



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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): Amy Eschberger	INSP. DATE: December 10, 2014	INSP. TIME: 09:45
OPERATOR: Cripple Creek & Victor Gold Mining Company	OPERATOR REPRESENTATIVE: Chris Hanks	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$136,471,600.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: <i>Amy Eschberger</i>	SIGNATURE DATE: February 2, 2015

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>N</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>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(SB) COMPLETE INSP---- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <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 (DRMS Permit No. 1980-244) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Chris Hanks represented the Operator during the inspection. The focus of this inspection was to observe water levels and to monitor ongoing construction projects on site. A short post-inspection meeting with Chris Hanks and Marc Tidquist was held at the Operator's office in Victor, Colorado.

At the time of inspection, the weather was clear, cool, and sunny. The ground had some snow cover in shaded areas, but was mainly dry throughout the mine site. The first inspection task included visiting each of the high and low volume solution collection system transducers and recording water level values. The recording sheet is included with this report as Attachment A. The values obtained from this visit are summarized below in the Transducer Readings (Table A). At this time, all water level values appeared to be 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 20.0 gpm. The North Underdrain A35 and B63 pumpback lines were dry.

Next, an inspection was conducted of the alternate location for crushing stemming material for packing blast holes. This area is located on the existing West Blue Overburden Storage area between the Wild Horse Extension pit (WHEX) and the old Wild Horse pit. The Division received notification from the Operator on December 08, 2014 stating that this area would be occupied by a contractor-operated mobile crusher starting in January 2015. According to the Operator, the total volume of stemming crushed on site will not change. However, bringing in a contractor will free up the mine from the need to clean ore out of the main crusher when necessary to crush stemming. At the time of the inspection, there was no activity and no equipment present in this area (Photos 1 and 2).

An inspection was conducted of the WHEX pit area, where active surface mining (Photo 3) and production drilling (Photo 4) were in progress. The inspection then continued to the Ames crusher operations where Drain Cover Fill (DCF) used in construction of the new Squaw Gulch Valley Leach Facility (SGVLF) is processed and stockpiled (Photo 5). This material comes from crushed ore from the Cresson Project.

The Poverty Gulch area located at the northwestern edge of the permit area was also visited during the inspection. The Division observed the future location of a series of sediment control ponds (A-D, from lower elevation to higher elevation) which will be constructed in this area. The Division also observed the future site of sediment pond EMP #21, located near the northwestern permit boundary (Photo 6). This area had been cleared but construction of the pond had not yet begun.

The Division briefly visited two other sites located in the Poverty Gulch area which are permitted under the same Operator. These sites included the Chicago Tunnel (DRMS Permit No. M-1988-026) and the Providence Mine (DRMS Permit No. M-2012-052). These sites were observed from the vehicle in passing mainly to familiarize the inspector with their locations in relation to the Cresson Project.

Afterward, the Division visited the SGVLF toe berm/Hwy 67 realignment area located on the western edge of the site (Photo 7). The embankment toe can be accessed by Teller Co Rd 88 and Shelf Rd. At the time of inspection, the underdrain ponds were dry. Straw wattles had been staked in around the pond perimeters to help keep sediment from washing into the ponds. The 8-inch diameter primary underdrain pipe exits the embankment toe toward the underdrain ponds (Photo 8) which are located approximately 15 feet from the embankment toe. The channels present along the toe berm have been lined with riprap (see Photo 8). Previously, these channels were eroding naturally as surface runoff from Hwy 67 flowed downgradient toward the underdrain pond area. The Operator intends to keep surface runoff from mixing with any fluids that may exit the primary underdrain system which will be pumped back to the mine circuit. The Division observed a stormwater pond being constructed downgradient from the underdrain ponds (Photos 9-11). Riprap-lined diversion ditches have been constructed around the underdrain ponds directing

runoff from the toe berm into the stormwater pond. The Division observed two groundwater-monitoring wells located just downgradient from the stormwater pond which appeared to have been recently installed (Photo 12). The specific purpose of these wells was unclear at the time of the inspection. All disturbances observed within this valley are well within the Mine Life Extension 2 Permit Boundary approved in Amendment No. 10 (AM-10) on September 12, 2012.

The final location visited during the inspection was the southern edge of the SGVLF from off of Hwy 67. No activity was observed in the SGVLF, as construction in this area has suspended for the season. Mr. Hanks indicated that construction of the SGVLF will continue in the spring, as weather permits. Ames has completed covering the accepted Phase I 80-mil DSMS LLDPE geomembrane liner with DCF within SGVLF Phase I, except for a portion on the upper southeast side of the SGVLF Phase I (Photo 13) where the liner has been installed and anchored in but was not covered by DCF before construction ceased. According to the weekly CQA reports submitted by the Operator, this section of exposed liner was installed and accepted for DCF during the week ending on November 08, 2014. The four Low Volume Solution Collection (LVSC) riser pipes were observed sticking up from the DCF in the southern edge of the Pregnant Solution Storage Area (PSSA; Photo 14). The Operator wishes to place spent ore around these riser pipes to help stabilize them as approved in the Technical Revision No. 72 (TR-72). However, the Division requires the Operator to first address the Division's questions and comments regarding the SGVLF PSSA Project Final Report with Quality Assurance Monitoring & Test Results that the Operator submitted on November 20, 2014. This report details work associated with the Cresson Project that was performed under specific criteria established in AM-10 for this permit. This report documents the construction quality assurance and quality control services provided by AMEC from January 2013 thru November 2014 for the SGVLF PSSA. The Division's review of this report was submitted to the Operator on December 10, 2014. (Since this inspection was conducted, the Division has received responses from the Operator which are currently under review.)

During the post-inspection meeting, the discussion with Mr. Hanks and Mr. Tidquist was primarily focused on the Division's review of the SGVLF PSSA Project Final Report (mentioned above).

This concluded the inspection.

Phase I High Volume Solution Collection (readings in ft)

<u>Pump #299 / XDCR #xx</u>	<u>Pump #300 / XDCR #00</u>	
36.4	36.4	
<u>Pump #301 / XDCR #01</u>	<u>Pump #302 / XDCR #02</u>	<u>Pump #303 / XDCR #03</u>
22.5	33.6	37.0

Phase I Low Volume Solution Collection (readings in ft)

<u>Pond Lvl / XDCR #1</u>	<u>System Press / XDCR #2</u>
52.40	47.30

Phase I Pond Piezometers (readings in ft)

<u>Piezo #1 (HAND)</u>	<u>Piezo #2 (AUTO)</u>
0.53	0.64

Phase II & III High Volume Solution Collection (readings in ft)

<u>Pump / XDCR #4</u>	<u>Pump / XDCR #5</u>	<u>Pump / XDCR #6</u>
27.4	34.4	30.3

Phase II & III Low Volume Solution Collection (readings in ft)

<u>Pump / XDCR #1 (AUTO)</u>	<u>Pump / XDCR #2 (AUTO)</u>
0.28	0.54

Phase II & III Pond Piezometer (readings in ft)

<u>Piezo (Pipe)</u>
33.70

Phase IV High Volume Solution Collection (readings in ft)

<u>Pump #4 / XDCR #307</u>	<u>Pump #5 / XDCR #308</u>	<u>Pump #6 / XDCR #309</u>	<u>XDCR pipe (#310 Reserved)</u>
15.1	14.8	14.9	14.8

Phase IV Low Volume Solution Collection (readings in inches)

<u>Pump / XDCR #1</u>	<u>Pump / XDCR #2</u>
15.90	11.50

Phase V High Volume Solution Collection (readings in ft)

<u>XDCR #311 (AUTO)</u>	<u>XDCR #312 (AUTO)</u>	<u>XDCR #313 (AUTO)</u>	<u>XDCR #314 (AUTO)</u>
23.28	15.31	25.10	15.80

Phase V Low Volume Solution Collection (readings in inches)

<u>XDCR #001</u>	<u>XDCR #002</u>
9.00	12.90

External Pond Low Volume Solution Collection (readings in inches)

<u>Pump / XDCR #1-EXT (AUTO)</u>	<u>Pump / XDCR #2-EXT (AUTO)</u>
13.1	15.6

Table A. Transducer readings recorded at Cresson Project on 12/10/2014.

PHOTOGRAPHS



Photo 1. View looking northwest, showing alternate location for crushing stemming material located on existing West Blue Overburden Storage area.

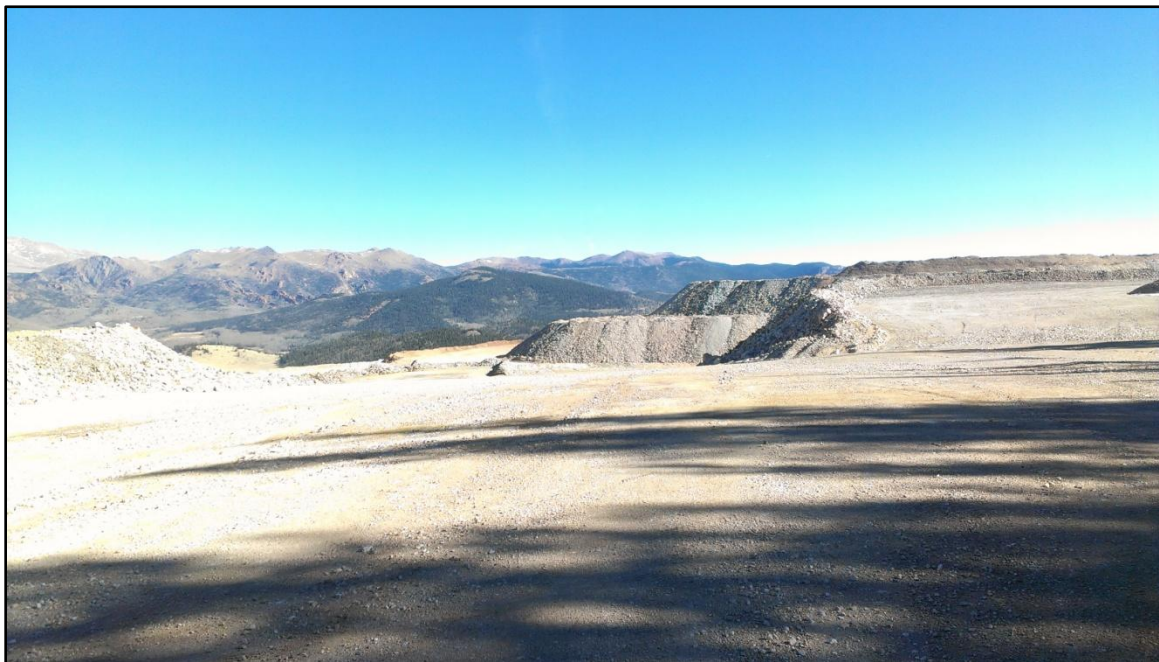


Photo 2. View looking east, showing haul road leading up to alternate location for crushing stemming material located on existing West Blue Overburden Storage area.

PHOTOGRAPHS (cont.)



Photo 3. View looking southwest, showing active mining in WHEX pit.



Photo 4. View looking west, showing production drilling in WHEX pit.

PHOTOGRAPHS (cont.)



Photo 5. View looking west, showing AMES crusher operations where DCF is stockpiled.



Photo 6. View looking north, showing future location of pond EMP #21 located in far northwestern portion of permit area.

PHOTOGRAPHS (cont.)



Photo 7. View looking northwest from Hwy 67 (at the top of the embankment), showing underdrain ponds located below in Squaw Gulch Valley on southwestern side of the embankment.



Photo 8. View looking east at southwest side of SGVLF toe berm, showing concrete-lined underdrain ponds. Primary underdrain pipe (indicated) exits toe berm toward ponds. Note channels along toe berm have been lined with riprap.

PHOTOGRAPHS (cont.)



Photo 9. View looking east toward southwestern side of SGVLF embankment, showing stormwater pond constructed downgradient from underdrain ponds. Note riprap-lined diversion ditches.



Photo 10. View looking southwest, showing southern portion of stormwater pond constructed downgradient from underdrain ponds.

PHOTOGRAPHS (cont.)



Photo 11. View looking southeast, showing northern bank of stormwater pond constructed just southwest of underdrain ponds.

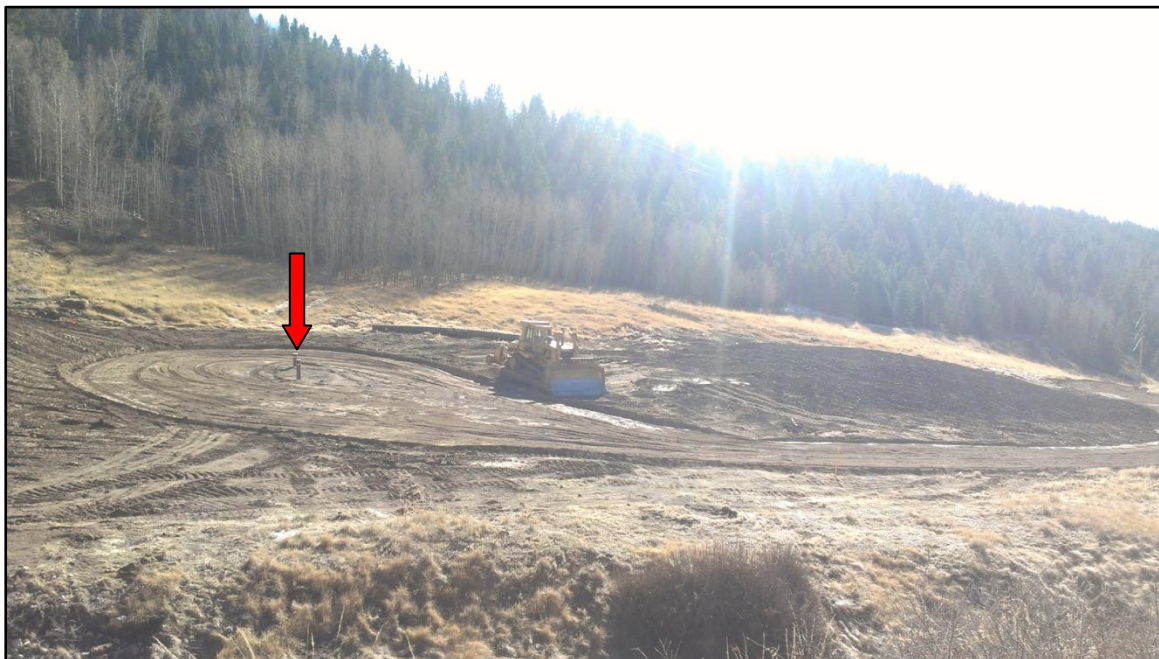


Photo 12. View looking southeast, showing earthwork in progress downgradient from stormwater pond. Location of two groundwater monitoring wells is indicated.

PHOTOGRAPHS (cont.)



Photo 13. View looking east from SGVLF embankment, showing Phase I 80-mil DSMS LLDPE geomembrane liner installed on upper southeast portion of SGVLF, not covered by DCF. Note new high-grade mill facility located above.



Photo 14. View looking northeast from SGVLF embankment, showing DCF covering accepted Phase I 80-mil DSMS LLDPE geomembrane liner in SGVLF. Note four LVSC riser pipes sticking up from southwestern end of the PSSA.

Inspection Contact Address

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

Enclosure(s): Attachment A (recording sheet for water level values)

CC: Tom Kaldenbach, DRMS
Tim Cazier, DRMS
Elliott Russell, DRMS
Chris Hanks, CC&V
DRMS file

ATTACHMENT A

Date:

Phase I High Volume Solution Collection

Pump #299 / XDCR #xx
Note: 80% Pump #300 / XDCR #00
cap. @ 63.75 Pump #301 / XDCR #01
ft Pump #302 / XDCR #02
 Pump #303 / XDCR #03

Phase I Pond Piezometers

Pond Lvl / XDCR #1
 System Press / XDCR #2

Phase I Low Volume Solution Collection

Note: Req'd Piezo #1 (HAND)
< 2 ft Piezo #2 (AUTO)

Phase II & III High Volume Solution Collection

Note: 80% Pump / XDCR #4
cap. @ 49.4 Pump / XDCR #5
ft Pump / XDCR #6

Phase II & III Pond Piezometer

Piezo (Pipe)

Phase II & III Low Volume Solution Collection

Note: Req'd Pump / XDCR #1 (AUTO)
< 2 ft Pump / XDCR #2 (AUTO)

Phase IV High Volume Solution Collection

Note: 80% Pump #4 / XDCR #307
cap. @ 56.5 Pump #5 / XDCR #308
ft Pump #6 / XDCR #309
 XDCR pipe (#310 Reserved)

Phase IV Low Volume Solution Collection

Note: Req'd Pump / XDCR #1
< 24" Pump / XDCR #2

Phase V High Volume Solution Collection

Note: 80% XDCR #311 (AUTO)
cap. @ 36.5 XDCR #312 (AUTO)
ft XDCR #313 (AUTO)
 XDCR #314 (AUTO)

Phase V Low Volume Solution Collection

Note: Req'd XDCR #001
< 24" XDCR #002

External Pond Low Volume Solution Collection

Note: Req'd Pump / XDCR #1-EXT (AUTO)
< 24" Pump / XDCR #2-EXT (AUTO)

Underdrain Discharge Area

(2 gal bucket) South Underdrain (S U/D)
Note: 1 4" Pipe Discharge AG 01 Spring Pipe
l/sec = NPDES Discharge AG 1.5 -001A
15.85 gpm North Underdrain (N U/D)
 24-inch Solid Pipe

Arequa Gulch Monitor Well Pumpback System

35A
Data first 63B
collected by B63
DRMS 3/8/12 A3C *> Pumpback lines dry*

	4/9/14	6/3/14	8/7/14	11/5/14	12/10/14	Notes
Units	No Check	12:31	13:48	14:12	(10:54)	
(ft) n/a		34.8	34.8	37.9	36.4	
(ft) n/a		35.3	35.3	40.3	36.4	
(ft) n/a		22.4	24.7	29.4	22.5	
(ft) n/a		35.3	36.8	39.0	33.6	
(ft) n/a		38.2	39.9	42.6	37.0	
Units	No Check	12:31	13:48	14:12	(10:54)	
(ft) n/a		53.7	56.2	57.5	52.4	
(ft) n/a		48.7	49.0	48.3	47.3	system head
Units	No Check	12:36	13:55	13:54	(10:30)	
(ft) n/a		0.44	0.36	0.55	0.53	
(ft) n/a		0.78	0.52	0.42	0.64	
Units	No Check	12:39	14:12	14:04	(10:46)	
(ft) n/a		12.9	26.1	28.3	27.4	
(ft) n/a		15.4	30.4	29.2	34.4	
(ft) n/a		14.0	28.1	31.7	30.3	
Units	No Check	12:37	14:12		(10:47)	
(ft) n/a		31.0	31.0	31.0	33.7	
Units	No Check	12:40	14:14	14:02	(10:49)	
(ft) n/a		0.26	0.40	0.31	0.28	
(ft) n/a		0.40	0.46	0.47	0.54	
Units	11:06	11:56	11:32	12:21	(11:15)	
(ft) 11.6		12.3	17.0	19.7	15.1	
(ft) 11.2		12.0	16.7	19.4	14.8	
(ft) 11.4		11.9	16.5	19.3	14.9	
(ft) 11.4		12.0	16.5	19.3	14.8	
Units	11:06	12:02	11:36	12:34	(11:17)	
(in) 16.8		17.1	16.1	16.1	15.9	
(in) 12.0		11.6	11.6	11.2	11.5	
Units	No Check	12:22	13:37	14:23	(11:03)	
(ft) n/a		16.78	17.45	34.39	23.28	
(ft) n/a		17.06	15.77	28.77	15.31	
(ft) n/a		16.96	16.04	28.56	23.10	
(ft) n/a		16.77	19.41	30.61	15.80	
Units	No Check	12:24	13:39	14:21	(11:05)	
(in) n/a		8.92	12.30	11.12	9.00	
(in) n/a		16.30	15.50	14.60	12.90	
Units	No Check	13:03	13:53	13:49	(10:25)	
(in) n/a		13.2	13.3	12.9	13.1	
(in) n/a		8.6	13.6	16.9	15.6	
Units	13:20	12:55	~13:50	No Check	(10:38)	
(gpm) 3.6		8.0	12.0	N/C	20.0	
(gpm) Dry		Dry	N/C	N/C	N/C	
(gpm) Dry		Dry	N/C	N/C	N/C	
(gpm) Dry		Dry	N/C	N/C	N/C	
(gpm) Dry		Dry	N/C	N/C	N/C	
Units	13:17	12:45	No Check		(10:35)	
(in) 0.00		0.00	0.00	N/C	N/C	
(ft) 35.37		30.29	31.08	N/C	29.28	
(gpm) 0.00		0.6	N/C	N/C	N/C	
(gpm) 0.00	Dry	Dry	N/C	N/C	N/C	