

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, Wallace Erickson, Russ Mea	June 16, 2017	09:50
OPERATOR:		OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Battle Mountain Resources, Inc.		Larry Fiske	112d-3 - Designated Mining Operation	
REASON FOR INSPECTION:		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	ALAN		June 29, 2017	

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 Y	(BG) BACKFILL & GRADING <u>N</u>	(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>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN <u>N</u>	(CI) COMPLETE INSP \underline{Y}
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>N</u>	(RS) RECL PLAN/COMP <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>N</u>	(ST) STIPULATIONS <u>N</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 1,049 permitted acres, with 372 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 Inspectors and company representative listed on page one of this report, Julio Madrid and Steve Carino of Battle Mountain Resources Inc. were present during the inspection. Also present were the Operators environmental consultants, Melissa Chalona and Trevor Crane or Engineering Analytics, Inc. 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. Five Photos accompany this report to illustrate the current site conditions.

The main purpose of this inspection was to conduct a complete inspection with all pertinent personnel in preparation for the transfer of oversight from Wallace Erickson to Lucas West. The site was not active, and the water treatment facility was not operating during this inspection. The water treatment facilities utilizes a series of holding ponds, tanks, media filters and a reverse osmosis (RO) system to treat ground water prior to discharge. Photo One shows the RO System housed in the facility. When operating the water treatment facility receives a flow of approximately 700 gpm and discharges approximately 580 gpm. The holding ponds are all fenced in facilities and Pond 1 can be seen in Photo Two. Pond 1 consists of raw water pumped from a series of wells and feeds the treatment system. Ponds 2,3 and 4 are used to store water at various stages of the treatment procedure. Pond 3 is currently drained and being upgraded from an HDPE liner to a concrete liner. Ponds 2, and 4 are slated to also be upgraded at a TBD date. The areas around the water treatment facility include access roads, equipment storage areas and parking areas are all in good condition.

The tailings impoundment area appeared to be stable and in good condition. The free water pool located on top of the impoundment was observed, and the water levels are far below the maximum waterline that is outlined in the permit conditions. Photo Three shows the free water pool and surrounding vegetation. The other areas of the tailings impoundment are very well vegetated and appear to meet or exceed the conditions of the adjacent undisturbed areas. The maximum water line is designed to protect the main embankment from saturation which could lead to stability issues. The main embankment is well vegetated, appears to be stable and in good condition as seen in Photo Four. Also visible in photo Four is the underdrain system and collection pond located at the base of the main embankment. The operator has recently repaired a section on the north side of embankment that was experiencing some erosion issues. The repairs were completed successfully and no signs of significant erosion of the main embankment was noted during the inspection. The tailings impoundment and the main embankment to the collection pond immediately down gradient. The underdrains convey water that has percolated through the tailings impoundment down to the collection pond, where it is then recirculated back to the free water pool. The under drain was observed discharging water into the collection pond, which indicates the liner, and all of its components are functioning as designed.

Recently the Operator submitted and gained approval of Technical Revision 34 (TR-34) which addressed the south diversion ditch that runs along the southern edge of the tailings impoundment and the spill way associated with it. The main objective of TR-34 was to implement construction of a new concrete spill way with an upgraded capacity to handle storm water flows. Construction of the spill way has not commenced to date, and due to contacting difficulties will most likely not commence until the 2018 season. Photo Five shows the current spill way that exists as part of the storm water diversion system. The Division would like to remind the Operator that if the construction schedule changes to please notify the specialist, as inspections during construction of the spill way will take place. Routine maintenance of the diversion ditch above the location of the spill way has been recently completed. The diversion ditch appears to be in good condition and adequate to handle storm water runoff from the up gradient area.

The overall footprint of the site is in good condition and is free from excessive trash and debris. No noxious weeds or signs of significant erosion were noted during the inspection. 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









PERMIT #: M-1988-112 INSPECTOR'S INITIALS: LJW INSPECTION DATE: June 16, 2017

Inspection Contact Address

Larry Fiske Battle Mountain Resources, Inc. P.O. Box 310 San Luis, CO 81152

Enclosure

CC: Russ Means, Senior Environmental Protection Specialist Wallace Erickson, Senior Environmental Protection Specialist Tony Waldron, Minerals Program Director