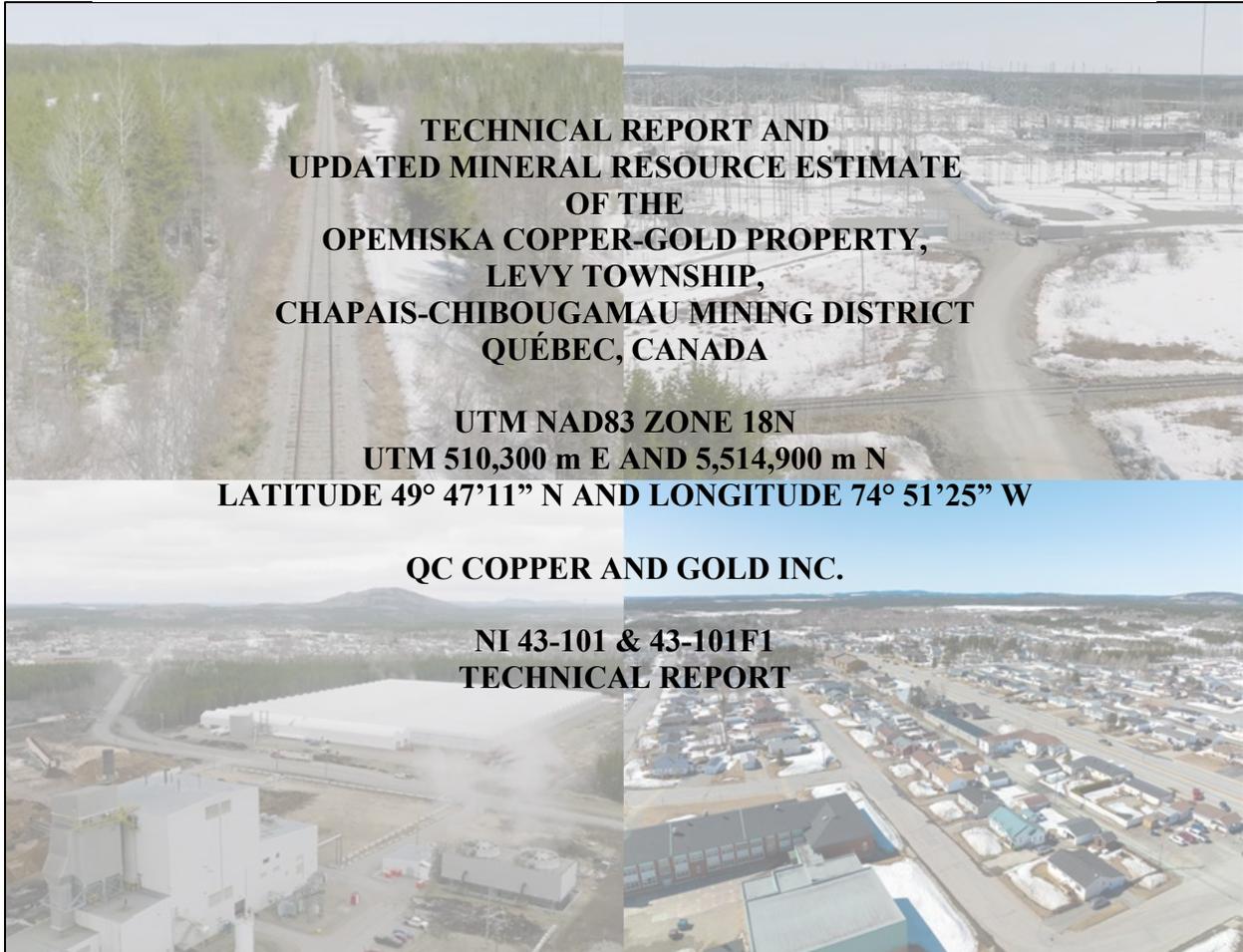




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**P&E Mining Consultants Inc.
Report 451**

**Effective Date: January 8, 2024
Signing Date: February 22, 2024**

Frontispiece: Top Left – Canadian National Railroad line near Chapais, Québec; Top Right – Hydro-Québec Chibougamau sub-station; Bottom Left - Chapais co-generation plant and green house; Bottom Right - Areal view of the municipality of Chapais with Opemiska Deposit in the background.

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1.0 SUMMARY

P&E Mining Consultants Inc. (“P&E”) was contracted to prepare a National Instrument 43-101 (“NI 43-101”) Technical Report and Updated Mineral Resource Estimate (“MRE”) of the Opemiska Property (the “Property” or the “Project”) for QC Copper and Gold Inc. (“QC Copper”). The Technical Report (the “Report”) has an effective date of January 8, 2024. QC Copper is a reporting issuer and trades on the TSX Venture Exchange (TSXV) with the symbol “QCCU” and on the OTCQB under the symbol “QCCUF”.

1.1 LOCATION AND PROPERTY DESCRIPTION

The Opemiska Property (the “Property”) is covered by 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 historical and current mining development activity. QC Copper fulfilled all its obligations under the terms of the option agreement with Explorateurs-Innovateurs de Québec Inc. (“Ex-In”) on June 16, 2023 and executed the purchase agreement. As a result, these claims have been transferred to and are 100% owned by QC Copper, subject to a 2% net smelter return (“NSR”) royalty to Ex-In, 50% of which can be purchased by QC Copper for CAD\$4.5M.

1.2 ACCESS, INFRASTRUCTURE, CLIMATE

The Opemiska Property is located immediately adjacent to the Community of Chapais (population 1,468; Census Canada 2021) and is road accessible with the paved Québec Highway 113 crossing the Property. The Property is located 40 km west of the Town of Chibougamau (population 6,491; Census Canada 2021) and 480 km north of the City of Montréal, Québec. The centre of the Property is located at approximately UTM NAD83 Zone 18U 510,300 m E and 5,514,900 m N, or 49°47 N Latitude and 74°51 W Longitude).

The Property benefits significantly from excellent access and close proximity to the Chapais and Chibougamau. 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 and support exploration and mining. The Property has year-round access from Québec Highway 113 and other roads north of Chapais. A regional airport is located between Chapais and Chibougamau.

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

1.3 HISTORY

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 at the Springer and Perry Mines in 1953 and continued until 1991. Total production from the Springer and Perry Mines was approximately 22.0 Mt grading 2.40% Cu, 0.29 g/t Au, and 0.21 g/t Ag containing 527 kt Cu, 6,400 kg Au, and 4,600 kg Ag. Subsequent to the closure of the Mines, Ex-In completed several surface mineral exploration surveys and follow-up diamond drilling programs.

1.4 GEOLOGY AND MINERALIZATION

The Opemiska Property is located in the western part of the Abitibi Subprovince in the Archean (circa 2.7 Ga) Superior Province. The Abitibi Subprovince contains mainly metavolcanic, metasedimentary and plutonic rocks that are variably deformed and metamorphosed.

On the 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. This 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 thickness of 6.0 m and have been developed to depths of >1,000 m below surface. The mineralization consists mainly of chalcopyrite, pyrite, and pyrrhotite and minor amounts of sphalerite, magnetite, galena, molybdenite, arsenopyrite, and gersdorffite. Native gold has been observed associated with chalcopyrite and pyrite. Locally significant amounts of scheelite and molybdenite are present.

The copper-gold deposits on the Opemiska Property are 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 historically considered not economic to mine by underground methods and remains in place. The current Project aims to define Mineral Resources that could potentially be mined as an open pit.

1.5 EXPLORATION AND DRILLING

Exploration activities have included the digitization of historical mine data and historical excavations of the Springer and Perry Mines for 3-D modelling of the geology and mining and the reprocessing of geophysical survey data.

QC Copper has focused on diamond drilling at Opemiska. They completed a 23-hole 3,372 m drilling program in 2019, a 78-hole 16,411 m drilling program in early-2021, and 180 drill holes totalling 47,192 m in late-2021 through 2023.

1.6 SAMPLE ANALYSES AND DATA VERIFICATION

The Authors of this Report have reviewed QC Copper’s protocols for sample preparation, security and analytical procedures for the 2019 through 2023 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 (“MRE”). The Authors 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 the Authors have undertaken drill core re-sampling and drill hole-twinning programs. QC Copper should continue with the current Quality Assurance/Quality Control (“QA/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. Mr. Antoine Yassa, P.Geo., géo, an independent Qualified Person under the terms of NI 43-101, visited the Opemiska Property again on February 24, 2023, for the purpose of completing a site visit and due diligence sampling. The site visits included an inspection of the Property, verification of drill sites and drill collars, and due diligence sampling of drill core. The drill core samples were delivered by Mr. Yassa to the AGAT Labs preparation facility in Val d’Or, QC (2021) and the Actlabs facility in Ancaster, ON (2023), for analysis.

Based on evaluation of the QA/QC program and the due diligence sampling, it is the opinion of the Authors of this Report that the analytical results are suitable for use in the current MRE.

1.7 METAL RECOVERIES

Based on the results of 2023 testwork at SGS and historical production records, and assuming the mineral composition of the current Mineral Resources approximately resembles the historical Opemiska mineral resource, high recoveries of copper and gold could be anticipated in a modern mineral processing facility. Modern equipment and processes could be anticipated to produce grades and recoveries of copper, gold and silver comparable to historical operations, despite lower Mineral Resource grades.

Copper and gold recoveries similar to historical recoveries – 95% copper recovery and 85% gold recovery, could be anticipated. A proportion of the gold could be recovered by gravity methods and refined on-site, or sold as a separate concentrate. The grade of the copper concentrate could be expected to be increased to 23 to 25% Cu, which would enhance the value of the concentrate NSR.

1.8 MINERAL RESOURCE ESTIMATE

The updated Measured and Indicated Mineral Resource Estimate for the Opemiska Cu-Au Property consist of 2,090 Milb of copper equivalent (“CuEq”), or 1,750 Milb Cu, 845 koz Au and 5.5 Moz Ag in 97.5 Mt. Additionally, the updated Inferred Mineral Resources consists of 157 Milb of CuEq contained in 11 Mt, or 127 Milb Cu, 70 koz Au and 907 koz Ag. The effective date of this updated Mineral Resource Estimate is January 8, 2024.

The updated MRE contains pit-constrained and out-of-pit Mineral Resources. At a 0.15% CuEq cut-off, pit constrained Measured and Indicated Mineral Resources consist of 1,780 Mlb of CuEq, or 1,478 Mlb Cu, 762 koz Au and 4.258 Moz Ag, in 87.3 Mt, and Inferred Mineral Resources consist of 128 Mlb CuEq, or 104 Mlb Cu, 55 koz Au and 689 koz Ag, in 9.8 Mt (Table 1.1). A conceptual starter pit calculated for the Opemiska Deposit contains 19.1 Mt of Measured and Indicated Mineral Resources grading 1.1% CuEq in 19.1 Mt (Table 1.2).

TABLE 1.1									
OPEMISKA DEPOSIT SUMMARY OF MINERAL RESOURCES (1 TO 10)									
Classification	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	CuEq (%)	CuEq (Mlb)
Pit Constrained (0.15% CuEq Cut-off)									
Measured	52,704	0.77	892	1.65	2,800	0.30	500	0.94	1,091
Indicated	34,629	0.77	586	1.31	1,458	0.24	261	0.90	690
Measured + Indicated	87,333	0.77	1,478	1.52	4,258	0.27	762	0.93	1,780
Inferred	9,791	0.48	104	2.19	689	0.18	55	0.59	128
Out of Pit (0.8% CuEq Cut-off)									
Measured	4,064	1.24	111	3.81	498	0.32	42	1.44	129
Indicated	6,067	1.18	157	3.92	764	0.20	42	1.32	176
Measured + Indicated	10,130	1.20	268	3.87	1,261	0.26	83	1.37	305
Inferred	1,162	0.89	23	5.84	218	0.40	15	1.15	29
Total (0.15% & 0.8% CuEq Cut-off)									
Measured	56,767	0.80	1,003	1.81	3,297	0.30	542	0.97	1,219
Indicated	40,696	0.83	743	1.70	222	0.23	303	0.97	866
Measured + Indicated	97,463	0.81	1,746	1.76	5,519	0.27	845	0.97	2,085
Inferred	10,953	0.53	127	2.58	907	0.20	70	0.65	157

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\$4.00/lb Cu and US\$1,875/oz Au, US\$24/oz Ag and 0.76 CAD\$/US\$ FX. Cu, Au and Ag process recovery and smelter payable were 91%, 72% and 72%, respectively. Open pit mining cost was CAD\$2.50/t, processing CAD\$14/t, G&A CAD\$2.25/t. Out of pit mining costs were CAD\$68/t.
6. Pit slopes were 50 degrees in rock and 30 degrees in overburden.
7. Historical mined volumes were depleted from the blocks to report the correct tonnages and metal content of the remaining high-grade vein material.
8. $CuEq \% = Cu \% + (Au \text{ g/t} \times 0.54) + (Ag \text{ g/t} \times 0.007)$.

9. Out-of-pit Mineral Resources were selected which exhibit continuity and reasonable potential for extraction by the long hole underground mining method. Narrow strings of grade blocks and orphaned blocks were depleted.
10. Totals may not sum to 100% due to rounding.

Classification	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	CuEq (%)	CuEq (Mlb)
Measured	11,684	0.81	207	1.96	736	0.38	142	1.02	264
Indicated	7370	0.94	153	2.4	569	0.43	101	1.19	193
Measured + Indicated	19,054	0.86	360	2.13	1,306	0.4	243	1.09	456

See notes below Table 1.1.

Out-of-pit Measured and Indicated Mineral Resources have been added to the Opemiska Deposit. At a 0.8% CuEq cut-off, the out-of-pit Mineral Resources consist of 268 Mlb Cu, 83 koz Au, and 1.3 Moz Ag, or 305 Mlb CuEq, in 10.1 Mt, and Inferred Mineral Resources of 23 Mlb Cu, 15 koz gold, and 218 koz silver, or 29 Mlb CuEq, in 1.2 Mt (Table 1.1).

This updated pit-constrained MRE is sensitive to CuEq cut-off grade (Table 1.3).

Classification	CuEq Cut-off (%)	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	CuEq (%)	CuEq (Mlb)
Measured	1.00	16,797	1.43	529	2.98	1,612	0.58	315	1.76	653
	0.90	19,689	1.33	579	2.80	1,772	0.54	340	1.64	714
	0.80	23,191	1.24	634	2.61	1,948	0.49	366	1.52	779
	0.70	27,156	1.15	689	2.43	2,124	0.45	393	1.41	845
	0.60	31,864	1.06	745	2.25	2,306	0.41	420	1.30	912
	0.50	36,881	0.98	796	2.09	2,473	0.38	446	1.20	973
	0.40	42,039	0.90	838	1.94	2,615	0.35	468	1.11	1,024
	0.30	46,932	0.84	869	1.80	2,720	0.32	485	1.03	1,062
	0.20	51,067	0.79	887	1.70	2,783	0.30	497	0.96	1,084
	0.15	52,704	0.77	892	1.65	2,800	0.30	500	0.94	1,091
Indicated	1.00	10,684	1.48	349	2.22	762	0.50	171	1.77	416
	0.90	12,380	1.39	380	2.13	847	0.46	183	1.66	452
	0.80	14,450	1.30	413	2.04	946	0.42	196	1.54	491
	0.70	16,765	1.21	446	1.94	1,046	0.39	209	1.43	529
	0.60	19,376	1.12	479	1.84	1,145	0.36	222	1.33	566
	0.50	22,406	1.03	510	1.73	1,242	0.32	233	1.22	603

**TABLE 1.3
PIT-CONSTRAINED BLOCK MODEL SENSITIVITY AT VARIOUS CuEq CUT-OFF GRADES**

Classification	CuEq Cut-off (%)	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	CuEq (%)	CuEq (Mlb)
	0.40	25,685	0.95	539	1.61	1,332	0.30	244	1.12	635
	0.30	29,306	0.87	563	1.49	1,399	0.27	252	1.03	663
	0.20	33,014	0.80	581	1.36	1,445	0.24	259	0.94	683
	0.15	34,629	0.77	586	1.31	1,458	0.24	261	0.90	690
	0.10	35,961	0.74	589	1.27	1,466	0.23	263	0.88	693
Measured + Indicated	1.00	27,482	1.45	878	2.69	2,373	0.55	486	1.77	1,069
	0.90	32,069	1.36	959	2.54	2,619	0.51	523	1.65	1,165
	0.80	37,640	1.26	1,047	2.39	2,894	0.47	563	1.53	1,270
	0.70	43,921	1.17	1,135	2.24	3,169	0.43	602	1.42	1,373
	0.60	51,239	1.08	1,224	2.10	3,451	0.39	642	1.31	1,478
	0.50	59,286	1.00	1,306	1.95	3,715	0.36	679	1.21	1,575
	0.40	67,724	0.92	1,337	1.81	3,947	0.33	711	1.11	1,659
	0.30	76,238	0.85	1,432	1.68	4,119	0.30	737	1.03	1,725
	0.20	84,081	0.79	1,468	1.56	4,228	0.28	756	0.95	1,768
	0.15	87,333	0.77	1,478	1.52	4,258	0.27	762	0.93	1,780
0.10	89,833	0.75	1,484	1.48	4,275	0.27	766	0.90	1,787	
Inferred	1.00	1,342	1.40	41	6.68	288	0.55	24	1.74	52
	0.90	1,578	1.31	46	6.22	315	0.50	25	1.62	57
	0.80	1,901	1.21	51	5.65	346	0.45	27	1.49	63
	0.70	2,315	1.11	57	5.11	381	0.40	30	1.36	69
	0.60	2,912	0.99	64	4.53	425	0.35	33	1.21	78
	0.50	3,763	0.87	72	3.97	481	0.30	37	1.06	88
	0.40	5,036	0.74	83	3.37	546	0.26	42	0.91	101
	0.30	6,506	0.64	92	2.91	608	0.22	47	0.78	112
	0.20	8,531	0.53	100	2.42	664	0.19	53	0.65	123
	0.15	9,791	0.48	104	2.19	689	0.18	55	0.59	128
0.10	11,258	0.43	107	1.96	708	0.16	57	0.53	132	

See notes below Table 1.1.

The updated MRE is based on a database containing 17,837 surface and underground diamond drill holes totalling 1,143,699 m and 419,105 assays. All historical mine-era drilling was converted from mine grid to UTM using transformation equations calculated by a qualified land surveyor based on differential GPS measurements of many located drill casings.

All historical mine excavations and stopes were digitized in mine grid coordinates from numerous maps, vertical and longitudinal projections, and solid geologic wireframe models were built and converted to UTM coordinates. All stopes were digitized down to the bottom of the Perry Mine (-820 m) and the Springer Mine (-715 m) and formed the basis of the reinterpretation of the geology of the Opemiska Deposit. New mineralized envelopes were defined using a manually adjusted implicit modelling technique for the Deposit, based on a structural model defined in 2022 in areas of historical mining and of known mineralization that could not be mined underground. As a result, the Deposit tonnage decreased somewhat. However, some out-of-pit Mineral Resources were defined at a 0.8% CuEq cut-off that identified a significant tonnage beneath the conceptual pit, which will be the object of further drilling, along with some satellite zones east of the MRE pit shell.

To satisfy the requirement of reasonable prospects for eventual economic extraction (“RPEEE”) by open pit mining, a reporting pit shell was determined based on conceptual parameters and costs. Copper and gold will be recovered using conventional crushing, grinding, gravity, and flotation to produce a copper concentrate that could be shipped to a smelter for processing.

Material within the constraining pit shell was classified according to Mineral Resource confidence classifications defined in CIM Definition Standards for Mineral Resources and Mineral Reserves. Data quality and quantity, geological and grade continuity, and confidence in the grade and bulk density estimates were considered when classifying the Mineral Resource. Mineral Resources are classified as either Measured, Indicated or Inferred. Measured, Indicated, and Inferred Mineral Resources were determined from respective search ranges of 30, 40 and 120 m with a respective minimum of seven, four and one composites.

The updated MRE presented in this 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 potential economic viability worthy of public disclosure.

1.9 ENVIRONMENT, COMMUNITY AND SOCIAL IMPACT

The Opemiska Property is currently at the advanced exploration stage. Only limited environmental geochemistry studies have been undertaken to date and no other environmental surveys are required at this stage. All historical mining infrastructure has been decommissioned and dismantled since 1991. QC Copper does not have any responsibility for environmental matters arising from the previous mining operations. QC Copper does have an active social and community relations program with the local communities, including First Nation groups.

1.10 CONCLUSIONS AND RECOMMENDATIONS

The Opemiska Property contains notable copper-gold-silver structurally-controlled Mineral Resources hosted in folded and faulted Archean mafic-ultramafic sills. The Property has potential for delineation of additional Mineral Resources associated with extension of the known structurally-controlled mineralization and for discovery of new satellite mineralized zones. The Property benefits significantly from nearby grid power, roads, rail line, and local labour.

The drilling conducted in 2021 on the Opemiska Property outside the pit-constrained MRE in this Report demonstrates that there is potential to add additional Minerals Resources. Further drilling of seven target areas to define additional Mineral Resources is recommended prior to advancing mine development. The twin-drill hole program undertaken to verify the accuracy of the historical mine surface and underground drilling, generally indicates reasonable accuracy of the copper mining assays. However, these results are not definitive and more QA/QC work is recommended to better establish the quality of the historical in-house mine assays. Additionally, an expanded metallurgical test program is recommended to confirm concentrate grade and recoveries and provide design criteria for a suitable processing facility. A Preliminary Economic Assessment is also recommended.

A budget of CAD\$3.1M million is proposed to complete the recommended 2024 work program, as summarized below in Table 1.4.

Opemiska Project Items	Activity	Cost per Unit (CAD\$/unit)	Units	Unit Type	Estimated Cost (CAD\$)
General					
Labour, Company Personnel	Project Management	900	45	days	40,500
	Geologists	500	90	days	45,000
	Hourly Workers	300	90	days	27,000
	Core Shack Technicians	400	90	days	36,000
	Slashers, Trail Builders	300	30	days	9,000
Project Expenses	House Rental and Maintenance	3,000	3	month	9,000
	Core Shack Rental, Repairs, and Maintenance	5,000	3	month	15,000
	Food	1,200	3	month	3,600
	Vehicles	1,200	3	month	3,600
	Map Scanning	4	2,000	map	8,000
	Digitization	500	120	days	60,000

**TABLE 1.4
RECOMMENDED 2024 PROGRAM AND BUDGET**

Opemiska Project Items	Activity	Cost per Unit (CAD\$/unit)	Units	Unit Type	Estimated Cost (CAD\$)
Permitting and Surveying	Surveying	2,000	6	days	12,000
	Exploration Permitting				5,000
	FN Consultation				5,000
	Claim Renewals				8,000
Diamond Drilling					
	Drilling Contract	90	15,000	metres	1,350,000
	Drilling Tools	12,000	3	months	36,000
	Televiwer				15,000
	Assays	41	10,000	metres	410,000
	Standards & Blanks				5,000
	Core Boxes & Tags	14	3,600	units	50,400
	Sample Reject/Pulp Storage				3,000
	Core Storage				3,000
Metallurgy					
	Sampling, Grinding, Gravity Concentration, Flotation, Locked Cycle Tests, Concentrate Dewatering, Tailings Tests				200,000
Preliminary Economic Analysis					
	Engineering	2,500	100		250,000
	Geology	1,500	60		90,000
	Financial Modelling	2,000	45		90,000
	Report				15,000
Contingency (10%)					280,410
Total					3,084,510

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 Technical Report and updated Mineral Resource Estimate (“MRE”) of 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) under the symbol “QCCU” and on the OTCQB under the symbol “QCCUF”. QC Copper has its corporate office located at:

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

This 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”). The Mineral Resources in this estimate are considered compliant 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. This Technical Report has an effective date of January 8, 2024.

2.2 SOURCES OF INFORMATION

2.2.1 Independent Site Visits

Mr. Antoine Yassa, P.Geo. of P&E and an independent Qualified Person under the terms of NI 43-101, conducted a site visit to Opemiska Property on February 24, 2023. The site visit included verification of drill sites and drill collars, due diligence sampling of drill core, and review of operating procedures, particularly the quality control protocols and sampling procedures. The findings are summarized in Section 12 of this Report.

Previously, the Opemiska Property was visited by Mr. Antoine Yassa, P.Geo., of P&E, an independent Qualified Person who under the terms of NI 43-101, conducted a site visit from May 31, 2021, to June 1, 2021, for the previous Technical Report (P&E, 2021). A data verification sampling program was conducted as part of that on-site review.

2.2.2 Additional Information Sources

In addition to the site visits, the Authors held discussions with technical personnel from QC Copper regarding all pertinent aspects of the Property and carried out a review of available literature and documented results concerning the Property. The reader is referred to those data sources, which are outlined in Section 27 of this Report, for further detail. Sections from reports authored by other consultants have been summarized in this Report, and are indicated where appropriate. Select technical data, as noted in this Technical Report, were provided by QC Copper and the Authors have relied on the integrity of such data.

Sections 2 to 10, 20 and 23 of this Technical Report were prepared by Charles Beaudry, P.Geo., under the supervision of Antoine Yassa, P.Geo., who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Report as indicated in Table 2.1 below and in the “Certificate of Author” included in Section 28 of this Report. Sections 11 and 12 of this Report were prepared by Jarita Barry, P.Geo. under the supervision of Antoine Yassa, P.Geo., who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Report as indicated in Table 2.1 below and in the “Certificate of Author” included in Section 28 of this Report. Sections 13 and 20 of this Report were prepared by Grant Feasby, P.Eng., under the supervision of Antoine Yassa, P.Geo., who, acting as a Qualified Person as defined by NI 43-101, takes responsibility for those sections of this Report as indicated below in Table 2.1 and in the “Certificate of Author” included in Section 28 of this Report. Section 14 of this Technical Report was prepared by Fred Brown, 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 Report as indicated below in Table 2.1 and in the “Certificate of Author” included in Section 28 of this Report.

Qualified Person	Contracted By	Sections of Technical Report
Antoine Yassa, P.Geo.	P&E Mining Consultants Inc.	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 23 and Co-author 1, 14, 25, 26, 27
Eugene Puritch, P.Eng., FEC, CET	P&E Mining Consultants Inc.	Co-author 1, 14, 25, 26, 27

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 percent (“%” or “wt %”). 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 2.2, shows the meaning of the abbreviations for technical terms used throughout the text of this Report.

TABLE 2.2	
TERMINOLOGY AND ABBREVIATIONS	
Abbreviation	Meaning
\$	dollar(s)
°	degree(s)
°C	degrees Celsius
<	less than
>	greater than
%	percent
µm	micrometre or micron
3-D	three-dimensional
AA	atomic absorption
AAS	atomic absorption spectrometry
Actlabs	Activation Laboratories Ltd.
AEMQ	Association de l'Exploration Minière de Québec
Ag	silver
AGAT	AGAT Laboratories Ltd.
ALS	ALS Minerals, part of ALS Limited, ALS Global
ARD	acid rock drainage
ARD/ML	acid rock drainage/metal leaching
asl	above sea level
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)
CNG	Cree National Government
Co	cobalt
C of A	Certificate of Authorization
COMEX	Review Committee for Environmental and Social Impact
Company, the	QC Copper and Gold Inc.
CROP	Cooke-Robitaille Option Property
CRM or CRMs	certified reference material or certified reference materials
CSA	Canadian Securities Administrators
Cu	copper
CuEq	copper equivalent
\$M	dollars, millions
E	east

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
EQA	Environmental Quality Act
EIA	(Québec's Northern) environmental impact assessment
Ex-In	Explorateurs-Innovateurs de Québec Inc.
Expert Lab	Laboratoire Expert Inc.
FA	fire assay
Falconbridge	Falconbridge Copper Limited / Corporation Falconbridge Copper
Fe	iron
ft	feet, foot
FN	First Nations
ft	foot
Ga	Giga annum or billions of years
g	gram
g/t	grams per tonne
ha	hectare(s)
HPGR	high-pressure grinding rolls
ICP-OES	inductively coupled plasma optical emission spectroscopy
ICP-MS	inductively coupled plasma mass spectrometry
ID	identification
ID ³	inverse distance cubed
IP	induced polarization
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
JBNQA	James Bay and Northern Québec Agreement
k	thousand(s)
k m ³	thousands of cubic metre(s)
kg	kilograms(s)
km	kilometre(s)
koz	thousand ounces
kt	kilotonnes or thousands of tonnes
lb	pound (weight)
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)
m asl	metres above sea level
M&I	Measured and Indicated (Mineral Resources)
MELCC	Ministry of Environment and Fight Against Climate Change

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
MERN or the Ministry	Ministère de Énergie et des Ressources Naturelles Province of Québec / Québec Ministry of Energy and Natural Resources
ML	metal leachable
ML	mining lease
Mlb	millions of pounds
Mo	molybdenum
Moz	million ounces
MPP	MPP probe measures the magnetic susceptibility and EM conductivity
MRE	Mineral Resource Estimate
MRN	Ministère Richesses Naturelles
MRNF	Ministère des Ressources naturelles et de la Faune, Québec
Mt	mega tonne or million tonnes
N	north
NAD	North American Datum
NAD83	North American Datum of 1983
NE	northeast
Ni	nickel
NI 43-101	National Instrument 43-101
NN	Nearest Neighbour
No. or no.	number
non-ARD	non-acid generating
non-ML	nonmetal leachable
NSR	net smelter return
OK	Ordinary Kriging
OREAS	OREAS North America Inc.
OSC	Ontario Securities Commission
oz	ounce
oz/T	ounces per ton (short ton)
P ₈₀	passing 80%
P&E	P&E Mining Consultants Inc.
PDAC	Prospectors and Developers Association of Canada Conference
PEA	Preliminary Economic Assessment
P.Eng.	Professional Engineer
P.Geo.	Professional Geoscientist
ppb	parts per billion
ppm	parts per million
Project, the	the Opemiska Copper Gold Project that is the subject of this Technical Report

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
Property, the	the Opemiska Copper Gold Property that is the subject of this Technical Report
QA/QC	quality assurance/quality control
QC	quality control
QC Copper	QC Copper and Gold Inc.
QEMSCAN	quantitative evaluation of materials by scanning electron microscopy
QMS	quality management system
Report, the	this NI 43-101 Technical Report
RPEEE	reasonable prospects for eventual economic extraction
RQD	rock quality determination
S	south
SCC	Standards Council of Canada
S.G.	specific gravity
SGS	SGS S.A., Société Générale de Surveillance SA.
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
W	tungsten
wt% or wt %	weight percent
XRD	X-ray diffraction
Zn	zinc

Some conversion factors applicable to this report are shown in Table 2.3.

TABLE 2.3
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

TABLE 2.3
CONVERSION FACTORS

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

The Authors have assumed, and relied on the fact, that all the information and existing technical documents listed in the References section of this Report are accurate and complete in all material aspects. Although the Authors have carefully reviewed all the available information presented, the Authors cannot guarantee its accuracy and completeness. The Authors reserve the right, but will not be obligated to revise this Report and conclusions, if additional information becomes known subsequent to the effective date of this Report.

Copies of the tenure documents, operating licenses, permits, and work contracts were not reviewed, and the Authors have completely relied on Discussions with QC Copper management for such information as it applies to Section 4 of this Report. 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 January 8, 2024). The Authors have relied on this public information, and the tenure information from QC Copper, and has not undertaken an independent detailed legal verification of title and ownership of the Opemiska Property claims. The Authors have 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 considers it has a reasonable basis to rely on 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 the Authors have relied on the integrity of such data.

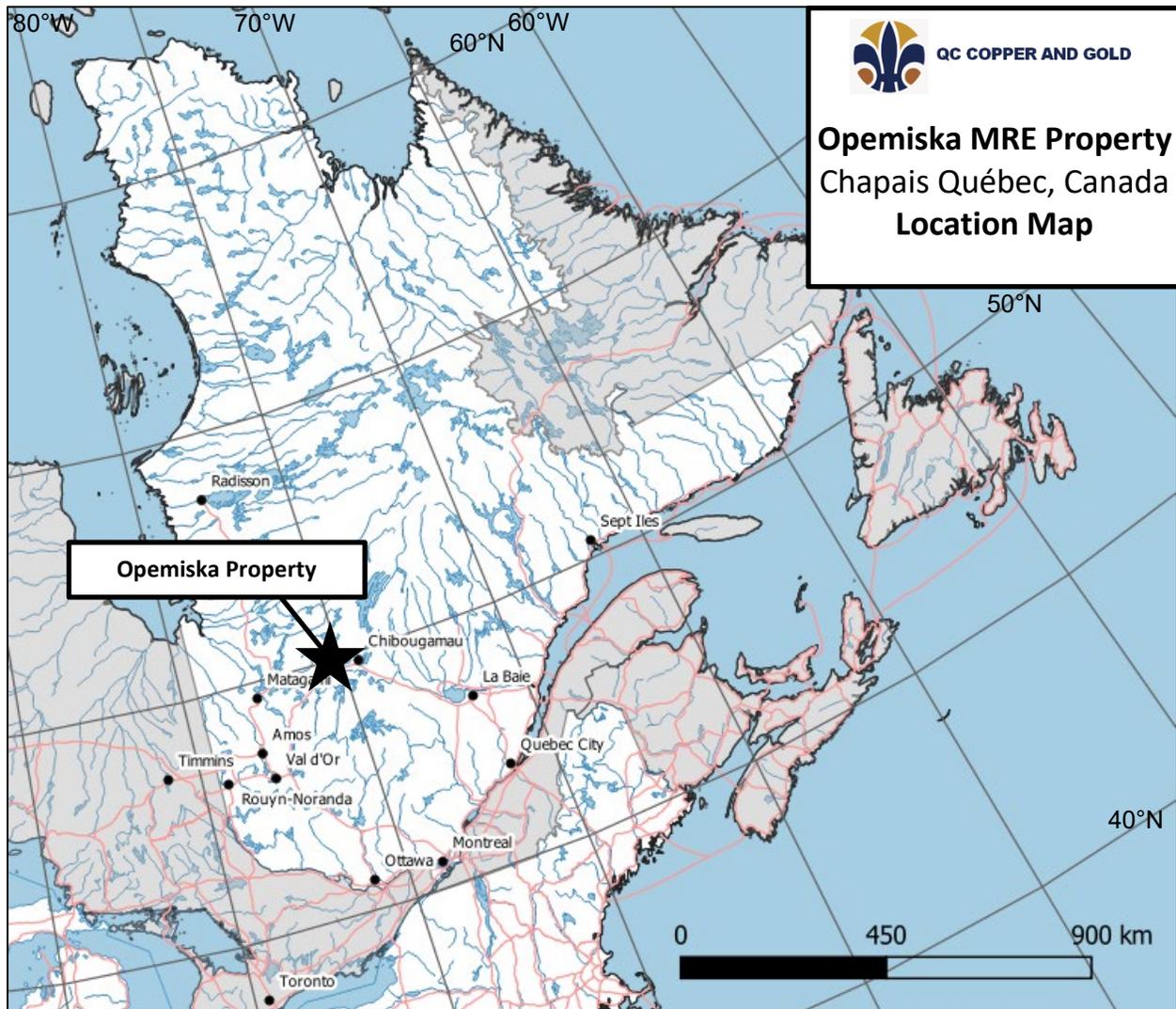
A draft copy of this Technical Report has been reviewed for factual errors by QC Copper and the Authors have relied on QC Copper's knowledge of the Property in this regard. All statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions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

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

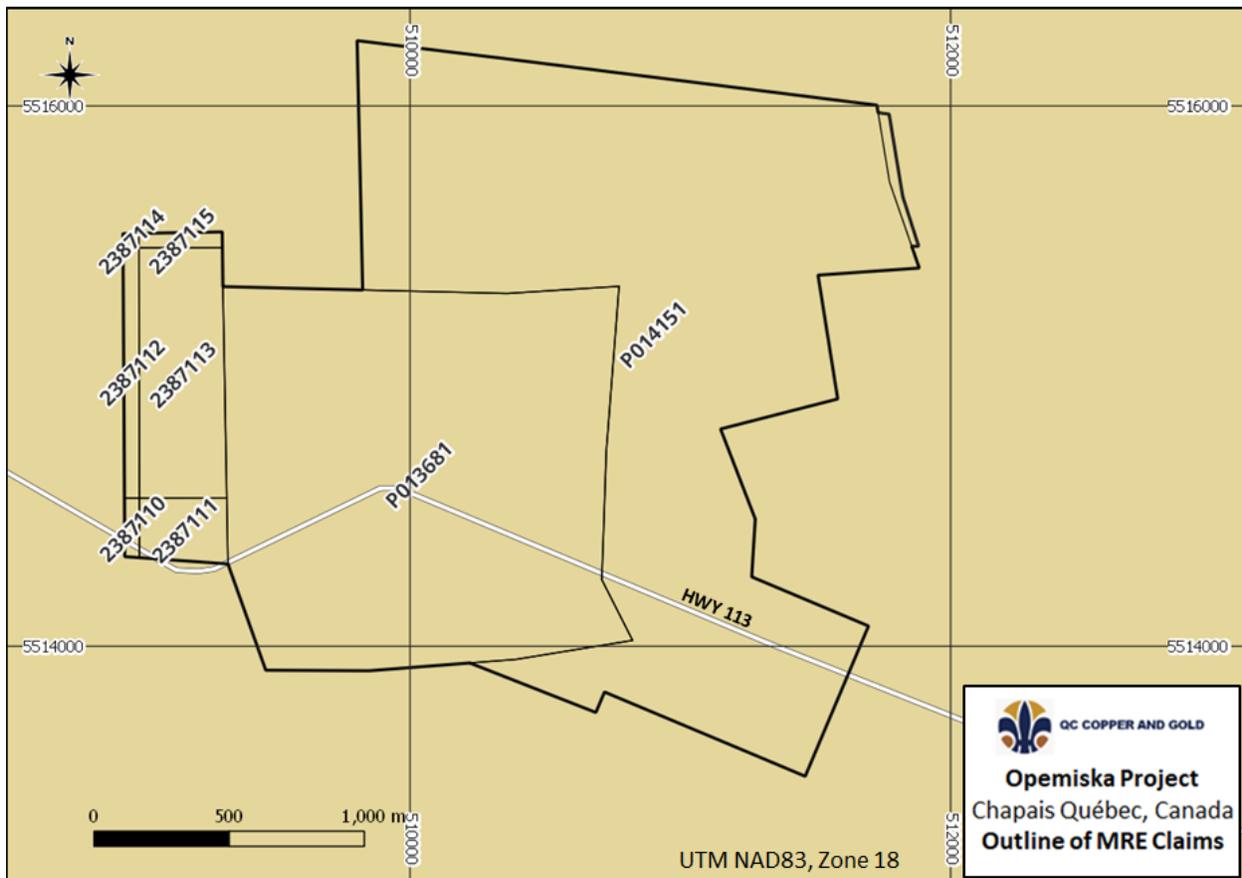
The Opemiska Property (the “Property” or the “Project”) lies within the northeast portion of the Abitibi Metavolcanic Belt, adjacent to the Community of Chapais, 480 km north of Montreal, Québec, Canada (Figure 4.1). The Property is located within the southwest quadrant of Levy Township, on NTS Sheet 32G15, and the mineral rights extend under Chapais (Figure 4.2). Three historical mining shafts (Springer 1, Springer 2, and Perry) are present on the Property and operated between 1953 and 1991. The centre of the Property is located at approximately UTM NAD83 Zone 18U 510,300 m E and 5,514,900 m N) (or 49°47’11’’ N Latitude and 74°51’25’’ W Longitude).

FIGURE 4.1 LOCATION MAP



Source: modified by P&E (January 2024) after QC Copper (2021)

FIGURE 4.2 OPEMISKA PROPERTY CLAIM MAP



Source: QC Copper (2023)

4.2 PROPERTY DESCRIPTION AND TENURE

The Property consists of 8 individual, map-designated cells (claims) covering an aggregate area of approximately 520 ha (Figure 4.2), which is the Opemiska Property. There are no surface rights associated with these claims. A list of claims, expiry dates, area, renewal fees and work requirements are presented in Table 4.1. All the claims are recorded under the name of QC Copper and Gold Inc. (GESTIM Profile ID = 101295) and are in good standing as of the effective date of this Report. Claims P013681 and P014151 cover the updated Mineral Resources described in Section 14 of this Report.

TABLE 4.1
OPEMISKA PROPERTY, MINERAL TENURE

Claim ID	Expiry Date	Area (ha)	Fees (CAD\$)	Work Requirement (CAD\$)	Banked Credits (CAD\$)
P013681	June 21, 2025	193.91	111.00	3,600	2,269,226
P014151	June 21, 2025	278.99	111.00	3,600	2,034,658
2387110	June 21, 2025	1.20	37.50	1,000	319
2387111	June 21, 2025	7.57	37.50	1,000	319
2387112	June 21, 2025	5.27	37.50	1,000	319
2387113	June 21, 2025	29.27	73.25	2,500	319
2387114	June 21, 2025	0.31	37.50	1,000	319
2387115	June 21, 2025	1.71	37.50	1,000	319

Source: QC Copper (October 2023)

Note: Land tenure information effective January 8, 2024

QC Copper fulfilled all its obligations under the terms of the option agreement with Ex-In on June 16, 2023 and executed the purchase agreement of 11 claims. As a result, these claims have now been transferred to and are 100% owned by QC Copper, subject to a 2% NSR royalty, 0% of which can be purchased by QC Copper for \$4.5 million. Note that 12 claims were described in P&E (2021), but claim 2466404 was included in error.

A small sliver claim, number 2466404 (1.72 ha), located on the northeastern boundary of claim P014151, turned out to have not been included in the agreement, because of the omission to list it in the original option agreement. The claim in question is not underlain by any significant known mineralization, despite historical exploration. Most importantly, the 2021 MRE conceptual pit is located at least 900 m west of the sliver and is not expected to pose any issue with regard to any infrastructure required for an eventual mine development.

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.com)).

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 substances, 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.; B) pays the required fees, which vary according to the surface area of the claim, its location and the date on 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. As of December 9, 2021, the claim holder may, without penalty, file with the Minister an application for renewal of claims under section 61 of the Mining Act and a statutory work report under section 72 of the Mining Act, at the latest 1-day before the expiration of the claim.

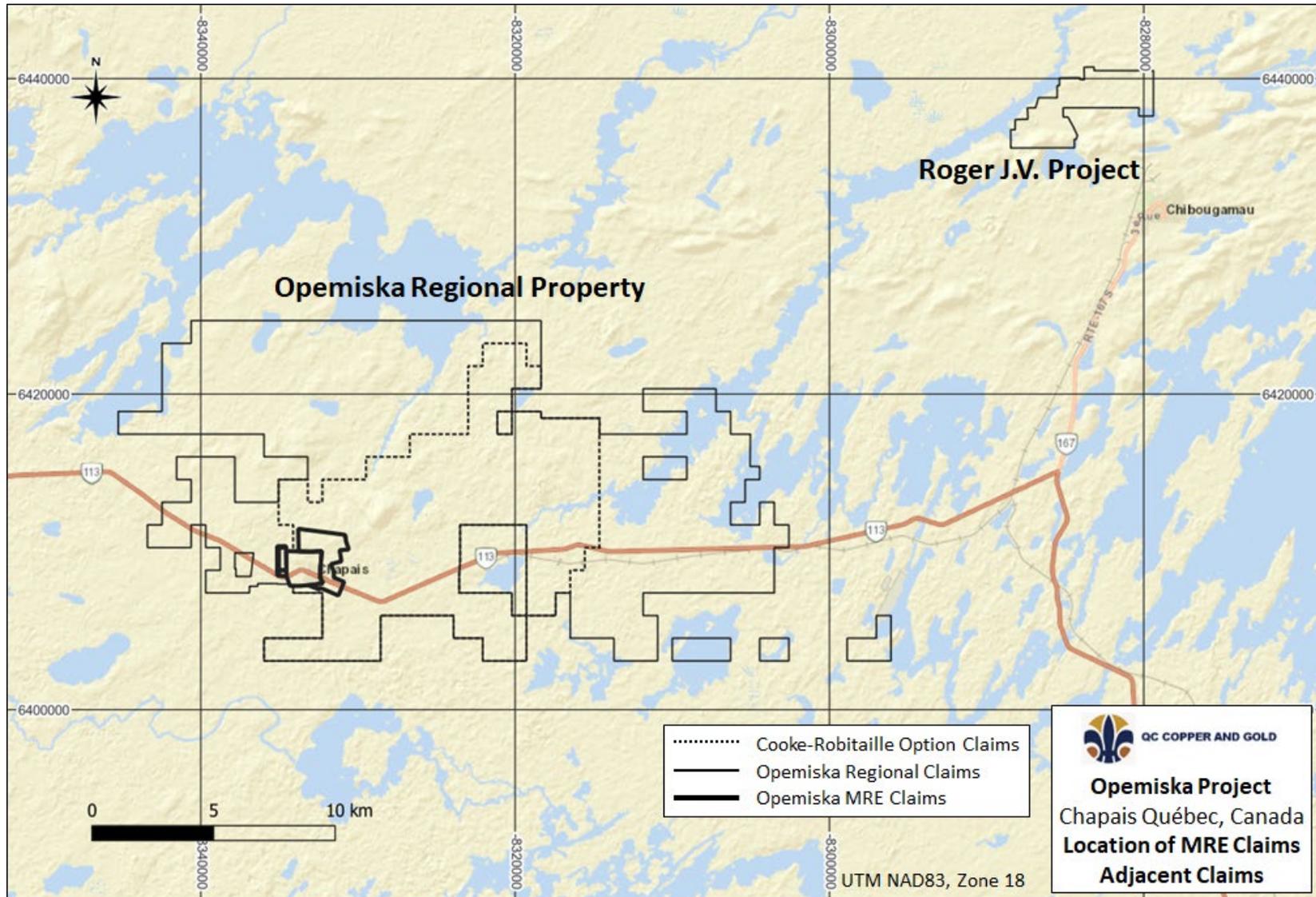
When renewing a claim, a holder may apply excess work credits from other claims held under his control, up to the amount required for the renewal. The claim under renewal must be located within a radius of 4.5 km from the centre of the claim from which the credits will be used, but need not be contiguous. 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 Opemiska Property claims are in good standing until their next renewal date of June 21, 2025.

4.3 ADDITIONAL PROPERTIES OF INTEREST

The historical Chapais Mining District encompassed the Cooke and Robitaille Mines, in addition to the Springer and Perry Mines. The Cooke and Robitaille Mines are located on the adjacent Cooke-Robitaille Option Property (“CROP”) (Figure 4.3), which is under option by QC Copper and Gold from 2736-1179 Québec Inc., a privately owned exploration company based in Québec. Beyond the CROP, QC Copper has acquired numerous claims in the region, either by purchase or by staking to east and northwest of the CROP claims, and to the west of the Opemiska claims (Windfall Geotek Claims). This latter group of claims was purchased in 2023, primarily to cover the old tailings facility operated by Falconbridge- during mining operations. The Company continues to evaluate opportunities to acquire more land in the area, either by purchase or by staking but, as of the Effective Date of this Report, the Opemiska Regional Property (including the Opemiska Property and CROP claims) consists of 457 claims totalling 24,485 ha, all in good standing with sufficient assessment credits to last until near the end of 2024. In addition, QC Copper’s landholdings in the Chapais-Chibougamau region includes the Roger Property, located farther east and to the north of Chibougamau (see Figure 4.3). For the purposes of this Report, all these additional properties are not considered part of the Opemiska Property, because they are subject to different option agreements and have separate histories and exploration targets. The Authors have not reviewed the tenure for these other properties.

FIGURE 4.3 QC COPPER'S ADDITIONAL PROPERTIES OF INTEREST IN THE CHAPAIS-CHIBOUGAMAU AREA



Source: QC Copper and Gold Inc. (2021).

4.4 ENVIRONMENTAL AND PERMITTING

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

A work permit is not required in the Province of Québec, in order to conduct mapping, sampling and geophysical surveys on a claim. The holder may extract and dispatch mineral substances, but only for geological or geochemical sampling and in a quantity >50 t.

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 municipality centres. 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, most 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 is being planned, at least 30 days before the beginning of program; and
- 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*”) that states, per claim, all exploration work completed during the year.

The Opemiska Property is 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 Property is 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 particular animal species.

4.5 ADDITIONAL RISKS AND ABILITY TO PERFORM WORK

The Opemiska Project covers a large part of the historical Springer and Perry Mines, the area of the dismantled processing plant, and the tailings facility. All the historical mining and processing infrastructure has been dismantled and the mining operation decommissioned since 1991. QC Copper does not have any responsibility for environmental matters arising from the historical mining and processing operations.

To the extent known, and apart from the encumbrances noted above, the Authors are not aware of any other significant factors or risks that may affect access, title or right or ability to perform work on the Opemiska Property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESS

The Opemiska Property is road accessible (Figure 5.1). The Chapais–Chibougamau area is an active mining and forestry centre with a total population of approximately 10,000 residents (Census Canada, 2016). The Opemiska Property is located immediately adjacent to the municipality of Chapais (population 1,468; Census Canada, 2021) and is road accessible with paved Québec Highway 113 crossing the Property. The Property is located 40 km west of the Town of Chibougamau (population 6,491; Census Canada 2021), which straddles Highway 167. Highway 113 connects Chapais to the Abitibi area and Highway 167 heads south to the Saguenay – Lac St-Jean area. These all-weather paved highways are maintained year-round. The Property itself is readily accessed via forestry roads and historical mine access roads.

The Chapais-Chibougamau area is serviced by the Chibougamau-Chapais Airport, located 20 km southwest of Chibougamau (along highway no. 113). Regularly scheduled direct flights depart from the airport three times per week to Montreal, Québec (via Air Creebec).

The Opemiska Property partly underlies the municipality of Chapais.

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 generally common in the summer, such that there is no dry season. Snowfall is common in the winter, particularly in the early and latter part of the season. The “warm” season generally is from mid-May to mid-September. The “cold” season is 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 past 60 years resulted in the establishment of very experienced mining workforce and the full range of associated secondary tradesmen. The local communities where this work force resides are shown in Figure 5.1.

5.4 INFRASTRUCTURE

Hydro-electric power sufficient water for mining operations and sufficient infrastructure for exploration and mining operations are readily available in the Project area. There is sufficient area on the Opemiska Regional Property to build and extend mining infrastructure.

FIGURE 5.1 PROPERTY LOCATION MAP SHOWING LOCAL COMMUNITIES



Source: modified by P&E (January 2024) after QC Copper (2021)

5.5 PHYSIOGRAPHY

The physiography of the general area is one of rolling hills and abundant lakes and rivers. Forest cover is variable, in part because selected areas having been harvested. Some areas are still forested with tall spruce, jack pine, birch and poplar. The overburden cover generally consists of sand, clay and boulders varying in thickness from 1 m to locally more than 80 m 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 m above sea level (“m asl”). The general elevation averages approximately 400 m above sea level, except for Mount Springer located a few km to the northeast of the Project, which reaches elevation 540 m. Drainage in the Project area is westward through the Waswanipi and Nottaway Rivers and ultimately into James Bay. The lakes, rivers, and creeks throughout the Property area provide abundant sources of water.

6.0 HISTORY

There have been three main periods of historical exploration and mining activities on the Opemiska Property and surrounding area: 1) 1929 to 1953; 2) 1953 to 1991; and 3) 1993 to 2016. The activities undertaken in each of the three periods are summarized below.

6.1 1929 TO 1953: DISCOVERY AND HISTORICAL EXPLORATION

The information in this sub-section is summarized mainly from the documents listed in Table 6.1. The documents prefixed with “GM” refer to numbers in the Québec SIGEOM geoscientific archive of historical assessment work. They can be searched online and downloaded free of charge, and 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 Ltd. Huston, M.B. Energy Mines and Resources Canada.	Geological Report with Technical 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.

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 at what would become the Springer Mine. The discovery 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 by forest fires at the time. The chalcopyrite discovery was hosted in a gabbro dyke. The dimensions of the mineralized area were 1,200 ft (360 m) long and 800 ft (240 m) wide in a north-south direction.

The first development work on the Property was completed 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 the St. Felicien, Lac St-John area, which allowed the development of the mining industry in the Chapais–Chibougamau District to proceed. Along with new construction, the old buildings were rehabilitated, including a new concrete shaft collar. A total of 6,100 m (20,000 ft) of exploratory surface drilling was completed in 1952.

6.2 1953 TO 1991: HISTORICAL EXPLORATION AND MINE PRODUCTION

The information in this sub-section is summarized mainly from the documents listed in Table 6.2. The documents prefixed with “GM” refer to numbers in the Québec SIGEOM geoscientific archive of historical assessment work. These documents can be searched online and downloaded, and 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).

The Chapais–Chibougamau Mining District is the second largest of its kind in the Québec part of the Abitibi Greenstone Belt. From 1953 to 2008, the District produced ~86 Mt of mineralized material, including 1.57 Mt Cu, 176.1 t Au, 108.8 t Ag, and 72,066 t Zn (Leclerc *et al.*, 2012).

Opemiska Copper Mines were in production from December 1953 until June 1991. Total production from the Springer and Perry Mines was 22.0 Mt grading 2.40% Cu, 0.29 g/t Au, and 0.21 g/t Ag containing 527 kt Cu, 6,400 kg Au, and 4,600 kg Ag (Table 2 in RPA, 2013 and Table 2 in RPA, 2014).

Production came from seven easterly-trending mineralized zones; specifically, the No. 1, 2, 3 (or Main Ore Zone), 3, 4, 5 and No. 6 Zones. The mineralized zones were described as being sharp-walled, except for No 3 or “Main Ore Zone”, which is hosted by a shear or fault zone that contains a breccia-type mineralization with altered gabbro remnants set in a sulphide (mainly chalcopyrite) matrix.

