

STATE OF
COLORADO

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Grand Island Resources TR-10 Second Quarter 2023 Report

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Wed, Sep 6, 2023 at 2:11 PM

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Mr. Lennberg,

Enclosed is Grand Island Resources TR-10 Second Quarter 2023 Water Monitoring Report. I am also enclosing the link for the appendix as it is quite lengthy and will not let me attach it to this email. Please let me know if you have questions or cannot download the appendix and we will figure out another way to get it to you.

We would also like to express our gratitude for granting us an extension for the second quarter report as we navigate through post Cease and Desist funding.

 [2ND Q APPENDIX FINAL.pdf](#)

Respectfully,

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TR-10 SECOND QUARTER 2023 - WATER MONITORING REPORT DRMS - 090623 - Final.pdf
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SECOND QUARTER 2023
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
September 6, 2023



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1. Introduction

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"***. 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.

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. The Operator and GIR agreed to provide the reports on specific dates.

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 on 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). Including 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) presented on Figure 6,
- 1.2. Monthly Potentiometric Surface (water table) maps constructed from water table measurements taken during the sampling events Figures 12, 13 and 14 for the months of April, May, and June 2023, 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).



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

On March 2, 2023, the Division of Reclamation, Mining and Safety concluded its review of the Technical Revision (TR11) application submitted to the Division on February 22, 2023, addressing the following: Revise analytical parameter list for groundwater samples to eliminate analyzing for Total Silver, Asbestos, Coliform (max total), Coliform (30-day average), 2-Chlorophenol, Color, Corrosivity, Foaming Agents, Odor and Phenol. The complete updated Table 4.1 for TR10 that lists all parameters that groundwater samples will be analyzed for can be found in the permit file. The decision reached by the Division is: **"Approve"**.

Test results from water samples collected from the three monitoring wells are presented on tables 2.1.1, 2.1.2 and 2.1.3 for the months of April, May, and June 2023, respectively. 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. The complete Water Quality Analytical Results from the Laboratories are provided in the appendices.



Table 2.1.1 Groundwater Quality Test Results – Sample Date April 18, 2023

Parameter	Standard	Cross Well	Caribou Well	Compliance Well	Compliance Well Duplicate	Compliance Well FB	Unit	Comments
Aluminum (Al)	5	0.008	0.048	0.001	0.001	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0304	0.0064	0.0409	0.0411	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	<2.8	<3.0	<2.7	<2.8	<3.0	mrem/year	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	ND	ND	ND	ND	0.01	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0001	ND	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	3.97	0.42	3.28	3.29	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0044	0.1625	ND	ND	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	0.2	0.2	<0.1	0.4	0.5	pCi/l	
Iron (Fe)	0.3	ND	0.028	0.012	0.011	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0006	0.0006	0.0002	0.0002	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0009	ND	0.0097	0.0095	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	ND	ND	0.0043	0.0044	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO3)	10	ND	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.22	0.09	0.27	0.28	ND	mg/l as N	Dissolved
Nitrite (NO2)	1	ND	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.5	8.1	8.0	8.0	n/a	pH units	
Selenium (Se)	0.02	ND	ND	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO4)	250	10.76	2.67	10.34	10.12	ND	mg/l	Dissolved
TDS	400	107	23	115	119	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 -0.03	ND	ND	ND	ND	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	1.33	0.005	0.106	0.106	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"								

Table 2.1.2 Groundwater Quality Test Results – Sample Date May 16, 2023

Parameter	Standard	Cross Well	Caribou Well	Compliance Well	Compliance Well Duplicate	Compliance Well FB	Unit	Comments
Aluminum (Al)	5	0.008	0.093	0.115	0.09	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0282	0.0068	0.0299	0.0291	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	<3.2	<3.5	<3.5	<3.5	<3.4	mrem/year	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	ND	ND	ND	ND	ND	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0002	ND	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	4.54	0.52	0.96	0.83	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0079	0.1118	ND	ND	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	0.6	<0.1	1.3	<0.1	0.7	pCi/l	
Iron (Fe)	0.3	0.006	0.045	0.046	0.04	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0005	0.0005	0.0003	0.0003	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0012	0.0016	0.0079	0.0077	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0005	ND	0.0034	0.0036	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO3)	10	ND	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.42	0.12	0.32	0.30	ND	mg/l as N	Dissolved
Nitrite (NO2)	1	ND	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.0	6.7	7.4	7.4	n/a	pH units	
Selenium (Se)	0.02	ND	ND	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO4)	250	8.85	2.72	4.86	4.79	ND	mg/l	Dissolved
TDS	400	89	40	69	45	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 - 0.03	ND	ND	ND	ND	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	1.75	0.008	0.086	0.087	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"								

Table 2.1.3 Groundwater Quality Test Results – Sample Date June 14, 2023

Parameter	Standard	Cross Well	Caribou Well	Compliance Well	Compliance Well Duplicate	Compliance Well FB	Unit	Comments
Aluminum (Al)	5	ND	0.022	0.017	0.021	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0306	0.0064	0.0267	0.0261	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	<3.4	<3.1	<3.4	<3.4	<3.0	mrem/year	Std is in mrem/year; Lab reports pCi
Boron (B)	0.75	ND	ND	ND	ND	ND	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0001	ND	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	3.11	0.47	0.65	0.49	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0022	0.2949	ND	ND	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	0.9	0.5	0.7	1.2	0.5	pCi/l	
Iron (Fe)	0.3	0.08	0.02	0.014	0.019	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0008	0.0005	0.0002	0.0002	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0051	0.0023	0.0084	0.0082	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0023	ND	0.004	0.004	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO3)	10	ND	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.37	0.16	0.18	0.18	ND	mg/l as N	Dissolved
Nitrite (NO2)	1	ND	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.3	8.2	8.2	8.2	n/a	pH units	
Selenium (Se)	0.02	ND	ND	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO4)	250	10.48	2.80	3.70	3.90	ND	mg/l	Dissolved
TDS	400	112	22	55	45	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 -0.03	ND	ND	ND	ND	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	1.31	0.005	0.147	0.144	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, 2.2.2, and 2.2.3, provide sampling date and groundwater elevations taken at the time of water sample collection for the months of April, May, and June 2023, respectively. The groundwater elevations shown on the tables were used to develop the potentiometric water surfaces depicted on Figures 12, 13, and 14 for the month of April, May, and June 2023, respectively.

Table 2.2.1 Wells Groundwater Elevation – April 18,2023

Groundwater Elevation - April		
WELL	COLLAR ELEV.	4/18/2023
	Ft. AMSL	
Caribou	9,744.25	9,710.18
Cabin (Compliance)	9,677.35	9,647.99
Cross	9,692.85	9,653.69
Winze	9,697.48	9,559.80

Table 2.2.2 Wells Groundwater Elevation – May 16, 2023

Groundwater Elevation - May		
WELL	COLLAR ELEV.	5/16/2023
	Ft. AMSL	
Caribou	9,744.25	9,703.99
Cabin (Compliance)	9,677.35	9,626.75
Cross	9,692.85	9,634.09
Winze	9,697.48	9,577.40

Table 2.2.3 Wells Groundwater Elevation – June 14, 2023

Groundwater Elevation - June		
WELL	COLLAR ELEV.	6/14/2023
	Ft. AMSL	
Caribou	9,744.25	9,701.30
Cabin (Compliance)	9,677.35	9,628.85
Cross	9,692.85	9,634.30
Winze	9,697.48	9,676.40



Figure 12 Potentiometric Water Surface – April 2023

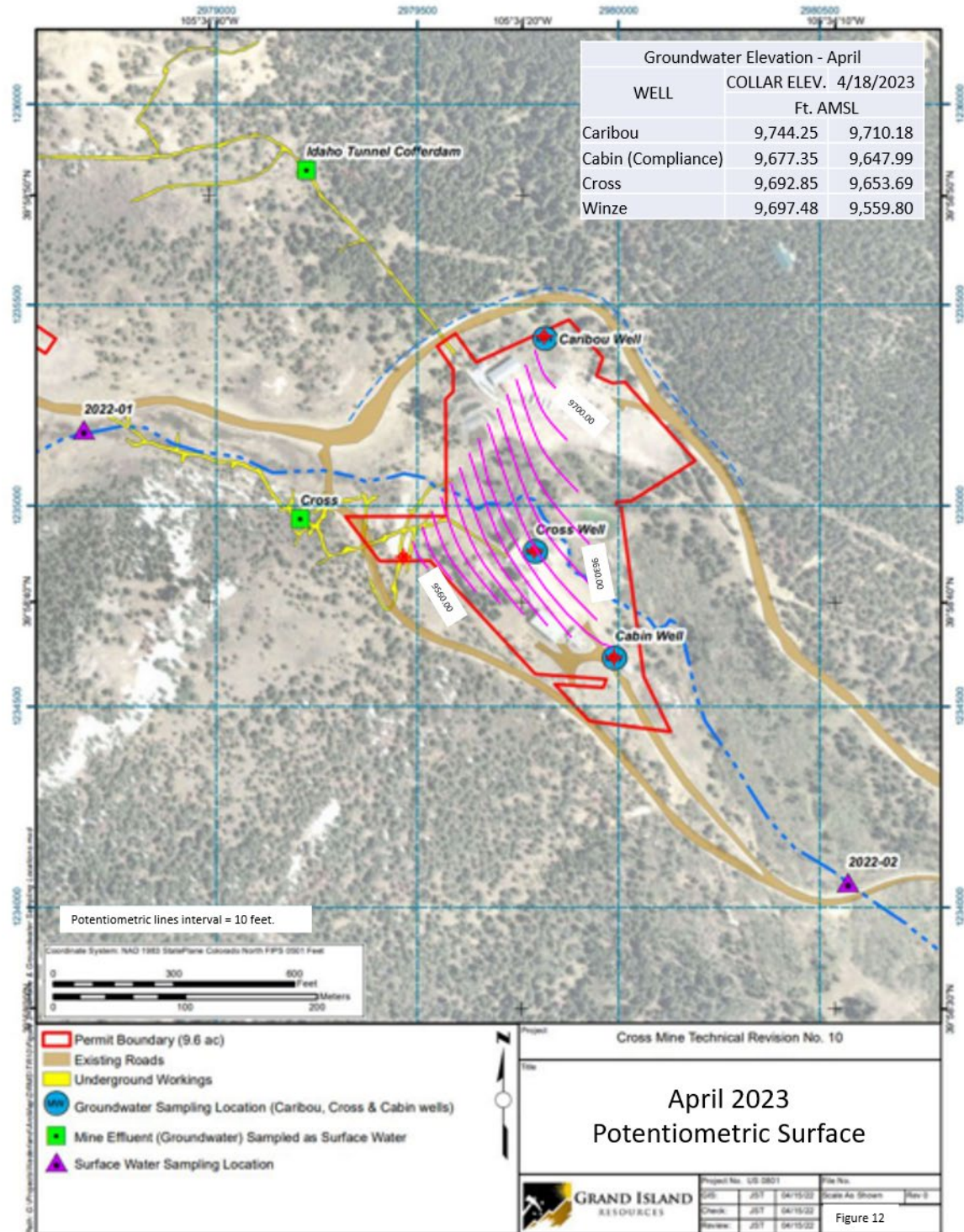




Figure 13 Potentiometric Water Surface – May 2023

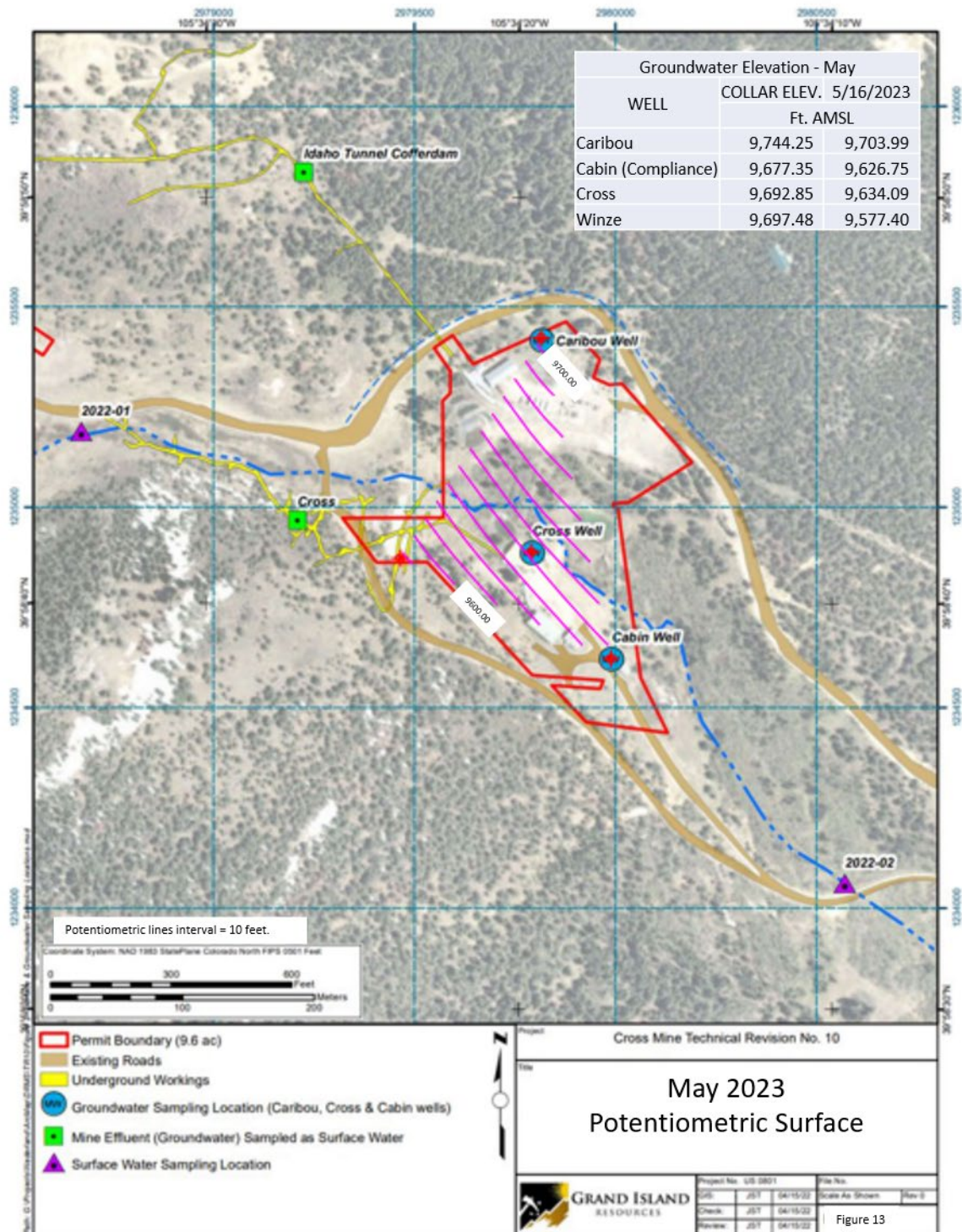
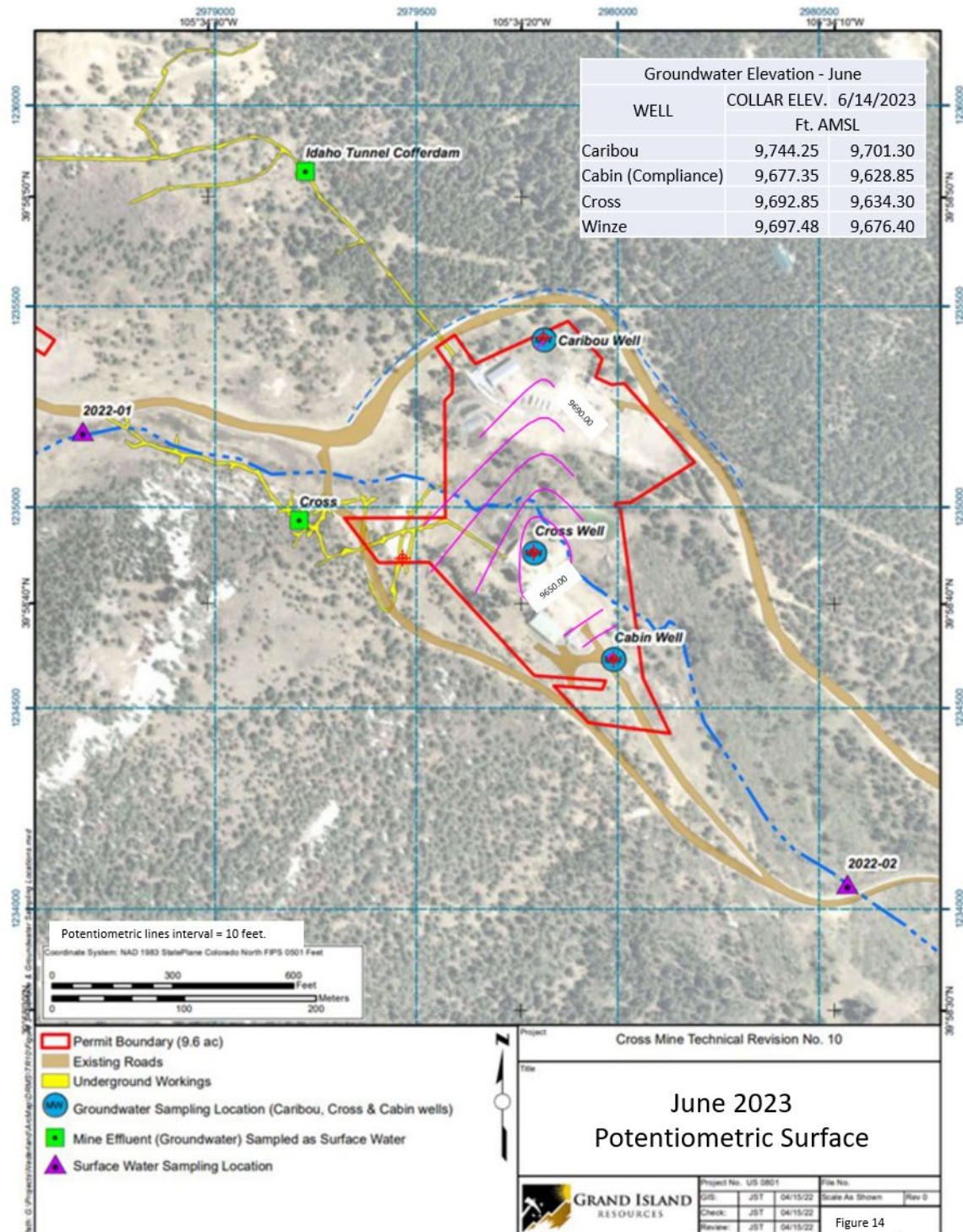




Figure 14 Potentiometric Water Surface – June 2023





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 located in the Cross Mine and one station is located in the Idaho Tunnel/Caribou Mine, namely Cross Portal and Caribou Portal, respectively. Water Quality Analytical Results are summarized on Tables 3.1., 3.2., and 3.3 for the months of April, May, and June 2023, respectively. 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.

Table 3.1 Effluent Quality Test Results – Sample Date April 18, 2023

Parameter	Standard	Cross Portal	Caribou Portal	Caribou Portal Duplicate	Caribou Portal FB	Unit	Comments
Aluminum (Al)	5	0.029	0.001	0.004	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0724	0.0588	0.06	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	<3.0	4.0	4.1	<3.0	mrem/year	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	ND	ND	ND	ND	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0011	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	0.65	0.49	0.47	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0025	ND	ND	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	1.5	3.9	5.5	<0.1	pCi/l	
Iron (Fe)	0.3	0.03	0.009	0.01	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0022	0.0004	0.0005	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0124	ND	ND	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0065	0.0065	0.0066	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO ₃)	10	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.09	0.08	0.07	ND	mg/l as N	Dissolved
Nitrite (NO ₂)	1	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	8.1	8.5	8.5	n/a	pH units	
Selenium (Se)	0.02	0.0014	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO ₄)	250	14.75	9.71	9.63	ND	mg/l	Dissolved
TDS	400	133	147	152	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 - 0.03	0.0009	0.0059	0.0062	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	0.239	0.006	0.006	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"							

Table 3.2 Effluent Quality Test Results – Sample Date May 16, 2023

Parameter	Standard	Cross Portal	Caribou Portal	Caribou Portal Duplicate	Caribou Portal FR	Unit	Comments
Aluminum (Al)	5	0.037	0.239	0.318	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0504	0.0055	0.0059	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	3.3	<3.2	<3.2	<3.1	mrem/year	Std is in mrem/year; Lab reports pCi/l
Boron (B)	0.75	ND	ND	ND	ND	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0009	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	0.86	0.3	0.34	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0021	0.0012	0.0014	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	1.6	0.9	0.1	0.5	pCi/l	
Iron (Fe)	0.3	0.026	0.087	0.099	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0021	0.0010	0.0012	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0113	0.0023	0.003	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0033	ND	ND	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO3)	10	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.21	0.29	0.45	ND	mg/l as N	Dissolved
Nitrite (NO2)	1	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	7.7	7.2	7.2	n/a	pH units	
Selenium (Se)	0.02	ND	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO4)	250	11.98	1.44	1.46	ND	mg/l	Dissolved
TDS	400	85	31	31	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 - 0.03	0.0004	ND	ND	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	0.179	0.014	0.021	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"							



Table 3.3 Effluent Quality Test Results – June 14, 2023

Parameter	Standard	Cross Portal	Caribou Portal	Caribou Portal Duplicate	Caribou Portal FB	Unit	Comments
Aluminum (Al)	5	0.015	0.028	0.034	ND	mg/l	Dissolved
Antimony (Sb)	0.006	ND	ND	ND	ND	mg/l	Dissolved
Arsenic (As)	0.01	ND	ND	ND	ND	mg/l	Dissolved
Barium (Ba)	2	0.0431	0.0266	0.0263	ND	mg/l	Dissolved
Beryllium (Be)	0.004	ND	ND	ND	ND	mg/l	Dissolved
Beta and Photon Emitters	4	3.1	<3.0	<3.0	<3.0	mrem/year	Std is in mrem/year; Lab reports pCi
Boron (B)	0.75	ND	ND	ND	ND	mg/l	Dissolved
Cadmium (Cd)	0.005	0.0010	ND	ND	ND	mg/l	Dissolved
Chloride (Cl)	250	0.88	0.38	0.4	ND	mg/l	Dissolved
Chromium (Cr)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Cobalt (Co)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Copper (Cu)	0.2	0.0024	ND	0.0008	ND	mg/l	Dissolved
Cyanide [Free] (Cn)	0.2	ND	ND	ND	ND	mg/l	Total
Fluoride (F)	2	ND	ND	ND	ND	mg/l	Dissolved
Gross Alpha Particle Activity	15	0.7	3.4	1.9	<0.1	pCi/l	
Iron (Fe)	0.3	0.017	0.033	0.035	ND	mg/l	Dissolved
Lead (Pb)	0.05	0.0018	0.0007	0.0007	ND	mg/l	Dissolved
Lithium (Li)	2.5	ND	ND	ND	ND	mg/l	Dissolved
Manganese (Mn)	0.05	0.0085	0.0053	0.0054	ND	mg/l	Dissolved
Mercury (inorganic) (Hg)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Molybdenum (Mo)	0.21	0.0030	0.0029	0.003	ND	mg/l	Dissolved
Nickel (Ni)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Nitrate (NO3)	10	ND	ND	ND	ND	mg/l as N	Dissolved
Nitrate-NitriteTotal	10	0.18	0.25	0.27	ND	mg/l as N	Dissolved
Nitrite (NO2)	1	ND	ND	ND	ND	mg/l as N	Dissolved
pH (field)	6.5 - 8.5	8.2	8.5	8.5	n/a	pH units	
Selenium (Se)	0.02	ND	ND	ND	ND	mg/l	Dissolved
Silver (Ag)	0.05	ND	ND	ND	ND	mg/l	Dissolved
Sulfate (SO4)	250	7.70	7.15	6.5	ND	mg/l	Dissolved
TDS	400	82	94	87	ND	mg/l	Total
Thallium (Tl)	0.002	ND	ND	ND	ND	mg/l	Dissolved
Uranium (U)	0.0168 - 0.03	0.0004	0.0018	0.0018	ND	mg/l	Dissolved
Vanadium (V)	0.1	ND	ND	ND	ND	mg/l	Dissolved
Zinc (Zn)	2	0.215	0.014	0.015	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"							



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

No samples were collected during the Month of April 2023 because no surface flows were observed at the time of April sampling event. Surface water analytical results are presented on tables 4.1 and 4.2 for the months of May and June 2023, respectively.

4.2. Surface Water Flows

No Flow measurements were taken during the Month of April 2023 because no surface flows were observed at the time of April sampling event.



Table 4.1 Surface Water Quality Test Results – Sample Date May 15, 2023

Parameter	Sta. 2022-01	Sta. 2022-02	Sta. 2022-02 Duplicate	Sta. 2022-02 Field Blank	Unit
Arsenic Potentially Dissolved	ND	ND	ND	ND	ug/L
Arsenic Total Recoverable	ND	ND	ND	ND	ug/L
Cadmium Potentially Dissolved	ND	0.19	ND	ND	ug/L
Cadmium Total Recoverable	ND	0.28	ND	ND	ug/L
Chromium Potentially Dissolved	ND	ND	2.4	ND	ug/L
Chromium Total Recoverable	ND	0.67	ND	ND	ug/L
Chromium, hexavalent Dissolved	ND	ND	ND	ND	mg/L
Chromium, hexavalent Total	ND	ND	ND	0.011	mg/L
Chromium, trivalent Potentially Dissolve	ND	ND	ND	ND	mg/L
Chromium, trivalent Total Recoverable	ND	ND	ND	ND	mg/L
Copper Potentially Dissolved	1.6	3.8	6.1	ND	ug/L
Copper Total Recoverable	2.2	4.9	3.2	ND	ug/L
Field pH	7.6	8.1	8.1	7.7	SU
Field Temperature	0.2	1.7	1.7	21	Degrees C
Iron Total Recoverable	630	1100	970	15	ug/L
Lead Potentially Dissolved	0.34	22	18	ND	ug/L
Lead Total Recoverable	0.58	24	14	ND	ug/L
Manganese Potentially Dissolved	28	54	43	ND	ug/L
Mercury, Potentially Dissolved	6.8	23	20	0.26	ng/L
Mercury, Total Recoverable	ND	ND	ND	ND	ug/L
Nickel Potentially Dissolved	ND	ND	ND	ND	ug/L
pH adj. to 25 deg C	7.9	7.5	7.4	7.7	SU
Selenium Potentially Dissolved	ND	ND	ND	ND	ug/L
Silver Potentially Dissolved	ND	ND	ND	ND	ug/L
Specific Conductance	54	68	67	ND	umhos/cm
Specific Conductance Total	54	68	67	ND	umhos/cm
Sulfide Total (SM 4500 S2 D)	0.17	0.13	ND	ND	mg/L
Sulfide Total (SM4500 S2 H)	ND	ND	ND	ND	mg/L
Temperature	20.3	20.2	19.5	20.7	Degrees C
Total Suspended Solids	5.2	39	51	ND	mg/L
Un-ionized Hydrogen Sulfide Total	ND	ND	ND	ND	mg/L
Zinc, Total Recoverable	2.2	26	32	ND	ug/L
Zinc Potentially Dissolved	8.4	32	25	6	ug/L
ND Indicates "Not Detected"					



Table 4.2 Effluent Quality Test Results – Sample Date June 14, 2023

Parameter	Sta. 2022-01	Sta. 2022-02	Sta. 2022-02 Duplicate	Sta. 2022-02 Field Blank	Unit
Arsenic Potentially Dissolved	ND	ND	ND	ND	ug/L
Arsenic Total Recoverable	ND	ND	ND	ND	ug/L
Cadmium Potentially Dissolved	ND	ND	ND	ND	ug/L
Cadmium Total Recoverable	ND	ND	ND	ND	ug/L
Chromium Potentially Dissolved	ND	0.59	0.53	0.52	ug/L
Chromium Total Recoverable	ND	ND	ND	ND	ug/L
Chromium, hexavalent Dissolved	ND	ND	ND	ND	mg/L
Chromium, hexavalent Total	ND	ND	ND	ND	mg/L
Chromium, trivalent Potentially Dissolved	ND	ND	ND	ND	mg/L
Chromium, trivalent Total Recoverable	ND	ND	ND	ND	mg/L
Copper Potentially Dissolved	2.4	2.6	2.7	ND	ug/L
Copper Total Recoverable	1.3	1.9	1.5	ND	ug/L
Field pH	7.9	8.2	8.2	8.5	SU
Field Temperature	9.3	7.8	7.8	22	Degrees C
Iron Total Recoverable	290	310	550	14	ug/L
Lead Potentially Dissolved	0.44	2.6	3.1	ND	ug/L
Lead Total Recoverable	0.3	2.5	2.6	ND	ug/L
Manganese Potentially Dissolved	8.5	14	12	ND	ug/L
Mercury, Potentially Dissolved	4.1	7.1	6.9	ND	ng/L
Mercury, Total Recoverable	ND	ND	ND	ND	ug/L
Nickel Potentially Dissolved	ND	ND	ND	ND	ug/L
pH adj. to 25 deg C	7.5	7.3	7.9	8.5	SU
Selenium Potentially Dissolved	ND	ND	ND	ND	ug/L
Silver Potentially Dissolved	ND	0.082	ND	ND	ug/L
Specific Conductance	44	78	77	ND	umhos/cm
Specific Conductance Total	44	78	77	ND	umhos/cm
Sulfide Total (SM 4500 S2 D)	ND	ND	ND	ND	mg/L
Sulfide Total (SM4500 S2 H)	ND	ND	ND	ND	mg/L
Temperature	21.1	21.9	22.1	22.1	Degrees C
Total Suspended Solids	1.6	3.6	3.2	ND	mg/L
Un-ionized Hydrogen Sulfide Total	ND	ND	ND	ND	mg/L
Zinc, Total Recoverable	3.5	11	15	ND	ug/L
Zinc Potentially Dissolved	7.1	26	19	7.6	ug/L
ND Indicates "Not Detected"					



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 4th Quarter 2022 Report; the conclusion of the review and phone conversation is that the SAP 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

Field Blank Quality Control Samples were collected from the Cabin Well (Compliance) for the months of April, May, and June. A Field Duplicate sample was collected from the Cabin Well (Compliance) during the March 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 Blank Quality Control Samples were collected from the Caribou Portal. A Field Duplicate sample was collected from the Caribou Portal during the March 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

No surface water samples were collected during the months of March, April, or May 2023 given that the stream on both sampling stations were dry.



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 Month of April, 6.2 Month of May and 6.3 Month of June present the monthly DMRs filed by The Operator with CDPHE for the 1st quarter 2023.

Table 6.1 DMR April 2023

DMR Copy of Record

Permit

Permit #:
Major:

CO0032751
No

Permittee:
Permittee Address:

Grand Island Resources LLC
12567 W Cedar Dr
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 04/01/23 to 04/30/23

DMR Due Date:

05/28/23

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								=	17.5			04 - deg C	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						=	6.7					=	7.7	12 - SU	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	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	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	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								<	10.0			<	10.0	28 - ug/L	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	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																
01114	Lead, total recoverable	1 - Effluent Gross	0	--	Sample								=	0.9			=	1.8	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	300.0 30DA AVG			<=	600.0 DAILY MX	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Value NODI																
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Sample								<	2.0			<	2.0	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	150.0 30DA AVG			<=	300.0 DAILY MX	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Value NODI																
01220	Chromium, hexavalent dissolved [as	1 - Effluent	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	01/30 - Monthly	GR - GRAB

Table 6.1 DMR April 2023 (continued)

Crj	Gross			Value NODI															
01303	Zinc, potentially dissolved	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
01304	Silver, potentially dissolved	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
01306	Copper, potentially dissolved	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
01309	Arsenic, potentially dissolved	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
01313	Cadmium, potentially dissolved	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
01314	Chromium, trivalent, potentially dissolved	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
01318	Lead, potentially dissolved	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
01319	Manganese, potentially dissolved	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
01322	Nickel, potentially dissolved	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
01323	Selenium, potentially dissolved	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
03582	Oil and grease	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
04262	Chromium, trivalent total recoverable	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	4	--	Sample														
					Permit Req.														
					Value NODI														
51202	Sulfide-hydrogen sulfide [undissociated]	1 - Effluent Gross	0	--	Sample														
					Permit Req.														
					Value NODI														

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Table 6.2 DMR May 2023

DMR Copy of Record

Permit

Permit #:
Major:

CO0032751
No

Permittee:
Permittee Address:

Grand Island Resources LLC
12567 W Cedar Dr
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 05/01/23 to 05/31/23

DMR Due Date:

06/28/23

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					Units	# 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			
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample							=	5.34		10.0	04 - deg C	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					=	6.7			=	7.6	12 - SU	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	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	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	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							<	10.0	<	10.0	28 - ug/L	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	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													
01114	Lead, total recoverable	1 - Effluent Gross	0	--	Sample							=	2.8	=	3.1	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Permit Req.							<=	300.0 30DA AVG	<=	600.0 DAILY MX	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Sample							<	2.0	<	2.0	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Permit Req.							<=	150.0 30DA AVG	<=	300.0 DAILY MX	28 - ug/L	02/30 - Twice Per Month	GR - GRAB
					Value NODI													
01220	Chromium, hexavalent dissolved [as	1 - Effluent	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	01/30 - Monthly	GR - GRAB

[illegible]

Table 6.3 DMR June 2023

DMR Copy of Record

Permit #:		00000791	Permittee:		Grand Island Resources LLC	Facility:		CROSS AND CARIBOU MINES										
Major:		No	Permittee Address:		12507 W Cedar Dr Lakewood, CO 80226	Facility Location:		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 06/01/23 to 06/06/23		DMR Due Date:		07/06/23	Status: NotDMR 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:			Title:			Telephone:												
Last Name:																		
No Data Indicator (NDDI)																		
Form NDDI:			--															
Code	Parameter Name	Monitoring Location	Session #	Permit NDDI		Quantity or Loading				Quality or Concentration				Units	# of E's	Frequency of Analysis	Sample Type	
						Qualifier 1	Value 1	Qualifier 2	Value 2		Qualifier 1	Value 1	Qualifier 2	Value 2				
00010	Temperature, water temp. centigrade	1 - Effluent Cross	0	--	Sample									15.0	mg/L	0	0000 - Continuous	RC - Recorder (auto)
					Permit Req.								Reg Mon ME WK AVE		Reg Mon DAILY MX		0000 - Continuous	RC - Recorder (auto)
					Value NDDI													
00400	pH	1 - Effluent Cross	0	--	Sample									7.0	mg/L	0	0000 - Twice Per Month	OR - GPAB
					Permit Req.								NO MINIMUM		NO MAXIMUM		0000 - Twice Per Month	OR - GPAB
					Value NDDI													
00030	Solids, total suspended	1 - Effluent Cross	0	--	Sample									1.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								30.0 30DA AVE		40.0 DAILY MX		0000 - Monthly	OR - GPAB
					Value NDDI													
00070	Arsenic, total recoverable	1 - Effluent Cross	0	--	Sample									1.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								Reg Mon 30DA AVE				0000 - Monthly	OR - GPAB
					Value NDDI													
00080	Iron, total recoverable	1 - Effluent Cross	0	--	Sample									100.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								Reg Mon 30DA AVE				0000 - Monthly	OR - GPAB
					Value NDDI													
01004	Zinc, total recoverable	1 - Effluent Cross	0	--	Sample									10.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								100.0 30DA AVE		100.0 DAILY MX		0000 - Monthly	OR - GPAB
					Value NDDI													
01113	Cadmium, total recoverable	1 - Effluent Cross	0	--	Sample									1.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								50.0 30DA AVE		50.0 DAILY MX		0000 - Monthly	OR - GPAB
					Value NDDI													
01114	Lead, total recoverable	1 - Effluent Cross	0	--	Sample									1.0	mg/L	0	0000 - Twice Per Month	OR - GPAB
					Permit Req.								500.0 30DA AVE		500.0 DAILY MX		0000 - Twice Per Month	OR - GPAB
					Value NDDI													
01118	Copper, total recoverable	1 - Effluent Cross	0	--	Sample									1.0	mg/L	0	0000 - Twice Per Month	OR - GPAB
					Permit Req.								100.0 30DA AVE		500.0 DAILY MX		0000 - Twice Per Month	OR - GPAB
					Value NDDI													
01220	Chromium, hexavalent dissolved (as	1 - Effluent Cross	0	--	Sample									50.0	mg/L	0	0000 - Monthly	OR - GPAB
					Permit Req.								Reg Mon 30DA AVE		Reg Mon DAILY MX		0000 - Monthly	OR - GPAB
					Value NDDI													

Table 6.3 DMR June 2023 (continued)

Coj	Conc			Value NOD															
01003	Zinc, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01004	Silver, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01005	Copper, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01006	Arsenic, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01010	Cadmium, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01014	Chromium, trivalent, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01016	Lead, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01018	Manganese, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01020	Nickel, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01023	Selenium, potentially dissolved	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01060	Oil and grease	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01060	Chromium, trivalent total recoverable	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01060	Flow, in conduit or flow treatment plant	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														
01000	Sulfide-hydrogen sulfide (undissociated)	1 - Effluent Conc	0	---	Sample														
					Permit Req.														
					Value NOD														

Table 6.3 DMR June 2023 (continued)

17000	Mercury, total (as Hg)	1 - Effluent Conc	0	—	Sample Permit Req.								0.0	0.0	20 ug/L	0	0/00 - Monthly	00 - 0000
					Value NOD								0.0	0.0	20 ug/L	0	0/00 - Monthly	00 - 0000
18000	Oil and grease visual	1 - Effluent Conc	0	—	Sample Permit Req.		—	0.0	AB - abstr0.pdf							0	0/00 - Twice Per Month	00 - VISUAL
					Value NOD			Reg (as Hg) MAX	AB - abstr0.pdf							0	0/00 - Twice Per Month	00 - VISUAL
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.																		
Self-Check Errors																		
No errors.																		
Comments																		
Attachments																		
Name														Type		Size		
2023_06_CrossCaribouMine_Results_1.pdf														pdf		1013 PM.0		
2023_06_CrossCaribouMine_Results_2.pdf														pdf		1021 PM.0		
2023_06_CrossCaribouMine_CoverLetter.pdf														pdf		1026 PM.0		
Report Last Saved By																		
Grand Island Resources LLC																		
User:					pdelaney@alexconsource.com													
Name:					Patrick Delaney													
E-Mail:					pdelaney@blackfoxmining.com													
Date/Time:					2023-07-06 12:16 (Time Zone: -06:00)													
Report Last Signed By																		
User:					pdelaney@alexconsource.com													
Name:					Patrick Delaney													
E-Mail:					pdelaney@blackfoxmining.com													
Date/Time:					2023-07-06 12:17 (Time Zone: -06:00)													

Appendices

APPENDICES

APPENDIX A GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

APPENDIX A.1 APRIL 2023 GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Cross Well

Sample Date/Time: 4/18/23 1:00 PM

Lab Number: 230418115-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	3.97 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.22 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	10.76 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.008 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0304 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	0.0044 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0006 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	0.0009 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Cross Well
Sample Date/Time: 4/18/23 1:00 PM
Lab Number: 230418115-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	1.33 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	17.2 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	ND	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 4/18/23 1:30 PM

Lab Number: 230418115-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	3.28 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.27 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	10.34 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.001 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0409 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0002 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	0.0097 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	0.0043 mg/L	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance Well
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.106 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	16.7 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.012 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	3.29 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.28 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	10.12 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.001 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0411 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0002 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	0.0095 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	0.0044 mg/L	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.106 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	16.8 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.011 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Compliance 03

Sample Date/Time: 4/18/23 1:30 PM

Lab Number: 230418115-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	ND	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	ND	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	0.01 mg/L	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	ND	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	ND	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 4/18/23 11:30 AM

Lab Number: 230418115-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.42 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.09 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	2.67 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.048 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0064 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	0.1625 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0006 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou Well
Sample Date/Time: 4/18/23 11:30 AM
Lab Number: 230418115-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.005 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	3.7 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.028 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Cross Portal

Sample Date/Time: 4/18/23 12:15 PM

Lab Number: 230418115-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.65 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.09 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	14.75 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.029 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0724 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	0.0011 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	0.0025 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0022 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	0.0124 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	0.0065 mg/L	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	0.0014 mg/L	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Cross Portal
Sample Date/Time: 4/18/23 12:15 PM
Lab Number: 230418115-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	0.0009 mg/L	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.239 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	25.2 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.030 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Caribou Portal

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.49 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.08 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	9.71 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.001 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0588 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0004 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	0.0065 mg/L	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal
Sample Date/Time: 4/18/23 11:15 AM
Lab Number: 230418115-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	0.0059 mg/L	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.006 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	26.1 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.009 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Caribou 02

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.47 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	0.07 mg/L	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	9.63 mg/L	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	0.004 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	0.0600 mg/L	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	0.0005 mg/L	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	0.0066 mg/L	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou 02
Sample Date/Time: 4/18/23 11:15 AM
Lab Number: 230418115-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	0.0062 mg/L	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	0.006 mg/L	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	27.1 mg/L	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	0.010 mg/L	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Caribou 03

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND	EPA 300.0	0.10 mg/L	4/19/23	QC64405	AMJ
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	4/19/23	QC64370	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	4/19/23	QC64402	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	4/19/23	QC64403	AMJ
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	4/20/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	4/19/23	QC64404	AMJ
Sulfate	ND	EPA 300.0	0.10 mg/L	4/19/23	QC64406	AMJ
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	4/20/23	QC64398	MLT
Aluminum	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	4/21/23	QC64413	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	4/21/23	QC64413	MBN
Barium	ND	EPA 200.8	0.0007 mg/L	4/21/23	QC64413	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	4/21/23	QC64413	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Lead	ND	EPA 200.8	0.0001 mg/L	4/21/23	QC64413	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	4/21/23	QC64413	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	4/21/23	QC64413	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Page 17 of 22

230418115

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Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou 03
Sample Date/Time: 4/18/23 11:15 AM
Lab Number: 230418115-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	4/21/23	QC64413	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	4/21/23	QC64413	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	4/21/23	QC64413	MBN
Boron	ND	EPA 200.7	0.01 mg/L	4/19/23	QC64373	MAT
Calcium	ND	EPA 200.7	0.1 mg/L	4/19/23	QC64373	MAT
Iron	ND	EPA 200.7	0.005 mg/L	4/19/23	QC64373	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230418115

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 4/18/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC64405	Blank	ND	EPA 300.0	4/18/23
Cyanide-Free	QC64370	Blank	ND	ASTM D4282-15	4/19/23
Fluoride	QC64402	Blank	ND	EPA 300.0	4/18/23
Mercury	QC64398	Method Blank	ND	EPA 245.7	4/20/23
Aluminum	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Antimony	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Arsenic	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Barium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Beryllium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Cadmium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Chromium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Cobalt	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Copper	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Lead	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Manganese	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Molybdenum	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Nickel	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Selenium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Silver	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Thallium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Uranium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Vanadium	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Zinc	QC64413	Method Blank	ND	EPA 200.8	4/18/23
Boron	QC64373	Method Blank	ND	EPA 200.7	4/18/23
Calcium	QC64373	Method Blank	ND	EPA 200.7	4/18/23
Iron	QC64373	Method Blank	ND	EPA 200.7	4/18/23
Nitrate Nitrogen	QC64403	Blank	ND	EPA 300.0	4/18/23
Nitrite Nitrogen	QC64404	Blank	ND	EPA 300.0	4/18/23
Sulfate	QC64406	Blank	ND	EPA 300.0	4/19/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC64405	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	101.4	-	
		MS	75 - 125	103.0	-	
Cyanide-Free	QC64370	Duplicate	0 - 20	-	0.0	ASTM D4282-15
		LCS	90 - 110	97.5	-	
		MS	75 - 125	108.5	-	
Fluoride	QC64402	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	96.6	-	
		MS	75 - 125	99.5	-	
Mercury	QC64398	Duplicate	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	108.6	-	

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ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Aluminum	QC64413	MS	80 - 120	98.0	-	EPA 200.8
		LCS	90 - 110	105.6	-	
		MS	70 - 130	112.9	-	
		MSD	0 - 10	-	5.3	
Antimony	QC64413	LCS	90 - 110	105.1	-	EPA 200.8
		MS	70 - 130	107.8	-	
		MSD	0 - 10	-	0.9	
Arsenic	QC64413	LCS	90 - 110	103.3	-	EPA 200.8
		MS	70 - 130	87.1	-	
		MSD	0 - 10	-	1.2	
Barium	QC64413	LCS	90 - 110	103.7	-	EPA 200.8
		MS	70 - 130	100.6	-	
		MSD	0 - 10	-	0.6	
Beryllium	QC64413	LCS	90 - 110	103.1	-	EPA 200.8
		MS	70 - 130	104.6	-	
		MSD	0 - 10	-	8.8	
Cadmium	QC64413	LCS	90 - 110	97.4	-	EPA 200.8
		MS	70 - 130	112.7	-	
		MSD	0 - 10	-	4.5	
Chromium	QC64413	LCS	90 - 110	104.8	-	EPA 200.8
		MS	70 - 130	105.3	-	
		MSD	0 - 10	-	2.8	
Cobalt	QC64413	LCS	90 - 110	105.3	-	EPA 200.8
		MS	70 - 130	100.4	-	
		MSD	0 - 10	-	1.0	
Copper	QC64413	LCS	90 - 110	101.4	-	EPA 200.8
		MS	70 - 130	119.5	-	
		MSD	0 - 10	-	2.3	
Lead	QC64413	LCS	90 - 110	100.0	-	EPA 200.8
		MS	70 - 130	97.9	-	
		MSD	0 - 10	-	7.1	
Manganese	QC64413	LCS	90 - 110	106.0	-	EPA 200.8
		MS	70 - 130	95.6	-	
		MSD	0 - 10	-	0.7	
Molybdenum	QC64413	LCS	90 - 110	101.7	-	EPA 200.8
		MS	70 - 130	121.4	-	
		MSD	0 - 10	-	1.3	
Nickel	QC64413	LCS	90 - 110	105.1	-	EPA 200.8
		MS	70 - 130	85.6	-	
		MSD	0 - 10	-	0.1	
Selenium	QC64413	LCS	90 - 110	99.9	-	EPA 200.8
		MS	70 - 130	108.8	-	
		MSD	0 - 10	-	8.8	
Silver	QC64413	LCS	90 - 110	104.8	-	EPA 200.8
		MS	70 - 130	102.3	-	
		MSD	0 - 10	-	1.8	
Thallium	QC64413	LCS	90 - 110	106.5	-	EPA 200.8
		MS	70 - 130	103.0	-	
		MSD	0 - 10	-	9.6	
Uranium	QC64413	LCS	90 - 110	102.3	-	EPA 200.8
		MS	70 - 130	109.3	-	

Abbreviations/ References:

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ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MSD	0 - 10	-	9.4	
Vanadium	QC64413	LCS	90 - 110	102.9	-	EPA 200.8
		MS	70 - 130	109.0	-	
		MSD	0 - 10	-	0.1	
Zinc	QC64413	LCS	90 - 110	106.3	-	EPA 200.8
		MS	70 - 130	101.8	-	
		MSD	0 - 10	-	0.0	
Boron	QC64373	Duplicate	0 - 20	-	0.0	EPA 200.7
		LCS	90 - 110	102.2	-	
		MS	75 - 125	108.0	-	
Calcium	QC64373	Duplicate	0 - 20	-	0.9	EPA 200.7
		LCS	90 - 110	94.1	-	
		MS	75 - 125	97.9	-	
Iron	QC64373	Duplicate	0 - 20	-	0.0	EPA 200.7
		LCS	90 - 110	97.5	-	
		MS	75 - 125	101.3	-	
Nitrate Nitrogen	QC64403	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	97.5	-	
		MS	75 - 125	95.1	-	
Nitrite Nitrogen	QC64404	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	90.6	-	
		MS	75 - 125	98.2	-	
Sulfate	QC64406	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	102.1	-	
		MS	75 - 125	106.1	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resources</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only) <div style="text-align: center;"> CAL Task 230418115 JML </div>	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bmolsonm@g.employment.edu</u>		Email: _____			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Commerce City Lab
 10411 Heinz Way
 Commerce City CO 80640

Lakewood Service Center
 610 Garrison Street, Unit E
 Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)			No. of Containers	Grab or (Check One Only) Composite	Tests Requested																		
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>			Soil <input type="checkbox"/>	Sludge <input type="checkbox"/>	Drinking Water <input type="checkbox"/>																
Date	Time	Sample ID																					
4/18/23	13:00	CROSS WELL	5	G	<div style="font-size: 2em; text-align: center;"> QB022050014 Revised 3/2023 "Monthly Groundwater" </div>																		
4/18/23	13:30	COMPLIANCE WELL	5	G																			
4/18/23	13:30	COMPLIANCE 02	5	G																			
4/18/23	13:30	COMPLIANCE 03	5	G																			
4/18/23	11:30	CARIBOU WELL	5	G																			
4/18/23	12:15	CROSS PORTAL	5	G																			
4/18/23	11:15	CARIBOU PORTAL	5	G																			
4/18/23	11:15	CARIBOU 02	5	G																			
4/18/23	11:15	CARIBOU 03	5	G																			
Instructions: <u>1 HNO3 bottle & Radionuclide bottle field filtered</u>			C/S Info: _____			Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>																	
Relinquished By: <u>Brooke Moran</u>			Date/Time: <u>4/18/23 3:30</u>			Received By: <u>[Signature]</u>			Date/Time: <u>4/18/23 2pm</u>			Relinquished By: <u>[Signature]</u>			Date/Time: <u>4/18/23 4pm</u>			Received By: <u>[Signature]</u>			Date/Time: <u>4/18/23</u>		



Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Lab Control ID: 23H01750

Received: Apr 21, 2023

Reported: May 19, 2023

Purchase Order No.

