Lewicki & Associates
ENGINEERING | GEOLOGY | ENVIRONMENTAL

September 18, 2024
Revised: October 14, 2024

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

Delivered Via Email
Gold Hill Mill, Permit No. M-1994-117
Cash Mine, Permit No. M-1983-141

To Whom It May Concern

The second quarter, 2024 ("Q2/24") water sampling was conducted by Lewis Perkins, Colorado Milling Company, on June 20, 2024. However, those samples were lost. Therefore, additional samples were taken on July 16, 2024. Those samples were lab tested and are the basis for this report. A third quarter sampling occurred in September 2024, insuring that the water data gathered at Gold Hill Mill continues to cover variations across the year.

- **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,

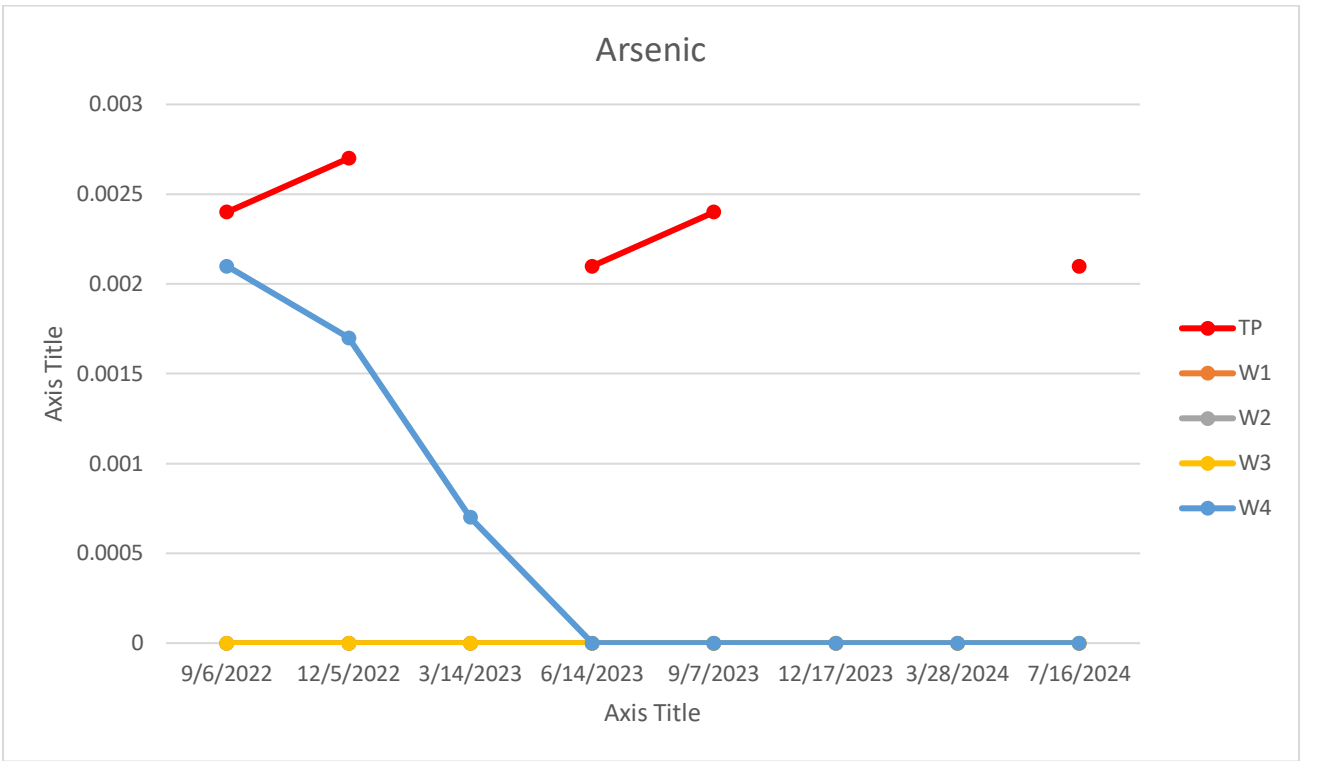
Ben Langenfeld, P.E.
Lewicki & Associates, PLLC
(720) 842-5321, ex. 1
benl@lewicki.biz

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	06/20/2024	14:05	34.4	7.5	12.5	773	240716120	07/16/2024	0	0	0	0.01	186	80.6
W-2	06/20/2024	14:15	32.4	7.25	10.2	446	240716120	07/16/2024	0	0.0003	0	0.05	268	138
W-3	06/20/2024	14:28	23.7	6.91	13	438	240716120	07/16/2024	0	0	0	0.005	257	98.4
W-4	06/20/2024	14:50	27.4	6.86	12.6	338	240716120	07/16/2024	0	0	0	0.001	203	52.7
TP	06/20/2024	16:25		7.68	20.6	1614	240716120	07/16/2024	0.0021	0	0	0	1396	782
	Cash Mine M-1983-141													
MW-1	06/20/2024	13:50	54.8	7.34	14.5	1602	240716120	07/16/2024	0	0.0005	0.1913	0.017	1417	867
MW-5	06/20/2024	15:45	9	7.35	16.5	903	240716120	07/16/2024	0.001	0	0.0543	0.002	684	327
CG	06/20/2024	15:50		7.85	12	456	240716120	07/16/2024	0	0.0003	0.0112	0.179	308	162
CMP	07/16/2024	15:45		8.02	18.9	90	240716120	07/16/2024	0.0009	0.0027	0.0009	0.737	1195	734

Analytes from lab analysis are dissolved.

