




**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.

<b>MINE NAME:</b> Cresson Project	<b>MINE/PROSPECTING ID#:</b> M-1980-244	<b>MINERAL:</b> Gold	<b>COUNTY:</b> Teller
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Timothy A. Cazier	<b>INSP. DATE:</b> January 19, 2017	<b>INSP. TIME:</b> 10:30
<b>OPERATOR:</b> Cripple Creek & Victor Gold Mining Company	<b>OPERATOR REPRESENTATIVE:</b> Jeff Campbell	<b>TYPE OF OPERATION:</b> 112d-3 - Designated Mining Operation	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$173,934,420.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> April 3, 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>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</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----- <u>Y</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>NA</u>	(CI) COMPLETE INSP---- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>Y</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**

The Division conducted a monitoring inspection of the site on January 19, 2017. Messrs. Jeff Campbell and Gary Horton, and Ms. Clara Steward represented the CC&V Environmental Department during various parts of the inspection. Tim Cazier represented the Division. The planned inspection agenda included the following facilities and areas:

- High Grade Mill (HGM);
- Arequa Gulch Valley Leach Facility (AGVLF): Edge of Liner signs, header breach repair;
- Globe Hill Development Area.

### **Site Inspection:**

**High Grade Mill:** The Division was accompanied by Gary Horton and Don Rodabough to the HGM to perform an exterior walk-around inspection. The Division noted snow and ice in the leach tank secondary containment area (**Photo 1**). CC&V submitted photographic evidence of removing the snow and ice via email on February 2, 2017, so this was not cited as a problem in this inspection report. The Division also noted a leaking pump on the south side of the neutral pH process water tank (see **Photo 2**). Mr. Rodabough indicated maintenance was scheduled for the pump and the sludge would be cleaned out of the secondary containment as part of the maintenance program. The water level in the southwest stormwater sump (see **Photo 3**) appeared to be well below the overflow elevation of the mill liner. Mr. Rodabough pointed out CC&V had replaced an exterior pipe (see **Photo 4**) from the neutral pH filter press to the process ore thickener with a new rubber lined pipe to prevent leaking the pipe.

**AGVLF:** The Division was accompanied by Mr. Campbell and Mr. Jason Cruz to inspect the area where a 12" header pipe ruptured on January 4, 2017 (**Photo 5**) on the northeast end of the AGVLF between the Load Out Bin (LOB) and the Lime Silo. Back fill of the washed out area had been completed (**Photo 6**) and CC&V representatives pointed out how the release solution remained on the VLF liner area. The inspection proceeded to the southeast area of the AGVLF where CC&V representatives pointed out the progress made in replacing the edge of liner (EOL) signs cited as a problem in the Division's November 21, 2016 inspection report. Mr. Campbell indicated 65 signs had been replaced (**Photo 7**) and CC&V was waiting for an additional 17 signs to arrive in order to complete the task (**Photo 8**). The Division noted the replaced signs had only one bolt attaching the signs to the T-posts, a condition that led to the previous signs being torn off by high winds. The Division strongly recommends CC&V use two bolts to attach each EOL sign to each T-post.

The Division noted stockpiled ore near the South Cresson area on the way to the southeast area of the AGVLF. CC&V followed up with an email on February 2, 2017 indicating these stockpiles are temporary and will only be present for the next couple of months whilst CC&V completes an ore characterization analysis program. They also stated these stockpiles are located atop of backfill waste (the old South Cresson Pit). The Division plans to follow up on these stockpiles in future inspections.

**Squaw Gulch Valley Leach Facility:** The Division observed High Volume Solution Collection System (HVSCS) water levels near the Squaw Gulch ADR (ADR2). All levels were below the 94 foot limit. However, with the old snow, it was noted there were no footprints in the vicinity of the piezometer (ID #88314). The piezometer was installed to provide the most reliable water level in the SGVLF as it was designed to be outside the riser pipe drawdown radius of influence. This inspector questioned Mr. Cruz as to whether CC&V was monitoring the piezometer. He stated he would check procedures and get back to the Division. CC&V followed up with an email on February

2, 2017 confirming "the VLF2 piezometer (#88314/pond level) is recorded per shift".