None Received

Customer ID: 20040H

Account ID: Z01034

Stuart Nielson
Colorado Analytical Laboratories, Inc.
10411 Heinz Way
Commerce City, CO 80640

ANALYTICAL REPORT

*Report may only be copied in its entirety.
Results reported herein relate only to discrete samples
submitted by the client. Hazen Research, Inc. does not warrant
that the results are representative of anything other than the
samples that were received in the laboratory*

By: Michelle Stringer for
Roxanne Sullivan
Analytical Laboratories Director

Customer ID: 20040H

Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID		23H01750-001						
Customer Sample ID		230418115-01C - Monthly Groundwater - Cross Well sampled on 04/18/23 @ 1300						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.2	0.9	0.1	SM 7110 B	5/10/23 @ 1159	VP
Gross Beta	pCi/L	T	<2.8	2.0	2.8	SM 7110 B	5/10/23 @ 1159	VP

Lab Sample ID		23H01750-002						
Customer Sample ID		230418115-02C - Monthly Groundwater - Compliance Well sampled on 04/18/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	<0.1	0.8	0.1	SM 7110 B	5/10/23 @ 1201	VP
Gross Beta	pCi/L	T	<2.7	2.2	2.7	SM 7110 B	5/10/23 @ 1201	VP

Lab Sample ID		23H01750-003						
Customer Sample ID		230418115-03C - Monthly Groundwater - Compliance 02 sampled on 04/18/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.4	0.9	0.1	SM 7110 B	5/10/23 @ 1203	VP
Gross Beta	pCi/L	T	<2.8	2.0	2.8	SM 7110 B	5/10/23 @ 1203	VP

Lab Sample ID		23H01750-004						
Customer Sample ID		230418115-04C - Monthly Groundwater - Compliance 03 sampled on 04/18/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.5	0.8	0.1	SM 7110 B	5/10/23 @ 1205	VP
Gross Beta	pCi/L	T	<3.0	2.0	3.0	SM 7110 B	5/10/23 @ 1205	VP

Lab Sample ID		23H01750-005						
Customer Sample ID		230418115-05C - Monthly Groundwater - Caribou Well sampled on 04/18/23 @ 1130						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.2	0.9	0.1	SM 7110 B	5/10/23 @ 1207	VP
Gross Beta	pCi/L	T	<3.0	2.0	3.0	SM 7110 B	5/10/23 @ 1207	VP

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level,
1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample
(AR) = As Received < = Less Than

Customer ID: 20040H

Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
 Colorado Analytical Laboratories, Inc.

Lab Sample ID		23H01750-006						
Customer Sample ID		230418115-06C - Monthly Groundwater - Cross Portal sampled on 04/18/23 @ 1215						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	1.5	1.4	0.1	SM 7110 B	5/10/23 @ 1209	VP
Gross Beta	pCi/L	T	<3.0	2.1	3.0	SM 7110 B	5/10/23 @ 1209	VP

Lab Sample ID		23H01750-007						
Customer Sample ID		230418115-07C - Monthly Groundwater - Caribou Portal sampled on 04/18/23 @ 1115						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	3.9	1.9	0.1	SM 7110 B	5/10/23 @ 1211	VP
Gross Beta	pCi/L	T	4.0	2.4	3.0	SM 7110 B	5/10/23 @ 1211	VP

Lab Sample ID		23H01750-008						
Customer Sample ID		230418115-08C - Monthly Groundwater - Caribou 02 sampled on 04/18/23 @ 1115						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	5.5	2.2	0.1	SM 7110 B	5/10/23 @ 1213	VP
Gross Beta	pCi/L	T	4.1	2.4	2.7	SM 7110 B	5/10/23 @ 1213	VP

Lab Sample ID		23H01750-009						
Customer Sample ID		230418115-09C - Monthly Groundwater - Caribou 03 sampled on 04/18/23 @ 1115						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	<0.1	0.6	0.1	SM 7110 B	5/10/23 @ 1215	VP
Gross Beta	pCi/L	T	<3.0	2.0	3.0	SM 7110 B	5/10/23 @ 1215	VP

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level,
 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample
 (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 05/10/2023

Batch QC Summary Form

Analyte: Gross Alpha

Control Standard/LFB: ID: C11a-04 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11a-04 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(46.3) - (1.000) - (0.0)}{57.4} \times 100 = 81\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	x		
Spike Recovery	70 - 130 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

23H01743	_____
23H01744	_____
23H01706	_____
23H01707	_____
23H01717	_____
23H01745	_____
23H01747	_____
23H01750	_____
23H01466	_____
_____	_____

Evaluator:

Michelle Stringer _____

05/18/2023

Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 05/10/2023

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11a-04 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11a-04 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(37.3) (1.000) - (0.5) (0.200)}{44} \times 100 = 85\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

23H01743 _____
23H01744 _____
23H01706 _____
23H01707 _____
23H01717 _____
23H01745 _____
23H01747 _____
23H01750 _____
23H01466 _____

Evaluator:

Michelle Stringer _____

05/18/2023

Date



Ship To: Hazen Research
 Preserved: Y / N
 HNO3 Lot #: N/A
 Date Preserved: N

Report To Information	Bill To Information (If different from report to)	Project Name
Company Name: <u>Colorado Analytical Laboratory</u>		<u>Monthly Groundwater</u>
Report To: <u>Stuart Nielson</u>		
E-Mail: <u>stuartnielson@coloradotab.com</u>		
Address:	Address:	Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>10411 Heinz Way</u>	CAL TASK 230418115	Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>Commerce City, CO 80640</u>	JML	
Phone: <u>303-659-2313</u>		

Tests Requested

[illegible]

Comment:

Relinquished by: (Signature) <i>Adams</i>	Date: Time: <i>4/19/23</i> <i>9:50</i>	Received by: (Signature)	Date: Time:
	Date: Time:	Relinquished by: (Signature)	Date: Time:
	Date: Time:	Received by: (Signature) <i>PR</i>	Date: Time: <i>RECEIVED APR 21 1300</i>

4/11 Pres. PR 4/22/23/1300
4/11 Pres. PR 4/21/23/1315

Page 1 of 1



ANALYTICAL SUMMARY REPORT

May 04, 2023

Colorado Analytical Laboratories Inc
PO Box 507
Brighton, CO 80601-0507

Work Order: C23040617 Quote ID: C15681

Project Name: 230418115; Monthly Groundwater

Energy Laboratories, Inc. Casper WY received the following 9 samples for Colorado Analytical Laboratories Inc on 4/20/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C23040617-001	230418115-01D - Cross Well	04/18/23 13:00	04/20/23	Groundwater	Metals by ICP/ICPMS, Dissolved
C23040617-002	230418115-2D - Compliance Well	04/18/23 13:30	04/20/23	Groundwater	Same As Above
C23040617-003	230418115-3D - Compliance 02	04/18/23 13:30	04/20/23	Groundwater	Same As Above
C23040617-004	230418115-4D - Compliance 03	04/18/23 13:30	04/20/23	Groundwater	Same As Above
C23040617-005	230418115-5D - Caribou Well	04/18/23 11:30	04/20/23	Groundwater	Same As Above
C23040617-006	230418115-6D - Cross Portal	04/18/23 12:15	04/20/23	Groundwater	Same As Above
C23040617-007	230418115-7D - Caribou Portal	04/18/23 11:15	04/20/23	Groundwater	Same As Above
C23040617-008	230418115-8D - Caribou 02	04/18/23 11:15	04/20/23	Groundwater	Same As Above
C23040617-009	230418115-9D - Caribou 03	04/18/23 11:15	04/20/23	Groundwater	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager .

Report Approved By:



CLIENT: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Work Order: C23040617

Report Date: 05/04/23

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-001
Client Sample ID: 230418115-01D - Cross Well

Report Date: 05/04/23
Collection Date: 04/18/23 13:00
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 17:43 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-002
Client Sample ID: 230418115-2D - Compliance Well

Report Date: 05/04/23
Collection Date: 04/18/23 13:30
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 17:47 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-003
Client Sample ID: 230418115-3D - Compliance 02

Report Date: 05/04/23
Collection Date: 04/18/23 13:30
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 17:52 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-004
Client Sample ID: 230418115-4D - Compliance 03

Report Date: 05/04/23
Collection Date: 04/18/23 13:30
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 18:11 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-005
Client Sample ID: 230418115-5D - Caribou Well

Report Date: 05/04/23
Collection Date: 04/18/23 11:30
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 17:57 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-006
Client Sample ID: 230418115-6D - Cross Portal

Report Date: 05/04/23
Collection Date: 04/18/23 12:15
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 18:01 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-007
Client Sample ID: 230418115-7D - Caribou Portal

Report Date: 05/04/23
Collection Date: 04/18/23 11:15
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 18:06 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-008
Client Sample ID: 230418115-8D - Caribou 02

Report Date: 05/04/23
Collection Date: 04/18/23 11:15
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 20:19 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230418115; Monthly Groundwater
Lab ID: C23040617-009
Client Sample ID: 230418115-9D - Caribou 03

Report Date: 05/04/23
Collection Date: 04/18/23 11:15
Date Received: 04/20/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	04/24/23 20:24 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Work Order: C23040617

Report Date: 04/27/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Analytical Run: ICPMS207-B_230424A
Lab ID: QCS		Initial Calibration Verification Standard								04/24/23 17:28
Lithium		0.0506	mg/L	0.012	101	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								04/24/23 17:33
Lithium		0.624	mg/L	0.012	100	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								04/24/23 19:41
Lithium		0.626	mg/L	0.012	100	90	110			
Method: E200.8										Batch: R400949
Lab ID: LRB		Method Blank								Run: ICPMS207-B_230424A 04/24/23 12:05
Lithium		ND	mg/L	0.002						
Lab ID: LFB		Laboratory Fortified Blank								Run: ICPMS207-B_230424A 04/24/23 12:15
Lithium		2.54	mg/L	0.013	102	85	115			
Lab ID: C23040617-004AMS		Sample Matrix Spike								Run: ICPMS207-B_230424A 04/24/23 18:16
Lithium		2.60	mg/L	0.10	104	70	130			E
Lab ID: C23040617-004AMSD		Sample Matrix Spike Duplicate								Run: ICPMS207-B_230424A 04/24/23 18:20
Lithium		2.56	mg/L	0.10	102	70	130	1.6	20	E
Lab ID: B23041532-004BMS		Sample Matrix Spike								Run: ICPMS207-B_230424A 04/24/23 21:02
Lithium		2.62	mg/L	0.10	104	70	130			E
Lab ID: B23041532-004BMDS		Sample Matrix Spike Duplicate								Run: ICPMS207-B_230424A 04/24/23 21:06
Lithium		2.63	mg/L	0.10	104	70	130	0.4	20	E

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

E - Estimated value - result exceeds the instrument upper quantitation limit



Work Order Receipt Checklist

Colorado Analytical Laboratories Inc

C23040617

Login completed by: Hannah R. Johnson

Date Received: 4/20/2023

Reviewed by: cjohnson

Received by: mar

Reviewed Date: 4/21/2023

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	4.9°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as —dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None



Ship To: Energy Labs

CP2040017

Sub-Lab Chain of Custody Form

Report To Information Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u> Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>		Bill To Information (if different from report to)		Project Name <u>Monthly Groundwater</u>	
Address:		Address:		CAL TASK 230418115 JML	
				Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Tests Requested

Sample Date/Time	Sample ID	Matrix	Metals (Sub)	Container Type
4/18/23	1:00 PM 230418115-01D - Cross Well	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	1:30 PM 230418115-02D - Compliance Well	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	1:30 PM 230418115-03D - Compliance 02	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	1:30 PM 230418115-04D - Compliance 03	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	11:30 AM 230418115-05D - Caribou Well	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	12:15 PM 230418115-06D - Cross Portal	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	11:15 AM 230418115-07D - Caribou Portal	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	11:15 AM 230418115-08D - Caribou 02	Water - Ground	X	250 ml Cylinder - HNO3
4/18/23	11:15 AM 230418115-09D - Caribou 03	Water - Ground	X	250 ml Cylinder - HNO3

3.0

Relinquished by: (Signature) <i>[Signature]</i>	Date: Time: <u>4/19/23</u> <u>1500</u>	Received by: (Signature) <i>[Signature]</i>	Date: Time: <u>4/20/2023</u> <u>1100</u>
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Ship To: Energy Labs

Boyd

Sub-Lab Chain of Custody Form

Report To Information Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u> Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>		Bill To Information (If different from report to)		Project Name <u>Monthly Groundwater</u>	
		Address:		CAL TASK 230418115 JML	
				Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Tests Requested

Metals (Sub)

Sample Date/Time	Sample ID	Matrix
Comment: 230418115-01D - Run Dissolved Lithium-Sample was field filtered. 230418115-02D - Run Dissolved Lithium-Sample was field filtered. 230418115-03D - Run Dissolved Lithium-Sample was field filtered. 230418115-04D - Run Dissolved Lithium-Sample was field filtered. 230418115-05D - Run Dissolved Lithium-Sample was field filtered. 230418115-06D - Run Dissolved Lithium-Sample was field filtered. 230418115-07D - Run Dissolved Lithium-Sample was field filtered. 230418115-08D - Run Dissolved Lithium-Sample was field filtered. 230418115-09D - Run Dissolved Lithium-Sample was field filtered.		

Container Type

Relinquished by: (Signature)	Date: Time:	Received by: (Signature) <i>M. Ray</i>	Date: Time: <i>4/20/2023</i>	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
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Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Cross Well

Sample Date/Time: 4/18/23 1:00 PM

Lab Number: 230418115-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	62.4 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	41.9 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-2.40 units	SM 2330-B	units	4/25/23	-	SAN
pH	5.96 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	62.4 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	107 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 4/18/23

Date Reported: 5/22/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 4/18/23 1:30 PM

Lab Number: 230418115-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	59.7 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	41.1 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-2.18 units	SM 2330-B	units	4/25/23	-	SAN
pH	6.21 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	59.7 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	115 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	59.5 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	39.2 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-2.21 units	SM 2330-B	units	4/25/23	-	SAN
pH	6.20 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	59.5 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	119 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 4/18/23 1:30 PM
Lab Number: 230418115-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	4.6 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	0.1 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-7.01 units	SM 2330-B	units	4/25/23	-	SAN
pH	5.03 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	4.6 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	ND	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 4/18/23 11:30 AM

Lab Number: 230418115-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	18.2 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	9.0 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-4.02 units	SM 2330-B	units	4/25/23	-	SAN
pH	5.47 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	18.2 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	23 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Cross Portal

Sample Date/Time: 4/18/23 12:15 PM

Lab Number: 230418115-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	92.8 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	61.4 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-0.91 units	SM 2330-B	units	4/25/23	-	SAN
pH	7.11 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	92.8 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	133 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	116.8 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	63.8 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-0.26 units	SM 2330-B	units	4/25/23	-	SAN
pH	7.65 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	116.8 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	147 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou 02

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	129.4 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	61.6 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-0.14 units	SM 2330-B	units	4/25/23	-	SAN
pH	7.74 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	129.4 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	152 mg/L	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230418115

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230418115
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 4/18/23
Date Reported: 5/22/23
Matrix: Water - Ground

Customer Sample ID Caribou 03

Sample Date/Time: 4/18/23 11:15 AM

Lab Number: 230418115-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Calcium as CaCO ₃	0.2 mg/L	EPA 200.7	0.1 mg/L	4/19/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	4/21/23	-	DPL
Langelier Index	-6.34 units	SM 2330-B	units	4/25/23	-	SAN
pH	5.65 units	SM 4500-H-B	0.01 units	4/18/23	-	TAB
Temperature	20 °C	SM 4500-H-B	1 °C	4/18/23	-	TAB
Total Alkalinity	ND	SM 2320-B	4.0 mg/L as CaCO ₃	4/21/23	QC64455	DPL
Total Dissolved Solids	ND	SM 2540-C	5 mg/L	4/19/23	QC64347	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230418115

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 4/18/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC64455	Blank	ND	SM 2320-B	4/21/23
Total Dissolved Solids	QC64347	Blank	ND	SM 2540-C	4/18/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC64455	Duplicate	0 - 20	-	1.3	SM 2320-B
		LCS	90 - 110	97.9	-	
		LCS-2	90 - 110	98.2	-	
Total Dissolved Solids	QC64347	Duplicate	0 - 20	-	10.4	SM 2540-C
		LCS	85 - 115	104.7	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resources</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only) CAL Task 230418115 JML	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bmolsonm@g.employment.com</u>		Email: <u>edu</u>			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
610 Garrison Street, Unit E
Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)			No. of Containers	Grab or (Check One Only) Composite	Tests Requested												
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>			Soil <input type="checkbox"/>	Sludge <input type="checkbox"/>	Drinking Water <input type="checkbox"/>										
Date	Time	Sample ID															
4/18/23	13:00	CROSS WELL	5	G	Q B 0 2 2 0 5 0 0 1 4												
4/18/23	13:30	COMPLIANCE WELL	5	G	Revised 3/2023												
4/18/23	13:30	COMPLIANCE 02	5	G	"Monthly Groundwater"												
4/18/23	13:30	COMPLIANCE 03	5	G													
4/18/23	11:30	CARIBOU WELL	5	G													
4/18/23	12:15	CROSS PORTAL	5	G													
4/18/23	11:15	CARIBOU PORTAL	5	G													
4/18/23	11:15	CARIBOU 02	5	G													
4/18/23	11:15	CARIBOU 03	5	G													
Instructions: <u>1 HNO3 bottle & Radionuclide bottle field filtered</u>			C/S Info: <u>HD</u>		Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>												
Relinquished By: <u>Brooke Moran</u>			Deliver Via: <u>HD</u>		Temp. <u>4.3 C/Ice</u> Sample Pres. Yes <input type="checkbox"/> No <input type="checkbox"/>												
Date/Time: <u>4/18/23 3:30</u>			Received By: <u>[Signature]</u>		Date/Time: <u>4/18/23 3:44</u>												
Page 1 of 1			Relinquished By: <u>[Signature]</u>		Date/Time: <u>4/18/23</u>												

APPENDIX A.2 MAY 2023 GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Cross Well

Sample Date/Time: 5/16/23 1:00 PM

Lab Number: 230516111-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	4.54 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.42 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	8.85 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.008 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0282 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	0.0002 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	0.0079 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0005 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0012 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	0.0005 mg/L	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Cross Well
Sample Date/Time: 5/16/23 1:00 PM
Lab Number: 230516111-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	1.75 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	16.4 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.006 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 5/16/23 1:30 PM

Lab Number: 230516111-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.96 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.32 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	4.86 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.115 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0299 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0003 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0079 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	0.0034 mg/L	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance Well
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.086 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	10.1 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.046 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.83 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.30 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	4.79 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.090 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0291 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0003 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0077 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	0.0036 mg/L	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

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mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.087 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	9.8 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.040 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

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ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Compliance 03

Sample Date/Time: 5/16/23 1:30 PM

Lab Number: 230516111-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	ND	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
<u>Dissolved</u>						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	ND	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	ND	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	ND	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
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ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 5/16/23 11:30 AM

Lab Number: 230516111-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.52 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.12 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	2.72 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.093 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0068 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	0.1118 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0005 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0016 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou Well
Sample Date/Time: 5/16/23 11:30 AM
Lab Number: 230516111-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.008 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	3.8 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.045 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Cross Portal

Sample Date/Time: 5/16/23 12:15 PM

Lab Number: 230516111-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.86 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.21 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	11.98 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.037 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0504 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	0.0009 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	0.0021 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0021 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0113 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	0.0033 mg/L	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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230516111

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Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Cross Portal
Sample Date/Time: 5/16/23 12:15 PM
Lab Number: 230516111-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	0.0004 mg/L	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.179 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	18.7 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.026 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Caribou Portal

Sample Date/Time: 5/16/23 11:15 AM

Lab Number: 230516111-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.30 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.29 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	1.44 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.239 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0055 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	0.0012 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0010 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0023 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal
Sample Date/Time: 5/16/23 11:15 AM
Lab Number: 230516111-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i><u>Dissolved</u></i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.014 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	3.0 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.087 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
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ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Caribou 02

Sample Date/Time: 5/16/23 11:15 AM

Lab Number: 230516111-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.34 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	0.45 mg/L	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	1.46 mg/L	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
Dissolved						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	0.318 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	0.0059 mg/L	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	0.0014 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	0.0012 mg/L	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	0.0030 mg/L	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

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ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

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Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou 02
Sample Date/Time: 5/16/23 11:15 AM
Lab Number: 230516111-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	0.021 mg/L	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	3.1 mg/L	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	0.099 mg/L	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou 03
Sample Date/Time: 5/16/23 11:15 AM
Lab Number: 230516111-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND	EPA 300.0	0.10 mg/L	5/17/23	QC65069	NRP
Cyanide-Free	ND	ASTM D4282-15	0.005 mg/L	5/17/23	QC65038	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	5/17/23	QC65070	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	5/17/23	QC65071	NRP
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	5/19/23	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	5/17/23	QC65072	NRP
Sulfate	ND	EPA 300.0	0.10 mg/L	5/17/23	QC65073	NRP
<u>Dissolved</u>						
Mercury	ND	EPA 245.7	0.0002 mg/L	5/23/23	QC65164	MAT
Aluminum	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	5/17/23	QC65041	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	5/17/23	QC65041	MBN
Barium	ND	EPA 200.8	0.0007 mg/L	5/17/23	QC65041	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	5/17/23	QC65041	MBN
Cobalt	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Copper	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Lead	ND	EPA 200.8	0.0001 mg/L	5/17/23	QC65041	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN
Molybdenum	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	5/17/23	QC65041	MBN
Selenium	ND	EPA 200.8	0.0008 mg/L	5/17/23	QC65041	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
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ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou 03
Sample Date/Time: 5/16/23 11:15 AM
Lab Number: 230516111-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Silver	ND	EPA 200.8	0.0005 mg/L	5/17/23	QC65041	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Uranium	ND	EPA 200.8	0.0002 mg/L	5/17/23	QC65041	MBN
Vanadium	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	5/17/23	QC65041	MBN
Boron	ND	EPA 200.7	0.05 mg/L	5/18/23	QC65087	MAT
Calcium	ND	EPA 200.7	0.1 mg/L	5/18/23	QC65087	MAT
Iron	ND	EPA 200.7	0.005 mg/L	5/18/23	QC65087	MAT

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230516111

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 5/16/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC65069	Blank	ND	EPA 300.0	5/17/23
Cyanide-Free	QC65038	Blank	ND	ASTM D4282-15	5/17/23
Fluoride	QC65070	Blank	ND	EPA 300.0	5/17/23
Mercury	QC65164	Method Blank	ND	EPA 245.7	5/23/23
Aluminum	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Antimony	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Arsenic	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Barium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Beryllium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Cadmium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Chromium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Cobalt	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Copper	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Lead	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Manganese	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Molybdenum	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Nickel	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Selenium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Silver	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Thallium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Uranium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Vanadium	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Zinc	QC65041	Method Blank	ND	EPA 200.8	5/16/23
Boron	QC65087	Method Blank	ND	EPA 200.7	5/16/23
Calcium	QC65087	Method Blank	ND	EPA 200.7	5/16/23
Iron	QC65087	Method Blank	ND	EPA 200.7	5/16/23
Nitrate Nitrogen	QC65071	Blank	ND	EPA 300.0	5/17/23
Nitrite Nitrogen	QC65072	Blank	ND	EPA 300.0	5/17/23
Sulfate	QC65073	Blank	ND	EPA 300.0	5/17/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC65069	Duplicate	0 - 20	-	3.1	EPA 300.0
		LCS	90 - 110	104.9	-	
		MS	75 - 125	103.3	-	
Cyanide-Free	QC65038	Duplicate	0 - 20	-	0.0	ASTM D4282-15
		LCS	90 - 110	100.3	-	
		MS	75 - 125	107.5	-	
Fluoride	QC65070	Duplicate	0 - 20	-	7.7	EPA 300.0
		LCS	90 - 110	98.3	-	
		MS	75 - 125	98.2	-	
Mercury	QC65164	Duplicate	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	106.4	-	

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Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Aluminum	QC65041	MS	80 - 120	102.0	-	EPA 200.8
		LCS	90 - 110	105.7	-	
		MS	70 - 130	112.1	-	
		MSD	0 - 10	-	4.8	
Antimony	QC65041	LCS	90 - 110	109.6	-	EPA 200.8
		MS	70 - 130	111.2	-	
		MSD	0 - 10	-	2.5	
Arsenic	QC65041	LCS	90 - 110	104.9	-	EPA 200.8
		MS	70 - 130	107.5	-	
		MSD	0 - 10	-	4.8	
Barium	QC65041	LCS	90 - 110	106.2	-	EPA 200.8
		MS	70 - 130	104.3	-	
		MSD	0 - 10	-	2.5	
Beryllium	QC65041	LCS	90 - 110	107.6	-	EPA 200.8
		MS	70 - 130	105.2	-	
		MSD	0 - 10	-	4.9	
Cadmium	QC65041	LCS	90 - 110	103.0	-	EPA 200.8
		MS	70 - 130	110.3	-	
		MSD	0 - 10	-	1.8	
Chromium	QC65041	LCS	90 - 110	107.5	-	EPA 200.8
		MS	70 - 130	106.7	-	
		MSD	0 - 10	-	3.1	
Cobalt	QC65041	LCS	90 - 110	108.4	-	EPA 200.8
		MS	70 - 130	107.1	-	
		MSD	0 - 10	-	3.3	
Copper	QC65041	LCS	90 - 110	103.8	-	EPA 200.8
		MS	70 - 130	103.2	-	
		MSD	0 - 10	-	1.3	
Lead	QC65041	LCS	90 - 110	102.8	-	EPA 200.8
		MS	70 - 130	103.5	-	
		MSD	0 - 10	-	2.2	
Manganese	QC65041	LCS	90 - 110	108.9	-	EPA 200.8
		MS	70 - 130	108.7	-	
		MSD	0 - 10	-	3.5	
Molybdenum	QC65041	LCS	90 - 110	101.1	-	EPA 200.8
		MS	70 - 130	93.5	-	
		MSD	0 - 10	-	0.4	
Nickel	QC65041	LCS	90 - 110	105.3	-	EPA 200.8
		MS	70 - 130	105.9	-	
		MSD	0 - 10	-	4.5	
Selenium	QC65041	LCS	90 - 110	94.9	-	EPA 200.8
		MS	70 - 130	104.6	-	
		MSD	0 - 10	-	0.8	
Silver	QC65041	LCS	90 - 110	97.4	-	EPA 200.8
		MS	70 - 130	101.7	-	
		MSD	0 - 10	-	0.1	
Thallium	QC65041	LCS	90 - 110	107.9	-	EPA 200.8
		MS	70 - 130	108.6	-	
		MSD	0 - 10	-	0.3	
Uranium	QC65041	LCS	90 - 110	104.9	-	EPA 200.8
		MS	70 - 130	102.4	-	

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
 mg/L = Milligrams Per Liter or PPM
 ug/L = Micrograms Per Liter or PPB
 mpn/100 mls = Most Probable Number Index/ 100 mls
 Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
 (s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MSD	0 - 10	-	3.6	
Vanadium	QC65041	LCS	90 - 110	104.7	-	EPA 200.8
		MS	70 - 130	107.2	-	
		MSD	0 - 10	-	5.0	
Zinc	QC65041	LCS	90 - 110	107.8	-	EPA 200.8
		MS	70 - 130	127.2	-	
		MSD	0 - 10	-	0.2	
Boron	QC65087	Duplicate	0 - 20	-	15.4	EPA 200.7
		LCS	90 - 110	103.7	-	
		MS	75 - 125	113.5	-	
Calcium	QC65087	Duplicate	0 - 20	-	8.0	EPA 200.7
		LCS	90 - 110	96.3	-	
		MS	75 - 125	106.5	-	
Iron	QC65087	Duplicate	0 - 20	-	1.1	EPA 200.7
		LCS	90 - 110	96.9	-	
		MS	75 - 125	106.8	-	
Nitrate Nitrogen	QC65071	Duplicate	0 - 20	-	6.6	EPA 300.0
		LCS	90 - 110	101.1	-	
		MS	75 - 125	93.9	-	
Nitrite Nitrogen	QC65072	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	93.6	-	
		MS	75 - 125	100.5	-	
Sulfate	QC65073	Duplicate	0 - 20	-	1.5	EPA 300.0
		LCS	90 - 110	103.8	-	
		MS	75 - 125	105.0	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information	Bill To Information (If different from report to)	Project Name / Number
Company Name: <u>GIR</u>	Company Name: _____	
Contact Name: <u>Brooke Moran</u>	Contact Name: _____	
Address: <u>12567 W Cedar Rd Ste 251</u>	Address: _____	Task Number (Lab Use Only)
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>	City _____ State _____ Zip _____	CAL Task 230516111 ARF
Phone: <u>303-506-1618</u>	Phone: <u>bmolsonm@g.emporia.edu</u>	
Email: <u>Sergio.rivera@novame</u>	Email: <u>allix.com</u>	
Sample Collector: <u>BM</u>	PO No.: _____	
Sample Collector Phone: <u>303-506-1618</u>		

Commerce City Lab
 10411 Heinz Way
 Commerce City CO 80640

Lakewood Service Center
 12860 W. Cedar Dr, Suite 100A
 Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)				No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/> Sludge <input type="checkbox"/>			Drinking Water <input type="checkbox"/>											
Date	Time	Sample ID															
5/16/23	13:00	CROSS WELL	4	G	QB022050014 REVISED 3/2023 "MONTHLY GROUNDWATER"												
"	13:30	COMPLIANCE WELL	4	G													
"	13:30	COMPLIANCE 02	4	G													
"	13:30	COMPLIANCE 03	4	G													
"	11:30	CARIBOU WELL	4	G													
"	12:15	CROSS PORTAL	4	G													
"	11:15	CARIBOU PORTAL	4	G													
"	11:15	CARIBOU 02	4	G													
"	11:15	CARIBOU 03	4	G													
Instructions: <u>HNO3 & GROSS ALPHA</u> <u>BOTTLES FIELD-FILTERED</u>				C/S Info: _____				Seals Present Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>									
Relinquished By: <u>Karen Lopez</u>				Date/Time: <u>05/16/23</u>				Received By: <u>A. Forth</u>				Date/Time: <u>5/16/23</u>					
Relinquished By: _____				Date/Time: _____				Received By: _____				Date/Time: _____					



CAL Task
230516111

ARF

Bottle Order Test Detail

Order ID: QBO22050014

Date Created: 5/4/22

Ship To: Grand Island Resources LLC
65 Arikaree Circle
Nederland CO 80466

Shipping Options:

Ship Via: Customer Pickup Cooler: Yes

Chain of Custody Drinking Water:
Standard: 1

Attention: Brooke Molson-Moran

Customer Needs By: 5/4/23

Ships From: Lakewood

****Verify All Shipping Addresses****

Project:

Monthly Groundwater

Qty.	Bottle / Preservative / Test
------	------------------------------

8	1L - Unpreserved Gross Alpha/Beta (Sub) - Water - Ground
---	---

8	500 ml Cylinder - HNO3 Hg - Water - Ground Metals (Sub) - Water - Ground
---	--

8	500 ml Cylinder - NaOH Cyanide - Free - Water - Ground
---	---

8	500 ml Cylinder - Unpreserved Ag - Dis - Water - Ground Al - Dis - Water - Ground As - Dis - Water - Ground B - Dis - Water - Ground Ba - Dis - Water - Ground Be - Dis - Water - Ground Ca - Dis - Water - Ground Cd - Dis - Water - Ground Chloride - Water - Ground Co - Dis - Water - Ground Cr - Dis - Water - Ground Cu - Dis - Water - Ground
---	--

****Samples should be shipped or hand delivered the same day they are collected. Orders that require sub-lab analysis should be delivered to the lab Monday thru Wednesday only.****

Internal Shipping Instructions:

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Ship To: Grand Island Resources LLC
65 Arikaree Circle
Nederland CO 80466

CAL Task
230516111

ARF

Attention: Brooke Molson-Moran

Shipping Options:

Ship Via: Customer Pickup Cooler: Yes

Chain of Custody

Drinking Water:

Standard: 1

Customer Needs By: 5/4/23

Ships From: Lakewood

Project:

Monthly Groundwater

****Verify All Shipping Addresses****

Qty. Bottle / Preservative / Test

Fe - Dis - Water - Ground
Fluoride - Water - Ground
Langelier Index - Water - Ground
Mn - Dis - Water - Ground
Mo - Dis - Water - Ground
Ni - Dis - Water - Ground
Nitrate Nitrogen - Water - Ground
Nitrate/ Nitrite Nitrogen - Water - Ground
Nitrite Nitrogen - Water - Ground
Pb - Dis - Water - Ground
Sb - Dis - Water - Ground
Se - Dis - Water - Ground
Sulfate - Water - Ground
Tl - Dis - Water - Ground
U - Dis - Water - Ground
V - Dis - Water - Ground
Zn - Dis - Water - Ground

****Samples should be shipped or hand delivered the same day they are collected. Orders that require sub-lab analysis should be delivered to the lab Monday thru Wednesday only.****

Internal Shipping Instructions:

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507



ANALYTICAL SUMMARY REPORT

June 01, 2023

Colorado Analytical Laboratories Inc
PO Box 507
Brighton, CO 80601-0507

Work Order: C23050735 Quote ID: C15681

Project Name: 230516111; Monthly Groundwater

Energy Laboratories, Inc. Casper WY received the following 9 samples for Colorado Analytical Laboratories Inc on 5/18/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C23050735-001	230516111-01D - Cross Well	05/16/23 13:00	05/18/23	Groundwater	Metals by ICP/ICPMS, Dissolved
C23050735-002	230516111-02D - Compliance Well	05/16/23 13:30	05/18/23	Groundwater	Same As Above
C23050735-003	230516111-03D - Compliance 02	05/16/23 13:30	05/18/23	Groundwater	Same As Above
C23050735-004	230516111-04D - Compliance 03	05/16/23 13:30	05/18/23	Groundwater	Same As Above
C23050735-005	230516111-05D - Caribou Well	05/16/23 11:30	05/18/23	Groundwater	Same As Above
C23050735-006	230516111-06D - Cross Portal	05/16/23 12:15	05/18/23	Groundwater	Same As Above
C23050735-007	230516111-07D - Caribou Portal	05/16/23 11:15	05/18/23	Groundwater	Same As Above
C23050735-008	230516111-08D - Caribou 02	05/16/23 11:15	05/18/23	Groundwater	Same As Above
C23050735-009	230516111-09D - Caribou 03	05/16/23 11:15	05/18/23	Groundwater	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager .

Report Approved By:



CLIENT: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Work Order: C23050735

Report Date: 06/01/23

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-001
Client Sample ID: 230516111-01D - Cross Well

Report Date: 06/01/23
Collection Date: 05/16/23 13:00
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:20 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-002
Client Sample ID: 230516111-02D - Compliance Well

Report Date: 06/01/23
Collection Date: 05/16/23 13:30
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:27 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-003
Client Sample ID: 230516111-03D - Compliance 02

Report Date: 06/01/23
Collection Date: 05/16/23 13:30
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:33 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-004
Client Sample ID: 230516111-04D - Compliance 03

Report Date: 06/01/23
Collection Date: 05/16/23 13:30
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:39 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-005
Client Sample ID: 230516111-05D - Caribou Well

Report Date: 06/01/23
Collection Date: 05/16/23 11:30
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:45 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-006
Client Sample ID: 230516111-06D - Cross Portal

Report Date: 06/01/23
Collection Date: 05/16/23 12:15
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:52 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-007
Client Sample ID: 230516111-07D - Caribou Portal

Report Date: 06/01/23
Collection Date: 05/16/23 11:15
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 12:58 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-008
Client Sample ID: 230516111-08D - Caribou 02

Report Date: 06/01/23
Collection Date: 05/16/23 11:15
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 13:24 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230516111; Monthly Groundwater
Lab ID: C23050735-009
Client Sample ID: 230516111-09D - Caribou 03

Report Date: 06/01/23
Collection Date: 05/16/23 11:15
Date Received: 05/18/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L	L	0.006		E200.8	05/25/23 13:49 / eli-b

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
L - Lowest available reporting limit for the analytical method used

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Work Order: C23050735

Report Date: 05/31/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method:	E200.8								Analytical Run: ICPMS208-B_230524B		
Lab ID:	QCS	Initial Calibration Verification Standard								05/25/23 01:27	
Lithium		0.0486	mg/L	0.0062	97	90	110				
Lab ID:	CCV	Continuing Calibration Verification Standard								05/25/23 11:49	
Lithium		0.654	mg/L	0.0062	105	90	110				
Lab ID:	CCV	Continuing Calibration Verification Standard								05/25/23 13:11	
Lithium		0.661	mg/L	0.0062	106	90	110				
Method:	E200.8								Batch: R402638		
Lab ID:	LRB	Method Blank			Run: ICPMS208-B_230524B				05/24/23 15:06		
Lithium		ND	mg/L	0.003							
Lab ID:	LFB	Laboratory Fortified Blank			Run: ICPMS208-B_230524B				05/24/23 15:19		
Lithium		2.41	mg/L	0.0064	96	85	115				
Lab ID:	B23051834-004BMS	Sample Matrix Spike			Run: ICPMS208-B_230524B				05/25/23 11:36		
Lithium		2.54	mg/L	0.10	100	70	130			E	
Lab ID:	B23051834-004BMSD	Sample Matrix Spike Duplicate			Run: ICPMS208-B_230524B				05/25/23 11:43		
Lithium		2.48	mg/L	0.10	97	70	130	2.5	20	E	
Lab ID:	C23050735-008AMS	Sample Matrix Spike			Run: ICPMS208-B_230524B				05/25/23 13:30		
Lithium		2.69	mg/L	0.10	108	70	130			E	
Lab ID:	C23050735-008AMSD	Sample Matrix Spike Duplicate			Run: ICPMS208-B_230524B				05/25/23 13:36		
Lithium		2.75	mg/L	0.10	110	70	130	2.0	20	E	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

E - Estimated value - result exceeds the instrument upper quantitation limit



Work Order Receipt Checklist

Colorado Analytical Laboratories Inc

C23050735

Login completed by: Selena J. Fowler

Date Received: 5/18/2023

Reviewed by: cjohnson

Received by: tsa

Reviewed Date: 5/22/2023

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	4.3°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as —dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

Ship To: Energy Labs

023050735

Sub-Lab Chain of Custody Form

Report To Information Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u>	Bill To Information (If different from report to)	Project Name <u>Monthly Groundwater</u>
Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>	Address: CAL TASK 230516111 ARF	Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Tests Requested

Sample Date/Time	Sample ID	Matrix
5/16/23 1:00 PM	230516111-01D - Cross Well	Water - Ground
5/16/23 1:30 PM	230516111-02D - Compliance Well	Water - Ground
5/16/23 1:30 PM	230516111-03D - Compliance 02	Water - Ground
5/16/23 1:30 PM	230516111-04D - Compliance 03	Water - Ground
5/16/23 11:30 AM	230516111-05D - Caribou Well	Water - Ground
5/16/23 12:15 PM	230516111-06D - Cross Portal	Water - Ground
5/16/23 11:15 AM	230516111-07D - Caribou Portal	Water - Ground
5/16/23 11:15 AM	230516111-08D - Caribou 02	Water - Ground
5/16/23 11:15 AM	230516111-09D - Caribou 03	Water - Ground

3.522 upon dept.

Relinquished by: (Signature) A. Fort	Date: 5/17/23	Time: 1600
Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) Zephaniah	Date: 5/18/2023	Time: 10:00
Received by: (Signature) Taylor Atchley	Date:	Time:



Ship To: Energy Labs

C23050735

Sub-Lab Chain of Custody Form

Report To Information Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u> Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>		Bill To Information (If different from report to)		Project Name <u>Monthly Groundwater</u>	
		Address:		CAL TASK 230516111 ARF	
				Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Tests Requested

Metals (Sub)	
--------------	--

Container Type

Sample Date/Time	Sample ID	Matrix
Comment: 230516111-01D - Run Dissolved Lithium-Sample was field filtered. 230516111-02D - Run Dissolved Lithium-Sample was field filtered. 230516111-03D - Run Dissolved Lithium-Sample was field filtered. 230516111-04D - Run Dissolved Lithium-Sample was field filtered. 230516111-05D - Run Dissolved Lithium-Sample was field filtered. 230516111-06D - Run Dissolved Lithium-Sample was field filtered. 230516111-07D - Run Dissolved Lithium-Sample was field filtered. 230516111-08D - Run Dissolved Lithium-Sample was field filtered. 230516111-09D - Run Dissolved Lithium-Sample was field filtered.		

