-235952	R-14 S1	04-26-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.3	5
CAMO-23-261134	R-14 S1	11-16-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	0.3	5
CAMO-22-235948	R-14 S1	04-26-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235948	R-14 S1	04-26-2022	57-74-9	Chlordane(alpha/gamma)	0.0765	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0765	0.448
CAMO-23-261134	R-14 S1	11-16-2022	Cl(-1)	Chloride	1.65	mg/L	NQ	Y	F	N3B-2023-457	REG	EPA:300.0	0.067	250
CAMO-22-235948	R-14 S1	04-26-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	77.57
CAMO-23-261133	R-14 S1	11-16-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	77.57
CAMO-22-235948	R-14 S1	04-26-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-23-261133	R-14 S1	11-16-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	100
CAMO-22-235948	R-14 S1	04-26-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	20.32
CAMO-23-261133	R-14 S1	11-16-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	20.32
CAMO-22-235952	R-14 S1	04-26-2022	Cr	Chromium	5.64	ug/L	J	Y	F	2022-489	REG	EPA:200.8	3	50
CAMO-23-261134	R-14 S1	11-16-2022	Cr	Chromium	6.77	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	3	50
CAMO-22-235952	R-14 S1	04-26-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.3	50
CAMO-23-261134	R-14 S1	11-16-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	1	50
CAMO-22-235952	R-14 S1	04-26-2022	Cu	Copper	0.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.3	1,000
CAMO-23-261134	R-14 S1	11-16-2022	Cu	Copper	3	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	3	1,000
CAMO-22-235948	R-14 S1	04-26-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	2022-489	REG	EPA:335.4	0.00167	0.2
CAMO-23-261133	R-14 S1	11-16-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N3B-2023-457	REG	EPA:335.4	0.00167	0.2
CAMO-22-235948	R-14 S1	04-26-2022	50-29-3	DDT[4,4']	0.01	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.01	2.29
CAMO-23-261133	R-14 S1	11-16-2022	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	0.05
CAMO-22-235948	R-14 S1	04-26-2022	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	0.05
CAMO-23-261133	R-14 S1	11-16-2022	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	7.997
CAMO-22-235948	R-14 S1	04-26-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	7.997
CAMO-23-261133	R-14 S1	11-16-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	600
CAMO-22-235948	R-14 S1	04-26-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	600
CAMO-23-261133	R-14 S1	11-16-2022	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	600
CAMO-22-235948	R-14 S1	04-26-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	75
CAMO-23-261133	R-14 S1	11-16-2022	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	75
CAMO-22-235948	R-14 S1	04-26-2022	91-94-1	Dichlorobenzidine[3,3']	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1.25
CAMO-23-261133	R-14 S1	11-16-2022	91-94-1	Dichlorobenzidine[3,3']	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	1.25
CAMO-22-235948	R-14 S1	04-26-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.355	197.202
CAMO-23-261133	R-14 S1	11-16-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.355	197.202
CAMO-22-235948	R-14 S1	04-26-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	25
CAMO-23-261133	R-14 S1	11-16-2022	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	25
CAMO-22-235948	R-14 S1	04-26-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235948	R-14 S1	04-26-2022	75-35-4	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	7
CAMO-23-261133	R-14 S1	11-16-2022	75-35-4	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	7
CAMO-22-235948	R-14 S1	04-26-2022	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	70
CAMO-23-261133	R-14 S1	11-16-2022	156-59-2	Dichloroethene[cis-1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	70
CAMO-22-235948	R-14 S1	04-26-2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-23-261133	R-14 S1	11-16-2022	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	100
CAMO-22-235948	R-14 S1	04-26-2022	120-83-2	Dichlorophenol[2,4-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	45.3
CAMO-23-261133	R-14 S1	11-16-2022	120-83-2	Dichlorophenol[2,4-]	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	45.3
CAMO-22-235948	R-14 S1	04-26-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5

Attachment 5

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-22-235948	R-14 S1	04-26-2022	542-75-6	Dichloropropene [cis/trans-1,3-]	0.5	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	4.7
CAMO-22-235948	R-14 S1	04-26-2022	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.01	0.02
CAMO-22-235948	R-14 S1	04-26-2022	84-66-2	Diethylphthalate	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	14,800.52
CAMO-22-235948	R-14 S1	04-26-2022	84-66-2	Diethylphthalate	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	14,800.52
CAMO-22-235948	R-14 S1	04-26-2022	131-11-3	Dimethyl Phthalate	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	611.56
CAMO-22-235948	R-14 S1	04-26-2022	131-11-3	Dimethyl Phthalate	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	611.56
CAMO-22-235948	R-14 S1	04-26-2022	84-74-2	Di-n-butylphthalate	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	884.799
CAMO-22-235948	R-14 S1	04-26-2022	84-74-2	Di-n-butylphthalate	0.624	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	884.799
CAMO-22-235948	R-14 S1	04-26-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1.52
CAMO-22-235948	R-14 S1	04-26-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	1.52
CAMO-22-235948	R-14 S1	04-26-2022	51-28-5	Dinitrophenol[2,4-]	5.41	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	5.41	38.67
CAMO-22-235948	R-14 S1	04-26-2022	51-28-5	Dinitrophenol[2,4-]	4.95	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	4.95	38.67
CAMO-22-235948	R-14 S1	04-26-2022	121-14-2	Dinitrotoluene[2,4-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	2.37
CAMO-22-235948	R-14 S1	04-26-2022	121-14-2	Dinitrotoluene[2,4-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	2.37
CAMO-23-261133	R-14 S1	11-16-2022	121-14-2	Dinitrotoluene[2,4-]	0.0766	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	2.37
CAMO-22-235948	R-14 S1	04-26-2022	606-20-2	Dinitrotoluene[2,6-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.49
CAMO-22-235948	R-14 S1	04-26-2022	606-20-2	Dinitrotoluene[2,6-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.49
CAMO-23-261133	R-14 S1	11-16-2022	606-20-2	Dinitrotoluene[2,6-]	0.0766	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	0.49
CAMO-22-235948	R-14 S1	04-26-2022	123-91-1	Dioxane[1,4-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	4.59
CAMO-22-235948	R-14 S1	04-26-2022	123-91-1	Dioxane[1,4-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	4.59
CAMO-22-235948	R-14 S1	04-26-2022	122-39-4	Diphenylamine	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	12.2
CAMO-22-235948	R-14 S1	04-26-2022	122-39-4	Diphenylamine	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	12.2
CAMO-22-235948	R-14 S1	04-26-2022	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	98.7
CAMO-22-235948	R-14 S1	04-26-2022	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.01	98.7
CAMO-22-235948	R-14 S1	04-26-2022	72-20-8	Endrin	0.01	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.01	2.23
CAMO-22-235948	R-14 S1	04-26-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	700
CAMO-23-261133	R-14 S1	11-16-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	700
CAMO-22-235948	R-14 S1	04-26-2022	206-44-0	Fluoranthene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	802.198
CAMO-22-235948	R-14 S1	04-26-2022	206-44-0	Fluoranthene	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	802.198
CAMO-22-235948	R-14 S1	04-26-2022	86-73-7	Fluorene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	287.64
CAMO-22-235948	R-14 S1	04-26-2022	86-73-7	Fluorene	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	287.64
CAMO-23-261134	R-14 S1	11-16-2022	F(-1)	Fluoride	0.257	mg/L	NQ	Y	F	N3B-2023-457	REG	EPA-300.0	0.033	1.6
CAMO-22-235948	R-14 S1	04-26-2022	76-44-8	Heptachlor	0.00665	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00665	0.022
CAMO-22-235948	R-14 S1	04-26-2022	118-74-1	Hexachlorobenzene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.10
CAMO-22-235948	R-14 S1	04-26-2022	118-74-1	Hexachlorobenzene	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.10
CAMO-22-235948	R-14 S1	04-26-2022	87-68-3	Hexachlorobutadiene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1.39
CAMO-22-235948	R-14 S1	04-26-2022	87-68-3	Hexachlorobutadiene	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	1.39
CAMO-23-261133	R-14 S1	11-16-2022	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	1.39
CAMO-22-235948	R-14 S1	04-26-2022	77-47-4	Hexachlorocyclopentadiene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.41
CAMO-22-235948	R-14 S1	04-26-2022	77-47-4	Hexachlorocyclopentadiene	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.41
CAMO-22-235948	R-14 S1	04-26-2022	67-72-1	Hexachloroethane	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	3.28
CAMO-22-235948	R-14 S1	04-26-2022	67-72-1	Hexachloroethane	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	3.28
CAMO-22-235948	R-14 S1	04-26-2022	2691-41-0	HMX	0.0855	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0855	1001.11
CAMO-23-261133	R-14 S1	11-16-2022	2691-41-0	HMX	0.0766	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	1001.11
CAMO-22-235952	R-14 S1	04-26-2022	Fe	Iron	30	ug/L	U	N	F	2022-489	REG	EPA-200.7	30	1,000
CAMO-23-261134	R-14 S1	11-16-2022	Fe	Iron	34.5	ug/L	J	Y	F	N3B-2023-457	REG	SW-846:6010D	30	1,000
CAMO-22-235948	R-14 S1	04-26-2022	78-59-1	Isophorone	3.79	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.79	780.63
CAMO-22-235948	R-14 S1	04-26-2022	78-59-1	Isophorone	3.47	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.47	780.63
CAMO-22-235952	R-14 S1	04-26-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-489	REG	EPA-200.8	0.5	15
CAMO-23-261134	R-14 S1	11-16-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	0.5	15

Attachment 5

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-22-235952	R-14 S1	04-26-2022	Mn	Manganese	2	ug/L	U	N	F	2022-489	REG	EPA-200.7	2	200
CAMO-23-261134	R-14 S1	11-16-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	2	200
CAMO-22-235948	R-14 S1	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-489	REG	EPA-245.2	0.067	2
CAMO-22-235952	R-14 S1	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-489	REG	EPA-245.2	0.067	2
CAMO-23-261133	R-14 S1	11-16-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-457	REG	SW-846:7470A	0.067	2
CAMO-23-261134	R-14 S1	11-16-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-457	REG	SW-846:7470A	0.067	2
CAMO-22-235948	R-14 S1	04-26-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	F	2022-489	REG	SW-846:8260D	0.333	100
CAMO-23-261133	R-14 S1	11-16-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	F	N3B-2023-457	REG	SW-846:8260D	0.333	100
CAMO-22-235948	R-14 S1	04-26-2022	75-09-2	Methylene Chloride	1.58	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	5
CAMO-23-261134	R-14 S1	11-16-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.5	5
CAMO-22-235948	R-14 S1	04-26-2022	90-12-0	Methylnaphthalene[1-]	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	30
CAMO-22-235948	R-14 S1	04-26-2022	90-12-0	Methylnaphthalene[1-]	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	30
CAMO-22-235948	R-14 S1	04-26-2022	91-57-6	Methylnaphthalene[2-]	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	30
CAMO-22-235948	R-14 S1	04-26-2022	91-57-6	Methylnaphthalene[2-]	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	30
CAMO-22-235952	R-14 S1	04-26-2022	Mo	Molybdenum	1.5	ug/L	NQ	Y	F	2022-489	REG	EPA-200.8	0.2	1,000
CAMO-23-261134	R-14 S1	11-16-2022	Mo	Molybdenum	1.23	ug/L	NQ	Y	F	N3B-2023-457	REG	SW-846:6020B	0.2	1,000
CAMO-22-235948	R-14 S1	04-26-2022	91-20-3	Naphthalene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	30
CAMO-22-235948	R-14 S1	04-26-2022	91-20-3	Naphthalene	0.297	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.297	30
CAMO-23-261133	R-14 S1	11-16-2022	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	30
CAMO-22-235952	R-14 S1	04-26-2022	Ni	Nickel	0.687	ug/L	J	Y	F	2022-489	REG	EPA-200.8	0.6	200
CAMO-23-261134	R-14 S1	11-16-2022	Ni	Nickel	1.39	ug/L	J	Y	F	N3B-2023-457	REG	SW-846:6020B	0.6	200
CAMO-23-261134	R-14 S1	11-16-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.329	mg/L	NQ	Y	F	N3B-2023-457	REG	EPA-353.2	0.017	10
CAMO-22-235956	R-14 S1	04-26-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-488	REG	EPA-300.0	0.033	1
CAMO-22-235948	R-14 S1	04-26-2022	98-95-3	Nitrobenzene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1.4
CAMO-22-235948	R-14 S1	04-26-2022	98-95-3	Nitrobenzene	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	1.4
CAMO-23-261133	R-14 S1	11-16-2022	98-95-3	Nitrobenzene	0.0766	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	1.4038
CAMO-22-235948	R-14 S1	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.0017
CAMO-22-235948	R-14 S1	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.0017
CAMO-22-235948	R-14 S1	04-26-2022	62-75-9	Nitrosodimethylamine[N-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.0049
CAMO-22-235948	R-14 S1	04-26-2022	62-75-9	Nitrosodimethylamine[N-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.0049
CAMO-22-235948	R-14 S1	04-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.03
CAMO-22-235948	R-14 S1	04-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.03
CAMO-22-235948	R-14 S1	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	0.37
CAMO-22-235948	R-14 S1	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	0.37
CAMO-22-235948	R-14 S1	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	9.81
CAMO-22-235948	R-14 S1	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	9.81
CAMO-22-235948	R-14 S1	04-26-2022	608-93-5	Pentachlorobenzene	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	3.07
CAMO-22-235948	R-14 S1	04-26-2022	608-93-5	Pentachlorobenzene	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	3.07
CAMO-22-235948	R-14 S1	04-26-2022	87-86-5	Pentachlorophenol	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1
CAMO-22-235948	R-14 S1	04-26-2022	87-86-5	Pentachlorophenol	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	1
CAMO-23-261134	R-14 S1	11-16-2022	ClO4	Perchlorate	0.265	ug/L	NQ	Y	F	N3B-2023-457	REG	SW-846:6850	0.05	13.82
CAMO-22-235948	R-14 S1	04-26-2022	355-46-4	Perfluorohexanesulfonic acid	0.61	ng/L	U	N	UF	2022-489	REG	EPA:537M	0.610	401.1
CAMO-23-261133	R-14 S1	11-16-2022	355-46-4	Perfluorohexanesulfonic acid	0.593	ng/L	U	N	UF	N3B-2023-457	REG	EPA:537M	0.593	401.1
CAMO-22-235948	R-14 S1	04-26-2022	1763-23-1	Perfluorooctanesulfonic acid	0.74	ng/L	U	N	UF	2022-489	REG	EPA:537M	0.74	60.16
CAMO-23-261133	R-14 S1	11-16-2022	1763-23-1	Perfluorooctanesulfonic acid	0.718	ng/L	U	N	UF	N3B-2023-457	REG	EPA:537M	0.718	60.16
CAMO-22-235948	R-14 S1	04-26-2022	335-67-1	Perfluorooctanoic acid	0.74	ng/L	U	N	UF	2022-489	REG	EPA:537M	0.74	60.16
CAMO-23-261133	R-14 S1	11-16-2022	335-67-1	Perfluorooctanoic acid	0.718	ng/L	U	N	UF	N3B-2023-457	REG	EPA:537M	0.718	60.16
			pH	pH	8.08	SU								6-9
			pH	pH	8.04	SU								6-9
CAMO-22-235948	R-14 S1	04-26-2022	85-01-8	Phenanthrene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	170.41

