RESOURCE ESTIMATE OF THE

WARINTZA CENTRAL CU-MO PORPHYRY DEPOSIT

Warintza Project, Cordillera del Cóndor, Ecuador

Effective Date: December 13, 2019
Report Date: December 18, 2019
Revised Date: February 13, 2020

- prepared for Solaris Resources Inc. -

Trevor Rabb, PGeo, Darcy Baker, PhD, PGeo & Eleanor Black, PGeo

Equity Exploration Consultants Ltd.

SOLARIS RESOURCES

EQUITY

Cover photo: Warintza Central drill core from hole W29 showing quartz-pyrite-molybdenite vein. Source: D. Baker (2019).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 SUMMARY

1.1 Property Description & Ownership

The Warintza Project ("Project") is in the canton Limon Indaza, province of Morona Santiago, Ecuador. The Project is situated 85 km east of the major city of Cuenca, in a rural part of the Cordillera del Cóndor, an inland mountain range forming the border between Ecuador and Peru. The site can be accessed year-round by airplane or helicopter.

The Project is 100% owned by Solaris Resources Inc ("Company") and comprises the Warintza Property ("Property") which include eight metallic mineral concessions covering 268 km^2. Herein, Property and Project are used synonymously to refer to the Warintza Project. Three concessions with an area of 10 km^2 are permitted for exploration activities including drilling and path construction. There are four new concessions contiguous with the original concession and one concession to the northwest. BHP Billiton holds a 2% net smelter royalty on the original three concessions.

1.2 Geology & Mineralization

The Property is underlain by Jurassic supracrustal volcanic and sedimentary rocks of the Mishuallli Member of the Chapiza Formation, as well as Jurassic granitoids of the Zamora Batholith. These rocks are intruded by Late Jurassic syn-mineralization porphyry and hydrothermal breccia that host the Warintza Central Deposit and are of similar age to other porphyry and epithermal deposits in the Zamora Cu-Au belt (e.g. Fruta del Norte, Mirador).

Warintza Central Deposit is a calc-alkalic copper-molybdenum porphyry deposit with Cu mineralization (but not Mo) partly redistributed by supergene processes to form leached and underlying supergene-enriched zones that both overlie primary mineralization. Four additional Cu ± Mo rock and soil anomalies including El Trinche, Warintza West, East and South are defined on the Project but have not been drill-tested.

1.3 Exploration Status

The 2000 and 2001 drilling program represents the last exploration program of significance on the Project. The first exploration activities undertaken by the company consist of surface rock, silt and soils sampling in summer 2019. The rock samples are anomalous in copper and molybdenum.

1.4 Data Verification

Warintza Central Deposit was discovered and defined by a 6,531 m, 33-hole diamond drilling campaign. Samples were collected from the entire length of each drillhole and submitted to Bondar Clegg in Quito, Ecuador. The samples were prepared and composited into mineralized domains defined by observed geochemical weathering domains, including leached, enriched and primary. The resultant pulps were shipped to Bondar Clegg, North Vancouver for analysis of copper, molybdenum, zinc, lead and silver determined by an ore grade method using a three-acid digest and atomic absorption finish ("AAS") finish and of gold by 30 g fire assay with AAS finish. The quality assurance quality control program included regular insertion of reference materials and pulp duplicates into the sample stream.

The reference materials were monitored for copper and have acceptable performance. The reproducibility of the duplicates indicates acceptable analytical precision. The data from the drilling programs are adequate for the purposes of resource estimation.

1.5   Resource Estimate

Equity Exploration Consultants Ltd ("Equity") estimated copper, molybdenum and gold resources for the Warintza Central Deposit. The resource block model is based on 33 drill holes, 30 of which were drilled within the Warintza Central Deposit and three drilled near the Warintza East target. Copper grades were estimated in nine different domains based on geochemical weathering and lithology. Gold and molybdenum grades were estimated in four different domains based on lithology.

Equity is satisfied that the resource estimate and classification of resources reported herein represent a reasonable estimate of the Warintza Central Deposit. The mineral resources presented conform with the most recent CIM Definition Standards (CIM, 2014), were prepared according to CIM Best Practice Guidelines (CIM, 2003) and are reported in accordance with Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted into mineral reserves.

To assess the "Reasonable Prospects for Eventual Economic Extraction", Equity constrained the overall mineral resource by completing pit optimisation on the block model using Lerchs-Grossman algorithim. The results of the pit optimisation were used solely to test the "Reasonable Prospects for Eventual Economic Extraction" by an open-pit and do not represent an attempt to estimate mineral reserves. Although it is not certain that additional drilling will add to the current resource base, the incorporation of 87% of the current mineral inventory into the open pit constrained resource highlights the fact that the current resource base and constraining pit is limited by the current drilling and the early stage of the project. The inferred open pit resources in the Warintza Central deposit within the constraining optimised pit shell are reported at 0.2% copper cut-off summarized in Table 1.1.

The mineral resources estimates were completed by Trevor Rabb, PGeo, an independent qualified person as defined in National Instrument 43-101. All estimation domains used were designed by Trevor Rabb. Equity generated a database for the Warintza Project based on data provided by Solaris Resources Inc. This database was validated for quality and accuracy by Eleanor Black, PGeo

This report describes the work completed by Equity. It includes key assumptions and parameters used to prepare the mineral resource model and the potential limitations of the assumptions.

Table 1.1. Mineral Resource Statement for Warintza Central deposit, Morona-Santiago, Ecuador, Equity Exploration Consultants, effective date December 13, 2019

Classification	Zone	Cu Cut-off	Tonnage	Cu	Cu	Mo	Mo	Au	Au
		%	(T)	(%)	(Mlbs)	(%)	(Mlbs)	(g/t)	(oz)
Inferred	Leached - Open Pit	0.2	1,970,300	0.24	11	0.027	1.2	0.07	4,500
	Enriched - Open Pit	0.2	64,100,800	0.62	870	0.029	40.7	0.06	119,700
	Primary - Open pit	0.2	57,689,100	0.50	636	0.028	35.7	0.06	114,400
Inferred	Total - Open Pit	0.2	123,760,200	0.56	1,516	0.028	77.5	0.06	238,600

[1]*Mineral Resources are reported using a cut-off grade of 0.2% copper.*
[2]*The Open Pit Mineral Resource is constrained using an optimized pit that has been generated using Lerchs –Grossman pit optimisation algorithm with parameters outlined in Table 14.26. The resulting pit produces a strip ratio of 0.71 to 1.*
[3]*The Warintza Central Mineral Resource statement has been prepared by Trevor Rabb, PGeo who is a qualified person as defined by NI 43-101.*
[4]*Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.*
The Warintza Mineral Resource statement has been prepared in accordance with NI43-101 Standards of Disclosure for Mineral Projects (May, 2016) and the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014).
Source: Equity (2019).

1.6   Conclusions & Recommendations

The Cu-Mo porphyry deposit at Warintza Central Deposit has not been fully delineated and requires further drill-testing. The four other known geochemical targets are prospective for porphyry mineralization and also warrant drill-testing. Further exploration including geophysical surveying of the Property along with surface sampling and mapping is warranted to evaluate the entire land package and determine if other targets exist, including other mineralization styles.

A phase I drilling program is recommended to test the depth extents of Warintza Central Deposit for a cost of USD$0.56 M. A second phase of exploration would focus on testing the lateral extents of Warintza Central Deposit and study the optimal drill spacing. Airborne geophysics and drill-testing of geochemical anomalies is recommended to evaluate the entire Property. Infill drilling and geometallurgical studies are contingent on the advancement of Warintza Central Deposit to a preliminary economic assessment. Total cost for phase II is estimated at USD$14.71 M for drill optimisation, regional Property drill testing, infill drilling and geometallurgical studies.

2.0 INTRODUCTION

This report has been prepared for Solaris Resources Inc. ("Solaris") in order to satisfy reporting issuer disclosure requirements as dictated by National Instrument 43-101 ("NI 43-101"). Solaris engaged Exploration Consultants Ltd. ("Equity") to prepare a resource estimate, examine the Project the field, compile all exploration information available on the Property and make recommendations for further exploration, if warranted. This report has been prepared based on field observations, data, letters and reports supplied by Solaris and on publicly available scientific and regional geological publications. A complete list of references is provided in Appendix A. Abbreviations and units of measure used in this report are defined in Table 2.1.

Warintza is not an "Advanced Property" as defined by NI 43-101 so this report lacks Items 15 through 22 as described in Form 43-101F1. To maintain consistency, however, our sections herein are numbered in accordance with 43-101F1.

Author Baker and Rabb, both independent Qualified Persons under the meaning of NI 43-101, examined the Warintza Property on May 6-8, 2019. Two drilling sites (W11 and W12) were examined and their locations confirmed. Outcrop exposures within the Warintza Central Deposit were also examined. Author Black built and validated the database and assisted with geological modeling.

Baker, Rabb and Black are not directors, officers or shareholders of Solaris and have no interest in the Warintza Property or any nearby properties.

Table 2.1. Table of Abbreviations and Units

Abbreviations	
AAS	atomic absorption spectroscopy
Ag	silver
Au	gold
BWI	Bond's work index
Cu	copper
CuEq	Copper equivalent
DDH	diamond drill hole
EM	electromagnetic
ESE	east-southeast
FA	fire assay
GPS	global positioning system
ICP AES	inductively coupled plasma emission spectrometry
ICP MS	inductively coupled plasma mass spectrometry
ID2	inverse distance squared
ID3	inverse distance cubed
IP	induced polarization
ISO	International Standards Organization
K	thousand
M	million
M+I	measured and indicated
Ma	million years ago
Mo	molybdenum
MOU	memorandum of understanding
N	north
NE	northeast
NI 43-101	National Instrument 43-101
NNE	north-northeast
NSR	net smelter royalty
OK	ordinary kriging
Pb	lead
pH	acidity scale

Abbreviations	
PSAD-56	Provisional South American datum
P80	80% passing through grind test
QA	quality assurance
QC	quality control
SG	specific gravity
SCC	sericite-clay-chlorite
RBU	Remuneración Básica Unificada (annual Ecuadorian wage calculation)
TSX-V	Toronto Stock Exchange – Ventures
UTM	Universal Transverse Mercator
W	west
Zn	zinc
Units of measure	
cm	centimetre
Ha	hectare
USD$	United States dollar
g/t	grams/tonne
lbs	pounds
Mt	Million tonnes
ha	hectare
km	kilometre
km^2	square kilometres
kg	kilogram
m	metre
mm	millimetre
oz/ton	troy ounce per short ton
%	percent
ppb	part per billion
ppm	part per million
T	metric tonnes

Source:Equity (2019).

3.0 RELIANCE ON OTHER EXPERTS

The qualified persons have relied on other experts with regards to legal and political matters.

A letter dated May 9th, 2019 (Donoso, 2019) from the legal firm Ferrere in Quito has been completely relied upon to confirm the status of mining rights and legal and financial obligations relating to the Warintza Property. An email dated August 5th, 2019 (Velásquez, 2019) from Federico Velásquez, Vice President of Operations & Corporate Affairs for Solaris, describes the permitting and land holding status of the Project. These letters forms the basis for the disclosure in Section 4 of this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Warintza Property is located in southeastern Ecuador in the province of Morona Santiago and canton Limon Indaza. It is located 235 line km southeast from the capital Quito and 85 line km ESE from the city of Cuenca (Figure 4.1). The Property is centred at 3˚10' S latitude and 78˚17' W longitude (PSAD-56 UTM Zone 17S: 800186E; 9648676N) within the Cordillera del Cóndor, a mountain range in the eastern Andes that locally forms the border between Ecuador and Peru.

4.2 Mineral Tenure and Ownership

The Property is covered by eight metallic mineral concessions which collectively cover ~268 km^2 (Table 4.1 and Figure 4.2). All concessions were acquired through the Agencia de Regulation Y Control Minero. There are three original concessions which are now represented by reduced versions of the original concessions established by Billiton Ecuador B.V in 1999. Five additional concessions were established in early 2017.

The Property is held 100% by Solaris exclusive of surface rights. To the authors' knowledge, the Property has no royalties, back-in rights or other agreements and encumbrances, apart from a 2% net smelter royalty ("NSR") payable to Billiton Ecuador B.V, now BHP Billiton. No environmental liabilities were noted by the authors on the Warintza Property. The annual Conservation Patent payments for the eight concessions have been fufilled as of the issuance of this report and are valid until March 2020 (Donoso, 2019).

Table 4.1. Table of Warintza Concessions

Name	Concession Number	Area (Ha)	Type	Registration Date	Good to Date
CAYA 21	101083	2500	Concession	25/5/2010	13/9/2031
CAYA 22	101092	2500	Concession	25/5/2010	13/9/2031
CURIGEM 9	100081	5000	Concession	25/5/2010	13/9/2031
CLEMENTE	90000333	1601	Concession	8/3/2017	10/8/2039
MAIKI 01	90000310	4072	Concession	8/3/2017	10/8/2039
MAIKI 02	90000311	4304	Concession	31/3/2017	23/12/2039
MAIKI 03	90000313	2500	Concession	8/3/2017	10/8/2039
MAIKI 04	90000314	4300	Concession	31/3/2017	23/12/2039
Grand Total		**26777**			

Source: Equity (2019).

The Project was in a period of inactivity from late 2006 as a result of social unrest within the surrounding communities and lack of support for mineral exploration within Ecuador. In 2018 Solaris restored the relationship with local communities and commenced consultation. Solaris has committed to on-going community engagement and returned 2,349.67 ha of surface rights to local Shuar communities (Velásquez, 2019). The return of the surface rights was an integral step to restoring the community's acceptance of activity at the Project.

As of the date of this report, Solaris holds a Memorandum of Understanding (MOU) with the pertaining communities for land access and use in three original mineral concessions (Curigem 9, Caya 21 and Caya 22), and holds permits to carry out exploration drilling on the three concessions including the water use permit and environmental licence permits (Velásquez, 2019).

4.3 Maintenance of Mineral Concessions

Concessions have a term of 25 years and can be renewed for additional periods of 25 years if applications for renewal are submitted before the expiration of the concessions. In order to maintain concessions in good standing a fee must be paid by March 31st each calendar year for the Conservation Patent. The fees are based on a calculated annual minimum wage, Remuneración Básica Unificada

("RBU"). For each hectare, the Conservation Patent fees start at 2.5% of the RBU per annum for the "initial exploration stage" and increase as the project advances.

Exploration expenditure is required annually based on the area of the concessions and required expenditures increase each year. Excess spending can be carried over for a portion of the following year's required expenditure. The mining regulatory body must authorize transfer of ownership of a concession to a third party.

Table 4.2 Exploration and Exploitation Phases

Project Stage	Length of Time	RBU
Initial Exploration	Up to four years from the time the concession is granted.	2%
Advanced Exploration	Up to four years; application must be made prior to the end of the Initial Exploration Period. The application must include a waiver of part of the surface initially granted.	5%
Economic Evaluation	Up to two years, starting once the Initial Exploration Period or the Advanced Exploration Period has ended. May be extended, on application, for up to two years.	5%
Exploitation	Commences on the request of the concessionaire, which must be made prior to the end of the Economic Evaluation Period. Various requirements and conditions apply.	10%

Source: Equity (2019).
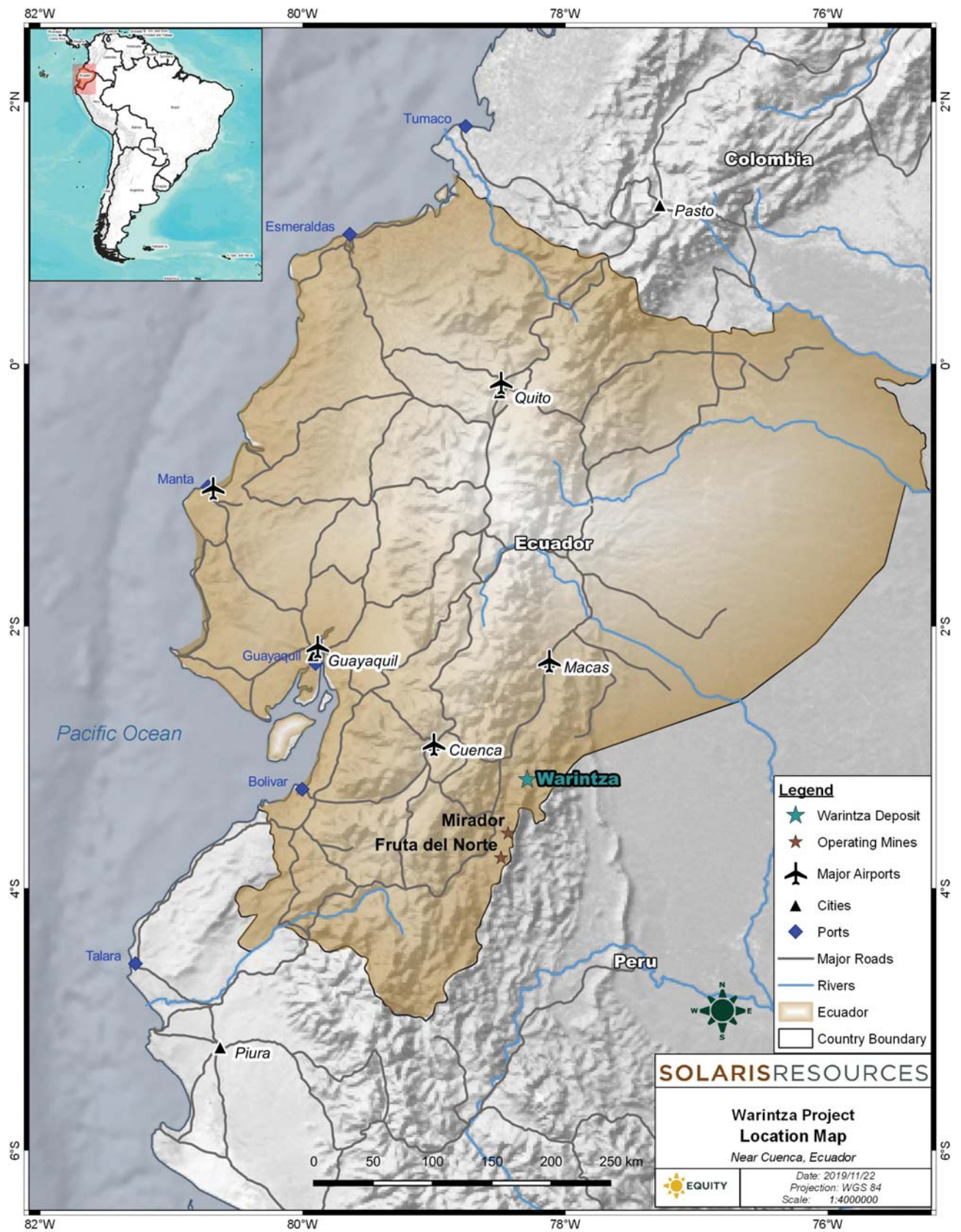
Figure 4.1. Location Map.

Source: Equity (2019).
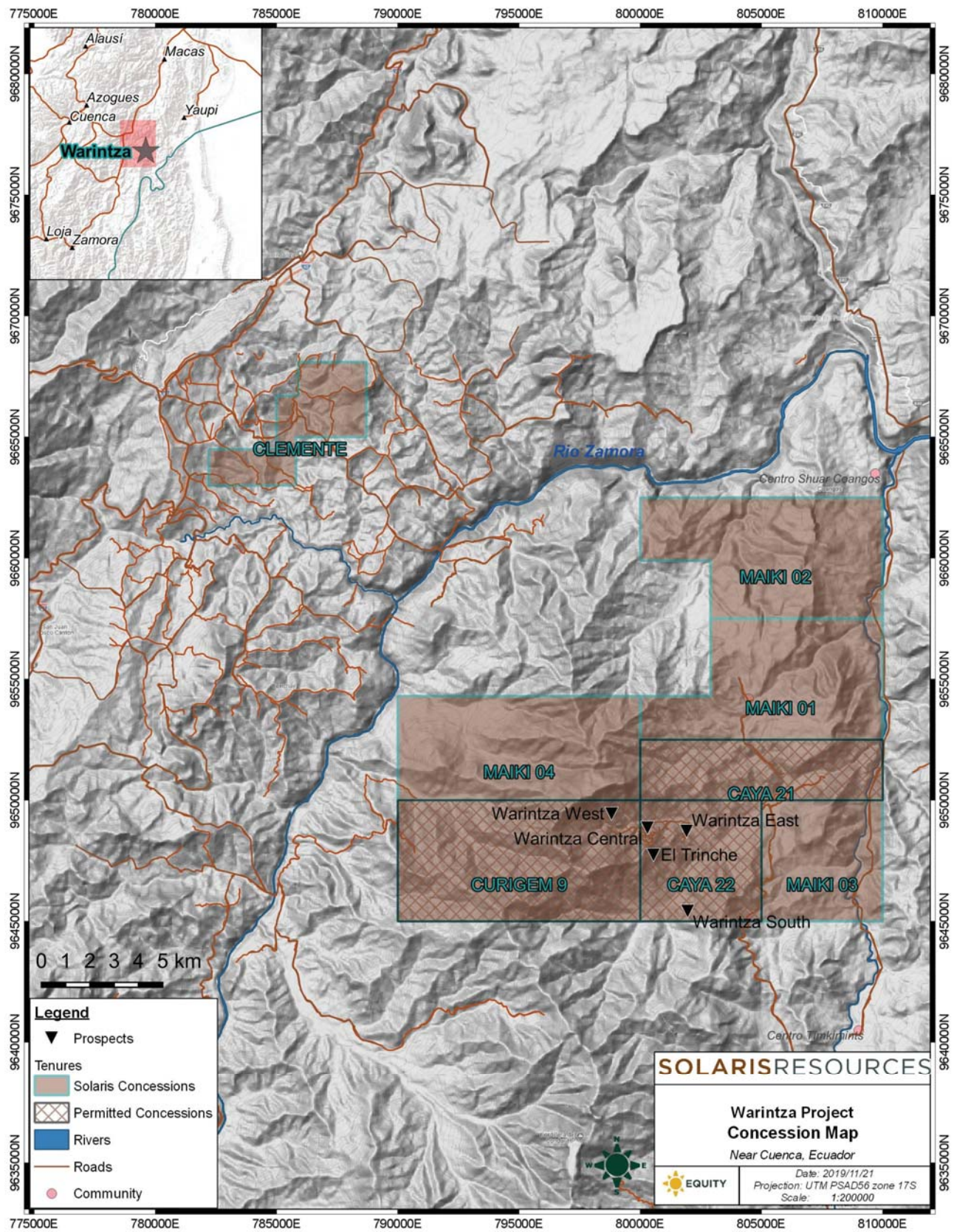
Figure 4.2. Warintza Project Tenure Map.

Source: Equity (2019).

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

The Warintza Property is characterized by heavily forested, hilly rainforest that is dissected by numerous streams and small rivers. Elevation on the Property ranges from approximately 700 m to 2,300 m above sea level.

The nearest public, sealed highway (route 45) is within about 20 km of the Warintza Property (Figure 5.1) but currently there is no direct road access. An unsealed, ~550 m long airstrip at the village of Warintza provides good access to the Project (Figure 5.2). Small charter aircraft are available in Macas and can reach Warintza in 35 minutes of air travel time. From the western end of the airstrip, the Warintza Central Deposit is accessible on foot via a series of trails that were the principle means of transportation for crew and equipment during past exploration campaigns. Some helicopter support was reportedly also utilized.

The nearest major population centre is Macas. Small villages including Warintza (~120 families) and Yawi (~20 families) occur proximal to the Property.

Warintza village is classified Af (tropical rainforest climate) in the Köppen-Geiger climate system according to the website www.climate-data.org which reports the average annual temperature as 22.4°C and average rainfall at 2,617 mm. Rainfall is significant year-round but peaks in May whereas temperature is consistent year-round. From a mineral exploration point of view, the Warintza Property could be explored year-round.

No studies have addressed the suitability of sites for infrastructure (e.g. tailings, processing plant sites) or the availability of resources (e.g. water, power, personnel) at Warintza. Other projects in Ecuador with similar terrain, climate and access (e.g. Mirador and Fruta del Norte located 48 km and 70 km, respectively, SSW of Warintza) have recently shown similar conditions do not preclude mining. Detailed studies, however, are required to determine sufficiency of surface rights and availability of power, water, personnel and mining infrastructure sites at Warintza. These are beyond the scope of this technical report.
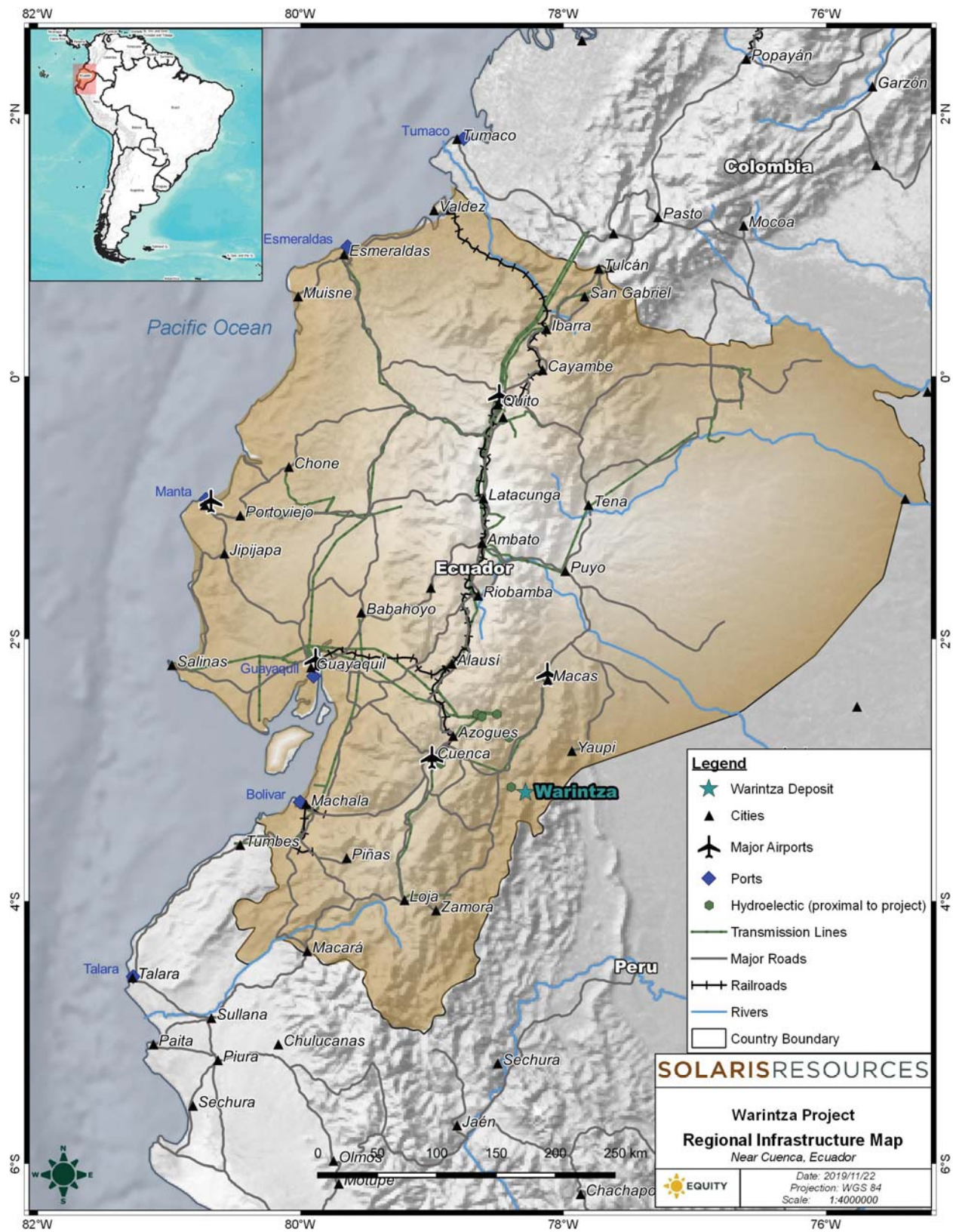
Figure 5.1. Infrastructure map showing nearest road access to Warintza and location of Macas – the nearest major population centre.

Source: Equity (2019).

Figure 5.2. Unsealed airstrip access at Warintza village viewed towards the southwest. The hilly topography characteristic of the Property is apparent in the background. The Warintza Central Deposit underlies the ridge in the centre of the photograph.

Source: Baker (2019).

6.0 HISTORY

6.1 Property Ownership Changes

The following description of the Warintza Project ownership history is largely derived from Sivertz et al. (2006) and Ronning and Ristorcelli (2018).

Prior to 1994, no mineral exploration had been reported in the Warintza area. In that year, Gencor Limited ("Gencor") began grassroots exploration of the Pangui project in southeastern Ecuador which was directed at identifying gold mineralization in the Oriente foreland basin (Gendall et al., 2000). Following corporate restructuring of Gencor in 1997, Billiton PLC ("Billiton") continued the Pangui project. Between 1994 and 1999 Billiton completed regional-scale geochemical and airborne magnetic-electromagnetic (EM) geophysical surveys over a large area, and more detailed mapping and geochemical surveys of targets within it, ultimately leading to the initial drilling of several of the 10 regional-scale porphyry and skarn targets that were identified.

In April 2000, Billiton and Corriente Resources Inc. ("Corriente") entered into an agreement covering 230 km^2 of mineral concessions in the southeastern part of Ecuador which included Warintza. Under the agreement, Corriente could earn a 70% interest in each of the Billiton projects by completing a feasibility study and meeting certain financial and work commitments (Corriente Resource Inc. Annual Information Form, 2000). At the completion of each feasibility study, Billiton could elect to (a)

back-in for a 70% interest by providing production financing; (b) retain a 30% working interest, or; (c) dilute to a 15% Net Profit Interest ("NPI"). Corriente also entered into an exploration management arrangement whereby Lowell Mineral Exploration Ecuador S.A. ("Lowell") could earn up to 10% of Corriente's interest in certain properties in exchange for managing the exploration of the properties.

In 2002, Corriente purchased 100% of three of its optioned Ecuadorian properties (Mirador, San Carlos and Panantza) from Billiton in return for a 2% NSR, of which 1% could be purchased for USD$2 million. In November 2003, Corriente announced that it had purchased 100% of the remaining Ecuadorian concessions it held under option from Billiton, including Warintza, for a 2% NSR with no buy-down and no back-in rights (Corriente Resources Inc. Annual Report 2003).

By this time, Lowell had vested its 10% interest in Corriente's Ecuadorian properties, including Warintza, Mirador, San Carlos and Panantza. In 2004, Lowell swapped its 10% interest in Corriente's Ecuadorian properties for 100% interest in the Warintza concessions (Corriente Resources Inc. Annual Report 2004).

The three concessions were voluntarily placed under force majeure in 2006 by Lowell. Except for surface sampling in 2005-06, Lowell carried out no significant exploration on the Warintza Property after its acquisition in 2004. Instead, Lowell's efforts were directed towards obtaining social license for exploration and mining from the local Shuar communities.

In July 2013, Lowell Copper Inc. completed a reverse takeover of Waterloo Resources Ltd. to form Lowell Copper Ltd. ("Lowell Copper").

In October 2016, Lowell Copper merged with Gold Mountain Mining Corporation and Anthem United Inc. to create a new company – JDL Gold Corp. ("JDL").

In March 2017, JDL merged with Luna Gold Corp. to form Trek Mining Inc. ("Trek"). In December 2017, Trek merged with NewCastle Gold Ltd. and Anfield Gold Corp. to form Equinox Gold Corp. ("Equinox"). In August 2018, Equinox spun out its copper assets, including the Warintza Property, into Solaris Resources Inc. ("Solaris").

6.2   Exploration by Previous Owners

As described above, Warintza was a target that was generated from grassroots exploration in the Cordillera del Cóndor initiated by Gencor in 1994. Records of this early work at Warintza are unavailable but according to Gendall et al. (2000), the first-pass exploration technique was panned-concentrate stream sediment sampling. Anomalous drainages were followed up with prospecting and mapping in creeks and soil sampling of ridges. Collectively these data led to the identification of four porphyry targets: Warintza Central, East, West and South.

Once Billiton awarded the continuation of the exploration of the Warintza Project to Corriente, they proceeded to scout drill test the Warintza Central target and based on early success, ultimately drilled 33 core holes (6,531 m) in two campaigns: February-April 2000 (16 holes; 2,391 m) and July-August 2001 (17 holes; 4,140 m). Drilling confirmed Warintza Central as a supergene-enriched Cu-Mo porphyry deposit. At the same time, mapping and lithogeochemical sampling were carried out over Warintza West (Vaca and León, 2001).

6.2.1 Surface Geochemistry

Analytical data for the surface samples collected by previous operators (quantities summarized in Table 6.1) have been compiled into a database.

