Compañía Minera Quebrada Blanca S.A.®

NI 43-101 TECHNICAL REPORT ON

HYPOGENE MINERAL RESOURCE ESTIMATE

AT DEC. 31, 2007

QUEBRADA BLANCA

REGION I, CHILE

BY

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REGIONAL MANAGER RESERVE EVALUATIONS

TECK COMINCO LTD.

MARCH. 31, 2008

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3. SUMMARY

Teck Cominco Limited began a diamond drilling program in early 2007 with the purpose of defining a hypogene resource at the Quebrada Blanca property in northern Chile. This report summarizes scientific and technical information supporting an inferred hypogene resource estimation following guidelines set out in “Form 43-101F Technical Report” under National Instrument 43-101 Standards of Disclosure for Mineral Projects.

Quebrada Blanca (QB) is located in Region I in Chile on the high plateau of the northern Chilean Andes. The deposit is situated at about 4300 meters above sea level, about 30 kilometers west of the international border with Bolivia and 170 kilometers southeast of the Chilean port city of Iquique. The property is accessed by a 140 km well maintained gravel road originating from the Pan American highway. An operating mine is exploiting the supergene enrichment zone and producing copper cathode by heap leaching, solvent extraction and electrowinning (SX-EW) since 1994.

The Quebrada Blanca copper mine is owned by Compañía Minera Quebrada Blanca S.A. (CMQBSA). Ownership of CMQBSA is held by Teck Cominco Limited (TCL) at 76.5%, Inversiones Mineras S.A. at 13.5%, and Empresa National de Minería (ENAMI) holds the remaining 10%.

The Quebrada Blanca ore body is a typical pluton-related porphyry copper deposit with chalcopyrite and molybdenite stockwork veining hosted within multiple Eocene intrusions. The oldest intrusion corresponds to a 2 km by 5 km quartz monzonite stock with an elongation ENE with several later intrusions emplaced along the central axis of the quartz monzonite. Mineralization is associated with all Eocene intrusive types, but the later igneous breccia and vuggy breccia host the better grade mineralization. A leached capping and secondary enrichment zone has formed over the hypogene mineralization.

Exploration on the QB property has been intermittent since 1975, but was rejuvenated in 2007. Past exploration programs consisting of geological mapping, geochemistry, drilling, and geophysics have delineated the extent of the mineralization and alteration in the porphyry copper system. Recent work has been oriented to defining zones of better copper mineralization within the Eocene intrusions by diamond drilling methods.

A hypogene mineral resource has been defined at 1.030 billion tonnes at 0.50 %Cu and 0.020 %Mo based on a 200 meter drilling grid over an area of about 1.75 kms by 500 meters directly beneath the current supergene pit mining operation. The majority of the hypogene drilling was accomplished in 2007. The resource occurs within an unsmoothed optimized pit to demonstrate that the deposit has “reasonable prospects of economic extraction” as stated in the CIM Definition Standards for mineral resources and mineral reserves.

Mineralization terminates towards the west at the Quebrada Blanca fault, but is open to the east and at depth. Diamond drilling will continue in 2008 eastward to try to identify additional resources. Also, infill drilling on the previous drilling grid will upgrade portions of the inferred resources.

The inferred hypogene resource is supported by various copper and molybdenum check analyses on about 5% of the pulps at a second external lab. Also, statistics on the internal quality control program at the primary lab used in 2007, Andes Analytical Assay Ltda in Santiago, has verified the integrity of the sample preparation and analyses although minor issues were identified. Regular rock density measurements on half cores in 2005 and 2007 merged with historical data have generated a reliable database for estimating tonnages. A geostatistical block model utilized a validated assay database and the most recent geological interpretation based on detailed lithological logging.

Preliminary metallurgical testing has determined copper and molybdenum can be recovered from a conventional grinding and flotation plant. No significant deleterious elements were identified in the concentrates. The QB concession is of sufficient area to accommodate a plant and tailings pond. Preliminary pit optimization at $1.50 lb/Cu has verified that there is reasonable potential for economic extraction. Also, the strip ratio will be very low so that waste disposal is not expected to be an issue. However, securing sufficient water rights may put limitations on the size of the concentrator.

4. INTRODUCTION

This report is compiled for Teck Cominco Limited utilizing the guidelines set out in “Form 43-101F1 Technical Report” under “National Instrument 43-101 Standards of Disclosure for Mineral Projects”.

This report has been prepared to summarize scientific and technical information in support of a hypogene inferred resource estimate at December 31st, 2007 at Quebrada Blanca that was the subject of a press release on March 3, 2008, and was included in the Teck Cominco Limited 2007 Annual Report and Annual Information Form.

Information contained in this report was based on a 9,732 meter diamond drilling program in 2007 and about 7,559 meters of prior diamond drilling programs targeted for the hypogene zone in the area of the resource estimation. Short intercepts at the upper limit of the hypogene zone from reverse circulation drilling completed in previous years for defining supergene reserves were also included in the hypogene resource estimation.

Diamond drill holes were routinely analyzed for copper and molybdenum from generally 2 meter drill hole intervals. In addition, density measurements at 20 meter intervals by the wax immersion method representing the various rock types were taken on pieces of half core from 2005 and 2007. Gold analyses and 49 element ICP geochemical analyses were performed on all intervals in 2007. Metallurgical test work on 20 core samples was performed in the CIMM laboratory in Santiago, Chile. Several pits were optimized by varying the copper price and fixed operating costs estimated for a typical 120 ktpd concentrator.

Neil Barr, the “qualified person” responsible for this report, worked in the capacity of Chief Mine Geologist at QB from June 2001 to May 2007, and as Regional Manager Reserve Evaluations since October 2007. He is currently supervising the hypogene resource evaluation as an employee of Teck Cominco Limited. From June 2007, he has visited the project on a regular basis.

5. RELIANCE ON OTHER EXPERTS

Not applicable.

6. PROPERTY DESCRIPTION and LOCATION

The Quebrada Blanca hypogene deposit is located in the Community of Pica, Province of Iquique, Region I, Chile (Figure 1). The claim block “Mine Claim Block” hosting the porphyry copper deposit is comprised of a contiguous block of 3,234 claims, referred to as “explotación constituida”, roughly covering 80 km^2 (Figure 2). The claim block is located at latitude 21° south and longitude 68°48’ west, or at 520,000 east and 7,578,000 north in the UTM grid system. The claims are held 100% by Compañía Minera Quebrada Blanca S.A. (CMQBSA).

The mineralized zone which includes the inferred hypogene resource occurs within multiple Eocene intrusions centrally placed within the claim block. An operating mine is currently exploiting the supergene enrichment zone. Some of the current infrastructure, including the electrowinning plant, will eventually have to be removed to totally exploit the hypogene resource. The location of the hypogene waste dumps, tailings pond, and mill have not been planned at this stage, but there is ample space in the area (Figure 3). QB has water rights for 316 liters per second in 7 wells from Salar Michincha and an additional 120 liters per second in nearby Salar de Alconcha.

There are no known back-in rights, payments, agreements, or other encumbrances to which the mine is subject. Chile has a law whereby royalties are paid to the federal government at a maximum rate of 5% based on a formula which essentially translates to profits before taxes. Permits will have to be acquired for a tailings impoundment, slurry line to the coast if desired, and an additional water line from a undetermined source.

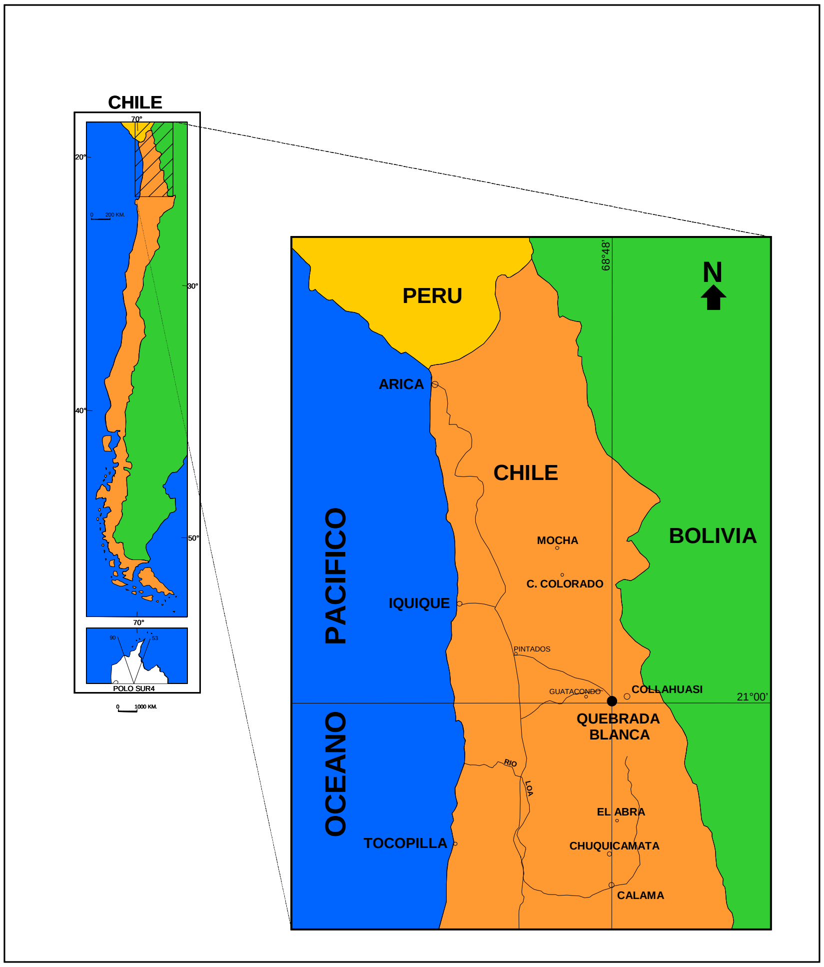

Figure 1. Location map of the Quebrada Blanca property.

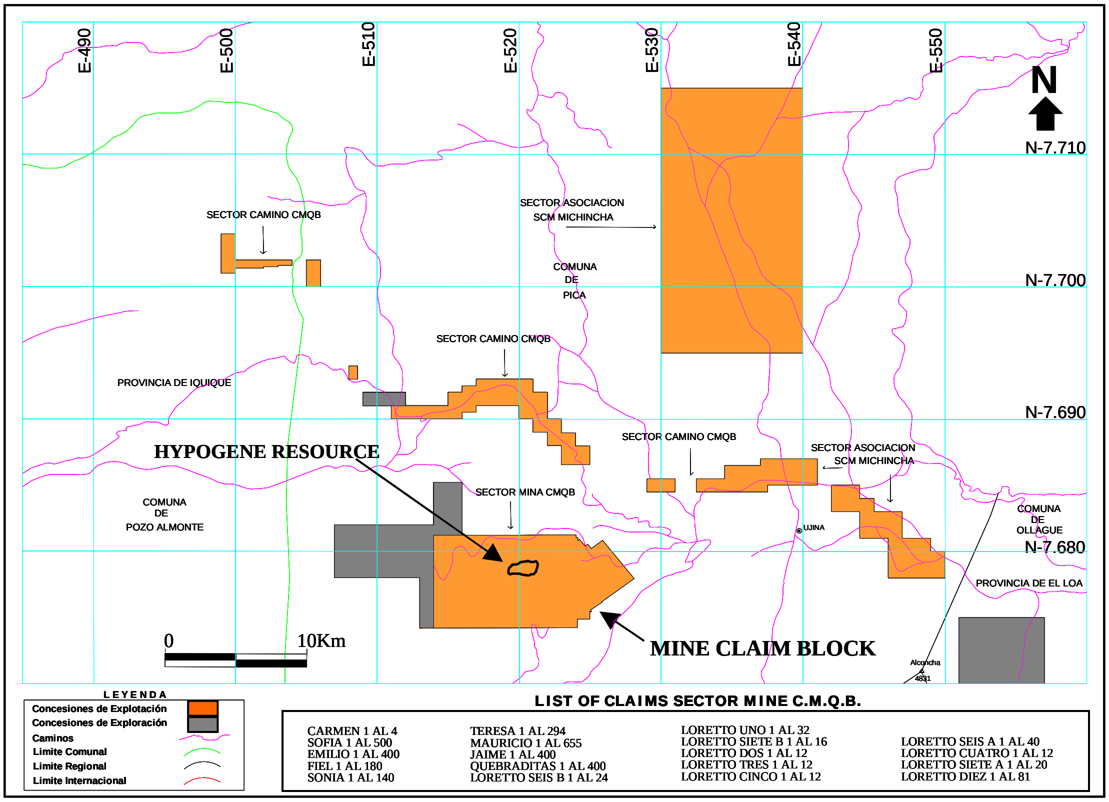

Figure 2. CMQBSA mineral claims including the Mine Claim Concessions hosting the porphyry copper deposit.

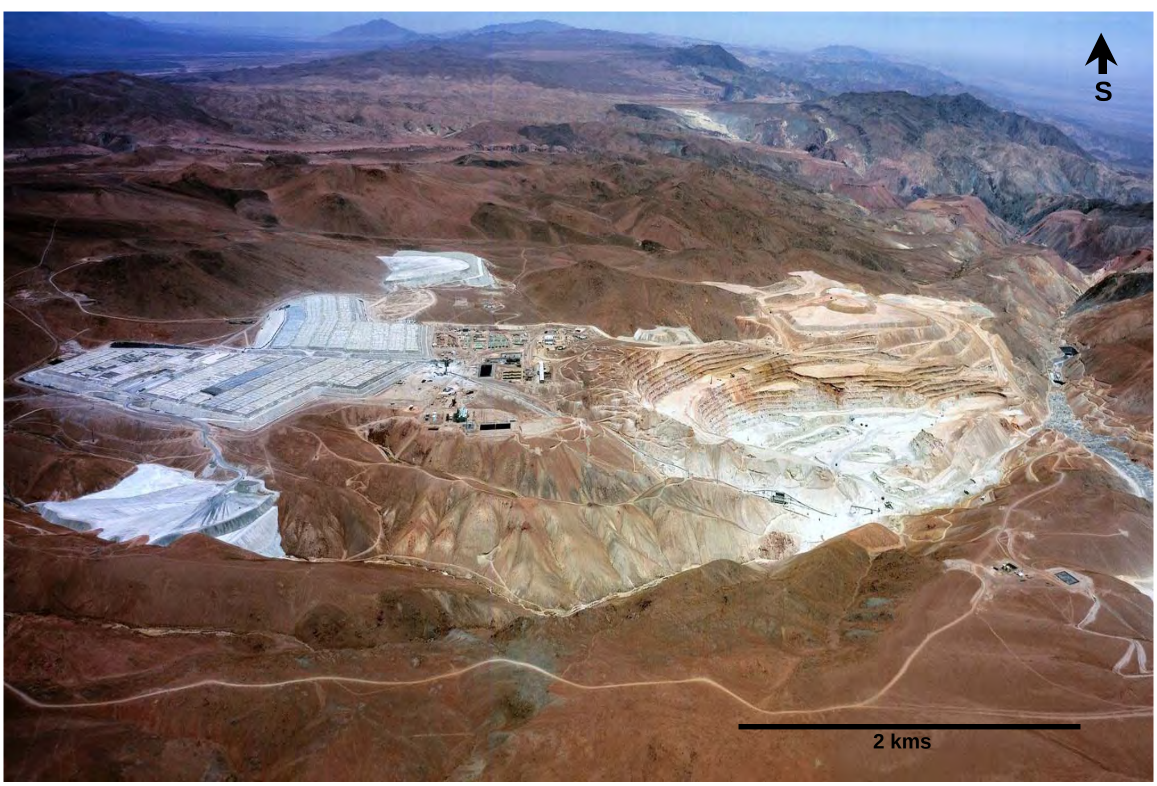

Figure 3. Aerial view of the QB mine property looking south, circa 2005.

7. ACCESSIBILTY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

The Quebrada Blanca property is located between 4150 and 4400 meters elevation above sea level. The local topography is represented by rounded hills disrupted by steep gulches. Vegetation cover consists of sparse tufts of grass and small shrubs.

The property is accessed by a well maintained gravel road extending 140 kms east from the Pintados intersection on the Pan American highway (Figure 1). The distance from Iquique is 240 kms, about 3.5 hours by pick-up truck or 4.5 hours by bus. The distance from major centers requires rotational work shifts in a permanent camp situation.

Sunshine prevails most of the year in an arid to semi-arid climate, but during the summer rainy season referred to as "Bolivian Winter", thunder storms or afternoon showers can bring heavy precipitation. Annual rainfall or occasionally light snowfall totals about 150 mm on average, but precipitation is highly variable from year to year. Temperatures range from 15°C to 0°C in the summer months and 8°C to –5°C in the winter. Short stoppages in mine extraction may occur in the summer months caused by lightning storms.

