

Attachment G

Present Day (2003) Financial Assurance Cost Estimate for  
the No. 2 Tailing Reclamation Project

## Project Completion Facts

Project Name: **2 Dam Tailing Reclamation**

Construction/Activity Start Date: March 2006

Construction/Activity Completion Date: Substantial completion as of July 2007.

Acres Completed/Affected: 459/618 (tailing area)/(tailing area + other disturbed areas)

Volume/Tonnage of Regrading: 1,281,204 cubic yards

Volume/Tonnage of Fill and Cover Material: 3,475,079 cubic yards

Linear Feet of Stormwater Conveyance Completed: 41,206 linear feet

Description of Work Completed: Only pertinent portions of the work are described since partial financial assurance release was granted this year for the majority of the work.

The top surface cover soil, consisting of Gila conglomerate was placed over the top surface to a minimum of 2 feet. In many areas the top surface cover thickness was substantially more in order to achieve the required top surface grades. In places the top surface cover was up to 12 feet thick

The side slope cover soil also consisted of Gila Conglomerate. The thickness of the Gila Conglomerate on the side slopes varied between 2 feet to 16 feet. The large variation resulted from the side slope drainage benches that were graded into the side slope cover soils.

Overall, the data indicate that 71% of the surface area of the No. 2 tailing dam has a minimum of 3 feet of cover (see attached map).

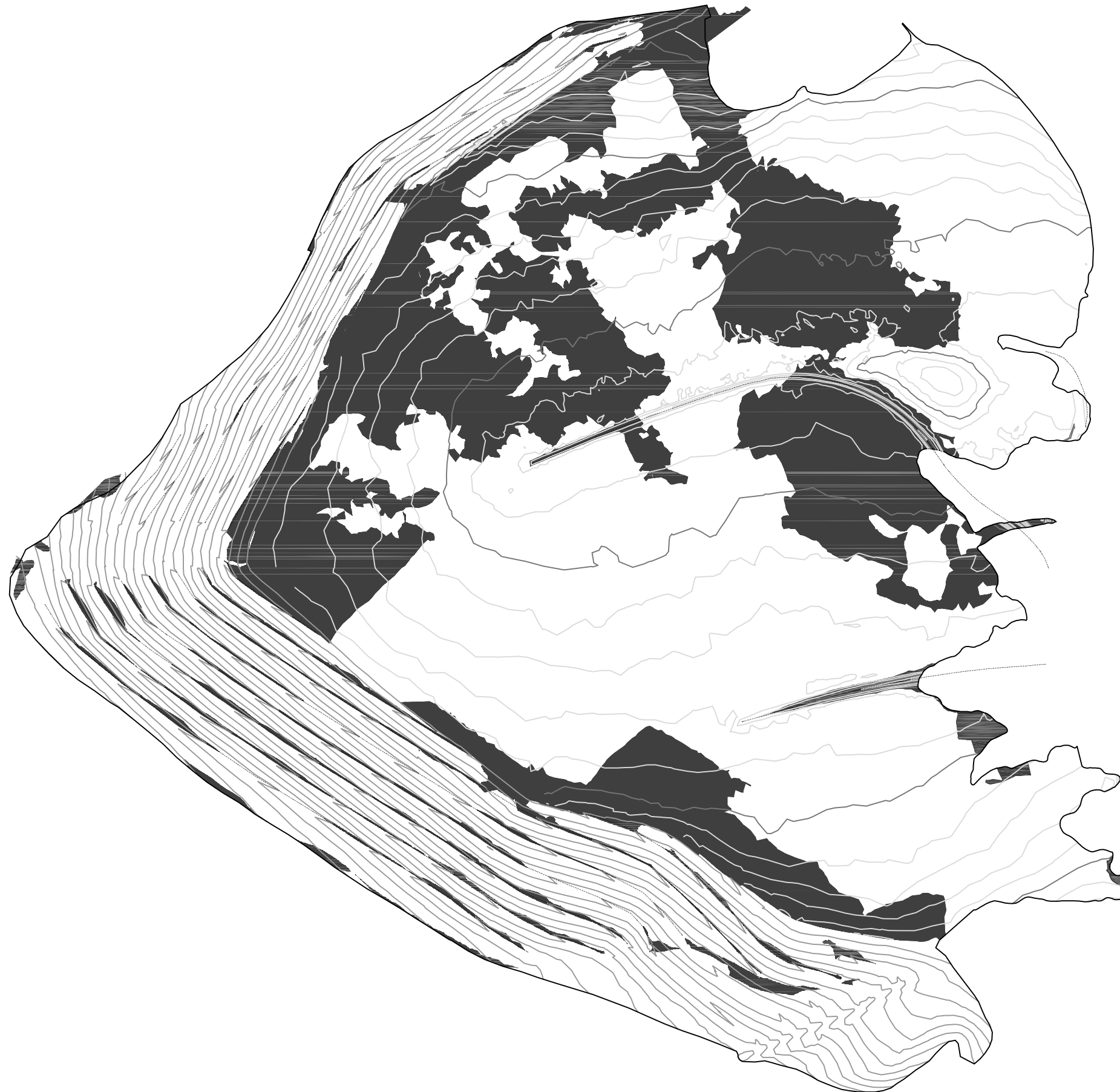
In addition, Tyrone removed and covered some launder-related tailing on the north east corner of the dam. Tyrone also is nearing completion of grading and completing channels that had to be postponed for the Redrock Diversion structure completion.