Relinquished by: (Signature) A. Kolden 5/17/23	Date: Time:	Received by: (Signature)	Date: Time:

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Cross Well

Sample Date/Time: 5/16/23 1:00 PM

Lab Number: 230516111-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	60.2 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	40.7 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-1.45 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.87 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	60.2 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	89 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 5/16/23 1:30 PM

Lab Number: 230516111-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	41.6 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	24.5 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-1.68 units	SM 2330-B	units	5/23/23	-	SAN
pH	7.02 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	41.6 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	69 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	41.6 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	24.5 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-1.74 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.96 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	41.6 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	45 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 5/16/23 1:30 PM
Lab Number: 230516111-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	ND	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-7.18 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.03 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	ND	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	ND	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 5/16/23 11:30 AM

Lab Number: 230516111-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	18.9 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	9.2 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-3.51 units	SM 2330-B	units	5/23/23	-	SAN
pH	5.96 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	18.9 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	40 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Cross Portal

Sample Date/Time: 5/16/23 12:15 PM

Lab Number: 230516111-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	68.6 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	47.0 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-0.98 units	SM 2330-B	units	5/23/23	-	SAN
pH	7.22 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	68.6 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	85 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal

Sample Date/Time: 5/16/23 11:15 AM

Lab Number: 230516111-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	14.7 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	7.8 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-2.68 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.97 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	14.7 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	31 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 5/16/23

Date Reported: 6/29/23

Matrix: Water - Ground

Customer Sample ID Caribou 02

Sample Date/Time: 5/16/23 11:15 AM

Lab Number: 230516111-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	13.9 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	8.1 mg/L	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-2.88 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.78 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	13.9 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	31 mg/L	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230516111

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230516111
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 5/16/23
Date Reported: 6/29/23
Matrix: Water - Ground

Customer Sample ID Caribou 03

Sample Date/Time: 5/16/23 11:15 AM

Lab Number: 230516111-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Calcium as CaCO ₃	ND	EPA 200.7	0.1 mg/L	5/18/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	5/18/23	-	DPL
Langelier Index	-7.19 units	SM 2330-B	units	5/23/23	-	SAN
pH	6.44 units	SM 4500-H-B	0.01 units	5/16/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	5/16/23	-	AKF
Total Alkalinity	ND	SM 2320-B	4.0 mg/L as CaCO ₃	5/18/23	QC65055	DPL
Total Dissolved Solids	ND	SM 2540-C	5 mg/L	5/18/23	QC65045	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230516111

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 5/16/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC65055	Blank	ND	SM 2320-B	5/18/23
Total Dissolved Solids	QC65045	Blank	ND	SM 2540-C	5/17/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC65055	Duplicate	0 - 20	-	2.6	SM 2320-B
		LCS	90 - 110	101.4	-	
		LCS-2	90 - 110	98.8	-	
Total Dissolved Solids	QC65045	Duplicate	0 - 20	-	5.0	SM 2540-C
		LCS	85 - 115	103.1	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information	Bill To Information (If different from report to)	Project Name / Number
Company Name: <u>GIR</u>	Company Name: _____	
Contact Name: <u>Brooke Moran</u>	Contact Name: _____	
Address: <u>12567 W Cedar Rd Ste 251</u>	Address: _____	Task Number (Lab Use Only)
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>	City _____ State _____ Zip _____	CAL Task 230516111 ARF
Phone: <u>303-506-1618</u>	Phone: <u>bmolsonm@g.emporia.edu</u>	
Email: <u>Sergio.rivera@novame</u>	Email: <u>allix.com</u>	
Sample Collector: <u>BM</u>	PO No.: _____	
Sample Collector Phone: <u>303-506-1618</u>		

Commerce City Lab
 10411 Heinz Way
 Commerce City CO 80640

Lakewood Service Center
 12860 W. Cedar Dr, Suite 100A
 Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)				No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/> Sludge <input type="checkbox"/>			Drinking Water <input type="checkbox"/>	QB022050014 REVISED 3/2023 "MONTHLY GROUNDWATER"										
Date	Time	Sample ID															
5/16/23	13:00	CROSS WELL		4	G												
"	13:30	COMPLIANCE WELL		4	G												
"	13:30	COMPLIANCE 02		4	G												
"	13:30	COMPLIANCE 03		4	G												
"	11:30	CARIBOU WELL		4	G												
"	12:15	CROSS PORTAL		4	G												
"	11:15	CARIBOU PORTAL		4	G												
"	11:15	CARIBOU 02		4	G												
"	11:15	CARIBOU 03		4	G												

Instructions: <u>HNO3 & GROSS ALPHA</u>				C/S Info: _____		Seals Present Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
BOTTLES FIELD FILTERED				Deliver Via: <u>Hand</u>		Temp. <u>4.9</u> °C/Ice <u>Y</u>	
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
<u>Karen Lopez</u>	<u>05/16/23</u>	<u>A. Forth</u>	<u>5/16/23 1:05 PM</u>				



CAL Task
230516111

ARF

Bottle Order Test Detail

Order ID: QBO22050014

Date Created: 5/4/22

Ship To: Grand Island Resources LLC
65 Arikaree Circle
Nederland CO 80466

Shipping Options:

Ship Via: Customer Pickup Cooler: Yes

Chain of Custody Drinking Water:
Standard: 1

Attention: Brooke Molson-Moran

Customer Needs By: 5/4/23

Ships From: Lakewood

****Verify All Shipping Addresses****

Project:

Monthly Groundwater

Qty.	Bottle / Preservative / Test
------	------------------------------

8	1L - Unpreserved Gross Alpha/Beta (Sub) - Water - Ground
---	---

8	500 ml Cylinder - HNO3 Hg - Water - Ground Metals (Sub) - Water - Ground
---	--

8	500 ml Cylinder - NaOH Cyanide - Free - Water - Ground
---	---

8	500 ml Cylinder - Unpreserved Ag - Dis - Water - Ground Al - Dis - Water - Ground As - Dis - Water - Ground B - Dis - Water - Ground Ba - Dis - Water - Ground Be - Dis - Water - Ground Ca - Dis - Water - Ground Cd - Dis - Water - Ground Chloride - Water - Ground Co - Dis - Water - Ground Cr - Dis - Water - Ground Cu - Dis - Water - Ground
---	--

****Samples should be shipped or hand delivered the same day they are collected. Orders that require sub-lab analysis should be delivered to the lab Monday thru Wednesday only.****

Internal Shipping Instructions:

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Ship To:	Grand Island Resources LLC 65 Arikaree Circle Nederland CO 80466	CAL Task 230516111	Shipping Options: Ship Via: Customer Pickup Cooler: Yes
Attention:	Brooke Molson-Moran	ARF	<div> Chain of Custody Drinking Water: Standard: 1 </div>
Verify All Shipping Addresses			Customer Needs By: 5/4/23 Ships From: Lakewood Project: Monthly Groundwater

Qty.	Bottle / Preservative / Test
	Fe - Dis - Water - Ground
	Fluoride - Water - Ground
	Langelier Index - Water - Ground
	Mn - Dis - Water - Ground
	Mo - Dis - Water - Ground
	Ni - Dis - Water - Ground
	Nitrate Nitrogen - Water - Ground
	Nitrate/ Nitrite Nitrogen - Water - Ground
	Nitrite Nitrogen - Water - Ground
	Pb - Dis - Water - Ground
	Sb - Dis - Water - Ground
	Se - Dis - Water - Ground
	Sulfate - Water - Ground
	Tl - Dis - Water - Ground
	U - Dis - Water - Ground
	V - Dis - Water - Ground
	Zn - Dis - Water - Ground

****Samples should be shipped or hand delivered the same day they are collected. Orders that require sub-lab analysis should be delivered to the lab Monday thru Wednesday only.****

Internal Shipping Instructions:

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507



Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Lab Control ID: 23H01903
Received: May 17, 2023
Reported: Jun 27, 2023
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.
10411 Heinz Way
Commerce City, CO 80640

ANALYTICAL REPORT

*Report may only be copied in its entirety.
Results reported herein relate only to discrete samples
submitted by the client. Hazen Research, Inc. does not warrant
that the results are representative of anything other than the
samples that were received in the laboratory*

By: Roxanne Sullivan
Roxanne Sullivan
Analytical Laboratories Director

Customer ID: 20040H

Account ID: Z01034

ANALYTICAL REPORT

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.

Lab Sample ID		23H01903-001						
Customer Sample ID		230516111-01C - Monthly Groundwater - Cross Well sampled on 05/16/23 @ 1300						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.6	1.2	0.1	SM 7110 B	6/19/23 @ 1444	KT
Gross Beta	pCi/L	T	<3.2	2.3	3.2	SM 7110 B	6/19/23 @ 1444	KT

Lab Sample ID		23H01903-002						
Customer Sample ID		230516111-02C - Monthly Groundwater - Compliance Well sampled on 05/16/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	1.3	1.4	0.1	SM 7110 B	6/19/23 @ 1446	KT
Gross Beta	pCi/L	T	<3.5	2.3	3.5	SM 7110 B	6/19/23 @ 1446	KT

Lab Sample ID		23H01903-003						
Customer Sample ID		230516111-03C - Monthly Groundwater - Compliance 02 sampled on 05/16/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	<0.1	1.1	0.1	SM 7110 B	6/19/23 @ 1447	KT
Gross Beta	pCi/L	T	<3.5	2.3	3.5	SM 7110 B	6/19/23 @ 1447	KT

Lab Sample ID		23H01903-004						
Customer Sample ID		230516111-04C - Monthly Groundwater - Compliance 03 sampled on 05/16/23 @ 1330						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.7	1.0	0.1	SM 7110 B	6/19/23 @ 1448	KT
Gross Beta	pCi/L	T	<3.4	2.1	3.4	SM 7110 B	6/19/23 @ 1448	KT

Lab Sample ID		23H01903-005						
Customer Sample ID		230516111-05C - Monthly Groundwater - Caribou Well sampled on 05/16/23 @ 1130						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	<0.1	0.8	0.1	SM 7110 B	6/19/23 @ 1449	KT
Gross Beta	pCi/L	T	<3.5	2.3	3.5	SM 7110 B	6/19/23 @ 1449	KT

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample (AR) = As Received < = Less Than

Customer ID: 20040H

Account ID: Z01034

ANALYTICAL REPORT

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.

Lab Sample ID		23H01903-006					
Customer Sample ID		230516111-06C - Monthly Groundwater - Cross Portal sampled on 05/16/23 @ 1215					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time
Gross Alpha	pCi/L	T	1.6	1.5	0.1	SM 7110 B	6/19/23 @ 1450
Gross Beta	pCi/L	T	3.3	2.5	3.0	SM 7110 B	6/19/23 @ 1450
							Analyst
							KT

Lab Sample ID		23H01903-007					
Customer Sample ID		230516111-07C - Monthly Groundwater - Caribou Portal sampled on 05/16/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time
Gross Alpha	pCi/L	T	0.9	1.2	0.1	SM 7110 B	6/19/23 @ 1451
Gross Beta	pCi/L	T	<3.2	2.6	3.2	SM 7110 B	6/19/23 @ 1451
							Analyst
							KT

Lab Sample ID		23H01903-008					
Customer Sample ID		230516111-08C - Monthly Groundwater - Caribou 02 sampled on 05/16/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time
Gross Alpha	pCi/L	T	0.1	0.9	0.1	SM 7110 B	6/19/23 @ 1452
Gross Beta	pCi/L	T	<3.2	2.4	3.2	SM 7110 B	6/19/23 @ 1452
							Analyst
							KT

Lab Sample ID		23H01903-009					
Customer Sample ID		230516111-09C - Monthly Groundwater - Caribou 03 sampled on 05/16/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time
Gross Alpha	pCi/L	T	0.5	0.9	0.1	SM 7110 B	6/19/23 @ 1453
Gross Beta	pCi/L	T	<3.1	2.3	3.1	SM 7110 B	6/19/23 @ 1453
							Analyst
							KT

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 06/16/2023

Batch QC Summary Form

Analyte: Gross Alpha

Control Standard/LFB: ID: C11a-004 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(58.4) - (1.000) - (0.5)}{57.4} \times 100 = 102\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	x		
Spike Recovery	70 - 130 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

23H01851	_____
23H01853	_____
23H01875	_____
23H01901	_____
23H01904	_____
23H01906	_____
23H01903	_____
_____	_____
_____	_____
_____	_____

Evaluator:

Michelle Stringer _____

06/26/2023

Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 06/16/2023

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11a-004 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(43.9) (1.000) - (0.5) (0.200)}{44} \times 100 = 100\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

23H01851	_____
23H01853	_____
23H01875	_____
23H01901	_____
23H01904	_____
23H01906	_____
23H01903	_____
_____	_____
_____	_____
_____	_____

Evaluator:

Michelle Stringer _____

06/26/2023

Date



LABORATORIES, INC.

Report To Information

Company Name: Colorado Analytical Laboratory

Report To: Stuart Nielson

E-Mail: stuartnielson@coloradolab.com

Address:

10411 Heinz Way

Commerce City, CO 80640

Phone: 303-659-2313

Bill To Information (If different from report to)

Project Name

Monthly Groundwater

Address:

CAL TASK

230516111

ARF

Compliance Samples: Yes ☐ No ☒

Submit Data to CDPHE: Yes ☐ No ☒

Date Preserved: N/A

Ship To: Hazen Research

Preserved: Y/N N

HNO3 Lot #: N/A

Tests Requested

Gross Alpha/Beta (Sub)

Sample Date/Time	Sample ID	Matrix	Container Type
5/16/23 1:00 PM	230516111-01C - Cross Well	Water - Ground	1L - Unpreserved
5/16/23 1:30 PM	230516111-02C - Compliance Well	Water - Ground	1L - Unpreserved
5/16/23 1:30 PM	230516111-03C - Compliance 02	Water - Ground	1L - Unpreserved
5/16/23 1:30 PM	230516111-04C - Compliance 03	Water - Ground	1L - Unpreserved
5/16/23 11:30 AM	230516111-05C - Caribou Well	Water - Ground	1L - Unpreserved
5/16/23 12:15 PM	230516111-06C - Cross Portal	Water - Ground	1L - Unpreserved
5/16/23 11:15 AM	230516111-07C - Caribou Portal	Water - Ground	1L - Unpreserved
5/16/23 11:15 AM	230516111-08C - Caribou 02	Water - Ground	1L - Unpreserved
5/16/23 11:15 AM	230516111-09C - Caribou 03	Water - Ground	1L - Unpreserved

Comment:

Preservation v BA 5/18/23 1400
All preserved on 5/17/23 1550 BL
RECEIVED MAY 17 2023
1530

Relinquished by: (Signature) A. Foltz	Date: Time: 5/17/23 1100	Received by: (Signature) [Signature]	Date: Time: 5/18/23 1400
		Relinquished by: (Signature)	Date: Time: 5/18/23 1400
		Received by: (Signature)	Date: Time: 5/18/23 1400

APPENDIX A.3 JUNE 2023 GROUNDWATER AND EFFLUENT ANALYTICAL RESULTS

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Well
Sample Date/Time: 6/14/23 1:00 PM
Lab Number: 230614146-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	3.11 mg/L	EPA 300.0	0.10	0.013	6/14/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/14/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/14/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.37 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/14/23	QC65725	AMJ
Sulfate	10.48 mg/L	EPA 300.0	0.10	0.02	6/14/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	ND mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0306 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	0.0022 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0008 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0051 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0023 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Well
Sample Date/Time: 6/14/23 1:00 PM
Lab Number: 230614146-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	1.31 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	21.0 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.080 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 6/14/23

Date Reported: 7/24/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 6/14/23 1:30 PM

Lab Number: 230614146-02

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.65 mg/L	EPA 300.0	0.10	0.013	6/14/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/14/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/14/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.18 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/14/23	QC65725	AMJ
Sulfate	3.70 mg/L	EPA 300.0	0.10	0.02	6/14/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.017 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0267 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0002 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0084 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0040 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

MDL = Method Detection Limit

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance Well
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-02

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.147 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	9.6 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.014 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-03

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.49 mg/L	EPA 300.0	0.10	0.013	6/14/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/14/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/14/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.18 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/14/23	QC65725	AMJ
Sulfate	3.90 mg/L	EPA 300.0	0.10	0.02	6/14/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.021 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0261 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0002 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0082 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0040 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-03

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.144 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	9.5 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.019 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 6/14/23

Date Reported: 7/24/23

Matrix: Water - Ground

Customer Sample ID Compliance 03

Sample Date/Time: 6/14/23 1:30 PM

Lab Number: 230614146-04

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND mg/L	EPA 300.0	0.10	0.013	6/14/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/14/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/14/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	ND mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/14/23	QC65725	AMJ
Sulfate	ND mg/L	EPA 300.0	0.10	0.02	6/14/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	ND mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	ND mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	ND mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

MDL = Method Detection Limit

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-04

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	ND mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	ND mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	ND mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 6/14/23

Date Reported: 7/24/23

Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 6/14/23 11:30 AM

Lab Number: 230614146-05

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.47 mg/L	EPA 300.0	0.10	0.013	6/15/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/15/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/15/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.16 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/15/23	QC65725	AMJ
Sulfate	2.80 mg/L	EPA 300.0	0.10	0.02	6/15/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.022 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0064 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	0.2949 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0005 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0023 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	ND mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

MDL = Method Detection Limit

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou Well
Sample Date/Time: 6/14/23 11:30 AM
Lab Number: 230614146-05

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.005 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	4.0 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.020 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Portal
Sample Date/Time: 6/14/23 12:15 PM
Lab Number: 230614146-06

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.88 mg/L	EPA 300.0	0.10	0.013	6/15/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/15/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/15/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.18 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/15/23	QC65725	AMJ
Sulfate	7.70 mg/L	EPA 300.0	0.10	0.02	6/15/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.015 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0431 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	0.0010 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	0.0024 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0018 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0085 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0030 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Portal
Sample Date/Time: 6/14/23 12:15 PM
Lab Number: 230614146-06

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	0.0004 mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.215 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	17.3 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.017 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal
Sample Date/Time: 6/14/23 11:15 AM
Lab Number: 230614146-07

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.38 mg/L	EPA 300.0	0.10	0.013	6/15/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/15/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/15/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.25 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/15/23	QC65725	AMJ
Sulfate	7.15 mg/L	EPA 300.0	0.10	0.02	6/15/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.028 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0266 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0007 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0053 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0029 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal
Sample Date/Time: 6/14/23 11:15 AM
Lab Number: 230614146-07

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	0.0018 mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.014 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	14.1 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.033 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou 02
Sample Date/Time: 6/14/23 11:15 AM
Lab Number: 230614146-08

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	0.40 mg/L	EPA 300.0	0.10	0.013	6/15/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/15/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/15/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	0.27 mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/15/23	QC65725	AMJ
Sulfate	6.50 mg/L	EPA 300.0	0.10	0.02	6/15/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	0.034 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	0.0263 mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	0.0008 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	0.0007 mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	0.0054 mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	0.0030 mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou 02
Sample Date/Time: 6/14/23 11:15 AM
Lab Number: 230614146-08

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	0.0018 mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	0.015 mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	14.1 mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	0.035 mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 6/14/23

Date Reported: 7/24/23

Matrix: Water - Ground

Customer Sample ID Caribou 03

Sample Date/Time: 6/14/23 11:15 AM

Lab Number: 230614146-09

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	ND mg/L	EPA 300.0	0.10	0.013	6/15/23	QC65721	AMJ
Cyanide-Free	ND mg/L	ASTM D4282-15	0.005	0.0005	6/16/23	QC65771	DN
Fluoride	ND mg/L	EPA 300.0	1.00	0.024	6/15/23	QC65723	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.50	0.02	6/15/23	QC65724	AMJ
Nitrate/ Nitrite Nitrogen	ND mg/L	Calculation	0.05	0.02	6/16/23	-	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.30	0.01	6/15/23	QC65725	AMJ
Sulfate	ND mg/L	EPA 300.0	0.10	0.02	6/15/23	QC65726	AMJ
Dissolved							
Mercury	ND mg/L	EPA 245.7	0.0002	0.00002	6/20/23	QC65820	MAT
Aluminum	ND mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Antimony	ND mg/L	EPA 200.8	0.0012	0.00012	6/19/23	QC65774	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006	0.00006	6/19/23	QC65774	MBN
Barium	ND mg/L	EPA 200.8	0.0007	0.00007	6/19/23	QC65774	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001	0.000008	6/19/23	QC65774	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Chromium	ND mg/L	EPA 200.8	0.0015	0.00015	6/19/23	QC65774	MBN
Cobalt	ND mg/L	EPA 200.8	0.0002	0.00005	6/19/23	QC65774	MBN
Copper	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Lead	ND mg/L	EPA 200.8	0.0001	0.000006	6/19/23	QC65774	MBN
Manganese	ND mg/L	EPA 200.8	0.0008	0.00001	6/19/23	QC65774	MBN
Molybdenum	ND mg/L	EPA 200.8	0.0005	0.00005	6/19/23	QC65774	MBN
Nickel	ND mg/L	EPA 200.8	0.0009	0.00005	6/19/23	QC65774	MBN
Selenium	ND mg/L	EPA 200.8	0.0008	0.00008	6/19/23	QC65774	MBN
Silver	ND mg/L	EPA 200.8	0.0005	0.000003	6/19/23	QC65774	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

MDL = Method Detection Limit

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Page 17 of 22

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Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou 03
Sample Date/Time: 6/14/23 11:15 AM
Lab Number: 230614146-09

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>							
Thallium	ND mg/L	EPA 200.8	0.0002	0.000003	6/19/23	QC65774	MBN
Uranium	ND mg/L	EPA 200.8	0.0002	0.000002	6/19/23	QC65774	MBN
Vanadium	ND mg/L	EPA 200.8	0.001	0.0001	6/19/23	QC65774	MBN
Zinc	ND mg/L	EPA 200.8	0.001	0.00003	6/19/23	QC65774	MBN
Boron	ND mg/L	EPA 200.7	0.05	0.01	6/16/23	QC65753	MBN
Calcium	ND mg/L	EPA 200.7	0.1	0.01	6/16/23	QC65753	MBN
Iron	ND mg/L	EPA 200.7	0.005	0.0005	6/16/23	QC65753	MBN

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230614146

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 6/14/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC65721	Blank	ND	EPA 300.0	6/14/23
Cyanide-Free	QC65771	Blank	ND	ASTM D4282-15	6/16/23
Fluoride	QC65723	Blank	ND	EPA 300.0	6/14/23
Mercury	QC65820	Method Blank	ND	EPA 245.7	6/20/23
Aluminum	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Antimony	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Arsenic	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Barium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Beryllium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Cadmium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Chromium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Cobalt	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Copper	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Lead	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Manganese	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Molybdenum	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Nickel	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Selenium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Silver	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Thallium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Uranium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Vanadium	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Zinc	QC65774	Method Blank	ND	EPA 200.8	6/14/23
Boron	QC65753	Method Blank	ND	EPA 200.7	6/14/23
Calcium	QC65753	Method Blank	ND	EPA 200.7	6/14/23
Iron	QC65753	Method Blank	ND	EPA 200.7	6/14/23
Nitrate Nitrogen	QC65724	Blank	ND	EPA 300.0	6/14/23
Nitrite Nitrogen	QC65725	Blank	ND	EPA 300.0	6/14/23
Sulfate	QC65726	Blank	ND	EPA 300.0	6/14/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC65721	Duplicate	0 - 20	-	1.9	EPA 300.0
		LCS	90 - 110	100.1	-	
		MS	75 - 125	99.7	-	
Cyanide-Free	QC65771	Duplicate	0 - 20	-	0.0	ASTM D4282-15
		LCS	90 - 110	94.6	-	
		MS	75 - 125	104.8	-	
Fluoride	QC65723	Duplicate	0 - 20	-	5.7	EPA 300.0
		LCS	90 - 110	100.0	-	
		MS	75 - 125	96.5	-	
Mercury	QC65820	Duplicate	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	107.2	-	

Abbreviations/ References:

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mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Aluminum	QC65774	MS	80 - 120	88.0	-	EPA 200.8
		LCS	90 - 110	109.0	-	
		MS	70 - 130	116.9	-	
		MSD	0 - 10	-	2.6	
Antimony	QC65774	LCS	90 - 110	102.3	-	EPA 200.8
		MS	70 - 130	113.1	-	
		MSD	0 - 10	-	0.4	
Arsenic	QC65774	LCS	90 - 110	98.4	-	EPA 200.8
		MS	70 - 130	121.6	-	
		MSD	0 - 10	-	2.6	
Barium	QC65774	LCS	90 - 110	97.7	-	EPA 200.8
		MS	70 - 130	107.1	-	
		MSD	0 - 10	-	0.6	
Beryllium	QC65774	LCS	90 - 110	96.5	-	EPA 200.8
		MS	70 - 130	113.1	-	
		MSD	0 - 10	-	3.0	
Cadmium	QC65774	LCS	90 - 110	95.8	-	EPA 200.8
		MS	70 - 130	112.5	-	
		MSD	0 - 10	-	1.4	
Chromium	QC65774	LCS	90 - 110	102.0	-	EPA 200.8
		MS	70 - 130	113.9	-	
		MSD	0 - 10	-	0.3	
Cobalt	QC65774	LCS	90 - 110	104.2	-	EPA 200.8
		MS	70 - 130	112.2	-	
		MSD	0 - 10	-	0.8	
Copper	QC65774	LCS	90 - 110	99.2	-	EPA 200.8
		MS	70 - 130	115.5	-	
		MSD	0 - 10	-	0.9	
Lead	QC65774	LCS	90 - 110	95.5	-	EPA 200.8
		MS	70 - 130	102.9	-	
		MSD	0 - 10	-	2.9	
Manganese	QC65774	LCS	90 - 110	102.1	-	EPA 200.8
		MS	70 - 130	116.1	-	
		MSD	0 - 10	-	0.7	
Molybdenum	QC65774	LCS	90 - 110	96.7	-	EPA 200.8
		MS	70 - 130	105.4	-	
		MSD	0 - 10	-	2.4	
Nickel	QC65774	LCS	90 - 110	103.4	-	EPA 200.8
		MS	70 - 130	114.0	-	
		MSD	0 - 10	-	0.8	
Selenium	QC65774	LCS	90 - 110	98.5	-	EPA 200.8
		MS	70 - 130	116.6	-	
		MSD	0 - 10	-	2.5	
Silver	QC65774	LCS	90 - 110	90.3	-	EPA 200.8
		MS	70 - 130	93.7	-	
		MSD	0 - 10	-	0.8	
Thallium	QC65774	LCS	90 - 110	98.8	-	EPA 200.8
		MS	70 - 130	105.2	-	
		MSD	0 - 10	-	1.7	
Uranium	QC65774	LCS	90 - 110	94.9	-	EPA 200.8
		MS	70 - 130	96.9	-	

Abbreviations/ References:

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MDL = Method Detection Limit

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ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313

Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MSD	0 - 10	-	3.5	
Vanadium	QC65774	LCS	90 - 110	102.3	-	EPA 200.8
		MS	70 - 130	115.7	-	
		MSD	0 - 10	-	1.3	
Zinc	QC65774	LCS	90 - 110	103.8	-	EPA 200.8
		MS	70 - 130	117.4	-	
		MSD	0 - 10	-	0.6	
Boron	QC65753	Duplicate	0 - 20	-	2.5	EPA 200.7
		LCS	90 - 110	100.9	-	
		MS	75 - 125	102.1	-	
Calcium	QC65753	Duplicate	0 - 20	-	1.2	EPA 200.7
		LCS	90 - 110	97.2	-	
		MS	75 - 125	97.4	-	
Iron	QC65753	Duplicate	0 - 20	-	3.2	EPA 200.7
		LCS	90 - 110	97.2	-	
		MS	75 - 125	96.0	-	
Nitrate Nitrogen	QC65724	Duplicate	0 - 20	-	2.6	EPA 300.0
		LCS	90 - 110	95.8	-	
		MS	75 - 125	87.5	-	
Nitrite Nitrogen	QC65725	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	91.5	-	
		MS	75 - 125	93.4	-	
Sulfate	QC65726	Duplicate	0 - 20	-	0.4	EPA 300.0
		LCS	90 - 110	97.6	-	
		MS	75 - 125	95.5	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

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(s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resources</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only) CAL Task 230614146 JAK	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bmolsonm@g-emporia.edu</u>		Email: _____			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
610 Garrison Street, Unit E
Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)				No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/> Sludge <input type="checkbox"/>			Drinking Water <input type="checkbox"/>											
Date	Time	Sample ID															
6/14/23	13:00	CROSS WELL		5	G	QB022050014 Revised 3/2023 "Monthly Groundwater"											
"	13:30	COMPLIANCE WELL		5	G												
"	"	COMPLIANCE 02		5	G												
"	"	COMPLIANCE 03		5	G												
"	11:30	CARIBOU WELL		5	G												
"	12:15	CROSS PORTAL		5	G												
"	11:15	CARIBOU PORTAL		5	G												
"	11:15	CARIBOU 02		5	G												
"	11:15	CARIBOU 03		5	G												
Instructions: <u>Cross Alpha Samples received in 1-liter glass amber containers. 6/14/23 JK</u>				C/S Info: <u>1D</u>				Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>									
Relinquished By: <u>BMoran</u>				Date/Time: <u>6/14/23</u>				Received By: <u>WA</u>				Date/Time: <u>6/14/23</u>					
Date/Time: <u>6/14/23</u>				Date/Time: <u>6/14/23</u>				Date/Time: <u>6/14/23</u>				Date/Time: <u>6/14/23</u>					

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Well

Sample Date/Time: 6/14/23 1:00 PM

Lab Number: 230614146-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	75.5 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	52.2 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-1.73 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.45 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	75.5 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	112 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146

Client PO: \$1500 Prepayment Received

Client Project: Monthly Groundwater

Date Received: 6/14/23

Date Reported: 7/24/23

Matrix: Water - Ground

Customer Sample ID Compliance Well

Sample Date/Time: 6/14/23 1:30 PM

Lab Number: 230614146-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	38.2 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	23.7 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-2.19 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.56 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	38.2 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	55 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance 02
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	38.7 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	23.5 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-2.14 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.61 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	38.7 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	45 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Compliance 03
Sample Date/Time: 6/14/23 1:30 PM
Lab Number: 230614146-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	ND mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-6.39 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.12 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	ND mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	ND mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou Well

Sample Date/Time: 6/14/23 11:30 AM

Lab Number: 230614146-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	18.0 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	9.7 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-3.19 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.28 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	18.0 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	22 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Cross Portal

Sample Date/Time: 6/14/23 12:15 PM

Lab Number: 230614146-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	57.0 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	42.1 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-1.21 units	SM 2330-B	units	6/23/23	-	SAN
pH	7.12 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	57.0 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	82 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou Portal

Sample Date/Time: 6/14/23 11:15 AM

Lab Number: 230614146-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	72.6 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	45.4 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-0.29 units	SM 2330-B	units	6/23/23	-	SAN
pH	7.90 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	72.6 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	94 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou 02

Sample Date/Time: 6/14/23 11:15 AM

Lab Number: 230614146-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	67.7 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	43.1 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-0.39 units	SM 2330-B	units	6/23/23	-	SAN
pH	7.85 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	67.7 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	87 mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 230614146

Report To: Patrick Delaney

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Bill To: Accounts Payable

Company: Grand Island Resources LLC
12567 W Cedar Dr
Suite 250
Lakewood CO 80228

Task No.: 230614146
Client PO: \$1500 Prepayment Received
Client Project: Monthly Groundwater

Date Received: 6/14/23
Date Reported: 7/24/23
Matrix: Water - Ground

Customer Sample ID Caribou 03

Sample Date/Time: 6/14/23 11:15 AM

Lab Number: 230614146-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Calcium as CaCO ₃	0.1 mg/L	EPA 200.7	0.1 mg/L	6/16/23	-	MBN
Carbonate	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Hydroxide	ND mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/19/23	-	DN
Langelier Index	-5.83 units	SM 2330-B	units	6/23/23	-	SAN
pH	6.50 units	SM 4500-H-B	0.01 units	6/14/23	-	AKF
Temperature	20 °C	SM 4500-H-B	1 °C	6/14/23	-	AKF
Total Alkalinity	ND mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/19/23	QC65794	DN
Total Dissolved Solids	ND mg/L	SM 2540-C	5 mg/L	6/20/23	QC65797	ISG

Dissolved Metals filtered in the field by the customer

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 230614146

Report To: Patrick Delaney
Company: Grand Island Resources LLC

Receive Date: 6/14/23
Project Name: Monthly Groundwater

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC65794	Blank	ND	SM 2320-B	6/19/23
Total Dissolved Solids	QC65797	Blank	ND	SM 2540-C	6/19/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC65794	Duplicate	0 - 20	-	0.6	SM 2320-B
		LCS	90 - 110	101.0	-	
		LCS-2	90 - 110	103.2	-	
Total Dissolved Solids	QC65797	Duplicate	0 - 20	-	1.4	SM 2540-C
		LCS	85 - 115	97.4	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.



DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Chain of Custody Form



Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resources</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only) <div style="text-align: center;"> CAL Task 230614146 JAK </div>	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bmolsonm@g-emporia.edu</u>		Email: _____			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Commerce City Lab
 10411 Heinz Way
 Commerce City CO 80640

Lakewood Service Center
 610 Garrison Street, Unit E
 Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Sample Matrix (Select One Only)				No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/> Sludge <input type="checkbox"/>			Drinking Water <input type="checkbox"/>											
Date	Time	Sample ID															
6/14/23	13:00	CROSS WELL		5	G	<div style="font-size: 2em; text-align: center;"> QB022050014 Revised 3/2023 "Monthly Groundwater" </div>											
"	13:30	COMPLIANCE WELL		5	G												
"	"	COMPLIANCE 02		5	G												
"	"	COMPLIANCE 03		5	G												
"	11:30	CARIBOU WELL		5	G												
"	12:15	CROSS PORTAL		5	G												
"	11:15	CARIBOU PORTAL		5	G												
"	11:15	CARIBOU 02		5	G												
"	11:15	CARIBOU 03		5	G												
Instructions: <u>Cross Alpha Samples received in 1-liter glass amber containers. 6/14/23 JK</u>				C/S Info: <u>1D</u> Deliver Via: _____				Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/> Temp. <u>5</u> °C/Ice <u>Y</u>									
Relinquished By: <u>BMoran</u>		Date/Time: <u>6/14/23</u>		Received By: <u>WA</u>		Date/Time: <u>6/14/23</u>		Relinquished By: _____		Date/Time: _____		Received By: _____		Date/Time: _____			



ANALYTICAL SUMMARY REPORT

July 07, 2023

Colorado Analytical Laboratories Inc
PO Box 507
Brighton, CO 80601-0507

Work Order: C23060668 Quote ID: C15681

Project Name: 230614146; Monthly Groundwater

Energy Laboratories, Inc. Casper WY received the following 9 samples for Colorado Analytical Laboratories Inc on 6/16/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C23060668-001	230614146-01D - Cross Well	06/14/23 13:00	06/16/23	Groundwater	Metals by ICP/ICPMS, Dissolved
C23060668-002	230614146-02D - Compliance Well	06/14/23 13:30	06/16/23	Groundwater	Same As Above
C23060668-003	230614146-03D - Compliance 02	06/14/23 13:30	06/16/23	Groundwater	Same As Above
C23060668-004	230614146-04D - Compliance 03	06/14/23 13:30	06/16/23	Groundwater	Same As Above
C23060668-005	230614146-05D - Caribou Well	06/14/23 0:00	06/16/23	Groundwater	Same As Above
C23060668-006	230614146-06D - Cross Portal	06/14/23 12:15	06/16/23	Groundwater	Same As Above
C23060668-007	230614146-07D - Caribou Portal	06/14/23 11:15	06/16/23	Groundwater	Same As Above
C23060668-008	230614146-08D - Caribou 02	06/14/23 11:15	06/16/23	Groundwater	Same As Above
C23060668-009	230614146-09D - Caribou 03	06/14/23 11:15	06/16/23	Groundwater	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager .

Report Approved By:



CLIENT: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Work Order: C23060668

Report Date: 07/07/23

CASE NARRATIVE

Tests associated with analyst identified as ELI-H were subcontracted to Energy Laboratories, 3161 E.Lyndale Ave., Helena, MT, EPA Number MT00945.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-001
Client Sample ID: 230614146-01D - Cross Well

Report Date: 07/07/23
Collection Date: 06/14/23 13:00
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 13:49 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-002
Client Sample ID: 230614146-02D - Compliance Well

Report Date: 07/07/23
Collection Date: 06/14/23 13:30
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 13:53 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-003
Client Sample ID: 230614146-03D - Compliance 02

Report Date: 07/07/23
Collection Date: 06/14/23 13:30
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 13:57 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-004
Client Sample ID: 230614146-04D - Compliance 03

Report Date: 07/07/23
Collection Date: 06/14/23 13:30
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 14:01 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-005
Client Sample ID: 230614146-05D - Caribou Well

Report Date: 07/07/23
Collection Date: 06/14/23
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 14:05 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-006
Client Sample ID: 230614146-06D - Cross Portal

Report Date: 07/07/23
Collection Date: 06/14/23 12:15
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 14:09 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-007
Client Sample ID: 230614146-07D - Caribou Portal

Report Date: 07/07/23
Collection Date: 06/14/23 11:15
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 14:28 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-008
Client Sample ID: 230614146-08D - Caribou 02

Report Date: 07/07/23
Collection Date: 06/14/23 11:15
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 15:10 / eli-h

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc
Project: 230614146; Monthly Groundwater
Lab ID: C23060668-009
Client Sample ID: 230614146-09D - Caribou 03

Report Date: 07/07/23
Collection Date: 06/14/23 11:15
Date Received: 06/16/23
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, DISSOLVED							
Lithium	ND	mg/L		0.001		E200.8	06/28/23 15:14 / eli-h

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: Colorado Analytical Laboratories Inc

Work Order: C23060668

Report Date: 06/30/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method:	E200.8								Analytical Run: ICPMS205-H_230627A		
Lab ID:	ICV	Initial Calibration Verification Standard							06/27/23 12:48		
Lithium		0.0619	mg/L	0.10	103	90	110				
Lab ID:	CCV	Continuing Calibration Verification Standard							06/28/23 13:13		
Lithium		0.633	mg/L	0.10	101	90	110				
Lab ID:	CCV	Continuing Calibration Verification Standard							06/28/23 14:20		
Lithium		0.607	mg/L	0.10	97	90	110				
Method:	E200.8								Batch: R185788		
Lab ID:	LRB	Method Blank			Run: ICPMS205-H_230627A				06/27/23 13:50		
Lithium		ND	mg/L	0.001							
Lab ID:	LFB	Laboratory Fortified Blank			Run: ICPMS205-H_230627A				06/27/23 13:53		
Lithium		0.0521	mg/L	0.10	104	85	115				
Lab ID:	C23060668-006AMS	Sample Matrix Spike			Run: ICPMS205-H_230627A				06/28/23 14:12		
Lithium		0.0594	mg/L	0.10	119	70	130				
Lab ID:	C23060668-006AMSD	Sample Matrix Spike Duplicate			Run: ICPMS205-H_230627A				06/28/23 14:16		
Lithium		0.0518	mg/L	0.10	104	70	130		20		

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Colorado Analytical Laboratories Inc

C23060668

Login completed by: Hannah R. Johnson

Date Received: 6/16/2023

Reviewed by: cjohnson

Received by: meh

Reviewed Date: 6/19/2023

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	11.4°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as —dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

Page 1

Ship To: Energy Labs



Sub-Lab Chain of Custody Form

CP3061416

Report To Information Company Name <u>Colorado Analytical Laboratory</u> Report To: <u>Rebecca Manzanares</u> E-Mail: <u>rebeccamanzanares@coloradolab.com</u>		Bill To Information: (If different from report to)		Project Name <u>Monthly Groundwater</u>	
Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>		Address: <u>CAL TASK</u> <u>230614146</u> <u>JAK</u>		Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Tests Requested

Sample Date/Time		Sample ID	Matrix	Metals (Sub)																Container Type
6/14/23	1:00 PM	230614146-01D - Cross Well	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	1:30 PM	230614146-02D - Compliance Well	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	1:30 PM	230614146-03D - Compliance 02	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	1:30 PM	230614146-04D - Compliance 03	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	11:30 AM	230614146-05D - Caribou Well	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	12:15 PM	230614146-06D - Cross Portal	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	11:15 AM	230614146-07D - Caribou Portal	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	11:15 AM	230614146-08D - Caribou 02	Water - Ground	X																250 ml Cylinder - HNO3
6/14/23	11:15 AM	230614146-09D - Caribou 03	Water - Ground	X																250 ml Cylinder - HNO3

Relinquished by: (Signature) <i>gadam</i>	Date: Time: <u>6/15/23</u> <u>1500</u>	Received by: (Signature) <i>[Signature]</i>	Date: Time: <u>6/16/23</u> <u>11:05</u>	Relinquished by: (Signature)	Date: Time:
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Page 2

Ship To: Energy Labs

CPDadadS

Sub-Lab Chain of Custody Form

Report To Information Company Name <u>Colorado Analytical Laboratory</u> Report To: <u>Rebecca Manzanarez</u> E-Mail: <u>rebeccamanzanarez@coloradolab.com</u> Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>	Bill To Information: (If different from report to)	Project Name <u>Monthly Groundwater</u>
	Address:	Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	CAL TASK 230614146 JAK	

Tests Requested

Metals (Sub)	
--------------	--

Container Type

Sample Date/Time	Sample ID	Matrix
Comment: 230614146-01D - Run Dissolved Lithium-Sample was field filtered.		
230614146-02D - Run Dissolved Lithium-Sample was field filtered.		
230614146-03D - Run Dissolved Lithium-Sample was field filtered.		
230614146-04D - Run Dissolved Lithium-Sample was field filtered.		
230614146-05D - Run Dissolved Lithium-Sample was field filtered.		
230614146-06D - Run Dissolved Lithium-Sample was field filtered.		
230614146-07D - Run Dissolved Lithium-Sample was field filtered.		
230614146-08D - Run Dissolved Lithium-Sample was field filtered.		
230614146-09D - Run Dissolved Lithium-Sample was field filtered.		

Relinquished by: (Signature) <i>Adana</i>	Date: Time: 6/15/23 1500	Received by: (Signature) <i>Amelia King</i>	Date: Time: 6/16/23 11:05	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
---	-----------------------------	---	------------------------------	---------------------------------	-------------	-----------------------------	-------------

Page 2 of 2



Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Lab Control ID: 23H02083

Received: Jun 15, 2023

Reported: Jul 21, 2023

Purchase Order No.

None Received

Customer ID: 05377Z

Account ID: Z01034

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.
10411 Heinz Way
Commerce City, CO 80640

ANALYTICAL REPORT

*Report may only be copied in its entirety.
Results reported herein relate only to discrete samples
submitted by the client. Hazen Research, Inc. does not warrant
that the results are representative of anything other than the
samples that were received in the laboratory*

By: Roxanne Sullivan
Roxanne Sullivan
Analytical Laboratories Director

Customer ID: 05377Z

Account ID: Z01034

ANALYTICAL REPORT

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.

Lab Sample ID			23H02083-001					
Customer Sample ID			230614146-01C - Monthly Groundwater - Cross Well sampled on 06/14/23 @ 1300					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.9	1.2	0.1	SM 7110 B	7/18/23 @ 0850	KT
Gross Beta	pCi/L	T	<3.4	2.3	3.4	SM 7110 B	7/18/23 @ 0850	KT

Lab Sample ID			23H02083-002					
Customer Sample ID			230614146-02C - Monthly Groundwater - Compliance Well sampled on 06/14/23 @ 1330					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.7	1.1	0.1	SM 7110 B	7/18/23 @ 0852	KT
Gross Beta	pCi/L	T	<3.4	2.3	3.4	SM 7110 B	7/18/23 @ 0852	KT

Lab Sample ID			23H02083-003					
Customer Sample ID			230614146-03C - Monthly Groundwater - Compliance 02 sampled on 06/14/23 @ 1330					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	1.2	1.2	0.1	SM 7110 B	7/18/23 @ 0853	KT
Gross Beta	pCi/L	T	<3.4	2.3	3.4	SM 7110 B	7/18/23 @ 0853	KT

Lab Sample ID			23H02083-004					
Customer Sample ID			230614146-04C - Monthly Groundwater - Compliance 03 sampled on 06/14/23 @ 1330					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.5	0.8	0.1	SM 7110 B	7/18/23 @ 0854	KT
Gross Beta	pCi/L	T	<3.0	2.2	3.0	SM 7110 B	7/18/23 @ 0854	KT

Lab Sample ID			23H02083-005					
Customer Sample ID			230614146-05C - Monthly Groundwater - Caribou Well sampled on 06/14/23 @ 1130					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.5	1.0	0.1	SM 7110 B	7/18/23 @ 0856	KT
Gross Beta	pCi/L	T	<3.1	2.3	3.1	SM 7110 B	7/18/23 @ 0856	KT

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample (AR) = As Received < = Less Than

ANALYTICAL REPORT

Rebecca Manzanares
Colorado Analytical Laboratories, Inc.

Lab Sample ID			23H02083-006					
Customer Sample ID			230614146-06C - Monthly Groundwater - Cross Portal sampled on 06/14/23 @ 1215					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	0.7	1.1	0.1	SM 7110 B	7/18/23 @ 0857	KT
Gross Beta	pCi/L	T	3.1	2.4	2.8	SM 7110 B	7/18/23 @ 0857	KT

Lab Sample ID			23H02083-007					
Customer Sample ID			230614146-07C - Monthly Groundwater - Caribou Portal sampled on 06/14/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	3.4	1.9	0.1	SM 7110 B	7/18/23 @ 0858	KT
Gross Beta	pCi/L	T	<3.0	2.1	3.0	SM 7110 B	7/18/23 @ 0858	KT

Lab Sample ID			23H02083-008					
Customer Sample ID			230614146-08C - Monthly Groundwater - Caribou 02 sampled on 06/14/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	1.9	1.5	0.1	SM 7110 B	7/18/23 @ 0859	KT
Gross Beta	pCi/L	T	<3.0	2.3	3.0	SM 7110 B	7/18/23 @ 0859	KT

Lab Sample ID			23H02083-009					
Customer Sample ID			230614146-09C - Monthly Groundwater - Caribou 03 sampled on 06/14/23 @ 1115					
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	<0.1	0.7	0.1	SM 7110 B	7/18/23 @ 0900	KT
Gross Beta	pCi/L	T	<3.0	2.2	3.0	SM 7110 B	7/18/23 @ 0900	KT

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Replicate Sample (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 07/18/2023

Batch QC Summary Form

Analyte: Gross Alpha

Control Standard/LFB: ID: C11a-004 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(56.1) (1.000) - (0.0) (0.200)}{57.4} \times 100 = 98\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	x		
Spike Recovery	70 - 130 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

23H02083	_____
23H02090	_____
23H02091	_____
23H02049	_____
23H02092	_____
23H01697	_____
23H01733	_____
23H01848	_____
23H01949	_____
_____	_____

Evaluator:

 _____

07/20/2023

Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Date: 07/18/2023

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11a-004 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(42.7) - (1.000)}{44} - \frac{(0.8) - (0.200)}{44} \times 100 = 97\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

 x Batch QC Passes**
 Batch QC Fails
 Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

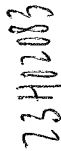
23H02083	_____
23H02090	_____
23H02091	_____
23H02049	_____
23H02092	_____
23H01697	_____
23H01733	_____
23H01848	_____
23H01949	_____
_____	_____

Evaluator:

 _____

07/20/2023

Date



Preserved: $Y \setminus N$

HN03 Lot #:

Date Preserved:

Tests Requested

Comment:

preservation V IX 6/16/73 1215
 A12 preserved 6/15/73

Date: Time:

11

APPENDIX B OUTFALL-001 ANALYTICAL RESULTS

APPENDIX B.1 APRIL 2023 OUTFALL-001 ANALYTICAL RESULTS



ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Delaney
GS Mining Company LLC
422 Gregory Street
Central City, Colorado 80427

Generated 4/26/2023 2:20:29 PM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-174860-1

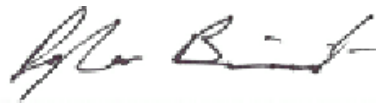
Eurofins Denver

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
4/26/2023 2:20:29 PM

Authorized for release by
Dylan Bieniulis, Project Manager I
Dylan.Bieniulis@et.eurofinsus.com
(303)736-0138



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Chronicle	22
Certification Summary	23
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Definitions/Glossary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Job ID: 280-174860-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: GS Mining Company LLC

Project: Nederland, CO

Report Number: 280-174860-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/11/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.5 C.

