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Symbol: EPC-DO: 24-171

Date: July 30, 2024

LA-UR: 24-27126

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, Second Quarter 2024

Dear Mr. Ball:

On May 5, 2022, the New Mexico Environment Department (NMED) issued Discharge Permit DP-1132 to the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) for discharges of treated effluent from the Technical Area 50 Radioactive Liquid Waste Treatment Facility (RLWTF). Pursuant to Permit Condition Number (No.) 24, NNSA and Triad are required to submit a quarterly monitoring report by August 1, 2024. The following permit conditions are addressed in Attachments 1 through 6 of this report.

- Condition No.13: Maintenance and Repair
- Condition No. 14: Damage to Structural Integrity
- Condition Nos. 25 and 26: RLWTF Influent Volumes
- Condition No. 27: Discharge Volumes
- Condition No. 29: Effluent Sampling
- Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporative Tank System
- Condition No. 36: Groundwater Monitoring
- Condition No. 41: Stabilization of Specific Units and Systems that have Ceased

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

Sincerely,

**SARAH
HOLCOMB**
(Affiliate)

Digitally signed by
SARAH HOLCOMB
(Affiliate)
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Sarah S. Holcomb
Group Leader
Environmental Compliance Programs
Triad National Security, LLC

Sincerely,

**ROBERT
GALLEGOS**

Digitally signed by
ROBERT GALLEGOS
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Robert A. Gallegos
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Attachment: Attachment 1 RLWTF Monitoring Report – Second Quarter 2024
Attachment 2 Quarterly Summary of Maintenance and Repair Activities Conducted at
the RLWTF
Attachment 3 RLWTF Daily Influent and Effluent Volumes
Attachment 4 Treated Effluent Sampling Results
Attachment 5 Groundwater Monitoring Report – Second Quarter 2024
Attachment 6 Monitoring Well Location Map

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Attachment 1

RLWTF Monitoring Report – Second Quarter 2024

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

Condition No. 24: Monitoring Reports

Pursuant to Permit Condition Number (No.) 24, the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) are required to submit a quarterly monitoring report by August 1, 2024, for the monitoring period of April 1, 2024, through June 30, 2024 (second quarter). The following permit conditions are addressed in Attachments 1 through 6 of this report.

- Quarterly Monitoring Report
 - Condition No.13: Maintenance and Repair
 - Condition No. 14: Damage to Structural Integrity
 - Condition Nos. 25 and 26: RLWTF Influent Volumes
 - Condition No. 27: Discharge Volumes
 - Condition No. 29: Effluent Sampling
 - Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporative Tank System
 - Condition No. 36: Groundwater Monitoring
 - Condition No. 41: Stabilization of Specific Units and Systems that have Ceased

Condition No. 13: Maintenance and Repair

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

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

Condition No. 14: Damage to Structural Integrity

- On August 31, 2022, NMED was notified that the south treated effluent tank at the RLWTF was taken out of service when treated effluent was discovered to have wept onto the exterior surface of the tank. Corrective Action Plans were submitted to NMED on September 30, 2022 (EPC-DO:22-264), and November 21, 2022 (EPC-DO: 22-315). A Corrective Action Plan Implementation Extension Request (EPC-DO: 23-274) was submitted to NMED on August 30, 2023. NMED approved this request on October 3, 2023.
- An epoxy resin patch and an additional welded patch were applied to the thinning area of the tank in January and February 2023.
- During this reporting period, the facility continued efforts to procure the replacement effluent tanks.

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

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

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

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

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

Condition No. 27: Discharge Volumes

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

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

Condition No. 29: Effluent Sampling

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

- **MES Sampling.** Treated effluent from the RLWTF was discharged to the MES this quarter during the months of April, May, and June. Quarterly sampling for all water contaminants listed in 20.6.2.3103 NMAC, all toxic pollutants as defined in 20.6.2.7.T(2) NMAC, and total kjeldahl nitrogen (TKN) was completed on April 10th, 2024. These analytical results are provided in **Attachment 4, Table 1.**
- Monthly sampling for TKN, nitrate (NO₃-N), total dissolved solids (TDS), chloride (Cl), fluoride (F), and perchlorate (ClO₄) was completed on May 9th and June 13th, 2024. Analytical results from these discharges are provided in **Attachment 4, Tables 2 and 3.**

All sample results from the MES 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.

- **NPDES Outfall 051 Sampling.** No treated effluent from the RLWTF was discharged to NPDES Outfall 051 this reporting period. Therefore, no effluent sampling from NPDES Outfall 051 was completed during the second quarter 2024 monitoring period.
 - **SET Sampling.** No treated effluent was discharged to the SET during the reporting period. Therefore, no effluent sampling from the SET was completed during the second quarter 2024 monitoring period.
-

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

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

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

Condition No. 36: Ground Water Monitoring

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

- **Attachment 5** provides the complete ground water monitoring report from the quarterly sampling of perched/intermediate ground water monitoring well MCOI-6 on May 16, 2024.

Sample results from MCOI-6 for TKN, NO₃+NO₂-N, TDS, Cl, F, and ClO₄ are provided in **Attachment 5, Table 1**. These samples were submitted to GEL Laboratories, LLC for analysis. All results from the May 16, 2024, sampling event at MCOI-6 were below 20.6.2.3103 NMAC standards and 20.6.2.7.T NMAC screening levels, with the exception of the following:

- NO₃+NO₂-N was detected at a concentration of 16.4 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 2019 through 2023 was 13.6 mg/L with multiple exceedances of the 10 mg/L standard. Detections of NO₃+NO₂-N at MCOI-6 at concentrations greater than the ground water standard were previously identified and reported to NMED. Monitoring well MCOI-6 will continue to be routinely sampled for NO₃+NO₂-N in accordance with DP-1132 and pursuant to the Compliance Order on Consent (Consent Order).

- ClO₄ was detected at a concentration of 126 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 2017 through 2022 was 97 µg/L. Detections of ClO₄ at MCOI-6 at concentrations greater than the 20.6.2.7.T NMAC guidance screening levels were previously identified and reported to NMED. Monitoring well MCOI-6 will continue to be routinely sampled for ClO₄ in accordance with DP-1132 and pursuant to the Consent Order.

