Technical Report on the Caya 36 and Piedra Liza Properties Zamora-Chinchipe Province, Ecuador



for CORRIENTE RESOURCES INC.

December 20, 2006

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## 1.0 SUMMARY

Corriente Resources Inc. ("Corriente"), through its Ecuadorian subsidiary Minera Midasmine S.A., owns the Caya 36 and Piedra Liza properties, located in southeastern Ecuador. Corriente Resources Inc. engaged OreQuest Consultants Ltd ("OreQuest") in October 2006 to provide a Technical Report for the Caya 36 and Piedra Liza properties. This Technical Report was prepared by George Sivertz, P.Geo., Senior Geologist, OreQuest Consultants Ltd, and George Cavey, P.Geo, President, OreQuest Consultants Ltd.

The last Canadian National Instrument ("NI") 43-101-compliant Technical Report for the Mirador project (which at that time included the Caya 36 mining concession) was completed by Mine Development Associates. This report was filed on SEDAR by Corriente on December 15, 2006.

The Caya 36 and Piedra Liza properties are owned by Minera Midasmine S.A., ("Midasmine"), an Ecuadorian company that is 100% owned by Corriente through Corriente Resources Inc., its whollyowned Cayman Island-based subsidiary. Corriente thereby holds a 100% interest in the Caya 36 property, subject to a 2% Net Smelter Royalty (NSR) interest held by BHP Billiton S.A., and an unencumbered 100% interest in the Piedra Liza property. The Caya 36 and Piedra Liza properties were transferred from EcuaCorriente to Minera Midasmine S.A. in October 2006. All work on the Caya 36 and Piedra Liza properties prior to October 2006 was performed by EcuaCorriente.

The Caya 36 property comprises one mining concession that covers an area of 4,740 hectares (47.4 km sq<sup>2</sup>). It is centered 14 km east of the Rio Zamora (Zamora River) in the Zamora-Chinchipe Province of southeastern Ecuador; the eastern property boundary is adjacent to the Ecuador-Perú border. The concession is approximately 340 km south of Ecuador's capital city of Quito and 70 km east-southeast of the city of Cuenca. The Piedra Liza property comprises two mining concessions that cover an area of 1,950 hectares (19.5 km sq<sup>2</sup>). It is centered three km west of the Zamora River in the Zamora-Chinchipe Province of southeastern Ecuador. The eastern property boundary is adjacent to the paved Cuenca-Loja highway. The concessions are approximately 360 km south of Quito and 80 km south of Cuenca.

Billiton Ecuador B.V., now BHP Billiton S.A. ("Billiton") began regional exploration in southeastern Ecuador in 1994 and identified a number of possible porphyry copper targets in the region. In April 2000, Billiton and Corriente entered into an agreement covering 230 sq km of mineral concessions in the southern part of the region, including the area of the present Caya 36 property. Corriente, through its Ecuadorian subsidiary company EcuaCorriente S.A. ("EcuaCorriente"), has carried out exploration on the Mirador property (including the Caya 36 mining concession) since April 2000. Much of the work focused on the Mirador and Mirador Norte copper-gold deposits, and it included geological mapping, geochemical soil sampling, rock chip sampling and core drilling. To date 36,284 m of core drilling in 143 diamond drill holes has been completed. Corriente, through its wholly-owned subsidiary companies in Ecuador, holds a 100%

interest in the Mirador property. Billiton holds a 2% Net Smelter Royalty interest in the Mirador deposit.

The Caya 36 and Piedra Liza properties are at an early stage of exploration. The Caya 36 property was primarily explored for porphyry Cu-Mo deposits by Billiton and EcuaCorriente in the period 1994-2000. In 1999, Billiton discovered anomalous copper and molybdenum in geochemical samples from the Chancho zone, part of which is now the in northern part of the Caya 36 property. EcuaCorriente began exploration work here starting in 2000, after entering the agreement with Billiton. EcuaCorriente began reconnaissance prospecting, geological mapping, and geochemical sampling on the Piedra Liza property in 2003.

The southern segment of the Chancho copper-molybdenum porphyry prospect, just south of the northern Caya 36 property boundary, has been explored by geological mapping, rock sampling, geophysical surveys, and five diamond drill core holes, but the area of exploration at the Chancho prospect is on the order of 10-20 hectares, while the total area of the property is 4,740 hectares. Panned concentrate stream sediment samples from the Caya 36 property contain gold grades ranging from below laboratory detection limit to 5,498 ppb (5.5 grams/tonne), and eight of the 172 panned concentrate samples contain more than 136 ppb gold. Three rock samples contain from 450 to 660 ppb gold. The bedrock geology and alteration at Caya 36, as at Piedra Liza, are prospective for gold-bearing skarn and epithermal low-sulphidation or intermediate-sulphidation Au-Ag deposits. It is important to bear in mind that the Cu-Mo-Au porphyry deposits in the Corriente Copper Belt are all within intrusive phases of the Zamora Batholith, and not within Misahuallí volcanic rocks. For this reason, the exploration carried out by Billiton and EcuaCorriente in the period 1994-2000 focused on the Zamora Batholith, and the Misahuallí volcanic terrane was largely neglected. The Misahuallí rocks have significance in the exploration for epithermal gold-silver deposits in Ecuador, because they host the Fruta Del Norte gold-silver deposit, discovered by Aurelian Resources Inc. in 2006.

EcuaCorriente began reconnaissance prospecting, geological mapping, and geochemical sampling at the Piedra Liza property in 2003, after anomalous gold grades were reported from a single panned concentrate stream sediment sample and a rock sample from a road cut. The 27 panned concentrate stream samples taken by EcuaCorriente since 2003 at Piedra Liza have all returned anomalous gold grades, ranging from 191 to 31,349 ppb. Six of the panned concentrates contain more than 11,965 ppb gold (10 grams/tonne); even for this non-quantitative type of sample, these are high grades. Reconnaissance rock-chip samples from the property have graded as high as 7,430 ppb gold (7.43 grams/tonne), and twelve samples contain over 106 ppb gold.

This report makes recommendations for exploration for epithermal gold-silver deposits and goldbearing skarn on the Caya 36 and Piedra Liza properties, and includes exploration guidelines for these types of deposits. Specifically, it is recommended that Midasmine should adopt an exploration approach that focuses on geological details such as zones of silicification and quartz veining, regardless of the host-rock lithology. There are fundamental differences in the exploration approaches needed for the giant porphyry deposits, which often have a geological and geochemical



"footprint" well over two square kilometres in area, and epithermal precious metal deposits, which may be "blind" (buried under overburden or cover rocks) and there may be very little surface evidence of their existence.

# 2.0 INTRODUCTION AND TERMS OF REFERENCE

# Introduction

Corriente Resources Inc. ("Corriente") engaged OreQuest Consultants Ltd in the fourth quarter of 2006 to prepare a Technical Report on the Piedra Liza 1, Piedra Liza 2 and Caya 36 concessions in southeastern Ecuador. The Technical Report was prepared as defined in NI 43-101 and in compliance with the format set out in 43-101F1. The Technical Report is entitled "Technical Report on the Caya 36 and Piedra Liza 1 and 2 Mining Concessions, Zamora-Chinchipe Province, Ecuador". The Technical Report was prepared by George Sivertz, P.Geo., Senior Geologist, OreQuest Consultants Ltd, and George Cavey, P.Geo, President, OreQuest Consultants Ltd. George Sivertz examined the Piedra Liza 1 and Piedra Liza 2 concessions on October 25-26, 2006, and the Caya 36 concession on October 30, 2006. George Cavey did not visit the Piedra Liza or Caya 36 properties.

## **Terms of Reference**

The authors are not associated or affiliated with Corriente Resources Inc., Minera Midasmine S.A., EcuaCorriente S.A., ExplorCobres S.A., or any related companies. Any fees paid to the authors or OreQuest Consultants Ltd for the field work done or for the preparation of 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.

All of the Figures in this report were prepared by Corriente Resources Inc. and its Ecuadorian subsidiary company EcuaCorriente S.A. The sections of this report that discuss legal, geological, geochemical, and geophysical aspects of the Piedra Liza and Caya 36 concessions rely in part on information set out in the following reports:

- Arevalo, M., Gonzalez, P., Leon, J., Queveda, L., and Vaca, E., 1999: Exploracion Geologica y Geoquimica de las anomalias de Cu, Mo, Au en "Chancho-Wawayme", Proyecto Pangui, Provincia de Zamora-Chinchipe, Sur-Este de Ecuador, October 25, 1999. Report prepared for Billiton B.V.
- Mine Development Associates, 2006: Technical Report Update on the Copper, Gold and Silver Resources and Pit Optimizations, Mirador and Mirador Norte Deposits, Mirador Project, Ecuador. December 15, 2006.



Trejo Rodriguez y Asociados, Abogados 2006: Letter Regarding Corporate Matters and the Status of Title to the Mining Concessions in Ecuador. Prepared for Minera Midasmine S.A., Quito, Ecuador, November 27, 2006.

The sections of this report that discuss regional geology, regional physiography and climate, and third-party exploration activities in southern Ecuador rely in part on information set out in the following reports:

AMEC Americas Limited, 2005: Mirador Copper Project Feasibility Study Report. May 2005.

- Gold, R., 2000: Chancho and Chancho Norte Prospects, Corriente Copper Belt: Geological Data Summary and Recommendations for Siting of Drill Platforms. Report for EcuaCorriente S.A., August 8, 2000.
- Sillitoe, Richard H, 2006: Comments on Geology and Potential of the Fruta Del Norte Epithermal Gold Prospect, Ecuador. Report prepared for Aurelian Resources Inc, July 2006.
- Vaca, E., and Leon, J., 2001: Exploracion en el Cinturon de Porfidos Cupriferos de Corriente, Ecuador: Reporte de la Fase de Perforaciones "Proyecto Panantza Porfido de Cu, Au y Mo", February 2001. Report prepared for EcuaCorriente S.A.
- Valarezo, V., 2006: Estudio de Impacto Ambiental, Proyecto Panantza-San Carlos. Report for ExplorCobres S.A., February 2006.

The information stated in this Technical Report is derived in part from the personal field work of the author Sivertz in Ecuador, and is also based in part on personal communications with Mr. Ken Shannon, P. Geo., Chairman and C.E.O. of Corriente Resources Inc., Mr. John Drobe, P.Geo., Chief Geologist for Corriente, Dr. Darryl Lindsay, P.Geo, General Manager of ExplorCobres S.A., and the capable field geologists who did field work on the Piedra Liza and Caya 36 concessions in 2005 and 2006 (Rober Diaz and Juan Leon). It also draws on information provided in reports written by Billiton B.V. and Corriente Resources Inc., published reports by third-party consultants, and press releases issued by Corriente Resources Inc., Aurelian Resources Inc, and other public companies exploring for minerals in Ecuador. Geological and technical reports that contributed information to this Technical Report are listed in the References section of this report. The writers have carefully reviewed all of the information provided by Corriente and its subsidiary companies, and believe the information to be reliable. 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 concessions and in all maps and references in this report is UTM zone 17 S, datum Provisional SAD 1956. The estimated costs in the Recommendations section include Ecuadorian taxes where applicable.

There were no limitations put on the authors with respect to information regarding Corriente or any of its subsidiary companies in the preparation of this report.

#### **Abbreviations and Acronyms**

The following is a list of acronyms and abbreviations that are frequently used in this report: atomic absorption spectroscopy (laboratory analytical procedure) AAS Ag silver arsenic As Au gold Bi bismuth centimetre cm Cu copper g/t grams per tonne Hg mercury ICP Inductively Coupled Plasma (laboratory analytical procedure) kilogram kg kilometre km KV kilovolts litre per minute lpm metre m metres above sea level masl millimetre mm parts per billion ppb parts per million (34.286 ppm equals one troy ounce per short ton) ppm Pb lead RC reverse circulation drilling method metric ton (1000 kg) tonne tpd tonnes per day Zn zinc

# **RELIANCE ON OTHER EXPERTS**

The authors have not personally reviewed the land tenure, are not Qualified Persons with regard to land tenure in Ecuador, and have not independently verified the legal status or ownership of the properties or underlying option agreements. The law firm of Trejo Rodriguez y Asociados Abogados Cia. Ltda, an independent law firm, provided the writers with legal opinions on corporate ownership, concession tenure and the status of fee payments as of November 27, 2006.

The results and opinions expressed in this report are conditional upon the aforementioned environmental, geological 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 writers reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. The writers assume no responsibility for the actions of Corriente in distributing this report.

