

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	Elliott R. Russell	February 24, 2015	10:00	
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:		
Cripple Creek & Victor Gold Mining Company	Chris Hanks	112d-3 - Designated Mining Operation		

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	None	\$136,471,600.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None /	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	GH MM	March 4, 2015

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected. 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 Y	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN <u>N</u>	(SB) COMPLETE INSP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP <u>N</u>
(AT) ACID OR TOXIC MATERIALS Y	· · ·	

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

OBSERVATIONS

The Division of Reclamation, Mining and Safety (Division) conducted an inspection of the Cresson Project (Permit File No. M-1980-244), a Regular 112d(3) Designated Mining Operation Reclamation Permit with 5,989.7 permitted acres and an approved post-mining land use of Rangeland and Wildlife Habitat. The mine is located southeast of Cripple Creek, Colorado and north of Victor, Colorado. Elliott Russell, with the Division, inspected the site while Chris Hanks, representing the operator, accompanied the inspection. This inspection was carried out as a part of the Division's normal monitoring program. The primary focus of this inspection was to observe water levels and to monitor ongoing construction projects on site.

Inspection:

At 10:00, the Division met Mr. Hanks at the Operator's office in Victor. At the time of the inspection the temperature was cold, the sky was clear, and the ground was frozen; throughout the site there was up to 8 inches of snow on the ground.

- A mine site identification sign (see Photo 1) was observed at the entrance to the Ironclad Facilities and was in compliance with Rule 3.1.12(1).
- The Phase V pad area of the Arequa Gulch Valley Leach Facility (AGVLF) was actively being loaded with ore and solution feeder lines were being laid down on various portions of the leaching pad (see **Photo 2**).
- The alternate location for crushing stemming material, used for packing blast holes, was inspected (see Photo 3). Mr. Hanks anticipated that the contractor would be finished crushing the material shortly because the volume for one year's use had nearly been crushed and stockpiled.
- The project for replacing the AGVLF crushed header from Phase IV was being prepared. A lay-down area had been cleared for the delivery of the 20" steel pipe. Two excavators were being used to prepare the area on the southern end of the line while a bobcat was clearing snow closer to the Phase IV pumps.
- The Division observed the general area in which the Grassy Valley 01 (GV-01) monitoring flume is located (see Photo 4). Pond 19, which is just upstream from the flume, has been disturbed from the Wildhorse Extension (WHEX) mining operation. Mr. Hanks stated that any water that would typically report to this pond now flows into the WHEX area leaving the flume dry. He discussed the possibility of submitting a letter requesting the removal of the flume and the sampling requirement of GV-01.

Water Levels:

The inspection continued as the Division visited each of the high and low volume solution collection system transducers and recorded the water level values (field data sheet attached). The values obtained from this visit are summarized in the Transducer Readings table below (see **Table 1**). These readings were all within their corresponding range of acceptable values. The North and South Arequa Gulch underdrains were inspected. The South Underdrain discharge was determined to be approximately 8.0 gpm while the North Underdrain A35 and B63 pumpback lines were dry. All discharge from the underdrains is collected and pumped back onto the AGVLF.

Construction:

The Division and Mr. Hanks were accompanied by Ron DiDonato into the Squaw Gulch Valley Leach Facility (SGVLF) (see **Photo 5**). The Division observed:

- The delivery and placement operations of spent ore into the southwest portion of the SGVLF Pregnant Solution Storage Area (PSSA). Spent ore is being removed from AGVLF Phase IV pad area, near the main crusher's truck loadout (see **Photo 6**);
- The final segment (31'high) of the PSSA risers had been welded and the top elevation of the risers is now at 9,455' (see **Photo 7**);
- A GPS bulldozer removing snow on the slopes of the PSSA to ensure a clean, snow-free contact between the Drain Cover Fill (DCF) and the spent ore (see **Photo 8**). The operator was using the surveyed data file to accurately remove snow without removing the DCF;
- Quality control and assurance personnel testing the compaction of the spent ore in the location footprint of the new ADR; and
- Final slope grading and the placement of Structural Fill (SF) on the upper reaches of the eastern half of the SQVLF Phase II (see **Photo 9**).

