

April 13, 2022

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

Delivered Via Email

RE: Q1 2022 Water Sampling Results
Gold Hill Mill, Permit No. M-1994-117

To Whom It May Concern

The first quarter, 2022 ("Q1/22") water sampling was conducted by Lewis Perkins, Colorado Milling Company, on March 15, 2022.

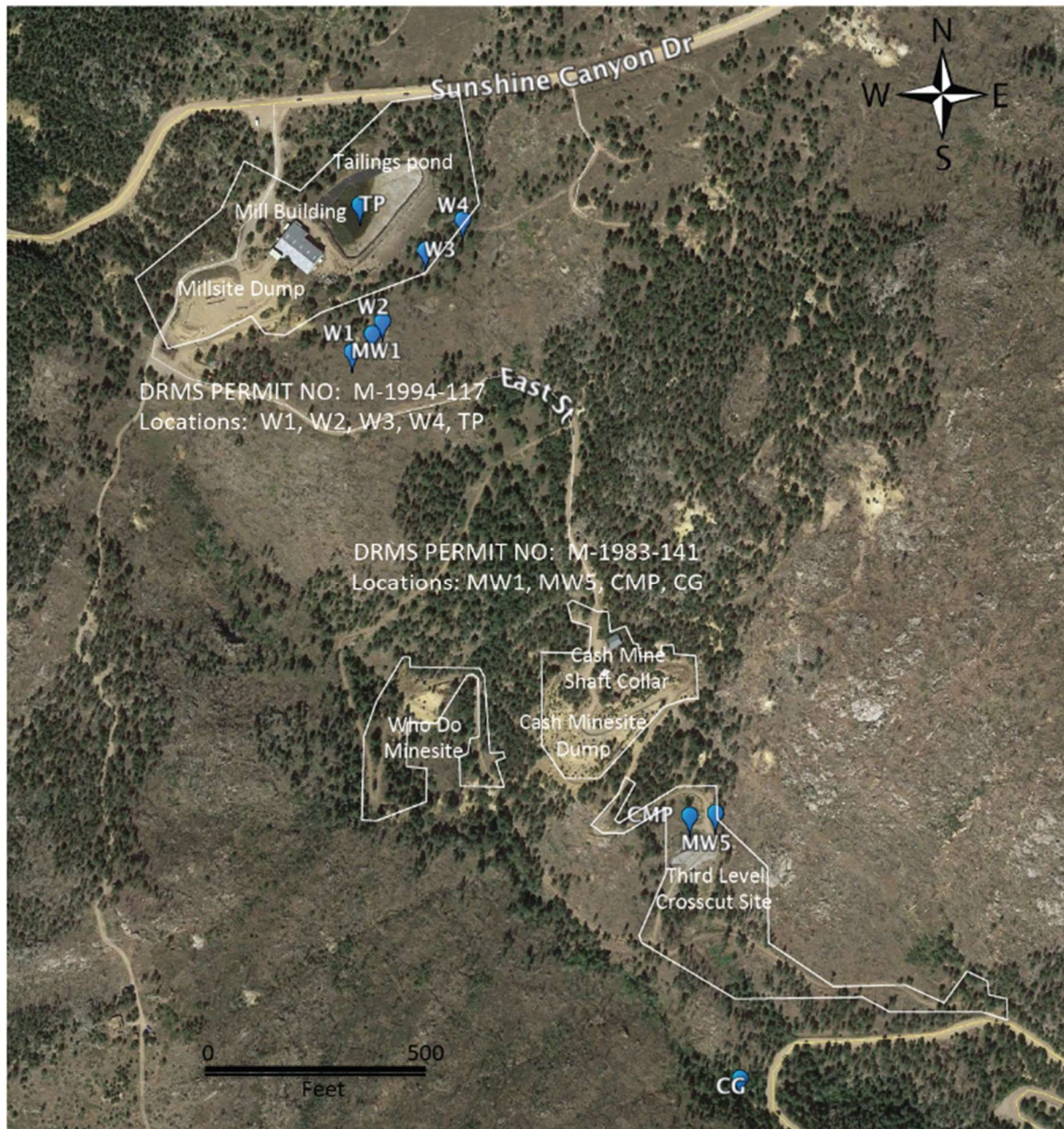
- **Trace Element & Related Data:** Five monitoring stations were sampled for arsenic, cadmium, manganese, zinc, total dissolved solids ("residue") and sulfate. Analyses were performed by Colorado Analytical Laboratories Inc., based in Denver. Copies of their original laboratory analytical reports are 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.

