



Request for Additional Information, 4Q2022 GW/SW Reports, Gold Hill Mill and Cash & Who Do Mines

Ben Langenfeld <benl@lewicki.biz>

Thu, Jan 26, 2023 at 8:48 AM

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

Patrick

Please see the attached revised data report, which addresses your questions.

Ben Langenfeld

benl@lewicki.biz

(303) 960 5613

[Quoted text hidden]



GHM-Q4 2022 Water Sampling Report.pdf

1464K

January 11, 2023

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

Delivered Via Email

RE: Q4 2022 Water Sampling Results
Gold Hill Mill, Permit No. M-1994-117
Cash Mine, Permit No. M-1983-141

To Whom It May Concern

The fourth quarter, 2022 ("Q4/22") water sampling was conducted by Lewis Perkins, Colorado Milling Company, on December 5, 2022.

- **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.

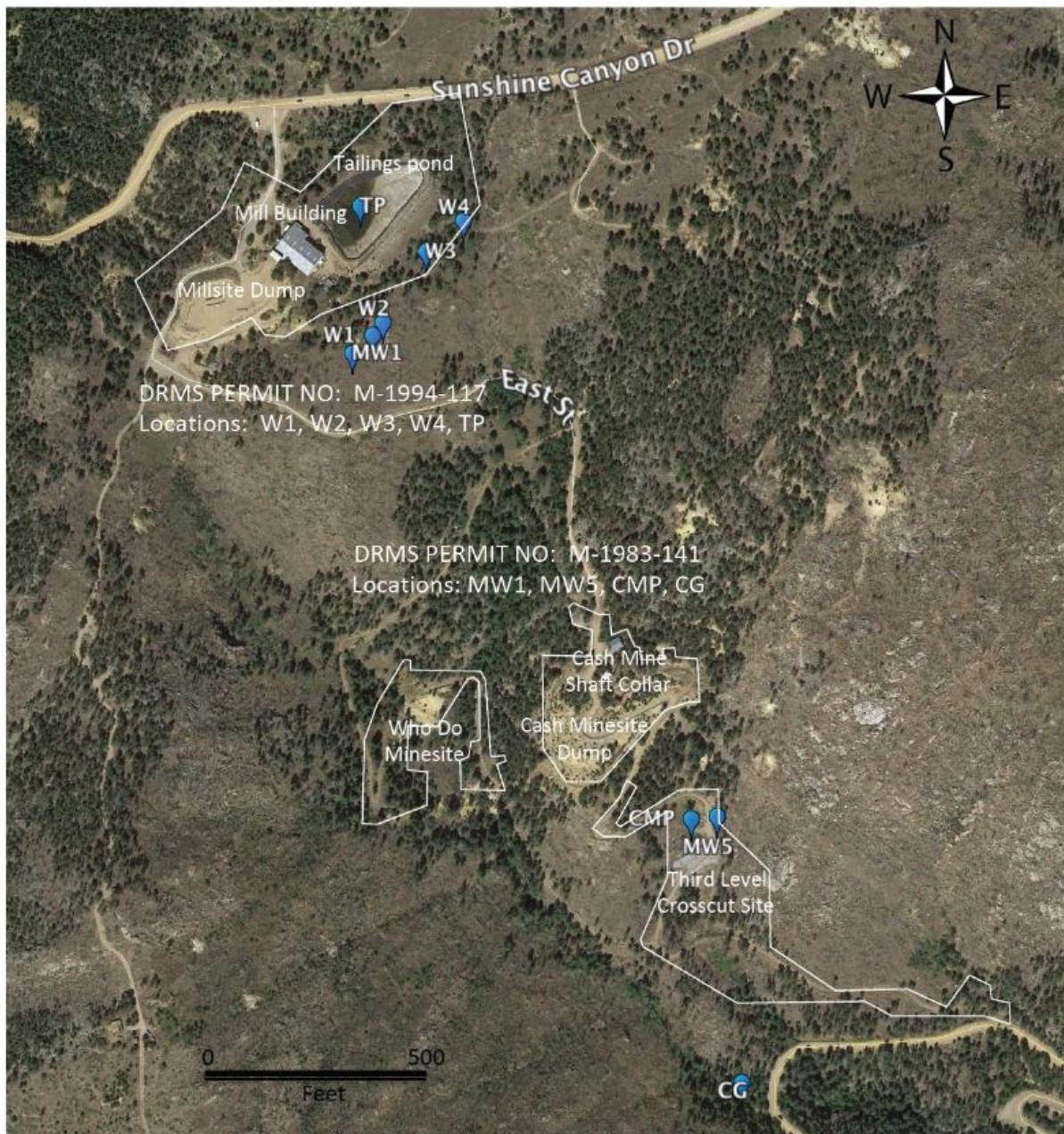
Note that zero values in the graphs represent "non-detect" results.

Please contact me with any questions.

