



Additional Information Requested, 2Q2023 GWSW Monitoring Report, Gold Hill and Cash & Who Do Mines

Ben Langenfeld <benl@lewicki.biz>

Mon, Jul 31, 2023 at 8:39 AM

To: "Lennberg - DNR, Patrick" <patrick.lennberg@state.co.us>

Mr. Lennberg

The reference to frozen waters was erroneous and has been removed. Please see the corrected Q2 2023 water sampling report.

Ben Langenfeld, P.E.

Lewicki & Associates

benl@lewicki.biz

Office: (720) 842-5321

Cell: (303) 960-5613

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Q2 2023 Water Sampling Report.pdf

4280K

July 21, 2023

Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm 215
Denver, CO 80203

Delivered Via Email

RE: Q2 2023 Water Sampling Results
Gold Hill Mill, Permit No. M-1994-117
Cash Mine, Permit No. M-1983-141

To Whom It May Concern

The second quarter, 2023 ("Q2/23") water sampling was conducted by Lewis Perkins, Colorado Milling Company, on June 14, 2023.

- **Trace Element & Related Data:** Five monitoring stations were sampled for arsenic, cadmium, manganese, zinc, total dissolved solids ("residue") and sulfate. Analyses were performed by Colorado Analytical Laboratories Inc., based in Denver. Copies of their original laboratory analytical reports are included in this submittal.
- **Other Data:** Water depth, temperature and pH data were gathered in the field during sampling and are included in this submittal.

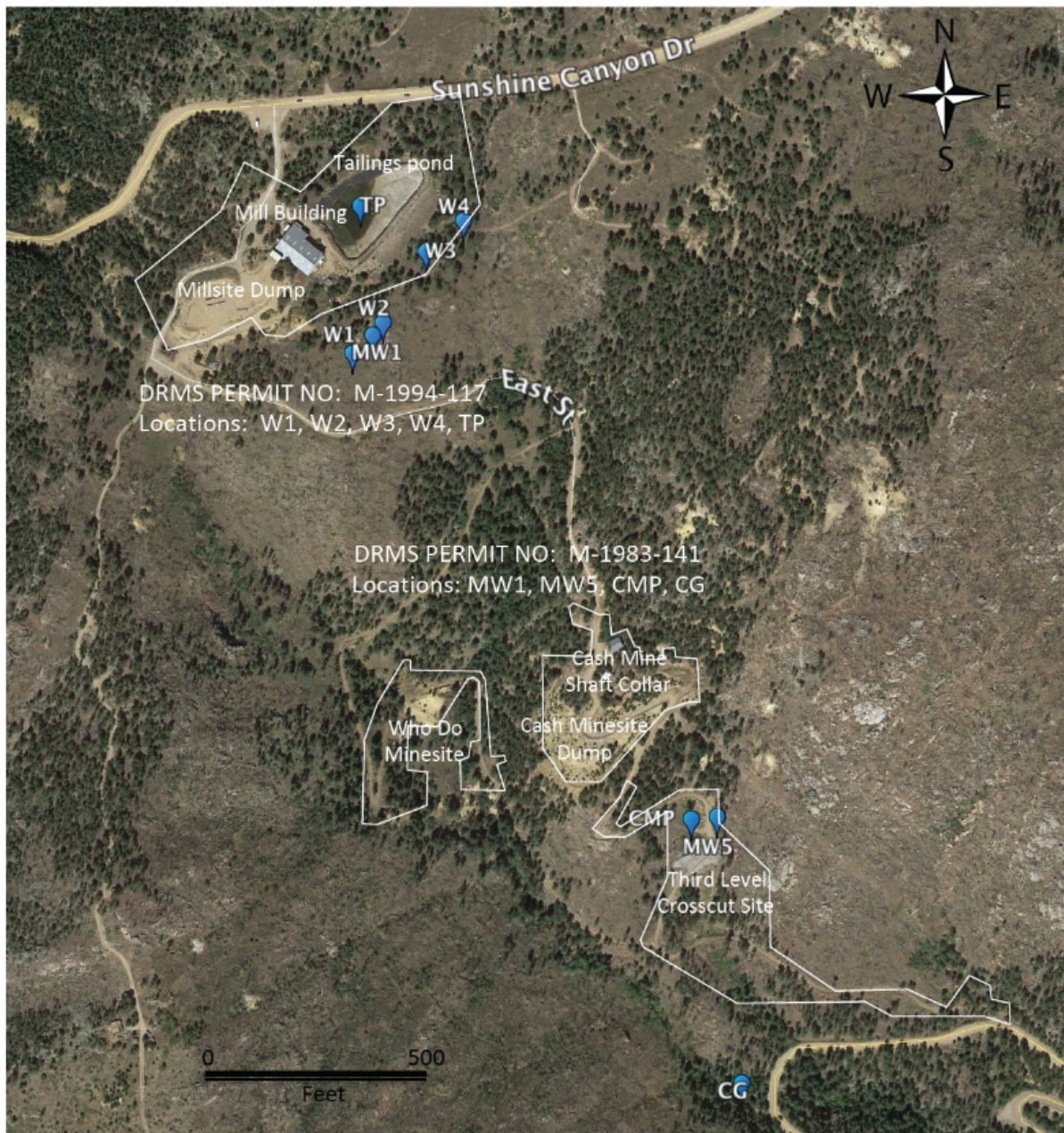
Note that zero values in the graphs represent "non-detect" results.

Please contact me with any questions.

Regards,



Ben Langenfeld, P.E.
Lewicki & Associates, PLLC
(720) 842-5321, ex. 1
benl@lewicki.biz

