



**The Union Milling Company**

P.O. Box 620490  
Littleton, CO 80162-0490  
+1.303.947.3499

15 June 2018

Dustin Czapla  
Division of Reclamation, Mining and Safety  
Department of Natural Resources  
1313 Sherman St., Room 215  
Denver, CO 80203

**RE: 2018 Annual Report, M1990-057 Leadville Mill**

Dear Mr. Czapla,

The Annual Report for mine permit M-1990-057 is filed, as well payment of \$518.00. The 110d Annual Report Form electronically submitted along with our Annual Fee Invoice and Report Request dated 18 May 2018 is completed, signed and included with this documentation.

No new disturbances have occurred at the Leadville Mill within the past 12 months; no permanent reclamation activities have occurred at the Leadville Mill site within the past 12 months. No additional surface area disturbances are planned for the Leadville Mill within the next 12 months, and no operating activities are planned for the near-term. A map is submitted with this report showing the current disturbance outline and proposed activities within the current disturbance area.

This annual report addresses the activities conducted in the previous period from June 17, 2017 to June 18, 2018, and also addresses the proposed activities for the upcoming period from June 19, 2018 to June 18, 2019.

If you have additional questions or need additional information, please contact me at 303-947-3499 or [nmichael@unionmilling.com](mailto:nmichael@unionmilling.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Nick Michael', is written over a horizontal line.

Nick Michael  
Member

attachments

## **Annual Report**

The 110d Annual Report Form has been electronically submitted along with our Annual Fee Invoice and CDRMS Report Request dated 18 May 2018 is completed, signed and included with this documentation. See Page 8.

### **Property**

Permit M-1990-057 includes the Leadville Mill. The permit operator is:

Union Milling Company, LLC (UMC)  
Nick Michael, Member  
P. O. Box 620490  
Littleton, CO 80162-0490  
303-947-3499

The Leadville Mill is located in the Northeast Quarter of the Northeast Quarter of Section 33, and the Southeast Quarter of the Southeast Quarter of Section 28, Township 9 South, Range 80 West. The county designated address is 13815 Highway 24, Lake County, Colorado. The owner of the Leadville Mill is:

Constructive Investments, LLC  
Nick Michael, Member  
PO Box 620490  
Littleton, CO 80162-0490

### **Activities: June 17, 2017 to June 18, 2018**

The mill remained idle, on care and maintenance status, with no production or milling occurring in the last 12-month period. Care and maintenance were the only activities that occurred during the past year at the mill.

The Leadville Mill activities for the past 12 months are presented below.

1. Groundwater Quality Sampling. Monitoring wells MW-2 located at approximate coordinates N39°13'44.17", W106°19'59.98", elevation 9701ft, and MW-3 located at approximate coordinates N39°13'49.87", W106°19'53.61", elevation 9744ft were tested. Locations are shown on the attached map.

Water samples have now been collected and tested for 14 consecutive quarters through Q1 2018. Results are summarized in the tables below. In all testing, cyanide was not detected.

**Table 1: MW-2 Water Test Results (mg/L)**

Analyte	2014-Q4	2015-Q1	2015-Q2	2015-Q3	2015-Q4	2016-Q1	2016-Q2	2016-Q3	2016-Q4	2017-Q1	2017-Q2	2017-Q3	2017-Q4	2018-Q1
<b>Method: 200.8 ICP/MS, Protocol: EPA</b>														
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	0.032	0.072	0.110	0.140	0.170	0.100	0.078	0.047	0.080	0.052	0.036	0.036	0.048	0.062
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.001	ND	ND	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	0.001	0.048	0.028	0.031	0.039	0.039	0.065	ND	0.041	0.130	0.008	0.052	0.041	0.048
Cobalt	0.001	ND	0.001	0.002	0.002	0.001	0.002	ND	ND	ND	ND	ND	ND	ND
Copper	0.009	0.010	0.010	0.001	0.002	0.007	0.011	ND	0.006	0.016	0.004	0.016	0.009	0.018
Lead	0.001	0.010	0.015	0.002	0.003	0.011	0.008	0.002	0.009	0.007	0.003	0.005	0.005	0.008
Manganese	0.090	0.160	0.300	0.540	0.630	0.330	0.370	0.021	0.220	0.170	0.100	0.100	0.110	0.240
Molybdenum	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	0.005	0.005	0.005	0.006	0.007	0.004	0.005	ND	0.003	0.005	ND	0.002	ND	0.003
Selenium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.005	0.002	0.002	0.002	0.002	0.002	0.005
Vanadium	0.001	ND	ND	0.007	0.006	ND	0.009	ND	ND	ND	ND	ND	ND	ND
Zinc	0.015	0.048	0.054	0.072	0.095	0.047	0.038	0.011	0.035	0.028	0.015	0.026	0.035	0.046
<b>Method: 9012A Total and/or Amenable, Protocol: SW846</b>														
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detectable