Gold Hill Mill Analyte Graphs for the Past Five Quarters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0.002
0.0015
0.001
0.0005
0
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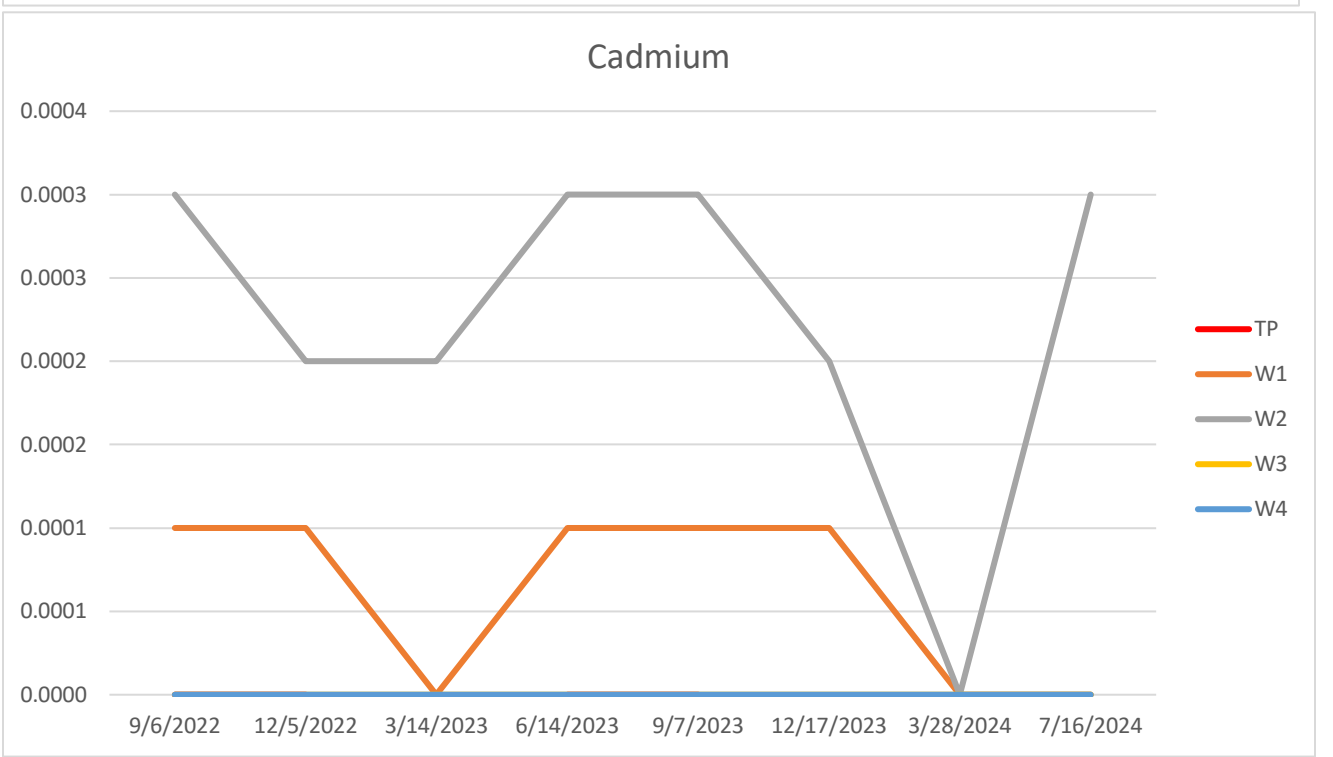
9/6/2022
12/5/2022
3/14/2023
6/14/2023
9/7/2023
12/17/2023
3/28/2024
7/16/2024
Axis Title
TP
W1
W2
W3
W4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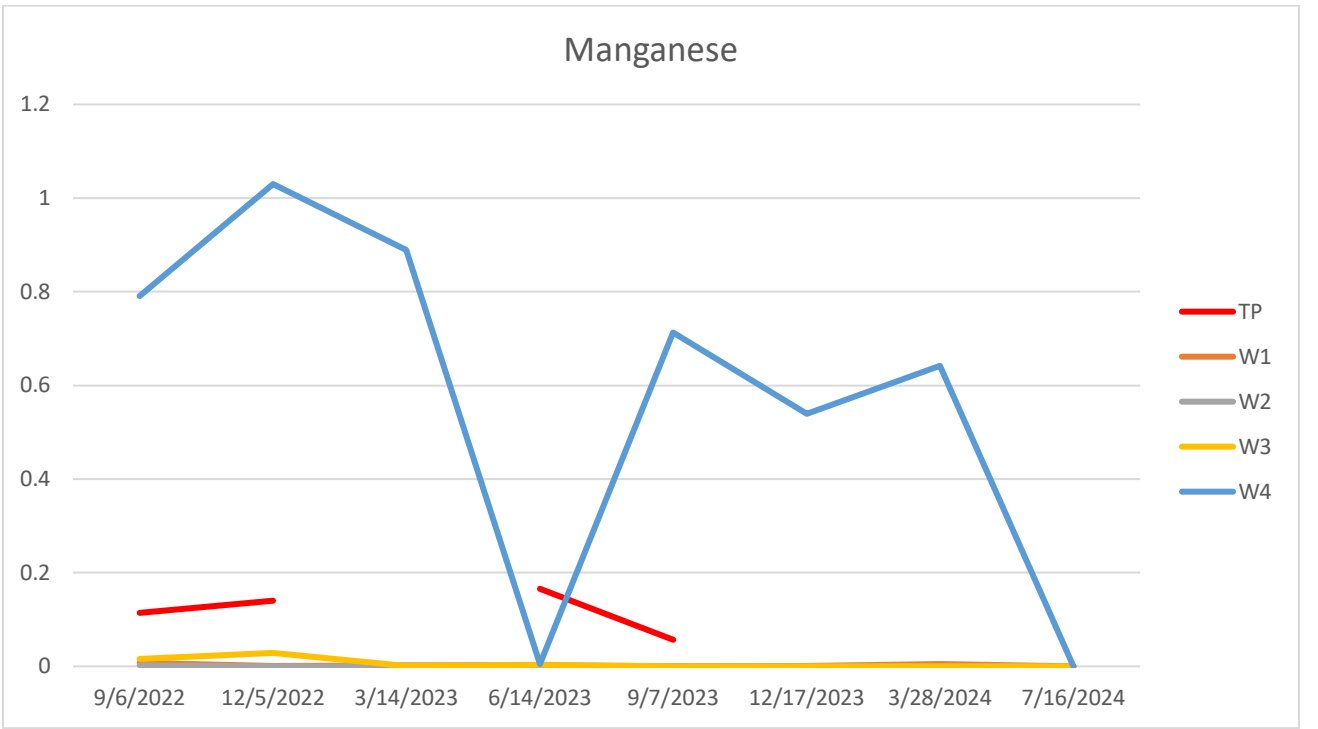
0.0003
0.0003
0.0002
0.0002
0.0001
0.0001
0.0000
9/6/2022
12/5/2022
3/14/2023
6/14/2023
9/7/2023
12/17/2023
3/28/2024
7/16/2024
TP
W1
W2
W3
W4


Manganese
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1
0.8
0.6
0.4
0.2
0
9/6/2022
12/5/2022
3/14/2023
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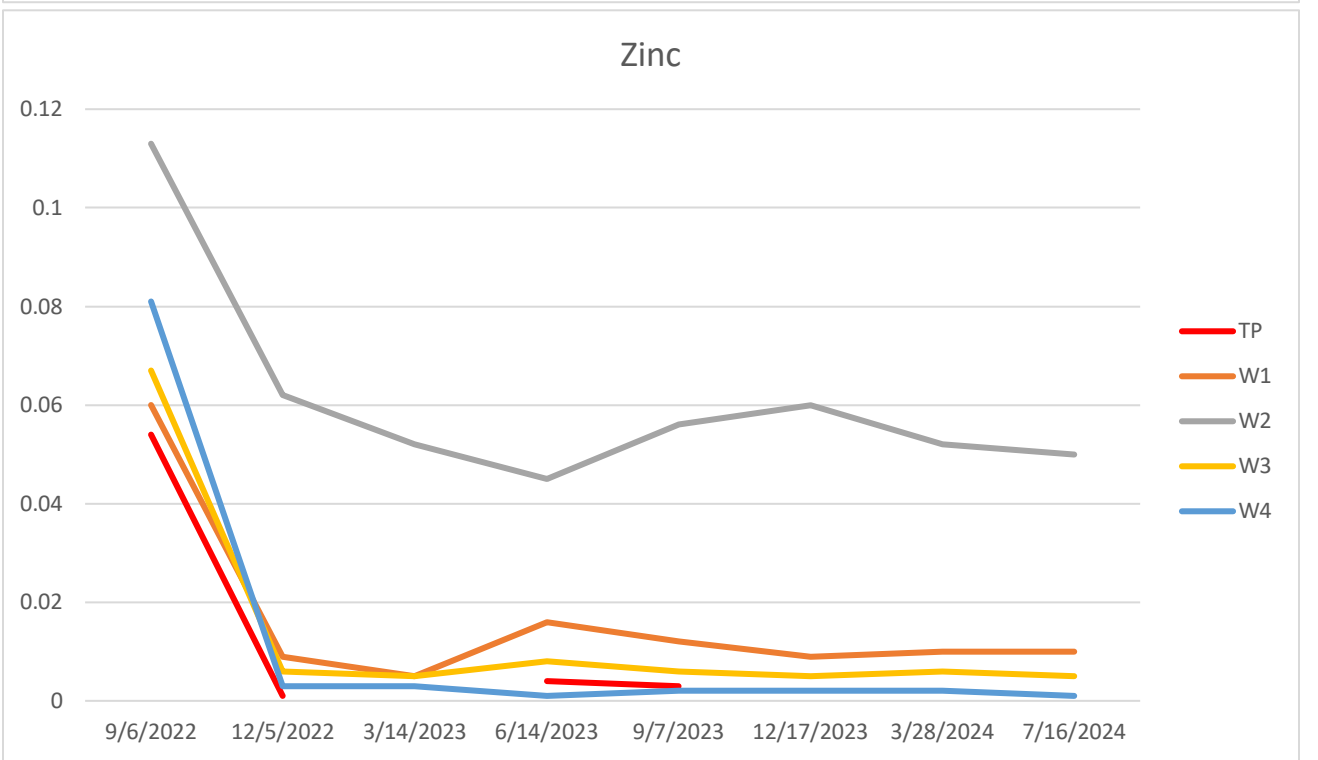
12/17/2023
3/28/2024
7/16/2024
TP
W1
W2
W3
W4