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

<i>Locations</i>		Well Measurements						Water Analyses (ppm/mg/L)						
<i>Locations ID</i>	Date	Time	Depth	pH	Temp (C)	Conductivity (uS/cm)	Sample ID	Date	As	Cd	Mn	Zn	Residue	Sulfate
MW-1	03/15/22	14:00	66.6	6.42	8.6	1646	220315070-01	03/15/22	-	-	0.380	0.014	1,355	853.44
W-1	03/15/22	14:20	41.75	8.09	9.3	496	220315070-02	03/15/22	-	-	-	0.006	259	145.41
W-2	03/15/22	14:39	56.2	7.63	8.8	589	220315070-03	03/15/22	-	0.0002	-	0.069	338	185.05
W-3	03/15/22	14:55	29.1	8	8.4	559	220315070-04	03/15/22	-	-	0.010	0.004	325	123.42
W-4	03/15/22	15:15	33.5	7.35	7.9	736	220315070-04	03/15/22	-	0.0001	0.441	0.013	444	165.00
MW-5	03/15/22	16:05	20.1	7.56	9.9	928	220315070-05	03/15/22	0.0014	-	0.218	-	662	264.41

Analytical Results

TASK NO: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID MW-1

Sample Date/Time: 3/15/22 2:00 PM

Lab Number: 220315070-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	853.44 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	1355 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<u>Dissolved</u>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	0.3802 mg/L	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	0.014 mg/L	EPA 200.8	0.001 mg/L	3/21/22	QC55700	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: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID W-1

Sample Date/Time: 3/15/22 2:20 PM

Lab Number: 220315070-02

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	145.41 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	259 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<u>Dissolved</u>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	0.006 mg/L	EPA 200.8	0.001 mg/L	3/21/22	QC55700	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.

Analytical Results

TASK NO: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID W-2

Sample Date/Time: 3/15/22 2:39 PM

Lab Number: 220315070-03

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	185.05 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	338 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<u>Dissolved</u>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	0.0002 mg/L	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	0.069 mg/L	EPA 200.8	0.001 mg/L	3/21/22	QC55700	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.

Analytical Results

TASK NO: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID W-3

Sample Date/Time: 3/15/22 2:55 PM

Lab Number: 220315070-04

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	123.42 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	325 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<u>Dissolved</u>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	0.0098 mg/L	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	0.004 mg/L	EPA 200.8	0.001 mg/L	3/21/22	QC55700	MBN

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Date Analyzed = Date Test Completed

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ND = Not Detected at Reporting Limit.

Analytical Results

TASK NO: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID W-4

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

Lab Number: 220315070-05

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	165.00 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	444 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<i>Dissolved</i>						
Arsenic	ND	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	0.4405 mg/L	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	0.013 mg/L	EPA 200.8	0.001 mg/L	3/21/22	QC55700	MBN

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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: 220315070

Report To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Bill To: Avrom Howard

Company: Colorado Milling CO
72 Brandywine Dr
Williamsville NY 14221

Task No.: 220315070
Client PO:
Client Project: Gold Hill

Date Received: 3/15/22
Date Reported: 3/22/22
Matrix: Water - Ground

Customer Sample ID MW-5
Sample Date/Time: 3/15/22 4:05 PM
Lab Number: 220315070-06

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Sulfate	264.41 mg/L	EPA 300.0	0.01 mg/L	3/16/22	QC55641	AMJ
Total Dissolved Solids	662 mg/L	SM 2540-C	5 mg/L	3/17/22	QC55631	DEK
<u>Dissolved</u>						
Arsenic	0.0014 mg/L	EPA 200.8	0.0006 mg/L	3/21/22	QC55700	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	3/21/22	QC55700	MBN
Manganese	0.2178 mg/L	EPA 200.8	0.0008 mg/L	3/21/22	QC55700	MBN
Zinc	ND	EPA 200.8	0.001 mg/L	3/21/22	QC55700	MBN

