



Chino Mines Company
Box 10
Bayard, NM 88023

March 22, 2012

Certified Mail #70101670000114199252
Return Receipt Requested

Mr. Holland Shepherd
Energy, Minerals and Natural Resources Dept.
Mining and Minerals Division
Mining Act Reclamation Program
1220 South St. Francis Drive
Santa Fe, New Mexico 87505-4225

Dear Mr. Shepherd:

Re: Response to Request for Additional Information,
Application for Modification of Waiver, Revision 10-1, Permit No. GR010RE

On July 28, 2010 Freeport-McMoRan Tyrone Inc. (Tyrone) submitted a request to the Mining and Minerals Division (MMD) to increase the area at the Tyrone Mine that is waived from the New Mexico Mining Act (NMMA) requirement to achieve a post-mining land use or self-sustaining ecosystem following the permanent cessation of mining activities. On March 9, 2011 Tyrone submitted responses to comments received from MMD as a result of a multi-agency review of the waiver modification request.

By letter dated February 21, 2012 MMD requested additional technical information on the modification including revisions of drawings and maps previously submitted by Tyrone and additional information related to costs of partial or complete pit backfilling. By electronic message dated March 6, 2012 Tyrone submitted a draft map for MMD review that delineated the stockpile slopes which MMD is not prepared to grant a waiver for at this time (as described in their February 21 letter). On March 7, 2012 MMD approved the delineation on that map and requested additional information concerning the waiver modification. This letter is Tyrone's response to all of MMD's requests for additional technical information concerning this matter.

Pit Backfilling

In MMD's February 21, 2012 letter, the Agency requested additional information describing how partial and complete open pit backfilling would affect the mine economics. MMD also specifically required "supporting information such as the current profit margin for copper production and a discussion regarding... the impact to copper production costs". In this request MMD was requiring business confidential information which has not been required in the past in order to justify a waiver application. Tyrone immediately expressed concern about this new requirement. On February 24, 2012 MMD provided verbal confirmation that they would not require the business confidential information listed above to evaluate Tyrone's waiver request,

but would accept instead other information related to economic infeasibility similar to that provided with previous waiver applications.

As stated above, Tyrone submitted a waiver application dated July 28, 2010. Section 3.0 of that application provided justifications to approve the waiver request for open pit areas. The justifications were based on economic infeasibility and environmental unsoundness.

In a letter dated April 12, 2004, MMD conditionally approved waivers of the same four open pits (Main, Gettysburg, Savanna and Copper Mountain Pits) that Tyrone proposed in the July 28, 2010 application. The least cost approach to reclamation of these four pits was based on a partial backfill reclamation scenario for the four pits. In 2004 it was estimated that this approach would cost at least \$611 Million at an average cost per acre of \$494,000 per acre. In Section 3.0 of Tyrone's 2010 waiver application, the partial backfill cost of these same pits with their expansions is estimated to be a total cost of at least \$784 Million at an average cost per acre of \$570,000 per acre. MMD agreed with Tyrone in 2004 that these costs were extraordinary and were economically infeasible. The costs now are greater and would logically be viewed also as economically infeasible.

To partially backfill the four open pits this application addresses, it would require at least 320,400,000 cubic yards (or roughly 576,720,000 tons) of fill material that is assumed to be obtained from the closest stockpile. Assuming a production rate of 100,000 tons moved per day (similar to Tyrone's current operating mining rate) it would take approximately 16 years to partially backfill these pits. This illustrates the magnitude of this undertaking.

Tyrone is backfilling or planning to partially backfill certain pits as part of its active mining operations. Backfilling of open pits is only economically feasible where it can happen as part of mining operations. That decision involves fluctuating variables such as copper price and an evaluation of the impact of backfilling on copper resources and reserves. For example, Tyrone is currently backfilling the South Rim Pit and the San Salvador Hill Pit because in order to mine the reserves in the Main and Copper Mountain Pits, additional waste stockpile capacity was needed. These pits became more valuable to the company as waste storage areas than the value of any remaining copper resources in those areas which is always a tradeoff to consider. There is a big environmental benefit also because these two pits will become stockpile areas that can be graded for reclamation in the future and the runoff from the surfaces can be discharged to the perimeter of the mine once they are backfilled.

Tyrone maintains that if a waiver is not granted for open pits, there would be a significant negative effect on the mine life and mine economics. Tyrone's current mine life based on proven reserves is through 2020. In order to provide a conceptual estimate of the impact to Tyrone's economic mine life due to imposing the additional burden of backfilling and reclaiming pits, Tyrone ran a conceptual present value model assuming that \$784,000,000 was added to the cash flow burden at \$50,000,000 per year for 16 years to roughly simulate the impact to Tyrone's present value. This conceptual estimate indicated that applying this additional burden onto Tyrone's cash flow would take Tyrone's currently positive present value to a significantly

negative present value. This kind of impact could eliminate the rest of Tyrone's mine life, so it is clear that reclamation of these pits is not economically feasible.

Stockpiles

The following revised drawings and maps are enclosed:

- 1) Figure 3 from the July 28, 2010 modification request which delineates the areas to be waived.
- 2) Drawings A-1, A-2 and A-3 from Attachment A of the July 28, 2010 modification request.
- 3) Figure 5 cross sections from the March 9, 2011 response to MMD comments.

Tyrone has revised certain tables as follows:

- 1) Tables 1.4.1 and 2.2.1 from the text of the July 28, 2010 modification request and
- 2) Tables A-1, A-2 and A-3 from Attachment A to the July 28, 2010 modification request which is submitted as a revision of Attachment A.

MMD requested that Tyrone describe how stormwater will be handled at the interface of the waived (not reclaimed) and unwaived (reclaimed) stockpile slopes so that impacted runoff from the unreclaimed slopes does not adversely affect the reclaimed slopes. These interfaces might occur, for example, at the location where the south end of the 2A Stockpile interior slope abuts the north end of the 2B, 2C, 4A stockpiles interior slope (see revised Figure 3). In such instances, Tyrone would construct stormwater diversion berms and/or excavated channels to prevent impacted stormwater from flowing onto the reclaimed areas. In situations where impacted water could potentially flow onto a flat area below an unreclaimed slope, a diversion channel would be excavated to route the impacted water around the reclaimed surface. These features would be constructed primarily on the unreclaimed surface. More generally, Tyrone will design future reclamation surfaces with the intent of preventing adverse impacts to reclaimed surfaces from impacted runoff.

Please contact me at 575-313-3098 if you wish to discuss the additional information that we have provided in response to your requests.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim H. Cook for".