Quarterly samples were not collected from alluvial monitoring wells MCA-RLW-1 or MCA-RLW-2 during this period due to insufficient water in the wells. **Attachment 5** provides the ground water monitoring report for these alluvial wells collected on May 6th, 2024.

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

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

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

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

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

Clarifier #1

- Stabilization activities for Clarifier #1 were completed under the Stabilization Plan for the Low-Level Clarifier #1 submitted to NMED on December 4, 2018 (EPC-DO: 18-428). This workplan was approved by NMED on December 27, 2018.
- Stabilization of Clarifier #1 was completed on June 10, 2024. The required Clarifier #1 Stabilization Completion Report (EPC-24-085) was submitted to NMED on July 2, 2024.

Clarifier #2

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

75K Tank

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

100K Tank

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

Gravity Filter

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

WM2-North/South Tanks

- Stabilization activities for the WM2-North/South Tanks are being completed under the Stabilization Plan for the 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.

- During this reporting period, the subcontractor continued project planning and site preparation. All of the electrical and several of the mechanical isolations required for stabilization have been completed. Work on the units continues to complete the remaining mechanical isolations and install the containment structure on top of the tanks.
- The established completion date for stabilization of the WM2-North/South Tanks is September 2024.

Attachment 2

Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

Structures	Description	Built	Task Type						Total
			PM	CO	MD	SR	UP		
Building 1	Original treatment bldg.	1963	48	11	1	0	0	60	
Building 2	Original influent storage bldg.	1963	1	0	0	0	0	1	
Building 66	TRU influent storage	1982	2	1	0	0	0	3	
Building 90	100K Influent Storage tank	1982						0	
Building 248	Low-level bottoms storage	1996	1	1	0	0	0	2	
Building 250	Low-level influent storage	2009	15	0	1	0	0	16	
Building 257	Mechanical Evaporator System	2010	1	0	0	0	0	1	
TA52	Solar Evaporation Tank	2011	12	0	0	0	0	12	
Totals			80	13	2	0	0	95	

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

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00773528	01	CO	500001 REPAIR / REPLACE HUES
500001	00773528	02	CO	500001 REPAIR / REPLACE HUES
500001	00704595	01	CO	500001 REPLACE PV-002 IN ROOM 116B
500001	00649070	01	CO	500001 TROUBLESHOOT & REPAIR THE PRE-COAT PUMP IN ROOM 116B
500001	00784652	01	CO	500001 TS/ REPAIR ELECTRICAL COMPONENTS ON TK-8 CONTROLS
500001	00785342	01	CO	500001 TROUBLESHOOT/REPAIR REPLACE DESICCANT DAD-002
500001	00773559	01	CO	500001 TROUBLESHOOT/REPAIR OF FRA-1
500001	00768074	01	CO	500001 REMOVE AND REPLACE THE MICROFILTER MEMBRANES
500001	00782279	01	CO	500001 REPAIR DAD-003
500001	00776749	01	CO	500001 REPLACE FLEX CONNECTORS ON FE-31
500001	00734726	01	CO	500001 REPLACE FLEX CONNECTORS ON FE-30
500001	00640706	04	MD	500001 INSTALL NEW RLW EFFLUENT PIPING AND PERFORM PMT
500001	00778066	01	PM	50-1 PH ANALYZER 3MO VERIFICATION 2 EA
500001	00777723	01	PM	500001 2YR PRV REPLACEMENT, BOILER (4 EA)
500001	00777336	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00777335	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00642237	01	PM	50-1 CA PRV 5 YEAR MAINTENANCE
500001	00772342	01	PM	50-1 FEXT (1M) PM
500001	00778059	01	PM	500001 MICROFILTER 3 MONTH PUMP MAINTENANCE
500001	00776992	01	PM	500001 TCA 6MO PM, AUTO DUMP 5EA
500001	00771907	01	PM	500001 FAR 3MO PM (9 EA)
500001	00777278	01	PM	50-1 FEXT (1M) PM
500001	00778037	01	PM	50-1 REPLACE ANNUAL PRE-FILTERS HV-011, HV-12 AND FE-27
500001	00777729	01	PM	50-1 (A) DAD PM
500001	00777416	01	PM	50-0001 (M) AED
500001	00777288	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00777734	01	PM	50-0001 (A) CRANE TRUCK SAFETY OVERLOOK INSPECTION PM
500001	00780002	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00780031	01	PM	50-1 FEXT (1M) PM
500001	00780040	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00779975	01	PM	50-0001 ASE-004 3MO PM, EXHAUST STACK PUMP
500001	00778036	01	PM	500001 FE'S 1YR PM, (MECHANICAL) (11 EA)
500001	00777274	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00780046	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00781091	01	PM	50-1 RUA (A) MAINTENANCE (TRANE)

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00780345	01	PM	50-0001 (M) AED
500001	00747792	01	PM	50-1 RVF 1YR PM
500001	00783758	01	PM	50-1 ULTRASONIC TANK: 3-YR INSPECTION (VISUAL/EXTERNAL)
500001	00786180	01	PM	500001 & 500248 WINDSOCK 1YR PM (INSPECTION)
500001	00777719	01	PM	500001 5YR PRV REPLACEMENT MAINTENANCE (3 EA)
500001	00781207	01	PM	500001 DRE 1YR PM, (MECHANICAL) 6 EA
500001	00780051	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00783761	01	PM	500001 (A) CA MECHANICAL PM
500001	00780712	01	PM	500001 EH (1YR) PM, ELEVATOR 3RD PARTY INSP
500001	00783268	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00783237	01	PM	50-1 FEXT (1M) PM
500001	00783266	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00786182	01	PM	500001 BFP'S 1YR PM, 2 EA (RAD AREAS)
500001	00786181	01	PM	500001 BFP'S 1YR PM, (RAD AREAS) (13EA)
500001	00786179	01	PM	500001 DRE 1YR PM, (ELECTRICAL) 6 EA
500001	00785632	01	PM	500001 LUBE 6MO PM, OPS EQUIPMENT LUBRICATION
500001	00785631	01	PM	500001 PV 3MO PM, (MECHANICAL)
500001	00786183	01	PM	500001 BHW 1YR PM, SUMMER LAY-UP (SHUTDOWN)
500001	00785629	01	PM	50-1 SPW/SPH (Q) FIRE SUPPRESSION SYSTEMS PM
500001	00784091	01	PM	50-1 DRUM TUMBLER (3M) PM
500001	00783762	01	PM	500001 (A) NATURAL GAS SEISMIC SHUTOFF VALVE INSPECT PM 3 EA
500001	00783286	01	PM	500001 PERFORM WEEKLY EYEWASH/ SAFETY SHOWER TESTING
500001	00783283	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00784067	01	PM	50-1 RLW FUME HOOD TEST (A)
500001	00778167	01	PM	50-66/50-01 FAH 1YR PM, HEPA FILTERS (PLENUM) TESTING