A camp houses about 800 workers on site as mining in the secondary enrichment zone and processing by solvent extraction and electrowinning has been in operation since 1992. The mine claim block has sufficient area to place additional waste dumps, tailings ponds, and concentrating plant beyond the final pit design limits. Power is generated on site, with supplemental power drawn from a 20 km connection to the existing northern power grid. Water is currently brought in through a 37 km pipeline from Salar Michincha to the east, but an additional source may be required for a concentrator. QB has water rights for 316 liters per second in 7 wells and an additional 120 liters per second in nearby Salar de Alconcha.

8. HISTORY

Mineralization was recognized at QB perhaps as far back as the 1800's. Prospecting pits, shallow shafts, and short adits were driven beneath the oxide copper showings many years ago, perhaps in the years 1905-1930. The underground mine workings are small at QB accounting for only small tonnage extraction.

In the 1950's, a subsidiary company of Anaconda, Chile Exploration Co., staked a claim block over the deposit. No geological information is on record for this period. The claim block was expropriated in 1971 by the Chilean government.

After the Allende government was overthrown in 1973, the QB claim block became available again. The Chilean geological survey carried out a geological mapping program along with geophysical and geochemical surveys on the property. The Chuquicamata Division of Codelco completed one diamond drillhole in 1975 intersecting 12 meters of supergene copper enrichment averaging 1.39 %TCu.

The Superior Oil-Falconbridge Group optioned the property and in 1977 formed a Chilean subsidiary company, Compañía Exploradora Doña Inés Limitada, to carry out the exploration in the Quebrada Blanca area. During the next five years, Compañía Exploradora Doña Inés Ltda. completed detailed geological surface mapping, geochemistry, mineralogy, thin section descriptions, surface and core sampling, approximately 44,000 meters in 229 diamond drill holes, and 2,600 meters of underground tunnelling. The majority of this work was undertaken in the supergene enrichment zone. A set of N-S sections spaced every 50 meters was produced with interpretations of lithology, structure, alteration, copper mineralogy, and copper assays. Metallurgical samples were taken from the tunnels and drill core for flotation, crushing, and grinding tests. Low-grade material was used for column testing. During the option period in late 1982, Enami acquired the property from Codelco. A prefeasibility study was completed during this period and although positive, the Superior Oil-Falconbridge Group dropped the property due to poor commodity prices.

In 1989, Cominco became involved with the property and Compañía Minera Quebrada Blanca S.A. (CMQBSA) was formed. CMQBSA was held by Cominco Ltd. (76.5%), ENAMI (10%), and Sociedad Minera Pudahuel (13.5%). Later, Cominco sold 29.5% of its share to Teck Corporation. A prefeasibility and a feasibility study was completed during 1990 and 1991 on the supergene mineralization, and a production decision was made in 1992. Construction began immediately for an open pit, acid-bacterial heap leaching operation on the secondary enrichment zone, producing cathode copper by solvent extraction and electrowinning (SX-EW). Waste stripping began in 1992, with the first cathodes produced in 1994. Mining and cathode production is still in operation. Low-grade run-of-mine material has been dump leached since 2003.

In November 2000, Aur Resources Inc. purchased Cominco's and Teck's portion (76.5%) of CMQBSA.

In July 2007, Teck Cominco Ltd. acquired Aur Resources Inc. in a friendly takeover, regaining a 76.5% ownership in CMQBSA.

The original mine plan of 1992 stated 17 years of supergene reserves (not NI 43-101 compliant) amounting to 1,273,040 tonnes of cathode copper production. At Dec. 31, 2007; 950,856 tonnes of cathode copper has been produced from oxide and secondary sulphide copper heap leaching, solvent extraction, and electrowinning. No hypogene resource or reserve tonnage has ever been reported at QB, however about 6.5 million tonnes at 0.58 %TCu of hypogene material has been removed from the supergene pit and stockpiled in anticipation of an eventual concentrating plant. Diamond drilling began in 2007 as a first phase in defining a hypogene resource.

9. GEOLOGICAL SETTING

9.1 REGIONAL and DISTRICT GEOLOGICAL SETTING

The geologic setting in northern Chile is represented by a series of N-S trending magmatic belts, progressively younger in age towards the east (Figure 4). The Quebrada Blanca porphyry copper deposit is part of the middle Eocene-early Oligocene metallogenic belt of northern Chile, which coincides throughout much of its length with the Domeyko fault system, a major intra-arc structural feature. The Domeyko system predominantly comprises reverse faults that developed during the contractional tectonism marking the Incaic tectonic event. Quebrada Blanca and the other porphyry copper deposits in the belt were emplaced during the Incaic faulting and consequent tectonic uplift. Some of the largest copper porphyry deposits in the world, such as Chuquicamata, Escondida, Rosario (at Collahuasi), and El Abra are of similar origin.

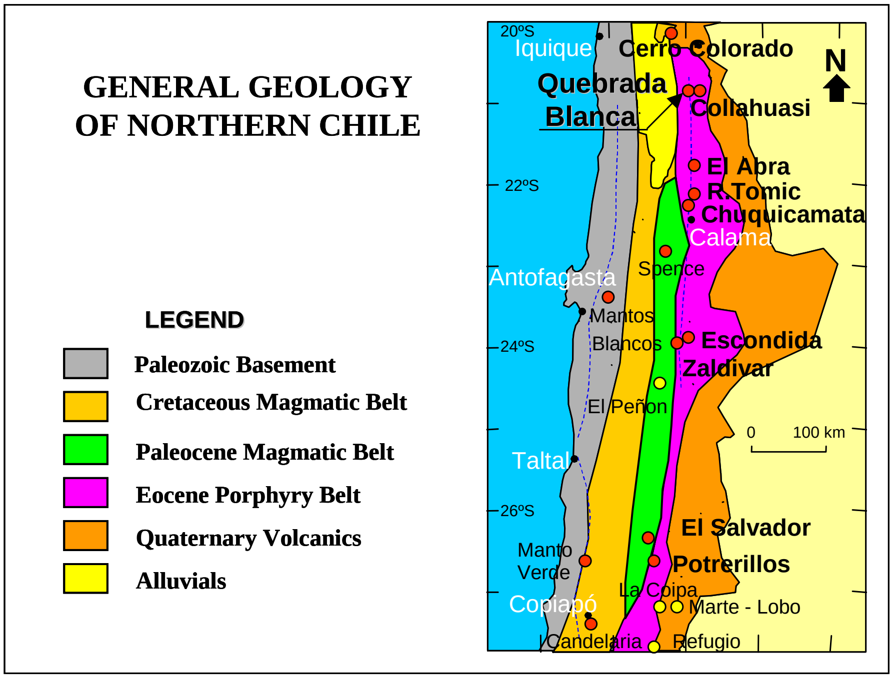

Figure 4. Generalized geology map of northern Chile.

The main component of the Domeyko system at the latitude of Quebrada Blanca is the West fault, some 3 km west of the orebody. This high-angle reverse fault, which originated as a normal fault bounding the eastern margin of the Mesozoic back-arc sedimentary basin, underwent major tectonic inversion during the Incaic event. The faults that controlled emplacement of the Quebrada Blanca deposit must have been active during the major reverse offset. The immediate district hosts three significant porphyry copper deposits within a 25 kilometer E-W linear span, the QB deposit and the Rosario and Ujina deposits of Collahuasi. These deposits all occur within a 30 to 40 km horst block of Mesozoic and Paleozoic aged rocks, bounded to the east by the Loa Fault (Figure 5).

The Quebrada Blanca District is characterized by a thick succession of andesite and rhyolite volcanics and minor sediments of the Collahuasi Formation dated at about 300 Ma. The volcanic rocks in the vicinity of Quebrada Blanca generally consist of subaerial and subaqueous flows and minor volcaniclastics. A comagmatic, north-south trending diorite batholith has intruded the sequence. These units are partially covered by Tertiary gravels and younger rhyolitic and dacitic ignimbrites. The volcanic sequence is offset by a series of NNE trending left lateral faults and deformed by a broad north trending anticlinal structure.

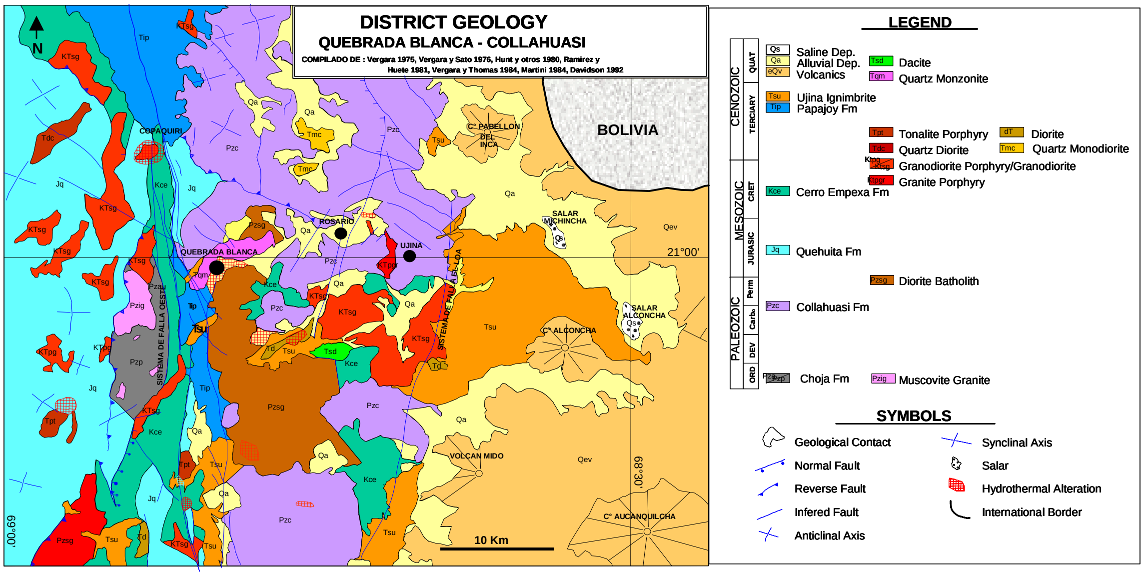

Figure 5. Geology map of the Quebrada Blanca district.

9.2 PROPERY GEOLOGY

Centrally located within the QB concession are multiple intermediate intrusions of Eocene (38Ma) age emplaced within Paleozoic andesite and rhyolite volcanics and a diorite batholith (300Ma) (Figure 6). The localization of the Eocene intrusions is thought to be a result of dextral strike slip movement during the Incaic event in northern Chile along the Quebrada Blanca reverse fault and strike slip displacement on the fundamental ENE structure resulting in a dilation zone facilitating emplacement of the intrusions, breccias, and copper and molybdenum mineralization. The axial distribution of the porphyry and breccia bodies within the quartz monzonite intrusion suggests that incremental opening took place along the ENE structure. The ENE structure is suspected to mirror a zone of structural weakness in the Paleozoic basement.

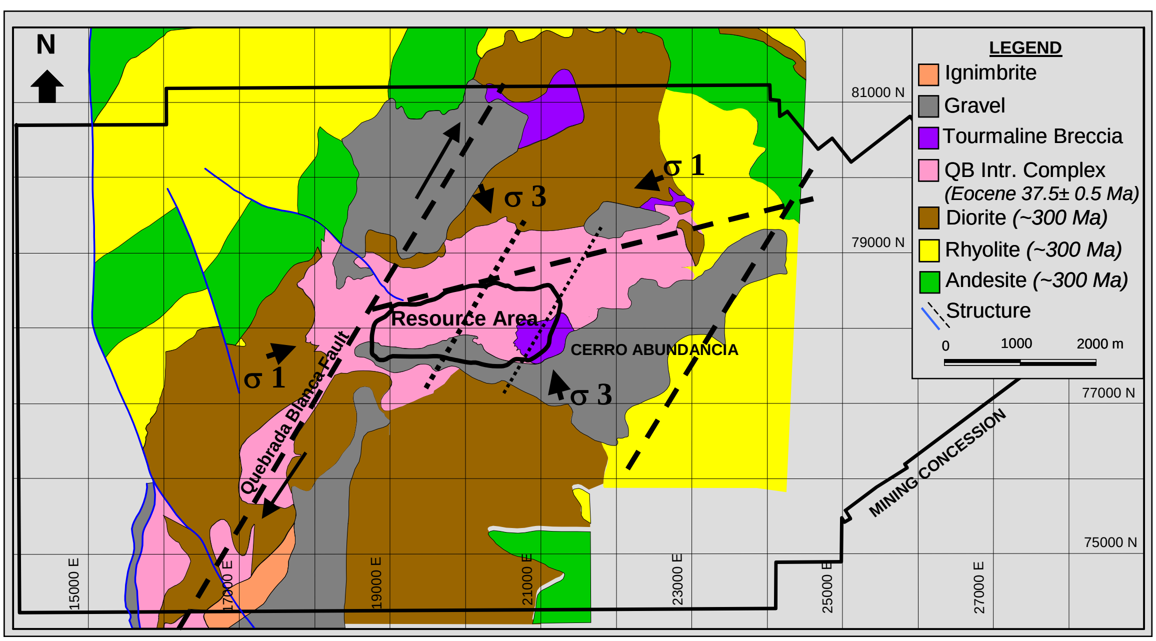

Figure 6. General geology of the QB mine concession.

A pink to grey equigranular quartz monzonite stock with an elongation ENE, approximately 2 kms by 5 kms in size, represents the oldest mineralized Eocene intrusive on the property. The quartz monzonite contains local xenoliths of diorite and andesite from the Collahuasi Formation.

A series of feldspar porphyry dikes and small irregular stocks, dated at about 37Ma, have invaded the central portion of the quartz monzonite stock. The majority of the dikes are steeply SE dipping and NNE trending, roughly parallel to the elongation of the quartz monzonite stock, ranging from less than a meter to tens of meters in width (Figure 7). The feldspar porphyry dikes are grey in color, characterized by plagioclase phenocrysts with lesser biotite and quartz phenocrysts in a fine grained matrix. The percentage of phenocrysts can vary from <30% to >50% suggesting there may have been multiple injections. Mineralization is variable in this rock unit.

The better mineralization is associated with the emplacement of a NE trending igneous breccia, occupying the central part of the quartz monzonite stock and covering an area of about 1.1 by 2.5 kms. The igneous breccia varies in composition in relation to the percentage of biotite and potassium feldspar and in texture from clast rich to clast deficient. The potassium feldspar-rich igneous breccia has a very fine-grained to aplitic fluidal texture, occasionally porphyritc. Clasts, when present, originate mainly from the feldspar porphyry intrusive and quartz monzonite, with diorite, andesite, and rhyolite clasts only observed locally. The biotite-rich igneous breccia is characterized by a medium to coarse-grained fluidal texture, with the main mineral component consisting of rounded plagioclase grains up to 70% and biotite up to 25% in the matrix. Clasts of feldspar porphyry intrusive and quartz monzonite are most common, with diorite, andesite, and rhyolite abundant locally.

A series of narrow, aphanitic to micro-porphyritic green diorite dikes trending ENE and NNE containing up to 10% subhedral plagioclase crystals to 0.5mm in size are also present. These dikes appear to postdate most of the intrusive rocks, but may predate the igneous breccias as possible fragments are frequently present within the igneous breccia.

Superimposed on the early magmatic porphyry alteration is an intensive phyllic alteration event generated during the release of overpressured magmatic fluids creating a distinct rock type mapped as vuggy breccia. Quartz with pyrite and minor chalcopyrite cemented the clasts which themselves underwent intense sericitic alteration obliterating original textures. A similar tourmaline breccia zone occurs further to the east, but is not well understood due to the lack of exposure.

The property has been bisected by channels of Tertiary gravels up to 200 meters in thickness. Boulders containing copper oxides have been observed in the gravel, suggesting partial erosion of the secondary copper mineralization. A young ignimbrite covers part of the property to the south.

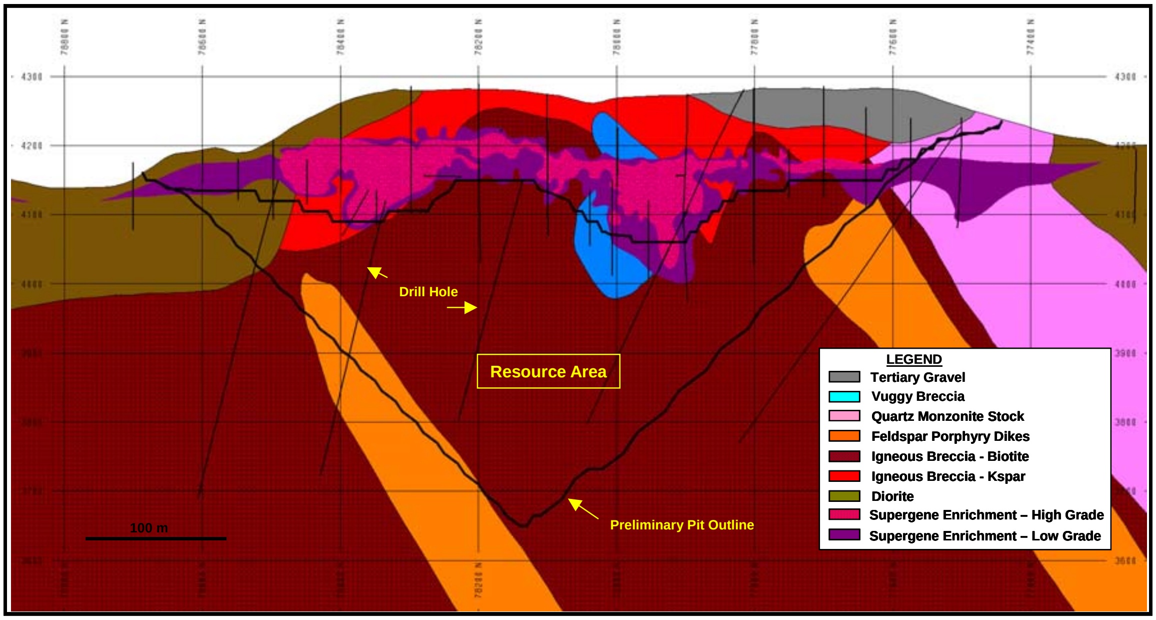

Figure 7. N-S cross section 19+800E looking east showing QB lithologies.