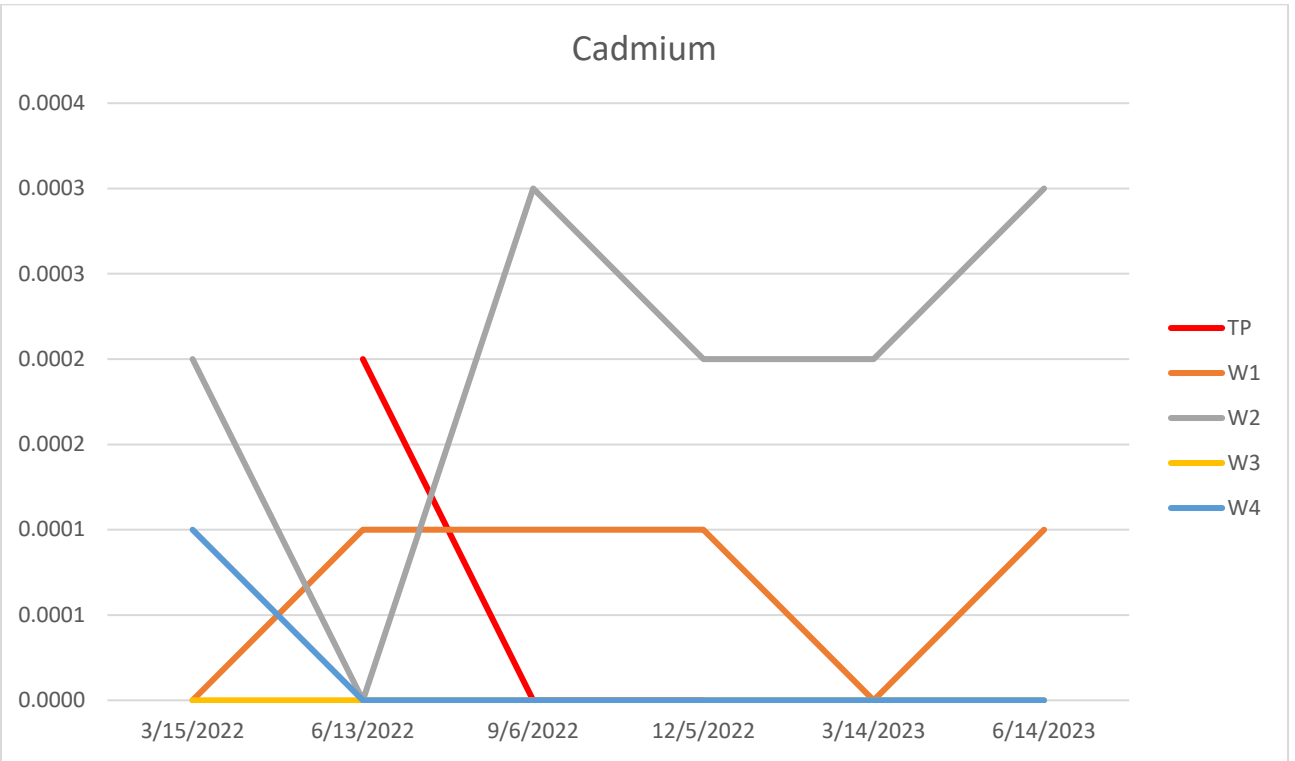
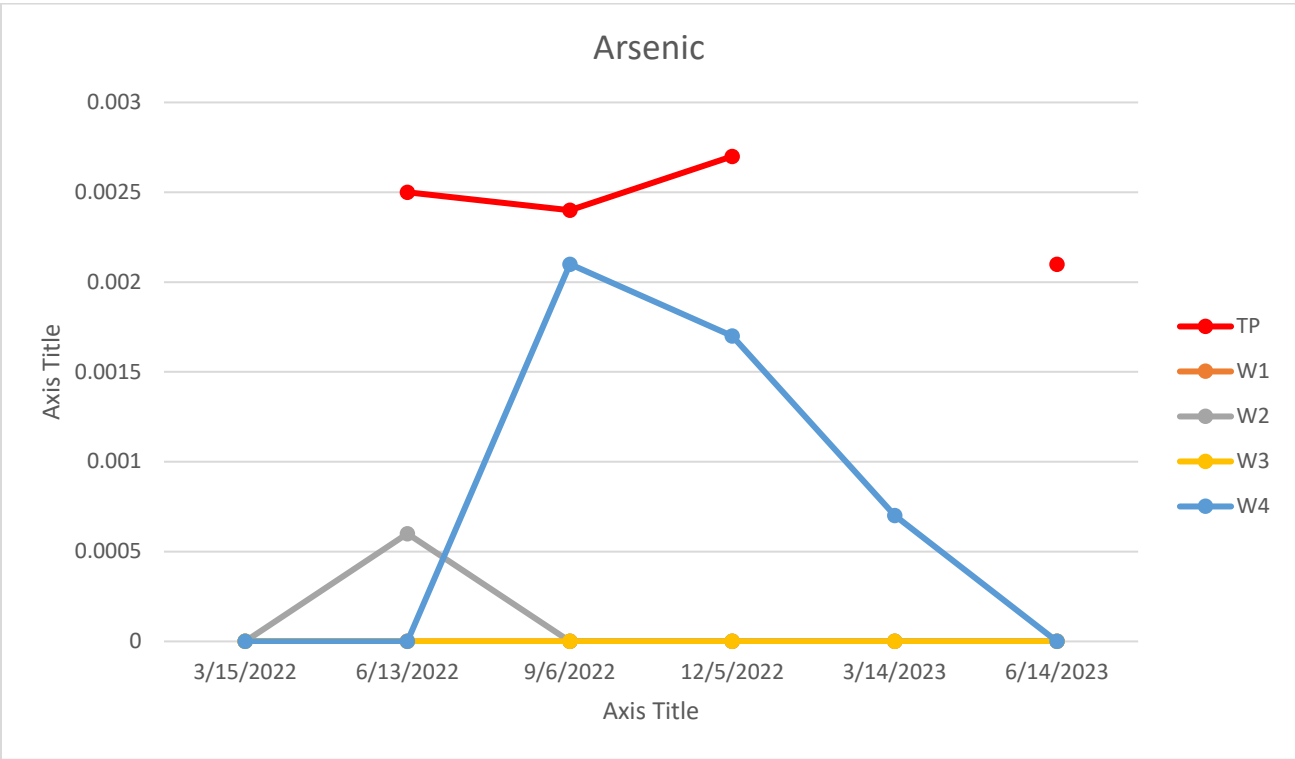


