



**THIRD QUARTER 2024**  
**GROUNDWATER, MINE EFFLUENT, SURFACE WATER AND TREATMENT PLANT**  
**EFFLUENT QUALITY**  
**REPORT COMPLIANT WITH THE TERMS OF TECHNICAL REVISION #10 (TR-10)**

**Prepared by Grand Island Resources**  
**OCTOBER 30, 2024**





## Table of Contents

1. Background .....	3
2. Ground Water Monitoring.....	6
2.1. Water Quality Analytical Results .....	6
2.2. Groundwater Levels and Potentiometric Water Surface .....	8
3. Mine Effluent Monitoring.....	12
4. Surface Water Monitoring.....	14
4.1. Water Quality Analytical Results .....	14
4.2. Surface Water Flows.....	14
5. Quality Management (Quality Control & Quality Assurance).....	17
5.1. Groundwater.....	17
5.2. Mine Effluent .....	17
5.3. Surface Water .....	17
6. NPDES permit CO-0032751 Outfall 001.....	18

## List of Appendices

### APPENDIX A GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

#### APPENDIX A.1 SEPTEMBER 2024 GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

### APPENDIX B OUTFALL-001 ANALYTICAL RESULTS

#### APPENDIX B.1 JULY 2024 OUTFALL-001 ANALYTICAL RESULTS

#### APPENDIX B.2 AUGUST 2024 OUTFALL-001 ANALYTICAL RESULTS

#### APPENDIX B.3 SEPTEMBER 2024 OUTFALL-001 ANALYTICAL RESULTS

### APPENDIX C SURFACE WATER ANALYTICAL RESULTS

#### APPENDIX C.1 SEPTEMBER 2024 SURFACE WATER ANALYTICAL RESULTS

### APPENDIX D CHAIN OF CUSTODY (COC) FORMS

### APPENDIX E FIELD SHEETS

### APPENDIX F SURFACE WATER STATION PHOTOGRAPHS





## 1. Background

On April 28, 2022, the Division of Reclamation, Mining and Safety (Division) approved Technical Revision application (TR-10) filed with the Division on February 28, 2022, addressing the following: ***Modify the water management and treatment program and provide a surface water and groundwater monitoring program (in accordance with corrective action #1 of the Board Order issued for Violation No. MV-2021-017).***

The terms of TR-10 approved by the Division were thereby incorporated into Permit No. M-1977-410. All other conditions and requirements of Permit No. M-1977-410 remain in full force and effect. Grand Island Resources (The Operator) will need to provide five consecutive quarters of groundwater monitoring data that include all sampling parameters and standards required by ***WQCC's "Interim Narrative Standard"***. At the time of issuance of this Quarterly Report, the Operator has collected and has analyzed, via third party laboratory, site waters from 7 monitoring locations, from May 2022 through January of 2024.

Water effluent from the mines is currently managed via the Treatment System into Coon Track Creek under CDPHE Water Quality Control Division (WQCD) National Pollutant Discharge Elimination System NPDES permit CO-0032751. Compliance samples from the Water Treatment System OUTFALL-001 are collected and tested twice per month; the results are submitted to CDPHE.

Technical Revision 10 (TR10) terms require The Operator to submit to DRMS Quarterly Water Monitoring Reports not later than 30 days from the end of the quarter.

GIR appeared before the MLR Board on January 18, 2023, where GIR presented testimony to the Board and requested to lift the Cease-and-Desist Order put into place during the February 2022 Board hearing for violation M2021-017. On March 13, 2023, the signed Board Order was issued which lifted the Cease-and-Desist Order for the site.

During the MLR Board January 2023 hearing, GIR withdrew the appeal of the Division's determination that the Cross Gold Mine was a designated mining operation (DMO). The due date for submitting the DMO Conversion Application was set to July 17, 2023, i.e., 180 days from the hearing date. GIR submitted to DRMS, a one-year extension request to the maximum allowed by Rule 7.2.3(2)(c). The extension request was approved by DRMS on March 1, 2023, which includes several stipulations including Stipulation #2 which states that all groundwater monitoring and reporting will continue as approved in Technical Revision 10 (TR10). This includes a written request for approval by GIR and approval by DRMS process whereby GIR will issue requests for approval letters to DRMS describing planned underground activities, objectives,





methods, expected disturbance, and impacts prevention mechanisms prior to commencement of the activities. Upon receiving written approval by DRMS, GIR will implement the actions.

The quarterly reports must include:

- 1.1. Analytical results for the 7 sampling locations described in Technical Revision #10 (TR10 - Figure 6),
- 1.2. Monthly Potentiometric Surface (water table) maps constructed from water table measurements taken during the sampling events. Figures 27, 28 and 29 depict surfaces for the months of July, August and September 2024, respectively,
- 1.3. Water Quality analytical results summary tables highlighting exceedances of select parameters from Regulation 41, Tables 1-4 water quality standards,
- 1.4. Laboratory data packages,
- 1.5. Chain of Custody sheets,
- 1.6. Field sheets for the sampling event(s).

On December 22, 2023, GIR requested a one-year extension for the filing of Designated Mining Operation (DMO) application. A Formal Public Hearing before the Board was scheduled for the Board meeting of January 17-18, 2024.

On January 17, 2024, the Board granted GIR's request extending the DMO application filing by 365 days.

On April 15, 2024, the Board issued to the Operator written confirmation of the Findings of Fact, Conclusion of Law, and Order and Bord Order document signed by the Board on April 11, 2024.

On January 31, 2024, GIR submitted to DRMS a request to Modify Water Sample Collection Frequency and Locations, Identified as Technical Revision 14 (TR-14), as follows:

#### **Adjustment to Sampling Frequency**

The Operator requests that the current sample collection is adjusted from Monthly Sampling to Once per Quarter Sampling.

#### **Adjustment to Sampling Points**

The Operator requests that the current 7 sample collection points (3 groundwater wells [Cross, Caribou and Compliance], 2 mine effluent points [Cross and Caribou Portals] and 2 surface water stations [one upstream and one downstream of the mine site], are adjusted to a single sample point for the site located at the Compliance Well.

On February 5, 2024, DRMS issued to GIR a partial approval of TR-14 addressing the request to change the sampling frequency at the site from monthly to quarterly. DRMS did not approve the request to reduce the number of sampling locations from seven (7) locations to one (1) location.

Resulting from TR-14 partial approval, the sample collected by GIR on September 23, 2024, serves as the sample for the Third Quarter 2024 subject of this report. The results for groundwater are provided on Table 2.1.1.





On August 27, 2024, GIR submitted to the Division of Reclamation, Mining and Safety (Division/DRMS) a request for Technical Revision 15 (TR-15) to reduce the analyte list for surface water, mine effluent and groundwater samples collected on a quarterly basis at the Cross Gold Mine.

On September 10, 2024, DRMS issued to GIR a Preliminary Adequacy Review; Technical Revision (TR-15) – Request to Reduce the Surface Water, Mine Effluent and Groundwater Sampling Analyte List; indicating that the application for TR-15 may be deemed inadequate and denied unless the following item is addressed to the Division’s satisfaction.

1. Please provide updated tables for Surface Water and Groundwater and Effluent Testing Parameters that reflect what the Operator would be analyzing samples for once the requested reduction of analytes is approved.

On September 11, 2024, GIR provided DRMS with the requested tables for Surface Water and Groundwater and Effluent Testing Parameters that reflect what the Operator would be analyzing samples for once the requested reduction of analytes is approved.

On September 12, 2024, the Division approved TR-15.

The testing of Surface Water, Groundwater and Effluent for the Third Quarter of 2024 (September 23, 2024) reflects the approved TR-15 Analyte List.





## **2. Ground Water Monitoring**

Three groundwater monitoring locations corresponding to existing ground water wells, namely, Cabin Well (Compliance), Cross Well and Caribou Well were selected by DRMS for the program. All 3 wells have permanent pumping system installations and water level dataloggers. Water samples for water quality determination are collected via the existing permanent pumping systems.

### **2.1. Water Quality Analytical Results**

Test results from water samples collected from the three monitoring wells are presented on Table 2.1.1 corresponding to the month of September 2024. The results are presented as required and in accordance with the revised Analytical Parameters approved by DRMS as described in the preceding paragraph, the test results are compared with the most stringent concentrations (Standard) based on DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT Water Quality Control Commission REGULATION NO. 41 -THE BASIC STANDARDS FOR GROUNDWATER 5 CCR 1002-41. Water Quality Analytical Results from the Laboratories are provided in the appendices of this report.





**Table 2.1.1 Groundwater Quality Test Results – Sample Date September 23, 2024**

Parameter	Standard	Cross Well	Caribou Well	Compliance Well	Compliance Well Duplicate	Field Blank	Unit	Comments
Aluminum (Al)	5	ND	0.023	0.019	ND	0.036	mg/l	Dissolved
Antimony (Sb)	0.006	0.00055	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.031	0.0097	0.042	0.043	0.0015	mg/l	Dissolved
Beta and Photon Emitters	4	0.609	0.329	1.19	1.7	0.725	pCi/l	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	0.006	0.0025	0.0049	0.0035	0.0015	mg/l	Dissolved
Cadmium (Cd)	0.005	ND	ND	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	4.2	ND	3.1	3.1	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0037	0.099	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	1.39	0.327	0.779	0.259	0.115	pCi/l	
Iron (Fe)	0.3	0.048	0.013	ND	0.0093	ND	mg/l	Dissolved
Lead (Pb)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.007	0.0031	0.0066	0.0075	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.00082	ND	0.0047	0.0048	ND	mg/l	Dissolved
Nitrate (NO3)	10.0	0.33	0.15	0.35	0.35	ND	mg/l as N	Dissolved
Nitrate-Nitrite (total)	10.0	0.36	0.096	0.38	0.38	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.3	7.0	6.9	6.9	---	pH units	
Sulfate (SO4)	250	9.9	3	9.4	9.4	ND	mg/l	Dissolved
TDS	400	99	37	91	88	36	mg/l	Total
Uranium (U)	0.0168 - 0.03	0.000066	ND	0.00015	0.00014	ND	mg/l	Dissolved
Zinc (Zn)	2	1.5	0.0092	0.089	0.086	ND	mg/l	Dissolved
The highlighted cells Indicate Test Results Higher than the Reference Values from Reg. 5 CCR 1002-41								
"ND" Indicates Not Detected								





## 2.2. Groundwater Levels and Potentiometric Water Surface

Potentiometric Figures were developed based on recorded (automated dataloggers) groundwater levels at each of the three monitoring wells at the time the water quality samples were collected. The Cross Winze water levels are also included.

Tables 2.2.1 - July, 2.2.2 August, and 2.2.3 September, provide date and groundwater elevations. The groundwater elevations shown on the tables were used to develop the potentiometric water surfaces depicted on Figures 27, 28, and 29 for the month of July, August and September 2024, respectively.

Please note that no data was logged for the Cabin Well for the months of July and August due to automated transducer failure, that condition has been corrected.

**Table 2.2.1 Wells and Winze Groundwater Elevation – July 23, 2024**

Groundwater Elevation - July		
WELL	COLLAR ELEV.	7/23/2024
	Ft. AMSL	
Caribou	9,744.25	9,705.52
Cabin (Compliance)	9,677.35	NO DATA
Cross	9,692.85	9,642.64
Winze	9,697.48	9,654.10

**Table 2.2.2 Wells and Winze Groundwater Elevation – August 23, 2024**

Groundwater Elevation - August		
WELL	COLLAR ELEV.	8/23/2024
	Ft. AMSL	
Caribou	9,744.25	9,707.06
Cabin (Compliance)	9,677.35	NO DATA
Cross	9,692.85	9,645.70
Winze	9,697.48	9,643.60

**Table 2.2.3 Wells and Winze Groundwater Elevation – September 23, 2024**

Groundwater Elevation - September		
WELL	COLLAR ELEV.	9/23/2024
	Ft. AMSL	
Caribou	9,744.25	9,709.07
Cabin (Compliance)	9,677.35	9,634.68
Cross	9,692.85	9,646.79
Winze	9,697.48	9,652.50





Figure 27 Potentiometric Water Surface – July 2024

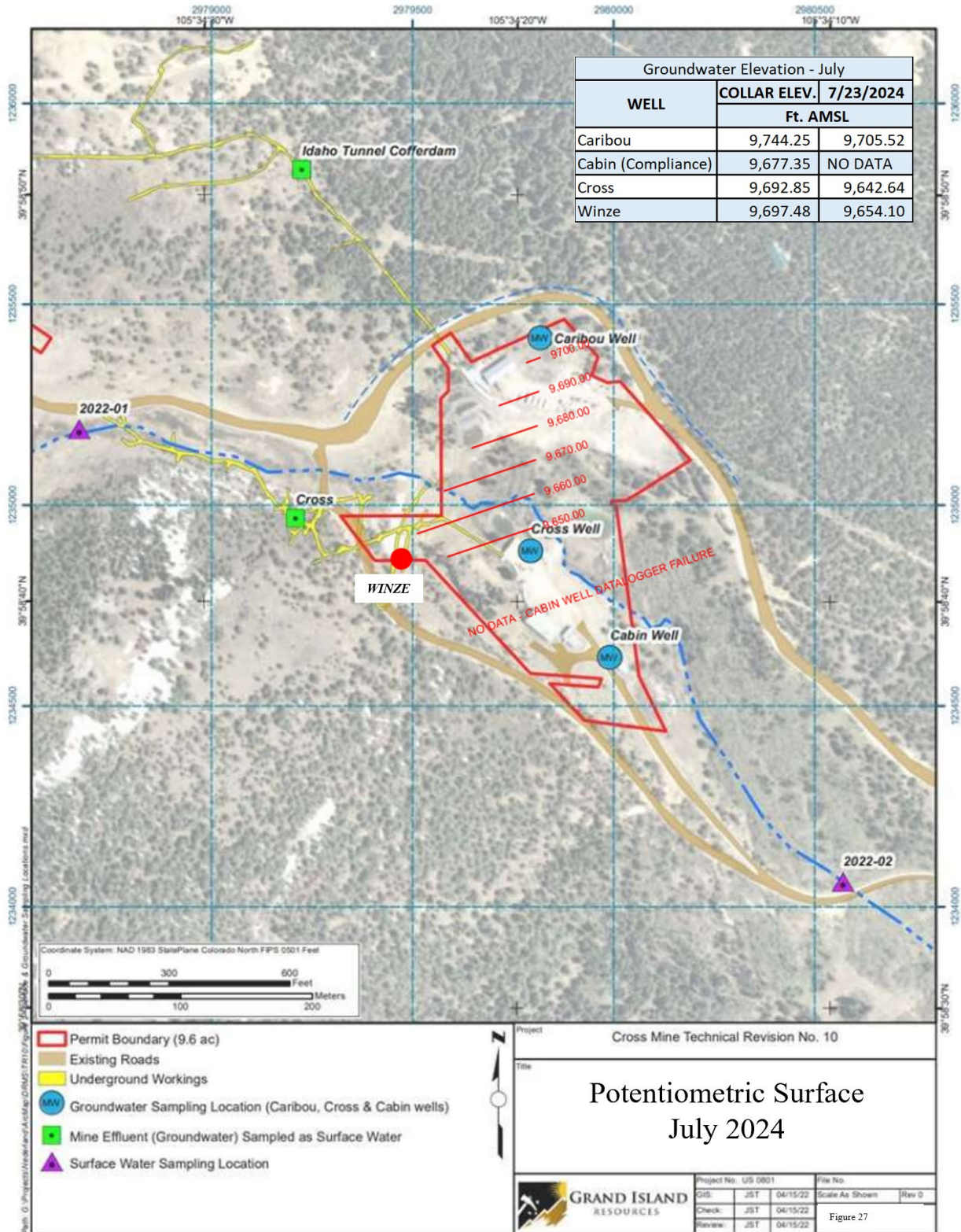






Figure 28 Potentiometric Water Surface – August 2024

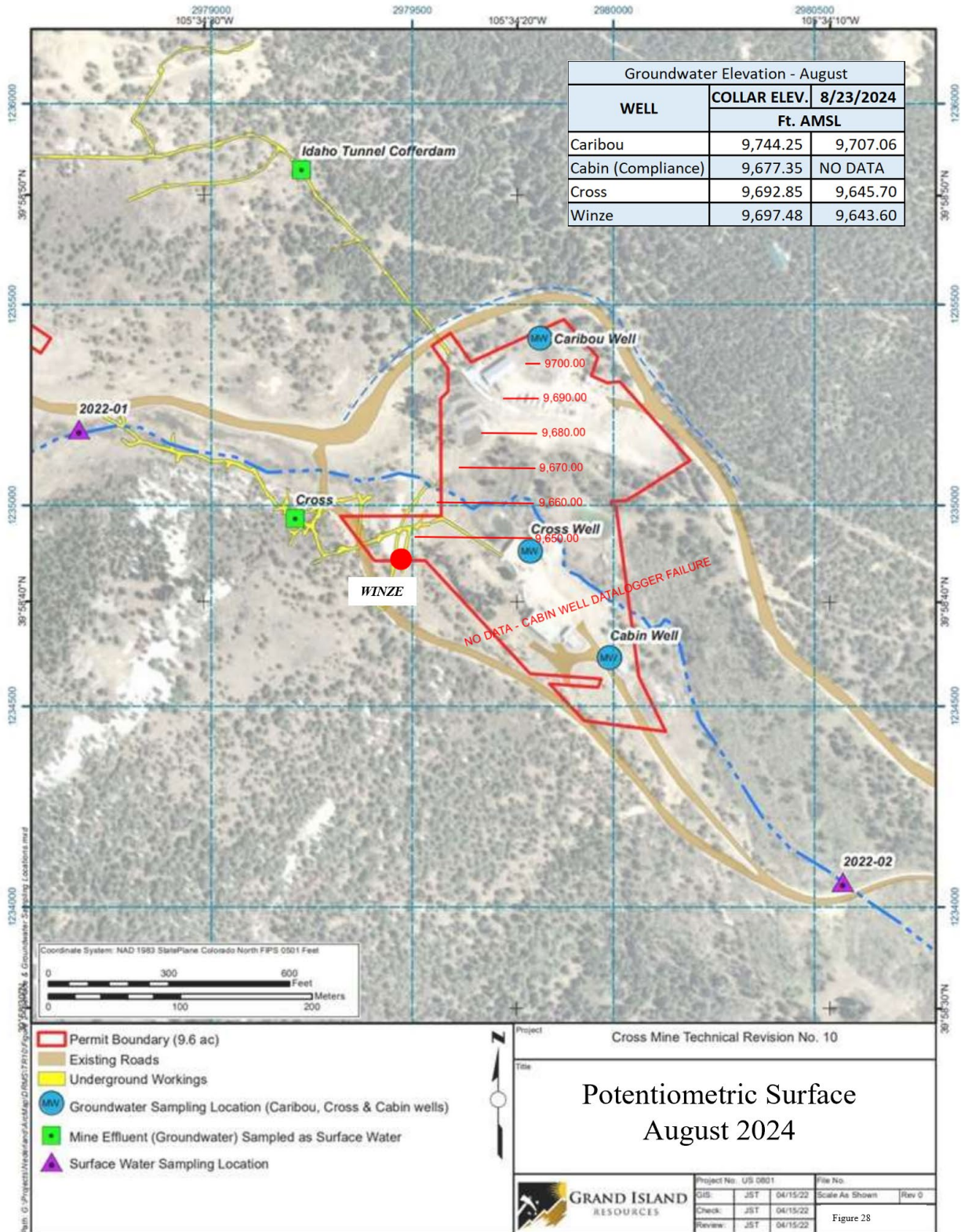
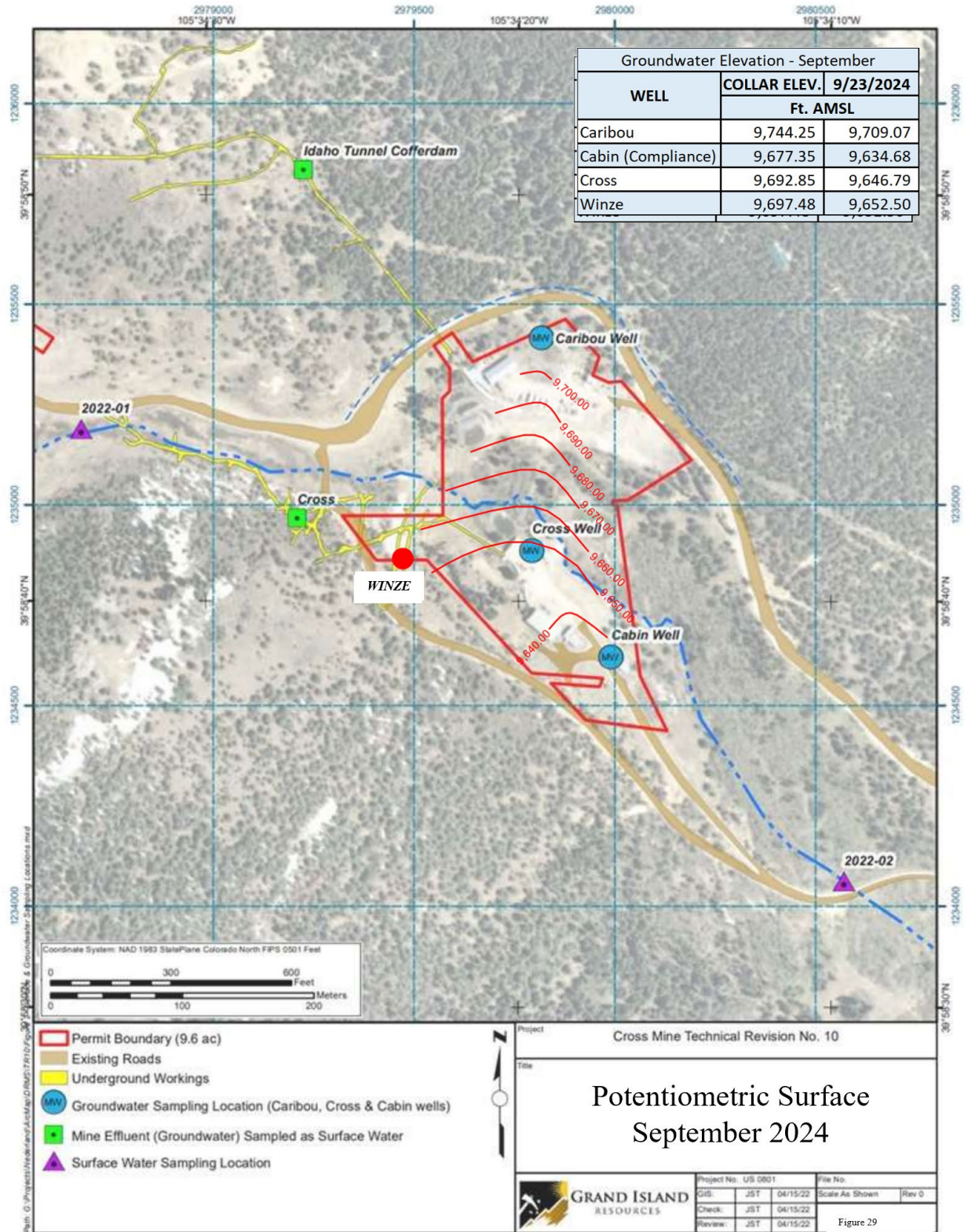






Figure 29 Potentiometric Water Surface – September 2024







### **3. Mine Effluent Monitoring**

Two mine effluent monitoring locations corresponding to points of interest within the GIR site were selected by DRMS as part of the program. One station is in the Cross Mine and one station is in the Idaho Tunnel/Caribou Mine, namely Cross Portal and Caribou Portal, respectively. Water Quality Analytical Results are summarized on Table 3.1. for the month of September 2024. The complete Water Quality Analytical Results from the Laboratories are provided in Appendix A.

Mine effluent reports to the Water Treatment Plant and discharges via the NPDES permit CO-0032751 Outfall 001 (see section 6 for DMR Copy of Record).





**Table 3.1 Effluent Quality Test Results – Sample Date September 23, 2024**

Parameter	Standard	Cross Port <sup>1</sup>	Cross Portal Duplicate	Caribou Port <sup>1</sup>	Unit	Comments
Aluminum (Al)	5	ND	ND	ND	mg/l	Dissolved
Antimony (Sb)	0.006	0.00042	0.00053	0.00089	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.072	0.073	0.063	mg/l	Dissolved
Beta and Photon Emitters	4	1.41	1.68	1.75	pCi/l	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	0.0041	0.0041	0.0037	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0013	0.0012	ND	mg/l	Dissolved
Chloride (Cl)	250	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0018	0.0018	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	2.43	1.01	7.72	pCi/l	
Iron (Fe)	0.3	0.011	ND	0.012	mg/l	Dissolved
Lead (Pb)	0.05	0.00072	0.00072	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0099	0.0093	0.0038	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0069	0.0066	0.0068	mg/l	Dissolved
Nitrate (NO <sub>3</sub> )	10.0	0.13	0.13	0.19	mg/l as N	Dissolved
Nitrate-Nitrite (total)	10.0	0.09	0.083	0.11	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.9	7.9	8.3	pH units	
Sulfate (SO <sub>4</sub> )	250	11	11	12	mg/l	Dissolved
TDS	400	120	120	140	mg/l	Total
Uranium (U)	0.0168 -0.03	0.00077	0.00077	0.0062	mg/l	Dissolved
Zinc (Zn)	2	0.23	0.22	0.0083	mg/l	Dissolved
The highlighted cells Indicate Test Results Higher than the Reference Values from Reg. 5 CCR 1002-41						
"ND" Indicates Not Detected						





#### **4. Surface Water Monitoring**

Two surface water monitoring stations were considered by DRMS to be sufficient and adequate to characterize surface water within the basin of interest. Station 2022-01 is located upstream of the Operator's facility and Station 2022-02 is located downstream of the Operator's facility.

##### **4.1. Water Quality Analytical Results**

Surface water samples were collected on September 23, 2014, from surface water sampling station 2022-02 exclusively because no surface water flows were observed at station 2022-01. Table 4.1.1 provides Analytical Results for the 3<sup>rd</sup> Quarter 2024.

##### **4.2. Surface Water Flows**

Surface water flow measurements were taken during the 3<sup>rd</sup> Quarter of 2024 for surface water station 2022-02 at the time of the sampling event. Table 4.2.1 present the estimated corresponding flows.





Table 4.1.1 Surface Water Analytical Results – September 2024

Parameter	Sta 2202-01	Sta 2202-02	Sta. 2022-02 Duplicate	Units
Cadmium Total Recoverable	No Surface Water flows were observed during the sampling event.	0.33	ND	ug/L
Copper Potentially Dissolved		ND	ND	ug/L
Copper Total Recoverable		0.81	ND	ug/L
Field pH		8.1	8.1	ug/L
Field Temperature		7.2	7.2	Degrees C
Iron Total Recoverable		67	69	ug/L
Lead Potentially Dissolved		0.36	0.46	ug/L
Lead Total Recoverable		0.66	0.64	ug/L
Manganese Potentially Dissolved		2.3	3.6	ug/L
Mercury		ND	ND	ug/L
Nickel Potentially Dissolved		ND	ND	ug/L
pH adj. to 25 deg C		8.1	8.1	SU
Silver Potentially Dissolved		ND	ND	ug/L
Specific Conductance		230	230	umhos/cm
Specific Conductance Total		230	230	umhos/cm
Temperature		19.6	20.9	Degrees C
Total Suspended Solids		1.6	ND	mg/L
Zinc Total Recoverable		15	17	ug/L
Zinc Potentially Dissolved		23	19	ug/L





**Table 4.2.1 Surface Water Flow Estimates – September 2024**

Station	Velocity fps	Depth ft	Width ft	Flow gpm
2022-01	dry bed	-	-	-
2022-02	0.45	0.38	1.67	126.5





## **5. Quality Management (Quality Control & Quality Assurance)**

Grand Island Resources (GIR) is committed to meeting expectations pertaining to the TR10 water quality data collection including proper water sample collection and testing via a Quality Management Program which is founded on Quality Assurance aimed to prevent errors. The program incorporates, among others, Standard Operating Procedures, Sample Collection Protocols, Chains of Custody, and the selection of State Credited Testing Laboratories which have internal Quality Control and Quality Assurance Methods and Standards. Quality Control aimed to identify errors is implemented via testing of one or more of the following Field or Laboratory: Duplicate Samples, Field Blanks and Matrix Spikes.

On Monday March 13, 2023, GIR consulted with Mr. Patrick Lennberg of DRMS (via telephone) a specific deficiency noted by DRMS on their letter of March 2, 2023, requesting additional information of the GIR 1st Quarter 2022 Report; the conclusion of the review and phone conversation is that the SOP approved under TR10 states field duplicate samples will be collected side-by-side with the primary sample. The Operator shall collect one field duplicate sample for each media sampled (groundwater, effluent, and surface water), for a total of 3 duplicate samples to be collected per sampling event as committed to in TR10. GIR initiated the collection of the Field Duplicate for each media sampled on the March 2023 sampling event and will continue to do so for all sampling events going forward.

### **5.1. Groundwater**

Trip Blank Samples were collected at the Cabin Well (Compliance) and Field Duplicate samples were collected from the Cabin Well (Compliance) during the September sampling event. Duplicate and Matrix Spike tests were performed for select parameters which are incorporated in the QC section of the Laboratory Report. No Rinsate samples were collected because water samples were collected from permanently installed equipment at each well.

### **5.2. Mine Effluent**

Field Duplicate samples were collected from the Cross Portal during the September sampling event. Duplicate tests were performed for select parameters which are incorporated in the QC section of the Laboratory Report. No Rinsate samples were collected because disposable samplers were used.

### **5.3. Surface Water**

Field Duplicates were collected from Station 2022-02.





**6. NPDES permit CO-0032751 Outfall 001**

Effluent from the Cross Mine and Idaho Tunnel/Caribou Mine is collected in sumps and ponds and it is pumped to the Water Treatment Plant (subject of TR-10). Treated water is released to Coon Track Creek via pipeline to Outfall-001 in accordance with CDPHE NPDES permit.

Tables 6.1, 6.2 and 6.3 present the DMR Copies of Record filed by the Operator with CDPHE for the month of June, July and August 2024, respectively. Copies of Record for September 2024 will be included in the Fourth Quarter 2024 Report.



Table 6.1 DMR June 2024

DMR Copy of Record

Form Approved OMB No. 2040-0004 expires on 07/31/2026

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

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Permit

Permit #:  
Major:

CO0032751  
No

Permittee:  
Permittee Address:

Grand Island Resources LLC  
12567 W Cedar Dr Ste 110  
Lakewood, CO 80228

Facility:  
Facility Location:

CROSS AND CARIBOU MINES  
CROSS AND CARIBOU MINES  
BOULDER COUNTY, CO 80466

Permitted Feature:

001  
External Outfall

Discharge:

001-A  
Treated Mine Water to Coon Track Creek

Report Dates & Status

Monitoring Period:

From 06/01/24 to 06/30/24

DMR Due Date:

07/28/24

Status:

NetDMR Validated

Considerations for Form Completion

Oil and grease - see I.A.2, pg 3. 30 day average is the highest monthly average during period reported.

