THEMAC RESOURCES

February 25, 2014

RECEIVED MARP MAR 04 2014 MINING & MINERALS DIVISION

RECEIVED MARP MAR 04 2013 MINING & MINERALS DIVISION

Chris Eustice
Mining and Minerals Division
Wendell Chino Building, Third Floor
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Humidity Cell Termination Report for the Copper Flat Project, New Mexico, and SRK's External Memorandum: Copper Flat PFS and DFS Gap Analysis

Dear Mr. Eustice,

This letter transmits the geochemistry reports for Copper Flat referenced above. Included with this transmittal:

- A bound hard copy of the Humidity Cell Termination Report for the Copper Flat Project, New Mexico
- A hard copy of SRK's External Memorandum: Copper Flat PFS and DFS Gap Analysis
- Two CDs: one with both reports, another with only the Humidity Cell Termination Report (included in the report binder)

The reports and CDs were prepared by SRK Consulting. Please contact me or Jeff Smith with any questions. Please email me to confirm receipt of the report and disk. My email address is kemmer@themacresourcesgroup.com.

Sincerely,

Katie Emmer

Katie Emmer
Permitting & Environmental Compliance Manager

cc: Douglas Haywood, Bureau of Land Management
David Henney, Mangi Environmental Group
Mark Nelson, CDM Smith
Brad Reid & Kurt Vollbrecht, New Mexico Environment Department

SRK Consulting (UK) Limited
5th Floor Churchill House
17 Churchill Way
Cardiff CF10 2HH
Wales, United Kingdom
E-mail: enquiries@srk.co.uk
URL: www.srk.co.uk
Tel: + 44 (0) 2920 348 150
Fax: + 44 (0) 2920 348 199

External Memorandum

To:	Steve Raugust	**From:**	Rob Bowell, Ruth Warrender, Amy Prestia
Company:	THEMAC Resources Group Ltd.	**Project Number:**	191000.03/UK3939
File Ref:	*P:\U3939 Copper Flat Scoping Study\Project\Reps\PFS DFS Comparison memo*	**Project Title:**	Copper Flat
		Date:	February 13, 2014
Subject:	**Copper Flat PFS and DFS Gap Analysis**		

Introduction

SRK Consulting, Inc. (SRK) has undertaken a geochemical characterization study to assess the Acid Rock Drainage and Metal Leaching (ARDML) potential of waste rock, tailings and ore at the Copper Flat project, New Mexico. This assessment has included static and kinetic geochemical characterization testing of representative materials and the development of numerical predictions to assess potential future water quality associated with the mine facilities (waste rock dumps, tailings facility and pit lake). The results of the characterization program and subsequent numerical predictions are provided in the *Geochemical Characterization Report for the Copper Flat Project* (SRK, 2013a) and *Predictive Geochemical Modeling of Pit Lake Water Quality at the Copper Flat Project, New Mexico* (SRK, 2013b) report, prepared by SRK Consulting, Inc. and submitted in May and September 2013, respectively.

The characterization program and subsequent numerical predictions were designed around the Pre-Feasibility Study (PFS) mine plan. However, subsequent changes to the mine plan have been made as part of the Definitive Feasibility Study (DFS). THEMAC Copper Resources Group Ltd. has requested that SRK review and compare the relevant information contained with both the PFS and DFS reports and undertake a gap analysis to determine whether additional work is warranted based on the revised mine plan and new information provided in the DFS. The findings of the data review and gap analysis are presented herein.

Data Review and Gap Analysis

A comparison of the relevant design criteria for the PFS and DFS are provided in Table 1 along with implications for the geochemical characterization study. This comparison demonstrates that in most cases there have only been minor changes to the design criteria and the implication of these changes on the results of the geochemical characterization work are not significant. In instances where there has been a more substantial change between the PFS and DFS (for example the change in waste rock tonnage and the removal of the low grade ore stockpile), the predictions provided by SRK as part of the PFS reflect a more conservative scenario and therefore no additional work is considered necessary for the purpose of the DFS. Figure 1 presents the DFS mine plan and Figure 2 shows the layout of the DFS Waste Rock Disposal Facilities. The PFS facility layout as originally presented in SRK 2013a is shown in Figure 3 and 4. A comparison of Figures 1 through 4 shows the general configuration of the DFS mine plan is similar to the PFS mine plan.