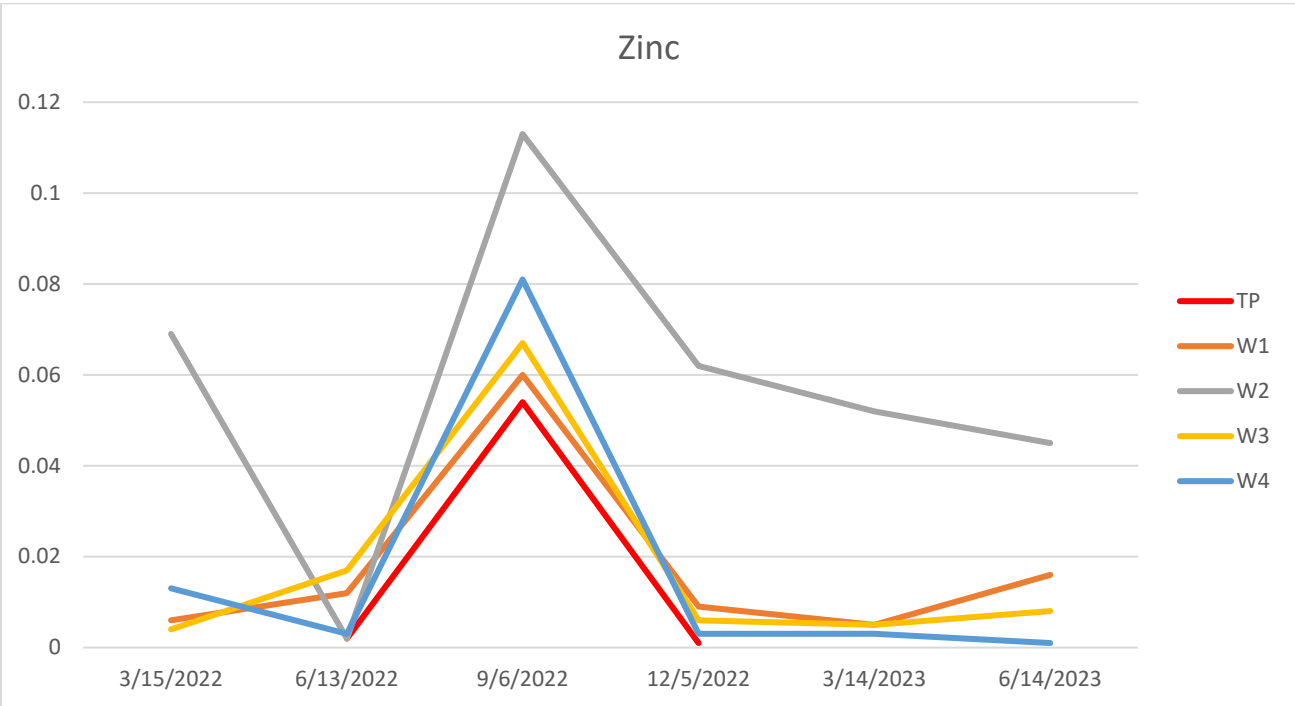
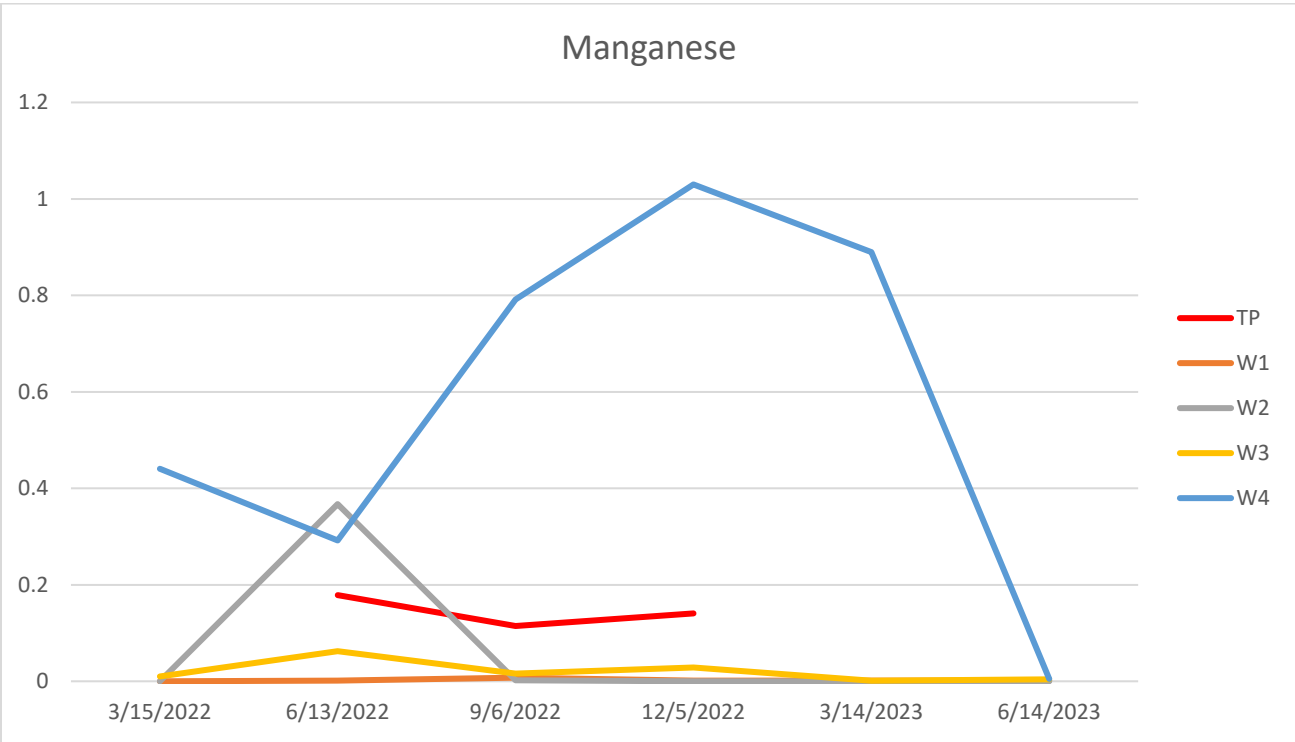
Map showing locations of water monitoring stations for permits M-1994-117 & M-1983-141

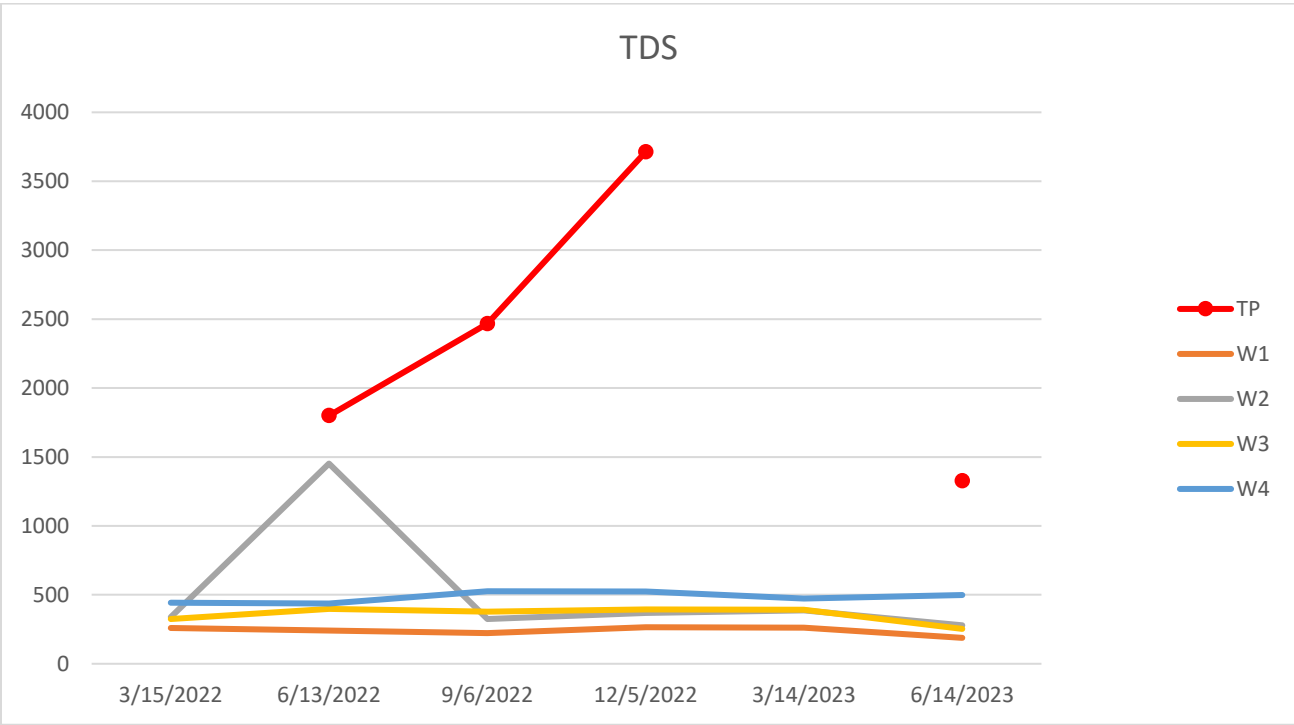
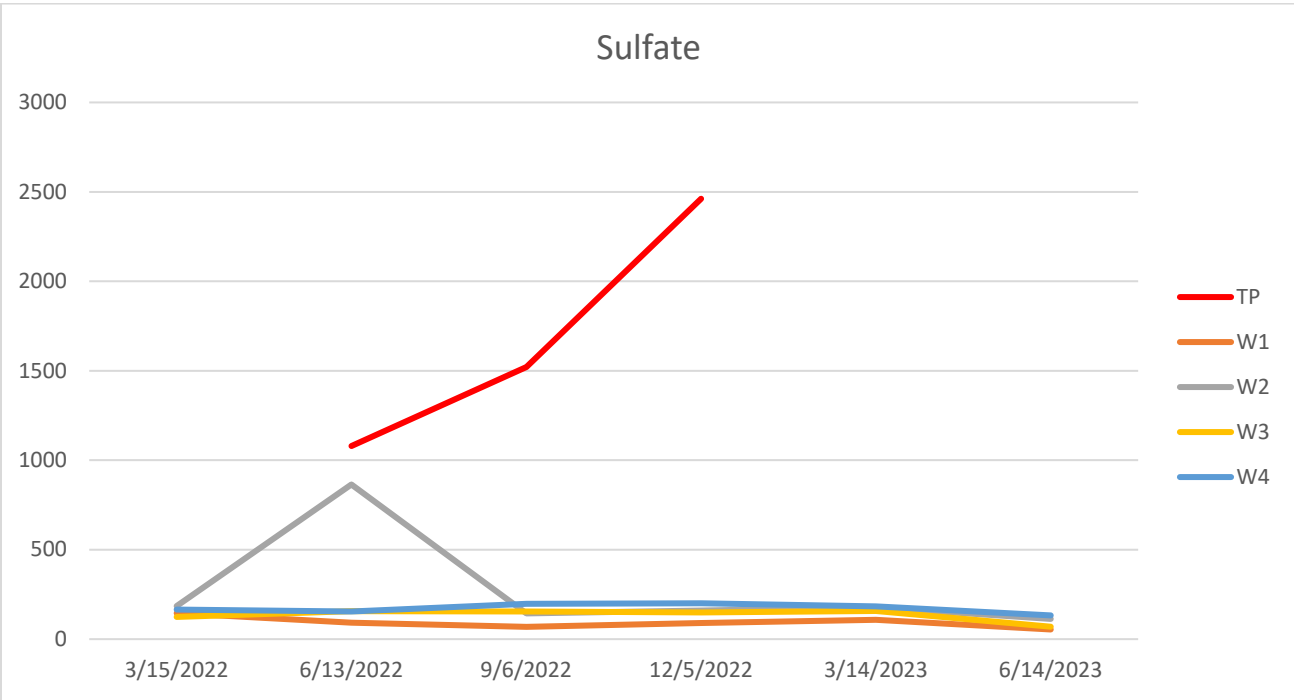
Locations		Well Measurements					Water Analyses (ppm/mg/L)							
Locations ID	Date	Time	Depth	pH	Temp (C)	Conductivity (uS/cm)	Sample ID	Date	As	Cd	Mn	Zn	Residue	Sulfate
Gold Hill Mill M-1994-117														
W-1	6/14/2023	16:25	28.4	7.92	10	289	230615108	6/14/2023	0	0.0001	0.0015	0.016	188	54.01
W-2	6/14/2023	16:50	33.1	7.6	9.7	407	230615108	6/14/2023	0	0.0003	0	0.045	279	113.07
W-3	6/14/2023	17:15	19.3	7.09	9.1	385	230615108	6/14/2023	0	0	0.0039	0.008	253	69.54
W-4	6/14/2023	17:48	30.4	7.17	9.1	651	230615108	6/14/2023	0	0	0.005	0.001	498	132.76
TP	6/14/2023	12:30	0	7.6	15.7	1572	230615108	6/14/2023	0.0021	0	0.1656	0.004	1327	698.14
Cash Mine M-1983-141														
MW-1	6/14/2023	13:15	58.5	7.36	12	1613	230615108	6/14/2023	0	0	0.3359	0.003	1466	859.98
MW-5	6/14/2023	18:20	14.4	7.3	11.1	915	230615108	6/14/2023	0.0012	0	0.2567	0.001	699	268.92
CG	6/14/2023	19:00	0	7.82	10	595	230615108	6/14/2023	0.0009	0.0009	0.2558	0.347	437	239.01
CMP	6/14/2023	18:35	0	7.93	16.2	1373	230615108	6/14/2023	0	0.0035	0.0216	1.38	1240	747.19