Table 6.1. Summary of Surface Samples from the Warintza Property

Sample Type	Count
Soil	981
Rock channel	256
Rock chip	240
Rock panel	15

Source: Equity (2019).

Results for copper and molybdenum soil and rock samples are summarized in the figures below. Copper in soil and rock does not perfectly outline the Warintza Central Deposit but it does effectively highlight the general area of the porphyry centre (Figure 6.1). Molydenum in soil and rock is somewhat more restricted but the patterns are similar (Figure 6.2). The soil sampling pattern in both figures demonstrates the progression from ridge soil sampling to the establishment of a more detailed grid over the deposit. Rock samples are largely restricted to stream drainages where outcrop exposures are more abundant. Overall, surface sampling is a highly effective tool to identify exposed porphyry deposits such as Warintza. Note that not all soil / rock anomalies have been drill-tested.
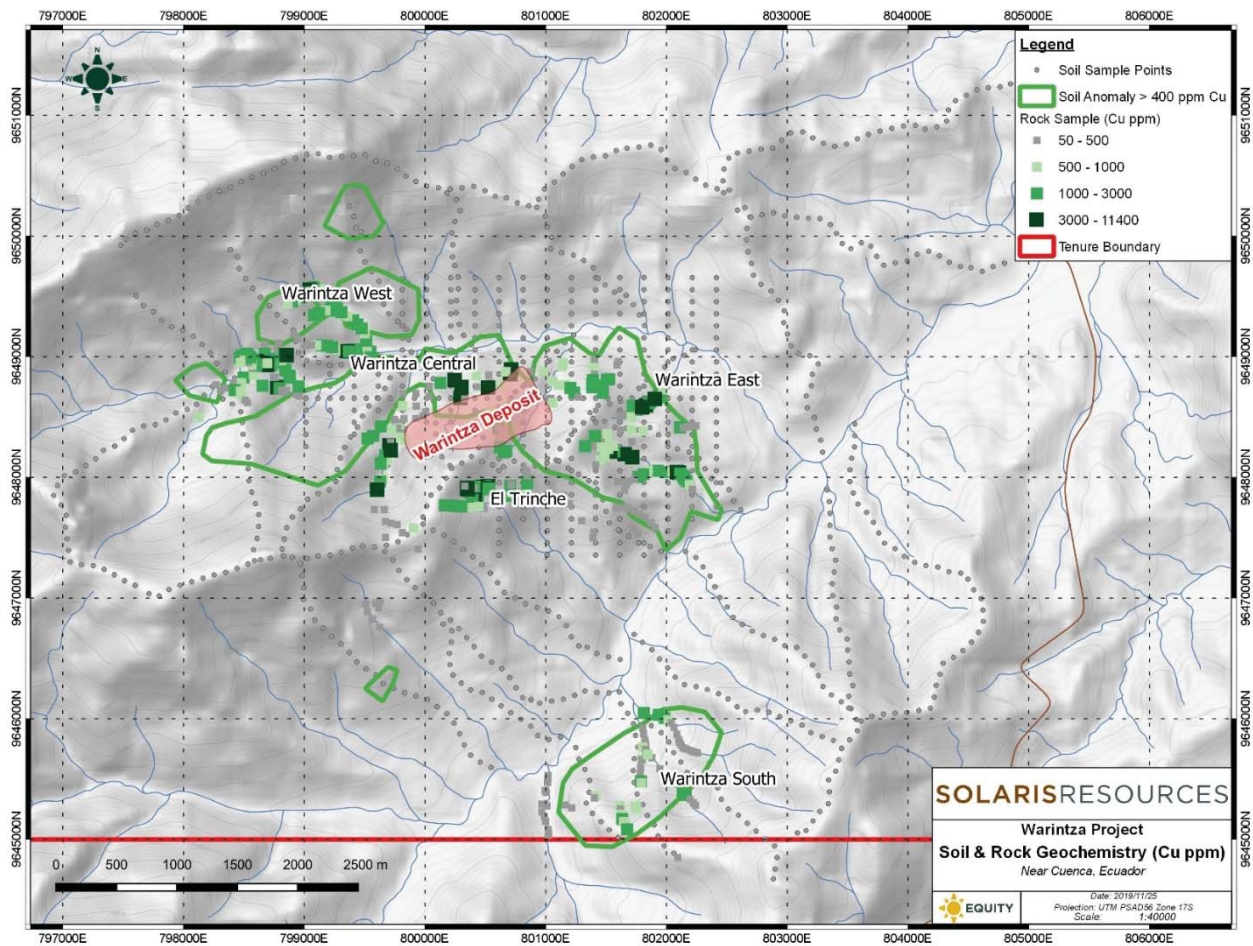
Figure 6.1. Property soil and rock geochemistry map summarizing results for copper. Outlines of >400 ppm copper anomalies are shown as green outlines and effectively highlight the Warintza Central Deposit.
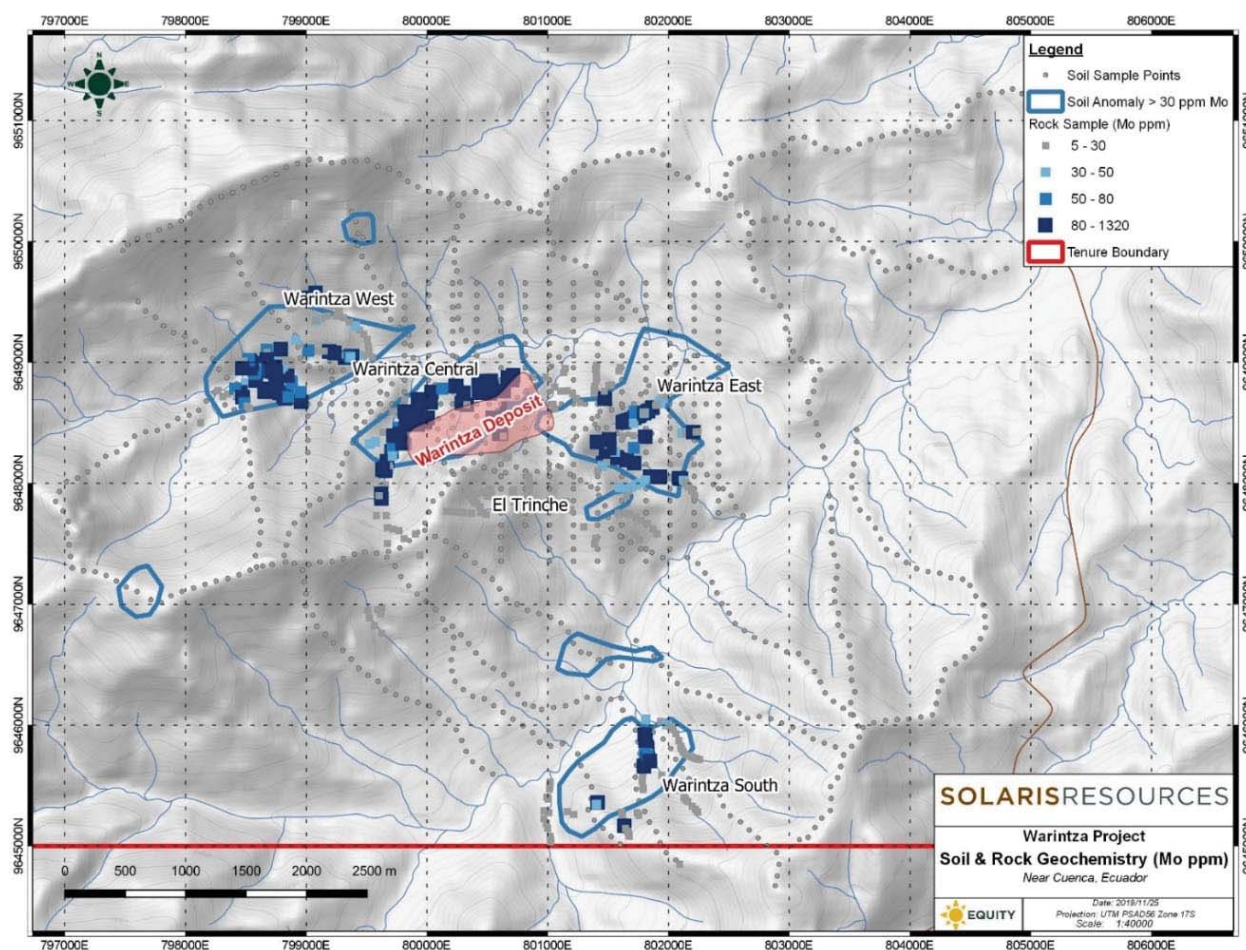
Source: Equity 2019.

Figure 6.2. Property soil and rock geochemistry map summarizing results for molybdenum. Outlines of >30 ppm molybdenum anomalies are shown as blue outlines and effectively highlight the Warintza Central Deposit.

Source: Equity (2019).

6.2.2 Geophysics

Internal program summary reports indicate that an airborne magnetics-EM survey was flown in 1999. The data from this survey is not available.

6.3 Historical Mineral Resource Estimates

Following the 2000-2001 Warintza drilling, three mineral resource estimates were prepared in 2001 and 2005 for the Warintza Central deposit (Vaca and León, 2001 and Suárez, 2005). None of these early estimates were prepared in accordance with NI 43-101 and all of them were superseded by later estimates prepared in accordance with NI 43-101-. As such, they are not considered significant and are not discussed further.

6.3.1 2006 Mineral Resource Estimate (Ronning and Ristorcelli, 2006)

In 2006, Mine Development Associates prepared a mineral resource estimate on the Warintza Central deposit for Lowell Mineral Exploration LLC (Ronning and Ristorcelli, 2006). It is based on data

from all 33 holes and 2,142 analyses of copper, molybdenum and gold. Gold was not included in the resource estimate as the gold grades were deemed too low to be of value.

The resource estimate used a geologically-constrained model, dividing the copper mineralization into three zones: leached, supergene-enriched, and hypogene or primary. All of the molybdenum mineralization was modeled as primary, and it spans all three of the copper zones. Only the supergene-enriched and primary zones were included in the mineral resource estimation.

The Warintza Central resource estimate used kriging for estimation. Trials using two other estimation techniques – one employing a nearest-neighbour algorithm and the other an inverse distance squared algorithm – were also completed. A comparison of the results led to the conclusion that at the current drill spacing the kriged model would give the most appropriate estimate.

Copper assays were capped at 1.5% Cu (primary) and 2.7% Cu (supergene-enriched). Only the primary zone was materially impacted by capping (reducing the mean grade by 4%), with no material difference to the mean grade of the supergene-enriched zone.

Variograms were calculated using 10 m composites for each copper zone and for molybdenum, then used to estimate grades for individual blocks.

The 2006 mineral resource estimate used a copper equivalent cut-off grade; "copper-equivalent" or "CuEq" was calculated using an in-situ value ratio of 6 copper to 1 molybdenum. At a cut-off grade of 0.3% CuEq, the Warintza Central deposit was estimated to contain an inferred mineral resource of 195,000,000 tonnes grading 0.61% CuEq, or 0.42% Cu and 0.031% Mo. Table 6.2, Table 6.3 and Table 6.4 present Ronning and Ristorcelli's (2006) inferred mineral resource estimate for the Warintza Central deposit.

Table 6.2. 2006 Warintza Central Deposit Inferred Mineral Resource Estimate – Primary Zone

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbs)	Mo%	Molybdenum (tonnes)	Molybdenum (lbs)
0.30	141,000,000	0.56	0.37	528,000	1,164,000,000	0.031	44,000	97,000,000
0.35	133,000,000	0.58	0.39	513,000	1,131,000,000	0.032	42,000	92,600,000
0.40	114,000,000	0.61	0.42	477,000	1,051,600,000	0.032	36,000	79,400,000
0.45	91,000,000	0.66	0.47	425,000	937,000,000	0.032	29,000	63,900,000
0.50	76,000,000	0.69	0.50	379,000	835,600,000	0.033	25,000	55,100,000
0.55	63,000,000	0.73	0.53	334,000	736,300,000	0.033	21,000	46,300,000
0.60	51,000,000	0.76	0.56	285,000	628,300,000	0.034	17,000	37,500,000
0.70	30,000,000	0.85	0.63	189,000	416,700,000	0.036	11,000	24,300,000
0.80	16,000,000	0.93	0.70	113,000	249,100,000	0.038	6,000	13,200,000
0.90	9,000,000	1.01	0.76	68,000	149,900,000	0.041	4,000	8,800,000
0.95	6,000,000	1.04	0.79	47,000	103,600,000	0.042	3,000	6,600,000

Source: Ronning and Ristorcelli (2006)

Table 6.3. 2006 Warintza Central Deposit Inferred Mineral Resource Estimate – Enriched Zone

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbs)	Mo%	Molybdenum (tonnes)	Molybdenum (lbs)
0.30	54,000,000	0.72	0.54	292,000	643,700,000	0.029	16,000	35,300,000
0.35	52,000,000	0.73	0.55	288,000	634,900,000	0.030	16,000	35,300,000
0.40	50,000,000	0.75	0.57	283,000	623,900,000	0.031	15,000	33,100,000
0.45	47,000,000	0.77	0.58	271,000	597,500,000	0.032	15,000	33,100,000
0.50	44,000,000	0.79	0.59	261,000	575,400,000	0.032	14,000	30,900,000
0.55	41,000,000	0.81	0.61	251,000	553,400,000	0.033	14,000	30,900,000
0.60	37,000,000	0.83	0.63	233,000	513,700,000	0.034	13,000	28,700,000
0.70	27,000,000	0.90	0.69	185,000	407,900,000	0.036	10,000	22,000,000
0.80	19,000,000	0.97	0.74	141,000	310,900,000	0.038	7,000	15,400,000
0.90	11,000,000	1.06	0.81	90,000	198,400,000	0.040	4,000	8,800,000
0.95	9,000,000	1.09	0.85	77,000	169,800,000	0.040	4,000	8,800,000

Source: Ronning and Ristorcelli (2006)

Table 6.4. 2006 Warintza Central Deposit Inferred Mineral Resource Estimate – Total

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbs)	Mo%	Molybdenum (tonnes)	Molybdenum (lbs)
0.30	195,000,000	0.61	0.42	820,000	1,807,800,000	0.031	60,000	132,300,000
0.35	185,000,000	0.62	0.43	801,000	1,765,900,000	0.031	58,000	127,900,000
0.40	164,000,000	0.65	0.46	759,000	1,673,300,000	0.031	51,000	112,400,000
0.45	138,000,000	0.69	0.50	696,000	1,534,400,000	0.032	44,000	97,000,000
0.50	120,000,000	0.73	0.53	641,000	1,413,200,000	0.032	39,000	86,000,000
0.55	104,000,000	0.76	0.56	584,000	1,287,500,000	0.033	34,000	75,000,000
0.60	88,000,000	0.79	0.59	519,000	1,144,200,000	0.034	30,000	66,100,000
0.70	57,000,000	0.87	0.66	374,000	824,500,000	0.036	21,000	46,300,000
0.80	35,000,000	0.96	0.73	254,000	560,000,000	0.038	13,000	28,700,000
0.90	20,000,000	1.03	0.79	158,000	348,300,000	0.041	8,000	17,600,000
0.95	15,000,000	1.07	0.83	124,000	273,400,000	0.041	6,000	13,200,000

Source: Ronning and Ristorcelli (2006)

Mine Development Associates' 2006 mineral resource estimate was prepared in accordance with NI 43-101 and uses resource categories stipulated by NI 43-101. The issuer is not treating the 2006 historical estimate as a current mineral resource because it is superseded by the resource estimate presented herein (Section 14).

6.3.2 2018 Mineral Resource Estimate (Ronning and Ristorcelli, 2018)

In 2018, Mine Development Associates updated their previous mineral resource estimate on the Warintza Central deposit for Equinox and Solaris (Ronning and Ristorcelli, 2018). It was based on the same database and geological model as used in the 2006 estimate and used the same estimation parameters. The 2018 mineral resource estimate was identical to the 2006 estimate except for rounding differences and the inclusion of estimates above different cut-off grades (Table 6.5, Table 6.6, and Table 6.7).

Table 6.5. 2018 Warintza Central Deposit Inferred Mineral Resource Estimate – Primary Zone

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbsX1000)	Mo%	Molybdenum (tonnes)	Molybdenum (lbsX1000)
0.25	149,170,000	0.55	0.36	542,000	1,194,905,000	0.031	46,000	101,413,000
0.30	**140,532,000**	**0.56**	**0.37**	**526,000**	**1,159,631,000**	**0.031**	**44,000**	**97,003,000**
0.35	133,454,000	0.58	0.39	515,000	1,135,381,000	0.032	42,000	92,594,000
0.40	114,476,000	0.61	0.42	479,000	1,056,014,000	0.032	36,000	79,366,000
0.45	90,576,000	0.66	0.47	423,000	932,555,000	0.032	29,000	63,934,000
0.50	75,616,000	0.69	0.50	377,000	831,143,000	0.033	25,000	55,116,000
0.55	62,936,000	0.73	0.53	333,000	734,139,000	0.033	21,000	46,297,000
0.60	50,756,000	0.76	0.56	284,000	626,113,000	0.034	17,000	38,223,747
0.70	30,058,000	0.85	0.63	189,000	416,674,000	0.036	11,000	24,251,000

Source: Ronning and Ristorcelli (2018)

Table 6.6. 2018 Warintza Central Deposit Inferred Mineral Resource Estimate – Enriched Zone

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbs)	Mo%	Molybdenum (tonnes)	Molybdenum (lbs)
0.25	57,465,000	0.69	0.52	301,000	663,591,000	0.028	16,000	35,274,000
0.30	**54,462,000**	**0.72**	**0.54**	**294,000**	**648,159,000**	**0.029**	**16,000**	**35,274,000**
0.35	51,901,000	0.73	0.55	287,000	632,727,000	0.030	16,000	35,274,000
0.40	49,626,000	0.75	0.57	281,000	619,499,000	0.031	15,000	33,069,000
0.45	47,410,000	0.77	0.58	274,000	604,067,000	0.032	15,000	33,069,000
0.50	44,236,000	0.79	0.59	263,000	579,816,000	0.032	14,000	30,865,000
0.55	40,705,000	0.81	0.61	249,000	548,951,000	0.033	13,000	28,660,000
0.60	36,823,000	0.83	0.63	232,000	511,472,000	0.034	12,000	27,545,000
0.70	26,809,000	0.90	0.69	184,000	405,651,000	0.036	10,000	22,046,000

Source: Ronning and Ristorcelli (2018)

Table 6.7. 2018 Warintza Central Deposit Inferred Mineral Resource Estimate – Total

Cutoff CuEq%	Tonnes	CuEq%	Cu%	Copper (tonnes)	Copper (lbs)	Mo%	Molybdenum (tonnes)	Molybdenum (lbs)
0.25	206,635,000	0.59	0.41	843,000	1,858,497,000	0.030	62,000	136,687,000
0.30	**194,994,000**	**0.61**	**0.42**	**820,000**	**1,807,791,000**	**0.031**	**60,000**	**132,277,000**
0.35	185,356,000	0.62	0.43	802,000	1,768,107,000	0.031	58,000	127,868,000
0.40	164,102,000	0.65	0.46	760,000	1,675,513,000	0.031	51,000	112,436,000
0.45	137,986,000	0.69	0.50	696,000	1,534,417,000	0.032	44,000	97,003,000
0.50	119,852,000	0.73	0.53	640,000	1,410,958,000	0.032	39,000	85,980,000
0.55	103,641,000	0.76	0.56	582,000	1,283,090,000	0.033	34,000	74,957,000
0.60	87,580,000	0.79	0.59	516,000	1,137,585,000	0.034	30,000	65,784,000
0.70	56,867,000	0.87	0.66	373,000	822,324,000	0.036	21,000	46,297,000

Source: Ronning and Ristorcelli (2018)

Mine Development Associates' 2018 mineral resource estimate was prepared in accordance with NI 43-101 and classifies resources in accordance with CIM Definition Standards for Mineral Resources and Mineral Reserves (May, 2014). The issuer is not treating the 2018 historical estimate as a current mineral resource because it is superseded by the resource estimate presented herein (Section 14).

6.4   Historical Production

No ore production has been reported for the Warintza Property.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional and Local Geology

The following regional geological synthesis is taken liberally from Gendall et al. (2000) and references therein.

At the country-scale, Ecuador is divided into three physiographic regions – Costa, Sierra and Oriente (Figure 7.1). The Oriente region comprises a foreland basin that lies between the Guyana Shield to the east and the Andean mountain chain to the west. The western edge of Oriente comprises a back-arc fold and thrust belt that geographically comprise the subandean Cordillera de Cutucú and Cordillera del Cóndor mountain chains. Early Mesozoic rifting in this back-arc preceded basin infilling in early Jurassic time. Resultant deposits include marine limestone, sandstone and shale of the Santiago Formation, red-bed sandstone and shale of the Chapiza Formation as well as arc-type volcanic and volcaniclastic rocks of the Misahualli Member (Figure 7.2).

Following this deposition, batholiths emplaced along the eastern side of the Cordillera Real include the most significant geological feature relevant to copper porphyry formation – the Zamora Batholith. This igneous complex comprises Middle to Late Jurassic, calc-alkaline intrusive rocks that crop out along a 200 km long NNE trend (Figure 7.1). This igneous complex is correlative with the Abitagua and Cuchila batholiths exposed in central Ecuador and at the northern border with Colombia, respectively. These are interpreted as deep remnants of a volcanic arc that developed along an Andean-type continental margin.
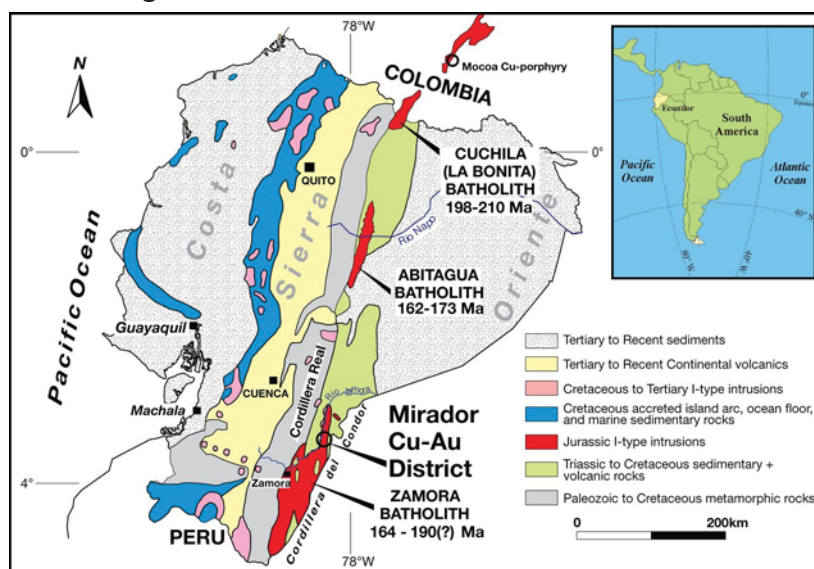
Figure 7.1. Simplified geology map showing the three main physiographic regions of Ecuador (Costa, Sierra and Oriente) as well as the Zamora Batholith and other Jurassic I-type intrusions that transect the length of Ecuador.

Source: from Drobe et al. (2013).
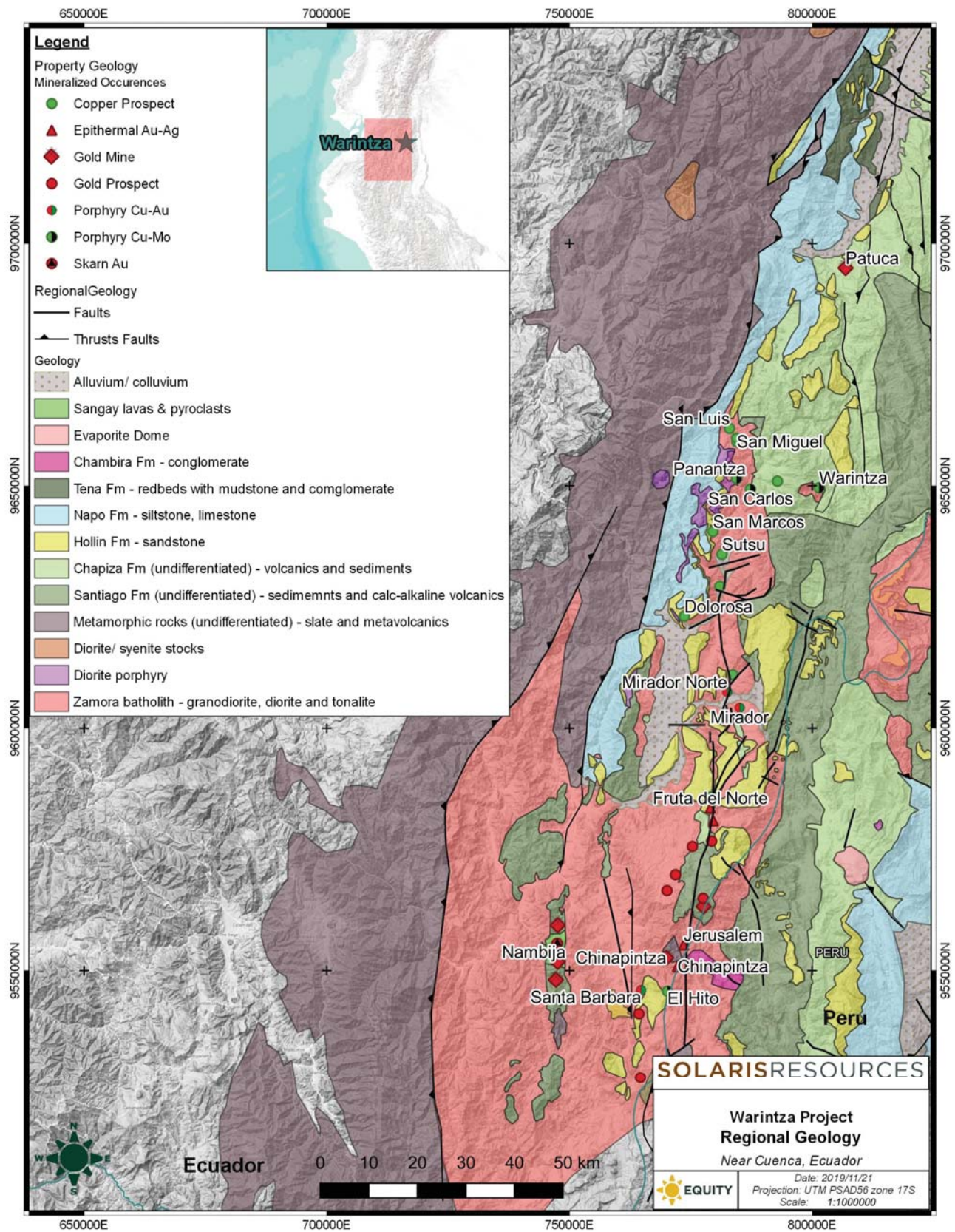
Figure 7.2. Regional geology showing deposits and prospects associated with Late Jurassic magmatism defined by Drobe et al. (2013) as the "Zamora Copper-Gold belt".

Source: modified from (Roa, 2017) by Equity (2019).

Principal rock types comprising the Zamora Batholith are equigranular and medium-grained granodiorite, diorite and tonalite, as well as coarse K-feldspar megacrystic monzogranite (Drobe et al., 2013). These rocks are not generally copper-bearing and are not the drivers of copper porphyry deposit formation. The host rocks to the Zamora Batholith include marine sedimentary and minor andesitic rocks of the Lower Jurassic Santiago Formation to the east, and Paleozoic to Cretaceous metamorphic rocks to the west.

A volumetrically less significant component of the Zamora Batholith includes a series of younger, subvolcanic intrusions that intrude the main phase plutonic rocks. These were emplaced at much shallower levels and typically comprise porphyritic feldspar-hornblende ± quartz andesitic to dacitic dykes and stocks. Significantly, these intrusions are responsible for the porphyry deposits in the Cordillera del Cóndor including Mirador, Mirador Norte, San Carlos, Panantza and Warintza as well as several smaller deposits that all were discovered by following up targets generated through the regional work by Gencor/ Billiton.

In detail, the subvolcanic intrusions responsible for porphyry mineralization are aligned along three north-south trends that represent the trend of early structures that controlled their emplacement. The central structure is the most well-developed and hosts the Panantza, San Carlos, Mirador, Fruta del Norte and Chinapintza deposits among others; 20 km west a concordant structure hosts the Nambija gold skarn and 15 km east, a third structure hosts Warintza.

7.2   Regional Metallogeny

The name "Zamora Copper-Gold belt" has been proposed (Drobe et al., 2013) for a 120 km by 30 km belt that comprises numerous deposits linked to Late Jurassic magmatism. This belt includes porphyry deposits (including Warintza), gold skarns and epithermal gold deposits.

The porphyry copper deposits of the Zamora Copper-Gold belt exhibit similar alteration and mineralization characteristics (Gendall et al., 2000). The highest-grade copper mineralization is generally associated with system cores centred on porphyry stocks that are characterized by potassic alteration with pyrite to chalcopyrite ratios of about 1:10. Away from the cores this ratio increases to >10:1. Elevated Zn-in-soils are common features in propylitic alteration halos to porphyry cores. Alteration away from cores tends to comprise clay- and sericite-rich zones that overprint potassic alteration minerals.

7.3   Property Geology

Only ~7% of the original Warintza Property has been geologically mapped at property-scale (Ronning and Ristorcelli, 2018). The mapped part of the Project (Figure 7.3) is divided into six main lithological units as summarized in Table 7.1.

Mid to Late Jurassic supracrustal rocks of the Chapiza Formation are the oldest rocks on the Property, and probably range from pre- to syn-mineralization in relative age (Ronning and Ristorcelli, 2018). This Formation includes basalt, andesite and tuff of the Misahualli Member as well as conglomerate, arenite-arkose, sandstone and shale. Chapiza conglomerate is perhaps best known for covering the Fruta del Norte gold-silver deposit located to the south of Warintza (Leary et al., 2016).

Table 7.1. Summary of Property Lithological Units

Mapped Unit	Domain Code[1]	Rock Types	Age
Superficial deposits	n/a		
Late intrusive rocks	n/a	Immediately post-mineral to much later dikes and volcanic plugs consisting of rhyolite/rhyodacite, hornblende porphyry and diabase	
Hydrothermal Breccia	BXMN	Hydrothermal breccia gradational from stockwork and crackle breccia	
Syn-mineralization intrusive rocks	POTP	Diorite to quartz monzonite	
Zamora Batholith	GRAN	Medium-grained granodiorite and tonalite	Late Jurassic?
Chapiza Formation	VSED	Sedimentary and volcanic (Misahualli Member) rocks	Mid to Late Jurassic

[1]Codes used in the 3D geological model that supports resource estimation (see Section 14).

Source: Equity (2019)

Zamora Batholith plutonic rocks intrude Chapiza stratified rocks and include medium-grained granodiorite and tonalite with 10-15% biotite and hornblende (Ronning and Ristorcelli, 2018).

Syn-mineralization (or intra-mineral) porphyritic intrusions were previously referred to as "early quartz latite porphyry" (Vaca and León, 2001), with "early" referring to its emplacement just before or contemporaneous with the earliest mineralization (Ronning and Ristorcelli, 2018). Rock compositions range from diorite to quartz monzonite. Pre-2001 work identified separate early and intra-mineral porphyry phases that were later found to comprise the same rock type with different intensities of alteration (Vaca and León, 2001).

The syn-mineralization porphyry units are spatially associated with hydrothermal breccia, which shows a textural gradation from a stockwork of quartz-sulphide veinlets through crackle breccia to a "true" breccia comprising altered rock fragments in quartz-sericite-chlorite-sulphide cement (Ronning and Ristorcelli, 2018). Breccia fragments consist mostly of syn-mineralization porphyry with minor clasts of biotite-altered volcanic basement (Vaca and León, 2001). The authors of this report agree with the statement of Ronning and Ristorcelli (2018) that there is "a much greater proportion of stockwork and crackle breccia than of true breccia with rotated fragments".

There are no radiometric age constraints on syn-mineralization porphyry/hydrothermal breccia and the Zamora batholith at Warintza. Similar cross-cutting relations at Mirador, however, suggest a time gap of ~8 Ma, with mineralized porphyry and Zamora batholith dated at 156 Ma and 164 Ma respectively (Drobe et al., 2013).

Rhyodacite and rhyolite are mapped in the Warintza West area where they are pyrite-bearing and exhibit strong quartz-sericite alteration (Ronning and Ristorcelli, 2018). Geochemical assay, however, returned low copper and molybdenum values. Late hornblende porphyry and diabase (or andesite) dikes also occur in the mapped area. Hornblende dikes host trace pyrite and magnetite but lack mineralized veinlets and returned low Cu-Au-Mo grades, so are interpreted as late- to post-mineralization (Ronning and Ristorcelli, 2018). Diabase dikes occur near structural zones and also returned low Cu-Mo-Ag contents, suggesting they also post-date mineralization.