#### PROPERTY LOCATION AND DESCRIPTION

#### **Property Location**

The Piedra Liza and Caya 36 mining concessions are located in Zamora-Chinchipe Province in southeastern Ecuador (Figure 1). The Caya 36 mining concession (also referred to as the "Caya 36 property" in this report) is approximately 340 km south of Ecuador's capital city of Quito and 70 km east-southeast of the city of Cuenca, and the Piedra Liza concessions are 360 km south of Quito and 80 km south of Cuenca.



Figure 1: Minasmine Concession Locations in Ecuador



The contiguous Piedra Liza 1 and 2 mining concessions (also referred to as the "Piedra Liza property" in this report) are centered 2 km west of the Rio Zamora (Zamora River), immediately southwest of the town of Yanzatza (also spelled "Yantzaza") and 1.5 km north of the town of Zumbi. The center of the concession block has UTM coordinates and 746,750 E and 9,574,000 N (UTM Zone 17S, Provisional South American Datum 1956). The two Piedra Liza concessions cover an area of 1,950 hectares (Table 1). The concessions are registered with the National Directorate of Mining and have not been legally surveyed. There is a short tunnel in the northern sector of the Piedra Liza 1 mining concession, apparently driven in an attempt to explore a 25-cm quartz-pyrite vein. It is believed that this tunnel, now abandoned, was made by informal miners (pers. comm. Rober Diaz, 2006).

The Caya 36 mining concession is centered 10 km east of the Rio Zamora (Zamora River), adjacent to the border with Perú (Figure 2). The concession is approximately 45 km northeast of the Piedra Liza property and is contiguous with and south of the Mirador property, which covers the Mirador and Mirador Norte copper-gold porphyry deposits. The center of the Caya 36 concession is located at UTM coordinates 786,000 E and 9,597,000 N (UTM Zone 17S, Provisional South American Datum 1956). The concession covers an area of 4,740 hectares; it is registered with the National Directorate of Mining and has not been legally surveyed. The authors are not aware of any historic mine workings or tailings within the Caya 36 concession.

Concession Name	DINAMI Code number	Concession Area Hectares	Owner as of Date of This Report	Title Registration Date	2006 Fee Paid
Caya 36	500200	4,740	Minera Midasmine S.A.	August 23, 2001	\$9480
Piedra Liza 1	500992	1,050	Minera Midasmine S.A.	August 10, 2005	\$1050
Piedra Liza 2	500993	900	Minera Midasmine S.A.	August 10, 2005	\$900

Table 1: Caya 36 and Piedra Liza Mining Concession Data

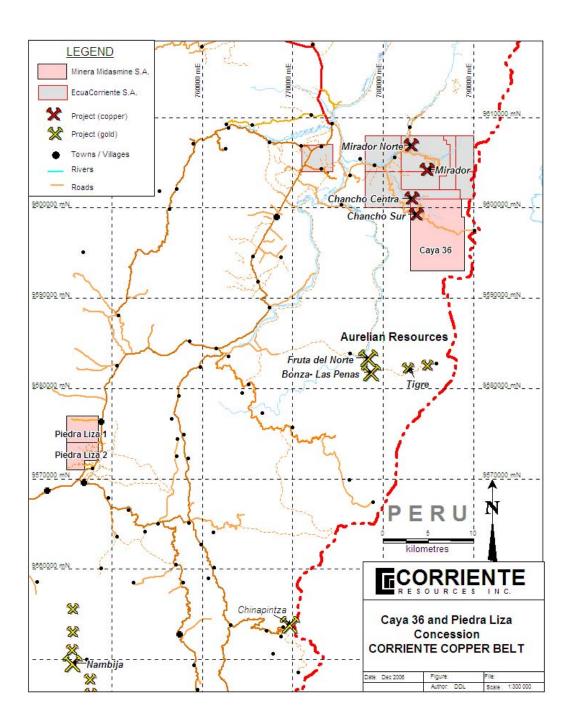


Figure 2: Location Map of Caya 36 and Piedra Liza Mining Properties

# **Property Description, Caya 36 Mining Concession**

The following italicized section was taken verbatim from documents supplied to OreQuest by Corriente (2006).

"On August 6, 2001, before the First Notary of Zamora, the Mining Concession Deed for CAYA 36 (code 500200), encompassing an area of 4,740 mining hectares, was legalized. The deed was issued by the Regional Mining Office for Zamora to BILLITON ECUADOR B.V. a Netherlands-based company, on July 27, 2001 and duly inscribed in the Property Register of El Pangui on August 23, 2001.

Through public deed granted on May 17, 2004 before Doctor Roberto Salgado, Third Notary of Quito, duly approved by Resolution of the Superintendence of Companies on May 28, 2004 and inscribed in the Mercantile Register of Quito on June 11, 2004, the subsidiary of BILLITON ECUADOR B.V. in Ecuador registered its change of corporate name to MINERA PANANTZA B.V. (MPBV).

In accordance to the Agreement executed between BILLITON E&D 3 B.V. GATRO SOUTH AMERICA HOLDINGS LIMITED, BILLITON DEVELOPMENT B.V., and CORRIENTE RESOURCES INC., dated as of May 31st. 2004, Corriente Resources Inc., became the controlling shareholder of Minera Panantza B.V., and therefore concession Caya 36 became mineral property of Corriente Resources Inc.

Additionally, Minera Panantza B.V. (MPBV) has the obligation to pay to BILLITON E&D 3 B.V. a royalty equivalent to 2% of the "Net Smelter Return", for the mining area in concession CAYA 36."

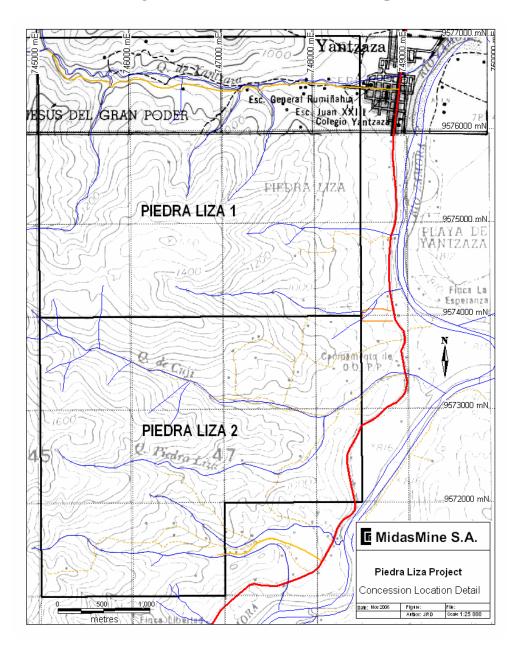
The Caya 36 concession was transferred from Minera Panantza B.V. to Minera Curigem S.A. in 2005. In 2006, the Caya 36 concession was transferred from Corriente subsidiary Minera Curigem S.A. (now ExplorCobres S.A.) to another subsidiary, EcuaCorriente S.A., and then to Minera Midasmine S.A., also a 100%-controlled Ecuadorian subsidiary of Corriente Resources Inc. Corriente, through its wholly-owned Cayman Island-based subsidiary, which in turn controls the companies in Ecuador, holds a 100% interest in the Caya 36 concession. BHP Billiton retains a 2% NSR interest in the Caya 36 mining concession. Corriente reports that the 2% NSR royalty held by BHP Billiton can be reduced to 1% if Corriente makes a payment of \$2 million to BHP Billiton.

#### **Property Description, Piedra Liza Mining Concessions**

The contiguous Piedra Liza 1 and Piedra Liza 2 mining concessions are located in the Zamora region of Zamora-Chinchipe Province. The Piedra Liza 1 concession covers an area of 1,050 hectares, and the Piedra Liza 2 concession covers 950 hectares (Trejo Rodriguez, 2006). Title to the Piedra Liza 1 and Piedra Liza 2 mining concessions was registered with the National Directorate of Mining on August 10, 2005, in the name of EcuaCorriente S.A. The mining concessions were subsequently transferred from EcuaCorriente S.A. to Minera Midasmine S.A. Corriente, through its wholly-owned Cayman Island-based subsidiary Corriente Resources Inc., controls EcuaCorriente S.A. and



Minera Midasmine S.A. and thereby holds an unencumbered 100% control in the Piedra Liza 1 and Piedra Liza 2 mining concessions.





# **Permits and Agreements**

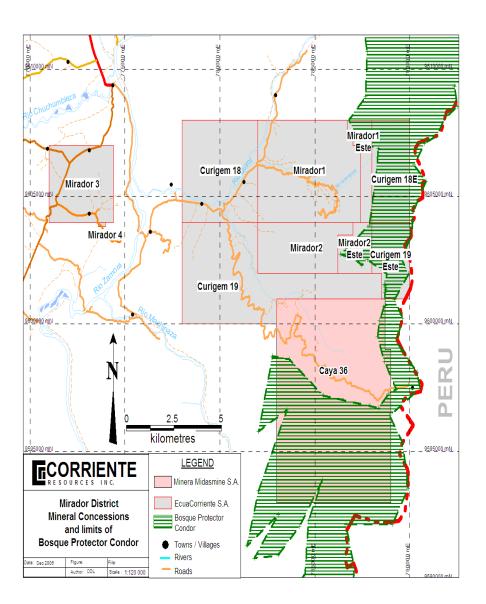
Under Ecuadorian mining law, exploration or environmental permits are normally not required for exploration activities that do not materially disturb the land surface. This means that under normal circumstances, activities such as geological or topographic mapping, prospecting, reconnaissance geophysical surveys, and the collecting of rock, soil, and stream sediment samples can be conducted

without a permit. Activities that do significantly disturb the land surface, such as test pitting, trenching, line cutting, trail and road building, and drilling require an Environmental Impact Statement (EIS), an annual permit that is reviewed at year-end by the Ministry of Energy and Mines in Quito, Ecuador. For any mine development, as opposed to exploration activities, another document known as an EIA (Environmental Impact Assessment) report must be filed and approved by government authorities.

As of the Effective Date of this report, there is no exploration work being conducted on the Caya 36, Piedra Liza 1, or Piedra Liza 2 mining concessions and there are no exploration (EIS) or other environmental permits in force or under application for the Caya 36, Piedra Liza 1, or Piedra Liza 2 mining concessions (pers. comm. Darryl Lindsay, 2006).

On March 23, 2005 (Registro Oficial, Organo del Gobierno del Ecuador), a forest preserve (Bosque Protector Cóndor) was designated. This preserve lies along a section of Ecuador's southeastern border with Peru and covers the southern portion of the Caya 36 concession (Figure 3). While this forest designation does not preclude exploration and mining, there will be more stringent environmental regulations and permitting, which will have to be approved by both the Minister of Mines and Energy and the Minister of the Environment. There are no known mineralized target areas within the Bosque Protector Cóndor. Minasmine intends to seek permission to explore there in the future.

The Piedra Liza mining concessions cover "colono" (non-Shuar/indigenous territory) land with formal title holders (Corriente, 2006). Under normal circumstances in southern Ecuador, permission to enter private lands for reconnaissance exploration activities is informally negotiated directly with rural landowners. For the work done to date by EcuaCorriente, permission to enter the privately-owned lands at Piedra Liza was obtained from the landowners or their representatives, and it is expected that these arrangements will hold in the future.



# Figure 4: Caya 36 Concession Map and Limits of Bosque Protector Cóndor

The Caya 36 concession covers land controlled by the military (adjacent to the border with Perú), land within the Bosque Protector Cóndor forest (in the southern half of the concession) and "colono" (non-Shuar/indigenous territory) land with formal title holders (Gold, 2000). As part of its land acquisition program for the Mirador Project, EcuaCorriente has purchased approximately 900 hectares (nine square kilometres) of land in the north-central section of the Caya 36 concession (Figure 4). This land purchase was made in order to secure title to a possible tailings impoundment facility in the Tundayme valley. This area is no longer part of the Mirador property or the Mirador Project, and it is not included in EcuaCorriente's plans for the development of the Mirador Project (pers. comm. Darryl Lindsay, 2006).