Globe Hill Development Area: The Division visited the area where the Globe Hill stormwater diversion channel is planned for the purpose of maintaining flows in Poverty Gulch. Ms. Steward and Mr. Ben Larsen accompanied the Division on this portion of the inspection. This area was covered by snow (see **Photos 9 and 10**). CC&V representatives indicated the Globe Hill pit would remove most, if not all the trees in this area.

On Site Meeting: Mr. Tyler O'Donnell briefed the Division on CC&V's plans to make changes to the process at the HGM by adding a concentrate storage area south of the HGM and sending this material from the gravity/flotation circuit (non-cyanide) to the proposed storage building and sending this material off site for further processing. The Division indicated this change should be submitted as a revision (a Technical Revision would be the ideal initial submittal). The Division would determine through the review process if the change was significant enough to require it be submitted as an amendment.

Summary:

1. The Division strongly recommends CC&V use two bolts to attach each EOL sign to each T-post.
2. Post inspection, CC&V confirmed a) the SGVLF piezometer (ID #88314/pond level) is being monitored and recorded; b) ore storage near the South Cresson is temporary; and c) the snow and ice in the HGM vat leach area was removed and mine personnel will continue to maintain secondary containment capacity in that area.
3. The concentrate shipping revision to the permit could be submitted as a TR, but the Division will make a final determination as to whether it requires an amendment through the review process.
4. No problems were cited.
5. The Division is waiting for CC&V to submit a copy of the 2016 annual geotechnical report.

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

## **PHOTOGRAPHS**



Photo 1. Snow & ice in Vat leach tank secondary containment area (removed post inspection).



Photo 2. Leaking pump on south side of the neutral pH process water tank (note sludge to be cleaned up).