Principal Executive Officer

First Name:  
Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
						Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample								=	7.0		7.7	04 - deg C	0	99/99 - Continuous	RC - Recorder (auto)
					Permit Req.									Req Mon MX WK AV		Req Mon DAILY MX	04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample						=	7.3				8.1	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM				9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample							<	4.0		<	4.0	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	30.0 30DA AVG		<=	45.0 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample							<	5.0				28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG				28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample							=	42.0				28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG				28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
01094	Zinc, total recoverable	1 - Effluent Gross	0	--	Sample							=	15.0		=	15.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	750.0 30DA AVG		<=	1500.0 DAILY MX	28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
01113	Cadmium, total recoverable	1 - Effluent Gross	0	--	Sample							<	1.0		<	1.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	50.0 30DA AVG		<=	300.0 DAILY MX	28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
																			02/30 - Twice Per	



Table 6.1 DMR June 2024 (continued)

01114	Lead, total recoverable	1 - Effluent Gross	0	--	Sample										=	1.5	=	1.7	28 - ug/L		Month	GR - GRAB
					Permit Req.										<=	300.0 30DA AVG	<=	600.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI																	
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Sample										=	1.8	=	2.2	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	150.0 30DA AVG	<=	300.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI																	
01220	Chromium, hexavalent dissolved [as Cr]	1 - Effluent Gross	0	--	Sample										<	20.0	<	20.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
01303	Zinc, potentially dissolved	1 - Effluent Gross	6	--	Sample										=	32.5	=	35.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	262.0 30DA AVG	<=	301.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI																	
01304	Silver, potentially dissolved	1 - Effluent Gross	6	--	Sample												<	0.5	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	0.17 30DA AVG	<=	4.7 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI											B - Below Detection Limit/No Detection						
01306	Copper, potentially dissolved	1 - Effluent Gross	6	--	Sample										=	1.64	=	2.3	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	13.0 30DA AVG	<=	20.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI																	
01309	Arsenic, potentially dissolved	1 - Effluent Gross	0	--	Sample												<	5.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.												Req Mon DAILY MX		28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
01313	Cadmium, potentially dissolvd	1 - Effluent Gross	6	--	Sample												<	1.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	0.89 30DA AVG	<=	3.7 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI											B - Below Detection Limit/No Detection						
01314	Chromium, trivalent, potentially dissolvd	1 - Effluent Gross	0	--	Sample										<	20.0			28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon 30DA AVG			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
01318	Lead, potentially dissolvd	1 - Effluent Gross	6	--	Sample										=	1.55	=	2.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.										<=	5.4 30DA AVG	<=	140.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI																	
01319	Manganese, potentially dissolvd	1 - Effluent Gross	0	--	Sample										=	0.58	=	0.58	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
01322	Nickel, potentially dissolved	1 - Effluent Gross	0	--	Sample										<	3.0	<	3.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample										<	5.0	<	5.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI																	
03582	Oil and grease	1 - Effluent Gross	0	--	Sample												<=	10.0 INST MAX	19 - mg/L		77/77 - Contingent	GR - GRAB
					Permit Req.																	
					Value NODI													9 - Conditional Monitoring - Not Required This Period				
	Chromium, trivalent total	1 - Effluent			Sample												<	20.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.												Req Mon DAILY MX		28 - ug/L		01/30 - Monthly	GR - GRAB



Table 6.1 DMR June 2024 (continued)

04262	recoverable	Gross	0	--	Value NODI														0		
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	6	--	Sample								=	0.278199	=	0.346041	03 - MGD	99/99 - Continuous	RC - Recorder (auto)		
					Permit Req.							<=	0.458 30DA AVG		Req Mon DAILY MX	03 - MGD	0	99/99 - Continuous	RC - Recorder (auto)		
					Value NODI																
51202	Sulfide-hydrogen sulfide [undissociated]	1 - Effluent Gross	0	--	Sample								<	1.0			19 - mg/L	01/30 - Monthly	GR - GRAB		
					Permit Req.								Req Mon 30DA AVG			19 - mg/L	0	01/30 - Monthly	GR - GRAB		
					Value NODI																
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample								<	0.2	<	0.2	28 - ug/L	01/30 - Monthly	GR - GRAB		
					Permit Req.								<=	1.0 30DA AVG	<=	2.0 DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB	
					Value NODI																
84066	Oil and grease visual	1 - Effluent Gross	0	--	Sample			=	0.0	AB - abst=0.prst=1								02/30 - Twice Per Month	VI - VISUAL		
					Permit Req.				Req Mon INST MAX	AB - abst=0.prst=1							0	02/30 - Twice Per Month	VI - VISUAL		
					Value NODI																
Submission Note																					
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.																					
Edit Check Errors																					
No errors.																					
Comments																					
Attachments																					
Name														Type		Size					
CO0032751_DMRcov_2024_06.pdf														pdf		202111.0					
CO0032751_Lab_2024_06_J192702-1_06-12-24.pdf														pdf		1097033.0					
CO0032751_Lab_2024_06_J193445-1_06-28-24.pdf														pdf		1016312.0					
Report Last Saved By																					
Grand Island Resources LLC																					
User:				JOHNRINKO																	
Name:				John Rinko																	
E-Mail:				johnrinko@yahoo.com																	
Date/Time:				2024-07-28 21:17 (Time Zone: -06:00)																	
Report Last Signed By																					
User:				JOHNRINKO																	
Name:				John Rinko																	
E-Mail:				johnrinko@yahoo.com																	
Date/Time:				2024-07-28 21:18 (Time Zone: -06:00)																	



Table 6.2 DMR July 2024

DMR Copy of Record

Form Approved OMB No. 2040-0004 expires on 07/31/2026

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with this permit and EPA NPDES regulations 40 CFR 122.41(l)(4)(i). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average 2 hours per outfall. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Permit

Permit #:  
Major:

CO0032751  
No

Permittee:  
Permittee Address:

Grand Island Resources LLC  
12567 W Cedar Dr Ste 110  
Lakewood, CO 80228

Facility:  
Facility Location:

CROSS AND CARIBOU MINES  
CROSS AND CARIBOU MINES  
BOULDER COUNTY, CO 80466

Permitted Feature:

001  
External Outfall

Discharge:

001-A  
Treated Mine Water to Coon Track Creek

Report Dates & Status

Monitoring Period:

From 07/01/24 to 07/31/24

DMR Due Date:

08/28/24

Status:

NetDMR Validated

Considerations for Form Completion

Oil and grease - see I.A.2, pg 3. 30 day average is the highest monthly average during period reported.

Principal Executive Officer

First Name:  
Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading				Units	Quality or Concentration						Units	# of Ex.	Frequency of Analysis	Sample Type
						Qualifier 1	Value 1	Qualifier 2	Value 2		Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3				
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample								=	7.5		7.9	04 - deg C	0	99/99 - Continuous	RC - Recorder (auto)
					Permit Req.									Req Mon MX WK AV		Req Mon DAILY MX	04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample						=	7.5				7.8	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM				9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample								<	4.0		4.0	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	30.0 30DA AVG		45.0 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample								<	5.0			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample								=	100.0			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
01094	Zinc, total recoverable	1 - Effluent Gross	0	--	Sample								=	30.0		30.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	750.0 30DA AVG		1500.0 DAILY MX	28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
01113	Cadmium, total recoverable	1 - Effluent Gross	0	--	Sample								<	1.0		1.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	50.0 30DA AVG		300.0 DAILY MX	28 - ug/L		01/30 - Monthly	GR - GRAB
					Value NODI															
																			02/30 - Twice Per	



**Table 6.2 DMR July 2024 (continued)**

01114	Lead, total recoverable	1 - Effluent Gross	0	--	Sample									=	0.94	=	1.0	28 - ug/L		Month		GR - GRAB	
					Permit Req.								<=	300.0 30DA AVG		<=	600.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI																		
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Sample									=	0.49	=	0.97	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	150.0 30DA AVG		<=	300.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI																		
01220	Chromium, hexavalent dissolved [as Cr]	1 - Effluent Gross	0	--	Sample									<	20.0	<	20.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.									Req Mon 30DA AVG			Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
01303	Zinc, potentially dissolved	1 - Effluent Gross	7	--	Sample									=	31.0	=	37.0	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	221.0 30DA AVG		<=	253.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI																		
01304	Silver, potentially dissolved	1 - Effluent Gross	7	--	Sample											<	1.0	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	0.14 30DA AVG		<=	3.9 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI									B - Below Detection Limit/No Detection									
01306	Copper, potentially dissolved	1 - Effluent Gross	7	--	Sample									=	0.89	=	0.99	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	16.0 30DA AVG		<=	25.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI																		
01309	Arsenic, potentially dissolved	1 - Effluent Gross	0	--	Sample											<	5.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.												Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
01313	Cadmium, potentially dissolvd	1 - Effluent Gross	7	--	Sample											<	1.0	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	0.75 30DA AVG		<=	3.1 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI									B - Below Detection Limit/No Detection									
01314	Chromium, trivalent, potentially dissolvd	1 - Effluent Gross	0	--	Sample									<	20.0			28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.									Req Mon 30DA AVG				28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
01318	Lead, potentially dissolvd	1 - Effluent Gross	7	--	Sample									=	0.87	=	0.94	28 - ug/L		02/30 - Twice Per Month		GR - GRAB	
					Permit Req.								<=	4.6 30DA AVG		<=	118.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month		GR - GRAB	
					Value NODI																		
01319	Manganese, potentially dissolvd	1 - Effluent Gross	0	--	Sample									=	4.0	=	4.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.									Req Mon 30DA AVG			Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
01322	Nickel, potentially dissolvd	1 - Effluent Gross	0	--	Sample									<	3.0	<	3.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.									Req Mon 30DA AVG			Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample									<	5.0	<	5.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.									Req Mon 30DA AVG			Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly		GR - GRAB	
					Value NODI																		
03582	Oil and grease	1 - Effluent Gross	0	--	Sample											<=	10.0 INST MAX	19 - mg/L		77/77 - Contingent		GR - GRAB	
					Permit Req.																		
					Value NODI														9 - Conditional Monitoring - Not Required This Period				
	Chromium, trivalent total	1 - Effluent			Sample											<	20.0	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Permit Req.												Req Mon DAILY MX	28 - ug/L		01/30 - Monthly		GR - GRAB	
					Value NODI																		



Table 6.2 DMR July 2024 (continued)

04262	recoverable	Gross	0		Value NODI														0		
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	7	--	Sample								=	0.156233	=	0.316318	03 - MGD	0	99/99 - Continuous	RC - Recorder (auto)	
					Permit Req.							<=	0.265 30DA AVG		Req Mon DAILY MX	03 - MGD	99/99 - Continuous		RC - Recorder (auto)		
					Value NODI																
51202	Sulfide-hydrogen sulfide [undissociated]	1 - Effluent Gross	0	--	Sample								<	1.0			19 - mg/L	0	01/30 - Monthly	GR - GRAB	
					Permit Req.								Req Mon 30DA AVG			19 - mg/L	01/30 - Monthly		GR - GRAB		
					Value NODI																
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample								<	0.2	<	0.2	28 - ug/L	0	01/30 - Monthly	GR - GRAB	
					Permit Req.							<=	1.0 30DA AVG	<=	2.0 DAILY MX	28 - ug/L	01/30 - Monthly		GR - GRAB		
					Value NODI																
84066	Oil and grease visual	1 - Effluent Gross	0	--	Sample			=	0.0	AB - abst=0,prst=1								0	02/30 - Twice Per Month	VI - VISUAL	
					Permit Req.				Req Mon INST MAX	AB - abst=0,prst=1							02/30 - Twice Per Month		VI - VISUAL		
					Value NODI																

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

Name	Type	Size
CO0032751_DMRcov_2024_07.pdf	pdf	201185.0
CO0032751_Lab_2024_07_J193704-1_07-08-24.pdf	pdf	1322943.0
CO0032751_Lab_2024_07_J194456-1_07-24-24.pdf	pdf	1039048.0

Report Last Saved By

Grand Island Resources LLC

User:JOHNRINKO

Name:John Rinko

E-Mail:johnrinko@yahoo.com

Date/Time:2024-08-27 20:15 (Time Zone: -06:00)

Report Last Signed By

User:JOHNRINKO

Name:John Rinko

E-Mail:johnrinko@yahoo.com

Date/Time:2024-08-27 20:16 (Time Zone: -06:00)



Table 6.3 DMR August 2024

DMR Copy of Record

Form Approved OMB No. 2040-0004 expires on 07/31/2026

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

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Permit

Permit #:  
Major:

CO0032751  
No

Permittee:  
Permittee Address:

Grand Island Resources LLC  
12567 W Cedar Dr Ste 110  
Lakewood, CO 80228

Facility:  
Facility Location:

CROSS AND CARIBOU MINES  
CROSS AND CARIBOU MINES  
BOULDER COUNTY, CO 80466

Permitted Feature:

001  
External Outfall

Discharge:

001-A  
Treated Mine Water to Coon Track Creek

Report Dates & Status

Monitoring Period:

From 08/01/24 to 08/31/24

DMR Due Date:

09/28/24

Status:

NetDMR Validated

Considerations for Form Completion

Oil and grease - see I.A.2, pg 3. 30 day average is the highest monthly average during period reported.

Principal Executive Officer

First Name:

Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample							=	8.1		8.8	04 - deg C	0	99/99 - Continuous	RC - Recorder (auto)
					Permit Req.								Req Mon MX WK AV		Req Mon DAILY MX	04 - deg C			
					Value NODI														
00400	pH	1 - Effluent Gross	0	--	Sample					=	7.6			=	8.0	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.					>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU			
					Value NODI														
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample							<	4.0	<	4.0	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	30.0 30DA AVG	<=	45.0 DAILY MX	19 - mg/L			
					Value NODI														
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample							<	5.0			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG			28 - ug/L			
					Value NODI														
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample							=	21.0			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG			28 - ug/L			
					Value NODI														
01094	Zinc, total recoverable	1 - Effluent Gross	0	--	Sample							=	27.0	=	27.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	750.0 30DA AVG	<=	1500.0 DAILY MX	28 - ug/L			
					Value NODI														
01113	Cadmium, total recoverable	1 - Effluent Gross	0	--	Sample							<	1.0	<	1.0	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.							<=	50.0 30DA AVG	<=	300.0 DAILY MX	28 - ug/L			
					Value NODI														
																		02/30 - Twice Per	



Table 6.3 DMR August 2024 (continued)

01114	Lead, total recoverable	1 - Effluent Gross	0	--	Sample						=	0.9	=	1.0	28 - ug/L		Month	GR - GRAB
					Permit Req.						<=	300.0 30DA AVG	<=	600.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Sample						=	0.48	=	0.95	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	150.0 30DA AVG	<=	300.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01220	Chromium, hexavalent dissolved [as Cr]	1 - Effluent Gross	0	--	Sample						<	20.0	<	20.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.							Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
01303	Zinc, potentially dissolved	1 - Effluent Gross	8	--	Sample						=	25.0	=	25.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	241.0 30DA AVG	<=	263.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01304	Silver, potentially dissolved	1 - Effluent Gross	8	--	Sample								<	0.5	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	0.16 30DA AVG	<=	4.1 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI							B - Below Detection Limit/No Detection						
01306	Copper, potentially dissolved	1 - Effluent Gross	8	--	Sample						=	0.86	=	1.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	17.0 30DA AVG	<=	25.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01309	Arsenic, potentially dissolved	1 - Effluent Gross	0	--	Sample								<	5.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.									Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
01313	Cadmium, potentially dissolvd	1 - Effluent Gross	8	--	Sample								<	1.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	0.82 30DA AVG	<=	3.2 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI							B - Below Detection Limit/No Detection						
01314	Chromium, trivalent, potentially dissolvd	1 - Effluent Gross	0	--	Sample						<	20.0			28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.							Req Mon 30DA AVG			28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
01318	Lead, potentially dissolvd	1 - Effluent Gross	8	--	Sample						=	0.85	=	0.93	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						<=	5.0 30DA AVG	<=	122.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01319	Manganese, potentially dissolvd	1 - Effluent Gross	0	--	Sample						=	0.76	=	0.76	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.							Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
01322	Nickel, potentially dissolvd	1 - Effluent Gross	0	--	Sample						<	3.0	<	3.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.							Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample						=	2.6	=	2.6	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.							Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI													
03582	Oil and grease	1 - Effluent Gross	0	--	Sample										19 - mg/L		77/77 - Contingent	GR - GRAB
					Permit Req.									<=	10.0 INST MAX			
					Value NODI										9 - Conditional Monitoring - Not Required This Period			
	Chromium, trivalent total	1 - Effluent			Sample								<	20.0	28 - ug/L		01/30 - Monthly	GR - GRAB
					Permit Req.										Req Mon DAILY MX	28 - ug/L		01/30 - Monthly







## **Appendices**



## APPENDICES



## APPENDIX A GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 10/24/2024 10:46:13 AM

## JOB DESCRIPTION

Nederland, CO - Groundwater

## JOB NUMBER

280-197036-1



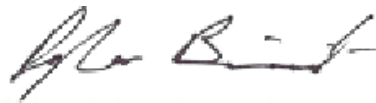
# Eurofins Denver

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



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# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	6
Detection Summary . . . . .	9
Method Summary . . . . .	12
Sample Summary . . . . .	13
Client Sample Results . . . . .	14
QC Sample Results . . . . .	23
QC Association . . . . .	32
Chronicle . . . . .	37
Certification Summary . . . . .	41
Chain of Custody . . . . .	43
Receipt Checklists . . . . .	45





## Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

#### Rad TICs

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

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## Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

### Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO - Groundwater

Job ID: 280-197036-1

**Job ID: 280-197036-1**

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## Job Narrative 280-197036-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Radiochemistry data information:

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy or unless requested as wet weight by the client.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

The method blank (MB) z-score is within limits, unless stated otherwise below, and is stored in the level IV raw data.

This laboratory report is confidential and is intended for the sole use of Eurofins Environment Testing and its client.

### Receipt

The samples were received on 9/23/2024 4:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.5°C, 5.0°C and 5.1°C.

### Receipt Exceptions

Due to laboratory instrumentation issue for the requested Sulfate analysis by SM4500 SO4 E, the laboratory analyzed the submitted samples for Sulfate by EPA method 300.0. The client was notified on 9/30/2024 and approved of the method substitution for this sample delivery group.

### Method 200.7 Rev 4.4 - Metals (ICP) - Dissolved

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# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Job ID: 280-197036-1 (Continued)

Eurofins Denver

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Metals (ICP) - Dissolved. The samples were prepared on 9/25/2024 and analyzed on 9/26/2024.

### Method 200.8 - ICPMS Total Metals - Dissolved

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for ICPMS Total Metals - Dissolved. The samples were prepared on 9/26/2024 and analyzed on 9/27/2024 and 10/1/2024.

### Method SM 2540C - Solids, Total Dissolved (TDS)

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Solids, Total Dissolved (TDS). The samples were analyzed on 9/24/2024 and 9/25/2024.

### Method 300.0 - Anions, Ion Chromatography

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 10/1/2024.

### Method 300.0 - Anions, Ion Chromatography

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 9/24/2024.

### Method 353.2 - Nitrogen, Nitrate-Nitrite

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Nitrogen, Nitrate-Nitrite. The samples were analyzed on 10/8/2024.

### Method SM 4500 Cl- E - Chloride, Total

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Chloride, Total. The samples were analyzed on 10/3/2024.

### Method 901.1 - Cesium 137 & Other Gamma Emitters (GS) - Dissolved

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Cesium 137 & Other Gamma Emitters (GS) - Dissolved. The samples were prepared on 10/15/2024 and analyzed on 10/19/2024.

Gamma prep batch 160-683713

The minimum detectable concentration (MDC) for the method blank (MB) is above the requested limit for Cs137. The activity was not observed in the MB above the MDC or reporting limit (RL). The data for the following sample have been reported with the MDC achieved: (MB 160-683713/1-A).

Gamma prep batch 160- 683713

The detection goal of 20 pCi/L was not met for Cs-137 for the following samples. An elevated MDC can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent "force-fit" of the non-existent peak which resulted in higher than normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data, the activity is well below the RL and MDC: COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8)

Gamma Prep Batch 160-683713

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## Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO - Groundwater

Job ID: 280-197036-1

### Job ID: 280-197036-1 (Continued)

Eurofins Denver

Many isotopes requested by gamma spectrometry analysis do not have any gamma emissions, the gamma emissions they do have are very poor, and/or are reported by assuming secular equilibrium with a longer-lived parent (or vice-versa). For example, Th-232 (which does not have a good gamma-ray) is often reported assuming the shorter-lived Ra-228 daughter is in equilibrium with the Th-232 parent. Or, Pb-214 and/or Bi-214, daughters of potentially volatile Rn-222 in the Ra-226 decay chain, may not be in equilibrium with the parent unless sufficient time has been allowed since the break in equilibrium (e.g. 21 days in the case of Ra-226-supported ingrowth). The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from      Reported to Analyte

Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7), CARIBOU PORTAL (280-197036-8) and (280-197036-A-1-B DU)

#### Method 900.0 - Gross Alpha and Gross Beta Radioactivity - Dissolved

Samples CROSS WELL (280-197036-1), COMPLIANCE WELL (280-197036-2), COMPLIANCE 02 (280-197036-3), COMPLIANCE 03 (280-197036-4), CARIBOU WELL (280-197036-5), CROSS PORTAL (280-197036-6), CROSS PORTAL 02 (280-197036-7) and CARIBOU PORTAL (280-197036-8) were analyzed for Gross Alpha and Gross Beta Radioactivity - Dissolved. The samples were prepared on 9/26/2024 and analyzed on 10/6/2024 and 10/7/2024.

Gross Alpha and Gross Beta batch 681024

Although the sample was prepped at full volume, the detection goal was not met for Gross Alpha. However the activity in the sample was above the detection goal achieved. The laboratory does not believe this discrepancy to have a negative impact on the data being reported:

CARIBOU PORTAL (280-197036-8).

Eurofins Denver



# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Client Sample ID: CROSS WELL

## Lab Sample ID: 280-197036-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.0060	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Iron	0.048	J	0.10	0.0091	mg/L	1		200.7 Rev 4.4	Dissolved
Antimony	0.00055	J	0.0020	0.00040	mg/L	1		200.8	Dissolved
Barium	0.031		0.0030	0.00038	mg/L	1		200.8	Dissolved
Copper	0.0037		0.0020	0.00071	mg/L	1		200.8	Dissolved
Manganese	0.0070		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.00082	J	0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.000066	J	0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	1.5		0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.33	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	9.9		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.36		0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	99		10	4.7	mg/L	1		SM 2540C	Total/NA
Chloride	4.2		2.0	0.68	mg/L	1		SM 4500 Cl- E	Total/NA

## Client Sample ID: COMPLIANCE WELL

## Lab Sample ID: 280-197036-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.019	J	0.10	0.018	mg/L	1		200.7 Rev 4.4	Dissolved
Boron	0.0049	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Barium	0.042		0.0030	0.00038	mg/L	1		200.8	Dissolved
Manganese	0.0066		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.0047		0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.00015	J	0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	0.089		0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.35	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	9.4		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.38		0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	91		10	4.7	mg/L	1		SM 2540C	Total/NA
Chloride	3.1		2.0	0.68	mg/L	1		SM 4500 Cl- E	Total/NA

## Client Sample ID: COMPLIANCE 02

## Lab Sample ID: 280-197036-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.0035	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Iron	0.0093	J	0.10	0.0091	mg/L	1		200.7 Rev 4.4	Dissolved
Barium	0.043		0.0030	0.00038	mg/L	1		200.8	Dissolved
Manganese	0.0075		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.0048		0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.00014	J	0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	0.086		0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.35	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	9.4		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.38		0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	88		10	4.7	mg/L	1		SM 2540C	Total/NA
Chloride	3.1		2.0	0.68	mg/L	1		SM 4500 Cl- E	Total/NA

## Client Sample ID: COMPLIANCE 03

## Lab Sample ID: 280-197036-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.036	J	0.10	0.018	mg/L	1		200.7 Rev 4.4	Dissolved
Boron	0.0015	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved

This Detection Summary does not include radiochemical test results.

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# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Client Sample ID: COMPLIANCE 03 (Continued)

Lab Sample ID: 280-197036-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0015	J	0.0030	0.00038	mg/L	1		200.8	Dissolved
Total Dissolved Solids (TDS)	36	J	40	19	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: CARIBOU WELL

Lab Sample ID: 280-197036-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.023	J	0.10	0.018	mg/L	1		200.7 Rev 4.4	Dissolved
Boron	0.0025	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Iron	0.013	J	0.10	0.0091	mg/L	1		200.7 Rev 4.4	Dissolved
Barium	0.0097		0.0030	0.00038	mg/L	1		200.8	Dissolved
Copper	0.099		0.0020	0.00071	mg/L	1		200.8	Dissolved
Manganese	0.0031		0.0030	0.00051	mg/L	1		200.8	Dissolved
Zinc	0.0092	J	0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.15	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	3.0	J	5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.096	J	0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	37		10	4.7	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: CROSS PORTAL

Lab Sample ID: 280-197036-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.0041	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Iron	0.011	J	0.10	0.0091	mg/L	1		200.7 Rev 4.4	Dissolved
Antimony	0.00042	J	0.0020	0.00040	mg/L	1		200.8	Dissolved
Barium	0.072		0.0030	0.00038	mg/L	1		200.8	Dissolved
Cadmium	0.0013		0.0010	0.00019	mg/L	1		200.8	Dissolved
Copper	0.0018	J	0.0020	0.00071	mg/L	1		200.8	Dissolved
Lead	0.00072	J	0.0010	0.00023	mg/L	1		200.8	Dissolved
Manganese	0.0099		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.0069		0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.00077	J	0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	0.23		0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.13	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	11		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.090	J	0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	120		10	4.7	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: CROSS PORTAL 02

Lab Sample ID: 280-197036-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.0041	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Antimony	0.00053	J	0.0020	0.00040	mg/L	1		200.8	Dissolved
Barium	0.073		0.0030	0.00038	mg/L	1		200.8	Dissolved
Cadmium	0.0012		0.0010	0.00019	mg/L	1		200.8	Dissolved
Copper	0.0018	J	0.0020	0.00071	mg/L	1		200.8	Dissolved
Lead	0.00072	J	0.0010	0.00023	mg/L	1		200.8	Dissolved
Manganese	0.0093		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.0066		0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.00077	J	0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	0.22		0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.13	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	11		5.0	1.0	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

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## Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

### Client Sample ID: CROSS PORTAL 02 (Continued)

### Lab Sample ID: 280-197036-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.083	J	0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	120		10	4.7	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: CARIBOU PORTAL

### Lab Sample ID: 280-197036-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.0037	J B	0.10	0.0015	mg/L	1		200.7 Rev 4.4	Dissolved
Iron	0.012	J	0.10	0.0091	mg/L	1		200.7 Rev 4.4	Dissolved
Antimony	0.00089	J	0.0020	0.00040	mg/L	1		200.8	Dissolved
Barium	0.063		0.0030	0.00038	mg/L	1		200.8	Dissolved
Manganese	0.0038		0.0030	0.00051	mg/L	1		200.8	Dissolved
Molybdenum	0.0068		0.0020	0.00037	mg/L	1		200.8	Dissolved
Uranium	0.0062		0.0010	0.000030	mg/L	1		200.8	Dissolved
Zinc	0.0083	J	0.010	0.0020	mg/L	1		200.8	Dissolved
Nitrate as N	0.19	J	0.50	0.090	mg/L	1		300.0	Total/NA
Sulfate	12		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.11		0.10	0.044	mg/L	1		353.2	Total/NA
Total Dissolved Solids (TDS)	140		10	4.7	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver



# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	ICPMS Total Metals	EPA	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 4500 Cl- E	Chloride, Total	SM	EET DEN
900.0	Gross Alpha and Gross Beta Radioactivity	EPA	EET SL
901.1	Cesium 137 & Other Gamma Emitters (GS)	EPA	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
Evaporation	Preparation, Evaporation	None	EET SL
Fill_Geo-0	Fill Geometry, No In-Growth	None	EET SL

## Protocol References:

EPA = US Environmental Protection Agency  
None = None  
SM = "Standard Methods For The Examination Of Water And Wastewater"

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100  
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-197036-1	CROSS WELL	Water	09/23/24 13:00	09/23/24 16:35
280-197036-2	COMPLIANCE WELL	Water	09/23/24 13:30	09/23/24 16:35
280-197036-3	COMPLIANCE 02	Water	09/23/24 13:30	09/23/24 16:35
280-197036-4	COMPLIANCE 03	Water	09/23/24 13:30	09/23/24 16:35
280-197036-5	CARIBOU WELL	Water	09/23/24 11:30	09/23/24 16:35
280-197036-6	CROSS PORTAL	Water	09/23/24 12:15	09/23/24 16:35
280-197036-7	CROSS PORTAL 02	Water	09/23/24 12:15	09/23/24 16:35
280-197036-8	CARIBOU PORTAL	Water	09/23/24 11:15	09/23/24 16:35



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Client Sample ID: CROSS WELL

Date Collected: 09/23/24 13:00

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:12	1
Boron	0.0060	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:12	1
Iron	0.048	J	0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:12	1

Client Sample ID: COMPLIANCE WELL

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.019	J	0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:16	1
Boron	0.0049	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:16	1
Iron	ND		0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:16	1

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:39	1
Boron	0.0035	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:39	1
Iron	0.0093	J	0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:39	1

Client Sample ID: COMPLIANCE 03

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.036	J	0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:44	1
Boron	0.0015	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:44	1
Iron	ND		0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:44	1

Client Sample ID: CARIBOU WELL

Date Collected: 09/23/24 11:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.023	J	0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:48	1
Boron	0.0025	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:48	1
Iron	0.013	J	0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:48	1

Client Sample ID: CROSS PORTAL

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:52	1
Boron	0.0041	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:52	1
Iron	0.011	J	0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:52	1

Client Sample ID: CROSS PORTAL 02

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 08:56	1
Boron	0.0041	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 08:56	1
Iron	ND		0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 08:56	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Client Sample ID: CARIBOU PORTAL

Date Collected: 09/23/24 11:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 09:00	1
Boron	0.0037	J B	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 09:00	1
Iron	0.012	J	0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 09:00	1

## Method: EPA 200.8 - ICPMS Total Metals - Dissolved

Client Sample ID: CROSS WELL

Date Collected: 09/23/24 13:00

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00055	J	0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:41	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:41	1
Barium	0.031		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:41	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:41	1
Copper	0.0037		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:41	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:41	1
Manganese	0.0070		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:21	1
Molybdenum	0.00082	J	0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:41	1
Uranium	0.000066	J	0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:41	1
Zinc	1.5		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:41	1

Client Sample ID: COMPLIANCE WELL

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:44	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:44	1
Barium	0.042		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:44	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:44	1
Copper	ND		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:44	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:44	1
Manganese	0.0066		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:25	1
Molybdenum	0.0047		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:44	1
Uranium	0.00015	J	0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:44	1
Zinc	0.089		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:44	1

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:48	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:48	1
Barium	0.043		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:48	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:48	1
Copper	ND		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:48	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:48	1
Manganese	0.0075		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:28	1
Molybdenum	0.0048		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:48	1
Uranium	0.00014	J	0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:48	1
Zinc	0.086		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:48	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 200.8 - ICPMS Total Metals - Dissolved

Client Sample ID: COMPLIANCE 03

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:52	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:52	1
Barium	0.0015	J	0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:52	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:52	1
Copper	ND		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:52	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:52	1
Manganese	ND		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:32	1
Molybdenum	ND		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:52	1
Uranium	ND		0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:52	1
Zinc	ND		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:52	1

Client Sample ID: CARIBOU WELL

Date Collected: 09/23/24 11:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:55	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:55	1
Barium	0.0097		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:55	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:55	1
Copper	0.099		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:55	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:55	1
Manganese	0.0031		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:35	1
Molybdenum	ND		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:55	1
Uranium	ND		0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:55	1
Zinc	0.0092	J	0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:55	1