Three main structural trends, ENE, NNE, and NW, have been defined in the deposit area. The NNE and NW trends observed within the deposit are clearly post mineral faults characterized by gouge and breccia. These structures appear as oblique normal faults, however, displacement is later than 14Ma as shown by offsets in the overlying Tertiary gravel. The normal motion is assumed to result from minor structural adjustments, however the faults were also clearly active at the time of mineralization. Some of the pyritic D-type veins have a NW orientation, and historical mapping in an exploration tunnel has identified larger apparent displacements of clasts in the breccia than certain hydrothermal veins. The ENE structural trend is defined by the orientation of the quartz monzonite stock, feldspar porphyry dikes, igneous breccia, and hydrothermal breccias.

Alteration zoning patterns observed at Quebrada Blanca are typical for porphyry copper deposits (Figure 8). Centrally located potassic alteration with a ENE elongation represented by potassium feldspar and secondary biotite are associated with the quartz monzonite stock, feldspar porphyry dikes, and intrusive breccias. Propylitic alteration, mainly corresponding to the diorite batholith, is characterized by a chlorite-epidote-calcite assemblage. Weak to moderate phyllic alteration represented by quartz-pyrite D-type veins trending NW overprint earlier alteration assemblages. A late hydrothermal event has generated extensive zones of pervasive phyllic alteration. Later, kaolinite and minor montmorillonite clays formed in the leached capping and secondary enrichment zone from alteration of feldspar and biotite minerals in contact with acid generated from pyrite oxidation.

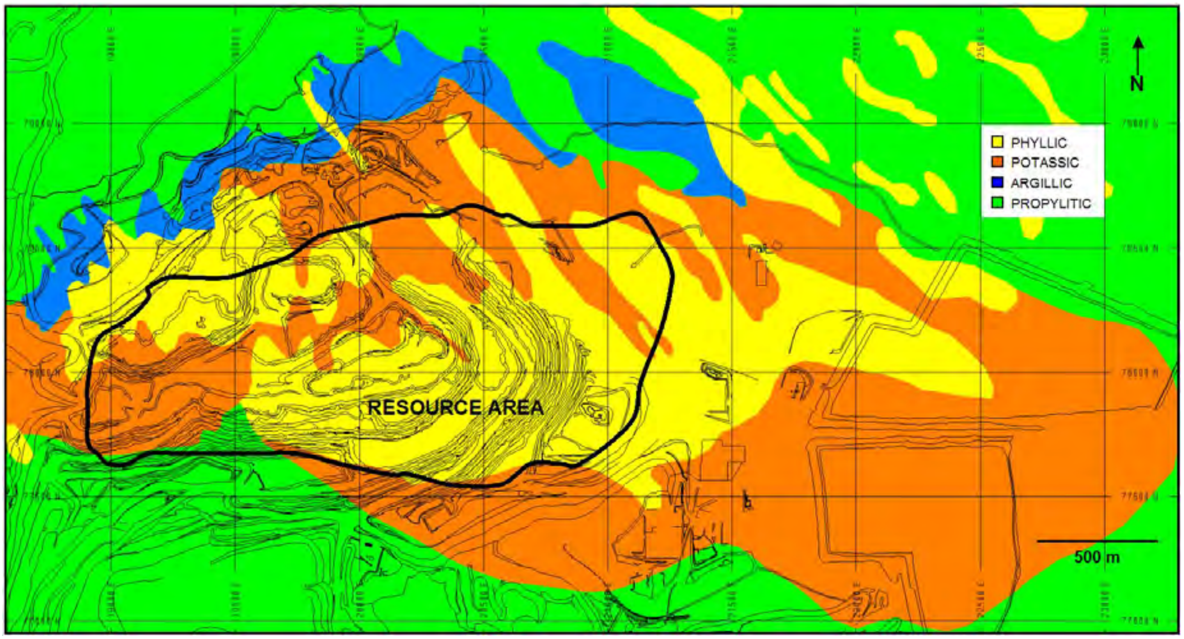

Figure 8. Alteration pattern at Quebrada Blanca.

10. DEPOSIT TYPES

The QB property hosts a large, intrusive hosted porphyry copper deposit with a well developed secondary enrichment blanket. Alteration and mineralization patterns, well documented in surface mapping, drilling, and pit exposures, are consistent with typical patterns observed in porphyry copper environments. The commonly accepted porphyry copper model, a steep-walled intrusive complex accompanied by copper and molybdenum mineralization emplaced in older rocks in the zone of structural weakness, is consistent with the QB porphyry copper deposit. Alteration is zoned from potassic outward to propylitic, with late fracture controlled phyllic alteration superimposed. Higher grade primary (hypogene) mineralization is associated with potassic alteration.

Recent exploration programs consist of diamond drilling concentrated along the central potassic alteration zone. Many short hypogene intercepts at the bottom of drill holes from earlier supergene reverse circulation infill drilling have confirmed that a central higher grade hypogene zone exists. Steeply angled diamond drill holes averaging about 500 meters in length are planned to continue testing the zone in 2008.

11. MINERALIZATION

Mineralization in the QB hypogene porphyry environment consists of disseminated and veinlet chalcopyrite and molybdenite in an area of approximately 2km by 5kms within Eocene intrusions and occasionally in the adjacent diorite or volcanic rocks. Bornite has only been identified as a minor component in some samples. Other metals such as gold and silver are only present in very low concentrations.

The quartz monzonite stock and feldspar porphyry intrusives are characterized by disseminated and stockwork A-type and B-type veins. Subsequently, numerous D-type quartz-pyrite veinlets with centimetric sericitic halos were formed in these rock types. Copper and molybdenum grades in the quartz monzonite and feldspar porphyry tend to have a lower values on average.

The igneous breccia is thought to represent a reactivation of the porphyry copper system. Copper and molybdenum mineralization tend to have higher grades on average in this rock type. Mineralized clasts of quartz monzonite and feldspar porphyry within the igneous breccia have been documented, including clasts containing D-type veins. Therefore, the enhanced grades in the igneous breccia are the main focus of drilling and resource definition. The zone of focus in the igneous breccias trends ENE, and as defined so far, occurs within an area approximately 2.0 km by 0.5 kms. Drill holes have intersected mineralization to about 400 meters vertical depth in the hypogene zone, and mineralization is still open.

A vuggy breccia representing an intense phyllic alteration zone associated with a late hydrothermal depressurization of magmatic-hydrothermal fluids contains higher copper and molybdenum grades than the other rock types. Mineralization occurs as coarse clots of pyrite, pyrite-chalcopyrite, or molybdenite in quartz. Local zones of molybdenite-cemented clasts within the vuggy breccia have grades over 1% Mo. The vuggy breccia is not volumetrically significant in the hypogene zone.

Copper and molybdenum grades within and between drill holes are quite consistent in the central area of the deposit. Mineralization tends to become more variable to the north and south, with higher grade intersections more confined to structural zones. Mineralization continues at depth. Mineralization terminates towards the west at the Quebrada Blanca fault, but remains open to the east. Drilling will continue testing the igneous breccia to the east in 2008.

Mineralization at Quebrada Blanca is based on a structural model of intersecting NNE faults with the ENE trend. The Quebrada Blanca Fault which bounds the ore body to the west, orientated NNE, is interpreted as having reverse displacement during the mineralization event. The subsidiary NNE-striking faults within the deposit must also have undergone reverse motion at the same time, albeit with lesser cumulative displacements. Assumption of reverse motion on the NNE faults implies similar kinematics for the NW faults, which are likely to form a conjugate set.

12. EXPLORATION

Intensive exploration was carried out on the QB property during the late 1970's and early 1980's by Cía. Exploradora Doña Inés Ltda. Field mapping, sampling and diamond drilling was completed over a five year period, producing reports and several detailed maps depicting lithology, structure, alteration, relict sulphides, Cu-Mo-Ag-Au distributions, and mineralogy.

The Quebrada Blanca mining concession was covered by an aeromagnetic survey performed for Codelco in 1992. This survey covers most of northern Chile and was flown along N-S 500 meter spaced lines. In May 2002, this data set was acquired for a strategic 35km by 35km block centered on the Quebrada Blanca deposit. These data were subsequently processed by Quantec, but was only used in regional exploration. However, NNE, ENE, and NW lineaments interpreted by CMQBSA staff as structural controls at Quebrada Blanca are well illustrated on a regional scale on the pole-reduced magnetic map.

In 1978, Geo-exploraciones conducted a magnetic survey over part of the east-central portion of the QB property, referred to as the Pampa Negra area, in order to better define poorly expose magnetic breccias. The survey identified several zones with higher magnetic responses which were subsequently drilled by Cía. Exploradora Doña Inés Ltda. Disseminated magnetite associated with pyrite and chalcopyrite zones were identified in one drill hole and a tourmaline breccia associated with few moderately magnetic units was intersected in a second drill hole. These zones will be further explored by diamond drilling in the future.

In 2002, Quantec conducted a ground magnetic survey on behalf of CMQBSA on a block measuring approximately 5.5 by 1.5 km in an area located over the northern part of the QB pit outline. The survey was performed along N-S lines with a line-spacing of 100 m. The purpose of the survey was to define the diorite-quartz monzonite contact. The results, interpreted by Quantec, showed that the contact is in fact very irregular, marked by several moderately magnetic bodies extending from 100 to 250 meters below surface, with no apparent deeper root. On surface, these magnetic bodies coincide with the recognized diorite batholith. The absence of roots for the diorite bodies, inferred from the magnetic survey, suggest that they may represent roof pendants preserved on top of the quartz monzonite.

The data was acquired in 2002 from a regional hyperspectral survey flown by Noranda in 1999 that included the QB deposit. In 2003, Spectral International Inc. processed the data and produced a series of maps for each of the following minerals: alunite, chlorite, hematite, illite, kaolinite, and tourmaline. The chlorite occurrence map helped locate the propylitic alteration zones mapped to the north and the south of the pit.

Several induced polarization and resistivity surveys were conducted on the Quebrada Blanca mining concession with the objective of defining zones of primary and secondary sulphide mineralization. In 1973, the first survey was conducted within an area of 2km by 5km centred on the current pit area. The lines were oriented in several directions with a dipoles spacing of 50m and 100m in order to enhance resolution of the shallow features. Quantec processed an inversion of the data set in 2002 and identified a strong chargeability zone coinciding with a low resistivity zone to the ENE of the pit. This well-developed IP anomaly was interpreted to potentially indicate the presence of a chalcocite blanket. In 1992, a second survey was conducted on a large part (approximately 85%) of the Quebrada Blanca mining concession, again by Quantec. The survey was performed along N-S lines with a line spacing of 1km, and a dipole spacing of 200 m. The line spacing was reduced to 500 m within the supergene mine to obtain a better image of the Quebrada Blanca deposit. A large IP anomaly, coinciding with the Quebrada Blanca Eocene intrusions was identified on the property (Figure 9).

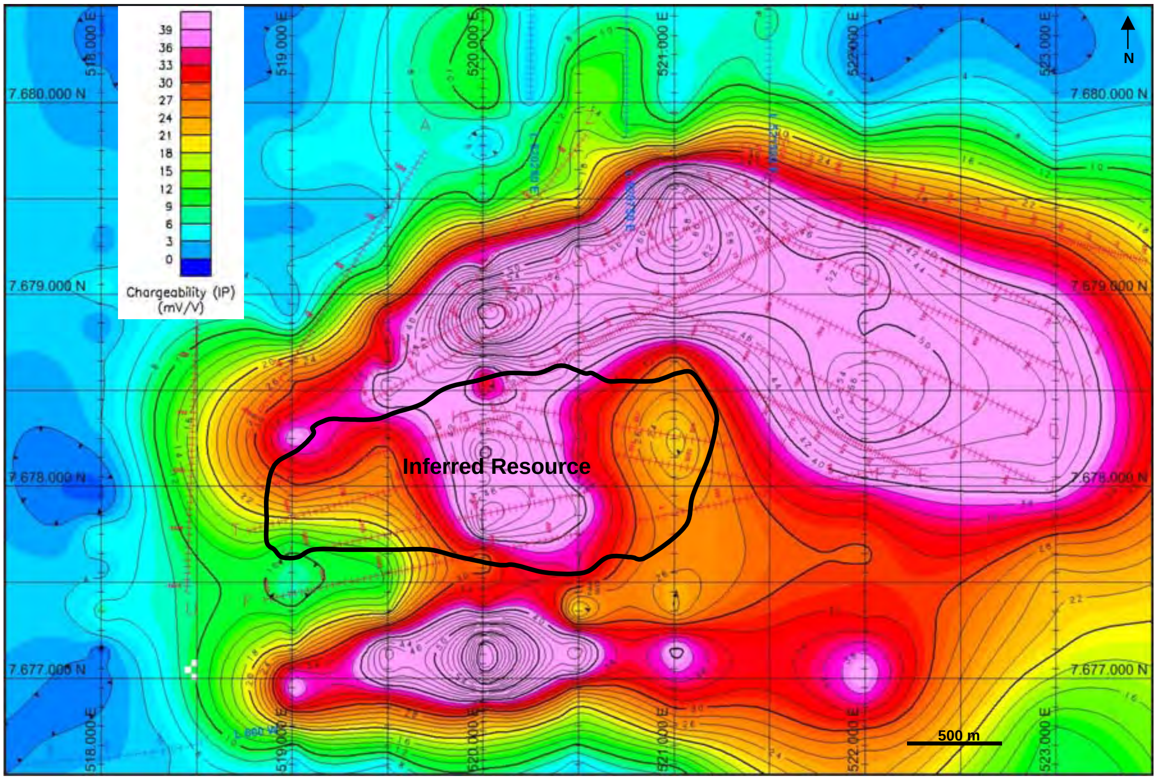

Figure 9. QB chargeability anomaly at 4100 meter elevation.

All the geological information pertaining to the QB claim blocks from various sources was transferred to layered compilation plans using the GIS based system MAPINFO between 2002 and 2004 by QB staff.

The result of all this previous work on the property has been the identification of good drilling targets east of the current inferred hypogene resource as indicated by the induced polarization survey, magnetic survey, and identification of the propylitic alteration zone on surface from hyperspectral data.

13. DRILLING

Drilling on the QB property was accomplished with a combination of reverse circulation and diamond drill holes. The majority of the drilled meters correspond to reverse circulation drilling in the supergene enrichment zone. Drilling in 2007, 2005, and a few holes in 1977/82 totalling 17,291m were targeted for the hypogene zone (Table 1, Figure 10). Additionally, most the supergene drilling included a hypogene intercept at the bottom of the hole, averaging about 42 meters.

	Diamond Drilling		Reverse Circulation		TOTAL	
YEAR	**Meters**	**# Holes**	**Meters**	**# Holes**	**Meters**	**# Holes**
1975	120	1			120	1
1977/82	38,997	229			38,997	229
1977/82	5,598	15			5,598	15
1990	2,394	5	1,415	14	3,809	19
1994			1,613	13	1,613	13
1995			3,487	19	3,487	19
1997			7,486	47	7,486	47
2000	3,035	15	14,069	92	17,104	107
2001			16,956	107	16,956	107
2002			22,934	261	22,934	261
2003			43,836	369	43,836	369
2004			26,553	143	26,553	143
2005	1,961	6	11,160	121	13,121	127
2006			5,106	45	5,106	45
2007	9,732	36			9,732	36
TOTAL HYP	**17,291**	**57**				
TOTAL	**61,837**	**307**	**154,614**	**1,231**	**216,451**	**1,538**

TABLE 1. Register of drilling on the Quebrada Blanca property. Drilling intended to test the hypogene zone (blue) in the area of the resource estimation.