Two plastic 500ml bottles of nitric acid preserved sample volume, one plastic 250ml bottle of unpreserved volume & two unpreserved VOA vial containers of sample volume were received without container labels. As only one sample ID is referenced the chain of custody the containers were logged as UTFALL-001 (280-174860-1). The client was notified.

TOTAL RECOVERABLE METALS (ICP)

Sample UTFALL-001 (280-174860-1) was analyzed for Total Recoverable Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 04/13/2023 and analyzed on 04/15/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample UTFALL-001 (280-174860-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 04/17/2023 and analyzed on 04/18/2023.

This report includes Reporting Limits (RLs) for 200.8 Potentially Dissolved Silver that are less than Eurofins TestAmerica Denver's standard reporting limit. 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.

Lead and Manganese were detected in method blank MB 280-608620/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample UTFALL-001 (280-174860-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 04/12/2023 and analyzed on 04/13/2023.

Case Narrative

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Job ID: 280-174860-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Copper was detected in method blank MB 280-608367/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Sample OUTFALL-001 (280-174860-1) was analyzed for total mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 04/14/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - POTENTIALLY DISSOLVED

Sample OUTFALL-001 (280-174860-1) was analyzed for Trivalent Chromium - Potentially Dissolved in accordance with SM3500_CR3_B. The samples were analyzed on 04/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - TOTAL RECOVERABLE

Sample OUTFALL-001 (280-174860-1) was analyzed for Trivalent Chromium - Total Recoverable in accordance with SM3500_CR3_B. The samples were analyzed on 04/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY

Sample OUTFALL-001 (280-174860-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 04/12/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Sample OUTFALL-001 (280-174860-1) was analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 04/13/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED HEXAVALENT CHROMIUM

Sample OUTFALL-001 (280-174860-1) was analyzed for dissolved hexavalent chromium in accordance with SM 3500 CR B. The samples were analyzed on 04/11/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Sample OUTFALL-001 (280-174860-1) was analyzed for hexavalent chromium in accordance with 3500_CR_B. The samples were analyzed on 04/11/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Sample OUTFALL-001 (280-174860-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 04/12/2023.

The following samples did not equilibrate to within 0.05 pH units after three measurements but its duplicate did therefore the sample was not rerun: OUTFALL-001 (280-174860-1) and (280-174860-C-1 DU). Data has been reported with this narration.

Case Narrative

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Job ID: 280-174860-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Sample OUTFALL-001 (280-174860-1) was analyzed for sulfide in accordance with SM20 4500 S2 D. The samples were analyzed on 04/14/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HYDROGEN SULFIDE

Sample OUTFALL-001 (280-174860-1) was analyzed for Hydrogen Sulfide in accordance with SM20 4500 S2 H. The samples were analyzed on 04/18/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LOW LEVEL MERCURY

Sample OUTFALL-001 (280-174860-1) was analyzed for Low Level Mercury in accordance with EPA 1631. The samples were prepared on 04/13/2023 and analyzed on 04/20/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-174860-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	3.2		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	24	J	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Lead	0.86	J	1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	2.4	J	10	2.0	ug/L	1		200.8	Total Recoverable
Lead	1.2	B	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	0.73	J B	3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	6.2	J	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	7.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	21.6	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.7		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	22		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.

Eurofins Denver

Method Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-174860-1	OUTFALL-001	Water	04/11/23 13:00	04/11/23 15:10

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

Client Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.2		0.50	0.20	ng/L		04/13/23 16:30	04/20/23 11:58	1

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

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	24	J	100	9.1	ug/L		04/13/23 07:56	04/15/23 05:37	1

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

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		04/12/23 14:38	04/13/23 01:12	1
Cadmium	ND		1.0	0.19	ug/L		04/12/23 14:38	04/13/23 01:12	1
Chromium	ND		3.0	0.50	ug/L		04/12/23 14:38	04/13/23 01:12	1
Copper	ND		2.0	0.71	ug/L		04/12/23 14:38	04/13/23 01:12	1
Lead	0.86	J	1.0	0.23	ug/L		04/12/23 14:38	04/13/23 01:12	1
Zinc	2.4	J	10	2.0	ug/L		04/12/23 14:38	04/13/23 01:12	1

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

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		04/17/23 15:03	04/18/23 09:19	1
Cadmium	ND		1.0	0.19	ug/L		04/17/23 15:03	04/18/23 09:19	1
Chromium	ND		3.0	0.50	ug/L		04/17/23 15:03	04/18/23 09:19	1
Copper	ND		2.0	0.71	ug/L		04/17/23 15:03	04/18/23 09:19	1
Lead	1.2	B	1.0	0.23	ug/L		04/17/23 15:03	04/18/23 09:19	1
Manganese	0.73	J B	3.0	0.51	ug/L		04/17/23 15:03	04/18/23 09:19	1
Nickel	ND		3.0	0.83	ug/L		04/17/23 15:03	04/18/23 09:19	1
Selenium	ND		5.0	1.0	ug/L		04/17/23 15:03	04/18/23 09:19	1
Silver	ND		0.50	0.045	ug/L		04/17/23 15:03	04/18/23 09:19	1
Zinc	6.2	J	10	2.0	ug/L		04/17/23 15:03	04/18/23 09:19	1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		04/14/23 16:24	04/14/23 22:17	1

Eurofins Denver

Client Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

General Chemistry

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	230		2.0	2.0	umhos/cm			04/12/23 12:39	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/13/23 14:40	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			04/11/23 18:48	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.7	HF	0.1	0.1	SU			04/12/23 12:48	1
Temperature (SM 4500 H+ B)	21.6	HF	1.0	1.0	Degrees C			04/12/23 12:48	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			04/14/23 15:40	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			04/18/23 16:37	1
Field pH (SM4500 S2 H)	7.7		1.0	1.0	SU			04/18/23 16:37	1
Field Temperature (SM4500 S2 H)	22		1.0	1.0	Celsius			04/18/23 16:37	1
Specific Conductance (SM4500 S2 H)	230		2.0	2.0	umhos/cm			04/18/23 16:37	1
Sulfide (SM4500 S2 H)	ND		4.0	4.0	mg/L			04/18/23 16:37	1

General Chemistry - Total Recoverable

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND	H	0.020	0.020	mg/L			04/26/23 12:30	1

General Chemistry - Dissolved

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			04/11/23 19:08	1

General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL-001
Date Collected: 04/11/23 13:00
Date Received: 04/11/23 15:10

Lab Sample ID: 280-174860-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L			04/26/23 12:32	1

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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

Lab Sample ID: MB 400-621558/3-A
Matrix: Water
Analysis Batch: 621683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 621558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.20	ng/L		04/19/23 16:40	04/20/23 10:11	1

Lab Sample ID: LCS 400-621558/4-A
Matrix: Water
Analysis Batch: 621683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 621558

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.75		ng/L		95	79 - 121

Lab Sample ID: LCSD 400-621558/5-A
Matrix: Water
Analysis Batch: 621683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 621558

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.68		ng/L		94	79 - 121	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-608363/1-A
Matrix: Water
Analysis Batch: 608933

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 608363

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	9.1	ug/L		04/13/23 07:56	04/15/23 05:01	1

Lab Sample ID: LCS 280-608363/2-A
Matrix: Water
Analysis Batch: 608933

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 608363

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	5000	5480		ug/L		110	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-608367/1-A
Matrix: Water
Analysis Batch: 608553

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 608367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		04/12/23 14:38	04/13/23 00:15	1
Cadmium	ND		1.0	0.19	ug/L		04/12/23 14:38	04/13/23 00:15	1
Chromium	ND		3.0	0.50	ug/L		04/12/23 14:38	04/13/23 00:15	1
Copper	1.17	J	2.0	0.71	ug/L		04/12/23 14:38	04/13/23 00:15	1
Lead	ND		1.0	0.23	ug/L		04/12/23 14:38	04/13/23 00:15	1
Zinc	ND		10	2.0	ug/L		04/12/23 14:38	04/13/23 00:15	1

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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

Lab Sample ID: LCS 280-608367/2-A

Matrix: Water

Analysis Batch: 608553

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 608367

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	36.9		ug/L		92	89 - 111
Cadmium	40.0	37.9		ug/L		95	89 - 111
Chromium	40.0	37.0		ug/L		92	86 - 115
Copper	40.0	37.5		ug/L		94	90 - 115
Lead	40.0	38.7		ug/L		97	88 - 115
Zinc	40.0	39.0		ug/L		98	88 - 115

Lab Sample ID: LCSD 280-608367/3-A

Matrix: Water

Analysis Batch: 608553

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 608367

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	40.0	35.7		ug/L		89	89 - 111	3	20
Cadmium	40.0	40.3		ug/L		101	89 - 111	6	20
Chromium	40.0	36.7		ug/L		92	86 - 115	1	20
Copper	40.0	36.8		ug/L		92	90 - 115	2	20
Lead	40.0	39.2		ug/L		98	88 - 115	1	20
Zinc	40.0	37.5		ug/L		94	88 - 115	4	20

Lab Sample ID: MB 280-608620/1-B

Matrix: Water

Analysis Batch: 609083

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 608892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		04/17/23 15:03	04/18/23 09:01	1
Cadmium	ND		1.0	0.19	ug/L		04/17/23 15:03	04/18/23 09:01	1
Chromium	ND		3.0	0.50	ug/L		04/17/23 15:03	04/18/23 09:01	1
Copper	ND		2.0	0.71	ug/L		04/17/23 15:03	04/18/23 09:01	1
Lead	0.310 J		1.0	0.23	ug/L		04/17/23 15:03	04/18/23 09:01	1
Manganese	0.586 J		3.0	0.51	ug/L		04/17/23 15:03	04/18/23 09:01	1
Nickel	ND		3.0	0.83	ug/L		04/17/23 15:03	04/18/23 09:01	1
Selenium	ND		5.0	1.0	ug/L		04/17/23 15:03	04/18/23 09:01	1
Silver	ND		0.50	0.045	ug/L		04/17/23 15:03	04/18/23 09:01	1
Zinc	ND		10	2.0	ug/L		04/17/23 15:03	04/18/23 09:01	1

Lab Sample ID: LCS 280-608620/2-B

Matrix: Water

Analysis Batch: 609083

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 608892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	38.2		ug/L		96	89 - 111
Cadmium	40.0	37.0		ug/L		93	89 - 111
Chromium	40.0	39.3		ug/L		98	86 - 115
Copper	40.0	40.6		ug/L		102	90 - 115
Lead	40.0	37.4		ug/L		93	88 - 115
Manganese	40.0	39.8		ug/L		99	87 - 115
Nickel	40.0	37.9		ug/L		95	86 - 115
Selenium	40.0	37.8		ug/L		95	85 - 114
Silver	40.0	39.0		ug/L		97	90 - 114

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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

Lab Sample ID: LCS 280-608620/2-B

Matrix: Water

Analysis Batch: 609083

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 608892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	40.0	40.4		ug/L		101	88 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-608762/1-A

Matrix: Water

Analysis Batch: 608923

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 608762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		04/14/23 16:24	04/14/23 21:41	1

Lab Sample ID: LCS 280-608762/2-A

Matrix: Water

Analysis Batch: 608923

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 608762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.22		ug/L		104	90 - 110

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-608432/31

Matrix: Water

Analysis Batch: 608432

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			04/12/23 12:39	1

Lab Sample ID: LCS 280-608432/30

Matrix: Water

Analysis Batch: 608432

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 280-608627/2

Matrix: Water

Analysis Batch: 608627

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			04/13/23 14:40	1

Lab Sample ID: LCS 280-608627/1

Matrix: Water

Analysis Batch: 608627

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	453		mg/L		91	79 - 114

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-608335/10

Matrix: Water

Analysis Batch: 608335

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		0.020	0.0040	mg/L			04/11/23 18:47	1

Lab Sample ID: LCS 280-608335/8

Matrix: Water

Analysis Batch: 608335

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.0986		mg/L		99	91 - 112

Lab Sample ID: LCSD 280-608335/9

Matrix: Water

Analysis Batch: 608335

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	0.100	0.0987		mg/L		99	91 - 112	0	20

Lab Sample ID: 280-174860-1 MS

Matrix: Water

Analysis Batch: 608335

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
Chromium, hexavalent	ND		0.100	0.0973		mg/L		97	91 - 112

Lab Sample ID: 280-174860-1 MSD

Matrix: Water

Analysis Batch: 608335

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		0.100	0.0981		mg/L		98	91 - 112	1	20

Lab Sample ID: 280-174860-1 DU

Matrix: Water

Analysis Batch: 608335

Client Sample ID: OUTFALL-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND		ND		mg/L		NC	20

Lab Sample ID: MB 280-608328/3-A

Matrix: Water

Analysis Batch: 608335

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.020	0.0040	mg/L			04/11/23 19:07	1

Lab Sample ID: LCS 280-608328/1-A

Matrix: Water

Analysis Batch: 608335

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.0972		mg/L		97	91 - 112

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: LCSD 280-608328/2-A

Matrix: Water

Analysis Batch: 608335

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	0.100	0.100		mg/L		100	91 - 112	3	20

Lab Sample ID: 280-174860-1 MS

Matrix: Water

Analysis Batch: 608335

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	ND		0.100	0.0987		mg/L		99	91 - 112		

Lab Sample ID: 280-174860-1 MSD

Matrix: Water

Analysis Batch: 608335

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		0.100	0.0981		mg/L		98	91 - 112	1	20

Lab Sample ID: 280-174860-1 DU

Matrix: Water

Analysis Batch: 608335

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		mg/L		NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-608533/5

Matrix: Water

Analysis Batch: 608533

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH adj. to 25 deg C	7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 280-174860-1 DU

Matrix: Water

Analysis Batch: 608533

Client Sample ID: OUTFALL-001

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH adj. to 25 deg C	7.7	HF	7.9		SU		3	5
Temperature	21.6	HF	21.9		Degrees C		1	10

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-608797/11

Matrix: Water

Analysis Batch: 608797

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			04/14/23 15:37	1

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QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: LCS 280-608797/9
Matrix: Water
Analysis Batch: 608797

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.502	0.488		mg/L		97	81 - 122

Lab Sample ID: LCSD 280-608797/10
Matrix: Water
Analysis Batch: 608797

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	0.502	0.504		mg/L		100	81 - 122	3	10

Method: SM4500 S2 H - Unionized Hydrogen Sulfide

Lab Sample ID: MB 280-609182/4
Matrix: Water
Analysis Batch: 609182

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Un-ionized Hydrogen Sulfide	ND		1.0	1.0	mg/L			04/18/23 16:37	1
Field pH	ND		1.0	1.0	SU			04/18/23 16:37	1
Field Temperature	ND		1.0	1.0	Celsius			04/18/23 16:37	1
Specific Conductance	ND		2.0	2.0	umhos/cm			04/18/23 16:37	1
Sulfide	ND		4.0	4.0	mg/L			04/18/23 16:37	1

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Metals

Prep Batch: 608363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total Recoverable	Water	200.7	
MB 280-608363/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-608363/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 608367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-608367/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-608367/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 280-608367/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	

Analysis Batch: 608553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total Recoverable	Water	200.8	608367
MB 280-608367/1-A	Method Blank	Total Recoverable	Water	200.8	608367
LCS 280-608367/2-A	Lab Control Sample	Total Recoverable	Water	200.8	608367
LCSD 280-608367/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	608367

Filtration Batch: 608620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-608620/1-B	Method Blank	Potentially Dissolved	Water	FILTRATION	
LCS 280-608620/2-B	Lab Control Sample	Potentially Dissolved	Water	FILTRATION	

Prep Batch: 608762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	245.1	
MB 280-608762/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-608762/2-A	Lab Control Sample	Total/NA	Water	245.1	

Filtration Batch: 608831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 608892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Potentially Dissolved	Water	200.8	608831
MB 280-608620/1-B	Method Blank	Potentially Dissolved	Water	200.8	608620
LCS 280-608620/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	608620

Analysis Batch: 608923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	245.1	608762
MB 280-608762/1-A	Method Blank	Total/NA	Water	245.1	608762
LCS 280-608762/2-A	Lab Control Sample	Total/NA	Water	245.1	608762

Analysis Batch: 608933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total Recoverable	Water	200.7 Rev 4.4	608363
MB 280-608363/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	608363
LCS 280-608363/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	608363

Eurofins Denver

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Metals

Analysis Batch: 609083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Potentially Dissolved	Water	200.8	608892
MB 280-608620/1-B	Method Blank	Potentially Dissolved	Water	200.8	608892
LCS 280-608620/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	608892

Prep Batch: 621558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	1631E	
MB 400-621558/3-A	Method Blank	Total/NA	Water	1631E	
LCS 400-621558/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-621558/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 621683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	1631E	621558
MB 400-621558/3-A	Method Blank	Total/NA	Water	1631E	621558
LCS 400-621558/4-A	Lab Control Sample	Total/NA	Water	1631E	621558
LCSD 400-621558/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	621558

General Chemistry

Filtration Batch: 608328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Dissolved	Water	FILTRATION	
MB 280-608328/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-608328/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-608328/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-174860-1 MS	OUTFALL-001	Dissolved	Water	FILTRATION	
280-174860-1 MSD	OUTFALL-001	Dissolved	Water	FILTRATION	
280-174860-1 DU	OUTFALL-001	Dissolved	Water	FILTRATION	

Analysis Batch: 608335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Dissolved	Water	SM 3500 CR B	608328
280-174860-1	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
MB 280-608328/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	608328
MB 280-608335/10	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-608328/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	608328
LCS 280-608335/8	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-608328/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	608328
LCSD 280-608335/9	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	
280-174860-1 MS	OUTFALL-001	Dissolved	Water	SM 3500 CR B	608328
280-174860-1 MS	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
280-174860-1 MSD	OUTFALL-001	Dissolved	Water	SM 3500 CR B	608328
280-174860-1 MSD	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
280-174860-1 DU	OUTFALL-001	Dissolved	Water	SM 3500 CR B	608328
280-174860-1 DU	OUTFALL-001	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 608432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	SM 2510B	
MB 280-608432/31	Method Blank	Total/NA	Water	SM 2510B	

Eurofins Denver

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

General Chemistry (Continued)

Analysis Batch: 608432 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-608432/30	Lab Control Sample	Total/NA	Water	SM 2510B	

Analysis Batch: 608533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	SM 4500 H+ B	
LCS 280-608533/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
280-174860-1 DU	OUTFALL-001	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 608627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	SM 2540D	
MB 280-608627/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-608627/1	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 608797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	
MB 280-608797/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-608797/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-608797/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 609182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total/NA	Water	SM4500 S2 H	
MB 280-609182/4	Method Blank	Total/NA	Water	SM4500 S2 H	

Analysis Batch: 610203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Total Recoverable	Water	SM3500 CR B	

Analysis Batch: 610205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-174860-1	OUTFALL-001	Potentially Dissolved	Water	SM3500 CR B	

Lab Chronicle

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-174860-1

Date Collected: 04/11/23 13:00

Matrix: Water

Date Received: 04/11/23 15:10

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	621558	04/13/23 16:30	VLC	EET PEN
							Completed:	04/14/23 10:00 ¹		
Total/NA	Analysis	1631E		1			621683	04/20/23 11:58	VLC	EET PEN
Total Recoverable	Prep	200.7			50 mL	50 mL	608363	04/13/23 07:56	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			608933	04/15/23 05:37	KRP	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	608831	04/15/23 00:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	608892	04/17/23 15:03	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			609083	04/18/23 09:19	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	608367	04/12/23 14:38	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			608553	04/13/23 01:12	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	608762	04/14/23 16:24	PFM	EET DEN
Total/NA	Analysis	245.1		1			608923	04/14/23 22:17	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			608432	04/12/23 12:39	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	608627	04/13/23 14:40	MCR	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	608328	04/11/23 18:22	SJD	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	608335	04/11/23 19:08	SJD	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	608335	04/11/23 18:48	SJD	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			608533	04/12/23 12:48	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	608797	04/14/23 15:40	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			610205	04/26/23 12:32	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			610203	04/26/23 12:30	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			609182	04/18/23 16:37	ZPM	EET DEN

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-24
Arizona	State	AZ0713	12-20-23
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-24
Connecticut	State	PH-0686	09-30-22 *
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-23
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-23
New Jersey	NELAP	190002	06-30-23
North Carolina (WW/SW)	State	358	12-31-22 *
North Dakota	State	R-034	01-08-23 *
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-23 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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	06-30-23
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23

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

Eurofins Denver

Accreditation/Certification Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-174860-1

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
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-24

[illegible]

Login Sample Receipt Checklist

Client: GS Mining Company LLC

Job Number: 280-174860-1

Login Number: 174860

List Number: 1

Creator: Rystrom, Joshua R

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.	False	Refer to Job Narrative for details.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GS Mining Company LLC

Job Number: 280-174860-1

Login Number: 174860

List Number: 2

Creator: Peckinpaugh, Marshall

List Source: Eurofins Pensacola

List Creation: 04/13/23 12:54 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	5.4°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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Delaney
GS Mining Company LLC
422 Gregory Street
Central City, Colorado 80427

Generated 5/8/2023 11:13:26 AM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-175722-1

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
5/8/2023 11:13:26 AM

Authorized for release by
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Dylan.Bieniulis@et.eurofinsus.com
(303)736-0138

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Definitions/Glossary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

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.

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Job ID: 280-175722-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: GS Mining Company LLC

Project: Nederland, CO

Report Number: 280-175722-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/27/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.8 C.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample UTFALL-001 (280-175722-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/02/2023 and analyzed on 05/03/2023.

This report includes Reporting Limits (RLs) for 200.8 Potentially Dissolved Silver that are less than Eurofins TestAmerica Denver's standard reporting limit. 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.

Copper was detected in method blank MB 280-610632/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample UTFALL-001 (280-175722-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 05/02/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-175722-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Copper	1.1	J	2.0	0.71	ug/L	1			200.8	Total
Lead	1.8		1.0	0.23	ug/L	1			200.8	Recoverable
Copper	0.94	J B	2.0	0.71	ug/L	1			200.8	Total
Lead	1.6		1.0	0.23	ug/L	1			200.8	Recoverable
Zinc	5.7	J	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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-175722-1	OUTFALL-001	Water	04/27/23 13:00	04/27/23 15:33

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

Client Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

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

Client Sample ID: OUTFALL-001

Date Collected: 04/27/23 13:00

Date Received: 04/27/23 15:33

Lab Sample ID: 280-175722-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.1	J	2.0	0.71	ug/L		05/02/23 08:08	05/02/23 19:05	1
Lead	1.8		1.0	0.23	ug/L		05/02/23 08:08	05/02/23 19:05	1

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

Client Sample ID: OUTFALL-001

Date Collected: 04/27/23 13:00

Date Received: 04/27/23 15:33

Lab Sample ID: 280-175722-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		05/02/23 15:00	05/03/23 09:19	1
Copper	0.94	J B	2.0	0.71	ug/L		05/02/23 15:00	05/03/23 09:19	1
Lead	1.6		1.0	0.23	ug/L		05/02/23 15:00	05/03/23 09:19	1
Silver	ND		0.50	0.045	ug/L		05/02/23 15:00	05/03/23 09:19	1
Zinc	5.7	J	10	2.0	ug/L		05/02/23 15:00	05/03/23 09:19	1

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-610522/1-A

Matrix: Water

Analysis Batch: 611022

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 610522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		05/02/23 08:08	05/02/23 19:01	1
Lead	ND		1.0	0.23	ug/L		05/02/23 08:08	05/02/23 19:01	1

Lab Sample ID: LCS 280-610522/2-A

Matrix: Water

Analysis Batch: 611022

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 610522

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	40.3		ug/L		101	88 - 115

Lab Sample ID: 280-175722-1 MS

Matrix: Water

Analysis Batch: 611022

Client Sample ID: OUTFALL-001

Prep Type: Total Recoverable

Prep Batch: 610522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.1	J	40.0	41.2		ug/L		100	90 - 115
Lead	1.8		40.0	42.5		ug/L		102	88 - 115

Lab Sample ID: 280-175722-1 MSD

Matrix: Water

Analysis Batch: 611022

Client Sample ID: OUTFALL-001

Prep Type: Total Recoverable

Prep Batch: 610522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	1.1	J	40.0	41.4		ug/L		101	90 - 115	0	20
Lead	1.8		40.0	42.4		ug/L		101	88 - 115	0	20

Lab Sample ID: MB 280-610632/1-B

Matrix: Water

Analysis Batch: 611069

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 610866

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		05/02/23 15:00	05/03/23 08:54	1
Copper	0.952	J	2.0	0.71	ug/L		05/02/23 15:00	05/03/23 08:54	1
Lead	ND		1.0	0.23	ug/L		05/02/23 15:00	05/03/23 08:54	1
Silver	ND		0.50	0.045	ug/L		05/02/23 15:00	05/03/23 08:54	1
Zinc	ND		10	2.0	ug/L		05/02/23 15:00	05/03/23 08:54	1

Lab Sample ID: LCS 280-610632/2-B

Matrix: Water

Analysis Batch: 611069

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 610866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	38.8		ug/L		97	89 - 111
Copper	40.0	39.3		ug/L		98	90 - 115
Lead	40.0	39.4		ug/L		99	88 - 115
Silver	40.0	39.7		ug/L		99	90 - 114
Zinc	40.0	38.9		ug/L		97	88 - 115

Eurofins Denver

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Metals

Prep Batch: 610522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175722-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-610522/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-610522/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-175722-1 MS	OUTFALL-001	Total Recoverable	Water	200.8	
280-175722-1 MSD	OUTFALL-001	Total Recoverable	Water	200.8	

Filtration Batch: 610632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175722-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-610632/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-610632/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 610866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175722-1	OUTFALL-001	Potentially Dissolved	Water	200.8	610632
MB 280-610632/1-B	Method Blank	Potentially Dissolved	Water	200.8	610632
LCS 280-610632/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	610632

Analysis Batch: 611022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175722-1	OUTFALL-001	Total Recoverable	Water	200.8	610522
MB 280-610522/1-A	Method Blank	Total Recoverable	Water	200.8	610522
LCS 280-610522/2-A	Lab Control Sample	Total Recoverable	Water	200.8	610522
280-175722-1 MS	OUTFALL-001	Total Recoverable	Water	200.8	610522
280-175722-1 MSD	OUTFALL-001	Total Recoverable	Water	200.8	610522

Analysis Batch: 611069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175722-1	OUTFALL-001	Potentially Dissolved	Water	200.8	610866
MB 280-610632/1-B	Method Blank	Potentially Dissolved	Water	200.8	610866
LCS 280-610632/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	610866

Lab Chronicle

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-175722-1

Date Collected: 04/27/23 13:00

Matrix: Water

Date Received: 04/27/23 15:33

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			100 mL	100 mL	610632	04/28/23 18:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	610866	05/02/23 15:00	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			611069	05/03/23 09:19	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	610522	05/02/23 08:08	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			611022	05/02/23 19:05	LMT	EET DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-175722-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-24
Arizona	State	AZ0713	12-20-23
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-23 *
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-23 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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

Eurofins Denver

Client Information		Lab PM: Bieniulis, Dylan T		Carrier Tracking No(s):		OOCC No:	
Patrick Delaney		E-Mail: Dylan.Bieniulis@Eurofinset.com		State of Origin:		Page:	
Company: Grand Island Resources		PWSID:		Analysis Requested		Job #:	
Address: 12567 West Cedar Road Suite 250		Due Date Requested:		TAT Requested (days):		Preservation Codes:	
City: Lakewood		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Advance Payment Required		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Phone: 315-414-6986		PO #:		Project #:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: pdelaney@blackfoxmining.com		WO #:		SSOW#:			
Project Name: Wastewater Discharge - Nederland, CO		Sample Date		Sample Time		Sample Type (C=comp, G=grab)	
Site: second half of the month event		4/27/23		13:00		G W	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)	
OUTFALL-001		4/27/23		13:00		G W	
Matrix (W=water, S=solid, O=water, A=air)		Preservation Code:		Field Filtered Sample (Yes or No)		Permit List	
				N		200.8 - Potentially Dissolved Metals (Second half of the month permit list) 200.8 - Total Recoverable Metals (Second half of the month permit list) 280-175722 Chain of Custody	
Special Instructions/Note:		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) pH = temp =	
Possible Hazard Identification		Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Special Instructions/QC Requirements:			
Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:	

Login Sample Receipt Checklist

Client: GS Mining Company LLC

Job Number: 280-175722-1

Login Number: 175722

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	
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 MAY 2023 OUTFALL-001 ANALYTICAL RESULTS



ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Delaney
GS Mining Company LLC
422 Gregory Street
Central City, Colorado 80427

Generated 6/15/2023 1:27:11 PM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-176346-1

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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6/15/2023 1:27:11 PM

Authorized for release by
Dylan Bieniulis, Project Manager I
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(303)736-0138



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Definitions/Glossary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Job ID: 280-176346-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: GS Mining Company LLC

Project: Nederland, CO

Report Number: 280-176346-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/11/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.9 C.

TOTAL RECOVERABLE METALS (ICP)

Sample OUTFALL 001 (280-176346-1) was analyzed for Total Recoverable Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 05/12/2023 and analyzed on 05/18/2023.

Iron was detected in method blank MB 280-612163/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample OUTFALL 001 (280-176346-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/15/2023 and analyzed on 05/16/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample OUTFALL 001 (280-176346-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/12/2023 and analyzed on 05/19/2023.

Chromium was detected in method blank MB 280-612163/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Sample OUTFALL 001 (280-176346-1) was analyzed for total mercury (CVAA) in accordance with EPA Method 245.1. The samples were

Case Narrative

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Job ID: 280-176346-1 (Continued)

Laboratory: Eurofins Denver (Continued)

prepared on 05/23/2023 and analyzed on 05/24/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - POTENTIALLY DISSOLVED

Sample UTFALL 001 (280-176346-1) was analyzed for Trivalent Chromium - Potentially Dissolved in accordance with SM3500_CR3_B. The samples were analyzed on 05/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - TOTAL RECOVERABLE

Sample UTFALL 001 (280-176346-1) was analyzed for Trivalent Chromium - Total Recoverable in accordance with SM3500_CR3_B. The samples were analyzed on 05/22/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY

Sample UTFALL 001 (280-176346-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 05/23/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Sample UTFALL 001 (280-176346-1) was analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 05/17/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED HEXAVALENT CHROMIUM

Sample UTFALL 001 (280-176346-1) was analyzed for dissolved hexavalent chromium in accordance with SM 3500 CR B. The samples were analyzed on 05/11/2023.

Chromium, hexavalent failed the recovery criteria high for LCS 280-612154/3-A. The analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Sample UTFALL 001 (280-176346-1) was analyzed for hexavalent chromium in accordance with 3500_CR_B. The samples were analyzed on 05/11/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Sample UTFALL 001 (280-176346-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 05/19/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Sample UTFALL 001 (280-176346-1) was analyzed for sulfide in accordance with SM20 4500 S2 D. The samples were analyzed on 05/17/2023.

Sulfide was detected in method blank MB 280-612886/11 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL,

Case Narrative

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Job ID: 280-176346-1 (Continued)

Laboratory: Eurofins Denver (Continued)

the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HYDROGEN SULFIDE

Sample OUTFALL 001 (280-176346-1) was analyzed for Hydrogen Sulfide in accordance with SM20 4500 S2 H. The samples were analyzed on 05/24/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 280-176346-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	80	J B	100	9.1	ug/L	1		200.7 Rev 4.4	Total
Chromium	1.1	J B	3.0	0.50	ug/L	1		200.8	Recoverable
Copper	1.4	J	2.0	0.71	ug/L	1		200.8	Total
Lead	2.5		1.0	0.23	ug/L	1		200.8	Recoverable
Zinc	3.9	J	10	2.0	ug/L	1		200.8	Total
Copper	0.88	J	2.0	0.71	ug/L	1		200.8	Recoverable
Lead	2.1		1.0	0.23	ug/L	1		200.8	Potentially
Zinc	10		10	2.0	ug/L	1		200.8	Dissolved
Specific Conductance	180		2.0	2.0	umhos/cm	1		SM 2510B	Potentially
pH adj. to 25 deg C	8.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Dissolved
Temperature	20.1	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	8.1		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	180		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-176346-1	OUTFALL 001	Water	05/11/23 09:45	05/11/23 13:10

1

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Client Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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

Client Sample ID: OUTFALL 001
Date Collected: 05/11/23 09:45
Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	80	J B	100	9.1	ug/L		05/12/23 07:43	05/18/23 13:35	1

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

Client Sample ID: OUTFALL 001
Date Collected: 05/11/23 09:45
Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/12/23 07:43	05/19/23 03:28	1
Cadmium	ND		1.0	0.19	ug/L		05/12/23 07:43	05/19/23 03:28	1
Chromium	1.1	J B	3.0	0.50	ug/L		05/12/23 07:43	05/19/23 03:28	1
Copper	1.4	J	2.0	0.71	ug/L		05/12/23 07:43	05/19/23 03:28	1
Lead	2.5		1.0	0.23	ug/L		05/12/23 07:43	05/19/23 03:28	1
Zinc	3.9	J	10	2.0	ug/L		05/12/23 07:43	05/19/23 03:28	1

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

Client Sample ID: OUTFALL 001
Date Collected: 05/11/23 09:45
Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/15/23 14:55	05/16/23 00:45	1
Cadmium	ND		1.0	0.19	ug/L		05/15/23 14:55	05/16/23 00:45	1
Chromium	ND		3.0	0.50	ug/L		05/15/23 14:55	05/16/23 00:45	1
Copper	0.88	J	2.0	0.71	ug/L		05/15/23 14:55	05/16/23 00:45	1
Lead	2.1		1.0	0.23	ug/L		05/15/23 14:55	05/16/23 00:45	1
Manganese	ND		3.0	0.51	ug/L		05/15/23 14:55	05/16/23 00:45	1
Nickel	ND		3.0	0.83	ug/L		05/15/23 14:55	05/16/23 00:45	1
Selenium	ND		5.0	1.0	ug/L		05/15/23 14:55	05/16/23 00:45	1
Silver	ND		0.50	0.045	ug/L		05/15/23 14:55	05/16/23 00:45	1
Zinc	10		10	2.0	ug/L		05/15/23 14:55	05/16/23 00:45	1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL 001
Date Collected: 05/11/23 09:45
Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 01:07	1

General Chemistry

Client Sample ID: OUTFALL 001
Date Collected: 05/11/23 09:45
Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	180		2.0	2.0	umhos/cm			05/23/23 10:58	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			05/17/23 18:34	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/11/23 15:45	1
pH adj. to 25 deg C (SM 4500 H+ B)	8.1	HF	0.1	0.1	SU			05/19/23 15:35	1
Temperature (SM 4500 H+ B)	20.1	HF	1.0	1.0	Degrees C			05/19/23 15:35	1

Eurofins Denver

Client Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

General Chemistry (Continued)

Client Sample ID: OUTFALL 001

Date Collected: 05/11/23 09:45

Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			05/17/23 18:29	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/24/23 13:58	1
Field pH (SM4500 S2 H)	8.1		1.0	1.0	SU			05/24/23 13:58	1
Field Temperature (SM4500 S2 H)	20		1.0	1.0	Celsius			05/24/23 13:58	1
Specific Conductance (SM4500 S2 H)	180		2.0	2.0	umhos/cm			05/24/23 13:58	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/24/23 13:58	1

General Chemistry - Total Recoverable

Client Sample ID: OUTFALL 001

Date Collected: 05/11/23 09:45

Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND	H	0.020	0.020	mg/L			05/22/23 10:36	1

General Chemistry - Dissolved

Client Sample ID: OUTFALL 001

Date Collected: 05/11/23 09:45

Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND	*+	0.020	0.0040	mg/L			05/11/23 15:45	1

General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL 001

Date Collected: 05/11/23 09:45

Date Received: 05/11/23 13:10

Lab Sample ID: 280-176346-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L			05/26/23 06:59	1

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-612163/1-A

Matrix: Water

Analysis Batch: 613111

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11.1	J	100	9.1	ug/L		05/12/23 07:43	05/18/23 13:26	1

Lab Sample ID: LCS 280-612163/2-A

Matrix: Water

Analysis Batch: 613111

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10700		ug/L		107	85 - 115

Lab Sample ID: 280-176346-1 MS

Matrix: Water

Analysis Batch: 613111

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	80	J B	10000	10500		ug/L		104	70 - 130

Lab Sample ID: 280-176346-1 MSD

Matrix: Water

Analysis Batch: 613111

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Iron	80	J B	10000	10800		ug/L		107	70 - 130	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612163/1-A

Matrix: Water

Analysis Batch: 613118

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/12/23 07:43	05/19/23 03:24	1
Cadmium	ND		1.0	0.19	ug/L		05/12/23 07:43	05/19/23 03:24	1
Chromium	1.01	J	3.0	0.50	ug/L		05/12/23 07:43	05/19/23 03:24	1
Copper	ND		2.0	0.71	ug/L		05/12/23 07:43	05/19/23 03:24	1
Lead	ND		1.0	0.23	ug/L		05/12/23 07:43	05/19/23 03:24	1
Zinc	ND		10	2.0	ug/L		05/12/23 07:43	05/19/23 03:24	1

Lab Sample ID: LCS 280-612163/20-A

Matrix: Water

Analysis Batch: 613118

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	39.3		ug/L		98	89 - 111
Cadmium	40.0	40.5		ug/L		101	89 - 111
Chromium	40.0	43.0		ug/L		107	86 - 115
Copper	40.0	39.2		ug/L		98	90 - 115
Lead	40.0	41.7		ug/L		104	88 - 115
Zinc	40.0	41.0		ug/L		103	88 - 115

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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

Lab Sample ID: 280-176346-1 MS

Matrix: Water

Analysis Batch: 613118

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	41.3		ug/L		103	79 - 120
Cadmium	ND		40.0	41.4		ug/L		104	89 - 111
Chromium	1.1	J B	40.0	42.2		ug/L		103	86 - 115
Copper	1.4	J	40.0	40.5		ug/L		98	90 - 115
Lead	2.5		40.0	43.9		ug/L		103	88 - 115
Zinc	3.9	J	40.0	41.6		ug/L		94	88 - 115

Lab Sample ID: 280-176346-1 MSD

Matrix: Water

Analysis Batch: 613118

Client Sample ID: OUTFALL 001

Prep Type: Total Recoverable

Prep Batch: 612163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		40.0	40.8		ug/L		102	79 - 120	1	20
Cadmium	ND		40.0	39.6		ug/L		99	89 - 111	5	20
Chromium	1.1	J B	40.0	42.0		ug/L		102	86 - 115	0	20
Copper	1.4	J	40.0	39.3		ug/L		95	90 - 115	3	20
Lead	2.5		40.0	43.8		ug/L		103	88 - 115	0	20
Zinc	3.9	J	40.0	43.3		ug/L		98	88 - 115	4	20

Lab Sample ID: MB 280-612179/1-B

Matrix: Water

Analysis Batch: 612609

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 612430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/15/23 14:55	05/16/23 00:18	1
Cadmium	ND		1.0	0.19	ug/L		05/15/23 14:55	05/16/23 00:18	1
Chromium	ND		3.0	0.50	ug/L		05/15/23 14:55	05/16/23 00:18	1
Copper	ND		2.0	0.71	ug/L		05/15/23 14:55	05/16/23 00:18	1
Lead	ND		1.0	0.23	ug/L		05/15/23 14:55	05/16/23 00:18	1
Manganese	ND		3.0	0.51	ug/L		05/15/23 14:55	05/16/23 00:18	1
Nickel	ND		3.0	0.83	ug/L		05/15/23 14:55	05/16/23 00:18	1
Selenium	ND		5.0	1.0	ug/L		05/15/23 14:55	05/16/23 00:18	1
Silver	ND		0.50	0.045	ug/L		05/15/23 14:55	05/16/23 00:18	1
Zinc	ND		10	2.0	ug/L		05/15/23 14:55	05/16/23 00:18	1

Lab Sample ID: LCS 280-612179/2-B

Matrix: Water

Analysis Batch: 612609

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 612430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	38.9		ug/L		97	89 - 111
Cadmium	40.0	39.8		ug/L		99	89 - 111
Chromium	40.0	39.2		ug/L		98	86 - 115
Copper	40.0	38.4		ug/L		96	90 - 115
Lead	40.0	39.7		ug/L		99	88 - 115
Manganese	40.0	39.9		ug/L		100	87 - 115
Nickel	40.0	37.7		ug/L		94	86 - 115
Selenium	40.0	40.3		ug/L		101	85 - 114
Silver	40.0	40.3		ug/L		101	90 - 114

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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

Lab Sample ID: LCS 280-612179/2-B

Matrix: Water

Analysis Batch: 612609

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 612430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	40.0	40.8		ug/L		102	88 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-613507/1-A

Matrix: Water

Analysis Batch: 613659

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 613507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 00:49	1

Lab Sample ID: LCS 280-613507/2-A

Matrix: Water

Analysis Batch: 613659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 613507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.74		ug/L		95	90 - 110

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-613464/5

Matrix: Water

Analysis Batch: 613464

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			05/23/23 10:58	1

Lab Sample ID: LCS 280-613464/4

Matrix: Water

Analysis Batch: 613464

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	1490		umhos/cm		106	90 - 110

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

Lab Sample ID: MB 280-612884/3

Matrix: Water

Analysis Batch: 612884

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			05/17/23 18:33	1

Lab Sample ID: LCS 280-612884/1

Matrix: Water

Analysis Batch: 612884

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	502	447		mg/L		89	79 - 114

Eurofins Denver

QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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

Lab Sample ID: LCSD 280-612884/2

Matrix: Water

Analysis Batch: 612884

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	502	457		mg/L		91	79 - 114	2	20

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-612263/64

Matrix: Water

Analysis Batch: 612263

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		0.020	0.0040	mg/L			05/11/23 14:44	1

Lab Sample ID: MB 280-612263/65

Matrix: Water

Analysis Batch: 612263

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		0.020	0.0040	mg/L			05/11/23 14:43	1

Lab Sample ID: LCS 280-612263/68

Matrix: Water

Analysis Batch: 612263

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.103		mg/L		103	91 - 112

Lab Sample ID: LCSD 280-612263/66

Matrix: Water

Analysis Batch: 612263

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	0.100	0.102		mg/L					

Lab Sample ID: LCSD 280-612263/67

Matrix: Water

Analysis Batch: 612263

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	0.100	0.102		mg/L		102	91 - 112	1	20

Lab Sample ID: MB 280-612154/5-A

Matrix: Water

Analysis Batch: 612263

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.020	0.0040	mg/L			05/11/23 17:14	1

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QC Sample Results

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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

Lab Sample ID: LCS 280-612154/3-A
Matrix: Water
Analysis Batch: 612263

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.477	*+	mg/L		477	91 - 112

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-613264/5
Matrix: Water
Analysis Batch: 613264

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	7.1		SU		101	99 - 101

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-612886/11
Matrix: Water
Analysis Batch: 612886

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0225	J	0.050	0.022	mg/L			05/17/23 18:18	1

Lab Sample ID: LCS 280-612886/9
Matrix: Water
Analysis Batch: 612886

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	0.454		mg/L		91	81 - 122

Lab Sample ID: LCSD 280-612886/10
Matrix: Water
Analysis Batch: 612886

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	0.446		mg/L		89	81 - 122	2	10

Method: SM4500 S2 H - Unionized Hydrogen Sulfide

Lab Sample ID: MB 280-613665/1
Matrix: Water
Analysis Batch: 613665

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Un-ionized Hydrogen Sulfide	ND		1.0	1.0	mg/L			05/24/23 13:58	1
Field pH	ND		1.0	1.0	SU			05/24/23 13:58	1
Field Temperature	ND		1.0	1.0	Celsius			05/24/23 13:58	1
Specific Conductance	ND		2.0	2.0	umhos/cm			05/24/23 13:58	1
Sulfide	ND		1.0	1.0	mg/L			05/24/23 13:58	1

Eurofins Denver

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Metals

Prep Batch: 612163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total Recoverable	Water	200.7	
280-176346-1	OUTFALL 001	Total Recoverable	Water	200.8	
MB 280-612163/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 280-612163/20-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 280-612163/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
280-176346-1 MS	OUTFALL 001	Total Recoverable	Water	200.7	
280-176346-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	
280-176346-1 MSD	OUTFALL 001	Total Recoverable	Water	200.7	
280-176346-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	

Filtration Batch: 612179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-612179/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-612179/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

Filtration Batch: 612331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 612430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Potentially Dissolved	Water	200.8	612331
MB 280-612179/1-B	Method Blank	Potentially Dissolved	Water	200.8	612179
LCS 280-612179/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	612179

Analysis Batch: 612609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Potentially Dissolved	Water	200.8	612430
MB 280-612179/1-B	Method Blank	Potentially Dissolved	Water	200.8	612430
LCS 280-612179/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	612430

Analysis Batch: 613111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	612163
MB 280-612163/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612163
LCS 280-612163/20-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612163
280-176346-1 MS	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	612163
280-176346-1 MSD	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	612163

Analysis Batch: 613118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total Recoverable	Water	200.8	612163
MB 280-612163/1-A	Method Blank	Total Recoverable	Water	200.8	612163
LCS 280-612163/20-A	Lab Control Sample	Total Recoverable	Water	200.8	612163
280-176346-1 MS	OUTFALL 001	Total Recoverable	Water	200.8	612163
280-176346-1 MSD	OUTFALL 001	Total Recoverable	Water	200.8	612163

Prep Batch: 613507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	245.1	
MB 280-613507/1-A	Method Blank	Total/NA	Water	245.1	

Eurofins Denver

QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Metals (Continued)

Prep Batch: 613507 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-613507/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 613659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	245.1	613507
MB 280-613507/1-A	Method Blank	Total/NA	Water	245.1	613507
LCS 280-613507/2-A	Lab Control Sample	Total/NA	Water	245.1	613507

General Chemistry

Filtration Batch: 612154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Dissolved	Water	FILTRATION	
MB 280-612154/5-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-612154/3-A	Lab Control Sample	Dissolved	Water	FILTRATION	

Analysis Batch: 612263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Dissolved	Water	SM 3500 CR B	612154
280-176346-1	OUTFALL 001	Total/NA	Water	SM 3500 CR B	
MB 280-612154/5-A	Method Blank	Dissolved	Water	SM 3500 CR B	612154
MB 280-612263/64	Method Blank	Total/NA	Water	SM 3500 CR B	
MB 280-612263/65	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-612154/3-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	612154
LCS 280-612263/68	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-612263/66	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	
LCSD 280-612263/67	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 612884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 280-612884/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-612884/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-612884/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Analysis Batch: 612886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	SM 4500 S2 D	
MB 280-612886/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-612886/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-612886/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 613264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	SM 4500 H+ B	
LCS 280-613264/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 613302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total Recoverable	Water	SM3500 CR B	

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QC Association Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

General Chemistry

Analysis Batch: 613464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	SM 2510B	
MB 280-613464/5	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-613464/4	Lab Control Sample	Total/NA	Water	SM 2510B	

Analysis Batch: 613665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Total/NA	Water	SM4500 S2 H	
MB 280-613665/1	Method Blank	Total/NA	Water	SM4500 S2 H	

Analysis Batch: 613892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176346-1	OUTFALL 001	Potentially Dissolved	Water	SM3500 CR B	

Lab Chronicle

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 280-176346-1

Date Collected: 05/11/23 09:45

Matrix: Water

Date Received: 05/11/23 13:10

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	612163	05/12/23 07:43	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			613111	05/18/23 13:35	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	612331	05/12/23 14:59	KMS	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	612430	05/15/23 14:55	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			612609	05/16/23 00:45	LRD	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612163	05/12/23 07:43	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			613118	05/19/23 03:28	LRD	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	613507	05/23/23 17:26	PFM	EET DEN
Total/NA	Analysis	245.1		1			613659	05/24/23 01:07	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			613464	05/23/23 10:58	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	612884	05/17/23 18:34	MCR	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	612154	05/11/23 14:47	SL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	612263	05/11/23 15:45	SL	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	612263	05/11/23 15:45	SL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			613264	05/19/23 15:35	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	612886	05/17/23 18:29	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			613892	05/26/23 06:59	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			613302	05/22/23 10:36	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			613665	05/24/23 13:58	ZPM	EET DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: GS Mining Company LLC
Project/Site: Nederland, CO

Job ID: 280-176346-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	06-12-23
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	06-08-23
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-24
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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

Eurofins Denver

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: GS Mining Company LLC

Job Number: 280-176346-1

Login Number: 176346

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.	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 250
Lakewood, Colorado 80228

Generated 6/5/2023 11:57:26 AM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-177050-1

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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6/5/2023 11:57:26 AM

Authorized for release by
Dylan Bieniulis, Project Manager I
Dylan.Bieniulis@et.eurofinsus.com
(303)736-0138

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Definitions/Glossary

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

Job ID: 280-177050-1

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.