Detailed drilling in the spring of 1956 outlined an important deposit in the Perry Zone area. The outlined deposit strikes 330° and dips 56° to the north. A fault that strikes 130° and dips to the southwest 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 massive sulphides. The alteration is partial chloritization. The sulphides present are mainly chalcopyrite and pyrite with some pyrrhotite and arsenopyrite. Quartz vein sections containing sulphides are common in the mineralized horizon.

In 1980, Falconbridge Copper Limited (“Falconbridge”), the original developer of the mining claims, changed its name to Corporation Falconbridge Copper (“Falconbridge”), and again in 1987, to Minnova Inc. (“Minnova”). In October 1986, an agreement between Minnova and Québec Ministry of Energy and Resources led to an exploration program at the Springer and Perry Mines, which were part of the Minnova Opemiska Division. In 1987, low copper price meant that the secondary products gold and silver became metals of interest for exploration. Between the discovery of Springer in 1932 and closure of that Mine in 1991, a total of 612 surface and 15,287 underground diamond drill holes, totalling 82,767 and 861,542 m, respectively, were completed on the Opemiska Property by Falconbridge and Minnova.

6.3 1993 TO 2016: EX-IN EXPLORATION AND DRILL PROGRAMS

The information in this sub-section is summarized mainly from the documents listed in Table 6.3. The documents prefixed with “GM” refer to numbers in the Québec SIGEOM geoscientific archive of historical assessment work. They can be searched online and downloaded free of charge, and are all georeferenced on government compilation maps.

TABLE 6.3	
OPEMISKA PROPERTY ASSESSMENT FILED BETWEEN 1994 AND 2016	
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.

TABLE 6.3
OPEMISKA PROPERTY ASSESSMENT FILED BETWEEN 1994 AND 2016

Assessment File ID (Year)	Summary
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 Polymetalliques à Tonnage 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 pilliers 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.

6.3.1 Surface Exploration

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

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”) surveys were completed. An Ex-In report also records that, in 1995, a sample weighing 15.5 t 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 m core drilling program was completed, to test a surface vein that was not exploited. In 2003, Beep-Mat prospecting was completed, along with stripping and trenching. In 2004, a line grid was cut to guide a Max-Min survey. Additional sampling was conducted. In 2005, magnetic separation tests were completed. In 2006, a second core drilling program of 1,000 m was initiated on five separate veins to test for the presence of mineralization close to surface.

Work completed in 2009 followed the discovery of a 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 m, have been previously investigated for gold. One zone is located north of Springer No. 1 Shaft and the other one is south of that shaft. The report also notes that certain drill holes confirm the presence of 150 m wide sections grading >0.5% Cu and 0.3 g/t Au.

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 and 4945 E	1.50	Surface (stope @ 37.0 m below)
Vein 1	Channel sample	2.10	4.20	2.06	5320 N and 4700 E	1.50	Surface (stope @ 18.0 m below)
Vein 2	Channel sample	1.98	9.10	4.80	5165 N and 4500 E	1.50	Surface (stope @ 61.0 m below)
Vein 2	S-25	0.55	10.40	2.74	5205 N and 4266 E	3.35	no
Vein 2	S-25	0.45	8.50	1.37	5195 N and 4266 E	6.40	no
Vein 2	Channel sample	2.87	4.30	0.34	5060 N and 5200 E	0.00	Surface (stope @ 25.9 m below)
Vein 2	S-87	1.92	3.90	1.02	5070 N and 5348 E	6.70	(stope @ 23.8 m below)
Vein 2E	S-159	0.76	7.10	0.69	5377 N and 6504 E	4.57	no
Vein 2	S-51	1.10	8.30	1.03	5599 N and 6091 E	17.07	no
Vein 2	S-71	0.95	4.60	0.34	5723 N and 6100 E	8.23	no
Vein 3	S-54	0.64	15.50	11.65	4768 N and 5105 E	23.78	no
Vein 2	S-68	1.74	3.90	6.17	4478 N and 4535 E	4.57	no
Vein 3	S-65	1.62	5.60	1.03	4608 N and 4705 E	5.49	(stope 11.3 m below)
Vein 3	S-714	2.13	7.60	---	4598 N and 4749 E	10.37	(stope 7.9 m below)
Vein 2	S-752	1.16	14.50	1.03	4935 N and 4495 E	2.44	no
Vein 2	S-184	1.07	4.90	0.00	5005 N and 4732 E	13.41	no
Vein 2	S-808	29.36	1.10	----	5038 N and 4208 E	25.06	(stope ?)
Vein 2	S-763	15.00	3.20	1.03	5010 N and 4202 E	22.00	(stope 2.4 m below)
Vein 2	S-721	24.70	1.40	---	4660 N and 4550 E	12.20	???

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
Perry Mine							
Vein B2	S-944	2.56	12.80	0.34	6237 N and 7081 E	26.52	(surface pillar 18.3 m)
Vein B2	S-887	0.98	16.50	0.34	6226 N and 7072 E	18.90	(surface pillar 18.3 m)
Vein B2	S-887	1.68	11.80	0.69	6254 N and 7082 E	10.06	(stope 8.2 m below)
Vein B2	S-952	6.16	4.40	1.03	6379 N and 6991 E	18.90	(surface pillar 18.3 m)
Vein D2	S-41	0.49	10.20	0.69	6342 N and 7138 E	19.51	(mined)
Vein D2	S-953	5.18	10.80	0.34	6381 N and 7129 E	21.65	(mined)
Vein D2	S-162	2.38	6.50	0.00	6394 N and 7130 E	17.38	(mined)
Vein C	S-134	1.22	17.10	0.00	6292 N and 7404 E	13.11	(stope 23.5 m below)
Vein B	S-737	4.48	5.10	0.69	7250 N and 6925 E	10.06	(stope 2.2 m below)
Vein B	S-149	10.67	4.50	0.00	6876 N and 7041 E	38.11	(mined ?)
Vein D2	S-949	1.07	10.00	0.00	6135 N and 7225 E	15.85	???
Vein J-B	S-739	1.28	4.50	0.00	6970 N and 7268 E	26.52	no
Vein J-B	S-164	0.64	10.30	1.03	6466 N and 5946 E	27.44	no
GAP	S-874	1.49	13.60	0.34	7477 N and 5976 E	10.36	no
NE Zone	S-256	1.07	5.70	0.34	7194 N and 9699 E	10.67	???
NE Zone	S255	3.02	6.00	0.69	7231 N and 9598 E	10.98	not mentioned
L Zone	S-615	1.22	9.20	0.34	6191 N and 10000 E	23.17	no

Notes:

1. The location of the targets is given as Mine Grid in feet in the Ex-In report. The lengths in feet were converted to metres using the factor 3.28.
2. The oz/T Au were converted into grams per tonne (g/t) using a factor of 34.285.
3. The underground workings (stope) were estimated below the intersections reported.
4. Note width of mineralization for S-808, S-763 and S-721 (original data modified from GM-60257, Table 6.3).

A trench 200 m long by 3.0 m wide oriented north–south, perpendicular to the mineralized structures, was completed in 2009. The overburden thickness ranged from 0.5 m to 5.0 m locally. Sampling was completed 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 g/t 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, S-141, S-148, S-149 and S-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 by Ex-In (2002), this second zone of mineralization appears to be located approximately 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 previously noted zone, approximately 100 m south of No. 3 Vein South, and returned values of 0.65% Cu and 0.83 g/t 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 completed in this area. A map accompanying Ex-In (2002) shows the location of two ventilation raises. Note that the samples were collected after blasting and, therefore, that such sampling is 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 Ex-In (2002) summarized the results for 29 samples. The copper values are up to 26.0% Cu and the gold values are up to 11.11 g/t Au. Individual widths were not given within, except a note 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 of Dimroth *et al.* (1984), Daigneault and Allard (1990) and Dubé and Guha (1992), the principal movement along the Gwillim Fault was concluded to have 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 this fault. If these fold structures, which are unique to the Chibougamau region, 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 that 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. Mineralized material extracted from Vein No 3 totalled 6,491,793 t grading 2.61% Cu and 0.69 g/t Au. Vein No. 7 (also east-west trending) extended for 606 m horizontally with an average width of 2.4 m and was mined to 1,000 m depth. A total of 616,320 t of mineralized material grading 1.88% Cu and 2.37 g/t Au has been extracted from this vein. Many other smaller veins have been mined at Springer for a total production of 13 Mt of mineralized material grading 2.54% Cu, 0.48 g/t Au, and 0.28 g/t Ag (RPA, 2013).

The Perry Shaft is located approximately 700 m east of Springer No. 2 Shaft. The mineralized structures generally strike north-northwest and 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, width of 7.6 m and vertical extension

of 750 m. Total production at Perry is reported to be 9.0 Mt grading 2.19% Cu, 0.02 g/t Au, and 0.11 g/t Ag (RPA, 2014).

6.3.2 Drill Programs

Exploration diamond drilling campaigns were completed by Ex-In in 2006, 2010, 2015 and 2016. The drill core size varies from BQ (earlier drilling) to NQ (recent drilling). The drill core was logged with the sampling focused on the main mineralized veins, whereas most of the remaining drill core was assayed in 3.0 to 6.0 m 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.

6.3.2.1 2006 Drilling Program

In 2006, Ex-In completed approximately 46 short drill holes for a total of 970 m. Drill hole collar locations are listed in Table 6.5 and assay results in Table 6.6.

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

TABLE 6.5
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				
139	509,682	5,514,804	360	-45	20.00	1.78
140	509,670	5,514,808	360	-45	19.68	1.35
141	509,673	5,514,824	180	-45	30.00	0.93
142	509,680	5,514,821	180	-45	22.36	1.00
143	509,692	5,514,808	360	-45	18.00	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	15.00	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 drill holes				969.80	

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

TABLE 6.6
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	45.2	5.88
115	5.43	7.70	2.27	1.80	-----	-----
117	12.94	13.55	0.60	11.10	57.9	16.40
118	7.89	10.96	3.10	6.80	-----	-----
119	5.05	5.92	0.90	26.30	117.0	6.20
120	9.00	10.36	1.40	20.00	78.0	9.57

TABLE 6.6
SIGNIFICANT INTERSECTIONS FROM 2006 DRILLING

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
121	14.67	15.30	0.63	28.75	130.0	1.44
124	7.82	8.85	1.00	6.80	42.0	2.96
125	5.85	6.78	0.90	2.10	-----	-----
126	low values					
127	6.69	7.11	0.40	3.80	24.0	1.10
128	2.00	3.00	1.00	7.90	44.0	1.95
138	16.50	17.50	1.00	9.30	50.0	1.79
138	22.79	23.65	0.90	10.40	66.0	0.63
139	8.80	10.00	1.20	4.00	13.2	0.37
140	10.22	11.10	0.90	15.00	53.6	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	-----	-----
146ç	17.81	19.71	1.90	8.60	-----	-----
148	15.00	15.30	0.30	26.80	150.1	2.10
150	13.21	14.78	1.60	2.40	-----	-----
151	9.12	10.52	1.40	10.30	61.4	3.45
151	12.18	14.90	2.70	7.40	39.0	3.12
152	15.25	18.90	3.65	7.50	-----	-----
155	13.88	14.62	0.74	6.00	44.0	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	110.0	0.27
165	22.85	24.00	1.15	0.84	5.0	0.11

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

6.3.2.2 2010 Drill Program

Nineteen surface diamond drill holes totalling 1,748 m were completed by Ex-In in 2010 on the Opemiska Property. Drill hole collar locations are provided in Table 6.7 and significant assay results in Table 6.8.

TABLE 6.7
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 m.

TABLE 6.8
RESULTS FROM THE 2010 DRILL PROGRAM

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	4.3	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	82.50	84.00	1.5	0.55	-----	0.30
OP-2010-09	64.50	66.00	1.5	2.41	-----	0.38
OP-2010-10	57.00	58.50	1.5	-----	-----	0.72

TABLE 6.8
RESULTS FROM THE 2010 DRILL PROGRAM

Diamond Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Ag (g/t)	Au (g/t)
OP-2010-11	9.00	74.00	65.00	0.40	-----	0.12
including	52.50	54.00	1.50	2.02	-----	
OP-2010-12	3.00	64.45	61.45	0.31	-----	0.94
including	40.50	42.00	1.50	3.14	-----	30.4
OP-2010-13	9.00	102.00	93.00	0.39	-----	0.38
including	66.00	67.50	1.50	5.31	-----	15.8
OP-2010-14	6.00	111.00	105.00	0.33	-----	0.17
including	91.50	93.00	1.50	4.19	-----	3.20
OP-2010-15	9.00	102.00	93.00	0.49	-----	0.16
including	78.00	79.50	1.50	7.17	-----	
OP-2010-16	3.00	65.00	62.00	0.09	-----	0.02
including	60.00	61.50	1.50	1.54	-----	0.32
OP-2010-17	not drilled					
OP-2010-18	6.00	102.00	96.00	0.14	-----	0.05
including	84.00	85.50	1.50	1.49	-----	
OP-2010-19	3.00	93.00	90.00	0.74	-----	0.23
including	36.00	39.00	3.00	17.02	-----	1.75
OP-2010-20	4.50	51.00	46.50	0.21	-----	0.17
including	43.50	45.00	1.50	0.74	-----	2.55

Note: 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).

6.3.2.3 2015 Ex-In Drilling Program

Ex-In completed four drill holes totalling 537 m in 2015. Drill hole collar locations are provided in Table 6.9 and assay results in Table 6.10.

TABLE 6.9
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 drill holes				537.0

TABLE 6.10
DETAIL SAMPLING OF DRILL HOLE OP-2015-01 (TWINNING HOLE S-26)

Drill Hole OP-2015-01						S-26 (only a single 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	8.38 m 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	0.130	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	0.250	0.07	0.6		
36.3	39.0	3.0	0.738	0.95	6.1		
39.0	42.0	3.0	0.520	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	0.085	0.02	<0.5		
51.0	54.0	3.0	0.300	0.04	1.1		
54.0	57.0	3.0	1.254	0.08	4.3		
57.0	60.0	3.0	0.015	0.0	<0.5		
60.0	63.0	3.0	0.017	0.0	<0.5		
63.0	66.0	3.0	1.274	0.06	6.4		
66.0	69.0	3.0	0.039	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	0.039	0.0	<0.5		
84.0	87.0	3.0	0.144	0.02	0.6		
87.0	90.0	3.0	0.035	0.0	<0.5		

Note:

1. The composite for interval from 3.0 m to 57.0 m has been re-calculated to be 0.98% Cu, 0.024 g/t Au and 3.6 g/t Ag.
2. Silver and copper are positively correlated.
3. The drilling started and terminated in mineralization.
4. Falconbridge sampled only the massive copper mineralization and did not sample disseminated copper mineralization.

The casings for the 2015 drilling were located by a land surveyor. 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 drill hole). This drill hole duplicated a previous drill hole by Falconbridge, drill hole S-26 drilled in the 1930s that 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 by the land surveyor after locating the old casing for drill hole S-26.

The mineralized intersection in drill 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 drill 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 drill hole). This mineralization has also been reported as 0.11% Cu, 12.09 g/t Ag and 0.11 g/t Au over the 108.0 m length of the drill hole. 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, because the silver values reported above all other assays for silver within drill hole OP-2015-05 were “trace”. In drill 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 drill hole). A composite grading 0.04% Cu, 0.55 g/t Ag and 0.004 g/t Au has been calculated for the whole 138 m length of the drill hole. A review of the drill log with assays indicates a value of 0.023% Cu, with 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: <0.05% Cu, <0.01 g.t Au and <5.0 g/t Ag, except for an anomalous section from 126.0 to 132.0 m.

Drill hole OP-2015-09 was designed to test a mineralized zone intersected previously in 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 was intersected from 81.0 m to 84.0 m along drill hole 2015-09. The description of the drill core indicated that possibly a “chlorite shear” sub-parallel to the drill core axis has been followed. 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 was recorded 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 Blondeau Felsic Volcanics.

6.3.2.4 2016 Drill Program

The 2016 drilling program consisted of nine surface diamond drill holes for a total of 708 m, as shown in Table 6.11. 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 6.11
LOCATION OF 2016 SURFACE DIAMOND DRILL HOLES

Diamond Drill Hole ID	UTM Co-ordinates (NAD83 Zone 18N)		Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)
	Easting	Northing				
OP-16-01	509,705	5,514,734	1,505.5	180	-45	150
OP-16-02	509,631	5,514,986	1,526.1	175	-45	99
OP-16-03	509,529	5,515,013	1,513.4	175	-45	93
OP-16-04	509,639	5,514,698	1,509.2	180	-45	102
OP-16-05	509,789	5,514,858	1,532.0	172	-45	66
OP-16-06	509,761	5,514,854	1,529.6	165	-45	51
OP-16-07	509,598	5,515,000	1,520.5	180	-45	51
OP-16-08	509,575	5,515,002	1,517.6	170	-45	60
OP-06-09	509,789	5,514,858	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, proximal to 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 to be more ultramafic (pyroxenite). The gabbro is locally more chloritic, fractured and brecciated. These well-defined and altered rock corridors are generally injected by variable amounts of magnetite, quartz veining, pyrite and chalcopyrite.

The copper-gold mineralization was observed in many forms:

- **Magnetite Veins:** (massive) with fine disseminated chalcopyrite;
- **Pyrite Veins:** with fine chalcopyrite;
- **Fractures:** filled 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; and
- **Quartz-Carbonate Stringers:** with trace chalcopyrite.

A summary of significant drill hole assay intersections is presented in Table 6.12.

TABLE 6.12
LIST OF COMPOSITE INTERSECTIONS FROM THE 2016 SURFACE DRILLING CAMPAIGN
IN THE GENERAL AREA OF THE SPRINGER NO. 1 SHAFT

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
OP-16-01	27.0	31.5	4.5	4.05	0.404	5.7	2.14	
including	29.7	31.5	1.8	1.62	0.856	11.7	4.43	Stringers chalcopyrite
OP-16-01	78.0	79.2	1.2	1.08	0.102	4.7	1.52	
OP-16-01	90.0	99.6	9.6	8.64	2.498	11.7	3.30	
including	94.7	96.6	1.9	1.71	9.971	46.8	13.80	High Sulphide Vein (60% quartz)
OP-16-01	123.0	124.0	1.0	0.90	0.200	4.2	0.57	
OP-16-01	138.0	144.0	6.0	5.40	0.296	8.9	1.17	
OP-16-02	10.3	11.4	1.1	0.99	0.199	2.7	0.30	
OP-16-02	32.4	36.0	3.6	3.24	0.066	4.9	0.31	
OP-16-02	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	
OP-16-03	23.3	23.7	0.4	0.36	0.229	6.7	1.01	
OP-16-03	28.2	30.0	1.8	1.62	0.329	6.8	0.39	
OP-16-03	31.3	32.1	0.8	0.72	0.100	5.6	0.56	
OP-16-03	66.0	67.3	1.3	1.17	0.153	6.2	0.78	
OP-16-03	68.8	69.7	0.9	0.81	13.347	32.1	0.53	Vein (pyrite-arsenopyrite-chalcopyrite) felsic volcanic
OP-16-03	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-chalcopyrite)
OP-16-04	15.0	18.0	3.0	2.70	0.164	1.3	0.30	
OP-16-04	57.7	60.2	2.5	2.25	0.034	1.0	0.28	
OP-16-04	69.0	70.5	1.5	1.35	0.196	1.3	0.29	
OP-16-04	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
OP-16-06	14.7	17.0	2.3	2.07	0.023	1.4	0.30	
OP-16-06	48.0	51.0	3.0	2.70	0.145	2.3	0.40	
OP-16-07	6.0	11.8	5.8	5.22	0.128	3.4	0.51	

TABLE 6.12
LIST OF COMPOSITE INTERSECTIONS FROM THE 2016 SURFACE DRILLING CAMPAIGN
IN THE GENERAL AREA OF THE SPRINGER NO. 1 SHAFT

Diamond Drill Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Comment
including	8.0	8.9	0.9	0.81	0.050	5.4	0.53	Magnetite Vein (trace chalcopyrite)
OP-16-06	17.8	18.8	1.0	0.90	0.079	1.8	0.43	
OP-16-06	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)
OP-16-06	24.7	25.8	1.1	0.99	1.154	90.6	28.24	Sulphide Vein (chalcopyrite + trace magnetite)
OP-16-06	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)
OP-16-08	11.3	11.7	0.4	0.36	2.659	45.6	13.44	Magnetite Vein (chalcopyrite stringers)
OP-16-08	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)
OP-16-08	18.8	19.3	0.5	0.45	1.291	7.9	2.31	High Sulphide Vein (60% quartz)
OP-16-08	21.5	22.0	0.5	0.45	6.616	21.7	6.31	High Sulphide Vein (30% quartz)
OP-16-08	22.0	22.8	0.8	0.72	0.862	27.3	8.41	Stringers chalcopyrite
OP-16-08	23.3	24.3	1.0	0.90	2.959	16.1	4.55	High Sulphide Vein
OP-16-08	24.3	25.0	0.7	0.63	0.229	6.7	2.00	
OP-16-08	30.0	42.0	12.0	10.80	0.129	1.4	0.45	
OP-16-08	44.4	48.0	3.6	3.24	0.506	3.3	0.88	
OP-16-08	50.0	51.0	1.0	0.90	0.072	1.9	0.53	
OP-16-08	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

Notes:

1. True width is based on an average dip of 65° north for the known structures at the historical Springer Mine.
2. An arbitrary a value of 0.30% Cu was used as a cut-off grade for the composites.
3. Cu values were not capped.

Certified reference materials or blanks were not 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 drill core samples was quarter-cut and sampled as part of the 2021 diamond drilling program, in order to validate the pre-QC Copper drilling assays and these data are reviewed in Section 12 of this Report.

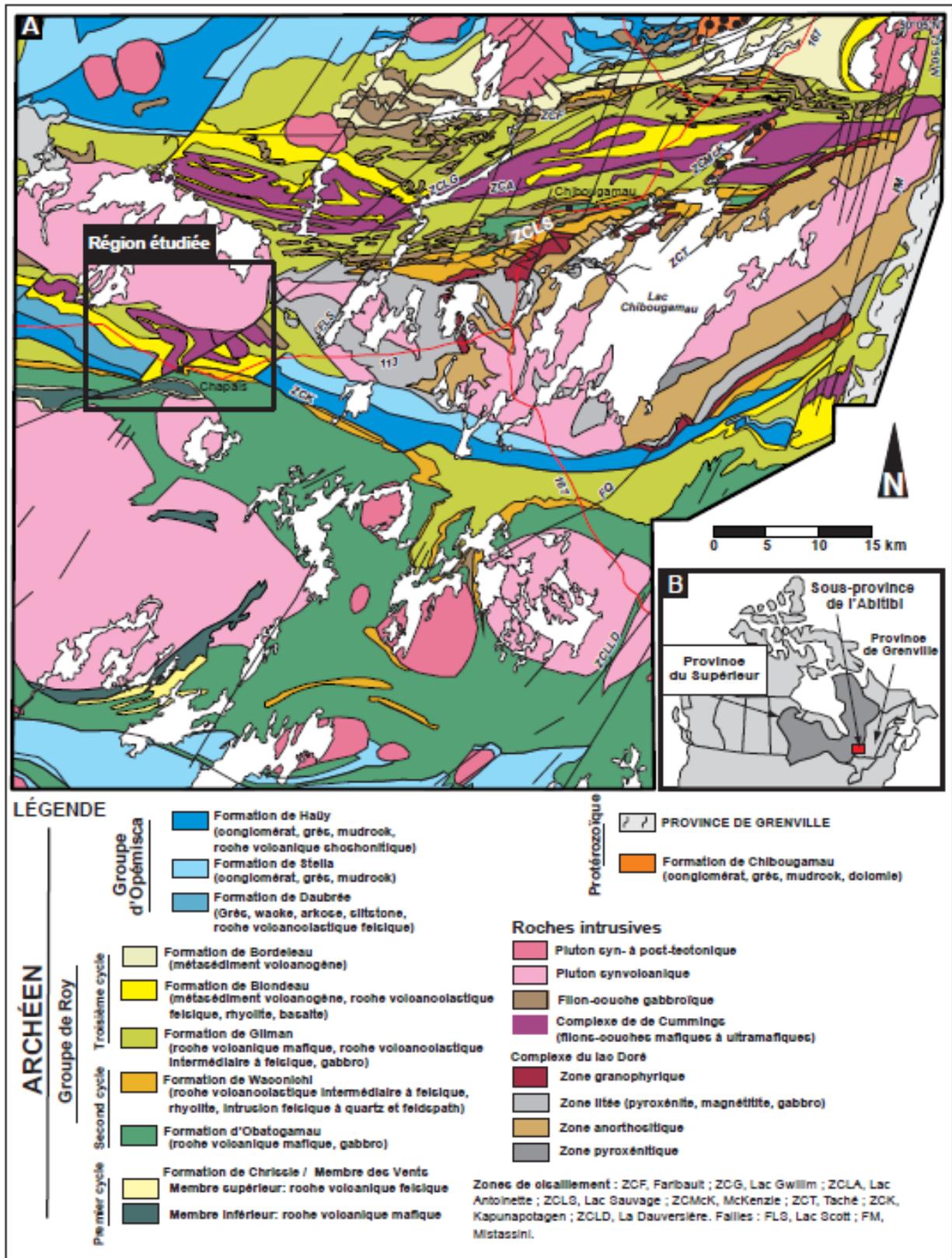
7.0 GEOLOGICAL SETTING AND MINERALIZATION

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 rock units are generally covered by a “vener” of glacial overburden.

The Chapais-Chibougamau Mining District (Figure 7.1) is located in the northeast part of the Abitibi Subprovince. The Abitibi Subprovince is one of the world’s largest contiguous areas of Archean metavolcanic and metasedimentary rocks and hosts many significant mineral deposits (Leclerc *et al.*, 2010, 2012). The general lithological distribution is characterized by oval-shaped granitoid batholiths surrounded by east-to-west trending “greenstone belts” that appear to wrap around and enclose the batholiths. Regional and local folding is common, and the dips of the rock units are generally sub-vertical. The region under study is located within the Northern Volcanic Zone of the Abitibi Subprovince (Guha *et al.*, 1988; Dube and Guha, 1992).

FIGURE 7.1 GEOLOGY OF THE CHAPAIS-CHIBOUGAMAU REGION



Source: Leclerc et al. (2010)

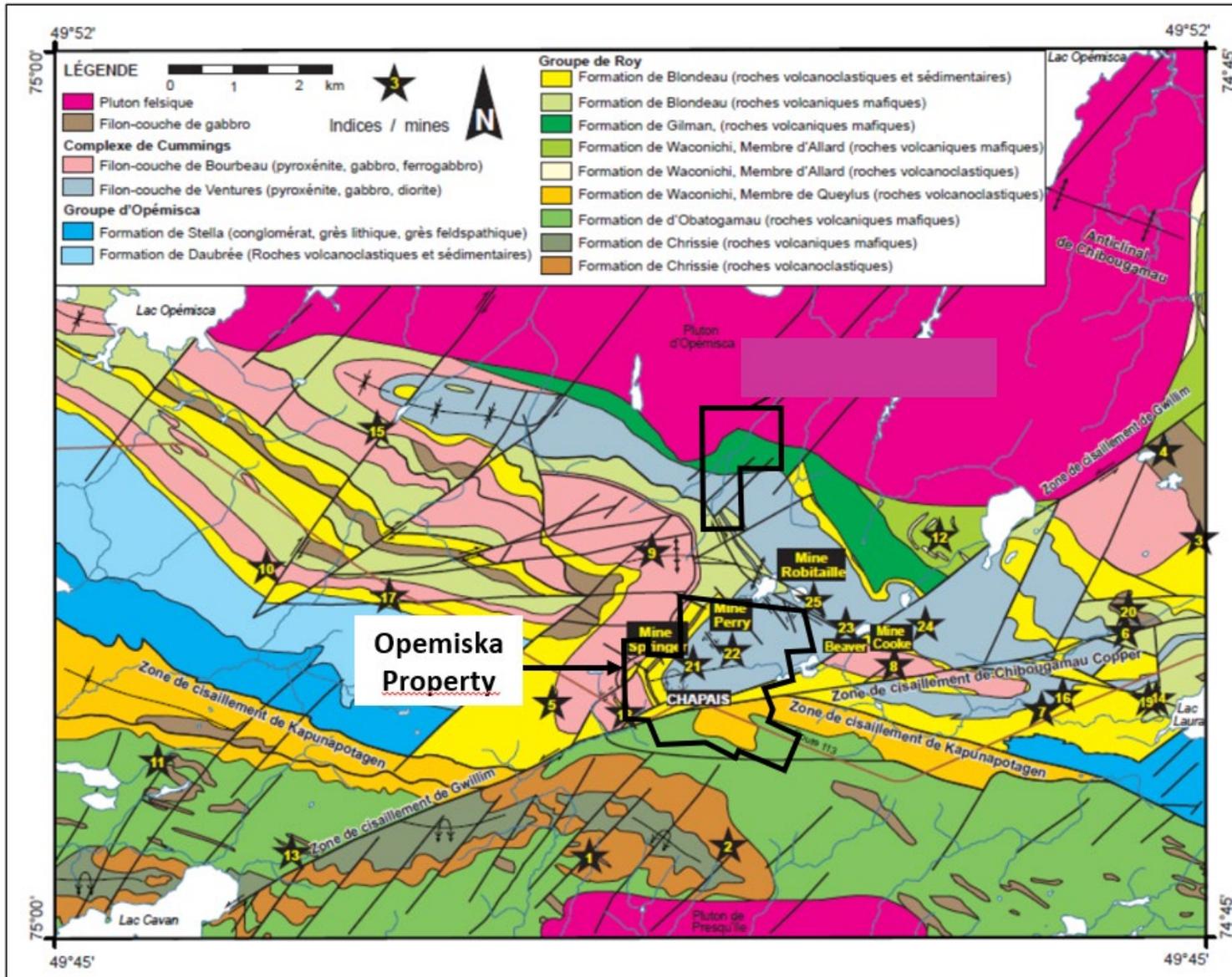
7.2 LOCAL AND PROPERTY GEOLOGY

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

Recent work by Leclerc *et al.* (2010, 2012) has refined the understanding of the complex geology and stratigraphy of the Opemiska Project area. The earlier stratigraphic interpretation has been modified, in order to take into consideration recent field observations.

The geology of the Opemiska Property 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.

FIGURE 7.2 CHAPAIS PROPERTY AREA GEOLOGY



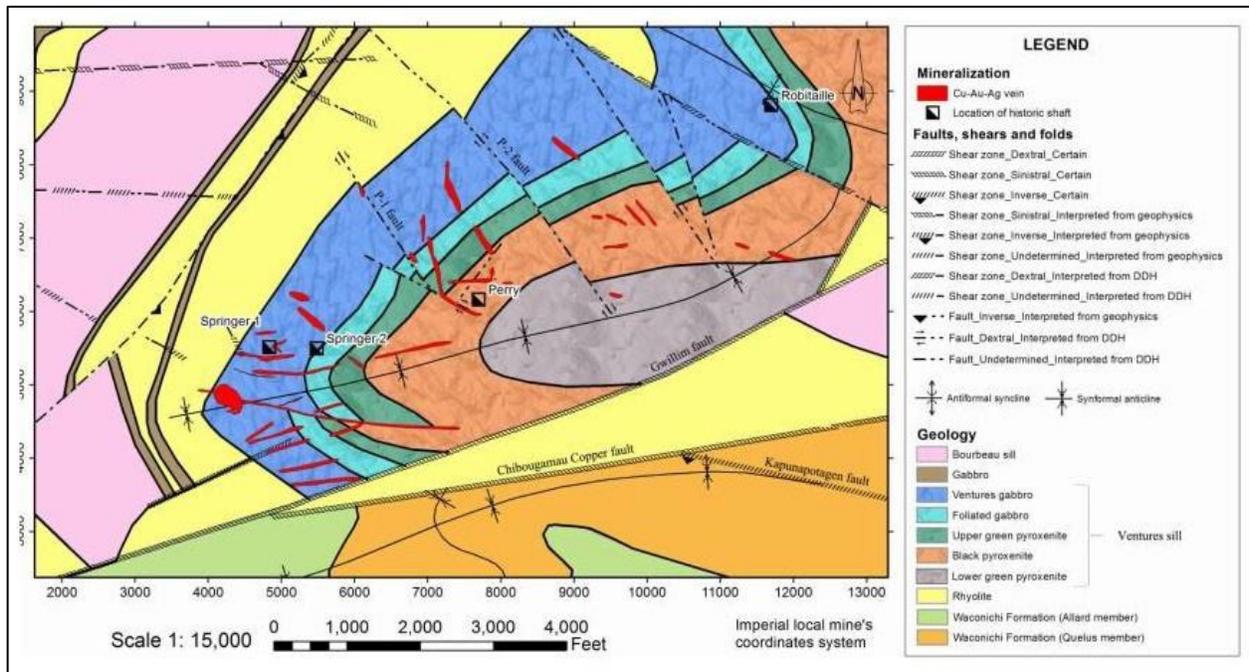
Source: modified by P&E (February 2024) after Leclerc et al. (2010)

The Ventures Sill, which is approximately 1,000 m thick, is the most common host unit of the mineralization on the Opemiska Property. The Ventures Sill has been divided from bottom to top into five laterally-persistent units:

1. **Lower Green Pyroxenite:** The lower green pyroxenite (~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 serpentized fractures. The upper contact is commonly sharp with no evidence of “chilling”;
2. **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);
3. **Upper Green Pyroxenite:** The Upper Green Pyroxenite is ~60 m thick and locally quite similar to the underlying pyroxenite. The rock is somewhat coarser-grained and interstitial feldspar is present. Contact with overlying unit is sharp, marked by cumulus plagioclase and titaniferous magnetite (McMillan, 1972);
4. **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 the unit has a sharp upper contact marked by abrupt change in texture and grain size; and
5. **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 generally coarse grained with 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).

The distribution of these units is shown in Figure 7.3.

FIGURE 7.3 LOCAL GEOLOGIC MAP



Source: Larouche (2019)

7.3 STRUCTURAL GEOLOGY

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 is cored by the Opemiska and Chibougamau Plutons (see Figure 7.2). This fold structure is related to the second major phase of regional deformation.

At Opemiska, the mineralization occurs within the large composite Ventures Sill that intrudes felsic volcanics (rhyolite) of the Blondeau Formation. The Ventures Sill and the volcanic units have been overturned, folded and truncated by the Gwillim Fault/Shear Zone (Figures 7.2 and 7.3). The fold plunges 45° to 65° to the east and postdates the second phase of regional deformation, but predates a third deformation phase (Leclerc *et al.*, 2012).

The Gwillim Fault (referred to originally as the Campbell Lake Fault) traverses the main block of claims in the Project area. An apparent “sinistral” horizontal displacement of 3,300 m along this structure has been determined (Watkins and Riverin, 1982). This fault was active during several tectonic events (Dimroth *et al.*, 1984), but its principal movement predates the third phase of deformation (Brown, 1970).

Six distinct directions of orientation were recognized by Falconbridge in the mineralized zones (GM-46158, Table 6.2):

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

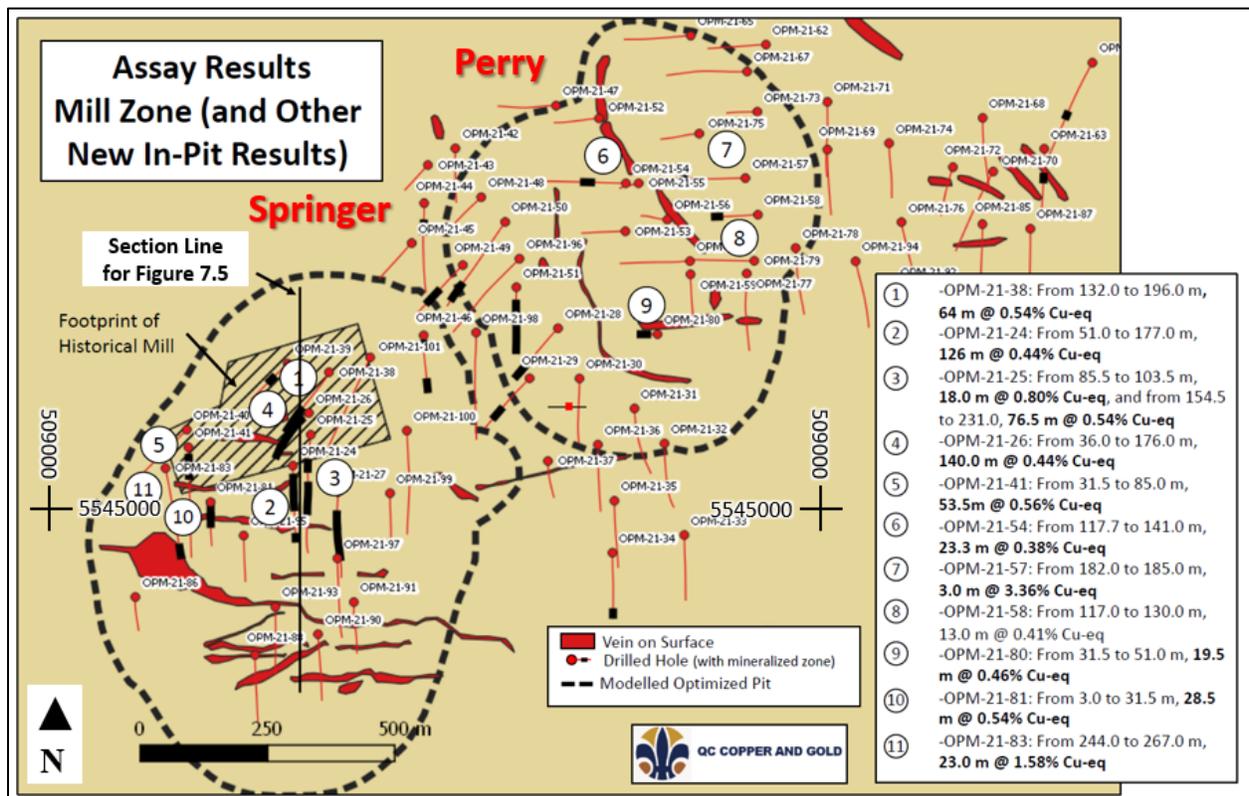
There are cross-cutting relationships between these different sets of fractures/shears, as exemplified by the Arsenopyrite Shear at surface. The relative ages of these structures remain to be determined.

7.4 DEPOSIT GEOLOGY AND MINERALIZATION

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

The mineralization at the Springer Mine 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 that developed in areas of maximum inflexion of folds (Watkins and Riverin, 1982). Plan and cross-section views of Springer show at least three different orientations for the mineralized veins (Figures 7.4 and 7.5), which could indicate a conjugate fault system or separate fracture systems.

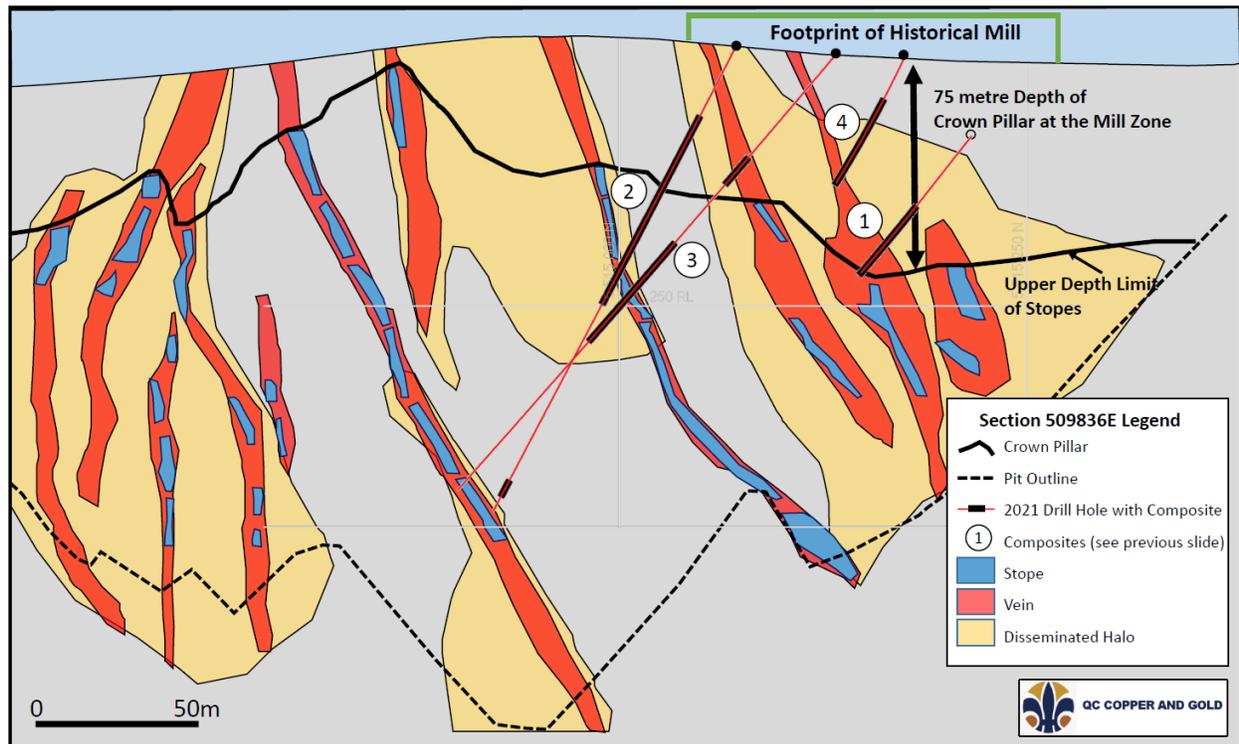
FIGURE 7.4 PLAN VIEW OF THE SPRINGER MINE SHOWING LINE-OF-SECTION



Source: Modified by P&E (January 2024), after QC Copper press release (June 28, 2021)

Note: The modelled optimized pits shown were for the 2021 MRE (P&E, 2021).

FIGURE 7.5 INTERPRETED VERTICAL CROSS-SECTIONAL PROJECTION OF SPRINGER MINE*



Source: QC Copper press release (June 28, 2021)

*Notes: * View looking west. Section line shown in Figure 7.4.*

In the limb of the fold at Perry Mine, the mineralization is associated to northwest-trending faults and fractures, developed perpendicular to stratigraphy (Figure 7.4).

Generally, mineralization of economic interest appears within more fractured/sheared sections of the host gabbro. These sections are generally strongly chloritized and variably silicified. A detailed description of the mineralization intersected in the 2016 drilling further classified the veins as follows:

- Massive pyrite veinlets (cut by magnetite?);
- Magnetite veins (minor associated disseminated chalcopyrite);
- Sulphide veins (massive chalcopyrite) with magnetite-rich margins, also with disseminated fragments of massive magnetite within chalcopyrite;
- High-sulphide veins with 30 to 50% quartz with massive chalcopyrite 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 cross-cut the copper-rich veins; and
- Small horizons with anomalous Cd-Zn within the felsic volcanics.

Although most of the mineralization mined at Springer and Perry was hosted in the upper part of the Ventures Sill, the regional and local structures are also important controls on mineralization at Opemiska. At Springer, the fold nose corresponding to the overturned anticline in the mafic-ultramafic sills controls significant amount of mineralization. A 6.0 m wide zone containing disseminated pyrrhotite and chalcopyrite occurs locally at the top of the Ventures Sill, where it is dilated at the nose of the fold (Watkins and Riverin, 1982).

The mineralized veins at Springer were described as restricted to fractures hosted in gabbro at the stratigraphic top of the Ventures Sills. The mineralization is generally massive, but locally disseminated. The main fractures trend 090° and dip 70° north. The main veins are up to 1,200 m long, average 6.0 m thick, and have been followed to >1,000 m depth. Vein No. 3 is the most important one, along with Vein No. 7 farther to the south. Additional, less important veins (six additional veins) have also been exploited. The mineralization consists mainly of chalcopyrite, pyrite, and pyrrhotite with smaller amounts of sphalerite, magnetite, galena, molybdenite, arsenopyrite, and gersdorffite (NiAsS). Native gold occurs in association with chalcopyrite and pyrite. The non-metallic gangue minerals are quartz, calcite and chlorite and minor amounts of biotite, stilpnomelane and actinolite. Locally significant amounts of scheelite and molybdenite are present. Later cross-cutting veins carry pitchblende-uraninite and molybdenite (DV 98-03; see Table 6.3 above). The alteration surrounding the veins is described as chlorite and carbonate.

At the time of the start of 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 generally strike east to west and dip steeply to the north. Some silver is present and locally important cobalt values have been obtained (e.g., surface drill hole S-57). In addition to the five veins, there are many other important drill intersections that are as yet uncorrelated. Included in these intersections are some carrying important zinc, lead and gold values, but in some cases with little copper present (GM-02098; see Table 6.1 above).

When mapping the area in 2009, the Ministère des Ressources naturelles et de la Faune (“MRNF”) sampled a mineralized quartz vein in gabbro outcrop (Sigeom à la Carte, 32G15 sample No. 2009050061). This vein is likely the same one intersected in drill hole OP-16-08. The sample graded >5.0 g/t Au, 740 ppm Co, 60 ppm Mo, 260 ppm Ni, 0.14% Zn, 20.49% Cu, 35.65% Fe and 0.29% W. This result confirms the multi-element association in some of the veins at Springer.

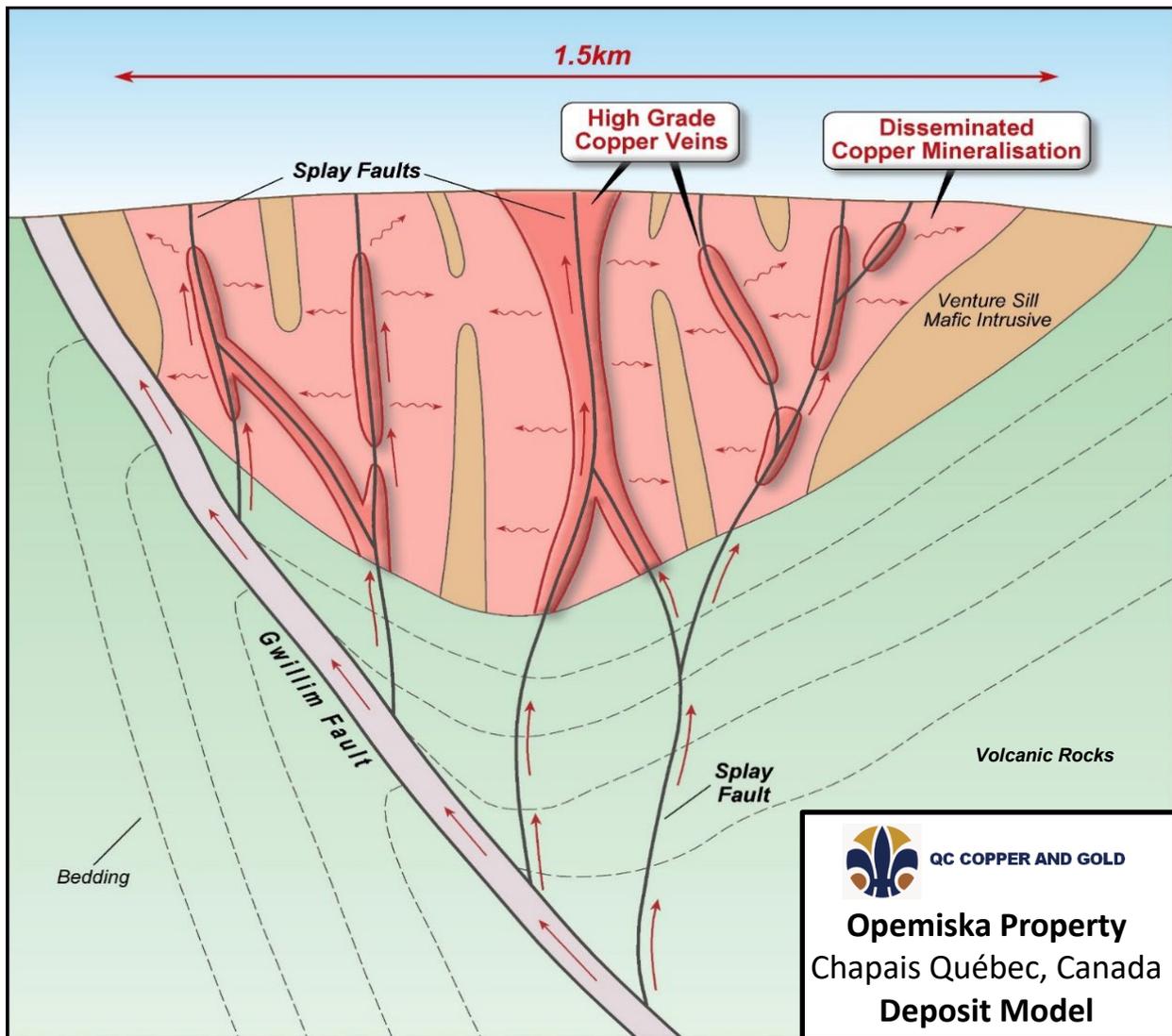
8.0 DEPOSIT TYPES

The mineral deposit type on the Opemiska Property is structurally controlled copper-gold veins. The veins occur in east-west trending axial planar faults and northwest-trending radial structures within the folded mafic-ultramafic Ventures Sill and Bourbeau Sill. The folds postdate the main east-west trending regional isoclinal folds (D2a), but predate the third phase of deformation (D3), and are interpreted to represent drag folding during sinistral movement (D2b) along the Gwillim Fault (Figure 8.1) (Leclerc *et al.*, 2012). Progressive deformation of the Ventures Sill caused rupturing of the unit, which produced 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 pathways for circulation of mineralizing 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 compare the veins systems at the Springer and Perry Mine Deposits on the Opemiska Property compared to the Chibougamau Mine Deposits farther east. At the Springer Mine, the veins proximal to the Gwillim Fault also contain significantly higher gold grades than the more distal veins (Salmon *et al.*, 1984). At Chibougamau, the main copper veins are oriented northeast-southwest at Henderson-Portage Mines, but the later-formed “Mines Shears” oriented at 110° appear to carry more gold.

FIGURE 8.1 **OPEMISKA DEPOSIT MODEL**



Source: QC Copper (2021)

9.0 EXPLORATION

Exploration work by QC Copper has been focused on diamond drilling and geological compilation and re-interpretation work. In addition, a geophysical 3-D IP survey, a drill hole televiewer survey and a structural geology study were completed. The drilling work is described in Section 10 of this Report. The compilation, geophysics, drill hole televiewer and structural geology work is summarized below.

9.1 RE-INTERPRETATION OF GEOLOGICAL MODEL

The Company carried on with the extensive compilation work started by Ex-In on the historical Springer and Perry Mines. During operation of the Mines, all drill holes were logged on paper and no digital records were compiled. QC Copper built a digital database that includes drill hole collar locations, deviation tests, geology, sampling, and assay results. The compilation included all the historical surface and underground drill holes for a total of 19,471 drill holes (1,074,735 m) and 375,931 samples.

None of the drill core from the historical surface and underground drilling during the mining period was preserved and there is no means of directly validating historical assays. Assay certificates were not preserved and the samples were assayed at the on-site mine laboratory. No information is available as to the sample preparation or analytical methods used by the Mine. The assay validation issue is addressed later in Section 12 of this Report. In summary, some of the historical surface drill holes were twinned in the 2019 and 2021 diamond drilling programs. The assay results and logs were compared in detail with the historical drilling, with the ultimate objective of validating all the historical mining results.

Level plans, sections and longitudinal projections were scanned and georeferenced to confirm the location of all the drill holes and digitize all the underground mine openings. All underground drifts, veins and stopes were digitized from the available scanned maps and combined into 3-D wireframe models using various software and ultimately integrated into GEOVIA GEMS™ modelling software and later converted to Micromine format. 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 below surface) and subsequently down to the bottom of the historical Springer Mine around 650 m depth and to the bottom of the historical Perry Mine around 1,000 m depth. Many stopes were intersected during the 2019 and 2021 drill programs typically within one or two metres of the projected downhole locations from the drill hole collars as projected in 3-D.

All the work described above was performed in the original local mine grid coordinates. All the drill holes and the 3-D wireframe models were subsequently converted to UTM coordinates and elevations above sea level, in order to better integrate with GPS and surface data, such as the Chapais town site and surrounding road network, using the transformation equations in listed below:

- Mine to UTM NAD83, Zone 18 Co-ordinate Transformation Equations:

$$X_UTM = (0.3048 * X_Mine) + 508,249.09$$

$$Y_UTM = (0.3048 * Y_Mine) + 5,513,407.36$$

$$Z_UTM = (Z_Mine - 3,676.91) * 0.3048$$

These equations were generated by a qualified land surveyor in Chibougamau, based on regression analysis of a large number of mine-era surface drill collar casings that were re-surveyed using a differential GPS unit. They were validated and confirmed when new found surface drill casings were located and georeferenced. In addition, QC Copper's drilling located buried drill casings within 1 or 2 m accuracy, when bulldozing new drill setups and projected stopes were typically encountered within a few of metres of anticipated down hole depth locations.

