NI 43-101 Technical Report on the Lost Cities – Cutucu Exploration Project, Province of Morona-Santiago, Ecuador

Centered at Approximately

Latitude 2° 37' 11” South by Longitude 78° 2' 55” west

Report prepared for

Report prepared by

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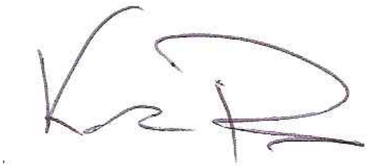
Original Document signed by

"Karl John Roa" (signed)
Karl John Roa, EurGeol



Cover image, The Macuma River area, northern Cordillera de Cutucú

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Glossary of terms

Alluvium	Unconsolidated deposits of silt, sand, gravel-sized particles formed due to river action
Amygdaloidal	Gas bubbles in volcanic rocks infilled with minerals such as calcite
Andesite	An intermediate volcanic rock composed of between 45 and 40% silica (SiO_2)
Antiform	A topographic feature comprising sedimentary layers in a convex upward formation
Back-arc	A submarine basin that forms behind a volcanic island arc
Calc-alkaline	A volcanic rock type typical of subduction related plate tectonics
Colluvium	Talus and detritus that accumulates at the base of a slope
Covellite	A copper sulphide mineral with the chemical formula CuS
Craton	A continent-bound rigid portion of the Earth's early crust
Cretaceous	The period of geological time approximately between 145 and 65 million years ago
Dacite	A volcanic rock composed of the minerals, plagioclase, potassium feldspar with biotite, hornblende and quartz; the fine grained equivalent of granodiorite
Epithermal	Near-surface hydrothermal phenomena and the metallic mineralization that results.
Glauconite	A light green iron-potassium mica, with very low weathering resistance.
Hypogene	Primary minerals formed at depth below the Earth's surface
Jurassic	The period of geological time approximately between 201 and 145 million years ago
Palaeozoic	The era of geological time between approximately 541 to 252 million years ago
Pliocene	The epoch of geological times extending between 5.3 to 2.6 million years ago
Porphyry	A textural characteristic of certain volcanic and intrusive rocks wherein large crystals of the mineral plagioclase are common.
Potassic	A mineralogical assemblage of potassium-feldspar, biotite and sericite that develops in the central part of porphyry copper systems
Quaternary	The period of geological time succeeding the Pliocene between 2.6 and 0.005 Ma
Rift	A laterally extensive rupture in the Earth's crust formed due to extensional tectonic forces
Regolith	A layer of loose weathered rock and soil covering bedrock
Skarn	Calcium-bearing silicate rocks formed by contact between the intrusion of magma and carbonaceous rocks
Tholeiite	(Tholeiitic basalt) A reduced igneous rock dominated by the minerals clinopyroxene plus plagioclase, with minor iron and titanium oxides
Transpression	A lateral or strike-slip fault deformation with simultaneous shortening perpendicular to the fault plane

Abbreviations

AMSL	above mean sea level
Ag	silver
Au	gold
As	arsenic
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
CAD$	Canadian Dollars
CIMM	Canadian Institute of Mining and Metallurgy
CPI	Consumer Price Index
Cu	copper
EurGEOL	European Federation of Geologists
FDN	Fruta del Norte
GIS	Geographic Information Systems
g/t	grams per tonne
Ha	hectare
Hg	mercury
km	kilometres
ICP-MS	Inductively Coupled Plasma – Mass Spectrometry
ICP-AES	Inductively Coupled Plasma – Atomic Emission Spectrometry
IPA	Investment Protection Agreement
lbs	pounds
Landsat	Earth orbit imaging platform controlled by NASA
LIDAR	Light Detection and Ranging
M	million
m	meters
mE	meters east in the UTM coordinate system
mN	meters north in the UTM coordinate system
Ma	million years
Mn	manganese
Mt	million tons
Mo	molybdenum
Moz	million ounces
MW	megawatt
NSR	net smelter royalty
oz	ounces
ppm	parts per million
PSAD	Provisional South American Datum
S.A.	Sociedad Anónimo (corporation or limited company)
SAR	Synthetic Aperture Radar
SAZ	Sub-Andean Zone
Sb	antimony
tpd	tonnes per day
USD	United States Dollars
UTM	Universal Transverse Mercator

1 Summary

Ecuasolidus S.A. ("ESA") is an Ecuador-based private mineral exploration company, incorporated in Quito on March 16th 2015 and majority-owned by Dr. Keith Barron. ESA is focused on grassroots mineral exploration activities in Ecuador. In March 2016 the Company applied for 42 mineral exploration concessions following an eight-year freeze on the issuance of exploration licenses in Ecuador. Exclusive exploration licenses were granted on December 27th and 28th, 2016 for the 42 tenements that comprise the "Property", herein named the "Lost Cities – Cutucu Project" or the "Project". The exploration concessions were registered between February 9th and 16th, 2017. On March 2nd, 2017, ESA announced that it had entered into a definitive purchase and sale agreement with Aurania Resources Limited ("Aurania"), under which Aurania will acquire ESA. The terms of the acquisition are subject to approval by the TSX Venture Exchange, among other conditions such as raising sufficient funds for the recommended exploration program. At the request of Aurania, Karl John Roa, EurGeol ("the Author"), carried out an independent review and preliminary field investigation of the Property in November 2015.

The area of mineral concessions that constitute the Property total 207,764Ha or 2,077.64km^2 and cover the core of the Cordillera de Cutucú. This isolated mountain range forms the foothills of the main Andes mountain chain, located between 2° and 3° south of the equator in southeastern Ecuador. With extreme topography, rising from a few hundred metres above mean sea level ("amsl") in the Amazon basin, and peaking at 2,460m, the Cordillera de Cutucú is sparsely inhabited and difficult to access. Modern mineral exploration techniques, to the Author's knowledge, have not been applied in the Project area due to prior restrictions on mineral exploration in the Cordillera de Cutucú. However, recent amendments to the mining law in Ecuador have opened the area to exploration for the first time in decades.

There are two compelling factors that rank the Lost Cities - Cutucu Project as prime mineral exploration tenure:

1. The Cordillera de Cutucú forms a geological uplift similar to the adjacent Cordillera del Cóndor that lies immediately to the south. The two uplifts are separated only by a geographical feature – the Santiago River. Mineral exploration that started south of the river in the 1990's in the Cordillera del Cóndor has since identified substantial gold, silver and copper resources comprising a known metallogenic district. This mineral endowment is exemplified by the Fruta del Norte ("FDN") Deposit that is reported to contain measured and indicated resources of 7.4Moz of gold and 9.9Moz of silver (24 Mt at a grade of 9.6 g/t gold and 12.9g/t silver). The largest known copper deposit in the Cordillera del Cóndor is San Carlos, reported to contain an inferred resource of 8.5 billion pounds ("Blbs") of copper in 657Mt of mineralized porphyry at a grade of 0.59% copper. The resource data for FDN and San Carlos have been obtained from information provided by third party companies and the Author has not undertaken an independent verification of the information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area. However, the geological formations and structural geological framework that hosts the extensive mineral deposits in the Cordillera del Cóndor plausibly extend into the Cordillera de Cutucú; hence its prospectivity for high quality mineral deposits such as the epithermal gold-silver, skarn gold and copper-gold as well as copper-molybdenum-gold porphyry deposits that occur in the Cordillera del Cóndor. Since the discovery of this substantial mineral inventory in the Cordillera del Cóndor, the term Northern Andean Jurassic Metallogenic Belt has been used to describe mineral deposits hosted by this particular Jurassic-aged belt that extends from 3° North in Colombia to 5° South in Ecuador. The Cordillera de Cutucú is strategically located within this belt and thus warrants a concerted grassroots mineral exploration program.

2. Extensive historical research has been conducted over the last decade by professional archivists and specialists on Hispanic colonial era maps of northern South America. The research implies that two of seven "cities", namely Sevilla del Oro and Logroño de los Caballeros, are located in the Cordillera de Cutucú. Both were founded by the Spanish Conquistadores, owing to extensive local gold production in the late 16th Century. Five of the cities that appear on contemporary maps have been found; the last being Nambija - the extremely rich gold deposit that was rediscovered in 1981 in the Cordillera del Cóndor. These "cities" comprised wooden forts with thatched dwellings which, once abandoned, would have been rapidly reclaimed by the dense rainforest. Over a hundred insightful historic documents pertaining to the colonial Spanish enterprise in Ecuador were found in various libraries in Ecuador, as well as the Archivo Historico Arzobispal, Lima, the Riva Agüero Institute, Lima,

the Biblioteca Nacional de España, Madrid, the Rare Book Section of the New York Public Library, the British Museum Library, as well as the Manuscript Section of the Apostolic Library in the Vatican and the Archivo de Las Indias in Seville. There is thus a compendium of both published and unpublished research that provides descriptions and other information about these two "cities". Some of the preserved manuscripts specifically refer to the Quinto royalty or "King's fifth", paid on gold production from the two aforementioned cities, now lost in the Cordillera de Cutucú. In addition, documents pertaining to the governor of the territory, Juan de Alderete, state that in its first year, almost 30,000 pesos (approximately 41,000oz) of gold were produced at Logroño.

The "Lost Cities – Cutucú Exploration Project" ("Project"), as the 42 contiguous concessions are named, represents an opportunity to apply modern mineral exploration techniques to an area that lies along trend with the Cordillera del Cóndor, along which significant mineral resources and reserves, particularly gold, copper and silver, are currently under development by third party mining companies.

It is thus recommended that a grassroots mineral exploration program be carried out on the Property using proven empirical exploration methods similar to those used in the adjacent Cordillera del Cóndor by Aurelian Resources Inc. ("Aurelian") in its discovery of the FDN gold-silver epithermal deposit, and by Gencor Ltd. ("Gencor") who discovered an extensive porphyry copper belt. A grassroots exploration program is outlined, with a total estimated budget of CAD$ 3,270,000, divided in two phases as follows:

Phase 1 – budget CAD$ 1,926,000:

- Remote sensing: interpretation of regional structure and stratigraphy from digital terrain and satellite imagery.
- Acquisition of Radarsat imagery over the license areas.
- A heliborne magnetic and radiometric survey is recommended over the entire Property at 400m line spacing, aimed at the identification of stratigraphic sequences, geological structures, the magnetic cores of porphyry copper centres and the magnetite-destructive alteration zones that could be related to various types of mineral deposit. Ancillary radiometric data would be used to help define potassic and sericitic alteration zones. Financial contingency is included so that compelling aeromagnetic anomalies can be in-filled at a 200m flight-line spacing to provide additional detail on specific targets.
- Regional stream sediment sampling would be undertaken with the aim of identifying metal anomalies associated with zones of mineralization. This first-pass sampling strategy would encompass a large area beneath rainforest cover, extracting the -80 mesh (<0.177mm) fraction from stream beds. Phase 1 would encompass sampling 8 of the principal drainage basins and would require the collection of approximately 700 samples at intervals of approximately 400m along the principal drainages. This program is expected to take approximately eight months to complete.
- Rock chip, channel and float sampling would also be undertaken where mineralization and hydrothermally altered zones are detected during the reconnaissance phase.
- Anomalous targets would be followed-up using the approach described below.

Phase 2 – budget CAD$ 1,344,000:

- Anomalies identified by airborne geophysics, remote sensing studies and the stream sediment sampling program undertaken in Phase 1 would be ranked for follow-up exploration activities.
- Stream sediment sampling of 54 secondary river basins would involve the collection of approximately 1,500 drainage samples, at a spacing of approximately 400m between samples. The objective of this secondary phase of exploration is to identify the less conspicuous mineralization that is not exposed over such large areas as that targeted in Phase 1. More subtle stream sediment anomalies may thus be identified from mineralization that is more deeply buried, or where only a small portion of the mineralized zone is exposed at surface. This phase is expected to take approximately 11 months to complete. However, compelling targets would be followed-up immediately upon their discovery, while other exploration teams would continue with the routine stream sediment sampling program.

Follow-up exploration would entail systematic ridge-and-spur sample traverses, or grid soil sampling, geological mapping, alteration studies, systematic channel and chip sampling, trenching (where deemed necessary), and ultimately scout-drilling. This work effort would form the basis of an ordered ranking of exploration targets for further drilling and/or geophysical surveys.

These critical strategic aspects will be included in a future budget, to include financial contingency beyond the two-phase reconnaissance budget outlined above.

2 Introduction

2.1 Issuer

This Technical Report ("Report") has been prepared in accordance with the guidelines of National Instrument 43-101 Standards of Disclosure for Mineral Projects, form 43-101F1 and companion policy 43-101CP of the Canadian Securities Administrators. The Report was prepared for Aurania by Karl John Roa ("the Author"), a Qualified Person ("QP") accredited with the European Federation of Geologists (EurGEOL). The Author is independent of both Aurania and ESA.

2.2 Terms of Reference

The Author was requested to prepare an initial geological and historical overview of the Property in southeastern Ecuador (Fig. 1) in following the possibility that the Cordillera de Cutucú, in which the Property is located, forms a geological and tectonic extension of the adjacent Cordillera del Cóndor that has an extensive gold, silver and copper resource endowment. The Author was tasked with providing an opinion as to whether the Lost Cities – Cutucu Project merits exploration for mineral deposits of similar style to those that have been recently discovered in the adjacent Cordillera del Cóndor. Contingent on his conclusion of the prospectivity of the Project, the Author was tasked with recommending an appropriate exploration program and budget.

The issuer, Aurania, intends to use the Report in support of disclosure and filing requirements with the Canadian Securities Regulators in relation to the acquisition of ESA pursuant to its announcement on March 2nd, 2017.

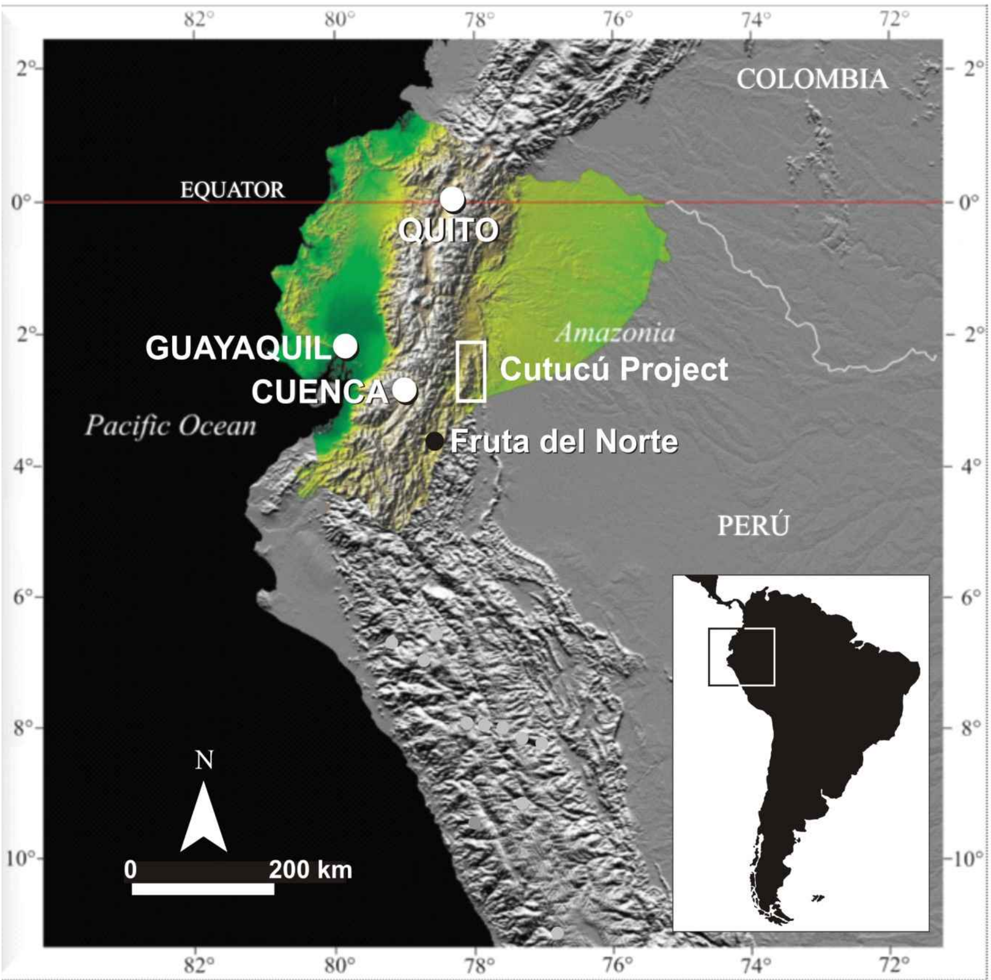

Figure 1. Physiographic map of Ecuador showing the location of the Lost Cities - Cutucu Project relative to the Fruta del Norte gold-silver deposit.

2.3 Sources of Information

The primary sources of information for this Report are published geological interpretations of the Cordillera de Cutucú supplemented by a compilation of regional and project-scale geological information, particularly from Aurelian Resources Inc. (e.g. Roa, 2008, 2010a,b; Roa et al., 2014; Leary et al., 2016) and from geologists formerly of Corriente Resources (J. Drobe and D. Lindsay) pertaining to the adjacent Cordillera del Cóndor. The Author undertook a nine-day preliminary geological field investigation in the Project area between November 18th and 26th, 2015. All sources of technical and historical information used to support this study are listed in the Section 19.

2.4 Limitations

While every effort has been made to ensure the integrity and reliability of the geoscientific, historic and ethnographic information contained in this Report, the Author reserves the right, but will not be obligated, to revise the Report's contents should additional information become available subsequent to its Effective Date.

To the Author's knowledge, no information has been withheld that would materially affect the conclusions made in this Report.

The Author assumes no responsibility for the actions of Aurania or its representatives in their distribution of this Report. Any other use of this Report by any third party is at that party's sole risk.

3 Reliance on Other Experts

The Author of this Technical Report is relying on a legal opinion of Tobar ZVS Spingarn, legal counsel in Quito, Ecuador, entitled "Ref: Legal Opinion on Ecuasolidus S.A. and its Mining Properties", and dated April 18, 2017, as to the validity and status of the Properties (Section 4.2). The Author understands that Tobar ZVS Spingarn is a legal firm that is qualified to opine on the legal status on the Properties. In addition, the Author has confirmed that the official Ecuadorian government website http://geo.controlminero.gob.ec:1026/geo_visor/ shows the Properties to be duly registered to ESA.

4 Property Description and Location

4.1 Area and Location

The Lost Cities – Cutucu Project, located in the Cordillera de Cutucú, consists of a contiguous block of 42 mineral exploration licenses extending north to south for 92km, and east to west for over 45km at their widest extent (Fig. 2). Each license encompasses an area of between 4,869Ha and 4,950Ha. In total, the Properties have an area of 207,764Ha or 2,077.64km^2.

The Properties are located approximately 376 road kilometres (260 line kilometres) to the south-southeast of the capital, Quito (population 1.7 million), and 140 line kilometres east-northeast of Ecuador's third largest city – Cuenca (population 332,000). The exploration licences lie within the cantons of Morona, Sucúa, Logroño, Santiago and Tiwintza in the province of Morona-Santiago. The status and issue date of each mineral exploration licence comprising the Properties is listed in Table 1. The property boundaries lie between grid lines 803,100mE to 853,900mE, and 9,755,500mN to 9,665,300mN, using the local Provisional South American Datum ("PSAD") 56 within UTM zone 17S, The centre of the Properties is at approximately 828,479mE and 9,710,415mN (Zone 17S), corresponding with latitudes -2° 37' 11" south and -78° 2' 55" west.

4.2 Mineral Tenure and Ownership

A legal opinion, on which the Author is dependant, as described in Section 3, confirms that titles to each of the exploration licenses constituting the Project are registered to ESA, and are in good standing.

The contiguous mineral exploration licence areas were applied for on March 1st, 2016 with the boundary corners of each concession defined in UTM grid coordinates (Table 1). Physical pegging of the license boundaries is not required by law. The mineral exploration license areas were granted on December 27th and 28th, 2016 by the Ministry of Non-renewable Natural Resources of Ecuador in Quito, and were registered to ESA between February 9th and 16th, 2017.

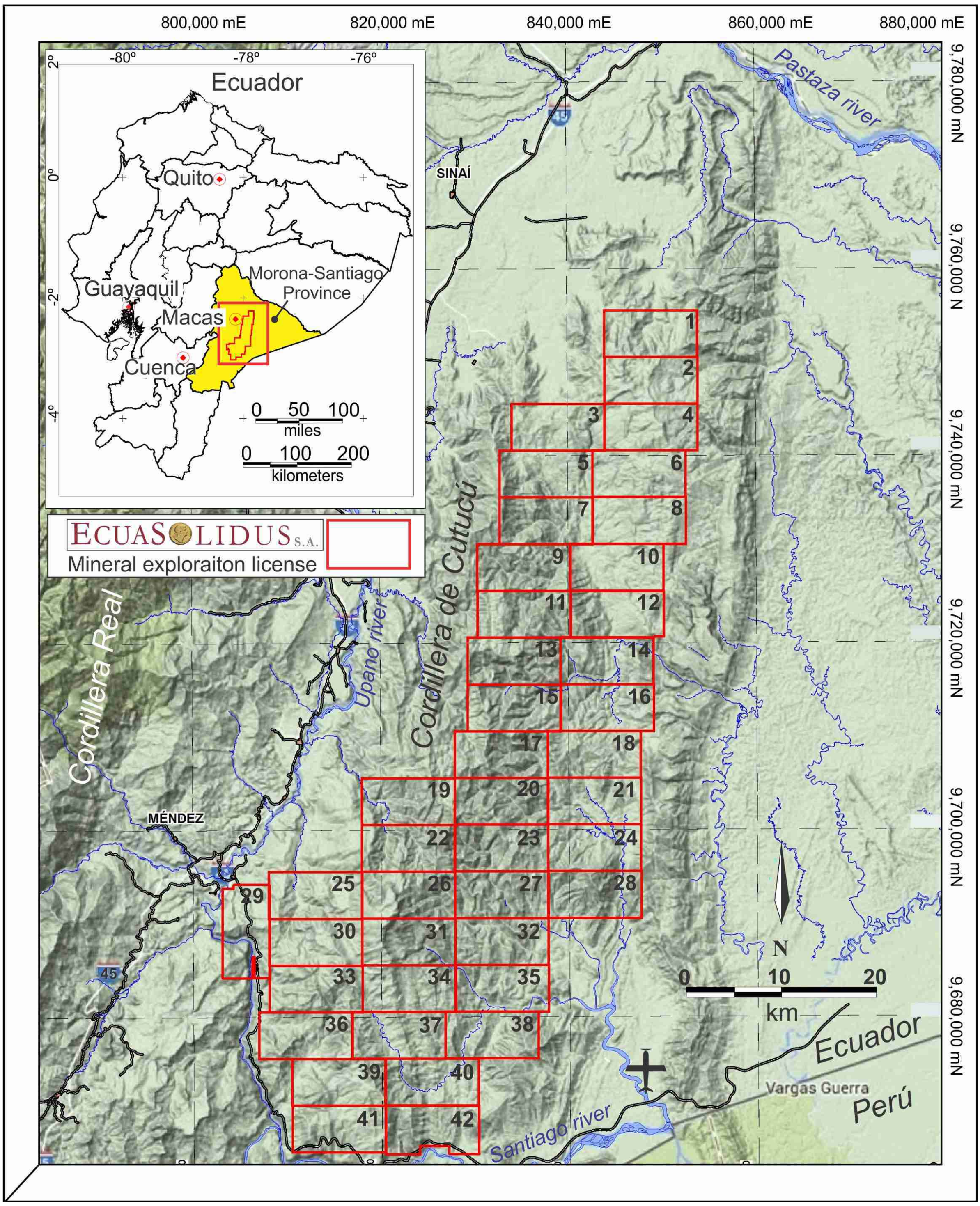

Figure 2. Shaded relief map of the Cordillera de Cutucú showing the location of the mineral exploration licenses that constitute the Lost Cities – Cutucu Project.