Table 1: Summary of PFS and DFS Design Criteria Pertinent to Geochemical Characterization Program

Parameter	Pre-Feasibility Study Design Criteria	Definitive Feasibility Study Design Criteria	Implications for Geochemical Characterization Study
Cu cut-off grade (wt%)	0.164	WRDF1 – 0.168 WRDF2 – 0.131 WRDF3 < 0.131	Minor. Based on the October 2013 revisions to the DFS, the low-low grade and high-low grade stockpiles will not be processed and the material in these stockpiles will become uneconomic waste rock. The DFS states that there will be three WRDFs with different cut-off grades; higher grade material will be deposited in WRDF1 and will have a cut-off grade of 0.168 wt% Cu (comparable to the PFS cut-off grade of 0.164 wt%); WRDF2 will have a lower cut-off grade of 0.131 wt%, and WRDF3 will receive material less than 0.131 wt%, which is likely to result in a reduced amount of sulfide-bearing waste in WRDF2 and WRDF3. The numerical predictions undertaken for the WRDF as part of the PFS are based the higher cut-off grade and therefore represent a conservative estimate of future water quality.
Waste rock (ktons)	60,725	44,682	None. The tonnage of waste rock has decreased for the DFS. The numerical predictions are based the higher (PFS) waste rock tonnage and therefore represent a conservative estimate of future water quality.
Waste rock proportions	Andesite 1.1%; biotite breccia 1.2%; quartz feldspar breccia 4.6%, quartz monzonite 78.2%, coarse crystalline porphyry 14.9%	Andesite 3.3%; biotite breccia 4.3%; quartz monzonite 77.5%, coarse crystalline porphyry 14.9%	Minor. The difference between the PFS and DFS waste rock proportions is negligible. There has been a small increase in the proportion of andesite intersected by the DFS pit (see Figure 5 and 6). However, this will not have significant implications for the numerical predictions, as the unoxidized andesite is predicted to be NAF with low levels of metal leaching. In addition, the DFS block model groups the biotite breccia and quartz feldspar breccia units together, which will have no effect on the geochemical characterization program.
Mill ore (ktons)	95,248	113,084	Not applicable. Mill ore was not considered.
Low grade stockpile ore (ktons)	2,870	There will be no separate LGO stockpile, but material deposited in WRDF1 and WRDF2 will be higher grade and the facilities are planned so that they could be re-mined for a future processing opportunity or reclaimed in their current configuration.	None. No geochemical predictions were undertaken for the LGO stockpile as part of the PFS. In addition, the cut-off grade for the higher grade material that will be deposited in WRDF1 (0.168 wt% Cu) is comparable to the waste rock cut-off grade used for the PFS (0.164 wt% Cu). Therefore no change to the waste rock characteristics is anticipated.

Parameter	Pre-Feasibility Study Design Criteria	Definitive Feasibility Study Design Criteria	Implications for Geochemical Characterization Study
WRDF design and closure	One WRDF. Closure of the facility will include placement of a 3-ft thick cover of growth media and native fill material.	Three WRDFs. Material in WRDF1 and WRDF2 will be higher grade and potentially re-mined. Closure of the facilities will include regrading, placement of a 3-ft thick cover and re-vegetation.	Minor. Although WRDF1 is not included in the PFS, this facility is located within the open pit surface drainage area and only requires that surface water contact with the material to be minimized. In addition, the total tonnage of waste rock has decreased for the DFS. Therefore, the numerical predictions conducted as part of the PFS represents a conservative estimate of future water quality.
TSF surface area (acres)	530	536	None. The planned surface area of the TSF has only increased by 1.1% between PFS and DFS, which will have minimal implications on the numerical model results.
TSF capacity	100 Mt	112 Mt	Minor. The tonnage of tailings has increased by 12% between the PFS and DFS. This is not expected to significantly increase solute loading from the TSF.
TSF design and closure	Underlain by a geomembrane liner (80-mil HDPE placed on 6 - 12 inch thick liner bedding fill layer) and tailings drainage collection system. Closure of the facility will include placement of a 36-inch reclamation cover.	Underlain by a geomembrane liner (80-mil HDPE placed on 12 inch thick liner bedding fill layer) and tailings drainage collection system. Closure of the facility will include placement of a minimum 36-inch reclamation cover.	None. The design and closure plans for the TSF have not changed between the PFS and DFS.
Pit wall final exposed lithologies	Andesite 1.2%; biotite breccia 4.0%; quartz feldspar breccia 6.3%, quartz monzonite 74.5%, coarse crystalline porphyry13.3%	Andesite 2.6%; biotite breccia 15.3%; quartz monzonite 68.6%, coarse crystalline porphyry 13.5%	None. The difference between the proportions of each lithology exposed in the final PFS and DFS pit walls is minor. There has been a small increase in the proportion of andesite, however, this will not have significant implications for the numerical predictions as the unoxidized andesite is predicted to be NAF with low levels of metal leaching. In addition, the DFS block model groups the biotite breccia and quartz feldspar breccia units together, which will have no effect on the pit lake model results as the geochemical properties remain unchanged.
Pit water balance	Disturbance area 156 acres; pit highwall area 143 acres; pit watershed area 230 acres; final water level 4900 ft amsl; final water surface area 18.6 acres; final pit water balance 100 acre-feet per year.	Disturbance area 161 acres; pit highwall area 129 acres; pit watershed area 230 acres; final water level 4860 ft amsl; final water surface area 18.6 acres; final pit water balance 101 acre-feet per year.	None. The final pit water balance has only changed by 1 acre-foot per year between PFS and DFS. Although there is a slight increase in the pit disturbance area (3%), the pit highwall area that will represent the greatest contribution to solute loading from run-off has reduced from 143 acres to 129 acres. The numerical predictions conducted for the PFS therefore represent a slightly more conservative estimate of future pit lake water quality.