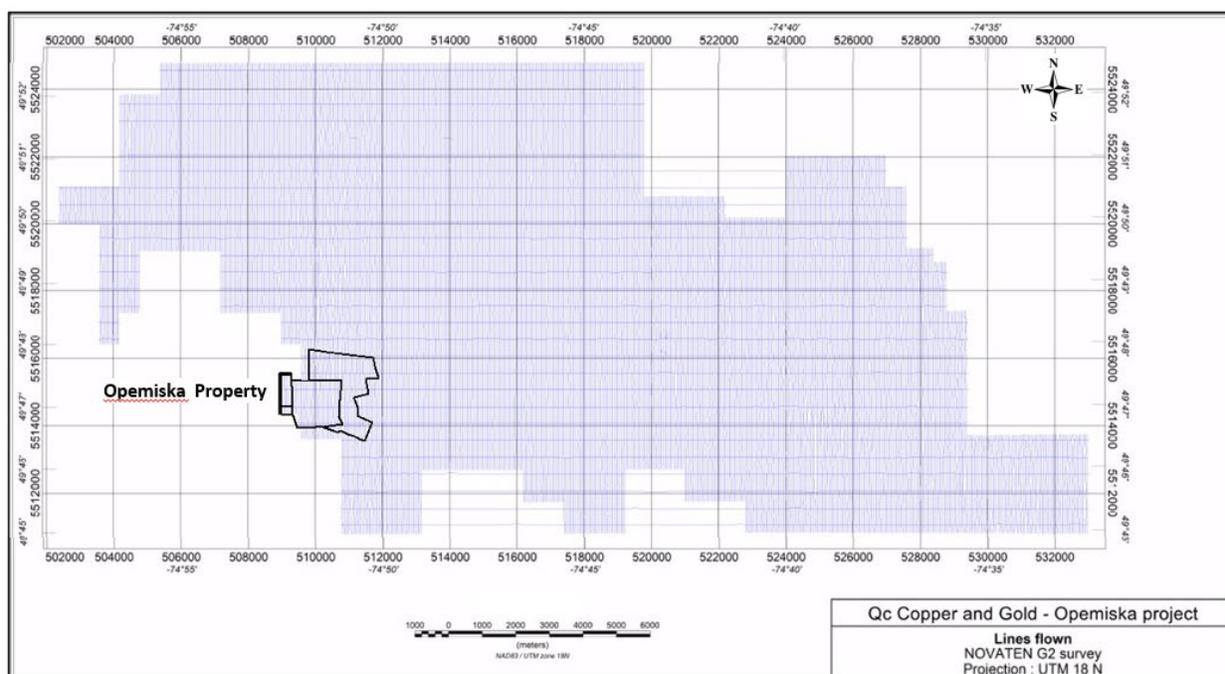
9.2 GEOPHYSICS

In 2022, QC Copper completed a high resolution, 75-m line spacing airborne magnetic survey that covered the Opemiska Property and QC Copper's adjacent properties (Figure 9.1). The survey data were micro-levelled to provide the maximum resolution and interpretability. Previous magnetic susceptibility measurements on drill core were used to constrain the 3-D inversions of the airborne survey data. This study was expected to define distinct geological domains for improved Mineral Resource modelling. The geophysical data reprocessing and 3-D inversions results indicate that the Ventures Sill is variably magnetic with the most magnetic portion corresponding to the Ventures Gabbro and Green Pyroxenite units. The magnetic response within these units, where cut by northwest-trending mineralized faults is diminished, which suggests that the mineralizing fluids were magnetite destructive. Magnetite is a ubiquitous vein mineral, which suggests 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.

During the fall 2022, Géophysique TMC was commissioned by QC Copper to complete a mise-à-la-masse survey in the vicinity of the Saddle Zone. The purpose of the survey was to confirm the connection between the mineralized zones and aid interpretation of the geological model in the area. Beforehand, a field grid consisting of 13 lines ranging from 275 to 600 m long was cut to lay the wires to guide the survey.

The mise-à-la-masse survey consisted of two types of readings. The first is a surface survey, which consisted of putting an electrode down the drill hole to the level of a mineralized zone and reading along the surface lines. For this, a total of 14 different readings were made, using 6 different drill holes. The second type of reading was drill hole-to-drill hole reading, which consisted of placing one transmitting electrode in one drill hole, at a mineralized interval and the receiving electrode at the same interpreted interval in an adjacent drill hole, and reading along one line to confirm the connection of the two zones.

FIGURE 9.1 FLIGHT LINES FOR THE 2022 AIRBORNE MAGNETIC SURVEY



Source: modified by P&E (2023), after Expert Geophysics (2022)

9.3 DRILL HOLE TELEVIEWER

A focused optical and acoustic drill hole televiewer surveying program was planned at the end of the 2021 drill program to obtain oriented structural measurements. A total of 16 drill holes were scanned (optic, some also with acoustic) with a Semm Logging Televiewer. Three of those drill holes were on the Bouchard Zone, four on Springer Zone, and nine on the Saddle Zone. The interpretation was completed in-house using Wellcad, in order to help understand the orientation and the relationships of the structures to the mineralization.

9.4 STRUCTURAL GEOLOGY STUDY

The Company engaged SRK Consulting to complete a structural geological study to better understand the relationships between the different veins and mineralized faults of this structurally-hosted Cu-Au-Ag deposit. The purpose of the study was to integrate all the available observations, including surface stripping, drill core, underground geology level plans, longitudinal projections and cross-sections, 3-D shapes of the existing stopes, and constrained inversions of the airborne magnetic data, into a comprehensive structural model for the Opemiska Deposit.

10.0 DRILLING

10.1 DRILLING OVERVIEW

In total, 17,837 surface and underground drill holes for 1,145,402 m are recorded as having been completed at the Opemiska Property. A breakdown of the drill holes and metres is presented in Table 10.1.

TABLE 10.1 ALL INCLUSIVE DRILLING STATISTICS ON OPEMISKA DEPOSIT		
Drilling Phase	Number of Drill Holes	Total (m)
Historical Mine_Surface	631	87,469.0
Historical Mine_UG	16,840	987,265.8
2002	7	104.5
2005	46	969.8
2010	19	1,748.0
2015	4	537.0
2016	9	708.0
2019	23	3,363.6
Early-2021	78	16,411.6
Late-2021 to 2023	180	47192.2
Grand Total	17,837	1,146,690.7

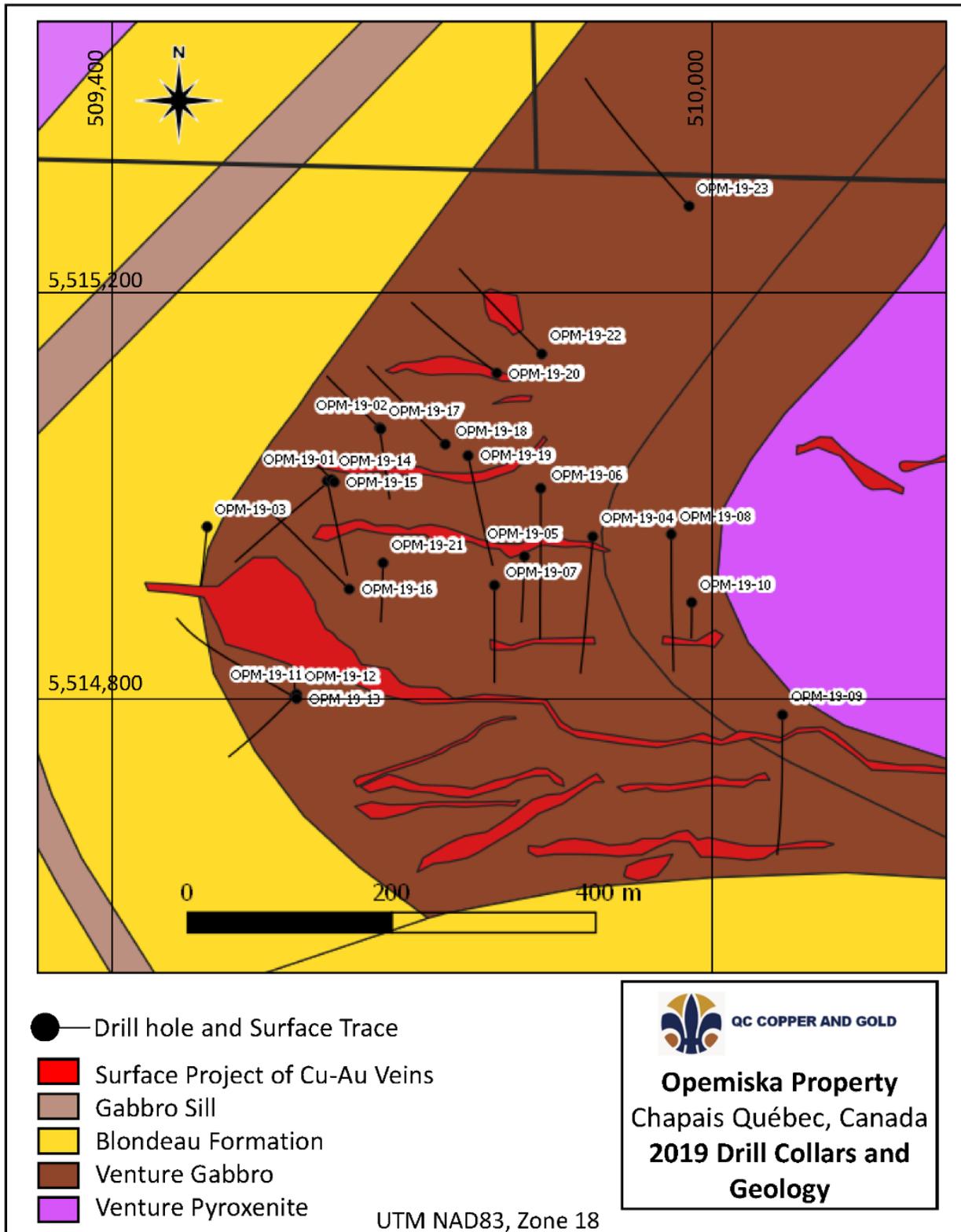
QC Copper completed drill hole programs in 2019 (as predecessor company, PowerOre Inc.), winter-spring 2021, autumn-winter 2021-2022, summer 2022, and winter 2023. These drill programs were all completed according to the industry standards with certified reference materials and blanks inserted in the sample stream to monitor and control the quality of the assay data. In addition, duplicate, ¼ drill 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.

The details of the QC Copper drilling programs are summarized below.

10.2 2019 DRILLING

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 due to prevailing economics. The drill hole locations are shown in Figure 10.1 and the drill hole collar locations, orientations and lengths are listed in Table 10.2.

FIGURE 10.1 2019 DIAMOND DRILL HOLE LOCATION MAP



Source: P&E (2021)

TABLE 10.2				
LOCATION OF 2019 SURFACE DRILL HOLES				
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
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 drill holes		3,363.6	

A series of drill holes were completed to duplicate some of Falconbridge's drill holes, 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) were completed for 3,364 m. 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., Ing. Samples of drill core were cut longitudinally along a line marked by the logging geologist and cut in half using a diamond drill core saw. Samples were assembled in batches with pulps of certified reference materials and blanks. Approximately 10% of the samples submitted for analyses were either certified reference materials or blanks. In addition, a suite of drill core duplicates was submitted for analysis. Finally, a suite of mineralized drill core from the 2010, 2015 and 2016 drilling programs was quartered and submitted for validation assay. These results are reviewed in Section 12 of this Report.

10.2.1 Lithologies

All the 2019 drill holes were collared in the Springer Mine area and all drill holes intersected either the Ventures 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 1 to 2 m thick.

A well-defined peridotite unit, possibly a sill, is present within the upper green pyroxenite in drill hole OPM-19-09 and may be 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 farther to the northwest, appears to be overlain by mafic volcanics. The rhyolite represents a possible target for VMS-type deposits.

10.2.2 Mineralization

Significant disseminated copper mineralization was intersected during the 2019 drill program, as summarized in Table 10.3. Preliminary observations from the 2019 drilling suggest that higher copper grades (\pm gold) are associated to main veins with more massive chalcopyrite along with quartz – pyrite – (pyrrhotite) – 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 to completely destroyed. Finally, a few quartz veins, locally with arsenopyrite, were intersected that carry higher grade gold and lower grade copper, and show a different orientation to the copper veins.

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
OPM-19-01	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
OPM-19-02	99.0	107.0	8.0	2.53	3.66	Hinge
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

TABLE 10.3
SIGNIFICANT MINERALIZED INTERSECTIONS FROM THE
2019 DRILLING CAMPAIGN

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Zone
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
OPM-19-04	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
OPM-19-07	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
OPM-19-09	94.2	108.0	13.8	1.45	0.33	Southeast
OPM-19-09	122.0	135.4	13.4	0.24	0.07	Southeast
OPM-19-09	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
OPM-19-14	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
OPM-19-16	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
OPM-19-18	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
OPM-19-19	81.1	89.0	7.9	4.10	0.51	Mill
OPM-19-19	98.6	117.6	19.0	0.37	0.16	Mill
OPM-19-19	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
including	18.0	25.0	7.0	1.27	0.24	Mill
OPM-19-20	61.5	76.3	14.8	1.07	0.61	Mill

TABLE 10.3
SIGNIFICANT MINERALIZED INTERSECTIONS FROM THE
2019 DRILLING CAMPAIGN

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Zone
OPM-19-20	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
OPM-19-21	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 considered 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 1.5 m (5 feet). Moreover, drilling in the vicinity of the historical process plant indicates that the mine left much thicker crown pillars in this area, presumably to protect the mill infrastructure. Finally, a total of 10 of the 23 drill holes were twins or quasi-twins of historical mine surface drill holes. Preliminary results of the comparison of the locations, widths and grade distributions between the historical assays and the QA/QC-controlled drilling by QC Copper indicates the historical in-house mine assay results are compatible with modern sampling. These data will be combined with additional twin holes in the 2021 drilling in Section 12 to validate the historical assays.

10.3 WINTER-SPRING 2021 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 drill holes were completed for a total of 16,411 m. All drill holes were completed with NQ sized drill core, using a hexagonal bar and a long reamer sleeve to minimize drill hole deviation.

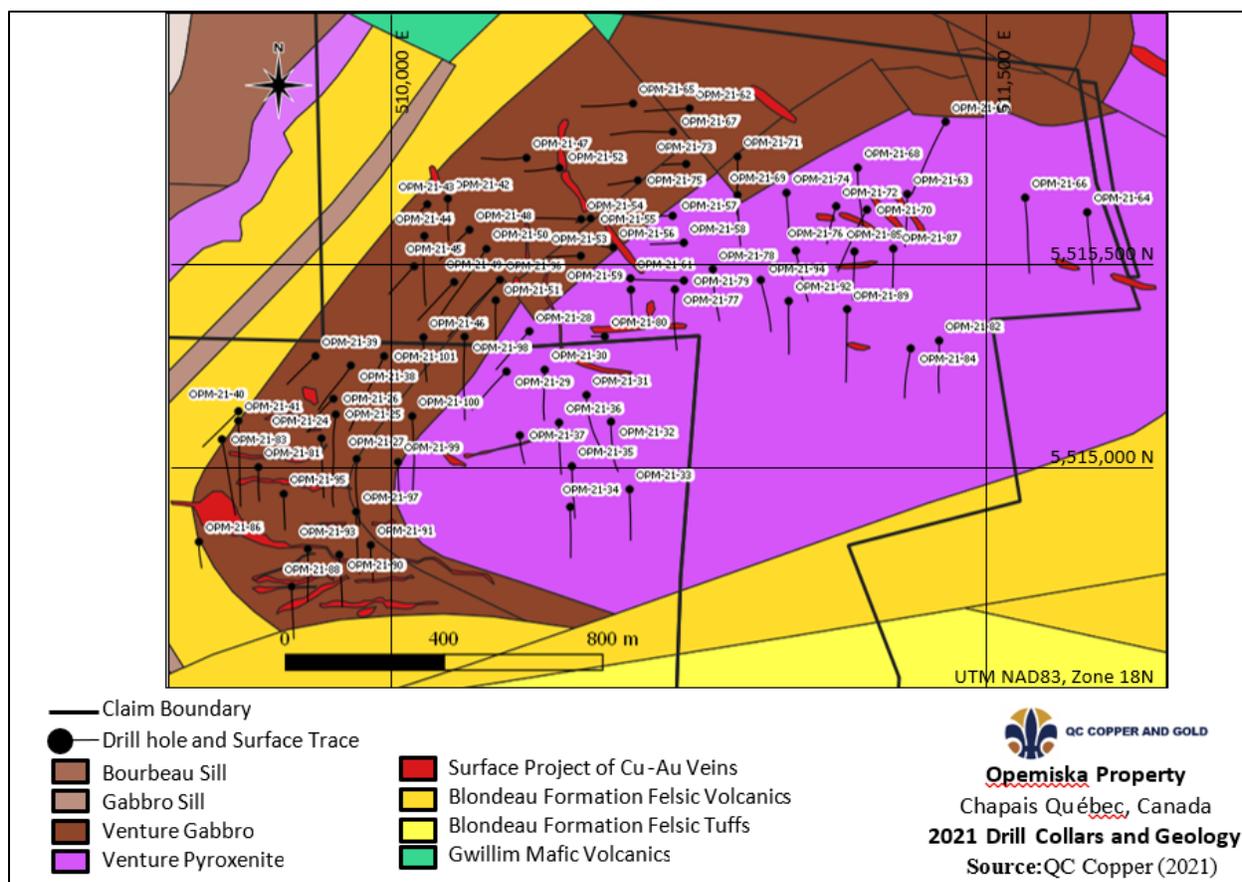
The work was carried out under the supervision of Denis McNichols, P.Geo., Project Manager for QC Copper. Drill core was logged by Patrice Rioux, géo. Junior, Julien Huget, Ing. Junior, Vincent Raymond, géo., all three working for Laurentia Exploration and by Armando G. Monteza, P.Geo. Junior, employed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

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 drill holes. All the drill hole collars were aligned using an "Azimuth Aligner" from Minnovare. This method guaranteed an accuracy of 0.1° on the

direction and on the dip of the drill holes, and is not affected by the high magnetic susceptibility of the rocks in the Ventures Sill. The device was checked regularly to ensure it was properly calibrated. The deviation tests were completed using a Reflex magnetic device, starting at 30 m and subsequently at 50 m intervals. Outlier azimuths and dips were removed from the dataset before plotting.

The drill hole locations are shown in Figure 10.2. Drill hole collar location coordinates and orientation and drill hole lengths are listed in Table 10.4. Results for the mineralized intervals intersected in the 2021 drilling are summarized in Table 10.5.

FIGURE 10.2 2021 DIAMOND DRILL HOLE LOCATION MAP



Source: P&E (2021)

Diamond Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elevation (m asl)
					Easting	Northing	
OPM-21-24	180	-63	322.0	P013681	509,821	5,515,074	403.8
OPM-21-25	180	-50	354.0	P013681	509,857	5,515,134	401.4

TABLE 10.4
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 asl)
					Easting	Northing	
OPM-21-26	225	-55	176.0	P013681	509,851	5,515,174	401.3
OPM-21-27	180	-50	256.2	P013681	509,909	5,515,022	409.1
OPM-21-28	225	-50	201.0	P014151	510,345	5,515,344	397.9
OPM-21-29	225	-50	201.0	P013681	510,287	5,515,242	395.2
OPM-21-30	180	-50	201.0	P013681	510,384	5,515,247	394.8
OPM-21-31	180	-50	204.0	P013681	510,489	5,515,183	392.6
OPM-21-32	180	-50	204.0	P013681	510,551	5,515,116	391.9
OPM-21-33	180	-50	201.0	P013681	510,598	5,514,945	391.4
OPM-21-34	180	-50	201.0	P013681	510,448	5,514,901	391.5
OPM-21-35	180	-50	201.0	P013681	510,452	5,515,004	391.9
OPM-21-36	180	-50	198.0	P013681	510,420	5,515,113	392.3
OPM-21-37	180	-45	102.0	P013681	510,321	5,515,081	392.0
OPM-21-38	220	-45	196.0	P013681	509,895	5,515,258	399.8
OPM-21-39	225	-50	154.5	P013681	509,806	5,515,281	399.2
OPM-21-40	225	-50	196.0	P013681	509,612	5,515,142	396.0
OPM-21-41	180	-50	319.8	P013681	509,611	5,515,118	397.4
OPM-21-42	181.5	-45	150.0	P014151	510,139	5,515,678	402.8
OPM-21-43	225	-50	102.0	P014151	510,088	5,515,664	404.9
OPM-21-44	180	-45	249.0	P014151	510,080	5,515,584	401.8
OPM-21-45	225	-50	150.0	P014151	510,054	5,515,507	399.4
OPM-21-46	180	-50	174.0	P014151	510,078	5,515,329	399.5
OPM-21-47	270	-55	198.0	P014151	510,338	5,515,781	403.0
OPM-21-48	225	-50	165.0	P014151	510,194	5,515,600	402.2
OPM-21-49	225	-50	201.0	P014151	510,155	5,515,468	400.0
OPM-21-50	215	-45	276.0	P014151	510,237	5,515,551	402.2
OPM-21-51	180	-50	192.0	P014151	510,260	5,515,422	400.9
OPM-21-52	270	-55	153.0	P014151	510,421	5,515,756	403.2
OPM-21-53	270	-55	146.0	P014151	510,475	5,515,534	400.1
OPM-21-54	270	-55	300.0	P014151	510,476	5,515,626	400.8
OPM-21-55	270	-80	241.0	P014151	510,500	5,515,628	401.0
OPM-21-56	270	-80	280.0	P014151	510,557	5,515,555	401.2
OPM-21-57	270	-50	204.0	P014151	510,706	5,515,635	402.8
OPM-21-58	270	-50	130.0	P014151	510,734	5,515,567	401.5
OPM-21-59	180	-50	132.0	P014151	510,601	5,515,449	399.1
OPM-21-60	210	-55	348.0	P014151	511,394	5,515,872	429.9
OPM-21-61	270	-55	234.0	P014151	510,600	5,515,477	400.0
OPM-21-62	270	-65	267.0	P014151	510,749	5,515,906	409.0
OPM-21-63	180	-50	201.0	P014151	511,298	5,515,690	425.9
OPM-21-64	180	-50	276.0	P014151	511,751	5,515,644	415.2

TABLE 10.4
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 asl)
					Easting	Northing	
OPM-21-65	270	-50	201.0	P014151	510,606	5,515,918	410.1
OPM-21-66	180	-55	324.0	P014151	511,595	5,515,681	416.8
OPM-21-67	270	-50	243.0	P014151	510,707	5,515,847	408.6
OPM-21-68	180	-50	225.0	P014151	511,173	5,515,756	423.0
OPM-21-69	180	-50	201.0	P014151	510,870	5,515,688	405.5
OPM-21-70	210	-50	264.0	P014151	511,196	5,515,650	424.0
OPM-21-71	180	-50	225.0	P014151	510,870	5,515,784	406.8
OPM-21-72	200	-50	150.0	P014151	511,119	5,515,659	415.9
OPM-21-73	270	-65	141.0	P014151	510,740	5,515,766	404.1
OPM-21-74	180	-45	150.0	P014151	510,993	5,515,693	408.4
OPM-21-75	270	-60	150.0	P014151	510,619	5,515,724	405.0
OPM-21-76	175	-50	201.0	P014151	511,017	5,515,547	408.1
OPM-21-77	180	-50	234.0	P014151	510,712	5,515,449	401.2
OPM-21-78	180	-50	201.0	P014151	510,808	5,515,500	402.2
OPM-21-79	270	-50	193.0	P014151	510,735	5,515,472	401.3
OPM-21-80	270	-50	51.0	P014151	510,535	5,515,331	397.6
OPM-21-81	180	-50	132.0	P013681	509,662	5,515,001	406.5
OPM-21-82	180	-50	201.0	P014151	511,378	5,515,320	399.1
OPM-21-83	170	-50	297.0	P013681	509,570	5,515,071	390.2
OPM-21-84	190	-50	192.0	P014151	511,306	5,515,301	392.0
OPM-21-85	180	-50	186.0	P014151	511,164	5,515,545	413.7
OPM-21-86	180	-50	102.0	P013681	509,512	5,514,813	393.3
OPM-21-87	180	-50	201.0	P014151	511,263	5,515,552	415.6
OPM-21-88	180	-50	210.0	P013681	509,746	5,514,700	382.2
OPM-21-89	180	-50	300.0	P014151	511,146	5,515,400	396.8
OPM-21-90	180	-50	201.0	P013681	509,866	5,514,780	398.1
OPM-21-91	180	-50	135.4	P013681	509,945	5,514,805	398.3
OPM-21-92	180	-50	204.0	P014151	510,999	5,515,420	401.0
OPM-21-93	180	-50	205.5	P013681	509,786	5,514,795	399.3
OPM-21-94	168	-50	201.0	P014151	510,928	5,515,473	403.4
OPM-21-95	180	-50	140.0	P013681	509,726	5,514,934	416.3
OPM-21-96	225	-50	297.0	P014151	510,271	5,515,474	400.4
OPM-21-97	180	-50	240.0	P013681	509,908	5,514,889	409.3
OPM-21-98	180	-55	357.0	P014151	510,182	5,515,330	400.2
OPM-21-99	180	-50	165.0	P013681	510,014	5,515,014	408.4
OPM-21-100	180	-50	310.4	P013681	510,050	5,515,130	401.2
OPM-21-101	205	-50	322.0	P013681	509,979	5,515,281	399.0
Total	78 holes		16,411.0				

TABLE 10.5
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM*

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	1.6	59	28
OPM-21-24	incl. from 121.5 to 177.0 m, 55.5 m @ 0.640% Cu-Eq	0.488	0.181	2.1	52	30
OPM-21-24	and from 303.0 to 310.5 m, 7.5 m @ 1.14% Cu-Eq	0.979	0.117	8.0	2,023	153
OPM-21-25	From 85.5 to 103.5 m, 18 m @ 0.826% Cu-Eq	0.660	0.185	3.3	141	46
OPM-21-25	and from 154.5 to 231.0 m, 76.5 m @ 0.542% Cu-Eq	0.355	0.236	1.6	58	29
OPM-21-26	From 36.0 to 176.0 m, 140 m @ 0.429% Cu-Eq	0.331	0.116	1.4	71	36
OPM-21-26	incl. from 105.0 to 150.9 m, 35.0 m @ 0.936% Cu-Eq	0.717	0.266	2.8	105	40
OPM-21-27	From 69.0 to 196.5 m, 127.5 m @ 0.382% Cu-Eq	0.318	0.061	2.0	73	28
OPM-21-27	incl. from 69.0 to 104.0 m, 35.0 m @ 0.860% Cu-Eq	0.749	0.094	4.4	129	40
OPM-21-28	From 140.0 to 195.0 m, 55 m @ 0.279% Cu-Eq	0.223	0.059	1.4	66	46
OPM-21-28	incl. from 170.0 to 177.5 m, 7.5 m @ 1.45% Cu-Eq	1.177	0.305	5.7	97	53
OPM-21-29	From 132.0 to 158.0 m, 26 m @ 0.345% Cu-Eq	0.279	0.070	1.5	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	2.9	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	2.0	81	45
OPM-21-39	From 64.0 to 75.0 m, 11.0 m @ 0.369% Cu-Eq	0.278	0.100	1.9	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	2.5	604	8
OPM-21-41	incl. from 75.0 to 85.0 m, 10.0 m @ 2.63% Cu-Eq	2.359	0.238	10.2	225	35
OPM-21-42	low values					

TABLE 10.5
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM*

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	2.3	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	3.3	100	37
OPM-21-46	and from 144.0 to 165.0 m, 21.0 m @ 0.446% Cu-Eq	0.114	0.417	3.2	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	2.2	74	29
OPM-21-50	From 221.5 to 251.6 m, 40.1 m @ 0.697% Cu-Eq	0.558	0.149	3.2	142	38
OPM-21-51	From 49.5 to 187.5 m, 138.0 m @ 0.458% Cu-Eq	0.390	0.066	2.0	89	48
OPM-21-51	incl. 111.0 to 187.5 m, 76.5 m @ 0.760% Cu-Eq	0.646	0.113	3.2	114	52
OPM-21-51	and incl. 133.4 to 161.2 m, 27.8 m @ 1.39% Cu-Eq	1.155	0.250	5.0	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	1.9	70	36
OPM-21-54	and from 258.9 to 264.1 m, 5.2 m @ 0.529% Cu-Eq	0.413	0.102	4.2	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	19.9	604	106
OPM-21-58	From 117.0 to 130.0 m, 13.0 m @ 0.376% Cu-Eq	0.329	0.041	1.8	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	2.1	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	2.4	49	60
OPM-21-64	From 134.0 to 155.0 m, 21.0 m @ 0.486% Cu-Eq	0.378	0.078	5.2	143	91

TABLE 10.5
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM*

Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-65	low values					
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	6.7	162	45
OPM-21-69	From 34.5 to 144.0 m, 109.5 m @ 0.626% Cu-Eq	0.594	0.009	2.6	109	37
OPM-21-69	incl. from 108.0 to 144.0 m, 36.0 m @ 1.59% Cu-Eq	1.534	0.012	4.5	250	53
OPM-21-70	From 46.5 to 48.8 m, 2.3 m @ 8.349% Cu-Eq	7.855	0.048	40.8	235	118
OPM-21-71	From 165.0 to 174.0 m, 9.0 m @ 0.349% Cu-Eq	0.330	0.009	1.3	84	52
OPM-21-71	From 216.0 to 223.5 m, 7.5 m @ 0.339% Cu-Eq	0.285	0.006	1.2	98	58
OPM-21-72	From 34.3 to 93.0 m, 58.7 m @ 0.128% Cu-Eq	0.105	0.018	1.0	24	79
OPM-21-72	incl. from 82.5 to 93.0 m, 10.5 m @ 0.360% Cu-Eq	0.275	0.077	3.0	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	1.3	23	33
OPM-21-75	From 139.5 to 145.5 m, 6.0 m @ 0.591% Cu-Eq	0.469	0.124	3.3	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	1.4	35	34
OPM-21-77	and from 153.7 to 168.7 m, 15.0 m @ 0.757% Cu-Eq	0.681	0.031	5.4	292	90
OPM-21-78	From 64.3 to 66.3 m, 2.0 m @ 1.73% Zn	0.016	0.164	3.9	11,490	55
OPM-21-78	and from 113.8 to 118.8 m, 5.0 m @ 0.358% Cu-Eq	0.284	0.045	4.1	45	114
OPM-21-79	From 136.5 to 145.0 m, 8.5 m @ 0.365% Cu-Eq	0.348	0.010	1.0	25	63
OPM-21-80	From 31.5 to 51.0 m, 19.5 m @ 0.440% Cu-Eq	0.405	0.014	2.5	39	32
OPM-21-81	From 3.0 to 129.0 m, 126.0 m @ 0.232% Cu-Eq	0.164	0.076	1.3	89	30
OPM-21-81	incl. from 3.0 to 31.5 m, 28.5 m @ 0.529% Cu-Eq	0.387	0.157	2.9	181	38
OPM-21-81	and from 43.5 to 66.0 m, 22.5 m @ 0.370% Cu-Eq	0.274	0.109	1.7	56	29
OPM-21-82	From 103.5 to 159.0 m, 55.5 m @ 0.525% Cu-Eq	0.437	0.028	6.8	388	46
OPM-21-83	From 244.0 to 267.0 m, 23.0 m @ 1.509% Cu-Eq	0.891	0.675	13.2	1,686	146

TABLE 10.5
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM*

Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-84	From 73.5 to 110.0 m, 36.5 m @ 0.348% Cu-Eq	0.291	0.023	4.1	151	57
OPM-21-84	and from 150.0 to 158.0 m, 8.0 m @ 0.237% Cu-Eq	0.203	0.011	2.6	55	40
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	1.7	92	45
OPM-21-89	From 195.0 to 229.5 m, 34.5 m @ 0.130% Cu-Eq	0.113	0.007	1.2	20	28
OPM-21-90	From 36.0 to 69.0 m, 33.0 m @ 0.347% Cu-Eq	0.267	0.095	1.1	52	31
OPM-21-90	incl. from 37.5 to 48.0 m, 10.5 m @ 0.928% Cu-Eq	0.721	0.250	2.7	89	49
OPM-21-90	and from 157.5 to 201.0 m, 43.5 m @ 0.275% Cu-Eq	0.119	0.194	1.6	477	31
OPM-21-91	From 39.0 to 67.5 m, 28.5 m @ 0.353% Cu-Eq	0.260	0.114	1.1	89	53
OPM-21-92	From 138.0 to 154.5 m, 16.5 m @ 0.335% Cu-Eq	0.300	0.011	2.7	47	42
OPM-21-93	From 7.0 to 36.0 m, 29.0 m @ 0.362% Cu-Eq	0.196	0.215	1.1	44	29
OPM-21-93	and from 90.0 to 122.0 m, 32.0 m @ 0.297% Cu-Eq	0.232	0.078	0.9	23	22
OPM-21-93	and from 195 to 205.5 m, 10.5 m @ 0.278% Cu-Eq	0.183	0.097	1.1	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	1.9	978	33
OPM-21-95	and from 106.5 to 112.5 m, 6.0 m @ 0.659% Cu-Eq	0.372	0.352	3.4	198	64
OPM-21-95	and from 136.5 to 140.0 m, 3.5 m @ 0.886% Cu-Eq	0.757	0.135	3.2	141	59
OPM-21-95	and from 244.5 to 297.0 m, 52.5 m @ 0.357% Cu-Eq	0.289	0.072	1.6	66	29
OPM-21-96	From 94.5 to 105.0 m, 10.5 m @ 0.497% Cu-Eq	0.446	0.040	2.2	49	24
OPM-21-96	and from 217.5 to 231.0 m, 13.5 m @ 0.322% Cu-Eq	0.240	0.091	1.6	74	38
OPM-21-96	and from 288.0 to 291.0 m, 3.0 m @ 0.911% Cu-Eq	0.773	0.082	7.9	419	62
OPM-21-97	From 23.75 to 27.0 m, 3.25 m @ 0.431% Cu-Eq	0.080	0.456	2.2	5,909	68
OPM-21-97	and from 109.5 to 127.6 m, 18.1 m @ 1.35% Cu-Eq	1.134	0.182	8.8	987	61
OPM-21-98	From 6.8 to 106.8 m, 100.0 m @ 0.482% Cu-Eq	0.376	0.125	1.6	66	37
OPM-21-98	incl. from 6.8 to 28.5 m, 21.7 m @ 1.55% Cu-Eq	1.185	0.452	3.4	92	41

TABLE 10.5
SUMMARY OF ASSAY RESULTS FOR MINERALIZED INTERVALS OF THE 2021 DRILL PROGRAM*

Drill Hole ID	Composite	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-98	and from 337.5 to 346.5 m, 9.0 m @ 18.29 g/t Au and 0.88% Zn	-----	18.29	-----	8,783	-----
OPM-21-98	incl. from 340.5 to 345.0 m, 4.5 m @ 36.1 g/t Au and 1.67% Zn	-----	36.10	-----	16,683	-----
OPM-21-99	From 15.0 to 48.0 m, 33.0 m @ 0.176% Cu-Eq	0.144	0.029	1.1	147	43
OPM-21-99	and from 156.0 to 163.0 m, 7.5 m @ 0.794% Cu-Eq	0.670	0.102	5.1	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	7.8	114	79
OPM-21-101	and from 220.5 to 297.0 m, 76.5 m @ 0.297% Cu-Eq	0.235	0.063	1.4	61	28

*Note: * CuEq% = Cu% + Au g/t*0.72 + Ag g/t*0.01*

10.3.1 Lithologies

All the drill holes completed in 2021, except OPM-21-40, OPM-21-41, OPM-21-83 and OPM-21-86, were collared and terminated in Ventures Sill gabbro or pyroxenite. The non-Ventures Sill drill 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 drill holes. A few holes drilled on the southern edge of the intrusion ended in Blondeau metavolcanics. All the other drill holes were collared either in the quartz-gabbro phase within the modelled open pit or were drilled in the pyroxenite on the Eastern Veins (Bouchard and McNichols Zones).

10.3.2 Mineralization

The mineralized intersections encountered in the 2021 drilling program are very similar to those in the 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 minor pyrrhotite with magnetic, chlorite, quartz and calcite as gangue minerals.

Locally, sphalerite-rich veins are encountered that have only modest concentrations of copper, but may have high gold values. Arsenopyrite is also present locally, but it has not been possible to relate the different vein mineralogy to different vein generations.

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

The highest gold grades encountered in 2021 came from drill hole OPM-21-98, which was 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 m interval of pyroxenite-hosted sulphide vein returned 18.3 g/t Au and 0.88% Zn in a low-angle vein.

10.4 DRILLING PROGRAMS IN LATE-2021, 2022 AND 2023

Subsequent to the publication of the Initial Mineral Resource Estimate for the Opemiska Project, from October 26, 2021, to February 12, 2023, QC Copper undertook three drilling programs on its Opémiska Property: 1) fall-winter 2021-2022; 2) summer 2022; and 3) winter 2023. The work was carried out by forage Pelletier, forage Chibougamau and forage Nordik.

A total of 180 drill holes totalling 47,192.2 m were completed during those programs. The diamond drilling programs were carried out on the Springer, Saddle (located between Springer and Perry), Perry, Bouchard and McNichols Zones, with the objective of verifying the presence of significant disseminated mineralization.

The locations of the 2021, 2022 and 2023 drill holes are shown in Figures 10.3 to 10.5. Drill hole collar locations, orientation and lengths are listed in Table 10.6.

The work was carried out under the supervision of Denis McNichols, P.Geo., Exploration Manager for QC Copper. Drill core was logged by geologists in-training, employed by QC Copper. The drill core processing and the operation of drill core sawing equipment were carried out under the supervision of André Bouchard, employed by QC Copper.

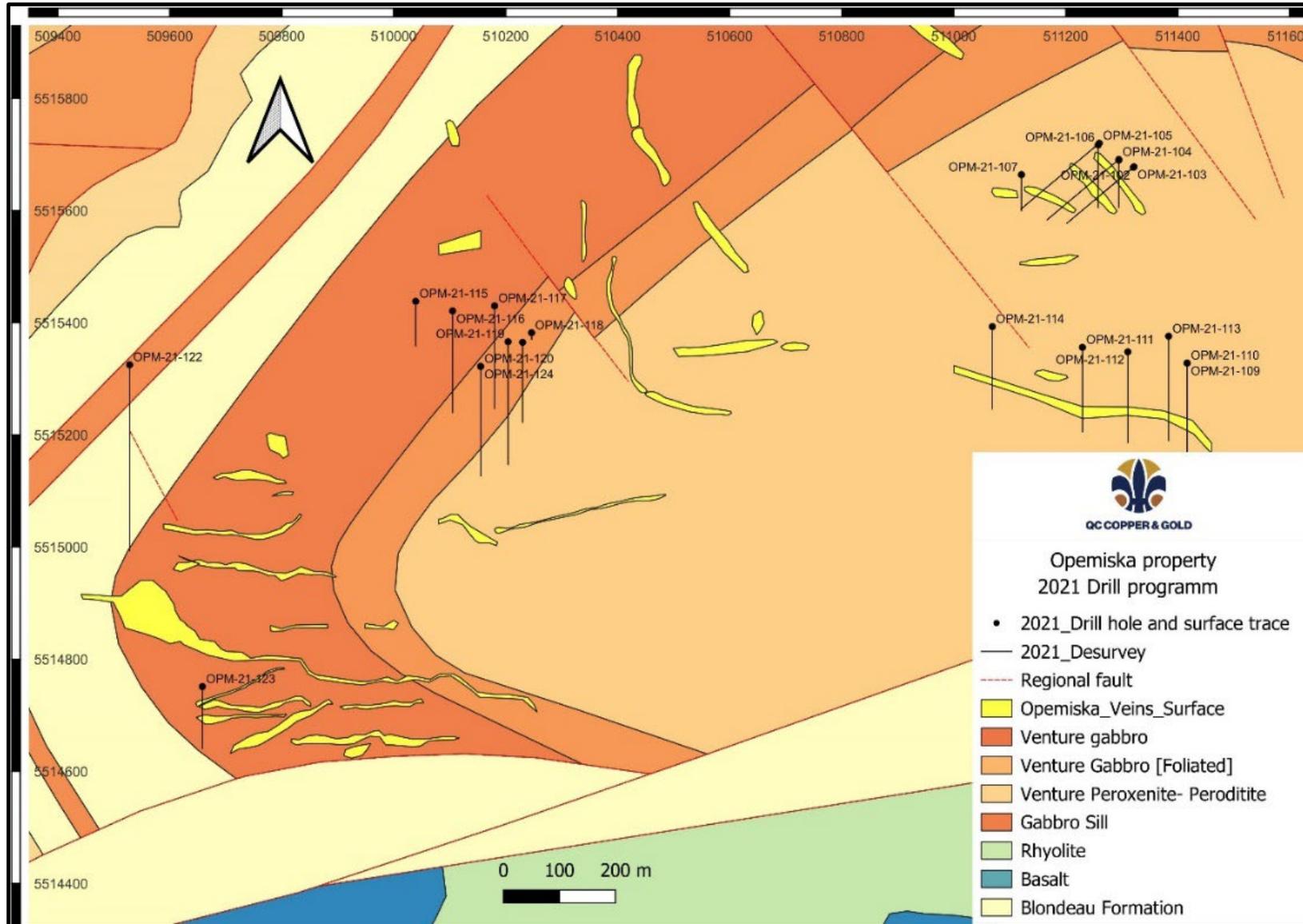
The drill holes were completed to test favourable targets for disseminated copper mineralization, adjacent to largely mined out “high-grade copper zones” and to investigate the metavolcanic/gabbro contact for disseminated copper mineralization within the Ventures Gabbro and felsic metavolcanic rocks.

Many drill holes were completed with NQ size using a hexagonal bar and a long reamer sleeve to minimize drill hole deviation, except for some drill holes that crossed underground stopes or mine drifts and were drilled telescopically in HQ-NQ-BQ size, in order to pass through those openings.

The drill collar sites were located initially by QC Copper personnel using a handheld GPS. Prior to the start of drilling, all the drill hole collar alignments were determined with an "Azimuth Aligner" from Minnovare. This method guaranteed the accuracy of 0.1°, on the direction and on the dip of the holes, and is not affected by the high magnetic susceptibility of the rocks in the Ventures Sill. The device was checked regularly to ensure proper calibration. The deviation tests were completed at every 50 m using an Axis Mining Technology gyro. Suspicious azimuths and dips were removed from the dataset before plotting. At the completion of each drill program, a professional land surveyor returned to the field to measure and record the final UTM coordinates of each collar using a differential GPS unit.

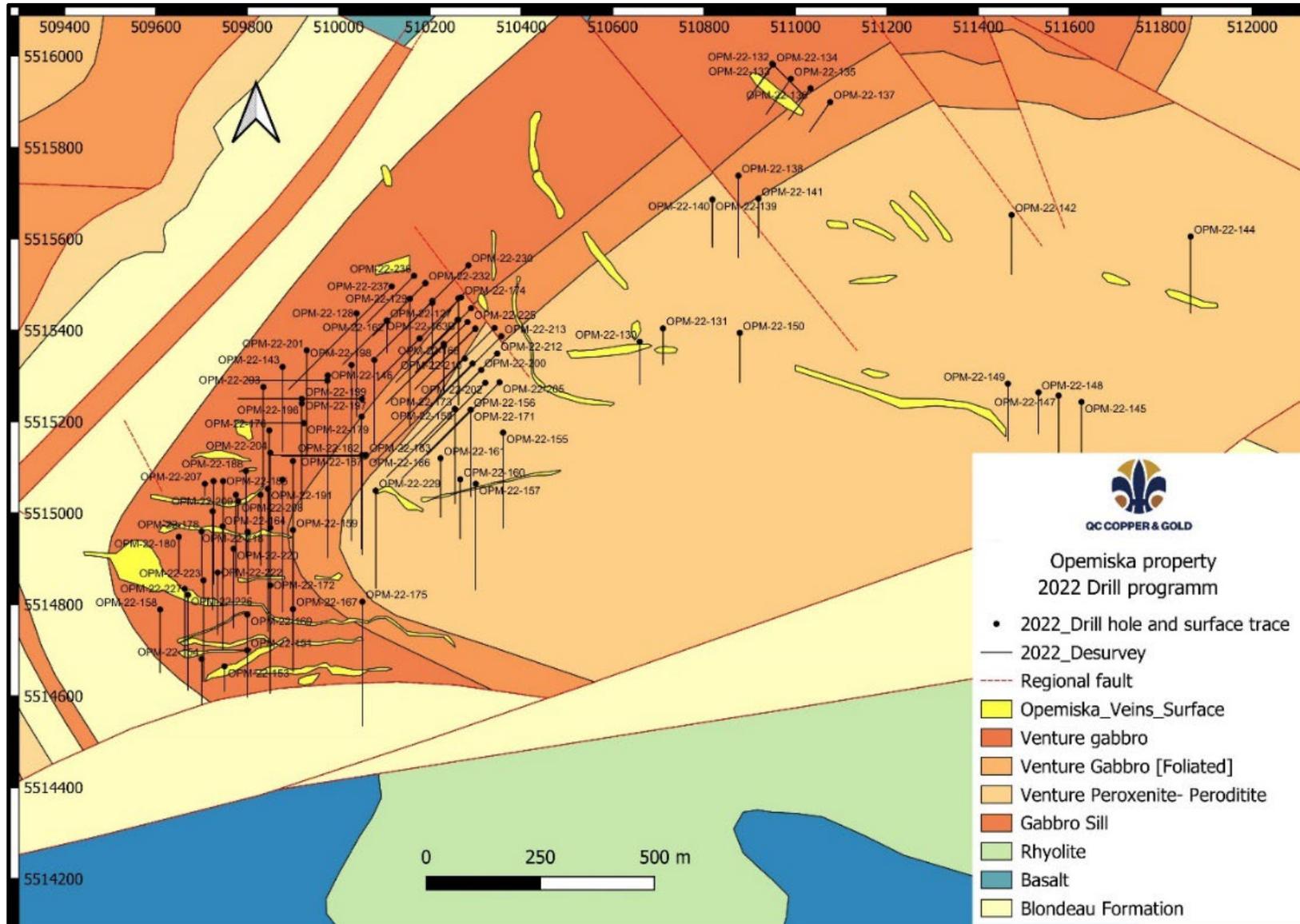
Drill core samples were cut in half using a diamond saw along a longitudinal line drawn by the logging geologist. Samples were collected in batches with insertion of certified reference material sachets and blanks. One certified reference material and one blank were sent with every 50 samples. In addition, quartered drill core duplicate samples were submitted for analysis. A total of 29,914 samples were sent to an independent commercial laboratory for analysis.