**Table 2: MW-3 Water Test Results (mg/L)**

Analyte	2014-Q4	2015-Q1	2015-Q2	2015-Q3	2015-Q4	2016-Q1	2016-Q2	2016-Q3	2016-Q4	2017-Q1	2017-Q2	2017-Q3	2017-Q4	2018-Q1
<b>Method: 200.8 ICP/MS, Protocol: EPA</b>														
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	0.036	0.043	0.065	0.120	0.058	0.056	0.060	0.087	0.042	0.044	0.045	0.038	0.037	0.045
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	0.003	ND	ND	0.003	ND	ND	ND	0.061	ND	ND	ND	ND	ND	ND
Cobalt	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	0.003	ND	ND	0.006	0.002	0.003	0.005	0.008	ND	0.004	0.002	0.003	0.003	0.079
Lead	ND	0.001	0.003	0.011	0.004	0.003	0.006	0.011	0.001	ND	0.001	0.001	0.001	0.015
Manganese	0.023	0.019	0.005	0.120	0.051	0.036	0.045	0.290	0.015	0.013	0.016	0.013	0.013	0.013
Molybdenum	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	0.003	ND	0.003	0.004	0.002	0.002	0.002	0.003	ND	ND	ND	ND	ND	0.002
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	0.008	0.009	0.009	0.010	0.007	0.007	0.006	0.002	0.005	0.005	0.004	0.004	0.005	0.006
Vanadium	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	0.008	ND	0.015	0.004	0.018	0.013	0.018	0.041	ND	ND	0.012	0.054	0.044	0.210
<b>Method: 9012A Total and/or Amenable, Protocol: SW846</b>														
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detectable

2. Surface Water Quality Sampling. Quarterly surface water quality sampling from three stations, SW-1 through SW-3 could not be performed due to insufficient stream flows to collect samples during the summer, fall, winter and spring sampling periods. However, sampling of the perched aquifer within the pit was sampled. Results are summarized in the table below. Note that sampling could not be performed during periods when the TSF was snow covered and the perched aquifer was frozen.

**Table 3: Perched Aquifer in TSF (mg/L)**

Analyte	2016-Q3	2016-Q4	2017-Q1	2017-Q2	2017-Q3	2017-Q4	2018-Q1
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
<b>Method: 200.8 ICP/MS, Protocol: EPA</b>							
Antimony	ND	ND		ND	ND		
Arsenic	0.009	0.007		0.010	0.007		
Barium	0.270	0.270		0.240	0.290		
Beryllium	0.001	0.001	TSF	ND	ND	TSF	TSF
Cadmium	0.005	0.002	SNOW	0.002	0.005	SNOW	SNOW
Chromium	0.008	0.007	COVERED	0.011	0.007	COVERED	COVERED
Cobalt	0.004	0.003	NO	0.003	0.005	NO	NO
Copper	0.074	0.025	ACCESS	0.024	0.034	ACCESS	ACCESS
Lead	0.085	0.066		0.079	0.089		
Manganese	0.550	0.470		0.360	0.570		
Molybdenum	ND	ND		ND	ND		
Nickel	0.015	0.012		0.012	0.014		
Selenium	ND	ND		ND	ND		
Silver	0.004	0.002		0.003	0.002		
Thallium	ND	ND		ND	ND		
Uranium	0.007	0.002		0.001	0.002		
Vanadium	0.017	0.011		0.017	0.013		
Zinc	0.290	0.190		0.230	0.340		
<b>Method: 9012A Total and/or Amenable, Protocol: SW846</b>							
Cyanide	ND	ND	ND	ND	ND		

ND = Non-Detectable

3. TSF Construction. Final construction remains delayed, awaiting investor funding. Precious metal prices have stabilized, and while UMC has, and continues to meet with interested investors, no agreements were reached in 2017. We continue to meet with interested parties and are hopeful that we will receive funding to complete the project in 2018/19. Regardless, it is not likely that funding will occur quickly enough to allow construction activities for the 2018 building season.
4. Signage. Permanent mill permit identification signs (metal-style) were maintained on the main gate to the facility and on the mill building, identifying the UMC and our permit number.
5. Fencing. The barbed wire property boundary fence was repaired in various areas where it was broken by wildlife. Fence maintenance is required by our Lake County Conditional Use Permit.