Regards,



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

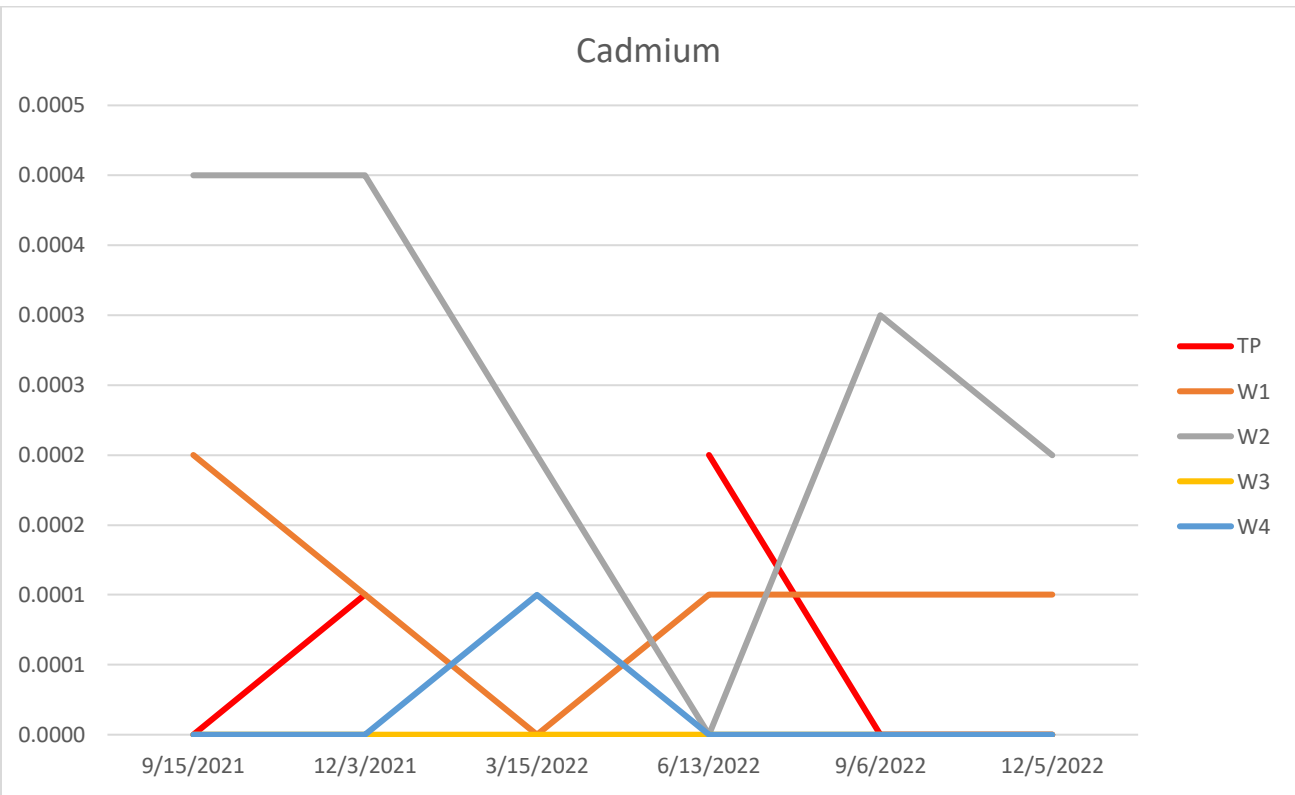
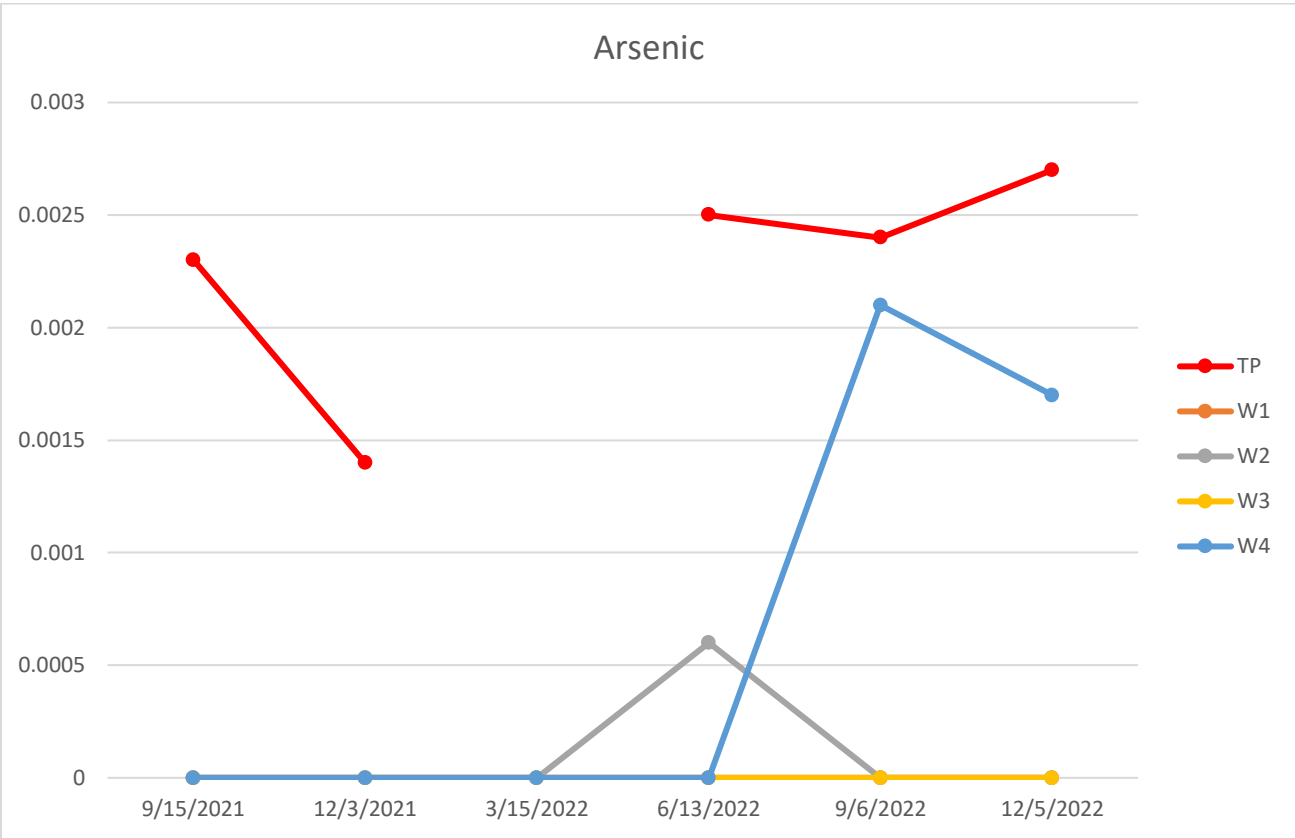


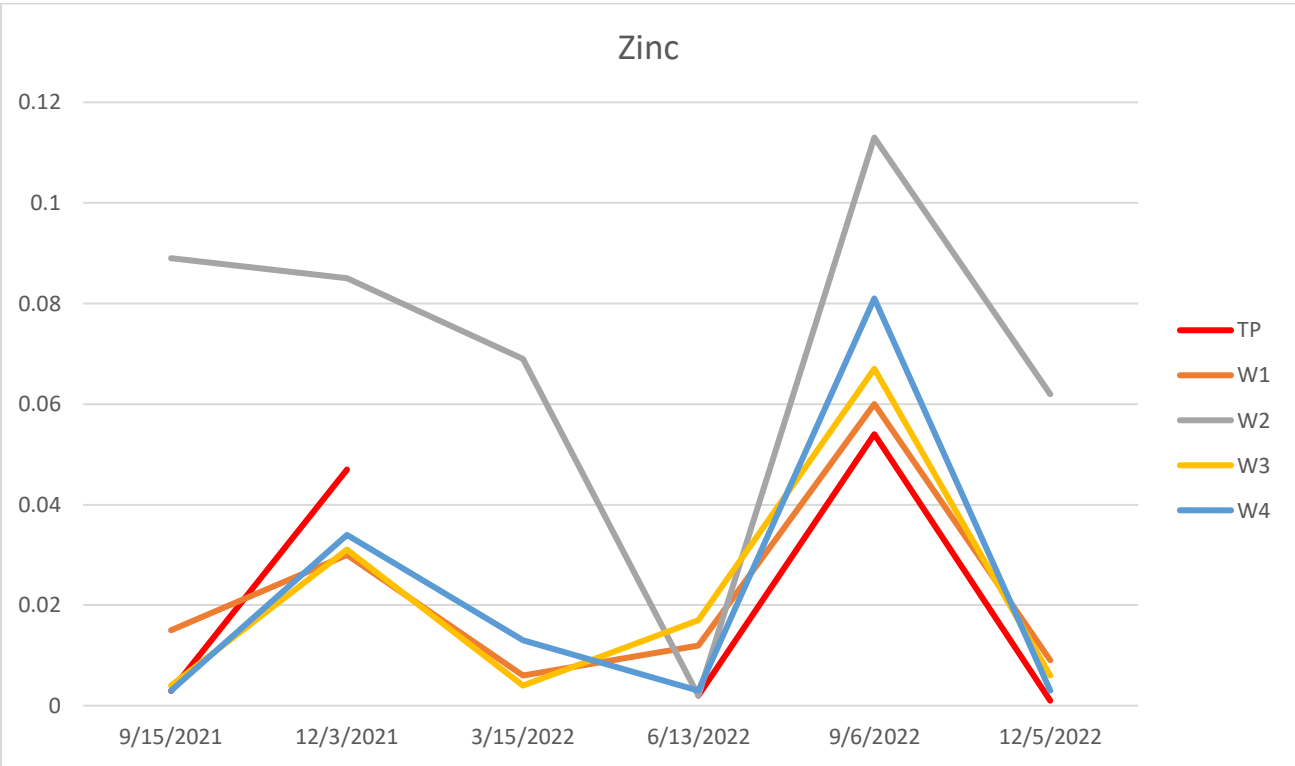
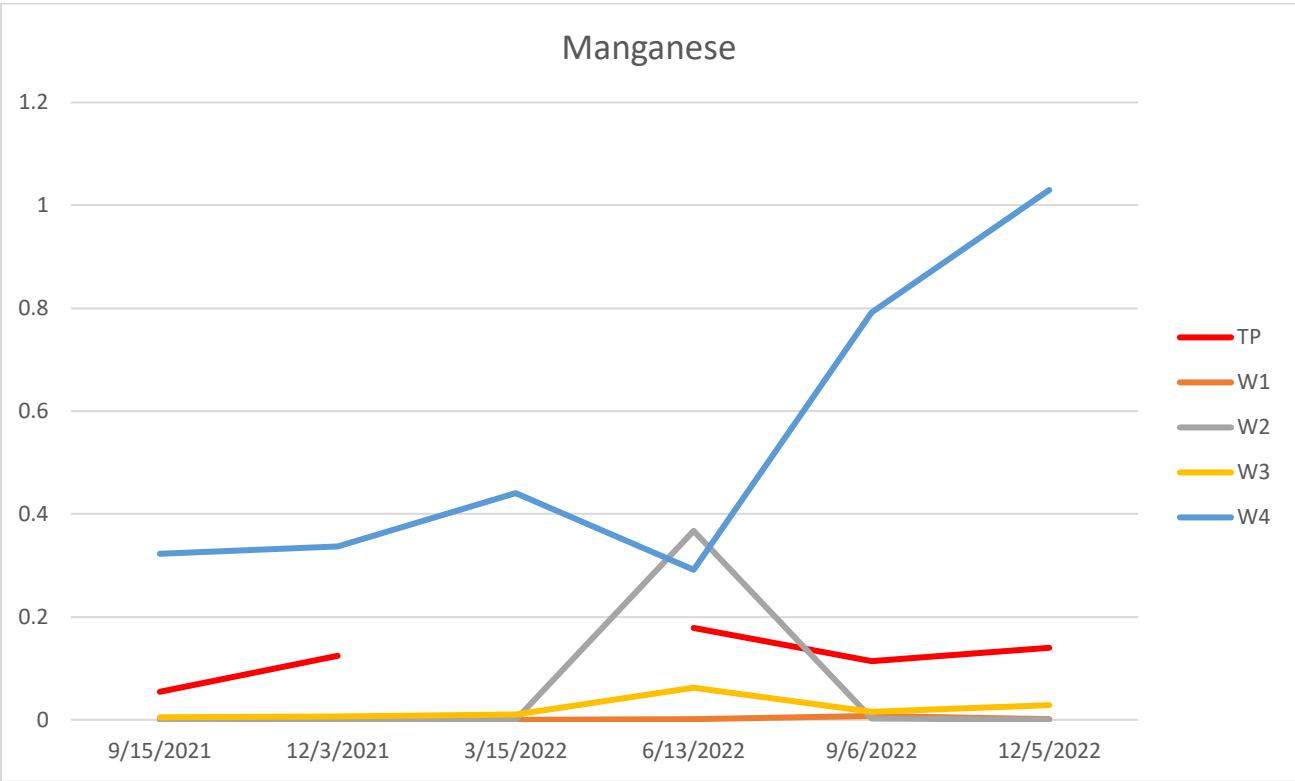
Map showing locations of water monitoring stations for permits M-1994-117 & M-1983-141