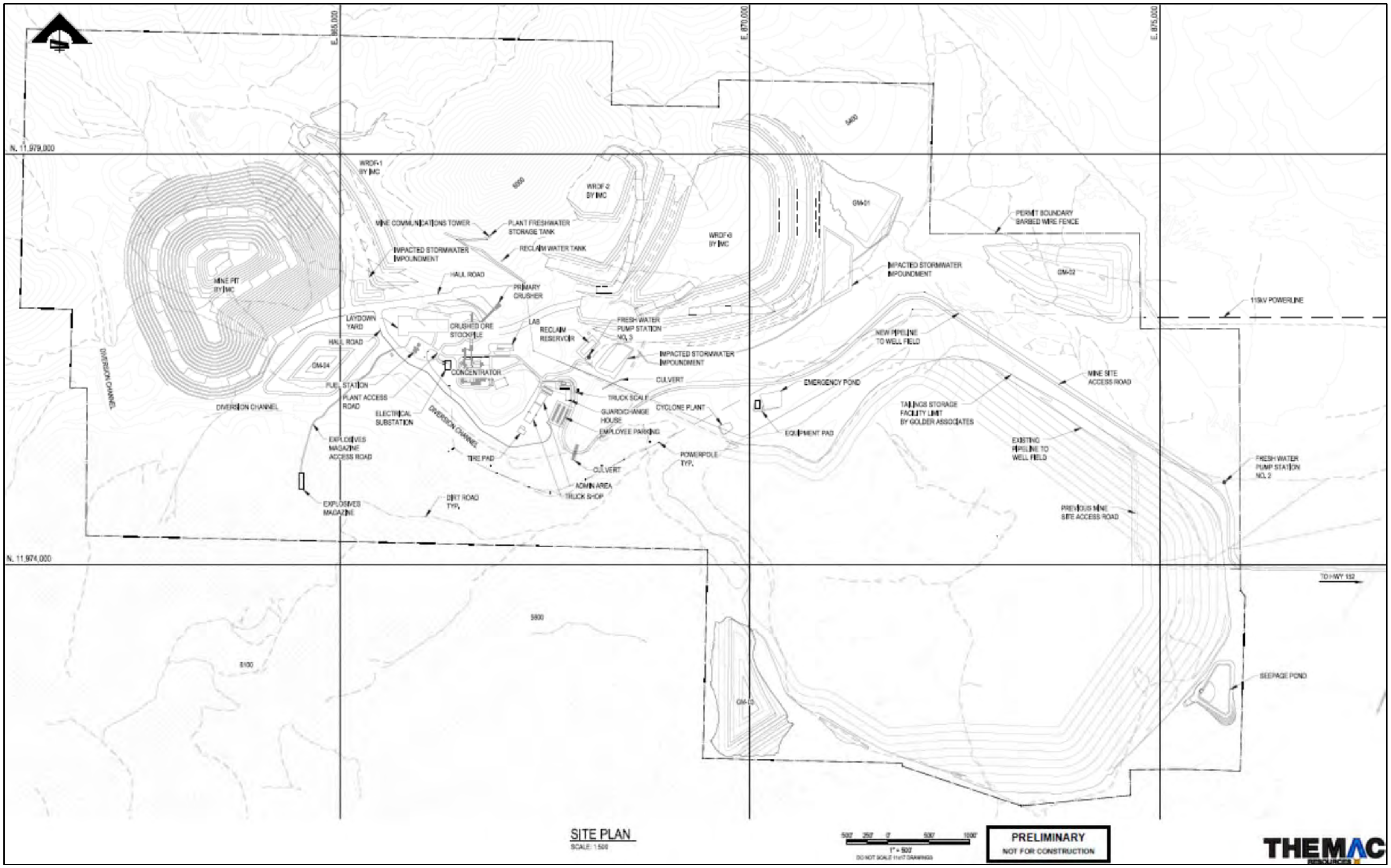

Figure 1: Definitive Feasibility Study Facility Layout