6. Permit Boundary. Permit boundary stakes were maintained as required.
7. Mill Facility Activity. The mill buildings and equipment were maintained in preparation of reconditioning and restarting the mill.
8. Sediment Control. Sediment control measures were performed on an as needed basis (temporary silt fence construction around the ore stockpiles, temporary historic tailings storage, and new tailings storage facility). Additionally, culverts were cleaned, and berms and roads were maintained as required.
9. Ore Stockpiles. Ore stockpiles remain covered with visqueen material as a temporary measure to minimize acid generating potential of sulfidic ores. Repairs were made as necessary.
10. Weed Control. Weed control measures were performed as required and according to the weed management plan. Identified weed species are Oxeye daisies and Canada thistle. Weeds occur sporadically near access roads, the mill building and the fence bordering the water treatment plant (East side of property). Ongoing spraying activities have significantly reduced weeds on the property. Current practice involves walking around property and spraying weeds as required over the June – September growing season.
11. Permitting Activity.
  - UMC submitted a status report to the Lake County Commissioners as required by our Conditional Use Permit (CUP).
  - UMC continued to maintain SWMP CDPHE. The APENs expired due to lack of activity at the mill and UMC will renew these permits ahead of construction activity.
12. Reclamation/Bond. No permanent reclamation occurred at the mill in the last 12 month period. Additional interim stabilization activities continued within existing disturbed areas. An Irrevocable Letter of Credit remains in place for \$64,430 from the Bank of Colorado of Yuma, CO for the Leadville Mill bond.

#### **Anticipated Activities: June 19, 2018 to June 18, 2019**

No new disturbances are planned for the Leadville Mill. Construction activities will continue within the existing disturbed area to finish the tailings storage facility. Figure 6-2 is submitted showing the current disturbance outline and major proposed activities within the current disturbance area.

UMC's planned activities for the year will occur in two phases; Phase 1 associated with environmental and permit-related activities, and Phase 2 work related with construction activities required to initiate mill operations.

#### **Phase 1 – Environmental & Permit Activities:**

1. Continue Ground- and Surface-water monitoring activity as required.
2. Continue routine care and maintenance activities as required by our 110(d) and Lake County CUP permits.
3. Renew APENs with CDPHE when required

#### **Phase 2 – Construction Activities:**

Construction activities are dependent on our ability to raise the capital required to complete and operate the mill. The following activities will occur once funds are in place.

- 1 Mill equipment, replacement and repair summer 2018.

- 2 SWMP application July 2019. (No NPDES)
- 3 APEN and Application for Construction Permit Feb 2019
- 4 MSHA compliance anticipated July 2019.
- 5 TSF reconstruction anticipated completion August 2019.
- 6 Initiate mill startup September 2019.
- 7 Initiate removal of the sulfidic ore in the temporary ore stockpiles within 60 days of resumption of milling operations.
- 8 No additional land will be disturbed; no additional land will be permanently reclaimed. The mill disturbed area will remain at 8.1 acres.

**Letter, Annual Fee, Report and Map Due  
May 18, 2018  
(CDRMS)**





## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman St. Room 215  
Denver, CO 80203

May 18, 2018

Nick Michael  
Union Milling Company, LLC  
P.O. Box 620490  
Littleton, CO 80162-0490

### **Annual Fee, Report and Map Due**

Under the terms of your Reclamation Permit and Colorado Statutes, you must submit an Annual Fee and Annual Report (including a map). You must pay the Annual Fee and submit an Annual Report each year until reclamation responsibility release is granted. The Annual Fee is not a renewal fee. The Fee and Report are for last year's exploration or mining and reclamation season, and must be paid even if your operation was inactive.

If you have requested reclamation responsibility release from the Division of Reclamation, Mining and Safety ("Division") but release has not been granted by the anniversary date listed below, the Annual Fee, Report and Map must be submitted. If the permit is released before the anniversary date, then by Statute, it is not necessary to pay an Annual Fee or submit an Annual Report for that year. The annual fee, report, and map are due on or before the Anniversary Date for the following operation:

Permit:	M-1990-057
Operation Name:	Leadville Mill
Anniversary Date:	June 18, 2018
Total Fee Due:	\$518.00 (Due on or before your anniversary date)

If the complete annual fee submittal is not received on or before your anniversary date, the enforcement process will be initiated. Enforcement actions may result in civil penalties and possible revocation of your permit.

**Effective January 1, 2018, all annual report, map, and fees must be submitted electronically, using the Division's ePermitting system.**

To file your report, upload your map, and pay your fee online now, go to the link below:  
[https://dnrforms.state.co.us/Forms/DRMSeForms\\_LandingPage](https://dnrforms.state.co.us/Forms/DRMSeForms_LandingPage)



If you have not yet set up your ePermitting account, go to the link below to get started:  
<http://mining.state.co.us/Pages/ePermitting.aspx>

There are detailed instructions on how to file your report, upload your map, and pay your fee in the ePermitting User's Manual at:  
<http://mining.state.co.us/Documents/DRMSePermittingManualVer1.pdf>

If you need additional information or have any questions, please contact Dustin M. Czapla at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at (303) 866-3567 ext. 8188, or by email at [Dustin.czapla@state.co.us](mailto:Dustin.czapla@state.co.us).

## Figure 6-2



