

***Panantza Copper Project***  
***Southeast Ecuador***

**Update on Inferred Resource Estimate**

**43-101 Technical Report**



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# 1 Summary

The Panantza copper porphyry deposit of Corriente Resources Incorporated (“Corriente”) is the northern-most of the advanced deposits in the Corriente Copper Belt, which includes the San Carlos deposit four kilometres to the southeast, and the Mirador and Mirador Norte copper-gold porphyry deposits about forty kilometres to the south. All the deposits contain mainly hypogene copper, with relatively minor overlying oxide and secondary enrichment horizons. Molybdenum, silver, and gold grades are low, but these metals could be of some economic interest.

Billiton Ecuador B.V. (“Billiton”), now BHP Billiton S.A. (“BHP Billiton”), discovered a number of porphyry copper deposit clusters in the Rio Zamora region of south eastern Ecuador in the mid to late 1990’s, during a five-year grassroots exploration program. In 1999, Billiton announced a restructuring of its new business initiatives to maximise its investment returns in new ventures and projects. Consequently, a joint venture opportunity became available over a major part of the Pangui porphyry copper province. Billiton found a suitable JV participant in Vancouver-based Corriente. Agreements covering the north and south tenures, now called the “Corriente Copper Belt”, were announced on October 18, 1999 and April 7, 2000. BHP Billiton holds a 2% Net Smelter Royalty interest in the deposits.

Drilling previous to the last programme in 2006 includes the initial 2984-metre drill program by Billiton in 1998 and, subsequent to the joint venture agreement, additional drilling by Corriente in 2000 totalling 5262 metres.

The last Canadian National Instrument (“NI”) 43-101-compliant Technical Report for the Panantza deposit (and including data on the San Carlos project) was completed by Geospectrum Consultants and was filed on SEDAR by Corriente in June, 2001. Since that time, Corriente has advanced the Panantza deposit by completing 25 additional drill holes totalling 8399 metres, as well as additional mapping and complete relogging of older core. Corriente engaged Mine Development Associates (“MDA”) in April 2007 to provide a block-model based mineral resource estimate for Panantza in order to provide an updated resource estimate from that reported in 2001. John Drobe, Chief Geologist for Corriente Resources, served as the Qualified Person responsible for preparing the mineral resource presented in the current report.

In working with MDA, Corriente has re-estimated the resources of the Panantza deposit by developing a block model incorporating the 2006 drill data for Panantza. Grades and tonnages are reported over a range of copper cutoff grades. Inferred mineral resource estimates based on a cutoff of 0.4 % Cu, and including only sulphide-mineralized material, are 463 MT at 0.66 % Cu (Inferred Resource category as per CIM, 2005).

At a copper cutoff of 0.65%, which was used in the 2001 Technical Report, the current Inferred resource estimate is an increase of 48% in tonnes and decrease of 6% in copper grade over the previous reported resource. Thus the recent drilling has shown that the Panantza deposit is larger than previously defined, with mineralization extending farther south, west, and to depth than previously recognized. The Panantza resource presented here is defined on the basis of 16,644 metres of drilling in 53 holes.

The Panantza deposit is within the Panantza concession that covers an area of 1200 hectares (12 square km). Project infrastructure, if developed, is expected to extend to parts of adjacent and contiguous concessions Panantza 2, San Carlos, Curigem 3, Curigem 7, and Curigem 8.

Recommendations to ready the project for a feasibility study include:

- Complete the current 100-metre spaced drill plan, designed to define limits of the 0.4% copper mineralization.
- Commence preliminary open-pit optimization and mine layout with an emphasis on sensitivities to mining costs (capital and operating expenditures).
- Reanalyse some of the historic drill core pulps to bring the historic data to the same confidence level as that collected in 2006.
- Conduct metallurgic testing, with emphasis on the hypogene and supergene zones and work index of each.

These recommendations are expected to cost approximately \$4.9M.

## **2 Introduction**

### **2.1 Introduction**

Corriente Resources Inc. (“Corriente”) has updated the estimate of the Inferred resources at the Panantza porphyry copper deposit following a third drill programme, relogging of core, and significant additional surface mapping. Corriente engaged Mine Development Associates (“MDA”) in the second quarter of 2007 to estimate an updated mineral resource for the Panantza deposit based on this recent work. MDA’s contribution entailed constructing a block model and estimating grades and tonnes in compliance with the CIM 2005 Mineral Resource and Mineral Reserve definitions. Steven Ristorcelli, P.Geo, Principal Geologist for MDA, assisted in the preparation of this resource estimate, and visited the property from September 2 to 4 of 2006. The block modeling and resource estimate were prepared by Steven Ristorcelli and Aaron Hanson based on data provided by Corriente.

The present Technical Report uses updated drill and surface data to present a geologically controlled, block-model based resource estimate for the Panantza deposit. It updates the resource initially reported in the NI 43-101 Technical Report titled “Corriente Copper Belt Project Southeast Ecuador - Order-of-Magnitude Study (Preliminary Assessment)”, dated June 22, 2001 by David Makepeace, P.Eng, of Geospectrum Engineering (Makepeace, 2001).

Historical exploration work on Panantza by Billiton Ecuador B.V. (“Billiton”) in 1998 and Corriente in 2000 has been utilized in preparing this report in a different manner to that in the 2001 report by Makepeace, after being reviewed, reevaluated and combined with more recent exploration data through relogging of all pre-2006 drill core, verification and auditing of the database, and remapping of surface outcrop.

This Technical Report was prepared by John Drobe, P.Geo, Chief Geologist, Corriente Resources Inc. John Drobe visited the project in December 2002, June 2003, and January, June, July-August, and December 2006.

### **2.2 Terms of Reference**

MDA are not associated or affiliated with Corriente Resources Inc, EcuCorriente S.A. (“EcuCorriente”), ExplorCobres S.A. (“ExplorCobres”, formerly named Minera Curigem S.A.), or any related companies. Any fees paid to MDA for the work done and reported on in this Technical Report are not dependent in whole or in part on any prior or future engagement or understanding resulting from the conclusions of this report. The fees are in accordance with industry standards for work of this nature.

The sections of this report that discuss other aspects of the Panantza project rely on information set out in the following reports:

Hawthorne, Gary, 2003: Status Report On Mineral Processing Characteristics Of Corriente Copper Belt Ecuador, Prepared for Corriente Resources, July 22, 2003.

Trejo, R., 2006: Letter Regarding the Status of Title to the Mining Concessions in Ecuador for ExplorCobres S.A. and EcuCorriente S.A., Trejo, Rodriguez y Asociados, Abogados Cia. Ltda., Prepared for Corriente Resources Inc, November 27 2006.

The report is also based in part on personal communications with Mr. Ken Shannon, P. Geo., C.E.O. of Corriente Resources Inc, Dr. Darryl Lindsay, P.Geo, geologist and General

Manager of ExplorCobres S.A., and Ecuadorian field geologists Juan Leon and Eduardo Vaca, who worked at Panantza between 1998 and 2006.

In September 2006, Steve Ristorcelli of MDA visited the Panantza project for two days (Ristorcelli, 2006). His time was spent reviewing core, taking duplicate check core samples and walking over the deposit. Drill-hole locations were checked with a GPS and two samples were taken along the creek bottom. Two surface samples and 20 core splits (1/4 core) were taken and delivered to ACME labs and inspected the overall QAQC of the core logging and sampling procedures at camp.

All measurement units used in this report are metric, and currency is expressed in US dollars, unless stated otherwise. The coordinate system in use on the property and in all maps and references in this report is UTM zone 17 S, Provisional South American Datum (PSAD) 1956. The estimated costs in the Recommendations section include Ecuadorian taxes where applicable.

### **3 Reliance on Other Experts**

The writer has not personally reviewed the land tenure, and is not a Qualified Person with regard to land tenure in Ecuador, and has not independently verified the legal status or ownership of the properties or underlying option agreements. The independent Ecuadorian law firm of Trejo, Rodriguez y Asociados, Abogados Cia. Ltda. provided the writer with legal opinions on land tenure, environmental liabilities, and the status of permits. All metallurgical information and reporting are adapted or quoted verbatim from information published in a report by Hawthorne (2003).

The results and opinions expressed in this report are conditional upon the aforementioned environmental, metallurgical and legal information being current, accurate, and complete as of the date of this report, and the understanding that no information has been withheld that would affect the conclusions made herein. The writer reserves the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to him subsequent to the date of this report. The writer will assume no responsibility for the actions of Corriente in distributing this report.

## **4 Property Description and Location**

### ***4.1 Location***

Panantza lies near the north end of the Corriente Copper Belt, which runs north-south along the valley of the Rio Zamora in the Morona Santiago and Zamora Chinchipe provinces of southeast Ecuador, near the border with Peru (Figure 4.1). The area is centered about 340 kilometers south of Quito and 70 kilometers east south east of the city of Cuenca. The Copper Belt has dimensions of about 80 kilometers (north-south) x 40 kilometers (east-west) and comprises several advanced and exploration stage porphyry copper prospects, as well as a couple of sediment-hosted copper targets.

### ***4.2 Mineral and Land Tenure***

Billiton began exploration in southeastern Ecuador in 1994 and identified a number of possible porphyry copper targets in the region (Billiton, 1999a). Since April 2000, under various agreements signed and completed with certain Ecuadorian subsidiaries of Billiton, Corriente earned a 100% interest in Billiton's mineral properties located in the Rio Zamora copper porphyry district in Ecuador (Billiton, 1999b). This required issuing shares to Billiton and

expending exploration funds under the terms of these agreements. Additionally, these mineral properties are subject to a 2% Net Smelter Royalty (“NSR”) payable to BHP Billiton, though the company has options to reduce the NSR to 1% for the Mirador/Mirador Norte, Panantza and San Carlos mineral properties upon the payment of US\$2 million to BHP Billiton for each such option exercised.

Corriente also entered into an exploration management arrangement where Lowell Mineral Exploration (“Lowell”) could earn up to 10% of Corriente’s interest in certain properties in exchange for managing the exploration of the properties. In December 2003, Corriente granted Lowell the option to exchange its 10% interest in the Corriente mineral concessions, including Panantza, for a 100% interest in the Warintza property. In June 2004, Lowell exercised that option. Corriente, through its wholly-owned subsidiary companies in Ecuador, now holds a 100% interest in the Panantza property.

According to Ecuadorian Mining Law, registered concessions have a term of 30 years, which can be automatically renewed for successive 30-year periods, provided that a written notice of renewal is filed by the registered concession holder before the expiry date (Trejo 2006). The state code numbers, area in hectares, property registration dates and ownership of the concessions are as indicated in Table (Trejo 2006). The company listed in Table 4.1, ExplorCobres S.A., is fully owned by Corriente (Trejo 2006; Appendix A). The Panantza deposit, as currently defined by drilling, is located wholly within the Panantza concession. A map of the Panantza concession and neighboring concessions is given in Figure 4.2.

**Table 4.1 Panantza Area Concession Data**

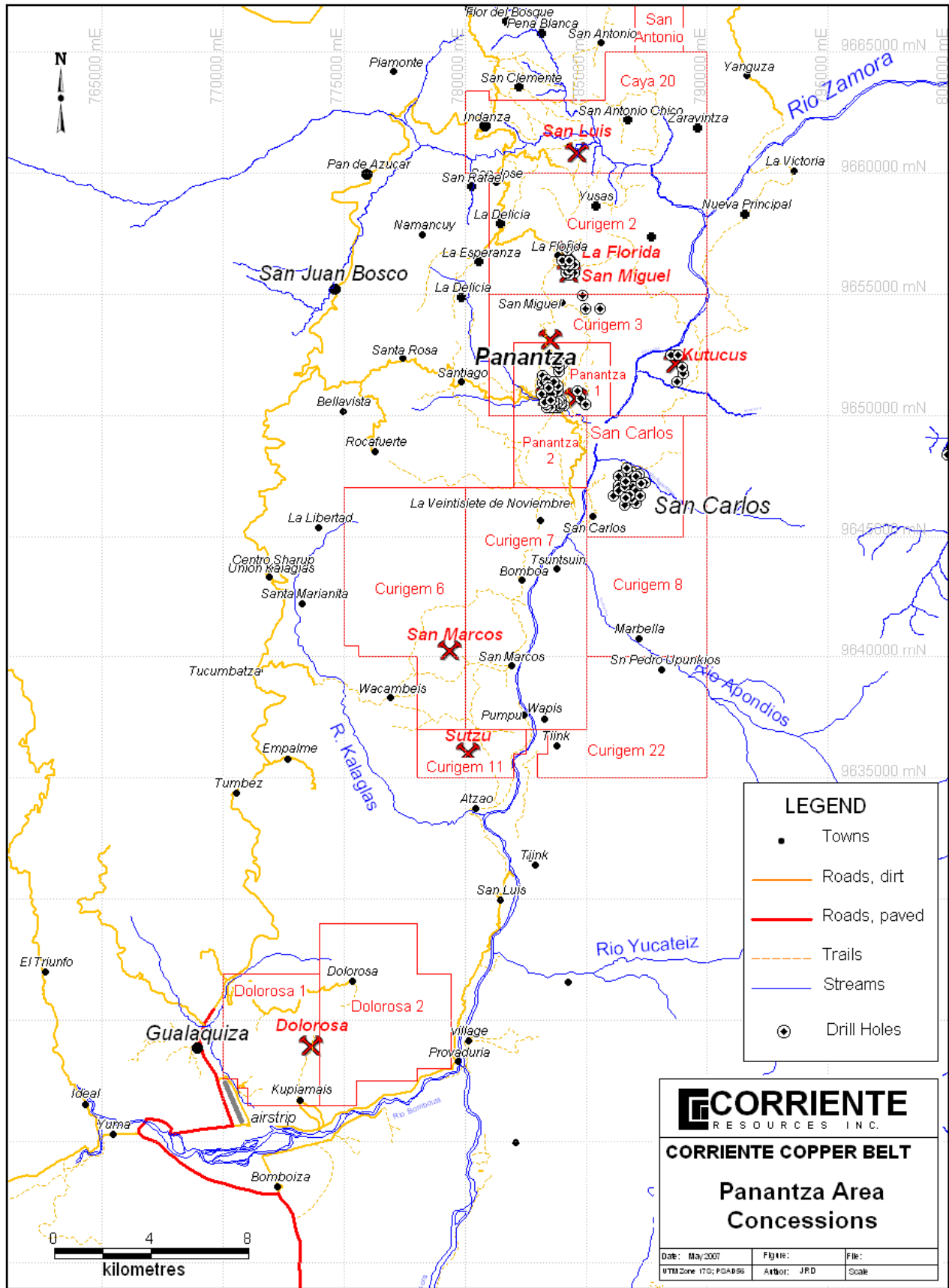
Concession	Code number	Hectares	Owner	Registration Date
Panantza	102212	1,200	EcuaCorriente S.A.	March 26 2003
Panantza 2	102278	900	ExplorCobres S.A.	December 3 2003
San Carlos	102211	2,000	ExplorCobres S.A.	March 26 2003
Curigem 2	100074	4,500	ExplorCobres S.A.	May 8 1996
Curigem 3	100075	3,300	ExplorCobres S.A.	March 8 1996
Curigem 7	100079	5,000	ExplorCobres S.A.	May 9 1996
Curigem 8	100080	3,000	ExplorCobres S.A.	March 8 1996