Thomas L. Shelley, Manager
Reclamation

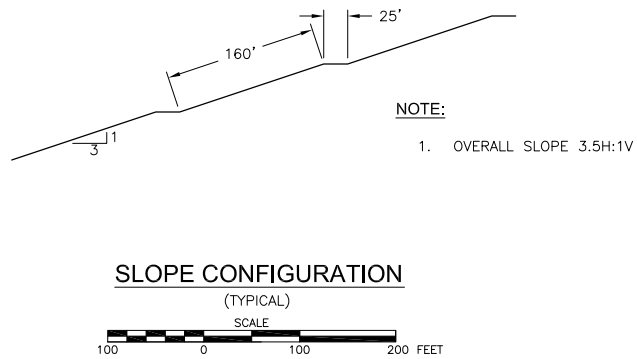
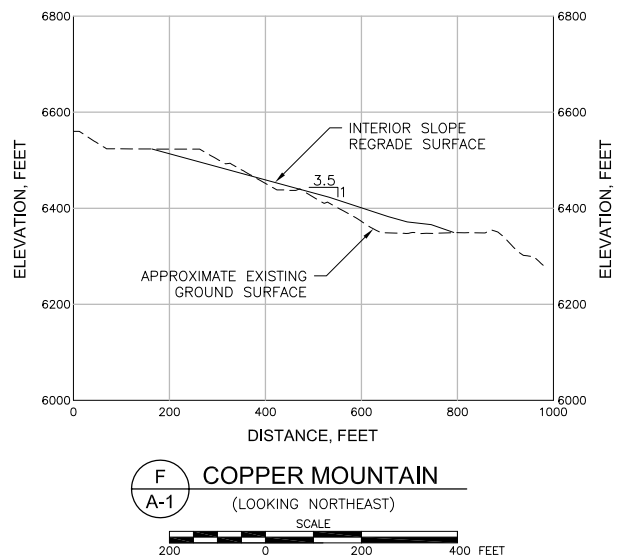
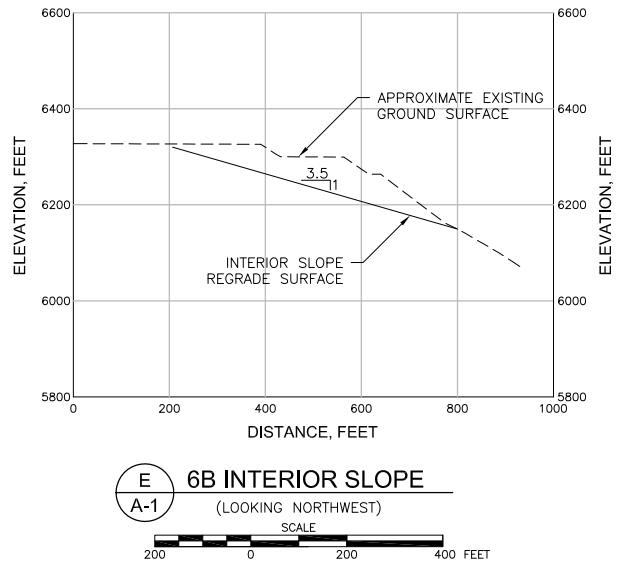
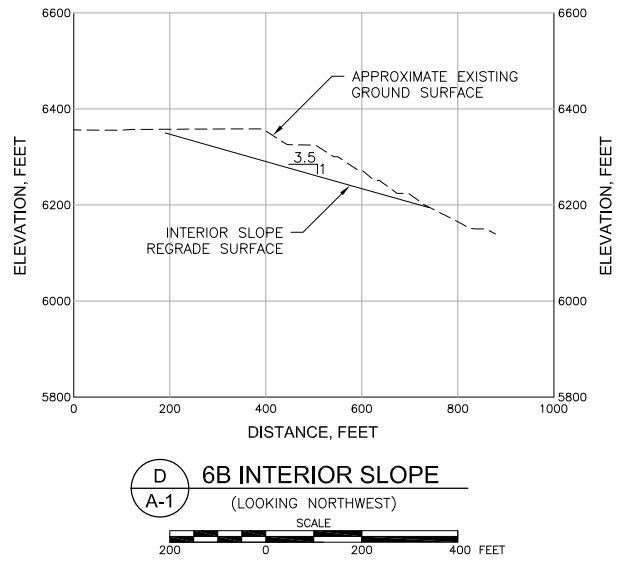
TLS
Attachments
20120322-100
c: D. Ohori, MMD



