




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): Patrick Lennberg and Brock Bowles	INSP. DATE: November 4, 2019	INSP. TIME: 09:30
OPERATOR: Cripple Creek & Victor Gold Mining Company	OPERATOR REPRESENTATIVE: Katie Blake	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$209,491,188.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 8, 2019	

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>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----- <u>Y</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <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

This was a normal monitoring inspection of the Cresson Project (Permit No. M-1980-244) conducted by Patrick Lennberg of the Division of Reclamation, Mining and Safety (Division). The Division was accompanied by Katie Blake and others during the inspection. This is a 112d-3 Designated Mining Operation (DMO) permitted for 6,007 acres to mine and process gold ore. The site is located between the towns of Cripple Creek and Victor in Teller County. The approved post-mining land use is a combination of rangeland and wildlife habitat. Photos 1-16 taken during the inspection are included with this report.

This inspection included the following facilities and areas:

- Assay Lab
- Arequa Gulch Valley Leach Facility (VLF1)
- Squaw Gulch Valley Leach Facility (VLF2) Overview
- Valley Leach Facility Leak Detection Sumps
- Valley Leach Facility Water Level Readings
- High Grade Mill Facility (HGM)
- East Cresson Overburden Storage Area Seep (ECOSA)

Squaw Gulch Valley leach Facility (SGVLF or VLF2):

The operation is currently advancing the 9,950 foot lift with run of mine material mixed with cement material, approved through TR-111, which is dispensed directly into the truck beds from the relocated silo approved through TR-114. Run of mine material is ore material of sufficient quality that it can be leached without having to be crushed. Additionally, crushed material is being placed along the 9,850 foot lift. These two lifts are being built out northwest of the mill facility. The Division inspected active leaching surfaces on the SGVLF. The operation is required to minimize ponding of leaching solution to less than 3 feet by 3 feet in area. This is to prevent the ponds from being a wildlife attractant. Active leaching areas appeared to be well-rippled to minimize ponding. No ponding was observed.

Arequa Gulch Valley Leach Facility (AGVLF or VLF1):

The current and maximum elevation of ore placement in the AGVLF is 10,400 feet (for Phase V). The Division inspected active leaching surfaces on the AGVLF. These surfaces were well saturated and ponding of leachate, greater than 3 feet by 3 feet, was observed. In addition, ponding of leachate was observed on the lower 10,200 foot level, although not as common as was observed on the upper level. The snow storm last week, the reason for rescheduling this inspection, resulted in several inches of snow accumulation. The weekend after the storm and prior to the inspection the temperatures rose substantially resulting melting of most all of the snow that fell. It is believed that the majority of the ponded water is a result of the quick snow melt. Prior to writing this inspection report the Operator stated that they were in the process of ripping the surface material to promote infiltration. The inspectors did note that a crew had arrived at the 10,400 foot level to begin addressing the ponding issues.

One of the 15 of the AGVLF Leak Detection System (LDS) sumps was inspected, AG-LDS-9. The sump was found to be dry. The operator must inspect all sumps weekly, and sample and characterize any water present. Any

water should be removed after sampling so it can be determined if water continues to enter the sump.

Valley Leach Facility Water Level Readings:

The Division recorded water level readings from transducers for the high volume solution collection system (HVSCS), pond piezometers, and low volume solution collection system (LVSCS) of the II/III, and IV of the AGVLF. The values recorded during this inspection are presented on the enclosed Attachment A. All recorded values were below their respective reporting limits (see Attachment A).

High Grade Mill (HGM) Facility:

The Division performed a 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. All the sediment that was in the Vat Leach area secondary containment on the west side of the Mill had been removed (as indicated via an email dated 9/30/2019).

At the time of this inspection the Mill was not in operation. A belt sensor was not working and the Operator was troubleshooting the issue to bring the Mill back online soon.

Assay Lab:

The Division walked the perimeter of the Assay Lab area, no problems were observed.