Figure 4.1 Location Map



Figure 4.2 Concession Map

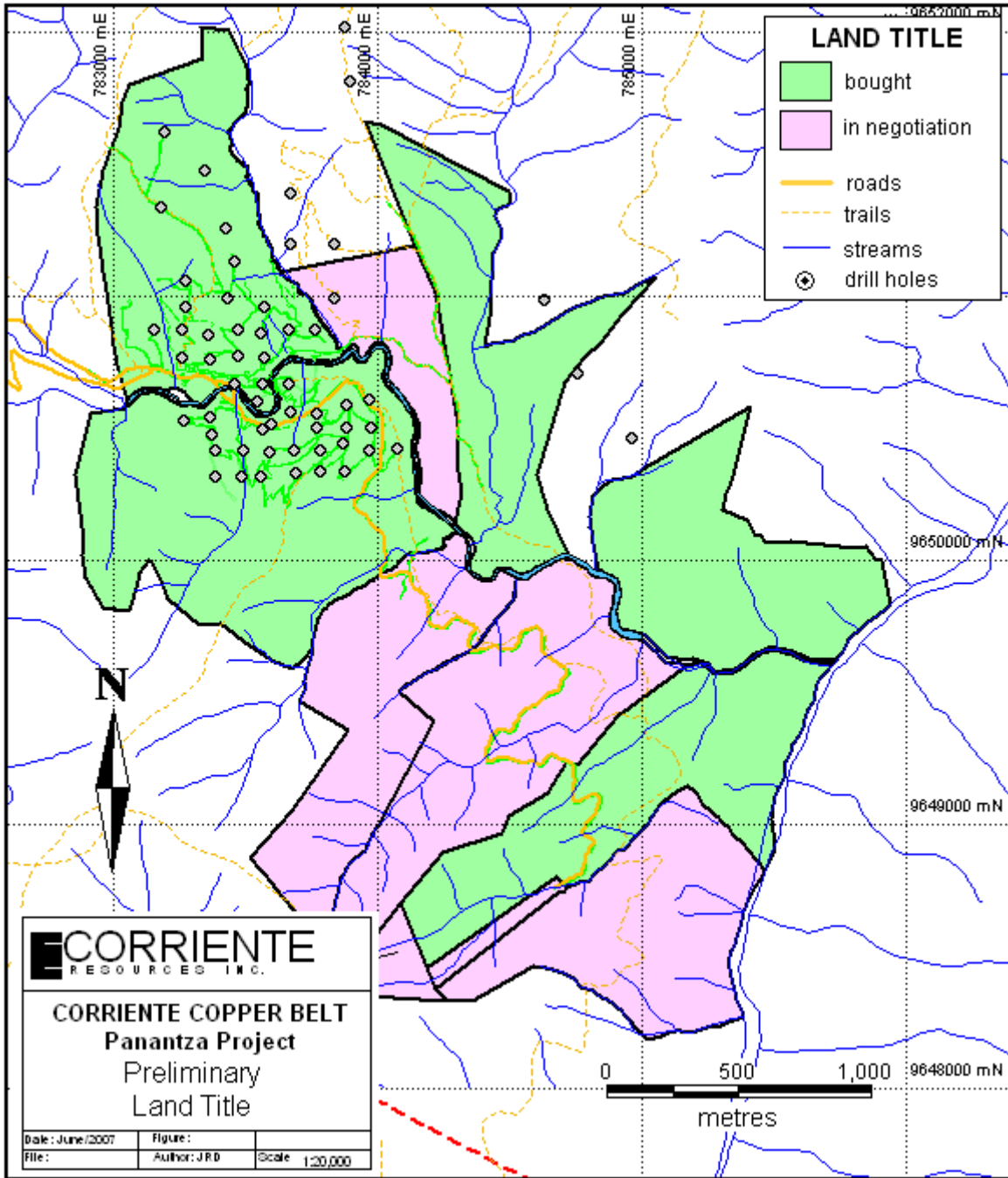


In 2006, Corriente hired Segundo Toledo of Topcon Survey S.A. to survey in the land parcels around Panantza. A surveyor was brought in because previous land title maps acquired from the municipality were found to have poor correlation with geographic features that bound the land parcels. The current surface rights holdings in the Panantza area are shown in Figure 4.3. These parcels cost from \$200 to \$400 per hectare which is generally equal to or higher than current prices for farm land in this area. With these purchases Corriente has secured surface rights over the Panantza deposit and established a framework for continued land acquisition in the area. Additional surface rights will have to be purchased for construction sites, dumps and mill sites.

Although Corriente acquires the rights to some or all of the minerals in the ground subject to the tenures that it acquires, or has a right to acquire, in most cases it does not thereby acquire any rights to, or ownership of, the surface to the areas covered by its mineral tenures. In such cases, applicable mining laws usually provide for rights of access to the surface for the purpose of carrying on mining activities, however, the enforcement of such rights can be costly and time consuming. In areas where there are no existing surface rights holders, this does not usually cause a problem, as there are no impediments to surface access. However, in areas where there are local populations or land owners, it is necessary, as a practical matter, to negotiate surface access.

There can be no guarantee that, despite having the legal right to access the surface and carry on mining activities, the company will be able to negotiate a satisfactory agreement with any such existing landowners/occupiers for such access, and therefore it may be unable to carry out mining activities. In addition, in circumstances where such access is denied, or no agreement can be reached, the company may need to rely on the assistance of local officials or the courts in such jurisdiction.

Figure 4.3 Land Title Map



### **4.3 Permits and Agreements**

For the exploration phase of the Panantza project, all the required permits for exploration are included on file with the Ecuadorian Government. For any mine development, an amended Environmental Impact Assessment (EIA) report must be filed and approved by Government authorities.

The following discussion of the Ecuadorian environmental permitting and approval process, including Table , is paraphrased from the report titled “Feasibility Study Report, Mirador Project, Ecuador”, by AMEC Americas Limited (AMEC 2005) to include recent modifications to the permitting processes.

*Ecuador’s environmental legislation is extensive and their requirements for operations, including initial and advanced stages of exploration, are well defined. Ecuador is one of the few Latin American countries that have adopted an EIA process for exploration activities. Argentina, Chile, and Peru have adopted a similar process to conduct environmental assessments for earliest stages of exploration.*

*Under Ecuadorian Mining Law, the Ministry of Energy and Mines handles the environmental approval system for new mining projects. Mineral concession holders are required to complete environmental impact studies and environmental management plans to prevent, mitigate, rehabilitate, and compensate for environmental and social impacts as a result of their activities. Annual audits of compliance with regard to the environmental management plans are required as a formal monitoring mechanism by the State. These studies are approved by the Sub secretary of Environmental Protection within the Ministry of Energy and Mines.*

*The environmental approval process is summarized as follows:*

- *Proponent publishes in local media details of the mineral concessions comprising the project.*
- *Proponent holds a minimum of 2 public information sessions, within the communities in/or adjacent to the project area, where the Project Description and Terms of Reference (ToRs) regarding how the EIA will be developed are open to community comment. A community committee is formed to observe the process and progress of the EIA.*
- *Proponent files the Project Description and Terms of Reference, which now includes the received public comments and observations, with the Ministry of Energy and Mines (MEM) and Ministry of the Environment (MoE).*
- *These ToRs need to be approved by MEM and published.*
- *Environmental baseline studies, environmental impact assessment and environmental management plan are completed by independent consultants registered with the Environmental authorities and contracted by the proponent in accordance with the ToRs.*
- *The draft version of the EIA is presented to the local affected communities and input to the EIA is requested. Corriente will have community meetings in Santiago de Pananza, San Carlos, San Juan Bosco, San Miguel de Conchay, and at the Ministries of Energy and of the Environment. The EIA is updated to acknowledge community input.*
- *The EIA is submitted to MEM who reviews within a 45-day period after which the ministry will request Corriente to respond to any comments and questions regarding the EIA.*
- *Corriente will have a 30-day period to submit responses to all comments and questions.*

- *The MEM will then take another 30-day period to revise the documentation and make a pronouncement on the EIA. An approval for the EIA will be obtained on meeting the MEM’s satisfaction with the all the information provided for the EIA and the associated Environmental Management Plan.*
- *Once the EIA is approved, and a financial guarantee, or insurance policy, in an amount determined by the Ministry and based on the Environmental Management Plan is registered, proceedings towards granting of the Environmental License starts. It is estimated that another 30-day period is needed to prepare and grant the Environmental License.*
- *Submission of EIA to the Ministry of the Environment will take place at the same time as with the Ministry of Energy and Mines. Approval times are expected to be less than MEM.*

**Table 4.2 List of Major Permits required for the Project at the Mining Stage**  
(based on AMEC, 2005; Mirador Project)

Permit	Granting Institution	Requirements	Estimated Time for Approval
Environmental License (EIA)	Ministry of Energy and Mines/ Ministry of Environment	Approval of EIA by both Ministries. Payment of license fees.	30 days after approval of the project and payment
Permit to Discharge	Ministry of Environment	Approval of EMP, payment of fees, compliance with EMP and regulations.	Valid for two years. To be obtained after one year of operations. Estimated time to obtain the permit: is 30 days.
Permit to Modify Water Courses	National Council for Hydrological Resources (Consejo Nacional de Recursos Hídricos)	-	-
Permit to Use and Transport Explosives	Joint Command of Logistics Management/Naval and Air Zone Command Squad (Dirección de Logística del Comando Conjunto/ Comandos de Brigada y de las Zonas Naval y Aérea)	Compliance with safety regulations	-
Occupational Health and Safety Permit	Ministry of Labor	Presentation of Company’s Health and Safety Plan.	Estimated time to obtain the permit is 30 days.

## 5 Access Routes, Climate, Physiography and Infrastructure

### 5.1 Access Routes

Access to the area is by scheduled air services of less than one hour from Quito to Cuenca. Road access from Cuenca to the village of Santiago de Panantza is via the towns of Gualaceo, Indanza and San Juan Bosco, mostly by reasonable-quality gravel roads over a distance of about 150 kilometres, or about four hours travel (Figures 4.1 and 5.1). There is paved road access from Quito to Cuenca for the transport of samples or heavy equipment. Access to the prospect from Santiago de Panantza is by a newly established gravel road, which continues past the camp to the village of 27 de Noviembre, about six kilometres south.

The locations of Panantza project and adjacent porphyry copper prospects are given in Table 5.1 below:

**Table 5.1**  
**Property Locations**

<b>Prospect</b>	<b>Latitude</b>	<b>Longitude</b>	<b>UTM Northing</b>	<b>UTM Easting</b>	<b>Elevation ASL</b>
<b>Panantza</b>	03° 09' 15''S	78° 26' 58''W	9 651 000 N	783 500 E	1000
<b>Panantza Este</b>	03° 09' 48''S	78° 26' 09''W	9 650 000 N	785 000 E	1050
<b>San Carlos</b>	03° 11' 19''S	78° 25' 11''W	9 647 200 N	786 800 E	1000
<b>Trinidad</b>	03° 08' 10''S	78° 26' 48''W	9 653 000 N	783 800 E	1300
<b>San Miguel</b>	03° 06' 33''S	78° 26' 32''W	9 655 974 N	784 313 E	1400
<b>La Florida</b>	03° 06' 06''S	78° 26' 39''W	9 656 816 N	784 249 E	1200

Of these, only Panantza and San Carlos have been drilled sufficiently to define a resource. Kutukus, San Miguel, La Florida and Panantza Este have limited exploration drilling.

## **5.2 Climate**

The area has a wet equatorial climate with a reported rainfall of 2300 mm per annum but with individual events of over 60 mm in 24 hours. Due to variations in local topography there is a wide range in rainfall levels and the area could be characterized as having numerous microclimates. Fieldwork is possible year round. The optimum period for collecting satellite imagery, airborne surveys or helicopter supported drilling programs is from November to January because of the drier weather conditions at this time.

## **5.3 Physiography**

Elevations at the project in the immediate vicinity of the mineralization range from 800 to 1500 metres. The deposit is crossed by the Rio Panantza, which flows east into the Rio Zamora, entering the gorge at an elevation of about 700 metres ASL. The Cordillera Oriental on the west, and the Cordillera de Condor on the east, rise to maximum elevations of 4200 and 1800 metres ASL, respectively. The area is covered by secondary tropical forest and rangeland for subsistence-level cattle ranching and agriculture.

## **5.4 Infrastructure**

The closest city is Cuenca with a population of approximately 250,000. There are a number of small towns and communities in the area of the project such as Gualaceo, Indanza, Santiago de Panantza, San Carlos de Limon, San Miguel de Conchay, and 27 de Noviembre. Figure 5.1 shows the infrastructure within the immediate area of the Panantza deposit.

The larger regional centre of Gualaquiza, 40 kilometers to the south, has banks, hotels and basic infrastructure. A paved highway now links Gualaquiza with towns to the south, including Pangui, Yanzatza, Zamora and onward to Loja.

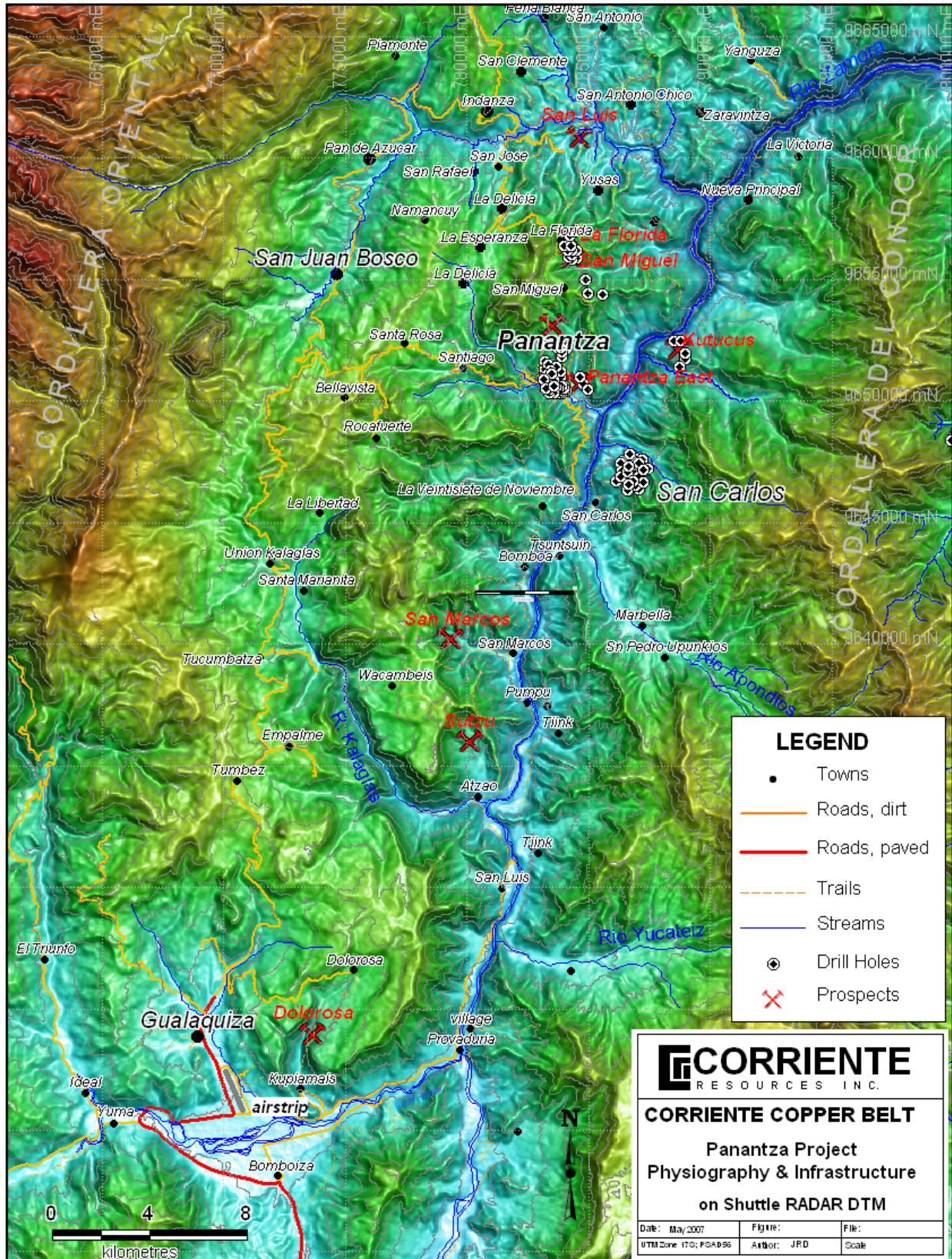
There is currently a sub transmission 69 kV power line between Cuenca and Limon, some 20 km north of the project; with a planned 138kV transmission line between Cuenca and Gualaquiza. The camp is now joined by a high tension line from the town of Santiago de Pananza to a 25kV transformer in the camp.