Table 1.4.1.R Revised Pit Area Comparison and Interior Slope Area

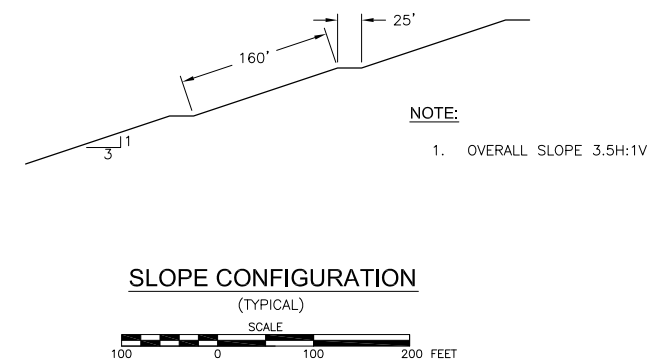
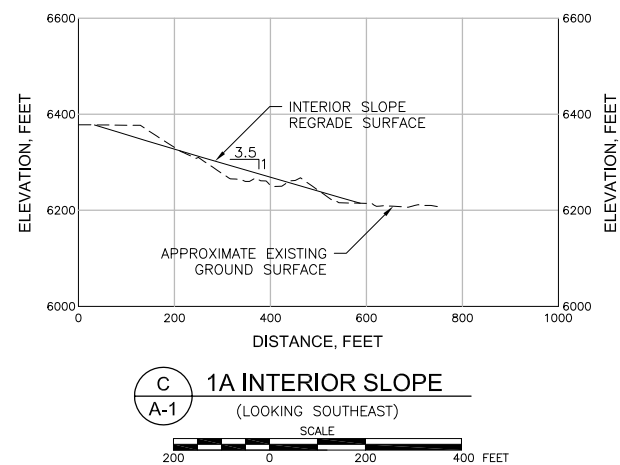
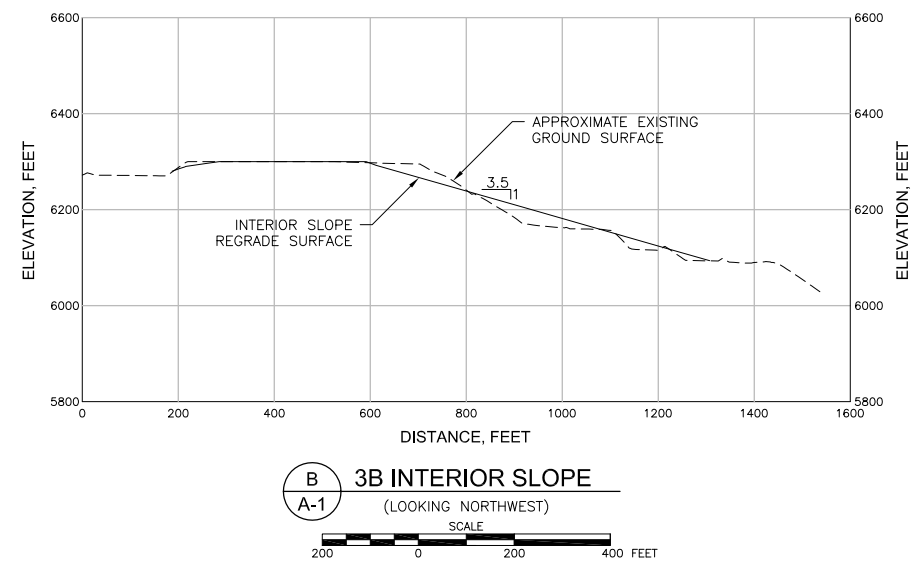
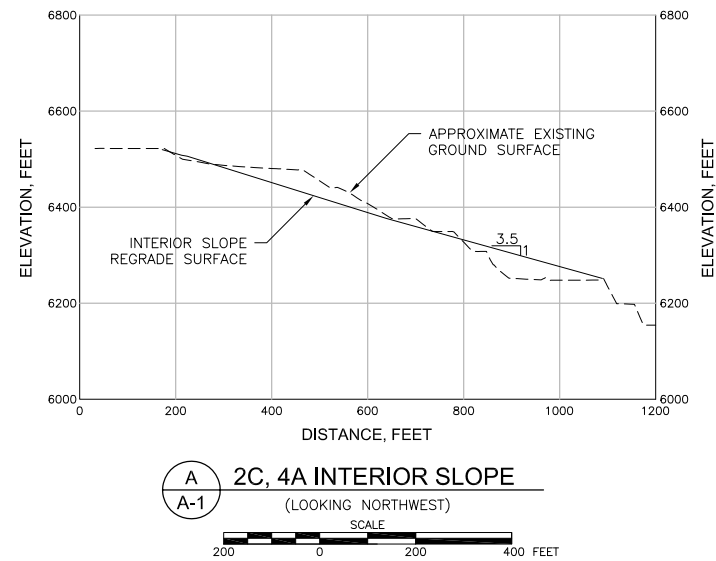
Unit	April 2004 Waiver Area (Acres)	Revised Proposed Waiver Area (Acres)	Changes from 07/28/10 request
Open Pit Units			
Main Pit (including West Main and Valencia Pits)	706	809	0
Gettysburg Pit	231	231	0
Savanna Pit	167	167	0
Copper Mountain Pit	132	164	0
Total Pit Waiver Area	1236	1371	0
Interior Slope of Stockpile Units			
1A and 1B		46	0
2A		0	-84
3B		60	0
2B, 2C, 4A		102	-75
5A		8	-24
Copper Mountain		32	0
6B, 6C		31	0
Total Stockpile Waiver Area		279	-183
Total Proposed Waiver Area		1650	-183

03/22/12

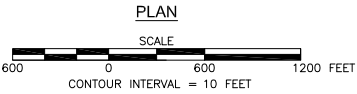
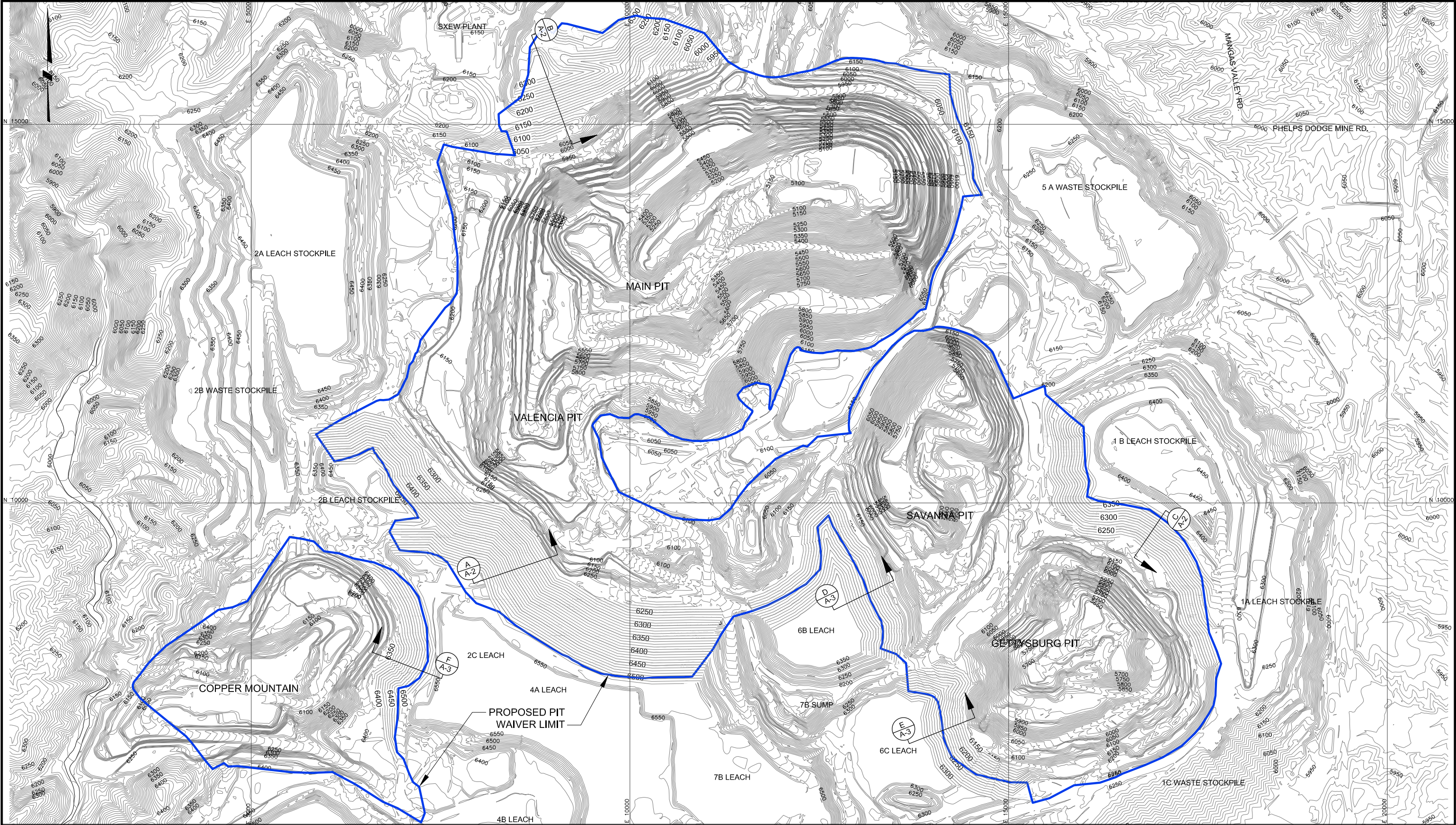
M:\Clients-A-H\Freport_McMoGen\1008011 - G & K TYRONE BOND 013-Sheet_Set\INTERIOR SLOPES\100801D010 3/16/2012 9:42:35 AM



				DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MMH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MMH.	DRAWING REFERENCE(S):				DESIGNED BY	T. LEIDICH	07/08/10	 FREEPORT-McMoRAN COPPER & GOLD INC.	PROJECT LOCATION		TYRONE MINE SITE		 MWH				
									DRAWN BY	C. LEE	07/08/10		PROJECT		INTERIOR SLOPE REGRADE						
									CHECKED BY	T. LEIDICH	07/08/10										
									APPROVED BY				TITLE		CROSS SECTIONS - INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS						
									PROJECT MANAGER	T. LEIDICH	07/08/10										
									CLIENT APPROVAL												
									CLIENT REFERENCE NO.												
B	ISSUED FOR SUBMITTAL			P.A.H.	T.E.L.	03/16/12															
A	ISSUED FOR REVIEW			C.C.L.	T.E.L.	07/10															
ISSUE REV	DESCRIPTION			TECH	ENG	DATE															



						DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.	DRAWING REFERENCE(S):			DESIGNED BY T. LEIDICH 07/08/10			PROJECT LOCATION TYRONE MINE SITE		
										DRAWN BY C. LEE 07/08/10			PROJECT INTERIOR SLOPE REGRADE		
B		ISSUED FOR SUBMITTAL	P.A.H.	T.E.L.	03/16/12					CHECKED BY T. LEIDICH 07/08/10					
A		ISSUED FOR REVIEW	C.C.H.	T.E.L.	07/10					APPROVED BY					
ISSUE / REV		DESCRIPTION	TECH	ENG	DATE					PROJECT MANAGER T. LEIDICH 07/08/10			TITLE CROSS SECTIONS - INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS		
										CLIENT APPROVAL				DRAWING A-2	REVISION B
										CLIENT REFERENCE NO.				FILE NAME 1008011D008	



B	ISSUED FOR SUBMITTAL	P.A.H.	T.E.L.	03/16/12	
A	ISSUED FOR REVIEW	C.C.L.	T.E.L.	07/10	
REV	DESCRIPTION	TECH	ENG	DATE	

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

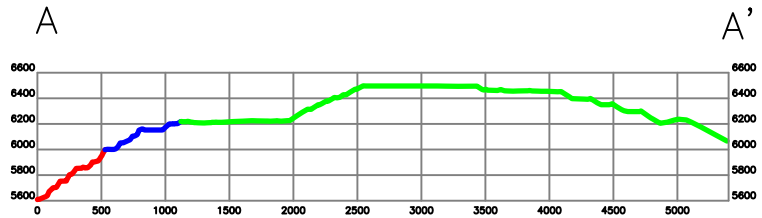
DRAWING REFERENCE(S):	

DESIGNED BY	T. LEIDICH	07/08/10
DRAWN BY	C. LEE	07/08/10
CHECKED BY	T. LEIDICH	07/08/10
APPROVED BY		
PROJECT MANAGER	T. LEIDICH	07/08/10
CLIENT APPROVAL		
CLIENT REFERENCE NO.		

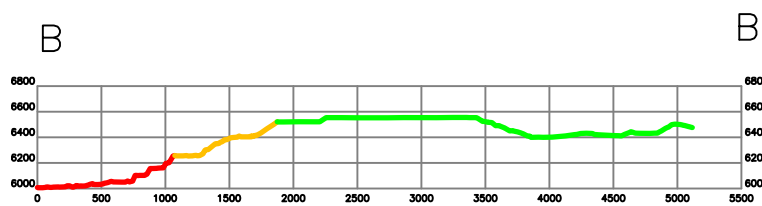


PROJECT LOCATION	TYRONE MINE SITE
PROJECT	INTERIOR SLOPE REGRADE
TITLE	PLAN VIEW-INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS

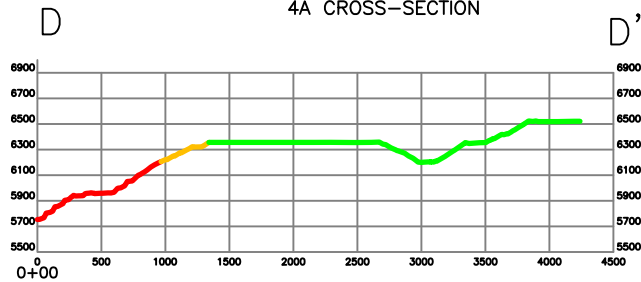
DRAWING	A-1	REVISION	B
FILE NAME	1008011D007		



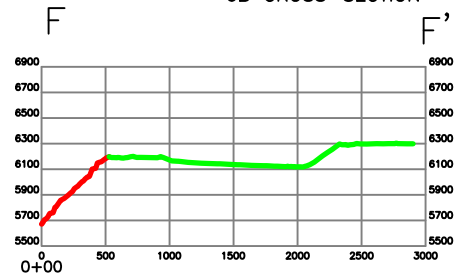
2A CROSS-SECTION



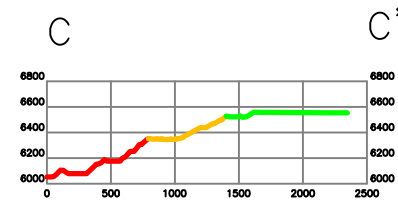
4A CROSS-SECTION



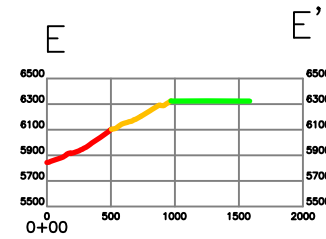
6B CROSS-SECTION



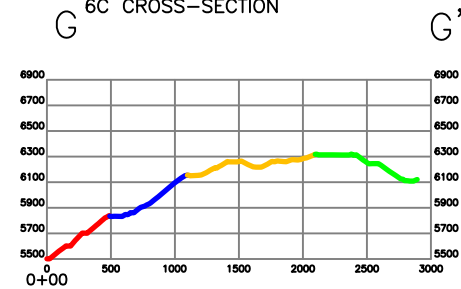
5A CROSS-SECTION



COPPER MTN CROSS-SECTION



6C CROSS-SECTION



3B CROSS-SECTION

— EXISTING WAIVER AREA
 — PROPOSED INTERIOR SLOPE WAIVER AREA
 — PROPOSED EXPANDED PIT WAIVER AREA
 — AREAS TO BE RECLAIMED



Drawn	MWH
Designed	MWH
Checked	TLS
Date	03-2012
Job No.	