East Cresson Overburden Storage Area (ECOSA) Seep:

The Division inspected the seep area located at the eastern toe of the ECOSA. The Operator at the time of the inspection had employed a subcontractor, Conley Construction of Cripple Creek, to excavate clay material to be stockpiled for Phase 3 liner construction (Amendment 13) and potential reclamation efforts. The excavation began near where the ECOSA seep water is collected and pumped out when needed and continued up the road to the south. The material is being removed to depths up to 30 feet in 10 foot benches. The clay is being hauled to the clay stockpile area where there is a clay processing plant.

Please contact Patrick Lennberg (303)866-3567 ext. 8114 or email at patrick.lennberg@state.co.us if you have any questions regarding this report.

Inspection Contact Address

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Enclosure Attachment A

ec: Michael Cunningham, DRMS
 Elliott Russell, DRMS

Patrick Lennberg, DRMS
Brock Bowles, DRMS
DRMS file
Justin Raglin, CC&V
Justin Bills, CC&V

PHOTOGRAPHS



Photo 1: Assay Lab exterior looking east from main entrance



Photo 2: Assay lab east end of building



Photo 3: Leak Detection System Sump, LDS-9 (dry)



Photo 4: Secondary containment area of the Vat Leach area, note no sediment



Photo 5: Secondary containment area of the Vat Leach area, note no sediment



Photo 6: Secondary containment area on the east side of the Mill



Photo 7: Secondary containment area on the east side of the Mill

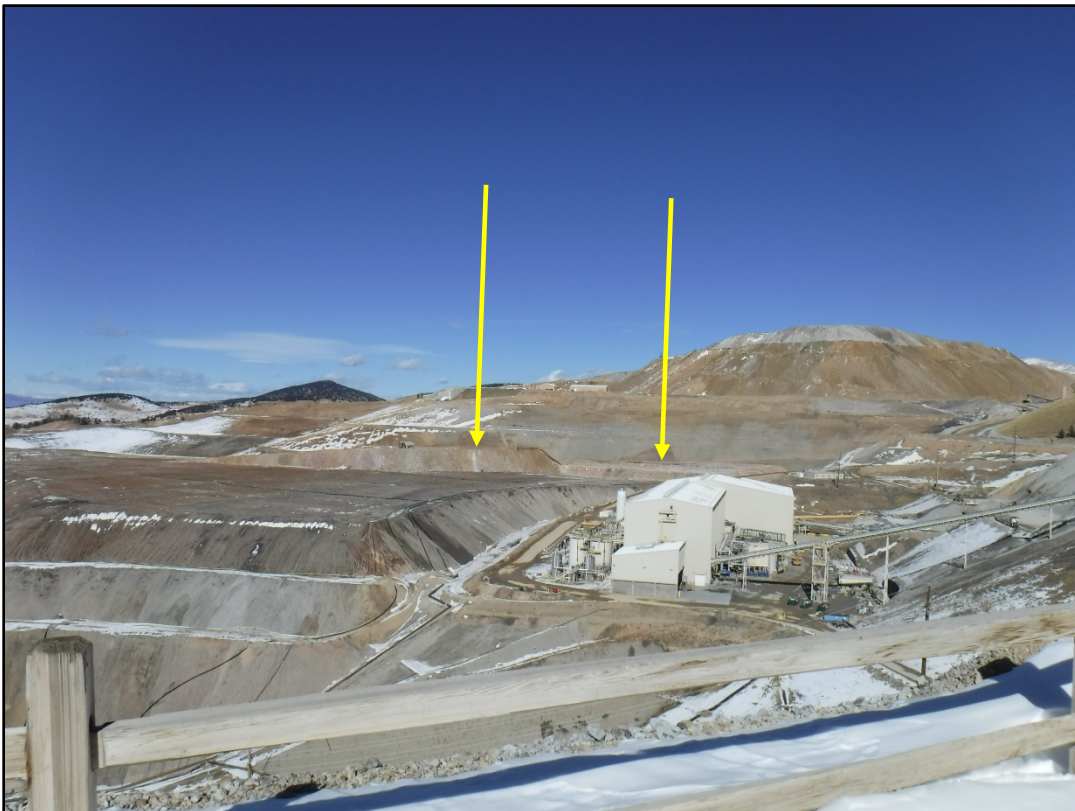


Photo 8: VLF 2 overlook area, arrows indicate active dumping areas



Photo 9: VLF 2 overlook area, no ponding visible at the time of inspection

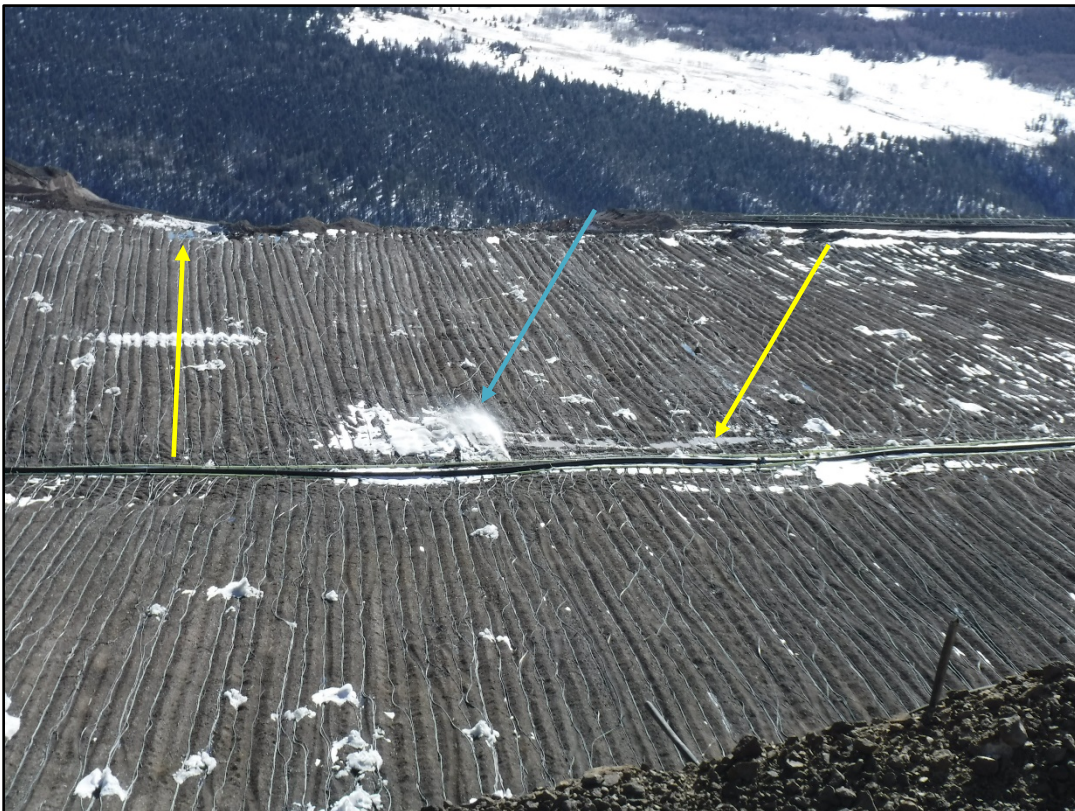


Photo 10: AGVLF 10,200' level, ponding water indicated by yellow arrows and spraying water indicated by blue arrow

