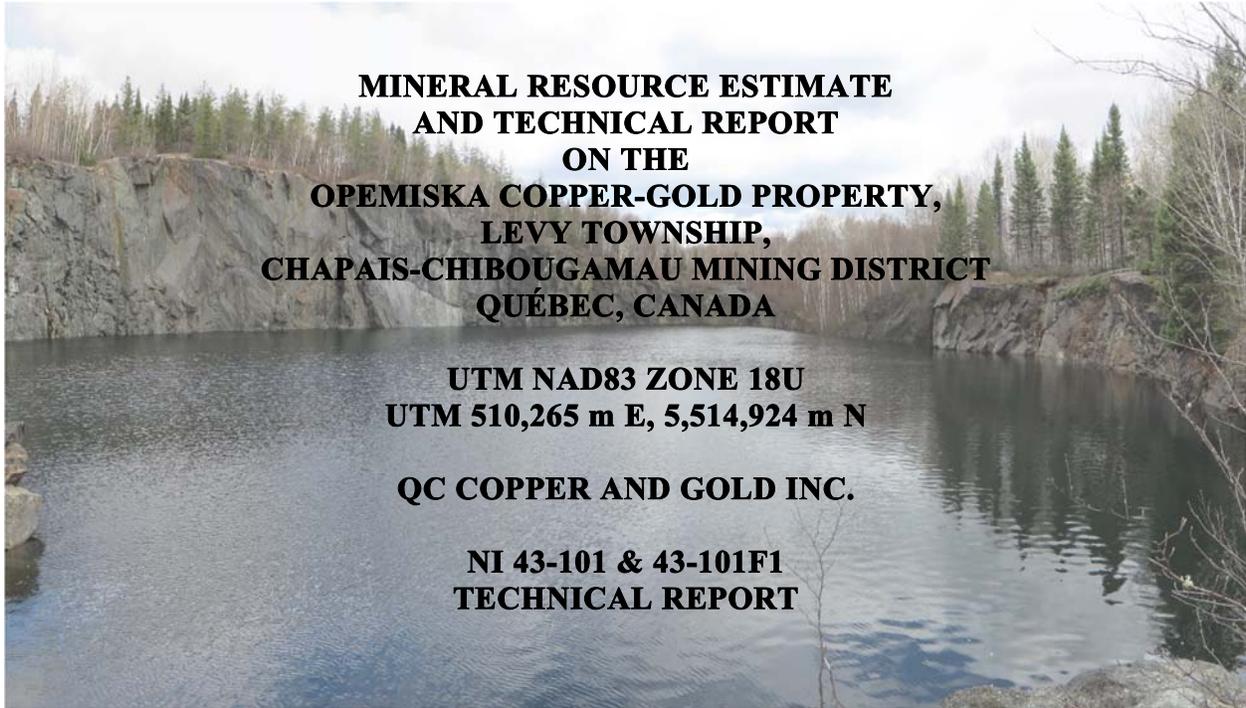




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**MINERAL RESOURCE ESTIMATE
AND TECHNICAL REPORT
ON THE
OPEMISKA COPPER-GOLD PROPERTY,
LEVY TOWNSHIP,
CHAPAIS-CHIBOUGAMAU MINING DISTRICT
QUÉBEC, CANADA**

**UTM NAD83 ZONE 18U
UTM 510,265 m E, 5,514,924 m N**

QC COPPER AND GOLD INC.

**NI 43-101 & 43-101F1
TECHNICAL REPORT**

**Antoine Yassa, P.Geo., géo
Eugene Puritch, P.Eng, FEC, CET**

**P&E Mining Consultants Inc.
Report 405**

**Effective Date: September 20, 2021
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1.0 SUMMARY

The following report was prepared to provide a National Instrument 43-101 (“NI 43-101”) Mineral Resource Estimate and Technical Report on the Opemiska Copper Gold Property (the “Property”) for QC Copper and Gold Inc. (“QC Copper”). The Technical Report has an effective date of September 20, 2021. QC Copper is a reporting issuer and trades on the TSX Venture Exchange (TSXV) with the symbol “QCCU”.

The Opemiska Copper-Gold Property (the “Property”) comprises 14 unpatented map designated mineral claims covering a total area of 686.58 ha in Levy Township in the Chapais-Chibougamau region of northwestern Québec. The Property is located in the northeastern part of the Abitibi Greenstone Belt in an area of significant mining activity. QC Copper has an option to earn a 100% interest in the Opemiska Property from Explorateurs-Innovateurs de Québec Inc. (“Ex-In”). The Property is subject to a 2% NSR royalty and certain advance royalty payments to Ex-In. The Company also has an option on the adjacent Cooke-Robitaille Property located immediately east of Opemiska and the wholly-owned Scott Property located further east. Additionally, QC Copper owns a 50% interest on the Roger Property located a few kilometres north of the Town of Chibougamau.

The Opemiska Property is located immediately adjacent to the Town of Chapais and is road accessible with the paved Québec Highway 113 transecting the Property. The Property is located 40 km west of the Town of Chibougamau and 480 km north of the City of Montréal, Québec. The centre of the Property is located at 510,265 m E, 5,514,924 m N (UTM NAD83 Zone 18U) or Latitude 49° 47’ 12” N and Longitude 74° 51’ 27” W.

The Property benefits significantly from excellent access and close proximity to the Chibougamau-Chapais mining camp. Mineral exploration, mining, along with mineral processing are major components of the local economy. The local infrastructure, business community and populace of the region are well-equipped to service mining and exploration activities.

The Property has year-round access from Québec Highway 113 and resource roads north of Chapais. A regional airport is located between Chapais, population 1,610, and Chibougamau, population 7,504.

The climate is typical of the Abitibi region and is characterized as humid sub-arctic continental. Winters are long, extending from November to April, with January minimum temperatures averaging minus 26°C. July maximum temperatures average plus 22°C. Generally, exploration activities can be carried out year-round. The terrain at Opemiska is characterized by low, undulating relief with elevations averaging approximately 400 m above sea level. Drainage on the Project area is toward the west into James Bay through the Waswanipi and Nottaway Rivers.

The Opemiska Property has a long history of exploration activities dating back to 1929 when copper mineralization was discovered by Leo Springer. Opemiska Copper Mines commenced production in December 1953 and continued until June 1991. Production from the Springer, Perry, Robitaille and Cooke Mines totalled 23,989,030 tonnes which produced 517,126 tonnes of copper, 27,074 kg of gold and 282,000 kg of silver. Subsequent to the closure of the mines, Ex-

In and QC Copper have completed several diamond-drilling campaigns and associated surface exploration programs.

The Opemiska Property is located in the western part of the Abitibi Subprovince of the Archean (ca. 2.7 Ga) Superior Province. The Abitibi Subprovince contains dominantly metavolcanic, metasedimentary and plutonic rocks and includes the Abitibi Greenstone Belt.

On the Opemiska Property, the mineralization consists of a series of chalcopyrite-bearing quartz veins that occupy fractures in folded and faulted gabbroic portions of the ultramafic to mafic Cummins Complex. The Complex is composed of three conformable, regionally extensive, layered Archean ultramafic-mafic sills that intrude felsic metavolcanic rocks of the Blondeau Formation. Most of the mineralization mined at the Springer and Perry Shafts was hosted within the upper part of the Ventures Sill that is the second of the three differentiated sills forming the Cummings Complex. At the Springer Mine, a fold nose associated with an overturned east-plunging anticline folding the Ventures Sill is a significant control on mineralization.

At the Springer Mine, the main veins are up to 1,200 m long, with an average width of 6.0 m and have been developed to more than 1,000 m in depth. The mineralization is comprised principally of chalcopyrite, pyrite, and pyrrhotite with lesser amount of sphalerite, magnetite, galena, molybdenite, arsenopyrite and gersdorffite. Native gold has been seen associated to chalcopyrite and pyrite. Locally significant amount of scheelite and molybdenite are present.

The copper-gold deposits on the Opemiska Property are late Archean in age and are described as structurally controlled copper-gold veins. Underground mining at the Springer and Perry Mines was restricted to the high-grade veins. Considerable disseminated mineralization surrounding the veins was previously considered as not economic to mine and remains in place. The current Project seeks to define Mineral Resources that could be mined as an open pit.

Exploration work by QC Copper has been focussed on diamond drilling and includes a 23-hole 3,364 m drilling program in 2019 and a 78-hole 16,411 m drilling program in 2021. Other exploration activities have included the digitization of historical mine data in a 3-D model of the geology and excavations of the Springer and Perry Mines and reprocessing of geophysical data.

The Opemiska Project is at the exploration stage and no environmental studies have been undertaken to date. All the historical mining infrastructure has been dismantled and the mining district decommissioned since 1991. Neither QC Copper and Gold nor the vendor, Ex-In have any responsibility for environmental matters arising from the previous mining operations.

The authors of this Technical Report have reviewed QC Copper's protocols for sample preparation, security and analytical procedures for the 2019 and 2021 drill programs and determined that the procedures are adequate and that the data is of good quality and satisfactory for use in the current Mineral Resource Estimate. The authors of this Technical Report also conclude that the majority of Ex-In's sample preparation, security and analytical procedures are adequate and in line with industry best practices. Additionally, to confirm the tenor of data collected by Falconbridge at the Property, QC Copper have undertaken core re-sampling and drill hole-twinning programs. Recommendation is made for QC Copper to continue with the current QC protocols, which includes the insertion of certified reference materials and blanks.

Mr. Antoine Yassa, P.Geo., géo, an independent Qualified Person under the terms of NI 43-101, visited the Opemiska Property on May 31 to June 1, 2021 for the purpose of completing a site visit and due diligence sampling. During the 2021 site visit, Mr. Yassa collected 15 samples from five diamond drill holes from QC Copper's 2021 drill program, and seven samples from two diamond drill holes from Ex-In's 2010 drill program. A range of high, medium, and low-grade samples were selected from stored drill core. Samples were collected by taking quarter core from the half core remaining in the core boxes. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Yassa directly to the AGAT Labs preparation facility in Val d'Or and subsequently transferred by AGAT to their Mississauga, ON facility for analysis. AGAT is an independent laboratory that maintains ISO registrations and accreditations. The accreditation program includes ongoing audits to verify the QA system and all applicable registered testing methods.

The samples delivered to AGAT were analyzed for copper by sodium peroxide fusion with ICP-OES/ICP-MS finish and for gold by fire assay with ICP finish. Drill core bulk density determinations were conducted by wet immersion method on all of the samples. P&E considers there to be good correlation between the majority of P&E's independent verification samples analyzed by AGAT Labs and the original analyses in the QC Copper's database. Based upon the evaluation of the QA/QC program and P&E's due diligence sampling, it is the opinion of the authors of this Technical Report that the analytical results are suitable for use in the current Mineral Resource Estimate.

The Mineral Resource Estimate presented in the current Technical Report has been prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral Resources have been classified in accordance with the "CIM Standards on Mineral Resources and Reserves: Definition and Guidelines" as adopted by CIM Council on May 10, 2014, and CIM Best Practices (2019). Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. The effective date of this Mineral Resource Estimate is September 20, 2021.

All drilling and assay data were provided in the form of Excel data files by QC Copper. The database for this Mineral Resource Estimate, compiled by P&E, consisted of 16,570 surface and underground diamond drill holes totalling 1,042,688 m. A total of 133 holes (22,774 m) were drilled between 2010 and 2021. The Mineral Resource database contains Cu, Au, Ag, Co and Zn assays. Verification of the assay database for the 2010-2021 drilling was performed by P&E against laboratory certificates that were obtained independently from ALS Laboratories Ltd. and Laboratoire Expert Inc. in Rouyn-Noranda, Québec. P&E validated the Mineral Resource Estimate database in GEOVIA GEMST[™]. Some minor errors were identified and corrected in the database. The authors of this Technical Report section are of the opinion that the supplied database is suitable for Mineral Resource estimation.

A total of seven mineralized vein wireframes for the Springer Zones and five mineralized wireframes for the Perry Zones were constructed for use in the Mineral Resource Estimate using a cut-off grade of 0.20% CuEq. Minimum constrained core length for interpretation was approximately 2.0 metres. The resulting wireframed 3-D domains were used as hard boundaries during Mineral Resource estimation, for rock model coding, statistical analysis and compositing limits. The bedrock surfaces were created with drill hole collars and overburden intercepts. Wireframes of historical underground excavations (stopes and drifts) were provided by QC Copper. The mined voids were utilized to deplete the Mineral Resources at both Springer and Perry zones.

A 1.5 m compositing length was used to regularize the assay sampling intervals for grade interpolation from drill hole intervals that fell within the mineralized wireframes. The composites were calculated for copper, gold, silver, cobalt and zinc over 1.5 m lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. Grade capping was performed on the 1.5 m composite values in the database within each constraining domain to control the possible bias resulting from erratic high-grade composite values in the database.

A total of 1,026 samples collected from the 2019 and 2021 drill holes were tested for bulk density by QC Copper and resulted in average bulk density of 2.96 t/m³.

The Opemiska block model was constructed using GEOVIA GEMSTM V6.8.4 modelling software. The block model consists of separate model attributes for estimated Cu, Au, Ag, Co, Zn and CuEq grades, rock type (mineralization domains), volume percent, bulk density, and classification. Block dimensions were 5 m x 5 m x 5 m. The grades of Cu, Co and Zn were interpolated into the model blocks using Inverse Distance squared (“ID²”), while Au and Ag were interpolated with Inverse Distance Cubed (“ID³”). A Nearest Neighbour (“NN”) estimate was conducted for validation purposes.

The CuEq values were calculated with the formula:

$$\text{CuEq \%} = \text{Cu \%} + (\text{Au g/t} \times 0.72) + (\text{Ag g/t} \times 0.01) + (\text{Co \%} \times 7.14) + (\text{Zn \%} \times 0.36)$$

In this Technical Report author’s opinion, the drilling, assaying and exploration work on the Opemiska Property supporting this Mineral Resource Estimate are sufficient to indicate a reasonable potential for economic extraction and thus qualify it as a Mineral Resource under the CIM definition standards.

Measured Mineral Resources were classified for the model blocks of the veins interpolated using at least three holes with an average spacing of 20 m or less. Indicated Mineral Resources were classified for the blocks of the veins interpolated using at least two holes with an average spacing of 40 m or less. Inferred Mineral Resource were classified for the blocks interpolated using at least one hole with 120 m or less spacing. Halo Zones were all classified as Inferred.

In order to report the Pit Constrained Mineral Resource Estimate, a first pass pit optimization was undertaken using a 0.20% Cu-Eq cut-off grade. The cut-off grade reflects costs of \$2.25/t for open pit mining, \$13/t processing costs and \$3/t G&A costs, for potentially economic portions of the mineralization. In some cases, mineralization below the 0.20% Cu cut-off value was included for the purpose of maintaining zonal continuity. The cut-off model uses August

2021 long term consensus forecasts of US\$3.50/lb Cu and US\$1,650/oz Au, Cu and Au process recovery of 80%, and a CAD\$/US\$ exchange of 0.76.

The Mineral Resource Estimate is reported herein with an effective date of September 20, 2021 and is tabulated in Table 1.1. The authors of this Technical Report section consider the mineralization of the Opemiska Project to be potentially amenable to open pit mining methods.

Classification	Tonnes (M)	Cu (%)	Au (g/t)	CuEq (%)	Cu (Mlb)	Au (koz)	CuEq (Mlb)
Measured	64.94	0.64	0.32	0.88	918.2	676.6	1,254.9
Indicated	16.73	0.69	0.26	0.88	255.2	139.0	325.8
M+I	81.67	0.65	0.31	0.88	1,173.4	815.6	1,580.7
Inferred	21.35	0.51	0.30	0.73	239.8	209.2	345.8

Notes:

1. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
2. *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
3. *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.*
4. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
5. *Metal prices used were US\$3.50/lb Cu and US\$1,650/oz Au and 0.76 CDN\$/US\$ FX. Cu process recovery and smelter payable was 80%. Open pit mining cost was C\$2.25/t, processing C\$13/t, G&A \$3/t.*
6. *Historical mined volumes were depleted from the blocks to report the correct tonnages and metal content of the remaining high-grade vein material.*

A budget of \$3.77 million is proposed to carry out 2021 and 2022 work as summarized in Table 1.2.

TABLE 1.2
PROPOSED 2021-2022 EXPLORATION BUDGET FOR THE OPEMISKA PROPERTY

Opemiska Project	Activity	Cost Per Unit (\$/unit)	Units	Unit Type	Projected Cost (\$)
GENERAL					
Labour Company Personnel	Project Management	9,000	5	Month	45,000
	Geologists	7,000	10	Man-Months	70,000
	Hourly Workers	300	220	Man-Day	66,000
Labour Contract Personnel	Core shack technicians	350	220	Man-Day	77,000
	Slashers, trail builders	2,000	20	Day	40,000
Project Expenses	House rental and maintenance	1,400	5	Month	7,000
	Core shack rental, repair, and maintenance	2,500	5	Month	12,500
	Food	600	5	Month	3,000
	Vehicles	600	5	Month	3,000
	Map scanning				7,000
	Digitization				3,000
Geophysics	Data Reprocessing				10,000
Permitting and Surveying	Surveying				6,000
	Exploration Permitting				4,000
	FN Consultation				3,000
PHASE 1					
Diamond Drilling	Drilling Contract	90	5,000	Metre	450,000
	Drilling Tools	12,000	2	Month	24,000
	Televiwer	3,000	4	Holes	12,000
	Assays				
	Standards & Blanks				2,000
	Laboratory	45	3,200	Sample	144,000
	Sample Reject/Pulp Storage				500

TABLE 1.2
PROPOSED 2021-2022 EXPLORATION BUDGET FOR THE OPEMISKA PROPERTY

Opemiska Project	Activity	Cost Per Unit (\$/unit)	Units	Unit Type	Projected Cost (\$)
	Core Storage				200
PHASE 2					
Diamond Drilling	Drilling Contract	90	15,000	Metre	1,350,000
	Drilling Tools	12,000	3	Month	36,000
	Televiewer	3,000	6	Holes	18,000.00
	Assays				
	Standards & Blanks				4,000
	Laboratory	45	10,000	Sample	450,000
	Sample Reject/Pulp Storage				1,500
	Core Storage				400
ENGINEERING					
	Metallurgical Testing (SGS Lakefield + P&E)				125,000
	Environmental studies				30,000
	Geotechnical studies				30,000
	Mineral Resources Estimate and Report (P&E)				100,000
	Preliminary Economic Assessment (P&E)				250,000
	Contingency (10%)				338,400
Total					3,772,5000

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 TERMS OF REFERENCE

QC Copper and Gold Inc. (“QC Copper” or the “Company”) retained P&E Mining Consultants Inc. (“P&E”) to complete a NI 43-101 Mineral Resource Estimate and Technical Report for the Opemiska Copper-Gold Property, Chapais-Chibougamau Mining District, Québec, Canada.

This Technical Report was prepared by P&E, at the request of Mr. Charles Beaudry, P.Geo, VP Exploration and Director of QC Copper. QC Copper is incorporated under the laws of the Province of British Columbia. Prior to September 28, 2020, the Company was known as PowerOre Inc.

QC Copper is a reporting issuer and trades on the TSX Venture Exchange (TSXV) with the symbol “QCCU”. QC Copper has its corporate office located at:

55 University Avenue, Suite 1805
Toronto, Ontario, Canada M5J 2H7

Mr. Antoine Yassa, P.Geo., géo, a Qualified Person under the terms of NI 43-101, conducted a site visit of the Property for the current Technical Report on May 31 and June 1, 2021. A data verification sampling program was conducted as part of the on-site review.

This Technical Report is considered current as of the effective date September 20, 2021.

The present Technical Report is prepared in accordance with the requirements of National Instrument 43-101 (“NI 43-101”) and in compliance with Form NI 43-101F1 of the Ontario Securities Commission (“OSC”) and the Canadian Securities Administrators (“CSA”).

2.2 SOURCES OF INFORMATION

This Technical Report is based, in part, on internal company technical reports, and maps, published government reports, company letters, memoranda, public disclosure and public information as listed in the References at the conclusion of this Technical Report. Sections from reports authored by other consultants have been directly quoted or summarized in this Technical Report, and are indicated where appropriate.

Sections 2 to 10, 20 and 23 of this Technical Report were prepared by Charles Beaudry, P.Geo., géo, under the supervision of Antoine Yassa, P.Geo., géo, who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Technical Report as outlined in the “Certificate of Author” included in this Technical Report. Sections 11 and 12 of this Technical Report were prepared by Jarita Barry, P.Geo. under the supervision of Antoine Yassa, P.Geo., géo, who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Technical Report as outlined in the “Certificate of Author” included in this Technical Report. Section 13 of this Technical Report were prepared by Grant Feasby, P.Eng., under the supervision of Antoine Yassa, P.Geo., géo, who, acting as a Qualified Person as

defined by NI 43-101, takes responsibility for those sections of this Technical Report as outlined in the “Certificate of Author” attached to this report. Section 14 of this Technical Report was prepared by Yungang Wu, P.Geo., under the supervision of Eugene Puritch, P.Eng., FEC, CET., who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Technical Report as outlined in the “Certificate of Author” included in this Technical Report.

2.3 UNITS AND CURRENCY

Unless otherwise stated all units used in this Technical Report are metric. Gold (“Au”) and silver (“Ag”) assay values are reported in grams of metal per tonne (“g/t Au or g/t Ag”) unless ounces per ton (“oz/T”) are specifically stated. Copper (“Cu”), zinc (“Zn”), and lead (“Pb”) concentrations are reported in weight % (“%”). The CAD\$ is used throughout this report unless the US\$ is specifically stated. At the time of issue of this Technical Report, the rate of exchange between the US\$ and the CAD\$ is US\$1.00 = CAD\$1.25. Location coordinates are expressed in the Universal Transverse Mercator (“UTM”) grid coordinates using 1983 North American Datum (“NAD83”) Zone 18U unless otherwise noted.

The following list, Table 2.1, shows the meaning of the abbreviations for technical terms used throughout the text of this Technical Report.

Abbreviation	Meaning
“\$”	dollar(s)
“°”	degree(s)
“°C”	degrees Celsius
<	less than
>	greater than
“%”	percent
“3-D”	three-dimensional
“AA”	atomic absorption
“AAS”	atomic absorption spectrometry
“Actlabs”	Activation Laboratories
“Ag”	silver
“ALS”	ALS Minerals
“ARD”	acid rock drainage
“Au”	gold
“Bourlamaque Lab”	Laboratoire d’Analyse Bourlamaque Ltée.
“°C”	degree Celsius
“CAD\$”	Canadian Dollar
“Cd”	cadmium
“CIM”	Canadian Institute of Mining, Metallurgy, and Petroleum
“cm”	centimetre(s)
“Co”	cobalt

TABLE 2.1
TERMINOLOGY AND ABBREVIATIONS (NI 43-101)

Abbreviation	Meaning
“Company”, the	QC Copper and Gold Inc.
“CRM” or “CRMs”	certified reference material or certified reference materials
“CSA”	Canadian Securities Administrators
“Cu”	copper
“CuEq”	copper equivalent
“CV _{AV} ”	average coefficients of variation
“\$M”	dollars, millions
“E”	east
“Ex-In”	Explorateurs-Innovateurs de Québec Inc.
“Expert Lab”	Laboratoire Expert Inc.
“FA”	fire assay
“Falconbridge”	Falconbridge Ltd.
“Fe”	iron
“FN”	First Nations
“ft”	foot
“Ga”	Giga annum or billions of years
“g”	gram
“g/t”	grams per tonne
“ha”	hectare(s)
“ICP-OES”	inductively coupled plasma optical emission spectroscopy
“ICP-MS”	inductively coupled plasma mass spectrometry
“ID”	identification
“ID”	inverse distance
“ID ² ”	inverse distance squared
“ID ³ ”	inverse distance cubed
“IP”	induced polarization
“ISO”	International Organization for Standardization
“k”	thousand(s)
“kg”	Kilograms(s)
“km”	kilometre(s)
“lb”	pound (weight)
“LDC”	Lac Dore Complex
“level”	mine working level referring to the nominal elevation (m RL), e.g. 4285 level (mine workings at 4285 m RL)
“M”	million(s)
“m”	metre(s)
“m ³ ”	cubic metre(s)
“MERN” or the “Ministry”	Ministère de Énergie et des Ressources Naturelles Province of Québec
“ML”	mining lease
“Mo”	molybdenum

TABLE 2.1
TERMINOLOGY AND ABBREVIATIONS (NI 43-101)

Abbreviation	Meaning
“Moz”	million ounces
“MRN”	Ministère Richesses Naturelles
“Mt”	mega tonne or million tonnes
“N”	north
“NAD”	North American Datum
“NE”	northeast
“Ni”	nickel
“NI”	National Instrument
“NN”	nearest neighbour
“no.”	number
“NSR”	net smelter royalty
“NW”	northwest
“QMS”	Quality Management System
“OSC”	Ontario Securities Commission
“Ore Research”	OREAS North America Inc.
“oz”	ounce
“P&E”	P&E Mining Consultants Inc.
“P.Eng.”	Professional Engineer
“P.Geo.”	Professional Geoscientist
“ppb”	parts per billion
“ppm”	parts per million
“Property”	the Opemiska Copper Gold Property that is the subject of this Technical Report
“QA/QC”	quality assurance/quality control
“QC Copper”	QC Copper and Gold Inc.
“QMS”	quality management system
“RQD”	rock quality determination
“S”	south
“SCC”	Standards Council of Canada
“SW”	southwest
“t”	metric tonne(s)
“T”	short ton(s)
“TDEM”	time-domain electromagnetic
“Technical Report”	this NI 43-101 Technical Report
“Techni-Lab”	Techni-Lab S.G.B. Abitibi Inc.
“t/m ³ ”	tonnes per cubic metre
“tpd”	tonnes per day
“US\$”	United States dollar(s)
“UTM”	Universal Transverse Mercator grid system
“VMS”	volcanogenic massive sulphides
“W”	west

TABLE 2.1
TERMINOLOGY AND ABBREVIATIONS (NI 43-101)

Abbreviation	Meaning
“W”	tungsten
“Zn”	zinc

Some conversion factors applicable to this report are shown in Table 2.2.

TABLE 2.2
CONVERSION FACTORS

1 ppm	1 g/t = 0.02917 oz/T
1 ppb	0.001 g/t
1 oz/T	34.2857 g/t
1 troy oz/T	34.29 g/t
0.029 troy oz/T	1 g/t
1 g	0.03215 troy oz
1 troy oz	31.1035 g
1 lb	0.454 kg
Linear Measurements	
1 ft	0.3048 m
1 mile	1.609 km
Area Measurements	
1 acre	0.405 ha
1 sq mile	2.59 sq km
1 sq km	100 ha

3.0 RELIANCE ON OTHER EXPERTS

P&E has assumed, and relied on the fact, that all the information and existing technical documents listed in the References section of this Technical Report are accurate and complete in all material aspects. While P&E has carefully reviewed all the available information presented to us, P&E cannot guarantee its accuracy and completeness. P&E reserves the right, but will not be obligated to revise the report and conclusions if additional information becomes known subsequent to the effective date of this Technical Report.

Copies of the tenure documents, operating licenses, permits, and work contracts were not reviewed. Information relating to tenure was reviewed by means of the public information available through the Province of Québec's Ministère de l'Énergie et des Ressources Naturelles ("MERN") on-line claim management system at https://gestim.mines.gouv.qc.ca/MRN_GestimP_Presentation/ODM02201_menu_base.aspx (accessed September 15, 2021). P&E has relied upon this public information, as well as tenure information from QC Copper and has not undertaken an independent detailed legal verification of title and ownership of the Opemiska Property claims. P&E has not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has relied on, and believes it has a reasonable basis to rely upon QC Copper to have conducted the proper legal due diligence.

Select technical data, as noted in this Technical Report, were provided by QC Copper and P&E has relied on the integrity of such data.

A draft copy of this Technical Report has been reviewed for factual errors by the client and P&E has relied on QC Copper's knowledge of the Property in this regard. All statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the effective date of this Technical Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

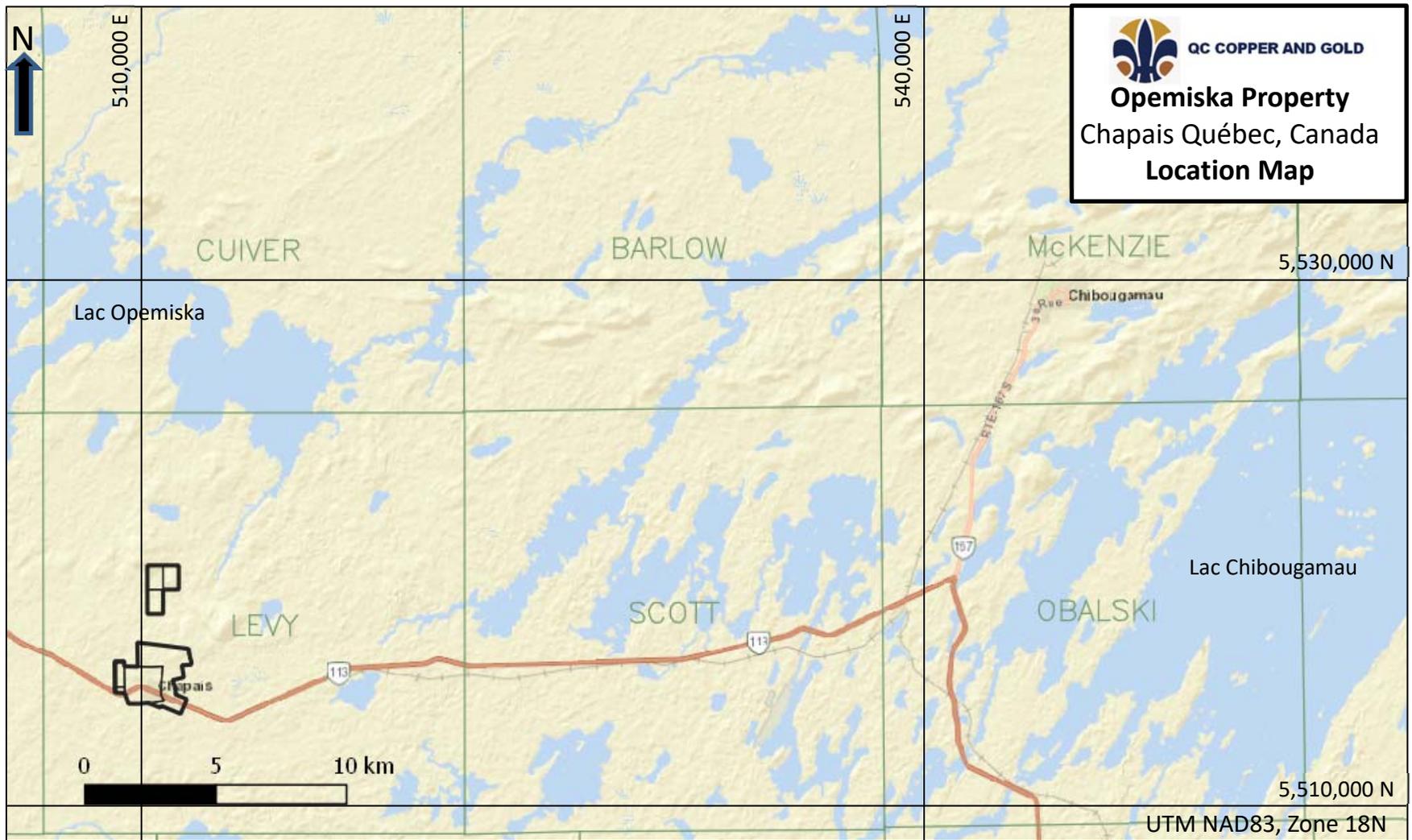
The Opemiska Property, which is currently under option by QC Copper from Ex-In, lies within the northeast portion of the Abitibi Metavolcanic Belt, adjacent to the Municipality of Chapais, 480 km north of Montreal, Québec, Canada (Figure 4.1). The claims are located within the southwest quadrant of Levy Township, on NTS Sheet 32-G15, and the mineral rights extend under most of the town of Chapais, Figure 4.2. Three historical mining shafts (Springer 1, Springer 2, and Perry) operated between 1953 and 1991 are present north and northwest of town of Chapais and are within the mining property. The centre of the Property is located at approximately UTM NAD83 Zone 18U 510,265 m E, 5,514,924 m N.

FIGURE 4.1 LOCATION MAP



Source: QC Copper and Gold Inc. (2021)

FIGURE 4.2 OPEMISKA PROPERTY TOWNSHIP LOCATION MAP



Source: QC Copper and Gold Inc. (2021)

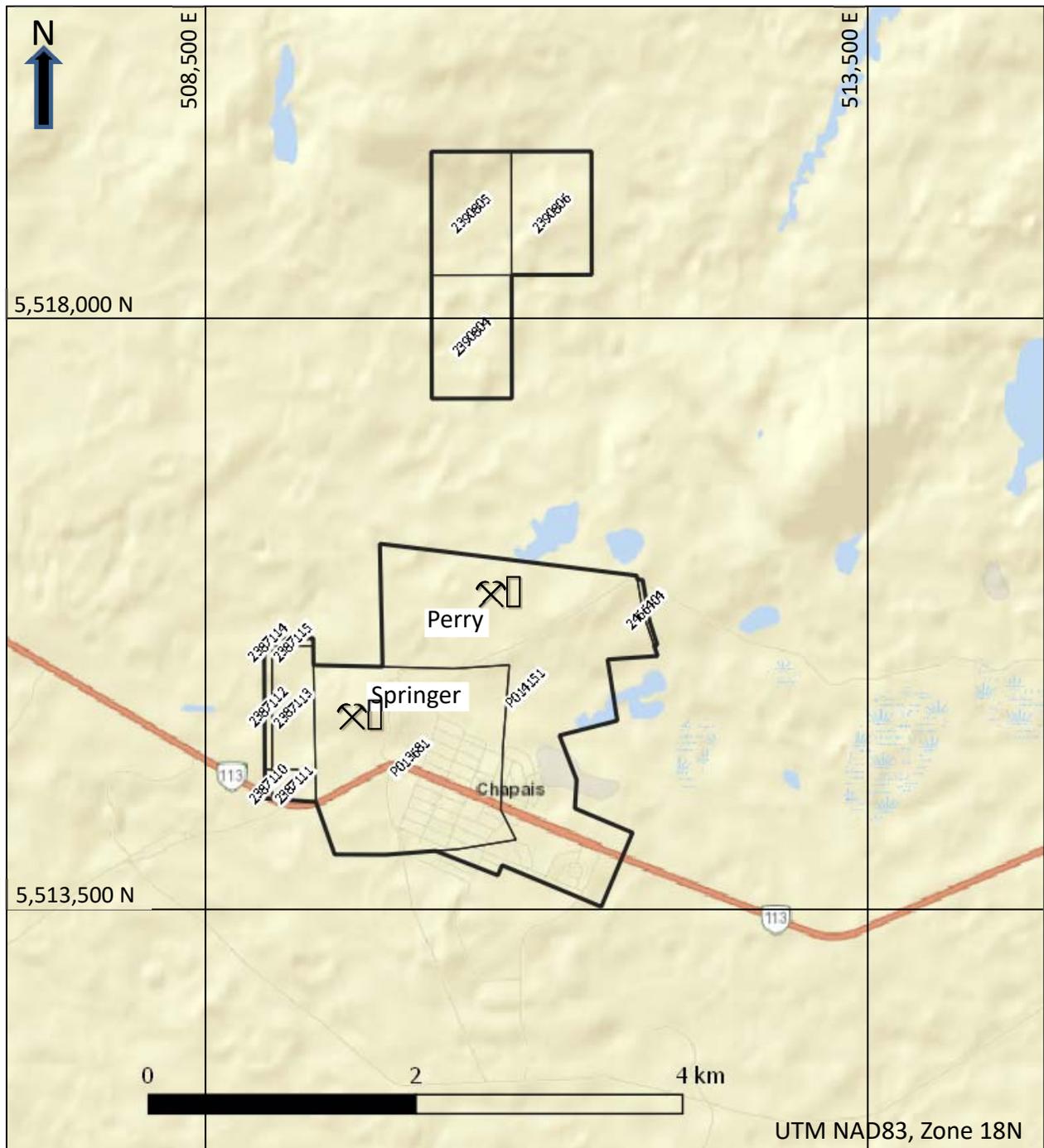
4.2 PROPERTY DESCRIPTION AND TENURE

The Property is comprised of 12 individual, map-designated cells (claims) covering an aggregate area of approximately 686.58 ha in two adjacent blocks (Figure 4.3), referred to as the “Main” block and the “North” block. There are no surface rights associated to the claims. A list of claims, expiry dates, area, renewal fees and work requirements are presented in Table 4.1. The claims are recorded under the name of Explorateurs-Innovateurs de Québec Inc. (“Ex-In”) who have optioned the Property to QC Copper.

TABLE 4.1					
OPEMISKA PROPERTY, MINERAL TENURE					
Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
Main Block					
P013681	June 21, 2022	193.91	101.00	3,600	1,169,183.45
P014151	June 21, 2022	278.99	101.00	3,600	185,109.47
2387110	June 21, 2022	1.2	34.25	1,000	-
2387111	June 21, 2022	7.57	34.25	1,000	-
2387112	June 21, 2022	5.27	34.25	1,000	-
2387113	June 21, 2022	29.27	67.00	2,500	237.00
2387114	June 21, 2022	0.31	34.25	1,000	-
2387115	June 21, 2022	1.71	34.25	1,000	-
2466404	October 19, 2023	1.72	34.25	500	-
North Block					
2390804	September 16, 2022	55.55	67.00	1,800	7,837.00
2390805	September 16, 2022	55.54	67.00	1,800	-
2390806	September 16, 2022	55.54	67.00	1,800	-

Source: QC Copper and Gold Corp (October 2021)

FIGURE 4.3 OPEMISKA PROPERTY CLAIM MAP



Source: QC Copper and Gold Inc. (2021)

To acquire a 100% interest in the Opemiska Copper Property, the QC Copper and Ex-In entered into a definitive agreement with the effective date being May 23, 2019. Its terms were as follows: By November 23, 2019, the QC Copper will issue 1.5 million shares and 1.5 million warrants (\$0.20 exercise price) and pay \$50,000 to Ex-In (paid and issued November 22, 2019); By May 23, 2021, QC Copper will incur \$500,000 in work expenditures on Opemiska, issue 1.5 million shares and 1.5 million warrants (\$0.25 exercise price) and pay \$150,000 to Ex-In (paid and

issued May 23, 2021); By May 23, 2021, QC Copper will incur an additional \$1,000,000 in work expenditures on Opemiska, issue 2 million shares and 2 million warrants (\$0.30 exercise price) and pay \$300,000 to Ex-In; By May 23, 2023, QC Copper will incur an additional \$1,500,000 in work expenditures on Opemiska, issue 3 million shares and 3 million warrants (\$0.35 exercise price) and pay \$1,000,000 to Ex-In.

The Opemiska Copper Property is subject to a 2% NSR royalty, 50% of which can be re-purchased by QC Copper at a cost of \$4.5 million (\$4.5M). At any time, QC Copper can accelerate its obligations to exercise 100% ownership of Opemiska Copper Property at an earlier date. Subject to certain adjustments in the case of accelerated issuance, all warrants to be issued to Ex-In will expire 36 months after their date of issuance. If QC Copper files a positive Feasibility Study, it will be required to pay advance royalty payments of \$250,000 per year. All securities to be issued to Ex-In will be subject to a four-month hold period in accordance with applicable laws.

In the Province of Québec, the granting of rights related to mining for minerals is primarily governed by the Mining Act (Québec) and administrated by the Québec Ministry of Energy and Natural Resources (the “Ministry” or the “MERN”). Rights in or over mineral substance in Québec form part of the “domain of the State” (public domain) and are subject to limited exceptions for privately owned mineral substances. Mining titles for mineral substance within the public domain are granted and managed by MERN ([www. Gestim](http://www.Gestim)).

A “claim” is the only exploration title for mineral substances (other than surface mineral substances, petroleum, natural gas and brine) currently issued in the Province of Québec. A claim gives its holder the exclusive right to explore for mineral substances in the lands subject to the claim but does not entitle its holder to extract mineral substances, except for sampling and then only in limited quantities. In order to mine mineral substance, the holder of a claim must obtain a mining lease.

The electronic map designation is the most common method of acquiring new claims from the MERN. whereby an applicant makes an online selection of available pre-mapped claim cells. In certain cases, claims can be obtained by physical staking.

A claim is issued for two year periods. At the end of every two year period, a claim can be renewed by the holder provided that the holder: a) submits a renewal application at least 60 days prior to the claim expiry date; b) pays the required fees, which vary according to the surface area of the claim, its location and the date upon which the application is received; and c) satisfies the work requirements related to the claims, which requires that the holder submits the assessment work report and work declaration forms at least 60 days before the claim expiry date. Filing within the 60 day period is subject to late submission payment fees.

When renewing a claim, a holder may apply excess work credits from other claims held under his control, up to the amount required for the renewal. The claim under renewal must be located within a radius of 4.5 km from the center of the claim from which the credits will be used but need not be contiguous. Excess work credits can only be carried forward for a period of 12 years, and after 12 years the balance of the unused credit will be cancelled. If required work was not performed or was insufficient to cover renewal of the claim, the holder may renew the claim

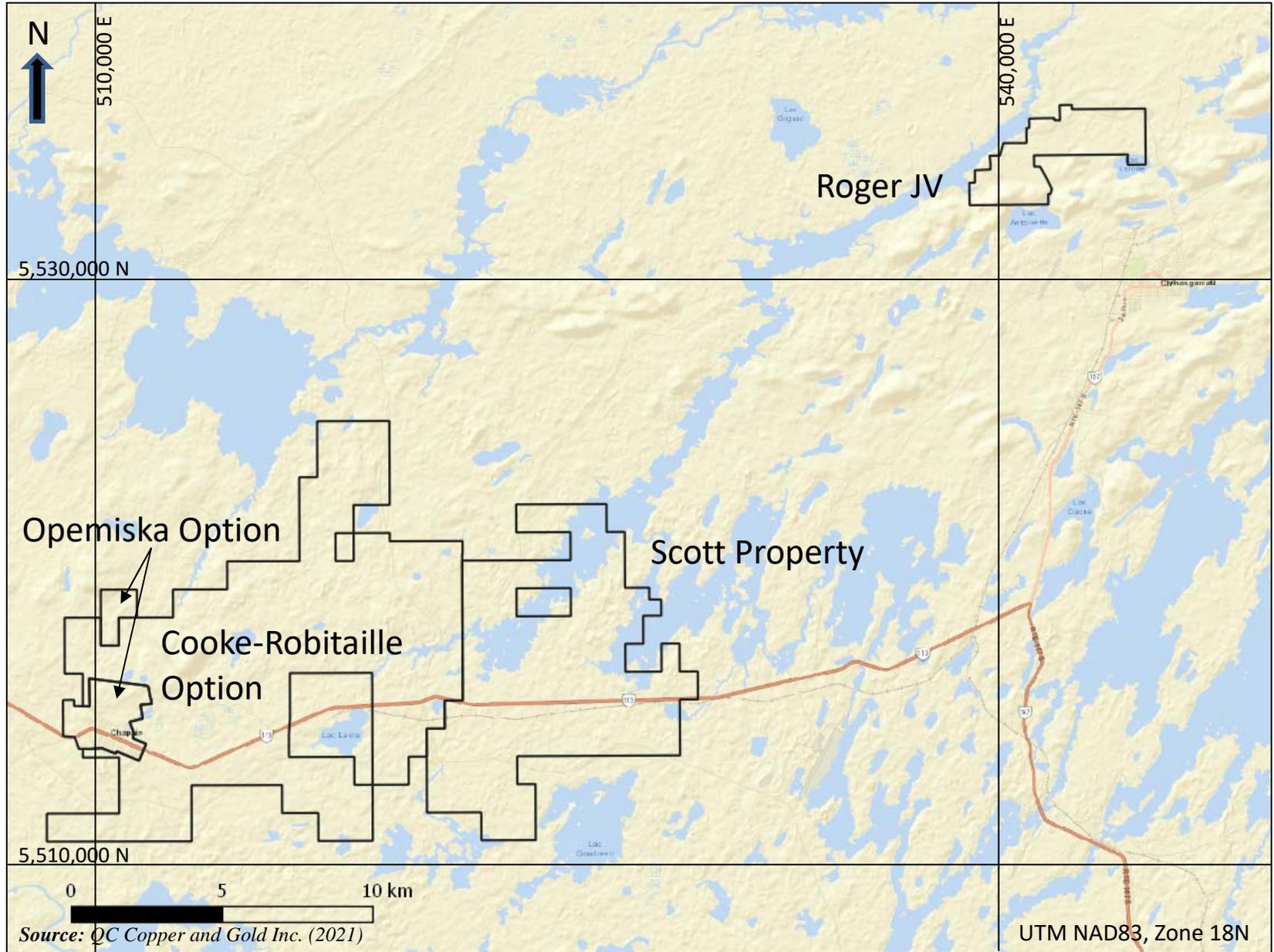
by paying an amount equal to double the minimum cost of work that should have been performed.

The earliest date for the next claim renewal of the Opemiska Property is 21 April 2022, which is 60 days prior to expiry date to avoid penalties.

4.3 OTHER PROPERTIES OF INTEREST

The historical Chapais mining district comprised the Cooke and Robitaille Mines in addition to the Springer and Perry Mines. The Cooke and Robitaille are located on the adjacent Cooke-Robitaille Property that is also under option by QC Copper and Gold from 2736-1179 Québec Inc., a privately owned exploration company based in Québec. Other properties of interest to QC Copper include the Scott Property, which is contiguous and to the east of Cooke-Robitaille and the Roger Property, located further east and to the north of the Town of Chibougamau. Figure 4.4 shows the locations of these properties. For the purposes of this report, these other properties are not considered part of the Opemiska Property because they are subject to a different option agreement and have separate exploration targets. P&E has not reviewed the tenure for the other properties of interest.

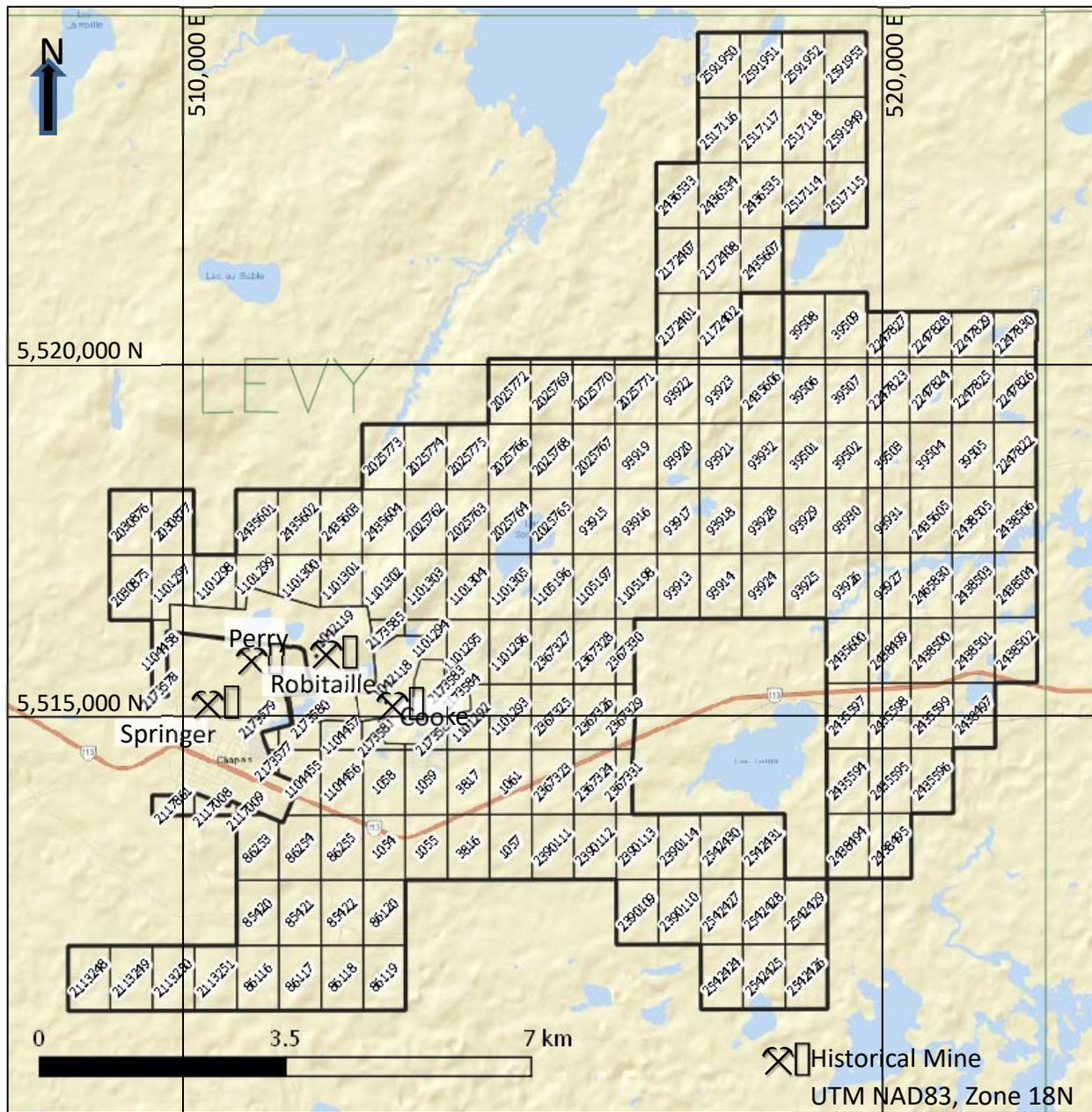
FIGURE 4.4 PROPERTIES OF INTEREST NEAR THE OPEMISKA PROPERTY



4.3.1 Cooke-Robitaille Property

The Cooke-Robitaille Property is located immediately adjacent to the east and is contiguous with the Opemiska Property. The Cooke-Robitaille property is comprised of 179 claims covering a total area of 9,276 hectares and is immediately contiguous to the Opemiska Property and surrounds it on three sides, Figure 4.4. Highway 113 crosses the claims along an east-west axis. The claims are underlain by the same geology that occurs on the Opemiska Property, including the Robitaille and Cooke Mines being two historical producers very similar in nature to the adjacent Springer and Perry Mines, and the Gwillim Fault, an important structural feature in the area, crosses the property for over 11 kilometres and a northeast-southwest axis. Figure 4.5 shows the location of the claims and Table 4.2 lists the claims forming the property. The Cooke-Robitaille Property was the subject of a compilation Technical Report in 2020 that is available on the QC Copper's website and on www.sedar.ca. QC Copper carried out a 12 hole, 3,772 metres, diamond drilling program in 2021. The reader is referred to the 2020 report for a complete review of historical work and assessment of its economic potential.

FIGURE 4.5 COOKE-ROBITAILLE PROPERTY CLAIM MAP



Source: QC Copper and Gold Corp (October 2021)

**TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE**

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
1054	2022-07-24	55.6	67	2,500	nil
1055	2022-07-24	55.6	67	2,500	nil

**TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE**

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
1057	2022-07-24	55.6	67	2,500	nil
1058	2022-07-24	55.59	67	2,500	nil
1059	2022-07-24	55.59	67	2,500	9,276.00
1061	2022-07-24	55.59	67	2,500	nil
3816	2022-09-17	55.6	67	2,500	nil
3817	2022-09-17	55.59	67	2,500	11,349.00
39501	2021-09-22	55.54	67	2,500	
39502	2021-09-22	55.54	67	2,500	98,895.84
39503	2021-09-22	55.54	67	2,500	nil
39504	2021-09-22	55.54	67	2,500	nil
39505	2021-09-22	55.54	67	2,500	nil
39506	2021-09-22	55.53	67	2,500	nil
39507	2021-09-22	55.53	67	2,500	96,511.79
39508	2021-09-22	55.52	67	2,500	10,077.38
39509	2021-09-22	55.52	67	2,500	203.81
85420	2022-07-11	55.61	67	2,500	52,932.71
85421	2022-07-11	55.61	67	2,500	7,494.82
85422	2022-07-11	55.61	67	2,500	nil
86116	2022-07-14	55.61	67	2,500	42,962.00
86117	2022-07-14	55.61	67	2,500	nil
86118	2022-07-14	55.61	67	2,500	nil
86119	2022-07-14	55.61	67	2,500	nil
86120	2022-07-14	55.61	67	2,500	nil
86253	2022-07-11	54.8	67	2,500	52,682.00
86254	2022-07-11	54.76	67	2,500	24,250.00
86255	2022-07-11	55.6	67	2,500	nil
93913	2022-09-13	55.56	67	2,500	nil
93914	2022-09-13	55.56	67	2,500	98,295.89
93915	2022-09-13	55.55	67	2,500	nil
93916	2022-09-13	55.55	67	2,500	nil
93917	2022-09-13	55.55	67	2,500	28,537.96
93918	2022-09-13	55.55	67	2,500	54,333.55
93919	2022-09-13	55.54	67	2,500	nil
93920	2022-09-13	55.54	67	2,500	nil
93921	2022-09-13	55.54	67	2,500	nil
93922	2022-09-13	55.53	67	2,500	nil
93923	2022-09-13	55.53	67	2,500	nil
93924	2022-09-13	55.56	67	2,500	94,827.64
93925	2022-09-13	55.56	67	2,500	nil

TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
93926	2022-09-13	55.56	67	2,500	nil
93927	2022-09-13	55.56	67	2,500	nil
93928	2022-09-13	55.55	67	2,500	nil
93929	2022-09-13	55.55	67	2,500	nil
93930	2022-09-13	55.55	67	2,500	nil
93931	2022-09-13	55.55	67	2,500	nil
93932	2022-09-13	55.54	67	2,500	nil
1042118	2022-12-10	74.4	67	2,500	814,667.50
1042119	2022-12-10	259.85	101	3,600	681,879.15
1101292	2021-09-08	42.44	67	2,500	20,406.76
1101293	2021-09-08	55.58	67	2,500	37,474.79
1101294	2021-09-08	27.45	67	2,500	110,992.87
1101295	2021-09-08	55.57	67	2,500	69,599.73
1101296	2021-09-08	55.57	67	2,500	nil
1101297	2021-09-08	48.32	67	2,500	nil
1101298	2021-09-08	44.9	67	2,500	nil
1101299	2021-09-08	34.64	67	2,500	nil
1101300	2021-09-08	40.15	67	2,500	nil
1101301	2021-09-08	44.42	67	2,500	nil
1101302	2021-09-08	53.95	67	2,500	nil
1101303	2021-09-08	55.56	67	2,500	nil
1101304	2021-09-08	55.56	67	2,500	nil
1101305	2021-09-08	55.56	67	2,500	nil
1104455	2021-11-04	44.67	67	2,500	nil
1104456	2021-11-04	55.59	67	2,500	nil
1104457	2021-11-04	24.68	34.25	1,000	56,796.00
1104458	2021-11-04	20.85	34.25	1,000	nil
1105196	2021-11-14	55.56	67	2,500	nil
1105197	2021-11-14	55.56	67	2,500	nil
1105198	2021-11-14	55.56	67	2,500	nil
2025762	2021-09-21	55.55	67	2,500	nil
2025763	2021-09-21	55.55	67	2,500	nil
2025764	2021-09-21	55.55	67	2,500	nil
2025765	2021-09-21	55.55	67	2,500	nil
2025766	2021-09-21	55.54	67	2,500	nil
2025767	2021-09-21	55.54	67	2,500	nil
2025768	2021-09-21	55.54	67	2,500	nil
2025769	2021-09-21	55.53	67	2,500	nil
2025770	2021-09-21	55.53	67	2,500	nil

**TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE**

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2025771	2021-09-21	55.53	67	2,500	nil
2025772	2021-09-21	55.53	67	2,500	nil
2025773	2021-09-21	55.54	67	2,500	nil
2025774	2021-09-21	55.54	67	2,500	nil
2025775	2021-09-21	55.54	67	2,500	nil
2030875	2021-10-26	55.56	67	2,500	nil
2030876	2021-10-26	55.55	67	2,500	nil
2030877	2021-10-26	55.55	67	2,500	nil
2113248	2022-07-30	55.61	67	2,500	nil
2113249	2022-07-30	55.61	67	2,500	nil
2113250	2022-07-30	55.61	67	2,500	nil
2113251	2022-07-30	55.61	67	2,500	nil
2117008	2022-08-12	13.05	34.25	1,000	nil
2117009	2022-08-12	3.48	34.25	1,000	nil
2117861	2022-08-15	17.62	34.25	1,000	nil
2172401	2021-10-02	55.52	67	1,800	nil
2172402	2021-10-02	55.52	67	1,800	nil
2172407	2021-10-02	55.51	67	1,800	nil
2172408	2021-10-02	55.51	67	1,800	nil
2173577	2021-11-04	4.25	34.25	1,000	nil
2173578	2021-11-04	3.5	34.25	1,000	nil
2173579	2021-11-04	5.83	34.25	1,000	nil
2173580	2021-11-04	25.27	67	2,500	nil
2173581	2022-07-24	14.62	34.25	1,000	nil
2173582	2022-07-24	12.05	34.25	1,000	nil
2173583	2021-09-08	0.03	34.25	1,000	nil
2173584	2021-09-08	0.37	34.25	1,000	nil
2173585	2021-09-08	15.11	34.25	1,000	nil
2247822	2021-08-26	55.54	67	1,800	nil
2247823	2021-08-26	55.53	67	1,800	96,149.93
2247824	2021-08-26	55.53	67	1,800	nil
2247825	2021-08-26	55.53	67	1,800	nil
2247826	2021-08-26	55.53	67	1,800	nil
2247827	2021-08-26	38.99	67	1,800	nil
2247828	2021-08-26	38.98	67	1,800	nil
2247829	2021-08-26	38.96	67	1,800	nil
2247830	2021-08-26	38.94	67	1,800	nil
2367323	2021-10-15	55.59	67	2,500	69,756.13
2367324	2021-10-15	55.59	67	2,500	8,050.85

**TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE**

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2367325	2021-10-15	55.58	67	2,500	18,705.84
2367326	2021-10-15	55.58	67	2,500	40,559.80
2367327	2021-10-15	55.57	67	2,500	10,209.53
2367328	2021-10-15	55.57	67	2,500	27,534.53
2367329	2021-10-15	24.55	34.25	1,000	4,182.27
2367330	2021-10-15	24.97	34.25	1,000	4,273.27
2367331	2021-10-15	21.7	34.25	1,000	1,584.70
2390109	2022-09-05	55.61	67	1,800	nil
2390110	2022-09-05	55.61	67	1,800	nil
2390111	2022-09-05	55.6	67	1,800	nil
2390112	2022-09-05	55.6	67	1,800	17,130.89
2390113	2022-09-05	55.6	67	1,800	nil
2390114	2022-09-05	55.6	67	1,800	nil
2435594	2023-01-06	55.59	67	1,200	nil
2435595	2023-01-06	55.59	67	1,200	nil
2435596	2023-01-06	55.59	67	1,200	nil
2435597	2023-01-06	55.58	67	1,200	nil
2435598	2023-01-06	55.58	67	1,200	nil
2435599	2023-01-06	55.58	67	1,200	nil
2435600	2023-01-06	55.57	67	1,200	nil
2435601	2023-01-06	55.55	67	1,200	nil
2435602	2023-01-06	55.55	67	1,200	nil
2435603	2023-01-06	55.55	67	1,200	nil
2435604	2023-01-06	55.55	67	1,200	nil
2435605	2023-01-06	55.55	67	1,200	nil
2435606	2023-01-06	55.53	67	1,200	nil
2435607	2023-01-06	55.51	67	1,200	nil
2436533	2023-01-27	55.5	67	1,200	nil
2436534	2023-01-27	55.5	67	1,200	nil
2436535	2023-01-27	55.5	67	1,200	nil
2438494	2023-03-20	55.6	67	1,200	nil
2438495	2023-03-20	55.6	67	1,200	nil
2438497	2023-03-20	55.58	67	1,200	nil
2438499	2023-03-20	55.57	67	1,200	nil
2438500	2023-03-20	55.57	67	1,200	nil
2438501	2023-03-20	55.57	67	1,200	nil
2438502	2023-03-20	55.57	67	1,200	nil
2438503	2023-03-20	55.56	67	1,200	nil
2438504	2023-03-20	55.56	67	1,200	nil

TABLE 4.2
COOKE-ROBITAILLE PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2438505	2023-03-20	55.55	67	1,200	nil
2438506	2023-03-20	55.55	67	1,200	nil
2465830	2021-10-12	55.56	67	1,200	nil
2517114	2023-04-29	55.5	67	1,200	nil
2517115	2023-04-29	55.5	67	1,200	nil
2517116	2023-04-29	55.49	67	1,200	nil
2517117	2023-04-29	55.49	67	1,200	nil
2517118	2023-04-29	55.49	67	1,200	nil
2542424	2022-08-21	55.61	67	1,200	nil
2542425	2022-08-21	55.61	67	1,200	nil
2542426	2022-08-21	55.61	67	1,200	nil
2542427	2022-08-21	55.61	67	1,200	nil
2542428	2022-08-21	55.61	67	1,200	nil
2542429	2022-08-21	55.61	67	1,200	nil
2542430	2022-08-21	55.6	67	1,200	nil
2542431	2022-08-21	55.6	67	1,200	nil
2591949	2022-12-20	55.49	67	1,200	nil
2591950	2022-12-20	55.48	67	1,200	nil
2591951	2022-12-20	55.48	67	1,200	nil
2591952	2022-12-20	55.48	67	1,200	nil
2591953	2022-12-20	55.48	67	1,200	nil

Source: QC Copper and Gold Corp (October 2021)

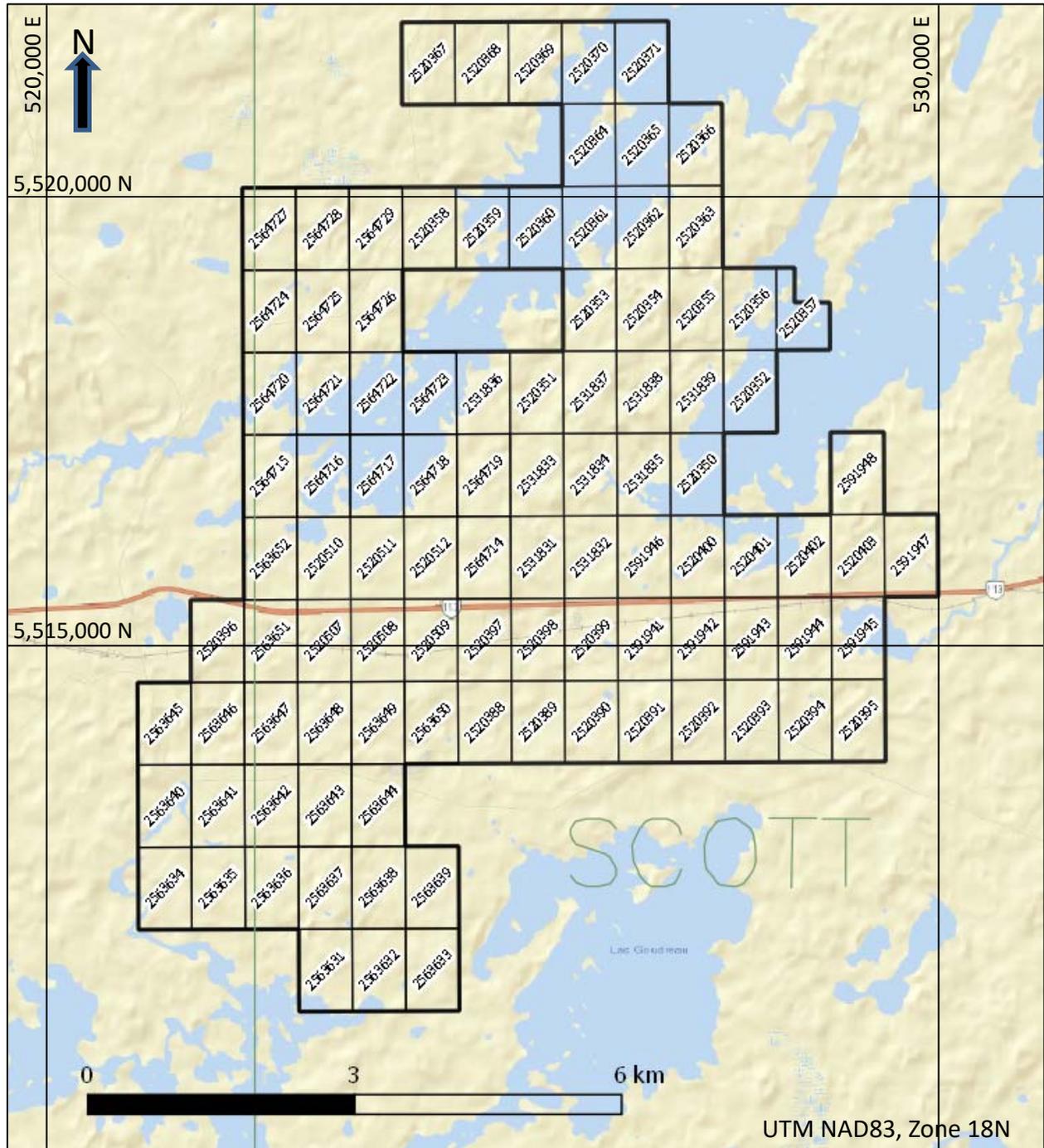
The western part of the property has seen much more exploration and is the host for the two historical mines, the Robitaille and Cooke, and is underlain by the Venture and Bourbeau sills, the important hosts in the camp. The central and eastern areas of the property, which have been much less explored, are underlain by the Blondeau volcanics and sediments, and the underlying Gilman mafic volcanics, and the Waconichi felsic volcanic rocks. The Robitaille Mine is hosted by the Venture Sill and is almost parallel to the Beaver Lake Fault which forms the hinge zone of the Beaver Lake antiform and extends at least to the Gwillim Fault. South of the fault, along a nearly parallel trend, is the historical Cooke Mine, hosted by the Bourbeau Sill and the Raymond Fault. Recent interpretations suggest that the Cooke hosting structure is the same as the Beaver Lake Fault and the mineralization event at Cooke and Robitaille are thought to be the same event.

4.3.2 Scott Property

The Scott Property is composed of 99 claims covering 5,652 hectares in Scott and Levy townships, near Chibougamau, Québec. The claims are contiguous with QC Copper's Cooke-Robitaille Property and straddle highway 113 which crosses the claims along an east-west axis.

The property has not been explored on the ground by the Company and the only work done to date has been a high-resolution airborne magnetic survey. The Scott Property claims general location is shown in Figure 4.4, individual claims are located in Figure 4.6 and listed in Table 4.3.

FIGURE 4.6 SCOTT PROPERTY CLAIM MAP



Source: QC Copper and Gold Corp (October 2021)

TABLE 4.3
SCOTT PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2520350	July 4, 2021	55.56	67	1,200	nil
2520351	July 4, 2021	55.55	67	1,200	nil
2520352	July 4, 2021	55.55	67	1,200	nil
2520353	July 4, 2021	55.54	67	1,200	5,888.68
2520354	July 4, 2021	55.54	67	1,200	nil
2520355	July 4, 2021	55.54	67	1,200	nil
2520356	July 4, 2021	55.54	67	1,200	5,888.68
2520357	July 4, 2021	40.03	67	1,200	nil
2520358	July 4, 2021	55.53	67	1,200	nil
2520359	July 4, 2021	55.53	67	1,200	5,888.68
2520360	July 4, 2021	55.53	67	1,200	nil
2520361	July 4, 2021	55.53	67	1,200	5,888.68
2520362	July 4, 2021	55.53	67	1,200	5,888.68
2520363	July 4, 2021	55.53	67	1,200	5,888.68
2520364	July 4, 2021	55.52	67	1,200	5,888.68
2520365	July 4, 2021	55.52	67	1,200	5,888.68
2520366	July 4, 2021	55.52	67	1,200	5,888.68
2520367	July 4, 2021	55.51	67	1,200	nil
2520368	July 4, 2021	55.51	67	1,200	nil
2520369	July 4, 2021	55.51	67	1,200	nil
2520370	July 4, 2021	55.51	67	1,200	5,888.68
2520371	July 4, 2021	55.51	67	1,200	nil
2520388	July 9, 2021	55.59	67	1,200	nil
2520389	July 9, 2021	55.59	67	1,200	nil
2520390	July 9, 2021	55.59	67	1,200	nil
2520391	July 9, 2021	55.59	67	1,200	nil
2520392	July 9, 2021	55.59	67	1,200	nil
2520393	July 9, 2021	55.59	67	1,200	nil
2520394	July 9, 2021	55.59	67	1,200	nil
2520395	July 9, 2021	55.59	67	1,200	nil
2520396	July 9, 2021	55.58	67	1,200	nil
2520397	July 9, 2021	55.58	67	1,200	nil
2520398	July 9, 2021	55.58	67	1,200	5,888.68
2520399	July 9, 2021	55.58	67	1,200	5,888.68
2520400	July 9, 2021	55.57	67	1,200	5,888.68
2520401	July 9, 2021	55.57	67	1,200	5,888.68
2520402	July 9, 2021	55.57	67	1,200	nil
2520403	July 9, 2021	55.57	67	1,200	nil

TABLE 4.3
SCOTT PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2520507	July 9, 2021	55.58	67	1,200	5,888.69
2520508	July 9, 2021	55.58	67	1,200	5,888.69
2520509	July 9, 2021	55.58	67	1,200	nil
2520510	July 9, 2021	55.57	67	1,200	5,888.69
2520511	July 9, 2021	55.57	67	1,200	5,888.69
2520512	July 9, 2021	55.57	67	1,200	nil
2531831	February 21, 2022	55.57	67	1,200	nil
2531832	February 21, 2022	55.57	67	1,200	nil
2531833	February 21, 2022	55.56	67	1,200	nil
2531834	February 21, 2022	55.56	67	1,200	nil
2531835	February 21, 2022	55.56	67	1,200	nil
2531836	February 21, 2022	55.55	67	1,200	nil
2531837	February 21, 2022	55.55	67	1,200	nil
2531838	February 21, 2022	55.55	67	1,200	nil
2531839	February 21, 2022	55.55	67	1,200	nil
2563631	May 4, 2022	55.62	67	1,200	nil
2563632	May 4, 2022	55.62	67	1,200	nil
2563633	May 4, 2022	55.62	67	1,200	nil
2563634	May 4, 2022	55.61	67	1,200	nil
2563635	May 4, 2022	55.61	67	1,200	nil
2563636	May 4, 2022	55.61	67	1,200	nil
2563637	May 4, 2022	55.61	67	1,200	nil
2563638	May 4, 2022	55.61	67	1,200	nil
2563639	May 4, 2022	55.61	67	1,200	nil
2563640	May 4, 2022	55.6	67	1,200	nil
2563641	May 4, 2022	55.6	67	1,200	nil
2563642	May 4, 2022	55.6	67	1,200	nil
2563643	May 4, 2022	55.6	67	1,200	nil
2563644	May 4, 2022	55.6	67	1,200	nil
2563645	May 4, 2022	55.59	67	1,200	nil
2563646	May 4, 2022	55.59	67	1,200	nil
2563647	May 4, 2022	55.59	67	1,200	nil
2563648	May 4, 2022	55.59	67	1,200	nil
2563649	May 4, 2022	55.59	67	1,200	nil
2563650	May 4, 2022	55.59	67	1,200	nil
2563651	May 4, 2022	55.58	67	1,200	nil
2563652	May 4, 2022	55.57	67	1,200	nil
2564714	May 14, 2022	55.57	67	1,200	nil

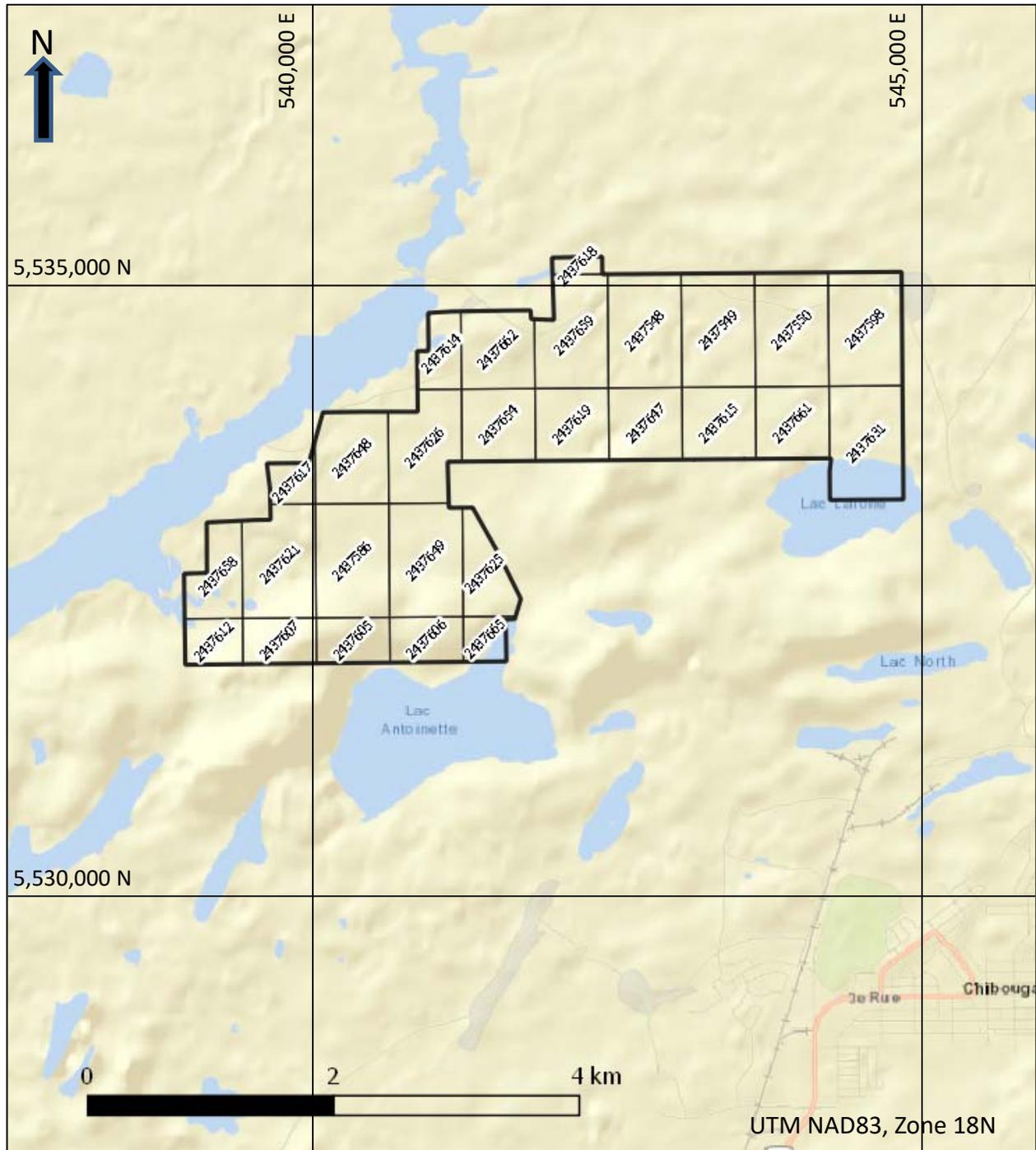
TABLE 4.3
SCOTT PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2564715	May 14, 2022	55.56	67	1,200	nil
2564716	May 14, 2022	55.56	67	1,200	nil
2564717	May 14, 2022	55.56	67	1,200	nil
2564718	May 14, 2022	55.56	67	1,200	nil
2564719	May 14, 2022	55.56	67	1,200	nil
2564720	May 14, 2022	55.55	67	1,200	nil
2564721	May 14, 2022	55.55	67	1,200	nil
2564722	May 14, 2022	55.55	67	1,200	nil
2564723	May 14, 2022	55.55	67	1,200	nil
2564724	May 14, 2022	55.54	67	1,200	nil
2564725	May 14, 2022	55.54	67	1,200	nil
2564726	May 14, 2022	55.54	67	1,200	nil
2564727	May 14, 2022	55.53	67	1,200	nil
2564728	May 14, 2022	55.53	67	1,200	nil
2564729	May 14, 2022	55.53	67	1,200	nil
2591941	December 20, 2022	55.58	67	1,200	nil
2591942	December 20, 2022	55.58	67	1,200	nil
2591943	December 20, 2022	55.58	67	1,200	nil
2591944	December 20, 2022	55.58	67	1,200	nil
2591945	December 20, 2022	55.58	67	1,200	nil
2591946	December 20, 2022	55.57	67	1,200	nil
2591947	December 20, 2022	55.57	67	1,200	nil
2591948	December 20, 2022	55.56	67	1,200	nil

4.3.3 Roger Property

The Roger Property is a 50/50 joint venture between QC Copper and SOQUEM, the Québec government mineral exploration company. The property is comprised of 28 claims covering 986.5 hectares and is located a few kilometres north of the town of Chibougamau, Québec in the township of McKenzie. The general location of the claims is shown in Figure 4.4 and individual claims are displayed in Figure 4.7 and listed in Table 4.4.

FIGURE 4.7 ROGER PROPERTY CLAIM MAP



Source: QC Copper and Gold Corp (October 2021)

TABLE 4.4
ROGER PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (\$)	Work Requirement (\$)	Banked Credits (\$)
2437548	November 29, 2021	55.38	67	2,500	40,370.95
2437549	November 29, 2021	55.38	67	2,500	40,370.95
2437550	November 29, 2021	55.38	67	2,500	40,370.95
2437586	November 29, 2021	55.4	67	2,500	40,386.12
2437598	November 29, 2021	55.38	67	2,500	40,370.96
2437605	November 29, 2021	22.1	67	1,000	16,108.95
2437606	November 29, 2021	22	67	1,000	16,033.12
2437607	November 29, 2021	22.21	67	1,000	16,192.37
2437612	November 29, 2021	17.55	67	1,000	12,658.58
2437614	November 29, 2021	19.63	67	1,000	14,235.89
2437615	November 29, 2021	35.1	67	2,500	24,607.57
2437616	November 29, 2021	0.35	34.25	1,000	nil
2437617	November 29, 2021	12.99	67	1,000	8,866.96
2437618	November 29, 2021	5.73	67	1,000	3,695.19
2437619	November 29, 2021	35.18	67	2,500	86,556.79
2437621	November 29, 2021	52.45	67	2,500	38,149.07
2437625	November 29, 2021	27.47	67	2,500	19,206.15
2437626	November 29, 2021	47.21	67	2,500	34,175.46
2437631	November 29, 2021	55.33	67	2,500	40,333.03
2437647	November 29, 2021	35.13	67	2,500	25,014.91
2437648	November 29, 2021	43.89	67	2,500	30,315.59
2437649	November 29, 2021	54.97	67	2,500	40,060.04
2437654	November 29, 2021	35.24	67	2,500	25,098.33
2437658	November 29, 2021	29.55	67	2,500	20,783.47
2437659	November 29, 2021	49.75	67	2,500	390,637.82
2437661	November 29, 2021	35.08	67	2,500	24,977.00
2437662	November 29, 2021	37.82	67	2,500	27,054.79
2437665	November 29, 2021	12.89	67	1,000	9,124.79

4.4 ENVIRONMENTAL AND PERMITTING

When land in the Province of Québec is not privately owned, it belongs primarily to the Crown, and in most relevant instances, this is the Province of Québec. In the case of Crown land, access is generally unlimited.

No work permit is required in the Province of Québec in order to conduct mapping, sampling and geophysical surveys in relation to a claim. The holder may extract and dispatch mineral

substances, but only for geological or geochemical sampling and in a quantity not in excess of 50 metric tons.

A regular forest management permit or “permis d’intervention en forêt” is required to be obtained from the MERN in order to conduct surface drilling, trenching or stripping on the Property. In addition, and since the start of 2021, a declaration must be registered with the Québec ministry of the environment whether or not the proposed work will be performed on any potential wetlands. Additional permitting and environmental studies would be required if a claim were to be developed beyond the exploration stage. Permitting for underground exploration is more complex to negotiate, involving numerous levels of regulations.

Additional requirements are mandatory for exploration close to city centers. It is recommended that the owner of a claim conforms to certain additional conditions, obligations or restrictions as part of the exercise of its mining rights notably:

- Article 65 of the mining act states that when a claim is located on the territory of a local municipality, the owner of the claim must “INFORM” the municipality and also the private landowners of the exploration work that are being planned at least 30 days before the beginning of program.
- Article 71.1 of the mining act also states that before December 31st of each year, the owner of a claim must transmit to the Ministry a report (the “*Annual Report*”) which mention, per claim, all exploration work completed during the year.

The Opemiska claims are located on the territory of the Municipality of Chapais, adjacent to Eeyou Istchee Baie James Territories and there is an obligation to consult with First Nations (“FN”). The closest reserve is Oujé-Bougoumou but the Springer and Perry Mines are located on traplines belonging to Waswanipi FN.

The Opemiska claims are also located on “Category III” lands on which Indigenous people can, while respecting the principles of conservation, carry on their traditional activities year round, and on which they have exclusive rights to certain animal species.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESS

The Opemiska Project is road accessible. The Chapais–Chibougamau area is an active mining and forestry center with a population of over 10,000 residents. Chapais borders paved highway number (“no.”) 113 and is located 40 km west of Chibougamau which straddles highway no. 167. Highway no. 113 connects Chapais to the Abitibi and highway no. 167 heads south to the Saguenay – Lac St-Jean area. These all-weather paved highways are maintained year round.

The Chapais-Chibougamau area is serviced by the same airport, located between the two towns, and offers three times a week regular scheduled direct flights to Montreal, Québec (via Air Creebec).

The Opemiska claims comprise two blocks, the Main Block partly underlies the town of Chapais and the North Block, located about 1.0 km north of the Main Block, can easily be accessed via forestry roads. The area around the North Block has been recently harvested but nevertheless some areas are still forested with tall spruce, jack pine, birch and poplar.

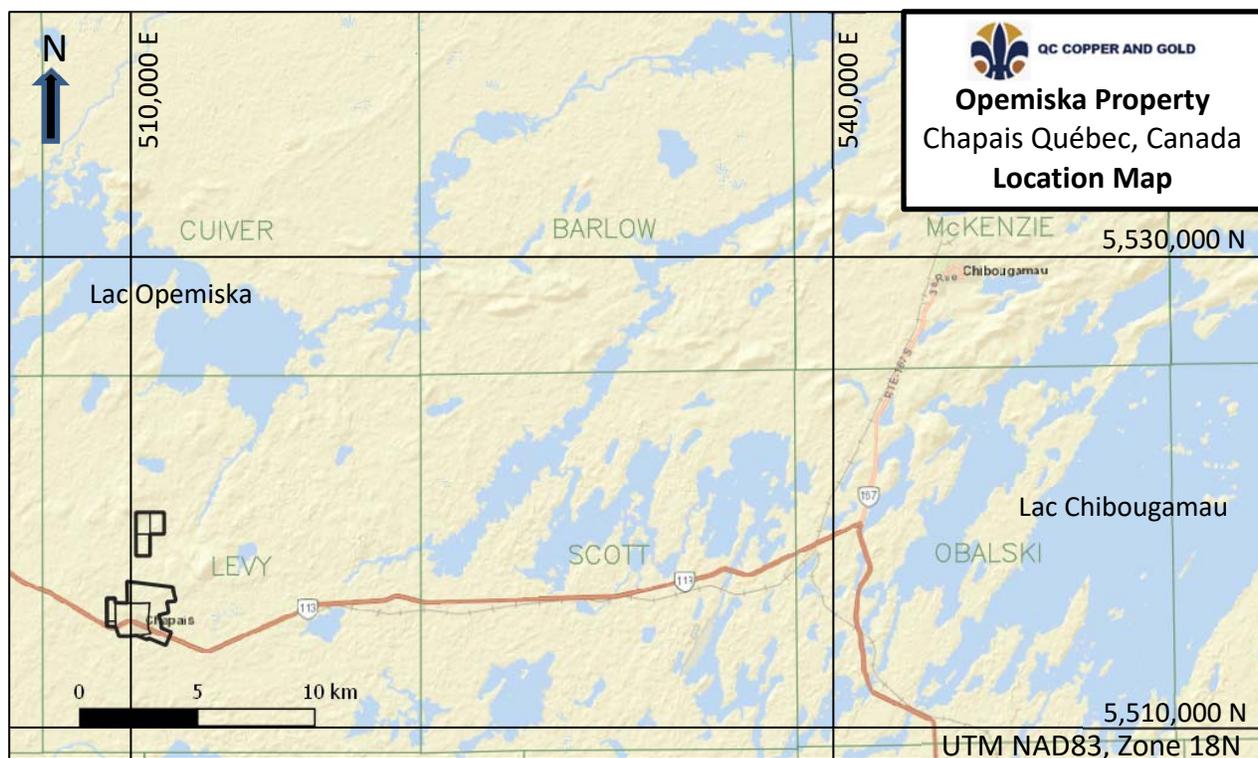
5.2 CLIMATE

The area has a humid sub-arctic continental climate with cool summers and cold winters. Climate conditions are fairly typical of the Canadian Shield. the temperature varies from an average minimum of -26°C in winter (January and February) to an average maximum of 22°C in the summer (July and August). Extreme temperatures below -36°C or above +27°C can be expected. Rainfall is usually frequent in the summer with no dry season. Snowfall is common in the winter, particularly in the early and latter part of the season. The “warm” season usually lasts from mid-May to mid-September and the “cold” season from early December to early March. Generally, exploration work can be carried out year-round.

5.3 LOCAL RESOURCES

A highly specialized work force resides in Chibougamau and within the Abitibi Region. The successful mining history of Chapais–Chibougamau over the last 60 years resulted in the establishment of very experienced miner workforce along with the full range of associated secondary tradesmen. Figure 5.1 shows the local communities where this work force resides.

FIGURE 5.1 PROPERTY LOCATION MAP SHOWING LOCAL COMMUNITIES



Source: QC Copper and Gold Inc. (2021)

5.4 INFRASTRUCTURE

Hydro-electric power, sufficient water for mining operations, and good infrastructure for exploration and mining operations are readily available in the Project area.

5.5 PHYSIOGRAPHY

The physiography of the general area is one of rolling hills and abundant lakes and rivers. Forest cover is variable, selected areas have been harvested. The overburden cover generally consists of sand, clay and boulders varying in thickness from 1.0 m to locally more than 80 metres along major regional faults. There are few bedrock exposures in general and widespread swampy areas are found within moderately to locally densely-forested sectors.

The elevation of the lakes in the general area is approximately 390 metres above sea level. The general elevation averages approximately 400 m above sea level, except for Mont Springer located a few kilometres to the northeast of the Project (elevation 540 m). Drainage in the Project area is toward the west into James Bay through the Waswanipi and Nottaway Rivers.

6.0 HISTORY

Three main periods of mining activities have occurred on the Opemiska Property and the surrounding area. Falconbridge Copper Limited, the original developer on the mining claims changed its name in 1980 to become **Corporation Falconbridge Copper** and again in 1987 to **Minnova Inc.**

6.1 EXPLORATION HISTORY 1929 TO 1953

Initial exploration between 1929 and 1953 predated mining operations. Within the area, a preliminary phase of surface exploration and discoveries occurred on the Opemiska Property and surrounding area following the discovery by Leo Springer in 1929 on what would become the Springer Mine. The discovery made by Mr. Leo Springer of the Springer Syndicate, was assisted by Lloyd Rochester, a pilot of Prospectors Airways. The showing lies on high outcrops that were visible as the area was burned over at the time. The chalcopyrite discovery was hosted in a gabbro dyke and the mineralized area was 1,200 feet (365.75 m) long and 800 feet (243.85 m) wide in a north-south direction.

The first development work on the Property was done in 1935 (GM 02098) and consisted of trenching and diamond drilling. Underground development was undertaken in 1936. A three compartment shaft was sunk to 168 m (550 ft) and extensive lateral work and underground drilling was carried out on the 46, 84 and 152 m (150, 275, and 500 ft) levels. Work was suspended in 1937 due to low metal prices.

In 1951 a decision was made to re-open the mine and place it in production at an initial processing rate of 400 tons per day. This decision was facilitated by the completion of the new highway connecting Chibougamau to St. Felicien, Lac St-John area, which allowed the development of the mining industry in the Chapais–Chibougamau district to proceed. The old buildings were rehabilitated along with new construction, including a new concrete shaft collar. A total of 6,100 m (20,000 ft) of exploratory surface drilling was completed in 1952.

The following documents in Table 6.1 prefixed with “GM” below refer to archive numbers in the Québec SIGEOM geoscientific archive of historical assessment work. The documents can be searched online and downloaded free of charge. In addition, the documents are all georeferenced on government compilation maps.

Assessment Report ID (Year)	Work Performed By	Work Summary
GM-03556 (1929)	Retty, J.A.	Geological Report by the MRN Claims Springer. The report describes the “Lake Opemiska Copper showing” which was visited in 1929.
GM-03558 (1933)	Opemiska Copper Mines	Geological Report with Technical

TABLE 6.1
HISTORICAL ASSESSMENT REPORTS 1929 TO 1951

Assessment Report ID (Year)	Work Performed By	Work Summary
	Ltd. Huston, M.B. Energy Mines and Resources Canada.	Evaluation, Map showing original drilling (+ composites) and also trenches with assays.
GM-03559 (1935)	Opemiska Copper Mines Ltd. Taschereau, R.H.	Information Report.
GM-01833 (1952)	Opemiska Copper Mines Ltd. Derry D.R.	Interim Report on Geology and Diamond Drilling Results.
GM-02005 (1951)	Graham R.B. Evaluation Technique.	Summary of Exploration and Development Activities.
GM-02098 (1952)	Thompson J.M. for OPEMISKA COPPER MINES (QUE).	Report on Opemiska Copper Mines.

6.2 EXPLORATION AND MINING 1953 TO 1991

Opemiska Copper Mines went into production in December 1953 and was in production until June 1991, after more than 37 years of operation. Total production from the Springer, Perry, Robitaille and Cooke Mines amounted to 23,989,030 tonnes which produced 517,126 tonnes copper, 27,074 kg of gold and 282,000 kg of silver (DV 92-01).

Production came from seven easterly-trending mineralization zones, the No. 1, 2, 3 (or Main Ore Zone), 3, 4, 5 and No. 6 Zones. The mineralized zones are reported to have been sharp-walled except for No 3 or “Main Ore Zone” that is hosted by a shear or fault zone containing a breccia-type ore showing altered gabbro remnants set in a sulphide (mainly chalcopyrite) matrix.

Detailed drilling in the spring of 1956 outlined an important ore body in the Perry Zone area. The outlined ore body strikes 330° and dips 56° to the north. A fault with a strike of 130° and a southwest dip lies from 15 to 120 m southwest of the Perry Zone. The mineralization in the Perry Zone is described as heavy impregnation of sulphides in the host rocks with some sections of massive sulphides. The alteration is partial chloritization without marked change to the original rock texture. The sulphides present are mainly chalcopyrite and pyrite with some pyrrhotite and arsenopyrite. Quartz vein sections containing sulphides are common in the ore horizon.

In October 1986, an agreement between Minnova (formerly Falconbridge) and Québec Ministry of Energy and Resources facilitated an exploration program at Springer, Perry and Cooke Mine which were all part of the Minnova / Opemiska Division at the time. On the three projects, underground drilling totalled 13,263 metres (43,502 ft) in 119 drill holes and a total of 667 metres of exploration drifting (2,187 ft). The report notes that as of March 31, 1987, a total of 24,986,356 tons of ore grading 2.29% Cu, 0.033 oz/T Au, and 0.35 oz/T Ag had been extracted from four distinct deposits: Springer, Perry, Robitaille and Cooke. It is also stated that in 1987,

with the low copper price, the secondary products, gold and silver became targets for exploration.

The following documents in Table 6.2 prefixed with “GM” below refer to archive numbers in the Québec SIGEOM geoscientific archive of historical assessment work. the documents are all georeferenced on government compilation maps.

TABLE 6.2	
OPEMISKA PROPERTY ASSESSMENTS FILED	
Assessment File ID (Year)	Summary
GM-2700 (1954)	Information Report. Cornwall, F.W. for the MRN. OPEMISKA COPPER MINES LTD.
GM-04273 (1956)	Information Report. Opemiska Copper Mines Ltd. Assad, J.R. MRN Sketch Map with “Campbell Lake Fault”.
GM-46158 (1987)	Rapport Géologique de la Partie Nord Ouest de la Propriété Bourbeau West. Cormier J.M. MINNOVA INC.
MM 87-03 (1989)	Etude métallogénique (aurifère) du Filon Couche de Bourbeau (région de Chibougamau). MRN. Dubé B., Guha J.
GM-049654 (1990)	Rapport des travaux d’exploration effectués entre le 1er Septembre 1986 et le 31 Mars 1987 sur les propriétés minières de Minnova Inc., Division Opemiska, canton Levy. Doiron G., géologue de projet. 30 Avril 1987 (numerous maps are appended to the report: sections, level plans, drifts, and longitudinal sections detailing Veine 10-2S, No. 4, No. 5, No. 6 at SPRINGER and Vein A at PERRY beside work carried at adjacent Cooke Mine).

6.3 SUMMARY OF HISTORICAL DIAMOND DRILLING BY FALCONBRIDGE AND SUCCESSOR COMPANIES

Ex-In and QC Copper recovered most of the maps, plans, vertical and longitudinal sections and diamond drill logs that were prepared and used during the mining operations at Springer and Perry Mines. All the material was scanned. The named and mined veins were digitized along with all stopes and underground drifts and crosscuts. This information was used to build the 3-D model of Springer and Perry Mines. None of the drill core that was retained from surface and underground drilling during the mining period was preserved and there is no possibility of directly validating historical assays. This issue is addressed later in Item 12, Data Verification, but in summary a number of historical surface holes were twinned for the 2019 and 2021 diamond drilling programs and the assay results and logs were compared in detail with the historical drilling with the ultimate objective of validating all the historical mining results.

A total of 612 surface and 15,287 underground diamond drill holes, totalling 82,767 and 861,542 metres, respectively, were completed on the Opemiska Property by Falconbridge between the discovery of Springer in 1932 and closure of the mine in 1991. All the drill hole collars were recorded in mine grid coordinates and were logged in imperial units. In order to standardize and metricize the results accurate transformation equations were calculated by Paul Roy, Québec

Land Surveyor in Chibougamau, Québec, for the coordinates between the mine grid, UTM NAD83 and Zone 18 coordinate systems. Table 6.3 summarizes the transformation parameters. Over the years these equations were validated and confirmed when new surface drill casings were located and georeferenced. In addition, QC Copper's drilling located buried drill casings within 1 or 2 metre accuracy when bulldozing new drill setups and projected stopes were typically encountered within a few of metres of anticipated down hole depth locations.

TABLE 6.3
COORDINATE TRANSFORMATION EQUATIONS CALCULATED BY
PAUL ROY, QUÉBEC LAND SURVEYOR, CHIBOUGAMAU, QUÉBEC

Mine to UTM NAD83, Zone18 co-ordinates transformation equations:

$$X_UTM = (0.3048 * X_Mine) + 508249.09$$

$$Y_UTM = (0.3048 * Y_Mine) + 5513407.36$$

$$Z_UTM = (Z_Mine - 3676.91) * 0.3048$$

UTM NAD83, Zone 18 to Mine co-ordinates transformation equations:

$$X_Mine = (X_UTM - 508249.09)/0.3048$$

$$Y_Mine = (Y_UTM - 5513407.36)/0.3048$$

$$Z_Mine = (Z_UTM/0.3048) + 3676.91$$

For each drill hole collar, the original coordinates were captured along with the azimuth and dip of the collar, the year of drilling, the down hole deviation measured with either Tropari instrument or an acid test and all the assays as recorded on the log. Since no assays certificates were preserved and even if they existed, the samples were assayed at the mine laboratory. No information is available as to the sample preparation or analytical methods used by the mine.

All named veins were digitized on georeferenced vertical cross sections and veins were subsequently snapped to drill hole vein intersections. All known stopes were also digitized.

6.4 EXPLORATION HISTORY 1993 TO 2016

Surface exploration works completed by Ex-In who acquired claims over the Springer and Perry Mines in 1995, is described in this section. A list of mineralization targets compiled by Ex-In in 2002 is provided in Table 6.4.

TABLE 6.4
LIST OF TARGETS DEFINED BY EX-IN IN 2002

Vein	Diamond Drill Hole ID	Width (m)	Cu (%)	Au (g/t)	Location Mine Grid (feet)	Depth (m)	Underground Workings
Springer Mine							
Vein 1	Channel sample	3.20	14.20	0.34	5275 N / 4945 E	1.50	Surface (stope @ 37.0 m below)
	Channel sample	2.10	4.20	2.06	5320 N / 4700 E	1.50	Surface (stope @ 18.0 m below)
Vein 2	Channel sample	1.98	9.10	4.80	5165 N / 4500 E	1.50	Surface (stope @ 61.0 m below)
	S-25	0.55	10.40	2.74	5205 N / 4266 E	3.35	no
	S-25	0.45	8.50	1.37	5195 N / 4266 E	6.40	no
Vein 2	Channel sample	2.87	4.30	0.34	5060 N / 5200 E	0.00	Surface (stope @ 25.9 m below)
	S-87	1.92	3.90	1.02	5070 N / 5348 E	6.70	(stope @ 23.8 m below)
Vein 2E	S-159	0.76	7.10	0.69	5377 N / 6504 E	4.57	no
	S-51	1.10	8.30	1.03	5599 N / 6091 E	17.07	no
	S-71	0.95	4.60	0.34	5723 N / 6100 E	8.23	no
Vein 3	S-54	0.64	15.50	11.65	4768 N / 5105 E	23.78	no
	S-68	1.74	3.90	6.17	4478 N / 4535 E	4.57	no
Vein 3	S-65	1.62	5.60	1.03	4608 N / 4705 E	5.49	(stope 11.3 m below)
Vein 3	S-714	2.13	7.60	---	4598 N / 4749 E	10.37	(stope 7.9 m below)
	S-752	1.16	14.50	1.03	4935 N / 4495 E	2.44	no
	S-184	1.07	4.90	0.00	5005 N / 4732 E	13.41	no
	S-808	29.36	1.10	----	5038 N / 4208 E	25.06	(stope ?)
	S-763	15.00	3.20	1.03	5010 N / 4202 E	22.00	(stope 2.4 m below)
	S-721	24.70	1.40	---	4660 N / 4550 E	12.20	???
Perry Mine							
Vein B2	S-944	2.56	12.80	0.34	6237 N / 7081 E	26.52	(surface pillar 18.3 m)
Vein B2	S-887	0.98	16.50	0.34	6226 N / 7072 E	18.90	(surface pillar 18.3 m)
Vein B2	S-887	1.68	11.80	0.69	6254 N / 7082 E	10.06	(stope 8.2 m below)
Vein B2	S-952	6.16	4.40	1.03	6379 N / 6991 E	18.90	(surface pillar 18.3 m)

TABLE 6.4
LIST OF TARGETS DEFINED BY EX-IN IN 2002

Vein	Diamond Drill Hole ID	Width (m)	Cu (%)	Au (g/t)	Location Mine Grid (feet)	Depth (m)	Underground Workings
Vein D2	S-41	0.49	10.20	0.69	6342 N / 7138 E	19.51	(mined)
Vein D2	S-953	5.18	10.80	0.34	6381 N / 7129 E	21.65	(mined)
Vein D2	S-162	2.38	6.50	0.00	6394 N / 7130 E	17.38	(mined)
Vein C	S-134	1.22	17.10	0.00	6292 N / 7404 E	13.11	(stope 23.5 m below)
Vein B	S-737	4.48	5.10	0.69	7250 N / 6925 E	10.06	(stope 2.2 m below)
Vein B	S-149	10.67	4.50	0.00	6876 N / 7041 E	38.11	(mined ?)
Vein D2	S-949	1.07	10.00	0.00	6135 N / 7225 E	15.85	???
Vein J-B	S-739	1.28	4.50	0.00	6970 N / 7268 E	26.52	no
	S-164	0.64	10.30	1.03	6466 N / 5946 E	27.44	no
GAP	S-874	1.49	13.60	0.34	7477 N / 5976 E	10.36	no
NE Zone	S-256	1.07	5.70	0.34	7194 N / 9699 E	10.67	???
NE Zone	S255	3.02	6.00	0.69	7231 N / 9598 E	10.98	Not mentioned
L Zone	S-615	1.22	9.20	0.34	6191 N / 10000 E	23.17	no

Notes:

The location of the targets is given as Mine Grid in feet within the report and presented in feet. The lengths in feet were converted to metres using the factor 3.28.