Analytes from lab analysis are dissolved.

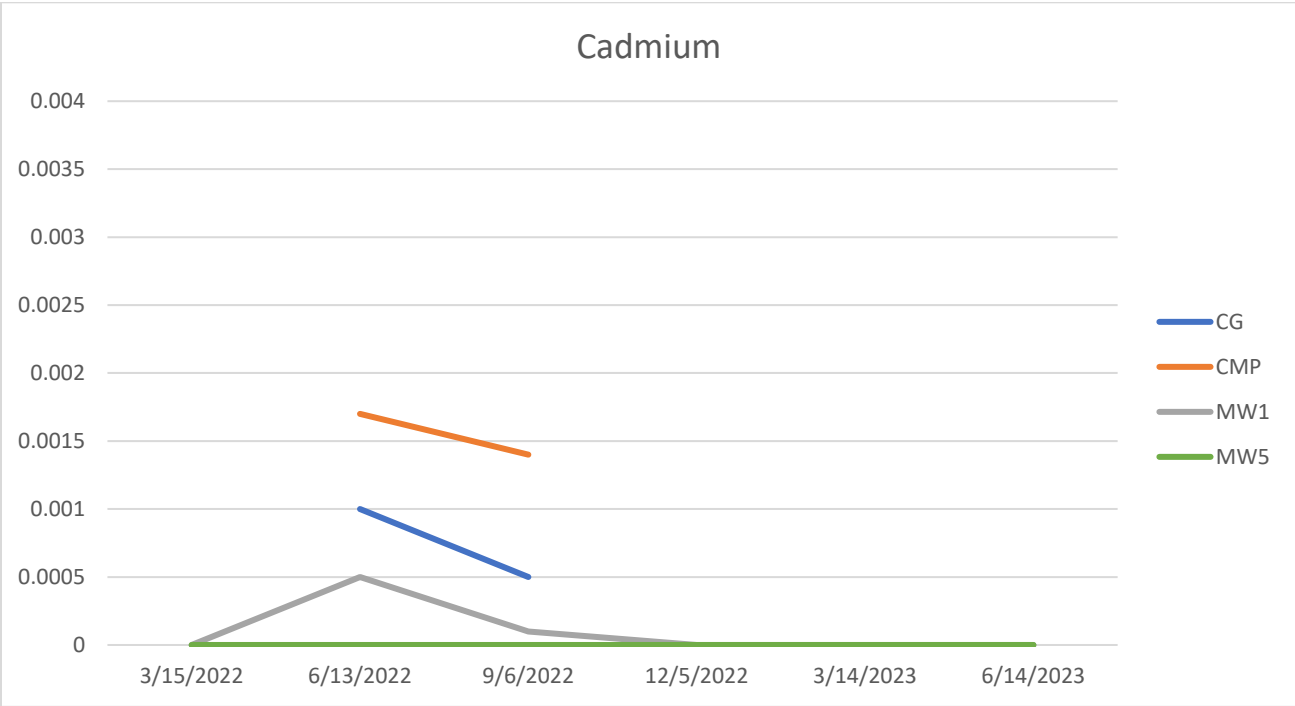
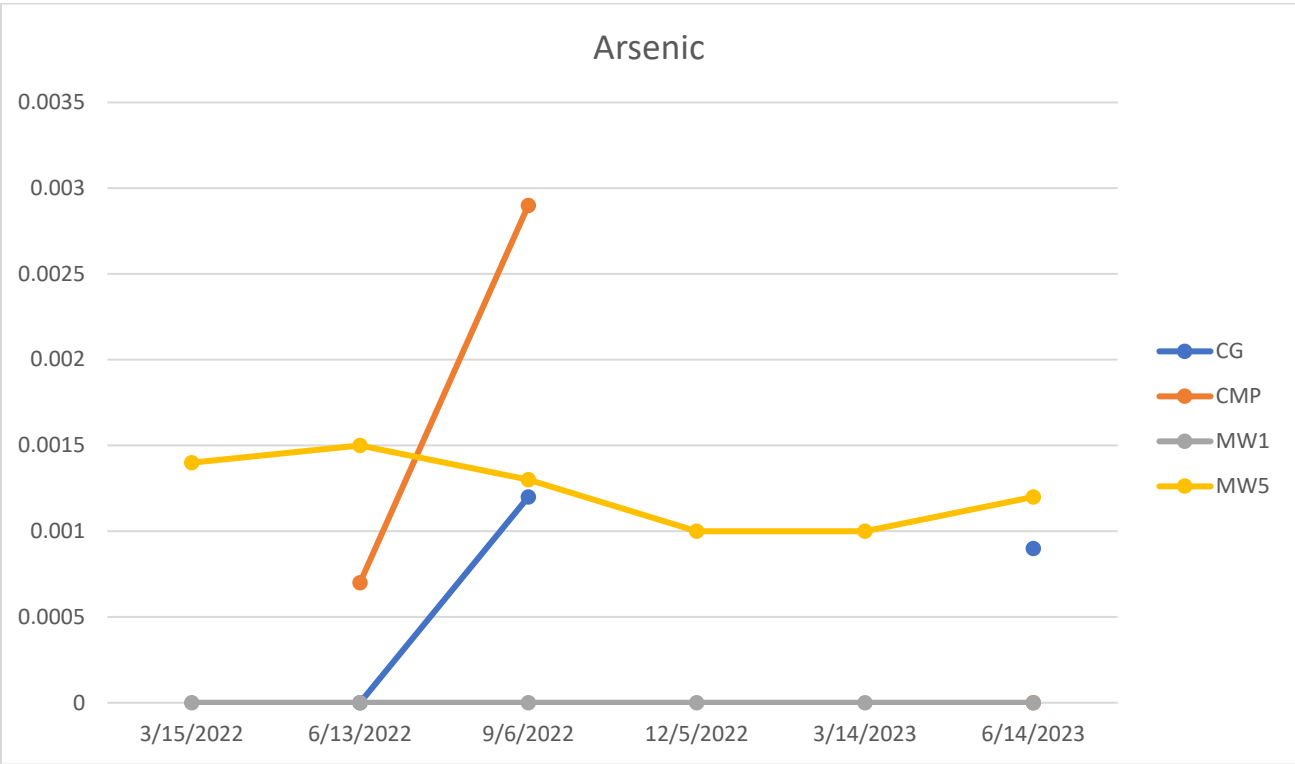
Gold Hill Mill Analyte Graphs for the Past Five Quarters