Zinc
0.12
0.1
0.08
0.06
0.04
0.02
0
9/6/2022
12/5/2022
3/14/2023
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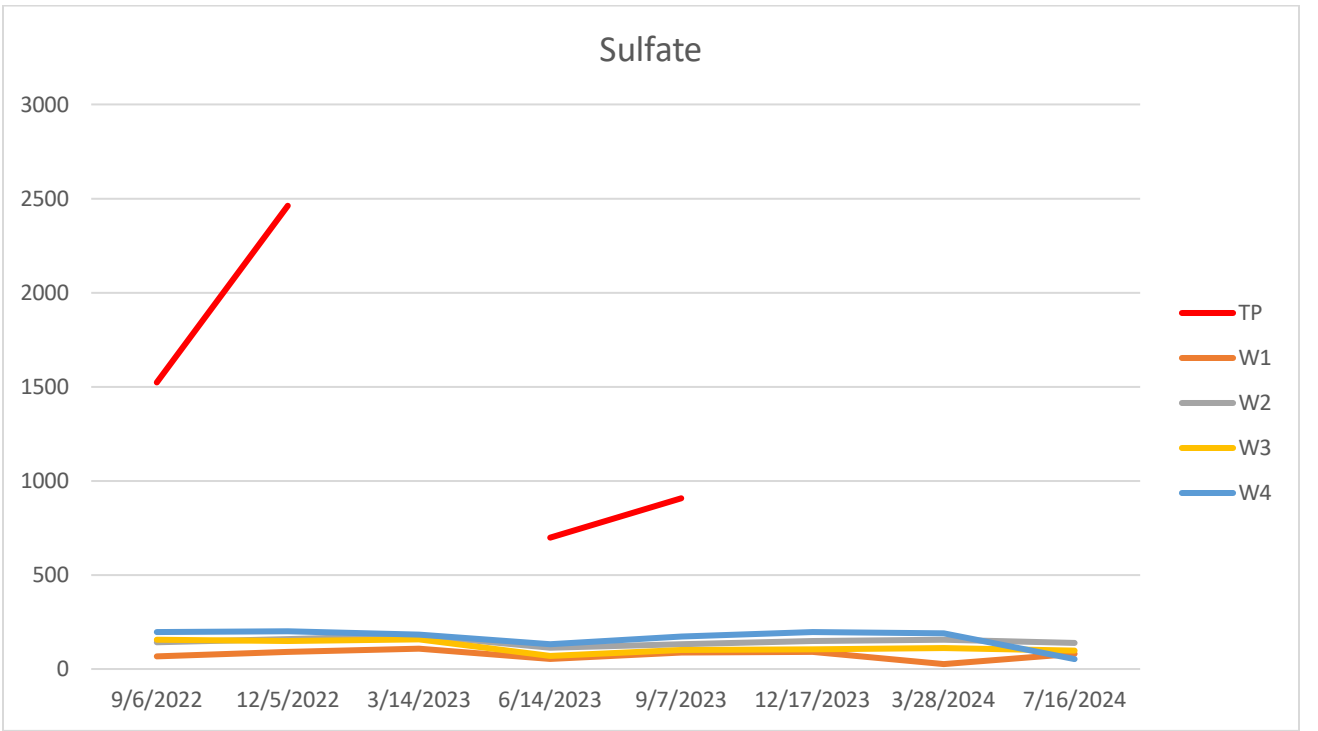
12/17/2023
3/28/2024
7/16/2024
TP
W1
W2
W3
W4