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/Site: Nederland, CO

Job ID: 280-177050-1

Job ID: 280-177050-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Grand Island Resources

Project: Nederland, CO

Report Number: 280-177050-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/25/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.4 C.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample Outfall-001 (280-177050-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/31/2023 and analyzed on 06/01/2023.

This report includes Reporting Limits (RLs) for 200.8 Potentially Dissolved Silver that are less than Eurofins TestAmerica Denver's standard reporting limit. 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.

Zinc was detected in method blank MB 280-613951/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample Outfall-001 (280-177050-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 05/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

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

Job ID: 280-177050-1

Client Sample ID: Outfall-001

Lab Sample ID: 280-177050-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Copper	1.9	J	2.0	0.71	ug/L	1			200.8	Total
Lead	3.1		1.0	0.23	ug/L	1			200.8	Recoverable
Copper	1.1	J	2.0	0.71	ug/L	1			200.8	Total
Lead	3.4		1.0	0.23	ug/L	1			200.8	Recoverable
Zinc	7.8	J B	10	2.0	ug/L	1			200.8	Potentially Dissolved
										Potentially Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

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

Job ID: 280-177050-1

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: 280-177050-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-177050-1	Outfall-001	Water	05/25/23 10:35	05/25/23 13:55

- 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: 280-177050-1

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

Client Sample ID: Outfall-001
Date Collected: 05/25/23 10:35
Date Received: 05/25/23 13:55

Lab Sample ID: 280-177050-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	J	2.0	0.71	ug/L		05/26/23 13:45	05/26/23 22:45	1
Lead	3.1		1.0	0.23	ug/L		05/26/23 13:45	05/26/23 22:45	1

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

Client Sample ID: Outfall-001
Date Collected: 05/25/23 10:35
Date Received: 05/25/23 13:55

Lab Sample ID: 280-177050-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		05/31/23 14:44	06/01/23 10:11	1
Copper	1.1	J	2.0	0.71	ug/L		05/31/23 14:44	06/01/23 10:11	1
Lead	3.4		1.0	0.23	ug/L		05/31/23 14:44	06/01/23 10:11	1
Silver	ND		0.50	0.045	ug/L		05/31/23 14:44	06/01/23 10:11	1
Zinc	7.8	J B	10	2.0	ug/L		05/31/23 14:44	06/01/23 10:11	1

QC Sample Results

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

Job ID: 280-177050-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-613895/1-A

Matrix: Water

Analysis Batch: 614090

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 613895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		05/26/23 13:45	05/26/23 21:20	1
Lead	ND		1.0	0.23	ug/L		05/26/23 13:45	05/26/23 21:20	1

Lab Sample ID: LCS 280-613895/2-A

Matrix: Water

Analysis Batch: 614090

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 613895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.2		ug/L		100	90 - 115
Lead	40.0	40.8		ug/L		102	88 - 115

Lab Sample ID: 280-177050-1 MS

Matrix: Water

Analysis Batch: 614090

Client Sample ID: Outfall-001

Prep Type: Total Recoverable

Prep Batch: 613895

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.9	J	40.0	40.0		ug/L		95	90 - 115
Lead	3.1		40.0	42.9		ug/L		100	88 - 115

Lab Sample ID: 280-177050-1 MSD

Matrix: Water

Analysis Batch: 614090

Client Sample ID: Outfall-001

Prep Type: Total Recoverable

Prep Batch: 613895

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Copper	1.9	J	40.0	39.5		ug/L		94	90 - 115	1	20
Lead	3.1		40.0	44.7		ug/L		104	88 - 115	4	20

Lab Sample ID: MB 280-613951/1-B

Matrix: Water

Analysis Batch: 614541

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 614302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		05/31/23 14:44	06/01/23 09:53	1
Copper	ND		2.0	0.71	ug/L		05/31/23 14:44	06/01/23 09:53	1
Lead	ND		1.0	0.23	ug/L		05/31/23 14:44	06/01/23 09:53	1
Silver	ND		0.50	0.045	ug/L		05/31/23 14:44	06/01/23 09:53	1
Zinc	2.06	J	10	2.0	ug/L		05/31/23 14:44	06/01/23 09:53	1

Lab Sample ID: LCS 280-613951/2-B

Matrix: Water

Analysis Batch: 614541

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 614302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	42.3		ug/L		106	89 - 111
Copper	40.0	40.9		ug/L		102	90 - 115
Lead	40.0	41.1		ug/L		103	88 - 115
Silver	40.0	40.8		ug/L		102	90 - 114
Zinc	40.0	40.8		ug/L		102	88 - 115

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QC Association Summary

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

Job ID: 280-177050-1

Metals

Prep Batch: 613895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177050-1	Outfall-001	Total Recoverable	Water	200.8	
MB 280-613895/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-613895/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-177050-1 MS	Outfall-001	Total Recoverable	Water	200.8	
280-177050-1 MSD	Outfall-001	Total Recoverable	Water	200.8	

Filtration Batch: 613951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177050-1	Outfall-001	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-613951/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-613951/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

Analysis Batch: 614090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177050-1	Outfall-001	Total Recoverable	Water	200.8	613895
MB 280-613895/1-A	Method Blank	Total Recoverable	Water	200.8	613895
LCS 280-613895/2-A	Lab Control Sample	Total Recoverable	Water	200.8	613895
280-177050-1 MS	Outfall-001	Total Recoverable	Water	200.8	613895
280-177050-1 MSD	Outfall-001	Total Recoverable	Water	200.8	613895

Prep Batch: 614302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177050-1	Outfall-001	Potentially Dissolved	Water	200.8	613951
MB 280-613951/1-B	Method Blank	Potentially Dissolved	Water	200.8	613951
LCS 280-613951/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	613951

Analysis Batch: 614541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177050-1	Outfall-001	Potentially Dissolved	Water	200.8	614302
MB 280-613951/1-B	Method Blank	Potentially Dissolved	Water	200.8	614302
LCS 280-613951/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	614302

Lab Chronicle

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

Job ID: 280-177050-1

Client Sample ID: Outfall-001

Lab Sample ID: 280-177050-1

Date Collected: 05/25/23 10:35

Matrix: Water

Date Received: 05/25/23 13:55

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			250 mL	250 mL	613951	05/26/23 11:33	KMS	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	614302	05/31/23 14:44	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			614541	06/01/23 10:11	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	613895	05/26/23 13:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			614090	05/26/23 22:45	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: 280-177050-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-08-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-24
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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

Eurofins Denver

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-177050-1

Login Number: 177050

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.3 JUNE 2023 OUTFALL-001 ANALYTICAL RESULTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Brooke Molson Moran
Grand Island Resources
12567 West Cedar Road
Suite 250
Lakewood, Colorado 80228

Generated 6/29/2023 1:36:05 PM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-177853-1

Eurofins Denver

Job Notes

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Authorization



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Definitions/Glossary

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

Job ID: 280-177853-1

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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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/Site: Nederland, CO

Job ID: 280-177853-1

Job ID: 280-177853-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Grand Island Resources

Project: Nederland, CO

Report Number: 280-177853-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The sample was received on 6/14/2023 2:34 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 was 5.8° C.

TOTAL RECOVERABLE METALS (ICP)

Sample UTFALL-001 (280-177853-1) was analyzed for Total Recoverable Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 06/19/2023 and analyzed on 06/21/2023.

Iron was detected in method blank MB 280-616155/1-A at a level that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample UTFALL-001 (280-177853-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/20/2023 and analyzed on 06/22/2023.

Chromium and Zinc were detected in method blank MB 280-616494/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample UTFALL-001 (280-177853-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/19/2023 and analyzed on 06/20/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Sample UTFALL-001 (280-177853-1) was analyzed for total mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/27/2023.

Case Narrative

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

Job ID: 280-177853-1

Job ID: 280-177853-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - POTENTIALLY DISSOLVED

Sample UTFALL-001 (280-177853-1) was analyzed for Trivalent Chromium - Potentially Dissolved in accordance with SM3500_CR3_B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - TOTAL RECOVERABLE

Sample UTFALL-001 (280-177853-1) was analyzed for Trivalent Chromium - Total Recoverable in accordance with SM3500_CR3_B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY

Sample UTFALL-001 (280-177853-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Sample UTFALL-001 (280-177853-1) was analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 06/21/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED HEXAVALENT CHROMIUM

Sample UTFALL-001 (280-177853-1) was analyzed for dissolved hexavalent chromium in accordance with SM 3500 CR B. The samples were analyzed on 06/14/2023.

The matrix spike and matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-616147 and analytical batch 280-616159 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference is suspected because the associated laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recoveries are within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Sample UTFALL-001 (280-177853-1) was analyzed for hexavalent chromium in accordance with 3500_CR_B. The samples were analyzed on 06/14/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Sample UTFALL-001 (280-177853-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 06/20/2023.

Sample did not equilibrate to within 0.05 pH units after three measurements. This was observed in a previous analysis thus the sample was not rerun. UTFALL-001 (280-177853-1)

The sample duplicate (DUP) precision for analytical batch 280-616882 was outside control limits. Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Case Narrative

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

Job ID: 280-177853-1

Job ID: 280-177853-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Sample OUTFALL-001 (280-177853-1) was analyzed for sulfide in accordance with SM20 4500 S2 D. The samples were analyzed on 06/15/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HYDROGEN SULFIDE

Sample OUTFALL-001 (280-177853-1) was analyzed for Hydrogen Sulfide in accordance with SM20 4500 S2 H. The samples were analyzed on 06/16/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

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

Job ID: 280-177853-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-177853-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	67	J B	100	9.1	ug/L	1		200.7 Rev 4.4	Total
Copper	2.3		2.0	0.71	ug/L	1		200.8	Recoverable
Lead	2.1		1.0	0.23	ug/L	1		200.8	Total
Zinc	5.9	J	10	2.0	ug/L	1		200.8	Recoverable
Copper	2.0		2.0	0.71	ug/L	1		200.8	Total
Lead	2.0		1.0	0.23	ug/L	1		200.8	Potentially
Zinc	9.0	J B	10	2.0	ug/L	1		200.8	Dissolved
Specific Conductance	140		2.0	2.0	umhos/cm	1		SM 2510B	Potentially
pH adj. to 25 deg C	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Dissolved
Temperature	21.7	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.5		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	22		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	140		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

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

Job ID: 280-177853-1

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: 280-177853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-177853-1	OUTFALL-001	Water	06/14/23 12:30	06/14/23 14:34

1

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Client Sample Results

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

Job ID: 280-177853-1

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

Client Sample ID: OUTFALL-001
Date Collected: 06/14/23 12:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	67	J B	100	9.1	ug/L		06/19/23 07:43	06/21/23 14:38	1

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

Client Sample ID: OUTFALL-001
Date Collected: 06/14/23 12:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 07:43	06/20/23 02:16	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 07:43	06/20/23 02:16	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 07:43	06/20/23 02:16	1
Copper	2.3		2.0	0.71	ug/L		06/19/23 07:43	06/20/23 02:16	1
Lead	2.1		1.0	0.23	ug/L		06/19/23 07:43	06/20/23 02:16	1
Zinc	5.9	J	10	2.0	ug/L		06/19/23 07:43	06/20/23 02:16	1

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

Client Sample ID: OUTFALL-001
Date Collected: 06/14/23 12:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:00	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 20:00	1
Chromium	ND		3.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:00	1
Copper	2.0		2.0	0.71	ug/L		06/20/23 14:40	06/22/23 20:00	1
Lead	2.0		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 20:00	1
Manganese	ND		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 20:00	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 20:00	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 20:00	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 20:00	1
Zinc	9.0	J B	10	2.0	ug/L		06/20/23 14:40	06/22/23 20:00	1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: OUTFALL-001
Date Collected: 06/14/23 12:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 23:07	1

General Chemistry

Client Sample ID: OUTFALL-001
Date Collected: 06/14/23 12:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	140		2.0	2.0	umhos/cm			06/27/23 07:51	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			06/21/23 16:51	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:23	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.5	HF	0.1	0.1	SU			06/20/23 20:42	1
Temperature (SM 4500 H+ B)	21.7	HF	1.0	1.0	Degrees C			06/20/23 20:42	1

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Client Sample Results

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

Job ID: 280-177853-1

General Chemistry (Continued)

Client Sample ID: OUTFALL-001

Date Collected: 06/14/23 12:30

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			06/15/23 14:02	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1
Field pH (SM4500 S2 H)	7.5		1.0	1.0	SU			06/16/23 12:05	1
Field Temperature (SM4500 S2 H)	22		1.0	1.0	Celsius			06/16/23 12:05	1
Specific Conductance (SM4500 S2 H)	140		2.0	2.0	umhos/cm			06/16/23 12:05	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1

General Chemistry - Total Recoverable

Client Sample ID: OUTFALL-001

Date Collected: 06/14/23 12:30

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

General Chemistry - Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 06/14/23 12:30

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:11	1

General Chemistry - Potentially Dissolved

Client Sample ID: OUTFALL-001

Date Collected: 06/14/23 12:30

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177853-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

QC Sample Results

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

Job ID: 280-177853-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-616155/1-A

Matrix: Water

Analysis Batch: 617030

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.7	J	100	9.1	ug/L		06/19/23 07:43	06/21/23 14:26	1

Lab Sample ID: LCS 280-616155/2-A

Matrix: Water

Analysis Batch: 617030

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10100		ug/L		101	85 - 115

Lab Sample ID: LCSD 280-616155/3-A

Matrix: Water

Analysis Batch: 617030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Iron	10000	10200		ug/L		102	85 - 115	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-616155/1-A

Matrix: Water

Analysis Batch: 616759

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 07:43	06/20/23 02:06	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 07:43	06/20/23 02:06	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 07:43	06/20/23 02:06	1
Copper	ND		2.0	0.71	ug/L		06/19/23 07:43	06/20/23 02:06	1
Lead	ND		1.0	0.23	ug/L		06/19/23 07:43	06/20/23 02:06	1
Zinc	ND		10	2.0	ug/L		06/19/23 07:43	06/20/23 02:06	1

Lab Sample ID: LCS 280-616155/27-A

Matrix: Water

Analysis Batch: 616759

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	43.0		ug/L		108	89 - 111
Cadmium	40.0	42.6		ug/L		106	89 - 111
Chromium	40.0	42.6		ug/L		106	86 - 115
Copper	40.0	41.7		ug/L		104	90 - 115
Lead	40.0	42.7		ug/L		107	88 - 115
Zinc	40.0	40.7		ug/L		102	88 - 115

Lab Sample ID: LCSD 280-616155/28-A

Matrix: Water

Analysis Batch: 616759

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 616155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	40.0	41.3		ug/L		103	89 - 111	4	20
Cadmium	40.0	40.9		ug/L		102	89 - 111	4	20
Chromium	40.0	40.5		ug/L		101	86 - 115	5	20

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QC Sample Results

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

Job ID: 280-177853-1

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

Lab Sample ID: LCSD 280-616155/28-A

Matrix: Water

Analysis Batch: 616759

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 616155

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	3	20
Lead	40.0	42.0		ug/L		105	88 - 115	2	20
Zinc	40.0	42.4		ug/L		106	88 - 115	4	20

Lab Sample ID: MB 280-616494/1-B

Matrix: Water

Analysis Batch: 617210

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 19:53	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 19:53	1
Chromium	0.501	J	3.0	0.50	ug/L		06/20/23 14:40	06/22/23 19:53	1
Copper	ND		2.0	0.71	ug/L		06/20/23 14:40	06/22/23 19:53	1
Lead	ND		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 19:53	1
Manganese	ND		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 19:53	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 19:53	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 19:53	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 19:53	1
Zinc	3.75	J	10	2.0	ug/L		06/20/23 14:40	06/22/23 19:53	1

Lab Sample ID: LCS 280-616494/2-B

Matrix: Water

Analysis Batch: 617210

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	41.5		ug/L		104	89 - 111
Cadmium	40.0	41.6		ug/L		104	89 - 111
Chromium	40.0	41.5		ug/L		104	86 - 115
Copper	40.0	40.8		ug/L		102	90 - 115
Lead	40.0	39.7		ug/L		99	88 - 115
Manganese	40.0	40.8		ug/L		102	87 - 115
Nickel	40.0	38.9		ug/L		97	86 - 115
Selenium	40.0	39.6		ug/L		99	85 - 114
Silver	40.0	40.2		ug/L		100	90 - 114
Zinc	40.0	42.6		ug/L		107	88 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-617604/1-A

Matrix: Water

Analysis Batch: 617768

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 617604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 22:18	1

Eurofins Denver

QC Sample Results

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

Job ID: 280-177853-1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 280-617604/2-A
Matrix: Water
Analysis Batch: 617768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617604

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

Lab Sample ID: LCSD 280-617604/3-A
Matrix: Water
Analysis Batch: 617768

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 617604

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.70		ug/L		94	90 - 110	9	10

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-617525/5
Matrix: Water
Analysis Batch: 617525

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			06/27/23 07:51	1

Lab Sample ID: LCS 280-617525/4
Matrix: Water
Analysis Batch: 617525

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	1360		umhos/cm		96	90 - 110

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

Lab Sample ID: MB 280-617026/3
Matrix: Water
Analysis Batch: 617026

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			06/21/23 16:50	1

Lab Sample ID: LCS 280-617026/1
Matrix: Water
Analysis Batch: 617026

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	401		mg/L		80	79 - 114

Lab Sample ID: LCSD 280-617026/2
Matrix: Water
Analysis Batch: 617026

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	465		mg/L		93	79 - 114	15	20

Eurofins Denver

QC Sample Results

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

Job ID: 280-177853-1

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-616159/23

Matrix: Water

Analysis Batch: 616159

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		0.020	0.0040	mg/L			06/14/23 16:14	1

Lab Sample ID: LCS 280-616159/21

Matrix: Water

Analysis Batch: 616159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.100		mg/L		100	91 - 112

Lab Sample ID: LCSD 280-616159/22

Matrix: Water

Analysis Batch: 616159

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	0.100	0.0994		mg/L		99	91 - 112	1	20

Lab Sample ID: MB 280-616147/3-A

Matrix: Water

Analysis Batch: 616159

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.020	0.0040	mg/L			06/14/23 16:02	1

Lab Sample ID: LCS 280-616147/1-A

Matrix: Water

Analysis Batch: 616159

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.101		mg/L		101	91 - 112

Lab Sample ID: LCSD 280-616147/2-A

Matrix: Water

Analysis Batch: 616159

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	0.100	0.0978		mg/L		98	91 - 112	4	20

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-616882/31

Matrix: Water

Analysis Batch: 616882

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	7.1		SU		101	99 - 101

Eurofins Denver

QC Sample Results

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

Job ID: 280-177853-1

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-616303/11

Matrix: Water

Analysis Batch: 616303

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			06/15/23 13:56	1

Lab Sample ID: LCS 280-616303/9

Matrix: Water

Analysis Batch: 616303

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	0.477		mg/L		95	81 - 122

Lab Sample ID: LCSD 280-616303/10

Matrix: Water

Analysis Batch: 616303

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	0.477		mg/L		95	81 - 122	0	10

Lab Sample ID: 280-177853-1 MS

Matrix: Water

Analysis Batch: 616303

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
Sulfide	ND		0.501	0.441		mg/L		88	81 - 122

Lab Sample ID: 280-177853-1 MSD

Matrix: Water

Analysis Batch: 616303

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
Sulfide	ND		0.501	0.453		mg/L		90	81 - 122	3	10

QC Association Summary

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

Job ID: 280-177853-1

Metals

Prep Batch: 616155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-616155/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-616155/27-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-616155/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 280-616155/28-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LCSD 280-616155/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	

Filtration Batch: 616494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 616728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Potentially Dissolved	Water	200.8	616494
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	200.8	616494
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	616494

Analysis Batch: 616759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total Recoverable	Water	200.8	616155
MB 280-616155/1-A	Method Blank	Total Recoverable	Water	200.8	616155
LCS 280-616155/27-A	Lab Control Sample	Total Recoverable	Water	200.8	616155
LCSD 280-616155/28-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	616155

Analysis Batch: 617030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total Recoverable	Water	200.7 Rev 4.4	616155
MB 280-616155/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	616155
LCS 280-616155/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	616155
LCSD 280-616155/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	616155

Analysis Batch: 617210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Potentially Dissolved	Water	200.8	616728
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	200.8	616728
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	616728

Prep Batch: 617604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	245.1	
MB 280-617604/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-617604/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 280-617604/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	

Analysis Batch: 617768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	245.1	617604
MB 280-617604/1-A	Method Blank	Total/NA	Water	245.1	617604
LCS 280-617604/2-A	Lab Control Sample	Total/NA	Water	245.1	617604

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QC Association Summary

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

Job ID: 280-177853-1

Metals (Continued)

Analysis Batch: 617768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-617604/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	617604

General Chemistry

Filtration Batch: 616147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Dissolved	Water	FILTRATION	
MB 280-616147/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-616147/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-616147/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	

Analysis Batch: 616159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Dissolved	Water	SM 3500 CR B	616147
280-177853-1	OUTFALL-001	Total/NA	Water	SM 3500 CR B	
MB 280-616147/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	616147
MB 280-616159/23	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-616147/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	616147
LCS 280-616159/21	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-616147/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	616147
LCSD 280-616159/22	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 616303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	
MB 280-616303/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-616303/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-616303/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
280-177853-1 MS	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	
280-177853-1 MSD	OUTFALL-001	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 616433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	SM4500 S2 H	

Analysis Batch: 616882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	SM 4500 H+ B	
LCS 280-616882/31	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 617026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	SM 2540D	
MB 280-617026/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-617026/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-617026/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Analysis Batch: 617525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Total/NA	Water	SM 2510B	
MB 280-617525/5	Method Blank	Total/NA	Water	SM 2510B	

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QC Association Summary

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

Job ID: 280-177853-1

General Chemistry (Continued)

Analysis Batch: 617525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-617525/4	Lab Control Sample	Total/NA	Water	SM 2510B	

Analysis Batch: 617695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177853-1	OUTFALL-001	Potentially Dissolved	Water	SM3500 CR B	
280-177853-1	OUTFALL-001	Total Recoverable	Water	SM3500 CR B	

Lab Chronicle

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

Job ID: 280-177853-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-177853-1

Date Collected: 06/14/23 12:30

Matrix: Water

Date Received: 06/14/23 14:34

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	616155	06/19/23 07:43	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			617030	06/21/23 14:38	LMT	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			150 mL	150 mL	616494	06/16/23 22:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	616728	06/20/23 14:40	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			617210	06/22/23 20:00	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616155	06/19/23 07:43	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			616759	06/20/23 02:16	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	617604	06/27/23 14:45	KMS	EET DEN
Total/NA	Analysis	245.1		1			617768	06/27/23 23:07	KMS	EET DEN
Total/NA	Analysis	SM 2510B		1			617525	06/27/23 07:51	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	617026	06/21/23 16:51	CAI	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	616147	06/14/23 15:22	LBR	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:11	LBR	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:23	LBR	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			616882	06/20/23 20:42	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	616303	06/15/23 14:02	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			616433	06/16/23 12:05	ZPM	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: 280-177853-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-10-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-09-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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

Eurofins Denver

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-177853-1

Login Number: 177853

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 250
Lakewood, Colorado 80228

Generated 7/13/2023 11:01:47 AM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-178450-1

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
(303)736-0138

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Definitions/Glossary

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

Job ID: 280-178450-1

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/Site: Nederland, CO

Job ID: 280-178450-1

Job ID: 280-178450-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Grand Island Resources

Project: Nederland, CO

Report Number: 280-178450-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/28/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.5 C.

POTENTIALLY DISSOLVED METALS (ICPMS)

Sample OUTFALL-001 (280-178450-1) was analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 07/05/2023 and analyzed on 07/11/2023.

This report includes Reporting Limits (RLs) for 200.8 Potentially Dissolved Silver that are less than Eurofins TestAmerica Denver's standard reporting limit. 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.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Sample OUTFALL-001 (280-178450-1) was analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/30/2023 and analyzed on 07/10/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

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

Job ID: 280-178450-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-178450-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Copper	1.5	J	2.0	0.71	ug/L	1			200.8	Total
Lead	0.97	J	1.0	0.23	ug/L	1			200.8	Recoverable
Copper	1.8	J	2.0	0.71	ug/L	1			200.8	Total
Lead	0.98	J	1.0	0.23	ug/L	1			200.8	Recoverable
Zinc	14		10	2.0	ug/L	1			200.8	Potentially Dissolved
										Potentially Dissolved
										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: 280-178450-1

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: 280-178450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-178450-1	OUTFALL-001	Water	06/28/23 09:00	06/28/23 15:55

- 1
- 2
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Client Sample Results

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

Job ID: 280-178450-1

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

Client Sample ID: OUTFALL-001

Date Collected: 06/28/23 09:00

Date Received: 06/28/23 15:55

Lab Sample ID: 280-178450-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.5	J	2.0	0.71	ug/L		06/30/23 09:17	07/10/23 21:25	1
Lead	0.97	J	1.0	0.23	ug/L		06/30/23 09:17	07/10/23 21:25	1

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

Client Sample ID: OUTFALL-001

Date Collected: 06/28/23 09:00

Date Received: 06/28/23 15:55

Lab Sample ID: 280-178450-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		07/05/23 08:40	07/11/23 05:35	1
Copper	1.8	J	2.0	0.71	ug/L		07/05/23 08:40	07/11/23 05:35	1
Lead	0.98	J	1.0	0.23	ug/L		07/05/23 08:40	07/11/23 05:35	1
Silver	ND		0.50	0.045	ug/L		07/05/23 08:40	07/11/23 05:35	1
Zinc	14		10	2.0	ug/L		07/05/23 08:40	07/11/23 05:35	1

QC Sample Results

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

Job ID: 280-178450-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: LCS 280-617711/25-A
Matrix: Water
Analysis Batch: 619159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 617711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	43.9		ug/L		110	89 - 111
Copper	40.0	42.0		ug/L		105	90 - 115
Lead	40.0	43.4		ug/L		109	88 - 115
Silver	40.0	40.0		ug/L		100	90 - 114
Zinc	40.0	40.8		ug/L		102	88 - 115

Lab Sample ID: MB 280-617929/1-A
Matrix: Water
Analysis Batch: 619033

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 617929

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	0.71	ug/L		06/30/23 09:17	07/10/23 20:53	1
Lead	ND		1.0	0.23	ug/L		06/30/23 09:17	07/10/23 20:53	1

Lab Sample ID: LCS 280-617929/2-A
Matrix: Water
Analysis Batch: 619033

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 617929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	40.6		ug/L		101	90 - 115
Lead	40.0	39.4		ug/L		99	88 - 115

Lab Sample ID: MB 280-618213/1-B
Matrix: Water
Analysis Batch: 619159

Client Sample ID: Method Blank
Prep Type: Potentially Dissolved
Prep Batch: 618313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.19	ug/L		07/05/23 08:40	07/11/23 14:53	1
Copper	ND		2.0	0.71	ug/L		07/05/23 08:40	07/11/23 14:53	1
Lead	ND		1.0	0.23	ug/L		07/05/23 08:40	07/11/23 14:53	1
Silver	ND		0.50	0.045	ug/L		07/05/23 08:40	07/11/23 14:53	1
Zinc	ND		10	2.0	ug/L		07/05/23 08:40	07/11/23 14:53	1

Lab Sample ID: LCS 280-618213/2-B
Matrix: Water
Analysis Batch: 619159

Client Sample ID: Lab Control Sample
Prep Type: Potentially Dissolved
Prep Batch: 618313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	42.3		ug/L		106	89 - 111
Copper	40.0	42.3		ug/L		106	90 - 115
Lead	40.0	42.7		ug/L		107	88 - 115
Silver	40.0	39.5		ug/L		99	90 - 114
Zinc	40.0	40.5		ug/L		101	88 - 115

Lab Sample ID: 280-178450-1 MS
Matrix: Water
Analysis Batch: 619097

Client Sample ID: OUTFALL-001
Prep Type: Potentially Dissolved
Prep Batch: 618313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		40.0	41.8		ug/L		105	89 - 111

Eurofins Denver

QC Sample Results

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

Job ID: 280-178450-1

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

Lab Sample ID: 280-178450-1 MS

Matrix: Water

Analysis Batch: 619097

Client Sample ID: OUTFALL-001

Prep Type: Potentially Dissolved

Prep Batch: 618313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.8	J	40.0	40.9		ug/L		98	90 - 115
Lead	0.98	J	40.0	43.5		ug/L		106	88 - 115
Silver	ND		40.0	38.8		ug/L		97	70 - 130
Zinc	14		40.0	54.5		ug/L		102	88 - 115

Lab Sample ID: 280-178450-1 MSD

Matrix: Water

Analysis Batch: 619097

Client Sample ID: OUTFALL-001

Prep Type: Potentially Dissolved

Prep Batch: 618313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		40.0	42.6		ug/L		106	89 - 111	2	20
Copper	1.8	J	40.0	40.8		ug/L		98	90 - 115	0	20
Lead	0.98	J	40.0	44.3		ug/L		108	88 - 115	2	20
Silver	ND		40.0	39.5		ug/L		99	70 - 130	2	20
Zinc	14		40.0	53.6		ug/L		99	88 - 115	2	20

QC Association Summary

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

Job ID: 280-178450-1

Metals

Prep Batch: 617711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-617711/25-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 617929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-178450-1	OUTFALL-001	Total Recoverable	Water	200.8	
MB 280-617929/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-617929/2-A	Lab Control Sample	Total Recoverable	Water	200.8	

Filtration Batch: 618213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-178450-1	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-618213/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-618213/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	
280-178450-1 MS	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	
280-178450-1 MSD	OUTFALL-001	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 618313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-178450-1	OUTFALL-001	Potentially Dissolved	Water	200.8	618213
MB 280-618213/1-B	Method Blank	Potentially Dissolved	Water	200.8	618213
LCS 280-618213/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	618213
280-178450-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	618213
280-178450-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	618213

Analysis Batch: 619033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-178450-1	OUTFALL-001	Total Recoverable	Water	200.8	617929
MB 280-617929/1-A	Method Blank	Total Recoverable	Water	200.8	617929
LCS 280-617929/2-A	Lab Control Sample	Total Recoverable	Water	200.8	617929

Analysis Batch: 619097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-178450-1	OUTFALL-001	Potentially Dissolved	Water	200.8	618313
280-178450-1 MS	OUTFALL-001	Potentially Dissolved	Water	200.8	618313
280-178450-1 MSD	OUTFALL-001	Potentially Dissolved	Water	200.8	618313

Analysis Batch: 619159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-618213/1-B	Method Blank	Potentially Dissolved	Water	200.8	618313
LCS 280-617711/25-A	Lab Control Sample	Total Recoverable	Water	200.8	617711
LCS 280-618213/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	618313

Lab Chronicle

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

Job ID: 280-178450-1

Client Sample ID: OUTFALL-001

Lab Sample ID: 280-178450-1

Date Collected: 06/28/23 09:00

Matrix: Water

Date Received: 06/28/23 15:55

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	618213	06/30/23 18:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	618313	07/05/23 08:40	KMS	EET DEN
Potentially Dissolved	Analysis	200.8		1			619097	07/11/23 05:35	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	617929	06/30/23 09:17	PFM	EET DEN
Total Recoverable	Analysis	200.8		1			619033	07/10/23 21:25	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: 280-178450-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-10-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-09-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23 *
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23 *
Louisiana (All)	NELAP	30785	06-30-23 *
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	190002	06-30-23 *
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-08-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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

Eurofins Denver



280-178450 Chain of Custody

[illegible]

Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-178450-1

Login Number: 178450

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.	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 C SURFACE WATER ANALYTICAL RESULTS

APPENDIX C.1 APRIL 2023 SURFACE WATER ANALYTICAL RESULTS

No observable flow, therefore, no samples collected.

APPENDIX C.2 MAY 2023 SURFACE WATER ANALYTICAL RESULTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Brooke Molson Moran
Grand Island Resources
12567 West Cedar Road
Suite 250
Lakewood, Colorado 80228

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JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-176512-1

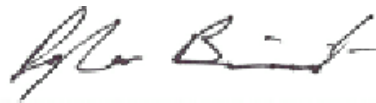
Eurofins Denver

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
(303)736-0138

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Definitions/Glossary

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

Job ID: 280-176512-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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/Site: Nederland, CO

Job ID: 280-176512-1

Job ID: 280-176512-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: GS Mining Company LLC

Project: Nederland, CO

Report Number: 280-176512-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/15/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.9 C.

The laboratory only received 1x250mL unpreserved container of sample volume for the requested 3500 CR B Hexavalent Chromium and 3500 CR B Dissolved Hexavalent Chromium analysis (from lab filtered sample volume) for the following sample: 2022-02-03 (280-176512-4). The laboratory created an aliquot from the single bottle provided to be filtered prior to analysis for dissolved Hexavalent Chromium analysis therefore no corrective action was required.

Due to laboratory review error, the MS sample volume (2022-02-MS) was mistakenly logged as an MS associated with the field duplicate sample (2022-02-02) rather than the parent sample (2022-02). Because it is a field duplicate sample and primary sample and MS sample analysis had already been started on these samples, the client was notified and approved of reporting MS data associated with the field duplicate rather than the parent sample: 2022-02-02 (280-176512-3) and 2022-02-02 (280-176512-3[MS]).

TOTAL RECOVERABLE METALS (ICP)

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for Total Recoverable Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 05/18/2023 and analyzed on 05/24/2023 and 05/25/2023.

Iron was detected in method blank MB 280-612618/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POTENTIALLY DISSOLVED METALS (ICPMS)

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/18/2023 and analyzed on 05/22/2023.

This report includes Reporting Limits (RLs) for 200.8 Potentially Dissolved Silver that are less than Eurofins TestAmerica Denver's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this

Case Narrative

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

Job ID: 280-176512-1

Job ID: 280-176512-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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.

The continuing calibration verification (CCV) associated with batch 280-613485 recovered above the upper control limit for As. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been qualified and reported. The associated samples are impacted: 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3), 2022-02-02 (280-176512-3[MSJ]), 2022-02-03 (280-176512-4), (CCV 280-613485/108), (LCS 280-612874/2-B), and (MB 280-612874/1-B).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/18/2023 and analyzed on 05/19/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for total mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 05/23/2023 and analyzed on 05/24/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - POTENTIALLY DISSOLVED

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for Trivalent Chromium - Potentially Dissolved in accordance with SM3500_CR3_B. The samples were analyzed on 05/30/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - TOTAL RECOVERABLE

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for Trivalent Chromium - Total Recoverable in accordance with SM3500_CR3_B. The samples were analyzed on 05/30/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 05/23/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 05/22/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED HEXAVALENT CHROMIUM

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for dissolved hexavalent chromium in accordance with SM 3500 CR B. The samples were analyzed on 05/16/2023.

Due to laboratory capacity the following sample was analyzed outside of the 24 hour hold time by approximately 5 minutes: 2022-01 (280-176512-1). Data has been qualified and reported.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

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

Job ID: 280-176512-1

Job ID: 280-176512-1 (Continued)

Laboratory: Eurofins Denver (Continued)

HEXAVALENT CHROMIUM

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for hexavalent chromium in accordance with 3500_CR_B. The samples were analyzed on 05/16/2023.

Due to laboratory capacity the following sample was analyzed outside of the 24 hour hold time by approximately 13 minutes: 2022-01 (280-176512-1). Data has been qualified and reported.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 05/19/2023 and 05/23/2023.

Sample 2022-01 (280-176512-1) and 2022-02-03 (280-176512-4) did not equilibrate to within 0.05 pH units after three measurements. This was observed in a previous analysis thus the sample was not rerun.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for sulfide in accordance with SM20 4500 S2 D. The samples were analyzed on 05/18/2023.

Sulfide was detected in method blank MB 280-613317/39 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sulfide was detected in method blank MB 280-613317/9 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sulfide exceeded the RPD limit for LCSD 280-613317/10. LCS and LCSD recovered within percent recovery criteria. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HYDROGEN SULFIDE

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for Hydrogen Sulfide in accordance with SM20 4500 S2 H. The samples were analyzed on 05/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LOW LEVEL MERCURY

Samples 2022-01 (280-176512-1), 2022-02 (280-176512-2), 2022-02-02 (280-176512-3) and 2022-02-03 (280-176512-4) were analyzed for Low Level Mercury in accordance with EPA 1631. The samples were prepared on 05/19/2023 and analyzed on 05/22/2023.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

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

Job ID: 280-176512-1

Client Sample ID: 2022-01

Lab Sample ID: 280-176512-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	6.8		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	630	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	2.2		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	0.58	J	1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	2.2	J	10	2.0	ug/L	1		200.8	Total Recoverable
Copper	1.6	J	2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	0.34	J	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	28		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	8.4	J	10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	54		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	5.2		4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	7.9	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.3	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Sulfide	0.17	B	0.050	0.022	mg/L	1		SM 4500 S2 D	Total/NA
Field pH	7.9		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	54		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

Client Sample ID: 2022-02

Lab Sample ID: 280-176512-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	23		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	1100	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.28	J	1.0	0.19	ug/L	1		200.8	Total Recoverable
Chromium	0.67	J	3.0	0.50	ug/L	1		200.8	Total Recoverable
Copper	4.9		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	24		1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	26		10	2.0	ug/L	1		200.8	Total Recoverable
Cadmium	0.19	J	1.0	0.19	ug/L	1		200.8	Potentially Dissolved
Copper	3.8		2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	22		1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	54		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	32		10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	68		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	39		4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.2	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

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

Job ID: 280-176512-1

Client Sample ID: 2022-02 (Continued)

Lab Sample ID: 280-176512-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfide	0.13	B	0.050	0.022	mg/L	1		SM 4500 S2 D	Total/NA
Field pH	7.5		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	68		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

Client Sample ID: 2022-02-02

Lab Sample ID: 280-176512-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	20		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	970	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Chromium	2.4	J	3.0	0.50	ug/L	1		200.8	Total Recoverable
Copper	6.1		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	18		1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	32		10	2.0	ug/L	1		200.8	Total Recoverable
Copper	3.2		2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	14		1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	43		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	25		10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	67		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	51		4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.5	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.4		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	67		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

Client Sample ID: 2022-02-03

Lab Sample ID: 280-176512-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.26	J	0.50	0.20	ng/L	1		1631E	Total/NA
Iron	15	J B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	6.0	J	10	2.0	ug/L	1		200.8	Potentially Dissolved
Chromium, hexavalent	0.011	J	0.020	0.0040	mg/L	1		SM 3500 CR B	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.7	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.7		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

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

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

Job ID: 280-176512-1

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: 280-176512-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-176512-1	2022-01	Water	05/15/23 09:00	05/15/23 16:26
280-176512-2	2022-02	Water	05/15/23 10:00	05/15/23 16:26
280-176512-3	2022-02-02	Water	05/15/23 10:00	05/15/23 16:26
280-176512-4	2022-02-03	Water	05/15/23 10:00	05/15/23 16:26

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Client Sample Results

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

Job ID: 280-176512-1

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

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.8		0.50	0.20	ng/L		05/19/23 15:30	05/22/23 12:39	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	23		0.50	0.20	ng/L		05/19/23 15:30	05/22/23 12:47	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	20		0.50	0.20	ng/L		05/19/23 15:30	05/22/23 12:55	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26	J	0.50	0.20	ng/L		05/19/23 15:30	05/22/23 15:03	1

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

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	630	B	100	9.1	ug/L		05/18/23 07:45	05/24/23 23:28	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1100	B	100	9.1	ug/L		05/18/23 07:45	05/24/23 23:32	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	970	B	100	9.1	ug/L		05/18/23 07:45	05/25/23 21:49	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	15	J B	100	9.1	ug/L		05/18/23 07:45	05/25/23 22:09	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-176512-1

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

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:28	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 07:45	05/19/23 01:28	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:28	1
Copper	2.2		2.0	0.71	ug/L		05/18/23 07:45	05/19/23 01:28	1
Lead	0.58	J	1.0	0.23	ug/L		05/18/23 07:45	05/19/23 01:28	1
Zinc	2.2	J	10	2.0	ug/L		05/18/23 07:45	05/19/23 01:28	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:30	1
Cadmium	0.28	J	1.0	0.19	ug/L		05/18/23 07:45	05/19/23 01:30	1
Chromium	0.67	J	3.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:30	1
Copper	4.9		2.0	0.71	ug/L		05/18/23 07:45	05/19/23 01:30	1
Lead	24		1.0	0.23	ug/L		05/18/23 07:45	05/19/23 01:30	1
Zinc	26		10	2.0	ug/L		05/18/23 07:45	05/19/23 01:30	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:08	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 07:45	05/19/23 01:08	1
Chromium	2.4	J	3.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:08	1
Copper	6.1		2.0	0.71	ug/L		05/18/23 07:45	05/19/23 01:08	1
Lead	18		1.0	0.23	ug/L		05/18/23 07:45	05/19/23 01:08	1
Zinc	32		10	2.0	ug/L		05/18/23 07:45	05/19/23 01:08	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:32	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 07:45	05/19/23 01:32	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:32	1
Copper	ND		2.0	0.71	ug/L		05/18/23 07:45	05/19/23 01:32	1
Lead	ND		1.0	0.23	ug/L		05/18/23 07:45	05/19/23 01:32	1
Zinc	ND		10	2.0	ug/L		05/18/23 07:45	05/19/23 01:32	1

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

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:32	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 14:27	05/22/23 19:32	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:32	1
Copper	1.6	J	2.0	0.71	ug/L		05/18/23 14:27	05/22/23 19:32	1
Lead	0.34	J	1.0	0.23	ug/L		05/18/23 14:27	05/22/23 19:32	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-176512-1

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

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	28		3.0	0.51	ug/L		05/18/23 14:27	05/22/23 19:32	1
Nickel	ND		3.0	0.83	ug/L		05/18/23 14:27	05/22/23 19:32	1
Selenium	ND		5.0	1.0	ug/L		05/18/23 14:27	05/22/23 19:32	1
Silver	ND		0.50	0.045	ug/L		05/18/23 14:27	05/22/23 19:32	1
Zinc	8.4	J	10	2.0	ug/L		05/18/23 14:27	05/22/23 19:32	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:34	1
Cadmium	0.19	J	1.0	0.19	ug/L		05/18/23 14:27	05/22/23 19:34	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:34	1
Copper	3.8		2.0	0.71	ug/L		05/18/23 14:27	05/22/23 19:34	1
Lead	22		1.0	0.23	ug/L		05/18/23 14:27	05/22/23 19:34	1
Manganese	54		3.0	0.51	ug/L		05/18/23 14:27	05/22/23 19:34	1
Nickel	ND		3.0	0.83	ug/L		05/18/23 14:27	05/22/23 19:34	1
Selenium	ND		5.0	1.0	ug/L		05/18/23 14:27	05/22/23 19:34	1
Silver	ND		0.50	0.045	ug/L		05/18/23 14:27	05/22/23 19:34	1
Zinc	32		10	2.0	ug/L		05/18/23 14:27	05/22/23 19:34	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:36	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 14:27	05/22/23 19:36	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:36	1
Copper	3.2		2.0	0.71	ug/L		05/18/23 14:27	05/22/23 19:36	1
Lead	14		1.0	0.23	ug/L		05/18/23 14:27	05/22/23 19:36	1
Manganese	43		3.0	0.51	ug/L		05/18/23 14:27	05/22/23 19:36	1
Nickel	ND		3.0	0.83	ug/L		05/18/23 14:27	05/22/23 19:36	1
Selenium	ND		5.0	1.0	ug/L		05/18/23 14:27	05/22/23 19:36	1
Silver	ND		0.50	0.045	ug/L		05/18/23 14:27	05/22/23 19:36	1
Zinc	25		10	2.0	ug/L		05/18/23 14:27	05/22/23 19:36	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:49	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 14:27	05/22/23 19:49	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:49	1
Copper	ND		2.0	0.71	ug/L		05/18/23 14:27	05/22/23 19:49	1
Lead	ND		1.0	0.23	ug/L		05/18/23 14:27	05/22/23 19:49	1
Manganese	ND		3.0	0.51	ug/L		05/18/23 14:27	05/22/23 19:49	1
Nickel	ND		3.0	0.83	ug/L		05/18/23 14:27	05/22/23 19:49	1
Selenium	ND		5.0	1.0	ug/L		05/18/23 14:27	05/22/23 19:49	1
Silver	ND		0.50	0.045	ug/L		05/18/23 14:27	05/22/23 19:49	1
Zinc	6.0	J	10	2.0	ug/L		05/18/23 14:27	05/22/23 19:49	1