TYRONE MINE
 Figure 5-Proposed Waiver Area Cross-Sections

Scale: AS NOTED	Rev.
Dept. ENVIRONMENT, LAND & WATER	0



March 21, 2012

Tom Shelley
Freeport McMoRan, Tyrone Inc.
P.O. Box 571
Tyrone, New Mexico 88065

Subject: Tyrone Stockpile Interior Area Cost Estimate Summary - Revised

Dear Mr. Shelley:

The cost estimate presented herein is one part of the justification that Freeport McMoRan, Tyrone Inc. (Tyrone) has assembled for the surface water containment zone interior slope reclamation waiver. This letter presents a summary of the Tyrone stockpile interior outslope area cost estimate along with a concise explanation of the underlying assumptions. This work was completed in coordination with MWH who developed the reclamation designs and the quantity take-offs based on September 2009 topography. Telesto developed the unit costs and compiled the cost estimate. The estimate includes costs for reclamation earthwork and 100 years of post reclamation water management and monitoring. The interior area reclamation and water management costs are summarized in Table A-1. Additional detail is provided in Tables A-2 and A-3. Detailed cost estimate summaries and interior slope regrade plan view (Drawing A-1) and cross-sections (Drawings A-2 and A-3) are attached to the end of this document.

Earthwork Cost Estimate

The earthwork reclamation portion of the cost estimate has been developed based on a template created by the New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division (MMD). The cost estimate is based on 2010 unit costs and is consistent with the cost estimation method used for the Tyrone Mine Closure/Closeout Plan Update (Golder, 2007). The earthwork reclamation cost estimate summary is presented in Table A-1.

The areas under consideration herein are located between the current and approved waiver areas and include: 1A and 1B Leach Stockpile outslopes; 6B / 6C Leach Stockpiles outslopes; 3B Waste Stockpile outslope; 4A Leach / 2B Leach / 2C Leach Stockpiles outslopes; a portion of the 5A Overburden Stockpile outslope adjacent to the main pit; and Copper Mountain Pit outslope (Drawing A-1).

The main activities that will occur in reclaiming the stockpiles include: regrading top surfaces and outslopes; hauling and grading cover material; ripping and revegetation of covered areas; and completing surface water channels to route storm water.

The major assumptions for the earthwork reclamation cost estimate include:

- **Engineering:** overall outslope gradient of 3.5:1 with an interbench slope of 3:1, approximate 25-foot wide terrace benches, maximum 160-foot inter-bench slope lengths.
- **Cover:** 36" cover thickness.
- **Pullback:** Trucks and loaders with dozer assist perform required pullback of stockpile material.
- **Cover Placement:** Trucks and loaders with dozer assist perform all cover loading and distribution. The economic optimum number of trucks per loader is used for each haul route.
- **Ripping:** Ripping (scarifying) of the final surface is performed at the same time as the revegetation and is included in the revegetation quote.
- **Dust Suppression/Road Maintenance:** Full-time water truck and motor grader during reclamation.
- **Channels:** In order to make the environmental result for the reclamation of interior and exterior slopes comparable, all interior surface water runoff will be captured and pumped to an external drainage.

Water Management Cost Estimate

The water management portion of the cost estimate includes 100 years of operations and maintenance (O&M). The cost estimate summary is presented in Table A-1. Water management costs were estimated by: (1) establishing the quantity of water to be managed, (2) identifying collection and conveyance system infrastructure requirements, (3) estimating infrastructure replacement frequency, and (4) estimating costs of infrastructure construction, O&M, and removal.

The water management cost estimate is divided into six components: (1) ponds, (2) pumps, (3) pipelines, (4) electrical infrastructure, (5) water quality monitoring, and (6) channels. Each component includes any infrastructure required during post-reclamation. Costs are included for construction, equipment replacement and removal (as needed). The major assumptions for the water management cost estimate include:

- **Water Quantity:** The average annual storm water runoff from reclaimed top and outslope areas was estimated using the SCS Curve Number Method (USDA, 2004a) applied to 100 years of daily data with 16 inches of average annual precipitation.
- **Water Quality:** Captured surface water will meet applicable standards and will not require treatment.
- **Infrastructure:** Infrastructure will be built during reclamation.
- **New / Replacements Costs:** New and replacement costs were taken from R.S. Means (2010).
- **Life Expectancy:** Ponds 30 yrs; Pumps 20 yrs; Pipelines 100 yrs (replace at 85 yrs) ; Electrical 100 yrs; and Channels 100 yrs.

- **Annual O&M cost (% of replacement costs):** Ponds 2%; Pumps 5%; Pipelines 1%; Electrical 1%; and Channels 15.39% (same as earthwork estimate).
- **Electricity Costs:** \$0.06/kWh.
- **Pipelines:** Chezy head loss coefficient for all pipelines is 150.
- **Pumps:** Average pump/motor efficiency is 70 percent.
- **Water Quality Monitoring:** Quarterly for years 1-12; semi-annual for years 13-20; and annually for years 21-100. It is assumed that the sampling will be a routine duty for site personnel.
- **Analytical costs:** Based on laboratory pricing guide (Energy Laboratories Inc., 2009) and includes packaging, handling, shipping, QA/QC, and lab result report preparation.

The water management cost estimate reflects the cost to construct, operate, and maintain the interior area water management system during the post-reclamation period. Annual costs for each subsystem were summed to generate a total cost for operational years 1 through 100.

Summary

This letter presents the reclamation earthwork and water management cost estimate for reclaiming the Tyrone stockpile interior outslope areas. The estimate includes costs for reclamation earthwork and 100 years of post reclamation water management and monitoring. The method used for cost estimation is consistent with the method used for the Tyrone Mine Closure/Closeout Plan Update (Golder, 2007) and includes 2010 unit costs.

Sincerely,

Telesto Solutions, Inc.