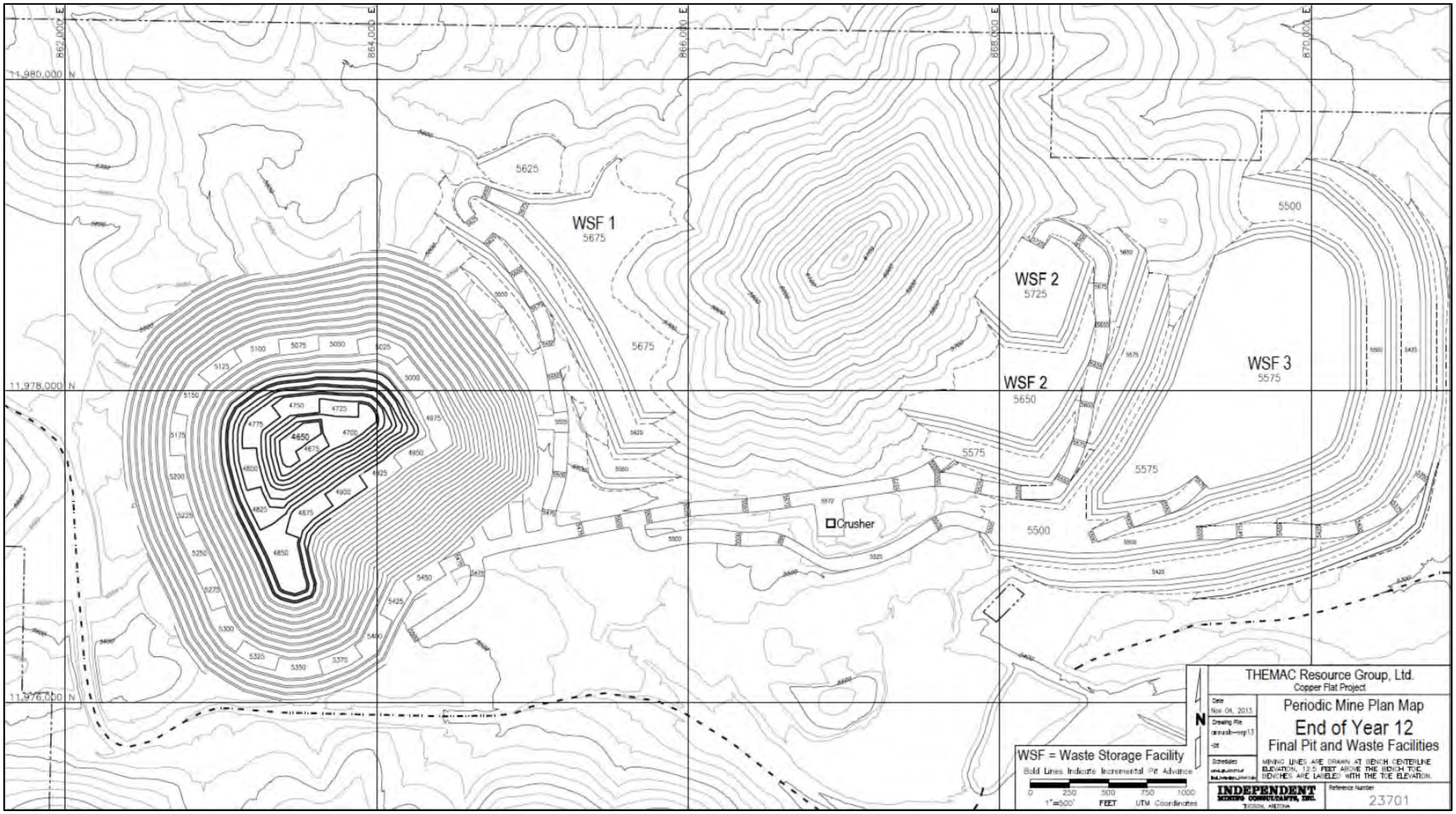

Figure 2: Definitive Feasibility Study Facility Layout Waste Rock Disposal Facility Detail