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Client Sample Results

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

Job ID: 280-176512-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 01:09	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 01:12	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 01:14	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 01:22	1

General Chemistry

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	54		2.0	2.0	umhos/cm			05/23/23 10:58	1
Total Suspended Solids (SM 2540D)	5.2		4.0	1.1	mg/L			05/22/23 14:10	1
Chromium, hexavalent (SM 3500 CR B)	ND	H	0.020	0.0040	mg/L			05/16/23 09:13	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.9	HF	0.1	0.1	SU			05/23/23 14:31	1
Temperature (SM 4500 H+ B)	20.3	HF	1.0	1.0	Degrees C			05/23/23 14:31	1
Sulfide (SM 4500 S2 D)	0.17	B	0.050	0.022	mg/L			05/18/23 18:54	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1
Field pH (SM4500 S2 H)	7.9		1.0	1.0	SU			05/26/23 13:33	1
Field Temperature (SM4500 S2 H)	20		1.0	1.0	Celsius			05/26/23 13:33	1
Specific Conductance (SM4500 S2 H)	54		2.0	2.0	umhos/cm			05/26/23 13:33	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	68		2.0	2.0	umhos/cm			05/23/23 10:58	1
Total Suspended Solids (SM 2540D)	39		4.0	1.1	mg/L			05/22/23 14:10	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/16/23 09:14	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.5	HF	0.1	0.1	SU			05/23/23 14:35	1

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Client Sample Results

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

Job ID: 280-176512-1

General Chemistry (Continued)

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SM 4500 H+ B)	20.2	HF	1.0	1.0	Degrees C			05/23/23 14:35	1
Sulfide (SM 4500 S2 D)	0.13	B	0.050	0.022	mg/L			05/18/23 18:55	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1
Field pH (SM4500 S2 H)	7.5		1.0	1.0	SU			05/26/23 13:33	1
Field Temperature (SM4500 S2 H)	20		1.0	1.0	Celsius			05/26/23 13:33	1
Specific Conductance (SM4500 S2 H)	68		2.0	2.0	umhos/cm			05/26/23 13:33	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	67		2.0	2.0	umhos/cm			05/23/23 10:58	1
Total Suspended Solids (SM 2540D)	51		4.0	1.1	mg/L			05/22/23 14:10	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/16/23 09:09	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.4	HF	0.1	0.1	SU			05/19/23 15:58	1
Temperature (SM 4500 H+ B)	19.5	HF	1.0	1.0	Degrees C			05/19/23 15:58	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			05/18/23 18:53	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1
Field pH (SM4500 S2 H)	7.4		1.0	1.0	SU			05/26/23 13:33	1
Field Temperature (SM4500 S2 H)	20		1.0	1.0	Celsius			05/26/23 13:33	1
Specific Conductance (SM4500 S2 H)	67		2.0	2.0	umhos/cm			05/26/23 13:33	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	ND		2.0	2.0	umhos/cm			05/23/23 10:58	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			05/22/23 14:10	1
Chromium, hexavalent (SM 3500 CR B)	0.011	J	0.020	0.0040	mg/L			05/16/23 09:12	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.7	HF	0.1	0.1	SU			05/23/23 14:41	1
Temperature (SM 4500 H+ B)	20.7	HF	1.0	1.0	Degrees C			05/23/23 14:41	1
Sulfide (SM 4500 S2 D)	ND	*1	0.050	0.022	mg/L			05/18/23 19:08	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1
Field pH (SM4500 S2 H)	7.7		1.0	1.0	SU			05/26/23 13:33	1
Field Temperature (SM4500 S2 H)	21		1.0	1.0	Celsius			05/26/23 13:33	1
Specific Conductance (SM4500 S2 H)	ND		2.0	2.0	umhos/cm			05/26/23 13:33	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			05/26/23 13:33	1

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Client Sample Results

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

Job ID: 280-176512-1

General Chemistry - Total Recoverable

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			05/30/23 08:39	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			05/30/23 08:39	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			05/30/23 08:39	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			05/30/23 08:39	1

General Chemistry - Dissolved

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND	H	0.020	0.0040	mg/L			05/16/23 09:05	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/16/23 09:05	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/16/23 09:01	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			05/16/23 09:12	1

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Client Sample Results

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

Job ID: 280-176512-1

General Chemistry - Potentially Dissolved

Client Sample ID: 2022-01
Date Collected: 05/15/23 09:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		05/30/23 08:39	1

Client Sample ID: 2022-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		05/30/23 08:39	1

Client Sample ID: 2022-02-02
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		05/30/23 08:39	1

Client Sample ID: 2022-02-03
Date Collected: 05/15/23 10:00
Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		05/30/23 08:39	1

QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: MB 400-625891/3-A
Matrix: Water
Analysis Batch: 625988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.20	ng/L		05/19/23 16:00	05/22/23 09:59	1

Lab Sample ID: LCS 400-625891/4-A
Matrix: Water
Analysis Batch: 625988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.55		ng/L		91	79 - 121

Lab Sample ID: LCSD 400-625891/5-A
Matrix: Water
Analysis Batch: 625988

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 625891

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.57		ng/L		91	79 - 121	0	20

Lab Sample ID: 280-176512-3 MS
Matrix: Water
Analysis Batch: 625988

Client Sample ID: 2022-02-02
Prep Type: Total/NA
Prep Batch: 625891

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	20		5.00	24.1	4	ng/L		72	71 - 125

Lab Sample ID: 280-176512-3 MSD
Matrix: Water
Analysis Batch: 625988

Client Sample ID: 2022-02-02
Prep Type: Total/NA
Prep Batch: 625891

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	20		5.00	25.1	4	ng/L		93	71 - 125	4	24

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-612618/1-A
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.1	J	100	9.1	ug/L		05/18/23 07:45	05/24/23 22:42	1

Lab Sample ID: LCS 280-612618/2-A
Matrix: Water
Analysis Batch: 613763

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 612618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10100		ug/L		101	85 - 115

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QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613902

Client Sample ID: 2022-02-02

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	970	B	10000	11500		ug/L		105	70 - 130

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 613902

Client Sample ID: 2022-02-02

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	970	B	10000	11400		ug/L		105	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-612618/1-A

Matrix: Water

Analysis Batch: 613118

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:05	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 07:45	05/19/23 01:05	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 07:45	05/19/23 01:05	1
Copper	ND		2.0	0.71	ug/L		05/18/23 07:45	05/19/23 01:05	1
Lead	ND		1.0	0.23	ug/L		05/18/23 07:45	05/19/23 01:05	1
Zinc	ND		10	2.0	ug/L		05/18/23 07:45	05/19/23 01:05	1

Lab Sample ID: LCS 280-612618/20-A

Matrix: Water

Analysis Batch: 613118

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.4		ug/L		101	89 - 111
Cadmium	40.0	43.1		ug/L		108	89 - 111
Chromium	40.0	41.9		ug/L		105	86 - 115
Copper	40.0	40.3		ug/L		101	90 - 115
Lead	40.0	40.4		ug/L		101	88 - 115
Zinc	40.0	41.5		ug/L		104	88 - 115

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613118

Client Sample ID: 2022-02-02

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	40.2		ug/L		100	79 - 120
Cadmium	ND		40.0	41.1		ug/L		103	89 - 111
Chromium	2.4	J	40.0	42.6		ug/L		101	86 - 115
Copper	6.1		40.0	45.7		ug/L		99	90 - 115
Lead	18		40.0	61.8		ug/L		109	88 - 115
Zinc	32		40.0	70.5		ug/L		95	88 - 115

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QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 613118

Client Sample ID: 2022-02-02

Prep Type: Total Recoverable

Prep Batch: 612618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		40.0	42.4		ug/L		106	79 - 120	5	20
Cadmium	ND		40.0	42.2		ug/L		106	89 - 111	3	20
Chromium	2.4	J	40.0	45.1		ug/L		107	86 - 115	6	20
Copper	6.1		40.0	47.3		ug/L		103	90 - 115	3	20
Lead	18		40.0	60.9		ug/L		106	88 - 115	1	20
Zinc	32		40.0	73.6		ug/L		103	88 - 115	4	20

Lab Sample ID: MB 280-612874/1-B

Matrix: Water

Analysis Batch: 613485

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 612883

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:27	1
Cadmium	ND		1.0	0.19	ug/L		05/18/23 14:27	05/22/23 19:27	1
Chromium	ND		3.0	0.50	ug/L		05/18/23 14:27	05/22/23 19:27	1
Copper	ND		2.0	0.71	ug/L		05/18/23 14:27	05/22/23 19:27	1
Lead	ND		1.0	0.23	ug/L		05/18/23 14:27	05/22/23 19:27	1
Manganese	ND		3.0	0.51	ug/L		05/18/23 14:27	05/22/23 19:27	1
Nickel	ND		3.0	0.83	ug/L		05/18/23 14:27	05/22/23 19:27	1
Selenium	ND		5.0	1.0	ug/L		05/18/23 14:27	05/22/23 19:27	1
Silver	ND		0.50	0.045	ug/L		05/18/23 14:27	05/22/23 19:27	1
Zinc	ND		10	2.0	ug/L		05/18/23 14:27	05/22/23 19:27	1

Lab Sample ID: LCS 280-612874/2-B

Matrix: Water

Analysis Batch: 613485

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 612883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	39.2	^+	ug/L		98	89 - 111
Cadmium	40.0	40.2		ug/L		101	89 - 111
Chromium	40.0	38.4		ug/L		96	86 - 115
Copper	40.0	38.5		ug/L		96	90 - 115
Lead	40.0	39.7		ug/L		99	88 - 115
Manganese	40.0	39.2		ug/L		98	87 - 115
Nickel	40.0	37.8		ug/L		94	86 - 115
Selenium	40.0	40.8		ug/L		102	85 - 114
Silver	40.0	38.0		ug/L		95	90 - 114
Zinc	40.0	37.8		ug/L		95	88 - 115

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613485

Client Sample ID: 2022-02-02

Prep Type: Potentially Dissolved

Prep Batch: 612883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	^+	40.0	38.3	^+	ug/L		96	79 - 120
Cadmium	ND		40.0	39.5		ug/L		99	89 - 111
Chromium	ND		40.0	38.3		ug/L		96	86 - 115
Copper	3.2		40.0	41.1		ug/L		95	90 - 115
Lead	14		40.0	52.7		ug/L		97	88 - 115

Eurofins Denver

QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613485

Client Sample ID: 2022-02-02

Prep Type: Potentially Dissolved

Prep Batch: 612883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	43		40.0	83.1		ug/L		99	87 - 115
Nickel	ND		40.0	38.1		ug/L		95	86 - 115
Selenium	ND		40.0	38.7		ug/L		97	85 - 114
Silver	ND		40.0	38.2		ug/L		95	70 - 130
Zinc	25		40.0	63.4		ug/L		96	88 - 115

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 613485

Client Sample ID: 2022-02-02

Prep Type: Potentially Dissolved

Prep Batch: 612883

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	^+	40.0	40.3	^+	ug/L		101	79 - 120	5	20
Cadmium	ND		40.0	40.6		ug/L		101	89 - 111	3	20
Chromium	ND		40.0	38.9		ug/L		97	86 - 115	2	20
Copper	3.2		40.0	42.0		ug/L		97	90 - 115	2	20
Lead	14		40.0	55.2		ug/L		104	88 - 115	5	20
Manganese	43		40.0	85.1		ug/L		104	87 - 115	2	20
Nickel	ND		40.0	38.0		ug/L		95	86 - 115	0	20
Selenium	ND		40.0	38.7		ug/L		97	85 - 114	0	20
Silver	ND		40.0	38.8		ug/L		97	70 - 130	2	20
Zinc	25		40.0	63.7		ug/L		97	88 - 115	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-613507/1-A

Matrix: Water

Analysis Batch: 613659

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 613507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		05/23/23 17:26	05/24/23 00:49	1

Lab Sample ID: LCS 280-613507/2-A

Matrix: Water

Analysis Batch: 613659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 613507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.74		ug/L		95	90 - 110

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613659

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Prep Batch: 613507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		5.00	4.84		ug/L		97	80 - 120

Eurofins Denver

QC Sample Results

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

Job ID: 280-176512-1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 613659

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Prep Batch: 613507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	4.99		ug/L		100	80 - 120	3	10

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-613464/31

Matrix: Water

Analysis Batch: 613464

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			05/23/23 10:58	1

Lab Sample ID: MB 280-613464/5

Matrix: Water

Analysis Batch: 613464

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			05/23/23 10:58	1

Lab Sample ID: LCS 280-613464/30

Matrix: Water

Analysis Batch: 613464

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	1470		umhos/cm		104	90 - 110

Lab Sample ID: LCS 280-613464/4

Matrix: Water

Analysis Batch: 613464

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	1490		umhos/cm		106	90 - 110

Lab Sample ID: 280-176512-3 DU

Matrix: Water

Analysis Batch: 613464

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	67		66.8		umhos/cm		0.4	10

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

Lab Sample ID: MB 280-613357/3

Matrix: Water

Analysis Batch: 613357

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			05/22/23 14:10	1

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QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: LCS 280-613357/1
Matrix: Water
Analysis Batch: 613357

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	502	428		mg/L		85	79 - 114

Lab Sample ID: LCSD 280-613357/2
Matrix: Water
Analysis Batch: 613357

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	502	412		mg/L		82	79 - 114	4	20

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-612610/14
Matrix: Water
Analysis Batch: 612610

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		0.020	0.0040	mg/L			05/16/23 09:00	1

Lab Sample ID: LCS 280-612610/11
Matrix: Water
Analysis Batch: 612610

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.104		mg/L		104	91 - 112

Lab Sample ID: 280-176512-3 MS
Matrix: Water
Analysis Batch: 612610

Client Sample ID: 2022-02-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND		0.100	0.0937		mg/L		94	91 - 112

Lab Sample ID: 280-176512-3 MSD
Matrix: Water
Analysis Batch: 612610

Client Sample ID: 2022-02-02
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		0.100	0.0959		mg/L		96	91 - 112	2	20

Lab Sample ID: 280-176512-3 DU
Matrix: Water
Analysis Batch: 612610

Client Sample ID: 2022-02-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND		ND		mg/L		NC	20

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QC Sample Results

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

Job ID: 280-176512-1

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

Lab Sample ID: 280-176512-3 DU

Matrix: Water

Analysis Batch: 612610

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND		ND		mg/L		NC	20

Lab Sample ID: MB 280-612599/3-A

Matrix: Water

Analysis Batch: 612610

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.020	0.0040	mg/L			05/16/23 09:01	1

Lab Sample ID: LCS 280-612599/1-A

Matrix: Water

Analysis Batch: 612610

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.103		mg/L		103	91 - 112

Lab Sample ID: LCSD 280-612599/2-A

Matrix: Water

Analysis Batch: 612610

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	0.100	0.104		mg/L		104	91 - 112	0	20

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 612610

Client Sample ID: 2022-02-02

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND		0.100	0.0962		mg/L		96	91 - 112

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 612610

Client Sample ID: 2022-02-02

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		0.100	0.0981		mg/L		98	91 - 112	2	20

Lab Sample ID: 280-176512-3 DU

Matrix: Water

Analysis Batch: 612610

Client Sample ID: 2022-02-02

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND		ND		mg/L		NC	20
Chromium, hexavalent	ND		ND		mg/L		NC	20

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QC Sample Results

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

Job ID: 280-176512-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-613264/5

Matrix: Water

Analysis Batch: 613264

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	7.1		SU		101	99 - 101

Lab Sample ID: LCS 280-613583/5

Matrix: Water

Analysis Batch: 613583

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	7.1		SU		101	99 - 101

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-613317/39

Matrix: Water

Analysis Batch: 613317

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0464	J	0.050	0.022	mg/L			05/18/23 18:52	1

Lab Sample ID: MB 280-613317/9

Matrix: Water

Analysis Batch: 613317

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.0332	J	0.050	0.022	mg/L			05/18/23 19:07	1

Lab Sample ID: LCS 280-613317/11

Matrix: Water

Analysis Batch: 613317

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	0.493		mg/L		98	81 - 122

Lab Sample ID: LCS 280-613317/41

Matrix: Water

Analysis Batch: 613317

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	0.513		mg/L		102	81 - 122

Lab Sample ID: LCSD 280-613317/10

Matrix: Water

Analysis Batch: 613317

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	0.433	*1	mg/L		86	81 - 122	13	10

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QC Sample Results

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

Job ID: 280-176512-1

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: LCSD 280-613317/40

Matrix: Water

Analysis Batch: 613317

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	0.547		mg/L		109	81 - 122	6	10

Lab Sample ID: 280-176512-3 MS

Matrix: Water

Analysis Batch: 613317

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		0.501	0.490		mg/L		98	81 - 122		

Lab Sample ID: 280-176512-3 MSD

Matrix: Water

Analysis Batch: 613317

Client Sample ID: 2022-02-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		0.501	0.515		mg/L		103	81 - 122	5	10

Lab Sample ID: 280-176512-4 MS

Matrix: Water

Analysis Batch: 613317

Client Sample ID: 2022-02-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND	*1	0.501	0.502		mg/L		100	81 - 122		

Lab Sample ID: 280-176512-4 MSD

Matrix: Water

Analysis Batch: 613317

Client Sample ID: 2022-02-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND	*1	0.501	0.539		mg/L		108	81 - 122	7	10

QC Association Summary

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

Job ID: 280-176512-1

Metals

Prep Batch: 612618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total Recoverable	Water	200.8	
280-176512-2	2022-02	Total Recoverable	Water	200.8	
280-176512-3	2022-02-02	Total Recoverable	Water	200.7	
280-176512-3	2022-02-02	Total Recoverable	Water	200.8	
280-176512-4	2022-02-03	Total Recoverable	Water	200.8	
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-612618/20-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-612618/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-176512-3 MS	2022-02-02	Total Recoverable	Water	200.7	
280-176512-3 MS	2022-02-02	Total Recoverable	Water	200.8	
280-176512-3 MSD	2022-02-02	Total Recoverable	Water	200.7	
280-176512-3 MSD	2022-02-02	Total Recoverable	Water	200.8	

Filtration Batch: 612874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Potentially Dissolved	Water	Poten_Diss_Met	
280-176512-2	2022-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-176512-3	2022-02-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-176512-4	2022-02-03	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-612874/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-612874/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	
280-176512-3 MS	2022-02-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-176512-3 MSD	2022-02-02	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 612883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Potentially Dissolved	Water	200.8	612874
280-176512-2	2022-02	Potentially Dissolved	Water	200.8	612874
280-176512-3	2022-02-02	Potentially Dissolved	Water	200.8	612874
280-176512-4	2022-02-03	Potentially Dissolved	Water	200.8	612874
MB 280-612874/1-B	Method Blank	Potentially Dissolved	Water	200.8	612874
LCS 280-612874/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	612874
280-176512-3 MS	2022-02-02	Potentially Dissolved	Water	200.8	612874
280-176512-3 MSD	2022-02-02	Potentially Dissolved	Water	200.8	612874

Analysis Batch: 613118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total Recoverable	Water	200.8	612618
280-176512-2	2022-02	Total Recoverable	Water	200.8	612618
280-176512-3	2022-02-02	Total Recoverable	Water	200.8	612618
280-176512-4	2022-02-03	Total Recoverable	Water	200.8	612618
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.8	612618
LCS 280-612618/20-A	Lab Control Sample	Total Recoverable	Water	200.8	612618
280-176512-3 MS	2022-02-02	Total Recoverable	Water	200.8	612618
280-176512-3 MSD	2022-02-02	Total Recoverable	Water	200.8	612618

Analysis Batch: 613485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Potentially Dissolved	Water	200.8	612883
280-176512-2	2022-02	Potentially Dissolved	Water	200.8	612883
280-176512-3	2022-02-02	Potentially Dissolved	Water	200.8	612883

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QC Association Summary

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

Job ID: 280-176512-1

Metals (Continued)

Analysis Batch: 613485 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-4	2022-02-03	Potentially Dissolved	Water	200.8	612883
MB 280-612874/1-B	Method Blank	Potentially Dissolved	Water	200.8	612883
LCS 280-612874/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	612883
280-176512-3 MS	2022-02-02	Potentially Dissolved	Water	200.8	612883
280-176512-3 MSD	2022-02-02	Potentially Dissolved	Water	200.8	612883

Prep Batch: 613507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	245.1	
280-176512-2	2022-02	Total/NA	Water	245.1	
280-176512-3	2022-02-02	Total/NA	Water	245.1	
280-176512-4	2022-02-03	Total/NA	Water	245.1	
MB 280-613507/1-A	Method Blank	Total/NA	Water	245.1	
LCS 280-613507/2-A	Lab Control Sample	Total/NA	Water	245.1	
280-176512-3 MS	2022-02-02	Total/NA	Water	245.1	
280-176512-3 MSD	2022-02-02	Total/NA	Water	245.1	

Analysis Batch: 613659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	245.1	613507
280-176512-2	2022-02	Total/NA	Water	245.1	613507
280-176512-3	2022-02-02	Total/NA	Water	245.1	613507
280-176512-4	2022-02-03	Total/NA	Water	245.1	613507
MB 280-613507/1-A	Method Blank	Total/NA	Water	245.1	613507
LCS 280-613507/2-A	Lab Control Sample	Total/NA	Water	245.1	613507
280-176512-3 MS	2022-02-02	Total/NA	Water	245.1	613507
280-176512-3 MSD	2022-02-02	Total/NA	Water	245.1	613507

Analysis Batch: 613763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-2	2022-02	Total Recoverable	Water	200.7 Rev 4.4	612618
MB 280-612618/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	612618
LCS 280-612618/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	612618

Analysis Batch: 613902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-3	2022-02-02	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-4	2022-02-03	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-3 MS	2022-02-02	Total Recoverable	Water	200.7 Rev 4.4	612618
280-176512-3 MSD	2022-02-02	Total Recoverable	Water	200.7 Rev 4.4	612618

Prep Batch: 625891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	1631E	
280-176512-2	2022-02	Total/NA	Water	1631E	
280-176512-3	2022-02-02	Total/NA	Water	1631E	
280-176512-4	2022-02-03	Total/NA	Water	1631E	
MB 400-625891/3-A	Method Blank	Total/NA	Water	1631E	
LCS 400-625891/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-625891/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	

Eurofins Denver

QC Association Summary

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

Job ID: 280-176512-1

Metals (Continued)

Prep Batch: 625891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-3 MS	2022-02-02	Total/NA	Water	1631E	
280-176512-3 MSD	2022-02-02	Total/NA	Water	1631E	

Analysis Batch: 625988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	1631E	625891
280-176512-2	2022-02	Total/NA	Water	1631E	625891
280-176512-3	2022-02-02	Total/NA	Water	1631E	625891
280-176512-4	2022-02-03	Total/NA	Water	1631E	625891
MB 400-625891/3-A	Method Blank	Total/NA	Water	1631E	625891
LCS 400-625891/4-A	Lab Control Sample	Total/NA	Water	1631E	625891
LCSD 400-625891/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	625891
280-176512-3 MS	2022-02-02	Total/NA	Water	1631E	625891
280-176512-3 MSD	2022-02-02	Total/NA	Water	1631E	625891

General Chemistry

Filtration Batch: 612599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Dissolved	Water	FILTRATION	
280-176512-2	2022-02	Dissolved	Water	FILTRATION	
280-176512-3	2022-02-02	Dissolved	Water	FILTRATION	
280-176512-4	2022-02-03	Dissolved	Water	FILTRATION	
MB 280-612599/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-612599/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-612599/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-176512-3 MS	2022-02-02	Dissolved	Water	FILTRATION	
280-176512-3 MSD	2022-02-02	Dissolved	Water	FILTRATION	
280-176512-3 DU	2022-02-02	Dissolved	Water	FILTRATION	

Analysis Batch: 612610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Dissolved	Water	SM 3500 CR B	612599
280-176512-1	2022-01	Total/NA	Water	SM 3500 CR B	
280-176512-2	2022-02	Dissolved	Water	SM 3500 CR B	612599
280-176512-2	2022-02	Total/NA	Water	SM 3500 CR B	
280-176512-3	2022-02-02	Dissolved	Water	SM 3500 CR B	612599
280-176512-3	2022-02-02	Total/NA	Water	SM 3500 CR B	
280-176512-4	2022-02-03	Dissolved	Water	SM 3500 CR B	612599
280-176512-4	2022-02-03	Total/NA	Water	SM 3500 CR B	
MB 280-612599/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	612599
MB 280-612610/14	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-612599/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	612599
LCS 280-612610/11	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-612599/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	612599
280-176512-3 MS	2022-02-02	Dissolved	Water	SM 3500 CR B	612599
280-176512-3 MS	2022-02-02	Total/NA	Water	SM 3500 CR B	
280-176512-3 MSD	2022-02-02	Dissolved	Water	SM 3500 CR B	612599
280-176512-3 MSD	2022-02-02	Total/NA	Water	SM 3500 CR B	
280-176512-3 DU	2022-02-02	Dissolved	Water	SM 3500 CR B	612599
280-176512-3 DU	2022-02-02	Dissolved	Water	SM 3500 CR B	612599

Eurofins Denver

QC Association Summary

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

Job ID: 280-176512-1

General Chemistry (Continued)

Analysis Batch: 612610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-3 DU	2022-02-02	Total/NA	Water	SM 3500 CR B	
280-176512-3 DU	2022-02-02	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 613264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-3	2022-02-02	Total/NA	Water	SM 4500 H+ B	
LCS 280-613264/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 613317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	SM 4500 S2 D	
280-176512-2	2022-02	Total/NA	Water	SM 4500 S2 D	
280-176512-3	2022-02-02	Total/NA	Water	SM 4500 S2 D	
280-176512-4	2022-02-03	Total/NA	Water	SM 4500 S2 D	
MB 280-613317/39	Method Blank	Total/NA	Water	SM 4500 S2 D	
MB 280-613317/9	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-613317/11	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCS 280-613317/41	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-613317/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
LCSD 280-613317/40	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
280-176512-3 MS	2022-02-02	Total/NA	Water	SM 4500 S2 D	
280-176512-3 MSD	2022-02-02	Total/NA	Water	SM 4500 S2 D	
280-176512-4 MS	2022-02-03	Total/NA	Water	SM 4500 S2 D	
280-176512-4 MSD	2022-02-03	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 613357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	SM 2540D	
280-176512-2	2022-02	Total/NA	Water	SM 2540D	
280-176512-3	2022-02-02	Total/NA	Water	SM 2540D	
280-176512-4	2022-02-03	Total/NA	Water	SM 2540D	
MB 280-613357/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-613357/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-613357/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Analysis Batch: 613464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	SM 2510B	
280-176512-2	2022-02	Total/NA	Water	SM 2510B	
280-176512-3	2022-02-02	Total/NA	Water	SM 2510B	
280-176512-4	2022-02-03	Total/NA	Water	SM 2510B	
MB 280-613464/31	Method Blank	Total/NA	Water	SM 2510B	
MB 280-613464/5	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-613464/30	Lab Control Sample	Total/NA	Water	SM 2510B	
LCS 280-613464/4	Lab Control Sample	Total/NA	Water	SM 2510B	
280-176512-3 DU	2022-02-02	Total/NA	Water	SM 2510B	

Analysis Batch: 613583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	SM 4500 H+ B	
280-176512-2	2022-02	Total/NA	Water	SM 4500 H+ B	

Eurofins Denver

QC Association Summary

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

Job ID: 280-176512-1

General Chemistry (Continued)

Analysis Batch: 613583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-4	2022-02-03	Total/NA	Water	SM 4500 H+ B	
LCS 280-613583/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 613992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Total/NA	Water	SM4500 S2 H	
280-176512-2	2022-02	Total/NA	Water	SM4500 S2 H	
280-176512-3	2022-02-02	Total/NA	Water	SM4500 S2 H	
280-176512-4	2022-02-03	Total/NA	Water	SM4500 S2 H	

Analysis Batch: 614130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176512-1	2022-01	Potentially Dissolved	Water	SM3500 CR B	
280-176512-1	2022-01	Total Recoverable	Water	SM3500 CR B	
280-176512-2	2022-02	Potentially Dissolved	Water	SM3500 CR B	
280-176512-2	2022-02	Total Recoverable	Water	SM3500 CR B	
280-176512-3	2022-02-02	Potentially Dissolved	Water	SM3500 CR B	
280-176512-3	2022-02-02	Total Recoverable	Water	SM3500 CR B	
280-176512-4	2022-02-03	Potentially Dissolved	Water	SM3500 CR B	
280-176512-4	2022-02-03	Total Recoverable	Water	SM3500 CR B	

Lab Chronicle

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

Job ID: 280-176512-1

Client Sample ID: 2022-01

Date Collected: 05/15/23 09:00

Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-1

Matrix: Water

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	625891	05/19/23 15:30	VLC	EET PEN
							Completed:	05/22/23 09:45 ¹		
Total/NA	Analysis	1631E		1			625988	05/22/23 12:39	VLC	EET PEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			613763	05/24/23 23:28	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	612874	05/17/23 17:47	PFM	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	612883	05/18/23 14:27	PFM	EET DEN
Potentially Dissolved	Analysis	200.8		1			613485	05/22/23 19:32	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			613118	05/19/23 01:28	LRD	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	613507	05/23/23 17:26	PFM	EET DEN
Total/NA	Analysis	245.1		1			613659	05/24/23 01:09	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			613464	05/23/23 10:58	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	613357	05/22/23 14:10	ABW	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	612599	05/16/23 08:16	SL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:05	SL	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:13	SL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			613583	05/23/23 14:31	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	613317	05/18/23 18:54	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			613992	05/26/23 13:33	SAH	EET DEN

Client Sample ID: 2022-02

Date Collected: 05/15/23 10:00

Date Received: 05/15/23 16:26

Lab Sample ID: 280-176512-2

Matrix: Water

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	625891	05/19/23 15:30	VLC	EET PEN
							Completed:	05/22/23 09:45 ¹		
Total/NA	Analysis	1631E		1			625988	05/22/23 12:47	VLC	EET PEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			613763	05/24/23 23:32	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	612874	05/17/23 17:47	PFM	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	612883	05/18/23 14:27	PFM	EET DEN
Potentially Dissolved	Analysis	200.8		1			613485	05/22/23 19:34	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			613118	05/19/23 01:30	LRD	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	613507	05/23/23 17:26	PFM	EET DEN
Total/NA	Analysis	245.1		1			613659	05/24/23 01:12	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			613464	05/23/23 10:58	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	613357	05/22/23 14:10	ABW	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	612599	05/16/23 08:16	SL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:05	SL	EET DEN

Eurofins Denver

Lab Chronicle

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

Job ID: 280-176512-1

Client Sample ID: 2022-02

Lab Sample ID: 280-176512-2

Date Collected: 05/15/23 10:00

Matrix: Water

Date Received: 05/15/23 16:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:14	SL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			613583	05/23/23 14:35	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	613317	05/18/23 18:55	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			613992	05/26/23 13:33	SAH	EET DEN

Client Sample ID: 2022-02-02

Lab Sample ID: 280-176512-3

Date Collected: 05/15/23 10:00

Matrix: Water

Date Received: 05/15/23 16:26

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	625891	05/19/23 15:30	VLC	EET PEN
Completed: 05/22/23 09:45 ¹										
Total/NA	Analysis	1631E		1			625988	05/22/23 12:55	VLC	EET PEN
Total Recoverable	Prep	200.7			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			613902	05/25/23 21:49	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	612874	05/17/23 17:47	PFM	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	612883	05/18/23 14:27	PFM	EET DEN
Potentially Dissolved	Analysis	200.8		1			613485	05/22/23 19:36	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			613118	05/19/23 01:08	LRD	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	613507	05/23/23 17:26	PFM	EET DEN
Total/NA	Analysis	245.1		1			613659	05/24/23 01:14	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			613464	05/23/23 10:58	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	613357	05/22/23 14:10	ABW	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	612599	05/16/23 08:16	SL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:01	SL	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:09	SL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			613264	05/19/23 15:58	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	613317	05/18/23 18:53	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			613992	05/26/23 13:33	SAH	EET DEN

Client Sample ID: 2022-02-03

Lab Sample ID: 280-176512-4

Date Collected: 05/15/23 10:00

Matrix: Water

Date Received: 05/15/23 16:26

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	625891	05/19/23 15:30	VLC	EET PEN
Completed: 05/22/23 09:45 ¹										
Total/NA	Analysis	1631E		1			625988	05/22/23 15:03	VLC	EET PEN

Eurofins Denver

Lab Chronicle

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

Job ID: 280-176512-1

Client Sample ID: 2022-02-03

Lab Sample ID: 280-176512-4

Date Collected: 05/15/23 10:00

Matrix: Water

Date Received: 05/15/23 16:26

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	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			613902	05/25/23 22:09	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	612874	05/17/23 18:07	PFM	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	612883	05/18/23 14:27	PFM	EET DEN
Potentially Dissolved	Analysis	200.8		1			613485	05/22/23 19:49	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	612618	05/18/23 07:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			613118	05/19/23 01:32	LRD	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	613507	05/23/23 17:26	PFM	EET DEN
Total/NA	Analysis	245.1		1			613659	05/24/23 01:22	PFM	EET DEN
Total/NA	Analysis	SM 2510B		1			613464	05/23/23 10:58	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	613357	05/22/23 14:10	ABW	EET DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	612599	05/16/23 08:16	SL	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:12	SL	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	612610	05/16/23 09:12	SL	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			613583	05/23/23 14:41	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	613317	05/18/23 19:08	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			614130	05/30/23 08:39	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			613992	05/26/23 13:33	SAH	EET DEN

¹ 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: 280-176512-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-23 *
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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	06-30-23
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23

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

Eurofins Denver

Accreditation/Certification Summary

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

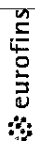
Job ID: 280-176512-1

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
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-24

Chain of Custody Record



**Environment Testing
America**

Client Information		Lab PM:		Carrier Tracking No(s):	
Client Contact: Patrick Delaney		Blenius, Dylan T			
Company: Grand Island Resources		E-Mail: Dylan.Blenius@Eurofinset.com		Page:	
Address: 12567 West Cedar Road Suite 250		Phone: 303-506-1618		Job #:	
City: Lakewood		FWSID:		Preservation Codes:	
State, Zip: CO, 80466		Due Date Requested:		M - Hexane	
Phone: 315-414-6986		TAT Requested (days):		N - None	
Email: pdelaney@blackfoxmining.com		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O - AsNaO2	
Project #: 28022821		Advance Payment Required		P - Na2O4S	
Site: Surface Water Sampling		PO #:		Q - NaHSO4	
		WO #:		R - Na2SO3	
		Sample Date		S - H2SO4	
		Sample Time		T - TSP Dodecahydrate	
		Sample Type (C=Comp, G=Grab)		U - Acetone	
		Matrix (Water, Swill, Overstall, BT-Tissue, A=Air)		V - MCAA	
		Preservation Code:		W - pH 4-5	
		Field Filtered Sample (Yes or No)		Z - other (specify)	
		Perform MS/MSD (Yes or No)		Other:	
		Analysis Requested		Total Number of containers	
		2510B - Specific Conductance, 2540D - TSS, SM4500-H+		200.8 - Potentially Dissolved Metals (First half of the month)	
		3500 CR-B - Total Hexavalent Cr and Trivalent Cr (calc)		200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury (First half of the month permit list)	
		3500 CR-B - Dissolved Hexavalent Cr (LAB FILTR) and Potentially Dissolved Trivalent Cr (calc)		1631E - Low Level Mercury (ETA Pensacola)	
		SM4500-S2-D - Sulfide and SM3600-S2-H - Un-ionized Hydrogen Sulfide (calc)			
		1631E - Low Level Mercury (ETA Pensacola)			
		2510B - Specific Conductance, 2540D - TSS, SM4500-H+			
		3500 CR-B - Total Hexavalent Cr and Trivalent Cr (calc)			
		3500 CR-B - Dissolved Hexavalent Cr (LAB FILTR) and Potentially Dissolved Trivalent Cr (calc)			
		SM4500-S2-D - Sulfide and SM3600-S2-H - Un-ionized Hydrogen Sulfide (calc)			
		1631E - Low Level Mercury (ETA Pensacola)			
		200.8 - Potentially Dissolved Metals (First half of the month)			
		200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury (First half of the month permit list)			
		Total Number of containers			
		Special Instructions/Note:			
		* Surface water potentially dissolved metals permit list = 200.8 (As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn)			
		* Surface water total recoverable metals list = 200.7 (Fe), 200.8 (As, Cd, Cr, Cu, Pb, Zn), and 245.1 (Hg)			
		2022-01		2022-01	
		pH = 7.06		pH = 7.06	
		temp = 0.2°C		temp = 0.2°C	
		2022-02		2022-02	
		pH = 8.01		pH = 8.01	
		temp = 1.7°C		temp = 1.7°C	
		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		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 checked="" type="checkbox"/> Archive For Months		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For Months	
		Special Instructions/QC Requirements:		Special Instructions/QC Requirements:	
		Method of Shipment		Method of Shipment	
		Received by:		Received by:	
		Date/Time:		Date/Time:	
		Company:		Company:	
		Received by:		Received by:	
		Date/Time:		Date/Time:	
		Company:		Company:	
		Received by:		Received by:	
		Date/Time:		Date/Time:	
		Company:		Company:	
		Custody Seal No.:		Custody Seal No.:	
		A Yes A No		A Yes A No	

4955 Yarrow Street
Arvada, CO 80002

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-176512-1

Login Number: 176512

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

Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-176512-1

Login Number: 176512

List Number: 2

Creator: Peckinpaugh, Marshall

List Source: Eurofins Pensacola

List Creation: 05/17/23 01:07 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	0.6°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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C.3 JUNE 2023 SURFACE WATER ANALYTICAL RESULTS

ANALYTICAL REPORT

PREPARED FOR

Attn: Brooke Molson Moran
Grand Island Resources
12567 West Cedar Road
Suite 250
Lakewood, Colorado 80228

Generated 6/29/2023 12:00:30 PM

JOB DESCRIPTION

Nederland, CO

JOB NUMBER

280-177856-1

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
6/29/2023 12:00:30 PM

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Definitions/Glossary

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

Job ID: 280-177856-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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
F1	MS and/or MSD recovery exceeds control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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/Site: Nederland, CO

Job ID: 280-177856-1

Job ID: 280-177856-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Grand Island Resources

Project: Nederland, CO

Report Number: 280-177856-1

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. 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 6/14/2023 2:34 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 9.4° C.

Receipt Exceptions

One VOA vial from each mercury kit was packaged outside of mercury kit.

2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02 (280-177856-2[MS]), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4)

TOTAL RECOVERABLE METALS (ICP)

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for Total Recoverable Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 06/19/2023 and analyzed on 06/21/2023.

Iron was detected in method blank MB 280-616151/1-A at a level that was above the method detection limit but below the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POTENTIALLY DISSOLVED METALS (ICPMS)

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for potentially dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/20/2023 and analyzed on 06/22/2023.

Chromium and Zinc were detected in method blank MB 280-616494/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICPMS)

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed

Case Narrative

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

Job ID: 280-177856-1

Job ID: 280-177856-1 (Continued)

Laboratory: Eurofins Denver (Continued)

for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/19/2023 and analyzed on 06/21/2023.

The continuing calibration verification (CCV) associated with batch 280-616944 recovered above the upper control limit for As. The MB/LCS and LCSD associated with this CCV were within limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 280-616944/157), (LCS 280-616151/28-A), (LCSD 280-616151/29-A) and (MB 280-616151/1-A).

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-616151 and analytical batch 280-616944 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.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for total mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - POTENTIALLY DISSOLVED

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for Trivalent Chromium - Potentially Dissolved in accordance with SM3500_CR3_B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRIVALENT CHROMIUM - TOTAL RECOVERABLE

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for Trivalent Chromium - Total Recoverable in accordance with SM3500_CR3_B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 06/27/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 06/21/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED HEXAVALENT CHROMIUM

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for dissolved hexavalent chromium in accordance with SM 3500 CR B. The samples were analyzed on 06/14/2023.

The matrix spike and matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-616147 and analytical batch 280-616159 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference is suspected because the associated laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recoveries are within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed

Case Narrative

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

Job ID: 280-177856-1

Job ID: 280-177856-1 (Continued)

Laboratory: Eurofins Denver (Continued)

for hexavalent chromium in accordance with 3500_CR_B. The samples were analyzed on 06/14/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 06/19/2023 and 06/20/2023.

Sample did not equilibrate to within 0.05 pH units after three measurements. This was observed in a previous analysis, thus the sample was not rerun. 2022-02 (280-177856-2) and 2022-02-03 (280-177856-4).