FIGURE 10.3 LOCATIONS OF THE FALL 2021 DRILL HOLES



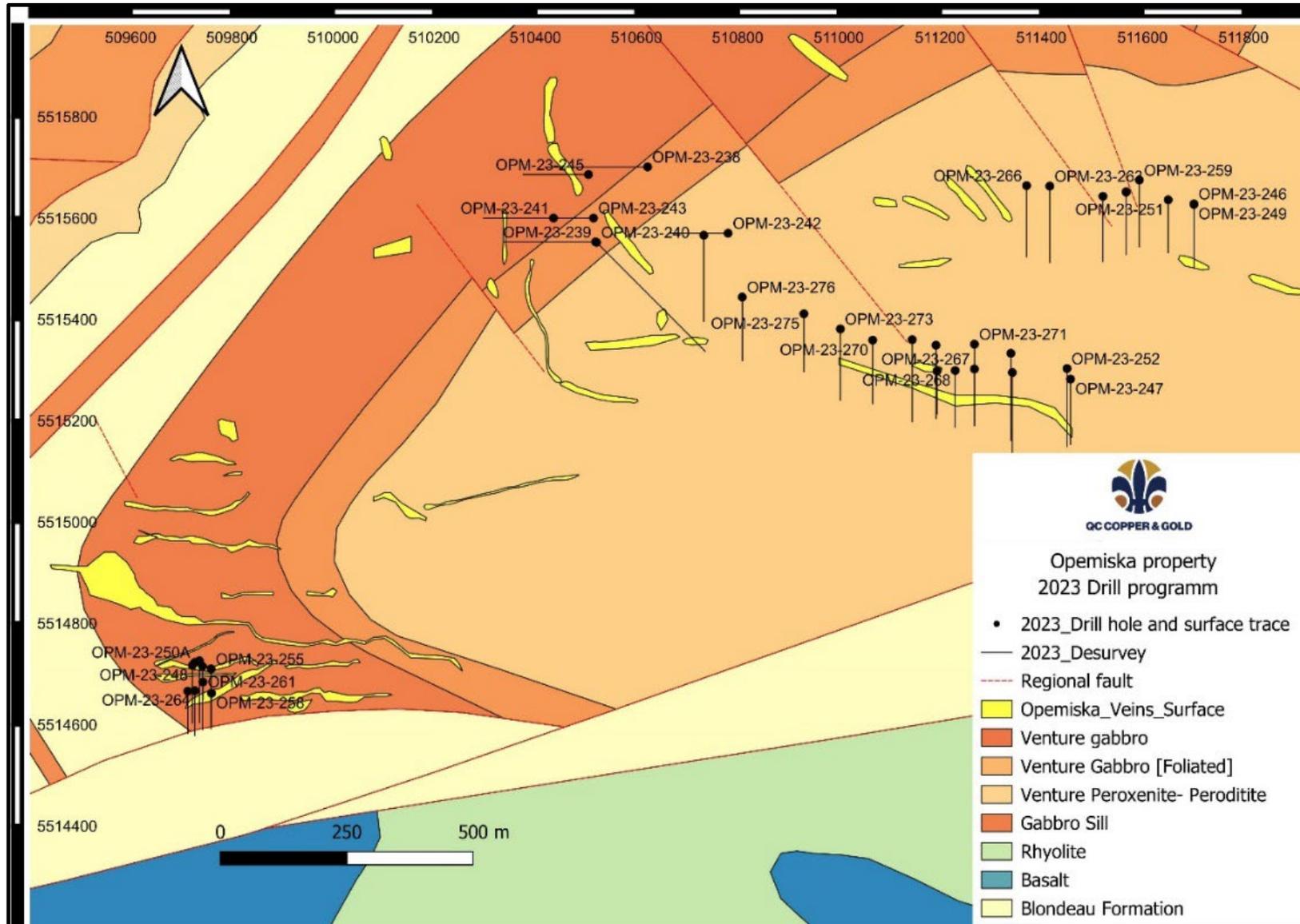
Source: QC Copper (November 2023)

FIGURE 10.4 LOCATIONS OF 2022 DRILL HOLES



Source: QC Copper (November 2023)

FIGURE 10.5 LOCATIONS OF 2023 DRILL HOLES



Source: QC Copper (November 2023)

TABLE 10.6
DETAILS OF 2021-2022 AND 2023 SURFACE DIAMOND DRILL HOLES (5 PAGES)

Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elev- ation (m asl)
					Easting	Northing	
OPM-21-102	230.0	-45.0	219.0	P014151	511,321	5,515,677	424.7
OPM-21-103	230.0	-60.0	180.0	P014151	511,322	5,515,678	424.6
OPM-21-104	230.0	-45.0	237.0	P014151	511,295	5,515,691	426.1
OPM-21-105	230.0	-45.0	258.0	P014151	511,260	5,515,720	428.6
OPM-21-106	180.1	-50.0	173.5	P014151	511,258	5,515,717	428.6
OPM-21-107	180.1	-59.9	129.0	P014151	511,121	5,515,664	415.8
OPM-21-108	179.9	-60.1	168.0	P014151	511,295	5,515,690	426.1
OPM-21-109	180.0	-45.0	224.0	P014151	511,417	5,515,328	402.4
OPM-21-110	180.0	-60.0	315.0	P014151	511,417	5,515,328	402.3
OPM-21-111	180.0	-50.0	234.0	P014151	511,230	5,515,356	394.7
OPM-21-112	180.0	-50.0	252.0	P014151	511,311	5,515,348	397.6
OPM-21-113	180.0	-50.0	290.0	P014151	511,384	5,515,376	405.1
OPM-21-114	180.0	-50.0	228.0	P014151	511,069	5,515,393	399.0
OPM-21-115	180.0	-45.0	111.7	P014151	510,039	5,515,438	399.6
OPM-21-116	180.0	-50.0	282.0	P014151	510,105	5,515,421	400.5
OPM-21-117	180.0	-50.0	285.0	P014151	510,180	5,515,430	399.8
OPM-21-118	180.0	-45.0	15.6	P014151	510,246	5,515,382	400.4
OPM-21-119	180.0	-50.0	340.5	P014151	510,204	5,515,366	400.7
OPM-21-120	180.0	-43.0	267.4	P014151	510,155	5,515,322	400.4
OPM-21-121	180.0	-50.0	222.0	P014151	510,230	5,515,365	400.3
OPM-21-122	180.0	-45.0	469.0	P014151	509,528	5,515,325	402.0
OPM-21-123	180.0	-45.0	156.4	P013681	509,658	5,514,751	393.5
OPM-21-124	180.0	-60.0	186.0	P014151	510,155	5,515,322	400.3
OPM-22-125	180.0	-50.0	363.0	P014151	510,262	5,515,470	400.5
OPM-22-126	180.0	-60.0	201.0	P014151	510,230	5,515,370	400.6
OPM-22-127	180.0	-65.0	165.0	P014151	510,106	5,515,421	400.4
OPM-22-128	180.0	-55.0	393.0	P014151	510,039	5,515,437	399.4
OPM-22-129	180.0	-50.0	432.0	P014151	510,156	5,515,469	400.1
OPM-22-130	180.0	-45.0	132.0	P014151	510,659	5,515,375	400.8
OPM-22-131	180.0	-45.0	111.0	P014151	510,710	5,515,404	401.1
OPM-22-132	135.0	-50.0	150.0	P014151	510,949	5,515,983	408.0
OPM-22-133	215.0	-50.0	147.0	P014151	510,950	5,515,918	407.8
OPM-22-134	215.0	-65.0	120.0	P014151	510,951	5,515,981	407.7
OPM-22-135	215.0	-50.0	147.0	P014151	510,990	5,515,950	408.6
OPM-22-136	215.0	-50.0	129.0	P014151	511,033	5,515,929	411.5
OPM-22-137	215.0	-50.0	123.0	P014151	511,076	5,515,899	414.2

TABLE 10.6
DETAILS OF 2021-2022 AND 2023 SURFACE DIAMOND DRILL HOLES (5 PAGES)

Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elev- ation (m asl)
					Easting	Northing	
OPM-22-138	180.0	-50.0	277.0	P014151	510,875	5,515,738	407.6
OPM-22-139	180.0	-50.0	162.0	P014151	510,818	5,515,686	405.8
OPM-22-140	180.0	-60.0	189.0	P014151	510,818	5,515,686	405.9
OPM-22-141	180.0	-50.0	132.0	P014151	510,919	5,515,688	406.3
OPM-22-142	180.0	-50.0	201.0	P014151	511,473	5,515,652	419.5
OPM-22-143	180.0	-45.0	261.0	P013681	509,877	5,515,320	398.6
OPM-22-144	180.0	-50.0	259.7	1042119	511,865	5,515,605	411.3
OPM-22-145	180.0	-50.0	258.0	1042119	511,626	5,515,243	388.8
OPM-22-146	180.0	-45.0	562.0	P014151	509,976	5,515,301	398.8
OPM-22-147	180.0	-50.0	195.0	1042119	511,576	5,515,257	389.4
OPM-22-148	180.0	-50.0	141.0	1042119	511,532	5,515,264	391.0
OPM-22-149	180.0	-50.0	195.0	P014151	511,465	5,515,283	397.7
OPM-22-150	180.0	-50.0	166.5	P014151	510,878	5,515,394	399.9
OPM-22-151	180.0	-45.0	82.0	P013681	509,800	5,514,700	383.9
OPM-22-152	180.0	-50.0	321.0	P013681	510,255	5,515,227	396.3
OPM-22-153	180.0	-50.0	84.0	P013681	509,750	5,514,665	381.7
OPM-22-154	180.0	-45.0	141.0	P013681	509,700	5,514,681	383.1
OPM-22-155	180.0	-50.0	325.0	P013681	510,360	5,515,176	393.4
OPM-22-156	180.0	-50.0	295.0	P013681	510,289	5,515,226	395.0
OPM-22-157	180.0	-50.0	360.0	P013681	510,300	5,515,064	392.2
OPM-22-158	180.0	-45.0	195.0	P013681	509,609	5,514,789	395.6
OPM-22-159	180.0	-50.0	393.0	P013681	509,900	5,514,963	414.6
OPM-22-160	180.0	-50.0	201.0	P013681	510,266	5,515,074	392.5
OPM-22-161	180.0	-50.0	201.0	P013681	510,223	5,515,120	394.4
OPM-22-162	225.0	-47.0	198.0	P014151	510,105	5,515,421	400.4
OPM-22-163	225.0	-70.0	44.8	P014151	510,260	5,515,422	400.8
OPM-22-163B	225.0	-70.0	374.7	P014151	510,261	5,515,423	400.8
OPM-22-164	180.0	-50.0	499.0	P013681	509,850	5,514,968	415.3
OPM-22-165	225.0	-45.0	273.0	P014151	510,262	5,515,423	400.9
OPM-22-166	225.0	-45.0	252.0	P014151	510,230	5,515,366	400.3
OPM-22-167	180.0	-45.0	193.0	P013681	509,900	5,514,790	399.5
OPM-22-168	225.0	-75.0	339.0	P014151	510,230	5,515,370	400.6
OPM-22-169	180.0	-45.0	255.0	P013681	509,800	5,514,778	397.8
OPM-22-170	225.0	-52.0	210.0	P014151	510,177	5,515,382	400.2
OPM-22-171	225.0	-45.0	300.0	P013681	510,289	5,515,226	395.0
OPM-22-172	180.0	-45.0	334.0	P013681	509,850	5,514,842	405.5

TABLE 10.6
DETAILS OF 2021-2022 AND 2023 SURFACE DIAMOND DRILL HOLES (5 PAGES)

Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elev- ation (m asl)
					Easting	Northing	
OPM-22-173	225.0	-45.0	297.0	P013681	510,254	5,515,228	396.4
OPM-22-174	225.0	-67.0	366.0	P014151	510,268	5,515,472	400.5
OPM-22-175	180.0	-45.0	384.0	P013681	510,052	5,514,806	389.7
OPM-22-176	180.0	-48.0	330.0	P013681	509,848	5,515,181	401.4
OPM-22-177	270.0	-83.0	213.0	P013681	509,923	5,515,197	401.6
OPM-22-178	180.0	-45.0	138.0	P013681	509,700	5,514,960	413.9
OPM-22-179	270.0	-57.0	263.0	P013681	509,924	5,515,197	401.7
OPM-22-180	180.0	-50.0	122.6	P013681	509,650	5,514,948	413.9
OPM-22-181	180.0	-50.0	527.0	P013681	509,900	5,515,114	403.2
OPM-22-182	180.0	-57.0	399.0	P013681	510,051	5,515,127	401.2
OPM-22-183	270.0	-85.0	267.5	P013681	510,060	5,515,127	400.8
OPM-22-184	270.0	-72.0	303.0	P013681	510,059	5,515,125	401.0
OPM-22-185	180.0	-52.0	345.0	P013681	509,747	5,515,070	402.7
OPM-22-186	270.0	-60.0	369.0	P013681	510,059	5,515,125	401.0
OPM-22-187	270.0	-45.0	295.0	P013681	510,058	5,515,127	400.8
OPM-22-188	180.0	-53.0	312.3	P013681	509,797	5,515,092	402.7
OPM-22-189	270.0	-71.0	291.0	P013681	509,975	5,515,290	399.0
OPM-22-190	180.0	-47.0	562.7	P014151	510,028	5,515,324	398.7
OPM-22-191	180.0	-52.0	507.0	P013681	509,845	5,515,053	407.0
OPM-22-192	270.0	-48.0	258.0	P013681	509,975	5,515,290	399.0
OPM-22-193	180.0	-50.0	420.0	P013681	509,746	5,514,971	413.8
OPM-22-194	270.0	-86.0	371.0	P013681	509,975	5,515,290	399.0
OPM-22-195	225.0	-55.0	300.0	P014151	510,205	5,515,464	400.7
OPM-22-196	180.0	-50.0	360.0	P013681	509,919	5,515,240	400.4
OPM-22-197	270.0	-77.0	330.0	P013681	509,919	5,515,250	400.2
OPM-22-198	180.0	-62.0	390.0	P014151	510,078	5,515,335	402.0
OPM-22-199	270.0	-50.0	216.0	P013681	509,919	5,515,250	400.0
OPM-22-200	225.0	-45.0	348.0	P013681	510,312	5,515,313	399.1
OPM-22-201	180.0	-50.0	357.0	P014151	509,930	5,515,356	398.0
OPM-22-202	225.0	-55.0	356.1	P013681	510,321	5,515,285	398.0
OPM-22-203	180.0	-48.0	328.5	P013681	509,835	5,515,276	401.0
OPM-22-204	180.0	-50.0	355.8	P013681	509,850	5,515,132	402.0
OPM-22-205	225.0	-50.0	348.0	P013681	510,352	5,515,286	397.2
OPM-22-206	225.0	-45.0	432.0	P014151	510,293	5,515,327	401.3
OPM-22-207	180.0	-50.0	40.9	P013681	509,707	5,515,064	403.1
OPM-22-208	180.0	-50.0	50.2	P013681	509,780	5,515,026	408.0

TABLE 10.6
DETAILS OF 2021-2022 AND 2023 SURFACE DIAMOND DRILL HOLES (5 PAGES)

Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elev- ation (m asl)
					Easting	Northing	
OPM-22-209	180.0	-50.0	278.8	P013681	509,775	5,515,040	406.0
OPM-22-210	225.0	-45.0	442.0	P014151	510,276	5,515,338	401.2
OPM-22-211	180.0	-50.0	351.0	P013681	509,726	5,515,070	402.8
OPM-22-212	225.0	-67.0	318.0	P014151	510,347	5,515,349	397.8
OPM-22-213	225.0	-67.0	555.0	P014151	510,356	5,515,387	399.1
OPM-22-214	180.0	-50.0	334.5	P013681	509,724	5,515,004	410.9
OPM-22-215	180.0	-57.0	282.0	P013681	509,829	5,515,040	407.9
OPM-22-216	225.0	-63.0	528.5	P014151	510,341	5,515,405	401.5
OPM-22-217	180.0	-50.0	450.0	P013681	509,877	5,515,073	406.4
OPM-22-218	180.0	-50.0	210.0	P013681	509,801	5,514,959	414.2
OPM-22-219	225.0	-75.0	489.0	P014151	510,299	5,515,404	400.4
OPM-22-220	180.0	-50.0	269.0	P013681	509,770	5,514,922	418.0
OPM-22-221	225.0	-75.0	426.0	P014151	510,282	5,515,418	400.5
OPM-22-222	180.0	-45.0	192.0	P013681	509,735	5,514,870	410.9
OPM-22-223	180.0	-50.0	345.0	P013681	509,704	5,514,853	404.9
OPM-22-224	180.0	-50.0	225.0	P014151	510,205	5,515,460	400.4
OPM-22-225	225.0	-75.0	476.3	P014151	510,290	5,515,448	400.4
OPM-22-226	180.0	-45.0	294.0	P013681	509,670	5,514,821	402.1
OPM-22-227	180.0	-45.0	211.13	P013681	509,663	5,514,834	403.1
OPM-22-228	225.0	-50.0	291.0	P014151	510,299	5,515,403	400.2
OPM-22-229	180.0	-50.0	331.0	P013681	510,081	5,515,049	396.0
OPM-22-230	225.0	-55.0	363.0	P014151	510,284	5,515,542	401.1
OPM-22-231	270.0	-67.0	378.0	P013681	510,051	5,515,250	400.1
OPM-22-232	225.0	-50.0	12.0	P014151	510,190	5,515,503	400.7
OPM-22-233	225.0	-50.0	252.0	P014151	510,190	5,515,503	400.7
OPM-22-234	180.0	-57.0	531.0	P013681	510,050	5,515,211	400.5
OPM-22-235	225.0	-75.0	324.0	P014151	510,190	5,515,503	400.7
OPM-22-235A	225.0	-75.0	9.0	P014151	510,190	5,515,503	400.7
OPM-22-236	225.0	-50.0	225.0	P014151	510,165	5,515,519	400.9
OPM-22-237	225.0	-45.0	450.0	P014151	510,116	5,515,496	400.2
OPM-23-238	270.0	-50.0	315.0	P014151	510,622	5,515,701	403.8
OPM-23-239	270.0	-50.0	282.0	P014151	510,519	5,515,553	401.5
OPM-23-240	135.0	-56.0	543.0	P014151	510,521	5,515,552	401.3
OPM-23-241	270.0	-52.0	225.0	P014151	510,436	5,515,600	401.1
OPM-23-242	270.0	-65.0	273.0	P014151	510,781	5,515,570	402.4
OPM-23-243	270.0	-50.0	159.0	P014151	510,515	5,515,600	401.0

TABLE 10.6
DETAILS OF 2021-2022 AND 2023 SURFACE DIAMOND DRILL HOLES (5 PAGES)

Drill Hole ID	Azimuth (°)	Dip (°)	Length (m)	Claim ID	UTM NAD83 Zone 18N		Elev- ation (m asl)
					Easting	Northing	
OPM-23-244	180.0	-50.0	264.0	P014151	510,733	5,515,566	401.9
OPM-23-245	270.0	-48.0	192.0	P014151	510,505	5,515,686	402.3
OPM-23-246	180.0	-60.0	252.0	P014151	511,702	5,515,628	416.7
OPM-23-247	180.0	-50.0	201.0	P014151	511,458	5,515,282	397.9
OPM-23-248	180.0	-50.0	177.0	P013681	509,722	5,514,717	383.3
OPM-23-249	180.0	-45.0	171.0	P014151	511,702	5,515,627	416.8
OPM-23-250	180.0	-50.0	189.0	P013681	509,736	5,514,726	383.4
OPM-23-250A	180.0	-50.0	23.6	P013681	509,727	5,514,723	383.4
OPM-23-251	180.0	-50.0	162.0	P014151	511,651	5,515,636	416.8
OPM-23-252	180.0	-50.0	240.0	P014151	511,451	5,515,303	399.5
OPM-23-253	180.0	-50.0	195.0	P013681	509,742	5,514,715	382.9
OPM-23-254	180.0	-60.0	225.0	P014151	511,568	5,515,652	416.6
OPM-23-255	180.0	-50.0	183.0	P013681	509,759	5,514,710	382.5
OPM-23-256	180.0	-45.0	174.0	P014151	511,568	5,515,651	416.8
OPM-23-257	180.0	-50.0	256.5	P014151	511,343	5,515,295	395.0
OPM-23-258	180.0	-50.0	96.0	P013681	509,760	5,514,662	381.9
OPM-23-259	180.0	-50.0	204.0	P014151	511,594	5,515,675	416.9
OPM-23-260	180.0	-50.0	201.0	P014151	511,522	5,515,643	417.1
OPM-23-261	180.0	-50.0	54.0	P013681	509,743	5,514,684	382.4
OPM-23-262	180.0	-50.0	267.0	P014151	511,340	5,515,333	397.5
OPM-23-263	180.0	-45.0	213.0	P014151	511,417	5,515,663	423.0
OPM-23-264	180.0	-50.0	138.0	P013681	509,727	5,514,667	381.2
OPM-23-265	180.0	-50.0	129.0	P013681	509,713	5,514,666	381.3
OPM-23-266	180.0	-50.0	219.0	P014151	511,371	5,515,664	423.7
OPM-23-267	180.0	-50.0	174.0	P014151	511,268	5,515,302	392.3
OPM-23-268	180.0	-50.0	174.0	P014151	511,230	5,515,299	390.6
OPM-23-269	180.0	-50.0	132.0	P014151	511,194	5,515,298	392.4
OPM-23-270	180.0	-50.0	195.0	P014151	511,067	5,515,359	398.1
OPM-23-271	180.0	-50.0	249.0	P014151	511,268	5,515,351	396.0
OPM-23-272	180.0	-50.0	225.0	P014151	511,192	5,515,349	394.2
OPM-23-273	180.0	-50.0	219.0	P014151	511,003	5,515,381	399.9
OPM-23-274	180.0	-50.0	252.0	P014151	511,145	5,515,360	394.5
OPM-23-275	180.0	-50.0	177.0	P014151	510,931	5,515,411	400.8
OPM-23-276	180.0	-50.0	195.0	P014151	510,809	5,515,444	403.0
Total			46,337.7				

10.4.1 Lithologies

All the drill holes completed since P&E (2021), except for 11 (OPM-21-123, OPM-22-151, OPM-22-153, OPM-22-154, OPM-23-248, OPM-22-250, OPM-22-253, OPM-22-255, OPM-22-258, OPM-22-264 and OPM-22-265), were collared on and terminated in the Ventures Sill. The additional 11 drill holes, either commenced (OPM-22-153 and OPM-22-258) or terminated in the rhyolite unit on the southwest border of the Ventures Sill gabbro.

10.4.2 Mineralization

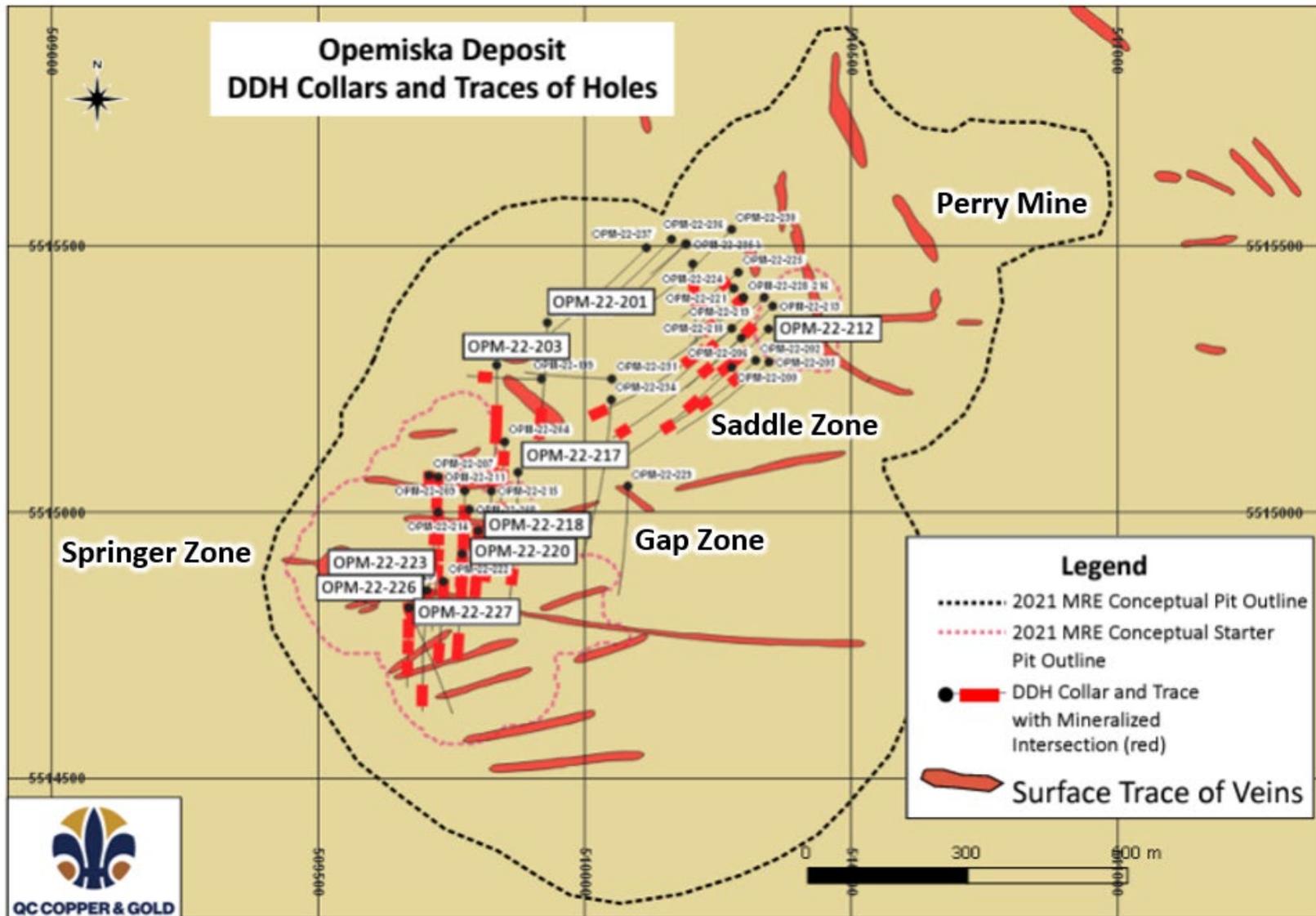
The mineralized intersections in the 2021, 2022 and 2023 drilling programs are very similar to those in the previous drilling. Mineralization occurs in the form of shear veins (mainly Springer) or quartz-rich veins (mainly Perry), and consists of primarily chalcopyrite with accompanying pyrite and smaller amounts of pyrrhotite with magnetite, chlorite, quartz and calcite as gangue minerals. Locally, sphalerite-rich veins are encountered with slight concentrations of copper, but higher gold values. Arsenopyrite is present locally.

The numerous veins mined in Springer and Perry Mines are surrounded by low-grade halos of weakly and variably altered Ventures Sill rock with minor chalcopyrite veins cm to dm thick and separated by barren rock. The low-grade copper typically forms halos up to three to five times the thickness 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, centred on Vein No. 3, the major vein historically mined by Falconbridge.

The mineralization at Opémiska contains variable gold with historical Au grades generally higher in the southern part of the Springer Mine, near the Gwillim Fault. Results 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 with higher copper grades.

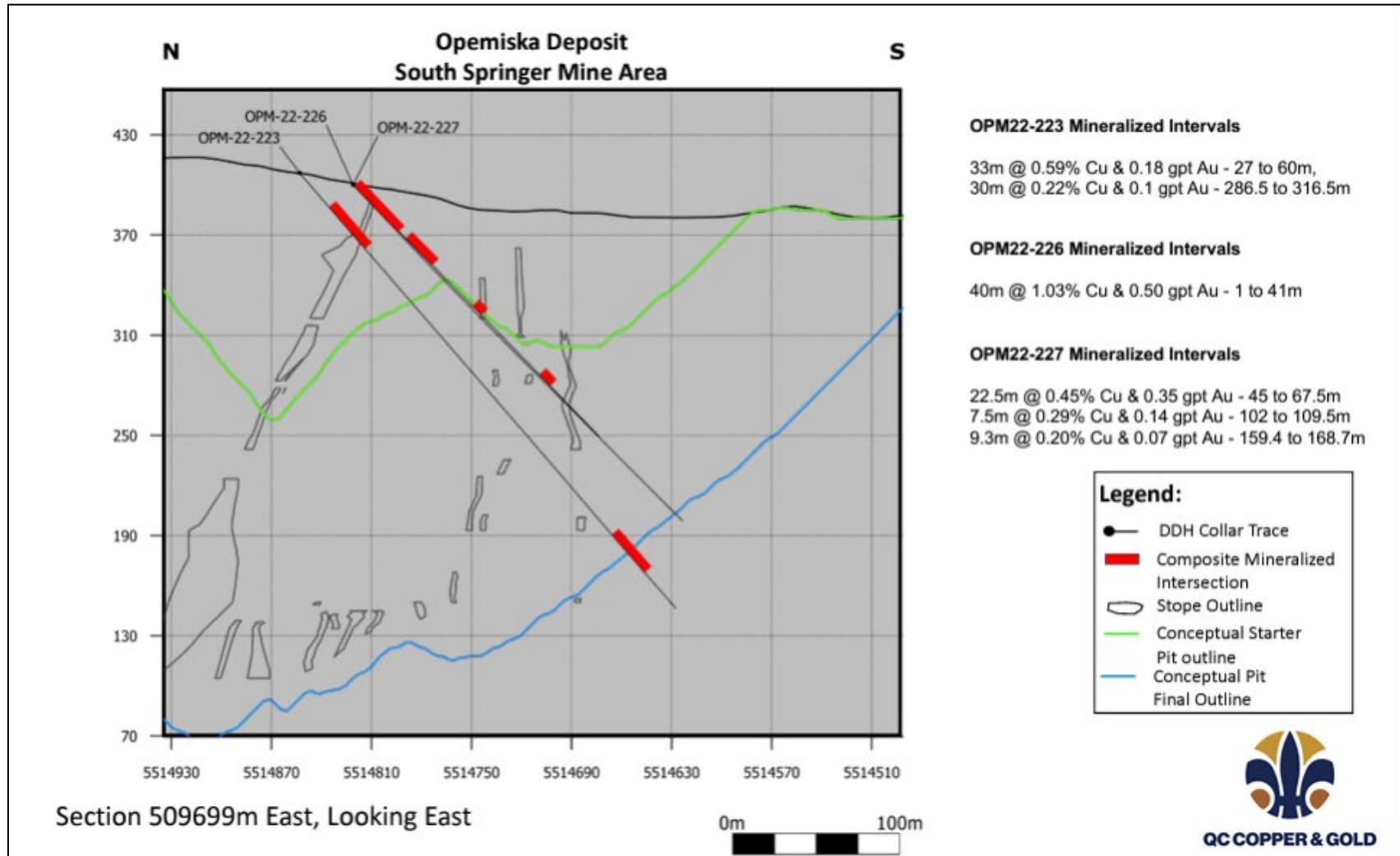
Plans and cross-sections for selected mineralized zones are shown in Figures 10.6 to 10.9. A summary of mineralized intervals for the drilling programs of 2021, 2022 and 2023 is presented in Table 10.7.

FIGURE 10.6 PLAN VIEW OF THE 2022 DRILL HOLES, VEINS, AND MINERALIZED ZONES



Source: QC Copper press release (September 19, 2022)

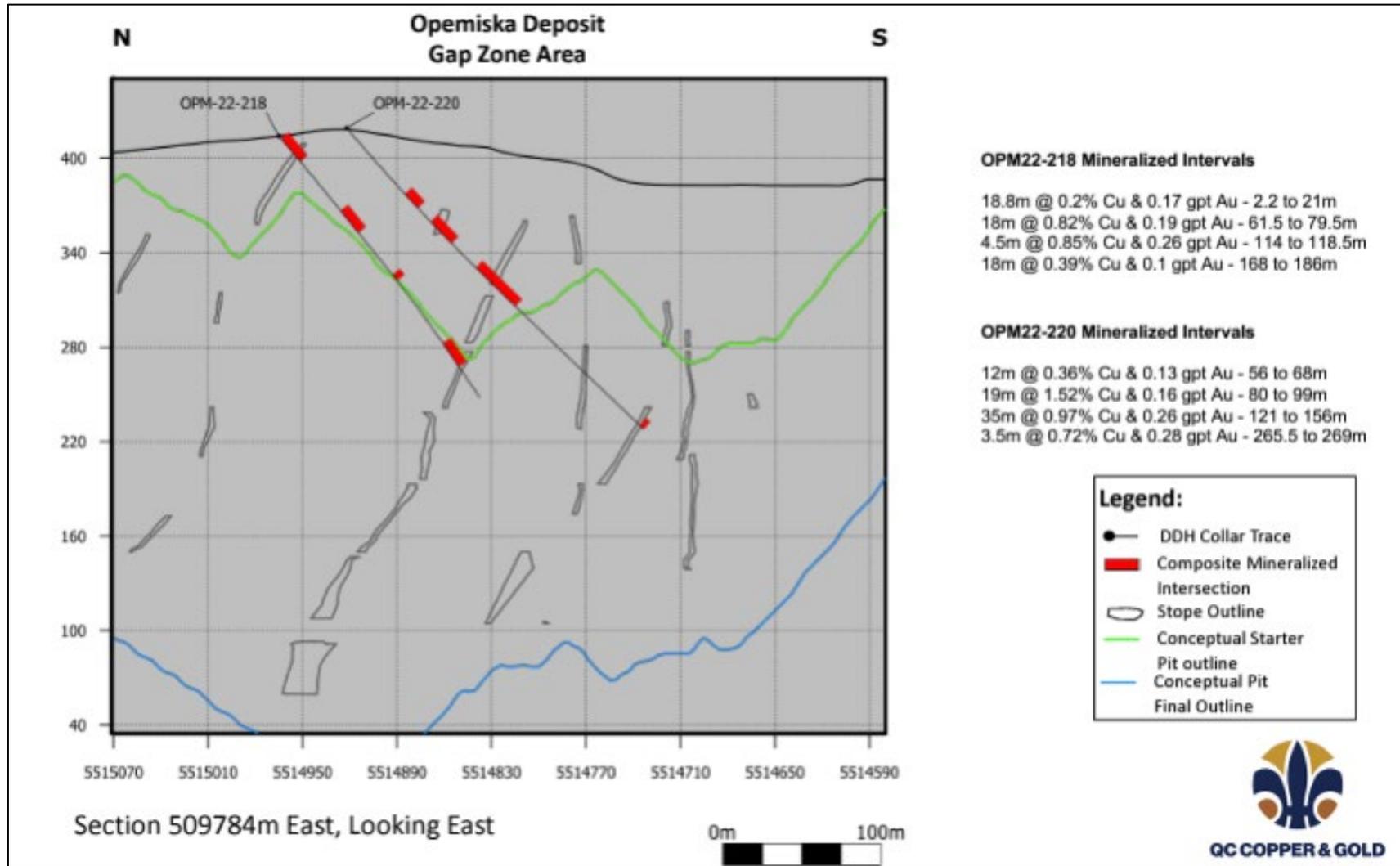
FIGURE 10.7 CROSS-SECTIONAL PROJECTION VIEW OF THE SPRINGER ZONE*



Source: QC Copper press release (September 19, 2022)

*Note: *Conceptual pit outlines are from P&E (2021)*

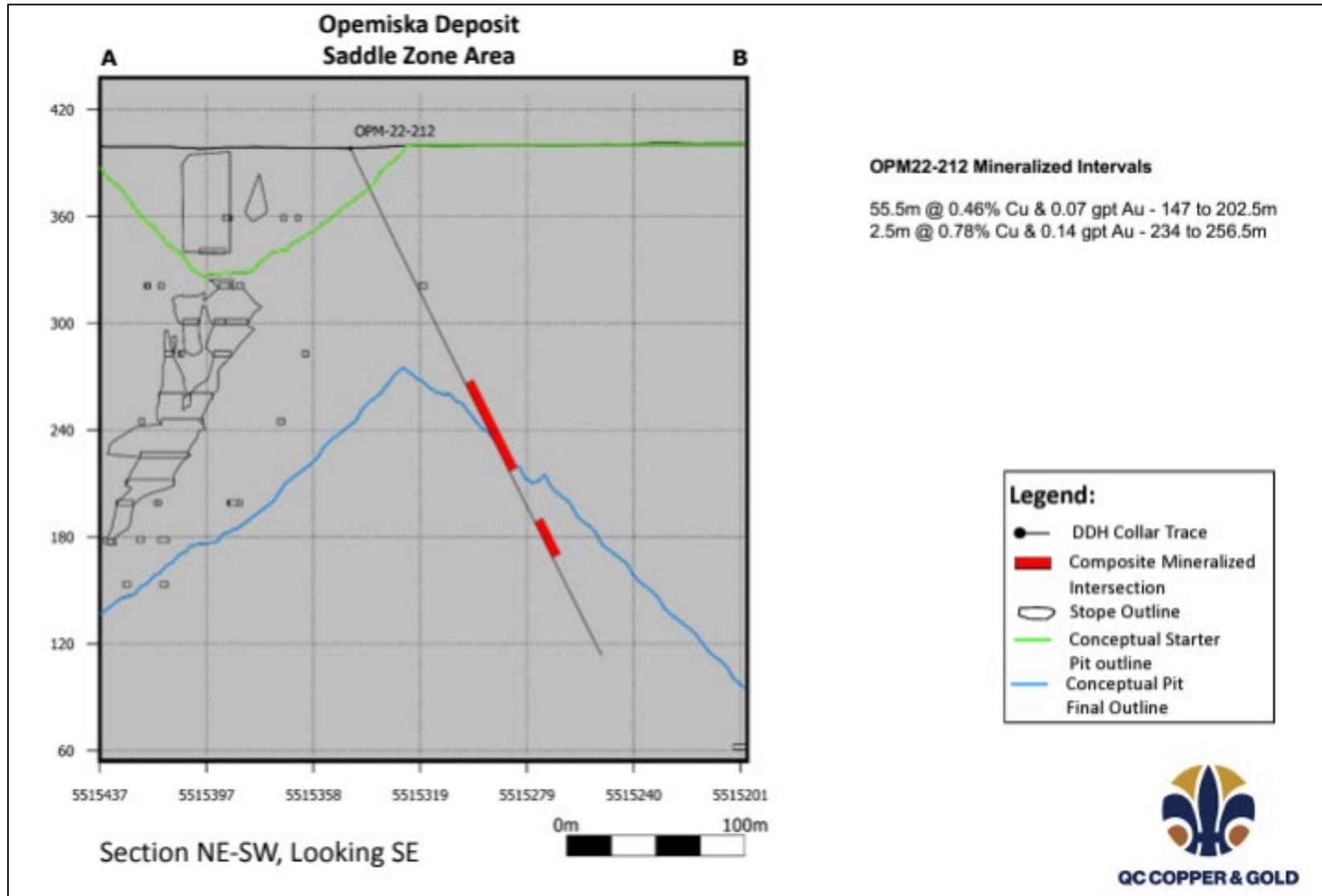
FIGURE 10.8 CROSS-SECTIONAL PROJECTION VIEW OF THE GAP ZONE*



Source: QC Copper press release (September 19, 2022)

Note: *Conceptual pit outlines are from P&E (2021)

FIGURE 10.9 CROSS-SECTIONAL PROJECTION VIEW OF THE SADDLE ZONE*



Source: QC Copper press release (September 19, 2022)

Note: *Conceptual pit outlines are from P&E (2021)

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-21-102	36.0	40.5	4.5	0.251	0.005	1.1	33	40
OPM-21-102	90.0	100.5	10.5	1.646	0.009	8.6	262	156
OPM-21-103	87.0	93.0	6.0	0.767	0.007	2.7	33	53
OPM-21-104	102.0	105.4	3.4	1.291	0.014	8.4	43	71
OPM-21-106	105.0	111.9	6.9	0.850	0.015	6.5	43	47
OPM-21-107	42.0	48.4	6.4	0.146	0.007	0.5	13	78
OPM-21-109	124.5	219.0	94.5	0.123	0.014	1.7	88	26
Including	124.5	141.0	16.5	0.227	0.030	2.6	54	38
Including	189.0	219.0	30.0	0.179	0.015	2.8	158	31
OPM-21-110	223.5	246.0	22.5	0.451	0.017	5.7	135	57
OPM-21-112	121.5	129.0	7.5	0.103	0.019	2.1	43	43
OPM-21-112	154.5	166.5	12.0	0.164	0.011	2.1	39	43
OPM-21-112	201.0	222.0	21.0	0.120	0.043	2.0	79	46
OPM-21-113	192.0	271.5	79.5	0.097	0.008	1.2	40	36
Including	192.0	201.0	9.0	0.273	0.016	2.5	33	92
Including	228.0	243.0	15.0	0.154	0.011	2.1	75	35
OPM-21-117	5.0	16.5	11.5	0.103	0.088	0.9	44	158
OPM-21-117	150.0	165.0	15.0	0.930	0.222	3.2	92	35
OPM-21-119	87.0	115.5	28.5	0.391	0.072	2.2	90	42
OPM-21-119	213.0	219.0	6.0	0.098	1.240	2.1	445	54
OPM-21-120	115.5	126.0	10.5	0.208	0.025	1.5	77	43
OPM-21-121	13.5	28.5	15.0	0.154	0.016	1.0	85	62
OPM-21-121	76.5	127.5	51.0	0.173	0.042	0.8	68	51
OPM-21-122	196.5	381.0	184.5	0.228	0.089	1.3	81	33
Including.	196.5	351.0	154.5	0.257	0.103	1.5	90	33
Including	285.0	310.5	25.5	0.646	0.245	2.6	112	38
OPM-21-123	6.0	99.0	93.0	0.304	0.136	2.9	346	44
OPM-22-125	276.0	283.5	7.5	1.525	0.262	9.0	324	86
OPM-22-125	321.0	324.0	3.0	0.179	0.588	3.1	525	86
OPM-22-126	60.0	160.5	100.5	0.342	0.042	2.0	107	48
OPM-22-127	87.0	112.5	25.5	0.249	0.042	1.4	59	37
OPM-22-128	66.0	96.0	30.0	0.420	0.083	3.9	141	61
Including	84.0	96.0	12.0	0.887	0.177	8.1	257	73
OPM-22-128	225.0	243.0	18.0	0.162	0.015	1.7	71	30

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-22-128	337.5	352.5	15.0	0.112	0.139	1.2	87	42
OPM-22-129	415.5	432.0	16.5	0.161	0.041	1.5	143	36
OPM-22-133	54.0	70.5	16.5	0.012	0.402	0.4	26	27
OPM-22-133	99.0	108.0	9.0	0.004	0.643	0.2	88	43
OPM-22-134	48.0	57.5	9.5	0.006	0.158	0.3	25	25
OPM-22-135	83.5	88.5	5.0	0.018	0.489	0.4	28	21
OPM-22-138	216.0	237.0	21.0	0.487	0.006	1.4	46	35
OPM-22-139	70.5	90.0	19.5	0.892	0.015	3.4	58	64
OPM-22-141	7.4	36.0	28.6	0.481	0.032	2.8	99	46
OPM-22-143	166.5	261.0	94.5	0.200	0.245	2.3	755	38
OPM-22-144	88.5	126.0	37.5	0.169	0.007	1.4	53	58
Including	88.5	102.0	13.5	0.383	0.007	3.1	105	60
OPM-22-146	237.0	429.0	192.0	0.226	0.109	1.5	71	36
OPM-22-146	291.0	334.5	43.5	0.593	0.327	2.4	66	36
OPM-22-147	149.0	158.0	9.0	0.190	0.006	1.8	49	31
OPM-22-149	141.0	168.0	27.0	0.145	0.013	2.2	86	38
OPM-22-151	43.5	67.5	24.0	0.252	0.049	0.6	35	51
OPM-22-152	144.0	321.0	177.0	0.129	0.018	0.7	41	33
Including	144.0	159.0	15.0	0.721	0.092	3.1	86	38
OPM-22-154	63.0	103.5	40.5	0.353	0.332	2.0	97	60
OPM-22-156	277.5	282.0	4.5	1.244	0.119	7.8	89	68
OPM-22-157	154.5	175.5	21.0	0.186	0.054	0.7	122	61
OPM-22-158	7.5	159.0	151.5	0.171	0.068	1.6	165	51
Including	7.5	31.5	24.0	0.835	0.236	4.7	93	100
OPM-22-159	30.0	160.5	130.5	0.072	0.130	1.5	356	30
OPM-22-159	228.0	231.0	3.0	0.493	0.148	3.7	122	50
OPM-22-159	339.0	342.0	3.0	0.568	0.151	3.3	27	38
OPM-22-159	378.0	381.0	3.0	1.759	0.403	12.6	150	58
OPM-22-160	21.0	43.5	22.5	0.222	0.105	1.6	32	35
OPM-22-161	46.5	96.0	49.5	0.331	0.057	2.6	100	39
OPM-22-161	139.5	145.5	6.0	0.523	0.060	3.1	59	44
OPM-22-162	69.0	84.0	15.0	0.595	0.273	3.7	104	56
OPM-22-163B	91.5	115.5	24.0	0.392	0.104	2.4	46	33
OPM-22-164	269.5	436.0	166.5	0.188	0.155	1.2	59	35

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
Including	292.0	307.0	15.0	0.499	0.231	2.0	63	36
Including	362.5	370.0	7.5	0.803	1.918	6.7	95	70
OPM-22-165	162.0	181.5	19.5	0.513	0.128	2.1	88	50
OPM-22-166	66.0	76.5	10.5	0.189	0.080	1.6	76	35
OPM-22-167	31.5	43.5	12.0	0.544	0.179	2.6	65	38
OPM-22-167	181.5	192.0	10.5	0.416	1.128	4.5	42	115
OPM-22-168	150.0	166.5	16.5	0.630	0.060	3.0	101	40
OPM-22-169	9.0	30.0	21.0	0.172	0.149	0.8	54	23
OPM-22-169	57.0	69.0	12.0	0.428	0.107	1.9	66	41
OPM-22-169	174.0	217.5	43.5	0.444	0.244	2.5	102	73
OPM-22-170	93.0	99.0	6.0	0.342	0.073	2.1	103	41
OPM-22-171	87.0	237.0	150.0	0.231	0.045	1.1	55	47
Including	99.0	138.0	39.0	0.249	0.032	1.4	52	42
Including	183.0	208.5	25.5	0.740	0.183	3.0	95	65
OPM-22-172	256.5	301.5	45.0	0.200	0.088	1.8	102	51
OPM-22-173	97.5	109.5	12.0	0.636	0.151	3.0	118	59
OPM-22-174	88.5	94.5	6.0	2.347	0.135	13.4	249	84
OPM-22-175	36.0	102.0	66.0	0.308	0.113	1.8	89	45
Including	36.0	63.0	27.0	0.564	0.192	3.5	134	55
OPM-22-175	186.0	201.0	15.0	0.190	0.313	4.9	2,401	33
OPM-22-176	122.4	244.5	122.1	0.218	0.111	1.1	51	28
Including	198.0	232.5	34.5	0.423	0.237	1.9	66	32
OPM-22-177	151.5	213.0	61.5	0.272	0.191	2.1	207	37
Including	193.5	213.0	19.5	0.652	0.448	3.4	103	39
OPM-22-178	15.0	96.0	81.0	0.210	0.092	1.8	207	30
OPM-22-179	135.0	220.5	85.5	0.322	0.388	1.3	56	32
OPM-22-180	50.6	56.0	5.4	1.728	0.244	18.3	412	67
OPM-22-180	100.5	122.6	22.1	0.736	0.187	5.6	209	67
OPM-22-181	165.0	208.5	43.5	0.253	0.133	1.4	68	37
OPM-22-181	330.0	339.0	9.0	0.271	0.070	2.2	109	53
OPM-22-181	382.5	412.5	30.0	0.145	0.553	2.3	301	50
OPM-22-182	181.5	196.5	15.0	0.299	0.049	2.0	67	60
OPM-22-182	261.0	273.0	12.0	0.125	0.739	2.5	4,141	36
OPM-22-182	354.0	360.0	6.0	0.662	0.153	5.7	200	69

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-22-183	260.8	267.5	6.7	0.771	0.438	3.2	58	43
OPM-22-184	193.5	200.0	6.5	0.377	0.224	2.6	203	54
OPM-22-184	240.0	273.0	33.0	0.464	0.256	1.6	61	37
OPM-22-185	5.0	23.0	18.0	0.331	0.108	1.4	66	30
OPM-22-185	32.0	36.0	4.0	0.757	0.840	3.5	78	60
OPM-22-185	50.0	67.0	17.0	0.314	0.154	1.1	60	36
OPM-22-185	81.0	98.0	17.0	0.644	0.349	4.8	101	41
OPM-22-185	171.0	181.5	10.5	0.354	0.668	4.8	403	43
OPM-22-185	222.0	237.0	15.0	0.167	0.037	1.4	77	44
OPM-22-186	220.5	333.0	112.5	0.272	0.061	1.6	60	28
Including	250.5	312.0	61.5	0.398	0.079	2.4	74	31
OPM-22-186	348.0	369.0	21.0	0.300	0.050	1.0	51	42
OPM-22-187	160.5	166.5	6.0	0.384	0.222	2.6	78	35
OPM-22-187	231.0	258.0	27.0	0.459	0.089	3.0	120	33
OPM-22-188	39.0	79.5	40.5	0.376	0.082	14.1	90	26
OPM-22-188	100.5	159.0	58.5	0.204	0.163	1.4	147	28
OPM-22-188	175.5	193.5	18.0	0.253	0.079	1.9	56	33
OPM-22-189	127.5	132.0	4.5	0.755	0.107	6.6	126	39
OPM-22-189	232.5	270.0	37.5	0.857	0.395	2.5	72	50
OPM-22-190	421.5	426.0	4.5	1.357	0.324	11.8	814	289
OPM-22-190	556.5	561.0	4.5	1.745	0.492	11.5	207	94
OPM-22-191	99.0	111.0	12.0	0.507	0.098	2.1	73	30
OPM-22-191	132.0	183.0	51.0	0.191	0.167	1.2	174	32
OPM-22-191	489.0	496.5	7.5	0.269	0.140	1.9	69	235
OPM-22-192	208.5	223.5	15.0	0.278	0.069	1.9	96	38
OPM-22-193	6.0	20.0	14.0	0.710	0.202	4.3	118	39
OPM-22-193	56.0	80.0	24.0	0.193	0.090	2.3	296	29
OPM-22-193	115.0	131.0	16.0	0.111	0.166	2.1	641	37
OPM-22-193	288.0	334.5	46.5	0.222	0.160	1.4	63	48
OPM-22-194	286.5	295.5	9.0	0.606	0.369	2.6	95	49
OPM-22-194	327.0	366.0	39.0	0.441	0.143	2.2	122	39
OPM-22-195	172.5	186.0	13.5	0.442	0.083	3.7	157	38
OPM-22-196	185.3	325.5	140.2	0.272	0.137	1.7	314	37
OPM-22-197	181.5	186.0	4.5	0.862	0.142	4.1	88	51

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-22-198	322.5	328.5	6.0	0.523	0.260	6.3	170	34
OPM-22-199	160.5	169.5	9.0	0.248	0.155	2.1	429	52
OPM-22-200	133.5	150.0	16.5	0.464	0.104	1.8	76	54
OPM-22-201	261.0	319.5	58.5	0.440	0.114	2.2	77	28
OPM-22-202	87.0	91.5	4.5	0.249	0.011	1.45	37	25
OPM-22-202	207.0	217.5	10.5	0.072	1.070	7.3	1,290	56
OPM-22-202	343.5	351.0	7.5	0.042	0.370	1.1	1,004	37
OPM-22-203	127.5	205.5	78.0	0.488	0.179	2.7	91	36
OPM-22-203	303.0	328.5	25.5	0.254	0.074	1.2	61	39
OPM-22-204	42.0	52.5	10.5	0.196	0.069	1.3	60	36
OPM-22-204	93.0	108.0	15.0	0.364	0.161	1.9	132	31
OPM-22-204	186.0	211.5	25.5	0.206	0.094	0.8	85	31
OPM-22-204	330.0	350.0	20.0	0.307	0.041	1.9	95	48
OPM-22-206	121.5	132.0	10.5	0.491	0.111	2.4	115	62
OPM-22-206	397.5	405.0	7.5	0.798	0.259	2.7	95	68
OPM-22-207	3.5	18.0	14.5	0.400	0.265	2.1	50	44
OPM-22-209	60.0	73.5	13.5	0.567	0.251	2.7	50	34
OPM-22-209	86.5	126.0	39.5	0.378	0.380	2.4	47	33
OPM-22-209	146.2	162.0	15.8	0.398	0.306	5.2	631	50
OPM-22-209	198.0	211.6	13.6	0.747	1.336	4.6	96	51
OPM-22-209	262.5	273.0	10.5	0.140	0.126	0.8	74	33
OPM-22-210	100.5	144.0	43.5	0.190	0.038	1.1	64	40
OPM-22-210	416.3	438.0	21.7	0.279	0.103	2.6	157	45
OPM-22-211	6.0	13.0	7.0	0.375	0.094	1.1	51	30
OPM-22-211	24.0	33.0	9.0	0.722	0.297	3.0	54	31
OPM-22-211	51.0	79.5	28.5	0.417	0.180	2.0	89	35
OPM-22-211	133.5	142.5	9.0	0.182	0.094	1.5	37	44
OPM-22-211	159.8	181.5	21.7	0.154	0.125	2.0	952	32
OPM-22-211	234.0	288.0	54.0	0.619	0.229	3.4	370	59
OPM-22-211	336.0	351.0	15.0	0.269	0.120	1.3	59	35
OPM-22-212	147.0	202.5	55.5	0.459	0.070	2.6	89	55
OPM-22-212	234.0	256.5	22.5	0.779	0.144	5.7	256	97
OPM-22-213	156.0	166.5	10.5	0.405	0.029	2.3	495	62
OPM-22-214	10.5	18.0	7.5	0.155	0.058	0.9	54	25

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-22-214	35.2	78.0	42.8	0.358	0.228	3.0	489	35
OPM-22-214	120.0	123.5	3.5	1.492	1.290	17.4	20,677	68
OPM-22-214	163.5	172.5	9.0	0.266	0.081	1.5	103	36
OPM-22-215	27.9	40.0	12.1	0.355	0.080	1.6	64	21
OPM-22-215	124.5	129.0	4.5	0.786	0.270	3.5	91	40
OPM-22-215	139.5	159.0	19.5	0.198	0.088	1.1	49	32
OPM-22-215	276.0	279.3	3.3	0.373	0.106	2.1	70	47
OPM-22-216	273.0	277.5	4.5	0.570	0.138	3.8	134	57
OPM-22-217	120.0	132.0	12.0	0.627	0.126	3.1	96	39
OPM-22-217	165.0	180.0	15.0	0.628	0.165	2.9	166	48
OPM-22-217	247.5	258.0	10.5	0.107	0.396	2.9	1,652	43
OPM-22-217	301.5	318.0	16.5	0.168	0.042	1.2	70	47
OPM-22-217	424.5	429.0	4.5	0.383	0.057	4.2	70	92
OPM-22-218	2.2	21.0	18.8	0.204	0.170	2.7	177	25
OPM-22-218	61.5	79.5	18.0	0.815	0.194	6.4	515	33
OPM-22-218	114.0	118.5	4.5	0.848	0.259	9.5	158	56
OPM-22-218	130.5	141.0	10.5	0.138	0.229	3.2	434	44
OPM-22-218	168.0	186.0	18.0	0.386	0.096	2.1	65	39
OPM-22-219	36.0	42.0	6.0	0.324	0.028	2.5	112	68
OPM-22-219	294.0	318.0	24.0	0.301	0.073	1.5	49	23
OPM-22-219	334.5	339.0	4.5	0.318	0.207	1.9	68	75
OPM-22-220	4.0	10.0	6.0	0.069	0.108	1.2	964	34
OPM-22-220	27.7	43.0	15.3	0.096	0.129	1.0	219	33
OPM-22-220	56.0	68.0	12.0	0.361	0.126	2.8	63	39
OPM-22-220	80.0	99.0	19.0	1.523	0.161	8.0	466	54
OPM-22-220	121.0	156.0	35.0	0.970	0.264	4.4	145	75
OPM-22-220	229.0	237.0	8.0	0.189	0.064	1.1	35	21
OPM-22-220	265.5	269.0	3.5	0.722	0.283	3.1	74	45
OPM-22-222	51.0	90.0	39.0	0.221	0.123	1.3	61	43
OPM-22-222	156.0	175.5	19.5	0.349	0.459	1.1	48	22
OPM-22-223	0.5	5.0	4.5	0.269	0.074	2.8	96	30
OPM-22-223	27.0	60.0	33.0	0.585	0.180	4.0	123	53
OPM-22-223	168.0	180.0	12.0	0.803	2.643	3.6	159	59
OPM-22-223	190.5	205.3	14.8	0.290	0.052	1.4	86	40

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-22-223	241.5	244.5	3.0	2.199	5.044	10.7	83	89
OPM-22-223	286.5	316.5	30.0	0.218	0.102	1.2	64	52
OPM-22-224	61.5	69.0	7.5	0.285	0.073	2.9	105	137
OPM-22-225	117.0	124.5	7.5	0.308	0.065	1.5	61	34
OPM-22-226	1.0	41.0	40.0	1.029	0.498	4.5	93	48
OPM-22-226	111.0	127.5	16.5	0.509	2.463	2.1	31	36
OPM-22-226	162.0	168.0	6.0	3.452	1.367	14.9	145	280
OPM-22-226	240.0	244.5	4.5	1.576	4.052	7.5	97	117
OPM-22-226	264.0	276.0	12.0	0.394	0.142	2.1	44	54
OPM-22-227	4.5	67.5	63.0	0.593	0.273	2.6	88	51
OPM-22-227	102.0	109.5	7.5	0.286	0.138	2.2	55	43
OPM-22-227	159.4	168.7	9.3	0.203	0.066	0.7	66	34
OPM-22-228	73.5	93.0	19.5	0.224	0.020	1.7	69	48
OPM-22-228	127.5	135.0	7.5	0.343	0.070	1.7	45	28
OPM-22-228	184.5	199.5	15.0	0.913	0.252	4.4	98	36
OPM-22-229	4.1	33.0	28.9	0.351	0.112	1.4	43	23
OPM-22-229	43.5	76.5	33.0	0.663	0.085	4.4	166	43
OPM-22-231	282.0	325.5	43.5	1.338	0.569	3.2	105	45
OPM-22-231	337.5	343.5	6.0	0.491	0.415	1.3	51	30
OPM-22-234	327.0	336.0	9.0	0.443	0.082	3.5	111	45
OPM-22-234	493.5	508.5	15.0	0.715	0.109	4.6	79	56
OPM-22-235	9.0	12.0	3.0	1.128	0.189	5.6	145	83
OPM-22-235	202.5	216.0	13.5	0.306	0.033	2.6	99	48
OPM-22-235	271.5	274.5	3.0	0.048	1.565	0.7	108	36
OPM-22-237	379.5	447.0	67.5	0.247	0.243	1.4	63	40
Including	379.5	388.5	9.0	0.621	1.137	6.0	123	63
Including	432.0	447.0	15.0	0.423	0.145	0.8	41	29
OPM-23-238	126.0	129.0	3.0	0.148	0.007	0.7	43	37
OPM-23-240	468.0	475.3	7.3	0.210	0.051	3.7	164	69
OPM-23-240	486.8	489.5	2.7	0.328	0.017	4.6	145	121
OPM-23-245	154.5	159.0	4.5	1.192	0.028	6.8	180	51
OPM-23-245	174.0	183.0	9.0	0.873	0.206	4.9	171	75
OPM-23-247	69.0	75.0	6.0	0.328	0.007	3.8	211	34
OPM-23-247	124.5	128.5	4.0	0.173	0.056	3.0	199	109

TABLE 10.7
SELECTED MINERALIZED INTERVALS FOR THE 2021, 2022 AND
2023 DRILLING PROGRAMS (8 PAGES)

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Au (g/t)	Ag (g/t)	Zn (ppm)	Co (ppm)
OPM-23-247	142.5	165.0	22.5	0.120	0.015	2.1	127	32
OPM-23-248	15.0	17.8	2.8	0.042	1.971	1.3	1,180	29
OPM-23-248	63.0	67.8	4.8	1.100	0.750	6.1	67	48
OPM-23-249	55.5	61.5	6.0	0.411	0.005	0.9	37	39
OPM-23-250	108.0	181.5	73.5	0.276	0.183	2.0	112	56
OPM-23-250A	19.5	23.1	3.6	0.196	0.087	0.8	31	31
OPM-23-251	46.5	52.5	6.0	0.127	0.006	0.7	18	137
OPM-23-251	140.3	149.0	8.7	0.511	0.010	4.9	63	85
OPM-23-252	115.0	117.4	2.4	4.418	0.095	38.8	210	100
OPM-23-252	162.0	172.5	10.5	0.310	0.027	5.4	289	55
OPM-23-253	40.5	49.5	9.0	0.405	0.210	1.5	37	32
OPM-23-253	64.5	165.0	100.5	0.335	0.273	2.2	236	54
OPM-23-254	199.5	202.9	3.4	0.286	0.014	4.0	51	92
OPM-23-255	30.0	47.0	17.0	0.218	0.204	0.7	28	30
OPM-23-255	78.0	133.5	55.5	0.386	0.260	2.6	159	55
OPM-23-255	144.0	150.0	6.0	0.318	0.149	3.4	201	92
OPM-23-257	30.0	35.6	5.6	0.306	0.026	6.1	57	32
OPM-23-262	130.5	143.0	12.5	0.339	0.018	4.8	76	36
OPM-23-262	193.5	201.0	7.5	0.205	0.011	2.8	147	44
OPM-23-263	160.1	162.5	2.4	1.797	0.016	8.9	216	101
OPM-23-264	49.5	61.5	12.0	0.438	0.190	1.8	42	42
OPM-23-264	93.0	111.0	18.0	0.186	0.055	1.4	167	67
OPM-23-265	43.5	120.0	76.5	0.270	0.191	1.9	56	54
OPM-23-267	106.5	129.0	22.5	0.366	0.014	5.1	81	44
OPM-23-268	150.0	156.0	6.0	0.265	0.009	3.8	27	74
OPM-23-269	58.6	59.6	1.0	12.900	1.220	243.0	3,970	644
OPM-23-269	94.5	100.5	6.0	0.152	0.025	3.8	71	42
OPM-23-270	154.5	178.5	24.0	0.136	0.010	1.9	120	60
OPM-23-273	115.5	123.0	7.5	0.206	0.010	2.8	49	38
OPM-23-274	138.0	150.0	12.0	0.241	0.024	1.6	27	119
OPM-23-274	163.5	175.7	12.2	0.370	0.036	3.3	40	84
OPM-23-275	121.5	125.0	3.5	0.295	0.023	1.9	45	43
OPM-23-276	64.0	66.8	2.8	0.586	0.007	5.7	71	51

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 first drilling program in 2002. The majority of those historical programs, however, were undertaken in the context of historical underground mining at the Springer and Perry Mines. Procedures used by past operators were very likely 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. The Opemiska Mining Division did undertake annual grade reconciliation that gave variable results, due to the inherent issues of mining multiple deposits with different copper and gold grades (Salmon, pers. comm., 2021).