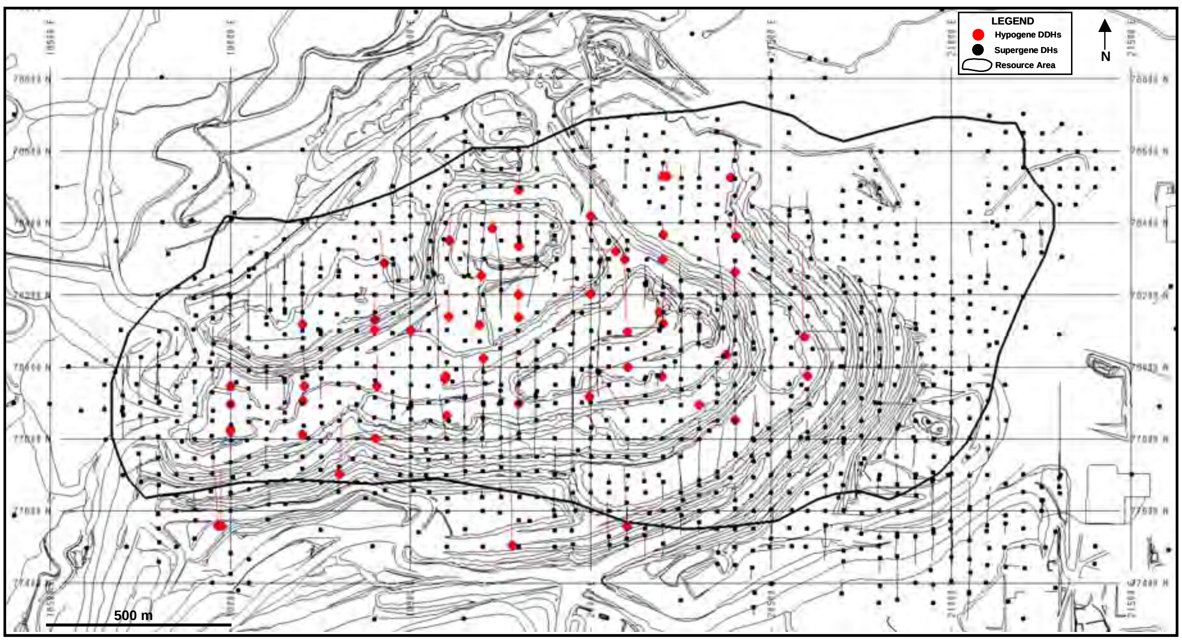

Figure 10. Drilling Coverage at Quebrada Blanca.

The diamond drill holes were geologically logged for lithology, structure, alteration, and mineralization. Also percentage core recovery, rock quality designation, fracture frequency, and hardness were recorded in the geotechnical database from generally two-meter intervals. The HQ and NQ core was split with ½ of the core retained, when not consumed for metallurgical testing, and stored in trays in racks on the property for reference. Drill core obtained in 2005 and 2007 was photographed prior to sampling.

The reverse circulation drill holes were geologically logged and sampled at one or two-meter intervals. A small representative sample of rock cuttings for each interval was kept in labelled chip trays as a record of the interval.

The hypogene drilling in 2007, which represents about half of the data used in the inferred hypogene resource estimate, were drilled at an azimuth of 360° and a dip angle of –75°. Some adjustments were made to the dip angle, maintaining –60° as a minimum, due to available collar sites in the current mining operation. One drill hole was oriented to the south for that reason. The drill holes are planned to intersect the mineralized intrusive bodies, which are interpreted to dip steeply to the SSE, to about 400 vertical meters from the base of the supergene zone. The mineralized intrusive bodies continue at depth, but the drilling program is designed to define resources with open pit potential. Drill hole intersections to date have succeeded in defining an extensive copper-molybdenum zone centrally located within the intrusive complex having relatively low copper grade variability. More distal to the central zone, copper and molybdenum grades are more irregular.

Diamond drilling at Quebrada Blanca is performed with HQ size core, reducing to NQ when necessary. Sampling was accomplished in 2007 at regular 2 meter intervals from the collar. Sampling crosses lithological boundaries, however abrupt changes in mineralization are uncommon, warranting this method appropriate.

Fifteen drill holes in 2007 were measured for down-hole deviations by Wellfield using a gyroscope instrument within the drill rods at 10 or 20 meter intervals. Drill holes not measured were lost prior to completion due to difficult ground conditions. Deviations tend to be minor for the majority of the drill holes, generally less than 3° for both dip and azimuth.

Geological information recorded in drill logs is stored in digital format for easy reference and plotting of plans and sections used in geological interpretations. Drilling results to date have confirmed the geological and mineralization model is valid.

14. SAMPLING METHOD and APPROACH

The majority of the samples utilized in the resource estimation were obtained from diamond drilling, however a small proportion originated from reverse circulation drilling (Table 2).

Diamond drill holes were sampled at two-meter regular intervals from the collar with average core recoveries exceeding 94%. Abrupt changes in mineralization are rare at QB justifying regular length sample intervals. One drill hole collared in 1975 and 15 drilled in 2000 were sampled at shorter intervals. In 2005 and 2007, meterage blocks placed in the core boxes were routinely checked for accuracy by QB staff by measuring the core in the core tube at the end of each run. Drill core was immediately photographed on a specially constructed apparatus. Samples were measured and marked at 2 meters intervals based on the meterage blocks in the core boxes and split with a diamond saw. A hydraulic splitter was used when core was highly broken. After each piece of core was split, one half was returned to the core box and the other half placed in a sample bag. When a two meter interval was completed, the sample tag, having been previously assigned to that interval, was stapled into a fold in the top of the plastic sample bag and the bag sealed. QB and exploration staff performed this work on site.

		TOTAL DATABASE		TOTAL HYP INTERCEPTS		RESOURCE AREA	
YEAR	Sample Type	# Samples	Avg. Length	# Samples	Avg. Length	# Samples	Avg. Length
1975	DDH	79	1.5	0	0.0	0	0.0
1977/83	DDH	20,805	2.0	6,590	2.0	3,384	2.0
1990	DDH	985	2.0	713	2.0	48	2.0
1990	RVC	796	1.8	35	2.0	0	0.0
1994	RVC	1,126	1.4	244	1.0	59	1.0
1995	RVC	2,476	1.4	386	1.0	99	1.0
1997	RVC	5,240	1.4	1,241	1.0	441	1.0
2000	DDH	2,581	1.0	768	1.0	283	1.0
2000	RVC	13,950	1.0	3,504	1.0	1,447	1.0
2001	RVC	7,789	1.7	2,571	1.7	1,041	1.9
2002	RVC	10,470	2.0	3,683	2.0	1,868	2.0
2003	RVC	19,210	2.0	4,119	2.0	1,790	2.0
2004	RVC	11,482	2.0	2,655	2.0	1,306	2.0
2005	RVC	49,972	2.0	1,406	2.0	845	2.0
2005	DDH	849	2.0	722	2.0	129	2.0
2006	RVC	2,521	2.0	929	2.0	524	2.0
2007	DDH	4,723	2.0	4,416	2.0	3,077	2.0
TOTAL		**155,054**	**1.8**	**33,982**	**1.8**	**16,341**	**1.9**

TABLE 2. Total sample intervals in the database, total samples in the hypogene zone, and total hypogene samples within the resource area.

Reverse circulation (RVC) drill holes were sampled at one or two-meter intervals from the collar with sample recoveries averaging 90%. It is normal practice for the entire sample to be collected at the drill rig, weighed, and halved or quartered in a riffle splitter for relatively dry samples. The sample split represents about 15 kgs (half of a one-meter sample or a quarter of a two-meter sample). Samples are placed in labelled plastic bags with a pre-assigned sample tag stapled into a fold in the top of the bag and sealed immediately at the drill rig. A rotary wet splitter must be employed in extreme wet conditions, where two smaller splits are recovered in porous sample bags at the rig, labelled, and dried.

Adequate sample coverage for a resource estimate in the hypogene zone corresponds to an area of 200 meter spaced diamond drill holes, approximately from 19+000E to 20+600E, 77+700N to 78+600N, and down to 3800 meter elevation, or approximately the same area as the resource. Beyond this area, drilling coverage consists of reverse circulation drill holes and a few diamond drill holes with short hypogene intercepts at the bottom of the hole. These areas require more drilling to confirm the continuity of the hypogene mineralization.

The better mineralization in the hypogene zone occurs as disseminated and stockwork veining in the igneous and vuggy breccias. The breccia bodies are interpreted to plunge steeply southeastwards at the intersections between the steeply east-dipping NNE faults and the steeply south-dipping ENE structure. The higher grade mineralization occurs in a zone about 500 meters in true width. The orientation of the drill holes is planned to intersect this zone of higher grade mineralization with a series of drill holes spaced at 200 meter centers along N-S section lines and dipping about –75°N. Copper grades within this zone have demonstrated low variability, therefore regular sampling intervals of two meters is justified.

A summary of the entire hypogene intercept from drill holes realized in the zone of the resource estimation is shown in Table 3.

DH-ID	From	EOH	Interval (m)	Au (ppb)	Cu (%)	Mo (%)	YEAR
DDH-025	160.00	387.60	227.60		0.91	0.031	1977/83
DDH-027	162.00	555.83	393.83		0.56	0.016	1977/83
DDH-047	106.00	305.08	199.08		0.58	0.020	1977/83
DDH-071	224.00	338.79	114.79		0.73	0.025	1977/83
DDH-081	102.00	258.85	156.85		0.75	0.011	1977/83
DDH-083	158.00	297.75	139.75		0.66	0.025	1977/83
DDH-102	144.00	554.80	410.80		0.63	0.022	1977/83
DDH-106	85.00	258.71	173.71		0.52	0.005	1977/83
DDH-111	94.00	716.60	622.60		0.48	0.011	1977/83
DDH-128	118.00	282.25	164.25		0.46	0.005	1977/83
DDH-132	118.00	263.95	145.95		0.42	0.010	1977/83
DDH-133	146.00	286.00	140.00		0.53	0.025	1977/83
DDH-134	160.00	303.60	143.60		0.41	0.007	1977/83
DDH-152	220.00	410.80	190.80		0.43	0.028	1977/83
DDH-154	216.00	377.60	161.60		0.79	0.022	1977/83
DDH-246	73.00	176.00	103.00		0.55	0.025	2000
DDH-251	56.00	292.30	236.30	22.3	0.30	0.007	2005
DDH-252	60.00	586.20	526.20	22.3	0.28	0.005	2005
DDH-253	110.00	304.50	194.50	21.2	0.29	0.010	2005
DDH-254	58.00	420.00	362.00	25.0	0.32	0.010	2005
DDH-255	16.00	167.00	151.00	30.2	0.43	0.028	2005
DDH-256	36.00	114.20	78.20	23.7	0.59	0.039	2007
DDH-257	36.00	241.25	205.25	21.7	0.43	0.036	2007
DDH-258	4.00	360.00	356.00	30.8	0.58	0.019	2007
DDH-259	14.00	348.00	334.00	40.5	0.71	0.019	2007
DDH-260	8.00	332.40	324.40	51.4	0.56	0.009	2007
DDH-261	8.00	95.05	87.05	52.8	0.62	0.012	2007
DDH-261A	10.00	302.00	292.00	37.5	0.43	0.019	2007
DDH-262	0.00	256.10	256.10	27.9	0.49	0.013	2007
DDH-263A	0.00	73.50	73.50	57.3	0.86	0.013	2007
DDH-264	28.00	103.35	75.35	50.7	0.54	0.012	2007
DDH-265	18.00	281.90	263.90	34.1	0.29	0.003	2007
DDH-266	76.00	330.00	254.00	26.8	0.46	0.014	2007
DDH-267	100.00	342.00	242.00	55.4	0.59	0.011	2007
DDH-269	36.00	311.90	275.90	29.2	0.62	0.033	2007
DDH-270	60.00	346.80	286.80	41.9	0.31	0.004	2007
DDH-271	58.00	335.60	277.60	25.6	0.62	0.040	2007
DDH-272	92.00	423.00	331.00	28.9	0.53	0.014	2007
DDH-273	0.00	560.70	560.70	29.1	0.47	0.023	2007
DDH-274	30.00	409.00	379.00	22.7	0.46	0.024	2007
DDH-275	0.00	436.00	436.00	19.1	0.41	0.011	2007
DDH-276	32.00	298.50	266.50	16.9	0.46	0.019	2007
DDH-278	14.00	234.00	220.00	27.5	0.53	0.035	2007
DDH-279	10.00	397.90	387.90	22.6	0.42	0.022	2007
DDH-280	58.00	566.70	508.70	34.6	0.57	0.030	2007
DDH-282	20.00	143.10	123.10	24.3	0.56	0.015	2007
DDH-283	76.00	475.80	399.80	17.8	0.42	0.007	2007
DDH-284	16.00	78.20	62.20	26.7	0.47	0.010	2007
DDH-284A	52.00	163.20	111.20	19.9	0.41	0.021	2007
DDH-286	90.00	446.40	356.40	18.9	0.35	0.008	2007
DDH-287	0.00	492.00	492.00	21.0	0.55	0.021	2007
DDH-288	68.00	198.00	130.00	15.1	0.20	0.005	2007
Average			**257.8**	**21.0**	**0.494**	**0.017**	

Table 3. List of drill hole intercepts in the hypogene zone to the end-of-hole (EOH) within the resource area.

15. SAMPLE PREPARATION, ANALYSES and SECURITY

Only diamond drilling programs in 2005 and 2007 and a few holes drilled between 1977 and 1983 were intended to test the hypogene mineralization. Other drilling programs, mainly reverse circulation drilling planned for defining supergene reserves, intersected an average hypogene intercept of 42 meters at the bottom of each hole.

15.1 1977-1983 DRILLING PROGRAM

Sampling of diamond drill core from 1977 to 1983 as described by Hunt et al, 1983, was done at two-meter intervals on a half split of the HQ and NQ core. Samples were crushed to minus 6 mm and a 1.5 kg sample was removed. The 1.5 kg sample was pulverized to minus 100 mesh and further split into three pulps. All sample preparation was performed on the QB property. One 500 gram pulp was sent to CESMEC lab in Iquique for total copper, acid soluble copper, and molybdenum analysis by Atomic Absorption Spectrophotometry. A check analysis was performed on a second pulp for total copper at Union Assay in Salt Lake City, USA by the potassium iodide method. The author does not know how well the check analysis matched the original, or what security measures were practiced during this period. However, 2,461 pulps from hypogene intervals were reanalyzed for total copper in 2002 (Figure 11). Of the sample pairs, 2.5% were beyond a 20% difference. The average copper grade of the original samples was 1.6% higher than the check assays. These drill holes represent a very small proportion of the resource estimation.

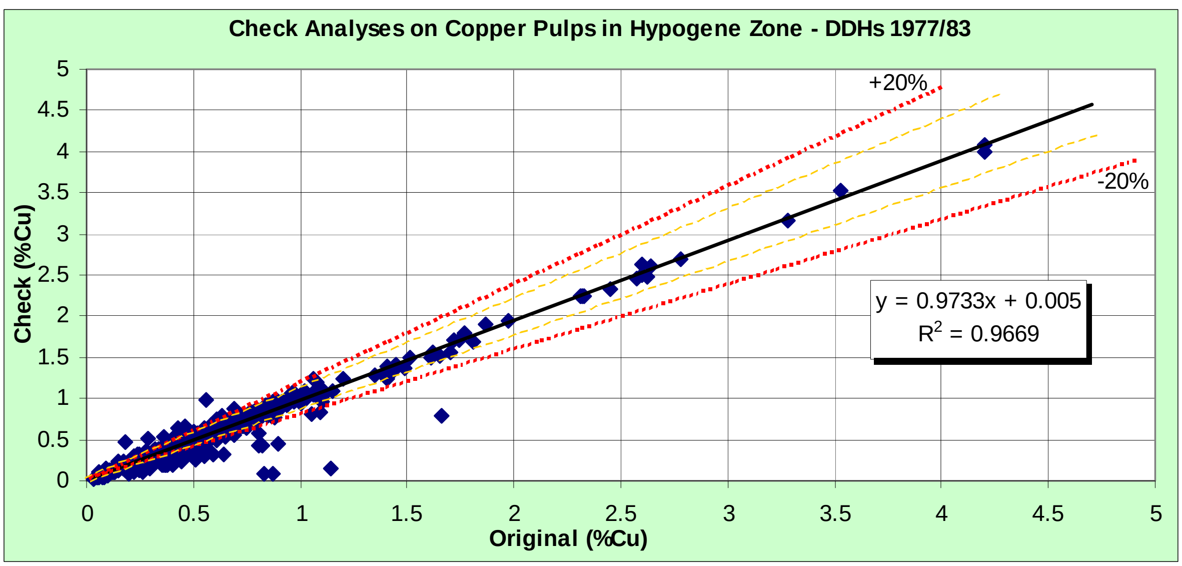

Figure 11. Check analyses for copper on pulps from drilling in the hypogene zone completed between 1997 and 1983.

15.2 2005 DRILLING PROGRAM

A diamond drilling program was initiated in 2005 for testing hypogene mineralization along the down dip extension of the interpreted mineralized zone. The program was terminated prematurely due to drilling problems caused by difficult ground conditions. Only two drill holes were completed to programmed depth. Drill core was split with a diamond saw at two meter intervals, bagged and dispatched to ACME lab in Santiago. A set of 40 pulps were renumbered and resubmitted to ACME as a check on analytical consistency (Figure 12). The check results for copper were exceptionally good.