The sample duplicate (DUP) precision for analytical batch 280-616882 was outside control limits. Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for sulfide in accordance with SM20 4500 S2 D. The samples were analyzed on 06/15/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HYDROGEN SULFIDE

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for Hydrogen Sulfide in accordance with SM20 4500 S2 H. The samples were analyzed on 06/16/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LOW LEVEL MERCURY

Samples 2022-01 (280-177856-1), 2022-02 (280-177856-2), 2022-02-02 (280-177856-3) and 2022-02-03 (280-177856-4) were analyzed for Low Level Mercury in accordance with EPA 1631. The samples were prepared on 06/27/2023 and analyzed on 06/28/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

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

Job ID: 280-177856-1

Client Sample ID: 2022-01

Lab Sample ID: 280-177856-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	4.1		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	290	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	2.4		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	0.44	J	1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	3.5	J	10	2.0	ug/L	1		200.8	Total Recoverable
Copper	1.3	J	2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	0.30	J	1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	8.5		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	7.1	J B	10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	44		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	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	21.1	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.5		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	44		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

Client Sample ID: 2022-02

Lab Sample ID: 280-177856-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	7.1		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	310	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	2.6		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	2.6		1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	14	F1	10	2.0	ug/L	1		200.8	Total Recoverable
Chromium	0.59	J B	3.0	0.50	ug/L	1		200.8	Potentially Dissolved
Copper	1.9	J	2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	2.5		1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	11		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Silver	0.082	J	0.50	0.045	ug/L	1		200.8	Potentially Dissolved
Zinc	26	B	10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	78		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	3.6	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	7.3	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	21.9	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	7.3		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	22		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	78		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

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

Job ID: 280-177856-1

Client Sample ID: 2022-02-02

Lab Sample ID: 280-177856-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	6.9		0.50	0.20	ng/L	1		1631E	Total/NA
Iron	550	B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Copper	2.7		2.0	0.71	ug/L	1		200.8	Total Recoverable
Lead	3.1		1.0	0.23	ug/L	1		200.8	Total Recoverable
Zinc	15		10	2.0	ug/L	1		200.8	Total Recoverable
Chromium	0.53	J B	3.0	0.50	ug/L	1		200.8	Potentially Dissolved
Copper	1.5	J	2.0	0.71	ug/L	1		200.8	Potentially Dissolved
Lead	2.6		1.0	0.23	ug/L	1		200.8	Potentially Dissolved
Manganese	12		3.0	0.51	ug/L	1		200.8	Potentially Dissolved
Zinc	19	B	10	2.0	ug/L	1		200.8	Potentially Dissolved
Specific Conductance	77		2.0	2.0	umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	3.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
pH adj. to 25 deg C	7.9	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	22.1	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	22		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA
Specific Conductance	77		2.0	2.0	umhos/cm	1		SM4500 S2 H	Total/NA

Client Sample ID: 2022-02-03

Lab Sample ID: 280-177856-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	14	J B	100	9.1	ug/L	1		200.7 Rev 4.4	Total Recoverable
Chromium	0.52	J B	3.0	0.50	ug/L	1		200.8	Potentially Dissolved
Zinc	7.6	J B	10	2.0	ug/L	1		200.8	Potentially Dissolved
pH adj. to 25 deg C	8.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	22.1	HF	1.0	1.0	Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	8.5		1.0	1.0	SU	1		SM4500 S2 H	Total/NA
Field Temperature	22		1.0	1.0	Celsius	1		SM4500 S2 H	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

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

Job ID: 280-177856-1

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: 280-177856-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-177856-1	2022-01	Water	06/14/23 07:30	06/14/23 14:34
280-177856-2	2022-02	Water	06/14/23 08:10	06/14/23 14:34
280-177856-3	2022-02-02	Water	06/14/23 08:10	06/14/23 14:34
280-177856-4	2022-02-03	Water	06/14/23 08:10	06/14/23 14:34

Client Sample Results

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

Job ID: 280-177856-1

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

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.1		0.50	0.20	ng/L		06/27/23 16:25	06/28/23 13:21	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	7.1		0.50	0.20	ng/L		06/27/23 16:25	06/28/23 13:29	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.9		0.50	0.20	ng/L		06/27/23 16:25	06/28/23 13:44	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.20	ng/L		06/27/23 16:25	06/28/23 13:52	1

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

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	290	B	100	9.1	ug/L		06/19/23 14:45	06/21/23 01:49	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	310	B	100	9.1	ug/L		06/19/23 14:45	06/21/23 01:54	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	550	B	100	9.1	ug/L		06/19/23 14:45	06/21/23 02:07	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	14	J B	100	9.1	ug/L		06/19/23 14:45	06/21/23 02:11	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-177856-1

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

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:54	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 14:45	06/21/23 00:54	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:54	1
Copper	2.4		2.0	0.71	ug/L		06/19/23 14:45	06/21/23 00:54	1
Lead	0.44	J	1.0	0.23	ug/L		06/19/23 14:45	06/21/23 00:54	1
Zinc	3.5	J	10	2.0	ug/L		06/19/23 14:45	06/21/23 00:54	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:56	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 14:45	06/21/23 00:56	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:56	1
Copper	2.6		2.0	0.71	ug/L		06/19/23 14:45	06/21/23 00:56	1
Lead	2.6		1.0	0.23	ug/L		06/19/23 14:45	06/21/23 00:56	1
Zinc	14	F1	10	2.0	ug/L		06/19/23 14:45	06/21/23 00:56	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 14:45	06/21/23 01:01	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 14:45	06/21/23 01:01	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 14:45	06/21/23 01:01	1
Copper	2.7		2.0	0.71	ug/L		06/19/23 14:45	06/21/23 01:01	1
Lead	3.1		1.0	0.23	ug/L		06/19/23 14:45	06/21/23 01:01	1
Zinc	15		10	2.0	ug/L		06/19/23 14:45	06/21/23 01:01	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/19/23 14:45	06/21/23 01:03	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 14:45	06/21/23 01:03	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 14:45	06/21/23 01:03	1
Copper	ND		2.0	0.71	ug/L		06/19/23 14:45	06/21/23 01:03	1
Lead	ND		1.0	0.23	ug/L		06/19/23 14:45	06/21/23 01:03	1
Zinc	ND		10	2.0	ug/L		06/19/23 14:45	06/21/23 01:03	1

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

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:03	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 20:03	1
Chromium	ND		3.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:03	1
Copper	1.3	J	2.0	0.71	ug/L		06/20/23 14:40	06/22/23 20:03	1
Lead	0.30	J	1.0	0.23	ug/L		06/20/23 14:40	06/22/23 20:03	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-177856-1

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

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	8.5		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 20:03	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 20:03	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 20:03	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 20:03	1
Zinc	7.1	J B	10	2.0	ug/L		06/20/23 14:40	06/22/23 20:03	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:28	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 20:28	1
Chromium	0.59	J B	3.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:28	1
Copper	1.9	J	2.0	0.71	ug/L		06/20/23 14:40	06/22/23 20:28	1
Lead	2.5		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 20:28	1
Manganese	11		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 20:28	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 20:28	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 20:28	1
Silver	0.082	J	0.50	0.045	ug/L		06/20/23 14:40	06/22/23 20:28	1
Zinc	26	B	10	2.0	ug/L		06/20/23 14:40	06/22/23 20:28	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:39	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 20:39	1
Chromium	0.53	J B	3.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:39	1
Copper	1.5	J	2.0	0.71	ug/L		06/20/23 14:40	06/22/23 20:39	1
Lead	2.6		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 20:39	1
Manganese	12		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 20:39	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 20:39	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 20:39	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 20:39	1
Zinc	19	B	10	2.0	ug/L		06/20/23 14:40	06/22/23 20:39	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:43	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 20:43	1
Chromium	0.52	J B	3.0	0.50	ug/L		06/20/23 14:40	06/22/23 20:43	1
Copper	ND		2.0	0.71	ug/L		06/20/23 14:40	06/22/23 20:43	1
Lead	ND		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 20:43	1
Manganese	ND		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 20:43	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 20:43	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 20:43	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 20:43	1
Zinc	7.6	J B	10	2.0	ug/L		06/20/23 14:40	06/22/23 20:43	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-177856-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 23:09	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 23:12	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 23:24	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 23:27	1

General Chemistry

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	44		2.0	2.0	umhos/cm			06/27/23 07:51	1
Total Suspended Solids (SM 2540D)	1.6	J	4.0	1.1	mg/L			06/21/23 16:51	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:19	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.5	HF	0.1	0.1	SU			06/19/23 16:16	1
Temperature (SM 4500 H+ B)	21.1	HF	1.0	1.0	Degrees C			06/19/23 16:16	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			06/15/23 13:58	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1
Field pH (SM4500 S2 H)	7.5		1.0	1.0	SU			06/16/23 12:05	1
Field Temperature (SM4500 S2 H)	21		1.0	1.0	Celsius			06/16/23 12:05	1
Specific Conductance (SM4500 S2 H)	44		2.0	2.0	umhos/cm			06/16/23 12:05	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	78		2.0	2.0	umhos/cm			06/27/23 07:51	1
Total Suspended Solids (SM 2540D)	3.6	J	4.0	1.1	mg/L			06/21/23 16:51	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:15	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.3	HF	0.1	0.1	SU			06/20/23 21:10	1

Eurofins Denver

Client Sample Results

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

Job ID: 280-177856-1

General Chemistry (Continued)

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SM 4500 H+ B)	21.9	HF	1.0	1.0	Degrees C			06/20/23 21:10	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			06/15/23 13:56	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1
Field pH (SM4500 S2 H)	7.3		1.0	1.0	SU			06/16/23 12:05	1
Field Temperature (SM4500 S2 H)	22		1.0	1.0	Celsius			06/16/23 12:05	1
Specific Conductance (SM4500 S2 H)	78		2.0	2.0	umhos/cm			06/16/23 12:05	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	77		2.0	2.0	umhos/cm			06/27/23 07:51	1
Total Suspended Solids (SM 2540D)	3.2	J	4.0	1.1	mg/L			06/21/23 16:51	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:19	1
pH adj. to 25 deg C (SM 4500 H+ B)	7.9	HF	0.1	0.1	SU			06/20/23 20:53	1
Temperature (SM 4500 H+ B)	22.1	HF	1.0	1.0	Degrees C			06/20/23 20:53	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			06/15/23 13:57	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1
Field pH (SM4500 S2 H)	7.9		1.0	1.0	SU			06/16/23 12:05	1
Field Temperature (SM4500 S2 H)	22		1.0	1.0	Celsius			06/16/23 12:05	1
Specific Conductance (SM4500 S2 H)	77		2.0	2.0	umhos/cm			06/16/23 12:05	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	ND		2.0	2.0	umhos/cm			06/27/23 07:51	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			06/21/23 16:51	1
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:22	1
pH adj. to 25 deg C (SM 4500 H+ B)	8.5	HF	0.1	0.1	SU			06/20/23 21:04	1
Temperature (SM 4500 H+ B)	22.1	HF	1.0	1.0	Degrees C			06/20/23 21:04	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.022	mg/L			06/15/23 13:58	1
Un-ionized Hydrogen Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1
Field pH (SM4500 S2 H)	8.5		1.0	1.0	SU			06/16/23 12:05	1
Field Temperature (SM4500 S2 H)	22		1.0	1.0	Celsius			06/16/23 12:05	1
Specific Conductance (SM4500 S2 H)	ND		2.0	2.0	umhos/cm			06/16/23 12:05	1
Sulfide (SM4500 S2 H)	ND		1.0	1.0	mg/L			06/16/23 12:05	1

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Client Sample Results

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

Job ID: 280-177856-1

General Chemistry - Total Recoverable

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SM3500 CR B)	ND		0.020	0.020	mg/L			06/27/23 18:42	1

General Chemistry - Dissolved

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:07	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND	F1	0.020	0.0040	mg/L			06/14/23 16:03	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:08	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	ND		0.020	0.0040	mg/L			06/14/23 16:09	1

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Client Sample Results

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

Job ID: 280-177856-1

General Chemistry - Potentially Dissolved

Client Sample ID: 2022-01
Date Collected: 06/14/23 07:30
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		06/27/23 18:42	1

Client Sample ID: 2022-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		06/27/23 18:42	1

Client Sample ID: 2022-02-02
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		06/27/23 18:42	1

Client Sample ID: 2022-02-03
Date Collected: 06/14/23 08:10
Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (dissolved) (SM3500 CR B)	ND		0.020	0.020	mg/L	-		06/27/23 18:42	1

QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: MB 400-631114/3-A

Matrix: Water

Analysis Batch: 631187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 631114

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.50	0.20	ng/L		06/27/23 16:00	06/28/23 10:02	1

Lab Sample ID: LCS 400-631114/4-A

Matrix: Water

Analysis Batch: 631187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 631114

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.25		ng/L		105	79 - 121

Lab Sample ID: LCSD 400-631114/5-A

Matrix: Water

Analysis Batch: 631187

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 631114

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	5.00	5.30		ng/L		106	79 - 121	1	20

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 631187

Client Sample ID: 2022-02

Prep Type: Total/NA

Prep Batch: 631114

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	7.1		5.00	12.0		ng/L		97	71 - 125

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 280-616151/1-A

Matrix: Water

Analysis Batch: 616917

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	21.3	J	100	9.1	ug/L		06/19/23 14:45	06/20/23 23:45	1

Lab Sample ID: LCS 280-616151/2-A

Matrix: Water

Analysis Batch: 616917

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10100		ug/L		101	85 - 115

Lab Sample ID: LCSD 280-616151/3-A

Matrix: Water

Analysis Batch: 616917

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Iron	10000	10200		ug/L		102	85 - 115	0	20

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QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 616917

Client Sample ID: 2022-02

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	310	B	10000	10300		ug/L		99	70 - 130

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 616917

Client Sample ID: 2022-02

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Iron	310	B	10000	10200		ug/L		99	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-616151/1-A

Matrix: Water

Analysis Batch: 616944

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^+	5.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:05	1
Cadmium	ND		1.0	0.19	ug/L		06/19/23 14:45	06/21/23 00:05	1
Chromium	ND		3.0	0.50	ug/L		06/19/23 14:45	06/21/23 00:05	1
Copper	ND		2.0	0.71	ug/L		06/19/23 14:45	06/21/23 00:05	1
Lead	ND		1.0	0.23	ug/L		06/19/23 14:45	06/21/23 00:05	1
Zinc	ND		10	2.0	ug/L		06/19/23 14:45	06/21/23 00:05	1

Lab Sample ID: LCS 280-616151/28-A

Matrix: Water

Analysis Batch: 616944

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.3	^+	ug/L		101	89 - 111
Cadmium	40.0	38.7		ug/L		97	89 - 111
Chromium	40.0	39.5		ug/L		99	86 - 115
Copper	40.0	39.9		ug/L		100	90 - 115
Lead	40.0	38.9		ug/L		97	88 - 115
Zinc	40.0	37.6		ug/L		94	88 - 115

Lab Sample ID: LCSD 280-616151/29-A

Matrix: Water

Analysis Batch: 616944

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	40.0	39.5	^+	ug/L		99	89 - 111	2	20
Cadmium	40.0	39.7		ug/L		99	89 - 111	2	20
Chromium	40.0	39.5		ug/L		99	86 - 115	0	20
Copper	40.0	39.2		ug/L		98	90 - 115	2	20
Lead	40.0	39.3		ug/L		98	88 - 115	1	20
Zinc	40.0	36.7		ug/L		92	88 - 115	2	20

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QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 616944

Client Sample ID: 2022-02

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	37.6		ug/L		94	79 - 120
Cadmium	ND		40.0	38.6		ug/L		97	89 - 111
Chromium	ND		40.0	38.8		ug/L		97	86 - 115
Copper	2.6		40.0	40.5		ug/L		95	90 - 115
Lead	2.6		40.0	41.6		ug/L		97	88 - 115
Zinc	14	F1	40.0	46.8	F1	ug/L		82	88 - 115

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 616944

Client Sample ID: 2022-02

Prep Type: Total Recoverable

Prep Batch: 616151

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		40.0	38.7		ug/L		97	79 - 120	3	20
Cadmium	ND		40.0	38.3		ug/L		96	89 - 111	1	20
Chromium	ND		40.0	38.7		ug/L		97	86 - 115	0	20
Copper	2.6		40.0	40.5		ug/L		95	90 - 115	0	20
Lead	2.6		40.0	41.5		ug/L		97	88 - 115	0	20
Zinc	14	F1	40.0	47.8	F1	ug/L		84	88 - 115	2	20

Lab Sample ID: MB 280-616494/1-B

Matrix: Water

Analysis Batch: 617210

Client Sample ID: Method Blank

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		06/20/23 14:40	06/22/23 19:53	1
Cadmium	ND		1.0	0.19	ug/L		06/20/23 14:40	06/22/23 19:53	1
Chromium	0.501	J	3.0	0.50	ug/L		06/20/23 14:40	06/22/23 19:53	1
Copper	ND		2.0	0.71	ug/L		06/20/23 14:40	06/22/23 19:53	1
Lead	ND		1.0	0.23	ug/L		06/20/23 14:40	06/22/23 19:53	1
Manganese	ND		3.0	0.51	ug/L		06/20/23 14:40	06/22/23 19:53	1
Nickel	ND		3.0	0.83	ug/L		06/20/23 14:40	06/22/23 19:53	1
Selenium	ND		5.0	1.0	ug/L		06/20/23 14:40	06/22/23 19:53	1
Silver	ND		0.50	0.045	ug/L		06/20/23 14:40	06/22/23 19:53	1
Zinc	3.75	J	10	2.0	ug/L		06/20/23 14:40	06/22/23 19:53	1

Lab Sample ID: LCS 280-616494/2-B

Matrix: Water

Analysis Batch: 617210

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	41.5		ug/L		104	89 - 111
Cadmium	40.0	41.6		ug/L		104	89 - 111
Chromium	40.0	41.5		ug/L		104	86 - 115
Copper	40.0	40.8		ug/L		102	90 - 115
Lead	40.0	39.7		ug/L		99	88 - 115
Manganese	40.0	40.8		ug/L		102	87 - 115
Nickel	40.0	38.9		ug/L		97	86 - 115
Selenium	40.0	39.6		ug/L		99	85 - 114
Silver	40.0	40.2		ug/L		100	90 - 114

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QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: LCS 280-616494/2-B

Matrix: Water

Analysis Batch: 617210

Client Sample ID: Lab Control Sample

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	40.0	42.6		ug/L		107	88 - 115

Lab Sample ID: 280-177856-1 MS

Matrix: Water

Analysis Batch: 617210

Client Sample ID: 2022-01

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	42.1		ug/L		105	79 - 120
Cadmium	ND		40.0	39.4		ug/L		98	89 - 111
Chromium	ND		40.0	40.1		ug/L		100	86 - 115
Copper	1.3	J	40.0	42.4		ug/L		103	90 - 115
Lead	0.30	J	40.0	40.5		ug/L		101	88 - 115
Manganese	8.5		40.0	47.9		ug/L		99	87 - 115
Nickel	ND		40.0	39.4		ug/L		98	86 - 115
Selenium	ND		40.0	39.4		ug/L		99	85 - 114
Silver	ND		40.0	38.5		ug/L		96	70 - 130
Zinc	7.1	J B	40.0	47.3		ug/L		101	88 - 115

Lab Sample ID: 280-177856-1 MSD

Matrix: Water

Analysis Batch: 617210

Client Sample ID: 2022-01

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	ND		40.0	42.0		ug/L		105	79 - 120	0	20
Cadmium	ND		40.0	40.6		ug/L		101	89 - 111	3	20
Chromium	ND		40.0	39.9		ug/L		100	86 - 115	0	20
Copper	1.3	J	40.0	40.6		ug/L		98	90 - 115	4	20
Lead	0.30	J	40.0	40.0		ug/L		99	88 - 115	1	20
Manganese	8.5		40.0	45.9		ug/L		94	87 - 115	4	20
Nickel	ND		40.0	39.4		ug/L		99	86 - 115	0	20
Selenium	ND		40.0	40.9		ug/L		102	85 - 114	4	20
Silver	ND		40.0	39.1		ug/L		98	70 - 130	1	20
Zinc	7.1	J B	40.0	43.6		ug/L		91	88 - 115	8	20

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 617210

Client Sample ID: 2022-02

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		40.0	41.6		ug/L		104	79 - 120
Cadmium	ND		40.0	41.1		ug/L		103	89 - 111
Chromium	0.59	J B	40.0	40.4		ug/L		100	86 - 115
Copper	1.9	J	40.0	41.5		ug/L		99	90 - 115
Lead	2.5		40.0	42.3		ug/L		99	88 - 115
Manganese	11		40.0	49.3		ug/L		97	87 - 115
Nickel	ND		40.0	38.9		ug/L		97	86 - 115
Selenium	ND		40.0	38.7		ug/L		97	85 - 114
Silver	0.082	J	40.0	40.3		ug/L		101	70 - 130
Zinc	26	B	40.0	63.5		ug/L		95	88 - 115

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QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 617210

Client Sample ID: 2022-02

Prep Type: Potentially Dissolved

Prep Batch: 616728

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		40.0	43.3		ug/L		108	79 - 120	4	20
Cadmium	ND		40.0	40.7		ug/L		102	89 - 111	1	20
Chromium	0.59	J B	40.0	41.9		ug/L		103	86 - 115	4	20
Copper	1.9	J	40.0	42.8		ug/L		102	90 - 115	3	20
Lead	2.5		40.0	42.7		ug/L		101	88 - 115	1	20
Manganese	11		40.0	50.7		ug/L		100	87 - 115	3	20
Nickel	ND		40.0	38.2		ug/L		95	86 - 115	2	20
Selenium	ND		40.0	41.2		ug/L		103	85 - 114	6	20
Silver	0.082	J	40.0	39.0		ug/L		97	70 - 130	3	20
Zinc	26	B	40.0	68.1		ug/L		106	88 - 115	7	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 280-617604/1-A

Matrix: Water

Analysis Batch: 617768

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 617604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.061	ug/L		06/27/23 14:45	06/27/23 22:18	1

Lab Sample ID: LCS 280-617604/2-A

Matrix: Water

Analysis Batch: 617768

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 617604

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

Lab Sample ID: LCSD 280-617604/3-A

Matrix: Water

Analysis Batch: 617768

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 617604

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.70		ug/L		94	90 - 110	9	10

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 617768

Client Sample ID: 2022-02

Prep Type: Total/NA

Prep Batch: 617604

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		5.00	5.15		ug/L		103	80 - 120

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 617768

Client Sample ID: 2022-02

Prep Type: Total/NA

Prep Batch: 617604

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		5.00	5.06		ug/L		101	80 - 120	2	10

Eurofins Denver

QC Sample Results

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

Job ID: 280-177856-1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-617525/5
Matrix: Water
Analysis Batch: 617525

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			06/27/23 07:51	1

Lab Sample ID: LCS 280-617525/4
Matrix: Water
Analysis Batch: 617525

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	1360		umhos/cm		96	90 - 110

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

Lab Sample ID: MB 280-617026/3
Matrix: Water
Analysis Batch: 617026

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			06/21/23 16:50	1

Lab Sample ID: LCS 280-617026/1
Matrix: Water
Analysis Batch: 617026

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	401		mg/L		80	79 - 114

Lab Sample ID: LCSD 280-617026/2
Matrix: Water
Analysis Batch: 617026

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	465		mg/L		93	79 - 114	15	20

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 280-616159/23
Matrix: Water
Analysis Batch: 616159

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		0.020	0.0040	mg/L			06/14/23 16:14	1

Lab Sample ID: LCS 280-616159/21
Matrix: Water
Analysis Batch: 616159

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.100	0.100		mg/L		100	91 - 112

Eurofins Denver

QC Sample Results

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

Job ID: 280-177856-1

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

Lab Sample ID: LCSD 280-616159/22

Matrix: Water

Analysis Batch: 616159

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	0.100	0.0994		mg/L		99	91 - 112	1	20

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

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		0.100	0.0931		mg/L		93	91 - 112		

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

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		0.100	0.0932		mg/L		93	91 - 112	0	20

Lab Sample ID: 280-177856-2 DU

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND		ND		mg/L		NC	20

Lab Sample ID: MB 280-616147/3-A

Matrix: Water

Analysis Batch: 616159

Client Sample ID: Method Blank

Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.020	0.0040	mg/L			06/14/23 16:02	1

Lab Sample ID: LCS 280-616147/1-A

Matrix: Water

Analysis Batch: 616159

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	0.100	0.101		mg/L		101	91 - 112		

Lab Sample ID: LCSD 280-616147/2-A

Matrix: Water

Analysis Batch: 616159

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	0.100	0.0978		mg/L		98	91 - 112	4	20

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND	F1	0.100	0.0786	F1	mg/L		79	91 - 112		

Eurofins Denver

QC Sample Results

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

Job ID: 280-177856-1

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

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	F1	0.100	0.0790	F1	mg/L		79	91 - 112	1	20

Lab Sample ID: 280-177856-2 DU

Matrix: Water

Analysis Batch: 616159

Client Sample ID: 2022-02

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND	F1	ND		mg/L		NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-616727/31

Matrix: Water

Analysis Batch: 616727

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	7.1		SU		101	99 - 101

Lab Sample ID: LCS 280-616882/31

Matrix: Water

Analysis Batch: 616882

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	7.1		SU		101	99 - 101

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-616303/11

Matrix: Water

Analysis Batch: 616303

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			06/15/23 13:56	1

Lab Sample ID: LCS 280-616303/9

Matrix: Water

Analysis Batch: 616303

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	0.477		mg/L		95	81 - 122

Lab Sample ID: LCSD 280-616303/10

Matrix: Water

Analysis Batch: 616303

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	0.477		mg/L		95	81 - 122	0	10

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QC Sample Results

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

Job ID: 280-177856-1

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: 280-177856-2 MS

Matrix: Water

Analysis Batch: 616303

Client Sample ID: 2022-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide	ND		0.501	0.485		mg/L		97	81 - 122		

Lab Sample ID: 280-177856-2 MSD

Matrix: Water

Analysis Batch: 616303

Client Sample ID: 2022-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		0.501	0.514		mg/L		102	81 - 122	6	10

QC Association Summary

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

Job ID: 280-177856-1

Metals

Prep Batch: 616151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total Recoverable	Water	200.8	
280-177856-2	2022-02	Total Recoverable	Water	200.7	
280-177856-2	2022-02	Total Recoverable	Water	200.8	
280-177856-3	2022-02-02	Total Recoverable	Water	200.8	
280-177856-4	2022-02-03	Total Recoverable	Water	200.8	
MB 280-616151/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-616151/28-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCS 280-616151/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 280-616151/29-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LCSD 280-616151/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
280-177856-2 MS	2022-02	Total Recoverable	Water	200.7	
280-177856-2 MS	2022-02	Total Recoverable	Water	200.8	
280-177856-2 MSD	2022-02	Total Recoverable	Water	200.7	
280-177856-2 MSD	2022-02	Total Recoverable	Water	200.8	

Filtration Batch: 616494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-2	2022-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-3	2022-02-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-4	2022-02-03	Potentially Dissolved	Water	Poten_Diss_Met	
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	Poten_Diss_Met	
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-1 MS	2022-01	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-1 MSD	2022-01	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-2 MS	2022-02	Potentially Dissolved	Water	Poten_Diss_Met	
280-177856-2 MSD	2022-02	Potentially Dissolved	Water	Poten_Diss_Met	

Prep Batch: 616728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Potentially Dissolved	Water	200.8	616494
280-177856-2	2022-02	Potentially Dissolved	Water	200.8	616494
280-177856-3	2022-02-02	Potentially Dissolved	Water	200.8	616494
280-177856-4	2022-02-03	Potentially Dissolved	Water	200.8	616494
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	200.8	616494
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	616494
280-177856-1 MS	2022-01	Potentially Dissolved	Water	200.8	616494
280-177856-1 MSD	2022-01	Potentially Dissolved	Water	200.8	616494
280-177856-2 MS	2022-02	Potentially Dissolved	Water	200.8	616494
280-177856-2 MSD	2022-02	Potentially Dissolved	Water	200.8	616494

Analysis Batch: 616917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total Recoverable	Water	200.7 Rev 4.4	616151
280-177856-2	2022-02	Total Recoverable	Water	200.7 Rev 4.4	616151
280-177856-3	2022-02-02	Total Recoverable	Water	200.7 Rev 4.4	616151
280-177856-4	2022-02-03	Total Recoverable	Water	200.7 Rev 4.4	616151
MB 280-616151/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	616151
LCS 280-616151/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	616151
LCSD 280-616151/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	616151
280-177856-2 MS	2022-02	Total Recoverable	Water	200.7 Rev 4.4	616151

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QC Association Summary

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

Job ID: 280-177856-1

Metals (Continued)

Analysis Batch: 616917 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-2 MSD	2022-02	Total Recoverable	Water	200.7 Rev 4.4	616151

Analysis Batch: 616944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total Recoverable	Water	200.8	616151
280-177856-2	2022-02	Total Recoverable	Water	200.8	616151
280-177856-3	2022-02-02	Total Recoverable	Water	200.8	616151
280-177856-4	2022-02-03	Total Recoverable	Water	200.8	616151
MB 280-616151/1-A	Method Blank	Total Recoverable	Water	200.8	616151
LCS 280-616151/28-A	Lab Control Sample	Total Recoverable	Water	200.8	616151
LCSD 280-616151/29-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	616151
280-177856-2 MS	2022-02	Total Recoverable	Water	200.8	616151
280-177856-2 MSD	2022-02	Total Recoverable	Water	200.8	616151

Analysis Batch: 617210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Potentially Dissolved	Water	200.8	616728
280-177856-2	2022-02	Potentially Dissolved	Water	200.8	616728
280-177856-3	2022-02-02	Potentially Dissolved	Water	200.8	616728
280-177856-4	2022-02-03	Potentially Dissolved	Water	200.8	616728
MB 280-616494/1-B	Method Blank	Potentially Dissolved	Water	200.8	616728
LCS 280-616494/2-B	Lab Control Sample	Potentially Dissolved	Water	200.8	616728
280-177856-1 MS	2022-01	Potentially Dissolved	Water	200.8	616728
280-177856-1 MSD	2022-01	Potentially Dissolved	Water	200.8	616728
280-177856-2 MS	2022-02	Potentially Dissolved	Water	200.8	616728
280-177856-2 MSD	2022-02	Potentially Dissolved	Water	200.8	616728

Prep Batch: 617604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	245.1	617604
280-177856-2	2022-02	Total/NA	Water	245.1	617604
280-177856-3	2022-02-02	Total/NA	Water	245.1	617604
280-177856-4	2022-02-03	Total/NA	Water	245.1	617604
MB 280-617604/1-A	Method Blank	Total/NA	Water	245.1	617604
LCS 280-617604/2-A	Lab Control Sample	Total/NA	Water	245.1	617604
LCSD 280-617604/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	617604
280-177856-2 MS	2022-02	Total/NA	Water	245.1	617604
280-177856-2 MSD	2022-02	Total/NA	Water	245.1	617604

Analysis Batch: 617768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	245.1	617604
280-177856-2	2022-02	Total/NA	Water	245.1	617604
280-177856-3	2022-02-02	Total/NA	Water	245.1	617604
280-177856-4	2022-02-03	Total/NA	Water	245.1	617604
MB 280-617604/1-A	Method Blank	Total/NA	Water	245.1	617604
LCS 280-617604/2-A	Lab Control Sample	Total/NA	Water	245.1	617604
LCSD 280-617604/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	617604
280-177856-2 MS	2022-02	Total/NA	Water	245.1	617604
280-177856-2 MSD	2022-02	Total/NA	Water	245.1	617604

Eurofins Denver

QC Association Summary

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

Job ID: 280-177856-1

Metals

Prep Batch: 631114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	1631E	
280-177856-2	2022-02	Total/NA	Water	1631E	
280-177856-3	2022-02-02	Total/NA	Water	1631E	
280-177856-4	2022-02-03	Total/NA	Water	1631E	
MB 400-631114/3-A	Method Blank	Total/NA	Water	1631E	
LCS 400-631114/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-631114/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	
280-177856-2 MS	2022-02	Total/NA	Water	1631E	

Analysis Batch: 631187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	1631E	631114
280-177856-2	2022-02	Total/NA	Water	1631E	631114
280-177856-3	2022-02-02	Total/NA	Water	1631E	631114
280-177856-4	2022-02-03	Total/NA	Water	1631E	631114
MB 400-631114/3-A	Method Blank	Total/NA	Water	1631E	631114
LCS 400-631114/4-A	Lab Control Sample	Total/NA	Water	1631E	631114
LCSD 400-631114/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	631114
280-177856-2 MS	2022-02	Total/NA	Water	1631E	631114

General Chemistry

Filtration Batch: 616147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Dissolved	Water	FILTRATION	
280-177856-2	2022-02	Dissolved	Water	FILTRATION	
280-177856-3	2022-02-02	Dissolved	Water	FILTRATION	
280-177856-4	2022-02-03	Dissolved	Water	FILTRATION	
MB 280-616147/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-616147/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-616147/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
280-177856-2 MS	2022-02	Dissolved	Water	FILTRATION	
280-177856-2 MSD	2022-02	Dissolved	Water	FILTRATION	
280-177856-2 DU	2022-02	Dissolved	Water	FILTRATION	

Analysis Batch: 616159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Dissolved	Water	SM 3500 CR B	616147
280-177856-1	2022-01	Total/NA	Water	SM 3500 CR B	
280-177856-2	2022-02	Dissolved	Water	SM 3500 CR B	616147
280-177856-2	2022-02	Total/NA	Water	SM 3500 CR B	
280-177856-3	2022-02-02	Dissolved	Water	SM 3500 CR B	616147
280-177856-3	2022-02-02	Total/NA	Water	SM 3500 CR B	
280-177856-4	2022-02-03	Dissolved	Water	SM 3500 CR B	616147
280-177856-4	2022-02-03	Total/NA	Water	SM 3500 CR B	
MB 280-616147/3-A	Method Blank	Dissolved	Water	SM 3500 CR B	616147
MB 280-616159/23	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 280-616147/1-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	616147
LCS 280-616159/21	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 280-616147/2-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	616147
LCSD 280-616159/22	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	

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QC Association Summary

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

Job ID: 280-177856-1

General Chemistry (Continued)

Analysis Batch: 616159 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-2 MS	2022-02	Dissolved	Water	SM 3500 CR B	616147
280-177856-2 MS	2022-02	Total/NA	Water	SM 3500 CR B	
280-177856-2 MSD	2022-02	Dissolved	Water	SM 3500 CR B	616147
280-177856-2 MSD	2022-02	Total/NA	Water	SM 3500 CR B	
280-177856-2 DU	2022-02	Dissolved	Water	SM 3500 CR B	616147
280-177856-2 DU	2022-02	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 616303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	SM 4500 S2 D	
280-177856-2	2022-02	Total/NA	Water	SM 4500 S2 D	
280-177856-3	2022-02-02	Total/NA	Water	SM 4500 S2 D	
280-177856-4	2022-02-03	Total/NA	Water	SM 4500 S2 D	
MB 280-616303/11	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 280-616303/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 280-616303/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
280-177856-2 MS	2022-02	Total/NA	Water	SM 4500 S2 D	
280-177856-2 MSD	2022-02	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 616432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	SM4500 S2 H	
280-177856-2	2022-02	Total/NA	Water	SM4500 S2 H	
280-177856-3	2022-02-02	Total/NA	Water	SM4500 S2 H	
280-177856-4	2022-02-03	Total/NA	Water	SM4500 S2 H	

Analysis Batch: 616727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	SM 4500 H+ B	
LCS 280-616727/31	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 616882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-2	2022-02	Total/NA	Water	SM 4500 H+ B	
280-177856-3	2022-02-02	Total/NA	Water	SM 4500 H+ B	
280-177856-4	2022-02-03	Total/NA	Water	SM 4500 H+ B	
LCS 280-616882/31	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 617026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	SM 2540D	
280-177856-2	2022-02	Total/NA	Water	SM 2540D	
280-177856-3	2022-02-02	Total/NA	Water	SM 2540D	
280-177856-4	2022-02-03	Total/NA	Water	SM 2540D	
MB 280-617026/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-617026/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-617026/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Analysis Batch: 617525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Total/NA	Water	SM 2510B	

Eurofins Denver

QC Association Summary

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

Job ID: 280-177856-1

General Chemistry (Continued)

Analysis Batch: 617525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-2	2022-02	Total/NA	Water	SM 2510B	
280-177856-3	2022-02-02	Total/NA	Water	SM 2510B	
280-177856-4	2022-02-03	Total/NA	Water	SM 2510B	
MB 280-617525/5	Method Blank	Total/NA	Water	SM 2510B	
LCS 280-617525/4	Lab Control Sample	Total/NA	Water	SM 2510B	

Analysis Batch: 617695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-177856-1	2022-01	Potentially Dissolved	Water	SM3500 CR B	
280-177856-1	2022-01	Total Recoverable	Water	SM3500 CR B	
280-177856-2	2022-02	Potentially Dissolved	Water	SM3500 CR B	
280-177856-2	2022-02	Total Recoverable	Water	SM3500 CR B	
280-177856-3	2022-02-02	Potentially Dissolved	Water	SM3500 CR B	
280-177856-3	2022-02-02	Total Recoverable	Water	SM3500 CR B	
280-177856-4	2022-02-03	Potentially Dissolved	Water	SM3500 CR B	
280-177856-4	2022-02-03	Total Recoverable	Water	SM3500 CR B	

Lab Chronicle

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

Job ID: 280-177856-1

Client Sample ID: 2022-01

Date Collected: 06/14/23 07:30

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-1

Matrix: Water

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	631114	06/27/23 16:25	VLC	EET PEN
							Completed:	06/28/23 08:45 ¹		
Total/NA	Analysis	1631E		1			631187	06/28/23 13:21	VLC	EET PEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			616917	06/21/23 01:49	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	616494	06/16/23 22:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	616728	06/20/23 14:40	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			617210	06/22/23 20:03	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			616944	06/21/23 00:54	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	617604	06/27/23 14:45	KMS	EET DEN
Total/NA	Analysis	245.1		1			617768	06/27/23 23:09	KMS	EET DEN
Total/NA	Analysis	SM 2510B		1			617525	06/27/23 07:51	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	617026	06/21/23 16:51	CAI	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	616147	06/14/23 15:22	LBR	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:07	LBR	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:19	LBR	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			616727	06/19/23 16:16	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	616303	06/15/23 13:58	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			616432	06/16/23 12:05	ZPM	EET DEN

Client Sample ID: 2022-02

Date Collected: 06/14/23 08:10

Date Received: 06/14/23 14:34

Lab Sample ID: 280-177856-2

Matrix: Water

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	631114	06/27/23 16:25	VLC	EET PEN
							Completed:	06/28/23 08:45 ¹		
Total/NA	Analysis	1631E		1			631187	06/28/23 13:29	VLC	EET PEN
Total Recoverable	Prep	200.7			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			616917	06/21/23 01:54	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	616494	06/16/23 22:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	616728	06/20/23 14:40	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			617210	06/22/23 20:28	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			616944	06/21/23 00:56	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	617604	06/27/23 14:45	KMS	EET DEN
Total/NA	Analysis	245.1		1			617768	06/27/23 23:12	KMS	EET DEN
Total/NA	Analysis	SM 2510B		1			617525	06/27/23 07:51	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	617026	06/21/23 16:51	CAI	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	616147	06/14/23 15:22	LBR	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:03	LBR	EET DEN

Eurofins Denver

Lab Chronicle

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

Job ID: 280-177856-1

Client Sample ID: 2022-02

Lab Sample ID: 280-177856-2

Date Collected: 06/14/23 08:10

Matrix: Water

Date Received: 06/14/23 14:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:15	LBR	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			616882	06/20/23 21:10	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	616303	06/15/23 13:56	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			616432	06/16/23 12:05	ZPM	EET DEN

Client Sample ID: 2022-02-02

Lab Sample ID: 280-177856-3

Date Collected: 06/14/23 08:10

Matrix: Water

Date Received: 06/14/23 14:34

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	631114	06/27/23 16:25	VLC	EET PEN
Completed:								06/28/23 08:45 ¹		
Total/NA	Analysis	1631E		1			631187	06/28/23 13:44	VLC	EET PEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			616917	06/21/23 02:07	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			250 mL	250 mL	616494	06/16/23 22:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	616728	06/20/23 14:40	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			617210	06/22/23 20:39	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			616944	06/21/23 01:01	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	617604	06/27/23 14:45	KMS	EET DEN
Total/NA	Analysis	245.1		1			617768	06/27/23 23:24	KMS	EET DEN
Total/NA	Analysis	SM 2510B		1			617525	06/27/23 07:51	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	617026	06/21/23 16:51	CAI	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	616147	06/14/23 15:22	LBR	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:08	LBR	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:19	LBR	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			616882	06/20/23 20:53	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	616303	06/15/23 13:57	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			616432	06/16/23 12:05	ZPM	EET DEN

Client Sample ID: 2022-02-03

Lab Sample ID: 280-177856-4

Date Collected: 06/14/23 08:10

Matrix: Water

Date Received: 06/14/23 14:34

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	631114	06/27/23 16:25	VLC	EET PEN
Completed:								06/28/23 08:45 ¹		
Total/NA	Analysis	1631E		1			631187	06/28/23 13:52	VLC	EET PEN

Eurofins Denver

Lab Chronicle

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

Job ID: 280-177856-1

Client Sample ID: 2022-02-03

Lab Sample ID: 280-177856-4

Date Collected: 06/14/23 08:10

Matrix: Water

Date Received: 06/14/23 14:34

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	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.7 Rev 4.4		1			616917	06/21/23 02:11	ADL	EET DEN
Potentially Dissolved	Filtration	Poten_Diss_Met			150 mL	150 mL	616494	06/16/23 22:30	LRD	EET DEN
Potentially Dissolved	Prep	200.8			50 mL	50 mL	616728	06/20/23 14:40	LJS	EET DEN
Potentially Dissolved	Analysis	200.8		1			617210	06/22/23 20:43	LMT	EET DEN
Total Recoverable	Prep	200.8			50 mL	50 mL	616151	06/19/23 14:45	LJS	EET DEN
Total Recoverable	Analysis	200.8		1			616944	06/21/23 01:03	LMT	EET DEN
Total/NA	Prep	245.1			30 mL	50 mL	617604	06/27/23 14:45	KMS	EET DEN
Total/NA	Analysis	245.1		1			617768	06/27/23 23:27	KMS	EET DEN
Total/NA	Analysis	SM 2510B		1			617525	06/27/23 07:51	KEG	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	617026	06/21/23 16:51	CAI	EET DEN
Dissolved	Filtration	FILTRATION			2 mL	2 mL	616147	06/14/23 15:22	LBR	EET DEN
Dissolved	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:09	LBR	EET DEN
Total/NA	Analysis	SM 3500 CR B		1	2 mL	2 mL	616159	06/14/23 16:22	LBR	EET DEN
Total/NA	Analysis	SM 4500 H+ B		1			616882	06/20/23 21:04	KEG	EET DEN
Total/NA	Analysis	SM 4500 S2 D		1	2 mL	2 mL	616303	06/15/23 13:58	SL	EET DEN
Potentially Dissolved	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total Recoverable	Analysis	SM3500 CR B		1			617695	06/27/23 18:42	RMS	EET DEN
Total/NA	Analysis	SM4500 S2 H		1			616432	06/16/23 12:05	ZPM	EET DEN

¹ 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: 280-177856-1

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	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-10-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-09-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

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	06-30-23
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23

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

Eurofins Denver

Accreditation/Certification Summary

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

Job ID: 280-177856-1

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
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24

Chain of Custody Record

Client Information Client Contact: Patrick Delaney Company: Grand Island Resources Address: 12567 West Cedar Road Suite 250 City: Lakewood State, Zip: CO, 80466 Phone: 303-414-0986 Email: pdelaney@blackfoxmining.com Project Name: Nederland, CO Site: First half of the month event		Sampler: BM Lab PM: Blenlulis, Dylan T Phone: 303 506 1616 E-Mail: Dylan.Blenlulis@et.eurofins.com PWSID:		Carrier Tracking No(s): State of Origin: Job #:		COC No: Page: Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: Advance Payment Required WO #:		Analysis Requested 2510B - Specific Conductance, 2540D - TSS, SM4500_H+ 3500_CR_B - Total Hexavalent Cr and Trivalent Cr (calc) 3500_CR_B - Dissolved Hexavalent Cr (LAB FILTER) and Potentially Dissolved Trivalent Cr (calc) SM4500_S2_D - Sulfide and SM3500_S2_H - Unfiltered Hydrogen Sulfide (calc) 1631E - Low Mercury (ETA)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - other (specify) Other: 2022-01 pH=7.9 Temp=9.30C 2022-02 pH=8.02 Special Instructions/Note: Temp=7.8		Total Number of Containers:	
Sample Identification 2022-01 2022-02 2022-02-02 2022-02-03 2022-02-MS		Sample Date 06/14/23 06/14/23 06/14/23 06/14/23 06/14/23		Sample Time 7:30 8:10 8:10 8:10 8:10		Sample Type (C=Comp, G=grab) G G G G G	
Matrix (Weaver, Solid, Overstall) W W W W W		Field Filtered Sample (Yes or No) X X X X X		Perform MSD (Yes or No) X X X X X		200.8 - Potentially Dissolved Metals (First half of the month permit list) 200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury 200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury 200.7 / 200.8 / 245.1 - Total Recoverable Metals and Mercury	
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 Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by: Relinquished by: PATRICK AMOADING Date/Time: 6/14/23 2:34 PM Relinquished by: Date/Time: Relinquished by: Date/Time:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab Special Instructions/QC Requirements:		Method of Shipment: Date/Time: 6/14/23 1:34 Company: ETADEN Date/Time: Company: Date/Time: Company:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 24 (RTM) COC		Ver: 01/16/2019	



7371
08.17 Testing

RT 0
FZ 0

ORIGIN ID:WHHA (303) 736-0100
EUROFINS
EUROFINS TESTAMERICA DENVER
4955 YARROW ST

SHIP DATE: 15JUN23
ACTWT: 24.85 LB
CAD: 290884/CAFE3708

ARVADA, CO 80002
UNITED STATES US

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHE
3355 MCLEMORE DRIVE

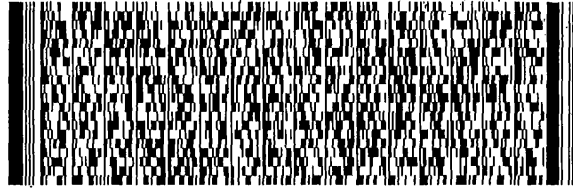
PENSACOLA FL 32514

(850) 474-1001
PO: YES

REF: S280-131239
DEPT: BOTTLE

4.0C
IRI An

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



FedEx
Express



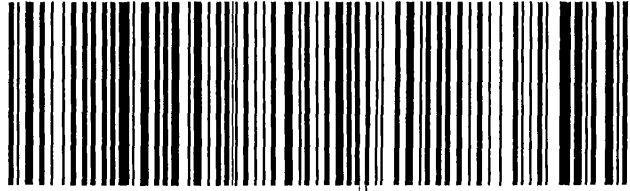
J23102211020101W

TRK# 6425 0006 7371
0201

FRI - 16 JUN 10:30A
PRIORITY OVERNIGHT

XH PNSA

32514
FL-US BFM



Login Sample Receipt Checklist

Client: Grand Island Resources

Job Number: 280-177856-1

Login Number: 177856

List Number: 1

Creator: Cannon, Charles D

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.	False	Thermal preservation not required.
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").	False	Headspace larger than 1/4".
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: 280-177856-1

Login Number: 177856

List Number: 2

Creator: Whitley, Adrian

List Source: Eurofins Pensacola

List Creation: 06/17/23 11:47 AM

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	4.0°C IR11
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

Chain of Custody Form



LABORATORIES, INC

Commerce City Lab

10411 Heinz Way

Commerce City CO 80640

Lakewood Service Center

610 Garrison Street, Unit E

Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resources</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only)	
City: <u>Lakewood State CO</u> Zip: <u>80228</u>		City: _____ State: _____ Zip: _____		_____	
Phone: <u>303-506-1618</u>		Phone: _____		_____	
Email: <u>bmo@grandislandresources.com</u>		Email: <u>bm@grandislandresources.com</u>		_____	
Sample Collector: <u>BM</u>		PO No.: _____		_____	
Sample Collector Phone: <u>303-506-1618</u>		_____		_____	

Sample Matrix (Select One Only)				No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Ground Water <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/>			Sludge <input type="checkbox"/>	Drinking Water <input type="checkbox"/>	AB	B	O	Z	Z	O	5	0	0	1
Date	Time	Sample ID															
4/8/23	13:00	CROSS WELL		5													
4/8/23	13:30	COMPLIANCE WELL		5													
4/8/23	13:30	COMPLIANCE 02		5													
4/8/23	13:30	COMPLIANCE 03		5													
4/8/23	11:30	CARIBOU WELL		5													
4/8/23	12:15	CROSS PORTAL		5													
4/8/23	11:15	CARIBOU PORTAL		5													
4/8/23	11:15	CARIBOU 02		5													
4/8/23	11:15	CARIBOU 03		5													

Instructions: <u>1 HNO3 bottle & Radionuclide bottle field filtered</u>		C/S Info: <u>AD</u>		Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Relinquished By: <u>4/18/23</u>	Date/Time: <u>4/18/23</u>	Received By: <u>4/18/23</u>	Date/Time: <u>4/18/23</u>	C/S Charge <input type="checkbox"/>	Temp. <u>43</u> °C/Ice <u>Y</u>
Relinquished By: <u>4/18/23</u>	Date/Time: <u>4/18/23</u>	Received By: <u>4/18/23</u>	Date/Time: <u>4/18/23</u>	Sample Pres Yes <input type="checkbox"/> No <input type="checkbox"/>	Date/Time: <u>4/18/23</u>