Table 1. Names and coordinates of the Company's mineral exploration license applications (the Properties), located in the Cordillera de Cutucú. UTM coordinates are in PSAD56 zone 17S.

N°	Permit Name	Point	X-Y (PSAD 56-Zone 17S)
1	Tacitus	P.P.	844000-9755500
		1	853900-9755500
		2	853900-9750500
		3	844000-9750500
2	Septimius Severus	P.P.	844000-9750500
		1	853900-9750500
		2	853900-9745500
		3	844000-9745500
3	Quintillus	P.P.	834100-9745500
		1	844000-9745500
		2	844000-9740500
		3	834100-9740500
4	Pupienus	P.P.	844000-9745500
		1	853900-9745500
		2	853900-9740500
		3	844000-9740500
5	Plautilla	P.P.	832800-9740500
		1	842700-9740500
		2	842700-9735500
		3	832800-9735500
6	Philip	P.P.	842700-9740500
		1	852600-9740500
		2	852600-9735500
		3	842700-9735500
7	Paulina	P.P.	832800-9735500
		1	842700-9735500
		2	842700-9730500
		3	832800-9730500
8	Otho	P.P.	842700-9735500
		1	852600-9735500
		2	852600-9730500
		3	842700-9730500
9	Nerva	P.P.	830400-9730500
		1	840300-9730500
		2	840300-9725500
		3	830400-9725500
10	Nero	P.P.	840300-9730500
		1	850200-9730500
		2	850200-9725500
		3	840300-9725500
11	Maxentius	P.P.	830400-9725500
		1	840300-9725500
		2	840300-9720500
		3	830400-9720500
12	Marcus Aurelius	P.P.	840300-9725500
		1	850200-9725500
		2	850200-9720600
		3	849100-9720600
		4	849100-9720500
		5	840300-9720500
13	Magnus Maximus	P.P.	829300-9720500
		1	839200-9720500
		2	839200-9715500
		3	829300-9715500
14	Macrinus	P.P.	839200-9720500
		1	849100-9720500
		2	849100-9715500
		3	839200-9715500
15	Licinius	P.P.	829300-9715500
		1	839200-9715500
		2	839200-9710500
		3	829300-9710500
16	Libius Severus	P.P.	839200-9715500
		1	849100-9715500
		2	849100-9710500
		3	839200-9710500
17	Julia	P.P.	827900-9710500
		1	837800-9710500
		2	837800-9705500
		3	827900-9705500

N°	Permit Name	Point	X-Y (PSAD 56-Zone 17S)
19	Honorius	P.P.	818000-9705500
		1	827900-9705500
		2	827900-9700500
		3	818000-9700500
20	Herenius Etruscus	P.P.	827900-9705500
		1	837800-9705500
		2	837800-9700500
		3	827900-9700500
21	Helena	P.P.	837800-9705500
		1	847700-9705500
		2	847700-9700500
		3	837800-9700500
22	Gordian	P.P.	818000-9700500
		1	827900-9700500
		2	827900-9695500
		3	818000-9695500
23	Glycerius	P.P.	827900-9700500
		1	837800-9700500
		2	837800-9695500
		3	827900-9695500
24	Geta	P.P.	837800-9700500
		1	847700-9700500
		2	847700-9695500
		3	837800-9695500
25	Galerus	P.P.	808100-9695500
		1	818000-9695500
		2	818000-9690500
		3	808100-9690500
26	Galba	P.P.	818000-9695500
		1	827900-9695500
		2	827900-9690500
		3	818000-9690500
27	Florian	P.P.	827900-9695500
		1	837800-9695500
		2	837800-9690500
		3	827900-9690500
28	Elagabalus	P.P.	837800-9695500
		1	847700-9695500
		2	847700-9690500
		3	837800-9690500
29	Hostilian	P.P.	803100-9693800
		1	804300-9693800
		2	804300-9694200
		3	808100-9694200
		4	808100-9684200
		5	806500-9684200
		6	806500-9686500
		7	806300-9686500
		8	806300-9684200
		9	803100-9684200
30	Diocletian	P.P.	808100-9690500
		1	818000-9690500
		2	818000-9685500
		3	808100-9685500
31	Didius Julianus	P.P.	818000-9690500
		1	827900-9690500
		2	827900-9685500
		3	818000-9685500
32	Diadumenian	P.P.	827900-9690500
		1	837800-9690500
		2	837800-9685500
		3	827900-9685500
33	Constans	P.P.	808100-9685500
		1	818000-9685500
		2	818000-9680500
		3	808100-9680500
34	Commodus	P.P.	818000-9685500
		1	827900-9685500
		2	827900-9680500
		3	818000-9680500

N°	Permit Name	Point	X-Y (PSAD 56-Zone 17S)
36	Carinus	P.P.	807000-9680500
		1	816900-9680500
		2	816900-9675500
		3	807000-9675500
37	Caracalla	P.P.	816900-9680500
		1	826800-9680500
		2	826800-9675500
		3	816900-9675500
38	Caligula	P.P.	826800-9680500
		1	836700-9680500
		2	836700-9675500
		3	826800-9675500
39	Aurelian	P.P.	810500-9675500
		1	820400-9675500
		2	820400-9670500
		3	810500-9670500

N°	Permit Name	Point	X-Y (PSAD 56-Zone 17S)
40	Augustus	P.P.	820400-9675500
		1	830300-9675500
		2	830300-9670500
		3	820400-9670500
41	Anthemius	P.P.	810500-9670500
		1	820400-9670500
		2	820400-9665500
		3	810500-9665500
42	Annia	P.P.	820400-9670500
		1	830300-9670500
		2	830300-9665300
		3	827100-9665300
		4	827100-9666200
		5	824000-9666200
		6	824000-9665300
		7	820400-9665300

4.3 Obligations for the Maintenance of Exploration Concessions

4.3.1 Term

Under Ecuadorian law, the initial or reconnaissance-stage of mineral exploration can be conducted for a maximum term of four years, whereas the ensuing phase of advanced exploration can extend for an additional term of four years. A subsequent economic evaluation phase lasts for two years, but is extendable for an additional two years. During the economic evaluation phase, the concession-holder is required to apply for the commencement of the exploitation phase of the project. Within six months of beginning the exploitation phase, the concession-holder is required to sign a mining exploitation contract with the Ecuadorian government, and negotiations regarding that contract may begin during the economic evaluation phase.

Once the initial exploration phase has been completed, and prior to initiating the advanced exploration phase, Ecuadorian mining law provides for a mandatory relinquishment of a part of the total area of the concession.

If a concession-holder wishes to transfer an existing concession to a third party, authorisation from the mining authorities must first be obtained.

In Ecuador, a mining concession confers the exclusive right to explore, exploit, process and sell any metallic minerals found within the concession. A mining concession is granted for up to 25 years and may be renewed for an additional 25-year period.

4.3.2 Fees

An annual exploration concession fee per hectare is required to be paid to the State by March 31st each year in order to maintain a concession in good standing. The fee is based on a percentage of the minimum mining wage that is set by the State, and hence the fee fluctuates from year to year. The fee that was required to be paid by March 31st, 2017 was US$9.37 per hectare.

4.3.3 Annual Exploration Expenditure

Under the terms of an exploration license agreement, the Company is required to make exploration expenditures as follows:

- Year 1: US$5 per Ha;
- Year 2: US$5 per Ha;
- Year 3: US$10 per Ha;
- Year 4: US$10 per Ha.

Excess expenditures made on a concession in any one year may be carried over in partial fulfilment of the expenditure obligation for the following year. Annual expenditure and reporting on exploration undertaken on each concession is required to be filed with the Ministry of Mines by March 31st each year.

Exploration concessions can be cancelled should the license-holder misrepresent the stage of the licences' development, by causing an excessive environmental impact, irreparable damage to Ecuadorian cultural heritage, or by the violation of human rights.

4.4 Surface Rights

Ownership of surface rights and the underlying mineral rights are separate articles under the laws and Constitution of Ecuador. Easements can be issued for access, for the construction of camps and for exploration infrastructure. The timeframes of such easements are concurrent with those of the associated mineral concessions.

ESA does not own the surface rights on any of the Properties in the Cordillera de Cutucú.

Owing to its remoteness and inaccessibility, surface rights over large tracts of the Cordillera de Cutucú are unclaimed. The remaining surface rights belong to various indigenous Shuar denominations, or are administered by the Shuar Federation under their respective jurisdictions in Morona-Santiago. The appropriate corporate social responsibility practice is to obtain permission from the surface rights holders for access to explore their land. There is a risk therefore that access will not be immediately forthcoming from all surface rights holders in the Project area, which would necessitate rescheduling components of the work program.

4.5 Legal Access and Permits

Most of the Property lies within the 344,002Ha Kutukú-Shaime Protected Forest area (CARE, 2012; Rivandeira Torres, 2012) shown in Fig. 3. This Protected Forest area was formally declared (Registro Official, Órgano del Gobierno del Ecuador), under official register No. 476, and ministerial resolution No.402, dated July 3rd, 1990.

Ecuador's Protected Forests are natural areas comprising public-, private-, and/or community-owned lands and are created to facilitate the management and protection of river basins and associated resources. Mineral exploration and mining activities may be undertaken in designated protected forests under a more stringent permitting and land management protocol for advanced-stage exploration activities such as trenching and drilling. Due consultation with local stake-holders is also required for exploration work planned in protected forests. As stipulated above, there is a risk that this consultation with local stake-holders may delay access to some parts of the Project, requiring rescheduling of the planned work program.

Exploration in a protected forest area requires that an environmental register ("Registro Ambiental") be obtained from the Ministry of the Environment. In addition, prior to the commencement of any exploration activities within a protected forest area, a basic forestry inventory is required to be undertaken and approved by the Ministry of the Environment.

The reconnaissance level mineral exploration activities proposed for the first two years of the four-year exploration concession granted for the Properties by the Ministry of Mines, do not necessitate an environmental impact assessment. Advanced exploration activities, such as drilling, trenching, and camp infrastructure construction and expansion, would eventually necessitate the acquisition of the requisite environmental permits. Helicopter support would be necessary to reach the highlands and the eastern part of the Project area, and will thus require several strategically located landing sites and fly camps. If deemed necessary, fly-camps will in turn entail the designation and clearing of several <½Ha tracts of vegetation for each landing site. In the event that fly camps are required, the requisite permitting will be sought after consultation with the appropriate government and local authorities, and environmental agencies. In such instances, a species survey would be used to establish an environmental base-line study. Each site would be cleared, and upon decommissioning, rehabilitated with the same ratio of indigenous species as documented in the base-line study.

4.6 Royalties and Windfall Tax

A press release by Aurania dated March 2nd, 2017, stated that a definitive purchase and sale agreement entered into between ESA and Aurania, stipulates a net smelter royalty ("NSR") of 2% and a 2% net sales royalty on non-smelted products, such as aggregate, is payable to Dr. Keith Barron from any future production from the Properties. The definitive purchase and sale agreement, dated February 27th, 2017 between ESA and Aurania has not been reviewed by the Author. The Author is unaware of any option agreements or joint venture terms implicit in the title of the Properties, nor obligations on the land covered by them.

Ecuadorian Mining Law defines a sliding-scale NSR of between 5% and 8%, payable to the State, from large-scale production (>1,000 metric tons per day ("tpd") from underground operations or >2,000 tpd from an open pit mine). The Mining Law stipulates that, within six months of the exploitation phase commencing, the concession-holder is required to sign a mining exploitation agreement with the Ecuadorian government.

The mining exploitation agreement addresses the framework of application of the windfall profit tax of 2009, to each potential mining operation.

An example of a recent mining exploitation agreement is provided by the accord reached in January 2016, between Lundin Gold Inc. and the Government of Ecuador. The agreement includes a 5% NSR, conditional on the advance payment of US$65 million. Most significantly, the amended Mining Law delays the application of the windfall profit tax until the complete investment made in the project is recovered by the mine owner. For FDN this includes the present value of the actual cumulative investment incurred from the signing of their exploitation agreement, until the start of mine production (Lundin Gold, 2016). A windfall tax would apply to FDN in the event that gold prices exceed a base price of US$2,200 per ounce, and the tax would be indexed to monthly inflation as defined by the United States Consumer Price Index.

4.7 Environmental Liabilities

The Author is not aware of any environmental liabilities to which the Property is subject.

4.8 Summary of Ecuadorian Mining Law

Ecuador's Mining Laws have been significantly amended since the 2008 moratorium on mineral exploration and mining activities. The Mining Law, ratified in 2009 and further amended in 2013, and in 2015, defines and regulates the different categories of mineral exploration and development activities, and their fiscal regime. These are summarized herein from Zumárraga and Bustamente (2013) and Wacaster (2015).

There are several phases integral to the Ecuadorian Mining Law, including prospecting, exploration and exploitation, processing and mine closure. The regulatory bodies overseeing mineral development activities are defined as (1) the Ministry of Non-Renewable Natural Resources, (2) the Ministry of the Environment, (3) the Mining Regulatory and Control Agency and (4) the National Geological and Control Agency. A fifth agency, the National Mining Company, has been incorporated to oversee the development of State mining projects and this entity may form partnerships with other entities to advance mining projects.

The status of mineral rights, their owners and commodity types under evaluation by the claimant can be viewed and verified on the government website that summarises mineral exploration and mining tenure in Ecuador – ARCOM – through the following portal:

http://geo.controlminero.gob.ec:1026/geo_visor/

This website provides the status of the Properties, their adjacent third party claims and protected forest area boundaries.

The Mining Law distinguishes between small-scale operations that are limited to process <300 metric tons per day ("tpd"), medium-scale (i.e. <1,000 tpd underground, or <2,000 tpd from an open pit, or <3,000 tpd from an alluvial operation) and large-scale mining operations. Small scale operations are subject to a 3% NSR that is due to the State, while medium-scale operations attract an NSR of 4%. The royalty for a large-scale producer is negotiated between 5% and 8%. 60% of the royalties paid by any mining entity are to be invested in the communities in which a mine operates.

In addition to clarifying important aspects of the windfall tax criteria, the amended Mining Law further streamlines the application and permitting process for exploration and mining activities to a six-month period. The relevant authorities are required to review and approve, respond with questions, or disapprove, an application within this timeframe. If the authorities do not respond within this period, the exploration tenement or mining application is deemed to have been approved.

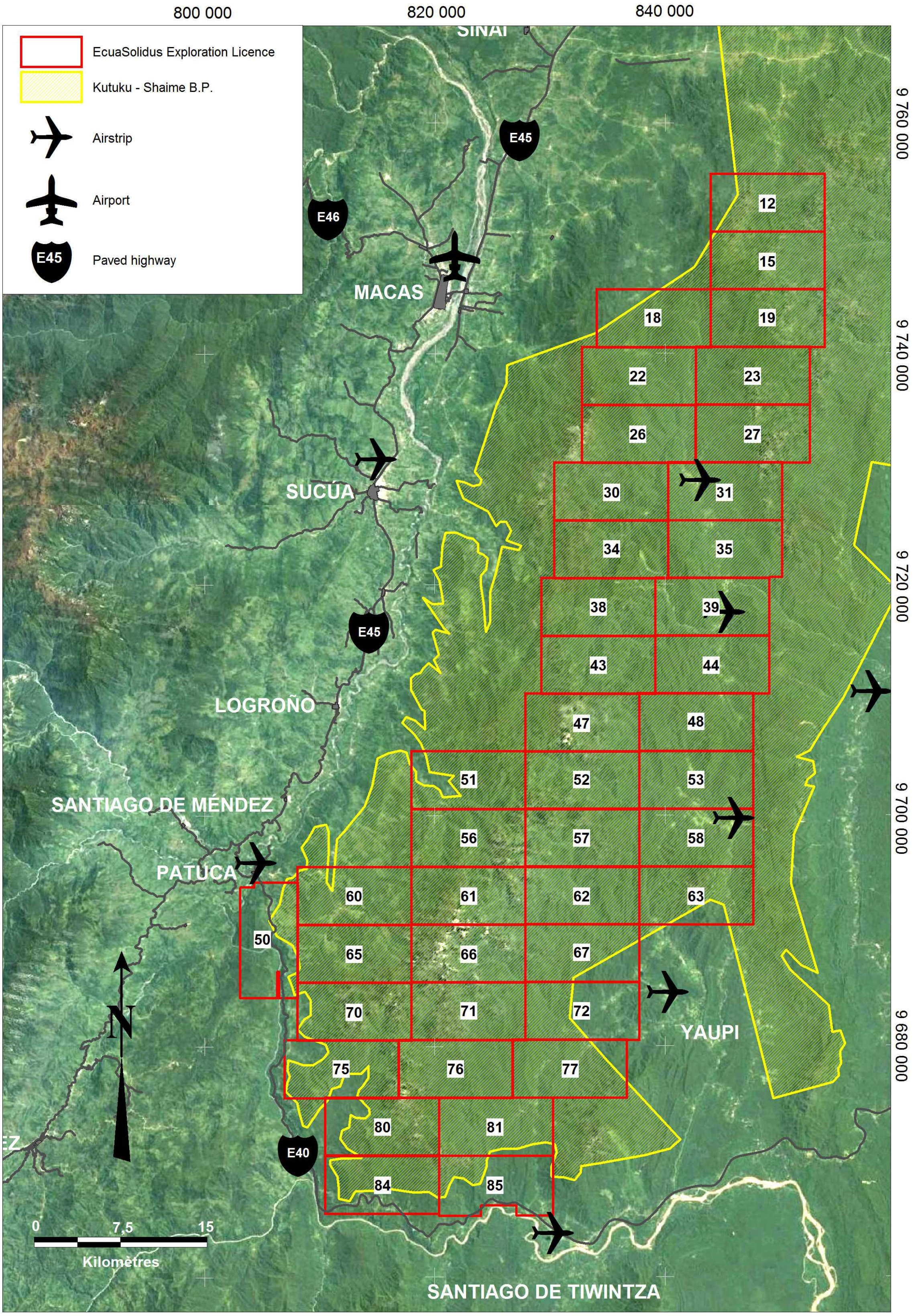

Figure 3. Landsat image (2001) of the Cordillera de Cutucú showing the location of the Properties of the Lost Cities – Cutucu Project, paved highways, rivers, main population centres and the limits of the Bosque Protectora (B.P) Kutuku-Shaime.

5 Access, Climate, Local Resources, Infrastructure and Physiography

5.1 Physiography

The Cordillera de Cutucú, the Cutucú Uplift or the Cutucú Dome, as it often referred to in geoscientific literature (e.g. Ruiz, 2002; Barson, 2002; Legrand et al., 2005; Baby et al., 2013), forms a distinctive mountain range and fluvial network which, along with the Cordillera del Cóndor, forms the eastern foothills of the Ecuadorian Andes. The Rio Santiago marks the division between the Cordillera de Cutucú to the north and the Cordillera del Cóndor to the south (Fig. 2).

The Cordillera de Cutucú is located between 2° south and 3° south of the equator. It is separated from the higher elevation Cordillera Real by the 8km wide Upano River valley (Fig. 4A). The course of the Upano River narrows as it flows to the south through the Rio Namangosa gorge and joins the Santiago River (Fig. 2). Its waters subsequently flow eastward, defining the southern limit of the Cordillera de Cutucú and of the Project area. The Cordillera del Cóndor rises to the south of the Santiago River into the province of Zamora-Chinchipe. The northern limit of the Cordillera de Cutucú is defined by the Pastaza River that flows to the southeast into the Amazon flat-lands which are typically 200m-300m amsl. The topography in the Project consists of deeply dissected tropical montane slopes and table-mountain highlands, or ”*tepuis*” (Figs. 4D & 4E), spanning elevations of between 280m and 2,480m amsl. Some streams continue at sub-surface as extensive and often spectacular caverns.

The 8 major fluvial basins that lie within the Project area all drain into the Amazon flat-lands. The longest river in the Project area is the Rio Mangosiza, flowing north to south for over 80km, and constitutes the inter-montane drainage divide between the two principal ranges of the Cordillera de Cutucú. The longer and broader of the Cutucú ranges that flanks the east bank of the Upano River, extends north-northeast by south-southwest for over 85km and includes the highest point, the Pico de Puma, at 2,460m (Prof. Octavio Latorre, pers. comm.). The smaller, yet more northerly component of the range extends an additional 30km northwards and tapers out towards the vast alluvial piedmont or outwash fan of the Pastaza River. The eastern flanks of the Cordillera de Cutucú rise abruptly from the Amazonian flat-lands as a distinctive escarpment, comprising the eroding antiformal flank that narrows southwards along a steep ridge-line.

Uplift and the associated mosaic of fault dislocations are visible as abrupt jogs, lineaments and angular offsets in the mountain topography and drainages, hence geological structure can be reconciled in detail from remote sensed data.

5.2 Access

The Project area is remote, rugged and difficult to access due to its steep and incised terrain and lack of infrastructure. Despite the numerous wooden and concrete suspension bridges that span the Upano River to its lowermost western slopes (Fig. 4G), the terrain has proven to be a formidable barrier to development, hence the extremely low population density throughout the Cordillera.

The concerted construction of paved roads in Amazonian Ecuador commenced in 1965 as oil exploration and associated infrastructure expanded southward. This led to the construction of the trans-Amazon highway which follows the course of the Upano River to the immediate west side of the Project area. Several frontier towns and hamlets are located along state highway E45 which parallels the western flank of the Cordillera de Cutucú (Figs. 3 & 4A).

Of these – Macas (elevation 1,028m amsl), the provincial capital of Morona-Santiago, is the largest town with a population of over 14,000 inhabitants, the centre of which is located on the west bank of the Upano River. From the Ecuadorian capital Quito to Macas by road is 376km, a travel time of approximately 8 hours. Macas is in turn serviced by highway E46 which winds through the Cordillera Real to the city of Riobamba (population over 157,000). Ecuador’s third largest city – Cuenca is 118km to the southwest of Macas. The airport at Macas has a paved, all-weather, 2.5km long runway that can handle commercial jet aircraft. During the Author’s field studies there were daily scheduled flights between Macas and Quito with a travel time of approximately one hour, as well as between Macas and Tena, a town to the north. Macas airport serves as a hub for small commercial aviators to Taisha and other outlying Shuar and frontier communities located within, or east of, the Cordillera de Cutucú.

