La Mina Gold-Copper Project
Antioquia, Republic of Colombia

Prepared for:
Bellhaven Copper & Gold Inc.

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Project #134015

Prepared by:
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1.0 SUMMARY

The La Mina property consists of two mineral exploration licenses located in the Department of Antioquia, Republic of Colombia, South America. Bellhaven Copper & Gold Inc. (“Bellhaven”) through its wholly-owned Colombian subsidiary Aurum Exploration Inc. Colombia. (“Aurum”), acquired its first exploration license by entering into an earn-in agreement in mid-2010 to acquire 80% of the mineral rights of a 1794 hectare license over a four year period with the option to acquire the remaining 20% on the basis of an ounces-in-reserve formula defined by the earn-in agreement. The second exploration license, of1416 hectares, was acquired in 2013 from the wholly owned Colombian subsidiary of AngloGold Ashanti Corporation, AngloGold Ashanti Colombia S.A. through an earn in agreement based on total expenditures over a 3 year period.

The La Mina project area forms a contiguous irregular shaped 3210 hectares block centered at 5°55'19"N and 75°44'42"W. Geographically, the mineral title is located within the Municipalities of Venecia and Fredonia , Department of Antioquia, 51 kilometers SW of the Colombian city of Medellin.

La Mina is located overlooking the Cauca River valley, along the eastern margin of Colombia's physiographic Western Cordillera. The topography of the region is mountainous, characterized by high-relief, vegetated mountains and steeply incised active drainages. The geological evolution of the region is complex, being linked to aggressive, compressional Meso-Cenozoic tectonics associated with Northern Andean Block assembly along the Romeral fault and suture system. The accretion of various allochthonous terranes in western Colombia during the Miocene incited deformation, uplift, magmatism and erosion. From a metallogenic standpoint, mineralization at La Mina is genetically linked to the emplacement of a cluster of Miocene-aged hypabyssal porphyry bodies. A variety of magmatic-hydrothermal Au (Cu) and Au-Ag (Pb, Zn, Cu) deposit types are associated with the geochemical and cooling history of the porphyry bodies.

Bellhaven and previous operators have applied varying degrees of systematic regional geology, geochemistry, and geophysics across the property over a period of approximately 10 years. The focus of interest is now along the eastern quarter of the Property where copper-gold mineralization was first discovered in 2002 at the La Cantera outcrop.

1.1 Introduction

InterPro Development Inc. ("InterPro") has prepared this Technical Report on the La Mina property deposits, located in the Department of Antioquia, Republic of Colombia, South America. Bellhaven Copper & Gold Inc. ("Bellhaven") through its wholly-owned Colombian subsidiary Aurum Exploration Inc. Colombia ("Aurum").

The purpose of this report is to provide a technical summary in support of the mineral resource estimates for the May 2013 "La Mina Amended Technical Report" of the La Cantera and Middle Zone deposits.

This is a Preliminary Economic Assessment (PEA) of the two areas La Cantera and the Middle Zone. Note that a PEA is preliminary in nature and includes Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied that would enable them to be classified as mineral reserves; there is no certainty that the preliminary economic assessment will be realized. The resource estimate for La Mina was reported in a 2013 Technical Report by Scott E. Wilson and Associates (Current name Mineral and Metals Consulting Inc. and has not been updated for this report.

The effective date of the La Mina database on which the resource was estimated is July 1, 2012. The effective date of this PEA for the La Mina resource is September 1, 2013.

This technical report documents a mineral resource statement for the La Mina Project prepared by SEWC. The report has been prepared according to the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 while the mineral resource statement reported herein has been prepared in conformity with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines."

This PEA relies heavily on the "La Mina Amended Technical Report of May 2013" for the geology, and resources sections of this PEA.

The PEA Study defines a standard, truck-and-shovel, open-cut mining operation to produce gold-copper-silver commercial concentrates by conventional milling and concentrating. The PEA concludes that the Project is financially robust with an estimated NPV@ 8% of US$262 million/$172 million (before/after tax) and an internal rate of return ("IRR") of 33.5%/26.4% (before/after tax). A key highlight of the Study is the $408/oz total cash cost (net of by-product credits, life of mine), making La Mina one of the lowest cost gold development projects in the Americas. Project highlights are summarized in Table 1.0 below.

Table 1.0 Project Production and Financial Highlights	
Resource and Production	
Whittle Pit Resource and Avg. Gold & Copper Grades	42.5 Mt @ 0.74 g/t Au, 0.24% Cu
Mine Life	9.7 years
Milling Rate (Plant Capacity)	12,500 mtpd
Total Gold / Copper Production	907,400 oz Au / 200.4 million lbs Cu
Average Annual Gold / Silver Production	93,409 oz Au / 80,367 oz Ag
Average Annual Copper Production	20.6 million lbs Cu
Costs, Revenues, and Profits (based on $1400/oz gold, $20/oz silver, and $3.25/lb copper prices)	
Total Cash Cost (net credits): 1st 5 Yrs & LOM Avg.	$178/oz gold / $408/oz gold
Initial Capital Expenditures including Contingency	$320.00 million
Average Annual Gross Revenue*	$189.40 million
Average Annual After-Tax Net Profit*	$32.99 million
Financial Summary (based on $1400/oz gold, $20/oz silver, and $3.25/lb copper prices)	
NPV @ 8% discount rate (before taxes/ after taxes)	$262 million / $172 million
IRR (before-tax/after-tax)	33.5% / 26.4%
Payback (years)**	4.57 years

* for periods with sales revenue; ** from start of mine construction; All $ are US$; Mt = million metric tonnes; mtpd = metric tonnes per day.

1.2 Mineralization

Middle Zone and La Cantera constitute two of the four drill-tested mineralized porphyry intrusive and breccia bodies on the La Mina property. In both deposits, the intrusive centers are occupied by a series of porphyry stocks and related breccias that together make up porphyry copper-gold deposits. In the case of La Cantera, the core of the deposit consists of a late, barren porphyritic stock resulting in a typical "doughnut" pattern (plan view) in its concentric relationship to the surrounding mineralized units. In the case of Middle Zone, the barren core is an amorphous feature that appears to have intruded preferentially along pre-existing planes of weakness. Various intrusive/breccias phases were involved in development of the porphyry deposits along with multi-phase alteration mineralization events, as most-often expressed by pronounced densities of veinlets cross-cutting the diamond drill core. Hydrothermal magnetite is an important gangue mineral associated with gold and copper, and potassic alteration is an important alteration type associated with higher gold and copper grades.

The La Cantera Deposit is slightly elliptical in plan view (long axis NW-SE), measuring approximately 200 m by 190 m in plan view on surface with a depth extent of 350-600 m based on the results from 24 drill holes. Average grades are close to 0.8g/t Au with 0.3% Cu.

The Middle Zone Deposit lies approximately 400 m north of La Cantera, and consists of a more pronounced elliptical body in plan view (long axis NE-SW), which remains open at depths of over 600 m, based on the results of 39 drill holes for a total of 14,159 meters. Fault displacement appears to have offset the western and eastern lobes of mineralization, and faulting appears to bound the western edge. Mineralization here is of two types. The first is high copper-gold ratio, similar to what is seen at La Cantera. The second is high gold with relatively low copper. Overall, the grades are lower than La Cantera, close to 0.5g/t Au with 0.1-0.2% Cu, over true widths of up to 100 m.

1.3 Current Exploration

Currently, Bellhaven has just wrapped up a post-resource Middle Zone drill program after taking advantage of the increased understanding of structure and mineralization controls that resulted from the resource estimation exercise. The drill program has just shifted onto the La Garrucha porphyry target, where targets defined by earlier drilling and recent soil sampling are being evaluated. Contingent upon results, the Company has additional targets between the Middle Zone and La Cantera, as well as at the La Cristalina prospect. The geologists are also advancing soil geochemical sampling, rock chip sampling, and surface mapping into the western half of the La Mina property. The Company has recently completed a comprehensive geophysical evaluation, which incorporates recent ground magnetics, IP, radiometric, ZTEM, and aerial magnetic data into a complete geophysical target map.

1.4 La Mina Inferred Resource

SEWC applied a cutoff grade of 0.3g/t Au gold for this Mineral Resource Statement. The Middle Zone deposit has been drilled at nominal 50m spacing to approximately 300m depth, but the data density is lower beyond that. Topography and complex structural geology necessitated the use of multiple drill hole fans from some sites, as well as off-axis drilling to target some areas. The Company has maintained a strong quality assurance and quality control program, which has validated the accuracy and precision of the assay data. Bellhaven has also advanced its knowledge of the metallurgical characteristics of the La Mina mineralization, as reported in November 2011, subsequent to the maiden Inferred Resource.

While data quality is excellent and drill hole spacing is sufficient for portions of these resources to be classified according to CIM standards as Indicated, additional metallurgical testing is underway and the Company intends to drill test additional targets in the Middle Zone. Additional drill information from deeper in the resource area is likely to solidify the geological model and continuity of the grade estimation in some key areas. For these reasons SEWC classifies the entire La Mina resource as Inferred Mineral Resources at this time. When the current metallurgical test work is completed and a few new drill holes are added, it is likely that portions of the Middle Zone resource can be upgraded to the Indicated category. The Inferred resources for the La Mina project are reported in Table 1.1. Gold equivalent ounces are based on $1,200/oz Au and $2.75/lb Cu. Resource calculations are an estimate and some differences may occur in the totals due to rounding.

Table 1.1 La Mina Inferred Resources at July 9, 2012								
Deposit	**Cut off grade Au g/t**	**Tonnes (000s)**	**Gold g/t**	**Gold ounces**	**Cu %**	**Contained lbs (000s)**	**AuEq g/t**	**AuEq Ounces**
La Cantera	0.3	40,560	0.77	1,009,000	0.31	279,800	1.26	1,639,000
Middle Zone	0.3	39,310	0.47	594,000	0.16	139,400	0.72	913,500
TOTAL	**0.3**	**79,870**	**0.62**	**1,603,000**	**0.24**	**419,300**	**0.99**	**2,553,000**

All resources reported above are inferred resources. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves. AuEq Oz =Gold-equivalent ounces. AuEq (g/t) calculated using consensus (as of 6 July2 2012) long-term prices for gold ($1,200/oz) and copper ($2.75/lb). No adjustment has been made for metallurgical recoveries or net-smelter returns as these remain uncertain at this time. AuEq formula: AuEq g/t = Au g/t + [(Cu% x 22.0462 x 2.75)/(1200/31.1)] g/t. All quantities are rounded to the appropriate number of significant figures; consequently sums may not add up due to rounding.

1.4a Gustavson Review

The Project consists of three defined occurrences of mineralized material, with two having sufficient drilling to estimate inferred resources. Gustavson performed a review of the sample statistics for the La Cantera and Middle Zone areas.

A detailed statistical analysis of the domains is not presented in the original NI43-101 report and the scope of this review did not allow a thorough spatial evaluation of these data. Initial review of the La Mina Sample and Block data showed some odd relationships between data sets, we undertook to reexamine the statistics to be sure that we had not introduced bias or misinterpreted the relationships between blocks and samples in the various domains.

Gustavson believes that the global estimate is valid and adequate for global grade and tonnage of an inferred resource and for a preliminary economic analysis. Gustavson recommends that a complete statistical and geostatistical study of the depositional domains and estimation parameters be included in any further work on the property, and that new grade models be built to support detailed mine production scheduling.

1.5 Metallurgy

In 2011 Aurum Exploration Colombia Inc. contracted Resource Development Inc. (RDi) to undertake a scoping level metallurgical study for La Mina porphyry gold and copper prospect in Colombia. A final report on this first phase of work was completed in October of 2011.

A series of metallurgical tests were performed on coarse reject samples from three drill holes collared at the La Cantera prospect and one drill hole at the Middle Zone prospect. These individual assay interval samples were composited to produce four composite samples ranging in grade from 0.73 to 1.5 g/t Au and 0.31 to 0.47% Cu. The gold and complete copper analyses of the composites are presented in Table 13-1 below.

The metallurgical tests included Bond's ball mill work-index determinations, in-place bulk density measurements, gravity tests, direct cyanidation recoveries, and carbon-in-leach tests, as well as rougher and cleaner flotation tests.

The Bond's ball millwork index determinations ranged from 10.2 to 14.0; the highest work index determination was measured from the La Cantera high-grade composite, possibly reflecting a greater abundance of quartz veins. These work indices are typical of porphyry gold-copper deposits.

Bulk densities, determined using a standard wax-coating method, ranged from 2.48 to 2.98 g/cc.

Gravity test work did not yield a high-grade concentrate indicating that there is little coarse gold at either La Cantera or Middle Zone. The lack of significant quantities of coarse gold is considered to be positive, allowing for more consistent flotation (by not requiring installation of a gravity circuit to collect the coarse gold) and cyanide leach results.

Whole-ore cyanide leach tests indicated recoveries of up to 90% of the gold and 70% of the copper whereas carbon-in-leach test results indicated recoveries of up to 87% of the gold and 73% of the copper from the four composite samples. As expected, copper recoveries were relatively low because of the chalcopyrite-dominant mineralogy of the composite samples (i.e., sulphide, not oxide, mineralogy).

A key outcome of the rougher flotation test work was that the application of a simple reagent suite of potassium amyl xanthate (PAX) and Aeropromotor 404 (AP 404), at a grind size of 80% passing 150 mesh, produced high gold recoveries ranging from 93.2 to 96.8% and copper recoveries ranging from 88.7 to 90.8%.

The other key result of the rougher and open-circuit cleaner flotation test work is that, with the exception of an outlier represented by Composite 2, the test work demonstrated the potential for La Mina to deliver concentrate grades ranging from 26.7 to 31.9% copper and 61.9 to 75.8 g/t gold. These concentrates are very clean, containing only trace amounts of arsenic, antimony, and lead, and below typical penalty benchmark levels charged against concentrate sales by smelters.

The metallurgical testing program will next focus on lock-cycle tests on representative samples of the La Cantera and middle zone prospects, as well as crushing and grinding test work for mill design and sizing. Once completed, these subsequent metallurgical results will provide important inputs into an upcoming preliminary feasibility study used to determine the potential economic viability of a mining operation at la mina. Bellhaven continues to drill at La Mina with the goal of expanding the existing resource.

1.6 Mining

MMC recommends that conventional truck and shovel open pit mining methods be used in order to best exploit the resources at the La Mina Project. This approach is well suited for these near surface, disseminated deposits. Mine schedules in Section 14 have been developed based on Inferred resources. Table 1.2 shows average Life-of-Mine (LOM) and yearly production for the La Mina Project.

Table 1.2 Estimated Production and Mill Recoveries for La Mina Project, Colombia

Production	LOM	Avg / Yr
Mining		
Total Tonnes Mined (Ore + Waste)	282,300,000 mt	29,050,000 mt
Total Ore Mined	42,500,000 mt	4,375,000 mt
Total Waste	239,800,000 mt	24,675,000 mt
Stripping Ratio (waste to ore)	5.6	5.6
Mill Recoveries		
Gold Recovery	90%	90%
Copper Recovery	88%	88%
Silver Recovery	30%	30%
Metal Production		
Gold in Concentrate	907,400 oz	93,409 oz
Copper in Concentrate	200,368,886 lbs	20,626,209 lbs
Silver in Concentrate	780,703 oz	80,367 oz

Open pit mining will take place two distinct areas: La Cantera and Middle Zone. La Cantera consists of a single pit mined in three phases. Middle zone consists of a single phase pit. The pit and phase outlines are shown in Figure 16.1. All pits and phases were defined by Whittle Optimized Pit Shells based on the resource models described in Section 14. Dilution was assumed to be included in the model blocks, given the size of the blocks relative to mineralized zones and loading equipment. Mining would take place on 10m benches using haul roads with maximum 10% grades for access.

1.7 Process

Ore from the La Cantera and the Middle Zone pits will be treated in a moderately sized conventional concentrator producing a copper concentrate. The concentrator will initially treat a nominal 12,500 metric tonnes per day (t/d) of ore supplied from the La Cantera pit; later, ore will be received from the Middle zone pits.

The process plant is designed to process ore at a head grade of 0.6% Cu and 0.9 grams per tonne gold Au. These levels are higher than the highest sustained head grades of 0.3% Cu and 0.8 g/t Au, but the design provides the flexibility to accommodate a wide range of head grades over the project life. The plant design also allows for 20% day-to-day fluctuations in throughput.

1.8 Infrastructure

1.8a Transportation

La Mina is well situated in terms of access to regional highways for both north and south conveyance. Highway 25 connects major transportation hubs in the north and south of the country, and nearby local roads have good access to the highway. The roughly 11[kM] of off-highway roads needed to access the mine site will require some expansion and drainage improvements to allow heavy machinery and equipment to reliably pass, but nothing exceptional. Road transport of goods is the primary method of delivery accounting for more than seventy percent of material transport in Colombia.

Rail service is not the prime carrier in Colombia which may offer benefits in pricing. Rail only transports around twenty-five percent of all national goods. Given the rail access available from the nearest industrial city of Medellin northward to the ports of Santa Marta and Cartagena, bimodal transport may prove profitable depending on the location of the ore smelter. In the south only the city of Cali is connected to its nearby port of Buenaventura by rail. If northbound rail service from nearby the mine is desired, decommissioned railway tracks lay within 20[kM] and while repairs would be required, it may be cost saving over time.

1.8b Power

Favorable investment conditions have helped electricity generation keep up with demand and avoid any major blackouts since 1991. In spite of this improvement, electricity transmission lines still do not reach some geographically isolated areas of the country, due to its proximity to Medellin, electrical power will not be an issue for La Mina project.. . The majority of generated power is produced from hydroelectric plants with most of the rest coming from biomass oxidation. The mine site lies within a few dozen kilometers of a 200[kV] power substation, though the additional output capacity of this substation is unknown. Local backup power generation would be advisable.

Colombia has some reserves of natural gas, and coal, which are exported. A nearby gas pipeline may be welcome for the generation of power, should auxiliary power be required. Coal delivery though, may prove problematic without nearby rail service.

1.8c Labor

Unskilled labor is available in the area.. Locally, there exists a reasonably large class of high school educated locals , which may provide a workforce with some inkling of the process and methods at reasonable cost.

1.8d Water

Water at the site is plentiful with access to seasonal and year-round streams. On site wells should also produce exceptionally depending on location.

1.8e Security

Colombia, especially the Medellin area has made great strides in the protection of industry and persons since the 1980s. However, local some narcotics forces still endanger commerce to some degree. Measures should be taken against non-governmental actions to avoid such inconveniences; such as transport of ore, and electrical power at the mine site.
Care should also be given in the selection of local heavy equipment lease, as extra-governmental bodies may control the majority of this equipment in the area.

1.9 Environmental and Social

The Bellhaven Project intends to comply with applicable environmental and social regulatory requirements of the Colombian and Regional regulatory agencies and with International standards as dictated by the Equator Principles, International Finance Corporation Principles, Performance Standards and Guidelines, and the World Bank Guidelines. The development of an Environmental and Social Impact Assessment (ESIA) will be required by the government of Colombia to acquire a mining operations permit and by Western Lenders as part of their requirements to provide support for project development.

The ESIA should include a baseline assessment of the site, expected impacts due to Project activities, mitigation actions required to prevent environmental and social impacts, and monitoring programs to determine the success of mitigations. Development and implementation of detailed environmental and social management plans will be required to address construction, operations, closure and post-closure periods of the Project. Closure and post-closure management plans should include appropriate maintenance and continued monitoring of the site, pollution emissions and potential impacts. The duration of monitoring and subsequent mitigations (if required) will be extended through the post-closure period, which should be defined on a risk basis with typical periods requiring a minimum of 5 years after closure or longer.

1.10 Financial Analysis

Table 1.3 Key Financial Projections for the La Mina Project, Colombia

Key Financial Projections	LOM	Avg / Yr
Payable Metal		
Gold	862,030 oz	88,738 oz
Copper	190,350,441 lbs	19,594,898 lbs
Silver	718,247 oz	73, 937 oz
Gross Revenues (based on $1400/oz gold, $3.25/lb copper, $20/oz silver prices)		
Gold	$ 1,206.84 million	$ 124.23 million
Copper	$ 618.64 million	$ 63.68 million
Silver	$ 14.36 million	$ 1.48 million
Total Gross Revenues	**$ 1,839.85 million**	**$ 189.40 million**
Net Project Revenues	**$ 1,689.95 million**	**$ 173.97 million**
EBITDA	**$ 855.10 million**	**$ 88.03 million**
Net Income (Before Tax)	**$ 475.92 million**	**$ 48.99 million**
Income Tax	**$ 155.41 million**	**$ 16.00 million**
Net Income (After-Tax)	**$ 320.50 million**	**$ 32.99 million**

1.11 Recommendations

SEWC recommends that Bellhaven implement the following resource development plans at La Mina.

- Evaluate the exploration opportunity to further expand the La Cantera resource, and evaluate possible connections to Middle Zone at depth. Drill test resulting targets.
- Evaluate the exploration opportunity for expansion of the Middle Zone deposit, particularly at depth. Drill test resulting targets.
- Drill test the exploration opportunity at the La Garrudia target. Met tests indicate these responde as the first tests in the Middle Zone and La Cantera
- Evaluate the requirements for infill drilling to upgrade the La Cantera resource to M&I
- Evaluate the requirements for infill drilling to upgrade the Middle Zone resource to M&Idvance the metallurgical evaluation of the La Cantera mineralization for input to future engineering studies, new drilling needs to be accomplished for new samples for lock-cycly-tests. For a pre-feasibility study.
- Advance the metallurgical evaluation of the La Cantera, Middle Zone and the La Garrcha mineralization for input to future engineering studies same reasons as above. New samples are required for lock-cycle tests for a pre-feasibility study. The La Garucha are appears similar to the other areas.
- All areas need further metallurgical work, particularly lock-cyclye tests to prove overall viability and potential recovery from the cleaner tails

The recommended budget for the drilling noted in the first three points is detailed below.
Advancing El Garrucha and Middle Zone targets: 2000m DH………………….$600,000
Expanding Middle Zone: 2500m DH………………..…$750,000
Drilling between Middle Zone and La Cantera: 2000m DH………………..…$600,000
TOTAL: ……………………………………………………………………………...$1,350,000

2.0 Introduction and Terms of Reference

2.1 Purpose of Technical Report

At the request of Patrick Highsmith - Past Director and CEO of Bellhaven, a technical report on the resources was prepared by Scott E. Wilson Consulting, Inc. ("SEWC") and this PEA was prepared at the request of Milagros Paredes on the La Mina Project ("La Mina"), Municipality of Venecia and Fredonia, Department of Antioquia, Colombia. The purpose of this report is to provide Bellhaven and its investors with an independent opinion on the technical and economic aspects as well as the mineral resources at La Mina. The report updates the August 29, 2012 La Mina Technical Report with additional mineralization identified and developed on the Middle Zone. This report conforms to the standards specified in Canadian Securities Administrators'

National Instrument 43-101, Companion Policy 43-101CP and Form 43-101F. The information in the report is current as of August 15, 2013.

This report describes the property geology, mineralization, exploration activities and exploration potential based on compilations of published and unpublished data and maps, geological reports and a field examination by the author. The authors have been provided documents, maps, reports and analytical results by Bellhaven. This report is based on the information provided, field observations and the author's familiarity with mineral occurrences and deposits and economics for development in Colombia and worldwide. All references are cited at the end of the report in Section 18, References.

The Scott E. Wilson of SEWC visited La Mina most recently on August 18 and 19, 2012 accompanied by Brad Yonaka, Former VP Exploration for Bellhaven.

This PEA report was prepared by InterPro Development Inc (InterPro) and Scott E. Wilson, SEWC, and the authors have participated in all aspects of this report. There is no affiliation between InterPro and Mr. Wilson and Bellhaven except that of independent consultant/client relationship.

2.2 Terms of Reference

This amended technical report addresses the addition of the Middle Zone mineralization to the La Cantera mineral resources that are described in a preceding technical report (Wilson 2011). Prior to this report the La Mina Property included resources exclusively identified in the La Cantera Porphyry. This technical report now addresses additional resources estimated for the Middle Zone Porphyry. The proximity of La Cantera and Middle Zone are close enough that both mineral occurrences could be processed by a common infrastructure.

2.2a Abbreviations

m .... meter(s)
km .... kilometer(s)
g/t .... grams/tonne
Ha .... Hectares
oz .... ounces
au .... gold
ag .... silver
cu .... copper
zn .... zinc
pb .... lead

2.2b Common Units

Gram	g
Kilo (thousand)	k
Less than	<
Million	M
Parts per billion	ppb
Parts per million	ppm
Percent	%
Square foot	ft2
Square inch	in2
Square meter	m2
Tonne	t
Tonnes per day	tpd
Tonnes per hour	tph
Tonnes per year	tpy

2.2c Common Chemical Symbols

Calcium carbonate	CaCO3
Copper	Cu
Cyanide	CN
Gold	Au
Hydrogen	H
Iron	Fe
Lead	Pb
Silver	Ag
Sodium	Na
Sulfur	S
Zinc	Zn

2.2d Common Acronyms

AA	atomic absorption
AuEq	gold equivalent
CIM	Canadian Institute of Mining, Metallurgy and Petroleum Engineers
ISO	International Standards Organization
NPI	Net profit interest
NSR	Net Smelter return
RQD	Rock quality designation
RC or RVC	Reverse circulation

3.0 Reliance on Other Experts

The authors made reliance on experts who are not Qualified Persons in the preparation of this report. Interpro added Environmental and Geotechnical personnel, whom while not QP rated added to the understanding of the project and are covered under the InterPro QP rating of Greg Chlumsky.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Area and Location

The La Mina project consists of two properties; 1) the 1,794 hectare La Mina Colombian mineral exploration license identified as Exploration License L5263005 ("concession"); 2) the 1416 hectare La Garrucha earn-in agreement license with Exploration License No. HHMM04.

The concessions are located near Medellin in the Department of Antioquia, Colombia approximately 500 km north-west of the Colombia's federal capital of Bogotá. This region has a long history of gold mining extending back several centuries. Now several parts of Antioquia are among the most active gold exploration regions in Colombia.

The closest settlement, La Mina, lies immediately adjacent to the La Mina Project. The larger town of Venecia, approximately 11km from the project, provides a source of supplies and logistical support for the project, rural farming activities, and for several small underground coal-mining operations in the near area.

4.2 Mineral Tenure

The La Mina project property consists of two Exploration Licenses totaling 3210 hectares. Namely the 1798 hectare La Mina license with Exploration License No. L5263005 and the La Garrucha license with Exploration License No. HHMM04. The location and details regarding the claim block are outlined in Table 4.1 and are shown in Figure 4.2. Exploration license number L5263005 was granted by the Instituto Colombiana de Geologia y Minera ("INGEOMINAS") to Alejandro Montoya-Palacios ("Montoya") in early 2000 as an Exploration Concession under the mining code of the country which grants the operator the right to explore over a 3-year renewable period under certain conditions for an additional two years including submission of a work plan known as a "*Plan de Trabajo de Inversión*", or PTI.

Table 4.1 La Mina Property Ownership

License Number	Size Hectares	Registered Title Holder
L5263005	1,794	Mr. Alejandro Montoya-Palacios
HHMM04	1,416	AngloGold Ashanti Colombia S.A.

Bellhaven's Colombian subsidiary, Aurum Exploration Inc. Colombia ("Aurum") signed an option agreement with Montoya to acquire 80% of the concession. The property is being held jointly by both parties through Mina Fredonia S.A.S. ("Fredonia"). Aurum can acquire the remaining 20% of the concession at a cost of US$20/oz applied to 20% of the ounces classified as "Proven Reserves" as defined by CIM Definition Standards.

The terms of the agreement to purchase 80% of the concession involve payments totaling US$4.4 million in cash and $US1.6 million in Belhaven shares. The payments to Montoya follow a four year payment plan which was initiated on 15 April 2010. The principal terms of the contract are as follows:

- On 15 April 2010, an amount of One Hundred Thousand US Dollars (US$ 100,000) - Paid.
- On 15 May 2010, an amount of One Hundred Thousand US Dollars (US$ 100,000) – Paid.
- On 15 October 2010, an amount of One Hundred Thousand US Dollars (US$ 100,000) and shares of stock in Bellhaven for a value that will be the equivalent of another One Hundred Thousand US Dollars (US$ 100,000) - Paid
- On 15 January 2011, an amount of Three Hundred Thousand US Dollars (US$ 300,000) and shares of stock in Bellhaven for a value that will be the equivalent of another One Hundred Thousand US Dollars (US$ 100,000) - Paid
- On 15 April 2011, an amount of Six Hundred Thousand US Dollars (US$ 600,000) - Paid
- On 15 October 2011, an amount of Six Hundred Thousand US Dollars (US$ 600,000) and shares of stock in Bellhaven for a value that will be the equivalent of another Six Hundred Thousand US Dollars (US$ 600,000) – Paid.
- On 15 April 2012, an amount of Six Hundred Thousand US Dollars (US$ 600,000) - Paid
- On 15 April 2013, an amount of One Million US Dollars (US$ 1,000,000) – USD$500,000 Paid, US$200,000 pending; US$300,000 to be paid in December 2013.
- On 15 April 2014, an amount of One Million US Dollars (US$ 1,000,000), and shares of stock in Bellhaven for a value that will be the equivalent of another Eight Hundred Thousand US Dollars (US$ 800,000).

To purchase the remaining 20%:

- Montoya shall be notified in writing about the intention to buy the remaining twenty percent (20%) and Montoya shall then be paid an amount that is the equivalent of twenty US dollars (US$ 20.00) per ounce of gold for twenty percent (20%) of "proven mineral reserves", as determined in a Feasibility Study conducted in accordance with the special Canadian standards thereto.
- The price of twenty US Dollars (US$ 20.00) refers only to the proven reserves of the twenty percent (20%) still belonging to Montoya, as Aurum shall by then already have acquired eighty percent (80%) of the reserves.

It should be noted that the Montoya Agreement provides for partial vesting in the mineral rights according to the above payment schedule. Under the contract, as of the payment in April 2012, Aurum is 43% vested in the La Mina mineral rights. The payment scheduled for April 2013 will result in Aurum reaching 56% equity in the mineral claim. Once the total indicated amounts have been paid, Aurum shall be the owner of one hundred percent (100%) of the Mining Rights and hence shall be the only registered beneficiary of the SAS Shares and the Concession.

La Garrucha exploration license, No. HHMM04, owned by AngloGold Ashanti Colombia S.A. was optioned by Bellhaven in 2013 to further exploration of a Au-Cu porphyry indicated by the surface and drilling exploration in 2011 and 2012 respectively. The details of the agreement are below.

Under the terms of the agreement, Bellhaven will invest US $8.5 million over a three-year period, including US $1.0 million in the first year, US $ 3.5million in the second year, US $4million in the third year and define a NI 43-101 compliant resource in order to earn its interest. Amounts invested by Bellhaven during a single year in excess of this yearly schedule will be credited to the following year's requirement.

After the earn-in period, should the newly discovered mineral resource be less than 3.0 million ounces of gold or gold-equivalent, Bellhaven will have earned 100% interest in the Property. In the event the resource exceeds the 3.0 million ounces of gold or gold-equivalent, AGAC will have a one-time option to back-in to 51% interest in the La Garrucha concession and form a joint-venture. In order to exercise this option AGAC must elect to pay Bellhaven US $17 million in cash, which is two times the amount expended by Bellhaven during the earn-in period, within 60 days of receiving confirmation of the earn-in and a compliant mineral resource that meets the size criterion. If AGAC backs into the La Garrucha Project it can earn an additional 24% equity (for a total of 75% ownership) by fully funding the preparation of a NI 43-101 compliant pre-feasibility study. If the back-in conditions are not met or AGAC elects not to exercise it one-time back-in right, it will retain no further interest in the Property except for a 2% NSR royalty on future gold production and a 1% NSR royalty on the future copper productions (Bellhaven has the right to purchase half of these royalties).

As the mineralised La Garrucha porphyry is known to exist near the boundary between the two licenses, the parties chose to outline an Area of Interest (”AOI”) that included the majority of the near-surface anomaly (see Figure 4.2). The AOI includes a 400m wide strip of Bellhaven's La Mina license. Furthermore, if a joint venture is formed in the future, this narrow strip of Bellhaven mineral rights may be vended into the joint venture to facilitate full development of the La Garrucha mineral resource. Neither AGAC nor the possible future joint venture will have any rights to any other portions of the La Mina concession, including the mineral resources at the La Cantera and Middle Zone deposits.

4.3 Surface Rights Agreements

Bellhaven signed an additional agreement with B2 Gold regarding purchase of the surface rights over 60 hectares around the exploration camp site and immediate project area; this allowed Aurum to acquire these surface rights for a total of US$470,000 over a 3-year period. During 2011, Bellhaven completed the payments under this agreement and now owns 100% of the surface rights governed by the agreement with B2 Gold.

During 2012, Bellhaven also acquired additional surface rights over the El Limon target. In April, the Company contracted with a private vendor for the purchase of 100% interest in a surface property encompassing 9.75 hectares to the north of the Middle Zone (the El Limon property). The property acquisition will be closed in Q3 of 2012 for a total purchase price of US $15,315 in cash.

4.4 General

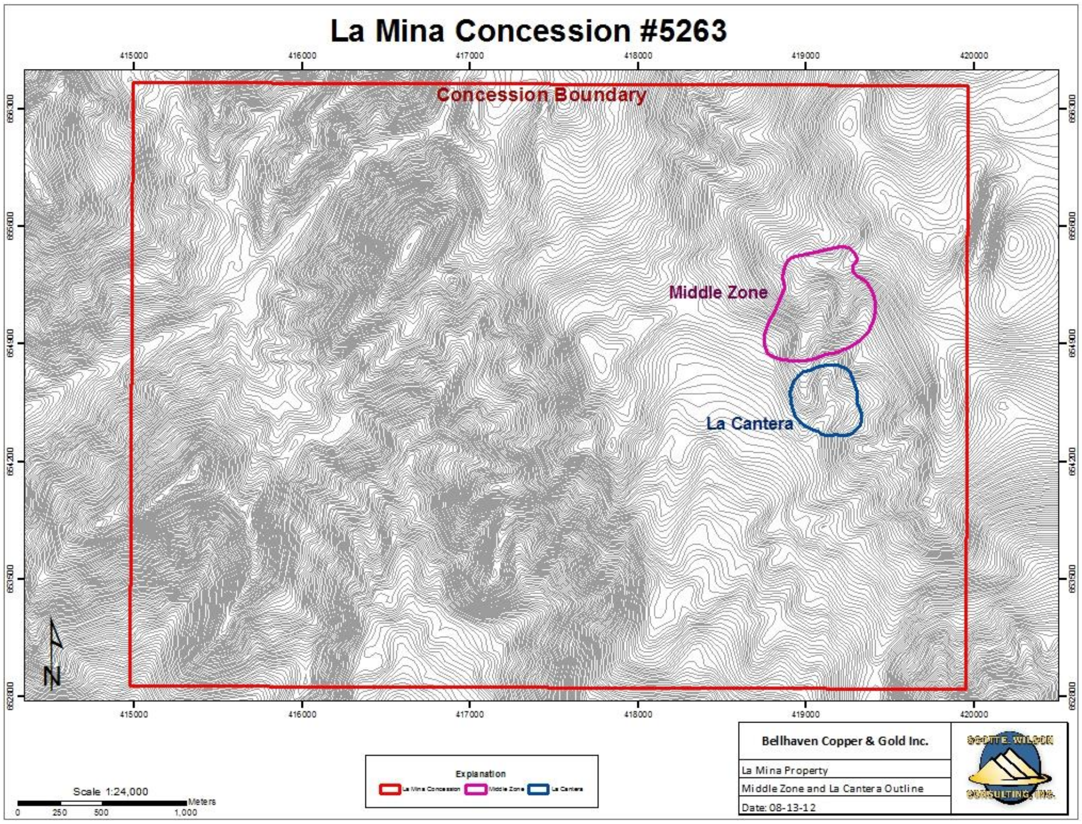
The authors know of no other known royalties, back in rights, payments or any other agreements to which the property is subject.

There are no known environmental liabilities to the La Mina project.

There are no known factors and risks that affect access, title, or the right or ability to perform work on the property.

Figure 4.1 Location of the La Mina Property

Figure 4.2 Claim Map Showing Location of La Mina Porphyry Bodies in Relation to Concession Boundaries



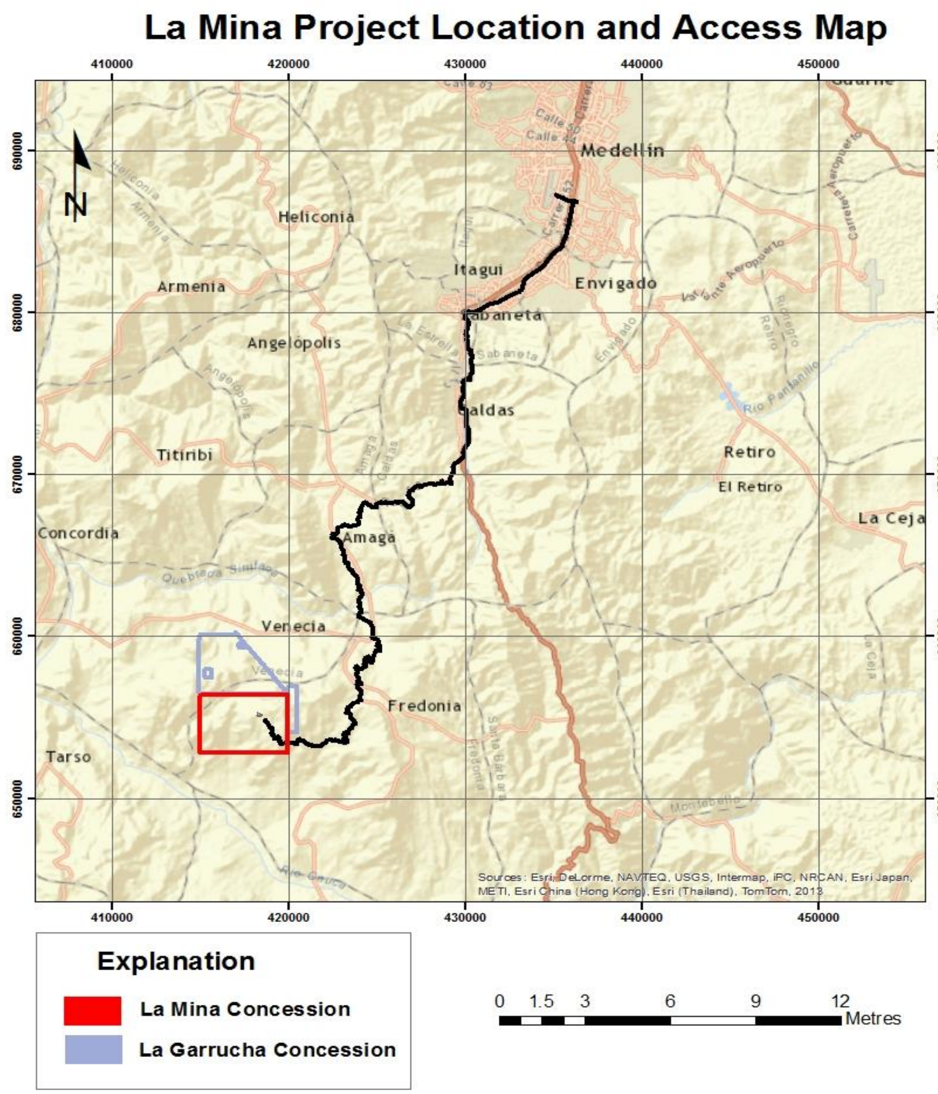
5.0 ACCESS, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access and Infrastructure

Access and infrastructure surrounding the La Mina project are good. The area is surrounded by gravel roads which connect a rural farm population to various nearby population centers, including Medellin which is a large cosmopolitan city (Figure 5.1). Various small towns, including Bolombolo and La Pintada are located within a two hour drive of the project area.

La Mina is accessed on a paved highway 30km southwest of Medellin to the junction with a gravel road that leads 11km to the property. Total travel time by road from Medellin is approximately 2.0 – 2.5 hours depending on road conditions and traffic around Medellin.

Figure 5.1 Location and Access to the La Mina Project.



The economy surrounding La Mina is rural. Agricultural activities dominated by coffee and mixed-crop farming are the principal sources of land use and income.

While Bellhaven owns a considerable area of surface rights over the La Cantera and Middle Zone deposits, the Company has also secured surface access agreements with other property owners in the area of planned exploration and drilling. Additional surface rights may be necessary for the establishment of a commercial mining project.

Water, power and labor are readily available at the project site. Local labor is not trained in modern exploration and mining methods, indicating the need to provide training and import qualified personnel. All requirements (personnel, equipment, contractors) for project exploration and development are available in Medellin. Heavy equipment and diamond drills are readily available throughout Colombia.

5.2 Physiography

The project area is located on the eastern slopes leading up from the Cauca River which marks a major physiographic feature marking the limit between the Western and Central physiographic regions where the La Mina Property is located.

The topography in the property area can be described as tropical mountainous, with sharp positive and negative changes in relief from an average elevation of approximately 1,700 m with ridges cresting at approximately 2,000 m.

The property is essentially 100% vegetated by Andean forest, dense secondary scrub growth, agricultural crops and grassy cattle pastureland.

5.3 Climate

The climate in this district can vary abruptly with elevation: below an elevation of ~1,000 m (in the Cauca river valley) the climate is hot (>24°C) while higher up it tends to be temperate (18°C to 24°C) between 1,000 m and 2,000 m, and then becomes cool above 2,000 m (12°C to 18°C). Annual rainfall is approximately 2,000 mm with the wettest months being from March to May, and then again from September to December.

6.0 HISTORY

6.1 Exploration Prior to 2002

The Antioquia district of Colombia in which the La Mina Property is located has been a source of gold mining that goes back several centuries to pre-Colombian times. Small-scale artisanal mining, some from hard-rock sources and some from alluvial deposits, were common throughout the district and so "pirquieniero" prospectors were likely active throughout the Central Cordillera district on either flank of the River Cauca.

The general area around La Mina was been noted in early regional survey work by the Colombian mines department, INGEOMINAS and this led to the staking of ground by the original and still current owner, Sr. Alejandro Montoya in 2000.

Historical research by Bellhaven has revealed local knowledge of several adits that targeted gold in the vicinity of the Middle Zone prospect. At one point, these mines were reportedly managed by a small-scale mining company from England. In addition, several streams originating from the resource areas were exploited by artisanal miners, some of whom still live in the area. No records of production are known to exist, though different sources corroborate that mining activity goes back to at least the 1920's.

6.2 Exploration 2002 – 2008

In the early 2000s, AngloGold Ashanti (AGA) carried out broad-scale geochemical and other exploration programs throughout this district of Colombia and was responsible for the initial discovery of copper-gold mineralization on surface at the La Cantera outcrop. In 2006, AGA drilled six holes into the La Cantera target, four of which successfully intercepted the gold-copper porphyry stock with mineralized intercepts of 50-100m.

In 2007, AGA formed the Avasca Joint Venture with Bema Gold (subsequently transferred to B2Gold) who continued with further surface geochemistry and geophysics north and south from the La Cantera discovery, as well as further west over a prominent N-S trending magnetic ridge feature identified from aerial geophysics flown by the Avasca JV in 2007.

The early exploration work at La Mina by AGA beginning in 2002 and later in 2005-08 by the Avasca Joint Venture (Avasca) focused on the principal La Cantera Zone. These programs consisted of:

- Regional mapping, 1:20,000 scale
- Property-scale geological mapping: 1:10,000 scale
- Geochemical sampling, soils and rock
- Trenching

- Geophysical surveys: aerial magnetic and radiometrics
- Drilling: six, core holes totaling 1,453 m (mid-2006) – AGA
- At the end of 2007, a regional airborne magnetic/radiometric survey was completed over the Property and neighboring ground (Avasca)
- In early 2008, the aerial geophysics was followed by additional auger soil and rock geochemical sampling programs over the anomalies (Avasca).
- Various sampling methods have been used to explore the La Mina Property, as follows:
- Regional-scale soil and rock/trench sampling carried out by AGA in 2002 which led to the discovery of the porphyry mineralization at the La Cantera zone.
- In 2007/08, additional soil sampling was completed by the Avasca joint venture over the aero-magnetic anomalies identified from their aerial geophysics (2007). This soil sampling was completed on an irregular grid, widely spaced over the entire 1,794 ha Property area (123 samples), but principally focused on the area around the La Cantera prospect and immediate vicinity (~1 km by 1 km). A later rock sampling program in 2008 collected 857 samples on a 100 m standard grid, and focused on La Cantera and some nearby magnetic anomalies.

Figure 6.1 illustrates the prominent magnetic features interpreted from aerial geophysics flown by the Avasca Joint venture in 2007. Identified clearly is the high magnetic response of the La Cantera porphyry stock at the southern end of the red rectangular block.

6.3 AGA Drilling

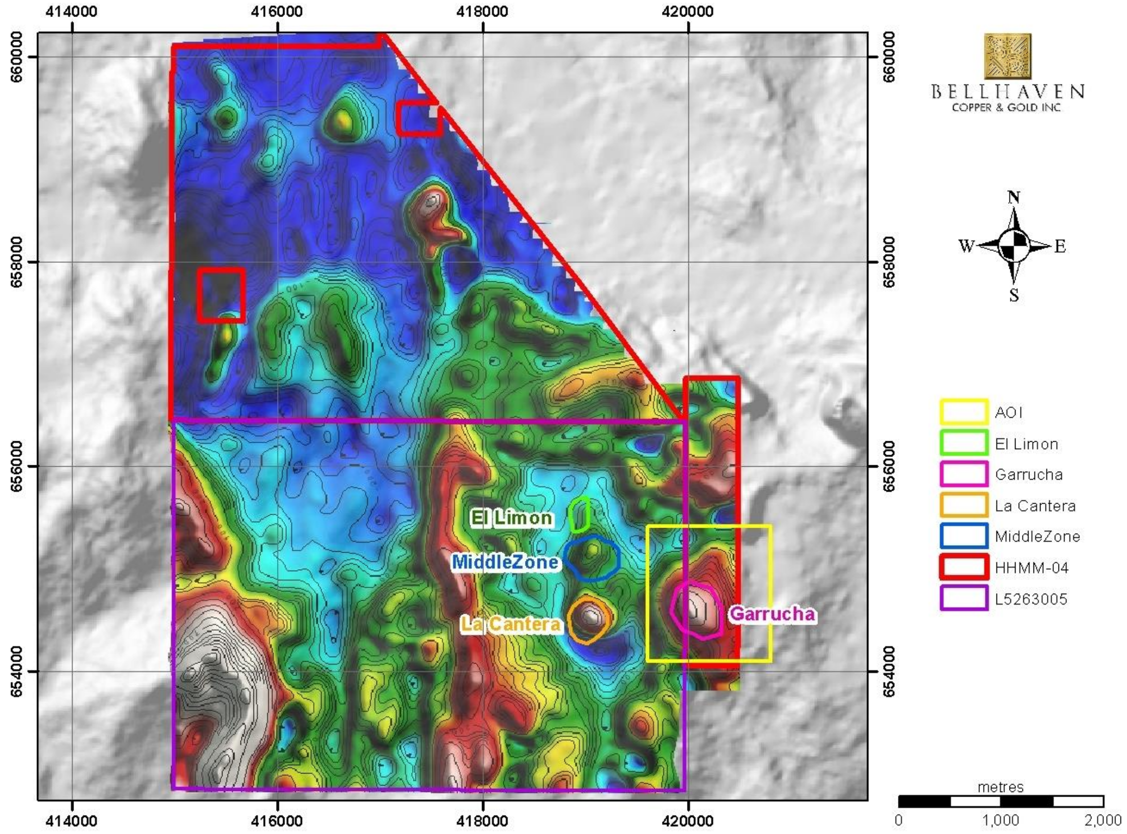
Six AGA drill holes were completed in and around the La Mina porphyry (later re-named the La Cantera Stock), with Holes 2 and 5 yielding 90m plus intercepts of greater than 1 g/t Au and good copper grades at shallow depths. Drill-holes 4 and 6 also contained significant values located near the surface; however Holes 1 and 3 were drilled off target to the west and did not encounter any mineralization of interest (Table 6.1).

Table 6.1 AGA Drill Results

Drill Hole	Dip	TotalDepth, m	Significant Intercepts	
			m	Au g/t/Cu %
LM-01	-60.5	258	No Significant Intercepts	
LM-02	-58.5	189	152	0.82/0.26
LM-03	-60.5	201	No Significant Intercepts	
LM-04	-60	250	106	0.32/0.21
LM-05	-60	252	106	1.11/0.40
LM-06	-60	304	122	0.40/0.24

Figure 6.1 Portion of Aerial Magnetics, Avasca Joint Venture 2007

Total Magnetic Intensity – Reduced to Pole



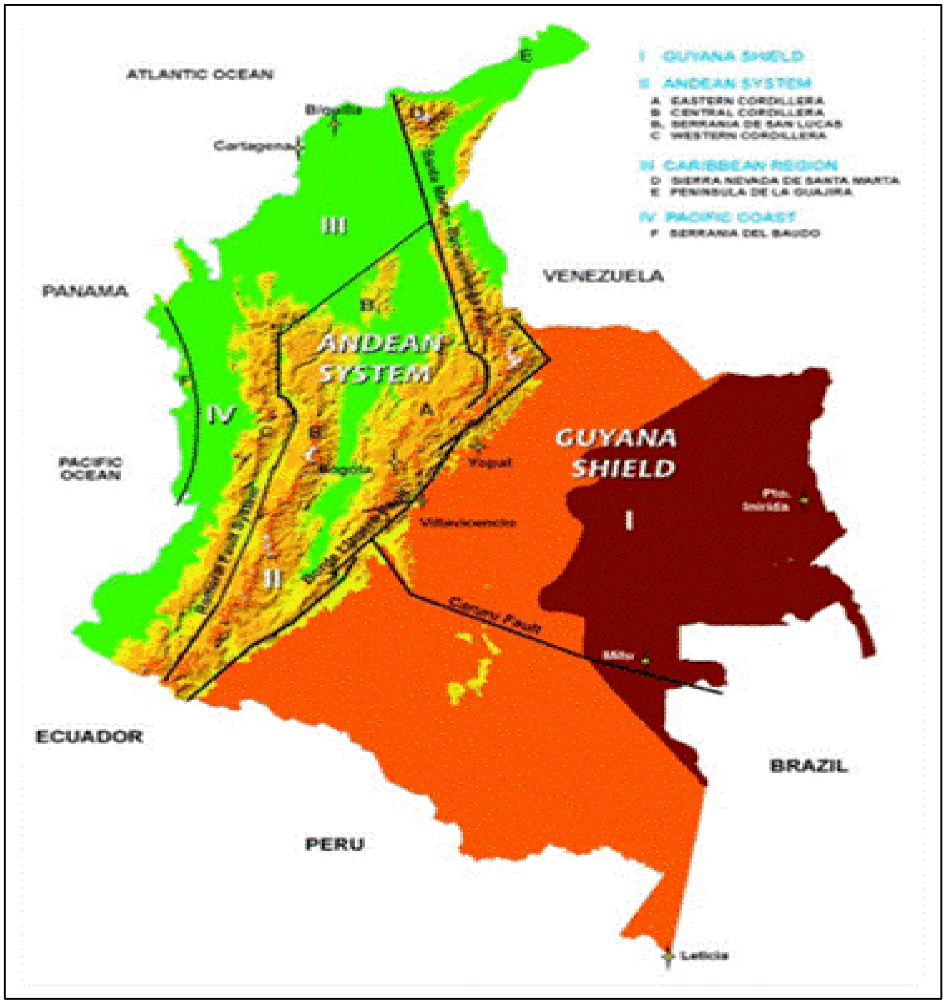
7.0 GEOLOGICAL SETTING AND MINERALIZATION

Colombia can be divided into four distinct geomorphological regions (Figure 7.1 and below):

1. The Guyana Shield
2. The Andean System
3. The Caribbean Region
4. The Pacific Coast Region

The La Mina property is located along the eastern margin of the Western Cordillera in the Andean System (Figure 7.1).

Figure 7.1 Geomorphological Regions of Colombia Showing the Approximate Location of La Mina.

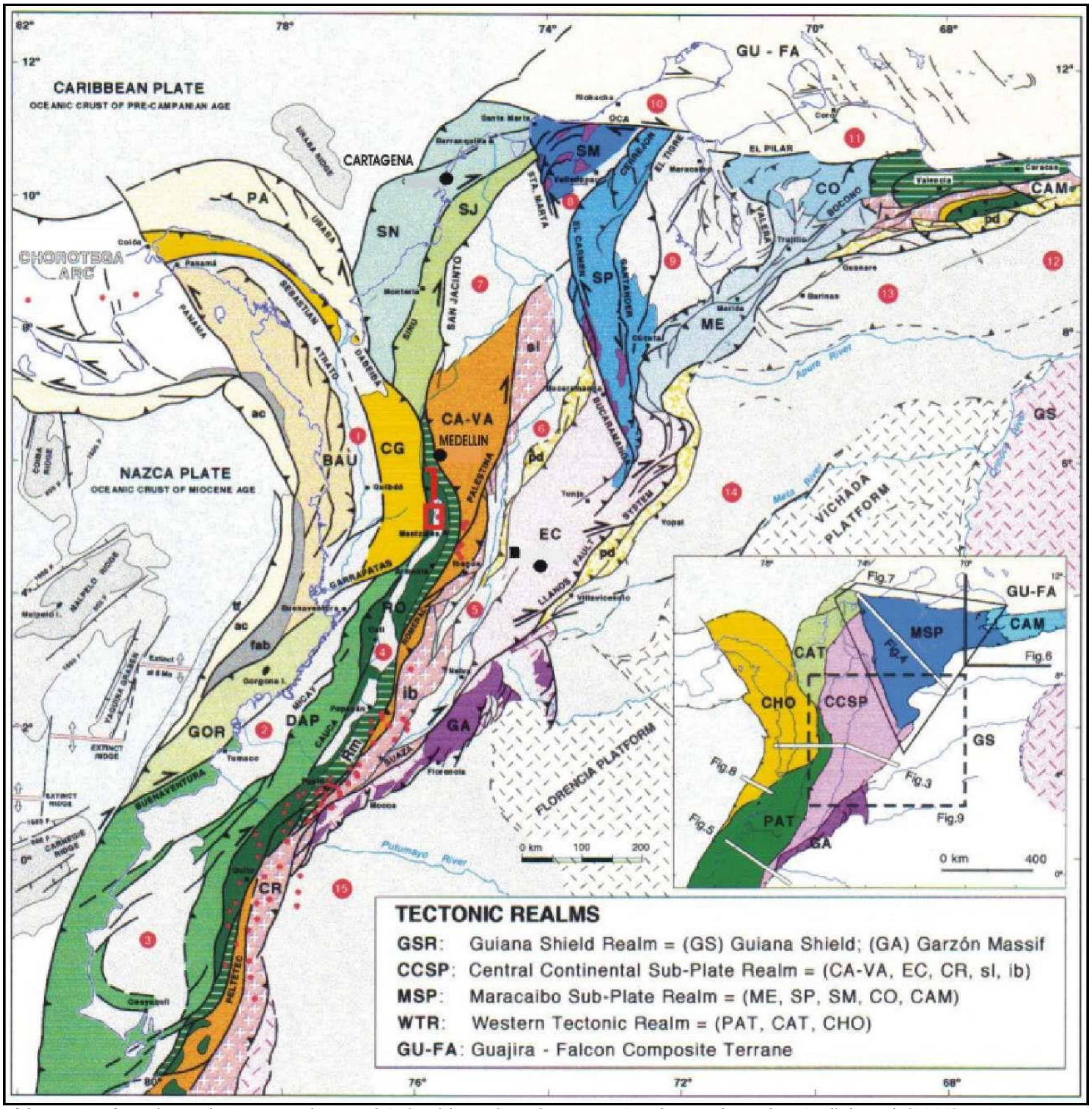


The La Mina region lies within the Romeral terrane, an oceanic mélange comprised of metamorphosed mafic to ultramafic complexes, ophiolitie sequences and oceanic sedimentary rocks of probable Late Jurassic to Early Cretaceous age (Cediel & Cáceres, 2000; Cediel et al., 2003). This terrane was accreted to the continental margin along the Romeral Fault, which lies east of the River Cauca, in the Aptian (125 to 110 Ma). Movement on the Romeral Fault was dextral indicating that terrane accretion was highly oblique from the southwest. The Romeral Fault zone is marked by dismembered ophiolitic rocks, including glaucophane schist, in a tectonic mélange and is interpreted as a terrane suture marking an old subduction zone. The resulting suture zone and mélange-related rocks can be traced for over 1,000 kilometers along the northern Andes. The Romeral terrane is bounded on the west side by the Cauca Fault. Further west, additional oceanic and island arc terranes were subsequently accreted to the Western Cordillera in the Paleogene and Neogene periods, culminating in the on-going collision of the Choco (or Panamá) arc since the late Miocene. This reactivated the Cauca and Romeral faults with left lateral and reverse movements (Cediel & Cáceres, 2000; Cediel et al., 2003). The original structure of the Romeral fault system has been modified by various post-Romeral tectonic events.

Following accretion, the Romeral terrane was overlain unconformably by siliciclastic, continentally derived sediments of the Oligocene to Lower Miocene Amagá Formation. The Amagá Formation, comprises basal conglomerates, sandstones, siltstones, shales and local coal seams (Durán et al., 2005). These sedimentary rocks are overlain by a thick sequence of volcanic and sedimentary rocks of the Late Miocene Combia Formation. The Combia Formation is divided into a Lower Member of basalt and andesite lava flows, agglomerates and tuffs, and an Upper Member of conglomerates, sandstones and crystal and lithic tuffs (Durán et al., 2005). The Combia Formation volcanic rocks were associated with at least one Middle to Late Miocene volcanic arc emplaced into the Romeral terrane basement rocks during this time period. Also associated with latest stages of arc formation was the syntectonic emplacement of a series of shallow-level intrusive rocks, including poly-phase hypabyssal stocks, dikes and sills of dioritic, granodioritic and monzonitic composition. These intrusive rocks cut all of the aforementioned sedimentary and volcanic units of the Amaga and Combia Formations. K-Ar whole rock ages for the intrusive rocks range from 8 to 6 Ma (Cediel *et al.,* 2003). The Combia Formation and accompanying hypabyssal intrusive rocks are well represented along a *ca.* 100 kilometer by 20 kilometer N-S trending belt extending from Anserma in the south to Jerico, Fredonia and Titiribi, located to the north of the La Mina project (Figure 7.2).

Following the early accretionary events, the region was subjected to compressional deformation during the early-middle-Miocene and middle-late-Miocene. In both cases the deformation was related to additional accretionary tectonic events taking place to the west along the active Pacific margin. The structural architecture of the Romeral fault and mélange system is essentially that of a 10+ kilometer wide series of N-S striking, vertically dipping, dextral transcurrent faults. Virtually all lithologic contacts within the Romeral basement rocks are structural in nature and are characterized by abundant shearing, mylonitization and the formation of clay-rich fault gouge. Structural reactivation during the Miocene resulted in orthogonal compression accompanied by mostly west-directed (back) thrusting and high- angle reverse fault development in the basement rocks. The Amaga Formation was deformed primarily into generally open, upright folds; local tilting and near isoclinal folds were associated with the west-directed thrust faults. The Combia Formation records both tilting and open folding. Both the Amaga and Combia Formations exhibit moderate to strong diapiric doming where affected by the emplacement of the mid-late-Miocene suite of intrusive rocks. N-S, NE-SW, NW-SE and E-W striking conjugate shearing and dilational fracturing affect all of the above geologic units.

Figure 7.2 Tectonic Map of Colombia



Litho-tectonicand morpho-structural map of Colombia and northwestern South America, after Cediel *et al.* (2003). **RO = Romeral terrane; Rm = Romeral melange;** CA-VA = Cajamarca-Valdivia terrane; sl = San Lucas block; ib = Ibague block;; DAP = Dagua-Pinon terrane; CG = Canas Gordas terrane; BAU Baudo terrane SP = Santander massif - Serranfa de Perija; GS = Guiana Shield; GA = Garzon massif; ME = Sierra de Merida; SM = Sierra Nevada de Santa Marta; EC = Eastern Cordillera; CO = Carora basin; CR = Cordillera Real; GOR = Gorgona terrane; PA = Panama terrane; SJ = San Jacinto terrane; SN = Sinu terrane; GU-FA = Guajira-Falcon terrane; CAM = Caribbean Mountain terrane; fab = fore arc basin; ac = accretionary prism; tf = trench fill; pd = piedmonte; 1 = Atrato (Choco) basin; 2 = Tumaco basin; 3 = Manabf basin; 4 = Cauca-Patfa basin; 5 = Upper Magdalena basin; 6 = Middle Magdalena basin; 7 = Lower Magdalena basin; 8 = Cesar-Rancherfa basin; 9 = Maracaibo basin; 10 = Guajira basin; 11 = Falcon basin; 12 = Guarico basin; 13 = Barinas basin; 14 = Llanos basin; 15 = Putumayo-Napo basin; Additional Symbols: PALESTINA = fault\suture system; red dot = Plio-Pleistocene volcano; Bogota = town or city.

7.1 Property Geology

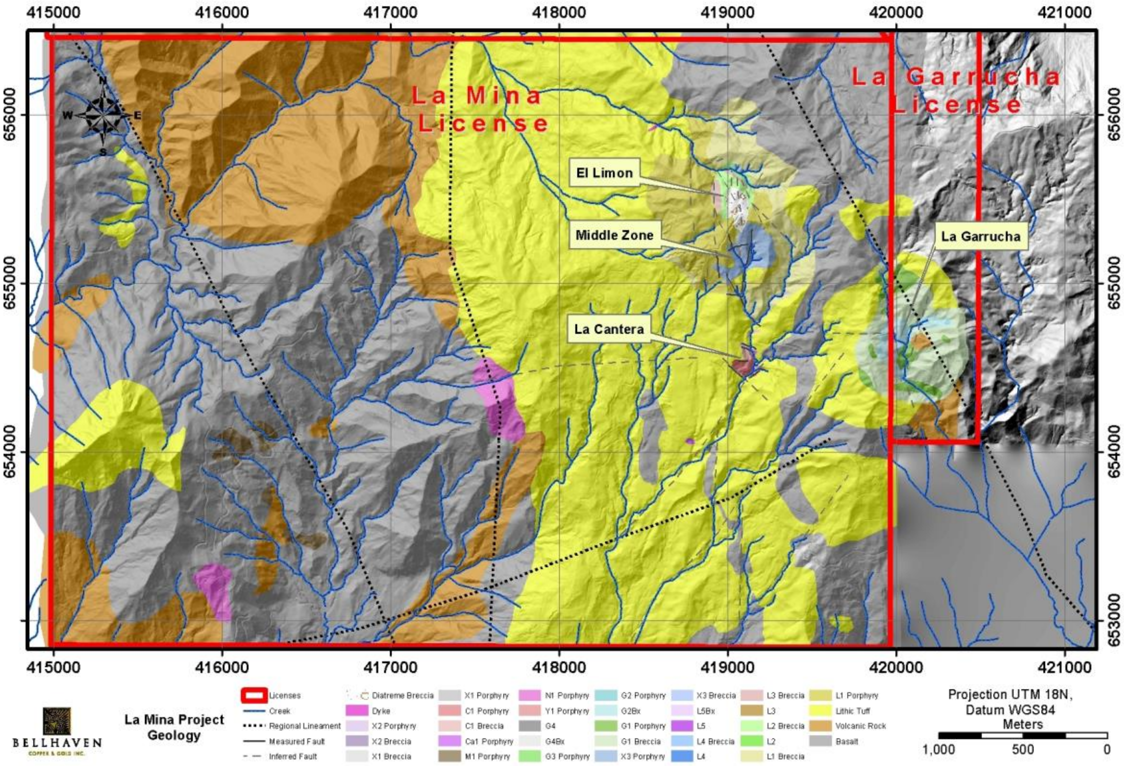
The La Mina Project lies within the Middle Cauca Belt of Miocene-age volcano-plutonic rocks of central Colombia that hosts several significant porphyry gold or copper-gold disseminated deposits such as La Colosa, Titiribi, Quebradona, and Quinchia, as well as large epithermal gold districts such as Marmato.

The immediate area around the La Mina Project is underlain by country rocks consisting of a series of basaltic volcanic rocks (Barroso Formation – oceanic tholeiitic basalts, dolerites, tuffs, etc), sedimentary rocks of the Amagá Formation, and an upper Combia Formation of basalts and andesitic basalts inter-layered with volcaniclastic rocks and coarse-grained sedimentary rocks (conglomerates, arenites).

At the project scale, the key host rocks for the porphyry-related gold, copper and silver mineralization are the intermediate composition volcanic rocks of the Combia Formation and the sub-volcanic breccias and related shallow level, porphyries which have intruded the Combia Formation. The Combia Formation developed within a Late Miocene magmatic arc that is interpreted to have included an early quiescent stage of volcanism and a later explosive event of wider extent.

Localized intrusive centers (e.g., La Cantera, Middle Zone, El Limon, and La Garrucha) comprise a series of intermediate composition porphyries and related intrusive (emplacement) breccias (Figure 7.3). The structural controls for these intrusive centers appears to have been provided by N-S, NE-SW and/or NW-SE trending, high-angle fault systems associated with the major Cauca River structure to the west of La Mina.

Figure 7.3 Generalized Geologic Map of the La Mina Project Area.



The following broad groupings of geological units have been interpreted and recognized from surface mapping and the drill core logging to date:

- Lithic and Crystal Tuffs (Combia Formation)
- Basalt-Andesite Lavas and Flows (Combia Formation)
- The La Cantera Porphyry and intrusive breccia
- The Middle Zone Porphyries and intrusive breccias
- The La Garrucha Porphyries and intrusive breccias
- The El Limon Porphyry
- Porphyry – undifferentiated
- Hydrothermal Breccia(s)

7.2 Intrusive Rocks

A good understanding of the intrusive rocks is key to understanding the porphyry-related Au-Cu mineralization. Intrusive rocks at La Mina consist of porphyries of probable intermediate composition. At least four different porphyries have been identified in the La Mina Project area and are distinguished by their mineralogy and texture. Other potential targets exist on the property, as distinguished from magnetic and geochemical anomalies. None of these additional targets have been drill tested to date. To standardize the naming conventions for the porphyry-related, intrusive lithologies used in logging and mapping, a generic lithology naming scheme was adopted. Modifiers such as “early” and “late” were dropped and rocks were named primarily based on the original mineralogy and texture and, in some cases, the absence or presence of and type of alteration.

As with other porphyry deposits worldwide, there is considerable overlap of the original mineralogy and texture of the different intrusive lithologies at La Mina. To date, four different centers of porphyry-related alteration and mineralization have been recognized: 1) La Cantera, 2) Middle Zone, 3) El Limon, and 4) La Garrucha. The phenocryst to matrix ratio of the intrusive lithologies varies from 50:50 to 80:20. The intrusive lithologies in all four intrusive centers contain essential plagioclase and amphibole phenocrysts, some lithologies contain minor but important amounts of magmatic biotite, and quartz phenocrysts or “eyes” are sparse. The dominant accessory mineral is magnetite; sphene, where observed, appears to be an alteration product of magmatic biotite or amphibole.

The porphyry “families” were named very simply for the geographic location of where they were first encountered (C – La Cantera, L – El Limon and G – La Garrucha) or in the case of the X family, because the origin and significance of these porphyries were “uncertain”. The numerical modifiers reflect the order in which the different members of a family (when more than one has been identified) were identified and not the relative age of the members of a family. For example, in the X family of Middle Zone, X1 was the first X porphyry identified but it was later determined to be younger than X3 and older than X2. These relative ages are based on clearly defined contact relations between different members of the same family. In previous press releases and the initial NI 43-101 technical report describing the geology of the La Cantera area (May 2011), the C1 Porphyry and C1 Breccia were referred to as the “early intermineral porphyry” and “early intermineral breccia” and the X1 Porphyry and X1 Breccia were referred to as the “late intermineral porphyry” and “late intermineral breccia”. The intrusive rocks of the El Limon area follow the nomenclature of Middle Zone. The relative ages of the different intrusive rocks and breccias in the various intrusive centers are given in Table 7.1.

The relative ages of the different intrusive phases are well known within each intrusive center; however, to date, cross-cutting or contact relationships between C1 phases and L1 phases and X3 phases have not been observed. Hence, the relative ages of these lithologies cannot be determined definitively. Similarly, the relative ages of the intrusive phases in the La Garrucha area as compared with the other areas are not known. The porphyries and breccia at La Garrucha have only been mapped at surface and in limited drilling. The relative age relationships although becoming clear at La Garrucha are not clear with respect to the other porphyries, elsewhere in the project area.

Table 7.1 Lithological Descriptions					
La Cantera		Middle Zone		La Garrucha	
		X2 Porphyry	Youngest		
		X1 Breccia		G4 Breccia	Youngest
X2 Porphyry	Youngest	X1 Porphyry		G4 Porphyry	
X1 Breccia		X3 Breccia		G2 Breccia	
X1 Porphyry		X3 Porphyry		G2 Porphyry	
C1 Breccia		L1 Breccia		G1 Breccia	
C1 Porphyry		L1 Porphyry		G1 Porphyry	
Volcanic rocks	Oldest	Volcanic rocks	Oldest	Volcanic Rocks	Oldest

While there have been limited thin section studies of the Cantera and Middle Zone rocks, the detailed petrographic and mineralogical reports are pending at the time of this writing. The following lithological descriptions are derived from hand and drill core specimens exhibiting weak to intense alteration and should therefore only be considered as field terms. Associated with the porphyries are breccias which includes auto-breccia and contact breccia. An auto-breccia is described as an intrusive breccia with clasts and matrix of the same intrusive phase. Contact breccias occur at contacts of porphyries with older volcanic rocks of the Combia Formation or with older porphyries. The porphyries are described below from youngest to oldest.

7.2a X2 Porphyry (X2)

The X2 Porphyry is observed at the Cantera and Middle Zone prospects. This porphyry is believed to be one of the youngest porphyries at La Mina and as such is typically not mineralized or strongly altered. X2 Porphyry is composed of 70% phenocrysts and 30% fine-grained matrix. Phenocrysts are comprised of 45% plagioclase, 17% amphibole (hornblende?) and 7% biotite. Quartz phenocrysts are absent. Plagioclase phenocrysts are subhederal to euhedral tabular crystals ranging from 1.5 x 1.0mm to 1.0 x 1.0mm. Amphiboles occur as euhedral –subhedral crystals with bimodal sizes of 1.0 x 0.5mm and 3.0 x 2.0mm. Biotite is euhedral at 0.3 X 0.3mm size. Accessory minerals consist of 1% fine grained disseminated magnetite.

Alteration of the X2 porphyry where present is weak and typically propyllitic to intermediate argillic with chlorite-carbonate and chlorite-clay respectively, chlorite partially replacing amphiboles. Locally where X2 is altered, a trace to 1% disseminated pyrite is common.

7.2b X1 Porphyry (X1)

The X1 is a name applied to a different intrusive at La Cantera than at Middle Zone. It was recognized first at La Cantera as a post-mineralizing intrusive at the core of the deposit. It was originally described as a "late intra-mineral porphyry" because it is only weakly and locally mineralized. X1 Porphyry has a porphyritic texture with 65-70% phenocrysts and 30-35% very fine grained matrix. Phenocrysts are comprised of 45% plagioclase, 15-17% amphibole (hornblende) and 3-5% biotite. Quartz phenocrysts are absent. Plagioclase phenocrysts are typically subhedral to euhedral tabular crystals of two sizes, 1.5 x 1.0mm and 1.0 x 1.0mm. Amphiboles occur as euhedral –subhedral crystals of bimodal size of 0.4 x 0.2mm and 0.8 x 0.2mm. Biotite is euhedral at 0.3 x 0.3mm size. Accessory minerals consist of 1% fine grained disseminated magnetite.

The X1 at Middle Zone is a mineralizing intrusive that has a similar petrography to the X1 of La Cantera. However, in this case it exhibits strong to intense potassic alteration with secondary biotite and magnetite within and proximal to gold and copper mineralized zones. In well mineralized portions it shows a high Cu/Au ratio. Pervasive replacement of the fine grained feldspar matrix with potassium feldspar imparts a light pinkish buff color. In areas distal to mineralization, a condition met predominantly in Middle Zone, the unit may be argillically or propyllitically altered.

7.2c X3 Porphyry (X3)

The X3 porphyry is observed only at the Middle Zone prospect. Contact relationships indicate that it is younger than El Limon Porphyry but older than X1 and X2 Porphyries. The X3 Porphyry is a bimodal feldspar porphyry with a phenocryst:matrix ratio of 70:30. Phenocrysts consist of 45-50% plagioclase, 10-12% amphibole (hornblende) and 2-3% biotite. Quartz phenocrysts are absent. Plagioclase is typically bimodal with finer phenocrysts of 0.4x0.2mm and coarser phenocrysts at 0.4x0.8mm. The coarser grained plagioclase is euhedral to subhedral and usually zoned and occurs occasionally as agglomerated pairs. The content of coarse plagioclase is variable from 0 to 5%. Amphiboles are typically euhedral to subhedral and also bimodal in nature with >50% coarse grained at 3 x 1mm and the balance of finer crystals having axes of 1 x 0.5mm. Accessory minerals consist of 1% fine grained disseminated magnetite.

Alteration is variable in type and intensity. Alteration ranges from moderate propyllitic to pervasive, intense potassic (biotite-magnetite with local potassium feldspar replacement of earlier biotite). Argillic or argillic/phyllic alteration is localized along the contacts and margins of late fractures and faults.

7.2d La Cantera Porphyry (C1)

The La Cantera porphyry is the “ore” forming or mineralizing intrusive at the Cantera prospect. The La Cantera porphyry is a medium to fine grained porphyry. The porphyry is very “crowded” with a phenocryst:matrix ratio of approximately 70:30. The groundmass comprises both micro-phenocrysts or fine grained crystalline quartzo-feldspathic(?) material (<20% of the matrix is aphanitic). Phenocrysts include plagioclase, amphibole, and biotite. Subhedral to euhedral plagioclase phenocrysts range in size from 0.4 x 0.2mm to 0.8 x 0.5mm, with occasional coarser grained phenocrysts having axes of 1.0 x 1.5mm in length. Subhedral to euhedral amphibole (10-12%) ranges in size from 0.2 x 0.4mm to 0.4 x 0.8mm. Biotite phenocrysts (5-8%) are dominantly 0.3 x 0.3mm euhedra. Quartz phenocrysts are absent. Accessory minerals consist of 1-2% fine grained disseminated magnetite.

Alteration of the Cantera porphyry is dominantly potassic, having secondary biotite and potassium feldspar-bearing assemblages (±magnetite ±actinolite). The potassic alteration occurs as both pervasive replacement of phenocrysts and matrix and in veins and along vein selvages. Potassium feldspar alteration, when present, is generally pervasive with total replacement of plagioclase by potassium feldspar, as well as frequent veins and vein selvages of potassium feldspar. Zones of banded quartz and quartz-magnetite veins are common and locally may comprise >25% of the rock volume. Closely spaced sheeted quartz veins are common in the upper portions of the porphyry. Elsewhere quartz veins do not exhibit a preferred orientation.

7.2e El Limon L1 Porphyry

The El Limon L1 Porphyry has been observed in the El Limon, Filo de Oro and Middle Zone prospects immediately to the north of the Cantera gold-copper prospect. It is exposed over an area of several square kilometers. The El Limon porphyry is composed of 60% phenocrysts and 40% matrix. Phenocrysts are comprised of 40% subhedral to euhedral plagioclase (occasionally as agglomerated pairs) that range in size from 1 x 1.5mm to 3 x 5mm, 15% subhedral amphibole that is commonly 0.5 x 5.5mm in size, and 5% subhedral biotite, which is typically 1 x 2mm in size. Quartz phenocrysts are absent. Accessory minerals consist of 1% very fine grained magnetite or pyrite. The El Limon Porphyry is characterized by coarse grained plagioclase phenocrysts which makes it visibly distinct from the C1, X1 and X2 Porphyries. When strongly altered, it can be difficult to distinguish L1 Porphyry from X3 Porphyry.

Alteration of the El Limon Porphyry is most commonly structurally controlled argillic to intermediate argillic. Potassic alteration ranges from strong secondary biotite, commonly without magnetite, to moderate secondary biotite-magnetite, which is typical near contacts with potassically altered X1 Porphyry or X3 Porphyry or their related intrusive breccias. Local weak potassic alteration in the form of secondary biotite and occasional potassium feldspar occurs in veins or selvages along quartz-magnetite veins.

7.2f El Limon L2 Porphyry

The L2 porphyry is observed in drill core at the El Limon prospect centered approximately 300m NNW of the center of the Middle Zone. L2 porphyry is composed of 45% phenocrysts and 55% fine grained, near aphanitic, matrix. Phenocrysts are comprised of 40% subhedral to euhedral plagioclase in a bimodal fashion ranging in size from <1mm to 1.5mm long and from 2 to 2.5mm long, 2-5% subhedral amphibole is commonly 0.5 x 2mm in size. The matrix is composed of a 50:50 mix of very fine grained plagioclase crystals and too fine to identify aphanitic felsic material (feldspar and amphibole). Accessory minerals consist of magnetite and minor (<0.5%) pyrite. The L2 poprhyry at El Limon is a mineralizing porphyry typically cut by an open quartz and quartz-magnetite vein stockwork and local fine grained disseminated chalcopyrite.

7.2g El Limon L3 Porphyry

The El Limon L3 Porphyry porphyry occurs within the El Limon prospect. It is almost itendical to the L1 porphyry except that it has 3-5% medium grained brown secondaty biotite phenocryts evenly disctributed throughout. Like the L1 porphyry it is for the most part argillically altered as well. No other alteration other than the clay and biotite is evident and it typically is unmineralized with detection limit Au values.

7.2h G1 Porphyry (G1)

The La Garrucha intrusive center occurs in an area named La Garrucha approximately 650 meters east of the La Cantera deposit. The possible importance of the intrusive center was realized in mid-2011 by Bellhaven geologists during routine reconnaissance geological mapping and sampling. Geologists encountered potassically altered (biotite-magnetite) porphyry with quartz chalcopyrite veins in some of the sparse outcrops in the area.

The G1 Porphyry has a crowded porphyritic appearance with a phenocryst to matrix ratio of 60% to 40%. Phenocrysts are comprised of 55% plagioclase and 5% amphibole (hornblende?). Quartz and biotite phenocrysts are absent. Euhedral plagioclase phenocrysts range in size from 0.5 x 1mm to 2 x 3mm with sparse, larger phenocrysts 3 x 5mm in size. Amphibole occurs as 0.5 x 2mm to 2 x 4mm euhedral phenocrysts. Accessory minerals consist of 1-3% fine grained disseminated magnetite.

Most commonly the G1 Porphyry exhibits moderate to strong argillic alteration which largely masks the possible presence of earlier propylitic or potassic alteration. Locally weak to moderate potassic alteration is observed as secondary biotite, magnetite and actinolite with only weak potassium feldspar development.

G1 porphyry appears to be the earliest porphyry developed at La Garrucha and is in contact with Combia Formation volcanic rocks along its outer margins. Weak biotite hornfelsing of the volcanic rocks occurs along the G1-volcanic contact.

7.2i G2 Porphyry (G2)

The G2 porphyry intrudes and brecciates the G1 Porphyry. These contact relationships have been seen at the surface and in drill core. The G2 Porphyry is texturally distinct from G1 and is characterized by a phenocryst:matrix ratio of 40:60. As such, G2 has a less crowded appearance in hand specimen due to the great percentage of fine-grained matrix. Phenocrysts are comprised of 35% plagioclase and 5% amphibole (hornblende?). Subhedral plagioclase is typically 1 x 1.5mm in size whereas subhedral to euhedral amphiboles range in size from 0.3 x 2mm to 0.5 x 2mm. Accessory minerals consist of 1% fine grained disseminated magnetite.

The G2 Porphyry is characterized by potassic alteration that includes both biotite and potassium feldspar-bearing assemblages. Magnetite and actinolite(?) occur with the biotite and potassium feldspar and also occur as a common alteration assemblage without significant secondary biotite.

The G2 porphyry has two distinct periods of intrusion, after G1 and before G4 but also after G4. This is seen in drilling where G2 is observed in some areas to cut G4 porphyry and in other areas is itself cut by G4. In each case the G2 porphyry is similar, except for the presence of significant additional alteration and mineralization in the early G4 porphyry.