Terence M. Fairbanks
Senior Hydrologist

TF:at
Enclosure

TABLES

Table A-1R Cost Estimate Summary - Revised

Item	Subtotal, Direct Costs	Subtotal, Indirect Costs 39.6%	Total Current Dollar Cost
EARTHWORK			
1A and 1B Leach Interior Slope	\$1,500,266	\$594,105	\$2,094,371
3B Stockpile Interior Slope	\$2,304,194	\$912,461	\$3,216,655
4A, 2B, 2C	\$5,419,025	\$2,145,934	\$7,564,959
5A Interior Slope	\$165,561	\$65,562	\$231,123
Copper Mountain Interior Slope	\$1,226,921	\$485,861	\$1,712,782
6B, 6C Leach Interior Slope	\$7,695,549	\$3,047,437	\$10,742,986
Total Capital Earthwork	\$18,311,516	\$7,251,360	\$25,562,876
Total Earthwork Operations and Maintenance	\$2,818,142	\$1,115,984	\$3,934,127
Total Earthwork	\$21,129,658	\$8,367,345	\$29,497,002
WATER MANAGEMENT			
Ponds			
Capital Costs	\$194,587	\$77,056	\$271,643
Replacement Costs	\$583,761	\$231,169	\$814,930
Operations & Maintenance	\$389,174	\$154,113	\$543,287
Total Ponds	\$1,167,522	\$462,339	\$1,629,860
Pumps			
Capital Costs	\$184,326	\$72,993	\$257,319
Replacement Costs	\$585,816	\$231,983	\$817,799
Operations & Maintenance	\$1,509,600	\$597,802	\$2,107,402
Total Pumps	\$2,279,742	\$902,778	\$3,182,520
Pipelines			
Capital Costs	\$580,214	\$229,765	\$809,979
Cost Removal and Replacement	\$684,887	\$271,215	\$956,102
Operations & Maintenance	\$1,265,101	\$500,980	\$1,766,082
Total Pipelines	\$2,530,203	\$1,001,960	\$3,532,163
Electrical Infrastructure			
Capital Costs	\$876,300	\$347,015	\$1,223,315
Cost Removal and Replacement	\$0	\$0	\$0
Operations & Maintenance	\$876,300	\$347,015	\$1,223,315
Total Electrical Infrastructure	\$1,752,601	\$694,030	\$2,446,631
Environmental Sampling	\$193,400	\$0	\$193,400
Channels			
Construction	\$1,837,503	\$727,651	\$2,565,154
Maintenance	\$282,792	\$111,986	\$394,777
Total Channels	\$2,120,295	\$839,637	\$2,959,932
Total Capital Water Management	\$3,672,931	\$1,454,481	\$5,127,412
Total Replacement and Maintenance	\$6,370,831	\$2,446,263	\$8,817,094
Total Water Management	\$10,043,762	\$3,900,744	\$13,944,506
Total	\$31,173,420	\$12,268,089	\$43,441,508

Table A-2R Water Management Summary - Revised

Water Management Area	Capital Costs	Cost Removal and Replacement	Operations & Maintenance	Water Sampling	Subtotal, Direct Costs
1A and 1B Leach Interior Slope	\$688,154	\$239,510	\$562,710	\$32,233	\$1,522,608
3B sp Outslope	\$180,501	\$258,540	\$513,651	\$38,680	\$991,371
4A, 2B, 2C	\$884,315	\$478,394	\$1,078,842	\$38,680	\$2,480,231
5A Interior Slope	\$137,631	\$47,902	\$112,542	\$6,447	\$304,522
Copper Mountain Interior Slopes	\$582,564	\$363,919	\$874,154	\$38,680	\$1,859,317
6B, 6C, Interior Slopes	\$1,199,766	\$466,199	\$1,181,069	\$38,680	\$2,885,714
Totals	\$3,672,931	\$1,854,463	\$4,322,968	\$193,400	\$10,043,762

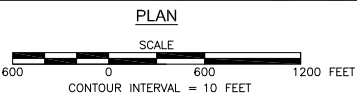
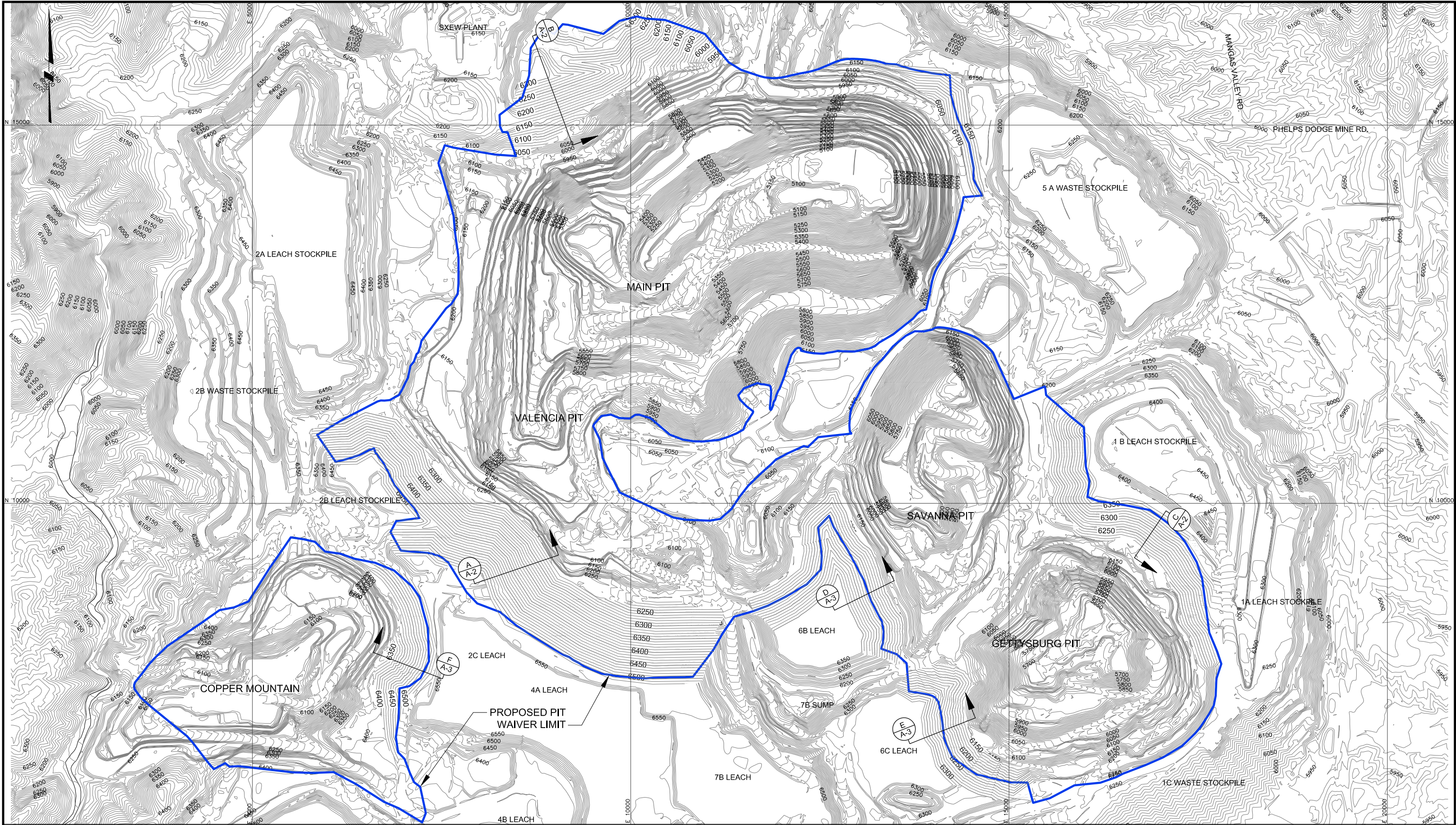
Table A-3R Earthwork, Operations and Maintenance and Water Management Cost Summary - Revised