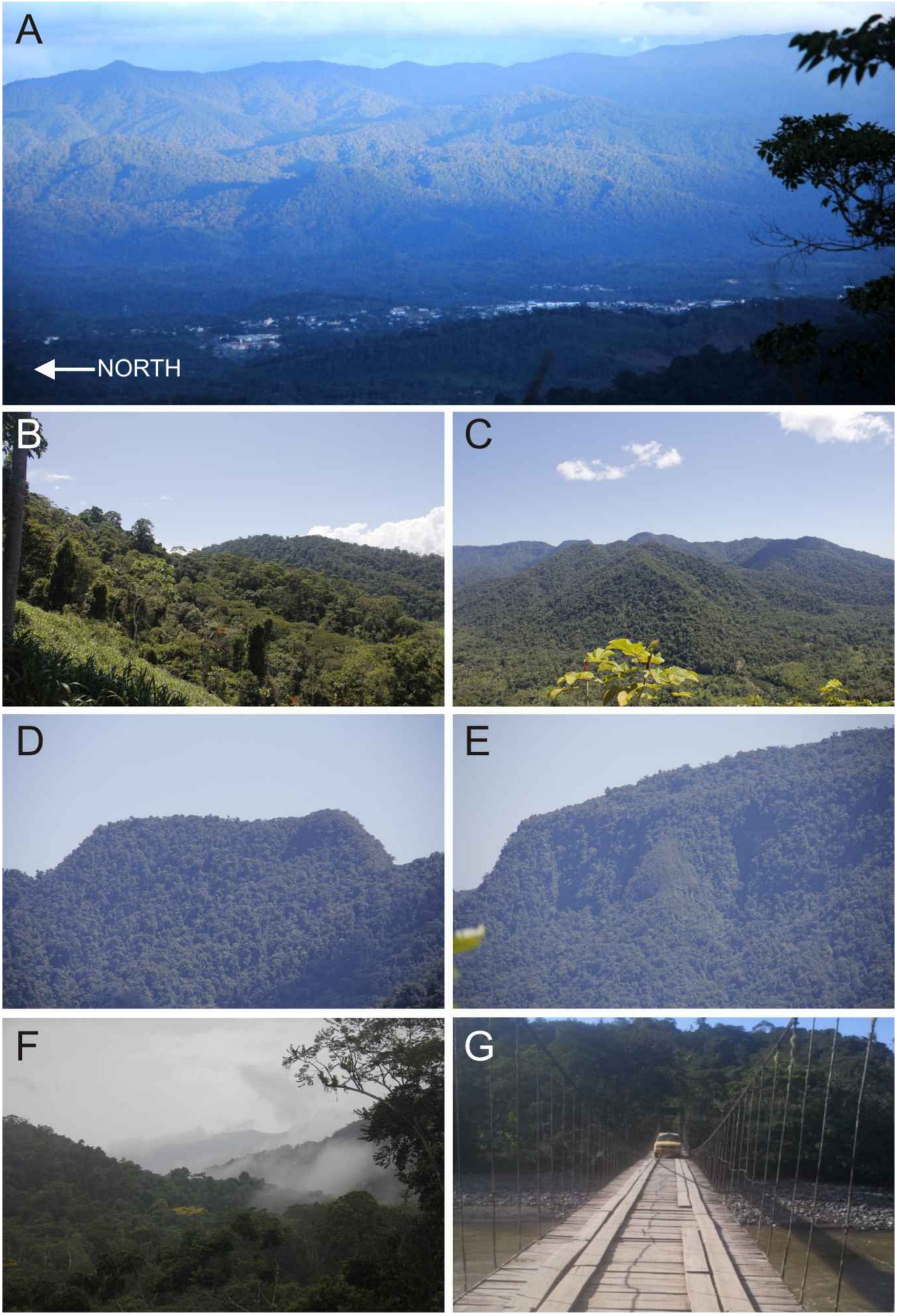

Figure 4. A. The Upano River Valley, Cordillera de Cutucú and provincial capital of Macas. B and C. Cordillera de Cutucú foothills. D and E. Tepui style or table mountain topography. F. Typical cloud forest caused by evapo-transpiration near Yaupi. G. Typical wooden suspension bridge over the Upano River. Photos by Karl Roa.

Other major hamlets, such as Sucúa, Logroño and Santiago de Mendez, are located south of Macas along highway E45 (Fig. 3). This paved road branches at the village of Patuca and continues as paved highway E40 around the southern margin of the Project area, and southern tip of the Cordillera de Cutucú, to the frontier town and military air base at Santiago, also known as Tiwintza. This checkpoint is located approximately 9km from the Peruvian border. From most of these hamlets, access via dirt tracks is limited to the lower reaches of the Cordillera de Cutucú along its western and southern flanks.

There is no dirt track access into the central part of the Project area – in the highlands of the Cordillera de Cutucú, or for that matter, beyond an elevation of approximately 1,300m on the westernmost slopes. Networks of poorly maintained footpaths exist throughout the Project area but each requires local knowledge to navigate. The northern extremity of the Project area is accessed immediately north of Macas by a dirt track leading to the lowland village of Taisha.

In terms of regional access to the Project area, asphalt roads in the province of Morona-Santiago are generally well maintained and drained, whereas spur roads, comprising compact dirt roads and concreted stretches in and around the cantons and small towns, are heavily pocked by washouts and are poorly maintained.

5.3 Climate

The tropical montane rainforests and eastern lowlands of Amazonian Ecuador have an equatorial climate, characterized by high humidity with no really distinguishable summer or winter months. Air masses moving westward from the Amazon lowlands have to rise over the eastern Cordillera (Cordillera Real), resulting in the formation of large cumulus and cumulonimbus cloud masses. Owing to its longitudinal extension, elevation range and deeply dissected and fragmented topography, the Project area exhibits a graduation of tropical to sub-tropical micro-climates which significantly impacts the distribution and diversity of biota (see Section 5.4).

While the seasonal variations in temperature are rather subtle, precipitation varies between 2,000mm and 3,000mm per year but can reach up to 4,500mm per year in the Project area (Fig. 5). The typical temperature range is between 17°C and 24°C, depending on elevation; sometimes rising to 28°C in the lowlands at the southern extremity of the Project area. Humidity levels range between 80% and 100%. Field activities can be conducted all year round but can be influenced by flooding, by low standing rivers and lightning during tropical thunderstorms. The optimum period for airborne geophysical surveys/LIDAR and the acquisition of satellite imagery is from October to December when clearer and drier weather conditions prevail.

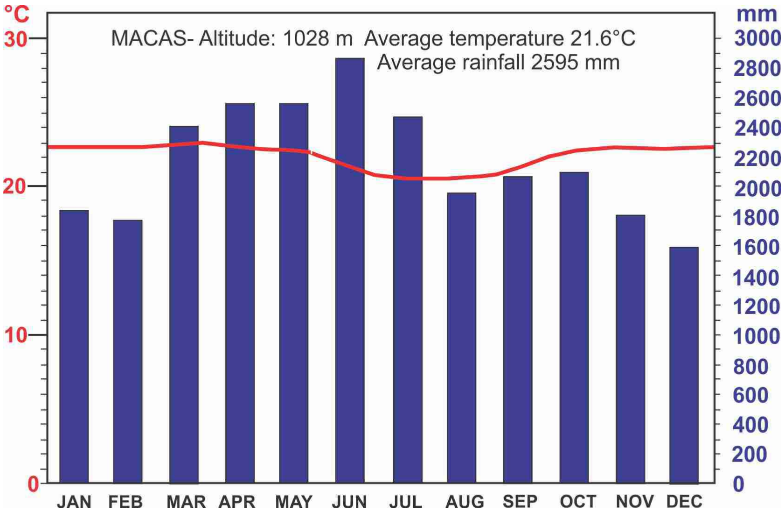

Figure. 5. Temperature and rainfall (mm) data for Macas airport. Source en.climate-data.org/location/2986.

5.4 Vegetation, wildlife and agriculture

The variability of humid montane relief and contrasting substrate compositions, together with the isolation and fragmentation of sandstone highland mesas and other topographic barriers, gives rise to a large diversity of plant and animal species and habitats in the Cordillera de Cutucú (e.g. Camp, 1952; Robbins et al., 1987; Neil, 2008). The dominant vegetation in the Project area comprises tropical evergreen and broad-leafed forest canopies, typically around 25m tall.

With increasing elevation and changing substrate composition, lowland forests give way to elfin cloud forests less than 10m tall, heathlands and other areas of stunted shrub growth. Bromeliads, orchids and species of ginger are among the flower species that predominate in these conditions. The stature of plants generally decreases atop of the sandstone mesas due to the lack of nutrients in the often acidic sandy colluvium, as well as the lower temperatures of these higher-elevation areas.

The tiered lowland forest vegetation supports a diverse avian fauna, ranging from parrots (e.g. *Hapalopsittaca pyrrhops*), parakeets (e.g. *Pyrrhura albipectus*), hawks (e.g. *Buteo magnirostris)* pygmy owls (e.g. *Glaucidium parkeri*) and humming birds (e.g. *Adelomyia melanogenys*) (Chaparo et al., 2011). The abundance of amphibian species (e.g. *Atelopus boulengeri* and *Phyllomedusa tarsius*) and insects is also the subject of various compendiums of research and exploration (e.g. Camp, 1952; Duellman and Lynch, 1998). Mosquitoes are not prevalent; hence the malaria infection risk is low. The large mammalian groups include spider monkeys, deer, armadillos, tapirs, peccaries and jaguars

Due to the extremes of topography and the lack of access into the Cordillera highlands, agricultural activity is largely confined to below 1,200m amsl, mostly on the western slopes on the east bank of the Upano River adjacent to the Project. The eastern slopes are largely undisturbed by human activity aside from localized subsistence or swidden horticulture plots, as traditionally practiced by Shuar inhabitants (Duchelle, 2007). The interior ridges and highlands of the Cordillera de Cutucú, in which a large part of the Project lies, represent pristine environments.

The Upano River valley, which lies immediately west of the project area, has largely been cleared and converted to pasture and plantation lands with significant secondary growth occurring along its banks (Rudel and Horowitz, 1993). Sugar-cane, palm fibre, plantain, yucca, bananas, rice, cacao, papaya, coffee and other tropical fruit production is the mainstay of the local agro-economy along with cattle ranching, and to a lesser extent, fishing and lumber. Deforestation and fragmentation of ecosystems is prevalent along the paved highways and their secondary and tertiary spur routes. Timber harvesting within the Kutuku-Shaime protected forest is illegal, but nevertheless proceeds uncontrolled in road-accessible areas.

5.5 Infrastructure

Infrastructure in the Project area is minimal; it is largely confined to foot trails, with paved road access along the southern limit of the Project.

In terms of regional infrastructure, Morona-Santiago province’s population of 180,000 is concentrated along the Trans-Amazon highway E45 (Fig. 3) that flanks the western side of the Project area. Macas, founded in 1599 (and often referred to in colonial history as Macabeo), is the largest town and serves as the provincial capital. It is located opposite the northern part of the Cordillera de Cutucú in the canton of Morona. The population of over 14,000 inhabitants relies on agriculture, retail marketing, service industries such as restaurants, bars and hotels, vehicle repair and banking, as well as government services and associated contracting. In addition, Macas is the principal transportation hub in the province, with numerous coach and bus companies providing scheduled and chartered services throughout Morona-Santiago and beyond.

There are large general hospitals in Macas and Sucúa, and health clinics in most population centres that have more than 1,000 residents. All of the main hydro-electric dams >100MW in the province are accessed from the E45 highway.

A new run-of-river hydro-electric plan for the Abanico River is in the permitting stage. This 14MW project has garnered significant public support since it will also augment the water supply to Macas. In addition, public support for the extension and improvement of the Macas-Taisha highway (aka vía Macuma-Taisha) has become an important counterpoint in the socio-economic development of Morona-Santiago.

Agricultural activities parallel the E45 highway in a swath approximately 10km wide. Small extractive industries for sand and gravel are commonplace along the broad and braided course of the Upano River (Fig. 3).

On a provincial level, agriculture, dominated by livestock farming, accounts for over 40% of the local economy, construction <9%, and aggregate quarrying just over 2%. These figures are from the Canton of Mendez for the year 2013 (GAD, 2014). Tourism is increasing in the form of adventure hikes, rafting and caving expeditions. Associated small industry, including craftwork by Shuar artisans and the performance of cultural ceremonies that illustrate the traditions of the Shuar people, are also developing.

Table 2. Population and infrastructure statistics for Morona-Santiago. (AFB denotes Air Force Base).

Name	Area (km²)	Canton	Population	Airport/Air strip/Air base	Medical facility	Military facility
Macas	5.3	Morona	>14000	Hard surface runway 2500 m	General Hospital	
Sucúa	1.6	Sucúa	>8000	Airstrip 1050 m	General Hospital	
Logrono	0.4	Logroño	>5000	None	Health Center	
Mendez	0.7	Santiago	>8000	None	Health Center	
Santiago	0.3	Tiwintza	>1000	Airbase Hard surface runway 1200 m	Health Center	Tiwintza AFB
Patuca	0.4	Santiago	>2000	Airbase Hard surface runway 1800 m	Health Center	Patuca AFB
Taisha	0.7	Taisha	>1000	Airstrip 1400 m	Health Center	Garisson

6 History

To the Author's knowledge, there is no documented history of modern, systematic mineral exploration in the Project area.

In terms of the region in which the Project is located, preliminary exploration of the Upano River was undertaken by the geologists Sinclair and Wasson (1923) on behalf of the Leonard Petroleum Exploration Company of New York. Royal Dutch Shell Corporation commenced an exploration program for petroleum in the Cordillera de Cutucú in the 1940's which, after several years of investigation, failed to produce any significant results (Tschopp, 1953; Harner, 1984). Subsequent expansion of oil exploration and production infrastructure, in particular the paved highways from the Oriente Basin southward, has led to a series of studies into the nature of the Cretaceous and Jurassic rocks in the Project area and the Cutucú Uplift (Christophoul, 1998; Gaibor et al., 2008). Notwithstanding the major oil endowment of Ecuador's portion of the Oriente Basin, which contains the third largest reserve of conventional oil in South America after Venezuela and Perú (EIA, 2015), the Cordillera de Cutucú appears to be deficient in recoverable oil, despite representing the emergent part of an otherwise highly productive system of half-grabens.

Three gold occurrences are recorded by FUNGEOMINE (Pillajo Gavidia, 2008) to lie in the southwestern sector of the Project area (Fig. 8), but no further information is provided.

7 Geological Setting and Mineralization

7.1 Geotectonic Context of Ecuador

Ecuador is situated along the northern segment of the Andes mountain chain and comprises three principal geo-tectonic domains fronting a major convergent plate boundary (Fig. 6). The trend of the Andes changes markedly in southern Ecuador from north-northeast to south-southeast. This is due to a major geological boundary or flexure zone termed the Huancabamba Deflection (e.g. Jaillard et al., 1990; Ruiz, 2002) (Fig. 6). Ecuador's geological make-up is dominated by the actively subducting oceanic Nazca plate, and the overriding South American continental lithosphere, the latter featuring 18 active volcanoes that comprise the southern end of the Northern Volcanic Zone of the Andes (Litherland et al., 1994; Ruiz, 2002). Sangay Volcano, having erupted three times in recorded history (between 1628 and 1934), is located 48km northwest of the Properties and has been episodically active since the eruption of 1934. No less than four volcano-magmatic arcs have formed in response to the subduction process; their volcanic and magmatic assemblages subsequently accreted to the Andes and Amazon basin (Chiaradia et al., 2004). Similar magmatic arcs world-wide contain some of the largest gold and copper deposits (Sillitoe, 2000; 2010).

The collage of trench-parallel geological terranes in Ecuador (Fig. 6) attests to the accretion of oceanic plateau and island-arcs. The thickened oceanic crust of the Carnegie Ridge is currently undergoing subduction along the Ecuador-Colombia Trench (Jaillard et al., 2000; Rosenbaum et al., 2005). The Andean orogenic period commenced during the Upper Triassic with the development of what is now South America, in response to Tethyan rifting. In the Lower Jurassic, the development of a major continental magmatic arc in Colombia and Ecuador, limited to the south by the Huancabamba deflection, gave rise to eruptions of andesitic lava flows and the emplacement of I-type granodioritic intrusions in the Cordillera Real and the Sub-Andean zone (Jaillard et al., 1995; 2000). To the east, continental clastic sediments filled a back-arc basin - the Oriente Basin. The calc-alkaline magmatic activity continued during the Middle and Upper Jurassic before a hiatus in sedimentation occurred (Litherland et al., 1994, Romeuf et al., 1995, Jaillard et al., 2000).

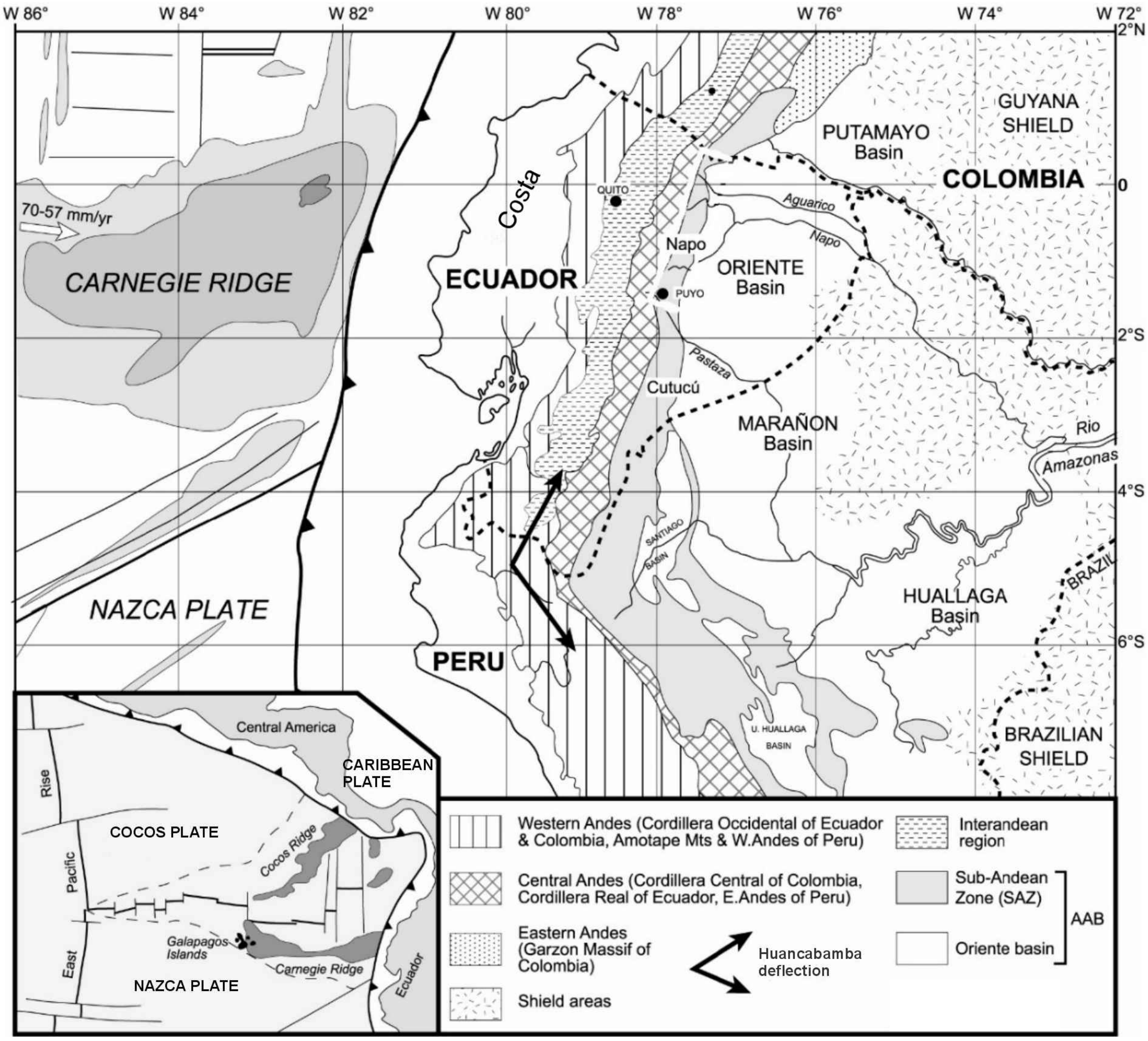

Figure 6. Geotectonic map of Ecuador and surrounding basins (from Ruiz, 2002).

During the Cretaceous, a series of marine transgressions and regressions led to the widespread deposition of continental sandstone deposits, followed by alternating sequences of mudstones, limestones, and minor sandstone intervals. Cordilleran uplift occurred during a period of compression related to renewed collision along the northern Andean margin during Upper Cretaceous to Early Tertiary. From the Paleocene, the magmatic activity restarted with the development of a new magmatic arc further to the west.

The tectonic framework of Ecuador is manifested by regional north-northeast to south-southwest lineaments or sutures that formed since the Mid-Tertiary period, reactivating the inverted fault systems of a Triassic - Jurassic aborted rift system, as well as Mesozoic sutures located between the accreted domains (Baby et al., 2004). A second system of structures, oriented northwest-southeast, constitutes transfer zones between these major sutures. These particular right-lateral faults were preferred sites for the intrusion of small tonalite and granodiorite plutons and stocks.

In terms of its principal geo-tectonic domains and dividing structures, Ecuador is customarily divided, from west to east into 3 principal zones outlined as follows (Fig. 7):

- La Costa. (the coast) The coastal lowlands and western foothills of Ecuador comprise accreted oceanic crustal terrane covered by a veneer of Tertiary sedimentary and volcanic rocks.
- La Sierra, (the ranges) The Ecuadorian Andes are divided into three distinctive zones. To the west is the Cordillera Occidental, comprising oceanic plateaus that accreted between the Cretaceous and the Eocene and subsequently experienced significant intrusive activity. On the eastern side, the Cordillera Real comprises Paleozoic to Mesozoic metamorphic rocks

and intrusions. Between these high cordilleras is the Inter-Andean valley, a fault-bound central depression formed in the Miocene, and filled with recent sedimentary, volcanic and vast volcaniclastic deposits. Some of the highest volcanoes on Earth are located in this axial zone.

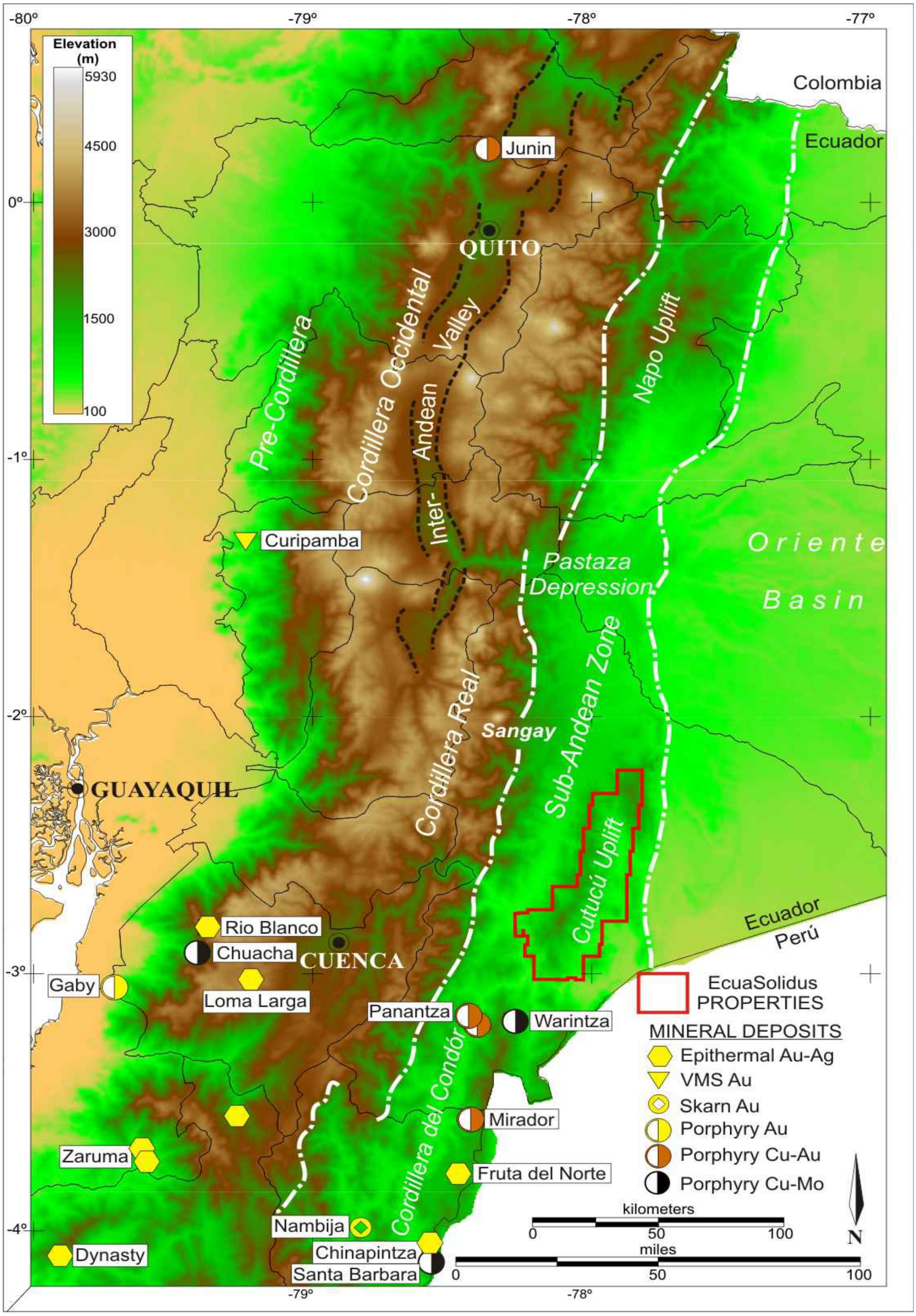

Figure 7. Topographic map of the Ecuadorian Sub-Andean Zone and Oriente Basin showing major mineral deposits in relation to the Properties.

