

Cripple Creek & Victor Gold Mining Company

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

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

SENT CERTIFIED, RETURN RECEIPT REQUESTED 7011-0470-0000-4833-9339

March 13, 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 RECEIVED

MAR 14 2014

DIVISION OF RECLAMATION MINING AND SAFETY

Reference:	Cripple Creek & Victor Gold Mining Company,
	Cresson Project Squaw Gulch (VLF), Hwy 67 Realignment

M-1980-244

Subject: Weekly Construction Quality Assurance ("CQA") Report: AMEC: Squaw Gulch (VLF), Hwy 67 Realignment - Weeks ending 03/01/14 and 03/08/14.

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 weeks ending March 1, 2014 and March 8, 2014.

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

Sincerely,

Timm Comer Manager, Environmental Resources

Enclosures: AMEC Squaw Gulch (VLF), Hwy 67 Realignment Monitoring Summary (Weekly Report). Weeks ending 03/01/14 and 03/08/2014.





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

Owner:	Cripple Creek & Victor Gold Mining Co.	Project Number:	Date
Project:	Squaw Gulch (VLF), Hwy 67 Realignment	74201125N0. ****. ****	01 March 2014
Location:	Cripple Creek & Victor Gold Mine, Colorado		
Contractor:	Ames Construction Co. Inc.		

Reporting Period: 2.23.14 through 3.1.14

Days	S	M	Т	W	Т	F	S
Work Chifts	D	D	D	D	D	D	D
Work Shifts	N	N	N	N	N	N	N

Ambient Temperature Ranges for reporting period: | Weather conditions for reporting period: Low: 11°F to 23°F High: 31°F to 44°F

Cloud Cover: Partly cloudy to overcast. Precipitation: Snow Saturday, March 1, 2014 Wind: Variable

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

Planning: Continuing construction activities and scheduling for the South MSE Wall and VLF.

CONSTRUCTION ACTIVITIES and PROGRESS:

I) Earthworks

A) VLF (PSSA, Phase I, Phase II)

Topsoil / Overburden Stripping: No topsoil stripping occurred; however, an excavator shaped and packed the slopes of the Area 34 Topsoil Stockpile.

Production drilling: Production drilling occurred within the VLF limits.

Production blasting: Five (5) production blasts occurred within the VLF.

Structural Fill:

A Cat 992 loader removed material from near stations B13+00 to B14+00. The material was hauled to the ADR haul road fill near stations 39+00 to 65+00 in 777 haul trucks and was placed as structural fill by a Cat D9 dozer. Cat dozers also cut material from the slopes above the ADR Haul Road fill areas. The material was pushed down to the fill area, placed as structural fill, and compacted per the project specification.

A John Deere 850 excavator and Cat 740 haul trucks removed material from near stations DD18+00 and B3+00 to B4+00 for placement as structural fill near stations FF0+00 to FF2+00, DD0+00 to DD3+00, and DD8+00 to DD10+00. The structural fill was placed and compacted per method specification.

A John Deere 850 excavator loaded Cat 740 haul trucks with material from Dump 4 to the south of Ames' mechanic shops. The material was placed as structural fill near station I36+00 adjacent to Dump 4 in the Phase 2 Diversion Channel area. The structural fill was placed and compacted per method specification.



A Cat dozer cut the slope to rough grade near stations C1+00 to C4+00. Material from the cut was used as structural fill near stations C4+00 to C7+00. The fill was placed and compacted according to project specification.

A Cat dozers cut the slope to rough grade near stations A5+00 to A7+00, DD4+00 to DD6+00, H12+00 to H14+00, and DD10 to DD12+00.

A John Deere 870 excavator cut the slope to rough grade near stations A0+00 to A4+00.

Note: An Amec field professional monitored structural fill material temperatures placed within fill areas. Average structural fill temperatures were above 32°F.

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 future use.

Squaw Gulch Clay Borrow Site: Clay mining and processing took place at the Squaw Gulch Clay Borrow Site. Approximately, 73,800 tons of soil liner fill material has been produced at the Squaw Gulch Clay Borrow Site to date.

Underdrain System:

Secondary Underdrain: Approximately, 175 feet of secondary underdrain was installed and tied into existing underdrain below ADR haul road station 23+00.

Approximately, 5,509 feet of secondary underdrain has been completed to date in the VLF.

Primary Underdrain: No work occurred on the primary underdrain.

To date, approximately 1,755 feet of primary underdrain has been completed.

Tree /Slash Grubbing and Clearing, Chipping:

No clearing or grubbing occurred.

B) Underground Workings

Confirmation drilling was conducted at underground working UG #6082, UG #U6183, UG #6274, and UG#U6429. Additional remediation work will be required.

Underground workings UG #6442, UG #6443, and UG #6445 were excavated to competent rock, backfilled, and are considered remediated.

Cemented rock fill was placed in underground workings UG #6302, UG #6320, and UG #6433.