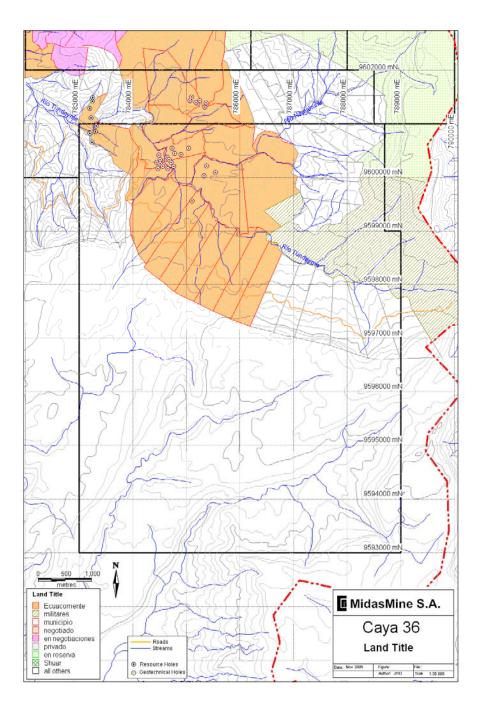


Figure 5: Caya 36 Property Land Title Ownership

#### **Environmental Permits**

As of the date of this report, there were no environmental permits in force or under application for the Caya 36, Piedra Liza 1, or Piedra Liza 2 mining concessions (pers. comm. Darryl Lindsay, 2006). A forest preserve (Bosque Protector Cóndor) covers the southern portion of the Caya 36 concession; Corriente reports that while this forest designation does not preclude exploration and mining, there will be more stringent environmental regulations and permitting, which will have to be approved by both the Minister of Mines and Energy and the Minister of the Environment. Apart from this, OreQuest is not aware of any environmental issues or liabilities that might hinder permitting of exploration or development of the Caya 36 or Piedra Liza properties.

#### ACCESS, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES AND INFRASTRUCTURE

#### Access

Access to the Caya 36 and Piedra Liza properties from Quito, the capital city of Ecuador, can be gained by road or by a combination of air and road travel. There is scheduled air service from Quito to Cuenca, a large city north of Piedra Liza and northwest of Caya 36. From Cuenca, roads lead to both properties, and small aircraft can be chartered to fly to Gualaquiza (Mercedes Molina airfield), the nearest public airport. As of December 2006, there was also scheduled/charter air service from Quito to Gualaquiza, with a travel time of approximately two hours.

From the Gualaquiza airfield, the Caya 36 concession can be reached by driving south on a paved highway to Chuchumbletza (21 km, 20 minutes). From Chuchumbletza, a gravel road leads south 5 km to a public barge ferry and a foot bridge that cross the Zamora River. From Quimi (also spelled "Quime"), on the east side of the river, a gravel road leads 3 km east to Tundayme village and continues eastwards to EcuaCorriente's Mirador property. At a point a few hundred metres east of Tundayme, this road intersects a well-built gravel military road that leads southeast to the Caya 36 concession (10 km). This military road, built in 1995, leads to Destacamento Mirador Cóndor, a military camp located on the spine of the Sierra del Cóndor, one kilometre east of the eastern boundary of the Caya 36 concession and approximately 22 km from Tundayme village. The road has fallen into disrepair, but can be easily and safely travelled on foot or by horses, mules, or off-road vehicles (ATVs) and motorcycles.

From Gualaquiza airfield, the Piedra Liza property is reached by driving on the newly-paved Cuenca-Loja highway (still under construction in some areas) that leads south-southwest through El Pangui to Yanzatza, a large town adjacent to the northeast corner of the property (60-70 km, 2-2.5 hours). From Yanzatza, the same paved highway passes south along the west side of the Zamora River, parallel to and a few hundred metres east of the eastern Piedra Liza property boundary. Numerous foot trails and a few local gravel roads lead west from the highway into the eastern sections of the property.

#### Climate

The area has a wet equatorial climate with an average of 2,300 millimetres of rain per year. Rainfall can exceed 60 mm in a 24-hour period. Variations in the local terrain exert a strong influence over rainfall, so the area has many different local rain regimes. Field work is possible all year round. The best time for airborne surveys or road and trail construction is from October to December, because of clearer skies and drier weather conditions.

#### Physiography

The Tundayme River, a tributary of the Rio Zamora, drains the central and northwestern parts of the Caya 36 concession. The highland areas of the Cordillera de Cóndor to the east rise to maximum elevations of 3,500 metres above sea level (masl). The elevations of the property range from about 1,000 masl in the northwest corner to greater than 1,800 masl on the ridges in the central and southern sections. The property supports second-growth tropical forest, although there are numerous clearings at lower elevations.

The Piedra Liza property is on the eastern flank of a highland area that lies west of the Zamora River. The property is drained by numerous small streams that flow eastwards directly into the river. Elevations range from 850 masl in the Zamora River valley to 1,640 masl on the ridges in the western section. The higher western sections of the property support second-growth tropical forest, although there are numerous clearings for plantations, grazing, and forage crops at lower elevations.

#### Local Resources and Infrastructure

The Caya 36 concession is almost uninhabited. The village closest to the concession is Tundayme, which is located 10 km northwest of the center of the concession. An electrical power line that runs from Chuchumbletza to the Mirador exploration camp passes through Tundayme. Many skilled and unskilled workers live in the Chuchumbletza-Tundayme area. Basic food supplies and accommodation can be obtained locally.

The system of paved and gravel roads leading from the capital city of Quito to the village of Tundayme is suitable for the transport of samples and light equipment and machinery. There is also road access from Tundayme to the Pacific Ocean port of Machala, through either Cuenca or Loja.

EcuaCorriente has completed construction of a private heavy-capacity barge at the Zamora River crossing at Quimi, and is studying the construction of a bridge to handle vehicle traffic. Corriente also reports that an initial road improvement engineering study has been completed for the main access road from Chuchumbletza to the Mirador property (approximately 17 km). The plan is to upgrade the existing dirt road to a 7.2-metre wide access road. This road will intersect the gravel military road that crosses the north-central section of the Caya 36 concession.

The eastern half of the Piedra Liza property is sparsely settled with small landholdings, and the more rugged western half is largely uninhabited. Most of the cleared land is used for pasture or for



growing animal feed. Agricultural products include beef cattle, fruit, coffee, and cacao. The main paved highway connecting Loja to El Pangui and Cuenca passes along the west side of the Zamora River, just east of the property. Many skilled and unskilled workers live in the Yanzatza- Zumbi area. A wide variety of food, accommodation, equipment, machinery and building materials can be obtained in Yanzatza. Electrical power lines pass along the highway on the east side of the property. There are good roads (almost entirely paved) from Quito to Yanzatza for the transport of samples or heavy equipment.

# HISTORY

Billiton Ecuador B.V., now BHP Billiton S.A. ("Billiton") began regional exploration in southeastern Ecuador in 1994. Panned concentrate stream-sediment sampling and reconnaissance-scale geological mapping were the main tools used to locate base metal anomalies. After further follow-up sampling and mapping, Billiton identified possible porphyry copper systems associated with these anomalies. The Tundayme River area (in which the present Mirador and Caya 36 concessions are located) attracted interest during the original reconnaissance geological and geochemical surveys completed in December 1994. These surveys, which included the collection of 315 pan concentrate samples, identified a 50 square kilometre drainage area where stream sediments contained anomalous grades of Cu, Mo, Au, Zn, and Ag. During the time of the border conflict between Ecuador and Perú (1995 to 1999), a large area in the Cordillera del Cóndor, including the Mirador and Caya 36 properties, was declared off limits by the Ecuadorian Government, and Billiton was forced to cease work.

After Ecuador and Perú signed a peace treaty in July 1999, Billiton resumed work and completed detailed follow-up surveys to better define the anomalous areas in what are now the Mirador and Caya 36 properties. Billiton collected 746 soil samples along ridges and 219 rock chips from outcrops in stream drainages traversing all the anomalous zones, including 266 soil samples and 104 rock samples from the area now covered by the Caya 36 concession. This work, along with geological mapping, defined the anomalous zones that later became known as the Mirador and Mirador Norte copper-gold porphyry deposits and the Chancho and Chancho Norte Cu-Mo-Au prospects. In April 2000, Billiton and Corriente entered into an agreement covering the area of the Mirador property, including the Caya 36 concession.

#### History of Exploration: Caya 36 Property

After entering the agreement with Billiton, Corriente's Ecuadorian subsidiary EcuaCorriente initiated geological mapping, trenching, outcrop sampling, soil geochemistry and VLF-EM surveys in the Chancho zone in the northwest section of the Caya 36 concession (Gold, 2000). This work culminated in the drilling of five diamond core holes in the Chancho zone. In 2004, EcuaCorriente drilled 19 vertical geotechnical holes in the Tundayme valley, also in the northwestern sector of the concession. These holes were intended to test the area of a proposed dam for a tailings impoundment in the Tundayme valley. EcuaCorriente geologists have continued to conduct



reconnaissance traverses since 2002, particularly in the west-central section of the Caya 36 property, and have collected 52 rock samples from outcrops and float in stream drainages and from rock-cuts on the roads traversing the Caya 36 property.

## History of Exploration: Piedra Liza Property

EcuaCorriente began exploration of the Piedra Liza property in March 2003, after panned concentrate samples from the main central drainage returned an anomalous gold assay. The concessions were registered in August, 2005. EcuaCorriente has collected a total of 27 panned concentrate samples from streams, 135 ridge soil samples, 91 grid soil samples, and 59 rock samples from the Piedra Liza concessions. The only evidence of previous exploration at Piedra Liza is a short tunnel in the northern sector of the Piedra Liza 1 mining concession, apparently driven in an attempt to explore a 25-cm quartz-pyrite vein. It is believed that this tunnel, now abandoned, was made by informal miners (pers. comm. Rober Diaz, 2006).

## **GEOLOGICAL SETTING**

## **Regional Geology**

The Piedra Liza and Caya 36 properties lie within a 150 km-long metallogenic copper-gold subprovince of Jurassic age located in the Cordillera del Cóndor and the adjoining areas of southeastern Ecuador (Figure 6). The principal areas of gold mineralization include the Fruta Del Norte deposit (Aurelian Resources Inc.) and other epithermal prospects, as well as the Nambija gold skarn district. The gold deposits and prospects lie south of and partially overlap the "Corriente Copper Belt", a north-trending belt of gold-bearing copper and copper-molybdenum porphyry deposits that was originally discovered by Gencor and was explored by Billiton B.V. in the 1990s. The Mirador and Mirador Norte, Panantza, and San Carlos porphyry deposits in the copper belt are currently being developed by Corriente Resources Inc.

Many of the epithermal gold-silver prospects and deposits are in the Misahuallí Formation, an andesitic volcanic sequence of Jurassic age. The Nambija skarn-hosted gold deposits are in the Triassic Piuntza Formation (Vallance et al, 2003). The Jurassic Zamora Batholith intrudes Misahuallí Formation rocks in many areas throughout the district, and Piuntza Formation rocks at Nambija. Both the Piuntza and Misahuallí rocks often occur in narrow, north-trending inliers or pendants" within the Zamora Batholith.

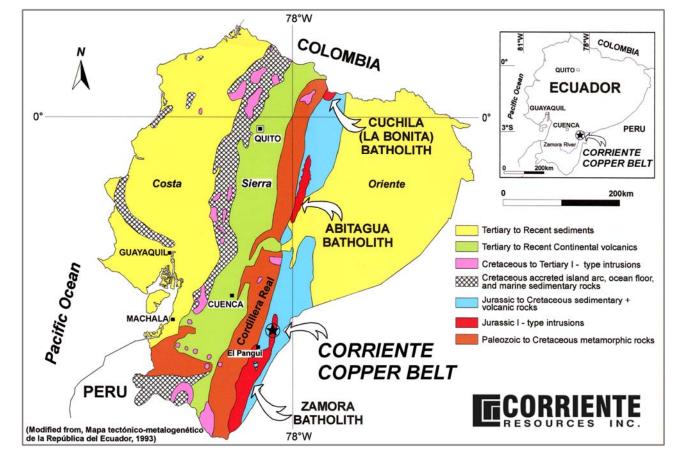


Figure 6: Generalized Geology Map of Ecuador

The stratigraphic sequence in southern Ecuador incorporates rocks of Paleozoic to Cretaceous age:

- Mid-Paleozoic metamorphic "basement" complex: Metagranite, schist, and gneiss that outcrop in the Cordillera Real, west of the Zamora Batholith.
- **Piuntza Formation:** Triassic sandstone, siltstone, limestone, volcaniclastic rocks and andesite flows.
- **Santiago Formation:** Upper Triassic to Lower Jurassic limestone and sandy shale. This Formation is 1,500m to 2,700m thick and outcrops to the east of the Zamora Batholith.
- **Chapiza and Misahuallí Units:** Middle to Late Jurassic pyroclastic rocks and lava flows, mainly of andesitic composition. The Misahuallí varies from 1,000m to 4,000m thick and unconformably overlies the Santiago Formation. Most of the epithermal and skarn-hosted gold mineralization in the Nambija- Fruta Del Norte area occurs in the Misahuallí Formation.