Previous mining operators, Falconbridge Copper Limited and Corporation Falconbridge Copper. ("Falconbridge") and Minnova, carried out work at the Property from 1953 to 1991, which consisted of 1,074,735 m of drilling in 17,471 surface and underground drill holes within and near the original vendor property outline. Although Falconbridge collected over 375,931 samples for assay throughout this period, no drill core, reject or pulp samples remain.

To confirm the grades determined by Falconbridge at the Property, QC Copper has undertaken drill hole-twinning programs as described in Section 12.2.1 of this Report. This work confirmed that mineralized zones are located in the same locations as in the original drilling, the widths of mineralization are consistent, and copper assays for the largest part of the grade curve in the 2021 MRE are similar to the results obtained by the Mine. On the other hand, gold assays are much more variable and difficult to compare with historical drilling results.

The absence of drill core from the historical mine drilling at the Property rules out resampling to confirm historical grades and, with the majority of the mine drilling completed underground, the twinning of historical drill holes is also impossible. An alternative to confirming the accuracy of historical in-house mine assays is to drill in detail a portion of the Deposit, subsequently compare the resulting tonnage and grade estimates with those estimated from the historical mine drilling. This action will be recommended as part of future drilling programs on the Deposit.

A complete review of historical drilling was presented in the 2021 MRE (P&E, 2021) and will be referred to extensively in this document. Ample and specific reference will be made to the parts of the 2021 MRE that complement the current work. This will allow a comparison of the results from the period before the 2021 MRE, consisting of 85 drill holes completed by Ex-In totalling 4,067 m, and 101 drill holes completed by QC Copper totalling 19,775.2 m, with the more recent post-2021 MRE drilling, comprising 180 drill holes totalling 47,192.2 m, including two extensions of pre-2021 MRE drill holes and three re-drilled holes. The total drilling statistics for the area of the conceptual open pit by drilling phase are presented in Table 10.1.

11.2 SAMPLING AND SECURITY (2002 TO 2023)

11.2.1 Ex-In (2002 to 2016)

The following description of sample preparation and security procedures has been taken largely from Larouche (2019).

During the recent drill programs (2002 to 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, and such sections carry higher grade.

The sampling steps are as follows:

- The drilled core is put in boxes that are closed and tied solidly for transportation; the boxes are transported to a secure location by a pick-up truck; the drill core boxes are then unloaded, washed if necessary and tagged with aluminum tags embossed with the drill hole number, box number and from- /to- interval 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 intervals;
- 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 on the geologist;
- The metallic sample pans and the 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, is moved to a permanent storage in steel drill core 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. Since QC Copper took over management of the project, the pre-2019 core boxes were transferred to a new storage facility where all core are stored

together. The pulps and rejects in Québec City were evaluated and trashed because of likely oxidation due to poor storage over many winters.

11.2.2 QC Copper (2019 to 2023)

Sample preparation and security procedures for the 2019 to 2023 drill programs are described as follows:

- The drilled core is stored in boxes that are closed and tied solidly for transportation; the boxes are transported to a secure location by a 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 per 4 boxes), both dry and wet, in order to obtain better optical results;
- RQD was conducted systematically over all pre-2021 MRE drill holes. For the post-2021 MRE drilling, a machine learning procedure (Caté, 2023) was developed based on the images of the drill core that produced a measure of rock quality designation that is comparable to the traditional method;
- 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 or employee), noting different geological units, alteration, structure, and mineralization (sulphide). Intervals with alteration and mineralization are usually marked for sampling;
- The drill core is cut with a diamond core cutting saw. One half of the drill core is sampled and placed in a tagged bag for assay. The other half drill core 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;
- During the most recent drill program, which commenced in the fall of 2021 immediately following publication of the 2021 MRE, drill core was typically sampled every 1.5 m. Where more localized veins or shorter intervals were present, drill core sample lengths were reduced accordingly, with a minimum sample length of 0.8 m. Generally, the shorter intervals represent isolated veins or well-mineralized sections; generally, such intervals carry higher grades of copper;
- 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, is moved to a permanent storage in steel drill core racks or cross-piled on pallets, within fenced yards; and
- Drill core storage facilities are under constant video surveillance and footage of video is monitored constantly to detect intrusion.

The drill core sampling statistics, summarized in Table 11.1, indicate that a total of 419,108 assays were available within or near the 2021 MRE conceptual open pit, of which 41,885 samples have full QA/QC results. Since the publication of the 2021 MRE, a total of 29,914 samples of drill core were collected and submitted for analysis with accompanying quality control.

TABLE 11.1 DRILL CORE SAMPLING STATISTICS	
Drilling Phase	Number Assays
Historical Mine_Surface	12,715
Historical Mine_UG	363,216
Ex-In	1,289
2019	1,134
2021	10,837
Post-2021 MRE	29,914
Total	419,105

Source: QC Copper (2023)

11.3 BULK DENSITY DETERMINATION

A total of 1,142 bulk density measurements were determined by immersion using wet and dry weighing measurements on-site by QC Copper personnel during the period from 2019 to 2023. Drill core samples were weighed dry, then weighed suspended within water. Selected samples were of a single rock type and between ~11 cm and 28 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. During the period leading up to the 2021 MRE, bulk density was measured on a total of 998 drill core samples. Afterwards samples were collected more sporadically and a total of 144 bulk density measurements were undertaken.

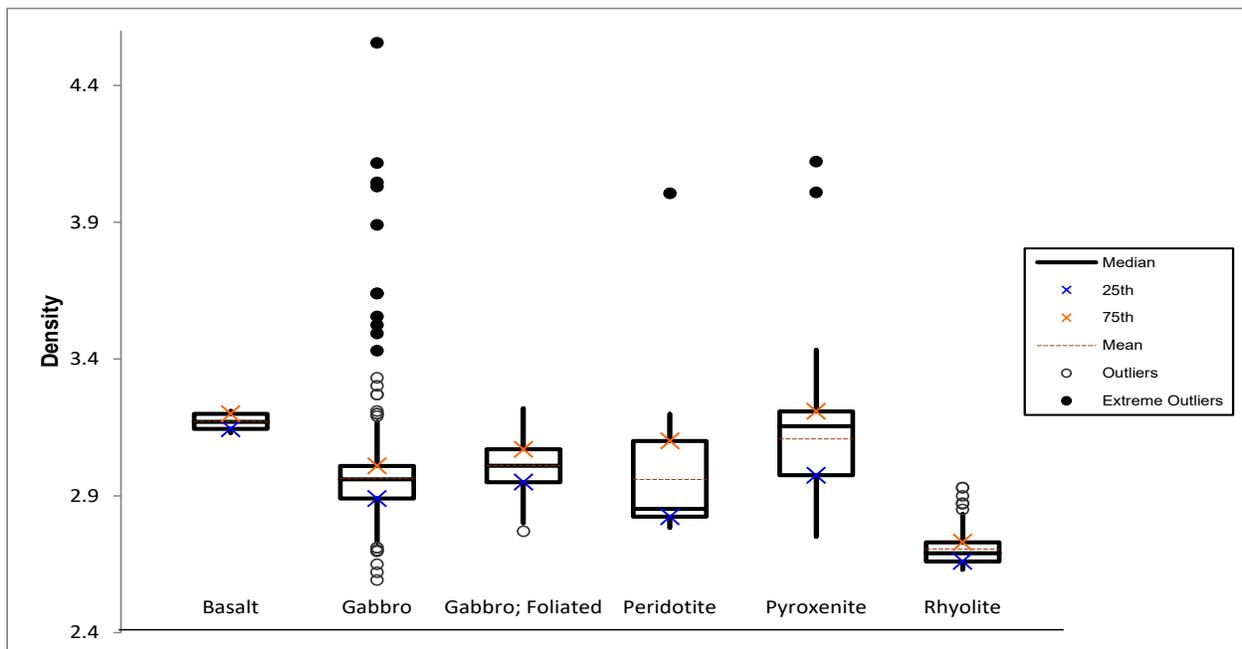
The measured values ranged from 2.59 to 4.56 t/m³, with an average bulk density for all units of 2.96 t/m³. The sampling statistics for the different units sampled are presented in Table 11.2 and a boxplot of results is shown in Figure 11.1.

TABLE 11.2									
STATISTICS FOR BULK DENSITY MEASUREMENTS OF CORE SAMPLES									
Lithology	Count	Mean	Std Dev	Range	Min	25th Perc.	50th Perc.	75th Perc.	Max
Basalt	5	3.17	0.03	0.08	3.13	3.15	3.17	3.2	3.210
Gabbro	748	2.96	0.142	1.96	2.59	2.89	2.96	3.01	4.560
Foliated Gabbro	77	3.01	0.089	0.45	2.77	2.95	3.01	3.07	3.220
Peridotite	35	2.96	0.232	1.22	2.78	2.82	2.85	3.1	4.010
Pyroxenite	170	3.11	0.179	1.37	2.75	2.98	3.15	3.21	4.120
Rhyolite	107	2.71	0.062	0.3	2.63	2.66	2.69	2.73	2.9

Source: QC Copper (2023)

Bulk density typically varies according to the relative abundance of silica, as demonstrated in Table 11.2 and Figure 11.1. The bulk density of the various phases of the Ventures Sill (the main host for mineralization at Opemiska) generally overlap, with the exception of outliers that are probably caused by the presence of secondary magnetite or sulphides. Gabbro, foliated gabbro and peridotite all average within 2% of each other, ranging from 2.96 and 3.01 t/m³, whereas the pyroxenite is slightly denser than even the peridotite at 3.11 t/m³ (the reasons why are uncertain, but may be due to hydration of olivine). Basalt, at 3.17 t/m³, appears to be slightly denser than the pyroxenite; however, only five determinations have been made to date.

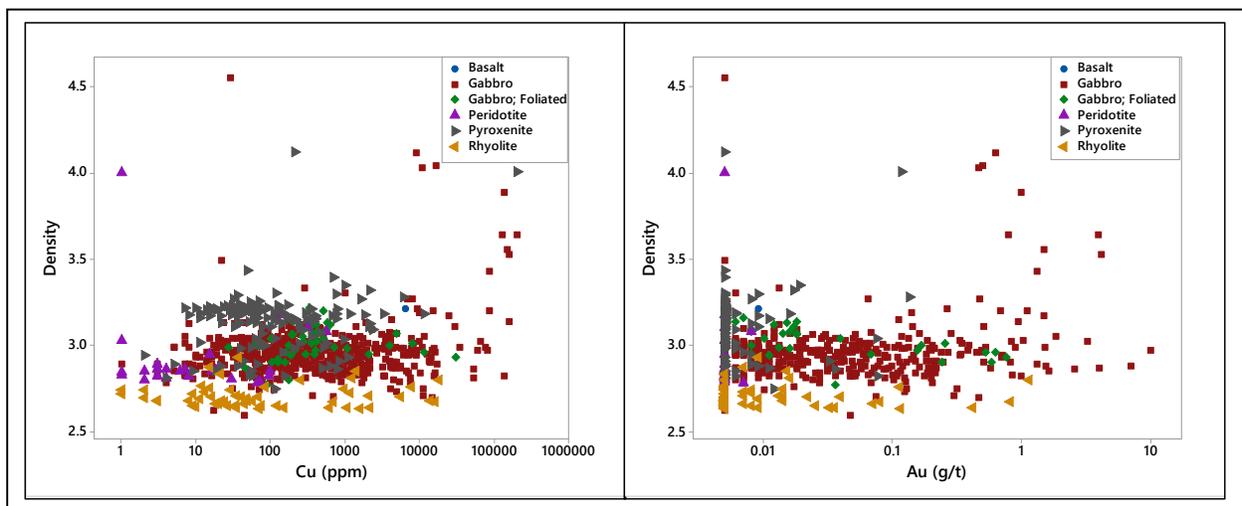
FIGURE 11.1 BOXPLOT OF BULK DENSITIES FOR DRILL CORE SAMPLES



Source: QC Copper (2023)

Bulk density measurements are compared to assay results for overlapping intervals in Figure 11.2. Results for copper and gold show generally flat profiles except for a few outliers, mainly >1.0% Cu and ~0.5 g/t Au. For the Opemiska Deposit, it appears that an average bulk density can be used for each major lithology, at least for the assays up to the average grade of the Deposit as estimated in the 2021 MRE.

FIGURE 11.2 SCATTERPLOT OF BULK DENSITY VERSUS GRADE BY LITHOLOGY



Source: QC Copper (2023)

A complete listing of the bulk density results is presented in Appendix H.

The Authors responsible for the current MRE, reviewed QC Copper's bulk density data. Of the 1,172 samples, 141 were located within the modelled domains and 1,031 outside the modelled domains. The domain constrained bulk density ranges from 2.68 to 2.94 t/m³ and averaged 2.97 t/m³.

For reporting purposes, QC Copper assigned bulk density by lithology as follows:

- Mafic: 2.96 t/m³
- Ultramafic: 3.06 t/m³
- Rhyolite: 2.70 t/m³
- Overburden: 2.00 t/m³

Independent verification sampling carried out in May 2021 and February 2023 by the site visit Author, confirmed QC Copper's on-site measurements. A total of 31 due diligence samples were measured independently at AGAT (22 determinations by water displacement on drill core in 2021) and Actlabs (nine determinations by water displacement on drill core in 2023) returned a mean value of 2.91 t/m³, median value of 2.90 t/m³, a minimum value of 2.69 t/m³, and a maximum value of 3.06 t/m³.

11.4 SAMPLE PREPARATION AND ANALYSIS

Drill core samples collected by Ex-In at Opemiska from 2010 to 2016 were analysed 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 analysed at Laboratoire Expert Inc., ("Expert Lab"), of Rouyn-Noranda, Québec, and by ALS Minerals ("ALS") in Val-d'Or, Québec from 2021 to 2023. Both laboratories are independent of QC Copper.

11.4.1 ALS (2010)

Samples at ALS throughout 2010 are analysed for gold by fire assay ("FA") with atomic absorption ("AA") finish, with higher-grade samples further analysed by FA with gravimetric finish. Samples are also analysed for a suite of 35 elements, including silver, copper and zinc, by aqua regia digest with ICP-AES finish. ALS maintains ISO registrations and accreditations and all ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

11.4.2 Bourlamaque Lab (2010 to 2015)

Samples at Bourlamaque Lab throughout 2010 to 2015 are analysed for gold, palladium and platinum by lead FA with AA finish. Silver, copper and zinc samples are analysed by aqua regia digest with AA finish, with high-grade samples further analysed 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 (CRM) and duplicates are inserted into the sample sequence.

11.4.3 Techni-Lab (2016)

Samples at Techni-Lab throughout 2016 are analysed 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-noted gold analyses at Opemiska in 2016.

11.4.4 Actlabs (2016)

Samples at Actlabs throughout 2016 are analysed 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 Expert Lab (2019)

Samples received at Expert Lab are logged into the tracking system, weighed, dried (if necessary), crushed to 80% passing minus 10 mesh, riffle split to 250 g, then pulverized to 90% passing minus 200 mesh. The crusher and pulverizer are suitably cleaned between batches. Samples are analysed for gold by lead FA on 30 g aliquots with AA finish. Samples returning results >5,000 ppb gold are then re-assayed by FA with gravimetric finish. Copper, silver, cobalt and zinc samples are analysed by partial digestion AA, with samples assaying >10,000 ppm re-assayed by total digestion AA. Expert Lab is a non-accredited facility that routinely performs assaying for junior mining companies. Blanks, CRMs and duplicates are inserted into the sample sequence at all sample preparation stages, as part of the lab’s internal QA/QC protocol.

11.4.6 ALS (2021 to 2023)

Sample preparation at ALS was divided between the full-service laboratory in Val d’Or and a preparation laboratory in Quevillon. Since the laboratory has uniform protocols throughout, it is very common for the prepared pulps to be sent to more than one of their major laboratories for analysis. Gold analyses by fire-assay however, were mainly performed in Val d’Or. ALS sample preparation and analytical procedures are specified in Table 11.3 by code. Detailed descriptions of each code are available from ALS upon request. ALS maintains ISO registrations and accreditations and all ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

TABLE 11.3 ALS DRILL CORE SAMPLE PREPARATION AND ANALYTICAL CODES (2021 TO 2023)		
Sample Preparation		
ALS Code	Description	
WEI-21	Sample weight received	
BAG-01	Ref pulp storage	
LOG-21	Sample Input – Client Barcode	
CRU-QC	QC Crush Test	
PUL-QC	QC Pulverizing test	
CRU-32	Crushing Specification: 90% <2 mm	
SPL-21	Riffle Splitting	
PUL-32m	Pulverization Specification: 500 g – 85% <75 um	
LOG-23	Pulp entry – Received with barcode	
Analytical Procedures		
ALS Code	Description	Instrument
ME-OG46	Assay-grade element content – Aqua regia	ICP-AES
CU-OG46	Assay-grade content Cu – Aqua regia	ICP-AES
AU-AA23	Au 30 g finish FA-AA	AAS
AU-GRA21	Au by fire assay and gravimetric finish	
ME-ICP41	Aqua regia ICP-AES 35 elements	ICP-AES

Source: QC Copper (2023)

11.5 QUALITY ASSURANCE/QUALITY CONTROL REVIEW

11.5.1 Ex-In Drilling (2002 to 2016)

Ex-In did not insert blind CRMs, 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. Fortunately, all or most of the core drilled by Ex-In has been preserved for review and re-sampling. QC Copper undertook drill core resampling and drill hole-twinning programs for the 2021 MRE to confirm the quality of the data collected by Ex-In at the Property, and these are discussed in Section 12.2.2. The results confirm that the Ex-In assays were of acceptable quality for Mineral Resource estimation and that the twin drilling results, albeit imperfect as a measure of the mining assay accuracy, are accurate within dominant ranges of copper metal concentrations in comparison to modern QA/QC-controlled assay results.

11.5.2 QC Copper Drilling (2019 and 2021)

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. QA/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 CRMs at a rate of 1:25 and blanks at a rate of 1:19. A total of 48 OREAS CRMs and 62 blanks were assayed. Similar QA/QC measures were taken in the Company's 2021 drilling program at the Property. CRMs were inserted at a rate of 1:23 and blanks at a rate of 1:24. A total of 462 OREAS CRMs were inserted in the sample stream and 447 blanks.

The Author considers the CRM data for copper, gold, silver, zinc and cobalt, to demonstrate acceptable accuracy and the blank performance to indicate no material issues with contamination in the Opemiska 2019 and 2021 diamond drilling data. A more detailed description of the QA/QC measures taken throughout the 2019 and 2021 QC Copper drilling programs is given in P&E (2021).

11.5.3 QC Copper Drilling (Post-2021 MRE Drilling 2021 to 2023)

QC Copper undertook a systematic QA/QC protocol from the commencement of drilling in 2019 at the Property, which has included the routine insertion of CRMs (to monitor analytical accuracy) and blank samples (to monitor contamination during sample preparation) into the sampling stream. CRMs were selected to represent the range of copper and gold grades encountered in the Deposit. In addition, a suite of randomly selected pulp samples, with grades between the assumed lower cut-off grade of the Deposit (~0.1% Cu) and up to at least the 95th percentile of grades, were submitted to a secondary laboratory (Actlabs, in Hamilton, Ontario) for verification assaying. The same CRMs were submitted to the secondary laboratory to enhance comparison. A suite of quartered drill core samples was also submitted for assay to ALS in order to estimate sampling variance of the drill core. Shortly following the publication of the 2021 MRE in the fall of 2021 (P&E, 2021), QC Copper embarked on a 180-hole diamond drilling program with a full complement of QA/QC controls to monitor and correct errors in the analyses.

Post-2021 MRE drilling was completed mainly within the 2021 MRE conceptual open pit, and QC Copper personnel collected 29,920 drill core samples and inserted 1,114 quality control samples, including 585 CRMs and 529 blanks (Table 11.5). The OREAS CRMs used during previous campaigns were again utilized throughout the 2021 to 2023 period, including OREAS-166, OREAS-502c, OREAS-504c and OREAS-505. A new CDN-CM-44 CRM, from CDN Resources Laboratory Ltd., was also utilized. Approximately 4% of samples submitted to the laboratory were quality control samples and, in addition, 3.3% of mineralized samples were re-analysed from pulps at a secondary laboratory. A total of 372 verification pulp assays were added to the 44 check assays originally undertaken for the Project in 2021 (P&E, 2021), bringing the percentage of drill core samples umpire assayed at a secondary lab closer to the recommended minimum of 5%. Sample statistics for the post-2021 MRE drilling are detailed in Table 11.4.

TABLE 11.4		
SAMPLING STATISTICS FOR POST-2021 MRE DRILLING		
Sample Type	Number of Analyses	Percent of Drill Core Samples (%)
Drill Core	29,920	--
CRMs	585	1.96
Blanks	529	1.77
Drill Core Duplicates	35	0.12
Umpire Assays on Pulps	1,318	3.30

Source: QC Copper (2023)

The analytical package implemented at ALS includes copper, gold, silver, zinc and cobalt (the same elements analysed since the commencement of drilling in 2019). However, in practice, only copper, gold and silver are of significant grade to have an economic impact on the Project. Therefore, only the QA/QC results for copper, gold and silver are discussed here. All control charts, including those for zinc and cobalt, are presented in Appendices I, J and K and the Table of Failures is presented in Appendix L.

11.5.3.1 Performance of Certified Reference Materials

CRMs were inserted into the sample stream approximately every 51 samples. Five CRMs were used during the 2021 to 2023 drill program to monitor copper, gold, silver, cobalt and zinc performances: the OREAS-166, OREAS-502c, OREAS-504, OREAS-505, and CDN-CM-44 CRMs. The OREAS-166 CRM was only utilized once prior to being replaced by CDN-CM-44, as it has a small, pre-packaged sample size of 10 g only and can only be used to monitor high-grade copper concentrations and not gold fire assays.

The number of aliquots used for the various CRMs is summarized in Table 11.5.

TABLE 11.5	
CRM SUMMARY STATISTICS USED IN POST-2021 MRE DRILLING	
Certified Reference Material	Number of Samples
OREAS-166	1
OREAS-502c	115
OREAS-504c	164
OREAS-505	299
CDN-CM-44	6
BLANK	529
Total	1,114

Source: QC Copper (2023)

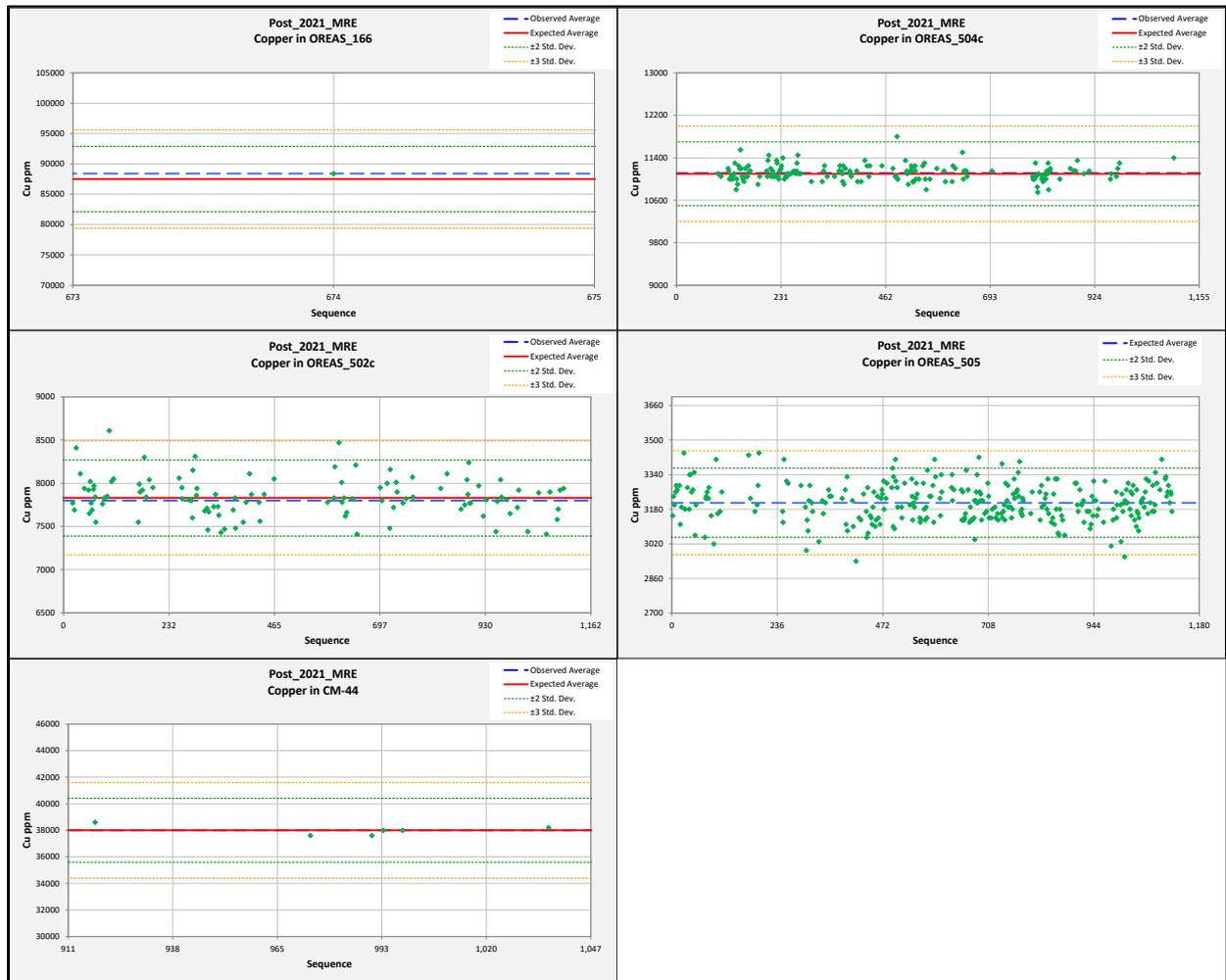
Criteria for assessing CRM performance are based as follows. Data falling within ± 2 standard deviations from the accepted mean value pass. Data falling outside ± 3 standard deviations from the accepted mean value, or two consecutive data points falling between ± 2 and ± 3 standard deviations on the same side of the mean, fail. When CRM results fell outside performance criteria limits, the sample was recorded in the Table of Failures (Appendix L) and the cause of the failure investigated. When the likely failure mode was determined, corrective measures were taken, which included re-assaying the pulp material of the sample numbers surrounding the failed CRM. When the re-assayed results were received, they were validated and subsequently re-imported in the database, replacing the original failed assays.

A complete suite of control charts for copper, gold, silver, cobalt and zinc were prepared for each CRM used in the post-2021 MRE diamond drilling program (Appendix K). Results of the cleaned database for copper, gold and silver only are presented in Figures 11.3 to 11.5 and details the corrected and uncorrected performance of each CRM are given in Table 11.6. Control charts present the analytical results for each CRM (green points), the CRM's certified mean value (red line), the observed average value (blue dashed line) and the control limits of ± 2 standard deviations (green dashed line) and ± 3 standard deviations (yellow dashed line).

CRM performance of all three elements is excellent, with only a few failed results for OREAS-502c and OREAS-505 CRMs that slightly exceed three standard deviations from the certified mean value remaining uncorrected. Generally, field office personnel were able to assess and follow up on failures in a timely fashion, however, during a short period in late 2022, follow-up action on some failures was delayed. Consequently, a number of failures were not acted upon prior to the pulps and coarse rejects being returned to the Company and they remain uncorrected. The uncorrected failures are identified as "unresolved" in the Table of Failures in Appendix L and are also clearly visible in Figures 11.3 through 11.6 (Figure 11.6 in section 11.5.3.2 Performance of Blanks) and Table 11.7 (section 11.5.3.2 Performance of Blanks).

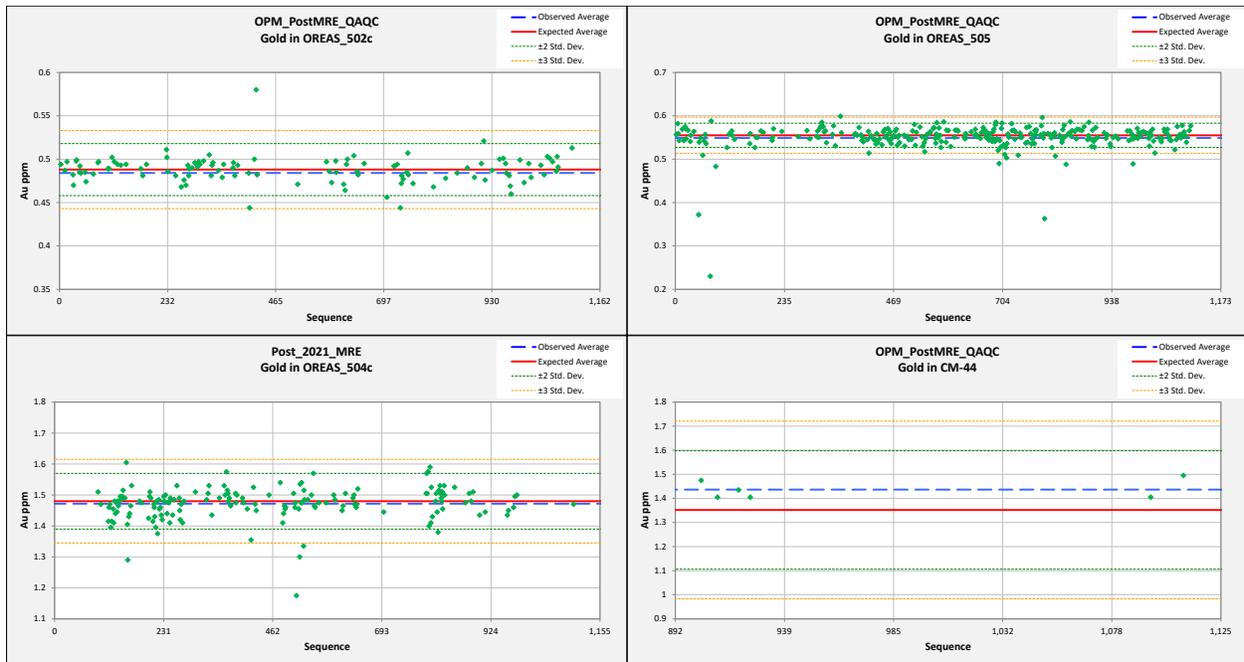
The Author also reviewed CRM performance for cobalt and zinc and, although quite a few low failures were recorded for both elements, the Author does not consider these failures to be of material impact to the Mineral Resource data. The Author considers that the CRM data demonstrate acceptable accuracy in the late-2021 to 2023, post-2021 MRE drilling data.

FIGURE 11.3 2021 TO 2023 QC COPPER CRM CONTROL CHARTS FOR COPPER



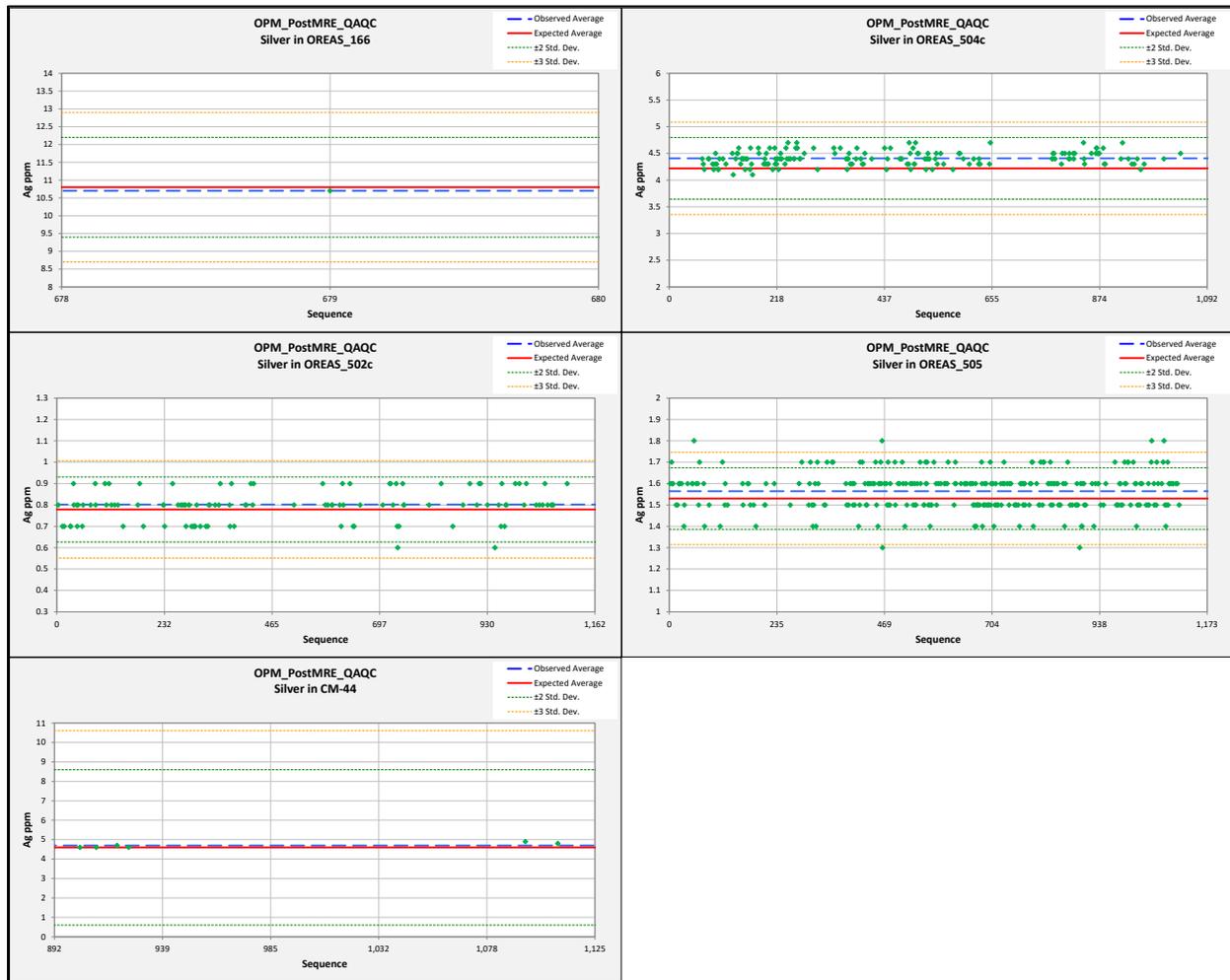
Source: QC Copper (2023)

FIGURE 11.4 2021 TO 2023 QC COPPER CRM CONTROL CHARTS FOR GOLD



Source: QC Copper (2023)

FIGURE 11.5 2021 TO 2023 QC COPPER CRM CONTROL CHARTS FOR SILVER



Source: QC Copper (2023)

**TABLE 11.6
SUMMARY OF CRM PERFORMANCE POST-2021 MRE DRILLING**

Certified Reference Material	Certified Mean Value	"Between Lab" 2 Std	No. Used	No. of Failures	
				Corrected	Remaining
Non-Element Related Failures					
Blank			529	4	0
CDN-CM-44			6	1	0
OREAS_166			1	1	0
OREAS_502c			115	5	0
OREAS_504c			164	1	0
OREAS_505			299	5	0

TABLE 11.6					
SUMMARY OF CRM PERFORMANCE POST-2021 MRE DRILLING					
Certified Reference Material	Certified Mean Value	"Between Lab" 2 Std	No. Used	No. of Failures	
				Corrected	Remaining
Copper					
Blank			529	13	6
CDN-CM-44	0.038%	2,400 ppm	6	0	0
OREAS_166	0.0875%	5,400 ppm	1	0	0
OREAS_502c	7,790 ppm	440 ppm	115	5	0
OREAS_504c	0.0111%	600 ppm	164	0	0
OREAS_505	3,210 ppm	160 ppm	299	4	0
Gold					
Blank			529	1	1
CDN-CM-44	1.352 g/t	0.246 g/t	6	0	0
OREAS_166	not analysed due to insufficient amount of sample material				
OREAS_502c	0.488 g/t	0.03 g/t	115	3	1
OREAS_504c	1.48 g/t	0.09 g/t	164	4	0
OREAS_505	0.555 g/t	0.028 g/t	299	14	5
Silver					
Blank			529		
CDN-CM-44	4.6 g/t	4 g/t	6	0	0
OREAS_166	10.8 g/t	1.4 g/t	1	0	0
OREAS_502c	0.779 g/t	0.152 g/t	115	0	0
OREAS_504c	4.22 g/t	0.576 g/t	164	0	0
OREAS_505	1.53 g/t	0.144 g/t	299	7	0
Cobalt					
Blank			529	1	0
CDN-CM-44	18 ppm	6 ppm	6	0	0
OREAS_166	1,970 ppm	216 ppm	1	0	0
OREAS_502c	14.4 ppm	1.2 ppm	115	5	0
OREAS_504c	16.2 ppm	1.88 ppm	164		
OREAS_505	8.39 ppm	0.526 ppm	299	3	0
Zinc					
Blank			529		
CDN-CM-44	95 ppm	20 ppm	6	0	0
OREAS_166	37 ppm	4 ppm	1	0	0
OREAS_502c	109 ppm	10 ppm	115	2	0
OREAS_504c	106 ppm	8 ppm	164	2	0
OREAS_505	88 ppm	8.8 ppm	299	0	0

Source: QC Copper (2023)

11.5.3.2 Performance of Blanks

QC Copper continued to utilize the dolomite marble purchased from a local hardware store as a blank material, as was previously used in the 2021 drilling program. Blanks were inserted at a frequency of around one in 56 samples and an attempt was made to position blank material subsequent to observed mineralization to monitor carry over contamination. All blank data for copper, gold, silver, cobalt and zinc were reviewed by the Author. Blank results were plotted against a suitable threshold limit, set at a level low enough to not impact results at or near the lower cut-off grade for the Deposit. The thresholds for copper, gold and silver at Opemiska, are suitably set at 300 ppm, 0.03 ppm and 4.6 ppm, respectively. There were 529 data points to examine.

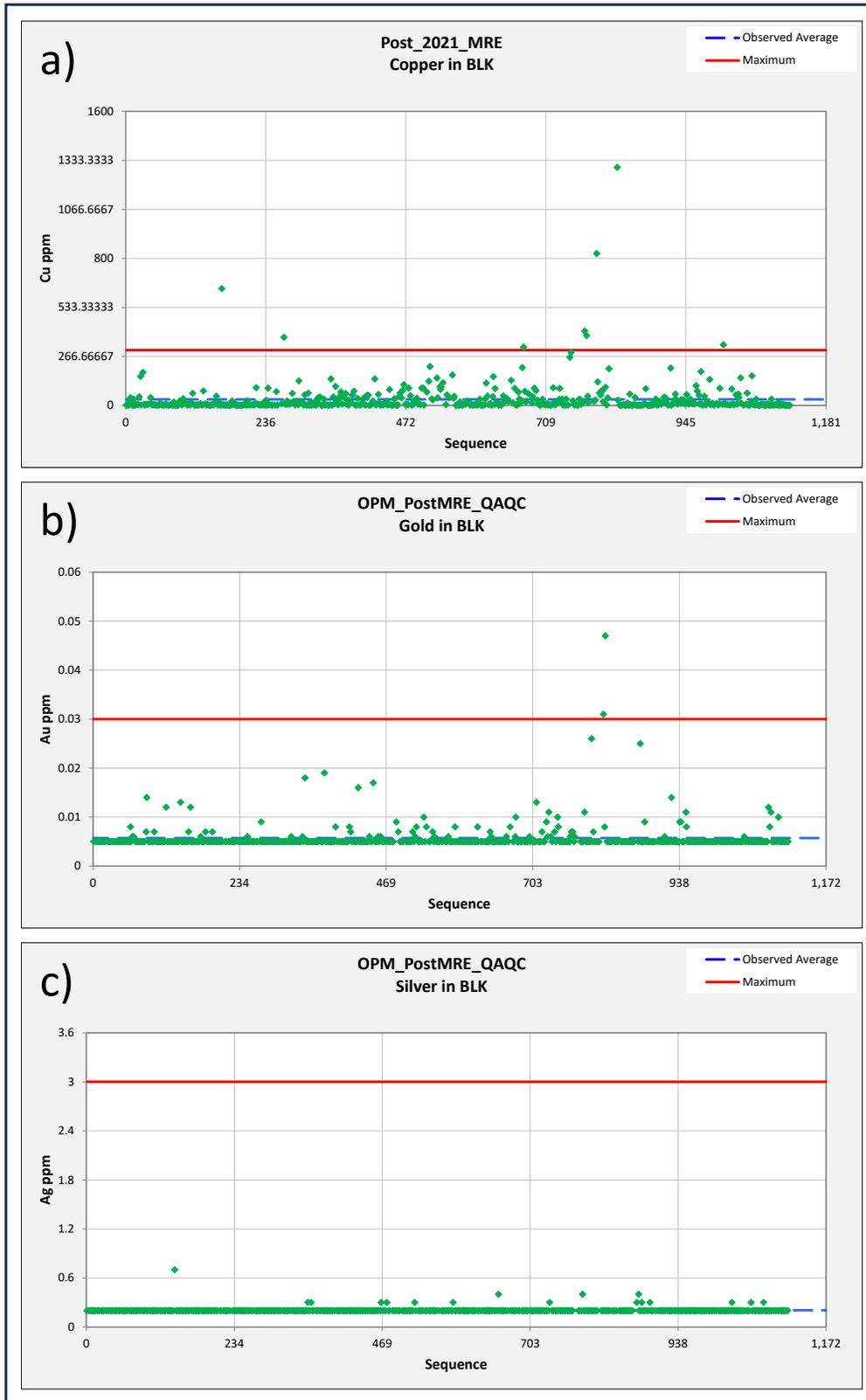
When blank samples were judged to have exceeded the threshold results, the sample was recorded in the Table of Failures (Appendix L) and the blank and surrounding samples were typically re-analysed from coarse reject material. Re-assaying typically confirmed that the failure was caused by contamination from adjacent samples, and the re-assayed results were imported into the database, replacing the failed assays.

Blank performance was generally good, with only a relative few elevated results returned from the lab (Figure 11.6). Project protocol dictates that personnel in the field office review QC sample performance once lab results are received, addressing any samples that exceed the set thresholds, and requesting reanalysis of any blank failures (and the affected drill core samples) that are considered significant. All failures and the follow-up action taken are documented in a Table of Failures (Appendix L).

Generally, field office personnel were able to assess and follow up on failures in a timely fashion, however, during a short period in late 2022 (as discussed previously in section 11.5.3.1) follow-up action on some failures was delayed. Consequently, a number of failures were not acted upon prior to the pulps and coarse rejects being returned to the Company and they remain uncorrected. The uncorrected failures are identified as “unresolved” in the Table of Failures (Appendix L) and are also clearly visible in the copper and gold blanks results in Figure 11.6.

The Author does not consider contamination to be an issue for the 2021 to 2023 drill data at Opemiska.

FIGURE 11.6 2021 TO 2023 QC COPPER BLANK CONTROL CHARTS FOR COPPER, GOLD AND SILVER



Source: QC Copper (2023)

ALS Laboratory Internal Quality Control

In addition to the treatment of the quality control materials used by QC Copper in the post-2021 MRE diamond drilling program, the laboratory's own control material analytical results (reported in every batch), were assessed for the estimation of the quality of the analyses. A very large number of analytical results were assessed, and results are summarized below.

Performance of ALS Laboratory's Internal CRMs

ALS uses appropriate CRMs to monitor the samples submitted by its clients. During the period of the post-2021 MRE diamond drilling program, the laboratory inserted between 1,424 and 2,575 CRMs (depending on the element analysed, as detailed in Table 11.7). More than 40 different CRMs were used during the program and, except for a few CRMs that were rarely utilized, all other CRM results were assessed by the QC Copper as part of the Company's QA/QC protocol.

Lab CRM	Count Cu (ppm)	Count Au (g/t)	Count Ag (g/t)	Count Co (ppm)	Count Zn (ppm)
AMIS0160	9				
CCU-1e	111				5
CDN-CM-34	440		440	440	440
CDN-GS-6G		22			
CT-22		24			
EMOG-17	552		431	429	434
G313-5		5			
G315-1		10			
G319-3		14			
G917-1		13			
G919-10		285			
GBM903-13	43				
GBM909-14	16				
GLG313-1		22			
KIP-19		320			
MP-1b	102				4
MRGeo08	441		441	441	441
OREAS-134b	76				4
OREAS231		70			
OREAS260		22			
OREAS315	79				5
OREAS316	70				4

TABLE 11.7					
SUMMARY OF ALS' CRM STATISTICS FOR THE POST-2021 MRE					
DIAMOND DRILLING					
Lab CRM	Count Cu (ppm)	Count Au (g/t)	Count Ag (g/t)	Count Co (ppm)	Count Zn (ppm)
OREAS317	50				
OREAS-45h	427		427	427	427
OREAS621	42				
OREAS932	111				
OxA147		5			
OxE166		191			
OxE182		11			
OxQ153		6			
PMP-18		21			
SK120		46			
SP49		6			
TAZ-20		326			
Total	2,575	1,424	1,739	1,737	1,764

Source: QC Copper (2023)

The certified values for the CRMs used by ALS are summarized in Table 11.8 and the average tolerance for the different elements analysed are presented in Figure 11.7. The certified values, provided by ALS from official Standard Specifications published by the producers of the CRMs, were in some cases adjusted by ALS to better reflect historical performance. Several variables go into the establishment of the laboratory's tolerance limits and assay grade analyses generally have tolerances around 4%, whereas geochemical analyses typically have tolerances of 5 to 10% and, in some cases, closer to 15%. The low-grade Taz-20 CRM in Figure 11.7 has a very large tolerance of 135% and the OREAS-45h CRM, a tolerance of over 200% (both CRMs beyond the limits of the chart) making them both unsuitable for monitoring the accuracy of analyses.

Results of the out-of-tolerance analyses are summarized in Table 11.9. Of the five elements analysed in the Project, copper, gold and silver are considered important for economics. Of these elements, copper and gold have fewer than 9% of the results that plot beyond $\pm 5\%$ and fewer than 3.2% of the results plot beyond $\pm 10\%$. The silver results, however, are much less reliable, with 41.0% and 25.5% of results plotting beyond the 5% and 10% tolerance limits, respectively. Upon investigation, the poor performance is due to a large percentage of silver results returning grades near to the analytical detections limits, where higher variations of grades are likely to occur. Cobalt and zinc results are generally poor for the same reason.

