

**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	September 27, 2018	09:45
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	<b>TYPE OF OPERAT</b>	TION:
Cripple Creek & Victor Gold Mining	Justin Bills, Katie Blake	112d-3 - Designated Mining Operation	
Company			
<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program	None	\$208,491,188.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA	None	None	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	
Clear	Thim UCZ	December 31, 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>N</u>	(FN) FINANCIAL WARRANTY <u>N</u>	( <b>RD</b> ) <b>ROADS <u>Y</u></b>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES $\underline{Y}$
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE PB	(RV) REVEGETATION Y
(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 Y	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>Y</u>	(OD) OFF-SITE DAMAGE <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**

Tim Cazier and Patrick Lennberg (DRMS) conducted a regular monitoring inspection of the site on September 27, 2018. Mr. Justin Bills and Ms. Katie Blake 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. VLF1);
- Squaw Gulch Valley Leach Facility (SGVLF, a.k.a. VLF2), including new road ramp problem area;
- East Cresson Overburden Storage Area (ECOSA) Seep;
- South Cresson Pit area southern limit;
- Valley Leach Facilities (VLF 1 and 2) Leak Detection System (LDS) Sumps;
- Process Solution Enhancement System (PSES);

#### Site Inspection:

<u>High Grade Mill</u>: Ms. Kimberly Worrell 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).

<u>Arequa Gulch Valley Leach Facility (VLF1)</u>: Messrs. Laurin Colby and Dylan Noble accompanied the DRMS, Ms. Blake and Mr. Bills on the VLF1 tour. Active leaching areas were observed, primarily elevation 10,200 and 10,400. <u>The amount of ponded solution observed (see Photos 1 -2) on the surface was significantly less than</u> <u>observed during the July inspection, but still exceeded the three foot by three foot limit allowed by the</u> <u>approved wildlife protection plan and cited as a Problem</u>. Site personnel were contacted by Mr. Colby during the inspection to begin remedying the situation. It took some time to correct this problem, but It appeared to be resolved by the time the DRMS's October inspection. The problem with solution ponding has continues to be an intermittent problem. The <u>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</u>. As of the writing of this inspection report, the ponded solution problem observed during the September inspection is considered abated.

<u>Squaw Gulch Valley Leach Facility (VLF 2 ) & Liner Repair Area</u>: Messrs. Colby and Bills accompanied the DRMS to the east side of VLF2 where the new access ramp (see **Photo 3**) to the 9950 elevation was identified by CC&V has not having been constructed in accordance with the revised ore stacking pan approved by the DRMS with TR-103. CC&V explained their investigation to assess liner damage. The DRMS is satisfied with their investigative approach.

Messrs. Colby and Noble accompanied the DRMS, Ms. Blake and Mr. Bills on the VLF2 tour. Active leaching areas were also observed on VLF 2. Some ponded solution was observed using binoculars on the northwest side of the pad at the 9850 elevation (see **Photo 4**). <u>The observed ponded solution on VLF2 was cited as a problem</u>. The problem was resolved by the DRMS's October inspection.

<u>East Cresson Overburden Storage Area (ECOSA) Seep</u>: The DRMS was accompanied by CC&V personnel to ECOSA seep area. The seepage area appeared wet with near zero flow (see **Photo 5**) was observed.

<u>South Cresson Pit area</u>: The purpose of the visit to the South Cresson pit was to help the DRMS clarify whether or not a revision is necessary with respect to the planned extent of the fully developed South Cresson pit. CC&V was in the process of demolishing the Ajax Building (see **Photo 6**), previously used to store drill core. The pit limit was staked with survey lathe (see **Photo 7**). Subsequent to the inspection, the DRMS determined the marked extent of the South Cresson pit does NOT require a revision to the mine reclamation permit.

<u>Valley Leach Facilities (VLF 1 and 2) Leak Detection System (LDS) Sumps</u>: Messrs. Colby and Noble accompanied the DRMS, Ms. Blake and Mr. Bills on the visit to several LDS sumps. The following table summarizes which sumps and observations made at each.

LDS Sump ID	Water Observed	Other Observations	
LDS 1	Yes (see <b>Photo 8</b> ) <sup>‡</sup>	Needs a raise or barrier to prevent debris and meteoric water	
		inflow (see <b>Photo 9</b> )	
LDS 12	Dry	Ground at surface is well below the top of sump (see Photo	
		10).	
LDS 13	Yes (see <b>Photo 11</b> ) <sup>‡</sup>	Needs a raise or barrier to prevent debris and meteoric water	
		inflow (see Photo 12)	
SG LDS 1	Dry	Ground at surface is well below the top of sump (see Photo J).	
		The CC&V provided map labels this as SG LDS 2. The map	
		needs to be corrected.	
SG LDS 3	Dry	Ground at surface is well below the top of sump (see Photo	
		13).	
‡ LDS sumps must be sampled and characterized when they contain water. Water should be removed			
afterwards so it can be determined if water continues to enter the sump.			

<u>Process Solution Enhancement System (PSES)</u>: Messrs. Colby and Noble accompanied the DRMS, Ms. Blake and Mr. Bills on the PSES tour. CC&V personnel clarified the PSES has been in use, but does not receive process solution from Phase II (VLF1) as it has a higher lime content causing problems with the system.

#### PERMIT #: M-1980-244 INSPECTOR'S INITIALS: TC1 INSPECTION DATE: September 27, 2018

# **PHOTOGRAPHS**



Photo 1. Ponded solution on VLF1 (10,400 level).



Photo 2. Ponded solution on VLF1 (10,400 level).

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Photo 3. New access ramp to the VLF2 9950 elevation.



Photo 4. Ponded solution observed using binoculars on northwest side of VLF2 at the 9850 elevation.



Photo 5. ECOSA seep area appeared wet with near zero flow.



Photo 6. Demolishing the Ajax Building.



Photo 7. South Cresson pit limit staked with survey lathe.



Photo 8. Water observed in VLF1 LDS1 sump.



Photo 9. VLF1 LDS1 low profile requires a raise or barrier to prevent debris and meteoric water inflow.



Photo 10. VLF1 LDS12 with adequate profile to prevent debris and meteoric water inflow.



Photo 11. Water observed in VLF1 LDS13 sump.



Photo 12. VLF1 LDS13 low profile requires a raise or barrier to prevent debris and meteoric water inflow.



Photo 13. VLF2 LDS3 with adequate profile to prevent debris and meteoric water inflow.

#### Inspection Contact Address

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