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

TA-50-0250 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500250	00626414	01	MD	500250 INSTALL LEVEL INDICATION ON 1-TK-1
500250	00777337	01	PM	500250 LTET/PHOSPHORUS (M) PM, EXIT LIGHT
500250	00778063	01	PM	500250 SHS 3MO PM, SAFETY SHOWER
500250	00778039	01	PM	50-250 LTE (A) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00777313	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00779344	01	PM	50-250 FEXT (A) PM; PORTABLE FIRE EXTINGUISHERS
500250	00778040	01	PM	500250 LPT (A) VISUAL INSPECTION
500250	00780008	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00780007	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00780029	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM
500250	00780023	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00783269	01	PM	500250 LTET (M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00783275	01	PM	500250 LTNT (M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00783270	01	PM	500250 LTE (M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00785630	01	PM	50-250 SPW (3M) PM
500250	00783259	01	PM	500250 FEXT (M), FIRE EXTINGUISHERS PM

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

TA-52-0181 Work Completion Report (04-01-2024 to 06-30-2024)				
Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-52-0182 Work Completion Report (04-01-2024 to 06-30-2024)				
Unit	Work Order	WO	WO Type	Task Title
520182	00777298	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00777297	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00777273	01	PM	520182 (M) FEXT PM
520182	00780050	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00780013	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00780012	01	PM	520182 (M) FEXT PM
520182	00779985	01	PM	520182 (3M) SIGNAGE VERIFICATION FOR FENCE LINE
520182	00779970	01	PM	520182 (3M) FENCE LINE VERIFICATION
520182	00785027	01	PM	52-182 (18M) WATER TIGHTNESS/GROUND SET
520182	00783285	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00783281	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00783280	01	PM	520182 (M) FEXT PM

TA-52-0183 Work Completion Report (04-01-2024 to 06-30-2024)				
Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

TA-50-0002 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500002	00785025	01	PM	500002 (A) WATER TIGHTNESS MORTANDAD CANYON

TA-50-0090 Work Completion Report (04-01-2024 to 06-30-2024)

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

TA-50-0066 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500066	00651553	01	CO	500066 TROUBLESHOOT AND REPAIR VOLTAGE FROM WM-66 LP-1
500066	00772859	01	PM	500066 (A) MIXER PANEL LAMP PM
500066	00781213	01	PM	50-66 PDI (A) CAL VERIFICATION

TA-50-0201 Work Completion Report (04-01-2024 to 06-30-2024)

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

TA-50-0248 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500248	00755046	01	CO	500248 TROUBLE SHOOT AND REPAIR NW MIXER
500248	00779982	01	PM	500248 PUMPS 3MO PM

TA-50-0257 Work Completion Report (04-01-2024 to 06-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500257	00784074	01	PM	50-257 EVAP BOILER (3M) PM

DP-1132 Report: Second Quarter 2024 RLWTF Maintenance

Acronyms used by LANL Maintenance:

ASE air sampler, exhaust
BHW boiler, hot water
CA compressed air
DAD dessicant air dryer
EB exhaust bank
EH exhaust heater
FAR filter, air replaceable
FE fan, exhaust
FEXT fire extinguisher
HEPA high-efficiency particulate air
HUE heater unit, electric

LPT lightning protection
LTE lights, emergency
LTET lights, emergency, tritium
LTNT lights, non-tritium
PRV pressure reducing valve
PV pump, vacuum
RCA radiological control area
SHS shower, safety
SPH sprinkler pipe, dry
SPW sprinkler pipe, wet
TCA tank, compressed air

Attachment 3

RLWTF Daily Influent and Effluent Volumes

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

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

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
Totals, 2024-Q2	470,184	338,205	0	0	645
Sub-total, April	142,505	117,176	0	0	447
Sub-total, May	142,929	119,462	0	0	0
Sub-total, June	184,750	101,567	0	0	198

All flows are in Liters.

1-Apr	6,699	0	0	0	0
2-Apr	8,743	0	0	0	0
3-Apr	8,327	0	0	0	0
4-Apr	7,343	0	0	0	0
5-Apr	7,570	0	0	0	0
6-Apr	5,375	0	0	0	0
7-Apr	5,413	0	0	0	0
8-Apr	6,737	0	0	0	0
9-Apr	13,815	5,121	0	0	165
10-Apr	7,494	14,750	0	0	0
11-Apr	2,952	13,906	0	0	0
12-Apr	3,104	7,328	0	0	0
13-Apr	1,363	8,266	0	0	0
14-Apr	984	8,221	0	0	0
15-Apr	4,504	0	0	0	0
16-Apr	5,678	0	0	0	146
17-Apr	3,974	0	0	0	0
18-Apr	7,759	9,803	0	0	0
19-Apr	1,665	13,955	0	0	0
20-Apr	1,173	12,911	0	0	0
21-Apr	984	13,622	0	0	0
22-Apr	3,482	9,292	0	0	0
23-Apr	4,050	0	0	0	136
24-Apr	4,466	0	0	0	0
25-Apr	4,050	0	0	0	0
26-Apr	4,353	0	0	0	0
27-Apr	984	0	0	0	0
28-Apr	1,098	0	0	0	0
29-Apr	3,558	0	0	0	0
30-Apr	4,807	0	0	0	0

