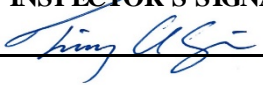




MINERALS PROGRAM INSPECTION REPORT

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, P.E.	INSP. DATE: September 28, 2021	INSP. TIME: 09:30
OPERATOR: Cripple Creek & Victor Gold Mining Compa	OPERATOR REPRESENTATIVE: Jeana Ratcliff	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: October 29, 2021	

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>N</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>Y</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</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>	(RS) RECL PLAN/COMP-- <u>N</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>N</u>	

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

OBSERVATIONS

Tim Cazier (DRMS) conducted a regular monitoring inspection of the site on Tuesday, September 28, 2021. Ms. Jeana Ratcliff represented CC&V for the duration of the inspection. The planned inspection agenda included the following facilities and areas:

- Drain cover fill (DCF) damaged areas;
- Schist Island backfill;
- ECOSA seeps;
- EMP 17 & 20 near ECOSA;
- VLF water levels;
- PSES stormwater pond.

DCF damaged areas: Three areas where DCF was damaged or washed away by the recent heavy rains were visited. The area on the north side of VLF2 had been repaired with DCF having been replaced (see **Photo 1**). The toe berm (constructed using DCF) near the water tank between VLF 1 and VLF2 had been washed out in two places, sending stormwater down the low area between VLF1 and VLF2. The berm had been repaired (see **Photo 2**). The third area visited was the south side of VLF2 where DCF has been washed off the steep section just above the Low Volume Solution Collection System (LVSCS) building (see **Photo 3**). Repair had not begun in this area as the contractor selected for the repair around the header pipes did not have the necessary equipment available, but they were expected shortly after this inspection. Site representatives stated the liner in all areas had or would be recertified and reports would be provided to the DRMS.

Schist Island backfill: Ms. Ratcliff and Messrs. Brandon Rising and Jeff Gaul accompanied the DRMS to an area above the west highwall to observe material placement in the Schist Island Pit low compaction zone. Mr. Gaul pointed out a concrete plug (see **Photo 4**) for a shaft remediation effort and that CC&V was keeping backfill away from it while the concrete cured. After a half hour with no haul trucks bringing backfill material, site representatives contacted site dispatch and we were informed that it would be at least an hour, if at all, before any haul trucks would bring backfill material to the Schist Island Pit. No low compaction zone fill placement was observed during this inspection.

ECOSA Seeps: Ms. Ratcliff and Ms. Maria Bujenovic accompanied the DRMS to the ECOSA toe to observe the status of two seeps. The north ECOSA seep has two small collection ponds designated ECOSA Seep #2A (see **Photo 5**) and #2B (see **Photo 6**) by CC&V. Ms. Bujenovic stated they had observed about a 2-day lag between heavy rain and seepage expression in these two new seeps. She said based on field measurements the pH of the seepage water was 2.99. Site representatives pointed out a berm constructed on the east side of the ECOSA toe access road to control seepage (see **Photo 7**). The south ECOSA seep, now designated ECOSA Seep #1 was observed to have negligible inflow (see **Photo 8**). Both seeps are clearly a result of acid mine drainage (ARD) from the ECOSA. CC&V believes the placement of growth media on the ECOSA will reduce or eliminate the seeps. However, the current stormwater controls for the ECOSA as placed on the south end (see **Photo 9**) are inadequate as observed by the excessive erosion gully. [The DRMS strongly recommends CC&V recover eroded growth media at the toe of the south end of the ECOSA for future reclamation.](#) The sitewide stormwater management plan for reclamation committed to by CC&V with the approval of amendment 11 is overdue and should be prioritized given the ongoing concurrent reclamation effort.

The clay borrow area at the south end of the ECOSA was observed (see **Photo 10**). Site representatives indicated

they were nearly finished extracting material for the borrow area. We discussed backfilling the borrow area to stabilize the slope above it. Ms. Ratcliff indicated the plan was to backfill the area with waste rock. The DRMS expressed concerns with this approach as the waste rock is what has been the cause of the ARD in the ECOSA seeps. Placing waste rock in the borrow area would also extend the footprint of the ECOSA, requiring a revision to the permit as it amounts to a change to both the approved mine and reclamation plans. I recommended using onsite inert material for backfill. However, [if inert material has to come from offsite, the DRMS will require a technical revision to approve the importation of inert fill in accordance with Rule 3.1.5\(9\).](#)

EMP 17 & 20: EMP 20 (see **Photo 11**) was observed and appeared to hold only stormwater with little to no ARD. EMP 17 appeared unimpacted.

VLF Water levels: The high volume solution collection system (HVSCS) and low volume solution collection system (LVSCS) water levels in the VLF2 pregnant solution storage area (PSSA) were checked for compliance with the permit. HVSCS water levels in the PSSA are to be less than 80 percent storage capacity. LVSCS water levels are to be less than two feet. Sustained conditions where the water levels are above this limit are to be reported to the DRMS. Water levels for all four riser pipes and the piezometer were checked remotely from the ADR2 building. Riser pipe water levels were between 60.8 and 62.2 feet and the piezometer (outside the influence from the draw down due to pumping in the risers) water level was at 73.9 feet. The 80% level is at 94 feet. The water levels in the low volume solution collection system (LVSCS) were also checked remotely at the same time. The water levels in the two sumps were observed to be at 8.1 and 9.9 inches, well below the maximum allowed 24 inches. A copy of the field log sheet is included as **Attachment A**.

