



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: Cresson Project	MINE/PROSPECTING ID#: M-1980-244	MINERAL: Gold	COUNTY: Teller
INSPECTION TYPE: Monitoring	INSPECTOR(S): Timothy A. Cazier	INSP. DATE: July 31, 2018	INSP. TIME: 09:40
OPERATOR: Cripple Creek & Victor Gold Mining Company	OPERATOR REPRESENTATIVE: Justin Bills	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: December 5, 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>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>Y</u>	(FW) FISH & WILDLIFE----- PB	(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 July 31, 2018. Mr. Justin Bills represented CC&V during the inspection. 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 repair area;
- East Cresson Overburden Storage Area (ECOSA) Seep;
- South Cresson Pit area – blast observed;
- Adsorption Desorption Recovery Facility No.1(ADR1);
- Adsorption Desorption Recovery Facility No.2 (ADR2);

Site Inspection:

High Grade Mill: Mr. Dave Rigsby accompanied the DRMS and Mr. Bills 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 continued to be offline (since around February 18, 2018).

Arequa Gulch Valley Leach Facility (VLF1): Mr. Laurin Colby accompanied the DRMS and Mr. Bills on the VLF1 tour. Active leaching areas were observed, primarily elevation 10,200 and 10,400. **The copious amount of ponded solution observed on the surface was unprecedented** (see **Photos 1 -3**) **and cited as a Problem.** Mr. Colby indicated they were having troubles with the “wobblers” becoming plugged with solids, causing them to malfunction (“squirt” instead of spray). The DRMS reminded CC&V, pursuant to the approved Wildlife Protection Plan, there should be no areas of ponded solution greater in area than three feet by three feet. Site personnel were contacted by Mr. Colby during the inspection to begin remedying the situation. Due to the large areas exhibiting solution ponding, it took some time to correct this problem. It appeared to be resolved by the time the DRMS’s August inspection. The problem with solution ponding has been an issue on and off for several months. The DRMS acknowledges the change in personnel over the past several months has made the importance of this issue a challenge to convey to the appropriate responsible parties. Nonetheless, the **DRMS continues to emphasize the importance of adhering to the three foot by three foot limit for ponded solution as directed in the approved wildlife protection plan.** As of the writing of this inspection report, the ponded solution problem observed during the July inspection is considered abated.

Squaw Gulch Valley Leach Facility (VLF 2) & Liner Repair Area: Messrs. Colby and Bills accompanied the Division to the VLF 2 slide area between the 9850 and 9650 benches. Ames construction had completed placement of the drain cover fill (DCF) over the repaired geomembrane liner between the 9650 and 9750 benches (see **Photo 4**) and were actively placing DCF between the 9750 and 9850 benches (see **Photo 5**) using a dozer with GPS to control the thickness of the DCF placement.

Active leaching areas were also observed on VLF 2. Some ponded solution was observed using binoculars on the northwest side of the pad (see **Photo 6**). However, the problem was not as extensive as that on VLF 1. Water levels in the VLF 2 pregnant solution storage area (PSSA) were checked to ensure they were below the 80 percent reporting level (94 feet for VLF 2 PSSA). The piezometer (which should provide the highest water level reading)

was at 77.09 ft. The other four transducers indicated a variable water level (as expected) between 69.55 ft and 70.76 ft.

East Cresson Overburden Storage Area (ECOSA) Seep: Mr. Bills accompanied the DRMS to the ECOSA seep area. No inflow to the seepage ponding area (see **Photo 7**) was observed. Mr. Bills indicated seepage begins to be expressed 4 to 6 hours after a storm event. It was noted at the time of the inspection the new Grassy Valley monitoring well for monitoring potential seep impacts had not yet been installed.

South Cresson Pit Blast: At 15:00, two successive blasts were observed in the South Cresson Pit from the American Eagle Overlook. The blasts appeared to have occurred as planned and no problems were observed.

Adsorption Desorption Recovery Facility No.1 (ADR1): The DRMS and Mr. Bills performed the ADR1 exterior walk-around inspection unaccompanied by a CC&V ADR representative. The purpose was to perform a visual inspection for leaks, spills and secondary containment problems. No problems were observed.

Adsorption Desorption Recovery Facility No.2 (ADR2): Mr. Jay Ballard accompanied the DRMS and Mr. Bills on the ADR2 exterior walk-around inspection. The purpose was to perform a visual inspection for leaks, spills and secondary containment problems. No problems were observed.

PHOTOGRAPHS



Photo 1. Ponded solution on VLF 1 north end/phase IV, elevation 10,200.

PHOTOGRAPHS (cont.)



Photo 2. Poned solution on VLF 1 (elevation 10,200, phase I/II).



Photo 3. Poned solution on VLF 1 (south side phase I bordering phase V).

PHOTOGRAPHS (cont.)



Photo 4. Completed placement of DCF between the VLF 2 9650 and 9750 benches.



Photo 5. Actively placing DCF between the VLF 2 9750 and 9850 benches.

PHOTOGRAPHS (cont.)



Photo 6. Ponded solution on northwest side of VLF 2.



Photo 7. ECOSA seepage collection pond (note lack of inflow).

Inspection Contact Address

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