7.2j G4 Porphyry (G4)

The G4 Porphyry has only been encountered in drill core. It has a phenocryst:matrix ratio of 40:60 and is characterized by 35-50% subhedral to euhedral plagioclase phenocrysts that define a seriate texture and range in size from 0.2 x 0.4mm to 3 x 4mm. Approximately 5-10% amphibole phenocrysts are subhedral to euhedral and range in size from 0.2 x 0.5mm to 0.5 x 2mm. G4 porphyry is very similar in appearance to the G2 porphyry and is typically only distinguished from the G2 porphyry by its high potassium feldspar content.

Alteration in the G4 Porphyry includes strong to intense pervasive potassium feldspar and magnetite with actinolite-magnetite, propylitic,, phylic and argillic overprinting assemblages. Argillic overpriniting is structurally controlled along fault zones. The potassium feldspar alteration which distinguishes G4 from G2 results in growth of feldspar phenocrysts, coarsening the crystal texture, and reduces the amount of fine grained matrix (fine grained matrix is more visibly crystalline). The potassium feldspar also imparts a distinct pink color cast to the rock making it more readily distinguishable from G2 porphyry.

7.2k Intrusive Breccias

Numerous breccias are associated with the emplacement of all of the porphyries. The breccias appear to be of two main types: auto-breccia and contact breccia. Auto breccias form along the margins of and within individual intrusive bodies where portions of the intrusive has partially cooled and solidified but comes in contact with unsolidified magma of the same intrusive. Contact breccia is created in several environments: a) at the contact with enclosing brittle host rocks such as the Combia Formation volcanic rocks at La Cantera; or b) with the El Limon porphyry in the Middle Zone; or c) at the contact with the younger non mineralized G1 porphyry at La Garrucha; or d) along the contact of the Limon porphyry with the host Combia Formation volcanics. In addition to these breccias, in some parts of the deposits, there are localized zones that appear to represent the mixing of two magmas (e.g., when both were still molten or very plastic). Pebble dikes have also been encountered cutting the intrusive rocks at the La Mina Project.

Breccias at La Mina can be simple, complex or any variation in between. Alteration can impact on the ability to identify the origin of clasts and/or matrix. Breccias may be matrix or clast supported; the breccia clasts can be monolithic or heterolithic. The breccia clasts range in shape from angular to rounded and exhibit a wide range of alteration and mineralization in the clast population. Potassically altered clasts, sometimes cut by quartz-sulfide veins can occur in a porphyry exhibiting significantly less alteration than the clasts indicating that there was an alteration and mineralization event that pre-dated the brecciation.

The X2 porphyry at Middle Zone, discussed above, has an associated breccia now called the White Breccia (WBx). This unit is almost invariably found in contact with the X2, and appears to form a halo around it. It constitutes an intensely altered, structural boundary zone that formed as a result of the X2 intrusive phase. It contains fragments of X1 and X3, the two porphyries that were intruded by the X2 unit.

The intrusive breccias at La Mina have been named based on the composition of the intrusive that forms the breccia matrix. Thus, the X3 Breccia can contain a wide range of clasts (e.g., composition, alteration, mineralization, shape, etc.) but the common thread linking all of the X3 Breccias is the fact that the breccia matrix is X3 Porphyry.

7.3 Volcanic Rocks

The volcanic rocks in the immediate project area (e.g., La Cantera, the Middle Zone, El Limon and La Garrucha) comprise a lower sequence of mafic lavas (basaltic to andesitic composition) and an upper sequence of lithic, crystal and crystal-lithic tuffs of presumed more felsic compositions. The technical team has not yet conducted any detailed work on the volcanic stratigraphy has been done to date. In the field, the volcanic rocks occur in sparse, isolated outcrops and are commonly pervasively argillized and oxidized (supergene) making rock identification difficult.

During the drilling of the La Cantera deposit, once the drill passed from the porphyry into the volcanic wall rocks, drilling typically continued for only another 30-50m before termination (as a function of alteration and mineralization). Accordingly, little was learned about the volcanic rocks from logging the drill core.

The alteration in the volcanic rocks is largely similar to the alteration in the intrusive rocks, comprising propylitic, potassic and argillic assemblages However most of the volcanic rock exhibit strong to intense biotite hornfelsing along this contact.

At the El Limon prospect and on the northeast margin of the Middle Zone occur what appears to be explosive diatreme or subvolcanic breccia. These breccia are characterized by polymictic well rounded clasts in a highly milled matrix. At the El Limon prospect it is conceivable that this explosive breccia removed much of the better grade mineralization leaving only narrow marginal zones of weak Au-Cu mineralizaed L2 porphyry.

7.4 Structure

The structural history at La Mina is gradually becoming clear as a result of three main factors: 1) evidence visible from airborne and ground geophysics, 2) mapping of surface features and inferences based on geomorphologic patterns, and 3) Middle Zone drilling, including the first oriented core holes.

There are several regional lineaments that cross the project area and these can be seen in the aerial magnetometry. The most important of these large-scale features is a prominent N-S trending lineament that parallels the N-S trending zone of anomalous magnetometry that bisects the project area. Two N30W trending regional lineaments are also present in the project area. The eastern-most of these is parallel to a zone of less well defined zones of anomalous magnetometry, anchored by the La Garrucha prospect at its southeastern-most extent.

There are some mapped faults (Figure 7.3) in the project area. These faults exhibit NE, NW and EW strikes. Dips on all of the mapped faults are generally sub-vertical. The abundant vein and fracture controlled alteration and mineralization generally lack a dominant orientation. When veins and fractures do exhibit a preferred orientation, it is commonly EW. In some areas of the property, stream cuts and ridgelines are clearly related to structural features; and this has been confirmed by drilling in the case of Middle Zone. These patterns show primarily NE and NW trends.

Middle Zone drilling reveals a number of significant structures, which have been tentatively grouped as intercepts of several structural planes. The most important of these planes strikes NW though the central part of Middle Zone, and downdrops both the later lithologic units and high Au-Cu mineralization on the west side. The two lobes of the Middle Zone magnetic anomaly shown in some versions of the data can be explained by offset along this NW trending fault zone.

7.5 La Cantera Prospect Geology

The La Cantera prospect was mapped initially by Anglo Gold Ashanti geologists when they began work at La Mina in 2002, with initial drilling in 2006. The geology was subsequently re-mapped by Bellhaven Copper and Gold geologists in 2010 and 2011 and is shown in Figure 7.4. The resource estimate discussed in this report (released as the La Mina Technical Report dated August 29, 2011) is based on 6,579 m drilled in the La Cantera resource area: 1,452 m contained in six holes drilled by AngloGold Ashanti/Bema Gold in 2006 and 4,953 m contained in 13 holes drilled by Bellhaven in 2010 and 2011. The La Cantera drilling was conducted on two N-S lines, three NW-SE lines, and two NE-SW lines to an approximate depth of 550 m.

Porphyry-related alteration and mineralization at the La Cantera prospect outcrops and the surface projection of the intrusive center measures approximately 200m EW by 200m NS. The porphyry-related alteration and mineralization has been traced from surface to a depth of 550m and is open at depth. The La Cantera prospect geology is relatively straightforward. The volcanic rocks of the Combia Formation were intruded by the C1 Porphyry with both contact and auto breccias forming at the margins of the C1 Porphyry. Subsequently the C1 Porphyry, C1 Breccia the Combia Formation volcanic rocks were intruded by the X1 Porphyry and auto breccias formed at the contact of X1 Porphyry with the C1 Porphyry and C1 breccia (Figure 7.4). Small amounts of X2 Porphyry subsequently intruded the X1 Porphyry.

Figure 7.4 General Surface Geology of the La Cantera Prospect Showing the Location of the Drill Holes.

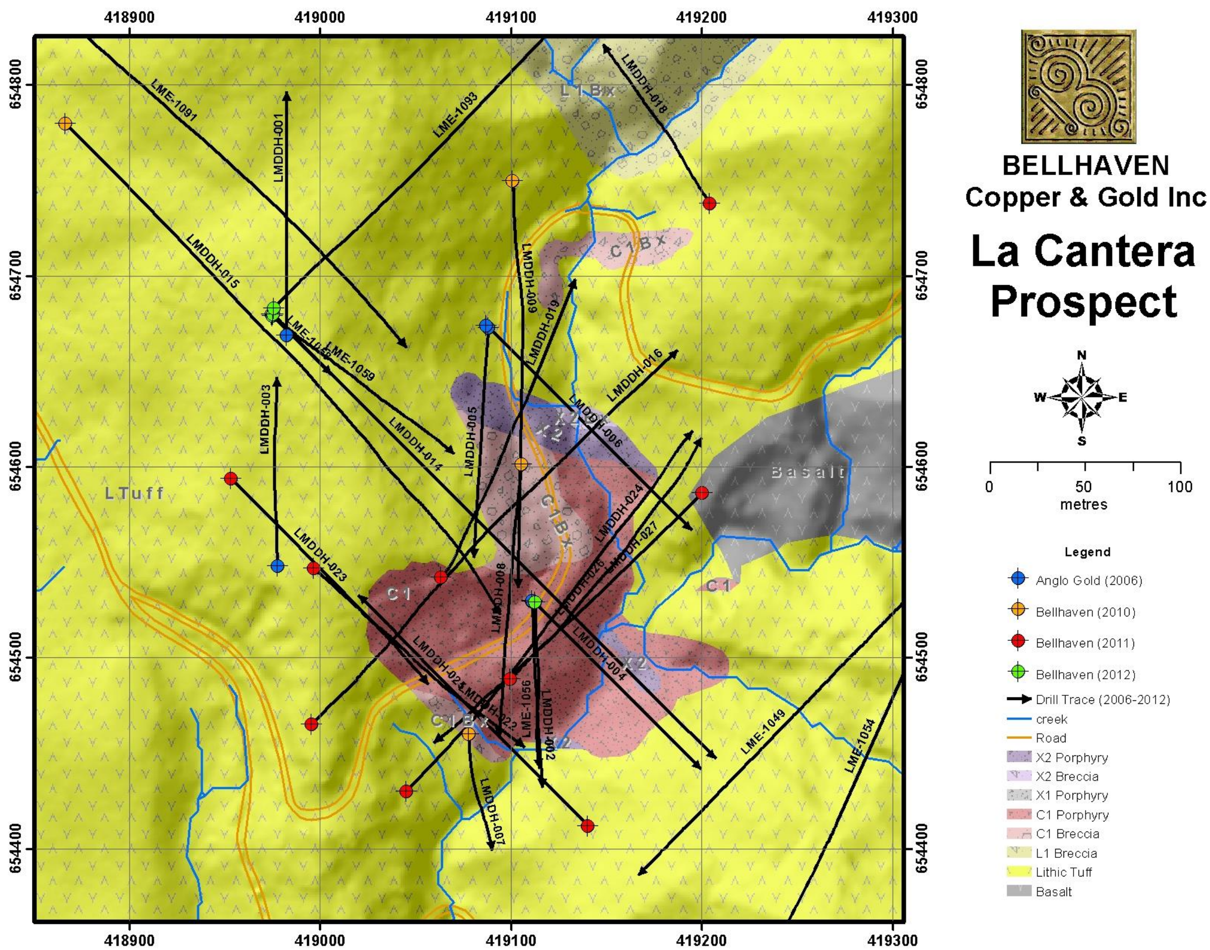
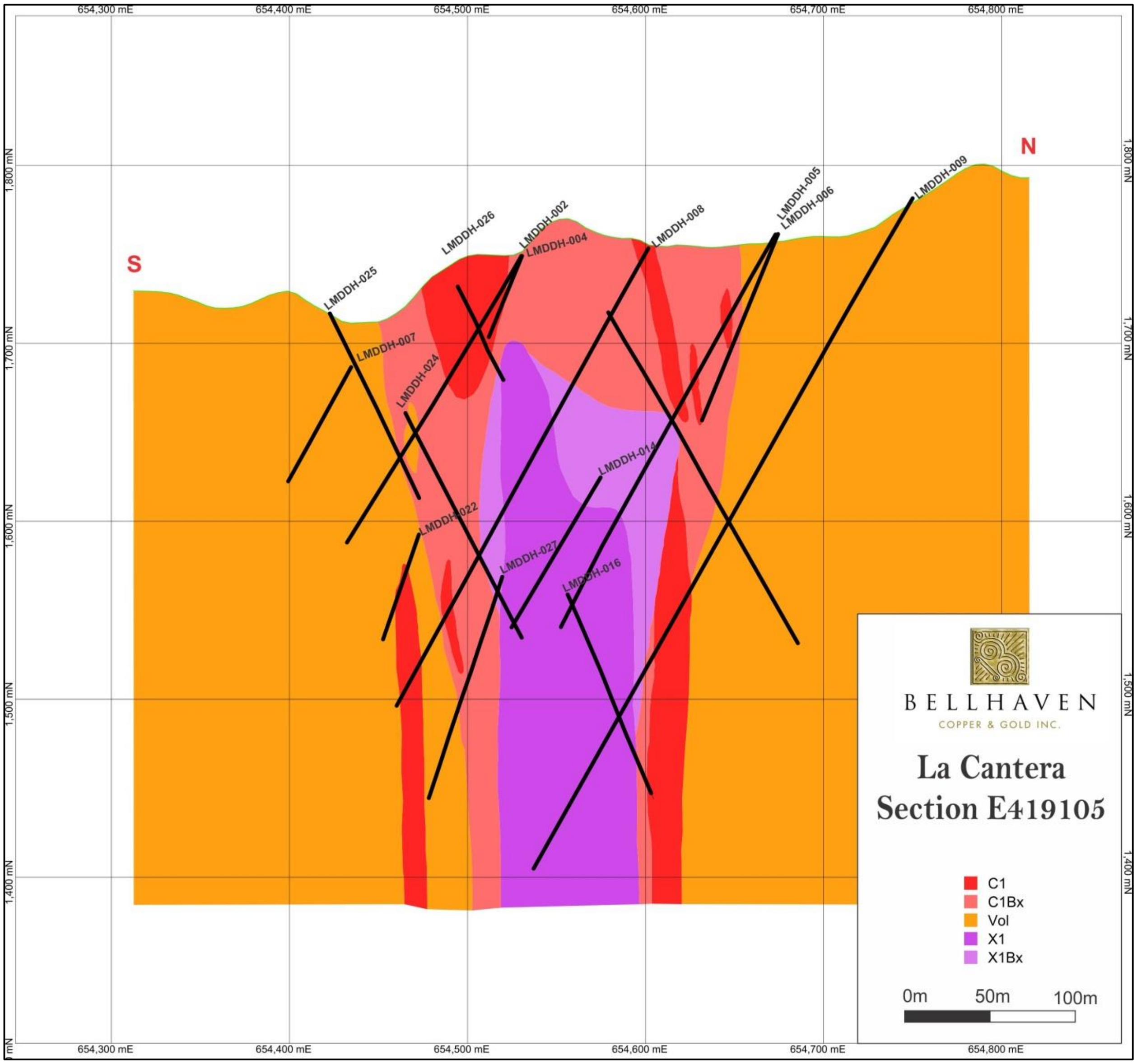


Figure 7.5 North-South Geology Cross-Section (Looking West) Through the La Cantera Deposit.



7.6 La Cantera Prospect Alteration

The observed alteration at La Cantera is typical of a gold-copper porphyry deposit: a potassic (calcic) core and an outer propylitic zone. Sericitic and intermediate argillic alteration assemblages are typically structurally controlled and can be observed overprinting the potassic and propylitic zones.

Potassic alteration is present as both biotite- and potassium-feldspar-bearing assemblages. Much of the potassic alteration is vein and fracture controlled. Common vein and fracture types include: 1) potassium feldspar "A" veins, 2) quartz veins with potassium feldspar selvages, 3) quartz-magnetite veins 4) hairline, anastomosing biotite fractures and 5) magnetite veins. The pervasive biotite alteration appears to have formed as a reaction between the hydrothermal fluids and primary magmatic mafic minerals. Much of the C1 Porphyry and C1 Breccia are pervasively altered to a biotite-magnetite assemblage wherein the mafic phenocrysts and porphyry matrix are replaced by biotite-magnetite. Volcanic rocks of the Combia Formation are also altered to biotite- and potassium feldspar-bearing assemblages near contacts with C1 Porphyry and C1 Breccia. As a result, the gold-bearing rocks are highly magnetic which creates a sharp contrast with the barren and weakly magnetic intermediate argillic altered rocks as well as the non-magnetic sericite-altered rocks surrounding the potassic core. Potassium feldspar-bearing alteration is locally widespread and pervasive but more commonly exists as irregularly shaped patches as a partial to total replacement of earlier biotite-bearing alteration assemblages. An example of pervasive biotite-magnetite-actinolite alteration in C1 Porphyry is shown in Figure 7.6.

Calcic alteration is represented by actinolitic amphibole-bearing alteration. This amphibole is dark green in color and although not verified by thin section petrography, it is interpreted as actinolite by analogy to other copper-gold porphyry deposits in the Middle Cauca Belt (e.g., Quebradona, La Colosa) where it has been identified as actinolite. The actinolite occurs in three different vein and fracture types: 1) potassium feldspar-actinolite with and without actinolite vein selvages, 2) magnetite veins with actinolite halos and 3)-actinolite±chalcopyrite±bornite veins and fractures. The actinolitic amphibole also occurs as selective replacement of earlier secondary biotite which itself had originally replaced igneous amphibole or biotite phenocrysts. The presence of actinolite in the alteration assemblage is typically an good indicator of gold and copper mineralization.

At least four different phases of vein and fracture controlled potassic and calcic alteration and mineralization have been recognized and, in order of their paragenetic sequence, include:

- Early hairline biotite fractures in zones of intense potassic alteration
- Magnetite-actinolite±chalcopyrite±bornite veins and fractures which can reach a vein density of 30 per meter
- Quartz-magnetite-actinolite±chalcopyrite±bornite veins and fractures which cut the magnetite-actinolite veins and fractures and which can reach a vein density of approximately 10 per meter. These veins and fractures are the principal source of mineralization in the La Cantera prospect
- Quartz-magnetite veins are commonly banded in appearance and do not carry significant mineralization.

An example of the superposition of multiple episodes of vein and fracture controlled alteration and mineralization is shown in Figure 7.7.

Figure 7.6 LMDDH-008 – 288m. C1 Porphyry With Pervasive Biotite-Magnetite Alteration of the Matrix and Actinolite Alteration of Primary Magmatic Mafic Phenocrysts.

Figure 7.7 LMDDH-016 392.5m. C1 Breccia with Potassic Alteration (Magnetite-K-Feldspar+/-Actinolite) Cut by Sheeted Magnetite Veins, Quartz-Magnetite Stockwork Veins and Late Pyrite-filled Fractures.

Phyllic (sericitic) alteration is represented by the mineral assemblage quartz-sericite-pyrite and is observed to a greater or lesser extent away from the potassic core but also replacing earlier potassic alteration. Phyllic alteration can be pervasive but much of the phyllic alteration is associated with quartz-pyrite veins with sericite selvages, so called "D" veins (Gustafson and Hunt, 1974).

Propylitic alteration is represented by two different mineral assemblages: 1) a "proximal" epidote-chlorite-illite-calcite assemblage and 2) a more widespread, "distal" chlorite-illite-calcite assemblage. Mafic phenocrysts are replaced by chlorite and calcite; plagioclase phenocrysts are partially to totally replaced by both epidote-calcite and illite-calcite. Propylitic alteration is found mostly in the Combia Formation volcanic rocks and X1 Porphyry and X1 Breccia. Propylitic alteration, if originally present in C1 Porphyry and C1 Breccia, has largely been overprinted by the potassic alteration.

Argillic alteration, both hypogene and supergene, is structurally controlled and is associated with faults, breccias and fractures and includes both chlorite- and "clay"-bearing assemblages. Argillic alteration is the youngest alteration event preserved at La Cantera.

7.6a La Cantera Prospect Mineralization

The principal ore minerals associated with the Au-Cu porphyry mineralization at La Mina are chalcopyrite and lesser bornite, both with associated gold mineralization. Secondary copper minerals (chalcocite, azurite, malachite and chrysocolla) do occur locally in the upper portions of the La Cantera prospect; however, it is not clear if they represent supergene enrichment or simply lower temperature "alteration" of primary hypogene copper mineralization. Overall gold mineralization greater than 0.3g/t Au is sulfide-poor and typically contains less than 1% total sulfides. In this type of mineralization chalcopyrite ± bornite are more abundant than pyrite.

Minor silver, lead and zinc mineralization is associated with calcite±quartz-tetrahedrite-sphalerite veins that cut earlier potassic alteration. These veins may be related to argillic alteration, which is commonly present where the veins are found.

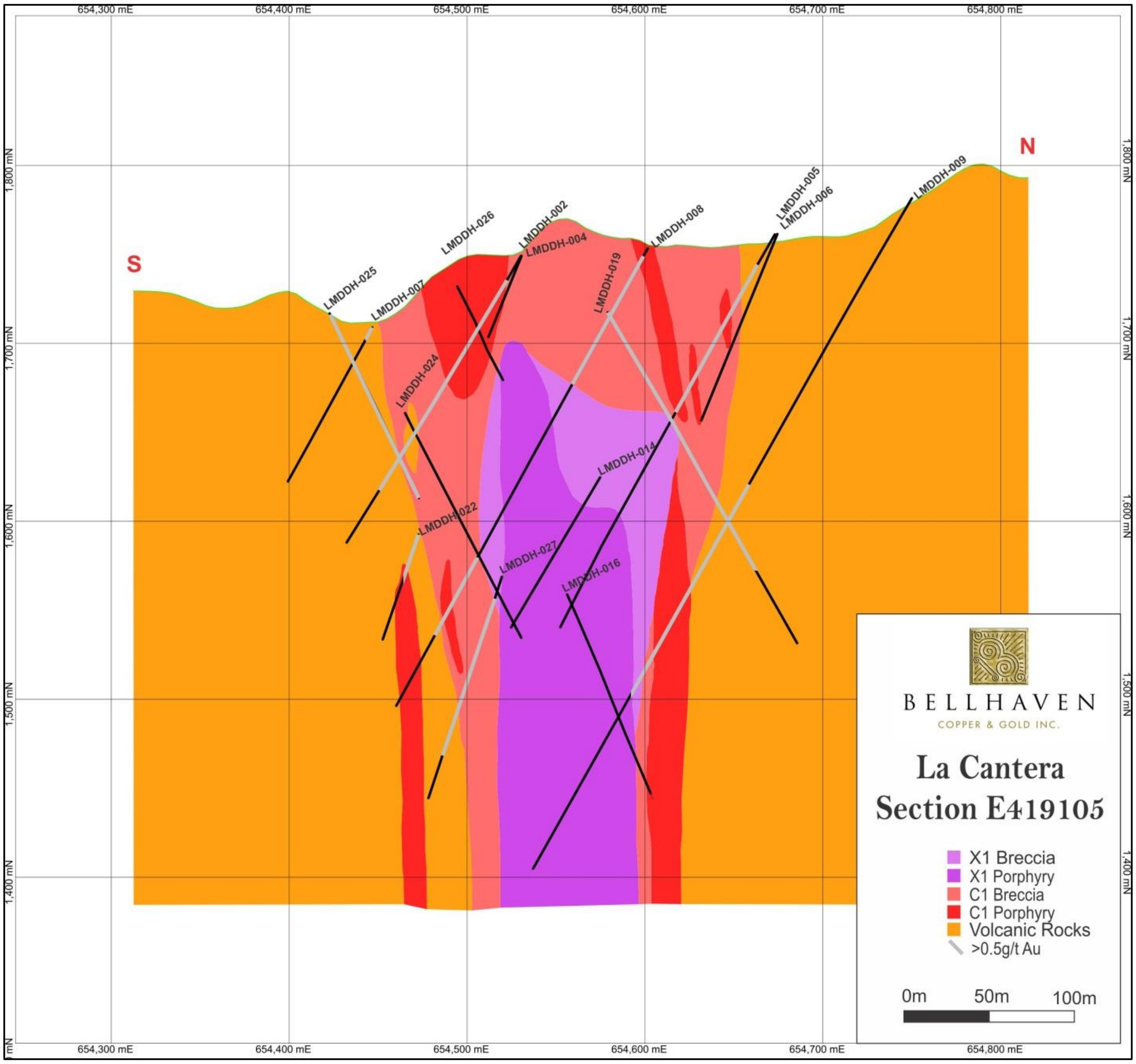
The most sulfide-rich with alteration and mineralization at La Cantera are the phyllic and argillic assemblages which commonly contain more than 3% total sulfides. However, this mineralization typically contains less than 0.3g/t Au and is not economically important.

The typical habit of the economic minerals can be summarized as follows:

- Chalcopyrite occurs in veinlets or as disseminated grains with secondary biotite, potassium feldspar and/or actinolite. Locally chalcopyrite occurs as clots with or without pyrite and it can be associated with bornite. In the C1 Porphyry and C1 Breccia chalcopyrite occurs in quartz-pyrite and potassium feldspar-actinolite "A" veins. Chalcopyrite, with and without bornite, also occurs in sulfide veins and fractures with pyrite and in veins with anhydrite and in veins with gypsum.
- Bornite is less abundant than chalcopyrite but it occurs in the same habits as and virtually always with chalcopyrite. Additionally it occurs as anhedral crystals often displaying exsolution patterns associated with chalcopyrite, or occurring as a replacement of chalcopyrite.
- Gold is usually associated with chalcopyrite and bornite and to a lesser extent with tetrahedrite, and filling fractures in chalcopyrite grains.
- In addition to the calcite±quartz-sphalerite veins described previously, tetrahedrite also locally forms subhedral crystals or grains associated with chalcopyrite or bornite.
- In addition to the calcite±quartz-tetrahedrite veins described previously, sphalerite occasionally occurs as anhedral grains with chalcopyrite±bornite±pyrite.
- In general, the mineralogy of the La Cantera system appears "clean" in that there are few minerals or elements that could negatively impact favorable response to standard metallurgical processes. This was confirmed by Bellhaven's preliminary metallurgical results, announced on November 15, 2011. In that news release, the Company reported achieving copper and gold recoveries above 85% in concentrates of commercial grade with low impurities.

- An example of the distribution of and lithological controls on gold mineralization at the La Cantera deposit is shown in Figure 7.8. Note the sharp breaks of the >0.5g/t Au mineralization at contacts between C1 Porphyry and Breccia with X1 Porphyry and Breccia. In general, the >0.5g/t Au mineralization does not extend significantly into the post-mineralizing X1 Porphyry or Breccia.

Figure 7.8 Drill Hole Intercepts with >0.5g/t Au in the La Cantera Prospect.



7.7 Middle Zone Prospect Geology

The Middle Zone prospect was mapped and drilled during work by Bellhaven Copper and Gold geologists starting in 2010. The surface geology of the Middle Zone prospect is shown in Figure 7.8. In total 53 holes were drilled at the Middle Zone prospect. The resource estimate discussed in this report is based on 39 drill holes totaling 14,159 m of diamond core drilling. The Middle Zone drilling was conducted on one N-S line, six NW-SE lines, and four NE-SW lines to a maximum depth of 680 m below surface.

Porphyry-related alteration and mineralization at the Middle Zone prospect outcrops in some areas, and the elongate surface projection of the intrusive center measures approximately 300m NW-SE by 400m NE-SW. The porphyry-related alteration and mineralization has been traced from surface to a depth of 680m and is open at depth. All intrusive units, regardless of their relationship to the mineralizing events, show similar rock types, and also show great similarity to those at La Cantera. The volcanic rocks of the Combia Formation were first intruded by the extensive, pre-mineralization L1 porphyry with marginal contact breccias. Subsequently both the L1 porphyry and volcanic rocks were intruded by the mineralizing X3 porphyry and breccia units (low copper/gold ratio), and later by the mineralizing X1 porphyry and breccia units (high copper/gold ratio). Mineralization occurring during these phases affected pre-existing units. For example, the L1 porphyry (normally barren) is mineralized in some locations near the X3 unit, and mineralization in the X3 unit has been augmented in some areas close to the later X1 unit. There are also areas of un-mineralized X3 and X1 distal to the center of the Middle Zone. This phenomenon has been observed in drilling to the north and northeast. The post-mineralizing X2 unit (which is analogous to the X1 unit at La Cantera) forms an alternating pod- or dike-like body that has intruded opportunistically along zones of weakness into the Middle Zone. Gold and copper values in this unit are very low, an order of magnitude less than in the surrounding L1 porphyry and volcanic units. However, the X2 intrusive is associated with the White Breccia, a strongly fractured and altered unit that often forms a halo around the X2. The White Breccia is mineralized according to the density and nature of X3 and/or X1 fragments.

Middle Zone exhibits a structural influence not seen at La Cantera. The mineralizing intrusive units are fault bound on the southwestern side by a feature striking NW. Another major feature runs through the center of Middle Zone, also striking NW, which appears to have downdropped the western half of the deposit. This displacement is most apparent along the X1 and X2 units, and is clear from the distribution of higher copper grades within the X1. A series of other faults with approximate NS trends occur throughout the Middle Zone, which do not provide clear evidence for displacement.

Figure 7.9 Surface Geology and Drill Holes Used in Resource Estimate at Middle Zone Prospect.

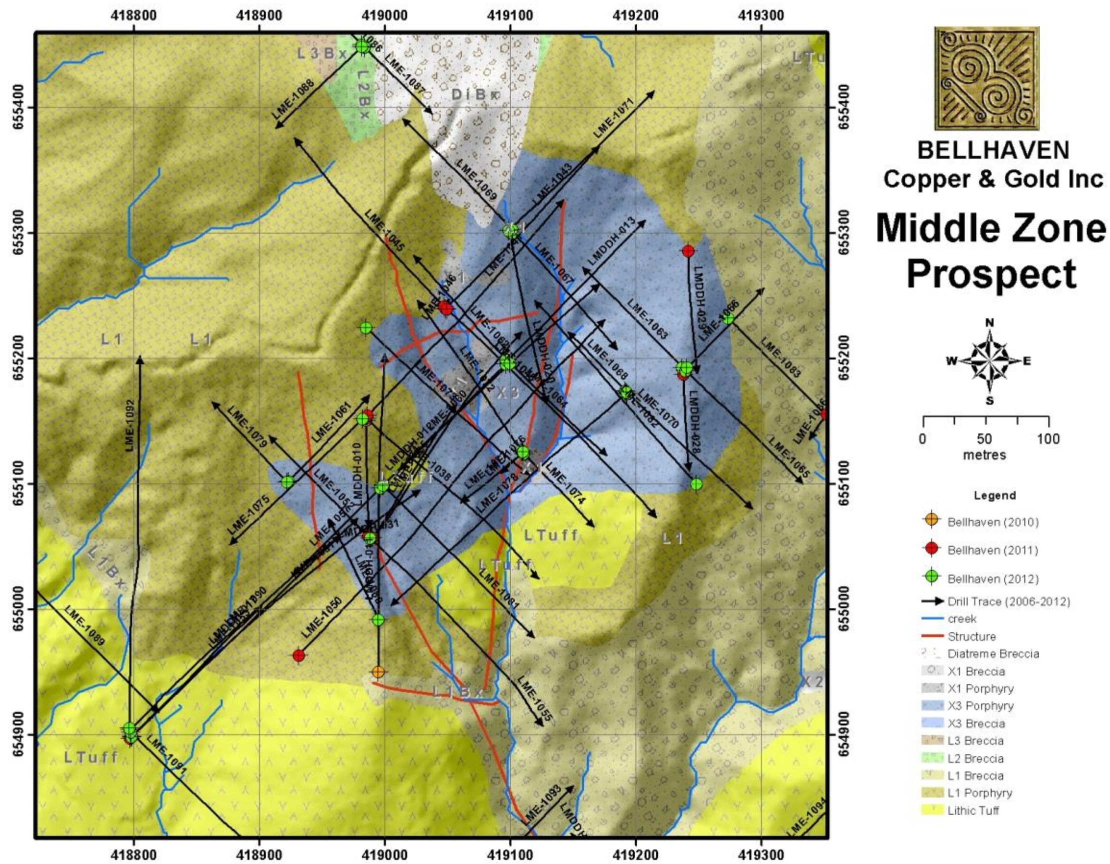
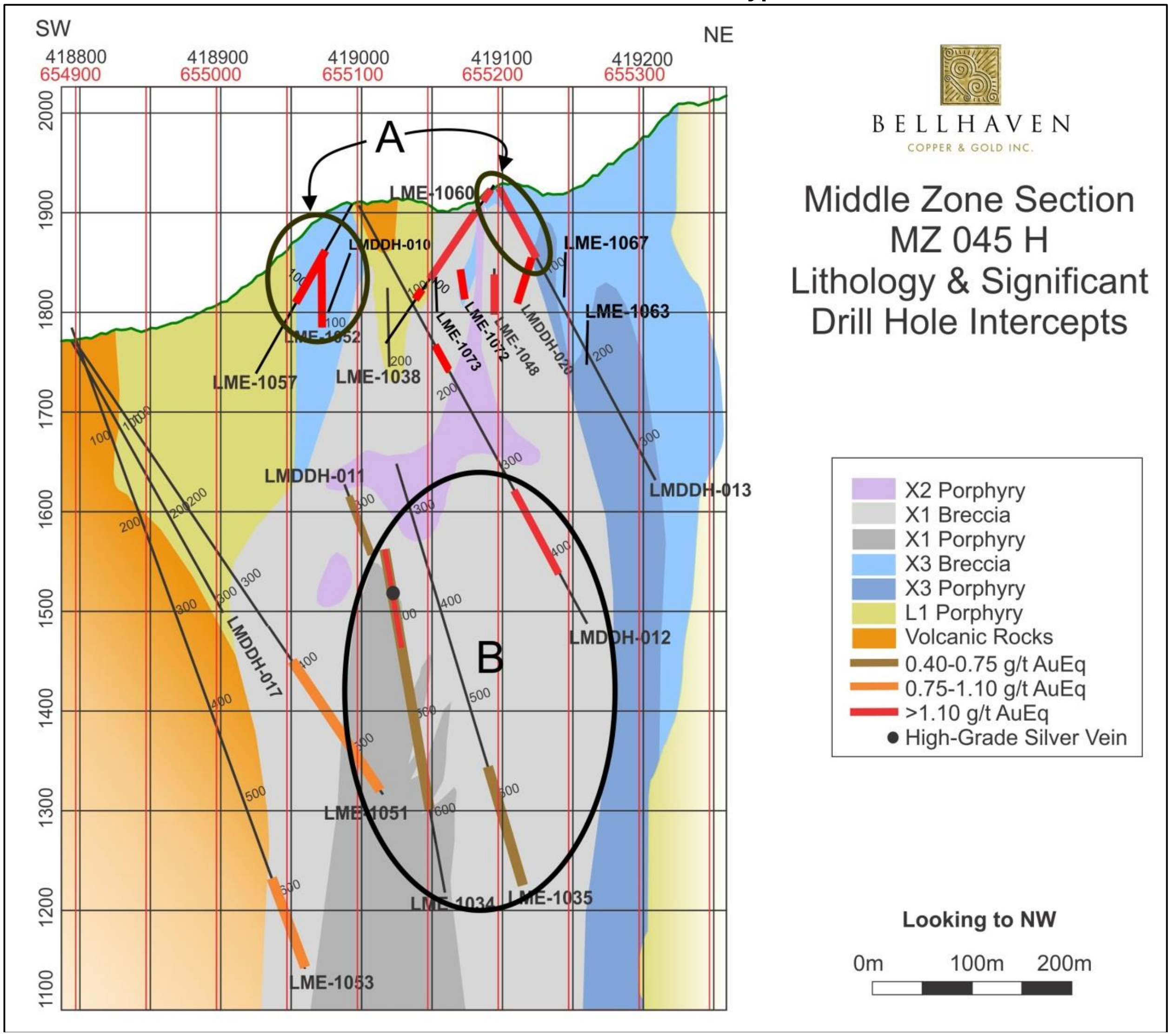


Figure 7.10 NE-SW Cross Section Through Middle Zone, Showing Significant Intercepts.
Labels A and B Refer to the Two Distinct Mineralization Types Discussed in Section 7.9



7.8 Middle Zone Prospect Alteration

The observed alteration at Middle Zone is typical of a gold-copper porphyry deposit, thus very similar to that described for La Cantera prospect in Section 7.6a: a potassic (calcic) core and an outer propylitic zone. Sericitic and intermediate argillic alteration assemblages are typically structurally controlled and can be observed overprinting the potassic and propylitic alteration.

Some alteration features particular to Middle Zone that are not observed at La Cantera are the following:

1) A strong halo of argillic alteration on the north and northeast sides of the deposit. This alteration penetrates the X1 and X3 units, and in some cases may have overprinted pre-existing mineralization (pyrite replacing magnetite in veins, for example). This halo of

argillic alteration is devoid of significant gold and copper. As with La Cantera, the argillic alteration appears to be a late alteration style, probably retrograde.

2) An intense clay alteration is characteristic of the WBx (White Breccia) unit that is often found at the boundaries of the post-mineralizing X2 unit.

In addition, veining at Middle Zone exhibits a distinct paragenetic sequence, for the most part observed in the following order:

- Early sinuous quartz veins and hairline magnetite-actinolite-chalcopyrite veins
- Several styles of quartz veins with magnetite at the vein boundaries
- Banded quartz veins and sinuous quartz-magnetite-actinolite-chalcopyrite veins
- Quartz veins with pyrite and chalcopyrite along the centerlines
- Anhydrite-pyrite-chalcopyrite-bornite veins (bornite rare), pyrite-calcite-magnetite veins
- Quartz-calcite-pyrite-sphalerite-galena veins
- Quartz-gypsum and quartz-gypsum-pyrite veins

7.9 Middle Zone Prospect Mineralization

The principal ore minerals associated with the Au-Cu porphyry mineralization at Middle Zone consist of chalcopyrite, pyrite, and, in very rare cases, bornite. Secondary copper minerals (chalcocite, cuprite, malachite and chrysocolla) do occur locally in the shallow portions at Middle Zone prospect; they represent lower temperature alteration of primary hypogene copper mineralization. Generally, gold mineralization greater than 0.3g/t Au occurs with sulfides, but total sulfide content is normally less than 3% (with pyrite > chalcopyrite).

Unlike La Cantera, Middle Zone mineralization falls into two distinct classes. The first is Au-rich, relatively Cu poor mineralization occurring in the X3 and X3 Breccia. It occurs at relatively shallow levels, primarily where the X3 unit drapes over the X1 Porphyry. In Figure 7.10, examples of this mineralization type are marked in ellipses labeled ‘A’. The second mineralization type is Cu-rich with variable Au, and predominates in the X1 Porphyry and X1 Breccia units. In Figure 7.10, examples of this type are shown in the ellipse labeled ‘B’. The deepest drilling in Middle Zone terminates in this second mineralization type.

Minor silver, lead, and zinc mineralization is associated with cross-cutting calcite±quartz-sphalerite-galena veins (late in the paragenetic sequence, as listed in the previous section). These veins are more common in the pervasive argillic alteration zone peripheral to the deposit. They also occur in contact margins between early and late porphyries. In the latter case, sub-epithermal veins occur predominantly in fault zones.

The most sulfide-rich zones at Middle Zone are the pyrite-rich argillic assemblages, where it is thought the sulfide has replaced magnetite during overprinting of potassic alteration. Pyrite content can exceed 6%. However, this mineralization invariably contains less than 0.3g/t Au and is not economically important.

The typical habits of mineralization can be summarized as follows:

- Chalcopyrite occurs mainly in veinlets, or as disseminated grains with secondary biotite, potassium feldspar and/or actinolite. In the X3 Porphyry and X3 Breccia, chalcopyrite occurs in pink quartz-pyrite “A-type” veins; it may also occur as disseminations in fine matrix breccia with or without grey silica clasts.
- Chalcopyrite and magnetite also occur as very thin, hair like veinlets, at borders or in the centerlines of pink quartz veins. This is common when the porphyry units show actinolite–magnetite alteration.
- Chalcopyrite associated with pyrite in veins and fractures, and in veins with gypsum, which cut all veins and structures described previously.
- In calcite±quartz-sphalerite-galena veins, chalcopyrite also locally forms subhedral crystals or grains associated with pyrite.

As with La Cantera, the ore mineralogy at Middle Zone appears “clean” in that there are few minerals or elements that could negatively impact favorable response to standard metallurgical processes.

7.10 La Garrucha Prospect Geology

The La Garrucha prospect is the current exploration focus of Bellhaven at the La Mina Project. Routine surface mapping and sampling in 2011 indicated the presence of porphyritic intrusive rocks containing Au values up to 1.5g/t Au in outcrop. Initial diamond drilling commenced in July 2011 with 6 drill holes (LME-1037, LME-1039, LME-1040, LME-1042, LME-1044 and LME-1047) completed. At the time drill holes were stopped before crossing the boundary of the adjacent AngloGold Ashanti Corporation license area to the east of the La Mina concession. The 2011 drilling indicated the presence of significant porphyry style- alteration and mineralization. A second drilling campaign of 5 drill holes (LME-1095, LME-1096, LME-1097 and LME-1098) in 2012 successfully intersected high grade porphyry style mineralization in hole LME-1096 and an intensely altered new (G4) porphyry, with the last 10 metres averaging 1.09g/t Au and 0.20% Cu. The fact that this high grade mineralization was immediately adjacent to the AngloGold Ashanti license lead to negotiations with AGAC to acquire their license. Acquisition of the AGAC license was finalized March 21, 2013.

Upon finalization of the acquisition of the AGAC license systematic soil sampling, surface mapping and rock channel sampling further defined the most prospective area of porphyry mineralization to direct further diamond drilling. Diamond drilling at La Garrucha resumed in May 2013 with 7 holes completed up to the time of this report.

Porphyry-related alteration and mineralization at the La Garrucha prospect outcrops in some areas along stream beds and areas of steep topographic relief. Results from diamond drilling to date suggests that the elongate (330 azimuth) core of the airborne magnetic anomaly outlines the surface projection of the area containing mineralized G2 and G4 porphyries. Porphyry-related alteration and mineralization has been traced from surface to a depth of 500m over a width of some 200m and is open at depth.

The porphyry complex at La Garrucha consists of at least 3 distinct porphyry events consisting of G1, G2 and G4 and their respective intrusive and contact breccias. The earliest porphyry, G1, intruded Combia Formation volcanic rocks. G1 event breccias occur near the volcanic contact and contains clasts of volcanic rock and G1 porphyry. Local zones of G1 autobreccia occur within the G1 porphyry. G2 porphyry intrudes the G1 and G1 breccias. G1 occurs as well crystallized porphyry, dykes, autobreccia and contact breccia with G1 porphyry. The G4 porphyry is believed to be the core of the porphyry complex at La Garrucha and hosts much of the Au-Cu mineralization. Similar to G2 porphyry G4 breccias form within and along the margins of the G4 porphyry. Early indications from drill core logging suggests the G2 porphyry may span the period of time from the intrusion of G1 to post G4 emplacement. Neither the G2 nor G4 pophyry appear to have come in contact with the volcanic Combia rocks.

La Garrucha appears thus far to be more structurally similar to La Cantera in that does not appear to be broken up by cross faults. However throughout the porphyry complex there are numerous steep angle fault zones often exhibiting clay gouge over several metres either side of the fault. Occasionally however the faults exhibit intensely crushed and fractures rock rather than gouge over several metres. Faults are frequently observed along lithologic contacts particularly between porphyries and breccia. No significant fault offsets are known to date.

Figure 7.11 Surface Geology ad Drill Holes at La Garrucha Prospect

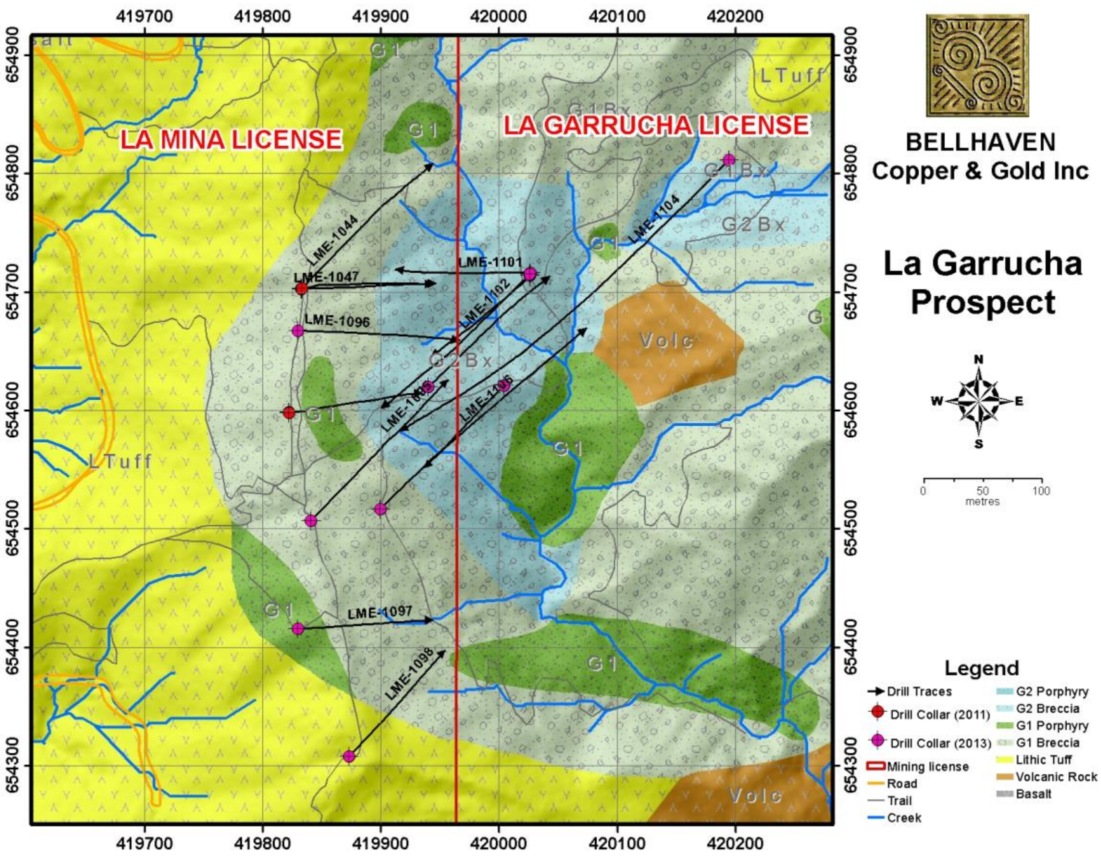
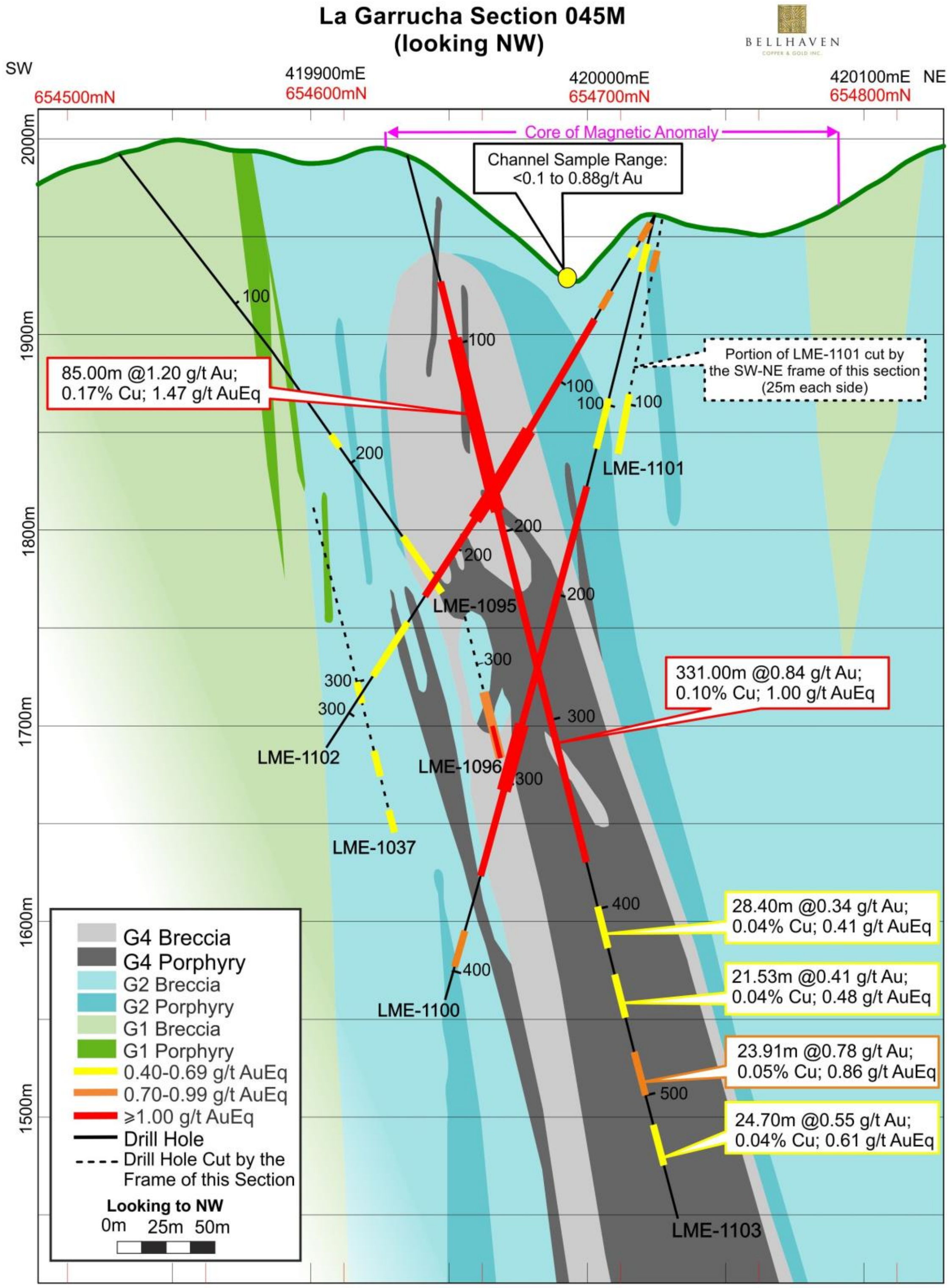


Figure 7.12 NE-SW La Garrucha Cross Section



7.11 La Garrucha Prospect Alteration

The observed alteration at Middle Zone is typical of a gold-copper porphyry deposit, thus very similar to that described for La Cantera and Middle Zone prospect in Section 7.6.1: a potassic core, grading out to sodic-calcic and an outer argillic zone. Magnetite alteration is ubiquitous throughout all of the porphyry phases and intensifies where porphyries or their breccias come in contact. Typically the magnetite is destroyed and replaced by pyrite in the phylic zones and argillized fault zones. Phylic alteration in the form of quartz-sericite-pyrite (QSP) appears to be structurally controlled and is observed overprinting the potassic, sodic-calcic and local areas of propylitic alteration. A particular type of late stage quartz-sulphide+/- carbonate vein set, up to several cm wide, invariably is enveloped by varying widths of QSP alteration, typically over intervals less than one metre but can be over 10s of metres where numerous veins occur at regular intervals over a number of metres.

Typically from the outer margin of G1 porphyry we encounter weak to moderate argillic (clay) alteration overprinting an inner sodic-calcic zone of actinolite-magnetite. More proximal to the later G2 porphyry moderate to intense secondary biotite and biotite magnetite alteration prevails within G1 porphyry and breccia. Alteration of G2 for the most part consists of early sodic-calcic (actinolite-magnetite) and later (where proximal to G4) moderate potassic alteration in the form of bitoite, distal to G4, and potassium feldspar where close to G4 porphyry. Typically where G2 is within several metres of G4 porphyry G2 porphyry is strongly potassium feldspar flooded exhibited by an increase in the potassium feldspar in the groundmass and an increase in the quantity of potassium feldspar envelopes along fractures and quartz veins. Late stage overprinting of both potassic and sodic-calcic is exhibited by local to pervasive weak propylitic alteration consisting of chlorite, epidote and calcium carbonate.

The G4 porphyry is intensely potassium feldspar altered. Without the intense K-spar alteration it would be almost identical in appearance to G2 porphyry. To the naked eye it is readily distinguished from G2 by its slightly coarser crystalline texture and marked pink color. Where alteration is most intense G4 porphyry has almost not crystalline texture visible and is almost totally composed of massive potassium feldspar. Although this is not extensive it is locally common in 10-30cm patches. Later sodic-calcic alteration (actinolite-magnetite) overprints the potassic alteration giving the porphyry a dark greenish-pink cast. Preliminary observations suggest these areas contain somewhat higher Au-Cu values.

In conjunction with wall rock alteration the La Garrucha porphyries are cut by a variety of porphyry style veins in varying amounts. The veins are typically composed of various combinations of quartz, magnetite, magnetite-sulphide, quartz-magnetite, quartz-magetite-sulphide, quartz-sulphide and quartz-carbonate-sulphide. Preliminary paragenesis of these veins based on observations from 13 drill holes is as follows.

- magnetite veins, often hairline size, cut by all other vein types
- quartz-chalcoplyrite +/- bornite centerline veins with <1mm centerline of chalcopyrite in semi-otherwise translucent quartz; typically several close spaced generations of this vein type as often times these cut similar quartz-chalcopyrite+/- bornite centerline veins.
- Quartz-magnetite +/- chalcopyrite +/- bornite veins with magnetite along inside margin of quartz vein
- Quartz-magnetite +/- chalcopyrite +/- bornite centerline veins (magnetite along centerline)
- Quartz-pyrite veins with sericite envelopes
- Quartz-carbonate+/-pyrite+/-sphalerite+/-stibnite
- Carbonate veins

7.12 La Garrucha Prospect Mineralization

The principal ore minerals associated with the Au-Cu porphyry mineralization at La Garrucha consist of chalcopyrite, bornite and perhaps pyrite. Secondary copper minerals (chalcocite, cuprite, malachite and chrysocolla) do occur locally in the shallow portions at La Garrucha but are rare and do not account for a significant Au-Cu values volumetrically. Pyrite mineralization for the most part is low at La Garrucha except where secondary QSP alteration has sulphidized previously existing magnetite. Typically the total sulphide content of the “ore” zone at La Garrucha is less that 2% whereas the magnetite content averages perhaps 3-5%.

Chalcopyrite is much more common than bornite. Bornite typically occurs as traces only and usually indicates greater significantly Au values. Both chalcopyrite occur as disseminations and within various veins types as disseminations, patches and ribbons. In a typical moderately to well mineralized zone at La Garrucha the chalcopyrite will rarely exceed 1% and typically averages in the area of 0.3% to 0.4%. Chalcopyrite in veins however can make up to 20% by volume by these veins are typically less than 1-2mm wide.

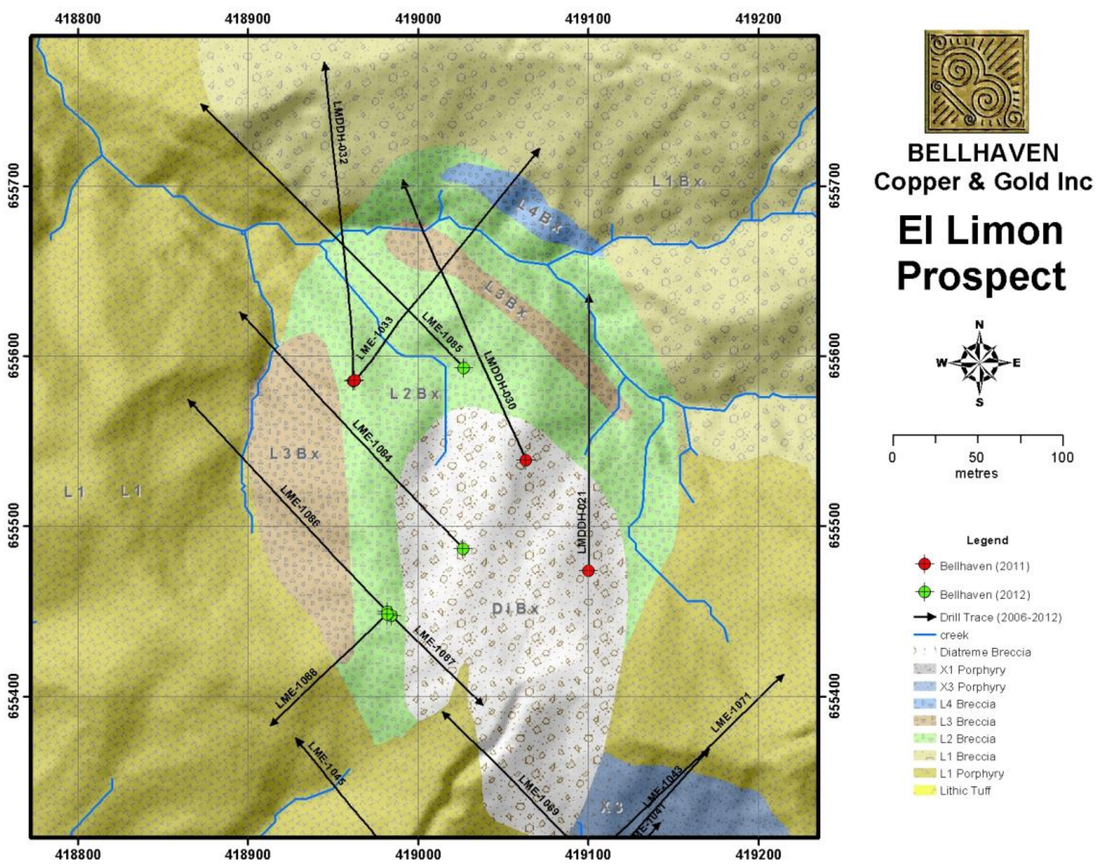
For the most part the tenor of the Au-Cu mineralization at La Garrucha is reflected in the presence of quartz veins, both quartz and magnetite and their various types as indicated above. However, in some instances there is little difference in Au-Cu grades between rock with 5% vein volume and rock with 25% vein volume. Similarly lithologies exhibiting identical alteration intensity the Au-Cu content will be low (typically less than 0.30g/t Au) when quartz veins are absent.

Minor silver, lead, and zinc mineralization is associated with cross-cutting quartz-calcite-sphalerite-galena veins (late in the paragenetic sequence, as listed in the previous section). These veins are more common at La Garrucha than Middle Zone and La cantera. At La Garrucha they are more common in G1 porphyry and breccia than G2 porphyry and breccia and much less common in the G4 porphyry and breccia.

7.13 El Limon Prospect Geology

The Limon complex measures approximately 800m in diameter of a sub-circular shape in plan view. The Limon porphyry complex partially encircles the Middle Zone to the north, west and south. Within the complex are two known mineralizing porphyry systems, the Middle Zone prospect and the El Limon prospect. Low level alteration assemblages (argillic and propylitic) at the El Limon prospect and the presence of a possible explosive diatreme suggest the El Limon prospect porphyry is very high vertically in the porphyry system and thus very weakly mineralized.

Figure 7.13 El Limon Prospect Geology



7.14 El Limon Prospect Alteration

Alteration at the El Limon prospect is variable as at the other prospects. The L1 prophyry is for the most part strongly argillized. Near its contact with the X3 porphyry it can exhibit weak to moderate biotite-magnetite alteration. Breccia clasts of L1 within the X3 porphyry typically exhibit moderate to strong relic biotite alteration. In the area of drill holes LMDDH-021 and 030, at considerable depth secondary potassium feldspar and magnetite and/or biotite are prevalent.

The L2 porphyry is moderately to strongly propylitized with the development of considerable epidote-calcite patches and partial vein infill. Amphiboles are partially to completely replaced by a mix of epidote-calcite-magnetite. Where propylitic alteration is weak the original alteration of actinolite-magnetite prevails.

Secondary biotite alteration defines the L3 porphyry. The biotite is typically medium grained (1-2mm length) euhedral, and evenly distributed throughout the porphyry.

7.15 El Limon Prospect Mineralization

Significant Au-Cu mineralization at El Limon is sporadic and associated with the L2 porphyry event and the strong potassic alteration (pottasium feldspar-magnetite and biotite-magnetite) event cutting the L1 porphyry at depth in drill holes LMDDH-021 and 030. Mineralization in the potassic zones of LMDDH-021 and 030 is comprised of chalcopyrite disseminations in weakly developed quartz and quartz-magnetite veins. Mineralization in the L2 porphyry and associated L2 breccia of small amounts of chalcopyrite within well quartz veins, quartz-magnetite veins, magnetite veins and fine grained disseminations in the porphyry. Unfortunately the L2 porphyry is small in extent and the Au-Cu grades observed are even much lower than the grades of the Middle Zone, typically in the 0.200g/t Au range with less than 0.10% Cu. As a result further exploration of the El Limon prospect is of low priority.

8.0 DEPOSIT TYPES

The La Mina Property hosts copper-gold mineralization associated with sub-volcanic porphyry stocks intruding a late Miocene-age volcanic-sedimentary sequence of the Combia Formation. These rocks are related to an extensive magmatic arc that developed along the northern South American plate margin (the Chocó block margin).

Past and current exploration in and around the La Mina district has been aimed at Au-Cu porphyry, and/or epithermal Au styles of mineralization. In the specific cases of La Cantera Middle Zone ,and La Garrucha the principal style of mineralization can be classified as Au-Cu porphyry.

Porphyry deposits are typically large, low or medium grade deposits usually associated with a combination of gold, copper, plus other base metals, and often molybdenum. Porphyries occur in a variety of tectonic settings; along the South American Andes Mountains they are classically related to the roots of andesitic strato-volcanoes, along subduction zones and continental-island arc settings. While some older examples of porphyries are known, most are associated with young, Tertiary-aged volcanic-igneous rocks however mineralization can extend into the surrounding sedimentary or volcanic host rocks.

Mineralization can occur in various styles and many combinations of disseminations, veins, stockwork, fractures, and breccias. As in the case of La Mina, multi-phase intrusions and inter-mineral phases are important factors in assessing porphyries, along with their wall rock conditions, host rocks, structural conduits, and various chemical parameters (pH, water content, etc).

A particular characteristic of porphyry deposits is the extent of their alteration halos as a result of abundant hydrothermal activity streaming from depth; these features in turn drive the applicable exploration methods for “vectoring” towards the center of this type of deposit. Therefore geochemical surveys are a basic and useful tool to map the large dispersion halos around the core porphyry center using stream sediments, soil sampling, or rock chip sampling for the principal economic elements of interest or various pathfinder elements.

The dispersed nature of sulfide distribution is also conducive to the application of various geophysical methods, either ground-based or using fixed-wing or helicopter-borne instruments. Magnetics, Induced Polarization, and radiometric geophysical surveys can be successfully used to outline alteration dispersion patterns and have all been applied to varying degrees in exploring the La Mina Property.

Therefore, exploration at La Mina is focused on discovering porphyry-style mineralization using an appropriate set of exploration techniques for this style of deposit.

9.0 EXPLORATION

Since acquiring an option on the Property in mid-2010, Bellhaven has advanced exploration through more detailed mapping and trenching at La Cantera and Middle Zone, mapping and channel sampling at La Garrucha, mapping, rock chip sampling and trenching throughout the project area, various ground geophysical surveys, and re-logging and re-interpretation of drill core from previous drilling campaigns. Furthermore, two airborne magnetic surveys have been flown over the La Mina Project at no cost to Bellhaven; the first was flown by AngloGold and the second was flown by Colombia Crest in 2011. Ground magnetic follow up surveys or geologically favorable areas was completed in mid-2012 and an airborne ZTEM survey was flown over much of the La Mina and La Garrucha licenses in late 2012. All of these data have been incorporated into the geophysical evaluation. Through September 1, 2013, Bellhaven has completed a total of 100 drill holes for a total of 35,334.21 metres. This drilling is summarized in Table 9.1. (see the following Section 9.1 for further details).

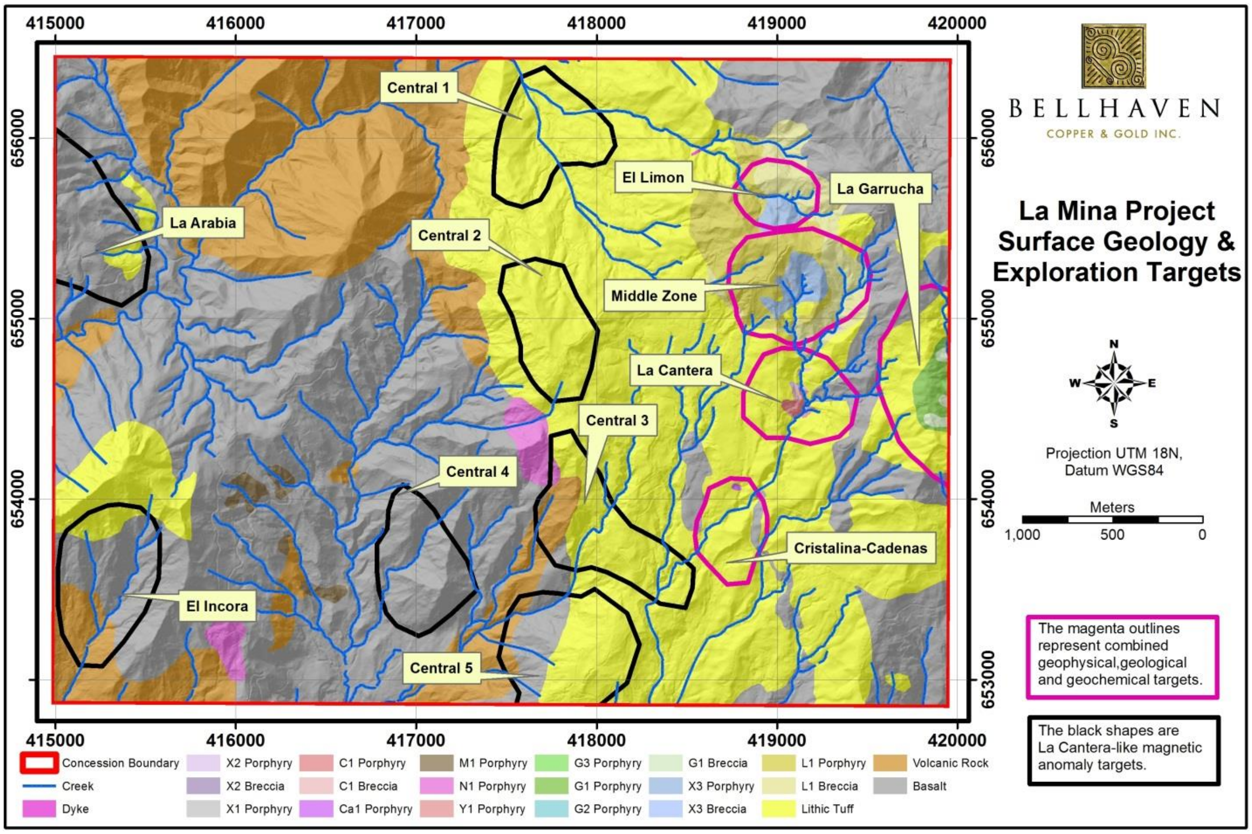
Table 9.1 Drilling Completed by Bellhaven at La Mina

Area	Drill Holes	Meters
La Cantera*	26	6,920
Middle Zone	53	18,462
El Limon	9	2,923
La Garrucha	17	6,733
La Cristalina	1	295

***Excludes six holes previously drilled by AGA. Including these holes increases the total number of drill holes for La Cantera to 26, for a total of 8372.86 meters*

Within the La Mina Project, there are a total of twelve zones of interest for copper-gold mineralization (Figure 9.1). Three of these zones are at least partially drill tested and have combined geological, geochemical and geophysical attributes that suggest that they have potential to host economic gold-copper mineralization (La Cantera, Middle Zone, and La Garrucha). Two of these zones (El Limon and La Cristalina) have 8 and 1 drill holes respectively. Results of this drilling at El Limon reported limited low grade Au-Cu mineralization but not of the size and tenor to warrant further exploration. The one drill hole at La Cristalina did not intersect any porphyry intrusive units nor were any significant Au or Cu values reported. It is postulated that the Cristalina-Cadenas area may constitute a more epithermal-related mineralized target, or is a capping 'leakage' of a porphyry mineralized target at some depth. An additional seven zones exhibit amenable geophysical and geochemical characteristics (Figure 9.1) and are also considered to be highly prospective. Some of these zones are just now seeing their first mapping and sampling by Bellhaven geologists (e.g., Central 1, La Arabia).

Figure 9.1 Exploration Targets at La Mina Project



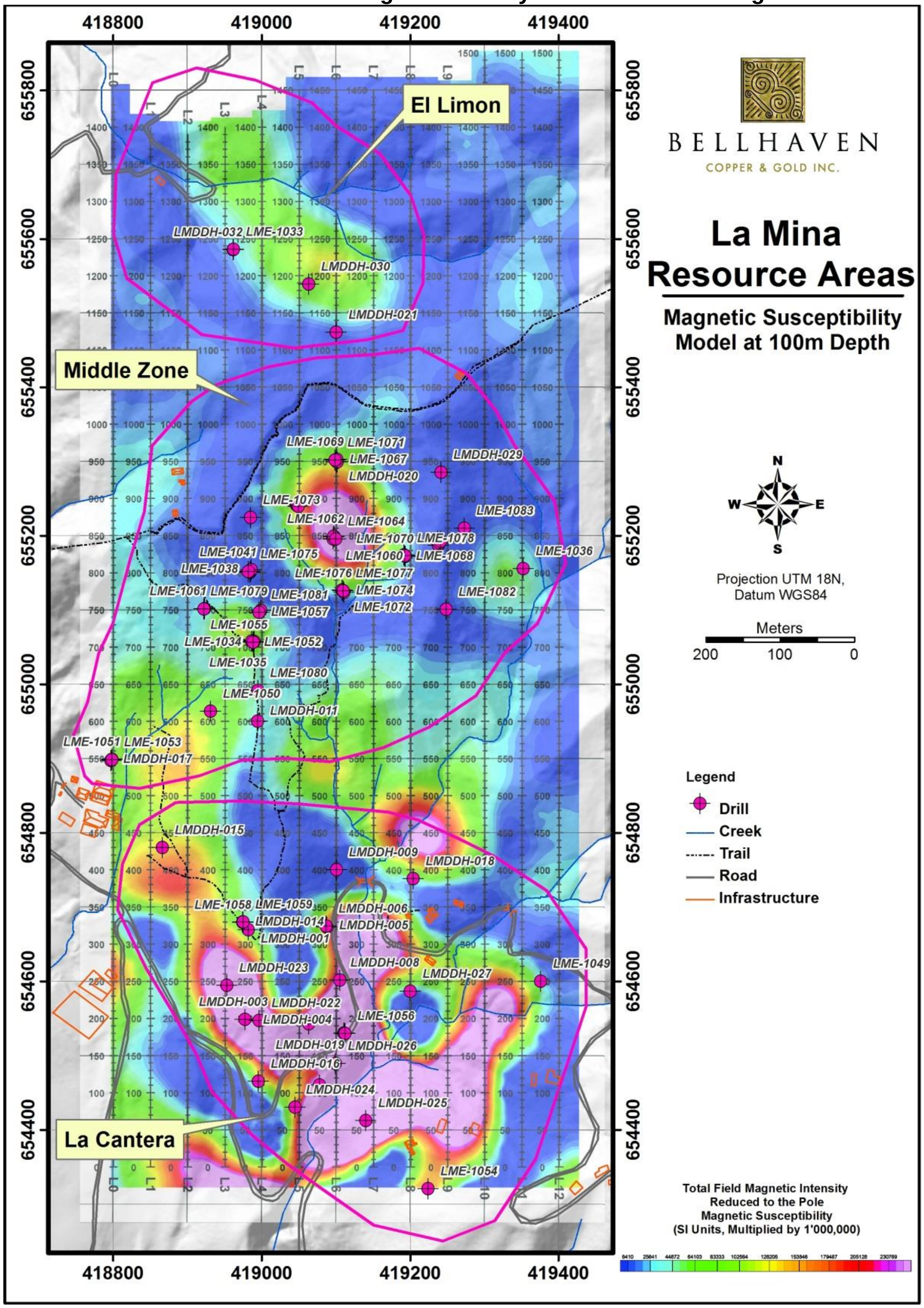
Bellhaven's drilling programs have been carried out by Kluane Colombia SA, a subsidiary of the Canadian drill contractor Kluane Drilling Ltd. and for a short period of time in 2012 by Andina de Perforaciones S.A. also from Colombia.

Prior to initiating its drill programs in 2010, Bellhaven completed channel sampling in trenches at Middle Zone where two surface exposures returned results of 19 m grading 0.73g/t Au and 24m grading 0.74g/t Au (0.4 g/t Au cut off) separated by a zone of 40 m of so far un-sampled trench.

In late 2010, ground-based geophysical surveys (magnetic, radiometrics, and IP) identified three new exploration targets (El Cafetal, La Virgen, and Filo de Oro) bringing to six the geophysical anomalies identified on the Property along a N-S trend of approximately 1.5km by 0.6km (Figure 9.2). This ground-based geophysics program consisted of approximately 18.5 line-kilometres of combined IP-magnetic-radiometric survey and was carried out by ARCE Geofisicos SAC, an independent geophysical contractor based in Lima, Peru.

In early 2012, a ground-based survey was conducted over the entire eastern half of La Mina. This data is currently being processed. This program consisted of approximately 114 line-kilometres of magnetic surveying and was carried out by KTTM Geophysics Limited, an independent geophysical contractor based in Medellin, Colombia.

Figure 9.2 Magnetic Susceptibility Model at 100m Depth.
The Area of the Ground Magnetic Survey is the Red Box in Figure 6.1



Principal observations from correlation of the 2010 ground geophysics with geochemistry and geological features were:

- Anomalously high radiometrics (potassium) likely represents K-silicate (potassic) altered rocks. The high potassium values occur over a distance of 900m along an approximately north-south trending corridor defined by the La Cantera-Middle Zone targets. High values also occur to the north at El Limon along an approximately east-west belt that is 500m long.
- High chargeability zones fringing the drilled zones at La Cantera and Middle Zone can be attributed to rocks containing high quantities (typically 5-10 volume percent) of pyrite. High chargeability features are observed at La Cantera, Middle Zone and Filo de Oro (LMDDH-028, LMDDH-029 and LME-1036).
- The La Cantera stock spatially coincides with a strong resistivity "low" while the Middle Zone is characterized by a weakly defined "low". Another prominent area characterized by a strong resistivity "low" occurs between the El Limon and Middle Zone targets.

In summary, exploration of the La Mina Property has been carried out using a systematic combination of geology, geochemistry, and geophysics which has identified several anomalous zones of interest. To date Bellhaven has drilled five of these targets;La Cantera, the Middle Zone, El Limon, La Garrucha and one drill hole at La Cristalina with 100 drill holes completed by Bellhaven through September 2013.

10.0 Drilling

Drilling programs by AngloGold Ashanti (2005) and by Bellhaven in its current campaign (2010-2012) have been based on HQ, HTW, NTW and BTW core as a function of depth, drill hole inclination, drill machine availability and ground conditions. Wardrop's (2011) observations at site and review of core logs and assay certificates indicates that the core sampling has been carried out in a professional manner and that there are no biases in recovery or sampling error evident.

Core samples are collected on a nominal 2m interval, except where occasional structures, core recovery, or lithological breaks are needed. Bellhaven completed a program of re-logging the early AGA holes. Relogging of its own holes is ongoing as the current geological understanding evolves to acquire a more complete and accurate understanding of the geological lithologies and mineralization controls. Bellhaven's logging procedure is thorough and includes recording of the following information:

- Sample Number, from – to
- Alteration Minerals: quartz, biotite, potassium feldspar, actinolite, albite, epidote, chlorite, sericite, calcite and clay
- Mineralization, %: chalcopyrite, bornite, chalcocite, pyrite, magnetite, limonite and goethite
- Vein Mineralization, percent: quartz, quartz-magnetite, pyrite, magnetite-actinolite, anhydrite, and age relationships, etc
- Graphic Log of Alteration, Mineralization, Lithology, Structure, etc.
- Alpha-numeric codes for lithology, structure and alteration (early, late and other)
- Comments and short description of principal alteration associations, etc.

A separate geotechnical log records fracture frequency, core recovery, Rock Quality Designation (RQD), and descriptions of fracture types and characteristics. A magnetic susceptibility meter has been in use throughout much of the program; the drill core technicians collect a nominal three magnetic susceptibility readings per sample interval. The average value is recorded on the log form.

Beginning with drill hole LMDDH-019, core densities are determined approximately every 30 meters using a standard weight in air/weight in water technique. These readings are recorded on a separate log sheet and entered into the database.

Core is photographed (2 boxes/photograph) in the condition that it is received from the drill site and then it is photographed again after the core has been logged, marked for sampling and cut.

10.1 La Cantera Drilling

The La Cantera deposit is intersected by a total of 25 diamond drill holes, the first six of which were drilled previous to Bellhaven. Table 10.1 below summarizes the drilling locations. All drill hole collar locations are surveyed by GPS and identified with well-defined monuments (Figure 10.1).

Table 10.1 La Cantera Drilling – all holes						
Hole ID	East (UTM)	North (UTM)	Elevation	Azimuth	Dip	EOH
LMDDH-001	418982.4	654669.3	1804.87	0.8	-60	258.15
LMDDH-002	419111.3	654529.9	1749.07	177	-59	188.60
LMDDH-003	418977.6	654548.4	1771.45	0	-61	200.20
LMDDH-004	419111.3	654530.3	1749.03	127	-60	250.00
LMDDH-005	419088.2	654673	1761.20	184	-60	251.55
LMDDH-006	419087.2	654674.4	1761.46	135	-60	303.9
LMDDH-007	419078.2	654460.4	1730.15	180	-60	124.97
LMDDH-008	419105.6	654601.6	1753.37	180	-60	297.18
LMDDH-009	419101	654750	1781.56	180	-60	434.34
LMDDH-014	418974.7	654680.1	1802.11	135	-50	511.74
LMDDH-015	418866.5	654780.1	1773.01	135	-55	639.77
LMDDH-016	418995.6	654465.4	1757.81	45	-58	517.01
LMDDH-019	419063.6	654542.6	1780.17	45	-57	320.04
LMDDH-022	418996.6	654547.2	1780.8	132	-59	286.66
LMDDH-023	418953.4	654594.3	1774.26	135	-65	365.76
LMDDH-024	419045.4	654430.6	1730.78	45	-55	436.77
LMDDH-025	419140.5	654412.3	1737.96	315	-55	305.35
LMDDH-026	419099.7	654489.1	1743.01	45	-55	294.13
LMDDH-027	419200.4	654586.6	1751.40	225	-60	419.10
LME-1049	419376.2	654600	1786.34	225	-55	501.80
LME-1054	419224.5	654320.5	1783.2	25	-55	483.41
LME-1056*	419112.6	654529.4	1749.04	180	-60	163.44
LME-1058*	418975.1	654679.5	1802.51	135	-50	67.97
LME-1059*	418975.3	654680.1	1802.53	135	-50	196.59

A summary of significant intercepts in drilling completed at La Cantera by Bellhaven (2010 through February 2012) is included in Table 10.2.

Table 10.2 La Cantera Deposit Drilling through February 2012						
Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LMDDH-07	7.62	27.91	20.29	0.74	0.40	1.43
LMDDH-08	0.70	88.00	87.30	1.07	0.30	1.59
LMDDH-08	197.05	269.72	72.67	0.88	0.39	1.55
LMDDH-09	194.75	337.19	142.44	0.70	0.29	1.20
LMDDH-14	100.00	246.00	146.00	0.93	0.33	1.51
LMDDH-14	392.00	454.00	62.00	0.75	0.38	1.40
LM-DDH-15	511.00	601.00	90.00	0.57	0.34	1.15
LMDDH-15	626.00	634.00	8.50	0.48	0.23	0.87
LMDDH-16	12.00	217.30	205.30	0.91	0.31	1.45
LMDDH-16	402.00	470.00	68.00	0.60	0.34	1.19
LMDDH-19	0.00	230.00	230.00	0.99	0.30	1.50
LMDDH-22	8.00	244.00	236.00	1.04	0.45	1.80
LMDDH-23	211.00	289.00	78.00	0.14	0.20	0.47
LMDDH-23	311.90	322.00	10.10	0.19	0.22	0.57
LMDDH-24	87.00	181.05	94.05	1.53	0.52	2.43
LMDDH-24	328.00	420.00	92.00	0.46	0.24	0.86
LMDDH-25	17.00	274.00	257.00	0.45	0.23	0.84
LMDDH-26	4.57	47.00	42.43	1.02	0.28	1.49
LMDDH-26	129.20	275.00	145.80	0.46	0.29	1.13
LMDDH-27	28.95	141.60	112.65	0.74	0.32	1.29
LMDDH-27	219.00	313.00	94.00	0.69	0.27	1.15
LME-1056*	40.00	158.00	118.00	1.00	0.32	1.54
LME-1059*	88.08	196.59	108.51	0.75	0.33	1.32

*The indicated drill holes are twins of existing holes, and were also planned as sources of material for the 2012 metallurgical study. They are not included in the La Cantera resource in this report, or in the 43-101 Technical Report dated August 29, 2011

All drilling on the project by Bellhaven and previous owners has been done with man-portable, diamond drill core machines. Drill hole locations are initially located in the field with a hand-held GPS unit or a total station theodolite. Upon completion of each drill hole final drill hole collar coordinates are surveyed with a total station theodolite by Bellhaven's full time survey crew on site.