**PHOTOGRAPHS (cont.)**

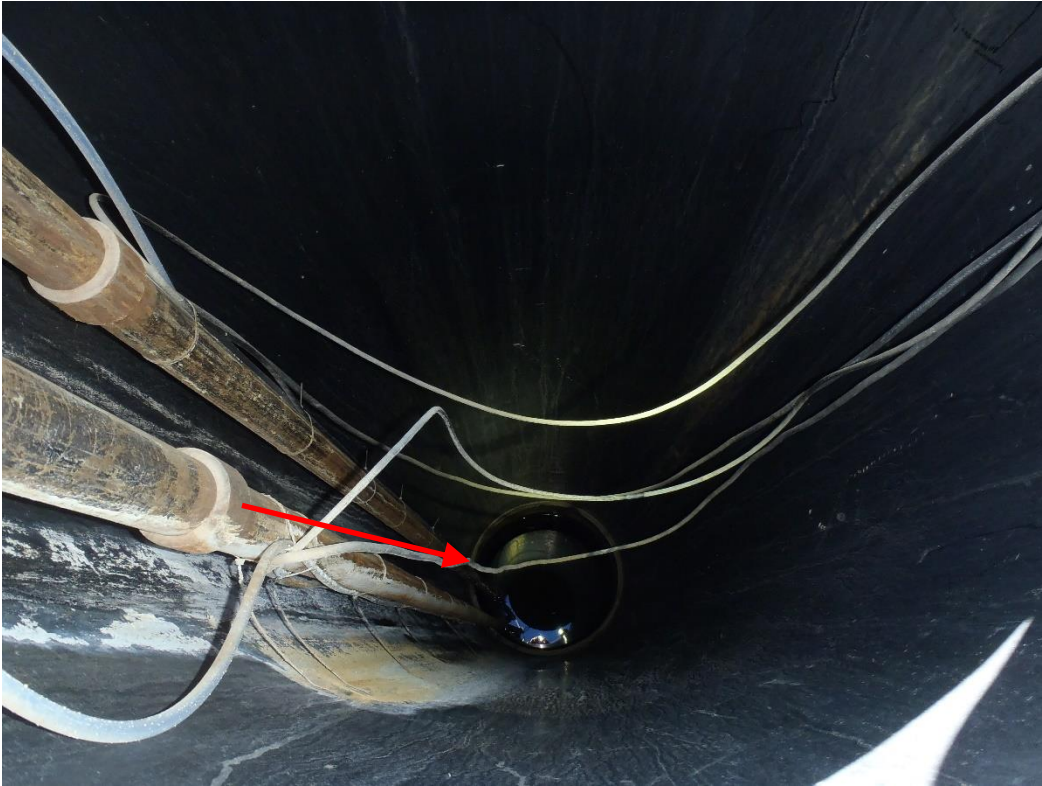


Photo 3. Water level in the HGM southwest stormwater sump.

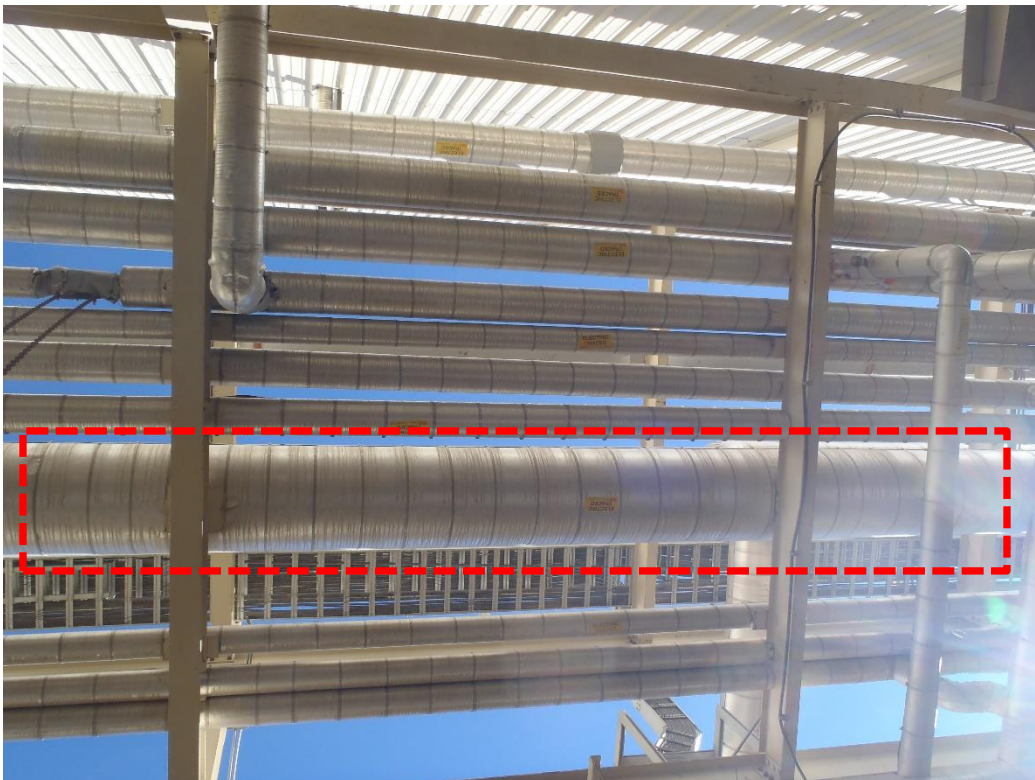


Photo 4. New rubber lined pipe from neutral pH filter press to process ore thickener.



**PHOTOGRAPHS (cont.)**



Photo 5. Source of header failure and top of backfill (looking west).



Photo 6. Completed Backfill of the washed out area from header failure (looking north).



**PHOTOGRAPHS (cont.)**



Photo 7. Four of 65 edge of liner signs replaced on T-posts.



Photo 8. Three of 17 edge of liner T-posts still needing signage.



**PHOTOGRAPHS (cont.)**



Photo 9. Globe Hill stormwater diversion channel area (1 of 2, looking SE).



Photo 10. Globe Hill stormwater diversion channel area (1 of 2, looking south).



**Inspection Contact Address**

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