The oz/T Au were converted into grams per tonne using a factor of 34.285.

The underground workings (stope) were estimated below the intersections reported.

Note width of mineralization for S-808, S-763 and S-721 (Original data modified from GM 60257).

Exploration was completed during 2009 in the southwest quadrant of the Opemiska Property. Compilation, line cutting (4.5 km), stripping, sampling, metallurgical testing, and Induced Polarization (“IP”) survey were completed. An Ex-In report also mentions that, in 1995, a sample weighing 15.5 tonnes was extracted from a surface vein at Opemiska, in order to test the recovery of surface pillars. Results were disappointing. In 1998, Ex-In also carried out an experimental gravimetric survey. In 2000, Ex-In started a Prefeasibility Study to test the possibility of mining lower grade material left behind at the closure of the mines. The Ex-In report also states that in 2002, a 100 metre core drilling program was completed, to test a surface vein which was not exploited. In 2003, Beep-Mat prospecting was completed, along with stripping and trenching. In 2004, a grid of lines was cut to facilitate a Max-Min survey. Additional sampling was conducted. In 2005, magnetic separation tests were conducted. In 2006 a second ore drilling program of 1,000 linear metres was initiated to test mineralization close to surface on five separate veins.

The work completed in 2009 followed the discovery of an erratic boulder carrying high-grade gold south of the Property. The company went back to old surface and underground maps in order to find a possible source for the high-grade boulder. It is reported that at levels 200 m and 400 m two zones drilled systematically at 15 metres, have been previously investigated for gold. One zone is located north of Springer No. 1 Shaft and the other one is located south of the shaft. The report also mentions that certain drill holes confirm the presence of wide sections (150 metres) grading >0.5% copper and 0.3 g/t Au.

A stripped area (trench), 200 m long by 3.0 m wide oriented in a north–south direction perpendicular to the mineralized structures was completed in 2009. The overburden thickness ranges from 0.5 m to 5.0 m locally. Sampling was done by blasting every 2.5 m along the trench. The trench exposed three separate mineralized zones. The most northerly zone corresponds to the No. 3 Vein, just east of the Glory Hole, an average value of 2.15% Cu and 0.53 ppm Au was calculated over a width of 14.55 m. This zone is in an area of previous surface drilling by Falconbridge with drill holes S-140, 141, 148, 149 and 150. The second zone of interest graded 2.99% Cu and 1.06 g/t Au over a width of 12.55 m. On the sketch provided with the EX-In 2002 report it appears that this second zone of mineralization is located about 60 m southwest of Vein No. 3 and would correspond to the “vein 3 South” projected at surface (previous drilling is also located in this area). The third zone intersected lies due south of the previous mentioned zone, about 100 m south, of No. 3 Vein South, and returned values of 0.65% Cu and 0.83 ppm Au over a width of 21.5 m on top of a recently located IP anomaly. This third zone would fall in the western extension of the No. 13, 4 and 5 zones. Drill hole S-853 was also drilled in this area. One of the maps accompanying Ex-In 2002 report shows the location of two ventilation raises. It should be remembered that the samples were collected after blasting. Such sampling method should be treated as equivalent to grab samples.

Channel sampling was also completed on Vein No. 2, south–southeast of Springer Shaft No. 1. Good results were returned from the sampling, a length of 75 m was sampled every 5.0 m. A table in the Ex-In 2002 report summarized the results of 29 samples. The copper values are up to 26.0% copper and the gold values are up to 11.11 g/t Au. No individual widths were given within the report except a mention that the vein sampled averages 0.45 m, locally 1.0 m wide. This stripping and sampling location was the site of the 2006 surface drilling by Ex-In. A rapid survey of the data acquired on this vein does not show a direct correlation between the higher values in copper and gold.

Based on the work by Dimroth et al. (1984), Daigneault et Allard (1990) and Dubé et Guha (1992), it was concluded that the principal movement along the Gwillim Fault occurred after the formation of the mineralized faults at the Springer and Perry Mines and had very little influence on this style of mineralization. On the other hand, the veins at Springer and Perry are considered to be related to the post D2 fold structures in the inverted and conjugate synformal anticline and antiformal syncline located along and next to the Gwillim Fault with geometric relations consistent with sinistral displacement along the said fault. Moreover, the Beaver Lake Fault is axial planar to the antiformal syncline and the Robitaille and Cooke Mines are parallel to this structure. If these fold structures, which are unique to the Chibougamau region, as are also the mines in Chapais, are related to the Gwillim Fault, this suggests that the mineralization at Chapais may all be related and produced in the late stages of movement along the Gwillim structure.

The main east-west vein (Vein No. 3) is the most important mineralized structure at Springer. Vein No. 3 has a horizontal length of 900 m, an average width of 6.0 m, and it has been mined to a depth of 1,000 m. Ore extracted from Vein No 3 totaled 6,491,793 tonnes grading 2.61% Cu and 0.69 g/t Au. Vein No 7 (also EW) extended for 606 m horizontally with an average width of 2.4 m. It was also mined to 1,000 m depth. A total of 616,320 tonnes of ore grading 1.88% Cu and 2.37 g/t Au has been extracted from this vein. Numerous other smaller veins have been mined at Springer for a total production of 12,500,000 tonnes of ore grading 2.56% Cu and 1.23 g/t Au.

The Perry Shaft is located about 700 m east of Springer No. 2 Shaft. The mineralized structures are generally oriented north-northwest with a dip to the northeast. Veins “B” and “D” were the most important. Vein “B” was mined for a length of 455 m with an average width of 12.0 m and a vertical continuity of 600 m. Vein “D” had a length of 330 m, a width of 7.6 m and a vertical extension of 750 m. Total production at Perry is reported at more than 9,000,000 tonnes grading 2.16% Cu and 0.24 g/t Au.

A summary of the assessment work carried out on the Opemiska Property between 1994 and 2016 is shown in Table 6.5.

ASSESSMENT FILE ID (Year)		Summary
GM-55059	(1994)	Géologie et Levé au BEEP MAT effectué sur la Propriété OPEMISCA. E. Gaucher. GEOSIG Inc.
MM 91-02	(1994)	Géologie et compilation géologique de la région de Chapais. Morin R., Ressources Naturelles du Canada & Ministère des Ressources Naturelles du Québec.
DV 98-03	(1998)	Géologie et Metallogénie du District Minier de Chapais-Chibougamau. Ministère Richesses Naturelles (MRN). Nouvelle Vision du Potential de Découverte. Editeur: Pierre Pilote.
MB 98-06	(1998)	Compilation et Répartition des Gisements Polymétalliques à Tonnage

TABLE 6.5
OPEMISKA PROPERTY ASSESSMENT FILED BETWEEN 1994 AND 2016

Assessment File ID (Year)	Summary
	évalué dans la Sous-Province de l'Abitibi. Lacroix, S. Gouvernement du Québec, Ministère des Ressources Naturelles. Secteur Mines.
GM-60142 (2001)	Atlas des Gisements Abitibi, Fiche No 182. Springer. CONSOREM. Faure S., Gaboury D.
GM-60258 (2001)	Rentabilité de l'exploitation des piliers de surface, Projet Mine Opemiska. E. Gaucher.
GM-60259 (2001)	Métallurgie des rejets du moulin, projet Mine Opemiska. E. Gaucher, A. Laplante.
GM-60262 (2001)	Plan d'affaire d'Ex-In Inc. sur Opemiska. Gaucher E., Gaucher P.
GM-60257 (2002)	Évaluation des Ressources en Cuivre et en Or exploitables a partir de la surface, Localisation des sites prioritaires a investiguer, Projet EX-07C, Mine Opemiska. Gaucher E.
GM-60260 (2002)	Digitalisation des forages, mine Opemiska
GM-60261 (2002)	Validation des Ressources de Minerais exploitables à ciel ouvert, phase 2 révisée, mine Opemiska. Gaucher E.
GM-63383 (2007)	Campagne de forage, secteur de la Mine Opemiska, Projet EX-07C. hiver 2005-2006, St-Pierre R. & Gaucher E.
GM-64969 (2009)	Rapport d'un levé de Polarisation Provoquée effectué sur la propriété Opemiska. Hubert, J.M. Explorateurs-Innovateurs de Québec Inc.
GM-64968 (2010)	Campagne d'Exploration 2009, Propriété Opemiska. Explorateurs-Innovateurs de Québec Inc. (Ex-In). Gaucher, E. & Pearson, N.
GM-65209 (2010)	Travaux de terrain 2009, Propriété Opemiska. EX-IN. Gaucher E., Pearson N.
GM-65737 (2010)	Levé de Polarisation Provoquée, propriété Opemiska (EX-07C) Block Nord. GEOSIG.
GM-65965 (2011)	Campagne d'Exploration 2010, Propriété Opemiska. Explorateurs-Innovateurs de Québec Inc. Drilling. Gaucher E., Pearson N., and Kongo J.B.
RP-2010-09A (2011)	Geology of the Chapais area (32G15-200-0101). Compilation, Geological Survey. MRNF. Leclerc F., Houle P., Rogers R.
RP-2013-02A (2014)	Geology of the Lac Simon Region (32G15-200-0102). Compilation, Geological Survey. MRNF. Leclerc F., Houle P.
GM-69674 (2016)	Campagne d'exploration 2015, Propriété Opemiska. Gaucher, F. & Gaucher P. Explorateurs-Innovateurs de Québec Inc.
GM- 70399 (2016)	Report on the limited core drilling campaign completed December 2016 on the Opemiska mining property. Larouche, C. for Explorateurs-Innovateurs de Québec Inc.

6.5 SUMMARY OF DIAMOND DRILLING BY EX-IN IN 2006, 2010, 2015 AND 2016

Diamond drilling campaigns were completed in 2006, 2010, 2015 and 2016 by Ex-In, and supplied information for the present Technical Report. The core size varies from BQ (earlier drilling) to NQ (recent drilling). The core was logged; sampling focussed on the main mineralized veins and most of the remaining drill core was assayed in 3.0 to 6.0 metre sections. The assaying was carried out systematically for copper (with few duplicate samples). Assaying for gold, silver and zinc has not been carried out systematically.

6.5.1 Ex-In Drilling in 2006

In 2006, Ex-In completed approximately 46 short drill holes for a total of 971 m. Locations are shown in Table 6.6 and results in Table 6.7.

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)	Casing (m)
	Easting	Northing				
110	509,779	5,515,025	180	-45	16.50	3.00
111	509,779	5,515,025	180	-70	15.00	1.77
113	509,759	5,515,026	180	-45	15.00	1.50
114	509,759	5,515,026	180	-70	21.00	1.47
115	509,751	5,515,022	180	-45	15.00	1.22
116	509,751	5,515,022	180	-70	21.00	1.22
117	509,769	5,515,029	180	-60	20.00	10.88
118	509,739	5,515,023	180	-60	18.00	0.30
119	509,827	5,514,856	330	-45	14.00	0.59
120	509,836	5,514,861	330	-45	13.50	1.30
121	509,844	5,514,867	330	-45	18.00	0.34
122	509,852	5,514,872	330	-45	18.00	0.20
123	509,869	5,514,941	360	-45	21.00	2.07
124	509,848	5,514,955	180	-45	18.00	2.00
125	509,823	5,514,957	180	-45	15.00	0.63
126	509,810	5,514,954	180	-45	13.50	1.14
127	509,800	5,514,949	180	-45	15.00	1.50
128	509,789	5,514,951	180	-45	15.00	2.00
129	511,074	5,515,502	175	-45	21.00	1.60
132	511,065	5,515,502	175	-45	21.00	2.50
133	511,062	5,515,484	355	-45	21.00	0.53
135	511,049	5,515,518	175	-45	21.00	3.12
138	510,400	5,513,323	360	-90	25.50	3.00
139	509,682	5,514,804	360	-45	20.00	1.78
140	509,670	5,514,808	360	-45	19.68	1.35

TABLE 6.6
LOCATION OF 2006 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)	Casing (m)
	Easting	Northing				
141	509,673	5,514,824	180	-45	30.00	0.93
142	509,680	5,514,821	180	-45	23.36	1.00
143	509,692	5,514,808	360	-45	18.50	1.20
144	509,693	5,514,831	180	-40	27.50	1.00
146	509,702	5,514,820	180	-45	30.00	4.57
147	509,713	5,514,822	180	-45	18.00	1.50
148	509,663	5,514,815	360	-45	22.50	1.70
149	509,663	5,514,813	360	-45	11.80	0.82
150	509,672	5,514,807	360	-45	20.00	1.00
151	509,681	5,514,806	360	-66	15.0	4.51
152	511,176	5,515,630	200	-45	24.00	10.36
153	511,176	5,515,630	200	-60	30.00	11.72
154	511,159	5,515,626	200	-45	21.00	10.50
155	511,158	5,515,633	180	-45	18.00	12.15
156	511,158	5,515,637	180	-55	30.00	4.79
157	511,197	5,515,619	180	-45	24.00	9.99
158	511,197	5,515,619	180	-60	29.50	6.79
159	511,215	5,515,614	180	-45	27.00	7.57
160	511,214	5,515,616	180	-45	15.00	7.00
165	511,217	5,515,621	180	-45	33.00	7.00
166	511,134	5,515,650	180	-45	51.00	2.89
Total	46 holes				970.8 m	

Notes: Within the report the azimuths of numerous drill holes are different from tables (locally 15°).

TABLE 6.7
SIGNIFICANT INTERSECTIONS FROM 2006 DRILLING

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
113	8.72	11.92	3.20	7.90		
114	10.08	10.56	0.48	12.30	45.20	5.88
115	5.43	7.70	2.27	1.80		
117	12.94	13.55	0.60	11.10	57.90	16.40
118	7.89	10.96	3.10	6.80		
119	5.05	5.92	0.90	26.30	117.00	6.20
120	9.00	10.36	1.40	20.00	77.95	9.57
121	14.67	15.30	0.63	28.75	130.00	1.44
124	7.82	8.85	1.00	6.80	42.00	2.96

TABLE 6.7
SIGNIFICANT INTERSECTIONS FROM 2006 DRILLING

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
125	5.85	6.78	0.90	2.10		
126				low values		
127	6.69	7.11	0.40	3.80	24.00	1.10
128	2.00	3.00	1.00	7.90	44.00	1.95
138	16.50	17.50	1.00	9.30	50.00	1.79
138	22.79	23.65	0.90	10.40	66.00	0.63
139	8.80	10.00	1.20	4.00	13.20	0.37
140	10.22	11.10	0.90	15.00	53.56	1.17
141	10.90	14.85	3.40	7.10		
142	16.10	17.00	0.90	8.70	30.8	1.52
143	1.20	4.40	3.20	2.70		
144	21.55	24.00	2.20	4.00		
146	17.81	19.71	1.90	8.60		
148	15.00	15.30	0.30	26.80	150.10	2.10
150	13.21	14.78	1.60	2.40		
151	9.12	10.52	1.40	10.30	61.37	3.45
151	12.18	14.90	2.70	7.40	38.98	3.12
152	15.25	18.90	3.65	7.50		
155	13.88	14.62	0.74	6.00	44.00	0.09
156	18.00	23.33	4.50	4.60		
157	16.87	20.14	3.30	4.90		
158	21.33	21.56	0.33	12.70	110.00	0.27
165	22.85	24.00	1.15	0.84	5.00	0.11

Notes: Locally no systematic sampling for copper even if gold assaying returned 0.30 to 0.45 g/t Au (hole 114 and others). Numerous sections require additional sampling. New composites have been estimated in Table 6.7.

6.5.2 Ex-In 2010 Core Drilling Program

A total of 19 surface diamond drill holes for a total of 1,748 m were completed in 2010 by Ex-In on the Opemiska Property. Locations are provided in Table 6.8 and significant results in Table 6.9.

TABLE 6.8
LOCATION OF 2010 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)	Casing (m)
	Easting	Northing				
OP-2010-01	509,638	5,514,511	340	-45	102.0	6.0
OP-2010-02	509,638	5,514,510	360	-60	72.0	6.0
OP-2010-03	509,610	5,514,765	360	-45	90.0	3.0
OP-2010-04	509,608	5,514,709	180	-45	98.0	9.0
OP-2010-05	509,640	5,514,719	35	-45	93.0	6.0
OP-2010-06	509,664	5,514,699	35	-45	105.0	6.0
OP-2010-07	509,610	5,514,773	180	-45	99.0	3.0
OP-2010-08	509,811	5,515,220	180	-45	102.0	6.0
OP-2010-09	509,825	5,515,166	180	-45	102.0	9.0
OP-2010-10	509,683	5,514,580	360	-45	120.0	6.0
OP-2010-11	509,612	5,514,787	360	-40	74.0	9.0
OP-2010-12	509,585	5,514,757	360	-45	65.0	3.0
OP-2010-13	509,825	5,515,166	225	-45	102.0	9.0
OP-2010-14	509,808	5,515,210	225	-45	111.0	6.0
OP-2010-15	509,790	5,515,138	220	-45	102.0	9.0
OP-2010-16	509,801	5,515,083	225	-45	65.0	3.0
OP-2010-17	509,775	5,515,139		not drilled		
OP-2010-18	509,775	5,515,057	225	-45	102.0	6.0
OP-2010-19	509,666	5,515,055	180	-70	93.0	3.0
OP-2010-20	509,682	5,515,052	180	-45	51.0	3.0

Note: 19 holes were completed for a total of 1,748 linear metres.

TABLE 6.9
RESULTS FROM THE 2010 DRILLING CAMPAIGN

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
OP-2010-01	16.00	16.50	0.5			0.61
OP-2010-02	5.00	10.50	5.5			1.70
OP-2010-03	6.00	90.00	84.0	0.66	4.33	0.36
OP-2010-04	17.50	19.00	1.5	0.44		9.54
OP-2010-05	Low values					
OP-2010-06	Low values					
OP-2010-07	3.00	99.00	96.0	0.06		0.06
including	3.00	4.50	1.5	0.75		
OP-2010-08			----	0.05		0.02
including	82.50	84.00	1.5	0.55		0.30
OP-2010-09			---	0.13		0.04
including	64.50	66.00	1.5	2.41		0.38

**TABLE 6.9
RESULTS FROM THE 2010 DRILLING CAMPAIGN**

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
OP-2010-10	57.00	58.50	1.5			0.72
OP-2010-11	9.00	74.00	65.0	0.40		0.12
including	52.50	54.00	1.5	2.02		
OP-2010-12	3.00	64.45	61.45	0.31		0.94
including	40.50	42.00	1.5	3.14		30.4
OP-2010-13	9.00	102.00	93.0	0.39		0.38
including	66.00	67.50	1.5	5.31		15.8
OP-2010-14	6.00	111.00	105.0	0.33		0.17
including	91.50	93.00	1.5	4.19		3.20
OP-2010-15	9.00	102.00	93.0 m	0.49		0.16
including	78.00	79.50	1.5 m	7.17		
OP-2010-16	3.00	65.00	62.0 m	0.09		0.02
including	60.00	61.50	1.5 m	1.54		0.32
OP-2010-17	Not drilled					
OP-2010-18	6.00	102.00	96.0	0.14		0.05
including	84.00	85.50	1.5	1.49		
OP-2010-19	3.00	93.00	90.0	0.74		0.23
including	36.00	39.00	3.0	17.02		1.75
OP-2010-20	4.50 (?)	51.00	46.5	0.21		0.17
including	43.50	45.00	1.5	0.74		2.55

Note: It is also interesting to note that most of drill holes started and finished in mineralization and the better copper values have been extended over the whole length of the drill hole (minus casing).

6.5.3 Ex-In 2015 Core Drilling Program

Ex-In drilled four holes, totalling 537 m in 2015. Locations are provided in Table 6.10 and results in Table 6.11.

**TABLE 6.10
LOCATION OF 2015 SURFACE DIAMOND DRILL HOLES**

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)
	Easting	Northing			
OP-2015-01	509,574	5,514,988	180	-45	90.0
OP-2015-05	509,860	5,514,792	180	-45	111.0
OP-2015-07	521,083	5,515,115	180	-45	141.0
OP-2015-09	509,905	5,515,059	360	-60	195.0
Total	4 holes				537.0 m

**TABLE 6.11
DETAIL SAMPLING HOLE OP-2015-01 (TWINNING HOLE S-26)**

OP-2015-01						S-26 only one assay reported	
From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)		
3.0	6.3	3.3	0.662	0.12	2.4		
6.3	7.05	0.75	22.78	2.29	87.4	8.38m to 8.99 m	5.29% Cu
7.05	9.7	2.65	0.653	0.16	2.3		
9.7	10.6	0.9	12.18	3.33	47.3		
10.6	15.0	4.4	0.658	0.10	2.4		
15.0	18.0	3.0	0.13	0.03	0.5		
18.0	21.0	3.0	0.913	0.15	2.3		
21.0	24.0	3.0	0.126	0.07	< 0.5		
24.0	27.0	3.0	0.157	0.04	< 0.5		
27.0	28.4	1.4	0.393	0.09	0.9		
28.4	29.15	0.75	2.145	2.18	7.9		
29.15	33.0	3.85	0.136	0.03	< 0.5		
33.0	36.0	3.0	0.25	0.07	0.6		
36.3	39.0	3.0	0.738	0.95	6.1		
39.0	42.0	3.0	0.52	0.12	1.7		
42.0	45.0	3.0	0.234	0.03	0.6		
45.0	48.0	3.0	0.429	0.10	1.3		
48.0	51.0	3.0	0.0848	0.02	< 0.5		
51.0	54.0	3.0	0.30	0.04	1.1		
54.0	57.0	3.0	1.254	0.08	4.3		
57.0	60.0	3.0	0.0147	0.0	< 0.5		
60.0	63.0	3.0	0.0172	0.0	< 0.5		
63.0	66.0	3.0	1.274	0.06	6.4		
66.0	69.0	3.0	0.0393	0.0	< 0.5		
69.0	72.0	3.0	0.205	0.08	0.8		
72.0	75.0	3.0	0.273	0.23	1.1		
75.0	78.0	3.0	0.871	0.20	2.7		
78.0	81.0	3.0	1.685	0.19	4.4		
81.0	84.0	3.0	0.0392	0.0	< 0.5		
84.0	87.0	3.0	0.144	0.02	0.6		
87.0	90.0	3.0	0.0349	0.0	< 0.5		

Note:

The composite for section between 3.0 m to 57.0 m has been re-calculated and gave: 0.98% Cu, 0.024 g/t Au and 3.62 g/t Ag.

A correlation between silver and copper can be observed.

It should be noted that the drilling started and terminated into mineralization.

Falconbridge only took a sample of the massive copper mineralization and did not sample disseminated copper mineralization.

The casings for the 2015 drilling were located by a land surveyor (P. Roy, Chibougamau). Drill hole OP-2015-01 intersected 22.78% Cu over 0.75 m (part of a section grading 4.21% Cu and 0.73 g/t Au over 7.6 m, from 3.0 m to 10.6 m along the hole). This hole duplicated a previous drill hole by Falconbridge, hole S-26 drilled in the 1930s which intersected 5.29% Cu over 0.61 m (from 27.5 ft to 29.5 ft). The location of diamond drill hole OP-15-01 has been surveyed in by the land surveyor after locating the old casing for drill hole S-26.

The mineralized intersection in hole OP-2015-01 has been estimated at 0.98% Cu and 0.24 g/t Au over 54.0 m. Only a small section (single assay) of hole S-26 has been sampled. Drill hole OP-2015-05 intersected 1.28% Cu, 0.50 g/t Ag and 0.52 g/t Au over 6.0 m (from 57.0 m to 63.0 m along the hole). This mineralization has also been reported as 0.11% Cu, 12.09 g/t Ag and 0.11 g/t Au over the length of the hole, which is 108.0 m. No cut-off values were used in the calculation of the composite. The best mineralized intersection (57.0 m to 63.0 m) has been recalculated as: 1.28% Cu, 0.52 g/t Au and 4.45 g/t Ag. It should be noted that a second intersection of 0.17% Cu, 0.05 g/t Au and 0.70 g/t Ag has been cut between 87.0 m to 90.0 m along the drill hole and a third intersection between 102.0 m to 105.0 m grading 0.406% Cu, 2.39 g/t Au and 2.6 g/t Ag over the 3.0 m. The 12.09 g/t silver value over the length of the drill hole should be re-evaluated as beside the silver values reported above all other assays for silver within hole OP-2015-05 were “trace”. It should also be noted, that in the sector of hole OP-2015-05, the copper values are “not anomalous” between the mineralized intersections.

Drill hole OP-2015-07 “duplicated” historical drill hole S-51 although the report does not specify if the casing was found in the field. The best intersection, as reported in the assessment work report, returned 0.23% Cu, 1.4 g/t Ag and 0.03 g/t Au over 3.0 m (from 72.0 m to 75.0 m along the hole). A composite grading 0.04% Cu, 0.55 g/t Ag and 0.004 g/t Au has been calculated for the whole length of the drill hole, 138 m. A review of the drill log with assays indicates a value of 0.023% Cu, trace Au and trace Ag between 72.0 and 75.0 m. Nevertheless, the assays show the reported values between 84.0 m to 87.0 m. All other assays from the drill hole are: <500 ppm Cu, <0.01 g.t Au and <5.0 ppm Ag, except for an anomalous section from 126.0 to 132.0 m.

Drill hole OP-2015-09 was aimed at testing a mineralized zone intersected by drill hole U-408 (underground). A zone grading 0.90% Cu, 13.3 g/t Ag and 1.18 g/t Au over 3.0 m has been intersected from 81.0 m to 84.0 m along hole 2015-09). The description of the core indicated that possibly a “chlorite shear” sub-parallel to the core axis has been followed. A close look at the description of the drill hole, the mineralized section reported appears at 84.0 to 87.0 m., the section also graded 1.18 g/t Au. A second anomalous section also appears between 99.0 to 105.0 m.

The intersections indicate that the width of the copper mineralization increases westward, toward the contact between the Ventures Sill and the Blondeau Felsic Volcanics.

6.5.4 Ex-In 2016 Core Drilling Program

The 2016 drilling program consisted of nine surface diamond drill holes for a total of 708 m as shown in Table 6.12. The drill holes were planned by P. Gaucher, Ing., and F. Gaucher, geophysicist, following numerous years of compilation work, limited surface detailed exploration (stripping, sampling & diamond drilling), and geophysical surveying, including a

recent experimental “TDEM” ground survey. Logging and sampling were supervised by C. Larouche.

TABLE 6.12
LOCATION OF 2016 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Elevation (m)	Azimuth (°)	Dip (°)	Length (m)
	Easting	Northing				
OP-16-01	509,704.5	5,514,734.2	1,505.5	180	-45	150
OP-16-02	509,631.4	5,514,986.2	1,526.1	175	-45	99
OP-16-03	509,529.3	5,515,013.4	1,513.4	175	-45	93
OP-16-04	509,639.0	5,514,698.2	1,509.2	180	-45	102
OP-16-05	509,788.6	5,514,858.2	1,532.0	172	-45	66
OP-16-06	509,76.07	5,514,853.6	1,529.6	165	-45	51
OP-16-07	509,597.8	5,514,999.9	1,520.5	180	-45	51
OP-16-08	509,575.3	5,515,001.5	1,517.6	170	-45	60
OP-06-09	509,788.6	5,514,858.2	1,532.0	165	-70	41

Note: All holes drilled on claim PO-13681.

Except for drill hole OP-16-03 and the end of drill hole OP-16-04, which intersected felsic volcanics of the Blondeau Formation, all of the 2016 drilling was located within the upper portion of the Ventures Sill, close to its contact with the structurally underlying but stratigraphically overlying felsic volcanics.

The gabbro is medium to coarse grained, locally pegmatitic, variably magnetic and the composition appears locally more mafic (gabbro-pyroxenite). The gabbro is locally more chloritic, fractured and brecciated along corridors. These fairly well defined and altered corridors are usually injected by variable amount of magnetite, quartz veining, pyrite and chalcopyrite.

The copper-gold (Cu-Au) mineralization was observed under numerous forms:

- Magnetite veins (massive) with fine disseminated chalcopyrite.
- Pyrite veins with fine chalcopyrite.
- Fractures filled up by massive chalcopyrite.
- **High Sulphide Veins** (30% to 70% quartz present) quartz usually carries fragments of massive magnetite and fractures are filled up locally with pyrite but usually massive chalcopyrite (see picture). Commonly these veins are surrounded by narrow halos rich in magnetite.
- **Sulphide Veins** massive chalcopyrite veins with lesser amount of disseminated fragments of magnetite. Again, magnetite veins at contacts.
- Quartz – Carbonate stringers with trace chalcopyrite.

A summary of significant drill hole intersections is presented in Table 6.13.

<p align="center">TABLE 6.13 LIST OF COMPOSITE INTERSECTIONS FROM THE 2016 SURFACE DRILLING CAMPAIGN IN THE GENERAL AREA OF THE SPRINGER NO. 1 SHAFT arbitrary a value of 3,000 ppm Cu was used as cut-off for the composites, no Cu values were capped</p>								
Diamond Drill Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Comment
OP-16-01	5.0	7.0	2.0	1.80	2.594	0.8	334	Rusty fractures
	27.0	31.5	4.5	4.05	0.404	5.70	2.14	
including	29.7	31.5	1.8	1.62	0.856	11.70	4.43	Stringers chalcopryite
	78.0	79.2	1.2	1.08	0.102	4.70	1.52	
	90.0	99.6	9.6	8.64	2.498	11.65	3.30	
including	94.7	96.6	1.9	1.71	9.971	46.80	13.80	High Sulphide Vein (60% quartz)
	123.0	124.0	1.0	0.90	0.200	4.20	0.57	
	138.0	144.0	6.0	5.40	0.296	8.85	1.17	
OP-16-02	10.3	11.4	1.1	0.99	0.199	2.7	0.30	
	32.4	36.0	3.6	3.24	0.066	4.9	0.31	
	90.0	93.0	3.0	2.70	0.166	4.2	0.44	
OP-16-03	21.7	22.6	0.9	0.81	0.156	3.8	0.57	
	23.3	23.7	0.4	0.36	0.229	6.7	1.01	
	28.2	30.0	1.8	1.62	0.329	6.8	0.39	
	31.3	32.1	0.8	0.72	0.100	5.6	0.56	
	66.0	67.3	1.3	1.17	0.153	6.2	0.78	
	68.8	69.7	0.9	0.81	13.347	32.1	0.53	Vein (pyrite-arsenopyrite-chalcopryite) Felsic Vol.
	74.6	75.8	1.2	1.08	0.308	16.0	1.60	
including	74.6	75.0	0.4	0.36	0.727	38.6	4.04	Breccia (pyrite-chalcopryite)
OP-16-04	15.0	18.0	3.0	2.70	0.164	1.3	0.30	
	57.7	60.2	2.5	2.25	0.034	1.0	0.28	
	69.0	70.5	1.5	1.35	0.196	1.3	0.29	
	91.3	94.0	2.7	2.43	0.114	2.9	0.53	
OP-16-05	5.0	9.0	4.0	3.60	1.854	22.7	5.07	
including	6.0	7.7	1.7	1.53	4.203	48.0	10.83	High Sulphide Vein (50% quartz)
OP-16-06	6.0	9.0	3.0	2.70	1.751	0.4	0.04	Pyrite stringers
	14.7	17.0	2.3	2.07	0.023	1.4	0.30	
	48.0	51.0	3.0	2.70	0.145	2.3	0.40	

TABLE 6.13
LIST OF COMPOSITE INTERSECTIONS FROM THE 2016 SURFACE DRILLING CAMPAIGN
IN THE GENERAL AREA OF THE SPRINGER NO. 1 SHAFT

arbitrary a value of 3,000 ppm Cu was used as cut-off for the composites,
no Cu values were capped

Diamond Drill Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Comment
OP-16-07	6.0	11.8	5.8	5.22	0.128	3.4	0.51	
including	8.0	8.9	0.9	0.81	0.050	5.4	0.53	Magnetite Vein (trace chalcopyrite)
	17.8	18.8	1.0	0.90	0.079	1.8	0.43	
	22.2	26.6	4.4	3.96	0.474	29.5	8.65	
including	24.0	24.7	0.7	0.63	0.332	25.6	5.98	Sulphide Vein (chalcopyrite + trace magnetite)
	24.7	25.8	1.1	0.99	1.154	90.6	28.24	Sulphide Vein (chalcopyrite + trace magnetite)
	38.5	39.2	0.7	0.63	0.066	6.2	0.49	
OP-16-08	7.6	12.7	5.1	4.59	0.458	9.4	2.58	
including	7.6	7.9	0.3	0.27	1.874	48.6	14.29	Magnetite Vein (chalcopyrite stringers)
	11.3	11.7	0.4	0.36	2.659	45.6	13.44	Magnetite Vein (chalcopyrite stringers)
	15.7	27.0	11.3	10.17	1.687	12.3	4.05	
including	17.1	18.3	1.2	1.08	8.694	58.0	21.20	High Sulphide Vein (20% quartz)
	18.8	19.3	0.5	0.45	1.291	7.9	2.31	High Sulphide Vein (60% quartz)
	21.5	22.0	0.5	0.45	6.616	21.7	6.31	High Sulphide Vein (30% quartz)
	22.0	22.8	0.8	0.72	0.862	27.3	8.41	Stringers chalcopyrite
	23.3	24.3	1.0	0.90	2.959	16.1	4.55	High Sulphide Vein
	24.3	25.0	0.7	0.63	0.229	6.7	2.00	
	30.0	42.0	12.0	10.80	0.129	1.4	0.45	
	44.4	48.0	3.6	3.24	0.506	3.3	0.88	
	50.0	51.0	1.0	0.90	0.072	1.9	0.53	
	57.0	60.0	3.0	2.70	0.101	3.0	0.80	
OP-16-09	6.0	8.0	2.0	1.38	1.785	12.3	2.16	Stringers chalcopyrite

Note: True width is based on an average dip of 65° N for the known structures at the former Springer Mine.

No certified reference materials or blanks were inserted into the sample batches for any of the drilling programs prior to QC Copper's 2019 program. However, all the assay certificates have been preserved and all the drill core from this period is available. A suite of mineralized core samples was quarter-cored as part of the 2021 diamond drilling program in order to validate the pre-QC Copper drilling assays and this data is reviewed in Section 12.

6.6 HISTORICAL PRODUCTION ON OTHER PROPERTIES

6.6.1 Cooke Mine

The Cooke underground mine produced 1.97 million tonnes ("Mt") of ore at a grade of 5.04 g/t gold and 0.66% copper between 1977 and 1987 (Leclerc et al, 2012).

The historical resources at the past-producing Cooke Mine are conceptual in nature. This mineralization is not a Mineral Resource. A Qualified Person has not done sufficient work to estimate a Mineral Resource and it is uncertain if further exploration will result in this mineralization being delineated as Mineral Resources

The Cooke Mine differs significantly from Springer and Perry Mines' orebodies as it occurs within the Bourbeau Sill instead of the Ventures Sill. The Bourbeau Sill is higher up in the stratigraphy than the Ventures Sill but is part of the Cummings Complex, a series of three differentiated ultramafic to mafic sills intruding the Blondeau Formation metavolcanics and metasediments.

At Cooke, the main mineralization is centered on two parallel veins (#7 and #9), consisting of east-west trending chloritic shears that are steeply north dipping.

Towards the end of the operations at Cooke, at the west end of the underground workings, numerous drill intersections indicated a lack of mineralization continuity until the mine geologist concluded that the mineralization was possibly oriented north-south for these structures (veins 64-65-66). Underground mine mapping indicated that the mineralized structure is folded near the Gwillim Fault, suggesting that there was late movement on the fault subsequent to the mineralizing event consistent with a late dextral movement along the overall sinistral displacement of the Gwillim Fault.

Recent surface drilling at the Cooke Mine encountered high but erratic cobalt-silver-gold-copper-nickel bearing veins located in the general area of veins 64-65-66. These veins have a reported historical resource of 67,346 tons grading 0.79% Cu, 0.124 opt Au, 0.31 opt Ag, and 0.15% Co at the closing of the mine in 1989. (Falconbridge internal reports).

The potential tonnage and grade of veins 64-65-66 are conceptual in nature. These veins are not a Mineral Resource. There has been insufficient exploration to define them as Mineral Resources and it is uncertain if further exploration will result in these veins being delineated as Mineral Resources.

A copper zone (zone Chibougamau Copper) previously investigated by Falconbridge and further detailed by 2736-1179 Québec Inc. (the vendor), is present north of the Cooke Shaft. The sub-

vertical shear / fracture is oriented east–west, and the mineralization is more persistent within the gabbro of the Ventures Sill, close to its contact with the Blondeau Felsic Volcanics. One of the better values intersected is: MC-09-35 (from 93.5 m to 100.5 m) a 7.0 m section grading 3.596% Cu, 0.445 g/t Au and 51.214 g/t Ag.

6.6.2 Robitaille Mine

The Robitaille Mine is located 1.5 kilometres northeast of the Perry shaft, on the northern side of the Gwillim Fault, and produced 204,000 tons grading 1.86% Cu (Morin 1994) between 1969 and 1972 from one main lens. No additional mineralization of economic interest was found from drilling at surface and underground even though abundant scattered copper and gold mineralization has been outlined.

The mine is located a few hundred metres northeast of the Beaver Lake Fault and has a strike parallel to the fault while dipping sub-vertically, whereas the fault dips moderately to the northeast. The Robitaille Zone appears to terminate on or is cut off by the fault. There is no record of any residual resources left in the mine after closure.

The Mine has been developed through a shaft, 1,400-feet deep, and a series of eight levels spaced about 175-feet apart. The last level at Robitaille (level 8) was extended southeastward to access Cooke Mine at level 7. A drift from the Perry Shaft to the southwest of the Robitaille Mine also extend 1,483 feet below the Robitaille Shaft at level 18 (drift 18-68).

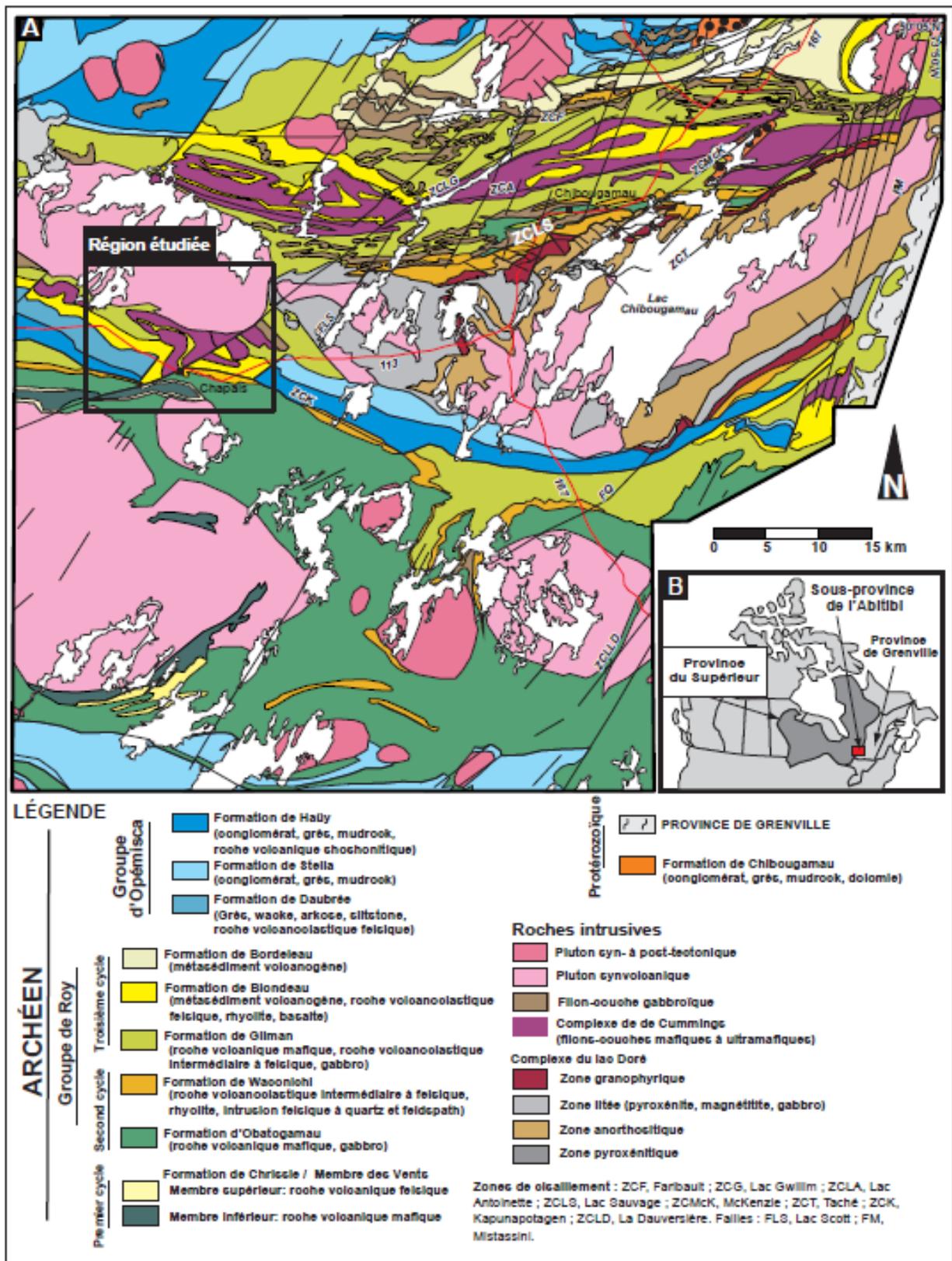
7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The Opemiska Project area is located within the Superior Structural Province of the Canadian Shield which is present in eastern Canada and the northeastern USA. The Precambrian formations are usually covered by a “veneer” of variable thickness of glacial overburden.

The Chapais-Chibougamau Mining District (Figure 7.1) is located at the northeast end of the well-documented Abitibi Subprovince. The Abitibi Subprovince is one of the world’s largest contiguous areas of Archean metavolcanic and metasedimentary rocks and hosts a significant number of mineral deposits. The general lithological distribution is characterized by oval-shaped batholiths surrounded by east – west trending “greenstone belts” that are wrapped around batholiths. Regional and local folding is common, and the dips of the formations are usually sub-vertical. The area under study is located within the Northern Volcanic Zone of the Abitibi Subprovince.

FIGURE 7.1 REGIONAL GEOLOGY OF THE CHAPAIS CHIBOUGAMAU AREA



Source: Leclerc et al. (2010)

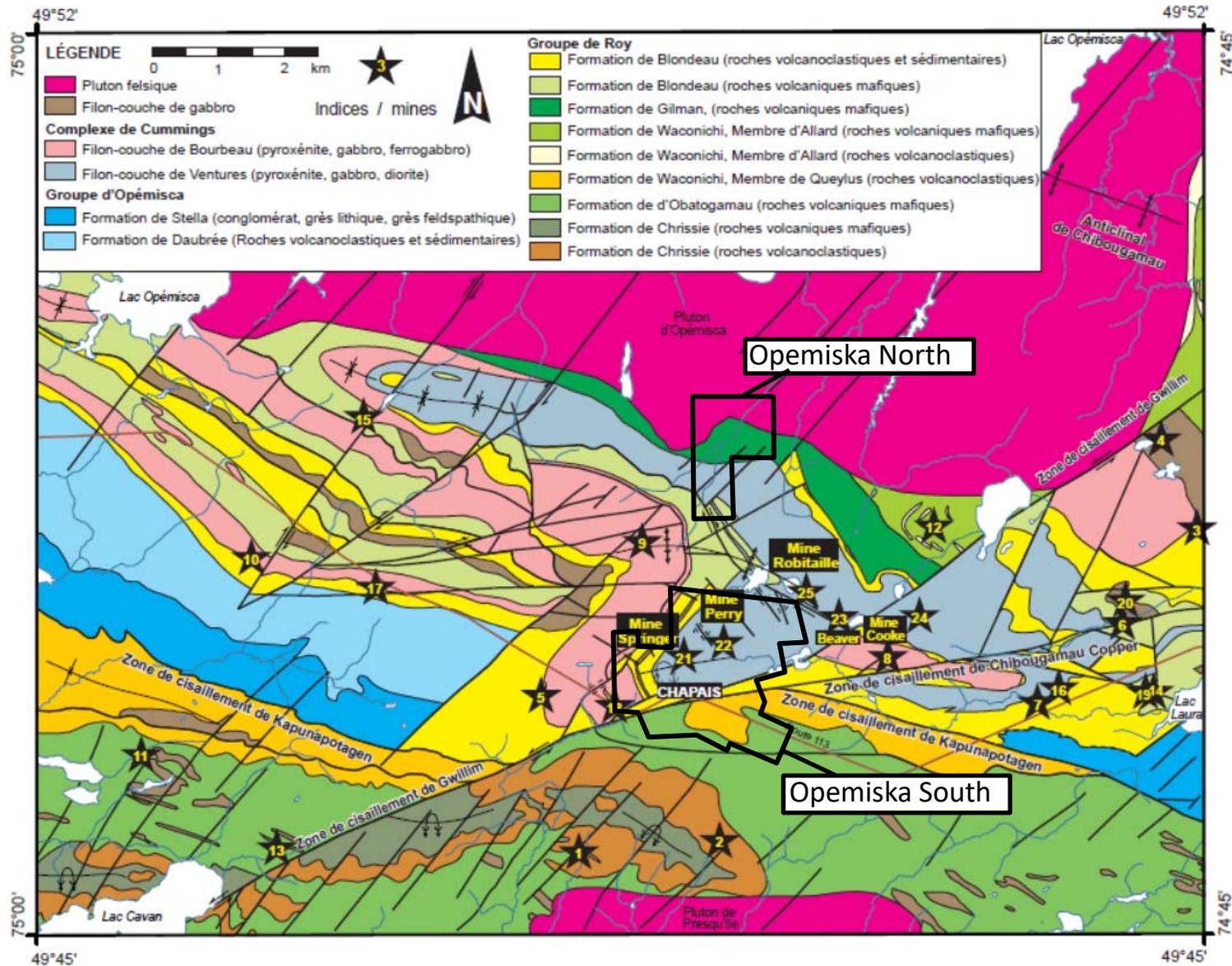
7.2 PROPERTY GEOLOGY

The metavolcanic stratigraphy in the Chapais-Chibougamau area is representative of deep water deposition to sub-aerial environments. The metavolcanic-sedimentary package is cut by mafic to ultramafic intrusions (Lac Dore Complex being the dominant example), mafic sills (Cummings Sills and gabbro) and younger plutonic intrusions ranging from tonalite to carbonatite.

Recent work by F. Leclerc for “Géologie Québec” from 2008 to 2017 has refined the understanding of the complex geology and stratigraphy of the Project area. The earlier stratigraphic interpretation has been modified in order to take into considerations recent field observations.

The geology of the two blocks of Opemiska Project claims is characterized by a fold affecting the Cummings Complex introduced at the lower contact of felsic volcanics of the Blondeau Formation (Figure 7.2). The Cummings Complex are comprised of three separate differentiated sills: the Roberge Sill at the base; the Ventures Sill; and the Bourbeau Sill higher up in the Blondeau stratigraphy. In the region gold mineralization often appears associated to the Bourbeau Sill whereas copper mineralization is associated with the Ventures Sill. North of Lac Chibougamau, the Roberge Sill is locally very strongly serpentized.

FIGURE 7.2 CHAPAIS AREA PROPERTY GEOLOGY



Source: Leclerc et al. (2010)

The Ventures Sill, which is approximately 1,000 m in thickness, is the most common “host” of the mineralization on the Opemiska Property. The Ventures Sill has been originally divided from bottom to top into five persistent units:

- Lower Green Pyroxenite The lower green pyroxenite (about 60 m thick) represents the basal layer of the Sill. It is medium grained, dark green to black in colour and strongly magnetic, with abundant serpentinized fractures. The upper contact is commonly sharp with no evidence of “chilling”;
- Black Pyroxenite with Peridotite Sills This unit is 350 m thick, medium grained and dark grey to black colour. Layers of serpentine–talc–magnetite (after cumulate olivine) are present. Layers containing primary chromite and magnetite are also recognized (Watkins and Riverin 1982);
- Upper Green Pyroxenite The Upper Green Pyroxenite is about 60 m thick and locally quite similar to the underlying pyroxenite. It is somewhat coarser grained and interstitial feldspar were also observed. Contact with overlying unit is sharp, marked by cumulus plagioclase and titaniferous magnetite (McMillan, 1972);
- Foliated Gabbro The Foliated Gabbro averages 150 m in thickness, its base is commonly marked by a 15 to 30 cm thick layer of clinopyroxene containing 30% to 40% magnetite and layering is well developed throughout. Strong foliation is defined by alignment of pyroxenes and feldspars and it has a sharp upper contact marked by abrupt change in texture and grain size;
- Ventures Gabbro. The Ventures Gabbro hosts the bulk of the mineralization at the Springer and Perry Mines. The unit is 350 m thick and represents the top of the Ventures Sill. Its composition is similar to the underlying Foliated Gabbro but locally carries up to 5% free quartz. It is usually coarse grained and shows an ophitic texture (association of lath-shaped euhedral crystals of plagioclase grouped radially or in an irregular mesh with surrounding or interstitial large anhedral crystals of pyroxene).

7.3 STRUCTURE

Within the Chapais-Chibougamau region, a combination of several deformational events created structural interference patterns in certain sectors. The Opemiska Property is located just south of the east-west trending “Chibougamau Anticline” which at its center is occupied by the Opemiska and Chibougamau Plutons. This fold structure is related to the second major phase of deformation in the region.

At Opemiska, the mineralization occurs within the large composite Ventures sill that intruded felsic volcanics of the Blondeau Formation. Both the Sill and the volcanics have been overturned and drag-folded into a prominent “nose” and truncated by a major fault (Gwillim and Beaver Lake Faults). The fold has an easterly “plunge” (45° to 65°). This structure postdates the second phase of deformation but predates a third deformation phase (Leclerc et al., 2012).

A major regional northeast-southwest structure named the “Gwillim Fault” (it was originally referred to as the Campbell Lake Fault), traverses the main block of claims in the Project area. An apparent “sinistral” horizontal displacement of 3,300 m has been calculated (Watkins and Riverin 1982). Brown (1970) suggested that this fault has been active during several episodes but its principal movement was prior to the third phase of deformation. It is also noted that “*The strata east of the fault are also overturned and the offset fold axes are interpreted to strike in a northerly direction*”.

A surface compilation map produced by Falconbridge (GM 46158) in 1987 shows that six distinct directions have been represented for the mineralized zones:

- N-100° represented by the main structure at Springer, Vein No. 3 and western section of Vein No. 1;
- N-080° represented at Springer by Vein No. 2, Vein No. 0, North portion of Vein No. 11, East part of Vein No. 1, Vein No. 4, Vein No. 7, and Vein C, at Perry;
- N-070° represented south of Springer Shaft by Veins 34, 13, 5, 6 and 7 South;
- N-130° represented at Springer by south part of Vein No. 11, Vein No. 22 and at Perry Vein D South and Gap Zone;
- N-160° - 170° represented at Perry by Veins A, B, B-North, J North and K;
- The “Arsenopyrite Fault” is oriented at N-150° parallel to the P-1 Fault.

There are cross-cutting relationships between these different sets of fractures/ shears as exemplified by the Arsenopyrite Shear at surface but the relative chronology of these structures is uncertain.

7.4 MINERALIZATION

The Chapais–Chibougamau Mining Camp is the second largest mining district in the Québec part of the Abitibi Greenstone Belt. The camp has produced approximately 86 million tonnes (Mt) of ore from 1953 to 2008, including 1.57 million tonnes Cu, 176.1 tonnes Au, 108.8 tonnes Ag, and 72,066 tonnes of Zn (RPA, 2013, Leclerc and al. 2012).

In the area, the mineralization consists of a series of largely chalcopyrite-bearing quartz veins that occupy fracture systems in folded and faulted gabbroic portions of two conformable, regionally extensive, layered Archean ultramafic-mafic sills. The veins are usually restricted to the fracture system and in lower grade halos around the main fractures/veins. The width and frequency of veins tend to increase toward the dilated nose of the main structure at Springer Mine (Watkins and Riverin, 1982).

The mineralization at the Springer Mine (Watkins and Riverin, 1982) is associated to a series of east-trending (090°), steeply (65°) north dipping, sets of axial plane faults and fractures with right-handed (dextral) displacement which developed in areas of maximum inflexion of folds. A

cross section at Springer indicates at least three different dips for the mineralized veins which could indicate a conjugate fault system or separate fracturing systems.

In the limb of the fold at Perry Mine, the mineralization is associated to northwest-trending faults and fractures, developed perpendicular to stratigraphy, with right-handed displacement and dipping moderately both northeast and southwest.

Mineralization of economic interest appears within more fractured/ sheared sections of the gabbro. These sections are usually strongly chloritized and variably silicified. A detailed description on the mineralization intersected within the 2016 drilling further classified the veins as:

- Massive pyrite veinlets (cut by magnetite?);
- Magnetite veins (minor associated disseminated chalcopryrite);
- Sulphide veins (massive chalcopryrite) with magnetite-rich margins, also with disseminated fragments of massive magnetite within chalcopryrite;
- High-sulphide veins with 30% to 50% quartz with massive chalcopryrite and some magnetite. Anomalous W values are sometimes found associated to these veins;
- Quartz veins within gabbro with higher gold values and low copper;
- Quartz veining within felsic tuffs with associated gold and minor copper and minor arsenopyrite;
- Gold-rich quartz-arsenopyrite veins north of Veins No. 1 and No. 2 that crosscut the copper-rich veins;
- Small horizons with anomalous Cd-Zn within the felsic volcanics.

Most the mineralization mined at Springer and Perry Shafts was hosted within the upper part of the Ventures Sill, however, the regional and local structures are also important for the control of mineralization at Opemiska. At Springer, a fold nose corresponding to an overturned anticline in mafic-ultramafic sills of the Cummings Complex which injected felsic volcanics of to the Blondeau Formation controls significant amount of mineralization. Watkins and Riverin (1982) also referred to a 6.0 m wide zone containing disseminated pyrrhotite and chalcopryrite occurring locally at the top of the Ventures Sill where it is dilated at the nose of the fold. Some granophyre patches were also described in places offering similarities to some of the contact zone of the Lac Dore Complex.

At Springer (Shaft No. 1 and No. 2), the mineralized veins were described as restricted to fractures hosted within gabbro at the stratigraphic top of the Ventures Sills. The mineralization is usually massive but locally disseminated. main fractures trend 090° with dip of 70° north. The main veins are up to 1,200 m long, average width of 6.0 m and have been followed to more than 1,000 m depth. Vein No. 3 is the most important vein at Springer along with Vein No. 7 further to the south. Other less important veins (six additional veins) have also been exploited. The

mineralization is comprised principally of chalcopyrite, pyrite, and pyrrhotite with lesser amount of sphalerite, magnetite, galena, molybdenite, arsenopyrite and gersdorffite. Native gold has been seen associated to chalcopyrite and pyrite. The non-metallic gangue minerals are represented by variable quantities of quartz, calcite, chlorite, minor biotite, stilpnomelane and actinolite. Locally significant amount of scheelite and molybdenite are present. It is also reported (DV 98-03) that later cross cutting veins carry pitchblende-uraninite and molybdenite.

The alteration surrounding the veins is described as chlorite and carbonate. A cobalt-rich intersection was reported in surface drill hole S-57. While the mine was operating, a search was conducted in drill holes to the West for any mineralized shear that might connect this intersection with the Arsenopyrite Vein running northwesterly through the old surface trenches and underground workings (GM-1833). It is also stated that this northwest shear can be very tight in places and would be very difficult to recognize if not injected by mineralization.

It is also reported that at the time of commencing operations at Springer (1952), five major copper-gold bearing veins or zones had been explored in the shaft area, either underground or by surface drilling. The veins consisted of chalcopyrite accompanied by quartz and magnetite. These veins have a general east-west strike and dip steeply to the north. There is some silver present and locally important cobalt values have been obtained. In addition to the five veins, there are many other important drill intersections as yet uncorrelated. Included in these are some intersections carrying important zinc, lead and gold values but in some cases with little copper present (GM 02098).

While mapping the general area in 2009, the Ministry took a sample from a mineralized quartz vein in outcrop cutting a gabbro (Sigeom à la Carte, 32G15 sample No 2009050061). The location of the sample is given as UTM co-ordinate NAD83 Zone 18N 509,787E / 5,5148,53N. This vein is likely the same vein intersected in drill hole OP-16-08. The sample ran >5,000 ppb Au, 740 ppm Co, 60 ppm Mo, 260 ppm Ni, 0.14% Zn, 20.49% Cu, 35.65% Fe and 0.29% W. This confirms a multi-elements association in some of the veins at Springer Shaft.

8.0 DEPOSIT TYPES

Several types of mineralization are present in the Chapais-Chibougamau Mining District. A synthesis of the various styles of mineralization is presented by Leclerc et al. (2012)

8.1 OPEMISKA-TYPE COPPER-GOLD VEINS

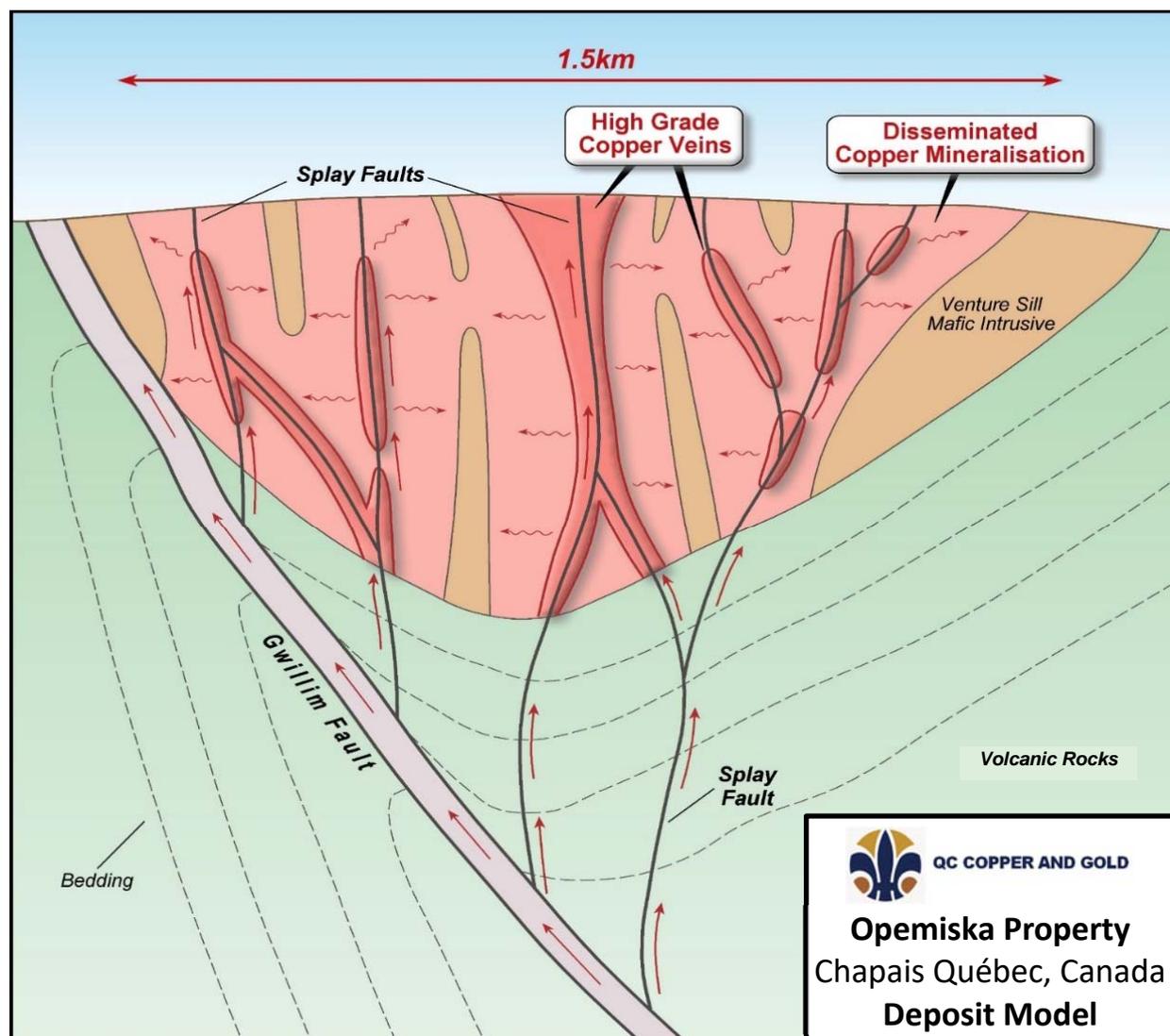
On the Opemiska Property, structurally-controlled copper-gold veins occur in east-west trending axial planar faults and northwest trending radial structures within the folded Venture Sill and in the Bourbeau Sill. The folds are later than the main east-west trending isoclinal folds (D2a) in the region but predate the third phase of deformation (D3) and are interpreted to represent drag folding along the Gwillim Fault during sinistral movement (D2b) (Figure 8.1) (Leclerc et al., 2015). Progressive deformation of the Venture Sill caused rupturing of the unit producing axial planar and radial fractures and faults, some of which were subsequently mineralized when the regional compression rotated from north-south to northwest-southeast, opening up the existing structures and providing passageway for hydrothermal fluids.

In the Chibougamau Mining Camp, structurally-controlled copper-gold mineralization occurs in west-northwest trending dextral shear zones (Merril, Copper Rand mines) related to the second deformation event (D2) and in cross cutting, northeast trending dextral shear zones (Henderson, Portage mines).

It is interesting to note similarities between different veins systems at Springer and Perry on the Opemiska Property compared to the Chibougamau Deposits. At Chibougamau, the main copper veins oriented northeast-southwest at Henderson-Portage Mines and the later “Mines Shears” oriented at 110° which also seems to carry more gold. At the Springer Mine the veins that are closest to the northeast trending Gwillim Fault also contain significantly higher gold grades than the veins located more remote to the Gwillim Fault (Salmon et al., 1984).

At Springer and Perry mining was all underground and restricted to the high-grade veins. Considerable disseminated material surrounding the veins was left behind because it was not economic. The current Project seeks to define Mineral Resources that could be mined as an open pit.

FIGURE 8.1 OPEMISKA DEPOSIT MODEL



Source: QC Copper and Gold Inc. (2021)

8.2 VOLCANOGENIC MASSIVE SULPHIDES (VMS)

VMS-type mineralization is associated with three distinct volcanic cycles in the Chapais-Chibougamau District. South of the camp, the oldest volcanic unit, the Chrissie Formation (2,79 Ga) is host to significant low-grade VMS-style mineralization (Duquette, 1968). The Lemoine and Scott deposits are hosted within the Waconichi Formation (2.73 Ga, Leclerc et al., 2017) and are located on the south and north limbs of the Chibougamau Anticline, respectively. The Lemoine Mine produced 758,070 tonnes at 4.2% copper, 9.56% zinc, 4.2 g/t gold and 93.38 g/t silver (Lafrance et al., 2006) and the deposit is composed of a massive sulphide lense and sulphide stockworks near the top of a tholeiitic rhyolite at the contact of the overlying Gilman Formation. The Scott deposit contains 3.6 million tonnes at 1.1% copper, 5.2% zinc, 0.3 g/t gold and 36 g/t silver and is composed of deformed massive sulphide lenses and stringers within a sequence of coherent felsic to intermediate volcanic rocks. In the Blondeau Formation (2.72 Ga)

numerous exhalative VMS-style occurrences have been documented and the small Bruneau Deposit consisting of veins and stringers of chalcopyrite-pyrite in north-south fractures in basalt at the contact with a gabbro sill. In Chapais the zinc-rich 8-5 Zone at the Cooke Mine is a small, massive sulphide lens at the contact between rhyolite and volcanoclastic rocks of the Blondeau Formation (Dubé and Guha, 1992).

8.3 MAGMATIC FE-TI-V MINERALIZATION ASSOCIATED TO MAFIC-ULTRAMAFIC LAYERED COMPLEXES AND SILLS

The Fe-Ti-V deposits occur within the “Layered Zone” of the Lac Dore Complex (“LDC”). Recent field investigations of the LDC point out to a possible “multi-phase” intrusion similar to the Riviere Bell Intrusion in Matagami. The presence of early massive magnetite veins with trace of chalcopyrite, within recent surface drilling at Springer could be related to the near proximity of the LDC.

8.4 OTHER DEPOSIT TYPES

Syn-volcanic vein-type polymetallic mineralization is present on the north flank of the Chibougamau Camp and is hosted by north-south, north-northwest and north-northeast trending faults interpreted to be syn-volcanic in age (Leclerc et al., 2012).

Within the Chapais-Chibougamau District, shear zone-hosted mineralization occurs in east-west trending reverse shear zones and in related conjugate northwest and northeast trending shear zones in major east-west deformation corridors related to the second phase of deformation (D2) (Guha et al., 1988).

9.0 EXPLORATION

Exploration work by QC Copper and Gold and its predecessor company, PowerOre Inc., has been focussed on diamond drilling. The main other exploration activities on the Property consisted of compilation of previous work into a technical report (Larouche, 2019) for the public listing of PowerOre Inc. Compilation work has included the digitizing of historical mine data into a 3-D model of the geology and excavations of the Springer and Perry Mines and reprocessing of some geophysical data from several ground-based geophysical surveys which included 3-D inversions of magnetic data.

The digitizing of historical mine data was commenced by Ex-In as part of an effort to evaluate the economic potential of the Property and to provide marketing material for the project. The initial work comprised the scanning of all historical mine drill logs and manual entry of over 9,200 collars and approximately 153,000 assays from the Springer and Perry Mines and the digitization of underground plans and sections from both mines down to a depth of approximately 500 m. Subsequent to QC Copper's option agreement, QC Copper completed additional data entry of nearly 7,200 drill collars, over 3,000 downhole survey measurements and nearly 183,400 assays. Numerous plans, vertical sections and longitudinal sections were scanned to complete the inventory of underground excavations. All underground drifts, veins and stopes were digitized from the available scanned maps and combined into 3-D wireframes using various software and ultimately integrated into GEOVIA GEMS™ modelling software. Geological contacts and faults were also digitized from level plans and the linework combined into 3-D surfaces to aid interpretation. Several hundred individual 3-D wireframes of the veins and stopes were constructed to approximately the -150 m elevation (approximate depth of 550 m) on the Springer Mine and to the bottom of the Perry Mine. Many stopes were perforated during the 2019 and 2021 drill programs. The drills typically intersected the stopes within one or two metres of the projected downhole locations from the collars as projected in 3-D.

Although all the work described above was performed in the original mine grid coordinates, all the drill holes and the 3-D wireframes were converted to UTM coordinates and elevations above sea level in order to better integrate with GPS and surface data such as the town site and surrounding road network using the equations in Table 6.3. These equations were commissioned from Mr. Paul Roy, a land surveyor in Chibougamau, and were constructed from regression equations using a large number of mine-era surface drill collar casings (many are still visible) and re-surveyed using differential GPS.

The geophysical data reprocessing and 3-D inversions results indicate that the Venture Sill is variably magnetic with the most magnetic portion corresponding to the Venture Gabbro and Green Pyroxenite units. The magnetic field within these units where they are cut by northwest trending mineralized faults is attenuated suggesting the mineralizing fluids which produced the Springer and Perry Mines were magnetite destructive. It is worth noting that magnetite is a ubiquitous mineral phase in the veins themselves suggesting that either the magnetite was chemically remobilized into the veins or that the veins formed in the late stages of the hydrothermal system when the fluid composition evolved from magnetite destructive to magnetite formative. At the scale and resolution of the survey we cannot detect the magnetite in the veins, but the broader northwest magnetic attenuation is quite evident in the data.

10.0 DRILLING

QC Copper and Gold Inc. and its predecessor company, PowerOre Inc. carried out two major diamond drilling programs on the Opemiska Property in 2019 and 2021. These two programs were all done to industry standards with certified reference materials and blanks inserted in the sample stream to control the quality of the assays. In addition, for the 2021 program, duplicate quarter core samples of mineralized rock were sampled to estimate sampling variance and verification assays were undertaken in a second laboratory to confirm the accuracy of the principal laboratory, ALS-Global.

10.1 2019 DRILLING PROGRAM BY QC COPPER

In 2019 an initial 23 hole, 3,364 metre diamond drilling program was carried out on the Springer Zones with the primary objective of verifying that significant disseminated mineralization exists between the veins that were mined underground. Drilling focused on crown pillars and interior pillars, where these could be targeted, and results confirmed the expectations that the project could be re-evaluated as an open pit to mine pillars and the low-grade material that was left in the underground because of prevailing economics. Table 10.1 lists the drill holes in the 2019 program and Figure 10.1 shows the drill hole locations.

A series of holes were drilled to duplicate some of Falconbridge's drill holes, and also to test favorable sections for disseminated copper mineralization adjacent to largely mined out "high-grade copper zones" and finally investigate the metavolcanic/gabbro contact for disseminated copper mineralization within both the Ventures gabbro and felsic metavolcanic rocks.

A total of 23 NQ-size drill holes (diameter 4.76 cm) has been completed for 3,363.6 linear metres. A total of 1,251 samples were sent to an independent commercial laboratory for analysis.

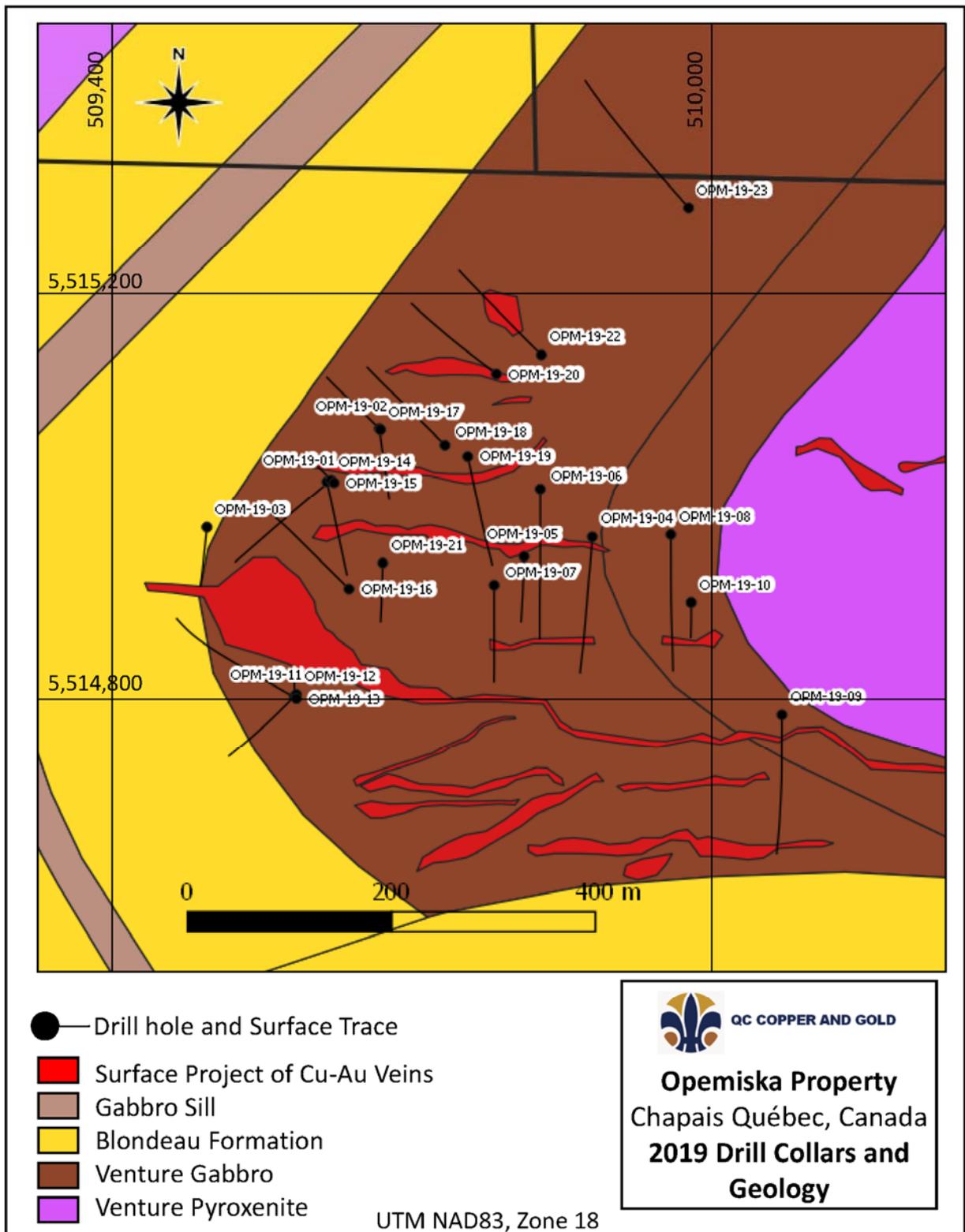
The drill program, logging and sampling were carried out under the supervision of Claude Larouche, P.Eng. Samples of core were cut longitudinally along a line marked by the logging geologist and cut in half using a diamond saw. Samples were assembled in batches with pulps of certified reference materials and blanks. Approximately 10% of the samples submitted for analyses were either standards or blanks. In addition, a suite of core duplicates was submitted for analysis. Finally, a suite of mineralized core from the 2010, 2015 and 2016 drilling programs was quarter cored and submitted for validation assay. These results are reviewed in Section 12.

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID
OPM-19-01	168.0	-48	139.1	PO13681
OPM-19-02	172.3	-50	107.5	PO13681
OPM-19-03	186.3	-60	115.4	PO13681
OPM-19-04	184.0	-47	193.7	PO13681
OPM-19-05	182.7	-49	98.5	PO13681
OPM-19-06	180.0	-50	226.5	PO13681

TABLE 10.1
LOCATION OF 2019 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID
OPM-19-07	180.0	-48	139.6	PO13681
OPM-19-08	180.0	-45	188.0	PO13681
OPM-19-09	180.0	-65	320.6	PO13681
OPM-19-10	180.0	-49	51.1	PO13681
OPM-19-11	360.0	-60	37.9	PO13681
OPM-19-12	225.0	-45	122.6	PO13681
OPM-19-13	300.0	-45	195.7	PO13681
OPM-19-14	230.0	-45	173.0	PO13681
OPM-19-15	315.0	-45	38.0	PO13681
OPM-19-16	310.0	-45	160.5	PO13681
OPM-19-17	315.0	-45	100.9	PO13681
OPM-19-18	315.0	-45	151.1	PO13681
OPM-19-19	180.0	-45	153.8	PO13681
OPM-19-20	308.8	-45	149.0	PO13681
OPM-19-21	180.0	-60	113.6	PO13681
OPM-19-22	315.8	-45	163.9	PO13681
OPM-19-23	322.0	-45	223.6	PO13681
Total	23 holes		3,363.6	

FIGURE 10.1 2019 DIAMOND DRILL HOLE LOCATION MAP



Source: QC Copper (2021)

10.1.1 Lithologies

All the drill holes from the 2019 program were collared in the Springer Mine area and all holes intersected either the Venture Sill or Blondeau Formation metavolcanic rocks in the stratigraphic hanging wall of the mineralization. Beside the well-established “stratigraphy” within the Ventures Sill, some of the units show variations, and layering. For example, the upper contact of the Ventures Gabbro with the rhyolite, that is now the structural footwall, locally appears to be represented by a visually more mafic phase (melano-gabbro) that differs from the typical Ventures Gabbro (leuco-gabbro). The melano-gabbro is finer grained and locally shows a chilled margin over 1 to 2 metres.

A well-defined peridotite unit that is possibly a sill is present within the upper green pyroxenite in drill hole OPM-19-09 and may present a useful marker unit.

Numerous dykes of diorite, locally porphyritic, are present within different units of the Ventures Sill and also the felsic metavolcanics. Rare tonalite dykes are also present within the Ventures Sill.

The rhyolite intersected within the Blondeau Formation (or the equivalent of the Blondeau Formation in Chapais) is possibly part of a larger rhyolite dome which further to the northwest appears to be overlain by mafic volcanic. This represents a possible target for VMS-type deposits.

10.1.2 Mineralization

Significant disseminated copper mineralization was intersected during the 2019 drill program, summarized in Table 10.2. Preliminary observations from the 2019 drilling suggested that higher copper grades (+/- gold) are associated to main veins with more massive chalcopyrite along with qtz – pyrite – (pyrrhotite) – and magnetite. The veins are well defined and locally do not show significant alteration at their contact. The wider sections of more disseminated copper mineralization (narrower fractures) appear to be present within larger corridors of stronger chloritic alteration where the original texture of the rock is partially or completely destroyed. Finally, a few quartz veins locally with arsenopyrite were intersected, they carry higher grade gold and less copper, and show a different orientation to the copper veins.

TABLE 10.2						
SIGNIFICANT MINERALIZED INTERSECTIONS FROM THE						
2019 DRILLING CAMPAIGN						
Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Zone
OPM-19-01	0.6	114.0	113.4	0.15	0.09	Hinge
including	51.0	66.0	15.0	0.50	0.41	Hinge
and	96.8	106.0	9.2	0.25	0.12	
OPM-19-02	2.0	107.0	105.0	0.43	0.36	Hinge
including	49.4	61.3	11.9	1.81	0.22	Hinge
and	99.0	107.0	8.0	2.53	3.66	Hinge

TABLE 10.2
SIGNIFICANT MINERALIZED INTERSECTIONS FROM THE
2019 DRILLING CAMPAIGN

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Zone
OPM-19-03	33.0	91.0	58.0	0.22	0.84	Hinge
including	53.0	58.7	5.7	0.71	0.35	Hinge
OPM-19-04	6.0	192.0	186.0	0.13	0.10	Mill
including	7.2	31.0	23.8	0.53	0.61	Mill
and	186.6	190.9	4.3	1.50	0.21	Mill
OPM-19-05	96.1	98.5	2.4	0.84	1.54	Mill
OPM-19-06	2.0	226.5	224.5	0.12	0.078	Mill
including	51.0	56.5	5.5	1.30	0.49	Mill
OPM-19-07	9.0	139.6	130.6	0.18	0.16	Mill / SE
including	14.2	22.1	7.9	0.84	0.32	Mill
and	97.0	110.0	13.0	0.39	0.99	Mill
OPM-19-08	116.6	129.0	12.4	0.35	0.12	Mill / SE
OPM-19-09	27.6	312.0	284.4	0.20	0.10	Southeast
including	26.4	46.0	19.6	0.59	0.15	Southeast
and	94.2	108.0	13.8	1.45	0.33	Southeast
and	122.0	135.4	13.4	0.24	0.07	Southeast
and	296.0	312.0	16.0	0.56	0.46	Southeast
OPM-19-10						Mill / SE
OPM-19-11	19.2	34.0	14.8	0.48	0.25	Hinge
OPM-19-12	12.0	26.0	14.0	0.25	0.17	Hinge
OPM-19-13	12.1	150.0	137.9	0.26	0.08	Hinge
including	81.0	100.0	19.0	1.51	0.46	Hinge
OPM-19-14	3.0	165.0	162.0	0.46	0.20	Hinge
including	38.0	81.0	43.0	1.27	0.56	Hinge
and	89.0	97.0	8.0	0.15	0.19	Hinge
OPM-19-15	19.0	35.0	16.0	0.28	0.10	Hinge
OPM-19-16	55.0	152.0	97.0	0.35	0.21	Hinge
including	55.0	105.0	50.0	0.41	0.34	Hinge
and	141.0	151.0	10.0	1.13	0.24	Hinge
OPM-19-17	18.0	20.0	2.0	0.81	0.34	Mill
OPM-19-18	28.0	102.0	74.0	2.13	0.41	Mill
including	38.0	63.0	25.0	3.25	0.96	Mill
and	73.0	87.5	14.5	4.95	0.33	Mill
OPM-19-19	16.1	150.0	133.9	0.53	0.11	Mill
including	16.1	29.3	13.2	0.47	0.11	Mill
and	81.1	89.0	7.9	4.10	0.51	Mill
and	98.6	117.6	19.0	0.37	0.16	Mill
and	137.7	150.0	12.3	1.51	0.27	Mill
OPM-19-20	15.0	117.1	102.1	0.41	0.15	Mill

TABLE 10.2
SIGNIFICANT MINERALIZED INTERSECTIONS FROM THE
2019 DRILLING CAMPAIGN

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Zone
including	18.0	25.0	7.0	1.27	0.24	Mill
and	61.5	76.3	14.8	1.07	0.61	Mill
and	96.0	117.1	21.1	0.77	0.19	Mill
OPM-19-21	7.0	107.0	100.0	0.17	0.20	Hinge
including	7.0	24.0	17.0	0.37	0.10	Hinge
and	34.0	49.3	15.3	0.27	1.00	Hinge
OPM-19-22	36.0	150.0	114.0	0.34	0.14	Mill
including	76.0	102.0	26.0	1.11	0.47	Mill
OPM-19-23	187.0	209.0	22.0	0.39	0.07	

The 2019 diamond drilling program objective was to confirm the presence of wide, near surface mineralization on the periphery of existing mined out veins. This objective was confirmed, and significant intervals were also identified in areas previously thought to be barren. In addition, some “un-named” veins were intersected in the drilling; these were not mined underground because they did not meet the minimum threshold requirement of 1.5% Cu over a minimum of 5 feet (1.5 m). Moreover, drilling in the vicinity of the historical process plant indicates that the mine left much thicker crown pillars in this area to protect the process plant. Finally, a total of 10 of the 23 holes were twins or quasi-twins of historical mine surface drill holes and preliminary results of the comparison of the locations, widths and grade distributions between the historical assays and the QAQC-controlled drilling by QC Copper indicates the mine assays were compatible with modern sampling. This data will be combined with additional twin holes in the 2021 drilling in Item 12 to validate the historical assays.

10.2 2021 DIAMOND DRILLING PROGRAM

From January 22 to May 16, 2021, QC Copper undertook a drilling campaign on its Opémiska Property. The work was carried out by Forage Miikan, a subsidiary of Forage Chibougamau. During the campaign, 78 holes were drilled, for a total of 16,411 metres.

The work was carried out under the supervision of Denis McNichols, P.Geo., Project Manager for QC Copper. Drill core was logged by Patrice Rioux, P.Geo. Junior, Julien Huget, Ing. Junior, Vincent Raymond, P.Geo., all three working for Laurentia Exploration and by Armando G. Monteza, P.Geo. Junior, employed by QC Copper. The core processing and the operators of core sawing equipment were carried out under the supervision of Mr. André Bouchard of Chapais, also an employee of Laurentia Exploration.

All holes were drilled with NQ sized core, using a hexagonal bar and a long reamer sleeve to minimize hole deviation.

The drill collars were set up by a professional land surveyor, who returned to the field after the campaign to record the final position of the holes. All the collars were aligned using an "Azimuth Aligner" from Minnovare. This method guaranteed an accuracy of 0.1° both on the direction and on the dip of the holes and is not affected by the high magnetic susceptibility of the rocks in the Venture Sill. The device was checked regularly to ensure it was still properly calibrated. The deviation tests were done using a Reflex magnetic device, starting at 30 metres and then at 50 metres. Any outlier azimuths and dips were removed from the dataset before plotting.

Table 10.3 lists the drill hole locations and statistics, and the holes are plotted in Figure 10.2. Results for the mineralized intervals intersected in the 2021 drilling are summarized in Table 10.4.

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83, Zone 18N		Elevation (m)
					Easting	Northing	
OPM-21-24	180	-63	322.0	P013681	509,820.8	5,515,074.0	403.8
OPM-21-25	180	-50	354.0	P013681	509,856.7	5,515,134.0	401.4
OPM-21-26	225	-55	176.0	P013681	509,851.0	5,515,174.0	401.3
OPM-21-27	180	-50	256.2	P013681	509,909.4	5,515,022.0	409.1
OPM-21-28	225	-50	201.0	P014151	510,344.9	5,515,344.0	397.9
OPM-21-29	225	-50	201.0	P013681	510,287.2	5,515,242.0	395.2
OPM-21-30	180	-50	201.0	P013681	510,383.7	5,515,247.0	394.8
OPM-21-31	180	-50	204.0	P013681	510,489.1	5,515,183.0	392.6
OPM-21-32	180	-50	204.0	P013681	510,550.8	5,515,116.0	391.9
OPM-21-33	180	-50	201.0	P013681	510,597.7	5,514,945.0	391.4
OPM-21-34	180	-50	201.0	P013681	510,448.0	5,514,901.0	391.5
OPM-21-35	180	-50	201.0	P013681	510,452.3	5,515,004.0	391.9
OPM-21-36	180	-50	198.0	P013681	510,419.9	5,515,113.0	392.3
OPM-21-37	180	-45	102.0	P013681	510,321.0	5,515,081.0	392.0
OPM-21-38	220	-45	196.0	P013681	509,894.8	5,515,258.0	399.8
OPM-21-39	225	-50	154.5	P013681	509,805.8	5,515,281.0	399.2
OPM-21-40	225	-50	196.0	P013681	509,611.8	5,515,142.0	396.0
OPM-21-41	180	-50	319.8	P013681	509,611.4	5,515,118.0	397.4
OPM-21-42	181.5	-45	150.0	P014151	510,139.4	5,515,678.0	402.8
OPM-21-43	225	-50	102.0	P014151	510,087.6	5,515,664.0	404.9
OPM-21-44	180	-45	249.0	P014151	510,080.3	5,515,584.0	401.8
OPM-21-45	225	-50	150.0	P014151	510,054.4	5,515,507.0	399.4
OPM-21-46	180	-50	174.0	P014151	510,077.9	5,515,329.0	399.5
OPM-21-47	270	-55	198.0	P014151	510,337.6	5,515,781.0	403.0
OPM-21-48	225	-50	165.0	P014151	510,193.8	5,515,600.0	402.2
OPM-21-49	225	-50	201.0	P014151	510,155.3	5,515,468.0	400.0
OPM-21-50	215	-45	276.0	P014151	510,236.7	5,515,551.0	402.2
OPM-21-51	180	-50	192.0	P014151	510,260.3	5,515,422.0	400.9

TABLE 10.3
LOCATION AND ATTITUDE OF 2021 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83, Zone 18N		Elevation (m)
					Easting	Northing	
OPM-21-52	270	-55	153.0	P014151	510,420.8	5,515,756.0	403.2
OPM-21-53	270	-55	146.0	P014151	510,474.6	5,515,534.0	400.1
OPM-21-54	270	-55	300.0	P014151	510,475.5	5,515,626.0	400.8
OPM-21-55	270	-80	241.0	P014151	510,499.5	5,515,628.0	401.0
OPM-21-56	270	-80	280.0	P014151	510,556.5	5,515,555.0	401.2
OPM-21-57	270	-50	204.0	P014151	510,706.2	5,515,635.0	402.8
OPM-21-58	270	-50	130.0	P014151	510,734.3	5,515,567.0	401.5
OPM-21-59	180	-50	132.0	P014151	510,601.1	5,515,449.0	399.1
OPM-21-60	210	-55	348.0	P014151	511,394.2	5,515,872.0	429.9
OPM-21-61	270	-55	234.0	P014151	510,599.8	5,515,477.0	400.0
OPM-21-62	270	-65	267.0	P014151	510,748.7	5,515,906.0	409.0
OPM-21-63	180	-50	201.0	P014151	511,297.5	5,515,690.0	425.9
OPM-21-64	180	-50	276.0	P014151	511,751.3	5,515,644.0	415.2
OPM-21-65	270	-50	201.0	P014151	510,606.3	5,515,918.0	410.1
OPM-21-66	180	-55	324.0	P014151	511,594.9	5,515,681.0	416.8
OPM-21-67	270	-50	243.0	P014151	510,707.1	5,515,847.0	408.6
OPM-21-68	180	-50	225.0	P014151	511,172.7	5,515,756.0	423.0
OPM-21-69	180	-50	201.0	P014151	510,869.9	5,515,688.0	405.5
OPM-21-70	210	-50	264.0	P014151	511,195.9	5,515,650.0	424.0
OPM-21-71	180	-50	225.0	P014151	510,869.8	5,515,784.0	406.8
OPM-21-72	200	-50	150.0	P014151	511,118.6	5,515,659.0	415.9
OPM-21-73	270	-65	141.0	P014151	510,740.1	5,515,766.0	404.1
OPM-21-74	180	-45	150.0	P014151	510,993.2	5,515,693.0	408.4
OPM-21-75	270	-60	150.0	P014151	510,618.5	5,515,724.0	405.0
OPM-21-76	175	-50	201.0	P014151	511,017.0	5,515,547.0	408.1
OPM-21-77	180	-50	234.0	P014151	510,711.5	5,515,449.0	401.2
OPM-21-78	180	-50	201.0	P014151	510,807.5	5,515,500.0	402.2
OPM-21-79	270	-50	193.0	P014151	510,734.5	5,515,472.0	401.3
OPM-21-80	270	-50	51.0	P014151	510,535.0	5,515,331.0	397.6
OPM-21-81	180	-50	132.0	P013681	509,661.9	5,515,001.0	406.5
OPM-21-82	180	-50	201.0	P014151	511,378.0	5,515,320.0	399.1
OPM-21-83	170	-50	297.0	P013681	509,570.2	5,515,071.0	390.2
OPM-21-84	190	-50	192.0	P014151	511,306.3	5,515,301.0	392.0
OPM-21-85	180	-50	186.0	P014151	511,164.4	5,515,545.0	413.7
OPM-21-86	180	-50	102.0	P013681	509,512.2	5,514,813.0	393.3
OPM-21-87	180	-50	201.0	P014151	511,262.5	5,515,552.0	415.6
OPM-21-88	180	-50	210.0	P013681	509,745.9	5,514,700.0	382.2
OPM-21-89	180	-50	300.0	P014151	511,146.1	5,515,400.0	396.8
OPM-21-90	180	-50	201.0	P013681	509,865.8	5,514,780.0	398.1

TABLE 10.3
LOCATION AND ATTITUDE OF 2021 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83, Zone 18N		Elevation (m)
					Easting	Northing	
OPM-21-91	180	-50	135.4	P013681	509,945.1	5,514,805.0	398.3
OPM-21-92	180	-50	204.0	P014151	510,998.8	5,515,420.0	401.0
OPM-21-93	180	-50	205.5	P013681	509,786.4	5,514,795.0	399.3
OPM-21-94	168	-50	201.0	P014151	510,928.2	5,515,473.0	403.4
OPM-21-95	180	-50	140.0	P013681	509,725.7	5,514,934.0	416.3
OPM-21-96	225	-50	297.0	P014151	510,270.7	5,515,474.0	400.4
OPM-21-97	180	-50	240.0	P013681	509,908.3	5,514,889.0	409.3
OPM-21-98	180	-55	357.0	P014151	510,181.7	5,515,330.0	400.2
OPM-21-99	180	-50	165.0	P013681	510,013.9	5,515,014.0	408.4
OPM-21-100	180	-50	310.4	P013681	510,049.7	5,515,130.0	401.2
OPM-21-101	205	-50	322.0	P013681	509,978.8	5,515,281.0	399.0
Total	78 holes		16,411.0				

TABLE 10.4
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM

Cu-Eq% = Cu-% + Au-g/t*0.72 + Ag-g/t*0.01						
Diamond Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-24	From 51.0 to 177.0 m, 126.0 m @ 0.438% Cu-eq	0.326	0.134	1.554	59	28
	incl. from 121.5 to 177.0 m, 55.5 m @ 0.640% Cu-eq	0.488	0.181	2.130	52	30
	and from 303.0 to 310.5 m, 7.5 m @ 1.14% Cu-eq	0.979	0.117	8.040	2,023	153
OPM-21-25	From 85.5 to 103.5 m, 18 m @ 0.826% Cu-eq	0.660	0.185	3.328	141	46
	and from 154.5 to 231.0 m, 76.5 m @ 0.542% Cu-eq	0.355	0.236	1.640	58	29
OPM-21-26	From 36.0 to 176.0 m, 140 m @ 0.429% Cu-eq	0.331	0.116	1.442	71	36
	incl. from 105.0 to 150.9 m, 35.0 m @ 0.936% Cu-eq	0.717	0.266	2.773	105	40
OPM-21-27	From 69.0 to 196.5 m, 127.5 m @ 0.382% Cu-eq	0.318	0.061	2.000	73	28
	incl. from 69.0 to 104.0 m, 35.0 m @ 0.860% Cu-eq	0.749	0.094	4.410	129	40
OPM-21-28	From 140.0 to 195.0 m, 55 m @ 0.279% Cu-eq	0.223	0.059	1.358	66	46
	incl. from 170.0 to 177.5 m, 7.5 m @ 1.45% Cu-eq	1.177	0.305	5.704	97	53
OPM-21-29	From 132.0 to 158.0 m, 26 m @ 0.345% Cu-eq	0.279	0.070	1.508	83	49
OPM-21-30	Low Values					
OPM-21-31	Low Values					
OPM-21-32	Low Values					
OPM-21-33	Low Values					
OPM-21-34	From 184.5 to 192.3 m, 7.8 m @ 0.634% Cu-eq	0.463	0.198	2.854	110	44
OPM-21-35	Low Values					
OPM-21-36	Low Values					
OPM-21-37	Low Values					
OPM-21-38	From 132.0 to 196.0 m, 64.0 m @ 0.523% Cu-eq	0.38	0.17	2.025	81	45
OPM-21-39	From 64.0 to 75.0 m, 11.0 m @ 0.369% Cu-eq	0.278	0.100	1.930	59	26
OPM-21-40	Low Values					
OPM-21-41	From 31.5 to 85.0 m, 53.5 m @ 0.558% Cu-eq	0.450	0.098	2.520	604	8
	incl. from 75.0 to 85.0 m, 10.0 m @ 2.63% Cu-eq	2.359	0.238	10.197	225	35
OPM-21-42	Low Values					

TABLE 10.4
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM

Cu-Eq% = Cu-% + Au-g/t*0.72 + Ag-g/t*0.01						
Diamond Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-43	Low Values					
OPM-21-44	From 57.0 to 78.0 m, 21.0 m @ 0.506% Cu-eq	0.402	0.113	2.257	114	40
OPM-21-45	Low Values					
OPM-21-46	From 25.5 to 36.0 m, 10.5 m @ 0.492% Cu-eq	0.423	0.050	3.300	100	37
	and from 144.0 to 165.0 m, 21.0 m @ 0.446% Cu-eq	0.114	0.417	3.164	329	45
OPM-21-47	Low Values					
OPM-21-48	Low Values					
OPM-21-49	From 110.4 to 150.0 m, 39.6 m @ 0.486% Cu-eq	0.395	0.095	2.231	74	29
OPM-21-50	From 221.5 to 251.6 m, 40.1 m @ 0.697% Cu-eq	0.558	0.149	3.167	142	38
OPM-21-51	From 49.5 to 187.5 m, 138.0 m @ 0.458% Cu-eq	0.390	0.066	1.997	89	48
	incl. 111.0 to 187.5 m, 76.5 m @ 0.760% Cu-eq	0.646	0.113	3.239	114	52
	and incl. 133.4 to 161.2 m, 27.8 m @ 1.39% Cu-eq	1.155	0.250	5.026	170	58
OPM-21-52	Low Values					
OPM-21-53	Low Values					
OPM-21-54	From 117.7 to 141.0 m, 23.3 m @ 0.358% Cu-eq	0.324	0.021	1.875	70	36
	and from 258.9 to 264.1 m, 5.2 m @ 0.529% Cu-eq	0.413	0.102	4.244	190	57
OPM-21-55	Low Values					
OPM-21-56	Low Values					
OPM-21-57	From 180.0 to 185.0 m, 5.0 m @ 3.10% Cu-eq	2.862	0.053	19.880	604	106
OPM-21-58	From 117.0 to 130.0 m, 13.0 m @ 0.376% Cu-eq	0.329	0.041	1.773	102	61
OPM-21-59	Low Values					
OPM-21-60	From 198.0 to 202.5 m, 4.5 m @ 0.580% Cu-eq	0.552	0.011	2.067	60	41
OPM-21-61	Low Values					
OPM-21-62	Low Values					
OPM-21-63	From 85.0 to 93.0 m, 8.0 m @ 0.560% Cu-eq	0.532	0.006	2.351	49	60
OPM-21-64	From 134.0 to 155.0 m, 21.0 m @ 0.486% Cu-eq	0.378	0.078	5.164	143	91
OPM-21-65	Low Values					

TABLE 10.4
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM

Cu-Eq% = Cu-% + Au-g/t*0.72 + Ag-g/t*0.01						
Diamond Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-66	Low Values					
OPM-21-67	Low Values					
OPM-21-68	From 162.0 to 172.5 m, 10.5 m @ 0.907% Cu-eq	0.837	0.005	6.671	162	45
OPM-21-69	From 34.5 to 144.0 m, 109.5 m @ 0.626% Cu-eq	0.594	0.009	2.551	109	37
	incl. from 108.0 to 144.0 m, 36.0 m @ 1.59% Cu-eq	1.534	0.012	4.515	250	53
OPM-21-70	From 46.5 to 48.8 m, 2.3 m @ 8.349% Cu-eq	7.855	0.048	40.809	235	118
OPM-21-71	From 165.0 to 174.0 m, 9.0 m @ 0.349% Cu-eq	0.330	0.009	1.283	84	52
	From 216.0 to 223.5 m, 7.5 m @ 0.339% Cu-eq	0.285	0.006	1.240	98	58
OPM-21-72	From 34.3 to 93.0 m, 58.7 m @ 0.128% Cu-eq	0.105	0.018	0.957	24	79
	incl. from 82.5 to 93.0 m, 10.5 m @ 0.360% Cu-eq	0.275	0.077	2.986	53	118
OPM-21-73	Low Values					
OPM-21-74	From 85.3 to 88.5 m, 3.2 m @ 0.405% Cu-eq	0.387	0.006	1.319	23	33
OPM-21-75	From 139.5 to 145.5 m, 6.0 m @ 0.591% Cu-eq	0.469	0.124	3.273	103	40
OPM-21-76	Low Values					
OPM-21-77	From 64.5 to 106.9 m, 42.4 m @ 0.219% Cu-eq	0.199	0.008	1.420	35	34
	and from 153.7 to 168.7 m, 15.0 m @ 0.757% Cu-eq	0.681	0.031	5.382	292	90
OPM-21-78	From 64.3 to 66.3 m, 2.0 m @ 1.73% Zn	0.016	0.164	3.925	11,490	55
	and from 113.8 to 118.8 m, 5.0 m @ 0.358% Cu-eq	0.284	0.045	4.134	45	114
OPM-21-79	From 136.5 to 145.0 m, 8.5 m @ 0.365% Cu-eq	0.348	0.010	0.965	25	63
OPM-21-80	From 31.5 to 51.0 m, 19.5 m @ 0.440% Cu-eq	0.405	0.014	2.485	39	32
OPM-21-81	From 3.0 to 129.0 m, 126.0 m @ 0.232% Cu-eq	0.164	0.076	1.295	89	30
	incl. from 3.0 to 31.5 m, 28.5 m @ 0.529% Cu-eq	0.387	0.157	2.874	181	38
	and from 43.5 to 66.0 m, 22.5 m @ 0.370% Cu-eq	0.274	0.109	1.707	56	29
OPM-21-82	From 103.5 to 159.0 m, 55.5 m @ 0.525% Cu-eq	0.437	0.028	6.766	388	46
OPM-21-83	From 244.0 to 267.0 m, 23.0 m @ 1.509% Cu-eq	0.891	0.675	13.237	1,686	146
OPM-21-84	From 73.5 to 110.0 m, 36.5 m @ 0.348% Cu-eq	0.291	0.023	4.052	151	57
	and from 150.0 to 158.0 m, 8.0 m @ 0.237% Cu-eq	0.203	0.011	2.563	55	40

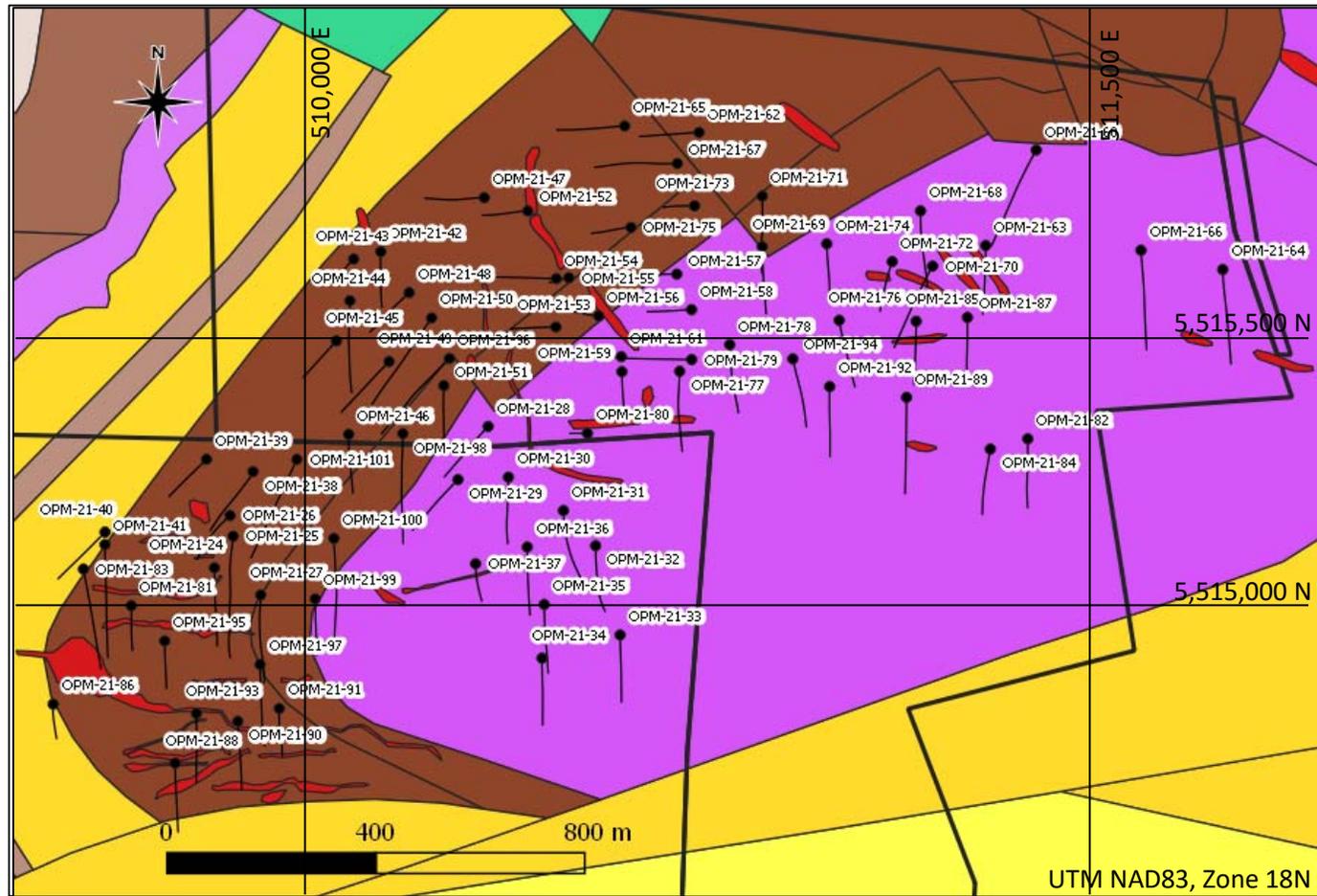
TABLE 10.4
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM

Cu-Eq% = Cu-% + Au-g/t*0.72 + Ag-g/t*0.01						
Diamond Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-85	???					
OPM-21-86	Low Values					
OPM-21-87	Low Values					
OPM-21-88	From 14.9 to 148.5 m, 133.6 m @ 0.470% Cu-eq	0.207	0.342	1.650	92	45
OPM-21-89	From 195.0 to 229.5 m, 34.5 m @ 0.130% Cu-eq	0.113	0.007	1.226	20	28
OPM-21-90	From 36.0 to 69.0 m, 33.0 m @ 0.347% Cu-eq	0.267	0.095	1.111	52	31
	incl. from 37.5 to 48.0 m, 10.5 m @ 0.928% Cu-eq	0.721	0.250	2.748	89	49
	and from 157.5 to 201.0 m, 43.5 m @ 0.275% Cu-eq	0.119	0.194	1.621	477	31
OPM-21-91	From 39.0 to 67.5 m, 28.5 m @ 0.353% Cu-eq	0.260	0.114	1.121	89	53
OPM-21-92	From 138.0 to 154.5 m, 16.5 m @ 0.335% Cu-eq	0.300	0.011	2.723	47	42
OPM-21-93	From 7.0 to 36.0 m, 29.0 m @ 0.362% Cu-eq	0.196	0.215	1.100	44	29
	and from 90.0 to 122.0 m, 32.0 m @ 0.297% Cu-eq	0.232	0.078	0.873	23	22
	and from 195 to 205.5 m, 10.5 m @ 0.278% Cu-eq	0.183	0.097	1.086	44	38
OPM-21-94	Low Values					
OPM-21-95	From 12.0 to 49.5 m, 37.5 m @ 0.338% Cu-eq	0.228	0.126	1.884	978	33
	and from 106.5 to 112.5 m, 6.0 m @ 0.659% Cu-eq	0.372	0.352	3.375	198	64
	and from 136.5 to 140.0 m, 3.5 m @ 0.886% Cu-eq	0.757	0.135	3.193	141	59
	and from 244.5 to 297.0 m, 52.5 m @ 0.357% Cu-eq	0.289	0.072	1.589	66	29
OPM-21-96	From 94.5 to 105.0 m, 10.5 m @ 0.497% Cu-eq	0.446	0.040	2.177	49	24
	and from 217.5 to 231.0 m, 13.5 m @ 0.322% Cu-eq	0.240	0.091	1.602	74	38
	and from 288.0 to 291.0 m, 3.0 m @ 0.911% Cu-eq	0.773	0.082	7.850	419	62
OPM-21-97	From 23.75 to 27.0 m, 3.25 m @ 0.431% Cu-eq	0.080	0.456	2.223	5,909	68
	and from 109.5 to 127.6 m, 18.1 m @ 1.35% Cu-eq	1.134	0.182	8.794	987	61
OPM-21-98	From 6.8 to 106.8 m, 100.0 m @ 0.482% Cu-eq	0.376	0.125	1.567	66	37
	incl. from 6.8 to 28.5 m, 21.7 m @ 1.55% Cu-eq	1.185	0.452	3.438	92	41
	and from 337.5 to 346.5 m, 9.0 m @ 18.29 g/t Au and 0.88% Zn		18.29		8,783	
	incl. from 340.5 to 345.0 m, 4.5 m @ 36.1 g/t Au and 1.67% Zn		36.10		16,683	

TABLE 10.4
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM

Cu-Eq% = Cu-% + Au-g/t*0.72 + Ag-g/t*0.01						
Diamond Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-99	From 15.0 to 48.0 m, 33.0 m @ 0.176% Cu-eq	0.144	0.029	1.072	147	43
	and from 156.0 to 163.0 m, 7.5 m @ 0.794% Cu-eq	0.670	0.102	5.080	125	44
OPM-21-100	Low Values					
OPM-21-101	From 187.5 to 190.5 m, 3.0 m @ 1.146% Cu-eq	0.773	0.411	7.750	114	79
	and from 220.5 to 297.0 m, 76.5 m @ 0.297% Cu-eq	0.235	0.063	1.400	61	28

FIGURE 10.2 2021 DIAMOND DRILL HOLE LOCATION MAP



- Claim Boundary
- Drill hole and Surface Trace
- Bourbeau Sill
- Gabbro Sill
- Venture Gabbro
- Venture Pyroxenite
- Surface Project of Cu -Au Veins
- Blondeau Formation Felsic Volcanics
- Blondeau Formation Felsic Tuffs
- Gwillim Mafic Volcanics


QC COPPER AND GOLD
Opemiska Property
 Chapais Québec, Canada
2021 Drill Collars and Geology
 Source: QC Copper (2021)

10.2.1 Lithologies

All the holes drilled in 2021, except for holes OPM-21-40, 41, 83 and 86, were collared and terminated in the gabbro or pyroxenite of the Venture Sill. The non-Venture holes were collared near the contact of the sill with the structurally underlying but stratigraphically overlying Blondeau Formation felsic metavolcanics and stayed in the felsic metavolcanics for the length of the holes. A few holes drilled on the southern edge of the intrusion ended in Blondeau metavolcanics. All the other holes were collared either in the quartz-gabbro phase within the modelled open pit or were drilled in the pyroxenite on the Eastern Veins.