- Hollin Formation: Lower Cretaceous quartzite and quartz sandstone, with thin (<2m) interbeds of shale and clay-bearing fine-grained sandstone that usually contains bitumen. The Hollin Formation unconformably overlies the Misahuallí volcanic rocks and the granitic rocks of the Zamora Batholith; the sequence is 30m to 200m thick in the Zamora El Pangui area and becomes thicker towards the north. The Hollin rocks are generally flat-lying to gently west-dipping, with the resistant quartzite and sandstone units often forming prominent mesas.
- **Napo Formation:** Dark grey to black Middle Cretaceous silty limestone and fine-grained calcareous siltstone and shale. The Napo Formation is 200m to 700m thick and conformably overlies the Hollin.

The Zamora Batholith, an intrusive complex with compositions ranging from diorite to granite, cuts the Santiago, Piuntza and Misahuallí rocks. This batholith is one of a number of Jurassic intrusive complexes in the Cordillera Real and sub-Andean regions of Ecuador that have been mapped as members of the Abitigua Subdivision. Isotopic age dates for the younger Late Jurassic porphyry intrusive phases of the Zamora Batholith range from 152 to 157 Ma. A variety of Tertiary-age intrusions, including basalt to rhyodacite dykes and quartz-feldspar porphyry bodies, cut the Zamora Batholith and the Mesozoic formations.

# Caya 36 Property Geology

The northwestern part of the Caya 36 concession is underlain by a north-striking inlier or pendant of probable Lower Jurassic Misahuallí volcano-sedimentary rocks that lies within the Zamora Batholith; Zamora granitic rocks outcrop along the western edge of the concession and in its northeastern section (Figure 7). In the southern half of the concession, the Zamora Batholith and the Misahuallí rocks are mostly overlain by quartzites of Lower Cretaceous Hollín Formation, but "windows" of Zamora and Misahuallí rocks have been mapped in areas where the Hollin cover has been eroded. An area of some 25 square kilometres in the extreme southern section of the concession has not been mapped in detail.

In the western part of the concession, the Zamora-Misahuallí contact is parallel and adjacent to a north-trending structural (fault) zone within the Zamora Batholith. A fine to medium-grained mineralized granophyric dyke (the "Chancho Diorite"), and late-stage hornblende-feldspar porphyry and more felsic hornblende-biotite-quartz porphyries intrude the fault zone.

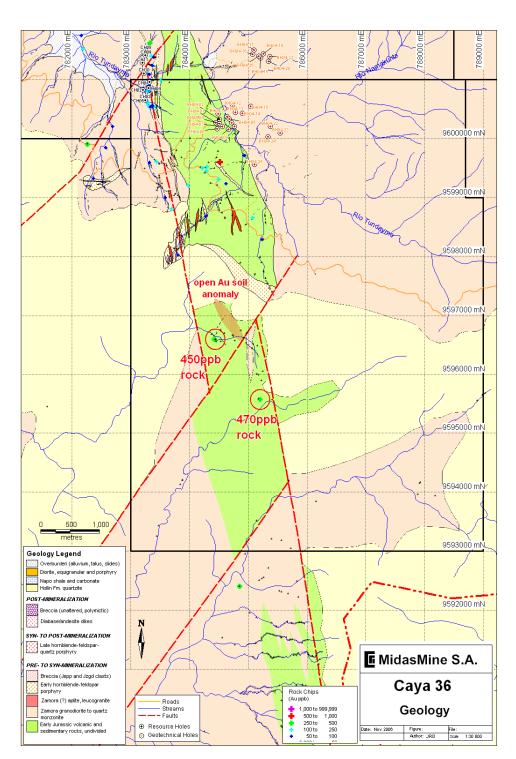


Figure 7: Caya 36 Property Geology Map



Mineralization in the Chancho Diorite is disseminated pyrite-chalcopyrite-molybdenite-(bornite) associated with pervasive sericite-chlorite-clay-(quartz) alteration. There is intense pervasive silicification associated with disseminated chlorite- (sericite) in the contact zone between the Zamora Batholith and the diorite. Alteration in the Zamora Batholith grades outwards from pervasive chlorite-pyrite-quartz-K-feldspar-epidote assemblages near the diorite contact to fracture-controlled K-spar-epidote-chlorite, and finally to K-metasomatism and chloritization along fracture planes (Gold, 2000).

# Piedra Liza Property Geology

Regional geological maps show that the property is near the eastern margin of a north-trending belt or inlier of volcanic and tuffaceous sedimentary rocks assigned to the Jurassic Chapiza and Misahuallí units. At the latitude of Piedra Liza, the belt of Misahuallí rocks is about 12 kilometres wide, and is intruded to the east and west by the Zamora Batholith.

Rocks exposed in the Piedra Liza stream valleys are mostly fine to medium grained granitic and subvolcanic rocks (diorite, quartz diorite, and granodiorite), fine to coarse-grained volcanic tuffs and flow rocks (andesite and dacite) and tuffaceous sedimentary rocks (Figure 8). These are everywhere altered to calc-silicate and hornfels assemblages. In the southern part of the property, fine to medium-grained granitic intrusive rocks outcrop in the main stream valleys, and in small strongly-weathered sites on trails and in gullies. Schistose intermediate volcanic rocks crop out along the road running west from Yanzatza in the northwest corner of the concession. East of these there are more small porphyritic, intermediate to felsic intrusions and volcanic and tuffaceous sedimentary rocks.

A cap of Hollin Formation sandstone and quartzite forms a mesa-like outlier about 1.5 km long and 500 metres wide in the north-central section of the property, and a smaller klippe occurs just south of where the Quebrada Piedra Liza crosses the highway. From just north of these Hollin rocks, gently to moderately west-dipping, bedded silty limestone, calcareous shale, mudstone, and siltstone are exposed along the highway and in the lower parts of the stream valleys on the east side of the property. These rocks resemble the Middle Cretaceous Napo Formation sequences seen in many areas of southeastern Ecuador.

A north-striking high-angle fault is interpreted to separate the silty limestone and calcareous shale on the lower east side of the property from the volcanic-intrusive rocks to the west. Another eastsoutheast striking high-angle fault, parallel the axis of the central valley, is interpreted to intersect the north-striking fault.

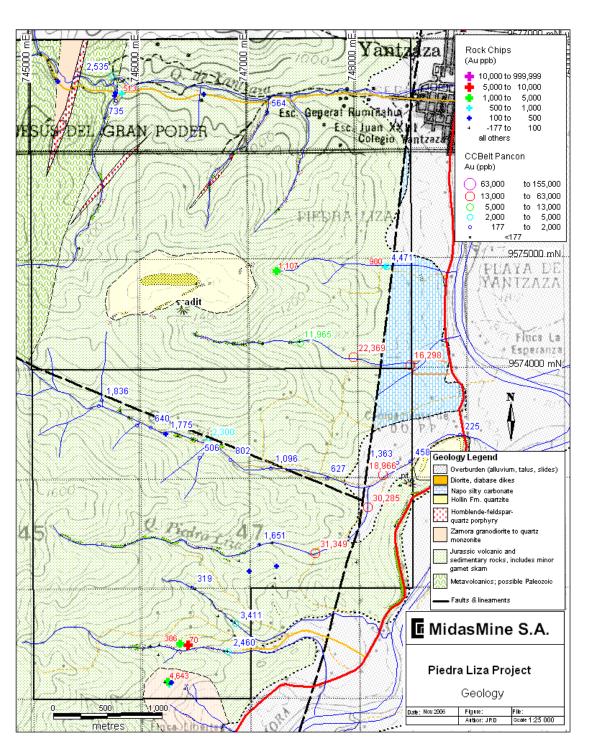


Figure 8: Piedra Liza Property Geology Map

Almost all of the rock samples collected by EcuaCorriente during prospecting and geological mapping are composed of intermediate to felsic volcanic rocks (andesite, dacite, and andesite tuff),



or granitic rocks ranging from diorite to granodiorite. Most of these are at least moderately silicified, with sericite-clay-(chlorite) alteration in granitic rocks and dacite, and chlorite-epidotequartz-(garnet) in andesite. Approximately one-quarter of the samples are described as skarn or endoskarn, or as calc-silicate rocks. These lithologies and alteration assemblages are typical of an andesite to dacite volcanic inlier or 'roof pendant', cut by intermediate to felsic plugs, dykes and sills.

# **DEPOSIT TYPES**

The exploration targets at the Caya 36 and Piedra Liza properties are gold-bearing skarn and intermediate to low-sulphidation epithermal precious metal deposits. The best-known examples of these deposit types in southern Ecuador are the Nambija gold skarn district, and the Fruta Del Norte epithermal gold prospect discovered in 2006 by Aurelian Resources Inc.

The Nambija gold district is centered approximately 25 kilometres due south of the Piedra Liza property (Figure 2). Nambija has been described by Vallance, et al (2003, 2006), and by Meinert (1998), among others. The Nambija oxidized gold skarn bodies are mainly in volcaniclastic rocks belonging to the Triassic Piuntza Formation. In the Nambija area, these rocks occur as a 1-2 km wide, 20-km long north-trending contact-metamorphosed lens within the Zamora Batholith. There are several mining centers, including Fortuna, Cambana, Nambija and Sultana del Cóndor.

The Nambija skarn is mainly composed of massive brown garnet, with subordinate pyroxene-epidote skarn at the margins of brown garnet skarn bodies. The skarn bodies are controlled by bedding and replace fine-grained andesite volcaniclastic rocks and limestone. Skarn units can occur in massive layers up to 30 metres thick. Porphyritic quartz diorite to granodiorite intrusions cut the Zamora granitic rocks and the Piuntza volcaniclastic rocks, and are found in most of the gold mines in close proximity to the skarn bodies.

Gold occurs in structurally-controlled irregular open-space fillings and tabular "veins" in skarn. These formed at the end of the prograde stage of skarn development, and during a subsequent weak retrograde stage. The open-space fillings and veins contain assemblages of quartz, K-feldspar, garnet, calcite, chlorite, and epidote with minor pyrite, hematite, sphalerite, chalcopyrite and native gold. Gold also occurs in quartz-calcite-chlorite-K-feldspar veins less than 1 millimetre thick that have the same north to northeast orientations as the earlier veins.

Several genetic models have been proposed for the Nambija gold mineralization. One theory holds that the Nambija skarn was formed during the intrusion of felsic phases of the Zamora Batholith, but that the gold was deposited during a much later epithermal event; another suggests that the gold is related to skarn formation during the emplacement of Tertiary felsic intrusions. A recent interpretation based on age-dating of titanite and molybdenite, measurements of oxygen isotope compositions, and studies of fluid inclusions in quartz, garnet, pyroxene, and calcite concludes that skarn formation and gold deposition were part of a continuous process related to the emplacement of



felsic intrusions at circa 145.5 Ma. The Zamora Batholith is Rb-Sr dated at 190-140 Ma (Vallance, et al, 2003, 2006).

The Fruta Del Norte (FDN) gold deposit of Aurelian Resources Inc. ("Aurelian") is located in the Cordillera del Cóndor in the area between the Midasmine properties, about 15 km southwest of Caya 36 and 30 km east-northeast of Piedra Liza and the town of Yanzatza (Figure 2). It has been described by Sillitoe (2006), and the following discussion is based upon his published July 2006 report titled "*Comments on Geology and Potential of the Fruta Del Norte Epithermal Gold Prospect, Ecuador*" and upon news releases by Aurelian Resources Inc.

The high-grade gold mineralization of the FDN deposit is 'blind'; a body of moderately silicified conglomerate with some pyrite and marcasite outcrops above the main gold zone. This outcrop contains "hundreds of ppm arsenic, tens of ppm antimony, a few ppm mercury and anomalous barium values, but only traces of gold" (Sillitoe, 2006). The outcrop led Steve Leary, Aurelian's geologist, to spot the discovery drill hole.

The Au-Ag mineralization at Fruta Del Norte is mainly in Misahuallí volcanic rocks, but the hydrothermal system has also affected the base of the overlying Suarez Formation, a conformable volcano-sedimentary sequence. The Zamora Batholith intrudes the Misahuallí unit to the west of the FDN deposit; the nearest intrusion is the "Camp" porphyry stock, two kilometres south of FDN.

The bulk of the gold mineralization in the FDN system is in a lower zone of quartz-carbonateadularia veins and stockworks containing base-metal sulphides, and in an overlying, west-dipping body of intense silicification with abundant pyrite and marcasite. A massive steeply-dipping quartz vein, up to 60 metres thick, cuts the vein-stockwork and silicified zones. Unlike the other two higher-grade zones, the quartz vein is almost barren of sulphide minerals.