- <u>El Oriente</u> (the east). The Oriente comprises the sub-Andean Zone (SAZ) and the extensive petroleum-rich foreland basin further east. This expansive basin is part of the extensive Putumayo-Oriente-Marañon petroleum province which borders the eastern flank of the Andes of Colombia, Ecuador and Perú. The basement rocks underlying the entire sedimentary basin are believed to consist of Proterozoic metamorphic and plutonic rocks of the Amazon Craton. In Ecuador, the SAZ is between 50km and 200km wide and comprises, from north to south: the Napo Uplift, the Pastaza Depression, the Cordillera de Cutucú, and the Cordillera del Cóndor (Fig. 7). The SAZ is separated from the Cordillera Real to the west by the Sub-Andean Thrust Fault and to the east from the Oriente Basin by the Sub-Andean Front. Both the Sub-Andean Thrust Fault and the faults forming the Sub-Andean Front are sub-parallel to the axis of the Andes and dip to the west. It is within the exhumed and up-thrust sedimentary, volcanic and intrusive rocks of the Cutucú Uplift that the Properties are located.

7.2 Geology of the Cordillera de Cutucú

7.2.1 Background

The strata forming the Project area in the Cordillera de Cutucú were once part of the greater Oriente Basin. This formed a system of extensive half-grabens filled with Triassic and Jurassic sedimentary sequences on Palaeozoic basement, and was covered by Cretaceous sedimentary sequences that can be stratigraphically correlated between Colombia in the north and Perú in the south. The Cordillera de Cutucú is an immense, thick-skinned uplift of the half-graben system in which cover sequences of Cretaceous strata have been deformed into a hanging wall anticline on frontal thrusts of the sub-Andean zone (Tschopp, 1953; Baby et al., 1999; Legrand et al., 2005). Continuing uplift, through transpressional tectonism, has defined the physiography and in particular, the rate of erosion which has effectively outpaced the rate of sedimentation since the Pliocene and Quaternary (Burgos et al., 2004: Baby et al., 2013). Erosion through the crest of the antiformal uplift reveals Palaeozoic basement rocks, interpreted as horsts, in the northeastern extremity of the Project area and Triassic and Jurassic rift-fill strata throughout the remainder of the Project area (Fig. 8).

Owing to its remote location and complete tropical rainforest cover, the geological makeup of the Project area and broader Cordillera de Cutucú is known only at a preliminary level (e.g. DGGM, 1982; Prodeminca, 1990; CODIGEM-BGS, 1993; Ramirez Aguilar, 2007). Since there is no State geological survey that administers the systematic geologic mapping of the Ecuador, most of the geological map compilations of the Cordillera de Cutucú are cursory, and have been conducted by private entities, such as petroleum exploration companies and by academic institutions, as cited above. In contrast, on account of the petroleum resources of the Marañon Basin, the Peruvian State geological survey (INGEMMET) has systematically mapped, at 1:100,000 scale, the geology of the border region forming the continuity of the Cordillera de Cutucú to the south (Quispesivana, 1996; Quispesivana & Zárate, 1999).

Recent insightful geological studies have been published on the basin dynamics of the Cordillera de Cutucú, as well as its seismicity and petroleum potential (e.g. Baby et al., 2004, 2013; Legrand et al., 2005; Gaibor et al., 2008). The few site-specific geological studies that have been undertaken were limited to stratigraphic appraisals in the Rio Chapiza and Rio Yaupi (Wasson and Sinclair, 1927; Tschopp 1953; Hobbs, 1975), as well as studies of outcrops along paved highway E45 from Mendez to Santiago (e.g. Christophoul 1998; Moran Coello et al. 1999, Gaibor et al., 2005; 2008).

7.2.2 Stratigraphy

7.2.2.1 Paleozoic metamorphic rocks

The oldest known geological components exhumed within the Project area are restricted to the northernmost slopes of the Cordillera de Cutucú, forming the Cerro Macuma anticline in which Paleozoic rocks are exposed (Fig. 8). The following information is summarized from Tschopp (1953) and Rocha Campos (1983).

The Lower Paleozoic Pumbuiza Formation comprises deformed back shale, quartzite and conglomerate. These greenschist-facies metamorphic sequences are unconformably overlain by the Permo-Carboniferous Macuma Formation, the uppermost sequences of which are characterized by abundantly fossiliferous dark limestones as well as lutite, marl and fine grained greenish-brown sandstones, that constitute a sequence that is estimated to be 1,250m thick (Fig. 9; Atahualpa Moreta, 2013).

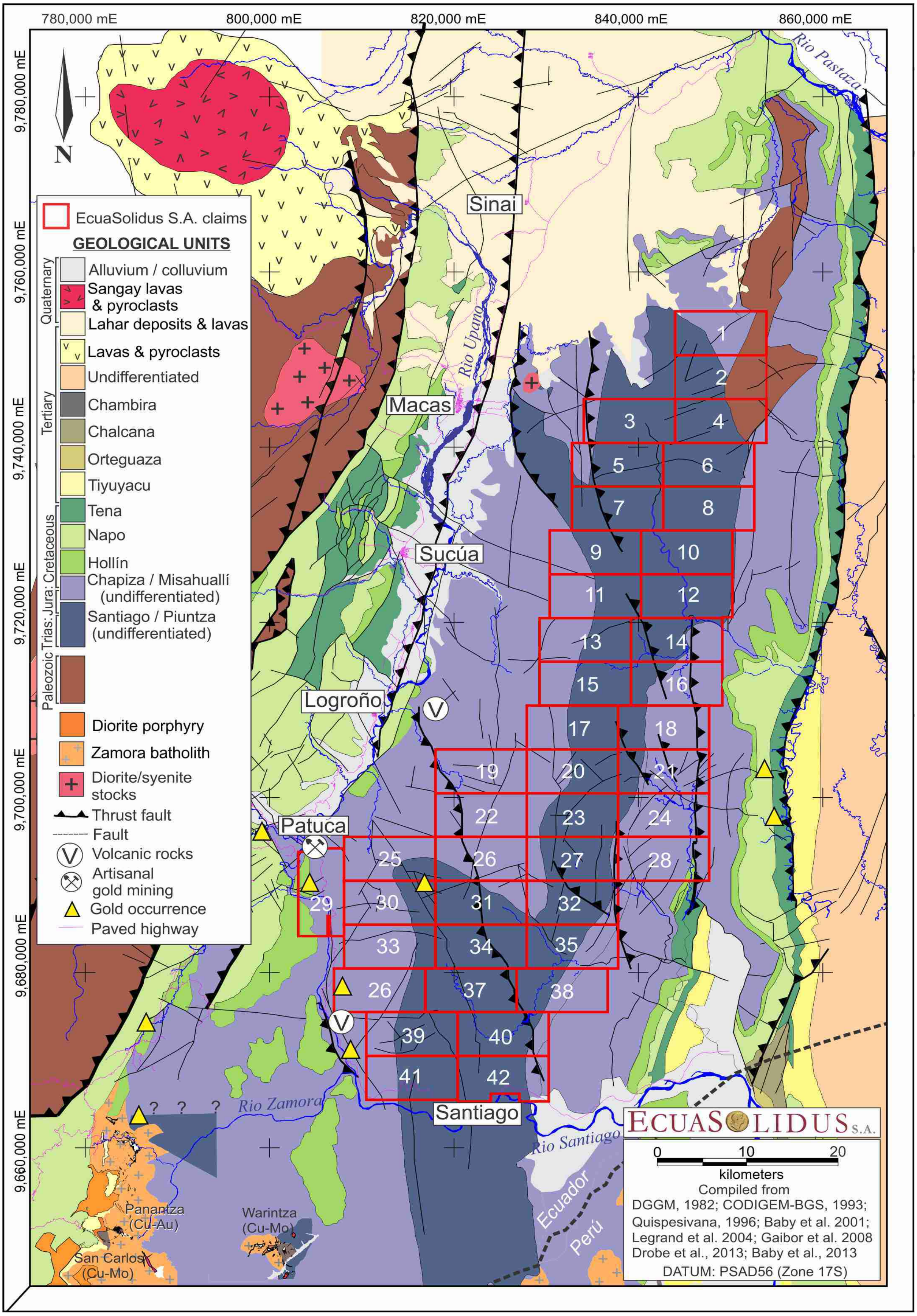

Figure 8. Geological map of the Cordillera de Cutucú and Project area.

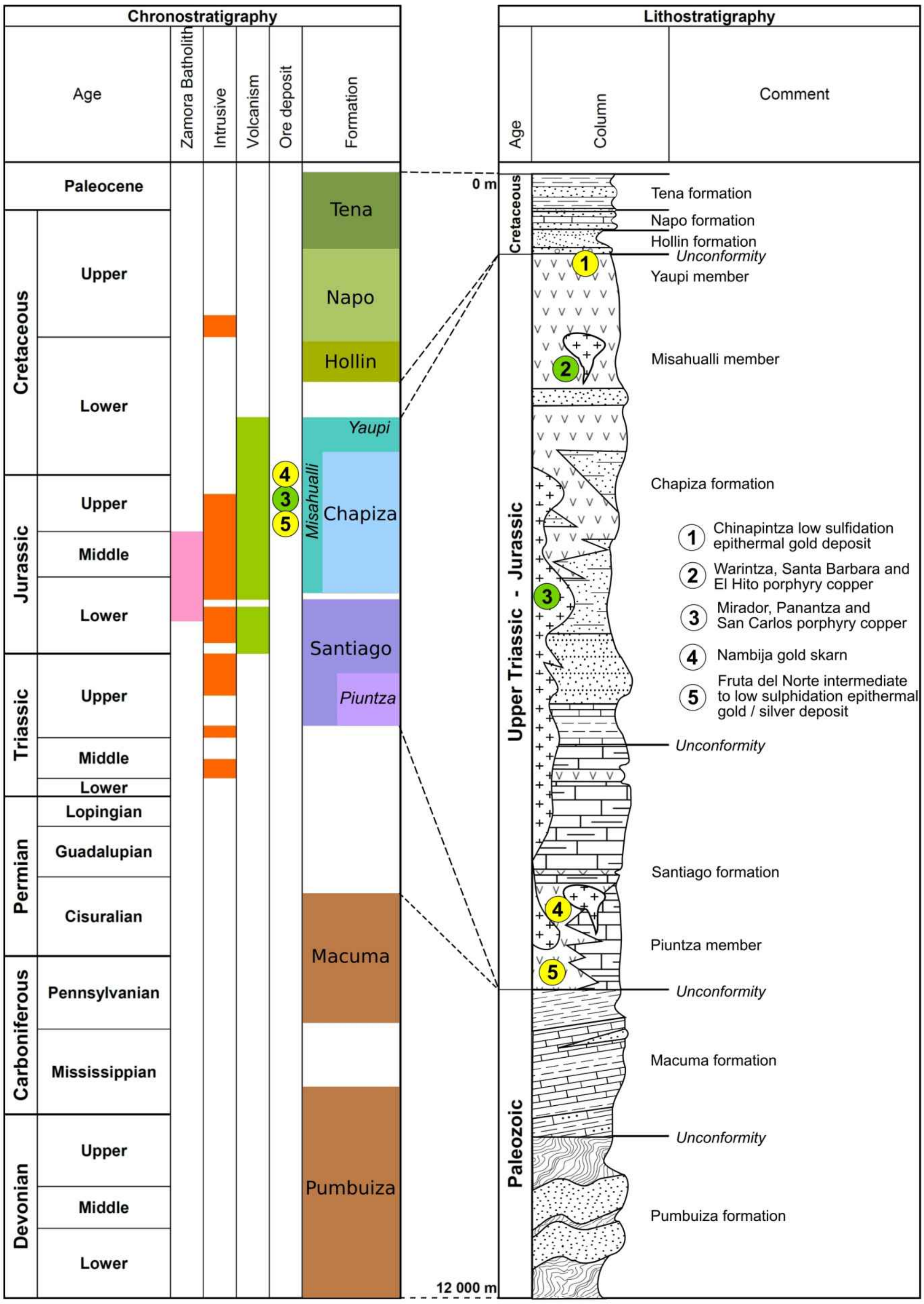

Figure 9. Stratigraphic section of the Cordillera de Cutucú based on the references cited in this Section 7.

The Macuma oil exploration well, located approximately 25km to the east of the Cordillera de Cutucú, traces the continuity of the Macuma Formation within the Oriente Basin. The total thickness of Paleozoic units is poorly constrained, although a provisional estimate is that they are approximately 2,500m thick.

7.2.2.2 Jurassic - Triassic

The Jurassic period encompasses two distinctive stratigraphic formations in the Project area, the lower of which, and extending into the Upper Triassic, are the marine to continental rift-fill deposits assigned to the Santiago Formation, forming the core of the Cutucú Uplift (Pindell and Tabbutt, 1995; Díaz et al., 2003). The rift-fill sequence overlies the Macuma Formation on an angular unconformity (Fig. 9). The Mid- to Late-Jurassic is represented by the Chapiza Formation which is laterally equivalent in Ecuador with the volcanic rocks regionally assigned to the Misahuallí Formation (Tschopp, 1953; Romeuf et al., 1995). This sedimentary-volcanic package forms part of a major tectonic-sedimentary cycle controlled by the north-northeast - south-southwest oriented Jurassic magmatic arc that extends from Colombia to the Huancabamba deflection in northern Perú. Initially the prevailing subduction direction was to the southeast and was responsible for the extrusive volcanic deposits of the Misahuallí Formation. The subduction direction subsequently changed to the northeast in the Late Jurassic and is contemporaneous with accumulation of the Yaupi member (Jaillard et al., 1997), discussed below.

Santiago Formation

Spanning the Late Triassic to Early Jurassic, the Santiago Formation, the type-section of which is along the banks of the Santiago River on the southern boundary of the Project area, comprises a kilometre-thick sequence of sedimentary strata composed of dark limestones and calcareous sandstones, as well as numerous intercalations of bituminous shale. Initially, the sedimentary units of the Santiago Formation filled an intra-cratonic rift, between 221–180 million years ("Ma") in age (Christophoul, 1999; Díaz et al., 2003; Gaibor et al., 2008). The constituent sedimentary sequences are estimated to be between 1,000m and 2,700m thick (Tschopp, 1953; Geyer; 1974), and are mapped along the axis of Cordillera de Cutucú (e.g. DGGM, 1982; CODIGEM-BGS, 1993; Ramirez Aguilar, 2007), and occur throughout the Project area. Regionally, the Santiago Formation continues southward into Perú, where it is termed the Pucará Formation.

According to Gaibor et al. (2005), the Santiago Formation can be divided into three distinctive sub-units or members. The lowermost Santiago River Member consists of thick beds of grey and black limestone and marl with lesser intra-formational breccias. The middle Yuquianza Member consists of black calcareous shale with sporadic intercalations of green siltstones. The younger unit, the Patuca Member, comprises clastic sequences with thick beds of grey, green and brown siltstones, greywacke and/or calcareous black shale. Basaltic lava flows are inter-bedded within the sedimentary pile.

The volcanic components of the Santiago Formation have two distinctive magmatic affinities. First among these are continental tholeiitic basalts that accumulated during the aforementioned rifting episode. The second suite of interleaved volcanic rocks consists of subduction-related, calc-alkaline lavas that may correspond to the first extrusive manifestations of the Mesozoic volcanic arc (Romeuf et al., 1995, Romeuf et al., 1997). Elsewhere in the sub-Andean zone of Ecuador, the Triassic volcanic rocks of the Santiago formation are designated as the Piuntza Unit, as initially described by Litherhand et al. (1994), forming a sequence of continental/marine volcanic and volcaniclastic rocks. The Piuntza Unit outcrops as enclaves of supra-crustal rocks within the Zamora Batholith, replete with intrusions (Drobe et al., 2013), and is the principal host for skarn deposits in the Nambija mining district (Fontboté et al., 2004). It has also recently been interpreted as the host for epithermal mineralization at the FDN gold-silver deposit (Leary et al., 2016).

The Santiago Formation is truncated by an angular unconformity that is overlain by units of various ages. The Santiago Formation is thus overlain by the Jurassic Chapiza Formation, the Misahuallí Member, the Yaupi Member or by the Cretaceous Hollín Formation. The Piuntza Unit is partially mapped immediately north of the Panantza copper porphyry deposit (Drobe et al., 2013).

Chapiza Formation

Sedimentary rocks assigned to the Mid- to Late-Jurassic Chapiza Formation flank the Santiago Formation in the core of the Cordillera de Cutucú in the northern, eastern and western extremities of the Project area (Tschopp, 1953). Furthermore, Christophoul (1998) and Gaibor et al. (2008) also report Chapiza sedimentary rocks to overthrust Cretaceous strata along the western margin of the Cordillera immediately west of the Proprties (Fig. 8). The Chapiza Formation is correlated with the regionally extensive Sarayaquillo Formation in Perú (Benavides, 1968; Gaibor et al., 2008) and the Girón Formation in Colombia (Tschopp, 1953). Its corresponding facies in Perú is a major source of salt diapirism.

The Chapiza Formation is approximately 4,500m thick. The lower part of the Formation is made up of evaporitic source rocks that are overlain by stacked red-bed units of polymict conglomerates and coarse sandstones. The upper part of the sequence is dominated by calc-alkaline volcanic rocks assigned to the Misahualli Member which is 1,000m to 3,000m thick (Tschopp, 1953). These lavas and volcaniclastcs consist of, rhyolitic tuffs, green to dark grey basalts, andesites and trachytes, interbedded with minor sedimentary units. Romeuf (1994) identified two distinctive volcanic phases, the younger of which is identified in the eastern part of the Cordillera del Cutucú and the Project area, and is assigned to the Yaupi Member (Jaillard et al., 1997: Rivadeneira and Baby, 1999). The older volcanic sequence, the Misahuallí Member, has been recognized in the western part of the Cordillera de Cutucú (e.g. Jaillard & al 1997; Romeuf 1994; Romeuf, 1997; Ramirez Aguilar 2007), adjacent to the western margin of the Properties. The presence of the Misahualli Member in the Uplift is significant since these strata conceal the FDN gold-silver deposit in the Cordillera del Cóndor (Leary et al., 2016), and therefore need to be explored carefully in the Project area.

7.2.2.3 Cretaceous

Cretaceous rocks outcrop along the lower elevation foothills fringing the Cordillera de Cutucú and extend into the southeastern and western extremities of the Project area (Fig. 8). The total thickness of the Cretaceous in the Cordillera de Cutucú is approximately 600m and comprises three distinctive lithostratigraphic units, namely the Hollín, Napo and Tena formations. The Lower Cretaceous is represented by the Hollín Formation which is up to 150m thick and consists of tabular white, cross-bedded sandstones with lesser dark carbonaceous shale intercalations and constitutes a major oil reservoir in the Oriente Basin. The Hollín Formation rests conformably upon the Yaupi Member but overlies all other Jurassic and older geological units on an angular unconformity.

The Albian to Early Maastrichtian Napo Formation, defined by sequences of black, organic-rich mudstones, carbonaceous sandstones and limestones, overlies the Hollin Formation conformably. Rare volcanic formations are intercalated within these sedimentary units along a north-northeast by southwest trend, roughly parallel to the axis of the Cutucú Uplift.

The Maastrichtian to Early Paleocene Tena Formation overlies the Napo Formation along an angular unconformity. Tena Formation sedimentary sequences consist of stacked red beds interspersed with sparse conglomeratic and mudstone units. The preserved thickness of the Tena Formation is less than 300m in the eastern part of the Oriente Basin (Estupiñán Letamendi, 2005).

7.2.3 Intrusive rocks

The lack of detailed geologic mapping of the Cordillera del Cutucú and the Project area may explain the paucity of intrusive rocks on existing geological maps. The 1:1,000,000 scale CODIGEM-BGS (1993) geological map depicts two small granitic plutons in the western and northwestern parts of the Cordillera.

7.2.4 Geological structure

The western margin of the Cordillera de Cutucú lies in faulted contact with the Cordillera Real. The contact is defined by the Real Fault or Palanda-Mendez-Cosanga Fault system that consists of east-verging antiformal thrust stacks that carry metamorphic sequences over the adjacent Rio Upano syncline and rocks of the Cordillera de Cutucú (Fig. 10).

The eastern margin of the Cordillera de Cutucú is marked by the west-dipping Cutucú – Napo Fault (Morona Front) and adjacent syncline. In detail, the eastern margin of the uplift consists of a complex fault system that contains thin-skinned, west-verging thrust slices on east-dipping faults, which seismic data (Institut Francais de Development, 2000) show to be rooted on a west-dipping, low-angle fault (Fig. 10).

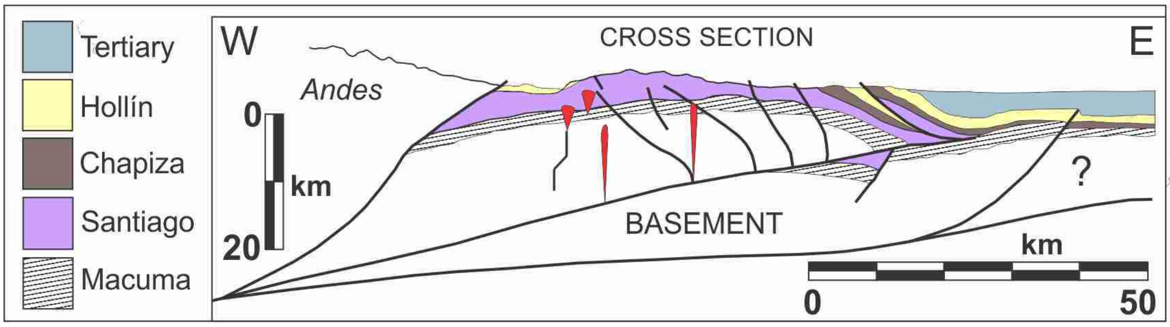

Figure 10. Regional cross section through the Cordillera de Cutucú, modified from Baby et al., 2013

In terms of its overall structural geological framework, the Cordillera de Cutucú and the entire Project area is interpreted as an inverted half-graben, the western bounding fault of which was reactivated as the Palanda-Mendez-Cosanga Fault system, and the eastern bounding fault is the Cutucú - Napo Fault (Legrand et al., 2004, 2005; Baby et al., 2013). The thick-skinned, broad antiformal structure of the Cordillera de Cutucú between these faults represents arching of the original half-graben in response to inversion of the Triassic - Jurassic aborted rift.

Most of the original normal faults in the Cordillera del Cóndor strike north-northeast – south-southwest and were reactivated as thrusts. These faults are linked by strike-slip transfer faults that strike north-northwest – south-southeast and controlled the intrusion of various igneous stocks as well as the Zamora Batholith (Gendall et al, 2000). Similar fault patterns are prevalent throughout the Project area in the Cordillera de Cutucú and, by analogy, are features that should be prioritized in exploration.