10.2.2 Mineralization

The mineralized intersections encountered in the 2021 drilling program are very similar to previous drilling. Mineralization occurs in the form of shear veins (mainly Springer) or quartz-rich veins (mainly Perry) with mineralization consisting primarily of chalcopyrite with accompanying pyrite and lesser pyrrhotite with magnetic, chlorite, quartz and calcite as gangue minerals.

Occasionally sphalerite-rich veins are encountered that have only modest concentrations of copper but may have high gold values. Arsenopyrite is also present locally as well but to date it has not been possible to relate the different vein mineralogy to different vein generations although it is likely to be the case.

The numerous mined veins in Springer and Perry Mines are surrounded by low-grade halos of weakly and variably altered Venture Sill rock with occasional chalcopyrite veins a few cm to a few tens of cm wide separated by barren rock. The low-grade copper is typically forms halos up to three to five times the width of the veins on either side. In the core of the Springer Mine the veins are sufficiently numerous to create a continuous halo of mineralization over several hundreds of metres, centered on Vein No. 3, the most important vein mined by Falconbridge.

The mineralized interval composited assay results are summarized in Table 10.4. Figure 10.2 is a map showing the drill hole locations.

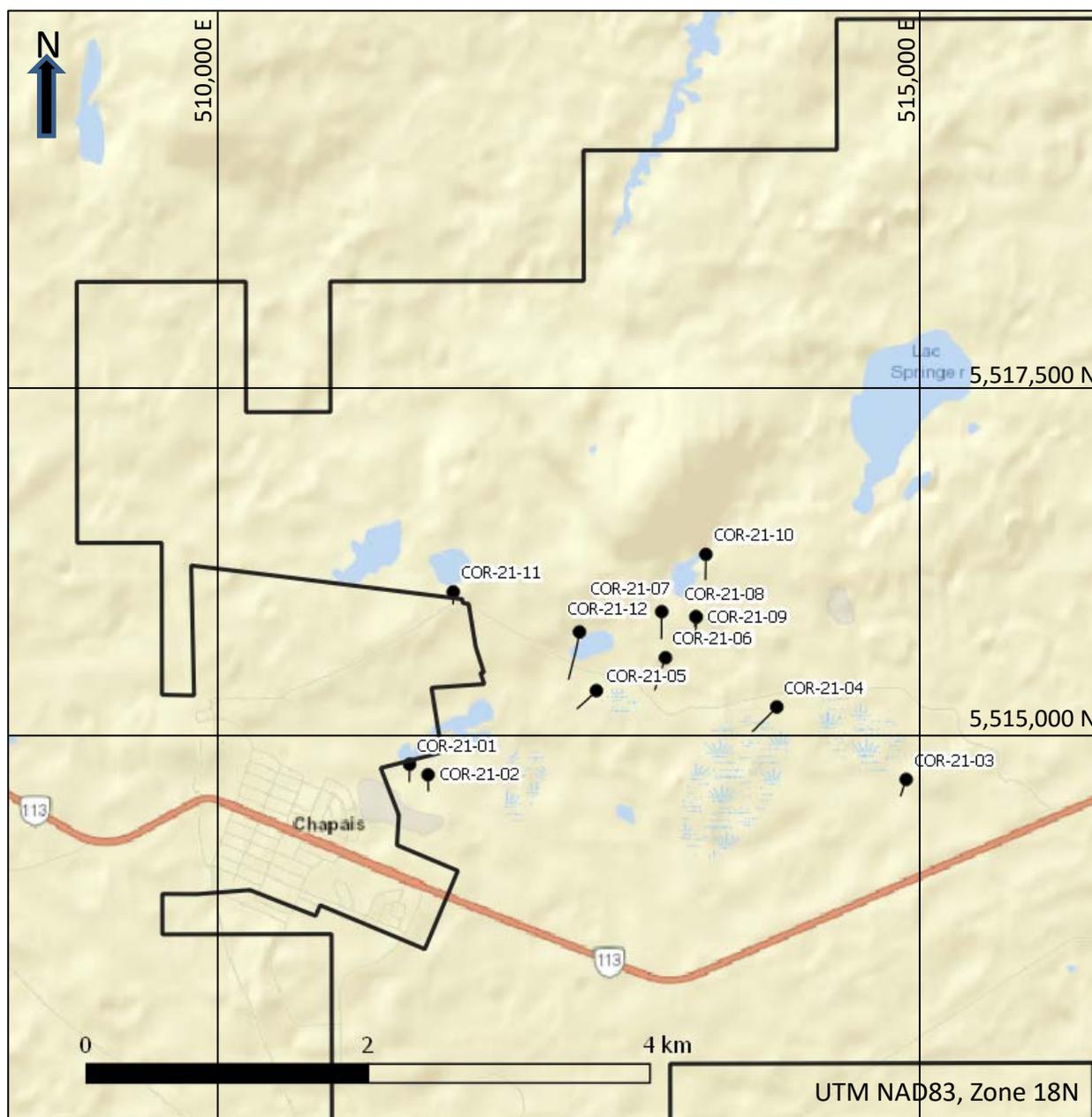
The mineralization at Opemiska contains variable gold with historical gold grades generally higher in the southern part of the Springer Mine, near the Gwillim Fault. The Cooke Mine, located off the Property to the east is also quite enriched in the gold and is also located near the Gwillim Fault. Results from 2021 suggest that gold tends to be more erratically distributed than copper and there is poor correlation between the two metals although higher individual gold grades tend to occur where copper is also higher. The highest gold grades encountered in 2021 came from hole OPM-21-98 drilled at the contact between the gabbro and the pyroxenite and found in a narrow pyrite-sphalerite vein almost parallel to the drill core. A 9.0 metre interval of pyroxenite-hosted sulphide vein returned 18.3 g/t gold and 0.88% zinc in a low angle vein.

10.3 DRILLING ON OTHER PROPERTIES

10.3.1 Drilling on the Cooke Robitaille Property

In 2021 QC Copper carried out a drilling program on the Cooke-Robitaille Property that consisted of 12 holes totalling 3,772 metres. The drill holes are shown in Figure 10.3, collars are listed in Table 10.5 and significant results are summarized in Table 10.6.

FIGURE 10.3 COOKE-ROBITAILLE PROPERTY 2021 DIAMOND DRILL HOLE PROGRAM LOCATION MAP



Source: QC Copper and Gold Corp (October 2021)

TABLE 10.5
LOCATION OF 2021 SURFACE DIAMOND DRILL HOLES
ON THE COOKE-ROBITAILLE PROPERTY

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)	Casing (m)
	Easting	Northing				
COR-21-01	511,353	5,514,831	180	-55	225	21
COR-21-02	511,484	5,514,756	180	-55	175	6
COR-21-03	514,877	5,514,723	200	-50	189	24
COR-21-04	513,959	5,515,237	225	-65	600	9
COR-21-05	512,679	5,515,353	225	-50	288	30
COR-21-06	513,169	5,515,587	200	-65	524.5	33
COR-21-07	513,142	5,515,914	180	-50	288	37.5
COR-21-08	513,387	5,515,875	180	-50	177	27.9
COR-21-09	513,385	5,515,878	180	-75	261	19.6
COR-21-10	513,456	5,516,320	180	-50	276	45
COR-21-11	511,663	5,516,054	180	-70	234.2	2.1
COR-21-12	512,559	5,515,770	190	-50	534	6.9

TABLE 10.6
SIGNIFICANT INTERSECTIONS FROM 2021 DRILLING
ON THE COOKE-ROBITAILLE PROPERTY

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
COR-21-03	163.3	179	15.7	0.150	0.07	0.732
including	163.3	164.4	1.1			9.550
COR-21-04	78	81	3	0.356	2.83	0.210
and	439	483	44	0.081	1.56	0.020
COR-21-06	162.4	176.1	13.7	0.010	26.73	0.130
and	491.3	492	0.7			2.350
COR-21-09	138	138.5	0.5	1.065	7.30	0.071
COR-21-10	183	183.5	0.5			5.120
and	225.5	229	3.5	0.030	6.00	4.080
and including	225.5	226	0.5			27.90

10.3.2 Drilling on the Roger Property

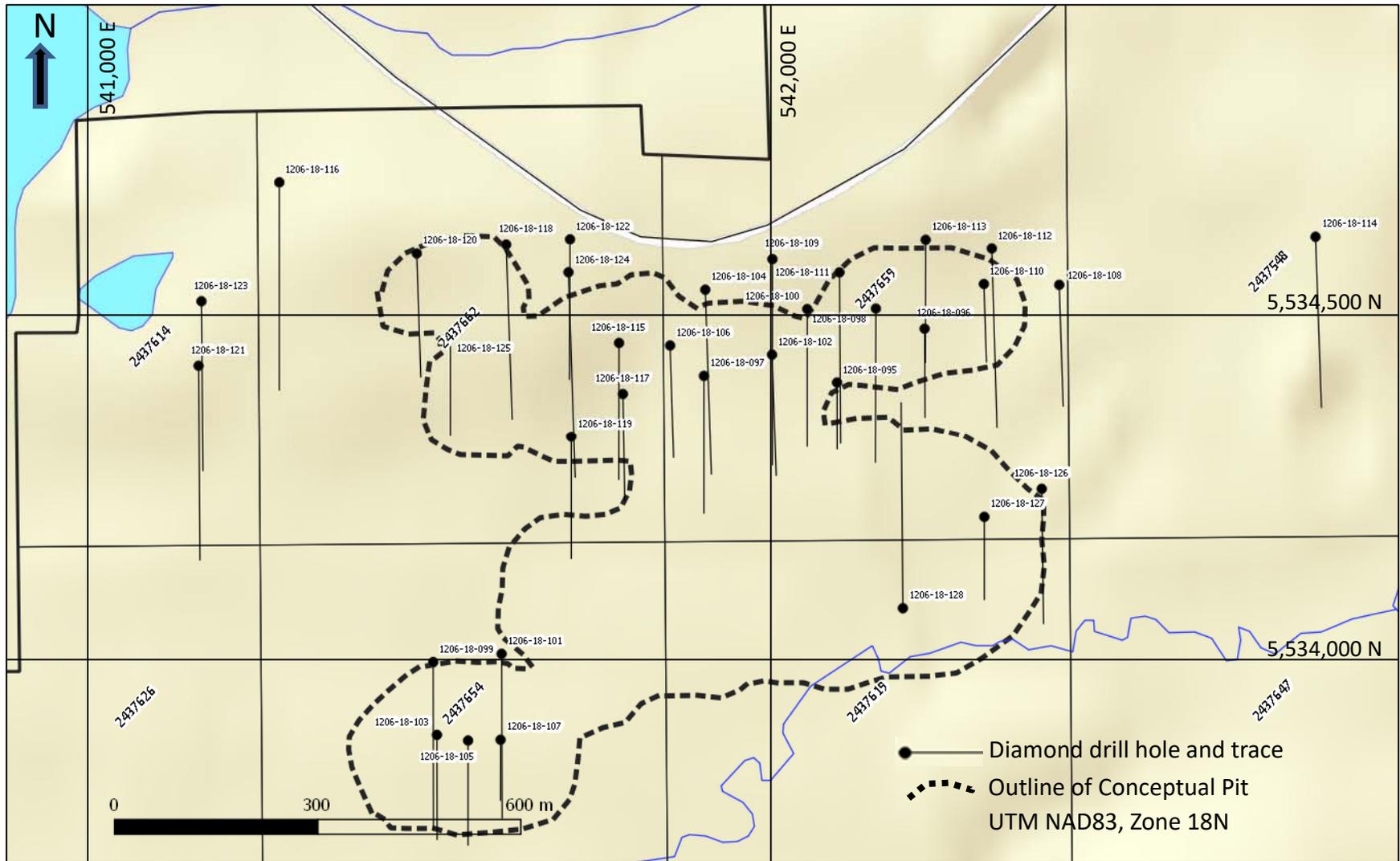
The Roger Property is host to the Roger Deposit which has a Current Mineral Resource that was defined in 2018. The Mineral Resources estimation was completed by GeoPointCom Inc. using a cut-off grade of 0.45 g/t AuEq. The Indicated Resource is estimated at approximately 10,900,000 tonnes at a grade of 0.85 g/t of gold, 0.80 g/t of silver and 0.06% of copper for a total of 333,000 ounces of gold equivalent. The Inferred Resources are estimated at 6,569,000 metric tonnes at a grade of 0.75 g/t of gold, 1.18 g/t of silver and 0.11% of copper for a total of 202,000

ounces of gold equivalent. GeoPointCom is of the opinion that the current Mineral Resource Estimate is accurate and representative of what is currently known for the Roger Deposit and that the estimate is compliant with CIM standards and guidelines for reporting Mineral Resources and Reserves.

The Roger Property Technical Report accompanying the Mineral Resource Estimate provides a comprehensive review of the property, its exploration history and mineral potential. The reader is referred to this document for more details.

Subsequent to the Mineral Resource Estimate, SOQUEM and its partner at the time undertook a 2018 diamond drilling program of 34 holes totalling 7,643 metres. The holes are plotted in Figure 10.4 in relation to the conceptual pit on the Roger Deposit and the collars are listed in Table 10.7. Table 10.8 summarizes the significant mineralized intersections obtained from the 2018 diamond drilling program.

FIGURE 10.4 ROGER PROPERTY 2018 DIAMOND DRILL HOLE PROGRAM LOCATION MAP



Source: QC Copper and Gold Corp (October 2021)

TABLE 10.7
LOCATION OF 2018 SURFACE DIAMOND DRILL HOLES
ON THE ROGER PROPERTY

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Azimuth (°)	Dip (°)	Length (m)	Casing (m)
	Easting	Northing				
1206-18-095	542,096	5,534,394	179.9	-50	152	6.1
1206-18-096	542,225	5,534,473	179.7	-50	201	21.0
1206-18-097	541,899	5,534,404	180.0	0	201	13.8
1206-18-098	542,153	5,534,502	180.2	0	225	16.3
1206-18-099	541,499	5,533,986	179.9	0	245	7.1
1206-18-100	542,052	5,534,502	180.0	0	201	19.65
1206-18-101	541,600	5,533,998	179.8	0	239	14.4
1206-18-102	542,000	5,534,435	178.0	0	177	11.4
1206-18-103	541,505	5,533,880	179.9	0	152	17.0
1206-18-104	541,901	5,534,530	178.1	0	270	32.7
1206-18-105	541,551	5,533,872	180.0	0	152	15.6
1206-18-106	541,849	5,534,448	178.2	-50	255	23.6
1206-18-107	541,599	5,533,873	180.1	-50	137	18.9
1206-18-108	542,424	5,534,537	178.1	0	177	5.6
1206-18-109	542,000	5,534,574	180.0	0	301	32.9
1206-18-110	542,312	5,534,538	178.1	-50	177	4.2
1206-18-111	542,099	5,534,555	179.6	0	250	17.3
1206-18-112	542,324	5,534,590	178.3	0	261	12.0
1206-18-113	542,226	5,534,603	180.1	-50	278	35.3
1206-18-114	542,802	5,534,607	178.0	0	249	6.6
1206-18-115	541,774	5,534,452	180.1	0	200	32.7
1206-18-116	541,272	5,534,687	180.0	0	303	28.9
1206-18-117	541,779	5,534,378	179.0	-45	221	26.3
1206-18-118	541,607	5,534,596	178.0	0	255	60.3
1206-18-119	541,703	5,534,315	180.0	-45	251	54.0
1206-18-120	541,475	5,534,583	178.1	0	180	67.9
1206-18-121	541,153	5,534,419	179.6	0	284	45.0
1206-18-122	541,701	5,534,603	180.3	0	204	49.7
1206-18-123	541,157	5,534,513	179.5	0	248	48.1
1206-18-124	541,699	5,534,555	178.1	0	300	47.4
1206-18-125	541,525	5,534,465	180.0	-50	231	56.5
1206-18-126	542,398	5,534,238	179.2	0	196	41.0
1206-18-127	542,313	5,534,198	180.0	-45	170	10.7
1206-18-128	542,193	5,534,065	359.5	0	300	4.6

TABLE 10.8
SIGNIFICANT INTERSECTIONS FROM 2018 DRILLING BY SOQUEM
ON THE ROGER PROPERTY

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Cu (ppm)
1206-18-095	92.0	107.0	15.0	1.048	tr	213
1206-18-097	13.8	89.5	75.7	0.39	0.43	971
and	168.5	183.5	15.0	0.406	tr	1,950
1206-18-098	207.0	211.5	4.5	2.346	tr	164
1206-18-099	11.5	17.5	6.0	0.48	tr	540
1206-18-100	40.5	46.5	6.0	1.63	tr	69
1206-18-101	31.3	32.6	1.3	10.04	15.0	5,661
and	142.5	145.5	3.0	1.256	4.5	1,395
and	152.4	153.4	1.0	92.95	223	7,875
1206-18-102	50.5	84.0	33.5	0.442	1.0	2,336
1206-18-103	51.5	57.5	6.0	1.72	35.28	2,034
1206-18-104	144.3	257.5	113.2	0.455	0.39	1,200
1206-18-105	86.5	88.0	1.5	3.146	9.0	258
	103.6	105.3	1.7	2.29	40.94	2,654
1206-18-106	25.0	27.9	2.9	1.082	7.45	8,046
and	62.6	149.7	87.1	0.307	0.6	1,199
and	171.8	195.7	23.9	0.81	tr	575
and	210.0	228.0	18.0	0.2	tr	1,944
and	52.0	52.9	0.9	0.468	12	686
1206-18-108	10.5	11.8	1.3	37.62	2	8
and	37.0	47.0	10.0	0.619	0	140
1206-18-109	125.5	131.8	6.3	0.595	1.7	306
and	183.4	190.0	6.6	0.458	5	4,348
and	195.0	212.5	17.5	0.237	2.1	2,229
1206-18-110	64.5	70.5	6.0	2.074	1.3	176
and	84.0	91.5	7.5	1.239	8	3,846
1206-18-111	220.0	224.5	4.5	6.002	tr	106
including	221.5	223.0	1.5	16.3	tr	33
1206-18-112	116.9	119.2	2.3	6.432	4.2	3,074
1206-18-113	150.5	152.5	2.0	0.436	2.8	4,075
1206-18-114	109.0	111.0	2.0	6.365	8.8	6,305
including	110.3	111.0	0.7	15.2	25	17,300
1206-18-115	43.5	50.5	7.0	0.675	0.5	598
and	88.7	115.0	26.3	0.3	0.3	1,714
and	160.0	171.5	11.5	0.174	0	2,657
1206-18-116	184.5	186.0	1.5	5.3	tr	63
1206-18-117	110.0	116.0	6.0	0.258	tr	1,321
and	195.5	197.0	1.5	20.47	4	194
1206-18-118	60.3	63.0	2.7	1.198	4.1	440

TABLE 10.8
SIGNIFICANT INTERSECTIONS FROM 2018 DRILLING BY SOQUEM
ON THE ROGER PROPERTY

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Cu (ppm)
and	206.5	218.0	11.5	0.471	0.7	413
1206-18-119	119.0	135.0	16.0	0.673	tr	121
1206-18-120	123.7	151.0	27.3	0.749	0.3	624
including	123.7	135.0	11.3	0.982	0.27	550
and including	140.5	151.0	10.5	0.82	0.38	960
1206-18-121	184.8	185.8	1.0	1.394	10	10,000
1206-18-122	102.5	112.5	10.0	0.687	0.6	997
and	171.0	185.2	14.2	0.467	0.6	722
1206-18-124	50.0	54.3	4.3	1.978	1.2	1,568
and	182.8	183.3	0.5	5.78	4	600
and	253.9	259.0	5.1	0.744	1.9	2,152
1206-18-125	80.5	89.0	8.5	0.483	tr	341
and	99.0	111.5	12.5	1.059	1.6	648
1206-18-126	114.4	121.0	6.6	0.388	1.2	589
1206-18-127	48.0	54.0	6.0	1.695	tr	465
1206-18-128	76.7	84.0	7.3	0.947	0.4	353

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 HISTORICAL SAMPLING AND SECURITY

Little is known about the sample preparation, analyses and security procedures used during historical drill programs carried out at the Property prior to Ex-In's involvement in 2002. It is probable that procedures used by past operators were those in common use at the time of the various historical programs, however documentation relating to the sampling and analytical methods utilized by historical operators has not been reviewed by the author of this Technical Report section.

Previous operators, Falconbridge Ltd., ("Falconbridge") carried out work at the Property from 1953 to 1991, which included more than 80,000 m of drilling from approximately 14,500 surface and underground drill holes. Falconbridge collected approximately 300,000 samples for assay throughout this period and no drill core, reject or pulp samples remain.

To confirm the tenor of data collected by Falconbridge at the Property, QC Copper has undertaken drill core re-sampling and hole-twinning programs and these are discussed in Section 12.2.1.

The following section examines the most recent phases of drilling completed by QC Copper and Ex-In on the Opemiska Property between 2010 and 2021. This Technical Report section author has undertaken evaluation of available assessment reports pertaining to drilling carried out by previous operator Ex-In, between 2010 and 2016.

11.2 SAMPLING AND SECURITY (2006 TO 2016)

11.2.1 Ex-In (2006 to 2016)

The following description of sample preparation and security procedures has largely been taken from Claude P. Larouche's 2019 Technical Report on the Property, available to download from QC Copper's website at <https://qccopper.com/projects/opemiska/>.

During the recent drill programs (2006 – 2016), the drill core was partially cut with a rock saw along its longitudinal axis and sampled every 0.3 m and up to 3.0 m, following the typology of the mineralization. Generally, the shorter intervals represent isolated veins or well-mineralized sections; usually such sections carry higher grade.

The sampling steps are as follows:

- The core is drilled and put in boxes that are closed and tied solidly for transportation; the boxes are transported to a secure location by pick-up truck; the core boxes are then unloaded, washed if necessary and tagged with aluminum tags embossed with the drill hole number, box number and interval from- /to- stapled onto the end of each drill core box.

- The drill core is measured and described by the geologist (consultant), noting different geological units, alteration, structure, and mineralization (sulphide). Sections with alteration and mineralization are usually marked for sampling.
- Experienced technicians hired by the exploration company performed sampling.
- The entire length of each drill hole is sampled, with mineralized sections sampled along mineralized contacts; the remaining drill core is assayed at approximately 3.0 m sections.
- One half of the drill core is sampled and placed in a tagged bag for assay. The other half is replaced in the box with corresponding tags placed at the beginning or the end of the sampled interval, depending of the geologist.
- The metallic pans and the core splitter are cleaned after each sample is taken.
- Each sample bag is then sealed and placed in larger shipping bags that are delivered directly by the company personnel to the commercial laboratory for assay.
- The other half of the drill core, retained in the drill core boxes for reference and further detailed sampling, are moved to a permanent storage in steel racks within fenced yards.
- The drill core is safeguarded within a locked building and fenced yard in Chapais. The rejects and pulps are stored in Québec City.
- At all times the locations are kept locked and only personnel authorized by QC Copper have access.

11.2.2 QC Copper (2019 to 2021)

Sample preparation and security procedures for the 2019 to 2021 drill programs are described as follows:

- The core is drilled and stored in boxes that are closed and tied solidly for transportation; the boxes are transported to a secure location by pick-up truck; the drill core boxes are then unloaded, washed if necessary and tagged with aluminum tags embossed with the hole number, box number and interval from/to stapled onto the end of each drill core box.
- Drill core is photographed (1 photo / 4 boxes), both dry and wet, in order to obtain better references.
- RQD is conducted systematically over every drill hole.

- MPP measurements (magnetic susceptibility) are also systematically conducted over the length of every drill hole.
- The drill core is measured and described by the geologist (consultant), noting different geological units, alteration, structure, and mineralization (sulphide). Sections with alteration and mineralization are usually marked for sampling.
- The drill core is cut with a diamond saw. One half of the drill core is sampled and placed in a tagged bag for assay. The other half is returned to the box with corresponding tags placed at the end of the sampled interval and an aluminum tag with sample number and meterage for each sample is stapled at the beginning of the sample.
- The metallic pans and splitter are cleaned after each sample is taken.
- Sample bags are then sealed and placed into larger shipping bags that are delivered directly by company personnel to the commercial laboratory for assay, or delivered to a reputable and independent transport company to complete delivery to the commercial laboratory.
- During the process of sample preparation, quality control samples are introduced between regular samples.
- The other half of the drill core, retained in the drill core boxes for reference and further detailed sampling, are moved to a permanent storage in steel racks or cross-piled on pallets, within fenced yards.
- Storage facilities are kept locked at all times and only authorized QC Copper personnel have access to enter.

11.3 BULK DENSITY DETERMINATION

A total of 778 bulk density measurements were determined by immersion using wet and dry weighting on site by QC Copper personnel during 2019. Samples were measured, weighed dry, then weighed suspended within water. Selected samples were of a single rock type and between 10.80 cm and 27.73 cm in length. Representative samples were taken of the different rock units, mineralized sections and intrusive dykes within the Ventures Sill. Samples from the felsic volcanic (rhyolite) were also included.

The measured values ranged from 2.63 t/m³ to 4.03 t/m³, with an average bulk density of 2.93 t/m³.

The detailed results are presented in Appendix I.

11.4 SAMPLE PREPARATION AND ANALYSIS

Drill core samples collected by Ex-In at Opemiska from 2010 to 2016 were analyzed at Laboratoire d'Analyse Bourlamaque Ltée., (“Bourlamaque Lab”) and ALS Minerals (“ALS”) in Val-d'Or, Québec, Techni-Lab S.G.B. Abitibi Inc., (“Techni-Lab”) and Activation Laboratories (“Actlabs”) in Québec.

Drill core samples collected by QC Copper at the Project in 2019 were analyzed at Laboratoire Expert Inc., (“Expert Lab”), of Rouyn-Noranda, Québec, and by ALS Minerals (“ALS”) in Val-d'Or, Québec in 2021. Both laboratories are independent of QC Copper.

11.4.1 ALS (2010)

Samples at ALS throughout 2010 are analyzed for gold by fire assay (“FA”) with atomic absorption (“AA”) finish, with higher-grade samples further analyzed by FA with gravimetric finish. Samples are also analyzed for a suite of 35 elements, including silver, copper and zinc, by aqua regia digest with ICP-AES finish.

ALS developed and implemented at each of its locations a Quality Management System (“QMS”) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards. ALS maintains ISO registrations and accreditations. ISO registration and accreditation provides independent verification that a QMS is in operation that meets all requirements of ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

11.4.2 Bourlamaque Lab (2010 - 2015)

Samples at Bourlamaque Lab throughout 2010 to 2015 are analyzed for gold, palladium and platinum by lead FA with AA finish. Silver, copper and zinc samples are analyzed by aqua regia digest with AA finish, with high-grade samples further analyzed by total digestion and AA finish.

Bourlamaque Lab is a non-accredited commercial laboratory, however, as part of the lab's internal QA/QC protocol, blanks, certified reference materials and duplicates are inserted into the sample sequence.

11.4.3 Techni-Lab (2016)

Samples at Techni-Lab throughout 2016 are analyzed for gold by FA with AA finish. Techni-Lab was purchased by Actlabs in 2010.

Techni-Lab was a Standards Council of Canada (“SCC”) accredited laboratory at the time of carrying out the above-mentioned gold analyses at Opemiska in 2016.

11.4.4 Actlabs (2016)

Samples at Actlabs throughout 2016 are analyzed for an array of elements, including copper, silver, cobalt and zinc by aqua regia digest with ICP finish.

Actlabs is an independent commercial laboratory that is ISO 17025 accredited with CAN-P-1579 (Mineral Lab) and CAN-P-1578 (forensic lab). Actlabs is also accredited/certified to ISO 9001:2015, Health Canada Licensed, FDA registered and inspected, OMAFRA accredited, and GMP/GLP compliant.

11.4.5 Laboratoire Expert Lab (2019)

Laboratoire Expert in Rouyn-Noranda, Québec is a non-accredited facility that routinely performs assaying for junior mining companies. Blanks, certified reference materials and duplicates are inserted into the sample sequence at all sample preparation stages, as part of the lab's internal QA/QC protocol.

Sample preparation at Laboratoire Expert includes the following procedures and operations:

- Log sample into tracking system;
- Record mass of sample material received;
- Samples are dried if necessary;
- Crush drill-core samples to finer than 80% at minus 10 mesh;
- Crusher is cleaned between samples with a wire brush and compressed air and barren material between sample batches;
- Split sample to approximately 250 g using a riffle splitter;
- Pulverize the split (up to approximately 300 g) to a particle size finer than 90% at minus 200 mesh (excess material is stored for the client as a crusher reject); and
- Pulverizer is cleaned with compressed air and silica sand between batches.

Samples are analyzed for gold by lead FA on 30 g aliquots with AA finish. Samples returning results greater than 5,000 ppb gold are subsequently re-assayed by FA with gravimetric finish. Copper, silver, cobalt and zinc samples are analyzed by partial digestion AA, with samples assaying greater than 10,000 ppm re-assayed by total digestion AA.

11.4.6 ALS Canada (2021)

Samples at ALS Canada throughout 2021 are analyzed for gold by FA with AA finish, with higher-grade samples further analyzed by FA with gravimetric finish. Samples are also analyzed for a suite of elements, including copper, silver, cobalt and zinc, by aqua regia digest with ICP-

AES finish. Overlimit copper, silver and zinc samples are also analyzed by aqua regia with ICP-OES or AAS finish.

11.5 QUALITY ASSURANCE/QUALITY CONTROL REVIEW

11.5.1 Ex-In Drilling (2006 to 2016)

Ex-In did not insert blind certified reference materials, blanks, or duplicates into the stream of samples as part of their own QA/QC protocol and instead relied upon the laboratories' own internal QC protocol. To confirm the quality of the data collected by Ex-In at the Property, QC Copper have undertaken core re-sampling and hole-twinning programs and these are discussed in Section 12.2.2.

11.5.2 QC Copper Drilling (2019)

QC Copper implemented and monitored a thorough quality assurance/quality control ("QA/QC") program for the drilling undertaken at the Opemiska Property over the 2019 period. QC protocol included the insertion of QC samples by Company personnel into every batch sent for analysis to monitor for analytical accuracy and contamination, including certified reference materials and blanks.

11.5.2.1 Performance of Certified Reference Materials

QC Copper utilized four different certified reference materials ("CRM") during the 2019 drill program: the OREAS 61F, OREAS 112, OREAS 601 and OREAS 924 CRMs. The CRMs were purchased from OREAS North America Inc., ("Ore Research") located in Sudbury, Canada, and were selected to monitor copper, silver, cobalt, zinc and gold. Details of the elements that each CRM is certified for, along with the corresponding certified mean values and standard deviations are outlined in Table 11.1.

A total of 48 CRMs were inserted in the sample stream for analysis during the 2019 program and criteria for assessing CRM performance are based as follows. Data falling within ± 3 standard deviations (σ) from the certified mean value, pass. Data falling outside ± 3 (σ) from the certified mean value, fail.

A summary of CRM performance is outlined in Table 11.1. CRM performance charts are presented in Figures J.1 through J.15 in Appendix J.

TABLE 11.1
SUMMARY OF CERTIFIED REFERENCE MATERIALS USED AT OPEMISKA IN 2019

Certified Reference Material	Certified Mean Value	"Between Lab" 2 Std	No. Used	No. Failures
Copper				
OREAS 112	5.1 %	0.46 %	11	0
OREAS 601	1,010 ppm	80 ppm	10	0
OREAS 924	5,120 ppm	560 ppm	23	3
Silver				
OREAS 61F	3.64 ppm	0.296 ppm	4	0
OREAS 112	17 ppm	10 ppm	11	0
OREAS 601	49.2 ppm	4.04 ppm	10	0
OREAS 924	1.99 ppm	0.4 ppm	23	0
Cobalt				
OREAS 112	547 ppm	24 ppm	11	2
OREAS 601	4.7 ppm	0.96 ppm	10	5
OREAS 924	23.4 ppm	2.74 ppm	23	1
Zinc				
OREAS 112	4302 ppm	390 ppm	11	0
OREAS 601	1330 ppm	128.4 ppm	9	0
OREAS 924	380 ppm	29.6 ppm	23	0
Gold				
OREAS 61F	4.6 ppm	0.268 ppm	4	0
OREAS 601	780 ppm	62 ppm	10	0

There were four data points for the OREAS 61F CRM (certified for gold and silver) and no failures were recorded (Figures J.1 and J.2 in Appendix J).

The OREAS 112 CRM, certified for copper, silver, cobalt and zinc, returned 11 results, two of which fall below -3σ from the certified mean value (Figures J.3 through J.6 in Appendix J). A slight negative bias is noted for silver.

The OREAS 601 CRM, certified for copper, silver, cobalt, zinc and gold, had ten data points to review. The majority of data falls within $\pm 3 \sigma$ from the certified mean value, except for five cobalt results that all fall below -3σ from the certified mean value (Figures J.7 through J.11 in Appendix J). Low biases are noted for cobalt and zinc.

There were four data points for the OREAS 924 CRM (certified for copper, silver, cobalt and zinc), with a single high failure recorded for cobalt and three high failures for copper (Figures J.12 through J.15 in Appendix J). High biases are noted for copper and cobalt and a low bias for zinc.

The author of this Technical Report section considers the CRM data to demonstrate acceptable accuracy and does not consider the failures recorded to be of material impact to the Opemiska 2019 diamond drilling data.

11.5.2.2 Performance of Blanks

Several bags of decorative white stone were purchased from a local supplier in 2019 to utilize as a non-certified blank material at the Project in 2019.

Blanks were inserted at a frequency of approximately one in 18 samples and attempt was made to place blank material subsequent to observed mineralization to monitor carry over contamination. All blank data for Cu, Au, Ag, Co, and Zn were graphed (Figures 11.1 to 11.5). If the assayed value in the certificate was indicated as being less than the detection limit, the value was assigned the value of one-half the detection limit for data treatment purposes. An upper tolerance limit of ten times the detection limit was set. There were 64 data points to examine.

All data fell below the set tolerance limit for gold and silver and the vast majority of data plotted below the set tolerance limits for zinc and cobalt. All but one data point plotted above the tolerance limit for copper, indicating that there is likely a background level of around 60 ppm copper in the decorative rock.

The author does not consider the data falling above the set tolerance limits to be of material impact to the 2019 Mineral Resource data.

FIGURE 11.1 2019 PERFORMANCE OF BLANK FOR CU

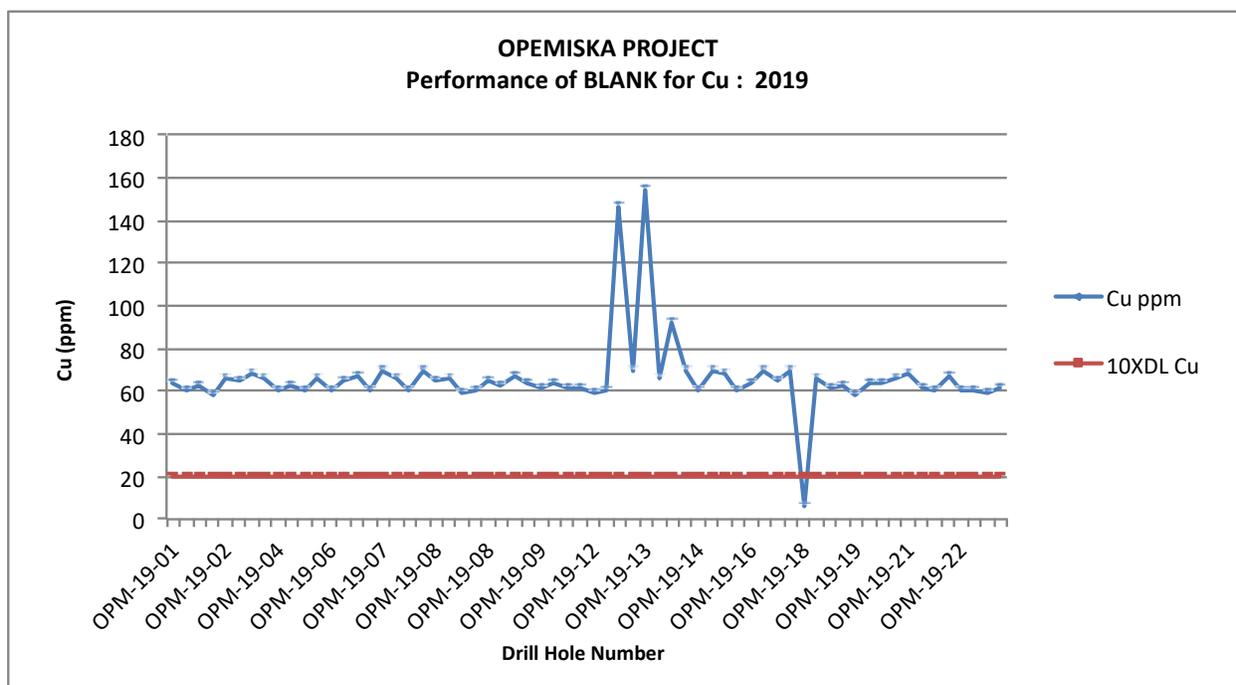


FIGURE 11.2 2019 PERFORMANCE OF BLANK FOR AU

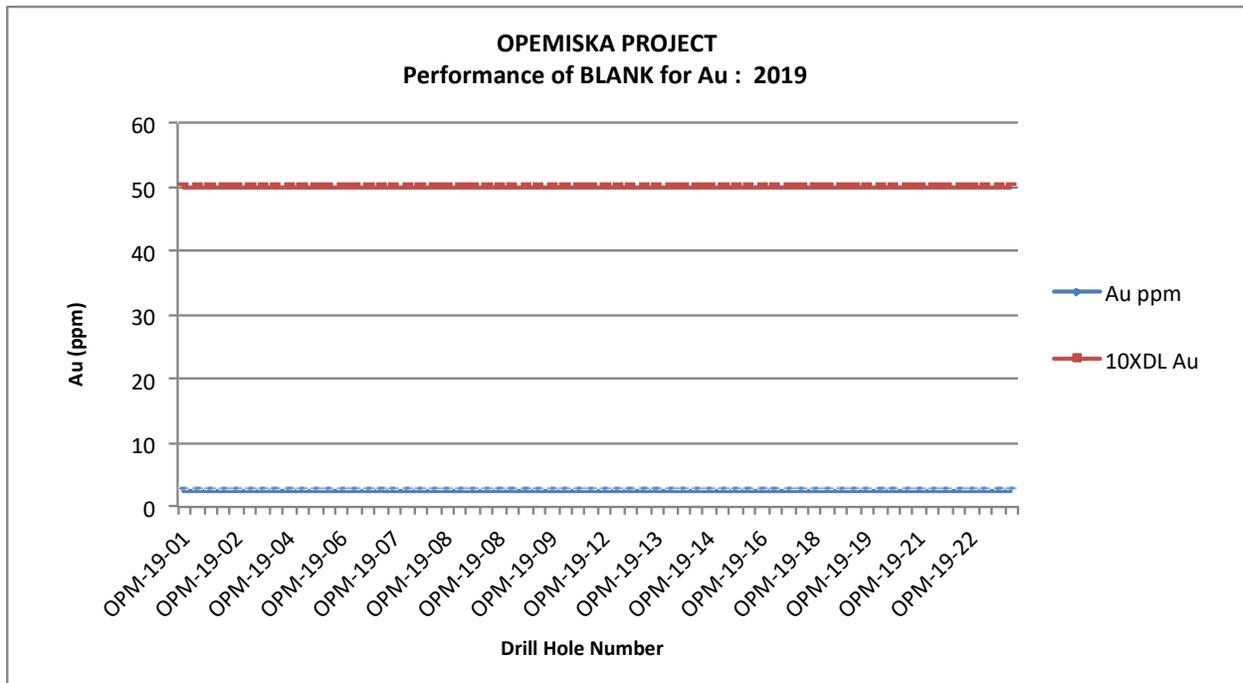


FIGURE 11.3 2019 PERFORMANCE OF BLANK FOR AG

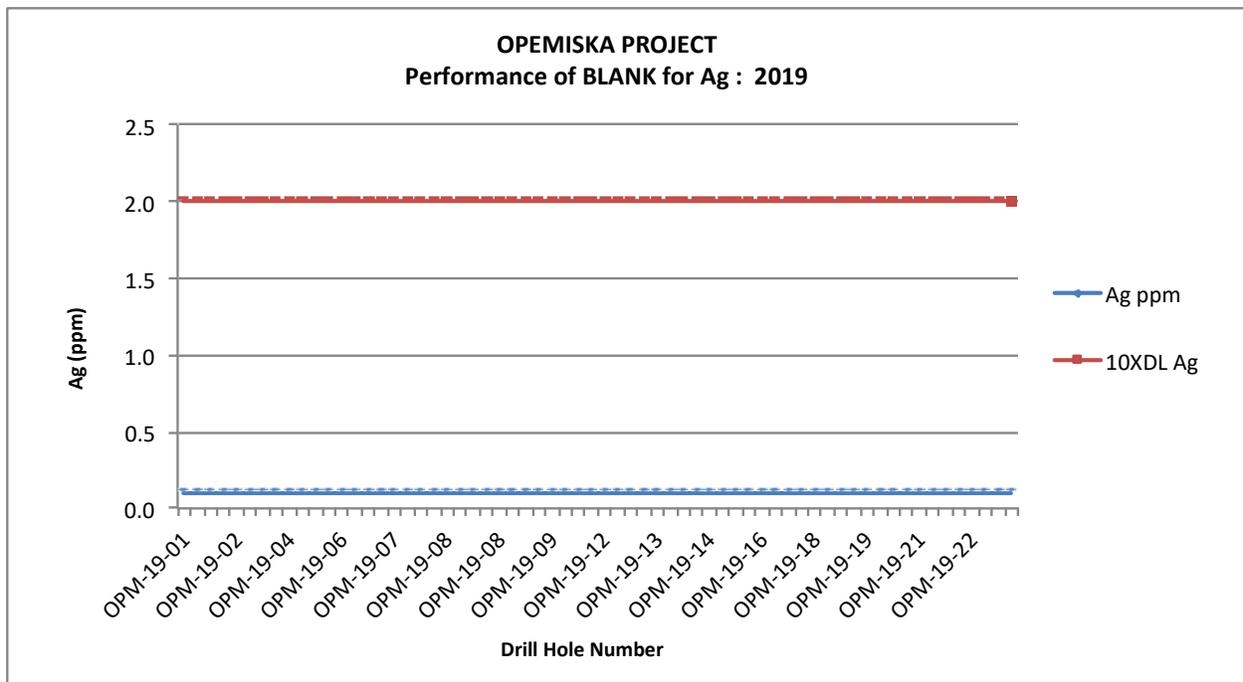


FIGURE 11.4 2019 PERFORMANCE OF BLANK FOR CO

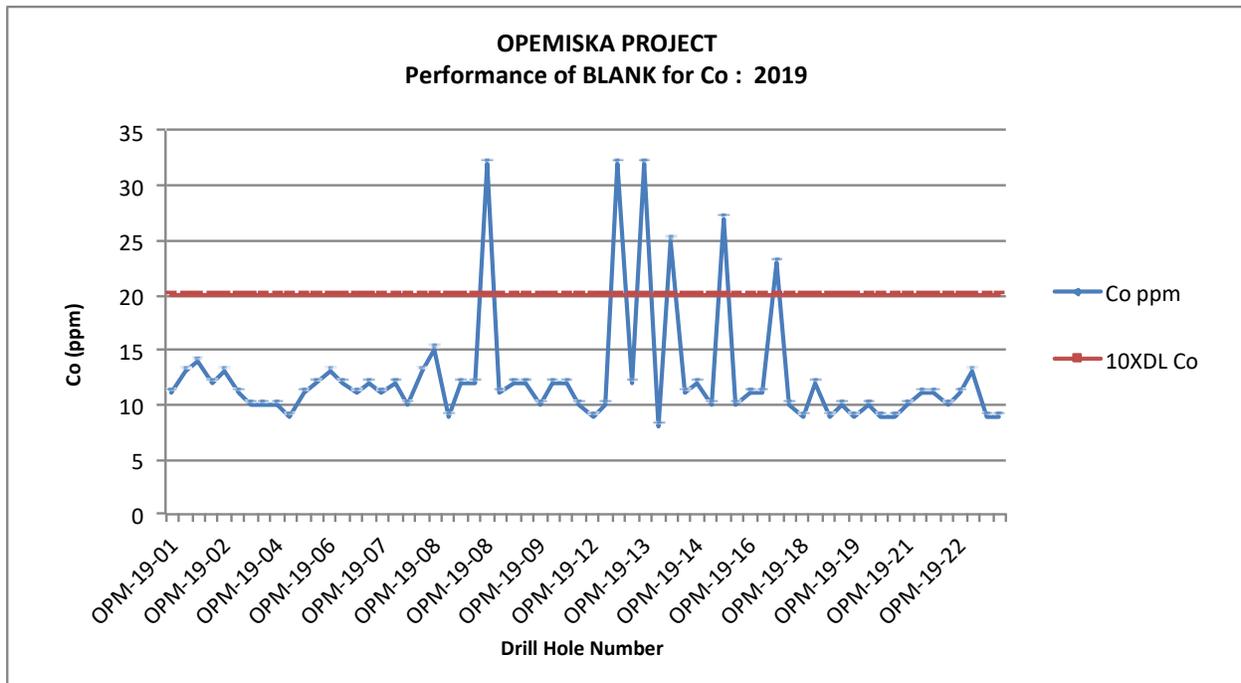
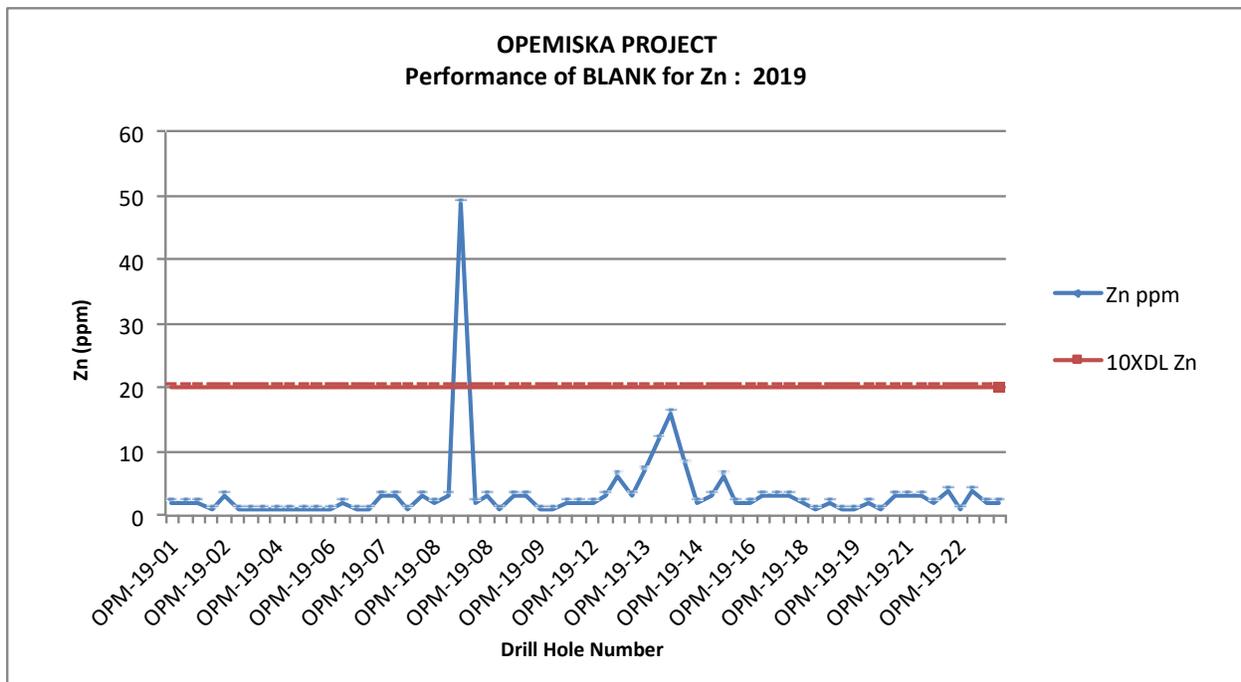


FIGURE 11.5 2019 PERFORMANCE OF BLANK FOR ZN



11.5.3 QC Copper Drilling (2021)

QC Copper again implemented a thorough QA/QC program throughout the 2021 drilling undertaken at the Property, with protocol similar to that implemented in 2019.

11.5.3.1 Performance of Certified Reference Materials

QC Copper utilized four different CRMs during the 2021 drill program: the OREAS 166, OREAS 502c, OREAS 504c and OREAS 505 CRMs. The CRMs were again purchased from Ore Research and selected to monitor copper, silver, cobalt, zinc and gold. Details of the elements that each CRM is certified for, along with the corresponding certified mean values and standard deviations are outlined in Table 11.2.

A total of 462 CRMs were inserted in the sample stream for analysis during the 2021 program and criteria for assessing CRM performance are as previously described in Section 11.5.2.1. All CRMs are certified for copper, gold, silver, cobalt and zinc except for OREAS 166, which is not certified for gold.

A summary of CRM performance is outlined in Table 11.2. CRM performance charts are presented in Figures K.1 to K.19 in Appendix K.

TABLE 11.2
SUMMARY OF CERTIFIED REFERENCE MATERIALS USED AT OPEMISKA IN 2021

Certified Reference Material	Certified Mean Value	"Between Lab" 2 Std	No. Used	No. Failures
Copper				
OREAS 166	8.82 %	0.54 %	14	0
OREAS 502c	7790 ppm	340 ppm	165	5
OREAS 504c	1.1 ppm	0.038 ppm	126	0
OREAS 505	3230 ppm	200 ppm	157	0
Silver				
OREAS 166	10.8 ppm	1.4 ppm	14	0
OREAS 502c	0.796 ppm	0.106 ppm	165	7
OREAS 504c	4.19 ppm	0.612 ppm	126	0
OREAS 505	1.53 ppm	0.22 ppm	157	1
Cobalt				
OREAS 166	1970 ppm	216 ppm	14	0
OREAS 502c	13.5 ppm	0.96 ppm	165	2
OREAS 504c	14.9 ppm	1.74 ppm	126	0
OREAS 505	8.14 ppm	1.062 ppm	157	0
Zinc				
OREAS 166	37 ppm	4 ppm	14	0
OREAS 502c	102 ppm	10 ppm	165	1
OREAS 504c	95 ppm	12.6 ppm	126	0
OREAS 505	84 ppm	8.6 ppm	157	0
Gold				
OREAS 502c	0.488	0.03 ppm	142	2
OREAS 504c	1.48 ppm	0.09 ppm	113	1
OREAS 505	0.555 ppm	0.028 ppm	137	1

There were 14 data points for the OREAS 166 CRM and no failures were recorded (Figures K.1 to K.4 in Appendix K).

The OREAS 502c CRM returned 165 results for copper, silver, cobalt and zinc and 142 results for gold. There were five copper results falling outside $\pm 3 \sigma$ from the certified mean value, seven silver, two cobalt, one zinc and two gold (Figures K.5 to K.9 in Appendix K). A slight negative bias is noted for both cobalt and zinc.

There were 126 data points for the OREAS 504c CRM to review for copper, silver, cobalt and zinc and 113 for gold (Figures K.10 to K.14 in Appendix K). There was one gold result falling outside $\pm 3 \sigma$ from the certified mean value. High biases are noted for copper and silver and a low bias for cobalt.

There were 157 data points for the OREAS 505 CRM for copper, silver, cobalt and zinc and 137 for gold (Figures K.15 to K.19 in Appendix K). Single failures were noted for silver and gold. Low biases are noted for cobalt and zinc and a high bias for silver.

QC Copper personnel monitored CRM results throughout the drill program via a “Table of Failures” and kept in communication with the lab about significant issues. Follow up investigation was undertaken for any failures encountered and an action history was recorded in the “Table of Failures”. A number of failures were found to be misallocated CRMs or blanks and this was corrected and recorded in the data. The majority of failures, following investigation, were considered minor and no follow up action was considered necessary. On two separate occasions, CRM failures necessitated CRMs and surrounding samples to be re-assayed (CRMs C725972 and C870195) and re-assayed CRMs passed, on both occasions, and the re-assay results were recorded in the database.

The author considers the CRM data to demonstrate acceptable accuracy in the Opemiska 2021 diamond drilling data.

11.5.3.2 Performance of Blanks

Two different non-certified blanks were utilized during the 2021 drill program at the Project:

- Blank 1: pebbles sourced from a local quarry were used for the first part of the program, however this was discontinued due to high background copper, zinc and cobalt levels;
- Blank 2: dolomite marble purchased from a local hardware store was found to be a much more reliable blank material and used for the remainder of the program.

Blanks were inserted at a frequency of approximately one in 24 samples and attempt was made to position blank material subsequent to observed mineralization to monitor carry over contamination. All blank data for Cu, Ag, Co, Zn and Au were graphed (Figures 11.6 to 11.15). If the assayed value in the certificate was indicated as being less than the detection limit, the value was assigned the value of one-half the detection limit for data treatment purposes. An upper tolerance limit of ten times the detection limit was set for silver and gold. Background levels for copper, cobalt and zinc were taken into consideration by using calculated averages and standard deviations to highlight anomalous data. There were 164 Blank 1 results and 283 for Blank 2 (447 blanks in total).

Blank 1

All data for gold and silver, except a single silver result, fell below the set tolerance limits (Figures 11.7 and 11.10). Background levels of around 168 ppm for copper, 150 ppm for cobalt and 37 ppm for zinc are evident in Figures 11.6, 11.8 and 11.9 respectively. Taking these background levels into account, the majority of the data falls within acceptable levels for all three elements, with very few anomalous results being returned.

Blank 2

All data for silver, cobalt and gold fell below the set tolerance limits (Figures 11.12, 11.13 and 11.15). The vast majority of data plotted below the set tolerance limits for copper and zinc (Figures 11.11 and 11.14).

QC Copper personnel monitored blank results throughout the drill program via a “Table of Failures” and kept in communication with the lab about significant contamination issues. Follow up investigation was undertaken for any failures encountered and an action history was recorded in the “Table of Failures”. All blank failures were considered minor and of no significant impact and no follow up action was considered necessary.

The author of this Technical Report section does not consider the anomalous data to be of material impact to the 2021 Mineral Resource data and recommends continued use of Blank 2 for future drilling at the Project.

FIGURE 11.6 2021 PERFORMANCE OF BLANK 1 FOR CU

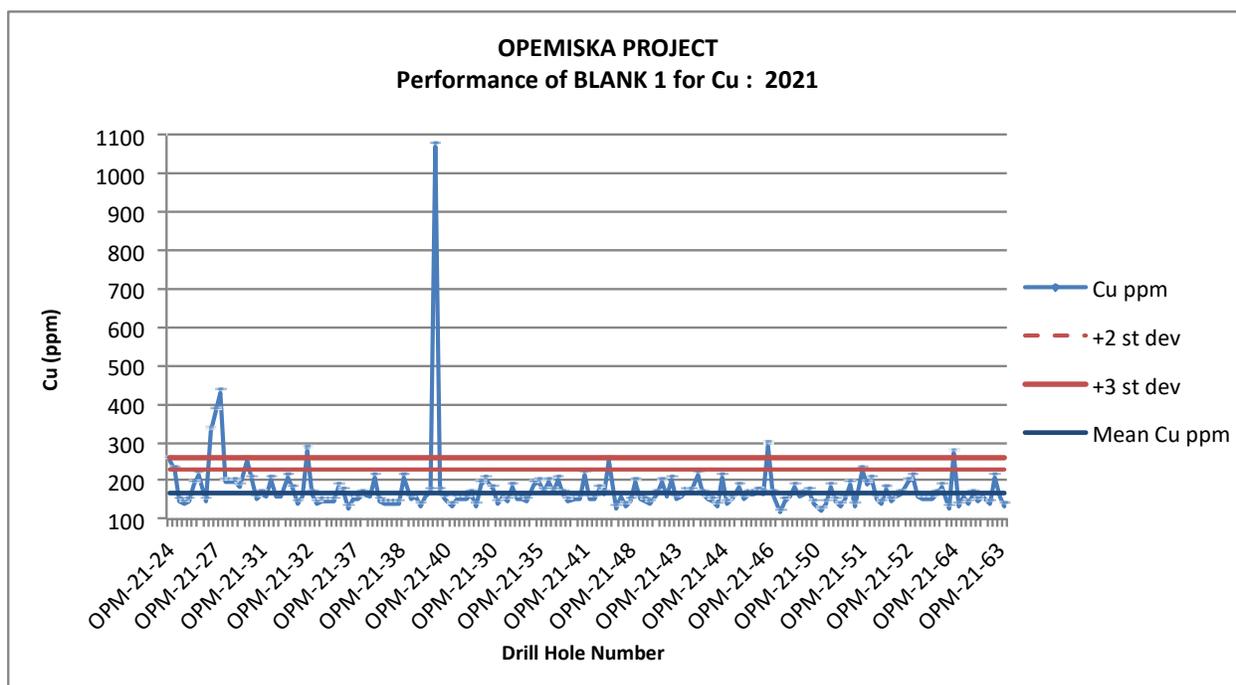


FIGURE 11.7 2021 PERFORMANCE OF BLANK 1 FOR AG

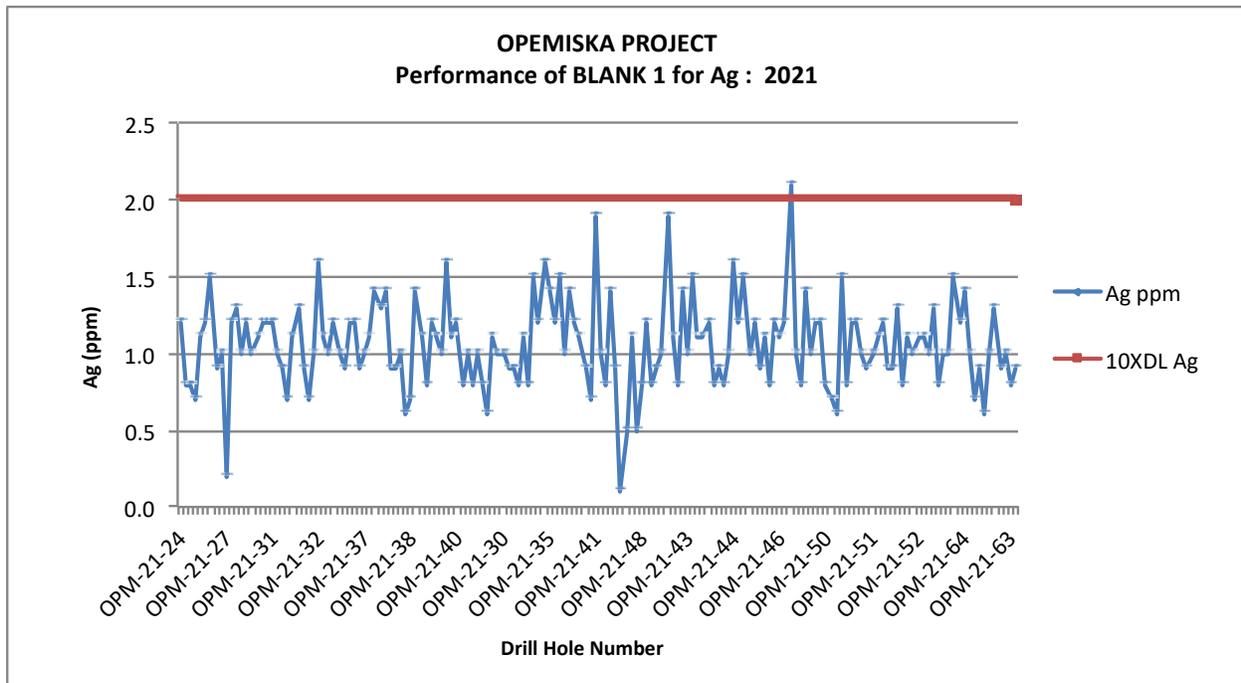


FIGURE 11.8 2021 PERFORMANCE OF BLANK 1 FOR CO

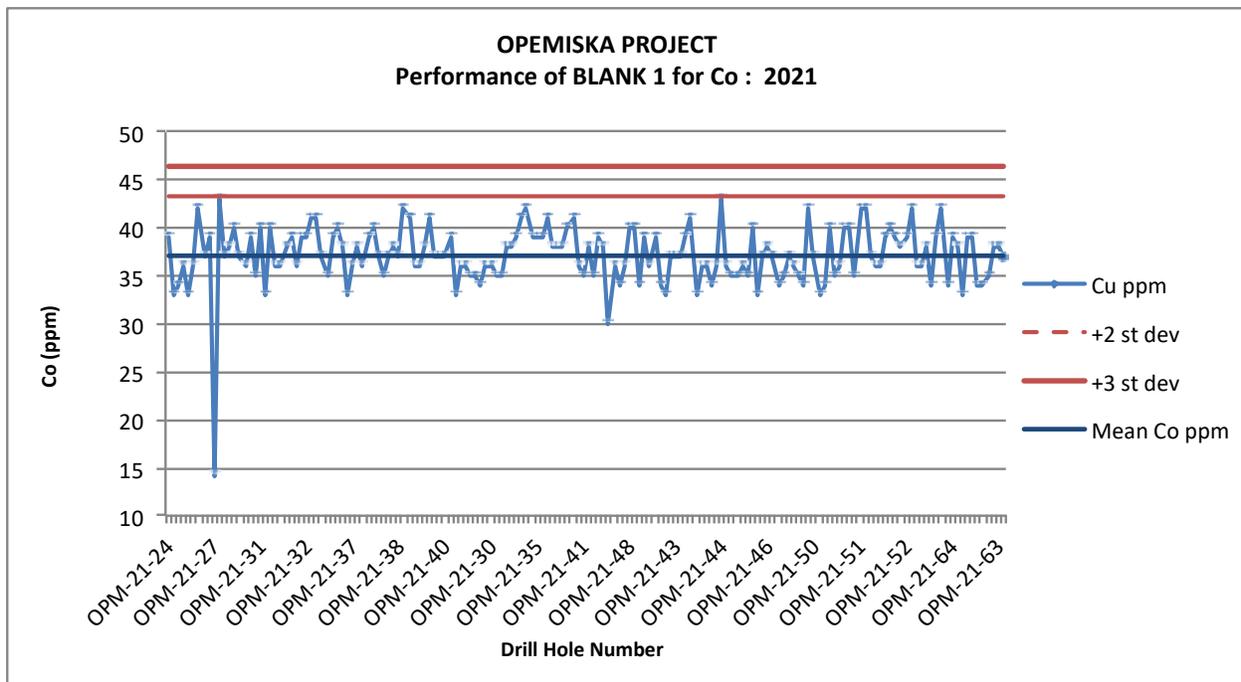


FIGURE 11.9 2021 PERFORMANCE OF BLANK 1 FOR ZN

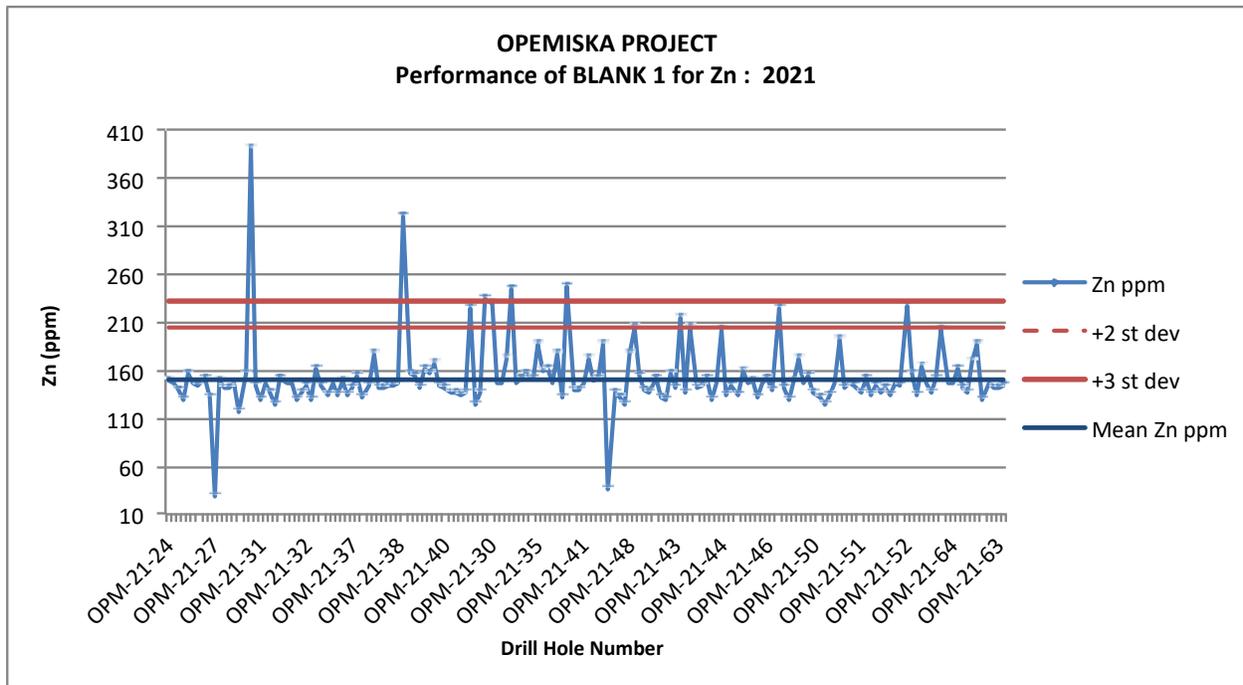


FIGURE 11.10 2021 PERFORMANCE OF BLANK 1 FOR AU

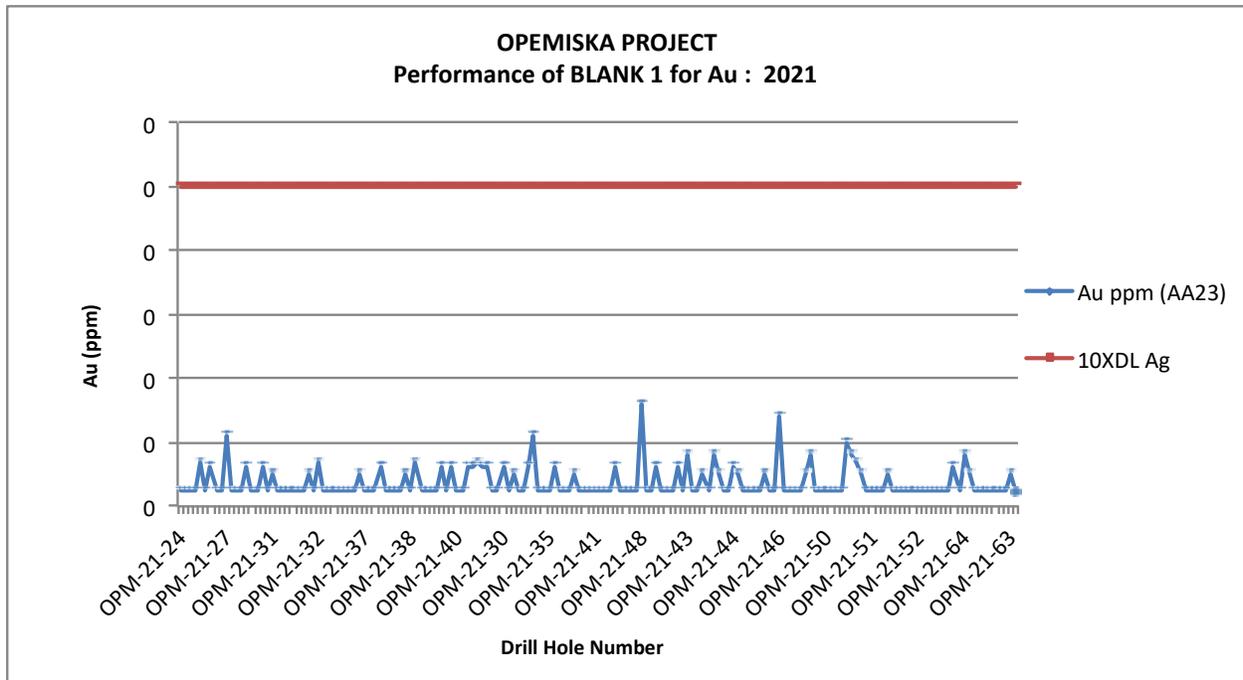


FIGURE 11.11 2021 PERFORMANCE OF BLANK 2 FOR CU

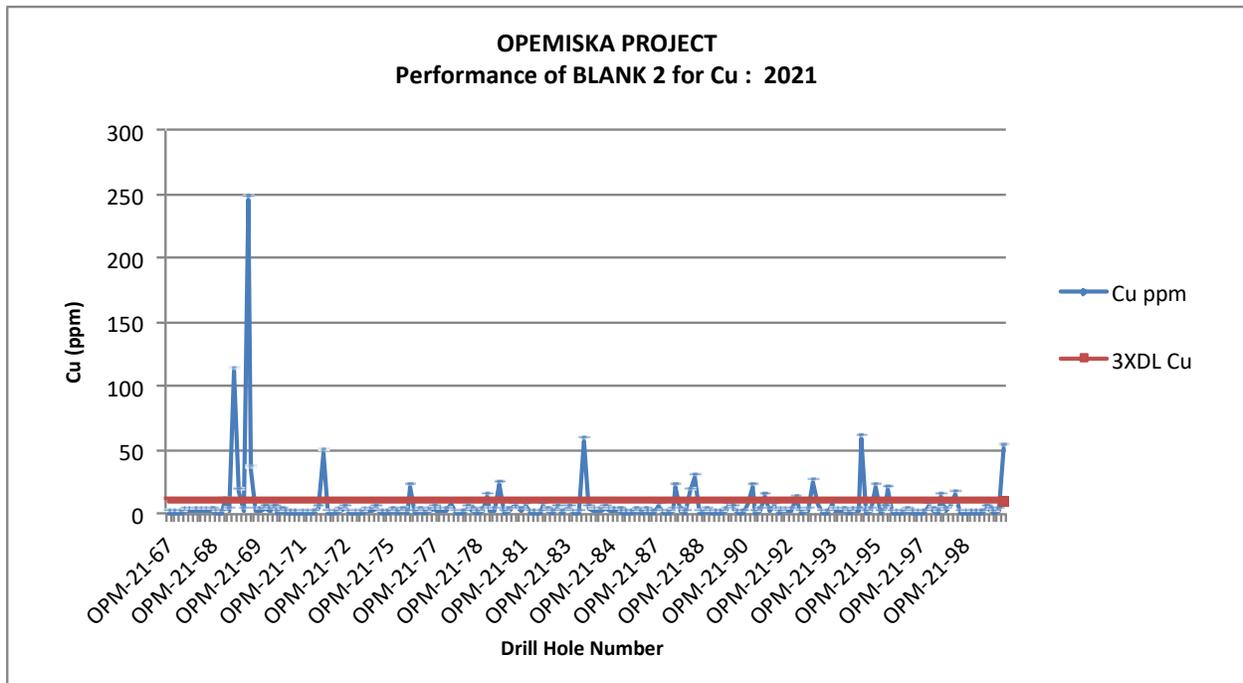


FIGURE 11.12 2021 PERFORMANCE OF BLANK 2 FOR AG

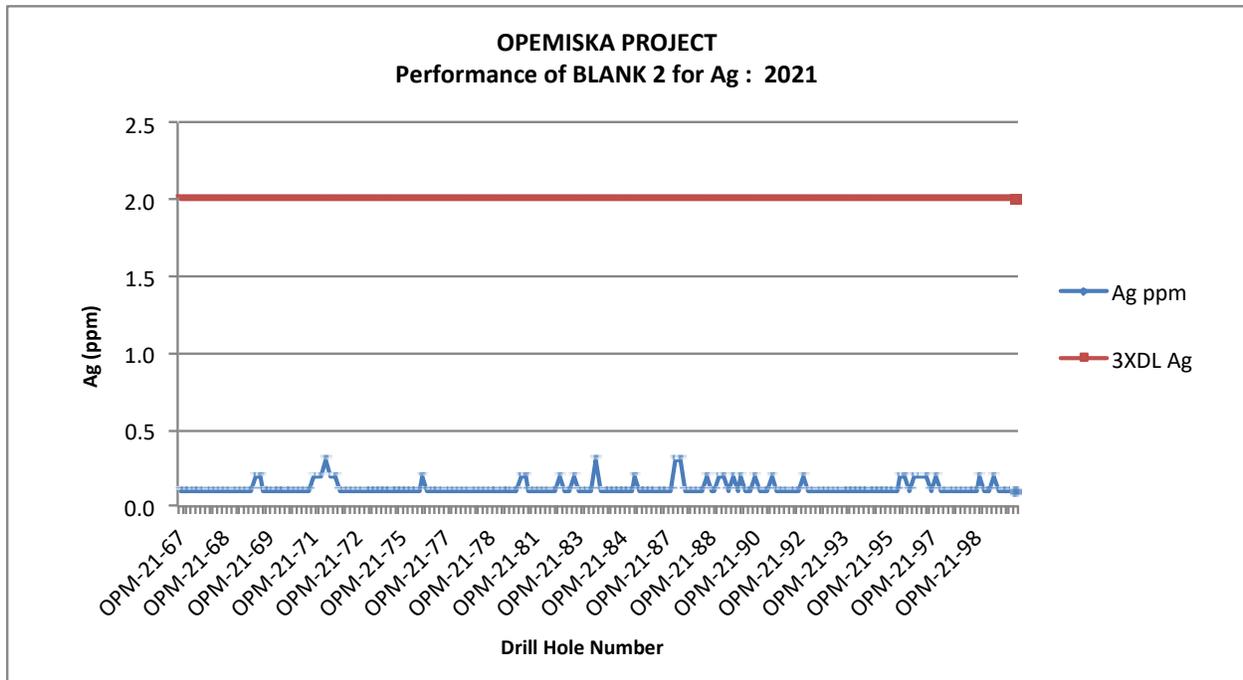


FIGURE 11.13 2021 PERFORMANCE OF BLANK 2 FOR CO

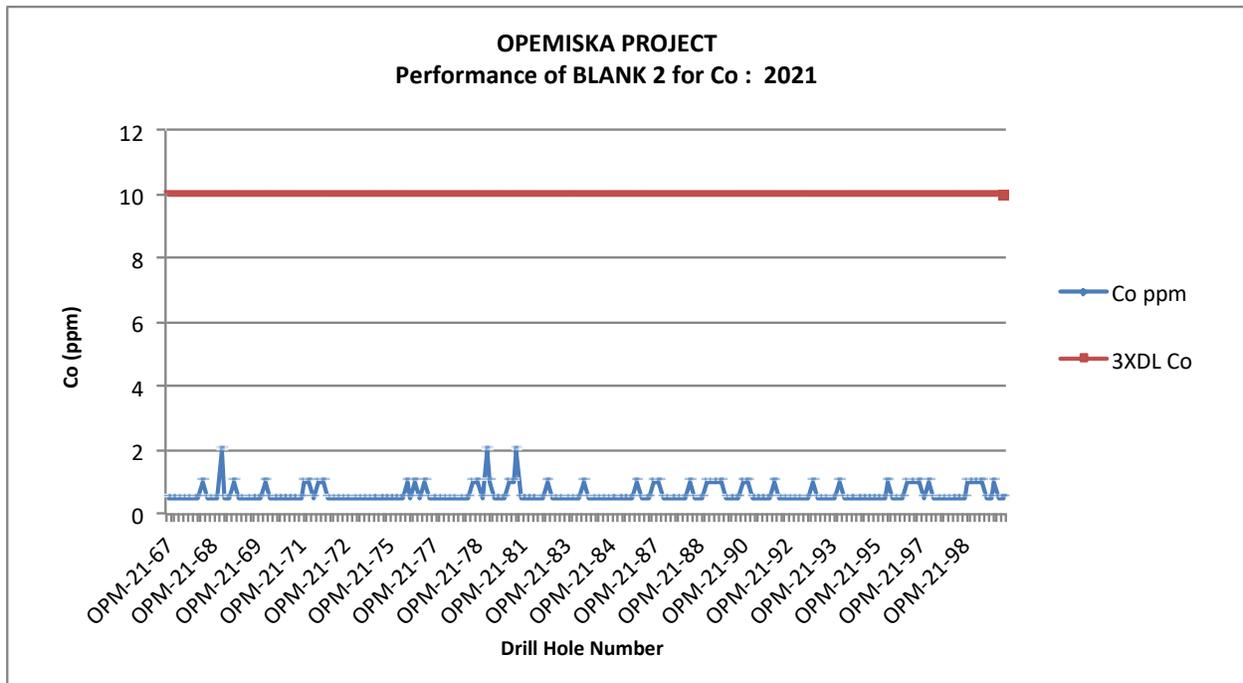


FIGURE 11.14 2021 PERFORMANCE OF BLANK 2 FOR ZN

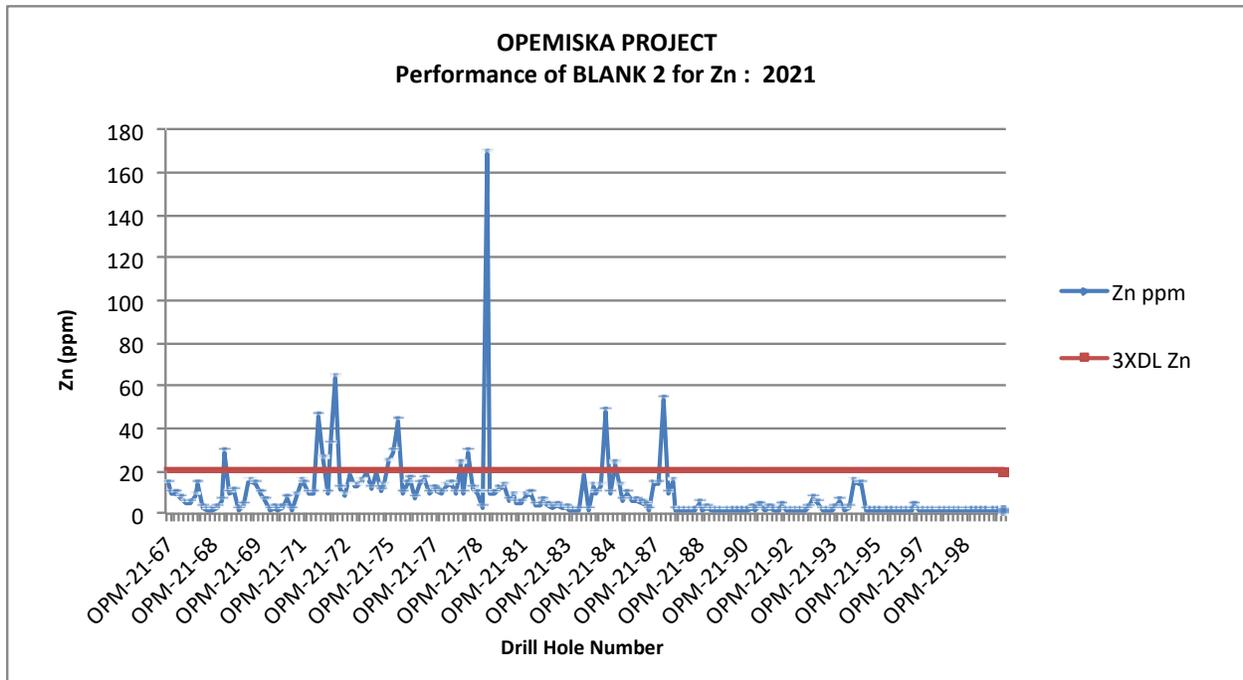
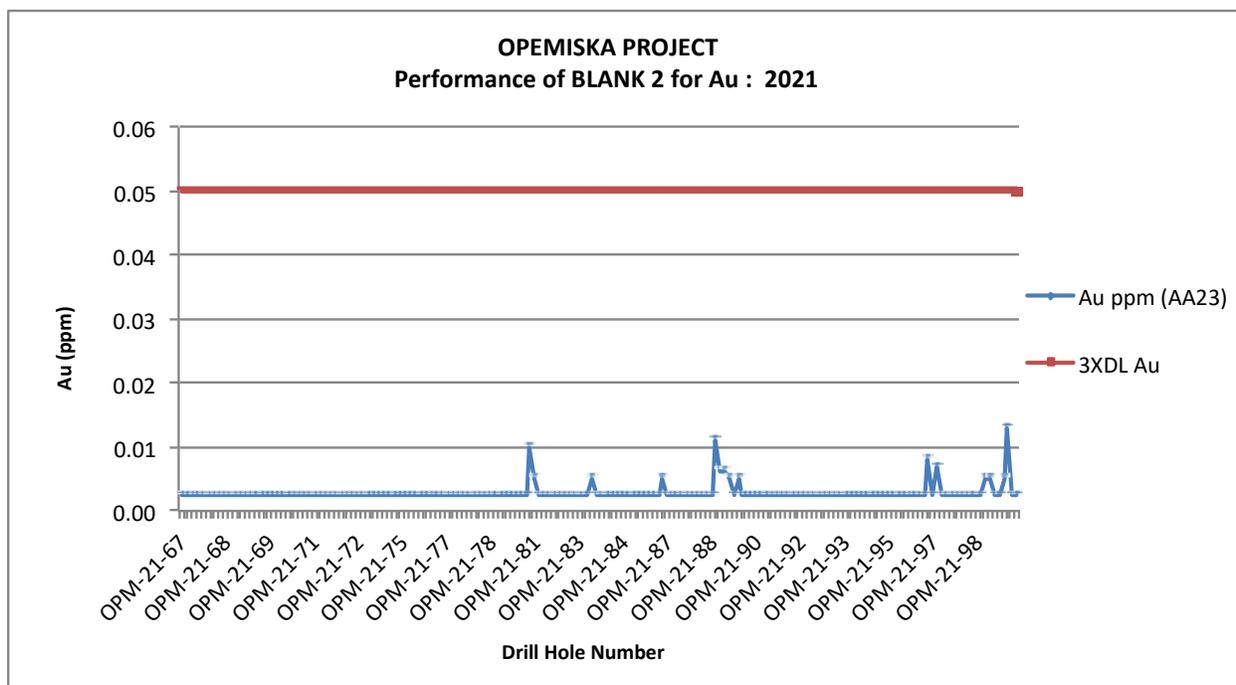


FIGURE 11.15 2021 PERFORMANCE OF BLANK 2 FOR AU



11.5.3.3 Performance of Laboratory Pulp Duplicates

The internal laboratory pulp duplicate data for copper (ICP41 and OG65), silver, cobalt, zinc and gold were examined for the 2021 drill program (all gold data were close to detection limit level for gold analyses and the author of this Technical Report section does not consider the data allows for meaningful precision assessment). There were 22 duplicate pairs in the data set for copper (ICP41), seven for copper (OG65) and 27 for silver, cobalt and zinc. The data were scatter graphed (Figures 11.16 to 11.20). The R^2 values for the lab duplicate data were estimated to be 1.0 for both copper data sets, 0.998 for silver and 0.999 for cobalt and zinc.

The average coefficients of variation (CV_{AV}) were used to estimate precision and, to eliminate the level of influence of the data nearer the detection limit where higher grade variations are more likely to occur, duplicate samples with combined means of less than 15 times the detection limit were excluded. CV_{AV} were calculated at 2.8% for copper (ICP41), 1.1% for copper (OG65), 1.8% for silver, 2.4% for cobalt and 2.0% for zinc, all acceptable levels of precision at the pulp level. Recommendation, however, is made for QC Copper to undertake its own duplicate sampling at the Property (field, coarse reject and pulp duplicates) in future drill programs; paying particular attention to the collection of a range of higher-grade samples, avoiding majority collection of data at or close to lower detection levels.