Alteration is pervasive and affects the entire volume of the known FDN zone. The main alteration mineral is illite, which is everywhere accompanied by >1% disseminated pyrite. Moderate silicification, accompanied by increased amounts of iron sulphides, occurs above the main gold deposit and west of the West fault. Pervasive intense silicification, characterized by black, grey, and white silicified areas with varying pyrite-marcasite contents, forms a west-dipping body with a vertical thickness of up to 160 m near the West fault.

The known portion of the FDN deposit appears to be confined to a north-striking structural zone that is about 200 metres wide. The bounding faults are nearly vertical; the western fault is post-mineral, and cuts off the mineralization along the entire known length of the deposit.

#### MINERALIZATION AND GEOCHEMISTRY

#### **Mineralization: Caya 36 Property**

Except for the south part of the Chancho porphyry copper-molybdenum prospect, which occupies a small area in the northwestern corner, the property is at an early stage of exploration, particularly the area of Misahuallí volcanic rocks east of the Chancho fault zone. Rock samples from the central and southern sections of the concession contain pyrite, with minor chalcopyrite, sphalerite and galena, and traces of dark grey sulphides or sulpho-salts (tetrahedrite or enargite?). Disseminated pyrite is present in almost all the altered volcanic rocks, in amounts up to 3%; the base metal sulphides are found in quartz veins and in calc-silicate rocks and skarn. Misahuallí volcanics east of the Chancho copper-molybdenum prospect and the Chancho fault display extensive silicification and propylitization. Pyrite is abundant and locally occurs as massive units of 10-30 cm width.

The Chancho porphyry copper-molybdenum prospect is a zone of mineralization that occurs mainly within the "Chancho Diorite", a sub-vertical dyke-like body of feldspar porphyry emplaced into the north-striking "Chancho fault" structure, a regional fault zone that cuts the Zamora Batholith adjacent to the contact with Misahuallí volcanic rocks to the east. Surface evidence indicates that the mineralized zone is at least 1,600 metres long and up to 60 metres wide (Gold, 2000). The greater part of the Chancho zone is located to the north of the Caya 36 concession, on the Curigem 19 concession (part of the Mirador property, owned by EcuaCorriente). Based on the evidence reported by Gold (2000), the southern segment of the Chancho zone extends approximately 500 metres south from Curigem 19 into the northwestern part of the Caya 36 concession. For the sake of brevity, in this report the southern Caya 36 segment is referred to simply as the "Chancho" zone.

The following discussion of the alteration and mineralization at the Chancho copper-molybdenum prospect was taken *verbatim* from Gold (2000). Minor changes in the formatting and font were made.

Alteration and mineralization at Chancho are characterized by the following features:

- An abrupt transition from pervasive alteration and mineralization in the Chancho Diorite and Zamora Batholith wallrock into apparently fresh rocks of the Zamora Batholith;
- An apparent mineral zonation of molybdenite- chalcopyrite- pyrite- (bornite) associated with sericite- chlorite- clay (or very fine sericite)- (quartz) in the Chancho Diorite;
- Disseminated chalcopyrite- pyrite- (barite) mineralization associated with pervasive silicification and variable chlorite- K-feldspar- epidote in Zamora batholith wallrock adjacent to the Chancho Diorite;
- Wallrock alteration of the Zamora Batholith at Chancho occurs as fracture-controlled epidote-K-feldspar- chlorite with weak pyrite mineralization. Alteration intensity decreases laterally from K-metasomatism of plagioclase with chlorite and epidote along fracture planes (proximal) to weak pervasive chloritisation of mafics (distal).

#### 1. Chancho Diorite

Alteration and mineralisation within the Chancho Diorite is pervasive, making the primary rock texture difficult to distinguish. Mineralisation is disseminated chalcopyrite- pyrite- molybdenite-bornite (?). Associated alteration is pervasive sericite- chlorite- clay with subordinate quartz in small irregular veins. Sericite- chlorite- clay proportions and intensity are variable within the rock unit. Sericite is pale green, and locally coarse when associated with quartz. Clay assemblages are pale

green to white, and may have sericite as their primary constituent. Possible bornite is fine, disseminated and is distinguished by the presence of strong purple- cyan- red iridescence atypical of chalcocite. Molybdenite occurs alone as smears on fractures, or with quartz in veinlets. No stockwork textures are observed. Semi-massive chalcopyrite-pyrite-bornite (?) mineralisation outcrops locally at the Río Tundayme transept and Quebrada 25.

Slickensides are common features developed in the Chancho Diorite, indicating post-mineral movement within the mineralised structure.

2. Pervasive Silicification and Chloritisation

Pervasive silicification of the Zamora Batholith occurs adjacent to the Chancho Diorite. Chlorite appears to replace relict mafics, and small clusters of sericite are locally present. Chalcopyrite mineralisation is disseminated and locally strong with py:cpy 9:1 and total sulphides of 5 %. Bornite and molybdenite appear to be absent. K-feldspar and epidote as scarce veinlets is common.

3. Chlorite- Epidote- K-Feldspar- Pyrite- Quartz Zone

Coarse quartz- chlorite- pyrite- (epidote)- (K-feldspar)- (sericite) assemblages appear to be typical of the edges of the Cu-mineralised zone. K-feldspar stockwork veinlets in pervasively chloritised rock are extensively developed at Quebrada 24, with coarse chlorite- pyrite- quartz- K-feldspar on contact with the Chancho Diorite.

#### 4. Zamora Batholith

The transition from weakly altered (non-pervasive) Zamora Batholith into silicified Zamora Batholith or pervasively altered Chancho Diorite appears to be abrupt. Distal wallrock alteration is evident only as spotty replacement of hornblende in the Zamora Batholith by chlorite. The lateral variation in Zamora Batholith wallrock alteration (distal to proximal) appears to be characterized by the transition from weak chlorite to the occurrence of K-metasomatism of plagioclase along fracture planes, and finally the occurrence of epidote with K-feldspar in veinlets. The primary granophyric texture remains fresh in all abovementioned zones.

*The mineralised area identified between Quebradas 24 and 25* [only the southernmost 500 metres of this area is within the Caya 36 concession] *has the following features:* 

• *Cu-(Mo)-(Au) mineralisation along a north-south trending structure of estimated minimum length 1,600 m and average apparent width of 60 m.* 



- Cu is the principal economic element; Mo and Au may contribute up to 10 % in terms of Cu equivalent at current metal prices
- Rock-chip geochemistry indicates Cu mineralisation of 0.74 % (0.80 % Cu Eq.) over an apparent width of 70 m at Quebrada 25
- Rock-chip geochemistry indicates Cu mineralisation of 0.9-1.3 % (1.0-1.4 % Cu Eq.) over an apparent width of 60 m at the Rio Tundayme transept
- Rock-chip geochemistry indicates Cu mineralisation of 1.64 % (1.7 % Cu Eq.) over an apparent width of 50 m at Quebrada 22
- Rock-chip geochemistry indicates Cu mineralisation of 0.49 % (0.5 % Cu Eq.) over an apparent width of 40 m at Quebrada 24

#### **Geochemistry: Caya 36 Property**

In December, 1994, Billiton completed its original reconnaissance surveys in the Tundayme River area (in which the present Mirador property and the Caya 36 concession are located). The 1995-1999 border conflict between Ecuador and Perú forced Billiton to suspend exploration in the area. After the Ecuador-Perú peace treaty in July 1999, Billiton resumed work and completed detailed follow-up surveys to better define the anomalous areas in what are now the Mirador and Caya 36 properties. By April 2000, when Billiton and Corriente entered into the agreement covering the Mirador property (including Caya 36), Billiton had collected 172 panned concentrate samples, 266 soil samples along ridges and 104 rock samples from the area now covered by the Caya 36 concession (Figure 9). In 2000, EcuaCorriente took 29 rock chip samples from mineralized Chancho zone outcrops along the Tundayme River and in a stream valley 350 m to the south. EcuaCorriente has continued to make reconnaissance traverses since 2002, particularly in the west-central section of the Caya 36 property, and has collected 52 rock samples from outcrops and float in stream drainages and from road cuts.

Sample	Au Range	Ag Range	Cu Range	Pb Range	Zn Range	As Range
Туре	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Pancons	<5-5,498	<0.2 - 12.3	<1.0 - 1,118	< 2.0 - 1,931	<1.0-2,010	< 5 - 46
Rocks	<5-660	< 0.2 - 42.7	2 - 20,000	<2.0-6,664	<1.0-13,000	<5 -1,390
Soils	<5-340	< 0.2 - 1.5	<1-3,315	<2 - 857	<1.0- 877	<5 -162

 Table 2: Caya 36 Property Geochemical Data

Billiton's panned concentrate stream-sediment samples returned Au, Ag, Cu, Pb, Zn and Mo grades ranging from below detection limit to strongly anomalous (Table 2). The highest gold grade reported was 5,498 ppb, and the highest silver grade was 12.3 ppm. These grades were not from the same sample; eight samples contained more than 100 ppb gold, but only one of these contained anomalous silver or base metals. The sample with the highest silver grade also reported the highest lead and zinc grades as well as very high copper and molybdenum grades. There appear to be two



populations of anomalous samples, one with anomalous gold only, and one with anomalous silver and base metals but little or no gold.

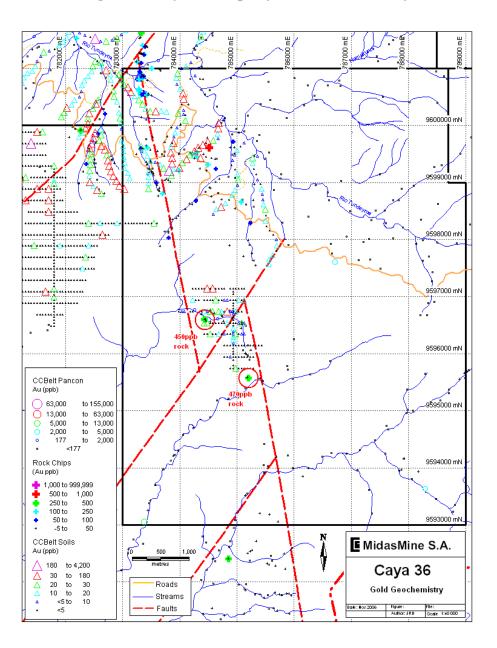
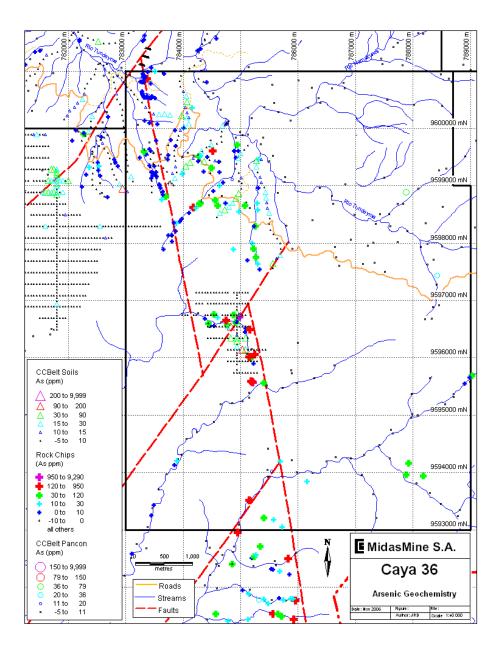


Figure 9: Caya 36 Property Gold Geochemistry

Billiton's ridge-crest soil samples also returned a wide range of precious and base metal grades, from below detection limit to moderately anomalous. As with the panned concentrate samples, the highest gold grades in soil are not strongly associated with silver or base metals, although two of the four highest gold samples contain anomalous copper (114 to 353 ppm). Silver grades in the soil samples are low; the highest value is 1.5 ppm. As might be expected, there is a cluster of Cu-Mo-



(Au) samples in the area of the Chancho South porphyry prospect. There is also a large, widely distributed population of samples with anomalous Cu-Pb-Zn-(Au)-(Mo).



#### Figure 10: Caya 36 Property Arsenic Geochemistry

The rock samples collected by Billiton and EcuaCorriente from the Caya 36 property fall into two categories; 29 samples were collected from mineralized outcrops in the Chancho Cu-Mo porphyry prospect, and 156 reconnaissance rock samples were collected from many different locations on the western half of the property. The 29 Chancho samples are all anomalous in copper (0.06% to 2.0%), with weakly to strongly anomalous molybdenum grades (25-1138 ppm), spotty gold grades (10-183 ppb), and generally low arsenic grades (Figure 10).