The weathering profile over the Warintza Project is variable and consists of discontinuous saprolite that transitions into fresh rock with depth. Saprolite is only developed locally in areas that are gently sloping whereas steeper areas have exposed fresh rock that is variably oxidised. Saprolite over the Warintza Central ore body is characterised as having a red earthy colour and is soft. The saprolite typically transitions into deeply weathered rock where primary textures and minerals can be

distinguished. The saprolite and transition areas have typically been leached of most sulphides and conform to the leached portions of the deposit.
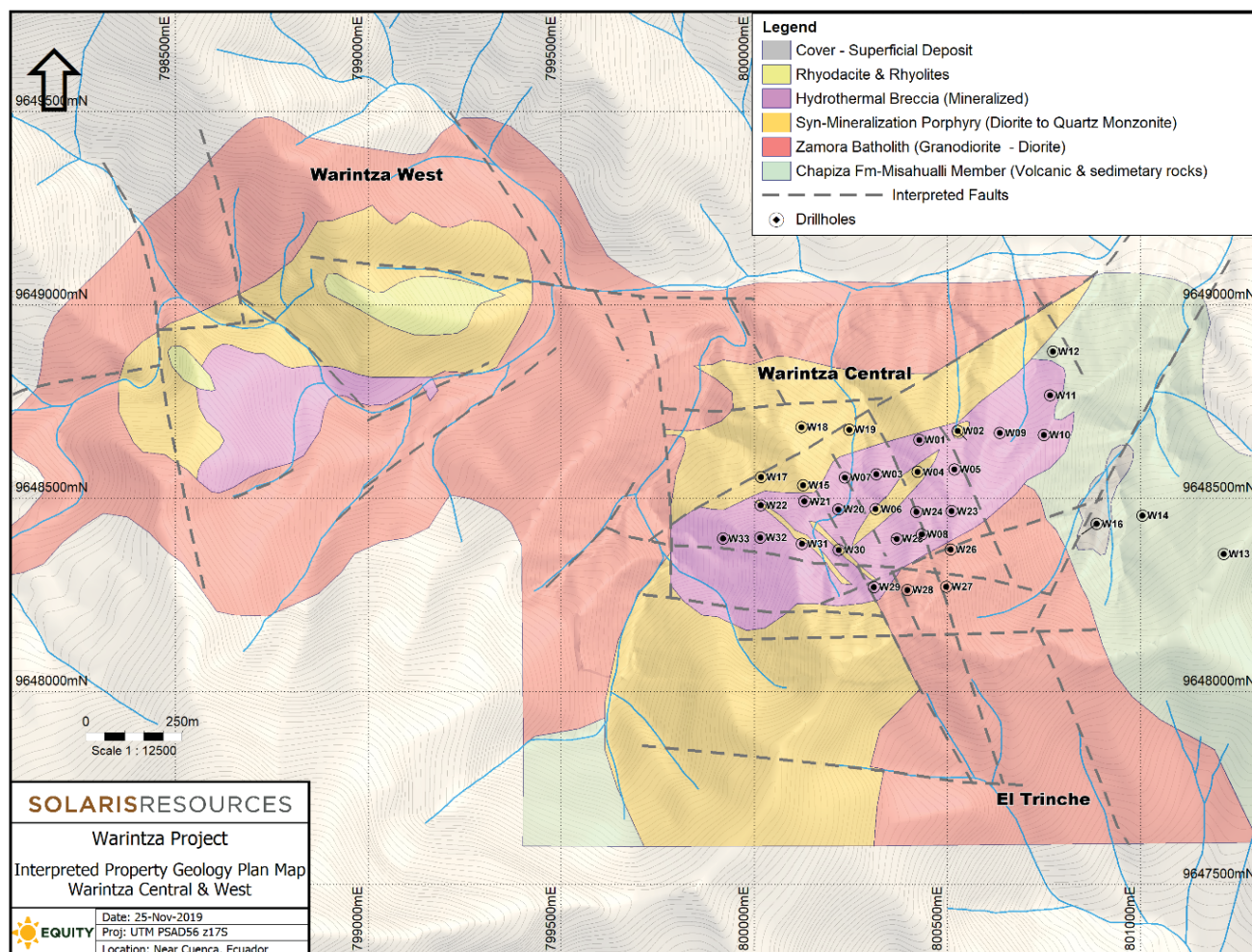
Figure 7.3. Property geology map showing the Warintza Central deposit and Warintza West target.

Source: drafted by Equity (2019) from mapping data supplied by Solaris.

7.4   Property Mineralization

Mineralization on the Warintza Property includes the Warintza Central deposit and at least four additional exploration targets; El Trinche, Warintza West, Warintza East and Warintza South. Each of these are summarized below.

7.4.1   Warintza Central

The Warintza Central Cu-Mo porphyry deposit is centered on an elliptical (likely late-Jurassic) stock that trends 060° and measures approximately 1000 m by 400 m on surface and extends to at least 300 m depth. In plan view (Figure 7.3), the northern part of the stock consists of syn-mineralization porphyry with the southern part comprising hydrothermal breccia. Syn-mineralization porphyry contains secondary biotite, interpreted as potassic alteration that is overprinted by quartz-

sericite alteration related to the hydrothermal breccia. Propylitic alteration (i.e. chlorite, epidote) occurs outboard of porphyry and breccia units, within rocks of the Zamora Batholith.

Mineralization at Warintza Central occurred in at least two stages: (1) an early event of Cu-Mo enrichment synchronous with porphyry emplacement and potassic alteration, and (2) a later event of copper mineralization/redistribution associated with the hydrothermal breccia and quartz-sericite alteration (Ronning and Ristorcelli, 2018). Other key differences between the early and late events include: (1) modal sulphide abundances averaging 1-2% in the early event and 3-5% in the late phase, (2) higher chalcopyrite to pyrite ratios in the late event (3:2 to 1:1) relative to the early one (1:4 to 3:7), and (3) predominance of disseminated chalcopyrite in the early event and vein-hosted chalcopyrite in the late stage.

Copper mineralization (but not molybdenum) has been partly redistributed by supergene processes to produce two additional types of mineralized zone that broadly overlie primary (i.e. unweathered) mineralization: (1) uppermost leached (or oxidized), and (2) underlying supergene enriched (. The leached zone is marked by widespread destruction of primary sulphide and low grades of copper, and ranges from 20-140 m thick with an average of 50 m (Ronning and Ristorcelli, 2018).
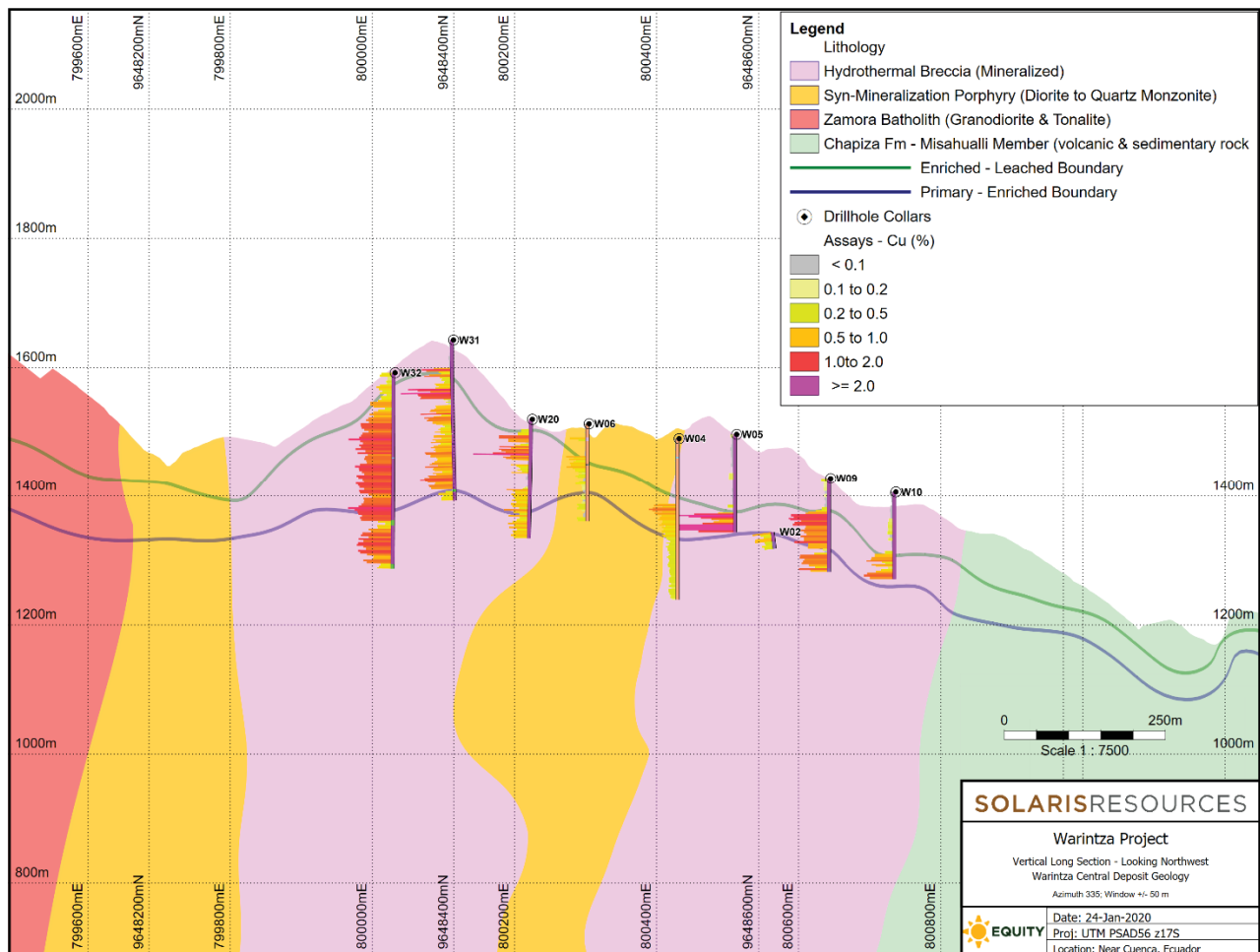
Figure 7.4. Vertical long section of the geology showing the Warintza Central deposit. Geochemical weathering boundaries are shown with copper distribution as histograms.

Source: Equity (2019).

The supergene-enriched zone is marked by high copper grades derived from re-deposited secondary sulphides, and ranges from 15-240 m thick with an average of 90 m (Figure 7.4). Although the general top-to-bottom zonation of Warintza Central is leached followed by supergene-enriched and then primary, there are also perched enriched zones within the leached zone as well as mixed zones of supergene and primary mineralization. Supergene-enriched zones are also thicker at higher elevation and thinner, but higher grade, at lower elevations (Vaca and León, 2001).

7.4.2 Other targets

The El Trinche prospect lies immediately south of Warintza Central and it is currently unclear whether they comprise part of the same mineralized system or not. The prospect consists of strongly deformed crackle breccia trending 330° and hosting 5-10% modal sulphide, comprising mostly pyrite with lesser abundances of chalcocite and chalcopyrite (Ronning and Ristorcelli, 2018). Assays of 37 surface rock samples returned 24 assays between 0.1-0.8% Cu with negligible Mo results.

The Warintza West prospect lies 1000 m west of Warintza Central and was first identified through relatively Cu ± Mo-rich pan concentrate samples collected as part of Billiton's 1994-1999 regional work. Follow-up rock chip sampling returned up to 0.5% Cu and 0.08% Mo whereas soil sampling returned similar Cu values to Warintza Central (Ronning and Ristorcelli, 2018). Geological mapping suggests mineralization is associated within an elliptical stock trending east-northeast that, like Warintza Central, consists of both syn-mineralization porphyry and hydrothermal breccia (Figure 7.3).

Warintza East lies just 500 m east of Warintza Central and is centered on a circular quartz porphyry intrusion, with a diameter of 400 m, emplaced into Chapiza Formation. The porphyry shows strong quartz-sericite alteration with relict fragments of potassic alteration, as well as magnetite alteration within adjacent supracrustal rocks. Both the porphyry and host rocks are overprinted by strong silicification (Puente, 2001). Mapping and rock sampling returned samples with up to 2-3% modal sulphide, chalcopyrite to pyrite ratios >1, and grades of up to 0.6% Cu and 0.02% Mo. Soil sampling returned similar Cu values to Warintza Central (Ronning and Ristorcelli, 2018).

The Warintza South target lies about two kilometres south of Warintza Central in an area of subdued topography with sparse outcrop (Lowell, 2005). Ridge-and-spur soil sampling done as part of Billiton's 1994-1999 regional work returned three lines of relatively high copper values, averaging 0.08% Cu with a maximum of 0.26% Cu. Geological mapping identified a granodiorite porphyry that returned surface rock samples with up to 0.2% Cu and 0.08% Mo (Ronning and Ristorcelli, 2018).

8.0 DEPOSIT TYPES

The Warintza Central deposit is a Cu-Mo porphyry associated with calc-alkalic igneous rocks. Porphyry deposits are typically large tonnage, low-grade, hypogene resources featuring (1) localization of Cu- and Mo-bearing sulphide in veinlet networks and as disseminated grains in altered wall rocks, (2) alteration and ore mineralization occurring at 1-4 km depth and related to magma emplaced at 6-8+ km depth, typically above subduction zones, (3) multi-phase intrusive rock complexes emplaced immediately before, during and/or immediately after mineralization, and (4) zones of phyllic-argillic and marginal propylitic alteration that overlap or surround potassic alteration (Berger et al., 2008).

Oxidation and acid leaching of primary mineralization may produce zones of (supergene) enrichment near the base of a weathered zone (Hartley and Rice, 2005; Sillitoe, 2005) that, in some deposits, are important to their economic viability. Porphyry deposits associated with calc-alkalic rocks are typically larger than those associated with alkalic rocks, both in terms of alteration footprint and metal endowment.

The deposit model for porphyry Cu-Mo deposits is relatively well-developed and accepted (e.g. Lowell and Guilbert, 1970; and more recent reviews by Sillitoe, 2000; Richards, 2003; Richards, 2005; Sillitoe and Thompson, 2006) and lends itself to several exploration methods. Geological mapping and diamond drilling can define alteration patterns, vein network densities, multi-phase intrusive centers and geochemical zonation that can help establish the viability of porphyry mineralization and/or establish vectors towards (higher grade) mineralization. The relatively large footprint of these deposits is amenable to surface geochemical methods such as soil, silt and/or rock geochemistry surveys. Disseminated sulphide mineralization and, in some systems, magnetite-destructive alteration can respond to ground-based induced polarization (IP) and ground- or air-based magnetic surveys. Spectral scanning methods – both airborne and on drill core – is a more recently developed method that produces more objective maps of alteration and vein patterns.

9.0 EXPLORATION

No exploration was conducted on the Project between 2006 and 2019. Between May and August, 2019 a surface sampling campaign resulted in collection of 165 rock samples, 67 stream sediment samples, and three soil samples (Table 9.1) from W and ESE of Warintza Central in areas that generally lacked historical sample coverage.

Samples were collected by surface field crews during traverses from Warintza village. Samples were sealed in poly bags and labelled with unique sample numbers. Field and sample characteristics were noted and entered into a database. Sample location data was collected using handheld GPS units. All 2019 samples were submitted to the ALS laboratory in Quito where sample preparation occurred followed by analysis in North Vancouver, BC by the analytical methods listed in Table 9.1.

Rock samples comprise rock chip and grab-style samples of outcrops and float boulders that are generally representative of the material available at each sample site.

Stream sediment samples comprise grab-style samples of available stream sediment. While this technique is useful for narrowing exploration focus, stream sediment is not generally indicative of underlying bedrock mineralization.

Soil samples were collected from only a few sites and comprise small samples of saprolite collected from shallow pits dug by hand. While geochemical analysis of soil is useful for narrowing exploration focus, metal contents may not be indicative of underlying bedrock mineralization.

A new coincident copper and molybdenum in rock anomaly west of Warintza Central has been identified from this work as displayed in Figure 9.1 and Figure 9.2. The stream sediment sampling identifies several anomalous drainages farther east of the known anomalies on the Maiki 03 and Caya 21 concessions. Results included nine sediment samples with values above 100 ppm Cu.

Table 9.1. Summary of 2019 Surface Samples by Sample Type

Sample Type	No.	Blanks	Gold Method	Multi-element Method
Rock	165	4	30 g fire assay with AAS finish	4 acid digest with ICPAES finish
Stream sediment	67	2	super trace aqua regia digest with ICP-MS finish	super trace aqua regia digest with ICP-MS finish
Soil	3	0	super trace aqua regia digest with ICP-MS finish	super trace aqua regia digest with ICP-MS finish

Source: Equity (2019).
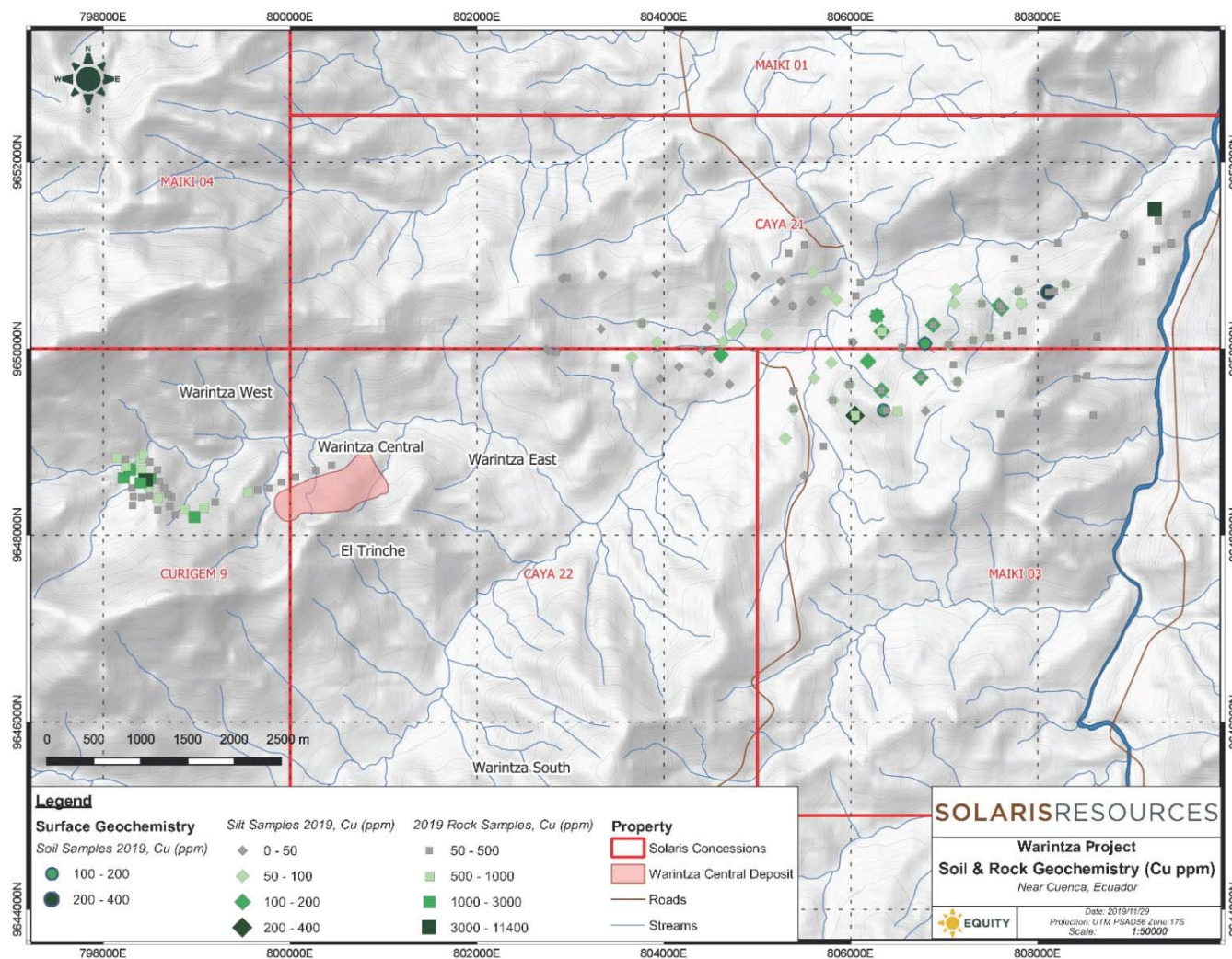
Figure 9.1 2019 stream sediment, soil and rock geochemistry map summarizing results for copper. A new copper-in-rock anomaly west of Warintza Central and several anomalous drainages farther east of the known anomalies have been identified.

Source: Equity (2019).
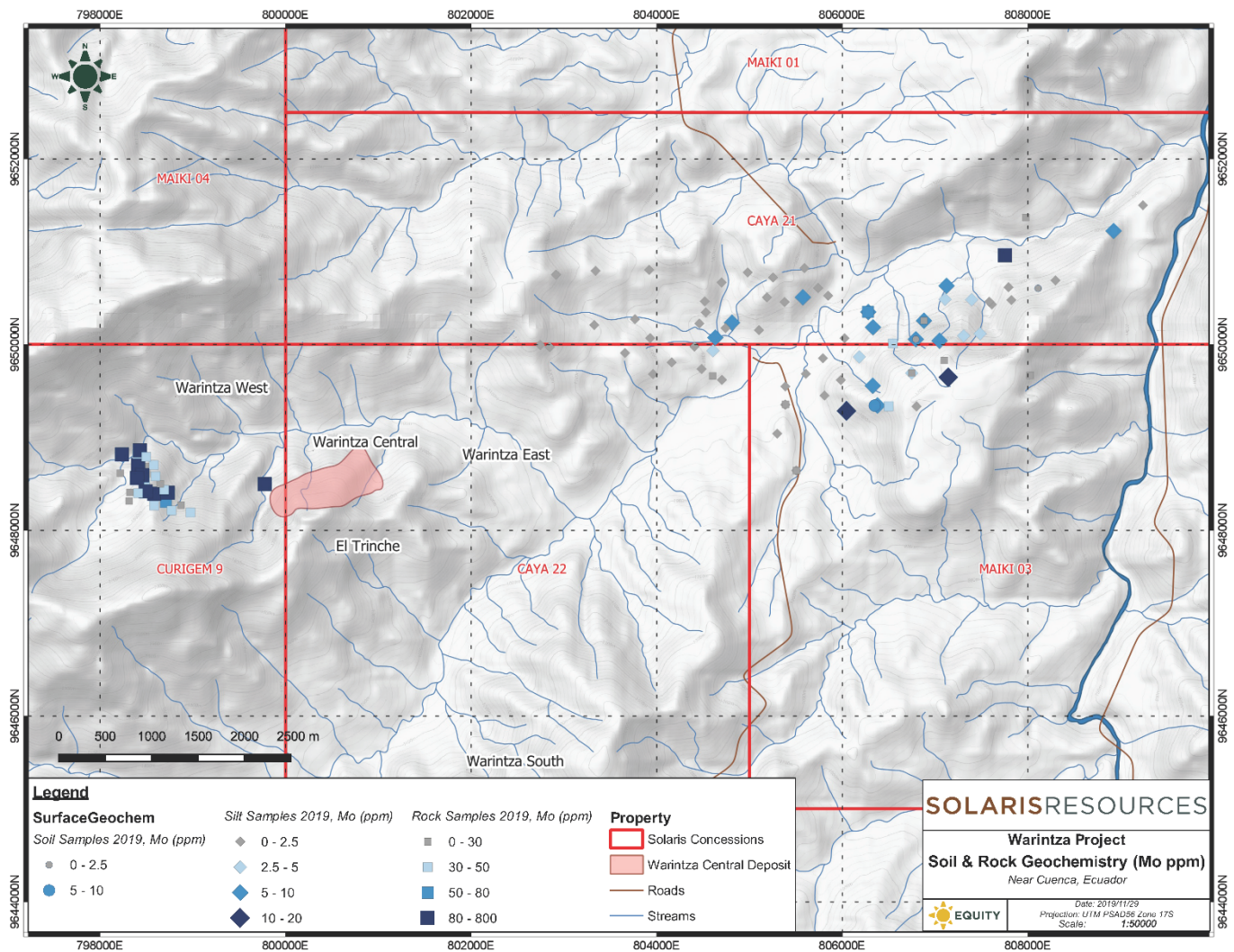
Figure 9.2 2019 stream sediment, soil and rock geochemistry map summarizing results for molybdenum. A new molybdenum-in-rock anomaly west of Warintza Central and several anomalous drainages farther east of the known anomalies have been identified.

Source: Equity (2019).

10.0 DRILLING

Solaris has not drilled the Project but a description of drilling by previous operators is provided, since data from these programs forms the basis of the Mineral Resources Estimate described in Section 14.

The Warintza Property was drilled in two campaigns executed by Lowell and Corriente during 2000 and 2001. 33 diamond drillholes were completed at Warintza Central for a total of 6,531.14 m (Table 10.1; Figure 10.1). No further drilling has been completed on the Project.

Table 10.1. Summary of Drill Meters by Year

Campaign	Number of Drillholes	Meters Drilled
2000	16	2,391.12
2001	17	4,140.02
Totals	**33**	**6,531.14**

Source: Equity (2019)
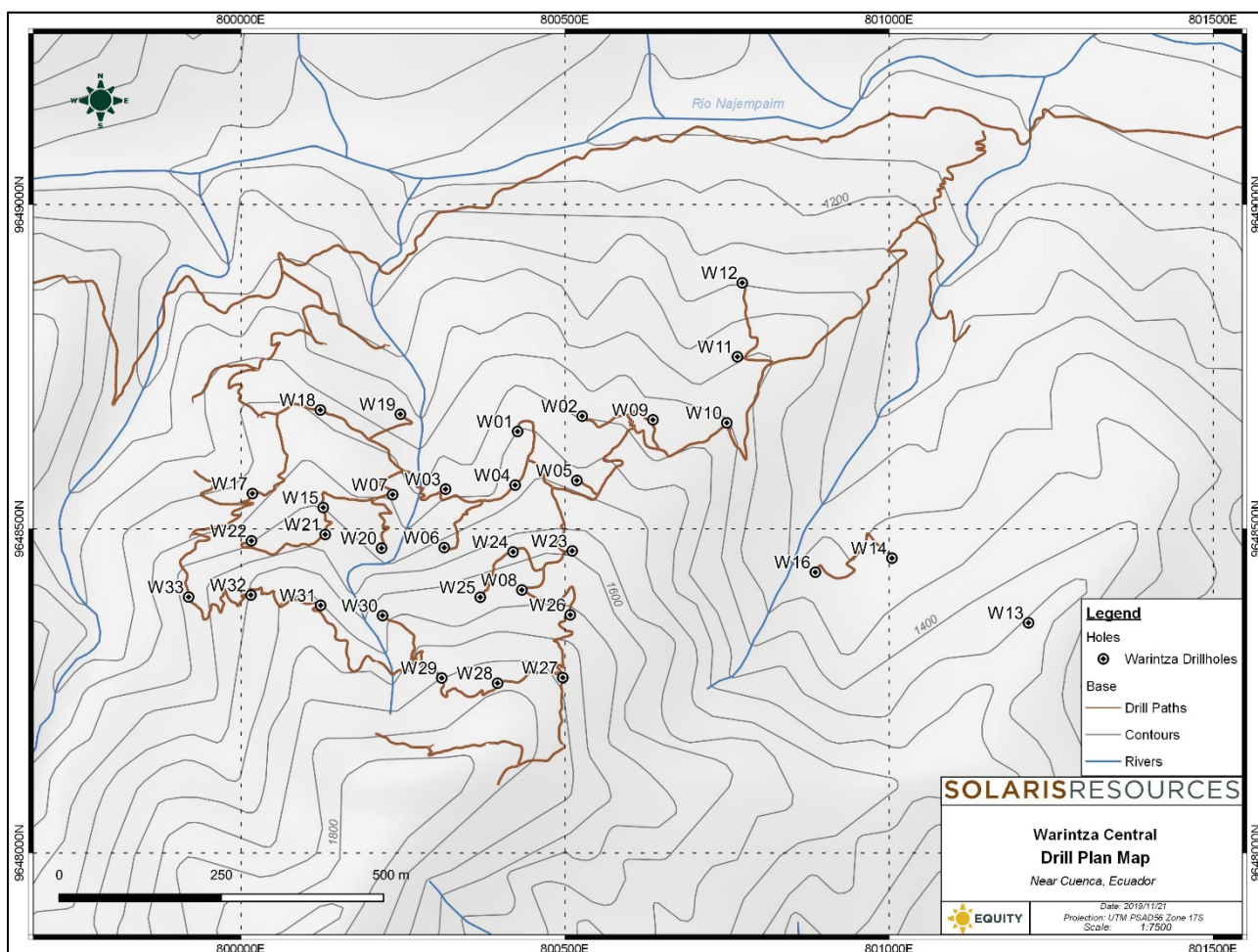
Figure 10.1. Plan map of the Warintza Central Deposit showing the location of drill holes completed in 2000 and 2001. All drilling was completed by Corriente; Solaris has not completed any drilling at Warintza.

Source: Equity (2019).

10.1 Drilling Procedures

The procedures in Section 10 and 11 are largely referenced from Vaca and León, 2001. The drilling was completed by Kluane Drilling using man-portable hydraulic drill rigs. The first drilling campaign was active from February to April 2000 and the second drilling campaign ran from July to August 2001. The drillholes all started NTW core size but many of the drillholes were reduced to BTW. The depth of core reduction is recorded in drill logs.

Drill holes were planned at a nominal 100 m grid spacing but rugged terrain dictated that some collar locations be modified to accommodate the topography. The collar locations were surveyed after drilling was completed although the survey method is unknown based on the reports available to the authors.

All but two holes were drilled vertically. The first drill campaign did not use a downhole survey tool but a Tropari downhole survey tool was used in 2001 with surveys completed at roughly 100 m intervals down hole. Three measurements were taken at each survey depth and then averaged for final use. Figure 10.2 demonstrates a typical section within Warintza Central with vertical drill holes and the logged lithological information on the drill trace

10.2 Core Handling Procedures

Diamond drill core was placed into the core box by the drilling crew and each box was labelled with the hole ID and box number at the drill rig. The core box was covered with a lid and transported to the camp site via the drill access trails. The core was processed by Lowell staff in the following order:

- The meter marks were calculated for each core box
- Core was sampled at one-meter intervals
- The core box was photographed with meter marking and sample tags
- Core was geotechnically logged for:
    - Recovery
    - RQD
    - Fracture counts
- Core was geologically logged for:
    - Mineralized zones (geochemical weathering)
    - Primary and secondary lithology
    - Alteration minerals
    - Sulphide minerals
    - Vein density
    - Brecciation intensity

The core has been moved serval times due to the remote nature of the site. Core was initially stored in a shed at the exploration camp but was subsequently moved to the town of Macas by Lowell in 2005. The core is currently stored in covered core racks.

The geotechnical logging of the core was not performed with current industry standard procedures. The geotechnical parameters including recovery and RQD were collected for regular one-meter intervals instead of block to block. Meter marks were equally divided between blocks. This procedure is sufficient for the stage of project but future programs should collect geotechnical data block to block to account for differences in run lengths that occur during drilling. Meter marks should be placed after checking for block errors and calculating the recovery. RQD was also captured over one-meter intervals using the sum of intact core intervals greater than 10 cm for NTW core and greater than 7.5 cm for the BTW core. The RQD is poorly captured for some of the drillholes.

Vaca and León (2001) state that the specific gravity was collected on a roughly 10 g piece of core every 20 m downhole using Archimedes method.