FIGURE 11.16 2021 LAB DUPLICATE RESULTS FOR CU (ICP41)

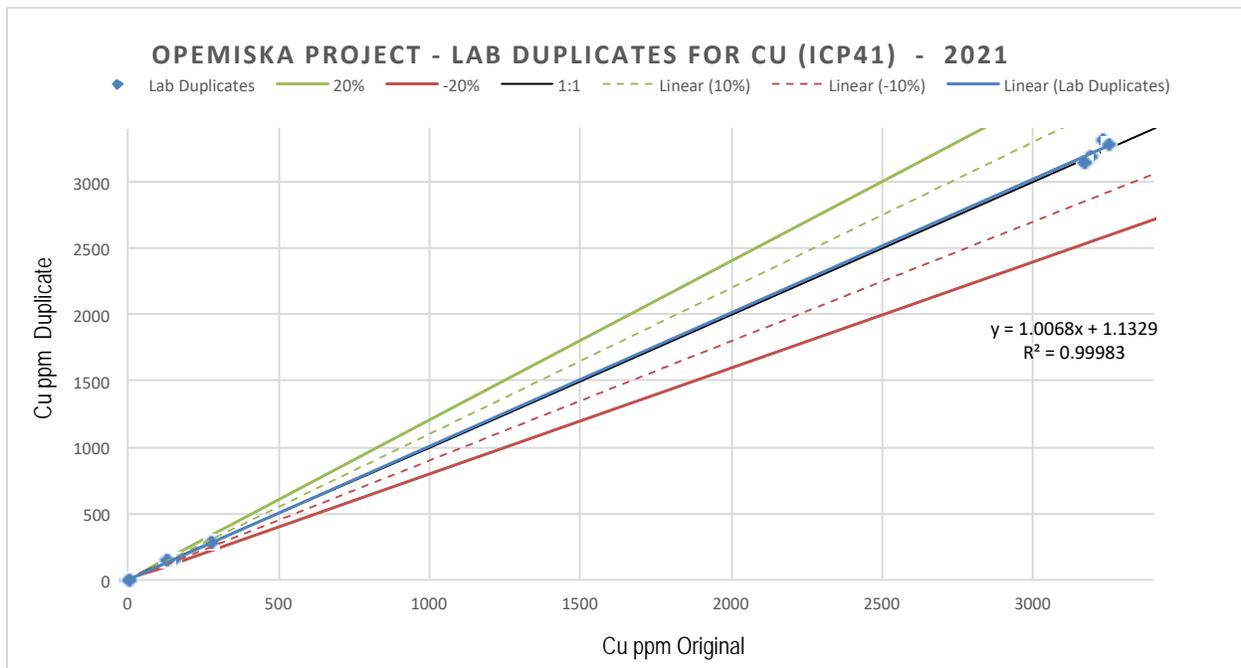


FIGURE 11.17 2021 LAB DUPLICATE RESULTS FOR CU (OG65)

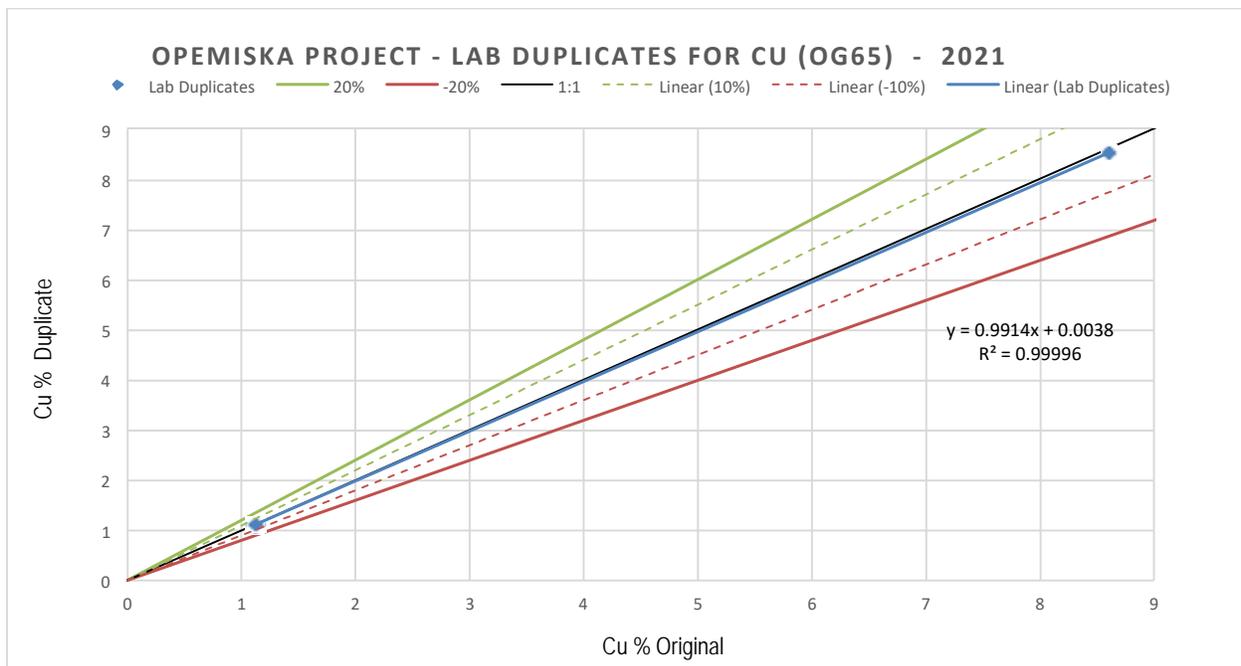


FIGURE 11.18 2021 LAB DUPLICATE RESULTS FOR AG

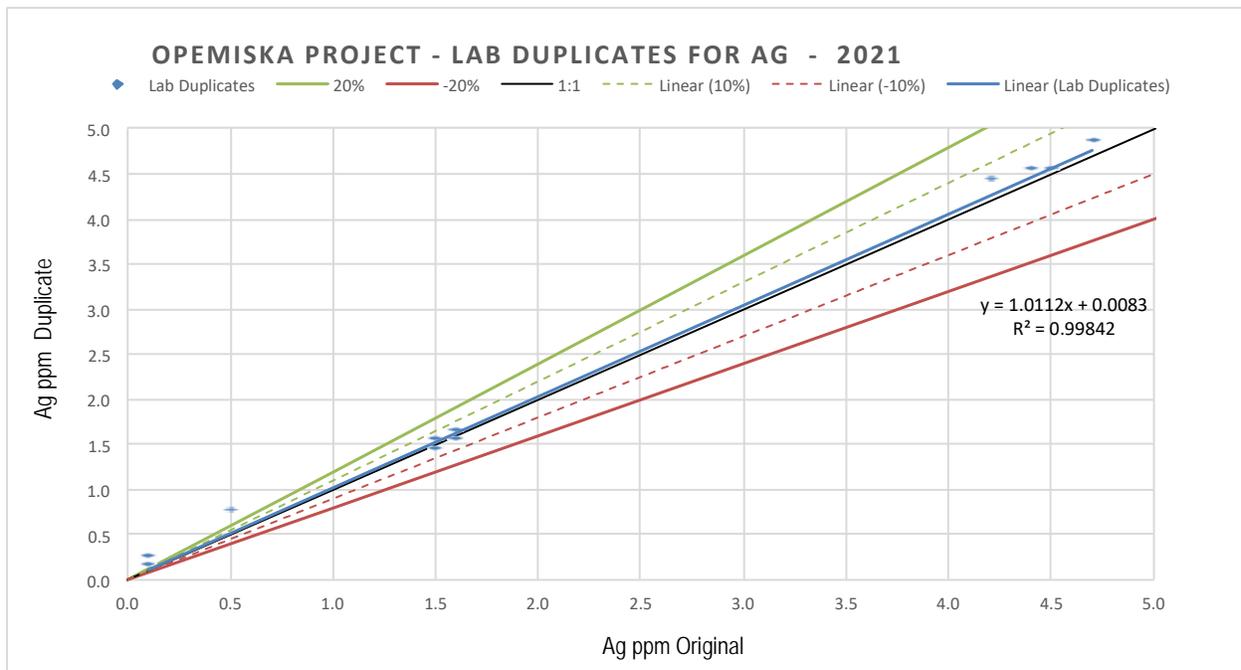


FIGURE 11.19 2021 LAB DUPLICATE RESULTS FOR CO

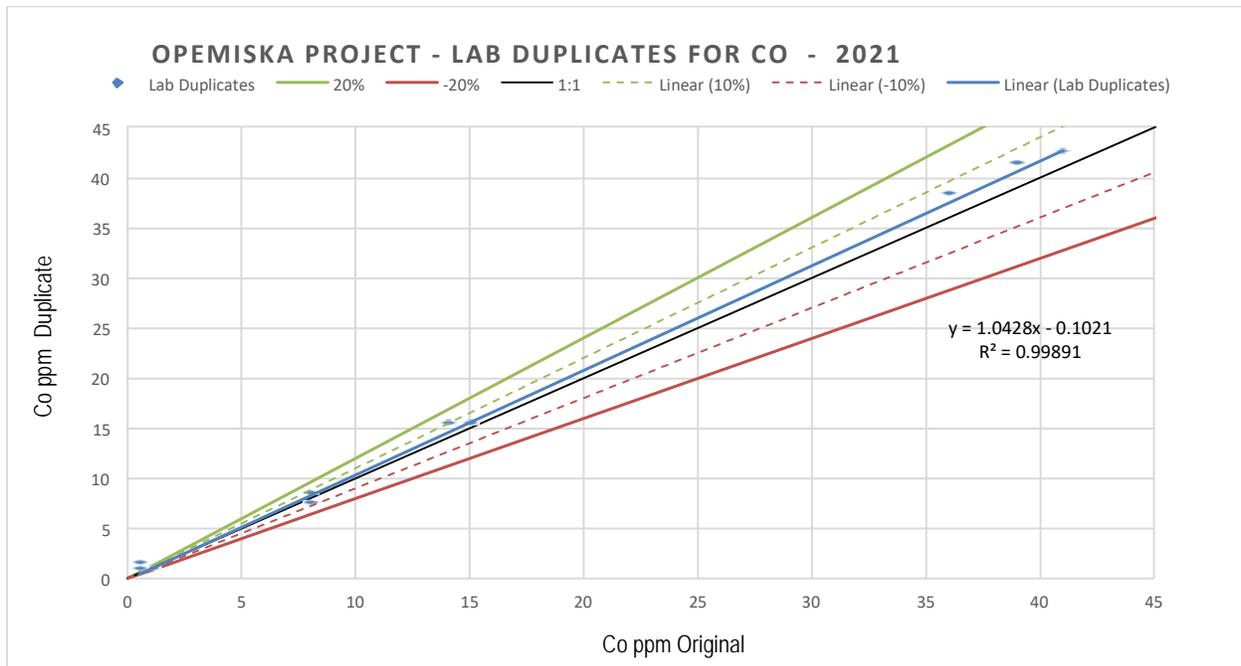
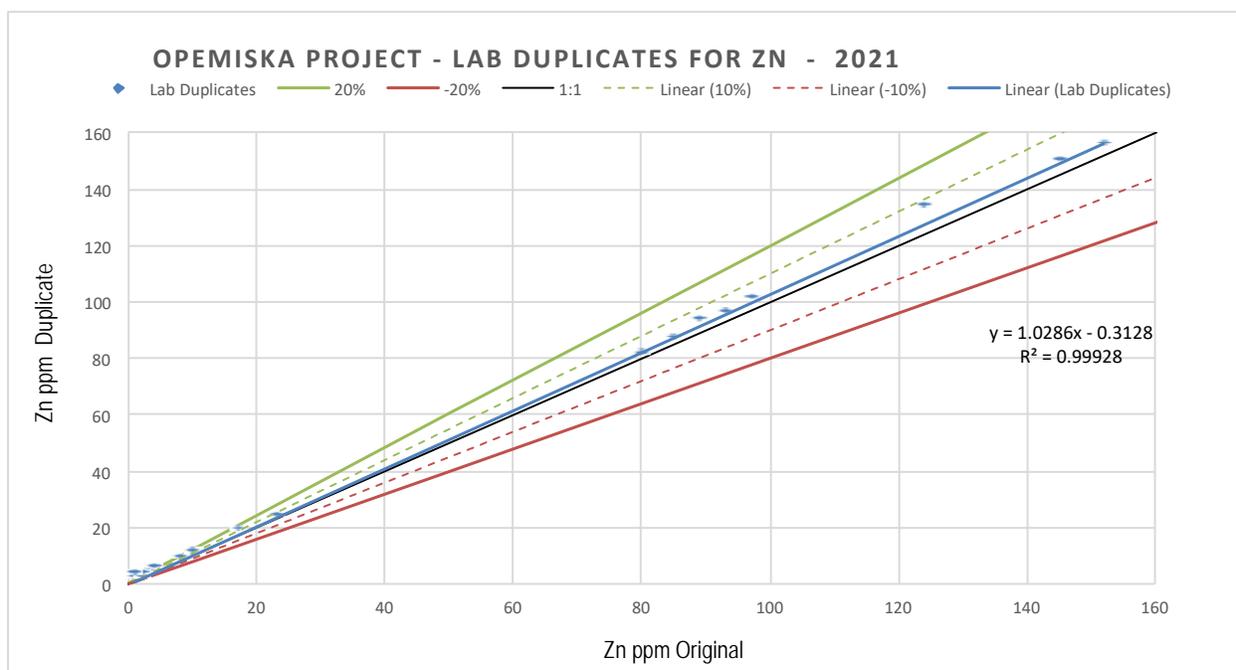


FIGURE 11.20 2021 LAB DUPLICATE RESULTS FOR ZN



11.5.4 2021 Opemiska Core Resampling Program

QC Copper carried out a core re-sampling program on select archived drill core from the 2021 drilling campaign at Opemiska.

New sample numbers were assigned and QC samples, comprising one OREAS 505 CRM and one blank were inserted into the core sample stream, bringing the total number of samples from 29 core samples to 31.

Samples were sent to ALS for assaying and analyzed for gold by FA with AA finish, copper, silver, cobalt and zinc, by aqua regia digest with ICP-AES finish. Copper samples returning results greater than 10,000 pm were further analyzed by aqua regia with ICP-OES or AAS finish.

QC Copper carried out a Gage R&R study of the drill core resampling results and the study indicates the following:

- Approximately one-third of the variance measured in the copper, gold and silver assays is due to variance of core sampling and includes all the sources of variance in sample preparation and analysis.
- The duplicate samples encompass about 80-85% of the range of values in the dataset, and are therefore representative of the sample population.
- A low discrimination index indicates that it is difficult to distinguish more than a few classes of samples in either of the three elements analysed.

- Longer samples (circa 1.5 m in length) will provide less sampling variance.

11.6 CONCLUSION

It is the opinion of the author of this Technical Report section that sample preparation, security and analytical procedures undertaken by QC Copper at the Opemiska Project during 2019 and 2021 are adequate and that the data is of good quality and satisfactory for use in the current Mineral Resource Estimate.

The author also concludes that the majority of Ex-In's sample preparation, security and analytical procedures are adequate and in line with industry best practices. The majority of analyses undertaken in 2015 however, were carried out at Bourlamaque Lab, a non-accredited facility, and the insertion of blind QC samples were not a part of protocol in any of Ex-In's drill campaigns at the Property. To further increase confidence in Ex-In's data, QC Copper have undertaken core re-sampling and hole-twinning programs. These are discussed in Section 12.2.2.

Recommendation is made for QC Copper to continue with the current QC protocol, which includes the insertion of CRMs and blanks, and to further support this protocol with:

- Umpire assaying (on at least 5% of samples) at a reputable secondary laboratory.
- Duplicate sampling at the Property in future drill programs (field, coarse reject and pulp duplicates), paying particular attention to the collection of a range of higher-grade samples, and avoiding majority collection of data at or close to lower detection levels.

12.0 DATA VERIFICATION

12.1 DRILL HOLE DATABASE

12.1.1 Opemiska Drill Hole Data (2019 to 2021)

P&E conducted verification of QC Copper's 2019 and 2021 drill hole data in the Opemiska Project drill hole assay database for copper, silver, cobalt, zinc and gold, by comparison of the database entries with assay certificates. Certificates were either downloaded directly by P&E from ALS Webtrieve or sent directly to P&E from Laboratoire Expert. Assay certificates were downloaded and received in comma-separated values (csv) format.

All of the 2019 and 2021 drill hole data (11,972 samples) were verified for copper, silver, cobalt, zinc and gold. Single minor discrepancies were encountered for copper, cobalt and zinc and two minor discrepancies for gold, which are not considered material to the current Mineral Resource Estimate.

12.1.2 Ex-In Drill Hole Data (2010 to 2016)

P&E also conducted verification of Ex-In's 2010 to 2016 drill hole data in the Opemiska Project drill hole assay database for copper, by comparison of the database entries against "hard copies" of Ex-In's assay certificates appended to Ex-In's available assessment reports. Assessment reports were provided to P&E by QC Copper in portable document format (pdf).

A summary of the data verification carried out on Ex-In's data is provided in Table 12.1.

TABLE 12.1
SUMMARY OF EX-IN DRILL HOLE DATA AT OPEMISKA, 2021 TO 2016

CU SAMPLES	2010	2015	2016	TOTAL
CONSTRAINED SAMPLES				
<i>% Checked</i>	91	100	88	91
<i>No. Checked</i>	424	102	191	717
<i>Total</i>	468	102	217	787
ALL SAMPLES				
<i>% Checked</i>	79	64	64	73
<i>No. Checked</i>	528	102	191	821
<i>Total</i>	667	159	299	1125

A total of 91% (771 out of 787 samples) of constrained copper data and 73% (821 out of 1,125 samples) of all 2010 to 2016 data were verified by P&E. Minor discrepancies were encountered during the verification process (ten in total, seven of which are results "offset" by one row). The author of this Technical Report section does not consider the discrepancies encountered to be of material impact to the current Mineral Resource Estimate.

12.2 OPEMISKA HISTORICAL DATA VERIFICATION

The following summarizes efforts by QC Copper to verify the historical data collected by Falconbridge and Ex-In.

12.2.1 Falconbridge Diamond Drill Twinning Program

Previous operators, Falconbridge carried out work at the Property from 1953 to 1991, including more than 80,000 m of drilling from approximately 14,500 surface & underground drill holes. Falconbridge collected around 300,000 samples for assay throughout this period and, unfortunately, no drill core, reject or pulp samples remain.

QC Copper completed a series of drill holes over 2019 and 2021, which included the twinning of select historical surface holes drilled by Falconbridge prior to and during mining operations. Drilling was designed to verify and integrate as much of the historical data as possible. Not all holes discussed in this section are true twins, however, all drill holes do confirm previously identified mineralized intersections.

A total of 36 diamond holes were drilled in the vicinity of earlier Falconbridge surface holes. Cross-sections along holes were drawn for each pair of holes to visually compare the traces of the original. The drill holes were also relocated to be side-by-side and all dips registered as -90 degrees to better compare the copper histograms of the pairs of holes. Drill hole comparisons can be viewed in Figures 12.3 to 12.6.

A number of issues that made twin comparisons challenging were encountered during the twinning program, including:

- All historical mine holes were drilled prior to mining and as such all the holes traversed high-grade veins. QC Copper's recent holes were generally stopped at voids caused by stopes, unless there was a crown pillar or internal pillar.
- Historical mine sample widths were often very narrow, sometimes as little as 10 to 15 cm, making comparison with modern sampling, typically 1 to 1.5 m, difficult. All original and recent holes were systematically composited over 1.5 m.
- Historical mine holes, surface holes in particular, were under-sampled, with only obviously high-grade intervals typically sampled. Once the mine started production, sampling rates increased, but holes were still never completely sampled. 2021 sampling was complete from top to bottom, except for a few cases where short intervals were missed for unknown reasons.
- Not all mine samples were assayed for gold and silver, two elements typically contributing to NSR. Zinc and/or cobalt were assayed where sphalerite and/or cobalt bloom was observed only.

QC Copper's twinning program of the historical Falconbridge surface holes generally confirms the tenor of historical results at Opemiska. Despite the difficulties encountered throughout the program, recent results correlate reasonably well with the historical data.

12.2.2 Ex-In Historical Database Verification

Ex-In, the previous operator at Opemiska, carried out drilling at the Property from 2002 to 2016, the majority of which was completed from 2010 to 2016. Sample preparation, security and analytical procedures, for the most part, are adequate and in line with industry best practices. Ex-In, however, did not establish adequate QC protocol to independently monitor the quality of analyses carried out by the various laboratories utilized, one of which was not accredited.

QC Copper has undertaken drill core re-sampling and hole-twinning programs to further increase confidence in the data collected by Ex-In at the Property.

12.2.2.1 Ex-In Diamond Drill Twinning Program

QC Copper completed a number of twin diamond drill holes in 2021 in an effort to increase confidence in the drill hole data collected by Ex-In at the Project. Four holes were used in a QQ-Plot study, in order to compare grade accumulation between the historical and recent data sets, with data showing good comparison when plotting on the X=Y curve.

The twin holes selected for the study are listed below:

- S940 / OPM-21-38
- S941 / OPM-21-26
- S372 / OPM-21-46
- S375 / OPM-21-51.

To allow for meaningful comparison, both sets of data were composited to 1.5 m, all samples with less than 1.5 m were removed from the dataset and data at lower detection levels were also removed. Figures 12.1 and 12.2 show resultant QQ-Plots for copper and gold respectively.

QQ-Plot results for copper assays, as shown in Figure 12.1, reveal that most of the samples contain less than 1% copper (10,000 ppm) and results track the X=Y line to about 1.3%. Higher-grade results also favour the Mine results, with large differences appearing at grades greater than 2.0%. The plot therefore demonstrates that the mine assays are comparable to QC Copper assays for results with less than 1.5 to 2.0% copper, which account for over 90% of the assay results.

The same dataset was used to generate a QQ-Plot for the gold assays (Figure 12.2), however, the highest six assays were removed because they were extreme outliers. Results are more difficult to compare than for the copper assays, but the QC Copper results appear higher for assays less than about 0.3 g/t gold and increased grades show higher results in the Mine assays. Considering that the range of gold values typically found in the Ex-In data is between 0.2 to 0.5 g/t gold, the results from the mine compare reasonably well. Higher grades will potentially have a local effect on data, however, the impact of outliers globally will likely have minimal impact.

FIGURE 12.1 QQ-PLOT STUDY FOR TWINNED EX-IN DRILL HOLES FOR CU

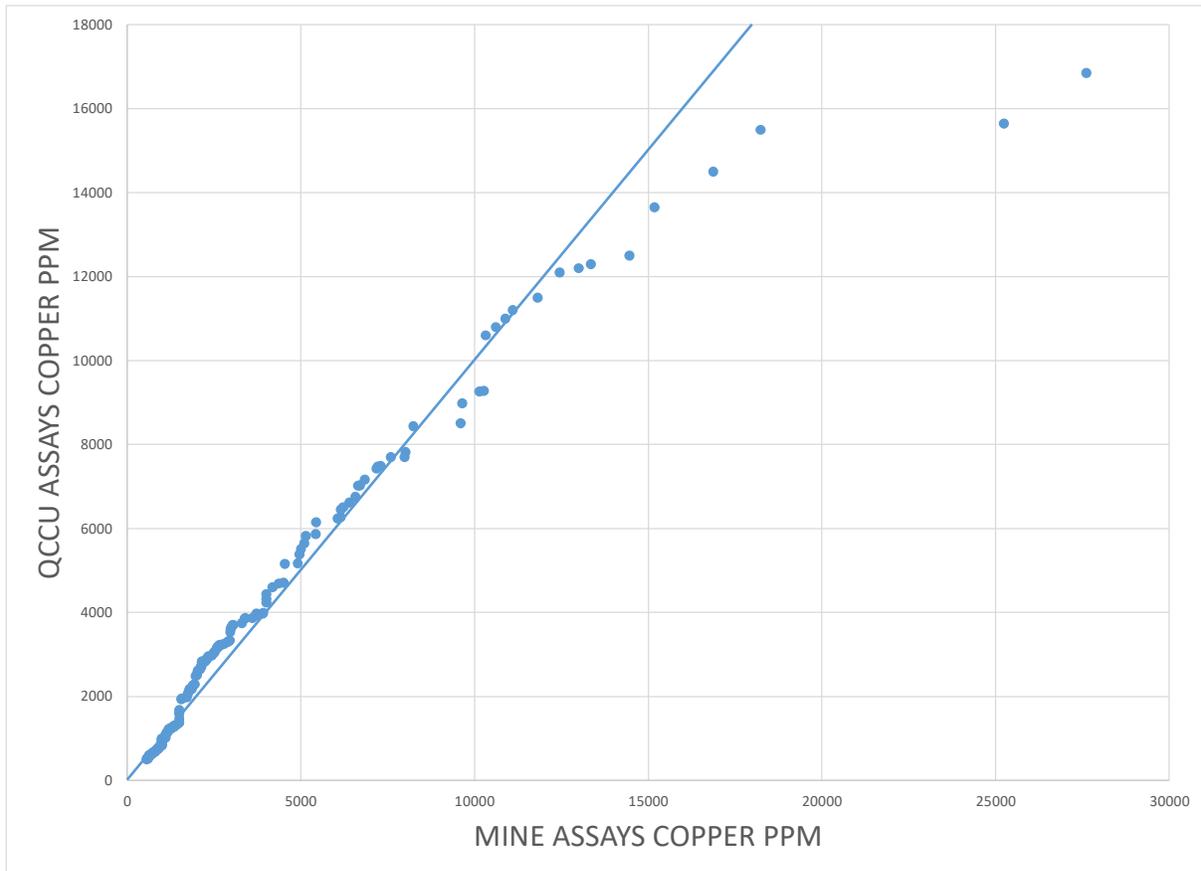
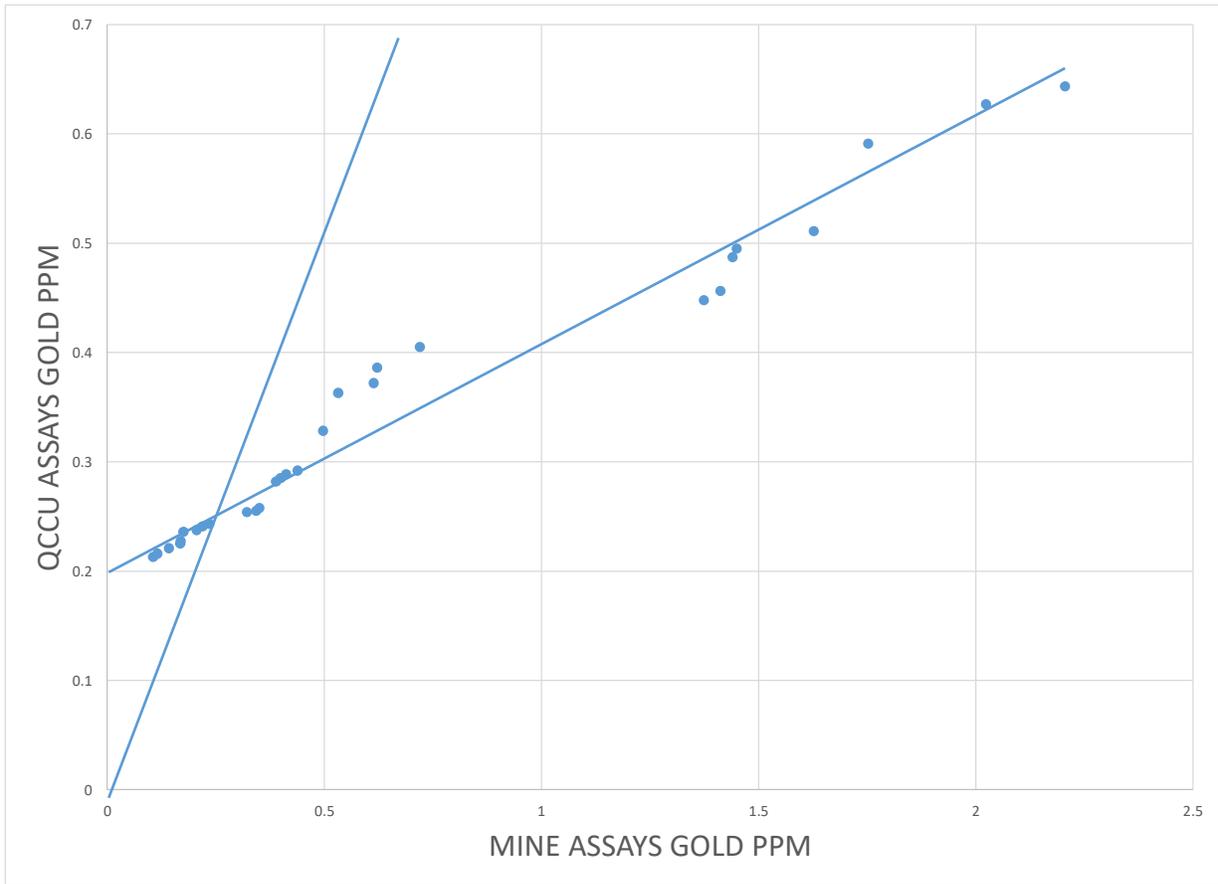


FIGURE 12.2 QQ-PLOT STUDY FOR TWINNED EX-IN DRILL HOLES FOR AU



Cross-sections along the four sets of twinned holes were drawn for each pair of holes to visually compare the traces of the original. The holes were also relocated to be side-by-side and all dips registered as -90 degrees to better compare the copper histograms of the pairs of holes. Hole comparisons, in section and plan, are shown in Figures 12.3 through 12.6.

FIGURE 12.3 QCCU EX-IN TWINNED HOLE COMPARISONS: S940 / OPM-21-38

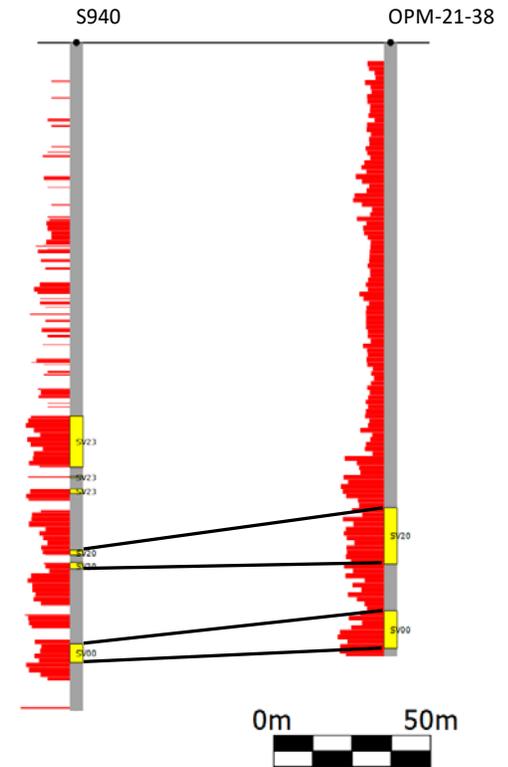
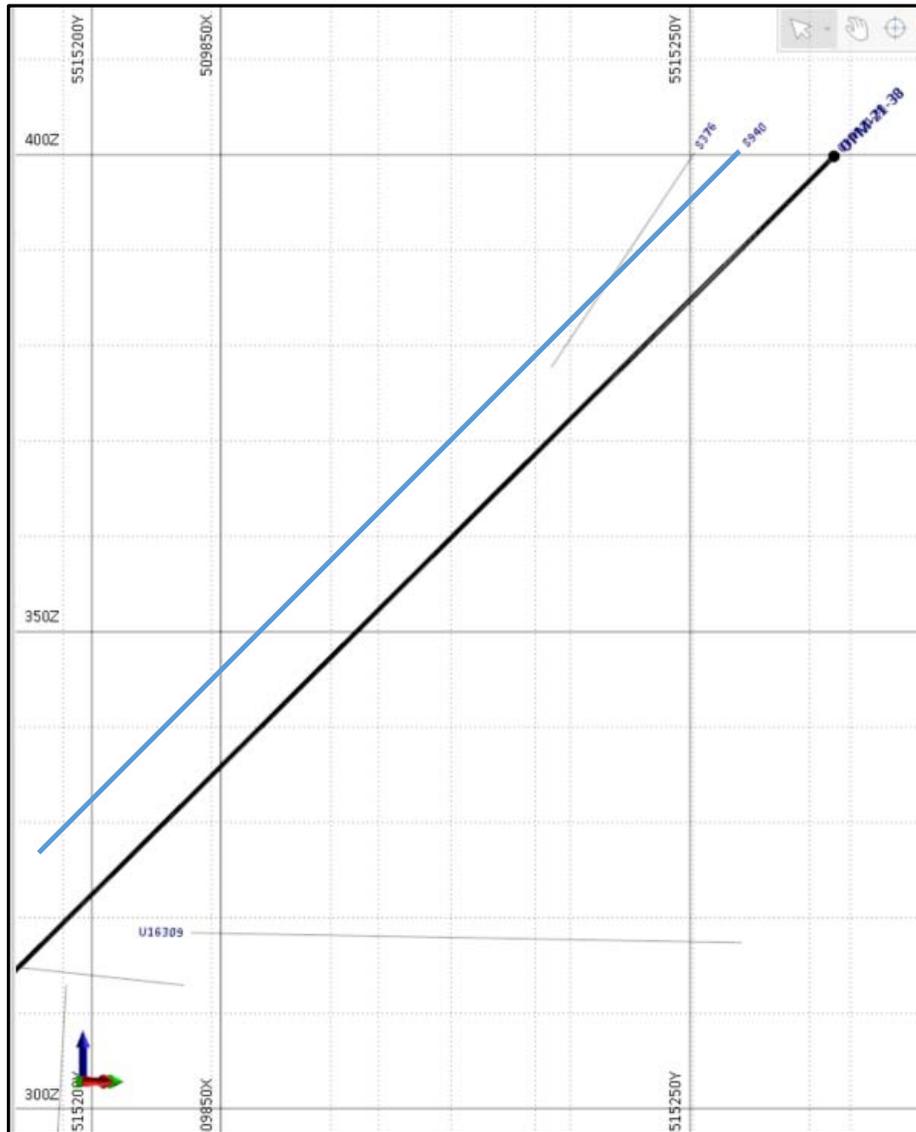


FIGURE 12.4 QCCU EX-IN TWINNED HOLE COMPARISONS: S941 / OPM-21-26

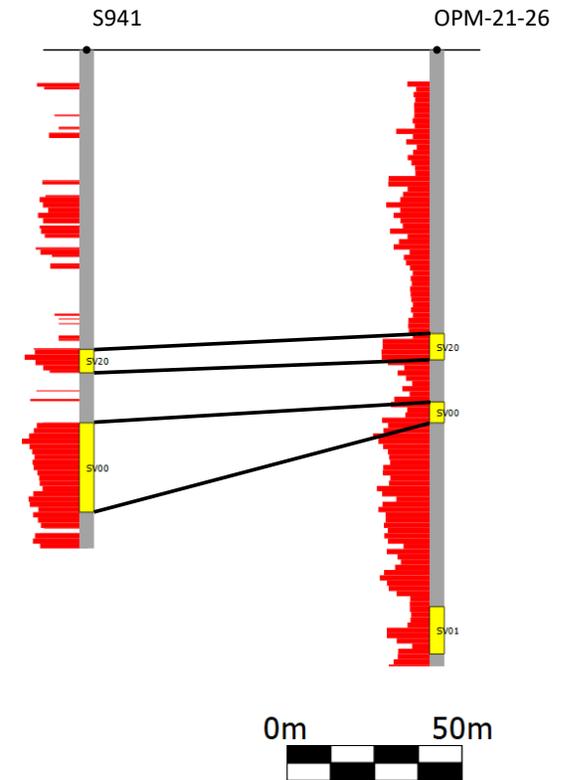
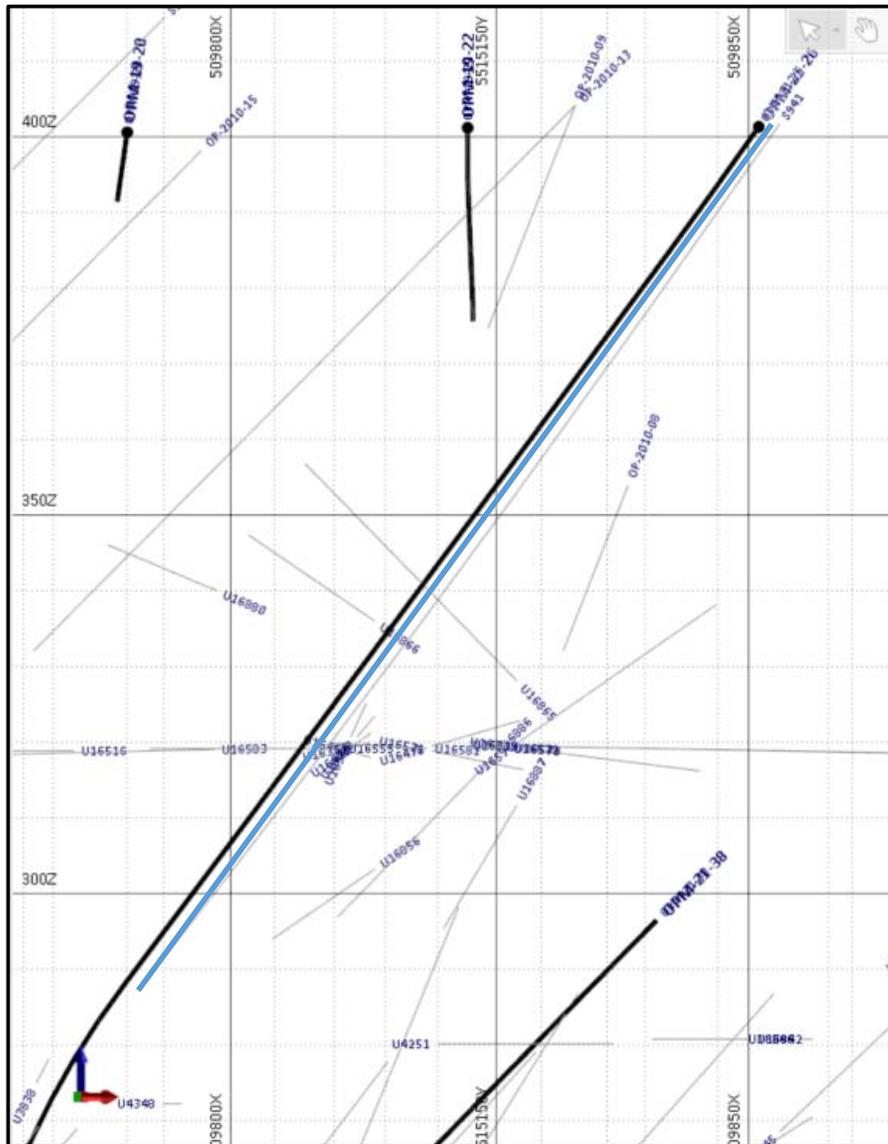


FIGURE 12.5 QCCU EX-IN TWINNED HOLE COMPARISONS: S372 / OPM-21-46

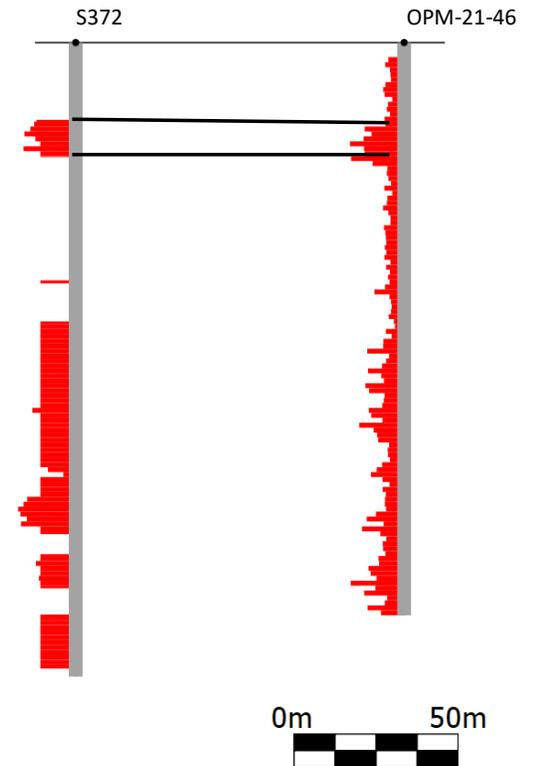
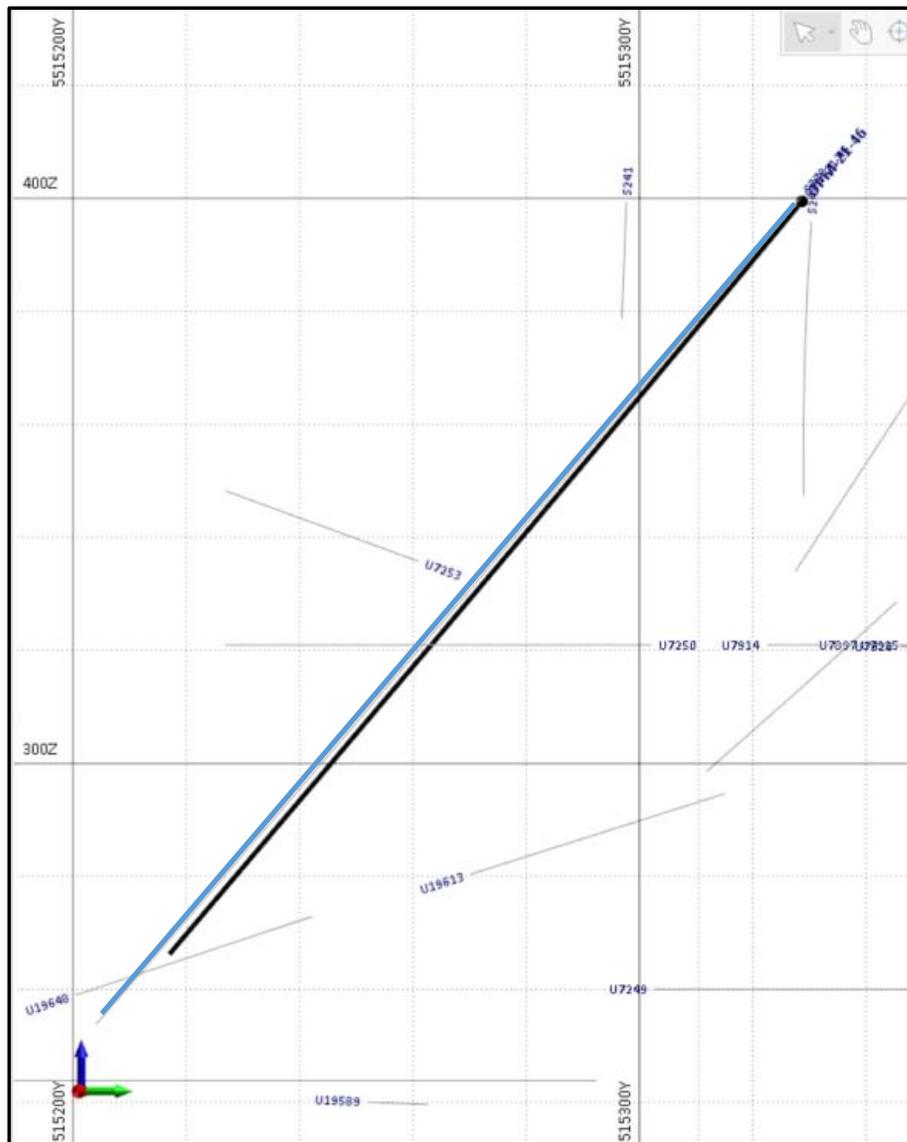
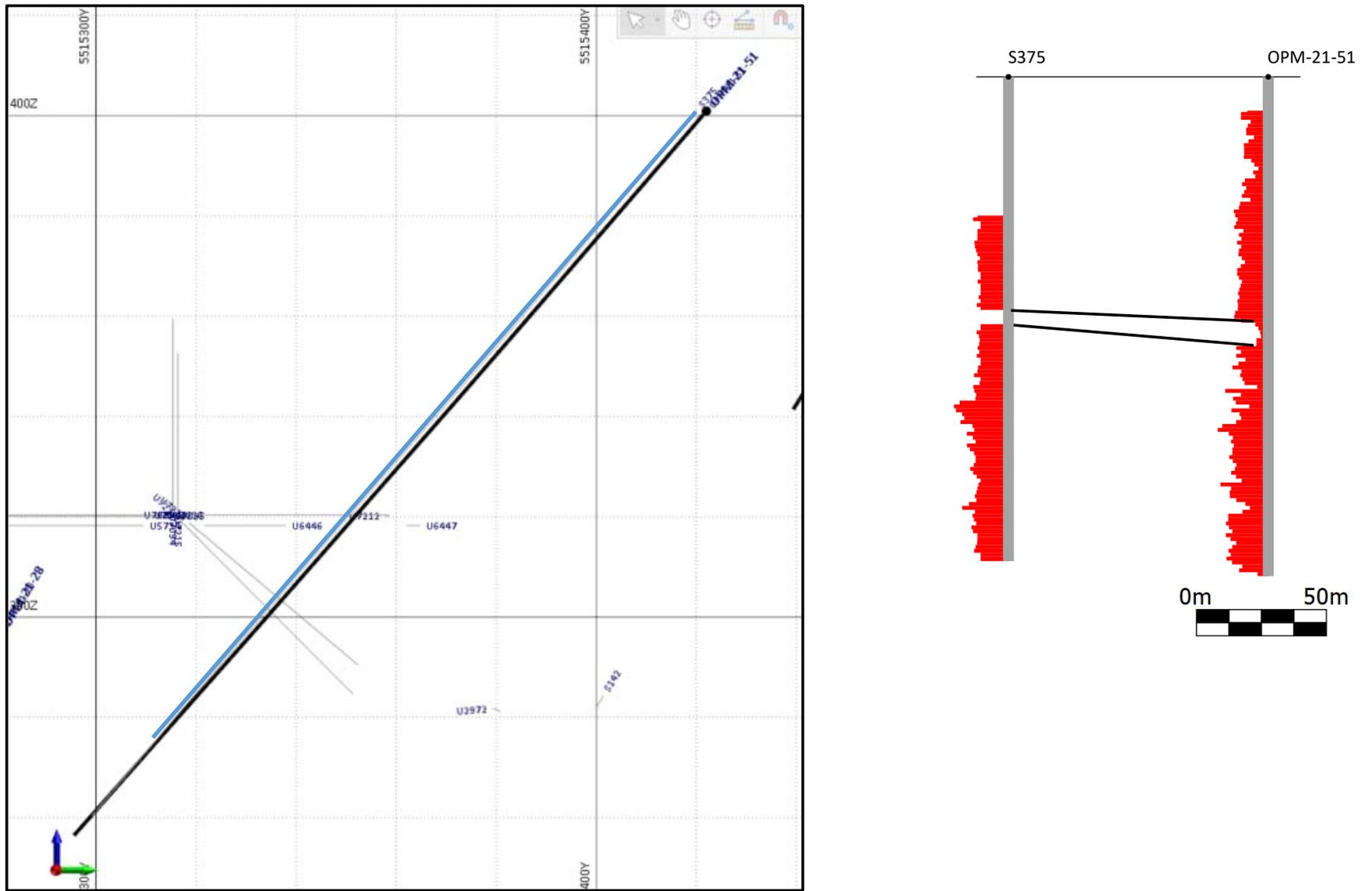


FIGURE 12.6 QCCU EX-IN TWINNED HOLE COMPARISONS: S375 / OPM-21-51



QC Copper’s twinning program of the four historical Ex-In drill holes confirms the tenor of the original mine assays, with recent results generally correlating with the historical data.

12.2.2.2 Ex-In Historical Core Sampling Program

QC Copper carried out an historical drill core re-sampling program on select archived drill core from Ex-In’s 2010, 2015 and 2016 drilling campaigns at the Opemiska Property.

New sample numbers were assigned and QC samples, comprising one of each of the OREAS 502c, OREAS 504c and OREAS 166 CRMs and three blanks were inserted into the core sample stream, bringing the total number of samples from 82 core samples to 88.

A total of 82 samples from 26 diamond drill holes were sampled: 24 samples from 14 holes from Ex-In’s 2010 drilling, 33 samples from four 2015 holes and 25 samples from eight 2016 holes. Samples were collected by taking a half drill core of the archived core (and a quarter core on occasion when necessary). Samples were analyzed for copper (n=82), silver (n=80) and gold (n=62).

Results of QC Copper’s core resampling program for copper, silver and gold are presented in Figures 12.7 through 12.9.

FIGURE 12.7 QCCU EX-IN CORE RESAMPLING PROGRAM RESULTS FOR CU

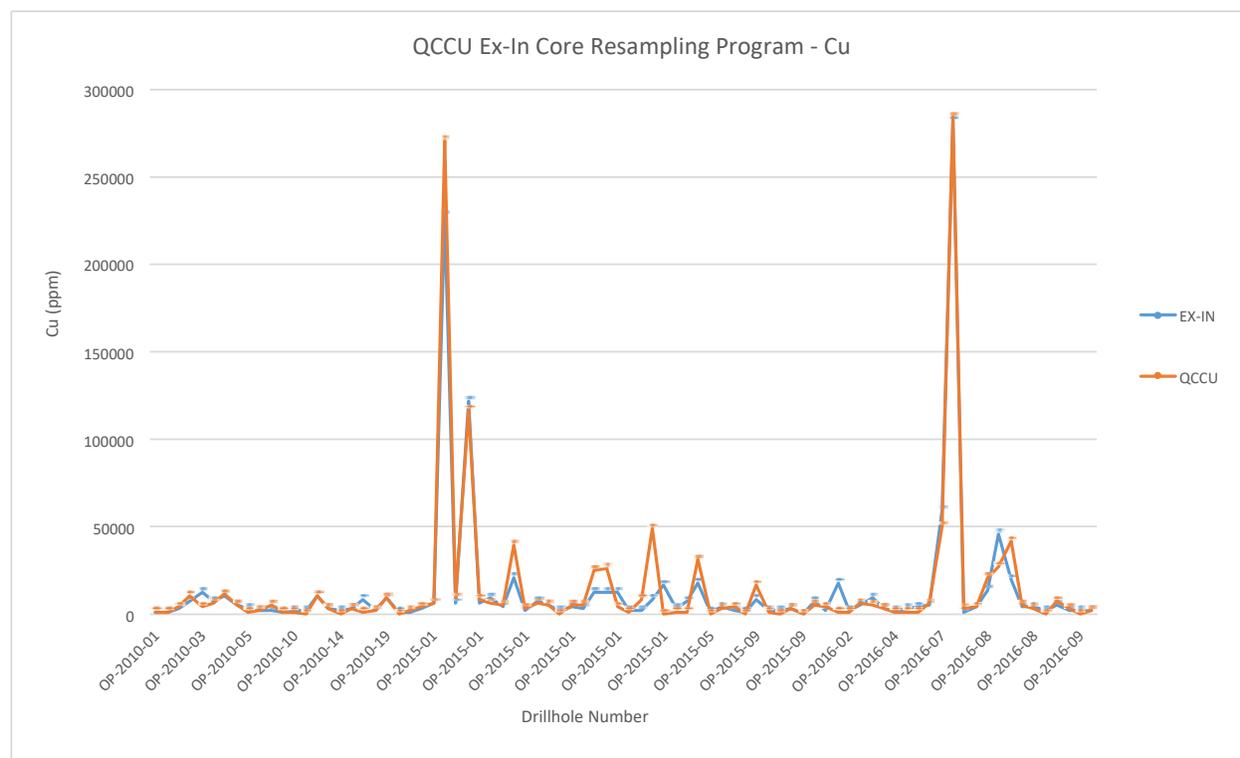


FIGURE 12.8 QCCU EX-IN CORE RESAMPLING PROGRAM RESULTS FOR AG

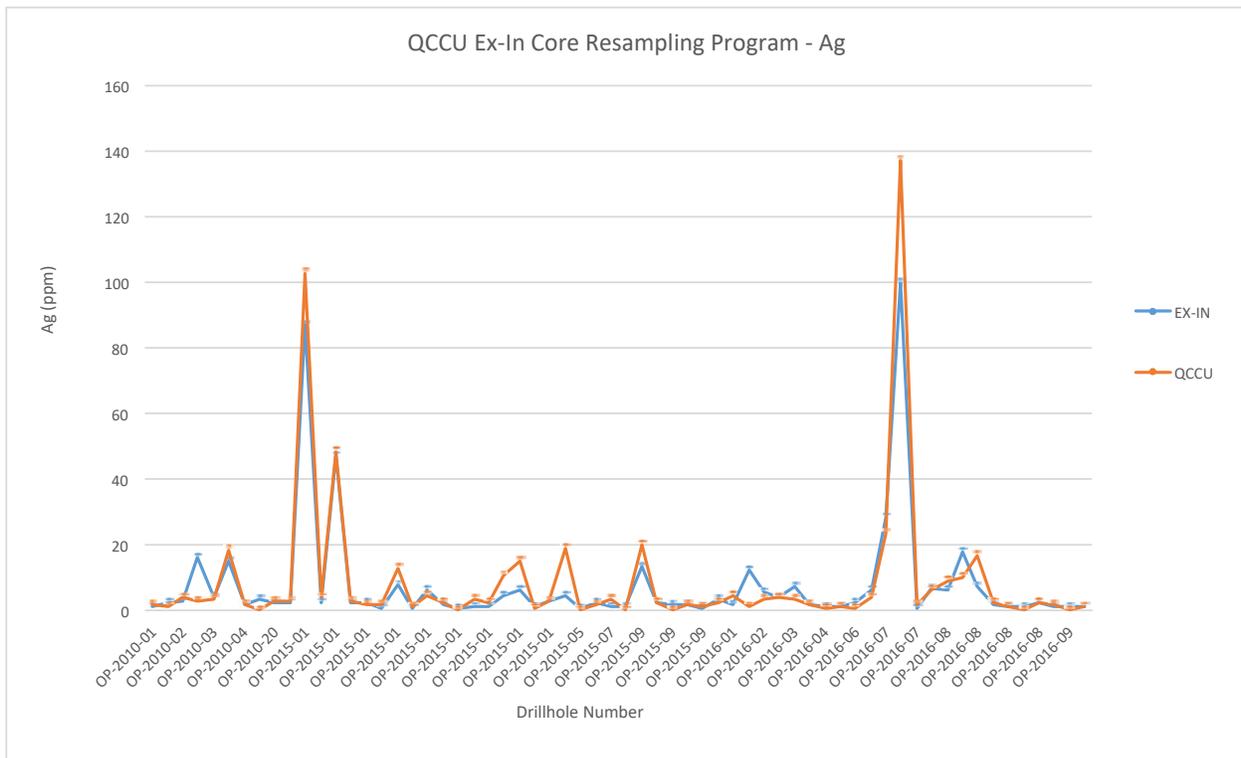
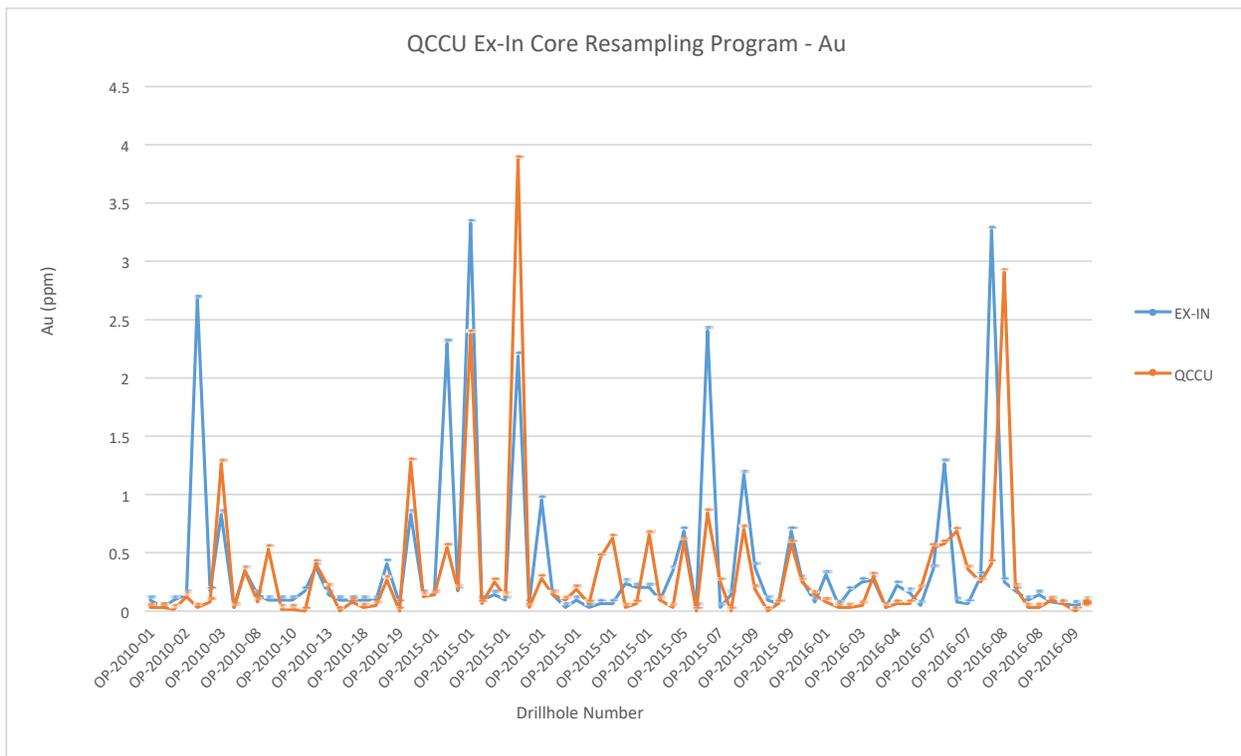


FIGURE 12.9 QCCU EX-IN CORE RESAMPLING PROGRAM RESULTS FOR AU



The author of this Technical Report section considers there to be acceptable correlation between assay values in QC Copper's resampled data and Ex-In's original data.

12.3 P&E SITE VISIT AND INDEPENDENT SAMPLING

The Opemiska Project was visited by Mr. Antoine Yassa, P.Geo., of P&E, from May 31, 2021 to June 1, 2021 for the purpose of completing a site visit and due diligence sampling.

Mr. Yassa collected 22 samples from seven diamond drill holes, five holes and 15 samples from QC Copper's 2021 drill program and two holes and seven samples from Ex-In's 2010 drill program. A range of high, medium and low-grade samples were selected from the archived drill core. Samples were collected by taking a quarter drill core, with the other quarter core remaining in the drill core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Yassa to the AGAT Labs preparation facility in Val d'Or, QC for analysis.

Samples at AGAT were analyzed for copper by sodium peroxide fusion with ICP-OES/ICP-MS finish and for gold by fire assay with ICP finish. Drill core bulk density determinations were measured by wet immersion method on all of the samples.

AGAT is an independent lab that has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a QMS is in operation at the location in question. AGAT Laboratories is certified to ISO 9001:2015 standards and is accredited, for specific tests, to ISO/IEC 17025:2017 standards.

Results of the Opemiska site visit verification samples for copper and gold are presented in Figures 12.10 and 12.11.

FIGURE 12.10 RESULTS OF MAY 2021 CU VERIFICATION SAMPLING BY P&E

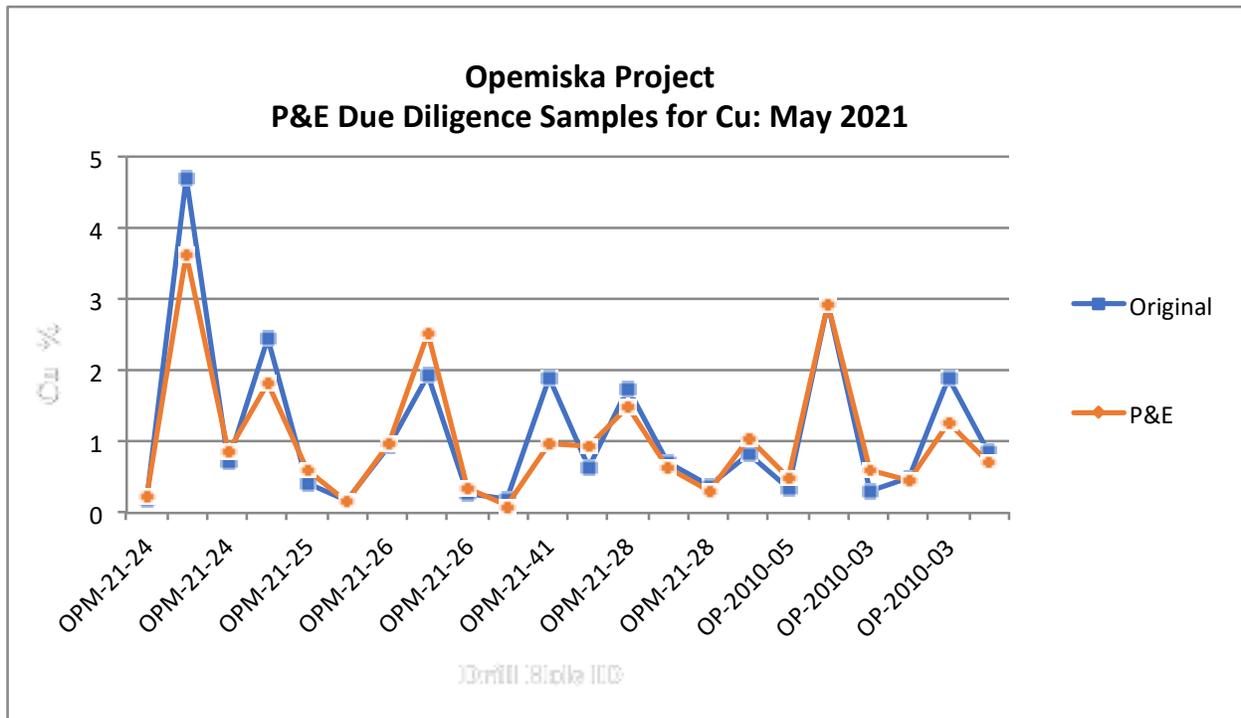
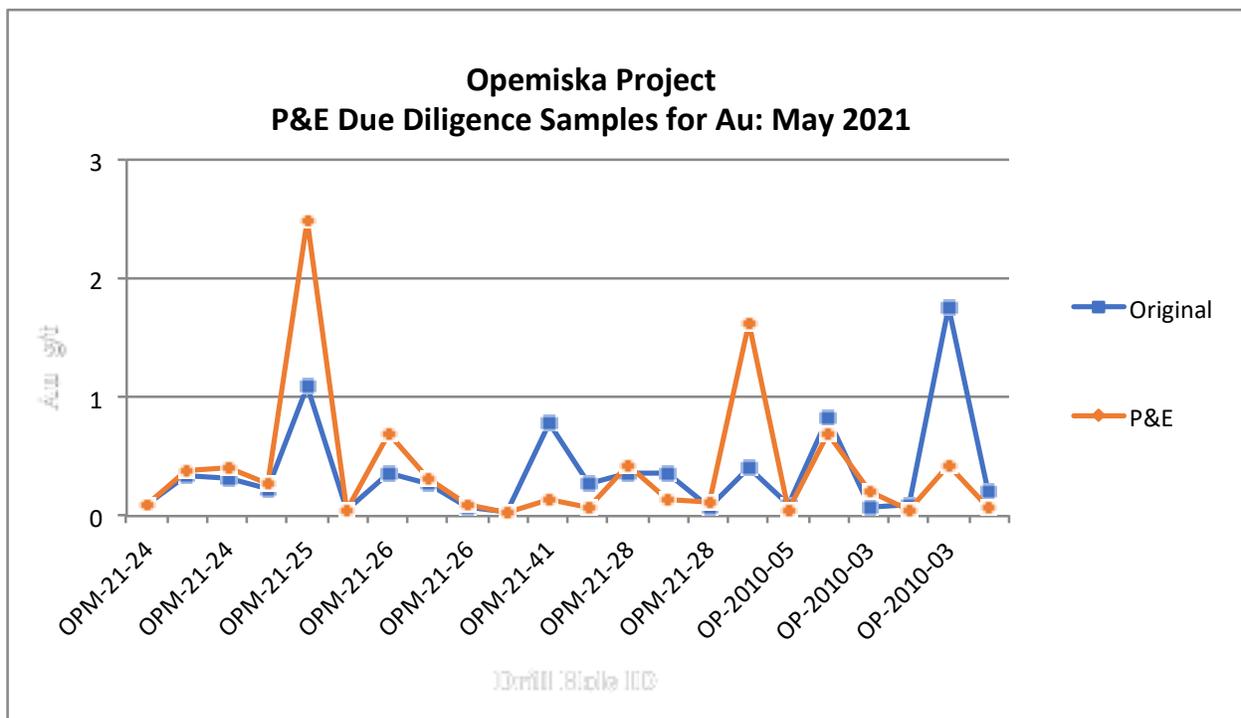


FIGURE 12.11 RESULTS OF MAY 2021 AU VERIFICATION SAMPLING BY P&E



The author of this Technical report section considers that there is good correlation between the copper and gold assay values in QC Copper's database and the independent verification samples collected by P&E and analyzed at AGAT.

12.4 CONCLUSION

The authors of this Technical Report section concludes that the data, for which complete assay and location information is known, are of good quality and appropriate for use in the current Mineral Resource Estimate, based upon the following:

- P&E's independent site visit samples;
- P&E's database verification;
- Assessment of QC Copper's hole twinning program to confirm the mineralization reported by Falconbridge and Ex-In;
- Assessment of the sample preparation, security and analytical procedures undertaken by QC Copper at the Opemiska Project during 2019 and 2021 and Ex-In from 2010 to 2016.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 GENERAL

Information on potential process metallurgy relies primarily on the available records of historical production at Opemiska Copper. Falconbridge Copper's Opemiska Mine operated from 1954 to 1991 and produced a copper concentrate that contained payable gold and silver.

Some metallurgical testing was completed in recent years after mine closure by COREM, Ex-In, and McGill University on mineralized material from the Mineral Resource zones and from historical tailings. The processing techniques that were applied were gravity-based and magnetic separation. No economic potential was indicated from these test results.

13.2 OPEMISKA PRODUCTION RECORD

Summaries of LOM production and that of last 10 years are shown in Table 13.1. High recovery was achieved for copper, moderately high for gold and silver, over the 37 years of operations.

Year	Tonnes Mined (k) Processed (Avg tpd)	Process Plant Feed Grade			Concentrate				Average Recoveries (%)		
		Cu (%)	Au (g/t)	Ag (g/t)	Tonnes (k)	Cu (%)	Au (g/t)	Ag (g/t)	Cu	Au	Ag
1954-1991	24,228 (1,870)	2.24	1.06	11.2	2,158.3	23.4	11.3	118	95.4	86.2	85.3
1982-1991	5,247 (1,500)	1.56	2.28	11.7	384.5	20.9	30.9	137	96.0	88.1	82.0

In the last 10 years of operations, the copper head grade was significantly lower and gold grade higher, however, recoveries remained high. The copper grade in the concentrate was lower than possibly desirable at the time, however, the gold in the process plant feed doubled and the concentrate grade approached one Troy Ounce.

13.3 MINERALOGY

No information on copper and gold mineralogy was available for review other than reports that indicate the host minerals were silica and calcite and the copper mineralogy being essentially chalcopyrite. Sulphides were reported to be mainly pyrite with some pyrrhotite.

13.4 REVIEW OF OPEMISKA HISTORICAL PROCESS PLANT OPERATIONS

The Opemiska historical processing included multi-stage crushing, ball mill grinding and a conventional flotation circuit using Sub-A (Denver sub aeration) cells. Scavenger flotation

concentrates and cleaner tailings were subject to regrinding. Automatic sampling and on-line X-ray sensors assisted in process control. The copper-gold concentrate was dewatered by disc filters and shipped in covered rail cars to the Noranda Smelter in Rouyn-Noranda.

The flotation reagent mix was also conventional with the use of lime, xanthates and frothers with sodium sulphide supplemented to depress non-copper sulphides.

The sand portion of the flotation tailings was separated by cyclones and used for mine backfill.

13.5 ANTICIPATED METALLURGICAL PERFORMANCE OF THE OPEMISKA MINERAL RESOURCE

Assuming the mineral composition of the current Mineral Resource resembles the historical Opemiska Mineral Reserve, high recoveries of copper as well as gold could be anticipated in a modern mineral processing facility. The process flowsheet would likely be similar to the historical one with grinding, flotation and concentrate dewatering/shipment (by rail). A new facility would include the use of the most effective reagents, modern flotation cells, pressure concentrate filters as well as potentially on-line particle size and x-ray fluorescent analysers.

Copper and gold recoveries similar to historical recoveries – 95% copper recovery, 85% gold recovery, could be anticipated. The copper grade of the concentrate could be expected to be increased to 23-35% Cu, which would improve the concentrate NSR value.

13.6 TESTWORK REQUIREMENTS

In order to confirm concentrate grade and recoveries, a metallurgical test program should be considered which would include:

- Mineralogical study including QEMSCAN and gold deportment. This would indicate liberation grind sizes for rougher and cleaner flotation. An indication of the use of gravity techniques to recover a fraction of the gold and whether magnetic separation (e.g., pyrrhotite removal) could be beneficial for concentrate upgrading;
- Crushing and grinding tests;
- Flotation tests, using copper and gold specific collectors, including “locked cycle” tests;
- Concentrate dewatering tests; and
- Tailings - ARD/ML testing, thickening and rheology.

This test program could be expected to cost approximately CAD\$125,000.

14.0 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The purpose of this Technical Report section is to summarize the initial Mineral Resource Estimate on the Opemiska Project located in the Chibougamau District of Québec. The Mineral Resource Estimate was based on the historical surface and underground drill holes and surface drill holes completed between 2010 to 2021.

The Mineral Resources Estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and were estimated in conformity with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines" (November 2019) and reported using the definitions set out in the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves. Mineral Resources that are not converted to Mineral Reserves do not have demonstrated economic viability. Confidence in the estimate of Inferred Mineral Resource is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral Resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource Estimates.

This Mineral Resource Estimate was prepared by Yungang Wu., P.Geo. under the direction of Antoine Yassa, P.Geo., géo and Eugene Puritch, P.Eng., FEC, CET of P&E Mining Consultants Inc., Brampton, Ontario. The effective date of this Mineral Resource Estimate is September 20, 2021.

14.2 DATABASE

All drilling and assay data were provided by QC Copper in the forms of Excel data files. The GEOVIA GEMSTM V6.8.4 database compiled by P&E for this Mineral Resource Estimate consisted of 16,570 surface and underground drill holes, totalling 1,042,688 metres, of which a total of 133 (totalling 22,774 metres) surface holes were drilled between 2010 to 2021 (Table 14.1). A drill hole plan is shown in Appendix A.

Dataset	No. of Drill Holes	Metres
2010-2021 Surface Drilling	133	22,774
Pre-2010 Surface Drilling	805	113,791
Pre-2010 Underground Drilling	15,632	906,123
Total	16,570	1,042,688

The database contains Cu, Au, Ag, Co, and Zn assays. The basic statistics of all raw assays are presented in Table 14.2.

TABLE 14.2
OPEMISKA ASSAY DATABASE SUMMARY

Variable	Cu	Au	Ag	Co	Zn	Length
Number of Samples	348,217	347,367	346,888	1,971	12,300	348,217
Minimum Value*	0.000	0.000	0.000	0.000	0.000	0.01
Maximum Value*	32.000	528.000	314.740	0.073	27.100	9.75
Mean*	0.750	0.331	0.226	0.004	0.020	1.16
Median*	0.120	0.000	0.000	0.003	0.004	1.22
Variance	4.038	11.476	10.296	0.000	0.148	0.38
Standard Deviation	2.010	3.388	3.209	0.003	0.384	0.62
Coefficient of Variation	2.680	10.231	14.225	0.889	18.805	0.54
Skewness	6.210	42.551	32.478	4.392	58.636	0.95
Kurtosis	54.224	3386.522	1556.822	43.701	3805.580	5.50

*Note: * Cu, Zn and Co units are %; Au and Ag units are g/t and length units are metres.
All drill hole survey and assay values are expressed in metric units, with grid coordinates reported using the NAD 83, Zone 18N UTM system.*

14.3 DATA VERIFICATION

Verification of the assay database for the 2010-2021 drilling was performed by P&E against laboratory certificates that were obtained independently from ALS Laboratories Ltd. and Laboratoire Expert Inc. in Rouyn-Noranda, Québec. A few insignificant errors were noticed in the assay database and corrected.

P&E validated the Mineral Resource Estimate database in GEMSTTM by checking for inconsistencies in analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, survey and missing interval and coordinate fields. Some minor errors were identified and corrected in the database. The authors of this Technical Report section are of the opinion that the supplied database is suitable for Mineral Resource estimation.

14.4 DOMAIN INTERPRETATION

Using available digitized information including mined-out stopes, underground and surface borehole assay results, a set of seven veins and a halo around the veins were constructed for the Springer Zone. Each vein encompasses the original stopes and includes lower-grade material that was not historically economical. Those low-grade halos capture mineralized intervals in the proximity of the old stopes and forms domains determined by the selection of mineralized material above 0.20% copper equivalent $CuEq \% = Cu \% + (Au \text{ g/t} \times 0.72) + (Ag \text{ g/t} \times 0.01) + (Co \% \times 7.14) + (Zn \% \times 0.36)$ that demonstrated lithological and structural zonal continuity along strike and down dip. Minimum constrained core length for interpretation was

approximately 2.0 metres. In some cases, mineralization below the CuEq cut-off was included for the purpose of maintaining zonal continuity and thickness. A larger halo domain covers the area between the veins with numerous low-grade disseminated mineralized areas within the host rock. This mineralized halo doesn't have continuity, however, represents an elevated low-grade mineralized background.

Five mineralized domains were generated for the Perry Zones.

The same method of creating a mineralized halo around older stopes and mineralized historical mining remnants to include previously unmined areas was modified slightly by using inclined sections orthogonal to the Perry Zones. This allowed a better constrain of material respecting the 0.20% copper equivalent cut-off. The modelled outlines were then extruded into wireframe solids at 15 m spacing on those incline planes.

The domain wireframes were utilized as hard boundaries for statistical analysis, model coding, grade interpolation, and Mineral Resource reporting purposes. The mineralized domain wireframes are displayed in Appendix B.

A Lidar generated topographical surface was provided by Qc Copper Gold Inc. to replace an earlier topographic surface created using Garmin BaseCamp with Québec topography at a scale 1:20,000. An overburden/bedrock surface was generated with drill hole log casing information.

Wireframes of historical underground excavations (stopes and drifts) were provided by QC Copper and were digitized from scanned historical plans and vertical sections. The mined out voids were utilized to deplete the mined Mineral Resources at both Springer and Perry zones.

14.5 MODEL ROCK CODE DETERMINATION

A unique model rock code was assigned to each mineralization domain for the Mineral Resource Estimate as presented in Table 14.3.

Zone	Domain	Model Code
Springer	Halo	100
Springer	Vein 02	120
Springer	Vein 03	130
Springer	Vein 04	140
Springer	Vein 05	150
Springer	Vein 06	160
Springer	Vein 07	170
Springer	Vein 09	190
Perry	VA	210
Perry	VB	220
Perry	VC	230

Zone	Domain	Model Code
Perry	VDS	240
Perry	VJ	250
Perry	Perry-East	260
Between Perry-Springer	Saddle	300

14.6 WIREFRAME CONSTRAINED ASSAYS

Wireframe constrained assays were back coded in the assay database with model rock codes that were derived from intersections of the mineralization solids and drill holes. The assays located within the mined-out voids were not considered in order to avoid a high-grade bias the Mineral Resource Estimate. The basic statistics of the mineralization wireframe constrained assays are presented in Table 14.4.

Zone	Variable	Cu	Au	Ag	Co	Zn	Length
Springer Veins	Number of Samples	86,017	85,883	85,796	588	588	86,017
	Minimum Value*	0.000	0.000	0.000	0.000	0.002	0.06
	Maximum Value*	31.100	297.770	181.000	0.073	27.100	7.62
	Mean*	0.894	0.632	0.049	0.005	0.141	1.1
	Median*	0.240	0.000	0.000	0.004	0.007	1.07
	Variance	4.403	19.627	1.944	0.000	2.717	0.36
	Standard Deviation	2.098	4.430	1.394	0.005	1.648	0.60
	Coefficient of Variation	2.348	7.014	28.215	1.052	11.686	0.54
	Skewness	5.844	25.041	63.420	7.564	14.843	0.93
	Kurtosis	48.435	1009.398	5743.815	83.254	228.413	5.12
Springer Halo	Number of Samples	63,367	62,816	62,632	1,872	1,872	63,367
	Minimum Value*	0.000	0.000	0.000	0.000	0.001	0.03
	Maximum Value*	29.400	236.570	154.300	0.052	10.230	5.19
	Mean*	0.388	0.363	0.068	0.003	0.018	1.16
	Median*	0.050	0.000	0.000	0.003	0.005	1.22
	Variance	1.836	12.224	1.942	0.000	0.058	0.32
	Standard Deviation	1.355	3.496	1.394	0.002	0.241	0.57
	Coefficient of Variation	3.492	9.644	20.453	0.675	13.742	0.49
	Skewness	9.181	29.288	53.046	8.086	40.546	0.70
	Kurtosis	120.13 3	1281.460	3973.037	143.298	1710.740	5.24
Perry	Number of Samples	34,616	34,616	34,614	269	269	34,616

TABLE 14.4
BASIC STATISTICS OF CONSTRAINED ASSAYS

Zone	Variable	Cu	Au	Ag	Co	Zn	Length
and Saddle	Minimum Value*	0.000	0.000	0.000	0.000	0.001	0.03
	Maximum Value*	32.000	252.000	274.000	0.038	0.253	5.79
	Mean*	1.225	0.144	0.042	0.004	0.012	1.15
	Median*	0.400	0.000	0.000	0.004	0.007	1.22
	Variance	6.663	4.824	3.090	0.000	0.000	0.43
	Standard Deviation	2.581	2.196	1.758	0.004	0.021	0.66
	Coefficient of Variation	2.107	15.271	42.315	0.994	1.753	0.57
	Skewness	4.892	65.201	118.085	4.527	7.124	0.98
	Kurtosis	33.980	5942.116	17348.12	28.234	70.406	4.89

Note: * Cu, Zn and Co units are %; Au and Ag units are g/t and length units are metres.

14.7 COMPOSITING

In order to regularize the assay sampling intervals for grade interpolation, a 1.5 m compositing length was selected for the drill hole intervals that fell within the constraints of the above-mentioned Mineral Resource wireframes. The composites were calculated for copper, gold, silver, cobalt and zinc over 1.5 m lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the 3-D wireframe constraint. Background values were used for un-assayed intervals as shown in Table 14.5. If the last composite interval was less than 0.5 m, the composite length was adjusted to make all composite intervals equal. This process would not introduce any short sample bias in the grade interpolation process. The composites located within the mined-out voids were removed for this Mineral Resource Estimate to avoid the mined high-grade overstating the in-situ Mineral Resources. The constrained composite data were extracted to a point area file for grade capping analysis. The composite statistics are summarized in Table 14.6.

TABLE 14.5
BACKGROUND VALUES USED FOR UN-ASSAYED INTERVALS

Domains	Cu (%)	Au (g/t)	Ag (g/t)	Co (%)	Zn (%)
Springer Veins	0.099	0.089	0.001	0.0001	0.001
Springer Halo	0.087	0.048	0.001	0.0001	0.001
Perry Veins	0.100	0.022	0.001	0.0001	0.001
Saddle Veins	0.091	0.009	0.001	0.0001	0.001

TABLE 14.6
BASIC COMPOSITE STATISTICS

Zone	Variable	Cu	Au	Ag	Co	Zn	Length
Springer Veins	Number of Samples	95,356	95,356	95,356	95,356	95,356	95,356
	Minimum Value*	0.000	0.000	0.000	0.0001	0.001	0.75
	Maximum Value*	22.676	149.646	80.979	0.0582	26.219	2.24
	Mean*	0.482	0.302	0.036	0.0001	0.002	1.50
	Median*	0.099	0.082	0.000	0.0001	0.001	1.50
	Variance	1.15	3.35	0.75	0.00	0.02	0.00
	Standard Deviation	1.07	1.83	0.87	0.00	0.13	0.05
	Coefficient of Variation	2.23	6.07	24.27	3.70	65.16	0.03
	Skewness	6.60	27.73	49.81	41.79	175.65	1.01
	Kurtosis	70.44	1,305.83	3,267.67	3,359.60	32,685.92	57.94
Springer Halo	Number of Samples	114,419	114,419	114,419	114,419	114,419	114,419
	Minimum Value*	0.000	0.000	0.000	0.0001	0.001	0.75
	Maximum Value*	20.896	103.359	67.354	0.0427	9.321	2.24
	Mean*	0.167	0.113	0.031	0.0002	0.001	1.50
	Median*	0.087	0.048	0.001	0.0001	0.001	1.50
	Variance	0.30	0.95	0.34	0.00	0.00	0.00
	Standard Deviation	0.55	0.98	0.58	0.00	0.03	0.05
	Coefficient of Variation	3.29	8.67	19.01	3.10	24.72	0.04
	Skewness	13.35	38.93	45.43	17.02	245.67	-0.05
	Kurtosis	271.64	2,435.77	3,058.44	748.07	64,843.88	51.42
Perry and Saddle	Number of Samples	35,602	35,602	35,602	35,602	35,602	35,602
	Minimum Value*	0.000	0.000	0.000	0.0001	0.001	0.75
	Maximum Value*	27.061	251.340	159.343	0.0328	0.239	2.22
	Mean*	0.752	0.100	0.026	0.0001	0.001	1.50
	Median*	0.202	0.000	0.000	0.0001	0.001	1.50
	Variance	2.61	3.62	1.07	0.00	0.00	0.00
	Standard Deviation	1.62	1.90	1.04	0.00	0.00	0.05
	Coefficient of Variation	2.15	18.97	39.11	3.25	1.53	0.04
	Skewness	6.17	82.83	113.48	30.41	96.48	1.04
	Kurtosis	60.26	9,324.58	16,179.56	1,606.80	13,193.12	37.04

Note: * Cu, Zn, and Co units are %; Au and Ag units are g/t and length units are metres.

14.8 GRADE CAPPING

Grade capping was performed on the 1.5 m composite values in the database within each constraining domain to control the possible bias resulting from erratic high-grade composite values in the database. Log-normal histograms and log-probability plots for gold composites were generated for each mineralization domain. Selected histograms and probability plots are presented in Appendix C. The grade capping values are detailed in Table 14.7. The capped composites were utilized to develop variograms which were utilized for block model grade interpolation.

**TABLE 14.7
GRADE CAPPING VALUES**

Domains	Elements	Total No. of Composites	Capping Value	No. of Capped Composites	Mean of Composites	Mean of Capped Composites	CoV of Composites	CoV of Capped Composites	Capping Percentile
Vein02	Cu	24,890	19	6	0.503	0.503	2.337	2.319	99.98
	Au	24,890	23	9	0.18	0.173	6.424	4.881	99.96
	Ag	24,890	34	5	0.066	0.061	17.514	15.144	99.98
	Zn	24,890	1	5	0.004	0.002	56.621	11.446	99.98
	Co	24,890	0.02	3	0.0002	0.0002	3.993	3.693	99.99
Vein03	Cu	24,749	17	7	0.702	0.702	1.87	1.863	99.97
	Au	24,749	33	9	0.231	0.223	6.307	5.144	99.96
	Ag	24,749	40	2	0.046	0.044	20.8	19.553	99.99
	Zn	24,749	no cap	0	0.001	0.001	3.549	3.549	100.00
	Co	24,749	0.03	1	0.0001	0.0001	4.234	3.926	100.00
Vein04	Cu	1,951	16	5	0.589	0.583	2.833	2.76	99.74
	Au	1,951	11	4	0.277	0.267	3.956	3.544	99.79
	Ag	1,951	12	3	0.13	0.063	18.092	10.476	99.85
	Zn	1,951	no cap	0	0.002	0.002	4.439	4.439	100.00
	Co	1,951	0.01	1	0.0002	0.0002	3.814	3.42	99.95
Vein05	Cu	3,575	11	2	0.336	0.335	2.371	2.324	99.94
	Au	3,575	25	7	0.514	0.435	7.528	4.214	99.80
	Ag	3,575	no cap	0	0.001	0.0007	7.464	7.464	100.00
	Zn	3,575	no cap	0	0.001	0.001	0.099	0.099	100.00
	Co	3,575	no cap	0	0.0001	0.0001	1.003	1.003	100.00
Vein06	Cu	20,799	10	14	0.359	0.357	2.273	2.196	99.93
	Au	20,799	26	17	0.294	0.272	6.306	4.489	99.92
	Ag	20,799	no cap	0	0.004	0.004	48.203	48.203	100.00
	Zn	20,799	no cap	0	0.001	0.001	0.519	0.519	100.00
	Co	20,799	0.008	1	0.0001	0.0001	2.672	1.982	100.00
Vein07	Cu	17,742	9	11	0.317	0.315	2.081	1.958	99.94
	Au	17,742	33	14	0.547	0.534	4.408	4.021	99.92

**TABLE 14.7
GRADE CAPPING VALUES**

Domains	Elements	Total No. of Composites	Capping Value	No. of Capped Composites	Mean of Composites	Mean of Capped Composites	CoV of Composites	CoV of Capped Composites	Capping Percentile
	Ag	17,742	14	1	0.017	0.014	29.837	22.488	99.99
	Zn	17,742	no cap	0	0.001	0.001	2.851	2.851	100.00
	Co	17,742	no cap	0	0.0001	0.0001	2.738	2.738	100.00
Vein09	Cu	1,650	9	1	0.349	0.345	2.379	2.218	99.94
	Au	1,650	6	6	0.208	0.186	4.356	3.393	99.64
	Ag	No Assays							
	Zn	No Assays							
	Co	No Assays							
Halo	Cu	114,419	13	31	0.167	0.166	3.288	3.193	99.97
	Au	114,419	33	14	0.113	0.11	8.668	7.499	99.99
	Ag	114,419	24	14	0.031	0.029	19.013	17.059	99.99
	Zn	114,419	1	2	0.001	0.001	24.719	6.273	100.00
	Co	114,419	0.02	1	0.0002	0.0002	3.101	3.019	100.00
VA	Cu	2,560	8	8	0.582	0.568	1.813	1.601	99.69
	Au	2,560	7	2	0.112	0.094	8.518	4.504	99.92
	Ag	No Assays							
	Zn	No Assays							
	Co	No Assays							
VB	Cu	18,917	21	21	0.818	0.815	2.157	2.111	99.89
	Au	18,917	14	14	0.124	0.092	18.875	6.768	99.93
	Ag	18,917	20	3	0.01	0.006	60.16	52.125	99.98
	Zn	18,917	no cap	0	0.001	0.001	0.093	0.093	100.00
	Co	18,917	no cap	0	0.0001	0.0001	0.564	0.564	100.00
VC	Cu	3,192	13	2	0.55	0.546	2.339	2.257	99.94
	Au	3,192	5	1	0.036	0.034	7.329	6.134	99.97
	Ag	3,192	no cap	0	0.004	0.004	36.788	36.788	100.00
	Zn	3,192	no cap	0	0.001	0.001	0.229	0.229	100.00

**TABLE 14.7
GRADE CAPPING VALUES**

Domains	Elements	Total No. of Composites	Capping Value	No. of Capped Composites	Mean of Composites	Mean of Capped Composites	CoV of Composites	CoV of Capped Composites	Capping Percentile
	Co	3,192	no cap	0	0.0001	0.0001	1.828	1.828	100.00
VDS	Cu	4,952	18	4	0.701	0.699	2.317	2.287	99.92
	Au	4,952	9	2	0.05	0.043	12.277	7.564	99.96
	Ag	4,952	no cap	0	0.003	0.003	37.718	37.718	100.00
	Zn	No Assays							
	Co	No Assays							
VJ	Cu	4,597	11	13	0.841	0.829	1.689	1.571	99.72
	Au	4,597	3	5	0.076	0.017	26.082	7.211	99.89
	Ag	4,597	no cap	0	0.002	0.002	35.158	35.158	100.00
	Zn	4,597	no cap	0	0.001	0.001	0.33	0.33	100.00
	Co	4,597	no cap	0	0.0001	0.0001	1.754	1.754	100.00
Perry East	Cu	258	9	1	0.584	0.543	2.658	2.086	99.61
	Au	258	1	1	0.03	0.026	5.003	3.747	99.61
	Ag	258	6	3	1.119	0.3	9.372	3.513	98.84
	Zn	258	no cap	0	0.003	0.003	4.554	4.554	100.00
	Co	258	0.015	1	0.0009	0.0008	3.051	2.576	99.61
Saddle	Cu	1,126	9	7	0.507	0.469	2.906	2.325	99.38
	Au	1,126	9	5	0.192	0.143	7.77	5.626	99.56
	Ag	1,126	no cap	0	0.387	0.387	4.189	4.189	100.00
	Zn	1,126	no cap	0	0.002	0.002	2.023	2.023	100.00
	Co	1,126	no cap	0	0.0007	0.0007	2.627	2.627	100.00

Note: CoV = coefficient of variation. Cu, Zn and Co units are %; Au and Ag units are g/t.

14.9 VARIOGRAPHY

A variography analysis was attempted for each domain using the copper capped composites within the domain as a guide to determining a grade interpolation search distance and ellipse orientation strategy. Selected variograms are presented in Appendix D.

Continuity ellipses based on the observed ranges were subsequently generated and utilized as the basis for estimation search ranges, distance weighting calculations and Mineral Resource classification criteria.

14.10 BULK DENSITY

A total of 1,026 samples collected from the 2019 and 2021 drill holes were tested for bulk density by QC Copper and resulted in average bulk density of 2.96 t/m³, 158 of which were located within the vein wireframes and 377 within the Springer Halos. The vein wireframe constrained bulk density ranging from 2.63 t/m³ to 3.65 t/m³ and averaged 2.97 t/m³, while the Halo constrained bulk densities averaged 2.94 t/m³, which were applied for the vein and halo Mineral Resource Estimate respectively.

14.11 BLOCK MODELLING

The Opemiska block model was constructed using GEOVIA GEMSTM V6.8.4 modelling software. The block model origin and block size are presented in Table 14.8. The block model consists of separate model attributes for estimated Cu, Au, Ag, Co, Zn and CuEq grades, rock type (mineralization domains), volume percent, bulk density, and classification.

TABLE 14.8			
OPEMISKA BLOCK MODEL DEFINITION			
Direction	Origin	No. of Blocks	Block Size (m)
X	509,270	392	5
Y	5,514,110	430	5
Z	440	140	5
Rotation	0° (no rotation)		

Note: Origin for a block model in GEMSTM represents the coordinate of the outer edge of the block with minimum X and Y, and maximum Z.

All blocks in the rock type block model were initially assigned a waste rock code of 99, corresponding to the surrounding country rocks. The mineralized domains were used to code all blocks within the rock type block model that contain 0.01% or greater volume within the wireframe domain. These blocks were assigned individual model rock codes as presented in Table 14.3. The overburden/bedrock and topography surfaces were subsequently utilized to assign rock codes 10 and 0, corresponding to overburden and air, respectively, to all blocks 50% or greater above the respective surfaces.

A volume percent block model was set up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining wireframe domain. As a result, the domain boundary was properly represented by the volume percent model ability to measure individual infinitely variable block inclusion percentages within that domain. The minimum percentage of the mineralization block was set to 0.01%. The historically mined areas were depleted in the volume percent model.

The grades of Cu, Co and Zn were interpolated into the model blocks using Inverse Distance squared (ID²), while Au and Ag were interpolated with Inverse Distance Cubed (ID³). Nearest Neighbour (NN) was run for validation purposes. Multiple passes were undertaken for the grade interpolation process to progressively capture the sample points, to avoid over-smoothing and preserve local grade variability. Grade blocks were interpolated using the parameters in Table 14.9. The composites located within the mined voids were not utilized for the grade interpolation in order to eliminate the influence of the mined out high grade on the remaining Mineral Resource Estimate.

Zone	Pass	Number of Composites			Search Range (m)		
		Min	Max	Max per Hole	Major	Semi-Major	Minor
Veins	I	7	15	3	30	20	15
	II	4	15	3	40	30	20
	III	2	15	3	80	60	40
	IV	1	15	3	120	90	60
Halos	I	7	12	3	10	7	5
	II	5	12	3	20	15	10
	III	1	12	3	20	15	10

CuEq was manipulated with formula:

$$\text{CuEq \%} = \text{Cu \%} + (\text{Au g/t} \times 0.72) + (\text{Ag g/t} \times 0.01) + (\text{Co \%} \times 7.14) + (\text{Zn \%} \times 0.36)$$

Selected vertical cross sections and plans of the Cu and CuEq blocks are presented in Appendix E and F.

14.12 MINERAL RESOURCE CLASSIFICATION

In the opinion of the authors of this Technical Report section, all the drilling, assaying and exploration work on the Opemiska Project support this Mineral Resource Estimate; and spatial continuity of the mineralization within a potentially mineable shape is sufficient to indicate a reasonable potential for economic extraction, thus it was qualified as a Mineral Resource under the 2014 CIM Definition Standards. The Mineral Resource was classified as Measured, Indicated and Inferred based on the geological interpretation, data quality, variogram performance and drill hole spacing.

Measured Mineral Resources were classified for the blocks of the veins interpolated with the Pass I in Table 14.9, which used at least three holes with an average spacing of 20 m or less.

Indicated Mineral Resources were classified for the blocks of the veins interpolated with the Pass II in Table 14.9, which used at least two holes with an average spacing of 40 m or less.

Inferred Mineral Resources were classified for the blocks interpolated with the Pass III and IV in Table 14.9, which used at least one hole with 120 m or less spacing. Halos were all classified as Inferred.

The classifications were manually adjusted on a longitudinal projection to reasonably reflect the distribution of each classification.

Selected classification block vertical cross sections and plans are attached in Appendix G.

14.13 CUEQ CUT-OFF VALUE CALCULATION

The Opemiska Mineral Resource Estimate was derived from applying CuEq cut-off values to the block models and reporting the resulting tonnes and grades for potentially open pit mineable areas.

The following parameters were used to calculate the CuEq cut-off values that determine open pit potential economically extractable portions of the constrained mineralization:

- Cu Price: US\$3.50/lb (Aug 2021 Consensus Economics long term forecast);
- Au price: US\$1,650/oz (Aug 2021 Consensus Economics long term forecast);
- Currency exchange rate: C\$/US\$ = 0.76;
- Cu process recovery: 80%;
- Mining cost: C\$2.25/tonne;
- Processing cost: C\$13/tonne; and
- G&A: C\$3/tonne.
- The cut-off value for the open pit Mineral Resource is 0.20% CuEq.

14.14 PIT OPTIMIZATION PARAMETERS

Open pit Mineral Resource model was further investigated with a pit optimization to ensure a reasonable assumption of potential economic extraction could be made. The following parameters were utilized in the pit optimization:

- | | |
|---------------------------------|-----------------------|
| • Metal Prices | From parameters above |
| • All Material Mining Cost | \$2.25/tonne mined |
| • Process Cost | \$13/tonne processed |
| • General & Administration Cost | \$3/tonne processed |
| • Process Capacity | 5 mtpy |
| • Pit Slopes | 50°. |

14.15 MINERAL RESOURCE ESTIMATE

The Mineral Resource Estimate is reported herein with an effective date of September 20, 2021 and is tabulated in Table 14.10. The authors of this Technical Report section consider the mineralization of the Opemiska Project to be potentially amenable to open pit mining methods.

TABLE 14.10							
OPEMISKA PIT CONSTRAINED MINERAL RESOURCE ESTIMATE ⁽¹⁻⁶⁾							
Classification	Tonnes (M)	Cu (%)	Au (g/t)	CuEq (%)	Cu (Mlb)	Au (koz)	CuEq (Mlb)
Measured	64.94	0.64	0.32	0.88	918.2	676.6	1,254.9
Indicated	16.73	0.69	0.26	0.88	255.2	139.0	325.8
M+I	81.67	0.65	0.31	0.88	1,173.4	815.6	1,580.7
Inferred	21.35	0.51	0.30	0.73	239.8	209.2	345.8

Notes:

1. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
2. *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
3. *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.*
4. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
5. *Metal prices used were US\$3.50/lb Cu and US\$1,650/oz Au and 0.76 CDN\$/US\$ FX. Cu process recovery and smelter payable was 80%. Open pit mining cost was C\$2.25/t, processing C\$13/t, G&A \$3/t.*
6. *Historical mined volumes were depleted from the blocks to report the correct tonnages and metal content of the remaining high-grade vein material.*

14.16 MINERAL RESOURCE SENSITIVITIES

Mineral Resources are sensitive to the selection of a reporting CuEq cut-off value and are demonstrated in Table 14.11.

TABLE 14.11
SENSITIVITIES OF PIT CONSTRAINED MINERAL RESOURCE ESTIMATE ⁽¹⁻⁷⁾

Classification	Cut-off CuEq (%)	Tonnes (M)	Cu (%)	Au (g/t)	CuEq (%)	Cu (Mlb)	Au (koz)	CuEq (Mlb)
Measured	2.0	4.98	2.10	1.64	3.28	230.7	262.4	360.7
	1.5	8.81	1.73	1.20	2.60	336.6	341.0	505.7
	1.0	17.28	1.34	0.81	1.92	509.8	449.1	732.6
	0.8	23.46	1.17	0.67	1.65	605.1	502.7	854.5
	0.6	32.19	1.00	0.54	1.39	709.5	561.0	988.0
	0.4	44.92	0.83	0.43	1.14	818.4	619.9	1,126.5
	0.2	64.94	0.64	0.32	0.88	918.2	676.6	1,254.9
Indicated	2.0	1.44	2.48	1.08	3.28	78.8	49.9	104.1
	1.5	2.46	2.01	0.84	2.63	109.2	66.5	142.8
	1.0	4.41	1.55	0.62	2.01	150.6	88.1	195.1
	0.8	5.83	1.35	0.53	1.74	172.9	98.9	223.0
	0.6	7.96	1.14	0.43	1.46	199.3	111.3	255.6
	0.4	11.16	0.92	0.35	1.18	227.2	124.6	290.4
	0.2	16.73	0.69	0.26	0.88	255.2	139.0	325.8
Inferred	2.0	1.27	2.13	1.98	3.57	59.7	81.0	100.0
	1.5	2.07	1.76	1.51	2.86	80.3	100.2	130.3
	1.0	3.83	1.34	1.04	2.10	113.6	127.6	177.5
	0.8	5.32	1.15	0.84	1.76	135.2	143.1	206.9
	0.6	7.63	0.96	0.66	1.44	161.3	161.3	242.2
	0.4	11.68	0.75	0.49	1.11	194.1	182.2	285.9
	0.2	21.35	0.51	0.30	0.73	239.8	209.2	345.8

14.17 MODEL VALIDATION

The block model was validated using a number of industry standard methods including visual and statistical methods.

Visual examination of composites and block grades on successive plans and vertical cross-sections were performed on-screen to confirm that the block models correctly reflect the distribution of composite grades.

The review of estimation parameters included:

- Number of composites used for estimation;
- Number of drill holes used for estimation;
- Mean distance to sample used;
- Number of passes used to estimate grade;
- Actual distance to closest point;
- Grade of true closest point; and,
- Mean value of the composites used.

The Inverse Distance (ID) estimate was compared to a Nearest-Neighbour (NN) estimate along with composites. A comparison of mean composite grades with the block model at zero grade are presented in Table 14.12.

TABLE 14.12			
AVERAGE GRADE COMPARISON OF COMPOSITES WITH BLOCK MODEL			
Zone	Data Type	Cu (%)	Au (g/t)
Springer veins	Composites	0.48	0.30
	Capped composites	0.48	0.29
	Block model interpolated with ID	0.55	0.27
	Block model interpolated with NN	0.54	0.27
Perry veins	Composites	0.75	0.10
	Capped composites	0.75	0.07
	Block model interpolated with ID	0.72	0.07
	Block model interpolated with NN	0.72	0.07

*Notes: ID= Cu interpolated with Inverse Distance squared; Au interpolated with Inverse Distance Cubed.
 NN = Cu and Au interpolated using Nearest Neighbour.*

The comparison shows the average grade of block model was different from that of the capped composites used for the grade estimation. These were most likely due to grade de-clustering and interpolation process. The block model values will be more representative than the composites due to 3-D spatial distribution characteristics of the block models.

A comparison of the Cu grade-tonnage curves of Springer Vein03 (Figure 14.1) and Perry VB (Figure 14.2) interpolated with ID² and NN on a global mineralization basis.

FIGURE 14.1 CU GRADE–TONNAGE CURVE OF SPRINGER VEIN 03

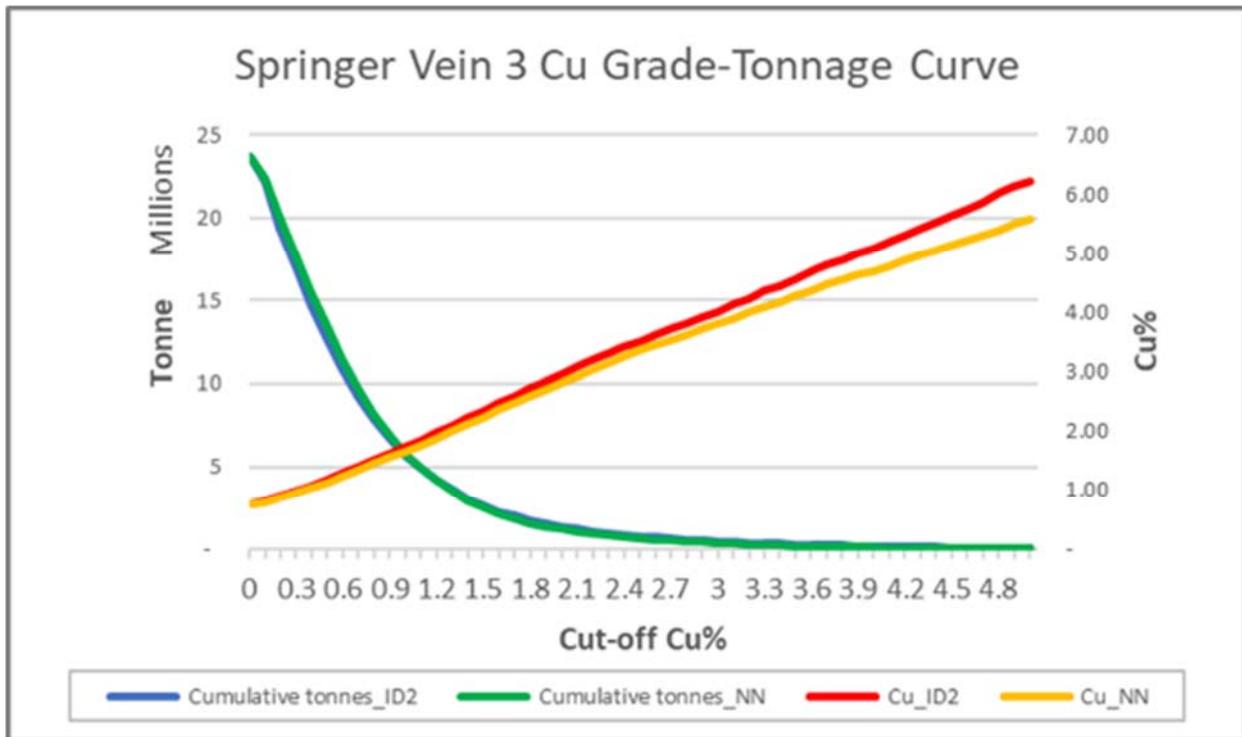
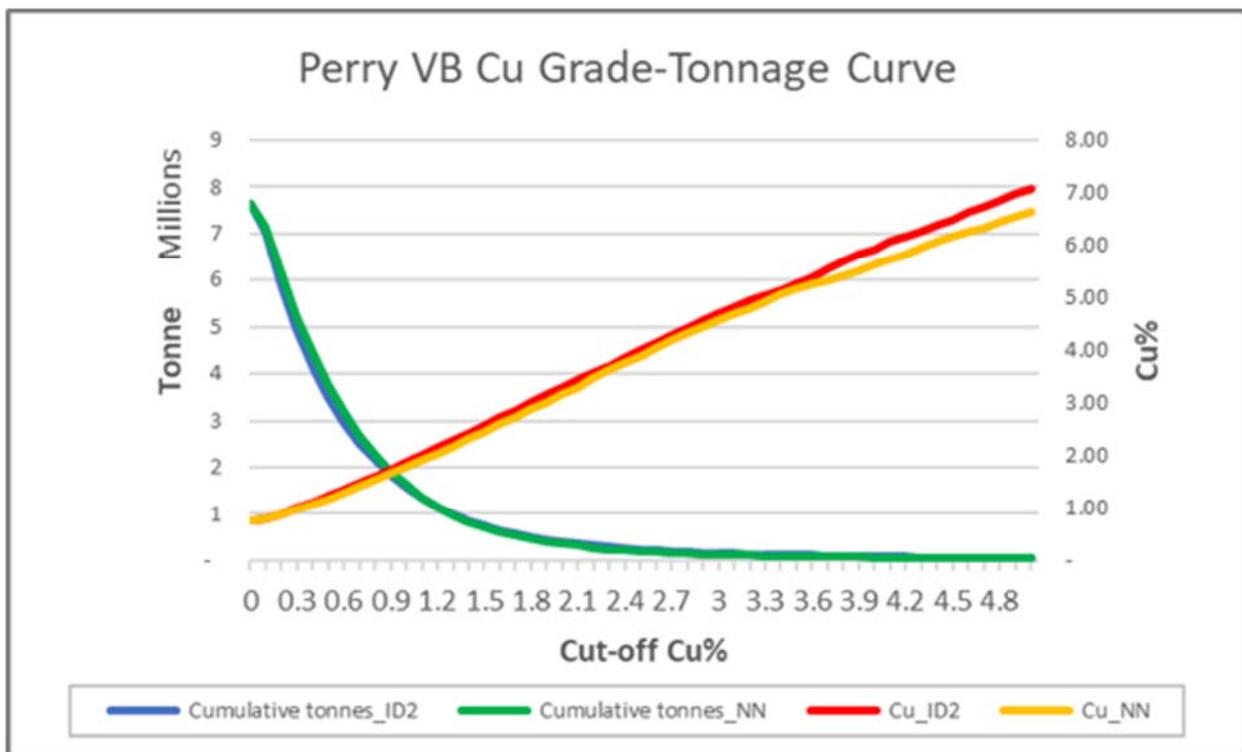


FIGURE 14.2 CU GRADE–TONNAGE CURVE OF PERRY VB



Local trends of Cu were evaluated by comparing the ID² and NN estimate against the composites. The special swath plots of Springer Vein03 and Perry VB are shown in Figures 14.3 to 14.8.

