

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:		
Cresson Project	M-1980-244	Gold	Teller		
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:		
Monitoring	Timothy A. Cazier	March 29, 2018	09:00		
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:			
Cripple Creek & Victor Gold Mining Compar	Justin Bills	112d-3 - Designated Mining Operation			
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:			
Normal I&E Program	None	\$208,491,188.00			
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:			
NA	None	None			
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:			
Cloudy		September 5, 2018			
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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>Y</u>	(EX) EXPLOSIVES <u>Y</u>
(PW) PROCESSING WASTE/TAILING Y	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN <u>NA</u>	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>Y</u>	(ST) STIPULATIONS <u>Y</u>
(AT) ACID OR TOXIC MATERIALS <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

The Division conducted a monitoring inspection of the site on March 29, 2018. Mr. Justin Bills represented CC&V during the inspection. Tim Cazier represented the Division. The planned inspection agenda included the following facilities and areas:

- High Grade Mill (HGM);
- Squaw Gulch Valley Leach Facility (SGVLF, a.k.a. VLF 2) slide area;
- SGVLF Underdrain Ponds;
- Arequa Gulch Valley Leach Facility (AGVLF, a.k.a. VLF 1) Phase IV Pumps & Header Failure;
- South Cresson Pit area.

Site Inspection:

<u>High Grade Mill</u>: The Division completed an exterior walk-around inspection. The purpose was to perform a visual inspection for leaks, spills and secondary containment problems. Both the east and west sides of the mill exterior were inspected, as well as the area around the completed concentrate storage facility (Con Barn). No problems were observed. It was noted at the time that the vat leach circuit on the west side of the HGM had not operated since on or around February 18, 2018.

<u>Squaw Gulch Valley Leach Facility (VLF 2) Slide Area</u>: Mr. Jeff Winterton accompanied the Division and Mr. Bills to the area on the east side of the VLF where a slide occurred in December 2017 between the 9850 and 9650 benches. Due to the slide and potential damage (unknown at the time of the inspection) the Division required CC&V to cease leaching within 500 feet of the slide area. The 500-foot limit was observed to be staked out using survey lathe (**Photo 1**) and leach system drip lines were observed to be tied off (**Photo 2**) outside this limit with drip lines dry within the 500-foot limit.

<u>SGVLF Underdrain Ponds</u>: The Division was accompanied by Mr. Dylan Noble to inspect the VLF 2 underdarin ponds. Wildlife fencing around the ponds had been completed (**Photo 3**). Mr. Noble indicated the water observed in the ponds (**Photo 4**) was meteoric. Mr. Noble explained the underdrain pumpback system has two pumps housed in the underdrain sump vault (**Photo 5**). Water levels observed from the two pump level indicators (**Photo 6**) in the vault were 39.4 ft (pump 19) and 41.6 ft (pump 20). Mr. Noble stated the pumps turn on at 50 ft and off at 35 ft.

<u>Phase IV Arequa Gulch Valley Leach Facility</u>: Messrs. Will Adams and Laurin Colby accompanied the Division and Mr. Bills to the Phase IV side of the VLF 1 where a leach system header failure (**Photo 7**) occurred on March 19, 2018. Repairs were underway at the time of the inspection. The Division was provided assurances all process solution remained within the VLF liner system and the event did not pose slope stability concern for the VLF.

While in the Phase IV area, the Division checked the water levels in the Phase IV HVSCS where an anomaly was observed during the February 2018 inspection related to water levels in the pumps being higher than the transducer reading which should be higher, as the transducer is outside the immediate influence of the pump drawdown cone of depression. The purpose of the transducer is to provide a more accurate indication of the water level in the Phase IV PSSA. The anomaly was observed again with the highest pump level at 36.3 ft and the transducer observed to be at 17.1 ft. CC&V agreed to investigate the anomaly.

South Cresson Pit area: As development of the South Cresson pit was in the early stages, blasting impacts on

nearby Victor and Goldfield might be at their most significant. Mr. Ben Larson accompanied the Division and Mr. Bills to a safe area about 1800 feet southeast of the Ajax building. The observation area was about 400 feet lower in elevation and roughly midway between Victor and Goldfield. The blast was to consist of two shots for the 10,155 bench at 14:30. Seismographs were not used. However, both shots were barely audible from this location and ground vibrations were slight and only detected at this location for the second shot. Mr. Larsen indicated CC&V continued to monitor blasts using several seismographs in the various communities around the mine.

<u>Permit Sign</u>: The permit sign observed at the Ironclad facility entrance meets the requirements of Rule 3.1.12 (Photo 8)

<u>On Site Meetings</u>: Mr. Mike Schaffner joined Mr. Bills for the close-out meeting in which the following items were discussed:

- a) Removal of DCF to inspect the VLF 2 geomembrane and soil liner under the VLF 2 slide area. Mr. Schaffner indicated the open trench approach to exposing the liner did not have the expected factor of safety, so CC&V engineers were working on an alternative approach.
- b) The Division requested a new contact for drill hole abandonment at CC&V with the departure of Jeff Campbell. Mr. Doug White (Newmont Geology) was offered as the new contact.

<u>Bond Review Status</u>: On March 20, 2018, the Division issued an acceptance letter for a \$500,000 increase rider bringing the bond currently held by the Division to \$208,491,188.00. The Division considers this to be adequate. However, the Division is in the process of reviewing CC&V's reclamation liability estimate submitted with the 2018 annual report. If any changes are required or comments need to be addressed, CC&V will be notified under separate cover.

Please contact Tim Cazier (303-866-3567, ext. 8169) if you have any questions regarding this report.

PHOTOGRAPHS



Photo 1. 500-foot leach limit staked out using survey lathe (more stakes beyond).



Photo 2. Leach system drip lines tied off at 500-ft limit.

PERMIT #: M-1980-244 INSPECTOR'S INITIALS: TC1 INSPECTION DATE: March 29, 2018

PHOTOGRAPHS (cont.)



Photo 3. Wildlife fencing around the VLF 2 underdrain ponds.



Photo 4. Meteoric water in NE VLF 2 underdrain pond.

PHOTOGRAPHS (cont.)



Photo 5. VLF 2 underdrain pump vault.



Photo 6. Water level indicators for Pumps 19 & 20 in VLF 2 underdrain sump vault.

PHOTOGRAPHS (cont.)



Photo 7. Erosion feature where a leach system header failure occurred on March 19, 2018.



Photo 8. Ironclad entrance permit sign.

Inspection Contact Address

Mike Schaffner Cripple Creek & Victor Gold Mining Company P.O. Box 191 Victor, CO 80860

EC: Michael Cunningham, DRMS Elliott Russell, DRMS Amy Eschberger, DRMS Meg Burt, CC&V Justin Bills, CC&V DRMS file