10.3 Recommendations

The drilling procedures and resultant data are adequate. Future drill programs should:

- Use HQ core size to improve recovery and improve representativity of samples
- Capture deviation with non-magnetic downhole survey tool
- Use block to block recovery and RQD
- Collect bulk density measurements on samples greater than 10 cm core length. The samples should be waxed or wrapped to account for porosity.
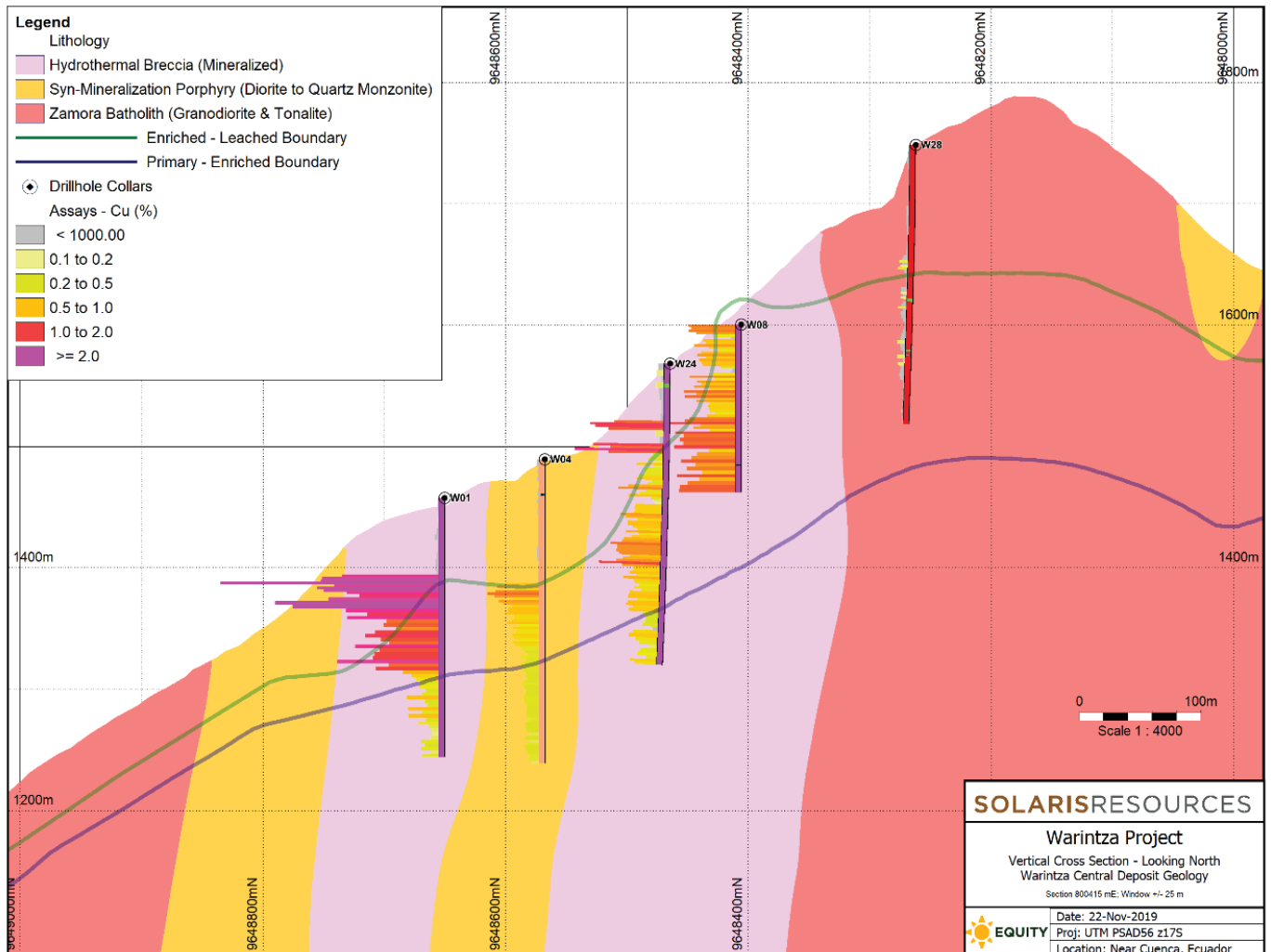
Figure 10.2. Vertical Cross Section of the Warintza Central Deposit including the 2019 geological model.

Source: Equity (2019).

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Sample Preparation and Sample Security

Diamond drill core was sampled at regular one-meter intervals that do not honour lithological contacts. Splitting of the core was performed using a diamond bladed core saw at the exploration camp. Broken or soft core was sampled using a scoop to divide half the contents of the core box. The one-meter samples were bagged and labeled with sample IDs. The sample shipment was packed to the Warintza airstrip along footpaths. The shipments were flown via chartered aircraft to Macas and carried by commercial transport directly to the preparation facility in Quito (Vaca and León, 2001).

The Bondar–Clegg preparation facility in Quito crushed and pulverised each sample before sending a 100 g pulp to North Vancouver, Canada. Using instructions from Lowell, the one-meter samples submitted were composited into larger samples designed to honour the mineralized zones (Table 11.1). The compositing length procedure was rigorously adhered to resulting in composites that mixed material types. The analytical results correspond to the composited intervals. Each hole has a record of the original one-meter samples taken and the relative composite assignment. It is unclear at which stage the composites are combined but based on the description it seems to be between crushing and pulverization.

Table 11.1. Sample Composite Lengths Applied to Sample based on Mineralized Zone Character

Sample Composite Length (m)	Material Type	Note
5	Leached	2 m in W1 and W2
2	Secondary	
3	Primary	

Source: Equity (2019)

The Bondar–Clegg preparation facility received core samples and prepared 2,142 pulps to ship for analysis (Table 11.2). Pulps were generated by first crushing core to -10 mesh that were then split in quarters up to a maximum weight of 250 g. One quarter split was pulverised to -150 mesh (106 micron) of which 100 g where shipped to the analytical lab for gold and multi-element analysis. Gold was determined from a 30 g aliquot by fire assay with AAS finish. Copper, molybdenum, zinc, lead and silver were determined by an ore grade method using a three-acid digest and AAS finish (Vaca and León, 2001). Silver and lead were only analyzed in the first campaign and results are available for 775 samples.

Table 11.2. Table of Assay Composite and QAQC Samples Submitted

Campaign	Year	Count of Samples Analyzed	Count of Reference Material	QA (%)	Count of Pulp Duplicates	QC (%)
1	2000	775				
2	2001	1367	65	5%	65	5%
	Total	2142				

Source: Equity (2019)

11.2 Quality Control Quality Assurance Program

The first drill campaign did not include a quality assurance quality control "QAQC" monitoring program. The second drill program utilized a QAQC monitoring program that included the use of reference materials and pulp duplicates with a 1 in 20 insertion rate for each type. There is no documentation stating which stage of the sample stream the QAQC samples were inserted and by which party, either Lowell or Bondar-Clegg personnel. The QAQC sample ID numbers are consistent with the sample ID series used to create the composites for analysis. The reference materials were identified using the fifth digit of the sample ID. The duplicates were identified with a '1' in the final character and correspond with the parent sample with the same sample ID but with a final character of '0' (Ronning and Ristorcelli, 2018).

Quality assurance for copper was monitored with three different internal Billiton reference materials that had been round robin tested at five laboratories (Table 11.3). Reference materials to evaluate the accuracy of molybdenum or gold analyses were not used. Twelve pulps of each type were submitted to five laboratories including Bondar–Clegg, Chemex, Loring Labs, SGS and CIMM. The internal reference materials utilized by Billiton have no background information available to the current authors, with the descriptions compiled from Ronning and Ristorcelli (2018). The source material, homogenization method, analytical method and locations of the laboratories used to create the reference materials are unknown.

Table 11.3. Table of Billiton Reference Materials

	GEM 1	GEM 2	GEM 3
Mean Cu (ppm)	11740	5585	145
Standard Deviation	531	256	13
SampleID (5th character)	7	8	9

Source: Equity (2019)
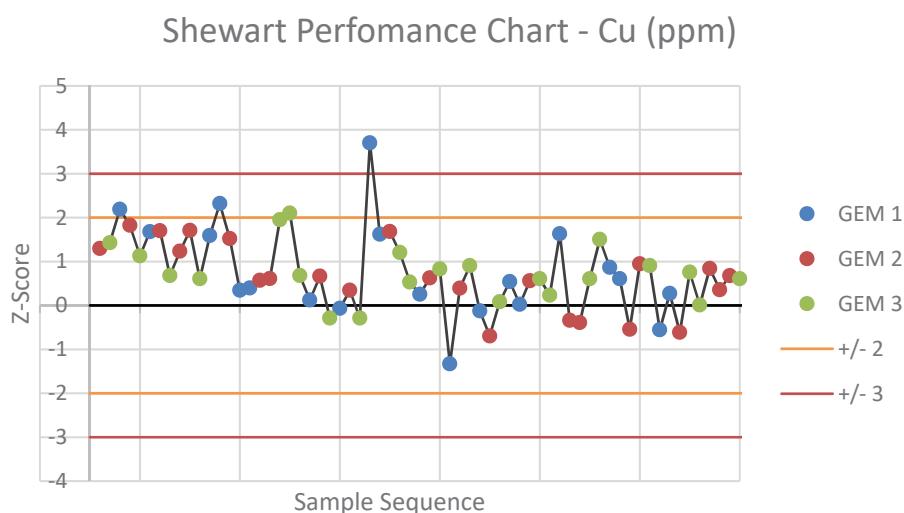
Figure 11.1. Shewart performance chart for Billiton reference materials.

Source: Equity. (2019).

The reference material performance is good with all reference materials passing within three standard deviations except one (Figure 11.1). The 1.5% failure rate is within acceptable range. There is a slight positive bias of the copper analyses that should be monitored in future drill programs. This could result from a mismatch of the analytical method where there is incongruence between the digest used for core versus the round-robin analysis or could be intra lab drift.
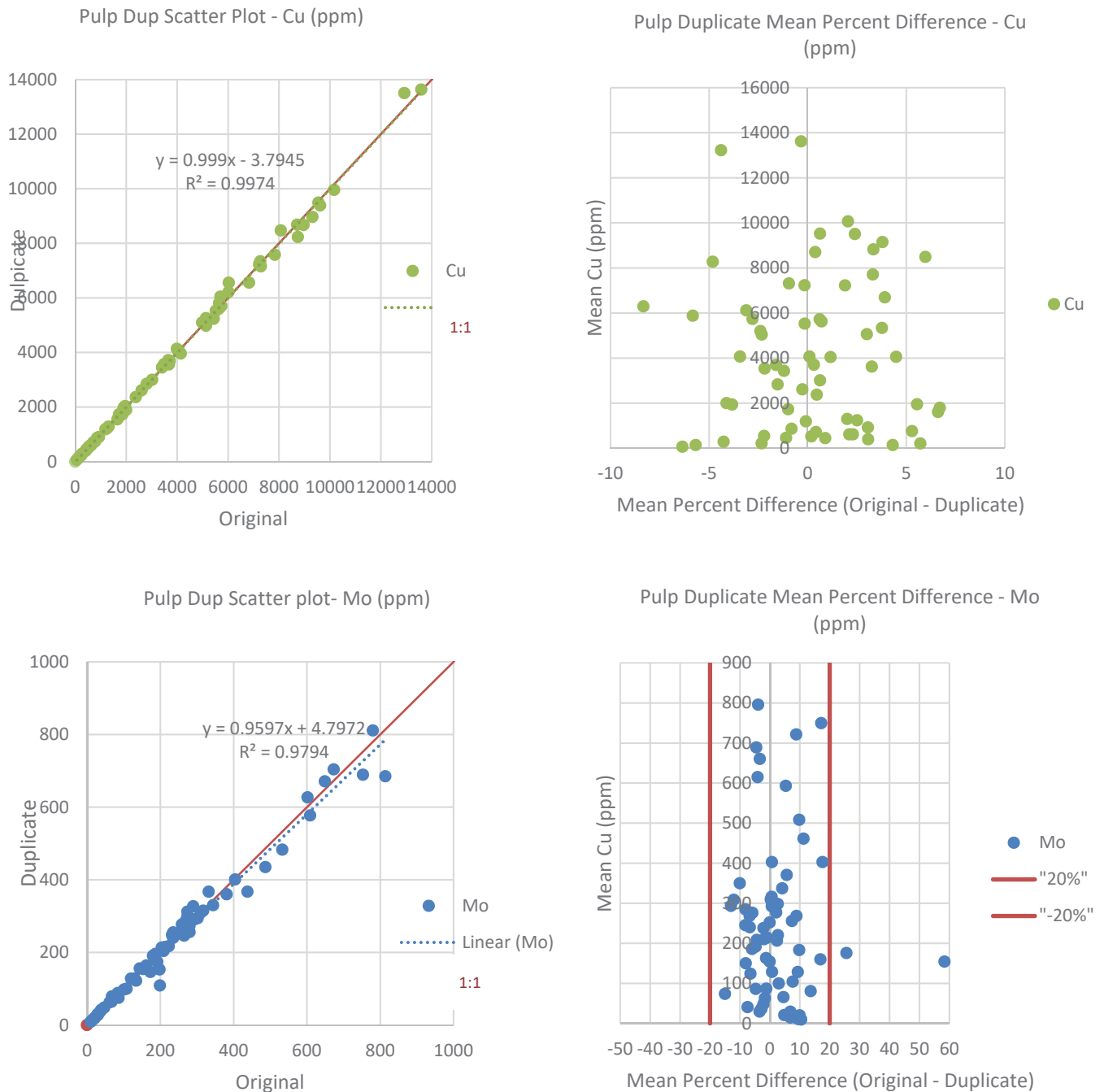
Figure 11.2. Scatter and mean percent difference plots of pulp duplicates for copper and molybdenum.

Source: Equity Exploration Consultants Ltd. (2019).

There were 65 pulp duplicates inserted during the second drill campaign. The pulp duplicates have very good agreement for copper and molybdenum as expected with intra lab pulp duplicates that monitor the analytical reproducibility (Figure 11.2). Copper has an average relative standard deviation of two which suggests very good precision of the paired results. The average relative standard deviation for molybdenum pairs is five which suggests the agreement is acceptable.

11.3 Recommendations

The sample preparation and analysis are consistent with industry standards practices. The chain of custody is poorly documented. Future drilling programs should follow these recommended procedures:

- Drill core sampling should honour significant changes in lithology, mineralized zone and alteration
- Analyze sample intervals rather than composite intervals
- Keep sample shipment and chain of custody records
- Use a QAQC monitoring program that includes commercially available certified reference materials matched to the analytical method, coarse blanks, preparation (or coarse crush) duplicates and field (or core) duplicates
- Monitor QAQC of molybdenum and gold assays, and
- Submit a selection of pulps and coarse rejects to an umpire laboratory.

12.0 DATA VERIFICATION

Drill data was received by Equity as individual drill hole logs and spreadsheets in Excel format and author Black re-created and validated a drillhole database from these files. All sample and assay composite intervals were compiled and merged with digital analytical certificate files. An Access® database was created for the collar, survey, geological data and assay tables. Each table was imported into Micromine™ 3D software for validation and use. Additional checks were made against the historical reports to validate inconsistencies within the data. For example, no intervals exceed the maximum hole depth.

12.1 Drill Hole Location Verification

The surveyed collar locations correlate well with a digital elevation model (DEM) except for hole W13 where the digital elevation model is 15 m higher than the recorded collar elevation. Hole W22 collar location had to be moved to match the location shown in (Vaca and León, 2001). All final depths were verified from the core photos and corrected in the database where rounding errors existed in the original data.

On the site visit in May, authors Baker and Rabb confirmed the location of drill trails and drill locations for W11 and W12. The locations of these drill hole collars were validated using a handheld GPS. There were no significant differences found between these results and the original surveyed locations. No tag or monument was identified in field but plastic casing within the actual hole is present that confirms the exact hole location (Figure 12.1).

Downhole survey data was validated by identifying large discrepancies between sequential dip and azimuth readings. No significant discrepancies were found.

Figure 12.1. Drill site W12 with vertical casing protruding from hole. Source: D. Baker (2019).

Source: Equity (2019)

12.2 Geological Data Verification and Interpretation

Geological data from drill core logs and historical surface maps were used to build a new 3D geological model (Figure 14.1). In general, there is good section-to-section and section-to-surface map correlation of geology, indicating that both the drill hole database and surface mapping has good integrity.

Core recovery averaged 94%. There is no relationship between recovery and copper or molybdenum grade.

While on the May site visit, copper was verified at an outcrop exposure located about 80 m west of drill hole W12. The rock sample database includes two samples from this area that returned elevated copper. This large creek exposure is cut by abundant quartz veins and pyrite veins with secondary chalcocite consistent with the supergene enriched zone of the Warintza Central deposit.

Figure 12.2. Closeup of sericite-altered porphyry cut by pyrite-chalcocite veins consistent with the supergene enriched zone of the deposit. Photo taken from a large outcrop exposure within a creek about 80 m west of drill site W12 within Warintza Central.

Source: Equity (2019)

12.3 Assay Verification

The following checks were completed, and in some cases, corrections were made to ensure that:

- No sample composite interval exceeds the total depth of its hole.
- Values below the detection limit were converted into a one-half the analytical method detection limit.
- 15% of the compiled assay values were checked against assay files provided directly by ALS. No differences in the values were identified.
- The QAQC data was compiled and charted to validate the results and is here considered sufficient for an early stage project.

Ten core samples were collected during the 2019 site visit and compared with historical results for the same core depth intervals (Table 12.1). Seven of 10 copper and molybdenum re-assays were ≥10% lower than the original analyses whereas duplication of gold assays was somewhat better. Correlation (ρ) between original analyses and 2019 re-assays is strong for copper ($\rho = 0.98$), molybdenum ($\rho = 0.95$) and gold ($\rho = 0.99$). Results of the 2019 re-assay program are less precise than the re-assay program published by Ronning and Ristorcelli (2018), which generally show <10% difference, but are nonetheless considered satisfactory.

Table 12.1. Comparison of 2019 Re-Assays to Original Assay Data

Drill Hole	From (m)	To (m)	Length (m)	Original Sampling				Equity Resampling			
				ID	Cu (%)	Mo (%)	Au (ppm)	ID	Cu (%)	Mo (%)	Au (ppm)
W07	24	26	2	10702600070	1.39	0.031	0.08	EQ0004	0.87	0.022	0.08
W07	73	75	2	10707500210	1.76	0.068	0.10	EQ0005	1.41	0.060	0.10
W07	122	125	3	10712500380	1.87	0.058	0.11	EQ0006	1.02	0.065	0.11
W07	152	155	3	10715500480	6.20	0.048	0.60	EQ0007	6.19	0.035	0.98
W20	36	38	2	1200380080	0.09	0.068	0.05	EQ0008	0.64	0.046	0.04
W20	52	54	2	1200540160	1.12	0.078	0.12	EQ0009	0.89	0.068	0.10
W20	129	132	3	1201320440	0.36	0.078	0.09	EQ0010	0.33	0.086	0.09
W29	173	176	3	1291760550	0.12	0.007	0.02	EQ0003	0.11	0.011	0.01
W29	200	203	3	1292030640	0.23	0.003	0.01	EQ0001	0.16	0.002	0.01
W29	263	266	3	1292660850	0.51	0.004	0.04	EQ0002	0.42	0.002	0.03
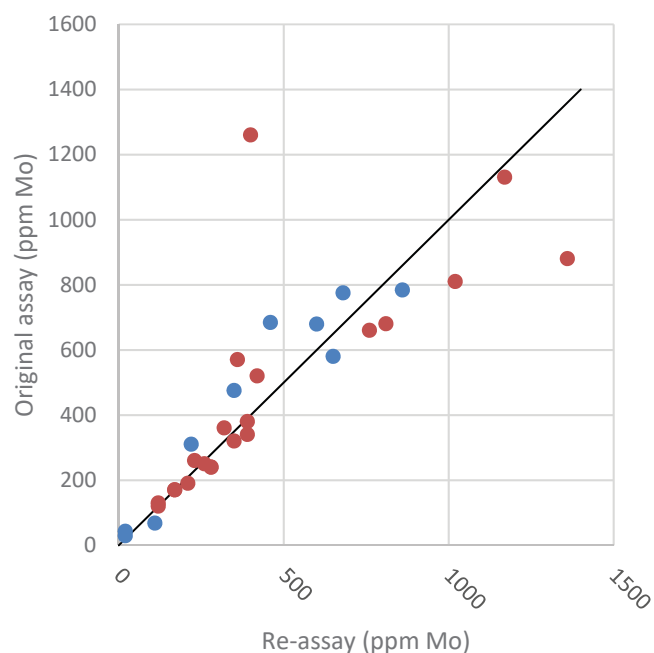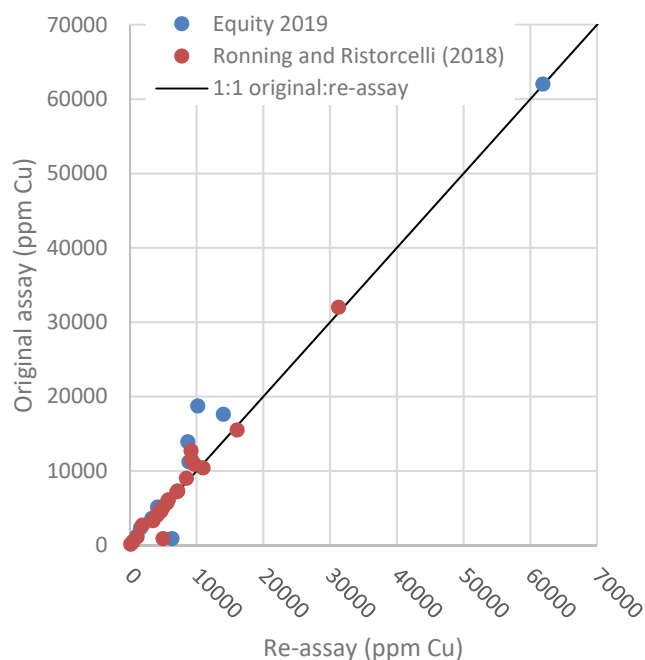
Figure 12.3. Scatterplots showing original and re-assay data for (left) copper and (right) molybdenum. Data includes ten samples from the 2019 Equity re-assay work and 21 samples published in 2018 technical report by Ronning and Ristorcelli (2018).

Source: Equity (2019)

12.4 Data Adequacy

It is the opinion of Equity that the location, downhole survey and assay data supplied is of adequate quality for use in mineral resource estimation.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

To date, there has only been a single metallurgical test completed on a single composite sample from the Warintza Central deposit and should be regarded as preliminary in nature. The testwork is detailed in a June 2002 report from Resource Development Inc (RDI, 2002). The test work utilised sample reject material, however, there is no information detailing the exact source of the material. The scope of the metallurgical test work included sample preparation, head analyses of samples, rougher floatation tests at three grind sizes, a cleaner floatation test to assess concentrate quality for Cu and Au, and a cleaner test on reground cleaner concentrate. Bond's ball mill work index determination was done through indirect methods based on a single sample from Mirador where BWI was measured directly.

13.1 Warintza Metallurgical Composite

The composite samples were crushed to 10 mesh, blended and split into 2 kg samples for flotation work. One of the 2 kg samples was split and analyzed by X-ray fluorescence analysis to determine head grade. The head grade of the Warintza composite sample is summarized in Table 13.1 and has grades that are representative of portions of the Warintza Central deposit.

Table 13.1. Warintza Metallurgical Sample Head Grades

Element	Concentration
Cu (%)	0.732
Acid Soluble Cu (%)	0.028
Au (g/t)	0.21
Ag (g/t)	3.09
Mo (ppm)	437

Source: RDI (2002)

Rougher floatation tests were completed on grind sizes of P80 for 65, 100 and 150 mesh sizes. The test procedure involved first grinding a 2 kg sample with 250 g/t lime in a laboratory rod mill followed by transfer to a floatation cell where additional lime (25 to 75 g/t) was added to obtain a pH of approximately eight. A simple reagent suite consisting of lime as a pH modifier, potassium amyl xanthate (PAX) as collector and methyl isobutyl carbonal (MIBC) as frother was employed in the rougher floatation tests. Concentrates were sampled at cumulative times of one and four minutes. After four minutes, the floatation pulp was conditioned with additional collectors and frothers and a third sample was collected at a cumulative time of six minutes. The results of the rougher floatation tests are summarized in Table 13.2.

RDI (2002) summarises the rougher floatation tests as follows:

- The results showed 94% Cu recovery in ten minutes of floatation
- 75% to 90% of copper floated in four minutes
- Recoveries were independent of grind size
- Gold recoveries were 71% and may be associated with the copper minerals

Table 13.2. Summary of Rougher Floatation Results

| Grind, P_{80} mesh | Recovery (10 minutes) | | | Feed | | Tailing | Rougher Flotation Conc. Grade Cu (%) |
	Weight (g)	Cu (%)	Au (%)	Calculated Cu (%)	Assayed Au (g/t)	Assayed Au (g/t)	
65	16.75	94.4	72.3	0.809	0.21	<0.07	4.56
100	13.84	94.2	71.3	0.804	0.21	<0.07	5.47
150	14.03	94.0	71.3	0.777	0.21	<0.07	5.21

Source: RDI (2002)

Cleaner floatation tests were also completed. The procedure consisted of floating rougher concentrates at a primary grind of P80 100 mesh that were reground for 15 minutes in a laboratory ball mill. Cleaner floatation tests used lime, PAX, and MIBC at a target pH of 10.5. Cleaner concentrates were collected at four minutes and was recleaned in a second cleaner floatation where concentrates were collected at cumulative times of 30 seconds, one minute and 2.5 minutes. Only the concentrate collected at 30 seconds was analysed for Au. The results of the cleaner concentrate are summarized in Table 13.3.

Table 13.3. Summary of Second Cleaner Concentrates

| | Concentrate | | |
	30 Seconds	1.0 Minute	2.5 Minutes
Cu (%)	15.1	13.37	11.93
Au (g/t)	1.23	-	-

Source: RDI (2002)

RDI (2002) summarises the cleaner floatation tests as follows:

- Concentrate grades were lower due to greater pyrite abundance and could be suppressed by a floatation pH greater than 11
- Additional testing is required to optimise the regrind time and cleaner floatation process conditions to determine the quality of the product that could be produced in the second cleaner concentrate

13.2 Indirect Hardess Index

The Bond's ball mill work index (BWI) was determined on a single sample from the Mirador project not on the Warintza Central deposit. The mineralization and host lithology are comparable for early stage estimates but further metallurgical work will be required at Warintza. Based on the results of the BWI from the Mirador sample, and known grind times to achieve target grain size, the test work calculated the Warintza Central composite sample to have a work index of 17.54, which RDI considered to be moderately hard. The formula used to derive the BWI (W_{i2}) is provided below:

$$\frac{10\,W_{i1}}{\sqrt{Xp_1}} - \frac{10\,W_{i1}}{\sqrt{XF_1}} = \frac{10\,W_{i2}}{\sqrt{Xp_2}} - \frac{10\,W_{i2}}{\sqrt{XF_2}}$$

Where:

W_{i1} = Known Work Index

W_{i2} = Unknown Work Index

Xp_1 , Xp_2 = 80% passing product size for known and unknown material

XF_1 , XF_2 = 80% passing feed size for known and unknown material

Source: RDI (2002)

In summary the test results completed to date were not optimised and have provided a broad estimate of hardness as well as a basis for amenability of the ore to floatation.

14.0 MINERAL RESOURCE ESTIMATES

The mineral resources presented conform with the most recent CIM Definition Standards (CIM, 2014) and are prepared according to CIM Best Practice Guidelines and are reported in accordance with Canadian Securities Administrators' National Instrument 43-101.

14.1 Introduction

The Mineral Resource Statement presented herein evaluates mineral resources for copper, molybdenum and gold for the Warintza Central deposit in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model prepared by Equity considers 33 core drill holes drilled by Lowell Copper over two separate campaigns from February to April, 2000 and July to August, 2001. The resource estimate work was completed by Trevor Rabb, PGeo (EGBC #39599), who meets the definition of "independent qualified person" as defined in National Instrument 43-101. The effective date of the resource statement is December 13, 2019.

This section describes the resource estimation methodology, key assumptions, and limitations of the resource estimate considered by Equity. It is of the opinion of Equity that the resource estimate reported herein is a reasonable representation of the copper-molybdenum-gold mineral resources of the Warintza Central deposit to the current level of sampling and geological understanding. The mineral resources are estimated in accordance with CIM "Estimation of Mineral Resources and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators National Instrument 43-101. Mineral resources are not minerals reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted into mineral reserves.

A project database was generated by Equity for the Warintza Project based on data provided by Solaris. The drill hole spacing and assay data reviewed are of sufficient quality to produce a reliable estimate. The resource classification has considered that the limits of mineralisation are yet to be defined.

Leapfrog™ Geo 4.5 was used to construct the estimation domain wireframes and Micromine™ 2018 and Leapfrog™ Edge 4.5 were used for geostatistical evaluation, generation of the resource block model and estimation and tabulating the mineral resources.

14.2 Resource Estimation Methodology

The main steps of the methodology for preparing the Warintza Central resource estimate are as follows:

- Site visit and verification of data and drill core,

- Review of 2006 resource model,

- Database generation and auditing of database,

- Generation of new geological, weathering, alteration, and regolith models,

- Sample compositing,

- Capping analysis on primary and composited data,

- Variography of composited data,

- Grade interpolation,

- Validation of grade interpolation, and

- Constraining of resource model using open pit optimisation.

The main differences between the current resource and the 2018 resource are as follows:

- Estimation domains were used and based on lithology and geochemical weathering,

- Pit constraints were generated using MineSite™ Optimiser,

- Block size of 10 x 10 x 10 metres was used, versus 20 x 20 x 20 metres used in the 2018 resource estimate,

- Regolith weathering profiles were generated for saprolite, oxidised rock, and fresh rock based on visual appearance of core using core photos, geotechnical data and re-logging,

- Specific gravity (SG) was estimated using ID2 interpolation; unestimated blocks were assigned average SG values based on regolith weathering profile, and

- Estimation using a combination of interpolation techniques of OK and ID3 for copper, OK and ID2 for molybdenum and ID2 for gold.

14.3 Drill Hole Database

The Warintza Project database was generated by Equity based on historical digital logs produced by Corriente in Microsoft™ Excel format and strip logs in PDF format. Drill hole data incorporated into the database included lithology, regolith, alteration, mineralisation, geochemical weathering, veining, structure, recovery and RQD. Drill hole locations and downhole surveys were obtained from Vaca and León (2001) and verified using published maps in historical reports, data used in the 2006 resource estimate and from surveyed collar locations during the 2019 Warintza site visit. Drill hole assay data was merged with sample interval data using the original assay certificates in CSV format. Portions of the database were checked against original assay certificates and core photos to ensure data integrity. Table 14.1 details the exploration data used for the resource estimate.

Table 14.1. Drill Holes, Meters and Samples by Year

Campaign	Drillholes (n)	Meters Drilled	Samples (n)
2000	16	2,391.12	775
2001	17	4,140.02	1,367
Totals	33	6,531.14	2,142

Source: Equity (2019)

14.4 Geological Modelling

Previous modelling and generation of resource domains focused on the leached and supergene enriched zones. Attempts were made by Ronning and Ristorcelli (2006) to segregate domains but this was not completed due to the risk of smearing high-grade zones and producing unrealistic and abrupt changes in resource grade distribution based on the sparse drilling.

Detailed modelling was completed by Equity using Leapfrog™ Geo 4.5. Three separate models were generated: a lithological model (Figure 14.1), a geochemical weathering model (Figure 14.2) and a regolith model (Figure 14.3). Fault models were also generated, however given the limited drilling it is uncertain how some of the faults interact with the resource model. All three models support the Warintza Central mineral resource. The lithological and weathering model were both used as resource estimation domains for the Warintza Central mineral resource.

14.4.1 Lithological Model

The lithological model was completed by Equity to produce a framework consistent with the Projects' surface mapping data. Four main lithologies were modelled – the two mineralised lithologies include syn-mineralisation porphyry (POTP) and mineralised hydrothermal breccia (BXMN) (Table 14.2). Weakly to unmineralised lithologies include granitoids belonging to the Zamora batholith (GRAN) and mixed volcanic and sedimentary rocks of Chapiza Formation (VSED). Drill core logging has captured these lithologies well. Some intervals were modified based on core photos, sampling intervals and copper grades. Some late stage, post-mineralisation dikes are present on the Property. The dikes are weakly mineralised to unmineralized and considered to be locally dilutive within the POTP domains.

Table 14.2. Domain Codes

Description	Estimation Domain	Domain Number
Zamora batholith	GRAN	10
Syn-Mineralisation Porphyry	POTP	20
Chapiza Formation	VSED	30
Hydrothermal Breccia	BXMN	100

Source: Equity (2019)

Figure 14.1. 3D lithological model built in Leapfrog™ Geo 4.5 by author Rabb from historical drillhole and surface mapping databases (looking southwest).

Source: Equity (2019).

14.4.2 Geochemical Weathering Model

The geochemical weathering model includes leached, enriched and primary zones and honours copper mineralisation and logged observations from drill core. The leached zones are characterised by very low-grade copper and can include heavily oxidised rock or saprolite. Perched copper enriched zones occur in the leached zone, specifically in the BXMN, and though rare they could be locally significant. Further drilling may demonstrate continuity of these zones. The lowermost contact of the leached zone was used, which includes isolated zones of enriched copper mineralisation related to the

underlying enriched zone. Lowermost contacts of the leached zones are typically coincident with elevated copper, increasing downhole and consistently greater than 0.2% Cu. Enriched zones occur across the Property. The intensity of mineralisation within the enriched zones is related to the primary mineralisation with, for example, BXMN showing much stronger enrichment than other rock types. Even weakly mineralised rock types (e.g. GRAN) show three to five times the copper concentration in the enriched zone compared to suspected primary mineralisation. Primary zones represent original hydrothermal, porphyry-related mineralisation that has not been modified in the supergene environment. Molybdenum and gold are not impacted by the weathering, therefore the weathering domains are not honoured for the estimation of molybdenum and gold grades.