FIGURE 14.3 CU GRADE EASTING SWATH PLOTS FOR SPRINGER VEIN 03

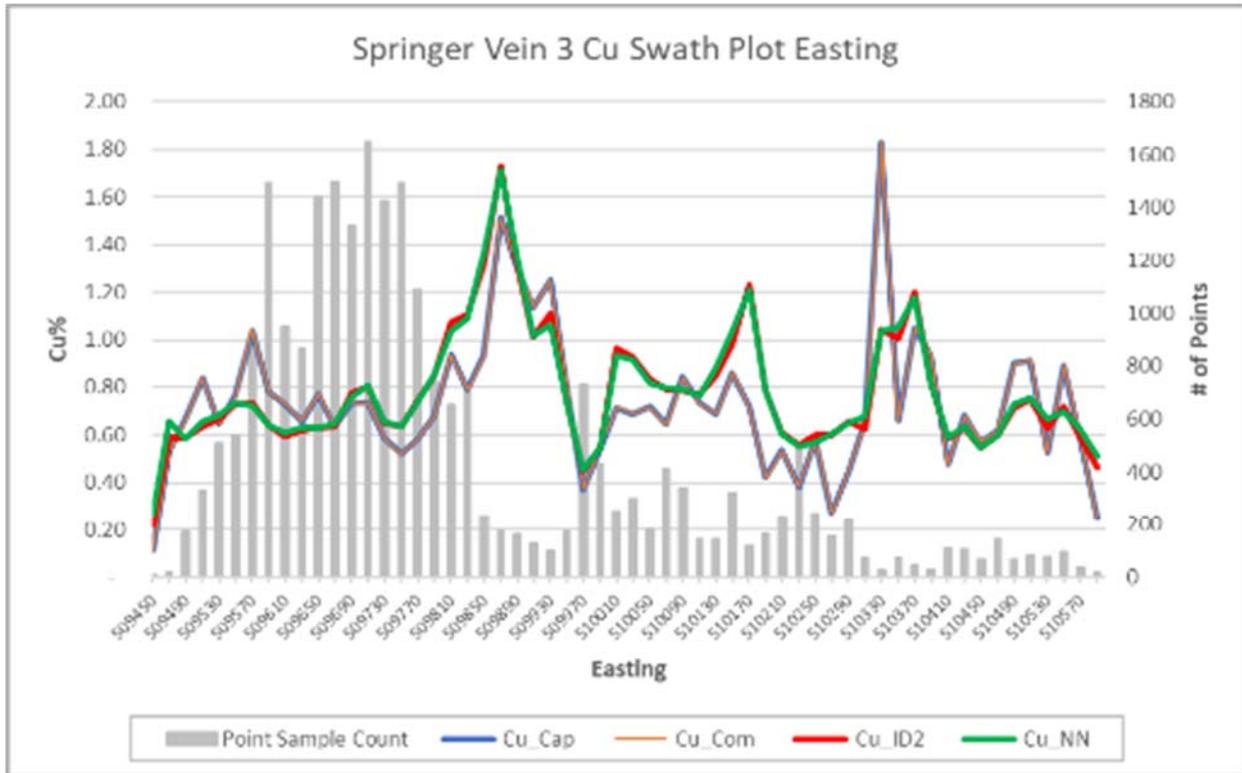


FIGURE 14.4 CU GRADE NORTHING SWATH PLOTS FOR SPRINGER VEIN 03

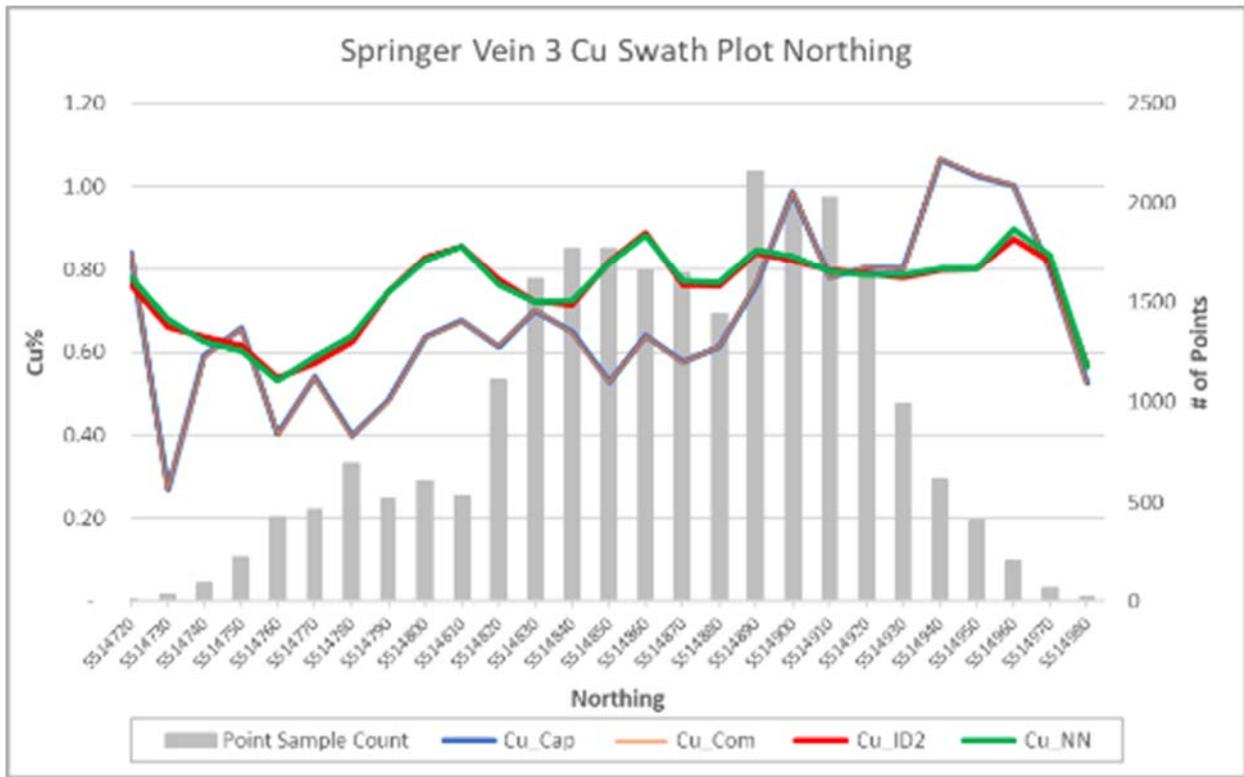


FIGURE 14.5 CU GRADE ELEVATION SWATH PLOTS FOR SPRINGER VEIN 03

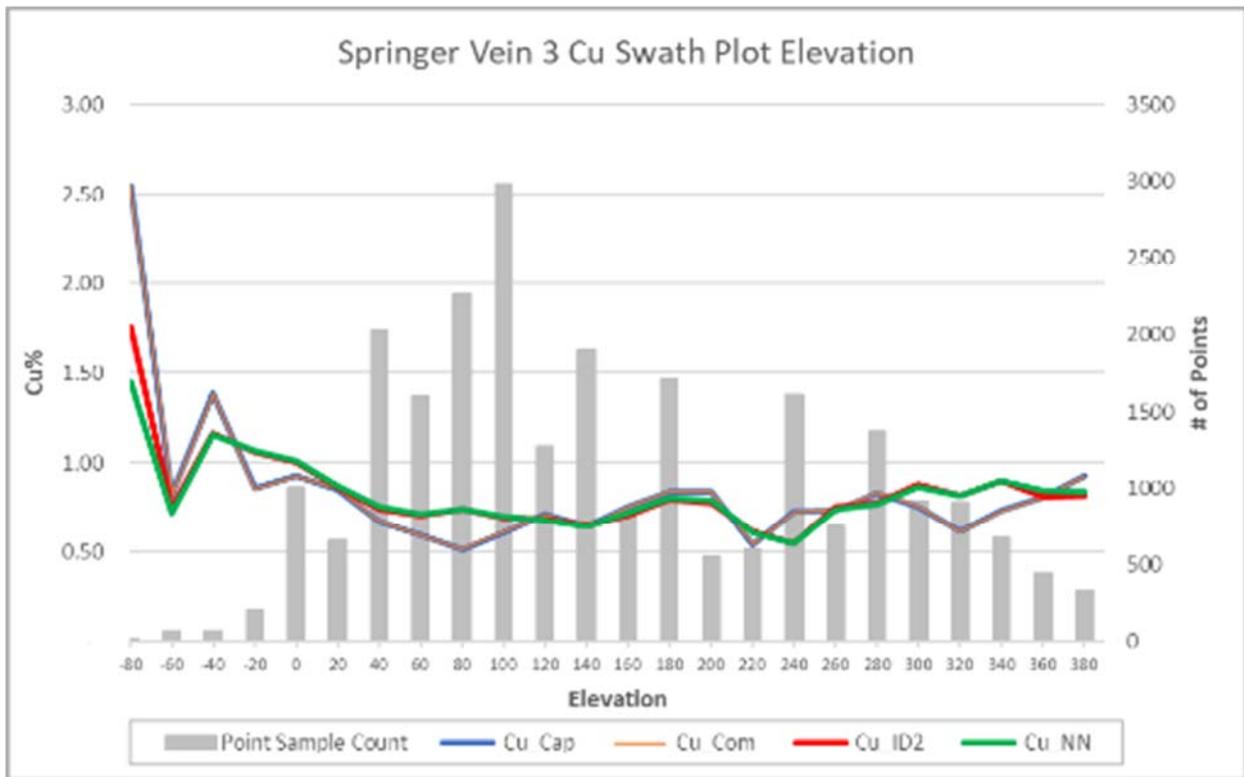


FIGURE 14.6 CU GRADE EASTING SWATH PLOTS FOR PERRY VB

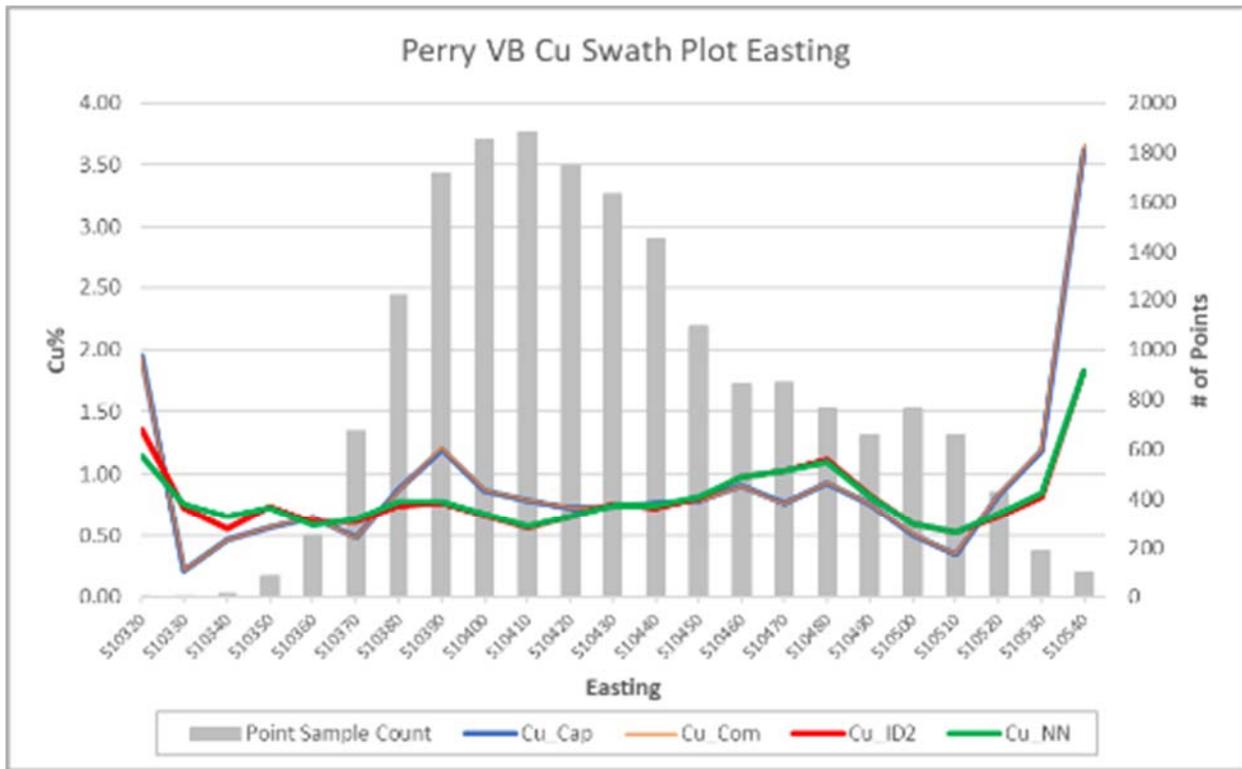


FIGURE 14.7 CU GRADE NORTHING SWATH PLOTS FOR PERRY VB

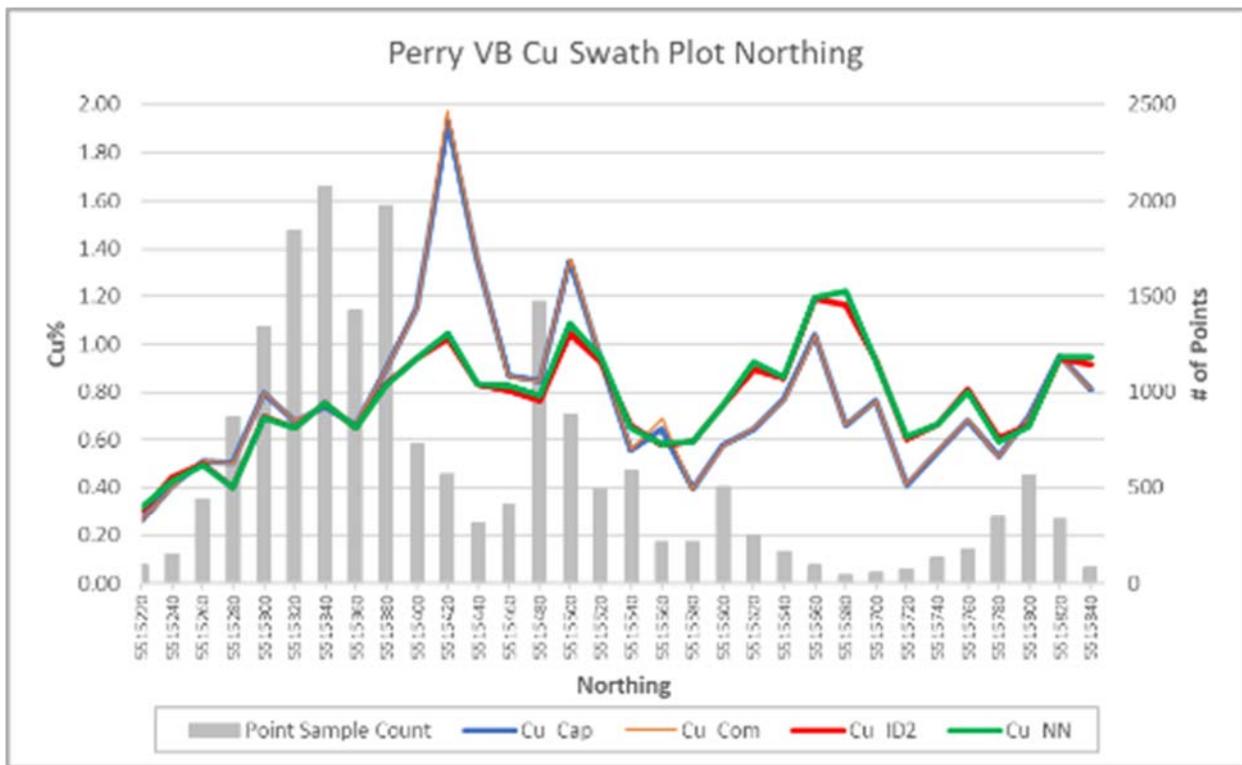
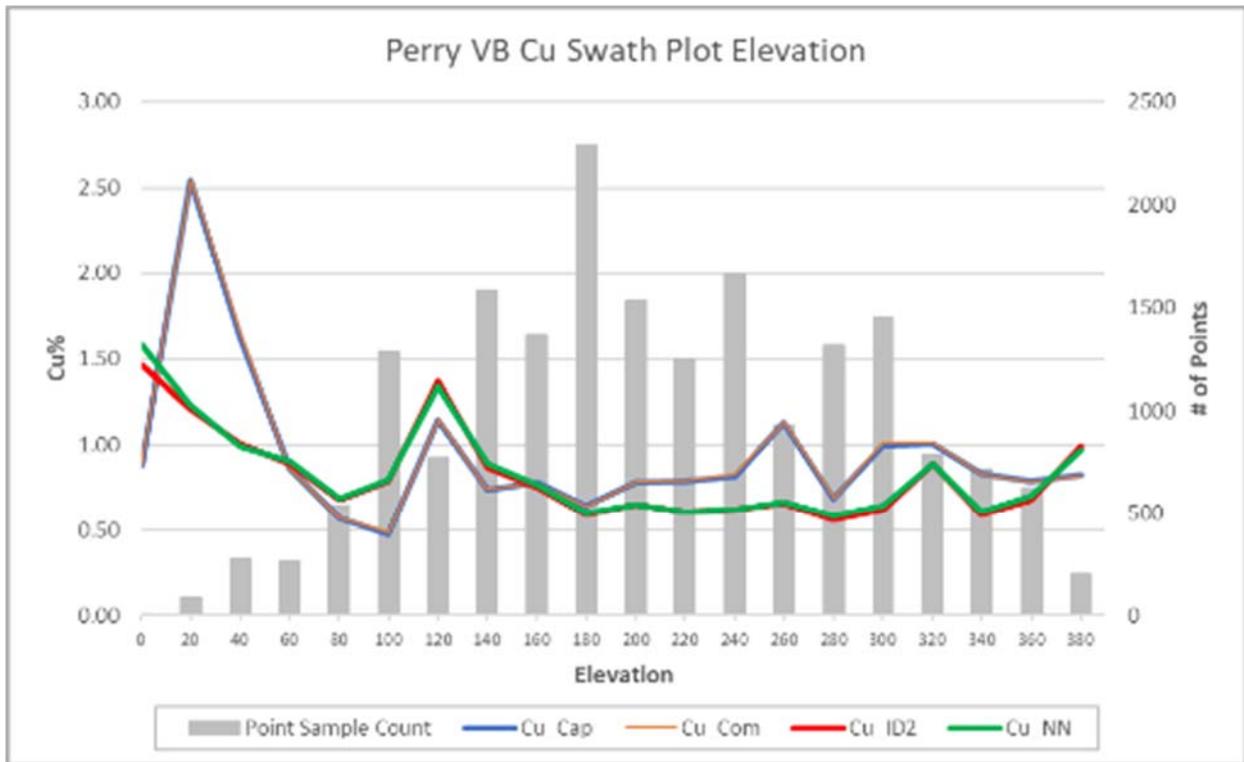


FIGURE 14.8 CU GRADE ELEVATION SWATH PLOTS FOR PERRY VB



15.0 MINERAL RESERVE ESTIMATES

This section is not applicable to this Technical Report.

16.0 MINING METHODS

This section is not applicable to this Technical Report.

17.0 RECOVERY METHODS

This section is not applicable to this Technical Report.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to this Technical Report.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to this Technical Report.

20.0 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS

The Opemiska Project is still at the exploration stage and no environmental studies have been undertaken to date and none are required at this stage of the Project. The Project covers a good part of the historical Springer and Perry Mines, the now dismantled mineral processing plant and part of the tailings facility. All the historical mining infrastructure has been dismantled and the mining district decommissioned since 1991. Neither QC Copper nor the vendor, Explorateurs-Innovateurs de Québec Inc. have any responsibility for environmental matters arising from the historical mining operations.

The only permits required by QC Copper for its exploration activities are “permis d’intervention” described in Item 4 and the wetlands declaration regarding activities in areas of flooding or potential flooding.

The Opemiska Property is located within the boundary of the municipality of Chapais and straddles the boundary between the traditional territories of the Cree Nations of Oujé Bougoumou and Waswanipi. As part of the ongoing exploration work programs regular consultations with nearby First Nations and the community of Chapais are held with the different groups. At least two town-hall meetings have been held with the Municipality of Chapais and regularly phone updates have been provided to the mayor and the economic development officer. Meetings have also been held with the Natural Resources Mining Exploration Officer of the community of Oujé Bougoumou to present the proposed exploration programs. The Cree have a formal consultation process to obtain consent for activities that may interfere with traditional activities undertaken by their members and QC Copper seeks prior consent before undertaking its exploration programs.

QC Copper strives to provide employment and business opportunities to the populations of Chapais and Oujé Bougoumou including employing personnel for wood slashing and drill access road building and for core shack activities. As the Project develops formal impact benefit agreements will be negotiated with all groups affected by the Project.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to this Technical Report.

22.0 ECONOMIC ANALYSIS

This section is not applicable to this Technical Report.

23.0 ADJACENT PROPERTIES

Other properties of significance that are nearby include: 1) the Laura Lake claims, located on the southern boundary of the Cooke-Robitaille Property; and 2) the Windfall Geotek claims to the west of the Opemiska Property.

23.1 LAC LAURA

The Lac Laura Property, owned by Vanadium Corp. Resource Inc., is located on the southern boundary of the Cooke-Robitaille Property, approximately 4.6 kilometres from the eastern edge of the Opemiska claims. Highway 113 crosses the center of the property and La Laura occupies the south-central portion of the claims. The importance of this property is the presence of a small, historical, gold resource that includes a portal, ramp and some underground development.

The main mineralized zone at Lac Laura is hosted by basalts and mafic pyroclastics of the Blondeau Formation and gabbro sills, possibly representing the Bourbeau Sill and the zone strikes east-west and dips moderately to steeply northwards. The mineralization is primarily gold, with elevated zinc and occasionally copper, and occurs in a series of east-west trending shear zones. No significant historical resources have been estimated.

23.2 WINDFALL GEOTEK INC.

The adjacent property to the west of Opemiska is owned by Windfall Geotek. These claims are primarily underlain by Blondeau Formation volcanics intruded by the Bourbeau Sill and some related gabbro sills. The rocks have been subjected to folding and have been affected by the same deformation as found on the Opemiska Property. The Springer anticlinal synform extends onto the property to the west and similar axial planar faulting is present. However, limited mineralization of the type found at Opemiska has been found on the Windfall Property in spite of good exposure and several dozen historical drill holes collared by Falconbridge.

24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the authors' knowledge there is no other relevant data, additional information or explanation necessary to make the Technical Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

QC Copper has an option to acquire a 100% interest in the Opemiska Property that hosts a significant past-producing copper-gold deposit that was mined underground between 1953 to 1991. The Property comprises 14 unpatented map designated mineral claims covering an area of 686.58 ha in Levy Township in the Chapais-Chibougamau region of northwestern Québec. The Property is located immediately adjacent to the Town of Chapais and is road accessible by paved Québec Highway 113. The Property is located 40 km west of the Town of Chibougamau and 480 km north of the City of Montréal, Québec.

The Property benefits significantly from excellent access and close proximity to the Chibougamau-Chapais mining camp. Mineral exploration, mining, along with mineral processing are major components of the local economy. The local infrastructure, business community and populace of the region are well-equipped to service mining and exploration activities.

The climate is typical of the Abitibi region and is characterized as humid sub-arctic continental with long winters extending from November to April. Exploration work can be carried out year-round. The terrain at Opemiska is characterized by low, undulating relief with elevations averaging approximately 400 m above sea level. Drainage on the Project area is toward the west into James Bay through the Waswanipi and Nottaway Rivers.

The Opemiska Property is located in the western part of the Abitibi Subprovince of the Archean (ca. 2.7 Ga) Superior Province. Mineralization on the Opemiska Property primarily consists of a series of chalcopyrite-bearing quartz veins that occupy fractures in folded and faulted gabbroic portions of the conformable, regionally extensive, layered Archean Cummings Complex ultramafic-mafic sills that intrude felsic metavolcanic rocks of the Blondeau Formation. At the past-producing Springer Mine, a fold nose associated with an overturned east-plunging anticline folding the Ventures Sill is a significant control on mineralization.

The Opemiska Property has a long history of mining and exploration activities dating back to 1929 with the first discovery of copper mineralization by Leo Springer. Falconbridge Copper Limited mined the property between 1953 to 1991. Total production from the Springer, Perry, Robitaille and Cooke Mines amounted to 23,989,030 tonnes which produced 517,126 tonnes copper, 27,074 kg of gold and 282,000 kg of silver.

On the Property, the main mineralized vein systems have been traced over a strike length of 1,200 m and to a maximum depth of approximately 1,000 m below surface. The mineralization is comprised principally of chalcopyrite, pyrite, and pyrrhotite with lesser amount of sphalerite, magnetite, galena, molybdenite, arsenopyrite and gersdorffite. Native gold is associated with chalcopyrite and pyrite. Locally significant amount of scheelite and molybdenite are present.

The copper-gold deposits on the Opemiska Property are late Archean in age and are considered to be structurally controlled copper-gold veins. Underground mining at the Springer and Perry Mines was restricted to the high-grade veins leaving behind considerable disseminated mineralization. The current Project seeks to define Mineral Resources that could be mined as an open pit.

Exploration work by QC Copper has been focussed on diamond drilling and includes a 23-hole 3,364 m drilling program in 2019 and a 78-hole 16,411 m drilling program in 2021.

The authors of this Technical Report have reviewed QC Copper's protocols for sample preparation, security and analytical procedures for the 2019 and 2021 drill programs and determined that the procedures are adequate and that the data is of good quality and satisfactory for use in the current Mineral Resource Estimate. Mr. Antoine Yassa, P.Geo., a Qualified Person under the regulations of NI 43-101 completed an on-site review of QC Coppers Opemiska Property for the current Technical Report on May 31 to June 1, 2021. Mr. Yassa's due diligence sampling show acceptable correlation with the original QC Copper and Ex-In assays and it is P&E's opinion that QC Copper's results are suitable for use in the current Mineral Resource Estimate.

The GEOVIA GEMST[™] database for this Mineral Resource Estimate, compiled by P&E, consisted of 16,570 surface and underground drill holes totalling 1,042,688 m. After conducting industry standard validation checks, P&E considers that the drill hole database supplied is suitable for Mineral Resource estimation. An average bulk density within the defined mineralized domains of 2.96 t/m³ was applied to the estimation.

A total of twelve (12) mineralized vein wireframes were generated for this Mineral Resource Estimate and resulting wireframe 3-D domains were used as hard boundaries during Mineral Resource estimation, for rock coding, statistical analysis and compositing limits. The topographic and bedrock surfaces were created with drill hole collars and overburden logging. The historical underground workings were provided by QC Copper and utilized to deplete the Mineral Resources at both the Springer and Perry Mines. A 1.5 m compositing length was used to regularize the assay sampling intervals for grade interpolation from drill hole intervals. Grade capping was performed on the 1.5 m composites to control possible bias from high-grade composite values.

In order to report the Pit Constrained Mineral Resource Estimate, a first pass pit optimizer run was undertaken using a 0.20% CuEq cut-off grade. The cut-off grade reflects costs of \$2.25/t for open pit mining, \$13/t processing costs and \$3/t G&A costs, for potentially economic portions of the mineralization. The cut-off model uses August 2021 long term consensus forecasts of US\$3.50/lb Cu and US\$1,650/oz Au, Cu and Au process recovery of 80%, and a CAD\$/US\$ exchange of 0.76.

In this Technical Report authors' opinion, the drilling, assaying and exploration work on the Opemiska Project supports this Mineral Resource Estimate and are sufficient to indicate a reasonable potential for economic extraction and thus qualify it as a Mineral Resource under the CIM definition standards. The Mineral Resource Estimate was classified as Measured, Indicated and Inferred based on the geological interpretation, semi-variogram performance and drill hole spacing.

The Mineral Resource Estimate presented in the current Technical Report has been prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral Resources have been classified in accordance with the "CIM Standards on Mineral Resources and Reserves:

Definition and Guidelines” as adopted by CIM Council on May 10, 2014. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

26.0 RECOMMENDATIONS

The initial Mineral Resource Estimate for the Opemiska Property shows that the project contains significant copper-gold mineralization. The Property benefits significantly from the highly attractive and benefits from several advantages, namely power, roads, rail line, local labour.

The drilling conducted in 2021 on the Opemiska Property outside the pit constrained Mineral Resource estimated in this Technical Report demonstrates that there is potential to add additional Minerals Resources. Further drilling to define additional Mineral Resources is warranted before advancing mine development.

Three target areas have been identified that have the potential to increase the Mineral Resources on the Property. These include the Saddle Zone, the Eastern Veins and the Perry Mine at depth beneath the conceptual pit.

Saddle Zone

Fifteen diamond drill holes totalling 4,500m have been earmarked for the Saddle Zone, of which six holes (1,500 m) are planned for the fall of 2021 to confirm the orientation of the mineralized structures in the Saddle Zone and the balance, an additional 8 to 10 holes totalling 3,000 metres, to be drilled in 2022 in order to extend the Saddle Zone to depth and hopefully allow further deepening of the Springer and Perry conceptual pits.

Eastern Veins

Drilling on the Eastern Vein in 2021 clearly indicated that these veins could provide additional near surface open pitable material to augment the mineral resources on Opemiska and possibly extend the Perry towards the east.

A two-phase drill program is proposed for the Eastern Veins. Initial drilling in the falloff 2021 will require up to 10 holes and 3,000 metres to confirm continuity on the veins for an open pit resource and up to an additional 40 holes totalling 8,000 metres to define indicated mineral resources as appropriate.

Perry Mine Deep

Work by RPA Consultants in 2014 on the Perry outlined an exploration target at depth that ranges from 3 to 11 million tonnes at a grade ranging between 1.5 and 2.5% Copper-equivalent (Salmon and de l'Étoile, 2014). In view of these results here is good reason to believe that there is the potential to define an underground minable resource in the deeper parts of the Perry Mine, below the conceptual pit. At present all the underground excavations at Perry have been digitized as well as all the veins and all historical surface and underground diamond drill holes and currently halos of low-grade mineralization surrounding the veins are being outlined with a nominal cut-off of about 0.7% Copper-equivalent. These will be converted to wireframe solids in order to evaluate and confirm the results of RPA. If results are satisfactory some drilling will be required to confirm and validated the historical mine assays and a total of up to 12 holes totalling 6,000 m are planned for this purpose.

In addition to the drilling some engineering work is required to inform the parameters that will be used in the economics of the project. Metallurgical studies are required to estimate the recoveries expected from the halo mineralization whereas ABA testing is needed to determine the cost of storing the waste material from mining and some geotechnical work is needed to estimate more realistic pit wall slopes.

Assuming favourable results from all this drilling, a revised mineral resources estimate will be prepared for the Opemiska Project and a Preliminary Economic Assessment will be undertaken as a precursor to a Pre-Feasibility Study to be completed toward the end of 2022. A budget of \$3.73 million is proposed to carry out 2021 and 2022 work as summarized in Table 26.1.

TABLE 26.1
PROPOSED 2021-2022 EXPLORATION BUDGET FOR THE OPEMISKA PROPERTY

Opemiska Project	Activity	Cost Per Unit (\$/unit)	Units	Unit Type	Projected Cost (\$)
GENERAL					
Labour Company Personnel	Project Management	9,000	5	Month	45,000
	Geologists	7,000	10	Man-Months	70,000
	Hourly Workers	300	220	Man-Day	66,000
Labour Contract Personnel	Coreshack technicians	350	220	Man-Day	77,000
	Slashers, trail builders	2,000	20	Day	40,000
Project Expenses	House rental and maintenance	1,400	5	Month	7,000
	Coreshack rental, repair, and maintenance	2,500	5	Month	12,500
	Food	600	5	Month	3,000
	Vehicles	600	5	Month	3,000
	Map scanning				7,000
	Digitization				3,000
Geophysics	Data Reprocessing				10,000
Permitting and Surveying	Surveying				6,000
	Exploration Permitting				4,000
	FN Consultation				3,000
PHASE 1					
Diamond Drilling	Drilling Contract	90	5,000	Metre	450,000
	Drilling Tools	12,000	2	Month	24,000
	Televiwer	3,000	4	Holes	12,000
	Assays				
	Standards & Blanks				2,000
	Laboratory	45	3,200	Sample	144,000
	Sample Reject/Pulp Storage				500

TABLE 26.1
PROPOSED 2021-2022 EXPLORATION BUDGET FOR THE OPEMISKA PROPERTY

Opemiska Project	Activity	Cost Per Unit (\$/unit)	Units	Unit Type	Projected Cost (\$)
	Core Storage				200
PHASE 2					
Diamond Drilling	Drilling Contract	90	15,000	Metre	1,350,000
	Drilling Tools	12,000	3	Month	36,000
	Televiewer	3,000	6	Holes	18,000
	Assays				
	Standards & Blanks				4,000
	Laboratory	45	10,000	Sample	450,000
	Sample Reject/Pulp Storage				1,500
	Core Storage				400
ENGINEERING					
	Metallurgical Testing (SGS_Lakefield + P&E)				125,000
	Environmental studies				30,000
	Geotechnical studies				30,000
	Mineral Resources Estimate and Report (P&E)				100,000
	Preliminary Economic Assessment (P&E)				250,000
	Contingency (10%)				338,400
Total					3,722,500

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28.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON

ANTOINE R. YASSA, P.GEO., GÉO

I, Antoine R. Yassa, P.Geo., residing at 3602 Rang des Cavaliers, Rouyn-Noranda, Québec, J0Z 1Y2, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Mineral Resource Estimate and Technical Report on The Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec”, (The “Technical Report”) with an effective date of September 20, 2021.
3. I am a graduate of Ottawa University at Ottawa, Ontario with a B. Sc (HONS) in Geological Sciences (1977) with continuous experience as a geologist since 1979. I am a geological consultant currently licensed by the Order of Geologists of Québec (License No 224) and by the Association of Professional Geoscientist of Ontario (License No 1890);

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Minex Geologist (Val-d’Or), 3-D Modelling (Timmins), Placer Dome 1993-1995
- Database Manager, Senior Geologist, West Africa, PDX, 1996-1998
- Senior Geologist, Database Manager, McWatters Mine 1998-2000
- Database Manager, Gemcom modelling and Resources Evaluation (Kiena Mine) 2001-2003
- Database Manager and Resources Evaluation at Julietta Mine, Bema Gold Corp. 2003-2006
- Consulting Geologist 2006-present

4. I have visited the Property that is the subject of this Technical Report on May 31 and June 1, 2021.
5. I am responsible for authoring Sections 2 to 12, and 15 to 24 and co-authoring sections 1, 12, 14, 25 and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 20, 2021

Signing Date: November 4, 2021

{SIGNED AND SEALED}

[Antoine R. Yassa]

Antoine R. Yassa, P.Geo., géo.

CERTIFICATE OF QUALIFIED PERSON

EUGENE PURITCH, P. ENG., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Mineral Resource Estimate and Technical Report on The Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec”, (The “Technical Report”) with an effective date of September 20, 2021.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition, I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for a Bachelor’s Degree in Engineering Equivalency. I am a mining consultant currently licensed by the: Professional Engineers and Geoscientists New Brunswick (License No. 4778); Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998); Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216); Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252); Professional Engineers of Ontario (License No. 100014010); Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912); and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877). I am also a member of the National Canadian Institute of Mining and Metallurgy.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M. & S. and Inco Ltd., 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
- Self-Employed Mining Consultant – Timmins Area, 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
- President – P&E Mining Consultants Inc, 2004-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 13 and co-authoring Sections 1, 14, 25 and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: September 20, 2021

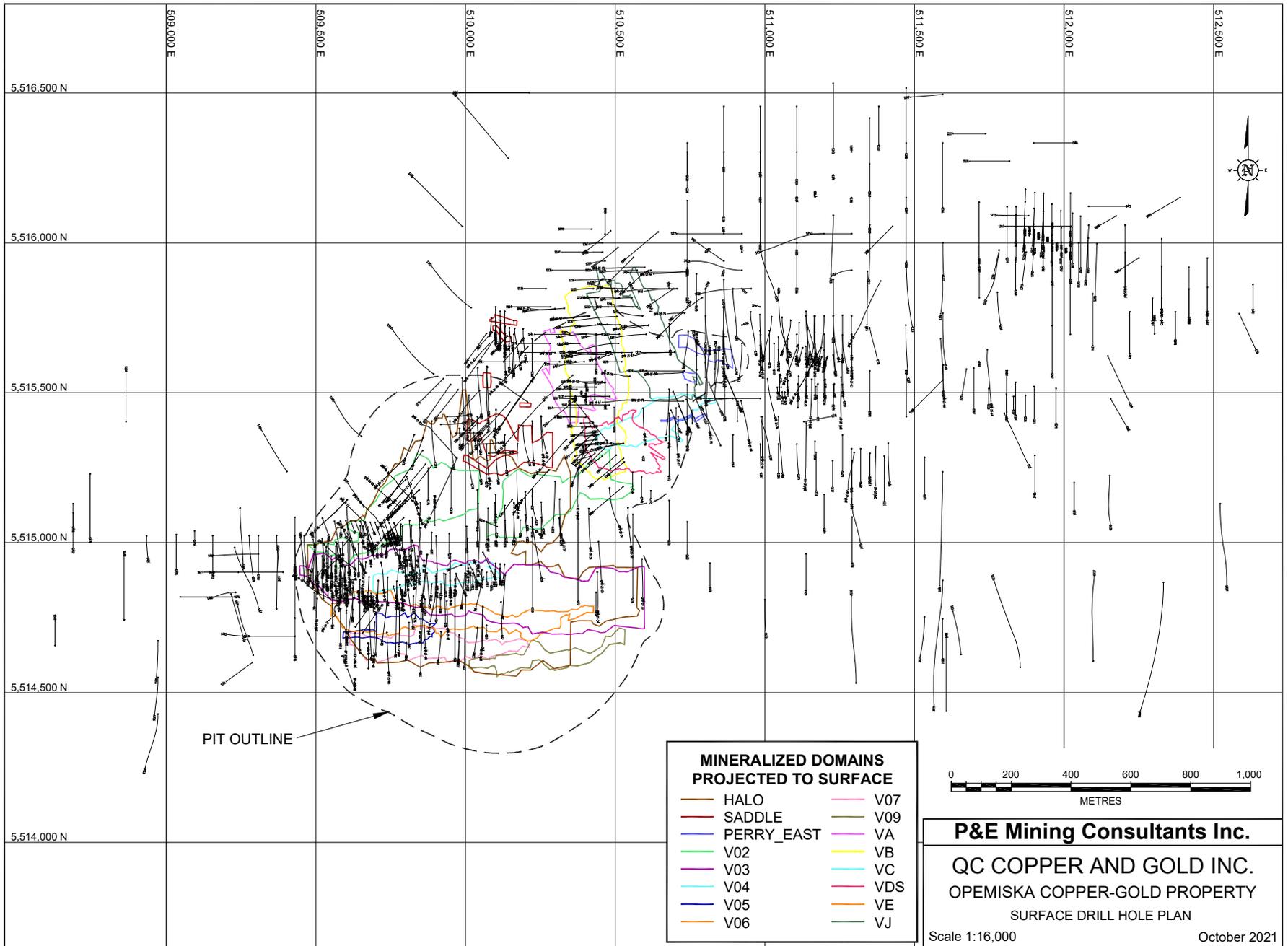
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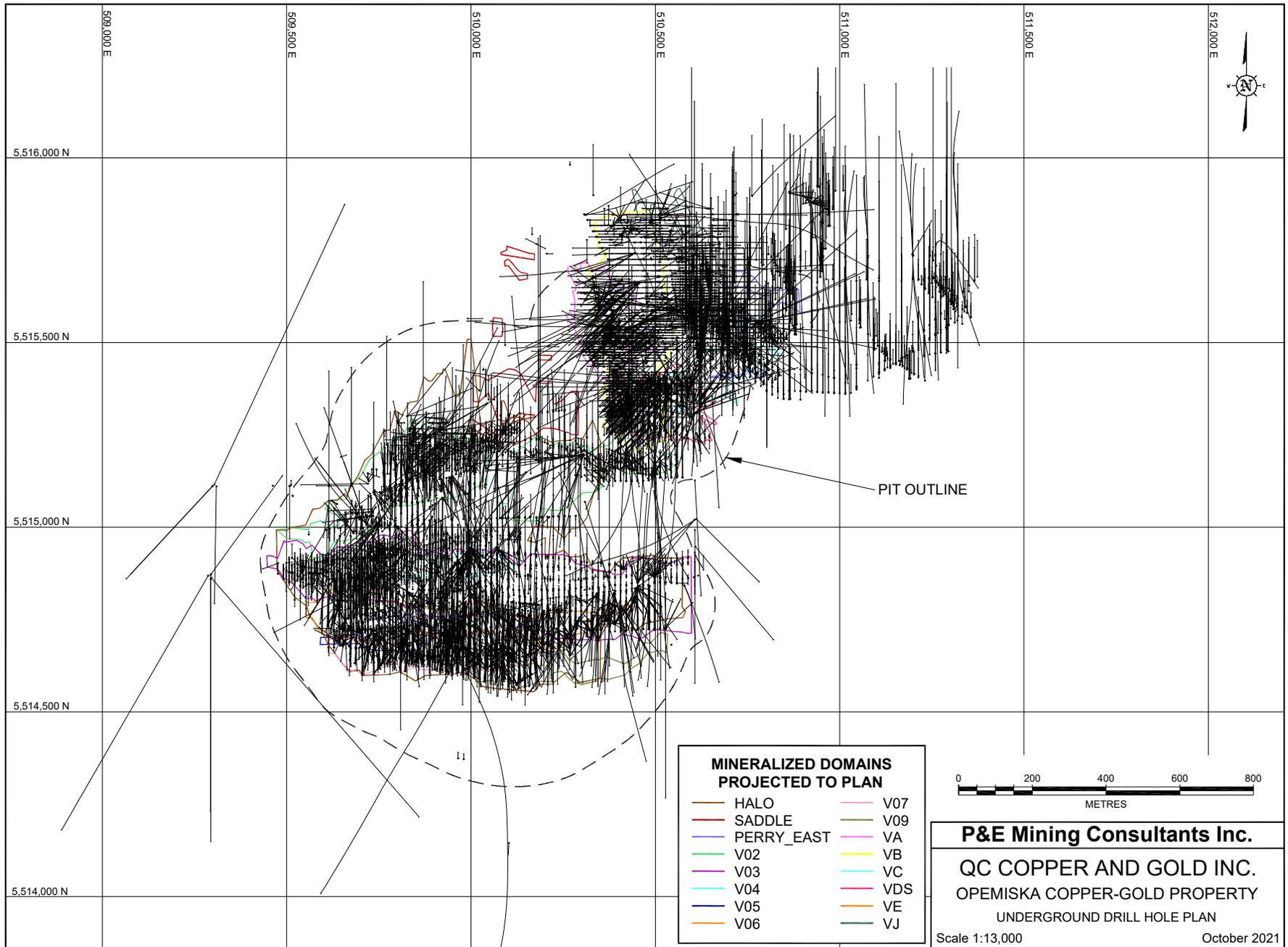
{SIGNED AND SEALED}

[Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

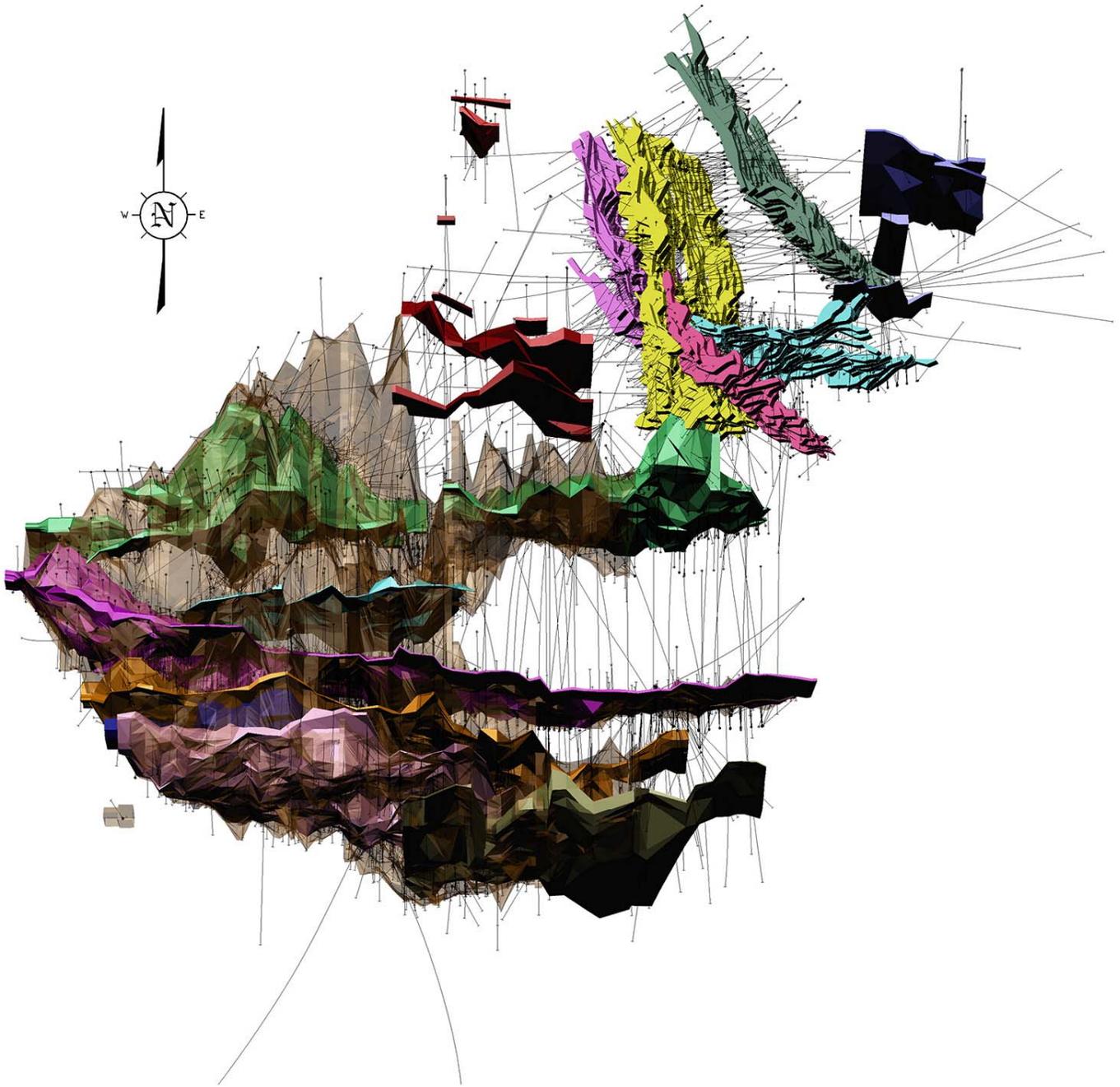
APPENDIX A SURFACE DRILL HOLE PLAN





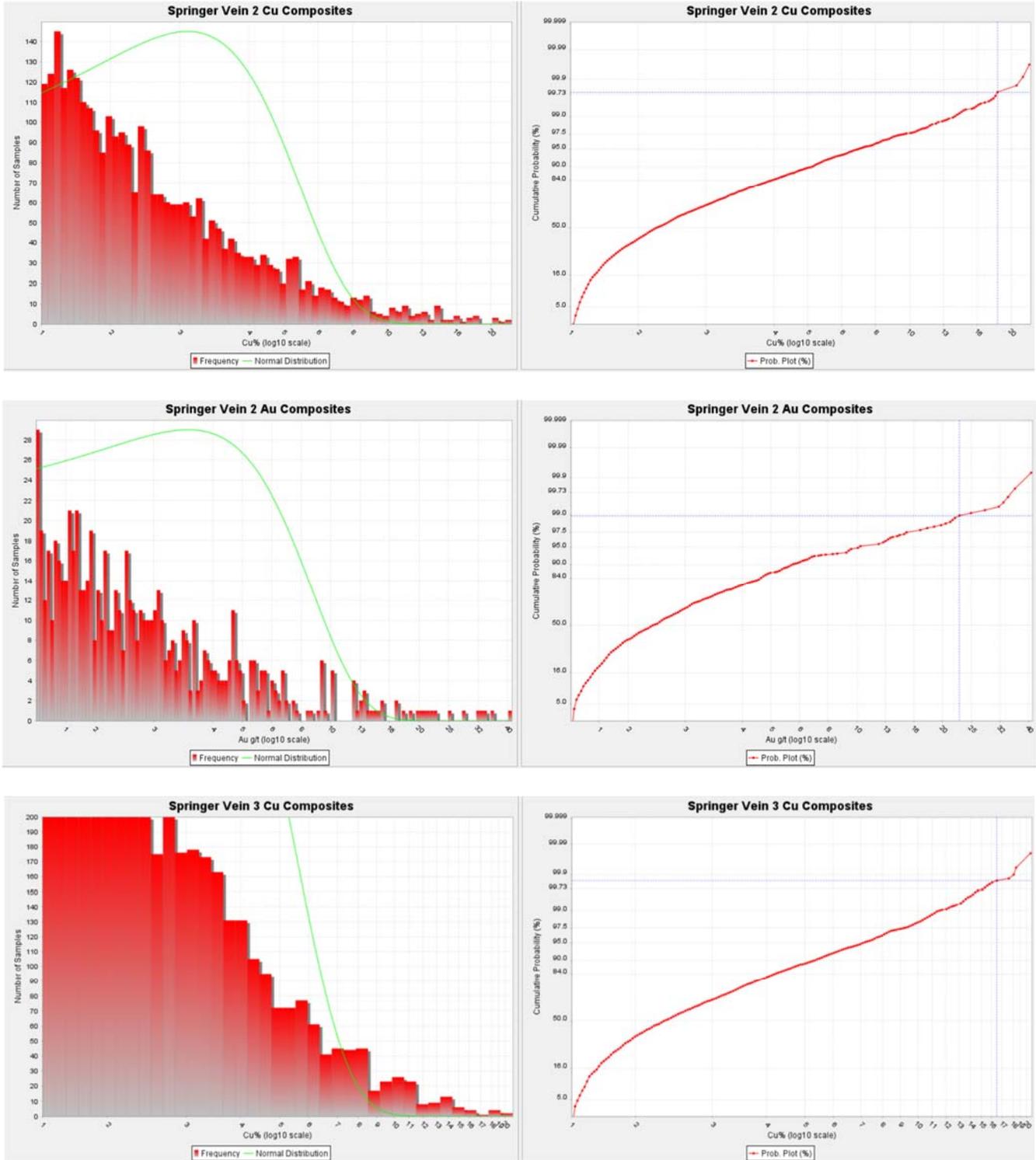
APPENDIX B 3-D DOMAINS

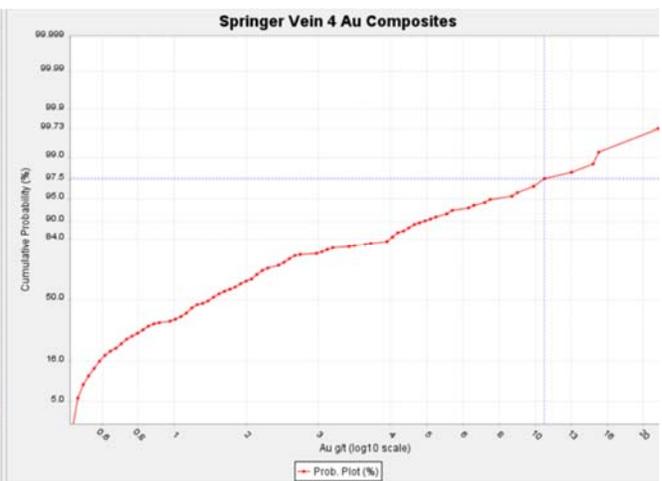
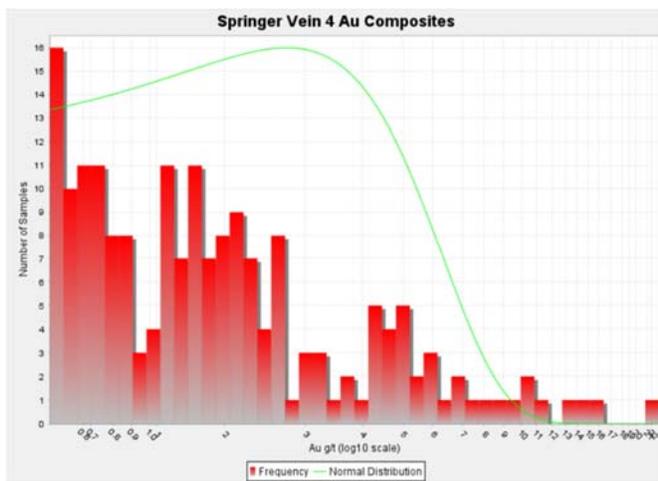
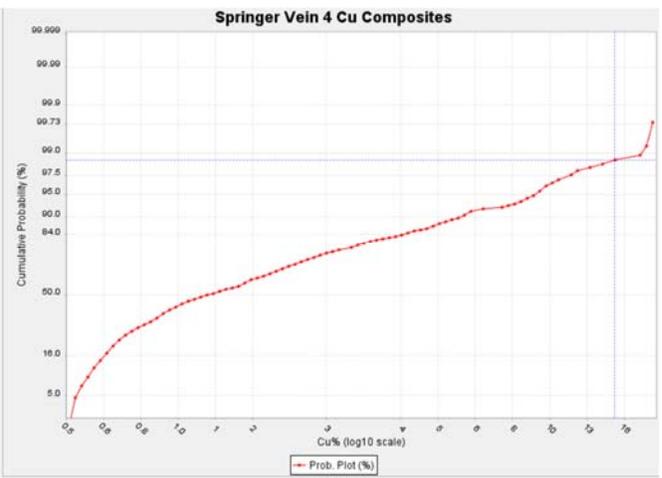
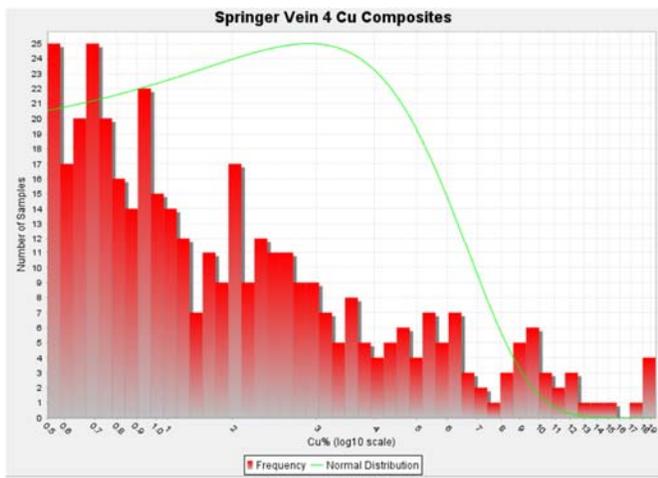
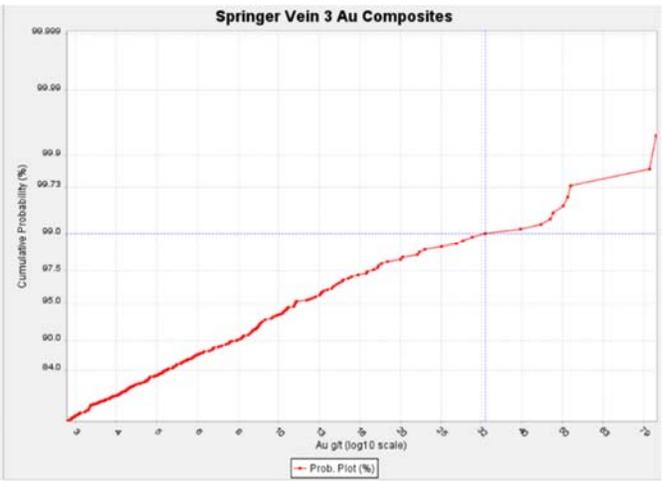
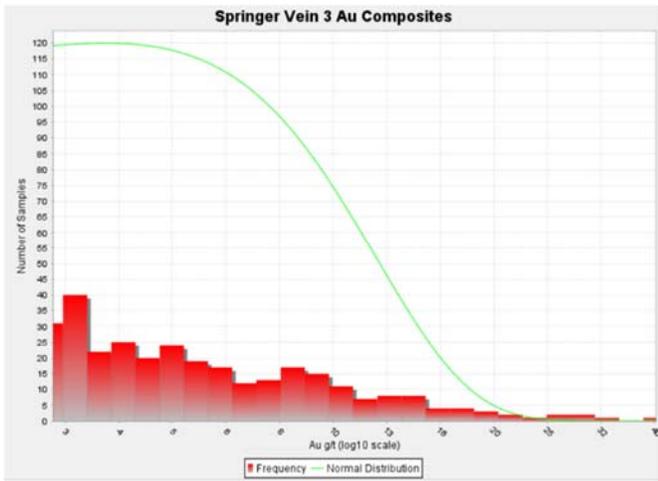
OPEMISKA COPPER-GOLD PROPERTY 3D DOMAINS

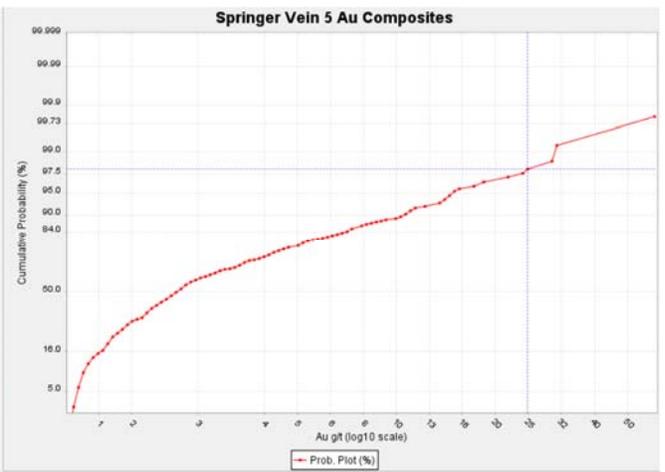
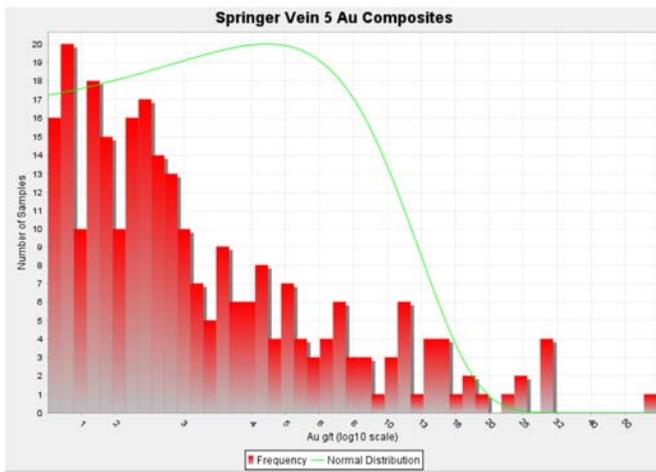
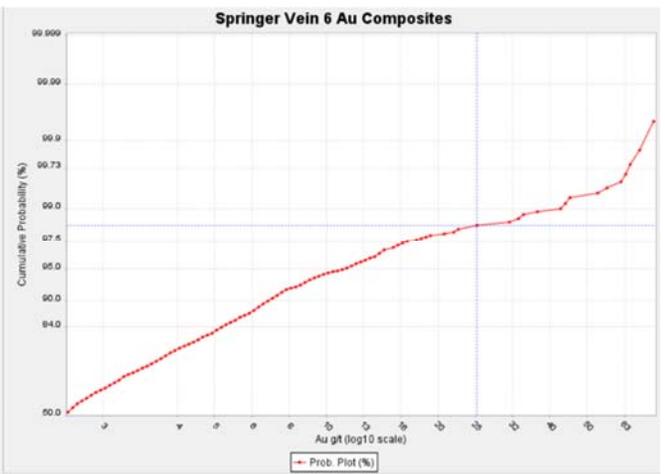
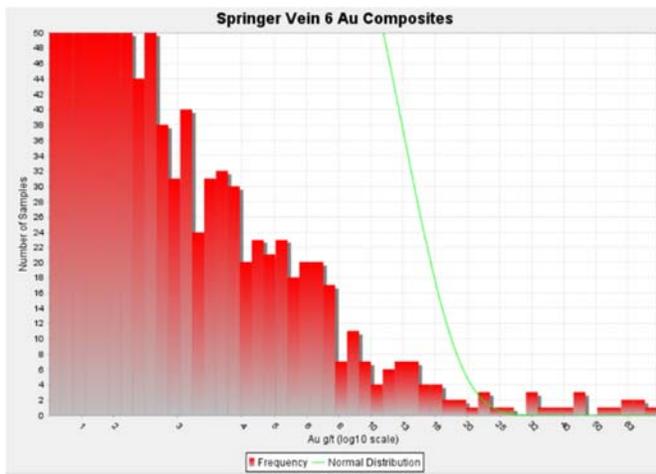
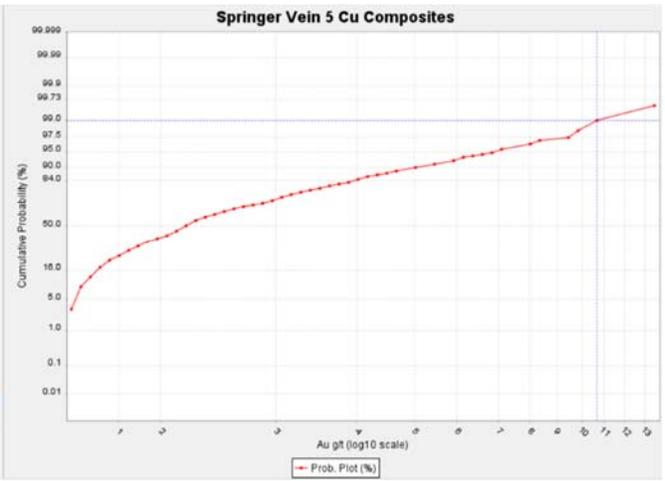
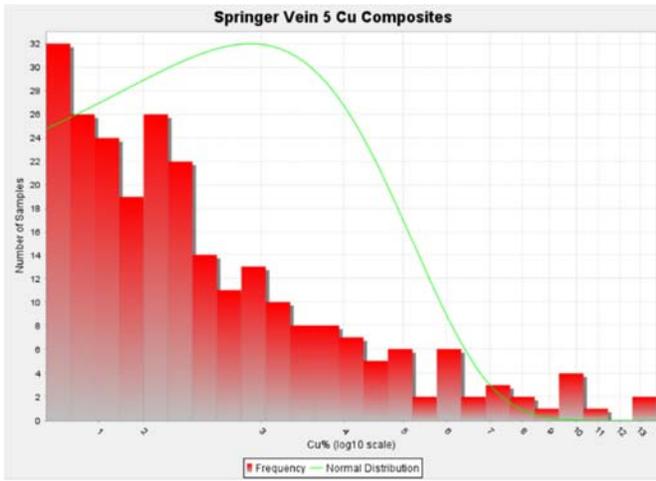


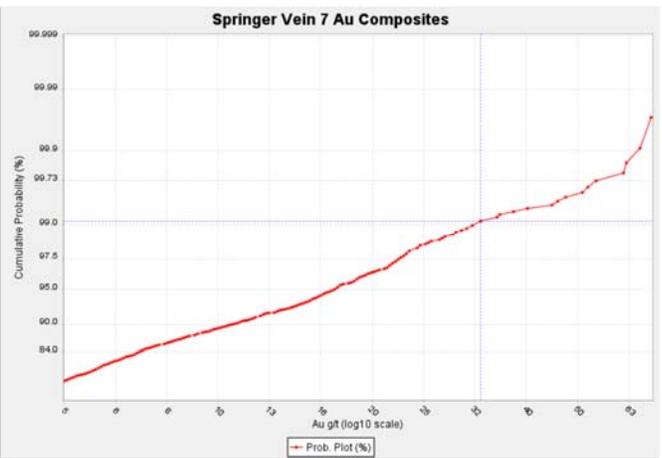
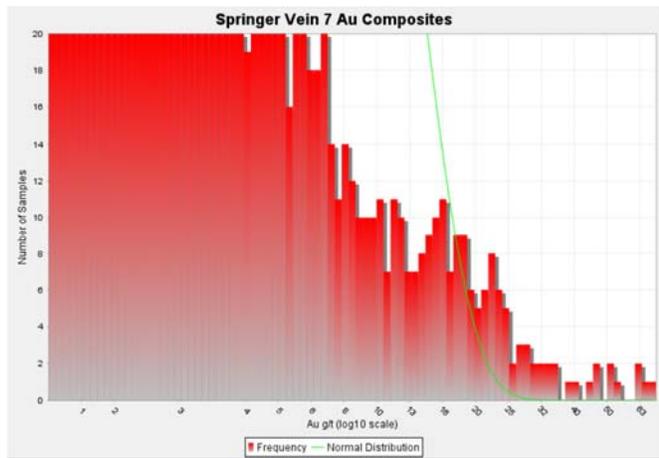
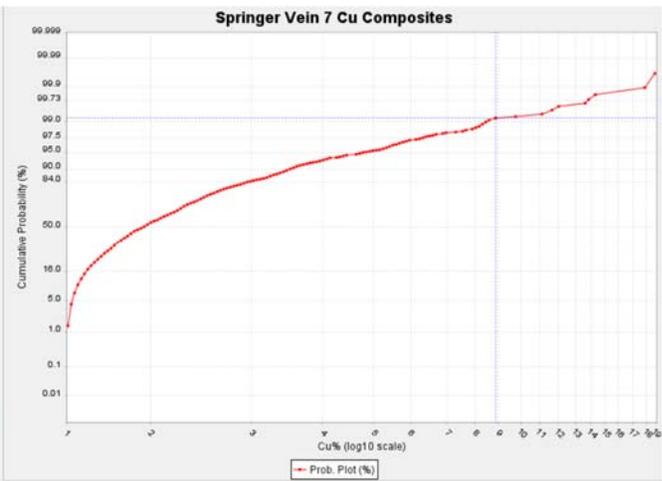
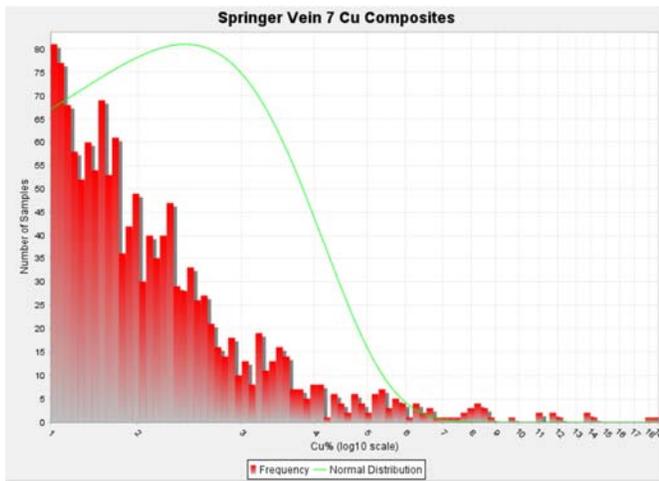
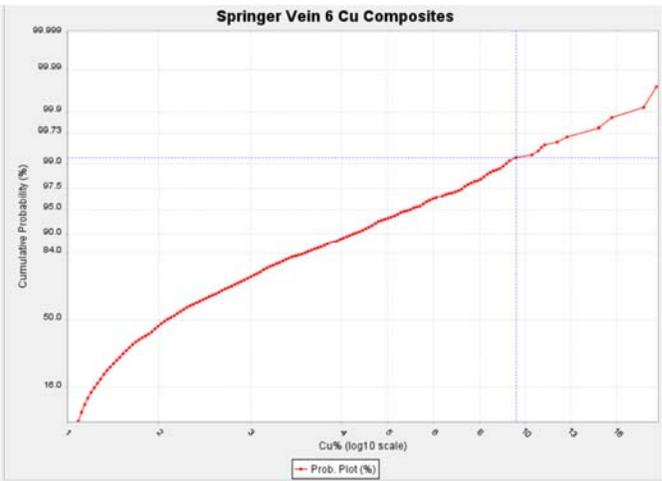
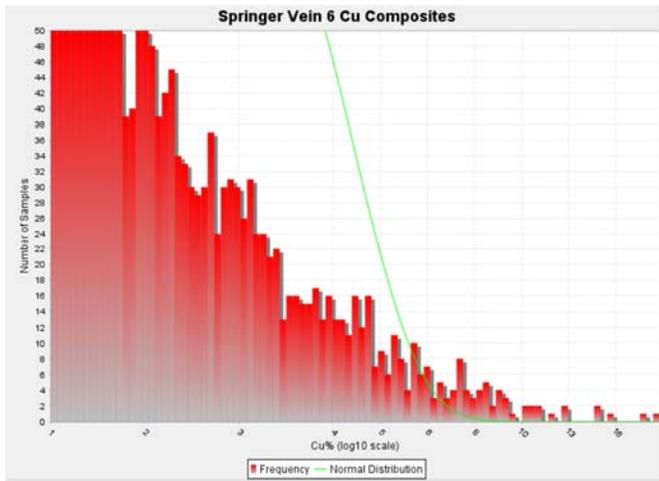
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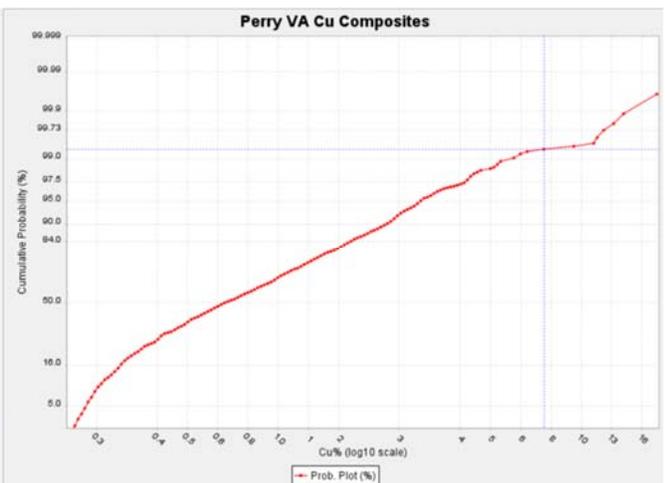
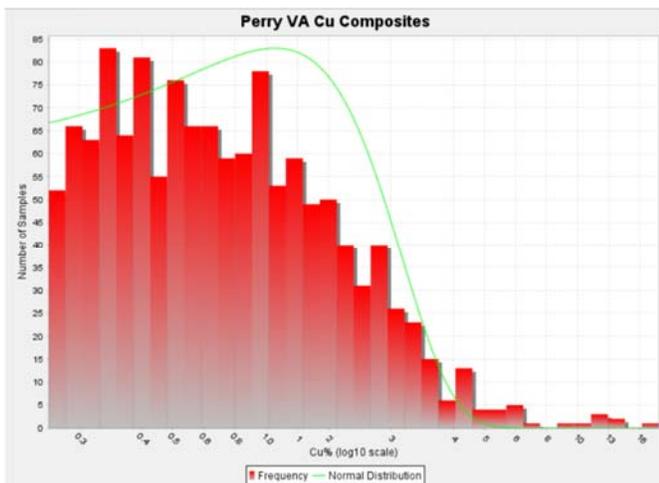
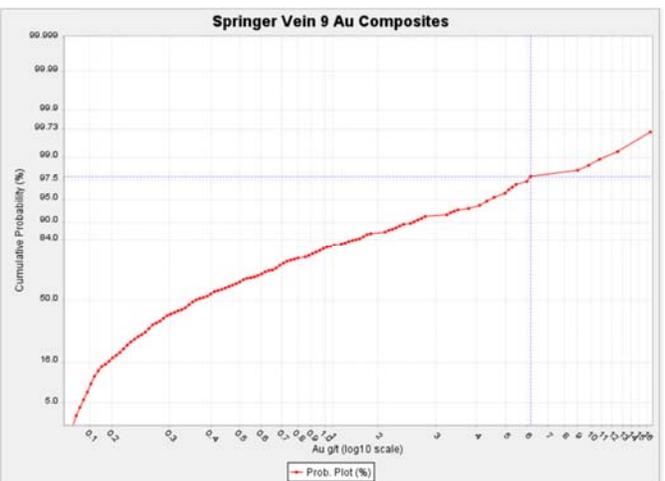
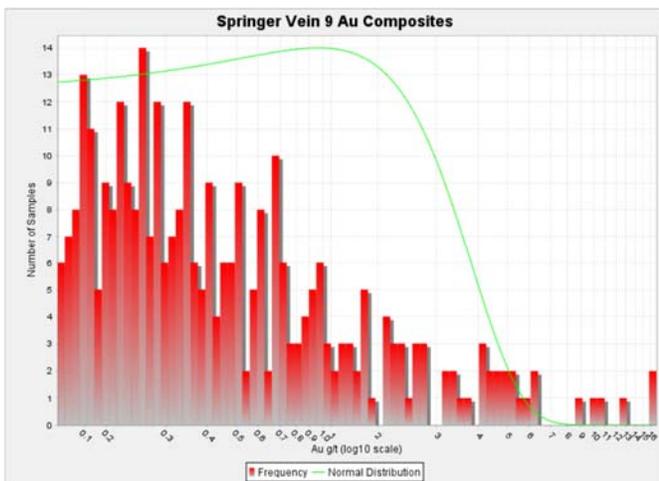
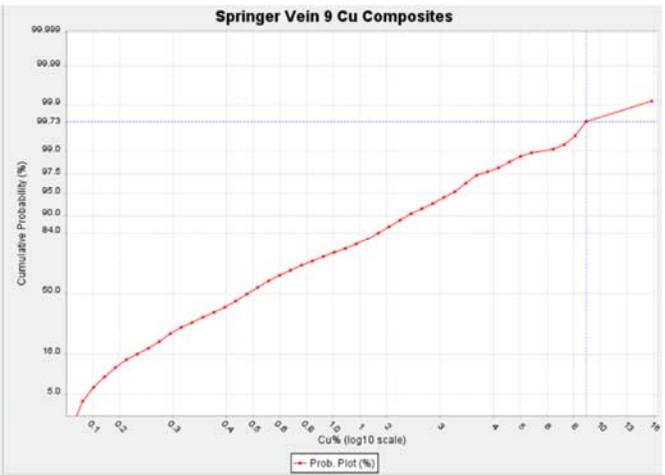
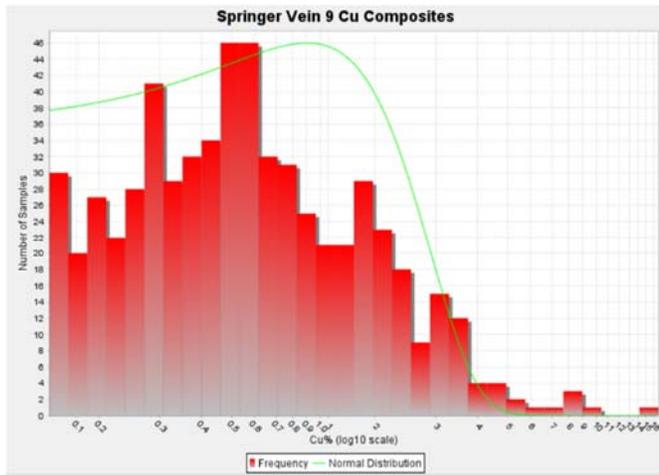
APPENDIX C LOG NORMAL HISTOGRAMS AND PROBABILITY PLOTS

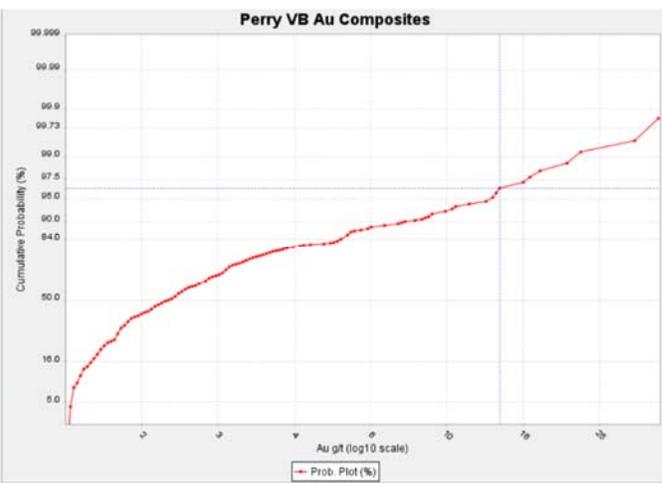
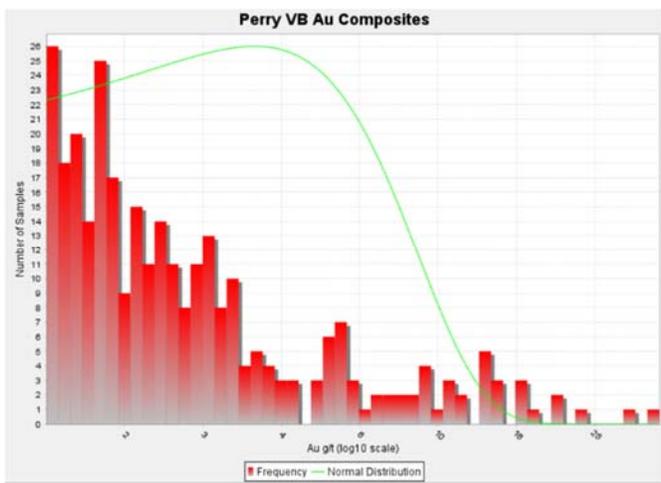
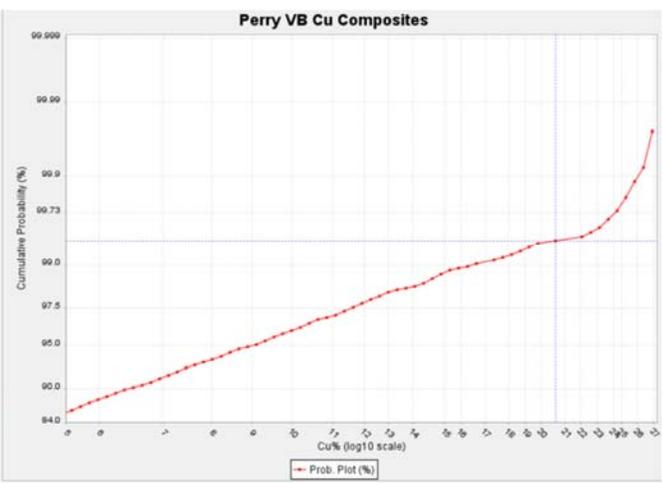
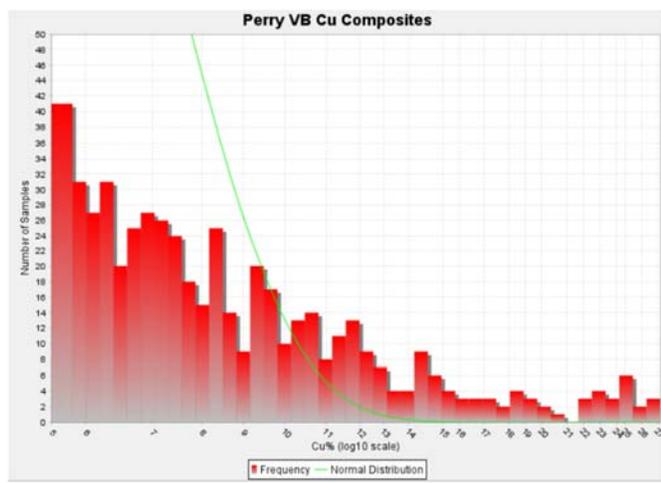
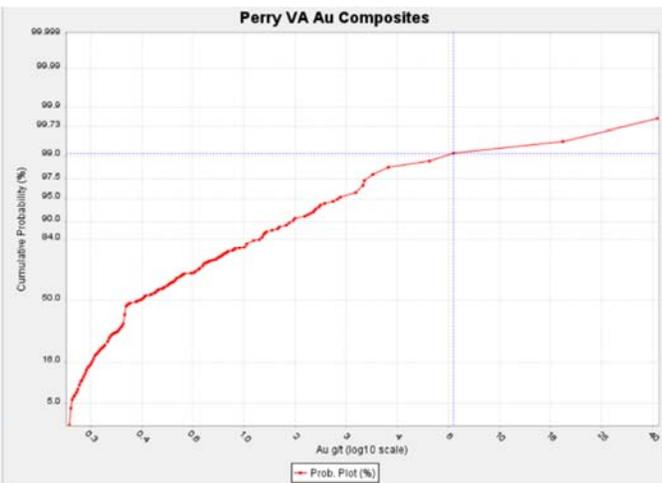
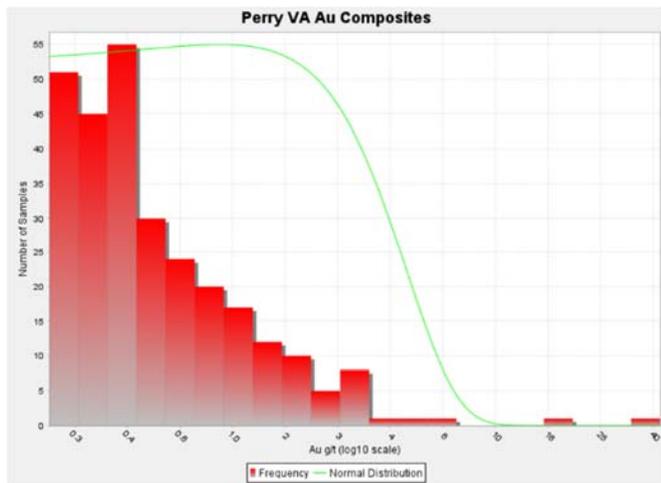


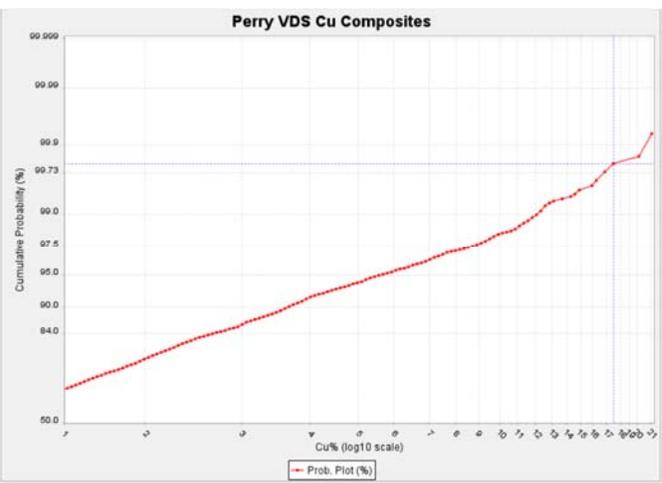
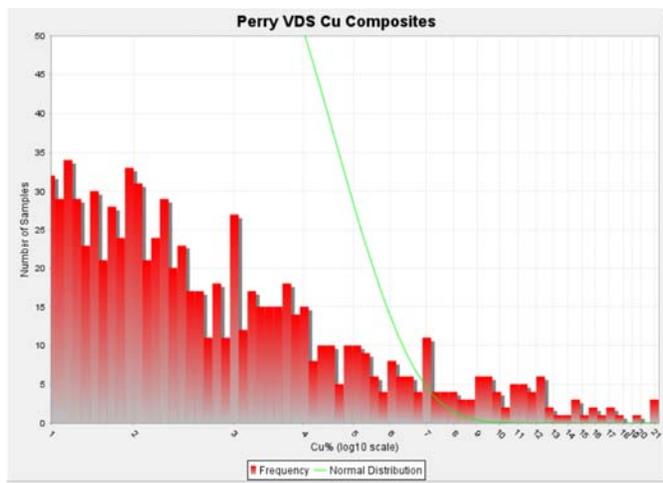
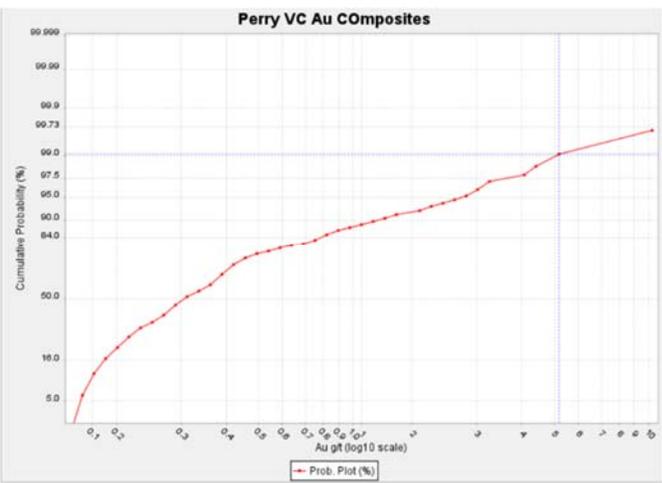
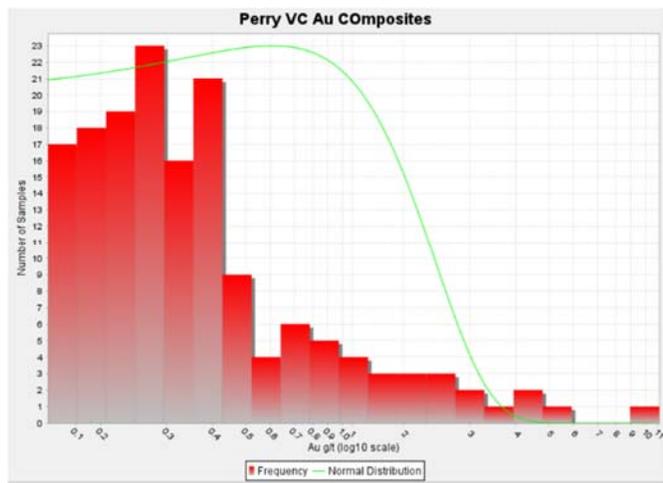
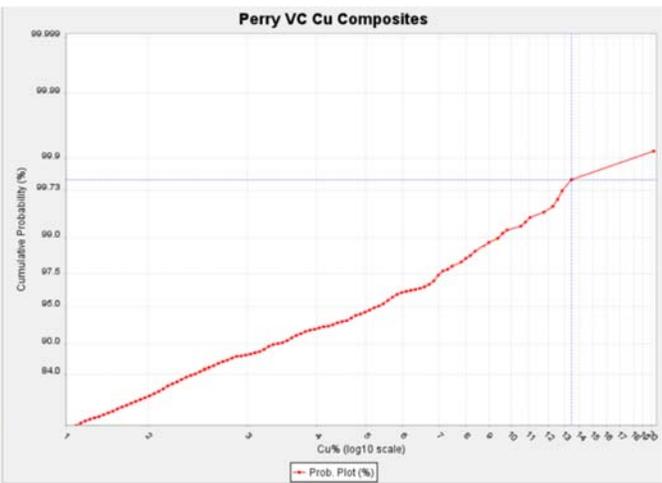
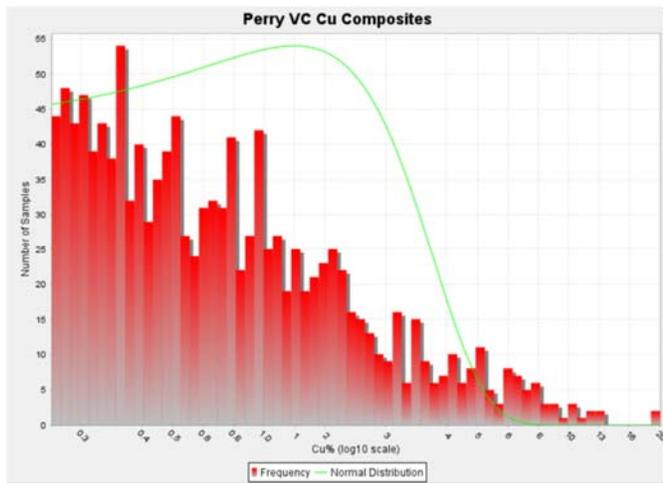


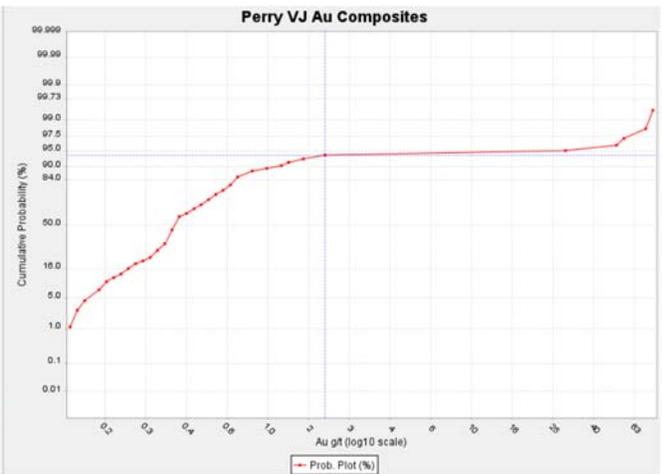
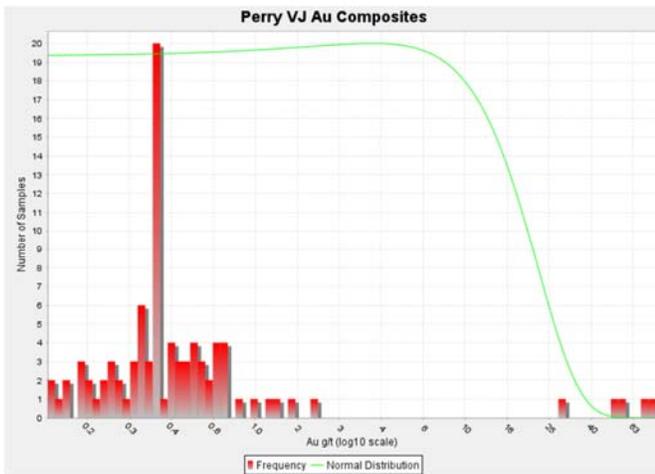
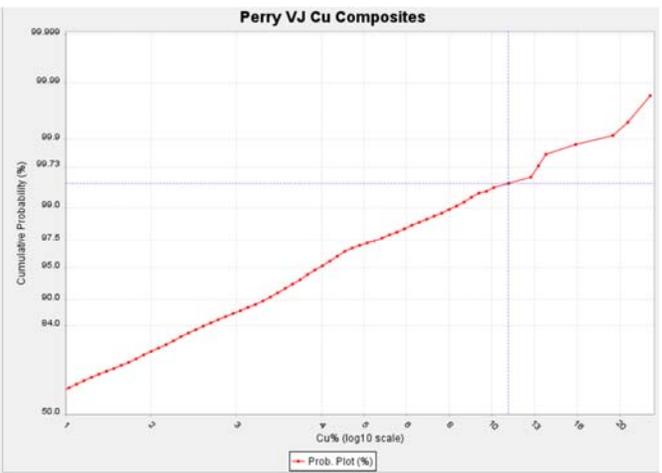
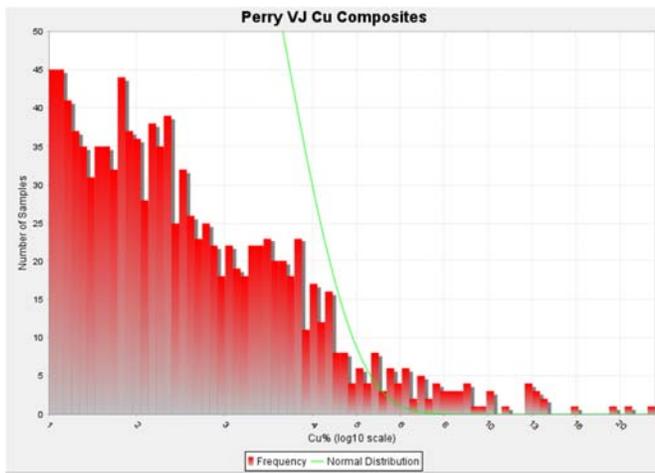
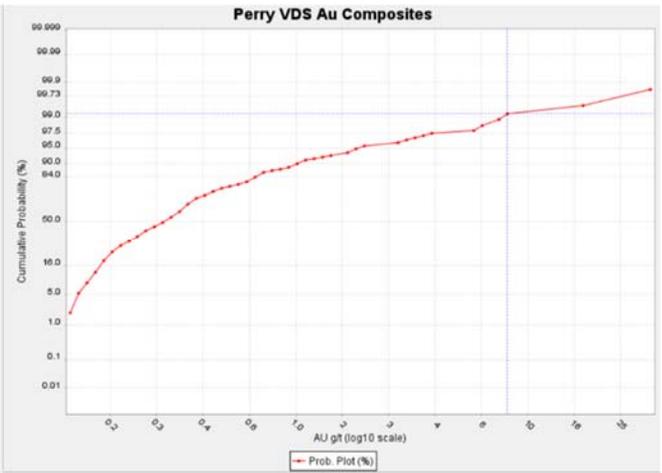
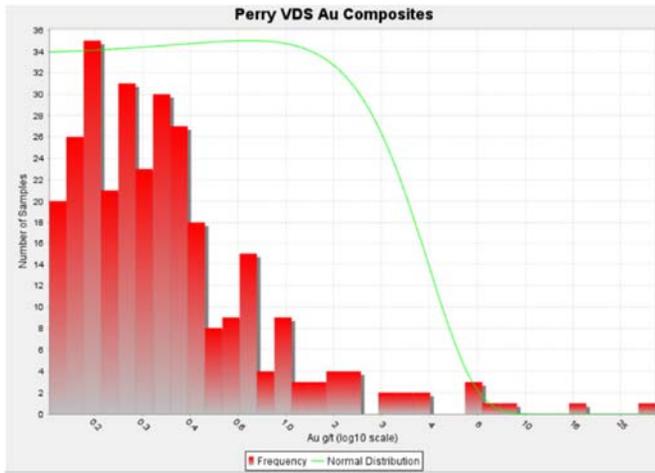