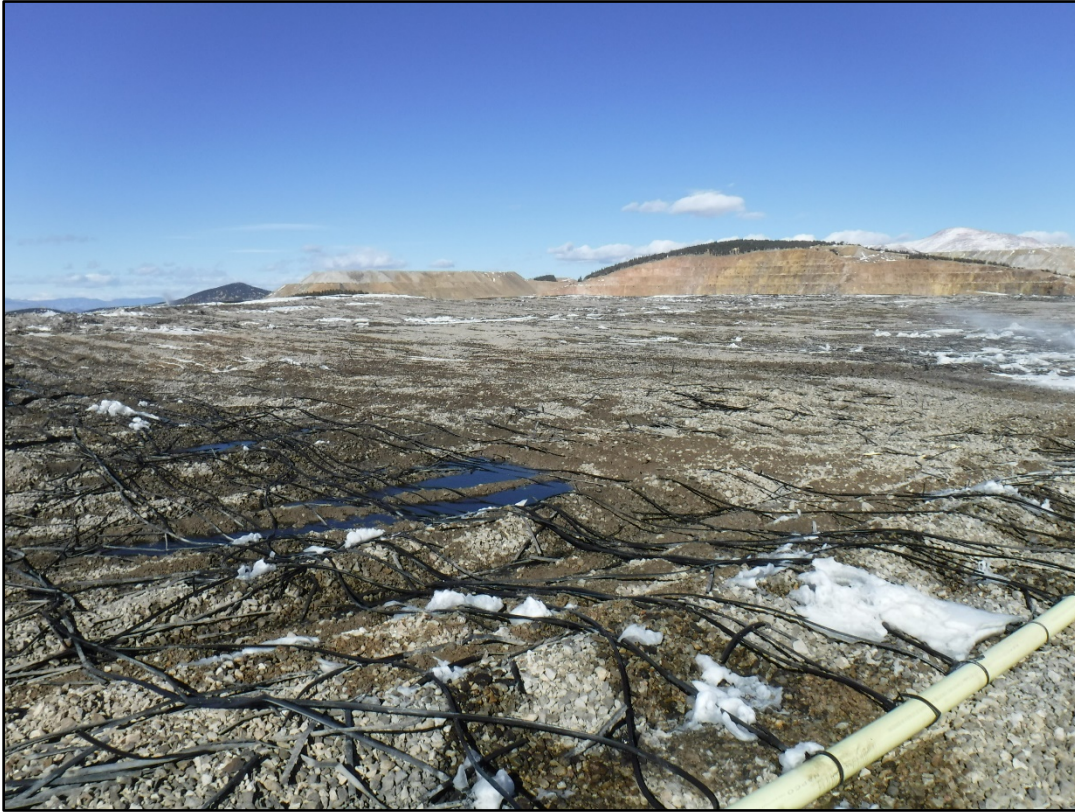


Photo 11: AGVLF 10,400' level, typical conditions



Photo 12: AGVLF 10,400' level, typical conditions



Photo 13: A view of the South Cresson Pit from AGVLF 10,400' level



Photo 14: ECOSA clay excavation looking north, arrow indicates location of seep collection pump



Photo 15: ECOSA clay excavation area looking south



Photo 16: ECOSA clay excavation area looking north

Attachment A

CC&V VLF Water Level Inspection Readings

Previous Results

Date:

AREQUA VLF:

Phase I HVSC & Pond Piezometers

Note: 80% cap.
@ 63.75 ft

Max. of Pump #299, #300, #301, 302, or #303 (Circle Pump #)

Pond Lvl / XDCR #1

System Press / XDCR #2

Phase I Low Volume Solution Collection

Note: Req'd
< 2 ft

Piezo #1 (HAND)

Piezo #2 (AUTO)

Phase II & III HVSC & Pond Piezometer

Note: 80% @
49.4 ft

Max. of XDCR #4, #5, or #6 (Circle XDCR #)

Piezo (Pipe)

Phase II & III Low Volume Solution Collection

Note: Req'd
< 2 ft

Pump / XDCR #1 (AUTO)

Pump / XDCR #2 (AUTO)

Phase IV High Volume Solution Collection

Note: 80% cap.
@ 56.5 ft

Max. of Pump #307, #308, or #309 (Circle Pump #)