TABLE 11.8
CERTIFIED VALUES FOR THE ALS CRMS USED FOR
POST-2021 MRE DIAMOND DRILLING

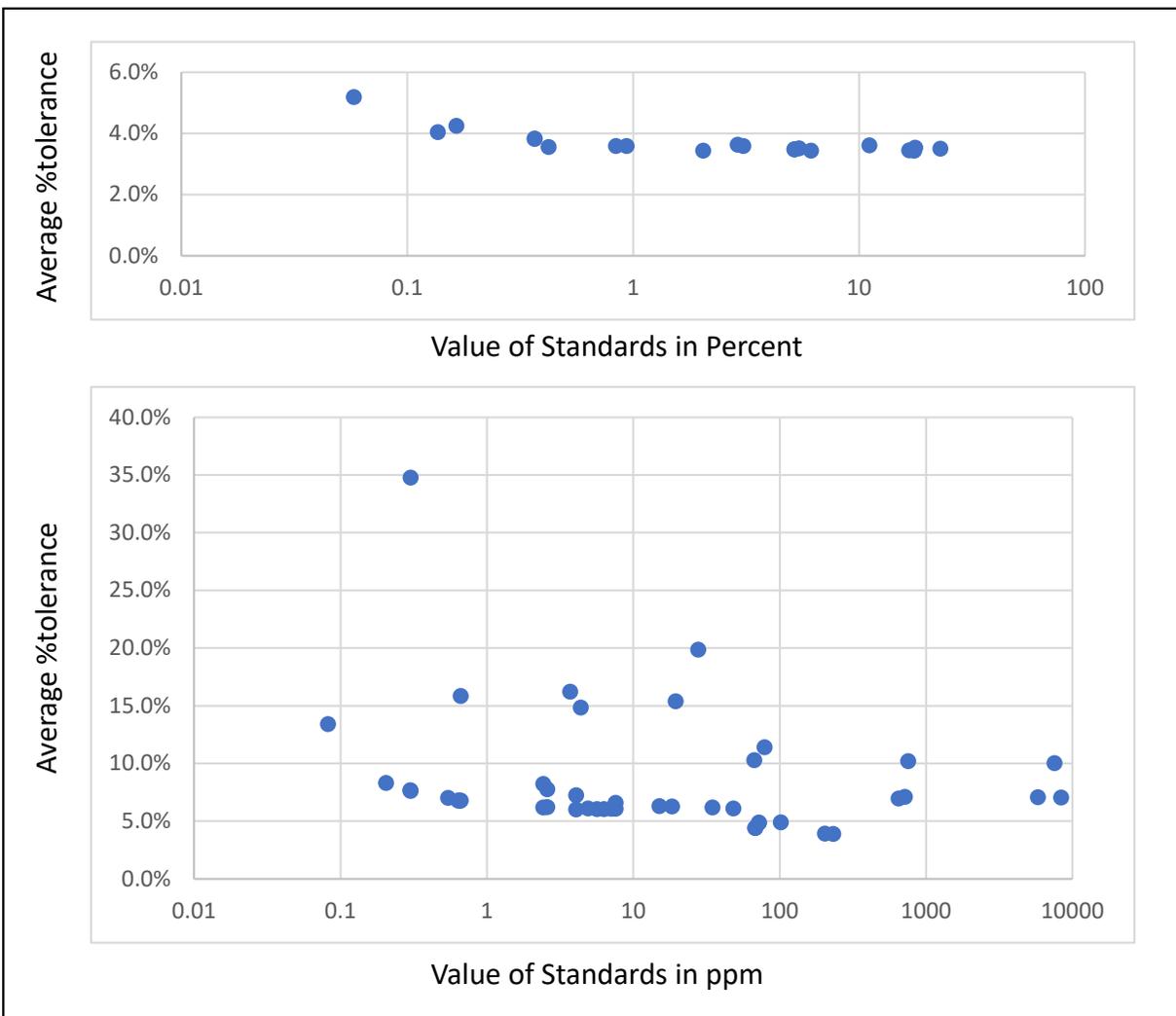
CRM	Cu (ppm)	Cu (%)	Au (g/t)	Ag (g/t)	Co (ppm)	Zn (ppm)	Zn (%)
AMIS0160		2.04					
CCU-1e		22.88					
CDN-CM-34	5,800	0.58		3.7			
CDN-GS-6G			6.30	84.0			
CT-22			2.58				
EMOG-17	8,371	0.837		67.0	756	7,534	
G313-5			7.07				
G315-1			5.64				
G319-3			4.92				
G917-1			48.37				
G919-10			7.58				
GBM903-13		2.895				9,342	
GBM909-14		2.190		96.6			6.56
GLG313-1			30.63				
GMN-04	38					65	
KIP-19			2.43				
MP-1b		3.069		47.0			16.67
MRGeo08	648			4.38	19.5	781	
OREAS 231	161		0.542	0.177	44.7	113	
OREAS 260	46.5		16.00	0.146	32.1	125	
OREAS 315	793			72.1	16.2		5.42
OREAS 316	1,650	0.165		102	10.9		11.10
OREAS 317	4,220	0.422		232	10.3		17.49
OREAS 621	3,660	0.366	1.25	68	27.9		5.17
OREAS 932		6.110		21.96	61.0	579	
OREAS-134b	1,363			204			17.69
OREAS-45h	717		41.10	0.092	79.0	27.7	
OREAS-76a	2,848		41.00		1191		
OxA147			0.082				
OxC129			0.205				
OxE166			0.652				
OxE182			0.663				
OXp172			15.057				
OxQ153			34.780	128			
PMP-18			0.300				

TABLE 11.8
CERTIFIED VALUES FOR THE ALS CRMs USED FOR
POST-2021 MRE DIAMOND DRILLING

CRM	Cu (ppm)	Cu (%)	Au (g/t)	Ag (g/t)	Co (ppm)	Zn (ppm)	Zn (%)
SE114			0.634				
SK120			4.075				
SP49			18.34	60.2			
TAZ-20			0.302				

Source: QC Copper (2023)

FIGURE 11.7 AVERAGE TOLERANCES FOR MOST CRMs USED BY ALS IN POST-2021 MRE DIAMOND DRILLING



Source: QC Copper (2023)

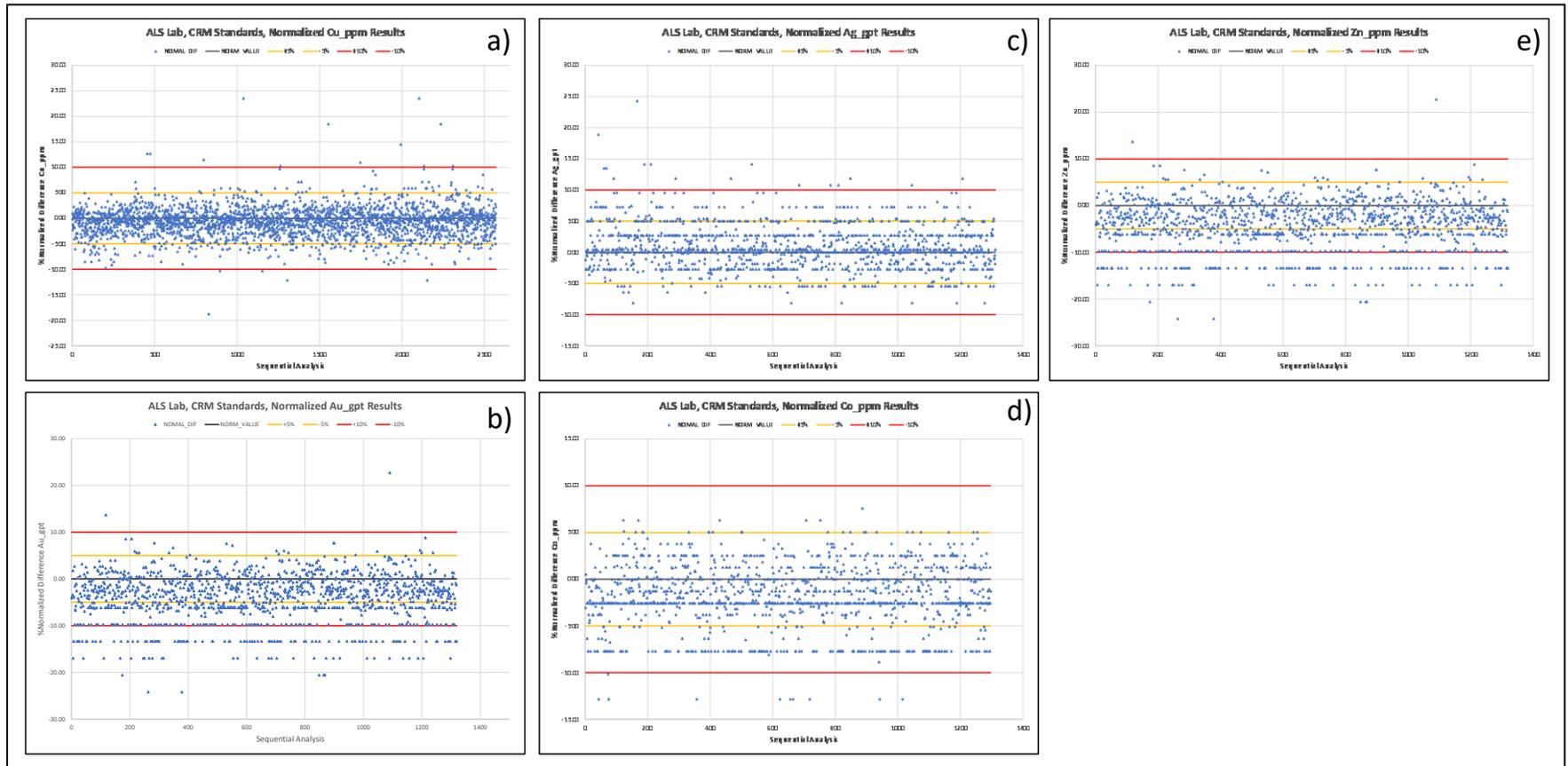
TABLE 11.9
SUMMARY OF OUT-OF-TOLERANCE STATISTICS FOR ANALYSES OF
ALS LABORATORY CRMS

Element	Total Number Analyses	$\geq+5\%/ \leq-5\%$		$\geq+10\%/ \leq-10\%$	
		Count	% Total	Count	% Total
Cu	2,570	222	8.60	19	0.70
Au	1,424	107	7.50	45	3.20
Ag	1,736	712	41.00	443	25.50
Co	1,297	230	17.70	13	1.00
Zn	1,315	545	41.40	135	10.30

Source: QC Copper (2023)

All ALS CRM results are plotted in chronological sequence and by element, with the various certified mean values standardized to 0% to allow side-by-side plotting in Figure 11.8. In the case of gold and zinc, most of the values that plot below -10% tolerance are attributable to the OREAS-45h CRM, which (as previously noted) has been determined to be unsuitable to monitor accuracy.

FIGURE 11.8 NORMALIZED CRM PERFORMANCE CHARTS FOR LABORATORY CRMs ANALYSED BY ALS FOR THE POST-2021 MRE DIAMOND DRILLING



Source: QC Copper (2023)

Notes: CRMs plotted are listed in Tables 11.7 and 11.8. Normalized certified values (0%) (black), plus control limits for ±5% (yellow) and ±10% (red) variation. Results plotted for Cu ppm (a), Au g/t (b), Ag g/t (c), Co ppm (d), and Zn ppm (e).

Performance of ALS Laboratory Internal Analytical Blanks

Analytical blanks accompany each client batch and a total 875 blank analysis were reported. These results provide estimates of the lower detection limit of the analytical method used and can, in some cases, highlight problems with the instrumentation. A summary of laboratory analytical blank results is given in Table 11.10. Results confirm that there were no issues with the instruments or reagents used to measure the concentration of the elements in the Opemiska Project. At most, the blank results were never more than three or four times the lower detection limit.

Type	Statistic	Cu (ppm)	Cu (%)	Au (g/t)	Ag (g/t)	Co (ppm)	Zn (ppm)	Zn (%)
Blanks	NUM	875	233	713	874	875	875	10
	MIN	1	0.001	0.005	0.05	0.2	1	0.001
	MAX	3	2	0.5	1	1	4	0.001

Source: QC Copper (2023)

11.5.3.3 Pulp Verification Sampling Results (Including Additional Pre-2021 MRE Data)

A suite of pulp samples was randomly selected from mineralized samples and submitted to a secondary laboratory, Actlabs in Ancaster, Ontario, to verify the accuracy of the analyses from ALS. Similar CRMs, digestion and analytical methods were used at the secondary laboratory. A total of 1,318 pulps (3.3% of drill core assays) were submitted for umpire analysis. The sample suite includes the original 45 samples from the 2021 drilling campaign and used in the 2021 MRE, an additional 412 pulps from the pre-2021 MRE drilling (in response to one of the recommendations that arose from P&E, 2021) and 861 pulp samples from the post-2021 MRE drilling program.

Results for the three economically important metals in the Opemiska Deposit (copper, gold and silver) are shown in Figure 11.9, with two diagram formats displayed: Average versus percent Difference plots on the left and QQ-Plots on the right. Average versus percent Difference plots allow visual estimation of the bias percentage for each sample and the overall between-lab pattern bias in the analyses. The QQ-Plots, which are constructed by independently sorting the results from smallest to largest, allow visualization of differences in sample accumulations with the rationale that any departure from the X=Y line (shown in black) is indicative of relative between-lab bias. This approach generally works in practice for the lower and middle part of the distribution, because towards the upper end, the number of samples is small, and the variance of the results much larger.

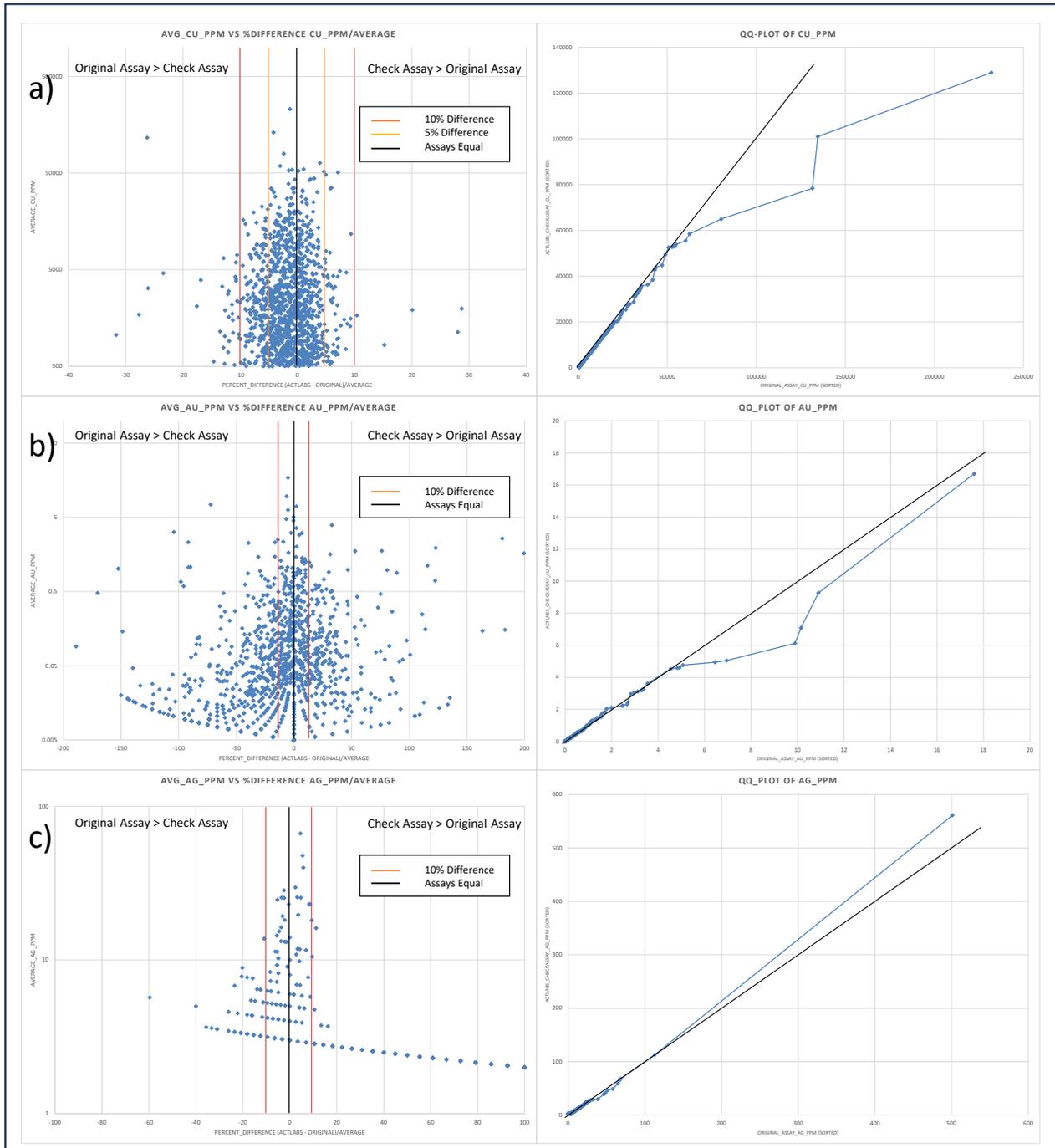
Results for copper on the left chart in Figure 11.9a show that most of the check samples assayed <5% difference compared to the original assays from ALS and the QQ-plot on the right indicates little bias in results up to approximately 5% copper, which includes most of the copper distribution

in the Deposit. The apparent bias in the high values is caused by the lack of data between the two datasets.

-

Results for gold (Figure 11.9b) are expectedly more variable, but also unbiased up to ~4.5 g/t Au. Silver results (Figure 11.9c) indicate absence of bias between the two laboratories up to ~120 g/t Ag. Finally, cobalt and zinc (not shown) show clear bias of 3 to 5% and 5 to 10% in favour of the secondary laboratory, for results >100 ppm and >60 ppm, respectively. The latter two elements, however, are not being used in the current MRE, and hence have little consequence on the results.

FIGURE 11.9 COMPARISON OF CHECK ASSAY RESULTS FROM ACTLABS WITH ORIGINAL ASSAY RESULTS FROM ALS GLOBAL



Source: QC Copper (2023)

Notes: A) Copper, b) Gold and C) Silver. Average versus % difference plots on the left and QQ plots on the right.

11.5.3.4 Opemiska Core Resampling Program (Includes Pre-2021 MRE Drill Core Resampling)

A total of 61 drill core samples were quartered and submitted to the original laboratory using the same methods of preparation and analysis as used in the primary laboratory and with the same CRMs and blank in order to better estimate the total variance of sampling. A standard statistical procedure, the Gage Repeatability & Reproducibility (“Gage R&R”), was used to estimate the sampling variance, with only the repeatability component, along with the part-to-part variation (the population of different duplicates) measured.

Duplicates were generally chosen randomly but selected to cover the approximate range of concentrations found in the Deposit. In addition, the average Absolute Percentage Difference (“APD”) for each element was calculated as an additional parameter to evaluate the variance of sampling. A total of 61 drill core duplicates were analysed, including duplicates from the 2021 diamond drilling campaign. Grouping data from different campaigns is considered acceptable as the parameter being estimated is inherent to the mineralization itself and not the laboratory. The Gage R&R results are summarized in Table 11.11. The columns shown in the table include the repeatability component of variance which, when added to the part-to-part variation adds up to 100%; a smaller value for repeatability is preferred and indicates that the duplicates cover a larger proportion of the range of values in the Deposit. The percent Study Var is the repeatability variance divided by the variance of the assays in the Deposit and the percent Tolerance is the repeatability variance divided by the range of assay value in the Deposit. Good measurement systems typically have values of <30% for both measures. Finally, the Discrimination Index (“DI”) is an estimate of the number of distinct classes of values can be defined in the duplicates. A DI of five or more indicates a good measurement system, whereas values of less than three raise questions about the data.

Element	N	Average % Difference	Repeatability Variance Component	% Study Var	% Tolerance or Range	Discrimination Index
Cu	61	30%	8.5	29.5	3.57	4
Au		52%	83.22	91.23	5.68	1
Ag		28%	5.51	1.46	117.22	5
Zn		16%	0.02	1.38	0.05	102
Co		21%	15.23	39.02	6.61	3

Source: QC Copper (2023)

Note: Calculation performed with Minitab v18.1; Standard Deviation Multiplier = 5.15; Alpha value to remove interaction = 0.1.

The average APD between the duplicates ranges from 16% (Co) to 52% (Au) and results are typical of vein type deposits. The average APD for gold is much higher than copper, which is typical as gold sampling variance is commonly twice the average for copper. This pattern is illustrated in the

Gage R&R results. Copper shows an acceptable percent Study Var (29.5) and excellent percent Tolerance (3.57), whereas gold shows high repeatability variance of 83%, a percent Study Var of 91%, with a percent Tolerance of only 5.7% and a DI of 1. Clearly, the gold assays are not very reliable; however, it is in the nature of the Deposit itself and not something that can be addressed easily by drill core sampling. A typical mineral deposit will contain sufficient analyses to somewhat improve the measurement system. Additionally, it should be noted that the bulk of the Deposit value stems from the copper mineralization (>70%), whereas the gold component is estimated to be <30%. Silver values show good percent Study Var at 1.46%, with very poor percent Tolerance at 117% and DI of 5. This is caused when the results are mostly low, including a few high-valued outliers, and indicates a reasonably good measurement system. Finally, but less importantly, zinc and cobalt values are acceptable for all the measures.

In conclusion, approximately one-third of the variance observed in the copper and silver results can be attributed to the measurement system, whereas the gold results reveal a much lower quality, and the zinc and cobalt results show a slightly better quality.

11.6 CONCLUSION

It is the opinion of the Author that sample preparation, security and analytical procedures undertaken by QC Copper at the Opemiska Project during drilling from 2019 to 2023 are adequate and that the data are of good quality and satisfactory for use in the current MRE.

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 twin-drilling program undertaken to verify the accuracy of the mine surface and underground drilling, generally indicate reasonable accuracy of the copper mining assays. However, these results are not definitive and more work is needed to better establish the quality of the in-house mine assays.

12.0 DATA VERIFICATION

12.1 DRILL HOLE DATABASE

12.1.1 Drill Hole Data (2019 to 2021)

The Authors 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 the Author from ALS Webtrieve or sent directly to the Author from Expert Lab. 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 MRE.

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

The Author 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 by QC Copper to the Author 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, 2021 TO 2016				
Cu Samples	2010	2015	2016	Total
Constrained Samples				
No. of Samples	468	102	217	787
No. Checked	424	102	191	717
% Checked	91%	100%	88%	91%
All Samples				
No. of Samples	667	159	299	1125
No. Checked	528	102	191	821
% Checked	79%	64%	64%	73%

Source: P&E (2021)

A total of 91% (717 out of 787 samples) of constrained copper data (consisting of samples included in the modelled mineralization shells) and 73% (821 out of 1,125 samples) of all 2010 to 2016 data were verified by the Author. Minor discrepancies were encountered during the verification process (ten in total, seven of which are results “offset” by one row). The Author does not consider the discrepancies encountered to be of material impact to the current MRE.

12.1.3 Drill Hole Data (2021 to 2023)

The Author conducted verification of QC Copper's 2021 to 2023 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. Assay certificates were either downloaded directly by the Author from ALS Webtrieve or were downloaded and received in comma-separated values ("csv") format.

All of the 2021 and 2023 drill hole data (40,751 samples) were verified for copper, silver, cobalt, zinc and gold. Very few minor discrepancies were encountered for copper, silver and gold, which are not considered material to the current MRE.

12.2 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 and successors, carried out work at the Property from 1953 to 1991, which consisted of 1,074,735 m of drilling from 17,471 surface and underground drill holes within and near the original vendor property outline. Falconbridge collected >375,931 samples for assay throughout this period. Unfortunately, no drill core, reject or pulp samples remain.

QC Copper completed a series of drill holes in 2019 and 2021, which included the twinning of select historical surface drill holes completed 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 drill holes discussed in this Report section are true twins. However, all the drill holes do confirm previously identified intersections.

A total of 36 diamond drill holes were completed in the vicinity of earlier Falconbridge surface drill holes. Cross-sections along drill holes were drawn for each pair of drill 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 drill holes.

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

- All historical mine drill holes were completed prior to mining and, therefore, all the drill holes traversed high-grade veins. QC Copper's recent drill holes were generally stopped at voids caused by stopes unless there was a crown pillar or internal pillar;
- Historical mine sample widths were commonly very narrow (sometimes as little as 4 to 6 inches) making comparison with modern sampling (typically 1 to 1.5 m) difficult. All original and recent drill holes were systematically composited over 1.5 m;

- Historical mine drill holes and surface drill holes in particular, were under-sampled, with only obviously high-grade intervals typically sampled. When the mine started production, sampling rates increased, but drill holes were still never completely sampled. The 2021 sampling was completed from top to bottom, except for a few cases where short intervals were missed for unknown reasons; and
- Not all mine samples were assayed for gold and silver. Zinc and (or) cobalt were assayed only where sphalerite and (or) cobalt bloom was observed.

QC Copper's twinning program of the historical Falconbridge surface drill holes generally confirms the grade of historical results; verifying that mineralized zones are located in the same locations as in the original drilling, the widths of mineralization are consistent and copper assays for the largest part of the grade curve in the 2021 MRE are similar to the results obtained by the Mine. Conversely, gold results are much more variable and difficult to compare with historical drilling results. Even though reasonable correlation is generally indicated for the copper assays, these results are not definitive and more work is required to better establish the quality of the in-house mine assays.

12.2.2 Ex-In Historical Database Verification

Ex-In, the previous operator at Opemiska, completed drilling at the Property from 2002 to 2016 (mainly 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 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 drill 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 plotted on the X=Y curve.

The twin drill holes selected for the study are listed below:

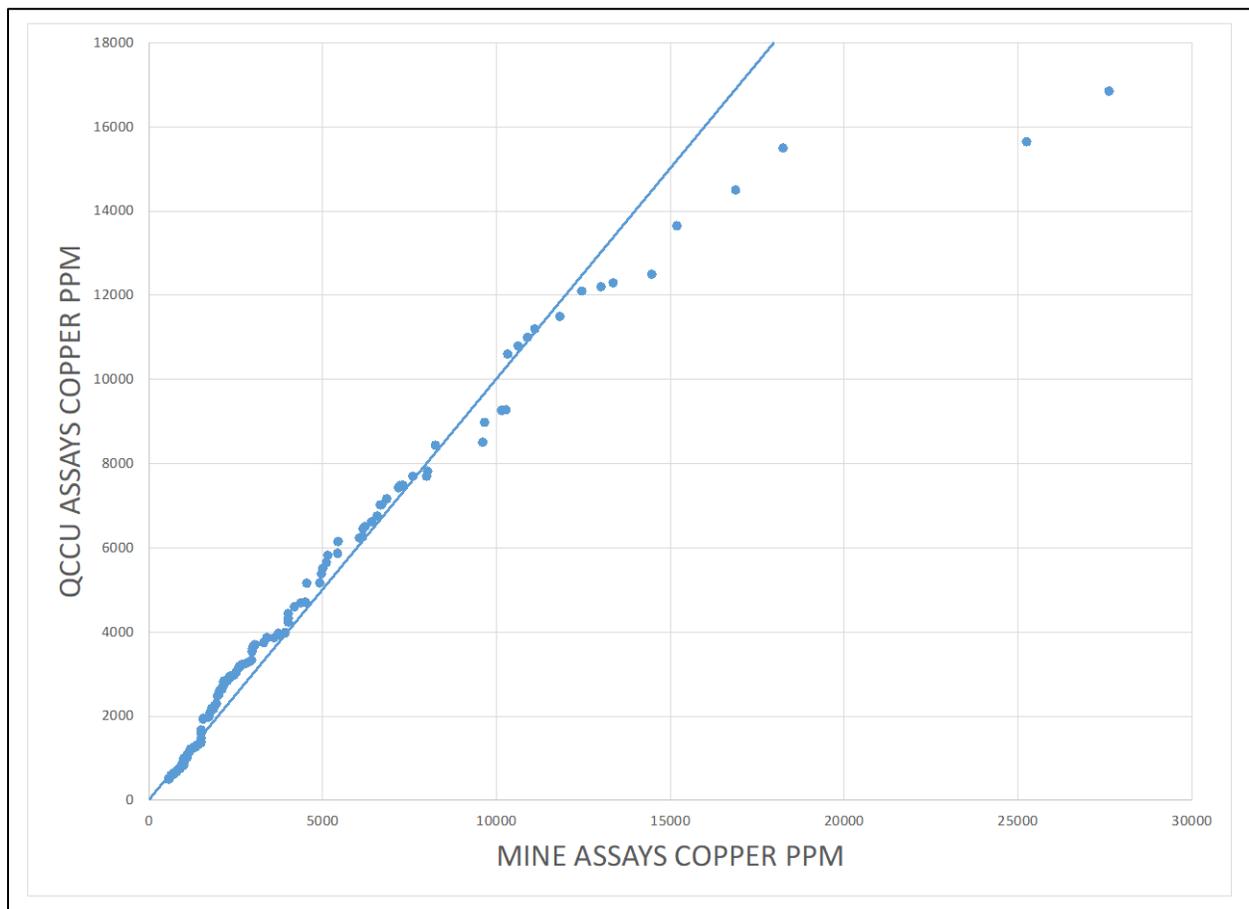
- S940 versus OPM-21-38
- S941 versus OPM-21-26
- S372 versus OPM-21-46
- S375 versus OPM-21-51

For meaningful comparison, both sets of data were composited to 1.5 m, all samples with <1.5 m were removed from the dataset, and data at lower detection levels were also removed. The resulting QQ-Plots for copper and gold are shown in Figures 12.1 and 12.2, respectively.

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

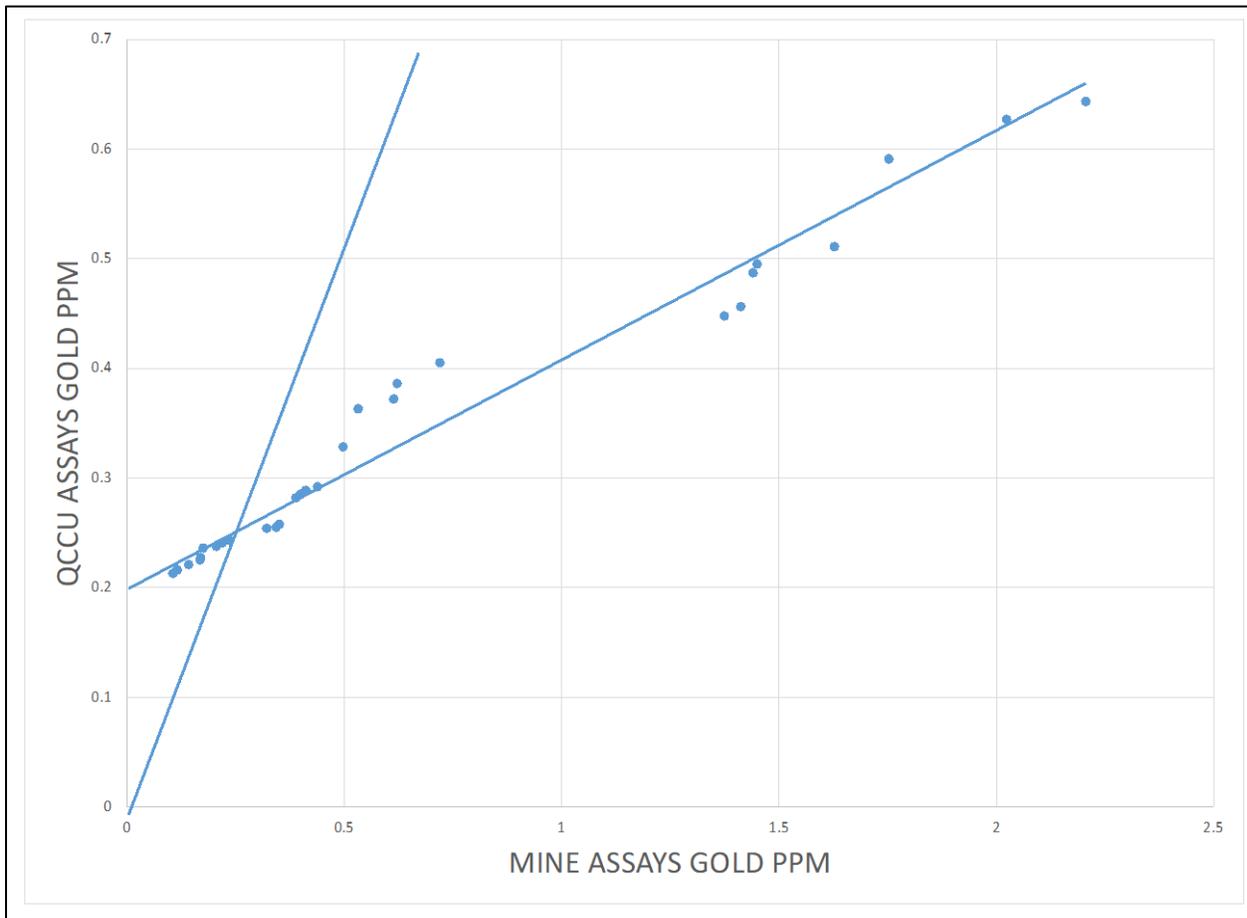
The same dataset was used to generate a QQ-Plot for the gold assays (Figure 12.2). However, the highest six assays were removed because they were extreme outliers. The gold results are more difficult to compare than for the copper assays, but the QC Copper results appear higher for assays <0.3 g/t gold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

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



Source: QC Copper (2021)

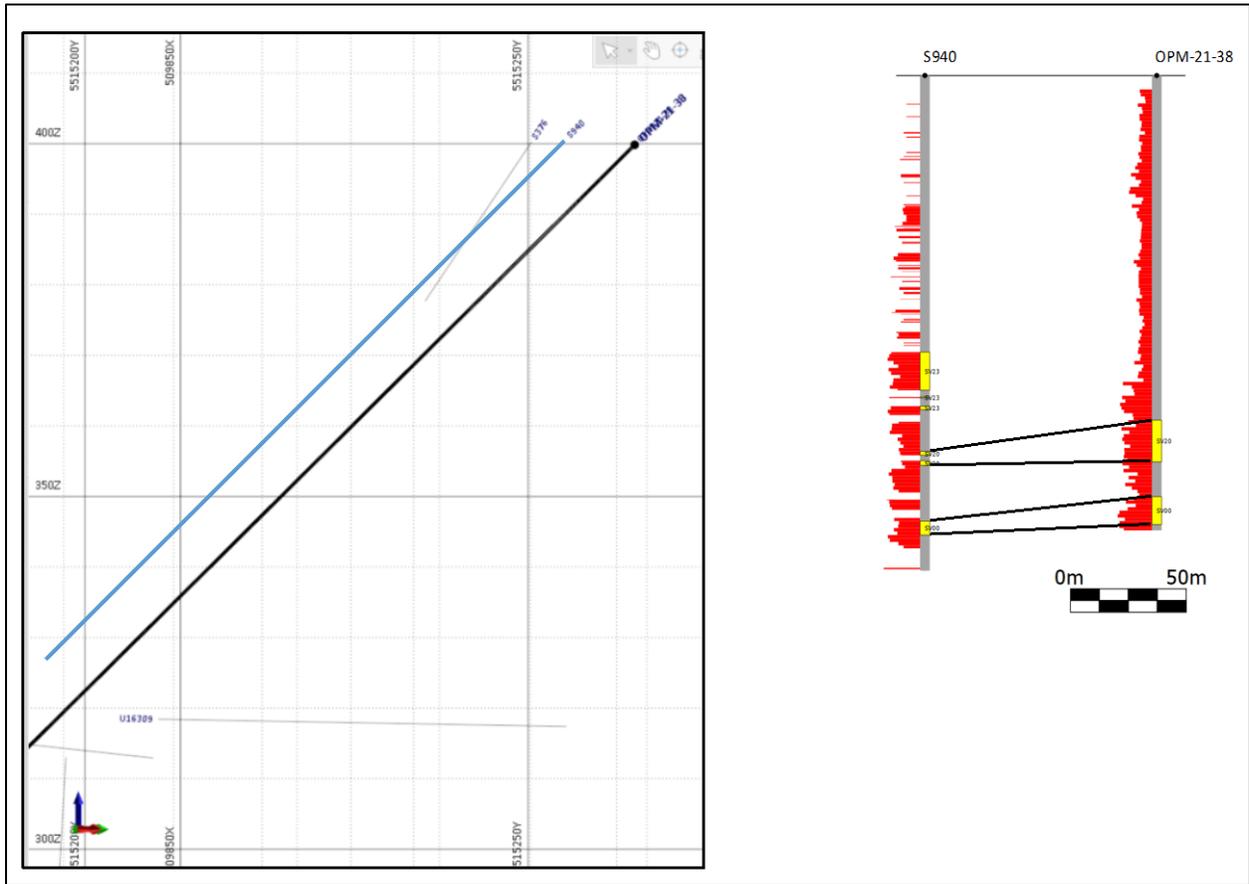
FIGURE 12.2 **QQ-PLOT STUDY FOR TWINNED EX-IN DRILL HOLES FOR AU**



Source: QC Copper (2021)

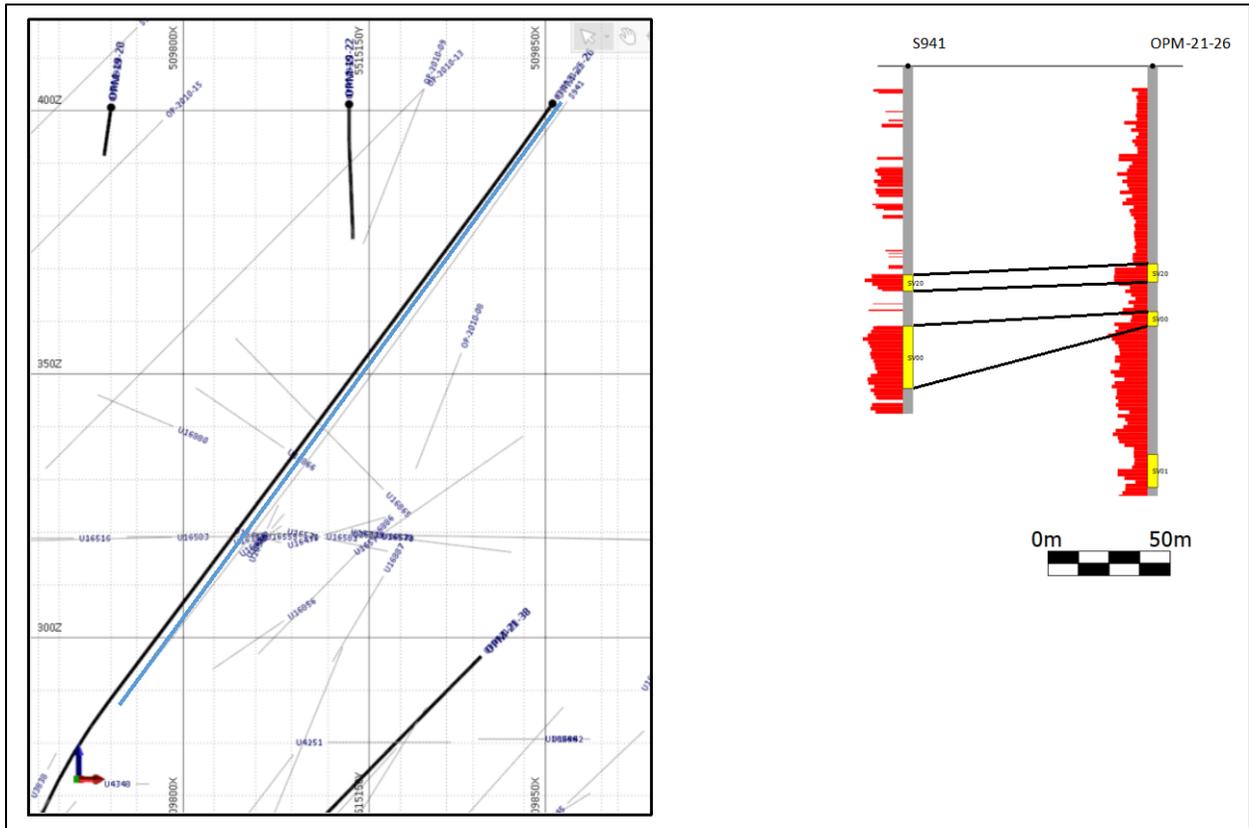
Cross-sections along the four sets of twinned drill holes were drawn for each pair of drill holes to visually compare the traces of the original. The drill holes were also relocated to be side-by-side and all dips registered as -90 degrees to better compare the copper histograms of the pairs of drill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

FIGURE 12.3 QC COPPER EX-IN TWINNED HOLE COMPARISONS: S940 VERSUS OPM-21-38



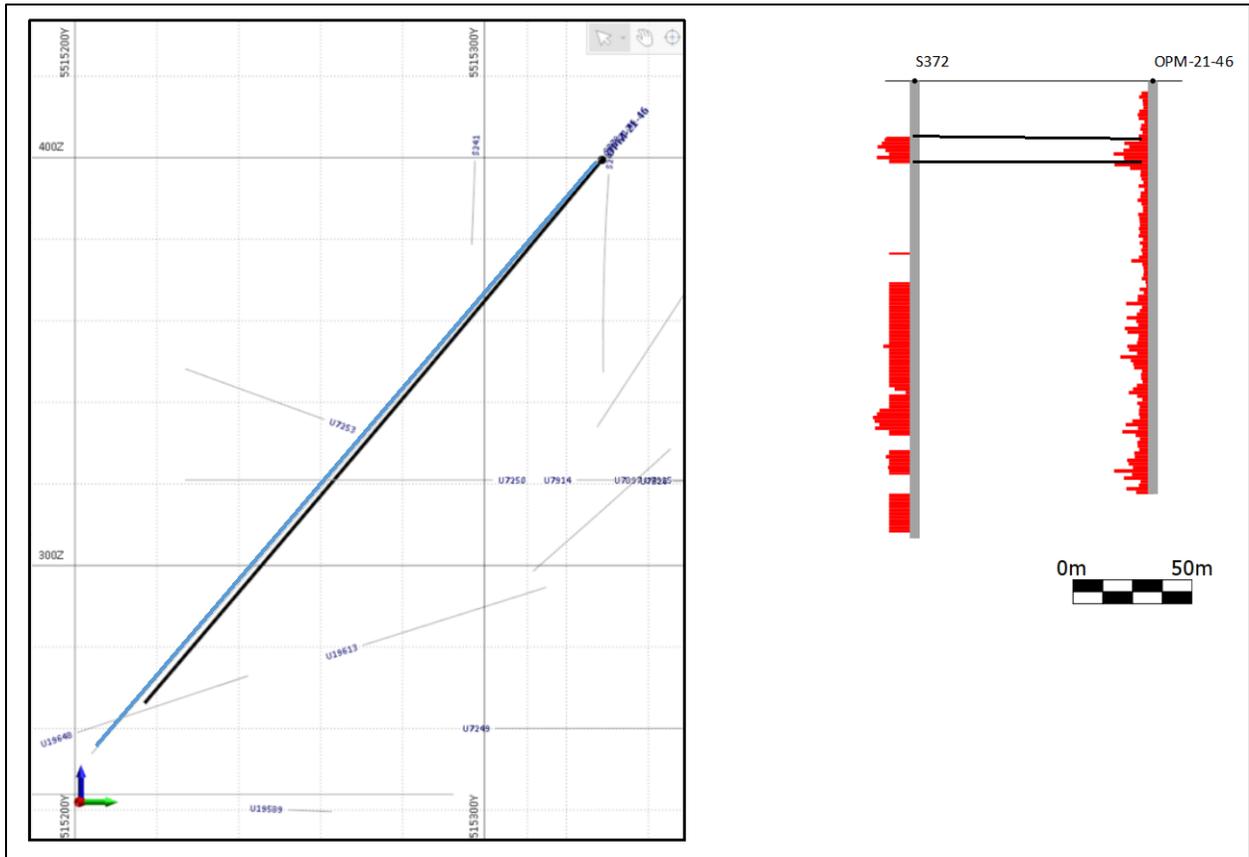
Source: QC Copper (2021)

FIGURE 12.4 QC COPPER EX-IN TWINNED HOLE COMPARISONS: S941 VERSUS OPM-21-26



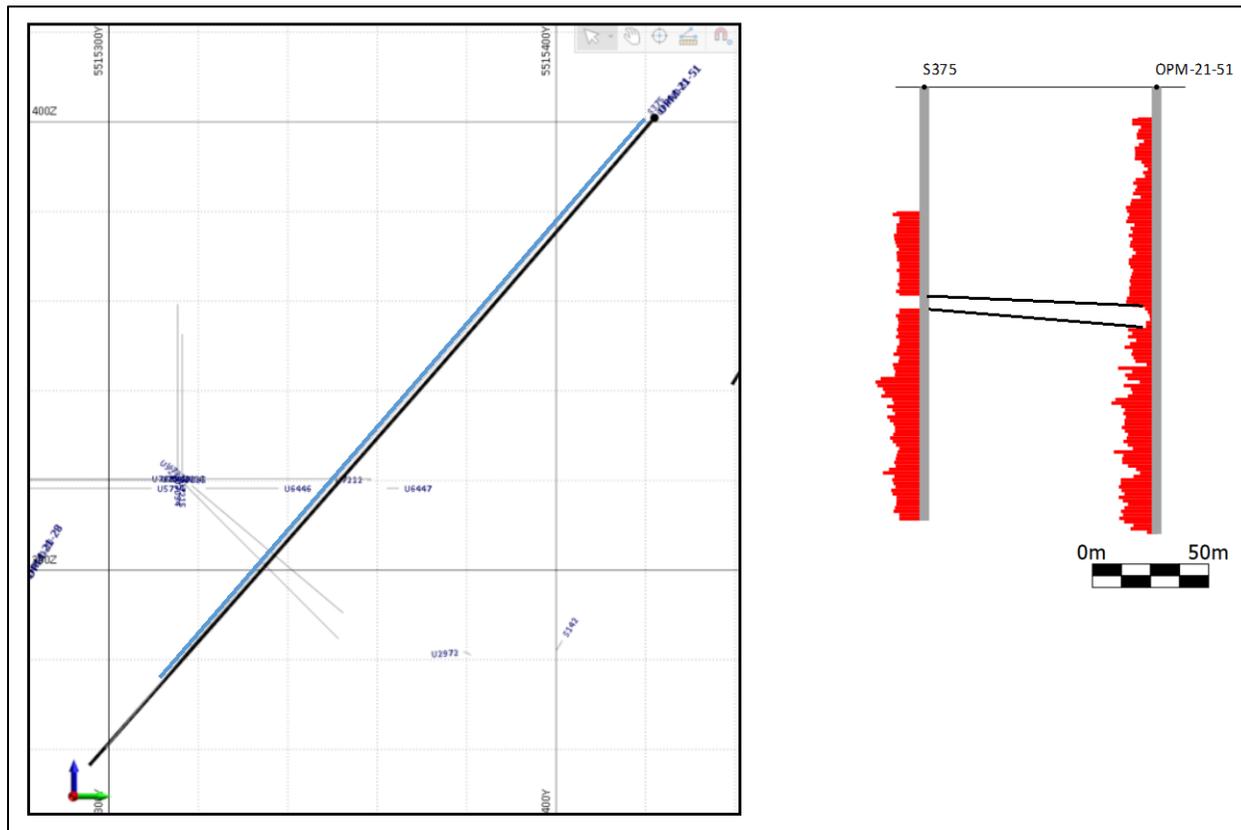
Source: QC Copper (2021)

FIGURE 12.5 QC COPPER EX-IN TWINNED HOLE COMPARISONS: S372 VERSUS OPM-21-46



Source: QC Copper (2021)

FIGURE 12.6 QC COPPER EX-IN TWINNED HOLE COMPARISONS: S375 VERSUS OPM-21-51



Source: QC Copper (2021)

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

12.2.2.2 Ex-In Historical Core Sampling Program

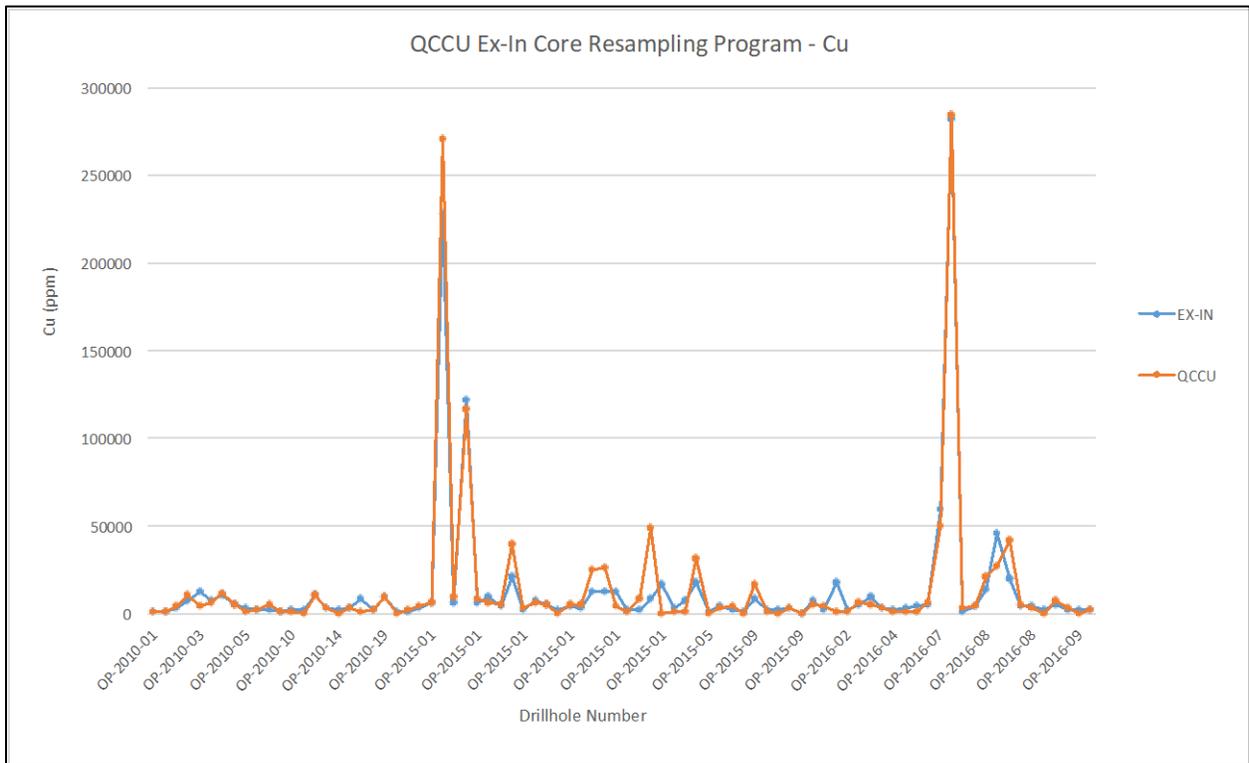
QC Copper carried out an historical drill core re-sampling program on select archived drill core from Ex-In’s 2010, 2015 and 2016 drilling campaigns at the Opemiska Property.

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 drill core sample stream, increasing the total number of drill core samples from 82 to 88.

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

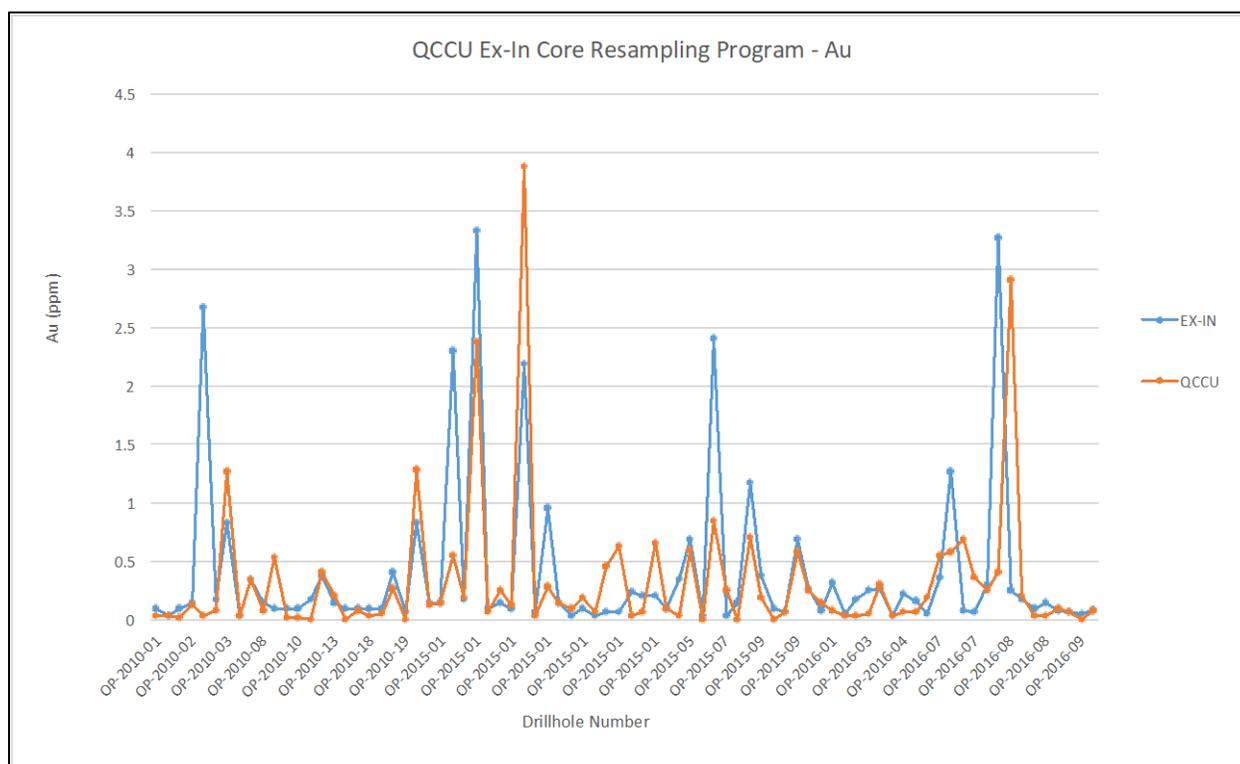
Results of the Company’s drill core resampling program for copper, silver and gold are presented in Figures 12.7 through 12.9.

FIGURE 12.7 QC COPPER EX-IN CORE RESAMPLING PROGRAM RESULTS FOR CU



Source: P&E (2021)

FIGURE 12.9 QC COPPER EX-IN CORE RESAMPLING PROGRAM RESULTS FOR AU



Source: P&E (2021)

The Author 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, and on February 24, 2023, for the purpose of completing independent site visits and due diligence sampling. The site visits also included discussions with the geologists and review of the operating procedures, with particular focus on the quality control protocol and sampling operations. During the site visits, it was arranged to randomly verify drilling sites. The verification was completed successfully in 2021. However, in 2023 the verification was limited to some collar casings from late-2021 and 2022, due to snowy weather conditions and some casings could only be identified by metal rods visible through the snow coverage.

Mr. Yassa collected 22 samples from seven diamond drill holes, five drill holes and 15 samples from QC Copper’s 2021 drill program, and two drill holes and seven samples from Ex-In’s 2010 drill program. In 2023, nine additional samples, from three drill holes, were collected from the 2022 drilling 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 drill 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

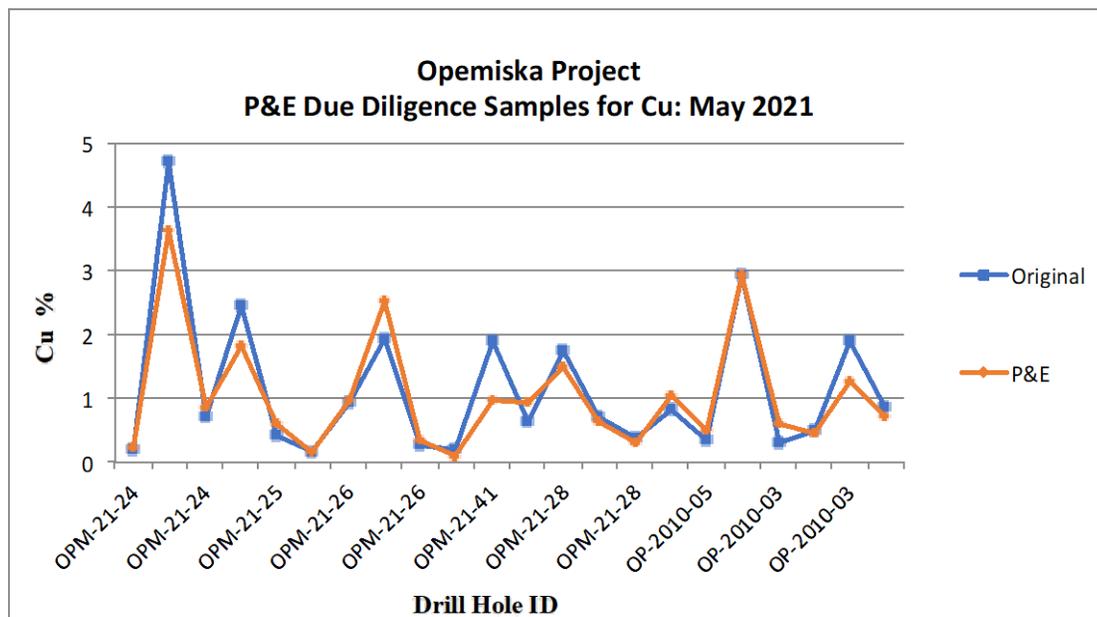
delivered by Mr. Yassa to the AGAT Labs preparation facility in Val d’Or, QC (2021) and the Actlabs facility in Ancaster, ON (2023) for analysis.

Samples at AGAT were analysed for copper, silver, zinc and cobalt by sodium peroxide fusion with ICP-OES/ICP-MS finish and for gold by fire assay with AAS finish. Samples at Actlabs were analysed for copper, silver, zinc and cobalt by total digestion with ICP-OES finish, and for gold by fire assay with AA finish. Drill core bulk density determinations were measured by wet immersion method on all samples.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a quality management system (“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. The Actlabs’ Quality System is accredited to international quality standards through ISO/IEC 17025:2017 and ISO 9001:2015. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Actlabs is also accredited by Health Canada. Both AGAT and Actlabs are independent of QC Copper and P&E.