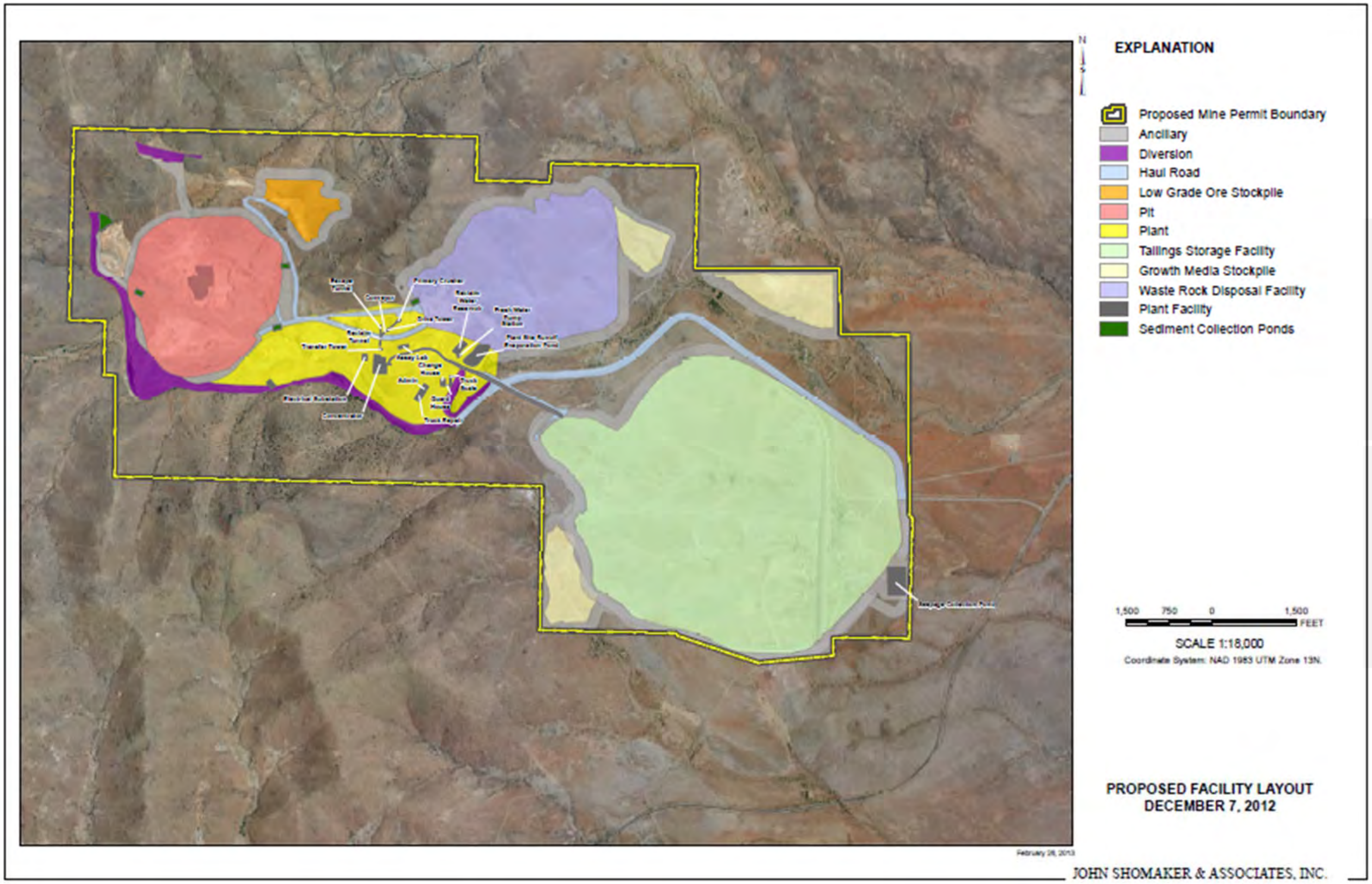

Figure 3: Pre-Feasibility Study Facility Layout

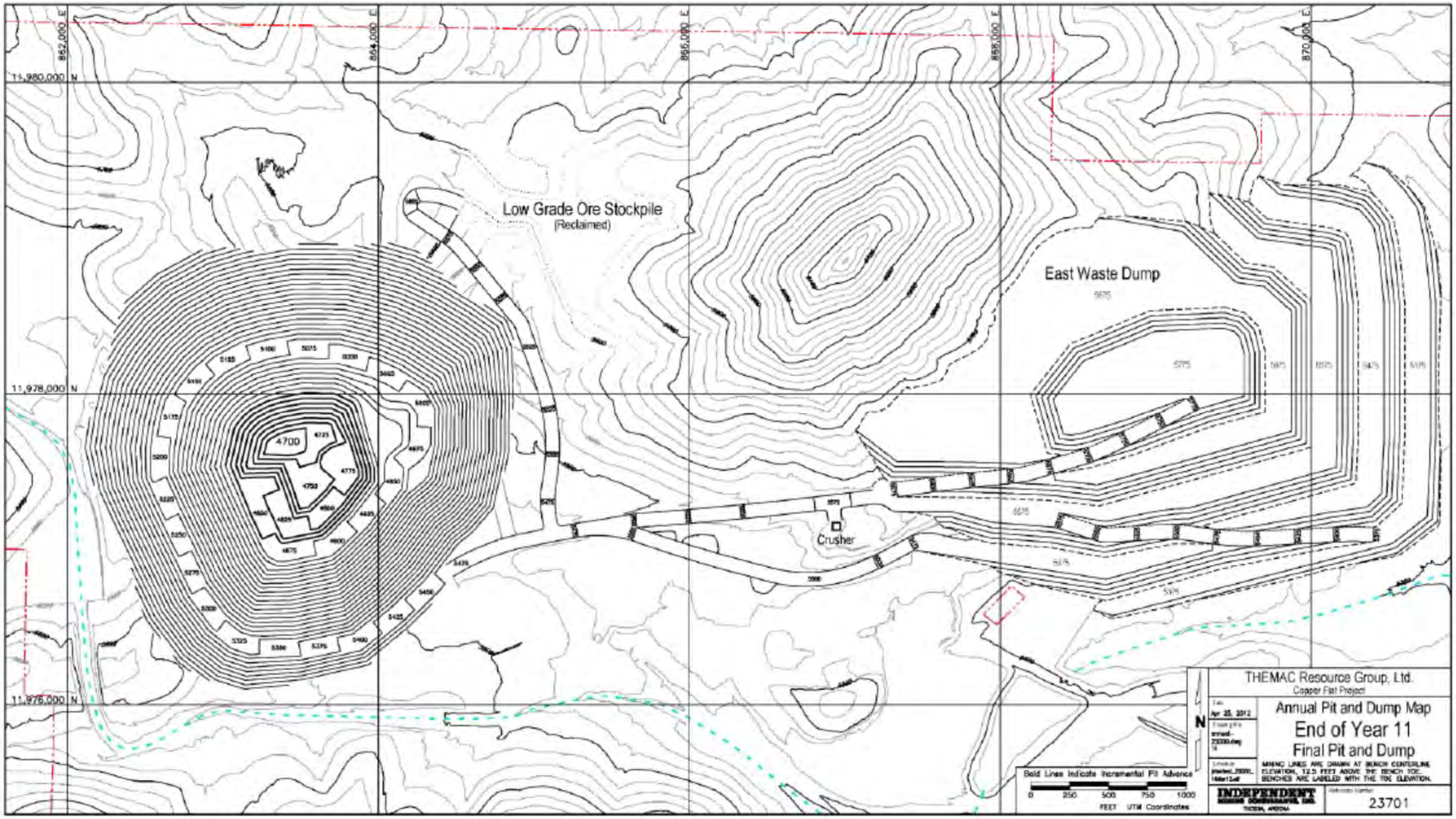

Figure 4: Pre-Feasibility Study Waste Rock Disposal Facility Detail

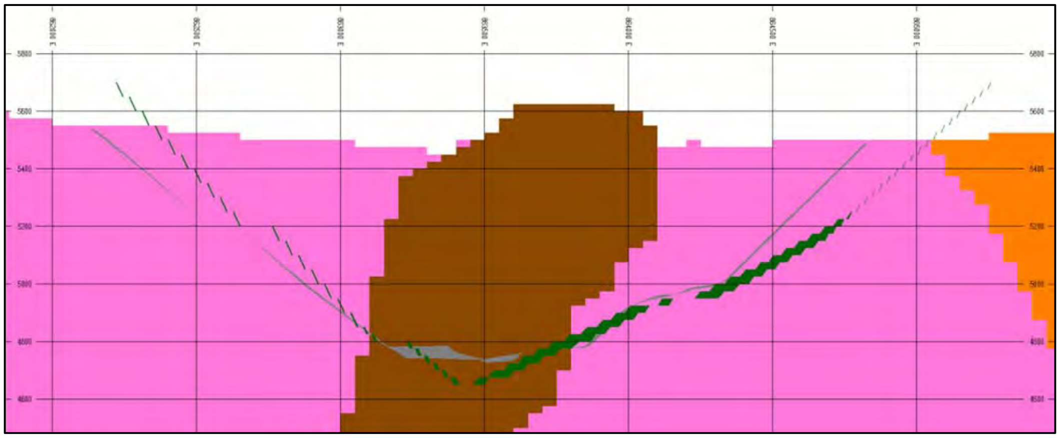

Figure 5: Cross section showing comparison between PFS pit shell (in grey) and DFS pit shell (in