XDCR pipe (#310 Resv'd)

Phase IV Low Volume Solution Collection

Note: Req'd
< 24"

Pump / XDCR #1

Pump / XDCR #2

Phase V High Volume Solution Collection

Note: 80% cap.
@ 36.5 ft

Max. of XDCR #311, #312, #313, or #314 (Circle XDCR #)

Phase V Low Volume Solution Collection

Note: Req'd
< 24"

XDCR #001

XDCR #002

External Pond Low Volume Solution Collection

Note: Req'd
< 24"

Pump / XDCR #1-EXT (AUTO)

Pump / XDCR #2-EXT (AUTO)

Underdrain Discharge Area

Note: 1 l/sec =
15.85 gpm

South Underdrain (S U/D)

4" Pipe Discharge AG 01 Spring Pipe

NPDES Discharge AG 1.5 -001A

North Underdrain (N U/D)

24-inch Solid Pipe

Aregua Gulch Monitor Well Pumpback System

Data first
collected by
DRMS 3/8/12

35A

63B

B63

A35

SQUAW GULCH VLF High Vol. SC:

LIT #88301 (north end)

LIT #88303

LIT #88305

LIT #88307 (south end)

Piezometer-LIT #88314

SQUAW GULCH VLF Low Vol. SC:

Note: Req'd
< 24"

Leachate Pump 1

Leachate Pump 2

3/21/19	4/23/19	5/21/19	6/24/19	7/23/19	11/4/19	Notes
TC1	AME	TC1	JPL	TC1		
TIME:	13:14	10:45			11:15	
(ft)		57.8	49.5	--	43.8	
(ft)		58.0	48.7	--	41.9	
(ft)		39.3	41.6	--	42.2	system head
TIME:	13:03				11:15	
(ft)		0.44	0.45	--	0.28	
(ft)		0.75	0.79	--	0.48	
TIME:	10:45	13:09	10:50		11:05	
(ft)	44.6	35.2	40.6	--	21.9	
(ft)	44.7	44.6	41	--	31.2	
TIME:	10:50	13:06	10:55			
(ft)	0.58	0.64	0.69	--	0.94	
(ft)	0.44	0.48	0.49	--	0.79	
TIME:	12:46	12:05	10:54	10:10	12:30	
(ft)	43.7	28.5	35.1	27.1	--	40.2
(ft)	44.2	25.1	25.1	37.7	--	38.9
TIME:	12:50	12:07	10:59	10:15		
(in)	13.3 to 17.0	16.5	16.4	15.3	--	17.1
(in)	12.4	12.5	12.4	12.1	--	12.5
TIME:		12:44	10:35			
(ft)		28.1	28.9	--	--	
TIME:		12:46				
(in)		15.37	10.5	--	--	
(in)		15.1	14.4	--	--	
TIME:		13:00			11:00	
(in)		13.2	--	--	7.0	
(in)		7.2	--	--	14.9	
TIME:		13:24				
(gpm)		0.0	--	--	--	
(gpm)		0.0	--	--	--	
(gpm)		0.0	--	--	--	
(gpm)		0.0	--	--	--	
(gpm)		0.0	--	--	--	
TIME:		0.00	--	--	--	
(ft)		OFF	--	--	--	
(gpm)		0.0	--	--	--	
(gpm)		0.0	--	--	--	
TIME:	10:25	10:20	12:22	8:30	9:23	
(ft)	70.61	54.82	52.79	62.2	42.1	--
(ft)	69.68	53.79	51.89	61.1	41.9	--
(ft)	70.21	54.4	52.32	61.7	42.4	--
(ft)	70.18	56.9	55.1	63.1	45.9	--
(ft)	80.6	63.14	62.4	69.1	55.4	--
TIME:	10:19	10:25	12:28	8:35	9:28	
(in)	6.6	7.2	8.1	6.8	12.5	--
(in)	6.9	7.8	8.8	7.1	12.9	--