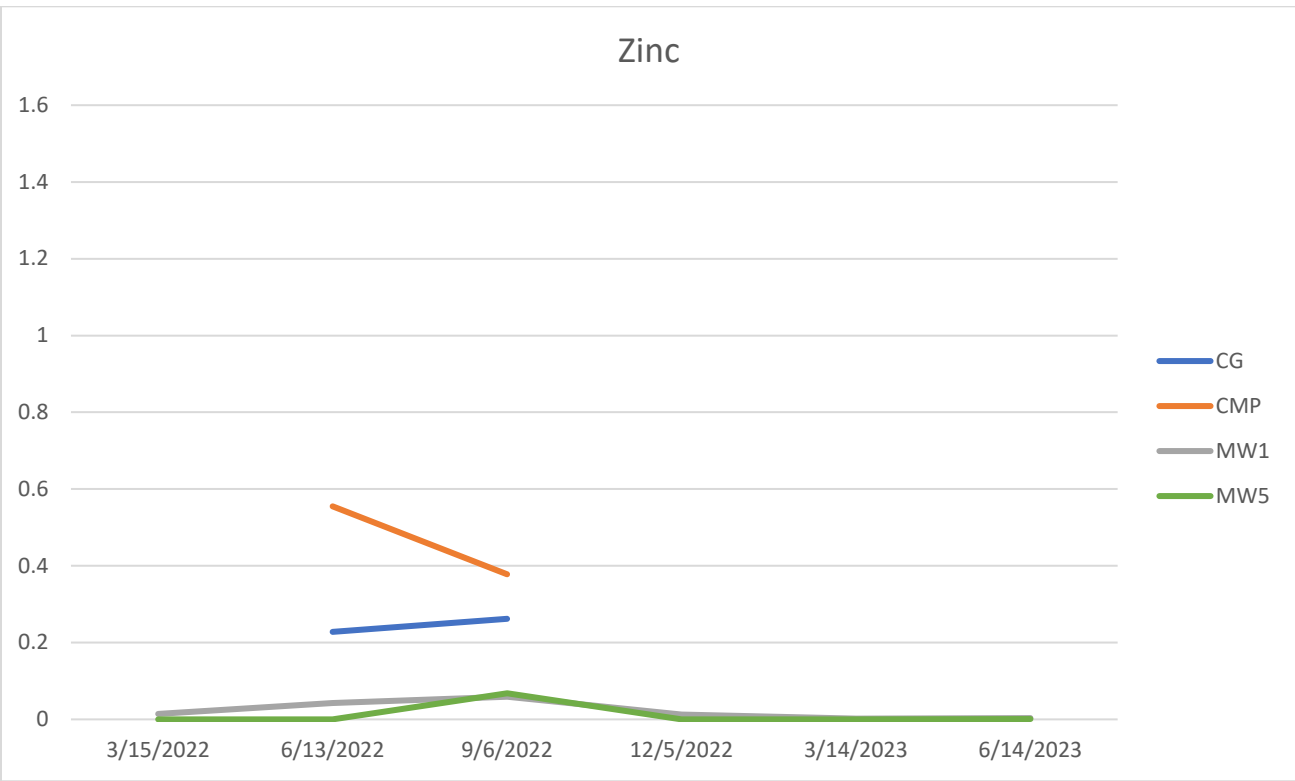
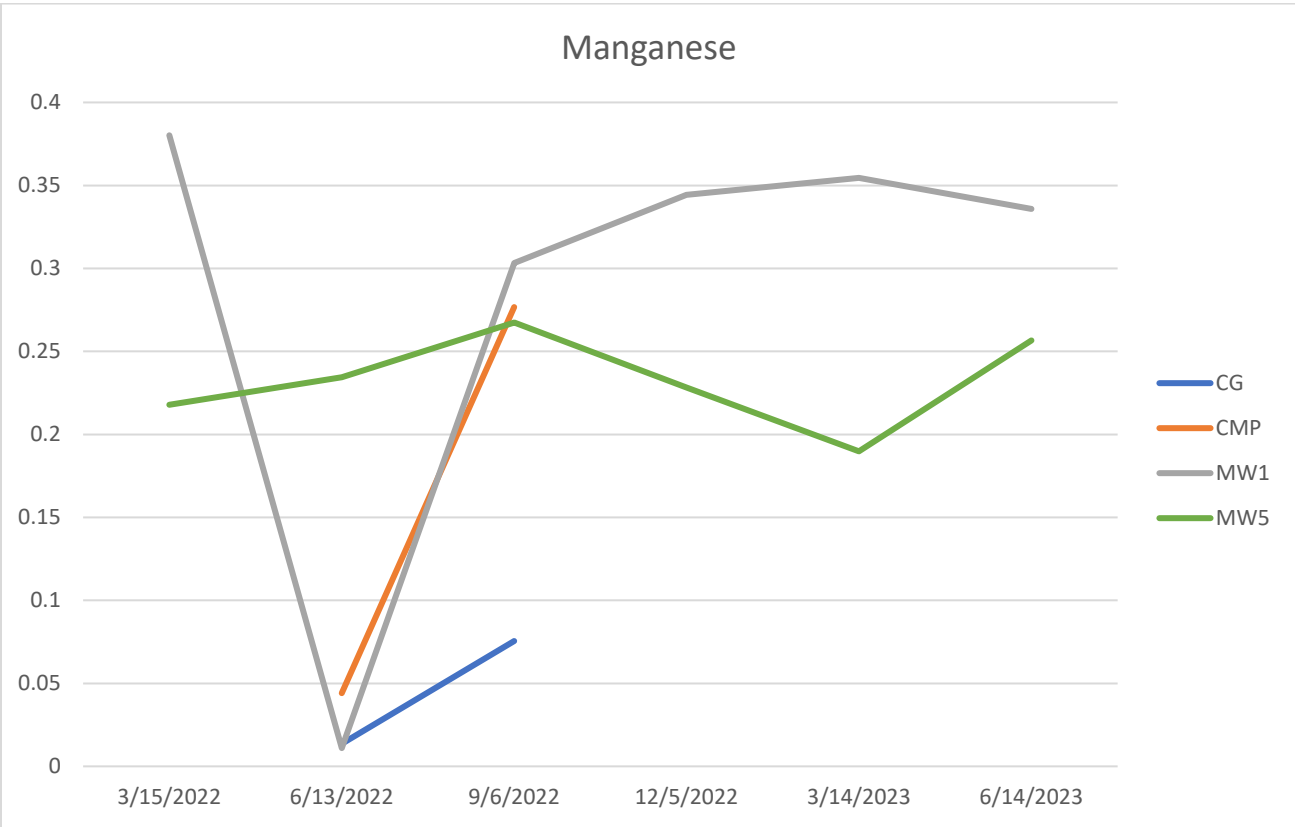