At the Middle Zone and La Cantera prospects drill holes have been drilled at azimuths of N45E, N45W and NS with inclinations of -55 to -90 degrees. In the case of La Cantera drilling was completed on a wide-spaced scissor pattern (50-100m spacing) providing good 3-dimensional coverage of the extent of mineralization that to date can be extended to a vertical depth of some 250-500m (around the low grade central core), see Figures 7.4 and 7.5 in Section 7.0.

At La Garrucha drill holes were drilled at azimuths of E-W (90), W-E (270), N45E and S45W with inclinations of -50 to -78 degrees.

Core Recovery observed has in general been very good, in excess of 90%, except in some discrete fault-gouge zones of a few meters in length (core length).

In the case of La Cantera, the drilling programs confirmed the ellipsoidal outline of the porphyry complex on surface (coincident with the magnetic signature), its steep vertical attitude, and the occurrence of mineralized porphyry and breccia zones draped around a central low grade core.

Figure 10.1 La Mina Drill Collar Monuments

10.2 Middle Zone Drilling

The Middle Zone deposit Resource is based on intersections from a total of 39 diamond drill holes, all by Bellhaven. The table below summarizes this drilling.

Table 10.3 Middle Zone Collar Surveys

Hole ID	East (UTM)	North (UTM)	Elevation	Azimuth	Dip	EOH
LMDDH-010	418985.03	655150.82	1940.12	180	-60	178.30
LMDDH-011	418994.97	654950.03	1869.70	0	-62	541.02
LMDDH-012	418999.24	655099.34	1907.68	45	-61	493.78
LMDDH-013	419098.01	655198.90	1928.01	45	-60	335.28
LMDDH-017	418797.07	654897.20	1772.88	45	-62	312.42
LMDDH-020	419101.06	655300.04	1958.24	179	-57	260.60
LMDDH-028	419238.29	655187.13	1971.16	180	-70	228.30
LMDDH-029	419241.89	655285.52	1998.72	180	-70	297.18
LMDDH-031	418989.05	655056.86	1887.51	0	-90	530.35
LME-1034	418990.06	655057.36	1887.56	45	-79	681.23
LME-1035	418990.22	655057.36	1887.56	45	-70	689.19
LME-1036	419352.61	655155.92	1913.07	225	-85	353.56
LME-1038	418985.50	655152.31	1940.29	135	-70	650.74
LME-1041	418986.37	655154.45	1940.67	45	-60	504.44
LME-1043	419048.78	655239.97	1932.09	45	-60	375.82
LME-1045	419047.44	655241.51	1932.48	315	-60	391.66
LME-1046	419047.60	655241.57	1932.47	0	-90	473.96
LME-1048	419049.50	655239.46	1932.03	135	-60	501.35
LME-1050	418931.50	654963.54	1815.13	45	-50	600.45
LME-1051	418798.73	654898.69	1773.00	45	-55	539.15
LME-1052	418986.85	655058.19	1887.52	315	-70	355.09
LME-1053	418798.48	654898.49	1773.01	45	-70	680.60
LME-1055	418988.74	655056.56	1887.52	135	-60	427.50
LME-1057	418996.61	655096.85	1909.27	225	-60	199.30
LME-1060	419096.69	655195.73	1926.05	225	-53	195.40
LME-1061	418923.30	655101.96	1881.71	45	-60	199.64
LME-1062	419096.88	655199.05	1926.16	315	-55	198.00
LME-1063	419237.43	655192.58	1971.07	315	-60	250.24
LME-1064	419100.06	655195.96	1926.29	135	-55	198.50
LME-1065	419239.92	655190.24	1971.20	135	-52	251.46
LME-1066	419241.111	655192.909	1971.447	45	-60	190.50
LME-1067	419102.236	655299.764	1958.286	135	-60	260.30
LME-1068	419191.817	655174.275	1931.367	315	-70	204.21
LME-1069	419101.409	655302.878	1958.842	315	-60	235.30
LME-1070	419193.716	655172.325	1931.37	135	-52	245.36
LME-1071	419099.213	655302.214	1959.457	45	-55	293.10
LME-1072	419108.59	655126.86	1894.906	325	-45	225.55
LME-1073	418985.483	655224.786	1952.558	135	-52	307.20
LME-1074	419110.873	655124.027	1895.075	135	-70	303.27

A summary of the significant intercepts in drilling completed in Middle Zone by Bellhaven (2010 to July 2012) and included in the resource estimate is given below.

Table 10.4 Middle Zone Prospect Drilling through July 2012

Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LMDDH-010	91.44	154.00	62.56	0.47	0.09	0.62
LMDDH-011	235.00	247.52	12.52	0.27	0.08	0.42
LMDDH-011	289.00	472.00	183.00	0.20	0.12	0.41
LMDDH-012	160.00	188.00	28.00	0.30	0.18	0.61
LMDDH-012	326.00	420.00	94.00	0.76	0.39	1.42
LMDDH-013	1.52	78.35	76.83	0.70	0.27	1.16
LMDDH-020	60.00	138.00	78.00	0.38	0.20	0.72
LMDDH-020	145.00	167.00	22.00	0.22	0.23	0.61
LMDDH-020	183.00	191.00	8.00	0.31	0.34	0.89
LMDDH-020	204.00	233.80	29.80	0.25	0.22	0.63
LMDDH-028	20.00	42.00	22.00	1.15	0.00	1.15
LMDDH-031	0.00	10.66	10.66	1.26	0.04	1.33
LMDDH-031	39.00	101.00	62.00	0.83	0.11	1.01
LMDDH-031	155.00	192.00	37.00	0.51	0.09	0.67
LMDDH-031	253.00	266.00	13.00	0.41	0.13	0.63
LMDDH-031	408.50	530.35	121.85	0.50	0.21	0.86
LME-1034	9.00	32.00	23.00	0.62	0.04	0.69
LME-1034	97.00	110.00	13.00	0.40	0.07	0.52
LME-1034	192.00	206.00	14.00	0.43	0.08	0.57
LME-1034	215.00	225.00	10.00	0.36	0.09	0.51
LME-1034	327.00	429.42	102.42	0.71	0.24	1.12
LME-1034	452.63	466.00	13.37	0.54	0.16	0.81
LME-1034	527.00	556.71	29.71	0.20	0.22	0.57
LME-1035	1.59	15.00	13.41	0.74	0.04	0.81
LME-1035	19.00	40.35	21.35	1.07	0.09	1.22
LME-1035	48.77	64.00	15.23	0.59	0.1	0.75
LME-1035	584.50	599.00	14.50	0.25	0.19	0.58
LME-1035	605.00	645.00	40.00	0.25	0.18	0.58
LME-1035	651.00	666.50	15.50	0.25	0.16	0.52
LME-1038	401.00	527.00	126.00	0.31	0.15	0.56
LME-1038	501.00	521.00	20.00	0.5	0.18	0.80
LME-1038	577.00	582.00	5.00	0.33	0.19	0.65
LME-1041	107.00	112.00	5.00	0.56	0.07	0.68
LME-1041	132.00	140.00	8.00	0.24	0.12	0.45
LME-1041	144.00	213.00	69.00	0.38	0.22	0.76
LME-1041	221.00	229.00	8.00	0.23	0.15	0.50
LME-1041	280.00	320.00	40.00	0.83	0.35	1.43
LME-1041	353.70	392.00	38.30	0.38	0.26	0.82
LME-1041	404.00	410.00	6.00	0.42	0.12	0.62
LME-1043	99.00	114.90	15.90	0.42	0.19	0.74

Table 10.4 Middle Zone Prospect Drilling through July 2012						
Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LME-1043	122.00	133.00	11.00	0.51	0.17	0.79
LME-1046	120.00	142.00	22.00	0.25	0.21	0.60
LME-1046	157.00	165.00	8.00	0.29	0.22	0.67
LME-1046	177.00	344.00	167.00	0.29	0.2	0.63
LME-1046	415.00	423.00	8.00	0.18	0.13	0.41
LME-1046	439.00	457.00	18.00	0.25	0.25	0.70
LME-1048	37.00	61.30	24.30	0.31	0.17	0.61
LME-1048	114.30	176.88	62.58	0.69	0.36	1.31
LME-1050	483.00	493.00	10.00	0.28	0.16	0.55
LME-1050	524.00	532.00	8.00	0.20	0.16	0.46
LME-1050	542.00	552.00	10.00	0.20	0.18	0.52
LME-1051	396.00	536.00	140.00	0.48	0.18	0.79
LME-1052	6.09	104.00	97.91	1.24	0.14	1.50
LME-1052	122.00	156.00	34.00	0.85	0.10	1.0
LME-1052	162.00	171.00	9.00	1.37	0.14	1.6
LME-1052	178.85	186.00	7.15	0.66	0.08	0.8
LME-1052	200.00	209.00	9.00	0.39	0.06	0.5
LME-1052	256.00	282	26.00	0.42	0.05	0.5
LME-1053	593.00	680.6	87.60	0.43	0.31	0.96
LME-1055	1.00	17.15	16.15	0.90	0.03	0.95
LME-1055	23.85	76.15	52.30	0.67	0.07	0.74
LME-1057	45.00	137.25	92.25	0.88	0.11	1.07
LME-1060	8.50	17.00	8.50	1.31	0.07	1.42
LME-1060	27.25	107.85	80.60	0.66	0.32	1.2
LME-1060	116.00	126.8	10.80	0.14	0.16	0.41
LME-1061	4.57	47.24	42.67	0.72	0.09	0.88
LME-1061	16.00	26.80	10.80	0.85	0.17	1.15
LME-1061	109.22	118.12	8.90	0.47	0.07	0.59
LME-1062	4.80	19.80	15.00	0.47	0.03	0.53
LME-1062	63.80	96.25	32.45	0.28	0.17	0.56
LME-1063	18.28	35.05	16.77	1.05	0.02	1.08
LME-1064	0.00	78.10	78.10	0.54	0.17	0.83
LME-1065	6.09	25.00	18.91	0.46	0.02	0.48
LME-1065	81.00	103.02	22.02	0.67	0.12	0.87
LME-1065	128.00	165.51	37.51	0.78	0.09	0.95
LME-1066	39.00	83.00	44.00	0.39	0.06	0.49
LME-1067	179.00	205.00	26.00	0.66	0.05	0.75
LME-1067	239.00	257.30	18.30	0.52	0.03	0.58
LME-1068	21.33	71.00	49.67	0.67	0.05	0.76
LME-1068	101.00	202.69	101.69	0.64	0.11	0.84
LME-1070	7.62	51.00	43.38	0.89	0.07	1.01
LME-1072	10.66	37.25	26.59	0.291	0.21	0.64
LME-1072	64.61	199.00	134.39	0.65	0.32	1.19

Table 10.4 Middle Zone Prospect Drilling through July 2012						
Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LME-1073	44.10	60.60	16.50	0.25	0.09	0.4
LME-1073	137.00	178.00	41.00	0.21	0.17	0.51
LME-1074	6.09	13.71	7.620	0.29	0.07	0.41
LME-1074	34.13	48.15	14.02	0.19	0.19	0.51
LME-1074	60.04	62.48	2.44	0.21	0.16	0.48
LME-1074	71.62	77.72	6.10	0.24	0.12	0.45

At the Middle Zone, 53 holes have been drilled to date within a generally elongate zone (N45E) in plan that is bounded on the western flank by interpreted faults but remains open to the southwest, southeast, and at depth. The fault offsets and open target zones on the south suggest a possible connection with La Cantera at depth. Drilling continued at Middle Zone beyond the early July 2012 cutoff for the resource estimate in a total of 14 additional holes. Details of these additional holes are listed in Table 10.5 below.

Table 10.5 Additional Middle Zone Drill Holes						
Hole ID	East (UTM)	North (UTM)	Elevation	Azimuth	Dip	EOH
LME-1075	418982.28	655151.71	1940.17	225	-50	236.10
LME-1076	419109.97	655125.65	1894.90	225	-50	39.62
LME-1077	419110.23	655125.84	1895.03	225	-65	153.92
LME-1078	419192.96	655173.38	1931.68	225	-50	422.09
LME-1079	418922.51	655101.39	1880.54	315	-50	147.82
LME-1080	418995.29	654991.70	1868.10	335	-60	188.36
LME-1081	418998.90	655098.64	1906.89	135	-50	292.60
LME-1082	419248.66	655100.04	1939.19	315	-50	322.78
LME-1083	419273.92	655231.91	1973.80	135	-50	208.78
LME-1089	418694.04	655043.48	1793.81	135	-51	297.18
LME-1090	418797.39	654904.12	1774.22	45	-64	596.79
LME-1091	418797.95	654902.29	1773.39	135	-50	548.94
LME-1092	418796.72	654905.36	1773.63	0	-48	446.53
LME-1093	418975.74	654683.25	1801.63	45	-51	400.81

A summary of the significant intercepts in drilling completed in Middle Zone by Bellhaven subsequent to the 2012 Resource and not included in the resource estimate is given below.

Table 10.6 Middle Zone Deposit Drilling Subsequent to the 2012 Resource						
Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LME-1075	95.60	109.90	14.30	0.51	0.15	0.76
LME-1075	120.40	126.10	5.70	0.95	0.18	1.27
LME-1075	132.40	157.80	25.40	0.41	0.06	0.51
LME-1076	19.50	24.38	4.88	0.29	0.07	0.41
LME-1076	30.48	39.62	9.14	0.26	0.24	0.67
LME-1077	12.19	65.53	53.34	0.33	0.21	0.69
LME-1078	16.76	27.43	10.67	0.73	0.06	0.84
LME-1079	No Significant Results					
LME-1080	66.75	101.19	34.44	0.69	0.10	0.86
	136.55	179.26	42.71	0.72	0.08	0.85
LME-1081	48.76	64.00	15.24	0.39	0.11	0.58
LME-1082	107.43	129.54	22.11	0.72	0.08	0.85
and	138.68	254.50	115.82	1.01	0.08	1.15
including	138.68	202.00	63.32	1.48	0.09	1.63
LME-1083	No Significant Results					
LME-1089	No Significant Results					
LME-1090	530.58	548.70	18.12	0.34	0.30	0.81
LME-1091	No Significant Results					
LME-1092	No Significant Results					
LME-1093	No Significant Results					

10.3 La Garrucha Drilling

Since drilling began at the La Garrucha prospect in July 2011 a total of 6733.49m has been drilled in 17 holes. The table below summarizes this drilling.

Table 10.7 La Garrucha Drill Holes Estimate

Hole ID	East (UTM)	North (UTM)	Elevation	Azimuth	Dip	EOH
LME-1037	419822.24	654598.62	2008.49	90	-70	380.08
LME-1039	419822.39	654598.45	2008.76	0	-90	509.93
LME-1040	419833.15	654703.30	2013.51	90	-70	355.09
LME-1042	419833.33	654703.11	2013.54	0	-90	391.66
LME-1044	419832.58	654702.80	2013.41	45	-70	502.92
LME-1047	419833.73	654703.22	2011.88	90	-60	242.31
LME-1095	419840.83	654507.20	1994.24	45	-51	280.11
LME-1097	419830.11	654667.56	2007.17	90	-65	349.81
LME-1098	419829.85	654415.93	1981.45	90	-70	360.27
LME-1100	419873.03	654308.13	1980.78	45	-65	297.18
LME-11101	420026.27	654714.28	1961.06	225	-75	414.52
LME-1102	420026.62	654716.92	1961.05	270	-76	422.45
LME-1103	420026.34	654715.66	1961.15	225	-60	320.04
LME-1104	419940.21	654620.09	1990.95	45	-75	565.40
LME-1105	420194.53	654811.87	2004.27	225	-55	614.17
LME-1106	420004.19	654621.40	1954.82	225	-68	285.59

A summary of the significant drill core intercepts for La Garrucha prospect is provided in the table below.

Table 10.8 La Garrucha Significant Drill Core Intercepts Estimate

Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LME-1037	359.00	374.10	15.10	0.49	0.08	0.62
LME-1039	No Significant Results					
LME-1040	161.00	169.00	8.00	0.30	0.18	0.60
	192.00	210.50	18.50	0.35	0.17	0.64
	258.00	355.09	97.09	0.35	0.14	0.60
LME-1042	No Significant Results					
LME-1044	269.10	281.94	12.84	12.84	0.09	0.99
LME-1047	119.50	1239.54	10.04	0.55	0.31	1.08
	154.00	172.40	18.40	0.31	0.15	0.57
	178.25	242.31	64.06	0.55	0.15	0.80
LME-1095	248.20	280.11	31.91	0.47	0.09	0.81
LME-1096	199.64	282.00	82.36	0.48	0.17	0.76
LME-1096	322.96	349.81	26.85	0.64	0.13	0.85
LME-1097	No Significant Results					
LME-1098	No Significant Results					
LME-1100	99.06	107.28	8.22	0.51	0.08	0.62
	143.00	359.80	216.80	1.31	0.15	1.55
	379.00	397.76	18.76	0.59	0.09	0.74
LME-1101	94.87	174.95	80.08	0.49	0.06	0.57
	216.71	253.59	36.88	0.45	0.03	0.49
	278.58	374.50	95.92	0.50	0.13	0.73
LME-1102	7.62	13.71	6.09	0.71	0.03	0.76
	19.81	25.90	6.09	0.53	0.03	0.57
	52.30	60.40	8.10	0.40	0.26	0.80
	66.50	224.62	158.12	1.01	0.17	1.26
	242.00	278.00	36.00	0.34	0.13	0.54
LME-1103	66.00	377.00	311.00	0.84	0.10	1.00
	392.80	421.20	28.40	0.34	0.04	0.41
	436.77	458.30	21.53	0.41	0.04	0.48
	476.09	537.80	61.70	0.56	0.04	0.62
Lme-1104	236.50	268.00	31.50	0.44	0.11	0.60
	355.00	426.00	71.00	1.02	0.14	1.24
	485.65	592.25	106.60	0.56	0.11	0.72
LME-1105	0.00	145.00	145.00	0.51	0.15	0.73

	168.60	200.25	31.65	0.38	0.04	0.44
LME-1106	38.10	50.29	12.19	0.43	0.07	0.54
	171.00	441.96	270.96	1.03	0.13	1.23

A list of the El Limon prospect drill hole collar locations is provided below.

Table 10.9 La Garrucha Drill Holes Estimate

Hole ID	East (UTM)	North (UTM)	Elevation	Azimuth	Dip	EOH
LMDDH-021	419100.48	655474.02	1974.88	0	-63	359.66
LMDDH-030	419063.61	655539.21	1970.59	335	-60	381.00
LMDDH-032	418961.77	655585.57	1949.54	0	-60	414.52
LME-1033	418962.60	655585.98	1949.45	45	-68	461.77
LME-1084	419026.66	655487.08	1986.53	315	-55	333.75
LME-1084	419026.95	655593.22	1917.00	315	-55	353.56
LME-1086	418981.98	655450.14	1994.02	315	-51	284.98
LME-1087	418984.24	655447.90	1993.80	135	-65	181.35
LME-1088	418981.84	655448.59	1994.04	225	-50	152.70

A summary of the significant drill core intercepts for the El Limon prospect is provided in the table below.

Table 10.10 El Limon Significant Drill Intercepts

Hole Number	From (m)	To (m)	Intercept (m)	Au (g/t)	Cu (%)	AuEq (g/t)
LMDDH-021	283.00	359.66	76.66	0.24	0.02	0.28
LMDDH-030	38.00	247.00	209.00	0.19	0.07	0.33
LMDDH-032	4.57	44.26	39.69	0.19	0.05	0.27
LMDDH-033	9.14	365.00	355.86	0.15	0.04	0.22
LME-1084	117.34	196.29	78.95	0.31	0.10	0.47
	234.39	283.46	49.07	0.36	0.11	0.53
LME-1085	18.28	60.65	42.37	0.24	0.12	0.43
LME-1086	154.22	175.80	21.58	0.31	Nil	0.32
LME-1087	No Significant Values					
LME-1088	No Significant Values					

10.4 Trenching

Since acquiring the Property in 2010, Bellhaven has completed several continuous trenches over the La Cantera and Middle Zone targets. Samples were collected as channels from surface outcrop using hammer and maul, or hand-held pneumatic hammer. Trenches vary in length from 20m to 50m+ and are generally oriented E-W. One of these trenches in the Middle Zone has been incorporated into the resource estimate.

10.5 Rock Sampling and Soil Geochemistry

Bellhaven has also augmented and significantly extended the original soil and rock chip sampling done by AGA. Ending July 2012, Bellhaven has taken a total of 682 rock chip samples and 1376 soil samples with further rock chip and soil sampling currently underway. Soil sampling and reconnaissance rock sampling continues across the La Mina Property. The Company expects to release new rock and soil geochemistry results during the third and fourth quarter of the year as new drill targets emerge.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Samples from Bellhaven's exploration and development drilling programs are cut (with a core saw) or split (with a core splitter). The instrument used depends on the level of clay content, in which high clay samples are split to avoid core loss from the core saw's lubricating water. The cut or split samples are stored in a secure core shed on site until they are shipped to the ALS Minerals sample preparation facility in Bogota (through LMDDH-023) or Medellin (all samples from LMDDH-024 to present), Colombia. The samples are prepared at the ALS Minerals sample preparation facilities and then sent to the ALS Minerals regional analytical facility in Lima, Peru. Samples for check assays are prepared at the SGS facility in Medellin, Colombia, and analyzed at the SGS laboratory in Lima, Peru.

At the La Mina project site, a field office and employee housing complex are located within walking distance of the La Cantera and Middle Zone prospects. All core from the AngloGold Ashanti (AGA) drill program is stored on site along with all core from Bellhaven's own programs, which have been underway since mid-2010. In total there are 1,479 meters of AGA core (six holes) and 24,738 meters of Bellhaven core (68 holes) stored at the project site. A new core shed was constructed in 2011 and has a two-tier core rack system. The pulps, splits, and rejects of prepared samples are currently being transferred directly from the preparation labs to a warehouse rented by Bellhaven in Medellin. Pulps, splits, and rejects currently at La Mina are gradually being moved to this same facility, in order to free up space for core from the continuing drill program.

The core sample procedure begins with checking of driller-placed core blocks for accuracy followed by photographs of consecutive pairs of core boxes. The core then undergoes detailed geotechnical and geological logging. Data recorded in geotechnical and geological logs are entered into the project database using a two person parallel input protocol. Technicians identify the nominal 2m sample intervals with wooden core blocks and mark the length of the core with a “cut line” to guide the core cutting. The technicians take care not to mix intervals of significantly different core recovery in the same sample, resulting in some sample intervals that are shorter than the nominal length. All core boxes (metal) are clearly tagged with hole ID and from/to information.

Core marked for sampling is cut or split by Bellhaven technicians (under geological supervision) using a standard electric masonry core saw mounted on a secure steel stand or by a manual Longyear core splitter. Standard safety equipment (hard hat, ear plugs and eye protection) are used by the core cutters and their helpers. The half-core is placed in plastic bags and tagged with a sample number marked on the outside of the bag and a corresponding sample tag inside the bag. Each bag is securely closed. The unused cut half of the core is then placed back in its correct place in the core box and stored for later reference. Blanks (5%), standards (5-12% depending on the nature of the material), preparation duplicates (5%) and field duplicates (2%) are inserted in the sample stream during this stage.

Regular drill core samples are collected in lots of 25–76 and shipped by company vehicle to ALS Minerals for preparation and analysis. Early in the drilling program samples were dispatched to the ALS preparation laboratory in Bogota. However in early 2011 with the addition of an ALS preparation facility in Medellin, samples are dispatched directly to ALS in Medellin for preparation and then forward by ALS to the ALS laboratory in Lima, Peru. Beginning in early 2013 (La Garrucha drill holes LME-1100 to LME-1106) core samples were dispatched to Actlabs Colombia in Rio Negro, Colombia for preparation and analysis. As noted, several QA/QC steps are included in sample preparation. At the preparation facility each sample is coarse crushed to 70% less than 2mm size. A 1kg split of each sample is routinely pulverized to 85% passing 75 microns. A final pulp of 250-300 grams is sent for analysis to the ALS Minerals laboratory in Lima.
Gold, copper, and ICP analyses at the ALS Minerals Lima lab are carried out as follows:

- **Gold:** Fire Assay, 50/30g charge, Atomic Absorption finish
- **Over-range** (>10ppm) results for gold are analyzed by Fire Assay with a Gravimetric finish.
- **Copper and other elements:** 4-acid digestion and ICP-AES analysis, including Cu, Ag, Al, As, Ba, Be, Bi, Ca, Co, Cr, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sc, Sr, Th, Ti, Tl, U, V, W and Zn.

The ALS Minerals laboratory in Lima, Peru is registered to ISO 9001:2008 and has received ISO 17025:2005 accreditation for certain specific methods, such as fire assay/AA gold.

The Actlabs Colombia laboratory in Rio Negro, Colombia is ISO 9001 certified and provides the company with significant turn-around-time on its drill core analyses as the result of a combined preparation and analytical facility in Colombia. Analytical preparation and procedures for gold fire assay and base and trace metal ICP-AES analysis is identical to that of ALS and SGS.

Check assay samples are collected in lots of varying size and shipped by company vehicle to the SGS laboratory in Medellin for preparation, then forwarded by SGS/ALS to the analytical facility in Lima, Peru. At the preparation facility, each sample is coarse crushed to 95% less than 2mm size. The final sample is pulverized to 95% passing 105 microns, and approximately 250 grams is sent to the analytical lab.

Gold, copper, and ICP analyses at the SGS Lima lab are carried out as follows:

- **Gold**: Fire Assay, 30g charge, Atomic Absorption finish
- **Over-range** (>3 g/t) results for gold are analyzed by 30g, Fire Assay with a Gravimetric finish
- **Copper and other elements**: 4-acid digestion and ICP-AES analysis, including Cu, Ag, Al, As, Ba, Be, Bi, Ca, Co, Cr, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sc, Sr, Th, Ti, Tl, U, V, W and Zn.

The SGS laboratory in Lima, Peru, has received accreditation to ISO/IEC 17025:2006 for mineral assay procedures. The preparation laboratory in Medellin is registered to ISO 9001:2008 for storage and preparation of samples.

11.1 Standard, Blank, and Duplicate Samples

Bellhaven commenced its Quality Assurance – Quality Control (QA-QC) program with its first hole, LMDDH-007. The system involves regular insertion of blanks, standards, and duplicates into the sample stream. Coarse and pulp duplicates are included in the protocol. In addition, approximately 10% of all samples are sent to the SGS laboratory in Lima as part of a check assay program. Certified reference materials (CRMs), including blanks and standards, are purchased from two Canadian suppliers, WCM Minerals in Burnaby British Columbia and CDN Laboratories in Burnaby, British Columbia. These include the following CRMs: blanks numbered BL110, BL111, BL112, BL113, BL115 and standards numbered CGS27, CM13, CM14, CU156, CU157, CU158, CU159, CU164, CU175, CU185, PM434, PM436, PM438, PM446 and PM447. The standards cover low, medium, and high grades monitored within +/- 2 standard deviations around the certified mean value of each.

The results of the analyses on the CRM's are included in this report. In all cases, the charts are annotated with the name of the reference material and the certified values for the elements of interest (the copper series of reference materials) as determined by WCM/CDN shown in the yellow box. The individual analyses are noted by the blue/black markers. The certified or accepted value is the solid black/blue line. Lines indicating ±2 and ±3 standard deviations (Std. Dev.) are shown by the dashed green and red lines, respectively. The number of determinations, mean, and standard deviation for all of the analyses are shown in the top right hand corner of the graph. The 3rd standard deviation was chosen as a limit for acceptable deviation from the certified means. This is currently the industry standard for both certified standards and blanks.

The information shown below is specific to the Middle Zone resource (from LMDDH-010 onward). Figures and discussion related to the La Cantera resource are included in Appendix A.

11.1a Standard Results

Fifteen standards were used in Middle Zone drilling (Figures 11.1-11.25 below), distributed randomly but with consideration for the size of assay lots. By and large, the results were excellent, well in line with expectations for both gold and copper. Out of 500 measurements for Au, only one fell outside the 3rd standard deviation, while only 10 out of 300 Cu measurements fell outside 3 standard deviations.

Using 2 standard deviations departure from the accepted value as a benchmark, only 13 Au determinations and 34 Cu determinations were outside an acceptable range.