C) South MSE Wall:

No work occurred at the South MSE Wall. The top of the timber panel facade needs to be anchored to the MSE wall to complete the installation.

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; Ambient and fill temperature monitoring and recording; Underground working remediation and confirmatory drilling; Production drilling and blasting; Secondary underdrain installation; Closure drain installation; SLF and DCF processing; and 100-mil smooth LLDPE liner delivery and inventory.
- II) <u>Laboratory Activities:</u> Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations, material classification, identifications, and field material sampling were performed during this reporting period.

The following samples were collected and returned to AMEC's laboratory for analysis:

Drain Cover Fill sample numbers DCF 58 and DCF 59 Soil Liner Fill sample numbers SLF 110-S through SLF 112-S Underdrain Fill sample number UF 8-R. Structural Fill sample numbers SF 4-R through SF 19-R Select Structural Fill sample number SSF 11-R

Clay Samples were also collected from Globe Hill in the WHEX area and returned to AMEC's Laboratory for Analysis.

Note: Samples labeled with the suffix "R" are samples of Record / QA samples; those without are QC samples.

General Project Items

Meetings and Discussions: The Contractor Meeting occurred on February 26, 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:

AK Drilling completed Closure Drain CD-2 and CD-3 at the bottom of the PSSA. CD-4 was abandon because of excessive down-hole alignment deviation during drilling.

Drain cover fill processing continued.

Rip rap processing did not occur but shot rock was transported to the rip rap processing area and stockpiled for later use.

Deliveries: Eight (8) truckloads consisting of 96 total rolls of 100 mil, smooth geomembrane liner were delivered to the site, recorded, and inventoried.

Submitted by: Eric Lorenson	Date: 5 Mar. 2014
CQA Monitor	

6-7-5-2000

Reviewed By: _____ Tim Burkhard Project Resident Manager Phone: 719.689.2986

TA

Approved By: _ **CC&V** Projects

Page 3 of 6

Date: 03/05/2014

Date: 3/12/14

MLE2 WE 01 March 2014.doc



ATTACHMENT A

Name	Feb 23	Feb 24	Feb 25	Feb 26	Feb 27	Feb 28	Mar 01
Tim Burkhard		PR	PR	PR	PR	PR	
Steve Rice		UG	UG	UG	UG	UG	
Ben Melly		ST	ST	ST	ST	ST	ST
Robert Redd		UG	UG	UG	UG	UG	UG
Tyler Browning			ST	ST	ST	ST	ST
John Roberts		CD	CD	CD	CD	CD	CD
Eric Lorenson		ST	ST	ST	ST	ST	ST
Razi Molloy		LT	LT	LT	LT	LT	LT
Matt Hartz		CD	CD	CD	CD	CD	CD
Chad Schreiner		ST			ST	ST	
Randy Johnson							ST
Andrea Meduna				SE	SE	SE	

AMEC - 2014 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

CD = Closure Drain Geologist



Photographs of daily activities: Feb 24 16 22 20 885 2016 7 5 11 / 105 09 49 5 19 SZEE ZABINIIS INCOM arın

Photo 1: Secondary underdrain below ADR Haul Road station 23+00.







Photo 3: Material removal at Dump 4 for use as structural fill.



Photo 4: Fill placement at the ADR Haul Road.



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

Owner:Cripple Creek & Victor Gold Mining Co.Project Number:DateProject:Squaw Gulch (VLF), Hwy 67 Realignment74201125N0. ****. ****08 March 2014Location:Cripple Creek & Victor Gold Mine, Colorado08 March 2014Contractor:Ames Construction Co. Inc.100 Mine, Colorado

Reporting Period 3 2 14 through 3 8 14

Days	S	M	T	W	Т	F	S
Work Shifts	D	D	D	D	D	D	D
WORK SHIIIS	N	N	N	N	N	N	N

Ambient Temperature Ranges for reporting period:Low:17°F to 26°FHigh:31°F to 48°F

Weather conditions for reporting period: Cloud Cover: Partly cloudy to overcast. Precipitation: Snow Saturday, March 8, 2014 Wind: Variable

Ames: Continuing construction tasks for the VLF.

Planning: Continuing construction activities and scheduling for the VLF.

CONSTRUCTION ACTIVITIES and PROGRESS:

I) Earthworks

A) VLF (PSSA, Phase I, Phase II)

Topsoil / Overburden Stripping: No topsoil stripping occurred; however, Cat dozers shaped and packed the slopes of the Area 34 Topsoil Stockpile.

Production drilling: Production drilling occurred within the VLF limits.

Production blasting: Three (3) production blasts occurred within the VLF.

Structural Fill:

A Cat 992 loader removed material from near stations B10+00 to B16+00. The material was hauled to the ADR haul road fill; near STA 49+00 to 50+00, 57+00 to 62+00 and in the buttress fill area adjacent to Dump 4, in 777 haul trucks and was placed as structural fill by a Cat D9 dozer. Cat dozers also cut material from the slopes above the ADR Haul Road fill areas. The material was pushed down to the fill area; dozers keyed into the bank for subsequent lift placement, and a Cat 330 hammer broke down oversize material. The structural fill was placed and compacted per method specification.

