

# 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:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:			
Cresson Project	M-1980-244	Gold	Teller			
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:			
Monitoring	Timothy Cazier, P.E.	April 29, 2021	09:00			
OPERATOR:	OPERATOR REPRESENTATIVE: TYPE OF OPERATION:					
Cripple Creek & Victor Gold Mining Compar	Katie Blake & Dylan Noble	112d-3 - Designated Mining Operation				
<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:				
Normal I&E Program	None	\$159,491,188.00				
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:			
NA	None	None				
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DAT	E:			
Clear	Thing alf-	June 4, 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 $\underline{Y}$	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE Y	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>N</u>	(SP) STORM WATER MGT PLAN <u>N</u>	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION $\underline{Y}$	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS Y	<u> </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 Thursday, April 29, 2021. Ms. Katie Blake and Mr. Dylan Noble represented CC&V for the duration of the inspection. The planned inspection agenda included the following facilities and areas:

- SGVLF/VLF2 Water levels and Surface Solution Ponding;
- AGVLF/VLF1 Water levels, Surface Solution Ponding and Phase V Surge Ponds;
- High Grade Mill (HGM);
- South Cresson Highwall.

Due to COVID-19 protocols, DRMS staff are currently required to perform inspections in separate vehicles from site Operators.

<u>SGVLF/VLF2 Water levels and Surface Solution Ponding</u>: The high volume solution collection system (HVSCS) 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. 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 as the readout displays at the riser pipes face south (towards the sun) and have become very difficult to impossible to read. Riser pipe water levels were between 44.7 and 47.2 feet and the piezometer (outside the influence from the draw down due to pumping in the risers) water level was at 60.8 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 11.1 and 12.6 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 being actively leached with process solution at the time of the inspection. Two small areas with ponded solution were observed using binoculars (see **Photo 1**). These two areas appeared to be close to the 3-ft by 3-ft limit in the approved wildlife protection plan. CC&V representatives stated they would remedy the situation.

<u>AGVLF/VLF1 Water levels, Surface Solution Ponding and Phase V Surge Ponds</u>: All HVSCS and LVSCS water levels were checked on VLF 1. All HVSCS levels were well below the 80% limit and all LVSCS levels were below the two-foot limit. A copy of the field log sheet is included as **Attachment A**.

VLF 1 was checked for solution ponding limits based on the approved wildlife protection plan limiting ponding to areas less than 3 feet by 3 feet. No ponding was observed on the 10,200, 10,300, and 10,400 levels. High Grade Mill tailings were observed stacked along the access road (see **Photo 2**).

DRMS aerial inspection images have highlighted ponds on the crusher side of Phase V. Site representatives explained these surge ponds were constructed in this area to accommodate collected Phase V leachate in an area where the collection pipes are on a flatter grade, thereby reducing their flow capacity. These surge ponds were inspected for compliance with the approved wildlife protection plan. Both ponds were dry at the time of the inspection but were surrounded by six-foot chain link fence and filled with bird balls (see **Photos 3** and **4**). The configuration appeared to meet the intent of the wildlife protection plan. The DRMS will continue to monitor these protections to ensure the fence is maintained and the sufficient bird balls are in place.

<u>High Grade Mill</u>: Mr. Donny Bauer 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). Both sides appeared well maintained and no measurable secondary containment storage volume was observed. The maintenance storage shed north of the HGM was also inspected. Containers not factory sealed and stored inside appeared to have adequate secondary containment (see **Photo 5**).

<u>South Cresson Highwall</u>: The South Cresson highwalls were inspected to observe bench configurations. Benches were more defined than what appeared in DRMS aerial images. Although bench crests appeared more rounded than in the adjacent Main Cresson pit (see **Photo 6**). An image taken of the east South Cresson highwall indicates the overall slope is ~58° (see **Photo 7**). The East Cresson west highwall bench crests are also somewhat rounded, limiting rockfall catchment capacity (see **Photo 8**). Site representatives were asked if the highwalls were scaled to limit rockfall. They indicated it was likely not common, but would check with Mine Operations to get a more definitive answer.

Miscellaneous Observations:

- New wildlife fencing was observed along the road between the VLF1 Phase V pumps and Hwy 67 just west of the city of Victor (see **Photo 9**).
- The widening of the berm/embankment for the holding pond west of the PSES (cited as having potential containment concerns in our June 30, 2020 inspection) was observed (see **Photo 10**). This embankment is still the low point where if capacity is exceeded, potentially impacted water would flow off the lined area. However, the widening of the embankment crest will reduce the potential for it to breach from overtopping erosion.
- The Arequa Gulch pumpback system was visited. A steel plate has been placed on the roof (see **Photo 11**) of the pumpback building to cover the hole in the roof and provide some protection from ice fall originating from the overhead Hwy 67 bridge. Site representatives were asked about the bird nest fouling the CRMW-3 series monitoring well. **Photo 12** shows how the cap on CRMW-3B was cut to accommodate several hoses. **Photo 13** shows how the cap on CRMW-3A was patched with duct tape to curtail bird entry.

# **PHOTOGRAPHS**



Photo 1. VLF 2: Smaller areas of ponded solution (looking SW from Brahma Building overlook).



Photo 2. HGM tailings stockpiled along VLF1 haul road (looking north).



Photo 3. VLF 1: East Phase V surge pond (looking east).



Photo 4. VLF 1: West Phase V surge pond (looking east, east surge pond in background).



Photo 5. Secondary containment under drums and buckets being filled with waste liquids (HGM Maintenance Shed).



Photo 6. Main Cresson and South Cresson Bench comparison (looking ENE from VLF1 10,400 level)



Photo 7. South Cresson, east highwall angle at ~58° (looking north).