Figure 11.1 Reference Material CU156 Performance for Au

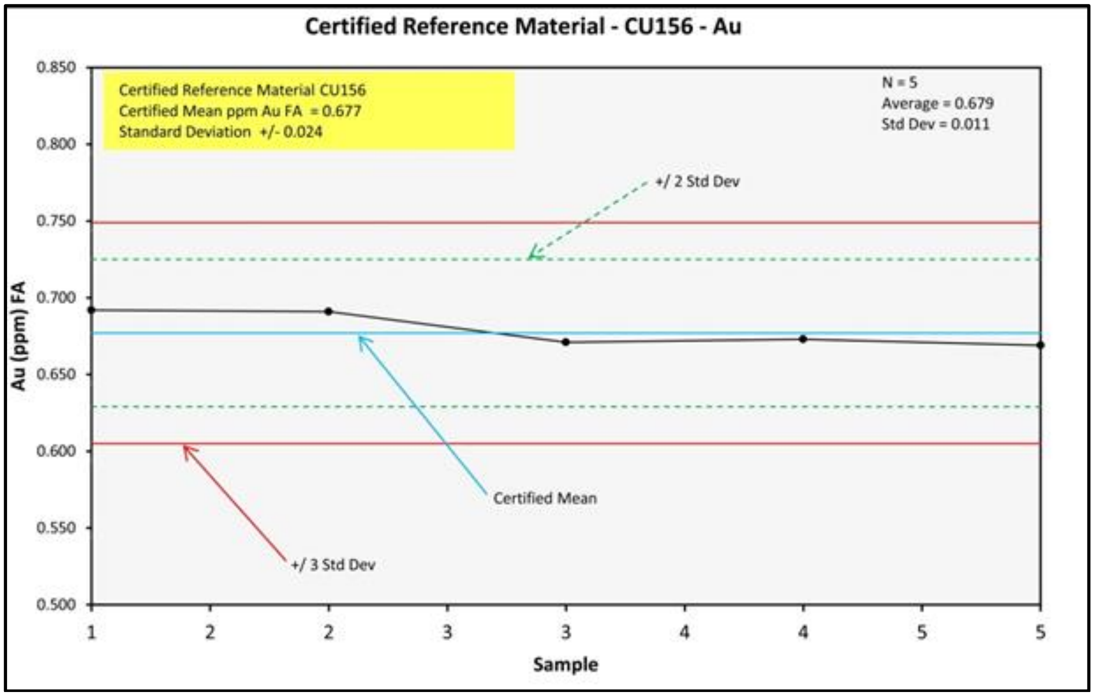


Figure 11.2 Reference Material CU157 Performance for Au

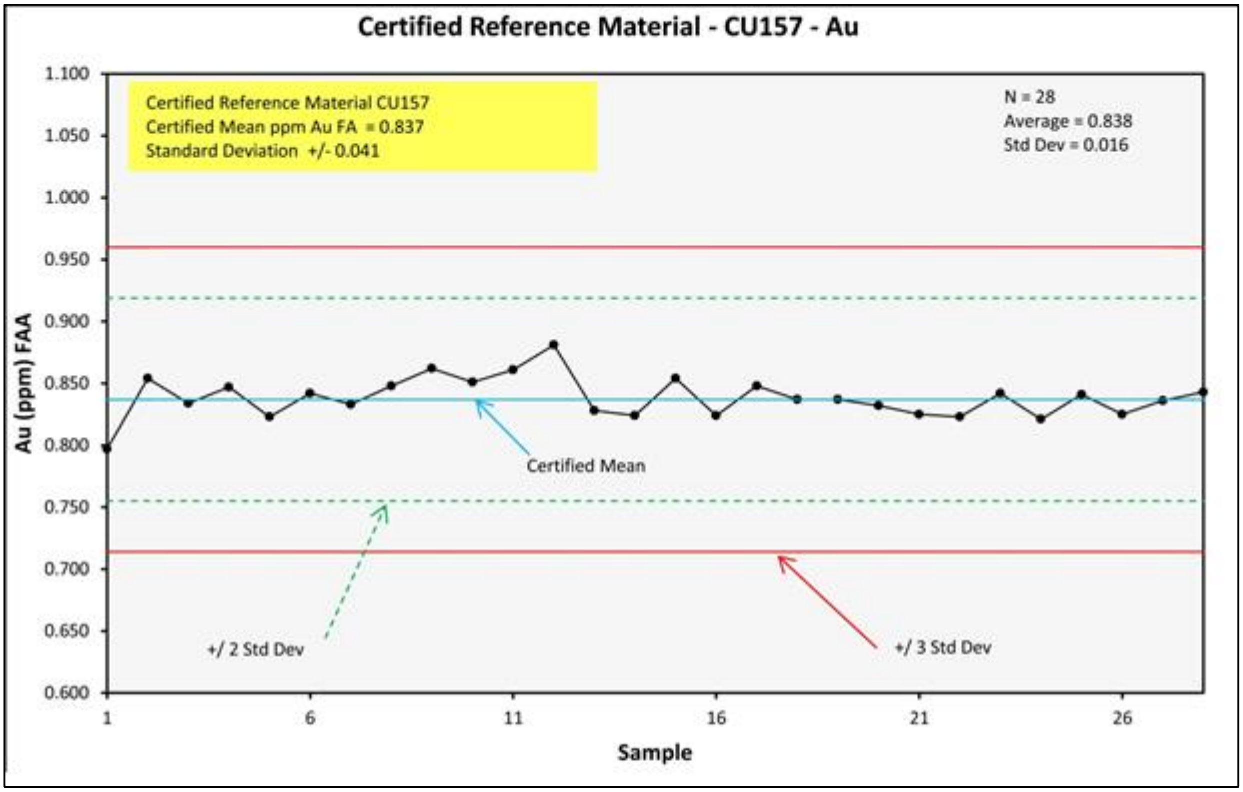


Figure 11.3 Reference Material CU158 Performance for Au

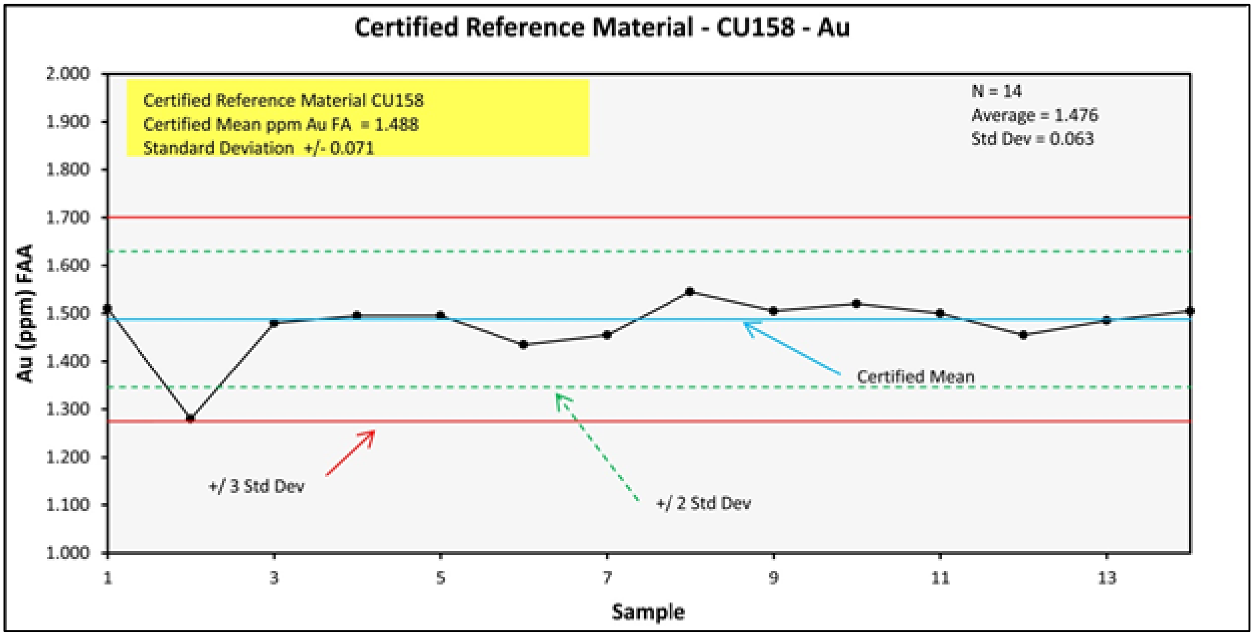


Figure 11.4 Reference Material CU159 Performance for Au

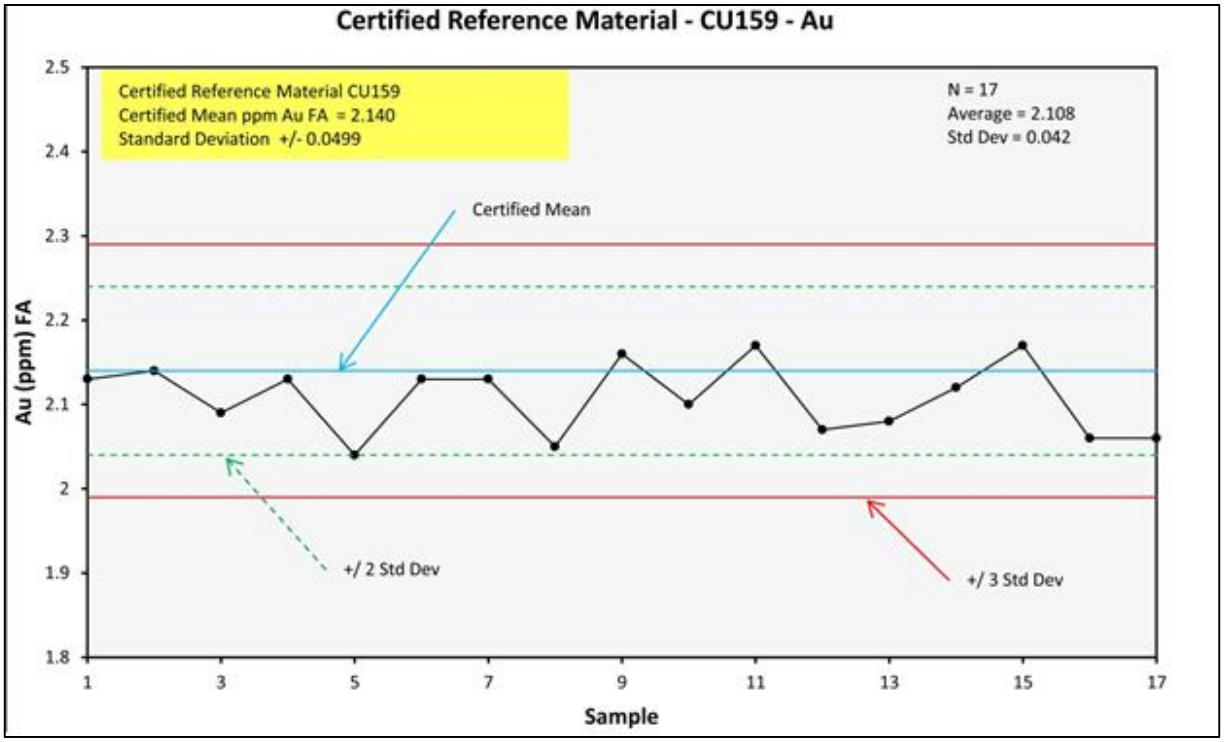


Figure 11.5 Reference Material CU164 Performance for Au

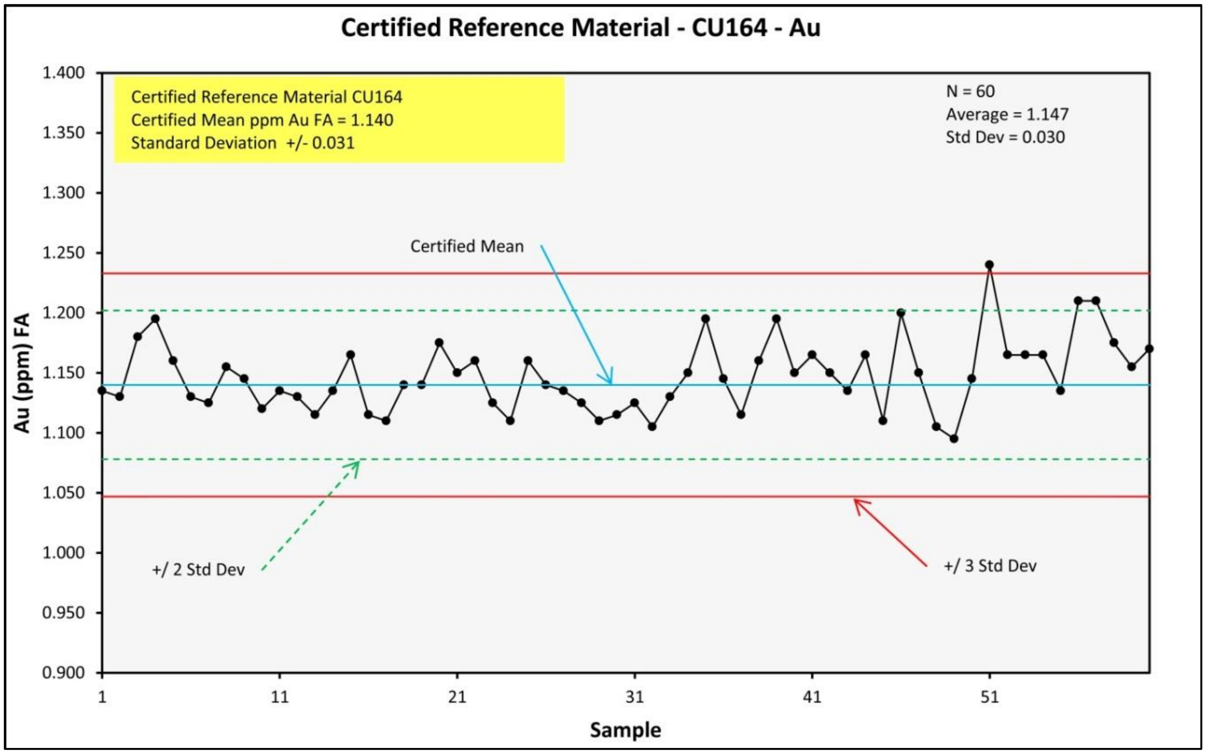


Figure 11.6 Reference Material CU175 Performance for Au

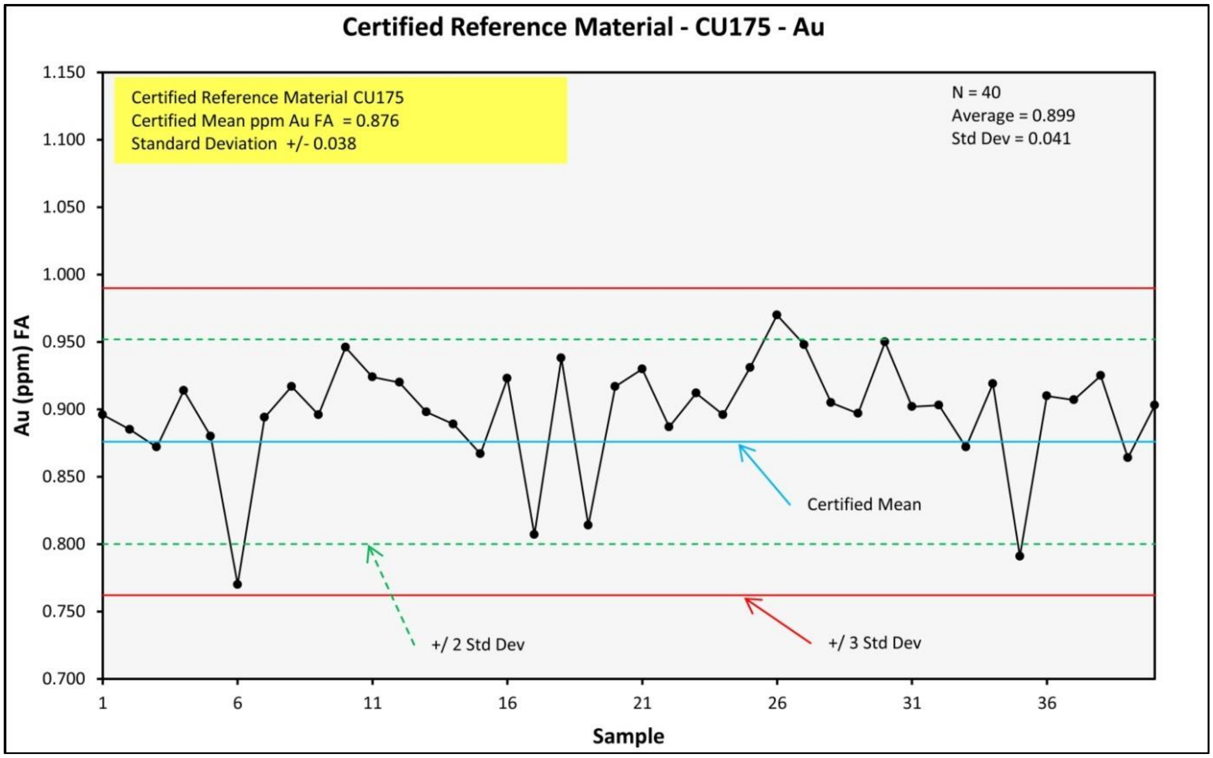


Figure 11.7 Reference Material CU184 Performance for Au

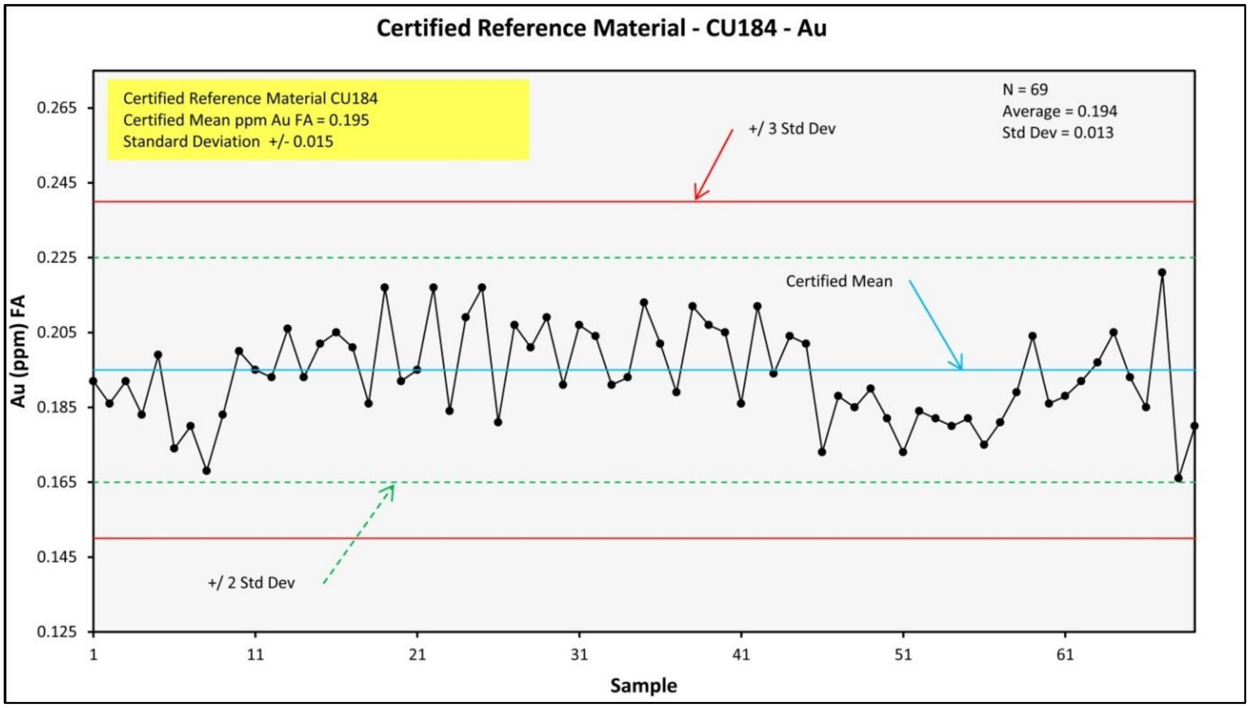


Figure 11.8 Reference Material CM13 Performance for Au

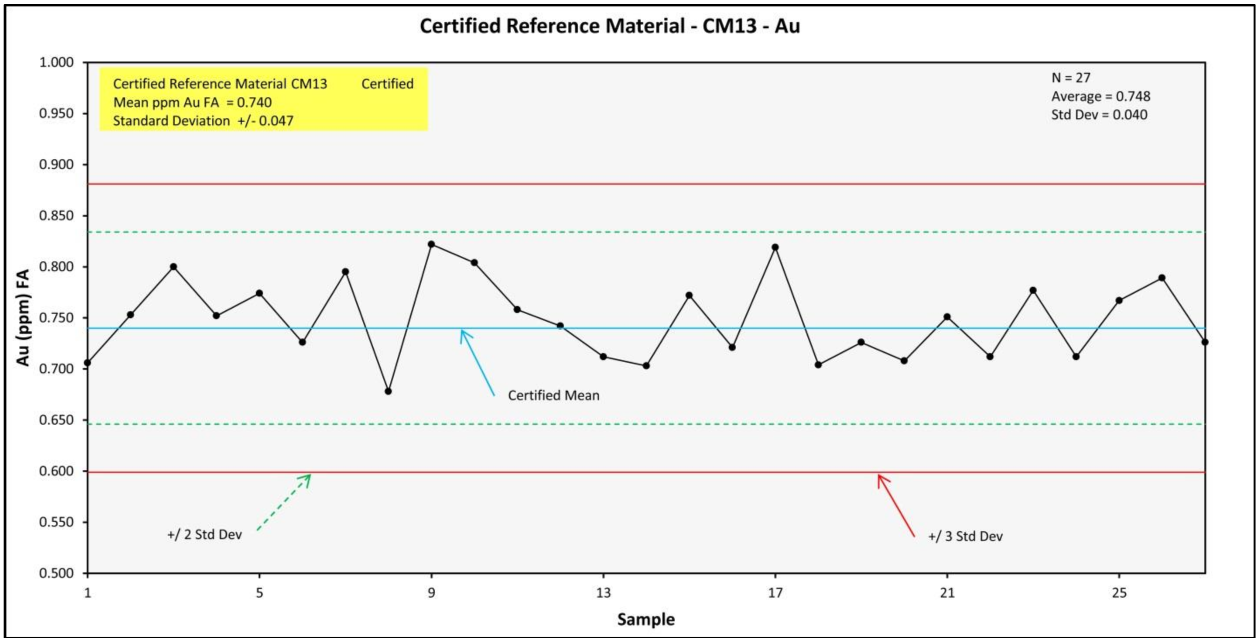


Figure 11.9 Reference Material CM14 Performance for Au

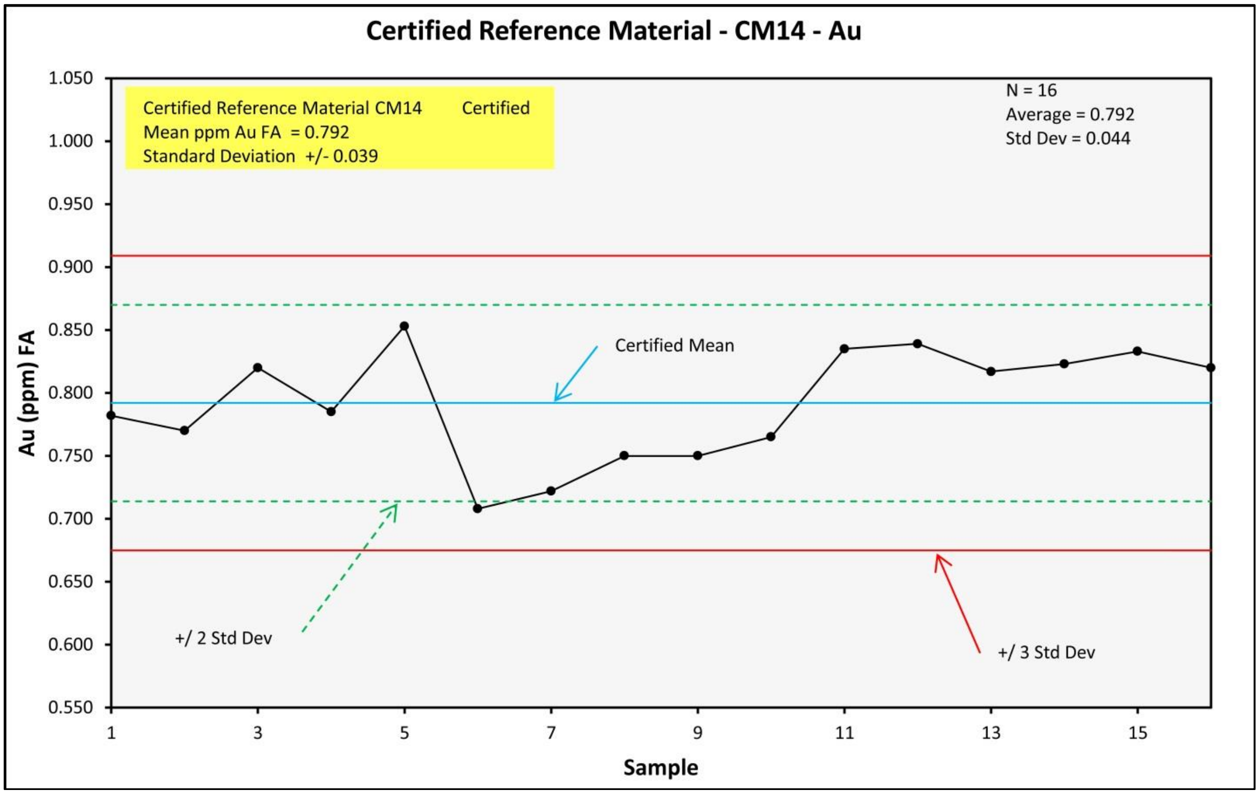


Figure 11.10 Reference Material CGS27 Performance for Au

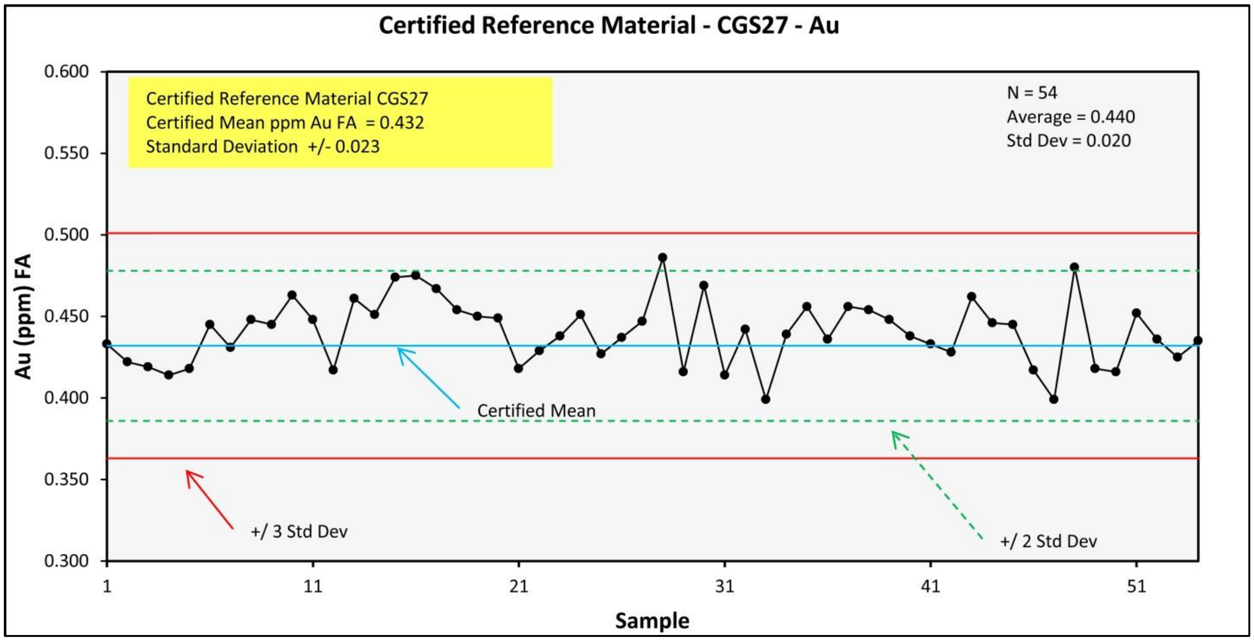


Figure 11.11 Reference Material PM434 Performance for Au

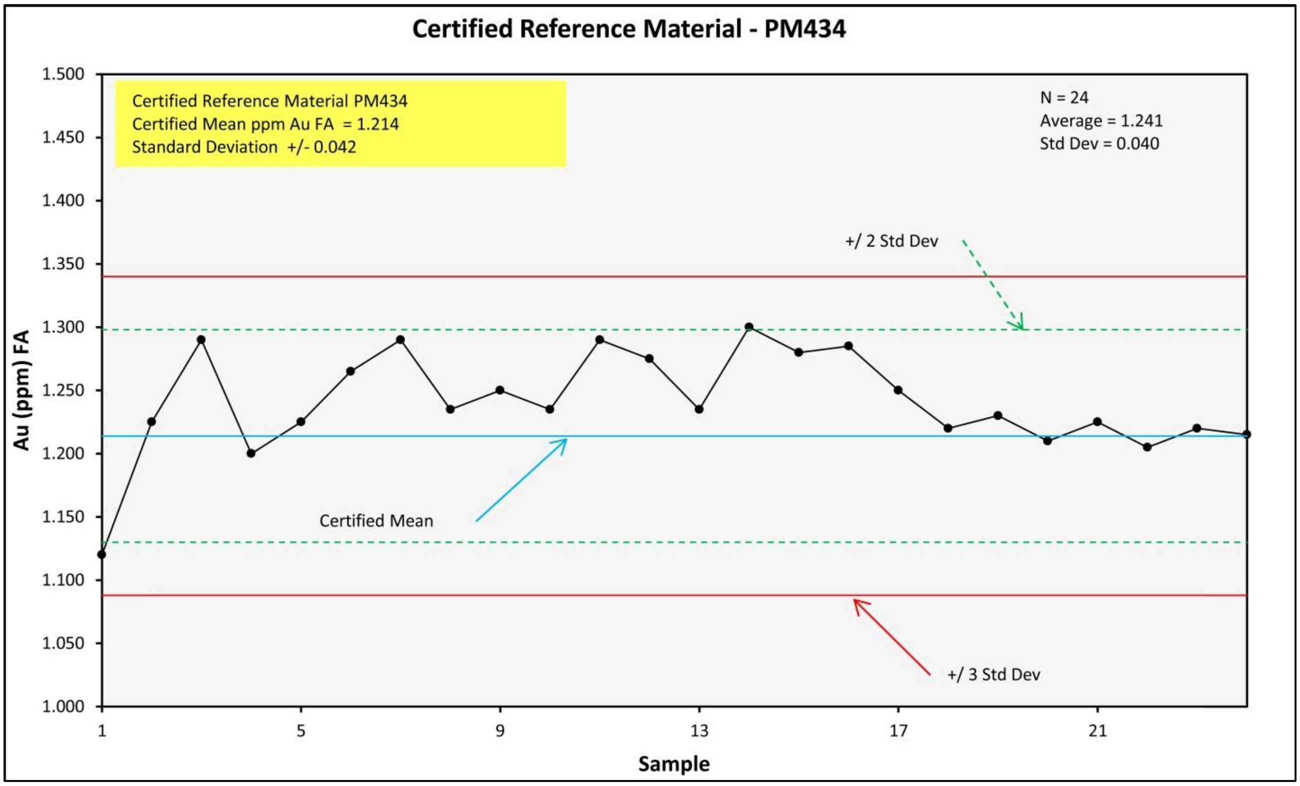


Figure 11.12 Reference Material PM436 Performance for Au

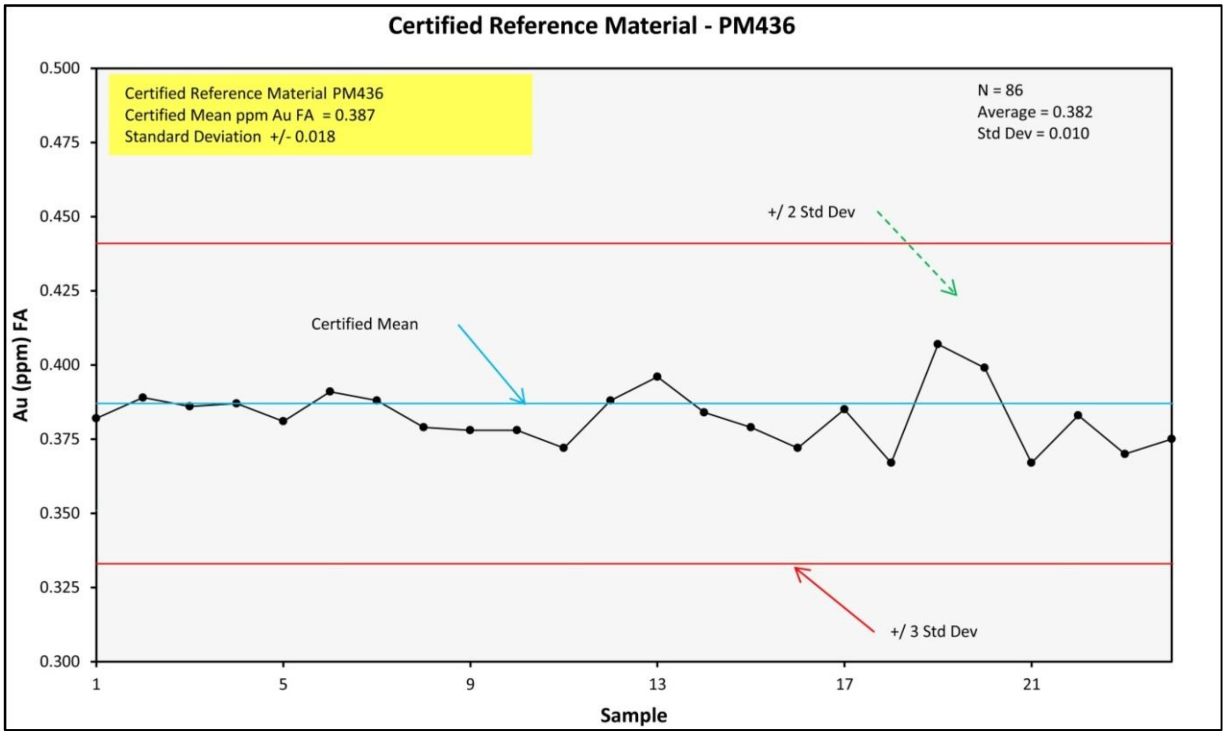


Figure 11.13 Reference Material PM438 Performance for Au

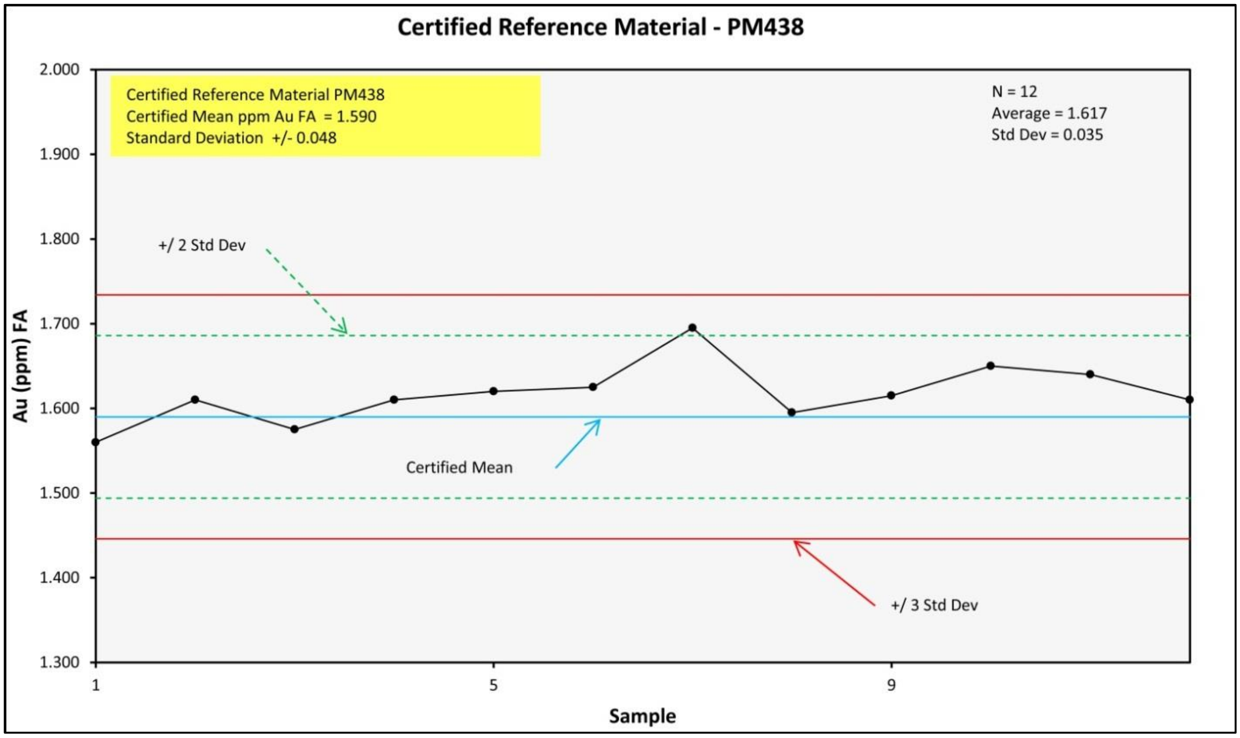


Figure 11.14 Reference Material PM446 Performance for Au

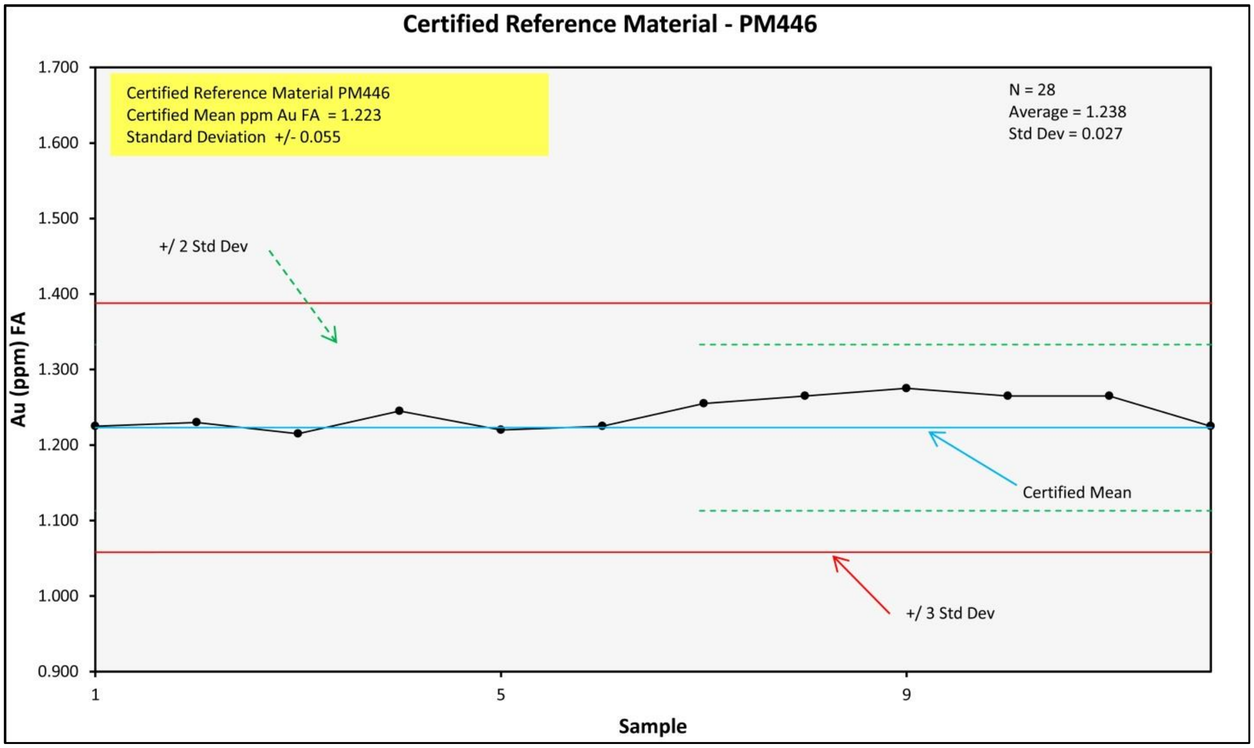


Figure 11.15 Reference Material PM447 Performance for Au

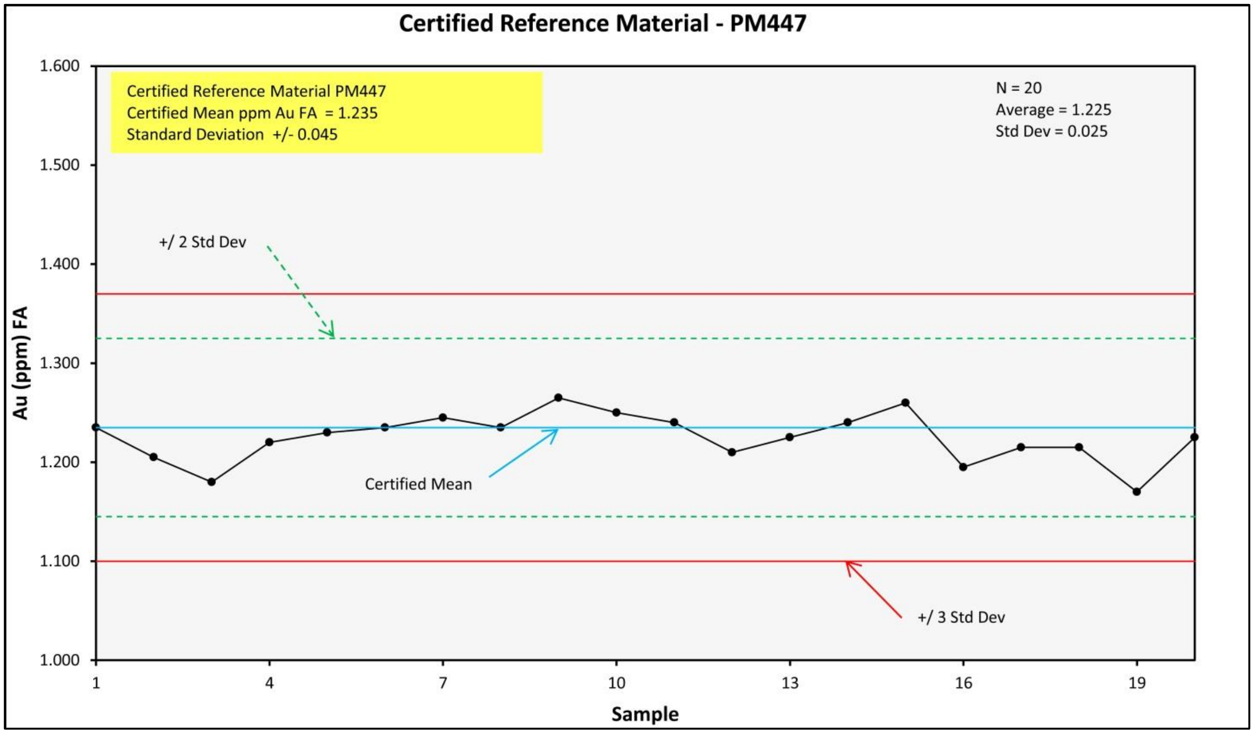


Figure 11.16 Reference Material CU156 Performance for Cu

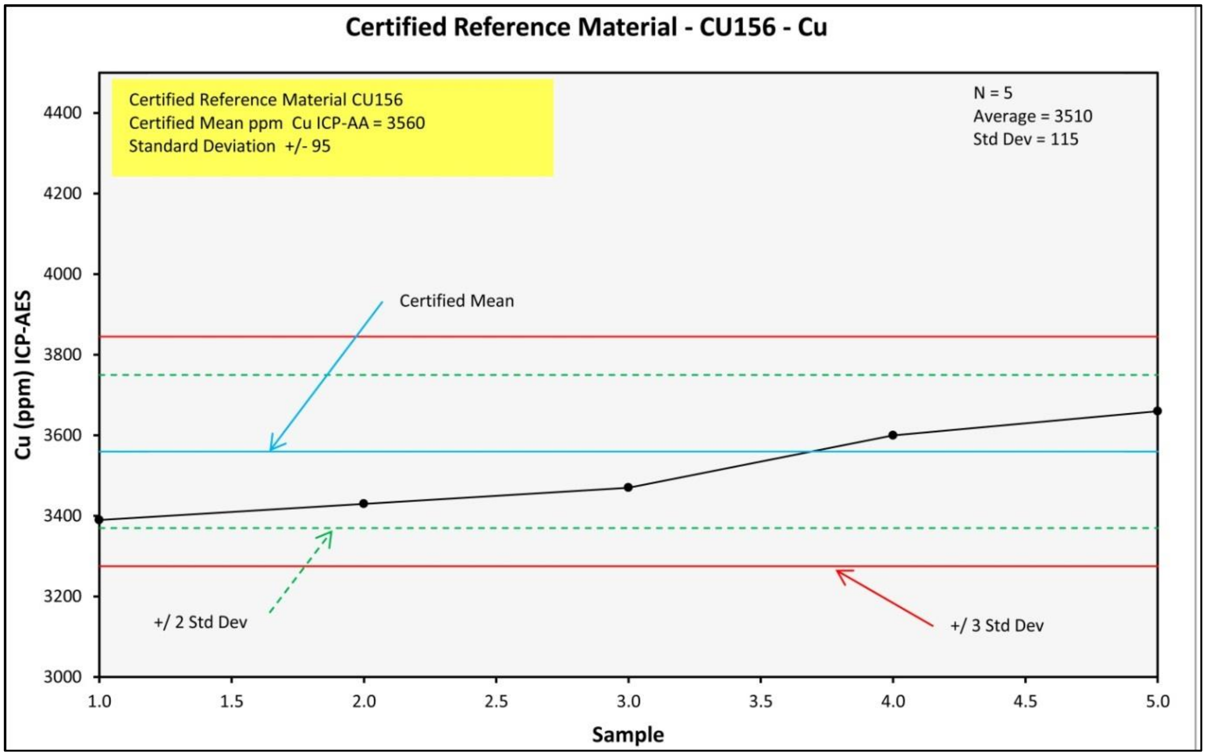


Figure 11.17 Reference Material CU157 Performance for Cu

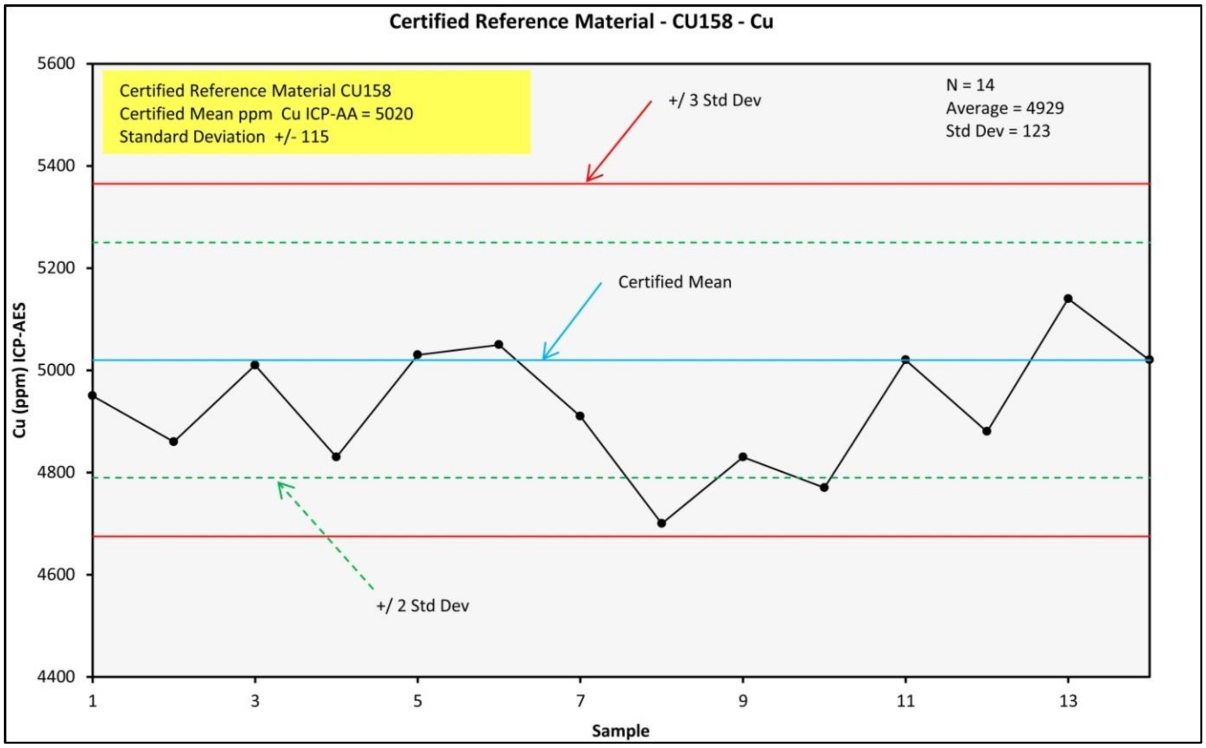


Figure 11.18 Reference Material CU158 Performance for Cu

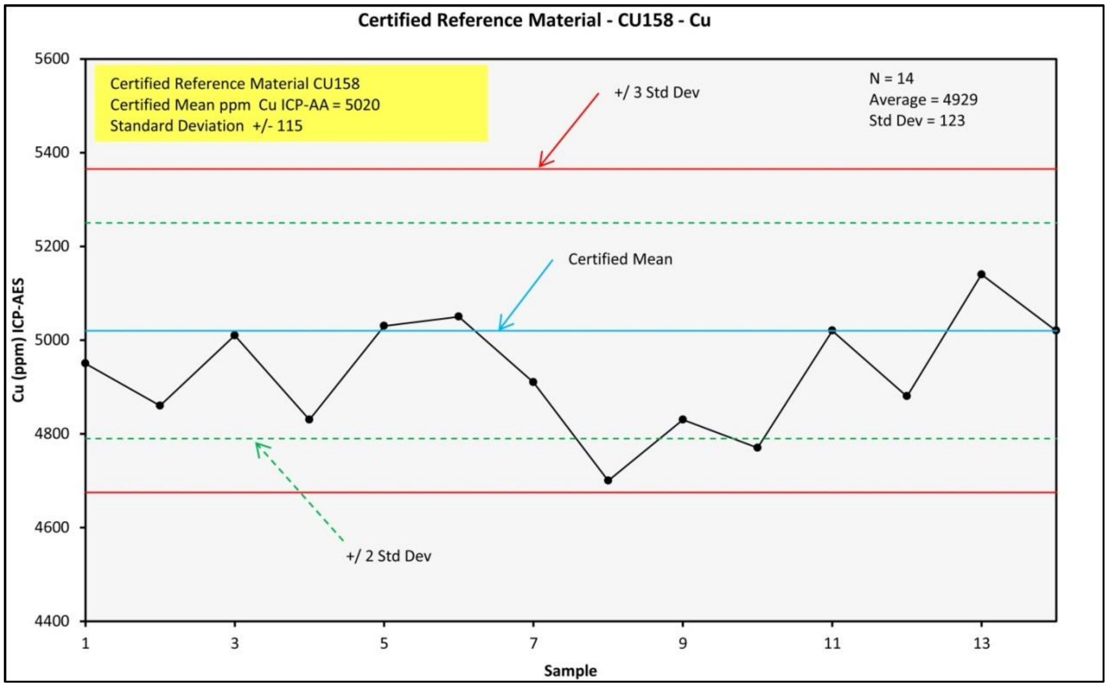


Figure 11.19 Reference Material CU159 Performance for Cu

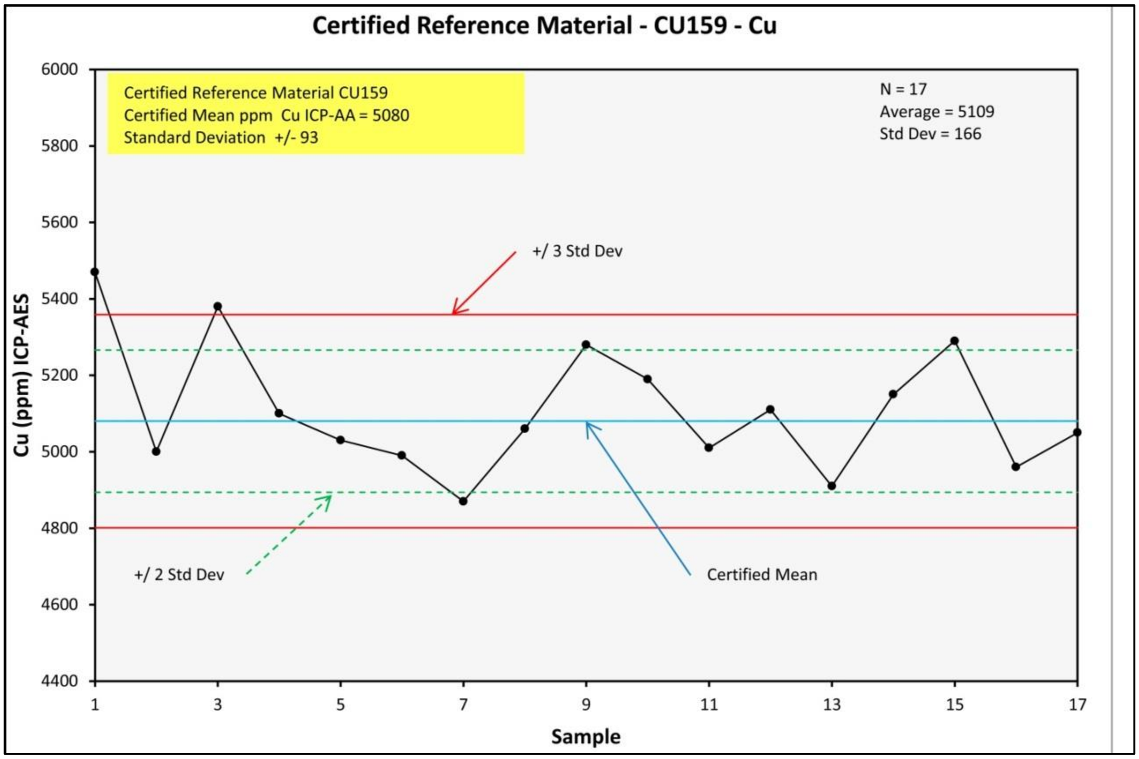


Figure 11.20 Reference Material CU164 Performance for Cu

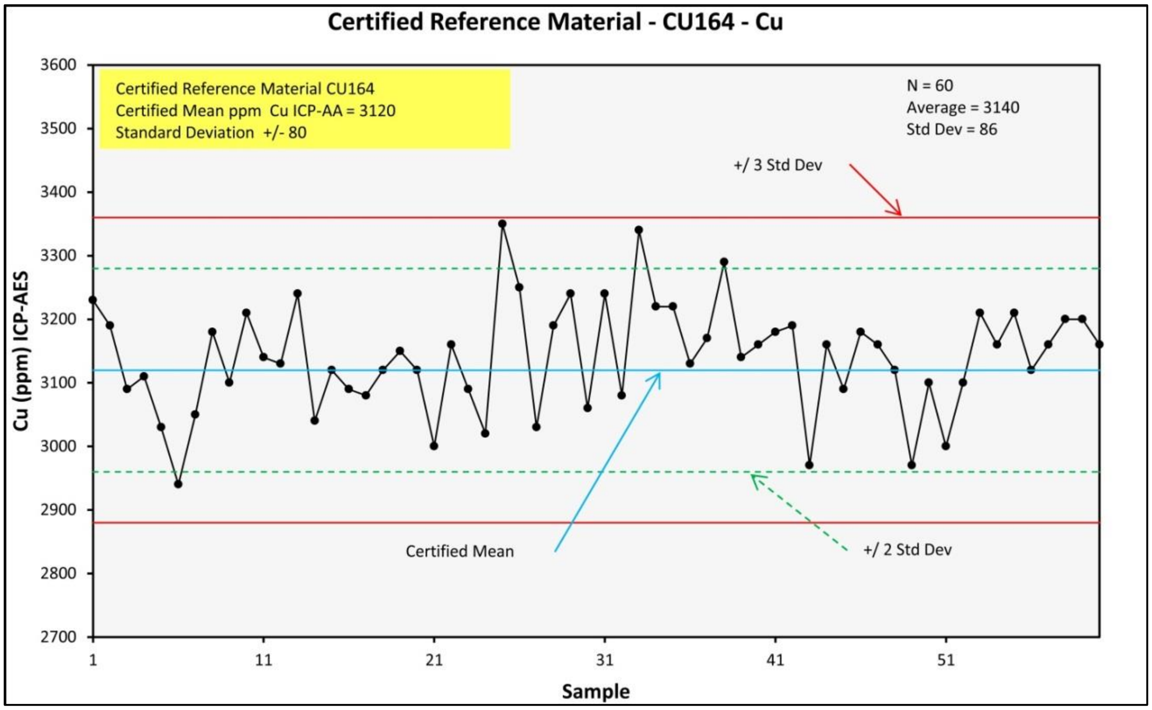


Figure 11.21 Reference Material CU175 Performance for Cu

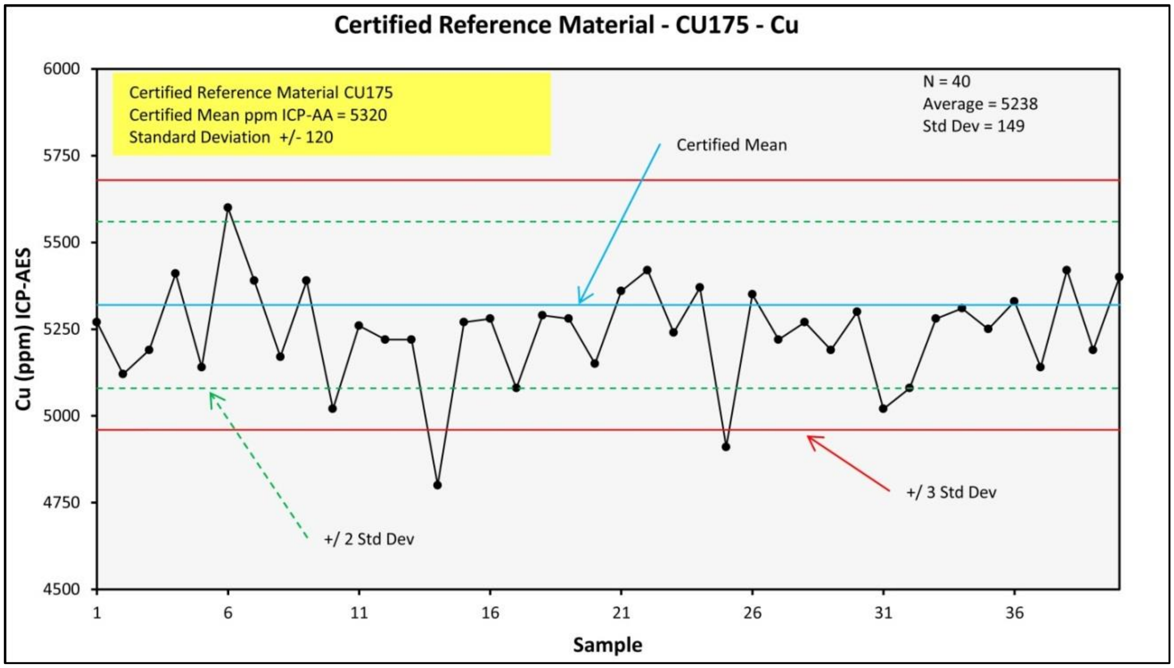


Figure 11.22 Reference Material CU184 Performance for Cu

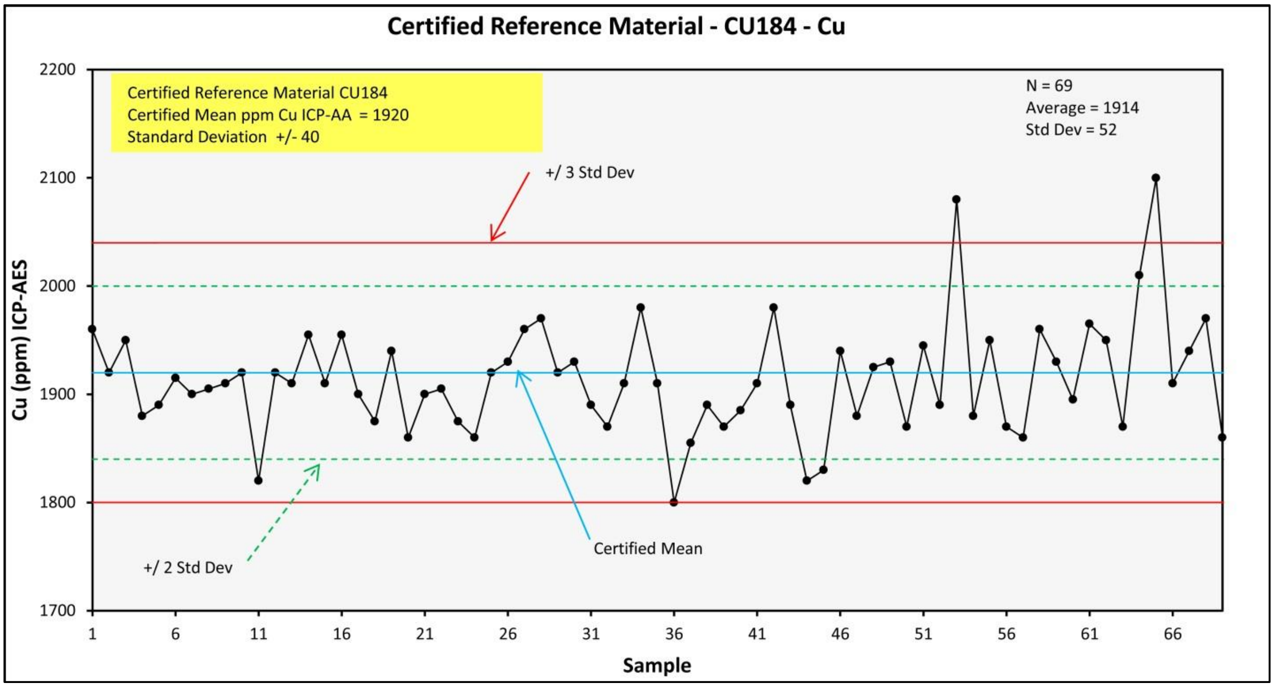


Figure 11.23 Reference Material CM13 Performance for Cu

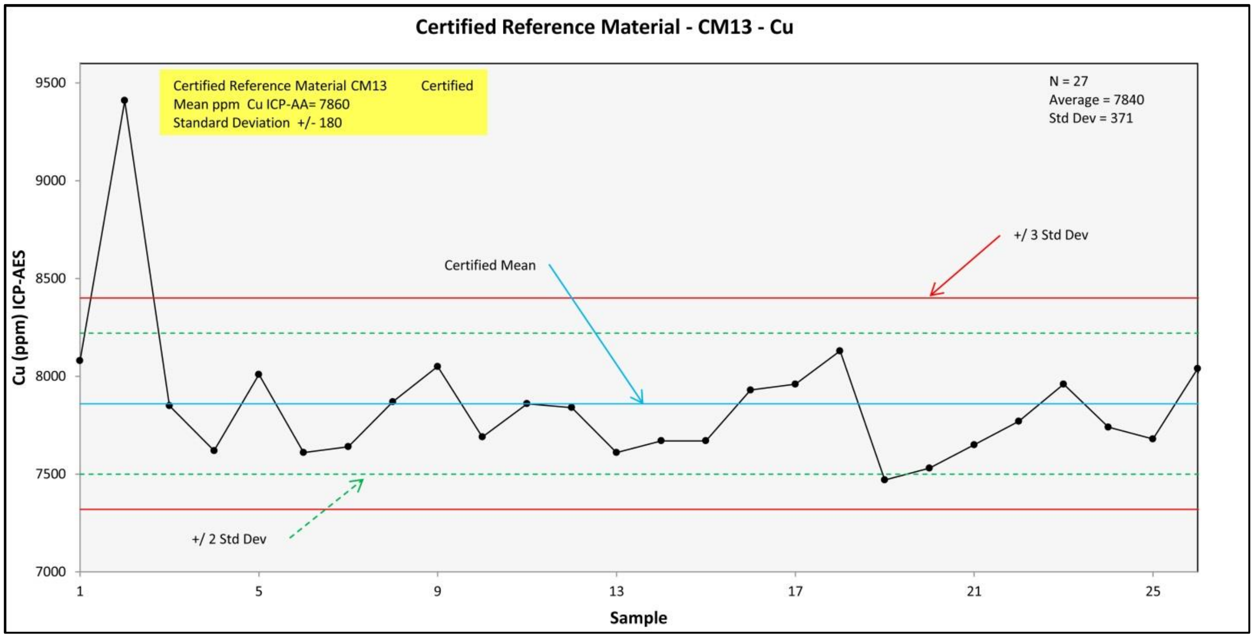


Figure 11.24 Reference Material CM14 Performance for Cu

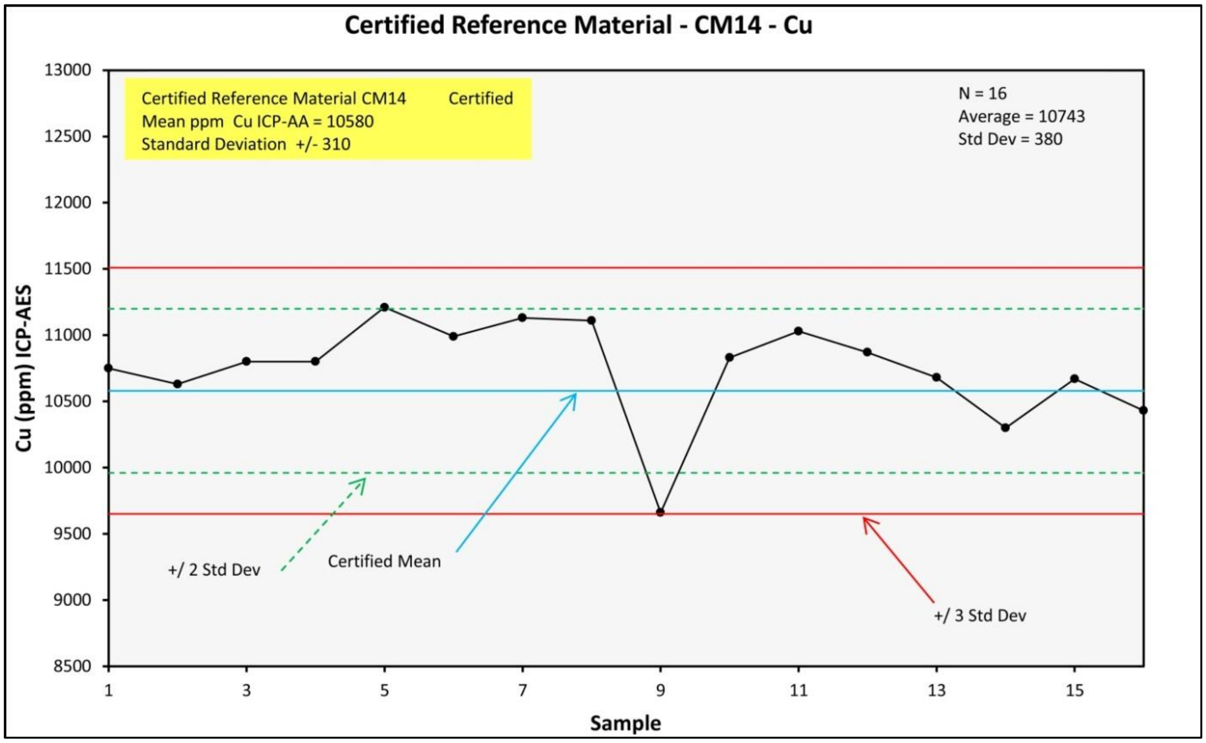
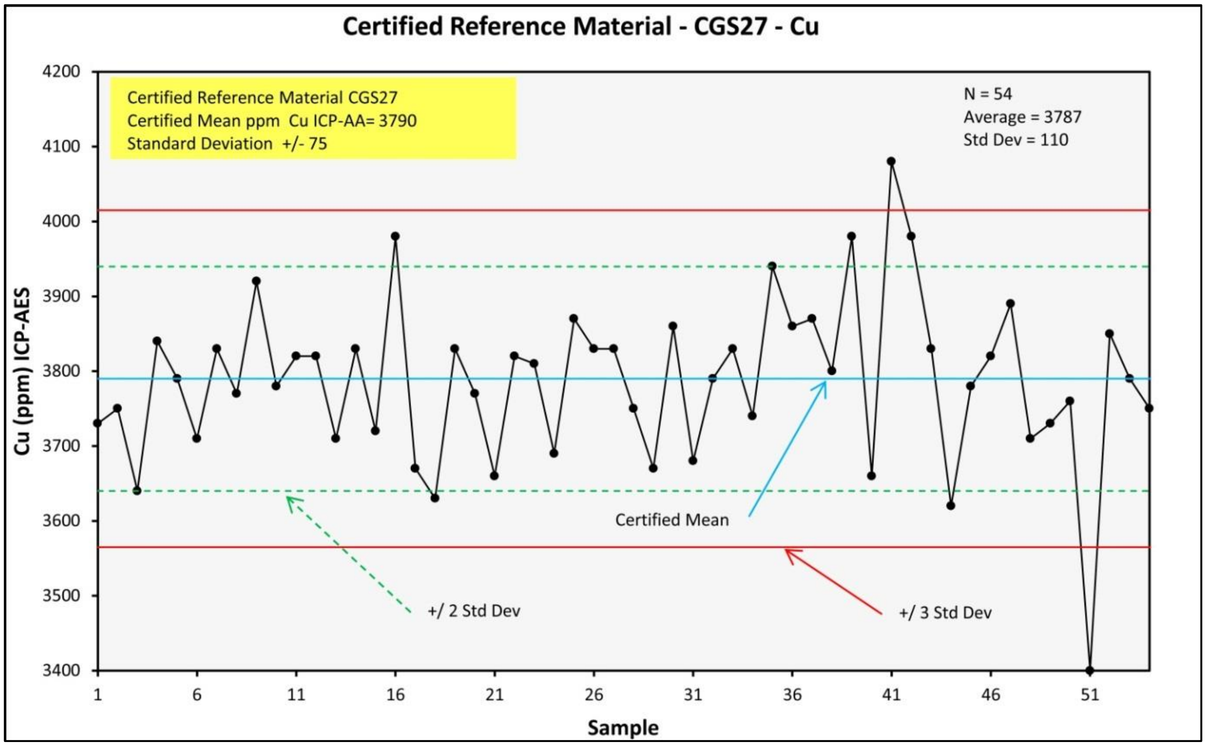


Figure 11.25 Reference Material CGS27 Performance for Cu



11.1b Blank Results

Five standard blanks were used in the Middle Zone (Figures 11.26-11.35 below). The gold results were again very good, with only six samples out of a total of 258 exceeding the 3rd standard deviation line. Copper also performed well in most cases, with 38 out of 258 samples falling outside of the 3rd standard deviation. Of these failures, just under half are at levels that fall well within ten times the copper reporting limit and therefore are not significant from a statistical standpoint. There are a few cases where review is warranted; and the Company is following up. BL110 and BL111 have statistically significant busts (three and two successive samples, respectively), and BL115 shows a number of busts that will be reviewed. Such a failure rate for certified blank materials is well within industry norms.

Figure 11.26 Reference Material – Blank BL110 Performance for Au

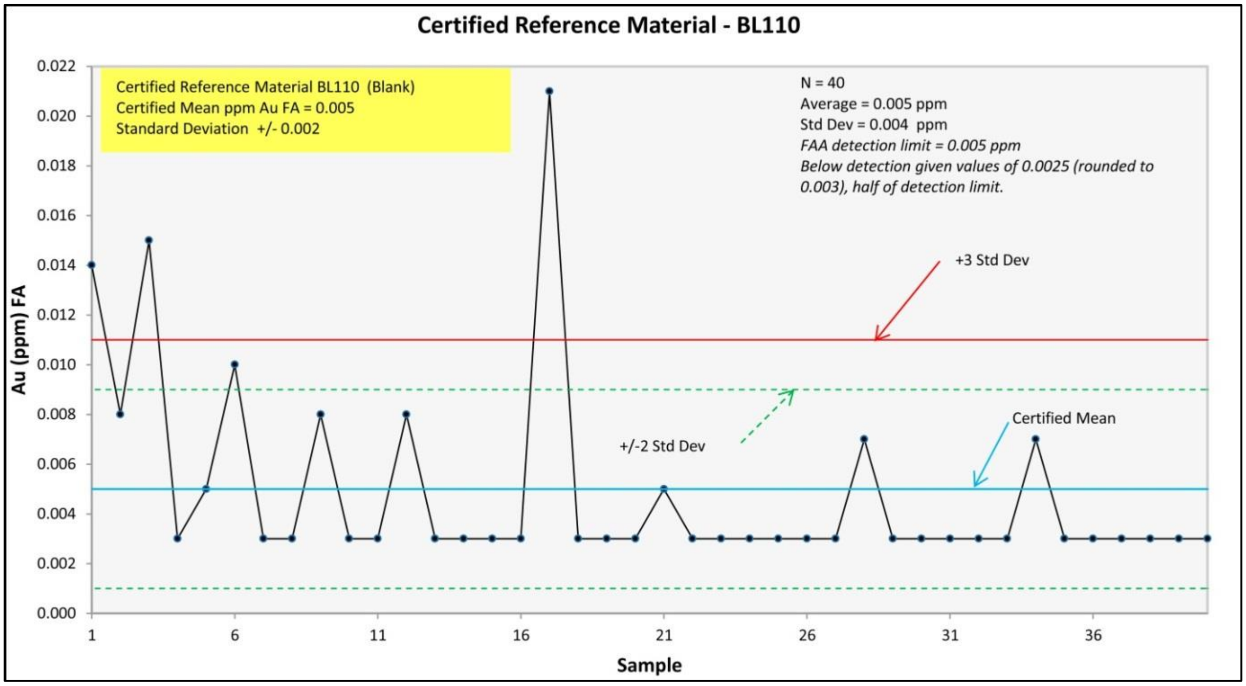


Figure 11.27 Reference Material – Blank BL111 Performance for Au

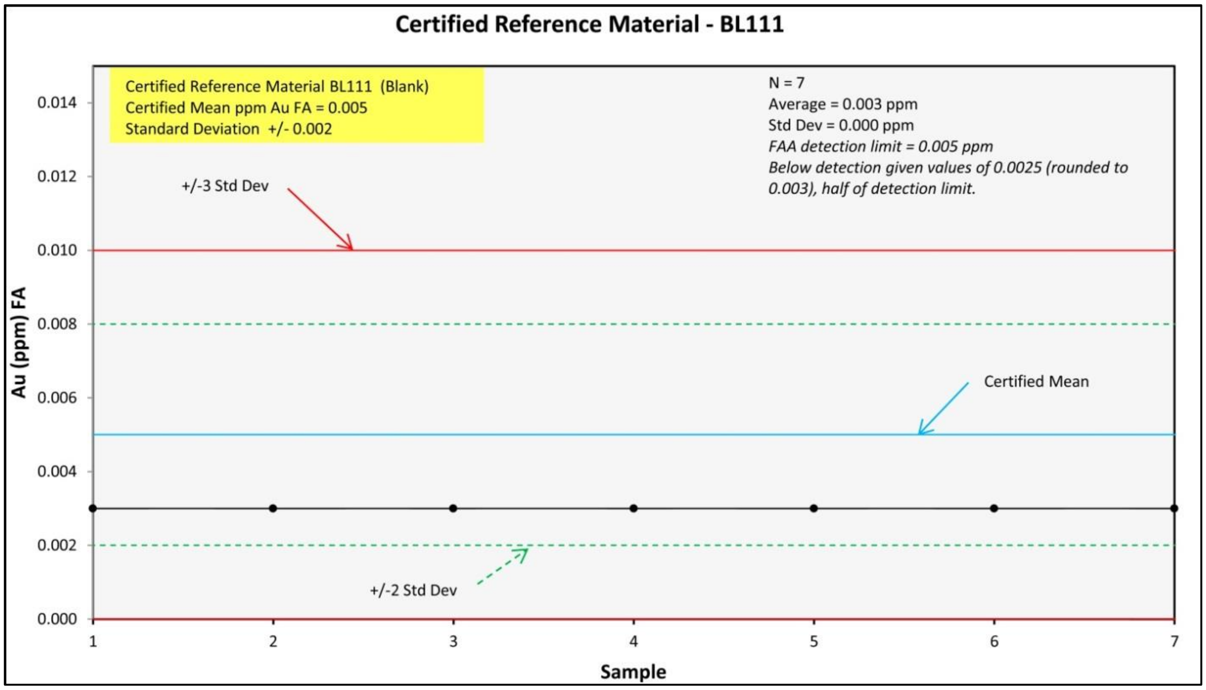


Figure 11.28 Reference Material – Blank BL112 Performance for Au

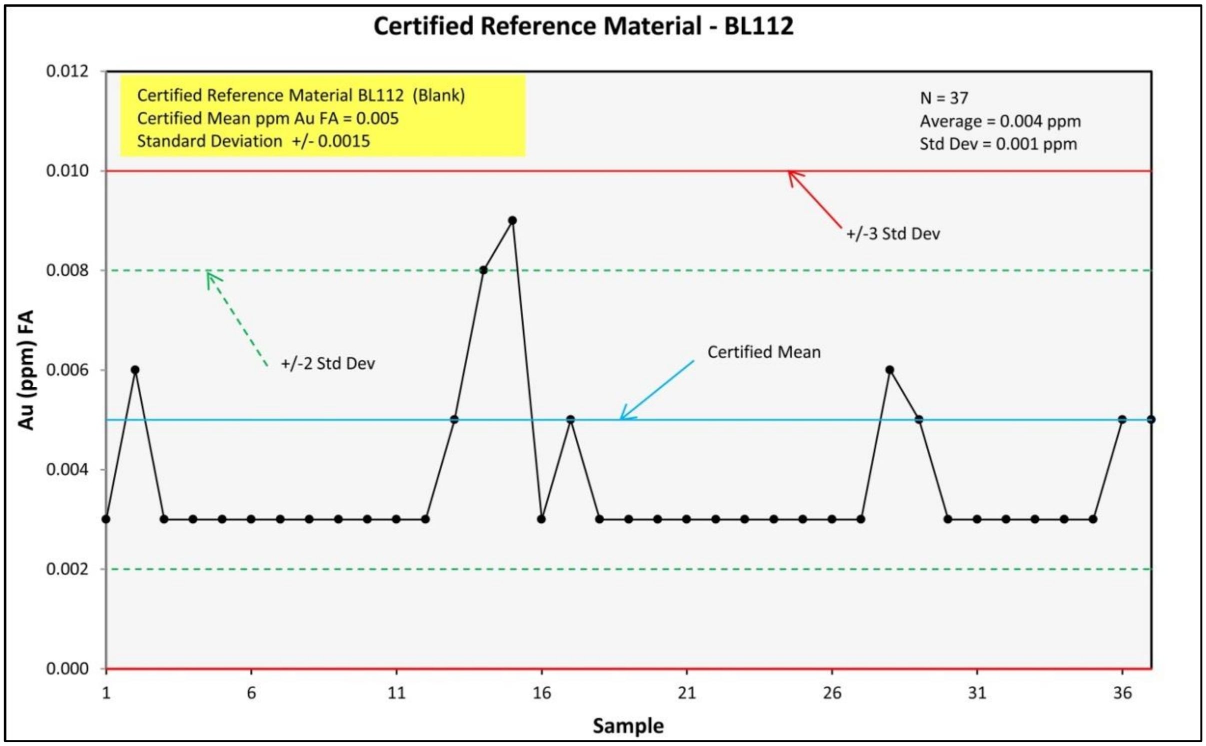


Figure 11.29 Reference Material – Blank BL113 Performance for Au

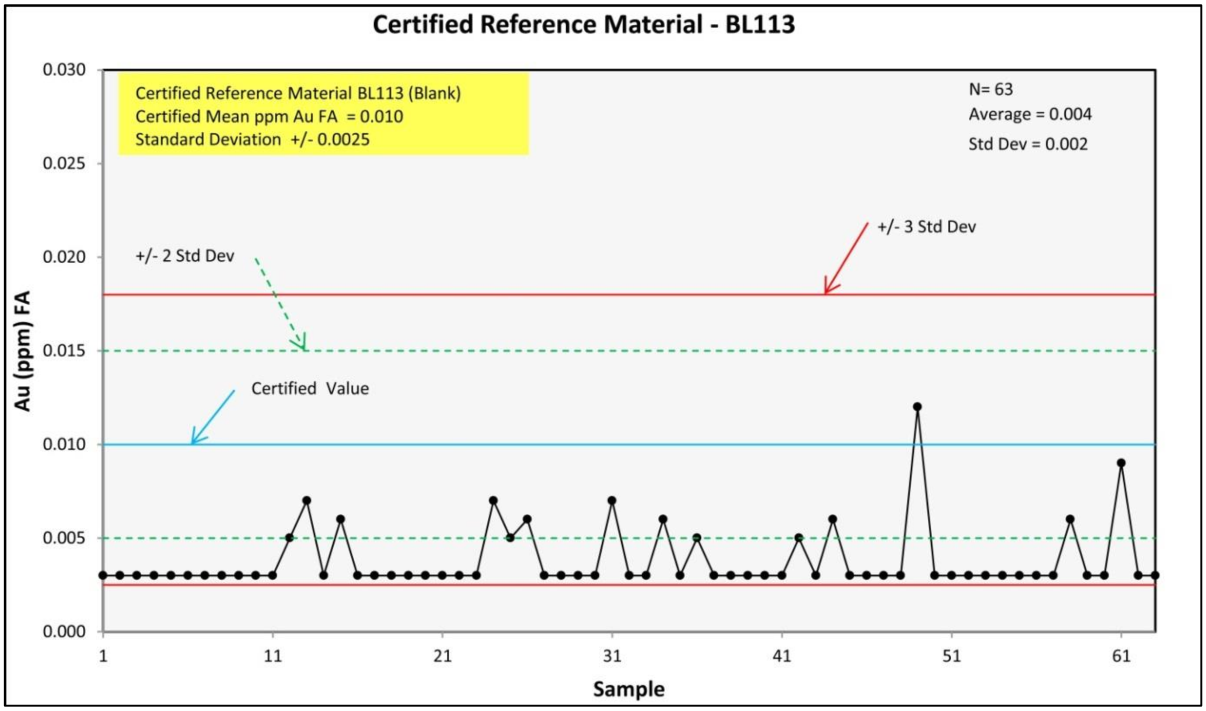


Figure 11.30 Reference Material – Blank BL115 Performance for Au

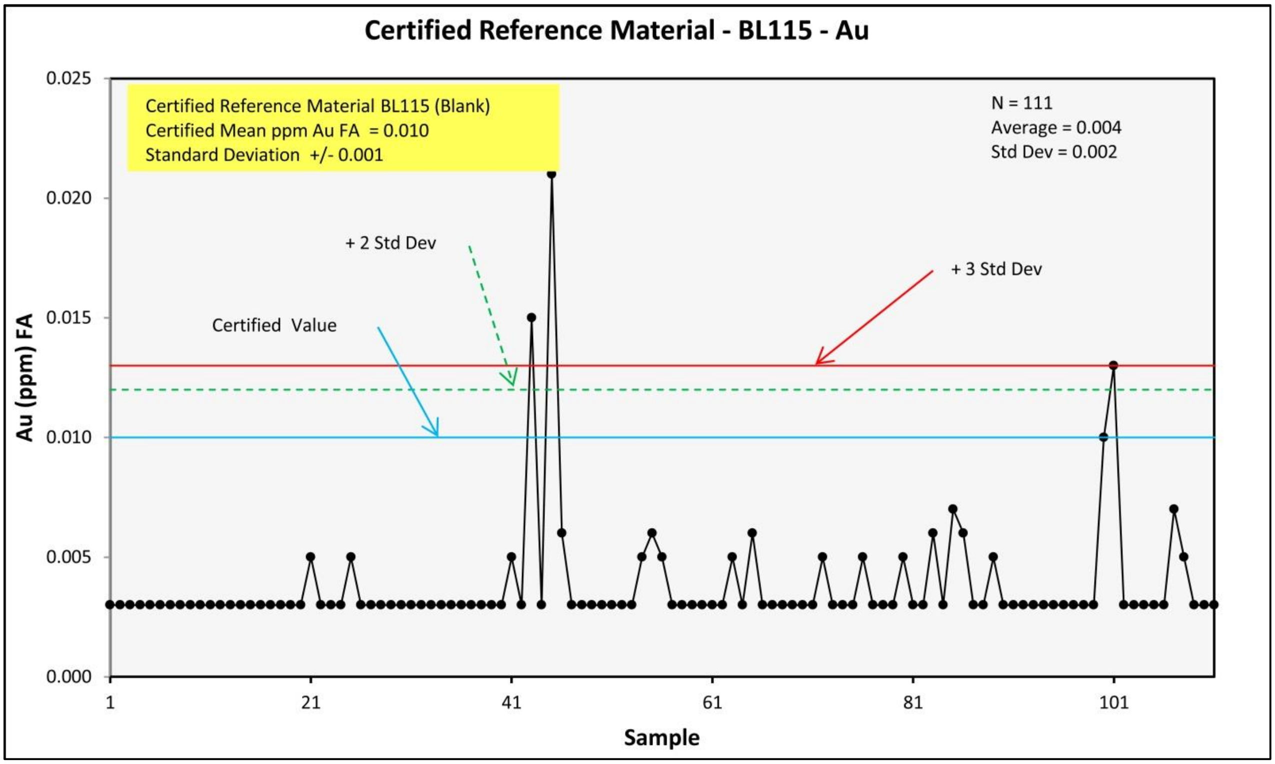


Figure 11.31 Reference Material – Blank BL110 Performance for Cu

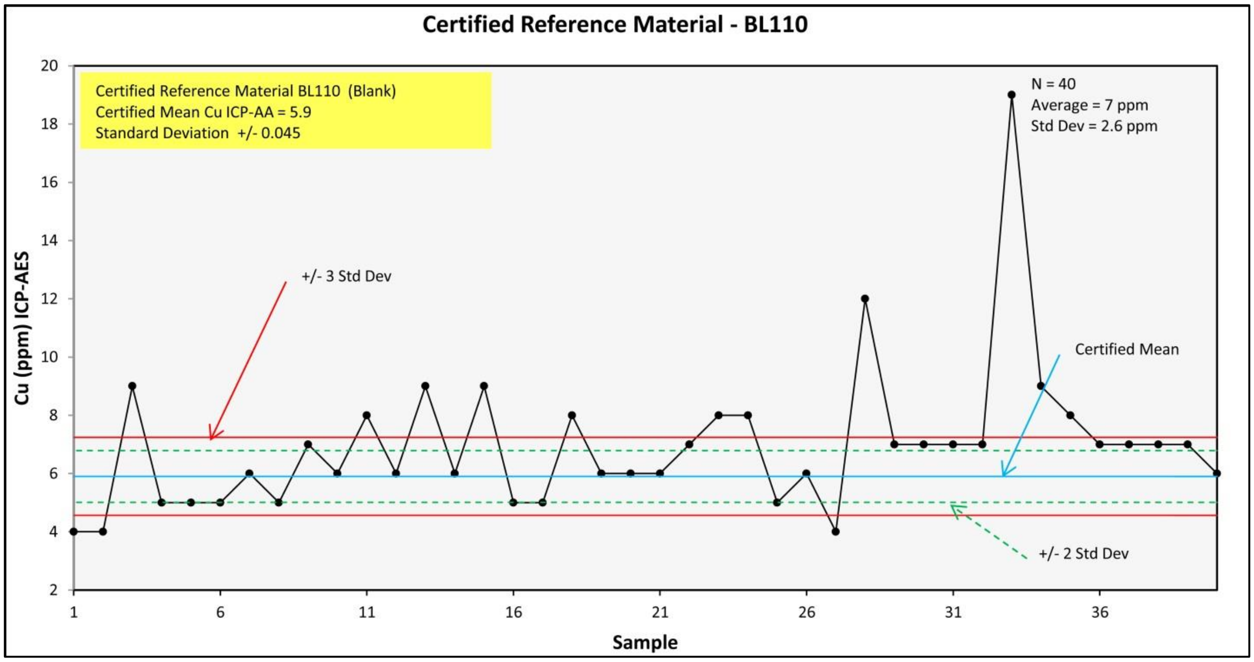


Figure 11.32 Reference Material – Blank BL111 Performance for Cu

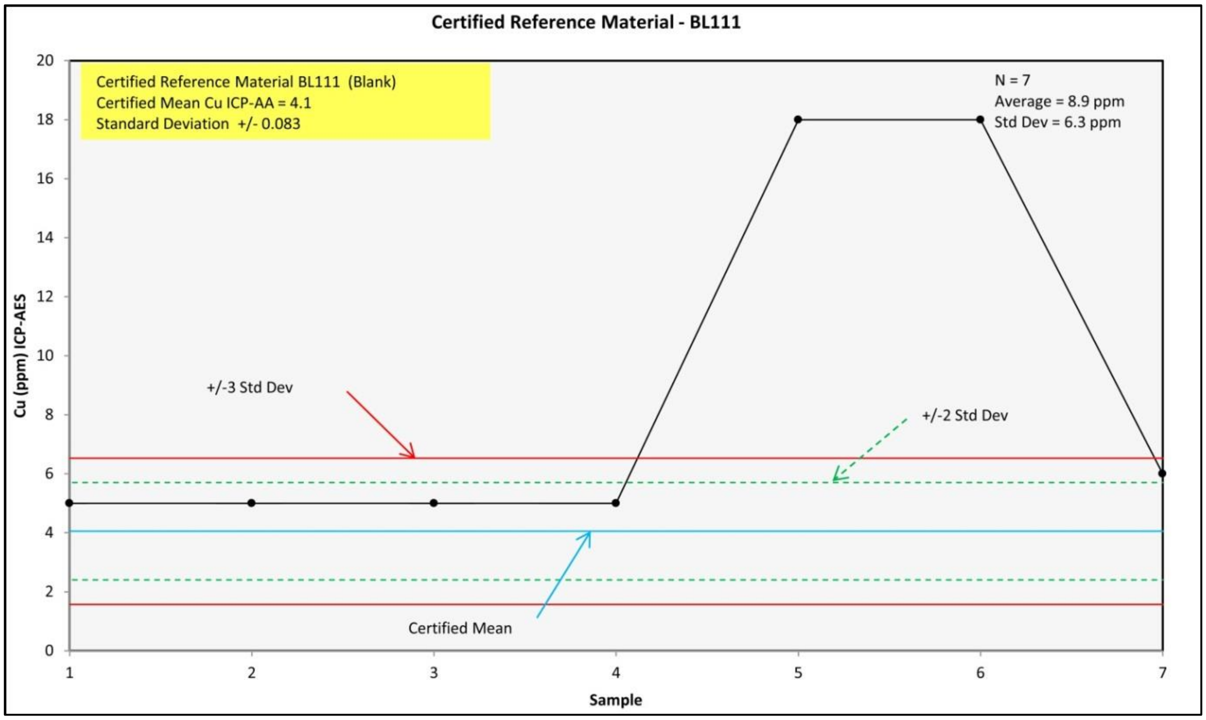


Figure 11.33 Reference Material – Blank BL112 Performance for Cu

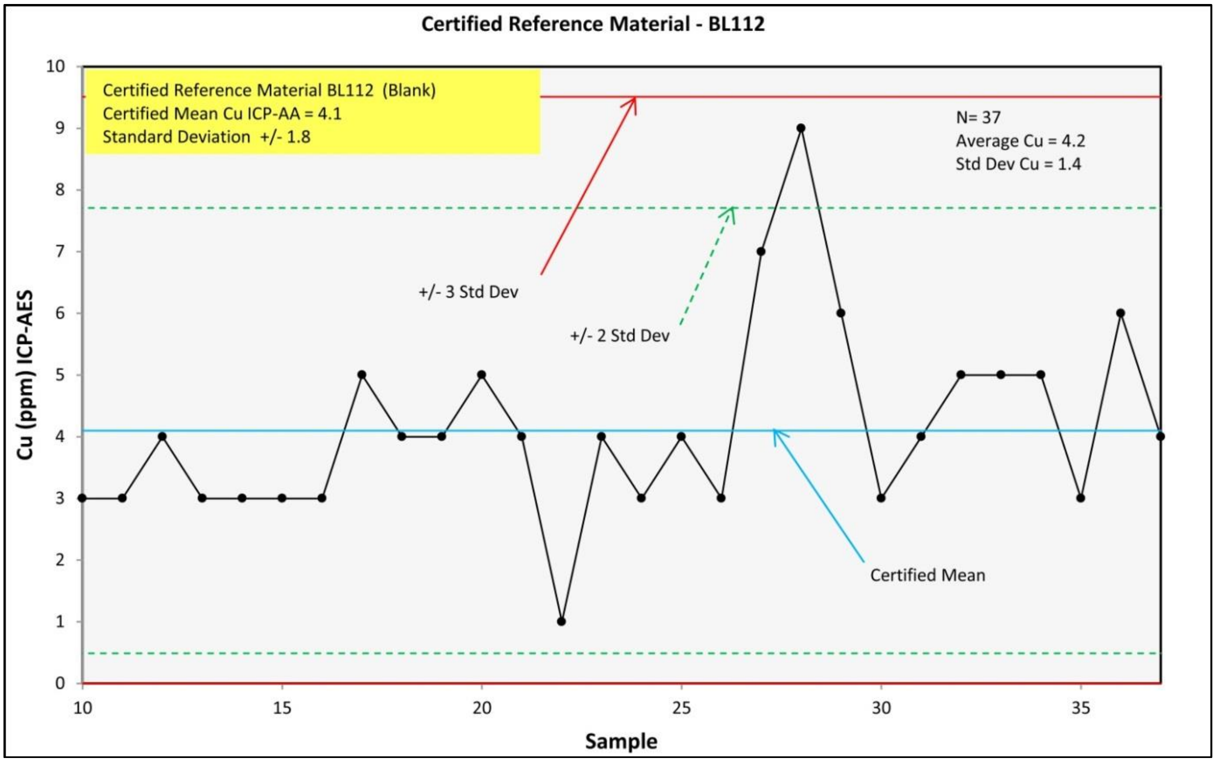


Figure 11.34 Reference Material – Blank BL113 Performance for Cu

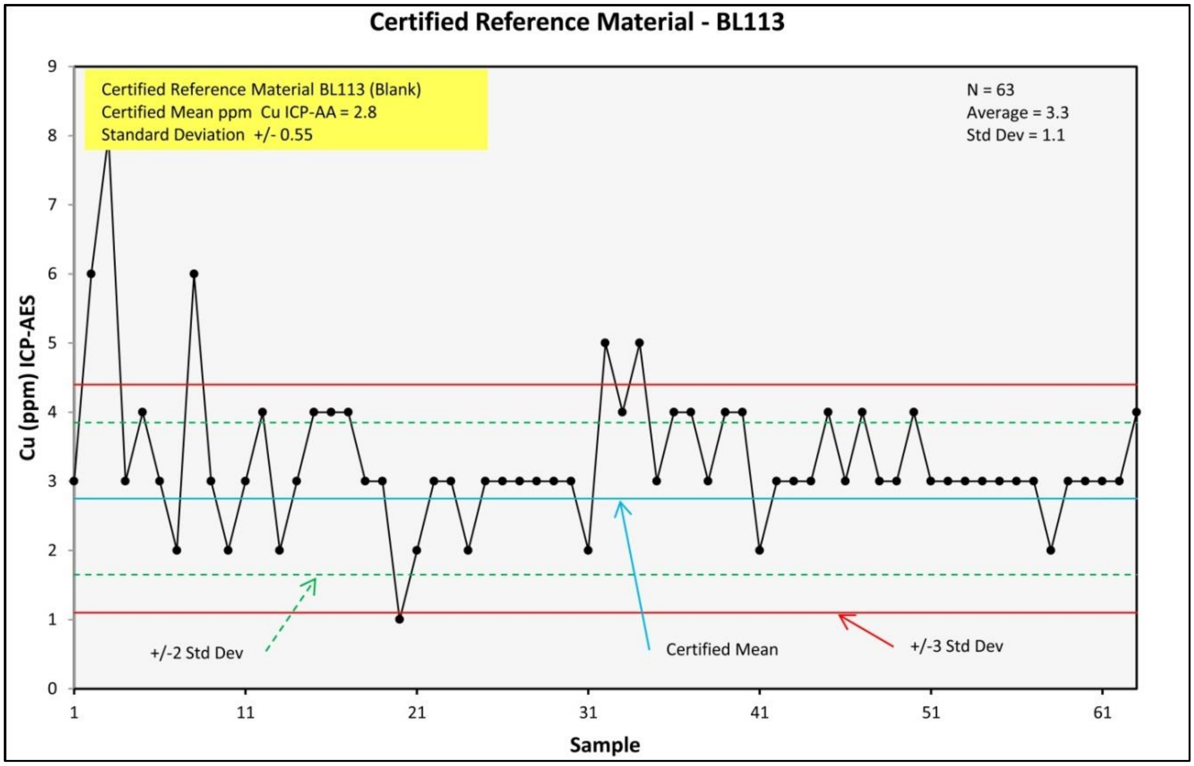
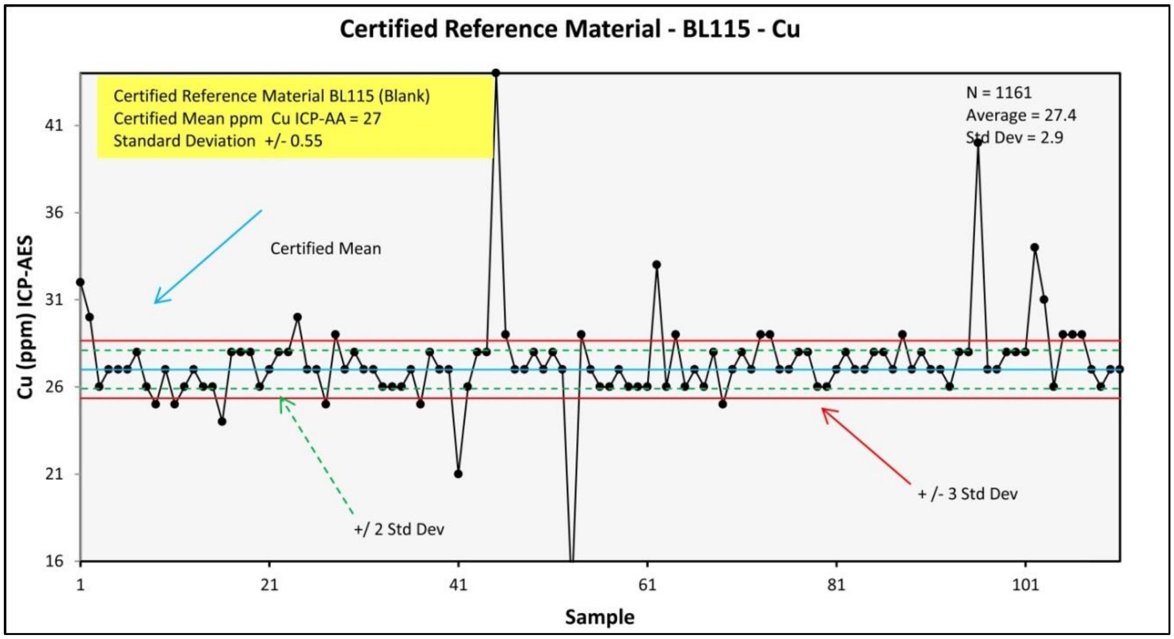


Figure 11.35 Reference Material – Blank BL115 Performance for Cu



11.1c Duplicate Types and Results

Three duplicate sample types are routinely generated during sampling of drill core at La Mina:

- Field duplicates are generated on-site at La Mina. Subsequent to sawing and packing half of the core as per normal sampling, an additional ¼ of the remaining core is cut and sent under a different sample number.
- Coarse duplicates are generated at the preparation lab in Medellin. It is a split of the original coarse crush, which is relabeled and processed through pulverization.
- Pulp duplicates are generated at the preparation lab in Medellin. It is a split of the final pulverized sample, which is relabeled and sent to the analytical lab.

The Middle Zone coarse, pulp, and field duplicates were collected in the following frequency on a hole-by-hole basis: 1% globally of all sampled intervals, 1.5% of samples assaying near cutoff grades for gold (0.3 g/t), and 2.5% for all intervals assaying above gold cutoff. In total, 164 coarse duplicates, 165 pulp duplicates, and 63 field duplicates were analyzed. There is excellent agreement between the coarse and pulp duplicates, and nearly all fall within the 10% range. The results are shown graphically in Figures 11.36-11.41 below.

Figure 11.36 Au Analyses (FA AA) for Preparation Duplicate Samples

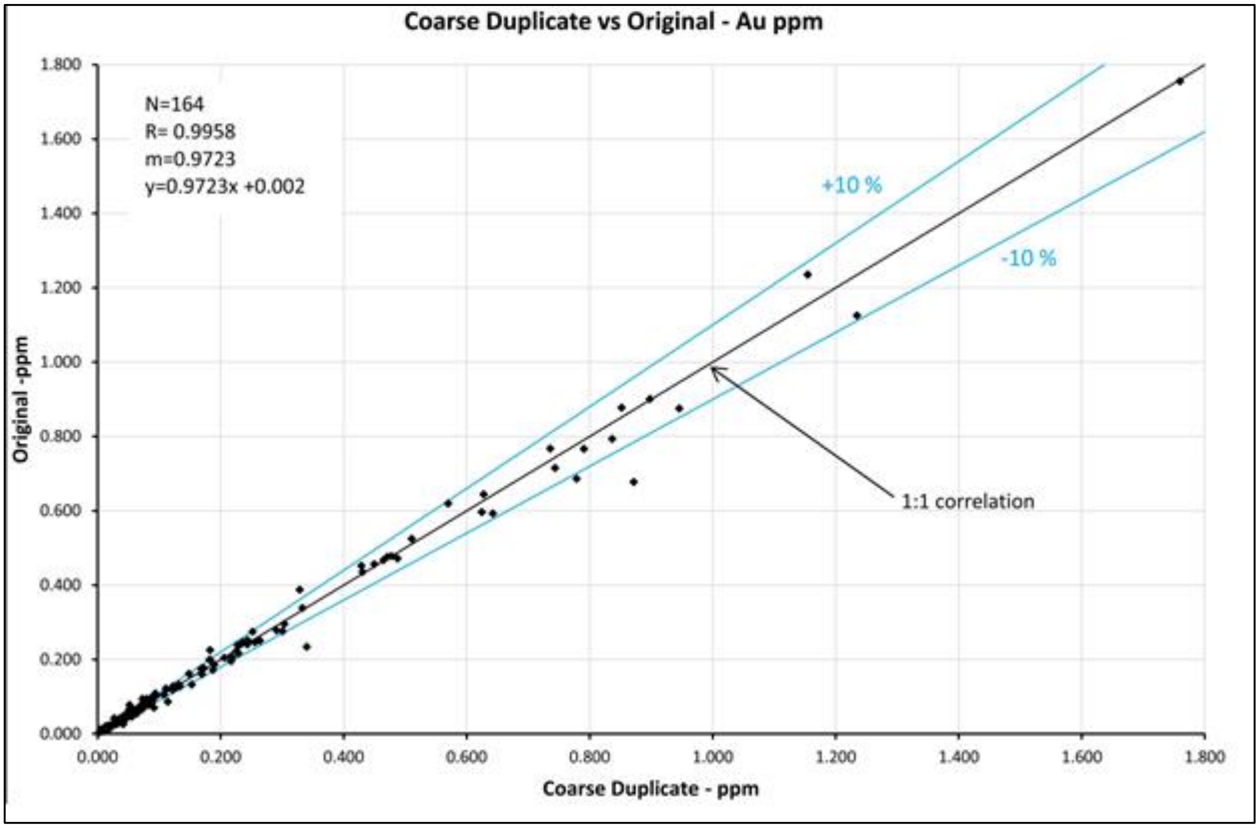


Figure 11.37 Au Analyses (FA AA) for Preparation Duplicate Samples

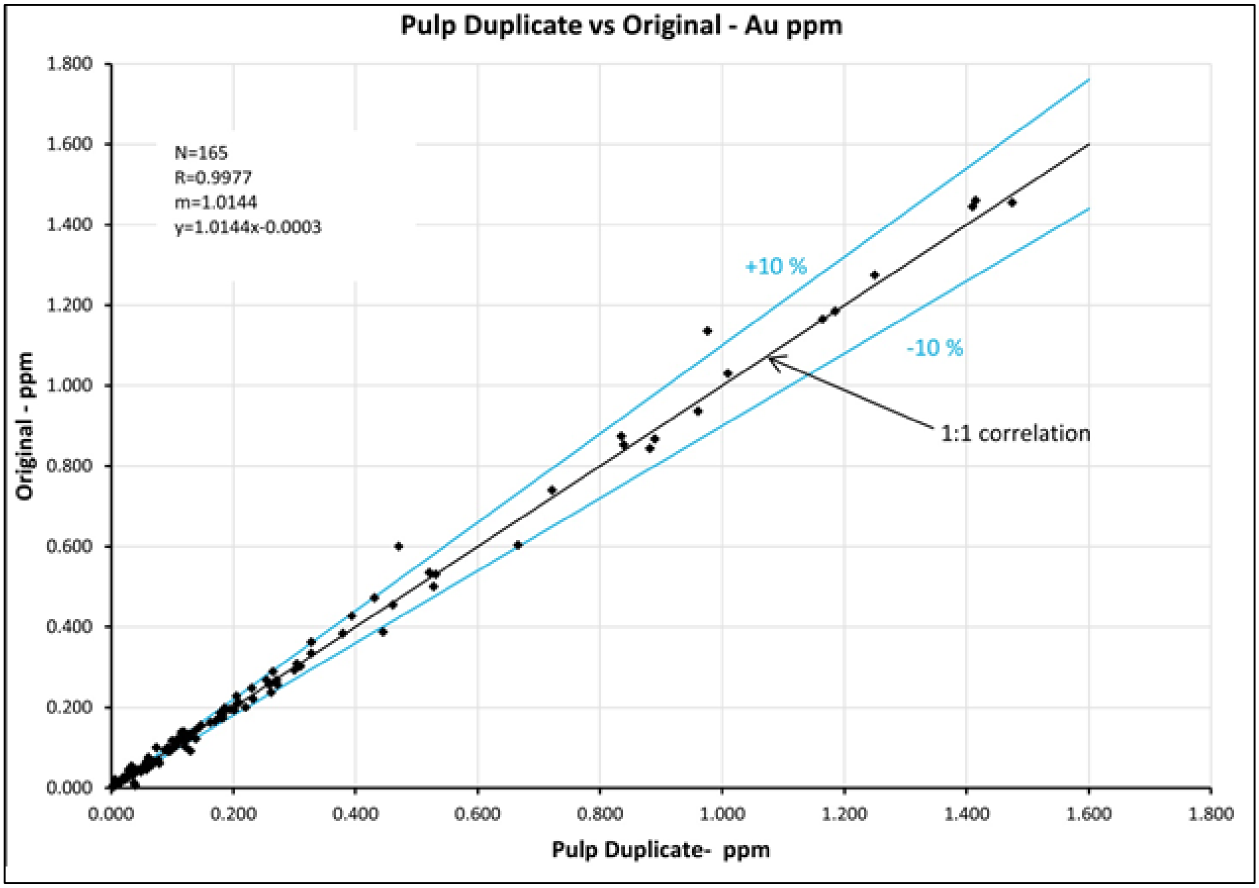


Figure 11.38 Au Analyses (FA AA) for Preparation Duplicate Samples

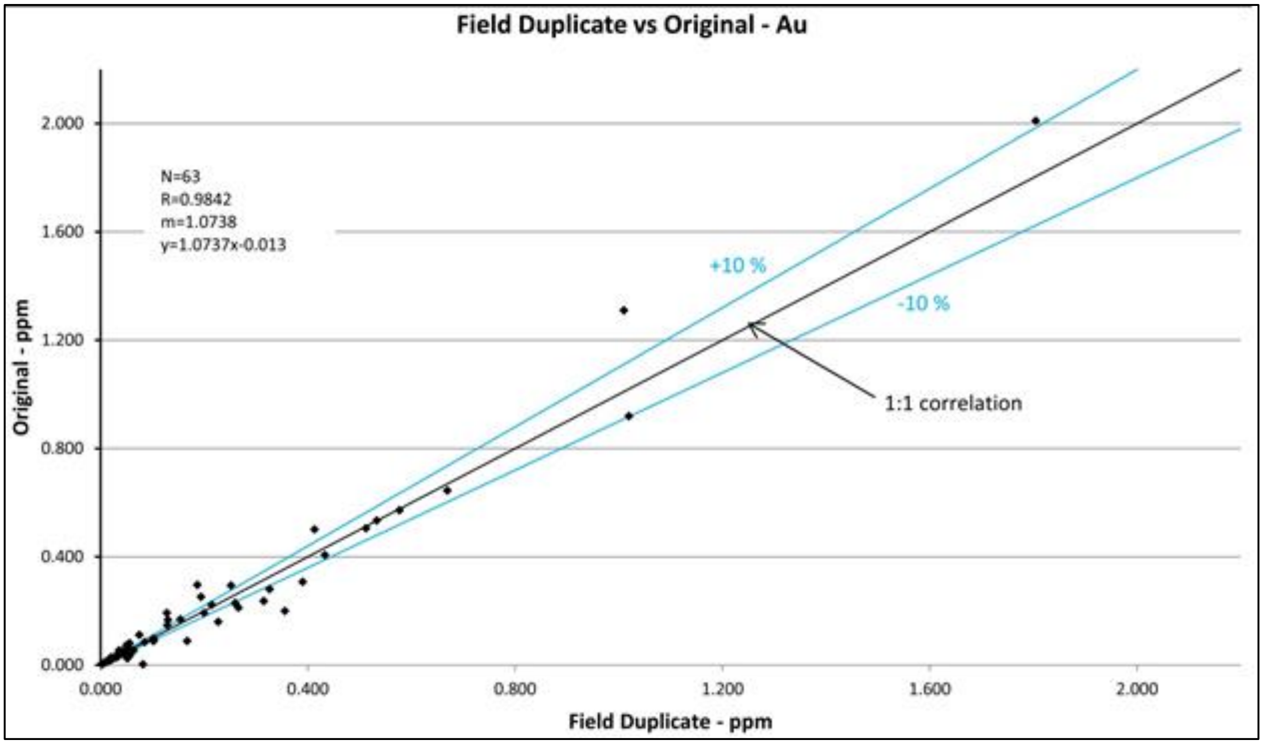


Figure 11.39 Cu Analyses (ICP-AES) for Preparation Duplicate Samples

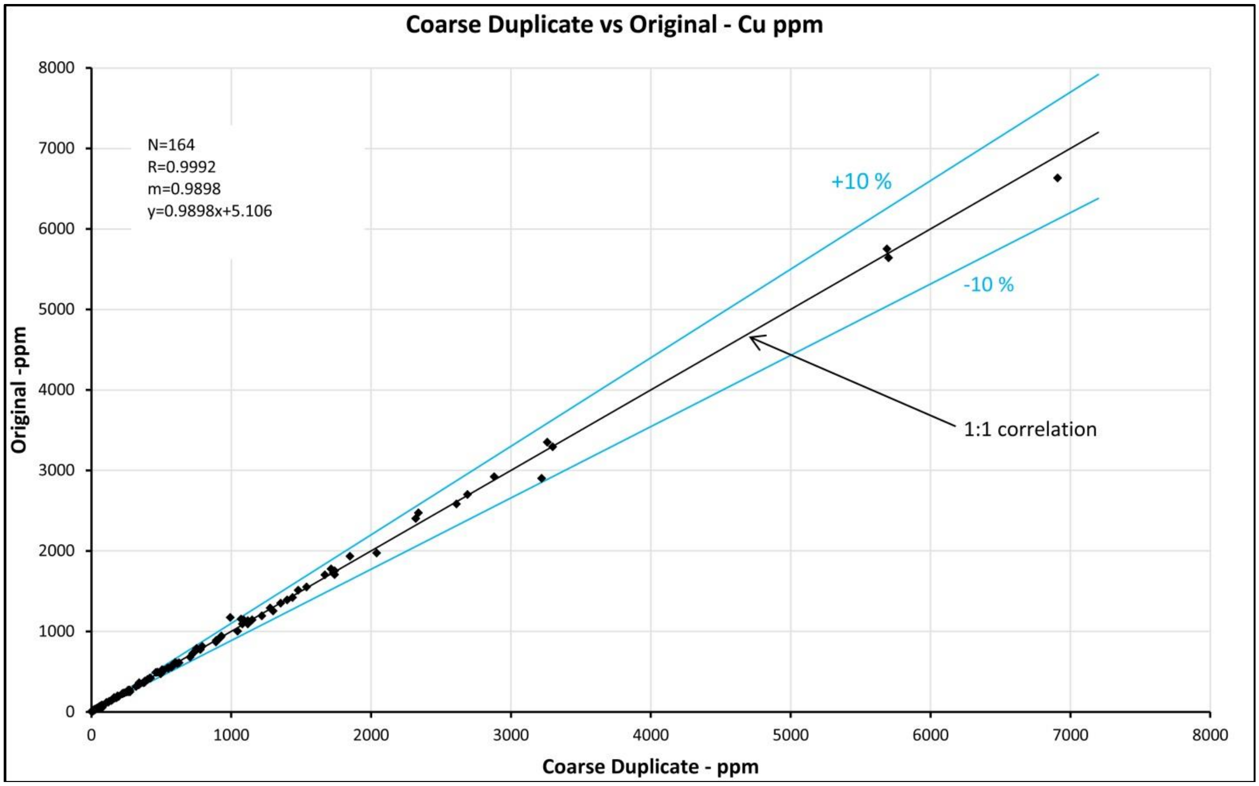


Figure 11.40 Cu Analyses (ICP-AES) for Preparation Duplicate Samples

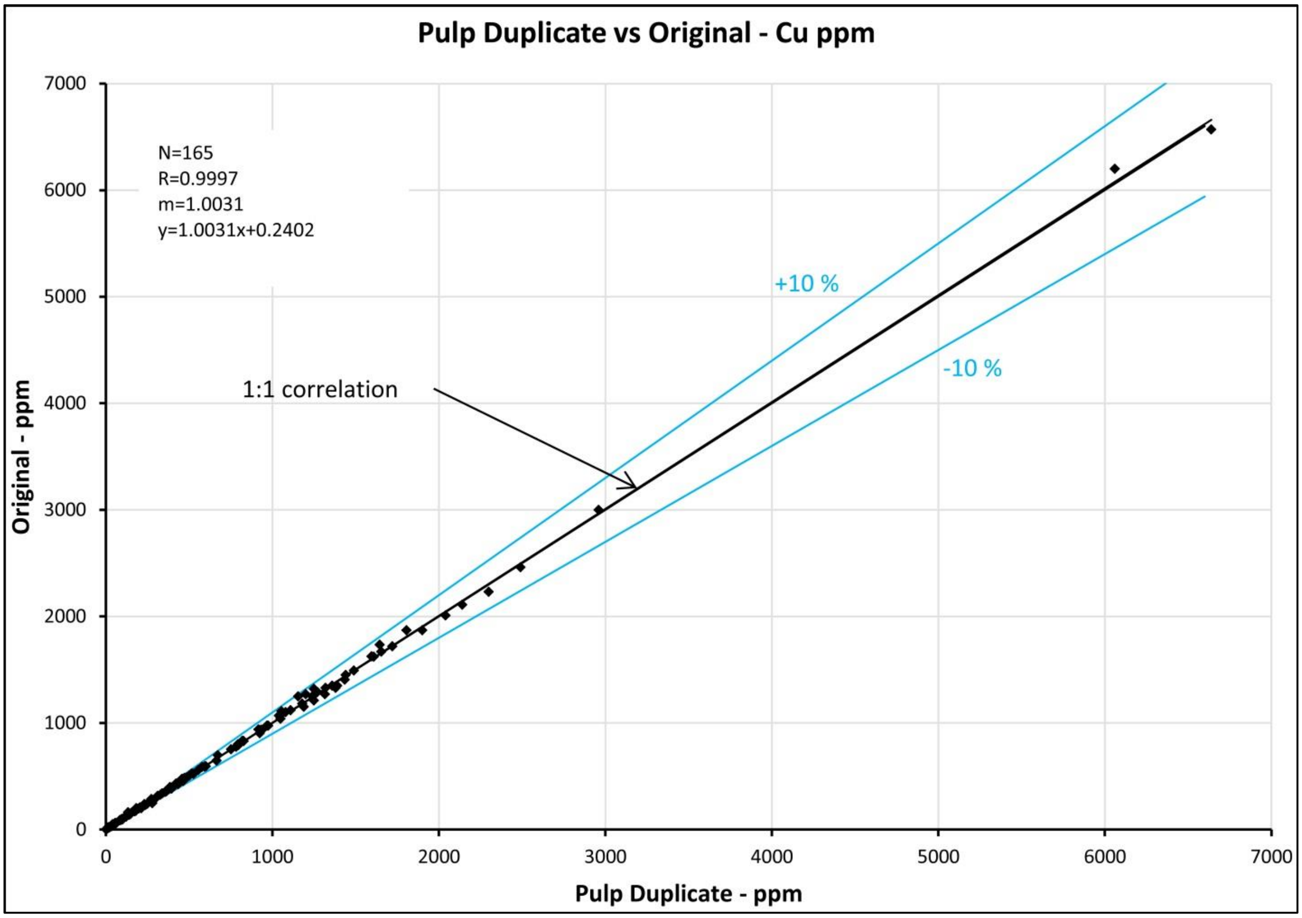
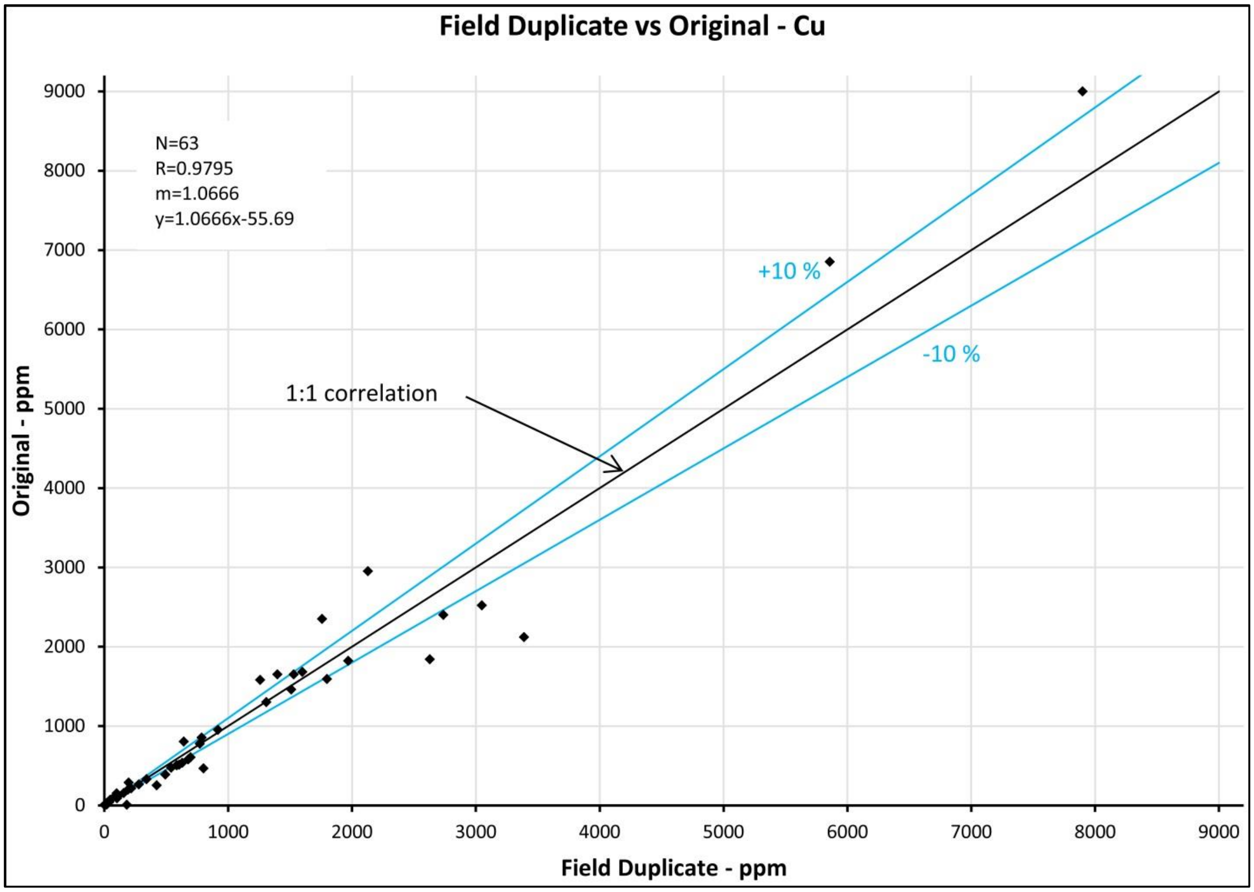


Figure 11.41 Cu Analyses (ICP-AES) for Preparation Duplicate Samples



11.2 Independent Check Assay Program

Bellhaven conducted a check assay study for the Middle Zone resource to accompany the standards, blanks, and duplicates program. Company geologists selected a suite of samples based on geological and grade variation for assay by a fully independent laboratory in order to further validate the resource and investigate possible laboratory or method bias. The first phase of this study is complete, with the second phase pending. The initial phase involved 70 check samples sent from intervals in 13 Middle Zone drill holes, distributed through a range of grades, alteration types, and intensities of weathering. The check assay value (reported by SGS) was compared with the original value for both gold and copper (originating from ALS Laboratories). The check value is considered acceptable if it falls within 10% of the original value, according to the following formula:

absolute value|(original value – check value)|/(average of values) < 10%.

Of the 70 check samples for Middle Zone completed to date, only three gold values were flagged as failing the above formula (Figure 11.42). In one case, the check value was higher than the original value. No values fell outside acceptable limits for copper (Figure 11.43). Four certified standards and blanks were inserted into the sample set, all of which fell within acceptable ranges.

For the three gold exceptions, re-check samples were sent to ALS Laboratories with different sample numbers. In each case, the two closest values were chosen and the outlier discarded. The two values were then subjected to the above formula to assure that they fell into the same compliance criteria. In all three cases acceptable values were obtained. These accepted values were then averaged and entered into the database (Figure 11.44). Two certified standards and two blanks were inserted into the sample set, all of which fell within acceptable ranges.

As an additional check, three to five samples from intervals close to each flagged re-check sample were re-assayed for gold. Out of 12 samples, all but one fell within acceptable check assay limits, and the one non-compliant value was greater in the re-check than the original. These are included in Figure 11.44.

Figure 11.42 Original vs Check Sample Comparison for Middle Zone – Au. The Blue Dotted Lines are +/- 10% From the Mean.

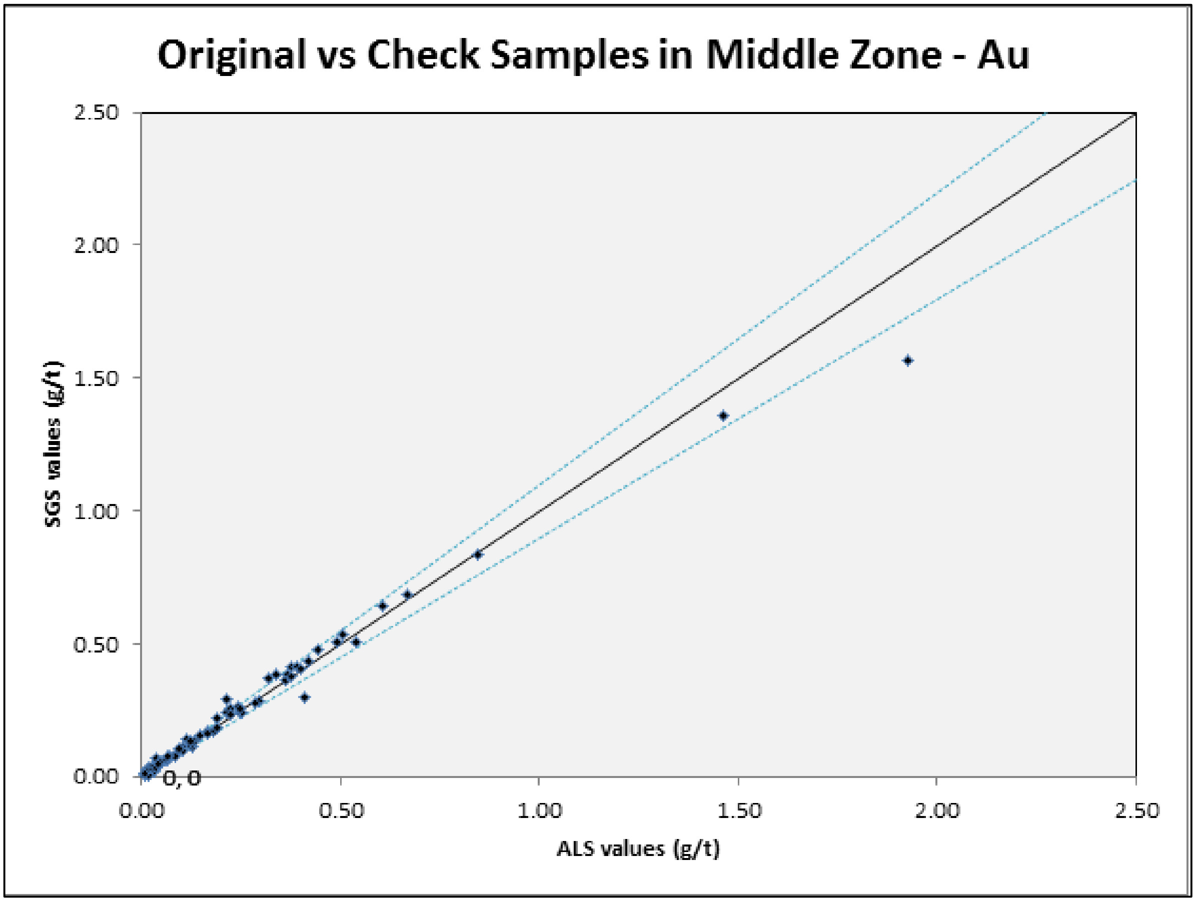


Figure 11.43 Original vs Check Sample Comparison for Middle Zone – Cu. The Blue Dotted Lines are +/- 10% From the Mean.

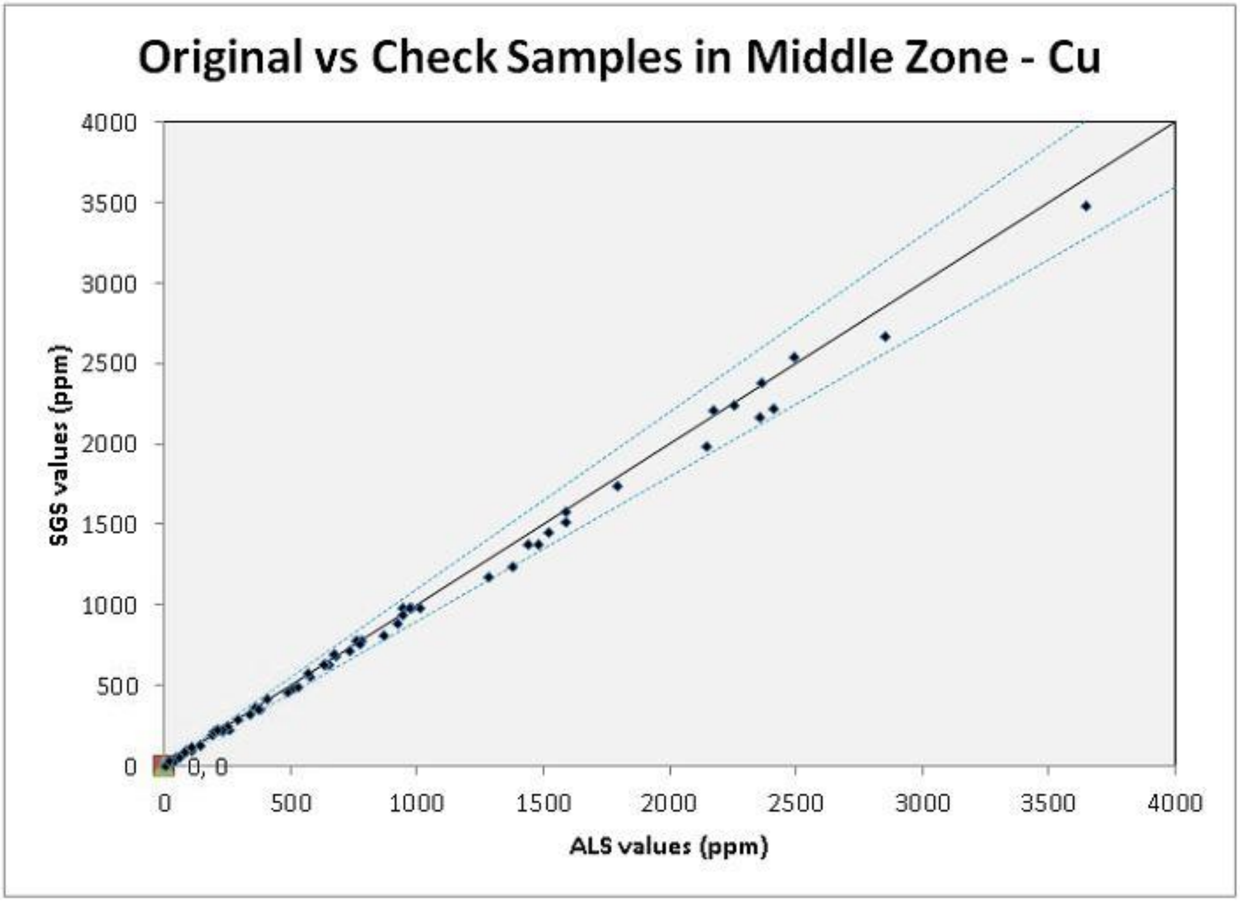
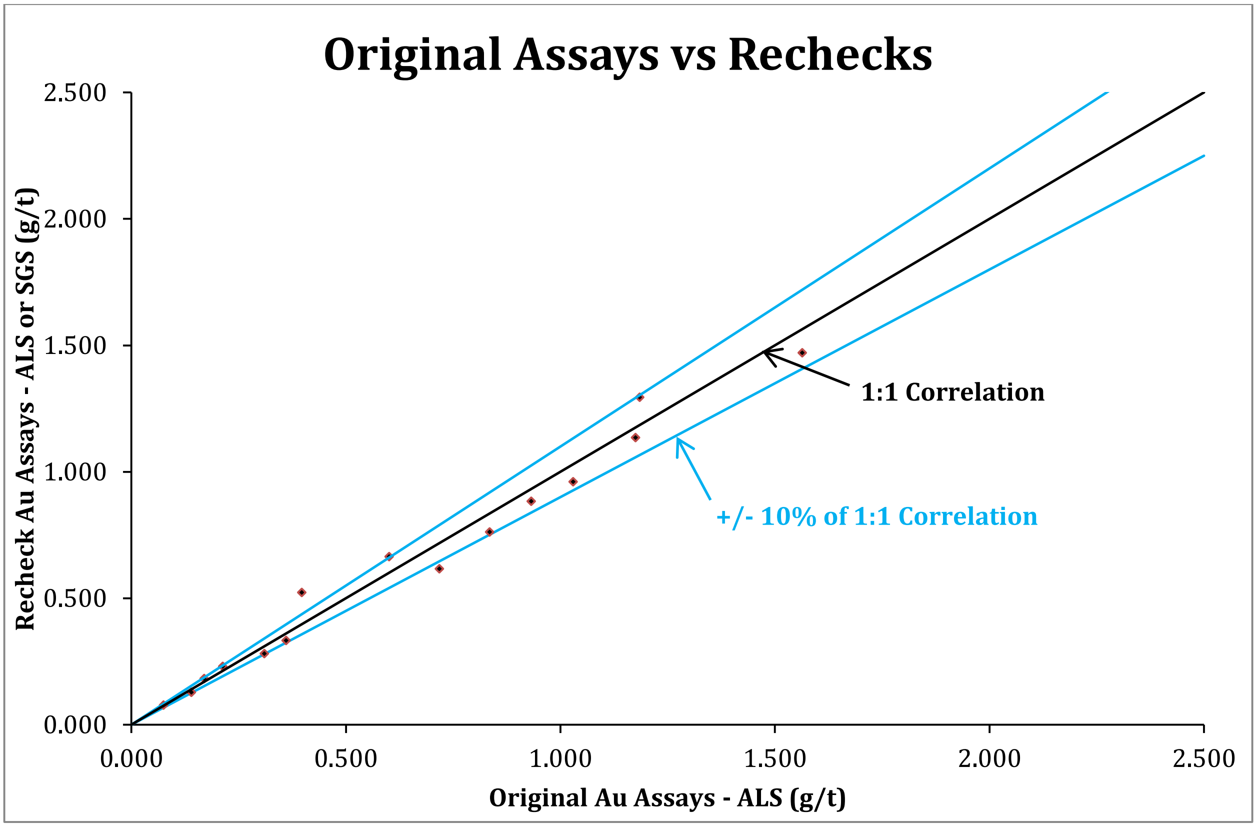


Figure 11.44 Original Assays vs Rechecks – With Outliers Rejected



11.3 Summary of QA/QC Program

Bellhaven's QA/QC program consists of certified standards, blanks, two types of lab duplicates and one type of field duplicate, as well as a check assay program involving a second analytical laboratory. The accuracy of the assays for gold and copper appears to be very good, as measured by the performance of analytical control samples. The repeatability or precision of the assay data for both copper and gold, as measured by duplicate and replicate assays, is also well within industry norms. Furthermore, the confirmation by an independent lab of gold and copper values for a selected suite of Middle Zone samples further enhances the credibility of the data. The fact that two accredited laboratories produced data that are so highly correlative is significant. Taken in its entirety, the quality assurance program from the Middle Zone deposit confirms that the data are of sufficient quality to support this resource calculation.