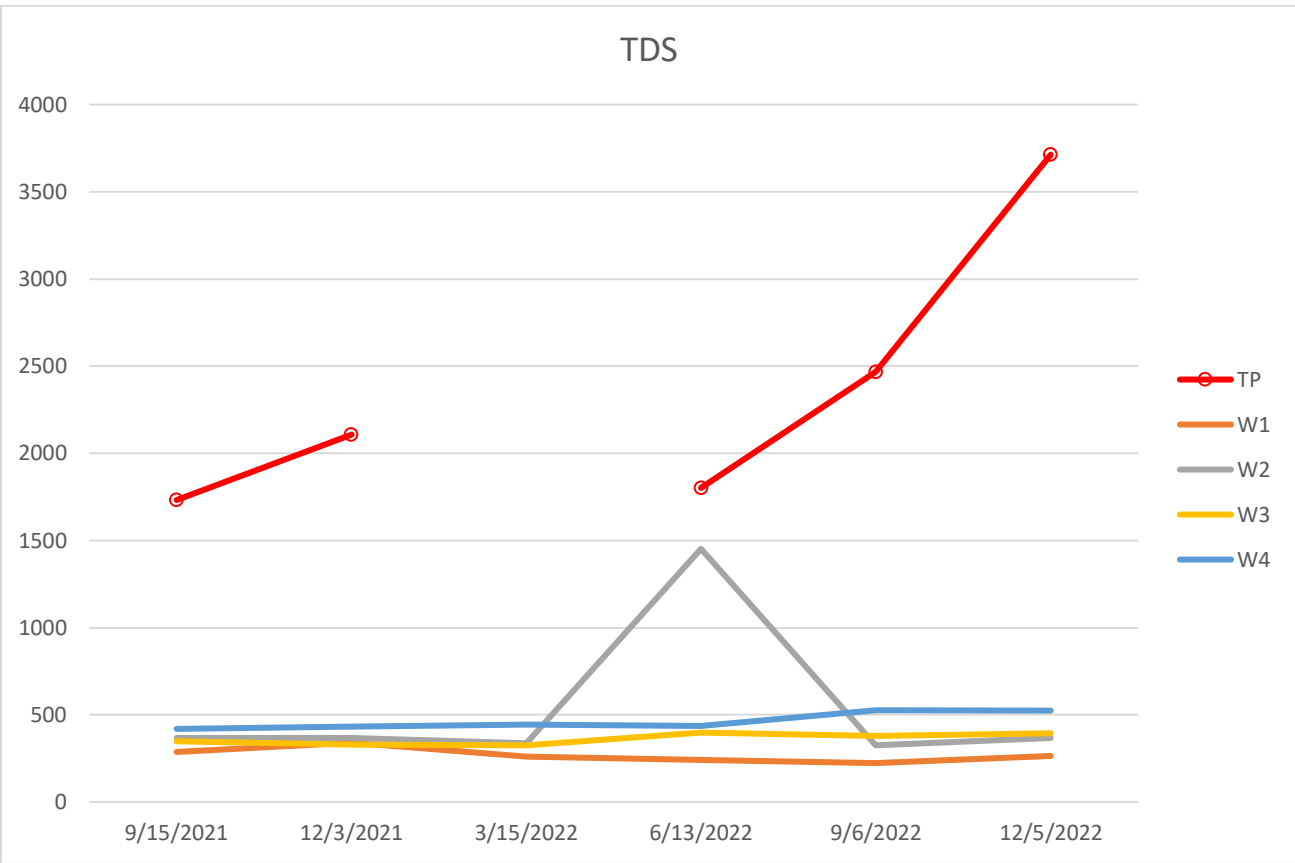
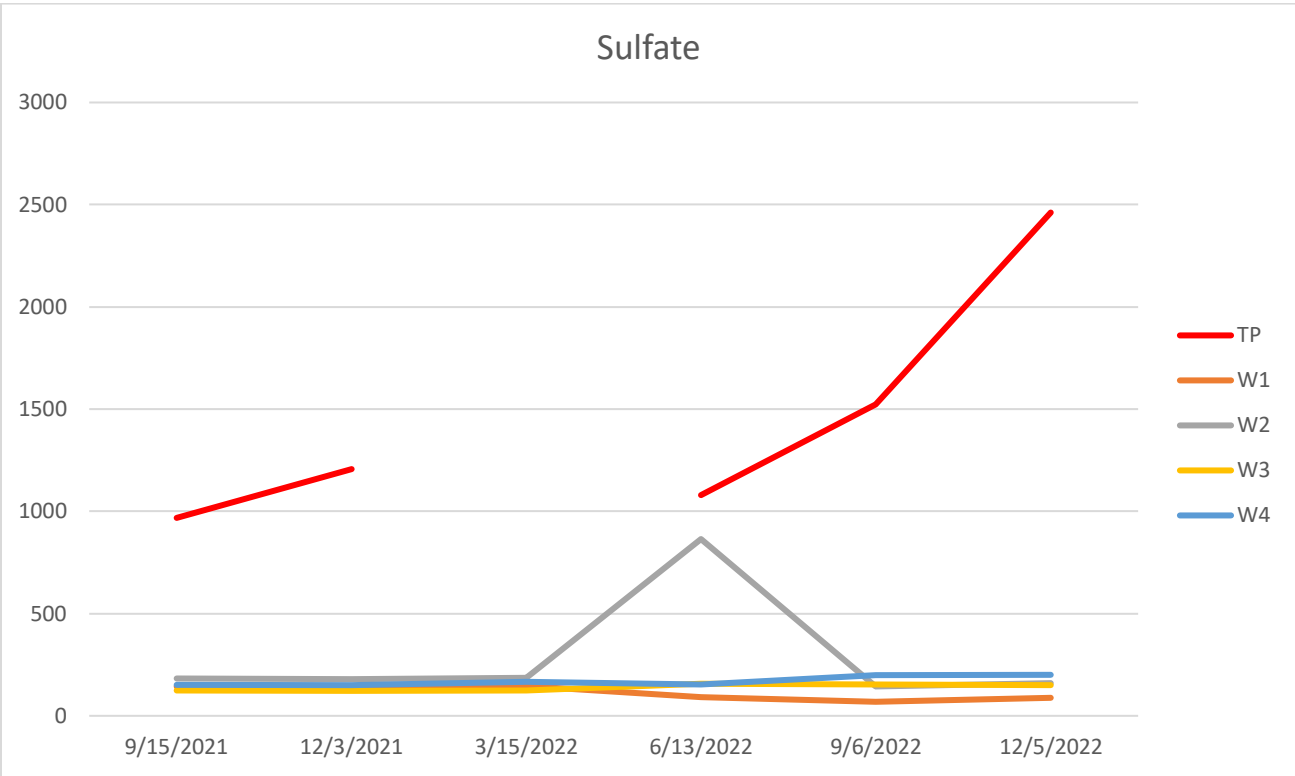
Locations		Well Measurements					Water Analyses (ppm/mg/L)							
Locations ID	Date	Time	Depth	pH	Temp (C)	Conductivity (uS/cm)	Sample ID	Date	As	Cd	Mn	Zn	Residue	Sulfate
Gold Hill Mill M-1994-117														
W-1	12/05/22	14:10	42.8	7.83	9.4	412	221206002	12/08/22	ND	0.0001	0.0013	0.009	265	89.4
W-2	12/05/22	14:30	53.3	7.67	8.4	550	221206002	12/08/22	ND	0.0002	ND	ND	368	160.7
W-3	12/05/22	14:55	29.1	7.51	7	622	221206002	12/08/22	ND	ND	0.0287	ND	395	149.35
W-4	12/05/22	15:15	35	7.37	7.6	798	221206002	12/08/22	0.0017	ND	1.03	ND	525	200.52
TP	12/05/22	11:55	0	7.6	1.4	4.65	221206002	12/08/22	0.0027	ND	0.1406	0.001	3713	2461.7
Cash Mine M-1983-141														
MW-1	12/05/22	14:10	64	7.36	85	1641	221206002	12/08/22	ND	ND	0.3444	0.013	1447	889.04
MW-5	12/05/22	15:49	22.5	7.55	9.7	901	221206002	12/08/22	0.001	ND	0.2282	ND	ND	ND
CG	12/05/22	N/A	FROZEN											
CMP	12/05/22	N/A	FROZEN											