Client Sample ID: CROSS PORTAL

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00042	J	0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:59	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:59	1
Barium	0.072		0.0030	0.00038	mg/L		09/26/24 14:48	10/01/24 19:39	1
Cadmium	0.0013		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:59	1
Copper	0.0018	J	0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:59	1
Lead	0.00072	J	0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:59	1
Manganese	0.0099		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:39	1
Molybdenum	0.0069		0.0020	0.00037	mg/L		09/26/24 14:48	10/01/24 19:39	1
Uranium	0.00077	J	0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:59	1
Zinc	0.23		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:59	1

Client Sample ID: CROSS PORTAL 02

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00053	J	0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 20:02	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 20:02	1
Barium	0.073		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 20:02	1
Cadmium	0.0012		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 20:02	1
Copper	0.0018	J	0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 20:02	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 200.8 - ICPMS Total Metals - Dissolved (Continued)

Client Sample ID: CROSS PORTAL 02

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00072	J	0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 20:02	1
Manganese	0.0093		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:42	1
Molybdenum	0.0066		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 20:02	1
Uranium	0.00077	J	0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 20:02	1
Zinc	0.22		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 20:02	1

Client Sample ID: CARIBOU PORTAL

Date Collected: 09/23/24 11:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00089	J	0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 20:06	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 20:06	1
Barium	0.063		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 20:06	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 20:06	1
Copper	ND		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 20:06	1
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 20:06	1
Manganese	0.0038		0.0030	0.00051	mg/L		09/26/24 14:48	10/01/24 19:46	1
Molybdenum	0.0068		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 20:06	1
Uranium	0.0062		0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 20:06	1
Zinc	0.0083	J	0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 20:06	1

## General Chemistry

Client Sample ID: CROSS WELL

Date Collected: 09/23/24 13:00

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.33	J	0.50	0.090	mg/L			09/24/24 04:03	1
Sulfate (EPA 300.0)	9.9		5.0	1.0	mg/L			10/01/24 20:47	1
Nitrate Nitrite as N (EPA 353.2)	0.36		0.10	0.044	mg/L			10/08/24 12:12	1
Total Dissolved Solids (TDS) (SM 2540C)	99		10	4.7	mg/L			09/24/24 09:17	1
Chloride (SM 4500 Cl- E)	4.2		2.0	0.68	mg/L			10/03/24 12:21	1

Client Sample ID: COMPLIANCE WELL

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.35	J	0.50	0.090	mg/L			09/24/24 03:12	1
Sulfate (EPA 300.0)	9.4		5.0	1.0	mg/L			10/01/24 20:58	1
Nitrate Nitrite as N (EPA 353.2)	0.38		0.10	0.044	mg/L			10/08/24 12:14	1
Total Dissolved Solids (TDS) (SM 2540C)	91		10	4.7	mg/L			09/24/24 09:17	1
Chloride (SM 4500 Cl- E)	3.1		2.0	0.68	mg/L			10/03/24 12:21	1

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.35	J	0.50	0.090	mg/L			09/24/24 03:29	1
Sulfate (EPA 300.0)	9.4		5.0	1.0	mg/L			10/01/24 21:09	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## General Chemistry (Continued)

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	0.38		0.10	0.044	mg/L			10/08/24 12:15	1
Total Dissolved Solids (TDS) (SM 2540C)	88		10	4.7	mg/L			09/24/24 09:17	1
Chloride (SM 4500 Cl- E)	3.1		2.0	0.68	mg/L			10/03/24 12:21	1

Client Sample ID: COMPLIANCE 03

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	ND		0.50	0.090	mg/L			09/24/24 03:46	1
Sulfate (EPA 300.0)	ND		5.0	1.0	mg/L			10/01/24 21:20	1
Nitrate Nitrite as N (EPA 353.2)	ND		0.10	0.044	mg/L			10/08/24 12:16	1
Total Dissolved Solids (TDS) (SM 2540C)	36 J		40	19	mg/L			09/24/24 09:17	1
Chloride (SM 4500 Cl- E)	ND		2.0	0.68	mg/L			10/03/24 12:20	1

Client Sample ID: CARIBOU WELL

Date Collected: 09/23/24 11:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.15 J		0.50	0.090	mg/L			09/24/24 02:38	1
Sulfate (EPA 300.0)	3.0 J		5.0	1.0	mg/L			10/01/24 21:53	1
Nitrate Nitrite as N (EPA 353.2)	0.096 J		0.10	0.044	mg/L			10/08/24 12:17	1
Total Dissolved Solids (TDS) (SM 2540C)	37		10	4.7	mg/L			09/25/24 08:48	1
Chloride (SM 4500 Cl- E)	ND		2.0	0.68	mg/L			10/03/24 11:59	1

Client Sample ID: CROSS PORTAL

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.13 J		0.50	0.090	mg/L			09/24/24 01:13	1
Sulfate (EPA 300.0)	11		5.0	1.0	mg/L			10/01/24 23:21	1
Nitrate Nitrite as N (EPA 353.2)	0.090 J		0.10	0.044	mg/L			10/08/24 12:19	1
Total Dissolved Solids (TDS) (SM 2540C)	120		10	4.7	mg/L			09/25/24 08:48	1
Chloride (SM 4500 Cl- E)	ND		2.0	0.68	mg/L			10/03/24 12:21	1

Client Sample ID: CROSS PORTAL 02

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.13 J		0.50	0.090	mg/L			09/24/24 02:55	1
Sulfate (EPA 300.0)	11		5.0	1.0	mg/L			10/01/24 23:32	1
Nitrate Nitrite as N (EPA 353.2)	0.083 J		0.10	0.044	mg/L			10/08/24 12:20	1
Total Dissolved Solids (TDS) (SM 2540C)	120		10	4.7	mg/L			09/25/24 08:48	1
Chloride (SM 4500 Cl- E)	ND		2.0	0.68	mg/L			10/03/24 11:59	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## General Chemistry

Client Sample ID: CARIBOU PORTAL

Date Collected: 09/23/24 11:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	0.19	J	0.50	0.090	mg/L			09/24/24 02:21	1
Sulfate (EPA 300.0)	12		5.0	1.0	mg/L			10/01/24 23:43	1
Nitrate Nitrite as N (EPA 353.2)	0.11		0.10	0.044	mg/L			10/08/24 12:21	1
Total Dissolved Solids (TDS) (SM 2540C)	140		10	4.7	mg/L			09/25/24 08:48	1
Chloride (SM 4500 Cl- E)	ND		2.0	0.68	mg/L			10/03/24 12:21	1

## Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity - Dissolved

Client Sample ID: CROSS WELL

Date Collected: 09/23/24 13:00

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-1

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	1.39	U	1.26	1.27	3.00	1.98	pCi/L	09/26/24 08:20	10/06/24 10:17	1
Gross Beta	0.609	U	0.721	0.723	4.00	1.16	pCi/L	09/26/24 08:20	10/06/24 10:17	1

Client Sample ID: COMPLIANCE WELL

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-2

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.779	U	0.975	0.979	3.00	1.62	pCi/L	09/26/24 08:20	10/06/24 10:17	1
Gross Beta	1.19		0.650	0.660	4.00	0.963	pCi/L	09/26/24 08:20	10/06/24 10:17	1

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.259	U	0.922	0.922	3.00	1.67	pCi/L	09/26/24 08:20	10/06/24 10:17	1
Gross Beta	1.70		0.648	0.670	4.00	0.883	pCi/L	09/26/24 08:20	10/06/24 10:17	1

Client Sample ID: COMPLIANCE 03

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-4

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.115	U	0.653	0.653	3.00	1.19	pCi/L	09/26/24 08:20	10/06/24 10:17	1
Gross Beta	0.725	U	0.556	0.560	4.00	0.872	pCi/L	09/26/24 08:20	10/06/24 10:17	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity - Dissolved

Client Sample ID: CARIBOU WELL  
Date Collected: 09/23/24 11:30  
Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-5  
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.327	U	0.609	0.610	3.00	1.06	pCi/L	09/26/24 08:20	10/06/24 10:17	1
Gross Beta	0.329	U	0.438	0.439	4.00	0.719	pCi/L	09/26/24 08:20	10/06/24 10:17	1

Client Sample ID: CROSS PORTAL  
Date Collected: 09/23/24 12:15  
Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-6  
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	2.43		1.55	1.58	3.00	2.26	pCi/L	09/26/24 08:20	10/07/24 07:50	1
Gross Beta	1.41		0.676	0.690	4.00	0.935	pCi/L	09/26/24 08:20	10/07/24 07:50	1

Client Sample ID: CROSS PORTAL 02  
Date Collected: 09/23/24 12:15  
Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7  
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	1.01	U	1.56	1.57	3.00	2.65	pCi/L	09/26/24 08:20	10/07/24 07:50	1
Gross Beta	1.68		0.776	0.794	4.00	1.13	pCi/L	09/26/24 08:20	10/07/24 07:50	1

Client Sample ID: CARIBOU PORTAL  
Date Collected: 09/23/24 11:15  
Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-8  
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	7.72	G	2.57	2.71	3.00	3.12	pCi/L	09/26/24 08:20	10/07/24 07:50	1
Gross Beta	1.75		0.802	0.821	4.00	1.04	pCi/L	09/26/24 08:20	10/07/24 07:50	1

## Method: EPA 901.1 - Cesium 137 & Other Gamma Emitters (GS) - Dissolved

Client Sample ID: CROSS WELL  
Date Collected: 09/23/24 13:00  
Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-1  
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-3.32	U	11.3	11.4	20.0	16.7	pCi/L	10/15/24 15:57	10/19/24 16:42	1
Other Detected Radionuclides										
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Bi-214	33.5		16.2	16.6		17.9	pCi/L	10/15/24 15:57	10/19/24 16:42	1
Pb-214	37.4		15.3	15.8		16.7	pCi/L	10/15/24 15:57	10/19/24 16:42	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 901.1 - Cesium 137 & Other Gamma Emitters (GS) - Dissolved

Client Sample ID: COMPLIANCE WELL

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-2

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-4.54	U G	11.3	11.3	20.0	20.5	pCi/L	10/15/24 15:57	10/19/24 18:09	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 18:09	1

Client Sample ID: COMPLIANCE 02

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-3

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-8.46	U G	8.38	8.42	20.0	24.0	pCi/L	10/15/24 15:57	10/19/24 19:14	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Pb-214	52.6		15.2	16.1		17.1	pCi/L	10/15/24 15:57	10/19/24 19:14	1

Client Sample ID: COMPLIANCE 03

Date Collected: 09/23/24 13:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-4

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-6.80	U G	19.4	19.4	20.0	31.4	pCi/L	10/15/24 15:57	10/19/24 20:41	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 20:41	1

Client Sample ID: CARIBOU WELL

Date Collected: 09/23/24 11:30

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-5

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	3.65	U	8.36	8.37	20.0	14.4	pCi/L	10/15/24 15:57	10/19/24 20:43	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 20:43	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: EPA 901.1 - Cesium 137 & Other Gamma Emitters (GS) - Dissolved

Client Sample ID: CROSS PORTAL

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-6

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	3.65	U	9.10	9.10	20.0	15.7	pCi/L	10/15/24 15:57	10/19/24 20:44	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 20:44	1

Client Sample ID: CROSS PORTAL 02

Date Collected: 09/23/24 12:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-7

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	1.91	U G	12.0	12.0	20.0	21.0	pCi/L	10/15/24 15:57	10/19/24 20:45	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Th-234	254		87.4	91.3		101	pCi/L	10/15/24 15:57	10/19/24 20:45	1

Client Sample ID: CARIBOU PORTAL

Date Collected: 09/23/24 11:15

Date Received: 09/23/24 16:35

Lab Sample ID: 280-197036-8

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-0.357	U G	13.8	13.8	20.0	24.4	pCi/L	10/15/24 15:57	10/19/24 20:47	1

Other Detected Radionuclides	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 20:47	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-668529/1-A

Matrix: Water

Analysis Batch: 668808

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 668529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.018	mg/L		09/25/24 08:11	09/26/24 07:59	1
Boron	0.00179	J	0.10	0.0015	mg/L		09/25/24 08:11	09/26/24 07:59	1
Iron	ND		0.10	0.0091	mg/L		09/25/24 08:11	09/26/24 07:59	1

Lab Sample ID: LCS 280-668529/2-A

Matrix: Water

Analysis Batch: 668808

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 668529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.2		mg/L		102	87 - 111
Boron	2.00	2.19		mg/L		110	86 - 110
Iron	10.0	10.3		mg/L		103	85 - 115

Lab Sample ID: 280-197036-8 MS

Matrix: Water

Analysis Batch: 668808

Client Sample ID: CARIBOU PORTAL

Prep Type: Dissolved

Prep Batch: 668529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		10.0	10.1		mg/L		101	70 - 130
Boron	0.0037	J B	2.00	2.18		mg/L		109	70 - 130
Iron	0.012	J	10.0	10.2		mg/L		102	70 - 130

Lab Sample ID: 280-197036-8 MSD

Matrix: Water

Analysis Batch: 668808

Client Sample ID: CARIBOU PORTAL

Prep Type: Dissolved

Prep Batch: 668529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		10.0	10.3		mg/L		103	70 - 130	2	20
Boron	0.0037	J B	2.00	2.23		mg/L		111	70 - 130	2	20
Iron	0.012	J	10.0	10.3		mg/L		103	70 - 130	1	20

## Method: 200.8 - ICPMS Total Metals

Lab Sample ID: MB 280-668815/1-A

Matrix: Water

Analysis Batch: 669326

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 668815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0030	0.00051	mg/L		09/26/24 14:48	09/30/24 15:31	1

Lab Sample ID: MB 280-669297/1-A

Matrix: Water

Analysis Batch: 669051

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 669297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020	0.00040	mg/L		09/26/24 14:48	09/27/24 19:34	1
Arsenic	ND		0.0050	0.00050	mg/L		09/26/24 14:48	09/27/24 19:34	1
Barium	ND		0.0030	0.00038	mg/L		09/26/24 14:48	09/27/24 19:34	1
Cadmium	ND		0.0010	0.00019	mg/L		09/26/24 14:48	09/27/24 19:34	1
Copper	ND		0.0020	0.00071	mg/L		09/26/24 14:48	09/27/24 19:34	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 200.8 - ICPMS Total Metals (Continued)

Lab Sample ID: MB 280-669297/1-A  
Matrix: Water  
Analysis Batch: 669051

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 669297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0010	0.00023	mg/L		09/26/24 14:48	09/27/24 19:34	1
Molybdenum	ND		0.0020	0.00037	mg/L		09/26/24 14:48	09/27/24 19:34	1
Uranium	ND		0.0010	0.000030	mg/L		09/26/24 14:48	09/27/24 19:34	1
Zinc	ND		0.010	0.0020	mg/L		09/26/24 14:48	09/27/24 19:34	1

Lab Sample ID: LCS 280-669297/2-A  
Matrix: Water  
Analysis Batch: 669051

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 669297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0400	0.0394		mg/L		99	85 - 115
Arsenic	0.0400	0.0373		mg/L		93	89 - 111
Barium	0.0400	0.0408		mg/L		102	89 - 115
Cadmium	0.0400	0.0392		mg/L		98	89 - 111
Copper	0.0400	0.0378		mg/L		95	90 - 115
Lead	0.0400	0.0405		mg/L		101	88 - 115
Manganese	0.0400	0.0360		mg/L		90	87 - 115
Molybdenum	0.0400	0.0393		mg/L		98	89 - 112
Uranium	0.0400	0.0358		mg/L		90	85 - 115
Zinc	0.0400	0.0373		mg/L		93	88 - 115

Lab Sample ID: 280-197045-C-1-I MS  
Matrix: Water  
Analysis Batch: 669051

Client Sample ID: Matrix Spike  
Prep Type: Dissolved  
Prep Batch: 669297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.0400	0.0394		mg/L		98	85 - 115
Arsenic	ND		0.0400	0.0368		mg/L		92	79 - 120
Barium	0.0060		0.0400	0.0460		mg/L		100	89 - 115
Cadmium	ND		0.0400	0.0389		mg/L		97	89 - 111
Copper	ND		0.0400	0.0366		mg/L		92	90 - 115
Lead	ND		0.0400	0.0390		mg/L		98	88 - 115
Manganese	0.79	B	0.0400	0.849	4	mg/L		160	87 - 115
Molybdenum	0.0059		0.0400	0.0457		mg/L		100	89 - 112
Uranium	0.00013	J	0.0400	0.0362		mg/L		90	85 - 115
Zinc	ND		0.0400	0.0370		mg/L		92	88 - 115

Lab Sample ID: 280-197045-C-1-J MSD  
Matrix: Water  
Analysis Batch: 669051

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Dissolved  
Prep Batch: 669297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.0400	0.0430		mg/L		108	85 - 115	9	20
Arsenic	ND		0.0400	0.0402		mg/L		101	79 - 120	9	20
Barium	0.0060		0.0400	0.0477		mg/L		104	89 - 115	3	20
Cadmium	ND		0.0400	0.0391		mg/L		98	89 - 111	0	20
Copper	ND		0.0400	0.0383		mg/L		96	90 - 115	5	20
Lead	ND		0.0400	0.0403		mg/L		101	88 - 115	3	20
Manganese	0.79	B	0.0400	0.889	4	mg/L		261	87 - 115	5	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 200.8 - ICPMS Total Metals (Continued)

Lab Sample ID: 280-197045-C-1-J MSD

Matrix: Water

Analysis Batch: 669051

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 669297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Molybdenum	0.0059		0.0400	0.0478		mg/L		105	89 - 112	4	20
Uranium	0.00013	J	0.0400	0.0383		mg/L		95	85 - 115	6	20
Zinc	ND		0.0400	0.0394		mg/L		98	88 - 115	6	20

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-668303/6

Matrix: Water

Analysis Batch: 668303

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.50	0.090	mg/L			09/23/24 16:42	1

Lab Sample ID: LCS 280-668303/4

Matrix: Water

Analysis Batch: 668303

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	5.00	4.99		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-668303/5

Matrix: Water

Analysis Batch: 668303

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	5.00	4.99		mg/L		100	90 - 110	0	10

Lab Sample ID: MRL 280-668303/3

Matrix: Water

Analysis Batch: 668303

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.500	0.470	J	mg/L		94	50 - 150

Lab Sample ID: 280-197036-6 MS

Matrix: Water

Analysis Batch: 668303

Client Sample ID: CROSS PORTAL

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.13	J	5.00	4.80		mg/L		94	80 - 120

Lab Sample ID: 280-197036-6 MSD

Matrix: Water

Analysis Batch: 668303

Client Sample ID: CROSS PORTAL

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.13	J	5.00	4.94		mg/L		96	80 - 120	3	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-197036-6 DU

Matrix: Water

Analysis Batch: 668303

Client Sample ID: CROSS PORTAL

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Nitrate as N	0.13	J	0.127	J	mg/L		1	15

Lab Sample ID: MB 280-669332/43

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.0	mg/L			10/01/24 22:26	1

Lab Sample ID: MB 280-669332/6

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.0	mg/L			10/01/24 13:13	1

Lab Sample ID: LCS 280-669332/4

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	99.7		mg/L		100	90 - 110

Lab Sample ID: LCS 280-669332/41

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	100		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-669332/42

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfate	100	100		mg/L		100	90 - 110	0	10

Lab Sample ID: LCSD 280-669332/5

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfate	100	100		mg/L		100	90 - 110	0	10

Lab Sample ID: MRL 280-669332/3

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	5.00	4.84	J	mg/L		97	50 - 150

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-197298-B-2 MS

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	290	E	50.0	338	E 4	mg/L		101	80 - 120

Lab Sample ID: 280-197298-B-2 MSD

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	290	E	50.0	338	E 4	mg/L		102	80 - 120	0	20

Lab Sample ID: 280-197298-B-2 DU

Matrix: Water

Analysis Batch: 669332

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	290	E	287	E	mg/L		0.06	15

## Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-670187/59

Matrix: Water

Analysis Batch: 670187

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/08/24 12:06	1

Lab Sample ID: LCS 280-670187/57

Matrix: Water

Analysis Batch: 670187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	0.993		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-670187/58

Matrix: Water

Analysis Batch: 670187

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.992		mg/L		99	90 - 110	0	10

Lab Sample ID: 280-196890-G-15 MS

Matrix: Water

Analysis Batch: 670187

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.5	F1	2.00	3.73	F1	mg/L		111	90 - 110

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-196890-G-15 MSD  
Matrix: Water  
Analysis Batch: 670187

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.5	F1	2.00	3.71		mg/L		110	90 - 110	1	10

## Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-668428/1  
Matrix: Water  
Analysis Batch: 668428

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		10	4.7	mg/L			09/24/24 09:17	1

Lab Sample ID: LCS 280-668428/2  
Matrix: Water  
Analysis Batch: 668428

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	503	526		mg/L		105	88 - 114

Lab Sample ID: 280-197036-4 DU  
Matrix: Water  
Analysis Batch: 668428

Client Sample ID: COMPLIANCE 03  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	36	J	36.0	J	mg/L		0	10

Lab Sample ID: MB 280-668583/1  
Matrix: Water  
Analysis Batch: 668583

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		10	4.7	mg/L			09/25/24 08:48	1

Lab Sample ID: LCS 280-668583/2  
Matrix: Water  
Analysis Batch: 668583

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	503	498		mg/L		99	88 - 114

Lab Sample ID: 280-196870-D-1 DU  
Matrix: Water  
Analysis Batch: 668583

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	7000		7400		mg/L		6	10

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 280-196980-A-13 DU  
Matrix: Water  
Analysis Batch: 668583

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	560		570		mg/L		1	10

## Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 280-669677/15  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0	0.68	mg/L			10/03/24 11:43	1

Lab Sample ID: MB 280-669677/46  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0	0.68	mg/L			10/03/24 12:20	1

Lab Sample ID: LCS 280-669677/13  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.0		mg/L		100	90 - 110

Lab Sample ID: LCS 280-669677/44  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.5		mg/L		103	90 - 110

Lab Sample ID: LCSD 280-669677/14  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	20.0	20.1		mg/L		100	90 - 110	1	10

Lab Sample ID: LCSD 280-669677/45  
Matrix: Water  
Analysis Batch: 669677

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	20.0	20.5		mg/L		103	90 - 110	0	10



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 280-197391-D-1 MS

Matrix: Water

Analysis Batch: 669677

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4.1		25.0	30.0		mg/L		103	90 - 110		

Lab Sample ID: 280-197391-D-1 MSD

Matrix: Water

Analysis Batch: 669677

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4.1		25.0	31.5		mg/L		109	90 - 110	5	10

Lab Sample ID: 280-197391-D-2 MS

Matrix: Water

Analysis Batch: 669677

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	13		25.0	40.5		mg/L		108	90 - 110		

Lab Sample ID: 280-197391-D-2 MSD

Matrix: Water

Analysis Batch: 669677

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	13		25.0	38.1		mg/L		99	90 - 110	6	10

## Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-681024/1-A

Matrix: Water

Analysis Batch: 682257

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 681024

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	-0.1122	U	0.563	0.563	3.00	1.11	pCi/L	09/26/24 08:20	10/06/24 10:16	1
Gross Beta	0.2773	U	0.512	0.513	4.00	0.871	pCi/L	09/26/24 08:20	10/06/24 10:16	1

Lab Sample ID: LCS 160-681024/2-A

Matrix: Water

Analysis Batch: 682257

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 681024

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Gross Alpha	49.5	51.30		7.57	3.00	2.17	pCi/L	104	75 - 125		

Lab Sample ID: LCSB 160-681024/3-A

Matrix: Water

Analysis Batch: 682257

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 681024

Analyte	Spike Added	LCSB Result	LCSB Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Gross Beta	70.8	70.62		7.59	4.00	0.875	pCi/L	100	75 - 125		

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Method: 900.0 - Gross Alpha and Gross Beta Radioactivity (Continued)

Lab Sample ID: 380-114436-A-1-D MS  
Matrix: Water  
Analysis Batch: 682222

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 681024

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	5.05		122	78.73		10.3	3.00	2.19	pCi/L	60	60 - 140

Lab Sample ID: 380-114436-A-1-F DU  
Matrix: Water  
Analysis Batch: 682116

Client Sample ID: Duplicate  
Prep Type: Total/NA  
Prep Batch: 681024

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Gross Alpha	5.05		2.907		2.13	3.00	2.00	pCi/L	0.49	1
Gross Beta	4.04		4.911		1.08	4.00	0.761	pCi/L	0.40	1

## Method: 901.1 - Cesium 137 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-683713/1-A  
Matrix: Water  
Analysis Batch: 684291

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 683713

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Cesium-137	-15.73	U G	18.3	18.4	20.0	23.5	pCi/L	10/15/24 15:57	10/19/24 15:35	1
Other Detected Radionuclides	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/L	10/15/24 15:57	10/19/24 15:35	1

Lab Sample ID: LCS 160-683713/2-A  
Matrix: Water  
Analysis Batch: 684300

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 683713

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Americium-241	135000	152800		15700		484	pCi/L	113	75 - 125
Cesium-137	39400	45790		4480	20.0	119	pCi/L	116	75 - 125
Cobalt-60	14500	16940		1660		84.4	pCi/L	117	75 - 125

Lab Sample ID: 280-197036-1 DU  
Matrix: Water  
Analysis Batch: 684292

Client Sample ID: CROSS WELL  
Prep Type: Dissolved  
Prep Batch: 683713

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Cesium-137	-3.32	U	-4.121	U	10.4	20.0	17.8	pCi/L	0.04	1
Other Detected Radionuclides	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Bi-214	33.5		24.08	U	22.9		26.2	pCi/L	0.24	1
Pb-214	37.4		39.93		15.3		26.2	pCi/L	0.08	1

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Metals

### Prep Batch: 668529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.8	
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.8	
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.8	
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.8	
280-197036-5	CARIBOU WELL	Dissolved	Water	200.8	
280-197036-6	CROSS PORTAL	Dissolved	Water	200.8	
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.8	
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.8	
MB 280-668529/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-668529/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-197036-8 MS	CARIBOU PORTAL	Dissolved	Water	200.8	
280-197036-8 MSD	CARIBOU PORTAL	Dissolved	Water	200.8	

### Analysis Batch: 668808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-5	CARIBOU WELL	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-6	CROSS PORTAL	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.7 Rev 4.4	668529
MB 280-668529/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	668529
LCS 280-668529/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	668529
280-197036-8 MS	CARIBOU PORTAL	Dissolved	Water	200.7 Rev 4.4	668529
280-197036-8 MSD	CARIBOU PORTAL	Dissolved	Water	200.7 Rev 4.4	668529

### Prep Batch: 668815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.8	
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.8	
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.8	
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.8	
280-197036-5	CARIBOU WELL	Dissolved	Water	200.8	
280-197036-6	CROSS PORTAL	Dissolved	Water	200.8	
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.8	
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.8	
MB 280-668815/1-A	Method Blank	Total Recoverable	Water	200.8	

### Analysis Batch: 669051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.8	669297
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.8	669297
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.8	669297
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.8	669297
280-197036-5	CARIBOU WELL	Dissolved	Water	200.8	669297
280-197036-6	CROSS PORTAL	Dissolved	Water	200.8	669297
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.8	669297
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.8	669297
MB 280-669297/1-A	Method Blank	Total Recoverable	Water	200.8	669297

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Metals (Continued)

### Analysis Batch: 669051 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-669297/2-A	Lab Control Sample	Total Recoverable	Water	200.8	669297
280-197045-C-1-I MS	Matrix Spike	Dissolved	Water	200.8	669297
280-197045-C-1-J MSD	Matrix Spike Duplicate	Dissolved	Water	200.8	669297

### Prep Batch: 669297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.8	
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.8	
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.8	
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.8	
280-197036-5	CARIBOU WELL	Dissolved	Water	200.8	
280-197036-6	CROSS PORTAL	Dissolved	Water	200.8	
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.8	
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.8	
MB 280-669297/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-669297/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-197045-C-1-I MS	Matrix Spike	Dissolved	Water	200.8	
280-197045-C-1-J MSD	Matrix Spike Duplicate	Dissolved	Water	200.8	

### Analysis Batch: 669326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-668815/1-A	Method Blank	Total Recoverable	Water	200.8	668815

### Analysis Batch: 669418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	200.8	668815
280-197036-2	COMPLIANCE WELL	Dissolved	Water	200.8	668815
280-197036-3	COMPLIANCE 02	Dissolved	Water	200.8	668815
280-197036-4	COMPLIANCE 03	Dissolved	Water	200.8	668815
280-197036-5	CARIBOU WELL	Dissolved	Water	200.8	668815
280-197036-6	CROSS PORTAL	Dissolved	Water	200.8	668815
280-197036-7	CROSS PORTAL 02	Dissolved	Water	200.8	668815
280-197036-8	CARIBOU PORTAL	Dissolved	Water	200.8	668815

## General Chemistry

### Analysis Batch: 668303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Total/NA	Water	300.0	
280-197036-2	COMPLIANCE WELL	Total/NA	Water	300.0	
280-197036-3	COMPLIANCE 02	Total/NA	Water	300.0	
280-197036-4	COMPLIANCE 03	Total/NA	Water	300.0	
280-197036-5	CARIBOU WELL	Total/NA	Water	300.0	
280-197036-6	CROSS PORTAL	Total/NA	Water	300.0	
280-197036-7	CROSS PORTAL 02	Total/NA	Water	300.0	
280-197036-8	CARIBOU PORTAL	Total/NA	Water	300.0	
MB 280-668303/6	Method Blank	Total/NA	Water	300.0	
LCS 280-668303/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-668303/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-668303/3	Lab Control Sample	Total/NA	Water	300.0	
280-197036-6 MS	CROSS PORTAL	Total/NA	Water	300.0	

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## General Chemistry (Continued)

### Analysis Batch: 668303 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-6 MSD	CROSS PORTAL	Total/NA	Water	300.0	
280-197036-6 DU	CROSS PORTAL	Total/NA	Water	300.0	

### Analysis Batch: 668428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Total/NA	Water	SM 2540C	
280-197036-2	COMPLIANCE WELL	Total/NA	Water	SM 2540C	
280-197036-3	COMPLIANCE 02	Total/NA	Water	SM 2540C	
280-197036-4	COMPLIANCE 03	Total/NA	Water	SM 2540C	
MB 280-668428/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-668428/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-197036-4 DU	COMPLIANCE 03	Total/NA	Water	SM 2540C	

### Analysis Batch: 668583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-5	CARIBOU WELL	Total/NA	Water	SM 2540C	
280-197036-6	CROSS PORTAL	Total/NA	Water	SM 2540C	
280-197036-7	CROSS PORTAL 02	Total/NA	Water	SM 2540C	
280-197036-8	CARIBOU PORTAL	Total/NA	Water	SM 2540C	
MB 280-668583/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-668583/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-196870-D-1 DU	Duplicate	Total/NA	Water	SM 2540C	
280-196980-A-13 DU	Duplicate	Total/NA	Water	SM 2540C	

### Analysis Batch: 669332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Total/NA	Water	300.0	
280-197036-2	COMPLIANCE WELL	Total/NA	Water	300.0	
280-197036-3	COMPLIANCE 02	Total/NA	Water	300.0	
280-197036-4	COMPLIANCE 03	Total/NA	Water	300.0	
280-197036-5	CARIBOU WELL	Total/NA	Water	300.0	
280-197036-6	CROSS PORTAL	Total/NA	Water	300.0	
280-197036-7	CROSS PORTAL 02	Total/NA	Water	300.0	
280-197036-8	CARIBOU PORTAL	Total/NA	Water	300.0	
MB 280-669332/43	Method Blank	Total/NA	Water	300.0	
MB 280-669332/6	Method Blank	Total/NA	Water	300.0	
LCS 280-669332/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-669332/41	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-669332/42	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-669332/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-669332/3	Lab Control Sample	Total/NA	Water	300.0	
280-197298-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-197298-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-197298-B-2 DU	Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 669677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Total/NA	Water	SM 4500 Cl- E	
280-197036-2	COMPLIANCE WELL	Total/NA	Water	SM 4500 Cl- E	
280-197036-3	COMPLIANCE 02	Total/NA	Water	SM 4500 Cl- E	
280-197036-4	COMPLIANCE 03	Total/NA	Water	SM 4500 Cl- E	

