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: Cresson Project	**MINE/PROSPECTING ID#:** M-1980-244	**MINERAL:** Gold	**COUNTY:** Teller
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Timothy Cazier	**INSP. DATE:** November 19, 2019	**INSP. TIME:** 09:30
OPERATOR: Cripple Creek & Victor Gold Mining Company	**OPERATOR REPRESENTATIVE:** Justin Bills & 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:** February 7, 2020

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---------- Y	(FN) FINANCIAL WARRANTY-------- N	(RD) ROADS---------- Y
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- Y	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- Y	(SF) PROCESSING FACILITIES------- Y	(TS) TOPSOIL---------- Y
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE---------- Y	(RV) REVEGETATION---- Y
(SM) SIGNS AND MARKERS---------- Y	(SP) STORM WATER MGT PLAN---- Y	(RS) RECL PLAN/COMP-- Y
(ES) OVERBURDEN/DEV. WASTE--------- Y	(SC) EROSION/SEDIMENTATION--- Y	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- Y	(OD) OFF-SITE DAMAGE---------- Y	

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 (DRMS), accompanied by Brock Bowles (DRMS) conducted a regular monitoring inspection of the site on Tuesday, November 19, 2019. 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);
- Squaw Gulch Valley Leach Facility (SGVLF, a.k.a. VLF2);
- Arequa Gulch Valley Leach Facility (AGVLF, a.k.a. VLF1);
- Lime Silo (near the crusher);
- East Cresson Overburden Storage Area (ECOSA) Clay Borrow area.

High Grade Mill: Mr. Charles Bissue 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 significant problems were observed. A thin layer of dried sludge was observed in the secondary containment area of the Neutral pH Process Water Tank (see **Photo 1**). Mr. Bissue stated it would be cleaned up as soon as possible. The vat leach circuit secondary containment on the west side of the HGM was observed to be clean and required no maintenance at the time of the inspection (see **Photo 2**).

Squaw Gulch Valley Leach Facility (VLF2): Messrs. Bissue and Laurin Colby accompanied the DRMS to VLF 2. The VLF2 9,900 level was observed from the 9,950 level. No ponded process solution was observed (see **Photo 3**). Ore stacking appeared to be in accordance with the approved mine plan.

High Volume Solution Collection System (HVSCS) and Low Volume Solution Collection System (LVCSC) water levels were checked (See **Attachment A**) and found to be at acceptable levels.

Arequa Gulch Valley Leach Facility (VLF1): Messrs. Colby and Dylan Noble accompanied the DRMS to VLF 1. Both the 10,200 and 10,300 levels on the south side of VLF1 (see **Photo 4**) and the 10, 300 level northeast side (above the South Cresson pit, (see **Photo 5**) were inspected. Some ice was observed, but no significant ponding. The 10,400 level (see **Photo 6**) was also inspected and found to be in compliance with the approved wildlife protection plan.

Only the Phase V HVSCS and LVSCS water levels were checked on VLF 1 (See **Attachment A**).

Lime Silo: Messrs. Bissue accompanied the DRMS to the lime silo in the crusher area. No problems were observed. Leak detection system sumps LDS-12 and -13 are nearby below the conveyor segment between the silo and the load out bin (LOB). Both sumps were checked and observed to be dry (see **Photos 7** and **8**).

ECOSA Clay Borrow area: Telephone conversations with site personnel informed the DRMS a significant clay source had been located south of the ECOSA seep at the toe of the ECOSA. Furthermore, CC&V stated their intent to utilize the clay in upcoming VLF2 liner construction. The DRMS expressed concerns about undercutting the potentially buttressing function of the borrow area. As such, the DRMS decided to inspect the borrow source. Ms. Jeana Ratcliff and Mr. Jeff Gaul were present at the clay borrow area (see **Photos 9** and **10**). CC&V representatives described measures being implemented to monitor the ECOSA for movement and stability. The monitoring methods consist of twice weekly prism surveys and drone flights used every two weeks to collect topographic data for comparison with previous data in order to assess whether movement has occurred. In

addition, CC&V's engineering consultant, NewFields, is performing an internal evaluation of the ECOSA slope stability.

General Site Observations: Site representatives stated blasting was being conducted in all five pits (Main & South Cresson, WHEX, Globe Hill, and Schist Island). Haul road stormwater sumps appeared to be in good operating condition. Dust control measures were being implemented. Site representatives pointed out an area between VLF1 phase V and the South Cresson pit, near the Ajax area had been hydroseeded (**Photo 11**). No fuel or oil spills were observed.