Metals results are all dissolved. See attached lab report for more details.

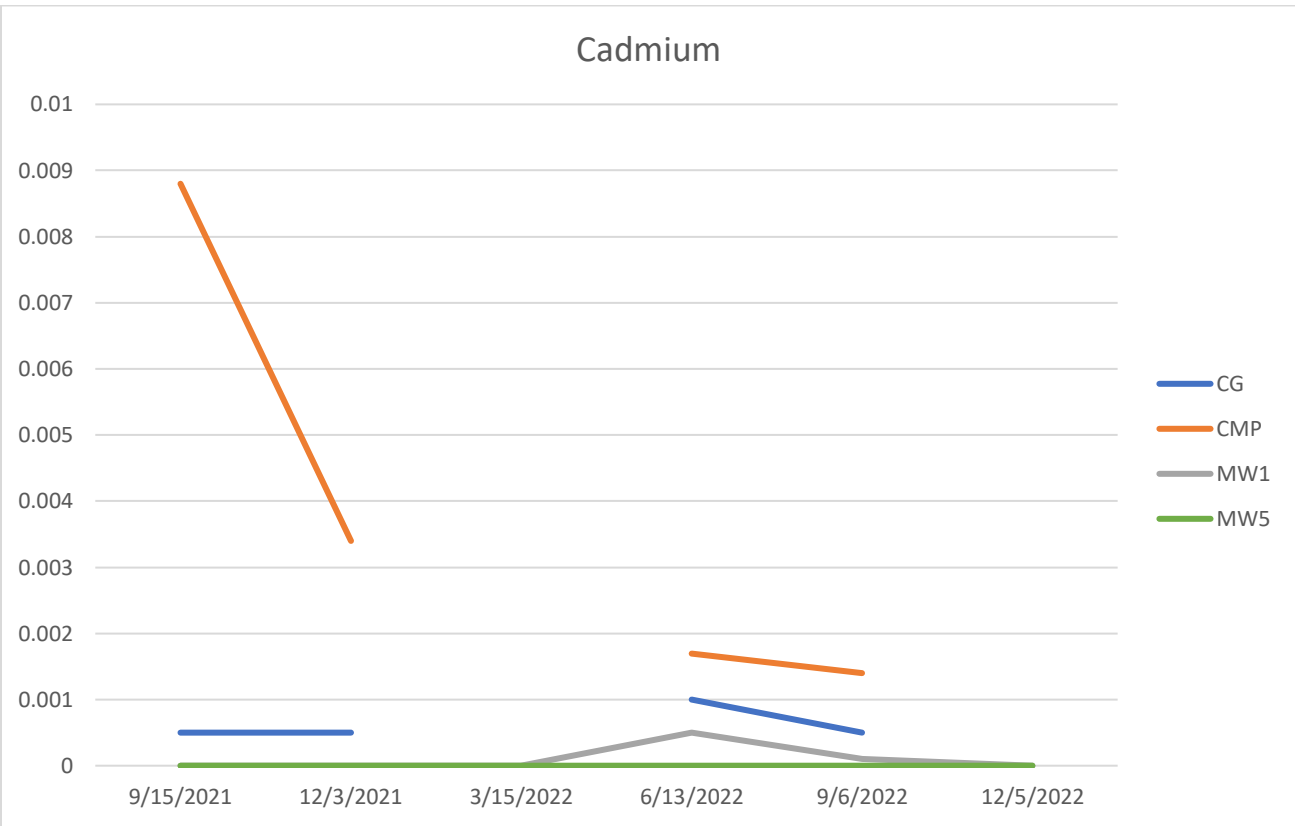
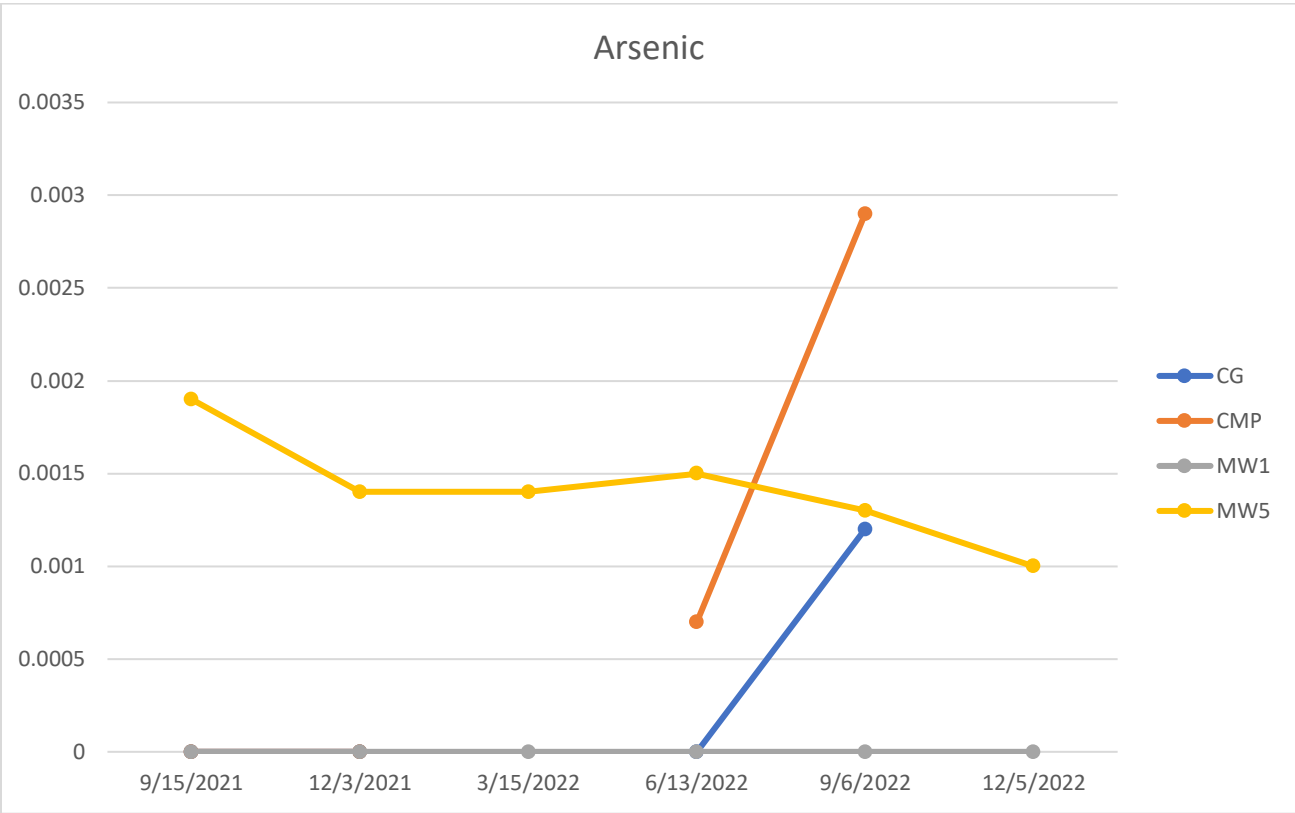
Gold Hill Mill Analyte Graphs for the Past Five Quarters