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## General Chemistry (Continued)

### Analysis Batch: 669677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-5	CARIBOU WELL	Total/NA	Water	SM 4500 Cl- E	
280-197036-6	CROSS PORTAL	Total/NA	Water	SM 4500 Cl- E	
280-197036-7	CROSS PORTAL 02	Total/NA	Water	SM 4500 Cl- E	
280-197036-8	CARIBOU PORTAL	Total/NA	Water	SM 4500 Cl- E	
MB 280-669677/15	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 280-669677/46	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 280-669677/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 280-669677/44	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCSD 280-669677/14	Lab Control Sample Dup	Total/NA	Water	SM 4500 Cl- E	
LCSD 280-669677/45	Lab Control Sample Dup	Total/NA	Water	SM 4500 Cl- E	
280-197391-D-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
280-197391-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
280-197391-D-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
280-197391-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 670187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Total/NA	Water	353.2	
280-197036-2	COMPLIANCE WELL	Total/NA	Water	353.2	
280-197036-3	COMPLIANCE 02	Total/NA	Water	353.2	
280-197036-4	COMPLIANCE 03	Total/NA	Water	353.2	
280-197036-5	CARIBOU WELL	Total/NA	Water	353.2	
280-197036-6	CROSS PORTAL	Total/NA	Water	353.2	
280-197036-7	CROSS PORTAL 02	Total/NA	Water	353.2	
280-197036-8	CARIBOU PORTAL	Total/NA	Water	353.2	
MB 280-670187/59	Method Blank	Total/NA	Water	353.2	
LCS 280-670187/57	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-670187/58	Lab Control Sample Dup	Total/NA	Water	353.2	
280-196890-G-15 MS	Matrix Spike	Total/NA	Water	353.2	
280-196890-G-15 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

## Rad

### Prep Batch: 681024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	Evaporation	
280-197036-2	COMPLIANCE WELL	Dissolved	Water	Evaporation	
280-197036-3	COMPLIANCE 02	Dissolved	Water	Evaporation	
280-197036-4	COMPLIANCE 03	Dissolved	Water	Evaporation	
280-197036-5	CARIBOU WELL	Dissolved	Water	Evaporation	
280-197036-6	CROSS PORTAL	Dissolved	Water	Evaporation	
280-197036-7	CROSS PORTAL 02	Dissolved	Water	Evaporation	
280-197036-8	CARIBOU PORTAL	Dissolved	Water	Evaporation	
MB 160-681024/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-681024/2-A	Lab Control Sample	Total/NA	Water	Evaporation	
LCSB 160-681024/3-A	Lab Control Sample	Total/NA	Water	Evaporation	
380-114436-A-1-D MS	Matrix Spike	Total/NA	Water	Evaporation	
380-114436-A-1-F DU	Duplicate	Total/NA	Water	Evaporation	



## QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

### Rad

#### Prep Batch: 683713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197036-1	CROSS WELL	Dissolved	Water	Fill_Geo-0	
280-197036-2	COMPLIANCE WELL	Dissolved	Water	Fill_Geo-0	
280-197036-3	COMPLIANCE 02	Dissolved	Water	Fill_Geo-0	
280-197036-4	COMPLIANCE 03	Dissolved	Water	Fill_Geo-0	
280-197036-5	CARIBOU WELL	Dissolved	Water	Fill_Geo-0	
280-197036-6	CROSS PORTAL	Dissolved	Water	Fill_Geo-0	
280-197036-7	CROSS PORTAL 02	Dissolved	Water	Fill_Geo-0	
280-197036-8	CARIBOU PORTAL	Dissolved	Water	Fill_Geo-0	
MB 160-683713/1-A	Method Blank	Total/NA	Water	Fill_Geo-0	
LCS 160-683713/2-A	Lab Control Sample	Total/NA	Water	Fill_Geo-0	
280-197036-1 DU	CROSS WELL	Dissolved	Water	Fill_Geo-0	



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

**Client Sample ID: CROSS WELL**

**Lab Sample ID: 280-197036-1**

**Date Collected: 09/23/24 13:00**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:12	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:41	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:21	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 04:03	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 20:47	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:12	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668428	09/24/24 09:17	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 12:21	CLP	EET DEN
Dissolved	Prep	Evaporation			157.01 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682259	10/06/24 10:17	SWS	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684291	10/19/24 16:42	MLS	EET SL

**Client Sample ID: COMPLIANCE WELL**

**Lab Sample ID: 280-197036-2**

**Date Collected: 09/23/24 13:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:16	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:44	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:25	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 03:12	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 20:58	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:14	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668428	09/24/24 09:17	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 12:21	CLP	EET DEN
Dissolved	Prep	Evaporation			200.01 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682259	10/06/24 10:17	SWS	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684291	10/19/24 18:09	MLS	EET SL

**Client Sample ID: COMPLIANCE 02**

**Lab Sample ID: 280-197036-3**

**Date Collected: 09/23/24 13:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:39	ADL	EET DEN

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# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

**Client Sample ID: COMPLIANCE 02**

**Lab Sample ID: 280-197036-3**

**Date Collected: 09/23/24 13:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:48	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:28	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 03:29	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 21:09	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:15	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668428	09/24/24 09:17	BRD	EET DEN
Total/NA	Analysis	SM 4500 CI- E		1	2 mL	2 mL	669677	10/03/24 12:21	CLP	EET DEN
Dissolved	Prep	Evaporation			200.03 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682259	10/06/24 10:17	SWS	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684291	10/19/24 19:14	MLS	EET SL

**Client Sample ID: COMPLIANCE 03**

**Lab Sample ID: 280-197036-4**

**Date Collected: 09/23/24 13:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:44	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:52	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:32	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 03:46	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 21:20	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:16	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	668428	09/24/24 09:17	BRD	EET DEN
Total/NA	Analysis	SM 4500 CI- E		1	2 mL	2 mL	669677	10/03/24 12:20	CLP	EET DEN
Dissolved	Prep	Evaporation			200.01 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682259	10/06/24 10:17	SWS	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684293	10/19/24 20:41	CAH	EET SL

**Client Sample ID: CARIBOU WELL**

**Lab Sample ID: 280-197036-5**

**Date Collected: 09/23/24 11:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:48	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:55	LMT	EET DEN

Eurofins Denver



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

**Client Sample ID: CARIBOU WELL**

**Lab Sample ID: 280-197036-5**

**Date Collected: 09/23/24 11:30**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:35	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 02:38	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 21:53	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:17	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668583	09/25/24 08:48	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 11:59	CLP	EET DEN
Dissolved	Prep	Evaporation			200.00 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682259	10/06/24 10:17	SWS	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684296	10/19/24 20:43	CAH	EET SL

**Client Sample ID: CROSS PORTAL**

**Lab Sample ID: 280-197036-6**

**Date Collected: 09/23/24 12:15**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:52	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 19:59	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:39	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 01:13	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 23:21	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:19	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668583	09/25/24 08:48	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 12:21	CLP	EET DEN
Dissolved	Prep	Evaporation			200.02 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682449	10/07/24 07:50	CMM	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684292	10/19/24 20:44	CAH	EET SL

**Client Sample ID: CROSS PORTAL 02**

**Lab Sample ID: 280-197036-7**

**Date Collected: 09/23/24 12:15**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 08:56	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 20:02	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:42	LMT	EET DEN

Eurofins Denver



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

**Client Sample ID: CROSS PORTAL 02**

**Lab Sample ID: 280-197036-7**

**Date Collected: 09/23/24 12:15**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 02:55	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 23:32	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:20	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668583	09/25/24 08:48	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 11:59	CLP	EET DEN
Dissolved	Prep	Evaporation			200.02 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682449	10/07/24 07:50	CMM	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684299	10/19/24 20:45	CAH	EET SL

**Client Sample ID: CARIBOU PORTAL**

**Lab Sample ID: 280-197036-8**

**Date Collected: 09/23/24 11:15**

**Matrix: Water**

**Date Received: 09/23/24 16:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	668529	09/25/24 08:11	SMK	EET DEN
Dissolved	Analysis	200.7 Rev 4.4		1			668808	09/26/24 09:00	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	669297	09/26/24 14:48	RMS	EET DEN
Dissolved	Analysis	200.8		1			669051	09/27/24 20:06	LMT	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	668815	09/26/24 14:48	SLH	EET DEN
Dissolved	Analysis	200.8		1			669418	10/01/24 19:46	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	668303	09/24/24 02:21	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	669332	10/01/24 23:43	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	670187	10/08/24 12:21	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	668583	09/25/24 08:48	BRD	EET DEN
Total/NA	Analysis	SM 4500 Cl- E		1	2 mL	2 mL	669677	10/03/24 12:21	CLP	EET DEN
Dissolved	Prep	Evaporation			200.02 mL	1.0 g	681024	09/26/24 08:20	MEH	EET SL
Dissolved	Analysis	900.0		1	1.0 mL	1.0 mL	682449	10/07/24 07:50	CMM	EET SL
Dissolved	Prep	Fill_Geo-0			1000 mL	1.0 g	683713	10/15/24 15:57	SAC	EET SL
Dissolved	Analysis	901.1		1			684300	10/19/24 20:47	CAH	EET SL

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins Denver



# Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-25
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	11-30-25
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	04-21-25
California	State	2513	10-08-24
Colorado	Petroleum Storage Tank Program	4025 (or)	01-08-25
Colorado	State	CO00026	06-30-25
Connecticut	State	PH-0686	10-14-24
Florida	NELAP	E87667-57	06-30-25
Georgia	State	4025-011	01-08-25
Illinois	NELAP	2000172024-9	05-31-25
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-25
Kentucky (WW)	State	KY98047	12-31-24
Louisiana	NELAP	30785	06-30-14 *
Louisiana (All)	NELAP	30785	06-30-25
Minnesota	NELAP	1788752	12-31-24
Nevada	State	CO000262024-08	07-31-25
New Hampshire	NELAP	2053	04-28-25
New Jersey	NELAP	230001	06-30-25
New York	NELAP	59923	04-01-25
North Dakota	State	R-034	01-08-25
Oregon	NELAP	4025	01-08-25
Pennsylvania	NELAP	013	07-31-25
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183	09-30-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO00026	07-31-25
Virginia	NELAP	460232	06-14-25
Washington	State	C583	08-03-25
West Virginia DEP	State	354	11-30-24
Wisconsin	State	999615430	08-31-25
Wyoming (UST)	A2LA	2907.01	10-31-25

## Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation	10259	06-30-22 *
California	Districts		
California	State	2886	06-30-25

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Denver



# Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Groundwater

Job ID: 280-197036-1

## Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

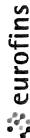
Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24 *
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Denver



# Chain of Custody Record



Environmental Testing  
America

<b>Client Information</b>		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Brooke Molson Moran		Phone:		Blenius, Dylan T		State of Origin:		Page:	
Company: Grand Island Resources		Address: 12567 West Cedar Road Suite 250		City: Lakewood		State, Zip: CO, 80466		Job #:	
Phone: 315-414-6986		PO #:		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		TAT Requested (days):		Due Date Requested:	
Email: bmolsonm@g.emporiam.edu		WO #:		Not required		Project #: 28025589		Analysis Requested	
Project Name: Nederland, CO		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Site: Groundwater Sampling		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Preservation Code:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
CROSS WELL		9/23/24		13:00		G		W	
COMPLIANCE WELL		"		13:30		G		W	
COMPLIANCE 02		"		13:30		G		W	
COMPLIANCE 03		"		13:30		G		W	
CARIBOU WELL		"		11:30		G		W	
CROSS PORTAL		"		12:15		G		W	
CARIBOU PORTAL		"		11:15		G		W	
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date:		Time:		Method of Shipment:	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date/Time:		Received by:		Company:	
Relinquished by:		Date/Time:		Received by:		Company:		Company:	
Relinquished by:		Date/Time:		Received by:		Company:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature (°C and Other Remarks):		3-11-2024 TAC (H-1)		Ver: 01/16/2019	



# Chain of Custody Record



Environment Testing



<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM: Bleniulis, Dylan T		Carrier Tracking No(s): 280-717444.1	
Client Contact: Shipping/Receiving		Phone:	E-Mail: Dylan.Bleniulis@eurofins.com		Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): 280-197036-1				
Address: 13715 Rider Trail North,		Preservation Codes:				
City: Earth City	Analysis Requested					
State/Zip: MO. 63045						
Phone: 314-298-8566(Tel) 314-298-8757(Fax)						
Email:						
Project Name: Nederland, CO - Groundwater	Due Date Requested: 10/22/2024					
Site:	TAT Requested (days):					
	PO #:					
	WO #:					
	Project #: 28025589					
	SSOW#:					
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, Soil, Sediment, etc.)	Preservation Code
CROSS WELL (280-197036-1)		9/23/24	13:00 Mountain	G	Water	
COMPLIANCE WELL (280-197036-2)		9/23/24	13:30 Mountain	G	Water	
COMPLIANCE 02 (280-197036-3)		9/23/24	13:30 Mountain	G	Water	
COMPLIANCE 03 (280-197036-4)		9/23/24	13:30 Mountain	G	Water	
CARIBOU WELL (280-197036-5)		9/23/24	11:30 Mountain	G	Water	
CROSS PORTAL (280-197036-6)		9/23/24	12:15 Mountain	G	Water	
CROSS PORTAL 02 (280-197036-7)		9/23/24	12:15 Mountain	G	Water	
CARIBOU PORTAL (280-197036-8)		9/23/24	11:15 Mountain	G	Water	
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testing/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica						
<b>Possible Hazard Identification</b>						
Unconfirmed						
Deliverable Requested: I, II, III, IV, Other (specify)						
Primary Deliverable Rank: 2						
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months						
Special Instructions/OC Requirements:						
Empty Kit Relinquished by:						
Date: Time: Method of Shipment:						
Relinquished by: <i>Anna Nielsen</i> Date: <i>10/24/24</i> Time: <i>1446</i> Company: <i>etaden</i>						
Relinquished by: <i>Sina Wehring</i> Date: <i>SEP 23 2024</i> Time: <i>0905</i> Company: <i>etaden</i>						
Relinquished by: Date: Time: Company:						
Relinquished by: Date: Time: Company:						
Custody Seals Intact: Custody Seal No.:						
Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks:						



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-197036-1

Login Number: 197036

List Number: 1

Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-197036-1

**Login Number: 197036**

**List Number: 2**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 09/25/24 01:41 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## APPENDIX B OUTFALL-001 ANALYTICAL RESULTS



## APPENDIX B.1 JULY 2024 OUTFALL-001 ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 7/19/2024 4:27:45 PM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-193704-1



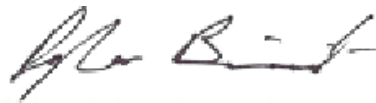
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## Job Notes

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## Authorization



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# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	7
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
QC Sample Results . . . . .	12
QC Association . . . . .	17
Chronicle . . . . .	20
Certification Summary . . . . .	21
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	26



## Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-193704-1

**Job ID: 280-193704-1**

**Eurofins Denver**

## Job Narrative 280-193704-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### Receipt

The sample was received on 7/8/2024 4:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

### Method 1631E - Mercury, Low Level (CVAFS)

Sample OUTFALL-001 (280-193704-1) was analyzed for Mercury, Low Level (CVAFS). The sample was prepared on 7/10/2024 and analyzed on 7/17/2024.

### Method 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Sample OUTFALL-001 (280-193704-1) was analyzed for Metals (ICP) - Total Recoverable. The sample was prepared on 7/11/2024 and analyzed on 7/12/2024.

### Method 200.8 - Metals (ICP/MS) - Potentially Dissolved

Sample OUTFALL-001 (280-193704-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared on 7/9/2024 and analyzed on 7/10/2024 and 7/11/2024.

### Method 200.8 - Metals (ICP/MS) - Total Recoverable

Sample OUTFALL-001 (280-193704-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared and analyzed on 7/11/2024.

### Method 245.1 - Mercury (CVAA)

Sample OUTFALL-001 (280-193704-1) was analyzed for Mercury (CVAA). The sample was prepared and analyzed on 7/17/2024.

### Method SM 2510B - Conductivity, Specific Conductance

Sample OUTFALL-001 (280-193704-1) was analyzed for Conductivity, Specific Conductance. The sample was analyzed on 7/9/2024.

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## Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-193704-1

### Job ID: 280-193704-1 (Continued)

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#### Method SM 2540D - Solids, Total Suspended (TSS)

Sample OUTFALL-001 (280-193704-1) was analyzed for Solids, Total Suspended (TSS). The sample was analyzed on 7/10/2024.

#### Method SM 3500 CR B - Chromium, Hexavalent

Sample OUTFALL-001 (280-193704-1) was analyzed for Chromium, Hexavalent. The sample was analyzed on 7/8/2024.

#### Method SM 3500 CR B - Chromium, Hexavalent - Dissolved

Sample OUTFALL-001 (280-193704-1) was analyzed for Chromium, Hexavalent - Dissolved. The sample was analyzed on 7/8/2024.

The method blank for preparation batch 280-659626 and analytical batch 280-659630 contained Chromium, hexavalent above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

#### Method SM3500 CR B - Chromium, Trivalent - Potentially Dissolved

Sample OUTFALL-001 (280-193704-1) was analyzed for Chromium, Trivalent - Potentially Dissolved. The sample was analyzed on 7/18/2024.

#### Method SM3500 CR B - Chromium, Trivalent - Total Recoverable

Sample OUTFALL-001 (280-193704-1) was analyzed for Chromium, Trivalent - Total Recoverable. The sample was analyzed on 7/18/2024.

#### Method SM 4500 H+ B - pH

Sample OUTFALL-001 (280-193704-1) was analyzed for pH. The sample was analyzed on 7/9/2024.

#### Method SM 4500 S2 D - Sulfide, Total

Sample OUTFALL-001 (280-193704-1) was analyzed for Sulfide, Total. The sample was analyzed on 7/10/2024.

#### Method SM4500 S2 H - Unionized Hydrogen Sulfide

Sample OUTFALL-001 (280-193704-1) was analyzed for Unionized Hydrogen Sulfide. The sample was analyzed on 7/10/2024.

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# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-193704-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	4.8		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	100	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.97	J	2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	1.0		1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	30		10	2.0	ug/L	1		200.8	Total Recoverable
Copper	0.99	J	2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	0.94	J	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	4.0		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	37	B	10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	190		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
pH adj. to 25 deg C	7.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.8	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.6		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	21		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	190		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA
Chromium, hexavalent	9.8	J B	20	4.0	ug/L	1		SM 3500 CR B	Dissolved

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	EET PEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET DEN
SM 2510B	Conductivity, Specific Conductance	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 3500 CR B	Chromium, Hexavalent	SM	EET DEN
SM 4500 H+ B	pH	SM	EET DEN
SM 4500 S2 D	Sulfide, Total	SM	EET DEN
SM3500 CR B	Chromium, Trivalent	SM	EET DEN
SM4500 S2 H	Unionized Hydrogen Sulfide	SM	EET DEN
1631E	Preparation, Mercury, Low Level	EPA	EET PEN
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET DEN
FILTRATION	Sample Filtration	None	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

## Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-193704-1	OUTFALL-001	Water	07/08/24 13:00	07/08/24 16:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: EPA 1631E - Mercury, Low Level (CVAFS)

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.8		0.50	0.20	ng/L		07/10/24 15:48	07/17/24 13:12	1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	B	100	9.1	ug/L		07/11/24 08:58	07/12/24 19:12	1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		07/11/24 08:58	07/11/24 20:24	1
Cadmium	ND		1.0	0.19	ug/L		07/11/24 08:58	07/11/24 20:24	1
Chromium	ND		3.0	0.50	ug/L		07/11/24 08:58	07/11/24 20:24	1
Copper	0.97	J	2.0	0.71	ug/L		07/11/24 08:58	07/11/24 20:24	1
Lead	1.0		1.0	0.23	ug/L		07/11/24 08:58	07/11/24 20:24	1
Zinc	30		10	2.0	ug/L		07/11/24 08:58	07/11/24 20:24	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		07/09/24 20:47	07/10/24 21:35	1
Cadmium	ND		1.0	0.19	ug/L		07/09/24 20:47	07/10/24 21:35	1
Chromium	ND		3.0	0.50	ug/L		07/09/24 20:47	07/10/24 21:35	1
Copper	0.99	J	2.0	0.71	ug/L		07/09/24 20:47	07/10/24 21:35	1
Lead	0.94	J	1.0	0.23	ug/L		07/09/24 20:47	07/10/24 21:35	1
Manganese	4.0		3.0	0.51	ug/L		07/09/24 20:47	07/10/24 21:35	1
Nickel	ND		3.0	0.83	ug/L		07/09/24 20:47	07/11/24 10:49	1
Selenium	ND		5.0	1.0	ug/L		07/09/24 20:47	07/10/24 21:35	1
Silver	ND		0.50	0.045	ug/L		07/09/24 20:47	07/10/24 21:35	1
Zinc	37	B	10	2.0	ug/L		07/09/24 20:47	07/10/24 21:35	1

## Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		07/17/24 18:10	07/17/24 23:10	1



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## General Chemistry

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	190		2.0	2.0	umhos/cm			07/09/24 15:10	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			07/10/24 10:24	1
Chromium, hexavalent (SM 3500 CR B)	ND		20	4.0	ug/L			07/08/24 17:51	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.6	HF	0.1	0.1	SU			07/09/24 12:40	1
Temperature (SM 4500 H+ B)	20.8	HF	1.0	1.0	Degrees C			07/09/24 12:40	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			07/10/24 14:56	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			07/10/24 03:40	1
Field pH (SM4500 S2 H)	7.6		1.0	1.0	SU			07/10/24 03:40	1
Field Temperature (SM4500 S2 H)	21		1.0	1.0	Celsius			07/10/24 03:40	1
Specific Conductance (SM4500 S2 H)	190		2.0	2.0	umhos/cm			07/10/24 03:40	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			07/10/24 03:40	1

## General Chemistry - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		20	20	ug/L			07/18/24 14:15	1

## General Chemistry - Dissolved

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	9.8	J B	20	4.0	ug/L			07/08/24 17:55	1

## General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL-001  
Date Collected: 07/08/24 13:00  
Date Received: 07/08/24 16:30

Lab Sample ID: 280-193704-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		20	20	ug/L			07/18/24 14:15	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-678068/3-A  
Matrix: Water  
Analysis Batch: 678143

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 678068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.20	ng/L		07/16/24 16:00	07/17/24 11:10	1

Lab Sample ID: LCS 400-678068/4-A  
Matrix: Water  
Analysis Batch: 678143

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 678068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.38		ng/L		108	79 - 121

Lab Sample ID: LCSD 400-678068/5-A  
Matrix: Water  
Analysis Batch: 678143

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 678068

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	5.68		ng/L		114	79 - 121	6	20

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-659699/1-A  
Matrix: Water  
Analysis Batch: 660337

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 659699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	18.7	J	100	9.1	ug/L		07/11/24 08:58	07/12/24 18:50	1

Lab Sample ID: LCS 280-659699/2-A  
Matrix: Water  
Analysis Batch: 660337

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 659699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9820		ug/L		98	85 - 115

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-659699/1-A  
Matrix: Water  
Analysis Batch: 660195

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 659699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		07/11/24 08:58	07/11/24 20:20	1
Cadmium	ND		1.0	0.19	ug/L		07/11/24 08:58	07/11/24 20:20	1
Chromium	ND		3.0	0.50	ug/L		07/11/24 08:58	07/11/24 20:20	1
Copper	ND		2.0	0.71	ug/L		07/11/24 08:58	07/11/24 20:20	1
Lead	ND		1.0	0.23	ug/L		07/11/24 08:58	07/11/24 20:20	1
Zinc	ND		10	2.0	ug/L		07/11/24 08:58	07/11/24 20:20	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-659699/23-A  
Matrix: Water  
Analysis Batch: 660195

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 659699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.0		ug/L		100	89 - 111
Cadmium	40.0	38.0		ug/L		95	89 - 111
Chromium	40.0	40.5		ug/L		101	86 - 115
Copper	40.0	40.1		ug/L		100	90 - 115
Lead	40.0	39.8		ug/L		99	88 - 115
Zinc	40.0	40.0		ug/L		100	88 - 115

Lab Sample ID: MB 280-659584/1-B  
Matrix: Water  
Analysis Batch: 659997

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 659707

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		07/09/24 20:47	07/10/24 20:48	1
Cadmium	ND		1.0	0.19	ug/L		07/09/24 20:47	07/10/24 20:48	1
Chromium	ND		3.0	0.50	ug/L		07/09/24 20:47	07/10/24 20:48	1
Copper	ND		2.0	0.71	ug/L		07/09/24 20:47	07/10/24 20:48	1
Lead	ND		1.0	0.23	ug/L		07/09/24 20:47	07/10/24 20:48	1
Manganese	ND		3.0	0.51	ug/L		07/09/24 20:47	07/10/24 20:48	1
Nickel	ND		3.0	0.83	ug/L		07/09/24 20:47	07/10/24 20:48	1
Selenium	ND		5.0	1.0	ug/L		07/09/24 20:47	07/10/24 20:48	1
Silver	ND		0.50	0.045	ug/L		07/09/24 20:47	07/10/24 20:48	1
Zinc	2.87	J	10	2.0	ug/L		07/09/24 20:47	07/10/24 20:48	1

Lab Sample ID: LCS 280-659584/12-B  
Matrix: Water  
Analysis Batch: 659997

Client Sample ID: Lab Control Sample  
Prep Type: Potentially Dissolved  
Prep Batch: 659707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.5		ug/L		101	89 - 111
Cadmium	40.0	37.3		ug/L		93	89 - 111
Chromium	40.0	38.2		ug/L		96	86 - 115
Copper	40.0	38.1		ug/L		95	90 - 115
Lead	40.0	38.8		ug/L		97	88 - 115
Manganese	40.0	37.5		ug/L		94	87 - 115
Nickel	40.0	37.1		ug/L		93	86 - 115
Selenium	40.0	41.4		ug/L		103	85 - 114
Silver	40.0	37.8		ug/L		94	90 - 114
Zinc	40.0	40.9		ug/L		102	88 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-660832/1-A  
Matrix: Water  
Analysis Batch: 660954

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 660832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		07/17/24 18:10	07/17/24 21:57	1

Eurofins Denver



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 280-660832/2-A  
Matrix: Water  
Analysis Batch: 660954

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 660832

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.12		ug/L		102	90 - 110

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-659779/4  
Matrix: Water  
Analysis Batch: 659779

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0	2.0	umhos/cm			07/09/24 15:10	1

Lab Sample ID: LCS 280-659779/3  
Matrix: Water  
Analysis Batch: 659779

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1410	1440		umhos/cm		102	90 - 110

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-659893/1  
Matrix: Water  
Analysis Batch: 659893

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			07/10/24 10:24	1

Lab Sample ID: LCS 280-659893/2  
Matrix: Water  
Analysis Batch: 659893

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	418		mg/L		83	79 - 114

## Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-659630/10  
Matrix: Water  
Analysis Batch: 659630

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		20	4.0	ug/L			07/08/24 17:50	1

Lab Sample ID: LCS 280-659630/8  
Matrix: Water  
Analysis Batch: 659630

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	100	99.7		ug/L		100	91 - 112

Eurofins Denver



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: SM 3500 CR B - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSD 280-659630/9

Matrix: Water

Analysis Batch: 659630

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	100	99.9		ug/L		100	91 - 112	0	20

Lab Sample ID: 280-193704-1 MS

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND		100	101		ug/L		101	91 - 112		

Lab Sample ID: 280-193704-1 MSD

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND		100	99.8		ug/L		100	91 - 112	1	20

Lab Sample ID: 280-193704-1 DU

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND			ND		ug/L				NC	20

Lab Sample ID: MB 280-659626/3-A

Matrix: Water

Analysis Batch: 659630

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	14.8	J	20	4.0	ug/L			07/08/24 17:54	1

Lab Sample ID: LCS 280-659626/1-A

Matrix: Water

Analysis Batch: 659630

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	100	106		ug/L		106	91 - 112		

Lab Sample ID: LCSD 280-659626/2-A

Matrix: Water

Analysis Batch: 659630

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	100	104		ug/L		104	91 - 112	2	20

Lab Sample ID: 280-193704-1 MS

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	9.8	J B	100	101		ug/L		91	91 - 112		

Eurofins Denver



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: 280-193704-1 MSD

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	9.8	J B	100	101		ug/L		91	91 - 112	1	20

Lab Sample ID: 280-193704-1 DU

Matrix: Water

Analysis Batch: 659630

Client Sample ID: OUTFALL-001

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	9.8	J B	ND		ug/L		NC	20

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-659755/5

Matrix: Water

Analysis Batch: 659755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	99 - 101

## Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-659945/11

Matrix: Water

Analysis Batch: 659945

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		0.050	0.022	mg/L			07/10/24 14:42	1

Lab Sample ID: LCS 280-659945/9

Matrix: Water

Analysis Batch: 659945

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.501	0.491		mg/L		98	81 - 122

Lab Sample ID: LCSD 280-659945/10

Matrix: Water

Analysis Batch: 659945

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	0.501	0.487		mg/L		97	81 - 122	1	10

Eurofins Denver



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Metals

### Filtration Batch: 659584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-659584/1-B	Method Blank	Potentially Dissolved	Water	Filtration	
LCS 280-659584/12-B	Lab Control Sample	Potentially Dissolved	Water	Filtration	

### Filtration Batch: 659686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

### Prep Batch: 659699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-659699/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-659699/23-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-659699/2-A	Lab Control Sample	Total Recoverable	Water	200.8	

### Prep Batch: 659707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Potentially Dissolved	Water	200.8	659686
MB 280-659584/1-B	Method Blank	Potentially Dissolved	Water	200.8	659584
LCS 280-659584/12-B	Lab Control Sample	Potentially Dissolved	Water	200.8	659584

### Analysis Batch: 659997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Potentially Dissolved	Water	200.8	659707
MB 280-659584/1-B	Method Blank	Potentially Dissolved	Water	200.8	659707
LCS 280-659584/12-B	Lab Control Sample	Potentially Dissolved	Water	200.8	659707

### Analysis Batch: 660119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Potentially Dissolved	Water	200.8	659707

### Analysis Batch: 660195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total Recoverable	Water	200.8	659699
MB 280-659699/1-A	Method Blank	Total Recoverable	Water	200.8	659699
LCS 280-659699/23-A	Lab Control Sample	Total Recoverable	Water	200.8	659699

### Analysis Batch: 660337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total Recoverable	Water	200.7 Rev 4.4	659699
MB 280-659699/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	659699
LCS 280-659699/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	659699

### Prep Batch: 660832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	245.1	
MB 280-660832/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-660832/2-A	Lab Control Sample	Total/NA	Water	245.1	

### Analysis Batch: 660954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	245.1	660832

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Metals (Continued)

### Analysis Batch: 660954 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-660832/1-A	Method Blank	Total/NA	Water	245.1	660832
LCS 280-660832/2-A	Lab Control Sample	Total/NA	Water	245.1	660832

