

# Cripple Creek & Victor Gold Mining Company

A Joint Venture - ANGLOGOLD ASHANTI (COLORADO) CORP., Manager

**Operations Office** P.O. Box 191 · 100 North 3<sup>rd</sup> Street Victor, Colorado 80860 (719) 689-2977 – Fax (719) 689-3254



## SENT CERTIFIED, RETURN RECEIPT REQUESTED 7011-0470-0000-4833-9179

February 5, 2014

Mr. Timothy Cazier Environmental Protection Specialist Colorado Department of Natural Resources Division of Reclamation, Mining and Safety Office of Mined Land Reclamation 1313 Sherman Street, Room 215 Denver, Colorado 80203

- Reference: Cripple Creek & Victor Gold Mining Company, Cresson Project Squaw Gulch (VLF), Hwy 67 Realignment
- Subject:Weekly Construction Quality Assurance ("CQA") Report:<br/>AMEC: Squaw Gulch (VLF), Hwy 67 Realignment Week ending 01/25/14.

Dear Mr. Cazier:

Cripple Creek & Victor Gold Mining Company ("CC&V") is hereby providing the weekly Construction activity and Progress report prepared by AMEC, reporting the CQA services performed for the Squaw Gulch (VLF), Hwy 67 Realignment Construction during the week ending January 25, 2014.

Should you have any questions, please do not hesitate to contact me at (719) 689-4055.

Sincerely,

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Timm Comer Manager, Environmental Resources

Enclosures: AMEC Squaw Gulch (VLF), Hwy 67 Realignment Monitoring Summary (Weekly Report). Week ending 01/25/14.



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## CRIPPLE CREEK & VICTOR GOLD MINING Co. Squaw Gulch (VLF), HWY 67 Realignment Field Monitoring Summary Weekly Report

Owner: Project: Location: Contractor:	Cripple Creek & Victor Gold Mining Co. Squaw Gulch (VLF), Hwy 67 Realignment Cripple Creek & Victor Gold Mine, Colorado Ames Construction Co. Inc.	Project Number: 74201125N0. ****, ****	Date 1.25.2014
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Reporting Period: 1.19.14 thru 1.25.14

Days	S	M	Т	W	T	F	S
Work Shifts	-	D	D	D	D	D	D
WORK SHIILS	•	-	-	-	-	-	-

Ambient Temperature Ranges for reporting period:Low:6°F to 24°FHigh:20°F to 46°F

Weather conditions for reporting period: Cloud Cover: Snow Thursday; otherwise, mostly clear Precipitation: None Wind: Variable

Ames: Continuing construction tasks for the Historical Crib Wall / South MSE Wall and VLF.

Planning: Continuing construction activities and scheduling for Historical Crib Wall / South MSE Wall and VLF.

#### **CONSTRUCTION ACTIVITIES and PROGRESS:**

#### I) Earthworks

A) VLF (Phase I)

Topsoil / Overburden Stripping: No topsoil or overburden stripping occurred this week.

Production drilling: Production drilling occurred during this reporting period within the VLF limits.

Production blasting: Five blasts occurred within the VLF.

#### **Structural Fill:**

Cat dozers continued pushing material downslope near stations A14+00 and B16+00 where it was placed into Cat 777 haul trucks by a Cat 992G loader. The material was transported to the buttress fill adjacent to Dump 4 and was placed in approximately 24-inch lifts by a Cat D9 dozer. A Cat 330 excavator rock hammer broke oversized rock while a Cat smooth drum vibratory roller compacted the lifts per method specification.

A Cat D10 pushed material downslope from Dump 4 east of the Phase 2 Diversion Channel area where it was placed as fill in approximately 3 foot lifts by a Cat dozers. The lifts were compacted per method specification by a Cat vibratory smooth drum roller.

A John Deere 850 excavator loaded 740 haul trucks with material removed near station Q4+00. The material was hauled in between stations E1+00 and C6+00 and placed using a Cat D8 GPS dozer in approximately 24 inch lifts. The lifts were compacted per method specification by a Cat CS56 smooth drum vibratory roller.