7.2.5 Mineral occurrences

Three gold occurrences have been recorded in the southwestern sector of Project area by FUNGEOMINE (Pillajo Gavidia, 2008) (Fig. 8). However, no useful information was provided on these reported occurrences and the areas are too remote to be reached during the Author’s review of the Project area.

Gold placers are also reportedly being exploited by artisanal miners in the southern and eastern parts of the Cordillera de Cutucú, specifically in the Yaupi, Cushuimi, Kaspaimi and Cangaime rivers (Pillajo Gavidia, 2008; Barragan et al. 1991). The Yaupi and Cushuimi river catchment basins lie within the Project area.

8 Deposit types

The Project area is located within the Northern Andean Jurassic Metallogenic Belt that extends from 3° north in Colombia to 5° south in Ecuador (Chiaradia et al. 2009). In both countries, the Mesozoic volcano-magmatic arc hosts numerous, and oftentimes spatially juxtaposed, porphyry copper, skarn and epithermal gold deposits (Gendall et al., 2000; Sillitoe and Perello 2005). Rosenbaum et al., (2005) contend that the subduction of thickened oceanic crust preconditions the metallogenic fertility of distinctive parts of the Andes. These mineral deposit types are well represented in the Cordillera del Cóndor segment of the Northern Andean Jurassic Metallogenic Belt.

Paz and Mino (1956) proposed, like many others since then, that the Cordillera de Cutucú represents an extension of the Cordillera del Cóndor (Ujueta, 2001) and therefore, there is a reasonable possibility that the types of mineral deposits that occur in the Cordillera del Cóndor may also occur along strike in the Project area in the Cutucú Uplift. The deposit types that should be the focus of exploration in the Project area include:

- Epithermal gold-silver deposits of which the FDN Deposit in the Cordillera del Cóndor, is the prime example. Current indicated mineral resources are 7.35Moz of gold and 9.89Moz of silver contained in 23.8Mt of mineralized material at a grade of 9.61g/t Au and 12.9g/t Ag (Lipiec et al., 2016). The resource data provided on the FDN Deposit have been obtained from information provided by Lundin Gold Inc. and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area

- Porphyry copper-gold and copper-molybdenum deposits of which the San Carlos and Mirador deposits are considered to be the prime examples in the Cordillera del Cóndor. Mirador is reported to contain a measured and indicated resource of 438Mt at a grade of 0.61% Cu, 0.19g/t Au and 1.5g/t Ag. The reported inferred mineral resource stands at 235Mt at a grade of 0.52% Cu, 0.17g/t Au and 1.3g/t Ag. San Carlos is currently the largest copper-molybdenum porphyry system within the Northern Andean Jurassic Metallogenic Belt, with a reported inferred resource estimate of 657Mt at a grade of 0.59% Cu, containing 7.7Blbs of copper. The resource data provided on the Mirador and San Carlos porphyries have been obtained from information provided by other companies and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

- Gold and copper skarn deposits, of which Nambija, in the Cordillera del Cóndor, is a good example. Average gold grades are reported to be between 10g/t and 30g/t Au, locally exceeding 1,000g/t. The total resources of Nambija were reported in 1990 at 23Mt at an average grade of 15g/t gold, for a total of about 11Moz contained gold (Prodeminca, 2000). In

2000, the resources were re-evaluated at between 4Moz and 5Moz of gold (Prodeminca, 2000; Fontboté et al, 2004). The resource data provided on the Nambija deposit have been obtained from information provided by Prodeminca and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

- Disseminated gold deposits of which Alta Chicama, in northern Perú, is an excellent example. The Alto Chicama Deposit is located in Lower Cretaceous sandstones that are the lateral equivalent of sedimentary sequences in the Project area.
- Lead-zinc deposits, of which San Vicente, located in a correlative of the Santiago Formation in northern Perú, is a good example. The San Vicente Deposit is reported to contain 20Mt at an average grade of 10% zinc and 0.8% lead. The resource data provided on the San Vicente base metal deposit have been obtained from information provided by other companies and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

Further information on the deposits used as examples here can be found in Section 15.

The successes of prior grassroots exploration programs in the Cordillera del Cóndor make it one of Ecuador's most prolific mineral districts. When coupled with its equally challenging infrastructure and topography, the application of similar exploration techniques are warranted in the Properties that comprise the Lost Cities-Cutucu Project. The recommended exploration program for the Project area is described in Section 18.

9 Exploration

To date, no mineral exploration activities have been undertaken by the Company on the Properties.

10 Drilling

To date, no drilling has been undertaken by the Company on the Properties.

11 Sample preparation, analyses and security

To date, no samples have been analysed by the Company.

12 Data verification

12.1 Field Verification of Geological Context

12.1.1 Introduction

Due to the complete lack of prior, modern mineral exploration in the Cordillera de Cutucú, there are no geochemical or assay data to verify. The field verification undertaken by the Author, between November 18th and 26th, 2015, focused on the general geology of the Project area and the existence of rock-types appropriate for the class of deposits being sought.

12.1.2 Western flank of the Cordillera de Cutucú.

A transect was made along the course of Chiguaza River to review the Chapiza Formation adjacent to a north-northwest – striking regional fault located in the western part of the Project area (Trace A, Fig. 11). The river was followed for 3.2km to the border of the Properties. Boulders in the river consist of fine-grained sedimentary and minor volcanic rock of either Jurassic or Cretaceous origin.

A dirt track that heads eastwards from the Patuca gold mine to the Pania River (Trace B, Fig. 11) revealed outcrops of Cretaceous Hollín Formation exposures where Chapiza Formation was expected, based on regional geological maps. The Hollin Formation is characterized by distinctive intervals, between 0.5m and 2m thick that contain pale green glauconite. This observation implies greater structural complexity in the area than was discerned from prior regional mapping.

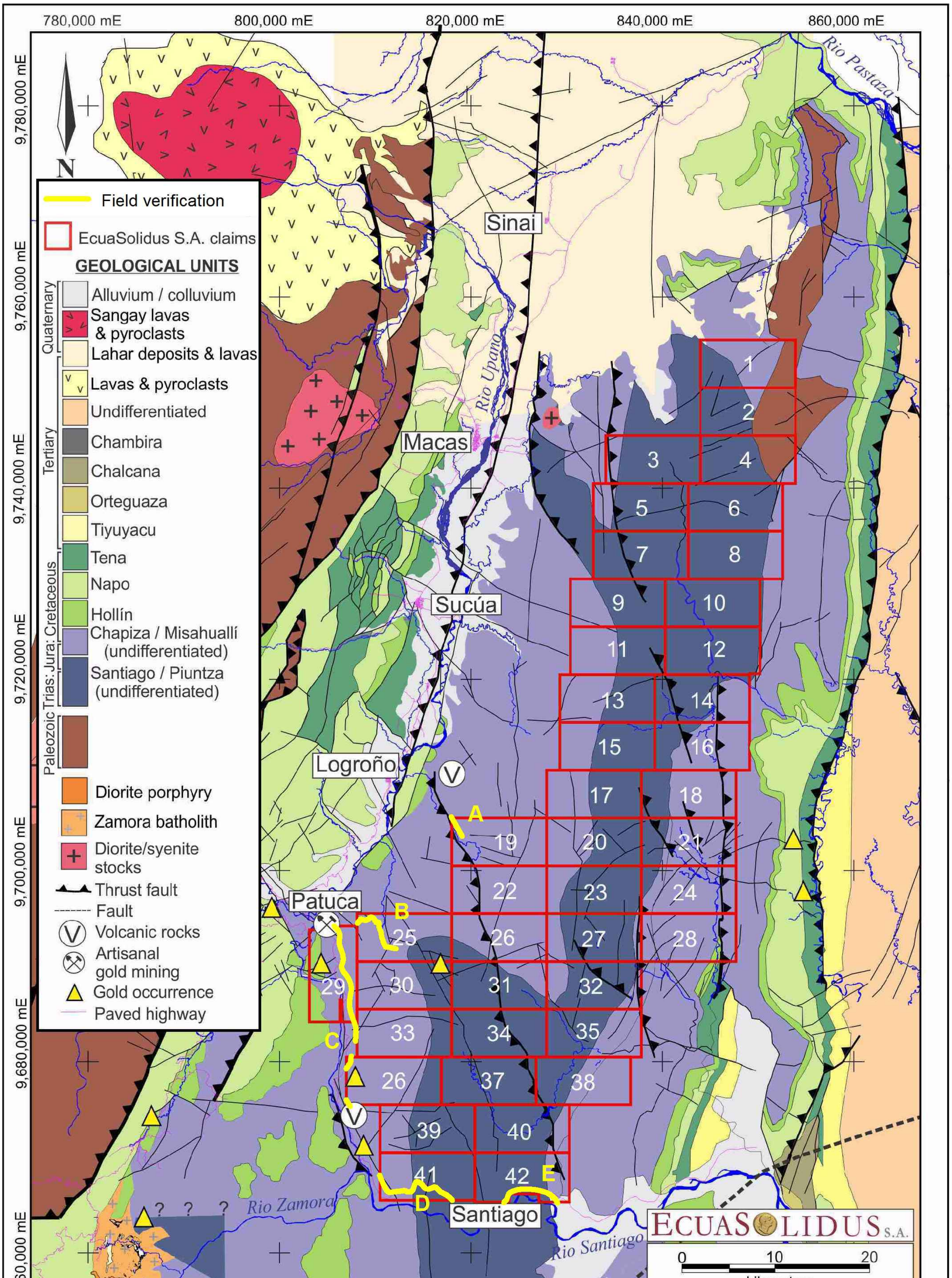

Figure 11. Regional geological map of the Project area showing the traverses that were reviewed by the Author.

12.1.3 Southern part of the Cordillera de Cutucú along the Santiago River

The paved highway E40 that links Patuca with the military airbase of Santiago, also known as Tiwintza, provides an excellent transect through the southern part of the Project area. The E40 follows the Santiago River, the banks of which expose sedimentary sequences characterized by arenites that become increasingly pelitic towards the axis of the Cutucú Uplift along the southern boundary of the Project area (Trace C, Fig. 11). In the vicinity of Chapinait (about 5km from Rio Yuquiantza), a fine-grained gabbro intrudes volcanic successions comprising massive ignimbrite that has chloritic as well as carbonate alteration. Between trace C and D (Fig. 11), massive ignimbrite displays localized quartz-carbonate veinlets and minor disseminated pyrite and covellite. The sedimentary sequences reappear in the transect to the east of the Yuquiantza River (Trace D, Fig. 11), composed of dark mudstone and siltstone beds tens of centimetres to a few metres thick, locally intercalated with chloritic tuff that exhibits iron oxide staining.

To the east (Trace E, Fig. 11), the Santiago River exposes successively coarser-grained sedimentary units, comprising alternating siltstones, sandstones and conglomerates. Closer to the town of Santiago, towards the east end of Trace E (Fig. 11), the sequence subsequently becomes more calcareous with dark limestones and red mudstones exposed near the east flank of the Cutucú Uplift.

Gold panning conducted in streams flowing from the Property into the Santiago River resulted in two, mm-scale colours of sub-angular gold being recovered.

12.2 Sampling and Analytical Procedures

Due to the fact that no recent exploration has been undertaken on the Properties, the taking of stream sediment and/or rock-chip samples for verification purposes was deemed pointless since there are no assay data yet available from the Project area.

12.3 Geochemistry

Since significant porphyry-style mineralization is distinguished in the intrusive suite in the Cordillera del Cóndor, it is intuitive to utilize geochemistry to understand the geological context of the Project area in the Cordillera de Cutucú and how this is linked to its overall prospectivity. Alkali gabbro sampled in the southwestern part of the Project area has a major oxide content (i.e. silica versus total alkalis) similar to ultramafic rocks in the Los Encuetros sector of the Zamora Batholith in the Cordillera del Cóndor (Fig. 12A). In this scheme, gabbro dykes in Cordillera del Cóndor are classified as foid gabbro, denoting a ratio of the mineral plagioclase to total feldspar >0.9. In contrast, alkali gabbro samples in the Project area contain small amounts of nepheline, due to their undersaturation with respect to silica, and some olivine. Meanwhile, volcanic rocks exposed in the southern extremity of the Project area are indistinguishable, based on their immobile trace element content, from volcanic rocks found in the adjacent Cordillera del Cóndor (Fig. 12B).

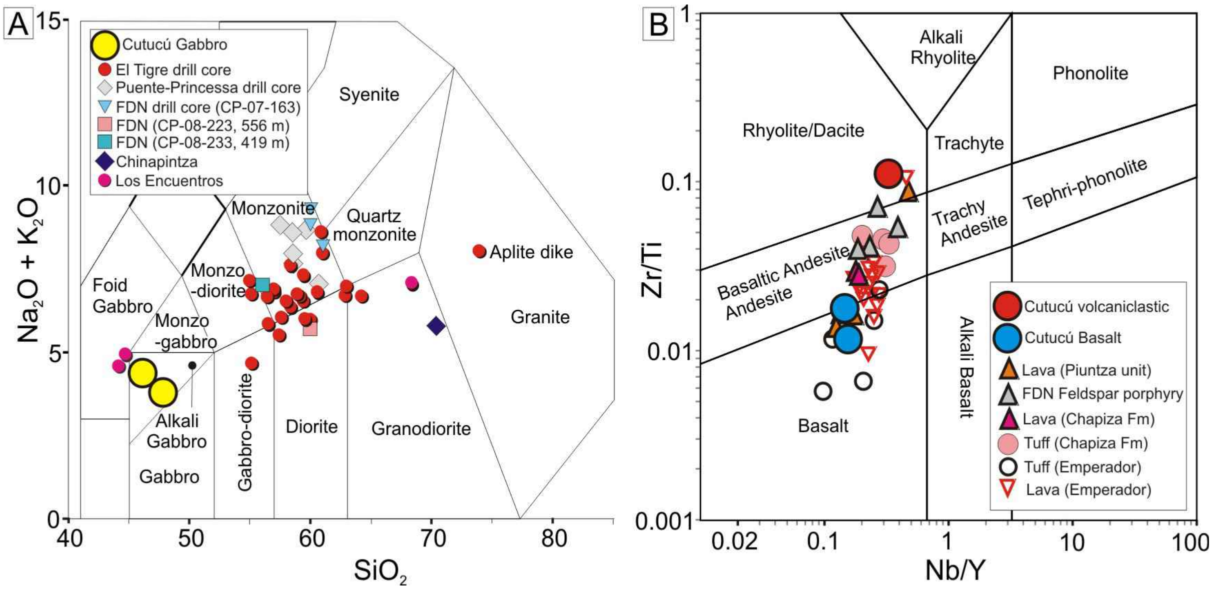

Figure 12. A. Total silica versus alkali classification diagram for intrusive rocks from the Cordillera del Cóndor compared with the two gabbro samples from the Cordillera de Cutucú. B. Immobile trace element ratio plots of extrusive rocks from both Cordilleras.

12.4 Verification of the historical narrative

The Author of this Report has conducted independent research on the historical context of the Cordillera de Cutucú as presented in Sections 16.2 and 16.3. The Author relied on the published compendiums of contemporary historic literature and ethnographic research pertaining to the Cordillera de Cutucú (i.e. Sinclair and Wasson, 1923; Vázquez de Espinosa [Upson Clarke], 1942; Harner, 1973; Salazar, 1977; Taylor and Descola, 1981; Navarro Cárdenas, 1986; Santos, 1992; Salmoral, 1993; Newson, 1995; Renard-Casevitz et al., 1998; Lorenzo García, 1999; Lane, 2002; Peñaherrera de Costales and Costales Samaniego, 2006; Martínez Martin, 2008). In addition to these scholarly accounts, the Author also referenced several antique topological/pictorial maps, from the 16th to 19th centuries, of South America, Perú and Ecuador, namely:

- Carta Corografica de la Republica del Ecuador Delineada por Don Pedro Maldonado e Baron de Humboldt (With large inset of the Galapagos Islands), 1858;
- Venezuela, New Grenada and Ecuador, Samuel Augustus Mitchell, 1849;
- South America, Sheet 1, Ecuador, Granada, Venezuela, Brazil, Guayana, Society for the Diffusion of Useful Knowledge, 1842;
- New Granada, Pinkertons Modern Atlas, 1812;
- La Terra Ferma La Gujana Spagnola, Olandese, Frances, E. Portughese E La Parte Settente.le Del Bresil, Antonio Zatta, 1785 Le Perou Dans LAmerique Meridionale Dressee, Nicolas De Fer, 1719;
- Carte de la Terre Ferme du Perou, du Bresil et du Pays des Amazones, by Guillaume de L'Isle,1703;
- Amerique Meridionale, Nicholas Sanson, 1650;
- Perúvia id est, Novi Orbis pars Meridionalis a Praestantissima eius in Occidetem Regione sic Appellata. Matthias Quad and Johann Bussemachaer, 1598; and
- Brasilia et Perúvia Cornelis De Jode, 1593.

The aforementioned research by the Author corroborates the historical narrative described in Sections 16.2 and 16.3 of this Report. It affirms, based on the aforementioned compendiums of literature, the credibility of Sevilla del Oro and Logroño de los Caballeros as colonial-era gold mining settlements that were formally established by the colonial Spanish, were subsequently abandoned in the late 16th century, and later subject to various expeditions of attempted re-discovery up until the 19th century.

12.5 Adequacy of the Data

Due to the fact that the exploration concessions constituting the Property have only recently been granted, there is no exploration data from the Project to verify. Consequently, verification was mainly of a qualitative nature, ensuring that the rock types located in the Project area are consistent with the mineral deposit-types being sought. Field studies by the Author confirm that the rock-types observed in the traverses undertaken on the Property are generally consistent with the formations to which they have been assigned in regional geological maps. There are exceptions in which field observations were at odds with regional mapping. For example, Trace B, described in Section 12.1.2., detected Cretaceous strata at outcrop instead of the Jurassic strata shown to occur in this locations on regional geological maps.

Quantitative verification of rock types was limited to major element and trace element geochemistry of intrusive and volcanic rock in the Project area in order to assess their similarity with igneous rocks in the Cordillera del Cóndor. The igneous rock suite of the Cordillera del Cóndor is closely linked with the Cordillera de Cutucú.

A literature review of historical information regarding Spanish colonial-era gold production from the Cordillera de Cutucú is consistent with a wide variety of published sources as listed above and in the reference section.

13 Mineral Processing and Metallurgical Testing

To date, no mineral processing or metallurgical testing has been carried out on the Properties.

14 Mineral Resource Estimate

No mineral resources estimates have been made on the Properties.

15 Adjacent Properties

15.1 Properties in the Cordillera de Cutucú

Small-scale hydraulic placer gold mining and aggregate extraction operations are actively exploiting materials along the low-elevation fringes of the Cordillera de Cutucú. Several small-scale mining licences, between 4Ha and 300Ha in extent, are located in the southern and western part of the Cordillera, particularly along the Santiago River. Other than alluvial gold workings, such as Patuca and its environs (Fig. 8), the Author is not aware of mineral deposits or advanced metallic mineral exploration projects immediately adjacent to the Properties. There is, however, one third-party claim that is 4Ha in extent, located within the main body of the contiguous license areas that constitute the Properties (Licence No 90000139 in Table 3).

In addition, three third-party metallic mineral exploration license applications directly adjoin the Properties to the west and the south. Granted exploration license areas and license applications pending approval are listed in Table 3, specifying the geological materials for which the license has been applied for or granted.

Table 3. Third-party licenses enclosed by, or directly adjacent to, the Properties.

Licence No.	Licence Name	Licence Holder	Area (Ha)	Date Granted	Material
90000366	ECCOMETALS 2	ECCOLMETALS S.A.	300	10/01/2017	Gold
90000459	AYANGASA 1	Cruz del Sol CSSA S.A.	3680	In process	Metallic
90000460	AYANGASA 2	Cruz del Sol CSSA S.A.	4720	In process	Metallic
90000139	SAN SIMON	Chiriap Tsenkush Felipe Natale	4	In process	Metallic
90000445	COANGOS	Cruz del Sol CSSA S.A.	4924	In process	Metallic
90000391	COMPROMISO	Ramirez Gonzaga Jose Francisco	295	In process	Gold
900012	MANGOSIZA	Empresa Publica Cementera Del Ecuador	1500	24/12/2015	None metallic

15.2 Properties in the Cordillera del Cóndor

The mineral deposits of the Cordillera del Cóndor are relevant to the exploration of the Project area owing to the similarities in geological and tectonic structure between the two cordilleras. The most significant difference that is evident in the geological compilation of the adjacent cordilleras, based on various sources of geological data, particularly from Aurelian Resources Inc. (e.g. Roa, 2008) and geologists formerly of Corriente Resources (J. Drobe and D. Lindsay), is that the Cordillera de Cutucú has fewer mapped intrusive rocks (Fig. 13). An explanation for this observation is that the Project area has been less deeply eroded than the Cordillera del Cóndor. If this interpretation proves to be correct, exploration targets may plausibly comprise mineralization formed at shallower levels such as epithermal systems. In contrast, porphyry copper systems form at deeper geological levels.

15.3 Epithermal gold-silver deposits

Several epithermal gold-silver deposits have been identified in the Cordillera del Cóndor, often juxtaposed upon, or lying proximal to, porphyry copper centres. A prime example of this paradigm, and being the most northerly in the Zamora Copper-Gold Metallogenic Belt, is the FDN gold-silver deposit, located 90km south of the southern limit of the Properties (Fig. 13). FDN was originally discovered by Aurelian Resources Inc. in 2006, following drill testing of a conceptual exploration target beneath 200m of locally silicified conglomerate-dominated sediments of the Chapiza Formation (Leary et al., 2016). Current indicated mineral resources are 7.35Moz of gold and 9.89Moz of silver contained in 23.8Mt grading 9.61g/t Au and 12.9g/t Ag (Lipiec et al., 2016; Table 4). The resource data provided on the FDN deposit have been obtained from Lundin Gold Inc. and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area.

FDN is classified as a late Jurassic intermediate to low sulphidation epithermal system in which gold mineralization is associated with high density, multi-generational veins, stockworks and breccias (Fig. 14), hosted within a volcanic roof pendant of the Zamora Batholith (Leary et al., 2007; 2016). Mineralization is localized within a coherent tabular zone showing exceptional grade continuity, and is bounded by two north-south striking faults, namely the West Fault and the East Fault Zone. The known FDN orebody measures 1.3km long, is between 150m and 300m wide, and up to 500m deep. Owing to its complete burial, the FDN deposit is well preserved to the extent that the overlying paleosurface, comprising sinter and mud pool deposits, remains largely intact.