The surface of VLF2 was not being actively leached with process solution at the time of the inspection. Some ponded meteoric was observed but not considered a problem.

VLF1 HVSCS water levels were also checked remotely from ADR2. There are four PSSAs in VLF1. All HVSCS water levels were below the 80% reporting level. The Phase IV and V LVSCS water levels were also checked remotely. Phases I & II/III LVSCS water levels were checked in the field, as was the external storage pond water level. All water levels were below reporting levels (see **Attachment A**). The DRMS noted the Phase I HVSCS "System Press / XDCR #2" reporting level was not linked to the remote monitoring system in ADR2, although the "Pond Lvl / XDCR #1" was. Site representatives stated they would look into it.

PSES stormwater pond: Ms. Ratcliff and Messrs. Rising and Dylan Noble accompanied the DRMS to the PSES bird-ball pond (see **Photo 12**) to inspect potential damage or overflow resulting from heavy rains in August. No significant high water mark or evidence of overtopping was observed.

Close-out meeting: Katie Blake and Jeana Ratcliff were present for the closeout meeting. The following items were discussed:

- DRMs concerns over using waste rock to backfill the south ECOSA clay borrow area as discussed above.
- TR-128 – CC&V was awaiting DRMS approval before approaching Teller County as per Teller County guidance. CC&V will then discuss needs with Teller County DOT. They plan to start construction in the 2nd quarter of 2022.

PHOTOGRAPHS



Photo 1. Repaired area on the north side of VLF2 had been (looking north from VLF2 pad).



Photo 2. Repaired toe berm near the water tank between VLF 1 and VLF2 (looking west).

PHOTOGRAPHS (cont.)



Photo 3. VLF 2: DCF washout above LVSCS building (looking east).

Photo 4. Schist Island low compaction zone backfill and shaft remediation concrete plug (from above west highwall).



PHOTOGRAPHS (cont.)



Photo 5. ECOSA Seep #2A (at toe of ECOSA, inside toe berm, note blue pipe for pumping out seep water).



Photo 6. ECOSA Seep #2B (looking SE from ECOSA toe berm separating Seep 2A from 2B)

PHOTOGRAPHS (cont.)



Photo 7. ECOSA access road constructed containment berm near ECOSA Seep #2 (looking SE).

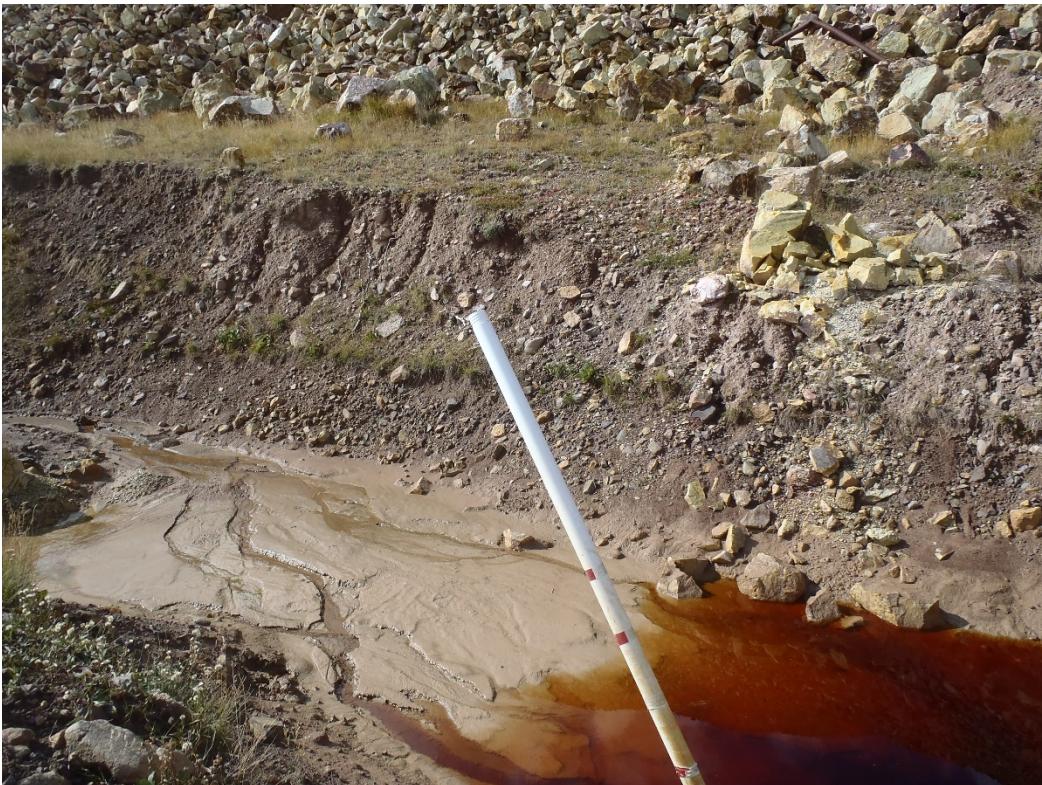


Photo 8. ECOSA Seep #1 (negligible inflow).