There is no established land-based communication system at the site. Communication is currently by satellite link and limited access to the cell-phone grid which follows the highway through San Juan Bosco.



The closest existing airstrip is at Gualaquiza, just southeast of the town, off the paved highway. It has an asphalt runway approximately 2100 metres (6900 ft) long. If warranted, it could be extended by about 300 metres for use by aircraft the size of a Hercules L100.

Figure 5.1 Access and Physiography Map





## 6 History

### 6.1 Exploration History

Billiton discovered a number of porphyry copper deposit clusters in the Pangui region of south eastern Ecuador during a five-year grassroots exploration program in the mid 1990's (Billiton, 1999a). A brief history of Billiton's involvement in the Panantza project follows:

- pre-1993 - small scale alluvial mining in the general Pangui area.
- 1993 - decision to commence gold exploration in Ecuador.
- 03/1994 - establishment of the Quito exploration office and application for concessions in the Pangui area.
- 07-09/1994 - regional exploration commenced in the Pangui area.
- 10-12/1994 - application for the concessions containing San Carlos.
- 01-03/1995 - recognition of the porphyry copper potential in the Jurassic intrusions and the decision to focus regional geochemical sampling on these targets.
- 04-06/1995 - definition of six porphyry copper targets in the Pangui area from regional geochemistry and geological mapping.
- 01-03/1996 - identification of the pan concentrate geochemical anomaly of the San Carlos porphyry.
- 04-06/1996 - definition of a large Cu-Mo soil geochemical anomaly at San Carlos.  
- recognition of San Carlos as a large porphyry copper system.
- 11/1996 - airborne magnetic survey in the immediate San Carlos area.
- 01-03/1997 - identification of alteration and porphyry mineralization in the area from the Panantza to the San Miguel porphyry prospects.
- 05-09/1997 - completion of five diamond drill holes at the San Carlos prospect with the intersection of significant copper mineralization.
- 10/1997 - preliminary engineering and environmental studies on the Pangui area.
- 02/1998 - completion of initial IP survey at Panantza and San Miguel.
- 03-04/1998 - completion of 8 diamond drill holes intersecting significant mineralization at Panantza.  
- drilling of 4 diamond drill holes intersecting low to moderate grade mineralization at San Miguel.
- 05-07/1998 - drilling of 7 more diamond drill holes at San Carlos.
- 08/1998 - commenced drilling of 3 additional diamond holes at Panantza - completion of ground magnetic survey at San Carlos.
- 09/1998 - completion of drilling at Panantza.

- 10-11/1998 - diamond drilling of 13 holes at San Carlos.  
- follow up induced polarisation survey at Panantza, Panantza east and Trinidad.
- 12/1998-02/1999- completion of a helicopter magnetic and electromagnetic survey over the Pangui project area.
- 03/1999 - completion of an induced polarisation survey at San Luis and IP sounding at Panantza and San Carlos.
- 05/1999 - receipt of corrected airborne geophysical data and start of interpretation.

In 1999, Billiton announced a restructuring of its new business initiatives to maximise its investment returns in new ventures and projects. Consequently, a joint venture opportunity became available over a major part of the Pangui porphyry copper province. Billiton found a suitable joint venture participant in Vancouver based Corriente Resources Inc., and agreements covering the north and south tenures were announced on October 18, 1999 and April 7, 2000 respectively. These agreements are structured to expedite the continuing exploration and development of what is now called the “Corriente Copper Belt” of which the Mirador, Mirador Norte, Panantza and San Carlos porphyries are the most advanced deposits.

In October, 2000, Corriente Resources began a 17-hole drill program directed by David Lowell and under the joint venture agreement with Billiton. Core drilling totalled 5262.08 metres and was completed with a man-portable Hydracore drill rig, transported via a series of hand-excavated trails and platforms. In addition to much lower drill-associated costs, this system allowed more flexibility in the sequencing and spacing of drill holes than the helicopter supported method used by Billiton. The drill spacing was about 100 metres and concentrated on the north side of the Rio Panantza, which bisects the deposit. The drill trail cuts also provided much needed geological exposure, as natural outcrops are limited to the few creeks which cross the prospect. All drill core was stored at camp, together with the core from the Billiton programme. Limited surface mapping was also completed.

The topography and all collars were surveyed using differential GPS equipment, and a contour map with four-metre contours was produced over the area of known mineralization. The road from the nearby village of Santiago de Panantza was extended into the camp.

Four holes (PE01 to 04, total 647m) drilled in November 2000 tested the adjacent Panantza Este soil anomaly, located one kilometre to the east of Panantza; the holes returned low-grade copper results, which did not warrant an immediate follow-up program.

At the end of the year 2000 drilling, an internal report for EcuCorriente S.A. was written (Vaca and León, 2001). A polygonal resource estimate was included therein but never reported publicly. This resource estimate was not done in compliance with NI 43-101 and CIM 2000, nor was it ever intended or reported to be.

The ridge immediately northeast of Panantza received another nine holes (PE05 to 14, total 1207m) in October-November 2004. This ridge is included within the western limit of the Panantza Este Mo-Zn soil anomaly, which appeared to be a faulted (sinistrally) extension of the Panantza soil anomaly. The drilling was to test whether mineralization extended northeast of Panantza and connected with the main Panantza East anomaly across a fault. The results were not encouraging and exploration switched to the San Miguel prospect to the north.

Over the period 2003-2005, the only other exploration activities in the area were reviews of the drill core and remapping of the trail system and creek outcrops.

## 6.2 Previous Resource Estimates

In June 2001, Corriente released a Scoping Study on a joint Panantza – San Carlos project (Makepeace, 2001). The Panantza part of the study was based on the 28 holes (8246m) drilled by Billiton and Corriente. The study reported Indicated resources calculated by David Makepeace (Geospectrum Consultants) of 236 MT at 0.72 %Cu using a 0.5% copper cutoff, or 148 MT at 0.82 % Cu, using a 0.65% copper cutoff. The mineral resource estimates did not distinguish between material types (leached, supergene, hypogene) and only reported copper grades. The estimates were made as follows:

*An overall composite thickness and weight-averaged copper grade was calculated for each hole in each deposit.*

*Golden Software Inc.'s SURFER (32) V6.04 was utilized for developing the grid, geostatistics, volume calculations and mapping of the data. Within the program, each drillhole was assigned a composite interval x composite grade [metres·% Cu] and a separate composite interval [metres]. Areas of influence (grid intersection values) were calculated by interpolating the area between the drillholes with respect to the search radius. The interpolation method used was Ordinary Kriging using a linear variogram model and no anisotropy. Volumes were calculated between two surfaces (Z=0 and Z=composite interval or Z=composite interval x composite grade) by SURFER for each grid intersection.*

*The grade for each of the deposits [% Cu] was derived by dividing the summation of the volume of the composite interval x composite grade [ $m^3$  % Cu] by the summation of the volume of composite interval [ $m^3$ ]. The tonnage for each of the deposits [tonnes] was derived by multiplying the summation of the volume of composite interval [ $m^3$ ] by the tonnage factor [tonnes/ $m^3$ ](2.60 - comm. Mr. J. A. Chapman).*

*Although SURFER is a powerful 3-D mapping program, it is not a sophisticated geological-mining software package. SURFER was used because a complete mineral inventory was not necessary at this stage of the project. This program makes it very easy to generate volumes (i.e. grade and tonnage) with a good degree of accuracy and in a time efficient manner.*

*SURFER does not handle angled drillhole data or curved drillhole data well. Therefore, the surface drillholes were assumed to be vertical, and therefore, the composites were as well. Both deposits have a few angled holes. The vertical-hole assumption would tend to shift the thickness and thickness-grade contours. Most angle holes were angled at approximately -60° and in the same direction. It was felt that these factors did not decrease the accuracy of this method of estimation enough to warrant another, more-time consuming method.*

*It was assumed that both of the deposits were homogeneous in lithology and mineralization. Porphyry copper deposits tend to be more homogeneous than most deposits so this method of estimation was applicable.*

*A minimum simple circular search radius of 100 metres was used to simulate the Panantza deposit resource calculations while a radius of 250 metres was used to simulate the San Carlos deposit. The difference was due to the drillhole density of the two deposits.*

In 2006, Corriente created three-dimensional solid models of the Panantza mineralization at various cutoff grades using the same data as Makepeace (2001). The solids are effectively grade shells, as used in constraining block models, and were constructed using the software SURPAC in the same manner as the grade shells used in the subsequent block modeling by MDA in 2007. Using the 0.4% copper grade shell, Corriente calculated an Inferred resource of approximately 395 million tonnes grading 0.67% copper. This resource was released to the public as an updated, 43-101 compliant estimate in a news release dated September 7, 2006.

## 7 Geological Setting

### 7.1 Regional Geology

The porphyry copper deposits of the Corriente Copper Belt are associated with porphyritic intrusive phases of the Late Jurassic calcalkaline batholiths of the Cordillera del Condor and other sub-Andean regions of Ecuador. The Zamora Batholith, a granitic intrusion which hosts all the known porphyry deposits, is part of the Abitigua Subdivision.

Radiometric dating by Billiton suggests that the porphyry mineralization is associated with the younger Upper Jurassic porphyry intrusive phases of the Zamora granite, with ages of 152 to 157 million years (Ma), with radiometric ages suggesting the intrusion of the actual batholith took place as early as 190 Ma (Gendall et. al., 2000; Coder, 2001).

The intrusions are emplaced within a package of marine sedimentary and volcanic rocks of the mid-late Jurassic Misahualli Formation, and possibly also older rocks of the Triassic Piuntza Formation. These units are exposed mostly along the east side of the batholith. The western contact is covered unconformably by Cretaceous arenaceous sandstone of the Hollin Formation, which is conformably overlain by more calcareous shales, limestone, and sandstone of the Napo Group (Figure 7.1).

Tertiary dioritic to rhyolitic dikes, sills, and plugs intrude the overlying sedimentary rocks and Zamora granite along the western edge of the batholith.

A regionally important fault in the area strikes northeast along the base of the main Cordillera Occidental, juxtaposing the Cretaceous units against older rocks to the west. The Cretaceous units are intensely folded and sheared along the fault.

### 7.2 Local Geology

The mineralization is wholly contained within the Zamora batholith and related porphyritic intrusions (Figure 7.2). The granite consists mainly of fine-grained aplite and coarse graphic-textured leucogranite, characterized by absent to sparse mafic content. Medium-grained, equigranular granite and quartz monzonite with 20-30% biotite and hornblende occurs at the limits of mineralization and is more typical of the Zamora batholith.

Hornblende-orthoclase porphyry intrudes the granitic rocks in the form of dikes and tabular plugs. There appear to be two generations of dikes: one slightly predating mineralization, and the other late in the mineralization sequence. The former is typically more seriate in texture, forms larger dikes, and has less quartz 'eyes' than the latter. To date they have been distinguished more on how well mineralized they are, rather than lithologic differences. They may form a continuous series of intrusions that co-evolved with the mineralizing fluids and were emplaced over the entire mineralizing event. Alternatively, they represent a single intrusive event, and differences in mineralization are related to how well-fractured and thus open to fluids the units were, relative to the host granite. More drilling and trenching is required to clarify the sequence of intrusion and mineralization.

Hydrothermal breccia occurs adjacent to the one of the late-mineral porphyry dikes on the southwest edge of the deposit. Fragments include unmineralized porphyry and mineralized granite. Copper grades are overall lower in this unit.

The youngest units are Tertiary in age and intrude the Cretaceous Hollin sandstone. They consist of a single northeast-striking, northwest-dipping rhyolite dike in the southeast corner of the deposit, and several narrow (1-2m) diabase dikes, all of which parallel the rhyolite dike and some cutting it.

Alluvial deposits cover the valley of the Rio Panantza, and slide-related colluvium forms a fan under the current camp (south of PA014 to the river).

Potassic alteration predominates in the granite and leucogranite host rocks and the mineralized porphyries. The late-mineral dikes have moderate chlorite-epidote alteration. Argillic alteration extends down from the supergene zone and overprints the potassic alteration along structures. Pervasive quartz-sericite-pyrite alteration zone is marginal to the potassic alteration, extending far to the east into the Panantza Este prospect, and for at least one kilometre west, where it is well exposed in the new road cuts on either side of the bridge over the Rio Panantza. Quartz-sericite alteration is also confined to structural zones within the potassic zone.

