




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: Cresson Project	MINE/PROSPECTING ID#: M-1980-244	MINERAL: Gold	COUNTY: Teller
INSPECTION TYPE: Monitoring	INSPECTOR(S): Timothy A. Cazier	INSP. DATE: November 29, 2018	INSP. TIME: 09:55
OPERATOR: Cripple Creek & Victor Gold Mining Company	OPERATOR REPRESENTATIVE: Justin Bills, Katie Blake	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$208,491,188.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: January 4, 2019	

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

Tim Cazier (DRMS) conducted a regular monitoring inspection of the site on November 29, 2018. Mr. Justin Bills and Ms. Katie Blake represented CC&V during the inspection. The mine was operating at reduced capacity as the both the mill and crusher were down for maintenance. The planned inspection agenda included the following facilities and areas:

- High Grade Mill (HGM);
- Arequa Gulch Valley Leach Facility (AGVLF, a.k.a. VLF 1);
- Squaw Gulch Valley Leach Facility (SGVLF, a.k.a. VLF 2), including: liner investigation of the Mill reject pile area and the plans for ore stacking on the north side for transition into Phase II construction;
- Chicago Tunnel area.

Site Inspection:

Permit signs were observed at both the ADR1 and Ironclad entrance locations.

High Grade Mill: Messrs. Laurin Colby and Charles Bissue accompanied the DRMS, Mr. Bills and Ms. Blake on the mill 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 concentrate storage facility (Con Barn). No problems were observed. The vat leach circuit on the west side of the HGM (See **Photo 1**) continued to be offline (since around February 18, 2018).

Arequa Gulch Valley Leach Facility (VLF1): Messrs. Colby and Bissue accompanied the DRMS, Mr. Bills and Ms. Blake on the VLF1 tour. Active leaching areas were observed, primarily elevation 10,200 and 10,400. No significant ponding was observed. However, due to the cold temperatures, lots of ice (most of it process solution) was observed (See **Photos 2, 3 and 4**). Discussions with Messrs. Colby and Bissue indicated the mines does not expect to experience process solution ponding problems when the observed ice begins to melt. They were confident they could manage the solution at the anticipated melting rates.

Squaw Gulch Valley Leach Facility (VLF 2) & Liner Repair Area: Messrs. Colby and Bissue accompanied the DRMS, Mr. Bills and Ms. Blake to the VLF 2. Frozen process solution was observed on the on the slope from the 9650 bench (See **Photo 5**).

We observed the removal of the mill reject stockpile identified during the DRMS February as a potential problem related to liner integrity. A dozer with GPS elevation controls (See **Photo 6**) was observed pushing the reject material down to an area where a wheel loader was filling haul trucks with the scraped material to transport to elsewhere on VLF2. The mine intends to use a similar potholing approach to detect liner damage as with the previous investigation.

During the October 25, 2018 aerial inspection, the DRMS noted the north side of VLF2 had completed two 100-foot lifts above the haul road (See **Photo 7**) and expressed concerns with how ore stacking would proceed while adhering to the guidelines approved in TR-103 designed to reduce the potential damage to the VLF liner. While on the north side, Messrs. Colby and Bissue explained the mine's planned approach to loading this side of VLF2 after completion of Phase 2 liner construction (anticipated to occur during the 2019 construction season). The DRMS agreed the approach to push down some material to level the area near the Phase 2 liner tie-in (See

Photo 8) and build some up from the bottom on the west side (See **Photo 9)** would likely be able to achieve satisfactory results, but would require frequent and detailed coordination between mine planners and equipment operators. The DRMS emphasized this will be a critical effort to avoid potential costly damage to the liner during the transition to loading the Phase 2 liner.

While on the north side of VLF2, the DRMS noted the edge of liner was not marked as required by the approved permit. **The missing edge of liner markers are cited as a problem on page 1 of this report.** Based on observations of edge of liner markers on the north side of VLF2 made by the DRMS during the December 20, 2018 inspection, this problem is considered abated.

Chicago Tunnel area: Mr. Bills, Ms. Blake and the DRMS drove to the Chicago Tunnel area, recently incorporated into the Cresson Project. This area was formerly regulated under a separate mine reclamation permit (M-1988-026). The Chicago Tunnel area disturbance was incorporated into the Cresson Project with the approvals of amendments 11 and 12 (AM-11 & AM-12). However, the release request for the former Chicago Tunnel was submitted and approved only recently (September 5, 2018). The Chicago Tunnel is still regulated by the DRMS, but now under this permit (M-1980-244). CC&V representatives indicated very little activity has occurred in the Chicago Tunnel area and confirmed no underground activity had occurred since Newmont began operating the mine. The DRMS observed no signs of underground activity or other activity directly related to the mining operation (See **Photos 10, 11 and 12**). It should be noted one of the mine contractors uses this area to store and maintain his equipment.

PHOTOGRAPHS



Photo 1. Vat leach circuit on the west side of the HGM.

PHOTOGRAPHS (cont.)



Photo 2. VLF 1 ice (elevation 10,200, phase I/II).



Photo 3. VLF 1 ice (elevation 10,200, phase I/II).

PHOTOGRAPHS (cont.)



Photo 4. VLF 1 ice (elevation 10,400, phase V).



Photo 5. VLF 2 ice 9650 and 9750 benches.

PHOTOGRAPHS (cont.)



Photo 6. Dozer with GPS elevation controls removing reject pile south of VLF 2.



Photo 7. October 25, 2018 aerial showing two 100-ft lifts above Phase II liner tie-in (looking north).

PHOTOGRAPHS (cont.)



Photo 8. North VLF2 area & direction material will be pushed down to level area near the Phase 2 liner tie-in.



Photo 9. NW VLF2 Area & direction material will be pushed up to facilitate the Phase 2 liner tie-in.

PHOTOGRAPHS (cont.)



Photo 10. Chicago Tunnel area (looking NE from portal).



Photo 11. Chicago Tunnel portal.

PHOTOGRAPHS (cont.)



Photo 12. Chicago Tunnel area (looking SW from portal).

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
Justin Raglin, CC&V
Justin Bills, CC&V
DRMS file