The methodology used to monitor the quality control during the drilling at the La Mina Project also exceeds industry norms. Company geologists routinely compare quality control data against certified values. The data and charts presented here document the follow-up assessment that occurs on the relatively rare occasions when values are returned that fall outside industry guidelines for quality. When assays for standards exceed certified values by more than 3 standard deviations, Bellhaven has investigated and addressed the concerns. Similarly when replicates or duplicates disagree by more than 10%, one can see follow-up analyses in the database. Hence, a complete review of the quality control data and Company practices tends to boost confidence in the assay data that are the building blocks of the resource models.

The quality control data for Middle Zone gold assays is particularly strong. Standards and blanks show almost no significant outliers beyond the 3rd standard deviation from certified values (one out of 500 cases for standards, 6 out of 258 cases for blanks). Even using the more stringent 2nd standard deviation, a relatively insignificant number of values were flagged (13 out of 500 cases for standards, 9 out of 258 cases for blanks). As documented above, many of the failures on blanks occurred at concentrations less than 10x the lower reporting limit of the method. At these low levels, an analytical method is much less reliable as precision is very high. The data from standards and blanks for gold indicate acceptable accuracy and do not identify any major episodes of contamination in the lab.

Gold assays in the coarse and pulp duplicates show good correlation and nearly all fall within ±10% of a 1:1 correlation. Since Company geologists collected data on duplicates at the crushing and pulverizing stages of sample preparation, we can see from the above data that there are no major problems with sub-sampling of the Middle Zone samples for gold. This level of agreement is well beyond industry norms. This type of duplicate data suggests that the sample prep laboratory is performing well, the geological materials pose no extraordinary challenges, and the precision of the analytical data is within expectations.

As expected, the field duplicates show significantly more scatter in the gold assays than laboratory duplicates do. It is important to see an improvement in duplicate performance from field duplicates to coarse lab duplicates. Nevertheless, Bellhaven geologists are currently reviewing the methodology for field duplicates in order to ensure equitable assessments of sampling error going forward. Using a ±20% precision envelope, we can see that most gold duplicates group nicely. Given that this comparison is between half core (original) and quarter core (duplicate) taken at the core saw, such correlation is certainly acceptable. It is recommended that future field duplicates be of comparable mass and volume, so the geologists should select either equal quarter core splits or half core splits.

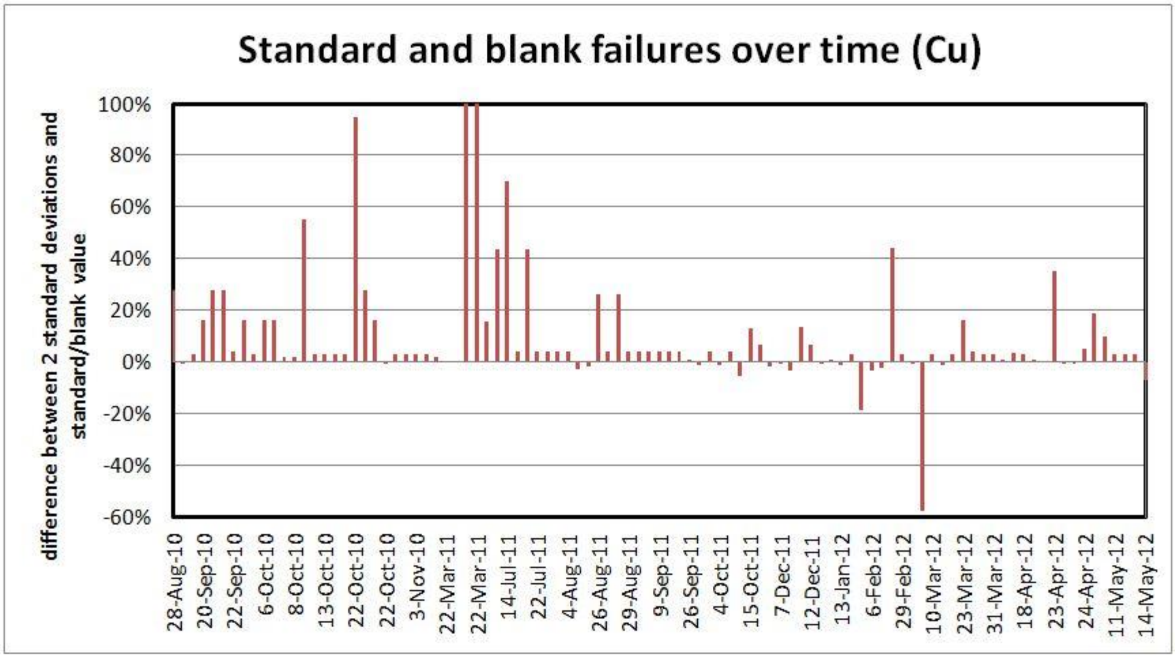
The independent lab check assay program also results in good agreement between gold in the data sets, with only three sample pairs out of 70 differing by more than 10%. Subsequent re-check samples on these three cases (with a number of surrounding samples being checked) resulted in assay pairs with acceptable precision. The confirmation of the tenor of mineralization from an independent laboratory provides added confidence. The ongoing comparison between independent labs will also provide a fall back position from which to evaluate drift or bias over time. This will become important as the resource is upgraded to potentially economic measured & indicated categories.

The quality control results for copper are also very good. While, there may be some subtle evidence of drifting bias at low concentration ranges in the laboratory method, the overall accuracy and precision of the copper data are sufficient to support this resource calculation.

Regarding the copper results for the analytical control samples and blanks, only 10 out of 330 standard determinations fell outside the 3rd standard deviation from the accepted copper values. The copper values in most certified blanks fell below the acceptable maximum values, but there were numerous failures at low concentration ranges (less than 10x the lower reporting limit for copper). The total number of failures was 38 out of 258 samples. The failures occurred with three certified blanks (BL110, BL111, and BL115). In the first two cases, the successive failures are limited in duration and do not suggest a prolonged problem at the lab. In the case of BL115, the number of successive busts does warrant a more detailed review. Analytical failures of low level standards or blanks could indicate contamination or some sort of drift in calibration at the low end of a method's operational range.

To evaluate this apparent systematic trend noted in the copper blanks and standards, Figure 11.45 below arranges both standard and blank failures by analysis date. The chart tracks the specific cases of failure of standards and blanks when compared against a conservative two standard deviations threshold. Percentage failure (y-axis) is defined as the percentage of the standard or blank measurement over (or under) the threshold value for that specific standard or blank. The chart excludes the majority of standards and blank measurements, since these fell within the above thresholds. Note that from the beginning of Middle Zone drilling in August 2010 to September 2011, there is a consistent positive bias to the copper results. The curve is almost bell shaped with its apex occurring in March 2011. The bias appears to neutralize or perhaps become weakly negative from September 2011 to mid-March 2012, possibly returning to a subtle positive bias thereafter.

Figure 11.45 Changes in the Magnitude of Difference Between Standards and Blanks for Copper, Plotted Against Date of Analysis.



If confirmed, this pattern would indicate some kind of drift in the copper baseline of the method. Contamination could also play a part in the positive bias, but it may be difficult to confirm that. However, it is important to point out that most of these failures occur at very low levels – well below the average grade of the Middle Zone resource. For that reason, it is unlikely that the apparent drift in low level copper values that may be in evidence here would have any material effect on these mineral resources.

As with gold, pulp and coarse duplicates for copper show good correlation, while the field duplicates show a significantly larger spread. Using the 10% precision envelope, the chart shows only one failure of a coarse duplicate at higher copper concentrations. The pulp duplicates perform even better. Again, having data for both coarse and pulp duplicates builds confidence that there are no significant sub-sampling problems for copper with the Middle Zone samples.

The field duplicates do show more scatter, suggesting that sampling error increases when dealing with geological materials in the field. However, as the coefficient of correlation remains high and the scatter is largely contained with a + 20% precision envelope, the sampling variability at Middle Zone is well in line with expectations. Improved consistency may result from collecting consistent quarter core samples for field duplicates in the future.

The two independent laboratories confirm the levels of copper mineralization based on the check assay program so far. The agreement between the two labs was excellent, with no values out of

70 pairs flagged outside the ± 10% precision envelope for samples containing at least 500 ppm copper.

12.0 Data Verification

With seventy four holes completed to the end of May 2012 by Bellhaven and previous operators, complemented by various and extensive surface geochemistry in streams, soils, and bedrock, SEWC concludes that an industry-standard program of QA-QC appropriate to the early-stage of exploration has been in place for most if not all of this work.

Since taking an option on the property, the Bellhaven sampling and assaying programs have been controlled by a systematic application of certified standards and blanks, along with Bellhaven's own field duplicate and laboratory duplicate checks. The use of an independent international preparation and assay laboratory, ALS Chemex, adds additional assurance that assay results are representative of the mineralization encountered on the property.

As an additional verification and check on the overall level of copper-gold grades reported for the porphyry mineralization at La Mina, SEWC independently collected samples from drill core representing the current drill programs. The samples were collected by SEWC or under SEWCs supervision in the case of selecting half-core for quartering by saw cutter.

This verification sampling is intended only as a check of the general level of copper-gold mineralization found at La Mina, but is not intended as a comprehensive QA-QC assessment for the purposes of resource estimation.

The results of the check assays compared to the Bellhaven originals are within acceptable precision. Bellhaven put no limitations on the author's review of the exploration site.

During the authors' site visit, logging procedures, sample collection and preparation procedures were reviewed.

12.1 Assay Certificate and Drill Hole Database Validation

SEWC selected 5%, or 157 random sample intervals from the 3,082 intervals in the Bellhaven drill hole database for validation. SEWC then compared the assay lab certificates from ALS Minerals (formally ALS Chemex during Anglo drilling) to the values that were in the database. SEWC found no discrepancies between the two data sources, and found them to match. It was noticed that when the assay reported on the certificated were at the lower detection limit (LDL), and recorded as such, that Bellhaven recorded the LDL value in the database. SEWC recommends that Bellhaven record half the value of the LDL in the database when further test results are not available. A sample of the drill hole database and assay certificate validation is shows in Table 12.1.

Table 12.1 Example Database Validation Table												
					ALS Minerals Certificate Values					Bellhaven Database		
		Method			Au-AA24	Cu-AA61	ME-MS61	ME-MS61	ME-ICP61			
		Element			Au ppm	Cu ppm	Ag ppm	Cu ppm	Cu ppm	Au ppm	Ag ppm	Cu ppm
DHD	Sample	Certificate No.	From	To								
LMDDH-003	10004238	LI06080367	18	20	0.144	3160	1.65	3360		0.144	1.7	3360
LMDDH-005	10004358	LI06079859	166	168	0.175	1010	.98	1110		0.175	1.0	1110
LMDDH-006	10004559	LI06084114	128	130	0.451	2740	1.54	3180		0.451	1.5	3180
LMDDH-007	AEC-3051	BG10118180	56.3	58.3	0.091		<0.5		1605	0.91	0.5	1605
LMDDH-009	AEC-2902	BG10113238	230.8	232.8	0.969		2.8		6290	0.969	2.8	6290
LMDDH-014	AEC-4223	BG10174944	441	442.9	0.235		2		2860	0.235	2	2860
LMDDH-015	AEC-4331	BG10180592	100.5	102	0.01		<0.5		10	0.01	0.5	10
LMDDH-016	AEC-4889	BG11017902	316	318	0.155		<0.5		287	0.155	0.5	287
LMDDH-022	AEC-5876	BG11048966	240.2	242	0.262		0.7		2070	0.262	0.7	2070
LMDDH-025	AEC-6178	BG11075204	86.55	89	0.6		1		2260	0.6	1	2260
LMDDH-026	AEC-6617	MD11079058	90	92	0.07		<0.5		449	0.07	0.5	449
LMDDH-027	AEC-7058	MD11088602	373	375	0.08		0.9		1055	0.08	0.9	1055

13.0 Mineral Processing and Metallurgical Testing

13.1 Summary

Aurum Exploration Inc. contracted Resource Development Inc. (RDi) to undertake a scoping level metallurgical study for La Mina porphyry gold and copper prospect in Colombia.

RDi received four composite samples for the metallurgical study. There were three samples from the La Cantera prospect consisting of average grade, low grade and high grade and one sample from the middle zone prospect. The samples assayed 0.306% to 0.476% Cu and 0.727 g/t to 1.454 g/t Au. Sequential copper analysis indicated that two of the four composites contained significant amount of oxide and secondary copper.

The metallurgical testwork undertaken included sample preparation and characterization, Bond's ball millwork index determinations, in-place bulk density measurements, gravity tests, direct cyanidation and carbon-in-leach tests and rougher and cleaner flotation tests.

The samples had a Bond's ball mill work index of 10.22 to 14.0 which is typically within the range of porphyry copper ores.

Gravity concentration tests indicated that one could not produce a high-grade concentrate that could be directly smelted. Hence, gravity circuit may not be applicable for this deposit.

Whole ore cyanide leach tests extracted over 80% of the gold from three of the four composites. The cyanide consumption was high because of leaching copper minerals along with gold.

Flotation process using a simple reagent suite consisting of potassium amyl xanthate (PAX), Aeropromotor 404 and methyl isobutyl carbonal recovered 85% to 90% of the gold and copper in the rougher concentrate. Regrinding of rougher concentrate followed by two stages of cleaner flotation in open-circuit tests produced a concentrate assaying over 26% Cu and ±50 g/t Au for three of the four composite samples.

An overall recovery of 79% for gold and 84% for copper were projected for the flotation process flowsheet based on assuming 83% of gold and 88% of copper in the rougher flotation process and 95% recovery for both metals in the cleaner flotation process.

However, docked cycle tests need to be performed to confirm these recoveries in the next phase of testing

13.2 Metallurgical Introduction

Aurum Exploration Inc. is exploring the La Mina Porphyry gold and copper prospect in Colombia. They contracted Resource Development Inc. (RDi) to undertake a scoping metallurgical study to evaluate the various processing options to recover copper and gold.

RDi received four composite samples for the study. There were three samples from the La Cantera prospect consisting of average grade, low grade and high grade and one sample from the middle zone prospect.

The scoping studies undertaken included sample preparation and characterization, Bond's ball mill work index determinations, gravity tests, direct cyanidation and carbon- in-leach tests and rougher and cleaner flotation tests. This PEA report summarizes the test procedures and results obtained in the study.

13.2a Metallurgical Test Work

RDI received coarse drill core rejects for the metallurgical study. These samples were composited to make four representative composite samples for the study. They are listed in Table 13.1.

Table 13.1 Description of Composite Samples

Composite No.	Description
1	La Cantera prospect, average grade
2	Middle Zone prospect
3	La Cantera, high grade
4	La Cantera prospect, low grade

13.2b Sample Preparation and Characterization

The composite samples were stage crushed to P_{100} of 6 mesh, thoroughly blended and riffle split into two parts. One part was stored in drums for later work. The other half of each composite was blended and split into 1kg charges using a twenty-way rotary splitter. The 1kg charges were weighed, bagged and stored in the freezer to avoid oxidation.

A 1 kg charge for each composite was pulverized to 150 mesh, blended and representative splits taken out for head analyses. The samples were submitted for gold assay using one-assay-ton fire-assay procedure, sequential copper analyses and ICP analyses. The test results are summarized in Tables 13.2 to 13.4.

The test results indicate the following:

- The gold content in these samples varied from 0.727 g/t to 1.454g/t.
- The total copper content varied from 0.306% to 0.476%. The majority of the copper in composite No.2 and No. 3 was primary copper whereas other two composites had significant amount of oxide and secondary copper (Table 3).
- ICP analyses indicated that the composite samples had only traces of other sulfide minerals (i.e. Zn, Pb, As, Ni, Mo, etc.).

Table 13.2 Head Analyses of Bellhaven Samples

Element	Composite No.			
	1	2	3	4
Au, g/t	1.207	0.727	1.427	1.454
Cu_{Total},ppm	3520	3320	4760	3060
$Cu_{Acid\ sol}$,ppm	1468	82	393	856
Cu_{CNsol},ppm	1092	65	299	425

Table 13.3 Proportion of Different Forms of Copper in the Bellhaven Samples

Element	Composite No.			
	1	2	3	4
$Cu_{Acid\ sol}$,%	41.7	2.5	8.3	28
Cu_{CNsol},%	31.0	2.0	6.3	13.9
$Cu_{CPrimary}$,%	27.3	95.5	85.4	58.1

Table 13.4 ICP Analyses of Composite Samples				
	Composite No.			
Element	1	2	3	4
Al	6.95	7.48	6.41	7.94
Ca	0.89	1.26	3.36	1.79
Fe	7.96	5.51	6.81	7.33
K	4.62	3.89	3.57	4.53
Mg	0.68	0.84	0.88	1.02
Na	1.99	2.01	1.89	2.25
Ti	0.19	0.14	0.21	0.24
Element, ppm				
As	<10	<10	<10	<10
Ba	837	1267	783	1062
Bi	<10	<10	<10	<10
Cd	9	6	7	8
Co	14	11	12	13
Cr	30	36	30	30
Cu	3533	3233	4359	3061
Mn	520	502	741	595
Mo	17	29	100	20
Ni	<5	<5	<5	<5
Pb	12	11	<10	11
Sr	307	408	487	433
V	110	99	84	105
W	<10	<10	<10	<10
Zn	132	95	105	167

13.3 In-Place Bulk Densities

RDi received rock samples from the various parts of the prospect for in-place bulk density measurements. We used the standard procedure of waxing the dried core samples and determining the water displacement volume to calculate the in-place bulk densities. The results for the 16 samples are given in Table 13.5. The bulk densities ranged from 2.48 to 2.98 g/cc.

Table 13.5 In-Place Bulk Densities for the Selected Con Samples

Sample Code	Au Grade	Target	Hole Number	Depth	Rock	SG
D1	AVG Medium Grade	Lacantera	DDH-08	26.00	EIB	2.53
D2	AVG Medium Grade	Lacantera	DDH-08	36.90	EIB	2.54
D3	AVG Medium Grade	Lacantera	DDH-08	50.80	EIB	2.64
D4	High Grade	Lacantera	DDH-08	204.00	EIB	2.67
D5	High Grade	Lacantera	DDH-08	217.17	EIB	2.98
D6	Low Grade	Lacantera	DDH-08	49.10	EIB	2.51
D7	Low Grade	Lacantera	DDH-08	63.50	EIB	2.58
D8	High Grade	Lacantera	DDH-09	265.27	Diorite Cantera	2.58
D 9	High Grade	Lacantera	DDH-09	289.00	Diorite Cantera	2.63
D10	High Grade	Lacantera	DDH-09	294.30	EIB	2.75
D11	AVG Medium Grade	Middle Zone	DDH-13	40.80	X3 Porphyry	2.62
D12	AVG Medium Grade	Middle Zone	DDH-13	49.80	X3 Porphyry	2.48
D13	AVG Medium Grade	Middle Zone	DDH-13	54.00	X3 Porphyry	2.54
D14	AVG Medium Grade	Middle Zone	DDH-13	78.25	X3 Porphyry Breccia	2.56
D15	Low Grade	Lacantera	DDH-09	227.50	EIB	2.64
D16	Low Grade	Lacantera	DDH-09	233.60	EIB	2.62

13.4 Ball Mill Work Indices

Ball Mill work indices were determined at 100 mesh for the four composite samples. The test data are given in Appendix B and the results are summarized in Table 13.6.

Table 13.6 Bond's Ball Mill Work Index @100 Mesh

Composite No.	Area	BWI
1	La Cantera average grade	10.22
2	Middle Zone	11.96
3	La Cantera high grade	14.00
4	La Cantera low grade	12.85

These results indicate that the ore hardness is within the range for the porphyry ores. The La Cantera high grade sample had the highest work index.

13.5 Grind Studies

A series of grind tests with 1kg charges were performed in a laboratory rod mill at 50% solids for all the composite samples to establish the grind time-grind size relationship. Laboratory rod mill simulates a ball mill-cyclone circuit in actual operation. The ores were ground for varying times and the ground pulp was wet screened on 400 mesh.

Both the plus 400 mesh and the minus 400 mesh fractions were filtered and dried and the plus 400 mesh was dry screened. All the size fractions were weighed and the size distributions were calculated.

The test data are given in Appendix C. The grind times required to achieve the desired grind sizes for each composite were determined from the grind data.

13.6 Gravity Tests

The objective of the gravity testing was to determine if one could recover free gold, especially coarse gold, from the ore in a concentrate which could be directly smelted.

The four composite samples (1kg charges) were ground to P_{80} of 65, 100, and 150 mesh and subjected to gravity concentration using a laboratory Knelson concentrator. The gravity concentrate was subjected to cleaner gravity concentration using Gemeni table.

The test data are summarized in Table 7 to 10. The test results indicate that gravity concentrate recovered 11% to 28% of the gold in 0.4% to 2.8% of the weight. The concentrate grade ranged from 2g/t to 115g/t Au.

Since the concentrate grade was too low to treat it separately and there may not be any coarse gold in the deposit, a gravity circuit may not be needed for this deposit.

Table 13.7 Gravity Test Results for Composite No.1							
Product	**Recovery %**				**Grade**		
	Wt	**Au**	**Cu**	**S**	**Au, g/t**	**Cu, g/t**	**S,%**
P_{80} 65 mesh (T-1)							
Gemeni Conc.	0.4	28.5	4.5	5.6	114.68	48,600	4.01
Gemeni Tails	11.4	27.1	10.4	8.6	3.53	3660	0.20
Cal. Knelson Conc.	11.8	55.6	14.9	14.1	7.02	5070	0.32
Knelson Tails	88.2	44.4	85.1	85.9	0.75	3870	0.26
Cal. Feed	100.0	100.0	100.0	100.0	1.49	4012	0.27
P_{80} 100 mesh (T-2)							
Gemeni Conc.	1.7	20.3	14.9	22.1	14.63	35000	3.71
Gemeni Tails	13.7	23.9	16.4	14.2	2.09	4660	0.29
Cal. Knelson Conc.	15.4	44.2	31.3	36.3	3.45	7960	0.66
Knelson Tails	84.6	55.8	68.7	63.7	0.79	3100	0.21
Cal Feed	100.0	100.0	100.0	100.0	1.20	3894	0.28
P_{80} 150 mesh (T-3)							
Gemeni Conc.	2.8	23.0	27.0	36.9	8.71	39400	3.57
Gemeni Tails	7.4	13.9	10.6	10.4	1.99	5880	0.38
Cal. Knelson Conc.	10.2	36.8	37.6	47.2	3.84	15088	1.26
Knelson Tails	89.8	63.2	62.4	52.8	0.75	2850	0.16
Cal. Feed	100.0	100.0	100.0	100.0	1.07	4102	0.27

Table 13. 8 Gravity Test Results for Composite No.2							
Product	**Recovery %**				**Grade**		
	Wt	**Au**	**Cu**	**S**	**Au, g/t**	**Cu, g/t**	**S,%**
P_{80} 65 mesh (T-4)							
Gemeni Conc.	0.9	18.9	2.5	19.7	21.45	9640	30.15
Gemeni Tails	10.7	15.8	12.4	10.5	1.44	3900	1.29
Cal. Knelson Conc.	11.6	34.7	14.8	30.2	2.93	4326	3.43
Knelson Tails	88.4	65.3	85.2	69.8	0.72	3250	1.04
Cal. Feed	100.0	100.0	100.0	100.0	0.98	3357	1.32
P_{80} 100 mesh (T-5)							
Gemeni Conc.	1.4	28.1	5.5	27.8	20.37	13190	23.65
Gemeni Tails	12.2	18.4	16.9	15.6	1.51	4560	1.50
Cal. Knelson Conc.	13.6	46.6	22.5	43.4	3.43	5437	3.75
Knelson Tails	86.4	53.4	77.5	56.6	0.62	2960	0.77
Cal. Feed	100.0	100.0	100.0	100.0	1.00	3297	1.18
P_{80} 150 mesh (T-6)							
Gemeni Conc.	1.9	17.7	7.3	38.1	9.05	12320	25.92
Gemeni Tails	10.0	18.6	21.9	22.0	1.85	7190	2.91
Cal. Knelson Conc.	11.9	36.3	29.2	60.1	3.02	8024	6.65
Knelson Tails	88.1	63.7	70.8	39.9	0.72	2640	0.60
Cal. Feed	100.0	100.0	100.0	100.0	0.99	3283	1.32

Table 13.9 Gravity Test Results for Composite No.3							
Product	**Recovery %**				**Grade**		
	Wt	**Au**	**Cu**	**S**	**Au, g/t**	**Cu, g/t**	**S,%**
P_{80} 65 mesh (T-7)							
Gemeni Conc.	1.2	12.8	6.4	5.6	18.97	25800	4.86
Gemeni Tails	10.5	16.8	14.8	7.2	2.95	7070	0.74
Cal. Knelson Conc.	11.7	29.5	21.2	12.7	4.65	9052	1.18
Knelson Tails	88.3	70.5	78.8	87.3	1.47	4470	1.07
Cal. Feed	100.0	100.0	100.0	100.0	1.84	5007	1.08
P_{80} 100 mesh (T-8)							
Gemeni Conc.	1.1	18.3	4.7	4.2	33.87	20300	4.79
Gemeni Tails	6.6	11.8	6.3	2.3	3.80	4730	0.46
Cal. Knelson Conc.	7.7	30.1	11.0	6.5	8.27	7044	1.10
Knelson Tails	92.3	69.9	89.0	93.5	1.61	4750	1.34
Cal. Feed	100.0	100.0	100.0	100.0	2.12	4927	1.32
P_{80} 150 mesh (T-9)							
Gemeni Conc.	2.5	14.9	12.2	13.0	14.81	24300	4.87
Gemeni Tails	6.8	14.0	14.3	9.0	5.21	10660	1.26
Cal. Knelson Conc.	9.4	28.9	26.5	22.0	7.82	14372	2.24
Knelson Tails	90.6	71.1	73.5	78.0	1.99	4110	0.82
Cal. Feed	100.0	100.0	100.0	100.0	2.54	5070	0.95

Table 13.10 Gravity Test Results for Composite No.4							
Product	**Recovery %**				**Grade**		
	Wt	**Au**	**Cu**	**S**	**Au, g/t**	**Cu, g/t**	**S,%**
P_{80} 65 mesh (T-10)							
Gemeni Conc.	1.9	19.8	7.5	16.4	16.53	13190	2.29
Gemeni Tails	7.4	13.6	8.9	8.8	2.95	4030	0.32
Cal. Knelson Conc.	9.3	33.4	16.4	25.2	5.74	5911	0.72
Knelson Tails	90.7	66.6	83.6	74.8	1.17	3080	0.22
Cal. Feed	100.0	100.0	100.0	100.0	1.59	3343	0.27
P_{80} 100 mesh (T-11)							
Gemeni Conc.	1.1	20.1	6.1	8.5	13.87	16890	2.13
Gemeni Tails	14.0	30.3	15.3	11.2	1.71	3450	0.23
Cal. Knelson Conc.	15.1	50.4	21.4	19.7	2.63	4463	0.37
Knelson Tails	84.9	49.6	78.6	80.3	0.46	2920	0.27
Cal. Feed	100.0	100.0	100.0	100.0	0.79	3153	0.29
P_{80} 150 mesh (T-12)							
Gemeni Conc.	2.6	11.5	12.4	25.5	2.78	14720	2.66
Gemeni Tails	8.6	23.2	14.8	16.5	1.73	5400	0.53
Cal. Knelson Conc.	11.2	34.7	27.3	42.0	1.98	7593	1.03
Knelson Tails	88.8	65.3	72.7	58.0	0.47	2560	0.18
Cal. Feed	100.0	100.0	100.0	100.0	0.64	3125	0.28

13.7 Whole Ore Cyanidation Leach Tests

Whole Ore Cyanidation and carbon-in-leach tests were performed on the four composites to determine the metal extractions and reagent consumptions.

Each composite sample (1kg charge) was ground to P_{80} of 200 mesh and slurried with water to a density of 40% solids. The slurried sample was adjusted to a pH of 11 with lime and a cyanide concentration of 1g/l. For the carbon-in- leach tests, 20g/l of carbon was also added to the slurry. The samples were bottle rolled for 48 hours. Kinetic samples were taken at 6, 24 and 48 hours for whole ore cyanidation tests and assayed for gold and copper. The pH and NaCN concentration were adjusted to 11 and 1g/l respectively at 6 and 24 hours. After 48 hours, the samples were filtered and the test residues thoroughly washed and dried. The dry residues were pulverized and assayed for gold and copper.

The test results are summarized in Tables 13.11 and 13.12.

The test results indicate the following:

- Gold extractions were reasonable (>80%) for composite No's. 2 to 4. The gold extraction from composite No. 1 was only 31.3%.
- The copper extractions for these samples ranged from 44% to 71%.
- The NaCN consumption was high (i.e. 1.7 to 4.4 kg/t).

There appears to be no-robbing components in these ores based on direct cyanidation and CIL tests.

Table 13.11 Cyanidation Leach Test Results (P_{80} = 200 mesh)

Parameter	Composite No.							
	1		2		3		4	
	Au	Cu	Au	Cu	Au	Cu	Au	Cu
Extraction % 6 hrs. 24 hrs. 48 hrs.	8.6 24.1 31.3	28.8 31.4 48.8	33.7 80.6 86.2	15.5 29.5 44.3	10.3 62.9 84.5	22.3 54.4 70.7	7.4 59.5 90.2	17.8 31.5 34.8
Residue, g/t	0.61	2120	0.10	320	0.21	402	0.06	2042
Cal. Feed g/t	0.89	4140	0.72	575	1.35	1372	0.63	3125
NaCN Consumption, Kg/t	4.363		1.791		3.268		2.858	

Note: Calculated Copper head assay for composite 2 and 3 is low.

Table 13.12 Carbon-in- Leach (CIL)Test Results								
Parameter	**Composite No.**							
	1		**2**		**3**		**4**	
	Au	**Cu**	**Au**	**Cu**	**Au**	**Cu**	**Au**	**Cu**
Extraction % (48 hrs)	41.3	49.4	86.8	42.6	85.7	72.9	84.9	34.7
Carbon g/t	12.20	241.2	21.26	518	41.06	4920	20.20	2184
Residue, g/t	0.54	2082	0.10	322	0.21	390	0.11	2050
Cal. Feed g/t	0.91	4115	0.73	561	1.49	1439	0.73	3139
NaCN Consumption, Kg/t	4.035		1.890		3.640		3.193	

13.8 Flotation Tests

13.8a Rougher Flotation

Flotation tests were undertaken with the primary objective of producing a copper and gold rich sulfide mineral concentrate. The process variables evaluated included grind size, collectors (potassium amyl xanthate (PAX), Aero Promotors 404 and 3418A) and sulfidization of the ore in the grinding circuit. There were six rougher flotation tests run with each of the four composites.

The process parameters for the flotation tests are given in Table 13.13. The flotation test data are given in Appendix F and the results are summarized in Tables 13.14 to 13.16.
The test results indicated the following:

- Gold recovery of 85% to 90% can be obtained in the rougher flotation concentrate along with similar recoveries for copper.
- These recoveries were achieved with a simple reagent suite consisting of potassium amyl xanthate (PAX), Aeropromotor 404.
- Sulfidization was found to be detrimental instead of beneficial for these samples.

Table 13.13 Flotation Process Test Parameter							
Test No.	Composite No.	Grind P_{80}, mesh	Reagents, g/t				
			PAX	AP 404	MIBC	Na_2S	3418 A
1	1	100	100	100	40	2000	-
2	1	150	100	100	40	2000	-
3	1	200	100	100	40	2000	-
4	1	150	100	100	40	-	-
5	1	150	-	-	40	2000	100
6	1	150	-	100	40	2000	100
7	2	100	100	100	40	-	-
8	2	150	100	100	40	-	-
9	2	200	100	100	40	-	-
10	2	150	100	-	40	-	-
11	2	150	-	-	40	-	100
12	2	150	-	100	40	-	100
13	4	100	100	100	40	1000	-
14	4	150	100	100	40	1000	-
15	4	200	100	100	40	1000	-
16	4	150	100	100	40	-	-
17	4	150	-	-	40	1000	100
18	4	150	-	100	40	1000	100
19	3	100	100	100	40	-	-
20	3	150	100	100	40	-	-
21	3	200	100	100	40	-	-
22	3	150	100	-	40	-	-
23	3	150	-	-	40	-	100
24	3	150	-	100	40	-	100

Table 13.14 Flotation Test Results for Composite No. 1					
Product	**Concentrate Recovery (9 min. float time)**			**Concentrate Grade**	
	Wt	**Au**	**Cu**	**Au, g/t**	**%Cu**
Test No. 1					
Rougher Conc.	3.9	13.6	7.3	3.37	0.7403
Rougher Tails	96.1	86.4	92.7	0.86	0.3800
Cal. Head	100.0	100.0	100.0	0.96	0.3940
Test No. 2					
Rougher Conc.	6.1	94.0	88.9	12.02	6.3531
Rougher Tails	93.9	6.0	11.1	<0.10	0.0514
Cal. Head	100.0	100.0	100.0	0.78	0.4342
Test No. 3					
Rougher Conc.	6.6	71.8	91.2	12.22	5.1777
Rougher Tails	93.4	28.2	8.8	0.34	0.0352
Cal. Head	100.0	100.0	100.0	1.13	0.3751
Test No. 4					
Rougher Conc.	6.9	96.8	90.8	20.75	4.9856
Rougher Tails	93.1	3.2	9.2	<0.10	0.0374
Cal. Head	100.0	100.0	100.0	1.47	0.3779
Test No. 5					
Rougher Conc.	5.7	33.0	28.9	5.60	2.0329
Rougher Tails	94.3	67.0	71.1	0.69	0.3020
Cal. Head	100.0	100.0	100.0	0.97	0.4008
Test No. 6					
Rougher Conc.	7.7	57.0	72.6	7.11	3.9677
Rougher Tails	92.3	43.0	27.4	0.45	0.1254
Cal. Head	100.0	100.0	100.0	0.97	0.4227

Table 13.15 Flotation Test Results for Composite No. 2					
Product	Concentrate Recovery (9 min. float time)			Concentrate Grade	
	Wt	Au	Cu	Au, g/t	%Cu
Test No. 7					
Rougher Conc.	8.6	77.0	87.5	7.45	3.2684
Rougher Tails	91.4	23.0	12.5	0.21	0.0442
Cal. Head	100.0	100.0	100.0	0.83	0.3222
Test No. 8					
Rougher Conc.	10.2	93.2	88.7	6.06	3.1202
Rougher Tails	89.8	6.8	11.3	<0.10	0.0452
Cal. Head	100.0	100.0	100.0	0.66	0.3592
Test No. 9					
Rougher Conc.	10.5	79.9	87.0	5.76	2.9573
Rougher Tails	89.5	20.1	13.0	0.17	0.0518
Cal. Head	100.0	100.0	100.0	0.76	0.3572
Test No. 10					
Rougher Conc.	10.7	93.6	91.2	6.11	3.0482
Rougher Tails	89.3	6.4	8.8	<0.10	0.0350
Cal. Head	100.0	100.0	100.0	0.70	0.3572
Test No. 11					
Rougher Conc.	10.4	80.9	90.8	6.16	3.0248
Rougher Tails	89.6	19.1	8.2	0.17	0.0356
Cal. Head	100.0	100.0	100.0	0.80	0.3477
Test No. 12					
Rougher Conc.	10.3	83.6	88.9	6.25	3.0045
Rougher Tails	89.7	16.4	11.1	0.14	0.0430
Cal. Head	100.0	100.0	100.0	0.77	0.3467

Table 13.16 Flotation Test Results for Composite No. 4					
Product	Concentrate Recovery (9 min. float time)			Concentrate Grade	
	Wt	Au	Cu	Au, g/t	%Cu
Test No. 13					
Rougher Conc.	5.3	73.9	74.9	10.73	4.8051
Rougher Tails	94.7	26.1	25.1	0.21	0.0894
Cal. Head	100.0	100.0	100.0	0.76	0.3375
Test No. 14					
Rougher Conc.	6.0	79.0	78.0	10.12	4.3742
Rougher Tails	94.0	21.0	22.0	0.17	0.0782
Cal. Head	100.0	100.0	100.0	0.76	0.3341
Test No. 15					
Rougher Conc.	5.9	86.0	79.2	9.80	4.4733
Rougher Tails	94.1	14.0	20.8	0.10	0.0736
Cal. Head	100.0	100.0	100.0	0.67	0.3327
Test No. 16					
Rougher Conc.	6.8	80.9	73.6	4.08	3.6364
Rougher Tails	93.2	19.1	26.4	0.07	0.0946
Cal. Head	100.0	100.0	100.0	0.34	0.3338
Test No. 17					
Rougher Conc.	6.6	57.5	77.4	9.15	4.0718
Rougher Tails	93.4	42.5	22.6	0.48	0.0840
Cal. Head	100.0	100.0	100.0	1.05	0.3478
Test No. 18					
Rougher Conc.	6.6	82.0	78.3	9.04	4.0440
Rougher Tails	93.4	18.0	21.7	0.14	0.0794
Cal. Head	100.0	100.0	100.0	0.73	0.3413

13.9 Metallurgical Conclusions

The preliminary metallurgical tests indicate that the LaMina ores(Cantera and the Middle Zone) are amenable to standard flotation and gold recovery by cyandization. The results of the preliminary tests presented in this section are positive.

Further indepth tests need to be run for prefeasibility studies. New samples may be needed since oxidation of previous samples is a concern in tropical climates.

13.10 Recommendations

Further metallurgical tests need to be run on the Cantera and the middle zone material. As indicated in this report, the resource material is only in the inferred category and with the drill needed to move this into the measured and indicated categories, metallurgical tests need to be conducted on those cores. The following are some recommendations for future studies:

- All core needs to be stored in plastic sleaves with either the air removed or nitrogen added to prevent oxidation.
- The testwork moving forward needs to include lock cycle tests to produce samples for concentrate grades and sufficient cleaner tails to conduct a separate study on the effectiveness of cyanide leaching on the cleaner tails and determine if the first or second cleaner should be leached. The difference is in the size of the cyanide leach plant for the cleaner tails.
- Testwork has begun on 11 core sample rejects on the fresh La Garucha material. The program includes preliminary grinding, rougher flotation tests, preliminary optimization of both grinding and flotation as necessary and production of cleaner samples for cyanide leaching. As positive results are assembled, lock cycle tests will be conducted on composite samples from this area. These results when defined will further set the flowsheet.

Depending on recovery of gold from the cleaner tails, Bellhaven might consider some sort of leach operation of the pyrite for the cleaner tails.

14.0 Mineral Resource Estimates

The Mineral Resource statement presented herein represents the mineral resource evaluation prepared for the La Cantera deposit and Middle Zone deposit at the La Mina project. Wireframes were created for 3 geologic groups at La Cantera and 5 geologic lithologies at Middle Zone. Grades within each group and lithology were estimated using either ordinary Kriging or inverse distance techniques in Vulcan block models using Bellhaven's drillhole database.

This section describes the resource estimation methodology and summarizes the key assumptions considered by SEWC. In the opinion of SEWC, the resource evaluation reported herein is a reasonable representation of the global gold, copper and silver mineral resources found in the La Mina Project at the current level of sampling.

Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the La Mina Project mineral resources was audited by SEWC. SEWC is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for gold, copper, and silver mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

Vulcan Software Version 8.1 was used to construct the geological solids, prepare assay data for geostatistical analysis, construct the block model, estimate metal grades and tabulate mineral resources.

The La Cantera resource estimate was not updated with any new information in this report. Dates described in section 14.1 coincide with the August 29, 2011 Technical Report (Wilson 2011). La Cantera is included in this technical report as part of a property as defined in the Companion Policy. La Cantera and Middle Zone occur on the La Mina Concession and could be supported and developed by a common infrastructure.

14.1 Resource Estimation Procedures

The modeling was undertaken in Vulcan Software. All exploration sampling has been used in the geological modeling process.

The drill hole data were resurveyed, transformed and validated in the Vulcan software, which was then used for the Mineral Resource modeling. The statistics have been completed using a combination of Vulcan, Microsoft Excel and Sage 2001. Geostatistics have been completed in Vulcan and Sage 2001 and grade interpolation has been undertaken in Vulcan. Compilation of the final model was also undertaken in Vulcan.

Vulcan software, in common with other mining software systems, relies on a block modeling approach to represent a deposit as a series of 3-D blocks to which grade attributes, and virtually any other attributes can be assigned. The software provides numerous means by which attributes can be assigned, and optimization routines are provided that allow block splitting, such that complex deposit outline details are not lost or smoothed out by regular size blocks.

In generating the resource model, sub blocks were used to accurately honor all deposit outlines. The approach used to build the final model is described briefly below

14.1a Database for Geologic Model

The drill hole database for the La Cantera resource estimation was provided by Bellhaven to SEWC in digital format in August of 2011 and was imported into Vulcan modeling software. The database included a total of 37 drill holes, 2 of which were in progress at the time the database was received. Of those 37 drill holes, 19 pertained to the La Cantera deposit. Table 14.1 outlines the data in the drill hole database provided by Bellhaven.

Statistical analysis has been undertaken of the La Mina data, summary statistics histograms have been calculated and the results of the analysis were compared to determine if suitable geological domains could be identified to be used in the Mineral Resource Estimation. The statistical investigations included descriptive and distribution analyses and assessments of outlier statistics.

Histograms and Log histograms have been plotted for sample gold, copper and silver assays. In all cases the data displays a positively skewed log normal distribution.

Figure 14.1 Plan View La Cantera Drilling – Not to Scale

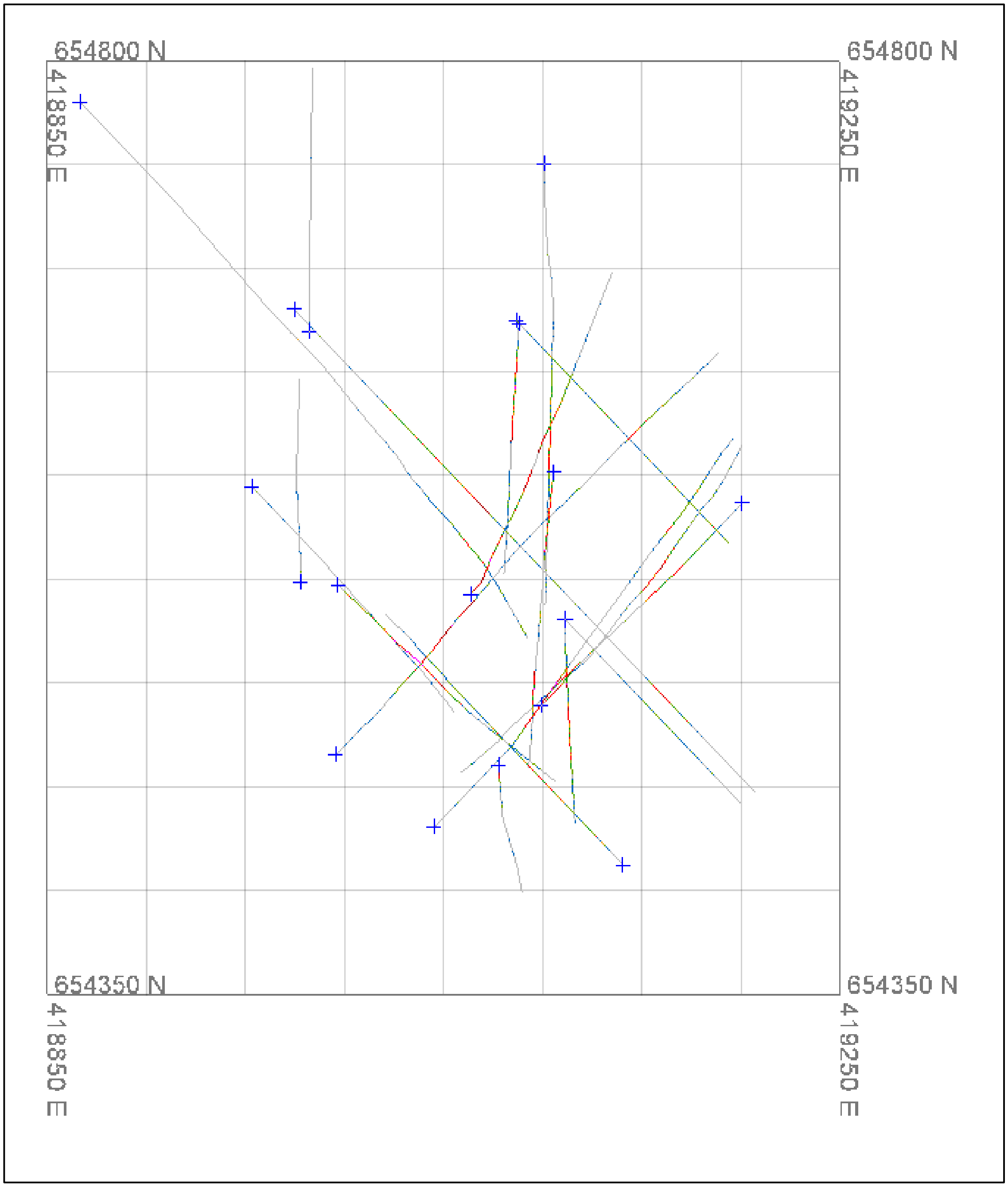
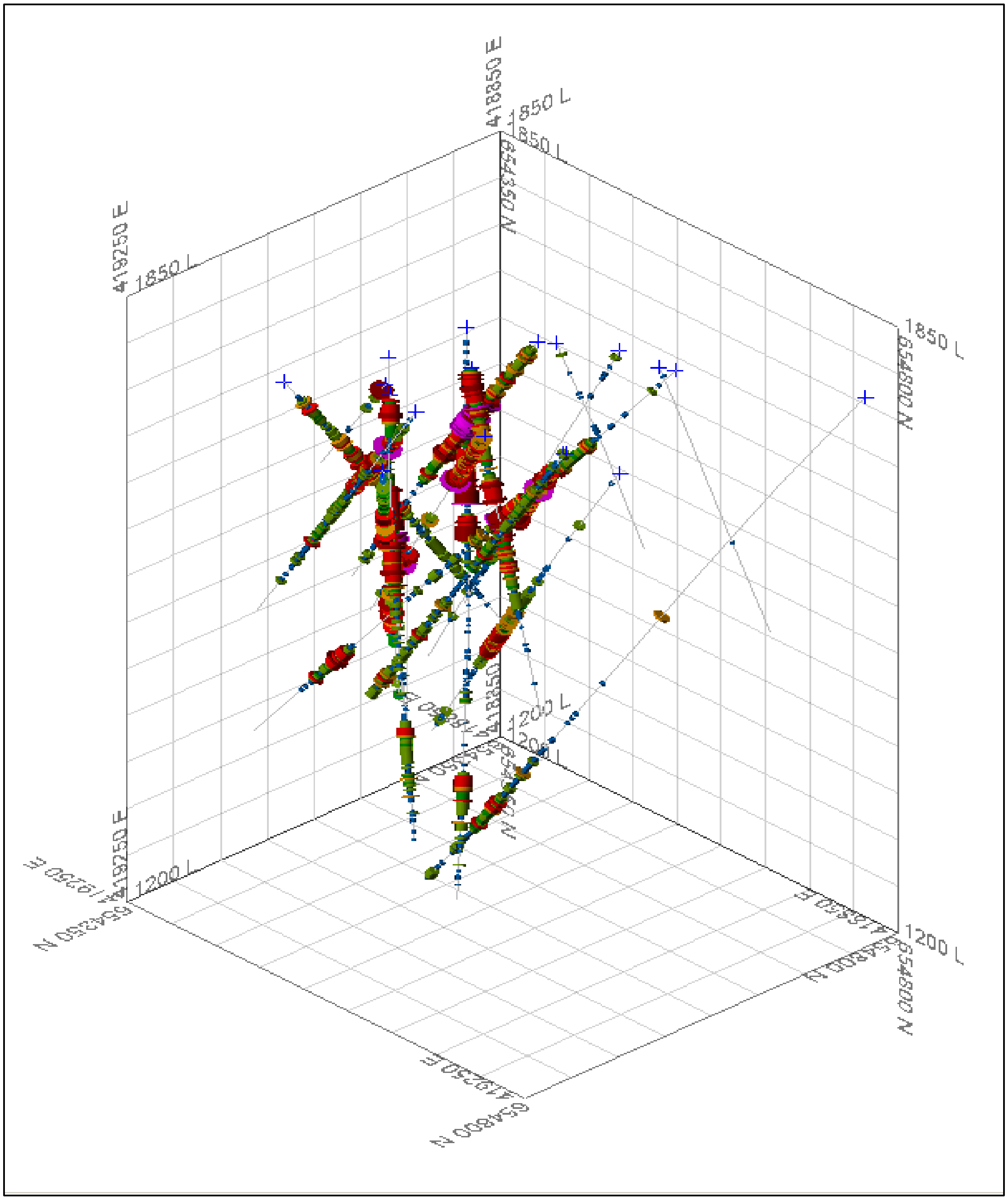


Figure 14.2 Isometric View La Cantera Drilling – Not to Scale



The 19 holes for La Cantera contain 3,082 intervals containing assays and lithology records, with an average interval length of 2.08 m. The assay table contains assays of 34 elements, and lithology table contains 12 different lithology types. Figures 14.3 and 14.4 illustrate the distribution of lithology groups in the La Cantera area only.

Figure 14.3 Distribution of Lithology

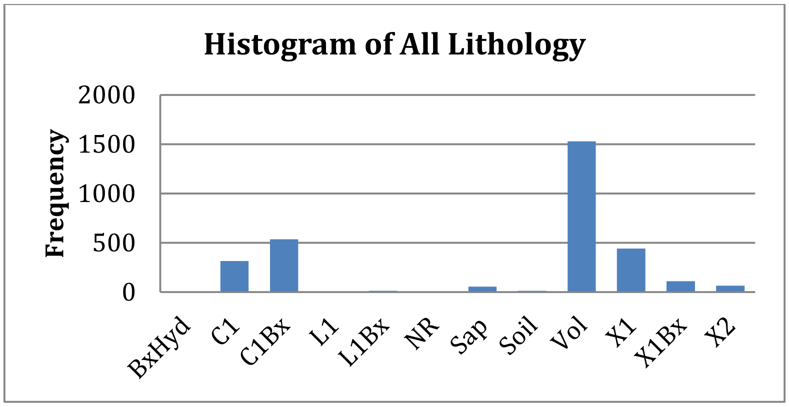


Figure 14.4 Distribution of Major Lithologies at La Cantera

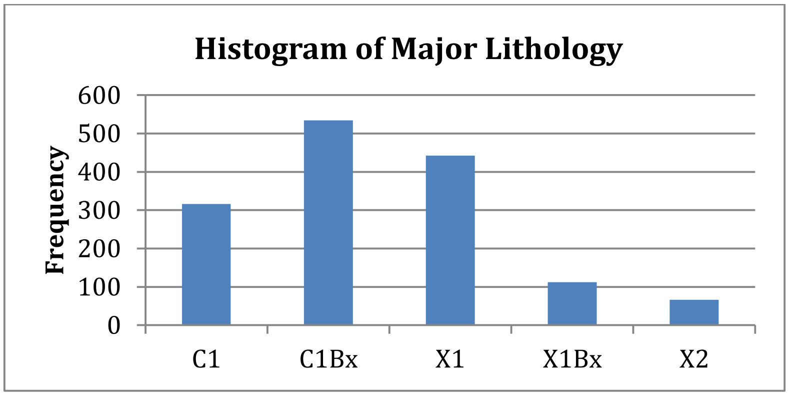


Figure 14.5 Incremental histogram for La Cantera Gold Data

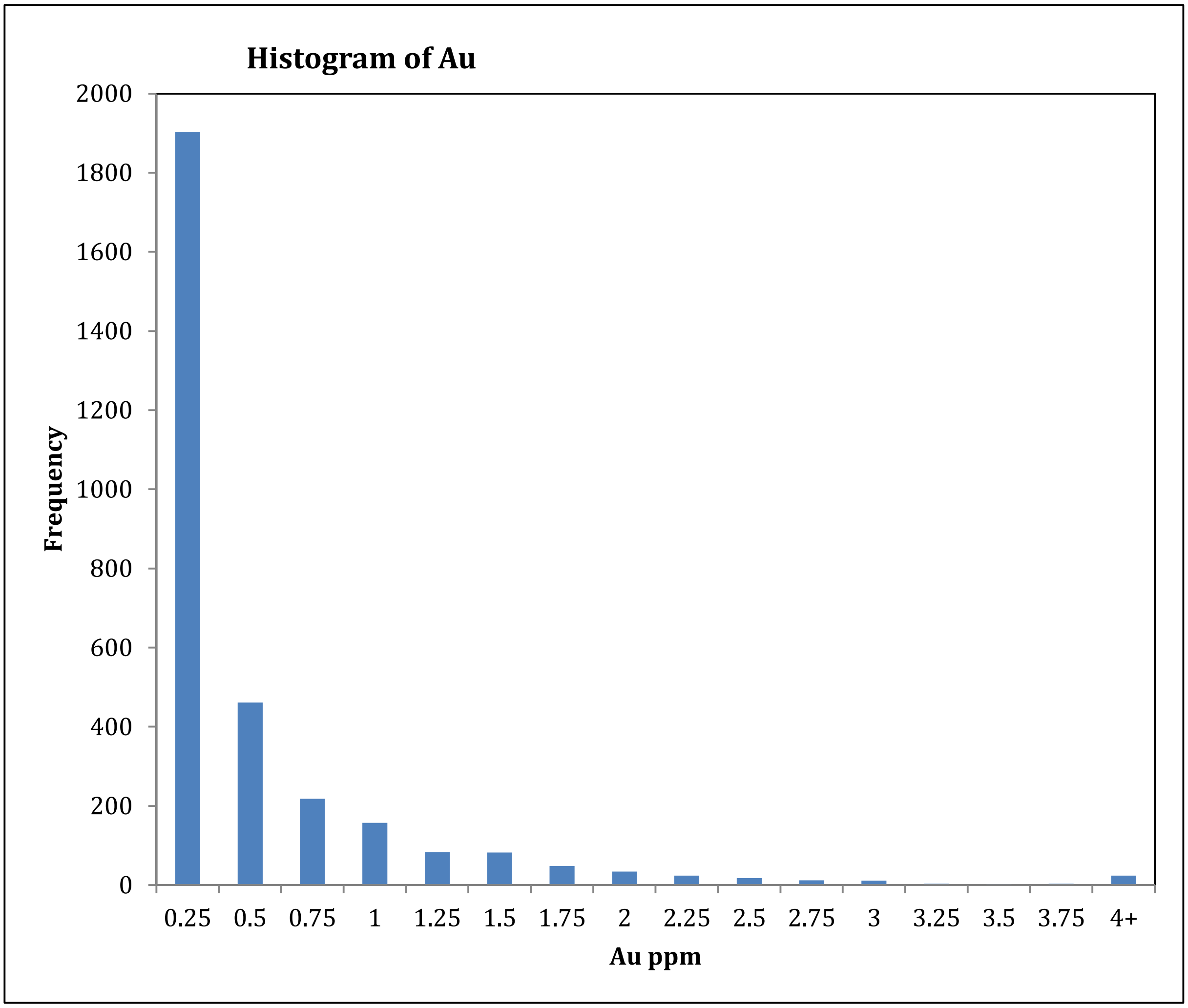


Figure 14.6 Incremental histogram for La Cantera Silver Data

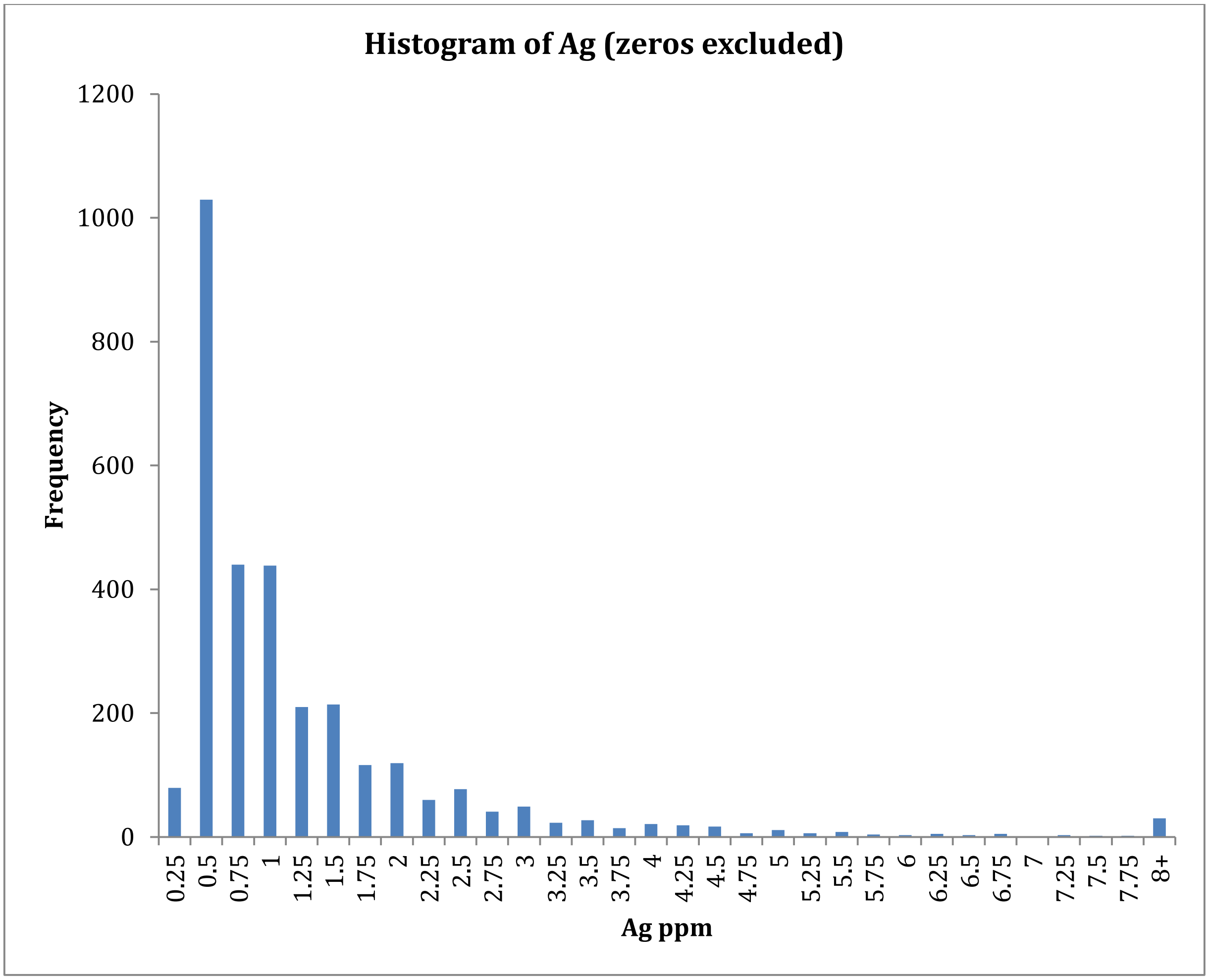
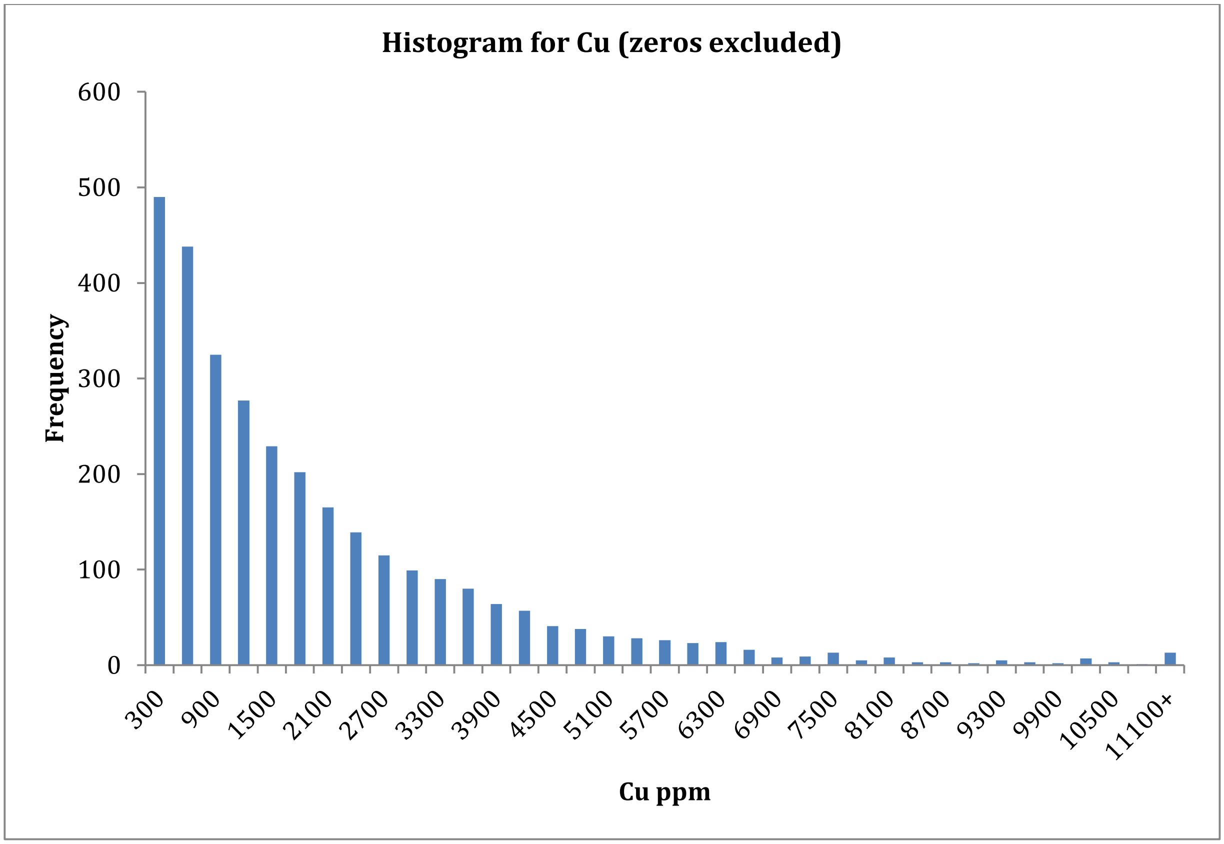


Figure 14.7 Incremental Histogram for La Cantera Copper Data



14.1b Geologic Model

Bellhaven created the first set of sections, a total of 12, for the La Cantera area. These sections were hand drawn on maps that had drill hole traces plotted. The sections were a combination of North, North-East by South-West and North-West by South-East bearing sections. Figure 14.8 is a sample of one of these sections.

Figure 14.8 Bellhaven Geologic Interpretation Section LC419105

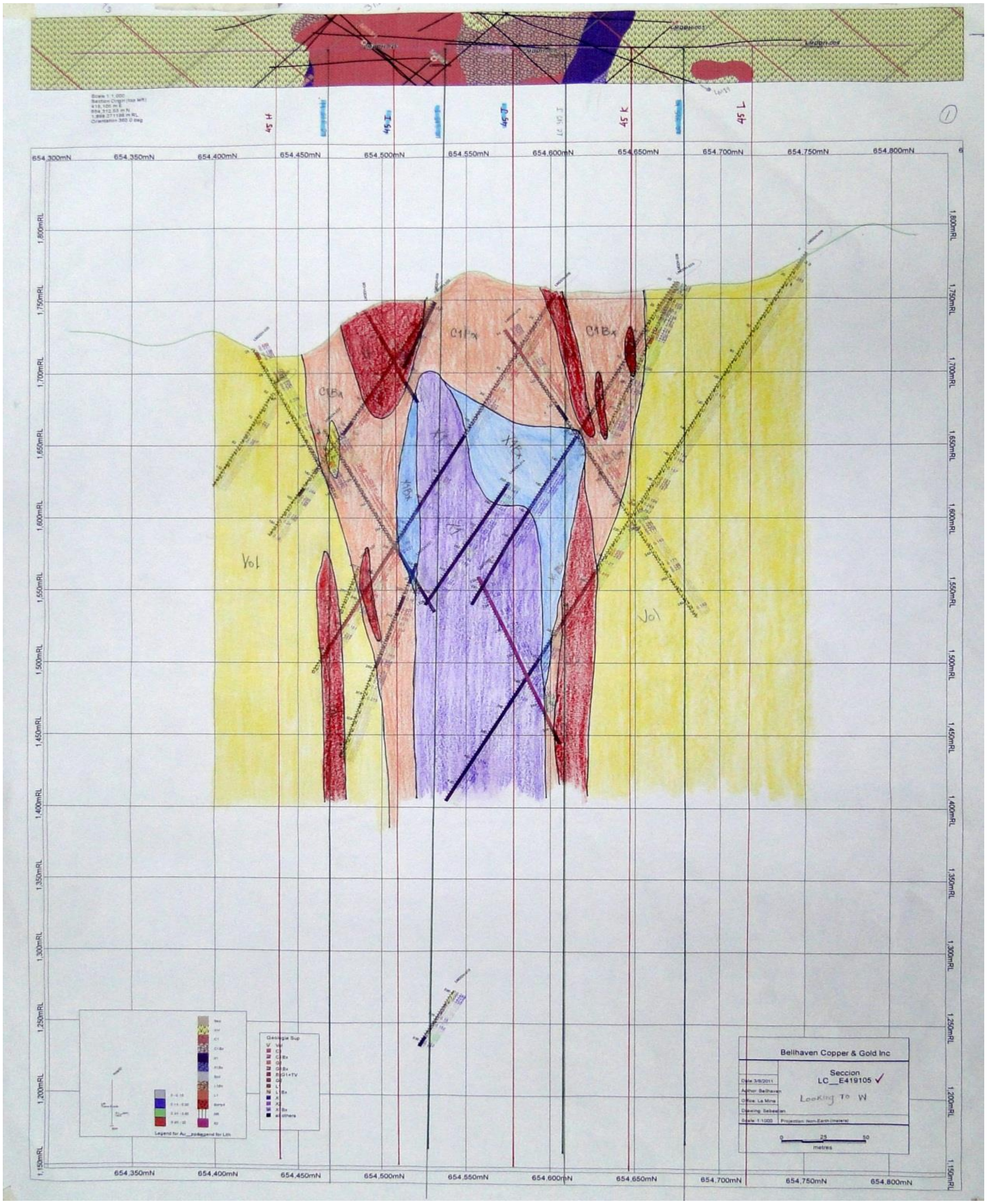
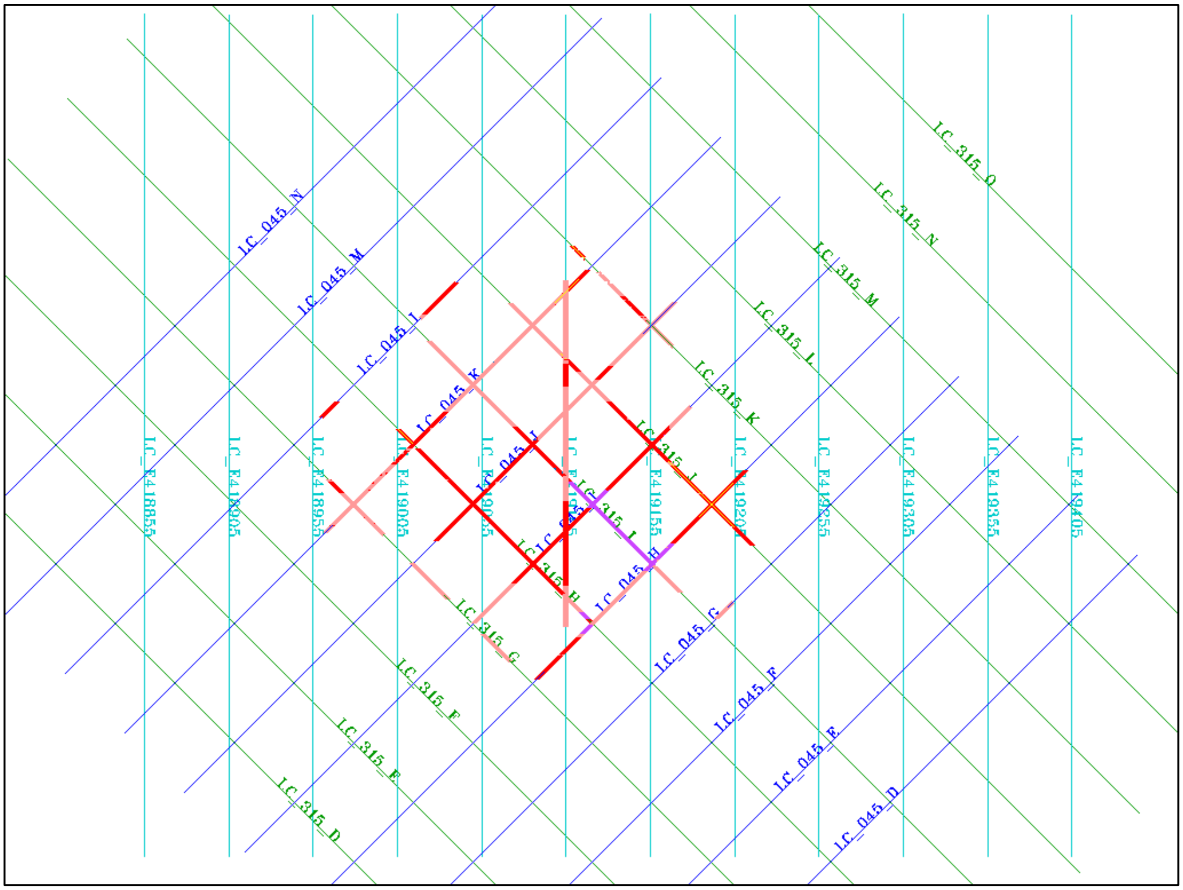


Figure 14.9 illustrates the section layout at La Cantera, and the 12 sections that included interpreted geology.

Figure 14.9 Bellhaven Sections with Geologic Interpretation for La Cantera



The 4 main lithology types in the La Cantera area were grouped into 2 lithology groups for the purpose of the Vulcan geologic model. The C1 and C1Bx types were grouped together into a C group and X1 and X1Bx were group into the X group. The C1 and C1Bx types were determined to have the same mineral composition, as were the X1 and X1Bx types. A third group was created to account for mineralization in the volcanic host rock. The C group is the primary group of interest, as it is the most mineralized with the highest grades. The X and Volcanic groups are also mineralized, but not to the same extent as the C group.

In Vulcan, the C group and X group lithologies were modeled in bench sections every 50m to a depth of 450m. The geologic interpretation for each bench was made using the section profile intercepts at each bench, along with intercepts of diamond drilling. Based on the author's experience with porphyry mineral deposits in the Cauca Belt, it can be reasonably assumed that the porphyry flares out at depth. This interpretation of the porphyry shape increases the potential volume of mineralized C-type porphyry, but it also proportionally increases the volume of barren X-group porphyry. Current drilling shows the pipe to be open at depth, however for this model a bottom depth of 600m, or the 1050m elevation, was chosen as a limit to grade estimation. Anything deeper than this is too speculative for grade estimation or geological inference.

While there is limited sampling to support grade estimate to the depth of 650m, the grade of copper and gold in the porphyry is robust to the bottom of the data set, and the geostatistics indicate very high vertical continuity of the porphyry mineralization. Therefore, it is reasonably assumed that mineralization can be projected to 650m depth. Additional drilling will be required to verify the depth and extent of the pipe, the geological continuity of the rock units and the grade continuity of the porphyry. Figure 14.10 illustrates the shape of the breccia pipe and the bench polygons used to create the geologic wireframes. The outer polygons displayed in orange represent the C lithology group, while the inner polygons colored in purple represent the mostly barren X group.

Figure 14.10 Bench Section Profiles of C and X in Vulcan

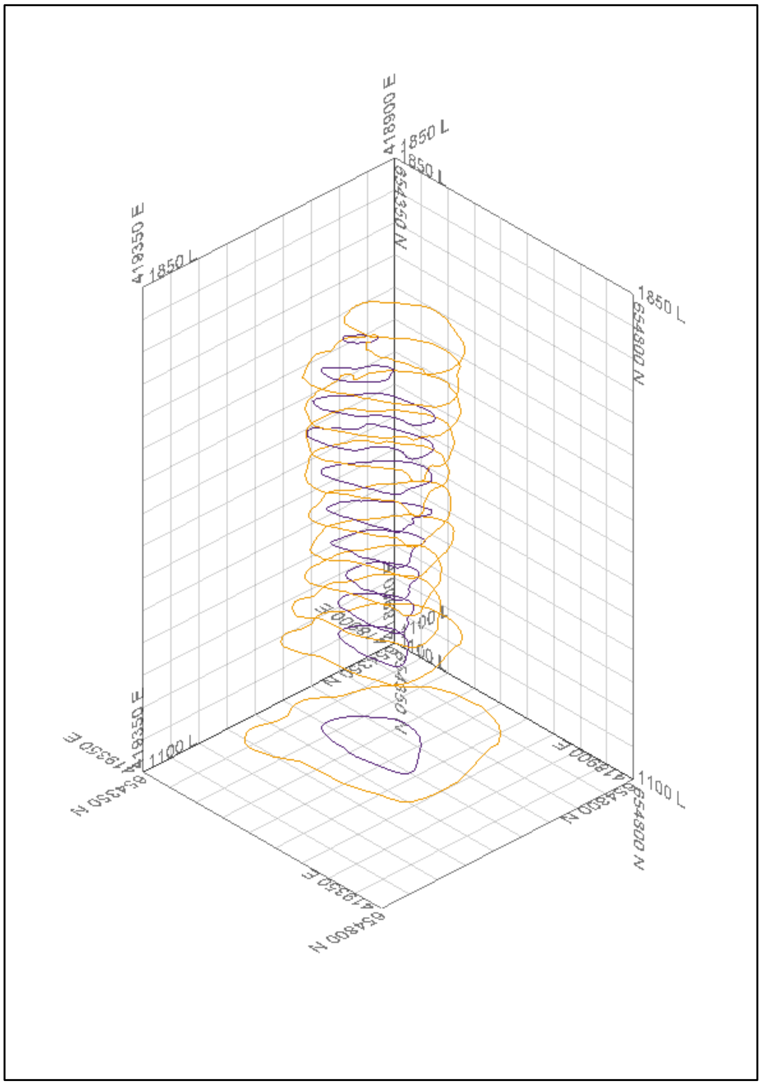
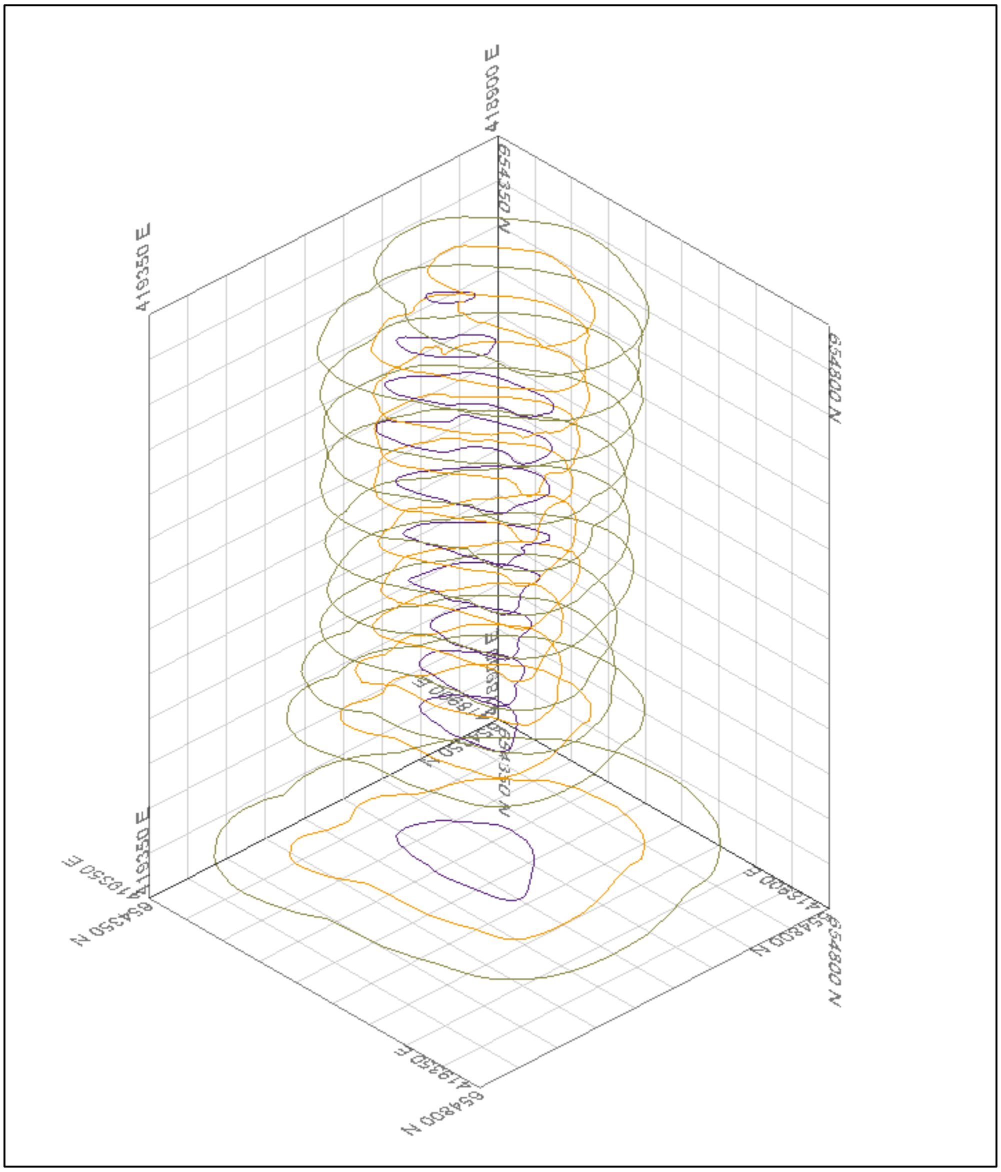


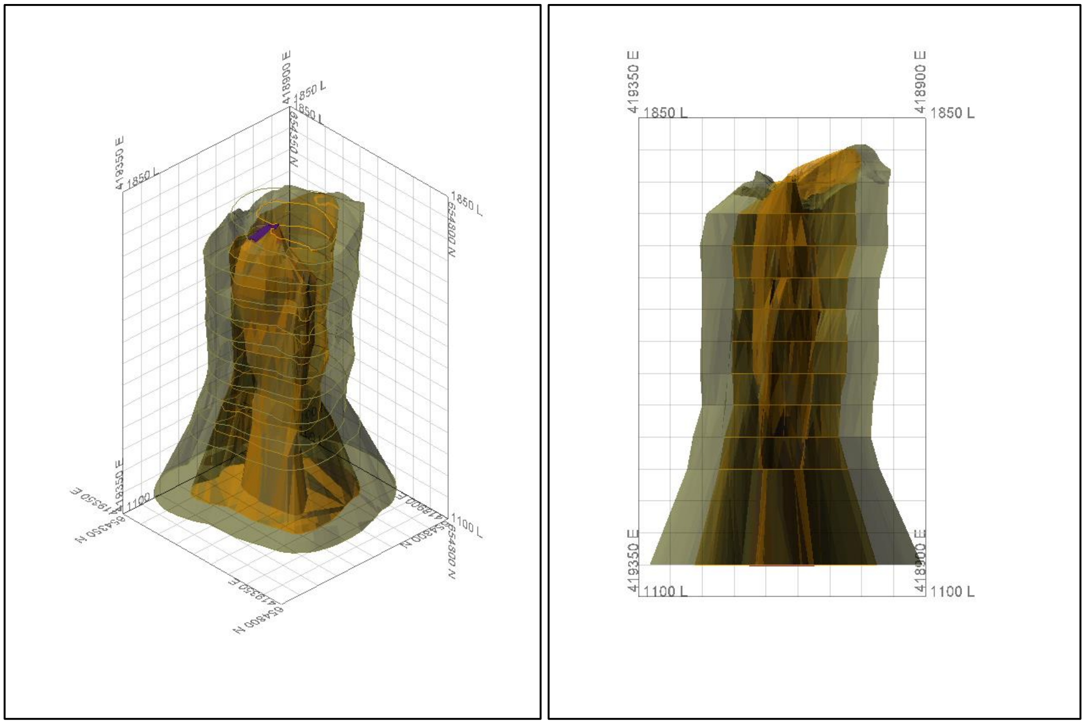
Figure 14.11 includes the addition of a volcanic zone group, which is a 50m buffer from the C type lithology. Drilling results indicate that the volcanic host rock around the breccia pipe could be mineralized within 50m of the contact with the porphyry.