The weathering model was combined with the lithological model in Leapfrog™ to generate independent domains for each rock type (Table 14.3). Due to a lack of samples within the enriched and primary zones for GRAN and VSED domains, enriched and primary domains were combined for estimation.

Table 14.3. Domains Generated by Combining Lithological and Weathering Models

Estimation Domain	Weathering Profile	Domain Number
GRAN	Leached	11
GRAN	Enriched	12
GRAN	Primary	13
POTP	Leached	21
POTP	Enriched	22
POTP	Primary	23
VSED	Leached	31
VSED	Enriched	32
VSED	Primary	33
BXMN	Leached	101
BXMN	Enriched	102
BXMN	Primary	103

Source: Equity (2019)
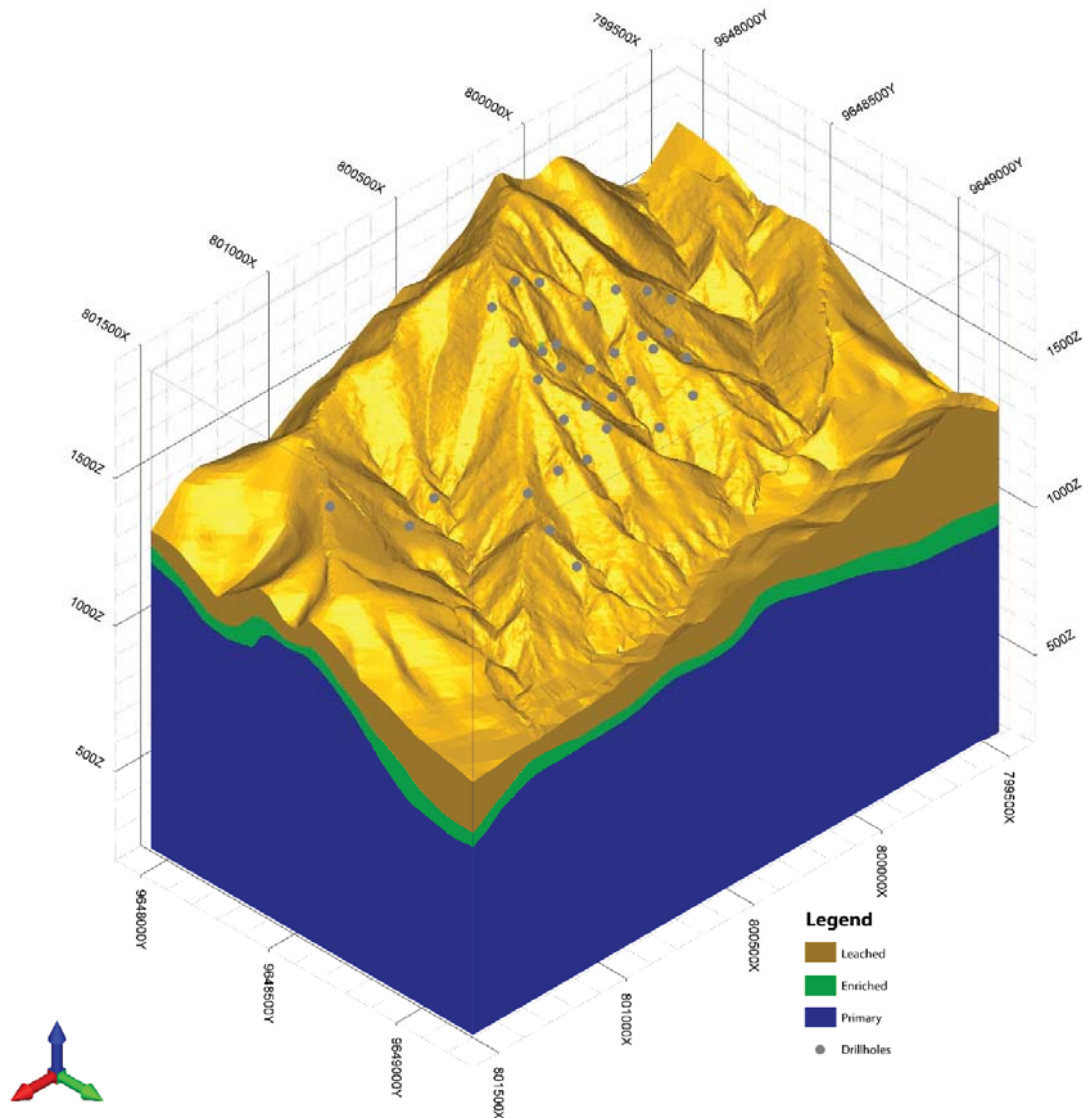
Figure 14.2. 3D geochemical weathering model built in Leapfrog™ Geo 4.5 by author Rabb from historical drillhole and surface mapping databases (looking southwest).

Source: Equity (2019).

14.4.3 Regolith Model

A regolith model was generated for preliminary geotechnical considerations for the Warintza Central pit optimisation and to assist in estimating and assigning specific gravity. The regolith model is similar to the geochemical weathering model but is not driven by geochemical enrichment or leaching. The model considers the physical weathering state of the rock and its physical rock properties particularly specific gravity, color, hardness, and breakage. Three domains were generated; saprolite, oxidised rock, and fresh rock. None of these domains were used to estimate grade for the Warintza Central mineral resource and were used solely for pit optimisation parameters and to assist in

estimating and assigning specific gravity. Outside of the immediate drilling area, the model is subject to inaccuracy due to lack of information. The regolith model codes are summarized in Table 14.4.

Saprolite is developed discontinuously over the Property and is not well represented by the drilling due to the pad building practices at Warintza Central. Drilling pads were built using cut and fill of saprolite. Overall it is interpreted that saprolite is developed discontinuously over the Property due to the extremely steep slopes and high levels of rain fall. At lower elevations and on gentle terrain, saprolite is well developed and contains a mix of in-situ saprolite and colluvial-saprolite deposits.

Oxidised rock is continuous and broadly conformable to the leached zones. Oxidised rock is discernable by its red-orange weathering appearance, slightly lower specific gravity compared to fresh rock, and preferential weathering of sulphides.

Fresh rock is discernable by absent or local weathering, higher specific gravity and fresh sulphides. The fresh rock domain can include enriched and primary mineralisation.
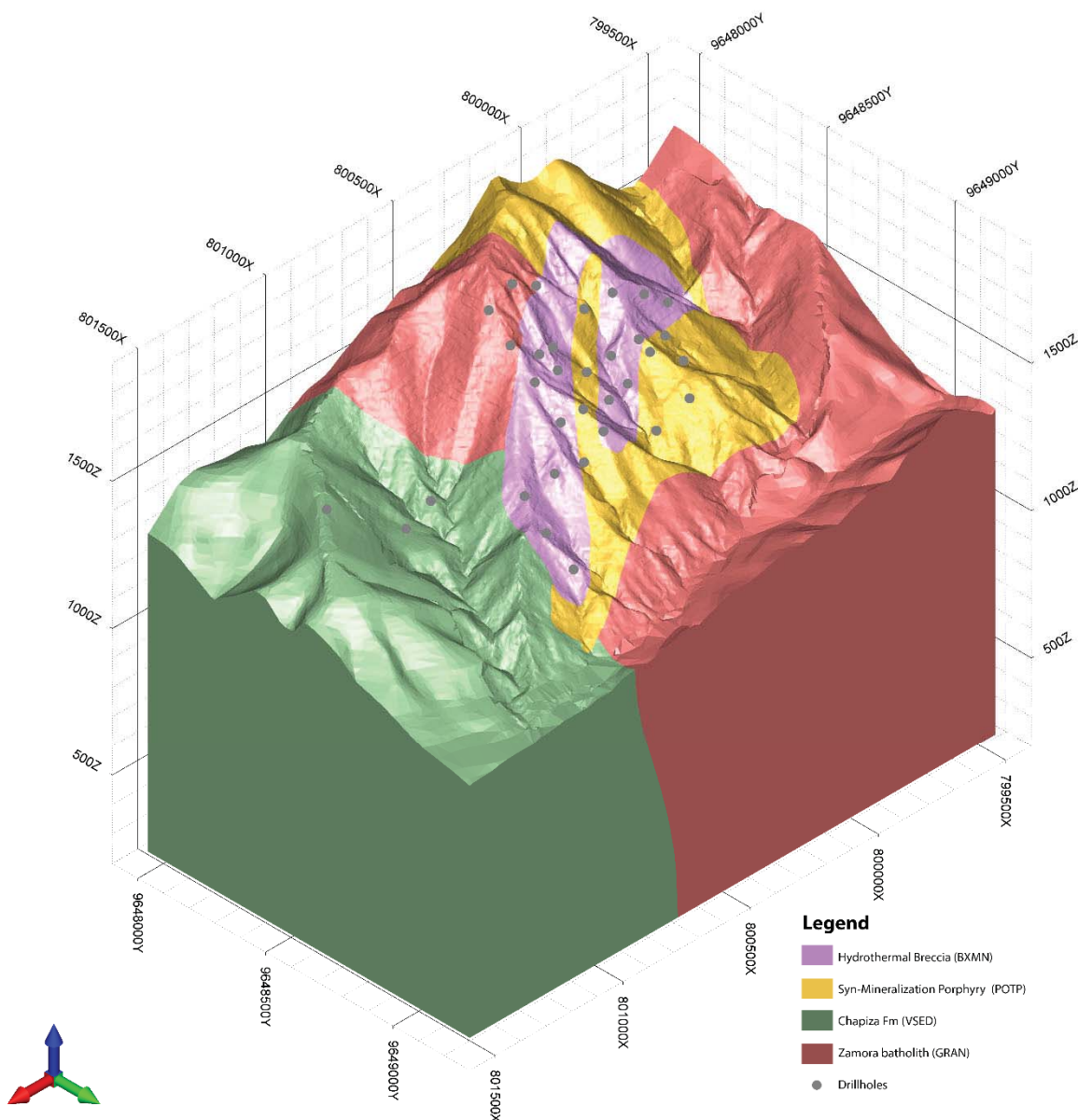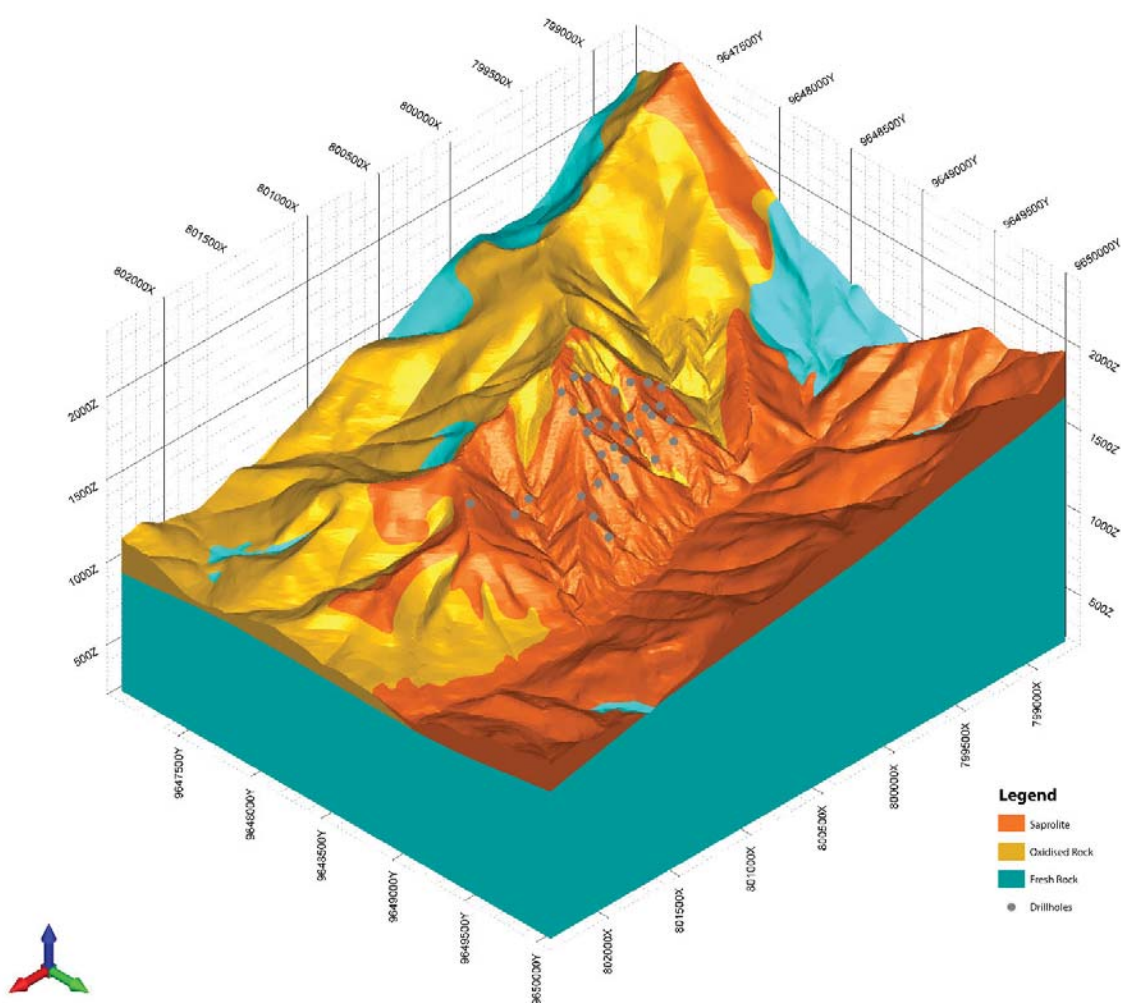

Figure 14.3. 3D regolith model built in Leapfrog™ Geo 4.5 by authors Rabb and Black from historical drillhole and surface mapping databases (looking southwest).

Source: Equity (2019).

Table 14.4. Regolith Domain Codes

Regolith	Slope Codes
Saprolite	1
Oxidised Rock	2
Fresh Rock	3

Source: Equity (2019)

14.4.4 Faults

There are six faults modelled within the Warintza Central deposit. There is a large amount of uncertainty as to the potential impact that these faults have on the mineral resource. Additional drilling across the modelled faults is required to determine if there are significant changes in grade or rock type. Faults are characterised by extremely broken core with clay gouge matrix. Very few geotechnical parameters were collected during the two drilling campaigns however, RQD and recovery are poor in and around faults. Warintza Central faults and their interaction with the resource are summarized in Table 14.5.

Table 14.5. Fault Summary

Fault Name	Offset	Impact To Resource Model
1	Uncertain	Truncates BXMN
3	Uncertain	-
5	Uncertain	Truncates BXMN
8	Uncertain	Truncates POTP
9	Uncertain	-

Source: Equity (2019)

14.5 Compositing

Prior to compositing, sample length was investigated (Figure 14.4). Sample lengths were found to be taken at intervals ranging from 2.0 m to 7.0 m intervals with 3.0 m sample lengths occurring most frequently. Shorter sample lengths are coincident with higher Cu grades but not coincident with elevated Mo or Au grades. Typical sampling at Warintza followed visual indications of Cu mineralisation.
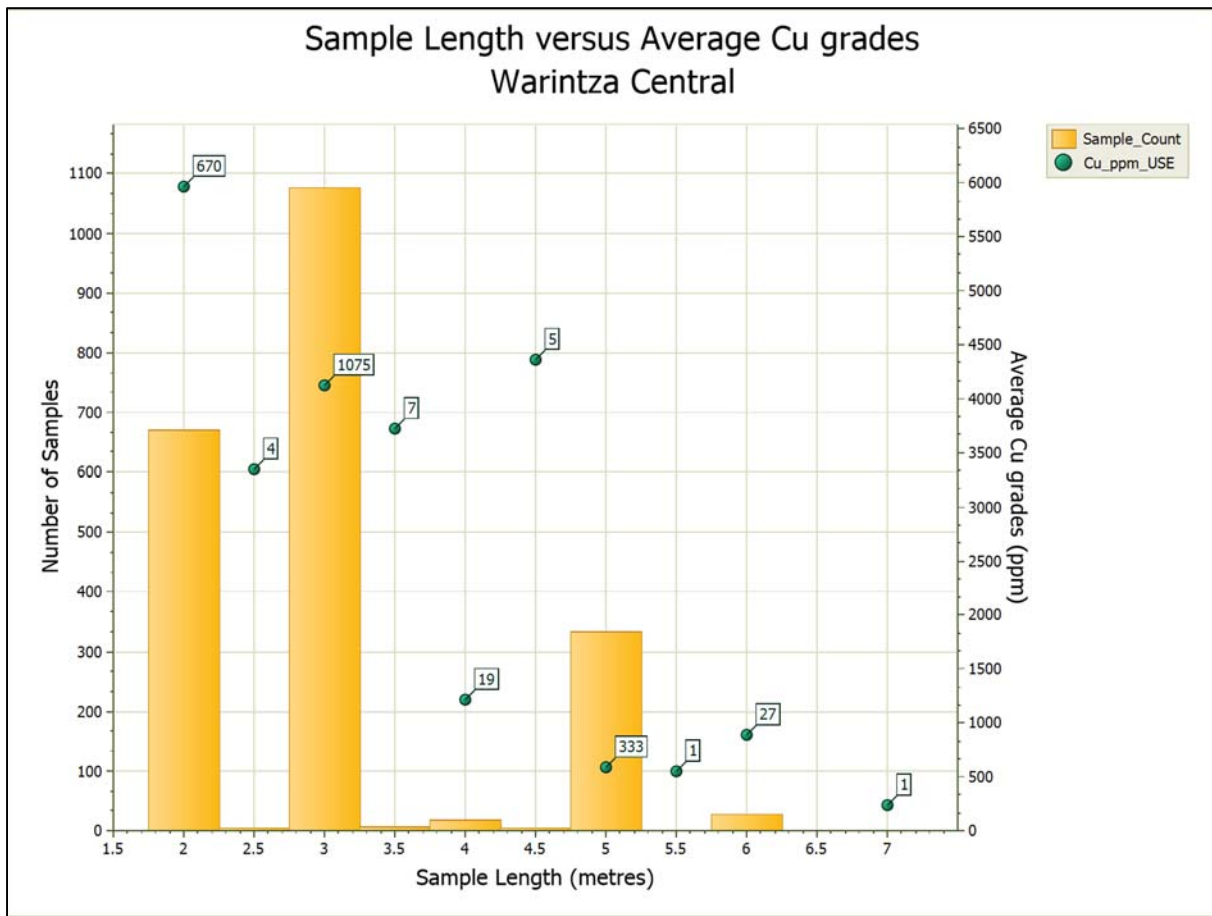
Figure 14.4. Histograms showing distribution of sample lengths in Warintza drill hole database. Average Cu grades are shown according to average lengths.

Source: Equity (2019)

A composite sample length of 3.0 m was selected for Warintza Central resource estimation. The composite sample length considered block size, original sample length and preservation of grade distribution. Composites were generated at regular three metre intervals downhole and were broken at domain boundaries. Where possible, residual samples less than 0.5 m from the compositing process were backstitched to the last interval within the domain. This resulted in three composite samples exceeding 3.0 m, with lengths of 3.07 m, 3.40 m and 3.41 m. A histogram of the resulting composite sample lengths is shown in Figure 14.5.

Histogram
Composite Sample Length

Minimum Value	0.56	Variance	0.06	Geometric Std Dev	1.14
Maximum Value	3.41	Standard Deviation	0.24	Sichel's Estimator	2.97
2nd Highest	3.40	Coeff. of Variation	0.08	Sichel's V	0.02
3rd Highest	3.07	Median	3.00	Sichel's Gamma	1.01
4th Highest	3.00	Ln Mean	1.08	Chi-Square	4286.920
N	2203	Ln Std Deviation	0.13	Degrees of Freedom	3
Mean	2.96	Geometric Mean	2.95		

Figure 14.5. Histogram of composite sample lengths

Source: Equity (2019)

14.5.1 Capping Analysis

Due to the significant number of samples that have lengths greater than 3 m (i.e. 333 samples with length of 5 m), the final number of composite samples are greater than the original sample count. This was considered for capping analysis where both original and composited sample datasets were used for Cu, Mo and Au. Capping values were chosen based on statistical analysis of cumulative probability plots (Figure 14.6).
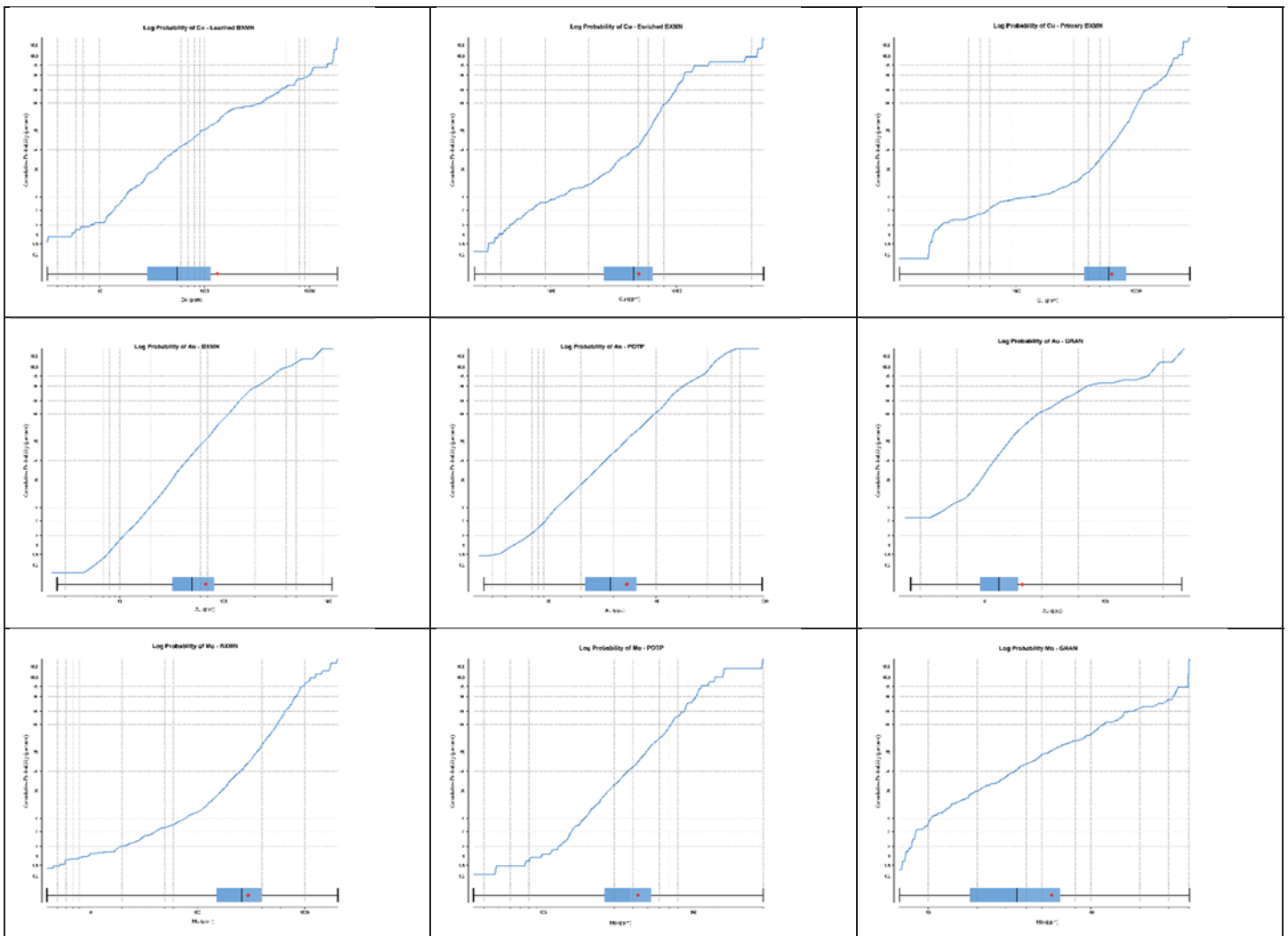
Figure 14.6. Cumulative probability plots used to generate topcut values.

Source: Equity (2019)

Bottom cutting of Au assay values was necessary for samples reporting less than detection limits. For samples reporting less than detection limit, a value of half the detection limit (2.5 ppb) was used. No extreme outliers were discovered during geostatistical evaluation of the data therefore assays were composited prior to grade capping. Summary statistics of the assay data prior to and after compositing and grade capping are provided in Table 14.6 to Table 14.8.

Table 14.6. Composite Sample Capping Statistics for Copper

Estimation Domain	Weathering Profile	Domain Number	Number of Samples Prior to Compositing	Length Weighted Average Cu (ppm)	Number of Samples After Compositing	Average Cu (ppm)	Capping Value Cu (ppm)	Number of Samples Capped	Average Cu Capped (ppm)	Percent Difference
GRAN	Leached	11	59	279	89	237	-	-	-	-
	Enriched	12	215	1233	205	1183	-	-	-	-
	Primary	13								
POTP	Leached	21	141	341	200	331	-	-	-	-
	Enriched	22	79	4053	62	3755	-	-	-	-
	Primary	23	213	1427	217	1389	-	-	-	-
VSED	Leached	31	15	926	25	831	-	-	-	-
	Enriched	32	117	2661	110	2569	-	-	-	-
	Primary	33								
BXMN	Leached	101	230	1194	361	922	11000	1	911	1%
	Enriched	102	702	7226	569	7154	21700	5	7117	1%
	Primary	103	368	5725	361	5694	13700	3	5425	5%

Source: Equity (2019)

Table 14.7. Composite Sample Capping Statistics for Molybdenum

Estimation Domain	Domain Number	Number of Samples Prior to Compositing	Length Weighted Average Mo (ppm)	Number of Samples After Compositing	Average Mo (ppm)	Capping Value Mo (ppm)	Number of Samples Capped	Average Mo Capped (ppm)	Percent Difference
GRAN	10	274	47	294	50	250	1	50	0
POTP	20	433	379	479	384	1300	4	381	0.8%
VSED	30	132	41	135	41	-	-	-	-
BXMN	100	1300	318	1291	317	1500	3	316	0.3%

Source: Equity (2019)

Table 14.8. Composite Sample Capping Statistics for Gold

Estimation Domain	Domain Number	Number of Samples Prior to Compositing	Length Weighted Average Au (ppb)	Number of Samples After Compositing	Average Au (ppb)	Capping Value Au (ppb)	Number of Samples Capped	Average Au Capped (ppb)	Percent Difference
GRAN	10	274	19	294	19	75	5	17	10.5%
POTP	20	433	30	479	31	200	2	30	3.2%
VSED	30	132	58	135	56	200	3	54	3.6%
BXMN	100	1300	69	1291	72	600	4	71	1.4%

Source: Equity (2019)

14.6 Contact Analysis

To assist with the estimation methodology, contact analysis was completed for copper to determine the nature of contacts vertically between weathering domains and laterally between lithological domains. Within the BXMN domain, there is a sharp contrast in Cu grade between the enriched and leached zones. This is shown in Source: Equity (2019)

Table 14.7 that shows change in grade within proximity to the leached-enriched domain contact. On average, the increase in grade is realised over 9 metres grading downwards into the enriched zone.
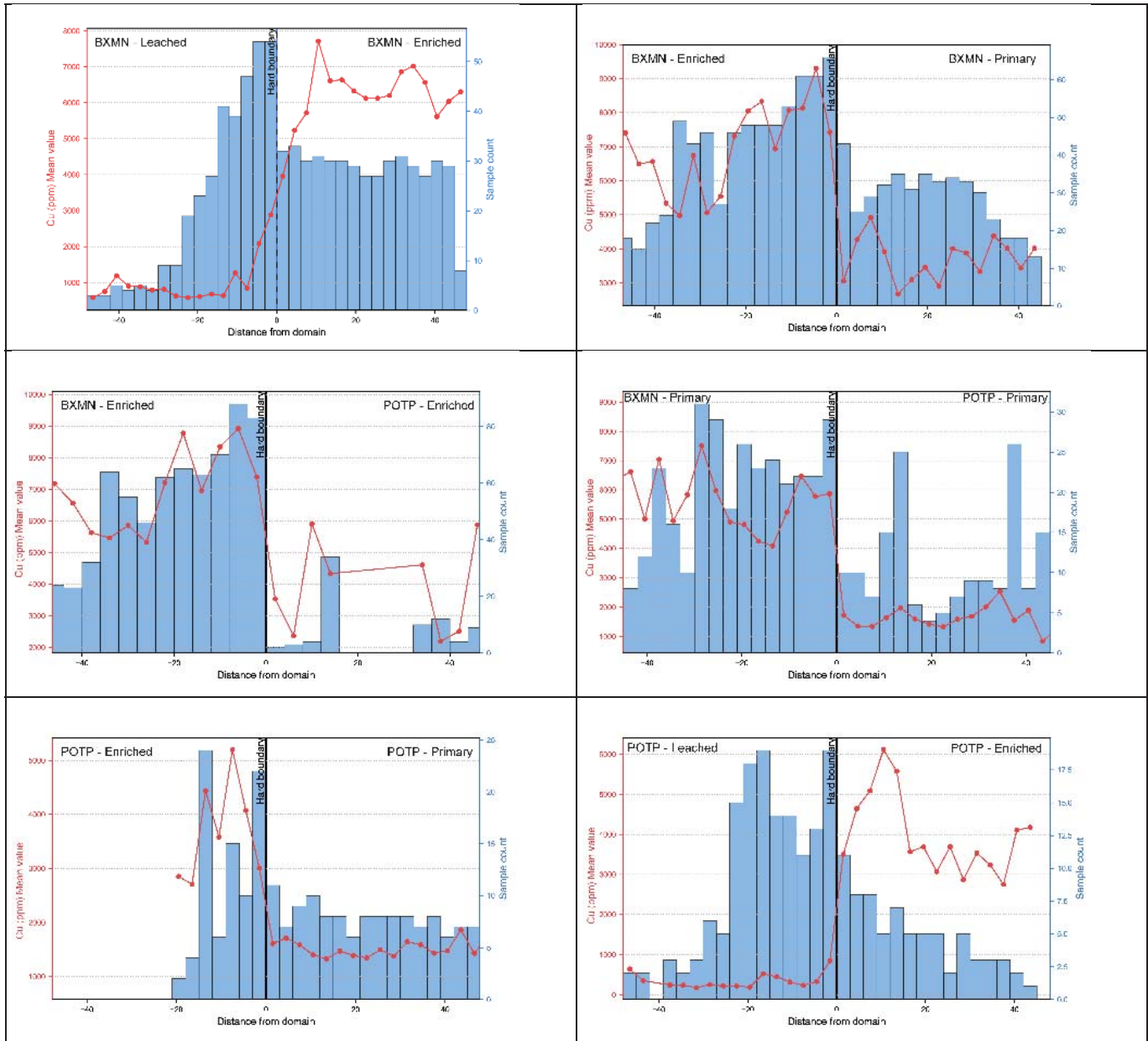
Figure 14.7. Contact plots of Cu grades across domain boundaries.