A John Deere 870 excavator loaded 740 haul trucks with material removed near station FF10+00. The material was hauled to an area near stations FF1+00 to F4+00 and DD0+00 to DD2+00 and placed using a Cat D8 GPS dozer in





approximately 24 inch lifts. The lifts were compacted per method specification by a Cat CS56 smooth drum vibratory roller.

A John Deere 850 excavator loaded 740 haul trucks with material removed at the base of the PSSA toe berm. The material was hauled to the upper PSSA toe berm fill surface and was placed using a Cat D8 GPS dozer in approximately 24 inch lifts. The lifts were compacted per method specification by a Cat CS56 smooth drum vibratory roller.

A John Deere 1050J, a Cat D8t GPS, and a Cat D6 GPS dozer graded the slopes between stations HH0+00 to HH2+00 and FF4+00 to FF8+00.

A Cat D9 dozer removed the former highway pavement and prepared a drill pad below the Crib Wall near stations B8+00 to B10+00.

A Cat dozer graded the slope near stations Q6+00 to Q10+00.

#### Clay (SLF) Processing:

Cameron Site: No clay mining or processing occurred at the Cameron Site. Approximately, 244,860 tons of clay / soil liner fill (SLF) material have been produced at the Cameron site. SLF produced from the operation remains stockpiled at Cameron Site for later removal / use.

Squaw Gulch Clay Borrow Site: Clay processing took place at the Squaw Gulch Clay Borrow Site. Approximately, 41,500 tons of soil liner fill material has been produced at the Squaw Gulch Clay Borrow Site to date.

A Cat 980 loader was used to transport till from the mid portion of the clay borrow area to the lower portion for processing.

#### Underdrain System:

Secondary Underdrain: No secondary underdrain was installed during this reporting period. Approximately, 5,064 feet of secondary underdrain has been completed to date in the VLF.

**Primary Underdrain:** No work was performed on the primary underdrain during this reporting period. A total of 1,294.60 feet of primary underdrain has been completed.

#### Tree /Slash Grubbing and Clearing, Chipping:

Tree removal occurred at the Drain Cover Fill (DCF) stockpile expansion area occurred.

#### **B) Underground Workings**

Confirmation drilling occurred at underground working UG #6302. Additional work will continue.

Two layers of geogrid and select structural fill were installed at Working UG # 6123. Work is to continue.

Working UG #6302 was excavated to a depth of 25 feet. The bottom of the shaft was not located and no timbers were found; they were possibly removed during slope grading. What appears to be an adit was noted at the bottom of the excavation trending in a northerly direction up-slope. Drilling will be required to further locate the adit. The shaft was backfilled for safety and drilling access was provided. Work to continue.

Cemented rock fill was placed in Underground Working number 6087.

UG 6374 was prepped for a 2-layer geogrid system. AMEC personnel approved the prepared subgrade for geogrid placement.





Ames finished backfilling UG #6320. The shaft was filled to within 50 feet of the surface using the 60-inch minus material. The remainder of the shaft was completed with the on-site tailings which classifies as coarse shaft backfill. The total amount of material placed in the shaft was approximately 6,355 cubic yards.

A Cat 345 excavator removed shot rock from the adit at UG #6003. Two additional adits were located and will require confirmatory drilling to isolate them.

Underground Workings U6332, 6342, 6417, 6405, 6416, 6410, and 6301 were excavated to competent rock, backfilled with structural fill, and are considered remediated.

Structural fill was placed over the cemented rock fill in Underground Working number U6280. The working is considered remediated.

Cemented rock fill was placed in Underground Working number 6036 and then backfilled with structural fill. The working is considered remediated.

Working UG #6283 was blasted, excavated, backfilled with structural fill, and is considered remediated.