Mr. Hanks informed the Division that the new high-grade mill (see **Photo 10**) was currently being tested at 75% capacity for periods of 24 hours. The Division observed a small stockpile of processed ore (see **Photo 11**) had been conveyed from the mill; this stockpile is located approximately 300 feet west of the main crusher's truck loadout. The process ore, which has been agglomerated with cement, is planned to be loaded onto the AGVLF, or SGVLF upon its completion, for further gold recovery.

Mr. Hanks also updated the Division with information on the current construction project in Poverty Gulch. The most activity was occurring on the construction of sediment control pond EMP #21. Spillways were also being installed on ponds A through D. The Division was unable to observe these activities and sediment control ponds due to ground conditions at the site.

Post-Inspection Meeting:

After the site inspection, the Division had a discussion with Lawrence Myers regarding the pond piezometers in Phase I and Phase II &III and how these have been recording water levels much higher than the readings from the respective high volume solution pumps. This is due to the draw-down effect that pumping has and that the respective cone of depression from each of the pumps does not significantly impact the level of water at the piezometers. Additionally, the Division had a discussion with Marc Tidquist in regards to the topsoil stockpile/visual berm in Poverty Gulch. CC&V is still designing the plans for the berms and understands that the outside toe (and any stormwater features) must remain inside of the existing approved Amendment 10 permit boundary.

The inspection concluded and the Division left the site at 14:50.

PERMIT #: M-1980-244 INSPECTOR'S INITIALS: ERR INSPECTION DATE: February 24, 2015

Table 1. Transducer readings recorded at the Cresson Project on February 24, 2015.

Table 1. Transducer readings re	conded at the cresson	r toject on r cordary 2	4, 2015.	
Phase I High Volume Solution Collect	tion (readings in ft)			
Pump #299 / XDCR #xx	Pump #300 / XDCR #00	Pump #301 / XDCR #01	Pump #302 / XDCR #02	Pump #303 / XDCR #03
42.1	44.1	24.9	37.3	42.0
Phase I Low Volume Solution Collect	ion (readings in ft)			
Pond Lvl / XDCR #1	System Press / XDCR #2			
0.55	0.68			
Phase I Pond Piezometers (readings in	ft)			
Piezo #1 (HAND)	Piezo #2 (AUTO)			
57.1	48.2			
Phase II & III High Volume Solution	Collection (readings in ft)			
Pump / XDCR #4	Pump / XDCR #5	Pump / XDCR #6		
25.0	18.3	27.1		
Dhage II & III Low Volume Solution	Collection (readings in ft)			
Phase II & III Low Volume Solution				
Pump / XDCR #1 (AUTO)	Pump / XDCR #2 (AUTO)			
0.46	0.30			
	• • • • •			
Phase II & III Pond Piezometer (read	ings in ft)			
Piezo (Pipe)				
31.8				
	() ()			
Phase IV High Volume Solution Colle	ction (readings in ft)			
Pump #4 / XDCR #307	Pump #5 / XDCR #308	Pump #6 / XDCR #309	XDCR pipe (#310 Reserved)	
35.7	35.4	35.3	35.3	
Phase IV Low Volume Solution Collect	ction (readings in inches)			
Pump / XDCR #1	Pump / XDCR #2			
18.3	11.5			
10.5	11.5			
Phase V High Volume Solution Collec	tion (readings in ft)			
XDCR #311 (AUTO)	XDCR #312 (AUTO)	XDCR #313 (AUTO)	XDCR #314 (AUTO)	
<u>19.20</u>	<u>29.53</u>	32.29	<u>32.28</u>	
19.20	27.33	34.29	32.28	
Phase V Low Volume Solution Collect	tion (readings in inches)			
XDCR #001	XDCR #002			
12.84	16.30			
External Pond Low Volume Solution (Collection (readings in inches))		
			0)	
Pump / XDCR #1-EXT (AUTO	<u>) P</u>	ump / XDCR #2-EXT (AUT	0)	
0.1		12.2		
9.1		12.2		

PHOTOGRAPHS



Photo 1. Site identification sign at the entrance of the Ironclad Facilities (south of County Road 82); looking southwest.