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

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-May	719	0	0	0	0
2-May	1,972	0	0	0	0
3-May	1,972	0	0	0	0
4-May	1,972	0	0	0	0
5-May	1,972	0	0	0	0
6-May	8,743	0	0	0	0
7-May	7,229	0	0	0	0
8-May	10,295	0	0	0	0
9-May	7,381	10,738	0	0	0
10-May	4,618	14,315	0	0	0
11-May	3,785	14,319	0	0	0
12-May	3,823	14,315	0	0	0
13-May	20,549	3,777	0	0	0
14-May	13,925	0	0	0	0
15-May	6,435	5,700	0	0	0
16-May	6,662	16,991	0	0	0
17-May	4,504	18,017	0	0	0
18-May	3,028	6,567	0	0	0
19-May	3,104	0	0	0	0
20-May	7,419	0	0	0	0
21-May	2,801	0	0	0	0
22-May	3,217	0	0	0	0
23-May	4,428	0	0	0	0
24-May	568	0	0	0	0
25-May	681	0	0	0	0
26-May	606	0	0	0	0
27-May	568	0	0	0	0
28-May	2,725	5,473	0	0	0
29-May	1,968	9,251	0	0	0
30-May	3,142	0	0	0	0
31-May	2,120	0	0	0	0

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

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-Jun	606	0	0	0	0
2-Jun	606	0	0	0	0
3-Jun	1,741	0	0	0	0
4-Jun	21,537	0	0	0	0
5-Jun	8,940	0	0	0	0
6-Jun	2,725	0	0	0	0
7-Jun	1,514	0	0	0	0
8-Jun	681	0	0	0	0
9-Jun	643	0	0	0	0
10-Jun	3,444	0	0	0	0
11-Jun	2,536	0	0	0	107
12-Jun	3,217	0	0	0	0
13-Jun	3,709	10,556	0	0	0
14-Jun	1,325	14,693	0	0	0
15-Jun	1,400	14,693	0	0	0
16-Jun	606	8,713	0	0	0
17-Jun	2,422	2,275	0	0	0
18-Jun	7,608	0	0	0	0
19-Jun	9,992	0	0	0	0
20-Jun	16,200	1,294	0	0	0
21-Jun	24,447	0	0	0	0
22-Jun	15,329	0	0	0	0
23-Jun	12,150	0	0	0	0
24-Jun	9,576	0	0	0	0
25-Jun	5,450	0	0	0	91
26-Jun	2,120	0	0	0	0
27-Jun	8,138	8,372	0	0	0
28-Jun	7,494	16,434	0	0	0
29-Jun	1,249	18,944	0	0	0
30-Jun	7,343	5,590	0	0	0