### Prep Batch: 678068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	1631E	
MB 400-678068/3-A	Method Blank	Total/NA	Water	1631E	
LCS 400-678068/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-678068/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	

### Analysis Batch: 678143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	1631E	678068
MB 400-678068/3-A	Method Blank	Total/NA	Water	1631E	678068
LCS 400-678068/4-A	Lab Control Sample	Total/NA	Water	1631E	678068
LCSD 400-678068/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	678068

## General Chemistry

### Filtration Batch: 659626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Dissolved	Water	FILTRATION	
MB 280-659626/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-659626/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-659626/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-193704-1 MS	OUTFALL-001	Dissolved	Water	FILTRATION	
280-193704-1 MSD	OUTFALL-001	Dissolved	Water	FILTRATION	
280-193704-1 DU	OUTFALL-001	Dissolved	Water	FILTRATION	

### Analysis Batch: 659630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Dissolved	Water	SM 3500 CR B	659626
280-193704-1	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
MB 280-659626/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	659626
MB 280-659630/10	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-659626/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	659626
LCS 280-659630/8	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-659626/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	659626
LCSD 280-659630/9	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	
280-193704-1 MS	OUTFALL-001	Dissolved	Water	SM 3500 CR B	659626
280-193704-1 MS	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
280-193704-1 MSD	OUTFALL-001	Dissolved	Water	SM 3500 CR B	659626
280-193704-1 MSD	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
280-193704-1 DU	OUTFALL-001	Dissolved	Water	SM 3500 CR B	659626
280-193704-1 DU	OUTFALL-001	Total/NA	Water	SM 3500 CR B	

### Analysis Batch: 659755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	SM 4500 H+ B	
LCS 280-659755/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Eurofins Denver



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## General Chemistry

### Analysis Batch: 659779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	SM 2510B	
MB 280-659779/4	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-659779/3	Lab Control Sample	Total/NA	Water	SM 2510B	

### Analysis Batch: 659820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	SM4500 S2 H	

### Analysis Batch: 659893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	SM 2540D	
MB 280-659893/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-659893/2	Lab Control Sample	Total/NA	Water	SM 2540D	

### Analysis Batch: 659945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	
MB 280-659945/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-659945/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-659945/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	

### Analysis Batch: 660959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-193704-1	OUTFALL-001	Potentially Dissolved	Water	SM3500 CR B	
280-193704-1	OUTFALL-001	Total Recoverable	Water	SM3500 CR B	



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

**Client Sample ID: OUTFALL-001**

**Lab Sample ID: 280-193704-1**

**Date Collected: 07/08/24 13:00**

**Matrix: Water**

**Date Received: 07/08/24 16:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			40 mL	40 mL	678068	07/10/24 15:48	VLC	EET PEN
							Completed:	07/11/24 09:00 <sup>1</sup>		
Total/NA	Analysis	1631E		1			678143	07/17/24 13:12	VLC	EET PEN
Total Recoverable	Prep	200.8			50 mL	50 mL	659699	07/11/24 08:58	KLG	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			660337	07/12/24 19:12	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			150 mL	150 mL	659686	07/09/24 09:30	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	659707	07/09/24 20:47	KLG	EET DEN
Potentially Dissolved	Analysis	200.8		1			659997	07/10/24 21:35	LMT	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			150 mL	150 mL	659686	07/09/24 09:30	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	659707	07/09/24 20:47	KLG	EET DEN
Potentially Dissolved	Analysis	200.8		1			660119	07/11/24 10:49	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	659699	07/11/24 08:58	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			660195	07/11/24 20:24	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	660832	07/17/24 18:10	CAF	EET DEN
Total/NA	Analysis	245.1		1			660954	07/17/24 23:10	CAF	EET DEN
Total/NA	Analysis	SM 2510B		1			659779	07/09/24 15:10	EL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	659893	07/10/24 10:24	MF	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	659626	07/08/24 17:07	LL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	659630	07/08/24 17:55	LL	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	659630	07/08/24 17:51	LL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			659755	07/09/24 12:40	EL	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	659945	07/10/24 14:56	CLP	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			660959	07/18/24 14:15	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			660959	07/18/24 14:15	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			659820	07/10/24 03:40	C1A	EET DEN

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



# Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

## Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-25
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	11-30-25
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	04-21-25
California	State	2513	01-08-25
Colorado	State	CO00026	06-30-25
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-24 *
Georgia	State	4025-011	01-08-25
Illinois	NELAP	2000172024-9	05-31-25
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-25
Kentucky (WW)	State	KY98047	12-31-24
Louisiana	NELAP	30785	06-30-14 *
Louisiana (All)	NELAP	30785	06-30-25
Minnesota	NELAP	1788752	12-31-24
Nevada	State	CO000262024-08	08-02-24
New Hampshire	NELAP	2053	04-28-25
New Jersey	NELAP	230001	06-30-25
New York	NELAP	59923	04-01-25
North Dakota	State	R-034	01-08-24 *
Oklahoma	NELAP	8614	08-31-24
Oregon	NELAP	4025-020	01-08-25
Pennsylvania	NELAP	013	07-31-24
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-23-23	09-30-24
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-24
Virginia	NELAP	460232	06-14-25
Washington	State	C583	08-03-24
West Virginia DEP	State	354	11-30-24
Wisconsin	State	999615430	08-31-24
Wyoming (UST)	A2LA	2907.01	10-31-25

## Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Denver



## Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-193704-1

### Laboratory: Eurofins Pensacola (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	01-09-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25



Ver: 01/16/2019



## Eurofins Denver

4955 Yarrow Street  
Avrada, CO 80002  
Phone: 303-736-0100 Fax: 303-431-7171

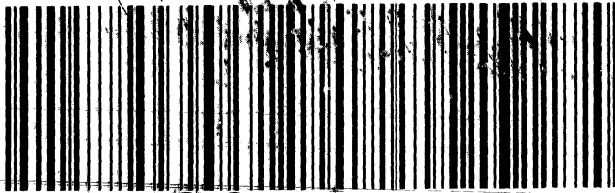
## Chain of Custody Record



## Environment Testing

[illegible]



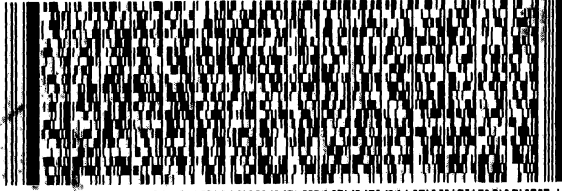


32514 BFM

WED - 10 JUL 10:30A  
PRIORITY OVERNIGHT

**XH PNSA**

TRK# 7385 6149 0935



J2410231122014

REF: 8280-141926  
DEPT: BOTTLE PREP

**PENSACOLA FL 32514**

**3355 MCLEMORE DRIVE**

**SHIPPING/RECEIVING**  
**EUROFINS ENVIRONMENT TESTING**

SHIP DATE: 07/10/2025  
ACTG: 18  
CAD: 29088  
SHIP DATE: 07/10/2025  
ACTG: 18  
CAD: 29088  
EUROFINS TESTAMERICA DENVER  
4955 YARROW ST  
ARVADA, CO 80002  
UNITED STATES US

574

10:30

09:25

07:10

Part # 159468-434 MTW EXP 02/25

**Environment Testing**  
**TestAmerica**

**eurofins**



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-193704-1

**Login Number: 193704**

**List Source: Eurofins Denver**

**List Number: 1**

**Creator: Naylis, Patrick J**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-193704-1

**Login Number: 193704**

**List Number: 2**

**Creator: Wilson, Lance**

**List Source: Eurofins Pensacola**

**List Creation: 07/10/24 01:04 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 8/1/2024 11:59:07 AM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-194456-1



# Eurofins Denver

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



Generated  
8/1/2024 11:59:07 AM

Authorized for release by  
Matthew Gardner, Project Manager I  
[Matthew.Gardner@et.eurofinsus.com](mailto:Matthew.Gardner@et.eurofinsus.com)  
Designee for  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	7
Sample Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	10
QC Association . . . . .	11
Chronicle . . . . .	12
Certification Summary . . . . .	13
Chain of Custody . . . . .	14
Receipt Checklists . . . . .	15



# Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-194456-1

**Job ID: 280-194456-1**

**Eurofins Denver**

## **Job Narrative 280-194456-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### **Receipt**

The sample was received on 7/24/2024 2:09 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C.

### **Method 200.8 - Metals (ICP/MS) - Potentially Dissolved**

Sample OUTFALL-001 (280-194456-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared on 7/26/2024 and analyzed on 7/29/2024.

### **Method 200.8 - Metals (ICP/MS) - Total Recoverable**

Sample OUTFALL-001 (280-194456-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared and analyzed on 7/25/2024.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: analyst added 5.0 mL of Hydrochloric acid to the batch, deviating from the SOP amount which is 2.5 mL.

Eurofins Denver



## Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-194456-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.87	J	1.0	0.23	ug/L	1		200.8	Total
Copper	0.78	J	2.0	0.71	ug/L	1		200.8	Recoverable
Lead	0.79	J	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Zinc	25		10	2.0	ug/L	1		200.8	Potentially Dissolved

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-194456-1	OUTFALL-001	Water	07/24/24 12:00	07/24/24 14:09

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL-001

Date Collected: 07/24/24 12:00

Date Received: 07/24/24 14:09

Lab Sample ID: 280-194456-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		07/25/24 08:44	07/25/24 17:38	1
Lead	0.87	J	1.0	0.23	ug/L		07/25/24 08:44	07/25/24 17:38	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 07/24/24 12:00

Date Received: 07/24/24 14:09

Lab Sample ID: 280-194456-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		07/26/24 14:47	07/29/24 20:05	1
Copper	0.78	J	2.0	0.71	ug/L		07/26/24 14:47	07/29/24 20:05	1
Lead	0.79	J	1.0	0.23	ug/L		07/26/24 14:47	07/29/24 20:05	1
Silver	ND		0.50	0.045	ug/L		07/26/24 14:47	07/29/24 20:05	1
Zinc	25		10	2.0	ug/L		07/26/24 14:47	07/29/24 20:05	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-661630/1-A  
Matrix: Water  
Analysis Batch: 661819

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 661630

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		07/25/24 08:44	07/25/24 17:31	1
Lead	ND		1.0	0.23	ug/L		07/25/24 08:44	07/25/24 17:31	1

Lab Sample ID: LCS 280-661630/23-A  
Matrix: Water  
Analysis Batch: 661819

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 661630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	38.8		ug/L		97	90 - 115
Lead	40.0	39.0		ug/L		98	88 - 115

Lab Sample ID: MB 280-661714/1-B  
Matrix: Water  
Analysis Batch: 662118

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 661715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		07/26/24 14:47	07/29/24 13:23	1
Copper	ND		2.0	0.71	ug/L		07/26/24 14:47	07/29/24 13:23	1
Lead	ND		1.0	0.23	ug/L		07/26/24 14:47	07/29/24 13:23	1
Silver	ND		0.50	0.045	ug/L		07/26/24 14:47	07/29/24 13:23	1
Zinc	ND		10	2.0	ug/L		07/26/24 14:47	07/29/24 13:23	1

Lab Sample ID: LCS 280-661791/2-B  
Matrix: Water  
Analysis Batch: 662118

Client Sample ID: Lab Control Sample  
Prep Type: Potentially Dissolved  
Prep Batch: 661715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	39.0		ug/L		97	89 - 111
Copper	40.0	36.5		ug/L		91	90 - 115
Lead	40.0	38.5		ug/L		96	88 - 115
Silver	40.0	38.1		ug/L		95	90 - 114
Zinc	40.0	39.6		ug/L		99	88 - 115



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

## Metals

### Prep Batch: 661630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194456-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-661630/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-661630/23-A	Lab Control Sample	Total Recoverable	Water	200.8	

### Filtration Batch: 661713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194456-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

### Filtration Batch: 661714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-661714/1-B	Method Blank	Potentially Dissolved	Water	Filtration	

### Prep Batch: 661715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194456-1	OUTFALL-001	Potentially Dissolved	Water	200.8	661713
MB 280-661714/1-B	Method Blank	Potentially Dissolved	Water	200.8	661714
LCS 280-661791/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	661791

### Filtration Batch: 661791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-661791/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

### Analysis Batch: 661819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194456-1	OUTFALL-001	Total Recoverable	Water	200.8	661630
MB 280-661630/1-A	Method Blank	Total Recoverable	Water	200.8	661630
LCS 280-661630/23-A	Lab Control Sample	Total Recoverable	Water	200.8	661630

### Analysis Batch: 662118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-661714/1-B	Method Blank	Potentially Dissolved	Water	200.8	661715
LCS 280-661791/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	661715

### Analysis Batch: 662166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194456-1	OUTFALL-001	Potentially Dissolved	Water	200.8	661715



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-194456-1

Date Collected: 07/24/24 12:00

Matrix: Water

Date Received: 07/24/24 14:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Potentially Dissolved	Filtration	Poten_Diss_Met			150 mL	150 mL	661713	07/25/24 11:26	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	661715	07/26/24 14:47	AES	EET DEN
Potentially Dissolved	Analysis	200.8		1			662166	07/29/24 20:05	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	661630	07/25/24 08:44	AMH	EET DEN
Total Recoverable	Analysis	200.8		1			661819	07/25/24 17:38	LMT	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194456-1

## Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

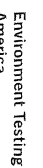
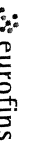
Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-25
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	11-30-25
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	04-21-25
California	State	2513	01-08-25
Colorado	State	CO00026	06-30-25
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-24 *
Georgia	State	4025-011	01-08-25
Illinois	NELAP	2000172024-9	05-31-25
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-25
Kentucky (WW)	State	KY98047	12-31-24
Louisiana	NELAP	30785	06-30-14 *
Louisiana (All)	NELAP	30785	06-30-25
Minnesota	NELAP	1788752	12-31-24
Nevada	State	CO000262024-08	08-02-24
New Hampshire	NELAP	2053	04-28-25
New Jersey	NELAP	230001	06-30-25
New York	NELAP	59923	04-01-25
North Dakota	State	R-034	01-08-24 *
Oklahoma	NELAP	8614	08-31-24
Oregon	NELAP	4025	01-08-25
Pennsylvania	NELAP	013	07-31-25
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-23-23	09-30-24
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-24
Virginia	NELAP	460232	06-14-25
Washington	State	C583	08-03-24
West Virginia DEP	State	354	11-30-24
Wisconsin	State	999615430	08-31-24
Wyoming (UST)	A2LA	2907.01	10-31-25

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Denver



## Chain of Custody Record

[illegible]



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-194456-1

Login Number: 194456

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## APPENDIX B.2 AUGUST 2024 OUTFALL-001 ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 8/15/2024 2:18:46 PM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-194790-1



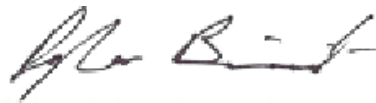
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## Job Notes

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## Authorization



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# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	7
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
QC Sample Results . . . . .	12
QC Association . . . . .	18
Chronicle . . . . .	21
Certification Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	24



## Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-194790-1

**Job ID: 280-194790-1**

**Eurofins Denver**

## **Job Narrative 280-194790-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### **Receipt**

The sample was received on 8/1/2024 1:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C.

### **Method 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable**

Sample OUTFALL 001 (280-194790-1) was analyzed for Metals (ICP) - Total Recoverable. The sample was prepared on 8/1/2024 and analyzed on 8/2/2024.

### **Method 200.8 - Metals (ICP/MS) - Potentially Dissolved**

Sample OUTFALL 001 (280-194790-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared and analyzed on 8/5/2024.

### **Method 200.8 - Metals (ICP/MS) - Total Recoverable**

Sample OUTFALL 001 (280-194790-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared on 8/1/2024 and analyzed on 8/2/2024, 8/5/2024 and 8/12/2024.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-662588 and analytical batch 280-662956 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

### **Method 245.1 - Mercury (CVAA)**

Sample OUTFALL 001 (280-194790-1) was analyzed for Mercury (CVAA). The sample was prepared and analyzed on 8/9/2024.

### **Method SM 2510B - Conductivity, Specific Conductance**

Sample OUTFALL 001 (280-194790-1) was analyzed for Conductivity, Specific Conductance. The sample was prepared on 8/1/2024 and analyzed on 8/2/2024.

### **Method SM 2540D - Solids, Total Suspended (TSS)**

Sample OUTFALL 001 (280-194790-1) was analyzed for Solids, Total Suspended (TSS). The sample was prepared on 8/1/2024 and analyzed on 8/2/2024 and 8/5/2024.

### **Method SM 3500 CR B - Chromium, Hexavalent - Dissolved**

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## Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-194790-1

### Job ID: 280-194790-1 (Continued)

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Sample OUTFALL 001 (280-194790-1) was analyzed for Chromium, Hexavalent - Dissolved. The sample was analyzed on 8/1/2024.

The laboratory control sample (LCS) for preparation batch 280-662555 and analytical batch 280-662593 recovered outside control limits for the following analytes: Chromium, hexavalent. The samples within the batch were rerun out-of-hold with passing QC and the results confirmed, therefore, in-hold data is being qualified and reported.

The laboratory did not perform the SM3500 CR B Total Hexavalent Chromium analysis requested for OUTFALL 001 (280-194790-1). Per a recent update to the laboratory's SOP all samples collected for hexavalent chromium analysis by SM3500 CR B undergo laboratory filtration to remove undissolved solids from the sample volume. The method does not digest solids in the sample volume prior to analysis. The laboratory will use the lab filtered hexavalent chromium analysis result from the sample to complete the Total Recoverable Trivalent Chromium calculated result.

#### Method SM3500 CR B - Chromium, Trivalent - Potentially Dissolved

Sample OUTFALL 001 (280-194790-1) was analyzed for Chromium, Trivalent - Potentially Dissolved. The sample was analyzed on 8/9/2024.

#### Method SM3500 CR B - Chromium, Trivalent - Total Recoverable

Sample OUTFALL 001 (280-194790-1) was analyzed for Chromium, Trivalent - Total Recoverable. The sample was analyzed on 8/9/2024.

#### Method SM 4500 H+ B - pH

Sample OUTFALL 001 (280-194790-1) was analyzed for pH. The sample was analyzed on 8/2/2024.

#### Method SM 4500 S2 D - Sulfide, Total

Sample OUTFALL 001 (280-194790-1) was analyzed for Sulfide, Total. The sample was analyzed on 8/2/2024.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-662748 recovered outside control limits for the following analytes: Sulfide.

#### Method SM4500 S2 H - Unionized Hydrogen Sulfide

Sample OUTFALL 001 (280-194790-1) was analyzed for Unionized Hydrogen Sulfide. The sample was analyzed on 8/4/2024.

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# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 280-194790-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	21	J	100	9.1	ug/L	1		200.7 Rev 4.4	Total
Copper	0.95	J	2.0	0.71	ug/L	1		200.8	Recoverable
Lead	1.0	B	1.0	0.23	ug/L	1		200.8	Total
Zinc	27	F1	10	2.0	ug/L	1		200.8	Recoverable
Copper	1.0	J	2.0	0.71	ug/L	1		200.8	Total
Lead	0.93	J	1.0	0.23	ug/L	1		200.8	Recoverable
Manganese	0.76	J	3.0	0.51	ug/L	1		200.8	Total
Selenium	2.6	J	5.0	1.0	ug/L	1		200.8	Recoverable
Zinc	25		10	2.0	ug/L	1		200.8	Total
Specific Conductance	200		2.0	2.0	umhos/cm	1		SM 2510B	Recoverable
pH adj. to 25 deg C	7.9	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.1	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.9		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	19		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	200		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET DEN
SM 2510B	Conductivity, Specific Conductance	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 3500 CR B	Chromium, Hexavalent	SM	EET DEN
SM 4500 H+ B	pH	SM	EET DEN
SM 4500 S2 D	Sulfide, Total	SM	EET DEN
SM3500 CR B	Chromium, Trivalent	SM	EET DEN
SM4500 S2 H	Unionized Hydrogen Sulfide	SM	EET DEN
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET DEN
FILTRATION	Sample Filtration	None	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

## Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-194790-1	OUTFALL 001	Water	08/01/24 12:00	08/01/24 13:40

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	21	J	100	9.1	ug/L		08/01/24 21:26	08/02/24 10:43	1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		08/01/24 21:26	08/02/24 19:19	1
Cadmium	ND		1.0	0.19	ug/L		08/01/24 21:26	08/02/24 19:19	1
Chromium	ND		3.0	0.50	ug/L		08/01/24 21:26	08/02/24 19:19	1
Copper	0.95	J	2.0	0.71	ug/L		08/01/24 21:26	08/02/24 19:19	1
Lead	1.0	B	1.0	0.23	ug/L		08/01/24 21:26	08/12/24 17:03	1
Zinc	27	F1	10	2.0	ug/L		08/01/24 21:26	08/05/24 14:53	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		08/05/24 08:44	08/05/24 17:43	1
Cadmium	ND		1.0	0.19	ug/L		08/05/24 08:44	08/05/24 17:43	1
Chromium	ND		3.0	0.50	ug/L		08/05/24 08:44	08/05/24 17:43	1
Copper	1.0	J	2.0	0.71	ug/L		08/05/24 08:44	08/05/24 17:43	1
Lead	0.93	J	1.0	0.23	ug/L		08/05/24 08:44	08/05/24 17:43	1
Manganese	0.76	J	3.0	0.51	ug/L		08/05/24 08:44	08/05/24 17:43	1
Nickel	ND		3.0	0.83	ug/L		08/05/24 08:44	08/05/24 17:43	1
Selenium	2.6	J	5.0	1.0	ug/L		08/05/24 08:44	08/05/24 17:43	1
Silver	ND		0.50	0.045	ug/L		08/05/24 08:44	08/05/24 17:43	1
Zinc	25		10	2.0	ug/L		08/05/24 08:44	08/05/24 17:43	1

## Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		08/09/24 16:27	08/09/24 23:59	1

## General Chemistry

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	200		2.0	2.0	umhos/cm			08/02/24 10:15	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			08/05/24 15:30	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.9	HF	0.1	0.1	SU			08/02/24 09:54	1
Temperature (SM 4500 H+ B)	19.1	HF	1.0	1.0	Degrees C			08/02/24 09:54	1
Sulfide (SM 4500 S2 D)	ND	*1	0.050	0.022	mg/L			08/02/24 15:36	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## General Chemistry (Continued)

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			08/04/24 20:13	1
Field pH (SM4500 S2 H)	7.9		1.0	1.0	SU			08/04/24 20:13	1
Field Temperature (SM4500 S2 H)	19		1.0	1.0	Celsius			08/04/24 20:13	1
Specific Conductance (SM4500 S2 H)	200		2.0	2.0	umhos/cm			08/04/24 20:13	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			08/04/24 20:13	1

## General Chemistry - Total Recoverable

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		20	20	ug/L			08/09/24 11:02	1

## General Chemistry - Dissolved

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND	*+	20	4.0	ug/L			08/01/24 16:43	1

## General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL 001  
Date Collected: 08/01/24 12:00  
Date Received: 08/01/24 13:40

Lab Sample ID: 280-194790-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		20	20	ug/L			08/09/24 11:02	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-662588/1-A  
Matrix: Water  
Analysis Batch: 662673

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	9.1	ug/L		08/01/24 21:26	08/02/24 10:35	1

Lab Sample ID: LCS 280-662588/2-A  
Matrix: Water  
Analysis Batch: 662673

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9940		ug/L		99	85 - 115

Lab Sample ID: 280-194790-1 MS  
Matrix: Water  
Analysis Batch: 662673

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	21	J	10000	9960		ug/L		99	70 - 130

Lab Sample ID: 280-194790-1 MSD  
Matrix: Water  
Analysis Batch: 662673

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	21	J	10000	10000		ug/L		100	70 - 130	0	20

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-662588/1-A  
Matrix: Water  
Analysis Batch: 662765

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		08/01/24 21:26	08/02/24 19:14	1
Cadmium	ND		1.0	0.19	ug/L		08/01/24 21:26	08/02/24 19:14	1
Chromium	ND		3.0	0.50	ug/L		08/01/24 21:26	08/02/24 19:14	1
Copper	ND		2.0	0.71	ug/L		08/01/24 21:26	08/02/24 19:14	1

Lab Sample ID: MB 280-662588/1-A  
Matrix: Water  
Analysis Batch: 662956

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		10	2.0	ug/L		08/01/24 21:26	08/05/24 14:48	1

Lab Sample ID: MB 280-662588/1-A  
Matrix: Water  
Analysis Batch: 663798

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.403	J	1.0	0.23	ug/L		08/01/24 21:26	08/12/24 16:56	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-662588/16-A  
Matrix: Water  
Analysis Batch: 662765

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	39.6		ug/L		99	89 - 111
Cadmium	40.0	39.2		ug/L		98	89 - 111
Chromium	40.0	39.1		ug/L		98	86 - 115
Copper	40.0	37.7		ug/L		94	90 - 115

Lab Sample ID: LCS 280-662588/16-A  
Matrix: Water  
Analysis Batch: 662956

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	40.0	40.0		ug/L		100	88 - 115

Lab Sample ID: LCS 280-662588/16-A  
Matrix: Water  
Analysis Batch: 663798

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	40.0	37.9		ug/L		95	88 - 115

Lab Sample ID: 280-194790-1 MS  
Matrix: Water  
Analysis Batch: 662765

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	36.9		ug/L		92	79 - 120
Cadmium	ND		40.0	37.7		ug/L		94	89 - 111
Chromium	ND		40.0	37.7		ug/L		94	86 - 115
Copper	0.95	J	40.0	36.9		ug/L		90	90 - 115

Lab Sample ID: 280-194790-1 MS  
Matrix: Water  
Analysis Batch: 662956

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	27	F1	40.0	61.4	F1	ug/L		87	88 - 115

Lab Sample ID: 280-194790-1 MS  
Matrix: Water  
Analysis Batch: 663798

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1.0	B	40.0	38.8		ug/L		95	88 - 115

Lab Sample ID: 280-194790-1 MSD  
Matrix: Water  
Analysis Batch: 662765

Client Sample ID: OUTFALL 001  
Prep Type: Total Recoverable  
Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	ND		40.0	38.0		ug/L		95	79 - 120	3	20
Cadmium	ND		40.0	39.0		ug/L		97	89 - 111	3	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-194790-1 MSD

Matrix: Water

Analysis Batch: 662765

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	ND		40.0	39.5		ug/L		99	86 - 115	5	20
Copper	0.95	J	40.0	38.3		ug/L		93	90 - 115	4	20

Lab Sample ID: 280-194790-1 MSD

Matrix: Water

Analysis Batch: 662956

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	27	F1	40.0	62.9		ug/L		90	88 - 115	2	20

Lab Sample ID: 280-194790-1 MSD

Matrix: Water

Analysis Batch: 663798

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 662588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1.0	B	40.0	39.4		ug/L		96	88 - 115	1	20

Lab Sample ID: MB 280-662680/1-B

Matrix: Water

Analysis Batch: 662956

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 662685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		08/05/24 08:44	08/05/24 17:06	1
Cadmium	ND		1.0	0.19	ug/L		08/05/24 08:44	08/05/24 17:06	1
Chromium	ND		3.0	0.50	ug/L		08/05/24 08:44	08/05/24 17:06	1
Copper	ND		2.0	0.71	ug/L		08/05/24 08:44	08/05/24 17:06	1
Lead	ND		1.0	0.23	ug/L		08/05/24 08:44	08/05/24 17:06	1
Manganese	ND		3.0	0.51	ug/L		08/05/24 08:44	08/05/24 17:06	1
Nickel	ND		3.0	0.83	ug/L		08/05/24 08:44	08/05/24 17:06	1
Selenium	ND		5.0	1.0	ug/L		08/05/24 08:44	08/05/24 17:06	1
Silver	ND		0.50	0.045	ug/L		08/05/24 08:44	08/05/24 17:06	1
Zinc	ND		10	2.0	ug/L		08/05/24 08:44	08/05/24 17:06	1

Lab Sample ID: LCS 280-662563/2-B

Matrix: Water

Analysis Batch: 662956

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 662685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.8		ug/L		102	89 - 111
Cadmium	40.0	37.5		ug/L		94	89 - 111
Chromium	40.0	41.2		ug/L		103	86 - 115
Copper	40.0	40.7		ug/L		102	90 - 115
Lead	40.0	38.6		ug/L		96	88 - 115
Manganese	40.0	41.1		ug/L		103	87 - 115
Nickel	40.0	40.6		ug/L		102	86 - 115
Selenium	40.0	39.0		ug/L		98	85 - 114
Silver	40.0	37.6		ug/L		94	90 - 114
Zinc	40.0	44.5		ug/L		111	88 - 115

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-663540/1-A  
Matrix: Water  
Analysis Batch: 663722

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 663540

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		08/09/24 16:27	08/09/24 23:16	1

Lab Sample ID: LCS 280-663540/2-A  
Matrix: Water  
Analysis Batch: 663722

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 663540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.97		ug/L		99	90 - 110

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-662657/4  
Matrix: Water  
Analysis Batch: 662657

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0	2.0	umhos/cm			08/02/24 10:15	1

Lab Sample ID: LCS 280-662657/3  
Matrix: Water  
Analysis Batch: 662657

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1410	1420		umhos/cm		100	90 - 110

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-662895/1  
Matrix: Water  
Analysis Batch: 662895

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			08/05/24 15:30	1

Lab Sample ID: LCS 280-662895/2  
Matrix: Water  
Analysis Batch: 662895

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	441		mg/L		88	79 - 114

## Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-662555/3-A  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: Method Blank  
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		20	4.0	ug/L			08/01/24 16:42	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: SM 3500 CR B - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 280-662555/1-A  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: Lab Control Sample  
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	100	113	*+	ug/L		113	91 - 112

Lab Sample ID: LCSD 280-662555/2-A  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: Lab Control Sample Dup  
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	100	101		ug/L		101	91 - 112	11	20

Lab Sample ID: 280-194790-1 MS  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: OUTFALL 001  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND	*+	100	102		ug/L		102	91 - 112

Lab Sample ID: 280-194790-1 MSD  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: OUTFALL 001  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND	*+	100	101		ug/L		101	91 - 112	1	20

Lab Sample ID: 280-194790-1 DU  
Matrix: Water  
Analysis Batch: 662593

Client Sample ID: OUTFALL 001  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND	*+	ND	*+	ug/L		NC	20

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-662674/5  
Matrix: Water  
Analysis Batch: 662674

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	99 - 101

## Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-662748/11  
Matrix: Water  
Analysis Batch: 662748

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		0.050	0.022	mg/L			08/02/24 15:14	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: LCS 280-662748/9  
Matrix: Water  
Analysis Batch: 662748

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.501	0.427		mg/L		85	81 - 122

Lab Sample ID: LCSD 280-662748/10  
Matrix: Water  
Analysis Batch: 662748

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	0.501	0.488	*1	mg/L		97	81 - 122	13	10



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Metals

### Filtration Batch: 662563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-662563/2-B	Lab Control Sample	Potentially Dissolved	Water	Filtration	

### Prep Batch: 662588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.7	
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.8	
MB 280-662588/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-662588/16-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-662588/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.7	
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.7	
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	

### Analysis Batch: 662673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	662588
MB 280-662588/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	662588
LCS 280-662588/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	662588
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	662588
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	662588

### Filtration Batch: 662680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-662680/1-B	Method Blank	Potentially Dissolved	Water	Filtration	

### Filtration Batch: 662682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Potentially Dissolved	Water	Poten_Diss_Met	

### Prep Batch: 662685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Potentially Dissolved	Water	200.8	662682
MB 280-662680/1-B	Method Blank	Potentially Dissolved	Water	200.8	662680
LCS 280-662563/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	662563