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

PHOTOGRAPHS

Photo 1. Thin dried sludge layer observed in secondary containment area of Neutral pH Process Water Tank.

PHOTOGRAPHS (cont.)

Photo 2. Vat leach circuit secondary containment area, west side of HGM – observed to be clean.

Photo 3. VLF2 9,900 level observed from the 9,950 level, no ponded process solution was observed.

PHOTOGRAPHS (cont.)

Photo 4. VLF1 10,300 bench (left) and 10,200 level (right) – no ponded process solution observed.

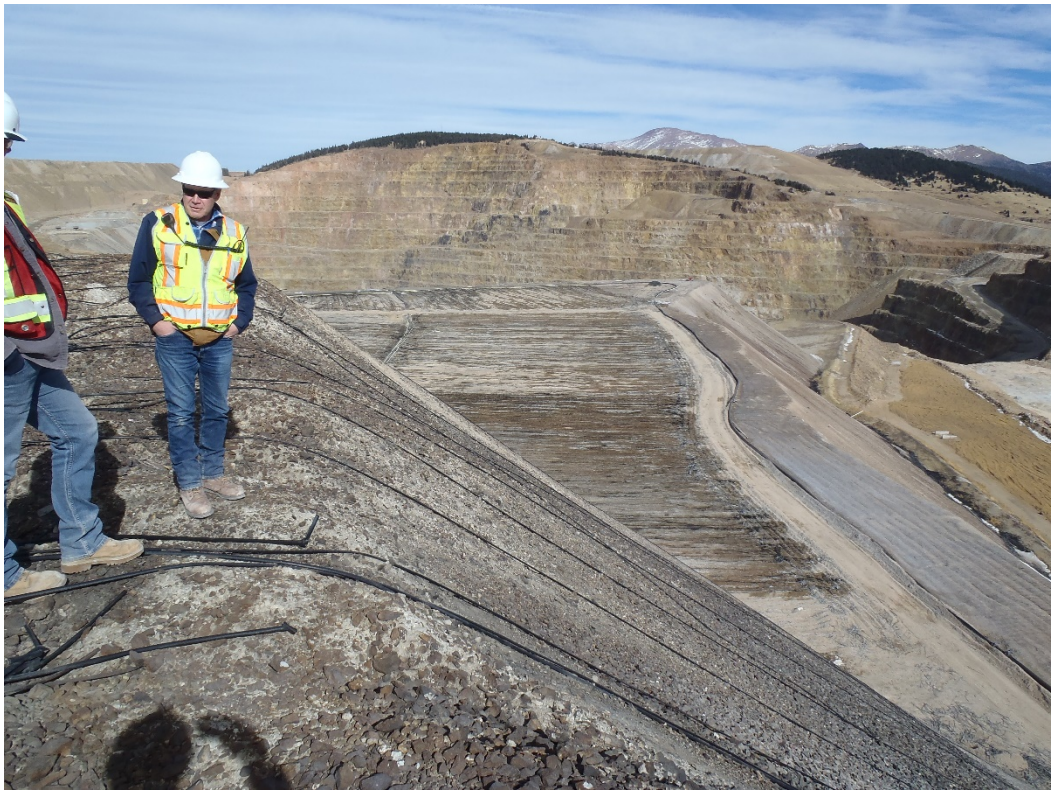

Photo 5. VLF1 10,300 level (east end) – no ponded process solution observed (looking east).

PHOTOGRAPHS (cont.)

Photo 6. VLF1 – 10,400 level – no significant ponding of process solution observed.

Photo 7. VLF1 LDS-12 sump observed to be dry.

PHOTOGRAPHS (cont.)

Photo 8. VLF1 LDS-13 sump observed to be dry.

Photo 9. ECOSA clay borrow source (looking SSW).

PHOTOGRAPHS (cont.)

Photo 10. ECOSA clay borrow source (looking NNE).

Photo 11. Hydroseeded area between VLF1 &South Cresson pit, near the Ajax.