Attachment 4

Treated Effluent Sampling Results

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on April 10, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-300585	RLWTF_MES	04/10/2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	1.67	0.042
RLWTF-24-300585	RLWTF_MES	04/10/2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	1.67	0.523
RLWTF-24-300585	RLWTF_MES	04/10/2024	309-00-2	Aldrin	0.00676	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.00676	0.00198
RLWTF-24-300579	RLWTF_MES	04/10/2024	Al	Aluminum	19.3	ug/L	U	N	F	2024-837	REG	EPA-200.8	19.3	5.000
RLWTF-24-300585	RLWTF_MES	04/10/2024	120-12-7	Anthracene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	1,721.28
RLWTF-24-300579	RLWTF_MES	04/10/2024	Sb	Antimony	1	ug/L	U	N	F	2024-837	REG	EPA-200.8	1	6
RLWTF-24-300585	RLWTF_MES	04/10/2024	12674-11-2	Aroclor-1016	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	1.4
RLWTF-24-300585	RLWTF_MES	04/10/2024	11104-28-2	Aroclor-1221	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0561
RLWTF-24-300585	RLWTF_MES	04/10/2024	11141-16-5	Aroclor-1232	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0561
RLWTF-24-300585	RLWTF_MES	04/10/2024	53469-21-9	Aroclor-1242	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0786
RLWTF-24-300585	RLWTF_MES	04/10/2024	12672-29-6	Aroclor-1248	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0786
RLWTF-24-300585	RLWTF_MES	04/10/2024	11097-69-1	Aroclor-1254	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0786
RLWTF-24-300585	RLWTF_MES	04/10/2024	11096-82-5	Aroclor-1260	0.034	ug/L	U	N	UF	2024-837	REG	SW-846-8082A	0.034	0.0786
RLWTF-24-300579	RLWTF_MES	04/10/2024	As	Arsenic	2	ug/L	U	N	F	2024-837	REG	EPA-200.8	2	10
RLWTF-24-300585	RLWTF_MES	04/10/2024	1912-24-9	Atrazine	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	3
RLWTF-24-300585	RLWTF_MES	04/10/2024	103-33-3	Azobenzene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.78
RLWTF-24-300579	RLWTF_MES	04/10/2024	Ba	Barium	0.67	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.67	2,000
RLWTF-24-300585	RLWTF_MES	04/10/2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	92-87-5	Benzidine	3.9	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3.9	0.001
RLWTF-24-300585	RLWTF_MES	04/10/2024	50-32-8	Benzo(a)pyrene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	0.2
RLWTF-24-300585	RLWTF_MES	04/10/2024	205-99-2	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	0.34
RLWTF-24-300585	RLWTF_MES	04/10/2024	207-08-9	Benzo(k)fluoranthene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	3.43
RLWTF-24-300579	RLWTF_MES	04/10/2024	Be	Beryllium	0.2	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.2	4
RLWTF-24-300585	RLWTF_MES	04/10/2024	319-84-6	BHC(alpha-)	0.00676	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.00676	0.069
RLWTF-24-300585	RLWTF_MES	04/10/2024	319-85-7	BHC(beta-)	0.00676	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.00676	0.243
RLWTF-24-300585	RLWTF_MES	04/10/2024	58-89-9	BHC(gamma-)	0.00676	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.00676	0.415
RLWTF-24-300585	RLWTF_MES	04/10/2024	111-44-4	Bis(2-chloroethyl)ether	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.14
RLWTF-24-300585	RLWTF_MES	04/10/2024	117-81-7	Bis(2-ethylhexyl)phthalate	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	55.64
RLWTF-24-300579	RLWTF_MES	04/10/2024	B	Boron	24	ug/L	J	Y	F	2024-837	REG	EPA-200.7	15	750
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	1.34
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	32.85
RLWTF-24-300585	RLWTF_MES	04/10/2024	74-83-9	Bromomethane	0.337	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.337	7.94
RLWTF-24-300579	RLWTF_MES	04/10/2024	Cd	Cadmium	0.3	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.3	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	56-23-5	Carbon Tetrachloride	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	57-74-9	Chlordane(alpha/gamma)	0.0778	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.0778	0.448
RLWTF-24-300579	RLWTF_MES	04/10/2024	Cl(-1)	Chloride	9.83	mg/L	J+	Y	F	2024-837	REG	EPA-300.0	0.335	250
RLWTF-24-300585	RLWTF_MES	04/10/2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	77.57
RLWTF-24-300585	RLWTF_MES	04/10/2024	67-66-3	Chloroform	4.18	ug/L	NQ	Y	UF	2024-837	REG	SW-846-8260D	0.333	100
RLWTF-24-300585	RLWTF_MES	04/10/2024	74-87-3	Chloromethane	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	20.32
RLWTF-24-300579	RLWTF_MES	04/10/2024	Cr	Chromium	3	ug/L	U	N	F	2024-837	REG	EPA-200.8	3	50
RLWTF-24-300579	RLWTF_MES	04/10/2024	Co	Cobalt	0.3	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.3	50
RLWTF-24-300579	RLWTF_MES	04/10/2024	Cu	Copper	2.44	ug/L	NQ	Y	F	2024-837	REG	EPA-200.8	0.3	1,000
RLWTF-24-300579	RLWTF_MES	04/10/2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	UJ	N	F	2024-837	REG	EPA-335.4	0.00167	0.2
RLWTF-24-300585	RLWTF_MES	04/10/2024	50-29-3	DDT[4,4']	0.0102	ug/L	UJ	N	UF	2024-837	REG	SW-846-8081B	0.0102	2.29
RLWTF-24-300585	RLWTF_MES	04/10/2024	106-93-4	Dibromomethane[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	0.05
RLWTF-24-300585	RLWTF_MES	04/10/2024	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	7.997
RLWTF-24-300585	RLWTF_MES	04/10/2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	600
RLWTF-24-300585	RLWTF_MES	04/10/2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	75
RLWTF-24-300585	RLWTF_MES	04/10/2024	91-94-1	Dichlorobenzidine[3,3']	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	1.25
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.355	197.2
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	25
RLWTF-24-300585	RLWTF_MES	04/10/2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	5