### Analysis Batch: 662765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.8	662588
MB 280-662588/1-A	Method Blank	Total Recoverable	Water	200.8	662588
LCS 280-662588/16-A	Lab Control Sample	Total Recoverable	Water	200.8	662588
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	662588
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	662588

### Analysis Batch: 662956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Potentially Dissolved	Water	200.8	662685
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.8	662588
MB 280-662588/1-A	Method Blank	Total Recoverable	Water	200.8	662588
MB 280-662680/1-B	Method Blank	Potentially Dissolved	Water	200.8	662685
LCS 280-662563/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	662685

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## Metals (Continued)

### Analysis Batch: 662956 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-662588/16-A	Lab Control Sample	Total Recoverable	Water	200.8	662588
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	662588
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	662588

### Prep Batch: 663540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	245.1	
MB 280-663540/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-663540/2-A	Lab Control Sample	Total/NA	Water	245.1	

### Analysis Batch: 663722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	245.1	663540
MB 280-663540/1-A	Method Blank	Total/NA	Water	245.1	663540
LCS 280-663540/2-A	Lab Control Sample	Total/NA	Water	245.1	663540

### Analysis Batch: 663798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total Recoverable	Water	200.8	662588
MB 280-662588/1-A	Method Blank	Total Recoverable	Water	200.8	662588
LCS 280-662588/16-A	Lab Control Sample	Total Recoverable	Water	200.8	662588
280-194790-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	662588
280-194790-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	662588

## General Chemistry

### Filtration Batch: 662555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Dissolved	Water	FILTRATION	
MB 280-662555/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-662555/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-662555/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-194790-1 MS	OUTFALL 001	Dissolved	Water	FILTRATION	
280-194790-1 MSD	OUTFALL 001	Dissolved	Water	FILTRATION	
280-194790-1 DU	OUTFALL 001	Dissolved	Water	FILTRATION	

### Analysis Batch: 662593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Dissolved	Water	SM 3500 CR B	662555
MB 280-662555/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	662555
LCS 280-662555/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	662555
LCSD 280-662555/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	662555
280-194790-1 MS	OUTFALL 001	Dissolved	Water	SM 3500 CR B	662555
280-194790-1 MSD	OUTFALL 001	Dissolved	Water	SM 3500 CR B	662555
280-194790-1 DU	OUTFALL 001	Dissolved	Water	SM 3500 CR B	662555

### Analysis Batch: 662657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	SM 2510B	
MB 280-662657/4	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-662657/3	Lab Control Sample	Total/NA	Water	SM 2510B	

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

## General Chemistry

### Analysis Batch: 662674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	SM 4500 H+ B	
LCS 280-662674/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 662748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	SM 4500 S2 D	
MB 280-662748/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-662748/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-662748/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	

### Analysis Batch: 662795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	SM4500 S2 H	

### Analysis Batch: 662895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 280-662895/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-662895/2	Lab Control Sample	Total/NA	Water	SM 2540D	

### Analysis Batch: 663459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-194790-1	OUTFALL 001	Potentially Dissolved	Water	SM3500 CR B	
280-194790-1	OUTFALL 001	Total Recoverable	Water	SM3500 CR B	



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

**Client Sample ID: OUTFALL 001**

**Lab Sample ID: 280-194790-1**

**Date Collected: 08/01/24 12:00**

**Matrix: Water**

**Date Received: 08/01/24 13:40**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.7			50 mL	50 mL	662588	08/01/24 21:26	AMH	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			662673	08/02/24 10:43	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			200 mL	200 mL	662682	08/02/24 11:25	KLG	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	662685	08/05/24 08:44	KLG	EET DEN
Potentially Dissolved	Analysis	200.8		1			662956	08/05/24 17:43	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	662588	08/01/24 21:26	AMH	EET DEN
Total Recoverable	Analysis	200.8		1			663798	08/12/24 17:03	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	662588	08/01/24 21:26	AMH	EET DEN
Total Recoverable	Analysis	200.8		1			662765	08/02/24 19:19	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	662588	08/01/24 21:26	AMH	EET DEN
Total Recoverable	Analysis	200.8		1			662956	08/05/24 14:53	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	663540	08/09/24 16:27	CAF	EET DEN
Total/NA	Analysis	245.1		1			663722	08/09/24 23:59	CAF	EET DEN
Total/NA	Analysis	SM 2510B		1			662657	08/02/24 10:15	EL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	662895	08/05/24 15:30	MF	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	662555	08/01/24 14:41	CLP	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	662593	08/01/24 16:43	CLP	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			662674	08/02/24 09:54	EL	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	662748	08/02/24 15:36	ABW	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			663459	08/09/24 11:02	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			663459	08/09/24 11:02	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			662795	08/04/24 20:13	C1A	EET DEN

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-194790-1

Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025	01-08-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature
SM3500 CR B		Water	Chromium, trivalent
SM3500 CR B		Water	Chromium, trivalent (dissolved)
SM4500 S2 H		Water	Field pH
SM4500 S2 H		Water	Field Temperature
SM4500 S2 H		Water	Specific Conductance
SM4500 S2 H		Water	Sulfide
SM4500 S2 H		Water	Un-ionized Hydrogen Sulfide



Ver: 01/16/2019



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-194790-1

Login Number: 194790

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 8/26/2024 3:16:50 PM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-195452-1



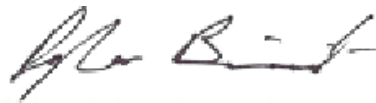
# Eurofins Denver

## Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



Generated  
8/26/2024 3:16:50 PM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	7
Sample Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	10
QC Association . . . . .	12
Chronicle . . . . .	13
Certification Summary . . . . .	14
Chain of Custody . . . . .	15
Receipt Checklists . . . . .	16



# Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-195452-1

**Job ID: 280-195452-1**

**Eurofins Denver**

## **Job Narrative 280-195452-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### **Receipt**

The sample was received on 8/16/2024 4:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

### **Method 200.8 - Metals (ICP/MS) - Potentially Dissolved**

Sample OUTFALL-001 (280-195452-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared and analyzed on 8/22/2024.

### **Method 200.8 - Metals (ICP/MS) - Total Recoverable**

Sample OUTFALL-001 (280-195452-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared on 8/19/2024 and analyzed on 8/20/2024.

Eurofins Denver



## Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-195452-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.80	J	1.0	0.23	ug/L	1		200.8	Total
Copper	0.72	J	2.0	0.71	ug/L	1		200.8	Recoverable
Lead	0.76	J	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Zinc	25		10	2.0	ug/L	1		200.8	Potentially Dissolved

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-195452-1	OUTFALL-001	Water	08/16/24 13:00	08/16/24 16:17

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 08/16/24 13:00  
Date Received: 08/16/24 16:17

Lab Sample ID: 280-195452-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		08/19/24 14:49	08/20/24 21:36	1
Lead	0.80	J	1.0	0.23	ug/L		08/19/24 14:49	08/20/24 21:36	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL-001  
Date Collected: 08/16/24 13:00  
Date Received: 08/16/24 16:17

Lab Sample ID: 280-195452-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		08/22/24 08:43	08/22/24 18:28	1
Copper	0.72	J	2.0	0.71	ug/L		08/22/24 08:43	08/22/24 18:28	1
Lead	0.76	J	1.0	0.23	ug/L		08/22/24 08:43	08/22/24 18:28	1
Silver	ND		0.50	0.045	ug/L		08/22/24 08:43	08/22/24 18:28	1
Zinc	25		10	2.0	ug/L		08/22/24 08:43	08/22/24 18:28	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-664455/1-A  
Matrix: Water  
Analysis Batch: 664859

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 664455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		08/19/24 14:49	08/20/24 21:29	1
Lead	ND		1.0	0.23	ug/L		08/19/24 14:49	08/20/24 21:29	1

Lab Sample ID: LCS 280-664455/2-A  
Matrix: Water  
Analysis Batch: 664859

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 664455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	36.9		ug/L		92	90 - 115
Lead	40.0	36.5		ug/L		91	88 - 115

Lab Sample ID: MB 280-664731/1-B  
Matrix: Water  
Analysis Batch: 665126

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 664752

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		08/22/24 08:43	08/22/24 18:05	1
Copper	ND		2.0	0.71	ug/L		08/22/24 08:43	08/22/24 18:05	1
Lead	ND		1.0	0.23	ug/L		08/22/24 08:43	08/22/24 18:05	1
Silver	ND		0.50	0.045	ug/L		08/22/24 08:43	08/22/24 18:05	1
Zinc	ND		10	2.0	ug/L		08/22/24 08:43	08/22/24 18:05	1

Lab Sample ID: LCS 280-664731/18-B  
Matrix: Water  
Analysis Batch: 665126

Client Sample ID: Lab Control Sample  
Prep Type: Potentially Dissolved  
Prep Batch: 664752

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	39.6		ug/L		99	89 - 111
Copper	40.0	39.9		ug/L		100	90 - 115
Lead	40.0	38.9		ug/L		97	88 - 115
Silver	40.0	37.8		ug/L		95	90 - 114
Zinc	40.0	44.9		ug/L		112	88 - 115

Lab Sample ID: 280-195452-1 MS  
Matrix: Water  
Analysis Batch: 665126

Client Sample ID: OUTFALL-001  
Prep Type: Potentially Dissolved  
Prep Batch: 664752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		40.0	39.7		ug/L		99	89 - 111
Copper	0.72	J	40.0	38.6		ug/L		95	90 - 115
Lead	0.76	J	40.0	40.8		ug/L		100	88 - 115
Silver	ND		40.0	37.4		ug/L		93	70 - 130
Zinc	25		40.0	68.1		ug/L		109	88 - 115

Lab Sample ID: 280-195452-1 MSD  
Matrix: Water  
Analysis Batch: 665126

Client Sample ID: OUTFALL-001  
Prep Type: Potentially Dissolved  
Prep Batch: 664752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		40.0	39.1		ug/L		98	89 - 111	2	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-195452-1 MSD

Matrix: Water

Analysis Batch: 665126

Client Sample ID: OUTFALL-001

Prep Type: Potentially Dissolved

Prep Batch: 664752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	0.72	J	40.0	38.8		ug/L		95	90 - 115	1	20
Lead	0.76	J	40.0	39.9		ug/L		98	88 - 115	2	20
Silver	ND		40.0	37.4		ug/L		93	70 - 130	0	20
Zinc	25		40.0	64.8		ug/L		100	88 - 115	5	20



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

## Metals

### Prep Batch: 664455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195452-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-664455/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-664455/2-A	Lab Control Sample	Total Recoverable	Water	200.8	

### Filtration Batch: 664513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195452-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
280-195452-1 MS	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
280-195452-1 MSD	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

### Filtration Batch: 664731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-664731/1-B	Method Blank	Potentially Dissolved	Water	Filtration	
LCS 280-664731/18-B	Lab Control Sample	Potentially Dissolved	Water	Filtration	

### Prep Batch: 664752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195452-1	OUTFALL-001	Potentially Dissolved	Water	200.8	664513
MB 280-664731/1-B	Method Blank	Potentially Dissolved	Water	200.8	664731
LCS 280-664731/18-B	Lab Control Sample	Potentially Dissolved	Water	200.8	664731
280-195452-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	664513
280-195452-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	664513

### Analysis Batch: 664859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195452-1	OUTFALL-001	Total Recoverable	Water	200.8	664455
MB 280-664455/1-A	Method Blank	Total Recoverable	Water	200.8	664455
LCS 280-664455/2-A	Lab Control Sample	Total Recoverable	Water	200.8	664455

### Analysis Batch: 665126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195452-1	OUTFALL-001	Potentially Dissolved	Water	200.8	664752
MB 280-664731/1-B	Method Blank	Potentially Dissolved	Water	200.8	664752
LCS 280-664731/18-B	Lab Control Sample	Potentially Dissolved	Water	200.8	664752
280-195452-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	664752
280-195452-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	664752



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-195452-1

Date Collected: 08/16/24 13:00

Matrix: Water

Date Received: 08/16/24 16:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Potentially Dissolved	Filtration	Poten_Diss_Met			200 mL	200 mL	664513	08/19/24 12:29	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	664752	08/22/24 08:43	SMK	EET DEN
Potentially Dissolved	Analysis	200.8		1			665126	08/22/24 18:28	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	664455	08/19/24 14:49	AMH	EET DEN
Total Recoverable	Analysis	200.8		1			664859	08/20/24 21:36	LMT	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-195452-1

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025	01-08-25

1
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11
12
13
14



Ver. 01/16/2019



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-195452-1

Login Number: 195452

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## APPENDIX B.3 SEPTEMBER 2024 OUTFALL-001 ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 9/18/2024 2:42:50 PM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-196277-1



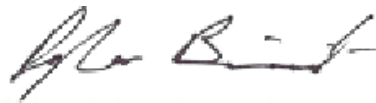
# Eurofins Denver

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



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Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	7
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
QC Sample Results . . . . .	12
QC Association . . . . .	17
Chronicle . . . . .	20
Certification Summary . . . . .	21
Chain of Custody . . . . .	22
Receipt Checklists . . . . .	23



## Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-196277-1

Job ID: 280-196277-1

Eurofins Denver

## Job Narrative 280-196277-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### Receipt

The sample was received on 9/6/2024 2:42 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.0°C.

### Receipt Exceptions

The following sample was received at the laboratory outside the required temperature criteria: OUTFALL-001 (280-196277-1). The sample is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

The laboratory did not log the SM3500 CR B Total Hexavalent Chromium analysis requested for OUTFALL-001 (280-196277-1). Per a recent update to the laboratory's SOP all samples collected for hexavalent chromium analysis by SM3500 CR B undergo laboratory filtration to remove undissolved solids from the sample volume. The method does not digest solids in the sample volume prior to analysis. The laboratory will use the lab filtered hexavalent chromium analysis result from the sample to complete the Total Recoverable Trivalent Chromium calculated result.

### Method 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Sample OUTFALL-001 (280-196277-1) was analyzed for Metals (ICP) - Total Recoverable. The sample was prepared on 9/9/2024 and analyzed on 9/10/2024.

### Method 200.8 - Metals (ICP/MS) - Potentially Dissolved

Sample OUTFALL-001 (280-196277-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared on 9/10/2024 and analyzed on 9/11/2024 and 9/12/2024.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-666762 and 280-666768 and analytical batch 280-667276 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

### Method 200.8 - Metals (ICP/MS) - Total Recoverable

Sample OUTFALL-001 (280-196277-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared on 9/9/2024 and analyzed on 9/11/2024.

### Method 245.1 - Mercury (CVAA)

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## Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-196277-1

### Job ID: 280-196277-1 (Continued)

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Sample UTFALL-001 (280-196277-1) was analyzed for Mercury (CVAA). The sample was prepared and analyzed on 9/10/2024.

#### Method SM 2510B - Conductivity, Specific Conductance

Sample UTFALL-001 (280-196277-1) was analyzed for Conductivity, Specific Conductance. The sample was analyzed on 9/9/2024.

#### Method SM 2540D - Solids, Total Suspended (TSS)

Sample UTFALL-001 (280-196277-1) was analyzed for Solids, Total Suspended (TSS). The sample was analyzed on 9/9/2024.

#### Method SM 3500 CR B - Chromium, Hexavalent - Dissolved

Sample UTFALL-001 (280-196277-1) was analyzed for Chromium, Hexavalent - Dissolved. The sample was analyzed on 9/6/2024.

The continuing calibration verification (CCV) associated with batch 280-666628 recovered above the upper control limit for Chromium, hexavalent. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

#### Method SM3500 CR B - Chromium, Trivalent - Potentially Dissolved

Sample UTFALL-001 (280-196277-1) was analyzed for Chromium, Trivalent - Potentially Dissolved. The sample was analyzed on 9/18/2024.

#### Method SM3500 CR B - Chromium, Trivalent - Total Recoverable

Sample UTFALL-001 (280-196277-1) was analyzed for Chromium, Trivalent - Total Recoverable. The sample was analyzed on 9/18/2024.

#### Method SM 4500 H+ B - pH

Sample UTFALL-001 (280-196277-1) was analyzed for pH. The sample was analyzed on 9/9/2024.

#### Method SM 4500 S2 D - Sulfide, Total

Sample UTFALL-001 (280-196277-1) was analyzed for Sulfide, Total. The sample was analyzed on 9/10/2024.

#### Method SM4500 S2 H - Unionized Hydrogen Sulfide

Sample UTFALL-001 (280-196277-1) was analyzed for Unionized Hydrogen Sulfide. The sample was analyzed on 9/10/2024.

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# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-196277-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	9.9	J	100	9.1	ug/L	1		200.7 Rev 4.4	Total
Copper	0.74	J	2.0	0.71	ug/L	1		200.8	Recoverable
Lead	0.42	J	1.0	0.23	ug/L	1		200.8	Total
Zinc	11		10	2.0	ug/L	1		200.8	Recoverable
Lead	0.42	J	1.0	0.23	ug/L	1		200.8	Total
Selenium	4.6	J	5.0	1.0	ug/L	1		200.8	Potentially
Zinc	18		10	2.0	ug/L	1		200.8	Dissolved
Specific Conductance	230		2.0	2.0	umhos/cm	1		SM 2510B	Potentially
pH adj. to 25 deg C	7.8	HF	0.1	0.1	SU	1		SM 4500 H+ B	Dissolved
Temperature	20.2	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.8		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	20		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	230		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET DEN
SM 2510B	Conductivity, Specific Conductance	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 3500 CR B	Chromium, Hexavalent	SM	EET DEN
SM 4500 H+ B	pH	SM	EET DEN
SM 4500 S2 D	Sulfide, Total	SM	EET DEN
SM3500 CR B	Chromium, Trivalent	SM	EET DEN
SM4500 S2 H	Unionized Hydrogen Sulfide	SM	EET DEN
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET DEN
FILTRATION	Sample Filtration	None	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

## Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-196277-1	OUTFALL-001	Water	09/06/24 11:00	09/06/24 14:42

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 09/06/24 11:00  
Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	9.9	J	100	9.1	ug/L		09/09/24 15:37	09/10/24 13:10	1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL-001  
Date Collected: 09/06/24 11:00  
Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		09/09/24 15:37	09/11/24 00:20	1
Cadmium	ND		1.0	0.19	ug/L		09/09/24 15:37	09/11/24 00:20	1
Chromium	ND		3.0	0.50	ug/L		09/09/24 15:37	09/11/24 00:20	1
Copper	0.74	J	2.0	0.71	ug/L		09/09/24 15:37	09/11/24 00:20	1
Lead	0.42	J	1.0	0.23	ug/L		09/09/24 15:37	09/11/24 00:20	1
Zinc	11		10	2.0	ug/L		09/09/24 15:37	09/11/24 00:20	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL-001  
Date Collected: 09/06/24 11:00  
Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		09/10/24 14:49	09/12/24 16:13	1
Cadmium	ND		1.0	0.19	ug/L		09/10/24 14:49	09/11/24 20:03	1
Chromium	ND		3.0	0.50	ug/L		09/10/24 14:49	09/12/24 16:13	1
Copper	ND		2.0	0.71	ug/L		09/10/24 14:49	09/12/24 16:13	1
Lead	0.42	J	1.0	0.23	ug/L		09/10/24 14:49	09/11/24 20:03	1
Manganese	ND	F1	3.0	0.51	ug/L		09/10/24 14:49	09/12/24 16:13	1
Nickel	ND		3.0	0.83	ug/L		09/10/24 14:49	09/12/24 16:13	1
Selenium	4.6	J	5.0	1.0	ug/L		09/10/24 14:49	09/12/24 16:13	1
Silver	ND		0.50	0.045	ug/L		09/10/24 14:49	09/11/24 20:03	1
Zinc	18		10	2.0	ug/L		09/10/24 14:49	09/12/24 16:13	1

## Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL-001  
Date Collected: 09/06/24 11:00  
Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		09/10/24 13:15	09/10/24 21:48	1

## General Chemistry

Client Sample ID: OUTFALL-001  
Date Collected: 09/06/24 11:00  
Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	230		2.0	2.0	umhos/cm			09/09/24 16:15	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			09/09/24 13:26	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.8	HF	0.1	0.1	SU			09/09/24 13:51	1
Temperature (SM 4500 H+ B)	20.2	HF	1.0	1.0	Degrees C			09/09/24 13:51	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			09/10/24 19:20	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## General Chemistry (Continued)

Client Sample ID: OUTFALL-001

Date Collected: 09/06/24 11:00

Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			09/10/24 00:32	1
Field pH (SM4500 S2 H)	7.8		1.0	1.0	SU			09/10/24 00:32	1
Field Temperature (SM4500 S2 H)	20		1.0	1.0	Celsius			09/10/24 00:32	1
Specific Conductance (SM4500 S2 H)	230		2.0	2.0	umhos/cm			09/10/24 00:32	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			09/10/24 00:32	1

## General Chemistry - Total Recoverable

Client Sample ID: OUTFALL-001

Date Collected: 09/06/24 11:00

Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		20	20	ug/L			09/18/24 13:22	1

## General Chemistry - Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 09/06/24 11:00

Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND	^+	20	4.0	ug/L			09/06/24 17:13	1

## General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 09/06/24 11:00

Date Received: 09/06/24 14:42

Lab Sample ID: 280-196277-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		20	20	ug/L			09/18/24 13:22	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-666725/1-A  
Matrix: Water  
Analysis Batch: 667010

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 666725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	9.1	ug/L		09/09/24 15:37	09/10/24 12:18	1

Lab Sample ID: LCS 280-666725/2-A  
Matrix: Water  
Analysis Batch: 667010

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 666725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10000		ug/L		100	85 - 115

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-666725/1-A  
Matrix: Water  
Analysis Batch: 666972

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 666725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		09/09/24 15:37	09/10/24 23:40	1
Cadmium	ND		1.0	0.19	ug/L		09/09/24 15:37	09/10/24 23:40	1
Chromium	ND		3.0	0.50	ug/L		09/09/24 15:37	09/10/24 23:40	1
Copper	ND		2.0	0.71	ug/L		09/09/24 15:37	09/10/24 23:40	1
Lead	ND		1.0	0.23	ug/L		09/09/24 15:37	09/10/24 23:40	1
Zinc	ND		10	2.0	ug/L		09/09/24 15:37	09/10/24 23:40	1

Lab Sample ID: LCS 280-666725/22-A  
Matrix: Water  
Analysis Batch: 666972

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 666725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	39.4		ug/L		98	89 - 111
Cadmium	40.0	39.7		ug/L		99	89 - 111
Chromium	40.0	40.9		ug/L		102	86 - 115
Copper	40.0	41.6		ug/L		104	90 - 115
Lead	40.0	40.0		ug/L		100	88 - 115
Zinc	40.0	39.2		ug/L		98	88 - 115

Lab Sample ID: MB 280-666759/1-B  
Matrix: Water  
Analysis Batch: 667134

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		09/10/24 14:49	09/11/24 19:33	1
Lead	ND		1.0	0.23	ug/L		09/10/24 14:49	09/11/24 19:33	1
Silver	ND		0.50	0.045	ug/L		09/10/24 14:49	09/11/24 19:33	1

Lab Sample ID: MB 280-666759/1-B  
Matrix: Water  
Analysis Batch: 667276

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		09/10/24 14:49	09/12/24 16:01	1

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-666759/1-B  
Matrix: Water  
Analysis Batch: 667276

Client Sample ID: Method Blank  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.00	J	3.0	0.50	ug/L		09/10/24 14:49	09/12/24 16:01	1
Copper	0.736	J	2.0	0.71	ug/L		09/10/24 14:49	09/12/24 16:01	1
Manganese	1.47	J	3.0	0.51	ug/L		09/10/24 14:49	09/12/24 16:01	1
Nickel	ND		3.0	0.83	ug/L		09/10/24 14:49	09/12/24 16:01	1
Selenium	ND		5.0	1.0	ug/L		09/10/24 14:49	09/12/24 16:01	1
Zinc	ND		10	2.0	ug/L		09/10/24 14:49	09/12/24 16:01	1

Lab Sample ID: LCS 280-666759/2-C  
Matrix: Water  
Analysis Batch: 667134

Client Sample ID: Lab Control Sample  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	39.4		ug/L		98	89 - 111
Lead	40.0	37.5		ug/L		94	88 - 115
Silver	40.0	37.0		ug/L		92	90 - 114

Lab Sample ID: LCS 280-666759/2-C  
Matrix: Water  
Analysis Batch: 667276

Client Sample ID: Lab Control Sample  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	39.5		ug/L		99	89 - 111
Chromium	40.0	38.8		ug/L		97	86 - 115
Copper	40.0	38.9		ug/L		97	90 - 115
Manganese	40.0	39.3		ug/L		98	87 - 115
Nickel	40.0	38.3		ug/L		96	86 - 115
Selenium	40.0	38.9		ug/L		97	85 - 114
Zinc	40.0	42.9		ug/L		107	88 - 115

Lab Sample ID: 280-196277-1 MS  
Matrix: Water  
Analysis Batch: 667134

Client Sample ID: OUTFALL-001  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		40.0	39.3		ug/L		98	89 - 111
Lead	0.42	J	40.0	38.7		ug/L		96	88 - 115
Silver	ND		40.0	37.3		ug/L		93	70 - 130

Lab Sample ID: 280-196277-1 MS  
Matrix: Water  
Analysis Batch: 667276

Client Sample ID: OUTFALL-001  
Prep Type: Potentially Dissolved  
Prep Batch: 666768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	38.5		ug/L		96	79 - 120
Chromium	ND		40.0	39.5		ug/L		99	86 - 115
Copper	ND		40.0	39.6		ug/L		99	90 - 115
Manganese	ND	F1	40.0	42.8		ug/L		107	87 - 115
Nickel	ND		40.0	39.8		ug/L		100	86 - 115
Selenium	4.6	J	40.0	40.2		ug/L		89	85 - 114
Zinc	18		40.0	56.4		ug/L		96	88 - 115

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: 280-196277-1 MSD

Matrix: Water

Analysis Batch: 667134

Client Sample ID: OUTFALL-001

Prep Type: Potentially Dissolved

Prep Batch: 666768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		40.0	40.5		ug/L		101	89 - 111	3	20
Lead	0.42	J	40.0	39.9		ug/L		99	88 - 115	3	20
Silver	ND		40.0	37.2		ug/L		93	70 - 130	0	20

Lab Sample ID: 280-196277-1 MSD

Matrix: Water

Analysis Batch: 667276

Client Sample ID: OUTFALL-001

Prep Type: Potentially Dissolved

Prep Batch: 666768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		40.0	40.2		ug/L		100	79 - 120	4	20
Chromium	ND		40.0	39.8		ug/L		99	86 - 115	1	20
Copper	ND		40.0	40.3		ug/L		101	90 - 115	2	20
Manganese	ND	F1	40.0	46.6	F1	ug/L		117	87 - 115	9	20
Nickel	ND		40.0	40.2		ug/L		101	86 - 115	1	20
Selenium	4.6	J	40.0	40.7		ug/L		90	85 - 114	1	20
Zinc	18		40.0	62.9		ug/L		112	88 - 115	11	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-666799/1-A

Matrix: Water

Analysis Batch: 667070

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 666799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		09/10/24 13:15	09/10/24 20:51	1

Lab Sample ID: LCS 280-666799/2-A

Matrix: Water

Analysis Batch: 667070

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 666799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.16		ug/L		103	90 - 110

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-666801/4

Matrix: Water

Analysis Batch: 666801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0	2.0	umhos/cm			09/09/24 16:15	1

Lab Sample ID: LCS 280-666801/3

Matrix: Water

Analysis Batch: 666801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1410	1450		umhos/cm		103	90 - 110

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-666766/1  
Matrix: Water  
Analysis Batch: 666766

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			09/09/24 13:26	1

Lab Sample ID: LCS 280-666766/2  
Matrix: Water  
Analysis Batch: 666766

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	501	426		mg/L		85	79 - 114

Lab Sample ID: LCSD 280-666766/3  
Matrix: Water  
Analysis Batch: 666766

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids	501	434		mg/L		87	79 - 114	2	20

## Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-666625/3-A  
Matrix: Water  
Analysis Batch: 666628

Client Sample ID: Method Blank  
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND	^+	20	4.0	ug/L			09/06/24 17:13	1

Lab Sample ID: LCS 280-666625/1-A  
Matrix: Water  
Analysis Batch: 666628

Client Sample ID: Lab Control Sample  
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	100	109	^+	ug/L		109	91 - 112

Lab Sample ID: LCSD 280-666625/2-A  
Matrix: Water  
Analysis Batch: 666628

Client Sample ID: Lab Control Sample Dup  
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	100	102	^+	ug/L		102	91 - 112	6	20

Lab Sample ID: 280-196277-1 MS  
Matrix: Water  
Analysis Batch: 666628

Client Sample ID: OUTFALL-001  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND	^+	100	102	^+	ug/L		102	91 - 112

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Method: SM 3500 CR B - Chromium, Hexavalent (Continued)

Lab Sample ID: 280-196277-1 MSD

Matrix: Water

Analysis Batch: 666628

Client Sample ID: OUTFALL-001

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND	^+	100	110	^+	ug/L		110	91 - 112	8	20

Lab Sample ID: 280-196277-1 DU

Matrix: Water

Analysis Batch: 666628

Client Sample ID: OUTFALL-001

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND	^+	ND	^+	ug/L		NC	20

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-666808/4

Matrix: Water

Analysis Batch: 666808

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	99 - 101

## Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-667072/11

Matrix: Water

Analysis Batch: 667072

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		0.050	0.022	mg/L			09/10/24 19:09	1

Lab Sample ID: LCS 280-667072/9

Matrix: Water

Analysis Batch: 667072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.500	0.504		mg/L		101	81 - 122

Lab Sample ID: LCSD 280-667072/10

Matrix: Water

Analysis Batch: 667072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	0.500	0.506		mg/L		101	81 - 122	0	10



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Metals

### Prep Batch: 666725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-666725/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-666725/22-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-666725/2-A	Lab Control Sample	Total Recoverable	Water	200.8	

### Filtration Batch: 666759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-666759/1-B	Method Blank	Potentially Dissolved	Water	Filtration	
LCS 280-666759/2-C	Lab Control Sample	Potentially Dissolved	Water	Filtration	

### Filtration Batch: 666762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
280-196277-1 MS	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
280-196277-1 MSD	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

### Prep Batch: 666768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Potentially Dissolved	Water	200.8	666762
MB 280-666759/1-B	Method Blank	Potentially Dissolved	Water	200.8	666759
LCS 280-666759/2-C	Lab Control Sample	Potentially Dissolved	Water	200.8	666759
280-196277-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	666762
280-196277-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	666762

### Prep Batch: 666799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	245.1	
MB 280-666799/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-666799/2-A	Lab Control Sample	Total/NA	Water	245.1	

### Analysis Batch: 666972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total Recoverable	Water	200.8	666725
MB 280-666725/1-A	Method Blank	Total Recoverable	Water	200.8	666725
LCS 280-666725/22-A	Lab Control Sample	Total Recoverable	Water	200.8	666725

### Analysis Batch: 667010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total Recoverable	Water	200.7 Rev 4.4	666725
MB 280-666725/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	666725
LCS 280-666725/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	666725

### Analysis Batch: 667070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	245.1	666799
MB 280-666799/1-A	Method Blank	Total/NA	Water	245.1	666799
LCS 280-666799/2-A	Lab Control Sample	Total/NA	Water	245.1	666799

### Analysis Batch: 667134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Potentially Dissolved	Water	200.8	666768

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## Metals (Continued)