PHOTOGRAPHS (cont.)



Photo 9. South ECOSA eroded reclamation (looking SW from CR 81).



Photo 10. South ECOSA clay borrow pit (looking south).

PHOTOGRAPHS (cont.)



Photo 11. EMP 20 pond – no evidence of ARD (looking NW).



Photo 12. PSES bird-ball pond (looking SE).

Inspection Contact Address

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

Enclosure: Attachment A

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

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

	10/29/20	3/29/21	4/29/21	5/27/21	9/28/21	Notes
EPS:	JPL	BFB	TC1	ERR	TC1	
TIME:	12:38	10:39	12:56	11:04	13:01	
(ft)	46.5@301	47.9@299	53.2	52.4	54.1	
(ft)	42.8	44.3	52.4	53.5	50.4	
(ft)	2.5	43.9	44.3	45.0	?	Will check in field (missed)

Phase I Low Volume Solution Collection

Note: Req'd
< 2 ft

Piezo #1 (HAND)

Piezo #2 (AUTO)

TIME:	10:32	10:25	11:18	13:33	
(ft)	--	0.68	0.60	0.46	0.53
(ft)	--	0.68	0.82	0.48	0.51

Phase II & III HVSC & Pond Piezometer

Note: 80% @
49.4 ft

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

Piezo (Pipe)

TIME:	11:38	10:19	9:47	11:33	13:03	
(ft)	24.4 @6	21.3@4	21.7	32.0	30.6	
(ft)	31.2	32.5	31.2	35.0	39.8	

Phase II & III Low Volume Solution Collection

Note: Req'd
< 2 ft

Pump / XDCR #1 (AUTO)

Pump / XDCR #2 (AUTO)

TIME:	11:40	10:21	9:50	11:46	13:31	
(ft)	0.45	0.32	0.72	0.53	0.56	
(ft)	0.68	0.35	0.54	0.48	0.49	

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)

TIME:	11:53	11:50	12:39	13:07	
(ft)	12.1@309	12.4	18.5	23.9	
(ft)	37.7	37.7	37.9	38.5	

Phase IV Low Volume Solution Collection

Note: Req'd
< 24"

Pump / XDCR #1

Pump / XDCR #2

TIME:	11:55	11:52	12:39	13:02	
(in)	14.9	14.9	13.1	14.2	
(in)	12.1	12.0	10.7	11.1	

Phase V High Volume Solution Collection

Note: 80% cap.
@ 36.5 ft

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

TIME:	11:05	9:56	9:35	10:41	13:06	
(ft)	14.8@311	18.7@314	19.3	24.0	28.7	

Phase V Low Volume Solution Collection

Note: Req'd
< 24"

XDCR #001

XDCR #002

TIME:	9:58	9:37	10:37	13:05	
(in)	7	6	6	8	14.5
(in)	10.8	11	15.9	16.1	NOT AVAILABLE

External Pond Low Volume Solution Collection

Note: Req'd
< 24"

Pump / XDCR #1-EXT (AUTO)

Pump / XDCR #2-EXT (AUTO)

TIME:	11:21	10:30	10:19	11:10	13:36	
(in)	4	6.7	4.2	12.3	9.5	
(in)	14.7	12	12.9	17.5	16.3	

Underdrain Discharge Area

Note: 1 f/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

TIME:	10:00				
(gpm)	Dry		Dry		
(gpm)	Dry		Dry		
(gpm)	Dry		Dry		
(gpm)	Dry		Dry		
(gpm)	Dry		Dry		

Arequa Gulch Monitor Well Pumpback System

Data first
collected by
DRMS 3/8/12

63B

123C

B63

123C

TIME:					
(ft)			--		
(ft)			--		
(gpm)			0		
(gpm)			0		

SQUAW GULCH VLF High Vol. SC:

Note: 80% cap.
@ 94 ft

LIT #88301 (north end)

LIT #88303

LIT #88305

LIT #88307 (south end)

Piezometer-LIT #88314

TIME:	13:02	10:38	12:18	13:08	
(ft)	19.5	30.4	47.2	54.7	62.1
(ft)	19.3	30.2	44.7	53.0	60.8
(ft)	19.6	29.9	46.9	54.2	62.1
(ft)	20.4	30.5	46.9	54.0	62.2
(ft)	--		60.8	67.2	73.9

SQUAW GULCH VLF Low Vol. SC:

Note: Req'd
< 24"

Leachate Pump 1 (P005)

Leachate Pump 2 (P006)

TIME:	13:02	11:06	10:38	12:18	13:09	
(in)	12.7	11.0	12.6	10.9	9.9	
(in)	11.2	9.5	11.1	9.3	8.1	

FIELD (OTHERS REMOTE @ ADQ)