Photo 2. Placement of solution feeder lines at the 10,300' level of the leach pad, surface ripped to allow better infiltration of solution; looking south.



Photo 3. Crushed blasting material used for stemming; looking northwest.



Photo 4. Area of Pond 19 and GV-01 circled in red (west of WHEX); looking east



Photo 5. Overview of the SGVLF; looking northwest.



Photo 6. Area in AGVLF Phase IV where spent ore is being extracted for the SGVLF, the main crusher's truck loadout in the background; looking northeast.



Photo 7. Final segment of the SGVLF PSSA risers with 15' uncontrolled lifts of spent ore behind, snow cleared from the DCF in the background; looking southeast.



Photo 8. Bulldozer using GPS to remove snow from the DCF, currently standing on the compacted footprint of the new ADR; looking northwest.



Photo 9. SF placement for Phase II of the SGVLF project, bulldozer working on the final grade circled in red; northwest.



Photo 10. Overview of the new high-grade mill facility; looking north.



Photo 11. Agglomerated processed ore from the high-grade mill; looking south.

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

CC: Tom Kaldenbach; DRMS Tim Cazier; DRMS Amy Eschberger; DRMS Chris Hanks; CC&V

ATTACHMENT A

Data		Ĩ	6/2/14	0/7/14	11/5/14	12/10/14	1/7/15	DImula	Notos
Date:	Volume Solution Collection	11-36-	6/3/14	8/7/14	11/5/14 14:12	12/10/14	1/7/15 15:19	2/24/15 10:59	Notes
	Pump #299 / XDCR #xx	Units (ft)	12:31 34.8	13:48 34.8	37.9	10:54 36.4	34.1	42.1	
-	Pump #300 / XDCR #00	(ft)	35.3	35.3	40.3	36.4	33.9	44.1	
10000100000	Pump #301 / XDCR #01	(ft)	22.4	24.7	29.4	22.5	39.6	24.9	
	Pump #302 / XDCR #02	(ft)	35.3	36.8	39.0	33.6	46.3	37,3	
	Pump #303 / XDCR #03	(ft)	38.2	39.9	42.6	37.0	52.8	47.00	
	Piezometers	(14)	12:31	13:48	14:12	10:54	15:19	10:59	
() ()	Pond Lvl / XDCR #1	(ft)	53.7	56.2	57.5	52.4	63.8	57.1	
	System Press / XDCR #2	(ft)	48.7	49.0	48.3	47.3	51.9	1.11	system head
	Volume Solution Collection	(14)	12:36	13:55	13:54	10:30	14:44	10:21	system nead
	Piezo #1 (HAND)	(ft)	0.44	0.36	0.55	0.53	0.39	+55	
	Piezo #2 (AUTO)	(ft)	0.78	0.52	0.42	0.64	0.64	.68	
		(14)							
	High Volume Solution Collection		12:39	14:12	11:01	10:46	15:10	10:47	
and the second se	Pump / XDCR #4	(ft)	12.9	26.1	28.3	27.4	38.4	250	
	Pump / XDCR #5	(ft)	15.4	30.4	29.2	34.4	46.4	18:3	
	Pump / XDCR #6	(ft)	14.0	28.1	31.7	30.3	42.9	27.1	
	Pond Piezometer	(e.)	12:37	14:12		10:17	15:10	10.47	
	Piezo (Pipe)	(ft)	31.0	31.0	31.0	33.7	46.7	31.8	
The second second second	Low Volume Solution Collection		12:40	14:14	14:02	10:49	15:12	10:53	· · · · · · · · · · · · · · · · · · ·
	Pump / XDCR #1 (AUTO)	(ft)	0.26	0.40	0.31	0.28	0.70	-46	
<2 ft	Pump / XDCR #2 (AUTO)	(ft)	0.40	0.46	0.47	0.54	0.25	.30	
Phase IV High	h Volume Solution Collection		11:56	11:32	12:21	11:15	13:47	11:52	
F	Pump #4 / XDCR #307	(ft)	12.3	17.0	19.7	15.1	27.1	35.7	
Note: 80%	Pump #5 / XDCR #308	(ft)	12.0	16.7	19.4	14.8	26.7	35.4	
<u>сар. @ 56.5</u> ft	Pump #6 / XDCR #309	(ft)	11.9	16.5	19.3	14.9	26.7	35.3	
	XDCR pipe (#310 Reserved)	(ft)	12.0	16.5	19.3	14.8	26.7	35.3	
Phase IV Low	v Volume Solution Collection		12:02	11:36	12:34	11:17	13:52	11:57	
Note: Reg'd	Pump / XDCR #1	(in)	17.1	16.1	16.1	15.9	16.7	18.3	
< 24* F	Pump / XDCR #2	(in)	11.6	11.6	11.2	11.5	11.0	11.5	
Phase V High	Volume Solution Collection		12:22	13:37	14:23	11:03	15:27	11:08	
)	XDCR #311 (AUTO)	(ft)	16.78	17.45	34.39	23.28	29.46	34.38	19.20
Note: 80%	XDCR #312 (AUTO)	(ft)	17.06	15.77	28.77	15.31	19.13		
<u>cap. @ 36.5</u> ft	XDCR #313 (AUTO)	(ft)	16.96	16.04	28.56	25.10	28.34	3229	
	XDCR #314 (AUTO)	(ft)	16.77	19.41	30.61	15.80	18.96	3778	
Phase V Low	Volume Solution Collection	11	12:24	13:39	14:21	11:05	15:29	11.12	
Note: Reg'd	XDCR #001	(in)	8.92	12.30	11.12	9.00	10.08	12.94	
< 24"	XDCR #002	(in)	16.30	15.50	14.60	12.90	16.80	16.30	
External Pon	d Low Volume Solution Collection	4	13:03	13:53	13:49	10:25	14:40	10:18	
	Pump / XDCR #1-EXT (AUTO)	(in)	13.03	13.3	12.9	13.1	13.5	9,1	
	Pump / XDCR #2-EXT (AUTO)	(in)	8.6	13.6	16.9	15.6	17.1	12,2	
		(11)						10 Co.	
Underdrain [Discharge Area		12:55	~13:50	No Check	10:38	14:56	10,39	
9	South Underdrain (S U/D)	(gpm)	8.0	12.0	N/C	20.0	14.0	B.D	155ec/201
Note: 1	4" Pipe Discharge AG 01 Spring Pipe	(gpm)	Dry	N/C	N/C	N/C	Dry	PA	
	NPDES Discharge AG 1.5 -001A	(gpm)	Dry	N/C	N/C	N/C	Dry	DN	
15 85 anm	•		<u> </u>						
	North Underdrain (N U/D)	(gpm)	Dry	N/C	N/C	N/C	Dry	DIY	
	24-inch Solid Pipe	(gpm)	Dry	N/C	N/C	N/C	Dry	DN	
Arequa Gulcl	h Monitor Well Pumpback System		12:45		No Check	10:35	14:52	10:32	
	35A	(in)	0.00	0.00	N/C	N/C	0.00	0.00	
	63B	(ft)	30.29	31.08	N/C	29.28	28.29	35.92	
collected by	B63	(gpm)	0.6		N/C	N/C	0.4	0.00	
						1		100	
	A35	(gpm)	Dry	Dry	N/C	N/C	0.0	000	.l