### Analysis Batch: 667134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-666759/1-B	Method Blank	Potentially Dissolved	Water	200.8	666768
LCS 280-666759/2-C	Lab Control Sample	Potentially Dissolved	Water	200.8	666768
280-196277-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	666768
280-196277-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	666768

### Analysis Batch: 667276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Potentially Dissolved	Water	200.8	666768
MB 280-666759/1-B	Method Blank	Potentially Dissolved	Water	200.8	666768
LCS 280-666759/2-C	Lab Control Sample	Potentially Dissolved	Water	200.8	666768
280-196277-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	666768
280-196277-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	666768

## General Chemistry

### Filtration Batch: 666625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Dissolved	Water	FILTRATION	
MB 280-666625/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-666625/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-666625/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-196277-1 MS	OUTFALL-001	Dissolved	Water	FILTRATION	
280-196277-1 MSD	OUTFALL-001	Dissolved	Water	FILTRATION	
280-196277-1 DU	OUTFALL-001	Dissolved	Water	FILTRATION	

### Analysis Batch: 666628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Dissolved	Water	SM 3500 CR B	666625
MB 280-666625/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	666625
LCS 280-666625/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	666625
LCSD 280-666625/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	666625
280-196277-1 MS	OUTFALL-001	Dissolved	Water	SM 3500 CR B	666625
280-196277-1 MSD	OUTFALL-001	Dissolved	Water	SM 3500 CR B	666625
280-196277-1 DU	OUTFALL-001	Dissolved	Water	SM 3500 CR B	666625

### Analysis Batch: 666766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	SM 2540D	
MB 280-666766/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-666766/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-666766/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

### Analysis Batch: 666801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	SM 2510B	
MB 280-666801/4	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-666801/3	Lab Control Sample	Total/NA	Water	SM 2510B	

### Analysis Batch: 666808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	SM 4500 H+ B	

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

## General Chemistry (Continued)

### Analysis Batch: 666808 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-666808/4	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 666814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	SM4500 S2 H	

### Analysis Batch: 667072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	
MB 280-667072/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-667072/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-667072/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	

### Analysis Batch: 667843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196277-1	OUTFALL-001	Potentially Dissolved	Water	SM3500 CR B	
280-196277-1	OUTFALL-001	Total Recoverable	Water	SM3500 CR B	



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

**Client Sample ID: OUTFALL-001**

**Lab Sample ID: 280-196277-1**

**Date Collected: 09/06/24 11:00**

**Matrix: Water**

**Date Received: 09/06/24 14:42**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			50 mL	50 mL	666725	09/09/24 15:37	KLG	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			667010	09/10/24 13:10	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			200 mL	200 mL	666762	09/09/24 13:07	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	666768	09/10/24 14:49	AES	EET DEN
Potentially Dissolved	Analysis	200.8		1			667134	09/11/24 20:03	LMT	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			200 mL	200 mL	666762	09/09/24 13:07	AES	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	666768	09/10/24 14:49	AES	EET DEN
Potentially Dissolved	Analysis	200.8		1			667276	09/12/24 16:13	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	666725	09/09/24 15:37	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			666972	09/11/24 00:20	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	666799	09/10/24 13:15	NKC	EET DEN
Total/NA	Analysis	245.1		1			667070	09/10/24 21:48	CAF	EET DEN
Total/NA	Analysis	SM 2510B		1			666801	09/09/24 16:15	EL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	666766	09/09/24 13:26	BRD	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	666625	09/06/24 16:41	ABW	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	666628	09/06/24 17:13	ABW	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			666808	09/09/24 13:51	EL	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	667072	09/10/24 19:20	ABW	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			667843	09/18/24 13:22	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			667843	09/18/24 13:22	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			666814	09/10/24 00:32	P1C	EET DEN

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196277-1

Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

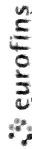
Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025	01-08-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	Temperature
SM3500 CR B		Water	Chromium, trivalent
SM3500 CR B		Water	Chromium, trivalent (dissolved)
SM4500 S2 H		Water	Field pH
SM4500 S2 H		Water	Field Temperature
SM4500 S2 H		Water	Specific Conductance
SM4500 S2 H		Water	Sulfide
SM4500 S2 H		Water	Un-ionized Hydrogen Sulfide



## Chain of Custody Record



<b>Client Information</b> Client Contact: John Rinko Company: Grand Island Resources Address: 12567 West Cedar Drive Suite 110 City: Lakewood State, Zip: CO, 80228 Phone: (303) 601-9230 Email: johnrinko@yahoo.com Project Name: Nederland, CO Site: First half of the month event			Sampler: Karen Lopez Phone: 720.497.722 PWSID:			Lab PM: Bienilius, Dylan T E-Mail: Dylan.Bienilius@et.eurofinsus.com Carrier Tracking No(s): Page:			GOE No					
<b>Analysis Requested</b> Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: WQ #: Project #: 28022821 SSOW #:			<b>Analysis Requested</b> 2510B - Specific Conductance, 2540D - TSS, SM4500_H+ 3500_CR_B - Total Hexavalent Cr and Trivalent Cr (calc) 3500_CR_B - Dissolved Hexavalent Cr (calc) Potentially Dissolved Trivalent Cr (calc) SM4500_S2_D - Sulfide and SM3500_S2_H - Unionized Hydrogen Sulfide (calc) 200.8 - Potentially Dissolved Metals (First half of the month permit list) 200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury (First half of the month permit list)			Total Number of Containers: 6			Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - H2SO4 H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)		
Sample Identification Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			pH / Temp: 200.8 - Potentially Dissolved Metals (First half of the month permit list)			Special Instructions/Note: *First half of the month potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn) *First half of the month total recoverable metals permit list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)					
Sample Date: 09/06/24 Sample Time: 11:00 Sample Type: G (Grab) Matrix: W (Water, S-solid, O-waste/oil, BT-Tissue, A-Air)			Field Filtered Sample (Yes or No):											



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-196277-1

**Login Number: 196277**

**List Source: Eurofins Denver**

**List Number: 1**

**Creator: Roehsner, Karen P**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 9/27/2024 3:41:28 PM

## JOB DESCRIPTION

Nederland, CO

## JOB NUMBER

280-196927-1



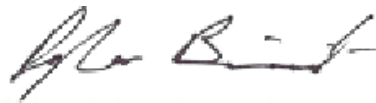
# Eurofins Denver

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



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9/27/2024 3:41:28 PM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	7
Sample Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	10
QC Association . . . . .	11
Chronicle . . . . .	12
Certification Summary . . . . .	13
Chain of Custody . . . . .	14
Receipt Checklists . . . . .	15





# Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO

Job ID: 280-196927-1

**Job ID: 280-196927-1**

**Eurofins Denver**

## **Job Narrative 280-196927-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### **Receipt**

The sample was received on 9/19/2024 2:38 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

### **Method 200.8 - Metals (ICP/MS) - Potentially Dissolved**

Sample OUTFALL-001 (280-196927-1) was analyzed for Metals (ICP/MS) - Potentially Dissolved. The sample was prepared on 9/23/2024 and analyzed on 9/24/2024 and 9/26/2024.

### **Method 200.8 - Metals (ICP/MS) - Total Recoverable**

Sample OUTFALL-001 (280-196927-1) was analyzed for Metals (ICP/MS) - Total Recoverable. The sample was prepared and analyzed on 9/23/2024.

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## Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-196927-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	1.3	J	2.0	0.71	ug/L	1		200.8	Total
Lead	0.69	J	1.0	0.23	ug/L	1		200.8	Recoverable
Copper	0.87	J	2.0	0.71	ug/L	1		200.8	Total
Lead	1.0		1.0	0.23	ug/L	1		200.8	Recoverable
Silver	0.056	J	0.50	0.045	ug/L	1		200.8	Potentially Dissolved
Zinc	20		10	2.0	ug/L	1		200.8	Potentially Dissolved

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-196927-1	OUTFALL-001	Water	09/19/24 11:30	09/19/24 14:38

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: OUTFALL-001

Date Collected: 09/19/24 11:30

Date Received: 09/19/24 14:38

Lab Sample ID: 280-196927-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.3	J	2.0	0.71	ug/L		09/23/24 08:53	09/23/24 22:41	1
Lead	0.69	J	1.0	0.23	ug/L		09/23/24 08:53	09/23/24 22:41	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 09/19/24 11:30

Date Received: 09/19/24 14:38

Lab Sample ID: 280-196927-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		09/23/24 15:06	09/24/24 19:02	1
Copper	0.87	J	2.0	0.71	ug/L		09/23/24 15:06	09/26/24 10:25	1
Lead	1.0		1.0	0.23	ug/L		09/23/24 15:06	09/24/24 19:02	1
Silver	0.056	J	0.50	0.045	ug/L		09/23/24 15:06	09/24/24 19:02	1
Zinc	20		10	2.0	ug/L		09/23/24 15:06	09/26/24 10:25	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-668183/1-A

Matrix: Water

Analysis Batch: 668498

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 668183

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/23/24 08:53	09/23/24 22:02	1
Lead	ND		1.0	0.23	ug/L		09/23/24 08:53	09/23/24 22:02	1

Lab Sample ID: LCS 280-668183/2-A

Matrix: Water

Analysis Batch: 668498

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 668183

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.7		ug/L		102	90 - 115
Lead	40.0	40.0		ug/L		100	88 - 115

Lab Sample ID: MB 280-668147/1-B

Matrix: Water

Analysis Batch: 668580

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 668292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		09/23/24 15:06	09/24/24 18:44	1
Lead	ND		1.0	0.23	ug/L		09/23/24 15:06	09/24/24 18:44	1
Silver	ND		0.50	0.045	ug/L		09/23/24 15:06	09/24/24 18:44	1

Lab Sample ID: MB 280-668147/1-B

Matrix: Water

Analysis Batch: 668826

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 668292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/23/24 15:06	09/26/24 09:14	1
Zinc	ND		10	2.0	ug/L		09/23/24 15:06	09/26/24 09:14	1

Lab Sample ID: LCS 280-668147/2-B

Matrix: Water

Analysis Batch: 668580

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 668292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	39.6		ug/L		99	89 - 111
Lead	40.0	40.8		ug/L		102	88 - 115
Silver	40.0	37.8		ug/L		95	90 - 114

Lab Sample ID: LCS 280-668147/2-B

Matrix: Water

Analysis Batch: 668826

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 668292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.7		ug/L		102	90 - 115
Zinc	40.0	40.4		ug/L		101	88 - 115

Eurofins Denver



# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

## Metals

### Filtration Batch: 668147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-668147/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-668147/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

### Prep Batch: 668183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-668183/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-668183/2-A	Lab Control Sample	Total Recoverable	Water	200.8	

### Prep Batch: 668292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Potentially Dissolved	Water	200.8	668147
MB 280-668147/1-B	Method Blank	Potentially Dissolved	Water	200.8	668147
LCS 280-668147/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	668147

### Analysis Batch: 668498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Total Recoverable	Water	200.8	668183
MB 280-668183/1-A	Method Blank	Total Recoverable	Water	200.8	668183
LCS 280-668183/2-A	Lab Control Sample	Total Recoverable	Water	200.8	668183

### Analysis Batch: 668580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Potentially Dissolved	Water	200.8	668292
MB 280-668147/1-B	Method Blank	Potentially Dissolved	Water	200.8	668292
LCS 280-668147/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	668292

### Analysis Batch: 668826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-196927-1	OUTFALL-001	Potentially Dissolved	Water	200.8	668292
MB 280-668147/1-B	Method Blank	Potentially Dissolved	Water	200.8	668292
LCS 280-668147/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	668292



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

Client Sample ID: OUTFALL-001  
Date Collected: 09/19/24 11:30  
Date Received: 09/19/24 14:38

Lab Sample ID: 280-196927-1  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Potentially Dissolved	Filtration	Poten_Diss_Met			1.0 mL	1.0 mL	668147	09/20/24 12:16	SLH	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	668292	09/23/24 15:06	KLG	EET DEN
Potentially Dissolved	Analysis	200.8		1			668826	09/26/24 10:25	LMT	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			1.0 mL	1.0 mL	668147	09/20/24 12:16	SLH	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	668292	09/23/24 15:06	KLG	EET DEN
Potentially Dissolved	Analysis	200.8		1			668580	09/24/24 19:02	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	668183	09/23/24 08:53	SMK	EET DEN
Total Recoverable	Analysis	200.8		1			668498	09/23/24 22:41	LMT	EET DEN

Laboratory References:  
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO

Job ID: 280-196927-1

Laboratory: Eurofins Denver

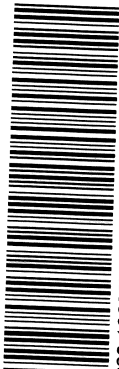
The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025	01-08-25

- 1
- 2
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- 12
- 13
- 14



## Chain of Custody Record



<b>Client Information</b> Client Contact: John Rinko Company: Grand Island Resources		Lab PM: Karen Lopez Bienilius, Dylan T E-Mail: Dylan.Bienilius@et.eurofinsus.com		280-196927 Chain of Custody State:	
Address: 12567 West Cedar Drive Suite 110 City: Lakewood State, Zip: CO, 80228		Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: (303) 601-9230 WO #: JohnRinko@yahoo.com Project #: 28022821 SSOW#:		PWSID:	
Site: second half of the month event		Sample Date: 09/19/24 11:30 Sample Time: 11:30 Sample Type (C=comp, G=grab): G Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air): W		Preservation Code:	
Sample Identification CUTFALL-001		Sample Date: 09/19/24 11:30 Sample Time: 11:30 Sample Type (C=comp, G=grab): G Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air): W		Preservation Code:	
Analysis Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
200.3 - Potentially Dissolved Metals (Second half of the month permit list)		200.8 - Total Recoverable Metals (Second half of the month permit list)		Total Number of containers	
Special Instructions/Note: *Second half of the month potentially dissolved metals permit list = 200.8 (Cd, Cu, Pb, Ag, Zn) *Second half of the month total recoverable metals permit list = 200.8 (Cu, Pb)		Temp = 7°C PH = 7.7 Observed visible sheen floating oil? Yes No (circle one) *If oil sheen observed in sampling for oil & grease required		Special Instructions/Note: *Second half of the month potentially dissolved metals permit list = 200.8 (Cd, Cu, Pb, Ag, Zn) *Second half of the month total recoverable metals permit list = 200.8 (Cu, Pb)	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab		Archive For 1 Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by: Karen Lopez		Date/Time: 09/19/24		Company: GIR	
Custody Seals Intact: A Yes A No		Custody Seal No.:		Date/Time: 09/19/24 11:30 Received by: John Rinko Date/Time: 09/19/24 11:30 Received by: Karen Lopez Date/Time: 09/19/24 11:30 Received by: John Rinko Date/Time: 09/19/24 11:30 Received by: Karen Lopez	



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-196927-1

Login Number: 196927

List Number: 1

Creator: Little, Matthew L

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## APPENDIX C SURFACE WATER ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Brooke Molson Moran  
Grand Island Resources  
12567 West Cedar Road  
Suite 110  
Lakewood, Colorado 80228

Generated 10/2/2024 5:12:54 PM

## JOB DESCRIPTION

Nederland, CO - Surface Water

## JOB NUMBER

280-197037-1



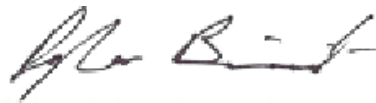
# Eurofins Denver

## Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



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10/2/2024 5:12:54 PM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	7
Sample Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	11
QC Association . . . . .	16
Chronicle . . . . .	19
Certification Summary . . . . .	20
Chain of Custody . . . . .	21
Receipt Checklists . . . . .	22



# Definitions/Glossary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Grand Island Resources  
Project: Nederland, CO - Surface Water

Job ID: 280-197037-1

Job ID: 280-197037-1

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## Job Narrative 280-197037-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

If potentially dissolved silver by method 200.8 is requested for samples on the chain of custody, this report contains a client specific, custom reporting limit.

### Receipt

The samples were received on 9/23/2024 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.5°C, 5.0°C and 5.1°C.

### Method 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Metals (ICP) - Total Recoverable. The samples were prepared on 9/26/2024 and analyzed on 9/30/2024.

### Method 200.8 - Metals (ICP/MS) - Potentially Dissolved

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Metals (ICP/MS) - Potentially Dissolved. The samples were prepared and analyzed on 9/26/2024.

### Method 200.8 - Metals (ICP/MS) - Total Recoverable

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 9/26/2024 and analyzed on 9/26/2024 and 9/27/2024.

### Method 245.1 - Mercury (CVAA)

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Mercury (CVAA). The samples were prepared on 9/27/2024 and analyzed on 9/28/2024.

### Method SM 2510B - Conductivity, Specific Conductance

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 9/30/2024.

### Method SM 2540D - Solids, Total Suspended (TSS)

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for Solids, Total Suspended (TSS). The samples were analyzed on 9/24/2024.

### Method SM 4500 H+ B - pH

Samples 2022-02 (280-197037-1) and 2022-02-02 (280-197037-2) were analyzed for pH. The samples were analyzed on 9/24/2024 and 9/25/2024.

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# Detection Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

Client Sample ID: 2022-02

Lab Sample ID: 280-197037-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	67	J	100	9.1	ug/L	1		200.7 Rev 4.4	Total
									Recoverable
Cadmium	0.33	J	1.0	0.19	ug/L	1		200.8	Total
									Recoverable
Copper	0.81	J	2.0	0.71	ug/L	1		200.8	Total
									Recoverable
Lead	0.66	J	1.0	0.23	ug/L	1		200.8	Total
									Recoverable
Zinc, Total	15		10	2.0	ug/L	1		200.8	Total
									Recoverable
Lead	0.36	J	1.0	0.23	ug/L	1		200.8	Potentially
									Dissolved
Manganese	2.3	J	3.0	0.51	ug/L	1		200.8	Potentially
									Dissolved
Zinc	23		10	2.0	ug/L	1		200.8	Potentially
									Dissolved
Specific Conductance	230		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	1.6	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	8.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.6	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: 2022-02-02

Lab Sample ID: 280-197037-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	69	J	100	9.1	ug/L	1		200.7 Rev 4.4	Total
									Recoverable
Lead	0.64	J	1.0	0.23	ug/L	1		200.8	Total
									Recoverable
Zinc, Total	17		10	2.0	ug/L	1		200.8	Total
									Recoverable
Lead	0.46	J	1.0	0.23	ug/L	1		200.8	Potentially
									Dissolved
Manganese	3.6		3.0	0.51	ug/L	1		200.8	Potentially
									Dissolved
Zinc	19		10	2.0	ug/L	1		200.8	Potentially
									Dissolved
Specific Conductance	230		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
pH adj. to 25 deg C	8.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.9	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
245.1	Mercury (CVAA)	EPA	EET DEN
SM 2510B	Conductivity, Specific Conductance	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 4500 H+ B	pH	SM	EET DEN
200.7	Preparation, Total Recoverable Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
245.1	Preparation, Mercury	EPA	EET DEN
Poten_Diss_Met	Filtration for Potentially Dissolved Metals	EPA	EET DEN

### Protocol References:

EPA = US Environmental Protection Agency  
SM = "Standard Methods For The Examination Of Water And Wastewater"

### Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-197037-1	2022-02	Water	09/23/24 10:00	09/23/24 16:25
280-197037-2	2022-02-02	Water	09/23/24 10:00	09/23/24 16:25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: 2022-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	67	J	100	9.1	ug/L		09/26/24 08:29	09/30/24 14:29	1

Client Sample ID: 2022-02-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	69	J	100	9.1	ug/L		09/26/24 08:29	09/30/24 14:33	1

## Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: 2022-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.33	J	1.0	0.19	ug/L		09/26/24 08:29	09/26/24 20:14	1
Copper	0.81	J	2.0	0.71	ug/L		09/26/24 08:29	09/27/24 10:12	1
Lead	0.66	J	1.0	0.23	ug/L		09/26/24 08:29	09/26/24 20:14	1
Zinc, Total	15		10	2.0	ug/L		09/26/24 08:29	09/26/24 20:14	1

Client Sample ID: 2022-02-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		09/26/24 08:29	09/26/24 20:18	1
Copper	ND		2.0	0.71	ug/L		09/26/24 08:29	09/27/24 10:16	1
Lead	0.64	J	1.0	0.23	ug/L		09/26/24 08:29	09/26/24 20:18	1
Zinc, Total	17		10	2.0	ug/L		09/26/24 08:29	09/26/24 20:18	1

## Method: EPA 200.8 - Metals (ICP/MS) - Potentially Dissolved

Client Sample ID: 2022-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/26/24 08:29	09/26/24 18:27	1
Lead	0.36	J	1.0	0.23	ug/L		09/26/24 08:29	09/26/24 18:27	1
Manganese	2.3	J	3.0	0.51	ug/L		09/26/24 08:29	09/26/24 18:27	1
Nickel	ND		3.0	0.83	ug/L		09/26/24 08:29	09/26/24 18:27	1
Silver	ND		0.50	0.045	ug/L		09/26/24 08:29	09/26/24 18:27	1
Zinc	23		10	2.0	ug/L		09/26/24 08:29	09/26/24 18:27	1

Client Sample ID: 2022-02-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/26/24 08:29	09/26/24 18:30	1
Lead	0.46	J	1.0	0.23	ug/L		09/26/24 08:29	09/26/24 18:30	1
Manganese	3.6		3.0	0.51	ug/L		09/26/24 08:29	09/26/24 18:30	1
Nickel	ND		3.0	0.83	ug/L		09/26/24 08:29	09/26/24 18:30	1
Silver	ND		0.50	0.045	ug/L		09/26/24 08:29	09/26/24 18:30	1
Zinc	19		10	2.0	ug/L		09/26/24 08:29	09/26/24 18:30	1

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# Client Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: 2022-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		09/27/24 18:35	09/28/24 01:42	1

Client Sample ID: 2022-02-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		09/27/24 18:35	09/28/24 01:50	1

## General Chemistry

Client Sample ID: 2022-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	230		2.0	2.0	umhos/cm			09/30/24 13:10	1
Total Suspended Solids (SM 2540D)	1.6	J	4.0	1.1	mg/L			09/24/24 12:49	1
pH adj. to 25 deg C (SM 4500 H+ B)	8.1	HF	0.1	0.1	SU			09/25/24 13:44	1
Temperature (SM 4500 H+ B)	19.6	HF	1.0	1.0	Degrees C			09/25/24 13:44	1

Client Sample ID: 2022-02-02  
Date Collected: 09/23/24 10:00  
Date Received: 09/23/24 16:25

Lab Sample ID: 280-197037-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	230		2.0	2.0	umhos/cm			09/30/24 13:10	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			09/24/24 12:49	1
pH adj. to 25 deg C (SM 4500 H+ B)	8.1	HF	0.1	0.1	SU			09/24/24 17:58	1
Temperature (SM 4500 H+ B)	20.9	HF	1.0	1.0	Degrees C			09/24/24 17:58	1



# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 280-196967-A-1-B MS  
Matrix: Water  
Analysis Batch: 669244

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 668670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	610		10000	11200		ug/L		106	70 - 130

Lab Sample ID: 280-196967-A-1-C MSD  
Matrix: Water  
Analysis Batch: 669244

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 668670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	610		10000	11200		ug/L		106	70 - 130	1	20

Lab Sample ID: MB 280-668670/1-A  
Matrix: Water  
Analysis Batch: 669244

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 668670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	9.1	ug/L		09/26/24 08:29	09/30/24 13:35	1

Lab Sample ID: LCS 280-668670/2-A  
Matrix: Water  
Analysis Batch: 669244

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 668670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10500		ug/L		105	85 - 115

Lab Sample ID: LCSD 280-668670/3-A  
Matrix: Water  
Analysis Batch: 669244

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total Recoverable  
Prep Batch: 668670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	10000	10500		ug/L		105	85 - 115	0	20

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: 280-197096-D-4-B MS  
Matrix: Water  
Analysis Batch: 668917

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 668670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		40.0	39.0		ug/L		97	89 - 111
Copper	0.81	J	40.0	37.1		ug/L		91	90 - 115
Lead	ND		40.0	39.5		ug/L		99	88 - 115
Zinc, Total	4.2	J	40.0	40.3		ug/L		90	88 - 115

Lab Sample ID: 280-197096-D-4-C MSD  
Matrix: Water  
Analysis Batch: 668917

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 668670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		40.0	38.7		ug/L		97	89 - 111	1	20
Copper	0.81	J	40.0	38.0		ug/L		93	90 - 115	2	20
Lead	ND		40.0	39.7		ug/L		99	88 - 115	0	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-197096-D-4-C MSD

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 668670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc, Total	4.2	J	40.0	41.5		ug/L		93	88 - 115	3	20

Lab Sample ID: MB 280-668670/1-A

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		09/26/24 08:29	09/26/24 19:52	1
Lead	ND		1.0	0.23	ug/L		09/26/24 08:29	09/26/24 19:52	1
Zinc, Total	ND		10	2.0	ug/L		09/26/24 08:29	09/26/24 19:52	1

Lab Sample ID: MB 280-668670/1-A

Matrix: Water

Analysis Batch: 668980

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/26/24 08:29	09/27/24 09:55	1

Lab Sample ID: LCS 280-668670/24-A

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	41.1		ug/L		103	89 - 111
Lead	40.0	41.5		ug/L		104	88 - 115
Zinc, Total	40.0	39.6		ug/L		99	88 - 115

Lab Sample ID: LCS 280-668670/24-A

Matrix: Water

Analysis Batch: 668980

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.3		ug/L		101	90 - 115

Lab Sample ID: LCSD 280-668670/25-A

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	40.0	39.8		ug/L		100	89 - 111	3	20
Lead	40.0	41.8		ug/L		105	88 - 115	1	20
Zinc, Total	40.0	40.8		ug/L		102	88 - 115	3	20

Lab Sample ID: LCSD 280-668670/25-A

Matrix: Water

Analysis Batch: 668980

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 668670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	40.0	40.6		ug/L		101	90 - 115	1	20

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-197052-E-1-E MS

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 668560

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.0	J	40.0	38.8		ug/L		95	90 - 115
Lead	ND		40.0	39.6		ug/L		99	88 - 115
Manganese	1900		40.0	1920	4	ug/L		44	87 - 115
Nickel	7.4		40.0	44.7		ug/L		93	86 - 115
Silver	ND		40.0	37.2		ug/L		93	70 - 130
Zinc	2.1	J	40.0	40.2		ug/L		95	88 - 115

Lab Sample ID: 280-197052-E-1-F MSD

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 668560

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	1.0	J	40.0	38.3		ug/L		93	90 - 115	1	20
Lead	ND		40.0	39.4		ug/L		99	88 - 115	0	20
Manganese	1900		40.0	1940	4	ug/L		75	87 - 115	1	20
Nickel	7.4		40.0	44.6		ug/L		93	86 - 115	0	20
Silver	ND		40.0	36.0		ug/L		90	70 - 130	3	20
Zinc	2.1	J	40.0	38.9		ug/L		92	88 - 115	3	20

Lab Sample ID: MB 280-668552/1-B

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 668560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		09/26/24 08:29	09/26/24 18:16	1
Lead	ND		1.0	0.23	ug/L		09/26/24 08:29	09/26/24 18:16	1
Manganese	ND		3.0	0.51	ug/L		09/26/24 08:29	09/26/24 18:16	1
Nickel	ND		3.0	0.83	ug/L		09/26/24 08:29	09/26/24 18:16	1
Silver	ND		0.50	0.045	ug/L		09/26/24 08:29	09/26/24 18:16	1
Zinc	ND		10	2.0	ug/L		09/26/24 08:29	09/26/24 18:16	1

Lab Sample ID: LCS 280-668552/2-B

Matrix: Water

Analysis Batch: 668917

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 668560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.7		ug/L		102	90 - 115
Lead	40.0	40.6		ug/L		101	88 - 115
Manganese	40.0	38.4		ug/L		96	87 - 115
Nickel	40.0	40.4		ug/L		101	86 - 115
Silver	40.0	38.0		ug/L		95	90 - 114
Zinc	40.0	39.7		ug/L		99	88 - 115

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-668997/1-A  
Matrix: Water  
Analysis Batch: 669211

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 668997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		09/27/24 18:35	09/28/24 00:36	1

Lab Sample ID: LCS 280-668997/2-A  
Matrix: Water  
Analysis Batch: 669211

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 668997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.07		ug/L		101	90 - 110

Lab Sample ID: 140-38596-G-1-E MS  
Matrix: Water  
Analysis Batch: 669211

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 668997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		5.00	5.10		ug/L		102	80 - 120

Lab Sample ID: 140-38596-G-1-F MSD  
Matrix: Water  
Analysis Batch: 669211

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 668997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	4.92		ug/L		98	80 - 120	4	10

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-669199/4  
Matrix: Water  
Analysis Batch: 669199

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0	2.0	umhos/cm			09/30/24 13:10	1

Lab Sample ID: LCS 280-669199/3  
Matrix: Water  
Analysis Batch: 669199

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1410	1450		umhos/cm		103	90 - 110

Lab Sample ID: 280-197194-F-1 DU  
Matrix: Water  
Analysis Batch: 669199

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	2100		2110		umhos/cm		0.3	10

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# QC Sample Results

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-668493/1

Matrix: Water

Analysis Batch: 668493

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			09/24/24 12:49	1

Lab Sample ID: LCS 280-668493/2

Matrix: Water

Analysis Batch: 668493

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	460		mg/L		91	79 - 114

Lab Sample ID: 280-197021-C-1 DU

Matrix: Water

Analysis Batch: 668493

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	15		16.0		mg/L		8	10

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-668550/4

Matrix: Water

Analysis Batch: 668550

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 280-197026-C-1 DU

Matrix: Water

Analysis Batch: 668550

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH adj. to 25 deg C	7.1		7.2		SU		0.3	5
Temperature	20.7		20.6		Degrees C		0.7	10

Lab Sample ID: LCS 280-668690/4

Matrix: Water

Analysis Batch: 668690

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 280-197092-D-1 DU

Matrix: Water

Analysis Batch: 668690

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH adj. to 25 deg C	7.6		7.7		SU		1	5
Temperature	19.7		19.3		Degrees C		2	10

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Metals

### Filtration Batch: 668397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-197037-2	2022-02-02	Potentially Dissolved	Water	Poten_Diss_Met	

### Filtration Batch: 668552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-668552/1-B	Method Blank	Potentially Dissolved	Water	Filtration	
LCS 280-668552/2-B	Lab Control Sample	Potentially Dissolved	Water	Filtration	
280-197052-E-1-E MS	Matrix Spike	Dissolved	Water	Filtration	
280-197052-E-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	

### Prep Batch: 668560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Potentially Dissolved	Water	200.8	668397
280-197037-2	2022-02-02	Potentially Dissolved	Water	200.8	668397
MB 280-668552/1-B	Method Blank	Potentially Dissolved	Water	200.8	668552
LCS 280-668552/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	668552
280-197052-E-1-E MS	Matrix Spike	Dissolved	Water	200.8	668552
280-197052-E-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	200.8	668552

### Prep Batch: 668670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total Recoverable	Water	200.8	
280-197037-2	2022-02-02	Total Recoverable	Water	200.8	
MB 280-668670/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-668670/24-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-668670/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 280-668670/25-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LCSD 280-668670/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
280-196967-A-1-B MS	Matrix Spike	Total/NA	Water	200.8	
280-196967-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	
280-197096-D-4-B MS	Matrix Spike	Total/NA	Water	200.8	
280-197096-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