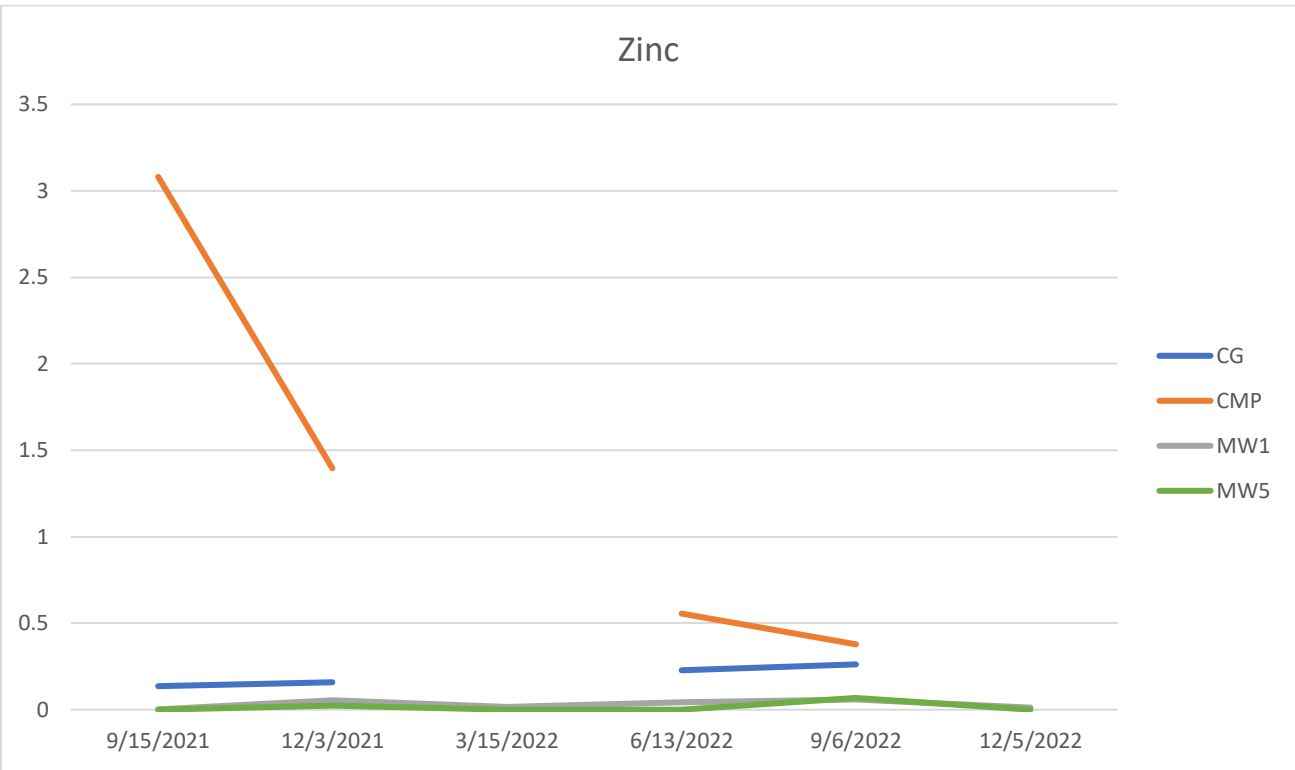
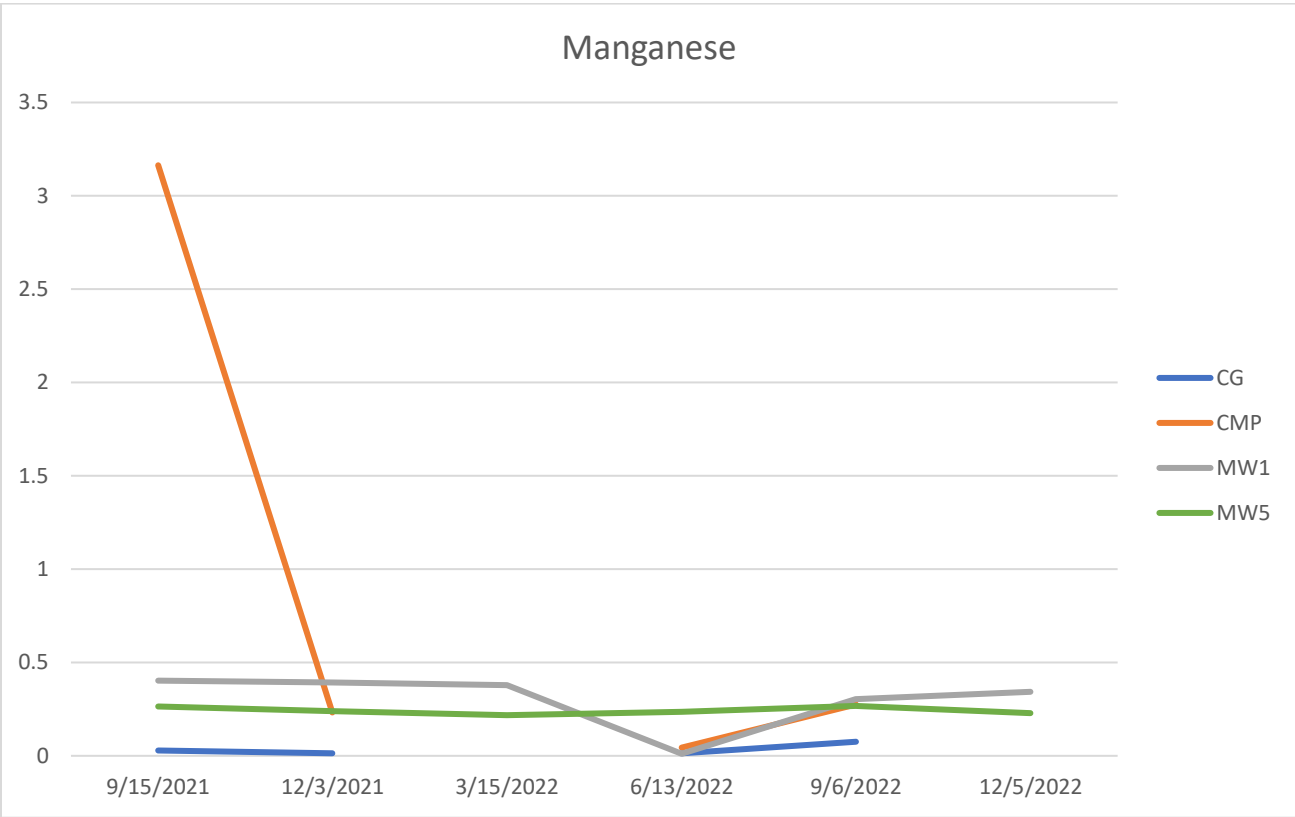