The low arsenic grades associated with high copper grades in the Chancho zone are typical of Cu-Mo porphyry mineralization in the Mirador area, whereas high arsenic grades are often associated with many precious-metal bearing epithermal systems in Ecuador and Perú. Arsenic in rock samples at Caya 36 can be a useful "indicator" element for epithermal mineralization related to structures, particularly in the Misahuallí volcanic rocks, and can help to determine whether precious and base metal geochemical anomalies in areas without outcrop are more likely to be related to porphyry-type mineralization in the Zamora Batholith, or epithermal mineralization in the Misahuallí terrane. An example of this can be seen in Figure 10, where rock samples containing anomalous arsenic are adjacent to inferred faults in Misahuallí volcanic rocks in the west-central part of the property. This area is considered to be a target for epithermal rather than porphyry-style mineralization.

The highest gold grades in rock samples are from three reconnaissance samples collected from Misahuallí Formation volcanic rocks east of the Chancho fault zone. Two of these samples, containing 450 and 470 ppb Au respectively, are located in the Curichai area in the west-central section of the property. One sample contains no significant silver, base metals, or arsenic, and the other has anomalous Cu-Zn and strongly anomalous As (680 ppm). The third sample, from the Tundayme valley about 1.5 km southeast of the Chancho zone, contains 660 ppb Au and 42.7 ppm Ag, with anomalous As, Cu and Pb. These samples are all from areas with weakly anomalous Au soil geochemistry.

# Mineralization: Piedra Liza Property

Exploration at Piedra Liza is at an early stage. No extensive or continuous zones of anomalous precious or base metals have yet been located, but rock chip samples containing strongly anomalous amounts of gold, silver, and copper have been collected from outcrops in the southern and central sections of the property (Figure 11). Many of the outcrops examined by OreQuest in the south-central section of the property are composed of silicified, propylitized, and calc-silicate altered rocks, including intrusive, volcanic-subvolcanic, and tuffaceous volcanic sedimentary rocks. Zones of sheeted and stockwork quartz veins containing anomalous gold, silver, and copper grades are present in some of these outcrops, and there is good potential to discover more of these vein zones.

Mineralization at Piedra Liza consists of pyrite, with minor chalcopyrite, sphalerite and galena, and traces of dark grey sulphides or sulpho-salts (tetrahedrite or enargite?). Disseminated pyrite is present in almost all rocks, in amounts up to 3%; the base metal sulphides are found in quartz veins and in calc-silicate rocks and skarn. Quartz veins of various types are relatively common in the southern part of the property. The area of greatest economic interest found to date is in the south-central section of the Piedra Liza 2 concession. This area (referred to in this report as the "Libertad area") includes an east-west ridge and the parallel stream valley immediately to the north. Gold-bearing drusy quartz veins are found in a quartz diorite (?) intrusion that outcrops on the Libertad ridge and in silicified, pyritic volcanic rocks in the Libertad valley. It is possible that both areas are within a north-northeast-trending structurally-controlled zone of alteration, quartz veining and precious +/- base metal mineralization.



The intrusion on the Libertad ridge has local areas of strong quartz-sericite-(pyrite) alteration. Some outcrops of intrusive rock on the ridge and volcanic rock in the valley have sheeted or stockwork zones of white to light grey quartz veins that are 5-20mm thick and occur in densities of up to 10-20 per metre. Some of these veins have irregular patches and blebs of fine-grained pyrite, and druses lined with quartz crystals. The best sample taken by EcuaCorriente on the Libertad ridge assayed 4,643 ppb gold and 3.9 ppm silver.

OreQuest collected six rock samples during the October 25-26 property visit. Two of these samples, from the east-draining Libertad valley, returned grades of 7.43 ppm gold - 15.2 ppm silver, and 2.07 ppm gold – 20.7 ppm silver, respectively. The samples were about 70 metres apart and both samples were taken from stockwork zones of quartz-sulphide veins in silicified volcanic rocks. These silicified, quartz-veined outcrops in the Libertad valley are approximately 400 metres north-northeast of the quartz vein zone on the Libertad ridge.

EcuaCorriente collected three rock chip samples from a short tunnel in the northern sector of the Piedra Liza 1 mining concession. This tunnel was apparently driven by informal miners in an attempt to explore a 25-cm quartz-pyrite vein, which is exposed at the tunnel entrance. A 0.5-m chip sample of this vein returned background values of precious and base metals. Two more chip samples, at the face and mid-point of the tunnel, graded 305 and 570 ppm copper, with background gold and silver values.

# Geochemistry: Piedra Liza Property

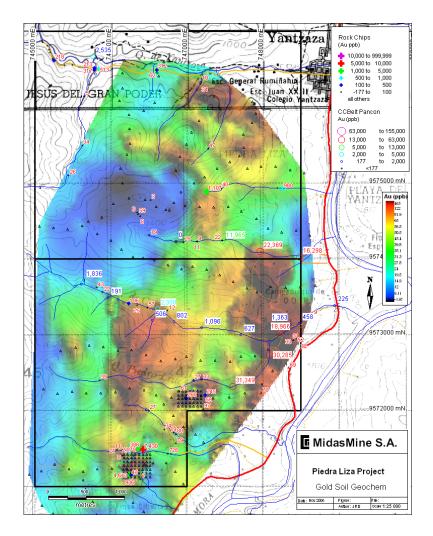
EcuaCorriente began exploration of the Piedra Liza property in March 2003, after panned concentrate samples from the main central drainage returned anomalous gold assays. EcuaCorriente has collected a total of 27 panned concentrate samples from streams draining the property, and 135 ridge soil samples, 91 grid soil samples, and 59 rock samples from within the boundaries of the Piedra Liza concessions (Table 3).



Sample Type	Au Range (ppb)	Ag Range (ppm)	Cu Range (ppm)	Pb Range (ppm)	Zn Range (ppm)	As Range (ppm)
Pancons	191 – 31,349	<0.5 -	43 - 299	10 - 270	71 – 697	7 - 181
Rocks	<2-7,430	<0.5 -	6 – 2,631	3 – 1,412	2-3,900	<5-2,211
<b>Ridge Soils</b>	<2-914	< 0.5 - 3.8	<2-1,638	<5-2,920	< 2 - 1,428	<5 - 295
Grid Soils	8 - 535	< 0.5 - 4.2	33 - 599	23 - 278	48 - 498	9 - 135

 Table 3: Piedra Liza Property Geochemical Data

Figure 11: Piedra Liza Gold Geochemistry





All 27 of the panned concentrate stream samples contain elevated gold grades (191-31,349 ppb). Ten of the 27 samples also contain anomalous silver (3.0-199.7 ppm). In a few samples, copper, lead, and zinc grades are weakly anomalous. None of the samples contains appreciable amounts of arsenic (7-181 ppm) or molybdenum (2-9 ppm).

Of the 59 rock samples (including the OreQuest samples), twelve contain anomalous gold (101-7,430 ppb). In these samples, silver generally accompanies gold; the silver grades in the nine highest gold samples range from 1.3 ppm to 20.7 ppm. Copper, lead, and zinc tend to occur together in the highest-grade samples but are not always accompanied by gold or silver. The four samples with the highest arsenic grades (388-2,211 ppm) also contain gold (513-7,430 ppb).

The 135 ridge-crest soil samples returned gold grades ranging from <2 ppb to 914 ppb. A high proportion (44%) contained anomalous gold grades of 40 ppb to 914 ppb. Copper grades in the soil samples range from <2 ppm to 1,638 ppm, but only ten samples contain more than 300 ppm copper. The highest silver grade is 3.8 ppm. Lead and zinc often occur together but the grades are spotty; 15 samples contain >200 ppm lead and nine samples have >300 ppm zinc. Arsenic grades reach weakly anomalous levels (137-295 ppm) in five of the ridge-crest soil samples; these samples also contain anomalous gold (32-210 ppb) and copper (124-342 ppm).

Gold grades in the 91 grid soil samples ranged from 8 ppb to 535 ppb; 57 of the 91 samples (63%) contained anomalous gold grades of 40 ppb to 535 ppb. As with the ridge-crest soil samples, silver and base metal grades range from background levels to moderately anomalous, and arsenic grades are low (<135 ppm).

# **EXPLORATION**

# **Caya 36 Property Exploration**

Between 1994 and 1999, Billiton collected 172 stream panned concentrate samples, 266 ridge-crest soil samples, and 104 rock samples. This work, along with geological mapping, defined anomalous copper-molybdenum-gold zones in the northern half of the Caya 36 concession, particularly in the northwestern corner of the concession (the southern segment of the Chancho zone). In 2000, EcuaCorriente collected 29 rock chip samples from the segment of the Chancho zone that lies within the Caya 36 concession, and completed geological mapping, geophysical surveys, and five diamond-drill core holes in the same area. EcuaCorriente also continued reconnaissance exploration south of the Chancho zone; in 2002 it collected 52 rock samples from outcrops and float in stream drainages and from rock cuts along the roads traversing the Caya 36 property. In 2004, EcuaCorriente carried out geological mapping and drilled 19 vertical geotechnical holes in the Tundayme valley, also in the northwestern sector of the concession. These holes were intended to test the area of a possible tailings impoundment facility for the Mirador Project. This area is no longer part of the Mirador property or the Mirador Project; it is not included in Corriente's plans for the development of the Mirador Project (pers. comm. Darryl Lindsay, 2006).

## Piedra Liza Property Exploration

EcuaCorriente began exploration of the Piedra Liza property in March 2003, after a panned concentrate sample from the central stream drainage returned anomalous gold assays. In total, EcuaCorriente has collected 25 panned concentrate samples from streams, 135 ridge soil samples, 91 grid soil samples, and 53 rock samples from the Piedra Liza concessions. OreQuest also collected six rock samples during the October 25-26 property visit. This work has led to the recognition of anomalous gold in rock, soil and panned concentrate samples along a north-tending belt in the eastern part of the property, and discovery of anomalous gold in rock and soil samples in the south-central section (Libertad area) of the Piedra Liza 2 concession.

#### DRILLING

#### Caya 36 Property Diamond Core Drilling, South Chancho Zone

In 2000, EcuaCorriente explored the Chancho Cu-Mo porphyry prospect. The work included geological mapping, rock geochemical sampling, trenching, and diamond drilling. Five diamond drill core holes were completed in the southern segment of the Chancho prospect; these drill holes are just inside the Caya 36 concession, near the northern boundary with EcuaCorriente's Curigem 19 concession (Table 4). For the sake of brevity, in this report the segment of the Chancho zone on the Caya 36 property is simply referred to as the "Chancho" zone or prospect.

The five Chancho holes were drilled within an area about 120 metres wide by 300 metres long (north-south). The northern part of this area (DDH CH01) adjoins the northern Caya 36 property boundary with EcuaCorriente's Curigem 19 concession. The holes intersected pervasively altered Chancho Diorite, intervals of Zamora intrusive rocks, and a few post-mineral dykes; the wall rocks are moderately to strongly altered granitic rocks of the Zamora Batholith. Alteration in the Chancho Diorite is silica-chlorite-secondary K-feldspar, with variable amounts of sericite, secondary biotite, and epidote. The Zamora wall rocks are silicified, with chlorite, secondary K-feldspar, and epidote. The northernmost holes (CH01 and CH04) intersected more Chancho Diorite than the holes to the south, which mostly cut Zamora Batholith rocks with thin dykes of Chancho Diorite.

Hole No.	Project	Easting	Northing	Elevation	Dip	Azimuth	Depth (m)
CH01	Chancho	783317.4	9600962	1042.2	-60	270	219.46
CH02	Chancho	783201.9	9600827	993	-70	90	176.17
CH03	Chancho	783241.8	9600654	1032.7	-60	70	134.74
CH04	Chancho	783301.1	9600860	1011.8	-60	270	137.16
CH05	Chancho	783241.8	9600654	1032.7	-60	250	57.00
						Total:	724.53

Copper-molybdenum mineralization was intersected in all holes. The best mineralization is in the two northern holes, CH01 and CH04. The two southernmost holes, CH03 and CH05, were drilled in



opposite directions from the same collar, apparently in an attempt to confirm the locations of the eastern and western contacts of the Chancho Diorite and to sample the entire width of the mineralized zone. These holes, together with the next hole to the north (CH02), intersected lower-grade copper-molybdenum mineralization (Table 5).

Even though the drill holes indicate that the Chancho Diorite "pinches and swells" in the southern part of the drill area, the mineralization is open to the south. Also, the Chancho Fault structure continues to the south and may traverse the entire length of the property (Figure 7).