Source: Equity (2019)

In contrast Mo and Au do not show any significant difference across the contacts of the leached and enriched zones as shown in Figure 14.8.
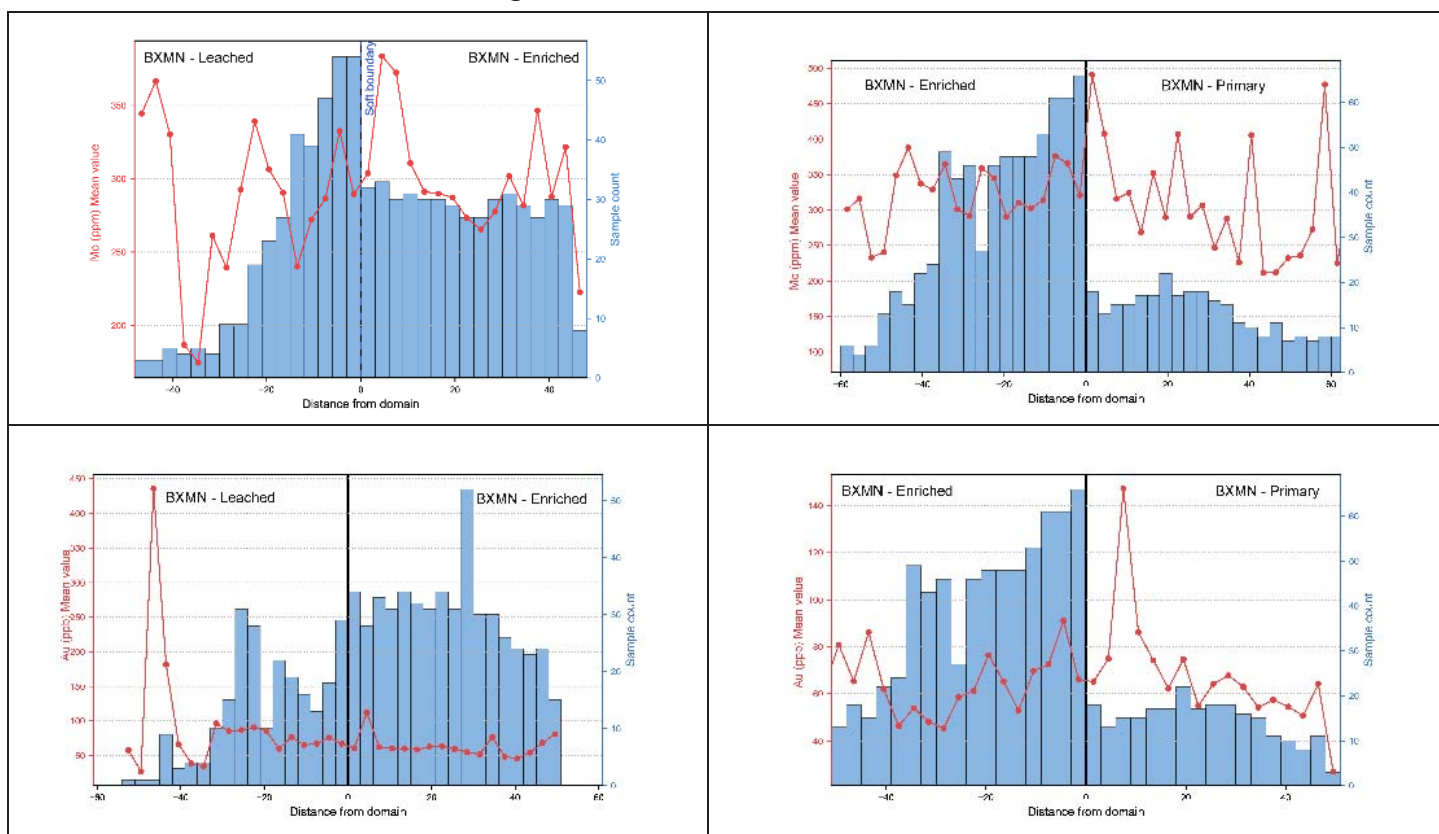
Figure 14.8. Contact plot for Mo and Au grades across domain boundaries.
Source: Equity (2019)

A summary of the estimation domains and treatment of the estimation domain boundaries are summarized Table 14.9 to Table 14.11.

Table 14.9. Summary of Copper Estimation Domains and Boundary Treatment

Estimation Domain	Weathering Profile	Domain Number	Metal	Domain Boundary Summary
GRAN	Leached	11	Cu	Hard
	Enriched	12	Cu	Hard
	Primary	13		
POTP	Leached	21	Cu	Hard
	Enriched	22	Cu	Hard
	Primary	23	Cu	Hard
VSED	Leached	31	Cu	Hard
	Enriched	32	Cu	Hard
	Primary	33		
BXMN	Leached	101	Cu	Hard
	Enriched	102	Cu	Hard
	Primary	103	Cu	Hard

Source: Equity (2019)

Table 14.10. Summary of Molybdenum Estimation Domains and Boundary Treatment

Estimation Domain	Domain Number	Metal	Domain Boundary Summary
GRAN	10	Mo	35 m soft boundary
POTP	20	Mo	50 m soft boundary
VSED	30	Mo	25 m soft boundary
BXMN	100	Mo	50 m soft boundary

Source: Equity (2019)

Table 14.11. Summary of Gold Estimation Domains and Boundary Treatment

Estimation Domain	Domain Number	Metal	Domain Boundary Summary
GRAN	10	Au	30 m soft boundary
POTP	20	Au	50 m soft boundary
VSED	30	Au	50 m soft boundary
BXMN	100	Au	20 m soft boundary

Source: Equity (2019)

14.7 Statistical Analysis

A summary of composite samples statistics is provided for Cu, Mo, and Au for each of the respective estimation domains. Enriched and primary weathering domains for GRAN and VSED domains were combined due to similar Cu grade distributions of their enriched and primary domains. There is no support that weathering domains control Mo and Au grades, and as such no weathering domains were used for the estimation of Mo and Au.
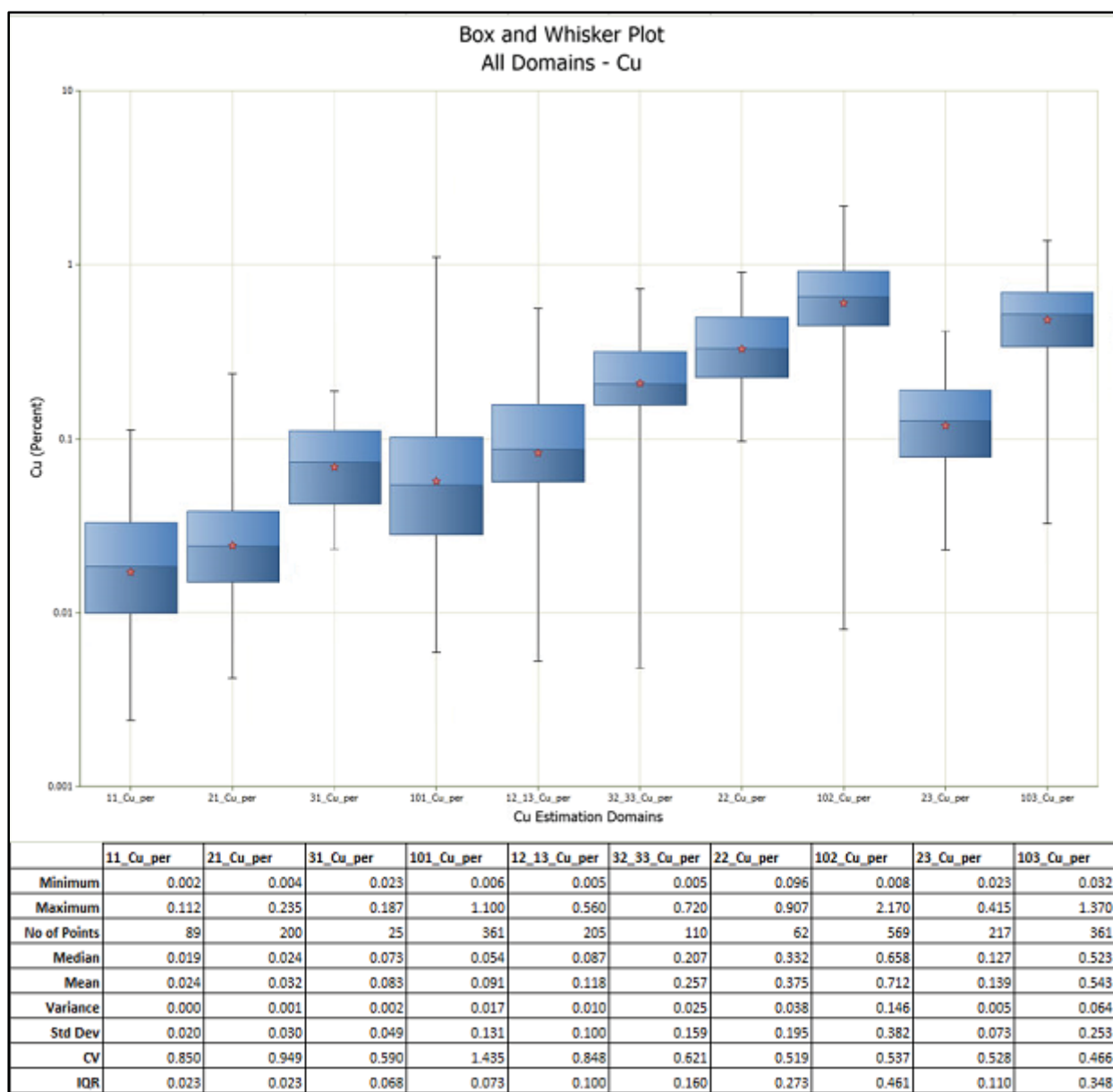
Figure 14.9. Composite sample statistics for copper estimation domains.

Source: Equity (2019)

	11_Cu_per	21_Cu_per	31_Cu_per	101_Cu_per	12_13_Cu_per	32_33_Cu_per	22_Cu_per	102_Cu_per	23_Cu_per	103_Cu_per
Minimum	0.002	0.004	0.023	0.006	0.005	0.005	0.096	0.008	0.023	0.032
Maximum	0.112	0.235	0.187	1.100	0.560	0.720	0.907	2.170	0.415	1.370
No of Points	89	200	25	361	205	110	62	569	217	361
Median	0.019	0.024	0.073	0.054	0.087	0.207	0.332	0.658	0.127	0.523
Mean	0.024	0.032	0.083	0.091	0.118	0.257	0.375	0.712	0.139	0.543
Variance	0.000	0.001	0.002	0.017	0.010	0.025	0.038	0.146	0.005	0.064
Std Dev	0.020	0.030	0.049	0.131	0.100	0.159	0.195	0.382	0.073	0.253
CV	0.850	0.949	0.590	1.435	0.848	0.621	0.519	0.537	0.528	0.466
IQR	0.023	0.023	0.068	0.073	0.100	0.160	0.273	0.461	0.110	0.348

Figure 14.10. Composite sample statistics for molybdenum and gold estimation domains.

Source: Equity (2019)

14.8 Variography

Directional variograms were generated for all domains and metals (Cu, Mo, and Au). Some of the estimation domains contained too few samples for variogram modelling and were subsequently grouped based on weathering and lithology to obtain stable calculated variograms. Modelled variogram distances were used to help inform interpolation parameters. For domains with low number of samples (ie. VSED and GRAN), variograms could only be modelled in a single direction, modelled anisotropy distances were informed by a factor comparable to the most stable variogram model. Given sparse drilling in the some of the domains, and vertical drill hole orientations, downhole variograms were always used to help inform the vertical continuity. Variogram parameters that were used to estimate Cu and Mo for the BXMN domains and Mo for the POTP domains are summarized in Table 14.12 and modelled variograms are presented in Figure 14.11 through Figure 14.19.

Table 14.12. Variogram Parameters

Estimation Domain	Weathering Profile	Domain Number	Metal	Dip	Dip Azimuth	Pitch	Major	Semi-Major	Minor	CC	Nugget
BXMN	Leached	101	Cu	32	0	9	125	85	50	0.75	0.25
	Enriched	102	Cu	32	0	9	165	125	25	0.85	0.15
	Primary	103	Cu	20	0	9	150	150	50	0.9	0.10
POTP	Leached	20	Mo	20	0	9	200	100	25	0.45	0
	Enriched										
	Primary						300	320	275	0.55	
BXMN	Leached	100	Mo	20	0	9	150	150	30	0.4	0
	Enriched										
	Primary						375	150	300	0.6	
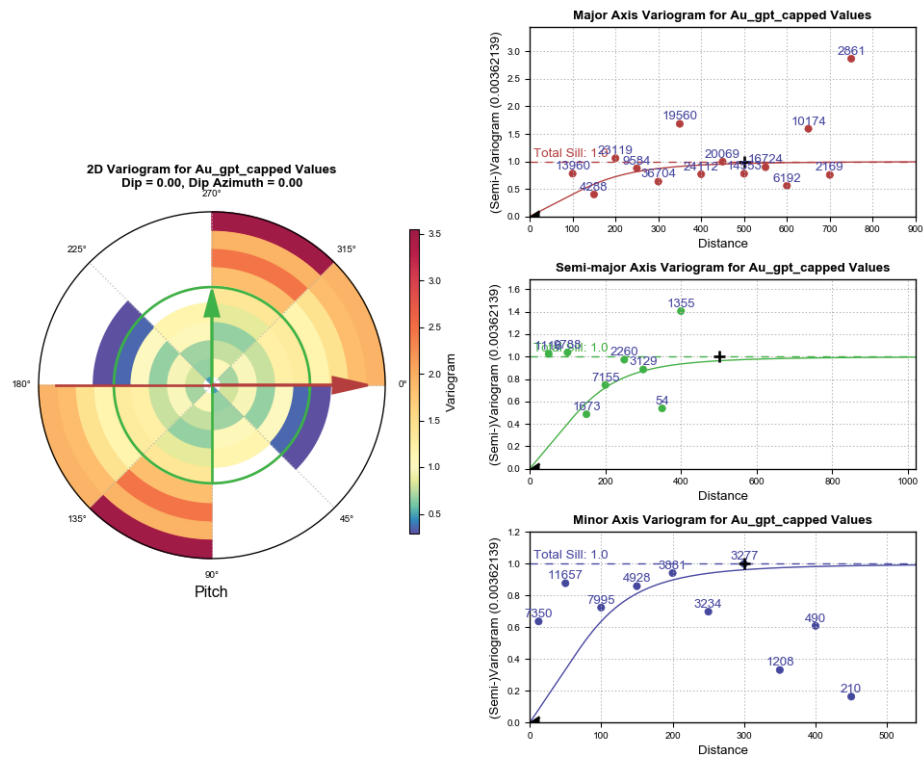
Source: Equity (2019)

Figure 14.11. Variography for BXMN – Au

Source: Equity (2019)
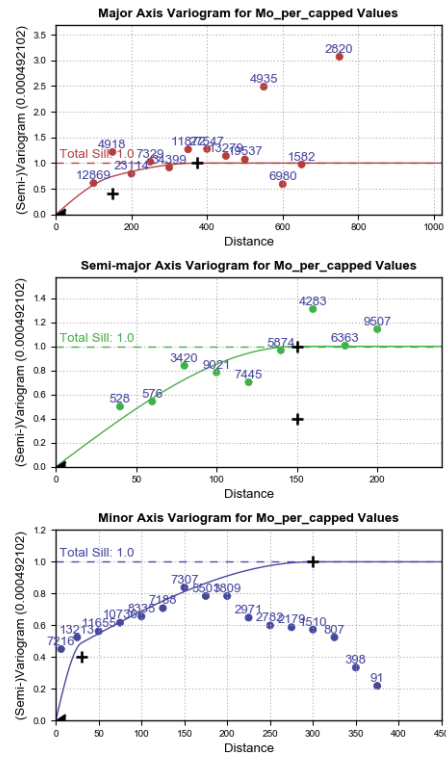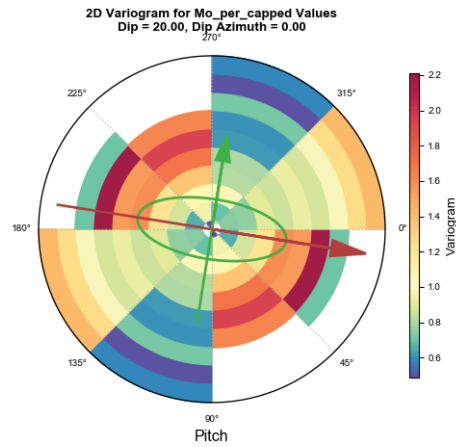
Figure 14.12. Variography for BXMN – Mo.

Source: Equity (2019)
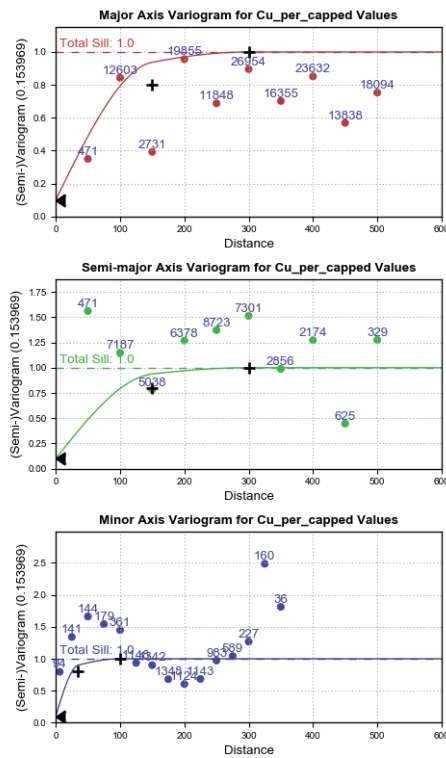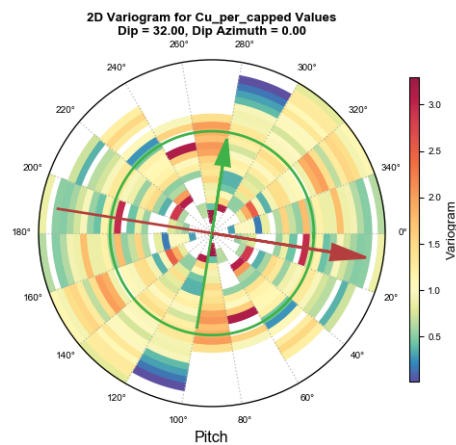
Figure 14.13. Variography for BXMN – Cu.

Source: Equity (2019)
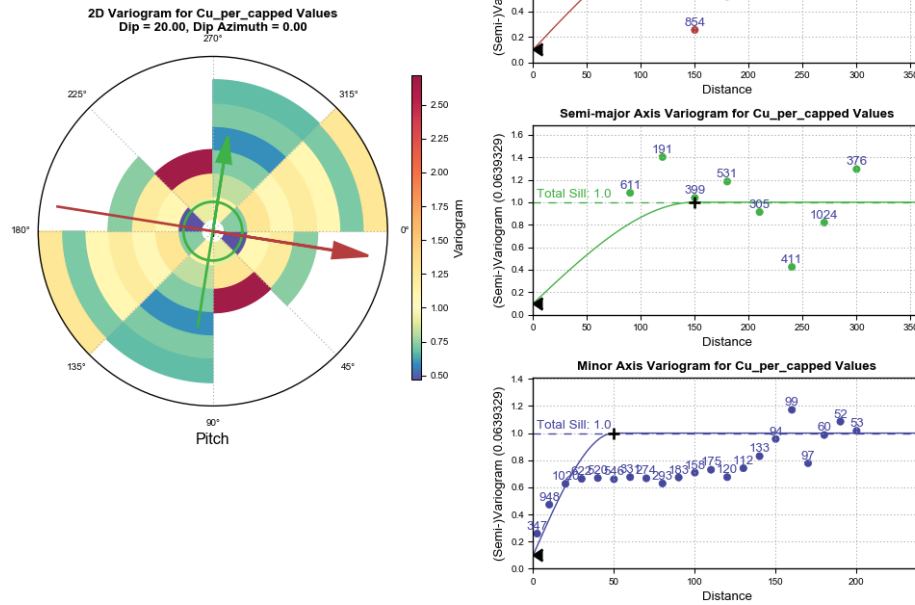
Figure 14.14. Variography for Primary BXMN – Cu.

Source: Equity (2019)
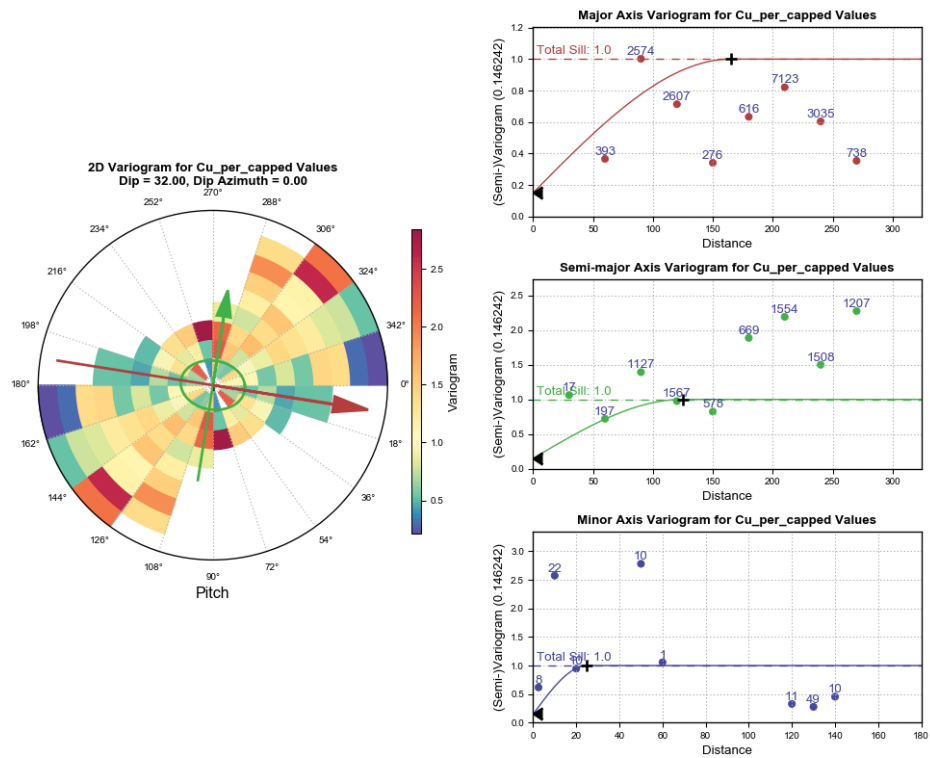
Figure 14.15. Variography for Enriched BXMN – Cu.

Source: Equity (2019)
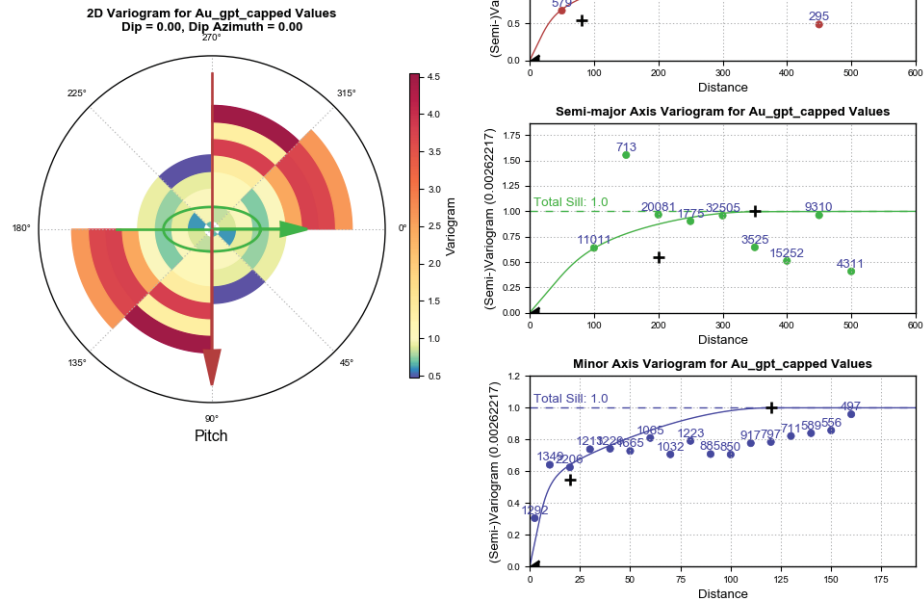
Figure 14.16. Variography for POTP – Au.

Source: Equity (2019)
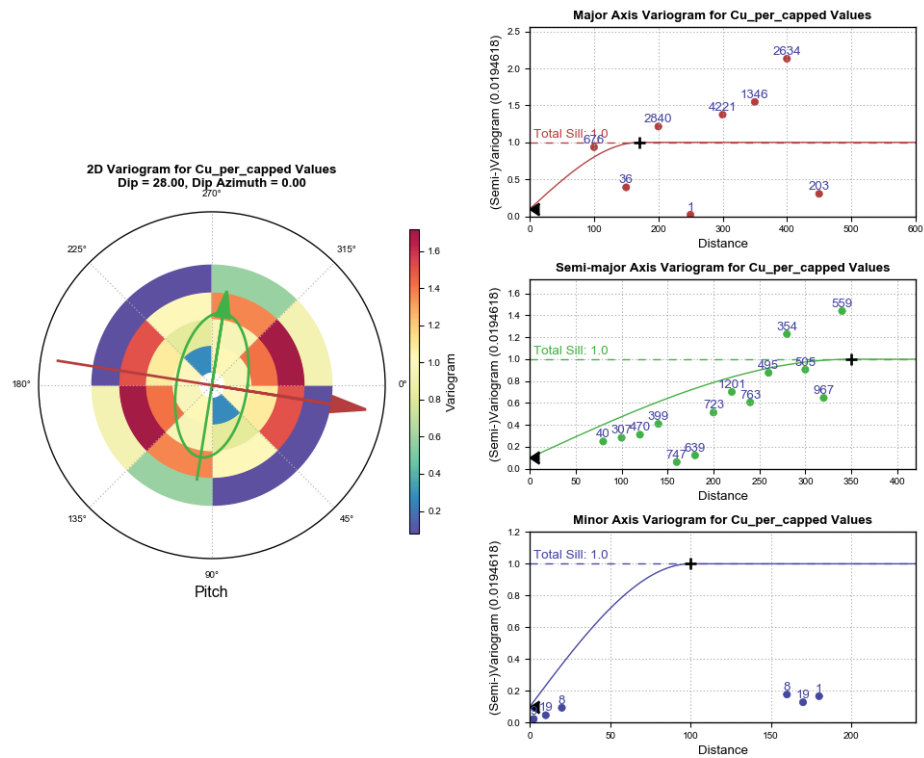
Figure 14.17. Variography for POTP – Cu.

Source: Equity (2019)
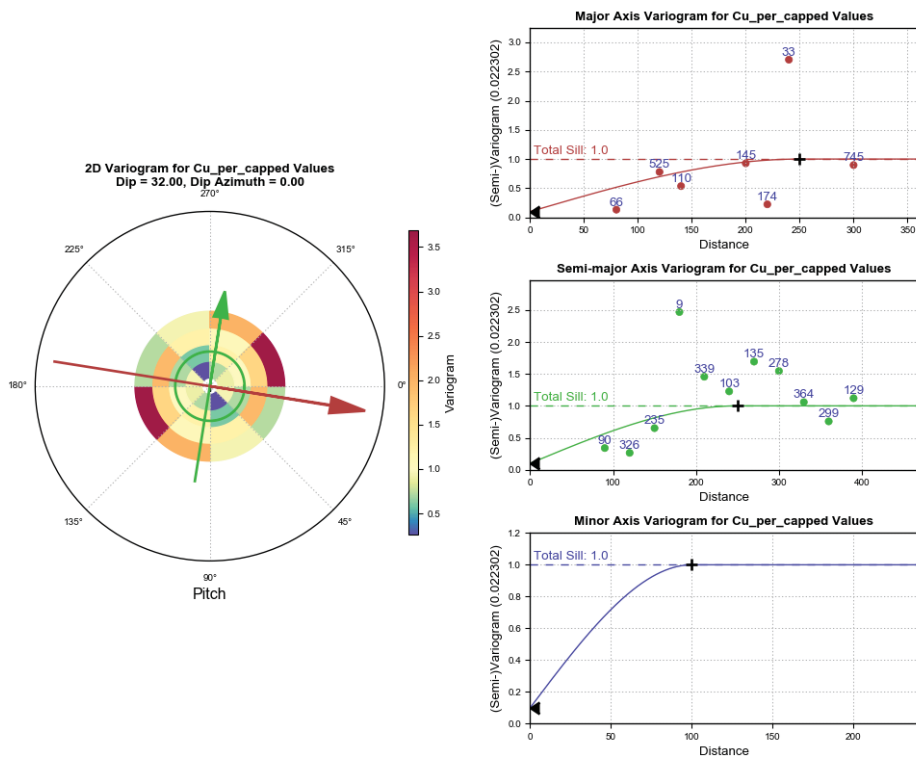
Figure 14.18. Variography for Enriched and Fresh POTP – Cu.

Source: Equity (2019)
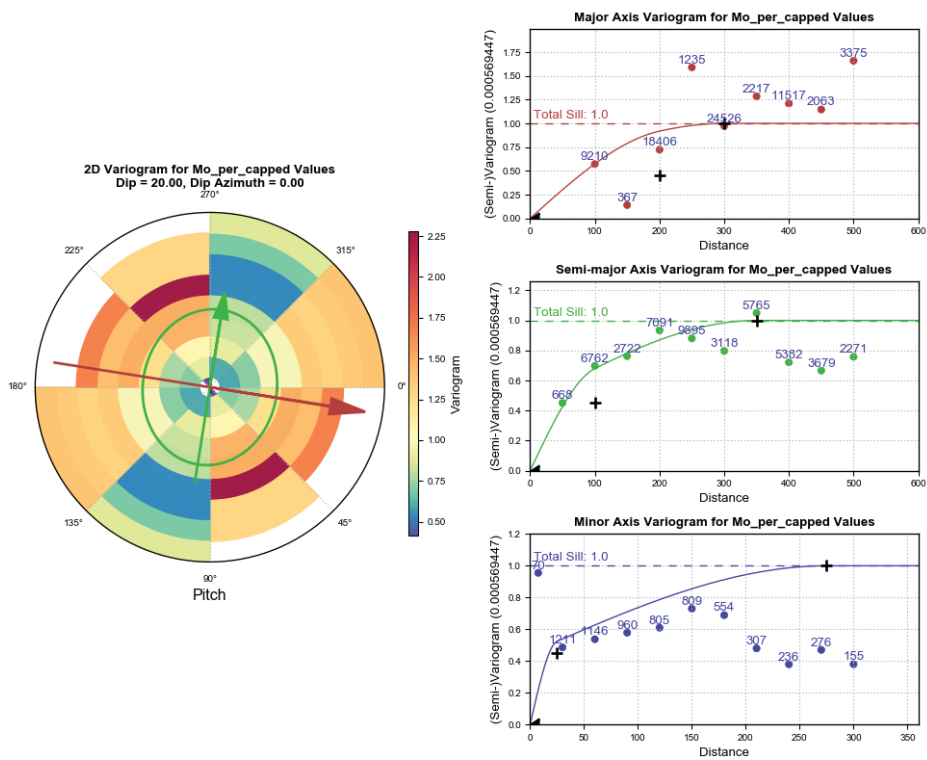
Figure 14.19. Variography for POTP – Mo.

Source: Equity (2019)

14.9 Specific Gravity

Specific gravity (SG) data was collected using water immersion method on small (10 cm) representative pieces of core. The SG determinations were collected on site by Lowell geologists. Previous application of SG used the geochemical weathering models. These models did not characterise the SG and rock mass quality sufficiently, therefore three regolith domains (Table 14.13) were generated to assist with SG assignment.

Table 14.13. Specific Gravity by Regolith Domain

Warintza Regolith	SG
Saprolite	2.28
Oxidised Rock	2.48
Fresh Rock	2.60

Source: Equity (2019)

Bulk density was estimated using ID2 for saprolite, oxidised and fresh rock. Blocks that were not estimated for SG were assigned average SG values from their respective domains.

14.10 Block Model and Grade Estimation Methodology

One single block model was generated for the Warintza Central resource. The block model definitions are shown in Figure 14.20 and summarized in Table 14.14.
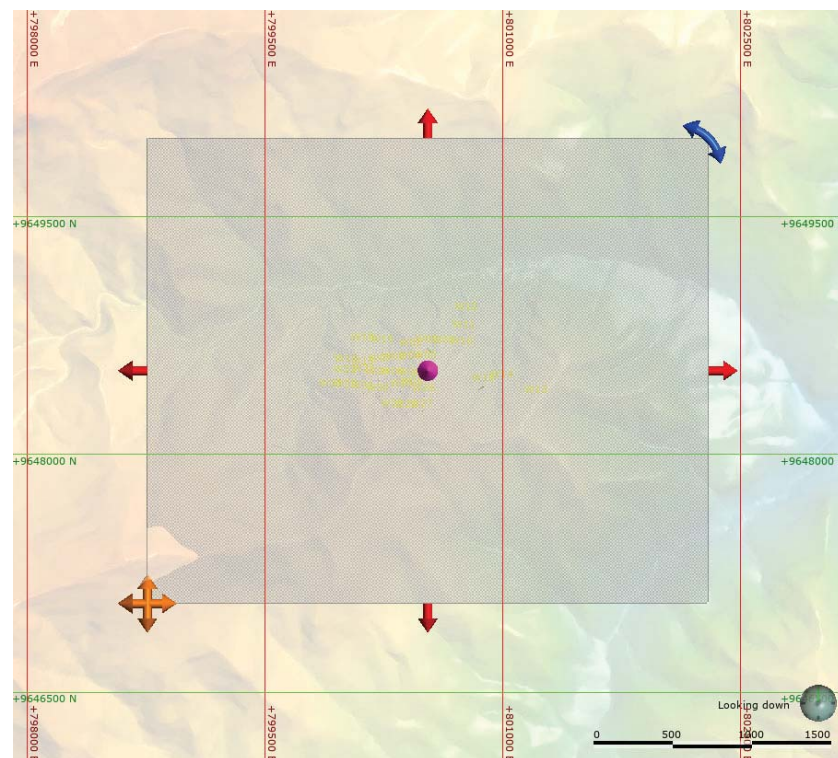
Figure 14.20. Block model extents.