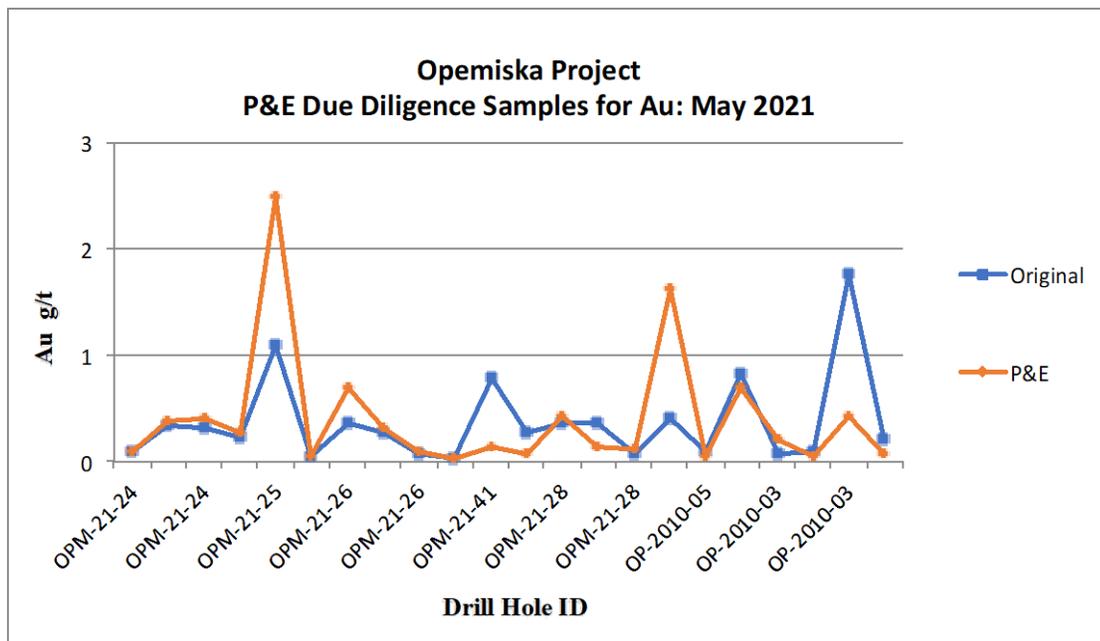
Results of the Opemiska site visit verification samples for copper and gold are presented in Figures 12.10 and 12.11 and for copper, gold, silver, zinc and cobalt in Figures 12.12 to 12.16.

FIGURE 12.10 RESULTS OF MAY 2021 CU VERIFICATION SAMPLING



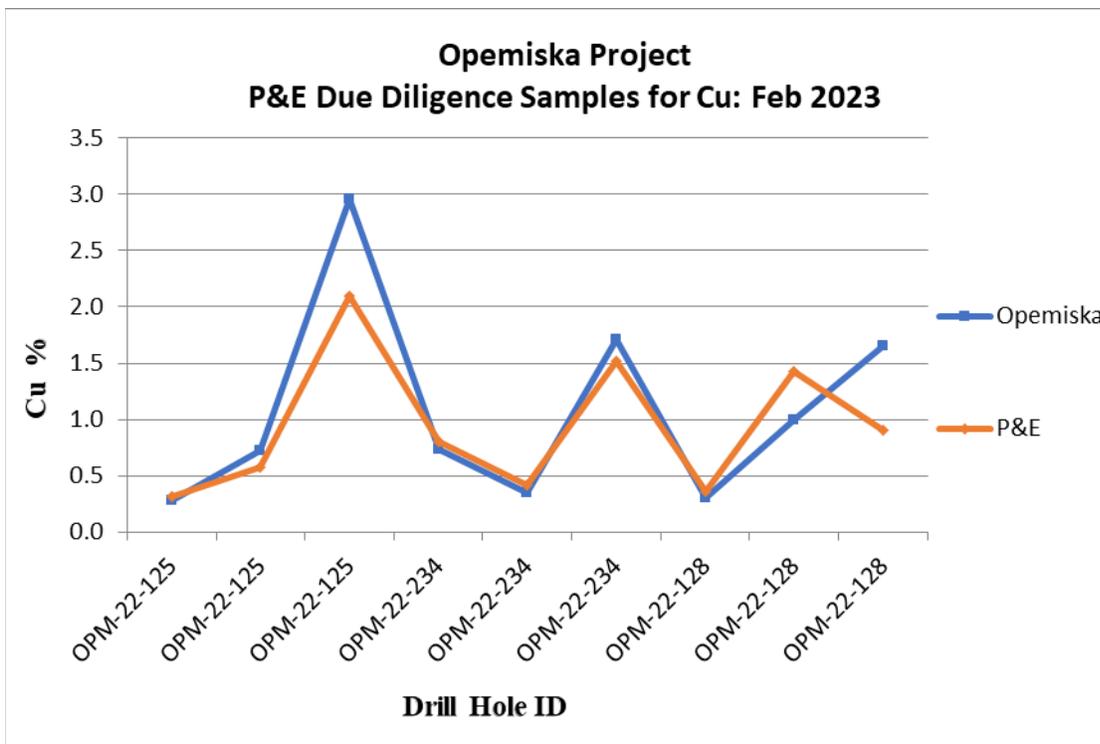
Source: P&E (2021)

FIGURE 12.11 RESULTS OF MAY 2021 AU VERIFICATION SAMPLING



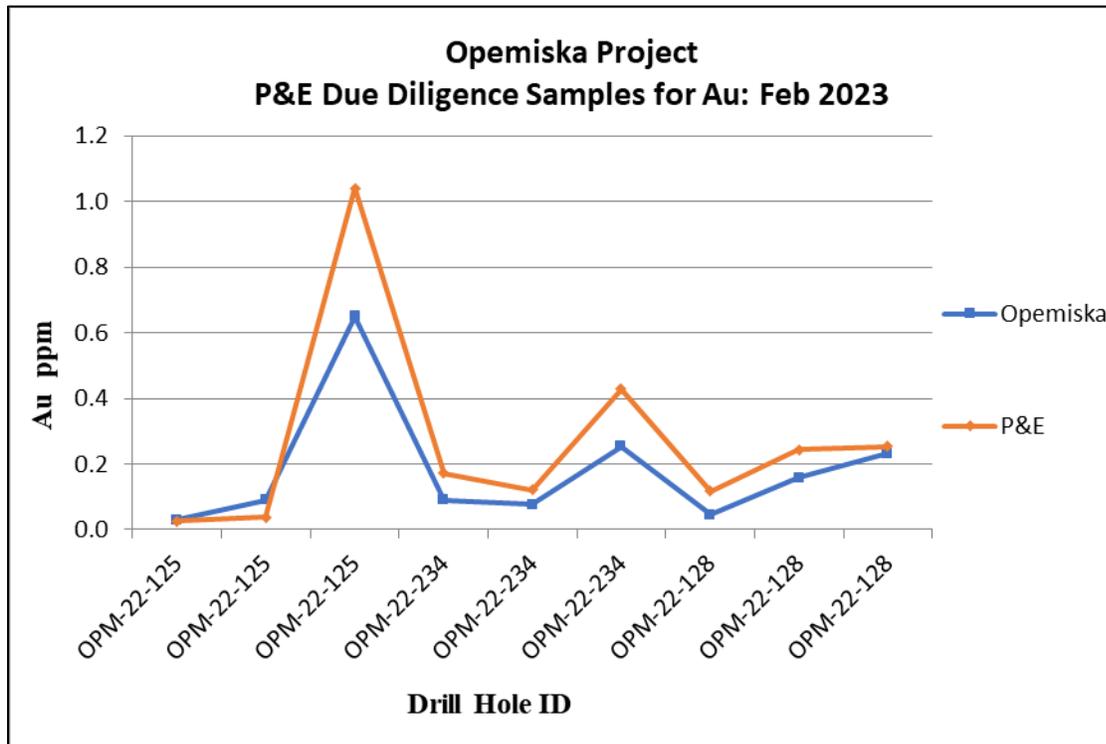
Source: P&E (2021)

FIGURE 12.12 RESULTS OF FEBRUARY 2023 CU VERIFICATION SAMPLING



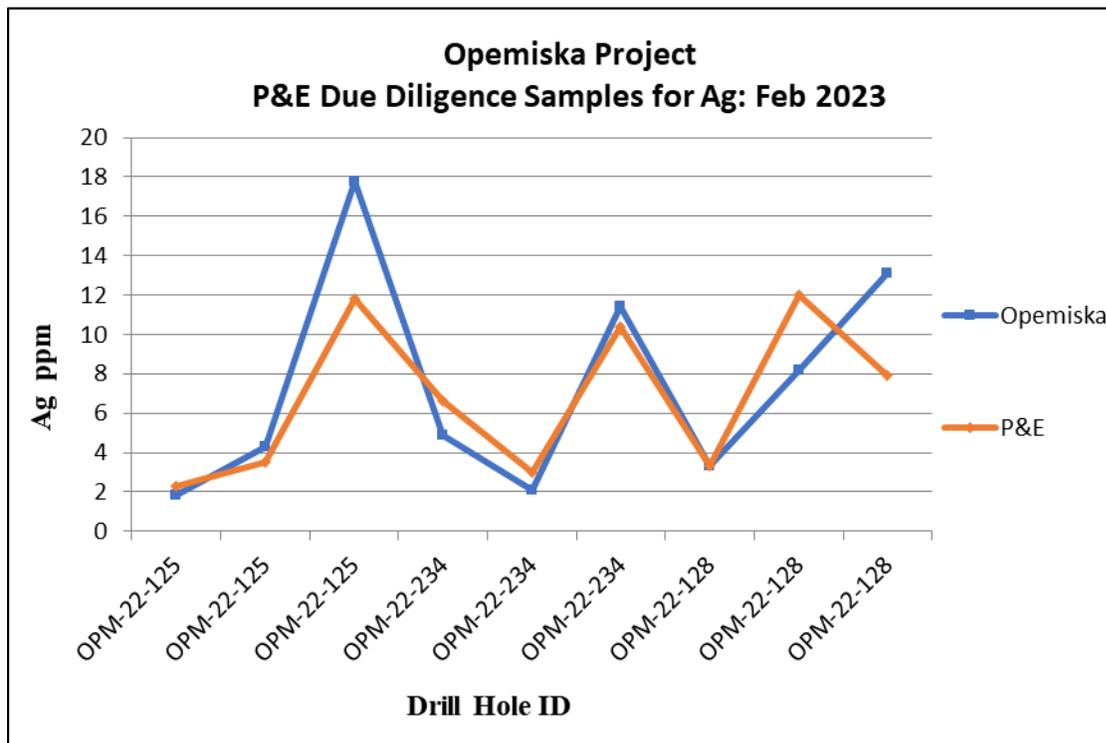
Source: P&E (2023)

FIGURE 12.13 RESULTS OF FEBRUARY 2023 AU VERIFICATION SAMPLING



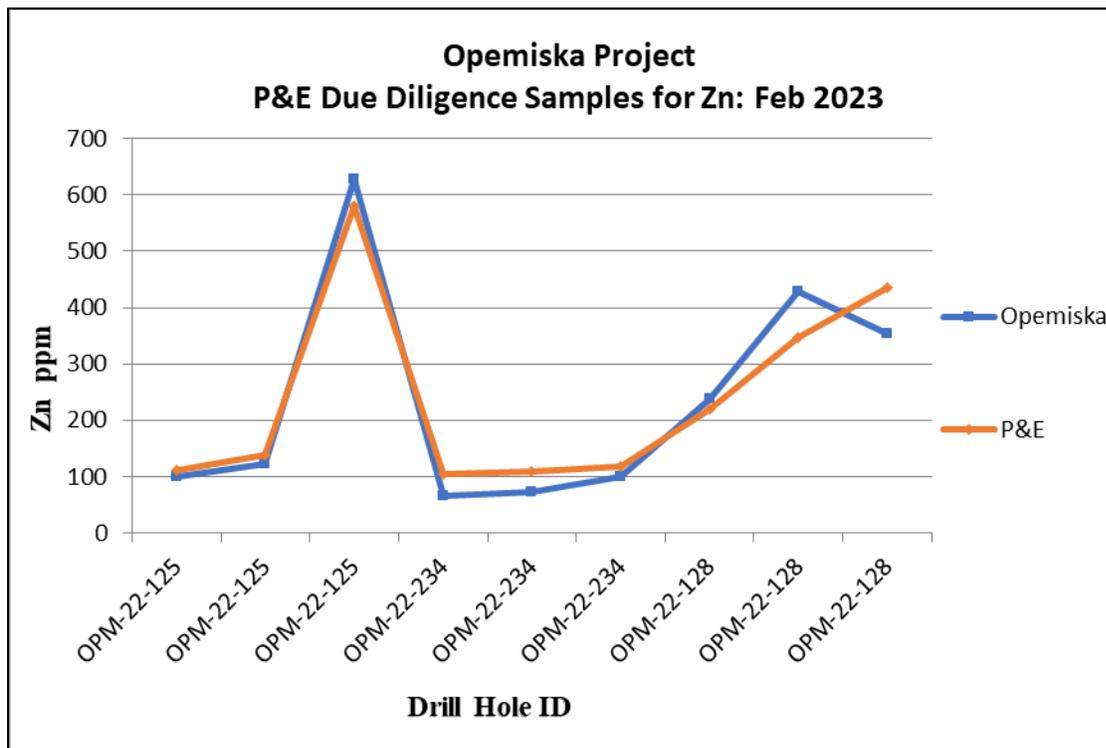
Source: P&E (2023)

FIGURE 12.14 RESULTS OF FEBRUARY 2023 AG VERIFICATION SAMPLING



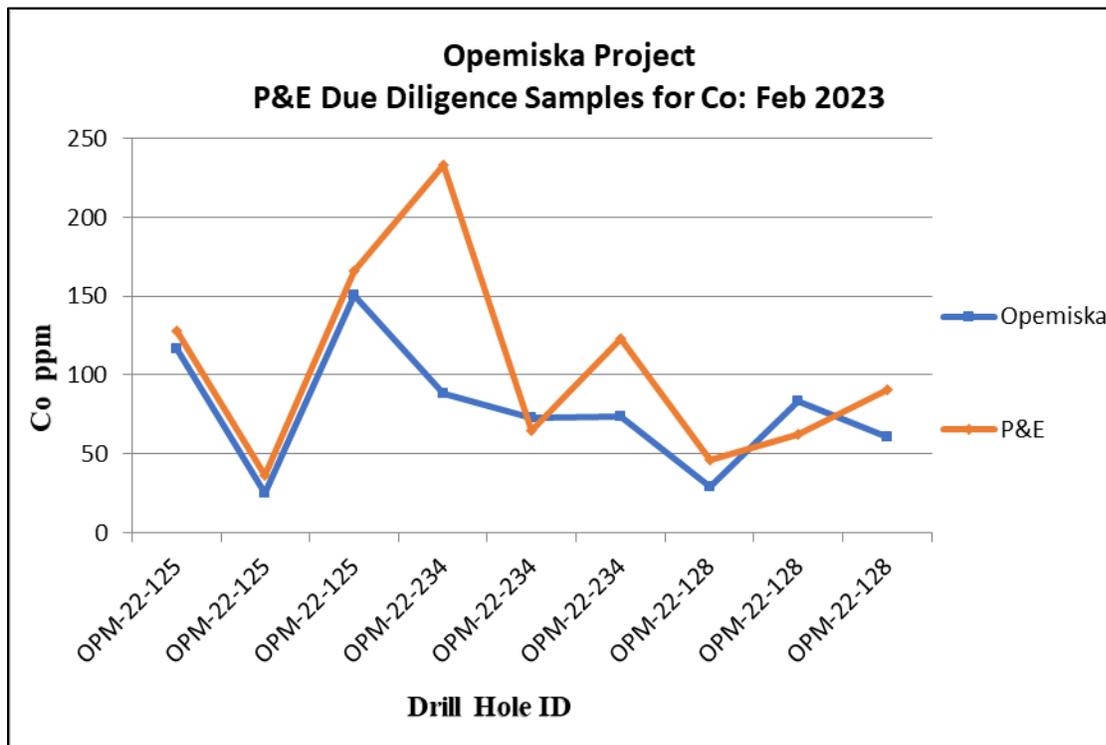
Source: P&E (2023)

FIGURE 12.15 RESULTS OF FEBRUARY 2023 ZN VERIFICATION SAMPLING



Source: P&E (2023)

FIGURE 12.16 RESULTS OF FEBRUARY 2023 CO VERIFICATION SAMPLING



Source: P&E (2023)

The Author considers there is good correlation between the copper, gold, silver, zinc and cobalt assay values in QC Copper's database and the independent verification samples collected by the Author and analysed at AGAT and Actlabs.

12.4 CONCLUSION

The Author concludes that the data, for which complete assay and location information is known, are of good quality and appropriate for use in the current MRE, based upon the following:

- The Author's independent site visit samples;
- The Author's database verification;
- Assessment of QC Copper's drill hole twinning program to confirm the mineralization reported by Falconbridge and Ex-In; and
- Assessment of the sample preparation, security and analytical procedures undertaken by QC Copper at the Opemiska Project during 2019 and 2023 and Ex-In from 2010 to 2016.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 GENERAL

Information on potential process metallurgy relies on the available records of production at Falconbridge's Copper and a recent (2023) mineralogical study and concentration testing on a composite sample prepared by QC Copper. Falconbridge Copper's Opemiska Mine operated from 1954 to 1991 and produced a high-grade copper concentrate with 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 Opemiska mineralized zones and from historical tailings. The processing techniques that were applied were basic gravity-based concentration techniques and magnetic separation. Economic potential of the application of these basic-gravity and "mag-sep" concentration technologies was not demonstrated by these test results.

A flotation metallurgical test program was completed at SGS Québec City on a single composite sample in June-July 2023. This sample contained 0.81% Cu and 1.23 g/t Au (Table 13.1).

Sample ID	Cu (%)	Au (g/t)	Ag (g/t)	Fe (%)	As (%)	S (%)
Composite 1	0.81	1.23	5.00	12.7	0.021	1.82

The copper grade of this composite is identical to the grade of the 2024 Measured and Indicated ("M&I") Mineral Resources, but the gold and silver grades are somewhat higher.

13.2 OPEMISKA PRODUCTION RECORD

Summaries of historical LOM production and of the final 10-years of production are shown in Table 13.2. High recovery was achieved for copper, with moderately high recovery for gold and silver, over the 37 years of operations.

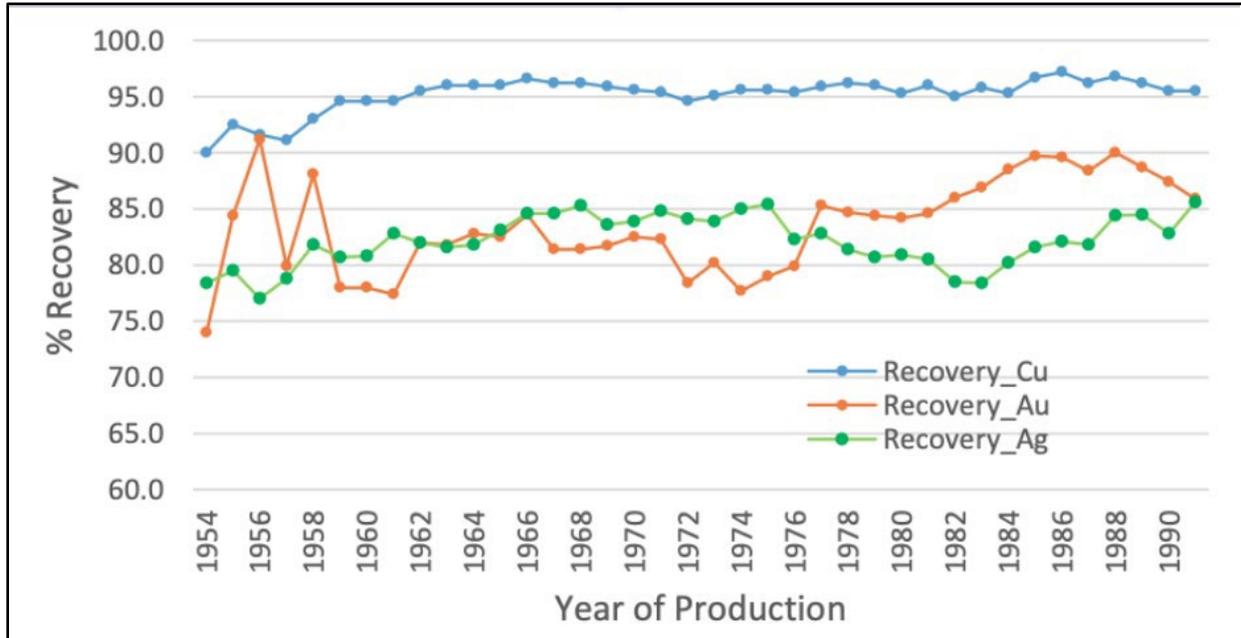
**TABLE 13.2
OPEMISKA MINE PRODUCTION RECORDS**

Year	Kt Processed (avg tpd)	Plant Feed Grade			Concentrate				Average Process Recoveries (%)		
		Cu (%)	Au (g/t)	Ag (g/t)	kt	Cu (%)	Au (g/t)	Ag (g/t)	Cu	Au	Ag
1954 to 1982	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 to 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 final 10-years of operations, the copper head grade was significantly lower and gold grade higher, but recoveries remained high. The copper grade in the concentrate was slightly lower than possibly desirable at the time, but the gold in the process plant feed doubled and the concentrate grade approached 1 troy ounce (31.1 g/t Au).

The historical annual performance record (% process recoveries) is shown in Figure 13.1. It is understood by the Author that gravity concentration of gold was introduced by Falconbridge during the later years of operation.

FIGURE 13.1 ANNUAL HISTORICAL PROCESS RECOVERY



Source: QC Copper Investor Presentation dated 4th Quarter 2023

13.3 MINERALOGY

Information on copper and gold mineralogy was not available for review on historical mineral production, other than reports that the host minerals were silica and calcite, and the copper mineralogy was essentially chalcopyrite. Additional sulphides were reported to be mainly pyrite with some pyrrhotite.

Bulk mineralogy identification was performed by SGS - QEMSCAN and X-ray diffraction (“XRD”), on the July 2023 Composite No. 1 sample. Gold deportment was examined by heavy liquid separation (S.G. = 2.85), and tabling and microscopic gold grain identification/association.

13.3.1 Mineral Identification

The main minerals in the 2023 composite sample were identified (in order of decreasing abundance) to be feldspars, amphibole, pyroxene, stilpnomelane (a soft potassium-iron silicate mineral), quartz, iron oxides, chlorite, micas and calcite. Minerals of economic interest are chalcopyrite (2.5%), pyrite (1.8%), iron-oxides (4.6%), and arsenopyrite (0.06%), all of which may host gold. Pyrrhotite was not observed.

13.3.2 Mineral Association

At a laboratory grind of 80% -140 Mesh, the chalcopyrite grains were 60% liberated, 23% partially (30 -80%) exposed, and 16% minorly (<30%) exposed. The amount of completely locked chalcopyrite was very low at 0.8%. The copper mineralogy results suggest an optimum concentration approach could include modest grinding and rougher flotation, followed by a regrind and a cleaner flotation phase.

Most of the gold present in the composite sample was identified as electrum (76 wt%), with 21 wt% as native gold. Electrum is 50 to 75% gold and 25 to 50% silver. A small proportion was identified as kustelite. Kustelite contains 25 to 50% gold, with the balance being silver.

The gold mineralization was characterized by SGS as being over 70% pure, free and liberated. The non-liberated gold occurred in complex association with pyrite (8%), arsenopyrite (6%), and chalcopyrite (2%). These associations suggest that depending on grind size, up to 14% of the gold would be challenging to physically recover from the mineral assemblage.

The gold grain ranged in size from <3 to >75 µm. The +75 µm fraction represented 40% of the gold mass. This result suggests that a modern gravity concentration circuit upstream of flotation could be beneficial in maximizing gold recovery.

13.4 REVIEW OF HISTORICAL OPEMISKA PLANT OPERATIONS

The Opemiska process included multi-stage crushing, ball mill grinding and a conventional flotation circuit using Sub-A (Denver sub-aeration) cells. As noted above, in later years of operation, a gravity circuit recovered free coarse-grained gold in advance of flotation of copper-gold. 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 the City of 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.

A modern processing circuit could include SAG-ball mill grinding, high-intensity gravity concentrators, high-efficiency flotation cells, attrition regrinding units, and pressure filtration of the final concentrate. High-pressure grinding rolls (“HPGR”) are an optional component of grinding. However, this technology is more applicable where leaching is performed and electricity costs are very high – neither of which are applicable to Opemiska.

13.5 2023 METALLURGICAL TESTING RESULTS ON AN OPEMISKA COMPOSITE

The SGS laboratory in Québec City performed basic grinding and flotation tests on the No. 1 Composite sample (Table 13.1).

Six rougher flotation tests indicated that a modest grind of P₈₀ 105 µm (140 Mesh) was better than a coarser grind of 150 µm (100 Mesh). Rougher copper and gold recoveries were 98 and 93%, respectively. The copper, gold and silver grades were 4.6%, 8.3 g/t and 21.5 g/t, respectively, in a 17.8% mass pull.

An optimized cleaner test yielded a final copper recovery of 90% (94% recovery to 1st cleaner + scavenger concentrate) with a grade of 26.5% Cu and a final gold recovery of 73% (81% recovery to 1st cleaner + scavenger concentrates), with a grade of 27.1 g/t Au. The regrind target (P₈₀) on intermediate concentrates was moderate at 25 to 30 µm.

SGS suggested, and the Author agrees, that in closed cycle testing, good grades and recoveries could be expected – those comparable to historical results.

13.6 ANTICIPATED METALLURGICAL PERFORMANCE OF THE OPEMISKA RESOURCE

Assuming the mineral composition of the current Mineral Resources approximately resembles the historical mineral resource, high recoveries of copper and gold could be anticipated in a modern mineral processing facility. As noted above, modern equipment and processes could be anticipated to produce comparable grades and recoveries of copper, gold and silver, in spite of lower Mineral Resource grades.

Copper and gold recoveries similar to historical recoveries – 95% copper recovery and 85% gold recovery, could be anticipated. A proportion of the gold could be recovered by gravity methods and refined on-site, or sold as a separate concentrate. The copper grade of the concentrate could be expected to be increased to 23 to 25% Cu, which would increase the NSR value of the concentrate.

14.0 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The updated Mineral Resource Estimate (“MRE”) 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:

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Mineral Resources that are not 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 Resources.

The updated Opemiska Mineral Resource was developed by QC Copper using Leapfrog and Micromine software, based on drill hole results received to February 10, 2023. The Mineral Resource models were then supplied to the Authors for review. This MRE review has been prepared under the direction of Antoine Yassa, P.Geo., and Eugene Puritch, P.Eng., FEC, CET, of P&E Mining Consultants Inc., both independent Qualified Persons in terms of NI 43-101 by reason of education, affiliation with a professional association, and past relevant work experience. A draft copy of this Report has been reviewed by QC Copper for factual errors.

14.2 DATABASE

All drilling and assay data were provided by QC Copper in the form of csv data files and imported into a GEMSTTM database. The data as supplied consist of collar, survey, assay, bulk density, and composite tables. Assay data consists of Cu, Au and Ag grades. A drill hole plan is shown in Appendix A. The coordinate reference system used is NAD83 UTM Zone 18N (EPSG 26918). Topography and overburden surfaces and underground development wireframe models were also supplied.

The data as supplied contains 17,753 collar records. Of these, 991 drill holes were not assayed, and 1,715 drill holes were outside the modelled mineralization zones. Seven drill holes were wedged deflections. A total of 15,034 drill holes are therefore available for modelling (Table 14.1). Summary statistics of the assays are presented in Table 14.2.

Dataset	No. of Drill Holes	Metres
Surface Drilling	554	88,817
Underground Drilling	14,480	784,369
Total	15,034	873,186

Variable	Cu	Au	Ag	Length
Number of Samples	364,396	286,740	241,509	364,468
Mean	0.75	0.47	3.12	1.18
Std Dev	2.01	4.23	11.04	0.61
Coefficient of Variation	2.69	9.02	3.54	0.51
Minimum	0.0001	0.01	0.10	0.03
Median	0.10	0.08	0.10	1.22
Maximum	33.40	620.22	501.00	10.97

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

14.3 DATA VERIFICATION

Verification of 91% of the 2010 to 2016 and 100% of the 2021 to 2023 wireframe constrained assay databases was performed by the Authors 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.

The Authors validated the MRE database 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 are of the opinion that the supplied database is suitable for Mineral Resource estimation.

14.4 DOMAIN INTERPRETATION

Interpreted mineralization wireframes were developed by QC Copper geologists based on logged drill hole lithology, assay grades, historical records, vertical cross-sections and level plans. QC Copper identified continuous zones of mineralization from assay grades equal to or greater than 0.15% Cu with observed continuity along strike and down-dip. The selected intervals include lower grade material where necessary to maintain continuity between drill holes. Three-dimensional wireframes were subsequently constructed using the Leapfrog™ Radial Basis Function, with hanging wall and footwall surfaces snapped directly to the drill hole intercepts. After visual inspection, a few of the veins were adjusted manually and over all acceptance by the Authors was achieved.

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. An overburden/bedrock surface was generated by QC Copper from drill hole log top of casing information.

Wireframes of historical underground excavations (stopes and drifts) were provided by QC Copper and were digitized from georeferenced, scanned historical plans and vertical cross-sections. The mined out areas were utilized to deplete the MRE at both the Springer and Perry Zones, although there is a possibility that the historical stope locations at the Springer and Perry Mines may slightly differ from the real locations since they may not be totally enclosed in the mineralized envelopes or totally enclose the mined-out portions of the copper-gold veins.

The Authors are of the opinion that the supplied mineralization models are suitable for Mineral Resource estimation.

14.5 MODEL ROCK CODE DETERMINATION

A total of 72 mineralization domains were defined by QC Copper. Model rock codes were assigned to each mineralization domain for the MRE, as presented in Table 14.3. By volume, eight domains incorporate 51% of the Mineral Resource: 1020, 1030, 1090, 1230, 2010, 2020, 2040, 2081.

Zone	Domain	Rock Code	Volume (k m ³)
Springer	V00	1000	356
Springer	V01	1010	805
Springer	V02	1020	5,639
Springer	V03	1030	6,745
Springer	V03-EXT	1031	447
Springer	V04	1040	628
Springer	V05	1050	772
Springer	V05B	1051	460
Springer	V06	1060	940
Springer	V06S	1061	268
Springer	V07	1070	1,236
Springer	V07S	1071	1,023
Springer	V08	1080	230
Springer	V09	1090	2,258
Springer	V10	1100	631
Springer	V11-1	1111	226
Springer	V11-2	1112	305
Springer	V13	1130	236
Springer	V20	1200	242
Springer	V21	1210	242
Springer	V22	1220	206
Springer	V23	1230	1,401
Springer	V28	1280	9
Springer	V29	1290	71
Springer	V30	1300	127
Springer	V31	1310	166
Springer	V31A	1311	2
Springer	V32	1320	332
Springer	V32B	1321	36
Springer	V33	1330	181
Springer	V33B	1331	194
Springer	V34	1340	373
Springer	V34-N	1341	213
Springer	V34B	1342	228
Springer	V34C	1343	33

TABLE 14.3
MODEL ROCK CODES OF MINERALIZATION DOMAINS

Zone	Domain	Rock Code	Volume (k m³)
Springer	V34D	1344	34
Springer	V34E	1345	131
Springer	V34F	1346	11
Springer	V39-40	1390	466
Springer	V41	1410	247
Springer	V41B	1411	440
Springer	V42	1420	443
Springer	V42A	1421	80
Springer	V43	1430	91
Springer	V60	1600	192
Springer	V61	1610	119
Springer	V62	1620	174
Springer	V63	1630	63
Springer	V64-65	1640	74
Springer	V72	1720	94
Perry	VA	2010	1,424
Perry	VA-1	2011	560
Perry	VA-2	2012	410
Perry	VB	2020	3,245
Perry	VB-2	2021	28
Perry	VC	2030	1,379
Perry	VD	2040	3,478
Perry	VE	2050	715
Perry	Veja	2060	1,037
Perry	VJb	2061	506
Perry	VJc	2062	1,195
Perry	VJ-1	2063	204
Perry	VJ-2	2064	462
Perry	VK	2070	702
Perry	Fault P1	2080	1,159
Perry	Fault P2	2081	2,930
Perry	Fault P3	2082	573
Perry	Fault B	2090	1,005
Perry	Fault J	2091	135
Saddle	V01	3010	500
Saddle	V02	3020	1,219
Saddle	V03	3030	303

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. Summary statistics of the constrained assays are presented in Table 14.4.

TABLE 14.4				
SUMMARY STATISTICS OF CONSTRAINED ASSAYS				
Variable	Cu	Au	Ag	Length
Number of Samples	189,467	134,903	101,883	189,497
Mean	1.21	0.73	5.75	1.14
Std Dev	2.52	5.60	14.75	0.64
Coefficient of Variation	208.12	763.20	256.30	56.30
Minimum	0.0001	0.01	0.10	0.03
Median	0.35	0.08	0.17	1.21
Maximum	32.00	620.22	459.42	7.62

Note: Cu 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, QC Copper selected a nominal 1.5 m compositing length for the drill hole intervals that fell within the constraints of the above-mentioned Mineral Resource model wireframes. The composites were calculated for copper, gold and silver 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, and then length distributed equally throughout the drill hole/wireframe intercept. The compositing process was halted upon exit from the footwall of the 3-D wireframe constraint. Generally, intervals from un-assayed underground drill holes used as structure delimitation instead of grade control were treated as null value intervals, and un-assayed intervals for partially assayed drill holes were treated as zero-grade intervals. By exception, unsampled intervals at the start of an underground hole reaching another mineralized structure were treated as null. The constrained composite data were extracted to a point area file for analysis. The composite summary statistics are presented in Table 14.5.

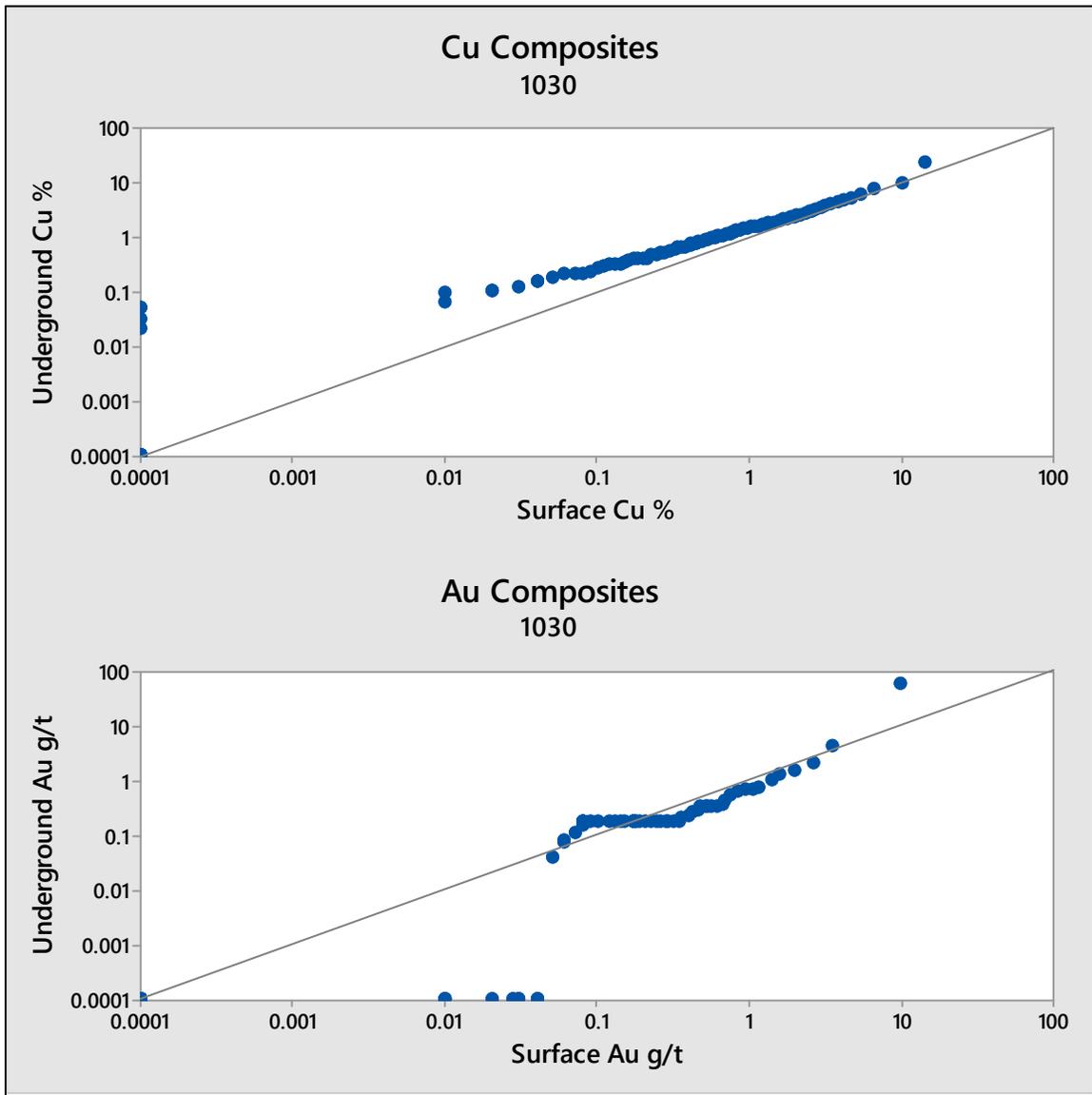
TABLE 14.5
COMPOSITE SUMMARY STATISTICS

Variable	Cu	Au	Ag	Length
Number of Samples	161,199	161,199	161,199	161,199
Mean	0.87	0.31	1.76	1.50
Std Dev	1.69	1.82	6.40	0.13
Coefficient of Variation	1.95	5.93	3.63	0.08
Minimum	0.00	0.00	0.00	0.50
Median	0.29	0.08	0.00	1.50
Maximum	28.23	232.42	251.52	2.24
Number of Samples = 0	20,123	61,637	94,002	0

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

The Authors reviewed the distribution of copper and gold grades between underground and surface drilling for uncapped composites for the rock code 1030 or V03 domain. The results suggest that surface drilling slightly underestimates copper grades by <1.0%, possibly due to the more scattered surface drilling locations and the earlier periods when surface exploration drill holes were assayed using less efficient methods with different detection limits (Figure 14.1).

FIGURE 14.1 DISTRIBUTION OF UNDERGROUND AND SURFACE CU AND AU COMPOSITES



14.8 GRADE CAPPING

Grade capping was performed on raw assay values within each constraining domain to control possible bias resulting from erratic high-grade values. Log-normal histograms and log-probability plots for gold assay sample results were generated for each mineralized domain. Selected log-probability plots are presented Appendix C. The grade capping values are detailed in Table 14.6. The capped assay values were utilized to develop variograms for block model grade interpolation. Samples were capped to the defined threshold prior to grade estimation.

TABLE 14.6
ASSAY CAPPING THRESHOLDS

Domain	Model Rock Code	Cu (%)	Au (g/t)	Ag (g/t)
Springer-V00	1000	15	20	35
Springer-V01	1010	20	30	80
Springer-V02	1020	20	35	110
Springer-V03	1030	20	25	90
Springer-V03Ext	1031	20	25	90
Springer-V04	1040	20	30	80
Springer-V05	1050	20	20	110
Springer-V05B	1051	20	40	130
Springer-V06	1060	20	110	130
Springer-V06S	1061	10	15	50
Springer-V07	1070	20	45	125
Springer-V07S	1071	10	55	110
Springer-V08	1080	20	10	70
Springer-V09	1090	20	25	100
Springer-V10	1100	10	5	65
Springer-V11-1	1111	10	10	30
Springer-V11-2	1112	20	5	40
Springer-V13	1130	10	10	50
Springer-V20	1200	10	5	35
Springer-V21	1210	15	10	70
Springer-V22	1220	10	10	60
Springer-V23	1230	20	25	65
Springer-V28	1280	5	No cap	No cap
Springer-V29	1290	15	5	60
Springer-V30	1300	15	15	50
Springer-V31	1310	20	15	35
Springer-V31A	1311	No cap	No cap	No cap
Springer-V32	1320	15	15	60
Springer-V32B	1321	5	5	35
Springer-V33	1330	15	20	70
Springer-V33B	1331	20	10	90
Springer-V34	1340	20	10	110
Springer-V34 North	1341	15	10	65
Springer-V34B	1342	10	No cap	50
Springer-V34C	1343	10	10	50
Springer-V34D	1344	No cap	No cap	No cap
Springer-V34E	1345	20	10	110
Springer-V34F	1346	No cap	No cap	No cap
Springer-V39-40	1390	20	35	70
Springer-V41	1410	20	30	70

TABLE 14.6
ASSAY CAPPING THRESHOLDS

Domain	Model Rock Code	Cu (%)	Au (g/t)	Ag (g/t)
Springer-V41B	1411	20	30	110
Springer-V42	1420	20	10	100
Springer-V42A	1421	10	10	65
Springer-V43	1430	10	15	60
Springer-V60	1600	15	20	40
Springer-V61	1610	20	25	45
Springer-V62	1620	15	25	70
Springer-V63	1630	15	20	110
Springer-V64-65	1640	10	25	90
Springer-V72	1720	5	30	80
Perry-VA	2010	15	15	110
Perry-VA-1	2011	20	No cap	120
Perry-VA-2	2012	20	7	120
Perry-VB	2020	20	25	125
Perry-VB-2	2021	20	No cap	No cap
Perry-VC	2030	20	10	110
Perry-VD	2040	20	20	145
Perry-VE	2050	20	15	80
Perry-VJa	2060	20	No cap	115
Perry-VJb	2061	20	No cap	115
Perry-VJc	2062	20	No cap	115
Perry-VJ-1	2063	No cap	No cap	No cap
Perry-VJ-2	2064	15	10	150
Perry-VK	2070	15	5	100
Perry-FLT P-1	2080	20	10	95
Perry-FLT P-2	2081	15	15	135
Perry-FLT P-3	2082	10	No cap	70
Perry-FLT B	2090	20	15	100
Perry-FLT J	2091	15	5	165
Saddle-V01	3010	5	No cap	60
Saddle-V02	3020	10	10	55
Saddle-V03	3030	15	15	70

14.9 VARIOGRAPHY

QC Copper developed experimental semi-variograms for capped copper assay values for grouped domains using directional spherical best-fit models. The nugget effect was modelled from the downhole semi-variograms.

Continuity ellipses based on the observed ranges of copper were subsequently generated and utilized as the basis for estimation search ranges, distance weighting calculations and Mineral Resource classification criteria by QC Copper. The resulting search ellipses were also applied to gold and silver.

As a check on the variography, the Authors developed median indicator semi-variograms for Cu composites for the largest eight domains, in order to test the ranges selected for classification of the Mineral Resource (Appendix D). The ranges demonstrated are between 20 and 120 m, with an average range of ~60 m, supporting the classification criteria established by QC Copper.

14.10 BULK DENSITY

A total of 1,172 samples collected from drill holes were analysed for bulk density by QC Copper and resulted in an average bulk density of 2.96 t/m³, 141 of which were located within the modelled domains and 1,031 outside the modelled domains. The domain constrained bulk density ranges from 2.68 t/m³ to 2.94 t/m³ and averages 2.97 t/m³. Bulk density values were based on lithologies since the bulk density of any mineralized and unmineralized lithology were not significantly different. (Table 14.7).

Parameter	Un-mineralized	Mineralized	Total
Number of Samples	1,031	141	1,172
Mean*	2.96	2.97	2.96
Std Dev*	0.17	0.21	0.17
Coefficient of Variation	0.06	0.07	0.06
Minimum*	2.59	2.68	2.59
Median*	2.96	2.94	2.96
Maximum*	4.56	4.05	4.56

*Note: *bulk density units are in t/m³.*

For reporting purposes, QC Copper assigned bulk density as listed in Section 11.3 above.

14.11 BLOCK MODELLING

QC Copper initially developed a model with a parent block size of 5.00 m x 2.50 m x 5.00 m and a sub-block size of 1.25 m x 1.25 m x 1.25 m. In order to meet the requirements that a Mineral Resource have “reasonable prospects for eventual economic extraction”, the Authors converted the sub-celled QC Copper block model to a whole-block model for use in reporting Mineral Resources (Table 14.8). The block model consists of separate model attributes for estimated Cu, Au, and Ag block grades, rock type (mineralization domains), volume percent, bulk density, classification and calculated CuEq block grade. Volume percent was calculated directly from the mineralization wireframes, in order 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’s ability to measure individual

infinitely variable block inclusion percentages within that domain. The historical mined areas were depleted in the volume percent model by setting the percent value to zero. Reconciliation between the QC Copper sub-blocked model and the Author’s whole-block model was within 1%.

TABLE 14.8 BLOCK MODEL DEFINITION			
Direction	Origin	No. of Blocks	Block Size (m)
X	509,272.50	426	5.0
Y	5,514,048.75	1,027	2.5
Z	442.50	214	5.0
Rotation	0° (no rotation)		

QC Copper interpolated Ag and Au into the model blocks using Inverse Distance Cubed (ID³). Cu was interpolated using Ordinary Kriging (OK), with the exception of Vein 22 (Rock Code 1220), which was interpolated using ID³. Multiple passes were undertaken for the grade interpolation process to progressively capture the sample points, avoid over-smoothing and preserve local grade variability. Grade blocks were interpolated from parameters in Table 14.9.

TABLE 14.9 BLOCK MODEL GRADE INTERPOLATION PARAMETERS						
Pass	Number of Composites			Search Range (m)		
	Min	Max	Max per Drill Hole	Major	Semi-Major	Minor
I	18	36	9	25	20	5
II	14	36	7	50	40	10
III	4	12	2	100	80	20
IV	2	12	1	200	160	40

A CuEq block grade was calculated directly from the block grade estimates as follows:

$$\text{CuEq}\% = \text{Cu}\% + (\text{Au g/t} \times 0.540) + (\text{Ag g/t} \times 0.007) + (\text{Co}\% \times 7.14)$$

Selected vertical cross-sections and plans of the CuEq block grades are presented in Appendix E.

The Authors developed a Nearest Neighbour (“NN”) estimate for validation purposes using the same composite data and grade capping thresholds.

14.12 MINERAL RESOURCE CLASSIFICATION

In the opinion of the Authors, all the drilling, assaying and exploration work on the Opemiska Project supports this MRE, and the spatial continuity of the mineralization within a potentially mineable shape is sufficient to indicate a reasonable potential for economic extraction.

The Mineral Resource was classified as Measured, Indicated and Inferred based on the geological interpretation, data quality, variogram performance and drill hole spacing, as follows:

- Measured Mineral Resources were classified for the blocks of the veins interpolated with Pass I, which used at least three drill holes with an average spacing of 20 m or less;
- Indicated Mineral Resources were classified for the blocks of the veins interpolated with Pass II, which used at least two drill holes with an average spacing of 40 m or less;
- Inferred Mineral Resources were classified for the blocks interpolated with Pass III and Pass IV, which used at least one drill hole within 120 m or less; and
- Isolated blocks (or small groups of blocks) of any classification enclosed within a large group of a different class were assigned the dominant classification.

All blocks of the Saddle Zone domains were downgraded to the Inferred classification, because of the interpretative nature of the Zone. A small number of peripheral blocks outside the defined ranges are unclassified and therefore not reported as a Mineral Resource.

Selected classification block cross-sections and plans are attached in Appendix F.

14.13 CUEQ CUT-OFF VALUE CALCULATION

The Opemiska MRE was derived from applying CuEq cut-off values to the block models and reporting the resulting tonnes and grades for potentially open pit and underground 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\$4.00/lb;
- Au price: US\$1,875/oz;
- Ag Price: US\$24/oz;
- Currency exchange rate: CAD\$/US\$ = 0.76;
- Cu process recovery: 91%;
- Au process recovery: 80%
- Ag process recovery: 80%
- Cu payable: 96%
- Au payable: 90%
- Ag payable: 90%
- Processing cost: CAD\$14/tonne; and
- G&A: CAD\$2.25/tonne.
- The cut-off value for the open pit Mineral Resource is 0.15% CuEq.
- The cut-off value for the out-of-pit Mineral Resource is 0.80% CuEq.

An NPV Scheduler optimized open pit was used to satisfy the requirement of Reasonable Prospects of Eventual Economic Extraction by open pit mining. The reporting pit shell was determined based on conceptual parameters and costs given above, and includes Measured, Indicated and Inferred Mineral Resources (see Appendix G). Copper and gold recovery will be achieved using conventional crushing, grinding, and flotation to produce a copper concentrate that could be shipped to a smelter for processing.

14.14 MINERAL RESOURCE ESTIMATE

The MRE is reported herein with an effective date of January 8, 2024 and is tabulated in Table 14.10.

TABLE 14.10									
OPEMISKA MINERAL RESOURCE ESTIMATE ⁽¹⁻¹¹⁾									
Class	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (koz)	Au (koz)	CuEq (%)	CuEq (Mlb)
Pit Constrained									
Measured	52,704	0.77	892	1.65	2,800	0.30	500	0.94	1,091
Indicated	34,629	0.77	586	1.31	1,458	0.24	261	0.90	690
Mea + Ind	87,333	0.77	1478	1.52	4,258	0.27	762	0.93	1,780
Inferred	9,791	0.48	104	2.19	689	0.18	55	0.59	128
Out of Pit									
Measured	4,064	1.24	111	3.81	498	0.32	42	1.44	129
Indicated	6,067	1.18	157	3.92	764	0.22	42	1.32	176
Mea + Ind	10,130	1.20	268	3.87	1,261	0.26	83	1.37	305
Inferred	1,162	0.89	23	5.84	218	0.40	15	1.15	29
Total									
Measured	56,767	0.80	1003	1.81	3,297	0.30	542	0.97	1,219
Indicated	40,696	0.83	743	1.70	2,222	0.23	303	0.97	866
Mea + Ind	97,463	0.81	1746	1.76	5,519	0.27	845	0.97	2,085
Inferred	10,953	0.53	127	2.58	907	0.20	70	0.65	157

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. The cut-off value for the open pit Mineral Resource is 0.15% CuEq. The cut-off value for the out-of-pit Mineral Resource is 0.80% CuEq.
6. Metal prices used were US\$4.00/lb Cu and US\$1,875/oz Au, US\$24/oz Ag and 0.76 CAD\$/US\$ FX. Cu, Au and Ag process recovery and smelter payable were 91%, 72% and 72% respectively. Open pit mining cost was CAD\$2.50/t, processing CAD\$14/t, G&A CAD\$2.25/t. Out of pit mining costs were CAD\$68/t.
7. Pit slopes were 50 degrees in rock and 30 degrees in overburden.
8. Historical mined volumes were depleted from the blocks to report the correct tonnages and metal content of the remaining high-grade vein material.
9. $CuEq \% = Cu \% + (Au \text{ g/t} \times 0.54) + (Ag \text{ g/t} \times 0.007)$
10. Out-of-pit Mineral Resources were selected which exhibit continuity and reasonable potential for extraction by the long hole underground mining method. Narrow strings of grade blocks and orphaned blocks were depleted.
11. Totals may not sum to 100% due to rounding.