Sulfate
3000
2500
2000
1500
1000
500
0
9/6/2022
12/5/2022
3/14/2023
6/14/2023
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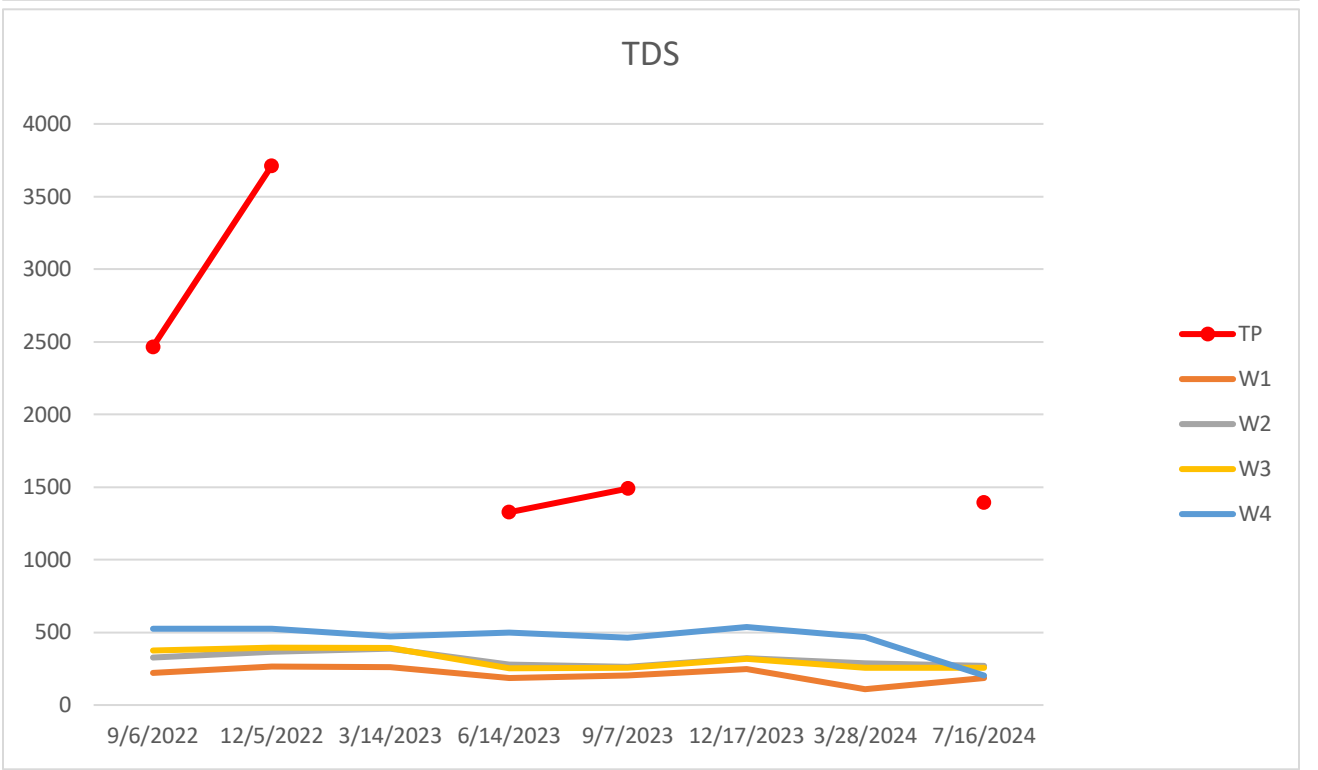
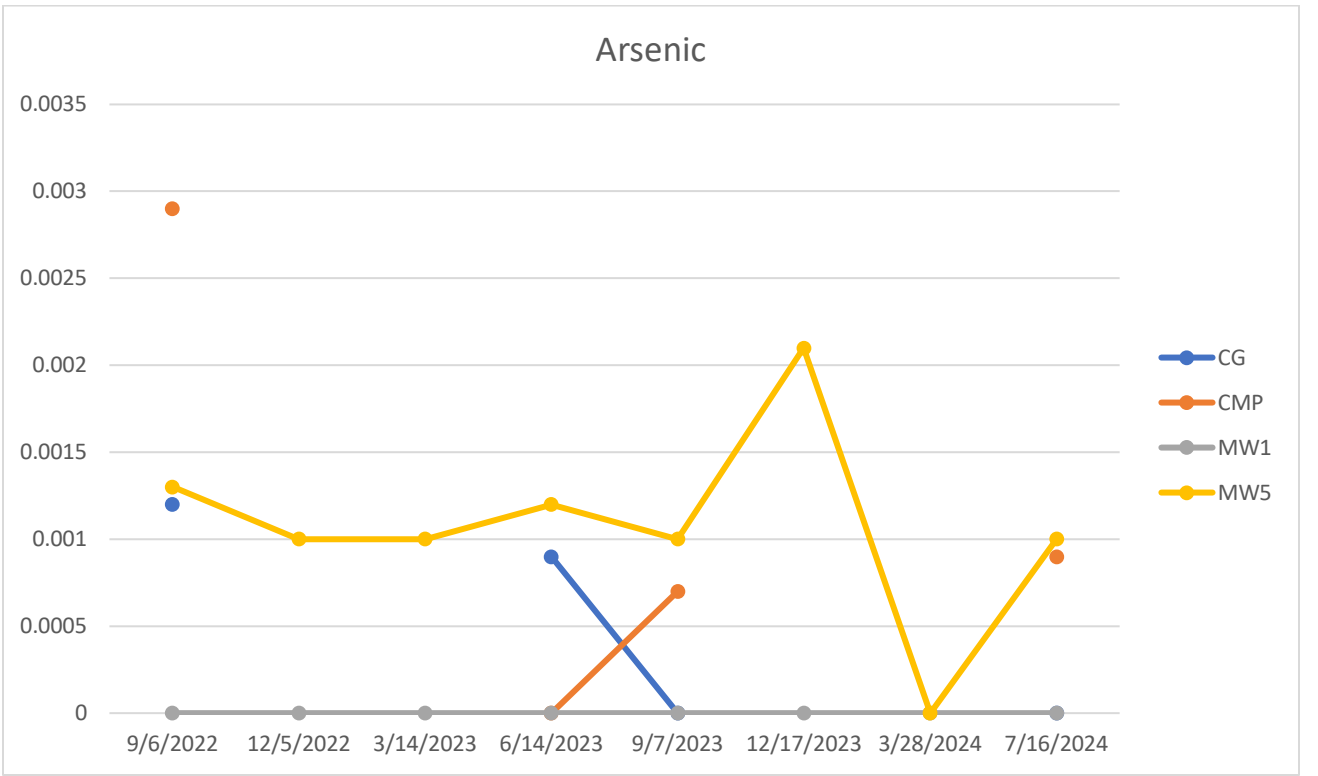
12/17/2023
3/28/2024
7/16/2024
TP
W1
W2
W3
W4


TDS
4000
3500
3000
2500
2000
1500
1000
500
0
9/6/2022
12/5/2022
3/14/2023
6/14/2023
9/7/2023
12/17/2023
3/28/2024
7/16/2024
TP
W1
W2
W3
W4

Cash Mine Analyte Graphs for the Past Five Quarters


Arsenic
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
9/6/2022
12/5/2022
3/14/2023
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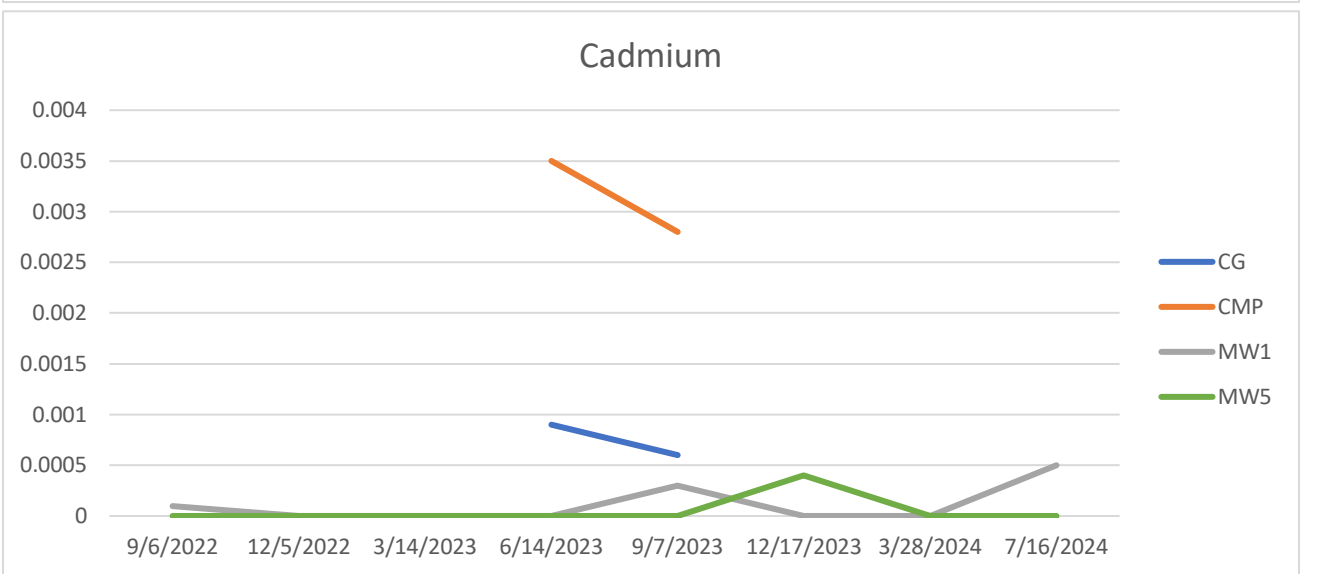
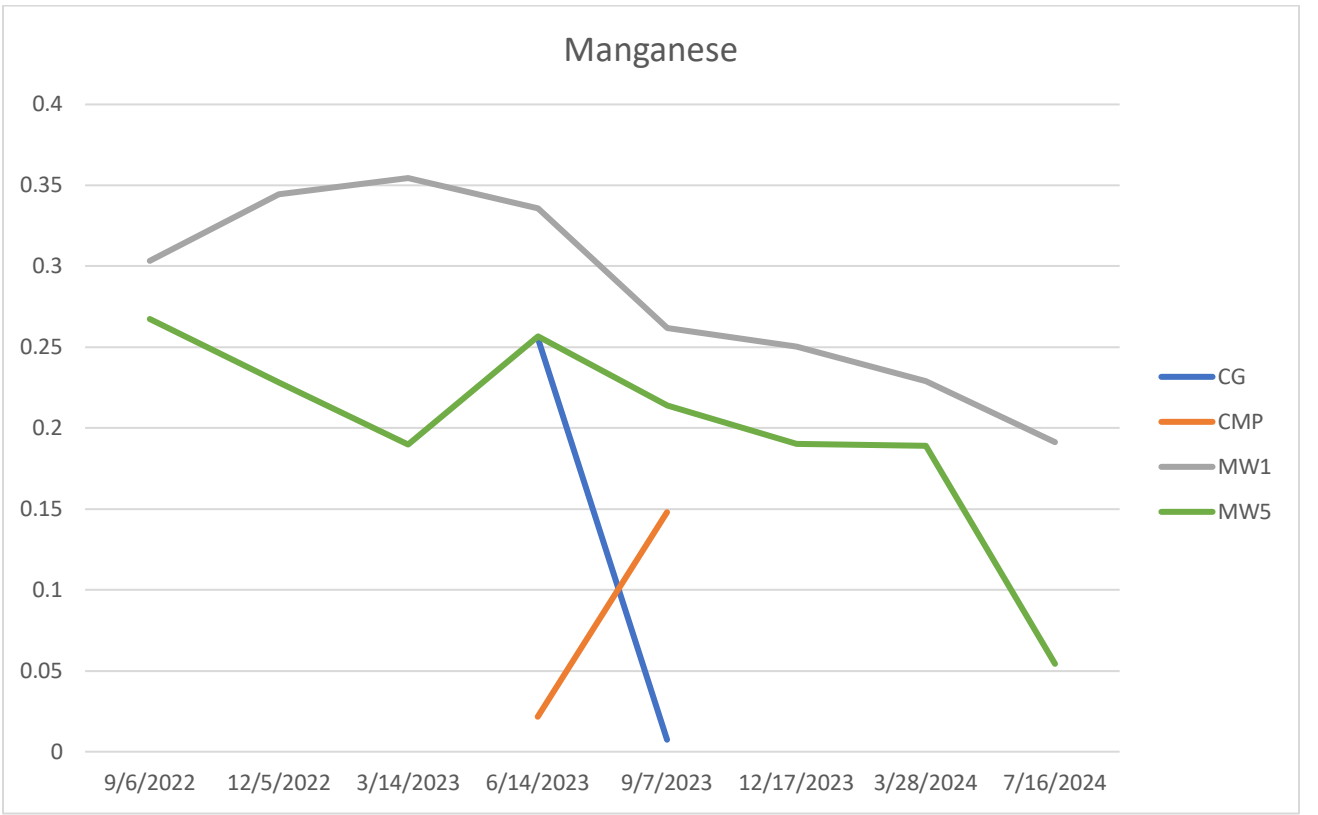
12/17/2023
3/28/2024
7/16/2024
CG
CMP
MW1
MW5