Figure 7.1 Regional Geology - Panantza Area

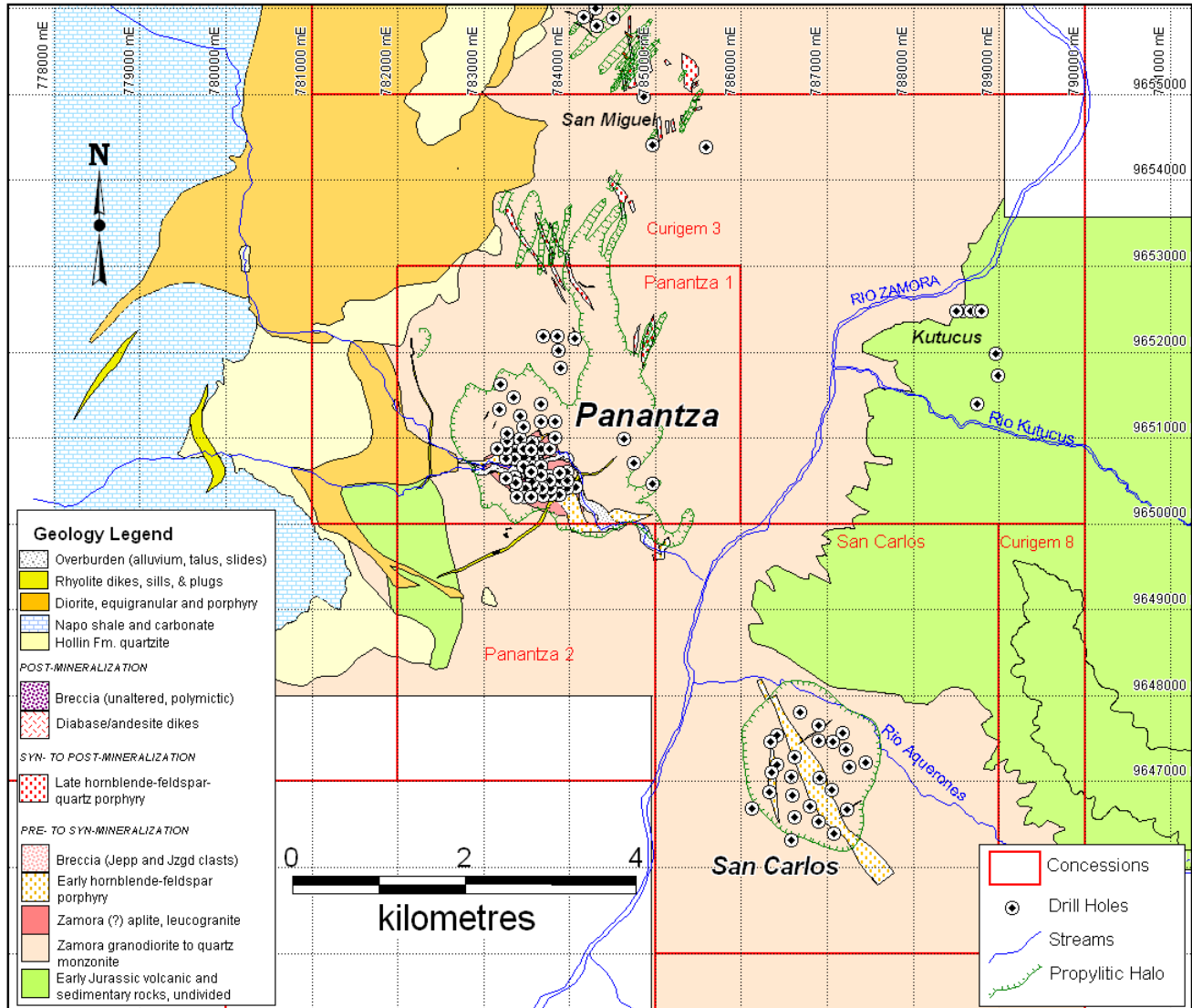
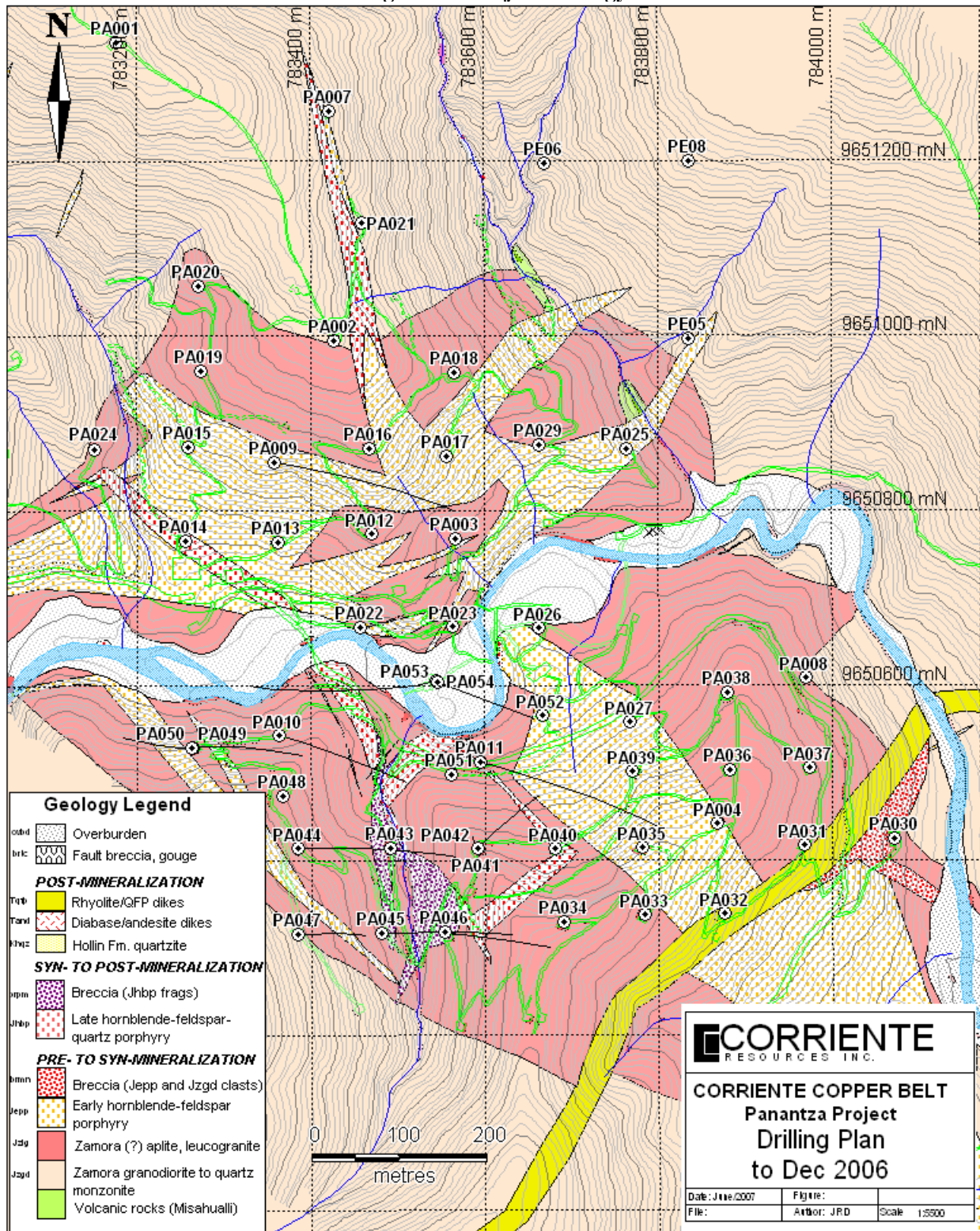




Figure 7.2 Project Geology



## **8 Deposit Types**

The host rock, alteration, and mineralization of the Panantza deposit are typical of calc-alkaline porphyry copper systems. Copper deposits of a similar style are widespread in the Cordilleras of North and South America. The lateritic weathering profile, and resultant mineral zonation of leached, supergene, and hypogene, is also typical of porphyries exposed in a tropical climate.

## **9 Mineralization**

The mineralization is mostly typical porphyry hypogene with disseminated chalcopyrite; molybdenite occurs mostly as selvages within quartz veins. Higher grades of hypogene copper averaging about 0.8% are restricted to zones of more concentrated and veinlet-controlled chalcopyrite-pyrite  $\pm$  magnetite. Mineralization has an approximate dimension of 900 metres by 600 metres and remains open at depth. The primary sulphides in the potassic alteration zone are chalcopyrite, molybdenite and pyrite. Anhydrite and gypsum are present locally. An intense, texture-destroying quartz stockwork runs through the centre of the deposit, from southeast to northwest.

Supergene (also called enriched) mineralization consists of both oxide and sulphide enrichment blankets, best developed just north of the river in an area roughly 600–metres long by 200–metres wide. Oxide copper mineralization is preserved in the leached, saprolite zone over the chalcocite mineralization and consists of mainly disseminated and fracture-controlled malachite and chrysocolla. Minor minerals are cuprite, pitch limonite and neotocite. The copper oxide is underlain by thin horizons of chalcocite coating chalcopyrite and pyrite in strongly argillic-altered host rock.

Mineralization drops relatively sharply (within about 50-100m) across a northwest-striking lineament on the east side of the deposit, and more gradually on the south, west, and north sides. Drill holes PA005 and PA006 intersected considerable low-grade, hypogene copper mineralization (about 0.4% Cu average) extending at least 400 metres northwest from the main mineralization modelled in this report. Adjacent drill holes and the soil anomaly suggest the width of this material is on the order of 200-250 metres.

## 10 Exploration

A second phase of exploration drilling on Panantza commenced in June 2006, starting at the south end and moving north, expanding and infilling the previous drilled area. The objective of this program was to extend mineralization outward, defining at 100 metre centres a 0.4% copper cutoff, as well as to infill previous drilling, bringing the overall drill spacing to 100 metres or less. Holes were also run to greater depths than in previous programs, to test the vertical limit of mineralization. A total of 8398 metres was drilled in 25 holes by December, when the project was suspended due to social unrest in the area. Remapping of the main creek outcrops and additional mapping of the new drill trails, new road exposures, together with relogging of all drill core, significantly increased the understanding of the geology and mineralization at Panantza.

## 11 Drilling

The Panantza deposit has been tested by 53 diamond drill holes totalling 16,644 metres, arranged in a rough grid on approximately 100-metre centres. A summary of the drill-hole information is given in Table 11.1.

**Table 11.1 Summary of Drilling**

Operator	Year	Start	Holes	# of Holes	Total Length	Down-hole Survey
Billiton	1998	Feb	PA001-008	8	1870.0	No
Billiton	1998	Aug	PA009-011	3	1112.8	Yes
Corriente	2000	5-Oct-00	PA012-029	17	5262.08	No
Corriente	2006	13-Jun-06	PA030-54	25	8397.69	Yes

In 1998, Billiton completed the initial eleven drill holes using a ‘Long-year 25A’ rig, beginning with HW-size casing and standard HQ size core (6.35 cm), and ending with NQ-size core down to depths of approximately 250-300m. The rigs were moved by means of a ‘Lama’ helicopter which utilized a 170m ‘Long-line’. Subsequent drilling by Corriente utilized Hydracore hydraulic diamond drills belonging to the contractor Kluane International Drilling Inc. (“Kluane”). These were man-portable wireline drill rigs, and recovered standard NTW (5.7 cm) and BTW (4.2 cm) core. The smaller BTW core was recovered from the lower parts of the deeper drill holes. All platforms were accessed from the central camp via hand-built trails or the new road.

Core recoveries are good, averaging 95%. No significant assay bias is expected for core losses in these zones because of the dominantly disseminated character of the mineralization. The RQD values measured from the core indicate that rock quality is moderate through most of the deposit. The average RQD value from the drilling over the whole of the deposit is 40.

The drill-hole collars were surveyed by Topcon S.A. using differential GPS equipment with reported instrument accuracy of  $\pm 1$  metre (X-Y) and  $\pm 2$  metres (Z). As some of these surveys were done on the excavated pads before drilling, the accuracy will be somewhat less than the accuracy of the equipment. It is expected that the accuracy will be of the order of  $\pm 3$  metres.

Down-hole surveys using Tropari (1998) and Sperry-Sun (2000 and 2006) instruments were completed on 28 of the 53 holes. Vertical holes drilled in 1998 (PA001-008) and 2000 (all holes) were not surveyed because the deviation was not expected to be significant; this agrees with deviation data from surveyed holes drilled in 2006. For these holes, the deviations are



mostly minimal, with average dip deviations of 1.7 degrees for vertical holes, versus 1.8 degrees for angle holes.

The following field procedures were used in all of the Corriente drilling campaigns:

- Core is stored in wooden boxes each holding five metres of core. When picked up at the drill, all core box lids were secured and the boxes were packed out on foot by workers to the road, then loaded onto trucks and delivered to the camp. Corriente staff opened the boxes and converted the drill hole depth markers from feet to metres. The core boxes were then placed on a stand and photographed in natural light.
- The core was marked at one-meter intervals by a geotechnician, who then measured the core recoveries and RQD. Technicians completed a preliminary drill log, wherein they recorded the core recovery, structural features, fracture density and orientation, and rock quality designation (RQD).

After the drill holes were completed, the collar locations were marked with a large PVC pipe capped with a plastic cover.

Most of the early drill holes at Panantza were drilled vertically. As the geological knowledge of the deposit increased, it was recognized that there exist various geologic features with sub-vertical geometry, such as syn-mineral to post-mineral dikes and quartz-sulfide stockwork. Accordingly, in the 2006 drilling program, a greater percentage of holes with angles of  $-60^{\circ}$  to  $-80^{\circ}$  were drilled to help define such features. No geotechnical drilling has been done at Panantza.

Specific gravity measurements were made on pieces of core that weighed from 10 grams to 30 grams each, collected at 20- to 30-metre intervals. For drill programs prior to 2006, specific gravity was determined by the displacement method, where the sample was weighed dry, then immersed in water. The amount of water displaced by the sample was measured in order to determine its volume. The specific gravity was calculated by dividing the dry sample weight by the weight of the displaced water. This is not a particularly accurate method, since some water is lost because the sample always retains moisture, and it is difficult to measure the volume of the displaced water with much accuracy. Data for the Billiton drill program (PA001-011) are erratic, suggesting poor methodology, and are not included in the resource estimation. Data from the 2000 Corriente program are better, but only eight of the 17 holes from this phase have density data recorded.

For the 2006 drilling program, the procedure was changed to the more accurate immersion method, where samples weighing between 100 to 400 grams were suspended with thin nylon monofilament and weighed dry, then immersed in water and weighed wet. Porous samples from the leached and supergene zones were sealed with paraffin. There are 394 specific gravity measurements in the present database which were used in tonnage estimations.

## **12 Sampling Method and Approach**

In 1998, the drill core was sealed in wooden core boxes and moved from the drill platform to the camp by helicopter. In subsequent programs the core was hauled to camp by mules and workers with backpacks. Corriente staff then opened the boxes and converted the drill-hole depth markers from feet to metres. The core boxes were then placed on a stand and photographed in natural light.

The core was marked at one-meter intervals by a geotechnician, who then measured the core recoveries and RQD. Technicians completed a preliminary drill log, wherein they recorded the

core recovery, structural features, fracture density and orientation, and rock quality designation (RQD).

Each one-meter interval of core was assigned a sample number. Based on the style of mineralization, the individual one-meter samples were physically combined into composite samples of different lengths. The sample intervals are taken to the nearest metre and, therefore, extend across geologic boundaries. This leads to minor dilution at the contacts of post-mineral dikes. In the 2006 drilling, some sample intervals were adjusted to coincide with dike contacts. Some of the larger, clearly post-mineral dikes were not sampled, and whole core remains in the boxes. The categories of mineralization used and the corresponding composite sample lengths were as follows:

- Leached zone (cap): five metres;
- Enriched (supergene) zone: two metres;
- Primary (hypogene sulphide) zone: three metres;
- Post-mineral dike: five metres.

The use of non-random sample lengths in the database does introduce a certain degree of bias, but with compositing and length weighting, the effect is minimized or eliminated.

The sample intervals were recorded and assigned sample numbers. The core was split longitudinally using a diamond saw. No line was marked on the core to guide the splitting process. In cases where the core fragments were too small to be sawn, core fragments representing one-half of the core volume were randomly picked out of the core boxes by hand.

Each core sample was placed in its own double plastic bag, and each bag was weighed and marked with the sample number. Batches of samples were then placed in sealed rice bags for shipment. For the first two phases of drilling, the samples were sent to a preparation laboratory in Quito, Ecuador. During the third phase of drilling, Corriente used the Acme preparation laboratory in Cuenca, Ecuador. Technicians at site prepared a list for the insertion of the duplicate and standard reference material (SRM) and QA/QC samples, and this list accompanied the sample shipment form to the manager of the preparation facility. The lab manager confirmed the sample shipment and the work orders, and lab batch numbers were scanned and forwarded to Corriente via email.

## **13 Sample Preparation, Analysis, and Security**

### ***13.1 Sample Preparation and Analyses – 1998***

Sample pulps from 1998 were prepared, processed and analyzed by Bondar-Clegg, prior to the merging of Bondar-Clegg and Chemex. Both of these preparation laboratories were independent from Billiton and Corriente and their Ecuadorian subsidiary companies. Each one-metre sample was crushed to -10 mesh using a TM Rhino primary jaw crusher and split into two equal fractions. Three consecutive (3 x 1metre) core samples of -80 mesh, each weighing about 1.2 or 2.1 kg in size (NQ or HQ core), were then composited by mixing in a vertical axis mixer. The composite sample was then split to approximately 1 kg at -80 mesh and pulverized to -150 mesh, while the remaining -80 mesh composite was stored by Bondar-Clegg Ecuador.