**Dam 2 as of July 2007**



AUTOCAD FILE: 2 Dam As-Built at Final Cover 12-12-07.dwg PROJECT NUMBER: 1004693



## LEGEND



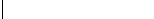
COVER LESS THAN 3' IN  
THIS AREA



2 FT. CONTOUR



10 FT. CONTOUR



CHANNEL ALIGNMENTS



LIMIT OF TAILS

Top Surface Area = 317 Acres

Outslope Area = 142 Acres

Top Surface Area with less than 3' cover = 116  
Acres

Outslope Area with less than 3' cover = 13  
Acres



SCALE



CONTOUR INTERVAL 2FT.

0	For Informational Purposes	12-13-07	M. Witter	J. Thompson	
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



A Freeport-McMoRan Company

PROJECT: **TYRONE TAILING RECLAMATION**

DRAWING TITLE:  
**2 DAM TOP SURFACE AND OUTSLOPE  
MAP OF AREA WITH LESS THAN 3' COVER**



**MWH**

Sheet \_\_\_ Of \_\_\_ Sheets

SCALE: DRAWING No.

AS SHOWN

Attachment G - Table 1. Cost Calculation Summary for Completed Work on 2 Tailing Impoundment

Calculation of Financial Assurance Amount Corresponding to Completed Scope in 2003 Dollars  
for Work Completed as of December 23, 2008 on: **No. 2 Tailing Dam**

The following calculations and explanations are provided to show how the appropriate amount was calculated as a reduction for the Financial Assurance calculations

The table below summarizes the costs from the financial assurance (FA) cost estimate (Attachment B) that correspond to the scope of work described in this attachment.

The source of these cost numbers is linked by the color coding shown in Attachment B to the exact cells from the FA cost estimate. The color coding in Attachment B links the Table below (same as table on the tab labeled "2007 FA Release Calc") to the original State cost estimate (see tabs labeled "13...Earthsum" and "15...Other"). These are direct costs, so the indirect cost multiplier of 1.396 is used to include indirect costs in the calculation. Other multipliers are used as shown in the table below because NMED and MMD personnel required some FA to be left in place to cover contingencies for addressing work that may need to be completed at the facility in the future. These contingencies are also explained in the table below.

In the case of Dam 2, partial financial assurance release was granted in 2008. Tyrone requests that additional financial release be granted for the significant area covered with 3 feet or greater cover depth.

Scope Item	Cost from FA Calculation	Multiplier	Reason for Multiplier
Pushdown existing outcrops	\$0		
Grade Existing Surface	\$0		
Grade GC Material	\$3,964.58	0.355	Tyrone requests additional credit be given by using this multiplier which was calculated by taking the remaining 50% of original cover costs and multiplying by the 71% which is the area with equal to or greater than 3 feet of cover. Since Tyrone has met the permit condition for 3 feet of cover in these areas, Tyrone requests additional financial assurance be released.
Rip Existing Surface	\$0		
Load GC Material on trucks (A)	\$2,595	0.355	same as above
Haul GC Material 2	\$3,797	0.355	same as above
Scraper assist w/ dozer	\$489,852	0.355	same as above
Haul GC Material w/ scrapers	\$682,934	0.355	same as above
Revegetation 100% (plow, apply fertilizer, seed mix, mulch and crimp mulch)			No reduction allowed at this time because the agency wants to monitor revegetation success longer before granting partial release.
Other			
Fencing, TP perimeter 3	\$0		

Attachment G - Table 1. Cost Calculation Summary for Completed Work on 2 Tailing Impoundment

Scope Item	Cost from FA Calculation	Multiplier	Reason for Multiplier
Screening plant for rip rap prod.	\$21,287	0.2	Agencies required some contingency for rip-rap to provide a contingency for unknowns related to placing another foot of cover and how much of the rip-rap in channels would have to be reconstructed due to these activities. The previous multiplier was 0.7 (granted last year). Tyrone requests an additional 0.2 multiplier to account for areas that already have greater than 3 feet of cover.
Outslope ditch, 100'horiz. Int.	\$0		
Outslope ditch rip rap, haul	\$37,145	0.2	same as rip-rap above
Outslope ditch rip rap, backfill	\$8,716	0.2	same as rip-rap above
Channels	\$0		
Spillways & Stilling Basins	\$0		
Redesign of the Break Area	\$0		
Direct Cost Sum	\$1,250,291	NA	
Indirect Sum 39.6%			
Indirect Cost Sum	\$495,115.42	NA	
Total =	\$1,745,407		

Note: This is the total cost that should be subtracted from the remaining work for this project in Attachment C "current cost" tab.  
See last tab of Attachment C to match total above.

## Attachment G - Summary of Remaining Financial Assurance Amount for Project Scope

### Summary of Remaining Financial Assurance

This summary calculates the financial assurance \$ remaining

for the following project:

#### **No. 2 Tailing Dam**

if the requested reduction is granted by State agencies.

The total cost in financial assurance for the project area described in this attachment is

**\$3,295,828** (see Attachment B - tab labeled "17...Itemized Bond Sum")

This number is the amount remaining after last years financial assurance reduction.

The amount of reduction requested in current dollars is:

**\$1,745,407** (see Table 1 of this attachment)

The difference or amount to remain in financial assurance is:

**\$1,550,421**

This remaining amount was calculated in 2003 dollars by State agencies to cover costs for all remaining scope items for this project area.

Furthermore, the contingencies explained on the preceding table provide additional \$ to address costs if additional work is needed at the site.