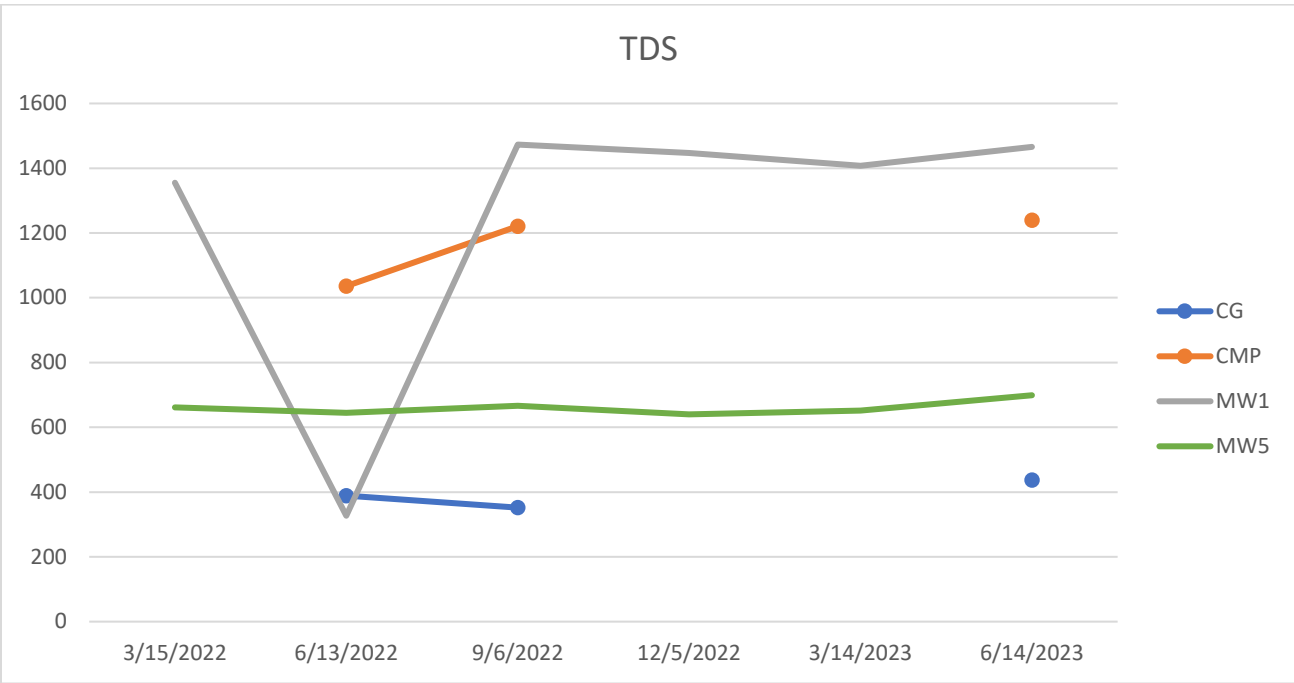
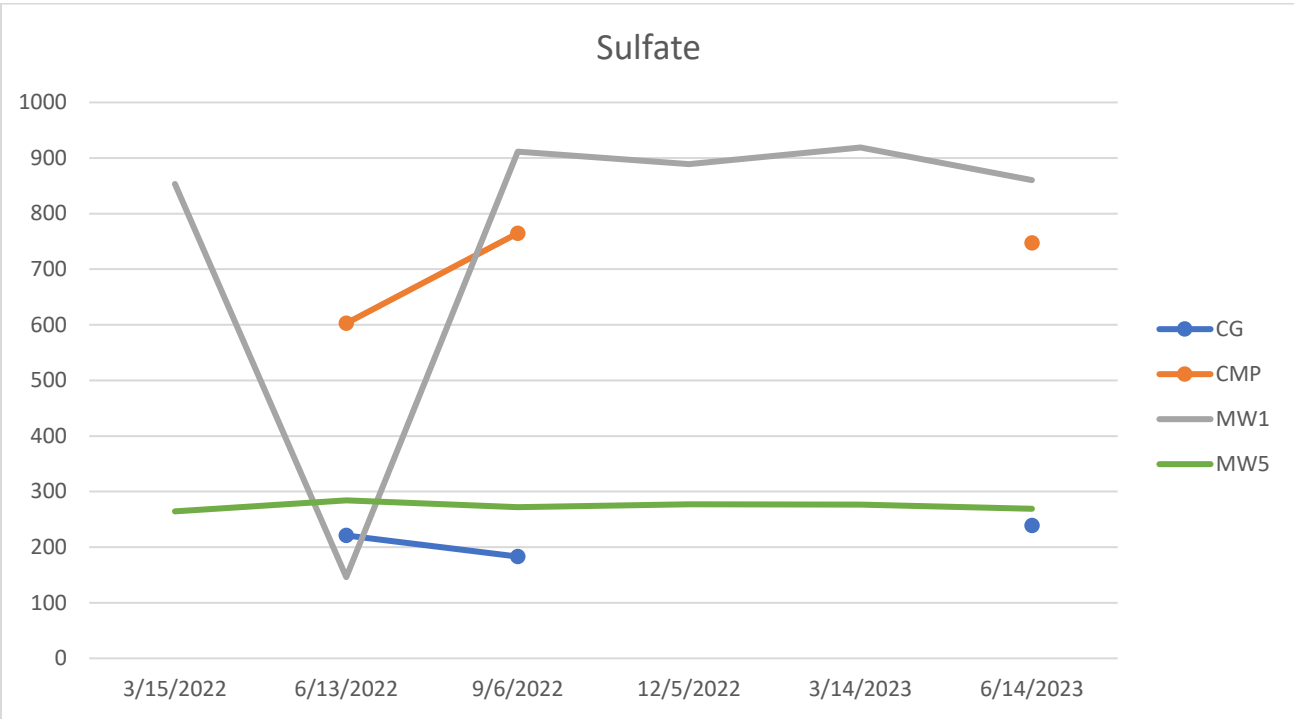