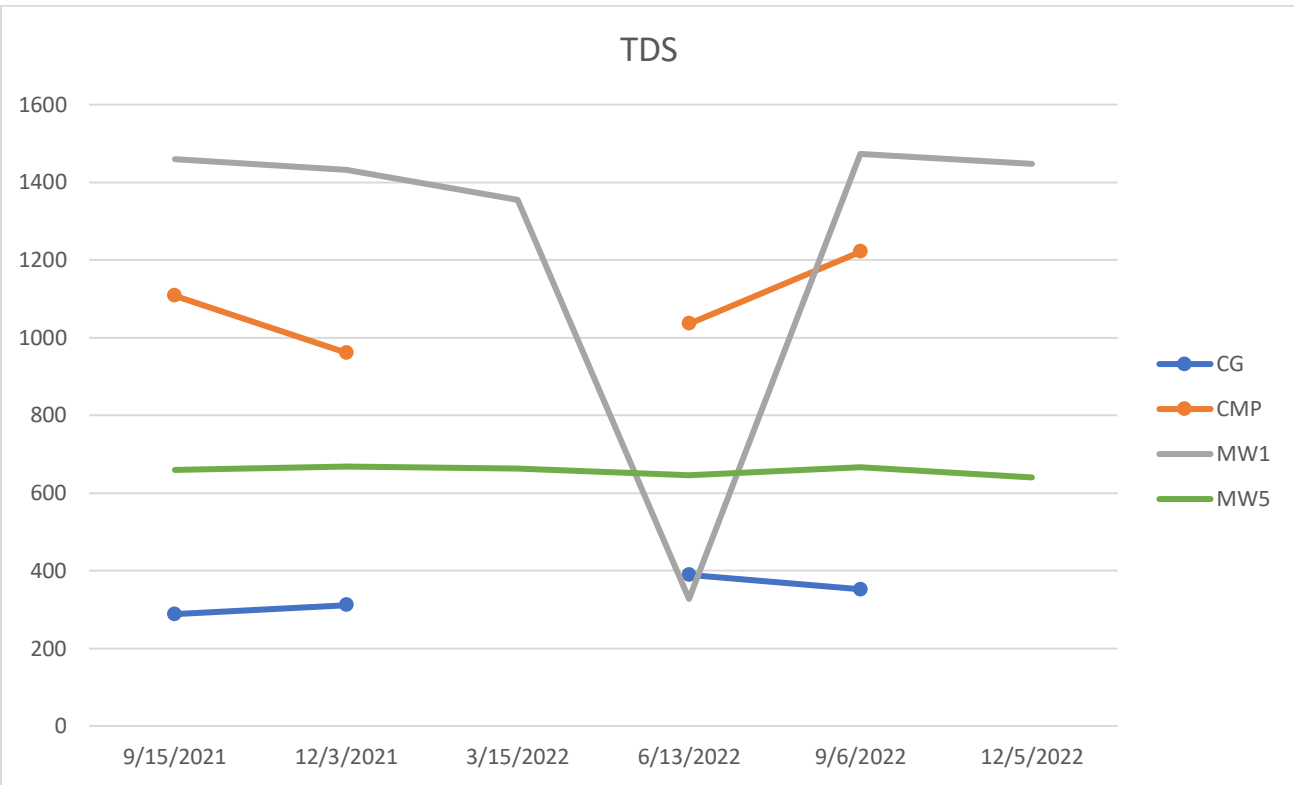
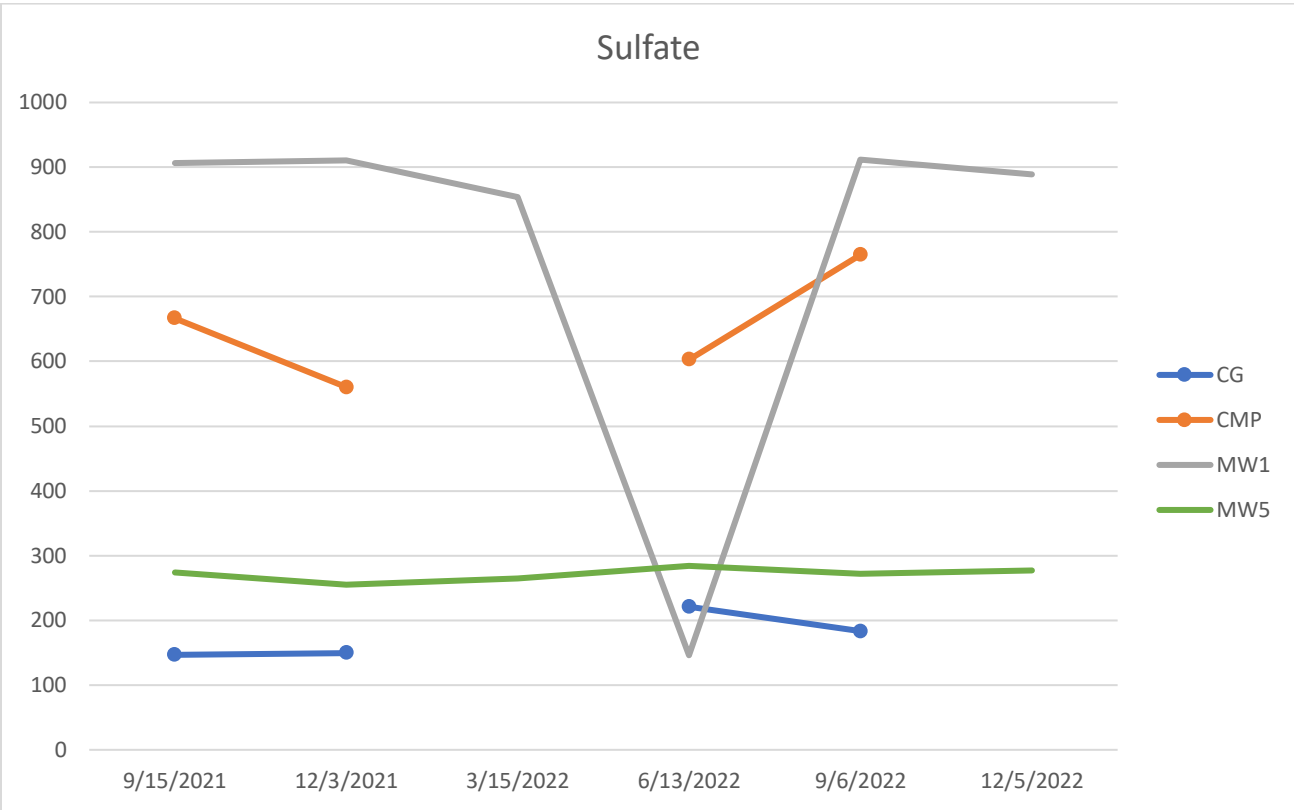