Chain of Custody Form



LABORATORIES, INC

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

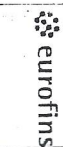
www.coloradolab.com

Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>EIR</u>		Company Name: _____		_____	
Contact Name: <u>Bruce Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only)	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bm@eirm.com</u>		Email: _____			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Sample Matrix (Select One Only)				Tests Requested																			
Waste Water <input type="checkbox"/>		Ground Water <input checked="" type="checkbox"/>		Surface Water <input type="checkbox"/>		Soil <input type="checkbox"/>		Sludge <input type="checkbox"/>		Drinking Water <input type="checkbox"/>													
Date	Time	Sample ID		No. of Containers		Grab or (Check One Only) Composite																	
5/16/23	13:00	CROSS WELL		4	6			RB 022050014 REVISED 3/2022 MONTHLY GROUNDWATER															
"	13:30	COMPLIANCE WELL		4	6																		
"	13:30	COMPLIANCE 02		4	6																		
"	13:30	COMPLIANCE 03		4	6																		
"	11:30	CARIBOU WELL		4	6																		
"	12:15	CROSS PORTAL		4	6																		
"	11:15	CARIBOU PORTAL		4	6																		
"	11:15	CARIBOU 02		4	6																		
"	11:15	CARIBOU 03		4	6																		
Instructions: 4IN03 & 6CROSS ALPHA				C/S Info:		Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>																	
80TTLES FIELD-FILTERED				Deliver Via: <u>Hand</u>		Temp. <u>4.9</u> °C/Ice																	
Relinquished By: <u>Karen Lopez</u>		Date/Time: <u>05/16/23</u>		Received By: <u>A. Lopez</u>		Date/Time: <u>05/16/23</u>		Relinquished By: <u>Hand</u>		Date/Time: <u>05/16/23</u>		C/S Charge <input type="checkbox"/>		Received By: <u>Hand</u>		Date/Time: <u>05/16/23</u>							

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-1714

Chain of Custody Record



Environment Testing
America

Client Information			Sampler		Lab Pk:		Carrier Tracking No(s):		COC No:	
Client Contact: Patrick Delaney			Phone: 303-506-1618		Blentius, Dylan T		Blentius, Dylan T		Page:	
Company: Grand Island Resources			FWSID:		E-Mail: Dylan.Blentius@Eurofins.com		State of Origin:		Job #:	
Address: 12567 West Cedar Road Suite 250			Due Date Requested:		Analysis Requested		Preservation Codes:			
City: Lakewood			TAT Requested (days):							
State/Zip: CO, 80466			Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone: 315-414-6986			PO #:							
Email: pdelaney@blackfoxmining.com			Advance Payment Required							
Project Name: Wastewater Discharge - Nederland, CO			Project #: 28022821							
Site: Surface Water Sampling			SSOW#:							
Sample Identification			Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other, A=air)	
2022-01			5/15/23		9:00		G		W	
2022-02			5/15/23		10:00		G		W	
2022-02-01-02			5/15/23		10:00		G		W	
2022-02-02-03			5/15/23		10:00		G		W	
2022-02-MS			5/15/23		10:00		G		W	
Possible Hazard Identification			Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For <input type="checkbox"/> Months	
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:		Company:	
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

Chain of Custody Form



LABORATORIES, INC

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
610 Garrison Street, Unit E
Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>Grand Island Resource</u>		Company Name: _____		_____	
Contact Name: <u>Brooke Moran</u>		Contact Name: _____		_____	
Address: <u>12567 W. Cedar Rd Ste 251</u>		Address: _____		Task Number (Lab Use Only)	
City <u>Lakewood</u> State <u>CO</u> Zip <u>80228</u>		City _____ State _____ Zip _____			
Phone: <u>303-506-1618</u>		Phone: _____			
Email: <u>bmoran@g-empor</u>		Email: <u>cedu</u>			
Sample Collector: <u>BM</u>		PO No.: _____			
Sample Collector Phone: <u>303-506-1618</u>					

Sample Matrix (Select One Only)				Tests Requested															
Date	Time	Sample ID	Waste Water <input type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/>	Soil <input type="checkbox"/> Sludge <input type="checkbox"/>	Drinking Water <input type="checkbox"/>	No. of Containers	Grab or (Check One Only) Composite												
6/14/23	13:00	CROSS WELL				5	G	QB022050014											
"	13:30	COMPLIANCE WELL				5	G	Revised 3/2023											
"	"	COMPLIANCE 02				5	G	"Monthly Groundwater"											
"	"	COMPLIANCE 03				5	G												
"	11:30	CARIBOU WELL				5	G												
"	12:15	CROSS PORTAL				5	G												
"	11:15	CARIBOU PORTAL				5	G												
"	11:15	CARIBOU 02				5	G												
"	11:15	CARIBOU 03				5	G												

Instructions:		C/S Info:		C/S Charge <input type="checkbox"/>		Temp. <u>5</u> °C/Ice <u>7</u>		Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Relinquished By: <u>BMoran</u>	Date/Time: <u>6/14/23</u>	Received By: <u>WA</u>	Date/Time: <u>6/14/23</u>	Relinquished By: <u>1525</u>	Date/Time: <u>6/14/23</u>	Received By: <u>5</u>	Date/Time: <u>7</u>	Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date/Time: <u>1525</u>

Chain of Custody Record

✱ eurofins

Environment Testing
America

Ver: 01/16/2019

APPENDIX E FIELD SHEETS

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - EventType=WQ										Entered in database (mm/dd/yyyy)		Pg 1 of 1 Pgs	
*StationID: <u>2022-01</u>			*Date (mm/dd/yyyy): <u>4 / 17 / 23</u>			*Group: <u>n/a</u>			*Agency: <u>n/a</u>				
*Funding: <u>n/a</u>			ArrivalTime: <u>13:43</u>		DepartureTime: <u>13:55</u>		*SampleTime (1st sample): <u>n/a</u>			*Protocol: <u>n/a</u>			
*Personnel: <u>BM</u>			*Purpose (circle all that apply): <input checked="" type="checkbox"/> WaterChem <input type="checkbox"/> WaterTox <input type="checkbox"/> FieldObs <input type="checkbox"/> FieldMeasure									*PurposeFailure: <u>n/a</u>	
*Location: <u>Bank Thalweg Midchannel OpenWater</u>			*GPS/DGPS		Lat (dd.ddddd):		Long (ddd.ddddd):		OCCUPATION METHOD: (Walk-in) <input checked="" type="checkbox"/> Bridge <input type="checkbox"/> R/V <input type="checkbox"/> Other <input type="checkbox"/>				
GPS Device: <u>GPS WAYPOINTS APP</u>			Target: <u>39.97904</u>		- <u>105.57585</u>		STARTING BANK (facing downstream): <input checked="" type="checkbox"/> LB <input type="checkbox"/> RB <input type="checkbox"/> NA						
Datum: <u>NAD83</u>		Accuracy (ft/m): <u>1.20</u>		*Actual: <u>39.978993</u>		- <u>105.575798</u>		Point of Sample (if Integrated, then -88 in dbase)					
Field Observations (SampleType = FieldObs)													
SITE ODOR: <input checked="" type="radio"/> None <input type="radio"/> Sulfides <input type="radio"/> Sewage <input type="radio"/> Petroleum <input type="radio"/> Mixed <input type="radio"/> Other				WADEABILITY: <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> Unk		BEAUFORT SCALE (see attachment): <u>3</u>		DISTANCE FROM BANK (m): <u>n/a</u>		STREAM WIDTH (m): <u>n/a</u>			
SKY CODE: <u>Clear</u> <input type="radio"/> Partly Cloudy <input type="radio"/> Overcast <input type="radio"/> Fog				WIND DIRECTION (from): <u>SE</u>		HYDROMODIFICATION: <input checked="" type="radio"/> None <input type="radio"/> Bridge <input type="radio"/> Pipes <input type="radio"/> ConcreteChannel <input type="radio"/> GradeControl <input type="radio"/> Culvert <input type="radio"/> AerialZipline <input type="radio"/> Other		LOCATION (to sample): <u>US / DS / WI /</u>					
OTHERPRESENCE: <u>n/a</u> <input type="radio"/> Vascular <input type="radio"/> Nonvascular <input type="radio"/> OilySheen <input type="radio"/> Foam <input type="radio"/> Trash <input type="radio"/> Other				DOMINANTSUBSTRATE: <u>n/a</u> <input type="radio"/> Bedrock <input type="radio"/> Concrete <input type="radio"/> Cobble <input type="radio"/> Gravel <input type="radio"/> Sand <input type="radio"/> Mud <input type="radio"/> Unk <input type="radio"/> Other		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): <u>2022-01-01-April</u>		1: (RB / LB / BB / US / DS / ##)					
WATERCLARITY: <u>n/a</u> <input type="radio"/> Clear (see bottom) <input type="radio"/> Cloudy (>4" vis) <input type="radio"/> Murky (<4" vis)				PRECIPITATION: <input checked="" type="radio"/> None <input type="radio"/> Fog <input type="radio"/> Drizzle <input type="radio"/> Rain <input type="radio"/> Snow		2: (RB / LB / BB / US / DS / ##)							
WATERODOR: <u>n/a</u> <input type="radio"/> None <input type="radio"/> Sulfides <input type="radio"/> Sewage <input type="radio"/> Petroleum <input type="radio"/> Mixed <input type="radio"/> Other				PRECIPITATION (last 24 hrs): <u>Unknown, <1", >1", None</u>		3: (RB / LB / BB / US / DS / ##)							
WATERCOLOR: <u>n/a</u> <input type="radio"/> Colorless <input type="radio"/> Green <input type="radio"/> Yellow <input type="radio"/> Brown				OBSERVED FLOW: <u>NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs</u>		2022-01-02-April							
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	DepthCollec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/BOTTOM/REP	<u>n/a</u>	<u>n/a</u>	<u>8.90</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:	<u>Ambient</u>												
Calib. Date:	<u>n/a</u>												
Samples Taken (# of containers filled) - Method=Water_Grab													
SAMPLE TYPE: <u>Grab / Integrated</u>		COLLECTION EQUIPMENT:		Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other									
	DepthCollec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface					<u>N/A</u>								
Sub/Surface													
COMMENTS: <u>NO VISIBLE FLOW, NO SAMPLES COLLECTED.</u>													

Run:										Sample Processing Date:									
Sample ID #:																			
Site Code:																			
<div style="display: flex; justify-content: space-between;"> <div> # Small Wells # Large Wells Empty Wells MPN </div> <div> # Small Wells # Large Wells False Positives MPN </div> </div>																			
Temp/Time: Start 4Hr. Check 14 Hr. Check 18 Hr. Check 22 Hr. Check, if needed																			
FIELD DUPLICATES										LAB DUPLICATES									
Normal Sample #										Normal Sample #									
Duplicate Sample #										Duplicate Sample #									
MPN										MPN									
95% CI										95% CI									
Lower										Lower									
Upper										Upper									
TOTAL COLIFORM										TOTAL COLIFORM									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
E. COLI										E. COLI									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
BLANKS										BLANKS									
Field Sample #										Lab Sample #									
Pass										Pass									
Needs Review										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:									
Processor / Date / Time:										Trays Read By:									
Entered into database:																			

Brooke Moran 4/17/23

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - EventType=WQ										Entered in database (mm/dd/yyyy)		Pg 1 of 1 Pgs	
*StationID: 2022-02		*Date (mm/dd/yyyy): 4 / 17 / 23		*Group: n/a		*Agency: n/a		*Protocol: n/a					
*Funding: n/a		ArrivalTime: 13:29		DepartureTime: 13:38		*SampleTime (1st sample): n/a							
*Personnel: SM		*Purpose (circle all that apply): WaterChem WaterTox FieldObs FieldMeasure		*PurposeFailure: n/a									
*Location: (Bank) Thalweg Midchannel OpenWater		*GPS/DGPS		Lat (dd.ddddd): 39.975787		Long (ddd.ddddd): -105.569328		OCCUPATION METHOD: Walk-in Bridge R/V Other					
GPS Device: GPS WAYPOINTS APP		Target: 39.975787		-105.569328		STARTING BANK (facing downstream): LB / (RB) / NA							
Datum: NAD83		Accuracy (ft/m): 1.40		*Actual: 39.975873		-105.569305		Point of Sample (if Integrated, then -88 in dbase)					
Field Observations (SampleType = FieldObs)													
SITE ODOR: None, Sulfides, Sewage, Petroleum, Mixed, Other		WADEABILITY: Y / N / Unk		BEAUFORT SCALE (see attachment): 1		DISTANCE FROM BANK (m): n/a		STREAM WIDTH (m): n/a		WATER DEPTH (m): n/a			
SKY CODE: Clear, Partly Cloudy, Overcast, Fog		WIND DIRECTION (from): S		HYDROMODIFICATION: (None) Bridge, Pipes, ConcreteChannel, GradeControl, Culvert, AerialZipline, Other		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): 2022-02-01-April		1: (RB / LB / BB / US / DS / ##)					
OTHERPRESENCE: n/a Vascular, Nonvascular, OilySheen, Foam, Trash, Other								2: (RB / LB / BB / US / DS / ##)					
DOMINANTSUBSTRATE: Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other								3: (RB / LB / BB / US / DS / ##)					
WATERCLARITY: n/a Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)		PRECIPITATION: None, Fog, Drizzle, Rain, Snow		PRECIPITATION (last 24 hrs): Unknown, <1", >1", None				2022-02-02-April					
WATERODOR: n/a None, Sulfides, Sewage, Petroleum, Mixed, Other								2022-02-03-April					
WATERCOLOR: n/a Colorless, Green, Yellow, Brown													
OBSERVED FLOW: NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs													
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	DepthCollec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/ BOTTOM/REP	n/a	n/a	14.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:			Ambient										
Calib. Date:			n/a										
Samples Taken (# of containers filled) - Method=Water_Grab													
Field Dup YES / NO: (SampleType = Grab / Integrated; LABEL_ID = FieldQA; create collection record upon data entry)													
SAMPLE TYPE: Grab / Integrated		COLLECTION EQUIPMENT: Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other											
	DepthCollec (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: NO VISIBLE FLOW, NO SAMPLES COLLECTED.													

Run:										Sample Processing Date:									
Sample ID #:																			
Site Code:																			
# Small Wells																			
# Large Wells																			
Empty Wells																			
MPN																			
Yellow +																			
# Small Wells																			
# Large Wells																			
False Positives																			
MPN																			
Yellow + Fluorescence (+)																			
Temp / Time																			
Start																			
4 Hr. Check																			
14 Hr. Check																			
18 Hr. Check																			
22 Hr. Check, if needed																			
FIELD DUPLICATES										LAB DUPLICATES									
Normal Sample #										Normal Sample #									
Duplicate Sample #										Duplicate Sample #									
MPN										MPN									
95% CI										95% CI									
Lower										Lower									
Upper										Upper									
TOTAL COLIFORM										TOTAL COLIFORM									
Duplicate										Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
E. COLI										E. COLI									
Duplicate										Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
BLANKS										BLANKS									
Field Sample #										Lab Sample #									
Pass										Pass									
Needs Review										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:																			
Entered into database:																			
NOTES:																			

Brooke Moran 4/17/23

IDENTIFICATION

Sample Control Number n/a

Samplers BM, KL

Ambient Air Temperature: 47.8 °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 32 Total Depth 205 Top of Screen 15 Filter Pack Interval n/a Borehole Diameter (inches) 3

2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 150.6 gallons

Well Casing ID n/a Well Casing OD * Protective Casing Stickup n/a Well Casing Stickup 1.2 Feet of Water n/a

Static Water Level 32 Total Depth 205 Total Volume Purged 624 Saturated Borehole Volume (gal) 151 Max Pumping Rate n/a

pH Meter: Meter Number 0AKTON 01
 Buffer 7 Measured Value 7.0 Temp 21.9 °C
 Buffer 10 Measured Value 10.0 Temp 23.7 °C
Turbidity Meter: Newton Standard n/a NTU Measured Value n/a NTU
FIELD PARAMETERS: METERS

Conductivity Meter: Meter Number CM1-2104-01479
 Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp 22 °C
 Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp 22 °C
 Standard n/a NTU Measured Value n/a NTU

Turbidity Meter: None Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

Time	Volume (gallons)	pH	Cond. (μ S/cm)	Temp. $^{\circ}$ C <input checked="" type="checkbox"/> $^{\circ}$ F <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
12:00	0	7.2	0.3	11.2 $^{\circ}$	2.2	FIELD FILTERED 1 HNO ₃
13:00	62.4	7.5	0.3	7.1	1.1	PRESERVED BOTTLE FOR
						DISSOLVED METALS & 1
						BOTTLE FOR RADIONUCLIDES
						COLLECTED SAMPLES
						WITH DISPOSABLE
						SAMPLING CUP.

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
4/18/23	13:00	7.0	7.5	0.3	7.1	1.1		

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)

Notes: SAMPLED VIA PORT. * 6 $\frac{5}{8}$ " (-1-40 ft) & 4 $\frac{1}{2}$ " (15-205 ft)
 Sampler's Signature _____

Sampler's Signature

Brooke Moran 4/18/23

GROUND WATER SAMPLING DATA SHEET

IDENTIFICATION

Sample Location COMPLIANCE WELL Date 4/18/23 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: 49.3 °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 52 Total Depth 165 Top of Screen 65 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-50 ft)
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 93.3 gallons 6" (50-165 ft)
 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 52 Total Depth 165 Total Volume Purged 511 Saturated Borehole Volume (gal) 93 Max Pumping Rate n/a

INSTRUMENT CALIBRATION

pH Meter: Meter Number DAKTON01

Buffer 7 Measured Value 7.0 Temp. 21.9 °C

Buffer 10 Measured Value 10.0 Temp. 23.7 °C

Turbidity Meter: Neutro Standard n/a NTU Measured Value n/a NTU

Conductivity Meter: Meter Number CM1-2104-01479

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 22 °C

Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 22 °C

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	7.6	0.4	6.7	2.2	FIELD FILTERED 1 HNO ₃
13:30	554	8.0	0.2	8.9	2.1	PRESERVED BOTTLE FOR
						DISSOLVED METALS &
						1 BOTTLE FOR
						RADIONUCLIDES
						COLLECTED SAMPLES
						WITH DISPOSABLE
						SAMPLING CUP

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"/>		
4/18/23	13:30	10.4	8.0	0.2	8.9	2.1		

Duplicate Sample-02 (sample control number/time COMPLIANCE 02)

Field Blank-03 (sample control number/time COMPLIANCE 03)

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 AT WELL * 6 5/8" (-1-50 ft) & 4 1/2" (15-165 ft)

Sampler's Signature

Brooke Moran 4/18/23

GROUND WATER SAMPLING DATA SHEET

IDENTIFICATION

Sample Location CARIBOU WELL Date 4/18/23 Start Time 10:30 Stop time 11:45 Project Number:
 Sample Control Number n/a Samplers BM, KL Page 1 of 1

WEATHER CONDITIONS

Ambient Air Temperature: 43.9 °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 29 Total Depth 165 Top of Screen 25 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-26 ft)
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 90.8 gallons 6" (26-165 ft)
 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 29 Total Depth 165 Total Volume Purged 483 Saturated Borehole Volume (gal) 91 Max Pumping Rate n/a

INSTRUMENT CALIBRATION

pH Meter: Meter Number 0AKTON 01 Conductivity Meter: Meter Number CM1-2104-01479
 Buffer 7 Measured Value 7.0 Temp. 21.9 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 22 °C
 Buffer 10 Measured Value 10.0 Temp. 23.7 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 22 °C
 Turbidity Meter: Newby 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
<u>10:30</u>	<u>0</u>	<u>7.8</u>	<u>0.1</u>	<u>8.1</u>	<u>2.3</u>	<u>FIELD FILTERED 1 HNO₃</u>
<u>11:30</u>	<u>483</u>	<u>8.1</u>	<u>0.3</u>	<u>4.8</u>	<u>2.1</u>	<u>PRESERVED BOTTLE & 1</u>
						<u>BOTTLE FOR</u>
						<u>RADIONUCLIDES</u>
						<u>COLLECTED SAMPLES</u>
						<u>WITH DISPOSABLE</u>
						<u>SAMPLING CUP.</u>

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"/>		
<u>4/18/23</u>	<u>11:30</u>	<u>10.0</u>	<u>8.1</u>	<u>0.3</u>	<u>4.8</u>	<u>2.1</u>		

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

Brooke Moran 4/18/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

FIELD PARAMETER MEASUREMENTS DURING PURGING

FINAL SAMPLE PARAMETERS

Mahe Moran 4/18/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: Newtr 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 type="checkbox"/>	pH	Cond. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measu red <input checked="" type="checkbox"/>		
4/18/23	11:15	n/a	8.5	0.3	4.3 $^{\circ}$	3.6		

Notes:

Sampler's Signature

Broke Moran 4/18/23

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - Event Type=WQ										Entered in 8-b (1/8/2008)		Pg 1 of 1 Pgs									
*StationID: 2022-01		*Date (mm/dd/yyyy): 5/15/23		*Group: n/a		*Agency: n/a		*Protocol: n/a		*Funding: n/a		*ArrivalTime: 9:50		*DepartureTime: 10:15		*SampleTime (1st sample): 10:00					
*Personnel: BM/KL		*Purpose (circle all that apply): WaterChem WaterTox FieldObs FieldMeasure		*PurposeFailure: n/a		*Location: Bank Thalweg Midchannel OpenWater		*GPS/DGPS		Lat (dd.ddddd):		Long (ddd.ddddd):		OCCUPATION METHOD: Walk-in Bridge R/V Other							
GPS Device: GPS WAYPOINTS APP		Target: 39.97904		-105.57585		STARTING BANK (facing downstream): (LB) RB / NA		Datum: NAD83		Accuracy (ft/m): 1.20		*Actual: 39.978993		-105.575798		Point of Sample (if Integrated, then -88 in dbase)					
Field Observations (SampleType = FieldObs)										WADEABILITY: (Y) N / Unk		BEAUFORT SCALE (see attachment): 2		DISTANCE FROM BANK (m): 12.5"		STREAM WIDTH (m): 25"		WATER DEPTH (m): 23.5"			
SITE ODOR: (None, Sulfides, Sewage, Petroleum, Mixed, Other)										WIND DIRECTION (from): SE		HYDROMODIFICATION: (None) Bridge, Pipes, Concrete Channel, Grade Control, Culvert, Aerial Zipline, Other		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): 2022-01-01-MAY		1: (RB / LB / BB / US / DS / ##)		2: (RB / LB / BB / US / DS / ##)			
OTHER PRESENCE: Vascular, Nonvascular, Oily Sheen, Foam, Trash, Other										PRECIPITATION: (None, Fog, Drizzle, Rain, Snow)		PRECIPITATION (last 24 hrs): Unknown, <1", >1", None		3: (RB / LB / BB / US / DS / ##)		2022-01-02-MAY		2022-01-03-MAY			
DOMINANT SUBSTRATE: Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other										WATER CLARITY: Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)		WATER ODOR: (None, Sulfides, Sewage, Petroleum, Mixed, Other)		WATER COLOR: Colorless, Green, Yellow, Brown		OBSERVED FLOW: NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs					
Field Measurements (SampleType = FieldMeasure; Method = Field)																					
	Depth Collec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)										
SUBSURF/MID/BOTTOM/REP	1"	1.49	38.5°	0.2°	7.6	n/a	n/a	0.3	n/a	6.6	n/a										
SUBSURF/MID/BOTTOM/REP																					
SUBSURF/MID/BOTTOM/REP																					
Instrument:			Ambient		(bucket)			Blue box													
Calib. Date:			n/a		5/15/23			n/a													
Samples Taken (# of containers filled) - Method=Water_Grab										Field Dup YES / NO: (SampleType = Grab / Integrated; LABEL_ID = FieldQA; create collection record upon data entry)											
SAMPLE TYPE: Grab / Integrated										COLLECTION EQUIPMENT: Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other											
	Depth Collec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs								
Sub/Surface	1"	n/a	n/a	n/a	1	n/a	1	3	1	1	n/a	n/a	n/a								
Sub/Surface																					
COMMENTS:																					

PLEASE SEE LAB REPORT

Run:										Sample Processing Date:									
Sample ID #:																			
Site Code:																			
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									
FIELD DUPLICATES										LAB DUPLICATES									
Normal Sample #										Normal Sample #									
Duplicate Sample #										Duplicate Sample #									
MPN										MPN									
95% CI										95% CI									
Lower										Lower									
Upper										Upper									
TOTAL COLIFORM										TOTAL COLIFORM									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
E. COLI										E. COLI									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
BLANKS										BLANKS									
Field Sample										Field Sample									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
Lab Sample #										Lab Sample #									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
Sampler Signature/Date / Time Arrived:										Placed in Incubator By / Date / Time:									
Processor / Date / Time:										Trays Read By:									
Entered into database:																			

Brooke Moran 5/15/23

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - EventType=WQ										Entered in database (mm/dd/yyyy)		Pg 1 of 1 Pgs	
*StationID: 2022-02		*Date (mm/dd/yyyy): 5 / 15 / 23		*Group: n/a		*Agency: n/a		*Protocol: n/a					
*Funding: n/a		ArrivalTime: 8:55		DepartureTime: 9:35		*SampleTime (1st sample): 9:00							
*Personnel: B.M. KL		*Purpose (circle all that apply): (WaterChem) WaterTox FieldObs FieldMeasure		*PurposeFailure: n/a									
*Location: Bank Thalweg Midchannel OpenWater		*GPS/DGPS		Lat (dd.ddddd): 39.975787		Long (ddd.ddddd): -105.569328		OCCUPATION METHOD (Walk-in) Bridge R/V Other					
GPS Device: GPS WAYPOINTS APP		Target: 39.975787		-105.569328		STARTING BANK (facing downstream): LB / (RB) NA							
Datum: NAD83		Accuracy (ft/m): 1.40		*Actual: 39.975787		-105.569328		Point of Sample (if Integrated, then -88 in dbase)					
Field Observations (SampleType = FieldObs)													
SITE ODOR: (None) Sulfides, Sewage, Petroleum, Mixed, Other				WEATHERABILITY: (Y) N / Unk		BEAUFORT SCALE (see attachment): 1		DISTANCE FROM BANK (m): 11.13"		STREAM WIDTH (m): 22.25"			
SKY CODE: Clear, Partly Cloudy, Overcast Fog				WIND DIRECTION (from): SE		HYDROMODIFICATION: (None) Bridge, Pipes, ConcreteChannel, GradeControl, Culvert, AerialZipline, Other		LOCATION (to sample): US / DS / WI /					
OTHERPRESENCE: Vascular, Nonvascular, OilySheen, Foam, Trash, Other						PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): 2022-02-01-MAY		1: (RB / LB / BB / US / DS / ##)					
DOMINANTSUBSTRATE: Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other						PRECIPITATION: (None) Fog, Drizzle, Rain, Snow		2: (RB / LB / BB / US / DS / ##)					
WATERCLARITY: Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)						PRECIPITATION (last 24 hrs): Unknown, <1", None		3: (RB / LB / BB / US / DS / ##)					
WATERODOR: (None) Sulfides, Sewage, Petroleum, Mixed, Other								2022-02-02-MAY					
WATERCOLOR: Colorless, Green, Yellow, Brown								2022-02-03-MAY					
OBSERVED FLOW: NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs													
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	Depth Collec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/BOTTOM/REP	1"	1.09	37.6°	1.7°	8.1	n/a	n/a	0.4	n/a	21.3	n/a		
SUBSURF/MID/BOTTOM/REP													
SUBSURF/MID/BOTTOM/REP													
Instrument:			Ambient	Dakota				BlueLab					
Calib. Date:			n/a	5/15/23				n/a					
Samples Taken (# of containers filled) - Method=Water_Grab													
SAMPLE TYPE: Grab / Integrated		COLLECTION EQUIPMENT: Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other DISPOSABLE CUP											
	Depth Collec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface	1"	n/a	n/a	n/a	1	n/a	1	3	1	1	n/a	n/a	n/a
Sub/Surface													
COMMENTS: DUPLICATE=2022-02-02 FIELD BLANK=2022-02-03 MATRIX SPIKE=2022-02-03													

PLEASE SEE LAB REPORT

Run:		Sample Processing Date:									
Sample ID #:											
Site Code:											
Yellow +	# Small Wells										
	# Large Wells										
	Empty Wells										
	MPN										
Yellow + Fluorescence (+)	# Small Wells										
	# Large Wells										
	False Positives										
	MPN										
Temp/Time	Start	4Hr. Check	14 Hr. Check	18 Hr. Check	22 Hr. Check, if needed						
TOTAL COLIFORM	Normal Sample #	FIELD DUPLICATES				LAB DUPLICATES					
	Duplicate Sample #										
	MPN										
	Mean										
E. COLI	Normal Sample #										
	Duplicate Sample #										
	MPN										
	Mean										
BLANKS	Field Sample #										
	Duplicate Sample #										
	MPN										
	Mean										
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:					

Brooke Moran 5/15/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: None Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

WATER MEASUREMENTS DURING PURGING						
Time	Volume (gallons)	pH	Cond. ($\mu\text{S}/\text{cm}$)	Temp. $^{\circ}\text{C}$ <input checked="" type="checkbox"/> $^{\circ}\text{F}$ <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
12:00	0	7.0	0.3	10.6 $^{\circ}$	2.3	FIELD FILTERED 1 AND 2 PRESERVED BOTTLE FOR DISSOLVED METALS & 1 1L BOTTLE FOR RADIONUCLIDES.
13:00	624	7.0	0.3	6.3 $^{\circ}$	1.6	
						COLLECTED SAMPLES WITH DISPOSABLE SAMPLING CUP

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
5/16/23	13:00	7.0	7.0	0.3	6.3 $^{\circ}$	1.6		

Notes: SAMPLED VIA PORT. #6 $\frac{5}{8}$ " (1-40 ft) & 4 $\frac{1}{2}$ " (15-205 ft)

Sampler's Signature

Brooke Moran 5/16/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: None 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. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
5/16/23	13:30	10.4	7.4	0.3	5.70	3.4		

(sample control number/time n/a)

Sampler's Signature

Brooke Moran 5/16/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: newtry Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

WATER QUALITY MEASUREMENTS DURING PURGING						
Time	Volume (gallons)	pH	Cond. ($\mu\text{S}/\text{cm}$)	Temp. $^{\circ}\text{C}$ <input checked="" type="checkbox"/> $^{\circ}\text{F}$ <input type="checkbox"/>	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>	Comments
10:30	0	7.4	0.2	8.0°	3.2	FIELD FILTERED 1 HNO ₃
11:30	483	6.7	0.2	5.4°	4.7	PRESERVED & 1 1-L
						BOTTLE FOR
						RADIONUCLIDES.
						COLLECTED SAMPLES
						WITH DISPOSABLE
						SAMPLING CUPS.

Sample Date	Sample Time	Discharge cfs <input type="checkbox"/> gpm <input checked="" type="checkbox"/>	pH	Cond. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
5/10/23	11:30	10.0	6.7	0.2	5.40	4.7		

Notes: SAMPLED VIA PORT. * 6 $\frac{5}{8}$ " (-1-26 ft) & 4 $\frac{1}{2}$ " (15-165 ft)
 Sampler's Signature Brooke Moran 5/16/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

FIELD PARAMETER MEASUREMENTS DURING PURGING

FINAL SAMPLE PARAMETERS

Sampler's Signature Broshe Moran 5/16/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

FIELD PARAMETER MEASUREMENTS DURING PURGING

FINAL SAMPLE PARAMETERS

Brooke Moran 5/16/23

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - Event Type=WQ										Entered in database (mm/dd/yyyy)		Pg 1 of 1 Pgs	
*StationID: 2022-01		*Date (mm/dd/yyyy): 6/14/23		*Group: n/a		*Agency: n/a		*Protocol: n/a					
*Funding: n/a		ArrivalTime: 8:10		DepartureTime: 8:40		*SampleTime (1st sample): 8:10							
*Personnel: BM		*Purpose (circle all that apply): WaterChem WaterTox FieldObs FieldMeasure		*PurposeFailure: n/a									
*Location: Bank Thalweg Midchannel OpenWater		*GPS/DGPS		Lat (dd.ddddd): 39.97904		Long (ddd.ddddd): -105.57585		OCCUPATION METHOD: Walk-in Bridge R/V Other					
GPS Device: GPS WAYPOINTS APP		Target: 39.97904		-105.57585		STARTING BANK (facing downstream): LB / RB / NA							
Datum: NAD83		Accuracy (ft/m): 1.20		*Actual: 39.978993		-105.575798		Point of Sample (if integrated, then -88 in dbase)					
Field Observations (SampleType = FieldObs)		SITE ODOR: None, Sulfides, Sewage, Petroleum, Mixed, Other		WADABILITY: Y / N / Unk		BEAUFORT SCALE (see attachment): 2		DISTANCE FROM BANK (m): 12.5		STREAM WIDTH (m): 25			
SKY CODE: Clear, Partly Cloudy, Overcast, Fog		WIND DIRECTION (from): NW		HYDROMODIFICATION: None, Bridge, Pipes, ConcreteChannel, GradeControl, Culvert, AerialZipline, Other		LOCATION (to sample): US / DS / WI		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): 2022-01-01-JUNE		1: (RB / LB / BB / US / DS / ##)			
OTHERPRESENCE: Vascular, Nonvascular, OilySheen, Foam, Trash, Other		DOMINANTSUBSTRATE: Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other		PRECIPITATION: None, Fog, Drizzle, Rain, Snow		2: (RB / LB / BB / US / DS / ##)		2022-01-02-JUNE		3: (RB / LB / BB / US / DS / ##)			
WATERCLARITY: Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)		PRECIPITATION (last 24 hrs): Unknown, <1", >1", None		2022-01-03-JUNE									
WATERODOR: None, Sulfides, Sewage, Petroleum, Mixed, Other													
WATERCOLOR: Colorless, Green, Yellow, Brown													
OBSERVED FLOW: NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs													
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	DepthCollec (m)	Velocity (fps)	Air Temp (°F)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/ BOTTOM/REP	1"	1.43	46.9°	9.3°	7.9	n/a	n/a	0.1	n/a	4.5	n/a		
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:			Ambient	Water				Blue/ob					
Calib. Date:			n/a	6/14/23				n/a					
Samples Taken (# of containers filled) - Method=Water_Grab													
SAMPLE TYPE: Grab / Integrated		COLLECTION EQUIPMENT: Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other: Disposable cup		Field Dup YES / NO: (SampleType = Grab / Integrated; LABEL_ID = FieldQA; create collection record upon data entry)									
	DepthCollec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface	1"	n/a	n/a	n/a	1	n/a	1	2	1	1	n/a	n/a	n/a
Sub/Surface													
COMMENTS:													

PLEASE SEE LAB REPORT

Run:		Sample Processing Date:									
Sample ID #:											
Site Code:											
Yellow +	# Small Wells										
	# Large Wells										
	Empty Wells										
	MPN										
Yellow + Fluorescence (+)	# Small Wells										
	# Large Wells										
	False Positives										
	MPN										
Temp/Time	Start	4Hr. Check	14 Hr. Check	18 Hr. Check	22 Hr. Check, if needed						
FIELD DUPLICATES											
Normal Sample #		Duplicate Sample #				Normal Sample #		Duplicate Sample #			
MPN		95% CI				MPN		95% CI			
TOTAL COLIFORM	Normal Duplicate					Normal Duplicate					
	Mean					Mean					
	Pass					Pass					
	Needs Review					Needs Review					
E. COLI	Normal Duplicate					Normal Duplicate					
	Mean					Mean					
	Pass					Pass					
	Needs Review					Needs Review					
BLANKS	Field Sample #					Lab Sample #					
	Pass					Pass					
	Needs Review					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 6/14/23

SURFACE WATER SAMPLING DATA SHEET

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - Event Type=WQ										Entered in SWAMP by: <u>WQ</u> Date: <u>6/14/23</u>		Pg <u>1</u> of <u>1</u> Pgs	
*StationID: <u>2022-02</u>			*Date (mm/dd/yyyy): <u>6/14/23</u>			*Group: <u>n/a</u>			*Agency: <u>n/a</u>				
*Funding: <u>n/a</u>			ArrivalTime: <u>7:25</u>			DepartureTime: <u>8:05</u>			*SampleTime (1st sample): <u>8:10</u>				
*Personnel: <u>BN</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</u> <u>Thalweg</u> <u>Midchannel</u> <u>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>39.975787</u>		*Actual: <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)								
Field Observations (SampleType = FieldObs)													
SITE ODOR: <u>None</u> <u>Sulfides</u> <u>Sewage</u> <u>Petroleum</u> <u>Mixed</u> <u>Other</u>						BEAUFORT SCALE (see attachment): <u>2</u>		DISTANCE FROM BANK (m): <u>10.75</u>		STREAM WIDTH (m): <u>21.5</u>			
SKY CODE: <u>Clear</u> <u>Partly Cloudy</u> <u>Overcast</u> <u>Fog</u>						WIND DIRECTION (from): <u>E</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>			
OTHERPRESENCE: <u>Vascular</u> <u>Nonvascular</u> <u>OilySheen</u> <u>Foam</u> <u>Trash</u> <u>Other</u>						PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode yyyy mm dd uniquecode): <u>2022-02-01-JUNE</u>							
DOMINANTSUBSTRATE: <u>Bedrock</u> <u>Concrete</u> <u>Cobble</u> <u>Gravel</u> <u>Sand</u> <u>Mud</u> <u>Unk</u> <u>Other</u>						2: (RB / LB / BB / US / DS / ##)							
WATERCLARITY: <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>							
WATERODOR: <u>None</u> <u>Sulfides</u> <u>Sewage</u> <u>Petroleum</u> <u>Mixed</u> <u>Other</u>						PRECIPITATION (last 24 hrs): <u>Unknown</u> , <1", >1", <u>None</u>							
WATERCOLOR: <u>Colorless</u> <u>Green</u> <u>Yellow</u> <u>Brown</u>						3: (RB / LB / BB / US / DS / ##)							
OBSERVED FLOW: <u>NA</u> <u>Dry Waterbody Bed</u> <u>No Obs Flow</u> <u>Isolated Pool</u> <u>Trickle</u> (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs						<u>2022-02-03-JUNE</u>							
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	DepthCollec (m)	Velocity (fps)	Air Temp (°F)	Water Temp (°C)	pH	O ₂ (mg/L)	O ₂ (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)	Stage Ht (units)		
SUBSURF/MID/ BOTTOM/REP	<u>1"</u>	<u>4.45</u>	<u>45.1°</u>	<u>7.8°</u>	<u>8.2</u>	<u>n/a</u>	<u>n/a</u>	<u>0.3</u>	<u>n/a</u>	<u>3.5</u>	<u>n/a</u>		
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:			<u>Ambient</u>	<u>Oakton</u>				<u>Bluebox</u>					
Calib. Date:			<u>n/a</u>	<u>6/14/23</u>				<u>n/a</u>					
Samples Taken (# of containers filled) - Method=Water_Grab													
SAMPLE TYPE: <u>Grab</u> <u>Integrated</u>		COLLECTION EQUIPMENT: <u>Indiv bottle (by hand)</u> <u>by pole</u> <u>by bucket</u> ; <u>Teflon tubing</u> <u>Kemmer</u> <u>Pole & Beaker</u> <u>Other</u> <u>disposable cup</u>											
	DepthCollec (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>2</u>	<u>1</u>	<u>1</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Sub/Surface													
COMMENTS: <u>DUPLICATE: 2022-02-02</u> <u>FIELD BLANK: 2022-02-03</u> <u>MATRIX SPIKE: 2022-02-03</u>													

PLEASE SEE LAB REPORT

Run:										Sample Processing Date:									
Sample ID #:																			
Site Code:																			
<div style="display: flex; justify-content: space-between;"> <div> # Small Wells # Large Wells Empty Wells MPN </div> <div> # Small Wells # Large Wells False Positives MPN </div> </div>																			
Temp/Time																			
<div style="display: flex; justify-content: space-between;"> <div>Start</div> <div>4Hr. Check</div> <div>14 Hr. Check</div> <div>18 Hr. Check</div> <div>22 Hr. Check, if needed</div> </div>																			
FIELD DUPLICATES										LAB DUPLICATES									
Normal Sample #										Normal Sample #									
Duplicate Sample #										Duplicate Sample #									
MPN										MPN									
95% CI										95% CI									
Lower										Lower									
Upper										Upper									
TOTAL COLIFORM										TOTAL COLIFORM									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
E. COLI										E. COLI									
Normal Duplicate										Normal Duplicate									
Mean										Mean									
Pass										Pass									
Needs Review										Needs Review									
BLANKS										BLANKS									
Field Sample #										Lab Sample #									
Pass										Pass									
Needs Review										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:									
Processor / Date / Time:										Trays Read By:									
NOTES:										Entered into database:									

Brooke Moran 6/14/23

GROUND WATER SAMPLING DATA SHEET

IDENTIFICATION

Sample Location CROSS WELL Date 6/14/23 Start Time 12:00 Stop time 13:15 Project Number: _____
 Sample Control Number n/a Samplers BM, KL Page 1 of 1

WEATHER CONDITIONS

Ambient Air Temperature: 52.5° °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 32 Total Depth 205 Top of Screen 15 Filter Pack Interval n/a Borehole Diameter (inches) 9" (10-40 ft)
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 184.5 gallons 5 7/8" (40-205 ft)
 Well Casing ID n/a Well Casing OD * Protective Casing Stickup n/a Well Casing Stickup 1.2 Feet of Water n/a
 Well purged with: WELL PUMP

FINAL WELL MEASUREMENTS

Static Water Level 32 Total Depth 205 Total Volume Purged 624 Saturated Borehole Volume (gal) 185 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. 13.1 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C
 Buffer 10 Measured Value 10.0 Temp. 13.1 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C
 Turbidity Meter: New 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
12:00	<u>0</u>	<u>7.5</u>	<u>0.4</u>	<u>10.5°</u>	<u>3.9</u>	FIELD-FILTERED BOTTLES
13:00	<u>624</u>	<u>7.3</u>	<u>0.3</u>	<u>7.2°</u>	<u>2.1</u>	1 HNO ₃ -PRESERVED & 1 2-L FOR RADIONUCLIDES
						SAMPLES COLLECTED WITH DISPOSABLE CUP

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"/>		
<u>6/14/23</u>	<u>13:00</u>	<u>7.0</u>	<u>7.3</u>	<u>0.3</u>	<u>7.2°</u>	<u>2.1</u>		

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" (-1-40 ft) & 4 1/2" (15-205 ft)

Sampler's Signature

Brooke Moran 6/14/23

GROUND WATER SAMPLING DATA SHEET

IDENTIFICATION

Sample Location COMPLIANCE WELL Date 6/14/23 Start Time 13:00 Stop time 13:45 Page 1 of 1
 Sample Control Number n/a Samplers BM, KL

Project Number:

WEATHER CONDITIONS

Ambient Air Temperature: 54.70 °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 33 Total Depth 165 Top of Screen 65 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-50 ft)
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 125.4 gallons 6" (50-165 ft)
 Well Casing ID n/a Well Casing OD X 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 33 Total Depth 165 Total Volume Purged 554 Saturated Borehole Volume (gal) 125 Max Pumping Rate n/a

INSTRUMENT CALIBRATION

pH Meter: Meter Number 0AKT0N01Buffer 7 Measured Value 7.0 Temp. 13.1 °CBuffer 10 Measured Value 10.0 Temp. 13.1 °CConductivity Meter: Meter Number CM1-2104-01479Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °CStandard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °CTurbidity Meter: Newbury 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 type="checkbox"/>	Comments
13:00	0	7.8	0.3	5.6°	5.4	FIELD-FILTERED BOTTLES:
13:30	554	8.2	0.3	5.5°	4.7	1 HNO ₃ -PRESERVED &
						1-1L FOR RADIONUCLIDES
						SAMPLES COLLECTED
						WITH DISPOSABLE CUP

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"/>		
6/14/23	13:30	10.4	8.2	0.3	5.5°	4.7		

Duplicate Sample-02 (sample control number/time COMPLIANCE-02)Field Blank-03 (sample control number/time COMPLIANCE-03)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 AT WELL * 6 5/8" (-1-50 ft) & 4 1/2 (15-165 ft)

Sampler's Signature

Brooke Moran 6/14/23

GROUND WATER SAMPLING DATA SHEET

IDENTIFICATION

Sample Location CARIBOU WELL Date 6/14/23 Start Time 10:30 Project Number:
 Sample Control Number n/a Samplers BM, KL Stop time 11:45 Page 1 of 1

WEATHER CONDITIONS

Ambient Air Temperature: 51.30 °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 20 Total Depth 165 Top of Screen 25 Filter Pack Interval n/a Borehole Diameter (inches) 9" (0-26 ft)
 2-inch = 0.1632 gal/ft 4-inch = 0.6528 gal/ft 6-inch = 1.4688 gal/ft Casing Volume: 125.6 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 20 Total Depth 165 Total Volume Purged 483 Saturated Borehole Volume (gal) 126 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. 13.1 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C
 Buffer 10 Measured Value 10.0 Temp. 13.1 °C Standard 0.447 mS/cm Measured Value 0.5 mS/cm Temp. 13 °C
 Turbidity Meter: New 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	7.5	0.2	6.30	3.2	FIELD FILTERED BOTTLES:
11:30	483	8.2	0.3	6.10	0.9	1 HNO ₃ -PRESERVED &
						1-1L FOR RADIONUCLIDES
						SAMPLES COLLECTED
						WITH DISPOSABLE CUP

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"/>		
6/14/23	11:30	10.0	8.2	0.3	6.10	0.9		

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

Brooke Moran 6/14/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: None 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 type="checkbox"/>	pH	Cond. (μ S/cm)	Temp. ($^{\circ}$ C)	Turbidity Visual Est. <input type="checkbox"/> Measured <input checked="" type="checkbox"/>		
6/14/23	11:15	n/a	8.5	0.4	3.8 $^{\circ}$	9.3		

Sampler's Signature

Brooke Moran 6/14/23

IDENTIFICATION

WEATHER CONDITIONS

INITIAL WELL MEASUREMENTS (Measurements in feet made from top of well casing)

FINAL WELL MEASUREMENTS

INSTRUMENT CALIBRATION

Turbidity Meter: None Standard n/a NTU Measured Value n/a NTU Standard n/a NTU Measured Value n/a NTU

Sampler's Signature Brooke Moran 6/14/23

APPENDIX F PHOTOGRAPHS

APPENDIX F.1 SAMPLE LOCATION 2022-01 PHOTOGRAPHS

APRIL 2023







APPENDIX F.1 SAMPLE LOCATION 2022-01 PHOTOGRAPHS

MAY 2023







APPENDIX F.1 SAMPLE LOCATION 2022-01 PHOTOGRAPHS

JUNE 2023







APPENDIX F.2 SAMPLE LOCATION 2022-02 PHOTOGRAPHS

APRIL 2023







APPENDIX F.2 SAMPLE LOCATION 2022-02 PHOTOGRAPHS

MAY 2023







APPENDIX F.2 SAMPLE LOCATION 2022-02 PHOTOGRAPHS

JUNE 2023