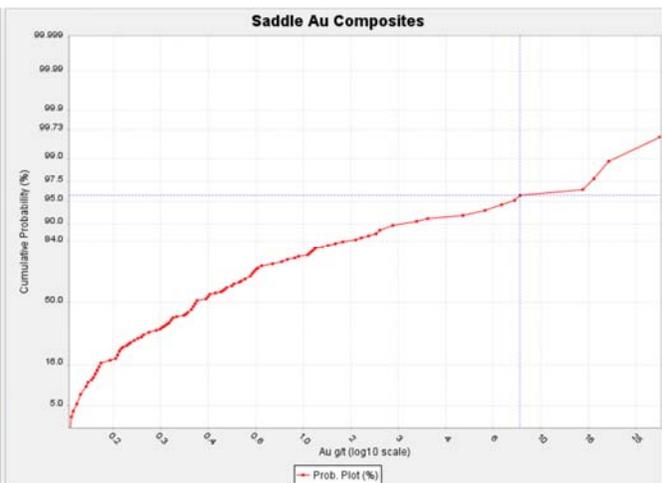
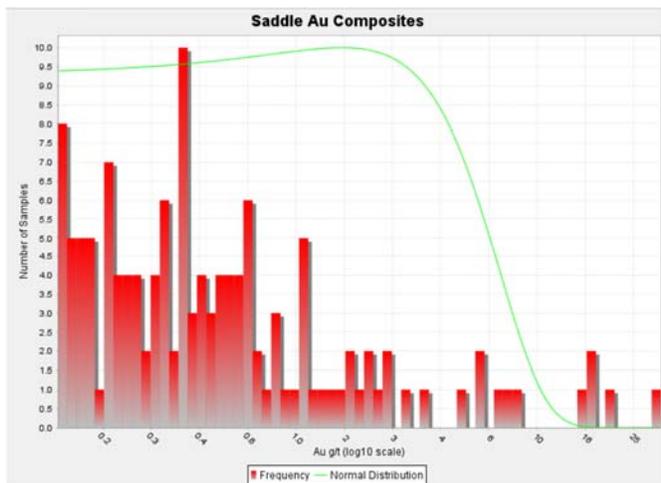
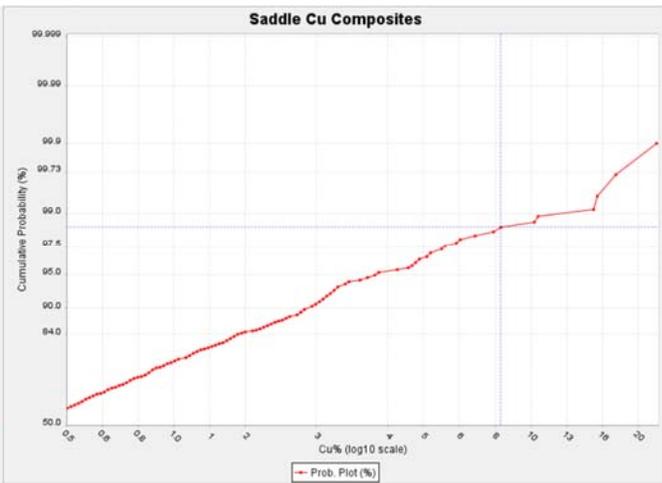
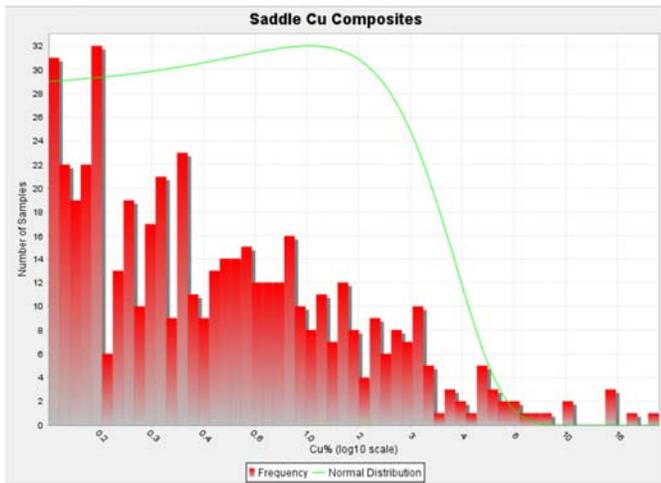
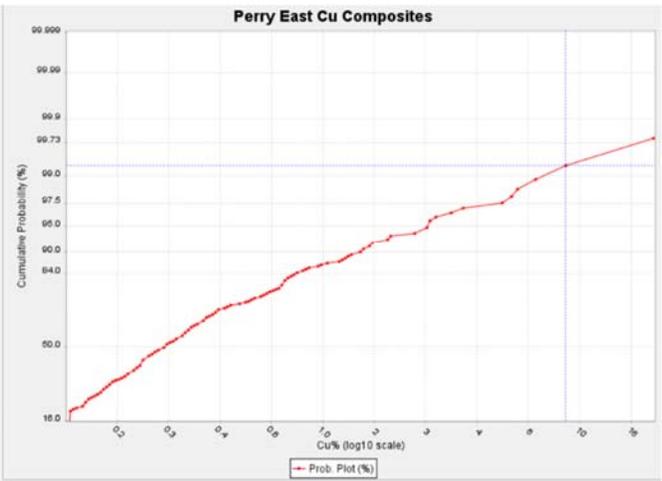
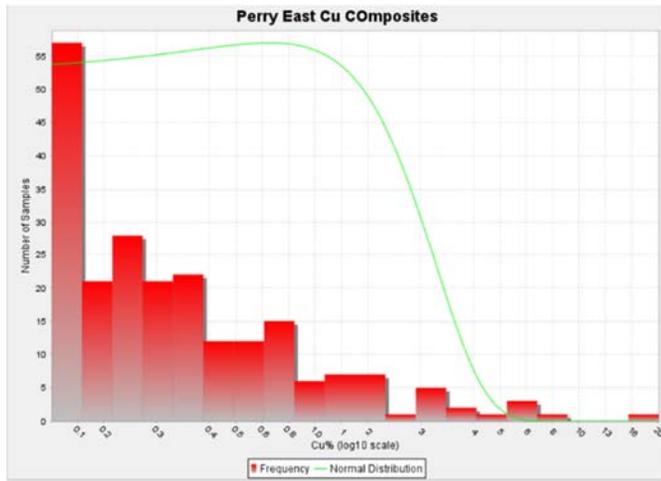




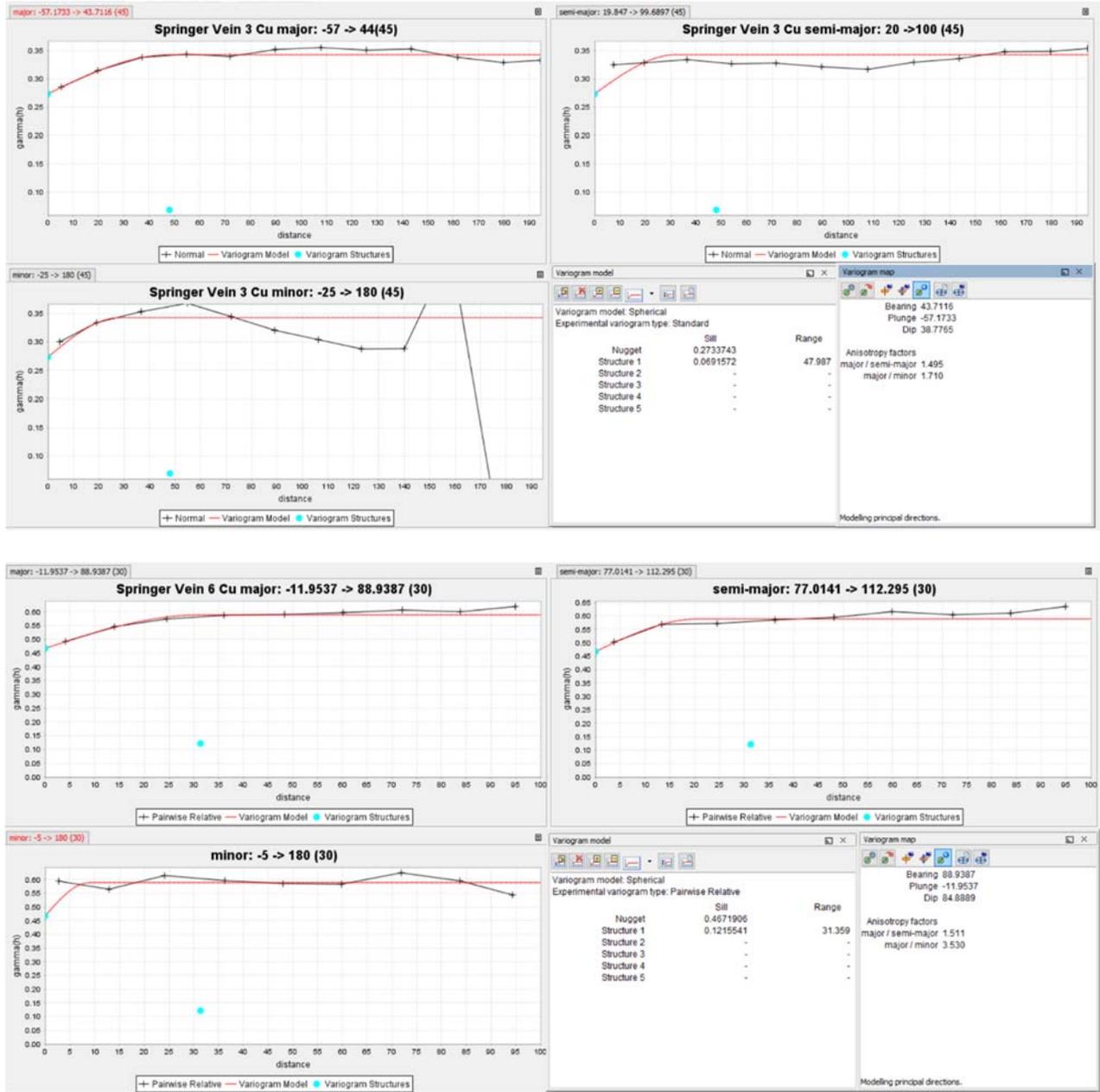


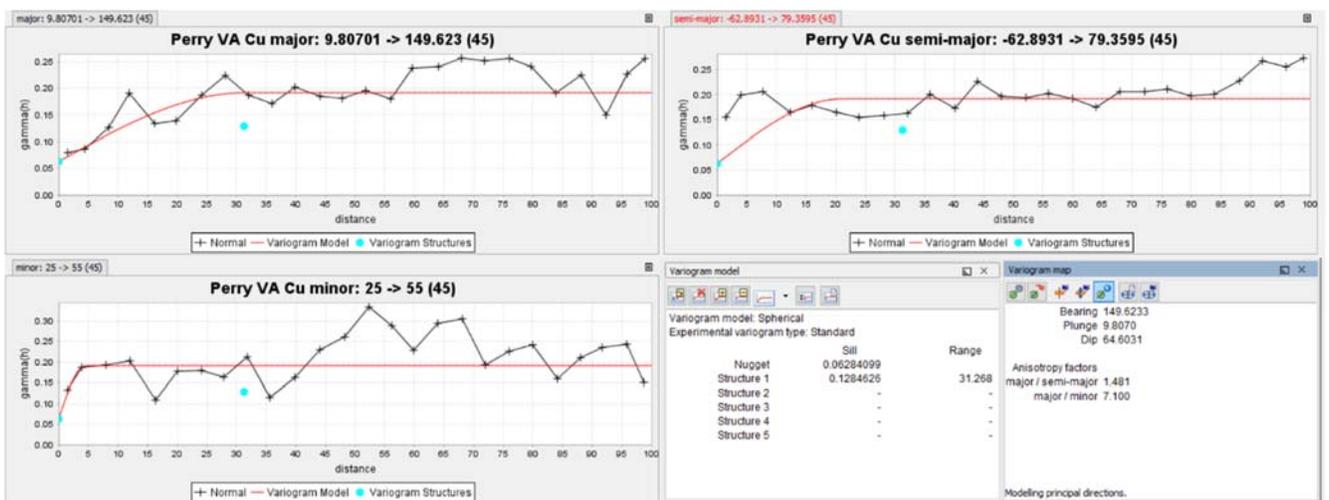
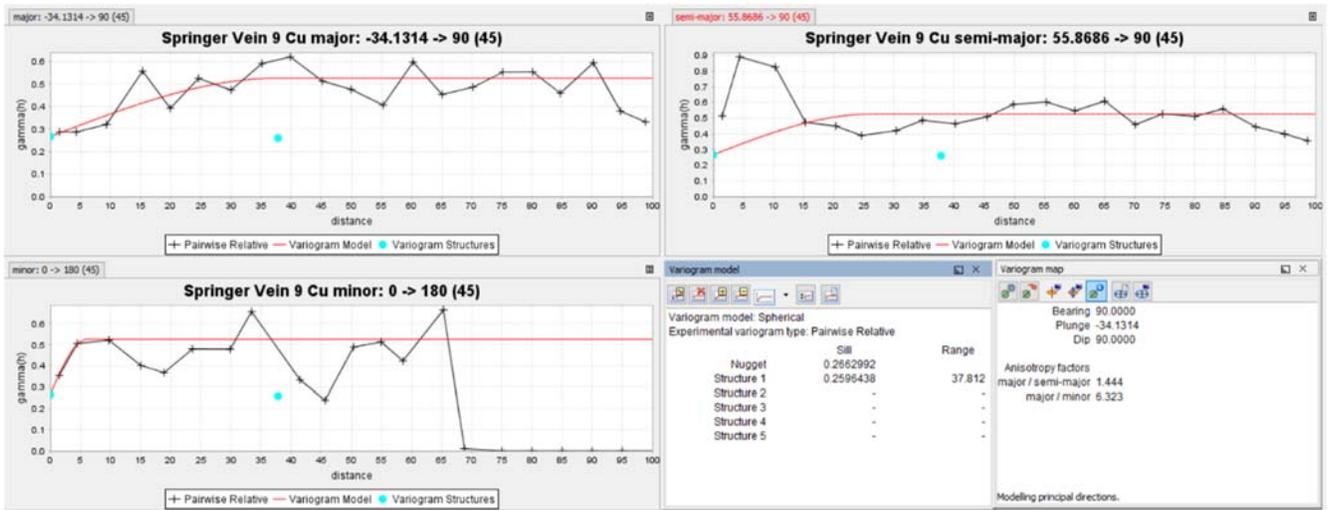
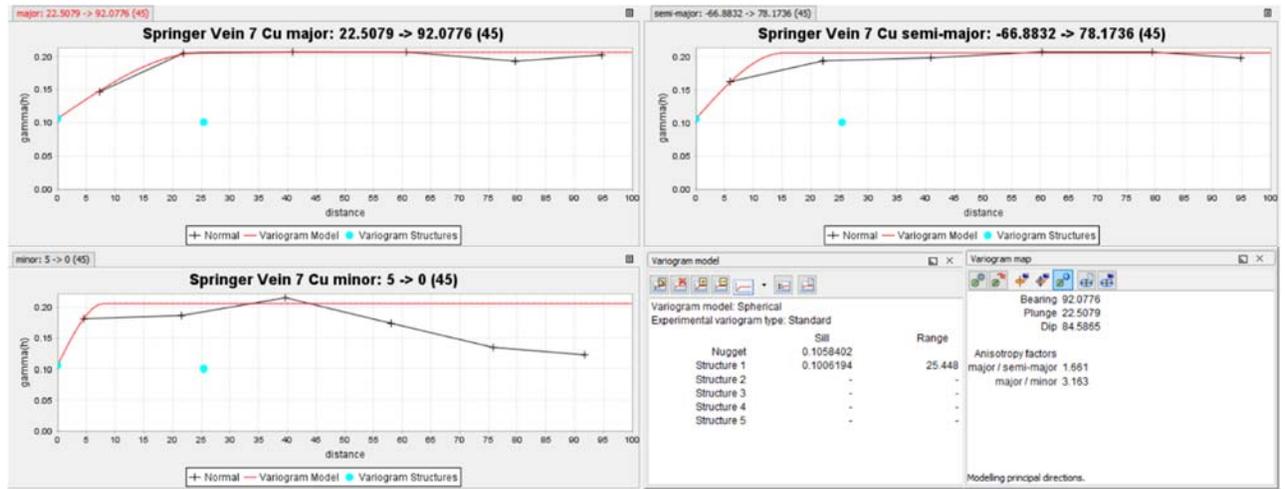


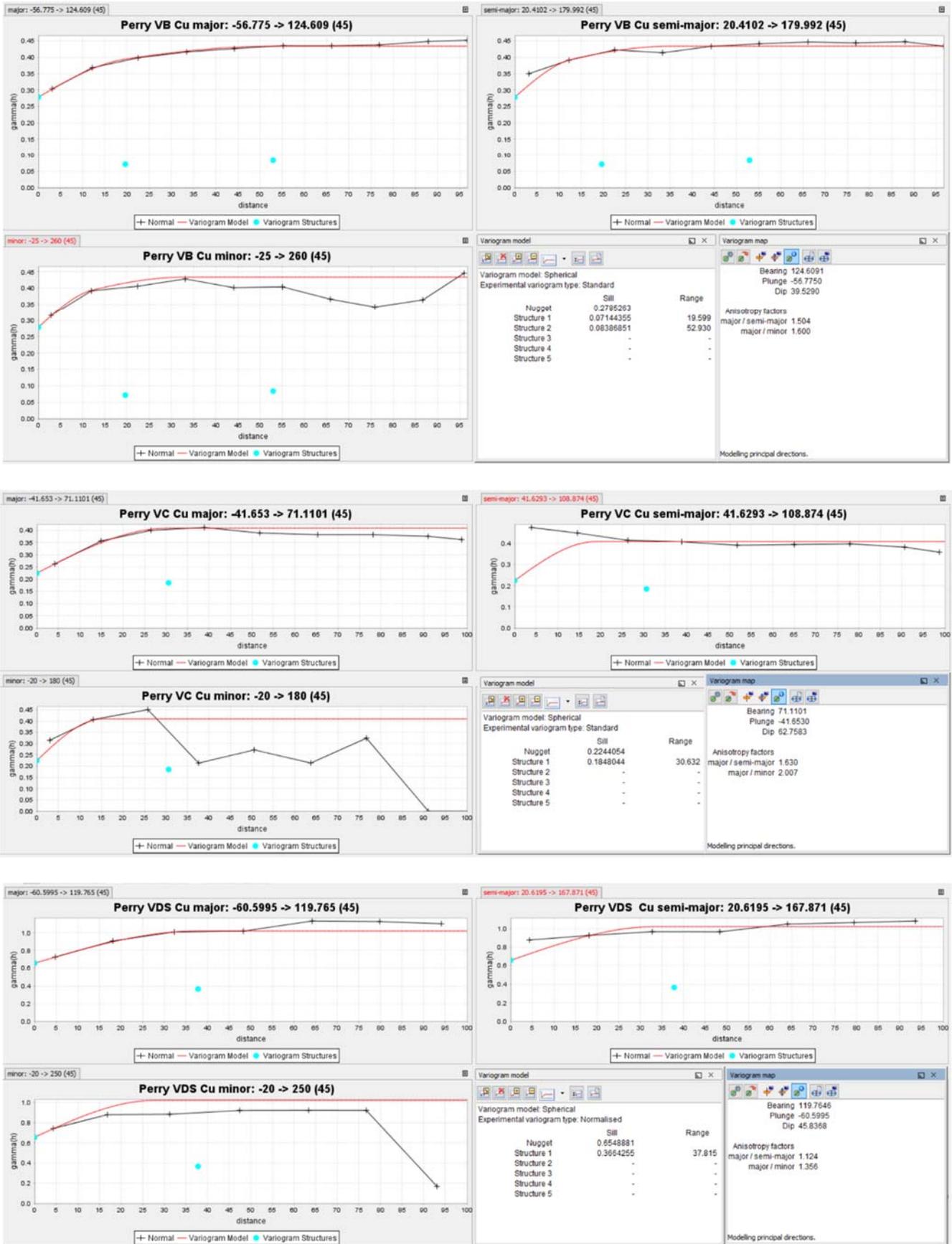


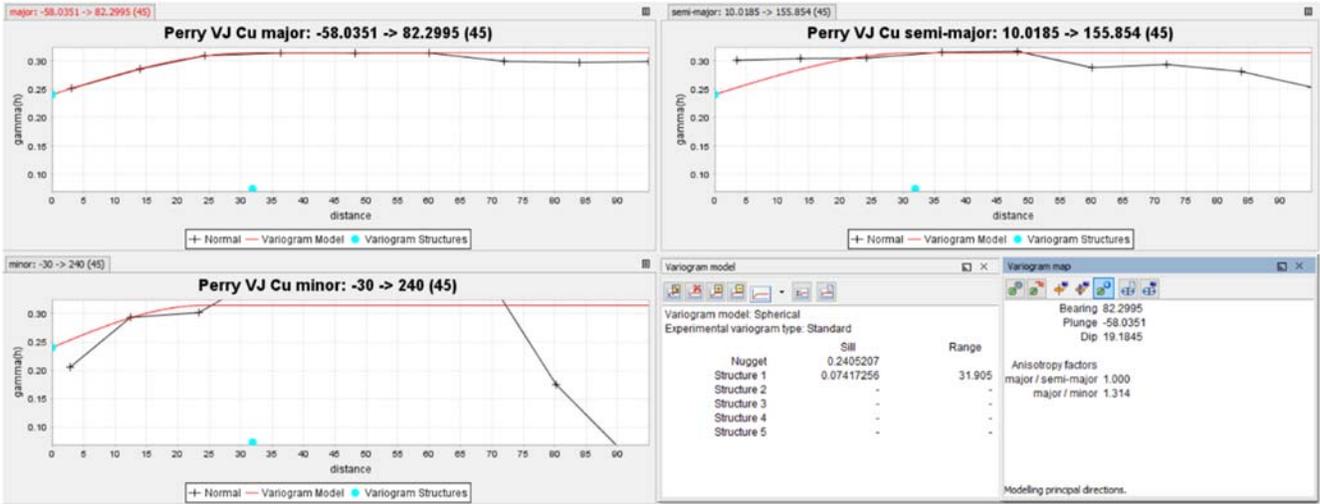


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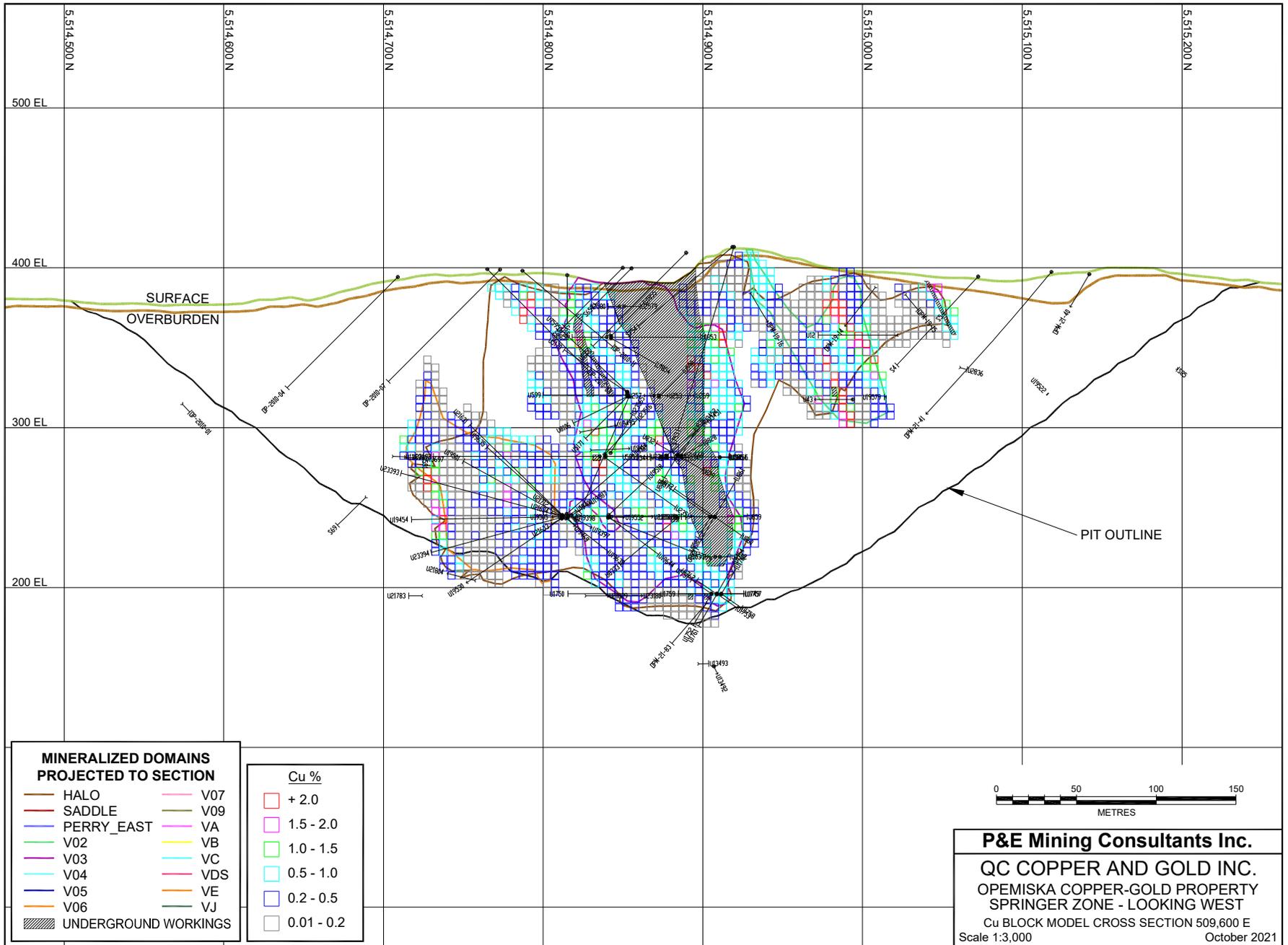


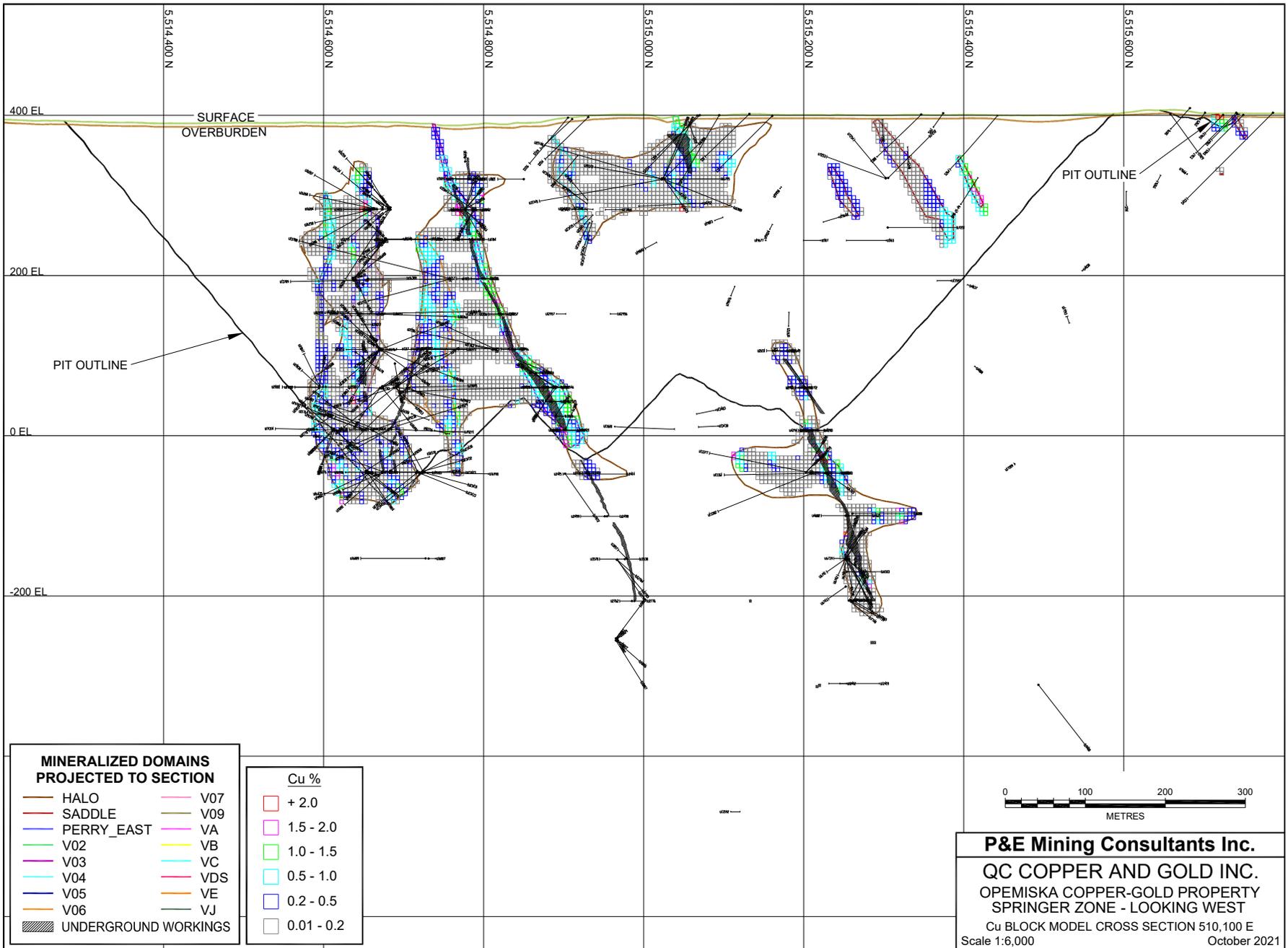


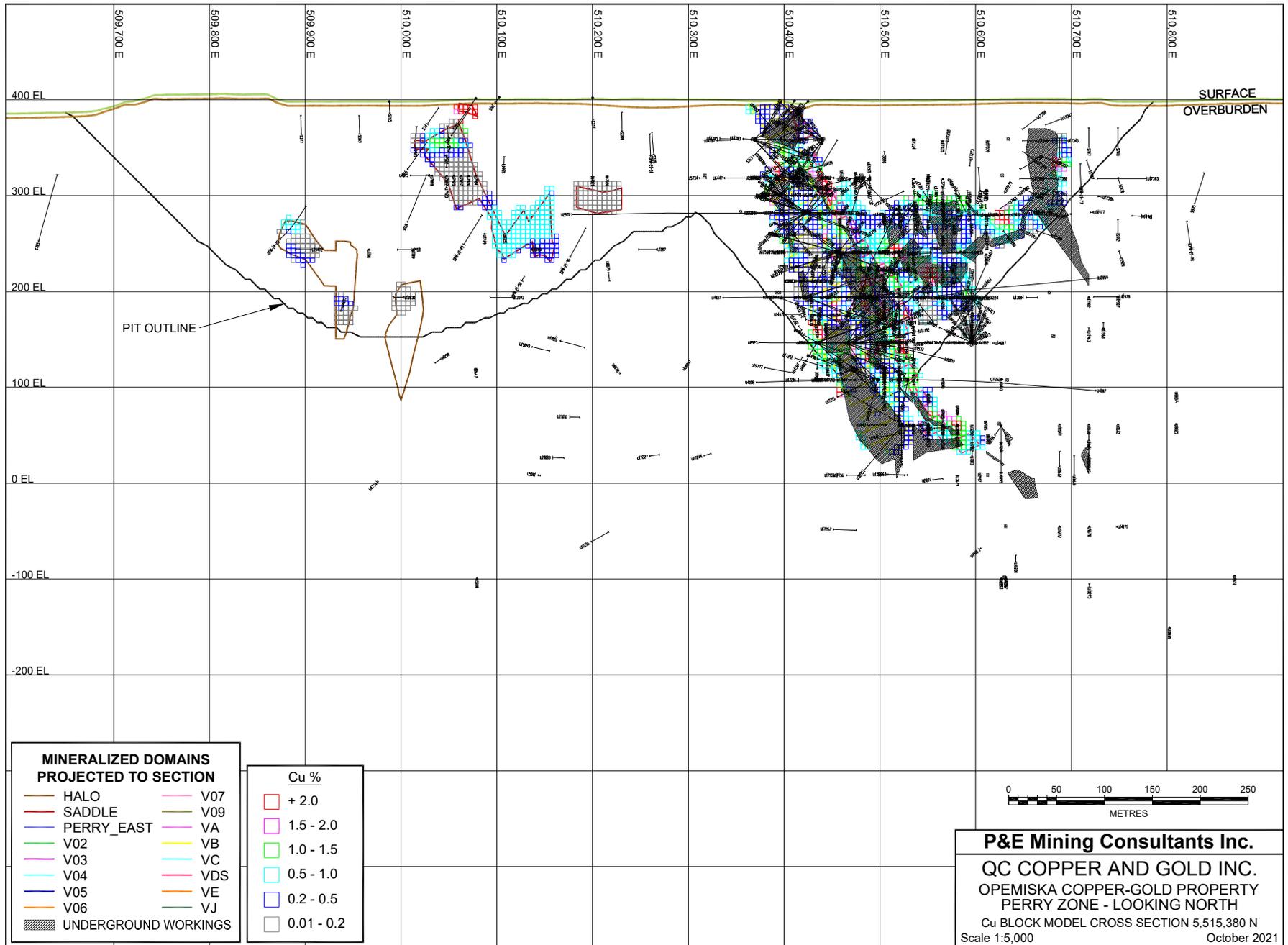


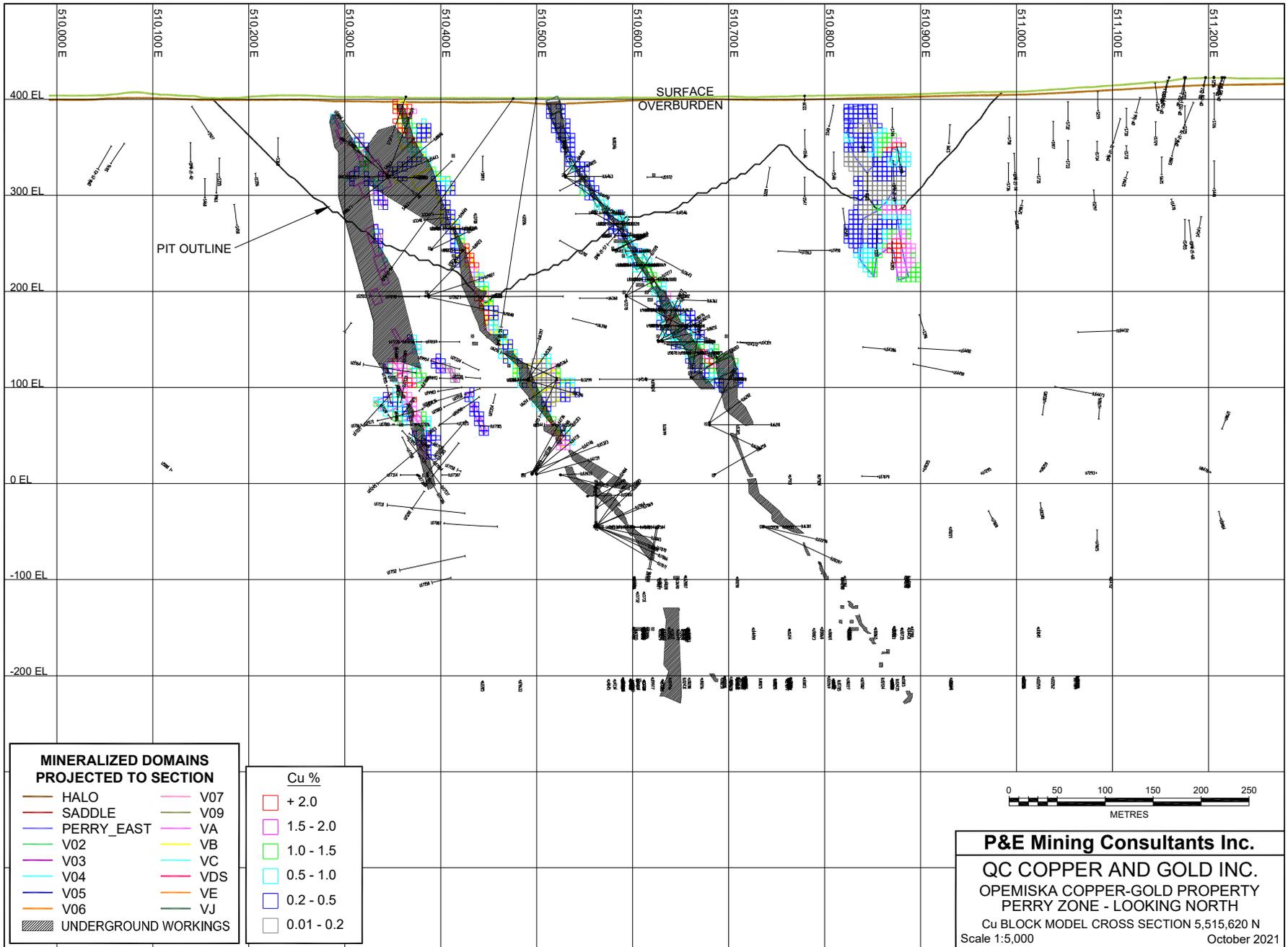


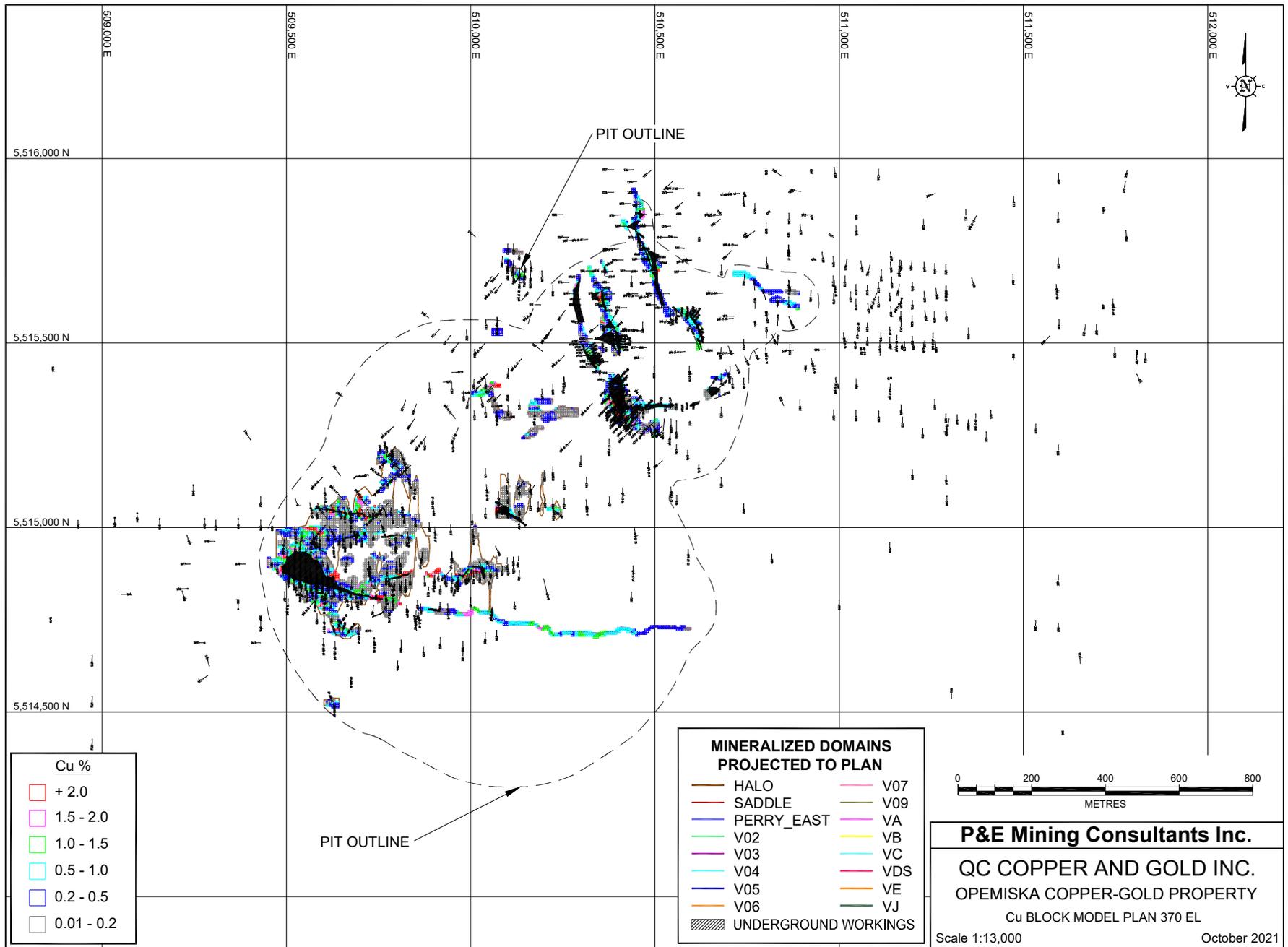
APPENDIX E Cu BLOCK MODEL CROSS SECTIONS AND PLANS

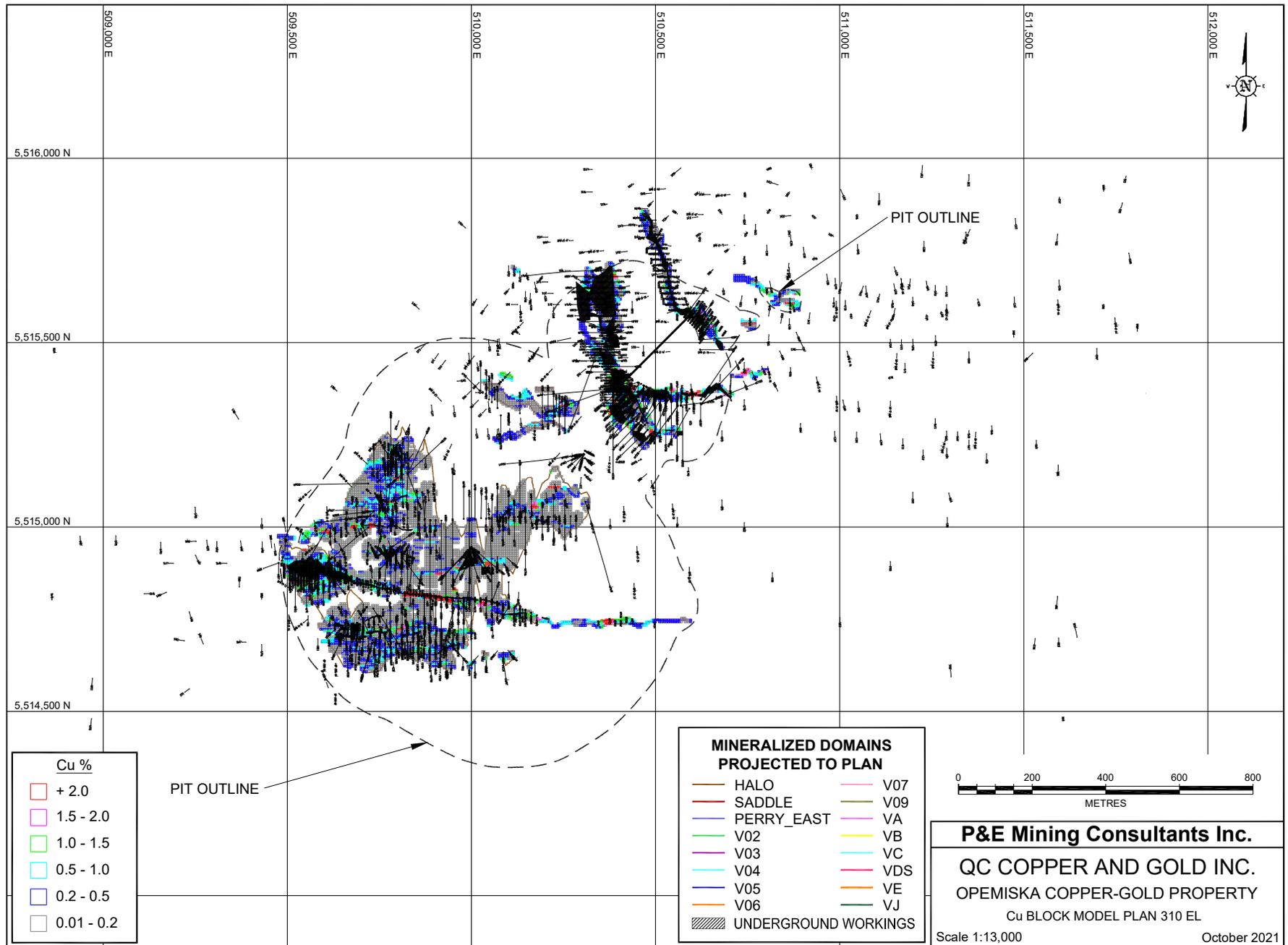


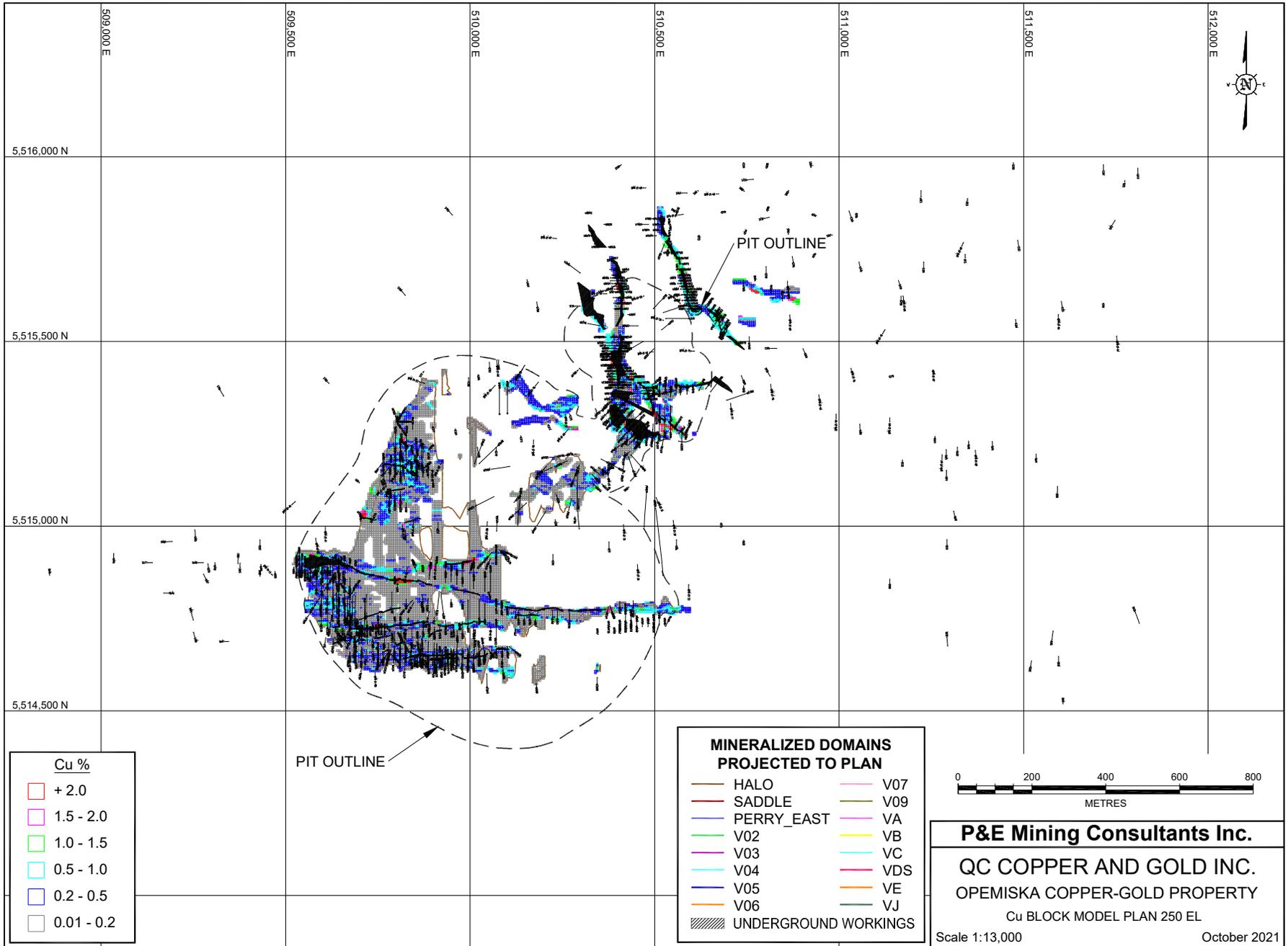




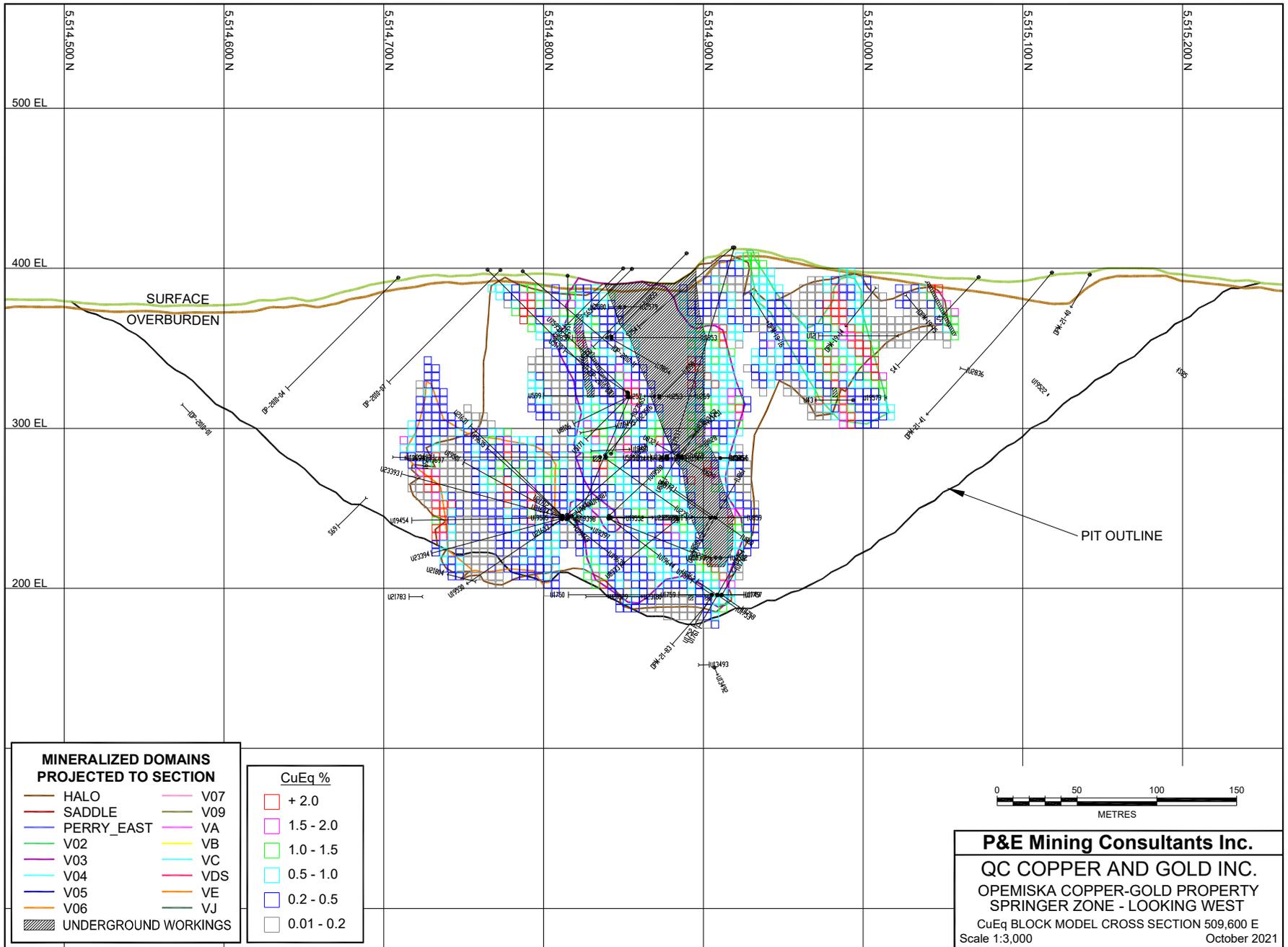


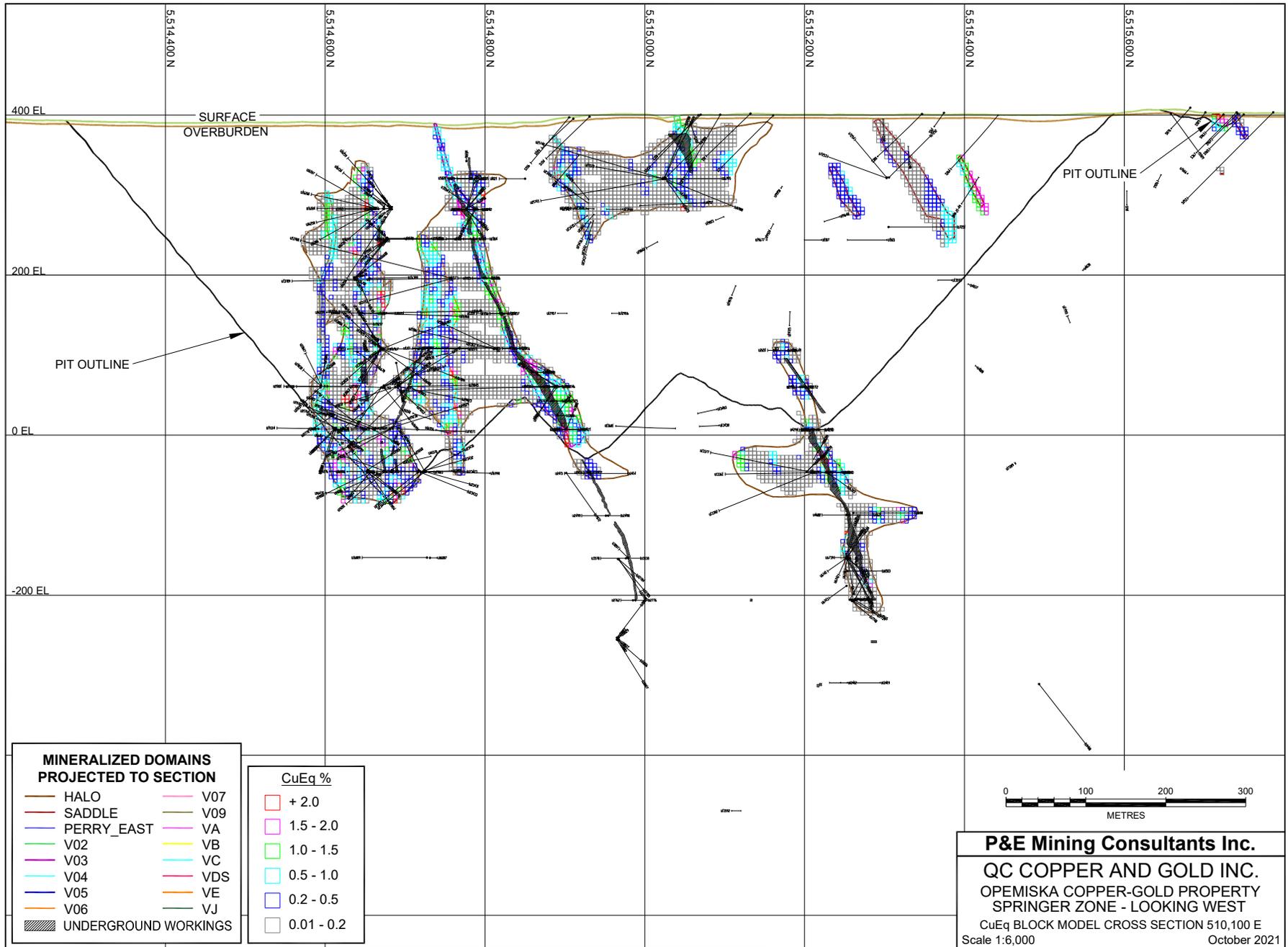


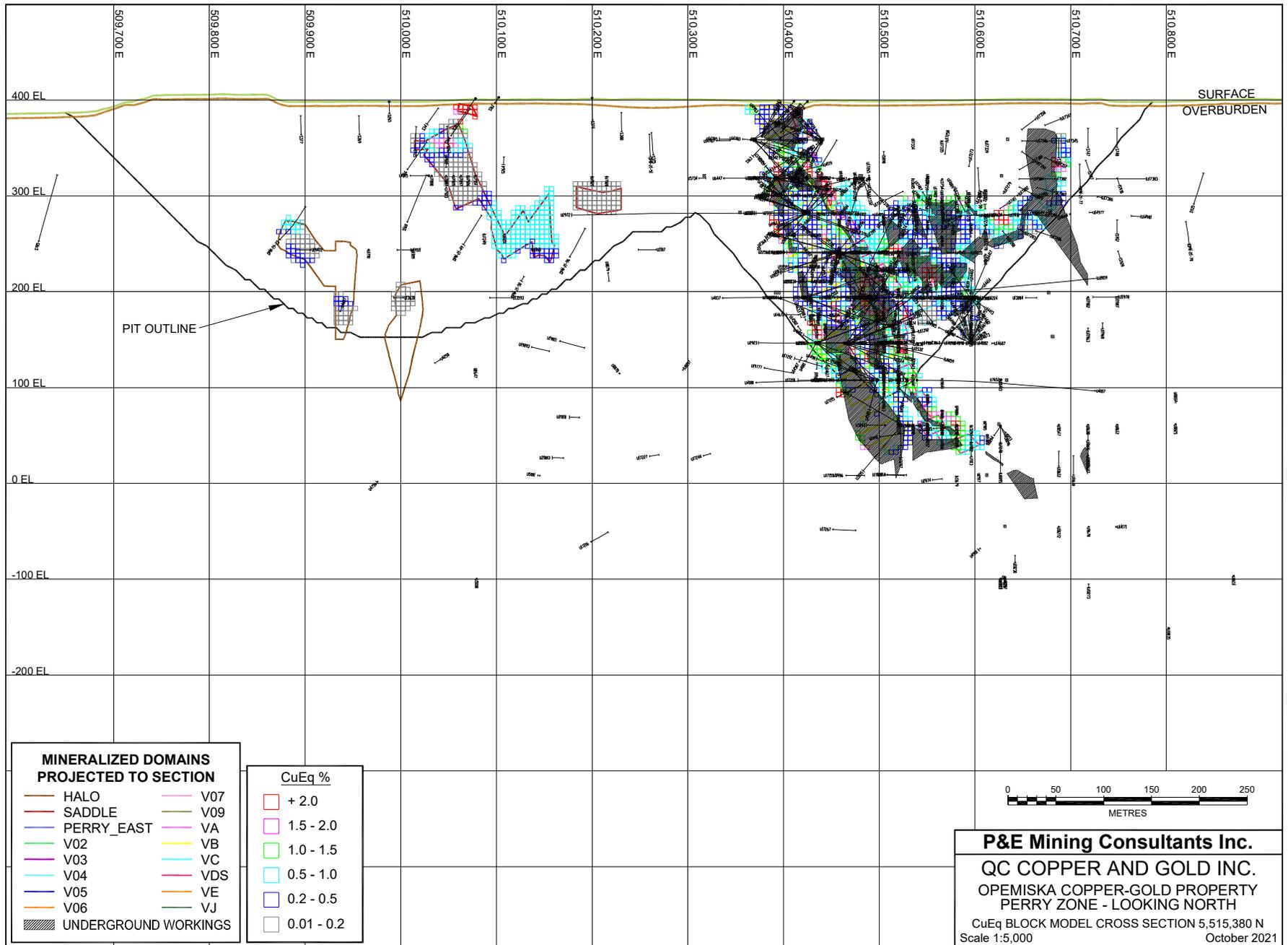


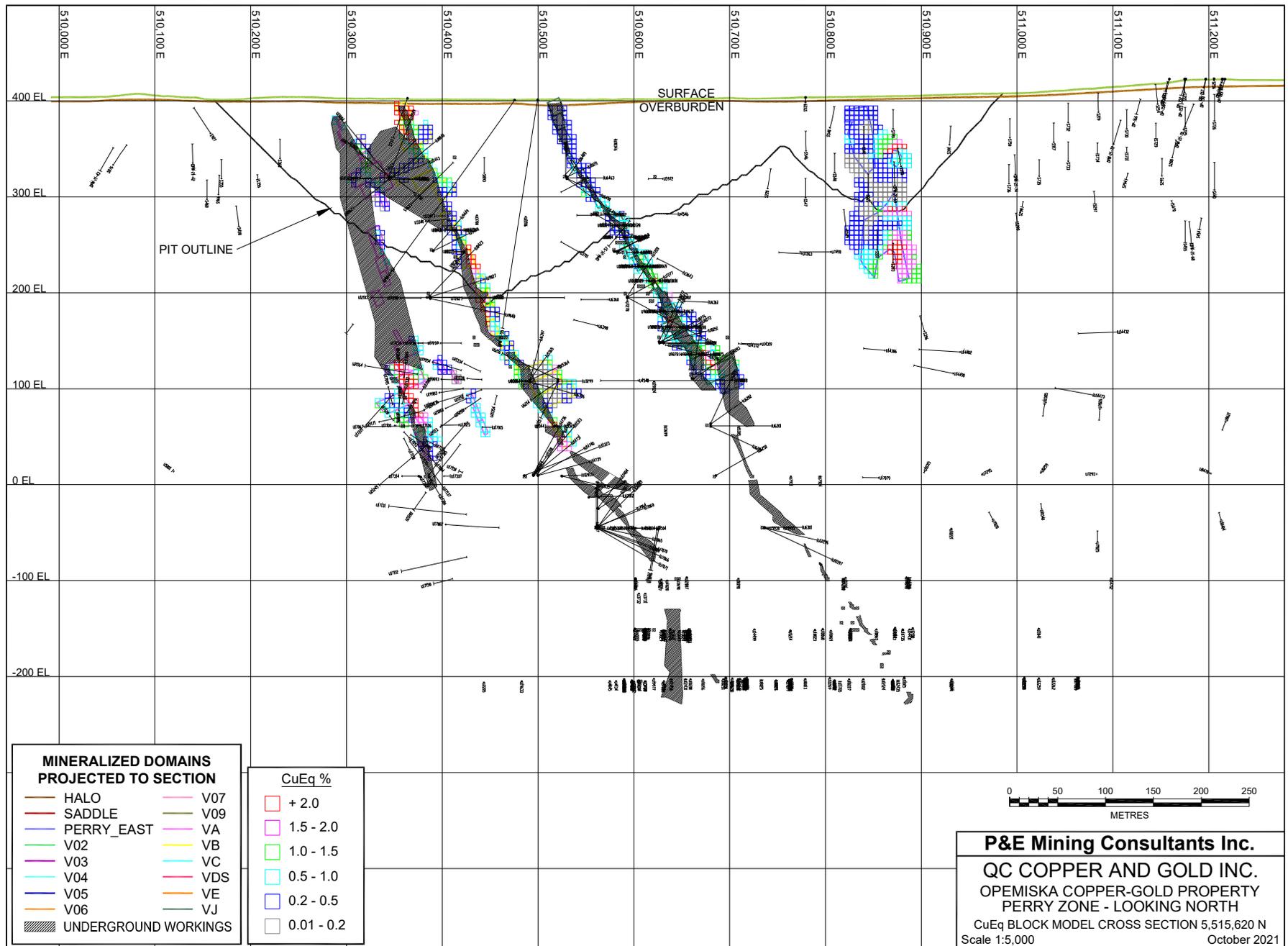


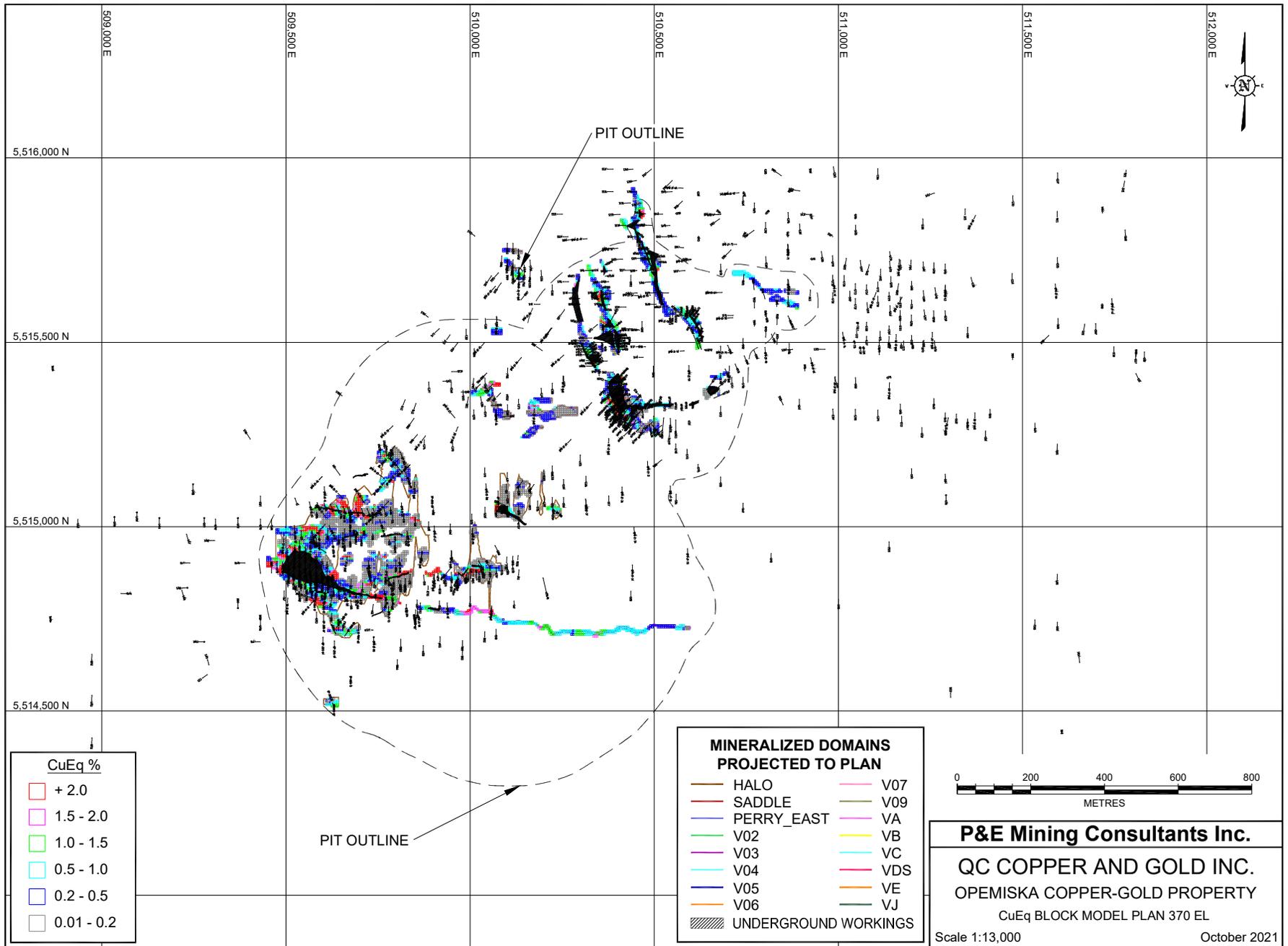
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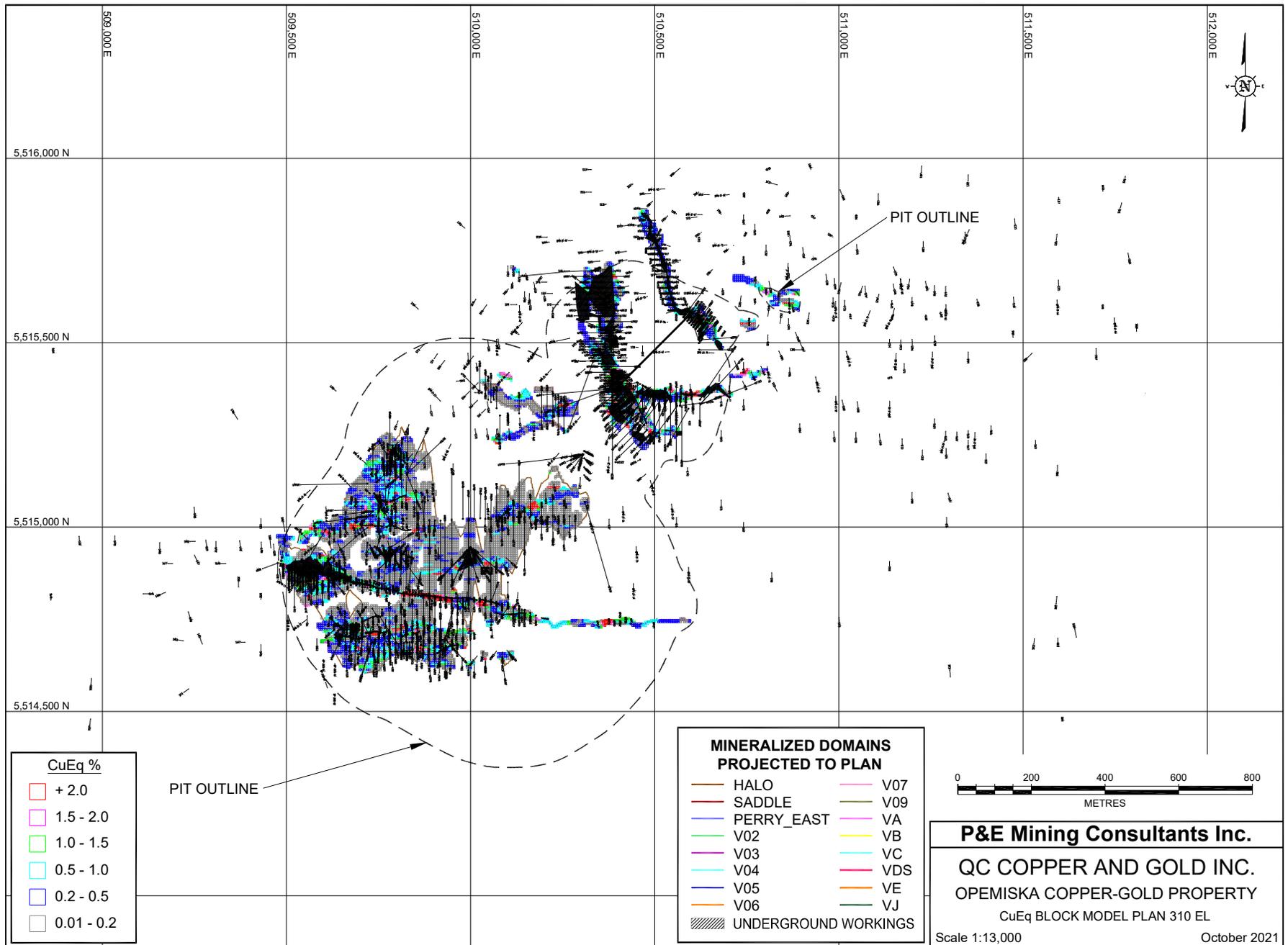


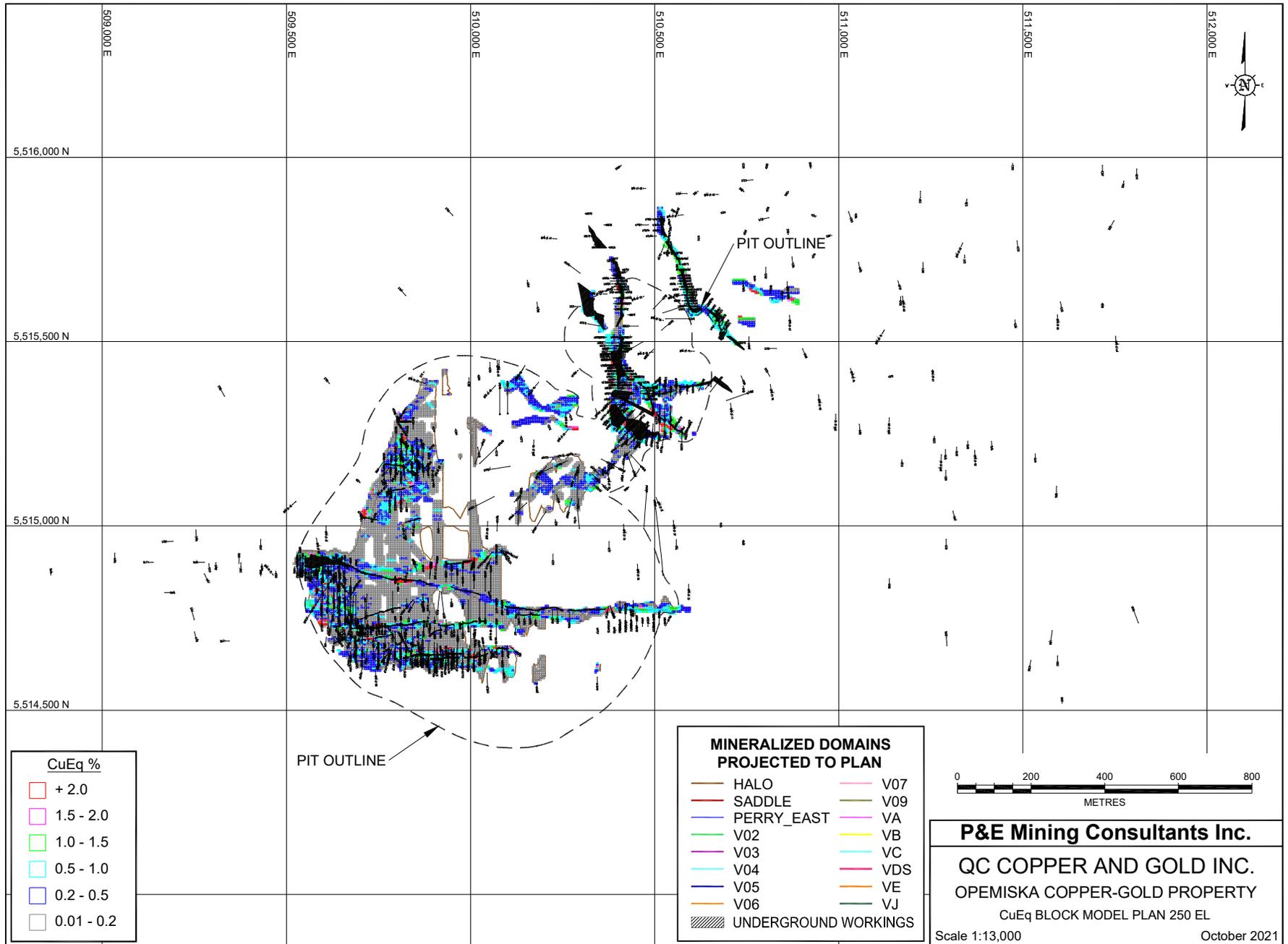




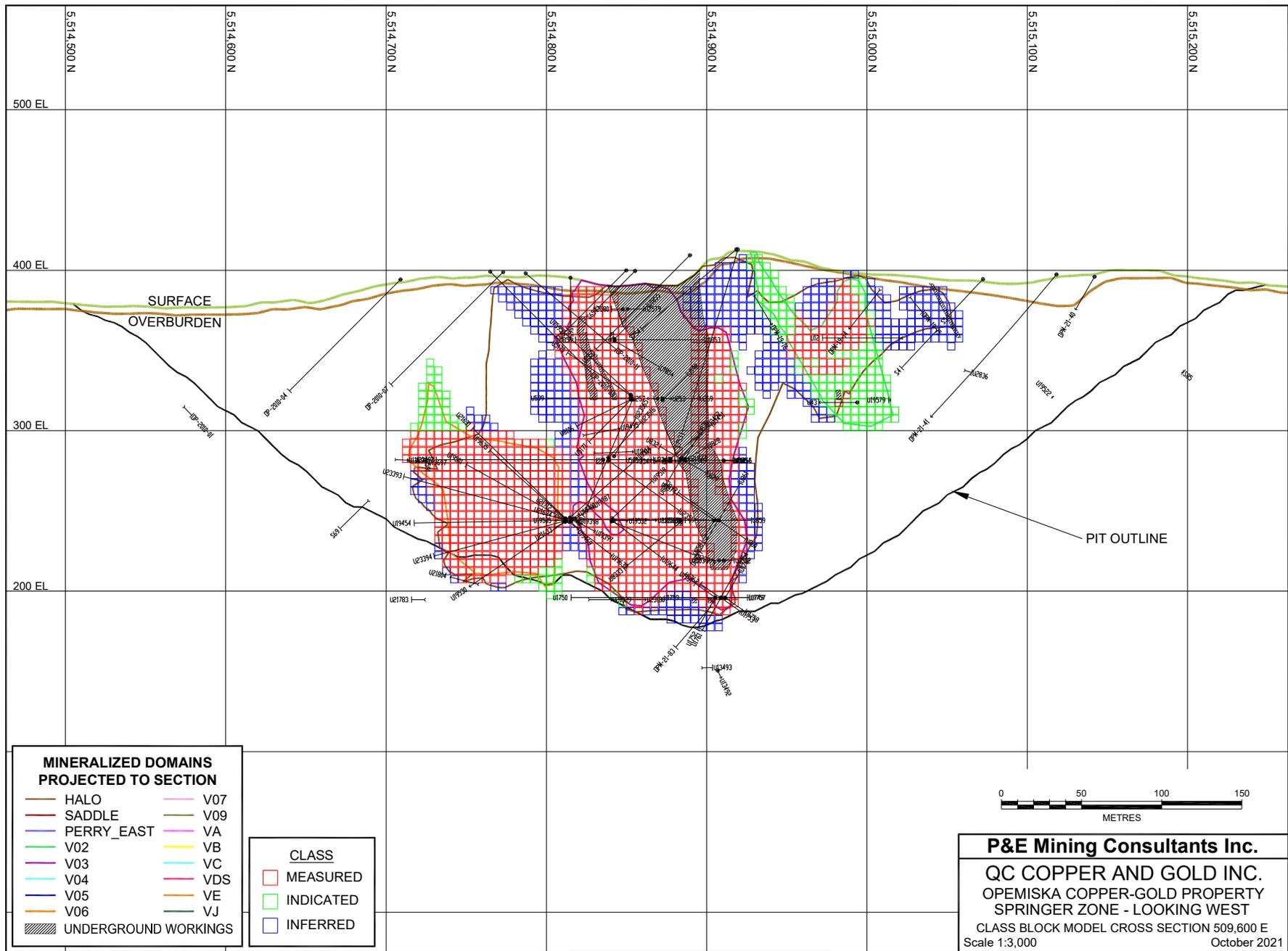


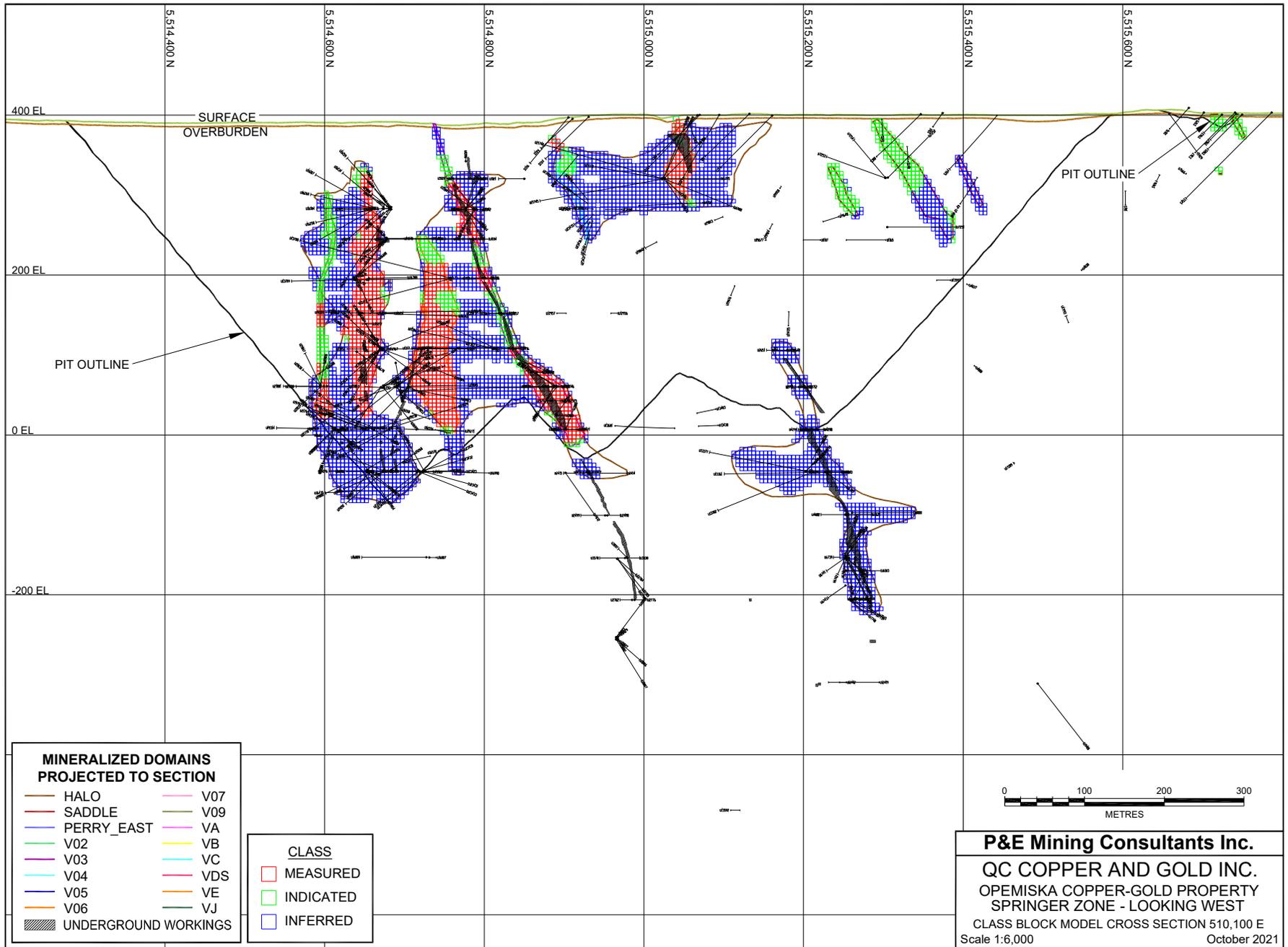


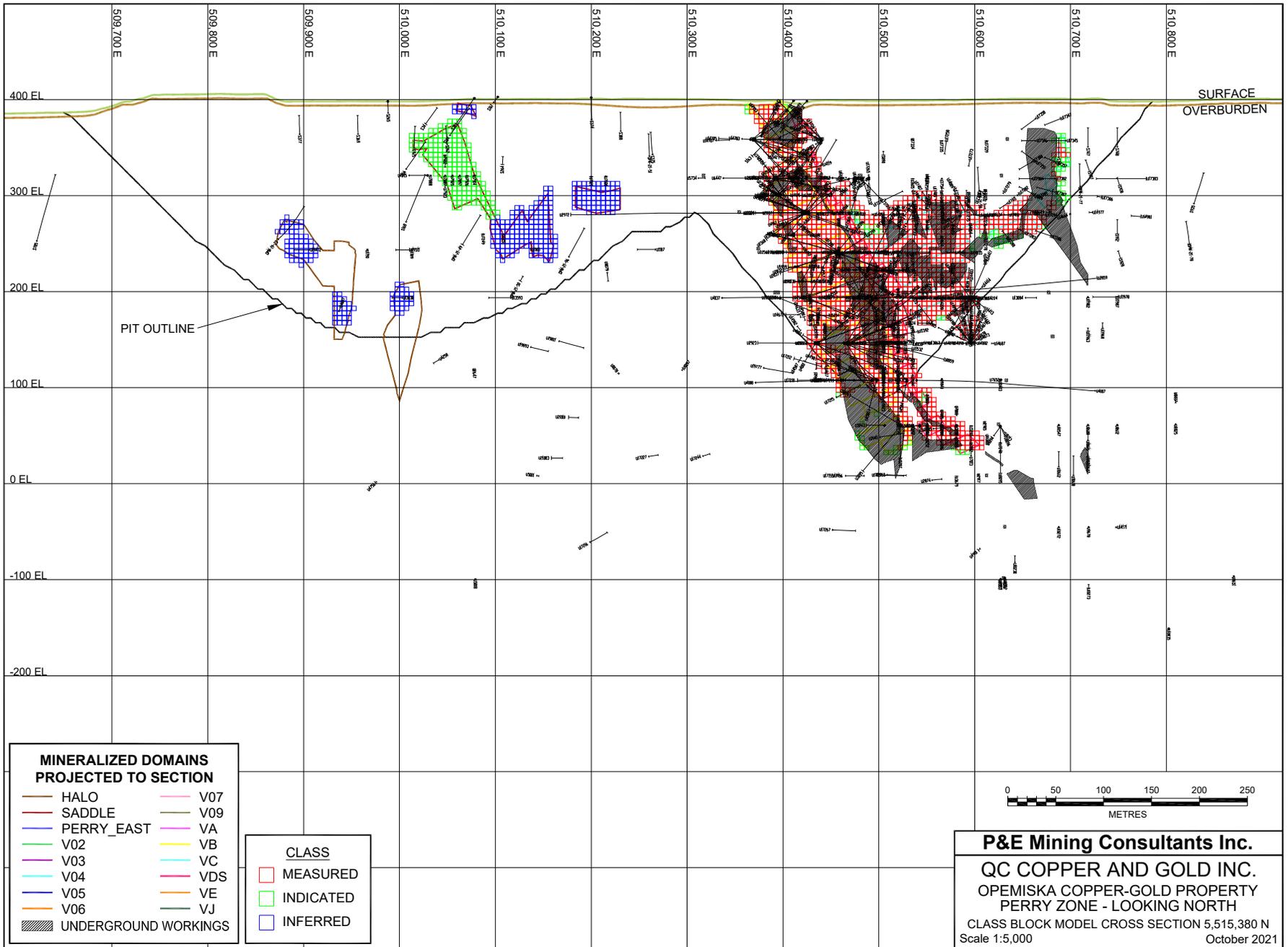


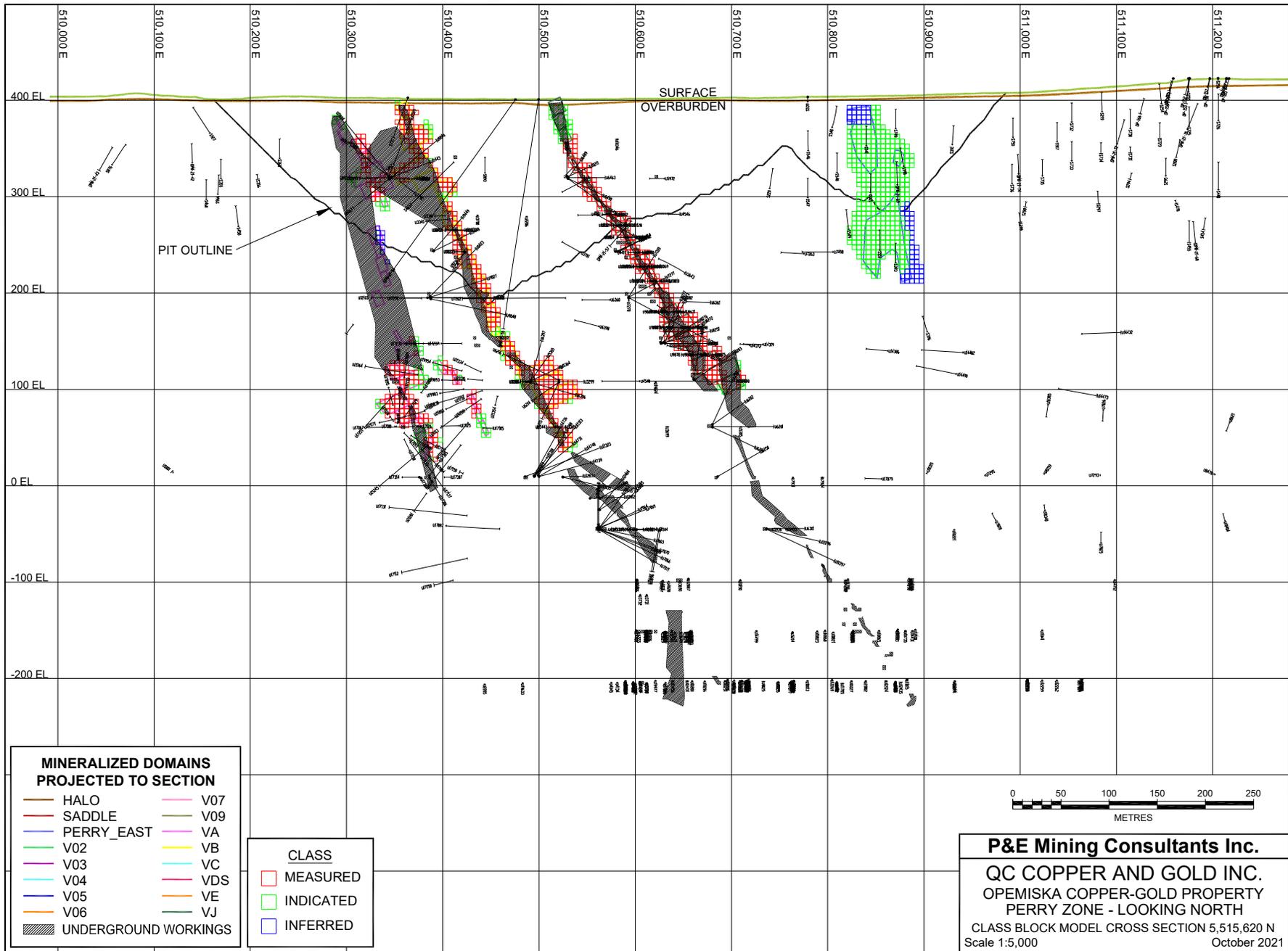


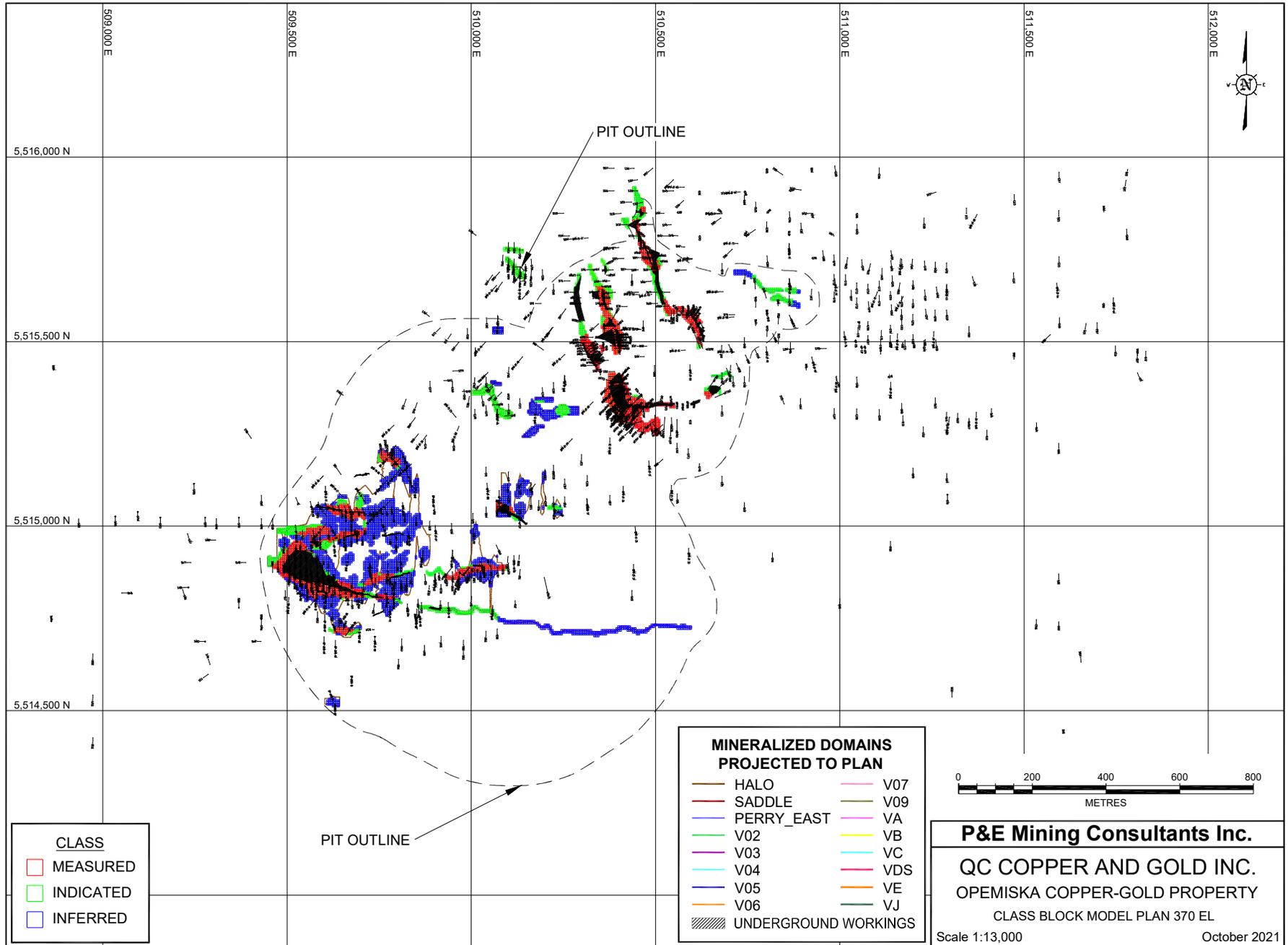
APPENDIX G CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS

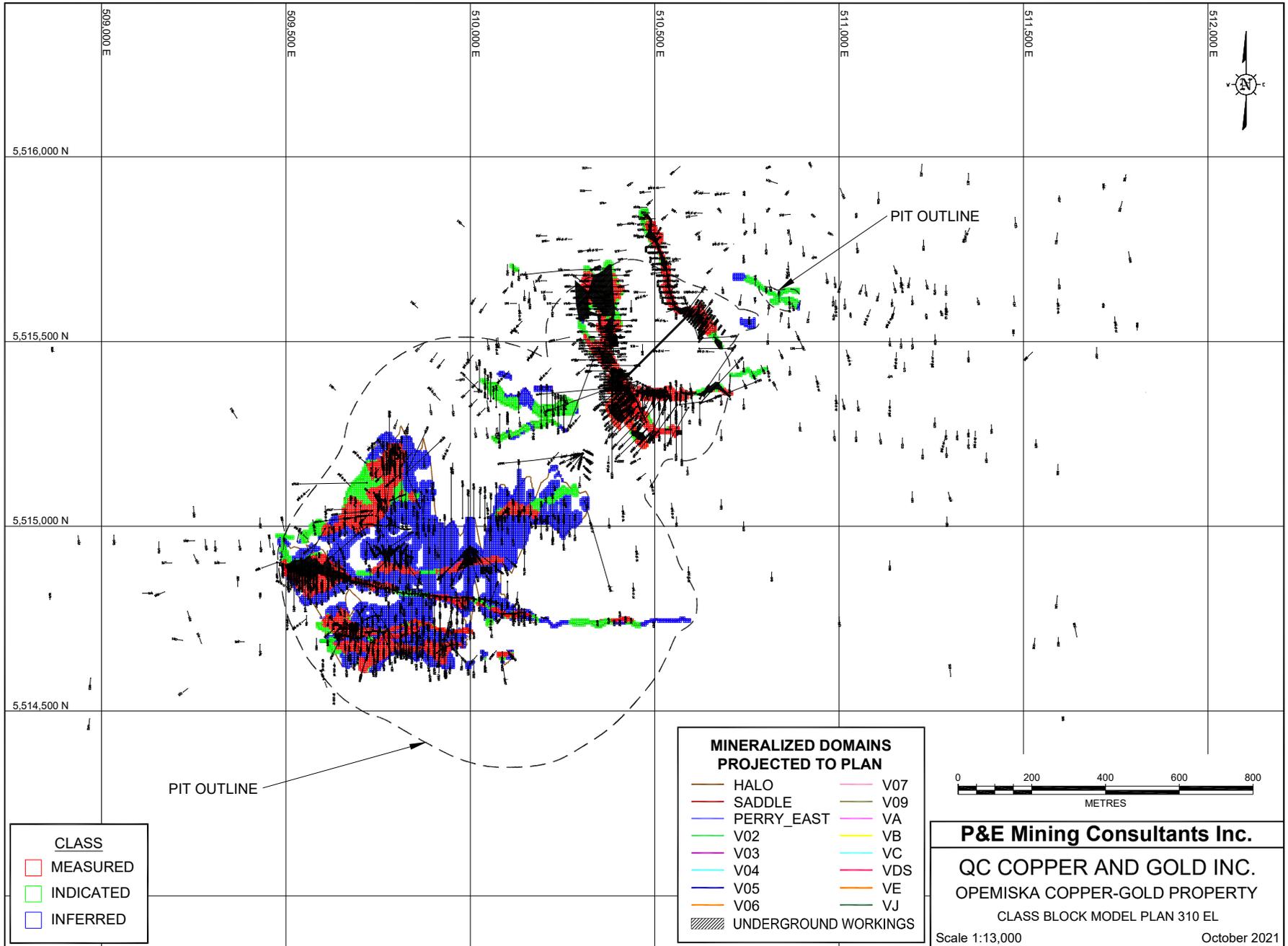


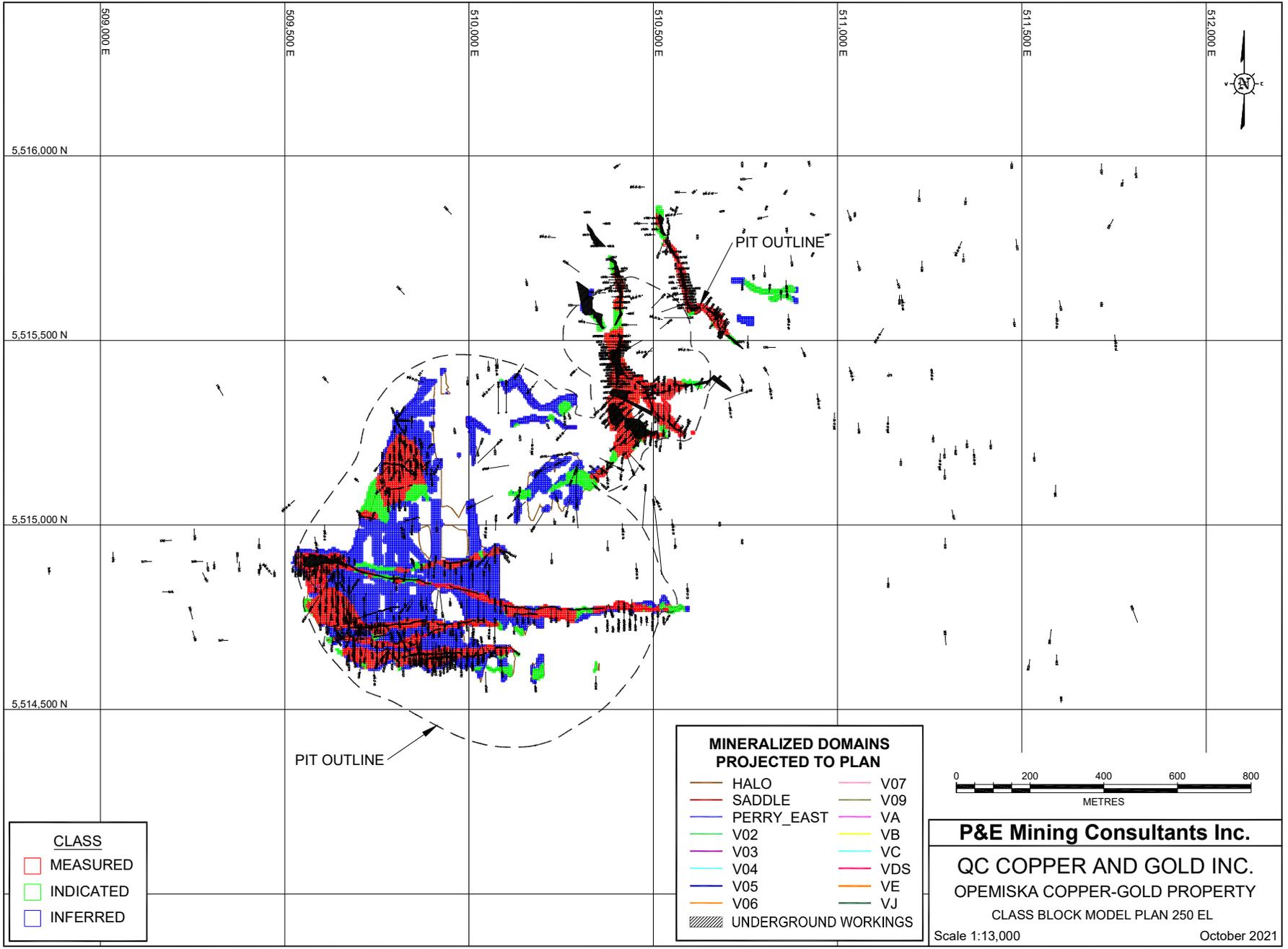












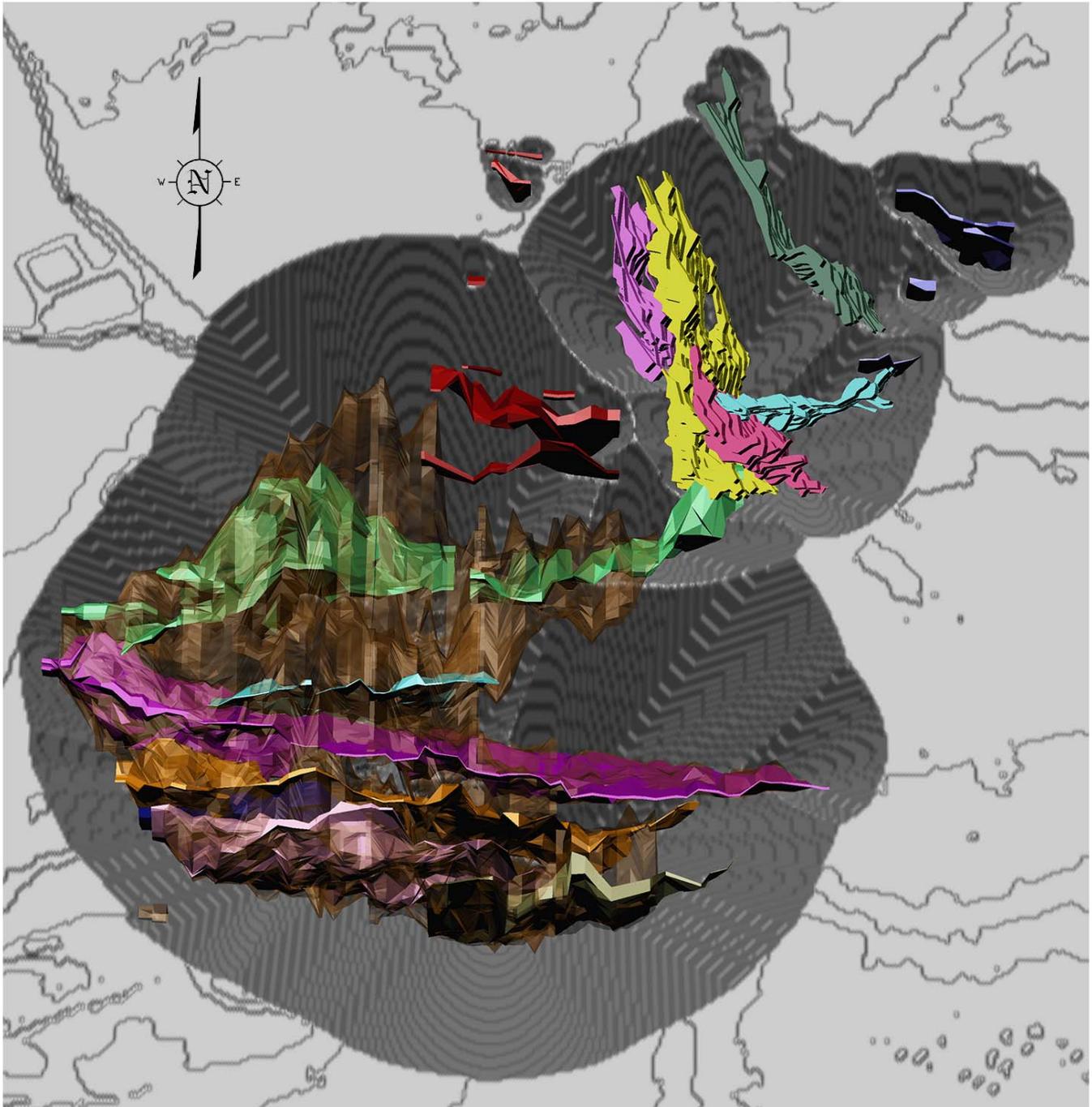
P&E Mining Consultants Inc.