Cash Mine Analyte Graphs for the Past Five Quarters







Analytical Results

TASK NO: 220614088

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.: 220614088

Client PO:

Client Project: Gold Hill

Date Received: 6/14/22

Date Reported: 6/22/22

Matrix: Water - Ground

Customer Sample ID Left Hand Creek

Sample Date/Time: 6/13/22 11:45 AM

Lab Number: 220614088-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Total Alkalinity	16.5 mg/L as CaCO ₃	SM 2320-B	4.0 mg/L as CaCO ₃	6/16/22	QC57611	TAB
Bicarbonate	16.5 mg/L as CaCO ₃	SM 2320-B	0.2 mg/L as CaCO ₃	6/16/22	-	TAB
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO ₃	6/16/22	-	TAB
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO ₃	6/16/22	-	TAB
Chloride	5.89 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57551	AMJ
Fluoride	ND	EPA 300.0	0.10 mg/L	6/14/22	QC57552	AMJ
Nitrate Nitrogen	ND	EPA 300.0	0.05 mg/L	6/14/22	QC57553	AMJ
Nitrate/ Nitrite Nitrogen	ND	Calculation	0.05 mg/L	6/16/22	-	AMJ
Nitrite Nitrogen	ND	EPA 300.0	0.03 mg/L	6/14/22	QC57555	AMJ
Specific Conductance	71 umhos/cm @ 25c	EPA 120.1	5 umhos/cm @ 25c	6/14/22	-	AKF

Dissolved

Chromium - Hexavalent	ND	SM 3500-Cr B	0.01 mg/L	6/16/22	QC57609	MAT
Mercury	ND	EPA 245.7	0.0002 mg/L	6/21/22	QC57670	MLT
Aluminum	0.037 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	6/15/22	QC57575	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Barium	0.0177 mg/L	EPA 200.8	0.0007 mg/L	6/15/22	QC57575	MBN
Beryllium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Copper	0.0027 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Lead	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0023 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Molybdenum	0.0006 mg/L	EPA 200.8	0.0005 mg/L	6/15/22	QC57575	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) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID Left Hand Creek
Sample Date/Time: 6/13/22 11:45 AM
Lab Number: 220614088-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
<i>Dissolved</i>						
Nickel	ND	EPA 200.8	0.0009 mg/L	6/15/22	QC57575	MBN
Boron	0.05 mg/L	EPA 200.7	0.01 mg/L	6/17/22	QC57614	MBN
Calcium	5.4 mg/L	EPA 200.7	0.1 mg/L	6/17/22	QC57614	MBN
Iron	0.056 mg/L	EPA 200.7	0.005 mg/L	6/17/22	QC57614	MBN
Magnesium	1.53 mg/L	EPA 200.7	0.02 mg/L	6/17/22	QC57614	MBN
<i>Total</i>						
Chromium - Trivalent	ND	Calculation	0.01 mg/L	6/16/22	-	MBN
Total Hardness	20.3 mg/L as CaCO ₃	SM 2340-B	0.1 mg/L as CaCO ₃	6/17/22	-	MBN
Mercury	ND	EPA 245.7	0.0002 mg/L	6/21/22	QC57670	MLT
Aluminum	0.042 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	6/15/22	QC57575	MBN
Copper	0.0052 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Lead	0.0004 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0106 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Molybdenum	0.0006 mg/L	EPA 200.8	0.0005 mg/L	6/15/22	QC57575	MBN
Calcium	5.4 mg/L	EPA 200.7	0.1 mg/L	6/17/22	QC57614	MBN
Iron	0.085 mg/L	EPA 200.7	0.005 mg/L	6/17/22	QC57614	MBN
Magnesium	1.62 mg/L	EPA 200.7	0.02 mg/L	6/17/22	QC57614	MBN

Holding time expired for Cr-Hex. Ok to test outside of hold time per 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

(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: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID Tailing Pond
Sample Date/Time: 6/13/22 12:40 PM
Lab Number: 220614088-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	1079.53 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	1800 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	0.0025 mg/L	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	0.0002 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.1786 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.002 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	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) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID MW1

Sample Date/Time: 6/13/22 3:15 PM

Lab Number: 220614088-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	146.07 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	327 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	0.0005 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0110 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.043 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	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) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID W2

Sample Date/Time: 6/13/22 3:50 PM

Lab Number: 220614088-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	864.57 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	1452 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	0.0006 mg/L	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.3673 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.002 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

Abbreviations/ References:

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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: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID W1

Sample Date/Time: 6/13/22 4:10 PM

Lab Number: 220614088-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	91.88 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	240 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0017 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.012 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

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Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID W3
Sample Date/Time: 6/13/22 4:15 PM
Lab Number: 220614088-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	156.93 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	398 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0624 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.017 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

Abbreviations/ References:

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Date Analyzed = Date Test Completed

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Analytical Results

TASK NO: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID W4

Sample Date/Time: 6/13/22 4:30 PM

Lab Number: 220614088-07

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	154.38 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	437 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.2917 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.003 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

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ND = Not Detected at Reporting Limit.

Analytical Results

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Company: Colorado Milling CO
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Moab UT 84532

Bill To: Jerry Jergensen

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

Task No.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID MW5

Sample Date/Time: 6/13/22 5:10 PM

Lab Number: 220614088-08

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	284.19 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	645 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	0.0015 mg/L	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.2345 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

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Date Analyzed = Date Test Completed

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

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: 220614088

Report To: Jerry Jergensen

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

Bill To: Jerry Jergensen

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P.O. Box 99
Moab UT 84532

Task No.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID Cash Mine Pond
Sample Date/Time: 6/13/22 5:20 PM
Lab Number: 220614088-09

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	602.78 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	1036 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	0.0007 mg/L	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	0.0017 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0441 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.555 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

Abbreviations/ References:

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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: 220614088

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.: 220614088
Client PO:
Client Project: Gold Hill

Date Received: 6/14/22
Date Reported: 6/22/22
Matrix: Water - Ground

Customer Sample ID Cash Gulch
Sample Date/Time: 6/13/22 5:45 PM
Lab Number: 220614088-10

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	221.02 mg/L	EPA 300.0	0.01 mg/L	6/14/22	QC57554	AMJ
Total Dissolved Solids	389 mg/L	SM 2540-C	5 mg/L	6/20/22	QC57591	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	6/15/22	QC57575	MBN
Cadmium	0.0010 mg/L	EPA 200.8	0.0001 mg/L	6/15/22	QC57575	MBN
Manganese	0.0136 mg/L	EPA 200.8	0.0008 mg/L	6/15/22	QC57575	MBN
Zinc	0.228 mg/L	EPA 200.8	0.001 mg/L	6/15/22	QC57575	MBN