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Analytical QC Summary

TASK NO: 220315070

Report To: Avrom Howard
Company: Colorado Milling CO

Receive Date: 3/15/22
Project Name: Gold Hill

Test	QC Batch ID	QC Type	Result	Method
Arsenic	QC55700	Method Blank	ND	EPA 200.8
Cadmium	QC55700	Method Blank	ND	EPA 200.8
Manganese	QC55700	Method Blank	ND	EPA 200.8
Zinc	QC55700	Method Blank	ND	EPA 200.8
Sulfate	QC55641	Blank	ND	EPA 300.0
Total Dissolved Solids	QC55631	Blank	ND	SM 2540-C

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Arsenic	QC55700	LCS	90 - 110	96.5	-	EPA 200.8
		MS	70 - 130	105.7	-	
		MSD	0 - 10	-	3.4	
Cadmium	QC55700	LCS	90 - 110	93.9	-	EPA 200.8
		MS	70 - 130	93.0	-	
		MSD	0 - 10	-	1.0	
Manganese	QC55700	LCS	90 - 110	96.3	-	EPA 200.8
		MS	70 - 130	103.8	-	
		MSD	0 - 10	-	1.8	
Zinc	QC55700	LCS	90 - 110	100.9	-	EPA 200.8
		MS	70 - 130	81.5	-	
		MSD	0 - 10	-	0.8	
Sulfate	QC55641	Duplicate	0 - 20	-	0.2	EPA 300.0
		LCS	90 - 110	98.6	-	
		MS	75 - 125	101.9	-	
Total Dissolved Solids	QC55631	Duplicate	0 - 20	-	3.5	SM 2540-C
		LCS	85 - 115	95.6	-	

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:

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Chain of Custody Form



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>Colorado Milling Co.</u>		Company Name: <u>same</u>		<u>Gold Hill</u>	
Contact Name: <u>Gerald Jergensen</u>		Contact Name: _____		_____	
Address: <u>12915 McCune Rd</u>		Address: _____		Task Number (Lab Use)	
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>220315070</u>	
Email: <u>JerryJergensen@aol.com</u>		Email: _____		JAK	
Sample Collector: <u>L. Perkins & Jerry J.</u>		PO No.: _____		_____	
Sample Collector Phone: <u>719-330-4212</u>		_____		_____	

303-447-8705

Sample Matrix (Select One Only)			No. of Containers	Grab or (Check One Only) Composite	Tests Requested									
Waste Water <input type="checkbox"/>	Ground Water <input type="checkbox"/>	Surface Water <input type="checkbox"/>			Soil <input type="checkbox"/>	Sludge <input type="checkbox"/>	Drinking Water <input type="checkbox"/>	AS	CD	MN	Zn	Residue/TOS	Sulfate	
Date	Time	Sample ID												
3/15/22	—	tailings Pond *FROZEN*	X	X										
4	2:00 PM	MW 1	2	✓		X	X	X	X	X	X			
4	2:20 PM	W-1	2	✓		X	X	X	X	X	X			
4	2:39 PM	W-2	2	✓		X	X	X	X	X	X			
4	2:55 PM	W-3	2	✓		X	X	X	X	X	X			
4	3:15 PM	W-4	2	✓		X	X	X	X	X	X			
4	4:05 PM	MW-5	2	✓		X	X	X	X	X	X			
4	—	Cash mine Pond *FROZEN*	X	X		X	X	X	X	X	X			
4	—	Cash Gulch	X	X		X	X	X	X	X	X			

Instructions:
Dissolved metals per histoy. 3/15/22 JK

C/S Info:

Deliver Via:

By hand in person

C/S Charge ☐

Seals Present Yes ☐ No ☐

Temp. 3 °C/Ice ☒

Sample Pres. Yes ☐ No ☒

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
<u>Louis Perkins</u>	<u>3/15/22</u>	<u>[Signature]</u>	<u>3/15/22</u>				