Figure 14.11 Bench Section Profiles Including Volcanic Buffer



The following figures illustrate the wireframes created from the bench polygons that were used to flag lithology boundaries in the block model, which will ultimately affect grade estimation parameters.

Figure 14.12 Wireframes of C, X and Volcanic Boundaries



14.1c Topography

Bellhaven provided 2m contours for the La Cantera area. This was used to create a surface wireframe in Vulcan to represent the surface topography. The topography was used to limit the surface extent of the C and X group wireframes.

14.1d Block Model

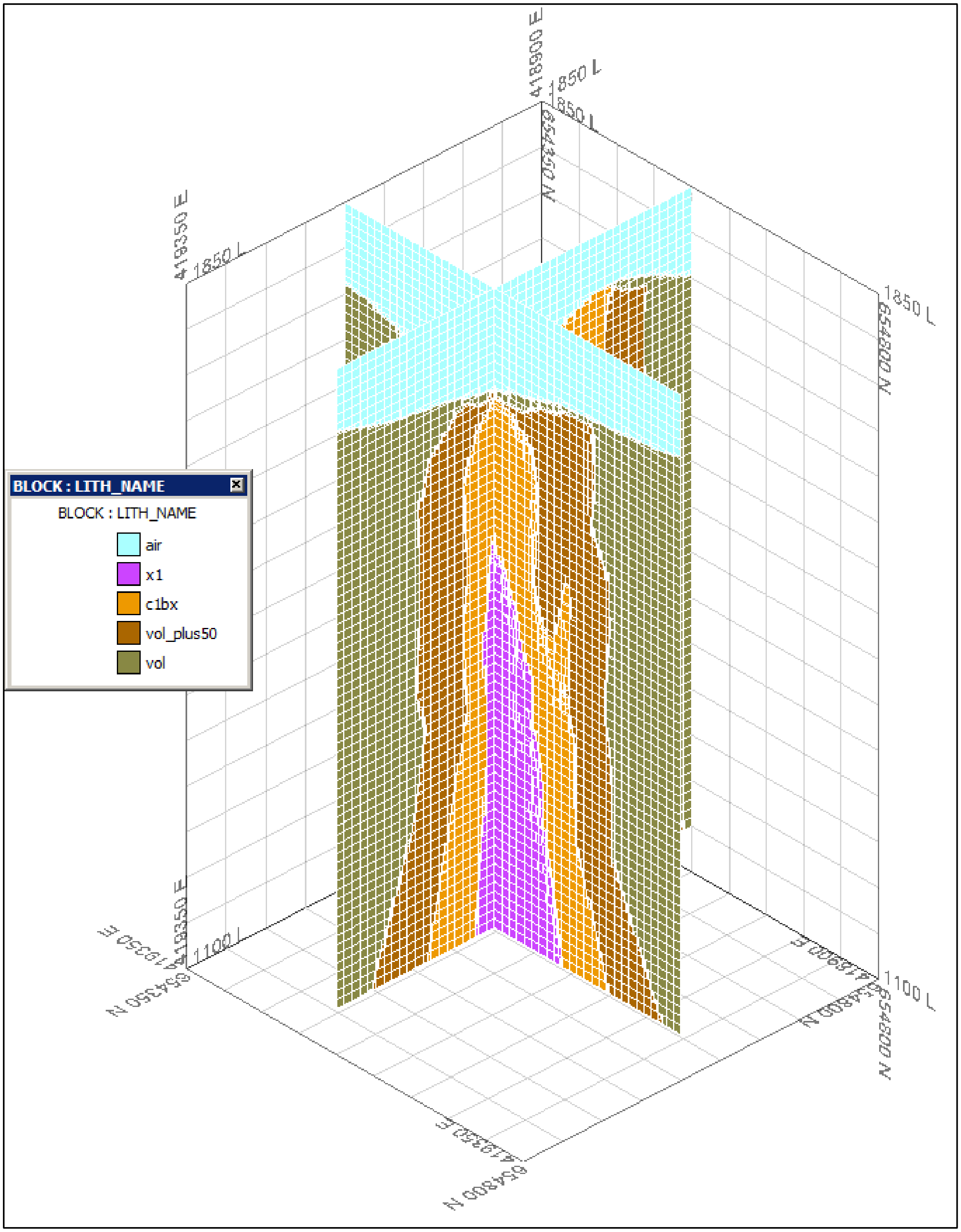
A block model was created in Vulcan for the La Cantera area of La Mina. The block model utilizes parent and sub-blocking methods to best define the geologic interpretations in the block model. The parent block size for the La Cantera block measure 10m cubed, and the sub-blocks have a minimum size of 2m cubed. Table 14.1 highlights the parameters used to build the La Cantera block model.

Table 14.1 La Cantera Block Model Parameters			
Parameter	X	Y	Z
Origin	418,600	6,540,000	1,150
Extent	419,800	6,553,000	2,100
Parent Block Size	10	10	10
Sub-Block Minimum Size	2	2	2
	Bearing	**Plunge**	**Dip**
Rotation	90	0	0

The block model included variables to store lithology, gold grade, copper grade, silver grade, distance to nearest gold sample, number of gold samples used, number of drill holes used and depth.

The lithology wireframes for the C, X and Volcanic groups were used to flag the lithology codes in the block model variable for lithology. Figure 14.13 shows two slices through the block model showing blocks colored by lithology.

Figure 14.13 Block Model showing Lithology of La Cantera



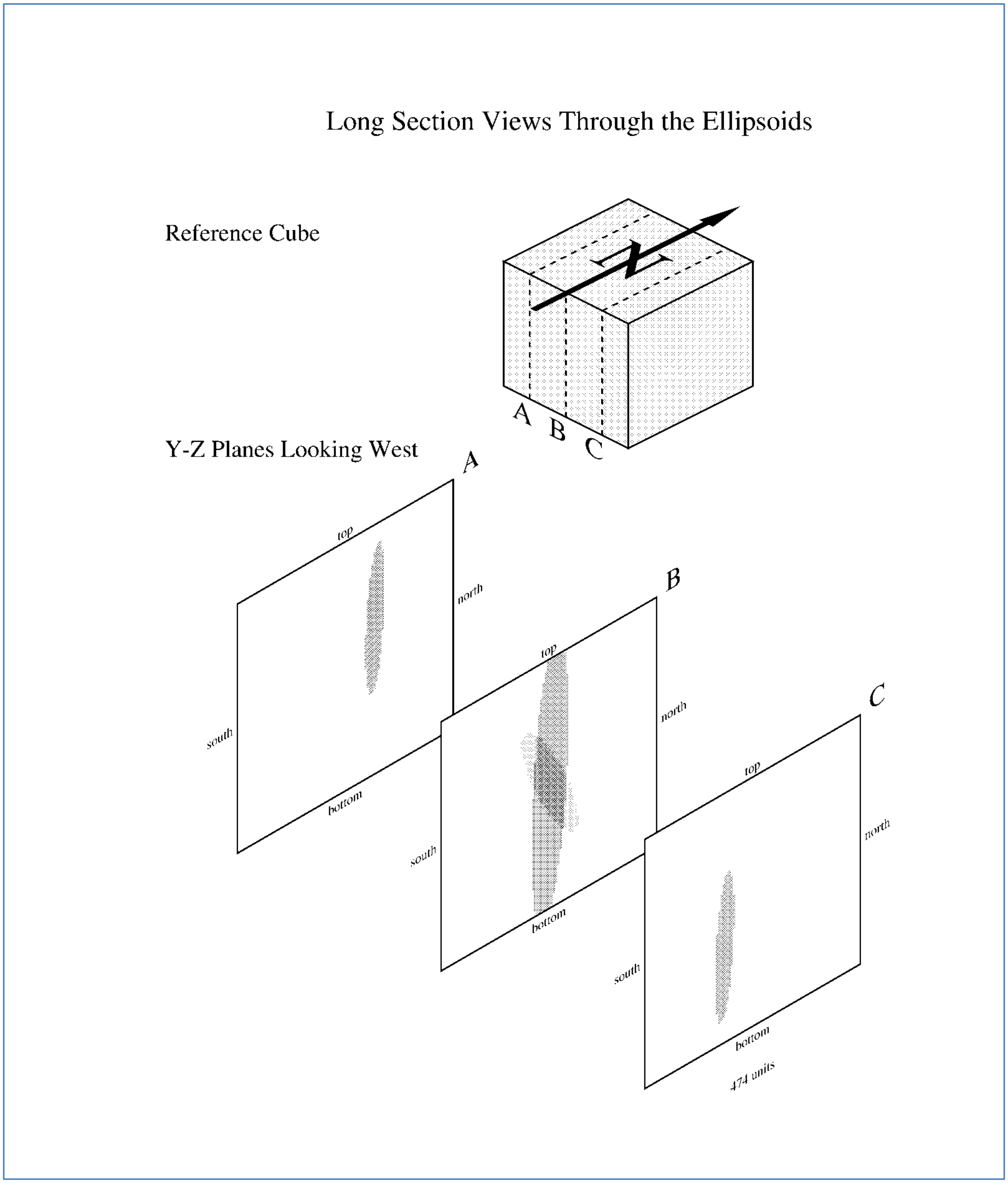
14.1e Grade Estimation

Based on variography, ordinary Kriging was used to estimate grades in the block model. Kriging yields the best unbiased estimate at each individual model block location. Three estimations were setup for each element; one for each lithology group. Gold, copper and silver grades were estimated into the block model. For each estimation run the block selection was restricted to within the respective lithology group. Hard boundaries were also set for estimations to restrict samples used; only samples matching the respective lithology group could be used for grade estimation. For all estimations, sample intervals were only used if they were greater than 1.5m in length. The search parameters were the same for estimates of gold, silver and copper. A minimum of 3 samples was required to estimate a block, and no more than 21 samples were used per block. No more than 3 samples from a single drill hole were allowed per estimated bock. For ordinary Kriging estimation, the nugget value was set to 0.184. Table 14.2 outlines the parameters used for ordinary Kriging. Figure 14.14 shows a section through the search ellipsoid showing the strong vertical continuity and anisotropy of the mineralization.

Table 14.2 Parameters for Ordinary Kriging Based on Nested Variography

Model Type	Sill Differential	Bearing (Rot. About Z)	Plunge (Rot. About Y)	Dip (Rot. About X)	Major Axis	Semi-Major Axis	Minor Axis
Spherical	0.137	48	17	-27	23	70	135
Spherical	0.269	56	-11	-3	118	32	290

Figure 14.14 La Cantera Ellipsoids



14.1f Block Model Validation

SEWC has undertaken a thorough validation of the resultant interpolated model in order to confirm the estimation parameters, to check that the model represents the input data on both local and global scales, and to check that the estimate is not biased.

Visual validation provides a local validation of the interpolated block model on a local block scale, using visual assessments and validation plots of sample grades verses estimated block grades. A thorough visual inspection of cross-sections, long-sections and bench/level plans, comparing the sample grades with the block grades has been undertaken, which demonstrates good correlation between local block estimates and nearby samples, without excessive smoothing in the block model.

Figures 14.15 and 14.16 demonstrate that Au and Cu mineralization estimates were constrained by geological shapes. At the deeper portions of the model, the distribution of the estimated grades is not propagated into the outer volcanic halo or into the mostly barren X1 core. Based on geology and geophysics, the interpretation in this district is that these near surface mineralized porphyries are apotheoses of deeper, larger intrusive bodies. The interpreted shape of the Cantera porphyries used in this model is a reasonable representation of that interpretation. While mineralization appears to continue below the limits of this model to depth, Bellhaven will need to drill several deep holes in order to support any estimation of grades below the 1050m level.

Figure 14.15 Block Model Slice Showing Au Estimated Grades

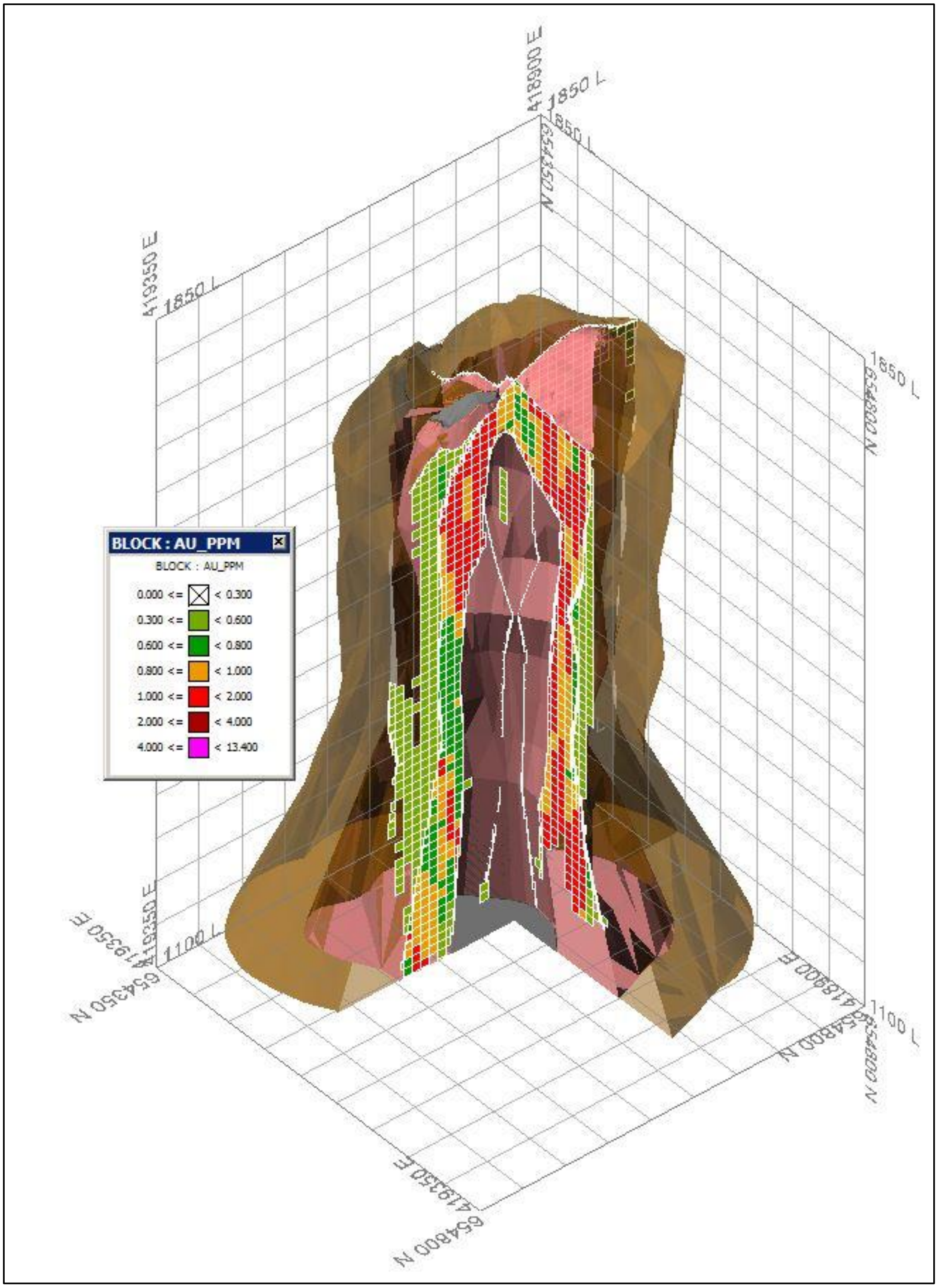
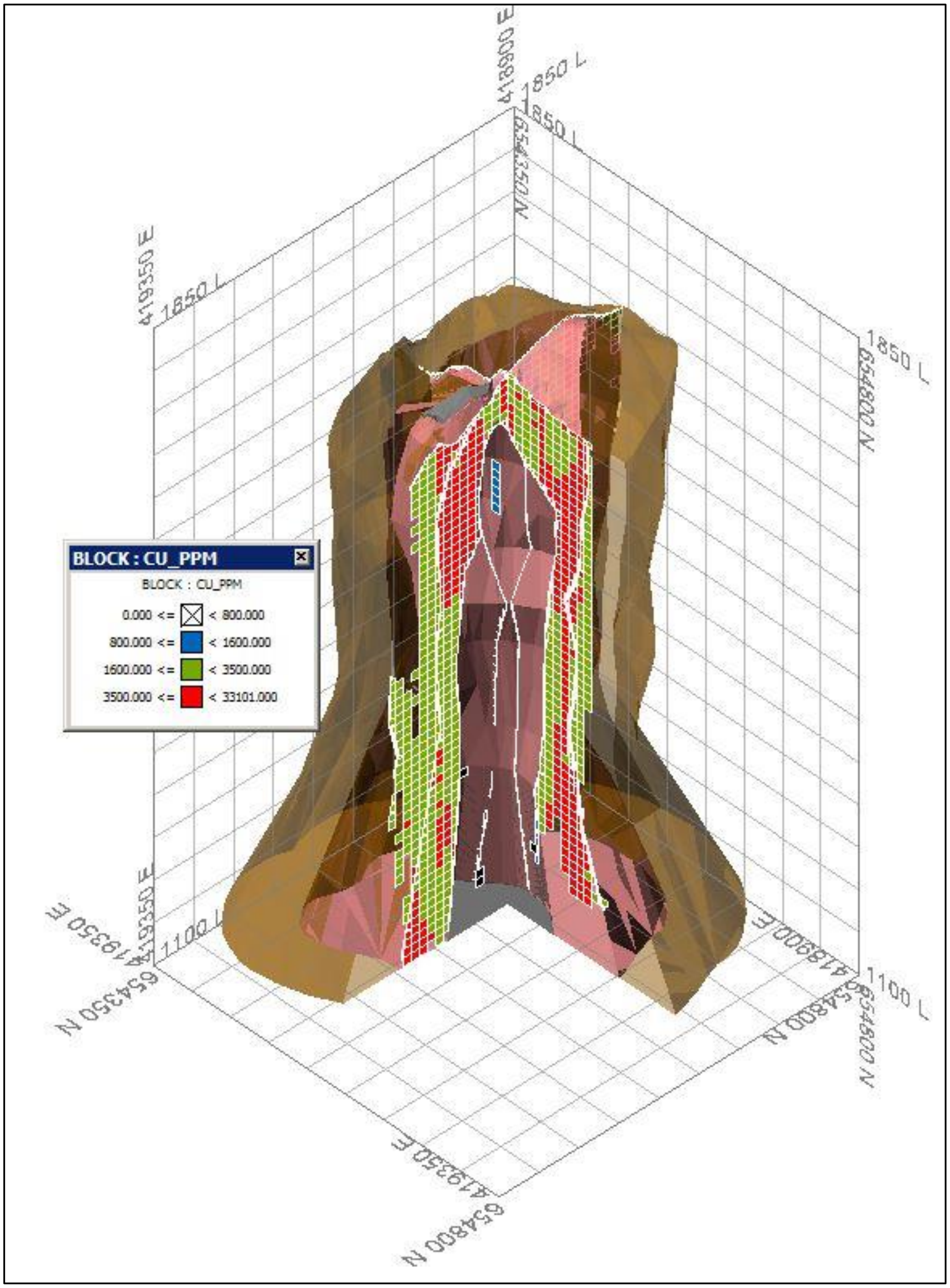


Figure 14.16 Block Model Slice Showing Cu Estimated Grades



14.1g Density

A density of 2.7 tonnes per cubic meter was used for the tonnage estimates, based on daily measurements performed by Bellhaven geologists on drill-core samples (e.g., the observed global density for La Cantera is 2.714 based on 100 determinations from drill holes LM-DDH-019 as well as LM-DDH-027).

14.1h Inferred Mineral Resources

The geology, deposit type, and mineralogy at La Cantera are well understood. However SEWC has classified the resources for the project as Inferred Mineral Resources at this time. If Bellhaven can demonstrate an understanding of the metallurgical characteristics of La Mina SEWC believes that a portion of the resource will be converted to Indicated Mineral Resources.

SEWC applied a gold price of $1,400 per ounce a processing cost of $5.00/ tonne and an assumed recovery of 90% to determine cutoff grades. Using these parameters an internal cut-off grade of 0.15 g/t Au is derived. Copper was not used in the determination of the cutoff grade. Due to the uncertainty of gold prices and recovery, the author recommends that a base cut-off grade of 0.3 g/t Au is appropriate for reporting resources for the La Cantera deposit. SEWC did not complete an economic evaluation of this first ever resource estimate. However, given the style of mineralization, the author is of the opinion that the entire mineral deposit, as currently modeled, has a reasonable likelihood of economic extraction by open pit mining methods. Resources are not reserves and do not have demonstrated economic viability.

Table 14.3 Mineralized Volcanics (C Group + 50m)

Cutoff	Tonnes	Au ppm	Cu ppm	Ag ppm	Au Ounces	Cu lbs (000s)	Ag Ounces
0.2	19,435,095	0.37	2,431	1.50	231,221	104,168	937,384
0.3	**12,427,391**	**0.45**	**2,763**	**1.53**	**179,818**	**75,693**	**611,380**
0.4	6,265,159	0.55	3,256	1.67	110,799	44,972	336,425
0.5	3,612,438	0.62	3,655	1.78	72,016	29,105	206,757
0.6	1,530,099	0.71	3,907	1.76	34,932	13,179	86,591

Table 14.4 C Group

Cutoff	Tonnes	Au ppm	Cu ppm	Ag ppm	Au Ounces	Cu lbs (000s)	Ag Ounces
0.2	28,391,478	0.9	3,271	2.22	821,618	204,718	2,026,659
0.3	**27,846,039**	**0.92**	**3,305**	**2.25**	**823,741**	**202,919**	**2,014,585**
0.4	24,717,853	0.99	3,403	2.34	786,838	185,439	1,859,800
0.5	22,038,053	1.05	3,522	2.45	744,050	171,120	1,736,117
0.6	20,324,423	1.1	3,612	2.52	718,870	161,838	1,646,866

Table 14.5 X Group							
Cutoff	Tonnes	Au ppm	Cu ppm	Ag ppm	Au Ounces	Cu lbs (000s)	Ag Ounces
0.2	1,119,834	0.33	1,066	1.04	11,882	2,632	37,448
0.3	**289,598**	**0.59**	**1,895**	**1.56**	**5,494**	**1,210**	**14,526**
0.4	153,899	0.81	2,602	1.94	4,008	883	9,600
0.5	112,457	0.94	2,961	2.23	3,399	734	8,064
0.6	89,616	1.05	3,319	2.39	3,026	656	6,887

Table 14.6 Total Inferred Mineral Resource							
Cutoff	Tonnes	Au ppm	Cu ppm	Ag ppm	Au Ounces	Cu lbs (000s)	Ag Ounces
0.2	48,946,407	0.68	1,930	1.91	1,064,722	208,286	3,001,490
0.3	**40,563,028**	**0.77**	**2,289**	**2.02**	**1,009,053**	**204,740**	**2,640,491**
0.4	31,136,911	0.90	2,719	2.20	901,645	186,658	2,205,825
0.5	**25,762,948**	**0.99**	**3,029**	**2.36**	**819,465**	**172,061**	**1,950,937**
0.6	21,944,138	1.07	3,361	2.47	756,827	162,580	1,740,344

14.2 Middle Zone Resource Estimates

14.2a Database for Geologic Model

The drillhole database for the Middle Zone resource estimation was provided by Bellhaven to SEWC in digital format in May of 2012 and was imported into Vulcan modeling software. The database was updated in May of 2012 to include a total of 74 drill holes, including the 39 drill holes (Figure 14.17, 14.18) that pertain to the Middle Zone deposit. Table 14.7 outlines the data in the drill hole database provided by Bellhaven.

Table 14.7 Bellhaven Drill Holes March 2012		
Area	**Drill Holes**	**Meters**
La Cantera	24	7846
Middle Zone	39	14158
El Limon	4	1617
La Garrucha	6	2382
El Cafetal	1	213

Figure 14.17 Plan View of Middle Zone Drilling

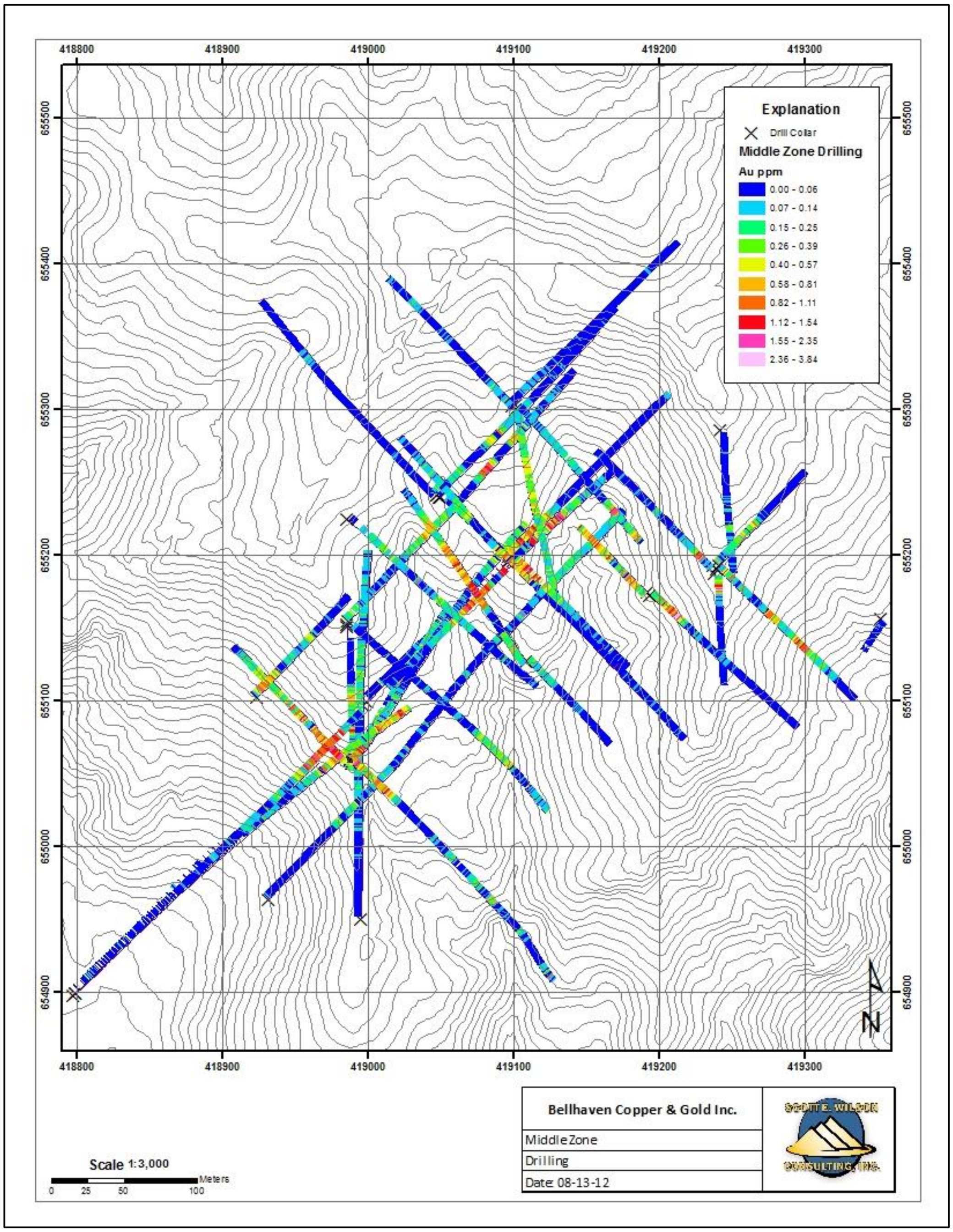
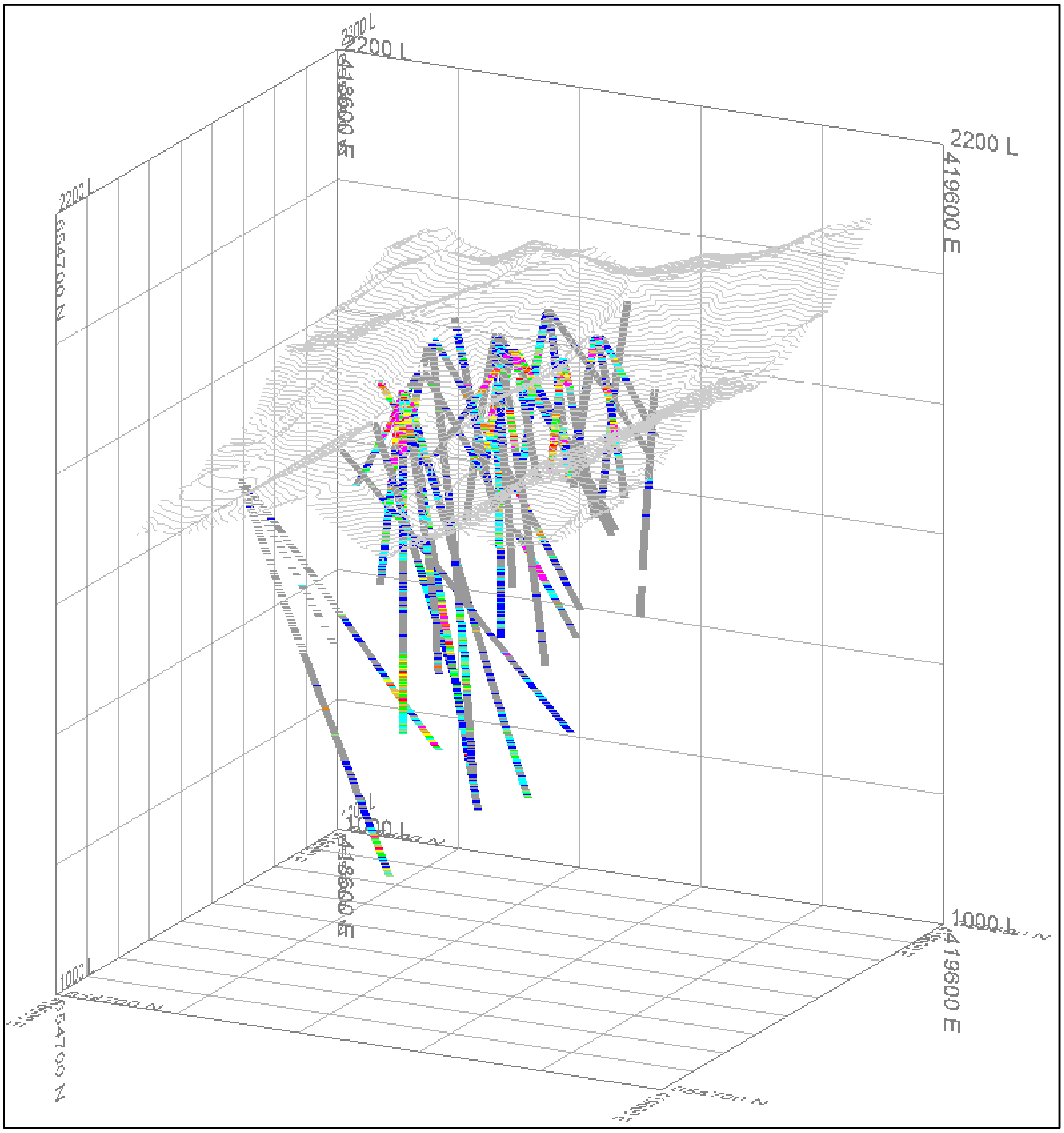


Figure 14.18 Isometric View of Middle Zone Drilling



The 39 holes for the Middle Zone contain 6,946 assay intervals and 7,317 lithology records, with an average interval length of 1.92 m. The assay table contains assays of 34 elements; and the lithology table contains 16 different lithology types. Figures 14.19 through 14.23 illustrate the distribution of lithology groups in the Middle Zone area only.

Figure 14.19 Distribution of Lithology – Middle Zone

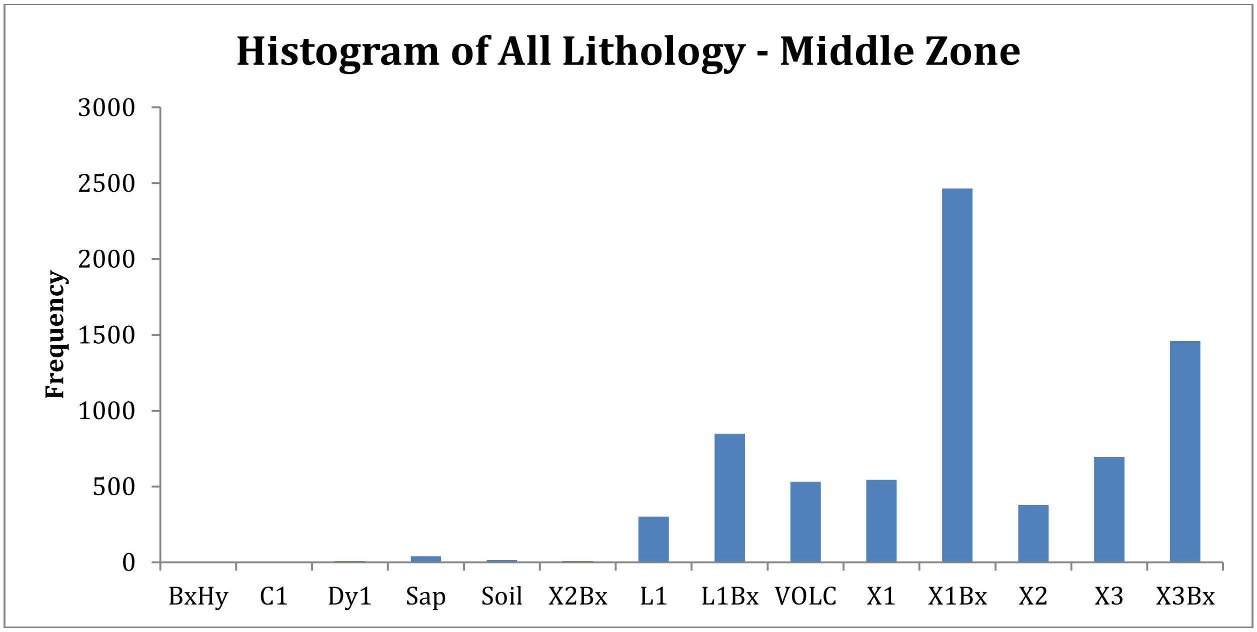


Figure 4.20 Distribution of Major Lithologies - Middle Zone

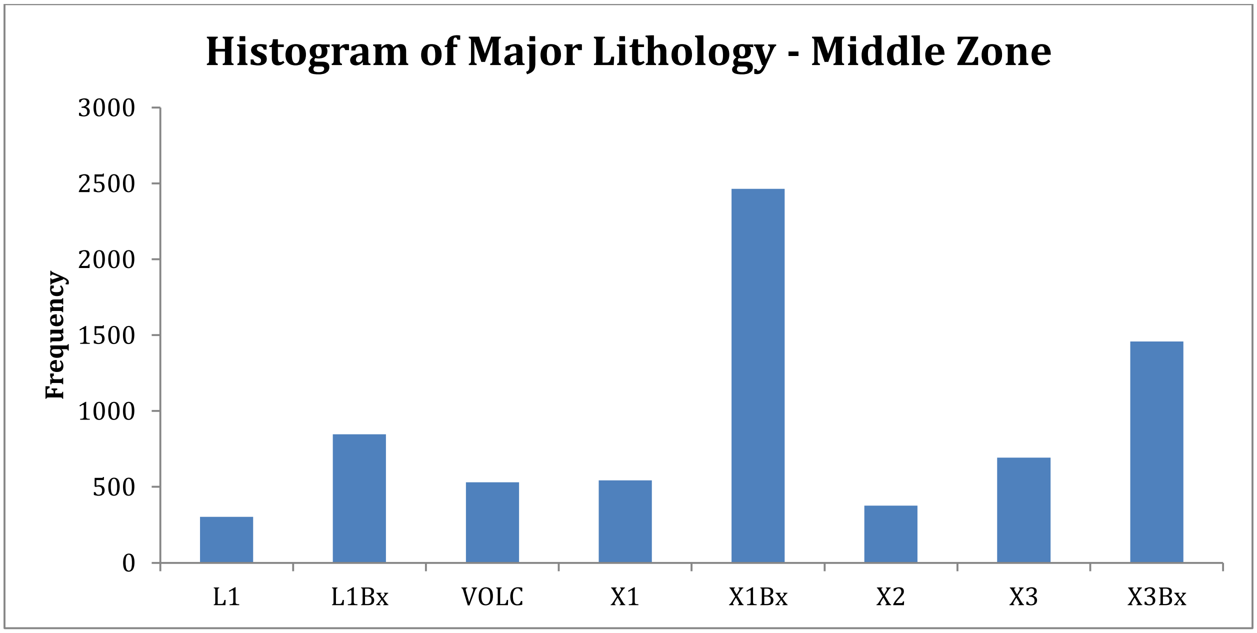


Figure 14.21 Histogram for Middle Zone Gold Data

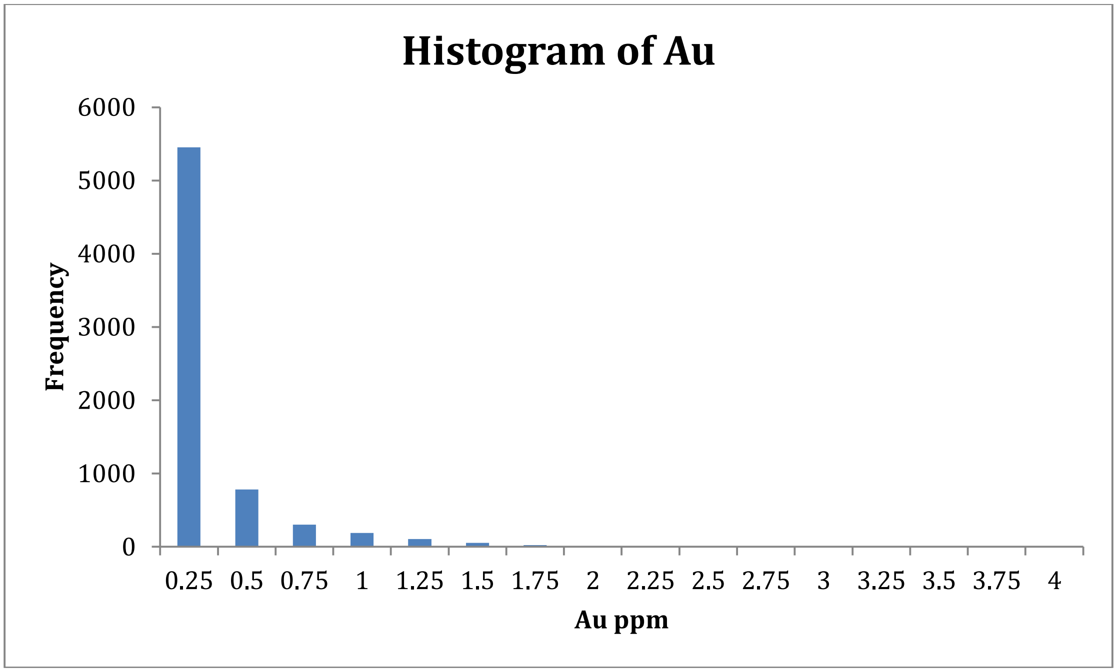


Figure 14.22 Histogram of Silver Data - Middle Zone

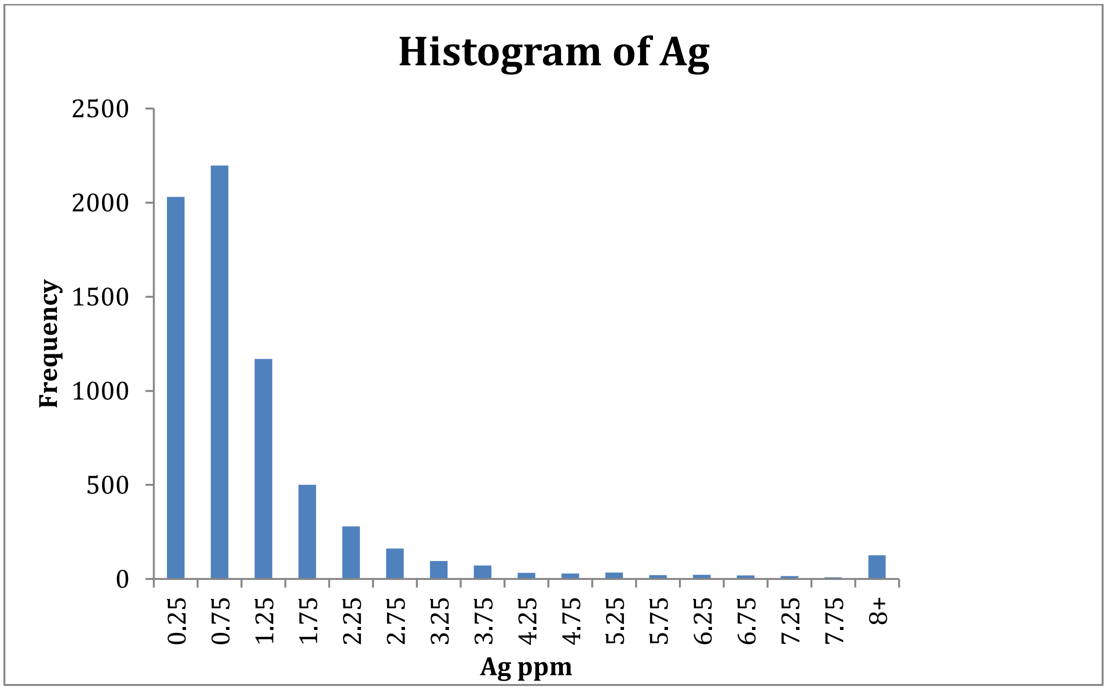
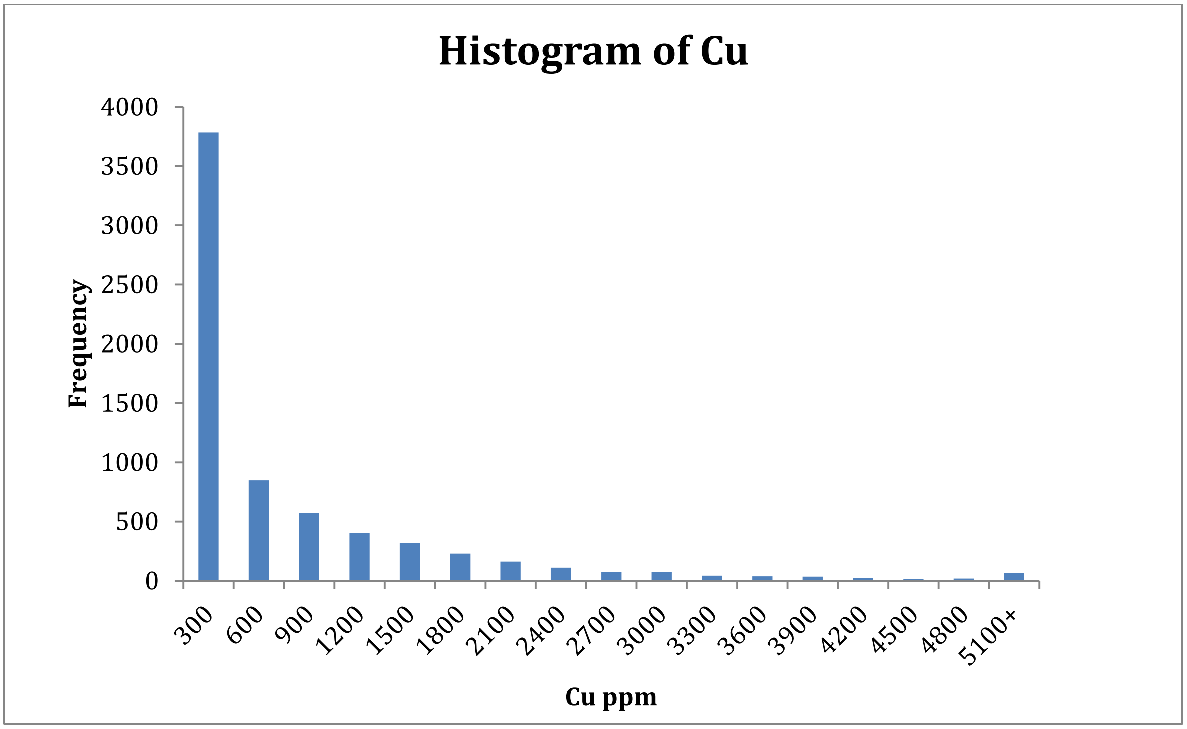


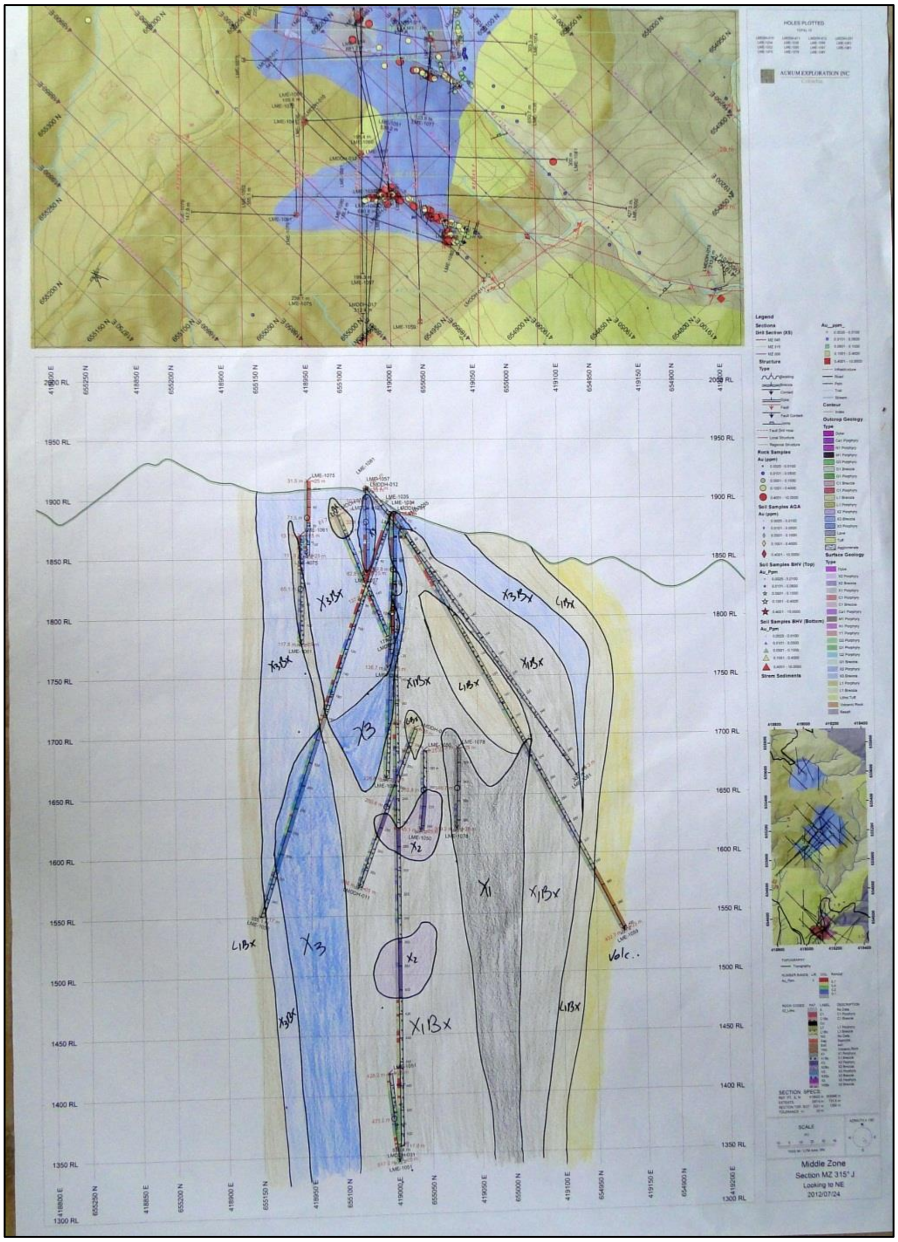
Figure 14.23 Histogram of Copper Data - Middle Zone



14.2b Geologic Model

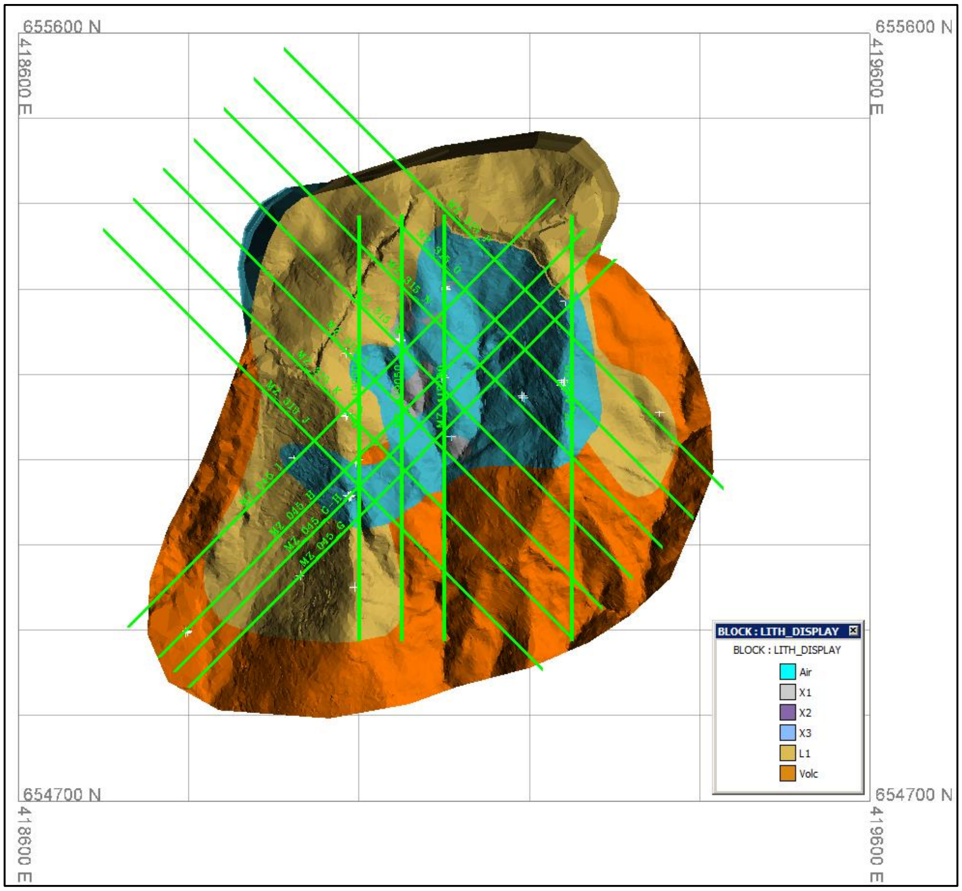
Bellhaven created the first set of sections, a total of 15, for the Middle Zone area. These sections were hand drawn on maps that had drill hole traces plotted. The sections were a combination of North, North-East by South-West and North-West by South-East bearing sections. Figure 14.24 is a sample of one of these sections.

Figure 14.24 Bellhaven Geologic Interpretation Section MZ_315_J



Bellhaven subsequently digitized each section into ArcView Software in 3D. Bellhaven provided these digitized geologic sections to SEWC and they were then imported into Vulcan for further modeling. Figure 14.25 illustrates the section layout at Middle Zone, and the 15 sections that included interpreted geology.

Figure 14.25 Middle Zone Sections with Geologic Interpretation



Eight out of the nine lithology types in the Middle Zone area were grouped into 4 lithology groups for the purpose of the Vulcan geologic model. The L1 and L1Bx types were grouped together as L1; X1 and X1Bx were grouped together as X1; X2 and X2Bx were grouped together as X2; and X3 and X3bx were grouped together as X3. The L1 and L1Bx types were determined to have the same mineral composition, as were the X1 and X1Bx, X2 and X2Bx, X3 and X3Bx types. The Volcanic (Volc) lithology group represents the host rock and was modeled to account for mineralization in this lithology. The X2 group represents the non-mineralized barren core of the deposit and was modeled. The principal lithology groups (L1, X1, X3) are the primary groups of interest, as they are the most mineralized with the highest grades

In Vulcan, all the lithologies were modeled in bench sections every 20m to a depth of 880m. The geologic interpretation for each bench was made using the Bellhaven section profile intercepts at each bench, along with diamond drilling intercepts. Current drilling shows the deposit to be open at depth, however for this model a bottom depth of 880m, or 1,060m elevation, was chosen. Further drilling will be required to determine the depth extent and boundaries of the body at depth. Figure 14.26 illustrates the shape of the porphyries and related breccias and the bench polygons used to create the geologic wireframes. The outer polygons displayed in blue represent X3, the middle polygons displayed in grey represent X1, while the inner polygons colored in magenta represent X2, the barren core.

Figure 14.26 Bench Section Profiles of X1, X2 and X3

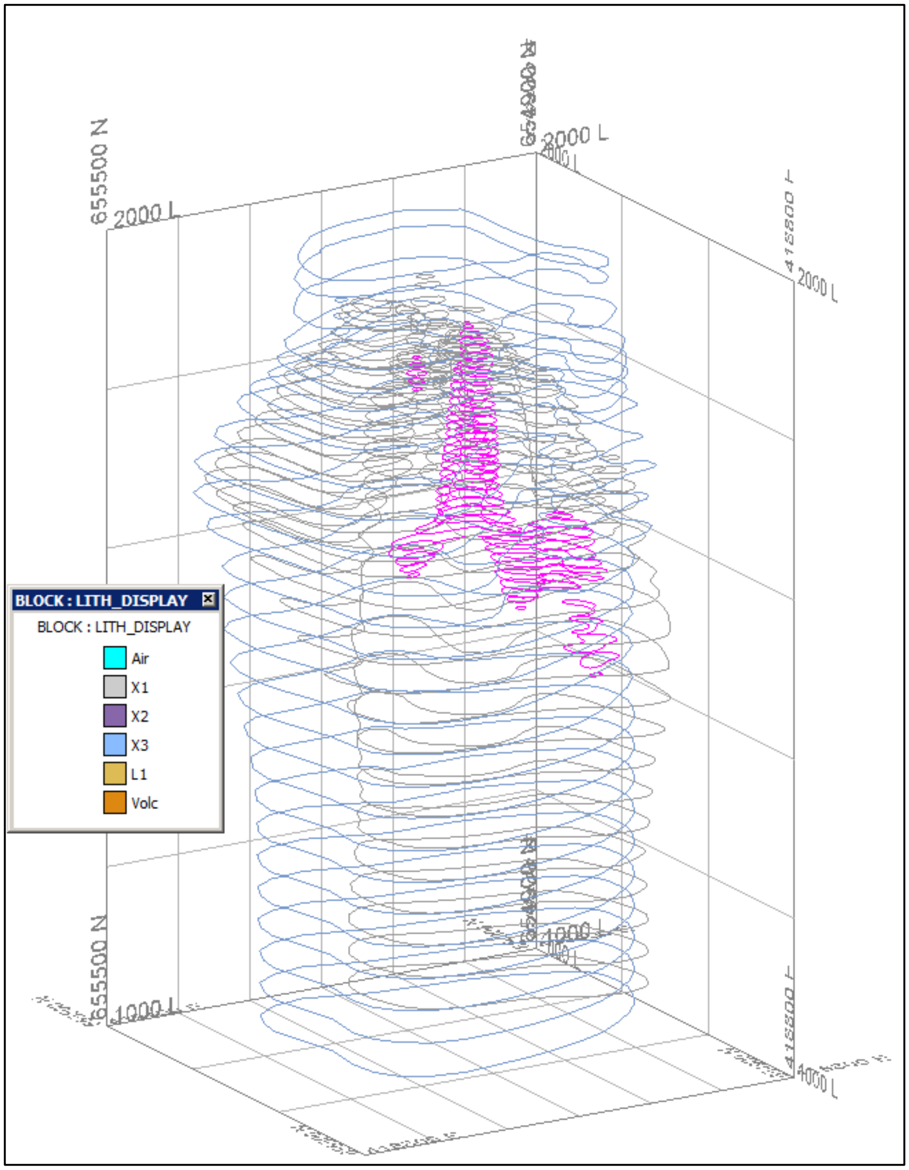
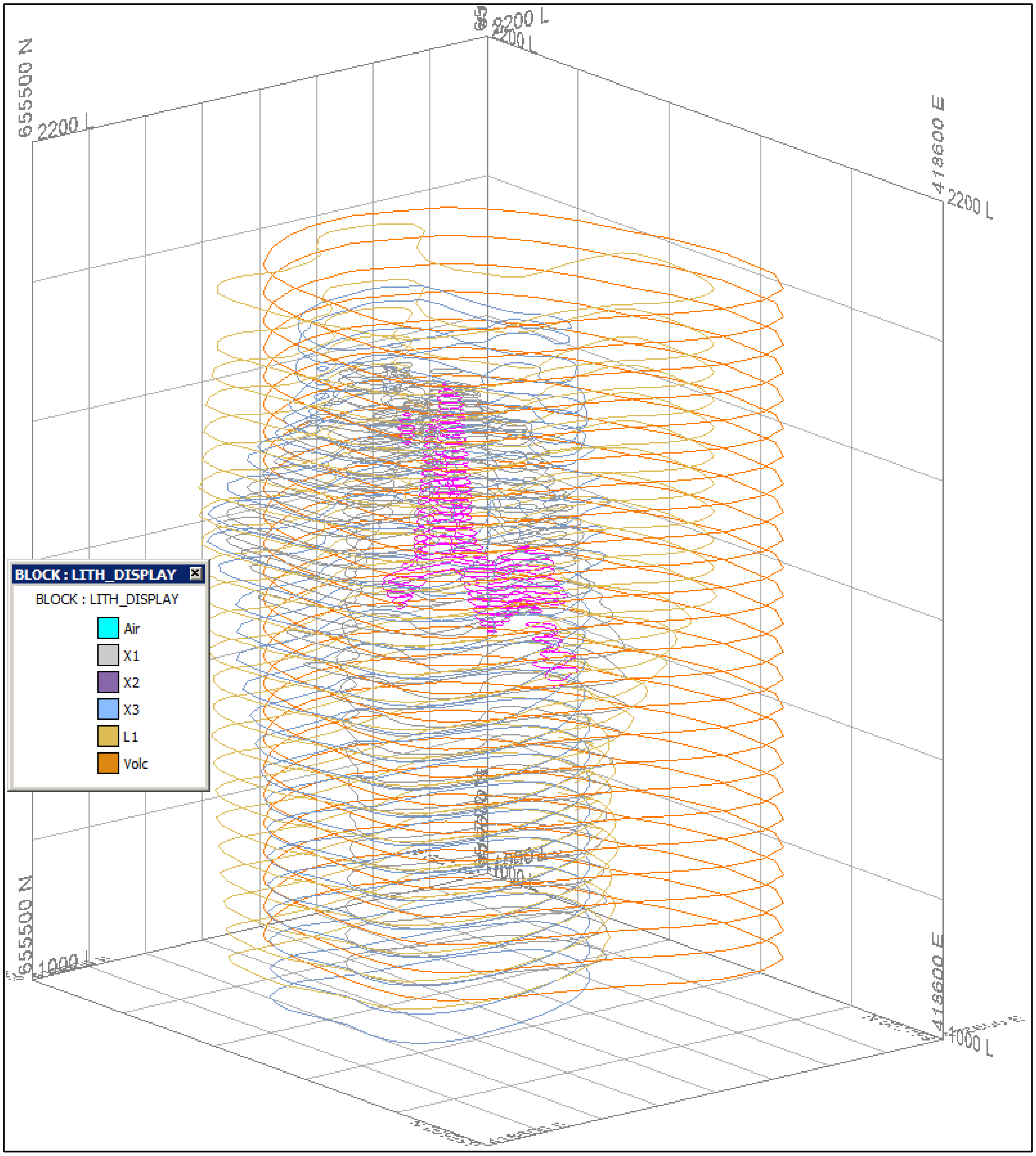


Figure 14.27 includes the addition of the outer L1 and Volc lithologies. Drilling has indicated there is mineralization present in the Volc lithology; however, the bulk of mineralization is hosted in the inner core (X1, X3, L1).

Figure 14.27 Bench Section Profiles including L1 and Volc Lithologies



The following figures illustrate the wireframes created from the bench polygons that were used to flag lithology boundaries in a block model, which will ultimately affect grade estimation parameters.

Figure 14.28 Wireframes of X1, X2 and X3 Boundaries

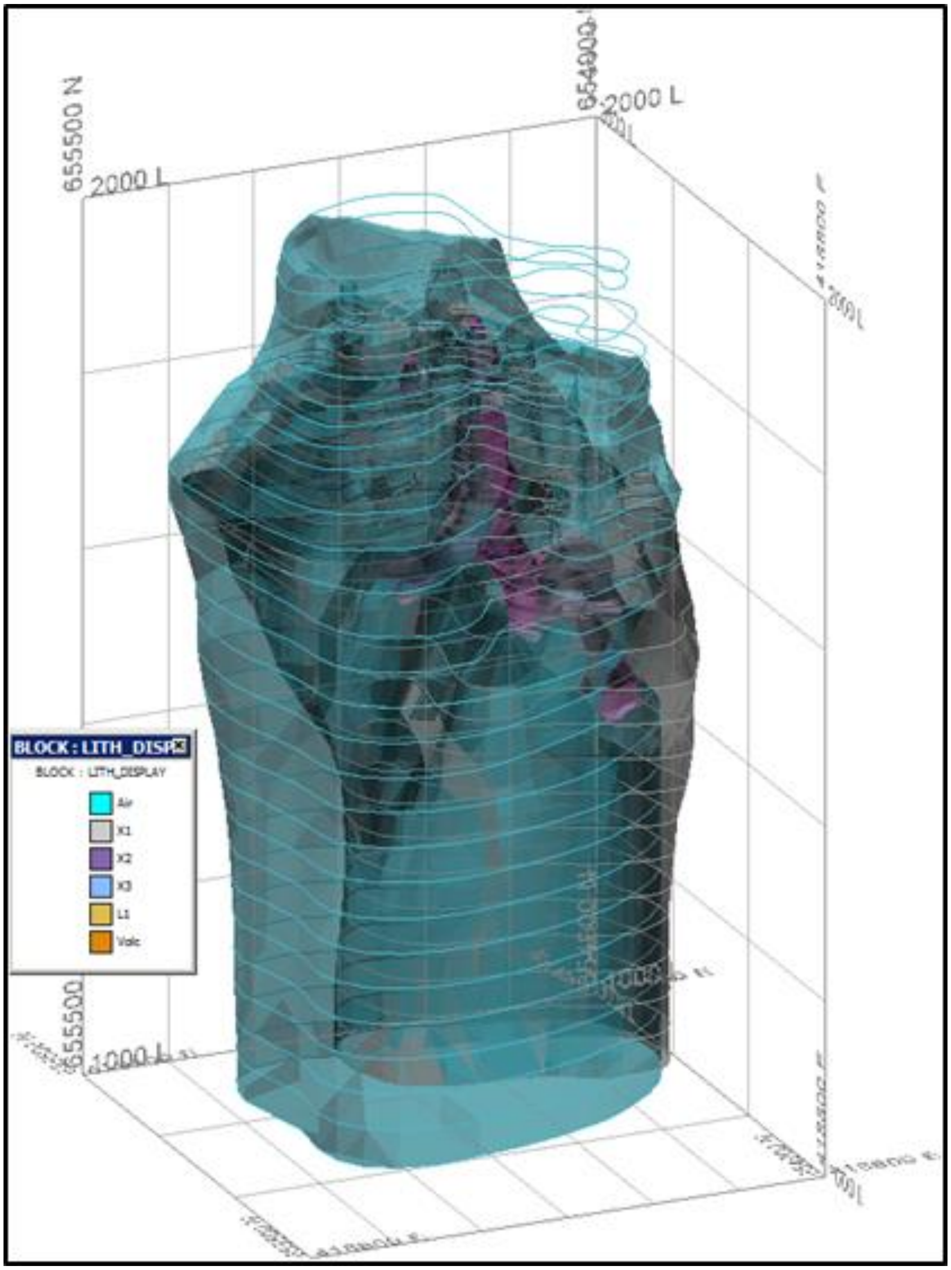
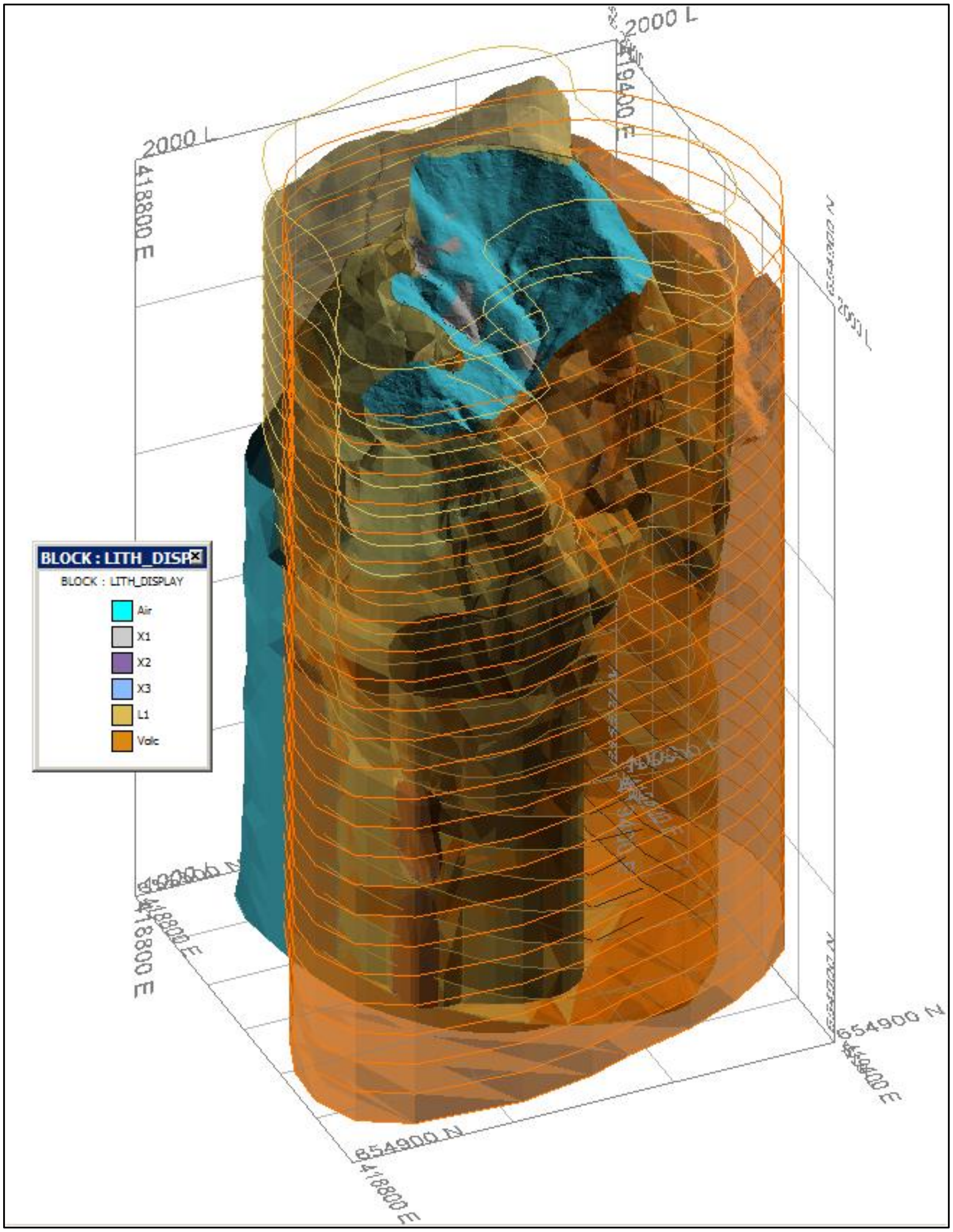


Figure 14.29 Wireframes of L1, Volc, X3 and X1 Boundaries



14.2c Topography

Bellhaven provided 2m contours for the entire La Mina resource area. This was used to create a surface wireframe in Vulcan to represent the surface topography. The topography was used to limit the surface extent of the X1, X2, X3, L1 and Volc wireframes. SEWC verified that drill hole collar survey information matched well with the digital topography used to constrain the model.

14.2d Block Model

A block model was created in Vulcan for the Middle Zone area of La Mina. The block model utilizes parent blocking methods to best define the geologic interpretations in the block model. The parent block size for the Middle Zone block measure 5m cubed. Table 14.8 highlights the parameters used to build the Middle Zone block model.

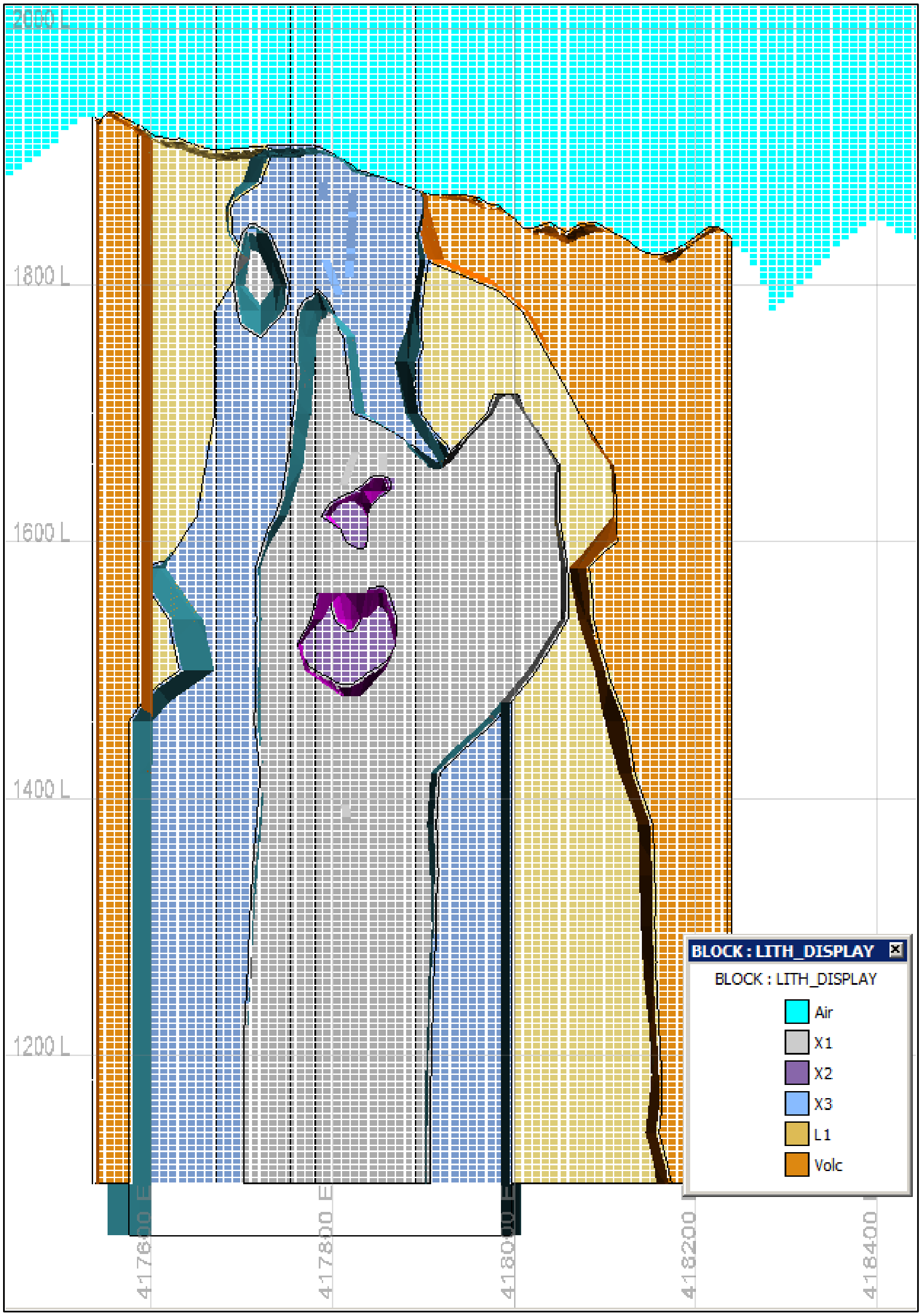
Table 14.8 Middle Zone Block Model Parameters

Parameter	X	Y	Z
Origin	418,730	654,750	1,100
Extent	419,450	655,500	2,100
Parent Block Size	5	5	5

The block model included variables to store lithology, gold grade, copper grade, silver grade, distance to nearest gold sample, number of gold samples used, number of drill holes used and depth.

The wireframes for the X1, X2, X3, L1 and Volc lithologies were used to flag the lithology codes in the block model variable for lithology. Figure 14.30 shows a slice through the block model with blocks colored by lithology.

Figure 14.30 Block Model showing Lithology of Middle Zone – Section MZ_315_J



14.2e Grade Estimation

Grades were estimated into the block model by using inverse distance interpolation. Variances were calculated to the 2nd power or Inverse Distance Squared. A minimum of 1 sample and a maximum of 15 samples were used for the estimation of contained metal (Au,Ag,Cu) in the deposit. For each estimation run the block selection was restricted to respect lithology groups. The search parameters were the same for each estimate for gold, silver and copper. No more than 4 samples from a single drill hole were allowed per estimated bock.

The search ellipsoid parameters were:

- Major axis radius: 140 meters
- Semi-major axis radius: 140 meters
- Minor axis radius:65 meters

The ellipsoid has an orientation of:

- Bearing: 45 degrees (rotation about Z axis)
- Plunge: 0 degrees (rotation about Y' axis)
- Dip -90 degrees (rotation about X' axis)

The following cross sections show that the search parameters modeled the geological interpretation of the ore deposit. This gives confidence that the estimation was appropriate for the Middle Zone Deposit.

