

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	Elliott R. Russell	February 18, 2016	10:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Cripple Creek & Victor Gold Mining Company	Chris Hanks	112d-3 - Designated Mining Operation	

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program	None	\$173,434,420.00		
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA	None	None		
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:		
Windy	TT MUL	March 11, 2016		

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

### **GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected

(AR) RECORDS <u>PB</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>N</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE PB	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>Y</u>	(SW) STORM WATER MGT PLAN <u>N</u>	(CI) COMPLETE INSP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) SEDIMENT CONTROL <u>Y</u>	(RS) RECL PLAN/COMP <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>		

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

## PROBLEMS/POSSIBLE VIOLATIONS

**INSPECTION TOPIC:** Fish & Wildlife

**PROBLEM/POSSIBLE VIOLATION:** Problem 1: A significant amount of potentially impacted water was observed in the SGVLF PSSA. This is a potential wildlife attractant.

**CORRECTIVE ACTIONS:** Provide an estimate as to how long this condition may persist and a proposed means to address/mitigate the problem by the Corrective Action due date.

### **CORRECTIVE ACTION RESOLVED: 3/03/16**

**INSPECTION TOPIC:** Availability Of Records

**PROBLEM/POSSIBLE VIOLATION:** Problem 2: The Division is unable to determine the possible impact with observations made near the southwest corner of the High Grade Mill Pad without definitively knowing where the edge of the mill pad liner is located.

**CORRECTIVE ACTIONS:** The Operator shall establish temporary markers along the edge of the mill pad liner before the next site inspection.

**CORRECTIVE ACTION DUE DATE: 3/14/16** 

# **OBSERVATIONS**

The Division of Reclamation, Mining and Safety (Division) conducted an inspection of the Cresson Project (Permit File No. M-1980-244), a Regular 112d(3) Designated Mining Operation Reclamation Permit with 5,989.7 permitted acres and an approved post-mining land use of Rangeland and Wildlife Habitat. The mine is located southeast of Cripple Creek, Colorado and north of Victor, Colorado. Elliott Russell, with the Division, inspected the site. Chris Hanks, representing the Operator, accompanied the inspection. This inspection was carried out as a part of the Division's normal monitoring program. The primary focus of this inspection was to monitor ongoing construction projects on site. The following facilities were inspected during this site visit:

- Squaw Gulch Valley Leach Facility (SGVLF)
- Arequa Gulch Valley Leach Facility (AGVLF)

### SGVLF Inspection:

The Division and Mr. Hanks were accompanied by Ron DiDonato into the SGVLF. Ore had been stacked in the majority of the Pregnant Solution Storage Area (PSSA); the pad was being advanced toward the ADR2 and the pad elevation was 9,550' (**Photo 1**). Feeder lines and distribution lines were being installed on the northeast portion of the pad (**Photo 2**). The Division observed standing water/solution, approximately ½ acre in size, in the bottom of the PSSA at the toe of the stacking face (**Photo 3**). The Division met with Jeff Winterton to discuss the start-up of the leaching activities in the SGVLF. Mr. Winterton stated he thought the current exposed pond depth in the PSSA was roughly 10 feet. He was recirculating the solution by pumping from one of the ADR2 riser pipes and planned to pump the pond down beneath the level of the spent ore. Since this water is potentially impacted and greater than 9 sq. ft. as identified in the permit, the Division has cited this as Compliance Problem 1 requiring corrective action which the Operator resolved on March 3, 2016. The Operator emailed photographs showing that the pond had been covered by the advancement of the ore pad and the water was no longer exposed (**Photos 4 & 5**).

Other SGVLF construction activities occurring at the time of the inspection included a Phase I cut and Phase II fill earthwork project near the entrance of the SGVLF haul road. Mr. DiDonato explained that the Phase II leak detection sump will be constructed slightly different then proposed. The proposed location had the sump being constructed in a portion of a major haul road so they have planned to relocate it to the other side of the haul road's safety berm toward the SGVLF. This modification will remove an area (approximately 2 acres) of the liner as well as a change of the Phase II leak detection trench alignment and length. The Division also observed the construction on the upper reaches of the Phase I Leak Detection Trench 1. (Photos 6 & 7).

Following up with observations made during the December 28, 2015 Aerial Inspection, the Division inspected the southwest corner of the High Grade Mill Pad (HGM). An aerial photograph showed some stained soils along the outward slope of the HGM. During this site inspection, the Division visited this area and discovered several distinct areas with altered soil colors (**Photos 8-11**). The Division was unable to determine the edge of the HGM pad liner and will need this information to determine significance and possibly the cause of these stained soils. This has been cited as Compliance Problem 2 requiring the Operator to delineate the edge of the mill pad liner before the next site inspection. Division has scheduled a site inspection for March 15, 2016.

### AGVLF Inspection:

AGVLF PSSA solution levels were not checked as a part of this inspection.

The Division observed "bird balls", which replaced the temporary netting, in the High Grade Mill solution infiltration trench in the northern portion of the AGVLF pad (**Photo 12**).

### General

The Division observed the posted Amendment 11 notice at the entrance to the Iron Clad Facilities (Photo 13).

This concludes the Division's Inspection Report; a subset of photographs taken during the time of the inspection are included below. If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at **303-866-3567 x8132**, or by email at <u>elliott.russell@state.co.us</u>.

# **PHOTOGRAPHS**



Photo 1. Overview of the SGVLF; looking northwest.



Photo 2. Distribution and feeder lines located on the northeast portion of the SGVLF ore pad; looking northeast.



Photo 3. Standing water in the SGVLF PSSA; looking southwest down the active stacking face of the pad.



Photos 4 & 5. Photos submitted by the Operator showing ponded solution had been covered by the ore pad.



Photo 6. Construction of the leak detection trench just above the SGVLF haul road; looking southwest.



Photo 7. Leak detection trench and membrane completed, awaiting a soil cap; looking northeast.



**Photo 8**. Overview of the southwest corner of the High Grade Mill Pad, area of concern circled in red; looking north. (P=Pad,  $1=1^{st}$  Bench,  $2=2^{nd}$  Bench)



Photo 9. Area of altered soils; looking southeast.



Photo 10. Additional photo of the Area of altered soils; looking southeast.



**Photo 11**. Additional photo of the Area of altered soils; looking northeast from the 1<sup>st</sup> bench. Black arrow representing direction and approximate location of Photo 10.



Photo 12. Southern portion of the southwest corner of the High Grade Mill pad, looking northwest.



**Photo 13**. High Grade Mill water Infiltration trench on the north side of the AGVLF with "Bird Balls" floating on the surface; looking northwest.



Photo 12. Amendment 11 notice at the entrance to the Iron Clad Facilities; looking south.

#### **Inspection Contact Address**

Jack Henris Cripple Creek & Victor Gold Mining Company 100 North Third Street Victor, CO 80860

CC: Chris Hanks; CC&V Wally Erickson; DRMS Tim Cazier; DRMS Amy Eschberger; DRMS