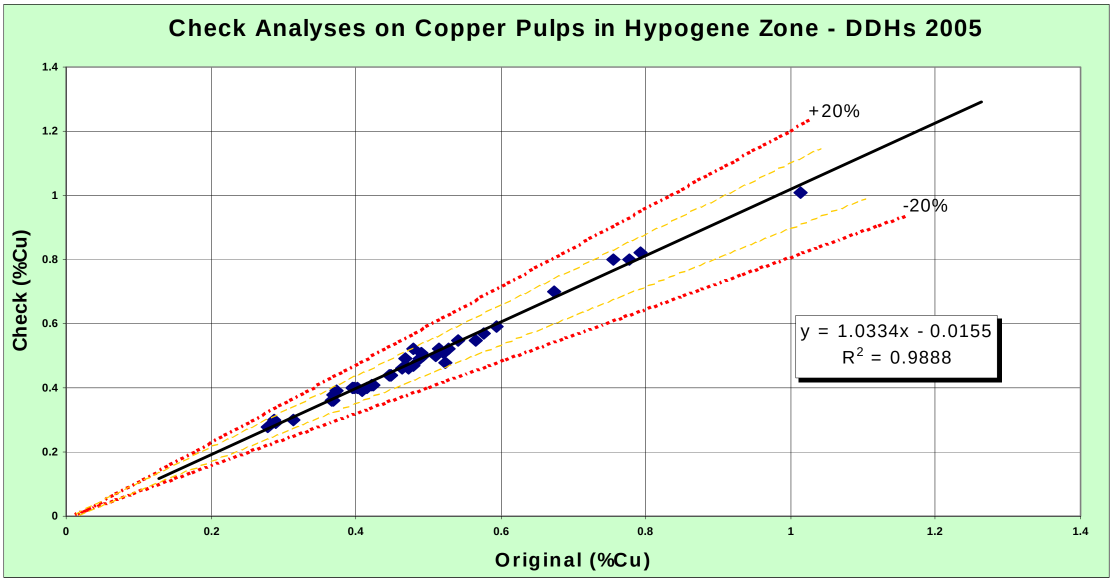

Figure 12. Check analyses on selected pulps from the 2005 drilling program.

In 2005, half core samples representing 2 meter intervals were prepared on site by QB staff. These samples were placed in plastic sample bags immediately after the splitting stage and sealed by stapling a sample tag in a fold in the upper part of the sample bag. Batches of 100 to 300 samples were placed in pallet boxes with a secured plywood lid and trucked to ACME lab in Santiago. A copy of the sample list was emailed to ACME in advance and a printed list accompanied each shipment. ACME notified QB staff upon arrival of the truck and confirmed the sample register. No discrepancies or apparent tampering were reported.

15.3 2007 DRILLING PROGRAM

The majority of the hypogene resource is based on diamond drilling completed in 2007. Drill holes were collared in or near the hypogene zone in the bottom of the current supergene pit. As stated in a prior section, half HQ or NQ cores representing 2 meter intervals were placed in plastic bags and sealed by QB staff on the property. Commonly, batches between 100 to 300 samples were sent to Andes Analytical Assay Ltda lab in Santiago for preparation and analyses. Samples were crushed to a minimum of 80% minus 10 mesh, homogenized, quartered and pulverized to approximately 400 grams passing 95% through 150 mesh. One gram of material was removed and weighed on a balance with a precision of 0.1 mg and transferred to a flask. Digestion in acid was accomplished by adding an acid mixture of 5 ml HNO_3, 15 ml HCl, and 3ml $HClO_4$, transferring the solution to a hot plate and evaporating without burning. Then, 10 ml HCl and de-ionized water was added, heated until boiling, and removed to cool. From this solution 100 ml was transferred for reading copper and molybdenum values by an Atomic Absorption Spectrophotometer against standards.

A QA/QC program for the 2007 drilling consisted of check analyses on pulps at ACME laboratory in Santiago for copper, molybdenum, and gold on 5% of the sample intervals. Also, internal checks by Andes Analytical Assay Ltda served as a check on pulps (5%) and coarse rejects (2.5%) with standards (5%) and blanks (~1%) inserted at regular intervals. The results show there were no analytical bias, errors, or significant contamination of samples at Andes (Figure 13, 14, 15, 16, 17, 18, & 19). The only potential issues identified at Andes in their internal quality control program were slightly elevated copper values in blanks during a batch run at the end of 2007 and another in early 2008. Although not a serious problem, Andes was notified that improvements should be made in the crushing room. Check analyses on 343 selected pulps at ACME were good, although 10 samples representing 2.9% of the checks registered significant differences, greater than 20%, from the original assays. Almost all of these samples were traced back to two drill holes from two dispatches. The QA/QC program demonstrated that the majority of these two dispatches were good, although there may have been a partial mix up. These samples and at least 10 adjacent samples in the corresponding dispatches were returned to Andes for reanalyses. The results from the reanalyses were not available prior to the resource estimation. However, the results of check analyses are satisfactory and will not bias the resource estimations.

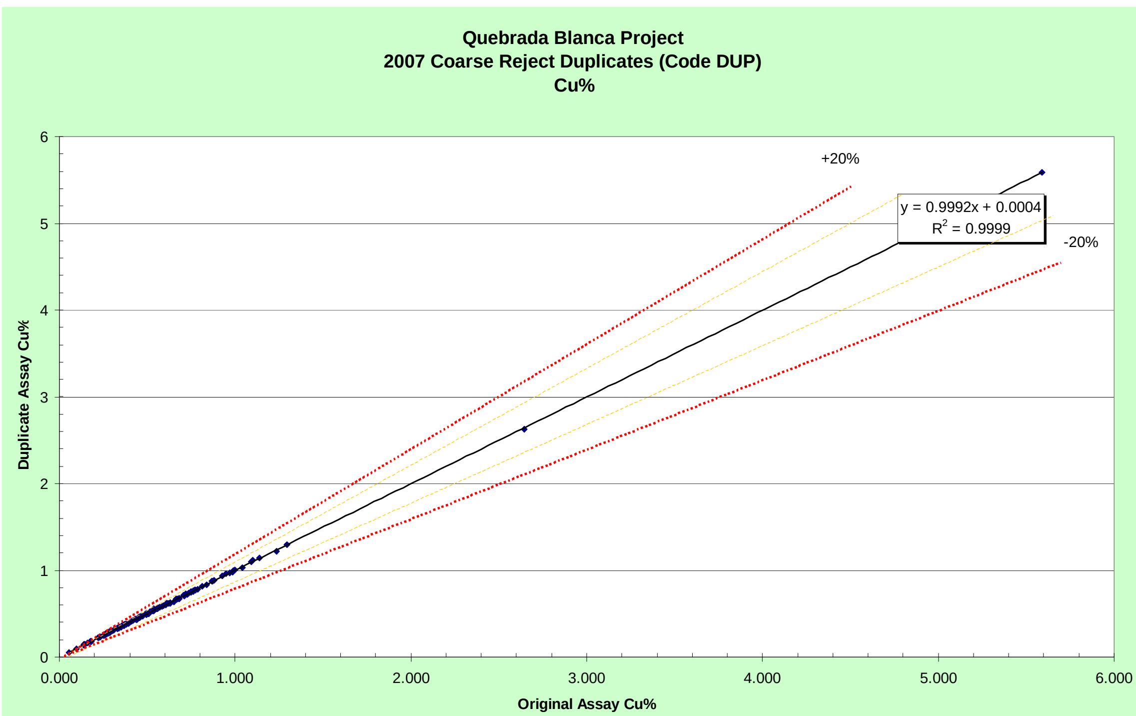

Figure 13. Internal pulp duplicate check assays at Andes lab.

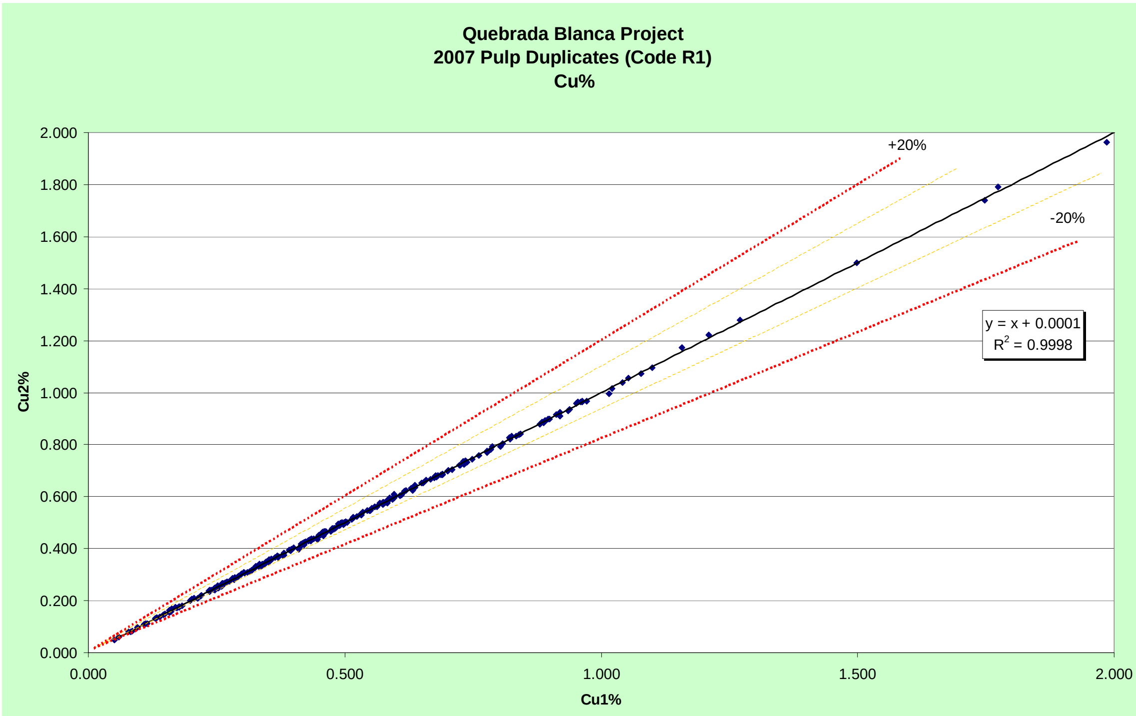

Figure 14. Internal coarse reject duplicates at Andes lab.

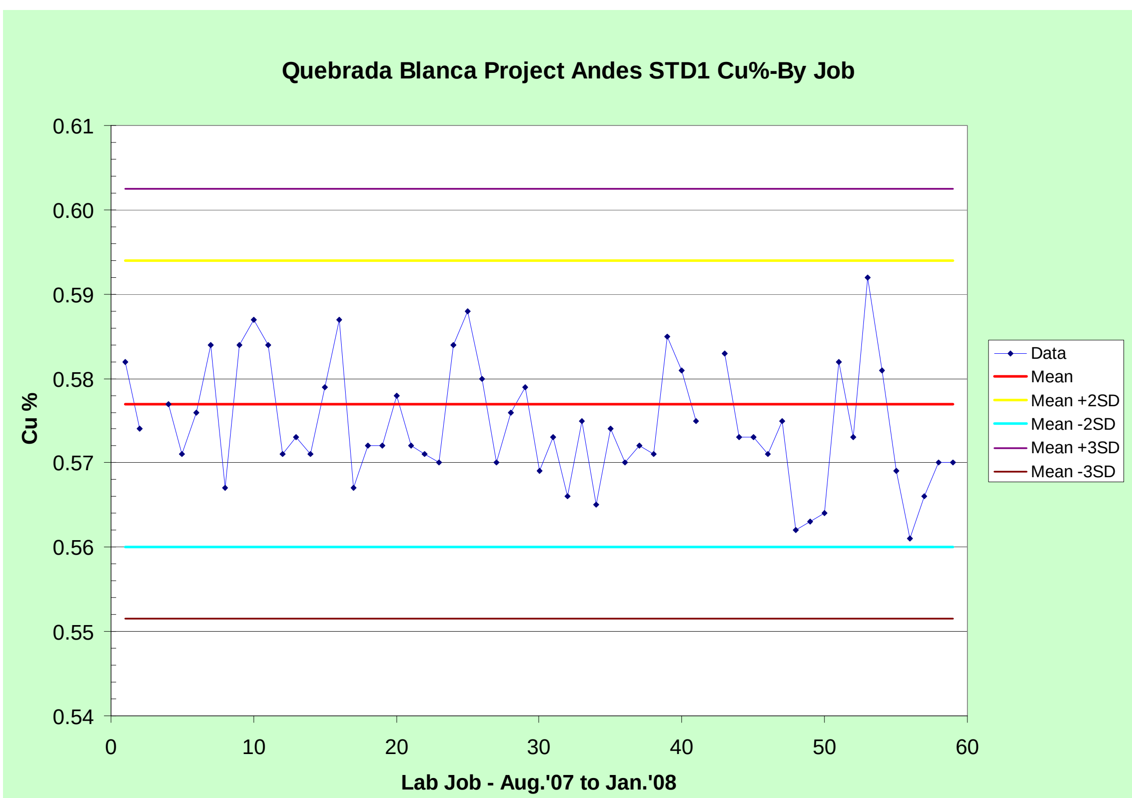

Figure 15. Internal check program with standard #1 at Andes lab.

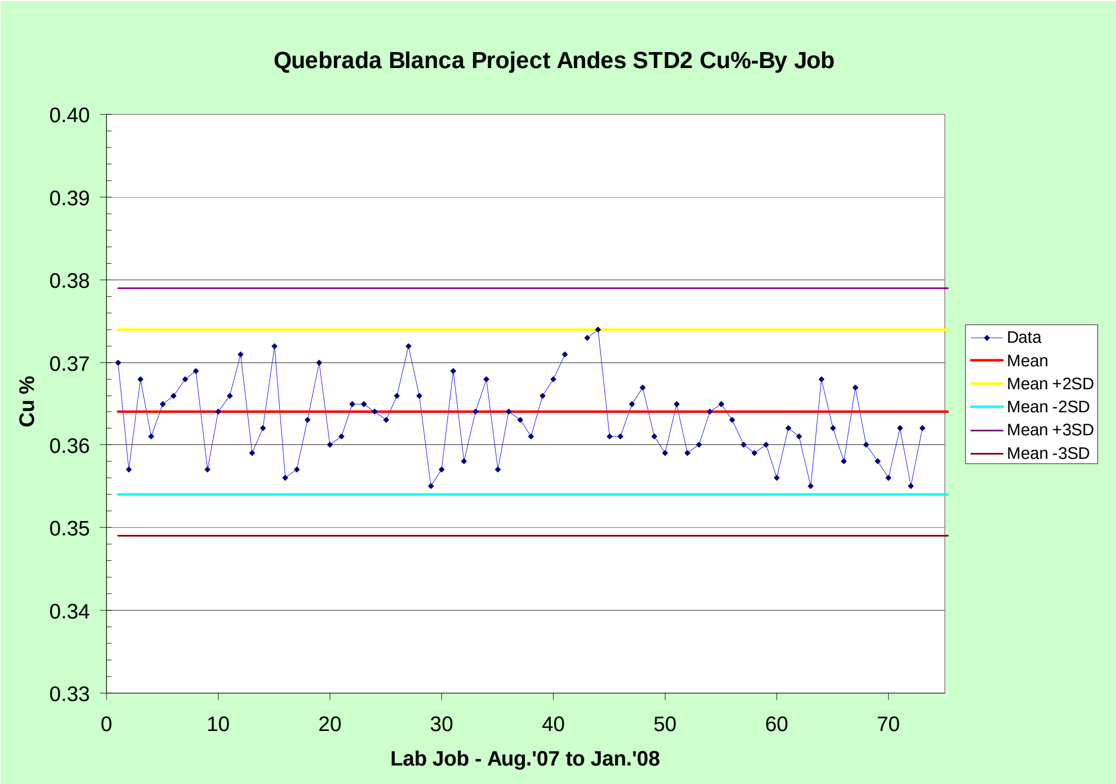

Figure 16. Internal check program for standard #2 at Andes lab.