Figure 14.31 Block Model Slice Showing Au Estimated Grades – Section MZ_315_J

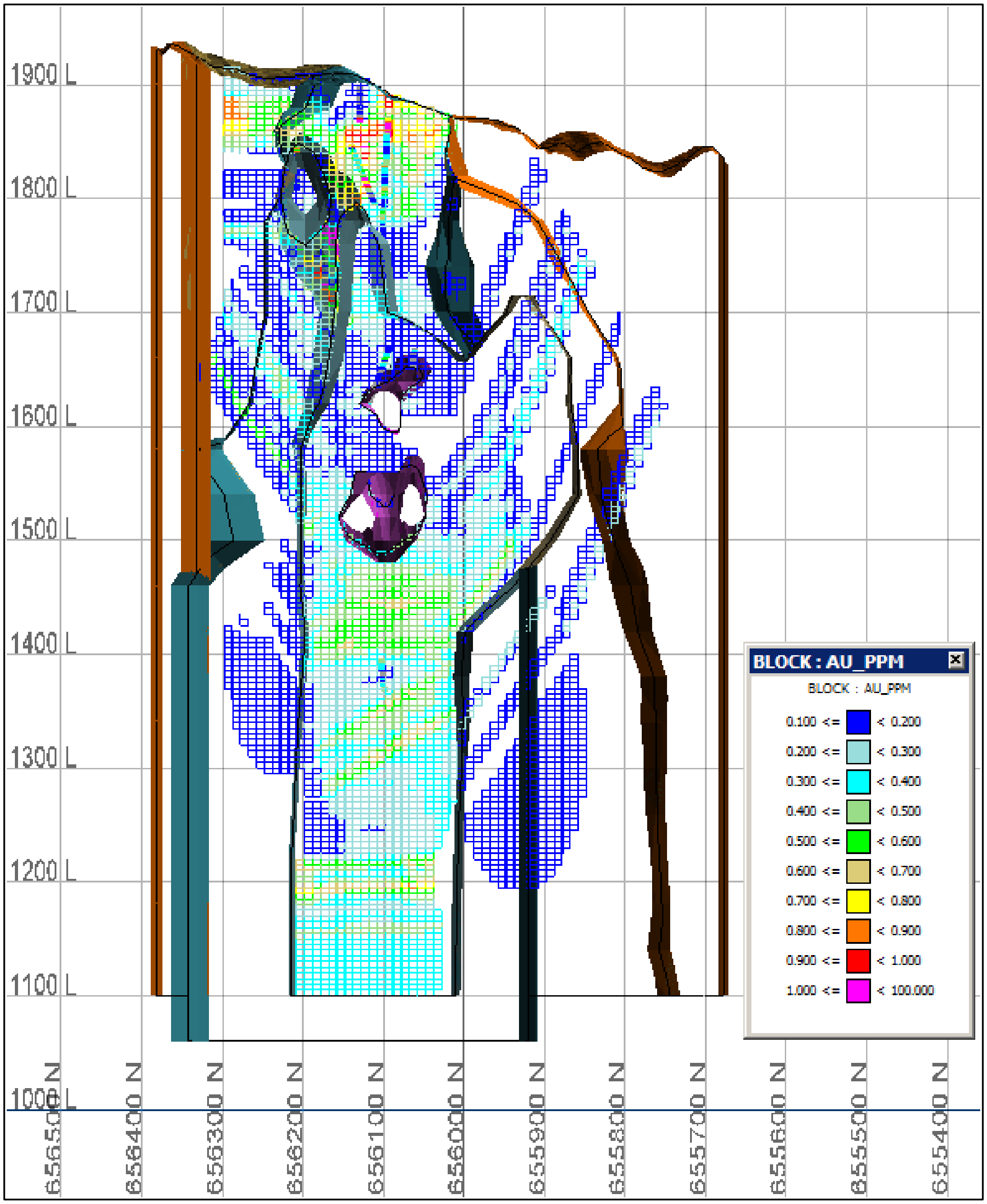
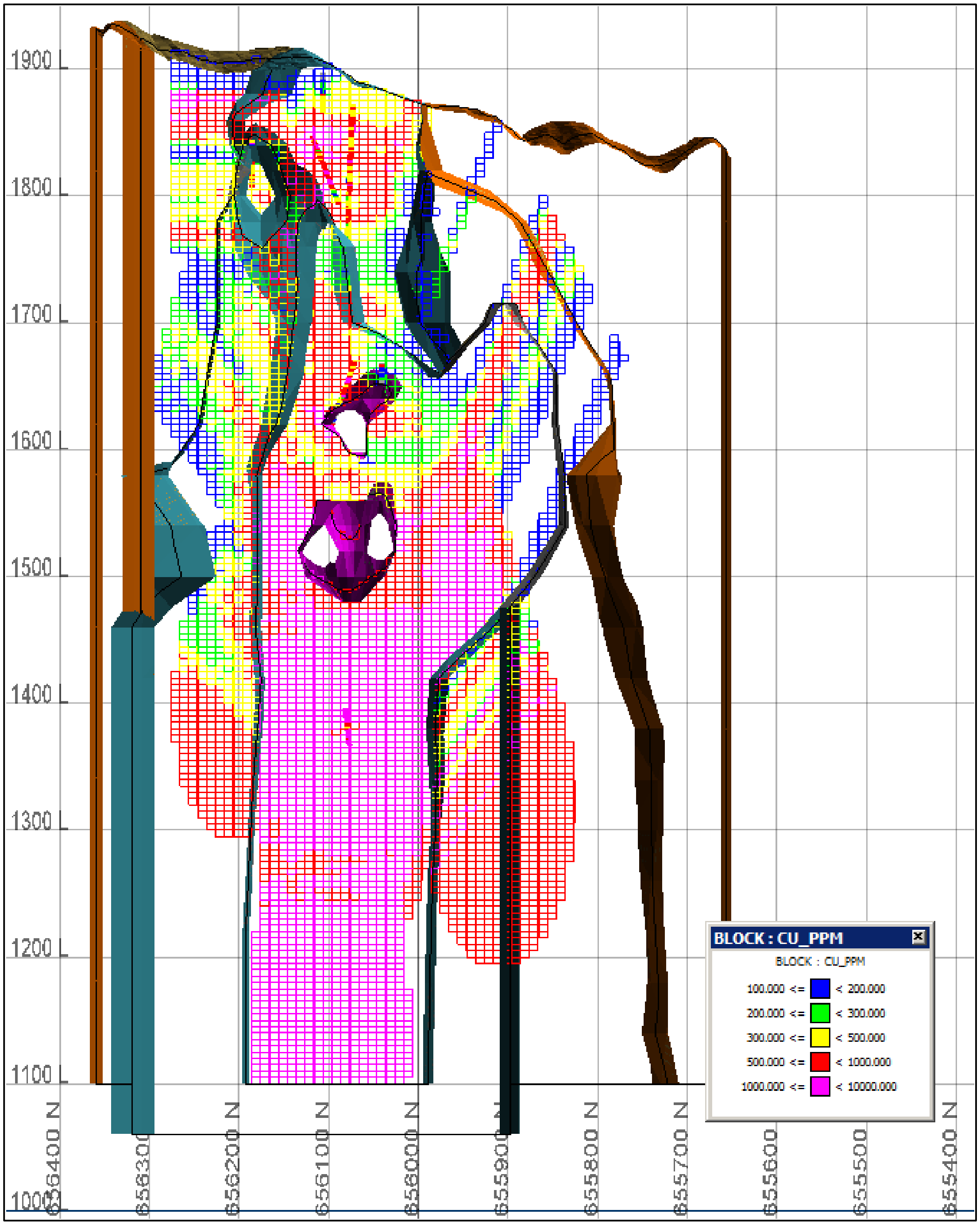


Figure 14.32 Block Model Slice Showing Cu Estimated Grades – Section MZ_315_J



14.2f Density

A density of 2.65 tonnes per cubic meter was used for the tonnage estimates, based on 536 measurements performed by Bellhaven geologist on drill-core samples.

14.2g Mineral Resources

The geology, deposit type, and mineralogy at the Middle Zone is well understood. Nominal drill spacing in the upper portions of the deposit is approximately 50m, but the drill density decreases below 300m depth. Since some target areas remain open at depth and additional metallurgical testing is underway, SEWC has classified the resources for Middle Zone as Inferred Mineral Resources at this time. If Bellhaven adds a few drill holes in key areas and demonstrates an improved understanding of the metallurgical characteristics of La Mina, SEWC believes that a portion of the resource will be converted to Indicated Mineral Resources.

SEWC applied a gold price of $1,400 per ounce, a processing cost of $5.00/ tonne and an assumed recovery of 90% to determine cutoff grades. Using these parameters an internal cut-off grade of 0.15 g/t Au is derived. Copper was not used in the determination of the cutoff grade. Due to the uncertainty of gold prices and recovery, SEWC recommends that a base cut-off grade of 0.3 g/t Au is appropriate to report resources for the Middle Zone Deposit. Again, the author did not complete an economic evaluation of this resource estimate. However, given the style of mineralization, the author is of the opinion that the entire mineral deposit, as currently modeled, has reasonable prospects of economic extraction by open pit. Resources are not reserves and do not have demonstrated economic viability.

Table 14.9 Middle Zone Resources at July 7, 2012

Cutoff Au g/t	Tonnes (x 1,000)	Au g/t	Au Oz. (x1,000)	Ag g/t	Ag Oz (x1,000)	Cu g/t	Cu Lbs. (x1,000)
0.2	68,866	0.37	819	1.88	4,162	1,354	2,056,119
0.3	**39,308**	**0.47**	**594**	**1.87**	**2,363**	**1,609**	**1,394,336**
0.4	19,350	0.61	379	2.20	1,369	1,666	710,999
0.5	11,852	0.72	274	2.49	949	1,786	466,695
0.6	7,233	0.83	193	2.74	637	1,894	302,125
0.7	4,768	0.93	143	2.88	441	1,944	204,380
0.8	3,087	1.03	102	3.02	300	2,005	136,470
0.9	1,890	1.15	70	3.05	185	2,075	86,456
1.0	1,207	1.27	49	2.96	115	2,162	57,541

Colombia is actively promoting responsible development of mining projects. Based on work with several Colombia projects the author is unaware that these mineral resource estimates could be materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors.

14.2h Block Model Validation

SEWC has undertaken a thorough validation of the resultant interpolated model in order to confirm the estimation parameters, to check that the model represents the input data on both local and global scales and to check that the estimate is not biased.

14.2h-1 Visual Validation

Visual validation provides a local validation of the interpolated block model on a local block scale, using visual assessments and validation plots of sample grades verses estimated block grades. A thorough visual inspection of cross-sections, long-sections and bench/level plans, comparing the sample grades with the block grades has been undertaken, which demonstrates good correlation between local block estimates and nearby samples, without excessive smoothing in the block model

14.3 Gustovson Independent Resource Review

Global Statistical Comparisons

Reviewing the statistics of the block models versus the samples, it seems as though there are relationships between the sample data and block model values which are cause for concern. Detailed review of the domain statistics as coded in the database is included in the appendix.

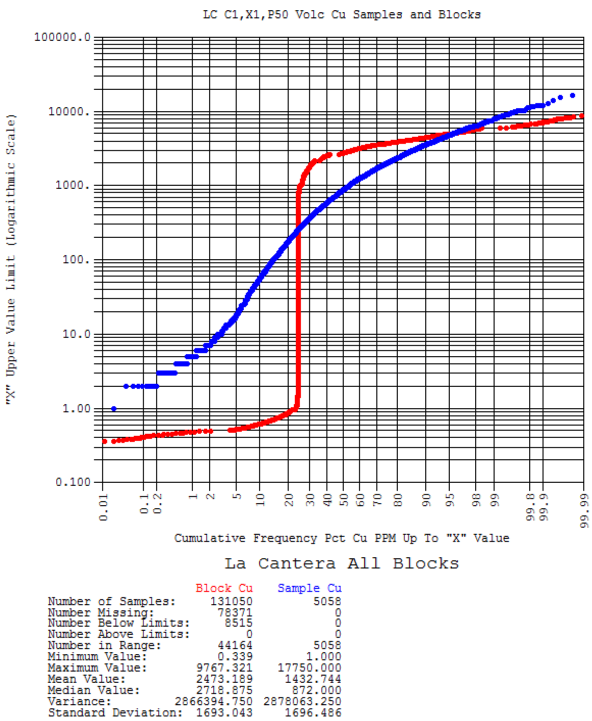
14.3a Global La Cantera Zone Statistical Comparison:

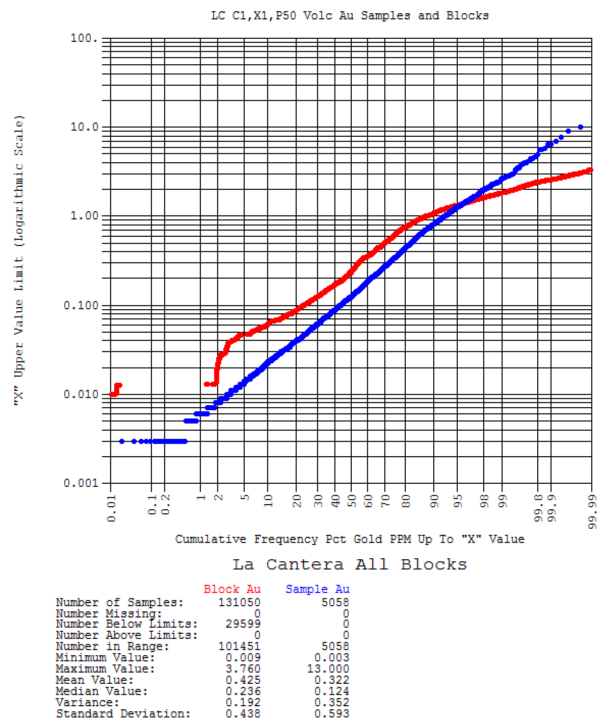
The cumulative frequency plots (CFP) for global LC zones (LC, X1, and volcanic samples vs LC, X1, P50, and volcanics) show the disconnect in the X1 block grades for copper. It is possible that copper values for the X1 domain were calculated using percent rather than PPM, or that another variable was used to estimate grade.

Global CFP for gold grades shows the segmentation of the block model interpolation into different domains very clearly. It is unusual to have the mean of the estimated grade significantly different than the mean of the samples used. It is difficult to know whether the relatively high mean block grade (0.425 ppm vs. 0.322 ppm) relative to sample grades is an estimation artifact, an artifact of relative drill density or an artifact of the data selection used.

Variance reduction for Cu samples to blocks is 0.41%, but the number is meaningless, as there is clearly a discontinuity in the block data (zone X1) which is distorting the value. Expected and achieved variance reductions for the models are presented in Table 14.10.

Figure 14.33 Block Model Slice Showing Cu Estimated Grades – Section MZ_315_J

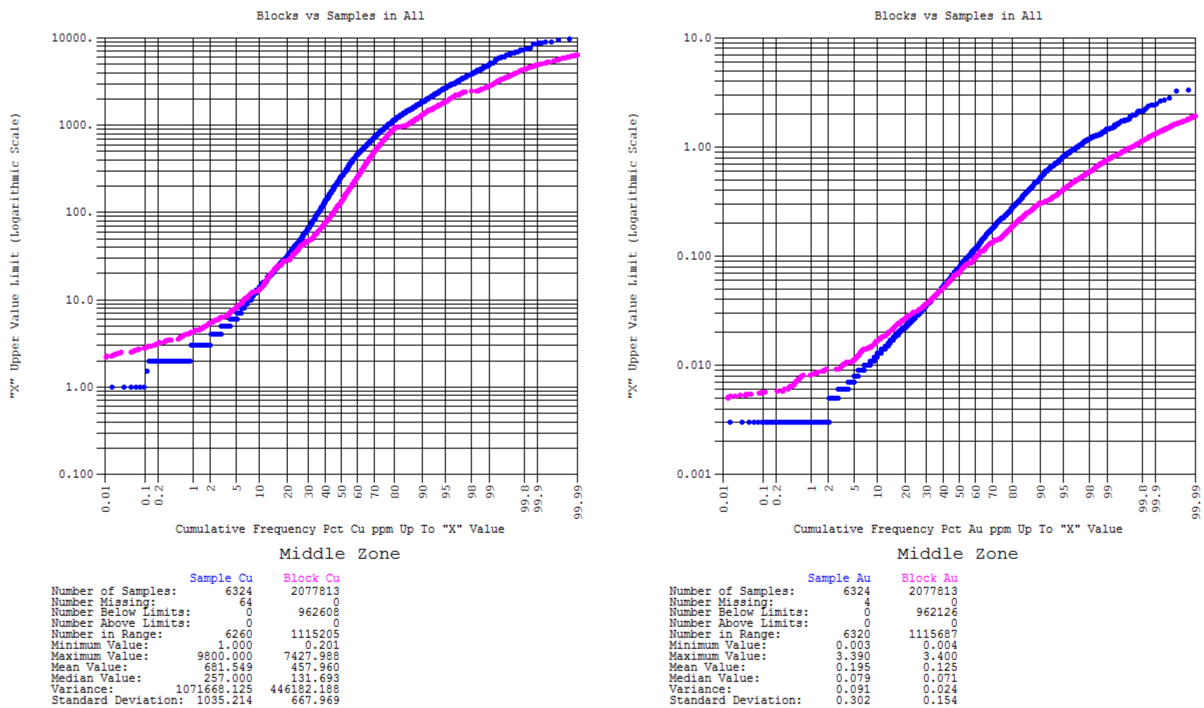




14.3b Global MZ Zone Statistical Comparison:

Comparison of all MZ zone data show fairly good agreement between sample and block grade distributions, albeit with a much lower degree of smoothing in the estimation than was seen in the LC data. There is also a fairly substantial reduction in mean grades between the samples and the blocks.

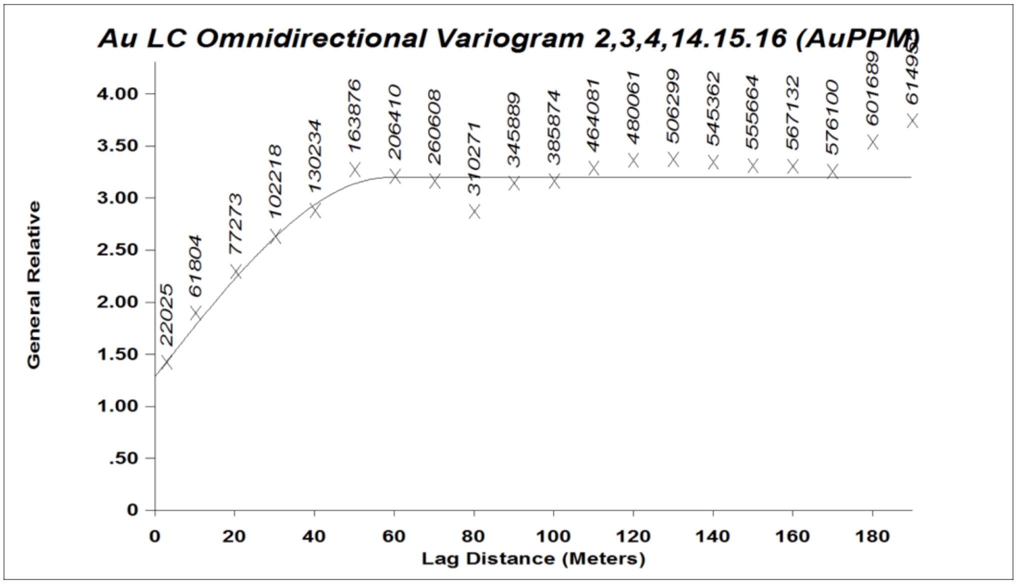
Figure 14.34 Middle Zone Global CFP



14.3c Variography:

The La Mina technical report describes ranges used for interpolation of block grades, but does not include any variograms for review. The variogram models were presented for la Cantera but were not presented for the Middle Zone. Gustavson has generated omnidirectional variograms for gold and copper for the MZ and LC zones for comparison with interpolation ranges used in the deposit, and to assist with consideration of expected variance reduction from the interpolation.

The variogram shapes are well defined and typical for metals in a porphyry system, though Gustavson's preliminary analysis of the variography appears to demonstrate less continuity than shown in the SEWC report. Gustavson recommends that a thorough domain analysis using both statistics and variography be performed as part of any future study.



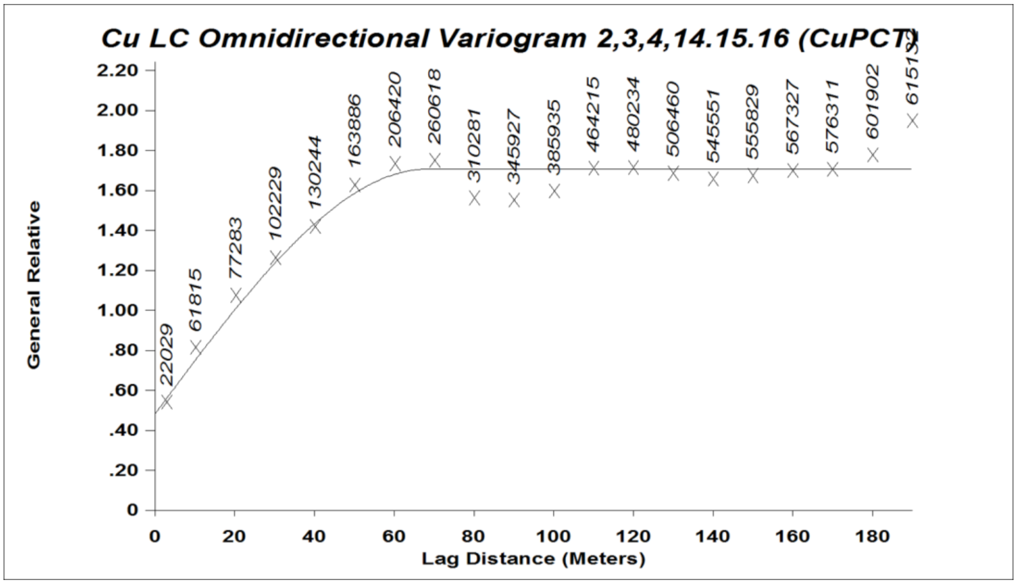
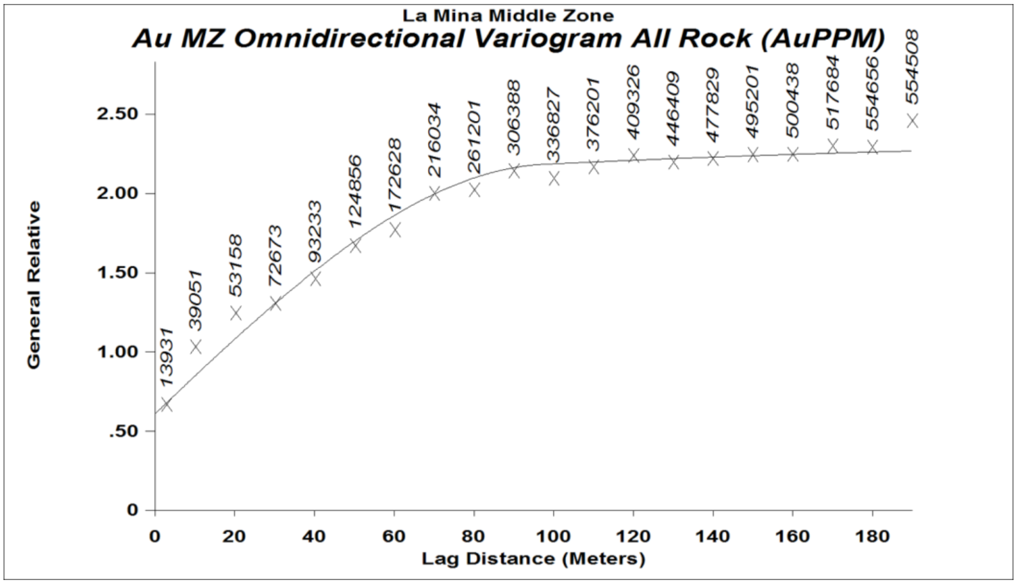


Figure 14.35 La Cantera Global Omnidirectional Variograms



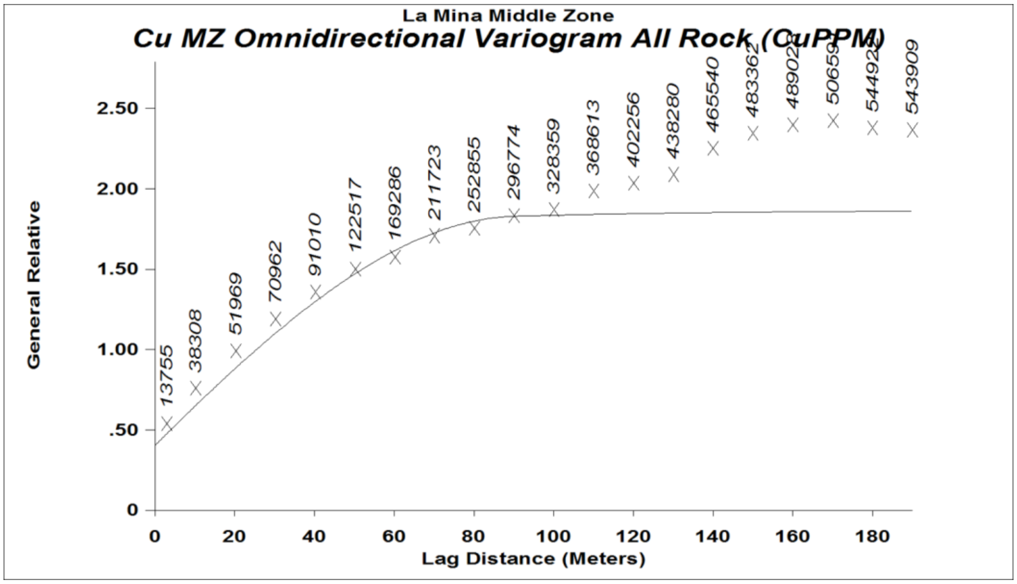


Figure 14.36 Middle Zone Global Omnidirectional Variograms

We expect from the block size and variogram ranges to see the following variance reductions from volume variance effects. The block variance factor is the percent of the sample variance that is expected to remain in the estimated block values.

Table 14.10 Variogram Parameters and Block Variance Reduction					
	Variogram Range	**Block Size**	**Nugget (As % of sill)**	**Expected Block Variance Factor**	**Realized Block Variance Factor**
LC Zone Cu	60m	10m	29%	60%	99%
LC Zone Au	50m	10m	42%	44%	55%
MZ Zone Cu	80m	5m	23%	72%	42%
MZ Zone	80m	5m	27%	68%	27%

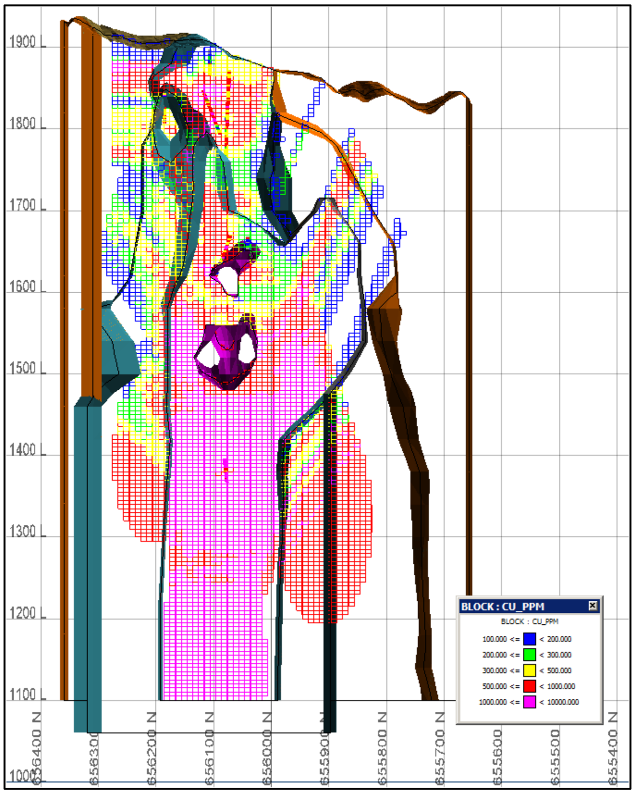
The La Cantera variance change for copper is an artifact of the X1 Zone behavior and cannot be considered. The La Cantera gold estimate appears to be under-smoothed, possibly indicating an overextension of some grade values from drill holes into blocks. The Middle Zone exhibits under-smoothing in both the copper and gold estimates.

There is a substantially different degree of smoothing in the estimation of the Middle Zone as compared with La Cantera. The analysis of the effects of estimation will require a full review of the domaining and the data, as well as correcting some of the internal inconsistencies between block domains, but it seems odd that two genetically similar deposits in the same region would receive such different treatments.

In general, the La Cantera estimation seems more consistent with what would be expected for estimation of a disseminated copper-gold orebody, but the treatment of different domains is sufficiently variable to warrant further review (IE, some domains show 85% variance reduction, while others show an increase in variance). The variance reduction seen in the MZ domain blocks is much lower on average and in certain cases would appear to be insufficiently smoothed for this type of deposit (15%, 18% variance reduction). This may be a result of using ID2 with a minimum of 1 sample for estimation. This sample selection methodology allows for projection of grade over a long distance from a single drillhole.

Review of the figures from pages 129 and 130 of the La Mina Amended technical report show grade projecting, apparently perpendicular to drillholes, across boundaries between certain estimation domains. This seems to be indicative of treatment of the domains as a single entity for purposes of estimation, which may not be the optimal way to handle interpolation of grade for the deposit.

Figure 14.37 La Cantera – Cross section (Cu_ppm)



14.3d Summary and Conclusions:

Review of the block and sample data for the La Cantera and Middle Zones at the La Mina project is generally consistent with expectations, though there are several areas that should be reviewed. Gustavson believes that the model is adequate for global inferred resource reporting and preliminary analysis.

There are several domains where there is substantial shifting of mean block grades as compared to sample grades, and at least one domain (X1 in La Cantera) where there may be an interpolation bust. Certain other domains show artifacts in the block grade distributions which are inconsistent with sample grades for those domains, and in some cases block grades which are wholly inconsistent with the sample grades for the domain, which merits further review.

Gustavson recommends a further detailed look at the La Mina resource prior to investment or detailed economic analysis. This work should include at a minimum generation of variography for the distinct lithologic domains within the deposit, and review of contact plots across domain boundaries to gain a better understanding of the relationships between the data populations across those boundaries.

Pit limits should be reassessed following an updated resource estimate. This will provide information necessary for management review of the appropriate combination of profit vs. risk.

I trust that this summary is useful in your decision making process. Statistics Feel free to call if you have questions or comments, or would like to discuss. Gustavson looks forward to working with InterPro and Bellhaven again in the future.

Best Regards,

GUSTAVSON ASSOCIATES, LLC

Donald E. Hulse, P.E.
Vice President

14.3e Appendix

Zone by Zone Statistical Comparison

LC Zone Statistical Comparison

<u>La Cantera</u>

Description of review:
Sample data were loaded from the La Cantera raw drillhole data files (63 holes) into MicroMODEL Software (used because it allows for very rapid generation of gross statistics and easy comparison of cumulative frequency and similar plots between various data models.) Data loaded were Hole ID, Easting, Northing, Elevation, Bearing, Dip, AuPPM, AgPPM, CuPPM and lithology code.

Block data were loaded as Blastholes (point cloud) into MicroMODEL, because it was determined that loading the data as blocks showed boundary effects related to majority tagging of blocks from block partials, particularly at the P50/Volcanics boundary. Block composites were scaled according to block partial volumes to allow for equitable treatment of the data. Data loaded were a Nominal Hole ID, Easting, Northing, Elevation, Scaler (1=10x10x10 block), AuPPM, AgPPM, CuPPM and rock code.

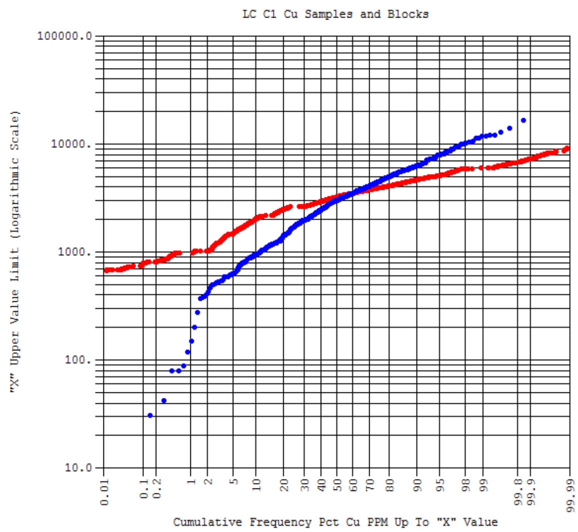
Cumulative frequency plots were generated for:

Table 14.11 Codes for Cumulative Frequency Plots

	Samples	**Blocks**
C1 Zone	Code 3, 4	Code 2
X1 Zone	Code 15, 16	Code 4
Volcanics	Code 14	P50 Only, Code 50
All Zones	Codes 3, 4, 14,15	Codes 2, 4, 50

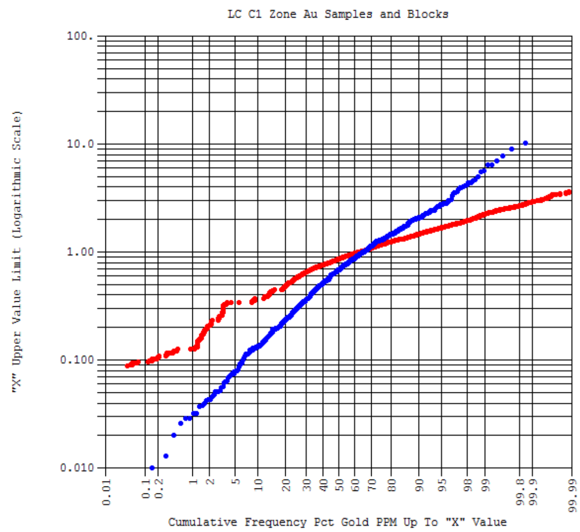
<u>La Cantera Discussion:</u>

C1 Domain:
Comparison of La Cantera sample statistics with block statistics shows reasonable agreement within the C1 Domain. There is a shift in the slope of the CFP as we would expect to see with a fairly smooth interpolation of the grade data. (Variance reduction for Au from samples to blocks is 86%, Variance reduction for Cu is 82.6%). Mean sample and block grades for Cu and Au are both similar.



La Cantera C1 Blocks

	Block Cu	Sample Cu
Number of Samples:	41084	679
Number Missing:	0	0
Number Below Limits:	7789	0
Number Above Limits:	0	0
Number in Range:	33295	679
Minimum Value:	640.640	31.000
Maximum Value:	9767.321	17750.000
Mean Value:	3280.320	3429.985
Median Value:	3241.085	3000.000
Variance:	1155032.125	5748081.000
Standard Deviation:	1074.724	2397.516

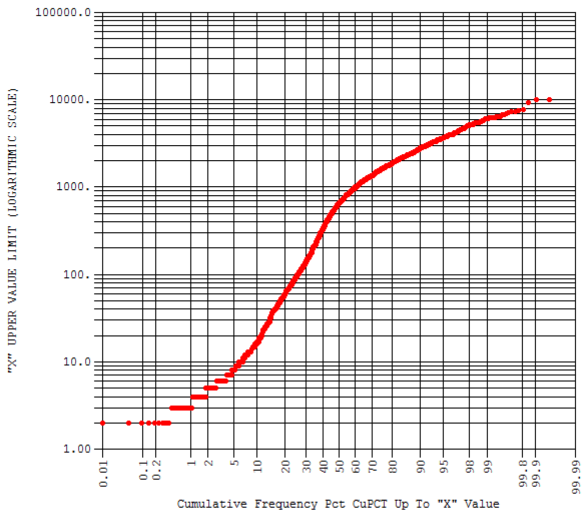


La Cantera C1 Blocks

	Block Au	Sample Au
Number of Samples:	41084	679
Number Missing:	0	0
Number Below Limits:	7789	0
Number Above Limits:	0	0
Number in Range:	33295	679
Minimum Value:	0.089	0.010
Maximum Value:	3.760	13.000
Mean Value:	0.904	0.998
Median Value:	0.860	0.683
Variance:	0.193	1.384
Standard Deviation:	0.440	1.176

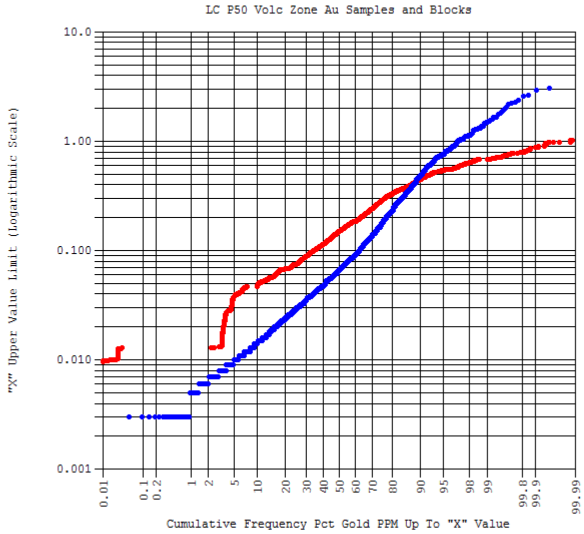
P50 Domain:

The P50 Zone is more difficult to compare, as the P50 data are not segregated from the Volcanics data within the assay file. As a result, we are comparing P50 block data with all volcanics assay data. There are no calculated blocks within the general volcanics in the block model. Also, there is no calculated Cu grade in the block model for the p50 zone. There is a significant shift in mean value between the sample grades and block grades for Gold, but this may be a result of the block grades being representative of interpolation of only the proximal (higher grade) assays from the p50 portion of the volcanics domain.



La Cantera

Number of Samples:	2106	Minimum Value:	2.000
Number Missing:	0	Maximum Value:	10170.000
Number Below Limits:	0		
Number Above Limits:	0	Mean Value:	1083.381
Number in Range:	2106	Median Value:	654.000
		Variance:	1718534.250
		Standard Deviation:	1310.929



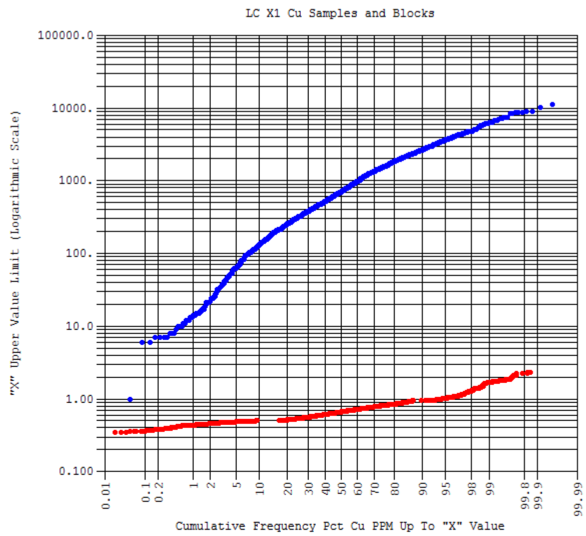
La Cantera p50 Blocks

	Block Au	Sample Au
Number of Samples:	78371	2106
Number Missing:	0	0
Number Below Limits:	21084	0
Number Above Limits:	0	0
Number in Range:	57287	2106
Minimum Value:	0.009	0.003
Maximum Value:	1.039	3.350
Mean Value:	0.201	0.180
Median Value:	0.149	0.066
Variance:	0.026	0.097
Standard Deviation:	0.163	0.311

(No cu block data in P50 or volcanics in La Cantera)

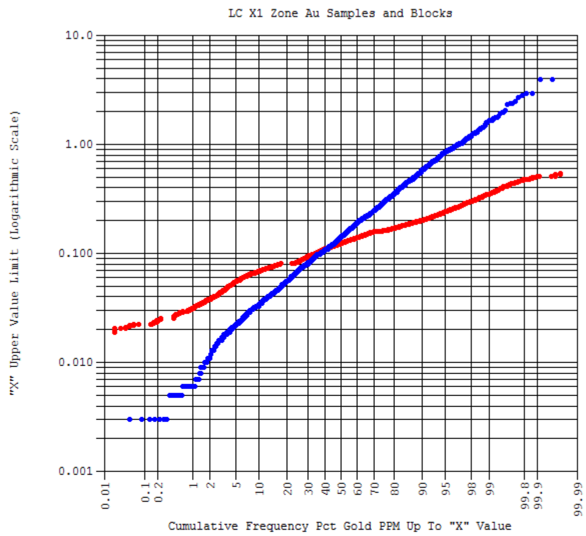
X1 Domain:

Gold data in the X1 domain show a substantially smoothed (97% variance reduction) interpolation and a substantial mean value reduction (0.251 to 0.132 gpt Au) for the gold grades. Copper grades, show a significant incongruity. The Block copper grades are substantially lower than sample grades for the same interval. Either the data set used is pulling information from a substantially dissimilar zone, or there is an error in the estimation routine.



La Cantera X1 Blocks

	Block Cu	Sample Cu
Number of Samples:	11595	2273
Number Missing:	0	0
Number Below Limits:	726	0
Number Above Limits:	0	0
Number in Range:	10869	2273
Minimum Value:	0.339	1.000
Maximum Value:	2.354	15550.000
Mean Value:	0.705	1159.815
Median Value:	0.663	705.000
Variance:	0.051	1715879.500
Standard Deviation:	0.225	1309.916



La Cantera X1 Blocks

	Block Au	Sample Au
Number of Samples:	11595	2273
Number Missing:	0	0
Number Below Limits:	726	0
Number Above Limits:	0	0
Number in Range:	10869	2273
Minimum Value:	0.019	0.003
Maximum Value:	0.605	5.730
Mean Value:	0.132	0.251
Median Value:	0.123	0.141
Variance:	0.004	0.120
Standard Deviation:	0.062	0.347

MZ - Middle Zone Statistical Comparison
La Mina Middle Zone

Description of review:

Sample data were loaded from the MZ data directory. Drillhole Data were filtered to include only drillholes flagged as belonging to the Middle Zone, as we were concerned that the X1 data artifacts seen in the LC data might be a result of including MZ drillhole information in comparison with LC block data. 36 MZ drillholes were loaded. Data loaded were Hole ID, Easting, Northing, Elevation, Bearing, Dip, AuPPM, AgPPM, CuPPM and lithology code.

The block model for the MZ zone does not appear to have sub-blocking, so it was loaded as a block model. Data loaded were Easting, Northing, Elevation, Lithology Code, AuPPM, AgPPM, and CuPPM. The MZ zone block model blocks are 5m x 5m x 5m in size, which explains the very large numbers of blocks in the general MZ block statistics as compared to the LC zone with its 10x10x10 nominal block size (and smaller geometric extent).

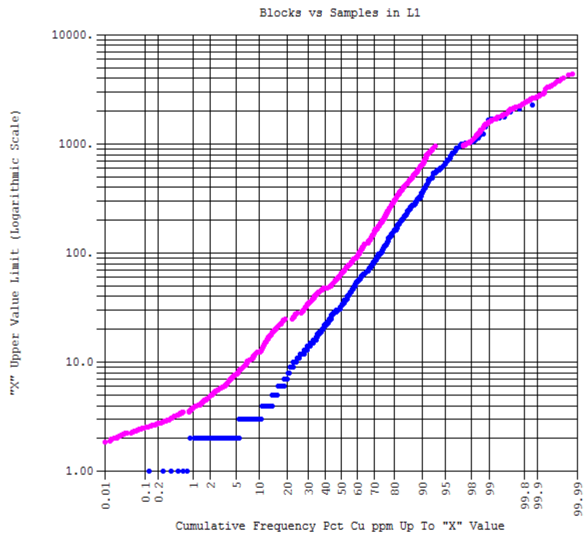
Cumulative frequency plots were generated for:

Table 14.12 Cumulative frequency plot Codes for La Mina Middle Zone

	Samples	**Blocks**
L1 Domain	Code 3, 4	Code 4
X1 Domain	Code 15, 16	Code 2
X3 Domain	Code 18, 19	Code 3
Volcanics	Code 14	Code 5
All Zones	Codes 3, 4, 14, 15, 16, 18, 19	Codes 2, 3, 4, 5

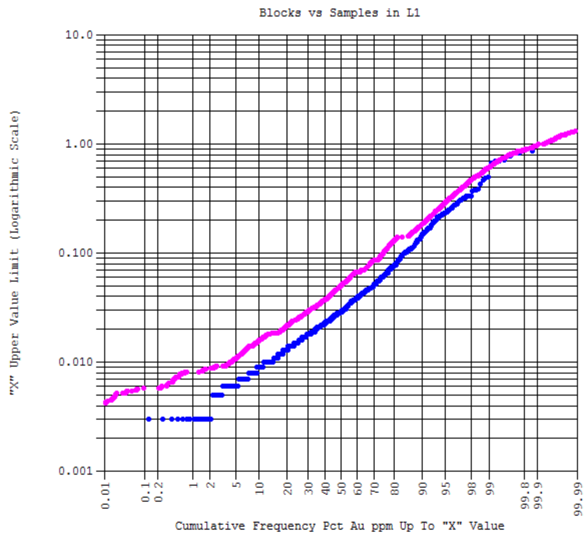
L1 Domain:

There are a few areas of concern here. L1 Domain blocks are substantially higher in mean grade than L1 domain samples, for both Cu and Au. There is a very low degree of smoothing indicated in the CFP and data variance change (Copper block variance is actually 40.8% HIGHER than sample variance; Gold variance reduction is 17.8%), and there is an odd discontinuity in the block grade curve at around the 95th percentile.



Middle Zone

	Sample Cu	Block Cu
Number of Samples:	781	508443
Number Missing:	0	0
Number Below Limits:	0	223942
Number Above Limits:	0	0
Number in Range:	781	284501
Minimum Value:	1.000	1.305
Maximum Value:	2440.000	5392.910
Mean Value:	137.702	208.147
Median Value:	33.000	64.042
Variance:	82762.086	116556.031
Standard Deviation:	287.684	341.403

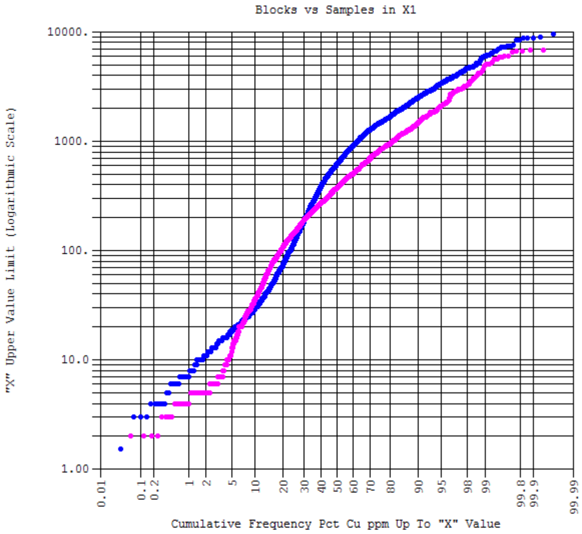


Middle Zone

	Sample Au	Block Au
Number of Samples:	781	508443
Number Missing:	1	0
Number Below Limits:	0	223560
Number Above Limits:	0	0
Number in Range:	780	284883
Minimum Value:	0.003	0.004
Maximum Value:	2.700	1.510
Mean Value:	0.065	0.087
Median Value:	0.029	0.050
Variance:	0.018	0.013
Standard Deviation:	0.135	0.114

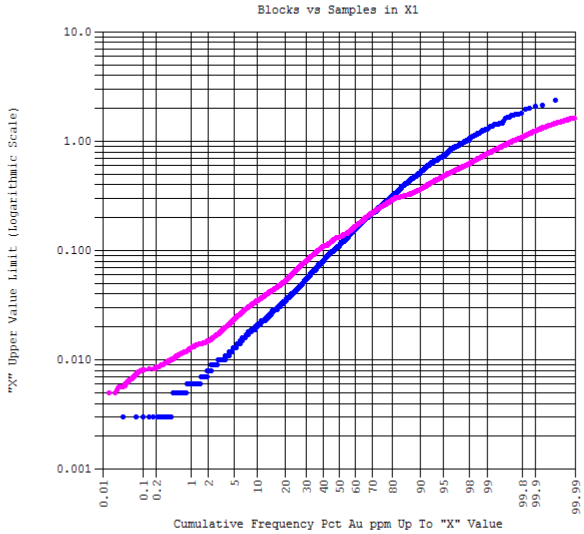
X1 Domain:

Comparison of CFP's for the X1 domain for copper shows the possibility that there is more than one subdomain of data within X1. The relationship to the interpolated block grades is somewhat unclear, with some population distortions in the curve and a decrease in mean grade from 1020 to 651 ppm. The degree of smoothing in the estimate is low. X1 gold grades are well behaved, with little distortion of the mean and a moderate variance reduction (63.9%) from the estimation.



Middle Zone

	Sample Cu	Block Cu
Number of Samples:	2919	1740
Number Missing:	3	61
Number Below Limits:	0	0
Number Above Limits:	0	0
Number in Range:	2916	1679
Minimum Value:	1.519	2.000
Maximum Value:	9590.000	9800.000
Mean Value:	1020.649	651.787
Median Value:	616.500	376.000
Variance:	1518546.000	780272.375
Standard Deviation:	1232.293	883.330

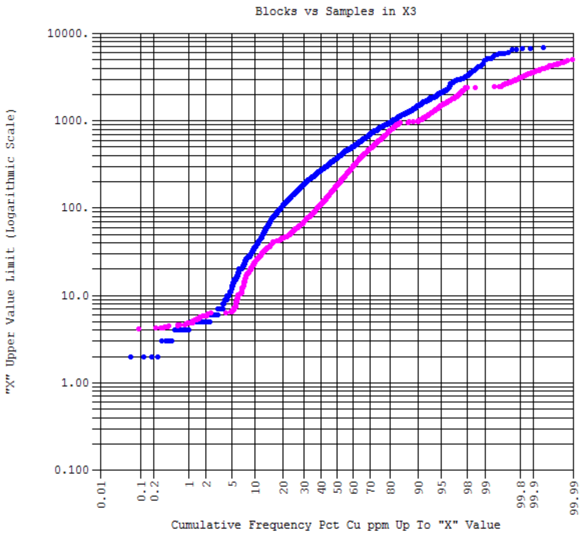


Middle Zone

	Sample Au	Block Au
Number of Samples:	2919	404322
Number Missing:	3	0
Number Below Limits:	0	43744
Number Above Limits:	0	0
Number in Range:	2916	360578
Minimum Value:	0.003	0.005
Maximum Value:	2.460	1.729
Mean Value:	0.210	0.180
Median Value:	0.110	0.133
Variance:	0.072	0.026
Standard Deviation:	0.269	0.160

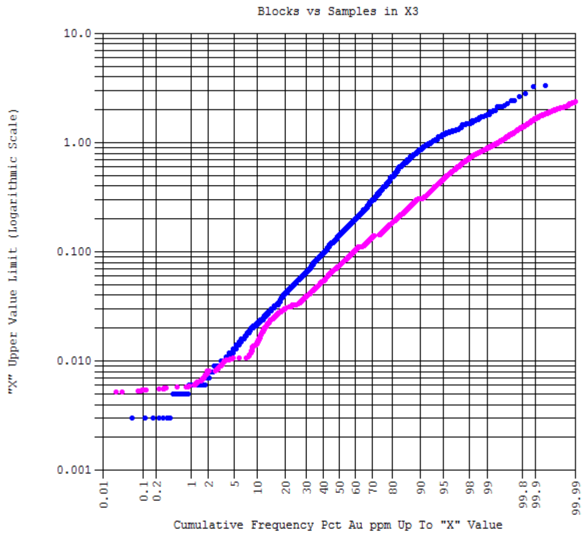
X3 Domain:

The X3 domain copper block CFP shows a significant reduction in mean block grade as compared to sample grades, and several sub-population artifacts in the block model which are not represented in the sample grade plot. It is difficult to understand how these block data are derived from these sample data. The gold block data are less variable, but there is a substantial grade difference with a mean block grade of 0.133 and a mean sample grade of 0.305.



Middle Zone

	Sample Cu	Block Cu
Number of Samples:	1740	435693
Number Missing:	61	0
Number Below Limits:	0	189645
Number Above Limits:	0	0
Number in Range:	1679	246048
Minimum Value:	2.000	0.201
Maximum Value:	9800.000	5789.080
Mean Value:	651.787	416.165
Median Value:	376.000	181.950
Variance:	780272.375	290357.125
Standard Deviation:	883.330	538.848

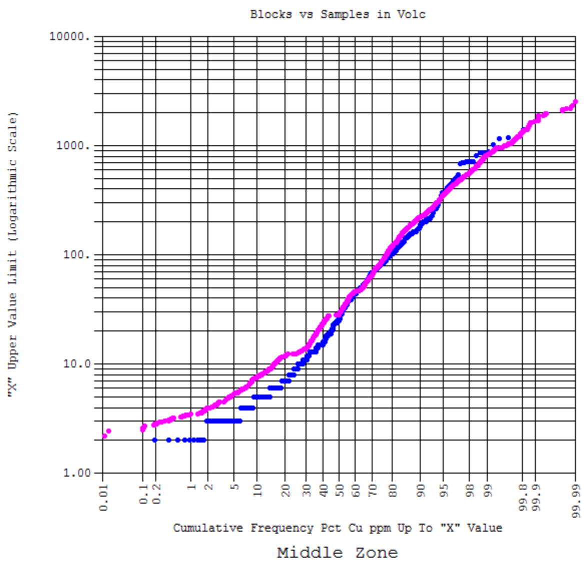


Middle Zone

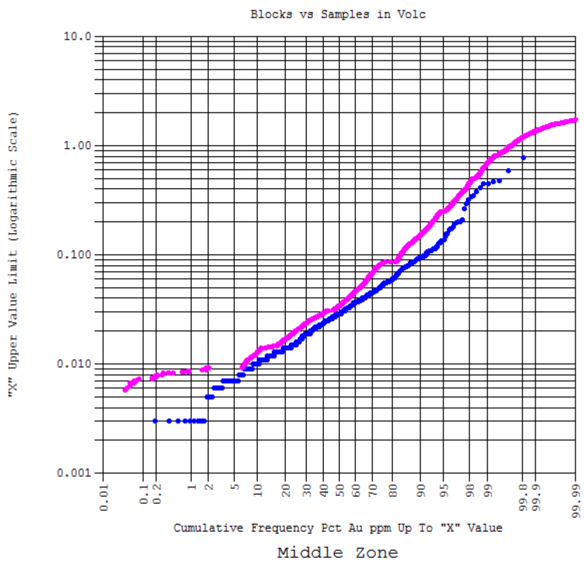
	Sample Au	Block Au
Number of Samples:	1740	435693
Number Missing:	0	0
Number Below Limits:	0	189632
Number Above Limits:	0	0
Number in Range:	1740	246061
Minimum Value:	0.003	0.004
Maximum Value:	3.390	3.400
Mean Value:	0.305	0.133
Median Value:	0.142	0.074
Variance:	0.168	0.032
Standard Deviation:	0.410	0.179

Volcanics Domain:

Block grades within the volcanics parallel sample grades extremely closely for copper, and are shifted somewhat higher for gold. The overall variance of the populations is extremely close, indicative of an estimation technique of very low smoothing. (Cu Variance reduction is 18.8%; Au block variance is actually 150% higher than sample variance.) This may be an artifact of data distribution, with higher grades proximal to the L1 and X1 domains, and lower grades more distal.



	Sample Cu	Block Cu
Number of Samples:	523	729355
Number Missing:	0	0
Number Below Limits:	0	505277
Number Above Limits:	0	0
Number in Range:	523	224078
Minimum Value:	2.000	1.311
Maximum Value:	1570.000	2987.384
Mean Value:	85.512	86.847
Median Value:	25.000	28.598
Variance:	30921.971	25169.557
Standard Deviation:	175.846	158.649



	Sample Au	Block Au
Number of Samples:	523	729355
Number Missing:	0	0
Number Below Limits:	0	505190
Number Above Limits:	0	0
Number in Range:	523	224165
Minimum Value:	0.003	0.004
Maximum Value:	0.809	2.200
Mean Value:	0.050	0.074
Median Value:	0.029	0.034
Variance:	0.006	0.015
Standard Deviation:	0.080	0.124

15.0 Mining

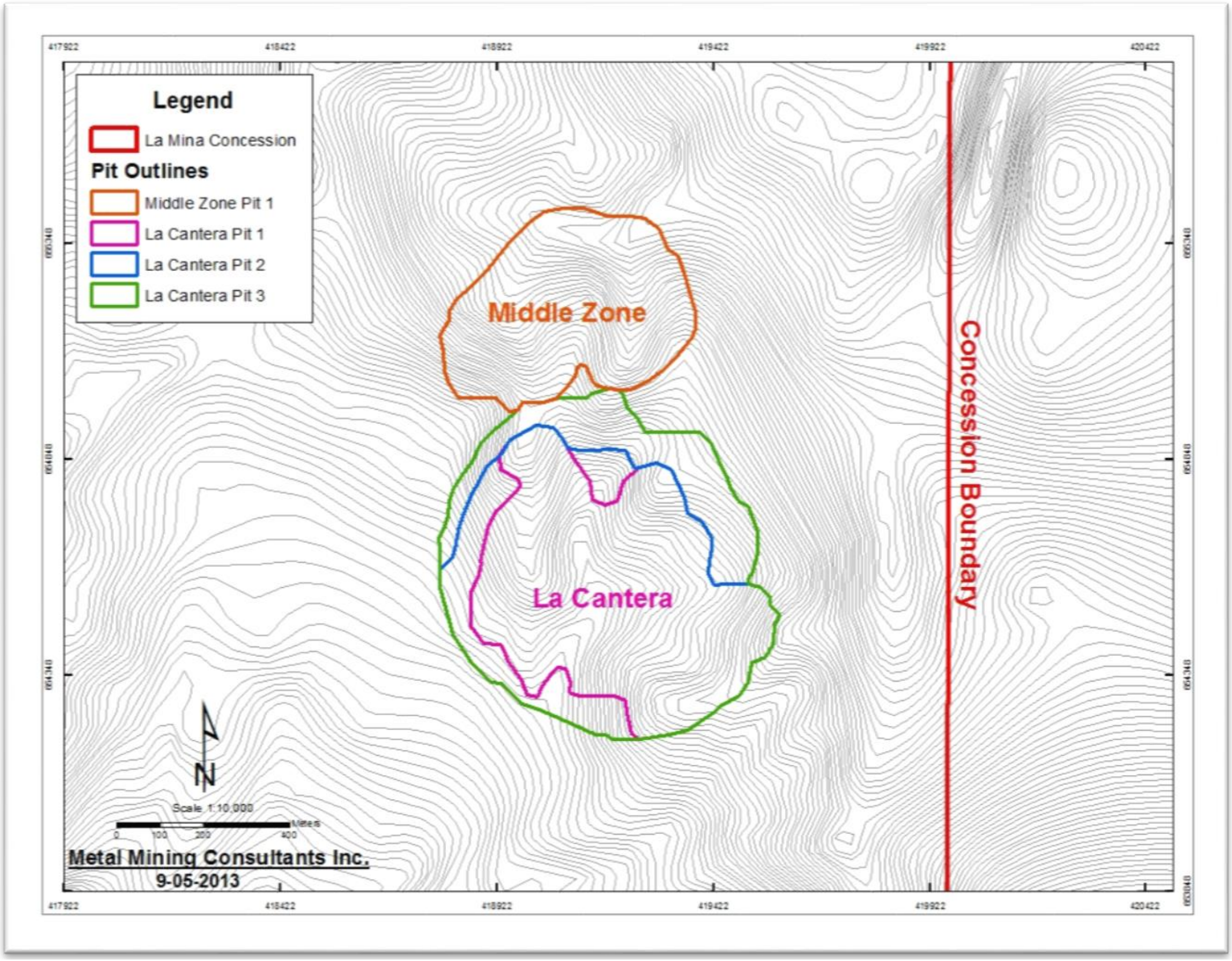
MMC recommends that conventional truck and shovel open pit mining methods be used in order to best exploit the resources at the La Mina Project. This approach is well suited for these near surface, disseminated deposits. Mine schedules have been developed based on Inferred resources. Table 15.1 shows average yearly production for the first eight years of mining. This is a new mining schedule based on updated Costs (September 1, 2013).

Table 15.1 Estimated Production and Mill Recoveries for La Mina Project, Colombia

Production	LOM	Avg / Yr
Mining		
Total Tonnes Mined (Ore + Waste)	282,300,000 mt	29,050,000 mt
Total Ore Mined	42,500,000 mt	4,375,000 mt
Total Waste	239,800,000 mt	24,675,000 mt
Stripping Ratio (waste to ore)	5.6	5.6
Mill Recoveries		
Gold Recovery	90%	90%
Copper Recovery	88%	88%
Silver Recovery	30%	30%
Metal Production		
Gold in Concentrate	907,400 oz	93,409 oz
Copper in Concentrate	200,368,886 lbs	20,626,209 lbs
Silver in Concentrate	780,703 oz	80,367 oz

Open pit mining will take place two distinct areas: La Cantera and Middle Zone. La Cantera consists of a single pit mined in three phases. Middle zone consists of a single phase pit. The pit and phase outlines are shown in Figure 1.1. All pits and phases were defined by Whittle Optimised Pit Shells based on the resource models described in Section 14. Dilution was assumed to be included in the model blocks, given the size of the blocks relative to mineralized zones and loading equipment. Mining would take place on 10m benches using haul roads with maximum 10% grades for access.

Figure 15.1 Potential Open Pit Mining Locations



15.1 Surface Mining Geotechnical Parameters

No site specific geotechnical studies have been undertaken to date.

15.2 Pit Optimization

The process of pit optimization utilized Gemcom Whittle™ software to determine pit extents. The project consists of two separate block models for La Cantera and Middle Zone. The pit optimization steps are as follows:

- The block models were created using Maptek Vulcan™ software as described in Section 14.
- The models were exported from Vulcan™ and imported into Gemcom Whittle™ Software.
- Middle Zone was reblocked so that the original 5m square blocks were combined into 1m square blocks.

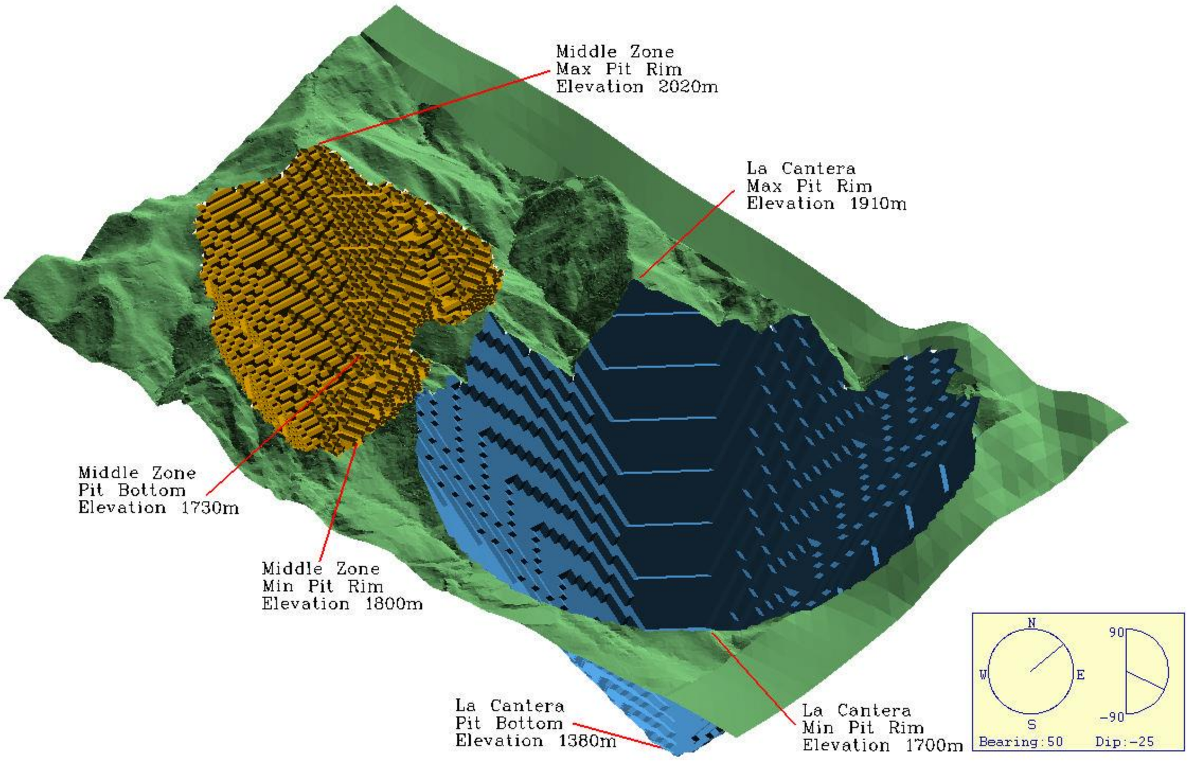
- Nested pits based on varying metal prices were optimized using the parameters in Table 15.2.
- Three specific pit shells were chosen for La Cantera in order to divide the ultimate pit into minable phases.
- Pit Shells were adjusted to meet a minimum mining width of 60 meters using the Whittle^{TM} Mining Width module.

Table 15.2 Input parameters for the Whittle Analysis

Whittle Inputs	Value	Unit
Slope Angle	50	°
Mining Cost	$1.90	USD
Processing Cost	$5.87	USD
G&A	$0.92	USD
Metal Prices		
Au	$1,400	USD
Ag	$20.00	USD
Cu	$3.25	USD
Recovery		
Au	90	%
Ag	30	%
Cu		
La Cantera	80	%
Middle Zone	90	%

As seen in Figure 15.1 the La Cantera and Middle Zone pits lie adjacent to each other making it possible to combine pits as a single operation. Given the steep terrain the pit rim elevations vary greatly. The La Cantera pit has a minimum pit rim elevation of 1700m and a maximum elevation of 1910m. The pit bottom reaches 1380m elevation giving the pit an average total depth of 420m. The Middle Zone is considerably smaller and pit lies directly north of the La Cantera pit. It has pit rim elevations from 1800m to 2020m with the pit bottom at 1730m. This gives the Middle Zone pit an average depth of 180m. Figure 15.2 shows a three dimensional view of the optimized pits and topography. The La Cantera pit is shown in blue and the Middle Zone pit in orange.

Figure 15.2 Three Dimensional View of Pits



The resulting minable resource from whittle optimization is shown in Table 15.3. This totals 36.8 million tonnes of mill feed with an average stripping ratio of 4.4.

Table 15.3 Estimated Production and Mill Recoveries for La Mina Project, Colombia		
Production	LOM	Avg / Yr
Mining		
Total Tonnes Mined (Ore + Waste)	282,300,000 mt	29,050,000 mt
Total Ore Mined	42,500,000 mt	4,375,000 mt
Total Waste	239,800,000 mt	24,675,000 mt
Stripping Ratio (waste to ore)	5.6	5.6
Mill Recoveries		
Gold Recovery	90%	90%
Copper Recovery	88%	88%
Silver Recovery	30%	30%
Metal Production		
Gold in Concentrate	907,400 oz	93,409 oz
Copper in Concentrate	200,368,886 lbs	20,626,209 lbs
Silver in Concentrate	780,703 oz	80,367 oz

15.3 Production and Scheduling

Mineralized material will be processed at a rate of 12,500 tonnes per day or 4.6 Million tonnes per year. This gives La Mina a mine life of slightly over eight years. Mining will begin with the La Cantera pit. All three phases of La Cantera will be mined before the Middle Zone pit is mined. Overburden stripping requires maximum mining rate 32 million tonnes per year. This rate is maintained for the first 5 years of production with the mining rate greatly reduced in the final four years. The mine schedule was developed in Gemcom Whittle. A long range stock pile is employed to improve initial grades and smooth mining rates over the mine life. Mining rates by phase are listed in table 15.4.

Table 15.4 Mined Tonnes by Phase									
Phase/Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
La Cantera 1	32,000,000	5,307,508	-	-	-	-	-	-	-
La Cantera 2	-	26,692,492	32,000,000	3,941,060	-	-	-	-	-
La Cantera 3	-	-	-	28,058,940	30,582,141	-	-	-	-
Middle Zone	-	-	-	-	-	15,399,571	13,253,343	10,603,714	559,713

15.4 Open Pit Mining equipment

The following is a preliminary list of mining equipment to be used in the La Mina Open pit.

Equipment	Units	Size	Number
Hydraulic Shovel	Cubic Meters	8.4	1
Front-end Loaders	Cubic Meters	16.1	2
Haul Trucks	Tonnes	100	20
Rotary Drills	Centimeters	27.94	3
Bulldozers	Kw	140	5
Graders	Kw	140	2
Water Trucks	Liters	26,500	1
Tire Trucks	kg-gvw	11,000	1
Bulk Trucks	kg/minutes	450	1
Light Plants	kW	10.1	4
Pumps	kW	74.5	3
Pickup Trucks	number		6
Buildings			
Shop	Square meters	2400	1
Dry	Square meters	720	1
Office	Square meters	715	1
Warehouse (all)	Square meters	1400	1
Anfo Storage	Square meters	130	1

15.5 Waste Rock Dump

The mine waste rock dumps (WRD) would be placed adjacent to the mine, south of the La Cantera pit. The topographic map indicates that there will be ample room for the anticipated volume. Additional studies are necessary to design the WRD to assure stability and to provide facilities to capture seepage water.

16.0 Mineral Recovery

16.1 Plant Design

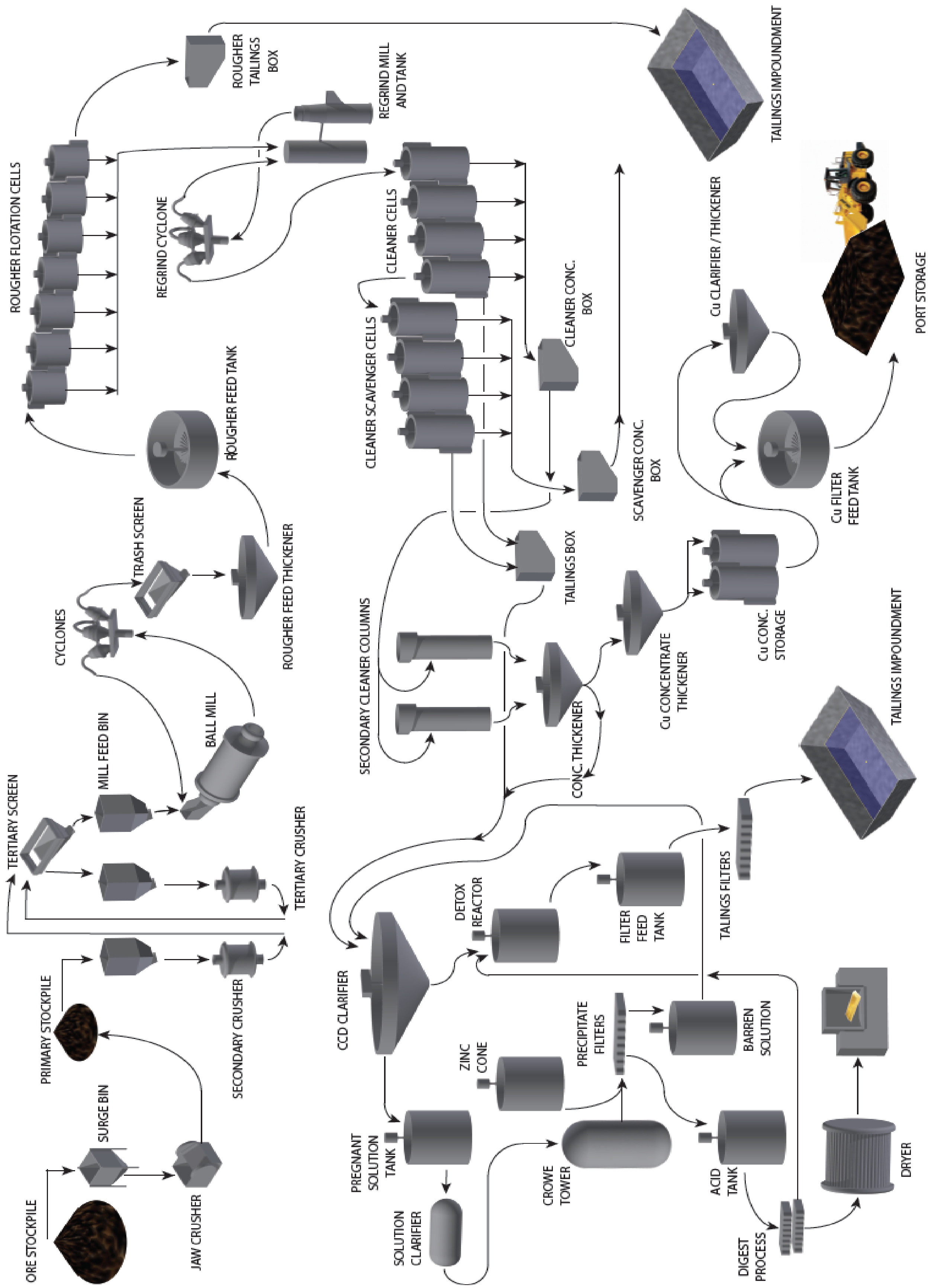
Ore from the La Cantera and the Middle Zone pits will be treated in a moderately sized conventional concentrator produce a copper concentrate and a smaller gold leach circuit operating on the cleaner tails. The concentrator will initially treat a nominal 12,500 metric tonnes per day (t/d) of ore supplied from the La Cantera pit; later, ore will be received from the Middle zone pits.

The process plant is designed to process ore at a head grade of 0.6% Cu and 0.9 grams per tonne gold Au. These levels are higher than the highest sustained head grades of 0.3% Cu and 0.8 g/t Au, but the design provides the flexibility to accommodate a wide range of head grades over the project life. The plant design also allows for 20% day-to-day fluctuations in throughput. The process includes the following facilities:

- Crushing and grinding to liberate minerals from the ore
- Froth flotation to separate most of the copper and gold minerals from minerals of no commercial worth
- A small cyanide leach plant that will recover gold on the flotation cleaner tails as a dore'
- Facilities to store tailings and provide reclaim water for the process
- Facilities to remove water from the products and to ship concentrates to market.

A process flow diagram is provided in Figure 16.1. The following descriptions of the main process circuits are based on all ore being sourced from the La Cantera pit during the first years of operation.

Figure 16.1 Flow Diagram



16.2 Operating Schedule and Availability

The crushing circuit will be designed to run on a basis of two 12-hour shift per day for 10 hours per shift, for 350 days per year. The grinding circuit and rest of the processing plant will be designed to operate on the basis of two 12-hour shifts per day, for 350 days per year. The throughput capacity will be 12,500 tonnes/day (t/d).

The crushing circuit availability will be 92%. This will allow sufficient downtime for the scheduled and unscheduled maintenance of the crushing and process plant equipment.

16.3 Processing Facilities

16.3a Primary Crushing

A conventional jaw crusher facility will be designed to crush run-of-mine (ROM) material to reduce the incoming feed material from the open pit mine at a total average feed rate of 650 t/h.

The major equipment and facilities in this area includes:

- Stationary grizzly,
- ROM surge bin,
- Vibrating grizzly,
- Jaw crusher,
- Secondary feed stockpile,
- Belt feeders,
- Conveyor belts, metal detectors, self-cleaning magnets and belt tear detectors,
- Belt scale,
- Dust collection system.

Haul trucks from the mine will dump ROM material onto a ROM surge stockpile. Material will be fed by a front-end loader dumping feed material into the 60-tonne capacity ROM surge bin. The surge bin will be equipped with a stationary grizzly with 600 mm × 600 mm square apertures to prevent oversize rocks from entering the circuit. A rock breaker will be available to break up any rocks larger than 600 mm which cannot pass through the stationary grizzly. The capacity in the surge bin will provide a steady feed of ore to the jaw crusher.

The ore will feed a vibrating grizzly for sizing and minus 150 mm material will bypass the jaw crusher and report directly to the primary stockpile via the stockpile feed conveyor system. Oversize material will be reduced to 80% minus 150 mm in the jaw crusher and will be discharged onto the stockpile feed conveyor via the jaw crusher discharge conveyor.

The crusher facility will be equipped with a dust collection system to control fugitive dust that will be generated during the crushing and conveying operations.

16.3b Primary Stockpile and Reclaim

The crushed ore will be conveyed to the top of the primary stockpile. The total live capacity of the stockpile will be approximately 12,500 live tonnes equivalent to the throughput rate for one day.

From the stockpile, a front-end-loader (FEL) will feed a conveyor, which will transfer the ore to the secondary crushing circuit.

16.3c Secondary and Tertiary Crushing

The secondary and tertiary cone crushers will crush the coarse feed material to 80% passing 12.5 millimeters (mm) for the milling process. The crushing and screening will be conducted as a dry process. The main items of equipment in the secondary and tertiary crushing circuit will be the following:

- Crusher feed bins
- Conveyor belts
- Cone crushers
- Vibrating sizing screen
- Metal detector
- Belt magnet
- Belt feeders
- Mill feed bin
- Cone crusher area dust collection system

The material from the primary crushed stockpile will be reclaimed using feeders and a conveyor and discharged to the secondary crusher feed bin. Material in the secondary bin will be metered into the secondary cone crusher via a belt feeder. The secondary cone crusher will produce a product size P_{80} of 25 mm.

The crushed material from the secondary crusher will be discharged onto the screen feed conveyor, which will deliver the ore to vibrating sizing screens. The screens will be a double-deck vibrating screen. The top-deck will have 30 mm square apertures and the bottom-deck will have 15 mm square apertures. The vibrating screen will be 2,000 mm wide and 5,000 mm long. Oversize from the vibrating screens will report to a conveyor that will deposit the material in a bin over two tertiary cone crushers. Feeders under the bin will distribute the material to two tertiary cone crushers. The tertiary cone crushers will produce a product that is 80 % passing 12.5 mm. The discharge of the tertiary crushers falls to the conveyor feeding the screen, closing the circuit.

The screen undersize, the 80% minus 12.5 mm material, will be conveyed to the Mill Fine Ore Bin.

A dust extraction system will remove the dust generated by the crushers. The dust collected by the system will be deposited onto the conveyor feeding the mill feed bin for subsequent processing.

16.3d Grinding Circuit Operation

The grinding circuit will reduce the size of the crushed material to the particle size required for the flotation process. The grinding process will be a single-stage operation with the ball mill in closed circuit with classifying cyclones. The grinding will be conducted as a wet process. The grinding circuit has the following main items of equipment:

- Conveyor belt feeders,
- Conveyor belt,
- Conveyor belt weigh scale,
- Ball mill, one unit 5,000 mm diameter × 9,000 mm long,
- Mill discharge pumpbox,
- Cyclone feed slurry pumps,
- Classification cyclone cluster,
- Vibrating trash screen,
- Sampler system.

The material in the mill feed bin will be drawn out under controlled feed rate conditions using belt feeders. These feeders will discharge the material onto a conveyor belt feeding the ball mill. A belt scale will control the feed to the ball mill. Water will be added to the ball mill feed material to assist the grinding process. The ball mill will operate at a critical speed of 78%.

The ball mill will have a classification circuit consisting of a mill discharge pumpbox, cyclone feed pumps and a classifying cyclone cluster. The discharge from the ball mill will be directed into a mill discharge pumpbox where dilution water will be added as required to adjust the slurry density for cyclone classification. The slurry in the mill discharge pumpbox will be pumped to a cyclone cluster for classification. The cut size for the cyclones will be at a particle size of P_{80} of 106 µm, and the circulating load will be 300%. The cyclone underflow will be returned to the ball mill as feed material.

The average milling rate will be 650 t/h of new feed which will constitute the feed to the flotation circuit. The overflow from the classification circuit will initially feed a vibrating trash screen. The trash screen will have a deck equipped with 1 mm × 10 mm slotted apertures for sizing. Process water will be used to spray the deck of the screen to wash off any oversize tramp material or trash.

This will be collected in a tote which will be emptied as required. The trash screen underflow will be discharged by gravity into the flotation feed thickener ahead of the flotation process. The pulp density of the screen underflow slurry will be approximately 34.5% solids.

Provision will be made for the addition of lime to the ball mill for the adjustment of the pH of the slurry in the grinding circuit prior to the flotation process.

Grinding media will be added to the mill in order to maintain the grinding efficiency. Steel balls will be added periodically using a ball charging kibble.

A mass flowmeter will monitor the process feed rates.

16.3e Rougher Flotation and Regrind

The bulk rougher flotation circuit is shown in Figure 15-1. Grinding cyclone overflow from all four ball mills will collect in a single vessel for distribution to one row of rougher flotation cells. The distributor dissipates the energy of the cyclone overflow and allows air trapped in the pipe to vent. It also decouples the bulk flotation from grinding.

One row of 28.3 m^3 tank cells will provide approximately 30 minutes of residence time.

Frother and collector may be added to individual cells at the first and sixth cells. The reagent system is discussed further in Section 15.7a

Tailings from the rougher bank will be sampled by sample pumps immersed in the up-flowing tails boxes of the last cells in line. The banks will discharge into a floor launder along with other miscellaneous process waste streams. The combined tailings stream will be mixed in a labyrinth at the end of the launder before it passes through a metallurgical sample cutter and falls into a final tails collection box. Two high-density polyethylene tailings lines will conduct the tailings by gravity to the cyclone house at the tailings impoundment.

Concentrate from the rougher flotation bank, at approximately 5% copper, will consist of about 12% of the flotation feed flow. Before upgrading in cleaner flotation, the concentrate will be reground to 80% finer than 35 µm to complete the liberation of mineral values from gangue. The combined concentrate from the flotation banks will be collected in pumpbox at the ends of the bank and pumped to two clusters of cyclones. Each cluster will have three 71 mm cyclones, 2 of which are expected to be operating at any one time. Standby pumps are provided; the discharges of each pair of pumps will be switched automatically by Teck-Taylor valves. Cyclone overflow from the cluster will be sampled, collected in a pumpbox, and pumped to the first cleaner feed distributor.

Cyclone underflow from each cluster will be fed to a regrind ball mill, each of 250 kW. The underflow from the cyclones will be introduced directly into the regrind mill.

16.3f Cleaners

The reground rougher concentrate will be cleaned in one stage of mechanical cells and one stage of flotation columns. Figure 16-1 is a simplified flow diagram of the circuit. In the cleaner circuit the pH is elevated to reject pyrite by adding lime to the regrind mills and the first mechanical cells. Sodium cyanide solution is also added to depress pyrite; provision is made for adding frother and collector throughout the circuit.
Regrind cyclone overflow will be pumped to a distributor that splits the flow between two banks of eight 100 m^3 tank cells, which constitute the first cleaners. The first cleaners will have 20 to 30 minutes of residence time and will be pulled moderately hard to achieve recovery in the cleaner circuit. Cleaner tails will be collected in a launder, sampled, and then piped to the cyanide leach circuit. The cleaner tails after leaching will be deposited below the surface of the water in the tailings pond to prevent acid formation due to oxidation of the sulphide content.

The concentrates from the first cleaner banks will be combined and upgraded in second cleaners. The second stage of cleaning consists of six column cells in parallel. All of the column cells will be approximately 2m in diameter x 14m high. The wash water will be provided by spray bars, and the flotation air will be dispersed by injecting it into a recirculating stream of tailings. The second cleaner tails pumped directly to the leach feed thickener, with the first cleaner tails.

The concentrate will be 27% to 28% Cu on average with a gold grade of between 0.3% and 1%, depending on the concentration of gold in the ore feed.

Vehicular access is provided to a laydown area at the tail of the banks.

16.3g Copper Concentrate Thickening

Copper concentrate from the second cleaner columns will collect in a pipe launder and flow by gravity to a 6 m diameter thickener. This thickener is operated without flocculant to avoid compromising the subsequent flotation process. Figure 15.1 contains a simplified flow diagram of the concentrate thickeners and stock tanks. The bulk concentrate will be thickened to 65% solids and pumped to a pair of stock tanks, and then to the pressure filters.

Thickener overflow water will be returned to the process water pond for re-use in the process. The stock tanks provide nine hours' storage capacity between them, sufficient for a normal maintenance shutdown of the plant.