Source: Equity (2019)

Table 14.14. Block Model Definitions

Axis	Block Size	Number of Blocks	Length	Origin (min)	Max Extents
X	10	354	3,540	798,760	802,300
Y	10	294	2,940	9,647,060	9,650,000
Z	10	120	1,200	1,000	2,200
Total Blocks		12,489,120			
Axis	Lower Left Block Centroid Coordinates				
X	798,765				
Y	9,647,065				
Z	1,005				

Source: Equity (2019)

The methodology for resource estimation for the Warintza Central resource was based on the following:

- Samples composited to 3.0 metre lengths downhole. End of hole samples were backstitched to the previous sample to avoid residual sample lengths

- Capping analysis based on lithological and weathering domains

- Unsampled intervals were discarded

- Blocks were estimated within explicitly modelled domains that honoured lithology and weathering

- OK, ID2 and ID3 were used to estimate Cu, Au and Mo. OK was used within domains where stable variograms could be calculated and modelled. ID3 was used for Cu where most domains exhibited higher variability. The estimates generated using ID3 produced better local estimates than ID2 and OK. ID2 was used for Mo and Au where the data exhibits lower variability.

- Domain boundaries were treated as hard for Cu estimation and combination of hard and soft for Mo and Au estimation.

- SG was estimated using ID2, unestimated blocks were assigned the regolith averages

Search distances and orientations were selected based on variogram modelling and visually checking continuity of grade. The final interpolation parameters were selected by conducting test runs using different search neighbourhood parameters. Interpolation methods were selected based on results from model validation, including cross validation, swath plot analysis and histogram reporduction. Table 14.15 through Table 14.20 show the interpolation methods and search parameters used.

Table 14.15. Estimation Methodology for Copper

Estimation Domain	Weathering Profile	Domain Number	Metal	Estimator Used	Minimum Samples	Maximum Samples
GRAN	Leached	11	Cu	ID3	2	12
	Enriched	12	Cu	ID3	2	12
	Primary	13				
POTP	Leached	21	Cu	ID3	2	12
	Enriched	22	Cu	ID3	2	12
	Primary	23	Cu	ID3	2	12
VSED	Leached	31	Cu	ID3	2	12
	Enriched	32	Cu	ID3	2	12
	Primary	33				
BXMN	Leached	101	Cu	OK	2	16
	Enriched	102	Cu	OK	2	16
	Primary	103	Cu	OK	2	16

Source: Equity (2019)

Table 14.16. Interpolation Parameters for Copper

Estimation Domain	Weathering Profile	Domain Number	Metal	Pass Number	Search Distances			Search Ellipse Orientation		
					Maximum	Intermediate	Minimum	Dip	Dip Az.	Pitch
GRAN	Leached	11	Cu	1	230	140	115	32	0	9
	Enriched	12	Cu	1	230	140	115	28	0	9
	Primary	13								
POTP	Leached	21	Cu	1	200	125	55	32	0	9
				2	300	187.5	82.5			
	Enriched	22	Cu	1	200	125	55			
				2	300	187.5	82.5			
	Primary	23	Cu	1	200	125	55	20	0	9
				2	300	187.5	82.5	20	0	9
VSED	Leached	31	Cu	1	230	140	115	0	0	0
	Enriched	32	Cu	1	230	140	115	0	0	0
	Primary	33								
BXMN	Leached	101	Cu	1	125	85	50	32	0	9
				2	187.5	127.5	75			
	Enriched	102	Cu	1	165	125	60			
				2	247.5	187.5	90			
	Primary	103	Cu	1	150	150	50	20	0	9
				2	225	225	75			

Source: Equity (2019)

Table 14.17. Estimation Methodology for Molybdenum

Estimation Domain	Domain Number	Metal	Estimator Used	Minimum Samples	Maximum Samples
GRAN	10	Mo	ID2	3	12
POTP	20	Mo	OK	3	12
VSED	30	Mo	ID2	3	12
POTP	20	Mo	OK	3	12

Source: Equity (2019)

Table 14.18. Interpolation Parameters for Molybdenum

Estimation Domain	Domain Number	Metal	Pass Number	Search Distances			Search Ellipse Orientation		
				Maximum	Intermediate	Minimum	Dip	Dip Az.	Pitch
GRAN	10	Mo	1	110	125	100	20	0	9
POTP	20	Mo	1	300	350	275	20	0	9
VSED	30	Mo	1	110	125	100	20	0	9
			2	165	187.5	150			
BXMN	100	Mo	1	375	150	200	20	0	9

Source: Equity (2019)

Table 14.19. Estimation Parameters for Gold

Estimation Domain	Domain Number	Metal	Minimum Samples	Maximum Samples
GRAN	10	Au	3	12
POTP	20	Au	3	12
VSED	30	Au	3	12
BXMN	100	Au	3	12

Source: Equity (2019)

Table 14.20. Interpolation Parameters for Au

Estimation Domain	Domain Number	Metal	Pass Number	Search Distances			Search Ellipse Orientation		
				Maximum	Intermediate	Minimum	Dip	Dip Az.	Pitch
GRAN	10	Au	1	225	225	75	10	53	9
POTP	20	Au	1	225	225	75	10	53	9
VSED	30	Au	1	230	140	115	0	0	0
BXMN	100	Au	1	225	225	75	10	53	9

Source: Equity (2019)

14.11 Model Validation

Models generated for Warintza Central were validated by completing a series of swath plots, cross validation plots and comparing estimates using different interpolation methods and comparison of average estimates to average composite grades.

14.11.1 Swath Plot

Swath plots were generated on a swath index based on north-south (X), east-west (Y) and vertical (Z) directions for all domains. The swath plots compare nearest neighbour estimates to the combined estimates for Cu, Mo and Au. The swath plots are shown in Figure 14.21. Swath plots were composited from one to three blocks depending on the data irregularity to validate the trends in metal grades across the resource model.
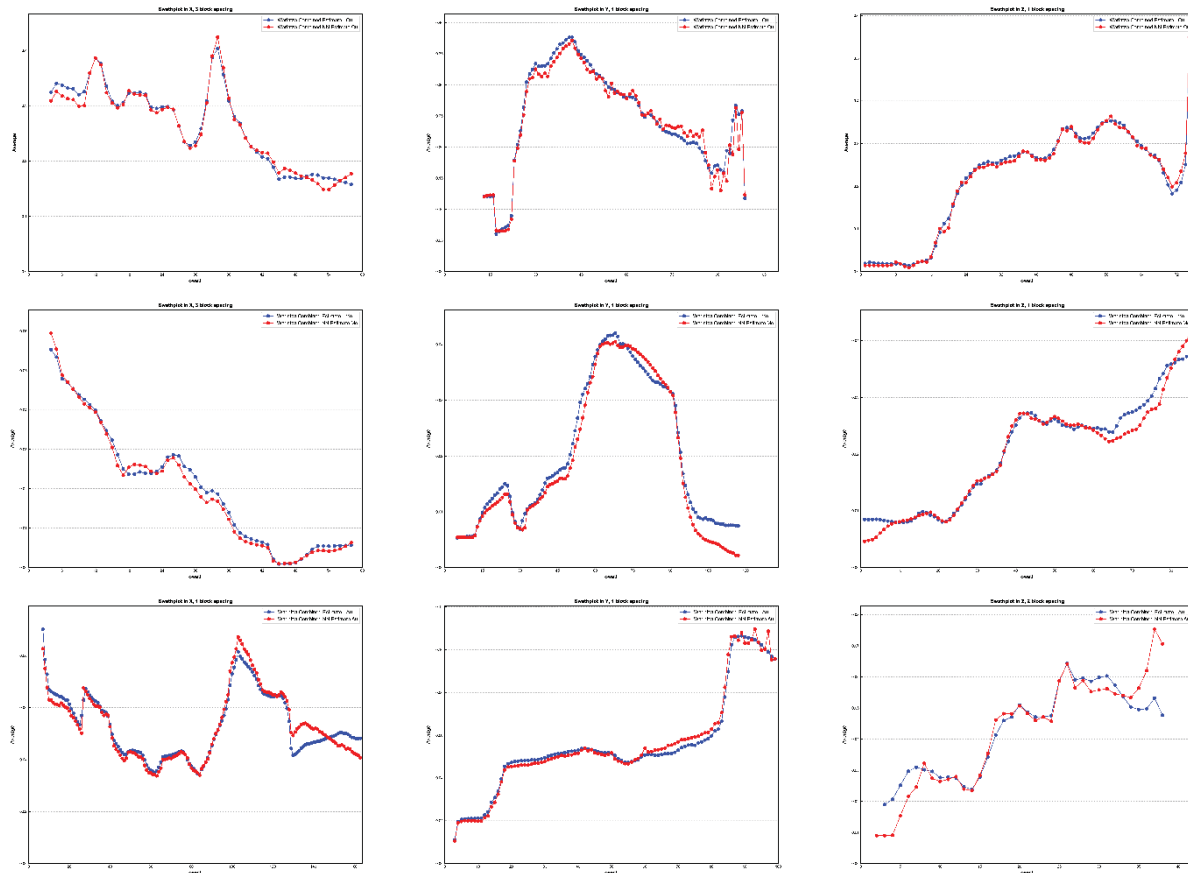
Figure 14.21. Swath plots for combined estimates of Cu, Mo and Au.

Source: Equity (2019)

Swath plots show that the estimates for Cu, Mo and Au are representative of local variations in metal grades and conform to the same trends and fluctuations of metal grades. Some smoothing and edge effects are evident from the swath plots that have been considered for classification of the mineral resource.

14.11.2 Cross Validation

Cross validation of the resource model was completed for Cu, Mo and Au by comparing composite sample to block estimates. The cross validation plots for the estimates are shown in Figure 14.22. The results of the cross validation show good correlation of estimated grades to composite samples for Cu, Mo and Au.
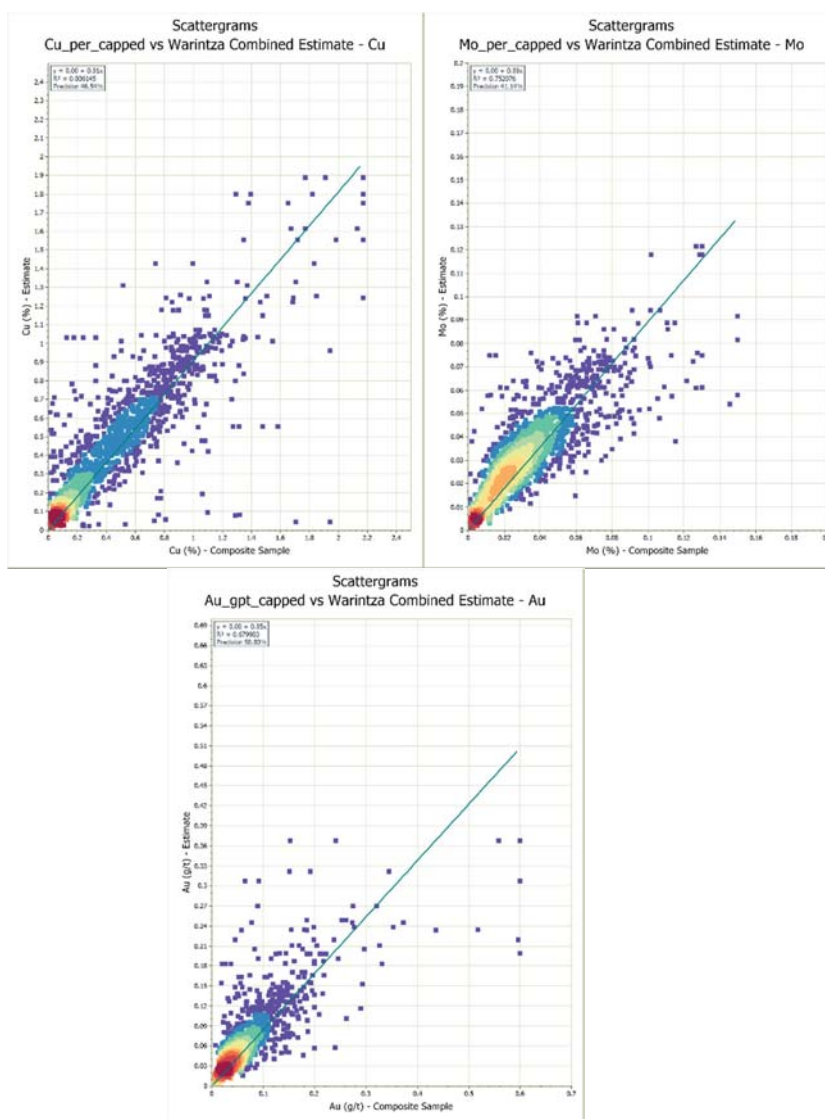
Figure 14.22. Cross validation plots of Cu, Au and Mo estimates.

Source: Equity (2019)

14.11.3 Comparison of Estimation Techniques

The Warintza Central resource model was compared to nearest neighbour estimates for all domains and metals. Table 14.24 shows a summary of estimates generated using nearest neighbour compared to estimation techniques outlined in Table 14.15 through Table 14.20. In general, estimates generated using nearest neighbour compare well with the combined estimation technique used.

Table 14.21. Estimation Summary for Nearest Neighbour and Combined Estimates

Nearest Neighbour Estimate			Combined Estimate		
Metal	Grade	Volume	Metal	Grade	Volume
Cu (%)	0.570		Cu (%)	0.546	
Mo (%)	0.028	52,056,000	Mo (%)	0.027	54,171,000
Au (g/t)	0.062		Au (g/t)	0.061	

Source: Equity (2019)

For domains and metals estimated using OK, estimates were compared against ID2 estimation methods. A summary of the comparison is provided in Table 14.22. The grades estimated using OK compare well with ID2.

Table 14.22. Estimation Summary for OK and ID2 Estimates

OK Estimates from Combined Estimate				ID2 Estimates			
Domain	Metal	Grade (%)	Volume	Domain	Metal	Grade (%)	Volume
BXMN	Cu	0.596	44,335,000	BXMN	Cu	0.595	45,068,000
BXMN	Mo	0.029	44,335,000	BXMN	Mo	0.029	45,068,000
POTP		0.033	5,821,000	POTP		0.033	5,821,000

Source: Equity (2019)

The Warintza Central resource estimate was also compared to estimates generated that honoured solely the weathering domains. This comparison was completed to review potential bias that may be introduced by integrating the lithological model into estimation domains. A comparison for the volume comprising the BXMN lithological domain is shown in Table 14.23.

Table 14.23. Estimation Summary for Regolith Model and Combined Regolith and Lithological Models

Weathering Model			
Cu Cut Off Grade (%)	Total Volume	Regolith Estimate - Cu (%)	Domain
0.2	854,000	0.398	Leached
0.2	19,582,000	0.529	Primary
0.2	18,230,000	0.663	Secondary
0.2	38,666,000	0.589	**Total**
Combined Weathering and Lithological Model			
Cu Cut Off Grade (%)	Total Volume	Combined Estimate – Cu (%)	Domain
0.2	1,300,000	0.245	Leached
0.2	23,756,000	0.540	Primary
0.2	19,279,000	0.689	Secondary
0.2	44,335,000	0.596	**Total**

Source: Equity (2019)

The comparison shows that the two different estimation approaches are comparable and have similar grade estimates. The combined estimation model that uses both lithology and regolith shows 15% more volume above cut-off at 0.2% Cu indicating that when lithological boundaries are ignored, there is a tendency to incorporate low grade into the BXMN domain.

14.11.4 Comparison to Samples

Average grades and distribution of composite sample grades were compared to average block grades. A comparison of the average composite sample grades to estimates is provided in Table 14.24.

Table 14.24. Comparison of Average Composite Sample Grades to Estimated Grades

		11_Cu_per	21_Cu_per	31_Cu_per	101_Cu_per	12_13_Cu_per	32_33_Cu_per	22_Cu_per	102_Cu_per	23_Cu_per	103_Cu_per	10_Mo_per	20_Mo_per	30_Mo_per	100_Mo_per	10_Au_gpt	20_Au_gpt	30_Au_gpt	100_Au_gpt
Composite Samples	Minimum	0.002	0.004	0.023	0.006	0.005	0.005	0.096	0.008	0.023	0.032	0.001	0.000	0.000	0.001	0.0025	0.0025	0.013	0.007
	Maximum	0.112	0.235	0.187	1.100	0.560	0.720	0.907	2.170	0.415	1.370	0.025	0.130	0.060	0.150	0.075	0.2	0.2	0.6
	No of Points	89	200	25	361	205	110	62	569	217	361	294	479	135	1291	294	479	135	1291
	Median	0.019	0.024	0.073	0.054	0.087	0.207	0.332	0.658	0.127	0.523	0.004	0.033	0.001	0.027	0.013	0.023	0.038	0.053
	Mean	0.024	0.032	0.083	0.091	0.118	0.257	0.375	0.712	0.139	0.543	0.005	0.038	0.004	0.032	0.017	0.030	0.054	0.071
	Variance	0.000	0.001	0.002	0.017	0.010	0.025	0.038	0.146	0.005	0.064	0.000	0.001	0.000	0.000	0.000	0.001	0.002	0.004
	Std Dev	0.020	0.030	0.049	0.131	0.100	0.159	0.195	0.382	0.073	0.253	0.004	0.026	0.008	0.021	0.014	0.028	0.040	0.063
	CV	0.850	0.949	0.590	1.435	0.848	0.621	0.519	0.537	0.528	0.466	0.830	0.690	1.908	0.652	0.842	0.921	0.738	0.886
Block Model Estimates	Minimum	0.004	0.006	0.030	0.015	0.013	0.041	0.135	0.038	0.031	0.138	0.001	0.001	0.001	0.001	0.003	0.003	0.020	0.011
	Maximum	0.118	0.173	0.342	0.480	0.377	0.598	0.753	1.889	0.399	1.370	0.014	0.122	0.026	0.112	0.067	0.225	0.145	0.423
	No of Points	3334	7367	1595	13769	7888	4716	4719	19379	12636	23861	11222	24722	6311	57009	11222	24722	6311	57009
	Median	0.024	0.030	0.058	0.077	0.105	0.200	0.335	0.656	0.120	0.533	0.003	0.037	0.001	0.026	0.014	0.027	0.045	0.058
	Mean	0.027	0.033	0.070	0.095	0.122	0.234	0.372	0.686	0.126	0.538	0.004	0.039	0.003	0.028	0.016	0.036	0.048	0.067
	Variance	0.000	0.000	0.001	0.004	0.005	0.013	0.017	0.058	0.003	0.028	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
	Std Dev	0.014	0.016	0.027	0.062	0.070	0.114	0.132	0.242	0.058	0.167	0.003	0.020	0.004	0.015	0.008	0.028	0.020	0.042
	CV	0.521	0.492	0.385	0.655	0.574	0.488	0.355	0.353	0.458	0.310	0.678	0.504	1.529	0.534	0.515	0.779	0.417	0.620

Source: Equity (2019)

All domains reported average composite sample grades within 15% of average estimated block grades, with the exception of Mo for GRAN domain and Au for POTP domain. Each of these domains were estimated with soft boundaries and should be expected to return average values for estimates that are different than the average composite sample values.

14.12 Mineral Resource Classification

Block model quantities and grade estimates were classified in accordance to the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) by Trevor Rabb, PGeo (EGBC #39599), an appropriate independent qualified person for the purpose of NI 43-101.

Mineral resource classification is subjective in nature and is guided by the data used in preparing the estimate. Classification of resources has considered geological continuity, data spacing, data type, data source, data quality, and geostatistical evaluation of these data.

Estimated blocks were assigned to inferred based on proximity to drill holes. Resource blocks within 75 metres laterally of drill holes (in plan view or within the X-Y plane) and up to 50 metres below the drill holes were classified as inferred. The inferred classification domain is shown in Figure 14.23.
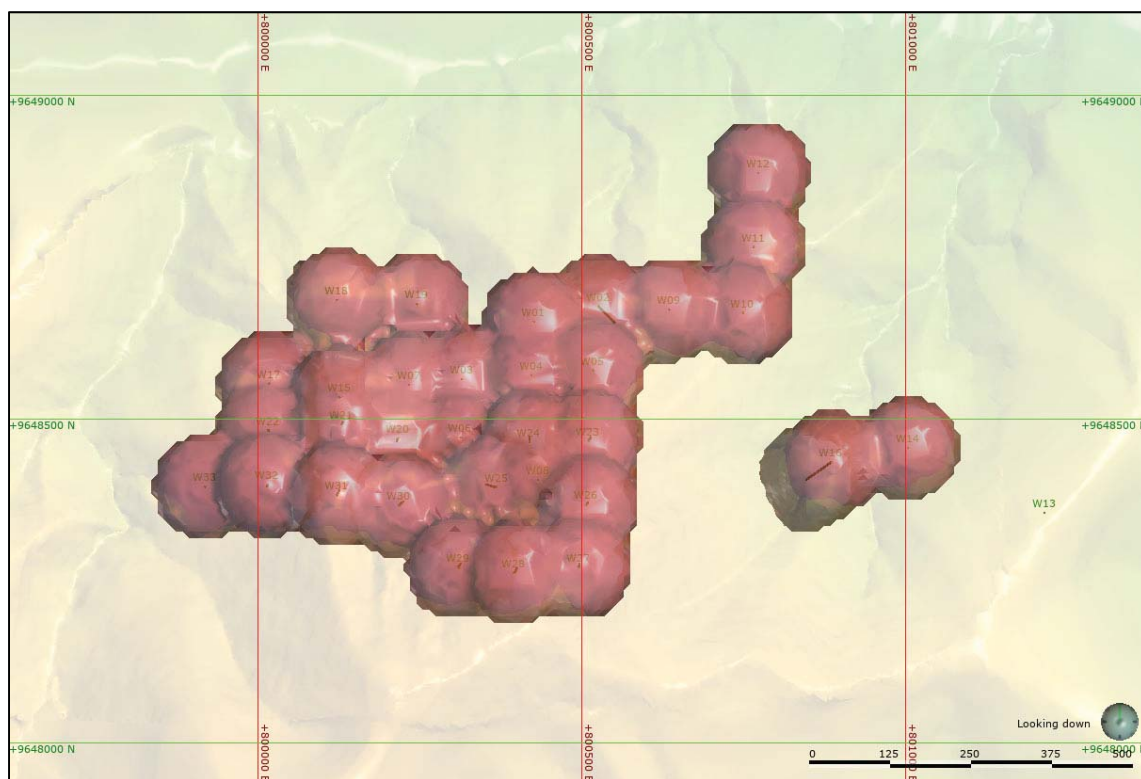
Figure 14.23. Inferred classification domain.

Source: Equity (2019)

14.13 Mineral Resource Statement

The CIM Definition Standards on Mineral Resources and Reserves (CIM Definition Standards, May 2014) state that:

"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction."

To sufficiently test the *reasonable prospects for eventual economic extraction* by an open pit, MineSite™ pit optimiser was utilised with reasonable input parameters to evaluate the portions of the block model that could be extracted economically using technical input parameters from comparable projects and operating mines. The results of the pit optimisation partially form the basis of the mineral resource statement, are used to constrain the mineral resource with respect to the CIM Definition Standards and do not constitute an attempt to estimate reserves. A summary of the Inferred Resources are summarized in Table 14.25. Resources are reported at 0.2% copper cut-off within an optimised pit shell below topography. Pit optimisation parameters are shown in Table 14.26 and the optimised pit is illustrated in Figure 14.24.
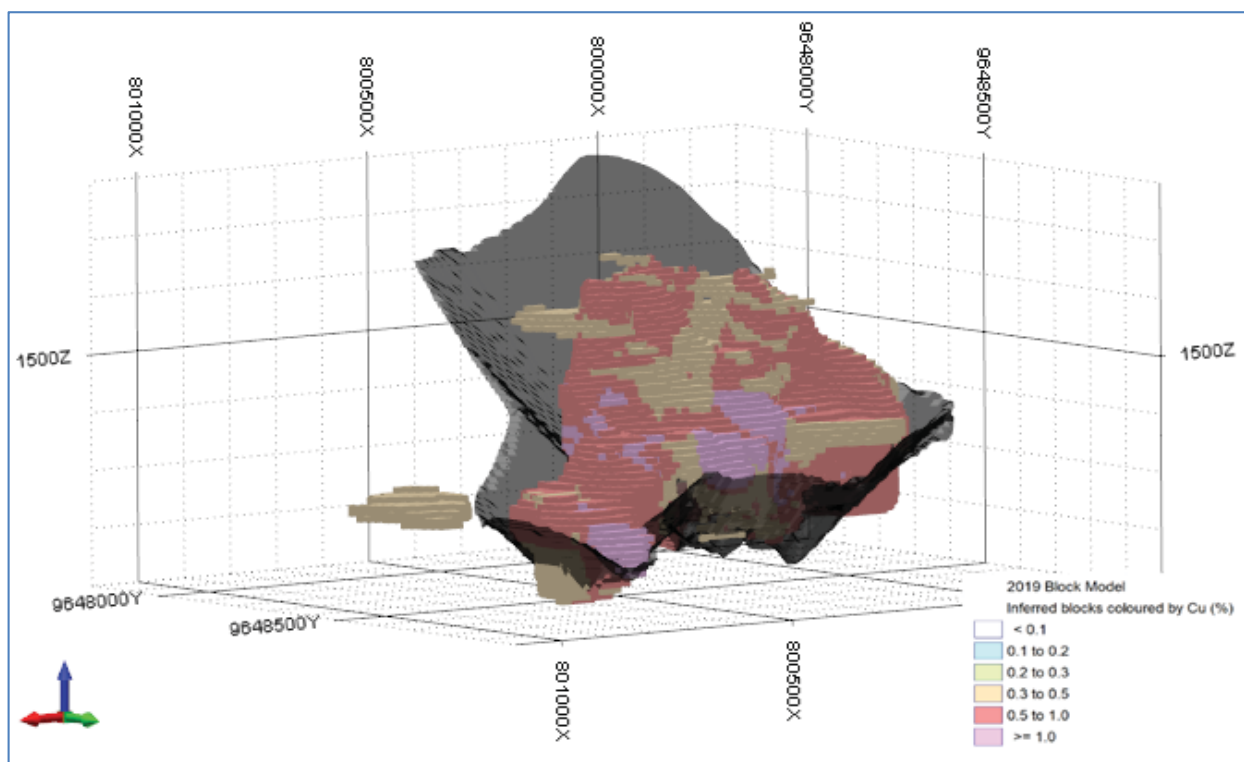
*Figure 14.24. Constraining optimised pit shell with 3D view of the inferred blocks greater than 0.3%
copper (looking southwest). Strip ratio for optimized pit is 0.71:1.00.*

Source: Equity (2019)

Table 14.25. Resource Statement for the Warintza Central Resource

Classification	Zone	Cu Cut-off	Tonnage	Cu	Cu	Mo	Mo	Au	Au
		(%)	(T)	(%)	(Mlbs)	(%)	(Mlbs)	(g/t)	(oz)
Inferred	Leached - Open Pit	0.2	1,970,300	0.24	11	0.027	1.2	0.07	4,500
	Enriched - Open Pit	0.2	64,100,800	0.62	870	0.029	40.7	0.06	119,700
	Primary - Open pit	0.2	57,689,100	0.50	636	0.028	35.7	0.06	114,400
Inferred	Total - Open Pit	0.2	123,760,200	0.56	1,516	0.028	77.5	0.06	238,600

[1]*Mineral Resources are reported using a cut-off grade of 0.2% copper.*
[2]*The Open Pit Mineral Resource is constrained using an optimized pit that has been generated using Lerchs –Grossman pit
optimisation algorithm with parameters outlined in Table 14.26. The resulting pit produces a strip ratio of 0.71 to 1.*
[3]*The Warintza Central Mineral Resource statement has been prepared by Trevor Rabb, PGeo who is a qualified person as defined
by NI 43-101.*
[4]*Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.*
*The Warintza Mineral Resource statement has been prepared in accordance with NI43-101 Standards of Disclosure for Mineral
Projects (May, 2016) and the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014).*
Source: Equity (2019)

Table 14.26. Pit Optimisation Parameters for the Warintza Central Resource

Metallurgical Recovery		
Copper	%	93%
Gold	%	70%
Silver	%	0%
Molybdenum	%	70%
Transporation Losses	%	0.15%
Metal Prices		
Copper	US$/lb	$ 3.16
Gold	US$/ounce	$ 1,275.00
Silver	US$/ounce	$ 15.00
Molybdenum	US$/lb	$ 11.34
Concentrate Transportation		
Copper Concentrate	US$/dmt	$ 184.78
Molybdenum Concentrate	US$/dmt	$ 219.78
TC/RC		
Copper Concentrate	US$/dmt	$ 141.87
Molybdenum Concentrate	US$/dmt	$ 917.11
Milling		
Processing Costs	US$/t Milled	$ 5.90
Mining		
Waste	US$/t Mined	$ 2.11
Ore	US$/t Mined	$ 2.43

Source: Equity (2019)
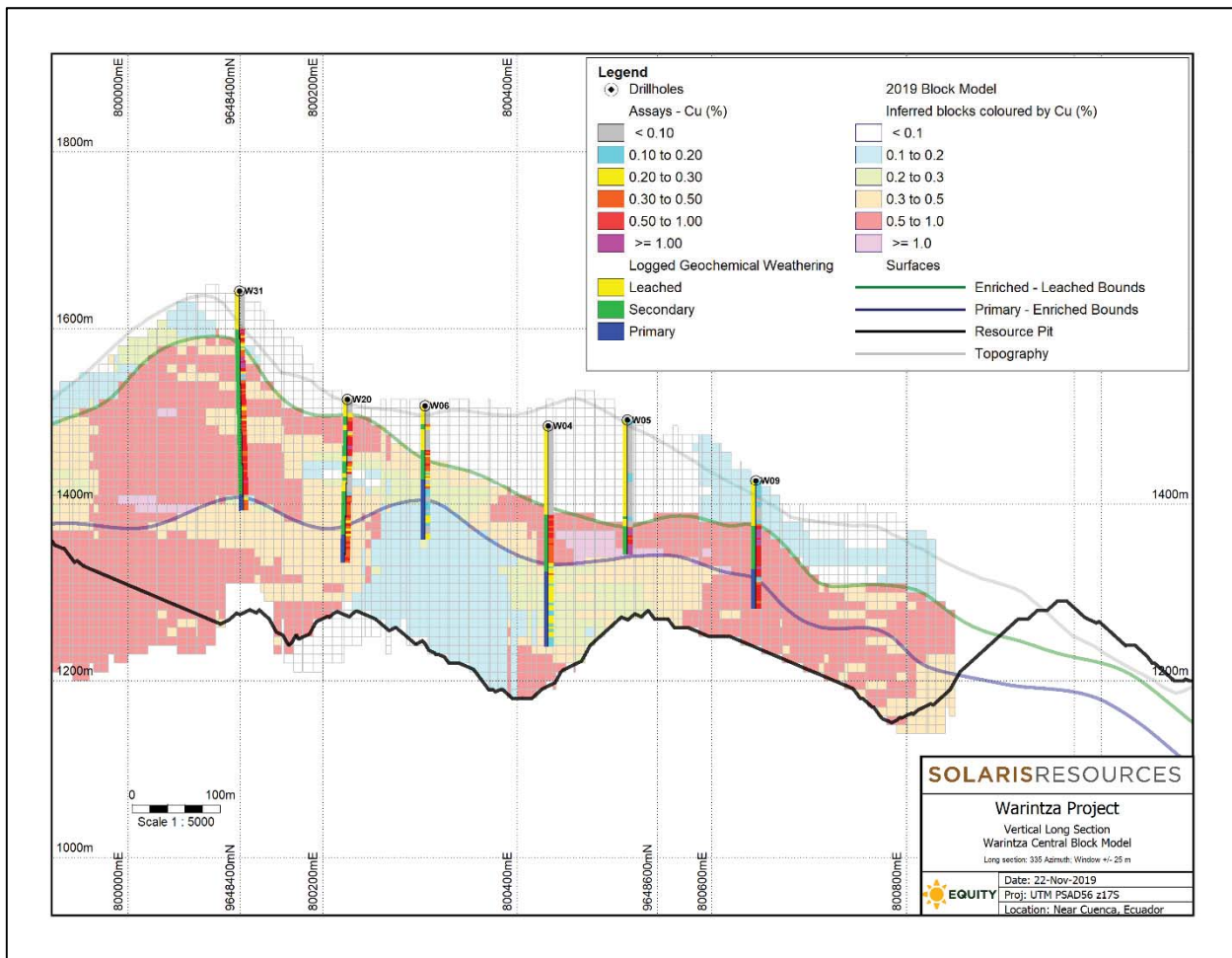
Figure 14.25. Vertical Long Section of the Warintza Central block model by copper.