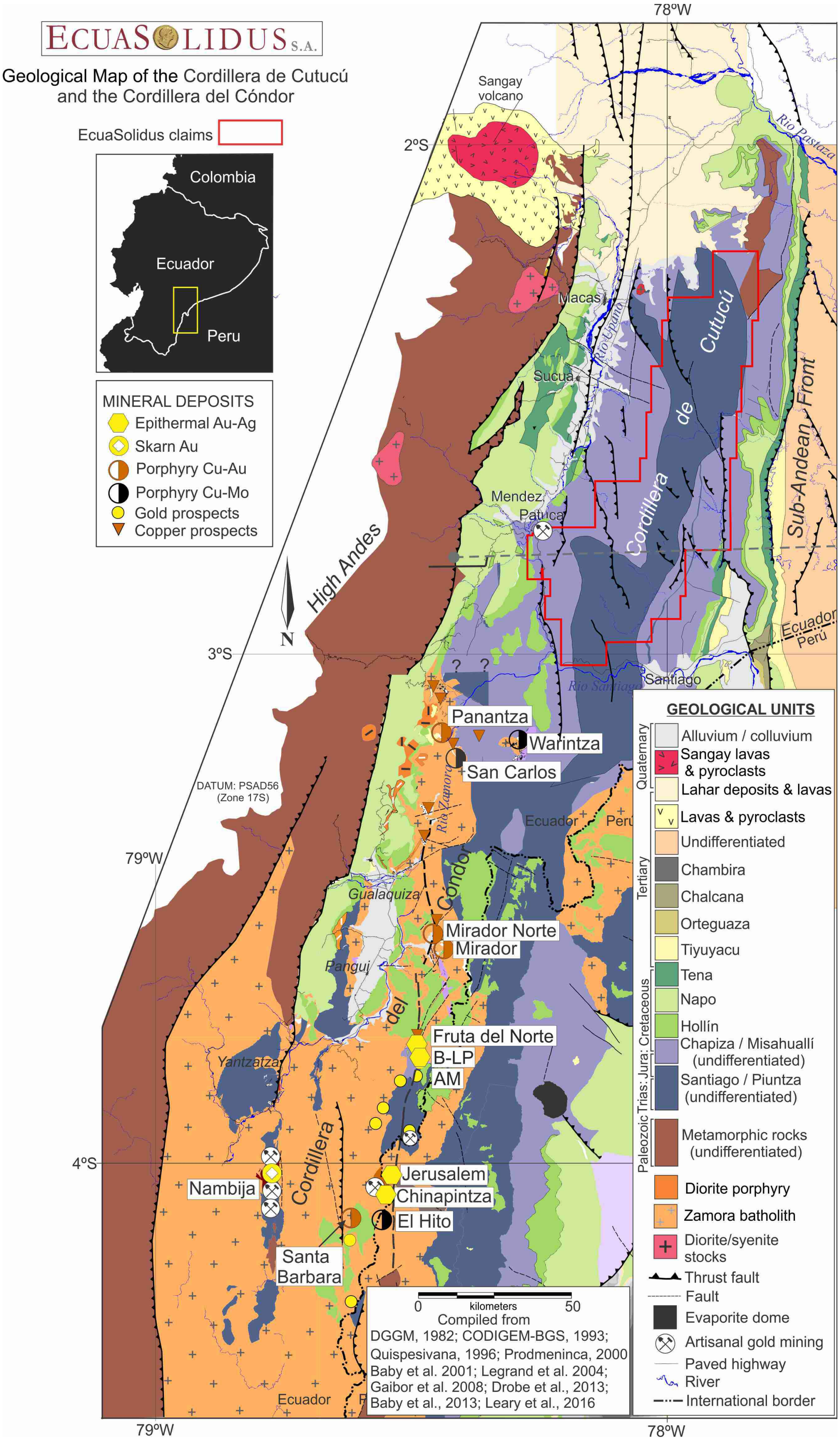

Figure 13. Geological map compilation of the Cordillera del Cóndor and Cordillera de Cutucú showing the location and type of the principal deposits and advanced exploration projects.

Table 4. Summary of NI43-101 Resources Reported from the Cordillera del Cóndor, adjacent to the Lost Cities – Cutucu Project.

Stage	Ownership	Deposit	Resources		Gold		Silver		Copper	
			Category	Millions of Tonnes	Grade (g/t)	Contained gold (Moz)	Grade (g/t)	Contained silver (Moz)	Grade (%)	Contained copper (Blbs)
Measured & Indicated Resources										
Development	CRCC-Tongguan Investment Co	Mirador	Measured & Indicated	438	0.19	2.7	1.4	21.5	0.61	5.9
	Lundin Gold Inc	Fruta del Norte	Measured & Indicated	24	9.61	7.4	12.9	9.9		
Pre-development	CRCC-Tongguan Investment Co	Mirador Norte	Indicated	171	0.09	0.5			0.51	1.9
	Lumina Gold Corp.	Santa Barbara	Indicated	365	0.51	6.0	0.9	10.1	0.10	0.8
		Los Cuyes	Indicated	47	0.82	1.2	6.19	9.3		
		Soledad	Indicated	35	0.63	0.7	7.21	8.1		
	Dynasty Metals & Mining Inc	Jerusalem	Measured & Indicated	1	13.80	0.4	79	2.4		
Inferred Resources										
Development	CRCC-Tongguan Investment Co	Mirador		235	0.17	1.3	1.3	9.9	0.52	2.7
		San Carlos		657					0.59	8.5
	Lundin Gold Inc	Fruta del Norte		12	5.69	2.1	10.8	4.1		
Pre-development	CRCC-Tongguan Investment Co	Mirador Norte		46	0.07	0.1			0.51	0.5
		Panantza		463					0.66	6.7
	JDL Gold Corp.	Warintza		195					0.42	1.8
	Lumina Gold Corp.	El Hito		161					0.31	1.1
		Santa Barbara		178	0.40	2.3	0.8	4.6	0.10	0.4
		Soledad		0	0.50	0.3	6.9	4.5		
		Chinapintza		1	6.00	0.1	47.1	1.1		
	Dynasty Metals & Mining Inc	Jerusalem		2	15.00	0.9	98	5.6		

Note: CRCC is China Railway Construction Corporation Limited

Note: The information presented in this table has been obtained from information provided by other companies and the Author and QP has been unable to verify the information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

The Chapiza Formation forms the mostly post-mineral sedimentary and volcaniclastic barren cover within the Suárez pull-apart basin wherein the FDN orebody lies. While previously referred to as the Suárez Formation (Leary et al., 2007; Hennessey et al., 2007), it is more appropriately recognized as an integral component of the regionally significant Chapiza Formation (Drobe et al., 2013; Leary et al., 2016). Other significant exploration targets of epithermal and mesothermal affinities are aligned with or proximal to the regionally extensive Las Peñas Fault Zone.

High grade epithermal gold-silver deposits with substantial base metal credits also exist around the Chinapintza mining district (Fig. 15), located approximately 34km south of FDN. Here intermediate to high sulphidation epithermal mineralization is associated with calc-alkaline volcanic rocks and intercalated sedimentary units, intruded by a cluster of porphyritic dacitic to rhyolitic dykes that constitute the Chinapintza Porphyry.

The Jerusalem deposit, owned by Dynasty Mining and Metals Inc. is a polymetallic low sulphidation epithermal system comprising sulphide-rich bands and seams hosted in calcium, iron and manganese carbonates, as well as quartz and clay minerals (Maynard, 2014). Jerusalem is reported to contain a measured and indicated resource of 422,300oz at a grade of 13.8g/t Au and 2.4Moz at a grade of 79g/t Ag (www.dynastymining.com) (Table 4). The resource data provided on the Jerusalem deposit are from Dynasty Mining and Metals Inc. and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

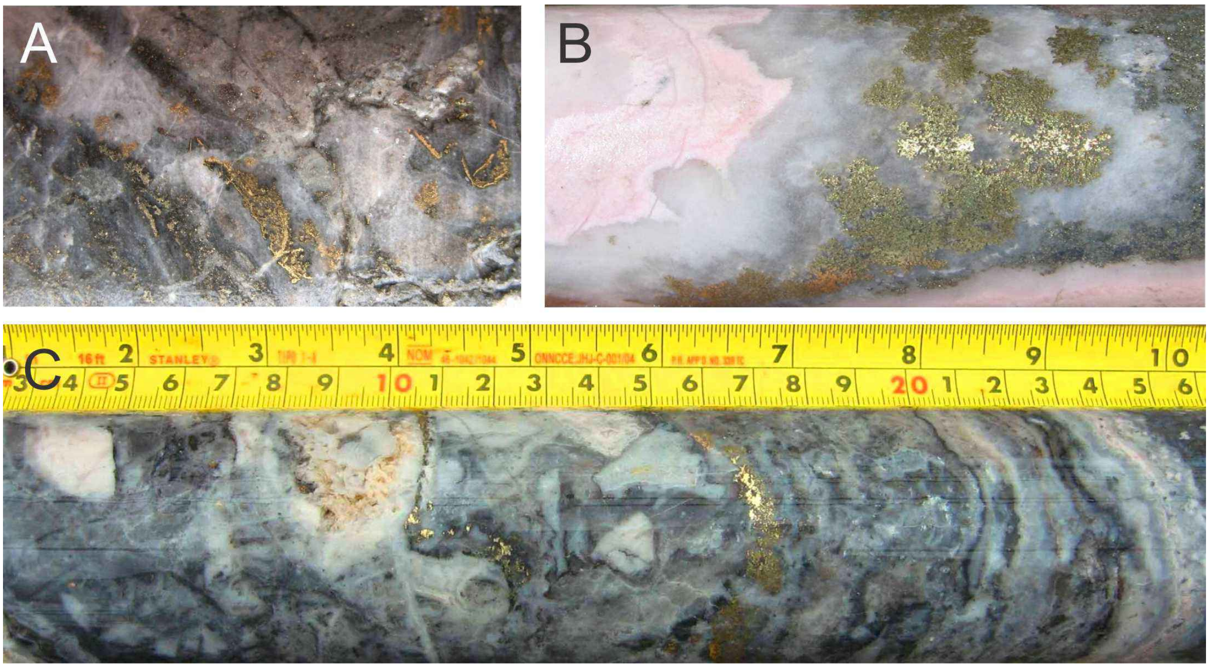

Figure 14. Examples of bonanza epithermal gold mineralization from the Fruta del Norte deposit

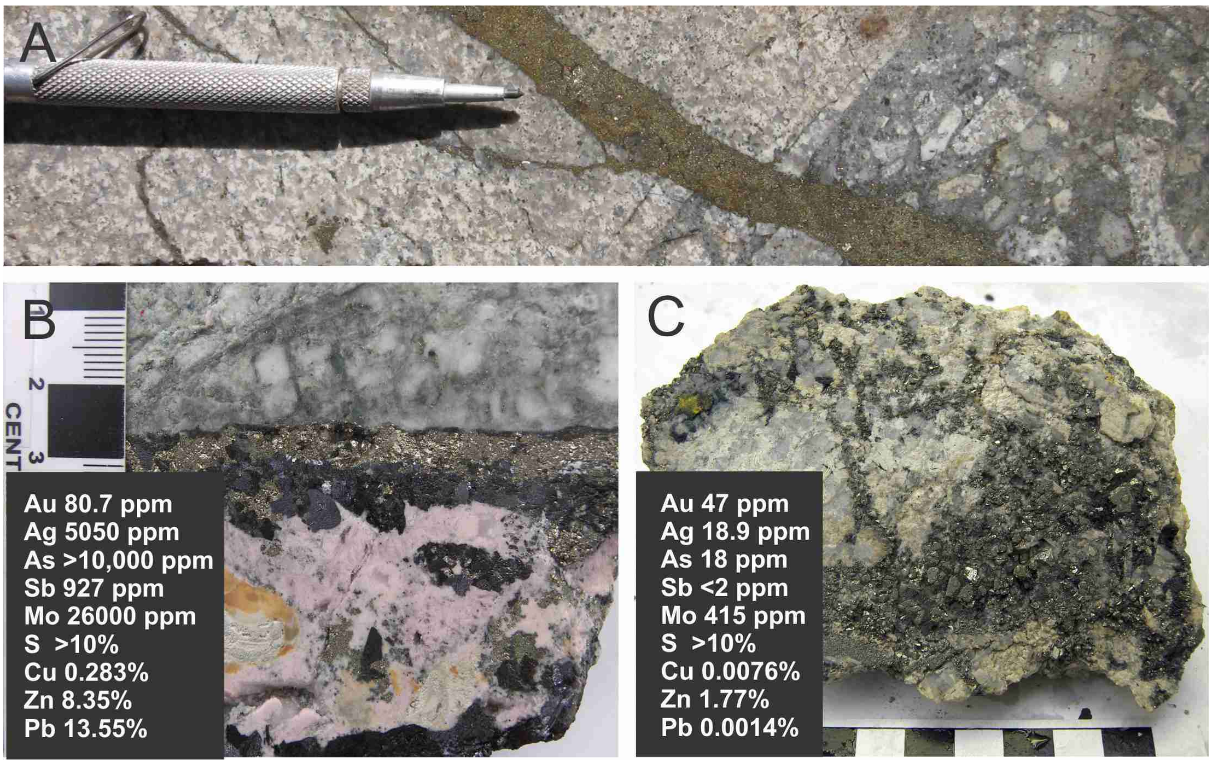

Figure 15. Examples of high grade epithermal gold mineralization from Chinapintza. A. Drill hole DEN 31 (Enma zone) consisting of pyrite matrix breccia zone with pervasive silica-illite-pyrite alteration. B: Gold and base metal-rich manganese carbonate vein. C: Massive sulphide in granodiorite. Samples were acquired during a site visit in 2007 by the Author (Ecuador Epithermal Exchange) and assayed by ALS Laboratories.

15.4 Porphyry copper-gold and copper-molybdenum deposits

Several significant porphyry copper-gold, copper-molybdenum and gold-copper deposits occur in the Cordillera del Cóndor (Fig. 13), along with numerous other copper-gold and/or molybdenum prospects as yet untested by extensive drilling. Copper deposits with modern resource estimates are listed in

Table 4. The deposits tend to occur in clusters and are associated with Late Jurassic, late composite porphyry intrusive phases of the Zamora Batholith (Drobe et al., 2013). Some, such as the Warintza copper-molybdenum deposit, formed in satellite plutons that intrude sedimentary and volcanic rocks of the Misahualli Formation and surrounding Santiago Formation. The Warintza deposit is the closest mineral resource to the Properties, and includes significant zones of high grade supergene chalcocite mineralization, as well as several other target areas that have yet to be drill tested to determine the grades of mineralization (www.jdlgold.com). The Warintza porphyry deposit is hosted in basalts, andesites, dacites and pyroclastic rocks with sedimentary intercalations; a sequence that is correlated with the upper part of the Misahuallí Formation (Ronning and Ristorcelli, 2012).

The most advanced porphyry copper project in the Cordillera del Cóndor is at Mirador, reported to contain a measured and indicated resource of 438Mt at a grade of 0.61% Cu, 0.19g/t Au and 1.5g/t Ag. The inferred mineral resource is reported at 235Mt at a grade of 0.52% Cu, 0.17g/t Au and 1.3g/t Ag (Table 4). Mineralization at Mirador consists of disseminated and fine fracture-fill chalcopyrite and pyrite in potassic altered granodiorite (Fig. 16) and early porphyry dacite, as well as disseminated coarse blebs of these sulphides (Drobe et al., 2013). Some of the porphyry mineralization in other deposits in proximity to Mirador is characterized by relatively high hypogene copper grades; Panantza and San Carlos being examples of such (Makepeace, 2001). San Carlos is currently the largest copper-molybdenum porphyry system within the Zamora Copper-Gold Metallogenic Belt, with a reported inferred resource estimate of 657Mt at a grade of 0.59% Cu, containing 7.7Blbs of copper (Table 4). The resource data provided on the Mirador and San Carlos porphyries have been obtained from information from other companies and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

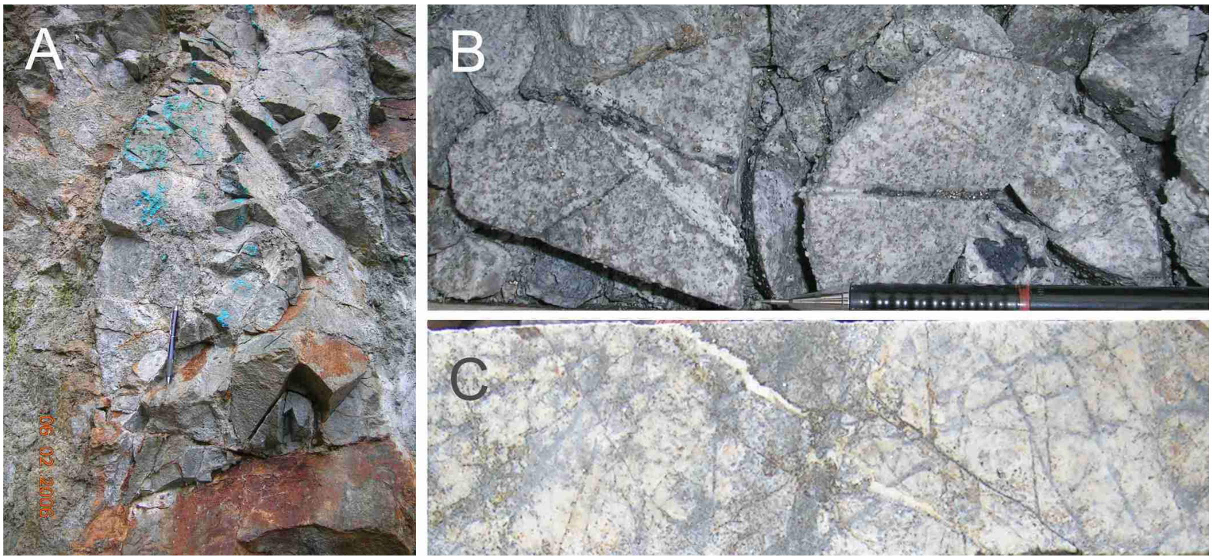

Figure 16. Porphyry copper style mineralization and alteration at the Mirador deposit. Photos by Steve Leary.

The Panantza deposit, located 42km due north of Mirador, has a reported inferred resources of 463Mt at a grade of 0.66% Cu, comprising disseminated chalcopyrite and molybdenite occurring as selvages to quartz veins. According to disclosures, higher grade hypogene copper, averaging approximately 0.8% Cu, is restricted to zones of concentrated veinlet-controlled chalcopyrite-pyrite ± magnetite (Drobe, 2007). The zone of economic mineralization measures approximately 900m by 600m and remains open at depth. The resource data provided on the Panantza porphyry have been obtained from information from other companies and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucu Project area.

The Santa Barbara deposit, located within the Chinapintza mining district, is the only gold-rich porphyry system known in the Cordillera del Cóndor to date. Porphyry Au-Cu mineralization at Santa Barbara is hosted, for the most part, in Upper Jurassic basaltic andesites intruded by dioritic dykes (Short et al., 2015). It is reported to contain an inferred resource of 6Moz Au, with an average grade of 0.51g/t Au, and 0.8Blbs of copper contained in 365Mt of mineralized rock. The resource data provided on the Santa Barabara porphyry have been obtained from information disclosed by Lumina Gold Corp.

(www.luminagold.com). The Author has been unable to verify the accuracy of said information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area.

15.5 Gold and Copper skarn deposits

The Nambija mining district hosts numerous garnet-rich oxidized gold skarns that developed during the late Jurassic. They are genetically related to a felsic porphyry, hosted mainly within volcaniclastic rocks of the Triassic Piuntza Unit (Fontboté et al, 2004; Chiardia et al., 2009). Average gold grades are reported to be between 10g/t and 30g/t Au, locally exceeding 1,000g/t. The total resources of Nambija were reported in 1990 at 23Mt at an average grade of 15g/t gold, for a total of about 11Moz contained gold (Prodeminca, 2000). In 2000, the remaining resources were re-evaluated at between 4Moz and 5Moz of gold (Prodeminca, 2000; Fontboté et al, 2004). The resource data provided on the Nambija deposit are from information provided by Prodeminca and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area.

15.6 Other deposit types

The potential for other styles of mineralization in the Project area, hitherto unrecognized in the sub-Andean Zone of Ecuador, are worth consideration given the greater range of mineral deposits being explored, developed and mined in similar stratigraphy in the northern part of neighbouring Perú. Upper Jurassic to Lower Cretaceous Chimú Formation sandstones in Perú have recently been targeted for disseminated gold deposits after the discovery of the 11.6Moz Alto Chicama - Lagunas Norte deposit by Barrick Gold Corp. The resource data provided on the Alta Chicama deposit are from Barrick Gold Corp. and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area. The discovery of gold-bearing breccias in bituminous sandstones of the Napo Formation at Maicu in the Cordillera del Cóndor by Aurelian Resources in 2004 highlights the potential for Alto Chicama – type mineralization in the Sub-Andean Mineral Belt.

Carlin type mineralization is also reported in Perú within calcareous sediments of the Sub-Andean terranes (Tumialan de la Cruz, 2010) and in the Triassic-Jurassic sediments of Colombia (Lobo-Guerrero, 2003).

In addition, the Upper Triassic - Lower Jurassic sedimentary strata of the Pucará Group in Perú, the stratigraphic equivalent of which is the Santiago Formation in Ecuador, have potential to host Mississippi Valley Type base metal deposits. Examples of this style of deposit in the Pucara Group in Perú include the Bongara Deposit which contains 2.78Mt at a grade of 12.77% zinc, 1.78% lead, 18.2g/t silver, and the San Vicente Deposit that contains 20Mt at an average grade of 10% zinc and 0.8% lead. The resource data provided on the Bongara and San Vicente base metal deposits are from information provided by other companies and the Author has been unable to verify the accuracy of that information, nor is the information necessarily indicative of any mineralization that may lie in the Lost Cities - Cutucú Project area.

16 Other Relevant Data and Information

16.1 Corporate Social Responsibility

Environmental studies relevant to the initial exploration phases of the Project will be undertaken in tandem with exploration as outlined in Section 4.5. The scope and detail required in the environmental studies will increase as exploration activities focus on target areas that emerge from the initial exploration phase.

The Company has engaged a professional consultant to design and implement a Community Social Responsibility ("CSR") strategy for the Project area. Dialogue and collaboration are the pillars of any successful CSR strategy, and through the implementation of Early Strategic Stakeholder Engagement ("ESSE"), the Company plans to engage and work with local stakeholders, including indigenous and non-indigenous communities, identified within the Property.

The first steps in Aurania's CSR strategy include:

- Establishing relationships based on open dialogue;
- Learning first from local communities, including indigenous groups; and

- Building a solid understanding of the socio-economic landscape of the Cordillera del Cutucú.

The CSR initiative aims to identify opportunities for collaboration with local communities and government representatives at the municipal, provincial and federal levels.

16.2 Reported Historical Gold Production

The following section was written by Dr. Keith Barron and edited by the Author who has independently researched the history of the Cordillera de Cutucú. The Author personally interviewed, in Quito, the Emeritus Professor of History, Octavio Latorre Tapia, who is an experienced archivist, cartographic analyst and a world authority on the early explorations of the Conquistadors in South America. The Author makes no claims as to the accuracy of the historical record pertaining to the Colonial history of Ecuador, or the speculations of Dr. Barron within this context.

16.2.1 Introduction

The history of gold production from the Cordillera de Cutucú, as researched by Dr. Keith Barron in collaboration with Professor Latorre, has involved a substantial body of work conducted over two decades across three continents.

Historical research into potential "lost" gold mines from the age of the Spanish Conquistadors was initiated by the Government of Ecuador following the accidental rediscovery, in 1981, of the gold mines of Nambija (Figs. 13 & 17), in the Cordillera del Cóndor. Within several months, over 25,000 artisanal miners are reported to have congregated on Nambija, forming 75 separate mining operations. As of the year 2000, some 2.7 million ounces of gold production was recorded officially, though significantly more is suspected to have gone unrecorded and simply vanished into the black economy (Prodeminca, 2000). The unregulated use of mercury to recover gold at Nambija has since contaminated water and soils to dangerous levels (Ramirez Requelme, 2003). It became clear to the Ecuadrean authorities that Nambija had been a Spanish Colonial gold mine abandoned centuries previously, the economic value of which warranted a country-wide appraisal. A pictorial map produced by Don Pedro Maldonado in 1750, accurately depicts the location of Nambija, a copy of which is available on-line from the US Library of Congress (https://www.loc.gov/item/2004627237/),

In the late 1980's the Dirección de Industrias del Ejército (a branch of the Ecuadorian military which included the Geological Survey) commissioned the *Investigación Histórica de la Minería en el Ecuador* (Navarro Cárdenas, 1986) to study antique historical documents pertaining to the Spanish Court in the search for other lost gold mining settlements. The Government of Ecuador thus recognized that if colonial Spanish mines could be relocated, they could potentially be exploited in a modern, environmentally and technically sound manner as opposed to the haphazard, chaotic and dangerous methods utilized by artisanal miners. The lost and abandoned colonial gold mines could thus be secured in such a way so as to ensure that production taxes would be received within Ecuador.