The copper concentrate, will be thickened to 65% solids in a 6m diameter high-capacity thickener.

Thickener underflow will be pumped into a storage tank and then pumped to a filter plant.

16.4 Concentrate Tails

Plant Site, and Tailings Storage Facility

16.5a General

The concepts presented in this section are based on evaluations of viewing topographical maps of the property and on past experience with gold-copper tailings operations. A definitive geotechnical site reconnaissance and investigation as well as more detailed engineering studies are required for confirmation or modification of these plans which are intended only to serve as a starting point for the pre-feasibility study design of the project.

16.5b Plant Site

The plant site will require enough area for the processing plant, truck shop, crusher, and ore stockpiles. Cursory review indicates that a suitable area that appears to require the least amount of earthwork is located in the relatively flat spaces to the immediate west and southwest of the mine location (see Figure 16.1A). Future reconnaissance and investigations will need to be completed to confirm this concept.

16.5c Tailings Storage Facility

The conceptual plan for the Tailings Storage Facility (TSF) is based on a total of 42.6 million tonnes of tailings deposited at a rate of 12,500 tonnes/day, 350 days per year. This equates to 9.7 years of life. Assuming an in-place density of 1.5 tonnes/ cubic meter for the deposited tailings, the total storage volume required is 28,400,000 cubic meters.

Review of the topographical map indicated a potential location for the TSF in the southwestern portion of the property (see Figure 16.2). To contain the expected volume, the proposed containment dam will be approximately 1100 m long with a maximum height of 160 m. The ultimate elevation of the tailings surface will be approximately 1140.

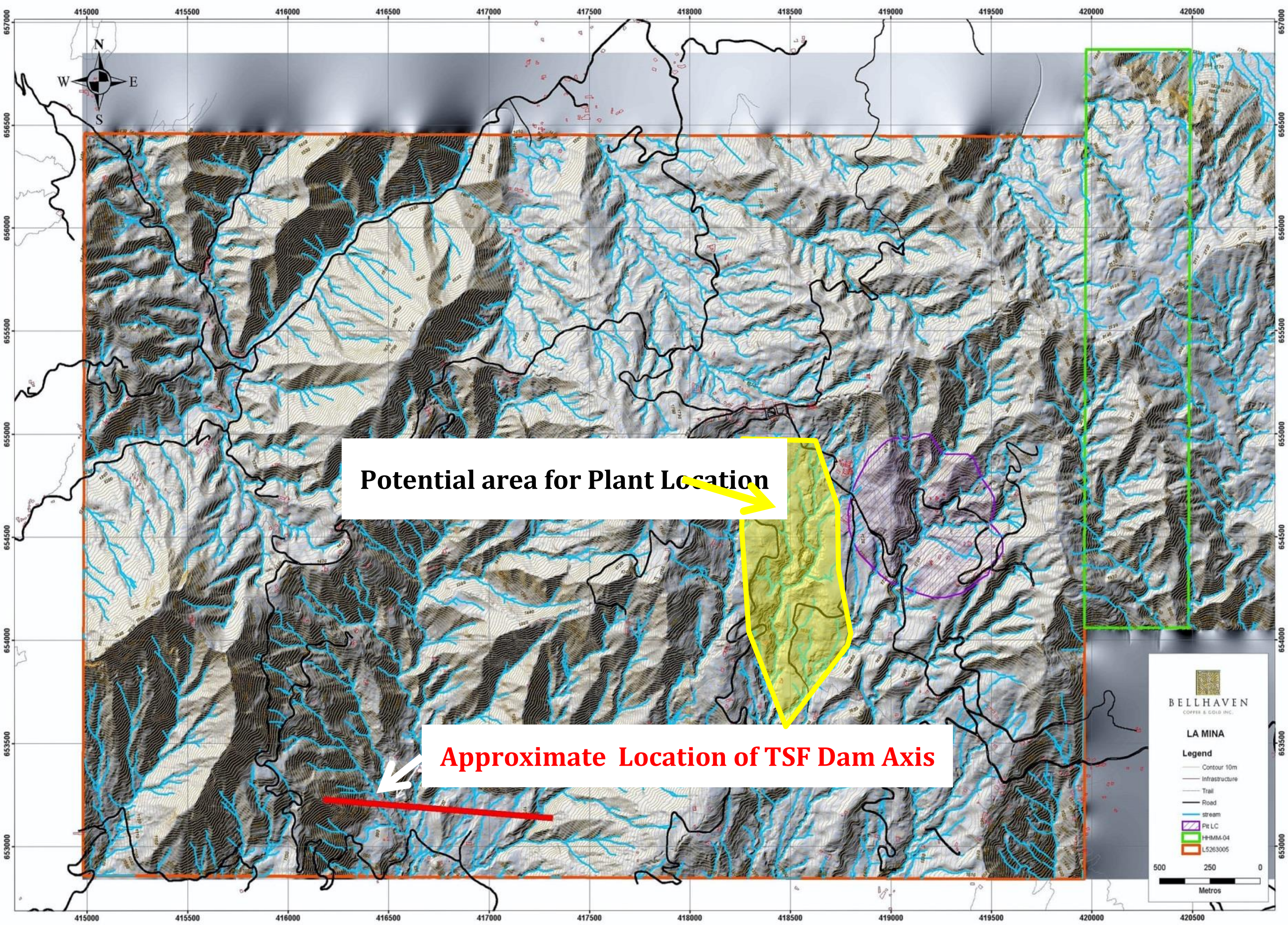
The containment dam would be built employing an initial starter dam with successive height increases constructed in a downstream configuration. The starter dam would be composed of local low permeability soils; the design would include a drainage system and, if appropriate, a liner on the upstream slope. The successive raises would be constructed of the coarse sand underflow portion of cycloned tailings slurry compacted to a satisfactory density, provided sufficient coarse materials were generated in the processing operations. Otherwise, the additional raises could be composed of mine waste rock, if the rock is not Potentially Acid Generating (PAG). If it is, then materials (preferably permeable) from a nearby quarry or borrow pit will have to be used.

Foundation preparation would consist of vegetation, topsoil and unsuitable material excavation to expose a suitably competent foundation to support the TSF embankment and basin. Excavation depths of topsoil and unsuitable materials would be estimated based on the results of the geological and geotechnical investigations. The topsoil would be stockpiled separately for future reclamation purposes, while unsuitable materials would be disposed of in appropriate places.

A tailings deposition plan would likely consist of multiple deposition points from the crest of the TSF, with frequent rotation of the active points to build the deposit in thin layers. The supernatant water recovery would be by barge pump.

Several water courses pass through the TSF basin. These will have to be diverted around the TSF with a series of dams and canals. Hydrologic studies will have to be completed to properly size these structures.

Figure 16.2 Location of Plant site and TSF dam axis



16.5 Copper Concentrator Tails

The final rougher scavenger tails will be the final plant tailings. The tailings will be pumped from the final scavenger cell to a tailings thickener and then to the tailings pond.

Slurry will leave the detoxification reactor via gravity overflow and enter the pumpbox which will feed the flotation tailings pond.

16.6 Project Reagent Handling and Storage

Various chemical reagents will be added to the process to facilitate process, and the subsequent settling of the solids in the thickeners.

The preparation of the various reagents will require the following equipment:

- Bulk handling system,
- Mix and holding tanks,
- Metering pumps,
- Transfer pumps,
- Flocculent preparation facility,
- Lime slaking and distribution facility,
- Eye-wash and safety showers,
- Applicable safety equipment.

Chemical reagents will be added to the grinding, flotation, circuits to enhance copper recovery in flotation. Fresh water will be used in the making up or the dilution of the various reagents that will be supplied in powder/solids form, or which require dilution prior to the addition to the appropriate circuit. These solutions will be added at the designated points of addition of the grinding, and flotation circuit using metering pumps. The solid reagents will generally be made up to the required solution strength in a mix tank, and then transferred to the holding tank from where the solution will be pumped to the point of addition.

Flocculent will be prepared in the standard manner as a dilute solution with 0.25% solution strength to the thickener feed wells were it will be further diluted by internal dilution water.

Lime will be delivered in bulk and be stored in a silo. The lime will be prepared in a lime slaking system as 20% concentration slurry. This lime slurry will be pumped to the points of addition using a closed loop system. The valves will be controlled by pH monitors, which will control the amount of lime added.

To ensure containment in the event of an accidental spill, the reagent preparation and storage facility will be located within a containment area designed to accommodate 110% of the content of the largest tank. In addition, each reagent will be prepared in its own bunded area in order to limit spillage and facilitate its return to its respective mix tank, or its disposal. The storage tanks will be equipped with level indicators and instrumentation to ensure that spills do not occur during normal operation. Appropriate ventilation, fire and safety protection and MSDS stations will be provided at the facility.

16.7 Project Process Water

16.7a Overall Project Water

A water supply system for fresh water and process water will be provided to support the operation.

Process water generated as thickener overflow solution, will be returned to the process water tank.

16.7b Overall Project Process Water

Process water generated as thickener overflow solution, will be returned to the process water tank.

16.7c Overall Project Fresh Water

Fresh and potable water will be supplied to a fresh/fire water storage tank from the sourced wells.

Fresh water will be used primarily for the following:

- Firewater for emergency use,
- Cooling water for the mill motor and mill lubrication system,
- Gland service for the slurry pumps,
- Reagent make-up,
- Potable water supply.

The fresh/fire water tank will be equipped with a standpipe which will ensure that the tank has at least 40 m^3, equivalent to 2 hours supply of firewater for an emergency.

The potable water from the fresh water source will be stored in the potable water storage tank prior to delivery to the various service points.

16.8 Overall Project Air Service

Separate air service systems will supply air to the following areas:

- Crushing: high pressure air for the dust collection system and other services will also be provided by a separate air compressor
- Instrumentation: instrument air will come from the plant air compressors and will be dried and stored in a dedicated air receiver.

16.9 Conclusions

InterPro has assumed a conventional copper flotation plant. Reviewing the flotation results indicated that the second cleaner tails contains as much as 5 grams per tonne of gold. A cyanide circuit may be looked at in the future.

16.10 Recommendations

InterPro has assumed, for this report, that a conventional crush, grind, flotation plant would be most effective for this ore. Depending on overall power availability, capital and operating cost preliminary studies considering High Pressure Grinding Mills, SAG mills need to be considered for crushing and partial grinding, Bellhaven also needs to consider the effectiveness of a Gekko cyanide leach system to increase gold recovery from the cleaner tails. These studies should not be undertaken until the resource is more fully defined to determine size of the operations.

17.0 INFRASTRUCTURE

17.1 Transportation

La Mina is well situated in terms of access to regional highways for both north and south conveyance. Highway 25 connects major transportation hubs in the north and south of the country, and nearby local roads have good access to the highway. The roughly 11[kM] of off-highway roads needed to access the mine site will require some expansion and drainage improvements to allow heavy machinery and equipment to reliably pass, but nothing exceptional. Road transport of goods is the primary method of delivery accounting for more than seventy percent of material transport in Colombia.

Rail service is not the prime carrier in Colombia which may offer benefits in pricing. Rail only transports around twenty-five percent of all national goods. Given the rail access available from the nearest industrial city of Medellin northward to the ports of Santa Marta and Cartagena, bimodal transport may prove profitable depending on the location of the ore smelter. In the south only the city of Cali is connected to its nearby port of Buenaventura by rail. If northbound rail service from nearby the mine is desired, decommissioned railway tracks lay within 20[kM] and while repairs would be required, it may be cost saving over time.

17.2 Power

Favorable investment conditions have helped electricity generation keep up with demand and avoid any major blackouts since 1991. In spite of this improvement, electricity transmission lines still do not reach some geographically isolated areas of the country, due to its proximity to Medellin, electrical power will not be an issue for La Mina project.. The majority of generated power is produced from hydroelectric plants with most of the rest coming from biomass oxidation. The mine site lies within a few dozen kilometers of a 200[kV] power substation, though the additional output capacity of this substation is unknown. Local backup power generation would be advisable.

Colombia has some reserves of natural gas, and coal which are exported. A nearby gas pipeline may be welcome for the generation of power, should auxiliary power be required. Coal delivery though, may prove problematic without nearby rail service.

17.3 Labor

Unskilled labor is available in the area., though with an overall unemployment rate below ten percent it may be difficult to attract higher skilled workers. Locally, there exists a reasonably large class of high school educated localsartisanal miners however, which may provide a workforce with some inkling of the process and methods at reasonable cost.

17.4 Water

Water at the site is plentiful with access to seasonal and year-round streams. On site wells should also produce exceptionally depending on location. Normal water requirements for a typical copper concentrator is 1 cubic meter per tonne treated (this includes recycle from the tailings pond). In the project area, InterPro sees no reason why water should be a problem, but as found in Peru, this needs serious investigation.

Current exploration operations are acquiring water from the aqueduct that supplies water to La Mina. The amount used is minimal (0.27% of the current flow rate) during the rainy season. However, the use of water from this source during the dry season may cause conflicts with the La Mina community. Therefore, it seems appropriate, as noted by ENVIRON in the Scoping Study, that Bellhaven establish a more reliable water source during construction and operations of the Project. A complete water resources study (surface and groundwater) should be completed over a number of years to provide baseline information that will allow the Company to make sound judgments on water acquisition and to provide a basis for determining potential impacts and defending the project from frivolous damage claims.

17.5 Security

Colombia, especially the Medellin area has made great strides in the protection of industry and persons since the 1980s. However, local narcotics forces still endanger commerce to some degree. Measures should be taken against non-governmental actions to avoid such inconveniences; such as transport of ore, and electrical power at the mine site.

Care should also be given in the selection of local heavy equipment lease, as extra-governmental bodies may control the majority of this equipment in the area.

18.0 ENVIRONMENTAL AND SOCIAL IMPACTS

18.1 Projected Environmental Activities for the Project

The Bellhaven Project intends to comply with applicable environmental and social regulatory requirements of the Colombian and Regional regulatory agencies and with International standards as dictated by the Equator Principles, International Finance Corporation Principles, Performance Standards and Guidelines, and the World Bank Guidelines. The development of an Environmental and Social Impact Assessment (ESIA) will be required by the government of Colombia to acquire a mining operations permit and by Western Lenders as part of their requirements to provide support for project development.

The ESIA should include a baseline assessment of the site, expected impacts due to Project activities, mitigation actions required to prevent environmental and social impacts, and monitoring programs to determine the success of mitigations. Development and implementation of detailed environmental and social management plans will be required to address construction, operations, closure and post-closure periods of the Project. Closure and post-closure management plans should include appropriate maintenance and continued monitoring of the site, pollution emissions and potential impacts. The duration of monitoring and subsequent mitigations (if required) will be extended through the post-closure period, which should be defined on a risk basis with typical periods requiring a minimum of 5 years after closure or longer. The post-closure period associated with this project will likely extend beyond the 5-year period due to the existence of tailings in a high rainfall area and the potential impact of acid rock drainage (ARD) to the water resources of the area.

18.2 Status of Current Social/Community Relations

The Bellhaven Project is aware of the opposition toward mining in Colombia. To deal with the antagonism, Bellhaven has established a dedicated team of social specialists to implement a stakeholder engagement program to establish a positive relationship with the communities primarily La Mina, Fredonia and Venecia. An ad hoc grievance redress mechanism is in place to deal with complaints and concerns resulting from Project activities.

The Bellhaven Project has developed a reputation with the adjacent village La Mina of being a good citizen with the work accomplished to date that includes providing jobs. It will be critical to maintain and build on these positive relationships to acquire the social license to operate if the Project moves forward.

A social baseline program is being established to engage the community during the planning, operations, closure and post-closure stages of the project. The people in the area should have the opportunity to provide input into the assessment of project impacts and potential mitigations.

It will be important for the social team to initiate programs that move the Project toward compliance with international requirements.

18.3 Compliance with International Environmental/Social Requirements

The issue of compliance with International requirements is important for this Project as Bellhaven is considering acquisition of project financing through Equator Principles compliant Lenders. A considerable amount of work is required to meet the basic requirements of the International principles, standards and guidelines.

A primary component of the International requirements is the development of an Environmental Social Impact Assessment that provides a complete baseline evaluation of the major environmental and social/community components of the project. Baseline information provides a basis for the determination of potential environmental and social impacts, appropriate mitigation measures required to diminish impacts and monitoring programs to determine the success of mitigations and the need to modify mitigation measures to assure success. Other important components of International requirements include: (1) development of implementation of environmental management/action plans for the construction, operations, closure and post-closure periods of the project; (2) development and implementation of social/community management/action plans covering all components of the project; (3) closure management/action plans; and (4) post-closure management/action plans. This evaluation of the project provides the information required to determine whether or not the project can be completed without significant degradation of the environment and the social well-being of the impacted communities.

18.4 Establishment of Baseline for Environmental and Social Components of the Project

Project plans and the information needed to develop a fit for purpose ESIA meeting the basic requirements of the International principles, standards and guidelines must be developed. A detailed baseline program for the environmental and social aspects of the Project must be established and implemented to acquire information to support development of an ESIA. The minimum baseline data collection is usually considered to be one (1) year. The baseline programs required include: (1) air quality monitoring and modeling; (2) Noise and vibration evaluations; (3) surface water monitoring and modeling; (4) groundwater monitoring and modeling; (5) soil survey; (6) biodiversity including flora and fauna with evaluation of habitat type; (7) geologic evaluation with respect to waste rock and the potential for acid generation and potential contamination of water resources with toxic elements; (8) waste rock storage location evaluation; (9) tailings disposal and potential issues associated with the storage site; and (10) social/community related work including a census of local residences and land ownership, land-use, and community health and safety.

18.5 Project Permitting and Certification Requirements and Status

The Bellhaven Project has an exploration license (concession) for an area of approximately 1,794 ha located in the Department of Antioquai in northwest Colombia. Bellhaven has acquired the necessary permits to conduct an exploration program including specific activities such as solid waste management, industrial discharges, and environmental management of drilling platforms and water abstractions.

As noted previously in this section, an ESIA will be required by the Colombian government and Lenders addressing the proposed Project. The use of natural resources or the performance of activities that may affect the environment is subject to strict controls by the Colombian Government. An Environmental License is the main mechanism controlling the exploitation of the environment and natural resources. The Environmental License is required to initiate any project, operation or activity impacting the environment. The entity granting the Environmental License for mining operation is the Regional Environmental Authorities (CAR). The application for an Environmental License must describe every aspect of the project and include a request for all relevant permits and authorizations required for the use of the relevant natural resource. The major authorizations and permits required for the construction and operations of a mine include: (1) Decree 948 (1995) regulates the prevention and control of atmospheric contamination and includes provisions for air quality. The permit identifies the project, the authorized emissions and the quantity and quality characteristics; (2) Use of water is regulated by Decree 1541 (1978). The decree establishes two types of permits that are granted for the use of water: (i) concessions granted by CAR and (ii) permits for liquid residues or contaminants granted by CAR. The residue permit specifies the type of contaminant, quantity and quality applicable and will include the treatment system required; and (3) Resolution 8321 (1983) issued by the Department of Health regulates the maximum levels of noise emissions permitted. Special permits are issued to allow a person or company to exceed the maximum levels.

The Colombian regulations governing the direct or indirect use of water, air, and soil for the purposes of disposing of any waste is subject to payment meant to compensate for damages to the environment. The acquisition of an Environmental License is also subject to payment of fees by the petitioner. The fees are calculated based on the investment value of the project.

There are a number of methods to governmental authorities to secure compliance with environmental laws. The authorities my impose sanctions, penalties or fines. In addition, certain violations are considered criminal offenses, such as illicit holding or handling of hazardous substances, illicit use of biological natural resources, invasion of areas of ecological importance and illicit exploration and/or exploitation of mines.

18.5a Status of Permit Acquisition

An Environmental Social Impact Assessment (ESIA) addressing the Project proposed will be required by the Colombian Regulatory Authority and by Lenders. The effort required for compliance with international principles, standards and guidelines will require a minimum of one (1) year of baseline for the major components of environmental and social concern. The Environmental License and associated permits and authorizations noted in Section 18.4 must also be acquired once the ESIA is completed. At this time, the Project has not initiated the development of the ESIA and has not acquired any authorizations or permits to initiate construction of the Project.

18.5b Performance and Reclamation Bonding Activities

The Project will be required to develop a closure plan and to establish a fund to cover reclamation and closure costs as the Project becomes an operating facility. The establishment of a reclamation and closure fund is an important requirement of the International Principles, standards and guidelines.

18.6 Site Description: Requirements and Plans for Major Components of the Project

The main project facilities, site components and operations techniques will influence the potential impacts to the environmental and social aspects of the Project. Activities associated with the project must be explained thoroughly in an Environmental and Social Management System (ESMS). The ESMS will describe the activities/measures that will be used to mitigate the impacts expected to occur as a result of the project activities (environmental and social).

18.6a Environmental Management Aspects of the Project

The ESMS will include a number of comprehensive management/action plans addressing the requirements of PS1 (Equator Principles – Principle 1), including action plans for all activities such as biodiversity management, water management, erosion and sedimentation control, waste management (domestic and hazardous waste), and tailings and waste rock management.

18.6b Soil Salvage Operations

Topsoil will be removed from areas that will be disturbed prior to disturbance due to implementation of Project activities. The material will be stockpiled and stabilized using vegetation to prevent wind and water erosion. Ditches will be used around the stockpile to prevent water from eroding the material from the stockpile site. This plant growth material will be used to reclaim disturbed sites at the termination of their use. In addition, this material will also be used to cap structures such as the waste rock and the tailings storage facilities.

18.6c Access Road Upgrade

The access roads into the Concession from Fredonia (approximately 11 kilometers) and Venecia (approximately 10 km) are unpaved, quite narrow with numerous sharp bends, and in relatively poor condition. Bellhaven uses both roads but prefers the longer road from Fredonia as it is in slightly better condition. Project staff also reported that the Venecia road crosses a major geologic fault, which will likely become a maintenance issue in the future. Development of the Project would require a substantial investment in upgrading at least one of the roads. It is assumed that the access road from Fredonia will be upgraded and used as the primary access road.

18.6d Water Acquisition

Current exploration operations are acquiring water from the aqueduct that supplies water to La Mina. The amount used is minimal (0.27% of the current flow rate) during the rainy season. However, the use of water from this source during the dry season may cause conflicts with the La Mina community. Therefore, it seems appropriate, as noted by ENVIRON in the Scoping Study, that Bellhaven establish a more reliable water source during construction and operations of the Project. A complete water resources study (surface and groundwater) should be completed over a number of years to provide baseline information that will allow the Company to make sound judgments on water acquisition and to provide a basis for determining potential impacts and defending the project from frivolous damage claims.

18.6e Power Development

The source of power for the Operation has not been decided at the time of this evaluation. Power will either be generated on site using a gas, oil or coal burning facility or will be sourced from the grid to the Project site via a transmission line. The use of an established power source with a transmission line to the Project is the assumed source of power for this evaluation. The conveyance of power to the site by transmission line will require an associated right of way cleared of vegetation.

18.6f Waste Rock Disposal

Waste rock will be generated during construction as land is modified to fit the requirements for infrastructure and during operations removing materials to reach the ore bodies. Much of this material will likely be acid generating and has the potential to result in seepage characterized with low pH values, high levels of potentially toxic elements, and high salt concentrations. Mitigation actions will be required to prevent environmental impact.

As noted previously, the waste rock stored in the waste rock storage facility will likely be acid forming. As a result, seepage from the dump must either be recycled or collected and treated prior to discharge into the environment. It is likely that the seepage will be used in the processing plant with excess conveyed to the tailings storage facility where it will be treated prior to discharge.

18.6f-1 Water Management associated with the Waste Rock Storage Facilities

Surface water and groundwater resources should be protected with the implementation of a mitigation program that meets the requirements of the regulatory institution and the lenders involved in funded the project. It is assumed during operations that seepage collected from the waste rock storage facility will be recycled for use in the processing plant and for other uses including dust control. Water recycling would limit the quantity of water required for discharge to the environment. Discharged water will likely require treatment using an appropriate system resulting in pH neutralization and removal of potentially toxic elements.

The groundwater resource should be protected using an appropriate liner system (if needed) or other mitigation strategy that will prevent ARD from impacting the groundwater system.

18.6 f-2 Monitoring Program for Waste Rock Storage Facilities

A monitoring program will be required to access the success of the mitigation actions used to prevent negative impact to the environment. Both surface and ground water should be monitored. Surface water monitoring installations should be located at points of discharge from the waste rock storage area. Installations should include quantification of flow and the chemistry of the water. The parameters and limits measured will include those required by the Colombian regulatory agencies and the International principles, standards and guidelines. Water flow should be continuously monitored and samples for chemistry evaluations should be collected on a quarterly basis at a minimum. Problematic water that is not recycled will be diverted to the tailings facility or directly to the water treatment facility for treatment prior to discharge. It is assumed during operations that water will be recycled for use in the processing plant and for other uses including dust control. Excess water will be discharged into receiving waters outside the project area.

Groundwater monitoring will consist of a number of monitoring wells located at strategic locations in the area of the waste rock storage area to show potential impact of ARD on the groundwater resources. Discovery of impacted groundwater will require development of mitigation plans to prevent migration of contaminated ground water outside the Project area.

18.6g Tailings Disposal

Tailings resulting from the operations should be stored in a facility that will prevent uncontrolled leakage from negatively impacting surface and groundwater resources. During operations, appropriate measures will be required to prevent wind-blown tailings dust from impacting the village or surrounding areas. In addition, any flow from the facility must meet effluent limits or be treated prior to discharge. Closure of the tailings storage facility may require an engineered cap or other mitigation actions to promote isolation of the tailings material and reduce the potential for environmental degradation during the post-closure period.

18.6g-1 Water Management for Tailings Disposal Facilities

Seepage from the tailings storage facility should be collected prior to discharge into the water resources of the area. Surface water and groundwater should be protected with the implementation of a mitigation program that meets the requirements of the Colombian regulatory institution and the lenders involved in funded the project. Surface water collected from the tailings storage facility will likely be recycled for processing and other uses. Any water discharged from the tailings storage facility will likely require treatment using an appropriate system. The ground water resource should be protected using a liner system (if needed) or other mitigation strategy that will prevent ARD and leachable elements from impacting the groundwater system present in the Project area and adjacent areas.

18.6 g-2 Monitoring Program for Tailings Storage Facilities

A monitoring program will be required to access the success of the mitigation actions used. Both surface and ground water should be monitored.

Surface water monitoring installations should be located at points of discharge from the tailings storage area. Installations should include quantification of flow and the chemistry of the water. The parameters and limits measured will include those required by the Colombian regulatory agencies and the International principles, standards and guidelines. Water flow should be continuously monitored and samples for chemistry evaluations should be collected on an appropriate basis. Water that does not meet effluent limits must be treated prior to discharge into receiving waters outside the project area. These requirements will exist during operations and the post-closure period.

Groundwater monitoring will consist of constructing a number of monitoring wells located at strategic locations in the area of the tailings storage area to identify potential impact on the groundwater resources. Discovery of impacted groundwater will require development of mitigation plans to prevent migration of contaminated ground water outside the Project area.

18.6h Hazardous Materials Management

As part of the ESIA, a hazardous materials management plan must be developed that includes mitigation measures for the avoidance or minimization of the use of hazardous materials. The plan should cover the production, transportation, handling, storage, and use of hazardous materials related to Project activities, including fuels, oils, lubricants, solvents,, and any other hazardous materials.

18.6i Pit Lake Development

Pit lakes will likely be established in the mine pits during the closure and post-closure periods of the operation. Due to high rainfall in the Project area, it is suspected that the pit lakes will discharge into the environment in the post-closure period. The water quality of the pit lakes should be evaluated using appropriate geochemical modeling to determine the characteristics expected due to dissolution of minerals associated with pit walls and materials placed in the pit such as tailings or waste rock. If required, appropriate mitigation actions must be developed to assure the establishment of uncontaminated water resources in the post-closure period.

18.6j Biodiversity Management

As noted in the IFC Environmental, Health and Safety Guidelines for Mining, habitat alteration is one of the most significant potential threats to biodiversity associated with mining. This may occur during any stage of the mine cycle with the greatest potential for temporary or permanent alteration of terrestrial and aquatic habitats occurring during construction and operational phases of the Project. The protection and conservation of biodiversity is fundamental to sustainable development. Integrating conservation needs and development priorities in a way that meets the land use needs of local communities is often a critical issue for mining projects. Recommended strategies for biodiversity management include consideration of the following: (1) whether any critical natural habitats will be adversely impacted or critically endangered or endangered species reduced; (2) whether the project is likely to impact any protected areas; (3) the potential for biodiversity offset projects (e.g. proactive management of alternative high biodiversity areas in cases where losses have occurred on the main site due to the mining development) or other mitigation measures; these were already started by ENVIRON as reported in 2012, no major impact has been reported (4) whether the project or its associated infrastructure will encourage in-migration, which could adversely impact biodiversity and local communities; (5) consideration of partnerships with internationally accredited scientific organizations to, for example, undertake biodiversity assessments, conduct ongoing monitoring, and manage biodiversity programs; and (6) consultation with key stakeholders (e.g. government, civil society, and potentially affected communities) to understand any conflicting land use demands and the communities dependency on natural resources and/or conservation requirements that may exist in the area.

18.6j-1 Baseline Programs

Baseline programs for flora and fauna have not been initiated in the Project area. Detailed baseline monitoring programs should be established to assess the presence of various species of plants and fauna that can be used to determine whether or not critical habitat exists. A careful evaluation of riparian environments along stream channels and the existence of wetland environments will be needed.

18.6k Waste Management

A solid and hazardous waste management plan will be required as part of the ESIA. The plan should follow a hierarchy of avoiding generating waste (where possible), reducing waste generation, and recycling or reusing waste in a manner that is safe for human health and the environment. Where waste cannot be recovered or reused, Bellhaven should treat, destroy, or dispose of it in an environmentally sound manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material. If third parties are contracted for hazardous waste disposal, Bellhaven should use reputable and legitimate enterprises licensed by the relevant Colombian government regulatory agencies and obtain chain-of-custody documentation to the final destination. Bellhaven should ascertain whether licensed disposal sites are being operated to acceptable standards and in such cases, Bellhaven should preferentially use these sites. Where this is not the case, Bellhaven should find alternative disposal options, including the possibility of developing disposal facilities at the Project site.

18.6l Occupational Health and Safety Management

Employers and supervisors are obliged to implement all reasonable precautions to protect the health and safety of workers. Companies should hire contractors that have the technical capability to manage the occupational health and safety issues of their employees, extending the application of the hazard management activities through formal procurement agreements. Preventive and protective measures should be introduced according to the following order of priority: (1) eliminating the hazard by removing the activity from the work process. Examples include substitution with less hazardous chemicals and using different manufacturing processes; (2) controlling the hazard at its source through use of engineering controls. Examples include local exhaust ventilation, isolation rooms, machine guarding, and acoustic insulating; (3) minimizing the hazard through design of safe work systems and administrative or institutional control measures. Examples include job rotation, training safe work procedures, lock-out and tag-out, workplace monitoring, limiting exposure or work duration; (4) providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE. The application of prevention and control measures to occupational hazards should be based on comprehensive job safety or job hazard analyses. The results of these analyses should be prioritized as part of a management/action plan based on the likelihood and severity of the consequence of exposure to the identified hazards.

18.7 Social/Community Management and Planning Requirements

Performance Standard 4 of the IFC Performance Standards on Environmental and Social Sustainability recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration and/or intensification of impacts due to project activities. While acknowledging the public authorities' role in promoting the health, safety, and security of the public, the Company has the responsibility to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project related-activities, with particular attention to vulnerable groups. The Company must develop action plans for public consultation and disclosure of activities planned, including community engagement procedures for the life of the project; an action plan to be disclosed to potentially affected communities including a grievance mechanism/system; a training program; and an adaptive/change management component. To accomplish these goals, Bellhaven must develop a robust understanding of the initial social conditions, the stakeholder network and the project definition form the initial building blocks for social assessment.

18.7a Interaction with Impacted Communities

Bellhaven has interacted with the La Mina Village providing support primarily in the form of jobs. However, a Social Community Management Program that meets the needs of the Company and the Village has not been established. To be successful over the Project time period, it will be important to expand their program and develop a Social/Community Management Program that has consulted with project affected communities in a structured and culturally appropriate manner. As noted in the Equator Principles, the process should ensure their free, prior and informed consultation and facilitate their informed participation as a means to establish whether a project has adequately incorporated affected communities' concerns. For projects such as this with adverse social or environmental impacts, disclosure should occur early in the Assessment process and in any event before the project construction commences, and on an ongoing basis.

To ensure that consultation, disclosure and community engagement continues throughout construction and operations of the project, the borrower should establish a grievance mechanism as part of the management system. This will allow the borrower to receive and facilitate resolution of concerns and grievances about the project's social and environmental performance raised by individuals or groups from among project-affected communities. The borrower will inform the affected communities about the mechanism in the course of its community engagement process and ensure that the mechanism addresses concerns, promptly and transparently, in a culturally appropriate manner, and is readily accessible to all segments of the affected communities.

18.7b Social and Community Requirements

International Finance Corporation (IFC) Performance Standard 1 suggests that social management plans be based on identification and evaluation of social impacts and risks, and notes that the process is dynamic and continuous. All affected communities should be included in the process. A robust understanding of the initial social conditions, the stakeholder network and the project definition form the initial building blocks for social assessment. Formalized risk and impact assessments that are well integrated into community planning processes would create a sustainable social management system.

Affected communities are communities of the local population within the project's area of influence who are likely to be adversely affected by the project. Where such consultation needs to be undertaken in a structured manner, Equator Principles Financial Institutions (EPFIs) will likely require the preparation of a Public Consultation and Disclosure Plan (PCDP).

Consultation and disclosure means the borrower has consulted with project affected communities in a structured and culturally appropriate manner. For projects with significant adverse impacts on affected communities, the process will ensure their free, prior and informed consultation and facilitate their informed participation as a means to establish, to the satisfaction of the EPFI, whether a project has adequately incorporated affected communities' concerns into the Project. In order to accomplish this, the Assessment documentation should be made available to the public by Bellhaven for a reasonable minimum period in the relevant local language and in a culturally appropriate manner. The borrower will take account of and document the process and results of the consultation, including any actions agreed resulting from the consultation. For projects with adverse social or environmental impacts, disclosure should occur early in the Assessment process and in any event before the project construction commences, and on an ongoing basis. Consultation should be "free" (free of external manipulation, interference or coercion, and intimidation), "prior" (timely disclosure of information) and "informed" (relevant, understandable and accessible information), and apply to the entire project process and not to the early stages of the project alone.

Bellhaven should tailor its consultation process to the language preferences of the affected communities, their decision-making processes, and the needs of disadvantaged or vulnerable groups.

Grievance measures should be developed to ensure that consultation, disclosure and community engagement continues throughout construction and operation of the project.

Bellhaven should establish a formalized grievance mechanism as part of the management system. This will allow the borrower to receive and facilitate resolution of concerns and grievances about the project's social and environmental performance raised by individuals or groups from among project-affected communities. The Company should inform the affected communities about the mechanism in the course of its community engagement process and ensure that the mechanism addresses concerns promptly and transparently, in a culturally appropriate manner, and is readily accessible to all segments of the affected communities.

Many other important aspects of Social and Community interactions described by the Equator Principles apply to the Bellhaven Project including: (1) Land Acquisition and Involuntary Resettlement; (2) Protection of Human Rights and Community Health; (3) Safety and Security Risks; (4) Impacts and Management of Project's Use of Security Personnel; (5) Protection of Cultural Property and Heritage; (6) Socio-economic Impacts; (7) Community Health and Safety Labor issues (including the four core labor standards); and (8) Closure of the Project.

18.7c Resettlement Program

Given the land area required for the mine area and buffer, Bellhaven will have to embark on a significant land acquisition program with multiple property owners. Land acquisition will involve both physical displacement and relocation of residents, as well as economic displacement (the taking of lands used for livelihoods including crop lands and pasture). This land acquisition includes the direct mine area, as well as the lands to be affected during the upgrading of the access road. To meet the IFC PSs requirements (see PS5 below), extensive stakeholder consultations and detailed socioeconomic analyses of affected people and valuations of lands, houses, and outbuildings, as well as new lands and residences to be provided as mitigation, will be required to support a resettlement plan.

18.8 Management of Mine Reclamation and Closure Requirements and Costs

18.8a Status of mine closure planning

Mine reclamation and closure activities and associated costs have not been developed for the Bellhaven Project. A closure plan for environmental and social aspects of the project will be required and presented in the ESIA for the Project. The estimated costs associated with site closure provided in this PEA are based on assumptions using typical conditions found during the mining and processing ore produced from similar types of mineralization.

18.8b Mine closure requirements – Environmental

The basis of the closure plan should be related to land use objectives with the plan being technically, economically and socially feasible. The major components of the closure plan should include: (1) the stabilization of the mine pit; (2) maintaining good quality water discharged from the pit lake likely to exist during the post-closure period; (2) capping and seepage control associated with the waste rock storage facilities; (3) capping and seepage control of the tailings storage facilities; (4) removal of infrastructure including the processing plant, crushers, truck shops and other facilities; (6) leveling (shaping) of disturbed areas and stabilizing using vegetation and other appropriate techniques; (7) monitoring to assure protection of the environment; and (8) implementation of mitigation actions to protect the environment and communities, if issues are discovered.

18.8b-1 Mine Pit

The mine pit will be maintained in a stable configuration during the post-closure period. A berm and/or fence will be constructed along the edge of the pit to prevent accidental entry. A pit lake is expected to develop during the post-closure period. The groundwater is expected to be near neutral but the rock exposed in the walls of the pit is expected to generate acid. As a result, the lake will likely be characterized with acid and high concentrations of potentially toxic elements including iron and sulfate. The pit water will potentially impact the surface and groundwater resources in the area. The system will require study using appropriate modeling to determine if environmental impact can be expected. Appropriate mitigation measures may be required to protect the environment. This discussion and evaluation will be required in the closure plan.

18.8b-2 Waste rock storage facilities

Waste rock is anticipated to generate acid during the operations and post-closure periods of the project. The mitigation measures placed in operations during construction of the storage facilities are expected to protect the environment during the post-closure period. The storage facility will be capped during the post-closure period to reduce the amount of water infiltrating into the waste rock materials. This will result in a reduction in the amount of impacted water that must be managed during the post-closure period. The cap will also prevent wind erosion and the impact of dust on the surrounding area. A water monitoring program will be maintained during the post-closure period to assure the environmental protection measures remain intact. If impacts are observed, appropriate mitigation actions should be developed and implemented.

18.8b-3 Tailings storage facilities

The tailings storage facility will be capped during the post-closure period to reduce the amount of water infiltrating into the tailings materials. This will result in a reduction in the amount of impacted water that must be managed during the post-closure period. The cap will also prevent wind erosion and the impact of dust on the surrounding area. The water monitoring program will provide value information with respect to ongoing water treatment and the potential requirement for implementation of additional mitigation actions needed to prevent environmental impact. If water discharged from the tailings storage facility meets effluent requirements, the water will be discharged to the receiving waters. However, if effluent requirements are not met, water treatment will be a continuing activity.

18.8b-4 Infrastructure Removal

It is anticipated that many of the structures will be donated to villagers and other entities for use after the mine closes as long as such facilities do not present issues during the post-closure period. Structures that do not represent other uses will be removed from the site. Machinery will be either used at other locations or scrapped with the metal recycled. Wood will likely be used by local villagers as construction material or for purposes such as fire wood. Other debris that is not usable or recyclable will be placed in a landfill. Unused chemicals will be recycled for use at other operations or treated as hazardous waste that will be properly disposed.

18.8b-5 Water management and treatment

Water management will be a primary concern during the post-closure period. As noted previously, water associated with the mine pit, waste rock storage, and tailings storage will be properly monitored and managed. In addition, mitigation actions will be maintained to prevent erosion and sedimentation of the surface water resources. Diversions, road ditches and culverts will be maintained to assure proper water management without erosion. Such maintenance will be required throughout the post-closure period.

Water treatment activities including acid water and sewage water will also require significant maintenance. Water discharged from the system must continue to meet effluent limitations. Once water can be discharged without treatment, the treatment facilities can be dismantled. Wastes generated from water treatment activities must also be properly disposed. Such materials can be placed in a controlled facility such as the tailings storage facility.

18.8b-6 Reclamation Plan

The quality and composition of growth medium for use (e.g. for capping) during site reclamation and closure activities must be conserved. Where topsoil is pre-stripped, it should be stored for future site rehabilitation activities. Topsoil management should include maintenance of soil integrity in readiness for future use. Storage areas should be temporarily protected or vegetated to prevent erosion. The amount of plant growth medium stored should be sufficient to support native plant species appropriate for the local climate and consistent with proposed future land uses. Overall thickness of the growth medium should be consistent with surrounding undisturbed areas and future land use.

Disturbance of vegetation during construction activities should be minimized. Disturbed areas should be vegetated once the sites are closed to further use using native plant species (progressive reclamation). Following closure actions such as removing infrastructure, areas will be leveled and re-vegetated using appropriate procedures, seed mixes and erosion control mitigation procedures. Invasive plant species (weeds) should be removed using biological, mechanical and thermal vegetation control measures and avoid the use of chemical herbicides as much as possible. Reclamation areas should be closely monitored and maintained through the post-closure period.

18.8b-7 Environmental Monitoring

As discussed previously, a monitoring program must be maintained throughout the post-closure period. All aspects of the project must be maintained under watchful eyes from water quality to vegetation success. Water discharged to surface water resources must meet effluent limitations established for the Project during the initial stages of the operation. Erosion and sedimentation control will be a major component for the protection of surface water quality. The quality of the ground water must also be maintained. The ground water monitoring program must be continued through the post-closure period to assure protection to the groundwater resource. Identification of degradation to the groundwater resource will require appropriate mitigation actions.

18.8c Mine closure requirements – Social

As noted in the IFC guidelines for mining, a mine closure plan that incorporates both physical rehabilitation and socio-economic considerations should be an integral part of the project life cycle and should be designed so that: (1) future public health and safety are not compromised; (2) the after-use of the site is beneficial and sustainable to the affected communities in the long term; and (3) adverse socio-economic impacts are minimized and socioeconomic benefits are maximized. Bellhaven should address beneficial future land use, which should be determined using a multi-stakeholder process that includes regulatory agencies, local communities, traditional land users, adjacent leaseholders, civil society and other impacted parties. The post-closure land use should be previously approved by the relevant national authorities, and be the result of consultation and dialogue with local communities and their government representatives. The closure plan should be regularly updated and refined to reflect changes in mine development and operational planning, as well as the environmental and social conditions and circumstances. Records of the mine works should also be maintained as part of the post-closure plan.

18.8d Closure Cost Estimates

Closure cost estimates are based on actions required assuming the project is funded for production rates of 12,500 tonnes/day. The closure cost estimate will be based on the following description of actions required to develop a stable post-closure condition for the environment and social/community aspects of closure.

18.8d-1 Potential Closure and Post-Closure Activities and Cost Activity

Table 18.1 Cost	
Activity	Total Cost (USD)
Grading, hauling, capping and revegetating the tailings storage facility 50 ha and 1m of cover – cap system	$8,000,000
Grading, hauling, capping, and revegetating the waste rock storage facility ($3.50/m3) 120 Ha and 1m of cover	$4,200,000
Removing and recycling the structures not used for future activities	
Disconnect and terminate services – process plant, mill, rock crusher, sewage treatment, water treatment ($35,000)	$87,500
Demolish and remove small buildings ($100/m2)	$500,000
Demolish and remove industrial buildings ($220/m2)	$1,100,000
Demolish and remove mill/processing plant ($220/m2)	$1,100,000
Demolish and remove crushers	$60,000
Demolish and remove conveyors ($80/m)	$16,000
Deconstruct thickeners, related	$210,000
Deconstruct small tanks	$260,000
Removal of UG tank and accessories	$110,000
Remove concrete pads, foundations, etc. ($14/m2)	$140,000
Reshape areas around load out area, roads ($7000/Ha)	$700,000
Remove contaminated soils etc. from the site ($2.80/m3)	$14,000
On site remediation of contaminated soils ($50/m3)	$100,000
Mine pit	
Blasting dozing of the benches - stabilization ($1.50/m3)	$600,000
Security fence and/or berm ($70/m)	$35,000
Water Management related	
Banks and waterways ($2000/Ha)	$40,000
Removal of bridges, culverts, ditches and related	$100,000
Safety of clean water dams minor earthwork	$15,000
Cleaning sedimentation impoundments ($4.50/m3)	$100,000
Water Treatment	$1,500,000
Diversions	
Channel maintenance	$20,000
Vegetation maintenance ($0.25/m2) assuming 600 ha	$1,500,000
Maintenance of reclaimed areas ($1000/Ha) regrading, erosion control, etc. assuming 600 ha	$600,000
Insurance	$350,000
Mobilization and demobilization of contractor (1%)	$198,380
Post-closure environmental monitoring (5%)	$991,880
Project management (10%)	$1,983,750
Social Program Closing Costs	$3,000,000
Subtotal (Rounded)	$27,500,000

18.8e Capital and Operating Costs

Capital costs associated with the environmental and social programs for the Bellhaven Mine Project include the acquisition of applicable permits and certifications, development of an air monitoring program, development of surface and groundwater monitoring systems including construction of monitoring wells. In addition, the development of a social/community management program will be an important aspect of the Project as it moves toward construction and operations.

Table 18.2 Capital Costs

Activity	Units	Unit Cost (USD)	Total Cost (USD)
ESIA Development			$500,000
Permitting Activities			$300,000
Water Monitoring			
Surface water monitoring activities			
Construction of field monitoring sites for T, EC, pH	3	10000	30000
Measurements - 2 sites - flumes with continuous measurements	3	20000	60000
Groundwater monitoring			
Construction of monitoring wells - 20 wells deep aquifer; average depth = 100m	2000	120	240,000
Construction of monitoring alluvial monitoring wells - 10 shallow; average depth = 10m	100	120	12,000
Acquisition of pump and sample collection system			8,000
Air Monitoring			
Construction of air quality monitoring stations with dust PM10 collection systems	3	8,000	24,000
Construction of air quality monitoring stations- dust Hi-Volume systems	3	6,000	18,000
Construction rainfall monitoring system	3	800	2,400
Construction of climatic station including T, Wind, VP or humidity, solar radiation components	1	20,000	20,000
Materials (towers, scaffolding, etc.)			10,000
Noise and Vibration			$30,000
Social Programs			$600,000
Resettlement Program			$500,000
Total Capital Cost			**$2,354,400**

19.0 MARKETING AND MARINE TRANSPORT OF CONCENTRATE

19.1 Scope

This section presents the preliminary marketing plan for the La Mina project. Assumptions are based on preliminary metallurgical data and historical data from other projects in South and Latin America.

Freight cost assumptions are based on consistent application of the principle that fuel and treatment charges are linked to the copper price used over the long term and historic information from other projects in the region.

Initially, La Mina will be a mine that produces concentrate for sale on the open market; rather than delivering it to its own smelter, it will be defined within the copper market as a custom concentrate producer. While it is expected that, in at least the first years of operation, all production will be delivered to Latin or South American smelters or Asia markets such as Korea, the commercial terms it will receive will be dictated by conditions on the international concentrates market.

Currently, approximately 5 Mt/a of contained copper, or a little more than 15 Mt/a of concentrate with an average concentrate grade of approximately 29% copper, is traded on the custom concentrate market.

This represents about half of the total Western World concentrate production.

Historically, the main producers of custom copper concentrates have been Pacific Rim mines in western Canada, South America, Asia, and Australia, and the major purchasers have been smelters in Japan, South Korea, the Philippines, Brazil and Western Europe. Bulgaria has also become a significant importer of copper concentrate in the last few years with the modernization and major expansion of its only primary copper smelter. In recent years, a major custom smelting industry has developed in India. A custom smelter in Thailand operated intermittently during 2004 to 2007 but has now closed.

China has long imported concentrates from mines in both the West and Mongolia and, in recent years, Chinese demand for concentrate has risen rapidly in line with rising copper production and consumption.

19.2 Quality

The anticipated quality of the copper concentrates to be produced is based on preliminary metallurgical testing carried out by RDi for the 2011. Overall the concentrates are considered to be of good quality with no significant deleterious constituents.

Copper Cu % 28.0 26-32
Silver Ag g/t 59 58-66
Gold Au g/t 3.3 1.9-6.3

19.3 Summary of Copper and Freight Market Expectations

19.3a Market Fundamentals

Between 2000 and 2009 global mine production grew on average by 1.94% per annum. The latest forecast for 2009 to 2020 shows growth slowing to 1.05% per annum and, in fact, falling further to 0.3% per annum when factoring in recent levels of mine production disruptions of around 6%.

Smelter capacity, on the other hand, grew on average by 3.37% per annum between 2000 and 2009, with 70% of that growth occurring in China and India. The rapid industrialization in China has played a key role in smelter capacity expanding faster than global mine capacity. As a result of this dislocation, smelter capacity utilization dropped from 90% in 2000 to 80% by 2009 – there were simply too many smelters competing for mine production – and smelter revenues were below average. Smelter capacity is forecast to expand further between 2009 and 2020, though at a reduced rate of 1.6% per annum. Approximately 60% of this growth is again expected to be in China and India.

Delays in mine project realization combined with the potential excess in smelter capacity could lead to further reductions in smelter utilization rates, or even smelter closures. Were these to occur, they would likely be in the industrialized countries, which have higher cost structures and weaker demand expectations than developing nations. With recessions at either end of the 2000 to 2009 period, refined copper consumption grew by only 1.3% per annum, the lowest growth rate for a comparable period since 1960. Based on recent trends, consumption for 2009 to 2020 is expected to grow by about 3% per annum.

If this level of consumption growth is to be realized, however, new sources of copper ore will need to be identified and brought into production. Existing mine production and "probable" mine projects will not be able to produce enough copper to "fill the pipeline." This could result in a gap of close to 6 million tonnes of mined copper by 2020, which will need to be sourced from higher-risk mine projects currently classified as "possible." In view of the time, capital, and permitting required to bring a new copper project into production, and the status of the "possible" projects, efforts to close the capacity gap will be challenging. This fundamental factor will have a significant influence on copper prices in the medium to long term.

19.3b Treatment and Refining Charges (TCRCs)

The key determinants for future treatment and refining charges are the supply/demand balance for copper concentrates, smelter economics, and spot market activity. The annual concentrate balance for the years 2014 until 2020 is forecast to be ±300,000 tonnes per annum from the equilibrium point, which equates to less than 2% of average concentrate demand for this period. The concentrate market is dependent on the development of major new mine and smelter projects over the period. Given the uncertainty with regard to the timing of these projects, it is difficult to accurately forecast annual concentrate balances, especially for periods beyond two or three years. Unless there is a significant reduction in smelter capacity, however, there appears to be no fundamental reason for material increases in TCRCs in the medium term.

TCRCs make up approximately 50% to 60% of smelter revenue. The balance comes from metal premiums, by-product sales such as sulfuric acid, and “free metal,” or metal recovered above the metal content to be paid to the mine. Smelter economics can vary by region and process, depending on the local market for by-products and whether the smelter enjoys any form of government subsidies.

The spot market provides a regular flow of deals that provide mines and smelters with data points for their annual negotiations. Spot TCRCs are more volatile than long-term TCRCs, due in part to the merchants’ ability to take advantage of the copper price curve and possible arbitrage between the LME and Shanghai, leading at times to very low charges

The overall trend toward lower charges in real dollars is evident in Figure 11.1. It appears that over the last 11 years, since 2000, treatment and refining charges have leveled out at an average price, without price participation, of US$0.169 per payable pound of copper for a 28% copper concentrate. The 11-year average charge with price participation is US$0.194; however, this includes the year 2006, when a rapid rise in copper price caused an unprecedented short-term spike of US$0.215 for price participation.

19.4 Payable Metals

The smelter terms used in this study are based on Bellhaven’s assessment of the copper market and on standard smelter terms in general use through the industry and confirmed by InterPro. Bellhaven obviously has not yet completed any sales terms with smelters.

Payable metals in the copper concentrate are copper, gold, and silver and are expected to be as follows:

Copper

- Buyer shall pay for 96.5% of the full copper content in the Concentrates, subject to a minimum deduction of 1.0 unit per dmt concentrate.

Gold

- Buyer shall pay for gold based on the gold content in the Concentrates according to the following

Schedule:

Gold Content per dmt concentrate Payable Gold

- If less than 1 g/dmt No payment
- If 1 g or more but <3 g/dmt 90% of the gold content
- If 3 g or more but <5 g/dmt 92% of the gold content
- If 5 g or more but <10 g/dmt 95% of the gold content
- If 10 g or more but <15 g/dmt 96% of the gold content
- If 15 g or more but <20 g/dmt 97% of the gold content
- If 20 g/dmt or more 98% of the gold content

Bellhaven has assumed a proposed refining charge of $5.00/oz of gold.

Silver

- If the silver content is less than 30 g/dmt, there shall be no payment for silver. If the silver content is 30 g/dmt or more, Buyer shall pay for 90% of the silver content.
- Bellhaven is using a refining charge of $0.45/oz of silver.

19.4a Penalty Elements

A number of elements qualify for penalties if they are present above certain thresholds in the copper concentrate. Concentrate contracts will stipulate both the maximum amount of a deleterious element that will be tolerated before it incurs a penalty and the scale of charges that then apply once the threshold is reached. So far there are no elements of concern of elements that may be of a concern in the La Mina concentrate

19.5 Concentrate Route

It is anticipated that the concentrate will be shipped in cargo containers of approximately 20 tonne capacity to the potential ports.

20.0 CAPITAL AND OPERATING COSTS

The capital and operating cost for this PEA have been developed from basic principals and public information.

The La Mina property consists of a 1,794 hectare Colombian mineral exploration license identified as Exploration License 5263 (“concession”). The concession is located near Medellin in the Department of Antioquia, Colombia approximately 500 km north-west of the Colombia’s federal capital of Bogotá. This region has a long history of gold mining extending back several centuries. Now several parts of Antioquia are among the most active gold exploration regions in Colombia.

The closest settlement, La Mina, lies immediately adjacent to the La Mina Project. The larger town of Venecia, approximately 11km from the project, provides a source of supplies and logistical support for the project, rural farming activities, and for several small underground coal-mining operations in the near area.

The two areas La Cantera and Middle Zone are less than 400 meters apart. The mineralization in both areas is similar (sulfides: chalcopyrite, bornite, pyrite, with bornite being very rare in MZ) but not exactly the same, we will provide detail description as well as metallurgical testing; in order to figure out what will be needed to build a floatation plant (cost wise).
InterPro’s’s scope of work was to either confirm or provide new costs for input into the Bellhaven, internal Preliminary Economic model, and need to validate the following inputs:

- CAPEX to build a mill that will use traditional floatation (throughput = 12,500 mt/day)
- CAPEX to build a mine
- Associated OPEX numbers (mining cost/mt, processing cost/mt).

Mineable tonnage is 42.5 million tonnes, with an average strip ratio of 5.6.

Projections for capital costs at this point are within a conceptual study range and are defensible and the numbers can be supported by InterPro’s experience and published information.

21.0 Project Review

21.1 Production Assumptions

InterPro has reviewed the production assumptions presented in Bellhaven's economic model and are in agreement with the data presented. This is based on other operating projects in South and Latin America.

Table 21.1 Overall Production Schedule		
Area	Units	Bellhaven Assumptions
Production Days (days per year)	DPY	350
Plant Capacity (ktpd)	Mt	12.5
LOM	Years	9.7
Total Ore - LoM	Mt	42.5
Waste - LoM	Mt	239.8
Total Material Mined - LoM	Mt	282.3
Ag	gr/t	2.06
Au	gr/t	0.87
Cu	%	0.32
Waste to Ore Strip Ratio	Millions of metric tonnes	5.6
Tonnage Total (Ore)	Mt	42.5

21.2 Commercial and Transportation Assumptions

CAM reviewed the commercial and transportation figures presented by Bellhaven in their economic model and is in agreement with the costs presented.

Table 21.2 Smelter Schedule for Concentrates

Copper Concentrate Commercial Premises	Bellhaven Assumptions
Payable Copper (%)	96%
Payable Silver (%)	92%
Payable Gold (%)	95%
Treatment charge (USD/MT)	$70
Refining Charge - Au (USD/oz.)	$5.50
Refining Charge - Ag (% of metal price)	1%
Refining charge - Copper (USD/lbs.)	$0.0699
Copper Concentrate Transportation	
Concentrate Trucking and Port (USD/MT)	$45.0
Concentrate Shipping (USD/MT)	$32.0

21.3 Mining

Mining of the La Mina project is planned for an open pit operation. InterPro has reviewed the costs pit mining for a 12,500 tonne-per-day (TPD) operation with an overall strip ratio of 5.6 for both of the ore zones. At this stripping ratio the operation would need to move some 81,250 total tones-per-day of ore and waste. Based on these figures, InterPro has prepared a preliminary equipment list, capital cost and operating cost for the mine. These are presented in the sections below. InterPro has not included any capital for pre-stripping of the mine area. Initially, all mine waste will be segregate as to Acid Generating and Non Acid Generating and will be placed in the dam accordingly.

21.3a Mine Equipment List and Capital Estimate

Table 21.3 is a preliminary estimate of the capital equipment that will be required to mine the La Mina material.

Table 21.3 Mine Equipment List

Mining Equipment	Units	Size	Number
Hydraulic Shovel	Cubic Meters	8.4	1
Front-end Loaders	Cubic Meters	16.1	3
Haul Trucks	Tonnes	100	20
Rotary Drills	Centimeters	27.94	3
Bulldozers	Kw	140	5
Graders	Kw	140	2
Water Trucks	Liters	26,500	1
Tire Trucks	kg-gvw	11,000	1
Bulk Trucks	kg/minutes	450	1
Light Plants	kW	10.1	4
Pumps	kW	74.5	3
Pickup Trucks	number		6
Buildings			
Shop	Square meters	2400	1
Dry	Square meters	720	1
Office	Square meters	715	1
Warehouse (all)	Square meters	1400	1
Anfo Storage	Square meters	130	1

Table 21.4 is a preliminary capital cost for the mining equipment listed in Table 20.3. The InterPro estimate is based on similar operations and capital costs published by InfoMine Services USA and other published sources.

Table 21.4 Mine Capital Cost

Capital Costs		
Equipment	Shipping & Assembly Inc.	25,800,000
Haul Roads/Site Prep		5,000,000
Stripping Estimate	Material Used in Tailing Dam Construction	2,900,000
Buildings		5,900,000
Electrical		480,000
Engineering	Owner's cost	2,500,000
Total Mining Capital	**Rounded**	**43,000,000**

21.3b Mine Operating Cost Estimate

Table 21.5 is a primary supplies list for a mining operation as discussed above. This list was prepared by InterPro and verified with published sources such as InfoMine USA, adjusted for Colombia Cost Parameters.

Table 21.5 Primary Supplies List		
Primary Supply Requirements		Consumption Estimate
Diesel Fuel	liters/day	35,000
Powder	kg/day	15,000
Caps	caps/day	70
Primers	primers/day	65
Drill Bits	bits/day	1.85
Det. Cord	meters/day	900

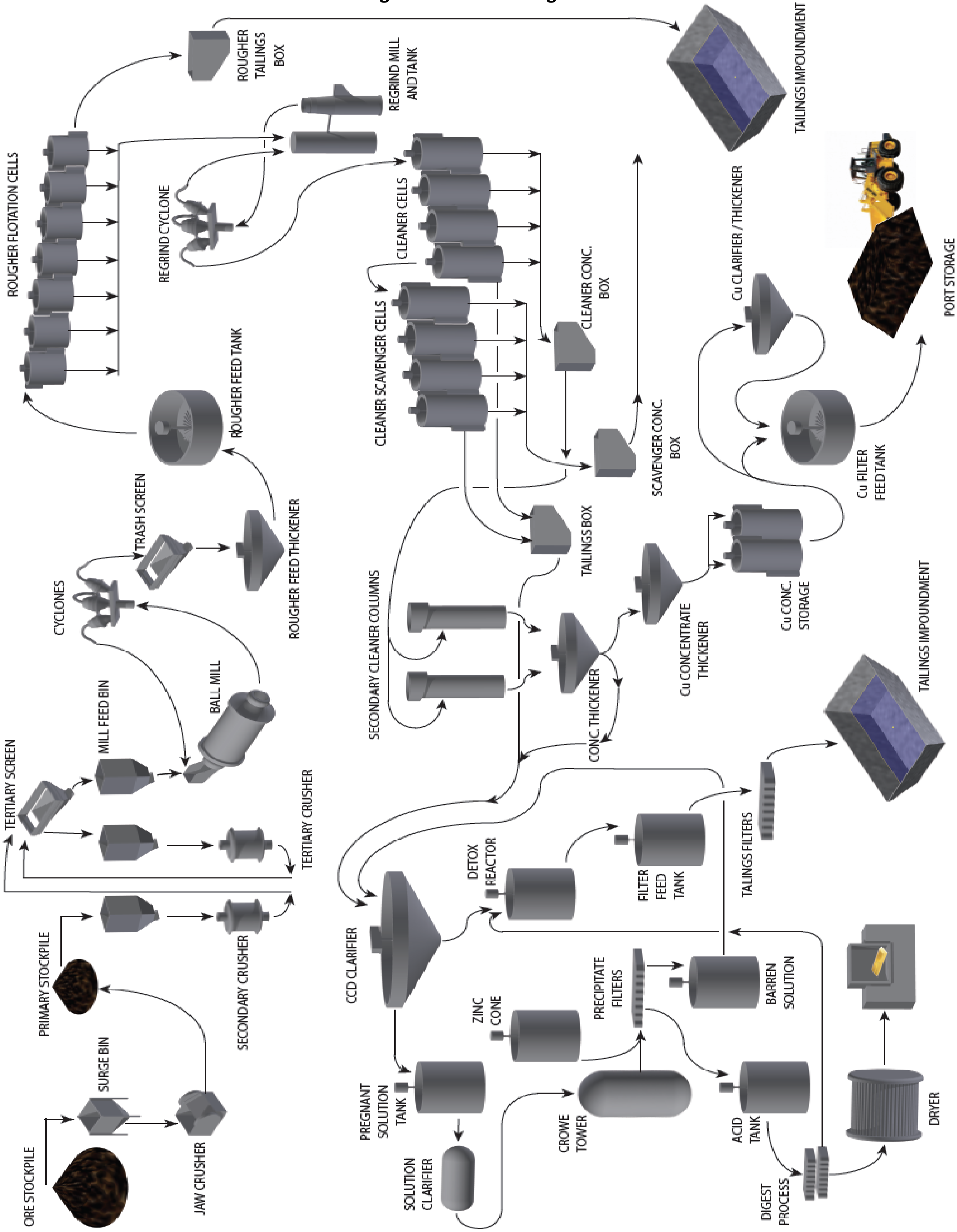
Table 21.6 Mine Operating Costs	
Operating Costs*	US$/tonne Ore Feed
Supplies	$2.41
Hourly Labor	$2.44
Equipment Operation	$5.79
Salaried Labor	$0.92
Miscellaneous	$0.82
Total Op cost per tonne Ore	**$12.38**
Per Tonne mined	**$1.90**

* Bellhaven has assumed a pit slope of 50 degrees for the initial pit, this appears reasonable as a starting point for the preliminary PEA

21.3b-1 Concentrator Capital Cost and Operating Costs

The capital and operating cost for the La Mina operation is based on the flowsheet provided as Figure 21.1. This is a typical copper/gold concentrator flowsheet. For this size operation a 3 stage crushing operation should be used, however InterPro believes a separate study regarding a SAG mill and or HPGM's might be an option and that this possible refinement may change the capital and Operating costs significantly.

Figure 21.1 Flow Diagram



In addition, InterPro has reviewed the project recoveries being used in the current Bellhaven cost model and finds that at this early stage of the project 88 percent (%) recovery for copper, 90% for gold and 30%for silver are reasonable. InterPro does believe that the silver recovery can be increased with additional metallurgical work to 40 to 45% recovery.

21.3c Process Capital Cost

The capital prepared by InterPro is comprised of all new pieces of equipment. No used equipment was estimated. The capital costs presented in Table 21.7 are all based on data found in the public record or published in sources such as InfoMine USA as adjusted for Colombian productivity and expat requirements. Also, no confidential information was used in preparing the estimated capital and operating costs. The costs are all in 2nd quarter 2013 US$.

Table 21.7 Concentrator Equipment List

Equipment	All metric	Size	Number
Crushing & Grinding			
Jaw Crusher	Opening (cm)x width(cm)	74x121	1
Bin /Feeder	Feeder Width	76	1
Belt Conveyor	Width (cm)length (m)	91x61	1
Bin /Feeder	Feeder Width	76	1
SAG Mill	Diameter-Length	10x4	1
Vibrating Screen	Width (m)x Length (m)	2x5	1
slurry Pump	Liters/min	5,293	1
slurry Pump	Liters/min	2,647	1
Cyclones	Diameter (cm)	71	4
Ball Mill	Diameter (m)x length(m)	5x9	1
Flotation			
Pumps	Liters/min	6,368	1
Rougher Cells	Volume M^3	17.75	1
Scavenger Cells	Volume M^3	17.75	1
Cleaner Cells	Volume M^3	3.5	1
Regrind			
Ball Mill	Diameter (m)length(m)	3x6	1
Slurry Pumps	Liter/min	6,203	1
Cyclones	Diameter (cm)	47	1
Concentrate			
Slurry Pumps	Liter/min	389	1
Concentrate Thickener	Diameter(m)	4	1
Filter	Surface Area (m^2)	40	1
Frontend Loader			
Tailings			
Pumps	Liter/min	12,559	1
Tailings Thickener	Diameter (m)	24	1
Cyclones	Diameter (cm)	61	2

Table 21.8 Concentrator Capital Cost	
Work Breakdown Structure	2013 US$
Equipment	56,500,000
Freight	5,085,000
Installation Labor	36,254,000
Concrete	5,690,000
Piping	15,918,000
Structural Steel	59,000,000
Instrumentation	3,563,000
Electrical	6,573,000
Coating & sealants	500,000
Mill Building	5,600,000
Tailings Starter Dam	11,000,000
EPCM	36,000,000
First Fills	2,000,000
Vendor Representatives	4,000,000
Start-up	2,000,000
Commissioning	3,500,000
Owners Cost	24,000,000
Total Capital	**277,183,000**
US$/Daily tonne	**22,175**

21.3d Concentrator Operating Costs

Table 21.9 has been assembled to reflect the personnel required to operate the concentrator illustrated in Figure 21.1. InterPro is of the opinion that three of the senior personnel, the mill superintendent, maintenance foreman and the senior metallurgist may have to be expatriates, possibly from Mexico.

Table 21.9 La Mina Concentrator Operating Labor	
Labor (Hourly)	Workers/day
Control Room Operator	6
Crusher Operator	3
Grinding Operator	6
Flotation Operator	6
Filter Operator	3
Assayers	3
Samplers	6
Laborers	12
Mechanics	6
Electricians	6
Total Hourly Personnel	**57**
Salaried Personnel	
Mill Superintendent	1
General Foreman	1
Maintenance Foreman	3
Plant Foreman	3
Senior Metallurgist	1
Metallurgist	2
Process Technician	3
Instrument Technician	3
Process Foreman	6
Total Salaried Personnel	**23**

Table 21.10 Daily Supplies Required for the Concentrator		
Supplies	Units	Daily Usage
Electricity	kwh/day	257,500
Diesel Fuel	liters/day	10
Fuel Oil	liters/day	4,956
Grinding Media	kilo's/day	14,594
Lime	kilo's/day	13,220
Collectors	kilo's/day	696
Frothers	kilo's/day	459

Based on the supplies and the personnel required to operate the concentrator, InterPro has estimated the overall operating cost. This cost is presented in Table 21.11.

Table 21.11 Concentrator Operating Costs		
Operating Costs	US$ per Year	US$/tonne Feed
Reagents/Supplies/Materials	6,840,918	$1.63
Power @US$0.08/KwHr	6,917,480	$1.65
Labor	7,163,125	$1.57
Concentrator Admin	1,596,875	$0.35
Maintenance Supplies	2,825,000	0.67
Total	25,343,398	5.87

21.4 G&A Costs

InterPro has reviewed the proposed G&A cost structure proposed for the La Mina project by Bellhaven and is the opinion that a 5 percent (%) charge on the overall mining cost per tonne of ore plus the cost of processing, using InterPro's estimates accounts for a G&A cost of US$0.9125 per tonne of ore and InterPro finds this acceptable.

22.0 FINANCIAL ANALYSIS

InterPro developed a cash-flow valuation model using long-term forecast metal prices of US$1,400/oz gold, US$3.25/lb copper, and US$20/oz silver (see Table 22.1). All financial projections are calculated in constant US dollars with no inflation assumed to affect the capital amounts, the costs, metal prices, or NPV discount rates. No leverage has been assumed—numbers reflect a 100% equity basis.

Table 22.1 Key Financial Projections for the La Mina Project, Colombia

Key Financial Projections	LOM	Avg / Yr
Payable Metal		
Gold	862,030 oz	88,738 oz
Copper	190,350,441 lbs	19,594,898 lbs
Silver	718,247 oz	73, 937 oz
Gross Revenues (based on $1400/oz gold, $3.25/lb copper, $20/oz silver prices)		
Gold	$1,206.84 million	$124.23 million
Copper	$618.64 million	$63.68 million
Silver	$14.36 million	$1.48 million
Total Gross Revenues	**$ 1,839.85 million**	**$189.40 million**
Net Project Revenues	**$1,689.95 million**	**$173.97 million**
EBITDA	**$855.10 million**	**$88.03 million**
Net Income (Before Tax)	**$475.92 million**	**$48.99 million**
Income Tax	**$155.41 million**	**$16.00 million**
Net Income (After-Tax)	**$320.50 million**	**$32.99 million**

Table 22.1 shows that the Project generates average annual net revenues of $174 million, EBITDA of $88 million, and net income (after-tax) of $33 million. The base-case pre-tax NPV @ 8% is estimated at $262 million with an associated 33.5% IRR and a payback period of 4.57 years. The base-case after-tax NPV @ 8% is calculated at $172 million with an associated 26.4% IRR and a payback period of 4.88 years.

Table 22.2 Pre-Tax NPV, IRR, and Payback Projections at Various Gold Prices for La Mina, Colombia					
Pre-Tax	**$1000/oz gold**	**$1,200/oz gold**	**$1,300/oz gold**	**$1,400/oz gold**	**$1,500/oz gold**
NPV @ 5%	$80	$204	$267	**$329**	$391
NPV @8%	$49	$155	$209	**$262**	$315
NPV @10%	$30	$127	$176	**$224**	$273
IRR (%)	14.0%	24.6%	29.1%	**33.5%**	37.6%
Payback (Years)	5.77	5.05	4.79	**4.57**	4.37

All NPV values are shown in US$ millions. Figures calculated using constant $3.25/lb copper and $20/oz silver prices.

Sensitivities were calculated by varying the gold and copper prices (Tables 22.2, 22.3, and 22.4), estimated capital expenditures (Table 22.5), as well as operating mining costs (Table 22.6) and operating processing costs (Table 22.7). Based on these figures it is apparent that the Project is most sensitive to gold and copper prices. ***The robustness of the project is apparent in Table 22.2 where even at a gold price of $1,000/oz, the Project generates a positive return.*** The Project continues to generate a positive NPV @ 8% until gold prices reach $1000/oz and copper prices drop below $3.00/lb (see Table 22.4). Increases in capital expenditures do not alter the Project NPV's much as shown in Table 22.5. For instance, a 20% increase in capital expenditures still generates a pre-tax IRR of 27% for the Project. Finally, the NPV and IRR of the Project are not sensitive to swings in operating mining and processing costs (see Tables 22.6 and 22.7).

Table 22.3 After-Tax NPV, IRR, and Payback Projections at Various Gold Prices for La Mina, Colombia				
After-Tax	**$1,200/oz gold**	**$1,300/oz gold**	**$1,400/oz gold**	**$1,500/oz gold**
NPV @ 5% (US$ million)	$140	$182	**$224**	$265
NPV @8% (US$ million)	$101	$136	**$172**	$208
NPV @10% (US$ million)	$78	$111	**$143**	$175
IRR (%)	19.7%	23.8%	**26.4%**	29.6%
Payback (Years)	5.29	5.07	**4.88**	4.71

All NPV values are shown in US$ millions. Figures in Table 13 calculated using constant $3.25/lb copper and $20/oz silver prices.

Table 22.4 NPV Sensitivity to Long-Term Metal Prices.							
Project Pre-Tax NPV at Various Metal Price Assumptions (NPV @ 8% discount)							
Metal Prices		Gold Price (US$/oz)					
		$1,000	**$1,200**	**$1,300**	**$1,400**	**$1,500**	**$1,600**
Copper Price (US$/lb)	**$2.50**	$(41)	$66	$119	$172	$226	$279
	$2.75	$(11)	$96	$149	$202	$256	$309
	$3.00	$19	$125	$179	$232	$286	$339
	$3.25	$49	$155	$209	$262	$315	$369
	$3.50	$78	$185	$239	$292	$345	$399

All NPV values are shown in US$ millions. Figures in Table 14 calculated using a constant $20/oz silver price

Table 22.5 NPV and IRR Sensitivity to Estimated CapEx.					
Pre-tax	Variance from Base Case—CapEx Estimate				
	-20%	**-10%**	**Base**	**+10%**	**+20%**
NPV (0%)	$524	$500	$476	$452	$428
NPV (5%)	$379	$352	$329	$306	$283
NPV (8%)	$306	$284	$262	$240	$218
NPV (10%)	$267	$246	$224	$203	$181
IRR (%)	42%	37%	33%	30%	27%

All NPV values are shown in US$ millions. Figures in Table 15 calculated using constant $1,400/oz gold, $3.25/lb copper, and $20/oz silver prices.

Table 22.6 NPV and IRR Sensitivity to Mine OpEx.					
Pre-tax	Variance from Base Case—Mine OpEx Estimate				
	-20%	**-10%**	**Base**	**+10%**	**+20%**
NPV (0%)	$589	$532	$476	$420	$363
NPV (5%)	$412	$320	$328	$287	$246
NPV (8%)	$332	$297	$262	$227	$192
NPV (10%)	$287	$256	$224	$193	$161
IRR (%)	38%	36%	33%	31%	28%

All NPV values are shown in US$ millions. Figures in Table 16 calculated using constant $1,400/oz gold, $3.25/lb copper, and $20/oz silver prices.

Table 22.7 NPV and IRR Sensitivity to Processing OpEx.					
Pre-tax	Variance from Base Case—Processing OpEx Estimate				
	-20%	-10%	Base	+10%	+20%
NPV (0%)	$528	$502	$476	$450	$424
NPV (5%)	$368	$348	$329	$309	$290
NPV (8%)	$295	$278	$262	$246	$229
NPV (10%)	$254	$239	$224	$209	$195
IRR (%)	36%	$35%	33%	32%	31%

All NPV values are shown in US$ millions. Figures in Table 17 calculated using constant $1,400/oz gold, $3.25/lb copper, and $20/oz silver prices.

23.0 Adjacent Properties

There are no adjacent properties to La Mina that have published NI 43-101 technical reports.

24.0 Other Relevant Data and Information

The author is not aware of any other information that would aid in the understanding of the La Mina Project or the La Cantera deposit.

25.0 Conclusions And Recommendations

InterPro and Gustavson have reviewed pertinent data from the La Mina Project regarding exploration data and methods for the La Cantera and Middle Zone Deposits. Interpro has determined that the statement of mineral resources at La Mina is reported in accordance with Canadian National Instrument 43-101, and the technical work summarized herein conforms to practices established by CIM Definition Standards (2010). Interpro completed its review of the project in preparation for this Technical Report. SEWC did a professional job in preparing the original 43-101 and met its objective and Interpro with a review by Gustavson has concluded:

- Assaying, density measurements, and drill hole surveys have been carried out in accordance with best industry standard practices and are suitable to support resource estimates.
- Sampling and assaying includes quality assurance procedures, including submission of blanks, reference materials, pulp duplicates and coarse reject duplicates, and execution of check assays by a second laboratory.
- The La Cantera gold, copper and silver deposit resource models were developed using industry-accepted methods.
- The Middle Zone gold, copper, and silver deposit resource models were developed using industry-accepted methods.
- These mineral resources are classified as Inferred Mineral Resources
- The Mineral Resources discussed in this report and concludes that there are no known or foreseeable impacts or risks to the project's continued viability.

• Further Metallugical testwork is required prior to a pre-feasibility study on these deposits past officers have not granted lock-cycle flotation test on either of the drilled deposit, these tests are critical to determine gold recovery, (potentially by leaching) or inclusion in the copper concentrate.

•Interpro recommends additional drill for metallurgical sample testing as the past samples, while valid for grade determinations, maybe oxidized, so metallurgical testing may not be valid for flotation work.

•Recent metallurgical work on the La Garucha project has indicated it responds favorably to the same process used at La Cantera and the Middle Zone deposits.

Industry standard mining, process design, construction methods and economic evaluation practices
have been used to assess the La Mina Project. The conclusion reached is that there is adequategeological and other pertinent data available to generate a PEA.

Based on current knowledge and assumptions, the results of this study show that the project has positive economics (within the very preliminary parameters of a PEA) and should be advanced to the next level of study by conducting the work indicated.

Continued metallurgical studies for gold recovery can influence the outcome of the La Mina project.

Most of these risks and opportunities are based on a lack of scientific information (test results, drill results, etc.) or the lack of control over external drivers (metal price, exchange rates, etc.).

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DEVELOPMENT

11/6/2013

AUTHOR'S CERTIFICATE

1. I, Gregory F. Chlumsky, of Lakewood, Colorado, do hereby certify:
2. I am currently employed as a Principal by InterPro Development, Inc., 13092 W. LaSalle Cir. Lakewood, Colorado 80228.
3. I graduated with a Bachelor of Science, Engineering Chemistry from the Colorado School of Mines, Golden, Colorado in 1970.
4. I am a Qualified Professional (QP) Member of the Mining and Metallurgical Society of America (01117QP) and a Member of the Society for Mining, Metallurgy and Exploration, Inc.
5. I have been employed as a Metallurgist, Process Engineer or Chemical Engineer continuously for a total of 43 years. My experience included Metallurgical Development and testing, Projects Manager for Property Development, and Project Manager for Due diligence evaluations of Batu Hijua (Indonesia), Los Pelambres (Chile), Antamina (Peru), Veladera (Argentina,) evaluations of numerous projects throughout North and South America, Africa, and Asia.
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
7. I have not made a personal inspection of the La Mina Project.
8. I am responsible for the preparation of items 15 through 22 of the technical report titled Preliminary Economic Evalaution(PEA) Technical Report – Bellhaven Copper & Gold Inc., La Mina Project, Antioquia, Republic of Colombia dated September 15, 2013 (the "Technical Report").
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. As of the date of the Technical Report September 15, 2013, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading. I have read both reports.
11. That I have read NI 43-101 and the Technical Report, and that the Technical Report was prepared in compliance with NI 43-101.
12. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Respectfully Submitted

G F Chlumsky

Gregory F. Chlumsky
Principal
InterPro Development Inc.
MMSA QP Number 01117QP

AUTHOR'S CERTIFICATE

1. I, Scott E. Wilson, of Highlands Ranch, Colorado, do hereby certify:
2. I am currently employed as President by Metal Mining Consultants Inc., 9137 S. Ridgeline Blvd., Suite 140, Highlands Ranch, Colorado 80129.
3. I graduated with a Bachelor of Arts degree in Geology from the California State University, Sacramento in 1989.
4. I am a Certified Professional Geologist and member of the American Institute of Professional Geologists (CPG #10965) and a Registered Member (#4025107) of the Society for Mining, Metallurgy and Exploration, Inc.
5. I have been employed as either a geologist or an engineer continuously for a total of 23 years. My experience included resource estimation, mine planning geological modeling and geostatistical evaluations of numerous projects throughout North and South America.
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
7. I made a personal inspection of the La Mina Project on August 18, 2012 for 2 days.
8. I have had prior involvement with Bellhaven Copper & Gold as the author of two previous technical reports related to La Cantera and the Middle Zone.
9. I am responsible, in whole or in part, for the preparation of items 1 through 14 and Items 23 through 27 of the technical report titled Preliminary Economic Assessment – Bellhaven Copper & Gold Inc., La Mina Project, Antioquia, Republic of Colombia dated September 15, 2013 (the Technical Report.)
10. As of the date of the report, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
11. That I have read NI 43-101 and Form 43-101F1, and that this technical report was prepared in compliance with NI 43-101.
12. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated November 6, 2013

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Scott E. Wilson