Cadmium
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
9/6/2022
12/5/2022
3/14/2023
6/14/2023
9/7/2023
12/17/2023
3/28/2024
7/16/2024
CG
CMP
MW1
MW5


Manganese
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
9/6/2022
12/5/2022
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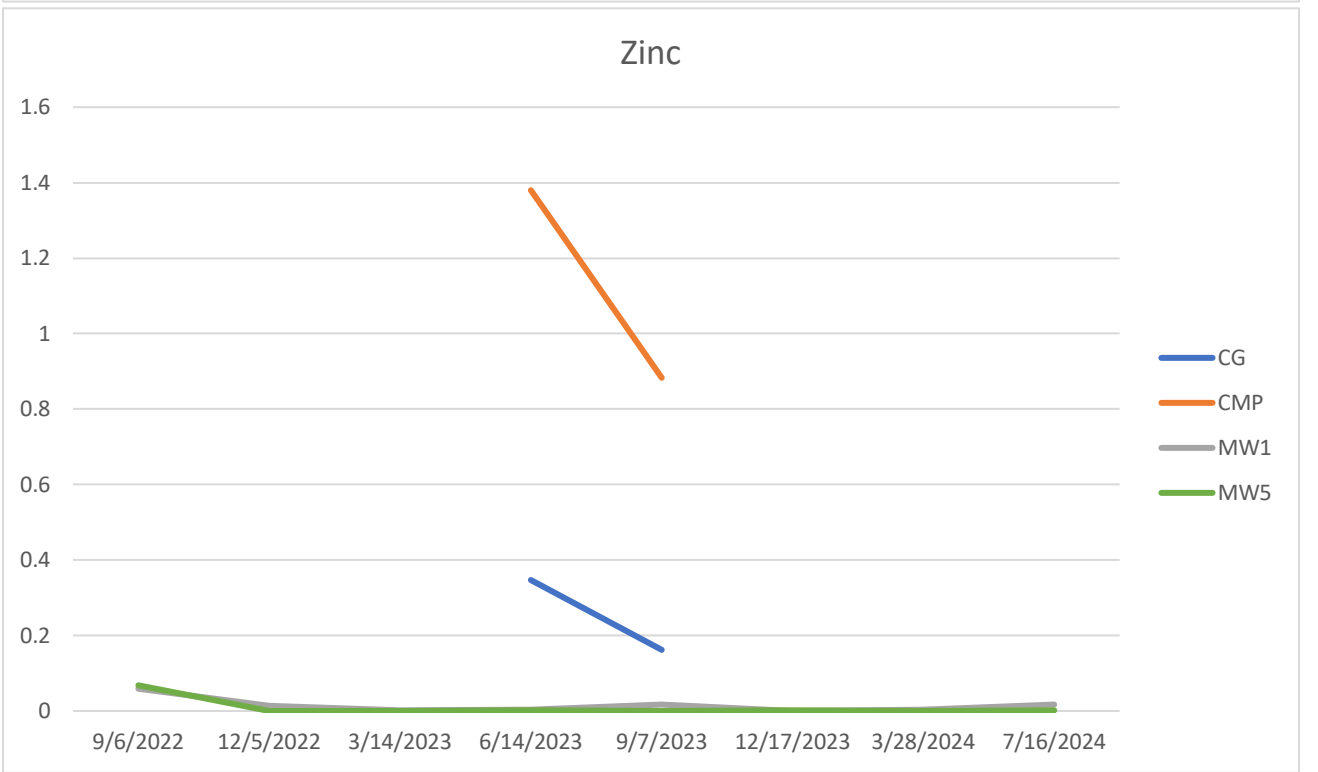
3/28/2024
7/16/2024
CG
CMP
MW1
MW5