Source: Equity (2019)

14.14 Grade Sensitivities

Block model quantities are shown in Table 14.27 at a range of copper cut-off grades to demonstrate that the Warintza Central resource is sensitive to the selected cut-off grades. The reader is cautioned that the figures presented in the tables should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.

Table 14.27. Cut-Off Grade Sensitivities of the Open Pit Warintza Central Resource

Zone	Classification	Cu Cut-off %	Tonnage (T)	Cu (%)	Cu (lbs)	Mo (%)	Mo (lbs)	Au (g/t)	Au (oz)
All Zones - Open Pit	Inferred	> 0.7	28,712,600	0.89	561,011,500	0.033	20,988,700	0.079	72,500
		> 0.65	35,832,100	0.84	666,597,700	0.033	26,196,300	0.075	86,800
		> 0.6	45,006,200	0.80	792,880,400	0.033	33,118,100	0.072	103,600
		> 0.55	57,168,800	0.75	946,732,000	0.032	40,617,200	0.070	129,200
		> 0.5	71,239,500	0.71	1,109,563,700	0.031	48,060,800	0.069	157,500
		> 0.45	82,209,600	0.68	1,224,810,000	0.030	54,709,000	0.067	177,800
		> 0.4	91,421,700	0.65	1,311,354,100	0.030	60,531,200	0.066	193,400
		> 0.35	97,566,000	0.63	1,362,135,500	0.030	64,200,800	0.065	203,500
		> 0.3	105,787,700	0.61	1,420,508,900	0.029	68,268,800	0.063	215,200
		> 0.25	112,073,000	0.59	1,458,890,800	0.029	71,610,300	0.062	223,600
		> 0.2	**123,760,200**	**0.56**	**1,516,403,000**	**0.028**	**77,484,300**	**0.060**	**238,600**
		> 0.15	136,241,000	0.52	1,564,730,000	0.029	86,776,000	0.058	255,800
		> 0.1	153,919,800	0.48	1,612,581,000	0.028	95,315,800	0.057	280,200

Zone	Classification	Cu Cut-off %	Tonnage (T)	Cu (%)	Cu (lbs)	Mo (%)	Mo (lbs)	Au (g/t)	Au (oz)
Leached - Open Pit	Inferred	> 0.7	-	-	-	-	-	-	-
		> 0.65	-	-	-	-	-	-	-
		> 0.6	-	-	-	-	-	-	-
		> 0.55	-	-	-	-	-	-	-
		> 0.5	-	-	-	-	-	-	-
		> 0.45	5,100	0.48	53,000	0.024	2,600	0.121	20
		> 0.4	9,500	0.45	93,700	0.038	8,000	0.114	35
		> 0.35	37,700	0.39	326,500	0.040	33,100	0.119	100
		> 0.3	153,900	0.34	1,146,200	0.027	91,100	0.081	400
		> 0.25	624,500	0.29	3,994,000	0.023	323,400	0.070	1,400
		> 0.2	**1,970,300**	**0.24**	**10,509,600**	**0.027**	**1,170,300**	**0.071**	**4,500**
		> 0.15	5,210,300	0.20	22,924,700	0.025	2,915,400	0.077	13,000
		> 0.1	10,401,000	0.16	36,858,400	0.025	5,728,500	0.084	28,100

Zone	Classification	Cu Cut-off %	Tonnage (T)	Cu (%)	Cu (lbs)	Mo (%)	Mo (lbs)	Au (g/t)	Au (oz)
Enriched - Open Pit	Inferred	> 0.7	21,577,200	0.90	429,974,400	0.031	14,525,000	0.076	52,900
		> 0.65	25,440,000	0.87	487,317,400	0.031	17,112,500	0.073	60,000
		> 0.6	30,546,500	0.83	557,464,800	0.031	20,870,500	0.070	69,000
		> 0.55	36,889,300	0.78	637,940,500	0.031	25,124,400	0.069	81,700
		> 0.5	42,374,000	0.75	701,332,400	0.030	28,466,900	0.067	90,900
		> 0.45	46,554,900	0.73	745,284,900	0.031	31,494,300	0.065	97,300
		> 0.4	50,333,800	0.70	780,702,500	0.031	34,118,600	0.064	103,500
		> 0.35	53,239,500	0.69	804,609,700	0.031	35,893,300	0.063	108,200
		> 0.3	57,366,600	0.66	833,752,100	0.030	37,686,700	0.061	113,100
		> 0.25	60,147,700	0.64	850,867,600	0.029	39,035,800	0.060	116,600
		> 0.2	**64,100,800**	**0.62**	**870,252,500**	**0.029**	**40,656,300**	**0.058**	**119,700**
		> 0.15	65,962,000	0.60	877,694,000	0.029	41,490,300	0.057	120,900
		> 0.1	70,443,100	0.57	890,054,800	0.027	41,870,800	0.054	123,000

Zone	Classification	Cu Cut-off %	Tonnage (T)	Cu (%)	Cu (lbs)	Mo (%)	Mo (lbs)	Au (g/t)	Au (oz)
Primary - Open Pit	Inferred	> 0.7	7,135,400	0.83	131,037,100	0.041	6,463,700	0.085	19,500
		> 0.65	10,392,100	0.78	179,280,300	0.040	9,083,800	0.080	26,800
		> 0.6	14,459,700	0.74	235,415,600	0.038	12,247,700	0.074	34,600
		> 0.55	20,279,400	0.69	308,791,500	0.035	15,492,800	0.073	47,500
		> 0.5	28,865,600	0.64	408,231,300	0.031	19,593,900	0.072	66,600
		> 0.45	35,649,700	0.61	479,472,100	0.030	23,212,000	0.070	80,500
		> 0.4	41,078,300	0.59	530,557,900	0.029	26,404,500	0.068	89,800
		> 0.35	44,288,900	0.57	557,199,300	0.029	28,274,400	0.067	95,100
		> 0.3	48,267,100	0.55	585,610,600	0.029	30,490,900	0.066	101,700
		> 0.25	51,300,800	0.53	604,029,200	0.029	32,251,100	0.064	105,600
		> 0.2	**57,689,100**	**0.50**	**635,641,000**	**0.028**	**35,657,700**	**0.062**	**114,400**
		> 0.15	65,068,700	0.46	664,111,300	0.030	42,370,300	0.058	121,900
		> 0.1	73,075,800	0.43	685,667,700	0.030	47,716,600	0.055	129,100

Source: Equity (2019)

14.15 Comparison with 2018 Resource Estimate

Equity compared the estimated resources with the Technical Report, Warintza Project, Ecuador June 22, 2018 resource estimates. Based on the comparison, there are some essential differences between the two resource models:

Software Employed:

- The 2019 estimate was generated using Leapfrog™ Edge v4.5 and Micromine™ 2018.

- Pit constraints were generated using MineSight™ Pit Optimiser.

Estimation Methodology:

- Three weathering domains were considered, in addition to lithology to constrain estimates.

- The estimation methodology used a combination of OK, ID2 and ID3 estimators for Cu, Au, and Mo.

- Block size is 10x10x10 metres.

- 3 metre composite samples were generated using Micromine™. Samples less than 0.5 m were backstitched to the final interval.

- Search distances were restricted to 1.5 times the modelled variogram distances.

Geological Resource Model:

- Lithological model was generated based on mapping and drill hole logs.

- Leached, enriched and primary weathering domains were generated and combined with a lithological model.

- Regolith domains were generated to assist with estimating and assigning SG.

Resource Reporting

- The 2019 estimate is reported at a 0.2% Cu cut-off.

14.16 Factors Materially Affecting this Resource Estimate

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the mineral resource estimate. All future exploration or development activities undertaken by Solaris requires ongoing consultation and stakeholder engagement by terms of the company's MOU with local area stakeholders.

23.0 ADJACENT PROPERTIES

The properties covering the Mirador District and San Carlos - Panantza are proximate to Warintza and share geological characteristics that provide information relevant to understanding the geology and mining prospects at Warintza (Figure 23.1). The information summarized below is disclosed in the Mirador Feasibility Study with an effective date of April 3, 2008 (Drobe et al., 2008), in the San Carlos - Panantza Preliminary Economic Assessment with an effective date of October 30, 2007 (Drobe et al., 2007) and in publicly available research papers. The qualified person has been unable to

verify the information and the information is not necessarily indicative of the mineralization on the Property that is the subject of this technical report.

As a result of a $679M (Canadian) cash transaction in 2010, the Mirador District and the San Carlos / Panantza porphyry copper deposits are currently owned and operated by EcuaCorriente S.A., a wholly owned subsidiary of CRCC-Tongguan Investment Co., Ltd. which is a joint venture formed between China Railways Construction Company (CRCC) and Tongling Non-Ferrous Metals.

23.1 Mirador District

Two main porphyry deposits – Mirador and Mirador Norte – as well as some lesser mineralized structures comprise the Mirador District (Drobe et al., 2013). These deposits are characterized by disseminated to blebby chalcopyrite which is most abundant within potassically altered plutonic rocks of the Zamora Batholith. Chalcocite-bearing, supergene-enriched zones overly the hypogene mineralization as at Warintza. Radiometric age dating (Drobe et al., 2013) indicates that the main Zamora Batholith granodiorite host rocks are ca. 164 Ma, whereas the causative subvolcanic intrusive rocks are about 8 million years younger.

Mirador commenced commercial production as a large-scale open pit mine on July 18, 2019 and has a current projected mine life of 30 years (Harris, 2019). The mine is expected to produce 11 Mt of copper concentrates annually containing 137 Mlbs of copper, 34,000 ounces of gold and 394,000 ounces of silver for 30 years. The copper concentrates it produces will be exported to China. Mineral resources at Mirador include Measured and Indicated of 438 Mt at 0.61% Cu, 0.19 g/t Au and 1.5 g/t Ag and Inferred of 235 Mt at 0.52% Cu, 0.17 g/t Au and 1.3 g/t Ag (Drobe et al., 2008). The information summarized below is disclosed in the Mirador Feasibility Study with an effective date of April 3, 2008 (Drobe et al., 2008) and publically available journal and news articles. The qualified person has been unable to verify the information and the information is not necessarily indicative of the mineralization on the Property that is the subject of this technical report.

23.2 San Carlos - Panantza

San Carlos - Panatza project is located about 15 km west of Warintza on concessions that are directly adjacent to the concessions covering the Warintza Central deposit. San Carlos and Panantza contain mainly hypogene copper with only minor overlying oxide and secondary enrichment horizons (Drobe et al., 2007). Typical hypogene mineralisation consists of disseminated chalcopyrite and molybdenite within quartz veins whereas higher-grade zones (>0.8% Cu) are associated with more concentrated chalcopyrite with pyrite and locally magnetite (Drobe et al., 2007).

The most recent resource estimates for the two deposits are detailed in a 2007 Preliminary Economic Assessment (Drobe et al., 2007). The reported San Carlos Inferred Resource is 600 Mt of 0.59% Cu for 7,738 Mlbs of Cu at a 0.4% Cu cut-off. The reported Panantza Inferred Resources is 463Mt of 0.66% Cu for 6,688 Mlbs of copper at a 0.4% Cu cut-off. Between the two deposits, there has been 22,580 m of drilling in 79 holes. This information is disclosed in the San Carlos - Panantza Preliminary Economic Assessment with an effective date of October 30, 2007 (Drobe et al., 2007). The qualified person has been unable to verify the information and the information is not necessarily indicative of the mineralization on the Property that is the subject of this technical report.
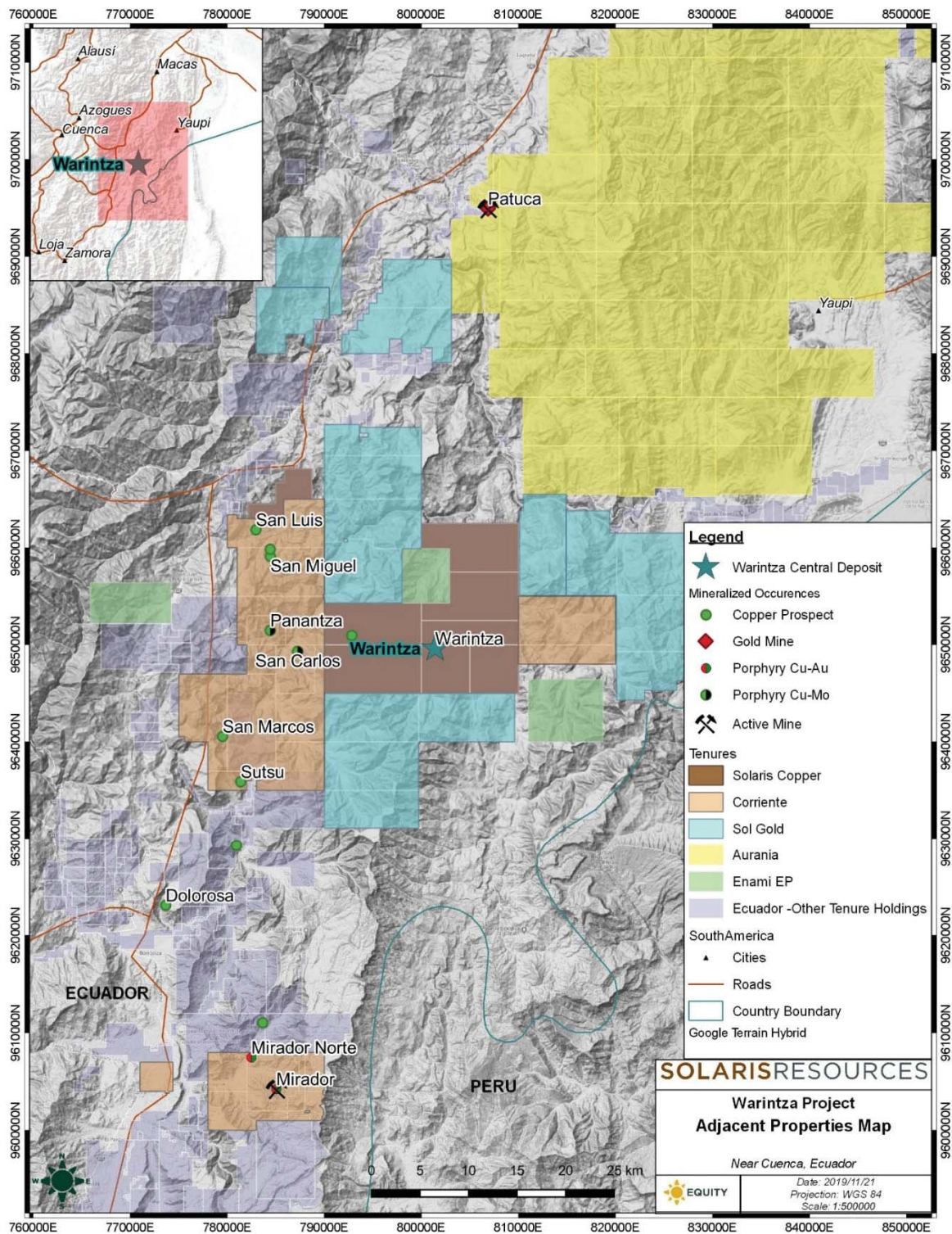
Figure 23.1. Map of the concessions and known prospects surrounding the Warintza Property.

Source: Equity (2019)

24.0 OTHER RELEVANT DATA AND INFORMATION

No other information or explanation is necessary to make this technical report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

Warintza is an under-explored, highly prospective Cu-Mo porphyry deposit within the Zamora Cu-Au belt – a newly defined belt which has only about 25 years of mineral exploration history in the Cordillera del Cóndor. Exploration efforts in the belt have identified numerous porphyry, gold skarn and epithermal gold deposits all related to Late Jurassic magmatism. While potential for other deposit types should not be ignored, Warintza is a typical calc-alkalic Cu-Mo porphyry system and is the clear focus for future exploration.

Warintza is somewhat unusual in the belt since it lies about 15 km off the main structural trend that hosts most porphyry deposits in the Zamora Cu-Au belt. Currently, it appears somewhat isolated well east of this better-known trend (i.e. the trend hosting Panatza, San Carlos and Mirador deposits, among others) but this may be reflective of more immature exploration in this more remote part of the belt.

Straightforward grass-roots exploration techniques work well in the Cordillera del Cóndor. Numerous porphyry deposits have been discovered in the area by initial panned concentrate stream sediment sampling, followed by prospecting, rock sampling, ridge soil sampling, grid soil sampling and finally scout drill-testing of geochemical anomalies. At Warintza, four such geochemical targets are well-defined but have not been investigated by drilling.

The Warintza Central deposit is the only target on the Property to have been drill-tested. Lithological and geochemical data from 33 holes drilled in 2000 and 2001 provide a suitable dataset for resource estimation based on our validation and verification efforts. Use of these data (Section 14) for modeling and resource estimation suggests that Warintza Central contains an inferred, pit-constrained resource of 124 Mt grading 0.56% Cu, 0.028% Mo and 0.06 g/t Au at 0.2% copper cut-off. Warintza Central is open at depth and laterally.

Existing exploration data is robust and can be used for future targeting and exploration decision-making. There exists good potential that additional drilling can expand the Warintza Central resource.

Early exploration at Warintza was hampered by community and social issues and, although this still presents risk, recent efforts by the issuer have opened the door to exploration once again. The return of the surface rights to the Shuar communities along with on-going community consultation has enabled Solaris to return to the Warintza Project.

26.0 RECOMMENDATIONS

26.1 Program

Additional diamond core drilling for the Warintza Central Deposit is recommended in two phases, with the second phase contingent on results of the first phase.

Phase one objectives are to test the Warintza Central Deposit at depth below the current resource pit. Four inclined drill holes with an average length of 500 m long are recommended to test the primary mineralisation below the current resource pit.

Phase two objectives are to optimize drill hole spacing and define the lateral extents of the Warintza Central Deposit, drill test geochemical targets on the Property and infill drilling of Warintza Central. Initial drilling during Phase two includes drilling four tightly spaced holes within an area of the deposit which will inform subsequent drill hole spacing requirements. Based on the dense drilling data, variography will be used to determine drill hole spacing required to upgrade the current resource classification (i.e. to reclassify inferred to indicated). Once drill hole spacing analysis is completed, a detailed drilling program to upgrade the resource classification can be designed. Secondly, testing the margins of the Warintza Central Deposit to the southwest and northeast (10 holes for 5,000 m) should be completed. A portion of these holes can also be used to characterise geotechnical considerations for open pit mining where appropriate (e.g. to characterize rock properties within pit high wall areas).

A property-wide airborne magnetic-radiometric survey should be completed as early as possible during the Phase two drilling to assist with property-scale targeting. The cost of the airborne survey would be $200,000 for roughly 1,400 line km of airborne survey work including quality control and post processing.

After the drill hole spacing optimisation drill holes are completed, the four untested, well-defined geochemical anomalies should be tested with two holes each (for 2,400 m). Positive results from these initial tests may warrant further drilling.

Infill drilling and geometallurgical studies designed to support a preliminary economic assessment are recommended for the Warintza Central Deposit. If nominal drill hole spacing of 50 m and average depth of 500 m is assumed, an infill program would require approximately 80 holes totalling 40,000 m of drilling and an estimated cost of $13.83 M.

A geometallurgical program is recommended for flow sheet development and optimisation, in addition to assessing the Warintza Central Deposit's heterogeneity. Depending on the outcome of the drilling program, the geometallurgical program should be done to a level that could support a Preliminary Economic Assessment. The metallurgical testing would utilise half cut core from the proposed drilling program to generate composite samples representative of different chemical weathering domains, grade distributions, and lithologies. Additional bond work index determination, including variability testing should be completed to determine the direct hardness of the ore and potential power and equipment requirements of the grinding circuit. Mineral liberation analysis and quantitative mineralogy should also be completed to determine the presence of pyrophyllite, talc, gypsum and anhydrite that may require special processing and mining considerations. Preliminary metallurgical testing suggests that conventional floatation can achieve good recovery. Further

optimisation of floatation and amenability of different ore types to leaching should also be explored. The cost for the geometallurgical program is estimated to cost $120,000.

Table 26.1. Recommended Two-phase Drilling Program

Phase I Drilling	Holes	Avg. Length (m)	Total (m)
Inclined holes to test Warintza Central at depth	4	500	2,000
		SUBTOTAL	2,000

Phase II Drilling	Holes	Avg. Length (m)	Total (m)
Infill drilling for drill hole spacing optimisation	4	500	2,000
Test margins/ extents of Warintza Central	10	500	5,000
Initial drill-testing of four nearby targets	8	300	2,400
Classification upgrade (infill) drilling	80	500	40,000
		SUBTOTAL	49,400

Source: Equity (2019)

26.2 Budget

Diamond drilling at Warintza is estimated to cost $280 per metre. This includes all technical, analytical and logistics costs. Phase one drilling is estimated to cost $560,000. Phase two is estimated to cost $14.71 M for infill and stepout drilling of Warintza Central, exploration drilling of regional targets, airborne geophysical survey, and geometallurgical studies.
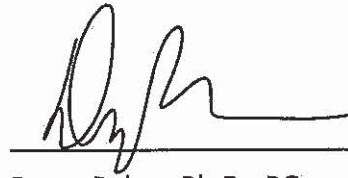
Table 26.2. Budget for Recommended Work Program

Phase I		USD$ ('000)	
Drilling		$	560
	SUBTOTAL	$	560

Phase II		USD$ ('000)	
Airborne Geophysics		$	200
Geometallurgy		$	120
Drilling		$	13,832
	SUBTOTAL	$	14,152
	TOTAL	**$**	**14,712**

Source: Equity (2019)
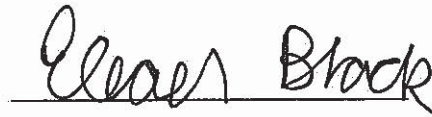
Respectfully submitted,

Trevor Rabb, PGeo

Darcy Baker, Ph.D., PGeo

EQUITY EXPLORATION CONSULTANTS LTD.
Vancouver, British Columbia
Effective Date: December 13, 2019
Signed Date: February 13, 2020

Eleanor Black, PGeo

27.0 REFERENCES

Berger, B. R., Ayuso, R. A., Wynn, J. C., and Seal, R. R., 2008, Preliminary model of porphyry copper deposits: US Geological Survey Open-File Report 2008-1321, 55 p.

CIM, 2003, Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines: Adopted by CIM Council on November 23, 2003, 10 p.

CIM, 2014, CIM Definition Standards for Mineral Resources and Mineral Reserves: Prepared by the CIM Standing Committee on Reserve Definitions, Adopted by CIM Council May 10, 2014, 10 p.

Corriente Resource Inc. Annual Information Form, 2000.

Corriente Resources Inc. Annual Report 2003, 24 p.

Corriente Resources Inc. Annual Report 2004, 24 p.

Donoso, A., 2019, Legal Report Lowell Mineral Exploration Ecuador S.A.

Drobe, J., Hoffert, J., Fong, R., Haile, J., and Collins, J., 2008, Technical Report, Mirador Copper-Gold Project 30,000 TPD Feasibility Study.

Drobe, J., Lindsay, D., Stein, H., and Gabites, J., 2013, Geology, mineralization, and geochronological constraints of the Mirador Cu-Au porphyry district, southeast Ecuador: Economic Geology, v. 108, p. 11–35.

Gendall, I. R., Quevedo, L. A., Sillitoe, R. H., Puente, C. O., León, J. P., and Povedo, R. R., 2000, Discovery of a Jurassic Porphyry Copper Belt, Pangui Area, Southern Ecuador: SEG Newsletter, v. 43, p. 8–15.

Harris, P., 2019, EcuaCorriente starts Mirador production.

Hartley, A. J., and Rice, C. M., 2005, Controls on supergene enrichment of porphyry copper deposits in the Central Andes – a review and discussion: Mineralium Deposita, v. 40, p. 515–525.

Leary, S., Sillitoe, R. H., Stewart, P. W., Roa, K. J., and Nicolson, B. E., 2016, Discovery, Geology, and Origin of the Fruta del Norte Epithermal Gold-Silver Deposit, Southeastern Ecuador: Economic Geology, v. 111, p. 1043–1072.

Lowell, D. J., 2005, Warintza Project: Internal report for Lowell Mineral Exploration, 15 p.

Lowell, J. D., and Guilbert, J. M., 1970, Lateral and vertical alteration-mineralization zoning in porphyry ore deposits: Economic Geology, v. 65, p. 373–408.

Puente, C., 2001, Warintza - Este, Exploracion Geologica Previa a la fase de Perforaciones, Provincia de Morona Santiago, SE Ecuador.

Richards, J. P., 2003, Tectono-magmatic precursors for porphyry Cu-(Mo-Au) deposit formation: Economic Geology, v. 98, p. 1515–1533.

Richards, J. P., 2005, Cumulative factors in the generation of giant calc-alkaline porphyry deposits, in Super porphyry copper and gold deposits – a global perspective: PGC Publishing, p. 7–26.

Roa, K. J., 2017, NI 43-101 Technical Report on the Lost Cities – Cutucu Exploration Project, Province of Morona-Santiago, Ecuador.

Ronning, P., and Ristorcelli, S., 2006, Technical Report, Warintza Project, Ecuador: Lowell Mineral Exploration LLC, 138 p.

Ronning, P., and Ristorcelli, S., 2018, Technical Report, Warintza Project, Ecuador: Equinox Gold Corp. and Solaris Copper Inc., 128 p.

Sillitoe, R. H., 2000, Gold-rich porphyry deposits: descriptive and genetic models and their role in exploration and discovery: Reviews in Economic Geology, v. 13, p. 315–345.

Sillitoe, R. H., 2005, Supergene oxidized and enriched porphyry copper and related deposits: Society of Economic Geology 100th Anniversary Volume, p. 723–768.

Sillitoe, R. H., and Thompson, J. F. H., 2006, Changes in mineral exploration practice: consequences for discovery: Society of Economic Geologists Special Publication, v. 12, p. 193–219.

Sivertz, G., Ristorcelli, S., Hardy, S., and Hoffert, J., 2006, Technical Report Update on the Copper, Gold, and Silver Resources and Pit Optimizations, Mirador Project, Ecuador: Corriente Resources Inc., 144 p.

Suárez, M., 2005, Estimacion de Recursos del Proyecto Warintza.

Vaca, E., and León, J., 2001, Proyecto Warintza, Anomalias Central y Oeste; Evaluacion Inicial y Recomendaciones de las Fases de Perforacion.

Velásquez, F., 2019, Warintza Force Majeure Status.

QUALIFIED PERSON'S CERTIFICATE

I, Trevor Rabb, PGeo, residing at 126-100 Klahanie Drive, Port Moody, BC V3H 5K3, do hereby certify:

1) I am a Resource Geologist and partner of Equity Exploration Consultants Ltd., a mining exploration management and consulting company with offices at 1238 – 200 Granville Street, Vancouver, British Columbia, V6C 1S4.
2) This Certificate applies to the technical report titled "Resource Estimate of the Warintza Central Cu-Mo Porphyry Deposit" with an effective date of December 13, 2019, and revised date of February 13, 2020, prepared for Solaris Resources Inc.
3) I am a graduate of Simon Fraser University (2009) with a Bachelor of Science degree in Geology.
4) I have been continually practiced as a geologist since 2009 and have worked managing exploration programs focused on identifying and delineating copper porphyry, VMS, orogenic gold, nickel and other deposits in British Columbia, Yukon, Ontario, Australia, and Brazil.
5) I have specialised in geochemistry, geostatistics and resource modelling for five years on various underground and open pit base metal and gold deposits in Canada, the United States, Central and South America.
6) I have practiced mineral resource estimation for three year on various underground and open pit base metal and gold deposits in Canada, the United States, Central and South America.
7) I am a Professional Geologist in good standing with Engineers and Geoscientists of British Columbia (EGBC registration number 39599.
8) I have read the definition of "Qualified Person" in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and according to NI 43-101 I am a qualified person owing to my education, professional experience and registration with professional associations.
9) I visited the Warintza Property between May 6-8, 2019.
10) I have had no previous involvement with the Warintza Property.
11) I am independent as defined by Section 1.5 of NI 43-101.
12) I am responsible for portions of section 12 and sections 13 and 14 of this report.
13) I have read NI 43-101 and confirm that the sections of this report for which I am an author or co-author have been prepared in accordance with NI 43-101.
14) As of the effective date of this report, to the best of my knowledge, information and belief, the sections of this report for which I am an author or co-author contain all scientific and technical information that is required to be disclosed so as to make the technical report not misleading.

Effective date: December 13, 2019

Signed date: February 13, 2020

"Trevor Rabb"

_____

Trevor Rabb, PGeo

QUALIFIED PERSON'S CERTIFICATE

I, Darcy E.L. Baker, PGeo, residing at 5821 Eagle Island, West Vancouver, British Columbia, V7W 1V6, do hereby certify:

1) I am a consulting Geologist and President of Equity Exploration Consultants Ltd., a mining exploration management and consulting company with offices at 1238 – 200 Granville Street, Vancouver, British Columbia, V6C 1S4.

2) This Certificate applies to the technical report titled "Resource Estimate of the Warintza Central Cu-Mo Porphyry Deposit" with an effective date of December 13, 2019, and revised date of February 13, 2020, prepared for Solaris Resources Inc.

3) I am a graduate of Dalhousie University (1997) with an Honours Bachelor of Science degree in Geology and am a graduate of the University of Newcastle, Australia (2003) with a Doctor of Philosophy degree in Geology.

4) Since 2003, I have worked managing exploration programs focused on identifying and delineating epithermal, porphyry, VMS, orogenic gold, IOCG and other deposits in Alaska, British Columbia, Mexico, Nevada, Nunavut, Ontario, Quebec and Yukon. Prior to launching a career in mineral exploration, I completed a Ph.D. research project studying the timing and structural relations of orogenic gold deposits in the Archean Pilbara Craton of Western Australia.

5) I am a Professional Geologist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (registration number 33448) and with the Association of Professional Geoscientists of Ontario (registration number 2746).

6) I have read the definition of "Qualified Person" in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and according to NI 43-101 I am a qualified person owing to my education, experience and registration with professional associations.

7) I visited the Warintza Property between May 6-8, 2019.

8) I have had no previous involvement with the Warintza Property.

9) I am independent as defined by Section 1.5 of NI 43-101.

10) I am responsible for sections 1 through 9 and 23 through 27 of this report.

11) I have read NI 43-101 and confirm that the sections of this report for which I am an author or co-author have been prepared in accordance with NI 43-101.

12) As of the effective date of this report, to the best of my knowledge, information and belief, the sections of this report for which I am an author or co-author contain all scientific and technical information that is required to be disclosed so as to make the technical report not misleading.

Effective date: December 13, 2019

Signed date: February 13, 2020

"Darcy Baker"

_____

Darcy E.L. Baker, PhD, PGeo

QUALIFIED PERSON'S CERTIFICATE

I, Eleanor Black, PGeo, do hereby certify:

1) I am a consulting Senior Geologist of Equity Exploration Consultants Ltd., a mining exploration management and consulting company with offices at 1238 – 200 Granville Street, Vancouver, British Columbia, V6C 1S4.
2) This Certificate applies to the technical report titled "Resource Estimate of the Warintza Central Cu-Mo Porphyry Deposit" with an effective date of December 13, 2019, and revised date of February 13, 2020, prepared for Solaris Resources Inc.
3) I am a graduate University of British Columbia (2004) with a Bachelor of Science degree in Geology.
4) Since 2004, I have worked managing exploration programs focused on identifying and delineating porphyry, VMS, orogenic gold, and other deposits in British Columbia, Nunavut, Ontario and Yukon, Canada as well as Finland and Brazil.
5) I am a Professional Geologist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (registration number 145519).
6) I have read the definition of "Qualified Person" in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and according to NI 43-101 I am a qualified person owing to my education, experience and registration with professional associations.
7) I have completed a review and compilation of the geological mapping, geochemical sampling and diamond drill logs to create a database of the available information. I have completed drill targeting, geological modelling, and examination of historical data on the Warintza Project.
8) I not visited the Warintza Property.
9) I have had no previous involvement with the Warintza Property.
10) I am independent as defined by Section 1.5 of NI 43-101.
11) I am responsible for sections 10, 11 and portions of section 12 of this report.
12) I have read NI 43-101 and confirm that the sections of this report for which I am an author or co-author have been prepared in accordance with NI 43-101.
13) As of the effective date of this report, to the best of my knowledge, information and belief, the sections of this report for which I am an author or co-author contain all scientific and technical information that is required to be disclosed so as to make the technical report not misleading.

Effective date: December 13, 2019

Signed date: February 13, 2020

"Eleanor Black"

_____

Eleanor Black, PGeo