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on April 10, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	7
RLWTF-24-300585	RLWTF_MES	04/10/2024	156-59-2	Dichloroethene[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	70
RLWTF-24-300585	RLWTF_MES	04/10/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	100
RLWTF-24-300585	RLWTF_MES	04/10/2024	120-83-2	Dichlorophenol[2,4-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	45.3
RLWTF-24-300585	RLWTF_MES	04/10/2024	78-87-5	Dichloropropane[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	542-75-6	Dichloropropane[1,3-]	0.5	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.5	4.71
RLWTF-24-300585	RLWTF_MES	04/10/2024	60-57-1	Dieldrin	0.0102	ug/L	U	N	UF	2024-837	REG	SW-846-8081B	0.0102	0.0175
RLWTF-24-300585	RLWTF_MES	04/10/2024	84-66-2	Diethylphthalate	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	14,800.5
RLWTF-24-300585	RLWTF_MES	04/10/2024	131-11-3	Dimethyl Phthalate	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	611.56
RLWTF-24-300585	RLWTF_MES	04/10/2024	84-74-2	Di-n-butylphthalate	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	884.8
RLWTF-24-300585	RLWTF_MES	04/10/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	1.52
RLWTF-24-300585	RLWTF_MES	04/10/2024	51-28-5	Dinitrophenol[2,4-]	5	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	5	38.67
RLWTF-24-300585	RLWTF_MES	04/10/2024	121-14-2	Dinitrotoluene[2,4-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	2.37
RLWTF-24-300585	RLWTF_MES	04/10/2024	606-20-2	Dinitrotoluene[2,6-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.49
RLWTF-24-300585	RLWTF_MES	04/10/2024	123-91-1	Dioxane[1,4]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	4.59
RLWTF-24-300585	RLWTF_MES	04/10/2024	122-39-4	Diphenylamine	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	122
RLWTF-24-300585	RLWTF_MES	04/10/2024	959-98-8	Endosulfan I	0.00676	ug/L	U	N	UF	2024-837	REG	SW-846-8081B	0.0068	98.7
RLWTF-24-300585	RLWTF_MES	04/10/2024	33213-65-9	Endosulfan II	0.0102	ug/L	U	N	UF	2024-837	REG	SW-846-8081B	0.0102	98.7
RLWTF-24-300585	RLWTF_MES	04/10/2024	72-20-8	Endrin	0.0102	ug/L	U	N	UF	2024-837	REG	SW-846-8081B	0.0102	2.23
RLWTF-24-300585	RLWTF_MES	04/10/2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	700
RLWTF-24-300585	RLWTF_MES	04/10/2024	206-44-0	Fluoranthene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	802.198
RLWTF-24-300585	RLWTF_MES	04/10/2024	86-73-7	Fluorene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	287.642
RLWTF-24-300579	RLWTF_MES	04/10/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-837	REG	EPA-300.0	0.033	1.6
RLWTF-24-300585	RLWTF_MES	04/10/2024	76-44-8	Heptachlor	0.00676	ug/L	U	N	UF	2024-837	REG	SW-846-8081B	0.0068	0.022
RLWTF-24-300585	RLWTF_MES	04/10/2024	118-74-1	Hexachlorobenzene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.1
RLWTF-24-300585	RLWTF_MES	04/10/2024	87-68-3	Hexachlorobutadiene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	1.39
RLWTF-24-300585	RLWTF_MES	04/10/2024	77-47-4	Hexachlorocyclopentadiene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.41
RLWTF-24-300585	RLWTF_MES	04/10/2024	67-72-1	Hexachloroethane	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	3.28
RLWTF-24-300585	RLWTF_MES	04/10/2024	2691-41-0	HMX	0.0813	ug/L	U	N	UF	2024-837	REG	SW-846-8330B	0.0813	1,001.1
RLWTF-24-300587	RLWTF_MES	04/10/2024	2691-41-0	HMX	0.0815	ug/L	U	N	UF	2024-837	FD	SW-846-8330B	0.0815	1,001.1
RLWTF-24-300579	RLWTF_MES	04/10/2024	Fe	Iron	30	ug/L	U	N	F	2024-837	REG	EPA-200.7	30	1,000
RLWTF-24-300585	RLWTF_MES	04/10/2024	78-59-1	Isophorone	3.5	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3.5	780.63
RLWTF-24-300579	RLWTF_MES	04/10/2024	Pb	Lead	0.5	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.5	15
RLWTF-24-300579	RLWTF_MES	04/10/2024	Mn	Manganese	2	ug/L	U	N	F	2024-837	REG	EPA-200.7	2	200
RLWTF-24-300579	RLWTF_MES	04/10/2024	Hg	Mercury	0.067	ug/L	U	N	F	2024-837	REG	EPA-245.2	0.067	2
RLWTF-24-300585	RLWTF_MES	04/10/2024	Hg	Mercury	0.067	ug/L	U	N	UF	2024-837	REG	EPA-245.2	0.067	2
RLWTF-24-300585	RLWTF_MES	04/10/2024	1634-04-4	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2024-837	REG	SW-846-8260D	0.333	100
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-09-2	Methylene Chloride	1.26	ug/L	J	Y	UF	2024-837	REG	SW-846-8260D	0.5	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	90-12-0	Methylnaphthalene[1-]	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	11.38
RLWTF-24-300585	RLWTF_MES	04/10/2024	91-57-6	Methylnaphthalene[2-]	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	35.11
RLWTF-24-300579	RLWTF_MES	04/10/2024	Mo	Molybdenum	0.2	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.2	1,000
RLWTF-24-300585	RLWTF_MES	04/10/2024	91-20-3	Naphthalene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	0.3	30
RLWTF-24-300579	RLWTF_MES	04/10/2024	Ni	Nickel	0.6	ug/L	U	N	F	2024-837	REG	EPA-200.8	0.6	200
RLWTF-24-300579	RLWTF_MES	04/10/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.177	mg/L	J+	Y	F	2024-837	REG	EPA-353.2	0.085	10
RLWTF-24-300581	RLWTF_MES	04/10/2024	NO2-N	Nitrite as Nitrogen	0.0686	mg/L	J	Y	F	2024-835	REG	EPA-300.0	0.033	1
RLWTF-24-300585	RLWTF_MES	04/10/2024	98-95-3	Nitrobenzene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	1.417
RLWTF-24-300585	RLWTF_MES	04/10/2024	55-18-5	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.0017
RLWTF-24-300585	RLWTF_MES	04/10/2024	62-75-9	Nitrosodimethylamine[N-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.0049
RLWTF-24-300585	RLWTF_MES	04/10/2024	924-16-3	Nitroso-di-n-butylamine[N-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.03
RLWTF-24-300585	RLWTF_MES	04/10/2024	930-55-2	Nitrosopyrrolidine[N-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	0.37
RLWTF-24-300585	RLWTF_MES	04/10/2024	108-60-1	Oxybis[1-chloropropane][2,2-]	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	9.81
RLWTF-24-300585	RLWTF_MES	04/10/2024	608-93-5	Pentachlorobenzene	3	ug/L	U	N	UF	2024-837	REG	SW-846-8270E	3	3.07