Attachment 5

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-22-235948	R-14 S1	04-26-2022	85-01-8	Phenanthrene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	170.41
CAMO-22-235948	R-14 S1	04-26-2022	108-95-2	Phenol	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	5
CAMO-22-235948	R-14 S1	04-26-2022	108-95-2	Phenol	2.97	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	2.97	5
CAMO-22-235948	R-14 S1	04-26-2022	1610-18-0	Prometon	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	249.93
CAMO-22-235948	R-14 S1	04-26-2022	1610-18-0	Prometon	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	249.93
CAMO-22-235948	R-14 S1	04-26-2022	129-00-0	Pyrene	0.324	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.324	117.42
CAMO-22-235948	R-14 S1	04-26-2022	129-00-0	Pyrene	0.297	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.297	117.42
CAMO-22-235948	R-14 S1	04-26-2022	Ra-226+228	Radium-226 and Radium-228	2.29	pCi/L	NQ	Y	UF	2022-489	REG	Generic:Radium by Calculation	-	5
CAMO-22-235948	R-14 S1	04-26-2022	121-82-4	RDX	0.0855	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0855	9.66
CAMO-23-261133	R-14 S1	11-16-2022	121-82-4	RDX	0.192	ug/L	J	Y	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	9.66
CAMO-22-235952	R-14 S1	04-26-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-489	REG	EPA:200.8	1.5	50
CAMO-23-261134	R-14 S1	11-16-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	1.5	50
CAMO-22-235952	R-14 S1	04-26-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.3	50
CAMO-23-261134	R-14 S1	11-16-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	0.3	50
CAMO-22-235948	R-14 S1	04-26-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-23-261133	R-14 S1	11-16-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	100
CAMO-22-235952	R-14 S1	04-26-2022	SO4(-2)	Sulfate	1.83	mg/L	NQ	Y	F	2022-489	REG	EPA:300.0	0.133	600
CAMO-23-261134	R-14 S1	11-16-2022	SO4(-2)	Sulfate	1.78	mg/L	NQ	Y	F	N3B-2023-457	REG	EPA:300.0	0.133	600
CAMO-22-235948	R-14 S1	04-26-2022	126-33-0	Sulfolane	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	20.03
CAMO-23-235948	R-14 S1	04-26-2022	126-33-0	Sulfolane	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	20.03
CAMO-22-235948	R-14 S1	04-26-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1.66
CAMO-23-235948	R-14 S1	04-26-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	1.66
CAMO-23-261133	R-14 S1	11-16-2022	630-20-6	Tetrachloroethane[1,1,1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5.74
CAMO-22-235948	R-14 S1	04-26-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	10
CAMO-23-261133	R-14 S1	04-26-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	10
CAMO-22-235948	R-14 S1	04-26-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235952	R-14 S1	04-26-2022	Tl	Thallium	0.6	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.6	2
CAMO-23-261134	R-14 S1	11-16-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6020B	0.6	2
CAMO-22-235948	R-14 S1	04-26-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1,000
CAMO-23-261133	R-14 S1	11-16-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	1,000
CAMO-23-261134	R-14 S1	11-16-2022	TDS	Total Dissolved Solids	136	mg/L	NQ	Y	F	N3B-2023-457	REG	EPA:160.1	2.38	1,000
CAMO-22-235948	R-14 S1	04-26-2022	TKN	Total Kjeldahl Nitrogen	0.397	mg/L	NQ	Y	UF	2022-489	REG	EPA:351.2	0.033	-
CAMO-23-261133	R-14 S1	11-16-2022	TKN	Total Kjeldahl Nitrogen	0.033	mg/L	UJ	N	UF	N3B-2023-457	REG	EPA:351.2	0.033	-
CAMO-22-235948	R-14 S1	04-26-2022	8001-35-2	Toxaphene (Technical Grade)	0.15	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.15	0.16
CAMO-22-235948	R-14 S1	04-26-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	70
CAMO-23-261133	R-14 S1	11-16-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	70
CAMO-22-235948	R-14 S1	04-26-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	200
CAMO-23-261133	R-14 S1	11-16-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	200
CAMO-22-235948	R-14 S1	04-26-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235948	R-14 S1	04-26-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-23-261133	R-14 S1	11-16-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	5
CAMO-22-235948	R-14 S1	04-26-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1136.82
CAMO-23-261133	R-14 S1	11-16-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	1136.82
CAMO-22-235948	R-14 S1	04-26-2022	95-95-4	Trichlorophenol[2,4,5-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	1165.98
CAMO-23-235948	R-14 S1	04-26-2022	95-95-4	Trichlorophenol[2,4,5-]	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	1165.98
CAMO-22-235948	R-14 S1	04-26-2022	88-06-2	Trichlorophenol[2,4,6-]	3.24	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.24	11.88

Table 6. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-14 Screen 1 in 2022. 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-22-235948	R-14 S1	04-26-2022	88-06-2	Trichlorophenol[2,4,6-]	2.97	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	2.97	11.88
CAMO-22-235948	R-14 S1	04-26-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0855	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0855	9.8
CAMO-23-261133	R-14 S1	11-16-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0766	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8330B	0.0766	9.8
CAMO-22-235952	R-14 S1	04-26-2022	U	Uranium	0.726	ug/L	NQ	Y	F	2022-489	REG	EPA-200.8	0.067	30
CAMO-23-261134	R-14 S1	11-16-2022	U	Uranium	0.659	ug/L	NQ	Y	F	N3B-2023-457	REG	SW-846:6020B	0.067	30
CAMO-22-235948	R-14 S1	04-26-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	2
CAMO-23-261133	R-14 S1	11-16-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	2
CAMO-22-235948	R-14 S1	04-26-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	1	620
CAMO-22-235948	R-14 S1	04-26-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	192.995
CAMO-23-261133	R-14 S1	11-16-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.333	192.995
CAMO-22-235948	R-14 S1	04-26-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	396
CAMO-23-261133	R-14 S1	11-16-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N3B-2023-457	REG	SW-846:8260D	0.5	396
CAMO-22-235952	R-14 S1	04-26-2022	Zn	Zinc	8.74	ug/L	J	Y	F	2022-489	REG	EPA:200.7	3.3	10,000
CAMO-23-261134	R-14 S1	11-16-2022	Zn	Zinc	3.3	ug/L	U	N	F	N3B-2023-457	REG	SW-846:6010D	3.3	10,000

Notes:

- ¹ ug/L - micrograms per liter.
- mg/L - milligrams per liter.
- ng/L - nanograms per liter.
- µCi/L - picocuries per liter.
- PC/L - picocuries per liter.

² U - The analyte is classified as not detected.

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

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

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

⁴ UF - Unfiltered.

F - Filtered.

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

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 NMAC 20.6.2.3103 where available, otherwise the value 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 NMAC 20.6.2.3103 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.

COC/Lab Request #: 2022-489
Page 1 of 1

Chain of Custody/Analysis Request

General Engineering Charleston SC		Los Alamos National Laboratory															
Client Contact:		Lab Agreement 620266															
Project Number: LANL		Analysis Turnaround															
Event - 14048		<input type="checkbox"/> 24 Hour - <input type="checkbox"/> 7 Days - <input type="checkbox"/> 14 Days - <input type="checkbox"/> 21 Days - <input checked="" type="checkbox"/> 28 Days - <input type="checkbox"/> Other - <input type="checkbox"/>															
Event ID: 14048																	
Field Sample ID	Sample Date	Sample Time	Sample Matrix	DP-8082-PCBs	DP-CN(TOTAL)	DP-Hg	DP-Metals	DP-Ra226+228	DP-SO4	DP-TKN	DP-TP-8081-PEST	DP-TP-8260-VOCs	DP-TP-8270-SVOCs	DP-TP-8330-HEXP	DP-TP-PFAS (subset) unpreserved	Rad Screening Info:	Lab Reporting Limit
CAMO-22-235948	04/26/2022	13:09	W	2	1	1	1	4	1	1	3	2	2	3	4	Acceptable knowledge identifies no DOT hazard classification	Method Detection Limit
CAMO-22-235952	04/26/2022	13:09	W						1								
CAMO-22-235960	04/26/2022	13:09	W									2					
CAMO-22-235949	04/26/2022	10:25	W	2	1	1	1	4	1	1	3	2	2	3	4		
CAMO-22-235953	04/26/2022	10:25	W						1								
CAMO-22-235961	04/26/2022	10:25	W									2					
CAMO-22-235984	04/26/2022	10:25	W	2	1	1	1	4	1	1	3	2	2	3	4		
CAMO-22-235985	04/26/2022	10:25	W	2	1	1	1	4	1	1	3	2	2	3	4		
CAMO-22-235986	04/26/2022	10:25	W						1								
CAMO-22-235987	04/26/2022	10:25	W						1								

Special Instructions:

Relinquished by:	Print Name: <i>Patricia May</i>	Received by:	Print Name:
Relinquished by:	Print Name:	Received by:	Print Name:
Relinquished by:	Print Name:	Received by:	Print Name:

R-46, Annual 2022 – April 26, 2022

a	Sample Date	4/26/2022
b	Sample Time	1025
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))	5,879.42
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)	49.26
i	Total volume of water purged prior to sample collection (gal)	257.95
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.04 Oxidation/Reduction Potential (MV): 193.7 Temp (deg C): 21.1 pH (SU): 7.09 Turbidity (NTU): 1.82 Specific Conductance (μ S/cm): 120.9
k	Description of sample methods	Attachment 5, Pages 66-67
l	Chain-of-Custody	Attachment 5, Pages 66-67
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 7

R-46, Annual 2022 – November 15, 2022

a	Sample Date	11/15/2022
b	Sample Time	1024
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))	5,879.47
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)	49.31
i	Total volume of water purged prior to sample collection (gal)	224
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 5.78 Oxidation/Reduction Potential (MV): 174.8 Temp (deg C): 20.7 pH (SU): 6.93 Turbidity (NTU): 0.57 Specific Conductance (μ S/cm): 123.9
k	Description of sample methods	Attachment 5, Page 68
l	Chain-of-Custody	Attachment 5, Page 68
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 7

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-22-235949	R-46	04-26-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	1.67	0.04
CAMO-22-235984	R-46	04-26-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	1.67	0.04
CAMO-23-261136	R-46	11-15-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	1.67	0.04
CAMO-22-235949	R-46	04-26-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	1.67	0.04
CAMO-22-235984	R-46	04-26-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	1.67	0.52
CAMO-23-261136	R-46	11-15-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	1.67	0.52
CAMO-23-261144	R-46	11-15-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	1.67	0.52
CAMO-22-235949	R-46	04-26-2022	309-00-2	Aldrin	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	0.00198
CAMO-22-235984	R-46	04-26-2022	309-00-2	Aldrin	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	0.00198
CAMO-22-235953	R-46	04-26-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	19.3	5.000
CAMO-22-235987	R-46	04-26-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-489	FD	EPA:200.8	19.3	5.000
CAMO-23-261137	R-46	11-15-2022	Al	Aluminum	68	ug/L	U	N	F	N38-2023-443	REG	SW-846:6010D	68	5.000
CAMO-23-261145	R-46	11-15-2022	Al	Aluminum	68	ug/L	U	N	F	N38-2023-443	FD	SW-846:6010D	68	5.000
CAMO-22-235949	R-46	04-26-2022	120-12-7	Anthracene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	1721.281
CAMO-22-235984	R-46	04-26-2022	120-12-7	Anthracene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	1721.281
CAMO-22-235984	R-46	04-26-2022	120-12-7	Anthracene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	1721.281
CAMO-22-235984	R-46	04-26-2022	120-12-7	Anthracene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	1721.281
CAMO-22-235953	R-46	04-26-2022	Sb	Antimony	1	ug/L	U	N	F	2022-489	REG	EPA:200.8	1	6
CAMO-22-235987	R-46	04-26-2022	Sb	Antimony	1	ug/L	U	N	F	2022-489	FD	EPA:200.8	1	6
CAMO-23-261137	R-46	11-15-2022	Sb	Antimony	1	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	1	6
CAMO-23-261145	R-46	11-15-2022	Sb	Antimony	1	ug/L	U	N	F	N38-2023-443	FD	SW-846:6020B	1	6
CAMO-22-235949	R-46	04-26-2022	12674-11-2	Aroclor-1016	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	12674-11-2	Aroclor-1016	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235949	R-46	04-26-2022	11104-28-2	Aroclor-1221	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	11104-28-2	Aroclor-1221	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235949	R-46	04-26-2022	11141-16-5	Aroclor-1232	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	11141-16-5	Aroclor-1232	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	53469-21-9	Aroclor-1254	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	53469-21-9	Aroclor-1254	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	53469-21-9	Aroclor-1242	0.0356	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	12672-29-6	Aroclor-1248	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	12672-29-6	Aroclor-1248	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235949	R-46	04-26-2022	11097-69-1	Aroclor-1254	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	11097-69-1	Aroclor-1254	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235949	R-46	04-26-2022	11096-82-5	Aroclor-1260	0.0333	ug/L	U	N	UF	2022-489	REG	SW-846:8082A	5	5
CAMO-22-235984	R-46	04-26-2022	11096-82-5	Aroclor-1260	0.0356	ug/L	U	N	UF	2022-489	FD	SW-846:8082A	5	5
CAMO-22-235953	R-46	04-26-2022	As	Arsenic	2	ug/L	U	N	F	2022-489	REG	EPA:200.8	2	10
CAMO-22-235987	R-46	04-26-2022	As	Arsenic	2	ug/L	U	N	F	2022-489	FD	EPA:200.8	2	10
CAMO-22-235987	R-46	11-15-2022	As	Arsenic	2	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	2	10
CAMO-23-261145	R-46	11-15-2022	As	Arsenic	2	ug/L	U	N	F	N38-2023-443	FD	SW-846:6020B	2	10
CAMO-22-235949	R-46	04-26-2022	1912-24-9	Atrazine	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	3
CAMO-22-235984	R-46	04-26-2022	1912-24-9	Atrazine	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	3
CAMO-22-235984	R-46	04-26-2022	1912-24-9	Atrazine	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	3
CAMO-22-235949	R-46	04-26-2022	103-33-3	Azobenzene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.7
CAMO-22-235949	R-46	04-26-2022	103-33-3	Azobenzene	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.7
CAMO-22-235984	R-46	04-26-2022	103-33-3	Azobenzene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.7
CAMO-22-235984	R-46	04-26-2022	103-33-3	Azobenzene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.7
CAMO-22-235953	R-46	04-26-2022	Ba	Barium	23.3	ug/L	NQ	Y	F	2022-489	REG	EPA:200.8	0.670	2.000
CAMO-22-235987	R-46	04-26-2022	Ba	Barium	23.9	ug/L	NQ	Y	F	2022-489	FD	EPA:200.8	0.670	2.000
CAMO-23-261137	R-46	11-15-2022	Ba	Barium	21.7	ug/L	NQ	Y	F	N38-2023-443	REG	SW-846:6010D	1.00	2.000
CAMO-23-261145	R-46	11-15-2022	Ba	Barium	21.4	ug/L	NQ	Y	F	N38-2023-443	FD	SW-846:6010D	1.00	2.000
CAMO-22-235949	R-46	04-26-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-22-235984	R-46	04-26-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMO-23-261136	R-46	11-15-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit-Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMD-23-261144	R-46	11-15-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.333	5
CAMD-22-235949	R-46	04-26-2022	92-87-5	Benzidine	4.11	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	4.11	0.001
CAMD-22-235949	R-46	04-26-2022	92-87-5	Benzidine	4.23	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	4.23	0.001
CAMD-22-235984	R-46	04-26-2022	92-87-5	Benzidine	4.08	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	4.11	0.001
CAMD-22-235984	R-46	04-26-2022	92-87-5	Benzidine	4.11	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	4.08	0.001
CAMD-22-235949	R-46	04-26-2022	50-32-8	Benzo(a)pyrene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	0.2
CAMD-22-235949	R-46	04-26-2022	50-32-8	Benzo(a)pyrene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	0.2
CAMD-22-235984	R-46	04-26-2022	50-32-8	Benzo(a)pyrene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	0.2
CAMD-22-235984	R-46	04-26-2022	50-32-8	Benzo(a)pyrene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	0.2
CAMD-22-235949	R-46	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	0.343
CAMD-22-235949	R-46	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	0.343
CAMD-22-235984	R-46	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	0.343
CAMD-22-235984	R-46	04-26-2022	205-99-2	Benzo(b)fluoranthene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	0.343
CAMD-22-235949	R-46	04-26-2022	207-08-9	Benzo(k)fluoranthene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	3.432
CAMD-22-235984	R-46	04-26-2022	207-08-9	Benzo(k)fluoranthene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	3.432
CAMD-22-235984	R-46	04-26-2022	207-08-9	Benzo(k)fluoranthene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	3.432
CAMD-22-235953	R-46	04-26-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-489	REG	EPA.200.8	0.2	4
CAMD-22-235987	R-46	04-26-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-489	FD	EPA.200.8	0.2	4
CAMD-23-261137	R-46	11-15-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6010D	1	4
CAMD-23-261145	R-46	11-15-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6010D	1	4
CAMD-22-235949	R-46	04-26-2022	319-84-6	BHC(alpha)	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	0.0693
CAMD-22-235984	R-46	04-26-2022	319-84-6	BHC(alpha)	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	0.0693
CAMD-22-235949	R-46	04-26-2022	319-85-7	BHC(beta)	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	0.24253
CAMD-22-235984	R-46	04-26-2022	319-85-7	BHC(beta)	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	0.24253
CAMD-22-235949	R-46	04-26-2022	58-89-9	BHC(gamma)	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	0.41512
CAMD-22-235984	R-46	04-26-2022	58-89-9	BHC(gamma)	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	0.41512
CAMD-22-235949	R-46	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.1365
CAMD-22-235949	R-46	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.1365
CAMD-22-235984	R-46	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.1365
CAMD-22-235984	R-46	04-26-2022	111-44-4	Bis(2-chloroethyl)ether	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.1365
CAMD-22-235949	R-46	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	55.64
CAMD-22-235949	R-46	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	55.64
CAMD-22-235984	R-46	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	55.64
CAMD-22-235984	R-46	04-26-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	55.64
CAMD-22-235953	R-46	04-26-2022	B	Boron	15	ug/L	U	N	F	2022-489	REG	EPA.200.7	15	750
CAMD-22-235987	R-46	04-26-2022	B	Boron	15	ug/L	U	N	F	2022-489	FD	EPA.200.7	15	750
CAMD-23-261137	R-46	11-15-2022	B	Boron	15	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6010D	15	750
CAMD-23-261145	R-46	11-15-2022	B	Boron	15	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6010D	15	750
CAMD-22-235949	R-46	04-26-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1.344
CAMD-22-235984	R-46	04-26-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	1.344
CAMD-23-261136	R-46	11-15-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8260D	0.333	1.344
CAMD-23-261144	R-46	11-15-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.333	1.344
CAMD-22-235949	R-46	04-26-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	32.851
CAMD-22-235984	R-46	04-26-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	32.851
CAMD-23-261136	R-46	11-15-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8260D	0.333	32.851
CAMD-23-261144	R-46	11-15-2022	75-25-2	Bromoform	0.333	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.333	32.851
CAMD-22-235949	R-46	04-26-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.337	7.545
CAMD-22-235984	R-46	04-26-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.337	7.545
CAMD-23-261136	R-46	11-15-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8260D	0.337	7.545
CAMD-23-261144	R-46	11-15-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.337	7.545
CAMD-22-235953	R-46	04-26-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-489	REG	EPA.200.8	0.3	5
CAMD-22-235987	R-46	04-26-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-489	FD	EPA.200.8	0.3	5
CAMD-23-261137	R-46	11-15-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6020B	0.3	5
CAMD-23-261145	R-46	11-15-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6020B	0.3	5