Cash Mine Analyte Graphs for the Past Five Quarters







Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID Left Hand Creek
Sample Date/Time: 6/14/23 7:40 PM
Lab Number: 230615108-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Total Alkalinity	16.1 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/20/23	QC65858	DN
Bicarbonate	16.1 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/20/23	-	DN
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	6/20/23	-	DN
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	6/20/23	-	DN
Chloride	6.67 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65784	NRP
Cyanide-Total	ND	EPA 335.4	0.005 mg/L	6/16/23	QC65772	DN
Cyanide-Weak Acid Dissociable	ND	ASTM 2036-09C	0.005 mg/L	6/21/23	QC65865	DPL
Fluoride	ND	EPA 300.0	1.00 mg/L	6/16/23	QC65785	NRP
Nitrate Nitrogen	ND	EPA 300.0	0.50 mg/L	6/16/23	QC65781	NRP
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	6/20/23	-	NRP
Nitrite Nitrogen	ND	EPA 300.0	0.30 mg/L	6/16/23	QC65782	NRP
Specific Conductance	75 umhos/cm @ 25c	EPA 120.1	5 umhos/cm @ 25c	6/15/23	-	AKF
Sulfate	8.79 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	47 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG

Dissolved

Chromium - Hexavalent	ND	SM 3500-Cr B	0.01 mg/L	6/22/23	QC65910	MAT
Mercury	ND	EPA 245.7	0.0002 mg/L	6/20/23	QC65820	MAT
Aluminum	0.058 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	6/21/23	QC65833	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Barium	0.0185 mg/L	EPA 200.8	0.0007 mg/L	6/21/23	QC65833	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	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: 230615108

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P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108

Client PO:

Client Project: Gold Hill

Date Received: 6/15/23

Date Reported: 6/27/23

Matrix: Water - Ground

Customer Sample ID Left Hand Creek

Sample Date/Time: 6/14/23 7:40 PM

Lab Number: 230615108-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Copper	0.0035 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Lead	0.0001 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0039 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Molybdenum	0.0005 mg/L	EPA 200.8	0.0005 mg/L	6/21/23	QC65833	MBN
Nickel	ND	EPA 200.8	0.0009 mg/L	6/21/23	QC65833	MBN
Zinc	0.008 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN
Boron	ND	EPA 200.7	0.05 mg/L	6/19/23	QC65777	MAT
Calcium	6.2 mg/L	EPA 200.7	0.1 mg/L	6/19/23	QC65777	MAT
Iron	0.052 mg/L	EPA 200.7	0.005 mg/L	6/19/23	QC65777	MAT
Magnesium	1.81 mg/L	EPA 200.7	0.02 mg/L	6/19/23	QC65777	MAT
<i>Total</i>						
Chromium - Trivalent	ND	Calculation	0.01 mg/L	6/23/23	-	MBN
Total Hardness	23.0 mg/L as CaCO ₃	SM 2340-B	0.1 mg/L as CaCO ₃	6/19/23	-	MAT
Mercury	ND	EPA 245.7	0.0002 mg/L	6/20/23	QC65820	MAT
Aluminum	0.104 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	6/21/23	QC65833	MBN
Copper	0.0038 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Lead	0.0003 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0091 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Molybdenum	0.0005 mg/L	EPA 200.8	0.0005 mg/L	6/21/23	QC65833	MBN
Calcium	6.2 mg/L	EPA 200.7	0.1 mg/L	6/19/23	QC65777	MAT

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

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID Left Hand Creek
Sample Date/Time: 6/14/23 7:40 PM
Lab Number: 230615108-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Total</i>						
Iron	0.100 mg/L	EPA 200.7	0.005 mg/L	6/19/23	QC65777	MAT
Magnesium	1.83 mg/L	EPA 200.7	0.02 mg/L	6/19/23	QC65777	MAT

Ammonium Sulfate buffer solution added upon arrival to laboratory to extend Hex-Cr hold time to 28 days.

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

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID Tailing Pond
Sample Date/Time: 6/14/23 12:30 PM
Lab Number: 230615108-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	698.14 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	1327 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<u>Dissolved</u>						
Arsenic	0.0021 mg/L	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.1656 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.004 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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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.

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID MW1

Sample Date/Time: 6/14/23 1:15 PM

Lab Number: 230615108-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	859.98 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	1466 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.3359 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.003 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID W1

Sample Date/Time: 6/14/23 4:25 PM

Lab Number: 230615108-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	54.01 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	188 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0015 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.016 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID W2

Sample Date/Time: 6/14/23 4:50 PM

Lab Number: 230615108-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	113.07 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	279 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	0.0003 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.045 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID W3

Sample Date/Time: 6/14/23 5:15 PM

Lab Number: 230615108-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	69.54 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	253 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0039 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.008 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID W4

Sample Date/Time: 6/14/23 5:48 PM

Lab Number: 230615108-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	132.76 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	498 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0050 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.001 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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ug/L = Micrograms Per Liter or PPB
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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: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID MW5

Sample Date/Time: 6/14/23 6:20 PM

Lab Number: 230615108-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	268.92 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	699 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<u>Dissolved</u>						
Arsenic	0.0012 mg/L	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.2567 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.001 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID Cash Mine Pond
Sample Date/Time: 6/14/23 6:35 PM
Lab Number: 230615108-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	747.19 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	1240 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<i><u>Dissolved</u></i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	0.0035 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.0216 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	1.38 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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

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

Analytical Results

TASK NO: 230615108

Report To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Jerry Jergensen

Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 230615108
Client PO:
Client Project: Gold Hill

Date Received: 6/15/23
Date Reported: 6/27/23
Matrix: Water - Ground

Customer Sample ID Cash Gulch
Sample Date/Time: 6/14/23 7:00 PM
Lab Number: 230615108-10

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	239.01 mg/L	EPA 300.0	0.10 mg/L	6/16/23	QC65786	NRP
Total Dissolved Solids	437 mg/L	SM 2540-C	5 mg/L	6/21/23	QC65831	ISG
<u>Dissolved</u>						
Arsenic	0.0009 mg/L	EPA 200.8	0.0006 mg/L	6/21/23	QC65833	MBN
Cadmium	0.0009 mg/L	EPA 200.8	0.0001 mg/L	6/21/23	QC65833	MBN
Manganese	0.2558 mg/L	EPA 200.8	0.0008 mg/L	6/21/23	QC65833	MBN
Zinc	0.347 mg/L	EPA 200.8	0.001 mg/L	6/21/23	QC65833	MBN