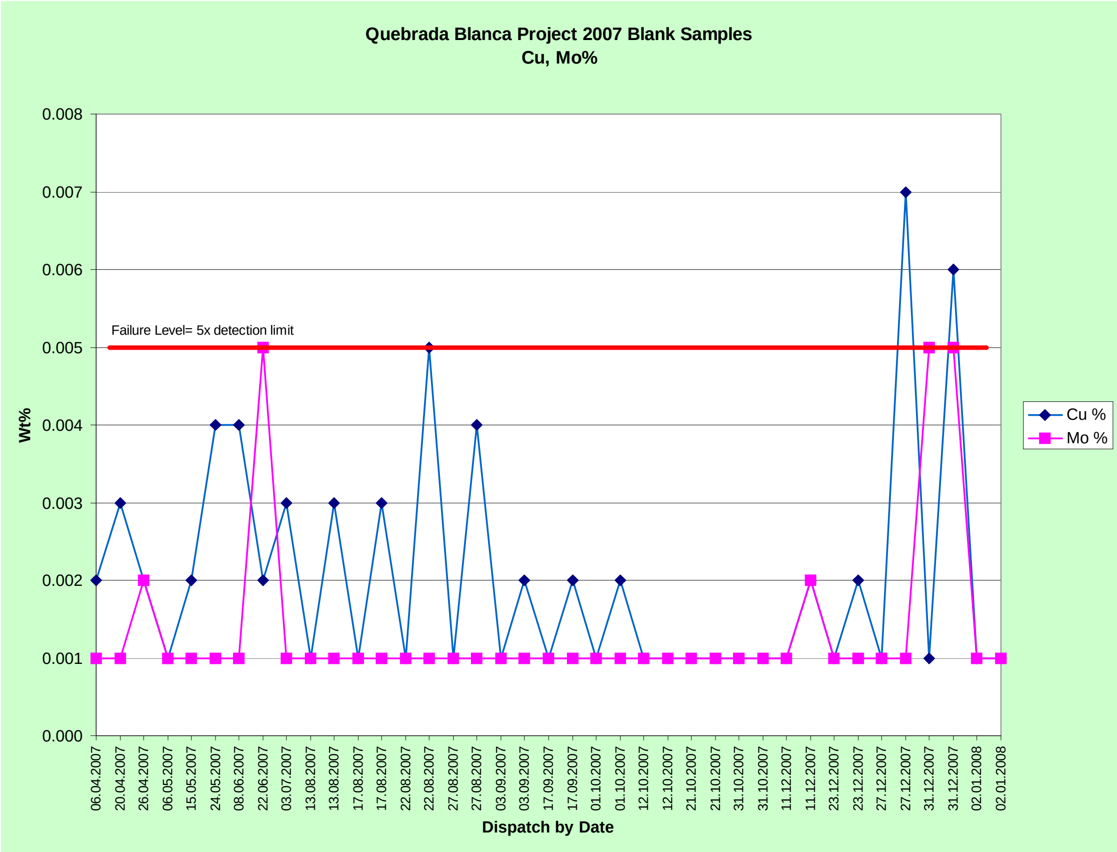

Figure 17. Internal blank checks at Andes lab.

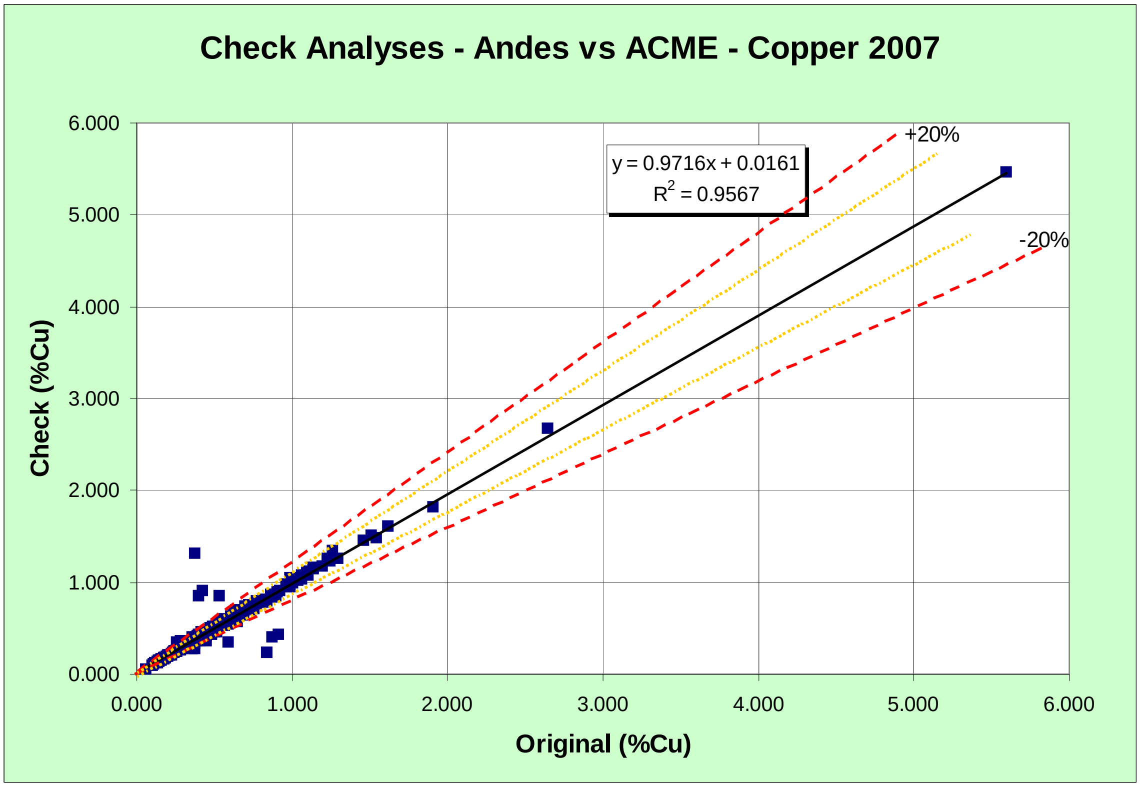

Figure 18. Pulp reanalyses for copper, Andes (original) versus ACME.

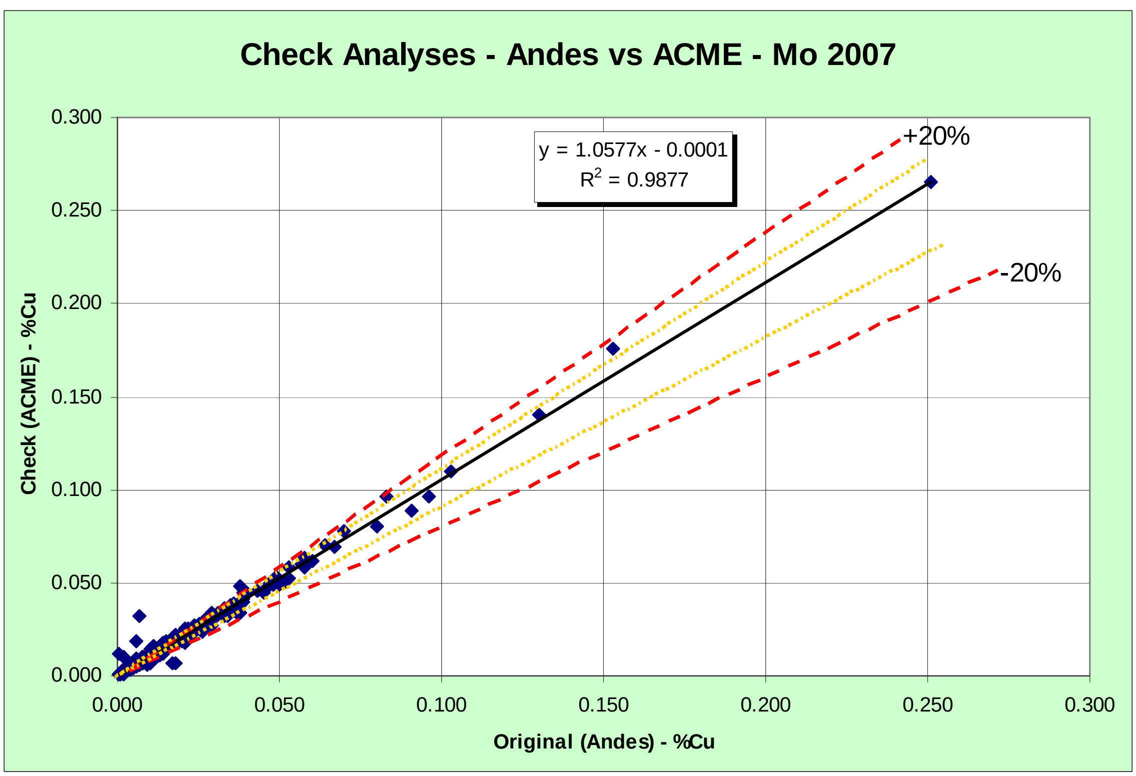

Figure 19. Pulp reanalyses for molybdenum, Andes versus ACME.

Andes Analytical Assay Ltda is certified under ISO 9001:2000, an international standard whereby Andes has demonstrated its ability to provide a quality service that meets consumer satisfaction.

The procedures for core handling and sampling in place at QB are intended to minimize errors and accidental mishandling. No errors were identified on site in 2007. QB staff relinquish custody of the samples after the splitting stage, when sealed bags are placed in pallet boxes by mine staff and trucked to Andes Analytical Assay Ltda in Santiago. No irregularities in the sample shipment process were detected. A dispatch form of sample numbers is sent to Andes by email. Upon arrival of the shipment, Andes notifies QB and in rare cases, any discrepancies between sample list and the actual samples. A visit to Andes Analytical Assay lab by Al Samis and Neil Barr in early 2008 did not identify any irregularities in their procedures. Andes internal quality control measures and LIMS sample management software ensure that errors are minimized.

16. DATA VERIFICATION

Collar locations are surveyed by the mine survey team prior to collaring the drill hole and again after completion. Down the hole directional surveys are performed by Wellfield with a gyroscopic instrument at 10 or 20 meter intervals inside the drill string. In both cases, an electronic data file is generated for merging into the database. No irregularities in the data were noted.

Original assay certificates are available on site from the 1977/1983, 2005, and 2007 drilling campaigns. In 2007, assay results arrived by email from Andes lab in Excel format for each batch. Each electronic file includes Andes internal check results. Each batch is also supported by signed copies of the assay certificates which arrive on site at a later date. The assay data is merged electronically into a database by matching sample numbers from the assay certificates with those entered into the database. The author also works with the data separately upon arrival from the lab. The two sets of data are periodically compared for differences, however few have been identified. Assay results plotted in section and plan view match well with historical data. Lithology sections are plotted after each drill hole is logged to highlight inconsistencies. Drill core is visually re-checked if necessary. AcQuire database software has been purchased to improve assay data management for 2008.

17. ADJACENT PROPERTIES

Two porphyry copper deposits (Ujina & Rosario) and one exotic copper oxide deposit (Huinquintipa) are situated on the adjacent property to the east of the Quebrada Blanca mine claim block, within 20 kms directly east of the QB porphyry copper deposit. Exploitation by open pit mining has been ongoing since 1999 by Cia. Minera Doña Ines de Collahuasi, owned by Xstatra (44%), Anglo American (44%), and a Japanese consortium (12%). Production in 2006 reached 380,000 tonnes of copper in concentrate and 60,000 tonnes of copper cathode, totalling 440,000 tonnes of copper. Reserves stated in the 2006 Cia. Minera Doña Ines de Collahuasi annual report were 1,675,537,000 tonnes at 0.90 %Cu at December 31st, 2006. Reserves are based on the JORC methodology.

Mineralization on the Collahuasi property represents separate copper porphyry centers and is not continuous from the QB porphyry. Ujina and Rosario are typical copper porphyry deposits, but the mineralization and grades are is not necessarily indicative of the mineralization in the QB porphyry deposit. Huinquintipa represents an distal exotic deposit formed by the leaching in the upper part of the Rosario deposit. The author has not been able to verify the information.

18. MINERAL PROCESSING and METALLURGICAL TESTING

Hatch Chile performed a preliminary assessment of the metallurgical behaviour of Quebrada Blanca hypogene material on 20 representative drill core samples and 9 representative drill core composite samples. Three drill core samples containing elevated levels of chalcocite were excluded from the assessment.

The 17 drill core samples were subjected to grindability tests to determine Bond ball mill work indices (BWi), and to rougher flotation tests to determine Cu, Mo, Au, and Ag flotation response.

The 9 composite samples were subject to mineralogical and chemical characterization of rougher flotation test results on ore feed and tailings as well as on final copper concentrate from cleaner flotation tests. Quality of the achievable final copper concentrates was also assessed.

A laboratory testing program was carried out by CIMM T&S in Santiago, Chile. Rougher and cleaner flotation tests were executed under standard testing conditions similar to those used at the adjacent Collahuasi operation. Bond index determinations were performed under standard conditions for ball mill grinding, and chemical and mineralogical characterization was in accordance to standard procedures.

Data analysis on the results of all laboratory testing on a selection of the 17 drill core samples combined to represent four lithological domains (Table 4) or one main global composite served for summarizing QB hypogene material.

COMP-1	Igneous Breccia (IBX) - 65% of total weight 50% IBB - biotite rich with clasts 50% IMB - biotite rich no clasts
COMP-2	Quartz Monzonite (QMZ) - 20% of total weight 100% QMZ
COMP-3	Igneous Breccia (IBX) - 10 % of total weight 50% IBK - k-spar rich with clasts 50% IMK - k-spar rich no clasts
COMP-4	Other Lithologies - 5% of total weight 50% FP1 - feldspar porphyry early 50% VBX - vuggy breccia

Table 4. Four lithological composites combined into one global composite.

Results from rougher flotation feed and tailings sulphide mineralogy, grades, and recoveries for the four sample groupings are presented in Table 5. Average feed grades for copper, molybdenum, and gold are similar to the mineral resource average grades. The results show that chalcopyrite and pyrite are the major sulphide species, and an average Bond Ball Mill work index of 13.48 kWh/st indicates QB hypogene material is medium hard. Recoveries of 78% and 72% for copper and molybdenum respectively in the rougher flotation stage were achieved. Mineralogical analysis of the rougher tailings identified significant liberated particles suggesting important improvements in recoveries are achievable by optimizing rougher flotation conditions.

		FEED GRADES			%TOTAL SULPHIDE			% RECOVERY				Bond BM Wi	% Liberation	
Sample	**Domain**	**%Cu**	**%Mo**	**Au g/t**	**cpy**	**py**	**other**	**Weight**	**Cu**	**Mo**	**Au**	**kWh/st**	**Cu**	**Mo**
COMP-1	IBX	0.59	0.025	0.028	57.34	40.24	2.42	5.80	75.55	71.05	47.94	13.38	91.23	100.00
COMP-2	QMZ	0.35	0.004	0.044	58.11	31.92	9.97	4.55	82.21	69.54	53.80	13.62	80.34	100.00
COMP-3	IBX	0.47	0.012	0.036	63.98	29.83	6.19	6.05	89.19	81.10	58.79	13.65	75.88	83.33
COMP-4	Other	0.39	0.012	0.019	22.67	76.11	1.22	9.66	77.21	72.22	39.70	13.81	74.96	83.33
COMP-T	Total	0.52	0.019	0.031	56.42	39.33	4.25	5.77	78.33	71.81	49.79	13.48	86.70	97.50

Table 5. Rougher flotation test results.

Cleaner flotation Tests were performed on 9 composite samples made from the original 20 drill core samples to determine final concentrate grades, copper and molybdenum recoveries, and chemical and mineralogical characterization of the final concentrates. These tests were done using a 50% longer time in the rougher flotation stage to 18 minutes allowing for increased rougher copper recovery. The test results show copper recoveries above 96% with a final concentrate grade of 30%Cu (Table 6). Molybdenum recoveries were low in total cleaner flotation due to inappropriate flotation conditions. Chemical analysis of the QB hypogene concentrates indicate no deleterious elements are present in significant concentrations (Table 7). Samples TCA-4, TCA-5, TCA-6, and TCA-7 were eliminated from the metallurgical assessment due to the presence of chalcocite causing elevated concentrate grades.

		%Cu	%Mo	%Cu Recovery			%Mo Recovery		
CMP	**Lithology**	**Final Con**	**Final Con**	**Rougher**	**Cleaner**	**Total**	**Rougher**	**Cleaner**	**Total**
TCA-1	IBB	32.64	0.120	83.1	98.1	81.5	84.3	49.6	41.8
TCA-2	IMB	30.36	0.060	85.3	96.5	82.3	80.7	33.0	26.6
TCA-3	IBB/IMB	31.14	0.069	84.6	97.2	82.2	74.8	47.9	35.9
TCA-4	IBK	50.67	0.050	88.1	97.4	85.8	59.1	70.4	41.6
TCA-5	IMK	50.54	0.045	91.5	94.4	86.4	81.1	41.7	33.8
TCA-6	IBK/IMK	51.03	0.088	89.0	97.1	86.4	75.9	66.7	50.7
TCA-7	QMZ	33.06	0.130	86.8	97.6	84.7	77.5	87.7	67.9
TCA-8	VBX	26.83	0.010	91.9	96.8	89.0	81.9	33.0	27.0
TCA-9	MOLY	29.91	0.085	89.6	98.0	87.8	77.5	56.8	44.0

Table 6. Copper and molybdenum recoveries for rougher and cleaner flotation.