Interior Slopes	Pre-Reclamation Area (acres)	Earthwork Direct Cost	Earthwork Operations and Maintenance	Direct Water Management Cost	Total Directs*	Total Indirect Costs (39.6%)	Total	Total \$/acre (rounded)
1A and 1B Leach	46	\$1,500,266	\$230,891	\$1,522,608	\$3,221,531	\$1,275,726	\$4,529,490	\$99,100
3B	60	\$2,304,194	\$354,615	\$991,371	\$3,611,501	\$1,430,154	\$5,080,335	\$84,700
4A, 2B, 2C	102	\$5,419,025	\$833,988	\$2,480,231	\$8,694,564	\$3,443,047	\$12,176,292	\$119,400
5A	8	\$165,561	\$25,480	\$304,522	\$489,116	\$193,690	\$689,252	\$86,200
Copper Mountain	32	\$1,226,921	\$188,823	\$1,859,317	\$3,236,381	\$1,281,607	\$4,556,669	\$142,400
6B, 6C	31	\$7,695,549	\$1,184,345	\$2,885,714	\$11,726,927	\$4,643,863	\$16,409,471	\$525,900
Total	279	\$18,311,516	\$2,818,142	\$10,043,762	\$30,980,020	\$12,268,088	\$43,441,508	\$155,760

* Water sampling "direct" costs (\$193,400) include indirect costs and have been excluded from the indirect cost calculation presented here.

DRAWINGS

M:\Clients-A-H\Freport_McMoRan\1008011 - G & K TYRONE BOND 013-Sheet Set\INTERIOR SLOPES\100801D007 3/16/2012 9:37:54 AM



B	ISSUED FOR SUBMITTAL	P.A.H.	T.E.L.	03/16/12	
A	ISSUED FOR REVIEW	C.C.L.	T.E.L.	07/10	
REV	DESCRIPTION	TECH	ENG	DATE	

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):	
-----------------------	--

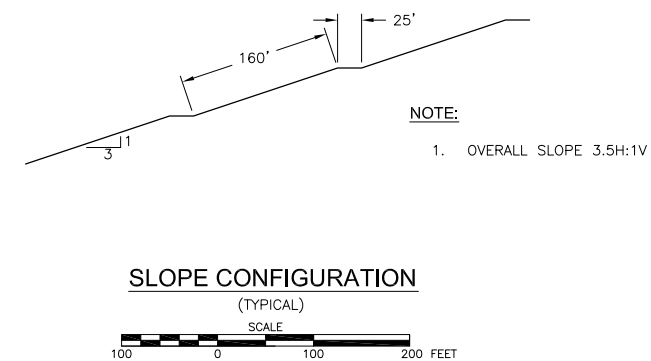
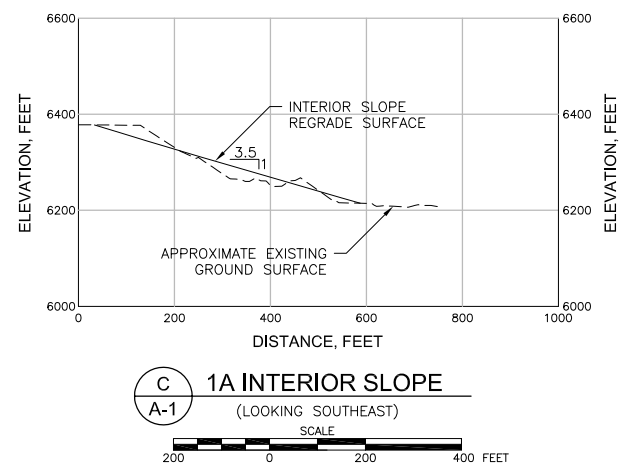
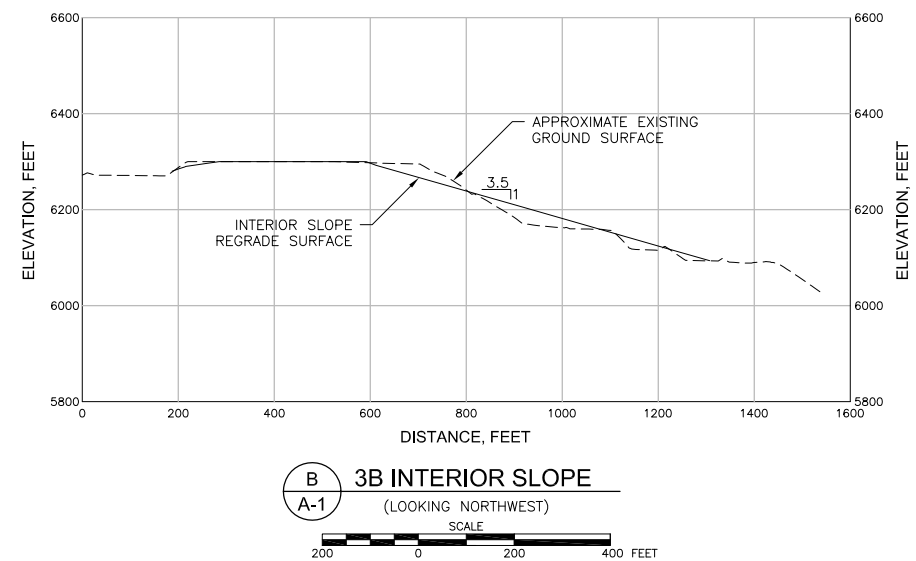
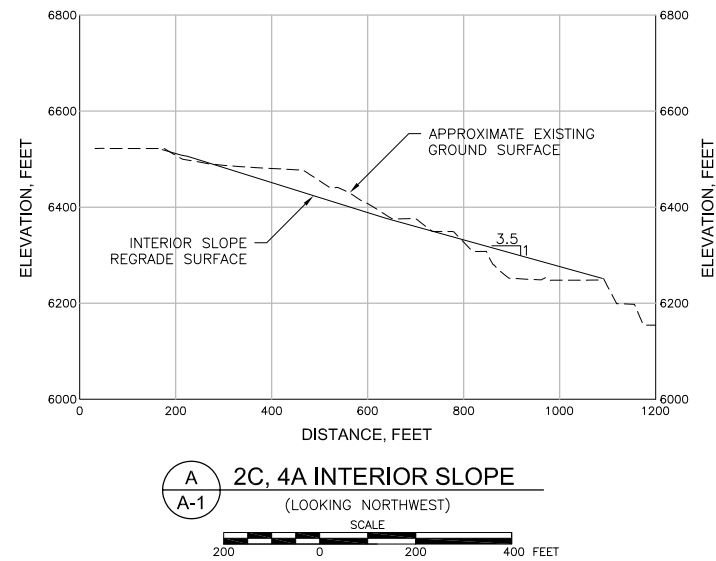
DESIGNED BY	T. LEIDICH	07/08/10
DRAWN BY	C. LEE	07/08/10
CHECKED BY	T. LEIDICH	07/08/10
APPROVED BY		
PROJECT MANAGER	T. LEIDICH	07/08/10
CLIENT APPROVAL		
CLIENT REFERENCE NO.		