One of the consultants on this study was Professor Latorre whose literary achievements include "*Los mapas del Amazonas y el desarrollo de la cartografia Ecuatoriana en el siglo XVIII*" (The maps of the Amazon and the Development of Ecuadorian Cartography in the 18th Century) and "*La expedición a la Canela y el descubrimiento del Amazonas*" (Expeditions in Search of Cinnamon and Discovery of the Amazon).

Through serendipitous circumstances Dr. Barron met Professor Latorre in 1998 and, as part of a Spanish language immersion course, lodged at his home in Quito. Dr. Barron became aware of the Professor's interest in the earliest explorations of Ecuador by the Spanish Conquistadors in the 16th century as well as his research into the earliest maps of South America. Dr. Latorre had discussed the extant evidence of other lost gold mining settlements in Ecuador with Dr. Barron in 1998 and in 2000, and was the motivating force behind the creation of Aurelian Resources Inc. in 2001.

Numerous documents uncovered by Professor Latorre and colleagues at the Banco Central of Ecuador and the Central Library of the Chancellery (http://www.cancilleria.gob.ec/central-library/) indicated that two famous gold mining settlements; namely Logroño de Los Caballeros and Sevilla del Oro, were still lost, as Nambija had been for several centuries.

Figure 17. The Nambija artisanal gold mining district in 2006. Photographs by Steve Leary.

Accounts of the Spanish conquests of the Aztecs in Mexico by Hernan Cortez (1521) and of the Inca in Perú by Francisco Pizarro (1532) are still poignant in cultural memory. Systematic looting of fabulous gold and silver treasures, mostly in the form of ceremonial objects taken by force from the indigenous peoples, or through grave robbing, is almost certainly the greatest act of cultural piracy the world has seen since perhaps the sacking of Rome by the Visigoths in 410 AD.

Stories of the sources of Inca gold evolved into the mythology of El Dorado, which alone has fuelled many adventures into the interior of the South American continent. Some of these were earnest exploration efforts, but many were fraudulent. The Inca and other indigenous peoples in the pre-Columbian era mined gold and silver over at least 1,000 years from hundreds of sources in South America; from Colombia through Ecuador and Perú to Venezuela, Guyana and Suriname.

No single mine accounted for the wealth of the Inca and it is a certainty that the Inca took gold from the peoples they themselves had subjugated.

As the Conquistadors streamed into the interior of South America in search of gold, they encountered numerous active and abandoned gold mines, as well as gold-bearing hard rock and placer occurrences. Those that became colonial mining operations were strictly regulated into *encomiendas* or “mine camps” by the Council of the Indies, titles for which were awarded to noblemen and, in some cases, to noblewomen. As well as mining gold and dutifully yielding the *Quinto* royalty or “King’s fifth”, these dignitaries were charged with indoctrinating the native population into the Catholic faith. Far from being benign patrons however, these mine owners and enforcers ran what were in essence, indigenous labour camps. Most of these *encomiendas* only lasted a few years however, until the gold was depleted or the labour force perished due to Old World diseases such as smallpox and influenza to which the native population had little immunity.

During the Spanish occupation of the New World it was illegal to possess undeclared gold dust or nuggets. All gold production had to be surrendered to the *Caja Real* (the Royal Treasury) where it was cast into rough ingots bearing imprinted fineness, tax stamps and origin. Few of these ingots have ever been recovered from modern-day salvage of Colonial shipwrecks. Typically the ingots were not preserved and were re-cast into milled coinage upon reaching Spain. What has survived, however, are the voluminous written accounting records, annual reports and other correspondence, most of which is housed in the Archive of the Indies, (*Archivo General de Indias*) in Seville, Spain, which is registered with UNESCO as a World Heritage Site:

(http://www.mecd.gob.es/cultura-mecd/areas-cultura/archivos/mc/archivos/agi/portada.html).

This is the main repository for documents from the Spanish Colonial era, by decree of Carlos III in 1785. More than 100 documents relating to Logroño de los Caballeros and Sevilla del Oro were located by professional archivists Guadalupe Fernández Morente and Esther González Pérez in Seville on behalf of Dr. Barron from the period November, 2007 to May, 2008. The documents are all handwritten and have been transcribed by specialists into coherent texts. They consist primarily of testimonials, ledger accounts of gold production from the Royal Treasury, court documents, reports to the Crown, or requests for honours, land, pensions, and titles. In the following sections, references to unpublished documents from this archive are denoted "AGI". These investigations were supplemented by archival searches by Dr. Barron and/or Professor Latorre in the various libraries in Ecuador previously mentioned, and further afield in the Archivo Historico Arzobispal and the Riva Agüero Institute, Lima, the Biblioteca Nacional de España, Madrid, the Rare Book Section of the New York Public Library, the British Museum Library, London, and the Manuscript Section of the Apostolic Library of the Vatican, Rome.

Locating Logroño and Sevilla del Oro is not a straightforward task since many of the documents pertaining to these Colonial mining camps are illegible, incomplete or otherwise hard to decipher. They are also written in a form of Spanish language resembling Elizabethan English. There are also occasionally contradictory statements in the historical record as to when the settlements were destroyed and relocated. What is known with relative certainty is that both were centres of gold mining, and a reconciliation of the local geography and history potentially narrows their search area.

16.2.2 Juan Salinas Loyola

After the civil wars in the Viceroyalty of Perú, Pedro de la Gasca in 1548 divided the eastern governorates into four territories, namely Quijos, Macas, Yaguarzongo and Bracamoros. All new expeditions of exploration required pre-approval by the Council of the Indies in Spain. The Viceroy, the Marquis of Cañete, gave the Conquistador Juan de Salinas Loyola a commission that authorized him to establish *encomiendas* in every town he populated in Yaguarzongo and Bracamoros, from which he would profit after the King's Fifth was deducted (Stirling, 1938). This lucrative arrangement was the impetus for the foundation of the settlements of Loyola, Valladolid, Zamora, Santiago de los Montañas and Santa Maria de las Nievas in the period 1556 through 1559. In 1560, Loyola founded Santa Maria del Rosario, which later became known as Sevilla del Oro. The foundation of Logroño may be attributed to Salinas Loyola or to his nephew Bernardo Loyola, possibly as early as 1568. In 1569-1570 Salinas Loyola travelled to Spain to have his merits and rights as "*Adelantado*" officially recognized by the Council of the Indies. This enabled Salinas Loyola to be appointed as Governor. In this role he took gifts of gold samples for the King.

"Logroño de los Caballeros" (or "Logroño of the Knights") was named after the town of Logroño in the province of Rioja in Spain, where Juan de Salinas was born. It was originally founded by the Knights Templar, hence its regal designation. The Loyola family owed their extreme wealth to gold mining and built a convent in the town that was to be funded in perpetuity. It was destroyed during the Spanish Civil War but its baroque façade was preserved and the building now serves as the Parliament for Rioja Province (Martínez Martin, 2008).

> Writing to the Council of the Indies in 1577, Loyola described his exploits
>
> "After my return (from Spain) I have been occupied in providing ruling and foundation to the four cities I left settled before I went to these realms……and have settled two others again in more convenient regions, that one is called Logroño and the other the New Sevilla del Oro, in all of these there are gold discoveries and every day there are more samples that promise more wealth…" (AGI, Quito, 21, N.46).

Writing from the *encomienda* of Alonso Velasquez Gavilanes (1579):

“It has been over 6 years since you were in these parts and provinces of Perú…in the peace making of the locals of the provinces of Chapico and the rest of the regions, when following my order, Captain Jose Villamar Maldonado, came to settle in these same provinces the city of Sevilla del Oro, where you stayed for over two years….after which, having I (Santiago Loyola) come into such city of Sevilla del Oro we found it….giving the order to General Bernardo Loyola to go with a force to the provinces of the Jivaro to settle a city in the name of His Majesty and bring the locals to peace….you had joined him on his expedition to the aforementioned provinces and helped bring peace to those natives, until you were all obliged to settling in those provinces the city of Logroño, where you stayed as well over 3 years….” (AGI, Council 126, R.14, April 19, 1582).

And by Juan Alderete, Salinas’ successor as Governor (and brother-in-law) (AGI, Patronato 294, No. 19):

The other city, which is populated between this city of Seville and the one of Santiago, is the city of Logroño de los Caballeros. The people are very bellicose and they do not serve and they have killed a quantity of Spaniards and every day they kill more. It is a very rough terrain with many rivers and ravines, and all of them generally carry gold, and in so much quantity, that it forces the Spaniards, forgetting the danger, to try to hold them for the profits which they inure and for which the land promises. They began to extract gold, and with being with so much work, they took the first year almost 30,000 pesos, which represents all the accrued spending on sustenance and supplies, for the Spaniards and the natives who mine it

In the city of Valladolid the 1st day of the month of December, 1582.

16.2.3 Location of Logroño & Sevilla del Oro – the Diego Mendez Map

Dr. Latorre was aware of a map of great historical importance, originally published in the world’s first atlas, by the Flemish cartographer Abraham Ortelius (1527-1598) labelled “*Perviae Auriferae Regionis Typus* (Gold Regions of Perú) (http://sites.fhi.duke.edu/defininglines/india/Peruiae/) (Fig. 18). The map is by “Didaco Mendezio”; the Latinized name for the priest and cartographer Diego Mendez and clearly marks the settlements of Logroño and Sevilla del Oro. However, due to its antiquity (1574) it can only be considered as an approximation at best. Mendez’s map predates the invention of the means to fix longitude, and so east-west measurements were plotted by dead reckoning. Dr. Latorre recognized early in his research that the Amazon basin as depicted on this map is clearly imaginary.

Close inspection of the map indicates a place name called “El Pongo”. This is the famous El Pongo de Manseriche, a narrow gorge in Amazonian Perú through which the Marañon River passes. Salinas de Loyola descended these treacherous rapids in 1557 and testified:

“they came to two very dangerous rivers, and the paths ended, and there I populated the towns of Santiago (…).

Later with some of the soldiers I navigated down the river in canoes travelling through narrow and dangerous rapids, especially the part the Indians call Pongo.” (AGI Patronage 113, R.7. Merits and Services: Juan de Salinas, Perú, Lima, Cuzco, 1565).

This description is of great significance since “Pongo” is a Shuar word that remains in use today but would have been unknown to Europeans, except Salinas and a handful of others.

It would have been, as a matter of officialdom, necessary for Salinas to have presented a map to the Council of the Indies regarding his petition for the Governorship. Having left for Spain in June, 1569, he spent some time in Hispaniola waiting for an onward ship. Diego Mendez was in Hispaniola at the same time, and it is not unreasonable to speculate that the two collaborated on a map which was later incorporated into Mendez’s map of 1574 (Fig. 18). The inference is that the relative positions of Sevilla del Oro and Logroño de los Caballeros on Mendez’s are relatively accurate, and were supplied by Salinas himself. Mendez ended his days as Chaplain of the Monastery of the Encarnation in Lima. A document bearing his signature in the Lima archives was found by Dr. Latorre. Mendez is also mentioned in the Compendium and Description of the West Indies (1628-1629) by Vazquez de Espinosa.

Figure 18. Page from the 1584 atlas of Ortelius showing the map of 1574 by Diego Mendez and detail of the Mendez map with "El Pongo" in lower right corner, Sevilla del Oro and Logroño are central. Keith Barron private collection.

16.2.4 History of Logroño and Sevilla del Oro - Fray Vasquez de Espinosa

In 2011, Professor Latorre and Dr. Barron visited the Vatican Library in Rome. Dr. Latorre's brother, Luis Latorre Tapia, is the Ecuadorian Ambassador to the Holy See and cordially facilitated their permission to conduct research in the library. Although the research yielded no significant initial results, an excerpted transcription published in a 1950's anthology, entitled "Great Works in Spanish Literature", later proved to be highly topical to the Cordillera de Cutucú. This anthology is the "Compendium and Description of the West Indies. Only when a full translation became available on-line in 2015 was it recognized that the original document actually resided in the Manuscript Section of the Apostolic Library in the Vatican (Barb Lat. 3584), in a different part of the library where Dr. Latorre had previously visited. The fortuitous re-discovery of this presumed lost document in the Vatican in 1929, by Charles Upson Clark of the Smithsonian Institution, is extremely insightful and is fully discussed in volume 102 of the Smithsonian Miscellaneous Collections, 1942. A transcription in Spanish was published in 1948 by the Smithsonian.

Vázquez de Espinosa was a Carmelite priest who lived in the New World from 1608-1622, residing in Mexico, Central and South America and the Caribbean. He returned to his native Spain and wrote his Compendium but only managed to get a small part of it typeset before he died in 1630. The document chronicles his travels in the Spanish territories and provides a fascinating account of geography, botany, ethnology, anthropology, ecclesiastical matters and mining in the New World. He was in the Audiencia de Quito (present day Ecuador) in 1614 and baptized 3,000 natives (San Pedro Muñoz, 1948).

The following are excerpts from the 1942 translation:

> 1111. Of the City of Sevilla del Oro in the Province of Macas.
> Thirty leagues from this town [Riobamba] to the southeast. is the city of Sevilla del Oro in the Province of Macas; it is mountainous country, and after crossing the Cordillera to get to this city, there is a paramo called Sufia (which translates as cold sierra) on which there are two very large lakes. Of the rivers issuing from them, one runs W. and passes near Riobamba; they call it the Rio de Chambo; after cutting through the Cordillera, its current turns E. and it becomes a large river; the Indians of the first province call it Corino, those of the second, Parosa. At 180 leagues from its source it unites with the great Rio de Orellana; there are extensive provinces on both sides of it but thinly settled.
>
> 1112. The other river follows a straight course to the E., running near the city of Sevilla del Oro, and is named Opano. From this city its current turns S. and it traverses the Province of the Jibaros. The country is the richest in gold in all the Indies. The natives are cannibals and very warlike, and devastated the city of Logroño de los Caballeros, massacring the Spaniards and burning the churches. This was all caused by maladministration, negligence and injuries inflicted by higher officials on certain residents of this city.
>
> 1128 …..12 leagues to the E. [from Cuenca] is the Province of the Jibaros, subdued by Gov. Juan de Salinas at the same time with that of Zaguarzongo; he established in it the city of Logroño de los Caballeros, which through bad management was carried by storm by these Jibaro Indians, who massacred all the Spaniards and burnt down the churches; and for the more than 30 years succeeding, these savages have done much damage in the territory of this Corregimiento of Cuenca, in villages in its jurisdiction which they have cut off, like Los Cuyes, and in the year 1621, the village of Cóndor, and they have done much other harm in this territory and the same in the Province of Macas which likewise adjoins them. The Indians of this tribe are very warlike and have carried out every enterprise they have undertaken; so they have become very haughty and exceedingly insolent through having received no chastisement. They are cannibals of horribly savage customs.
>
> 1129. The province they live in is one of the richest in gold to be found in all the country hitherto explored, so much so that the Indians took out all the wealth in gold possessed by the Incas from the slopes of the Santa Barbara mines. This country was subdued and settled for 2 years, and in that period the 20 percent accruing to His Majesty, was collected. Since then for the reasons given there has been no security on account of these savages, and so it would be of great importance for the Royal Council to entrust the pacification and subjugation of these Indians to the Corregidor of Cuenca, both because he is close at hand and the country is cheap and abundant as regards supplies, and for the wealth and tranquility which would accrue to the country; he should be given some honor for it; he will subdue them with ease.

The Compendium and Desciption of the West Indies is the only literal source which provides a description of the route to Sevilla del Oro. The same route, formerly used by the Conquistadors, now follows Highway E46 from Riobamba to Macas over the height of land and past the Atilo Lakes. The Jurumbaino River runs along the highway route and joins the Upano River from the west at Macas, then flows southwards. In Espinosa's account the Upano is called "Opano". This description corroborates the map of Mendez, wherein Sevilla del Oro is marked on the east side of a large north-south river.

16.2.5 The gold endowment of Logroño

There are numerous accounts in the historical record of substantial gold occurrences at Logroño and Sevilla del Oro, however whether they are placer or hard rock is difficult to determine. Juan de Alderete stated that in the first year almost 30,000 pesos of gold were produced at Logroño. A peso was the equivalent of 4.6g of "buen oro", yielding 22.5 carat purity (Lane, 1996). This entailed that approximately 4,100 troy ounces were produced. A *Caja Real* or "Treasury Building" was established at Logroño to receive gold production so that the *Quinto* could be recorded (testimony, Diego Gonzalez Rengel, Quito 3rd September, 1591 in the presence of the President of Judges, AGI, QUITO 404). Juan Calvache, resident of Cuenca, who had travelled with Captain Bartolomé Perez on a punitive mission against the Jivaro Indians stated:

(f.13v) They are [referring to the Jivaro] in lands that are very rich in gold. This witness in one week extracted 350 pesos of gold with six other men, and the witness said that this land was the richest in gold of all the Kingdoms of Perú. A lot of gold was extracted when there were crews but this all came to an end when the Indians rebelled."

The rebellion took place mid-1590 whereby 16 Spaniards were killed in Logroño de los Caballeros, and 40 were rescued (AGI, Legajo, QUITO 404, 127-3-15).

It would appear therefore that Logroño was destroyed and subsequently rebuilt several times, but after numerous unsuccessful attempts to relocate it, was finally lost (AGI QUITO 143, N.20, Memorial *Juan Bautista Sanchez de Orellana* about the conquest of Logroño 29-02-1720). One can deduce that gold mining at Logroño was considered worth every effort despite the intrinsic hazards.

16.2.6 The Destruction of Logroño

The historical record mentions the Logroño was destroyed in 1578 and rebuilt in 1590. Vazquez de Espinosa, writing in 1628, recounted that it was destroyed "30 years before" whereas Velasco claims its destruction in 1599, a date that is erroneous for reasons stipulated below. What is apparent is that Logroño is by and large absent from archival manuscript accounts after the year 1600, other than brief mention of its loss. It vanishes from maps after about 1630, and thereafter only appears over a hundred years later as the conjectured site of "ruins".

In contrast it appears that Sevilla del Oro was gradually abandoned and then finally relocated, its population employed thereafter in agriculture.

Two items are included below, for sake of completeness, and to once again illustrate that these were real places and not mythology, occupied and defended by real people, and sites of human tragedy. They also state that soldiers were sent to Santiago de los Montañas and Sevilla del Oro for aid to Logroño, and these must presumably have been the closest settlements.

Letter from the Royal Audience of Quito to their Majesty, 1579. (AGI/5, Quito 8, 6 ft)

Taylor –Landazuri: The Conquest of the Jibaro Region, 1550-1650, p. 108-9

"…The day after a group of people rebelled against us from one of the governorates of Juan de Salinas, these people called Gibaros and the city called Logroño; the rebellion took place as two Mestizos called all the aborigines and made them rebel coming after many Spanish settlements, killing 17 then and 3 more another day. Afterwards they intended to come to the aforementioned city and it must have been God who wanted to save the people of Logroño more for a miracle than the natural order; since we were notified in advance, we were prepared with large amounts of gun powder and lead and of people which is how we came to aid them. Some soldiers left afterwards with their respective leaders to destroy the attackers and because they had to cross a very mighty river, a raft of seven people was lost and another arrived with three less soldiers who were killed by Mestizos; the rest returned back to the city but were not able to cross through, and the two that were able to cross were killed offensively by Mestizos, who killed them as tokens of cruelty so that they could be recognized by the natives."

AGI Patronage 126, R. 14. Merits and Services: Alonso Velásquez de Gavilanes: Chiapico etc. 1582.

Proof of Services; Alonso de Velásquez Gavilanes, resident and mayor of Sevilla del Oro. Sevilla del Oro, April 19, 1582:

Witness Declaration: Francisco Machacón, mayor and neighbour of Sevilla del Oro:

"(doc.1, im.18) (…)This witness knows that a few days after mayor Alonso Velázquez de Gavilanes passed through Spain to these parts of Perú, he started a journey and pacification of the Indians of the provinces of Chapico, Guano and Guayano. At his expense and mission he populated the city of Sevilla del Oro, in which captain Joseph de Villamar Maldonado entered the journey, (…) and the witness knew that it was in the city of Cuenca that they were preparing people and things that were necessary for the journey. Alonso de Gavilanes brought Francisco de Rojas to the journey with him, and had prepared the weapons and things necessary for the journey (…)

This witness knows that mayor Alonso Velásquez de Gavilanes served Your Majesty in the conquests and pacifications of the Indians of the provinces, until Jhoan de Salinas Loyola sent him with captain Bernardo de Loyola, to conquer and pacify the Indians of the provinces of Jívaros, Paringues and Aquiones. The witness knows that after three or four years the provinces of Jívaros were pacified and populated in Your Majesty's name, and the city was called Logroño. Alonso Velázquez de Gavilanes returned to the city of (Sevilla del Oro), where he was mayor, and in the city of Logroño he was supervisor of Your Majesty's Real Hacienda (im.21) and he also became lieutenant and attorney of Sevilla del Oro; these responsibilities were given to him because he was a man of principal and honor (…).

This witness said that the soldiers of Palenque had a lot of work. They had to transport and cut the wood pile themselves. They did this in order to survive as they were very few waiting to be rescued (…) also (im.22) that some soldiers went down the river looking for help; three soldiers rafted to the city of Santiago, from where they were rescued. The witness believes that Alonso Velázquez de Gavilanes was one of those who were able to escape to the city of Logroño where one can extract gold, and increase the "reales quintos" [King's Fifth] of His Majesty.

The witness knows that the city has moved from where it was before, and he knows this because he heard it from residents of the city of Logroño, which at the time was above the Yndangoça River that the Spaniards called Ebro. He also knows that they removed the Indians from the provinces of Paringues and from the city of Logroño, who killed the seven Spaniards, and those from other nations who were capturing the Spaniards for their service. The witness knows this for a fact because he saw it with his own eyes, as he was one of the ones sent from the city of Sevilla del Oro to save the city of Logroño and to punish the criminals. He there heard that Alonso Velázquez de Gavilanes, had left the city because of what happened with a few friends and they went to the province of Aximbaca where two of the people wanted to kill them, for being people of the belligerent provinces, their names were Juan Arias and Correa, soldiers of that journey. They wanted to kill mayor Alonso Velázquez de Gavilanes and his accompanying soldiers with special weapons used by the people of the provinces of Aximbaca and Curahuangoça and Capiçango, which are countries where one cannot conquer Alonso Velázquez de Gavilanes and his soldiers without a lot of work and risk of life. Alonso Velázquez de Gavilanes went to the city of Logroño in the company of captain Juan Zapata, lieutenant governor, and very few soldiers. Also, the witness heard that they all returned to captain Bernardo de Loyola's house, who had been outside of the provinces, and they could not stop themselves from guarding the city which was a lot of work because they were so few, nor could they stop the surveillance because the provinces were carrying out the punishments for the death of the 7 Spaniards (…).