Zinc
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1.4
1.2
1
0.8
0.6
0.4
0.2
0
9/6/2022
12/5/2022
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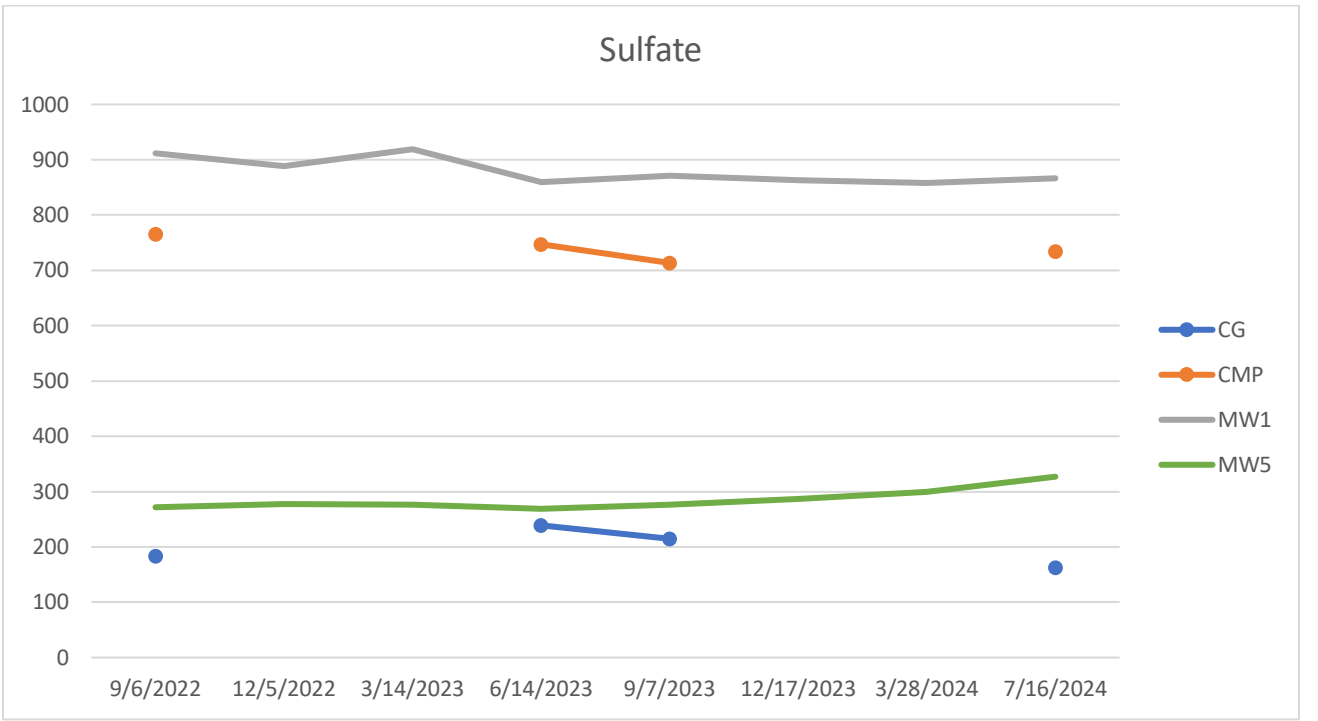
3/28/2024
7/16/2024
CG
CMP
MW1
MW5


Sulfate
1000
900
800
700
600
500
400
300
200
100
0
9/6/2022
12/5/2022
3/14/2023
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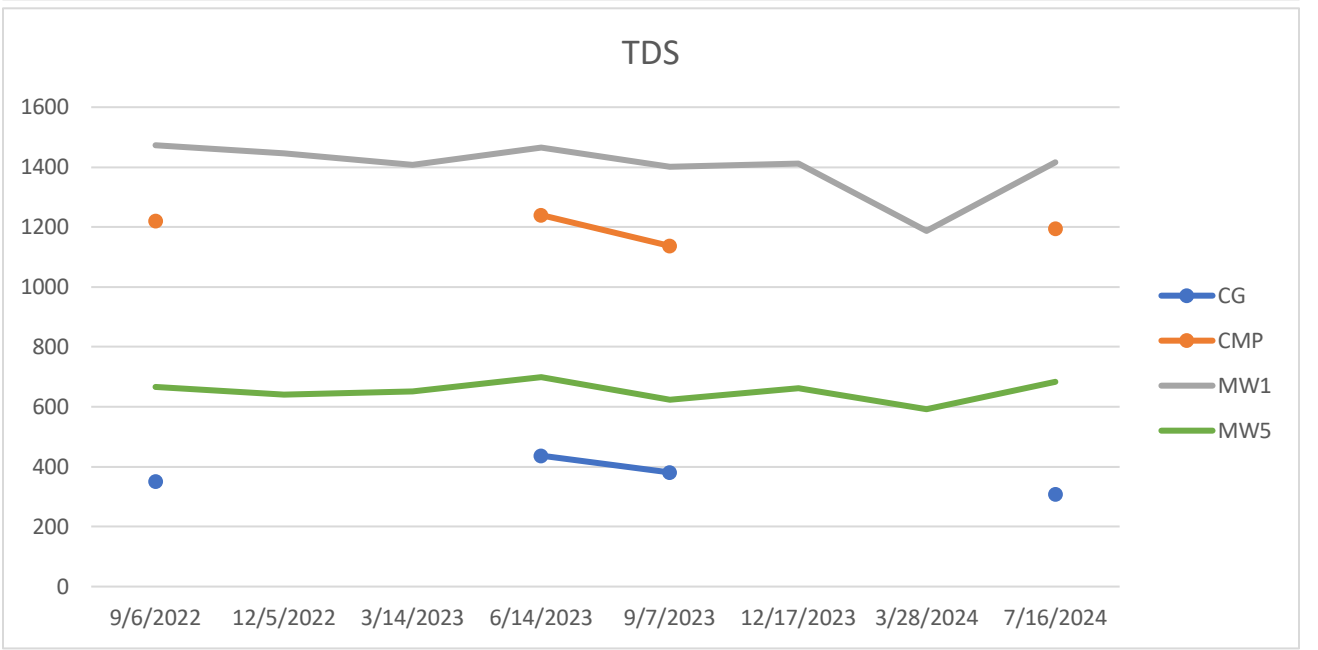
3/28/2024
7/16/2024
CG
CMP
MW1
MW5


TDS
1600
1400
1200
1000
800
600
400
200
0
9/6/2022
12/5/2022
3/14/2023
6/14/2023
9/7/2023
12/17/2023
3/28/2024
7/16/2024
CG
CMP
MW1
MW5

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID Left Hand Creek Composite
Sample Date/Time: 7/15/24 5:05 PM
Lab Number: 240716120-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Total Alkalinity	**14.1 mg/L as CaCO3**	SM 2320-B	4.0	1	7/17/24	QC74826	KJP
Bicarbonate	**14.1 mg/L as CaCO3**	SM 2320-B	0.2	0.2	7/17/24	-	KJP
Carbonate	**ND mg/L as CaCO3**	SM 2320-B	0.2	0.2	7/17/24	-	KJP
Hydroxide	**ND mg/L as CaCO3**	SM 2320-B	0.2	0.2	7/17/24	-	KJP
Chloride	**3.53 mg/L**	EPA 300.0	0.10	0.007	7/17/24	QC74803	NRP
Cyanide-Total	**ND mg/L**	EPA 335.4	0.005	0.0005	7/17/24	QC74809	KRB
Cyanide-Weak Acid Dissociable	**ND mg/L**	ASTM 2036-09C	0.005	0.0005	7/17/24	QC74810	KRB
Fluoride	**ND mg/L**	EPA 300.0	0.10	0.024	7/17/24	QC74800	NRP
Nitrate Nitrogen	**ND mg/L**	EPA 300.0	0.05	0.02	7/17/24	QC74801	NRP
Nitrate/ Nitrite Nitrogen	**ND mg/L**	Calculation	0.05	0.02	7/18/24	-	AMJ
Nitrite Nitrogen	**ND mg/L**	EPA 300.0	0.03	0.01	7/17/24	QC74802	NRP
Specific Conductance	**60 umhos/cm @ 25c**	EPA 120.1	5	5	7/16/24	-	KJP
Sulfate	**7.85 mg/L**	EPA 300.0	0.10	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**51 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Chromium - Hexavalent	**ND mg/L**	SM 3500-Cr B	0.02	0.01	7/17/24	QC74813	AMJ
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	7/18/24	QC74840	JJA
Aluminum	**0.012 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN
Antimony	**ND mg/L**	EPA 200.8	0.0012	0.00012	7/17/24	QC74812	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Barium	**0.0156 mg/L**	EPA 200.8	0.0007	0.00007	7/17/24	QC74812	MBN
Beryllium	**ND mg/L**	EPA 200.8	0.0001	0.000008	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Copper	**0.0021 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