Three 100 g pulp (-150 mesh) samples were taken from the 1 kg sample, and two of these were sent immediately to the quality control officer at Billiton in Ecuador. The officer gave the original 100g pulp, any duplicate 100g pulps, and the 100g internal standards new analytical sample numbers and these were then sent to the Bondar-Clegg laboratory in Vancouver for analysis. If not sent to Bondar-Clegg Vancouver as a pulp duplicates or for re-assay, the second

and third 100g pulps were stored by Billiton in Quito. The samples were assayed for gold using the fire assay technique on a 30 g sample with an atomic absorption spectroscopy (“AAS”) finish, and analyzed for copper, silver, molybdenum, lead, and zinc using four acid digestion followed by AAS. In addition, the samples were analyzed for acid soluble copper using citric acid in a one hour agitated leach, and AAS finish.

### ***13.2 Sample Preparation and Analyses – 2000***

Sample pulps from 2000 were prepared at Bondar-Clegg laboratories in Quito by laboratory personnel. The whole sample was crushed to 75% passing –10 mesh, and then a one-kilogram sub-sample (“split”) was pulverized to 95% passing –150 mesh. A 100 g split (“pulp sample”) was taken from the 1 kg pulverized sample and shipped to the Chemex laboratory in Vancouver, Canada. Here the pulp samples were fire assayed for gold with an AAS finish (using a 30 g aliquot), and were analyzed for copper, molybdenum and zinc using four-acid digestion and AAS methods (AMEC, 2004).

### ***13.3 Sample Preparation and Analyses – 2006***

The 2006 Panantza drill core samples were prepared at the Acme Analytical Labs (“Acme”) preparation facility in Cuenca, Ecuador. The sample preparation procedures were the same as were used in 2000 by Bondar-Clegg and Chemex, except that final sample pulverization was to 85% passing -200 mesh. The -200-mesh 100 g split material (pulp sample) was shipped to the Acme lab in Vancouver, Canada, for final analysis. Coarse rejects and remaining pulp from the samples are stored in Quito by Corriente.

For the copper, molybdenum, silver, lead, and zinc determination, 0.5 g of material was digested using a four-acid solvent, followed by inductively coupled plasma/atomic emission spectrometric (“ICP-AES”) analysis. Gold was determined by 30 g fire-assay fusion followed by ICP-AES analysis. All sample preparation procedures are appropriate and well done, and the assays and analyses are of good quality.

### ***13.4 Sample Security***

In all phases of drilling at Panantza, drill core samples remained under the control of authorized Billiton or Corriente personnel from the time they left the drill platforms until they were delivered to the preparation laboratory. For shipment, the individual sample bags were put into woven polypropylene bags. For the 1998 and 2000 programs, each of these bags was marked with the project number, the drill-hole number and a number identifying its place in the sequence of bags in the sample shipment. The shipment bags were secured with tape and rope, and were sent to the preparation laboratory in a contracted vehicle. In 2006, the practice of marking the shipment bags with the drill hole number was discontinued, and shipment bags were secured by number-coded nylon “zip” ties before shipment.

## **14 Data Verification**

### ***14.1 Introduction***

Quality control and quality assurance (QAQC) changed from drill phase to drill phase but basically followed procedures set up by Billiton in 1998. Table 14.1 summarizes the QAQC procedures by drill phase.

**Table 14.1 QAQC Sample Insertion by Year**

<b>Year</b>	<b>Holes</b>	<b>Standards</b>	<b>Duplicates</b>	<b>Checks</b>
1998	PA001-011	1:20	1:10	None
2000	PA012-029	None	None	1:10
2006	PA030-54	1:20	1:10	PA049-52

### ***14.2 Quality Control 1998***

Billiton initiated a quality control protocol in 1998 for the Panantza sample stream which included internal blind standard reference materials (standards, or SRMs) and assay duplicates. McIver 1999 describes the QAQC procedure as check samples (replicates sent to another lab) inserted after every 20<sup>th</sup> sample composite and duplicates after every 10<sup>th</sup> sample composite.

In addition, one of three internal SRMs was inserted after every 20th composite. The Billiton internal SRMs were made from compositing drill core sample rejects from San Carlos. Three SRMs representative of low, medium, and high-grade mineralization were prepared and subjected to a “round robin” survey of five reputable laboratories in Canada and Chile.

Quality control graphs for the internal standards and duplicates show acceptable precision and accuracy for the drill-hole assays with no significant deviations from the second standard deviation confidence limits (Figure 14.1 and 14.3).

### ***14.3 Quality Control 2000***

For the 2000 drill program, the only QAQC sample inserted into the sample shipments was a 100 g lab check. This sample was taken on a 1 in 10 basis and was shipped to Chemex in Vancouver for analysis. There is a high bias in the Bondar-Clegg results relative to the Chemex check samples (Figure 14.5), but this was also seen in the Mirador check sample data from the same period (AMEC, 2004) and was subsequently shown by a re-assay program set up by AMEC to be an issue with the check assays from Chemex.

To address the bias, all assays results from this drill phase will have to be checked with a re-assay audit of 10% of the pulps.

### ***14.4 Quality Control 2006***

A more comprehensive QA/QC program was adopted by Corriente in 2006, following procedures recommended by AMEC during their review of the Mirador project in 2004. In 2004, Corriente prepared two bulk SRMs from drill core sample reject material from Mirador and submitted these to a five laboratory round-robin. A description of these standards can be found in the Mirador 2004 feasibility study (AMEC, 2004). The SRMs consist of a high-grade (MS1) and low grade (MS2) 100 g pulps, one of which was inserted every 20 samples; which SRM was inserted depended usually on the visually estimated grade of the adjacent samples.

When the standards returned values greater or less than two standard deviations from the mean, Corriente requested reruns of ten samples prior to and ten samples following the “failed” inserted standard of a SRM. If another standard occurred within ten samples, then the rerun interval was half way to the next standard. The results are graphed in Figure 14.2.

Duplicates were inserted at the coarse fraction (-10 mesh) every 20 samples and at the fine fraction (-100 mesh) every 20 samples, for an overall 1 in 10 insertion rate. The results are graphed in Figure 14.3 and 14.4.

Based on recommendations from MDA, a blank program was initiated in late 2006 and only two drill holes had blanks inserted into the sample stream before the project was suspended.

Figure 14.1 Copper Standard Reference Plots – 1998 Data

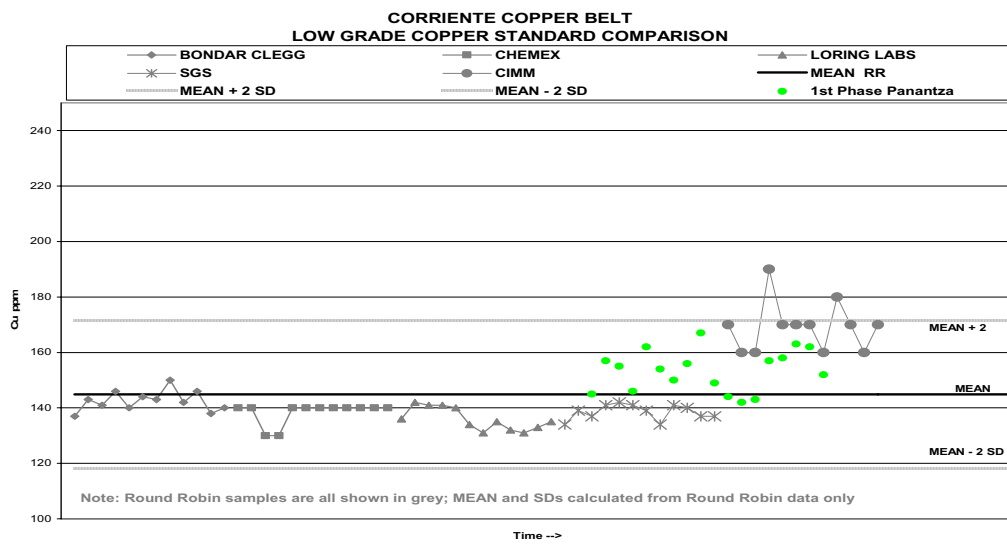
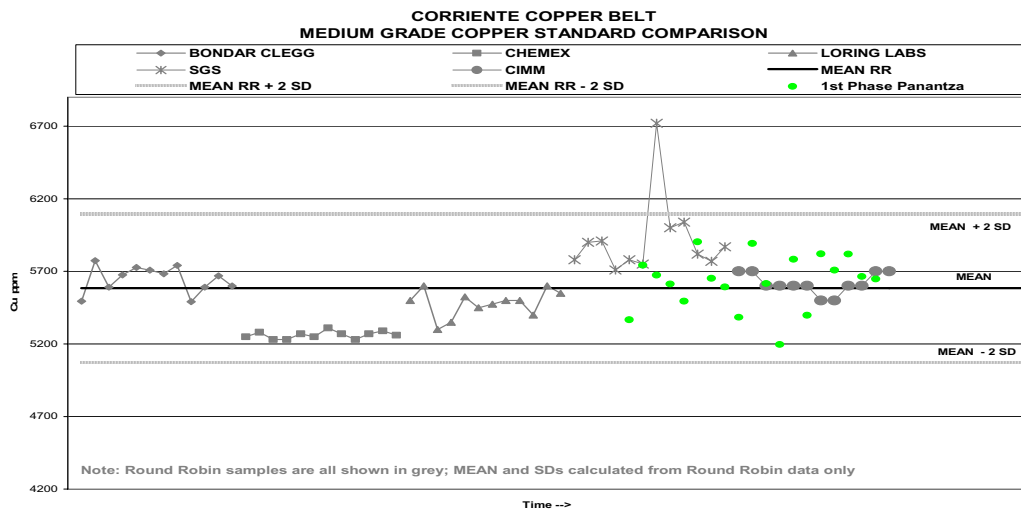
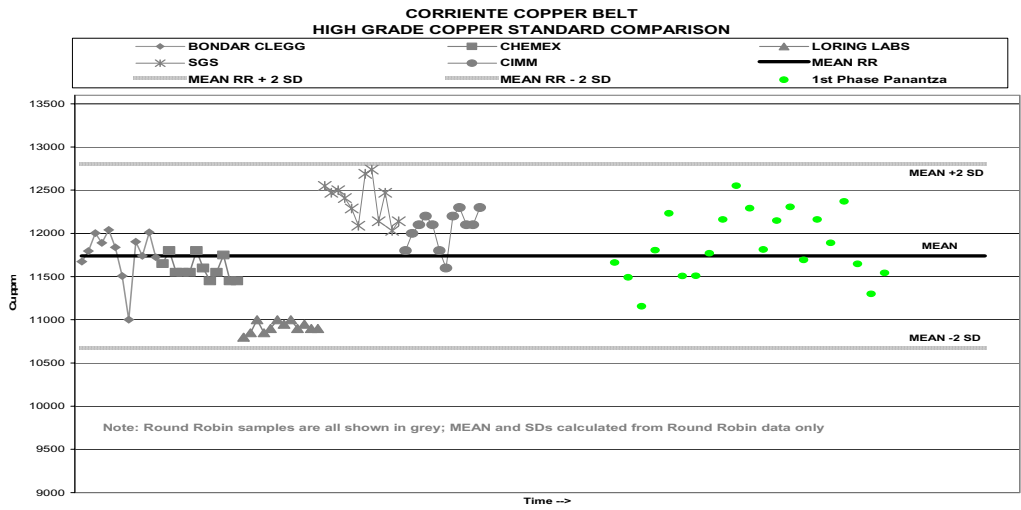


Figure 14.2 Copper Standard Reference Plots – 2006 Data

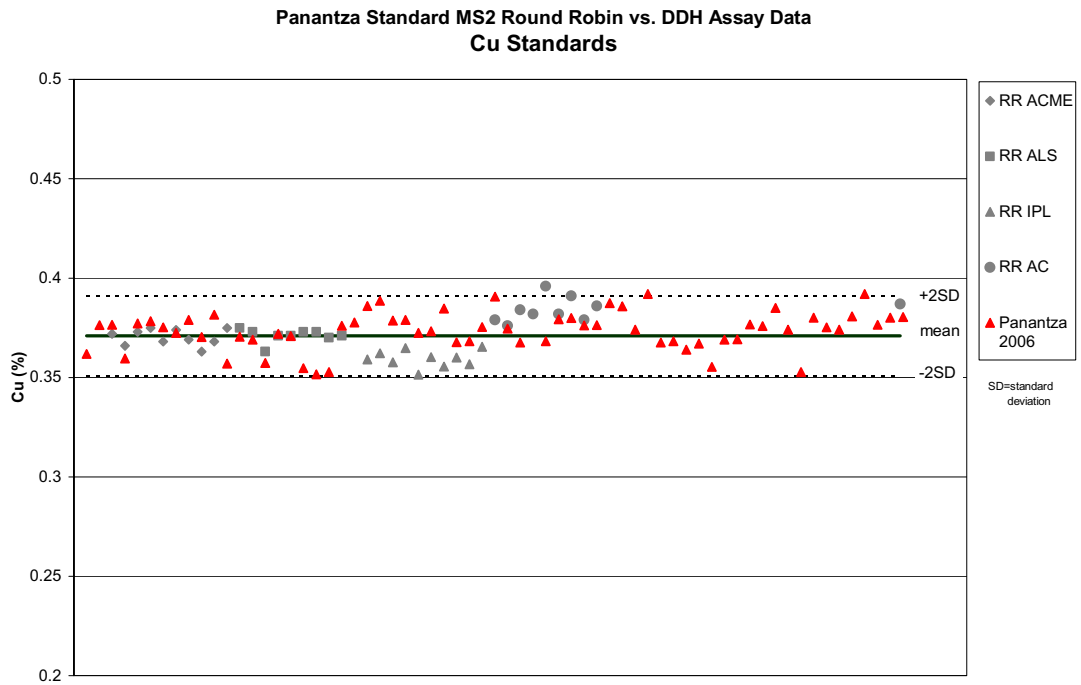
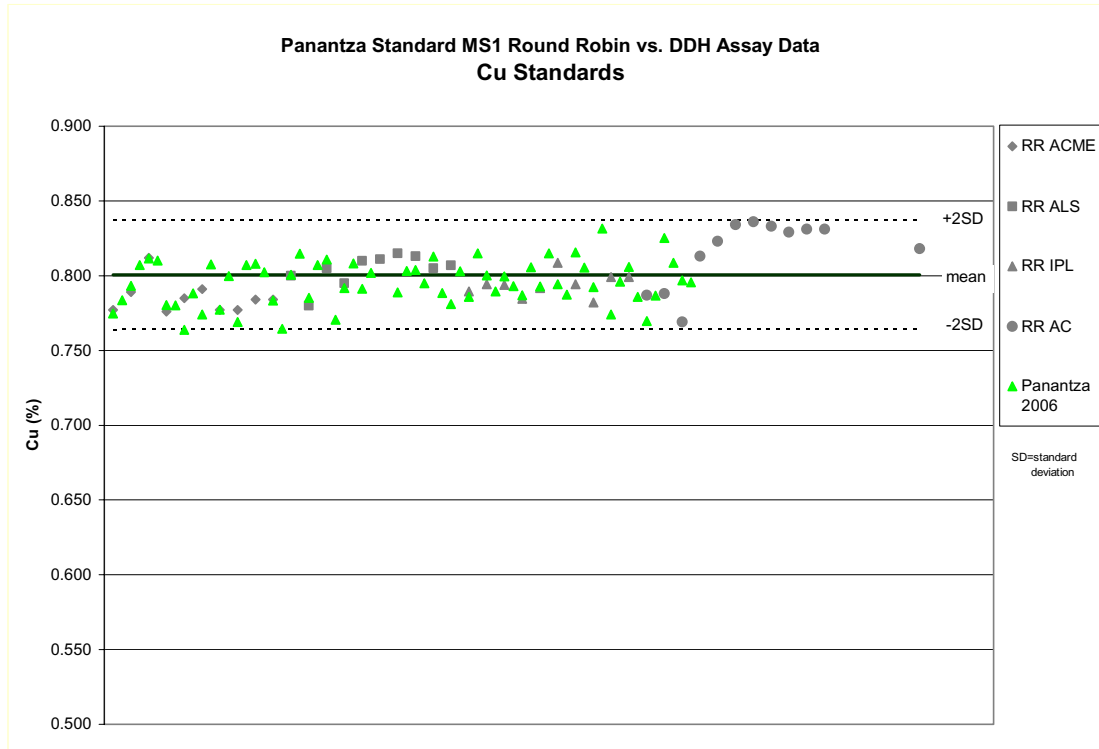