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Analytical QC Summary

TASK NO: 220614088

Report To: Jerry Jergensen
Company: Colorado Milling CO

Receive Date: 6/14/22
Project Name: Gold Hill

Test	QC Batch ID	QC Type	Result	Method
Total Alkalinity	QC57611	Blank	ND	SM 2320-B
Chloride	QC57551	Blank	ND	EPA 300.0
Chromium - Hexavalent	QC57609	Blank	ND	SM 3500-Cr B
Fluoride	QC57552	Blank	ND	EPA 300.0
Mercury	QC57670	Method Blank	ND	EPA 245.7
Aluminum	QC57575	Method Blank	ND	EPA 200.8
Antimony	QC57575	Method Blank	ND	EPA 200.8
Arsenic	QC57575	Method Blank	ND	EPA 200.8
Barium	QC57575	Method Blank	ND	EPA 200.8
Beryllium	QC57575	Method Blank	ND	EPA 200.8
Cadmium	QC57575	Method Blank	ND	EPA 200.8
Chromium	QC57575	Method Blank	ND	EPA 200.8
Copper	QC57575	Method Blank	ND	EPA 200.8
Lead	QC57575	Method Blank	ND	EPA 200.8
Manganese	QC57575	Method Blank	ND	EPA 200.8
Molybdenum	QC57575	Method Blank	ND	EPA 200.8
Nickel	QC57575	Method Blank	ND	EPA 200.8
Zinc	QC57575	Method Blank	ND	EPA 200.8
Boron	QC57614	Method Blank	ND	EPA 200.7
Calcium	QC57614	Method Blank	ND	EPA 200.7
Iron	QC57614	Method Blank	ND	EPA 200.7
Magnesium	QC57614	Method Blank	ND	EPA 200.7
Nitrate Nitrogen	QC57553	Blank	ND	EPA 300.0
Nitrite Nitrogen	QC57555	Blank	ND	EPA 300.0
Sulfate	QC57554	Blank	ND	EPA 300.0
Total Dissolved Solids	QC57591	Blank	ND	SM 2540-C

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC57611	Duplicate	0 - 20	-	1.1	SM 2320-B
		LCS	90 - 110	105.8	-	
		LCS-2	90 - 110	107.7	-	
Chloride	QC57551	Duplicate	0 - 20	-	2.7	EPA 300.0
		LCS	90 - 110	102.9	-	
		MS	75 - 125	99.9	-	
Chromium - Hexavalent	QC57609	Duplicate	0 - 20	-	0.0	SM 3500-Cr B
		LCS	90 - 110	101.1	-	
Fluoride	QC57552	Duplicate	0 - 20	-	3.6	EPA 300.0
		LCS	90 - 110	91.5	-	
		MS	75 - 125	88.7	-	
Mercury	QC57670	Duplicate	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	101.4	-	
		MS	80 - 120	94.0	-	

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Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Aluminum	QC57575	LCS	90 - 110	106.7	-	EPA 200.8
		MS	70 - 130	113.0	-	
		MSD	0 - 10	-	0.5	
Antimony	QC57575	LCS	90 - 110	96.4	-	EPA 200.8
		MS	70 - 130	91.3	-	
		MSD	0 - 10	-	1.5	
Arsenic	QC57575	LCS	90 - 110	95.6	-	EPA 200.8
		MS	70 - 130	118.6	-	
		MSD	0 - 10	-	4.3	
Barium	QC57575	LCS	90 - 110	95.7	-	EPA 200.8
		MS	70 - 130	98.4	-	
		MSD	0 - 10	-	0.4	
Beryllium	QC57575	LCS	90 - 110	94.4	-	EPA 200.8
		MS	70 - 130	87.7	-	
		MSD	0 - 10	-	0.1	
Cadmium	QC57575	LCS	90 - 110	93.2	-	EPA 200.8
		MS	70 - 130	85.2	-	
		MSD	0 - 10	-	2.1	
Chromium	QC57575	LCS	90 - 110	98.2	-	EPA 200.8
		MS	70 - 130	103.6	-	
		MSD	0 - 10	-	1.1	
Copper	QC57575	LCS	90 - 110	95.2	-	EPA 200.8
		MS	70 - 130	107.0	-	
		MSD	0 - 10	-	2.7	
Lead	QC57575	LCS	90 - 110	94.0	-	EPA 200.8
		MS	70 - 130	80.9	-	
		MSD	0 - 10	-	1.1	
Manganese	QC57575	LCS	90 - 110	98.2	-	EPA 200.8
		MS	70 - 130	104.9	-	
		MSD	0 - 10	-	2.3	
Molybdenum	QC57575	LCS	90 - 110	95.4	-	EPA 200.8
		MS	70 - 130	111.6	-	
		MSD	0 - 10	-	3.4	
Nickel	QC57575	LCS	90 - 110	98.8	-	EPA 200.8
		MS	70 - 130	96.0	-	
		MSD	0 - 10	-	2.0	
Zinc	QC57575	LCS	90 - 110	95.2	-	EPA 200.8
		MS	70 - 130	97.2	-	
		MSD	0 - 10	-	2.3	
Boron	QC57614	Duplicate	0 - 20	-	1.3	EPA 200.7
		LCS	90 - 110	104.1	-	
		MS	75 - 125	106.0	-	
Calcium	QC57614	Duplicate	0 - 20	-	1.5	EPA 200.7
		LCS	90 - 110	97.8	-	
		MS	75 - 125	88.1	-	
Iron	QC57614	Duplicate	0 - 20	-	0.0	EPA 200.7
		LCS	90 - 110	100.0	-	
		MS	75 - 125	99.4	-	
Magnesium	QC57614	Duplicate	0 - 20	-	1.1	EPA 200.7
		LCS	90 - 110	98.4	-	
		MS	75 - 125	90.6	-	

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Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Nitrate Nitrogen	QC57553	Duplicate	0 - 20	-	0.9	EPA 300.0
		LCS	90 - 110	96.2	-	
		MS	75 - 125	90.1	-	
Nitrite Nitrogen	QC57555	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	102.8	-	
		MS	75 - 125	97.0	-	
Sulfate	QC57554	Duplicate	0 - 20	-	1.9	EPA 300.0
		LCS	90 - 110	100.3	-	
		MS	75 - 125	94.7	-	
Total Dissolved Solids	QC57591	Duplicate	0 - 20	-	2.3	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
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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) 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>Colorado Milling Co.</u>	Company Name: <u>Same</u>	<u>Gold Hill</u>
Contact Name: <u>Gerald Jergensen</u>	Contact Name: _____	
Address: <u>12915 McAune Road</u>	Address: _____	Task Number (Lab Use Only)
City <u>Black Forest</u> State <u>CO</u> Zip <u>80106</u>	City _____ State _____ Zip _____	CAL Task
Phone: <u>719-330-4212</u>	Phone: _____	<u>220614088</u>
Email: <u>JerryJergensen@AOL.com</u>	Email: _____	JAK
Sample Collector: <u>Lewis Perkins</u>		
Sample Collector Phone: <u>303-447-8705</u>	PO No.: _____	

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 ☐	Ground Water ☒ <i>per history</i>	Surface Water ☐			Soil ☐	Sludge ☐	Drinking Water ☐	AS	CD	MMN	24-Zn per history	Residue/Tos-TDS	Sulfate	per history
Date	Time	Sample ID												
6/13/22	11:45 AM	Left hand creek * (see what to test sheet) *	2	X										
" "	12:40 PM	tailing Pond	X	/		X	X	X	X	X	X			
" "	3:15 PM	MW 1	2	/		X	X	X	X	X	X			
" "	3:50 PM	W 2	2	/		X	X	X	X	X	X			
" "	4:10 PM	W 1	2	/		X	X	X	X	X	X			
" "	4:15 PM	W 3	2	/		X	X	X	X	X	X			
" "	4:30 PM	W 4	2	/		X	X	X	X	X	X			
" "	5:10 PM	MW 5	2	X		X	X	X	X	X	X			
" "	5:20 PM	Cash mine pond	X	X		X	X	X	X	X	X			
" "	5:45 PM	Cash Gulch * see attached *	X	/		X	X	X	X	X	X			

Instructions: *OK to run act of HT*

C/S Info: _____

Seals Present Yes ☐ No ☐

Relinquished By: Lewis Perkins

Date/Time: 6/14/22

Received By: [Signature]

Date/Time: 6/14/22

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

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

No bottles received. →

Can do total hardness →