A John Deere 850 excavator removed material from the top of Dump 4 and near the Phase 2 diversion channel, STA 34+00 and 35+00. This material was transported using Cat 740 haul trucks for placement as structural fill near stations K26+00 to K32+00 and I36+00 in the Phase 2 diversion channel area. The structural fill was placed and compacted per method specification.

Cat dozers cut the slope to rough grade between stations DD8+00 to DD10+00 and B10+00 to B12+00 and near stations Q16+00 and G1+00.



A John Deere 870 excavator loaded 740 haul trucks with structural fill from STA Q4+00. A Cat dozer cut the slope to rough grade near stations C1+00 to C4+00. Material from the cut was used as structural fill near stations C4+00 to C7+00. The transported structural fill was placed at stations C5+00 to C7+00. The structural fill was placed and compacted per method specification.

Note: An AMEC field professional monitored structural fill material temperatures placed within fill areas. Average structural fill temperatures were above 32°F.

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 future use.

Squaw Gulch Clay Borrow Site: Clay mining and processing took place at the Squaw Gulch Clay Borrow Site. Approximately, 79,400 tons of soil liner fill material has been produced at the Squaw Gulch Clay Borrow Site to date.

Underdrain System:

Secondary Underdrain: No work occurred on the secondary underdrain.

Primary Underdrain: No work occurred on the primary underdrain.

Tree /Slash Grubbing and Clearing, Chipping:

No clearing or grubbing occurred.

B) Underground Workings

Confirmatory drilling was conducted at underground working UG#6274. Additional remediation work will be required.

Underground workings UG#6294, UG#6293, UG#6292, UG#6295, UG#6297, UG#6448, UG#6449, UG#6450, UG#6401, UG#6442, UG#6443 and UG#6445 were excavated to competent rock, backfilled and are considered remediated.

Drill access was provided to underground workings UG#6112, UG#6119, UG#6273 and UG#6318.

C) South MSE Wall:

The top of the timber panel facade was anchored to the MSE wall to complete the installation.

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:

- Field Activities: Observation of construction activities during this reporting period included: Slope grading and fill placement; Ambient and fill temperature monitoring and recording; Underground working remediation and confirmatory drilling; Production drilling and blasting; Closure drain installation; SF, SLF and DCF processing; and 100-mil smooth LLDPE liner delivery and inventory.
- II) <u>Laboratory Activities:</u> Laboratory testing continued with Permeability, Particle Size Distribution, Atterberg Limits, Moisture-Density, gradations, material classification, identifications, and field material sampling were performed during this reporting period.

The following samples were collected and returned to AMEC's laboratory for analysis:

Drain Cover Fill sample numbers DCF 60 and DCF 61 Soil Liner Fill sample numbers SLF 113-S through SLF 116-S Structural Fill sample numbers SF 20-R through SF 33-R

Note: Samples labeled with the suffix "R" are samples of Record / QA samples; those without are QC samples.

General Project items Meetings and Discussions: The Contractor Meeting occurred on March 05, 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:

AK Drilling completed Closure Drain CD-4a, CD-5 and CD-6 at the bottom of the PSSA.

Drain cover fill processing continued.

Rip rap processing continued.

Deliveries: Nine (9) truckloads consisting of 108 total rolls of 100 mil, smooth geomembrane liner were delivered to the site, recorded, and inventoried. Grand total of 204 rolls of 100- mil smooth LLDPE geomembrane to date.

Submitted by: Bobby Redd, El

Reviewed By: _____ Tim Burkhard Project Resident Manager Phone: 719.689.2986

Lat Approved By: _ **CC&V** Projects

-20

Date: 3/12/14

MLE2 WE 08 March 2014.doc

Date: 03-12-2014

Date. 05-12-201-

Date: 03-12-2014



ATTACHMENT A

AMEC - 2014 COA Field Staff Schedule MLE2

Name	Mar 02	Mar 03	Mar 04	Mar 05	Mar 06	Mar 07	Mar 08
Tim Burkhard		PR	PR	PR	PR	PR	
Steve Rice		UG	UG	UG	UG	UG	UG
Ben Melly	1	ST	ST				
Robert Redd		UG	UG	UG	UG	UG	
Tyler Browning		ST	ST	ST	ST	ST	ST
John Roberts	CD						
Eric Lorenson			ST	ST	ST	ST	ST
Razi Molloy		LT	LT	LT	LT	LT	LT
Matt Hartz	CD	CD	CD	CD	CD	CD	
Chad Schreiner		ST	ST	ST	ST	ST	
Andrea Meduna				SE			
Jessica Malone					CD	CD	CD

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

CD = Closure Drain Geologist



Photographs of daily activities:



Photo 1: Large rock gradation on Structural Fill.



Photo 2: Liner delivery (100-mil smooth LLDPE).







Photo 4: Fill placement at the buttress fill.