CMP	Lithology	%Cu	%Mo	%Fe	Ag g/t	Au g/t	%As	%Sb	%Bi	Hg g/t	%S	%Insol
TCA-1	IBB	32.64	0.120	27.5	56	0.48	<0.005	<0.005	<0.005	<0.1	33.72	2.16
TCA-2	IMB	30.36	0.060	29.7	53	0.43	<0.005	SM	SM	<0.1	33.31	5.15
TCA-3	IBB/IMB	31.14	0.069	28.2	52	0.48	SM	SM	SM	<0.1	SM	5.70
TCA-4	IBK	50.67	0.050	11.4	49	0.78	<0.005	SM	SM	0.1	26.54	7.26
TCA-5	IMK	50.54	0.045	14.1	49	0.33	SM	SM	SM	<0.1	27.94	5.22
TCA-6	IBK/IMK	51.03	0.088	13.6	49	0.55	<0.005	SM	SM	<0.1	28.12	5.43
TCA-7	QMZ	33.06	0.130	16.3	35	0.41	SM	SM	SM	SM	25.79	16.80
TCA-8	VBX	26.83	0.010	23.1	29	0.29	0.007	SM	SM	SM	27.70	16.30
TCA-9	MOLY	29.91	0.085	28.1	41	0.44	SM	SM	SM	SM	31.84	6.00

Table 7. Chemical characterization of QB concentrates. (Note: SM = Not Analyzed)

The analysis of the data acquired from flotation tests showed that the results could be substantially improved under more appropriate flotation conditions. Hatch made an estimate of achievable recoveries and concentrate grades from calculations based on projections of the best results from laboratory testing. Metallurgical performance was evaluated for the four lithological sample groupings . A set of key parameters describing metallurgical behaviour of each flotation stage was estimated. The key parameters were copper recoveries, weight recoveries, and enrichment ratio related to ore feed. For molybdenum and gold, similar parameters were used. The resulting projected values to be expected under optimized flotation conditions for the total composite sample are final concentrate grades of 29%Cu and 0.43%Mo, with recoveries of 87% for copper and 64% for molybdenum (Tables 8 & 9).

		% RECOVERY			
		Weight	Cu	Mo	Au
ROUGHER FLOTATION					
COMP-1	IBX	10.15	90.17	79.9	64.56
COMP-2	QMZ	8.57	87.24	79.21	45.14
COMP-3	IBX	9.55	89.46	82.98	54.85
COMP-4	Other	8.98	88.33	77.98	67
COMP-T	Global	9.84	89.86	80.41	59.56
CLEANER FLOTATION					
COMP-1	IBX	32.48	97.46	82.76	80.08
COMP-2	QMZ	27.59	96.55	71.45	64.32
COMP-3	IBX	30.12	97.13	77.52	72.04
COMP-4	Other	28.51	96.8	73.39	73.72
COMP-T	Global	31.14	97.3	79.66	75.66
GLOBAL FLOTATION					
COMP-1	IBX	3.3	87.89	66.12	51.7
COMP-2	QMZ	2.36	84.23	56.6	29.04
COMP-3	IBX	2.88	86.89	64.32	39.51
COMP-4	Other	2.56	85.5	57.23	49.39
COMP-T	Global	3.07	87.43	64.06	45.06

Table 8. Projected recoveries for copper, molybdenum, and gold.

		% Copper			% Molybdenum			Gold g/t		
		Feed	Concentrate	Tail	Feed	Concentrate	Tail	Feed	Concentrate	Tail
ROUGHER FLOTATION										
COMP-1	IBX	0.59	5.27	0.065	0.025	0.193	0.005	0.028	0.175	0.011
COMP-2	QMZ	0.35	3.56	0.049	0.011	0.102	0.003	0.044	0.232	0.026
COMP-3	IBX	0.47	4.40	0.055	0.015	0.130	0.003	0.036	0.204	0.018
COMP-4	Other	0.39	3.86	0.050	0.015	0.130	0.004	0.019	0.138	0.007
COMP-T	Global	0.52	4.76	0.060	0.020	0.166	0.004	0.031	0.189	0.014
CLEANERS FLOTATION										
COMP-1	IBX	5.27	30.03	0.198	0.193	0.492	0.049	0.175	0.431	0.052
COMP-2	QMZ	3.56	26.50	0.170	0.102	0.263	0.040	0.232	0.540	0.114
COMP-3	IBX	4.40	28.31	0.181	0.130	0.335	0.042	0.204	0.487	0.082
COMP-4	Other	3.86	27.17	0.173	0.130	0.335	0.049	0.138	0.357	0.051
COMP-T	Global	4.76	29.04	0.190	0.166	0.426	0.049	0.189	0.458	0.067

Table 9. Projected concentrate grades.

The preliminary metallurgical test results suggest that a conventional grinding and flotation process will produce saleable copper concentrates with possible silver credits. No deleterious penalty elements were identified.

19. MINERAL RESOURCE ESTIMATE

An inferred mineral resource has been estimated for the Quebrada Blanca hypogene deposit in January 2008. The estimate was made from a 3-dimensional block model QB-HYP08 utilizing the commercial mine software Gemcom™. All grade interpolation parameters are suitable for a porphyry copper deposit. Also, the block model is appropriately prepared and valid for this type of deposit.

The block model represents an interpretation of the rock types and mineralization zoning based on all drilling completed as of end of year 2007. Total copper values and molybdenum values were estimated in the model. The reported mineral resource numbers are based on the block model and optimized rough pit shell. The model was developed to represent the hypogene zone only; as such the bottom of the final optimized supergene pit, scheduled to be completed in 2015, was used as the “starting” topography for the hypogene model. All parameters used to generate the block model are stated in the subsequent sections.

19.1 GEOLOGICAL DOMAINS

19.1.1 LITHOLOGY

The Quebrada Blanca deposit as interpreted from drill core is represented by 12 lithological units. Raw assay grade distributions by lithology and grade trends across lithological boundaries were assessed to determine relationships between the units. This resulted in combining some lithologies resulting in a reduction to 7 lithological domains (Table 11).

Geological interpretations were prepared with all drill hole data on N-S sections spaced at 200 meter intervals. Most of the available data corresponded to the 2007 hypogene drill program. The sectional interpretations were tied together to form a 3-dimensional wireframe model. This model was later refined to reflect the drill hole data on the 50 meter spaced supergene drill grid. A tertiary gravel unit was modeled to ensure grade values were not interpolated into this barren waste zone and to provide accurate estimates for stripping ratios.

19.1.2 COPPER MINERALIZATION ZONES

The mineralization zone model developed by the Quebrada Blanca mine staff was used to develop a surface representing the contact between the secondary enrichment supergene zone and the primary mineralization in the hypogene zone for the purpose of composite tagging. Composites occurring in the hypogene zone were coded separately from other mineralization zone composites. Grade interpolation was based solely on hypogene composites. The mineralization codes for leached cap, oxide, and supergene were not used. Mineralization zone coding criteria is listed in Table 10.

Mineral Type	Min. %SCu	Max. %SCu	Sub Criteria	Principal Cu Mineralogy
Leached Cap	0.0	0.099		Barren
Oxide Low	0.1	0.499	%AsCu > 67% SCu	Chrysocolla, Brochantite
Oxide High	0.5	No Limit	%AsCu > 67% SCu	Chrysocolla, Brochantite
Supergene Low	0.1	0.499	%CnCu > 33% SCu	Chalcocite, Covellite, Chalcopyrite
Supergene High	0.5	No Limit	%CnCu > 33% SCu	Chalcocite
Hypogene	0.0	0.099		Chalcopyrite

Table 10 – Quebrada Blanca Mineralization Type Coding Criteria

The upper hypogene surface was prepared with a Laplace interpolation method on a 25 meter by 25 meter 2-dimensional grid. The control points were extracted directly from the drill hole database by selecting the coordinates of the first downhole occurrence of the hypogene mineralization type code. Both the interpolated points and original control points were used to create the 3-dimensional surface, ensuring the drill hole data was accurately represented.

To restrict block estimations within the hypogene zone, the supergene block model prepared in January 2008 by Quebrada Blanca mine staff was used to develop a surface representing the top of the hypogene zone over the entire area of the block model. This surface was based on points of the lower-most occurrence of non-hypogene blocks for each cell of the 3D block model. This selection criteria ensured each vertical column had a data point representing the maximum elevation for the hypogene resource model.

19.2 DENSITY ESTIMATION

Rock density data from original drill campaigns conducted between 1977 and 1983 (3,299 data points) were combined with the 2005 (78 data points) and 2007 (187 data points) programs. The data is summarized in Table 11.

		Pre-2005		2005 & 2007		TOTAL		
Domain	Description	#	mean	#	mean	# Data	Std Dev	Mean
IBX	Igneous Breccia	2,607	2.47	199	2.57	2,806	0.16	2.48
FPI	Feldspar Porphyry	72	2.45	36	2.59	108	0.15	2.50
DIO	Diorite	128	2.49	-	-	128	0.17	2.49
QMZ	Quartz Monzonite	56	2.50	17	2.51	73	0.12	2.51
TBX	Tourmaline Breccia	96	2.46	-	-	96	0.18	2.46
VBX	Vuggy Breccia	340	2.56	13	2.66	353	0.16	2.56
GRA	Tertiary Gravel	-	-	-	-	-	-	2.21

Table 11 – Quebrada Blanca Density Data and Summary Statistics. Tertiary Gravel density provided by mine personnel.

Although there is no documentation on the method of density measurement used in the original 1977 – 1983 drill campaigns, it is thought the measurements were derived from sample interval lengths, percentage core recovery, sample weight, and core diameter measurements taken during the geotechnical logging stage. The density measurements conducted in 2005 and 2007 were calculated with an immersion method, and confirmed the earlier findings.

Rock type codes were attached to each density measurement based on the 3-dimensional lithological model. The mean density value was then used for each lithological domain.

19.3 STATISTICAL ANALYSES

19.3.1 COPPER and MOLYBDENUM STATISTICS

Drillholes were assayed for total copper, sequential soluble copper, molybdenum and gold values typically at 2.0m or 1.0m standardized sample intervals, with approximately 75% of all sampling conducted at 2.0m intervals. A number of supergene drill campaigns did not test for molybdenum and gold values, consequently reducing their quantities within each domain. The drill holes were composited at 15 meter downhole intervals. The composite intervals were controlled by the 3-dimensional lithological model to honour geological boundaries. The upper surface was used to further code composites as primary mineralization or other zones. Only the hypogene composites were extracted for further analysis and interpolation purposes.

Total copper values and molybdenum values were calculated over the 15 meter composite intervals. Soluble copper data, which were determined by a sequential soluble copper analytical method, were very low and therefore omitted in the assessment of the hypogene resource.

Grade histograms were prepared for the composite data and compared to the raw assay data to confirm similarities in the distributions. The composite distributions are summarized in Table 12 and Table 13.

Total Copper %						
Domain	# Composites	Mean	Std Dev	CV	Min	Max
IBX	3,118	0.49	0.31	0.64	0.01	3.93
FPI	178	0.31	0.13	0.41	0.06	1.10
DIO	314	0.31	0.23	0.73	0.02	2.02
QMZ	216	0.35	0.18	0.51	0.09	1.37
TBX	104	0.37	0.15	0.41	0.06	0.99
VBX	150	0.82	0.50	0.62	0.13	3.78

Table 12 – Quebrada Blanca Hypogene Total Copper Composite Statistics

Molybdenum ppm						
Domain	# Composites	Mean	Std Dev	CV	Min	Max
IBX	1,899	148.7	136.5	0.92	3.6	1,555.3
FPI	140	93.7	92.2	0.98	7.0	608.8
DIO	117	100.1	106.9	1.07	8.0	778.0
QMZ	138	101.0	97.0	0.96	14.5	754.6
TBX	23	129.2	97.0	0.75	18.9	400.0
VBX	106	220.5	139.0	0.63	49.1	790.0

Table 13 – Quebrada Blanca Hypogene Molybdenum Composite Statistics

19.3.2 GRADE CAPPING

Log probability plots were analyzed for each grade domain to determine appropriate grade capping levels. Outlier capping and summary statistics of the final composited data are presented in Table 14. Grade histograms by lithology were prepared for the capped variables and validated against pre-capped data.

Total Copper %			
Domain	Cap %	#Capped	Mean
IBX	2.50	4	0.48
FPI	0.65	3	0.30
DIO	0.85	4	0.30
QMZ	0.90	4	0.34
TBX	0.65	5	0.36
VBX	2.00	4	0.80

Molybdenum ppm			
Domain	Cap %	#Capped	Mean
IBX	750	6	147.4
FPI	350	4	91.7
DIO	350	4	96.1
QMZ	300	4	94.1
TBX	300	2	122.2
VBX	600	2	218.3

Table 14 – Quebrada Blanca Hypogene Grade Capping Summary Statistics

19.3.3 CONTACT ANALYSES

Boundary analyses of total copper composites were conducted to determine grade trends across lithological domain contacts. All domains in geological contact were analyzed. The study revealed hard boundaries separating the igneous breccia unit (IBX), the vuggy breccia unit (VBX), the feldspar porphyry (FPI) unit, from all other domains. Soft boundaries were interpreted between diorite (DIO), quartz monzonite (QMZ), and tourmaline breccia (TBX). The results of these studies were used in setting up grade interpolation parameters that reflected these findings (Table 15).

Domain	IBX	FPI	DIO	QMZ	TBX	VBX
IBX	-	H	H	H	H	H
FPI	H	-	H	H	H	H
DIO	H	H	-	S	S	H
QMZ	H	H	S	-	S	H
TBX	H	H	S	S	-	H
VBX	H	H	H	H	H	-

Table 15. Lithology Contact Analyses, Hard (H) and Soft (S) Boundaries

19.3.4 ICP MULTI-ELEMENT STATISTICS

A suite of 49 elements was analyzed by mass spectrometry for each drill hole interval at Assayers Canada lab operating in Vancouver. The purpose of this analysis was to identify any additional economic elements or deleterious elements not recognized in core logging. The results indicate that all elements except copper and molybdenum, and perhaps rhenium, are present in very low concentration levels. Selected histograms representing intervals within the optimized pit shell are presented in Figure 20.

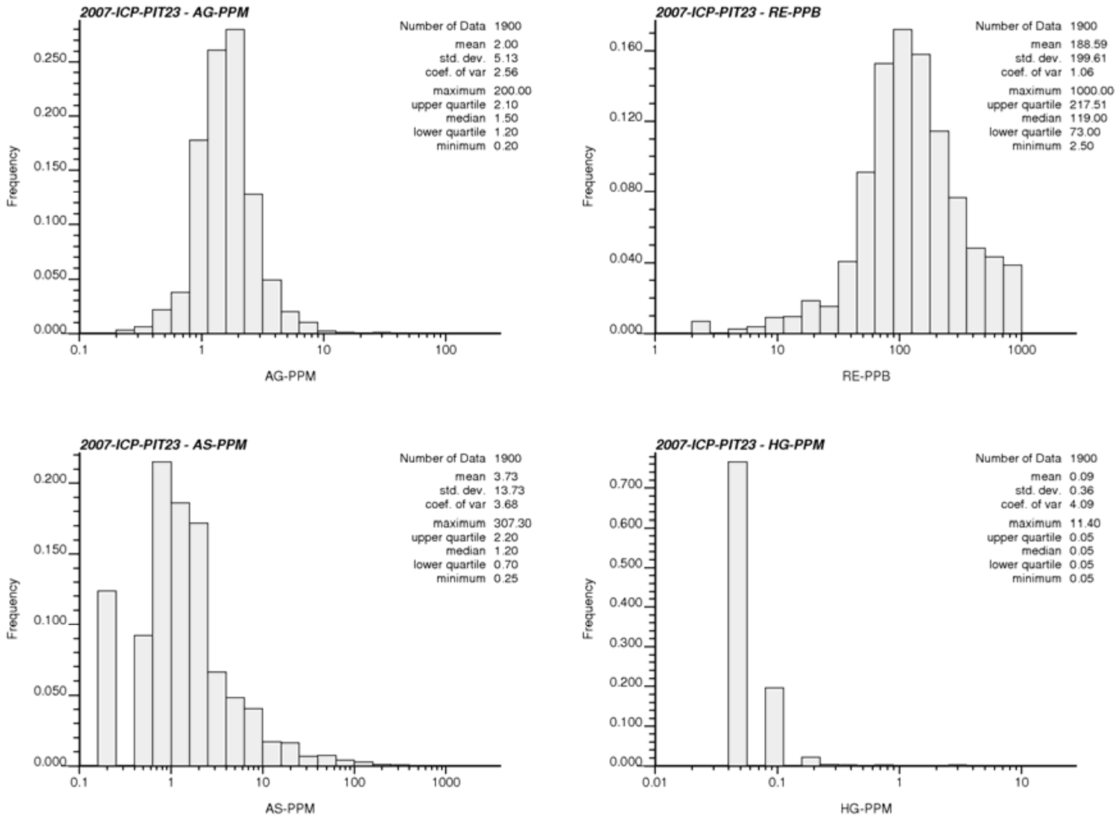

Figure 20. Histogram plots of ICP analyses for silver, rhenium, arsenic, and mercury.