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

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

Analytical QC Summary

TASK NO: 230615108

Report To: Jerry Jergensen
Company: Colorado Milling CO

Receive Date: 6/15/23
Project Name: Gold Hill

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC65858	Blank	ND	SM 2320-B	6/21/23
Chloride	QC65784	Blank	ND	EPA 300.0	6/15/23
Chromium - Hexavalent	QC65910	Blank	ND	SM 3500-Cr B	6/22/23
Cyanide-Total	QC65772	Blank	ND	EPA 335.4	6/16/23
Cyanide-Weak Acid Dissociable	QC65865	Blank	ND	ASTM 2036-09C	6/21/23
Fluoride	QC65785	Blank	ND	EPA 300.0	6/15/23
Mercury	QC65820	Method Blank	ND	EPA 245.7	6/20/23
Aluminum	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Antimony	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Arsenic	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Barium	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Beryllium	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Cadmium	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Chromium	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Copper	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Lead	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Manganese	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Molybdenum	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Nickel	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Zinc	QC65833	Method Blank	ND	EPA 200.8	6/15/23
Boron	QC65777	Method Blank	ND	EPA 200.7	6/15/23
Calcium	QC65777	Method Blank	ND	EPA 200.7	6/15/23
Iron	QC65777	Method Blank	ND	EPA 200.7	6/15/23
Magnesium	QC65777	Method Blank	ND	EPA 200.7	6/15/23
Nitrate Nitrogen	QC65781	Blank	ND	EPA 300.0	6/15/23
Nitrite Nitrogen	QC65782	Blank	ND	EPA 300.0	6/15/23
Sulfate	QC65786	Blank	ND	EPA 300.0	6/15/23
Total Dissolved Solids	QC65831	Blank	ND	SM 2540-C	6/20/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC65858	Duplicate	0 - 20	-	3.1	SM 2320-B
		LCS	90 - 110	92.4	-	
		LCS-2	90 - 110	100.2	-	
Chloride	QC65784	Duplicate	0 - 20	-	0.6	EPA 300.0
		LCS	90 - 110	103.3	-	
		MS	75 - 125	85.7	-	
Chromium - Hexavalent	QC65910	Duplicate	0 - 20	-	0.0	SM 3500-Cr B
		LCS	90 - 110	101.6	-	
Cyanide-Total	QC65772	Duplicate	0 - 20	-	3.4	EPA 335.4
		LCS	90 - 110	90.9	-	
		MS	75 - 125	78.0	-	
Cyanide-Weak Acid Dissociable	QC65865	Duplicate	0 - 20	-	3.0	ASTM 2036-09C

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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
Fluoride	QC65785	LCS	90 - 110	96.1	-	EPA 300.0
		MS	75 - 125	93.5	-	
		Duplicate	0 - 20	-	0.7	
Mercury	QC65820	LCS	90 - 110	101.9	-	EPA 245.7
		MS	75 - 125	97.0	-	
		Duplicate	0 - 20	-	0.0	
Aluminum	QC65833	LCS	90 - 110	107.4	-	EPA 200.8
		MS	70 - 130	120.4	-	
		MSD	0 - 10	-	4.9	
Antimony	QC65833	LCS	90 - 110	106.4	-	EPA 200.8
		MS	70 - 130	113.2	-	
		MSD	0 - 10	-	0.2	
Arsenic	QC65833	LCS	90 - 110	102.5	-	EPA 200.8
		MS	70 - 130	121.3	-	
		MSD	0 - 10	-	2.2	
Barium	QC65833	LCS	90 - 110	102.9	-	EPA 200.8
		MS	70 - 130	72.2	-	
		MSD	0 - 10	-	0.5	
Beryllium	QC65833	LCS	90 - 110	103.2	-	EPA 200.8
		MS	70 - 130	111.7	-	
		MSD	0 - 10	-	0.0	
Cadmium	QC65833	LCS	90 - 110	104.7	-	EPA 200.8
		MS	70 - 130	107.8	-	
		MSD	0 - 10	-	0.8	
Chromium	QC65833	LCS	90 - 110	102.9	-	EPA 200.8
		MS	70 - 130	112.5	-	
		MSD	0 - 10	-	0.1	
Copper	QC65833	LCS	90 - 110	103.4	-	EPA 200.8
		MS	70 - 130	111.4	-	
		MSD	0 - 10	-	1.4	
Lead	QC65833	LCS	90 - 110	102.8	-	EPA 200.8
		MS	70 - 130	103.4	-	
		MSD	0 - 10	-	0.2	
Manganese	QC65833	LCS	90 - 110	108.3	-	EPA 200.8
		MS	70 - 130	116.5	-	
		MSD	0 - 10	-	1.2	
Molybdenum	QC65833	LCS	90 - 110	102.7	-	EPA 200.8
		MS	70 - 130	112.2	-	
		MSD	0 - 10	-	1.9	
Nickel	QC65833	LCS	90 - 110	103.9	-	EPA 200.8
		MS	70 - 130	106.8	-	
		MSD	0 - 10	-	0.6	
Zinc	QC65833	LCS	90 - 110	104.1	-	EPA 200.8
		MS	70 - 130	127.1	-	
		MSD	0 - 10	-	0.1	
Boron	QC65777	Duplicate	0 - 20	-	0.0	EPA 200.7
		LCS	90 - 110	100.1	-	
		MS	75 - 125	108.8	-	
Calcium	QC65777	Duplicate	0 - 20	-	1.1	EPA 200.7

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

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Iron	QC65777	LCS	90 - 110	102.8	-	EPA 200.7
		MS	75 - 125	94.4	-	
		Duplicate	0 - 20	-	5.7	
		LCS	90 - 110	99.6	-	
		MS	75 - 125	104.1	-	
		Duplicate	0 - 20	-	2.2	
Magnesium	QC65777	LCS	90 - 110	102.0	-	EPA 200.7
		MS	75 - 125	110.0	-	
		Duplicate	0 - 20	-	1.5	
Nitrate Nitrogen	QC65781	LCS	90 - 110	98.7	-	EPA 300.0
		MS	75 - 125	91.4	-	
		Duplicate	0 - 20	-	0.0	
Nitrite Nitrogen	QC65782	LCS	90 - 110	92.6	-	EPA 300.0
		MS	75 - 125	92.8	-	
		Duplicate	0 - 20	-	0.4	
Sulfate	QC65786	LCS	90 - 110	103.5	-	EPA 300.0
		MS	75 - 125	94.9	-	
		Duplicate	0 - 20	-	0.1	
Total Dissolved Solids	QC65831	LCS	85 - 115	97.7	-	SM 2540-C
		Duplicate	0 - 20	-	0.1	

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

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

Colorado
Analytical
LABORATORIES, INC.

www.coloradolab.com

Sample Matrix (Select One Only)				Tests Requested	
Waste Water ☐	Soil ☐	Drinking Water ☐			
Ground Water ☐	Sludge ☐				
Surface Water ☐					
Date	Time	Sample ID	No. of Containers	Grab or (Check One Only) Composite	
6/14/23	7:40 PM	Left hand creek (see attached sheet)	3	X	Ammonium Sulfate buffer solution added upon arrival to laboratory to extend Hex-Cr hold time to 28 days.
"	12:30 PM	tailings Pond	2	/	
"	1:15 PM	MW 1	2	/	
"	4:25 PM	W-1	2	/	
"	4:50 PM	W-2	2	/	
"	5:15 PM	W-3	2	/	
"	5:48 PM	W-4	2	/	
"	6:20 PM	MW-5	2	/	
"	6:35 PM	Cash mine Pond	2	/	
"	7:00 PM	Cash Gulch	2	/	
Instructions:			Seals Present Yes ☐ No ☐		
Tests are confirmed as history. H			C/S Info:		
Relinquished By: Lewis Robinson			Deliver Via: HD		
Date/Time: 6/15/23	Date/Time: 6/15/23	Date/Time: 6/15/23	C/S Charge ☐	Temp. 2 °C/ice	Sample Pres. Yes ☒ No ☐
Received By: [Signature]	Received By: [Signature]	Received By: [Signature]	Date/Time:	Date/Time:	Date/Time: