




COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: April 9, 2014	INSP. TIME: 09:35
OPERATOR: Cripple Creek & Victor Gold Mining Company	OPERATOR REPRESENTATIVE: Chris Hanks, Scott Redabaugh	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$136,471,600.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 12, 2014

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>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>Y</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</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>N</u>	(SB) COMPLETE INSP---- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</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>N</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 April 9, 2014. Messrs. Timm Comer and Chris Hanks were present for a pre-inspection meeting. Messrs. Tim Cazier and Elliott Russell and Ms. Amy Eschberger represented the Division. The primary focus of this inspection was to observe ongoing construction and underground workings remediation in the Squaw Gulch VLF area.

Pre-Inspection Meeting:

Mr. Comer provided a status update on the following activities:

- Drawings are ready for the Squaw Gulch ADR location adjustment Technical Revision.
- CDPHE is ready to call the air quality permit complete.
- Arequa Gulch VLF barren solution pipe/water balance issue: the existing VLF pumps are to remain in service. The mine can increase the horsepower to facilitate lifting the barren solution over CN solution over the additional height of the VLF (compared to the elevation of the buried, now abandoned pipe elevation).
- Locations for the Squaw Gulch monitoring wells have been picked. Utilities are now being located.
- The 2014 annual report will include a unit cost update for the purpose of updating the financial warranty. The report will also clarify the affected area.
- The Squaw Gulch VLF closure drains will consist of ten five-inch diameter holes drilled approximately 50 feet into the diatreme. The increased depth is due to lower than expected permeability.
- New mercury emissions controls are being installed in the Arequa Gulch ADR to meet new EPA standards.
- The mine is getting a radiation permit from CDPHE for naturally occurring uranium and thorium that are being concentrated along with the gold in the mine's processing of the gold ore.

Inspection:

Mr. Hanks accompanied the all three Division representatives on the site inspection.

Acreage release: The Division observed the proposed acreage release area southeast of the existing radio tower (see **Photo 1**). The area appeared acceptable for release.

Mine plan: The Phase V VLF had been loaded with ore to above the repaired area that experienced sloughing in April 2012.

Construction: The Division observed installation of rock bolts designed to stabilize the steep wall on the west side of the proposed ADR (see **Photo 2**).

Scott Redabaugh and Ron DiDonato, representing CC&V provided oversight and answered the Division's questions regarding construction activity in the PSSA area. The Division observed the completed PSSA closure drains (see **Photo 3**) and secondary underdrain construction (see **Photo 4**). Mr. Redabaugh explained CC&V used geophysics to check for voids under the PSSA.

Messrs Redabaugh and DiDonato gave the Division a comprehensive overview of the investigation and

remediation approach used to ensure existing mine workings are stabilized prior to PSSA/VLF liner construction. A drilling program is used to confirm the extent of identified underground workings. Holes are drilled in a grid pattern (see **Photo 5**) to delineate the horizontal and vertical extents of underground workings within 50 feet of the surface. Red flags (see **Photo 6a**) confirm the existence of a void and are labeled with: underground working ID #, borehole #, void depth, and drilling date. Blue flags (see **Photo 6b**) indicate no void found and are labeled with: underground working ID #, borehole #, and drilling date. An excavator was observed exposing a drift (see **Photo 7**) for future remediation. Open workings, collapsed workings, shallow surface pits, laterals/drifts, inclines, and adits are all remediated per division approved project specifications. The new mill construction progress was observed from the AGVLF (see **Photo 8**).

Water levels: The inspection continued as the Division visited each of the high and low solution collection system transducers and recorded water level values in the Phase IV area only. The recording sheet is included as **Attachment A**. The water levels in the high volume collection system ranged between 11.9 and 12.3 feet, well below the 80% capacity level of 56.5 feet. The low volume collection system levels were observed to be between 12.0 and 16.8 inches, well below the 24-inch maximum allowed level.

The North and South Arequa Gulch underdrains were inspected. The South Underdrain discharge was determined to be 3.6 gpm. The North Underdrain, A35 pumpback line, B63 pumpback line were dry. The water level in the Arequa Gulch monitoring well (AGMW) 63 B was 35.37 feet, while AGMW 35A was dry.

PHOTOGRAPHS



Photo 1. Proposed acreage release area southeast of the existing radio tower (looking east).

PHOTOGRAPHS (cont.)



Photo 2. Installation of rock bolts in the steep wall on the west side of proposed ADR.



Photo 3. PSSA closure drains (looking south).

PHOTOGRAPHS (cont.)



Photo 4. Secondary underdrain construction.



Photo 5. Drill pattern to delineate extents of underground working (NE of PSSA).

PHOTOGRAPHS (cont.)

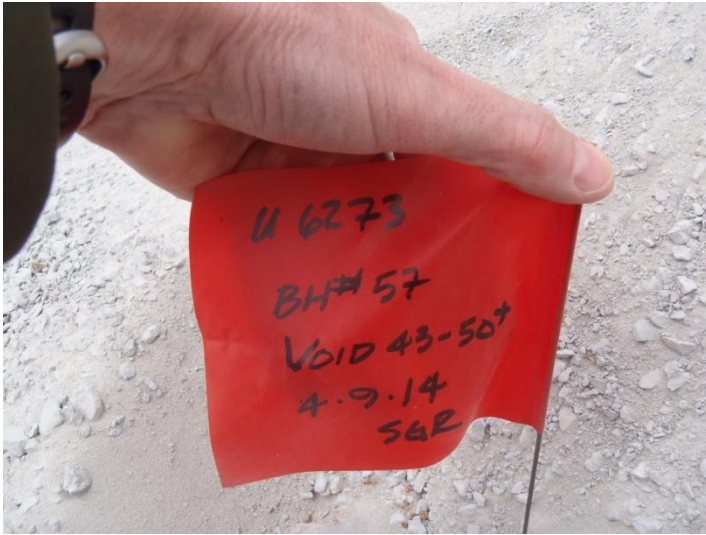


Photo 6a. Red Flag – confirming void.

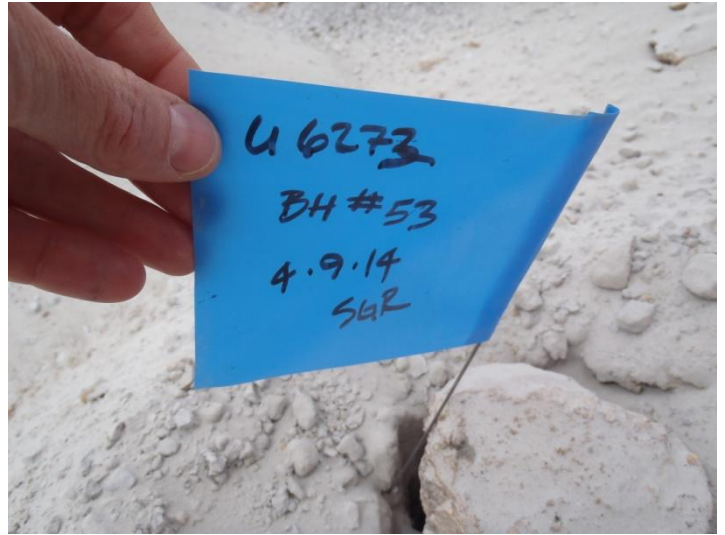


Photo 6b. Blue Flag – no void found.



Photo 7. Excavator exposing a drift for future remediation (NE of PSSA).

PHOTOGRAPHS (cont.)



Photo 8. New mill construction progress (looking north).

Inspection Contact Address

Timm Comer
Cripple Creek & Victor Gold Mining Company
100 North Third Street
Victor, CO 80860

Enclosure

EC: Tom Kaldenbach, DRMS
Amy Eschberger, DRMS
Elliott Russell, DRMS
Chris Hanks, CC&V
DRMS file

ATTACHMENT A

Date:

Phase I High Volume Solution Collection

Pump #299 / XDCR #xx
Note: 80% Pump #300 / XDCR #00
cap. @ 63.75 Pump #301 / XDCR #01
ft Pump #302 / XDCR #02
 Pump #303 / XDCR #03

Phase I Pond Piezometers

Pond Lvl / XDCR #1
 System Press / XDCR #2

Phase I Low Volume Solution Collection

Note: Req'd Piezo #1 (HAND)
< 2 ft Piezo #2 (AUTO)

Phase II & III High Volume Solution Collection

Note: 80% Pump / XDCR #4
cap. @ 49.4 Pump / XDCR #5
ft Pump / XDCR #6

Phase II & III Pond Piezometer

Piezo (Pipe)

Phase II & III Low Volume Solution Collection

Note: Req'd Pump / XDCR #1 (AUTO)
< 2 ft Pump / XDCR #2 (AUTO)

Phase IV High Volume Solution Collection

Note: 80% Pump #4 / XDCR #307
cap. @ 56.5 Pump #5 / XDCR #308
ft Pump #6 / XDCR #309
 XDCR pipe (#310 Reserved)

Phase IV Low Volume Solution Collection

Note: Req'd Pump / XDCR #1
< 24" Pump / XDCR #2

Phase V High Volume Solution Collection

Note: 80% XDCR #311 (AUTO)
cap. @ 36.5 XDCR #312 (AUTO)
ft XDCR #313 (AUTO)
 XDCR #314 (AUTO)

Phase V Low Volume Solution Collection

Note: Req'd XDCR #001
< 24" XDCR #002

External Pond Low Volume Solution Collection

Note: Req'd Pump / XDCR #1-EXT (AUTO)
< 24" Pump / XDCR #2-EXT (AUTO)

Underdrain Discharge Area

South Underdrain (S U/D)
Note: 1 4" Pipe Discharge AG 01 Spring Pipe
8/sec = NPDES Discharge AG 1.5 -001A
15.85 gpm North Underdrain (N U/D)
 24-inch Solid Pipe

Arequa Gulch Monitor Well Pumpback System

35A
Data first 63B
collected by B63
DRMS 3/8/12 A35

	4/29/13	6/19/13	9/4/13	10/30/13	1/30/14	4/9/14	Notes
Units	14:00	No Check	11:13	15:30	12:58		
(ft)	43.1	n/a	57.7	34.2	54.6	NR	
(ft)	36.6	n/a	37.5	35.4	35.0		
(ft)	23.4	n/a	26.1	21.8	24.4		
(ft)	28.2	n/a	40.8	37.8	36.9		
(ft)	30.2	n/a	43.3	41.8	41.3		
Units	14:00	No Check	11:13	15:30	12:58		
(ft)	43.3	n/a	57.3	53.4	55.1	NR	
(ft)	43.6	n/a	45.4	45.2	46.5		system head
Units	14:07	No Check	11:22	15:42	11:15		
(ft)	0.35	n/a	0.51	0.62	0.58	NR	
(ft)	0.54	n/a	0.69	0.51	0.56		
Units	14:12	No Check	11:27	15:36	11:12		
(ft)	14.3	n/a	29.6	14.1	16.0	NR	
(ft)	13.4	n/a	29.2	15.8	15.8		
(ft)	18.9	n/a	33.1	15.6	18.6		
Units	14:12	No Check	15:36	11:07			
(ft)	31.9	n/a	36.5	31.9	31.9	NR	
Units	14:11	No Check	11:25	15:38	11:05		
(ft)	0.50	n/a	0.38	0.32	0.39	NR	
(ft)	0.34	n/a	0.32	0.58	0.66		
Units	13:12	No Check	9:49	No Check	12:14	11:00	
(ft)	11.2	n/a	42.2	n/a	32.0	11.6	
(ft)	10.8	n/a	41.9	n/a	31.7	11.2	
(ft)	11.5	n/a	41.7	n/a	31.9	11.4	
(ft)	11.6	n/a	41.8	n/a	31.9	11.4	
Units	13:16	No Check	9:47	No Check	12:19	11:06	
(in)	16.0	n/a	18.5	n/a	19.5	16.8	
(in)	12.6	n/a	13.1	n/a	12.1	12.0	
Units	13:51	No Check	11:03	No Check	11:42		
(ft)	12.58	n/a	27.00	n/a	14.08	NR	
(ft)	12.93	n/a	27.09	n/a	14.86		
(ft)	12.92	n/a	27.04	n/a	15.58		
(ft)	12.79	n/a	27.45	n/a	15.73		
Units	13:53	No Check	11:05	No Check	11:44		
(in)	13.43	n/a	11.38	n/a	13.26	NR	
(in)	18.70	n/a	17.00	n/a	17.00		
Units	14:04	No Check	11:19	15:42	11:07		
(in)	9.8	n/a	13.4	9.5	13.6	NR	
(in)	4.4	n/a	15.0	10.5	10.4		
Units	14:18	No Check	11:32	11:05	11:28	13:20	
(gpm)	0.78	n/a	Dry	14.1	4.6	2gal/26 sec	2gal/33
(gpm)	Dry	n/a	Dry	Dry	Dry	DRY	
(gpm)	Dry	n/a	Dry	Dry	Dry	DRY	
(gpm)	Dry	n/a	Dry	Dry	Dry	DRY	
(gpm)	Dry	n/a	Dry	Dry	Dry	DRY	
Units	14:18	No Check	11:55	11:21	13:17		
(in)	76.2	n/a	0.00	0.00	0.00	0.00	
(ft)	14.23	n/a	14.59	17.75	23.75	35.37	
(gpm)	~0	n/a	0.66	0.62	0.98	0	Man.. Measured flow
(gpm)	0.0	n/a	0.00	0.00	0.00	0	Tot. Flow 7.52 gal