Drain Cover Stockpile Extension, Outside the Phase 2 Work Area; Seven underground workings were located within the planned stockpile extension yesterday. Four of the workings were previously removed in July 2013. The following workings were located and were backfilled during the site grading and tree removal: <u>UG #6424</u>; (5453), Known Shaft: Remediated, backfilled. <u>UG #U6425</u>: Unknown Trench: Runs from the east to west about 80-feet in length. Remediated, backfilled. UG #U6426: Unknown Shallow Surface Working. Remediated, backfilled.

#### C) Historical Crib Wall / South MSE Wall:

A Cat 320 excavator was used to remove tailings from behind the timbers at the historic crib wall. The tailings were pushed down hill near station B16+00 where they were loaded out and used as fill. A Cat 320 excavator was also used to remove timber panels form the historic crib wall that were fastened together with steel backing straps and spikes.

Timber-panel installation continued at the South MSE wall.

#### II) Storm Water Management

Best Management Practices (BMP) is being performed. Erosion control efforts took place during this reporting period following any precipitation (snow removal and runoff from melting snow and ice).

#### **CQA ACTIVITIES:**

- I) <u>Field Activities:</u> Observation of construction activities during this reporting period included: Slope grading and fill placement; Underground working remediation and drilling; Production drilling and blasting; Timber panel and tailing removal at the historic Crib Wall; Timber panel installation at the South MSE Wall; and Clay (Soil Liner Fill—SLF) and Drain Cover Fill (DCF) processing.
- II) <u>Laboratory Activities:</u> Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations and material classification and identifications and field material sampling were performed during this reporting period.

DCF: Sample 50 was collected and returned to Amec's laboratory for analysis. SLF Sample Number 91-S through 93-S were collected and returned to Amec's laboratory for analysis.





#### **General Project Items**

Meetings and Discussions: The Contractor Meeting occurred on January 22, 2014 with CC&V Projects, Amec, and Ames.

Summary of Concerns: None.

CC&V: Daily updates, reporting and scheduling are some of the tasks occurring between CC&V Projects, Amec and Ames.

Miscellaneous: A Grizzly was setup near the Midway area for Rip Rap production.

Deliveries: None

Submitted by: Eric Lorenson	Date: 25 Jan. 2014		
CQA Monitor			
Reviewed By: Eric Lorenson	For TIM BURKHARD	Date: 1-31-14	
Tim Burkhard ERIC LORENSUN			
Project Resident Manager			
Phone: 505.975.8655			
	/		

Approved By: Sutt Hudan CC&V Projects

Date: 1-30-14





# ATTACHMENT A

Name	Jan 19	Jan 20	Jan 21	Jan 22	Jan 23	Jan 24	Jan 25
Tim Burkhard	-	PR	PR	PR	PR	PR	PR
Steve Rice	-	UG	UG	UG	UG	UG	-
Ben Melly	-	ST	ST	ST	ST	ST	-
Robert Redd		UG	UG	UG	UG	UG	UG
Tyler Browning	-		ST	ST	-	ST	-
Reggie Long	-	-	-	-	-	-	-
Eric Lorenson	-	ST	ST	ST	ST	ST	ST
Razi Molloy	-	LT	LT	LT	LT	LT	LT
Randy Johnson	-	-	-	-	-	ST	ST

# AMEC - 2013 COA Field Staff Schedule MLE2

# **LEGEND**

- PS = Project Sponsor PCE = Project Certifying Engineer PM = Project Manager PR = Project Resident LS = Lead Soils Engineer LG = Lead Geosynthetics Engineer ST = Soil Technician LT = Laboratory Technician GT = Geosynthetics Technician FLM= Field/Laboratory Manager
- UG = Underground Working Remediation
- SE = Senior Engineer





# Photographs of daily activities:



Photo 1: Cut and fill operations east of the Phase 2 Diversion Channel adjacent to Dump 4.



Photo 2: Installed timber panels at the South MSE Wall.

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Photo 3: Placement of the second layer of geogrid at Underground Working UG 6123.



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Photo 4: Newly discovered adits at Underground Working UG 6003.

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All Marine Sciences

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