(…) This witness knows from the experience that he had, and because he was imprisoned in the province of Paringues (…), due to the land having been so rough and mountainous and there being a lack of food, everyone had to work very hard (im.24). Alonso Velázquez de Gavilanes, always had to carry his weapons on his back through the dangerous paths and ambushes (…), (and) he was forced many times to travel along dangerous paths, swimming across the rivers with weapons, also he had to cross very dangerous bridges which they say was normal in that area. During the times of war they were very dangerous because there were no Indians maintaining them. The witness also said that it was very dangerous and risky because of the rivers below were so big, and mighty. If someone was to fall in they would not escape without a miracle, and the rivers in those provinces were notorious for drowning Spaniards (…)

This witness said that Alonso Velázquez de Gavilanes came out of the provinces very sick. He came to this city after three or four months, without color and unhealthy (…), because during the conquest *they lacked meat and corn, and they didn't even have the roots that the Indians would eat. They went a very long time without eating (im.25), and they survived on eating grass alone (…)"*

16.2.7 Juan de Velasco

In 1789, Juan de Velasco, a Jesuit priest recently banished from the New World, wrote in Italy an anthology that became a "bestseller", entitled *Historia del Reino de Quito.* It documented a pre-Inca culture in Quito, the conquest of the Inca by the Conquistadors, and the final destruction of Logroño in 1599. In it he states that a coordinated attack by the Jivaro Indians united by the native chief 'Kiruba', resulted in the massacre of 12,000 Spaniards, their women carried off as brides. The visiting Governor was put to death by being held down while molten gold was poured down his throat "until his innards exploded". Valesco's account is fanciful however, since it draws on many elements of Plutarch's *Lives* and is largely apocryphal. It is known that the alleged assassinated Governor was still writing letters in 1606. King Carlos IV of Spain read Valesco's book with such interest that he believed the restoration of Logroño could potentially refloat the Spanish treasury. He offered a prize to whoever could rediscover Logroño and secure it for the Crown. Notwithstanding the King's impression and pledge there is no historical information which corroborates Velasco's version of events, in particular the ultimate destruction of Logroño in 1599, nor the existence of Kiruba. Indeed, the Shuar people have no oral histories or traditions commemorating the event (Lane, 2002). In all probability the population of Logroño comprised two dozen or so Spaniards at its maximum.

16.2.8 Explorations of 1816

Inspired by the King's pledge, the friar Antonio José Prieto, a Franciscan missionary, is alleged to have discovered the ruins of Logroño in 1816. The expeditions included Commander José María Suero, a group of soldiers, and Indians from the settlement of Sigsig near Cuenca. Prieto claimed to have found stone foundations of buildings, a central plaza, and the remains of several walls and roads at the confluence of the Rio Bomboisa and Rio Sangurima (AGI LEGAJO, QUITO 404, 127-2-15; AGI MISCELLANEOUS 4 A, 1816, R.2; AGI D.4.STATE 74, N. 50; Letter from the Marquis de la Concorde, 24- 07- 1817). Prieto, Suero and various other dignitaries from the city of Cuenca who had financed the venture also requested numerous lucrative postings and pensions from the Crown as a reward for the discovery. However, and perhaps most significantly, none of them requested any part of any future gold mining venture. Francisco Requena, ex-Governor of Mainas, expressed his doubts about the discovery the same year – 1816, given his familiarity with the geography of the region (*Audiencia y del Consejo de Indias, 2ª; Sala del Consejo del 14 de enero de 1820*).

As it transpired, all hopes to resurrect the lost gold mines were overshadowed by events in Europe. Napoleon Bonaparte and his armies overthrew the Spanish Crown and shortly thereafter the South American colonies began to proclaim independence. The city of Guayaquil was the first to declare its independence in Ecuador 1820, followed by Quito in 1822. Soon thereafter an end to Spanish rule was declared and the Spaniards were expelled from Ecuador.

The Prieto sites, now known as "El Remanso" and "Buenos Aires" are near the town of Gualaquiza (which Prieto founded), in the northern part of the Cordillera del Cóndor. Some archaeologists believe these ruins to be pre-Columbian in origin.

http://gadgualaquiza.gob.ec/gualaquiza/galerias-turismo/ruinas-arqueologicas/

http://arqueologia-diplomacia-ecuador.blogspot.ch/2011/02/delimitacion-e-investigacion-de-sitios.html

16.2.9 Proaño and Alvarez

General Victor Proaño lead several expeditions through the Cordillera de Cutucú in 1861, and between 1866-67. In the first journey, Proaño travelled from Macas across the Upano River and then transected the Cutucú eastwards, to the Rio Miazal and thence south down the Rio Mangosiza on the east side of the Cordillera. In the second expedition he repeated his journey but continued to the Rio Marañon and onwards to reach the Amazon. On his second trip Proaño reported the presence of Colombian miners recovering gold on the eastern side of the Cordillera de Cutucú (Peñaherrera de Costales and Samaniego, 1994).

Eudolfilo Alvarez was given the task to find a route for a rail link between the Puerto Bolivar on the coast of Ecuador, to the Rio Marañon and thence to the Amazon. The Panama Canal was at the time shut down due to the high mortality rates involved in its construction, and bankruptcy of the French company charged with its completion. The "Via Proaño" project had many false starts but finally commenced between 1912 and 1913. In the process, traces of gold were found in several drainages in the Cordillera de Cutucú (Alvarez, 1913).

16.2.10 Carmen Martinez Martin

In 2008, Dr. Carmen Martínez Martin published in Madrid, a chronicle entitled *Una ciudad perdida en la Amazonia: Logroño de los Caballeros* (A lost city in the Amazon: Logroño de los Caballeros). In this 199 page book which is predominantly ethnographic and historical background material, the site which Prieto had presumably discovered, is declared by Dr. Martinez to be the long-abandoned city of Logroño. However, there is no mention of the archeological studies carried out over the last 50 years; hence Martínez' research lacks critical insights. For instance, the two ruins allegedly found by Prieto are located on farmlands completely cleared for pasture. Though minor gold is known from streams in the vicinity of Gualaquiza and Bomboiza nearby, there are no active or abandoned mine sites.

16.2.11 Conclusions from the Historical Data:

The historical record of Logroño and Sevilla del Oro is remarkably preserved in Hispanic colonial era documents despite the several centuries that have lapsed since both were active gold mines for the Spanish crown. It is the belief of Keith Barron that both mining settlements are still lost to antiquity, just as Nambija had been until 1981. Attempts at relocating the old mining camps since 1800 focused on finding stone ruins under the guidance of historians. It is important nonetheless to consider the document of 1582 concerning the destruction of Logroño, since it mentions a "Palenque", a wooden palisade. It is reasonable to assume that a defendable log fort was built at Logroño de los Caballeros, within which the Spaniards lived in a compound. It is thus unlikely, given the constant danger of attack they endured, that any time and expense was put into the construction of stone buildings, or roads lined with paving stones, or open air plazas that typified contemporary Spanish colonial architecture. The mining camps were strictly functional and transient; hence there would have been no time or requirement for permanent dwellings. Potentially, the only stone building would have been the Caja Real (the Treasury building), but this is further speculation since no stone structures were found at Nambija. All efforts in such mine camps would have focussed on expediently mining gold.

One may again speculate that the surrounding villages would have been constructed from wood and palm thatch, all of which would have completely decomposed over time.

The assumption is that the mined areas will be marked by old rock dumps, rock stacks, trenches and pits, drainage ditches, and perhaps adits or shafts, assuming of course a hard rock source.

The earliest geographical records, pertaining to the Spanish crown, place Logroño and Sevilla del Oro within the Cordillera de Cutucú, in locations that were by no means easy to access. Even today, the Cordillera de Cutucú lacks infrastructure, and is by and large unpopulated rainforest. One may again speculate that if the mining settlements were located proximal to roads, or population centres, they would have been found some time ago. There is a general misconception that "all" gold the Spaniards found or plundered was depleted during their occupation of the New World. Experience and logic dictates otherwise. For instance, stream sediment surveys conducted by Aurelian in the Cordillera del Cóndor routinely encountered anomalous zones in areas of active or abandoned gold mining; some hard-rock, others alluvial placer. In one case, on the Maicu group of concessions near Chinapintza, a squared adit with chisel marks was located (Fig. 19). This is likely to have been constructed by the Spaniards, since the natives did not possess iron or steel, only bronze; insufficient to excavate in hard rock. This could even be the site of "Cóndor", as mentioned by Vasquez de Espinosa - destroyed in 1621.

The prime objective therefore of the Company's grassroots mineral exploration in the Cordillera de Cutucú, is to discover quality deposits of gold and other metals, an ambitious endeavour that combines both historical and geological investigations.

16.3 Field Investigations by Dr. Keith Barron and Dr. Octavio Latorre

From 2008 to 2012 Dr. Barron made five expeditions to the Cordillera de Cutucú, accompanied by Professor Lattore in two instances. Undocumented artisanal gold miners were encountered washing gold from Cretaceous gravels at Patuca, which lies immediately adjacent to the Project area (Figs. 13, 20 & 21).

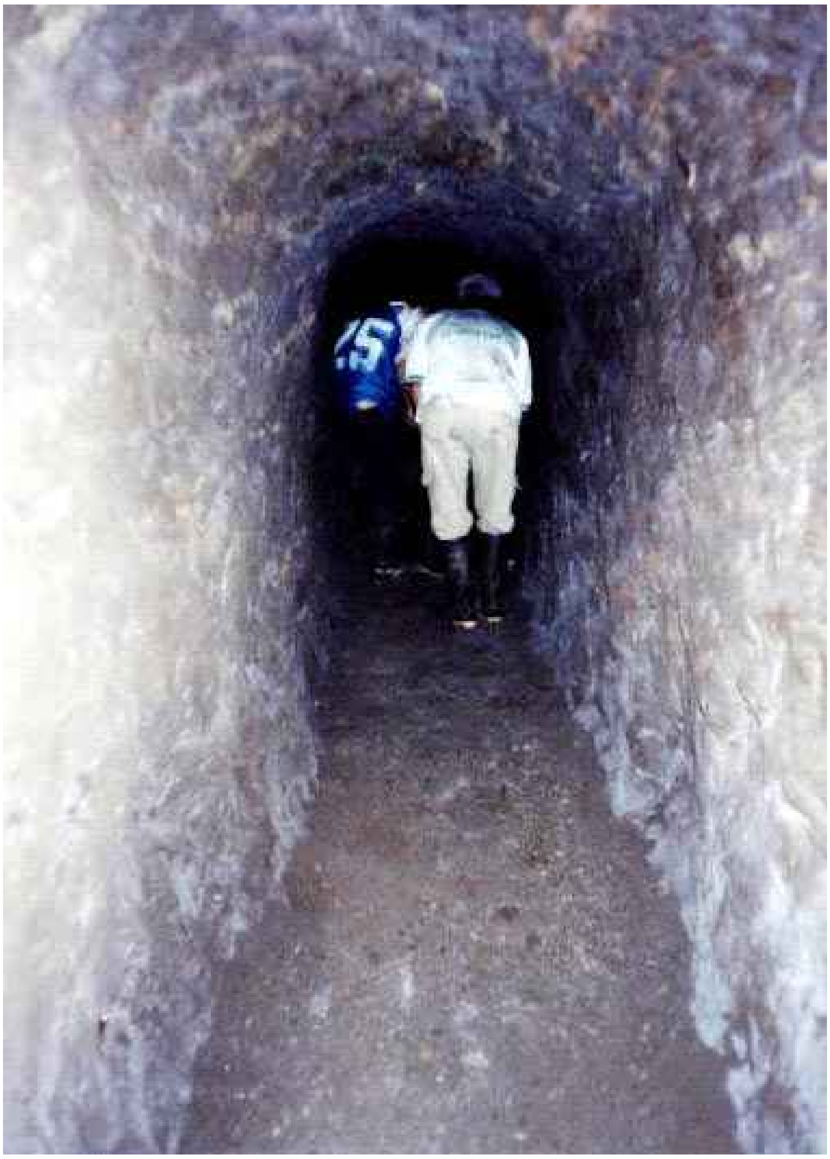

Figure 19. Old mine adit found at Maicu near Chinapintza by Aurelian Resources. Photo by Keith Barron.

Figure 20. Sluice box cleaning at Patuca, an artisanal gold mine in the southern Cordillera de Cutucú. Photo by Keith Barron, 2008.

Figure 21. Dr. Octavio Latorre providing scale to gold bearing alluvial gravels at Patuca. Photo by Keith Barron, 2008.

17 Interpretations and Conclusion

17.1 Opportunities

The Lost Cities – Cutucú Project lies in the Cordillera de Cutucú, a remote and sparsely populated mountain range forming the eastern foothills of the Andes. The Project area represents a segment of the Northern Andean Jurassic Metallogenic Belt that has not undergone recent mineral exploration. The difficulty of access into the highlands of the Cordillera, added to the low population density and poor infrastructure, are among the main reasons that no modern mineral exploration activities have been conducted in the Project area. The level of geological knowledge pertaining to the Cordillera de Cutucú in general, and the Project area in particular, is at best, cursory. Recent studies, based largely on petroleum exploration, indicate that the geological make-up of the Cordillera comprises, for the most part, Jurassic-Triassic volcano-sedimentary rocks of the Santiago Formation with isolated intrusions injected within these strata. Jurassic-Cretaceous volcanic and sedimentary rocks form the flanks of the Cordillera.

Geological reconnaissance conducted by the Author of this Report between November 18th and 26th, 2015, identified Cretaceous sedimentary rocks comprising the Hollin and Napo formations as well as volcano-sedimentary rocks possibly affiliated with the Chapiza Formation. Various mafic and felsic intrusive centres and hydrothermally altered lavas and volcaniclastic rocks were also identified.

Despite the low level of geological reconnaissance reported herein, the Lost Cities - Cutucú Project, represents an opportunity to conduct grassroots exploration activities in an area that has, to the Author's knowledge, not undergone systematic, modern, exploration. Based on the similarities of tectonic history, structural geological framework and stratigraphy between the Cordillera del Cóndor and the Cordillera de Cutucú, the Project merits systematic mineral exploration. Of the potential differences between the two contiguous cordilleras; the Cordillera de Cutucú may not be as deeply eroded as the Cordillera del Cóndor. By this rationale the likelihood of epithermal styles of mineralization and the distribution of stratigraphy that hosts and covers the FDN gold-silver deposit, constitutes a specific exploration target.

The geological factors that conceptually favour continuity of the Zamora Copper-Gold Metallogenic Belt hinge on the tectonics of the Cordillera de Cutucú, wherein compression, uplift and exhumation of the Santiago Formation may have formed favourable structural settings that in turn provided the plumbing for hydrothermal fluids to come into contact with chemically reactive and brittle host rocks. Precious and base-metal mineralization may thus occur at different stratigraphic levels in the structurally partitioned and exhumed volcano-sedimentary strata of the Santiago Formation which, based on all available geological information, comprises a substantial component of the Project area.

Notwithstanding its geological merits, the recorded history of the Cordillera de Cutucú reveals that gold mining activities were prolific here as part of the colonial Spanish enterprise. During a short period in the 16th century, the Upano River and Cordillera de Cutucú were meticulously recorded among the largest gold producers in all the Indies, with two main gold mining settlements: - Sevilla del Oro and Logroño de los Caballeros, since lost to antiquity - just as Nambija had been until its rediscovery in 1981.

17.2 Risks

The principle technical risks associated with the Lost Cities – Cutucú Project is that the planned exploration program may fail to define mineralized exploration targets that have the potential to contain economically extractable minerals or metals.

The principle operational risk is associated with access since the greater portion of the Project area lies within a protected forest in which environmental permits are needed earlier in the exploration process than in other mineral concession areas. Requisite permitting by the Ecuadorian authorities may result in the planned work program being delayed or rescheduled.

The required consultation with local stake-holders regarding exploration in protected forests may also cause delays in implementation, and/or result in the rescheduling, of the planned work program. Delays in the implementation of the planned work program would likely make the achievement of the goal of discovering potentially economic mineralization in the Project area more costly.

18 Recommendations

The grassroots nature of the Lost Cities - Cutucu Project requires comprehensive regional mineral exploration activities to define mineral occurrences and potential exploration targets. In order to develop an informed geoscientific understanding of the Project area, campaigns of geochemical sampling, geological mapping, together with remote sensing and geophysics, will be necessary to define and rank exploration targets for follow-up. Results generated from this grassroots exploration campaign would determine which concessions warrant further field investigation and which should be relinquished. The following recommended exploration program involves a two phase approach.

18.1 Phase 1

During Phase 1, the property would be surveyed at a regional scale in order to prioritize the main targets for Phase 2. Phase 1 involves the following components:

18.1.1 Remote sensed imagery study

The acquisition of satellite imagery such as Landsat and Radarsat would assist in determining the regional structural geology of the Project area, since it is within distinctive fault zones that mineralization is expected to form. For instance, the Las Peñas Fault Zone and Suárez pull-apart basin in the Cordillera del Cóndor comprise the structural framework in which the FDN Deposit occurs.

A preliminary interpretation of Landsat imagery would also be undertaken over the Project area, with a Radarsat study to provide more detailed structural information in selected areas of interest.

18.1.2 Magnetic and radiometric airborne survey

Airborne magnetic and radiometric surveying would provide a valuable and cost-effective means of mapping and correlating geology, for defining structure, as well as identifying the potentially magnetite-rich cores of porphyry systems, and magnetite-destructive alteration zones. Radiometric data may also define possible porphyry centres due to their typical potassic and sericitic alteration. Geophysical data should be acquired by helicopter so that a reasonably constant ground clearance and appropriately detailed sample spacing is achieved throughout the Property. Given the predominant north-south orientation of stratigraphy and structure in the Cordillera de Cutucú, flight lines would be oriented east to west in the Project area. Based on the size of the porphyry centres in the Cordillera del Cóndor, a maximum 400m flight line spacing is recommended for the Project area to ensure that at least two flight lines cover a typical porphyry target. Approximately 12,000 line-km would be required to cover the Properties.

18.1.3 Stream sediment sampling

Owing to the remoteness of the Project area, the dense tropical rainforest cover, and the scarcity of outcrop, stream sediment sampling provides an efficient, economical and empirical exploration method. Local examples of comprehensive drainage surveys used by Gencor and subsequently Billiton B.V. between 1994 and 2002, and by Aurelian between 2001 and 2005, proved to be fundamentally important in the definition of targets that are now significant mineral deposits of various types. It is recommended that stream sediment sampling of -80 (<0.177mm) fines be conducted throughout the Project area, with the aim of identifying gold and copper anomalies as well as pathfinder elements such as Ag, As, Sb, Hg and Mo. For this purpose, the Project area has been strategically subdivided into its component primary and secondary river basins or catchments.

Stream sediment samples should be dried at <70°C so that Hg is not volatilized and can be assayed using a multi-element, ICP-AES package after Aqua Regia digestion. Fire assay of a 50g aliquot is recommended for the determination of gold values.

In addition, pan concentrates should be extracted from each stream sediment sample site. The quantity, size and form of gold grains observed in the panned concentrate should be recorded. These thematic field observations should be cross-referenced with the assay data derived from the stream sediment samples.

The 8 main river basins that comprise the Project area should be sampled during Phase 1. This corresponds with approximately 280km of drainage. Accounting for an average spacing of one sample every 400m along the drainages, a minimum of 700 samples would be required during Phase 1.

18.1.4 Rock sampling

Rock-chip, float and channel sampling should be undertaken where mineralization and/or altered exposures are encountered. Rock samples should be analysed for gold by fire assay using a 50g aliquot and multi-element assay should be by ICP-AES after multi-acid digestion. Specific samples for which mercury assays are required should be dried at appropriately low temperatures.

18.2 Phase 2

Phase 2 exploration would focus on evaluating the anomalies detected during Phase 1, in order to identify and validate targets that warrant follow-up exploration. This phase would include grid or ridge-and-spur soil sample traverses, systematic rock channel sampling where possible, and scout drilling on targets of merit using a modular, man-portable diamond drill rig. Regional stream sediment sampling should continue in other areas while the more advanced exploration is being undertaken on targets.

The following work is recommended for Phase 2:

18.2.1 Stream sediment sampling

The same stream sediment sampling procedure as per Phase 1 should be used to infill areas of significant anomalism identified in Phase 1. A total of 54 secondary river basins with an average size of 30km^2, have been defined within the Properties. It is estimated therefore that approximately 550km of drainage sampling will be required. At a spacing of one every 400m, a minimum of 1,500 samples would be required. The average sampling density would therefore be approximately one sample per square kilometre. Assuming that each sample team, based on prior experience in the region, samples an average of 5 sites per day, each catchment basin will require between 3 and 15 field days, with contingency for 3 days travelling and logistics. A further 4 days of sample preparation, database recording, map compilation and reporting will be required after each field expedition. These estimates imply that the initial stream sediment sampling of the Properties would take about 11 months. Access to the basins would initially be by road, or by helicopter to reach the more remote areas. Any mineralized or altered outcrops encountered during the stream sediment sampling phase would be sampled.

18.2.2 Geological mapping

Geological and structural mapping should be carried out in order to test and build on the Phase 1 satellite imagery study and the anomalies identified in the airborne geophysical survey. The geological map would be updated as new field data are integrated at an appropriate scale.

A budget of CAD1,926,000 for Phase 1 and CAD1,344,000 for Phase 2, itemized in Table 5, is recommended for the grassroots exploration of the Project. In the Author's opinion, the proposed exploration strategy and budget are both reasonable and appropriate for a grassroots campaign over the area of the Properties.

Table 5. Budget for the preliminary exploration of the Lost Cities - Cutucu Project

Expenditure type	Phase 1 (Total CAD$)	Phase 2 (Total CAD$)
Administration	133,000	183,000
CRS, Environment, H&S	159,000	190,000
Imagery	59,000	-
Geophysics	1,002,000	-
Stream sediments and Geology		
- Exploration team	223,000	413,500
- Logistic	132,000	339,000
- Shipping & Assays	43,000	96,500
Sub-total stream sediment & geology	398,000	849,000
Sub-total	1,751,000	1,222,000
Contingency 10%	175,000	122,000
TOTAL	**1,926,000**	**1,344,000**

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CERTIFICATE OF QUALIFIED PERSON

I, Karl John Roa, a professional geologist residing at 19-3934 Lau Kapu Avenue, Volcano, HI 96785, USA do hereby certify that:

1. I am the author of the report entitled "NI 43-101 Technical Report on the Lost Cities - Cutucu Exploration Project, Province of Morona-Santiago, Ecuador" ("Report"), written for Aurania Resources Ltd ("the Issuer"), with an Effective Date of April 23rd, 2017;

2a. I am a Professional Geoscientist (EurGeol) registered with the European Federation of Geologists (EFG membership No 1392) and the Irish Geological Institute (membership No 269). I am a fellow of the Society of Economic Geologists.
2b. I graduated from the Camborne School of Mines, Cornwall, UK, with a B.Eng degree in Industrial Geology (1996) and a doctorate in Geology from Trinity College Dublin, Ireland (2005).
2c. I worked continuously as a contract geologist in Ecuador between 2006 and 2009, engaged in the exploration and initial development of the Fruta del Norte gold-silver deposit for Aurelian Resources Inc. Since 1996 I have worked as a geologist involved in mineral exploration and mine development throughout the Americas, including Alaska, Argentina, Brazil, Chile, Honduras, Mexico, Perú, as well as Australia, Ireland and Mongolia, for gold, silver, base metals and coal.
2d. By virtue of my educational background, registration and affiliation with recognized professional geoscience associations, and appropriate experience, that I fulfil the requirements set out in National Instrument 43-101 to be a 'qualified person' for the purposes of NI 43-101 disclosure reporting.

3 I visited the Property that constitutes the Lost Cities – Cutucu Project for nine consecutive days between November 18th and 26th, 2015.

4. I am responsible for the entire Report.

5. I am independent of both EcuaSolidus S.A. and Aurania Resources Ltd. as defined in Section 1.5 of NI 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, from EcuaSolidus S.A., Aurania Resources Ltd, or their affiliates. I have been paid a consulting fee for the preparation of this Report and the associated research and field work it pertains to.

6. I have had no prior involvement with the Properties that are the subject of this Report.

7. I have read Instruments NI 43-101 and NI 43-101F1 and have authored and read this Report that is the subject of this certificate, and confirm that the Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

8. At the Effective Date of the Report, to the best of my knowledge, information, and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.

Dated April 23, 2017

"Signed and Sealed"

____
Karl John Roa, EurGeol