Photo 8. South Cresson, west highwall (looking NW).

#### PERMIT #: M-1980-244 INSPECTOR'S INITIALS: TC1 INSPECTION DATE: April 29, 2021



Photo 9. New wildlife fencing along Phase V pump access road (looking SSE).



Photo 10. Widened embankment on SW side of PSES holding pond (note low point directs overflow off liner).



Photo 11. Steel plate on Arequa Gulch pumpback shed.



Photo 12. CRMW-3B monitoring well cap (showing cut for hose access).



Photo 13. CRMW-3A monitoring well cap (showing duct-taped seal around hole for hoses).

#### **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

CC&V VLF Wa	ter Level Inspection Readings					Previou	us Results		
Date:			2/27/20	7/29/20	9/15/20	10/29/20	3/29/21	4/29/21	Notes
AREQUA VLF:		EPS:	ERR	TC1	TC1	JPL	BFB		
Phase I HVSC &	Pond Piezometers	TIME:	10:33	10:01		12:38		12:56	
	Max. of Pump #299) #300, #301, 302, or #303 (Circle Pump #)	(ft)	49.5	45.6		46.5@301		53.2	· · · · ·
	Pond Lvl / XDCR #1	(ft)	49.0	45.2		42.8		52.4	
	System Press / XDCR #2	(ft)	41.0	43.3		2.5		44.3	system head
Phase I Low Vo	lume Solution Collection	TIME:	10:45	10:19				10:25	
Note: Req'd	Piezo #1 (HAND)	(ft)	0.44	0.42				0.60	
< 2 ft	Piezo #2 (AUTO)	(ft)	0.71	0.85				0,82	
Phase II & III H\	/SC & Pond Piezometer	TIME:	10:50	10:26	1	11:38		9:47	
Note: 80% @	Max. of XDCR #4, #5, or #6 Circle XDCR #)	(ft)	38.5	31.4		24.4 @6		21.7	pupsont
49.4 ft	Piezo (Pipe)	(ft)	39.8	41.4		31.2		31.2	1 or hole
Phase II & III Lo	w Volume Solution Collection	TIME:	10:52	10:30		11:40		9:50	
Note: Rea'd	Pump / XDCR #1 (AUTO)	(ft)	0.56	0.74		0.45		0.72	
< 2 ft	Pump / XDCR #2 (AUTO)	(ft)	0.24	0.29		0.43		0.54	
hase IV High V	Volume Solution Collection		11:45			0.08			
	Max. of Pump #307, #308, or	TIME:	11:45	13:07				11:50	
<u>Note: 80% cap.</u> <u>@ 56.5 ft</u>	#309 (Circle Pump #)	(ft)	44.2	19.1				12.4	
	XDCR pipe (#310 Resv'd)	(ft)	43.4	37.7				37.7	
Phase IV Low V	olume Solution Collection	TIME:	11:47	13:09				11:52	
Note: Req'd < 24"	Pump / XDCR #1	(in)	15.2	15.0		,		14.9	
< 24	Pump / XDCR #2	(in)	11.6	12.1				12.0	
Phase V High Vo	olume Solution Collection	TIME:	10:19	9:45		11:05	1.1	9:35	
<u>Note: 80% cap.</u> <u>@ 36.5 ft</u>	Max. of XDCR #311, #312, #313, or #314 (Circle XDCR #)	(ft)	30.2	15.1		14.8@311		19.3	
Phase V Low Vo	lume Solution Collection	TIME:	10:21	9:46				9:37	
Note: Req'd XDCR #001   < 24"	XDCR #001	(in)	8	6		7		6	Log up to da.
	XDCR #002	(in)	14.8	11.7		10.8		15.9	
xternal Pond L	ow Volume Solution Collection	TIME:	10:40	10:16		11:21		10:19	
	Pump / XDCR #1-EXT (AUTO)	(in)	14	10.1		4		4.2	
Note: Req'd < 24"	Pump / XDCR #2-EXT (AUTO)	(in)	16.8	17.5		14.7		12.9	
Inderdrain Disc		TIME:							
	South Underdrain (S U/D)	(gpm)		Dry		Dru		10:00	
	4" Pipe Discharge AG 01 Spring Pipe	(gpm)		Dry		Dry Dry		927	
Note: 1 <mark> </mark>	NPDES Discharge AG 1.5 -001A	(gpm)		Dry					
15.85 gpm	North Underdrain (N U/D)	(gpm)		Dry		Dry Dry			
	24-inch Solid Pipe	(gpm)	<u>61</u>	Dry		Dry			
roque Gulch M	Ionitor Well Pumpback System					Dry		N	
arequa Guich M	63B	(ft)		10:40				10.00	
Data first	123C			15.3				-	
collected by DRMS 3/8/12	B63	()		20.1				-	
	123C	(gpm)		~0.5				~	
		(gpm)				*		-	
QUAW GULCH	VLF High Vol. SC:	TIME:	11:04		10:59	13:02		12:00 10:3	8
<u>Note: 80% cap.</u>	LIT #88301 (north end)	(ft)	60.16		18.3	19.5		47.2	
	LIT #88303	(ft)	59.24		18.1	19.3		44.7	
<u>@ 94 ft</u>	LIT #88305	(ft)	66.9		18.9	19.6		46.9	
	LIT #88307 (south end)	(ft)	61.4		19.2	20.4		46.9	
	Piezometer-LIT #88314	(ft)	70.4		36.3			60.8	
QUAW GULCH	VLF Low Vol. SC:	TIME:	11:10		10:55	13:02		10:34	
- 24"	Leachate Pump 1	(in)	13.6		10.8	12.7	-	12.0	
< 71"	Leachate Pump 2	(in)	11.2		9.3	11.2			

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ATTACHMENT A