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-22-235949	R-46	04-26-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-22-235984	R-46	04-26-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMO-23-261136	R-46	11-15-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMO-23-261144	R-46	11-15-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMO-22-235949	R-46	04-26-2022	57-74-9	Chlordane(alpha/gamma)	0.0758	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0758	0.4484
CAMO-22-235984	R-46	04-26-2022	57-74-9	Chlordane(alpha/gamma)	0.0795	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.0795	0.4484
CAMO-23-261137	R-46	11-15-2022	Cl(-1)	Chloride	1.7	mg/L	J+	Y	F	N38-2023-443	REG	EPA:300.0	0.0670	250
CAMO-23-261145	R-46	11-15-2022	Cl(-1)	Chloride	1.69	mg/L	J+	Y	F	N38-2023-443	FD	EPA:300.0	0.0670	250
CAMO-22-235949	R-46	04-26-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	77.57
CAMO-22-235984	R-46	04-26-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	77.57
CAMO-23-261136	R-46	11-15-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	77.57
CAMO-23-261144	R-46	11-15-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	77.57
CAMO-22-235949	R-46	04-26-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-22-235984	R-46	04-26-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	100
CAMO-23-261136	R-46	11-15-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	100
CAMO-23-261144	R-46	11-15-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	100
CAMO-22-235949	R-46	04-26-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	20.321
CAMO-22-235984	R-46	04-26-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	20.321
CAMO-23-261136	R-46	11-15-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	20.321
CAMO-23-261144	R-46	11-15-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	20.321
CAMO-22-235953	R-46	04-26-2022	Cr	Chromium	5.12	ug/L	J	Y	F	2022-489	REG	EPA:200.8	3.00	50
CAMO-22-235987	R-46	04-26-2022	Cr	Chromium	5.17	ug/L	J	Y	F	2022-489	FD	EPA:200.8	3.00	50
CAMO-23-261137	R-46	11-15-2022	Cr	Chromium	5.29	ug/L	J	Y	F	N38-2023-443	REG	SW-846:6020B	3.00	50
CAMO-23-261145	R-46	11-15-2022	Cr	Chromium	5.1	ug/L	J	Y	F	N38-2023-443	REG	SW-846:6020B	3.00	50
CAMO-22-235953	R-46	04-26-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.300	50
CAMO-22-235987	R-46	04-26-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-489	FD	EPA:200.8	0.300	50
CAMO-23-261137	R-46	11-15-2022	Co	Cobalt	1	ug/L	J	Y	F	N38-2023-443	REG	SW-846:6010D	1	50
CAMO-23-261145	R-46	11-15-2022	Co	Cobalt	1.03	ug/L	J	Y	F	N38-2023-443	REG	SW-846:6010D	1.00	50
CAMO-22-235953	R-46	04-26-2022	Cu	Copper	0.908	ug/L	J	Y	F	2022-489	REG	EPA:200.8	0.300	1,000
CAMO-22-235987	R-46	04-26-2022	Cu	Copper	0.874	ug/L	J	Y	F	2022-489	FD	EPA:200.8	0.300	1,000
CAMO-23-261137	R-46	11-15-2022	Cu	Copper	3	ug/L	U	N	F	N38-2023-443	REG	SW-846:6010D	3	1,000
CAMO-23-261145	R-46	11-15-2022	Cu	Copper	3	ug/L	U	N	F	N38-2023-443	REG	SW-846:6010D	3	1,000
CAMO-22-235949	R-46	04-26-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	2022-489	REG	EPA:335.4	0.00167	0.2
CAMO-22-235984	R-46	04-26-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	2022-489	FD	EPA:335.4	0.00167	0.2
CAMO-23-261136	R-46	11-15-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N38-2023-443	REG	EPA:335.4	0.00167	0.2
CAMO-23-261144	R-46	11-15-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N38-2023-443	REG	EPA:335.4	0.00167	0.2
CAMO-22-235949	R-46	04-26-2022	50-29-3	DDT[4,4']	0.0099	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0099	2.29107
CAMO-22-235984	R-46	04-26-2022	50-29-3	DDT[4,4']	0.0104	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.0104	2.2911
CAMO-22-235949	R-46	04-26-2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	0.05
CAMO-22-235984	R-46	04-26-2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	0.05
CAMO-23-261136	R-46	11-15-2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	0.05
CAMO-23-261144	R-46	11-15-2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	0.05
CAMO-22-235949	R-46	04-26-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	7.997
CAMO-22-235984	R-46	04-26-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	7.997
CAMO-23-261136	R-46	11-15-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	7.997
CAMO-23-261144	R-46	11-15-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	7.997
CAMO-22-235949	R-46	04-26-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	600
CAMO-22-235984	R-46	04-26-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	600
CAMO-23-261136	R-46	11-15-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	600
CAMO-23-261144	R-46	11-15-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	600
CAMO-22-235949	R-46	04-26-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	75
CAMO-22-235984	R-46	04-26-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	75
CAMO-23-261136	R-46	11-15-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	75
CAMO-23-261144	R-46	11-15-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	75
CAMO-22-235949	R-46	04-26-2022	91-94-1	Dichlorobenzidine[3,3']	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1.25

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-22-235949	R-46	04-26-2022	91-94-1	Dichlorobenzidine[3,3']	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	1.25
CAMO-22-235984	R-46	04-26-2022	91-94-1	Dichlorobenzidine[3,3']	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1.25
CAMO-22-235984	R-46	04-26-2022	91-94-1	Dichlorobenzidine[3,3']	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	1.25
CAMO-22-235984	R-46	04-26-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.355	197.2
CAMO-22-235984	R-46	04-26-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.355	197.2
CAMO-23-261136	R-46	11-15-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.355	197.2
CAMO-23-261144	R-46	11-15-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.355	197.2
CAMO-22-235949	R-46	04-26-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	25
CAMO-22-235984	R-46	04-26-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	25
CAMO-23-261136	R-46	11-15-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	25
CAMO-23-261144	R-46	11-15-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	25
CAMO-22-235949	R-46	04-26-2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-22-235984	R-46	04-26-2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMO-23-261136	R-46	11-15-2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMO-23-261144	R-46	11-15-2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5
CAMO-22-235949	R-46	04-26-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	7
CAMO-22-235984	R-46	04-26-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	7
CAMO-23-261136	R-46	11-15-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	7
CAMO-23-261144	R-46	11-15-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	7
CAMO-22-235949	R-46	04-26-2022	156-59-2	Dichloroethene[cis-1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	70
CAMO-22-235984	R-46	04-26-2022	156-59-2	Dichloroethene[cis-1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	70
CAMO-23-261136	R-46	11-15-2022	156-59-2	Dichloroethene[cis-1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	70
CAMO-23-261144	R-46	11-15-2022	156-59-2	Dichloroethene[cis-1,2]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	70
CAMO-22-235949	R-46	04-26-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-22-235984	R-46	04-26-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	100
CAMO-23-261136	R-46	11-15-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	100
CAMO-23-261144	R-46	11-15-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	100
CAMO-22-235949	R-46	04-26-2022	120-83-2	Dichlorophenol[2,4]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	45.3
CAMO-22-235984	R-46	04-26-2022	120-83-2	Dichlorophenol[2,4]	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	45.3
CAMO-23-261136	R-46	11-15-2022	120-83-2	Dichlorophenol[2,4]	3.16	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8270E	3.16	45.3
CAMO-23-261144	R-46	11-15-2022	120-83-2	Dichlorophenol[2,4]	3.13	ug/L	UJ	N	UF	N38-2023-443	FD	SW-846:8270E	3.13	45.3
CAMO-22-235949	R-46	04-26-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMO-22-235984	R-46	04-26-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMO-23-261136	R-46	11-15-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMO-23-261144	R-46	11-15-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5
CAMO-22-235949	R-46	04-26-2022	542-75-6	Dichloropropene[cis/trans-1,3]	0.5	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	4.7
CAMO-22-235984	R-46	04-26-2022	542-75-6	Dichloropropene[cis/trans-1,3]	0.5	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.5	4.7
CAMO-22-235949	R-46	04-26-2022	60-57-1	Dieldrin	0.00990	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0099	0.01755
CAMO-22-235984	R-46	04-26-2022	60-57-1	Dieldrin	0.0104	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.0104	0.0175
CAMO-22-235949	R-46	04-26-2022	84-66-2	Diethylphthalate	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	14,800.5
CAMO-22-235984	R-46	04-26-2022	84-66-2	Diethylphthalate	0.325	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.325	14,800.5
CAMO-23-261136	R-46	11-15-2022	84-66-2	Diethylphthalate	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	14,800.5
CAMO-23-261144	R-46	11-15-2022	84-66-2	Diethylphthalate	0.313	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.313	14,800.5
CAMO-22-235949	R-46	04-26-2022	131-11-3	Dimethyl Phthalate	0.316	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.316	611.6
CAMO-22-235984	R-46	04-26-2022	131-11-3	Dimethyl Phthalate	0.325	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.325	611.6
CAMO-23-261136	R-46	11-15-2022	131-11-3	Dimethyl Phthalate	0.316	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.316	611.6
CAMO-23-261144	R-46	11-15-2022	131-11-3	Dimethyl Phthalate	0.313	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.313	611.6
CAMO-22-235949	R-46	04-26-2022	84-74-2	Di-n-butylphthalate	0.432	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.432	884.799
CAMO-22-235984	R-46	04-26-2022	84-74-2	Di-n-butylphthalate	0.759	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.759	884.799
CAMO-23-261136	R-46	11-15-2022	84-74-2	Di-n-butylphthalate	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	884.799
CAMO-23-261144	R-46	11-15-2022	84-74-2	Di-n-butylphthalate	0.711	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.711	884.799
CAMO-22-235949	R-46	04-26-2022	534-52-1	Dinitro-2-methylpheno[4,6]	3.16	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.16	1.52
CAMO-22-235984	R-46	04-26-2022	534-52-1	Dinitro-2-methylpheno[4,6]	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	1.52
CAMO-23-261136	R-46	11-15-2022	534-52-1	Dinitro-2-methylpheno[4,6]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1.52
CAMO-23-261144	R-46	11-15-2022	534-52-1	Dinitro-2-methylpheno[4,6]	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	1.52

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMD-22-235949	R-46	04-26-2022	51-28-5	Dinitrophenol[2,4-]	5.26	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	5.26	38.67
CAMD-22-235949	R-46	04-26-2022	51-28-5	Dinitrophenol[2,4-]	5.42	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	5.42	38.67
CAMD-22-235984	R-46	04-26-2022	51-28-5	Dinitrophenol[2,4-]	5.27	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	5.27	38.67
CAMD-22-235984	R-46	04-26-2022	51-28-5	Dinitrophenol[2,4-]	5.22	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	5.22	38.67
CAMD-22-235949	R-46	04-26-2022	121-14-2	Dinitrophenol[2,4-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	2.37
CAMD-22-235949	R-46	04-26-2022	121-14-2	Dinitrophenol[2,4-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	2.37
CAMD-22-235984	R-46	04-26-2022	121-14-2	Dinitrophenol[2,4-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	2.37
CAMD-22-235984	R-46	04-26-2022	121-14-2	Dinitrophenol[2,4-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	2.37
CAMD-23-261136	R-46	11-15-2022	121-14-2	Dinitrophenol[2,4-]	0.0818	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8330B	0.0818	2.37
CAMD-23-261144	R-46	11-15-2022	121-14-2	Dinitrophenol[2,4-]	0.0817	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8330B	0.0817	2.37
CAMD-22-235949	R-46	04-26-2022	606-20-2	Dinitrophenol[2,6-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.49
CAMD-22-235949	R-46	04-26-2022	606-20-2	Dinitrophenol[2,6-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.49
CAMD-22-235984	R-46	04-26-2022	606-20-2	Dinitrophenol[2,6-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.49
CAMD-22-235984	R-46	04-26-2022	606-20-2	Dinitrophenol[2,6-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.49
CAMD-23-261136	R-46	11-15-2022	606-20-2	Dinitrophenol[2,6-]	0.0818	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8330B	0.0818	0.49
CAMD-23-261144	R-46	11-15-2022	606-20-2	Dinitrophenol[2,6-]	0.0817	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8330B	0.0817	0.49
CAMD-22-235949	R-46	04-26-2022	123-91-1	Dioxane[1,4-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	4.59
CAMD-22-235949	R-46	04-26-2022	123-91-1	Dioxane[1,4-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	4.59
CAMD-22-235984	R-46	04-26-2022	123-91-1	Dioxane[1,4-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	4.59
CAMD-22-235949	R-46	04-26-2022	122-39-4	Diphenylamine	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	122
CAMD-22-235949	R-46	04-26-2022	122-39-4	Diphenylamine	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	122
CAMD-22-235984	R-46	04-26-2022	122-39-4	Diphenylamine	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	122
CAMD-22-235984	R-46	04-26-2022	122-39-4	Diphenylamine	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	122
CAMD-22-235949	R-46	04-26-2022	959-98-8	Endosulfan I	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	98.7
CAMD-22-235984	R-46	04-26-2022	959-98-8	Endosulfan I	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	98.7
CAMD-22-235949	R-46	04-26-2022	33213-65-9	Endosulfan II	0.0099	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0099	98.7
CAMD-22-235984	R-46	04-26-2022	33213-65-9	Endosulfan II	0.0104	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.0104	98.7
CAMD-22-235949	R-46	04-26-2022	72-20-8	Endrin	0.0099	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.0099	2.23
CAMD-22-235984	R-46	04-26-2022	72-20-8	Endrin	0.0104	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.0104	2.23
CAMD-22-235949	R-46	04-26-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	700
CAMD-22-235984	R-46	04-26-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	700
CAMD-23-261136	R-46	11-15-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	700
CAMD-23-261144	R-46	11-15-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	700
CAMD-22-235949	R-46	04-26-2022	206-44-0	Fluoranthene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	802.2
CAMD-22-235984	R-46	04-26-2022	206-44-0	Fluoranthene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	802.2
CAMD-22-235984	R-46	04-26-2022	206-44-0	Fluoranthene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	802.2
CAMD-22-235984	R-46	04-26-2022	206-44-0	Fluoranthene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	802.2
CAMD-22-235984	R-46	04-26-2022	206-44-0	Fluoranthene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	287.6
CAMD-22-235949	R-46	04-26-2022	86-73-7	Fluorene	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	287.6
CAMD-22-235984	R-46	04-26-2022	86-73-7	Fluorene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	287.6
CAMD-22-235984	R-46	04-26-2022	86-73-7	Fluorene	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	287.6
CAMD-23-261137	R-46	11-15-2022	F(-1)	Fluoride	0.23	mg/L	NQ	Y	F	N38-2023-443	REG	EPA:300.0	0.03	1.6
CAMD-23-261145	R-46	11-15-2022	F(-1)	Fluoride	0.231	mg/L	NQ	Y	F	N38-2023-443	FD	EPA:300.0	0.03	1.6
CAMD-22-235949	R-46	04-26-2022	76-44-8	Heptachlor	0.00659	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.00659	0.022
CAMD-22-235984	R-46	04-26-2022	76-44-8	Heptachlor	0.00691	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.00691	0.022
CAMD-22-235949	R-46	04-26-2022	118-74-1	Hexachlorobenzene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.1
CAMD-22-235984	R-46	04-26-2022	118-74-1	Hexachlorobenzene	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.1
CAMD-22-235984	R-46	04-26-2022	118-74-1	Hexachlorobenzene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.1
CAMD-22-235984	R-46	04-26-2022	118-74-1	Hexachlorobenzene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.1
CAMD-22-235949	R-46	04-26-2022	87-68-3	Hexachlorobutadiene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1.39
CAMD-22-235949	R-46	04-26-2022	87-68-3	Hexachlorobutadiene	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	1.39
CAMD-22-235984	R-46	04-26-2022	87-68-3	Hexachlorobutadiene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1.39
CAMD-22-235984	R-46	04-26-2022	87-68-3	Hexachlorobutadiene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	1.39
CAMD-23-261136	R-46	11-15-2022	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	1.387