Hole No.	From (m)	To (m)	Length (m)	Cu ppm	Mo ppm	Au ppb
CH01	50.0	182.0	132.0	5118	223	29
Including	131.0	182.0	51.0	9425	331	52
СН02	61.0	85.0	24.0	3121	38	11
СН03	18.0	117.0	99.0	3822	76	46
СН04	13.0	119.0	106.0	5957	212	32
CH05	0.0	57.0	57.0	2773	127	37

## Table 5: Drill Hole Length-Weighted Composite Assays, Caya 36 Chancho Zone

## Caya 36 Property Geotechnical Drilling, Tundayme River Valley

The geotechnical drilling program undertaken by EcuaCorriente Resources Inc. in the Tundayme River valley in 2004 was designed to test the nature of the overburden and shallow bedrock. The purpose of the investigation was to determine the suitability of the drilled area for a tailings impoundment dam. The bedrock geology was recorded, but the core was not split and no samples were taken for geochemical analysis. There were 26 vertical holes drilled; unmineralized Misahuallí Formation volcanic rocks were intersected in holes BH 04-01, 02, 04, 06, 07, 09, and 11, on the west side of the drilled area. The remainder of the holes, on the east side of the area tested, cut barren granitic rocks of the Zamora Batholith. This area is no longer part of the Mirador property or the Mirador Project; it is not included in Corriente's plans for the development of the Mirador Project (pers. comm. Darryl Lindsay, 2006).

## Piedra Liza Property Drilling

To the best of the writer's knowledge there has been no exploration drilling on the Piedra Liza concessions.

## SAMPLING METHOD, APPROACH AND SECURITY

#### **Caya 36 Property Geochemical Exploration Sampling**

All of the surface samples taken by Billiton and Corriente from the Caya 36 property are early-stage or reconnaissance geochemical exploration samples, intended to identify areas with anomalous precious and/or base metal grades and anomalous trace element geochemistry. Screened and panned concentrate samples were taken from sediments (alluvium) in most of the east-draining stream valleys on the west side of the property. In follow-up programs, surface rock chip and grab geochemical samples were collected from outcrops in stream valleys and roadcuts, mainly in the northwestern section of the property. Soil geochemical samples were taken from the "B" soil horizon at 100-metre intervals along the crestlines of the ridges.

All samples were securely handled, in same manner as other EcuaCorriente surface and drill samples. The samples were kept in the possession of the field geologists until they were delivered to the secured Mirador camp, where they were placed in woven polypropylene sacks, which were closed with cord or plastic security straps. The sacks were stored in a warehouse in the camp until they were shipped by contracted truck to the Bondar-Clegg (now ALS Chemex) preparation laboratory in Quito, Ecuador. Upon arrival in Quito, the truck driver reported to the office manager at EcuaCorriente's offices. The truck then proceeded to the preparation laboratory, where the office manager presented a sample shipment form listing the sample numbers to the manager of the preparation facility. The lab manager confirmed the sample shipment and the work orders, and lab batch numbers were photocopied or scanned and forwarded to EcuaCorriente.

## Caya 36 Property Chancho Zone Diamond Drill Samples

As of the date of this report, the drill core from the five Chancho holes is stored in wooden boxes in Corriente's core storage facility in the Mirador camp. When picked up at the drill, all the 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 Mirador camp. 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-metre 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 RQD. Each one-metre interval of core was assigned a sample number.

The sample intervals were recorded and assigned sample numbers. The core was split longitudinally using a diamond saw. 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 plastic bag, and each bag was weighed and marked with the sample number. The individual bagged samples were placed in woven polypropylene sacks, which were closed with cord or plastic security straps. The samples were stored in a warehouse in the camp until they were shipped by contracted truck to the Bondar-Clegg (now ALS Chemex) preparation laboratory in Quito, Ecuador. Upon arrival in Quito, the truck driver reported to the office manager at EcuaCorriente's offices. The truck then proceeded to the preparation laboratory, where the office manager prepared a list for the insertion of the duplicate and standard reference material (SRM) and QA/QC samples, and presented that list, and a 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 photocopied or scanned and forwarded to EcuaCorriente.

## Piedra Liza Property Geochemical Exploration Sampling

All of the samples taken by EcuaCorriente from the Piedra Liza property are early-stage or reconnaissance geochemical exploration samples, intended to identify areas with anomalous precious and/or base metal grades and anomalous trace element geochemistry. Screened and panned concentrate samples were taken from stream sediments (alluvium) in most of the east-draining stream valleys on the east side of the property. In follow-up programs, rock chip and grab geochemical samples were collected from outcrops and float in stream valleys and roadcuts, mainly in the eastern half of the property. Soil geochemical samples were taken from the "B" soil horizon at 100-metre intervals along the crestlines of ridges, and at 50-metre grid centres in small (500 x 500m) grids in the south-central and north-central sections of the property.

All the Piedra Liza samples were securely handled, in same manner as the EcuaCorriente surface and drill samples from the Caya 36 property. Beginning in 2004, the samples were shipped in contracted trucks from the Mirador camp to the Acme Analytical Laboratories preparation facility in Cuenca, Ecuador.

#### SAMPLE PREPARATION AND ANALYSIS

Sample pulps from the Billiton and EcuaCorriente surface exploration programs on the Caya 36 concession, including panned concentrate samples from streams, soil samples, and rock samples, were prepared at the Bondar-Clegg laboratory in Quito (Bondar-Clegg later became ITS Bondar-Clegg, which is now a part of ALS Chemex). Bondar-Clegg, ITS Bondar-Clegg, and ALS Chemex were and are independent from Corriente and its Ecuadorian subsidiary companies. Rock samples were prepared using a standard procedure (now ALS Chemex code PREP-31). The entire sample was crushed to 70% -2mm; a 250-gram split from the crushed sample was pulverized to 85% passing a 75-micron screen. Soil samples were prepared by sieving to -180 microns (80 mesh). Panned concentrate samples were treated as rock samples, and were prepared using the Bondar-Clegg/ALS Chemex procedure PREP-31.

All panned concentrate, rock, and soil geochemical samples from the Caya 36 property were fire assayed for gold and analyzed by multi-element ICP-ES. The samples were not analyzed for mercury.

Samples from the EcuaCorriente surface exploration programs at Piedra Liza, including panned concentrate samples from streams, soil samples, and rock samples, were prepared at the Acme Analytical Laboratories Ltd ("Acme") preparation lab in Cuenca, Ecuador. Sample pulps were air freighted to the main Acme analytical laboratory in Vancouver, BC. The first few samples from the 2003-2004 exploration programs were prepared at the ALS Chemex preparation lab in Quito, Ecuador, and the pulps were air freighted to the ALS Chemex laboratory in North Vancouver, BC.

At the Acme Vancouver lab, the Piedra Liza rock, soil and panned concentrate samples were fire assayed for gold (Group 3B, 30-gram sample), and analyzed by 35-element ICP-ES with four-acid digestion (Group 1E). The first few ALS Chemex samples from 2003-2004 were fire assayed for gold (ALS procedure Au-AA23), and analyzed by 33-element ICP-ES with four-acid digestion (procedure ME-ICP61).

For the September 2000 EcuaCorriente drilling program at the Chancho zone in the Caya 36 concession, the samples were shipped to the Bondar-Clegg laboratory in Quito, Ecuador. Here, 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 gram split ("pulp sample") was taken from the one-kilogram pulverized sample and shipped to the Bondar-Clegg (now ALS Chemex) analytical laboratory in Vancouver, Canada.

At the Bondar-Clegg Vancouver laboratory, the pulp samples were fire assayed for gold with an atomic absorption finish (using a 30-gram aliquot), and were analyzed for copper, molybdenum and zinc using four-acid digestion/atomic absorption spectroscopy ("AAS") methods.

# DATA VERIFICATION

The surface samples from the Caya 36 and Piedra Liza properties are reconnaissance geochemical exploration samples, intended to identify areas with geochemical evidence of mineralization. Laboratory analytical certificates from the various programs were inspected by Billiton and EcuaCorriente in order to catch "unreasonable" reported results caused by typographical errors, mistakes in units (e.g. ppm instead of ppb), and mixed-up data entries (e.g., lead assays reported in the "copper" column, and so on).

A phased geochemical exploration strategy for precious and base metals in southeastern Ecuador is often used to evaluate large regions for possible mineralization. The first phase involves collecting panned stream sediment samples at the mouths of large streams or at major stream junctions. In the second phase, stream drainages that have anomalous amounts of precious or base metals, or "indicator elements", are investigated by ground prospecting traverses in the stream valley, during which more closely-spaced panned samples or ordinary stream sediment samples are collected, as

well as rock samples from outcrops and float. Often, on the return leg of the traverse, geochemical soil samples are collected at regular spacings along the crests of the ridges flanking the valley. In the third phase, areas that continue to be of interest are explored by various methods at increasing levels of detail, usually including geological mapping, detailed grid-controlled soil and rock sampling, geophysical surveys, trenching, and drilling. This phased exploration strategy was employed by Billiton and EcuaCorriente at Caya 36 and Piedra Liza. At each step in the exploration process, the new geochemical results were evaluated to verify that they corroborated the results from the previous phases. This process, since it required progressive evaluation and confirmation of exploration data, served to validate the exploration results.

OreQuest (Sivertz) visited the Piedra Liza property on October 25-26, 2006, and Caya 36 on October 30, 2006. During the visits to Piedra Liza, OreQuest inspected some of the EcuaCorriente sample sites and collected six independent rock chip samples, mostly from locations not previously sampled by EcuaCorriente. In two cases (samples 171941 and 171945), attempts were made to re-sample anomalous EcuaCorriente sample sites (originally sampled by EcuaCorriente in early 2005), but the markers (plastic flagging) at the EcuaCorriente sites had been obliterated and it is unlikely that the OreQuest samples were taken from the same sites. Nonetheless, a sample of numerous chips of quartz vein float (subcrop) taken 15 metres away from the OreQuest 171941 sample site returned anomalous grades of 0.386 ppm gold and 3.8 ppm silver, and an OreQuest rock chip sample from a quartz vein (sample 171945) contained 4.9 ppm silver and 2,280 ppm copper. Anomalous gold and silver grades were obtained from "new" sample sites in the Libertad valley (OreQuest sample 171940 assayed 7.43 ppm Au and 15.2 ppm Ag across an apparent width of 1.0 m, and sample 171943 returned 2.07 ppm Au and 20.7 ppm Ag across a true width of 25 centimetres). The assays from the OreQuest samples, together with the EcuaCorriente results, provide evidence that goldsilver-(copper) mineralization exists in sheeted zones and stockworks of quartz veins in skarn, altered volcanic rocks, and altered granitic rocks at Piedra Liza.

Sample Number	Property	UTM East	UTM North	Spl length cm*	Au Ppm	Ag ppm	Cu ppm	COR** Au	COR** Ag
171940	P. Liza	746420	9571490	100	7.43	15.2	674	-	-
171941	P. Liza	746257	9571139	80	0.043	< 0.5	57	4643	3.9
171942	P. Liza	746265	9571150	Subcrop	0.386	3.8	40	-	-
171943	P. Liza	746350	9571500	25	2.07	20.7	127	-	-
171944	P. Liza	746700	9571750	80	0.034	0.9	142	-	-
171945	P. Liza	747450	9574930	8	0.04	4.9	2280	1107	1.3
171946	Caya 36	783440	9599240	100	0.016	1.3	61	-	-
171947	Caya 36	784270	9599512	60	0.026	1	998	-	-
171948	Caya 36	784295	9599526	100	0.115	0.5	922	-	-
171949	Caya 36	784491	9599314	40	0.134	< 0.5	98	-	-
171950	Caya 36	784300	9598700	60	0.008	0.9	423	-	-

Table 6: OreQuest Rock Chip Sample Results, Piedra Liza and Caya 36 Properties.

\*The sample lengths may or may not represent the true widths of the zones that were sampled. \*\* EcuaCorriente Grades.



The visit to Caya 36 included a road traverse across the entire property and brief traverses up two stream valleys. In both stream valleys, various fresh and altered dykes intrude layered skarn and calc-silicate rock. One sample was taken of calc-silicate rock (quartz-chlorite-epidote-garnet with 3-5% fine-grained pyrite). This sample (171950) returned 0.9 ppm silver, 423 ppm copper, and 2,610 ppm zinc. Three samples of manganese and iron-oxide rich weathered volcanic bedrock (saprolite) were taken from deep road-cuts; two of these (171948 and 171949) returned anomalous gold grades of 0.115 and 0.134 ppm. Also, anomalous copper grades of 998 and 992 ppm were obtained from samples 171947 and 171948.

## MINERAL PROCESSING AND METALLURGICAL TESTING

To the best of the writers' knowledge, no metallurgical sampling or testing have been conducted on materials from the Caya 36 or Piedra Liza properties.

## MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

There are no Reserves or Resources on the Caya 36 or Piedra Liza properties, either in a historical sense or as defined by NI 43-101 or conforming to CIMM standards.