Figure 14.3 Copper Pulp Duplicate Plots (-200 mesh)

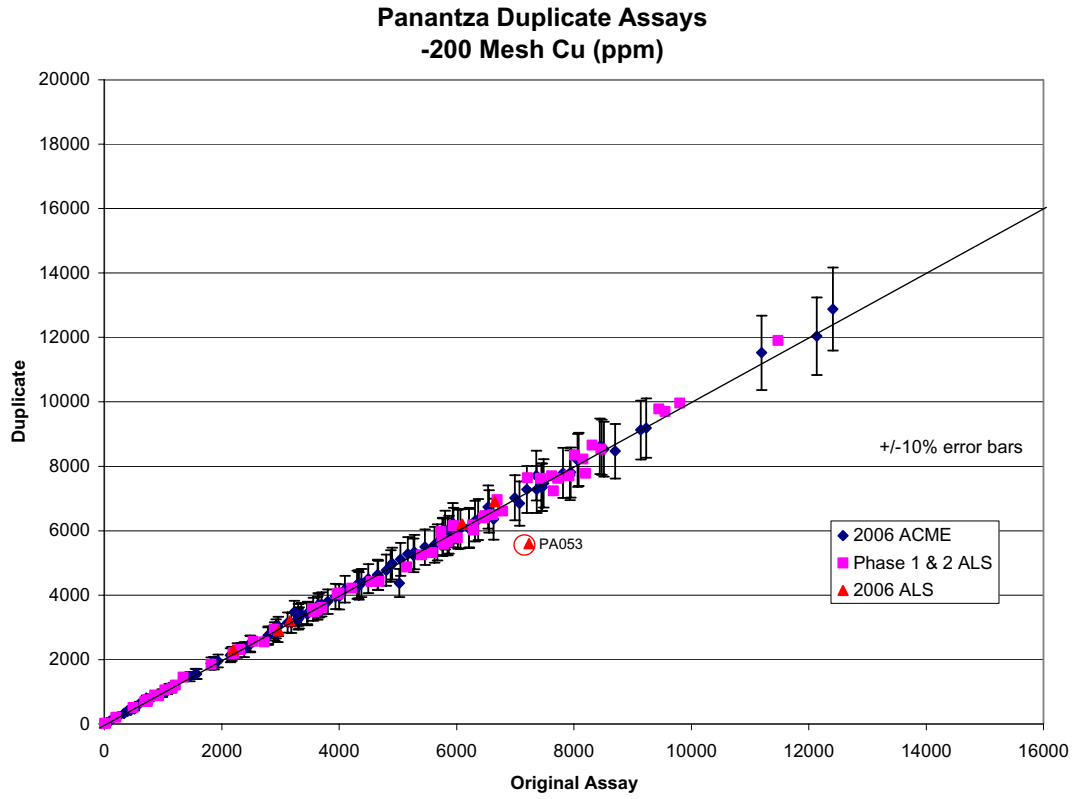


Figure 14.4 Copper Coarse Duplicate Plots (-10 mesh)

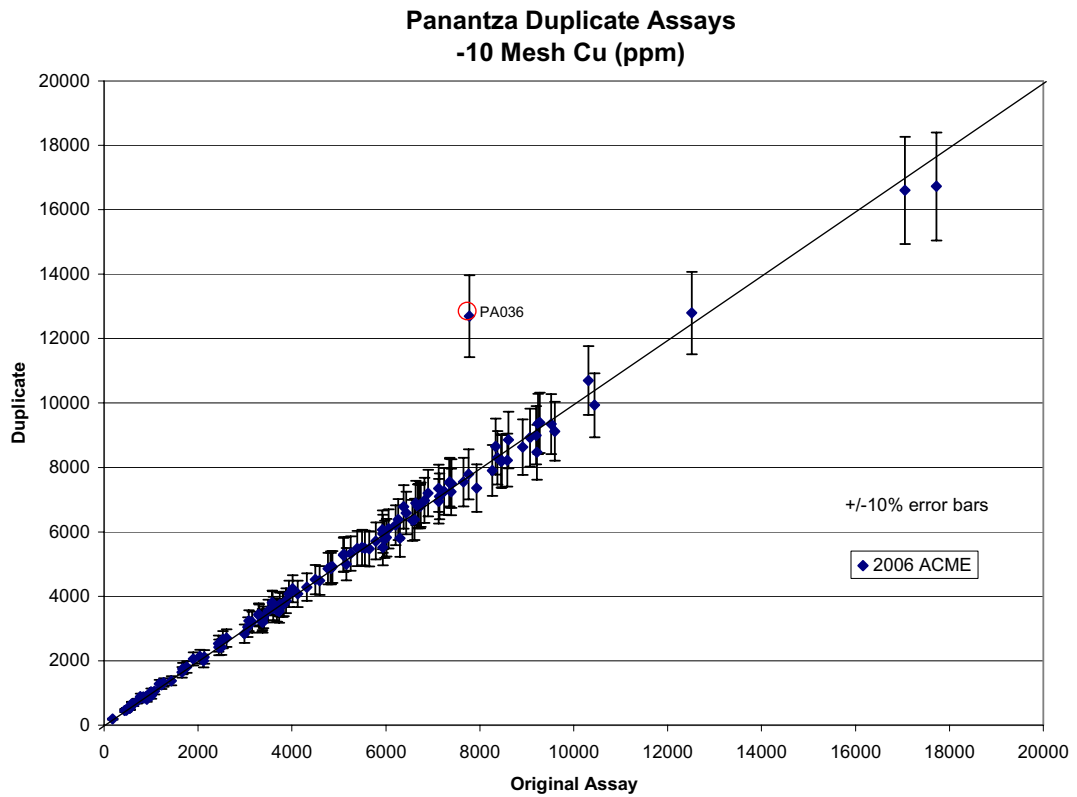
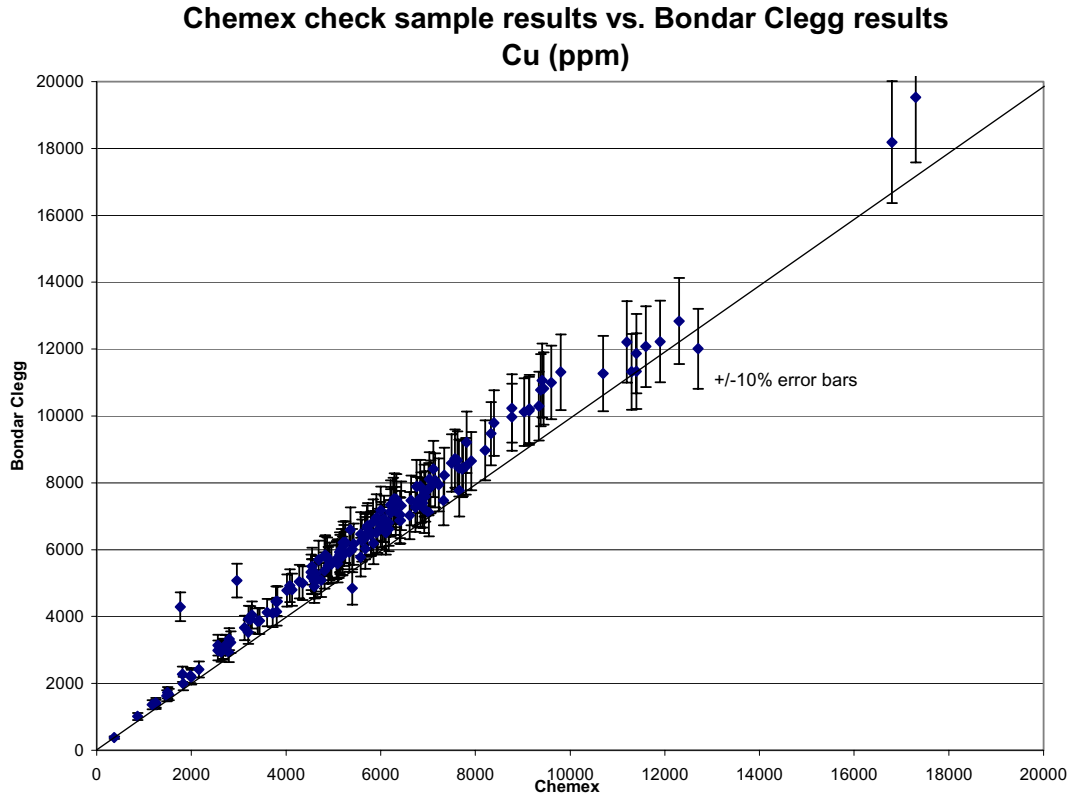


Figure 14.5 Copper Check Assay Plots



## 15 Adjacent Properties

Other than the mineral prospects and exploration activities of Corriente itself, there are no known mineral deposits or advanced mineral exploration projects immediately adjacent to the Panantza property.

## 16 Mineral Processing and Metallurgical Testing

### 16.1 History of Metallurgic Testwork – Hypogene Ore

The majority of the metallurgical flotation and oxide leach test work was done in 1998 by CIMM Technical Services in Santiago, Chile for Billiton on a total of four composite samples representing Panantza (Billiton, 1999c): one composite each from the oxide and supergene zones, and two from the hypogene zone. In 2001, Corriente conducted three flotation tests and a comparison work index test on a single sulphide composite from Panantza at PRA in Vancouver, BC (Hawthorne, 2003).

The test work resulted in an estimated copper recovery of 90% for the enrichment zone material and 95% recovery for the hypogene zone material using rougher flotation. Work index performed at PRA indicated an ore hardness of 21.5 KWHR/MT. The flow sheet developed to provide the metallurgical results was based on conventional copper-gold porphyry milling practices with reagent addition types and rates at typical grinds. A strong negative relationship was indicated between flotation recovery and the acid soluble copper ratio in the feed. A summary of the Billiton tests is given in Table 16.1.



**Table 16.1**  
**1999 Billiton Flotation Summary**

Sample	Zone	Analysis*					Rougher Flotation	
		TCu%	ACu%	ACu/TCu	AFe%	Mo%	Cu% Rec	Mo% Rec
M-01	Oxide	1.36	1.110	81.6	2.13	0.001	11.8	7.7
M-02	Enrichment	0.82	0.080	9.8	2.17	0.007	90.0	5.4
FT-03	Primary	0.63	0.008	1.3	1.83	0.007	94.9	61.8
M-03		0.64	0.009	1.4	1.88	0.008	95.9	63.9
Mean	Primary	0.64	0.009	1.3	1.86	0.008	95.4	62.9

\*TCu%=total copper, ACu%=acid soluble copper, AFe%=acid soluble iron, Rec=recovery

## 16.2 Heap Leach Potential

The leached zone of the deposit contains oxide mineralization that is minor (about 3% of the tonnage at a 0.4% copper cutoff) compared to the hypogene mineralization. As shown in Table 16.1, the copper oxide mineralization responds poorly to flotation, but generally is acid leachable. Leaching is a viable option from a technical perspective. However, this report recommends that no acid heap leaching be undertaken at this site as considerable work will be needed at the pre-feasibility and feasibility stage to characterize the copper oxide material by determining the spatial distribution of the various copper minerals. Since this report estimates that approximately 97% of the copper mineralization in the Panantza deposit is recoverable in the flotation circuit, it is recommended that flotation be used as the sole method for recovering copper.

## 16.3 Other Metal Recovery

The ore does contain small quantities of gold (Au), silver (Ag) and molybdenum (Mo). While average Au grades appear too low to be of interest (average assays of 0.075 g/t where Cu > 0.4%), there may be sufficient Mo to justify the recovery of a separate Mo concentrate. The average Mo grade for samples with >0.4% Cu is 102 ppm (0.01%). Testwork to date indicates Mo recoveries in the order of 63% for hypogene material. The grade distribution and metallurgy of Mo will be evaluated during subsequent studies. Similarly, average Ag grades are close to that of the Mirador deposit, where Ag reported to the concentrate in recoverable quantities. Therefore, Ag distribution will also be estimated in future studies.

# 17 Mineral Resource Estimate

## 17.1 Scope and background

Mine Development Associates (MDA), of Reno, Nevada, was asked to produce a block model resource estimate for Corriente's Panantza deposit. MDA received SURPAC generated files for drill data, topography, geology, and solids (3D models) of the interpretations. MDA took care to use reasonableness and believes this resource represents a fair assessment for Inferred classification. For this to be an Independent resource classified as Indicated or higher, those tasks lacking are an independent database audit, detailed geologic review, remaking of the solids, explaining the relatively well-mineralized leached material, detailed statistics and geostatistics, estimating multiple models, examining the density data in greater detail, and increasing the verification process.

This report uses the classification scheme accepted by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) – Definitions Adopted by CIM Council August 20, 2000 and

the revisions adopted on December 11, 2005, which defines an ‘Inferred Mineral Resource’ as that part of a Mineral Resource for which:

“ . . . quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

*Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.”*

## **17.2 Procedures**

After receiving database and discussing procedures with John Drobe, MDA coded the samples by the interpreted grade shell solids provided by Corriente. MDA then composited the drill samples down-hole into 6-metre composites while requiring at least 50% of the sample interval to be within the composite in order to be used for estimation. Capping was done at 2% Cu (19 samples) before compositing. Estimation used inverse-distance cubed interpolation, using parameters very similar to those used for the geologically similar Mirador and Mirador Norte deposits.

## **17.3 Panantza Block Model Coding and Estimation Parameters**

Assays were coded by the solids provided by Drobe. An order of precedence was required due to overlapping solids:

- If a block was in solid tqfp, it was coded as tqfp (5000),
- blocks in the “enriched” zone solid were coded as enriched (2000),
- blocks in the “leached” zone solid were coded as leached (4000),
- blocks within the Cu\_30 grade shell were coded as higher-grade hypogene (1030),
- blocks within the Cu\_20 grade shell were coded as lower-grade hypogene (1020), and
- blocks outside the Cu\_20 grade shell were coded as outside hypogene (1000).

Model coding was based on the solids, calculated as partial percentages for each code listed above. The exception to this was excluding 1000 because nothing was estimated outside the Cu\_20 solid. Because the solids were made with overlaps and gaps (non-coded space), some "fudging" was required and applied to normalize the percentages. Coding methodology was as follows (see Figure 17.1 for schematic illustration):

- Percents of 1030 and 1020 were calculated, with 1020 being adjusted to have 1030 removed.