green). *[Pink = quartz monzonite; brown = biotite breccia; orange = andesite]*

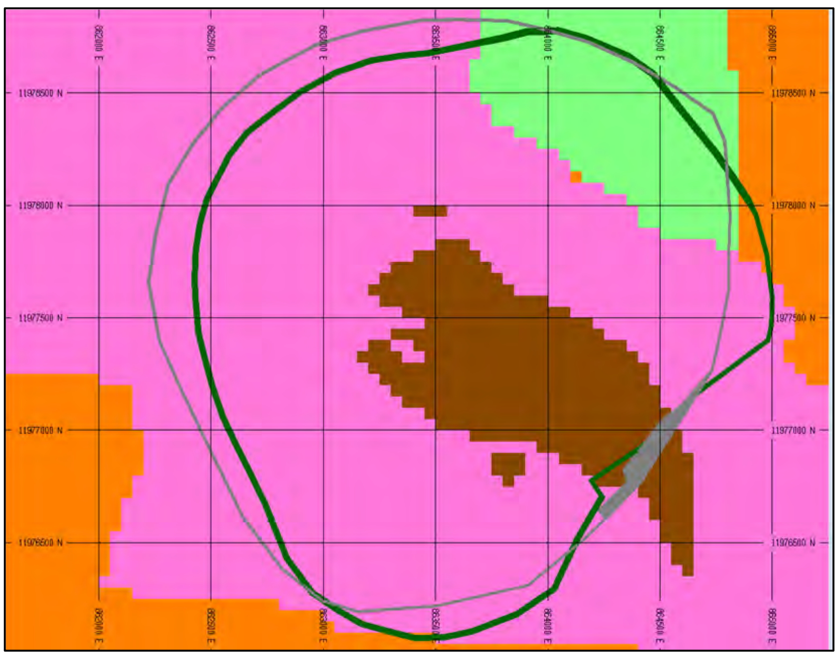

Figure 6: Plan view showing comparison between PFS pit shell (in grey) and DFS pit shell (in green). *[Pink = quartz monzonite; brown = biotite breccia; orange = andesite]*

Conclusions

Based on the findings presented herein, the previous geochemical characterization work remains valid and revisions to the geochemical characterization and modeling will not be required as part of the DFS. In most cases, the predictions provided by SRK as part of the PFS reflect a more conservative scenario and therefore no additional work is considered necessary for the purpose of the DFS.