Inspection Contact Address

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Enclosure

ec: Elliott Russell, DRMS
Patrick Lennberg, DRMS
Brock Bowles, DRMS
DRMS file
Justin Bills, CC&V
Justin Raglin, CC&V
Katie Blake, CC&V
Wendy Conlin, CC&V

ATTACHMENT A

CC&V VLF Water Level Inspection Readings

Previous Results

Date:		4/23/19	5/21/19	6/24/19	7/23/19	11/4/19	11/19/19	Notes
AREQUA VLF:	EPS:	AME	TC1	JPL	TC1	JPL	TC1	
Phase I HVSC & Pond Piezometers	TIME:		13:14	10:45		11:15		
Note: 80% cap. @ 63.75 ft — Max. of Pump #299, #300, #301, 302, or #303 (Circle Pump #)	(ft)		57.8	49.5	--	43.8		
Pond Lvl / XDCR #1	(ft)		58.0	48.7	--	41.9		
System Press / XDCR #2	(ft)		39.3	41.6	--	42.2		system head
Phase I Low Volume Solution Collection	TIME:		13:03					
Note: Req'd < 2 ft — Piezo #1 (HAND)	(ft)		0.44	0.45	--	0.28		
Piezo #2 (AUTO)	(ft)		0.75	0.79	--	0.48		
Phase II & III HVSC & Pond Piezometer	TIME:		13:09	10:50		11:05		
Note: 80% @ 49.4 ft — Max. of XDCR #4, #5, or #6 (Circle XDCR #)	(ft)		35.2	40.6	--	21.9		
Piezo (Pipe)	(ft)		44.6	41	--	31.2		
Phase II & III Low Volume Solution Collection	TIME:		13:06	10:55				
Note: Req'd < 2 ft — Pump / XDCR #1 (AUTO)	(ft)		0.64	0.69	--	0.94		
Pump / XDCR #2 (AUTO)	(ft)		0.48	0.49	--	0.79		
Phase IV High Volume Solution Collection	TIME:	12:05	10:54	10:10		12:30		
Note: 80% cap. @ 56.5 ft — Max. of Pump #307, #308, or #309 (Circle Pump #)	(ft)	28.5	35.1	27.1	--	40.2		
XDCR pipe (#310 Resv'd)	(ft)	25.1	25.1	37.7	--	38.9		
Phase IV Low Volume Solution Collection	TIME:	12:07	10:59	10:15				
Note: Req'd < 24" — Pump / XDCR #1	(in)	16.5	16.4	15.3	--	17.1		
Pump / XDCR #2	(in)	12.5	12.4	12.1	--	12.5		
Phase V High Volume Solution Collection	TIME:		12:44	10:35			10:00	
Note: 80% cap. @ 36.5 ft — Max. of XDCR #311, #312, #313, or #314 (Circle XDCR #)	(ft)		28.1	28.9	--	--	25.7 311	
Phase V Low Volume Solution Collection	TIME:		12:46				10:03	
Note: Req'd < 24" — XDCR #001	(in)		15.37	10.5	--	--	16.	
XDCR #002	(in)		15.1	14.4	--	--	16.8	
External Pond Low Volume Solution Collection	TIME:		13:00			11:00		
Note: Req'd < 24" — Pump / XDCR #1-EXT (AUTO)	(in)		13.2		--	7.0		
Pump / XDCR #2-EXT (AUTO)	(in)		7.2		--	14.9		
Underdrain Discharge Area	TIME:		13:24					
Note: 1 ℓ/sec = 15.85 gpm — South Underdrain (S U/D)	(gpm)		0.0		--	--		
4" Pipe Discharge AG 01 Spring Pipe	(gpm)		0.0		--	--		
NPDES Discharge AG 1.5 -001A	(gpm)		0.0		--	--		
North Underdrain (N U/D)	(gpm)		0.0		--	--		
24-inch Solid Pipe	(gpm)		0.0		--	--		
Arequa Gulch Monitor Well Pumpback System	TIME:							
Data first collected by DRMS 3/8/12 — 35A	(in)		0.00		--	--		
63B	(ft)		OFF		--	--		
B63	(gpm)		0.0		--	--		
A35	(gpm)		0.0		--	--		
SQUAW GULCH VLF High Vol. SC:	TIME:	10:20	12:22	8:30	9:23		10:28	
Note: 80% cap. @ 94 ft — LIT #88301 (north end)	(ft)	54.82	52.79	62.2	42.1	--	44.76	
LIT #88303	(ft)	53.79	51.89	61.1	41.9	--	44.32	
LIT #88305	(ft)	54.4	52.32	61.7	42.4	--	44.27	
LIT #88307 (south end)	(ft)	56.9	55.1	63.1	45.9	--	49.8	
Piezometer-LIT #88314	(ft)	63.14	62.4	69.1	55.4	--	54.4	
SQUAW GULCH VLF Low Vol. SC:	TIME:	10:25	12:28	8:35	9:28		10:34	
Note: Req'd < 24" — Leachate Pump 1	(in)	7.2	8.1	6.8	12.5	--	13.4	
Leachate Pump 2	(in)	7.8	8.8	7.1	12.9	--	13.7	