#### **ADJACENT PROPERTIES**

As of December 2006 there is intense exploration underway for epithermal gold-silver mineralization in southern Ecuador. Much of this activity was prompted by the Fruta Del Norte (FDN) gold-silver discovery made by Aurelian Resources Inc. in the first quarter of 2006. The FDN epithermal gold-silver deposit is located in the Cordillera del Cóndor, 30 km east-northeast of Yanzatza and the Midasmine Piedra Liza property.

In a News Release dated February 17, 2006, Aurelian announced that it had commenced drilling on its Fruta Del Norte epithermal gold-silver target. On April 5, 2006 Aurelian announced that it had intersected 237 metres averaging 4.14 g/t gold, and 60 metres averaging 3.42 g/t gold in two of the first six drill holes at FDN (holes CP-06-51 and CP-06-52). Drill results released by Aurelian since April 2006 include 255 metres grading 12.55 g/t gold in hole CP-06-58 (Aurelian News Release Dated June 21, 2006), and 260.45 metres at 6.59 g/t gold and 248.6 metres at 3.09 g/t gold in holes CP-06-83 and CP-06-85 (Aurelian News Release Dated December 15, 2006). Aurelian reports that it expects to complete a NI 43-101 compliant mineral resource estimate for the FDN deposit by the end of the second quarter of 2007 (Aurelian News Release Dated December 5, 2006).

Except for road-building by Aurelian, no evidence of third-party exploration was noted by OreQuest in the Piedra Liza area during its November 25-26<sup>th</sup> visit. However, the Yanzatza area is potentially a very active district and there may very well be exploration activities going on in this area that are not in the public record.



Exploration and development activity adjacent to the Caya 36 property is dominated by EcuaCorriente S.A. as it prepares its Mirador and Mirador Norte Cu-Au deposits for production.

In its report titled "Technical Report Update on the Copper, Gold and Silver Resources and Pit Optimizations, Mirador Project, Ecuador", dated May 18, 2006, Mine Development Associates ("MDA") reported Measured and Indicated Mineral Resources for the Mirador Deposit of 437,670,000 tonnes grading 0.61% Cu, 190 ppb gold, and 1.5 ppm silver, at a 0.40% Cu cutoff grade. Inferred Mineral Resources, also at a 0.40% Cu cutoff, were stated as 235,400,000 tonnes grading 0.52% Cu, 170 ppb gold, and 1.3 ppm silver.

In its Technical Report published on December 15, 2006, MDA reported a resource estimate for the Mirador Norte Deposit, located three kilometres to the northwest of the Mirador Deposit. MDA reported Indicated resources of 171,410,000 tonnes grading 0.51% Cu and 89 ppb gold at a 0.40% Cu cutoff grade, and Inferred resources of 44,820,000 tonnes grading 0.51% Cu and 68 ppb Au, also at a 0.40% Cu cutoff (MDA, 2006b).

## OTHER RELEVANT DATA AND INFORMATION

There are no other relevant data or information of material significance to report.

## INTERPRETATION AND CONCLUSIONS

The Midasmine Caya 36 and Piedra Liza mining concessions are exploration properties of merit. The exploration events of 2006, particularly Aurelian Resources' discovery of an important new epithermal gold-silver deposit in what is essentially a "greenfields" camp, demonstrate that this part of Ecuador could become an important new source of precious metals.

Historically, the Caya 36 property has been explored for Cu-Mo-Au porphyry deposits similar to the Corriente's Mirador, Mirador Norte, Panantza and San Carlos deposits. These are very large deposits with alteration and geochemical "footprints" measuring square kilometres in area. The reconnaissance exploration at Caya 36 involved the collection of widely-spaced panned concentrate stream samples, soil geochemical samples along the ridge crests, and non-systematic rock sampling. Exploration for precious metals requires a more detailed approach, because of the relatively small size of most low and intermediate-sulphidation precious metal deposits.

It is also true that exploration of the Caya 36 property focussed mainly on a search for younger intrusive phases of the Zamora Batholith and largely neglected the Misahuallí volcanic and volcanosedimentary rocks in the western part of the property. Misahuallí rocks host the FDN epithermal gold-silver deposit, located 15 km southwest of Caya 36 (Sillitoe, 2006).

The dominant mapped structure on the Caya 36 property is the Chancho fault zone, which lies within the Zamora Batholith adjacent to the contact with the Misahuallí rocks to the east. The Chancho Cu-Mo-Au porphyry prospect, in the northwestern corner of the Caya 36 property, is hosted by a fine to medium-grained mineralized granophyric dyke (the "Chancho Diorite") that was emplaced in the

Chancho fault zone. The low-grade Chancho Cu-Mo-Au porphyry mineralization is open to the south; epithermal gold-silver mineralization may also occur in Zamora or Misahuallí rocks within or adjacent to the Chancho fault zone, parallel splays, or in the interpreted intersecting faults (Figure 6).

The Piedra Liza property was acquired as a precious metals prospect, and exploration there has focused on precious metals from the outset. Nonetheless, the earlier reconnaissance exploration at Piedra Liza was conducted in much the same manner as the porphyry exploration in the Mirador area, using widely-spaced panned concentrate stream samples, soil geochemical samples along the ridge crests, and non-systematic rock sampling. As the more recent EcuaCorriente exploration programs have shown, a more detailed, prospecting-based exploration strategy will yield better results.

#### RECOMMENDATIONS

#### Caya 36 Property:

Large parts of the Caya 36 property have not been mapped or sampled. This is partly due to the lack of access to the southern and eastern sections. In order to expedite exploration in these areas, two strategies could be considered:

- The military road that leads from Tundayme village to the Destacamento Mirador Cóndor military camp traverses the central part of the Caya 36 property. The road has fallen into disrepair, but with permission from the Government and military authorities, it could be reopened to provide access for light trucks. Necessary repairs include rebuilding one small bridge and bulldozing or excavating a rough roadway through slide debris in at least five locations. An Environmental Impact Statement might be required for this work.
- Alternatively, or in conjunction with road repairs, an exploration base camp could be built at a central location adjacent to the military road; if the road remains closed to truck traffic, the camp would be serviced by pack animals or off-road vehicles (ATVs) and motorcycles.

The cost of road repairs and maintenance for one year is estimated to be approximately \$40,000, and camp construction and maintenance may cost \$20,000.

Once the access road is open or a base camp is operating, the west half of the property (west of 786,000 E) should be explored. No Environmental Impact Statement should be required for this work, but there may be more stringent rules in force in the Bosque Protector forest reserve, in the southern half of the property. The primary targets are epithermal and skarn-hosted gold-silver mineralization, which have much smaller and more subtle "footprints" than the Cu-Mo porphyry mineralization sought in previous campaigns:

• Evaluate the geological and geochemical data from previous Billiton and EcuaCorriente exploration campaigns conducted in the northwestern quadrant of the property (783000 E to 785500 E, from 9597500N to 9601000N). Conduct detailed prospecting and rock sampling in anomalous stream drainages;



- Construct a network of trails leading into the west-draining stream valleys in the southwestern quadrant of the property from appropriate points along the road;
- Conduct reconnaissance geological and prospecting surveys in the southwestern quadrant. The objective of these preliminary surveys is to assess the geology and prioritize favourable areas for more detailed exploration (Misahuallí Formation volcanic terrane, and in particular the extension of the Chancho fault zone south of the Chancho Cu-Mo-Au porphyry prospect);
- Carry out detailed rock sampling and prospecting, and rough mapping traverses in high priority target areas;
- Compile all the data from the western half of the property, and identify areas worthy of follow-up rock and soil geochemical surveys and IP-magnetic surveys.

The estimated cost for the geological, geochemical and geophysical work at Caya 36 is estimated to be approximately \$120,000.

# **Piedra Liza Property:**

Piedra Liza was staked as a gold-silver prospect. The reconnaissance-scale and preliminary followup exploration conducted to date are appropriate and well-done. As at Caya 36, the primary targets are epithermal and skarn-hosted gold-silver mineralization; evidence of epithermal precious metal mineralization has already been discovered. The following work is recommended:

- Conduct detailed prospecting and rock sampling in anomalous stream drainages. A log of mineralized float, including silicified rock and quartz vein fragments should be kept, and all altered outcrops should be chip-sampled;
- Assess the possibility of float prospecting along trails and in the cleared lands on the ridges on the east side of the property;
- Compile all geological and rock geochemical data and correlate with existing soil geochemical data to prioritize areas for detailed soil sampling;
- Carry out detailed soil geochemical sampling (50-m sample spacing) in the selected highpriority areas and over the known gold, silver, arsenic and copper soil geochemical anomalies;
- Conduct detailed IP and magnetic surveys over anomalies confirmed by the detailed soil geochemical surveys.

An Environmental Impact Statement (EIS) will be required for the recommended soil geochemical sampling and geophysical surveys. The estimated cost for the geological, geochemical and geophysical work and the EIS permitting at Piedra Liza is estimated to be approximately \$110,000.

Dated at Vancouver, British Columbia, this 20th day of December, 2006.

<u>/s/"George Cavey"</u> George Cavey, P.Geo. <u>/s/"George W. G. Sivertz"</u> George W. G Sivertz, P. Geo.

# **CERTIFICATE OF QUALIFICATIONS**

- I, George Cavey, of 306-595 Howe Street, Vancouver British Columbia, hereby certify:
- 1. I am a graduate of the University of British Columbia (1976) and hold a B.Sc. degree in geology.
- 2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of #306-595 Howe Street, Vancouver, British Columbia.
- 3. I have been employed in my profession by various mining companies since graduation, and I have been with OreQuest Consultants Ltd. since 1982.
- 4. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, and have been registered since 1992. I am also a member of the Association of Geoscientists of Ontario and have been a member since 1999.
- 5. I have read the definitions of "Qualified Person" set out in 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 fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 6. I am responsible for or was involved with the review and editing of this Technical Report, and with the preparation of the Summary, Interpretation and Conclusions, and Recommendations sections of this Report, titled "*Technical Report on the Caya 36 and Piedra Liza Properties, Zamora-Chinchipe Province, Ecuador*" for Corriente Resources Inc., December 20, 2006.
- 7. I have not visited the Caya 36 or Piedra Liza properties in Ecuador.
- 8. I have no direct involvement with, and do not expect to have any direct involvement with Corriente Resources Inc., or any of its subsidiary companies located in Canada, Ecuador or elsewhere.
- 9. To the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make this Technical Report not misleading.
- 10. I am independent of Corriente Resources Inc. applying all the tests in Section 1.4 of NI 43-101 and Section 3.5 of NI43-101 Companion Policy.
- 11. I have read NI 43-101 and NI 43-101F1 and this Technical Report has been prepared in compliance with that instrument and form.
- 12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by those parties for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.

<u>/s/"George Cavey"</u>

George Cavey, P.Geo. DATED at Vancouver, British Columbia, this 20th day of December, 2006.

## **CERTIFICATE OF QUALIFICATIONS**

I, George Sivertz, residing at 11708-246<sup>th</sup> Street, Maple Ridge, BC, V4R 1K8, do hereby certify that:

1. I am currently employed as Senior Geologist by:

OreQuest Consultants Ltd. #306 – 595 Howe Street Vancouver BC, Canada V6C 2T5

- 2. I hold a B.Sc. (Honours) degree in Geological Science granted by the University of British Columbia in 1976.
- 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 am a professional geologist and have practiced my profession on a full time basis in Canada, the USA, Europe, Asia, and South America since 1978.
- 5. I have read the definitions of "Qualified Person" set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 6. I am responsible for or was involved with the preparation of all parts of this Technical Report titled *"Technical Report on the Caya 36 and Piedra Liza Properties, Zamora-Chinchipe Province, Ecuador"* for Corriente Resources Inc., December 20, 2006.
- 7. I visited the Piedra Liza property on October 25-26th, 2006, and the Caya 36 property on October 30, 2006.
- 8. I have no direct involvement with, and do not expect to have any direct involvement with Corriente Resources Inc., or any of its subsidiary companies located in Canada, Ecuador or elsewhere.
- 9. As of the date of this certificate, to the best of my knowledge and belief, the parts of the Sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to ensure that the Technical Report is not misleading.
- 10. I am independent of Corriente Resources Inc., applying all the tests in Section 1.4 of NI 43-101 and Section 3.5 of NI 43-101 Companion Policy.
- 11. I have read NI 43-101 and NI 43-101F1 and this Technical Report has been prepared in compliance with that instrument and form.
- 12. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication of the Technical Report by those parties, including electronic publication of the Technical Report in the public company files in websites accessible by the public.

<u>/s/"George Sivertz"</u>

George Sivertz, P.Geo.

Dated at Vancouver, British Columbia, this 20th day of December, 2006.

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