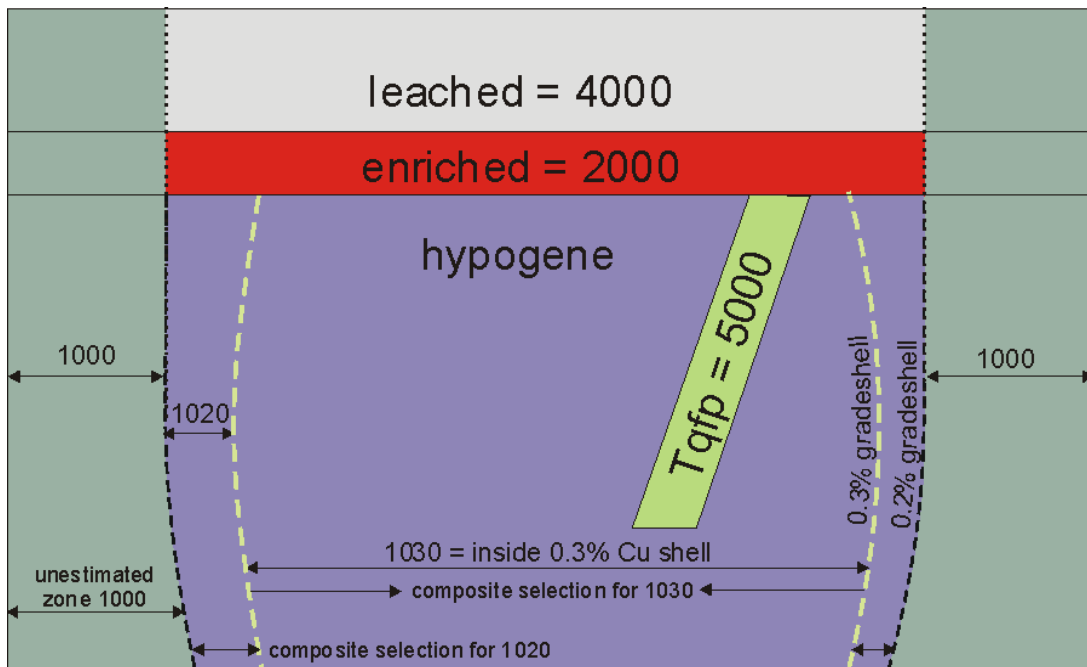
- 2000, 4000 and 5000 were calculated, each limited by the XY extents of 1020 projected vertically.
- Blocks that had some percent of 2000, 4000, or 5000 (meaning not 100% hypogene blocks) were normalized to have all percentages sum to 100%. This was done with block maths of: [%code = %code / (%1020 + %1030 + %2000 + %4000 + %5000)].

This corrects the percentages for cases of both overlaps and separations in the solids' triangles, while maintaining an overall volume change of less than 5% for all solids' volumes.

- Blocks that were only coded as 1020 and/or 1030 were not normalized, so the modeled internal unmineralized areas as well as partial blocks on the edge of the shell would remain only partially coded.

Note that all estimation was limited to above the 0.2% Cu shell and 0.3% shell for Panantza, even though mineralization, albeit poorly understood, does extend beyond the limits of these shells.

**Figure 17.1 Schematic Illustration of Estimation Coding Scheme**



The specific gravity attribute was estimated into the hypogene coded blocks, using a spherical search of 200m with an inverse distance cubed interpolation. All hypogene blocks that did not estimate were assigned a specific gravity of 2.66. The specific gravity of the block was then calculated as a volume weighted average of all domains, where: 2000 was assigned 2.455, 4000 was assigned 2.267, and 5000 was assigned 2.56 (leached and enriched were adjusted down by 1% for humidity).

Compositing was down-hole, with 6-metre composites that required 50% of the sample interval in order to composite, and was done with the above assay coding used as hard boundaries. The "leached" blocks were estimated from a 200-metre search, with 1/3 vertical anisotropy (i.e. flattened in the vertical), and with all composites available for selection (Table 17.1).

Blocks were estimated by inverse distance cubed (ID<sup>3</sup>) and nearest neighbor (NN) for all material types in or above the 1020 shell. All estimations were isotropic in the X-Y, with flattening of the search ellipse only occurring in the vertical axis. For all block partial percentage codes, only composites coded to the same zone were used in estimation (“hard boundary” estimation). The estimation parameters are given in Table 17.1:

**Table 17.1 Estimation Parameters**

code	search distance	anisotropy factor in the vertical	minimum composites	maximum composites	maximum composites per drill hole
1020	200	1	1	14	4
1030	200	1	1	14	4
2000	200	4	1	14	4
4000	150	3	1	14	4
5000	(not estimated)				

Blocks contain various attributes related to each solid code. Each block contains:

- Percent of each code 1020, 1030, 2000, 4000, and 5000 (lower hypogene, higher hypogene, enriched, leached, and Tqfp, respectively).
- Estimated grade by inverse distance cubed, for each domain code.
- Estimated grade by nearest neighbor, for each domain code.
- Anisotropic distance to nearest composite used to estimate by ID<sup>3</sup> for each code.
- Number of composites used to estimate the ID<sup>3</sup> grade for each code.
- Isotropic distance to nearest composite for each domain code (the nearest neighbor distance).
- Block classification attribute.
- Coincident down-hole composite grade (non-coded composite grades falling within a block).
- Block diluted ID<sup>3</sup> grade (volume weighted average grade of all codes’ estimated grades).
- Specific gravity (as a density multiplier with air taken into account).
- Percent below topography.

The model contains Inferred resources of 463,000,000 tonnes grading 0.66% Cu, when using a cutoff of 0.4% Cu (Table 17.2). This resource excludes blocks above this cutoff that are more than half within the leached solid (blocks dominated by leached volume) because metallurgical recovery has not been demonstrated for this copper-oxide bearing, leached material. These

excluded blocks total only 2-5% of the Inferred resource tonnage over a 0.3-0.5% Cu cutoff range.

### 17.4 MDA Discussion

- The solids were not completely “clean and correct” in their representation of spatial domains, so some minor assumptions and factoring needed to be applied.
- All block estimation was made inside or above the extents of the 0.20% copper solid.
- The block-diluted (reporting) grades were diluted with 0% Cu for the portions of blocks that were outside the solids. This dilution is clearly illustrated in Figures 17.2 and 17.3 as a low-grade rind around the deposit, shown in darker blue.
- There were blocks, mostly at the base of the model, where low-grade hypogene (1020) was coded, but did not estimate because of a lack of assays being close enough to be found in the search distance; these volumes have a 0% Cu grade assigned to them.
- The material in the leached solid is not strictly a leached zone; it contains significant oxidized copper mineralization.

Rounded numbers for the Inferred resource at Panantza at various copper cutoffs are given in Table 17.2. Note that, since the block model tonnes are diluted, minor amounts (0.3%) of leached, mineralized material (copper oxides) report to the tonnes in Table 17.2.

**Table 17.2 Inferred Resources – Blocks with >50% Hypogene and Enriched.**

<b>%Cu Cutoff</b>	<b>tonnes</b>	<b>%Cu (ID<sup>3</sup>)</b>	<b>lbs Cu</b>
0.00	616,000,000	0.54	7,386,000,000
0.20	547,000,000	0.60	7,266,000,000
0.25	531,000,000	0.61	7,190,000,000
0.30	510,000,000	0.63	7,058,000,000
0.35	490,000,000	0.64	6,912,000,000
<b>0.40</b>	<b>463,000,000</b>	<b>0.66</b>	<b>6,688,000,000</b>
0.45	436,000,000	0.67	6,439,000,000
0.50	403,000,000	0.69	6,091,000,000
0.55	353,000,000	0.71	5,516,000,000
0.60	290,000,000	0.74	4,708,000,000
0.65	219,000,000	0.77	3,736,000,000
0.70	158,000,000	0.81	2,827,000,000
0.75	107,000,000	0.85	2,025,000,000
0.80	64,000,000	0.91	1,291,000,000
0.85	41,000,000	0.96	864,000,000
0.90	26,000,000	1.01	570,000,000
0.95	17,000,000	1.06	395,000,000
1.00	12,000,000	1.09	287,000,000

Figure 17.2 Block Model Section NW -SE

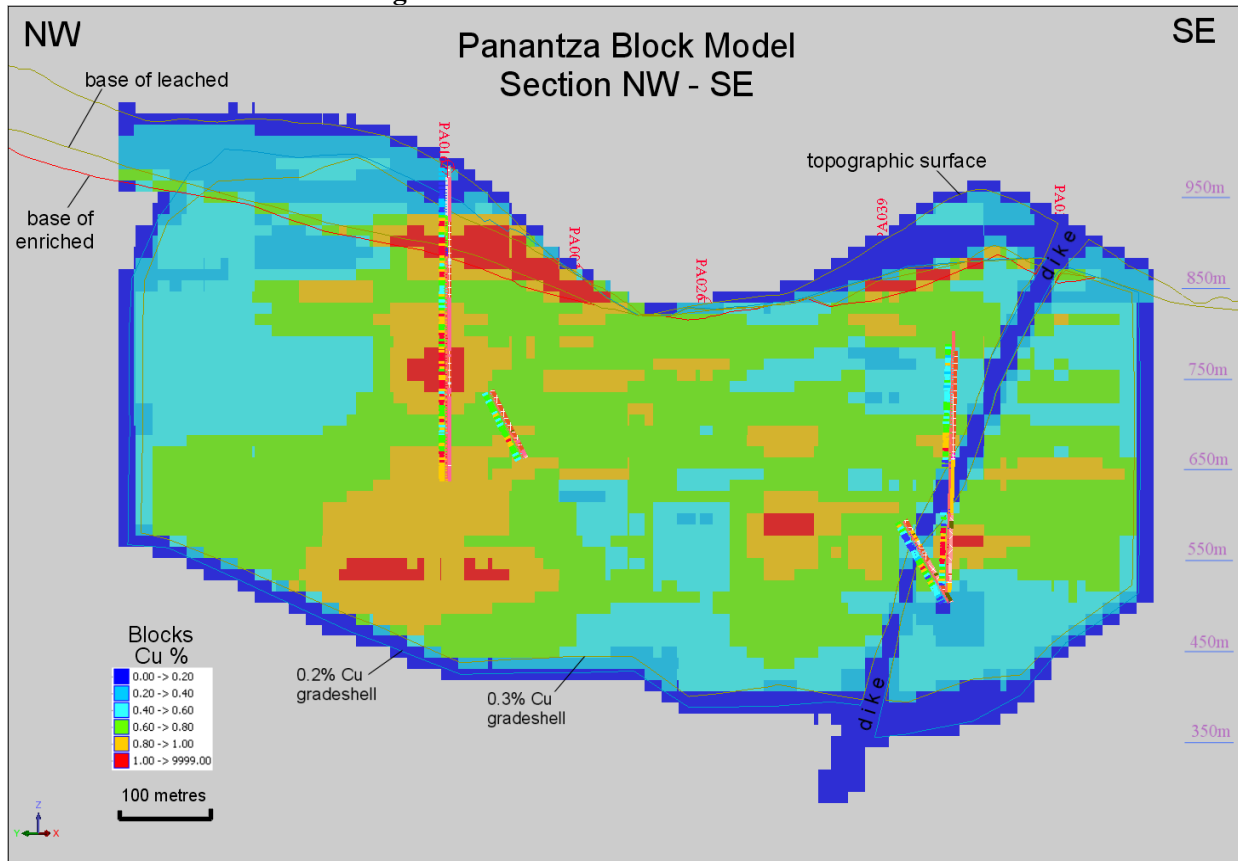
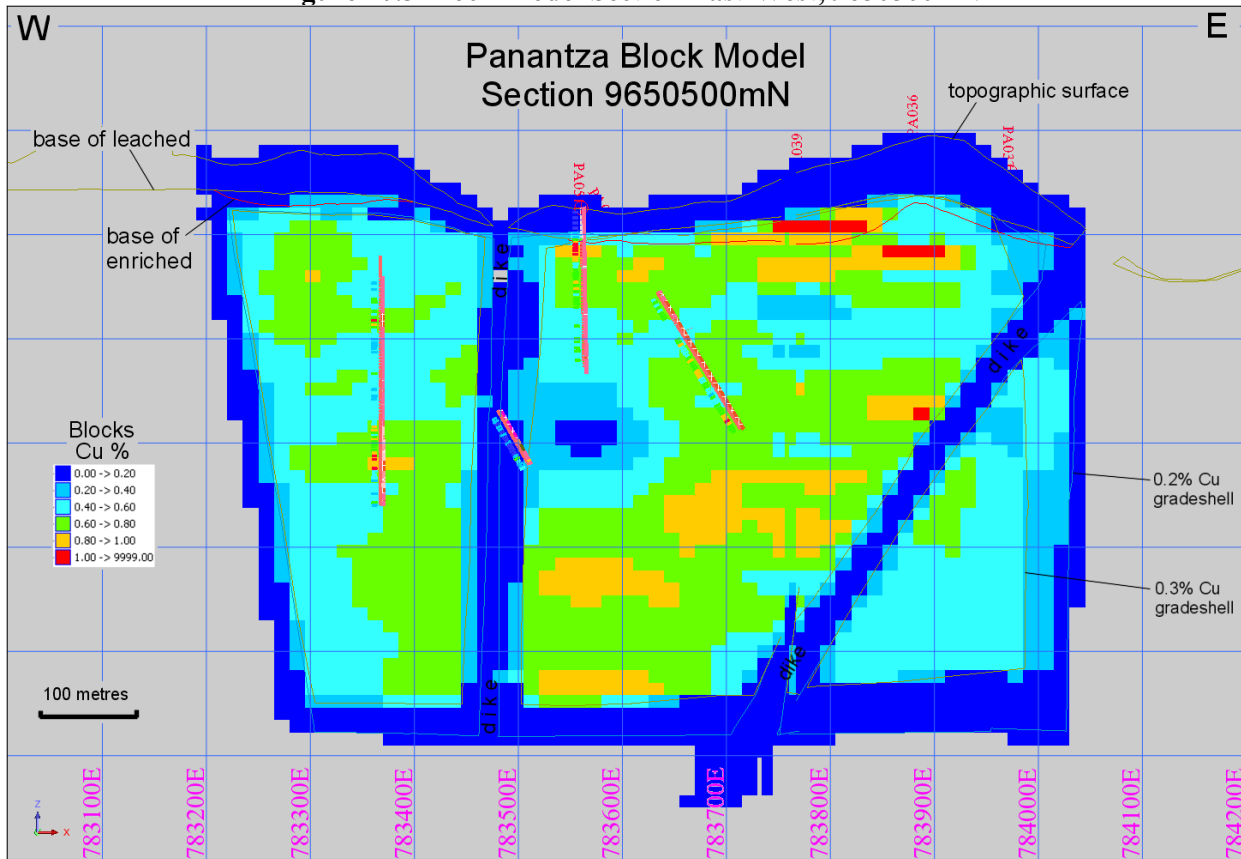


Figure 17.3 Block Model Section East-West, 9650500mN



### ***17.5 Corriente Discussion – Sectional Method Estimation Check***

Prior to constructing the block model and estimating the Panantza resource, Corriente constructed a sectional model of Panantza copper mineralization the using SURPAC 5.2 software. Copper grades above a 0.4% copper cutoff were averaged from all drill hole samples contained within approximately 100-metre spaced sections (each about 100 metres thick and contiguous with adjacent sections). The assays were weighed only by sample length within each drill hole. The section profiles were used to create a solid for which a volume was reported and, using a deposit-average specific gravity of 2.6, a tonnage calculated. This model provided a check on the block model estimation. The results from the two methods are in close agreement at the 0.4% copper cutoff.

### ***17.6 General Discussion***

Corriente conducts its mineral exploration and development activities in compliance with applicable environmental protection legislation. Corriente is not aware of any existing environmental problems related to any of its current or former properties that may result in material liability to the company.