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on April 10, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-300585	RLWTF_MES	04/10/2024	87-86-5	Pentachlorophenol	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	1
RLWTF-24-300585	RLWTF_MES	04/10/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2024-837	REG	SW-846:6850	0.05	13.82
RLWTF-24-300585	RLWTF_MES	04/10/2024	355-46-4	Perfluorohexanesulfonic acid	0.627	ng/L	U	N	UF	2024-837	REG	EPA:537M	0.627	401.099
RLWTF-24-300585	RLWTF_MES	04/10/2024	1763-23-1	Perfluorooctanesulfonic acid	0.76	ng/L	U	N	UF	2024-837	REG	EPA:537M	0.76	60.16
RLWTF-24-300585	RLWTF_MES	04/10/2024	335-67-1	Perfluorooctanoic acid	0.76	ng/L	U	N	UF	2024-837	REG	EPA:537M	0.76	60.16
RLWTF-24-300585	RLWTF_MES	04/10/2024	pH	pH	6.6	SU								6-9
RLWTF-24-300585	RLWTF_MES	04/10/2024	85-01-8	Phenanthrene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	0.3	170.4
RLWTF-24-300585	RLWTF_MES	04/10/2024	108-95-2	Phenol	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	1610-18-0	Prometon	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	249.93
RLWTF-24-300585	RLWTF_MES	04/10/2024	129-00-0	Pyrene	0.3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	0.3	117.42
RLWTF-24-300585	RLWTF_MES	04/10/2024	Ra-226+228	Radium-226 and Radium-228	0.718	pCi/L	UI	N	UF	2024-837	REG	Generic:Radium by Calculation	-	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	121-82-4	RDX	0.0813	ug/L	U	N	UF	2024-837	REG	SW-846:8330B	0.0813	9.66
RLWTF-24-300587	RLWTF_MES	04/10/2024	121-82-4	RDX	0.0815	ug/L	U	N	UF	2024-837	FD	SW-846:8330B	0.0815	9.66
RLWTF-24-300579	RLWTF_MES	04/10/2024	Se	Selenium	1.5	ug/L	U	N	F	2024-837	REG	EPA:200.8	1.5	50
RLWTF-24-300579	RLWTF_MES	04/10/2024	Ag	Silver	0.3	ug/L	U	N	F	2024-837	REG	EPA:200.8	0.3	50
RLWTF-24-300585	RLWTF_MES	04/10/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	100
RLWTF-24-300579	RLWTF_MES	04/10/2024	504(-2)	Sulfate	0.133	mg/L	U	N	F	2024-837	REG	EPA:300.0	0.133	600
RLWTF-24-300591	RLWTF_MES	04/10/2024	504(-2)	Sulfate	0.133	mg/L	U	N	F	2024-837	FD	EPA:300.0	0.133	600
RLWTF-24-300585	RLWTF_MES	04/10/2024	126-33-0	Sulfonate	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	20.03
RLWTF-24-300585	RLWTF_MES	04/10/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	1.66
RLWTF-24-300585	RLWTF_MES	04/10/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	10
RLWTF-24-300585	RLWTF_MES	04/10/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	5
RLWTF-24-300579	RLWTF_MES	04/10/2024	Tl	Thallium	0.6	ug/L	U	N	F	2024-837	REG	EPA:200.8	0.6	2
RLWTF-24-300585	RLWTF_MES	04/10/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	1,000
RLWTF-24-300579	RLWTF_MES	04/10/2024	TDS	Total Dissolved Solids	40	mg/L	NQ	Y	F	2024-837	REG	EPA:160.1	2.38	1,000
RLWTF-24-300579	RLWTF_MES	04/10/2024	TKN	Total Kjeldahl Nitrogen	2.45	mg/L	J	Y	F	2024-837	REG	EPA:351.2	0.033	10
RLWTF-24-300585	RLWTF_MES	04/10/2024	8001-35-2	Toxaphene (Technical Grade)	0.152	ug/L	U	N	UF	2024-837	REG	SW-846:8081B	0.152	0.158
RLWTF-24-300585	RLWTF_MES	04/10/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	70
RLWTF-24-300585	RLWTF_MES	04/10/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	200
RLWTF-24-300585	RLWTF_MES	04/10/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	5
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-69-4	Trichloroform	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	1,136.82
RLWTF-24-300585	RLWTF_MES	04/10/2024	95-95-4	Trichlorophenol[2,4,5-]	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	1,165.98
RLWTF-24-300585	RLWTF_MES	04/10/2024	88-06-2	Trichlorophenol[2,4,6-]	3	ug/L	U	N	UF	2024-837	REG	SW-846:8270E	3	11.88
RLWTF-24-300585	RLWTF_MES	04/10/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0813	ug/L	U	N	UF	2024-837	REG	SW-846:8330B	0.0813	9.8
RLWTF-24-300587	RLWTF_MES	04/10/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0815	ug/L	U	N	UF	2024-837	FD	SW-846:8330B	0.0815	9.8
RLWTF-24-300579	RLWTF_MES	04/10/2024	U	Uranium	0.067	ug/L	U	N	F	2024-837	REG	EPA:200.8	0.067	30
RLWTF-24-300585	RLWTF_MES	04/10/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	2
RLWTF-24-300585	RLWTF_MES	04/10/2024	1330-20-7	Xylene (Total)	1	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	1	620
RLWTF-24-300585	RLWTF_MES	04/10/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.333	192.995
RLWTF-24-300585	RLWTF_MES	04/10/2024	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	0.5	ug/L	U	N	UF	2024-837	REG	SW-846:8260D	0.5	396
RLWTF-24-300579	RLWTF_MES	04/10/2024	Zn	Zinc	3.3	ug/L	U	N	F	2024-837	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

UI - 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

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on April 10, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
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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

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 negative bias

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

Y - In the Detected column means the analyte was detected

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

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

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

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

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

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

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

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

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

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

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

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on May 9, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit	Groundwater Limit ⁶
RLWTF-24-300482	RLWTF_MES	05/09/2024	Cl(-1)	Chloride	0.262	mg/L	NQ	Y	F	2024-980	REG	EPA:300.0	0.067	250
RLWTF-24-300617	RLWTF_MES	05/09/2024	Cl(-1)	Chloride	0.263	mg/L	NQ	Y	F	2024-980	FD	EPA:300.0	0.067	250
RLWTF-24-300482	RLWTF_MES	05/09/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-980	REG	EPA:300.0	0.033	1.6
RLWTF-24-300617	RLWTF_MES	05/09/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-980	FD	EPA:300.0	0.033	1.6
RLWTF-24-300482	RLWTF_MES	05/09/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.298	mg/L	NQ	Y	F	2024-980	REG	EPA:353.2	0.017	10
RLWTF-24-300480	RLWTF_MES	05/09/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2024-980	REG	SW-846:6850	0.05	13.8
RLWTF-24-300482	RLWTF_MES	05/09/2024	TDS	Total Dissolved Solids	25	mg/L	NQ	Y	F	2024-980	REG	EPA:160.1	2.38	1,000
RLWTF-24-300617	RLWTF_MES	05/09/2024	TDS	Total Dissolved Solids	32	mg/L	NQ	Y	F	2024-980	FD	EPA:160.1	2.38	1,000
RLWTF-24-300482	RLWTF_MES	05/09/2024	TKN	Total Kjeldahl Nitrogen	2.45	mg/L	NQ	Y	F	2024-980	REG	EPA:351.2	0.033	-

Notes:

¹mg/L - milligrams per liter

²ug/L - micrograms per liter

³NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

⁴U - The analyte is classified as not detected

⁵Y - In the Detected column means the analyte was detected

⁶N - In the Detected column means the analyte was not detected

⁷F - In the Field Preparation Code column means the sample was filtered

⁸UF - In the Field Preparation Code column means the sample was not filtered

⁹REG - In the Sample Purpose column means the sample was a regular sample

¹⁰FD - In the Sample Purpose column means the sample was a field duplicate

¹¹Groundwater Limit represents standards for groundwater as identified in 20.6.2.3.103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3.103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on June 13, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit	Groundwater Limit ⁶
RLWTF-24-300491	RLWTF_MES	06/13/2024	Cl(-1)	Chloride	0.067	mg/L	U	N	F	2024-1284	REG	EPA-300.0	0.067	250
RLWTF-24-300618	RLWTF_MES	06/13/2024	Cl(-1)	Chloride	0.067	mg/L	U	N	F	2024-1284	FD	EPA-300.0	0.067	250
RLWTF-24-300491	RLWTF_MES	06/13/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-1284	REG	EPA-300.0	0.033	1.6
RLWTF-24-300618	RLWTF_MES	06/13/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-1284	FD	EPA-300.0	0.033	1.6
RLWTF-24-300493	RLWTF_MES	06/13/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.273	mg/L	NQ	Y	F	2024-1284	REG	EPA-353.2	0.017	10
RLWTF-24-300491	RLWTF_MES	06/13/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2024-1284	REG	SW-846/6850	0.05	13.8
RLWTF-24-300491	RLWTF_MES	06/13/2024	TDS	Total Dissolved Solids	32	mg/L	NQ	Y	F	2024-1284	REG	EPA-160.1	2.38	1,000
RLWTF-24-300618	RLWTF_MES	06/13/2024	TDS	Total Dissolved Solids	29	mg/L	NQ	Y	F	2024-1284	FD	EPA-160.1	2.38	1,000
RLWTF-24-300491	RLWTF_MES	06/13/2024	TKN	Total Kjeldahl Nitrogen	2.46	mg/L	NQ	Y	F	2024-1284	REG	EPA-351.2	0.033	-

Notes:

¹mg/L - milligrams per liter

²ug/L - micrograms per liter

³NQ - The analyte is classified as not detected

⁴U - No validation qualifier flag is associated with this result, and the analyte is classified as detected

⁵N - In the Detected column means the analyte was not detected

⁶Y - In the Detected column means the analyte was detected

⁷F - In the Field Preparation Code column means the sample was filtered

⁸UF - In the Field Preparation Code column means the sample was not filtered

⁹REG - In the Sample Purpose column means the sample was a regular sample

¹⁰FD - In the Sample Purpose column means the sample was a field duplicate

¹¹Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

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

Attachment 5
Groundwater Monitoring Report -
Second Quarter 2024

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

Quarterly Groundwater Monitoring Report – Second Quarter 2024

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MCA-RLW-1, Second Quarter 2024

a	Sample Date	5/6/2024
b	Sample Time	1223
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 May 6, 2024, due to insufficient water in the well. The well only contained 0.12 ft of standing water.

MCA-RLW-2, Second Quarter 2024

a	Sample Date	5/6/2024
b	Sample Time	1213
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCA-RLW-2
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,806.3
g	Total depth of the well (ft below ground surface (bgs))	40.4
h	Total volume of water in the monitoring well prior to sample collection (gal)	N/A
i	Total volume of water purged prior to sample collection (gal)	N/A
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): N/A Oxidation/Reduction Potential (MV): N/A Temp (deg C): N/A pH (SU): N/A Turbidity (NTU): N/A Specific Conductance (μ S/cm): N/A
k	Description of sample methods	N/A
l	Chain-of-Custody	N/A
m	Location Map	Attachment 6
	Analytical Results	N/A

Notes:

N/A – Not applicable. Well was not sampled when visited on May 6, 2024, due to insufficient water in the well. The well only contained 0.28 ft of standing water.

MCOI-6, Second Quarter 2024

a	Sample Date	5/16/2024
b	Sample Time	1005
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,137.89
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	32.54
i	Total volume of water purged prior to sample collection (gal)	97.85
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.19 Oxidation/Reduction Potential (MV): 179.9 Temp (deg C): 15.7 pH (SU): 7.11 Turbidity (NTU): 5.22 Specific Conductance (μ S/cm): 536
k	Description of sample methods	Attachment 5 Page 5
l	Chain-of-Custody	Attachment 5 Page 5
m	Location Map	Attachment 6
	Analytical Results	Attachment 5 Page 6, Table 1

Table 1. Analytical Results from Second Quarter 2024 Groundwater Sampling of Perched/Intermediate Monitoring Well MCOI-6, 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-24-313261	MCOI-6	05-16-2024	Cl(-1)	Chloride	45.1	mg/L	J+	Y	F	N3B-2024-3006	REG	SW-846:9056A	0.670	250
CAMO-24-313261	MCOI-6	05-16-2024	F(-1)	Fluoride	0.578	mg/L	NQ	Y	F	N3B-2024-3006	REG	SW-846:9056A	0.0330	1.6
CAMO-24-313261	MCOI-6	05-16-2024	NO3-ND2-N	Nitrate-Nitrite as Nitrogen	16.4	mg/L	NQ	Y	F	N3B-2024-3006	REG	EPA:351.2	0.425	10
CAMO-24-313261	MCOI-6	05-16-2024	ClO4	Perchlorate	126	ug/L	J-	Y	F	N3B-2024-3006	REG	SW-846:6850	1.00	13.8
CAMO-24-313261	MCOI-6	05-16-2024	TDS	Total Dissolved Solids	444	mg/L	NQ	Y	F	N3B-2024-3006	REG	EPA:160.1	2.38	1,000
CAMO-24-313260	MCOI-6	05-16-2024	TRN	Total Kjeldahl Nitrogen	0.0330	mg/L	U	N	UF	N3B-2024-3006	REG	EPA:351.2	0.0330	-

Notes:

¹mg/L - milligrams per liter.

ug/L - micrograms per liter.

²J+ - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.

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 negative bias.

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

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

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

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

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

Attachment 6

Monitoring Well Location Map

EPC-DO: 24-171

LA-UR-24-27126

Date: July 30, 2024