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

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID Left Hand Creek Composite
Sample Date/Time: 7/15/24 5:05 PM
Lab Number: 240716120-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Dissolved							
Lead	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Molybdenum	**0.0005 mg/L**	EPA 200.8	0.0005	0.00005	7/17/24	QC74812	MBN
Nickel	**ND mg/L**	EPA 200.8	0.0009	0.00005	7/17/24	QC74812	MBN
Zinc	**0.004 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN
Boron	**ND mg/L**	EPA 200.7	0.05	0.01	7/18/24	QC74819	MBN
Calcium	**6.5 mg/L**	EPA 200.7	0.1	0.01	7/18/24	QC74819	MBN
Iron	**0.018 mg/L**	EPA 200.7	0.005	0.0005	7/18/24	QC74819	MBN
Magnesium	**1.71 mg/L**	EPA 200.7	0.02	0.002	7/18/24	QC74819	MBN
Total							
Chromium - Trivalent	**ND mg/L**	Calculation	0.02	0.01	7/17/24	-	MBN
Total Hardness	**22.1 mg/L as CaCO3**	SM 2340-B	0.1	-	7/18/24	-	MBN
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	7/18/24	QC74840	JJA
Aluminum	**0.029 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Chromium	**ND mg/L**	EPA 200.8	0.0015	0.00015	7/17/24	QC74812	MBN
Copper	**0.0026 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Lead	**0.0002 mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**0.0053 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Molybdenum	**0.0005 mg/L**	EPA 200.8	0.0005	0.00005	7/17/24	QC74812	MBN
Calcium	**6.2 mg/L**	EPA 200.7	0.1	0.01	7/18/24	QC74819	MBN
Iron	**0.063 mg/L**	EPA 200.7	0.005	0.0005	7/18/24	QC74819	MBN
Magnesium	**1.62 mg/L**	EPA 200.7	0.02	0.002	7/18/24	QC74819	MBN

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

Abbreviations/ References:

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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.

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Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID Tailing Pond Composite
Sample Date/Time: 7/15/24 5:20 PM
Lab Number: 240716120-02

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**782 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**1396 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**0.0021 mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**ND mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

Abbreviations/ References:

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MDL = Method Detection Limit
mg/L = Milligrams Per Liter or PPM
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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

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Analytical Results

TASK NO: 240716120

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

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID MW1 Composite
Sample Date/Time: 7/15/24 2:05 PM
Lab Number: 240716120-03

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**867 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**1417 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**0.0005 mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**0.1913 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.017 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	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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Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID W1 Composite
Sample Date/Time: 7/15/24 2:20 PM
Lab Number: 240716120-04

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**80.6 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**186 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.010 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

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

(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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID W2 Composite
Sample Date/Time: 7/15/24 2:30 PM
Lab Number: 240716120-05

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**138 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**268 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**0.0003 mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.050 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

Abbreviations/ References:

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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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID W3 Composite
Sample Date/Time: 7/15/24 2:40 PM
Lab Number: 240716120-06

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**98.4 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**257 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.005 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

Abbreviations/ References:

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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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID W4 Composite
Sample Date/Time: 7/15/24 2:55 PM
Lab Number: 240716120-07

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**52.7 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**203 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**ND mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.001 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

Abbreviations/ References:

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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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID MW5 Composite
Sample Date/Time: 7/15/24 3:35 PM
Lab Number: 240716120-08

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**327 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**684 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**0.0010 mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**0.0543 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.002 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

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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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID Cash Mine Pond Composite
Sample Date/Time: 7/15/24 3:50 PM
Lab Number: 240716120-09

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**734 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**1195 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**0.0009 mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**0.0027 mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**0.0009 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.737 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

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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.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Bill To: Ben Langenfeld
Company: Colorado Milling CO
P.O. Box 99
Moab UT 84532

Task No.: 240716120
Client PO:
Client Project: Gold Hill

Date Received: 7/16/24
Date Reported: 7/29/24
Matrix: Water - Ground

Customer Sample ID Cash Gulch Composite
Sample Date/Time: 7/15/24 4:10 PM
Lab Number: 240716120-10

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	**162 mg/L**	EPA 300.0	1.00	0.012	7/17/24	QC74805	NRP
Total Dissolved Solids	**308 mg/L**	SM 2540-C	5	2	7/23/24	QC74897	ISG
Dissolved							
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	7/17/24	QC74812	MBN
Cadmium	**0.0003 mg/L**	EPA 200.8	0.0001	0.000006	7/17/24	QC74812	MBN
Manganese	**0.0112 mg/L**	EPA 200.8	0.0008	0.00001	7/17/24	QC74812	MBN
Zinc	**0.179 mg/L**	EPA 200.8	0.001	0.00003	7/17/24	QC74812	MBN

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

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ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 240716120

Report To: Ben Langenfeld
Company: Colorado Milling CO

Receive Date: 7/16/24
Project Name: Gold Hill

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC74826	Blank	ND	SM 2320-B	7/16/24
Chloride	QC74803	Blank	ND	EPA 300.0	7/16/24
Chromium - Hexavalent	QC74813	Blank	ND	SM 3500-Cr B	7/17/24
Cyanide-Total	QC74809	Blank	ND	EPA 335.4	7/17/24
Cyanide-Weak Acid Dissociable	QC74810	Blank	ND	ASTM 2036-09C	7/17/24
Fluoride	QC74800	Blank	ND	EPA 300.0	7/16/24
Mercury	QC74840	Method Blank	ND	EPA 245.7	7/18/24
Aluminum	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Antimony	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Arsenic	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Barium	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Beryllium	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Cadmium	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Chromium	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Copper	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Lead	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Manganese	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Molybdenum	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Nickel	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Zinc	QC74812	Method Blank	ND	EPA 200.8	7/16/24
Boron	QC74819	Method Blank	ND	EPA 200.7	7/16/24
Calcium	QC74819	Method Blank	ND	EPA 200.7	7/16/24
Iron	QC74819	Method Blank	ND	EPA 200.7	7/16/24
Magnesium	QC74819	Method Blank	ND	EPA 200.7	7/16/24
Nitrate Nitrogen	QC74801	Blank	ND	EPA 300.0	7/16/24
Nitrite Nitrogen	QC74802	Blank	ND	EPA 300.0	7/16/24
Sulfate	QC74805	Blank	ND	EPA 300.0	7/16/24
Total Dissolved Solids	QC74897	Blank	ND	SM 2540-C	7/22/24

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC74826	Duplicate -240712014-03	0 - 20	-	0.4	SM 2320-B
		LCS	90 - 110	97.9	-	
		LCS-2	90 - 110	102.9	-	
Chloride	QC74803	Duplicate -240715069-01	0 - 20	-	0.8	EPA 300.0
		LCS	90 - 110	101.8	-	
		MS -240715069-01	75 - 125	97.4	-	
Chromium - Hexavalent	QC74813	Duplicate -240709086-01	0 - 20	-	0.0	SM 3500-Cr B
		LCS	90 - 110	102.8	-	
Cyanide-Total	QC74809	Duplicate -240711114-01	0 - 20	-	0.0	EPA 335.4
		LCS	90 - 110	96.1	-	
		MS -240710189-01	75 - 125	100.0	-	
Cyanide-Weak Acid Dissociable	QC74810	Duplicate -240711077-03	0 - 20	-	5.7	ASTM 2036-09C