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-22-261144	R-46	11-15-2022	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.333	1.387
CAMO-22-235949	R-46	04-26-2022	77-47-4	Hexachlorocyclopentadiene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.41
CAMO-22-235949	R-46	04-26-2022	77-47-4	Hexachlorocyclopentadiene	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.41
CAMO-22-235984	R-46	04-26-2022	77-47-4	Hexachlorocyclopentadiene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.41
CAMO-22-235984	R-46	04-26-2022	77-47-4	Hexachlorocyclopentadiene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.41
CAMO-22-235949	R-46	04-26-2022	67-72-1	Hexachloroethane	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	3.28
CAMO-22-235949	R-46	04-26-2022	67-72-1	Hexachloroethane	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	3.28
CAMO-22-235984	R-46	04-26-2022	67-72-1	Hexachloroethane	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	3.28
CAMO-22-235984	R-46	04-26-2022	67-72-1	Hexachloroethane	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	3.28
CAMO-22-235949	R-46	04-26-2022	2691-41-0	HMX	0.0856	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0856	1,001.1
CAMO-22-235984	R-46	04-26-2022	2691-41-0	HMX	0.0872	ug/L	U	N	UF	2022-489	FD	SW-846:8330B	0.0872	1,001.1
CAMO-22-261136	R-46	11-15-2022	2691-41-0	HMX	0.0818	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8330B	0.0818	1,001.1
CAMO-22-261144	R-46	11-15-2022	2691-41-0	HMX	0.0817	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8330B	0.0817	1,001.1
CAMO-22-235953	R-46	04-26-2022	Fe	Iron	30	ug/L	U	N	F	2022-489	REG	EPA:200.7	30	1,000
CAMO-22-235987	R-46	04-26-2022	Fe	Iron	30	ug/L	U	N	F	2022-489	FD	EPA:200.7	30	1,000
CAMO-22-261137	R-46	11-15-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6010D	30	1,000
CAMO-22-261145	R-46	11-15-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6010D	30	1,000
CAMO-22-235949	R-46	04-26-2022	78-59-1	Isothorone	3.68	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.68	780.6
CAMO-22-235949	R-46	04-26-2022	78-59-1	Isothorone	3.8	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.8	780.6
CAMO-22-235984	R-46	04-26-2022	78-59-1	Isothorone	3.69	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.69	780.6
CAMO-22-235984	R-46	04-26-2022	78-59-1	Isothorone	3.66	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.66	780.6
CAMO-22-235953	R-46	04-26-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.5	15
CAMO-22-235987	R-46	04-26-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-489	FD	EPA:200.8	0.5	15
CAMO-22-261137	R-46	11-15-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6020B	0.5	15
CAMO-22-261145	R-46	11-15-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6020B	0.5	15
CAMO-22-235953	R-46	04-26-2022	Mn	Manganese	2	ug/L	U	N	F	2022-489	REG	EPA:200.7	2	200
CAMO-22-235987	R-46	04-26-2022	Mn	Manganese	2	ug/L	U	N	F	2022-489	FD	EPA:200.7	2	200
CAMO-22-261137	R-46	11-15-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-443	REG	SW-846:6010D	2	200
CAMO-22-261145	R-46	11-15-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-443	FD	SW-846:6010D	2	200
CAMO-22-235949	R-46	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-489	REG	EPA:245.2	0.067	2
CAMO-22-235953	R-46	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-489	REG	EPA:245.2	0.067	2
CAMO-22-235984	R-46	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-489	FD	EPA:245.2	0.067	2
CAMO-22-235987	R-46	04-26-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-489	FD	EPA:245.2	0.067	2
CAMO-22-261136	R-46	11-15-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:7470A	0.067	2
CAMO-22-261137	R-46	11-15-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-443	REG	SW-846:7470A	0.067	2
CAMO-22-261144	R-46	11-15-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:7470A	0.067	2
CAMO-22-261145	R-46	11-15-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-443	FD	SW-846:7470A	0.067	2
CAMO-22-235949	R-46	04-26-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-22-235984	R-46	04-26-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-22-261136	R-46	11-15-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8260D	0.333	100
CAMO-22-261144	R-46	11-15-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.333	100
CAMO-22-235949	R-46	04-26-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	5
CAMO-22-235984	R-46	04-26-2022	75-09-2	Methylene Chloride	1.51	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.5	5
CAMO-22-261136	R-46	11-15-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N3B-2023-443	REG	SW-846:8260D	0.5	5
CAMO-22-261144	R-46	11-15-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N3B-2023-443	FD	SW-846:8260D	0.5	5
CAMO-22-235949	R-46	04-26-2022	90-12-0	Methylnaphthalene [1-]	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	30
CAMO-22-235949	R-46	04-26-2022	90-12-0	Methylnaphthalene [1-]	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	30
CAMO-22-235984	R-46	04-26-2022	90-12-0	Methylnaphthalene [1-]	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	30
CAMO-22-235984	R-46	04-26-2022	90-12-0	Methylnaphthalene [1-]	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	30
CAMO-22-235949	R-46	04-26-2022	91-57-6	Methylnaphthalene [2-]	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	30
CAMO-22-235949	R-46	04-26-2022	91-57-6	Methylnaphthalene [2-]	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	30
CAMO-22-235984	R-46	04-26-2022	91-57-6	Methylnaphthalene [2-]	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	30
CAMO-22-235984	R-46	04-26-2022	91-57-6	Methylnaphthalene [2-]	0.313	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.313	30
CAMO-22-235953	R-46	04-26-2022	Mo	Molybdenum	1.11	ug/L	NQ	Y	F	2022-489	REG	EPA:200.8	0.2	1,000
CAMO-22-235987	R-46	04-26-2022	Mo	Molybdenum	1.06	ug/L	NQ	Y	F	2022-489	FD	EPA:200.8	0.2	1,000

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit-Condition No.36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMD-23-261137	R-46	11-15-2022	Mo	Molybdenum	1.05	ug/L	NQ	Y	F	N38-2023-443	REG	SW-846:6020B	0.2	1.000
CAMD-23-261145	R-46	11-15-2022	Mo	Molybdenum	0.967	ug/L	J	Y	F	N38-2023-443	FD	SW-846:6020B	0.2	1.000
CAMD-22-235949	R-46	04-26-2022	91-20-3	Naphthalene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	30
CAMD-22-235949	R-46	04-26-2022	91-20-3	Naphthalene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	30
CAMD-22-235984	R-46	04-26-2022	91-20-3	Naphthalene	0.313	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.313	30
CAMD-23-261136	R-46	11-15-2022	91-20-3	Naphthalene	0.34	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	30
CAMD-23-261144	R-46	11-15-2022	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	30
CAMD-22-235953	R-46	04-26-2022	Ni	Nickel	0.6	ug/L	U	N	F	2022-489	REG	EPA-200.8	0.6	200
CAMD-22-235987	R-46	04-26-2022	Ni	Nickel	0.6	ug/L	U	N	F	2022-489	REG	EPA-200.8	0.6	200
CAMD-23-261137	R-46	11-15-2022	Ni	Nickel	0.6	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	0.6	200
CAMD-23-261145	R-46	11-15-2022	Ni	Nickel	0.6	ug/L	U	N	F	N38-2023-443	FD	SW-846:6020B	0.6	200
CAMD-23-261137	R-46	11-15-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.352	mg/L	NQ	Y	F	N38-2023-443	REG	EPA-353.2	0.017	10
CAMD-23-261145	R-46	11-15-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.35	mg/L	NQ	Y	F	N38-2023-443	FD	EPA-353.2	0.017	10
CAMD-22-235957	R-46	04-26-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-488	REG	EPA-300.0	0.033	1
CAMD-22-235989	R-46	04-26-2022	NO2	Nitrite	0.033	mg/L	U	N	F	2022-488	FD	EPA-300.0	0.033	1
CAMD-22-235949	R-46	04-26-2022	98-95-3	Nitrobenzene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1.4
CAMD-22-235949	R-46	04-26-2022	98-95-3	Nitrobenzene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1.4
CAMD-22-235984	R-46	04-26-2022	98-95-3	Nitrobenzene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1.4
CAMD-22-235984	R-46	04-26-2022	98-95-3	Nitrobenzene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	1.4
CAMD-23-261136	R-46	11-15-2022	98-95-3	Nitrobenzene	0.0818	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8330B	0.0818	1.4
CAMD-23-261144	R-46	11-15-2022	98-95-3	Nitrobenzene	0.0817	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8330B	0.0817	1.4
CAMD-22-235949	R-46	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.0017
CAMD-22-235949	R-46	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.0017
CAMD-22-235984	R-46	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.0017
CAMD-22-235984	R-46	04-26-2022	55-18-5	Nitrosodiethylamine[N-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.0017
CAMD-22-235949	R-46	04-26-2022	924-16-3	Nitrosodiethylamine[N-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.0273
CAMD-22-235949	R-46	04-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.0273
CAMD-22-235984	R-46	04-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.0273
CAMD-22-235984	R-46	04-26-2022	924-16-3	Nitroso-di-n-butylamine[N-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.0273
CAMD-22-235949	R-46	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	0.37
CAMD-22-235984	R-46	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	0.37
CAMD-22-235984	R-46	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	0.37
CAMD-22-235984	R-46	04-26-2022	930-55-2	Nitrosopyrrolidine[N-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	0.37
CAMD-22-235949	R-46	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	9.8
CAMD-22-235949	R-46	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	9.8
CAMD-22-235984	R-46	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	9.8
CAMD-22-235984	R-46	04-26-2022	108-60-1	Oxybis(1-chloropropane)[2,2'-]	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	9.8
CAMD-22-235949	R-46	04-26-2022	608-93-5	Pentachlorobenzene	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	3.068
CAMD-22-235949	R-46	04-26-2022	608-93-5	Pentachlorobenzene	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	3.068
CAMD-22-235984	R-46	04-26-2022	608-93-5	Pentachlorobenzene	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	3.068
CAMD-22-235984	R-46	04-26-2022	608-93-5	Pentachlorobenzene	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	3.068
CAMD-22-235949	R-46	04-26-2022	87-86-5	Pentachlorophenol	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1
CAMD-22-235949	R-46	04-26-2022	87-86-5	Pentachlorophenol	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	1
CAMD-22-235984	R-46	04-26-2022	87-86-5	Pentachlorophenol	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1
CAMD-22-235984	R-46	04-26-2022	87-86-5	Pentachlorophenol	3.13	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.13	1
CAMD-23-261137	R-46	11-15-2022	ClO4	Perchlorate	0.263	ug/L	NQ	Y	F	N38-2023-443	REG	SW-846:6850	0.05	13.82
CAMD-23-261145	R-46	11-15-2022	ClO4	Perchlorate	0.58	ng/L	NQ	Y	F	N38-2023-443	FD	SW-846:6850	0.05	13.82
CAMD-22-235984	R-46	04-26-2022	355-46-4	Perfluorohexanesulfonic acid	0.592	ng/L	U	N	UF	2022-489	REG	EPA-537M	0.592	401.099
CAMD-22-235984	R-46	04-26-2022	355-46-4	Perfluorohexanesulfonic acid	0.592	ng/L	U	N	UF	2022-489	FD	EPA-537M	0.592	401.099
CAMD-22-235949	R-46	04-26-2022	1763-23-1	Perfluorooctanesulfonic acid	0.703	ng/L	U	N	UF	2022-489	REG	EPA-537M	0.703	60.16

Attachment 5

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No.36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMO-22-235984	R-46	04-26-2022	1763-23-1	Perfluorooctanesulfonic acid	0.718	ng/L	U	N	UF	2022-489	FD	EPA-537M	0.718	60.16
CAMO-22-235949	R-46	04-26-2022	335-67-1	Perfluorooctanoic acid	0.703	ng/L	U	N	UF	2022-489	REG	EPA-537M	0.703	60.16
CAMO-22-235984	R-46	04-26-2022	335-67-1	Perfluorooctanoic acid	0.718	ng/L	U	N	UF	2022-489	FD	EPA-537M	0.718	60.16
CAMO-22-235949	R-46	04-26-2022	pH	pH	7.09	SU							6-9	
CAMO-22-235949	R-46	04-26-2022	85-01-8	Phenanthrene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	170.4
CAMO-22-235949	R-46	04-26-2022	85-01-8	Phenanthrene	0.325	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.325	170.4
CAMO-22-235984	R-46	04-26-2022	85-01-8	Phenanthrene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	170.4
CAMO-22-235984	R-46	04-26-2022	85-01-8	Phenanthrene	0.313	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.313	170.4
CAMO-22-235949	R-46	04-26-2022	108-95-2	Phenol	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	5
CAMO-22-235949	R-46	04-26-2022	108-95-2	Phenol	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	5
CAMO-22-235984	R-46	04-26-2022	108-95-2	Phenol	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	5
CAMO-22-235984	R-46	04-26-2022	108-95-2	Phenol	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	5
CAMO-22-235949	R-46	04-26-2022	1610-18-0	Prometon	0.325	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.325	249.93
CAMO-22-235949	R-46	04-26-2022	1610-18-0	Prometon	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	249.93
CAMO-22-235984	R-46	04-26-2022	1610-18-0	Prometon	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	249.93
CAMO-22-235984	R-46	04-26-2022	1610-18-0	Prometon	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	249.93
CAMO-22-235949	R-46	04-26-2022	129-00-0	Pyrene	0.316	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	0.316	117.42
CAMO-22-235949	R-46	04-26-2022	129-00-0	Pyrene	0.325	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	0.325	117.42
CAMO-22-235984	R-46	04-26-2022	129-00-0	Pyrene	0.316	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	0.316	117.42
CAMO-22-235984	R-46	04-26-2022	129-00-0	Pyrene	0.313	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	0.313	117.42
CAMO-22-235949	R-46	04-26-2022	Ra-226+228	Radium-226 and Radium-228	0.294	pCi/L	J	Y	UF	2022-489	REG	Generic:Radium by Calculation	-	5
CAMO-22-235984	R-46	04-26-2022	Ra-226+228	Radium-226 and Radium-228	0.881	pCi/L	J	Y	UF	2022-489	FD	Generic:Radium by Calculation	-	5
CAMO-22-235949	R-46	04-26-2022	121-82-4	RDX	0.0856	ug/L	UJ	N	UF	2022-489	REG	SW-846:8330B	0.0856	9.66
CAMO-22-235984	R-46	04-26-2022	121-82-4	RDX	0.0872	ug/L	UJ	N	UF	2022-489	FD	SW-846:8330B	0.0872	9.66
CAMO-23-261136	R-46	11-15-2022	121-82-4	RDX	0.0818	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8330B	0.0818	9.66
CAMO-23-261144	R-46	11-15-2022	121-82-4	RDX	0.0817	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8330B	0.0817	9.66
CAMO-22-235953	R-46	04-26-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-489	REG	EPA-200.8	1.5	50
CAMO-22-235987	R-46	04-26-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-489	FD	EPA-200.8	1.5	50
CAMO-23-261137	R-46	11-15-2022	Se	Selenium	1.5	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	1.5	50
CAMO-23-261145	R-46	11-15-2022	Se	Selenium	1.5	ug/L	U	N	F	N38-2023-443	FD	SW-846:6020B	1.5	50
CAMO-22-235953	R-46	04-26-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-489	REG	EPA-200.8	0.3	50
CAMO-22-235987	R-46	04-26-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-489	FD	EPA-200.8	0.3	50
CAMO-23-261137	R-46	11-15-2022	Ag	Silver	0.3	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	0.3	50
CAMO-23-261145	R-46	11-15-2022	Ag	Silver	0.3	ug/L	U	N	F	N38-2023-443	FD	SW-846:6020B	0.3	50
CAMO-22-235949	R-46	04-26-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	100
CAMO-22-235984	R-46	04-26-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	100
CAMO-23-261136	R-46	11-15-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	100
CAMO-23-261144	R-46	11-15-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	100
CAMO-22-235953	R-46	04-26-2022	SO4(-2)	Sulfate	1.82	mg/L	NQ	Y	F	2022-489	REG	EPA-300.0	0.133	600
CAMO-22-235987	R-46	04-26-2022	SO4(-2)	Sulfate	1.85	mg/L	NQ	Y	F	2022-489	FD	EPA-300.0	0.133	600
CAMO-23-261137	R-46	11-15-2022	SO4(-2)	Sulfate	1.79	mg/L	NQ	Y	F	N38-2023-443	REG	EPA-300.0	0.133	600
CAMO-23-261145	R-46	11-15-2022	SO4(-2)	Sulfate	1.78	mg/L	NQ	Y	F	N38-2023-443	FD	EPA-300.0	0.133	600
CAMO-22-235949	R-46	04-26-2022	126-33-0	Sulfolane	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	20.03
CAMO-22-235984	R-46	04-26-2022	126-33-0	Sulfolane	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	20.03
CAMO-22-235984	R-46	04-26-2022	126-33-0	Sulfolane	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	20.03
CAMO-22-235984	R-46	04-26-2022	126-33-0	Sulfolane	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	20.03
CAMO-22-235949	R-46	04-26-2022	95-94-3	Tetrachlorobenzene [1,2,4,5]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1.66
CAMO-22-235949	R-46	04-26-2022	95-94-3	Tetrachlorobenzene [1,2,4,5]	3.25	ug/L	UJ	N	UF	2022-489	REG	SW-846:8270E	3.25	1.66
CAMO-22-235984	R-46	04-26-2022	95-94-3	Tetrachlorobenzene [1,2,4,5]	3.16	ug/L	U	N	UF	2022-489	FD	SW-846:8270E	3.16	1.66
CAMO-22-235984	R-46	04-26-2022	95-94-3	Tetrachlorobenzene [1,2,4,5]	3.13	ug/L	UJ	N	UF	2022-489	FD	SW-846:8270E	3.13	1.66
CAMO-23-261136	R-46	11-15-2022	630-20-6	Tetrachloroethane [1,1,1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5.74
CAMO-23-261144	R-46	11-15-2022	630-20-6	Tetrachloroethane [1,1,1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5.74
CAMO-22-235949	R-46	04-26-2022	79-34-5	Tetrachloroethane [1,1,2,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	10

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
CAMD-22-235984	R-46	04-26-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	10
CAMD-23-261136	R-46	11-15-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	10
CAMD-23-261144	R-46	11-15-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	10
CAMD-22-235949	R-46	04-26-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMD-22-235984	R-46	04-26-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMD-23-261136	R-46	11-15-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMD-23-261144	R-46	11-15-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5
CAMD-22-235953	R-46	04-26-2022	TI	Thallium	0.6	ug/L	U	N	F	2022-489	REG	EPA:200.8	0.6	2
CAMD-22-235987	R-46	04-26-2022	TI	Thallium	0.6	ug/L	U	N	F	2022-489	FD	EPA:200.8	0.6	2
CAMD-23-261137	R-46	11-15-2022	TI	Thallium	0.6	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	0.6	2
CAMD-23-261145	R-46	11-15-2022	TI	Thallium	0.6	ug/L	U	N	F	N38-2023-443	REG	SW-846:6020B	0.6	2
CAMD-22-235949	R-46	04-26-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1,000
CAMD-22-235984	R-46	04-26-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	1,000
CAMD-23-261136	R-46	11-15-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	1,000
CAMD-23-261144	R-46	11-15-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	1,000
CAMD-23-261137	R-46	11-15-2022	TDS	Total Dissolved Solids	119	mg/L	J	Y	F	N38-2023-443	REG	EPA:160.1	2.38	1,000
CAMD-23-261145	R-46	11-15-2022	TDS	Total Dissolved Solids	107	mg/L	J	Y	F	N38-2023-443	FD	EPA:160.1	2.38	1,000
CAMD-22-235949	R-46	04-26-2022	TKN	Total Kjeldahl Nitrogen	0.152	mg/L	U	N	UF	2022-489	REG	EPA:351.2	0.033	-
CAMD-22-235984	R-46	04-26-2022	TKN	Total Kjeldahl Nitrogen	0.0823	mg/L	J	Y	UF	2022-489	FD	EPA:351.2	0.033	-
CAMD-23-261136	R-46	11-15-2022	TKN	Total Kjeldahl Nitrogen	0.0595	mg/L	U	N	UF	N38-2023-443	REG	EPA:351.2	0.033	-
CAMD-23-261144	R-46	11-15-2022	TKN	Total Kjeldahl Nitrogen	0.0782	mg/L	U	N	UF	N38-2023-443	REG	EPA:351.2	0.033	-
CAMD-22-235949	R-46	04-26-2022	8001-35-2	Toxaphene (Technical Grade)	0.149	ug/L	U	N	UF	2022-489	REG	SW-846:8081B	0.149	0.158
CAMD-22-235984	R-46	04-26-2022	8001-35-2	Toxaphene (Technical Grade)	0.156	ug/L	U	N	UF	2022-489	FD	SW-846:8081B	0.156	0.158
CAMD-23-261136	R-46	04-26-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	70
CAMD-22-235984	R-46	04-26-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	70
CAMD-23-261136	R-46	11-15-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	70
CAMD-23-261144	R-46	11-15-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	70
CAMD-23-261144	R-46	11-15-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	200
CAMD-22-235949	R-46	04-26-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	200
CAMD-22-235984	R-46	04-26-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	200
CAMD-23-261136	R-46	11-15-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	200
CAMD-22-235949	R-46	04-26-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMD-22-235984	R-46	04-26-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMD-23-261136	R-46	11-15-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMD-23-261144	R-46	11-15-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5
CAMD-22-235949	R-46	04-26-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	5
CAMD-22-235984	R-46	04-26-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	5
CAMD-23-261136	R-46	11-15-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	5
CAMD-23-261144	R-46	11-15-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	5
CAMD-22-235949	R-46	04-26-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	1,136.82
CAMD-22-235984	R-46	04-26-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	1,136.82
CAMD-23-261136	R-46	11-15-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	1,136.82
CAMD-23-261144	R-46	11-15-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	1,136.82
CAMD-22-235949	R-46	04-26-2022	95-95-4	Trichloropheno[2,4,5-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	1,165.98
CAMD-22-235984	R-46	04-26-2022	95-95-4	Trichloropheno[2,4,5-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	1,165.98
CAMD-23-261136	R-46	04-26-2022	95-95-4	Trichloropheno[2,4,5-]	3.16	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8270E	3.16	1,165.98
CAMD-23-261144	R-46	04-26-2022	95-95-4	Trichloropheno[2,4,5-]	3.13	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8270E	3.13	1,165.98
CAMD-22-235949	R-46	04-26-2022	88-06-2	Trichloropheno[2,4,6-]	3.16	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.16	11.88
CAMD-22-235984	R-46	04-26-2022	88-06-2	Trichloropheno[2,4,6-]	3.25	ug/L	U	N	UF	2022-489	REG	SW-846:8270E	3.25	11.88
CAMD-23-261136	R-46	04-26-2022	88-06-2	Trichloropheno[2,4,6-]	3.16	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8270E	3.16	11.88
CAMD-23-261144	R-46	04-26-2022	88-06-2	Trichloropheno[2,4,6-]	3.13	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8270E	3.13	11.88
CAMD-22-235949	R-46	04-26-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0856	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0856	9.8
CAMD-22-235984	R-46	04-26-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0872	ug/L	U	N	UF	2022-489	REG	SW-846:8330B	0.0872	9.8
CAMD-23-261136	R-46	11-15-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0818	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8330B	0.0818	9.8
CAMD-23-261144	R-46	11-15-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0817	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8330B	0.0817	9.8

Table 7. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-46 in 2022. 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-22-235953	R-46	04-26-2022	U	Uranium	0.448	ug/L	NQ	Y	F	2022-489	REG	EPA.200.8	0.067	30
CAMO-22-235987	R-46	04-26-2022	U	Uranium	0.446	ug/L	NQ	Y	F	2022-489	FD	EPA.200.8	0.067	30
CAMO-23-261137	R-46	11-15-2022	U	Uranium	0.391	ug/L	NQ	Y	F	N38-2023-443	REG	SW-846:6020B	0.067	30
CAMO-23-261145	R-46	11-15-2022	U	Uranium	0.389	ug/L	NQ	Y	F	N38-2023-443	REG	SW-846:6020B	0.067	30
CAMO-22-235949	R-46	04-26-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	2
CAMO-22-235984	R-46	04-26-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	2
CAMO-23-261136	R-46	11-15-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	2
CAMO-23-261144	R-46	11-15-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	2
CAMO-22-235949	R-46	04-26-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	1	620
CAMO-22-235984	R-46	04-26-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	1	620
CAMO-22-235949	R-46	04-26-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.333	192.995
CAMO-22-235984	R-46	04-26-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.333	192.995
CAMO-23-261136	R-46	11-15-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.333	192.995
CAMO-23-261144	R-46	11-15-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.333	192.995
CAMO-22-235949	R-46	04-26-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2022-489	REG	SW-846:8260D	0.5	396
CAMO-22-235984	R-46	04-26-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2022-489	FD	SW-846:8260D	0.5	396
CAMO-23-261136	R-46	11-15-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N38-2023-443	REG	SW-846:8260D	0.5	396
CAMO-23-261144	R-46	11-15-2022	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	N38-2023-443	FD	SW-846:8260D	0.5	396
CAMO-22-235953	R-46	04-26-2022	Zn	Zinc	4.05	ug/L	J	Y	F	2022-489	REG	EPA.200.7	3.3	10,000
CAMO-22-235987	R-46	04-26-2022	Zn	Zinc	6.86	ug/L	J	Y	F	2022-489	FD	EPA.200.7	3.3	10,000
CAMO-23-261137	R-46	11-15-2022	Zn	Zinc	3.3	ug/L	U	N	F	N38-2023-443	REG	SW-846:6010D	3.3	10,000
CAMO-23-261145	R-46	11-15-2022	Zn	Zinc	3.3	ug/L	U	N	F	N38-2023-443	FD	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.

UI - The analyte is classified as not detected, with an expectation that the reported result is 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.

J - The analyte is classified as detected but the reported concentration value is expected to be 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 - Unfiltered.

F - 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 NMAC 20.6.2.3103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

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

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

General Engineering Laboratories,
Inc., Charleston, SC.
Charleston SC

Chain of Custody/Analysis Request

COC/Lab Request #:
N3B-2023-443
Page 1 of 1

Client Contact:		Lab Agreement #: N3B		Site Name: N3B LANL	
Field Sample ID	Sample Date	Sample Time	Sample Matrix		
CAMO-23-261136	11/15/2022	10:24	W	EPA:335.4_CN(T)	
CAMO-23-261137	11/15/2022	10:24	W	EPA:351.2_TKN+SW-846:9060_TOC	SW-846:8330_CO_HEX
CAMO-23-261138	11/15/2022	10:24	W	EPA:351.2_TKN+SW-846:9060_TOC	SW-846:8260_IFGMP_VOA
CAMO-23-261144	11/15/2022	10:24	W	EPA:350.1_NH3+353.2_NO3/NO2+365.4_PO4	SW-846:7470_Hg
CAMO-23-261145	11/15/2022	10:24	W	EPA:351.2_TKN+SW-846:9060_TOC	SW-846:8330_CO_HEX
CAMO-23-261146	11/15/2022	10:24	W	EPA:351.2_TKN+SW-846:9060_TOC	SW-846:8260_IFGMP_VOA
CAMO-23-261440	11/15/2022	11:37	W	EPA:351.2_TKN+SW-846:9060_TOC	SW-846:8330_CO_HEX
				EPA:903.1_Ra226+904_Ra228_900.0_GrossAB	
				EPA:CO_GS+905.0_S90+HASL:300_Am+Pu+U	
				EPA:SC_pH_TDS_Anion_Mik+SW-846:ClO4	

Rad Screening Info:
Sample type has no DOT hazard classification

Lab Reporting Limit Type:
Method Detection Limit

Special Instructions:

Relinquished by: <i>Janee Onstott</i>	Print Name: <i>Janee Onstott</i>	Date/Time: <i>11/16/2022 12:15</i>	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

R-60, Annual 2022 – April 27, 2022

a	Sample Date	4/27/2022
b	Sample Time	1131
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))	5,904.83
g	Total depth of the well (ft below ground surface (bgs))	1,360.90
h	Total volume of water in the monitoring well prior to sample collection (gal)	38.31
i	Total volume of water purged prior to sample collection (gal)	118.59
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 5.91 Oxidation/Reduction Potential (MV): 165.3 Temp (deg C): 23.3 pH (SU): 7.96 Turbidity (NTU): 0.80 Specific Conductance (μ S/cm): 123.7
k	Description of sample methods	Attachment 5, Pages 76-77
l	Chain-of-Custody	Attachment 5, Pages 76-77
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 8

R-60, Annual 2022 – November 21, 2022

a	Sample Date	11/21/2022
b	Sample Time	1027
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))	5,904.54
g	Total depth of the well (ft below ground surface (bgs))	1,360.90
h	Total volume of water in the monitoring well prior to sample collection (gal)	38.02
i	Total volume of water purged prior to sample collection (gal)	114.05
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 6.49 Oxidation/Reduction Potential (MV): 218.4 Temp (deg C): 15.7 pH (SU): 7.99 Turbidity (NTU): 2.43 Specific Conductance (μ S/cm): 123.5
k	Description of sample methods	Attachment 5, Page 78
l	Chain-of-Custody	Attachment 5, Page 78
m	Location Map	Attachment 6
	Analytical Results	Attachment 5, Table 8

Table 8. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-60 in 2022. 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-22-235950	R-60	04-27-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	1.67	0.0415
CAMO-23-261139	R-60	11-21-2022	107-02-8	Acrolein	1.67	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	1.67	0.0415
CAMO-22-235950	R-60	04-27-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	1.67	0.5232
CAMO-23-261139	R-60	11-21-2022	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	1.67	0.5232
CAMO-22-235950	R-60	04-27-2022	309-00-2	Aldrin	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	0.002
CAMO-22-235954	R-60	04-27-2022	Al	Aluminum	19.3	ug/L	U	N	F	2022-496	REG	EPA:200.8	19.3	5,000
CAMO-23-261140	R-60	11-21-2022	Al	Aluminum	68	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:6010D	68	5,000
CAMO-22-235950	R-60	04-27-2022	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	1,721.3
CAMO-22-235954	R-60	04-27-2022	Sb	Antimony	1	ug/L	U	N	F	2022-496	REG	EPA:200.8	1	6
CAMO-23-261140	R-60	11-21-2022	Sb	Antimony	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	1	6
CAMO-22-235950	R-60	04-27-2022	12674-11-2	Aroclor-1016	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	11104-28-2	Aroclor-1221	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	11141-16-5	Aroclor-1232	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	53469-21-9	Aroclor-1242	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	12672-29-6	Aroclor-1248	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	11097-69-1	Aroclor-1254	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235950	R-60	04-27-2022	11096-82-5	Aroclor-1260	0.0348	ug/L	U	N	UF	2022-496	REG	SW-846:8082A	0.0348	5
CAMO-22-235954	R-60	04-27-2022	As	Arsenic	2	ug/L	U	N	F	2022-496	REG	EPA:200.8	2	10
CAMO-23-261140	R-60	11-21-2022	As	Arsenic	2	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	2	10
CAMO-22-235950	R-60	04-27-2022	1912-24-9	Atrazine	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	3
CAMO-22-235950	R-60	04-27-2022	103-33-3	Azobenzene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.7
CAMO-22-235954	R-60	04-27-2022	Ba	Barium	23.9	ug/L	NQ	Y	F	2022-496	REG	EPA:200.8	0.67	2,000
CAMO-23-261140	R-60	11-21-2022	Ba	Barium	26.6	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6010D	1	2,000
CAMO-22-235950	R-60	04-27-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	71-43-2	Benzene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3.9	0.001
CAMO-22-235950	R-60	04-27-2022	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	0.2
CAMO-22-235950	R-60	04-27-2022	205-99-2	Benzo(b)fluoranthene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	0.34
CAMO-22-235950	R-60	04-27-2022	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	3.43
CAMO-22-235954	R-60	04-27-2022	Be	Beryllium	0.2	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.2	4
CAMO-23-261140	R-60	11-21-2022	Be	Beryllium	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	1	4
CAMO-22-235950	R-60	04-27-2022	319-84-6	BHC(alpha-)]	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	0.069
CAMO-22-235950	R-60	04-27-2022	319-85-7	BHC(beta-)]	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	0.24
CAMO-22-235950	R-60	04-27-2022	58-89-9	BHC(gamma-)]	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	0.42
CAMO-22-235950	R-60	04-27-2022	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.14
CAMO-22-235950	R-60	04-27-2022	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	55.64
CAMO-22-235954	R-60	04-27-2022	B	Boron	15	ug/L	U	N	F	2022-496	REG	EPA:200.7	15	750
CAMO-23-261140	R-60	11-21-2022	B	Boron	17.6	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6010D	15	750
CAMO-22-235950	R-60	04-27-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	1.34
CAMO-23-261139	R-60	11-21-2022	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	1.34
CAMO-22-235950	R-60	04-27-2022	75-25-2	Bromoforn	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	32.85
CAMO-23-261139	R-60	11-21-2022	75-25-2	Bromoforn	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	32.85
CAMO-22-235950	R-60	04-27-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.337	7.54
CAMO-23-261139	R-60	11-21-2022	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.337	7.54
CAMO-22-235954	R-60	04-27-2022	Cd	Cadmium	0.3	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.3	5
CAMO-23-261140	R-60	11-21-2022	Cd	Cadmium	0.3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.3	5
CAMO-22-235950	R-60	04-27-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	57-74-9	Chlordane(alpha/gamma)	0.0828	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.0828	0.45
CAMO-23-261140	R-60	11-21-2022	Cl(-1)	Chloride	1.81	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.067	250
CAMO-22-235950	R-60	04-27-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	77.57

Table 8. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-60 in 2022. 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-23-261139	R-60	11-21-2022	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	77.57
CAMO-22-235950	R-60	04-27-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	100
CAMO-23-261139	R-60	11-21-2022	67-66-3	Chloroform	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	100
CAMO-22-235950	R-60	04-27-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	20.32
CAMO-23-261139	R-60	11-21-2022	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	20.32
CAMO-22-235954	R-60	04-27-2022	Cr	Chromium	5.16	ug/L	J	Y	F	2022-496	REG	EPA:200.8	3	50
CAMO-23-261140	R-60	11-21-2022	Cr	Chromium	5.31	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6020B	3	50
CAMO-22-235954	R-60	04-27-2022	Co	Cobalt	0.3	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.3	50
CAMO-23-261140	R-60	11-21-2022	Co	Cobalt	1	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	1	50
CAMO-22-235954	R-60	04-27-2022	Cu	Copper	0.3	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.3	1,000
CAMO-23-261140	R-60	11-21-2022	Cu	Copper	3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	3	1,000
CAMO-22-235950	R-60	04-27-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	2022-496	REG	EPA:335.4	0.00167	0.2
CAMO-23-261139	R-60	11-21-2022	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	UF	N3B-2023-502	REG	EPA:335.4	0.00167	0.2
CAMO-22-235950	R-60	04-27-2022	50-29-3	DDT[4,4']	0.0108	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.0108	2.29
CAMO-23-261139	R-60	11-21-2022	106-93-4	Dibromoethane[1,2]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	0.05
CAMO-22-235950	R-60	04-27-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	7.997
CAMO-23-261139	R-60	11-21-2022	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	7.997
CAMO-22-235950	R-60	04-27-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	600
CAMO-23-261139	R-60	11-21-2022	95-50-1	Dichlorobenzene[1,2]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	600
CAMO-22-235950	R-60	04-27-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	75
CAMO-23-261139	R-60	11-21-2022	106-46-7	Dichlorobenzene[1,4]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	75
CAMO-22-235950	R-60	04-27-2022	91-94-1	Dichlorobenzidine[3,3']	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1.25
CAMO-23-261139	R-60	11-21-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.355	197.2
CAMO-22-235950	R-60	04-27-2022	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.355	197.2
CAMO-23-261139	R-60	11-21-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	25
CAMO-22-235950	R-60	04-27-2022	75-34-3	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	25
CAMO-23-261139	R-60	11-21-2022	107-06-2	Dichloroethane[1,2]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	75-35-4	Dichloroethane[1,1]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	7
CAMO-22-235950	R-60	04-27-2022	156-59-2	Dichloroethene[1,1]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	70
CAMO-23-261139	R-60	11-21-2022	156-59-2	Dichloroethene[1,2]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	70
CAMO-22-235950	R-60	04-27-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	100
CAMO-23-261139	R-60	11-21-2022	156-60-5	Dichloroethene[trans-1,2]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	100
CAMO-22-235950	R-60	04-27-2022	120-83-2	Dichloroethene[trans-1,2]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	45.3
CAMO-23-261139	R-60	11-21-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	78-87-5	Dichloropropane[1,2]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	542-75-6	Dichloropropene[trans-1,3]	0.5	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.5	4.71
CAMO-22-235950	R-60	04-27-2022	60-57-1	Dieldrin	0.0108	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.0108	0.018
CAMO-23-261139	R-60	11-21-2022	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	14,800.52
CAMO-22-235950	R-60	04-27-2022	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	611.56
CAMO-23-261139	R-60	11-21-2022	84-74-2	Di-n-butylphthalate	0.88	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	884.80
CAMO-22-235950	R-60	04-27-2022	534-52-1	Dinitro-2-methylphenol[4,6-]	5	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1.52
CAMO-23-261139	R-60	11-21-2022	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	5	38.67
CAMO-22-235950	R-60	04-27-2022	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	2.37
CAMO-23-261139	R-60	11-21-2022	121-14-2	Dinitrotoluene[2,4-]	0.083	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	2.37
CAMO-22-235950	R-60	04-27-2022	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.49
CAMO-23-261139	R-60	11-21-2022	606-20-2	Dinitrotoluene[2,6-]	0.083	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	0.49
CAMO-22-235950	R-60	04-27-2022	123-91-1	Dioxane[1,4-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	4.59
CAMO-23-261139	R-60	11-21-2022	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	122

Table 8. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-60 in 2022. 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-22-235950	R-60	04-27-2022	959-98-8	Endosulfan I	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	98.7
CAMO-22-235950	R-60	04-27-2022	33213-65-9	Endosulfan II	0.0108	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.0108	98.7
CAMO-22-235950	R-60	04-27-2022	72-20-8	Endrin	0.0108	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.0108	2.23
CAMO-22-235950	R-60	04-27-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	700
CAMO-23-261139	R-60	11-21-2022	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	700
CAMO-22-235950	R-60	04-27-2022	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	802.198
CAMO-22-235950	R-60	04-27-2022	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	287.64
CAMO-23-261140	R-60	11-21-2022	F(-1)	Fluoride	0.246	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.033	1.6
CAMO-22-235950	R-60	04-27-2022	76-44-8	Heptachlor	0.00719	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.00719	0.022
CAMO-22-235950	R-60	04-27-2022	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.098
CAMO-22-235950	R-60	04-27-2022	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1.39
CAMO-22-235950	R-60	11-21-2022	87-68-3	Hexachlorobutadiene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	1.39
CAMO-22-235950	R-60	04-27-2022	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.41
CAMO-22-235950	R-60	04-27-2022	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	3.28
CAMO-22-235950	R-60	04-27-2022	2691-41-0	HMX	0.0879	ug/L	U	N	UF	2022-496	REG	SW-846:8330B	0.0879	1,001.11
CAMO-22-235950	R-60	11-21-2022	2691-41-0	HMX	0.083	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	1,001.11
CAMO-22-235954	R-60	04-27-2022	Fe	Iron	30	ug/L	U	N	F	2022-496	REG	EPA:200.7	30	1,000
CAMO-23-261140	R-60	11-21-2022	Fe	Iron	30	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	30	1,000
CAMO-22-235950	R-60	04-27-2022	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3.5	780.63
CAMO-22-235954	R-60	04-27-2022	Pb	Lead	0.5	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.5	15
CAMO-23-261140	R-60	11-21-2022	Pb	Lead	0.5	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.5	15
CAMO-22-235954	R-60	04-27-2022	Mn	Manganese	2	ug/L	U	N	F	2022-496	REG	EPA:200.7	2	200
CAMO-23-261140	R-60	11-21-2022	Mn	Manganese	2	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6010D	2	200
CAMO-22-235950	R-60	04-27-2022	Hg	Mercury	0.067	ug/L	U	N	UF	2022-496	REG	EPA:245.2	0.067	2
CAMO-22-235954	R-60	04-27-2022	Hg	Mercury	0.067	ug/L	U	N	F	2022-496	REG	EPA:245.2	0.067	2
CAMO-23-261139	R-60	11-21-2022	Hg	Mercury	0.067	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:7470A	0.067	2
CAMO-23-261140	R-60	11-21-2022	Hg	Mercury	0.067	ug/L	U	N	F	N3B-2023-502	REG	SW-846:7470A	0.067	2
CAMO-22-235950	R-60	04-27-2022	1634-04-4	Methyl tert-Butyl Ether	0.067	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.067	100
CAMO-23-261139	R-60	11-21-2022	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	100
CAMO-22-235950	R-60	04-27-2022	75-09-2	Methylene Chloride	1.55	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.5	5
CAMO-23-261139	R-60	11-21-2022	75-09-2	Methylene Chloride	0.5	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.5	5
CAMO-22-235950	R-60	04-27-2022	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	30
CAMO-22-235950	R-60	04-27-2022	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	30
CAMO-22-235954	R-60	04-27-2022	Mo	Molybdenum	1.04	ug/L	NQ	Y	F	2022-496	REG	EPA:200.8	0.2	1,000
CAMO-23-261140	R-60	11-21-2022	Mo	Molybdenum	0.983	ug/L	J	Y	F	N3B-2023-502	REG	SW-846:6020B	0.2	1,000
CAMO-22-235950	R-60	04-27-2022	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	30
CAMO-23-261139	R-60	11-21-2022	91-20-3	Naphthalene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	30
CAMO-22-235954	R-60	04-27-2022	Ni	Nickel	0.6	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.6	200
CAMO-23-261140	R-60	11-21-2022	Ni	Nickel	0.6	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.6	200
CAMO-23-261140	R-60	11-21-2022	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.396	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:353.2	0.017	10
CAMO-22-235958	R-60	04-27-2022	NO2	Nitrite	0.033	mg/L	R	N	F	2022-495	REG	EPA:300.0	0.033	1
CAMO-22-235958	R-60	04-27-2022	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1,404
CAMO-23-261139	R-60	11-21-2022	98-95-3	Nitrobenzene	0.083	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	1,404
CAMO-22-235950	R-60	04-27-2022	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.0017
CAMO-22-235950	R-60	04-27-2022	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.0049
CAMO-22-235950	R-60	04-27-2022	924-16-3	Nitroso-dl-n-butylamine[N-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.027
CAMO-22-235950	R-60	04-27-2022	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	0.37
CAMO-22-235950	R-60	04-27-2022	108-60-1	Oxybis[1-chloropropane][2,2-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	9.8
CAMO-22-235950	R-60	04-27-2022	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	3.07
CAMO-22-235950	R-60	04-27-2022	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1
CAMO-23-261140	R-60	11-21-2022	ClO4	Perchlorate	0.336	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6850	0.05	13.82

Table 8. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-60 in 2022. 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-22-235950	R-60	04-27-2022	355-46-4	Perfluorohexanesulfonic acid	0.598	ng/L	U	N	UF	2022-496	REG	EPA-537M	0.598	401.10
CAMO-22-235950	R-60	04-27-2022	1763-23-1	Perfluorooctanesulfonic acid	0.724	ng/L	U	N	UF	2022-496	REG	EPA-537M	0.724	60.16
CAMO-22-235950	R-60	04-27-2022	335-67-1	Perfluorooctanoic acid	0.724	ng/L	U	N	UF	2022-496	REG	EPA-537M	0.724	60.16
CAMO-22-235950	R-60	04-27-2022	pH	pH	7.96	SU							6-9	6-9
CAMO-22-235950	R-60	11-21-2022	pH	pH	7.99	SU							6-9	6-9
CAMO-22-235950	R-60	04-27-2022	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	170.4
CAMO-22-235950	R-60	04-27-2022	108-95-2	Phenol	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	5
CAMO-22-235950	R-60	04-27-2022	1610-18-0	Prometon	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	249.93
CAMO-22-235950	R-60	04-27-2022	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	0.3	117.42
CAMO-22-235950	R-60	04-27-2022	Ra-226+228	Radium-226 and Radium-228	0.578	pCi/L	U	N	UF	2022-496	REG	Generic:Radium by Calculation	-	5
CAMO-23-261139	R-60	11-21-2022	Ra-226+228	Radium-226 and Radium-228	0.975	pCi/L	NQ	N	UF	N3B-2023-502	REG	Generic:Radium by Calculation	-	5
CAMO-22-235950	R-60	04-27-2022	121-82-4	RDX	0.0879	ug/L	U	N	UF	2022-496	REG	SW-846:8330B	0.0879	9.66
CAMO-23-261139	R-60	11-21-2022	121-82-4	RDX	0.083	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	9.66
CAMO-22-235954	R-60	04-27-2022	Se	Selenium	1.5	ug/L	U	N	F	2022-496	REG	EPA:200.8	1.5	50
CAMO-23-261140	R-60	11-21-2022	Se	Selenium	1.5	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	1.5	50
CAMO-22-235954	R-60	04-27-2022	Ag	Silver	0.3	ug/L	U	N	F	2022-496	REG	EPA:200.8	0.3	50
CAMO-23-261140	R-60	11-21-2022	Ag	Silver	0.3	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.3	50
CAMO-22-235950	R-60	04-27-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	100
CAMO-23-261139	R-60	11-21-2022	100-42-5	Styrene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	100
CAMO-22-235954	R-60	04-27-2022	S04(-2)	Sulfate	1.92	mg/L	NQ	Y	F	2022-496	REG	EPA:300.0	0.133	600
CAMO-23-261140	R-60	11-21-2022	S04(-2)	Sulfate	1.9	mg/L	NQ	Y	F	N3B-2023-502	REG	EPA:300.0	0.133	600
CAMO-22-235950	R-60	04-27-2022	126-33-0	Sulfolane	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	20.03
CAMO-22-235950	R-60	04-27-2022	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1.66
CAMO-23-261139	R-60	11-21-2022	630-20-6	Tetrachloroethane[1,1,1,2-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5.74
CAMO-22-235950	R-60	04-27-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	10
CAMO-23-261139	R-60	11-21-2022	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	10
CAMO-22-235950	R-60	04-27-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-22-235954	R-60	04-27-2022	Tl	Thallium	0.6	ug/L	U	N	UF	2022-496	REG	EPA:200.8	0.6	2
CAMO-23-261140	R-60	11-21-2022	Tl	Thallium	0.6	ug/L	U	N	F	N3B-2023-502	REG	SW-846:6020B	0.6	2
CAMO-22-235950	R-60	04-27-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	1,000
CAMO-23-261139	R-60	11-21-2022	108-88-3	Toluene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	1,000
CAMO-23-261140	R-60	11-21-2022	TDS	Total Dissolved Solids	167	mg/L	J	Y	F	N3B-2023-502	REG	EPA:160.1	2.38	1,000
CAMO-22-235950	R-60	04-27-2022	TKN	Total Kjeldahl Nitrogen	0.0977	mg/L	J	Y	UF	2022-496	REG	EPA:351.2	0.033	-
CAMO-23-261139	R-60	11-21-2022	TKN	Total Kjeldahl Nitrogen	0.0549	mg/L	U	N	UF	N3B-2023-502	REG	EPA:351.2	0.033	-
CAMO-22-235950	R-60	04-27-2022	8001-35-2	Toxaphene (Technical Grade)	0.162	ug/L	U	N	UF	2022-496	REG	SW-846:8081B	0.162	0.158
CAMO-23-261139	R-60	11-21-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	70
CAMO-22-235950	R-60	04-27-2022	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	70
CAMO-22-235950	R-60	04-27-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	200
CAMO-23-261139	R-60	11-21-2022	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	200
CAMO-22-235950	R-60	04-27-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	5
CAMO-23-261139	R-60	11-21-2022	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	5
CAMO-22-235950	R-60	04-27-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	1,136.82
CAMO-23-261139	R-60	11-21-2022	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	1,136.82
CAMO-22-235950	R-60	04-27-2022	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	1,165.98
CAMO-23-261139	R-60	04-27-2022	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2022-496	REG	SW-846:8270E	3	11.88
CAMO-22-235950	R-60	04-27-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0879	ug/L	U	N	UF	2022-496	REG	SW-846:8330B	0.0879	9.8

Table 8. Analytical Results from Annual Groundwater Sampling of Regional Monitoring Well R-60 in 2022. 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-23-261139	R-60	11-21-2022	118-96-7	Trinitrotoluene[2,4,6-]	0.0830	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8330B	0.083	9.8
CAMO-22-235954	R-60	04-27-2022	U	Uranium	0.464	ug/L	NQ	Y	F	2022-496	REG	EPA:200.8	0.067	30
CAMO-23-261140	R-60	11-21-2022	U	Uranium	0.504	ug/L	NQ	Y	F	N3B-2023-502	REG	SW-846:6020B	0.067	30
CAMO-22-235950	R-60	04-27-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	2
CAMO-23-261139	R-60	11-21-2022	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	2
CAMO-22-235950	R-60	04-27-2022	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	1	620
CAMO-22-235950	R-60	04-27-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.333	192.995
CAMO-23-261139	R-60	11-21-2022	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.333	192.995
CAMO-22-235950	R-60	04-27-2022	Xylene[m+p]	Xylene[1,3-]Xylene[1,4-]	0.5	ug/L	U	N	UF	2022-496	REG	SW-846:8260D	0.5	396
CAMO-23-261139	R-60	11-21-2022	Xylene[m+p]	Xylene[1,3-]Xylene[1,4-]	0.5	ug/L	U	N	UF	N3B-2023-502	REG	SW-846:8260D	0.5	396
CAMO-22-235954	R-60	04-27-2022	Zn	Zinc	5.22	ug/L	J	Y	F	2022-496	REG	EPA:200.7	3.3	10,000
CAMO-23-261140	R-60	11-21-2022	Zn	Zinc	6.85	ug/L	J	Y	F	N3B-2023-502	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.

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

R - The reported sample result is classified as rejected due to serious noncompliances regarding quality control acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.

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

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

⁴UF - Unfiltered.

F - Filtered.

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

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 NMAC 20.6.2.3103 where available, otherwise the value 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 ug/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

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

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

Client Contact: **Lab Agreement 620266** Site Name: Los Alamos National Laboratory

Project Number: LANL
Analysis Turnaround: 24 Hour - Other -
7 Days - 14 Days - 21 Days - 28 Days -

Event - 14048
Event ID: 14048

Field Sample ID	Sample Date	Sample Time	Sample Matrix	DP-8082-PCBs	DP-CN(TOTAL)	DP-Hg	DP-Metals	DP-Ra226+228	DP-SO4	DP-TKN	DP-TP-8081-PEST	DP-TP-8260-VOCs	DP-TP-8270-SVOCs	DP-TP-8330-HEXP	DP-TP-PFAS (subst) unpreserved
CAMO-22-235950	04/27/2022	11:31	W	2	1	1	1	4	1	1	3	2	2	3	4
CAMO-22-235954	04/27/2022	11:31	W						1						
CAMO-22-235962	04/27/2022	11:31	W									2			
CAMO-22-235965	04/27/2022	11:31	W											4	

Rad Screening Info:
Acceptable knowledge identifies no DOT hazard classification

Lab Reporting Limit
Method Detection Limit

Special Instructions:

Relinquished by: *[Signature]* Date/Time: *[Blank]*

Relinquished by: *[Signature]* Date/Time: *[Blank]*

Relinquished by: *[Signature]* Date/Time: *[Blank]*

Print Name: *[Signature]* Received by: *[Signature]* Date/Time: *[Blank]*

Print Name: *[Signature]* Received by: *[Signature]* Date/Time: *[Blank]*

Print Name: *[Signature]* Received by: *[Signature]* Date/Time: *[Blank]*

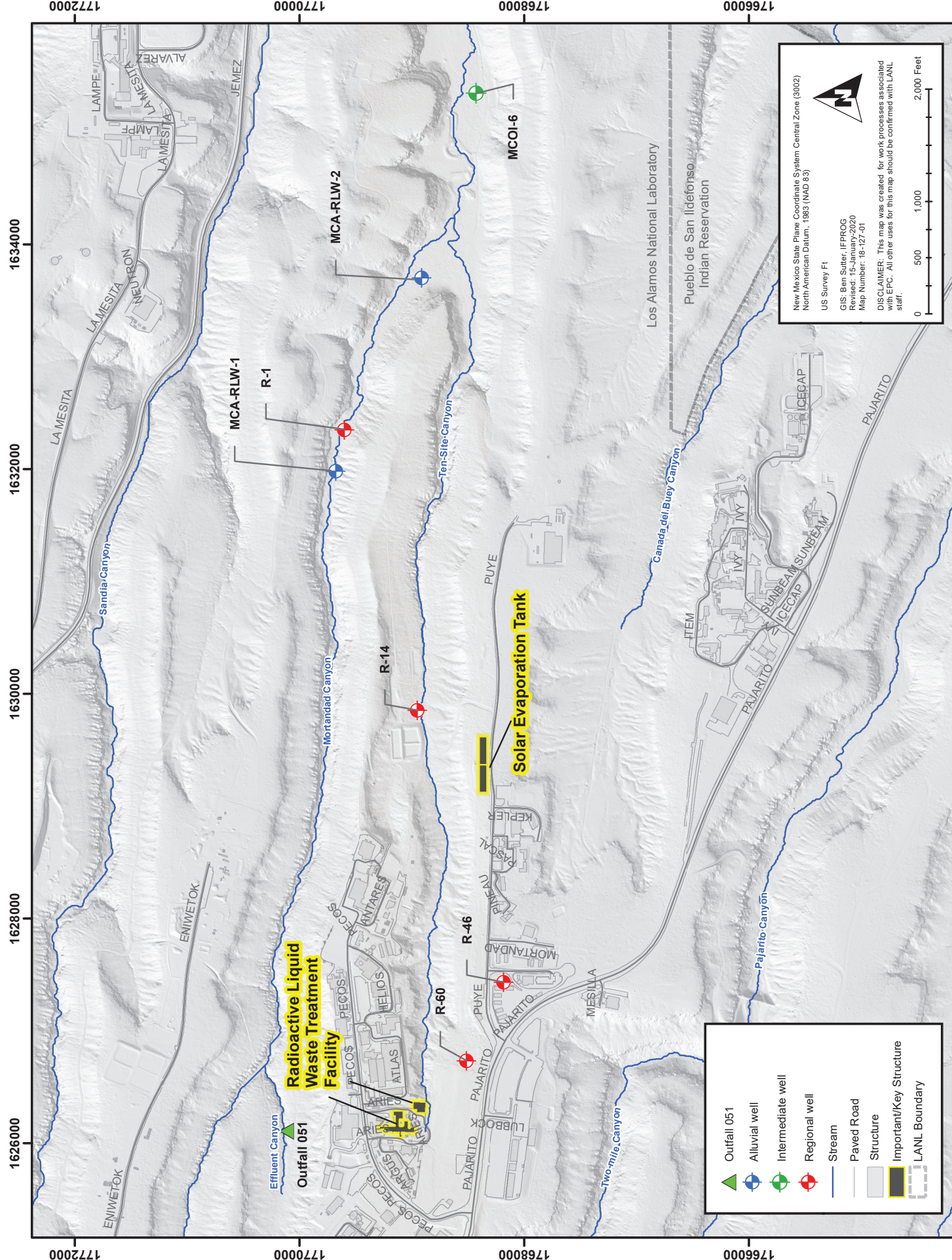
Attachment 6

Monitoring Well Location Map

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023



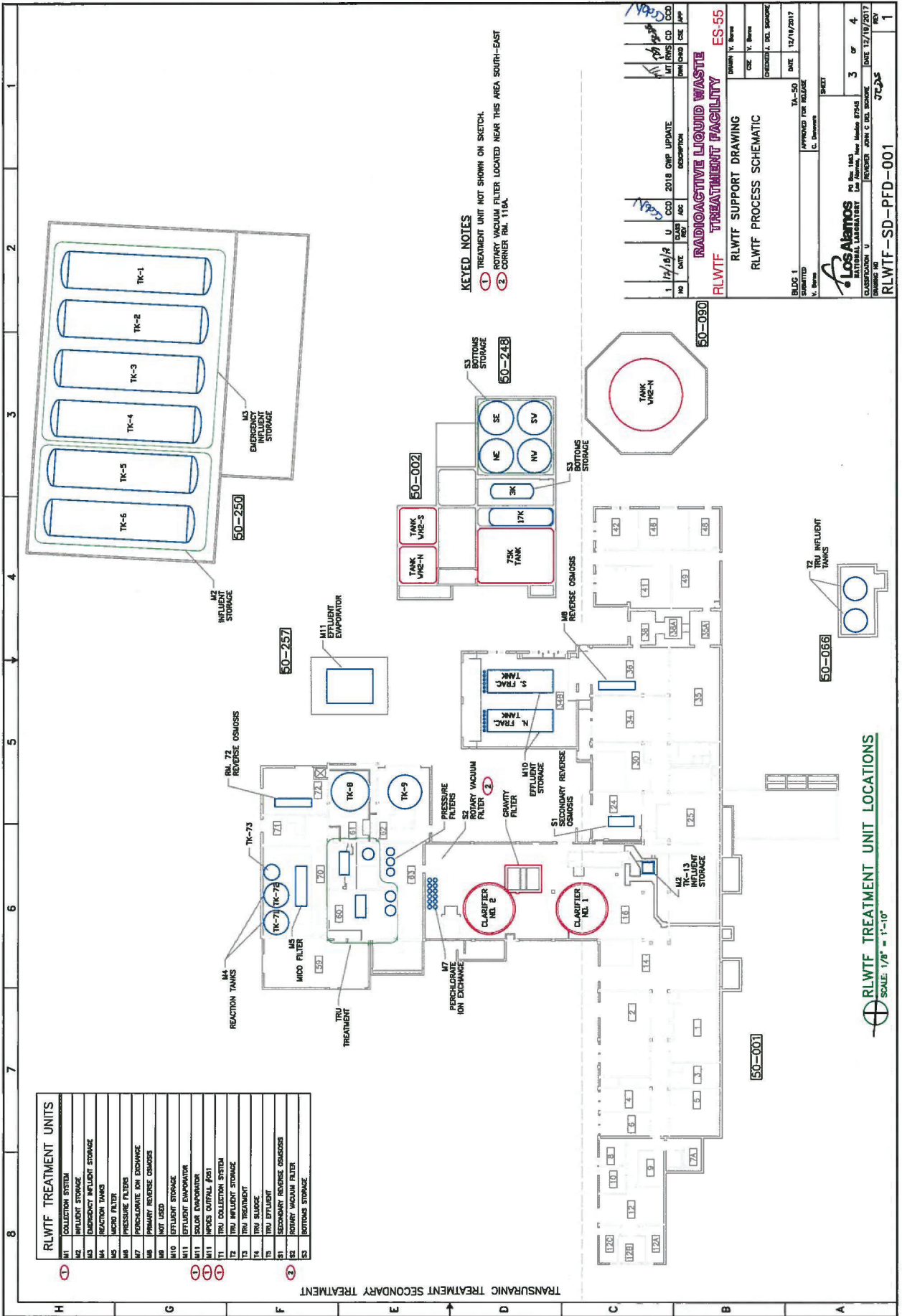
Attachment 7

All Major Structures at the RLWTF - Updated Schematic

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023



RLWTF TREATMENT UNITS	
M1	COLLECTION SYSTEM
M2	INFLUENT STORAGE
M3	EMERGENCY INFLUENT STORAGE
M4	REACTION TANKS
M5	MICRO FILTER
M6	PRESSURE FILTERS
M7	PERCHLORATE ION EXCHANGE
M8	PRIMARY REVERSE OSMOSIS
M9	NOT USED
M10	EFFLUENT STORAGE
M11	EFFLUENT EVAPORATOR
M12	SOLER EVAPORATOR
M13	HOSES (EXTRALU 303)
M14	RW COLLECTION SYSTEM
M15	RW INFLUENT STORAGE
M16	RW TREATMENT
M17	RW SLUDGE
M18	RW EFFLUENT
M19	SECONDARY REVERSE OSMOSIS
M20	ROTARY VACUUM FILTER
M21	BOTTOMS STORAGE

KEYED NOTES

- ① TREATMENT UNIT NOT SHOWN ON SKETCH.
- ② ROTARY VACUUM FILTER LOCATED NEAR THIS AREA SOUTH-EAST
- ③ CORNER RM. 118A

1. 12/18/17 U. CCO 2018 OPR UPDATE
 DATE DATE U. CCO 2018 OPR UPDATE
 SUBMITTED BY DATE U. CCO 2018 OPR UPDATE
 APPROVED FOR RELEASE
 TA-50
 DATE 12/18/2017
 C. Deveraux
 SHEET
 3 OF 4
 Los Alamos NATIONAL LABORATORY
 7000 South Street, Los Alamos, NM 87545
 DATE 12/18/2017
 REVISION JOHN C DEL SORICO
 CLASSIFICATION U
 RLWTF-SD-PFD-001
 37345
 1

RLWTF TREATMENT UNIT LOCATIONS
 SCALE: 1/8" = 1'-10"

Attachment 8

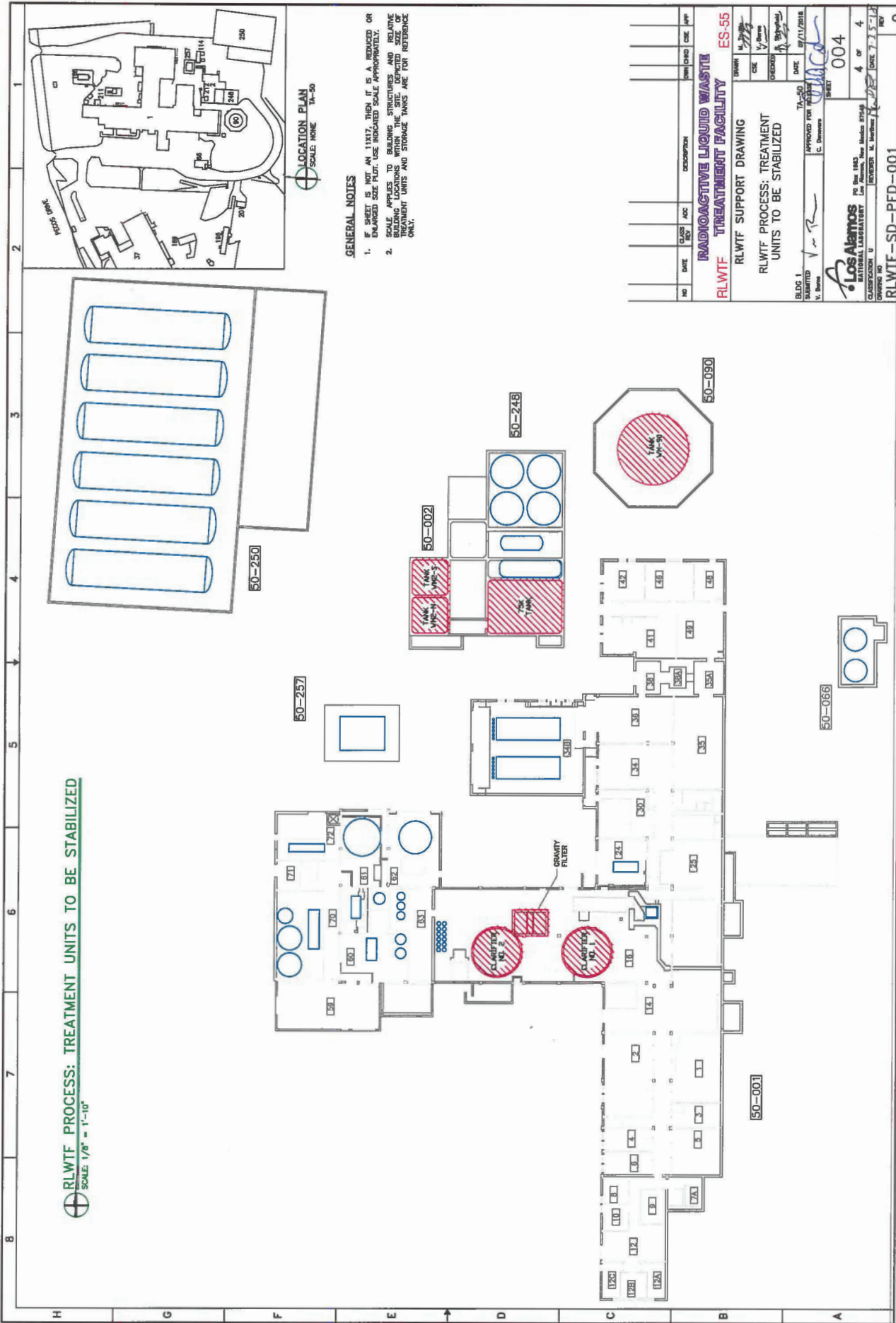
Treatment Units to be Stabilized at the RLWTF - Updated Schematic

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

RLWTF PROCESS: TREATMENT UNITS TO BE STABILIZED
SCALE: 1/8" = 1'-10"



GENERAL NOTES

- IF SURVEY IS NOT AT 1/8" = 1'-10", SHOW IT AS A REDUCED OR ENLARGED SIZE PLAT. USE INDICATED SCALE APPROVED FOR THIS SCALE APPLIES TO BUILDING STRUCTURES AND BUILDING LOCATIONS WITHIN THE SITE. INDICATED SCALE OF TREATMENT UNITS AND STORAGE TANKS ARE FOR REFERENCE ONLY.

LOCATION PLAN
SCALE: NONE
TR-50

NO.	DATE	CLASS	ISS	DESCRIPTION	DESIGNED	CHECKED	APP.
RADIOACTIVE LIQUID WASTE TREATMENT FACILITY ES-55							
RLWTF SUPPORT DRAWING							
RLWTF PROCESS: TREATMENT UNITS TO BE STABILIZED							
BLDG 1				TR-50	DATE	07/11/2018	
N. DRAWN				APPROVED FOR	DATE	07/11/2018	
C. DRAWN							
Los Alamos NATIONAL LABORATORY				CLASSIFICATION U			
REVISION 1				REVISION 2			
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REVISION 479				REVISION 480			
REVISION 481				REVISION 482			
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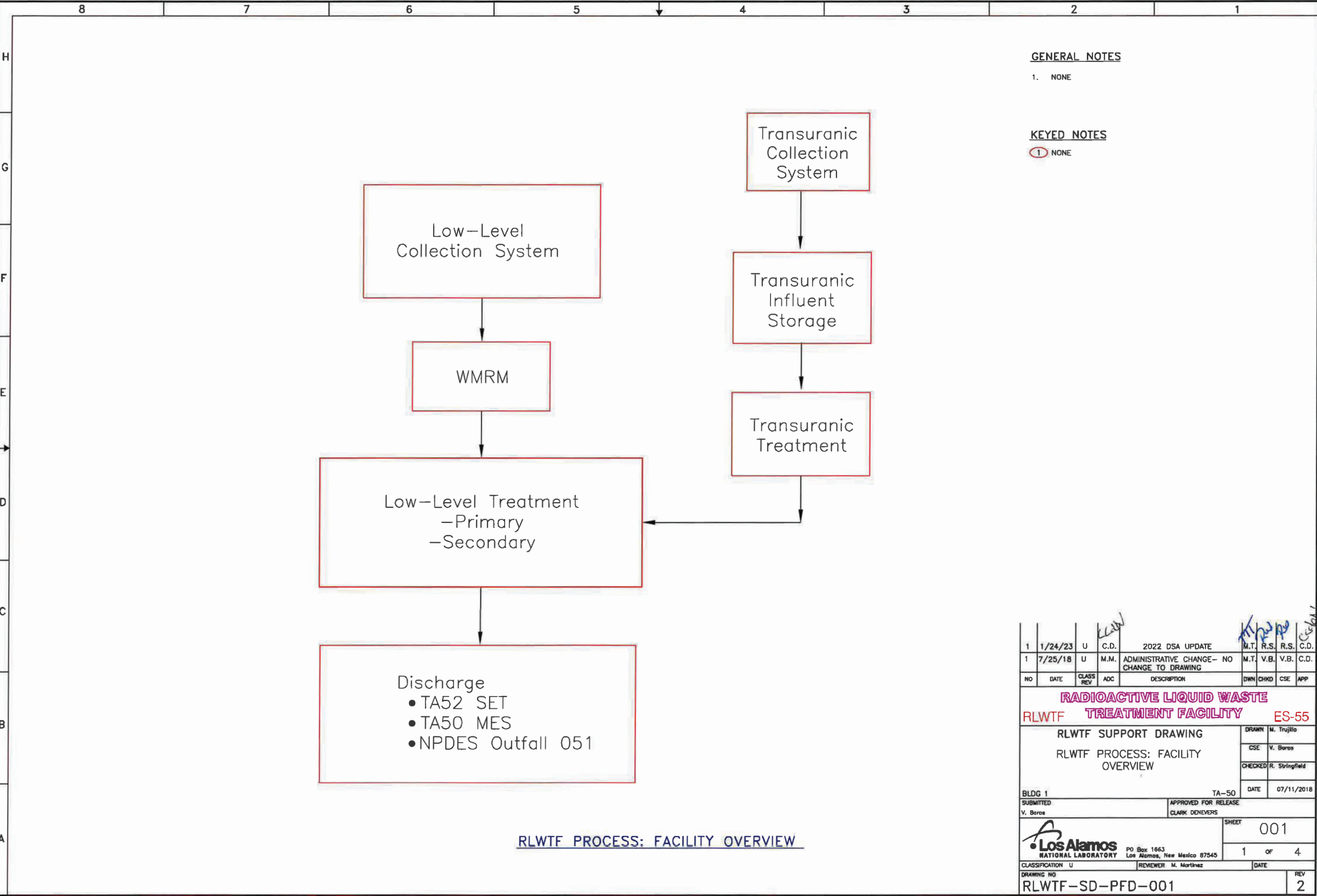
Attachment 9

Current Treatment Process Overview at the RLWTF - Flow Chart

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023



GENERAL NOTES

1. NONE

KEYED NOTES

① NONE

NO	DATE	CLASS REV	ADC	DESCRIPTION	DWN	CHKD	CSE	APP
1	1/24/23	U	C.D.	2022 DSA UPDATE	M.T.	R.S.	R.S.	C.D.
1	7/25/18	U	M.M.	ADMINISTRATIVE CHANGE-- NO CHANGE TO DRAWING	M.T.	V.B.	V.B.	C.D.

RADIOACTIVE LIQUID WASTE

RLWTF TREATMENT FACILITY ES-55

RLWTF SUPPORT DRAWING
 RLWTF PROCESS: FACILITY OVERVIEW

BLDG 1	TA-50	DATE	07/11/2018
SUBMITTED	APPROVED FOR RELEASE		
V. Boras	CLARK DENEVERS		

Los Alamos NATIONAL LABORATORY
 PO Box 1663
 Los Alamos, New Mexico 87545

CLASSIFICATION U REVIEWER M. Martinez DATE

DRAWING NO RLWTF-SD-PFD-001 REV 2

RLWTF PROCESS: FACILITY OVERVIEW

Plotted By: #11111 Plot Date: January 24, 2023
 RLWTF PROCESS SCHEMATIC REV 2.DWG

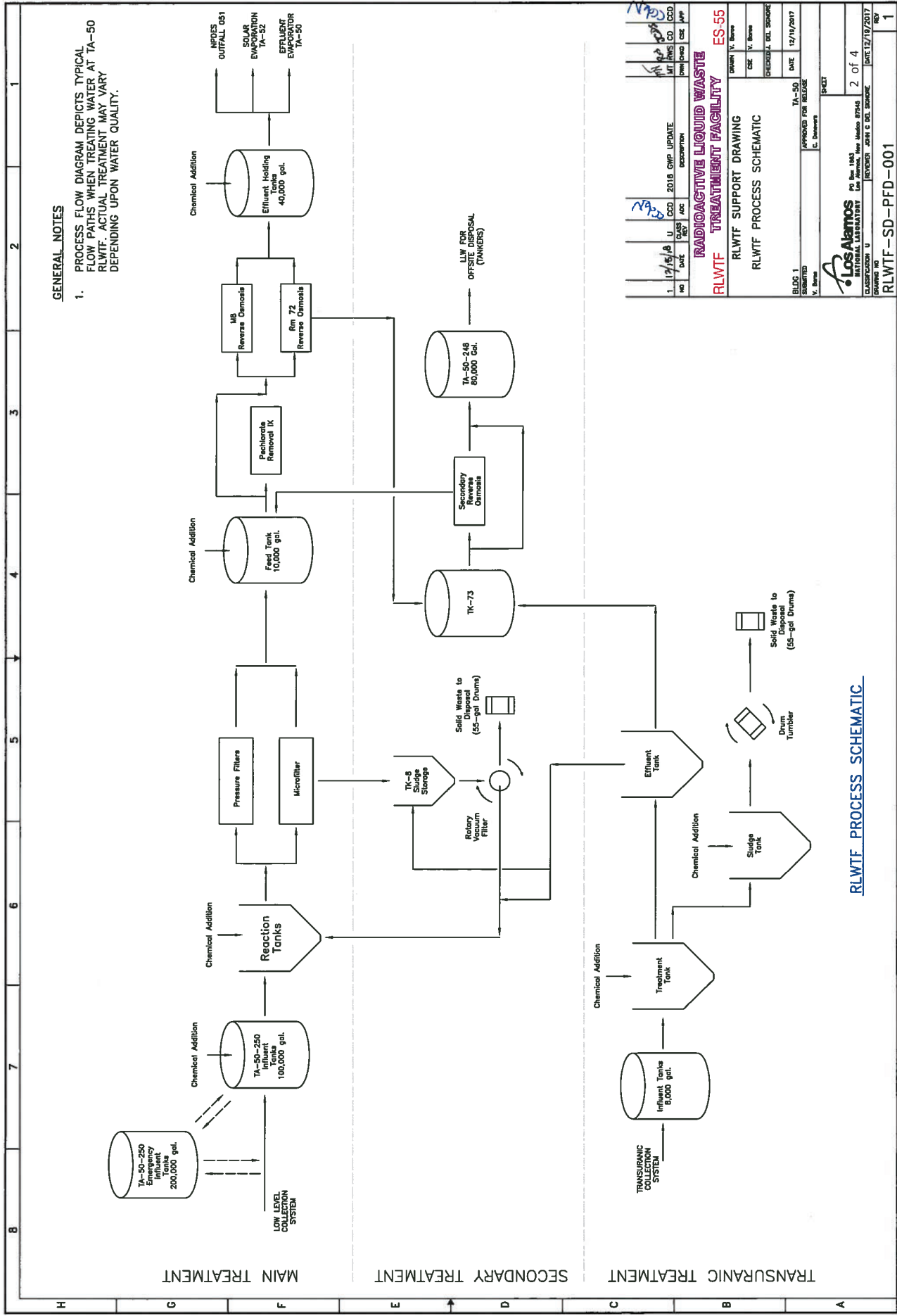
Attachment 10

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

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023



GENERAL NOTES

1. PROCESS FLOW DIAGRAM DEPICTS TYPICAL FLOW PATHS WHEN TREATING WATER AT TA-50 RLWTF. ACTUAL TREATMENT MAY VARY DEPENDING UPON WATER QUALITY.

RLWTF PROCESS SCHEMATIC

RADIOACTIVE LIQUID WASTE RLWTF TREATMENT FACILITY ES-55	
1. 12/15/18 U. CD. 2018 GMP UPDATE DATE REV. NO. OCCASION	DATE DES. JEFF DATE CON. JEFF
DRAWN BY: B. BROWN CHECKED BY: B. BROWN CREATED BY: B. BROWN	DATE: 12/19/2017 PREPARED FOR: RLWTF BY: C. DENVERS
BLDG 1 DRAWING NO. RLWTF-SD-PFD-001	SHEET NO. 2 OF 4 DATE: 12/19/2017 REVISION: JOHN C. DENVERS

Attachment 11

RLWTF Systems and Treatment Units - Narrative Description

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

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

Either of two reverse osmosis units can be used, the Room 72 single-pass unit, or the Room 36 double-pass unit (referred to as the M8 unit). The double-pass 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 Room 72 unit has three 8-inch-diameter pressure vessels, and operates at pressures of about 400 psig. The M8 unit has three 8-inch-diameter pressure vessels (first pass) and six 4-inch-diameter pressure vessels (second pass). Permeate from either unit is sent to storage tanks in Room 34B; concentrate from either unit is processed through the secondary treatment process. The Room 72 reverse osmosis unit has a capacity up to 60 gpm; 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 waste (~3,900 gallons) and the other for caustic waste (~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 waste is pumped from Building 50-66 into TK1 in Room 60. Acid waste is neutralized by mixing with liquid sodium hydroxide (nominal 25%); other chemicals (ferric sulfate or polymer) may be added to promote particle growth. Caustic waste requires less sodium hydroxide, and is also treated with chemicals 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. Clear liquid 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. Chemicals (lime, ferric sulfate, or polymer) may also be added to TK-7A for this purpose. 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 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 either receives additional treatment or is sent to storage tanks in Building 50-248 for disposition as bottoms.

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.

TABLE 2: VESSEL INFORMATION FOR RLWTF TREATMENT UNITS

Treatment Unit	Vessel(s)	Location	Vessel			Secondary Containment		
			Capacity	Category	Material	Structure	Material	Leak Detection
Main Treatment:								
M1 Collection system	Piping (~ 4 miles) Vaults (63)	Six TAS Six TAS	---	Inground	Polyethylene Concrete	Pipe Floor	Polyethylene Concrete	63 alarms 63 alarms
M2 Influent storage	WMRM tanks (2) Xfer piping	50-250-003 50-250-004	50,000 ea.	Aboveground	Fiberglass Polyethylene	Floor Pipe	Concrete Polyethylene	250_SMP3 250_Inf, 250_Eff
M3 Emergency influent storage	Xfer pump room WMRM tanks (4)	50-250-001 50-250-003	---	Aboveground	Steel Fiberglass	Floor Floor	Concrete Concrete	PLC250_SMP1 250_SMP3
M4 Reaction Tanks	TK71, TK72	50-01-70	10,000 ea.	Aboveground	Steel	Floor	Concrete	RUF_71A_A1
M5 Microfilter	Filter Concentrate tank	50-01-70 50-01-70	40 500	Aboveground	Steel Polyethylene	Floor Floor	Concrete Concrete	RUF_71A_A1 RUF_71A_A1
M6 Pressure filters	Cleaning tanks (2) Filters (3)	50-01-70 50-01-63	400 300	Onground	Polyethylene Lined Steel	Floor Floor	Concrete Concrete	RUF_71A_A1 SMP_16_A2
M7 Perchlorate ion exchange	IX vessels (8)	50-01-16	400	Aboveground	Fiberglass	Floor	Concrete	SMP_16_A2
M8 Primary reverse osmosis	TK09 R72 RO unit R72 CIP tank M8 RO unit M8 CIP tank	50-01-62 50-01-72 50-01-72 50-01-36 50-01-36	10,000 40 500 60 300	Aboveground	Steel Steel Polyethylene Fiberglass Polyethylene	Floor Floor Floor Floor Floor	Concrete Concrete Concrete Concrete Concrete	ID RUF_71A_A1 RUF_71A_A1 ID 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) Vaults (1)	TA50, TA55 50-201	---	Inground	PVDF, PP Concrete	Pipe Floor	PVDF, PP Concrete	CTL_WM57_A1 CTL_WM57_A1
T2 TRU Influent storage	Acid tank Caustic tank	50-66 50-66	3,900 3,000	Aboveground	Steel Steel	Floor Floor	Concrete Concrete	CTL_WM66_A4 CTL_WM66_A4
T3 TRU Treatment	TK1 TK2	50-01-60 50-01-60	900 800	Aboveground	Steel Fiberglass	Floor Floor	Concrete Concrete	ID 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

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

Treatment Unit	Vessel(s)	Location	Vessel			Secondary Containment		
			Capacity	Category	Material	Structure	Material	Leak Detection
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: 22-345

LA-UR-23-20036

Date: January 31, 2023

DP-1132 Condition No. 32: 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.
- In 2020 and 2021, there was little or no water in MCA-RLW-1 and MCA-RLW-2, and no samples were able to be collected during the quarterly sampling events. MCA-RLW-1 was dry throughout this period, while MCA-RLW-2 showed limited water in the sump.
- During 2022, MCA-RLW-1 was dry during the first three quarterly sampling events. A small amount of water was present at the bottom of MCA-RLW-1 when visited in the fourth quarter, but the water volume and level was insufficient to collect a sample.

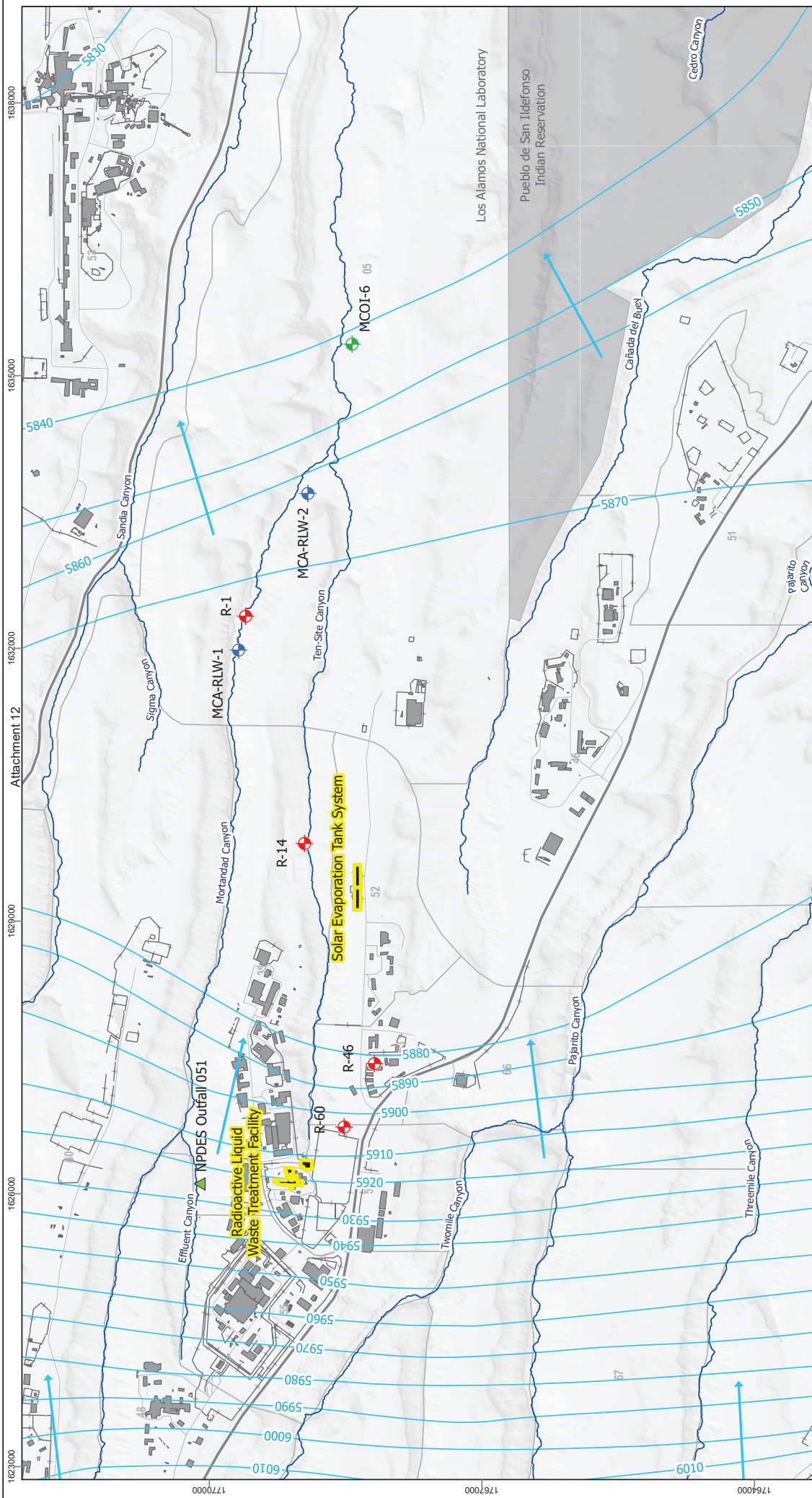
Limited water was present in the sump of MCA-RLW-2 during the first three quarters of 2022, and the well could not be sampled. However, sufficient water was present in MCA-RLW-2 during the fourth quarter sampling event, conducted in November 2022, due to a transient wetting front, and both quarterly and annual groundwater samples were collected. The groundwater surface elevation recorded at MCA-RLW-2 in the fourth quarter of 2022 was 6,810.69 feet above mean sea level.
- Alluvial groundwater levels in MCA-RLW-1 and MCA-RLW-2 are continuously monitored using pressure transducers, with readings collected hourly. These data are being used to identify transient wetting events in Mortandad Canyon. This information will provide a better understanding of the conceptual model for alluvial groundwater flow in upper Mortandad Canyon, and will be used to optimize groundwater sampling activities for these wells.

Perched-Intermediate Aquifer

- Perched-intermediate groundwater occurs within the lower part of the Banelier 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, and the groundwater-surface elevation recorded at MCOI-6 during 2022 quarterly sample events ranged from 6,138.39 to 6,140.47 feet above mean sea level.

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 generated by incorporating regional water levels recorded in 2022 and are included in the Monitoring Year 2023 Interim Facility-Wide Groundwater Monitoring Plan.
- In 2022, the elevation of the regional water table in monitoring wells sampled for DP-1132 ranged from 5,873.17 feet above mean sea level at R-1 to 5,904.83 feet above mean sea level at R-60.



Attachment 12

1638000

1635000

1632000

1629000

1626000

1623000

1770000

1775000

1780000

1785000



Figure 1



Map #18-127-07
 Created by Ben Suttler, JFPROG.
 September 14, 2022.

State Plane Coordinate System
 New Mexico, Central Zone, US Feet
 NAD 1983 Datum



Regional Water Table
 Elevation (feet above
 mean sea level)

- Important/Key Structure
- Watercourse
- Regional Groundwater Flow Direction

- NPDES Outfall 051
- Alluvial Well
- Intermediate Well
- Regional Well

Attachment 13

Water Tightness Test Report

EPC-DO: 22-345

LA-UR-23-20036

Date: January 31, 2023

WATER TIGHTNESS TEST REPORT

Radioactive Liquid Waste Treatment Facility Effluent to Outfall 051

J.P. Hernandez-Quintero
June 2022

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 50-02, then runs north to Outfall 051 in Mortandad Canyon. 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 #696305-01. Testing is done for the entire length of the outfall piping, from Building 50-02 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 1700 on 06/24/2022 until 1700 on 06/25/2022. Water level in the measuring tube dropped 0 inches, which indicates a water loss of 0 gallon over the 1300 feet of piping. No water was lost during the 24 hour exfiltration test.

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 1726 on 06/29/2022 until 1736 on 06/30/2022. 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 gallon.

Test Results

Water tightness testing of the single-walled pipe to Outfall 051 occurred on June 24 through 30 2022. Results are summarized in the below table:

	Exfiltration	Infiltration
Start Date	06/24/2022	06/29/2022
End Date	06/25/2022	06/30/2022
Duration (hrs)	24	24
Water loss-gain (gals)	0	0
Leakage rate (gals per day)	0	0
Leakage rate (GPD per mile) *	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