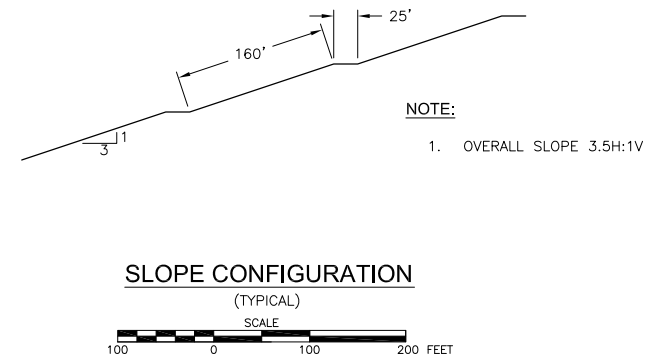
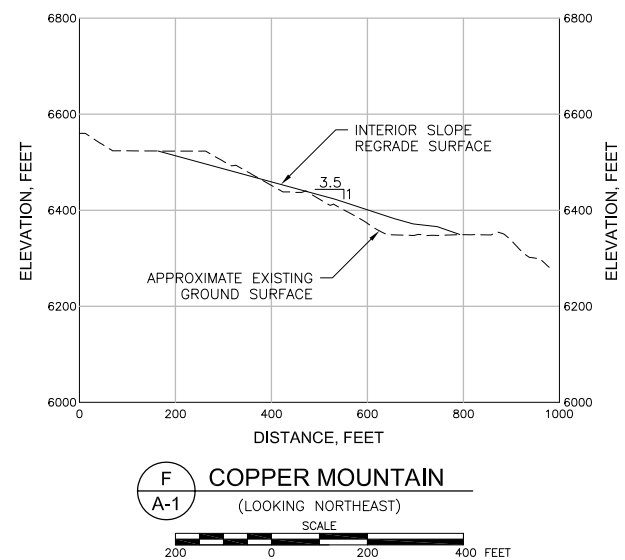
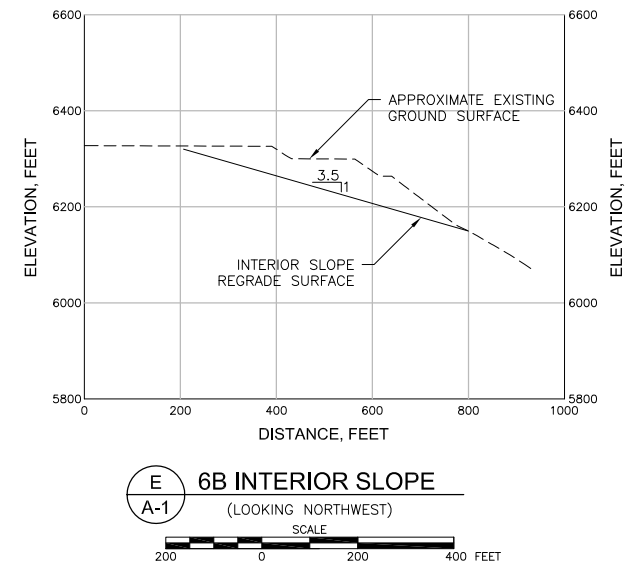
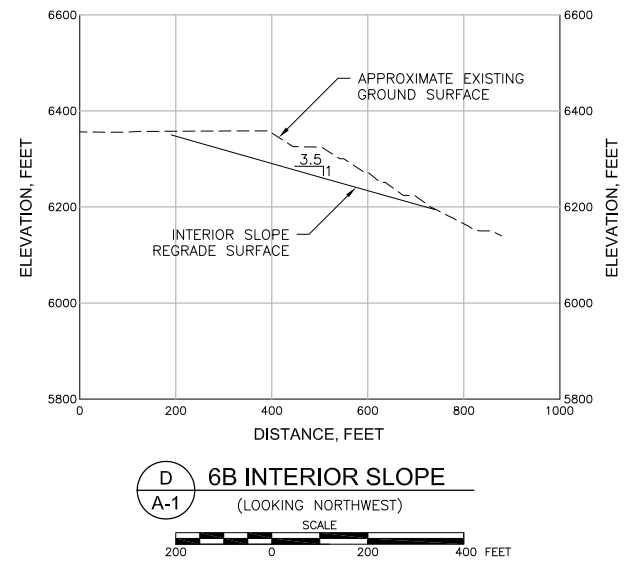
PROJECT LOCATION	TYRONE MINE SITE
PROJECT	INTERIOR SLOPE REGRADE
TITLE	PLAN VIEW-INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS

DRAWING	A-1	REVISION	B
FILE NAME	1008011D007		





						DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.	DRAWING REFERENCE(S):			DESIGNED BY T. LEIDICH 07/08/10			PROJECT LOCATION TYRONE MINE SITE		
										DRAWN BY C. LEE 07/08/10			PROJECT INTERIOR SLOPE REGRADE		
B		ISSUED FOR SUBMITTAL	P.A.H.	T.E.L.	03/16/12					CHECKED BY T. LEIDICH 07/08/10					
A		ISSUED FOR REVIEW	C.C.H.	T.E.L.	07/10					APPROVED BY					
ISSUE / REV		DESCRIPTION	TECH	ENG	DATE					PROJECT MANAGER T. LEIDICH 07/08/10					
										CLIENT APPROVAL			TITLE CROSS SECTIONS - INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS		
										CLIENT REFERENCE NO.				DRAWING A-2	REVISION B
														FILE NAME 1008011D008	





				DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.			DRAWING REFERENCE(S):						DESIGNED BY T. LEIDICH 07/08/10			 FREEPORT-McMoRAN COPPER & GOLD INC.			PROJECT LOCATION TYRONE MINE SITE					
										DRAWN BY C. LEE 07/08/10			PROJECT INTERIOR SLOPE REGRADE											
										CHECKED BY T. LEIDICH 07/08/10			TITLE CROSS SECTIONS - INTERIOR SLOPE REGRADE FOR PIT WAIVER ANALYSIS											
										APPROVED BY														
										PROJECT MANAGER T. LEIDICH 07/08/10														
B ISSUED FOR SUBMITTAL				P.A.H.	T.E.L.	03/16/12													DRAWING A-3			REVISION B		
A ISSUED FOR REVIEW				C.C.L.	T.E.L.	07/10													FILE NAME 1008011D010					
ISSUE/REV	DESCRIPTION			TECH	ENG	DATE																		

Table 2.2.1R Revised Estimated Reclamation Costs for Interior Stockpile Slopes

Stockpile Unit	Area (Acres)	Total Estimated Reclamation Cost (\$)	Unit Cost per Acre (\$/ac)
1A and 1B	46	\$4,500,000	\$99,100
3B	60	\$5,100,000	\$84,700
2B, 2C, 4A	102	\$12,200,000	\$119,400
5A	8	\$700,000	\$86,200
Copper Mountain	32	\$4,600,000	\$142,400
6B, 6C	31	\$16,400,000	\$525,900
Totals or Average	279	\$43,500,000.00	\$155,900

03/22/12