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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.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		LCS	90 - 110	98.1	-	
		MS -240711044-06C	75 - 125	94.5	-	
Fluoride	QC74800	Duplicate -240715033-01	0 - 20	-	0.5	EPA 300.0
		LCS	90 - 110	98.1	-	
		MS -240715033-01	75 - 125	89.5	-	
Mercury	QC74840	Duplicate -240711017-21	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	101.8	-	
		MS -240711017-21	80 - 120	96.0	-	
Aluminum	QC74812	LCS	90 - 110	104.6	-	EPA 200.8
		MS -240716039-01	70 - 130	104.7	-	
		MSD -240716039-01	0 - 10	-	0.0	
Antimony	QC74812	LCS	90 - 110	104.4	-	EPA 200.8
		MS -240716039-01	70 - 130	91.7	-	
		MSD -240716039-01	0 - 10	-	3.2	
Arsenic	QC74812	LCS	90 - 110	99.0	-	EPA 200.8
		MS -240716039-01	70 - 130	103.0	-	
		MSD -240716039-01	0 - 10	-	1.2	
Barium	QC74812	LCS	90 - 110	101.3	-	EPA 200.8
		MS -240716039-01	70 - 130	115.1	-	
		MSD -240716039-01	0 - 10	-	0.3	
Beryllium	QC74812	LCS	90 - 110	105.5	-	EPA 200.8
		MS -240716039-01	70 - 130	115.7	-	
		MSD -240716039-01	0 - 10	-	0.1	
Cadmium	QC74812	LCS	90 - 110	97.9	-	EPA 200.8
		MS -240716039-01	70 - 130	97.8	-	
		MSD -240716039-01	0 - 10	-	3.1	
Chromium	QC74812	LCS	90 - 110	101.9	-	EPA 200.8
		MS -240716039-01	70 - 130	102.1	-	
		MSD -240716039-01	0 - 10	-	3.2	
Copper	QC74812	LCS	90 - 110	97.3	-	EPA 200.8
		MS -240716039-01	70 - 130	102.7	-	
		MSD -240716039-01	0 - 10	-	1.8	
Lead	QC74812	LCS	90 - 110	107.5	-	EPA 200.8
		MS -240716039-01	70 - 130	107.9	-	
		MSD -240716039-01	0 - 10	-	0.0	
Manganese	QC74812	LCS	90 - 110	102.0	-	EPA 200.8
		MS -240716039-01	70 - 130	113.2	-	
		MSD -240716039-01	0 - 10	-	0.0	
Molybdenum	QC74812	LCS	90 - 110	97.0	-	EPA 200.8
		MS -240716039-01	70 - 130	104.5	-	
		MSD -240716039-01	0 - 10	-	1.2	
Nickel	QC74812	LCS	90 - 110	101.0	-	EPA 200.8
		MS -240716039-01	70 - 130	98.9	-	
		MSD -240716039-01	0 - 10	-	1.5	
Zinc	QC74812	LCS	90 - 110	98.0	-	EPA 200.8
		MS -240716039-01	70 - 130	88.0	-	
		MSD -240716039-01	0 - 10	-	1.7	
Boron	QC74819	Duplicate -240716031-01	0 - 20	-	0.0	EPA 200.7
		LCS	90 - 110	102.8	-	
		MS -240716034-12	75 - 125	93.4	-	
Calcium	QC74819	Duplicate -240716031-01	0 - 20	-	15.2	EPA 200.7

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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

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Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		LCS	90 - 110	97.4	-	
		MS -240716034-12	75 - 125	107.2	-	
Iron	QC74819	Duplicate -240716031-01	0 - 20	-	8.3	EPA 200.7
		LCS	90 - 110	105.4	-	
		MS -240716034-12	75 - 125	103.3	-	
Magnesium	QC74819	Duplicate -240716031-01	0 - 20	-	16.6	EPA 200.7
		LCS	90 - 110	99.3	-	
		MS -240716034-12	75 - 125	107.0	-	
Nitrate Nitrogen	QC74801	Duplicate -240715033-01	0 - 20	-	0.8	EPA 300.0
		LCS	90 - 110	99.0	-	
		MS -240715033-01	75 - 125	89.1	-	
Nitrite Nitrogen	QC74802	Duplicate -240715033-01	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	92.9	-	
		MS -240715033-01	75 - 125	90.0	-	
Sulfate	QC74805	Duplicate -240715069-01	0 - 20	-	0.2	EPA 300.0
		LCS	90 - 110	99.3	-	
		MS -240715069-01	75 - 125	106.3	-	
Total Dissolved Solids	QC74897	Duplicate -240716118-02	0 - 10	-	2.2	SM 2540-C
		LCS	85 - 115	99.9	-	

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

(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

Colorado Analytical 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: Colorado Milling Co	Company Name:	
Contact Name: Ben Langenfeld	Contact Name:	
Address: Lewicki & associates	Address:	Task Number (Lab Use Only)
City State Zip	City State Zip	CAL Task 240716120 JML
Phone: 303-960-5613	Phone:	
Email: Ben1@lewicki	Email:	
Sample Collector:		
Sample Collector Phone:	PO No.:	

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

Initials: JH Date: 7-16-24

tests confirmed per history JH

Sample Matrix (Select One Only)

Waste Water ☐ Soil ☐ Drinking Water ☐
Ground Water ☐ Sludge ☐
Surface Water ☐

Date	Time	Sample ID	No. of Containers	Grab or (Check One Only) Composite	Tests: AS	CO	WAD	24	Residue/TDS	Sulfate	
7/15/24	5:05 PM	Left hand creek (see enclosed test list) (only this one)	3	- X	X	X	X	X	X	X	
"	5:20 PM	Tailing Pond	2	- X	X	X	X	X	X	X	
"	2:05 PM	MW-1	2	- X	X	X	X	X	X	X	
"	2:20 PM	W-1	2	- X	X	X	X	X	X	X	
"	2:30 PM	W-2	2	- X	X	X	X	X	X	X	
"	2:40 PM	W-3	2	- X	X	X	X	X	X	X	
"	2:55 PM	W-4	2	- X	X	X	X	X	X	X	
"	3:35 PM	MW-5	2	- X	X	X	X	X	X	X	
"	3:50 PM	Cash mine Pond (21)	2	- X	X	X	X	X	X	X	
"	4:10 PM	Cash Gulch	2	- X	X	X	X	X	X	X	

Per history, prior conversation w/ customer $ container provided cyanide WAD/Total is needed, DO Not perform field parameters. -JH 7/16/24

Instructions: Paid Check

C/S Info:
Deliver Via: Hand C/S Charge ☐

Seals Present Yes ☐ No ☐
Temp. 1.4 °C/Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
L. Perkins	7/16/24 11:06 PM						7/16/24 11:06

CAL Task
240716120
JML

Aluminum, dissolved
Aluminum, total
Antimony, dissolved
Arsenic, dissolved
Arsenic, total
Barium, dissolved
Beryllium, dissolved
Bicarbonate as CaCO3
Boron, dissolved
Cadmium, dissolved
Cadmium, total
Calcium, dissolved
Carbonate as CaCO3
Cation-Anion Balance
Chloride
Chromium, total
Chromium, Trivalent Total
Conductivity @25C
Copper, dissolved
Copper, total
~~Cyanide, total~~ †
~~Cyanide, WAD~~ *
Dissolved Chromium, Hexavalent
Field Conductivity @25C
Field Dissolved Oxygen
Field pH
Field Temperature
Field Turbidity
Fluoride
Hardness as CaCO3 (dissolved)
Hydroxide as CaCO3
Iron, dissolved
Iron, total
Lead, dissolved
Lead, total
Magnesium, dissolved
Manganese, dissolved
Manganese, total
Mercury, dissolved
Mercury, total
Molybdenum, dissolved
Molybdenum, total
Nickel, dissolved
Nitrate/Nitrite as N

For left hand creek only testing