QC COPPER AND GOLD INC.
 OPEMISKA COPPER-GOLD PROPERTY
 CLASS BLOCK MODEL PLAN 250 EL

Scale 1:13,000 October 2021

APPENDIX H OPTIMIZED PIT SHELL

OPEMISKA COPPER-GOLD PROPERTY OPTIMIZED PIT SHELL



 HALO	 V03	 V07	 VC
 SADDLE	 V04	 V09	 VDS
 PERRY_EAST	 V05	 VA	 VE
 V02	 V06	 VB	 VJ

APPENDIX I DENSITY MEASUREMENTS COMPLETED ON DRILL CORE WITH SUMMARY LOGS

<p align="center">TABLE I.1 DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS</p>								
Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-16-01	3.8	20.18	359.11	1055.7	699.1	356.6	2.96	Leuco-gabbro
OPM-19-01	6.6	18.48	328.86	956.2	633.3	322.9	2.96	Qtz-sulphide-magnetite Vein
OPM-19-01	10.3	23.85	424.42	1246.1	824.1	422.0	2.95	Leuco-gabbro
OPM-19-01	13.5	21.18	376.90	1117.9	737.3	380.6	2.94	Leuco-gabbro
OPM-19-01	19.5	20.85	371.03	1101.5	732.3	369.2	2.98	Leuco-gabbro
OPM-19-01	22.9	24.80	441.32	1302.1	863.0	439.1	2.97	Leuco-gabbro chloritic
OPM-19-01	27.3	27.73	493.46	1473.5	984.4	489.1	3.01	Gabbro Altered Mineralized
OPM-19-01	30.9	24.58	437.41	1337.6	899.9	437.7	3.06	Leuco-gabbro
OPM-19-01	32.5	16.08	286.15	836.4	549.1	287.3	2.91	Gabbro Altered Mineralized
OPM-19-01	35.8	17.38	309.28	907.8	604.2	303.6	2.99	Gabbro Altered Mineralized
OPM-19-01	41.2	15.40	274.05	781.3	512.3	269.0	2.90	Leuco-gabbro chloritic
OPM-19-01	44.2	13.50	240.24	673.2	439.8	233.4	2.88	Gabbro Altered Mineralized
OPM-19-01	49.9	15.65	278.50	827.2	548.6	278.6	2.97	Leuco-gabbro chloritic
OPM-19-01	53.6	20.38	362.67	1064.0	704.9	359.1	2.96	Gabbro Altered Mineralized
OPM-19-01	57.8	19.00	338.11	954.4	617.1	337.3	2.83	Gabbro Altered Mineralized
OPM-19-01	60.8	19.45	346.12	994.4	647.3	347.1	2.86	Leuco-gabbro altered
OPM-19-01	65.3	19.63	349.32	973.3	628.6	344.7	2.82	Gabbro Altered Mineralized
OPM-19-01	70.3	22.15	394.17	1173.4	782.6	390.8	3.00	Leuco-Gabbro chloritic
OPM-19-01	74.1	13.65	242.91	947.0	711.8	235.2	4.03	Massive magnetite vein + cpy
OPM-19-01	78.0	14.00	249.13	717.3	471.5	245.8	2.92	Leuco-gabbro
OPM-19-01	83.0	16.25	289.17	853.3	566.9	286.4	2.98	Leuco-gabbro
OPM-19-01	87.6	17.65	314.09	910.3	596.5	313.8	2.90	Leuco-gabbro
OPM-19-01	91.5	18.15	322.98	939.0	619.0	320.0	2.93	Leuco-gabbro slightly altered

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-01	96.9	17.78	316.40	896.3	583.5	312.8	2.87	Gabbro Altered Mineralized
OPM-19-01	101.8	21.85	388.83	1111.0	727.5	383.5	2.90	Gabbro Altered Mineralized
OPM-19-01	105.1	18.75	333.66	963.3	633.1	330.2	2.92	Gabbro Altered Mineralized
OPM-19-01	109.2	17.80	316.76	919.3	606.9	312.4	2.94	Gabbro Altered Mineralized
OPM-19-01	114.4	17.28	307.50	885.1	577.3	307.8	2.88	Gabbro Altered Mineralized
OPM-19-01	117.2	15.23	271.02	779.5	511.4	268.1	2.91	Leuco-gabbro
OPM-19-01	121.4	15.48	275.47	847.0	572.6	274.4	3.09	Melano-gabbro
OPM-19-01	124.8	15.40	274.05	822.4	549.6	272.8	3.01	Leuco-gabbro magnetic
OPM-19-01	128.5	16.90	300.74	897.3	596.8	300.5	2.99	Leuco-gabbro
OPM-19-01	132.8	19.08	339.53	1036.6	697.2	339.4	3.05	Leuco-gabbro
OPM-19-01	136.7	20.25	360.35	1054.7	694.5	360.2	2.93	Leuco-gabbro
OPM-19-02	4.8	16.05	285.61	829.4	546.8	282.6	2.93	Gabbro Altered Mineralized
OPM-19-02	9.7	18.28	325.30	981.9	657.5	324.4	3.03	Gabbro Altered Mineralized
OPM-19-02	11.2	20.83	370.68	1096.6	722.2	374.4	2.93	Gabbro Altered Mineralized
OPM-19-02	15.4	12.23	217.64	612.6	397.2	215.4	2.84	Diorite
OPM-19-02	21.0	14.50	258.03	783.0	524.5	258.5	3.03	Melano - Leuco gabbro
OPM-19-02	26.5	16.45	292.73	869.9	577.9	292.0	2.98	Melano - Leuco gabbro
OPM-19-02	29.5	21.68	385.80	1145.2	762.5	382.7	2.99	Melano - Leuco gabbro
OPM-19-02	33.2	18.04	321.03	960.4	634.5	325.9	2.95	Melano - Leuco gabbro
OPM-19-02	35.5	18.60	330.99	986.2	654.6	331.6	2.97	Melano - Leuco gabbro
OPM-19-02	37.8	15.23	271.02	797.9	531.1	266.8	2.99	Melano - Leuco gabbro
OPM-19-02	42.0	14.05	250.02	752.1	503.8	248.3	3.03	Melano - Leuco gabbro
OPM-19-02	42.9	23.50	418.19	1251.0	836.4	414.6	3.02	Melano - Leuco gabbro
OPM-19-02	46.9	13.18	234.54	675.8	442.9	232.9	2.90	Leuco-gabbro
OPM-19-02	50.6	21.25	378.15	1457.6	1082.7	374.9	3.89	High sulphide QTZ vein
OPM-19-02	51.7	20.00	355.91	1008.4	650.8	357.6	2.82	Leuco-gabbro
OPM-19-02	56.1	16.98	302.16	822.7	522.7	300.0	2.74	Leuco-gabbro

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DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-02	59.8	13.23	235.43	676.7	444.5	232.2	2.91	Leuco-gabbro altered
OPM-19-02	64.3	13.85	246.46	726.9	482.2	244.7	2.97	Melano - Leuco gabbro
OPM-19-02	67.1	15.63	278.14	825.8	546.4	279.4	2.96	Melano - Leuco gabbro
OPM-19-02	68.1	25.50	453.78	1303.3	852.7	450.6	2.89	Melano - Leuco gabbro
OPM-19-02	75.4	19.58	348.43	1055.8	707.5	348.3	3.03	Melano - Leuco gabbro
OPM-19-02	78.2	18.13	322.63	943.4	617.5	325.9	2.89	Melano - Leuco gabbro
OPM-19-02	81.5	23.23	413.38	1175.6	762.9	412.7	2.85	Gabbro Altered Mineralized
OPM-19-02	85.4	19.73	351.10	1010.1	659.4	350.7	2.88	Gabbro Altered Mineralized
OPM-19-02	90.0	19.88	353.77	1049.6	703.3	346.3	3.03	Gabbro Altered Mineralized
OPM-19-02	95.8	20.13	358.22	1029.9	671.5	358.4	2.87	Gabbro Altered Mineralized
OPM-19-02	100.0	22.23	395.59	1126.1	734.1	392.0	2.87	Gabbro Altered Mineralized
OPM-19-02	104.3	20.73	368.90	1158.8	793.1	365.7	3.17	High sulphide QTZ vein
OPM-19-02	106.0	17.78	316.40	948.6	628.8	319.8	2.97	Leuco-gabbro
OPM-19-03	3.2	11.78	209.63	575.6	362.3	213.3	2.70	Rhyolite
OPM-19-03	9.1	11.65	207.32	556.9	350.7	206.2	2.70	Rhyolite
OPM-19-03	11.0	15.50	275.83	746.6	468.5	278.1	2.68	Rhyolite
OPM-19-03	18.2	18.38	327.08	892.9	560.7	332.2	2.69	Rhyolite
OPM-19-03	21.0	15.20	270.49	759.2	481.9	277.3	2.74	Rhyolite
OPM-19-03	25.3	19.80	352.35	947.3	596.1	351.2	2.70	Rhyolite
OPM-19-03	28.4	14.35	255.36	676.8	423.8	253.0	2.68	Rhyolite
OPM-19-03	34.6	17.75	315.87	848.3	530.2	318.1	2.67	Rhyolite
OPM-19-03	38.7	12.78	227.42	617.7	390.0	227.7	2.71	Rhyolite
OPM-19-03	43.9	14.65	260.70	693.6	431.0	262.6	2.64	Rhyolite
OPM-19-03	47.0	14.13	251.45	680.1	428.1	252.0	2.70	Rhyolite
OPM-19-03	49.3	15.50	275.83	753.1	471.6	281.5	2.68	Rhyolite
OPM-19-03	55.2	13.50	240.24	622.4	386.3	236.1	2.64	Rhyolite
OPM-19-03	57.0	13.20	234.90	651.7	415.2	236.5	2.76	Rhyolite

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Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-03	59.2	14.80	263.37	758.7	492.5	266.2	2.85	Rhyolite
OPM-19-03	61.0	18.95	337.22	934.9	595.2	339.7	2.75	Rhyolite
OPM-19-03	66.8	15.83	281.70	763.6	487.2	276.4	2.76	Rhyolite
OPM-19-03	72.0	17.35	308.75	834.5	518.9	315.6	2.64	Rhyolite
OPM-19-03	77.0	17.00	302.52	804.1	500.2	303.9	2.65	Rhyolite
OPM-19-03	81.5	23.23	413.38	1096.3	680.2	416.1	2.63	Rhyolite
OPM-19-03	85.0	16.90	300.74	784.9	486.8	298.1	2.63	Rhyolite
OPM-19-03	88.3	19.05	339.00	897.9	558.1	339.8	2.64	Rhyolite
OPM-19-03	91.7	15.43	274.58	702.9	436.8	266.1	2.64	Rhyolite
OPM-19-03	98.0	15.48	275.47	734.5	458.9	275.6	2.67	Rhyolite
OPM-19-03	99.2	11.08	197.17	530.5	331.1	199.4	2.66	Rhyolite
OPM-19-03	102.2	14.00	249.13	666.1	415.3	250.8	2.66	Rhyolite
OPM-19-03	109.4	13.88	247.00	657.1	410.4	246.7	2.66	Rhyolite
OPM-19-03	110.4	17.33	308.39	814.8	508.4	306.4	2.66	Rhyolite
OPM-19-04	5.4	15.50	275.83	826.0	551.3	274.7	3.01	Foliated gabbro
OPM-19-04	10.5	14.45	257.14	759.7	500.8	258.9	2.93	Foliated gabbro
OPM-19-04	12.2	21.33	379.57	1125.2	747.9	377.3	2.98	Foliated gabbro
OPM-19-04	16.4	20.75	369.25	1066.3	705.9	360.4	2.96	Foliated gabbro & min,
OPM-19-04	19.3	16.10	286.50	823.4	542.3	281.1	2.93	Melano-gabbro
OPM-19-04	23.5	21.43	381.35	1148.3	765.9	382.4	3.00	Foliated gabbro
OPM-19-04	29.4	23.90	425.31	1249.8	827.8	422.0	2.96	Foliated gabbro
OPM-19-04	35.0	20.35	362.13	1068.1	709.3	358.8	2.98	Foliated gabbro
OPM-19-04	39.0	18.43	327.97	981.2	652.3	328.9	2.98	Foliated gabbro
OPM-19-04	41.8	14.55	258.92	748.2	492.5	255.7	2.93	Foliated gabbro
OPM-19-04	47.3	20.63	367.12	1085.6	720.4	365.2	2.97	Foliated gabbro
OPM-19-04	51.0	15.45	274.94	814.1	537.6	276.5	2.94	Foliated gabbro
OPM-19-04	55.5	18.50	329.21	959.9	636.9	323.0	2.97	Foliated gabbro

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Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-04	58.5	24.33	432.96	1321.6	892.7	428.9	3.08	Leuco-gabbro
OPM-19-04	64.3	23.23	413.38	1231.5	817.5	414.0	2.97	Leuco-gabbro
OPM-19-04	68.8	14.78	263.01	794.5	528.4	266.1	2.99	Melano-gabbro
OPM-19-04	73.5	15.58	277.25	801.6	530.2	271.4	2.95	Melano-gabbro
OPM-19-04	75.6	18.03	320.85	947.7	628.4	319.3	2.97	Melano-gabbro
OPM-19-04	79.6	19.60	348.79	985.2	636.4	348.8	2.82	Leuco-gabbro
OPM-19-04	83.7	18.20	323.87	944.8	618.4	326.4	2.89	Leuco-Melano gabbro
OPM-19-04	89.1	22.98	408.94	1235.2	826.4	408.8	3.02	Leuco-Melano gabbro
OPM-19-04	92.8	22.90	407.51	1152.0	746.1	405.9	2.84	Leuco-Melano gabbro
OPM-19-04	96.5	21.25	378.15	1098.5	722.5	376.0	2.92	Leuco-Melano gabbro
OPM-19-04	100.4	15.90	282.95	826.0	545.6	280.4	2.95	Melano-gabbro
OPM-19-04	104.1	19.00	338.11	965.1	625.4	339.7	2.84	Melano-gabbro
OPM-19-04	107.6	17.85	317.65	917.0	601.1	315.9	2.90	Melano-gabbro
OPM-19-04	111.4	19.63	349.32	974.5	625.3	349.2	2.79	Diorite
OPM-19-04	115.3	19.53	347.54	1023.2	670.4	352.8	2.90	Melano-gabbro
OPM-19-04	121.5	23.30	414.63	1228.6	814.2	414.4	2.96	Melano-gabbro
OPM-19-04	124.7	19.15	340.78	1037.4	691.0	346.4	2.99	Melano-gabbro
OPM-19-04	129.8	21.25	378.15	1123.8	738.8	385.0	2.92	Leuco-Melano-gabbro
OPM-19-04	132.4	18.15	322.98	959.1	636.6	322.5	2.97	Leuco-Melano-gabbro
OPM-19-04	137.6	19.30	343.45	993.2	656.2	337.0	2.95	Melano-gabbro
OPM-19-04	142.1	18.58	330.64	994.2	658.0	336.2	2.96	Melano-gabbro
OPM-19-04	146.8	19.18	341.31	994.1	651.8	342.3	2.90	Melano-gabbro
OPM-19-04	149.0	21.28	378.68	1101.2	728.8	372.4	2.96	Melano-gabbro
OPM-19-04	153.0	20.83	370.68	1044.3	678.4	365.9	2.85	Diorite
OPM-19-04	158.3	18.03	320.85	941.9	627.2	314.7	2.99	Leuco-gabbro
OPM-19-04	160.1	18.90	336.33	978.4	650.0	328.4	2.98	Leuco-gabbro
OPM-19-04	167.0	22.90	407.51	1203.9	803.5	400.4	3.01	Leuco-gabbro

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Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-04	171.6	17.73	315.51	943.0	629.9	313.1	3.01	Leuco-gabbro
OPM-19-04	176.0	19.93	354.66	961.5	610.2	351.3	2.74	Gabbro altered
OPM-19-04	179.0	19.83	352.88	1027.7	675.6	352.1	2.92	Gabbro altered
OPM-19-04	184.8	20.03	356.44	987.5	633.6	353.9	2.79	Siliceous dyke
OPM-19-04	188.3	15.70	279.39	756.8	477.5	279.3	2.71	Qtz vein py-cpy-mag
OPM-19-04	192.1	14.80	263.37	744.3	482.7	261.6	2.85	Melano-gabbro
OPM-19-05	5.2	14.88	264.79	775.0	511.8	263.2	2.94	Foliated gabbro
OPM-19-05	8.8	18.23	324.41	955.3	628.9	326.4	2.93	Leuco-gabbro
OPM-19-05	13.8	20.40	363.02	1051.4	687.6	363.8	2.89	Foliated gabbro
OPM-19-05	17.7	19.53	347.54	1024.4	676.7	347.7	2.95	Gabbro altered - mineralized
OPM-19-05	22.1	20.75	369.25	1068.0	700.2	367.8	2.90	Leuco-gabbro
OPM-19-05	24.3	17.25	306.97	887.0	581.0	306.0	2.90	Leuco-gabbro
OPM-19-05	28.1	17.68	314.62	908.3	593.4	314.9	2.88	Leuco-gabbro
OPM-19-05	33.2	19.75	351.46	1002.2	652.3	349.9	2.86	Gabbro altered - mineralized
OPM-19-05	34.8	19.45	346.12	1013.3	665.0	348.3	2.91	Gabbro altered - mineralized
OPM-19-05	40.4	20.70	368.36	1072.2	706.0	366.2	2.93	Gabbro altered - mineralized
OPM-19-05	43.5	21.05	374.59	1053.9	682.1	371.8	2.83	Leuco-gabbro
OPM-19-05	48.0	17.98	319.96	917.1	591.5	325.6	2.82	Melano-gabbro
OPM-19-05	51.0	17.23	306.61	864.6	561.4	303.2	2.85	Melano-gabbro
OPM-19-05	57.0	18.33	326.19	1003.6	679.6	324.0	3.10	Leuco-gabbro
OPM-19-05	62.3	15.78	280.81	816.2	538.7	277.5	2.94	Leuco-gabbro
OPM-19-05	65.8	17.75	315.87	935.0	623.6	311.4	3.00	Leuco-gabbro
OPM-19-05	68.2	16.80	298.96	848.1	558.1	290.0	2.92	Leuco-gabbro
OPM-19-05	75.2	20.63	367.12	1055.3	684.7	370.6	2.85	Leuco-gabbro
OPM-19-05	79.2	13.03	231.87	656.6	424.9	231.7	2.83	Gabbro altered / diorite
OPM-19-05	82.5	18.60	330.99	943.2	607.6	335.6	2.81	Leuco-gabbro
OPM-19-05	85.0	11.88	211.41	626.3	408.1	218.2	2.87	Leuco-gabbro

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Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-05	90.0	12.05	214.43	606.8	392.7	214.1	2.83	Gabbro altered - mineralized
OPM-19-05	94.5	13.28	236.32	646.4	417.5	228.9	2.82	Gabbro altered - mineralized
OPM-19-05	97.4	22.85	406.62	1171.8	764.6	407.2	2.88	Gabbro altered - mineralized
OPM-19-06	4.1	18.90	336.33	922.8	589.4	333.4	2.77	Leuco-gabbro
OPM-19-06	7.6	14.43	256.79	770.7	510.0	260.7	2.96	Leuco-gabbro
OPM-19-06	12.0	19.50	347.01	973.5	632.4	341.1	2.85	Leuco-gabbro
OPM-19-06	17.5	20.40	363.02	1025.2	664.6	360.6	2.84	Leuco-gabbro
OPM-19-06	21.0	19.98	355.55	1050.0	693.0	357.0	2.94	Gabbro breccia
OPM-19-06	23.1	22.58	401.82	1181.8	781.1	400.7	2.95	Gabbro breccia
OPM-19-06	29.0	21.88	389.36	1155.8	772.9	382.9	3.02	Gabbro breccia
OPM-19-06	34.7	20.45	363.91	1046.6	687.1	359.5	2.91	Gabbro breccia
OPM-19-06	38.7	22.63	402.71	1185.1	784.6	400.5	2.96	Gabbro breccia
OPM-19-06	42.1	21.45	381.71	1119.4	742.3	377.1	2.97	Gabbro breccia
OPM-19-06	46.2	20.85	371.03	1084.8	717.7	367.1	2.96	Gabbro breccia
OPM-19-06	49.9	19.45	346.12	1035.8	688.7	347.1	2.98	Gabbro breccia
OPM-19-06	53.1	15.33	272.80	762.2	491.7	270.5	2.82	Gabbro altered - mineralized
OPM-19-06	56.8	15.53	276.36	825.9	553.4	272.5	3.03	Gabbro altered - mineralized
OPM-19-06	62.6	18.20	323.87	952.3	632.8	319.5	2.98	Leuco-gabbro
OPM-19-06	66.1	23.15	411.96	1231.8	817.6	414.2	2.97	Leuco-gabbro
OPM-19-06	71.0	22.10	393.28	1176.0	787.2	388.8	3.02	Leuco-gabbro
OPM-19-06	74.4	23.18	412.50	1248.5	840.0	408.5	3.06	Leuco-gabbro
OPM-19-06	80.2	23.50	418.19	1259.3	844.8	414.5	3.04	Leuco-gabbro
OPM-19-06	83.0	19.18	341.31	1010.0	669.5	340.5	2.97	Leuco-gabbro
OPM-19-06	88.8	18.15	322.98	938.0	617.1	320.9	2.92	Leuco-Melano gabbro
OPM-19-06	91.5	20.48	364.45	1108.5	743.2	365.3	3.03	Leuco-gabbro
OPM-19-06	97.4	19.90	354.13	1052.4	702.6	349.8	3.01	Melano-gabbro
OPM-19-06	100.0	16.30	290.06	824.7	540.8	283.9	2.90	Melano-gabbro

**TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS**

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-06	102.0	16.18	287.93	826.5	539.0	287.5	2.87	Melano-gabbro
OPM-19-06	108.8	18.28	325.30	999.6	674.3	325.3	3.07	Melano-gabbro
OPM-19-06	112.7	21.98	391.14	1083.1	694.9	388.2	2.79	Melano-gabbro
OPM-19-06	116.4	20.55	365.69	1075.2	713.6	361.6	2.97	Leuco-gabbro
OPM-19-06	118.9	14.35	255.36	747.8	493.6	254.2	2.94	Leuco-gabbro
OPM-19-06	122.8	18.20	323.87	898.7	578.5	320.2	2.81	Leuco-gabbro
OPM-19-06	129.6	22.18	394.70	1157.5	763.2	394.3	2.94	Gabbro breccia
OPM-19-06	132.8	18.65	331.88	990.6	660.7	329.9	3.00	Gabbro breccia
OPM-19-06	138.2	23.03	409.83	1193.5	788.0	405.5	2.94	Gabbro breccia
OPM-19-06	140.0	20.30	361.24	1025.4	666.4	359.0	2.86	Gabbro breccia
OPM-19-06	145.0	22.48	400.04	1131.4	736.3	395.1	2.86	Siliceous dyke
OPM-19-06	150.4	22.40	398.61	1148.8	755.4	393.4	2.92	Leuco-gabbro
OPM-19-06	152.7	20.93	372.46	1108.6	738.3	370.3	2.99	Gabbro altered - mineralized
OPM-19-06	160.3	17.95	319.43	922.3	603.7	318.6	2.89	Melano-gabbro
OPM-19-06	163.3	22.71	404.13	1160.6	761.7	398.9	2.91	Melano-gabbro
OPM-19-06	165.8	23.18	412.50	1137.9	728.8	409.1	2.78	Melano-gabbro
OPM-19-06	171.9	20.40	363.02	1072.2	715.1	357.1	3.00	Leuco-gabbro
OPM-19-06	177.0	21.30	379.04	1110.5	739.6	370.9	2.99	Melano-gabbro
OPM-19-06	180.2	22.40	398.61	1172.7	781.2	391.5	3.00	Leuco-gabbro
OPM-19-06	184.0	16.88	300.38	882.2	579.8	302.4	2.92	Grey Dyke
OPM-19-06	188.0	16.28	289.71	867.5	583.9	283.6	3.06	Melano-gabbro
OPM-19-06	191.3	16.00	284.72	841.8	560.6	281.2	2.99	Melano-gabbro
OPM-19-06	196.4	14.40	256.25	765.2	509.5	255.7	2.99	Gabbro altered - mineralized
OPM-19-06	200.3	20.93	372.46	1038.6	668.9	369.7	2.81	Gabbro altered - mineralized
OPM-19-06	203.9	16.65	296.29	823.9	534.5	289.4	2.85	Gabbro altered - mineralized
OPM-19-06	209.2	21.63	384.91	1126.5	749.3	377.2	2.99	Gabbro altered - mineralized
OPM-19-06	213.1	15.53	276.36	792.4	520.9	271.5	2.92	Gabbro altered - mineralized

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-06	215.6	17.83	317.29	869.4	557.1	312.3	2.78	Gabbro altered - mineralized
OPM-19-06	220.9	17.95	319.43	931.4	617.8	313.6	2.97	Gabbro altered - mineralized
OPM-19-06	224.3	15.90	282.95	826.4	547.5	278.9	2.96	Gabbro altered - mineralized
OPM-19-07	5.0	20.58	366.23	1094.5	726.4	368.1	2.97	Gabbro breccia
OPM-19-07	7.8	17.15	305.19	899.2	595.6	303.6	2.96	Gabbro altered - mineralized
OPM-19-07	16.8	22.25	395.95	1180.4	783.1	397.3	2.97	Pyrite Magnetite vein
OPM-19-07	21.2	18.20	323.87	943.1	617.8	325.3	2.90	Foliated gabbro
OPM-19-07	23.2	16.85	299.85	898.8	592.6	306.2	2.94	Foliated gabbro
OPM-19-07	30.4	18.23	324.41	930.3	604.4	325.9	2.85	Leuco gabbro
OPM-19-07	31.6	15.13	269.24	783.9	512.9	271.0	2.89	Leuco gabbro
OPM-19-07	38.3	15.18	270.13	794.1	523.7	270.4	2.94	Gabbro altered - mineralized
OPM-19-07	42.2	21.10	375.48	1099.7	720.8	378.9	2.90	Leuco gabbro
OPM-19-07	46.1	22.70	403.95	1136.0	729.9	406.1	2.80	Leuco gabbro
OPM-19-07	51.3	22.25	395.95	1167.7	771.6	396.1	2.95	Leuco gabbro
OPM-19-07	55.0	18.43	327.97	949.6	620.4	329.2	2.88	Leuco gabbro
OPM-19-07	59.6	23.33	415.16	1241.9	825.3	416.6	2.98	Leuco gabbro
OPM-19-07	63.4	21.80	387.94	1118.9	736.2	382.7	2.92	Leuco gabbro
OPM-19-07	68.0	15.98	284.37	862.7	574.6	288.1	2.99	Leuco gabbro
OPM-19-07	71.5	22.65	403.06	1143.6	748.1	395.5	2.89	Leuco gabbro
OPM-19-07	75.3	14.05	250.02	731.9	480.7	251.2	2.91	Leuco gabbro
OPM-19-07	79.7	15.53	276.36	814.2	536.9	277.3	2.94	Leuco gabbro
OPM-19-07	82.0	20.00	355.91	1040.1	684.8	355.3	2.93	Leuco gabbro
OPM-19-07	87.6	13.10	233.12	681.2	445.9	235.3	2.90	Foliated gabbro
OPM-19-07	91.4	19.00	338.11	989.3	651.1	338.2	2.93	Foliated gabbro
OPM-19-07	94.8	19.43	345.76	1013.7	660.1	353.6	2.87	Gabbro altered - mineralized
OPM-19-07	99.0	18.75	333.66	957.9	625.9	332.0	2.89	Gabbro altered - mineralized
OPM-19-07	101.2	19.53	347.54	1033.5	684.9	348.6	2.96	Melano gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-07	106.4	15.80	281.17	819.0	536.1	282.9	2.90	Melano gabbro
OPM-19-07	109.1	16.30	290.06	811.1	528.9	282.2	2.87	Melano gabbro
OPM-19-07	115.5	22.18	394.70	1168.5	772.1	396.4	2.95	Melano gabbro
OPM-19-07	119.3	14.10	250.91	749.5	491.7	257.8	2.91	Melano gabbro
OPM-19-07	122.0	23.20	412.85	1197.3	789.2	408.1	2.93	Melano gabbro
OPM-19-07	124.3	20.90	371.92	1088.2	717.4	370.8	2.93	Melano gabbro
OPM-19-07	129.2	17.28	307.50	883.3	577.8	305.5	2.89	Melano gabbro
OPM-19-07	134.0	14.75	262.48	774.5	509.6	264.9	2.92	Melano gabbro
OPM-19-07	136.2	14.63	260.35	753.8	486.7	267.1	2.82	Melano gabbro
OPM-19-08	3.3	20.85	371.03	1137.6	767.8	369.8	3.08	Foliated gabbro
OPM-19-08	5.6	18.15	322.98	1033.6	703.9	329.7	3.13	Foliated gabbro
OPM-19-08	10.7	17.05	303.41	926.0	624.9	301.1	3.08	Foliated gabbro
OPM-19-08	15.7	17.55	312.31	947.7	638.6	309.1	3.07	Foliated gabbro
OPM-19-08	19.3	20.13	358.22	1063.3	708.3	355.0	3.00	Foliated gabbro
OPM-19-08	25.1	19.65	349.68	1040.1	690.3	349.8	2.97	Foliated gabbro
OPM-19-08	27.6	18.63	331.53	1029.5	696.5	333.0	3.09	Foliated gabbro
OPM-19-08	30.8	15.20	270.49	857.4	589.4	268.0	3.20	Foliated gabbro
OPM-19-08	38.0	17.60	313.20	965.1	646.6	318.5	3.03	Foliated gabbro
OPM-19-08	42.9	13.30	236.68	745.7	501.3	244.4	3.05	Foliated gabbro
OPM-19-08	45.5	19.43	345.76	1066.3	724.1	342.2	3.12	Foliated gabbro
OPM-19-08	49.4	15.08	268.35	844.7	571.5	273.2	3.09	Foliated gabbro
OPM-19-08	53.0	14.90	265.15	801.3	540.0	261.3	3.07	Foliated gabbro
OPM-19-08	57.2	17.28	307.50	922.9	617.6	305.3	3.02	Foliated gabbro
OPM-19-08	63.1	17.43	310.17	941.3	632.3	309.0	3.05	Foliated gabbro
OPM-19-08	67.0	17.38	309.28	944.6	635.2	309.4	3.05	Foliated gabbro
OPM-19-08	69.8	17.95	319.43	1013.5	693.1	320.4	3.16	Foliated gabbro
OPM-19-08	75.2	20.63	367.12	1050.8	684.9	365.9	2.87	Foliated gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-08	78.3	18.48	328.86	993.1	668.2	324.9	3.06	Foliated gabbro
OPM-19-08	81.5	18.15	322.98	962.7	635.2	327.5	2.94	Foliated gabbro
OPM-19-08	85.9	14.88	264.79	800.7	534.1	266.6	3.00	Foliated gabbro
OPM-19-08	90.3	16.00	284.72	826.8	542.0	284.8	2.90	Foliated gabbro
OPM-19-08	95.0	12.53	222.98	626.7	412.1	214.6	2.92	Foliated gabbro
OPM-19-08	97.0	10.80	192.19	553.7	362.6	191.1	2.90	Foliated gabbro
OPM-19-08	103.0	14.93	265.68	814.6	546.3	268.3	3.04	Foliated gabbro
OPM-19-08	106.8	16.03	285.26	810.2	524.9	285.3	2.84	Grey Dyke
OPM-19-08	110.0	19.10	339.89	993.8	655.7	338.1	2.94	Foliated gabbro
OPM-19-08	116.5	19.68	350.21	1018.0	668.7	349.3	2.91	Upper green pyroxenite
OPM-19-08	117.4	19.20	341.67	986.3	636.3	350.0	2.82	Upper green pyroxenite
OPM-19-08	122.3	18.85	335.44	971.3	635.0	336.3	2.89	Upper green pyroxenite
OPM-19-08	126.2	18.80	334.55	957.7	625.1	332.6	2.88	Grey Dyke
OPM-19-08	131.8	20.93	372.46	1124.0	753.9	370.1	3.04	Upper green pyroxenite
OPM-19-08	134.0	19.20	341.67	1035.2	689.8	345.4	3.00	Upper green pyroxenite
OPM-19-08	139.6	22.63	402.71	1191.9	788.8	403.1	2.96	Upper green pyroxenite
OPM-19-08	143.0	20.45	363.91	1072.5	714.7	357.8	3.00	Upper green pyroxenite
OPM-19-08	147.1	18.23	324.41	930.1	611.0	319.1	2.91	Upper green pyroxenite
OPM-19-08	151.8	18.85	335.44	995.4	665.6	329.8	3.02	Upper green pyroxenite
OPM-19-08	156.3	17.70	314.98	913.4	600.7	312.7	2.92	Upper green pyroxenite
OPM-19-08	162.7	17.75	315.87	909.9	597.2	312.7	2.91	Upper green pyroxenite
OPM-19-08	164.6	14.40	256.25	731.0	475.2	255.8	2.86	Upper green pyroxenite
OPM-19-08	170.5	15.43	274.58	788.1	517.7	270.4	2.91	Upper green pyroxenite
OPM-19-08	172.2	19.58	348.43	1050.6	699.8	350.8	2.99	Upper green pyroxenite
OPM-19-08	179.7	21.80	387.94	1125.0	737.5	387.5	2.90	Upper green pyroxenite
OPM-19-08	183.2	16.40	291.84	855.9	563.5	292.4	2.93	Foliated gabbro
OPM-19-08	187.8	21.25	378.15	1044.5	670.8	373.7	2.80	Foliated gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-09	9.4	18.13	322.63	929.4	610.8	318.6	2.92	Upper green pyroxenite
OPM-19-09	11.8	16.85	299.85	816.5	526.1	290.4	2.81	Upper green pyroxenite
OPM-19-09	17.8	16.70	297.18	847.9	551.4	296.5	2.86	Upper green pyroxenite
OPM-19-09	21.3	13.53	240.77	710.7	467.5	243.2	2.92	Upper green pyroxenite
OPM-19-09	25.0	22.35	397.72	1178.9	783.9	395.0	2.98	Upper green pyroxenite
OPM-19-09	30.6	15.95	283.84	836.4	544.7	291.7	2.87	Upper green pyroxenite
OPM-19-09	33.3	22.25	395.95	1300.0	908.8	391.2	3.32	Black pyroxenite
OPM-19-09	38.2	20.88	371.57	1212.8	843.0	369.8	3.28	Black pyroxenite
OPM-19-09	42.6	24.00	427.09	1392.7	967.5	425.2	3.28	Black pyroxenite
OPM-19-09	47.0	18.50	329.21	1001.5	675.9	325.6	3.08	Peridotite
OPM-19-09	51.1	22.78	405.38	1285.1	879.1	406.0	3.17	Peridotite
OPM-19-09	54.0	25.30	450.22	1415.9	969.9	446.0	3.17	Peridotite
OPM-19-09	59.7	22.03	392.03	1102.6	711.4	391.2	2.82	Peridotite
OPM-19-09	63.4	23.85	424.42	1186.8	768.2	418.6	2.84	Peridotite
OPM-19-09	68.3	22.73	404.49	1284.6	881.1	403.5	3.18	Peridotite
OPM-19-09	70.5	17.68	314.62	1005.0	690.8	314.2	3.20	Peridotite
OPM-19-09	75.8	19.25	342.56	1072.7	733.7	339.0	3.16	Peridotite
OPM-19-09	77.5	16.35	290.95	895.9	613.1	282.8	3.17	Peridotite
OPM-19-09	85.5	21.75	387.05	1295.4	909.9	385.5	3.36	Black pyroxenite
OPM-19-09	89.0	20.58	366.23	1223.9	858.7	365.2	3.35	Black pyroxenite
OPM-19-09	92.1	16.65	296.29	975.8	677.4	298.4	3.27	Black pyroxenite
OPM-19-09	95.6	18.00	320.32	983.2	662.5	320.7	3.07	Foliated gabbro
OPM-19-09	100.1	18.08	321.74	962.0	636.2	325.8	2.95	Black pyroxenite mineralized
OPM-19-09	103.2	15.23	271.02	816.4	545.1	271.3	3.01	Black pyroxenite mineralized
OPM-19-09	110.5	21.75	387.05	1167.0	785.4	381.6	3.06	Black pyroxenite mineralized
OPM-19-09	111.8	20.23	360.00	1110.6	756.4	354.2	3.14	Black pyroxenite mineralized
OPM-19-09	119.2	19.58	348.43	1126.1	776.6	349.5	3.22	Black pyroxenite mineralized

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-09	121.5	13.95	248.24	768.5	518.7	249.8	3.08	Black pyroxenite mineralized
OPM-19-09	127.0	14.80	263.37	819.5	549.7	269.8	3.04	Foliated gabbro
OPM-19-09	132.1	16.33	290.60	895.6	598.1	297.5	3.01	Foliated gabbro
OPM-19-09	133.8	21.18	376.90	1125.2	746.1	379.1	2.97	Foliated gabbro
OPM-19-09	137.0	17.88	318.18	940.2	628.5	311.7	3.02	Foliated gabbro
OPM-19-09	141.8	19.90	354.13	1097.7	748.6	349.1	3.14	Foliated gabbro
OPM-19-09	148.6	18.58	330.64	967.6	633.6	334.0	2.90	Foliated gabbro
OPM-19-09	151.0	20.33	361.78	1077.3	717.0	360.3	2.99	Foliated gabbro
OPM-19-09	153.8	21.95	390.61	1151.6	765.7	385.9	2.98	Foliated gabbro
OPM-19-09	158.7	14.45	257.14	704.0	450.1	253.9	2.77	Foliated gabbro
OPM-19-09	161.8	14.33	255.01	783.2	526.3	256.9	3.05	Foliated gabbro
OPM-19-09	165.0	16.90	300.74	849.9	552.1	297.8	2.85	Foliated gabbro
OPM-19-09	168.8	15.78	280.81	803.9	526.4	277.5	2.90	Upper green pyroxenite
OPM-19-09	171.4	22.05	392.39	1139.0	751.1	387.9	2.94	Upper green pyroxenite
OPM-19-09	177.6	16.88	300.38	885.0	589.3	295.7	2.99	Upper green pyroxenite
OPM-19-09	180.0	22.75	404.84	1144.6	741.8	402.8	2.84	Upper green pyroxenite
OPM-19-09	185.4	17.75	315.87	896.6	580.8	315.8	2.84	Upper green pyroxenite
OPM-19-09	189.3	15.18	270.13	777.4	510.0	267.4	2.91	Upper green pyroxenite
OPM-19-09	194.0	17.83	317.29	874.5	560.3	314.2	2.78	Diorite
OPM-19-09	197.8	19.98	355.55	999.7	641.6	358.1	2.79	Upper green pyroxenite
OPM-19-09	200.6	19.68	350.21	1032.0	681.3	350.7	2.94	Upper green pyroxenite
OPM-19-09	204.9	13.68	243.44	717.0	474.4	242.6	2.96	Upper green pyroxenite
OPM-19-09	207.5	21.15	376.37	1066.3	696.2	370.1	2.88	Upper green pyroxenite
OPM-19-09	213.2	17.23	306.61	900.4	598.9	301.5	2.99	Upper green pyroxenite
OPM-19-09	216.0	15.80	281.17	819.0	540.9	278.1	2.94	Upper green pyroxenite
OPM-19-09	221.0	21.18	376.90	1089.6	711.9	377.7	2.88	Upper green pyroxenite
OPM-19-09	225.0	18.63	331.53	981.5	651.7	329.8	2.98	Upper green pyroxenite

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-09	230.7	20.10	357.69	1058.6	700.0	358.6	2.95	Upper green pyroxenite
OPM-19-09	234.1	16.10	286.50	771.3	490.4	280.9	2.75	Upper green pyroxenite
OPM-19-09	238.2	11.38	202.51	579.3	376.0	203.3	2.85	Upper green pyroxenite
OPM-19-09	243.3	13.08	232.76	652.7	421.5	231.2	2.82	Upper green pyroxenite
OPM-19-09	245.8	14.08	250.56	715.6	465.7	249.9	2.86	Upper green pyroxenite
OPM-19-09	252.1	15.95	283.84	798.5	516.8	281.7	2.83	Gabbro
OPM-19-09	256.9	16.53	294.16	832.6	541.9	290.7	2.86	Gabbro
OPM-19-09	258.6	21.48	382.24	1085.7	704.4	381.3	2.85	Gabbro
OPM-19-09	264.5	16.10	286.50	801.8	520.9	280.9	2.85	Gabbro
OPM-19-09	269.3	22.10	393.28	1099.6	714.1	385.5	2.85	Gabbro
OPM-19-09	270.6	18.83	335.09	913.0	582.6	330.4	2.76	Gabbro
OPM-19-09	273.1	15.73	279.92	817.5	537.7	279.8	2.92	Gabbro
OPM-19-09	279.1	21.43	381.35	1067.2	685.2	382.0	2.79	Gabbro
OPM-19-09	285.2	17.90	318.54	863.7	553.8	309.9	2.79	Gabbro
OPM-19-09	288.7	18.05	321.21	868.7	554.6	314.1	2.77	Gabbro
OPM-19-09	290.8	20.20	359.47	1001.0	638.1	362.9	2.76	Gabbro
OPM-19-09	297.1	21.53	383.13	1068.5	682.5	386.0	2.77	Gabbro
OPM-19-09	300.6	19.75	351.46	1075.1	723.3	351.8	3.06	Gabbro
OPM-19-09	305.8	17.20	306.08	884.1	568.1	316.0	2.80	Gabbro
OPM-19-09	308.0	18.63	331.53	891.6	568.1	323.5	2.76	Gabbro
OPM-19-09	311.1	19.65	349.68	929.4	585.4	344.0	2.70	Gabbro
OPM-19-09	318.2	15.88	282.59	763.9	483.3	280.6	2.72	Breccia Fault
OPM-19-09	319.5	12.98	230.98	625.9	399.1	226.8	2.76	Diorite gabbro
OPM-19-10	5.0	16.83	299.49	937.6	636.4	301.2	3.11	Foliated gabbro
OPM-19-10	9.1	20.18	359.11	1098.5	742.6	355.9	3.09	Foliated gabbro
OPM-19-10	13.8	14.40	256.25	781.3	526.4	254.9	3.07	Foliated gabbro
OPM-19-10	18.3	20.43	363.56	1148.8	790.4	358.4	3.21	Foliated gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-10	21.1	14.78	263.01	788.9	526.6	262.3	3.01	Foliated gabbro
OPM-19-10	24.5	12.68	225.64	697.0	473.3	223.7	3.12	Foliated gabbro
OPM-19-10	31.8	20.33	361.78	1092.6	731.2	361.4	3.02	Foliated gabbro
OPM-19-10	34.5	16.63	295.94	884.0	588.7	295.3	2.99	Foliated gabbro
OPM-19-10	38.7	11.35	201.98	614.4	415.9	198.5	3.10	Foliated gabbro
OPM-19-10	42.7	16.10	286.50	890.4	594.5	295.9	3.01	Foliated gabbro
OPM-19-10	47.0	21.93	390.25	1165.5	770.0	395.5	2.95	Foliated gabbro
OPM-19-10	48.4	21.73	386.69	1192.0	809.4	382.6	3.12	Foliated gabbro
OPM-19-11	16.6	17.08	303.94	905.3	599.9	305.4	2.96	Leuco gabbo
OPM-19-11	22.6	19.88	353.77	1062.6	708.6	354.0	3.00	Leuco gabbo
OPM-19-11	26.6	12.65	225.11	635.7	408.8	226.9	2.80	Siliceous dyke
OPM-19-11	27.7	21.55	383.49	1093.5	708.4	385.1	2.84	Siliceous dyke
OPM-19-11	34.5	18.85	335.44	987.4	650.8	336.6	2.93	Leuco-Melano gabbro
OPM-19-11	35.7	21.88	389.36	1154.2	762.2	392.0	2.94	Leuco-Melano gabbro
OPM-19-12	13.7	15.88	282.59	828.9	548.9	280.0	2.96	Gabbro altered - mineralized
OPM-19-12	18.7	15.60	277.61	808.9	533.7	275.2	2.94	Gabbro altered - mineralized
OPM-19-12	20.8	14.95	266.04	778.9	515.6	263.3	2.96	Gabbro altered - mineralized
OPM-19-12	24.3	15.90	282.95	863.9	578.7	285.2	3.03	Gabbro altered - mineralized
OPM-19-12	29.0	16.23	288.82	864.7	574.3	290.4	2.98	Gabbro altered - mineralized
OPM-19-12	34.6	20.50	364.80	1094.8	730.1	364.7	3.00	Gabbro altered - mineralized
OPM-19-12	38.7	19.78	351.99	1083.3	728.7	354.6	3.05	Gabbro altered - mineralized
OPM-19-12	43.0	19.33	343.98	1055.0	705.7	349.3	3.02	Gabbro altered - mineralized
OPM-19-12	47.0	17.13	304.83	912.5	608.9	303.6	3.01	Gabbro altered - mineralized
OPM-19-12	50.0	20.13	358.22	1057.6	699.3	358.3	2.95	Gabbro altered - mineralized
OPM-19-12	52.4	19.45	346.12	1015.1	667.9	347.2	2.92	Gabbro altered - mineralized
OPM-19-12	56.1	20.10	357.69	1055.1	697.5	357.6	2.95	Gabbro altered - mineralized
OPM-19-12	61.5	18.35	326.54	984.3	657.5	326.8	3.01	Leuco-Melano gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-12	64.4	20.10	357.69	1076.6	715.9	360.7	2.98	Leuco-Melano gabbro
OPM-19-12	68.4	16.23	288.82	864.3	578.2	286.1	3.02	Leuco-Melano gabbro
OPM-19-12	73.3	16.73	297.72	862.7	569.8	292.9	2.95	Leuco-Melano gabbro
OPM-19-12	77.2	18.70	332.77	976.0	647.4	328.6	2.97	Leuco-Melano gabbro
OPM-19-12	81.2	17.73	315.51	942.3	624.2	318.1	2.96	Melano gabbro
OPM-19-12	86.1	17.00	302.52	924.7	618.6	306.1	3.02	Melano gabbro
OPM-19-12	89.7	13.63	242.55	652.6	406.5	246.1	2.65	Rhyolite
OPM-19-12	90.6	18.48	328.86	880.4	547.9	332.5	2.65	Rhyolite
OPM-19-12	99.8	12.70	226.00	592.4	368.4	224.0	2.64	Rhyolite
OPM-19-12	103.2	23.75	422.64	1122.3	698.1	424.2	2.65	Rhyolite
OPM-19-12	106.4	20.23	360.00	959.9	598.8	361.1	2.66	Rhyolite
OPM-19-12	111.1	19.30	343.45	916.4	573.3	343.1	2.67	Rhyolite
OPM-19-12	115.4	21.98	391.14	1032.6	645.4	387.2	2.67	Rhyolite
OPM-19-12	119.4	22.53	400.93	1044.7	648.3	396.4	2.64	Rhyolite
OPM-19-13	12.6	11.58	206.07	630.7	426.9	203.8	3.09	Leuco gabbro
OPM-19-13	17.3	20.43	363.56	1095.1	730.1	365.0	3.00	Leuco gabbro
OPM-19-13	20.1	22.18	394.70	1128.8	732.6	396.2	2.85	Leuco gabbro
OPM-19-13	26.0	16.73	297.72	840.8	534.8	306.0	2.75	Leuco gabbro
OPM-19-13	29.3	15.58	277.25	773.6	500.5	273.1	2.83	Leuco gabbro
OPM-19-13	33.2	18.83	335.09	985.4	656.2	329.2	2.99	Leuco gabbro
OPM-19-13	38.0	16.20	288.28	844.9	563.9	281.0	3.01	Leuco gabbro
OPM-19-13	43.5	15.83	281.70	834.2	561.2	273.0	3.06	Leuco gabbro
OPM-19-13	45.8	18.60	330.99	975.7	647.1	328.6	2.97	Leuco gabbro
OPM-19-13	51.0	18.20	323.87	969.8	650.5	319.3	3.04	Leuco gabbro
OPM-19-13	52.7	15.75	280.28	813.0	537.2	275.8	2.95	Leuco gabbro
OPM-19-13	56.6	22.33	397.37	1175.9	781.5	394.4	2.98	Leuco gabbro
OPM-19-13	61.2	18.35	326.54	975.6	649.7	325.9	2.99	Leuco gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-13	67.0	15.95	283.84	830.0	543.1	286.9	2.89	Leuco gabbro
OPM-19-13	68.3	18.05	321.21	942.5	621.8	320.7	2.94	Leuco gabbro
OPM-19-13	71.0	17.85	317.65	905.7	587.8	317.9	2.85	Leuco gabbro
OPM-19-13	76.7	13.80	245.58	718.1	468.5	249.6	2.88	Gabbro altered - mineralized
OPM-19-13	78.1	16.98	302.16	869.2	563.6	305.6	2.84	Gabbro altered - mineralized
OPM-19-13	82.1	16.68	296.83	866.0	562.5	303.5	2.85	Gabbro altered - mineralized
OPM-19-13	87.0	18.10	322.09	984.3	654.9	329.4	2.99	Gabbro altered - mineralized
OPM-19-13	94.5	16.68	296.83	884.0	588.6	295.4	2.99	Gabbro altered - mineralized
OPM-19-13	96.4	21.28	378.68	1117.8	740.8	377.0	2.96	Gabbro altered - mineralized
OPM-19-13	100.7	21.75	387.05	1166.8	783.1	383.7	3.04	Gabbro altered - mineralized
OPM-19-13	106.3	18.85	335.44	996.9	662.8	334.1	2.98	Leuco gabbro
OPM-19-13	110.0	16.25	289.17	855.9	570.0	285.9	2.99	Leuco gabbro
OPM-19-13	112.5	19.45	346.12	1041.1	694.1	347.0	3.00	Leuco gabbro
OPM-19-13	118.3	13.45	239.35	715.1	475.9	239.2	2.99	Leuco gabbro
OPM-19-13	121.8	16.68	296.83	906.1	602.8	303.3	2.99	Leuco gabbro
OPM-19-13	126.1	14.48	257.68	775.6	512.2	263.4	2.94	Leuco gabbro
OPM-19-13	131.4	14.15	251.80	771.7	517.6	254.1	3.04	Leuco gabbro
OPM-19-13	134.5	19.80	352.35	1078.9	722.9	356.0	3.03	Leuco gabbro
OPM-19-13	140.0	19.13	340.42	1005.3	665.9	339.4	2.96	Melano gabbro
OPM-19-13	144.1	17.23	306.61	898.6	601.3	297.3	3.02	Melano gabbro
OPM-19-13	147.0	21.73	386.69	1155.1	768.2	386.9	2.99	Melano gabbro
OPM-19-13	151.5	21.08	375.12	1117.5	740.8	376.7	2.97	Melano gabbro
OPM-19-13	156.2	17.73	315.51	864.0	548.4	315.6	2.74	Rhyolite
OPM-19-13	158.2	17.93	319.07	876.7	557.9	318.8	2.75	Rhyolite
OPM-19-13	165.6	17.18	305.72	861.0	547.0	314.0	2.74	Rhyolite
OPM-19-13	182.8	17.03	303.05	823.1	517.2	305.9	2.69	Rhyolite
OPM-19-14	6.5	17.68	314.62	907.0	599.7	307.3	2.95	Leuco gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-14	10.7	21.10	375.48	1127.4	746.6	380.8	2.96	Leuco gabbro
OPM-19-14	14.5	20.53	365.34	1040.9	679.7	361.2	2.88	Leuco gabbro
OPM-19-14	15.7	20.08	357.33	1021.1	668.1	353.0	2.89	Leuco gabbro
OPM-19-14	22.4	19.48	346.65	1009.3	662.7	346.6	2.91	Leuco gabbro
OPM-19-14	27.0	15.75	280.28	792.1	511.4	280.7	2.82	Leuco gabbro
OPM-19-14	28.0	14.50	258.03	780.0	517.3	262.7	2.97	Leuco gabbro
OPM-19-14	35.5	22.50	400.39	1158.4	761.5	396.9	2.92	Gabbro altered - mineralized
OPM-19-14	39.5	17.50	311.42	915.3	606.0	309.3	2.96	Gabbro altered - mineralized
OPM-19-14	43.8	17.50	311.42	933.4	619.1	314.3	2.97	Gabbro altered - mineralized
OPM-19-14	47.3	15.83	281.70	842.5	559.2	283.3	2.97	Gabbro altered - mineralized
OPM-19-14	52.5	20.83	370.68	1064.4	690.5	373.9	2.85	Gabbro altered - mineralized
OPM-19-14	54.0	14.08	250.56	746.3	496.3	250.0	2.99	Gabbro altered - mineralized
OPM-19-14	58.9	16.45	292.73	804.8	518.0	286.8	2.81	Gabbro altered - mineralized
OPM-19-14	64.6	22.63	402.71	1132.5	733.2	399.3	2.84	Gabbro altered - mineralized
OPM-19-14	66.3	16.53	294.16	856.3	559.5	296.8	2.89	Gabbro altered - mineralized
OPM-19-14	69.9	14.45	257.14	799.3	535.9	263.4	3.03	Gabbro altered - mineralized
OPM-19-14	76.6	19.78	351.99	995.2	647.7	347.5	2.86	Gabbro altered - mineralized
OPM-19-14	78.8	13.65	242.91	681.3	439.8	241.5	2.82	Gabbro altered - mineralized
OPM-19-14	82.5	20.28	360.89	1053.9	696.7	357.2	2.95	Melano gabbro
OPM-19-14	85.5	12.85	228.67	642.1	414.3	227.8	2.82	Melano gabbro
OPM-19-14	90.5	17.85	317.65	953.1	624.6	328.5	2.90	Melano gabbro
OPM-19-14	94.2	20.20	359.47	1042.4	683.9	358.5	2.91	Melano gabbro
OPM-19-14	98.0	16.65	296.29	862.1	567.0	295.1	2.92	Melano gabbro
OPM-19-14	104.3	16.35	290.95	785.6	488.6	297.0	2.65	Rhyolite
OPM-19-14	107.4	22.03	392.03	1071.8	676.9	394.9	2.71	Rhyolite
OPM-19-14	112.5	17.10	304.30	819.9	516.2	303.7	2.70	Rhyolite
OPM-19-14	116.0	22.63	402.71	1091.9	688.8	403.1	2.71	Rhyolite

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-14	118.0	18.05	321.21	871.9	546.3	325.6	2.68	Rhyolite
OPM-19-14	121.6	17.90	318.54	866.7	546.5	320.2	2.71	Rhyolite
OPM-19-14	128.8	21.78	387.58	1047.1	659.3	387.8	2.70	Rhyolite
OPM-19-14	131.4	12.05	214.43	597.7	375.1	222.6	2.69	Rhyolite
OPM-19-14	135.5	22.08	392.92	1057.7	659.2	398.5	2.65	Rhyolite
OPM-19-14	140.9	14.80	263.37	727.8	460.0	267.8	2.72	Rhyolite
OPM-19-14	144.3	17.10	304.30	826.6	518.4	308.2	2.68	Rhyolite
OPM-19-14	146.0	21.25	378.15	1023.4	643.8	379.6	2.70	Rhyolite
OPM-19-14	156.2	17.58	312.84	845.1	528.5	316.6	2.67	Rhyolite
OPM-19-14	159.2	16.25	289.17	775.0	484.9	290.1	2.67	Rhyolite
OPM-19-14	166.2	21.00	373.70	1023.1	639.5	383.6	2.67	Rhyolite
OPM-19-14	168.2	24.13	429.40	1185.4	753.2	432.2	2.74	Rhyolite
OPM-19-15	19.9	15.18	270.13	759.6	499.4	260.2	2.92	Melano gabbro
OPM-19-15	21.4	19.43	345.76	1166.4	810.1	356.3	3.27	Melano gabbro
OPM-19-15	26.6	17.60	313.20	900.2	598.3	301.9	2.98	Melano gabbro
OPM-19-15	30.5	17.35	308.75	922.1	611.4	310.7	2.97	Melano gabbro
OPM-19-15	35.0	16.03	285.26	859.5	571.2	288.3	2.98	Melano gabbro
OPM-19-16	5.0	19.25	342.56	1032.2	686.1	346.1	2.98	Leuco gabbro
OPM-19-16	10.2	21.68	385.80	1108.5	722.3	386.2	2.87	Leuco gabbro
OPM-19-16	14.5	18.03	320.85	915.8	593.8	322.0	2.84	Leuco gabbro
OPM-19-16	17.6	23.53	418.72	1197.2	784.6	412.6	2.90	Gabbro altered - mineralized
OPM-19-16	21.0	22.18	394.70	1175.4	784.3	391.1	3.01	Gabbro altered - mineralized
OPM-19-16	26.6	16.75	298.07	852.5	554.2	298.3	2.86	Gabbro altered - mineralized
OPM-19-16	29.7	17.63	313.73	871.4	559.8	311.6	2.80	Gabbro altered - mineralized
OPM-19-16	35.5	23.45	417.30	1177.6	762.8	414.8	2.84	Gabbro altered - mineralized
OPM-19-16	39.4	14.10	250.91	714.5	463.2	251.3	2.84	Gabbro altered - mineralized
OPM-19-16	41.8	18.85	335.44	981.0	646.5	334.5	2.93	Gabbro altered - mineralized

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-16	45.2	18.75	333.66	983.5	652.3	331.2	2.97	Gabbro altered - mineralized
OPM-19-16	50.7	21.10	375.48	1113.0	731.9	381.1	2.92	Melano gabbro
OPM-19-16	56.3	16.20	288.28	887.0	594.7	292.3	3.03	Gabbro breccia
OPM-19-16	59.2	22.05	392.39	1180.5	787.3	393.2	3.00	Gabbro breccia
OPM-19-16	64.1	23.40	416.41	1139.8	725.7	414.1	2.75	Gabbro altered - mineralized
OPM-19-16	69.1	17.78	316.40	937.6	623.8	313.8	2.99	Gabbro breccia
OPM-19-16	70.6	23.28	414.27	1204.8	797.5	407.3	2.96	Gabbro breccia
OPM-19-16	75.5	20.23	360.00	1069.0	711.4	357.6	2.99	Gabbro altered - mineralized
OPM-19-16	81.6	16.45	292.73	891.0	598.0	293.0	3.04	Gabbro altered - mineralized
OPM-19-16	83.7	15.98	284.37	816.7	534.1	282.6	2.89	Gabbro altered - mineralized
OPM-19-16	90.9	18.88	335.98	953.9	618.1	335.8	2.84	Gabbro altered - mineralized
OPM-19-16	94.5	23.73	422.28	1224.8	807.1	417.7	2.93	Gabbro altered - mineralized
OPM-19-16	98.1	17.40	309.64	883.7	578.5	305.2	2.90	Gabbro altered - mineralized
OPM-19-16	103.5	17.90	318.54	892.6	579.0	313.6	2.85	Gabbro altered - mineralized
OPM-19-16	107.1	23.05	410.18	1154.6	748.3	406.3	2.84	Gabbro altered - mineralized
OPM-19-16	109.4	21.23	377.79	1093.5	726.0	367.5	2.98	Gabbro altered - mineralized
OPM-19-16	115.3	21.65	385.27	1138.6	758.5	380.1	3.00	Gabbro altered - mineralized
OPM-19-16	117.6	19.45	346.12	1018.3	668.9	349.4	2.91	Gabbro altered - mineralized
OPM-19-16	124.1	24.18	430.29	1238.3	810.5	427.8	2.89	Gabbro altered - mineralized
OPM-19-16	128.3	20.30	361.24	971.3	615.5	355.8	2.73	Rhyolite
OPM-19-16	132.6	18.03	320.85	864.3	543.5	320.8	2.69	Rhyolite
OPM-19-16	133.5	21.65	385.27	1023.6	647.6	376.0	2.72	Rhyolite
OPM-19-16	140.7	19.25	342.56	951.2	601.3	349.9	2.72	Rhyolite
OPM-19-16	143.6	20.20	359.47	955.0	598.4	356.6	2.68	Rhyolite
OPM-19-16	148.5	20.95	372.81	1045.5	671.6	373.9	2.80	Rhyolite mineralized
OPM-19-16	157.4	19.78	351.99	936.4	586.3	350.1	2.67	Rhyolite
OPM-19-16	159.0	13.43	238.99	640.1	401.4	238.7	2.68	Rhyolite

**TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS**

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-17	6.1	22.65	403.06	1188.1	788.4	399.7	2.97	Leuco-Melano gabbro
OPM-19-17	7.4	18.50	329.21	989.7	662.8	326.9	3.03	Leuco-Melano gabbro
OPM-19-17	13.9	19.98	355.55	1090.6	742.1	348.5	3.13	Leuco-Melano gabbro
OPM-19-17	18.7	15.28	271.91	807.9	539.3	268.6	3.01	Leuco-Melano gabbro
OPM-19-17	23.0	18.20	323.87	977.7	658.6	319.1	3.06	Leuco-Melano gabbro
OPM-19-17	26.7	20.70	368.36	1102.3	729.3	373.0	2.96	Leuco-Melano gabbro
OPM-19-17	28.9	21.35	379.93	1144.3	769.2	375.1	3.05	Leuco-Melano gabbro
OPM-19-17	36.0	17.13	304.83	902.6	601.5	301.1	3.00	Leuco-Melano gabbro
OPM-19-17	39.1	22.20	395.06	1206.0	814.3	391.7	3.08	Leuco-Melano gabbro
OPM-19-17	40.8	14.35	255.36	772.2	518.5	253.7	3.04	Leuco-Melano gabbro
OPM-19-17	47.2	22.88	407.16	1255.8	845.1	410.7	3.06	Leuco-Melano gabbro
OPM-19-17	51.1	22.25	395.95	1206.7	811.4	395.3	3.05	Leuco-Melano gabbro
OPM-19-17	52.9	19.38	344.87	1028.8	689.1	339.7	3.03	Leuco-Melano gabbro
OPM-19-17	58.2	22.18	394.70	1187.7	795.6	392.1	3.03	Leuco-Melano gabbro
OPM-19-17	64.4	20.68	368.01	1108.8	739.5	369.3	3.00	Melano gabbro
OPM-19-17	66.2	19.23	342.20	1022.6	681.0	341.6	2.99	Melano gabbro
OPM-19-17	76.5	20.83	370.68	1006.5	634.3	372.2	2.70	Rhyolite
OPM-19-17	79.4	21.93	390.25	1040.0	652.6	387.4	2.68	Rhyolite
OPM-19-17	82.9	19.18	341.31	935.8	588.1	347.7	2.69	Rhyolite
OPM-19-17	89.8	21.13	376.01	1007.5	633.9	373.6	2.70	Rhyolite
OPM-19-17	93.3	21.40	380.82	1112.4	733.2	379.2	2.93	Rhyolite
OPM-19-17	98.4	20.28	360.89	953.9	596.9	357.0	2.67	Rhyolite
OPM-19-18	6.8	14.73	262.12	788.4	531.4	257.0	3.07	Leuco-Melano gabbro
OPM-19-18	9.4	15.13	269.24	800.8	534.3	266.5	3.00	Leuco-Melano gabbro
OPM-19-18	12.4	18.78	334.20	991.1	662.6	328.5	3.02	Leuco-Melano gabbro
OPM-19-18	16.0	16.10	286.50	878.5	593.2	285.3	3.08	Leuco-Melano gabbro
OPM-19-18	23.5	20.38	362.67	1073.7	715.7	358.0	3.00	Leuco-Melano gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-18	27.2	15.13	269.24	820.0	553.2	266.8	3.07	Leuco-Melano gabbro
OPM-19-18	29.5	17.38	309.28	919.5	611.3	308.2	2.98	Melano gabbro
OPM-19-18	33.2	16.78	298.61	884.7	588.3	296.4	2.98	Melano gabbro
OPM-19-18	39.7	18.58	330.64	1013.8	679.1	334.7	3.03	Melano gabbro
OPM-19-18	42.7	20.03	356.44	1061.1	703.3	357.8	2.97	Gabbro altered - mineralized
OPM-19-18	45.6	14.45	257.14	765.6	509.0	256.6	2.98	Gabbro altered - mineralized
OPM-19-18	49.0	14.58	259.46	772.9	510.4	262.5	2.94	Gabbro altered - mineralized
OPM-19-18	54.0	21.20	377.26	1225.5	842.2	383.3	3.20	Gabbro altered - mineralized
OPM-19-18	61.0	19.45	346.12	1250.4	906.5	343.9	3.64	Gabbro altered - mineralized
OPM-19-18	63.7	20.30	361.24	1061.7	706.1	355.6	2.99	Gabbro altered - mineralized
OPM-19-18	69.0	18.80	334.55	964.0	631.5	332.5	2.90	Gabbro altered - mineralized
OPM-19-18	70.6	18.98	337.75	1004.7	668.4	336.3	2.99	Gabbro altered - mineralized
OPM-19-18	76.3	19.08	339.53	980.4	647.5	332.9	2.95	Gabbro altered - mineralized
OPM-19-18	80.0	12.90	229.56	711.9	485.4	226.5	3.14	Gabbro altered - mineralized
OPM-19-18	82.0	18.25	324.76	1177.7	854.3	323.4	3.64	Gabbro altered - mineralized
OPM-19-18	88.2	16.58	295.05	867.6	576.4	291.2	2.98	Melano gabbro
OPM-19-18	90.1	14.25	253.58	765.6	512.5	253.1	3.02	Melano gabbro
OPM-19-18	95.3	21.90	389.72	1100.4	722.9	377.5	2.91	Melano gabbro
OPM-19-18	97.7	22.00	391.50	1158.7	767.5	391.2	2.96	Melano gabbro
OPM-19-18	104.2	18.80	334.55	1001.7	665.5	336.2	2.98	Melano gabbro
OPM-19-18	108.4	21.98	391.14	1188.5	798.2	390.3	3.05	Melano gabbro
OPM-19-18	112.7	20.50	364.80	1082.3	719.5	362.8	2.98	Melano gabbro
OPM-19-18	114.6	21.88	389.36	1169.9	785.2	384.7	3.04	Melano gabbro
OPM-19-18	120.9	21.78	387.58	1140.6	755.2	385.4	2.96	Melano gabbro
OPM-19-18	124.8	22.85	406.62	1181.6	781.3	400.3	2.95	Melano gabbro
OPM-19-18	126.5	17.35	308.75	898.7	592.1	306.6	2.93	Melano gabbro
OPM-19-18	130.2	13.40	238.46	636.4	399.3	237.1	2.68	Rhyolite

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-18	136.9	16.10	286.50	786.5	501.7	284.8	2.76	Rhyolite
OPM-19-18	142.4	15.15	269.60	764.3	500.7	263.6	2.90	Rhyolite
OPM-19-18	145.8	15.78	280.81	758.5	477.1	281.4	2.70	Rhyolite
OPM-19-18	149.7	23.85	424.42	1128.5	702.7	425.8	2.65	Rhyolite
OPM-19-19	3.5	17.15	305.19	920.7	612.7	308.0	2.99	Leuco gabbro
OPM-19-19	5.6	21.68	385.80	1080.0	698.4	381.6	2.83	Leuco gabbro
OPM-19-19	12.1	24.28	432.07	1299.7	874.7	425.0	3.06	Leuco gabbro
OPM-19-19	15.3	23.23	413.38	1191.8	787.7	404.1	2.95	Leuco gabbro
OPM-19-19	19.0	22.43	399.15	1128.2	740.3	387.9	2.91	Leuco gabbro
OPM-19-19	25.4	21.65	385.27	1102.2	727.1	375.1	2.94	Gabbro altered - mineralized
OPM-19-19	30.0	21.75	387.05	1135.9	757.1	378.8	3.00	Leuco-Melano gabbro
OPM-19-19	33.2	19.08	339.53	983.0	650.7	332.3	2.96	Leuco-Melano gabbro
OPM-19-19	39.0	22.60	402.17	1160.9	769.4	391.5	2.97	Leuco-Melano gabbro
OPM-19-19	43.2	18.30	325.65	861.6	536.7	324.9	2.65	Leuco-Melano gabbro
OPM-19-19	46.4	18.48	328.86	948.2	631.6	316.6	2.99	Leuco-Melano gabbro
OPM-19-19	48.4	15.75	280.28	812.9	539.3	273.6	2.97	Leuco-Melano gabbro
OPM-19-19	53.6	15.88	282.59	816.5	542.7	273.8	2.98	Leuco-Melano gabbro
OPM-19-19	57.5	16.33	290.60	850.6	561.4	289.2	2.94	Leuco-Melano gabbro
OPM-19-19	60.9	16.18	287.93	814.7	531.7	283.0	2.88	Leuco-Melano gabbro
OPM-19-19	66.2	19.18	341.31	1072.8	738.0	334.8	3.20	Gabbro altered - mineralized
OPM-19-19	71.6	18.05	321.21	912.7	587.6	325.1	2.81	Gabbro altered - mineralized
OPM-19-19	76.3	19.93	354.66	1033.7	676.6	357.1	2.89	Gabbro altered - mineralized
OPM-19-19	81.0	14.28	254.12	677.7	427.4	250.3	2.71	Gabbro altered - mineralized
OPM-19-19	85.2	22.83	406.27	1377.1	975.9	401.2	3.43	Gabbro altered - mineralized
OPM-19-19	90.0	17.20	306.08	902.9	601.2	301.7	2.99	Foliated gabbro
OPM-19-19	93.4	15.58	277.25	812.3	540.5	271.8	2.99	Foliated gabbro
OPM-19-19	96.1	20.55	365.69	1051.1	691.3	359.8	2.92	Foliated gabbro

**TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS**

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-19	103.4	17.33	308.39	887.3	586.3	301.0	2.95	Foliated gabbro
OPM-19-19	105.2	23.23	413.38	1250.3	842.8	407.5	3.07	Upper green pyroxenite
OPM-19-19	109.6	19.25	342.56	1004.0	667.0	337.0	2.98	Upper green pyroxenite
OPM-19-19	114.6	21.30	379.04	1149.8	777.4	372.4	3.09	Upper green pyroxenite
OPM-19-19	119.1	17.73	315.51	932.2	623.8	308.4	3.02	Upper green pyroxenite
OPM-19-19	123.2	15.30	272.27	793.3	523.7	269.6	2.94	Upper green pyroxenite
OPM-19-19	127.4	18.45	328.32	942.0	619.3	322.7	2.92	Upper green pyroxenite
OPM-19-19	135.2	21.38	380.46	1087.3	712.5	374.8	2.90	Upper green pyroxenite
OPM-19-19	136.2	17.90	318.54	894.5	579.1	315.4	2.84	Upper green pyroxenite
OPM-19-19	138.0	18.65	331.88	910.6	589.4	321.2	2.83	Upper green pyroxenite
OPM-19-19	143.5	21.48	382.24	1046.4	674.7	371.7	2.82	Upper green pyroxenite
OPM-19-19	146.1	19.88	353.77	1069.2	721.4	347.8	3.07	Upper green pyroxenite
OPM-19-19	152.2	14.48	257.68	749.6	496.6	253.0	2.96	Upper green pyroxenite
OPM-19-19	153.4	20.25	360.35	1005.0	653.3	351.7	2.86	Upper green pyroxenite
OPM-19-20	9.6	21.13	376.01	1115.3	745.1	370.2	3.01	Melano gabbro
OPM-19-20	13.9	17.53	311.95	928.7	621.6	307.1	3.02	Melano gabbro
OPM-19-20	17.9	17.33	308.39	916.2	611.3	304.9	3.00	Melano gabbro
OPM-19-20	20.6	17.38	309.28	891.7	583.9	307.8	2.90	Melano gabbro
OPM-19-20	24.0	20.98	373.35	1073.4	705.1	368.3	2.91	Melano gabbro
OPM-19-20	31.4	19.63	349.32	1022.7	678.3	344.4	2.97	Melano gabbro
OPM-19-20	34.1	21.85	388.83	1115.8	734.8	381.0	2.93	Melano gabbro
OPM-19-20	37.7	19.35	344.34	984.3	643.4	340.9	2.89	Melano gabbro
OPM-19-20	42.7	20.33	361.78	1052.9	696.2	356.7	2.95	Melano gabbro
OPM-19-20	45.6	18.08	321.74	932.2	617.1	315.1	2.96	Melano gabbro
OPM-19-20	53.0	19.70	350.57	1002.3	657.0	345.3	2.90	Melano gabbro
OPM-19-20	55.4	20.15	358.58	1030.5	677.9	352.6	2.92	Melano gabbro
OPM-19-20	58.4	15.98	284.37	821.6	539.3	282.3	2.91	Melano gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-20	63.2	19.40	345.23	979.8	641.5	338.3	2.90	Melano gabbro
OPM-19-20	69.0	19.65	349.68	1008.8	664.5	344.3	2.93	Gabbro altered - mineralized
OPM-19-20	73.1	15.05	267.82	804.0	538.2	265.8	3.02	Gabbro altered - mineralized
OPM-19-20	75.4	16.35	290.95	855.5	569.6	285.9	2.99	Gabbro altered - mineralized
OPM-19-20	81.4	15.30	272.27	792.0	526.7	265.3	2.99	Leuco gabbro
OPM-19-20	84.8	15.93	283.48	807.6	527.5	280.1	2.88	Gabbro altered - mineralized
OPM-19-20	89.7	22.05	392.39	1146.4	756.5	389.9	2.94	Gabbro altered - mineralized
OPM-19-20	93.5	19.83	352.88	1041.3	693.9	347.4	3.00	Gabbro altered - mineralized
OPM-19-20	96.1	20.48	364.45	1106.6	745.9	360.7	3.07	Gabbro altered - mineralized
OPM-19-20	100.4	15.50	275.83	778.1	509.2	268.9	2.89	Siliceous dyke
OPM-19-20	106.1	21.95	390.61	1148.8	766.6	382.2	3.01	Gabbro altered - mineralized
OPM-19-20	108.1	14.65	260.70	839.6	578.0	261.6	3.21	Gabbro altered - mineralized
OPM-19-20	113.5	22.23	395.59	1159.8	771.7	388.1	2.99	Gabbro altered - mineralized
OPM-19-20	117.5	18.05	321.21	859.0	546.0	313.0	2.74	Rhyolite
OPM-19-20	120.6	18.70	332.77	866.5	540.4	326.1	2.66	Rhyolite
OPM-19-20	129.2	18.60	330.99	876.8	548.1	328.7	2.67	Rhyolite
OPM-19-20	138.0	18.08	321.74	933.7	615.1	318.6	2.93	Rhyolite
OPM-19-20	138.8	15.23	271.02	764.0	497.4	266.6	2.87	Rhyolite
OPM-19-20	146.4	23.10	411.07	1113.7	701.2	412.5	2.70	Rhyolite
OPM-19-21	3.4	17.58	312.84	889.9	579.3	310.6	2.87	Leuco gabbro
OPM-19-21	6.4	15.78	280.81	842.2	564.1	278.1	3.03	Gabbro altered - mineralized
OPM-19-21	12.2	18.28	325.30	948.4	624.6	323.8	2.93	Gabbro altered - mineralized
OPM-19-21	16.4	17.03	303.05	914.6	611.5	303.1	3.02	Gabbro altered - mineralized
OPM-19-21	20.7	18.50	329.21	997.8	665.5	332.3	3.00	Gabbro altered - mineralized
OPM-19-21	23.5	15.10	268.71	797.2	530.1	267.1	2.98	Gabbro altered - mineralized
OPM-19-21	29.4	21.15	376.37	1079.5	709.1	370.4	2.91	Gabbro altered - mineralized
OPM-19-21	32.8	19.33	343.98	998.8	661.1	337.7	2.96	Leuco gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-21	39.3	15.53	276.36	784.6	514.6	270.0	2.91	Leuco gabbro
OPM-19-21	43.0	19.78	351.99	1004.3	655.5	348.8	2.88	Leuco gabbro
OPM-19-21	47.3	18.58	330.64	900.9	570.6	330.3	2.73	Gabbro altered - mineralized
OPM-19-21	51.0	19.58	348.43	987.9	647.6	340.3	2.90	Melano gabbro
OPM-19-21	53.0	18.48	328.86	966.0	633.9	332.1	2.91	Melano gabbro
OPM-19-21	56.5	18.60	330.99	964.9	634.7	330.2	2.92	Melano gabbro
OPM-19-21	61.4	19.48	346.65	967.2	626.2	341.0	2.84	Leuco gabbro
OPM-19-21	68.0	20.08	357.33	999.5	651.7	347.8	2.87	Leuco gabbro
OPM-19-21	69.4	19.10	339.89	970.7	633.4	337.3	2.88	Leuco gabbro
OPM-19-21	76.9	20.45	363.91	1014.3	651.9	362.4	2.80	Leuco gabbro
OPM-19-21	80.8	13.18	234.54	685.0	452.2	232.8	2.94	Leuco gabbro
OPM-19-21	81.7	16.15	287.39	830.2	547.9	282.3	2.94	Grey Dyke
OPM-19-21	85.7	17.33	308.39	905.0	596.4	308.6	2.93	Melano gabbro
OPM-19-21	92.0	16.93	301.27	862.2	562.2	300.0	2.87	Melano gabbro
OPM-19-21	94.8	19.53	347.54	982.4	639.7	342.7	2.87	Grey Dyke
OPM-19-21	98.3	22.15	394.17	1126.9	738.9	388.0	2.90	Melano gabbro
OPM-19-21	103.5	19.18	341.31	980.2	640.0	340.2	2.88	Melano gabbro
OPM-19-21	107.6	16.88	300.38	843.9	548.9	295.0	2.86	Melano gabbro
OPM-19-21	111.3	17.83	317.29	952.3	637.5	314.8	3.03	Melano gabbro
OPM-19-22	5.5	19.65	349.68	1023.0	678.4	344.6	2.97	Leuco gabbro
OPM-19-22	9.0	21.00	373.70	1091.6	724.4	367.2	2.97	Leuco gabbro
OPM-19-22	13.0	17.90	318.54	939.1	623.9	315.2	2.98	Leuco gabbro
OPM-19-22	15.0	17.83	317.29	906.4	594.3	312.1	2.90	Leuco gabbro
OPM-19-22	20.0	22.20	395.06	1175.7	788.0	387.7	3.03	Leuco gabbro
OPM-19-22	26.8	21.80	387.94	1164.2	783.5	380.7	3.06	Leuco gabbro
OPM-19-22	28.9	20.38	362.67	1062.8	704.5	358.3	2.97	Leuco gabbro
OPM-19-22	32.4	20.63	367.12	1074.9	709.5	365.4	2.94	Leuco gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-22	37.6	18.10	322.09	912.8	594.3	318.5	2.87	Gabbro altered - mineralized
OPM-19-22	42.0	17.40	309.64	917.1	603.2	313.9	2.92	Gabbro altered - mineralized
OPM-19-22	46.3	18.53	329.75	950.9	627.2	323.7	2.94	Gabbro altered - mineralized
OPM-19-22	49.7	18.43	327.97	986.7	659.6	327.1	3.02	Gabbro altered - mineralized
OPM-19-22	54.1	21.25	378.15	1104.3	729.4	374.9	2.95	Gabbro altered - mineralized
OPM-19-22	58.5	19.28	343.09	1027.9	686.5	341.4	3.01	Gabbro altered - mineralized
OPM-19-22	62.5	15.85	282.06	840.8	559.9	280.9	2.99	Gabbro altered - mineralized
OPM-19-22	68.9	16.58	295.05	883.1	588.6	294.5	3.00	Gabbro altered - mineralized
OPM-19-22	70.7	18.83	335.09	1027.6	693.3	334.3	3.07	Gabbro altered - mineralized
OPM-19-22	74.3	15.88	282.59	846.4	564.7	281.7	3.00	Gabbro altered - mineralized
OPM-19-22	79.0	18.93	336.87	1016.9	680.3	336.6	3.02	Gabbro altered - mineralized
OPM-19-22	83.6	22.55	401.28	1185.7	785.2	400.5	2.96	Gabbro altered - mineralized
OPM-19-22	86.5	19.90	354.13	1108.0	756.7	351.3	3.15	Gabbro altered - mineralized
OPM-19-22	91.1	15.18	270.13	797.1	530.0	267.1	2.98	Gabbro altered - mineralized
OPM-19-22	96.3	22.60	402.17	1233.6	831.9	401.7	3.07	Gabbro altered - mineralized
OPM-19-22	101.8	18.40	327.43	999.3	672.9	326.4	3.06	Gabbro altered - mineralized
OPM-19-22	104.4	18.78	334.20	1032.0	697.3	334.7	3.08	Leuco gabbro
OPM-19-22	108.2	14.30	254.47	776.5	525.5	251.0	3.09	Leuco gabbro
OPM-19-22	112.2	18.15	322.98	958.8	637.7	321.1	2.99	Leuco gabbro
OPM-19-22	117.4	18.93	336.87	1022.6	684.7	337.9	3.03	Leuco gabbro
OPM-19-22	121.4	12.25	217.99	665.3	444.4	220.9	3.01	Leuco gabbro
OPM-19-22	125.6	21.18	376.90	1128.7	757.1	371.6	3.04	Melano gabbro
OPM-19-22	128.4	17.30	307.86	896.1	591.7	304.4	2.94	Melano gabbro
OPM-19-22	132.0	20.68	368.01	1092.6	730.6	362.0	3.02	Melano gabbro
OPM-19-22	137.3	17.73	315.51	953.4	634.3	319.1	2.99	Melano gabbro
OPM-19-22	138.5	19.78	351.99	1065.5	713.2	352.3	3.02	Melano gabbro
OPM-19-22	145.0	16.58	295.05	886.2	595.8	290.4	3.05	Melano gabbro

**TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS**

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-22	148.2	13.90	247.35	754.0	506.9	247.1	3.05	Melano gabbro
OPM-19-22	152.3	17.38	309.28	831.3	519.3	312.0	2.66	Rhyolite
OPM-19-22	161.4	19.68	350.21	943.4	598.4	345.0	2.73	Rhyolite
OPM-19-23	6.9	14.23	253.23	743.5	485.8	257.7	2.89	Leuco-melano gabbro
OPM-19-23	9.9	18.00	320.32	939.3	622.9	316.4	2.97	Leuco-melano gabbro
OPM-19-23	15.2	19.28	343.09	998.5	661.0	337.5	2.96	Leuco-melano gabbro
OPM-19-23	20.3	17.73	315.51	941.6	626.0	315.6	2.98	Siliceous dyke
OPM-19-23	22.0	17.88	318.18	926.3	614.9	311.4	2.97	Melano gabbro
OPM-19-23	27.4	19.55	347.90	1003.7	661.4	342.3	2.93	Melano gabbro
OPM-19-23	33.8	16.60	295.40	876.6	584.7	291.9	3.00	Gabbro breccia
OPM-19-23	37.2	18.60	330.99	981.9	655.2	326.7	3.01	Gabbro breccia
OPM-19-23	40.2	16.23	288.82	879.0	591.8	287.2	3.06	Gabbro breccia
OPM-19-23	44.0	18.45	328.32	963.6	633.4	330.2	2.92	Gabbro breccia
OPM-19-23	49.4	19.23	342.20	1016.5	673.2	343.3	2.96	Gabbro breccia
OPM-19-23	51.0	16.45	292.73	905.7	613.6	292.1	3.10	Gabbro breccia
OPM-19-23	56.8	21.08	375.12	1117.6	747.1	370.5	3.02	Gabbro breccia
OPM-19-23	58.4	18.68	332.42	970.2	641.7	328.5	2.95	Gabbro breccia
OPM-19-23	64.3	18.30	325.65	978.7	656.8	321.9	3.04	Gabbro breccia
OPM-19-23	66.5	20.55	365.69	1072.2	719.2	353.0	3.04	Gabbro breccia
OPM-19-23	73.6	18.08	321.74	975.5	654.5	321.0	3.04	Leuco gabbro
OPM-19-23	78.0	17.43	310.17	923.5	616.6	306.9	3.01	Leuco gabbro
OPM-19-23	79.1	20.15	358.58	1040.0	686.3	353.7	2.94	Leuco gabbro
OPM-19-23	83.2	21.00	373.70	1094.4	721.9	372.5	2.94	Leuco gabbro
OPM-19-23	88.5	14.13	251.45	723.5	476.3	247.2	2.93	Leuco gabbro
OPM-19-23	93.0	13.00	231.34	659.3	429.3	230.0	2.87	Leuco gabbro
OPM-19-23	95.8	16.18	287.93	820.2	539.5	280.7	2.92	Leuco gabbro
OPM-19-23	102.3	20.13	358.22	936.4	589.0	347.4	2.70	Melano gabbro

TABLE I.1
DRILL CORE SUMMARY LOG WITH DENSITY MEASUREMENTS

Drill Hole ID (diameter 47.6 mm)	Sample at (m)	Length (cm)	Volume Core (17.7953)	Dry Weight (g)	Weight in Water (g)	Volume Weight	Density	Lithologies
OPM-19-23	102.7	18.90	336.33	917.8	599.9	317.9	2.89	Melano gabbro
OPM-19-23	109.4	15.38	273.69	744.5	487.3	257.2	2.89	Melano gabbro
OPM-19-23	113.3	19.43	345.76	1031.2	689.4	341.8	3.02	Melano gabbro
OPM-19-23	117.2	20.25	360.35	1083.7	730.5	353.2	3.07	Melano gabbro
OPM-19-23	123.2	17.78	316.40	932.0	622.8	309.2	3.01	Melano gabbro
OPM-19-23	126.1	19.15	340.78	1012.7	665.4	347.3	2.92	Gabbro altered - mineralized
OPM-19-23	130.7	20.60	366.58	1058.3	696.1	362.2	2.92	Gabbro altered - mineralized
OPM-19-23	135.1	22.93	408.05	1219.4	813.5	405.9	3.00	Leuco gabbro
OPM-19-23	139.8	20.78	369.79	1109.1	741.7	367.4	3.02	Leuco gabbro
OPM-19-23	144.0	14.20	252.69	751.2	503.7	247.5	3.04	Leuco gabbro
OPM-19-23	149.0	20.90	371.92	1095.6	731.2	364.4	3.01	Melano gabbro
OPM-19-23	152.3	19.58	348.43	1010.6	668.9	341.7	2.96	Melano gabbro
OPM-19-23	155.3	21.98	391.14	1098.4	715.5	382.9	2.87	Melano gabbro
OPM-19-23	161.1	17.80	316.76	915.7	606.5	309.2	2.96	Melano gabbro
OPM-19-23	165.4	19.90	354.13	1050.2	705.0	345.2	3.04	Melano gabbro
OPM-19-23	169.0	16.58	295.05	866.3	577.8	288.5	3.00	Melano gabbro
OPM-19-23	173.0	22.70	403.95	1176.9	782.5	394.4	2.98	Melano gabbro
OPM-19-23	176.0	19.48	346.65	1041.9	696.0	345.9	3.01	Melano gabbro
OPM-19-23	180.0	20.70	368.36	1110.6	744.3	366.3	3.03	Melano gabbro
OPM-19-23	187.4	22.18	394.70	1140.7	757.1	383.6	2.97	Melano gabbro
OPM-19-23	189.1	19.40	345.23	1043.5	700.5	343.0	3.04	Melano gabbro
OPM-19-23	195.0	20.70	368.36	1089.7	726.2	363.5	3.00	Melano gabbro
OPM-19-23	199.3	17.85	317.65	941.4	627.4	314.0	3.00	Melano gabbro
OPM-19-23	201.7	20.63	367.12	1102.4	731.5	370.9	2.97	Melano gabbro
OPM-19-23	207.5	19.08	339.53	1098.8	762.7	336.1	3.27	Melano gabbro
OPM-19-23	217.4	18.55	330.10	889.7	561.6	328.1	2.71	Rhyolite
OPM-19-23	222.2	18.70	332.77	897.1	568.2	328.9	2.73	Rhyolite

