

**COLORADO Division of Reclamation, Mining and Safety** Department of Natural Resources

## MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

| MINE NAME:                      |                        | MINE/PROSPECTING ID#:           | MINERAL:                             | COUNTY:     |
|---------------------------------|------------------------|---------------------------------|--------------------------------------|-------------|
| San Luis Project                |                        | M-1988-112                      | Gold and silver                      | Costilla    |
| INSPECTION TYPE:                |                        | INSPECTOR(S):                   | INSP. DATE:                          | INSP. TIME: |
| Multi Person Inspection         |                        | Lucas J. West, Tim Cazier       | June 20, 2018                        | 09:30       |
| OPERATOR:                       |                        | <b>OPERATOR REPRESENTATIVE:</b> | TYPE OF OPERATION:                   |             |
| Battle Mountain Resources, Inc. |                        | Julio Madrid                    | 112d-3 - Designated Mining Operation |             |
|                                 |                        |                                 |                                      |             |
| <b>REASON FOR INSPECTION:</b>   |                        | BOND CALCULATION TYPE:          | BOND AMOUNT:                         |             |
| Normal I&E Program              |                        | None                            | \$7,400,000.00                       |             |
| DATE OF COMPLAINT:              |                        | POST INSP. CONTACTS:            | JOINT INSP. AGENCY:                  |             |
| NA                              |                        | None                            | None                                 |             |
| WEATHER:                        | INSPECTOR'S SIGNATURE: |                                 | SIGNATURE DATE:                      |             |
| Clear                           | Man                    |                                 | July 9, 2018                         |             |

## **GENERAL INSPECTION TOPICS**

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

| (AR) RECORDS <u>Y</u>                    | (FN) FINANCIAL WARRANTY <u>N</u>   | (RD) ROADS <u>Y</u>        |
|--|------------------------------------|----------------------------|
| (HB) HYDROLOGIC BALANCE <u>N</u>         | (BG) BACKFILL & GRADING Y          | (EX) EXPLOSIVES <u>N</u>   |
| (PW) PROCESSING WASTE/TAILING <u>N</u>   | (SF) PROCESSING FACILITIES N       | (TS) TOPSOIL <u>N</u>      |
| (MP) GENL MINE PLAN COMPLIANCE- <u>Y</u> | (FW) FISH & WILDLIFE <u>Y</u>      | (RV) REVEGETATION <u>N</u> |
| (SM) SIGNS AND MARKERS Y                 | (SP) STORM WATER MGT PLAN <u>N</u> | (RS) RECL PLAN/COMP Y      |
| (ES) OVERBURDEN/DEV. WASTE <u>N</u>      | (SC) EROSION/SEDIMENTATION Y       | (ST) STIPULATIONS <u>N</u> |
| (AT) ACID OR TOXIC MATERIALS <u>N</u>    | (OD) OFF-SITE DAMAGE <u>Y</u>      |                            |

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

## **OBSERVATIONS**

This inspection was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety for permitted operations. The San Luis Project is a 112d-3 operation permitted for the extraction and milling of precious metals. Mining and milling activities were completed in 1996 and the site has been in varying degrees of final reclamation ever since. The site includes approximately 736.92 permitted acres, with approximately 332 affected acres that are currently undergoing reclamation. The affected areas are to be reclaimed to support various post-mining land uses including industrial/ commercial, rangeland and wildlife habitat. The site is located approximately 4 miles northeast of San Luis, CO at approximately 8620 Feet in elevation. Public access to the site is controlled by a series of locked gates and the main offices and water treatment facility are located just north of Rito Seco Rd. Along with the Inspector and company representative listed on page one of this report Devon Horntvedt and Deb Miller, engineers employed by the Operator were present during the inspection. The Division currently holds a \$7.4 Million Financial Warranty for the site. The Financial Warranty was recently reviewed and is considered sufficient to achieve reclamation at this time. Six Photos accompany this report to illustrate the current site conditions.

The focus of this inspection was to accompany Deb Miller on her annual tailings dam safety inspection that is conducted internally. Tim Cazier, engineer for the Division, accompanied on the inspection to provide independent review of the dam and its inspection protocols. A more detailed write up of the findings of the dam inspection will be provided to the Operator under a separate cover.

The Tailings Impoundment facility as a whole appears to be in good condition and functioning as designed. Photos One and Two show the water collection pond within the Tailings Facility as well as the sprinkler system and other facilities on the surface. Due to recent drought conditions the water level in the collection pond has been drastically reduced. The face of the dam is in good condition and shows no signs of settling, slumping or erosion. The dam face can be seen in Photo Three. The vegetation appears to be doing well and no state listed noxious weeds were noted in that area. The exposed liner that is part of the underdrain and seepage collection system is in good condition. The toe drains at the base of the tailings dam can be seen in Photo Four. The seepage collection system appears to be functioning as designed and was producing approximately 25 GPM of seepage water from the system. The manifold and pipe system has been removed for routine maintenance. The toe drain seepage collection pond and pump back system are also in good condition. The Operator has expressed interest in altering the storm water control features for the face of the tailings dam by diverting clean storm water runoff off the face of the dam and out of the lined area to discharge into nearby drainages whereby removing that volume of water from the system. Changing the storm water management plan would need to be addressed through the Technical Revision process. The details of what would be required were discussed and would need to be officially submitted for technical review.

The process and construction of the concrete drop structure located adjacent to the tailings dam was conducted during this inspection. The contractors were working during the inspection and were in the process of grading, shaping and clearing vegetation of the drop structure. Photos of the work can be seen in Photo Five. The work appears to be coming along well and will continue to be monitored at various stages. The southern upland diversion ditch that reports to the concrete drop structure was also inspected. The ditch is in good condition and shows no signs of settling, slumping or erosion. An example of the condition of the upland diversion ditch can be seen in Photo Six.

Other areas of the permitted area were inspected for upcoming and ongoing reclamation tasks. Those areas include the water tower and facility, areas along the access road that can be reclaimed and storm water control structures located on site. Since the previous inspection the water tower and its associated foundations have been removed. The remaining tasks that remain to be completed are to reshape the hill top, stabilize the channel that was created where the overflow discharge for the tank once existed, final cleanup and topsoil with revegetation.

All areas that were inspected were in good condition and free from any trash and debris. No signs of settling, slumping or erosion were noted in those areas and no problems or possible violations were observed. All responses to this report should be directed to Lucas West at the Colorado Division of Reclamation Mining and Safety at 1313 Sherman Street, Room 215 Denver CO 80203, by phone at (970)-243-6368 or by email at lucas.west@state.co.us.



## **PHOTOGRAPHS**











Inspection Contact Address

Julio Madrid Battle Mountain Resources, Inc. P.O. Box 310 San Luis, CO 81152

Enclosure

CC: Larry Fiske, Newmont Mining Co.