19.4 GEOSTATISTICAL ANALYSES

Two variography analysis studies were completed for total copper. Variogram analysis was done for the igneous breccia unit, but due to data limitations within the other domains, global variography was conducted for all other combined domains. Molybdenum values were interpolated with an inverse distance squared method due to data limitations hindering practical variography. The direction of maximum continuity was aligned along strike, the semi-major direction was oriented down dip, and the minor direction perpendicular to the dip plane. The cross dip direction was used to establish the nugget effect. The experimental directional variograms were fit with two nested exponential structures. A strike of 080^o and a dip of -50^o were determined to be the direction of maximum continuity.

The variography clearly indicated an anisotropy associated with the total copper values of approximately 6:3:2 in the major direction versus semi-major versus minor direction (Table 16).

Total Copper %				Exponential Model 1		Exponential Model 2	
Domain	Nugget Effect (Gamma (h))		Directions (GSLIB Angles)	Sill (Gamma (h))	Range (m)	Sill (Gamma (h))	Range (m)
		X	80		102.1		658
IBX	0.044	Y	0	0.629	126.5	0.327	377.9
		Z	50		111.9		247.9
		X	80		87.6		739.5
GLOBAL	0.064	Y	0	0.595	110.5	0.341	300.7
		Z	50		123.1		253.9

Table 16 – Quebrada Blanca Total Copper Variogram Models

19.5 BLOCK MODELLING PROCEDURES

A block size of 20m(X) x 20m(Y) x 15m(Z) was adopted for this model. The model was aligned parallel with the mine grid (0° rotation) and prepared to cover the entire Quebrada Blanca supergene model with additional coverage in all directions, most notably the north and south. The extra coverage was added to permit pit optimization studies. The block model extends a total of 3,800 meters east-west, 3,600 metres north-south, and 915 metres vertically (Table 17).

	Minimum	Maximum	Block Size (m)	# Blocks
x	18+100	21+900	20	190
y	76+200	79+800	20	180
z	3500	4415	15	61

Table 17 – Quebrada Blanca Hypogene Block Model Dimensions

Geological interpretations covered 2,800 meters east-west from 18,600E, 2,000 metres north-south from 77,000N, and 915 meters vertically from 3,500 elevation. All blocks outside the area covered by the 3-dimensional lithological model were updated with a default waste code below the topography, and assigned a density of 2.48; equivalent to the main igneous breccia unit. No grade values were interpolated into blocks outside the area covered by the 3-dimensional lithological model.

Ordinary kriging was used to interpolate total copper values and inverse distance squared was used for molybdenum estimation. All interpolations were done with a one pass approach, specific to rock type. A large search of 650 meters along strike, 450 meters down dip, and 300 meters cross dip was used for each of the domains. The search ellipse was aligned along the direction of maximum continuity derived from variography. A minimum of 3 composites and a maximum of 12 composites were used for all grade domain interpolations, with no maximum per hole constraint. The large search was used to reduce the possibility of un-interpolated blocks. A more conservative classification model was developed to ensure grades were not reported beyond a 300 x 200 x 100 meter search. The data provided from the boundary analyses studies were used to determine the composite selection for interpolations. All search and interpolation parameters developed for the total copper estimation were also used for molybdenum estimation (Table 18). Grade values were not interpolated into the Tertiary Gravel unit (GRA). As an alternative, a default 0.001% total copper grade and 0.5 ppm molybdenum grade were assigned to the blocks.

Domain	Vario-Model	Min Cmps	Max Cmps	Search X	Search Y	Search Z	Domain Codes
IBX	IBX	3	12	650	450	300	IBX
FPI	GLOBAL	3	12	650	450	300	FPI
DIO	GLOBAL	3	12	650	450	300	DIO/QMZ/TBX
QMZ	GLOBAL	3	12	650	450	300	QMZ/DIO/TBX
TBX	GLOBAL	3	12	650	450	300	TBX/DIO/QMZ
VBX	GLOBAL	3	12	650	450	300	VBX

Table 18 – Quebrada Blanca Interpolation Parameters

19.6 MODEL VALIDATION

For validation purposes, an inverse distance squared model (ID^2) was interpolated for total copper values, and nearest neighbour models (NN) were interpolated for total copper and molybdenum. These models were estimated with the same search parameters to serve as check models against the primary models. Visual interrogation and statistical methods were also employed in the validation process.

The models were visually compared against the composite data on vertical cross sections at the 200 meter hypogene drill spacing, as well as the 50 meter supergene drill spacing. Grade histograms by domains were prepared for the primary models as well as the nearest neighbour models. The distributions were then compared to provide a statistical validation of the primary models. In all cases the mean values show a close correspondence between the primary models and nearest neighbour check models, while the co-efficient of variations for the nearest neighbour models are much higher, as would be expected. Detailed comparisons of the primary models and the nearest neighbour check models are provided in Table 19 and Table 20.

TOTAL COPPER						
Domain	OK Mean	NN Mean	OK CV	NN CV	OK #Data	NN #Data
IBX	0.39	0.39	0.46	0.65	89,452	91,472
FPI	0.30	0.29	0.15	0.26	9,558	9,837
DIO	0.23	0.23	0.64	0.84	14,218	14,459
QMZ	0.28	0.28	0.36	0.56	8,428	8,843
TBX	0.34	0.36	0.27	0.40	6,177	6,305
VBX	0.80	0.81	0.33	0.59	812	812

Table 19 – Quebrada Blanca Total Copper Block Validation Summary

MOLYBDENUM						
Domain	OK Mean	NN Mean	OK CV	NN CV	OK #Data	NN #Data
IBX	144.50	158.30	0.63	0.90	87,083	89,019
FPI	94.30	96.70	0.67	0.92	9,416	9,785
DIO	85.90	93.00	0.72	1.06	12,626	12,729
QMZ	105.40	121.40	0.42	0.54	8,194	8,590
TBX	112.90	102.40	0.36	0.67	5,888	6,134
VBX	220.40	227.10	0.33	0.68	812	812

Table 20 – Quebrada Blanca Molybdenum Block Validation Summary

Swath plots were prepared for the block model estimates, comparing the primary models with the nearest neighbour check models, over binned distances in all 3 dimensions. The swath plots provided confirmation the models were accurately displaying similar trends throughout the entire volume of the model.

19.7 RESOURCE CLASSIFICATION

A block classification system was developed to eliminate grades in blocks with low confidence at the limits of the search radius. This would ensure that only block grades used for pit optimization studies were reported as an inferred mineral resource.

A classification model was generated by assigning an integer tag to blocks that had two drill holes with hypogene composites within 300m x 200m x 100m (major, semi-major, minor) ellipse. The ellipse was rotated to 080° strike with a dip at –50°S. Hypogene blocks which met this minimum criteria were coded as inferred. All other blocks, including non-hypogene blocks, were assigned zero copper and molybdenum grades.

The resulting classified blocks were utilized for pit optimization and resource estimates in the hypogene deposit.

19.8 PIT OPTIMIZATION

Pit optimizations using Whittle 4.0 were accomplished on block model QB-HYP08 on hypogene blocks classified as inferred. Supergene and leached cap material in the block model were given zero value. Most of the cost parameters and concentrate payment terms were derived from estimates on another porphyry copper deposit of similar size in which TCL is involved with. Metal prices and concentrate contract terms were taken from long term corporate projections (Table 21). Based on these costs, the marginal cut-off grade equates to approximately 0.20%Cu. The QB final supergene pit design merged with the surface topography was used as the initial topography. A series of nested pit shells were generated by incrementing copper price.

Basic Parameters	
Process Rate (t/d)	120,000
Process Rate (Mt/yr)	43.8
Mine Capacity (Mt/yr)	100
Interramp Wall Angles (°)	45
Cu (US$/lb)	$1.50
Mo (US$/lb)	$10.00
Discount Rate (%)	10%
Metal Contract Terms	
%Cu Concentrate	28.0%
Payable Cu (%)	96.43%
Treatment Charge (US$/DMT Conc)	$85.00
Cu Refining (US$/lb)	$0.085
Ocean Freight (US$/wmt)	$90.00
Land Freight (US$/wmt)	$20.00
Contract Terms Molybdenum	
%Mo Concentrate	52.0%
Payable Mo (%)	100.0%
Roasting Charge ($/lb)	$0.55
Metallurgical Recoveries	
%Cu Recovery	90.0%
%Mo Recovery	60.0%
Operating Costs	
Direct Mine Costs (US$/t mined)	$1.10
Mine General (US$/t milled)	$0.33
Plant Costs (US$/t milled)	$3.46
G & A (US$/t milled)	$0.38
Sustaining Capital (US$/t milled)	$0.05

Table 21. Pit optimization parameters.

From the series of nested optimized pit shells, a pit shell was selected for reporting resources which well represented the hypogene drilling coverage. Within the pit shell are the solvent extraction and electrowinning areas of the current supergene operation as well as the secondary and tertiary crushing plants. These structures will eventually have to be removed if the resource is upgraded to a reserve in the future. Dismantling and removal costs for these structures have not been included in the pit optimization. An optimized pit shell is necessary to demonstrate “reasonable prospects of economic extraction” as stated in the CIM definition for resources.

19.9 RESOURCE STATEMENT

Mineralized blocks within the selected optimized pit were classified as Inferred Mineral Resources and were reported above a 0.3% total copper cut-off (Table 24). The entire mineral inventory within the optimized pit shell is displayed in Figure 21 at various copper cut-off grades.

Cut-Off (TCu)	kTonnes	TCu (%)	Mo (%)	Strip Ratio
0.30%	1,030,000	0.50	0.020	0.23

Table 22 – Quebrada Blanca Inferred Mineral Resources

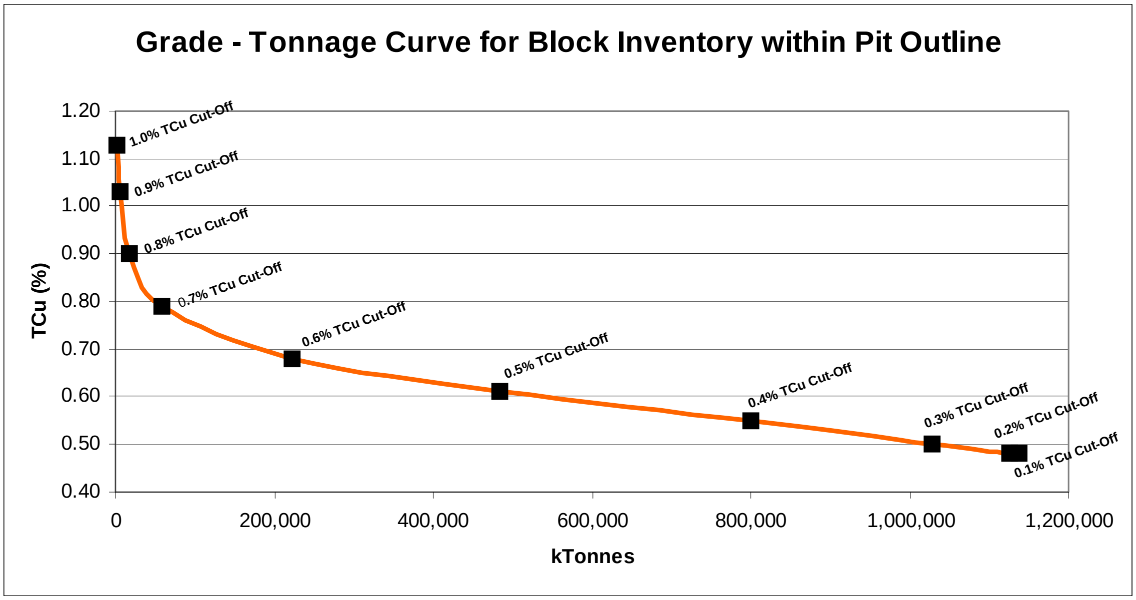

Figure 21 – Quebrada Blanca Grade / Tonnage Curve for a Block Inventory within the Pit Outline.

The qualified person responsible for supervising the estimation of a hypogene mineral resource is Neil Barr, P.Geo., the former Chief Geologist at Quebrada Blanca Copper Mine, currently Regional Manager Reserve Evaluation for Teck Cominco Chile Limited. Mineral resource categories are in compliance with definitions set out in section 1.2 of NI 43-101.

The inferred hypogene resource occurring within a rough optimized pit was estimated with block model QB-HYP08 at a cut-off grade of 0.30%Cu using US$1.50 lb/Cu. It is reasonable to assume that capital payback, environmental permits, and water supply needed to advance the project to reserve classification are attainable.

Costs associated with removing infrastructure located over the resource have not been considered in the pit optimization. Dismantling the solvent extraction and electrowinning plant will add to the capital costs.

20. OTHER RELEVANT DATA and INFORMATION

Not applicable.

21. INTERPRETATION and CONCLUSIONS

A diamond drilling program was initiated in early 2007 as a first stage in evaluating the potential for defining a hypogene resource in a porphyry copper environment at Quebrada Blanca. The drilling program included 9,732 meters in 36 drill holes on a 200 meter grid covering an area approximately 1.75 km by 0.50 kms and a vertical depth of 400 meters below the current supergene pit. Many drill holes were abandoned prior to reaching the programmed depth due to poor ground conditions, but enough information was gained, combined with 7,559 meters of previous diamond drill information targeted for the hypogene zone, to construct an adequate lithological and grade model of the porphyry copper deposit.

Diamond drill core was split and bagged on site. Samples were trucked to Andes Analytical Assay Ltda in Santiago for Cu, Mo, and Au analyses. The internal quality control and quality assurance program at Andes was statistically reviewed and no issues were identified, except minor contamination of copper at the end of 2007 and early 2008 in two blank checks. A second check on 5% of the pulps at ACME lab in Santiago identified 10 samples of 343 with >20% difference in the copper analysis. Almost all of the 11 samples were traced back to two drill holes originating from two dispatches. The majority of these two dispatches after checking and showed no analytical discrepancies. The few differences noted in the check pulps will not affect the quality of the hypogene resource estimate.

A grade block model constructed in the hypogene zone by interpolating 15-meter composites compared well statistically to the original assay data for copper and molybdenum. Copper values were kriged and molybdenum values estimated by inverse distance squared. These models were validated with ID^2 and NN checks for copper and NN for molybdenum. Contact studies between rock types determined which combinations could be treated as hard or soft boundaries. Density estimations by rock type are supported by 265 recent measurements on half cores by the wax immersion method, and 3,299 historical measurements. The QB hypogene grade model is sufficiently represented and validated.

Metallurgical testing at CIMM lab in Santiago on 20 diamond drill core samples provided preliminary data on copper and molybdenum recoveries by rock type. The work also demonstrated that a saleable copper concentrate can be produced from QB mineralized rock. No deleterious elements were identified.

A rough pit optimization on the QB block model demonstrated a portion of the deposit has reasonable prospects for economic extraction using US$1.50 lb/Cu. Cost parameters used in the optimization were derived from estimates of operating costs for similar sized concentrators and expected copper and molybdenum payment terms.

An inferred hypogene resource is defined by block grades estimated by a minimum of two drill hole composites occurring within a search ellipse of 300x200x100 meters in the strike direction of the mineralization. Also, the blocks must occur within the hypogene zone and the rough optimized pit limits. A grade of 0.30%Cu is a reasonable cut-off for reporting a resource.

22. RECOMMENDATIONS

Not applicable.

23. REFERENCES

Barr, N.C., Compañía Minera Quebrada Blanca S.A., Mineral Resources and Mineral Reserve Estimates (Supergene) at Dec. 31, 2007; January 7, 2008.

Butcher, B., Quebrada Blanca Hypogene Pit Optimization – 2007, TCL internal memo, Feb. 25, 2008.

Cia. Minera Doña Ines de Collahuasi, 2006 Annual Report; www.collahuasi.cl/

Desrochers, J.P., 2002-2004 Exploration Report, Compilation – Surface Mapping – RVC Drilling; QB internal report, December 2004.

Gray, J.H., McEwen, B.R., and Samis, A.N., The Quebrada Blanca Copper Project, CIM Bulletin, Volume 87, No. 985, November-December 1994.

Gustafson, L.B., Hunt, J.P., The Porphyry Copper Deposit at El Salvador, Chile; Ecomonic Geology, Volume 70, No. 5, pages 857 to 912, August 1975.

Hunt, J.P., Bratt, J.A., and Marquardt, L., Quebrada Blanca, Chile: An Enriched Porphyry Copper Deposit; Mining Engineering, June, 1983.

Rosas, J., Manriquiz, L., Hatch, Metallurgical Assessment of the Hypogene Ore at Quebrada Blanca, February 7, 2008.

Sillitoe, R.H., Some Comments on the Geology of the Quebrada Blanca Porphyry Copper Deposit and Environs, Northern Chile; a report prepared for CMQBSA, January 2005.

Sinclair, A.J., Blackwell, G.H., Applied Mineral Inventory Estimation, Cambridge University Press, 2002.

24. DATE and SIGNATURE PAGE

"Neil Barr"

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Neil Barr, P.Geo
Date: March 31, 2008