### Analysis Batch: 668917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Potentially Dissolved	Water	200.8	668560
280-197037-1	2022-02	Total Recoverable	Water	200.8	668670
280-197037-2	2022-02-02	Potentially Dissolved	Water	200.8	668560
280-197037-2	2022-02-02	Total Recoverable	Water	200.8	668670
MB 280-668552/1-B	Method Blank	Potentially Dissolved	Water	200.8	668560
MB 280-668670/1-A	Method Blank	Total Recoverable	Water	200.8	668670
LCS 280-668552/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	668560
LCS 280-668670/24-A	Lab Control Sample	Total Recoverable	Water	200.8	668670
LCSD 280-668670/25-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	668670
280-197052-E-1-E MS	Matrix Spike	Dissolved	Water	200.8	668560
280-197052-E-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	200.8	668560
280-197096-D-4-B MS	Matrix Spike	Total/NA	Water	200.8	668670
280-197096-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	668670

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# QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Metals

### Analysis Batch: 668980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total Recoverable	Water	200.8	668670
280-197037-2	2022-02-02	Total Recoverable	Water	200.8	668670
MB 280-668670/1-A	Method Blank	Total Recoverable	Water	200.8	668670
LCS 280-668670/24-A	Lab Control Sample	Total Recoverable	Water	200.8	668670
LCSD 280-668670/25-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	668670

### Prep Batch: 668997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total/NA	Water	245.1	
280-197037-2	2022-02-02	Total/NA	Water	245.1	
MB 280-668997/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-668997/2-A	Lab Control Sample	Total/NA	Water	245.1	
140-38596-G-1-E MS	Matrix Spike	Total/NA	Water	245.1	
140-38596-G-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

### Analysis Batch: 669211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total/NA	Water	245.1	668997
280-197037-2	2022-02-02	Total/NA	Water	245.1	668997
MB 280-668997/1-A	Method Blank	Total/NA	Water	245.1	668997
LCS 280-668997/2-A	Lab Control Sample	Total/NA	Water	245.1	668997
140-38596-G-1-E MS	Matrix Spike	Total/NA	Water	245.1	668997
140-38596-G-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	668997

### Analysis Batch: 669244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total Recoverable	Water	200.7 Rev 4.4	668670
280-197037-2	2022-02-02	Total Recoverable	Water	200.7 Rev 4.4	668670
MB 280-668670/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	668670
LCS 280-668670/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	668670
LCSD 280-668670/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	668670
280-196967-A-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	668670
280-196967-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	668670

## General Chemistry

### Analysis Batch: 668493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total/NA	Water	SM 2540D	
280-197037-2	2022-02-02	Total/NA	Water	SM 2540D	
MB 280-668493/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-668493/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-197021-C-1 DU	Duplicate	Total/NA	Water	SM 2540D	

### Analysis Batch: 668550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-2	2022-02-02	Total/NA	Water	SM 4500 H+ B	
LCS 280-668550/4	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
280-197026-C-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

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## QC Association Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

### General Chemistry

#### Analysis Batch: 668690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total/NA	Water	SM 4500 H+ B	
LCS 280-668690/4	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
280-197092-D-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

#### Analysis Batch: 669199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197037-1	2022-02	Total/NA	Water	SM 2510B	
280-197037-2	2022-02-02	Total/NA	Water	SM 2510B	
MB 280-669199/4	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-669199/3	Lab Control Sample	Total/NA	Water	SM 2510B	
280-197194-F-1 DU	Duplicate	Total/NA	Water	SM 2510B	



# Lab Chronicle

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

**Client Sample ID: 2022-02**

**Date Collected: 09/23/24 10:00**

**Date Received: 09/23/24 16:25**

**Lab Sample ID: 280-197037-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			669244	09/30/24 14:29	NKC	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			50 mL	50 mL	668397	09/23/24 20:40	AMH	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	668560	09/26/24 08:29	SMK	EET DEN
Potentially Dissolved	Analysis	200.8		1			668917	09/26/24 18:27	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			668917	09/26/24 20:14	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			668980	09/27/24 10:12	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	668997	09/27/24 18:35	AES	EET DEN
Total/NA	Analysis	245.1		1			669211	09/28/24 01:42	CAF	EET DEN
Total/NA	Analysis	SM 2510B		1			669199	09/30/24 13:10	EL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	668493	09/24/24 12:49	BRD	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			668690	09/25/24 13:44	EL	EET DEN

**Client Sample ID: 2022-02-02**

**Date Collected: 09/23/24 10:00**

**Date Received: 09/23/24 16:25**

**Lab Sample ID: 280-197037-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			669244	09/30/24 14:33	NKC	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			50 mL	50 mL	668397	09/23/24 20:40	AMH	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	668560	09/26/24 08:29	SMK	EET DEN
Potentially Dissolved	Analysis	200.8		1			668917	09/26/24 18:30	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			668917	09/26/24 20:18	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	668670	09/26/24 08:29	KLG	EET DEN
Total Recoverable	Analysis	200.8		1			668980	09/27/24 10:16	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	668997	09/27/24 18:35	AES	EET DEN
Total/NA	Analysis	245.1		1			669211	09/28/24 01:50	CAF	EET DEN
Total/NA	Analysis	SM 2510B		1			669199	09/30/24 13:10	EL	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	668493	09/24/24 12:49	BRD	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			668550	09/24/24 17:58	EL	EET DEN

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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# Accreditation/Certification Summary

Client: Grand Island Resources  
Project/Site: Nederland, CO - Surface Water

Job ID: 280-197037-1

## Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-25
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	11-30-25
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	04-21-25
California	State	2513	01-08-25
Colorado	Petroleum Storage Tank Program	4025 (or)	01-08-25
Colorado	State	CO00026	06-30-25
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-25
Georgia	State	4025-011	01-08-25
Illinois	NELAP	2000172024-9	05-31-25
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-25
Kentucky (WW)	State	KY98047	12-31-24
Louisiana	NELAP	30785	06-30-14 *
Louisiana (All)	NELAP	30785	06-30-25
Minnesota	NELAP	1788752	12-31-24
Nevada	State	CO000262024-08	07-31-25
New Hampshire	NELAP	2053	04-28-25
New Jersey	NELAP	230001	06-30-25
New York	NELAP	59923	04-01-25
North Dakota	State	R-034	01-08-25
Oklahoma	NELAP	8614	08-31-24 *
Oregon	NELAP	4025	01-08-25
Pennsylvania	NELAP	013	07-31-25
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183	09-30-24
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO00026	07-31-25
Virginia	NELAP	460232	06-14-25
Washington	State	C583	08-03-25
West Virginia DEP	State	354	11-30-24
Wisconsin	State	999615430	08-31-25
Wyoming (UST)	A2LA	2907.01	10-31-25

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Ver: 01/16/2019



## Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-197037-1

**Login Number: 197037**

**List Number: 1**

**Creator: Held, Wesley**

**List Source: Eurofins Denver**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## APPENDIX D CHAIN OF CUSTODY (COC) FORMS



<b>Client Information</b> Client Contact: Brooke Molson Moran Company: Grand Island Resources		<b>Lab PM:</b> Blenulis, Dylan T E-Mail: Dylan.Blenulis@et.leuofinnsus.com		<b>Carrier Tracking No(s):</b> State of Origin:		<b>COC No:</b> Page:	
Sample: Brooke Moran Phone: 303-506-1618 PWSID:		Due Date Requested: TAT Requested (days):		Job #:		Preservation Codes: A - HCL B - NaOH C - Na2S2O8 D - Na2SO4 E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Advance Payment Required WO #:		Project #: SSOW#:		Analysis Requested 200.8 - Potentially Dissolved Metals (SW Permit List) 2510B - Specific Conductance and SM4500_H+ - pH / Temp 2540D - Total Suspended Solids		Special Instructions/Note: *Surface water potentially dissolved metals permit list = 200.8 (Cu, Pb, Mn, Ni, Ag, Zn) *Surface water total recoverable metals permit list = 200.7 (Fe), 200.8 (Cd, Cu, Pb, Tot. Zn), and 245.1 (Hg)	
Sample Identification 2022-02 2022-02-02		Sample Date 9/23/24 9/23/24		Sample Time 10:00 10:00		Matrix (W=water, S=sediment, O=other) W W	
Sample Type (C=Comp, G=grab) G G		Preservation Code: N N		Field Filtered Sample (Yes or No) X X		Total Number of containers: 4 4	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date/Time: 9/23/24 14:30 9/23/24		Date/Time: 9/23/24 14:30 9/23/24		Date/Time: 9/23/24 14:30 9/23/24	
Deliverable Requested: I, II, III, IV, Other (specify)		Date/Time: 9/23/24 14:30 9/23/24		Date/Time: 9/23/24 14:30 9/23/24		Date/Time: 9/23/24 14:30 9/23/24	
Empty Kit Relinquished by:		Relinquished by: Brooke Moran Date/Time: 9/23/24 14:30		Relinquished by: Brooke Moran Date/Time: 9/23/24 14:30		Relinquished by: Brooke Moran Date/Time: 9/23/24 14:30	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	







## APPENDIX E FIELD SHEETS



# SURFACE WATER SAMPLING DATA SHEET

<b>SWAMP Field Data Sheet (Water Chemistry &amp; Discrete Probe) - EventType=WQ</b>						Entered in S-B-55 (m) (date) <u>n/a</u>		Pg <u>1</u> of <u>1</u> Pgs					
*StationID: <u>2022-01</u>		*Date (mm/dd/yyyy): <u>9/23/24</u>		*Group: <u>n/a</u>		*Agency: <u>n/a</u>							
*Funding: <u>n/a</u>		ArrivalTime: <u>9:35</u>		DepartureTime: <u>9:45</u>		*SampleTime (1st sample): <u>n/a</u>		*Protocol: <u>n/a</u>					
*Personnel: <u>BM</u>		*Purpose (circle all that apply): <u>WaterChem</u> <u>WaterTox</u> <u>FieldObs</u> <u>FieldMeasure</u>				*PurposeFailure: <u>n/a</u>							
*Location: Bank Thalweg Midchannel OpenWater		*GPS/DGPS		Lat (dd.ddddd): <u>39.97904</u>		Long (ddd.ddddd): <u>-105.57585</u>		OCCUPATION METHOD: <u>Walk-in</u> Bridge R/V <u>Other</u>					
GPS Device: <u>GPS WAYPOINTS APP</u>		Target: <u>39.97904</u>		BEAUFORT SCALE (see attachment): <u>3</u>		STARTING BANK (facing downstream): <u>LB</u> / RB / NA							
Datum: NAD83		Accuracy (ft/m): <u>1.20</u>		*Actual: <u>39.978993</u>		Point of Sample (if Integrated, then -88 in dbase)							
<b>Field Observations (SampleType = FieldObs)</b>													
SITE ODOR: <u>None, Sulfides, Sewage, Petroleum, Mixed, Other</u>		WATER CLARITY: <u>None</u> / <u>N</u> / <u>Unk</u>		WIND DIRECTION (from): <u>WNW</u>		HYDROMODIFICATION: <u>None</u> Bridge, Pipes, Concrete Channel, Grade Control, Culvert, Aerial Zipline, Other		LOCATION (to sample): <u>US</u> / <u>DS</u> (WI)					
SKY CODE: <u>Clear, Partly Cloudy, Overcast, Fog</u>		OTHER PRESENCE: <u>Vascular, Nonvascular, Oily Sheen, Foam, Trash, Other</u>		DOMINANT SUBSTRATE: <u>Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other</u>		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): <u>2022-01A</u>		1: (RB / LB / BB / US / DS / ##)					
WATER CLARITY: <u>NA</u> Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)		PRECIPITATION: <u>None</u> Fog, Drizzle, Rain, Snow		WATER ODOUR: <u>NA</u> None, Sulfides, Sewage, Petroleum, Mixed, Other		PRECIPITATION (last 24 hrs): <u>Unknown, &lt;1", &gt;1", None</u>		2: (RB / LB / BB / US / DS / ##)					
WATER COLOR: <u>NA</u> Colorless, Green, Yellow, Brown		OBSERVED FLOW: <u>NA</u> Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs						3: (RB / LB / BB / US / DS / ##)					
<b>Field Measurements (SampleType = FieldMeasure; Method = Field)</b>													
	Depth Collec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O <sub>2</sub> (mg/L)	O <sub>2</sub> (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/ BOTTOM/REP	<u>n/a</u>	<u>n/a</u>	<u>49.80</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>		
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:													
Calib. Date:													
<b>Samples Taken (# of containers filled) - Method=Water_Grab</b>										Field Dup YES (NO) (SampleType = Grab) / Integrated; LABEL_ID = FieldQA; create collection record upon data entry			
SAMPLE TYPE: <u>Grab / Integrated</u>		COLLECTION EQUIPMENT: <u>Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole &amp; Beaker; Other</u>		<u>n/a</u>									
	Depth Collec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface													
Sub/Surface													
COMMENTS: <u>DRY BED, NO SAMPLING. SOME SNOW PRESENT.</u>													

Run:		Sample Processing Date:												
Sample ID #:														
Site Code:		<u>PLEASE SEE LAB REPORT</u>												
Yellow +	# Small Wells													
	# Large Wells													
	Empty Wells MPN													
Yellow + Fluorescence (+)	# Small Wells													
	# Large Wells													
	False Positives MPN													
Temp/Time	Start	4 Hr. Check	14 Hr. Check	18 Hr. Check	22 Hr. Check, if needed									
<b>FIELD DUPLICATES</b>														
TOTAL COLIFORM	Normal Sample #	Duplicate Sample #		MPN		95% CI		Normal Sample #	Duplicate Sample #		MPN		95% CI	
				Lower	Upper						Lower	Upper		
	Mean	Pass		Needs Review					Mean		Pass		Needs Review	
E. COLI	Normal Duplicate	Mean		Pass		Needs Review			Normal Duplicate		Mean		Pass	
	Mean	Pass		Needs Review					Mean		Pass		Needs Review	
BLANKS	Field Sample #	Pass		Needs Review					Lab Sample #		Pass		Needs Review	
Mean = Mean of Normal and Duplicate, which is then compared to the individual corresponding CI's to determine acceptability of data														
Sampler Signature / Date / Time Arrived:				Placed in Incubator By / Date / Time:				Trays Read By:						
Processor / Date / Time:				Pulled from Incubator By / Date / Time:				Entered into database:						
NOTES:														

brooke Moran 9/23/24



# SURFACE WATER SAMPLING DATA SHEET

<b>SWAMP Field Data Sheet (Water Chemistry &amp; Discrete Probe) - EventType=WQ</b>										Event ID: <u>2022-02</u>		Pg 1 of 1 Pgs	
*StationID: <u>2022-02</u>			*Date (mm/dd/yyyy): <u>9/23/24</u>			*Group: <u>n/a</u>			*Agency: <u>n/a</u>				
*Funding: <u>n/a</u>			ArrivalTime: <u>9:55</u>			DepartureTime: <u>10:25</u>			*SampleTime (1st sample): <u>10:00 am</u>				
*Personnel: <u>BM, KL</u>			*Purpose (circle all that apply): <u>WaterChem</u> <u>WaterTox</u> <u>FieldObs</u> <u>FieldMeasure</u>						*PurposeFailure: <u>n/a</u>				
*Location: <u>Bank Thalweg Midchannel OpenWater</u>			*GPS/DGPS		Lat (dd.ddddd): <u>39.975787</u>		Long (ddd.ddddd): <u>-105.569328</u>		OCCUPATION METHOD: <u>Walk-in</u> <u>Bridge</u> <u>R/V</u> <u>Other</u>				
GPS Device: <u>GPS WAYPOINTS APP</u>			Target: <u>39.975787</u>		Actual: <u>39.975873</u>		- <u>105.569305</u>		STARTING BANK (facing downstream): <u>LB</u> <u>RB</u> <u>NA</u>				
Datum: <u>NAD83</u>			Accuracy (ft (m)): <u>1.40</u>		Point of Sample (if Integrated, then -88 in dbase)								
<b>Field Observations (SampleType = FieldObs)</b>													
SITE ODOR: <u>None</u> <u>Sulfides</u> <u>Sewage</u> <u>Petroleum</u> <u>Mixed</u> <u>Other</u>				WATER CLARITY: <u>Clear</u> <u>Partly Cloudy</u> <u>Overcast</u> <u>Fog</u>		WIND DIRECTION (from): <u>NE</u>		HYDROMODIFICATION: <u>None</u> <u>Bridge</u> <u>Pipes</u> <u>ConcreteChannel</u> <u>GradeControl</u> <u>Culvert</u> <u>AerialZipline</u> <u>Other</u>		LOCATION (to sample): <u>US</u> <u>DS</u> <u>WI</u>			
OTHER PRESENCE: <u>Vascular</u> <u>Nonvascular</u> <u>OilySheen</u> <u>Foam</u> <u>Trash</u> <u>Other</u>				DOMINANT SUBSTRATE: <u>Bedrock</u> <u>Concrete</u> <u>Cobble</u> <u>Gravel</u> <u>Sand</u> <u>Mud</u> <u>Unk</u> <u>Other</u>		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode):		1: (RB / LB / BB / US / DS / ##) <u>2022-02A</u>					
WATER CLARITY: <u>Clear</u> (see bottom), <u>Cloudy</u> (>4" vis), <u>Murky</u> (<4" vis)				PRECIPITATION: <u>None</u> <u>Fog</u> <u>Drizzle</u> <u>Rain</u> <u>Snow</u>		PRECIPITATION (last 24 hrs): <u>Unknown</u> , <1", >1", <u>None</u>		2: (RB / LB / BB / US / DS / ##) <u>2022-02B</u>					
WATER ODOR: <u>None</u> <u>Sulfides</u> <u>Sewage</u> <u>Petroleum</u> <u>Mixed</u> <u>Other</u>				WATER COLOR: <u>Colorless</u> <u>Green</u> <u>Yellow</u> <u>Brown</u>		OBSERVED FLOW: <u>NA</u> <u>Dry Waterbody Bed</u> <u>No Obs Flow</u> <u>Isolated Pool</u> <u>Trickle</u> (<0.1cfs) <u>0.1-1cfs</u> <u>1-5cfs</u> <u>5-20cfs</u> <u>20-50cfs</u> <u>50-200cfs</u> <u>&gt;200cfs</u>		3: (RB / LB / BB / US / DS / ##) <u>2022-02C</u>					
<b>Field Measurements (SampleType = FieldMeasure; Method = Field)</b>													
	Depth Collec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O <sub>2</sub> (mg/L)	O <sub>2</sub> (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/ BOTTOM/REP	<u>1"</u>	<u>0.45</u>	<u>51.1°F</u>	<u>7.2°</u>	<u>8.1</u>	<u>n/a</u>	<u>n/a</u>	<u>0.3</u>	<u>n/a</u>	<u>2.6</u>	<u>n/a</u>		
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:	<u>ambient O<sub>2</sub> station</u>												
Calib. Date:	<u>n/a</u> <u>9/23/24</u>												
<b>Samples Taken (# of containers filled) - Method=Water_Grab</b>													
Field Dup YES/NO: (SampleType = Grab) Integrated; LABEL_ID = FieldQA; create collection record upon data entry													
SAMPLE TYPE: <u>Grab</u> / <u>Integrated</u>		COLLECTION EQUIPMENT:		Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other: <u>disposable cup</u>									
	Depth Collec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface	<u>1"</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>1</u>	<u>n/a</u>	<u>1</u>	<u>n/a</u>	<u>1</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Sub/Surface													
COMMENTS: <u>4 containers total (each set)</u>													

Run:										Sample Processing Date:																																																																																																																													
Sample ID #: <u>PLEASE SEE LAB REPORT</u>																																																																																																																																							
Site Code:																																																																																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="3">Yellow +</td> <td># Small Wells</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td># Large Wells</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Empty Wells MPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">Yellow + Fluorescence (+)</td> <td># Small Wells</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td># Large Wells</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>False Positives MPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																				Yellow +	# Small Wells																			# Large Wells																			Empty Wells MPN																			Yellow + Fluorescence (+)	# Small Wells																			# Large Wells																			False Positives MPN																		
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Mean = Mean of Normal and Duplicate, which is then compared to the individual corresponding CI's to determine acceptability of data

Sampler Signature / Date / Time Arrived: \_\_\_\_\_ Placed in Incubator By / Date / Time: \_\_\_\_\_ Trays Read By: \_\_\_\_\_

Processor / Date / Time: \_\_\_\_\_ Pulled from Incubator By / Date / Time: \_\_\_\_\_ Entered into database: \_\_\_\_\_

NOTES:

Brooke Moran 9/23/24



## IDENTIFICATION

### WEATHER CONDITIONS

**INITIAL WELL MEASUREMENTS** (Measurements in feet made from top of well casing)

Well purged with: WELL PUMP

## INSTRUMENT CALIBRATION

**Turbidity Meter:** Naery Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

[illegible]

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. ( $\mu$ S/cm)	Temp. ( $^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
9/13/24	13:00	7.0	7.3	0.3	7.10	6.7		

\_\_\_\_\_  
Sampler's Signature

Brooke Moran 9/23/24



## GROUND WATER SAMPLING DATA SHEET

## IDENTIFICATION

Sample Location COMPLIANCE WELL Date 9/23/24 Start Time 13:00 Project Number:             
 Sample Control Number n/a Samplers BM, KL Stop time 13:45 Page 1 of 1

## WEATHER CONDITIONS

Ambient Air Temperature: 57.0° °C ☐ °F ☒ Not Measured ☐ Wind: Heavy ☐ Moderate ☐ Light ☒

Precipitation: None ☒ Rain ☐ Snow ☐ Heavy ☐ Moderate ☐ Light ☐ Sunny ☒ Partly Cloudy ☐

## INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

Static Water Level 39 Total Depth 165 Top of Screen 65 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-50 ft) 6" (50-165 ft)  
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 185 gallons  
 Well Casing ID n/a Well Casing OD \* Protective Casing Stickup n/a Well Casing Stickup 1.0 Feet of Water n/a  
 Well purged with: WELL PUMP

## FINAL WELL MEASUREMENTS

Static Water Level 39 Total Depth 165 Total Volume Purged 554 Saturated Borehole Volume (gal) 115 Max Pumping Rate n/a

## INSTRUMENT CALIBRATION

pH Meter: Meter Number OAKTON 01

Conductivity Meter: Meter Number CM1-2104-01479

Buffer 7 Measured Value 7.0 Temp. 12.9 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Buffer 4 Measured Value 4.0 Temp. 13.0 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Turbidity Meter: Neutry Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

## FIELD PARAMETER MEASUREMENTS DURING PURGING

Time	Volume (gallons)	pH	Cond. (µS/cm)	Temp. °C <input checked="" type="checkbox"/> °F <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
13:00	0	7.5	0.2	7.9	2.8	
13:30	554	6.9	0.3	5.4°	1.3	FIELD-FILTERED FOR METALS & RADIONUCLIDES
						SAMPLES COLLECTED WITH DISPOSABLE CUPS

## FINAL SAMPLE PARAMETERS

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (µS/cm)	Temp. (°C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
9/23/24	13:30	10.4	6.9	0.3	5.4°	1.3		

Duplicate Sample-02 (sample control number/time COMPLIANCE 02) QA/QC INFO  
 Field Blank-03 (sample control number/time COMPLIANCE 03) AVAILABLE IN  
 Rinsate Sample-04 (sample control number/time n/a) LAB REPORT  
 Matrix Spike-MS (sample control number/time n/a)  
 (sample control number/time n/a)

Notes: SAMPLED AT WELL \* 6 5/8" (-1-50 ft) & 4 1/2" (15-165 ft)

Sampler's Signature

Bruce Moran 9/23/24



## GROUND WATER SAMPLING DATA SHEET

## IDENTIFICATION

Sample Location CARIBOU WELL Date 9/23/24 Start Time 10:30 Stop time 11:45 Project Number:            Page 1 of 1  
 Sample Control Number n/a Samplers BM, KL

## WEATHER CONDITIONS

Ambient Air Temperature: 54.7° °C ☐ °F ☒ Not Measured ☐ Wind: Heavy ☐ Moderate ☐ Light ☒  
 Precipitation: None ☒ Rain ☐ Snow ☐ Heavy ☐ Moderate ☐ Light ☐ Sunny ☒ Partly Cloudy ☐

## INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

Static Water Level 28 Total Depth 165 Top of Screen 25 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-26 ft)  
6" (26-165 ft)  
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 161 gallons  
 Well Casing ID n/a Well Casing OD \* Protective Casing Stickup n/a Well Casing Stickup 2.4 Feet of Water n/a  
 Well purged with: WELL PUMP

## FINAL WELL MEASUREMENTS

Static Water Level 28 Total Depth 165 Total Volume Purged 484 Saturated Borehole Volume (gal) 113 Max Pumping Rate n/a

## INSTRUMENT CALIBRATION

pH Meter: Meter Number DAKTON01

Buffer 7 Measured Value 7.0 Temp. 12.9 °C

Buffer 4 Measured Value 4.0 Temp. 13.0 °C

Conductivity Meter: Meter Number CM1-2104-01479

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Turbidity Meter: Newtry Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

## FIELD PARAMETER MEASUREMENTS DURING PURGING

Time	Volume (gallons)	pH	Cond. (µS/cm)	Temp. °C <input checked="" type="checkbox"/> °F <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
10:30	0	6.8	0.1	14.5	2.4	
11:30	484	7.0	0.2	7.9	3.2	FIELD-FILTERED FOR METALS & RADIONUCLIDES
						SAMPLES COLLECTED WITH DISPOSABLE CUPS

## FINAL SAMPLE PARAMETERS

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (µS/cm)	Temp. (°C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
9/23/24	11:30	10.0	7.0	0.2	7.9°	3.2		

Duplicate Sample-02 (sample control number/time n/a)

Field Blank-03 (sample control number/time n/a)

Rinsate Sample-04 (sample control number/time n/a)

Matrix Spike-MS (sample control number/time n/a)

(sample control number/time n/a)

Notes: SAMPLED VIA PORT, \* 6 5/8" (-1-26 ft) & 4 1/2" (15-165 ft)

Sampler's Signature

Brocke Moran 9/23/24

QA/QC INFO  
AVAILABLE IN  
LAB REPORT



## GROUND WATER SAMPLING DATA SHEET

## IDENTIFICATION

Sample Location CROSS PORTAL Date 9/23/24 Start Time 12:00 Stop time 12:30 Project Number: Page 1 of 1  
 Sample Control Number n/a Samplers BM, KL

## WEATHER CONDITIONS

Ambient Air Temperature: \_\_\_\_\_ °C ☐ °F ☐ Not Measured ☐ Wind: Heavy ☐ Moderate ☐ Light ☐

Precipitation: None ☐ Rain ☐ Snow ☐ Heavy ☐ Moderate ☐ Light ☐ Sunny ☐ Partly Cloudy ☐

## INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

Static Water Level \_\_\_\_\_ Total Depth \_\_\_\_\_ Top of Screen \_\_\_\_\_ Filter Pack Interval \_\_\_\_\_ Borehole Diameter (inches)

2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: \_\_\_\_\_ gallons

Well Casing ID \_\_\_\_\_ Well Casing OD \_\_\_\_\_ Protective Casing Stickup \_\_\_\_\_ Well Casing Stickup \_\_\_\_\_ Feet of Water

Well purged with: \_\_\_\_\_

## FINAL WELL MEASUREMENTS

Static Water Level \_\_\_\_\_ Total Depth \_\_\_\_\_ Total Volume Purged \_\_\_\_\_ Saturated Borehole Volume (gal) \_\_\_\_\_ Max Pumping Rate \_\_\_\_\_

## INSTRUMENT CALIBRATION

pH Meter: Meter Number 0AKT01

Conductivity Meter: Meter Number CM1-2104-01479

Buffer 7 Measured Value 7.0 Temp. 12.9 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Buffer 4 Measured Value 4.0 Temp. 13.0 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Turbidity Meter: Newtrg Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

## FIELD PARAMETER MEASUREMENTS DURING PURGING

Time	Volume (gallons)	pH	Cond. (µS/cm)	Temp. °C <input type="checkbox"/> °F <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
12:15	n/a	7.9	0.3	6.0°	12.9	
						FIELD-FILTERED FOR METALS & RADIONUCLIDES
						SAMPLES COLLECTED WITH DISPOSABLE CUPS

## FINAL SAMPLE PARAMETERS

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (µS/cm)	Temp. (°C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
9/23/24	12:15	n/a	7.9	0.3	6.0°	12.9		

Duplicate Sample-02 (sample control number/time CROSS PORTAL 02)

Field Blank-03 (sample control number/time n/a)

Rinsate Sample-04 (sample control number/time n/a)

Matrix Spike-MS (sample control number/time n/a)

(sample control number/time n/a)

QA/QC INFO  
AVAILABLE  
IN LAB REPORT

Notes:

Sampler's Signature

Brooke Moran 9/23/24



## GROUND WATER SAMPLING DATA SHEET

## IDENTIFICATION

Sample Location CARIBOU PORTAL Date 9/23/24 Start Time 10:30 Stop time 11:15 Page 1 of 1  
 Sample Control Number n/a Samplers BM, KL

Project Number:

## WEATHER CONDITIONS

Ambient Air Temperature: \_\_\_\_\_ °C ☐ °F ☐ Not Measured ☐ Wind: Heavy ☐ Moderate ☐ Light ☐

Precipitation: None ☐ Rain ☐ Snow ☐ Heavy ☐ Moderate ☐ Light ☐ Sunny ☐ Partly Cloudy ☐

## INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

Static Water Level \_\_\_\_\_ Total Depth \_\_\_\_\_ Top of Screen \_\_\_\_\_ Filter Pack Interval \_\_\_\_\_ Borehole Diameter (inches)

2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: \_\_\_\_\_ gallons

Well Casing ID \_\_\_\_\_ Well Casing OD \_\_\_\_\_ Protective Casing Stickup \_\_\_\_\_ Well Casing Stickup \_\_\_\_\_ Feet of Water

Well purged with: \_\_\_\_\_

## FINAL WELL MEASUREMENTS

Static Water Level \_\_\_\_\_ Total Depth \_\_\_\_\_ Total Volume Purged \_\_\_\_\_ Saturated Borehole Volume (gal) \_\_\_\_\_ Max Pumping Rate \_\_\_\_\_

## INSTRUMENT CALIBRATION

pH Meter: Meter Number OAKTON 01

Conductivity Meter: Meter Number CM1-2104-01479

Buffer 7 Measured Value 7.0 Temp. 12.9 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Buffer 4 Measured Value 4.0 Temp. 13.0 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C

Turbidity Meter: Nettec Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

## FIELD PARAMETER MEASUREMENTS DURING PURGING

Time	Volume (gallons)	pH	Cond. (µS/cm)	Temp. °C <input checked="" type="checkbox"/> °F <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
11:15	n/a	8.3	0.3	5.5	3.1	
						FIELD-FILTERED FOR
						METALS & RADIONUCLIDES
						SAMPLES COLLECTED WITH
						DISPOSABLE CUPS

## FINAL SAMPLE PARAMETERS

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input type="checkbox"/>	pH	Cond. (µS/cm)	Temp. (°C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
9/23/24	11:15	n/a	8.3	0.3	5.5°	3.1		

Duplicate Sample-02 (sample control number/time n/a)  
 Field Blank-03 (sample control number/time n/a)  
 Rinsate Sample-04 (sample control number/time n/a)  
 Matrix Spike-MS (sample control number/time n/a)  
 \_\_\_\_\_ (sample control number/time n/a)

QA/QC INFO  
AVAILABLE IN  
LAB REPORT

Notes:

Sampler's Signature

Brooke Moran 9/23/24



## APPENDIX F PHOTOGRAPHS



## APPENDIX F.1 SAMPLE LOCATION 2022-01 PHOTOGRAPHS















## APPENDIX F.2 SAMPLE LOCATION 2022-02 PHOTOGRAPHS