APPENDIX J 2019 OPEMISKA CRM RESULTS FOR CU, AG, CO, ZN AND AU

FIGURE J.1 2019 PERFORMANCE OF OREAS 61F STANDARD FOR AU

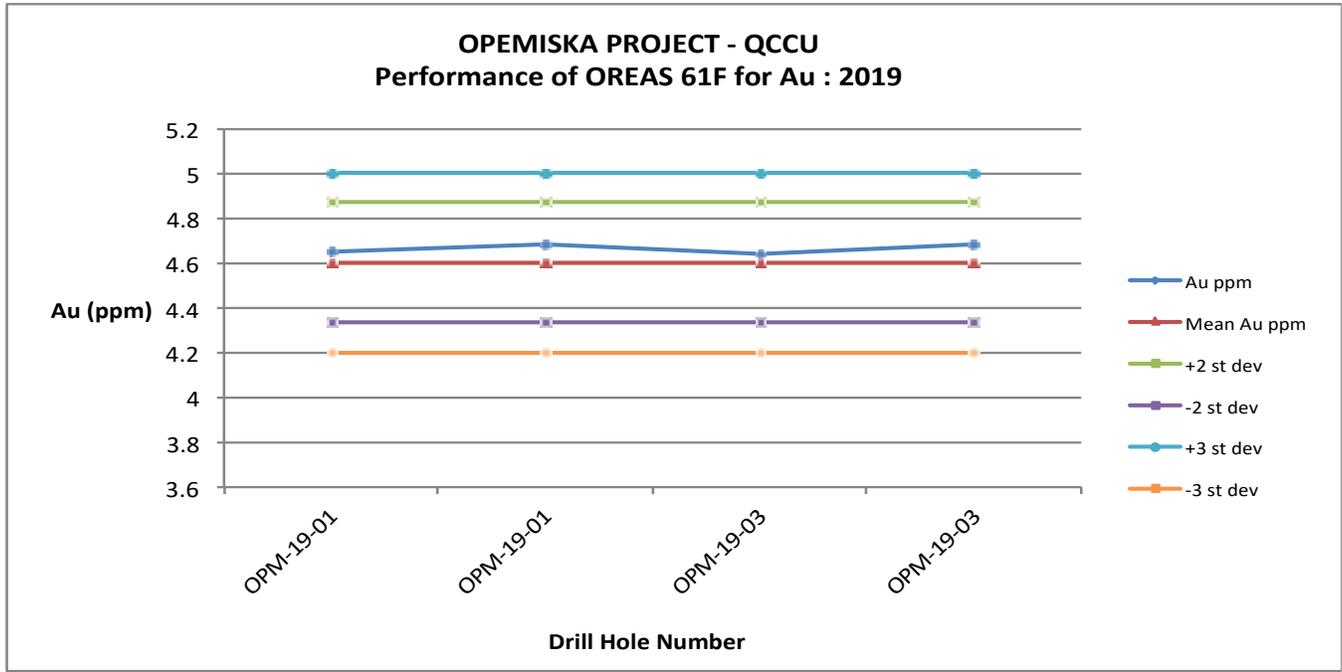


FIGURE J.2 2019 PERFORMANCE OF OREAS 61F STANDARD FOR AG

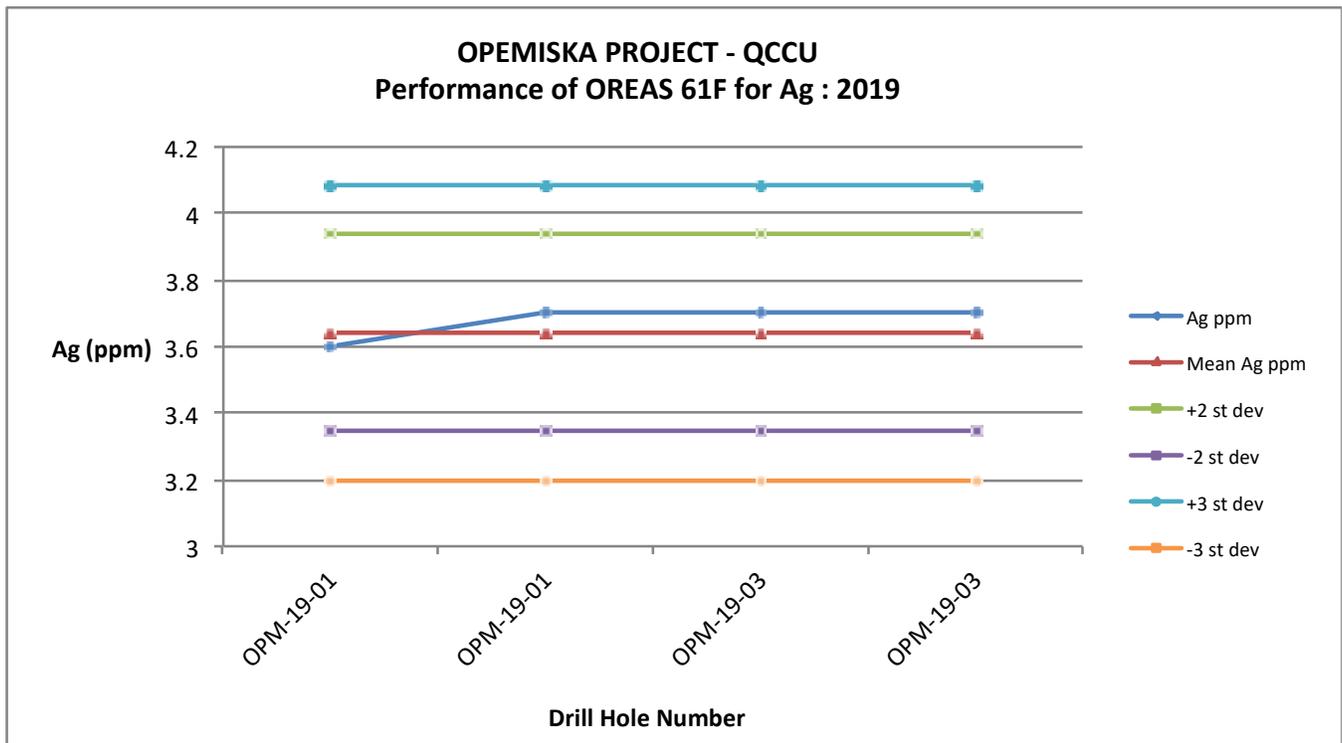


FIGURE J.3 2019 PERFORMANCE OF OREAS 112 STANDARD FOR CU

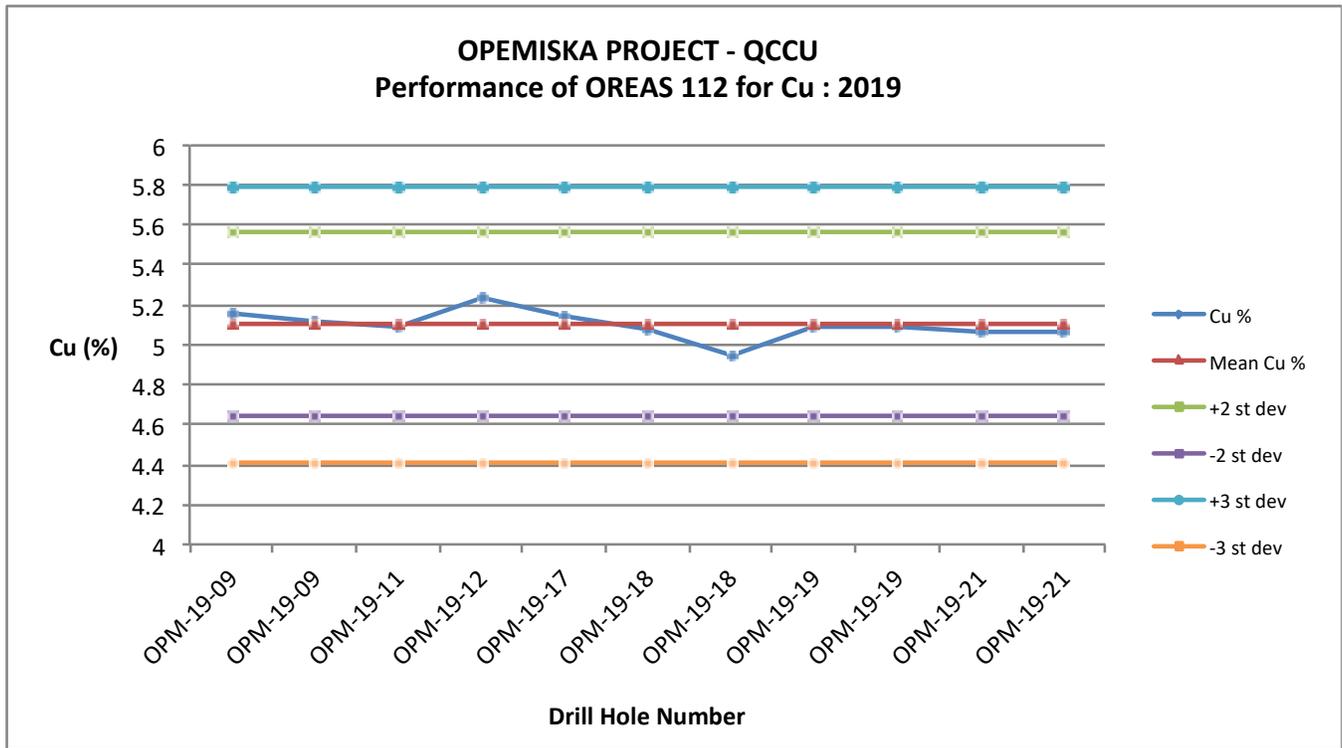


FIGURE J.4 2019 PERFORMANCE OF OREAS 112 STANDARD FOR AG

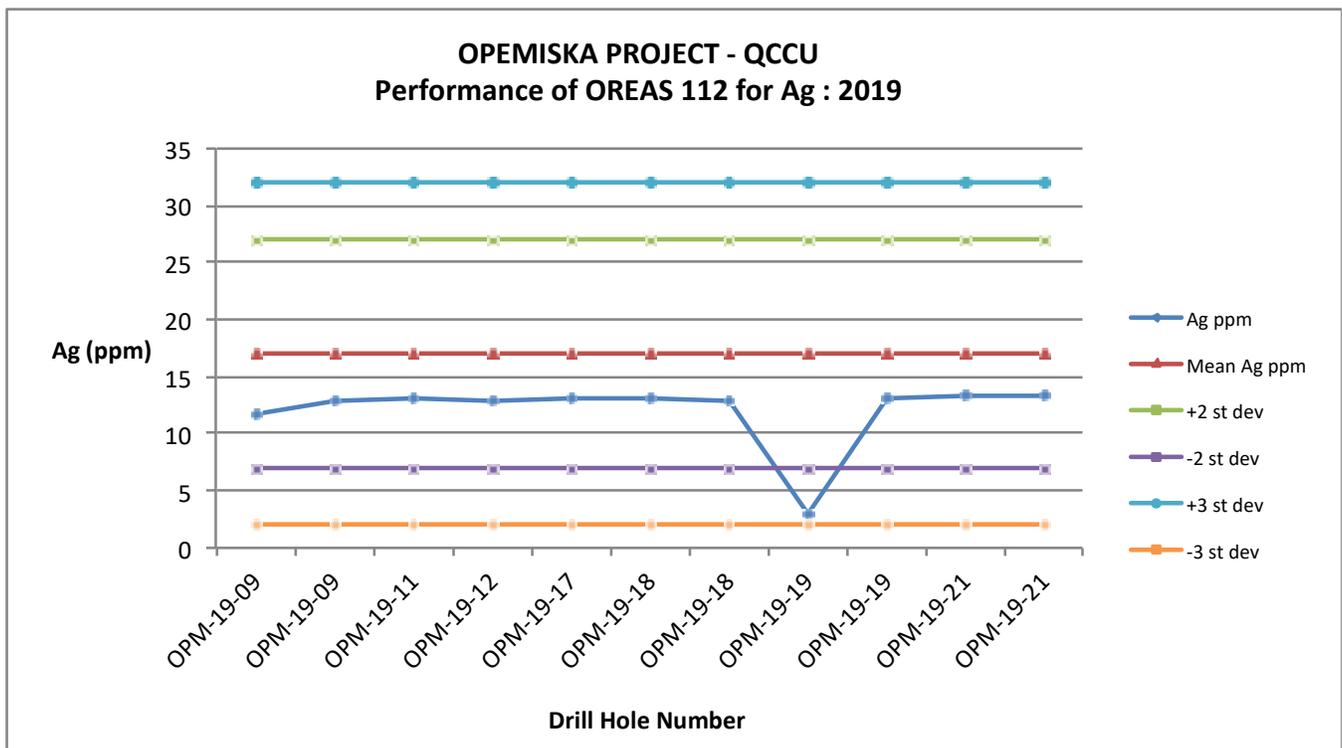


FIGURE J.5 2019 PERFORMANCE OF OREAS 112 STANDARD FOR CO

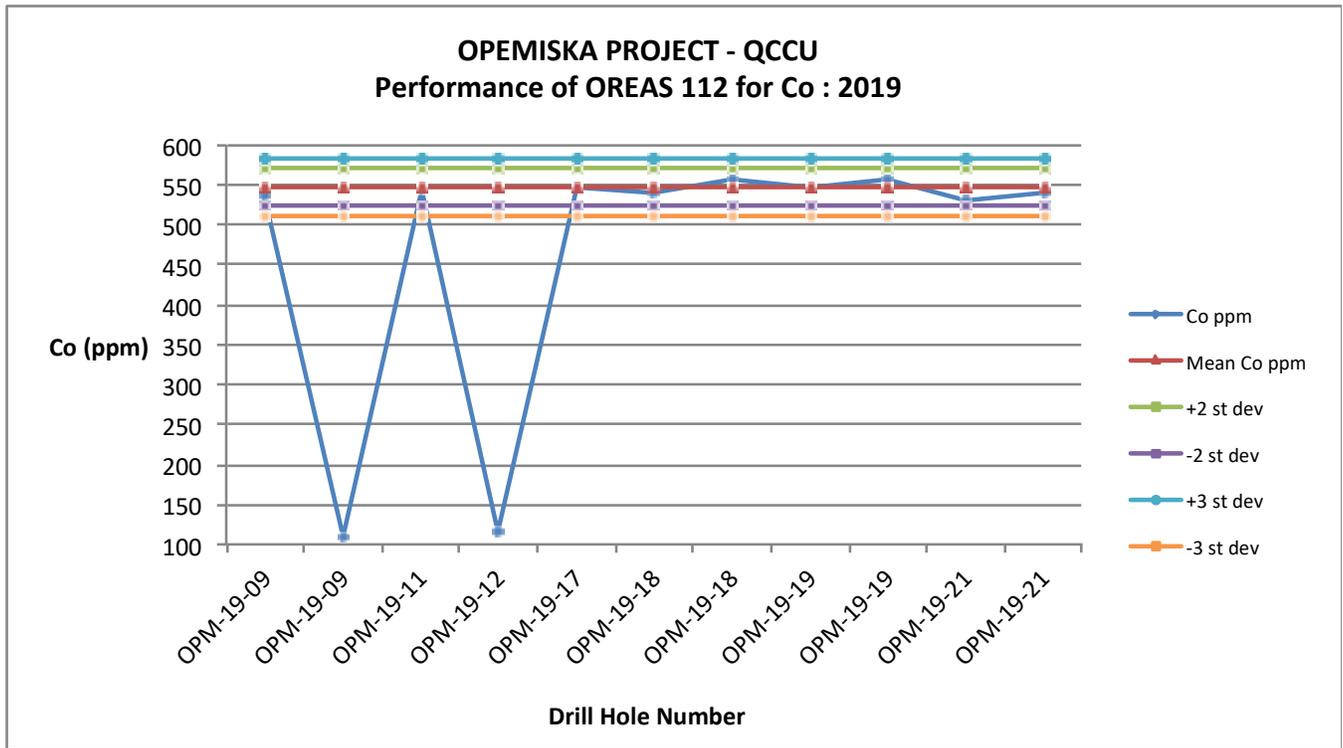


FIGURE J.6 2019 PERFORMANCE OF OREAS 112 STANDARD FOR ZN

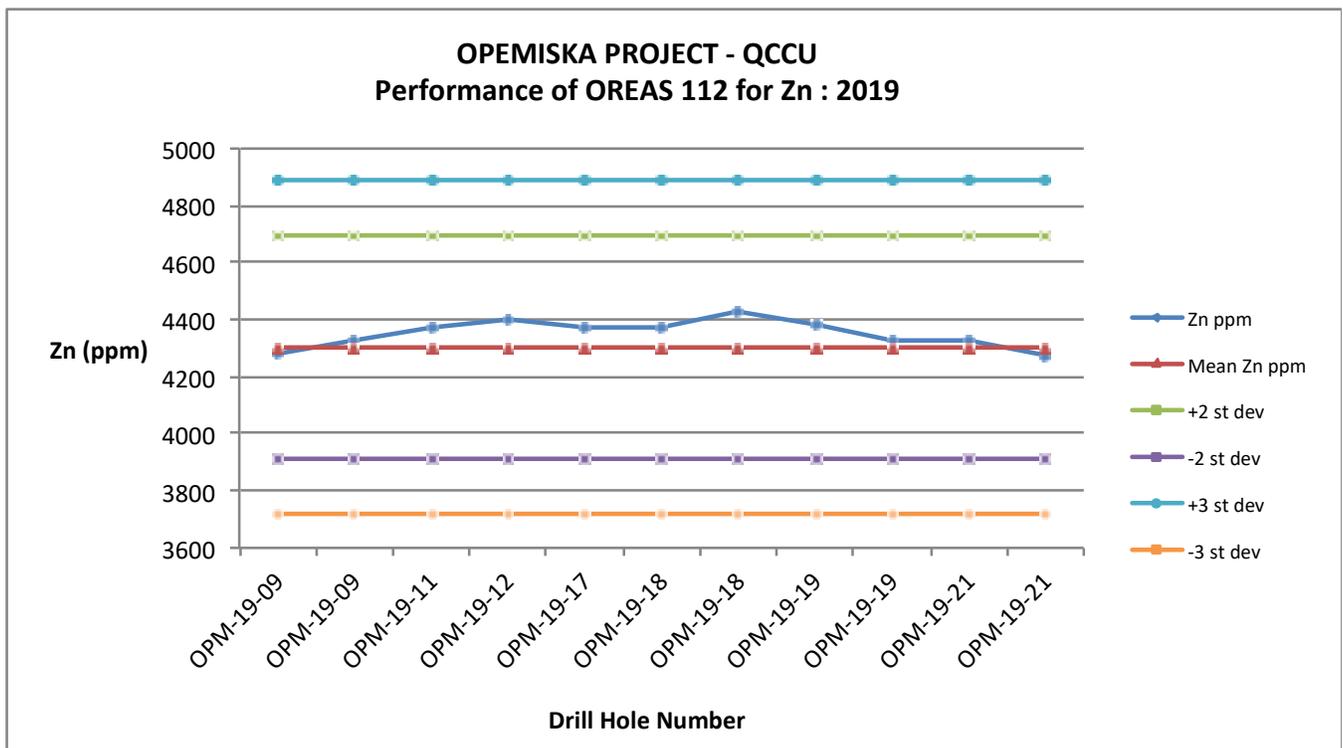


FIGURE J.7 2019 PERFORMANCE OF OREAS 601 STANDARD FOR CU

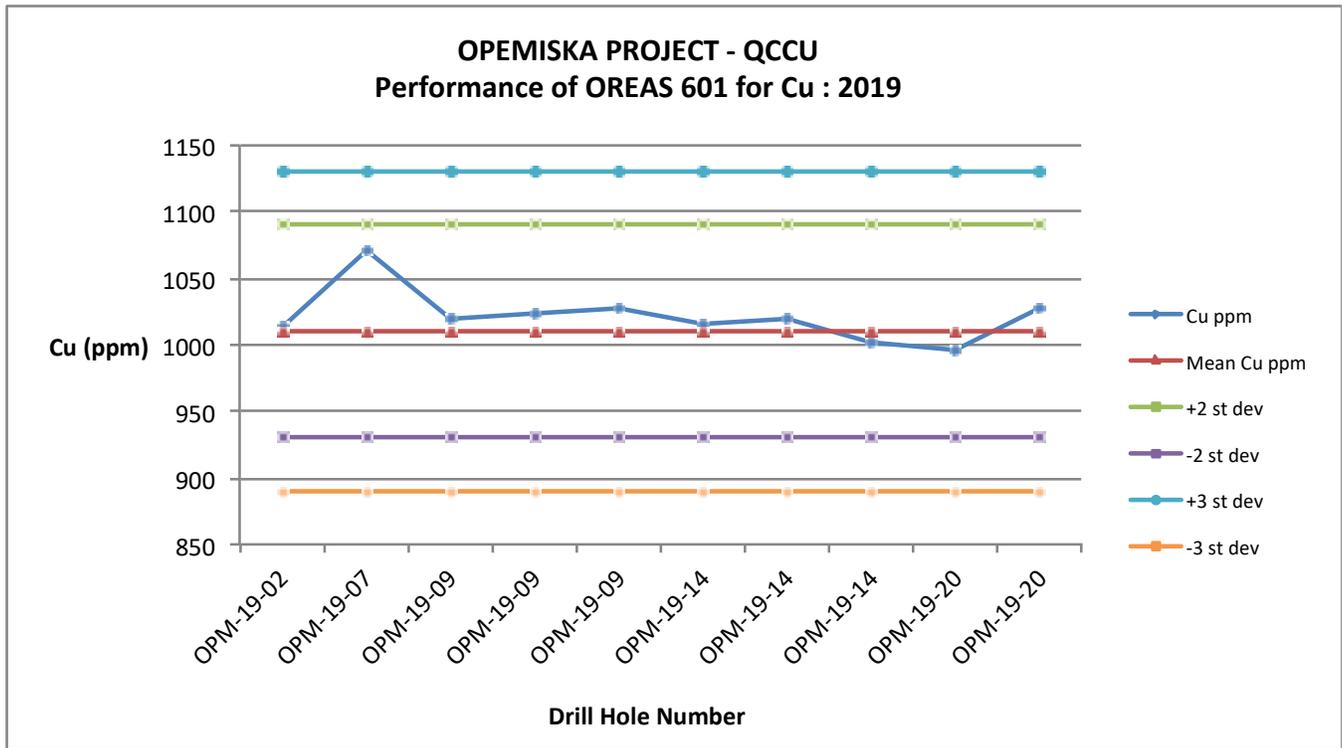


FIGURE J.8 2019 PERFORMANCE OF OREAS 601 STANDARD FOR AG

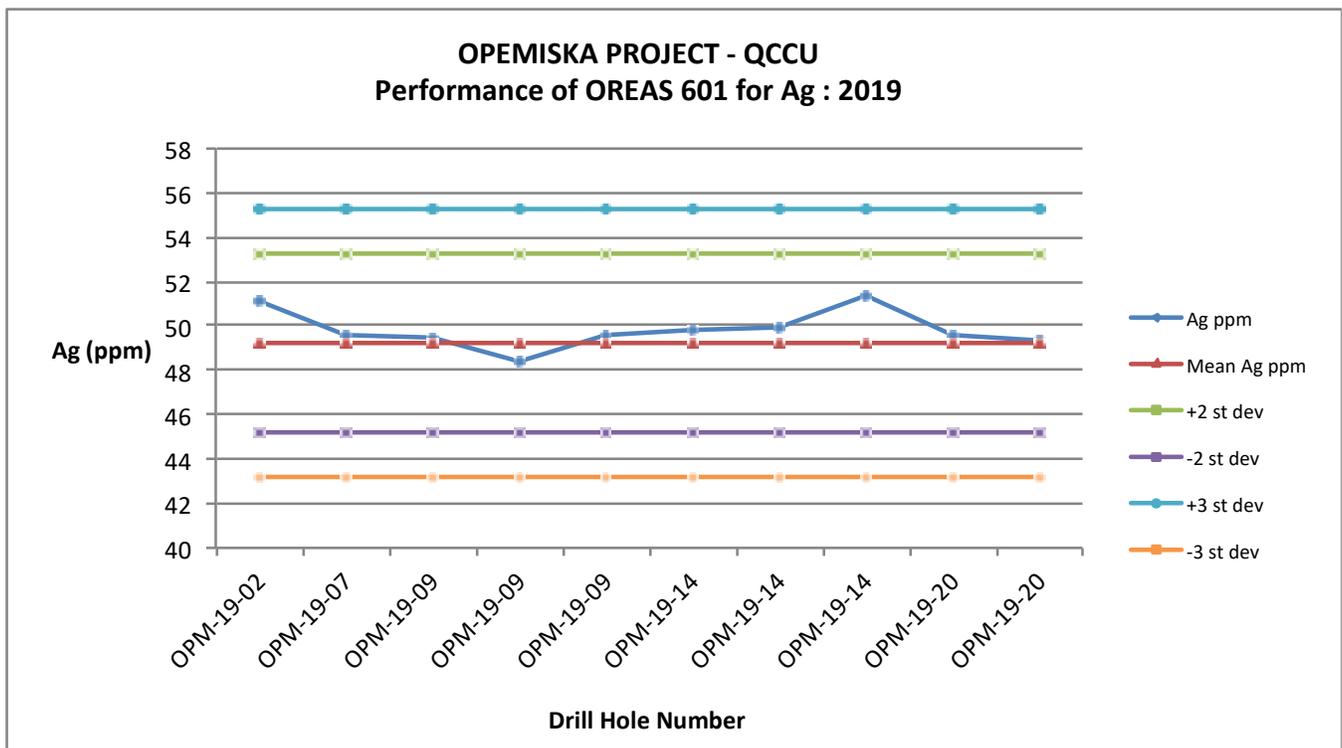


FIGURE J.9 2019 PERFORMANCE OF OREAS 601 STANDARD FOR CO

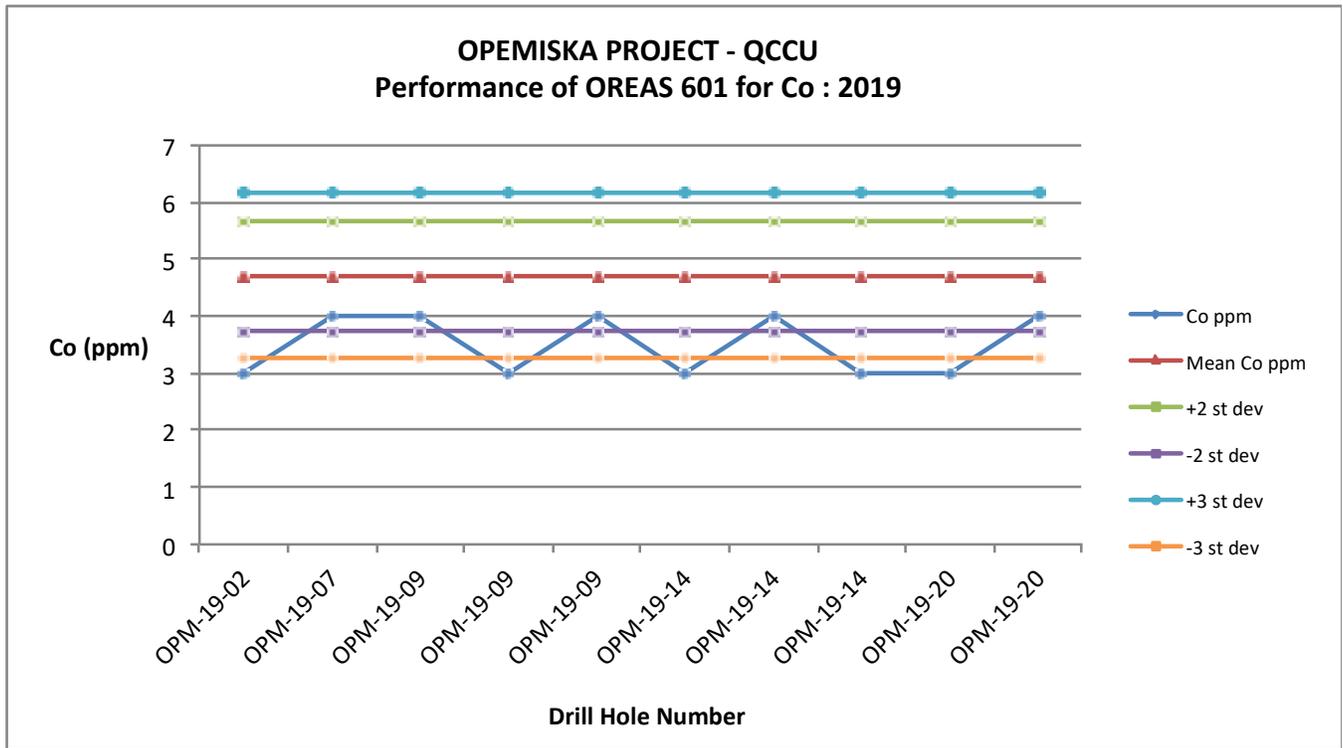


FIGURE J.10 2019 PERFORMANCE OF OREAS 601 STANDARD FOR ZN

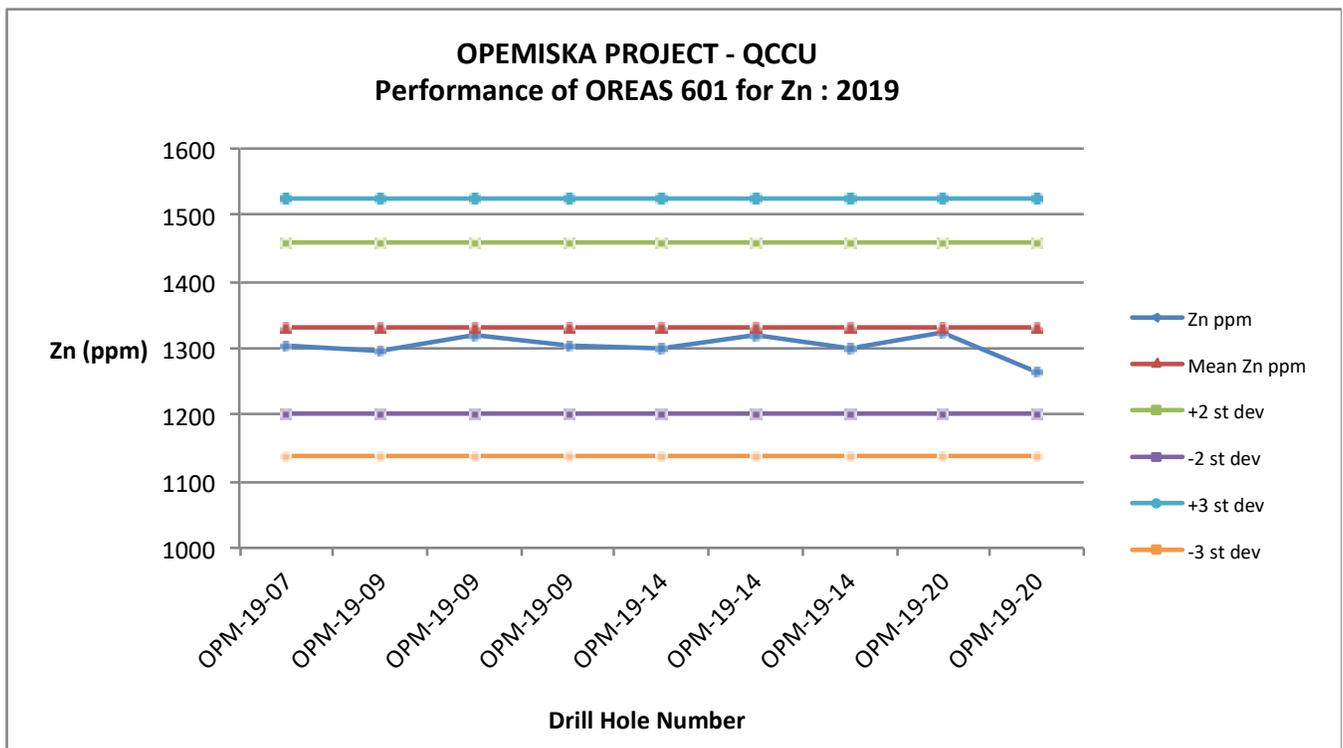


FIGURE J.11 2019 PERFORMANCE OF OREAS 601 STANDARD FOR AU

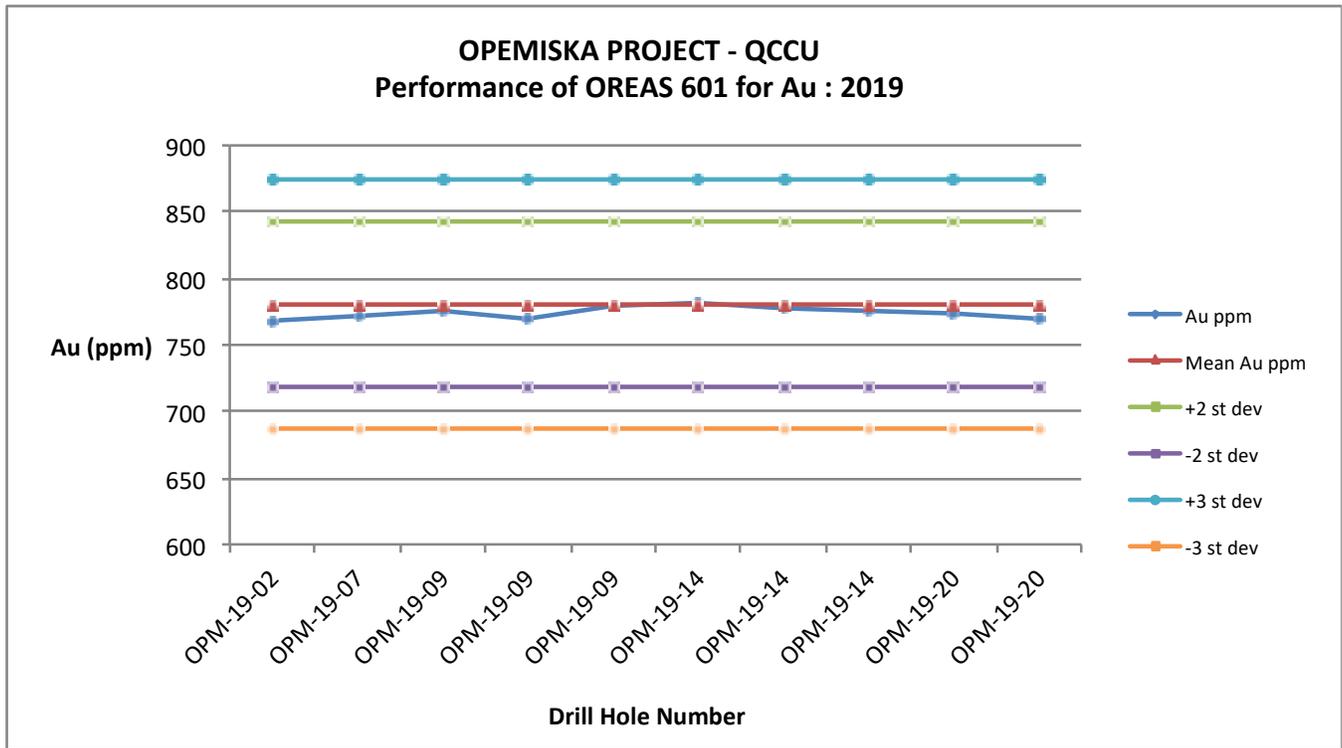


FIGURE J.12 2019 PERFORMANCE OF OREAS 924 STANDARD FOR CU

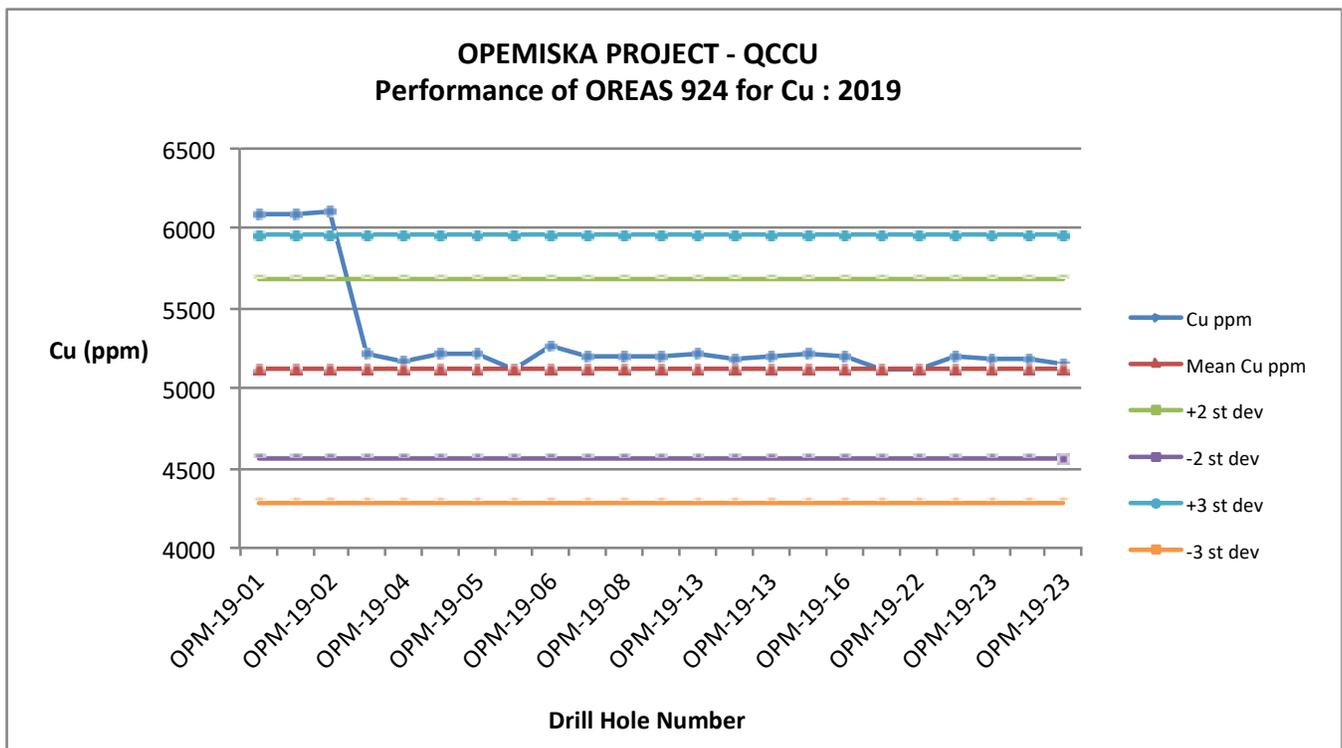


FIGURE J.13 2019 PERFORMANCE OF OREAS 924 STANDARD FOR AG

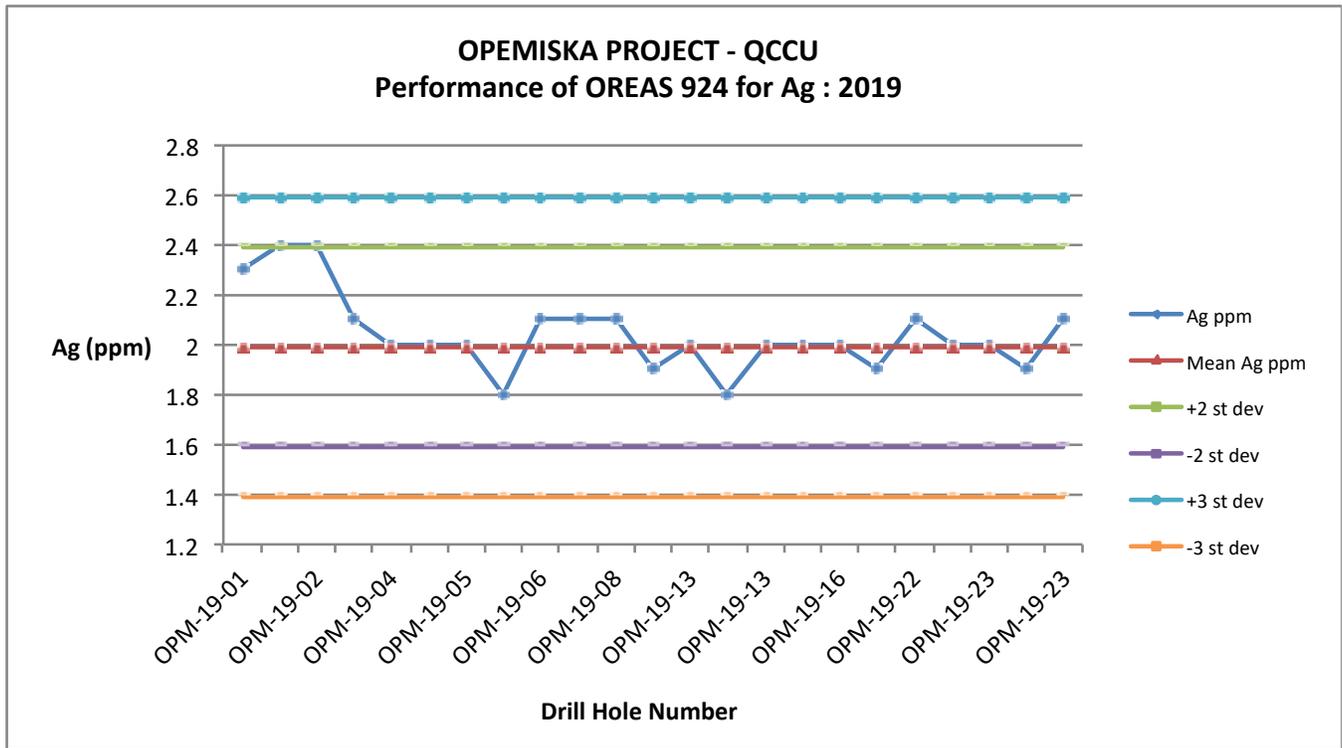


FIGURE J.14 2019 PERFORMANCE OF OREAS 924 STANDARD FOR CO

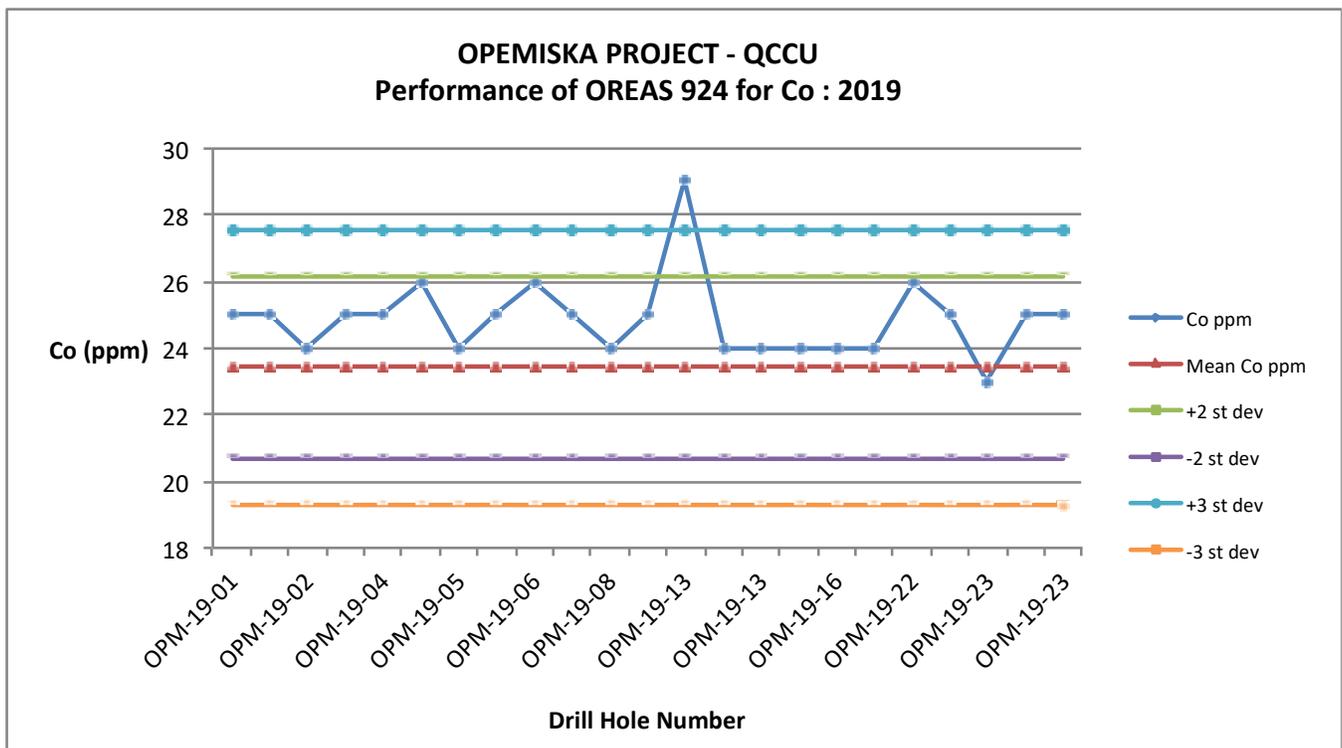
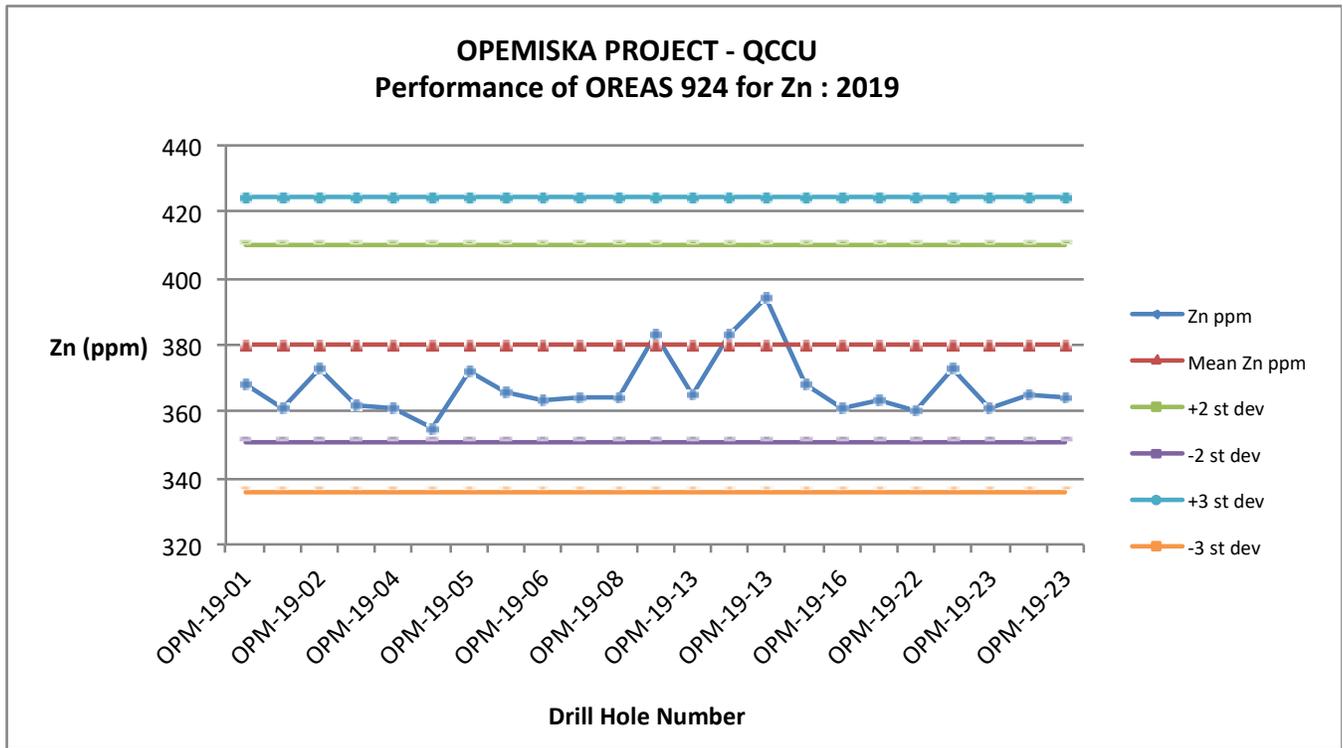


FIGURE J.15 2019 PERFORMANCE OF OREAS 924 STANDARD FOR ZN



APPENDIX K 2021 OPEMISKA CRM RESULTS FOR CU, AG, CO, ZN AND AU

FIGURE K.1 2021 PERFORMANCE OF OREAS 166 STANDARD FOR CU

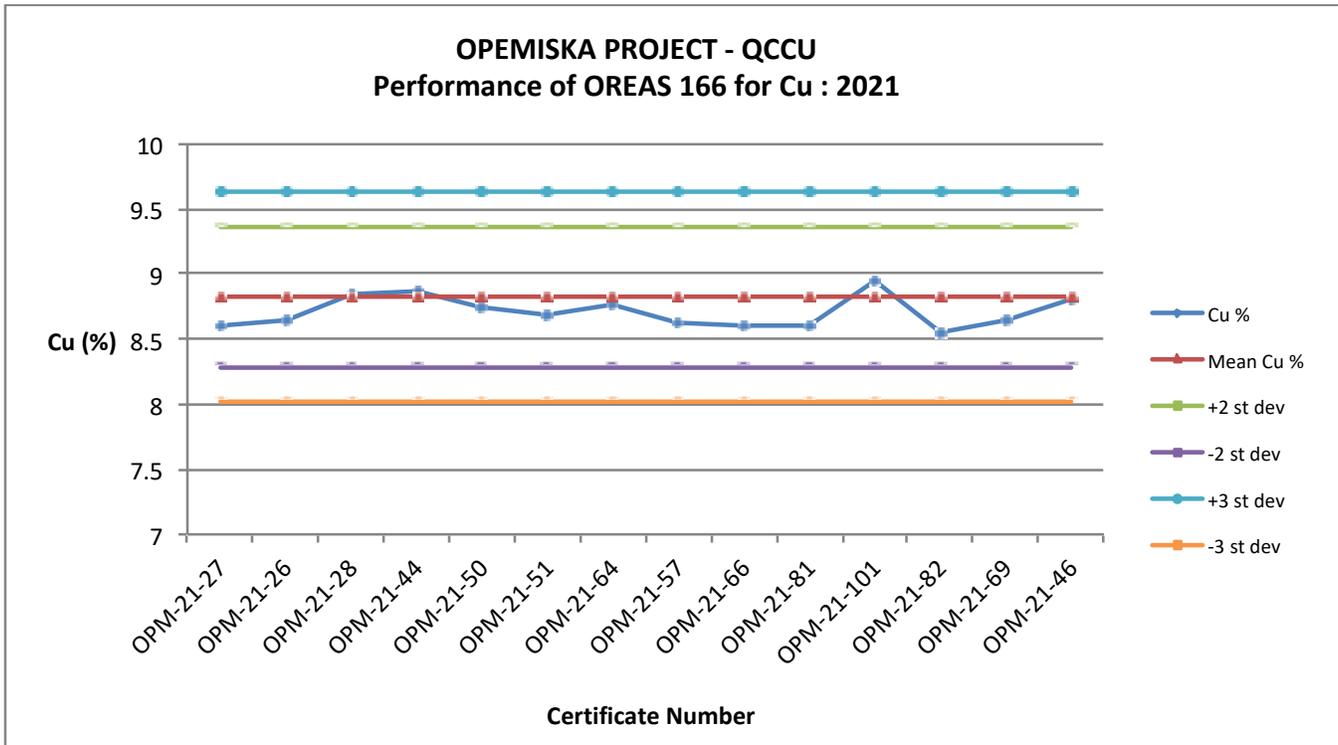


FIGURE K.2 2021 PERFORMANCE OF OREAS 166 STANDARD FOR AG

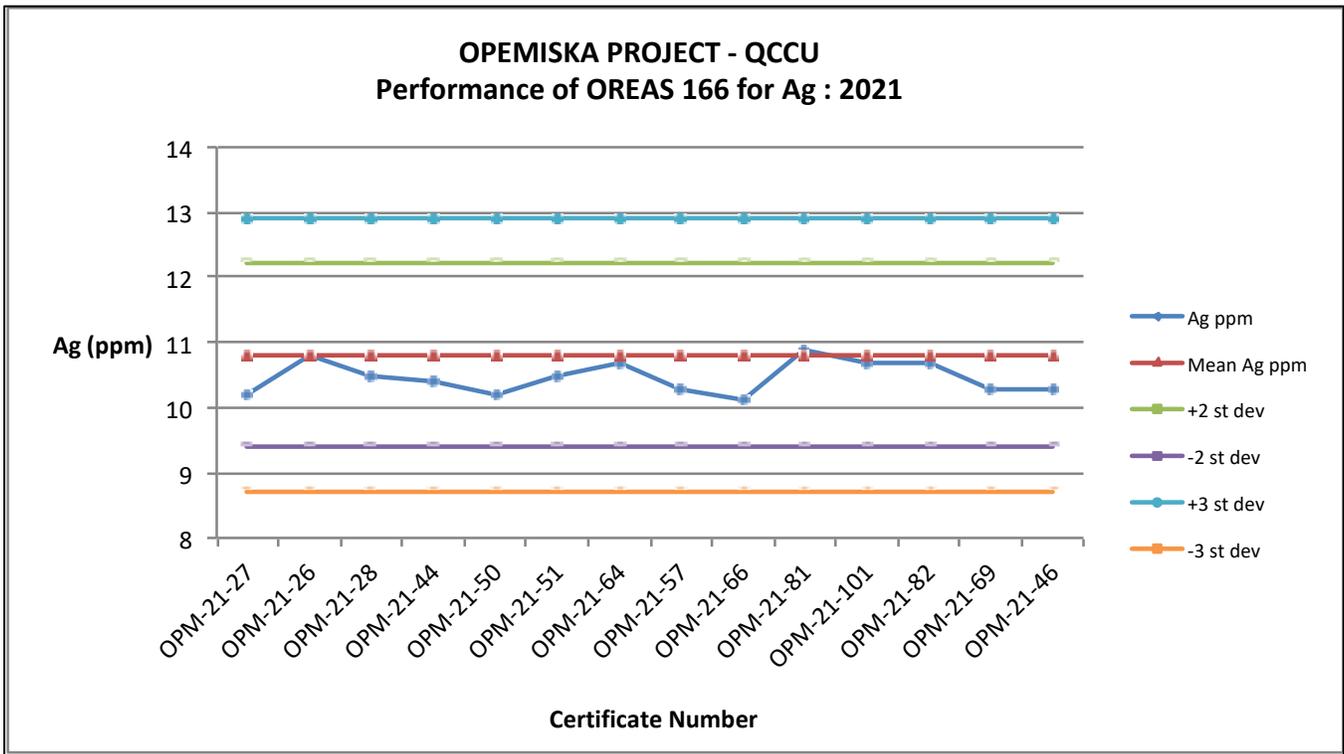


FIGURE K.3 2021 PERFORMANCE OF OREAS 166 STANDARD FOR CO

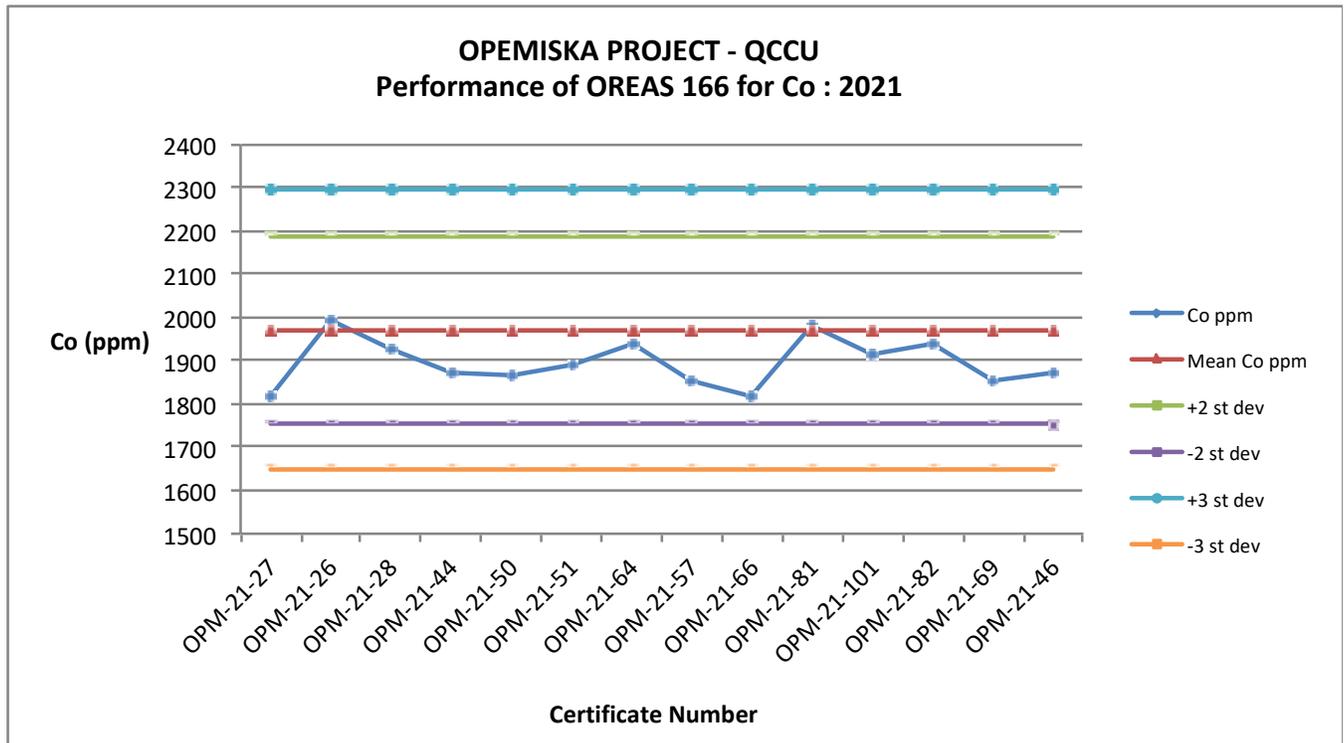


FIGURE K.4 2021 PERFORMANCE OF OREAS 166 STANDARD FOR ZN

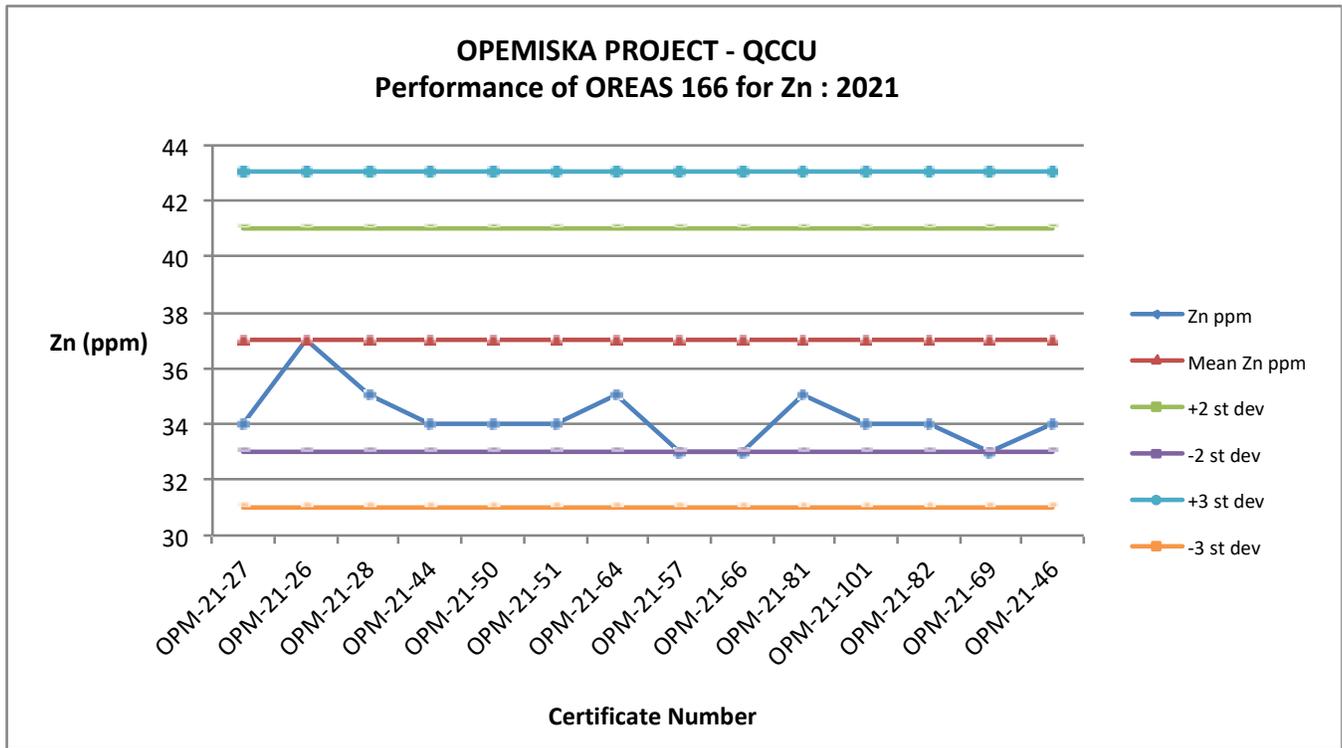


FIGURE K.5 2021 PERFORMANCE OF OREAS 502C STANDARD FOR CU

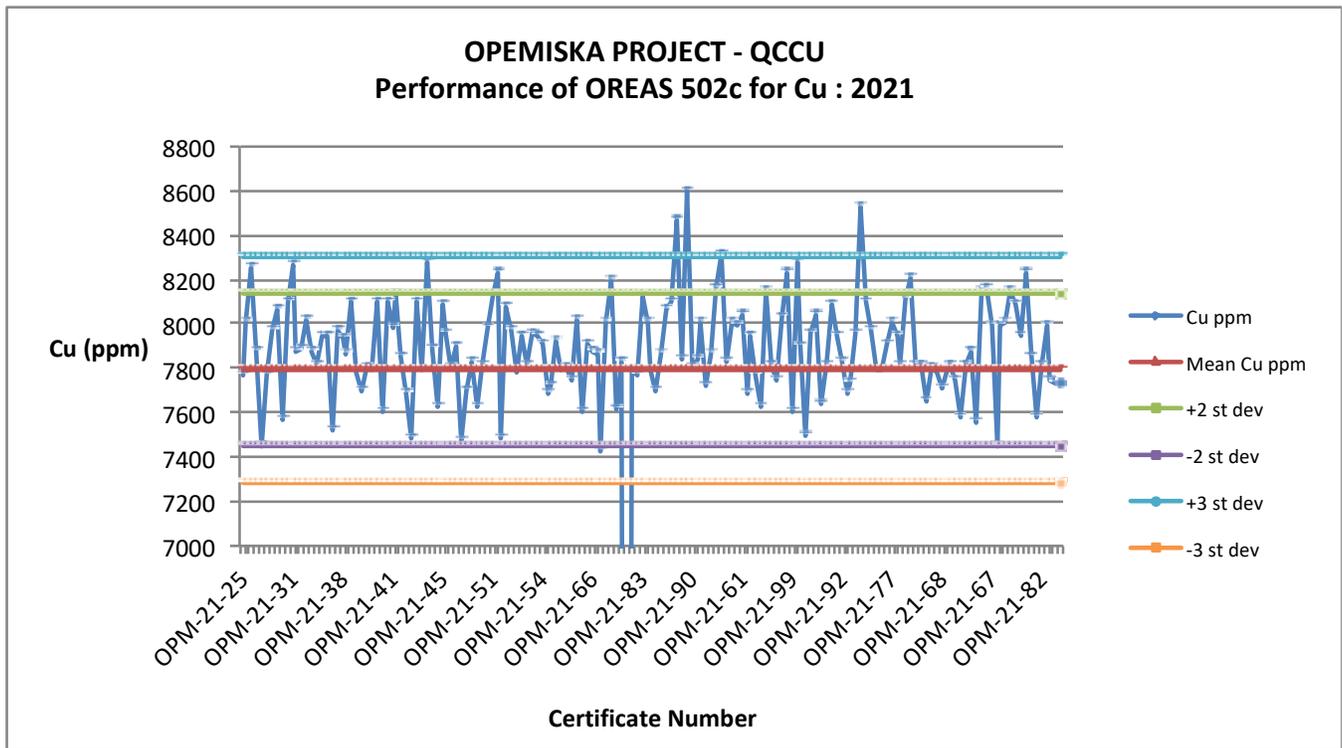


FIGURE K.6 2021 PERFORMANCE OF OREAS 502C STANDARD FOR AG

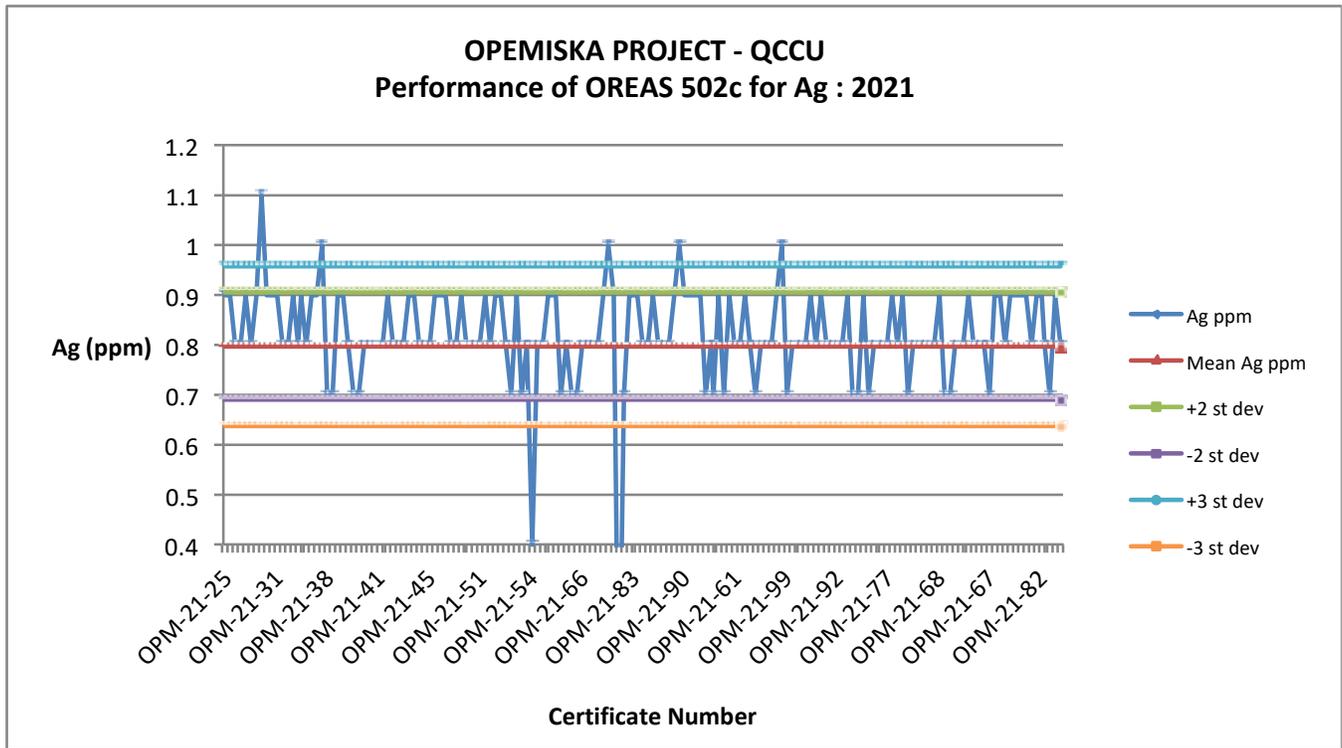


FIGURE K.7 2021 PERFORMANCE OF OREAS 502C STANDARD FOR CO

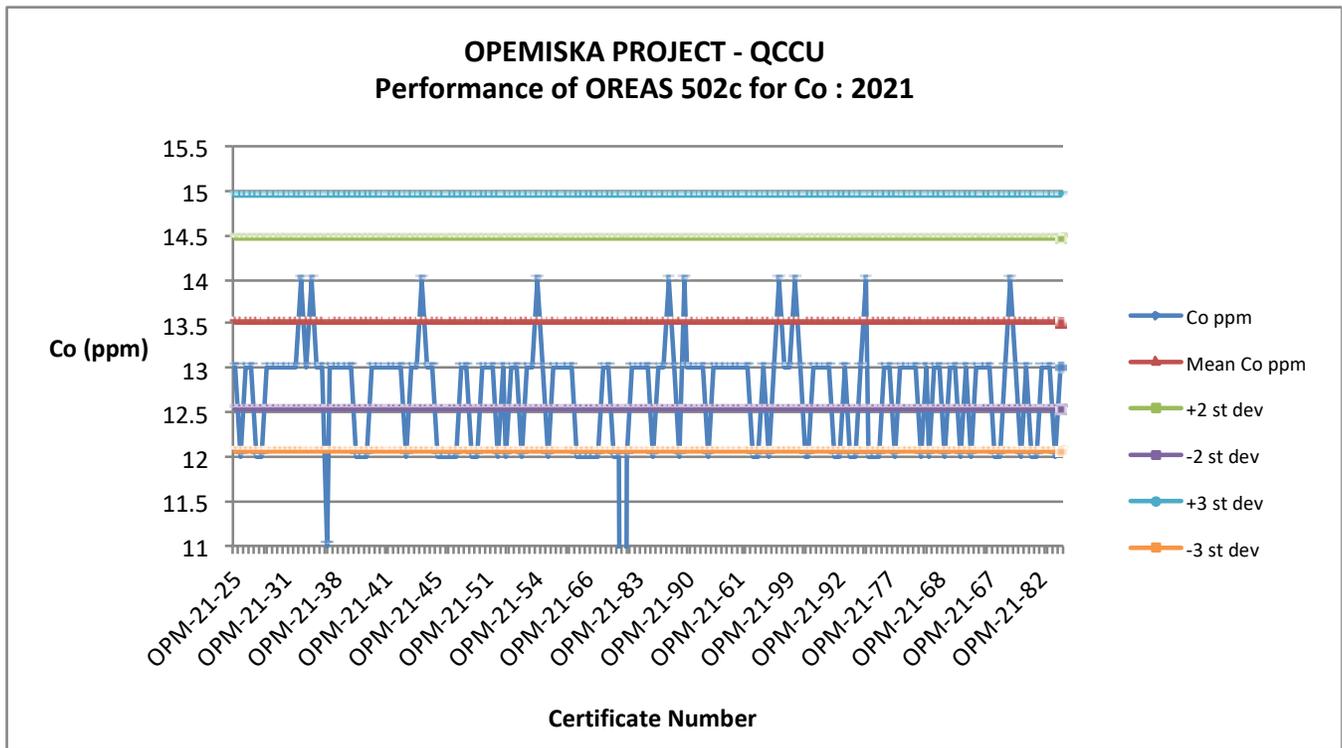


FIGURE K.8 2021 PERFORMANCE OF OREAS 502C STANDARD FOR ZN

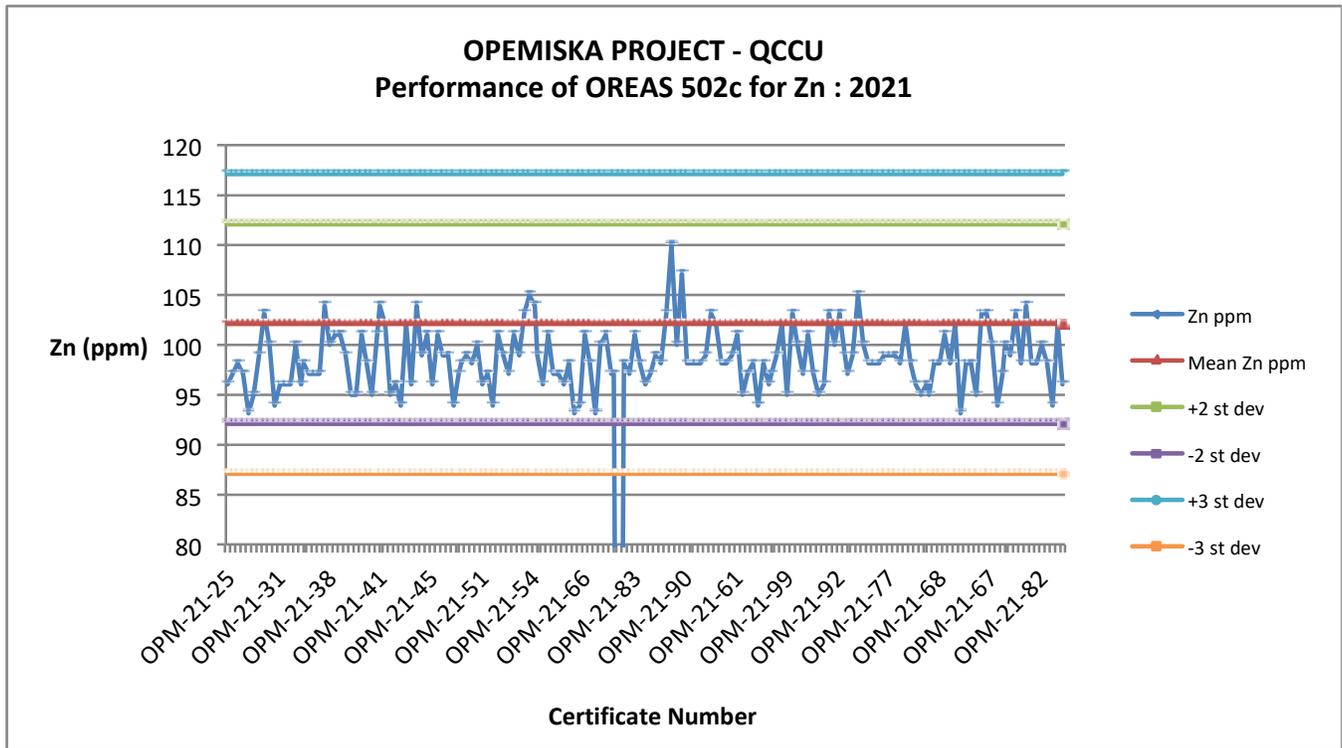


FIGURE K.9 2021 PERFORMANCE OF OREAS 502C STANDARD FOR AU

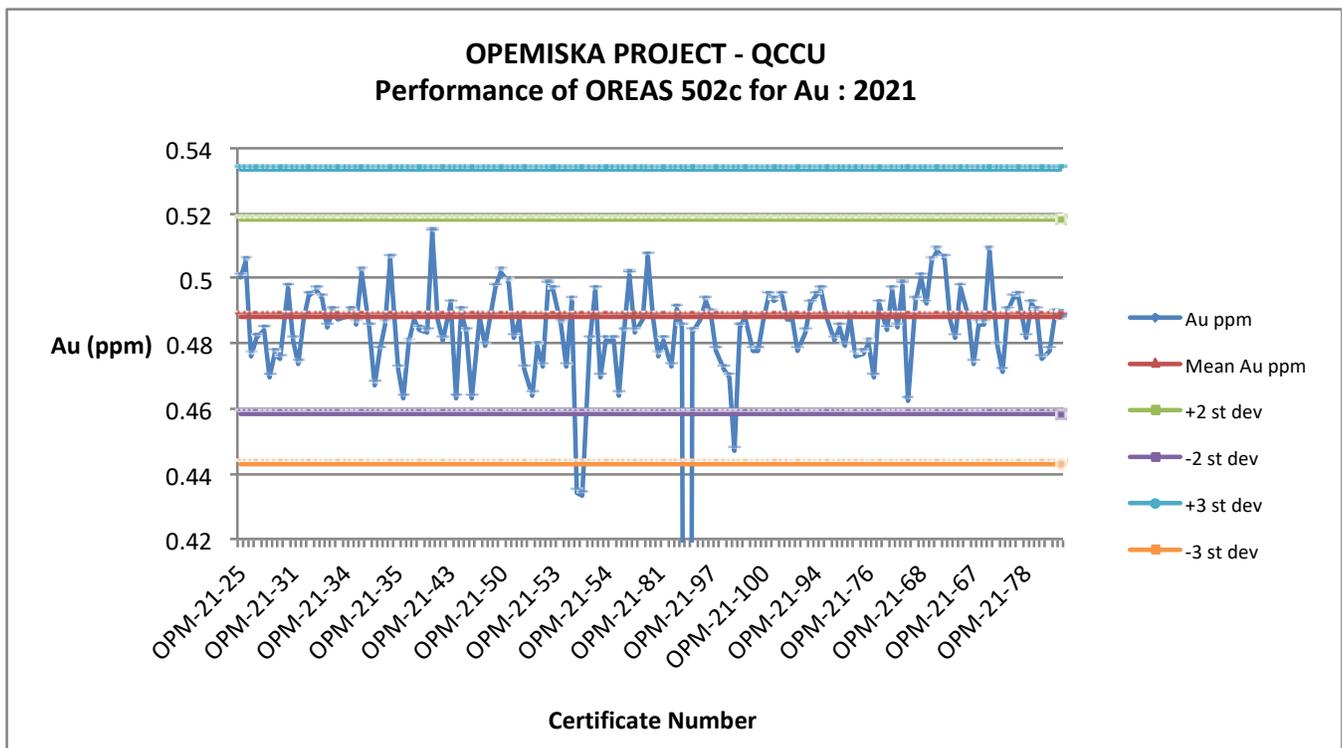


FIGURE K.10 2021 PERFORMANCE OF OREAS 504C STANDARD FOR CU

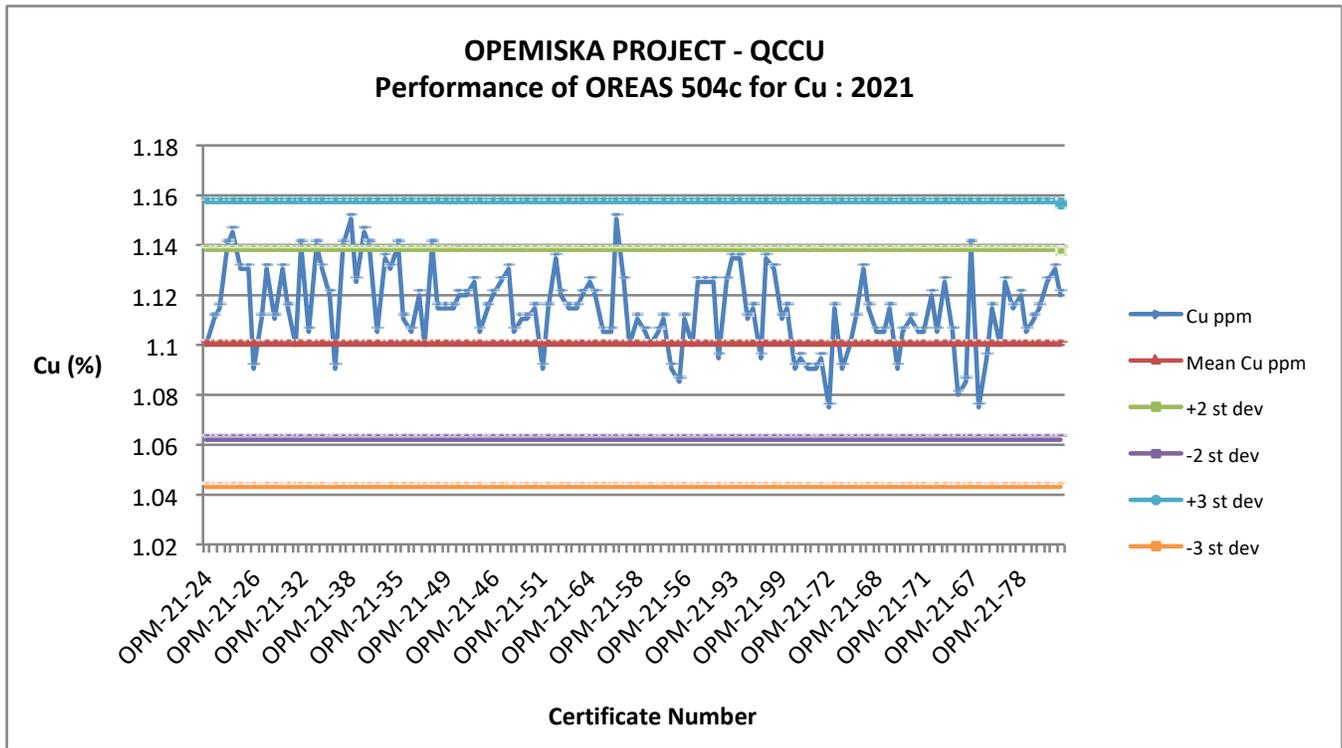


FIGURE K.11 2021 PERFORMANCE OF OREAS 504C STANDARD FOR AG

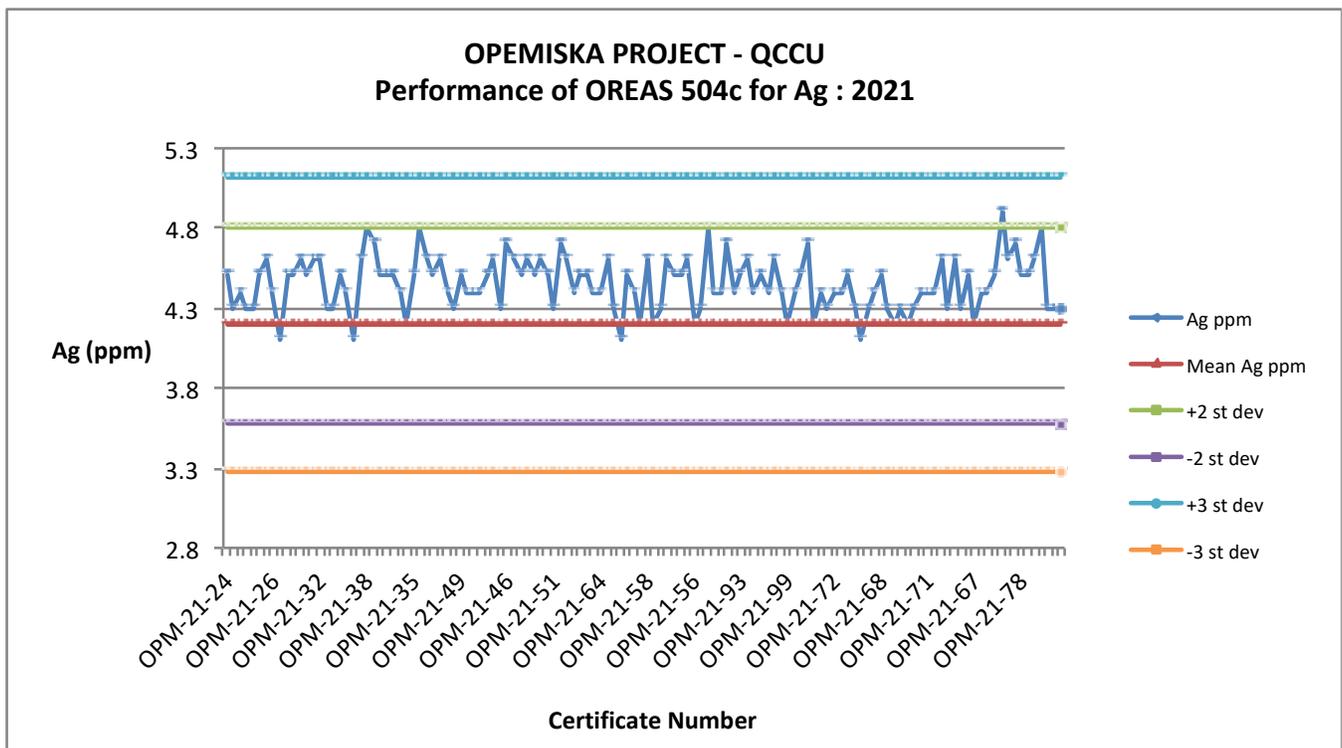


FIGURE K.12 2021 PERFORMANCE OF OREAS 504C STANDARD FOR CO

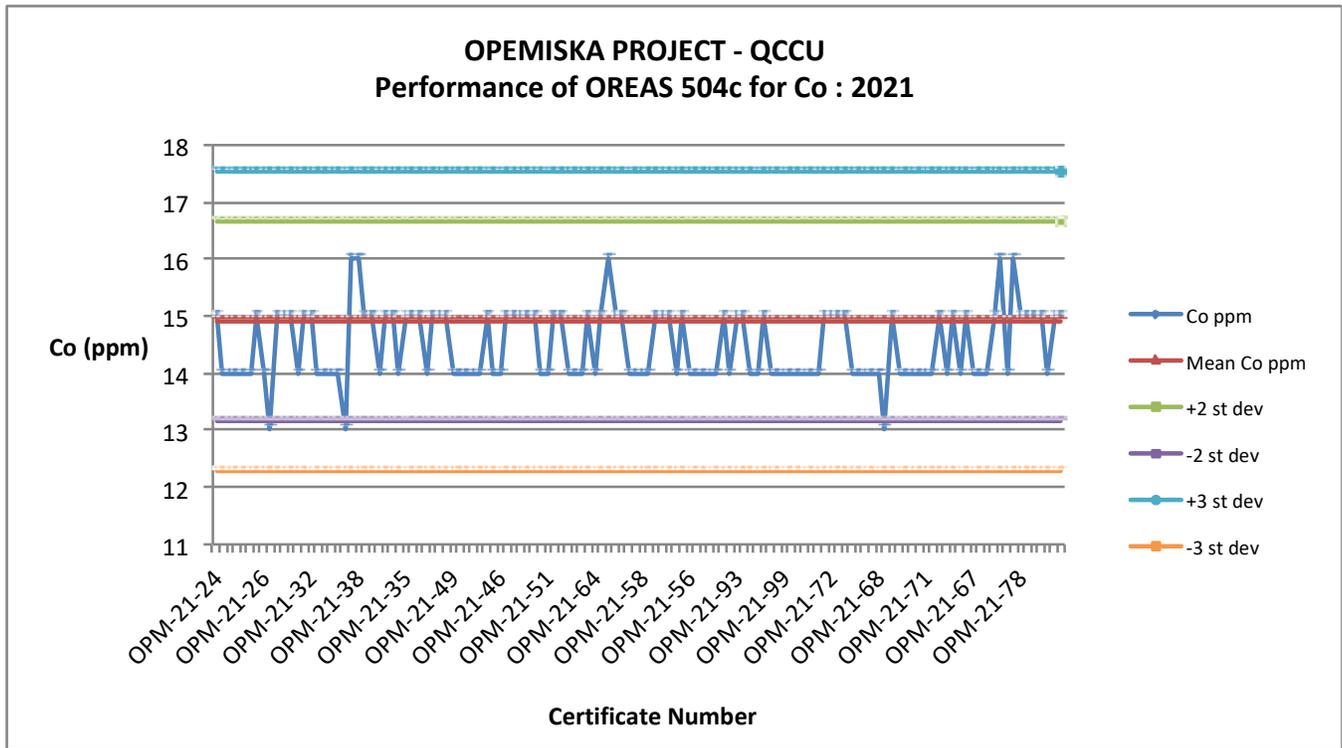


FIGURE K.13 2021 PERFORMANCE OF OREAS 504C STANDARD FOR ZN

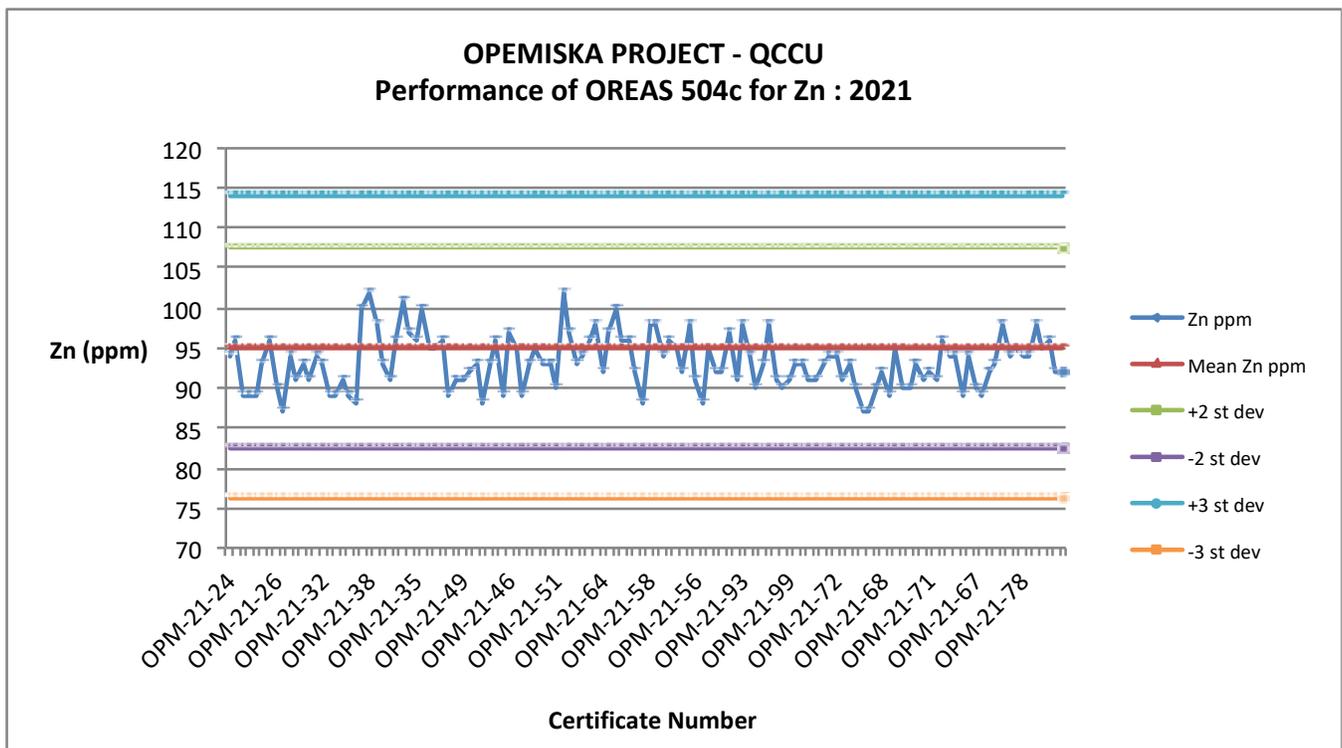


FIGURE K.14 2021 PERFORMANCE OF OREAS 504C STANDARD FOR AU

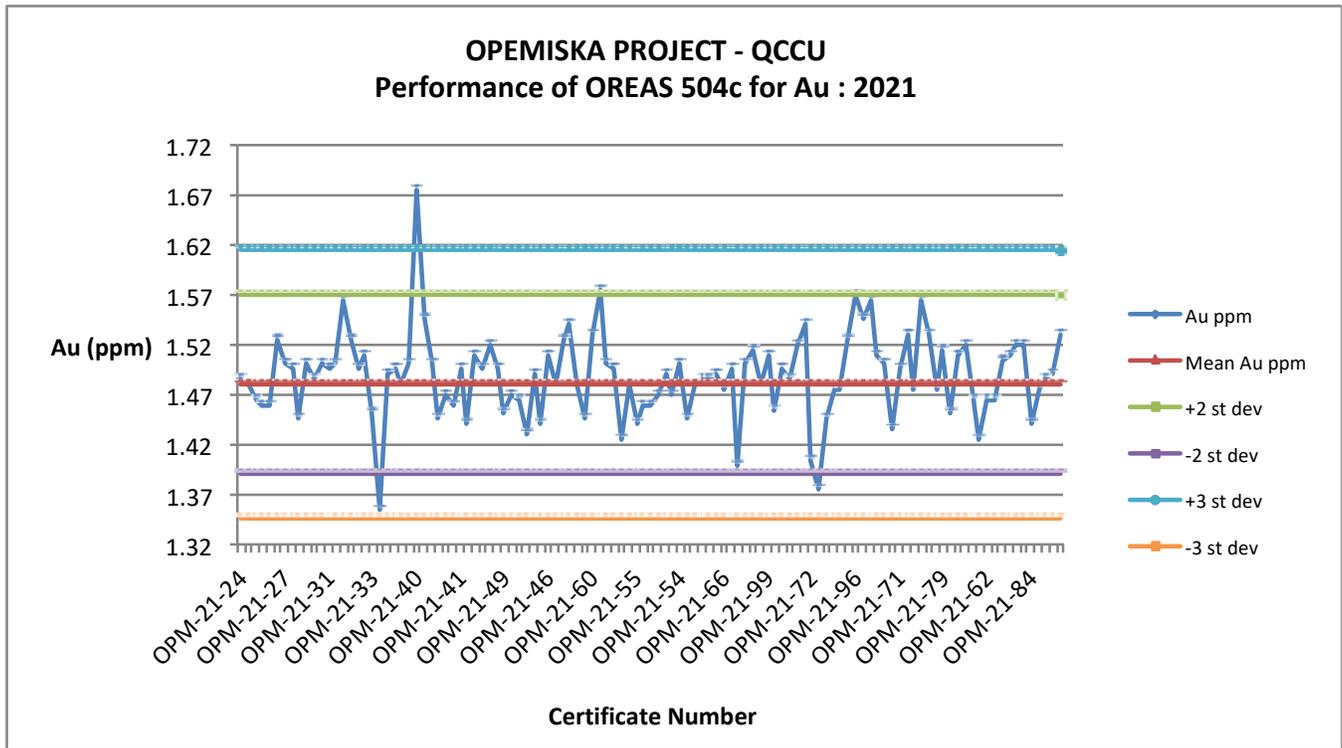


FIGURE K.15 2021 PERFORMANCE OF OREAS 505 STANDARD FOR CU

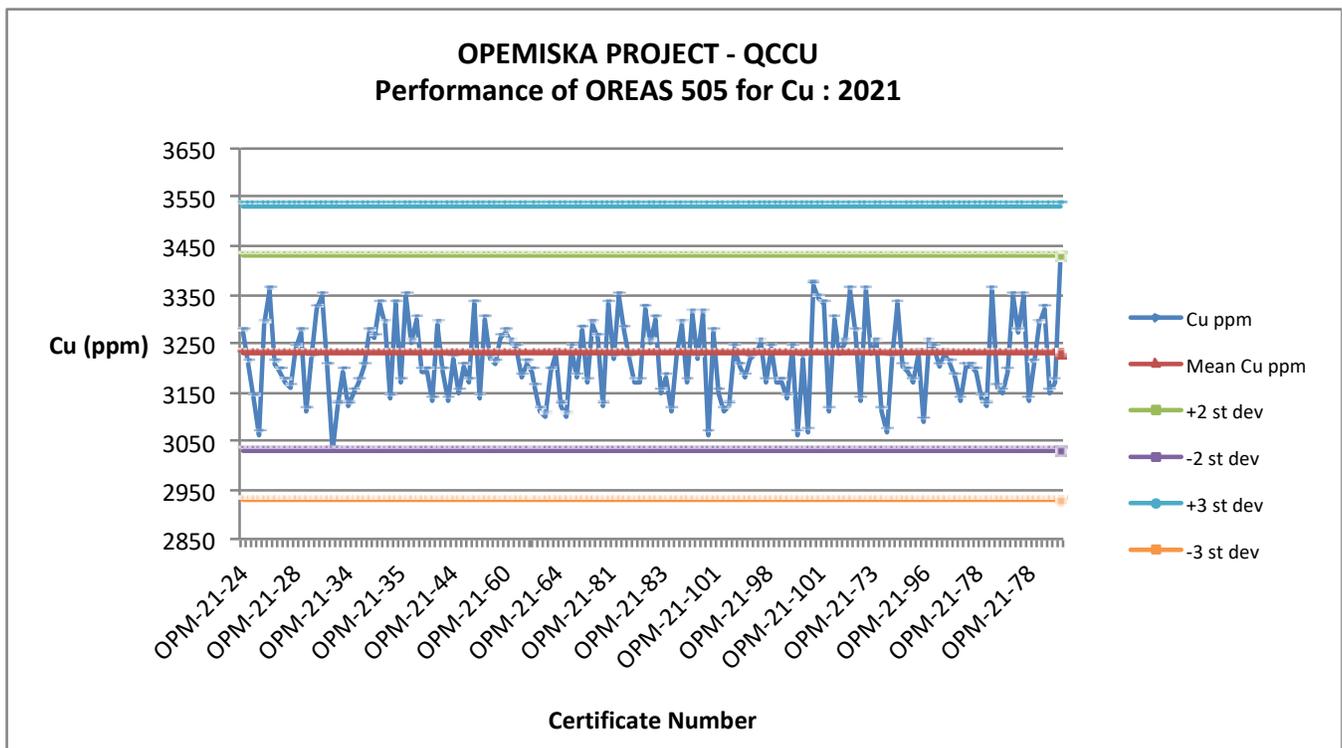


FIGURE K.16 2021 PERFORMANCE OF OREAS 505 STANDARD FOR AG

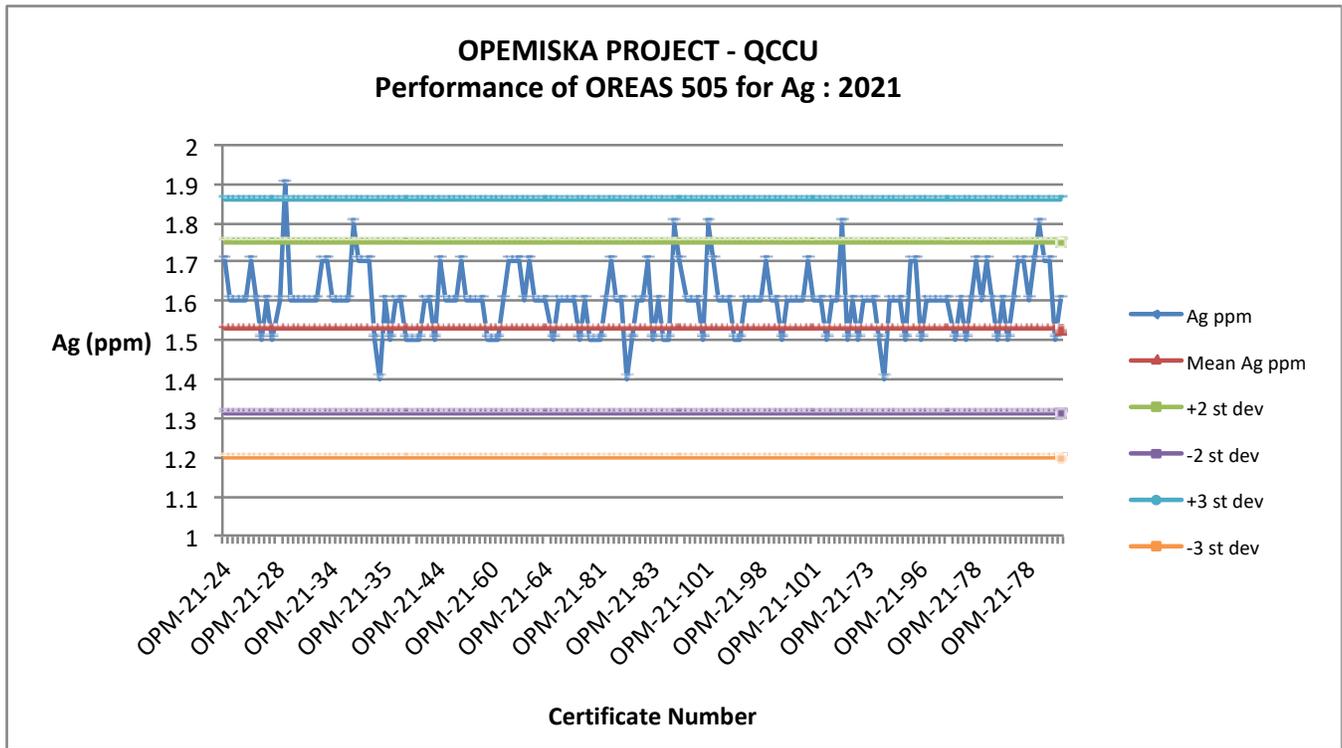


FIGURE K.17 2021 PERFORMANCE OF OREAS 505 STANDARD FOR CO

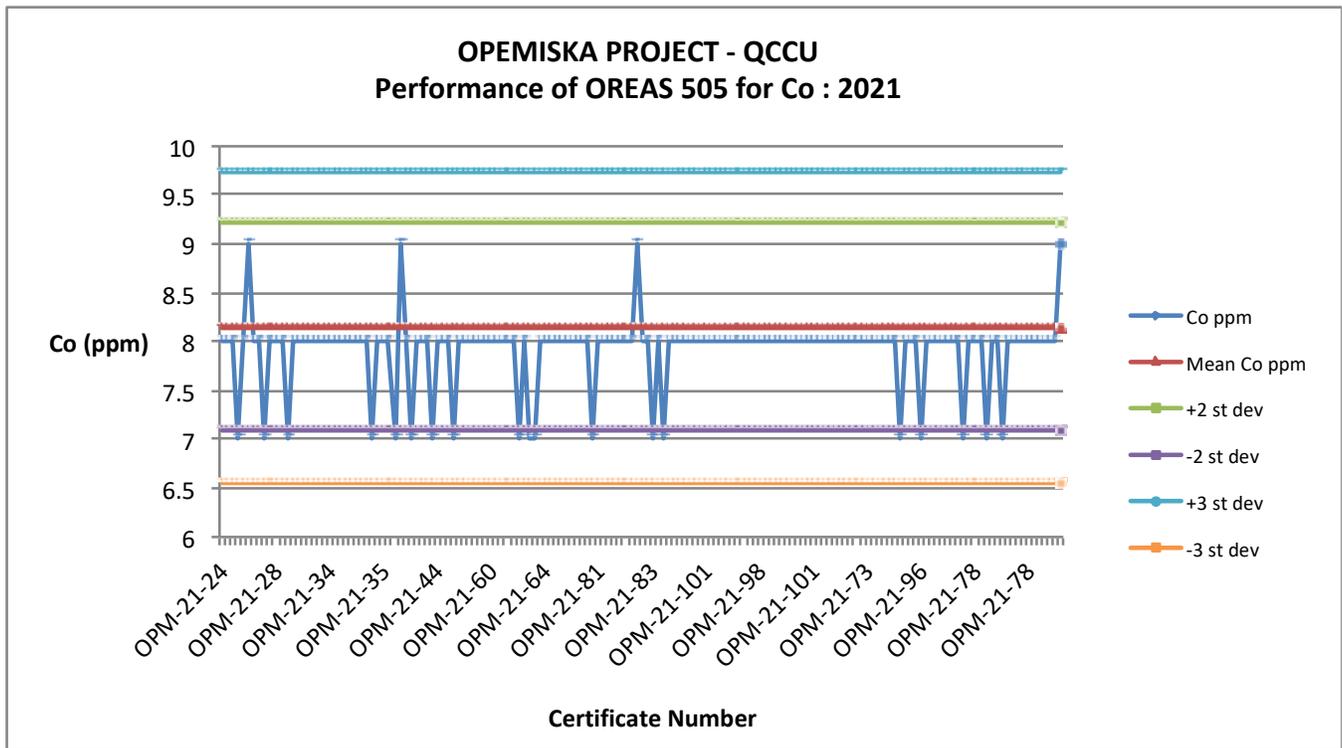


FIGURE K.18 2021 PERFORMANCE OF OREAS 505 STANDARD FOR ZN

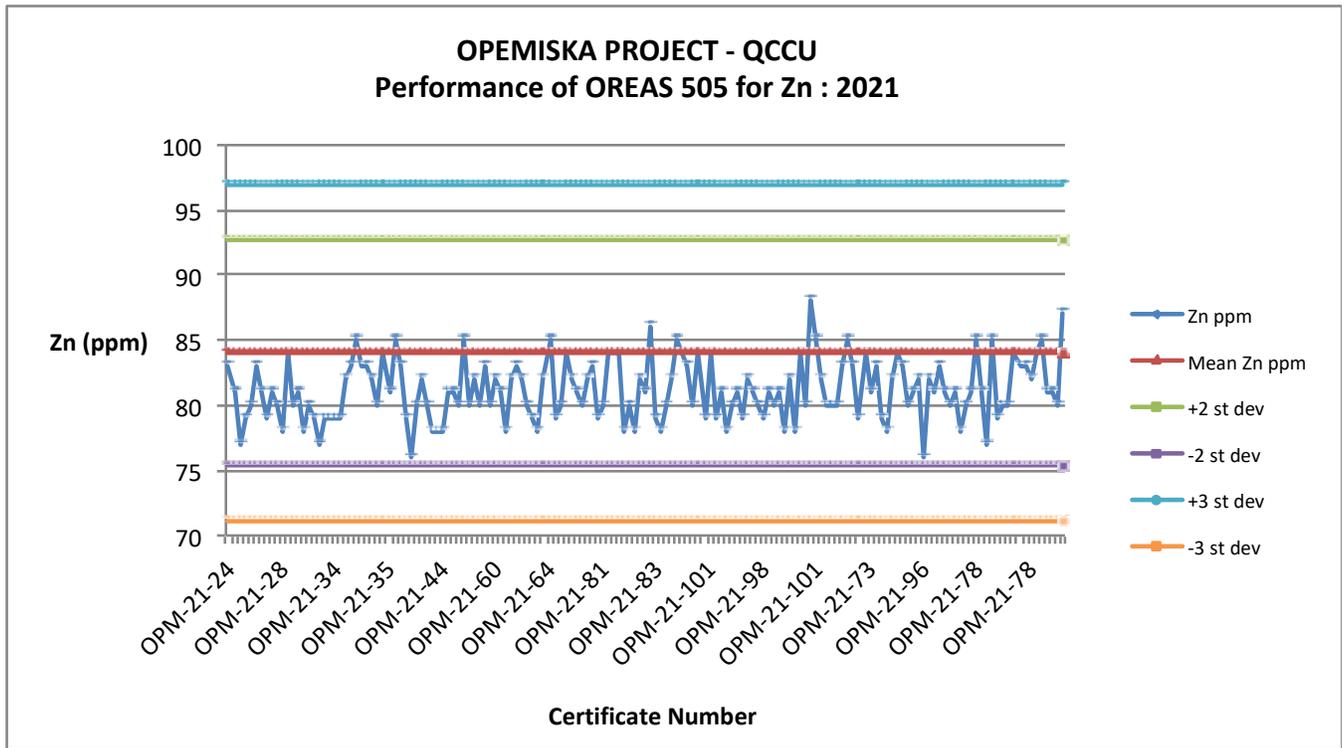


FIGURE K.19 2021 PERFORMANCE OF OREAS 505 STANDARD FOR AU