The Panantza project is located in Ecuador and therefore is subject to certain risks, including currency fluctuations and possible political or economic instability in Ecuador, which may result in the impairment or loss of mineral concessions or other mineral rights. In recent history, Ecuador has undergone numerous political changes at the presidential and congressional levels. Also, mineral exploration and mining activities may be affected in varying degrees by political instability and government regulations relating to the mining industry. Any changes in regulations or shifts in political attitudes are beyond the control of the company and may adversely affect its business. Exploration may be affected in varying degrees by government regulations with respect to restrictions on future exploitation and production, price controls, export controls, foreign exchange controls, income taxes, expropriation of property, environmental legislation and mine and/or site safety.

In November 2006, Rafael Correa won the Ecuador Presidential run-off election over Alvaro Noboa, but did not officially take office until January 15, 2007. During this transition period, the administration of President Alfredo Palacio experienced a number of protests in southeast Ecuador which eventually resulted in the suspension of the company's exploration in general and development activities at the Mirador Project.

Since President Correa's January 15, 2007 inauguration, his administration has focused primarily on exacting electoral and governmental reforms, which would result in the creation of a Constitutional Assembly and eventual re-writing of the Ecuador Constitution. These reforms are being met with substantial opposition from Congress.

While management believes that the current political climate in Ecuador will stabilize, there can be no certainty that this will be the case in the near future. Presently, management believes that the company's Ecuador operations will not be affected in the long-term and that any disruption to its projects will be resolved.

## **18 Other Relevant Data and Information**

In November 2006, a series of protests began that were held in the Morona-Santiago and Zamora-Chinchiipe provinces against resource development in general. The federal government held a number of ineffective negotiating sessions held with the protesters, and then asked the company to temporarily suspend its Mirador Project and all other exploration activities to aid in

the negotiating process. Corriente agreed to temporarily halt all field project work in order to secure the safety and security of project personnel, local communities and supporters.

On January 25, 2007, Corriente announced that there would be a delay in the start of production at the Mirador project from late 2008 to approximately mid-2009. This delay is largely due to adjustments to long lead-time equipment deliveries as a result of the decision to move off of the previous accelerated Mirador Project development plan. This plan was based on having key permits and government agreements completed by January 2007. Since these agreements are still being processed and Corriente is restricted from resuming planned development activities at Mirador, the Board of Directors elected to minimize the company's Mirador Project obligations.

## **19 Conclusions**

The last NI 43-101-compliant Technical Report for the Panantza project was prepared by Geospectrum Consultants and was filed on SEDAR in June 2001. Since that time, Corriente Resources Inc has advanced knowledge of the Panantza project geology and mineralization and expanded the estimated Inferred mineral resources by completing:

- 25 additional drill holes totalling 8399 metres;
- Additional mapping and remapping of surface exposures;
- Complete relogging of older core.
- Flotation tests on a metallurgy composite.
- A block model, including related geologic solid modelling, and estimation of an updated resource.

This Technical Report provides a summary of all work conducted at Panantza since the inception of the Project, and an update and review of the activities that took place subsequent to the filing of the last Technical Report. The updated Panantza drill hole assay database contains 5215 copper assays in 53 holes.

For the 2006 drilling program, Corriente generally followed the quality assurance/quality control (QAQC) guidelines recommended by AMEC Americas Ltd (AMEC, 2004). The results from the inserted QAQC samples indicate that the sample preparation procedures were conducted with appropriate care.

This updated resource estimate increases the Inferred resources at Panantza from those released by Makepeace (2001), which were reported at a 0.65% copper cutoff and included mineralized leached material with hypogene and enriched material. Using the same 0.65% copper cutoff, the current Inferred resources (from Table 17.2) are 219MT at 0.77% Cu, of only hypogene mineralization

Comparing these numbers with Makepeace (2001), which reported 148 MT at 0.82 % Cu, this is an increase of 48% in tonnes and decrease of 6% in copper grade over the previous reported Inferred resource.

This updated resource estimate justifies completing a preliminary assessment of the economic potential of the project. Recent drilling has shown that significant mineralization is still open to the south, west, and north sides, as well as at depth.

## **20 Recommendations**

Corriente feels the Panantza project is a property of merit and plans to continue working on expanding the resources. The recommendations listed below will ready the project for a Feasibility Study, and will cost in total approximately \$4.9M.



1. A Preliminary Assessment should be made using the data available to rough out a mine plan and associated economics, as well as search out any fatal flaws. Preliminary Assessment work in 2007 is budgeted at \$156,000 for pit design and report writing.
2. Complete drilling on the existing proposed drill plan (see Appendix B) to delimit the deposit to the west, north and south as well as determine its depth extents.
3. Program additional holes near the porphyry dikes to gain better knowledge of potential low-grade mineralization trends, as well as test the current block model estimation. The above mentioned drilling (items 1 & 2) will cost approximately \$1.7M.
4. At the end of the above drilling, a decision has to be made as to whether the drill spacing is sufficient to allow for a Feasibility Study reporting mineral resources in the Measured & Indicated category, or whether more infill drilling is required.
5. Concurrent with the drilling mentioned above, geotechnical data should be collected with the aim of advancing the geotechnical character of the rock mass and how it will affect both pit design and environmental factors. A geotechnical orientated core program will cost approximately \$650,000.
6. Samples should be collected for studying the acid rock drainage (ARD) issues associated with the future pit and waste dumps. To construct 10-12 ARD cells and load them with composite samples for *in situ* humidity tests will cost approximately \$3000.
7. Continue the metallurgical testing of core samples for conventional flotation, hardness, and for hydrometallurgical treatment of concentrates. A complete metallurgical testing programme, using about 4000kg of sample, will cost approximately \$470,000.
8. Because no valid QAQC samples were inserted in the 2000 drill programme, the drill core sample results from this phase will have to be audited by running 10% of the pulps as duplicates, with SRMs inserted every 20 samples. This will give these assay results the same confidence level as the remainder of the assay database. The SRMs should be made from Panantza reject core so that they can test for molybdenum (Mo) as well as copper. This re-analyses program will cost approximately \$10,000.
9. To date, the SRMs used at Panantza are the same as those used at the Mirador Project, and were made from Mirador drill core. The two deposits are sufficiently similar in grade and mineralization type that these standards are acceptable for use at Panantza for testing copper and gold grades. However, for best results and to also test for Mo, a low and high-grade copper SRM should be made from Panantza core sample rejects. Making two new SRMs for Panantza will cost about \$6000.
10. Mo occurs at concentrations averaging 100ppm in samples grading >0.4% copper. The preliminary metallurgy indicates Mo could be of interest, and therefore Mo should be included in the next block model estimation.
11. Commence environmental baseline studies and permitting for development of Panantza and San Carlos. This will require the implementation of a project socialization and community sustainable development program. The estimated cost for the combined Social and Environmental needs is \$500,000.
12. Commence negotiations with the Ecuador government regarding hydroelectric power and project taxation.
13. A Feasibility Study can be initiated once the above recommendations are complete, contingent on there not being any fatal flaws discovered.

## 21 References

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## 22 Date and Signature Page

Effective Date of the report:

June 7, 2007

The information upon which the contained resource estimates are based was current as of the Effective Date of June 7, 2007. For the land title data in this report, the Effective Date is March 7, 2006.

Completion Date of report:

July 10, 2007

I, John Drobe, P. Geo., do hereby certify that:

1. I am currently employed as Chief Geologist by:  
Corriente Resources Incorporated  
520 – 800 West Pender Street  
Vancouver, British Columbia, V6C 2V6  
Phone: 604-687-0449  
Fax: 604-687-0827  
E-mail: [jdrobe@corriente.com](mailto:jdrobe@corriente.com)
2. I graduated with a Bachelor of Science degree in Geology from University of British Columbia in 1987 and a Master of Science degree in Geology from Queen's University in Kingston, Ontario in 1991.
3. I have been a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia since 1992.
4. I have practiced my profession continuously since 1991, since my graduation from graduate university.
5. 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.
6. I visited the Panantza deposit on several occasions between 2003 and 2007 and have reviewed all diamond drill core and mapped the geology on the property.
7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication of the Technical Report in the public company files on their websites accessible by the public.

Dated at Vancouver, British Columbia, this 10th day of July, 2007.

*“John Drobe”*

\_\_\_\_\_  
John Drobe, M.Sc., P.Geo.

## **APPENDIX A**

**Letter Regarding the Status of Title to the Mining Concessions in Ecuador,  
for Explorcobres S.A. and Ecuacorriente S.A, Trejo, R., 2006.**



Trejo Rodríguez & Asociados Abogados Cía. Ltda.

Quito, November 27, 2006

**Messrs.  
EXPLORCOBRES S.A.  
QUITO.**

Dear Sirs:

In reference with the requested legal opinions the status of title to the mining concessions in Ecuador, we have reviewed the corporate records of **EXPLORCOBRES S.A.** and such other documents and considered such matters of law as we have considered necessary.

Based on our review, we are of the opinion that:

1. Through notarial deed executed before the Thirtieth Seventh Public Notary of the canton of Quito, Dr. Roberto Dueñas Mera on the 3rd of July of 2006, the Mining Company CURIGEM S.A., carried out the change of its title for that of EXPLORCOBRES S.A., which was approved through Resolution of the Companies Superintendence No. 2533 of the 18<sup>th</sup> of July of 2006 and duly registered on the Canton of Quito Mercantile Register on the 27<sup>th</sup> of September of 2006. This change of title was notified to the Azuay Mining Regional Authority on November 17<sup>th</sup> of 2006.
2. The National Direction of Mining (DINAMI), has issued up to the present, in favour before of MINERA CURIGEM S.A., now denominated EXPLORCOBRES S.A., 15 mining concessions titles with respect with the following denominated areas:

AREA NAME	HECTAREAS	STATUS	REGISTERED DATE	PATENTS PAYMENTS
CURIGEM 2	4.500 has.	TITLE REGISTERED	03-07-02	USD \$ 9.000,00
CURIGEM 3	3.300 has.	TITLE REGISTERED	03-07-02	USD \$ 6.600,00
CURIGEM 8	3.000 has.	TITLE REGISTERED	20-06-02	USD \$ 6.000,00
DOLOROSA 1	2.066 has.	TITLE REGISTERED	25-08-05	USD \$ 2.066,00
DOLOROSA 2	3.296 has.	TITLE REGISTERED	25-08-05	USD \$ 3.296,00
CHUMBIS	3.534 has.	TITLE REGISTERED	01-09-06	USD \$ 1.800,89
SAN ANTONIO	600 has.	TITLE REGISTERED	01-09-06	USD \$ 305,75
AYANGASA	3.673 has.	TITLE REGISTERED	01-09-06	USD \$ 1.871,72
CAYA 07	200 has.	TITLE REGISTERED	16-11-01	TEMPORARILY SUSPENDED
CAYA 20	3.880 has.	TITLE REGISTERED	26-09-01	TEMPORARILY SUSPENDED
CAYA 29	5.000 has.	TITLE REGISTERED	26-09-01	TEMPORARILY SUSPENDED
CURIGEM 6	4.070 has.	TITLE REGISTERED	03-07-02	TEMPORARILY SUSPENDED
CURIGEM 7	5.000 has.	TITLE REGISTERED	03-07-02	TEMPORARILY SUSPENDED
CURIGEM 11	850 has.	TITLE REGISTERED	20-06-02	TEMPORARILY SUSPENDED
CURIGEM 22	2.860 has.	TITLE REGISTERED	20-06-02	TEMPORARILY SUSPENDED



Trejo Rodriguez & Asociados Abogados Cia. Ltda.

3. Additionally, ECUACORRIENTE S.A. subscribed mining rights release and/or transfer contracts of the mining titles of the areas known as PANANTZA, PANANTZA 2 AND SAN CARLOS in favor of the EXPORCOBRES S.A. Company, which are under legalization and registration process. This process is expected to be concluded within two or three weeks approximately.
4. Based on a review of the Mining Title for each mining concession issued by the National Mining Office, which is a department of the Ministry of Energy and Mines in charge of managing the processes of issuance, conservation and extinction of mining rights in accordance with the current mining laws and regulations of Ecuador (the "Mining Law"), each of the properties, is duly registered in the name of EXPLORCOBRES S.A.
5. All legal and financing and legal obligations are complied and up to date; therefore, the above mentioned titles are in force.

The next mining patents payments ends march 31, 2007.

6. In regards to the status of Title of the mining concessions, each of the Properties is in good standing until the date of expiration of registration.

Please do not hesitate to contact me if you have any other inquiries or doubts.

Bests Regards,



**Dr. Juan Xavier Trejo**  
**ATTORNEY AT LAW**





Trejo Rodríguez & Asociados Abogados Cía. Ltda.

Quito, November 27, 2006

**Messrs.  
ECUACORRIENTE S.A.  
QUITO.**

Dear sirs:

In reference with the requested legal opinions the status of title to the mining concessions in Ecuador, we have reviewed the corporate records of **ECUACORRIENTE S.A.** and such other documents and considered such matters of law as we have considered necessary.

Based on our review, we are of the opinion that:

1. The National Direction of Mining (DINAMI), has issued up to the present, in favour of ECUACORRIENTE S.A. 10 mining concessions titles with respect with the following denominated areas:

AREA NAME	HECTAREAS	STATUS	REGISTERED DATE	PATENTS PAYMENTS
CURIGEM 18	1.600 has.	TITLE REGISTERED	23-08-01	USD \$ 3.200,00
CURIGEM 18 E	800 has.	TITLE REGISTERED	07-02-03	USD \$ 1.600,00
CURIGEM 19	2.900 has.	TITLE REGISTERED	23-08-01	USD \$ 5.800,00
MIRADOR 1	2.400 has.	TITLE REGISTERED	07-08-03	USD \$ 4.800,00
MIRADOR 2	1.200 has.	TITLE REGISTERED	07-08-03	USD \$ 2.400,00
MIRADOR 3	1.020 has.	TITLE REGISTERED	12-05-05	USD \$ 1.020,00
MIRADOR 4	8 has.	TITLE REGISTERED	09-01-06	USD \$ 8,00
PANANTZA	1.200 has.	TITLE REGISTERED	07-02-03	USD \$ 2.400,00
PANANTZA 2	900 has.	TITLE REGISTERED	03-12-03	USD \$ 971,51
SAN CARLOS	2.000 has.	TITLE REGISTERED	07-02-03	USD \$ 4.000,00

2. ECUACORRIENTE S.A., requested to the Zamora Mining Regional Authority the authorization of the material division on the concessions known as: Mirador 1, Mirador 2 and Curigem 19; if the request should be accepted, each mining title will be divided into two different concessions according to the technical data recorded on each application. The resolution that authorizes this division is in process.
3. ECUACORRIENTE S.A., subscribed mining rights transfer contracts of the mining titles of the areas known as PANANTZA, PANANTZA 2 AND SAN CARLOS in favor of the EXPLORCOBRES S.A. company, which are under legalization and registration process. This process is expected to be concluded within two or three weeks.



Trejo Rodríguez & Asociados Abogados Cia. Ltda.

4. Based on a review of the Mining Title for each mining concession issued by the National Mining Office, which is a department of the Ministry of Energy and Mines in charge of managing the processes of issuance, conservation and extinction of mining rights in accordance with the current mining laws and regulations of Ecuador (the "Mining Law"), each of the properties, is duly registered in the name of ECUACORRIENTE S.A.
5. All legal and financing and legal obligations are complied and up to date; therefore, the above mentioned titles are in force.

The next mining patents payments ends march 31, 2007.

6. In regards to the status of Title of the mining concessions, each of the Properties is in good standing until the date of expiration of registration.

Please do not hesitate to contact me if you have any other inquiries or doubts.

Bests Regards,



**Dr. Juan Xavier Trejo**  
**ATTORNEY AT LAW**



## **APPENDIX B**

### **Proposed Drill Program Map 2007**

