



## 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.

<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 Cazier	<b>INSP. DATE:</b> June 2, 2020	<b>INSP. TIME:</b> 09:00
<b>OPERATOR:</b> Cripple Creek & Victor Gold Mining Company	<b>OPERATOR REPRESENTATIVE:</b> Justin Bills & Jeana Ratcliff	<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> \$209,491,188.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Cloudy	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> June 19, 2020

**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.**

**INSPECTION TOPIC:** Signs & Markers

**PROBLEM/POSSIBLE VIOLATION:** Problem: The affected area boundary markers at the Carlton Tunnel could not be located. This is a problem for failure to maintain boundary markers around the affected area as required by Section 3.1.12(2) of the rule.

**CORRECTIVE ACTIONS:** The operator shall conduct a survey and replace the boundary markers in the correct location(s). The operator shall provide proof to the Division that this has been done by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 7/20/20

## **OBSERVATIONS**

Tim Cazier (DRMS) conducted a regular monitoring inspection of the site on Tuesday, June 2, 2020. Mr. Justin Bills and Ms. Jeana Ratcliff represented CC&V during the inspection. This monthly inspection was originally planned for May 28<sup>th</sup>, but was postponed at CC&V's request due to schedule conflicts. The planned inspection agenda included the following facilities and areas:

- Carlton Tunnel
- High Grade Mill (HGM);
- Squaw Gulch Valley Leach Facility (SGVLF, a.k.a. VLF2) Phase 2 Construction;

Due to State COVID-19 protocols, this was the first on-site inspection at CC&V since February 27, 2020. Also due to COVID-19 protocols, DRMS staff are currently required to perform inspections in separate vehicles from site Operators. As DRMS staff are now driving the CC&V mine site, CC&V requires each DRMS inspector to complete a two-hour safety training session in order to operate a vehicle on site. This training is/will be required annually for as long as the separate vehicle protocols remain in place.

Carlton Tunnel: Mr. Bills and Ms. Ratcliff accompanied the DRMS (via separate vehicles) to the Carlton Tunnel area. The DRMS was notified on March 11, 2020 of a minor structural failure in the Carlton Tunnel. Based on a review of flow data, they believe the failure occurred on February 11<sup>th</sup> when flows were reduced to around 500gpm. They reported on March 11<sup>th</sup> the flows had returned to normal and were averaging 850gpm. They also reported there had not been any impact to water quality as a result of the failure. On March 16, 2020, the DRMS performed an aerial inspection of the site which included the Carlton Tunnel as the planned on-site inspection was cancelled due to the pandemic. A photo of the Carlton Tunnel outlet (see **Photo 1**) showed some disturbance south of the tunnel. The purpose of visiting the Carlton Tunnel during this inspection was two-fold: 1) to assess the impact of the reported structural failure, and 2) investigate the aerially observed disturbed area south of the tunnel. The failure was observed from both the outlet (see **Photo 2**) and from above (see **Photo 3**). The condition was consistent with that reported by CC&V on March 11<sup>th</sup>. It did not appear the failure was damming or significantly impeding the discharge and the opening appeared adequately secured to prevent unauthorized entry. CC&V representatives indicated the disturbed area south of the tunnel is material removed from the passive treatment ponds which are periodically cleaned out. The sludge disposal area was fenced (see **Photos 4 and 5**). The fenced area was measured using a Trimble Juno 3B handheld GPS unit and determined to be 0.14 acres. Enclosed are post inspection maps based on Google Earth images from June 2016 (**Post Inspection Map Figure 1**) and September 2013 (**Post Inspection Map Figure 2**) illustrating the changing nature of this area, while also considering the DRMS March 16 aerial photo. No boundary markers could be found in the Carlton Tunnel area. **The missing boundary markers are cited as a Problem on page 1 of this report.** Without boundary markers the DRMS could not verify how much, if any of the sludge disposal area is outside the affected area boundary. Once the boundary markers are placed, the DRMS will follow-up during a subsequent inspection to determine if revisions need to be made to the permit. A topsoil stock pile was also observed northwest of the Carlton Tunnel treatment ponds (see **Photo 6**).

High Grade Mill: Mr. Andrew Orser accompanied the DRMS 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. Some sludge was observed in the Vat Leach tank area on the west side of the HGM (see **Photo 7**). Mr. Orser explained the sludge was from recent maintenance and was being

removed. As it was being addressed and did not appear to significantly impact storage volume, it was not cited as a problem. A pile of ore concentrate (about six feet high and estimated to be 15 to 20 feet in diameter) was observed on the concrete apron outside the con barn cover. As this was unusual, Mr. Orser explained they are experiencing rail transportation problems at the transfer point between the trucks hauling the concentrate off site and the rail yard.

Squaw Gulch Valley Leach Facility (VLF2): Mr. Steve Blaskovich accompanied the DRMS to the crest of the pad on the north side of VLF 2 to observe construction. They were working in the Phase 2 A-5 area. Mr. Blaskovich indicated the geomembrane liner installation (see **Photo 8**) had just started the previous week. Equipment was observed compacting the soil liner fill (SLF - see **Photo 9**) and a crew was observed checking SLF thickness (see **Photo 10**). Anchor trenches were observed on the uphill side of the area being prepared for geomembrane liner installation.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at [tim.cazier@state.co.us](mailto:tim.cazier@state.co.us) if you have any questions regarding this report.

### PHOTOGRAPHS



Photo 1. DRMS March 16, 2020 Aerial image of the Carlton Tunnel.

**PHOTOGRAPHS (cont.)**



Photo 2. Carlton Tunnel outlet view of failure material (outlined).

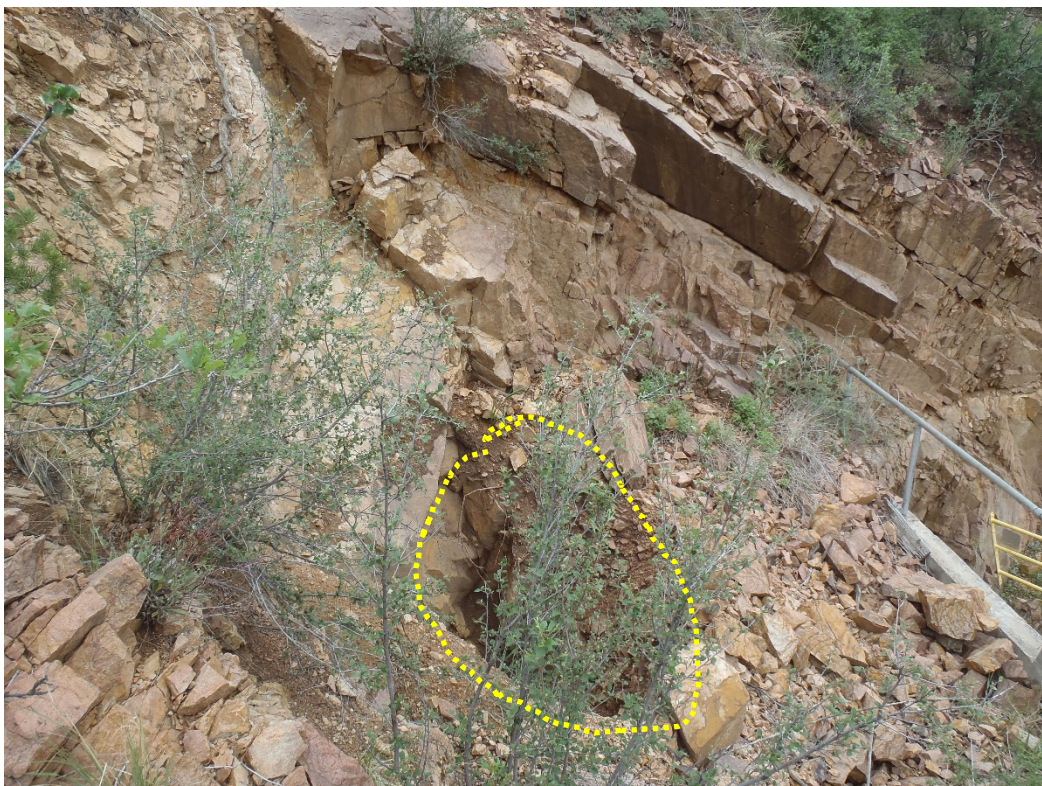


Photo 3. View of Carlton Tunnel failure from above outlet.

**PHOTOGRAPHS (cont.)**



Photo 4. Carlton Tunnel sludge disposal area (1 of 2 – looking east).



Photo 5. Carlton Tunnel sludge disposal area (2 of 2 – looking SSE).

**PHOTOGRAPHS (cont.)**



Photo 6. Carlton Tunnel topsoil stockpile (NW of treatment ponds – looking SE).



Photo 7. Sludge in HGM vat leach area.

**PHOTOGRAPHS (cont.)**



Photo 8. VLF 2 Phase 2 beginning of geomembrane installation.



Photo 9. VLF 2 Phase 2 SLF compaction effort.

**PHOTOGRAPHS (cont.)**



Photo 10. Crew verifying SLF required thickness.

**GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>Y</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <b>PB</b>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</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>Y</u>	

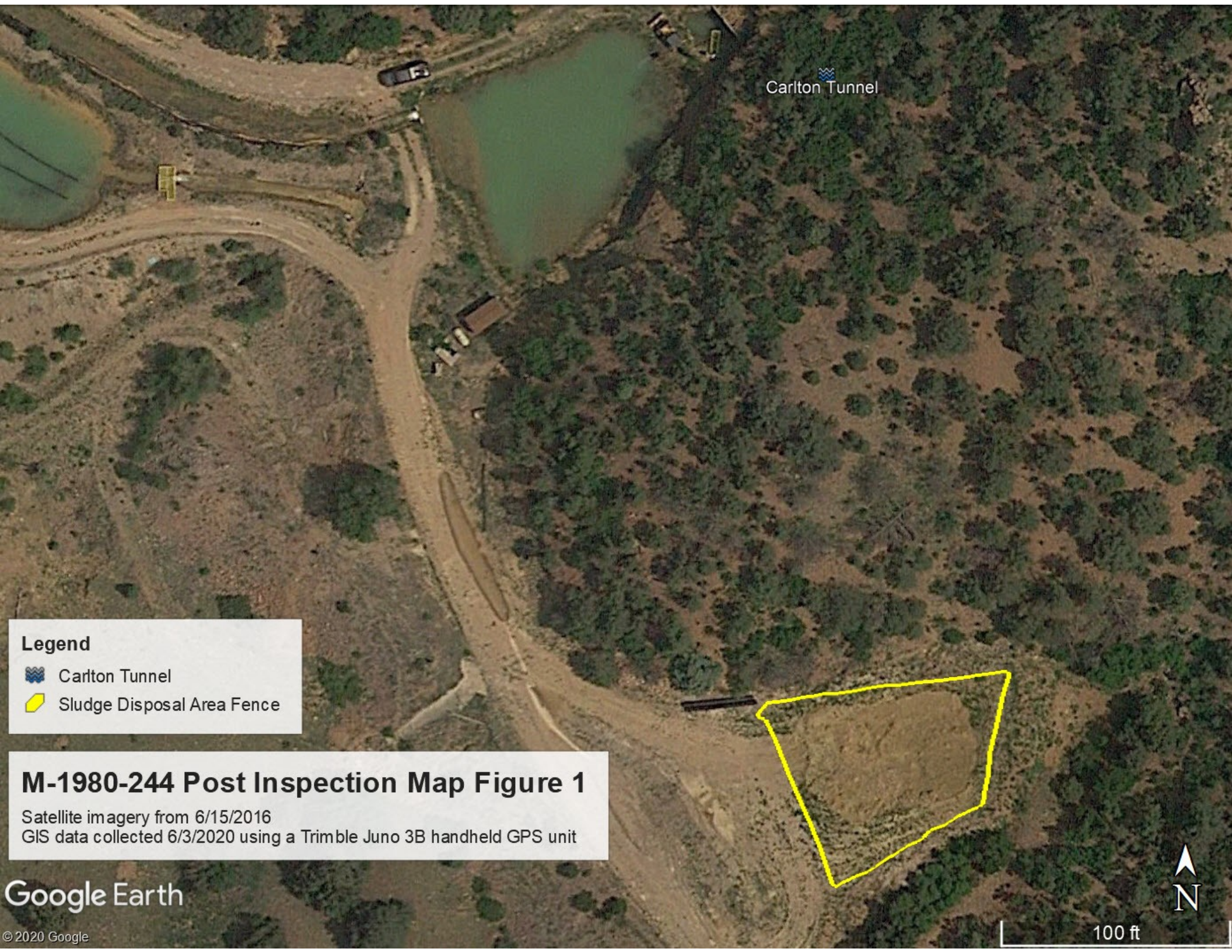
Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / **PB = Problem cited** / PV = Possible violation cited

**Inspection Contact Address**

Melissa Harmon  
Cripple Creek & Victor Gold Mining Company  
P. O. Box 191  
Victor, CO 80860



**Enclosures**

ec: Michael Cunningham, DRMS  
Elliott Russell, DRMS  
Patrick Lennberg, DRMS  
Brock Bowles, DRMS  
DRMS file  
Justin Bills, CC&V  
Jeana Ratcliff, CC&V  
Justin Raglin, CC&V  
Katie Blake, CC&V  
Wendy Conley, CC&V



Carlton Tunnel

### Legend

-  Carlton Tunnel
-  Sludge Disposal Area Fence

## M-1980-244 Post Inspection Map Figure 1

Satellite imagery from 6/15/2016  
GIS data collected 6/3/2020 using a Trimble Juno 3B handheld GPS unit

Google Earth

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100 ft

9/24/2013

Carlton Tunnel

### Legend

-  Carlton Tunnel
-  Sludge Disposal Area Fence

## M-1980-244 Post Inspection Map Figure 2

Satellite imagery from 9/24/2013

GIS data collected 6/3/2020 using a Trimble Juno 3B handheld GPS unit

Google Earth

© 2020 Google

100 ft