14.15 MINERAL RESOURCE SENSITIVITIES

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

Class	Cut-off (CuEq %)	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (koz)	Au (koz)	CuEq (%)	CuEq (Mlb)
Measured	1.00	16,797	1.43	529	2.98	1,612	0.58	315	1.76	653
	0.90	19,689	1.33	579	2.8	1,772	0.54	340	1.64	714
	0.80	23,191	1.24	634	2.61	1,948	0.49	366	1.52	779
	0.70	27,156	1.15	689	2.43	2,124	0.45	393	1.41	845
	0.60	31,864	1.06	745	2.25	2,306	0.41	420	1.3	912
	0.50	36,881	0.98	796	2.09	2,473	0.38	446	1.20	973
	0.40	42,039	0.9	838	1.94	2,615	0.35	468	1.11	1,024
	0.30	46,932	0.84	869	1.8	2,720	0.32	485	1.03	1,062
	0.20	51,067	0.79	887	1.7	2,783	0.3	497	0.96	1,084
	0.15	52,704	0.77	892	1.65	2,800	0.3	500	0.94	1,091
Indicated	0.10	53,872	0.75	895	1.62	2,809	0.29	503	0.92	1,094
	1.00	10,684	1.48	349	2.22	762	0.5	171	1.77	416
	0.90	12,380	1.39	380	2.13	847	0.46	183	1.66	452
	0.80	14,450	1.3	413	2.04	946	0.42	196	1.54	491
	0.70	16,765	1.21	446	1.94	1,046	0.39	209	1.43	529
	0.60	19,376	1.12	479	1.84	1,145	0.36	222	1.33	566
	0.50	22,406	1.03	510	1.73	1,242	0.32	233	1.22	603
	0.40	25,685	0.95	539	1.61	1,332	0.3	244	1.12	635
	0.30	29,306	0.87	563	1.49	1,399	0.27	252	1.03	663
	0.20	33,014	0.8	581	1.36	1,445	0.24	259	0.94	683
0.15	34,629	0.77	586	1.31	1,458	0.24	261	0.90	690	
0.10	35,961	0.74	589	1.27	1,466	0.23	263	0.88	693	
	1.00	27,482	1.45	878	2.69	2,373	0.55	486	1.77	1,069

TABLE 14.11
SENSITIVITIES OF PIT CONSTRAINED MINERAL RESOURCE ESTIMATE

Class	Cut-off (CuEq %)	Tonnes (kt)	Cu (%)	Cu (Mlb)	Ag (g/t)	Ag (koz)	Au (koz)	Au (koz)	CuEq (%)	CuEq (Mlb)
Measured & Indicated	0.90	32,069	1.36	959	2.54	2,619	0.51	523	1.65	1,165
	0.80	37,640	1.26	1,047	2.39	2,894	0.47	563	1.53	1,270
	0.70	43,921	1.17	1,135	2.24	3,169	0.43	602	1.42	1,373
	0.60	51,239	1.08	1,224	2.1	3,451	0.39	642	1.31	1,478
	0.50	59,286	1	1,306	1.95	3,715	0.36	679	1.21	1,575
	0.40	67,724	0.92	1,377	1.81	3,947	0.33	711	1.11	1,659
	0.30	76,238	0.85	1,432	1.68	4,119	0.3	737	1.03	1,725
	0.20	84,081	0.79	1,468	1.56	4,228	0.28	756	0.95	1,768
	0.15	87,333	0.77	1,478	1.52	4,258	0.27	762	0.93	1,780
	0.10	89,833	0.75	1,484	1.48	4,275	0.27	766	0.90	1,787
Inferred	1.00	1,342	1.4	41	6.68	288	0.55	24	1.74	52
	0.90	1,578	1.31	46	6.22	315	0.5	25	1.62	57
	0.80	1,901	1.21	51	5.65	346	0.45	27	1.49	63
	0.70	2,315	1.11	57	5.11	381	0.4	30	1.36	69
	0.60	2,912	0.99	64	4.53	425	0.35	33	1.21	78
	0.50	3,763	0.87	72	3.97	481	0.3	37	1.06	88
	0.40	5,036	0.74	83	3.37	546	0.26	42	0.91	101
	0.30	6,506	0.64	92	2.91	608	0.22	47	0.78	112
	0.20	8,531	0.53	100	2.42	664	0.19	53	0.65	123
	0.15	9,791	0.48	104	2.19	689	0.18	55	0.59	128
0.10	11,258	0.43	107	1.96	708	0.16	57	0.53	132	

14.16 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 Authors also calculated the average distance from a block to the closest drill hole for each class:

- Measured: 6.6 m
- Indicated: 13.9 m
- Inferred: 31.5 m.

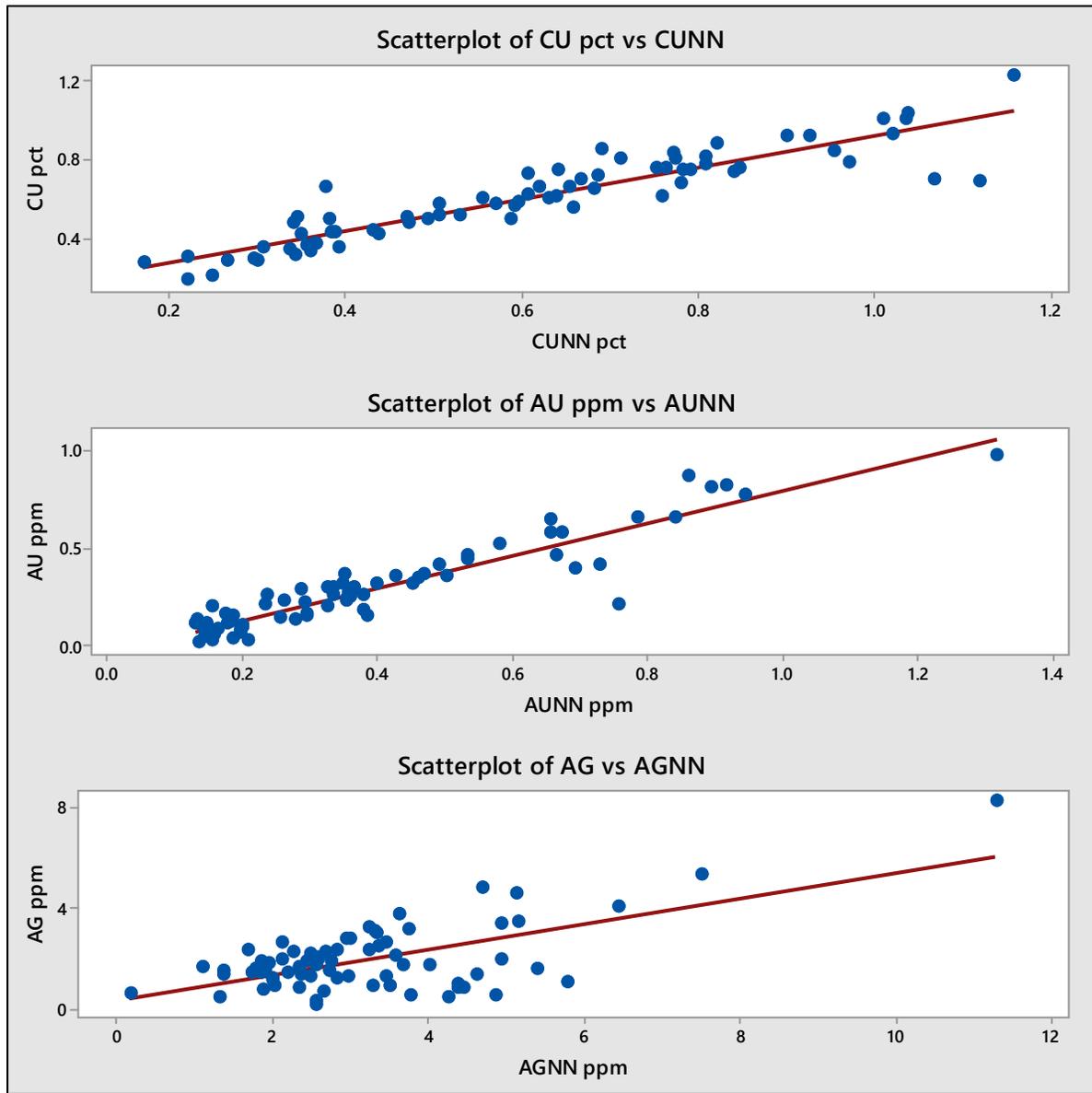
The QC Copper block model estimates were compared to Nearest-Neighbour (NN) estimates along with the average of the uncapped block composite grades within a block (Table 14.12 and Figure 14.2). The Authors consider the results to be acceptable for linear grade estimation.

A total modelled volume of 53.1 million cubic metres was compared to the total estimated volume of 47.4 million cubic metres (Table 14.13). The Authors consider this to be an acceptable level of volume comparison for a volume percentage block model.

TABLE 14.12			
AVERAGE GRADE COMPARISON OF COMPOSITES WITH BLOCK MODEL			
Data Type	Cu (%)	Au (g/t)	Ag (g/t)
Avg block composite grade	0.92	0.51	4.00
Avg block model grade estimate	0.82	0.42	3.48
Avg NN grade estimate	0.93	0.50	4.02

Notes: NN = Nearest Neighbour.

FIGURE 14.2 COMPARISON OF AVERAGE BLOCK GRADE ESTIMATES AND NEAREST NEIGHBOUR GRADES



Model Rock Code	Wireframe Volume * k m³	Estimated Volume * k m³	Difference
1000	356	349	-2%
1010	805	738	-9%
1020	5,639	4,862	-16%
1030	6,745	5,205	-30%
1031	447	309	-45%

**TABLE 14.13
VOLUME COMPARISON**

Model Rock Code	Wireframe Volume * k m³	Estimated Volume * k m³	Difference
1040	628	533	-18%
1050	772	709	-9%
1051	460	416	-11%
1060	940	806	-17%
1061	268	265	-1%
1070	1,236	1,060	-17%
1071	1,023	1,005	-2%
1080	230	213	-8%
1090	2,258	2,115	-7%
1100	631	627	-1%
1111	226	224	-1%
1112	305	299	-2%
1130	236	219	-8%
1200	242	240	-1%
1210	242	196	-24%
1220	206	186	-10%
1230	1,401	1,294	-8%
1280	9	9	-4%
1290	71	70	-2%
1300	127	110	-15%
1310	166	162	-2%
1311	2	2	-4%
1320	332	319	-4%
1321	36	36	-1%
1330	181	179	-1%
1331	194	191	-1%
1340	373	338	-11%
1341	213	211	-1%
1342	228	228	0%
1343	33	33	0%
1344	34	34	0%
1345	131	125	-5%
1346	11	11	-1%
1390	466	433	-8%
1410	247	228	-8%
1411	440	411	-7%
1420	443	405	-9%
1421	80	75	-8%
1430	91	83	-10%
1600	192	183	-4%

TABLE 14.13			
VOLUME COMPARISON			
Model Rock Code	Wireframe Volume * k m³	Estimated Volume * k m³	Difference
1610	119	118	-2%
1620	174	165	-6%
1630	63	56	-13%
1640	74	63	-17%
1720	94	90	-5%
2010	1,424	1,378	-3%
2011	560	543	-3%
2012	410	408	0%
2020	3,245	2,534	-28%
2021	28	10	-188%
2030	1,379	1,206	-14%
2040	3,478	3,222	-8%
2050	715	633	-13%
2060	1,037	944	-10%
2061	506	435	-17%
2062	1,195	991	-21%
2063	204	202	-1%
2064	462	462	0%
2070	702	648	-8%
2080	1,159	1,086	-7%
2081	2,930	2,873	-2%
2082	573	548	-5%
2090	1,005	940	-7%
2091	135	127	-6%
3010	500	496	-1%
3020	1,219	1,202	-1%
3030	303	293	-3%
Total	53,091	47,416	-12%

The Authors consider that the block model MRE and Mineral Resource classification for the Opemiska Project represent a reasonable estimation of the Mineral Resources in regards to compliance with generally accepted industry standards and guidelines, the methodology used for grade estimation, the classification criteria used and the actual implementation of the methodology in terms of Mineral Resource estimation and reporting. The Mineral Resources have been estimated in conformity with the generally accepted CIM “Estimation of Mineral Resource and Mineral Reserves Best Practices” guidelines as required by the Canadian Securities Administrators’ National Instrument 43-101. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

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 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.

The historical Opemiska operation, which included underground mines and surface mineral process facilities, had operated for 37 years until 1991. Tailings were stored northwest of the process plant. There was minimal amount of waste rock stored on surface.

The preliminary concepts regarding an Opemiska revitalization would include open pit mining, surface mineralized material processing, and surface management of tailings and waste rock. Each of these activities can be anticipated to be designed to minimize social and environmental impacts and limiting long-term liabilities. A “starter pit” could be established north-northwest of Chapais. This mining operation would not directly impact Chapais.

Open pit mining could be expected to intercept and dewater a significant portion of the historical Springer and Perry Mine underground workings, and to intercept the former location of the dismantled mineral process plant and a portion of the historical tailings facilities. All the historical mining infrastructure has been dismantled and the mining facilities decommissioned over 30 years ago. QC Copper is not expected to inherit any significant environmental responsibilities that have arisen from the historical mining operations. A considered exception could be the dewatering, treatment and discharge of mine water from the historical mine workings.

20.1 CURRENT PROJECT STATUS

The Opemiska Project is currently at an advanced exploration stage and a mining project is only at a conceptual development phase. Geochemical studies are the only environmental-related studies undertaken to date; no other environmental studies are required at this stage of the Project.

The only permits currently required by QC Copper for its exploration activities are “permis d’intervention” and a wetlands declaration regarding activities in areas of flooding or potential flooding (zones inondables).

20.2 PERMITTING

In the province of Québec, mining is principally regulated by the provincial government. The Ministry of Energy and Natural Resources (“MERN”: *Ministère de l’Énergie et des Ressources Naturelles du Québec*) is the provincial agency entrusted with the management of mineral substances in Québec.

The Opemiska Project, should it proceed to mine development, would be subject to Québec’s Northern environmental impact assessment (“EIA”) procedure. Opemiska is located in the territory covered by the James Bay and Northern Québec Agreement (“JBNQA”). The projects listed in Schedule A of the Environmental Quality Act (“EQA”) are automatically subject to the EIA and a prescribed review procedure. An EIA statement will need to be submitted for compliance and

review by the Review Committee for Environmental and Social Impact (“COMEX”) and the Cree National Government (“CNG”). A detailed collection of baseline data and assessment of these data are required in order to complete an EIA. Many specific baseline studies would be required – e.g., wildlife, hydrology, surface water and sediments, vegetation and archeology.

Mineralized material, waste rock, and tailings have already been geochemically analysed for potential environmental impacts, specifically acid rock drainage (“ARD”) and metal leaching (“ML”), and the descriptions presented on how these impacts are to be managed will be described in the EIA. Waste rock, separated by types, have been subjected to geochemical testing.

Following a release by Ministry of Environment and Fight Against Climate Change (“MELCC”), the provincial Certificate of Authorization (“C of A”) of the EIA, the Project will require a significant number of approvals, permits and authorizations to complete the construction phase up to the closure phase. Most of these are of provincial jurisdiction with a few of federal jurisdiction (e.g., explosives management).

Under Québec’s Mining Act, a company or person which/who performs prescribed exploration or mining activity must submit a Closure Plan for the land affected by such operations. This is subject to approval by the MERN and is conditional on receipt of a favourable C of A decision from the MELCC. This approval is required for the issue of a mining lease and for any mining operations to commence, including the construction phase. Ten years ago, a Decree (838-2013) was issued by MERN that requires a mining company must provide a financial guarantee for a Closure Plan.

20.2.1 Geochemical Testing

Four mineralized material samples, two tailings samples (from 2023 processing testwork), and 29 waste rock samples were tested for potential environmental impact. The mineralized material samples were obtained from drill core representing the Springer, Springer Au, the Saddle Zone, and the Perry Zones.

The mineralized material and tailings samples were measured to be non-acid generating (“non-ARD”) and non-metal leachable (“non-ML”). Therefore, no specific ARD/ML relevant management strategy should be needed for tailings in Project development.

The tests on waste rock produced variable results that indicated some potential acid generating and metal leaching characteristics for specific lithology. The leachable metals of interest were identified to be nickel, copper, chromium, cobalt, lead, and arsenic. Additional studies on waste rock were recommended by the study authors (Turgeon Consulting). These studies include mineralogy, particularly sulphur deportment, the presence of neutralizing minerals, and the initiation of Sobek and kinetic leaching tests. Waste rock management will influence be results of these additional tests and characterizations. However, based on the initial results, the extent of ARD/ML issues applicable to waste rock can be considered small.

20.3 SOCIAL AND COMMUNITY CONSIDERATIONS

As noted above, the Project 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.

Coinciding with the ongoing exploration work programs, regular consultations with nearby First Nations and the Community of Chapais are being held. Several town-hall meetings have been held with the Community of Chapais and regular phone updates have been provided to the mayor and the economic development officer. Since May 2023, QC Copper and Chapais have established a joint committee called “Ville-Mine”, which brings together leaders of Chapais and QC Copper management to discuss ongoing issues and present the concerns and aspirations of each party to the other. All meetings are held with approved agendas and produce recorded minutes.

The most recent Ville-Mine meeting, held on February 1, 2024, addressed some issues related to an environmental baseline study, possible candidates for the position of community liaison, a request for a QC Copper, board-approved local purchasing policy, and a request for a letter of support for Chapais’ advocacy for a rail trans-shipment yard. The yard would be located in Chapais if and when the Grande Alliance Project re-establishes the rail link between Chapais and Quevillon, located approximately 180 km to the southwest. It was agreed that the committee will strive to have semi-annual meetings with the next meeting planned in the fall of 2024.

Meetings have also been held with the Natural Resources Mining Exploration Officer of the community of Oujé Bougoumou to present the proposed exploration programs. QC Copper has had informal meetings with representatives of Oujé-Bougoumou during the Prospectors and Developers Association of Canada Conference (“PDAC”) and the Association de l’Exploration Minière de Québec (“AEMQ”) conventions to discuss the progress of the Project. More recently, QC Copper has reached out to the new Chief of Oujé-Bougoumou requesting a joint meeting. The Cree have a formal consultation process to obtain consent for Project activities that may interfere with traditional activities undertaken by their members and QC Copper seeks prior consent before undertaking its exploration programs.

Meetings have also been held with the Natural Resources Mining Exploration Officer of the community of Oujé-Bougoumou to describe the exploration programs and the Mineral Resource results that support a large-scale mine development.

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.

QC Copper has a stated policy of continual improvement in protecting human health and stewardship of the natural environment, by:

- Ensuring that all QC Copper employees and contractors understand the environmental and social commitments;

- Communicating and engaging with First Nations, residents, community leaders, and regulators on the Company's efforts to protect the environment and land in and around the Opemiska Property; and
- Aiming to exceed relevant environmental legislation, regulations, and corporate requirements by integrating environmental policies, programs, and practices into all Project activities.

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

The Lac Laura Property is located on the southern boundary of QC Copper's Cooke-Robitaille Property. The Lac Laura Property, owned by Vanadium Corp. Resource Inc., is located on the southern boundary of the Cooke-Robitaille Property, approximately 4.6 km from the eastern edge of the Opemiska claims. Highway 113 crosses the centre of the Property and Lac Laura occupies the south-central portion of the claims. The importance of this Property is the presence of a small, historical gold resource and 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. The mineralized zone strikes east-west and dips moderately to steeply northwards. The mineralization consists primarily of gold with elevated zinc and some copper, and occurs in a series of east-west trending shear zones.

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 acquired 100% interest in the Opemiska Property, which hosts a significant past-producing copper-gold deposit that was mined underground from 1953 to 1991. The Property consists of 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 adjacent to the Municipality 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 District. 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 chalcopyrite-bearing quartz veins that occupy fractures in folded and faulted gabbro within layered Archean Cummings Complex ultramafic-mafic sills intruding 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, appears to have been a significant control on the location of mineralization.

The 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 historical production from the Springer and Perry Mines was approximately 22.0 Mt grading 2.40% Cu, 0.29 g/t Au, and 0.21 g/t Ag containing 527 kt Cu, 6,400 kg Au, and 4,600 kg Ag.

The main mineralized vein systems on the Property 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 consists of mainly chalcopyrite, pyrite, and pyrrhotite, with smaller amounts of sphalerite, magnetite, galena, molybdenite, arsenopyrite, and gersdorffite. Native gold is associated with chalcopyrite and pyrite. Scheelite and molybdenite are present locally.

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 and left behind considerable amounts of 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. In late-2021, 2022 and 2023, QC Copper completed 180 drill holes totalling 46,816 m.

The Authors have reviewed QC Copper's protocols for sample preparation, security and analytical procedures for the 2019, 2021, 2022 and 2023 drill programs, and determined that the procedures are adequate and that the data are of good quality and satisfactory for use in the current MRE.

Mr. Antoine Yassa, P.Geo., 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. Mr. Antoine Yassa, P.Geo., an independent Qualified Person under the terms of NI 43-101, visited the Opemiska Property again on February 24, 2023 for the purpose of completing a site visit and due diligence sampling. The site visits included an inspection of the Property, verification of drill sites and drill collars, and due diligence sampling of drill core. The samples were delivered by Mr. Yassa to the AGAT Labs preparation facility in Val d'Or, QC (2021) and the Actlabs facility in Ancaster, ON (2023), for analysis. Based on evaluation of the due diligence sampling results, it is the opinion of the Authors that the analytical results are suitable for use in the current MRE.

The updated MRE has resulted in significant expansion of the in-pit Mineral Resources, in terms of grade and metal content, and established an out-of-pit Mineral Resource located as down-plunge extensions of the Deposit beneath the conceptual open pit. At a 0.15% CuEq cut-off, pit constrained Measured and Indicated Mineral Resources contain 1,780 Mlb of CuEq, or 1,478 Mlb Cu, 762 koz Au and 4.258 Moz Ag, in 87.3 Mt, and Inferred Mineral Resources contain 128 Mlb CuEq, or 104 Mlb Cu, 55 koz Au and 689 koz Ag, in 9.8 Mt. A conceptual starter pit calculated for the Opemiska Deposit contains 19.1 Mt of Measured and Indicated Mineral Resources grading 1.1% CuEq in 19.1 Mt. Out-of-pit Measured and Indicated Mineral Resources have been added to the Opemiska Deposit. At a 0.8% CuEq cut-off, the out-of-pit Mineral Resources contain 268 Mlb Cu, 83 koz Au, and 1.3 Moz Ag, or 305 Mlb CuEq, in 10.1 Mt, and Inferred Mineral Resources of 23 Mlb Cu, 15 koz gold, and 218 koz silver, or 29 Mlb CuEq, in 1.2 Mt. The effective date of this updated MRE is January 8, 2024.

This updated MRE is based on a database containing 17,837 surface and underground diamond drill holes totalling 1,146,690.7 m and 419,105 assays. All historical mine-era drilling was converted from mine grid to UTM using transformation equations calculated by a land surveyor based on differential GPS measurements of many located drill casings.

All historical mine excavations and stopes were digitized in mine grid from numerous maps, vertical and longitudinal sections, and solid wireframes were built and converted to UTM coordinates. All stopes were digitized down to the bottom of the Perry Mine (820 m) and the Springer Mine (715 m) and formed the basis of the reinterpretation of the geology of the Opemiska Deposit. New mineralized envelopes were defined using a manually adjusted implicit modelling technique for the Deposit, based on a structural model defined in 2022 in areas of historical mining and of known mineralization that could not be mined underground. As a result, the Deposit tonnage decreased somewhat. However, some out-of-pit Mineral Resources were defined at a 0.8% CuEq cut-off that identified a significant tonnage beneath the conceptual pit, which will be the object of further drilling, along with some satellite zones east of the pit.

To satisfy the requirement of reasonable prospects for eventual economic extraction (“RPEEE”) by open pit mining, a constraining pit shell was determined based on conceptual parameters and costs. Copper and gold will be recovered using conventional crushing, grinding, gravity, and flotation to produce a copper concentrate that could be shipped to a smelter for processing.

Material within the constraining pit shell was classified according to Mineral Resource confidence classifications defined in CIM Definition Standards for Mineral Resources and Mineral Reserves. Data quality and quantity, geological and grade continuity, and confidence in the grade and bulk density estimates were considered when classifying the Mineral Resource. Mineral Resources are classified as either Measured, Indicated or Inferred. Measured, Indicated, and Inferred Mineral Resources were determined from respective search ranges of 30, 40 and 120 m with a respective minimum of seven, four and one composites.

In the Authors’ opinion, the drilling, assaying and exploration work on the Opemiska Project supports this MRE 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 MRE presented in this 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 potential economic viability worthy of public disclosure.

26.0 RECOMMENDATIONS

The Opemiska Property contains notable copper-gold-silver structurally-controlled Mineral Resources hosted in deformed Archean mafic-ultramafic sills. The Property has potential for delineation of additional Mineral Resources associated with extension of the known structurally-controlled mineralization and for discovery of new satellite mineralized zones. The Property benefits significantly from nearby grid power, roads, rail line, and local labour.

The drilling completed on the Opemiska Property outside the pit constrained Mineral Resource estimated in this Report demonstrates that there is potential to add additional Mineral Resources. Further drilling to define additional Mineral Resources is recommended prior to advancing mine development. The twin-drilling program undertaken to verify the accuracy of the historical mine surface and underground drilling, generally indicate reasonable accuracy of the copper mining assays. However, these results are not definitive and more QA/QC work is recommended to better establish the quality of the historical in-house mine assays. Additionally, an expanded metallurgical test program is recommended to confirm concentrate grade and recoveries and provide design criteria for a large-scale processing facility. A Preliminary Economic Assessment is also recommended.

26.1 RECOMMENDATIONS FOR DRILLING

Seven target areas have been identified, within and outside the conceptual pit, that have the potential to increase the Mineral Resources on the Property. A total of 12,000 m in 48 drill holes are recommended to test and expand the current mineral resource on the Opemiska Property. Each of these targets and recommended actions are summarized below.

26.1.1 South of Vein No. 3

The area to the south of Vein No. 3 is composed of intersecting east-west and east-northeast trending veins, few of the latter having been mined and, therefore, are not well constrained. However, it is known that the intersection of these two vein systems represent areas of thickening and enrichment in the Springer Mine. Accurate drill targeting of the intersections is expected to add tonnage to the deposit and a 1,200 m, five drill holes program is recommended for 2024. Any additions to the Opemiska Deposit will be integrated into an updated MRE.

26.1.2 East of Veins 6, 7, 8

To the east of Veins 6, 7, and 8, the near-surface extensions of these veins have not been mined and was poorly drilled. A 1,500 m, six drill holes program is planned to test this area.

26.1.3 Gap Zone, Between Vein No. 3 and Vein No. 1

A wide area of low-grade mineralization is present to the north of Vein No. 3. The mineralization in this area was never mined, except for the larger veins, and therefore this mineralization for the most part was not incorporated into the 2021 MRE. Moreover, this mineralization was not specifically targeted in the 2022-2023 drilling program, such that several areas and “gaps” that

remain untested. Follow-up drilling of the Gap Zone is recommended to focus on establishing an Inferred Mineral Resource with a ten drill holes program totalling 2,000 m. The results of this work will be integrated into the geological model of the Opemiska Deposit, with the objective of an updated MRE at a later date.

26.1.4 Wedge Between Saddle Zone and Perry Veins

The Saddle Zone, an unmined area of the old Springer and Perry Mines, located in an area of uplift between the deeper parts of the conceptual pit on the Springer and Perry Mines (hence the name “Saddle Zone”), was discovered in 2021, but poorly defined. It was modelled for the current MRE after completion of nearly 30 surface drill holes totalling ~8,900 m. However, all the Mineral Resource is classified as Inferred, due to significant uncertainties regarding the structural interpretation of the mineralization. As with the Perry Mine and the area around Veins 0, 1, and 22 at the Springer Mine, where historical mining confirmed the presence of east-west veins and northwest-trending veins, that are already difficult to distinguish and model during mining, and much more difficult to interpret from only drill hole data, the Saddle Zone is thought to consist of the interaction between east-west trending vein structures on the western extension of the Wright and McNichols Veins, and northwest-trending vein structures parallel the Perry A and B Veins. The area immediately east of the Saddle Zone, adjacent to drill holes OPM-21-50 and 51 was poorly drilled by the mine and requires additional drilling that could easily add near surface mineralization. A total of six drill holes totalling 1,800 m is recommended for this work, which will focus on possible expansion of Mineral Resources along strike of the Saddle Zone that will be incorporated in a future MRE.

26.1.5 Between Vein 0 and Vein 23, north of Vein 2

This area has been identified as a possible vein structure that has been poorly drilled in the past. A seven drill holes program totalling 2,100 m is proposed to test this structure.

26.1.6 Eastern Veins: Bouchard and McNichol

The Eastern Veins are located immediately east of the Perry Pit along two parallel corridors. The northern structure called the Bouchard Vein, located up-dip from some underground stopes on the K-vein and along strike from the well mineralized drill hole OPM-21-69 (which intersected 1.53% Cu over 36.0 m from 108.5 m downhole). However, interpretation of the mineralized envelopes has been hampered by the likely presence of more than one vein direction (see Saddle Zone above) and more compilation work is required before proceeding with Mineral Resource definition drilling with a minimum of 1,700 m of drilling in seven holes.

The southern structure, called the McNichol Veins, is located along strike to the east of the east-west trending Wright Vein. QC Copper completed 22 drill holes totalling 4,863 m, which defined four parallel, east-west trending mineralized vein structures that appear to be continuous over a strike length of 900 m or more and down to a depth of ~150 m. The next drill program is recommended to define the Mineral Resource from the surface down to ~200 m vertical and will require completion of at least seven drill holes totalling 1,700 m.

Any additional Mineral Resources defined on the Eastern Veins will be integrated into an updated MRE of the Opemiska Project.

26.1.7 Perry Mine North Extension of B-Veins

The northern extension of the Vein B, between the existing stopes and the contact of the Ventures Sill, has not been much tested with drilling by the Mine and this area could easily add to the Mineral Resources. A systematic drill program is recommended for this area that will require completion of seven drill holes totalling at least 2,500 m.

26.2 RECOMMENDATIONS FOR QA/QC

It is recommended that QC Copper continue with the current QC protocol, which includes the insertion of CRMs and blanks, and to further support this protocol with:

- Tight diamond drilling of a few small sectors of the Deposit where historical underground drilling is abundant and no mining has occurred, to enable comparison between the grade and tonnage estimated from the modern drilling assays with those estimated from the historical in-house mine assays;
- Continue to collect on-site bulk density measurements and externally validate these measurements with another method such as by pycnometer on pulp samples;
- Increase the proportion of pulp verification assays carried out at a reputable umpire laboratory from the current level of 3.3% to approximately 5%;
- Increase the proportion of CRMs and blank insertions from the current level of approximately 2% up to at least 4% (i.e., 1 of each per 25 samples); and
- Ensure that all failures are identified and flagged as soon as laboratory results are received, and any necessary follow-up action (including re-assaying) is undertaken in a timely fashion. This will not only ensure that corrective action is taken before the pulp and reject samples are returned to the Company, but also likely decrease issues at the lab.

26.3 RECOMMENDATIONS FOR METALLURGICAL TESTWORK

An expanded metallurgical test program could be considered that would include:

- Accumulation of a large (~1 to 2 tonnes) composite sample with copper, gold and silver grades representing the Mineral Resource grades;
- Crushing and grinding tests;
- Gravity concentration of gold evaluation;

- Batch flotation rougher and cleaner tests, using copper and gold specific collectors with regrinding of cleaner tails and scavenger concentrates;
- “Locked cycle” tests;
- Concentrate dewatering tests; and
- Tailings (and waste rock) - ARD/ML testing; tailings thickening and rheology.

Confirmatory grinding and flotation tests on small composites that represent significant variation in the mineralogy of the Mineral Resources could be considered.

26.4 PRELIMINARY ECONOMIC ASSESSMENT

With the current MRE, the Opemiska Project is poised to advance to a Preliminary Economic Assessment (“PEA”). The PEA will be based on the current MRE and incorporate the metallurgical and environmental testing undertaken in 2023. Where possible, the assumptions used for the PEA will be derived from recent testing, historical mine and process plant results, or otherwise will use default industry assumptions to calculate the predicted financial performance of the Project. Undertaking a PEA is justified at this time, because of the comparatively high grades encountered in the Opemiska Deposit, even if there is a significant possibility of adding significant Mineral Resources by drilling the nearby targets. Additional exploration will probably add Mineral Resources and the PEA may need to be updated. Nevertheless, the advantages of establishing the financial parameters of such a favorable project in the near-term likely outweigh the possible additional costs related to an updated PEA.

26.5 ADDRESSING IDENTIFIED RISK FACTORS

Several factors have been identified by QC Copper that may add to the downside risk of the Opemiska Project include, but are not limited to, the following:

- The MRE conceptual pit encroaches on the municipality of Chapais, which raises social acceptance issues, and potential additional development capital costs and trade-off studies would need to be evaluated in future engineering and economic studies;
- The in-house mine assays from 1953 to 1991 cannot be validated by re-assaying, because no drill core remains for the holes drilled during mining operations. Limited twin-hole drilling for the 2021 MRE support the interpretation that in-house mine assays were of acceptable quality. However, assaying methods changed over time and a more detailed verification program would be required as the Project progresses through its development phases;
- The in-house mine copper and gold assays near the conceptual pit’s lower cut-off grades, particularly those performed prior to 1977, are of lower quality with high lower detection limits compared to modern assaying, which can increase the risk of grade misclassification near the cut-off grade. This problem would be progressively addressed as the number of modern drill holes in the Deposit increases, such that the

influence of current assays eventually outweighs that of the historical in-house mine assays. However, the final mining block destination, whether it be a mill, a low-grade stockpile or a waste-pile, would be determined after in-pit blast drilling;

- Geotechnical issues, including open stopes within the eastern pit wall, and the western contact of the Ventures Sill, which dips 60-degrees to the east, that is close to the slope of the pit wall, may create additional risks. The northeast-trending Gwillim Fault, which has an apron of gravel on its south side, due to late vertical movement, may increase the risk of flooding if it contains an aquifer. Otherwise, the host rocks at Opemiska are considered to be very competent and favourable for potential open pit excavation; and
- The positions in three dimensions of the historical stopes at the Springer and Perry Mines have been digitized from georeferenced plans and cross-sections. However, due to normal and expected imprecision, some of the stopes are neither totally enclosed in the mineralized envelopes or totally enclose the mined-out portions of the copper-gold veins, which creates some downside risk on grade compared to reality. Following a review, the Company decided that the issue is manageable at this stage of the Project. However, a review and re-digitization of an undetermined proportion of the stopes would be required as the Project advances through the development process.

All the risk issues identified above are notable and would require mitigation measures as the Project advances through the stages of the mine development process. However, it is the opinion of Report Authors that they do not require addressing for an MRE.

26.6 RECOMMENDED BUDGET

The total cost of the work program recommended by the Authors is estimated to be CAD\$3.1M (Table 26.1) Approximately 2.5 months will be required to complete the drilling and 3 to 6 months to complete the PEA.

TABLE 26.1 RECOMMENDED 2024 PROGRAM AND BUDGET					
Opemiska Project Items	Activity	Cost per Unit (CAD\$/unit)	Units	Unit Type	Estimated Cost (CAD\$)
General					
Labour, Company Personnel	Project Management	900	45	Days	40,500
	Geologists	500	90	Days	45,000
	Hourly Workers	300	90	Days	27,000
	Core Shack Technicians	400	90	Days	36,000
	Slashers, trail builders	300	30	Days	9,000

**TABLE 26.1
RECOMMENDED 2024 PROGRAM AND BUDGET**

Opemiska Project Items	Activity	Cost per Unit (CAD\$/unit)	Units	Unit Type	Estimated Cost (CAD\$)
Project Expenses	House Rental and Maintenance	3,000	3	Month	9,000
	Core Shack Rental, Repairs, and Maintenance	5,000	3	Month	15,000
	Food	1,200	3	Month	3,600
	Vehicles	1,200	3	Month	3,600
	Map Scanning	4	2,000	Map	8,000
	Digitization	500	120	Days	60,000
Permitting and Surveying	Surveying	2,000	6	Days	12,000
	Exploration Permitting				5,000
	FN Consultation				5,000
	Claim Renewals				8,000
Diamond Drilling					
	Drilling Contract	90	15,000	Metres	1,350,000
	Drilling Tools	12,000	3	Months	36,000
	Televiewer				15,000
	Assays	41	10,000	Metres	410,300
	Standards & Blanks				5,000
	Core Boxes & Tags	14	3,600	Units	50,400
	Sample Reject/Pulp Storage				3,000
	Core Storage				3,000
Metallurgy					
	Sampling, Grinding, Gravity Concentration, Flotation, Locked Cycle Tests, Concentrate Dewatering, Tailings Tests				200,000
Preliminary Economic Analysis					
	Engineering	2,500	100		250,000
	Geology	1,500	60		90,000
	Financial Modelling	2,000	45		90,000
	Report				15,000

TABLE 26.1
RECOMMENDED 2024 PROGRAM AND BUDGET

Opemiska Project Items	Activity	Cost per Unit (CAD\$/unit)	Units	Unit Type	Estimated Cost (CAD\$)
Contingency (10%)					280,410
Total					3,084,510

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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 “Technical Report and Updated Mineral Resource Estimate of the Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec, Canada”, (The “Technical Report”) with an effective date of January 8, 2024.
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 Professional Geoscientists 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 prior involvement with the Project that is the subject of this Technical Report. I was a “Qualified Person” for a Technical Report titled “Mineral Resource Estimate and Technical Report on The Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec”, with an effective date of September 20, 2021”.
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: January 8, 2024

Signed Date: February 22, 2024

{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 “Technical Report and Updated Mineral Resource Estimate of the Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec, Canada”, (The “Technical Report”) with an effective date of January 8, 2024.
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 prior involvement with the Project that is the subject of this Technical Report. I was a “Qualified Person” for a Technical Report titled “Mineral Resource Estimate and Technical Report on The Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District Québec”, with an effective date of September 20, 2021”.
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: January 8, 2024

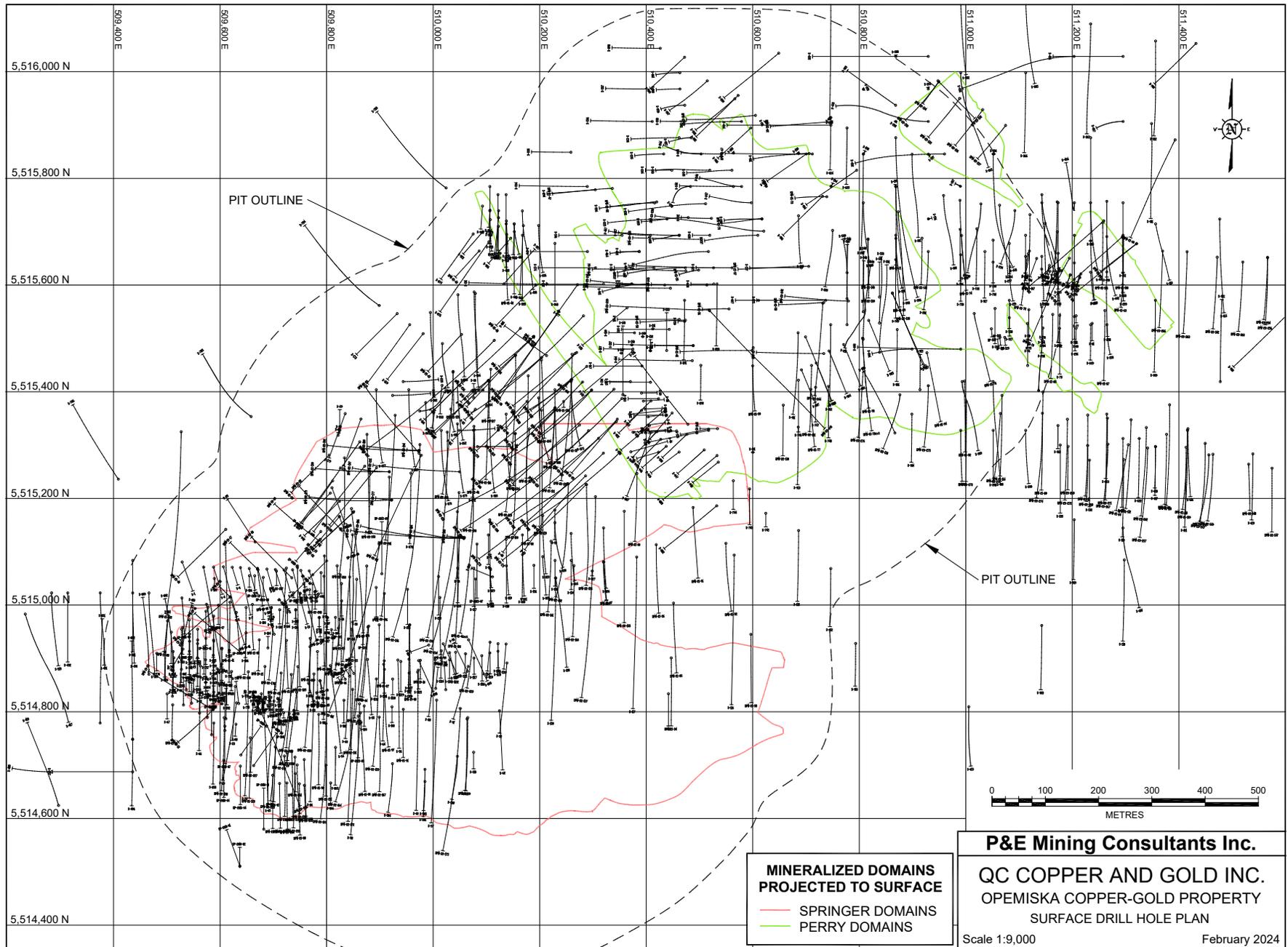
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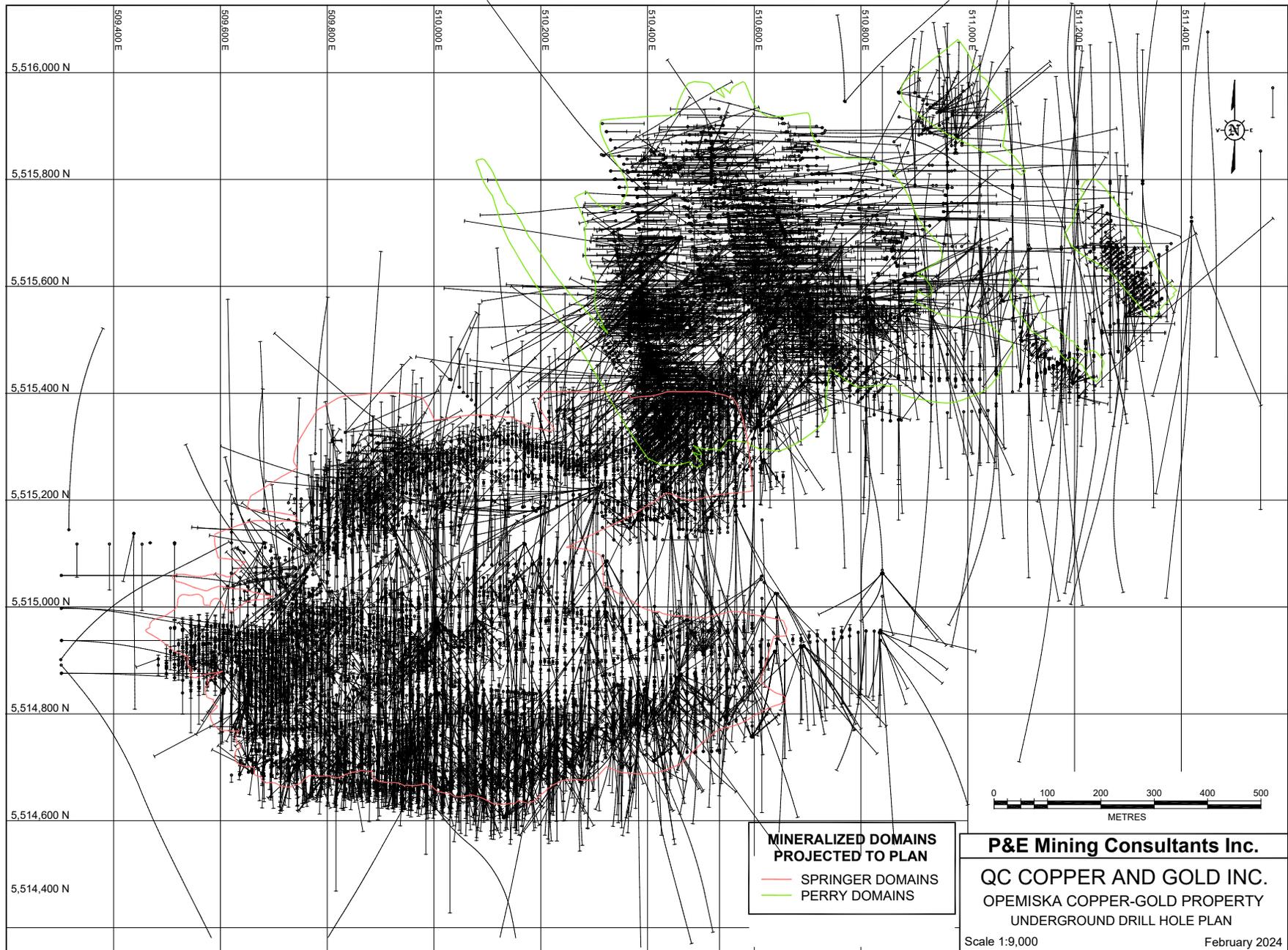
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[Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

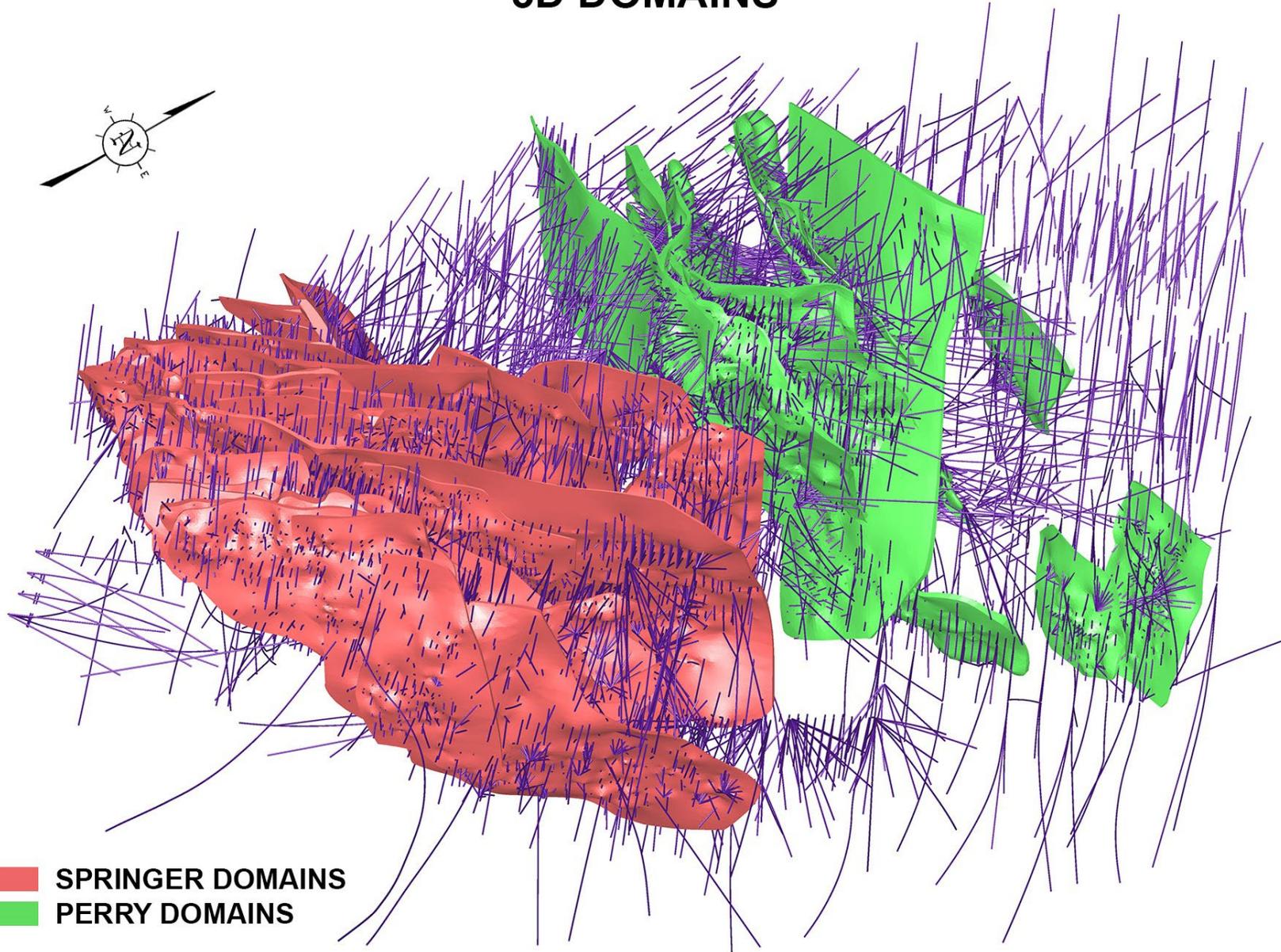
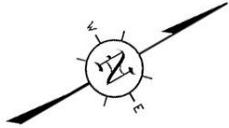
APPENDIX A DRILL HOLE PLANS





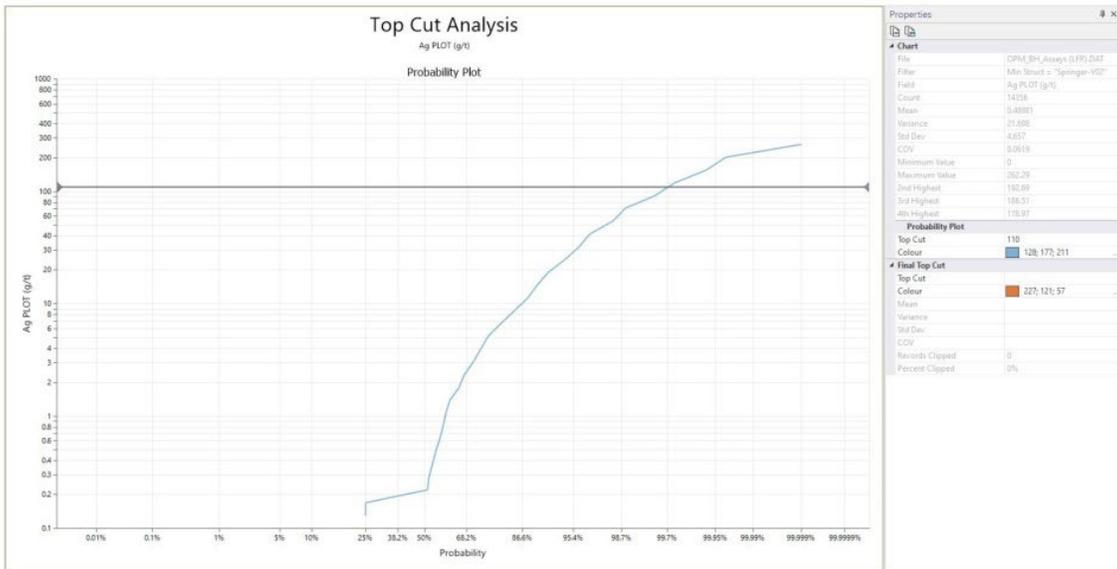
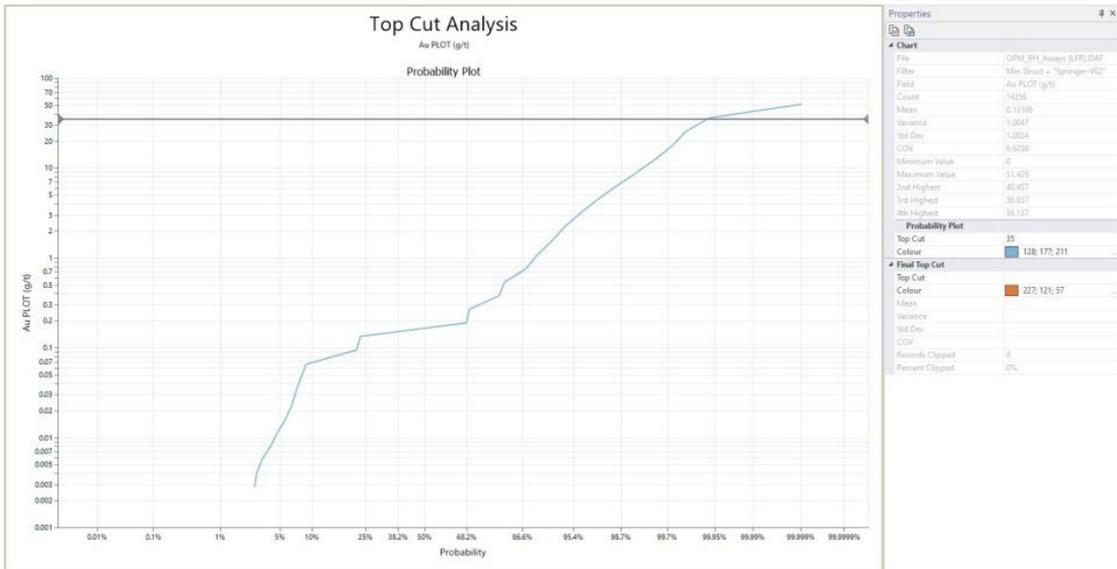
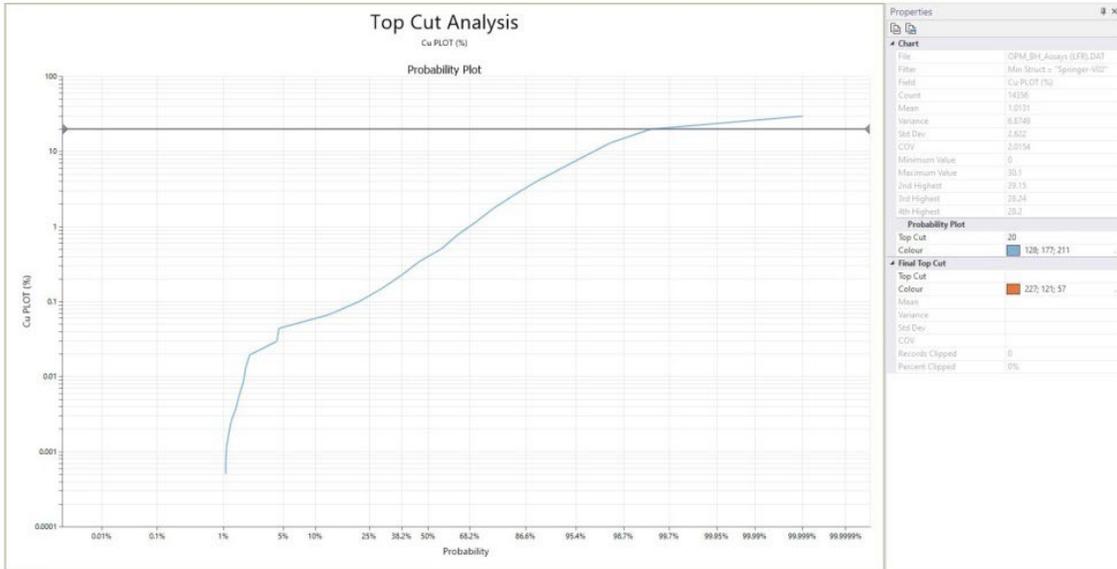
APPENDIX B 3-D DOMAINS

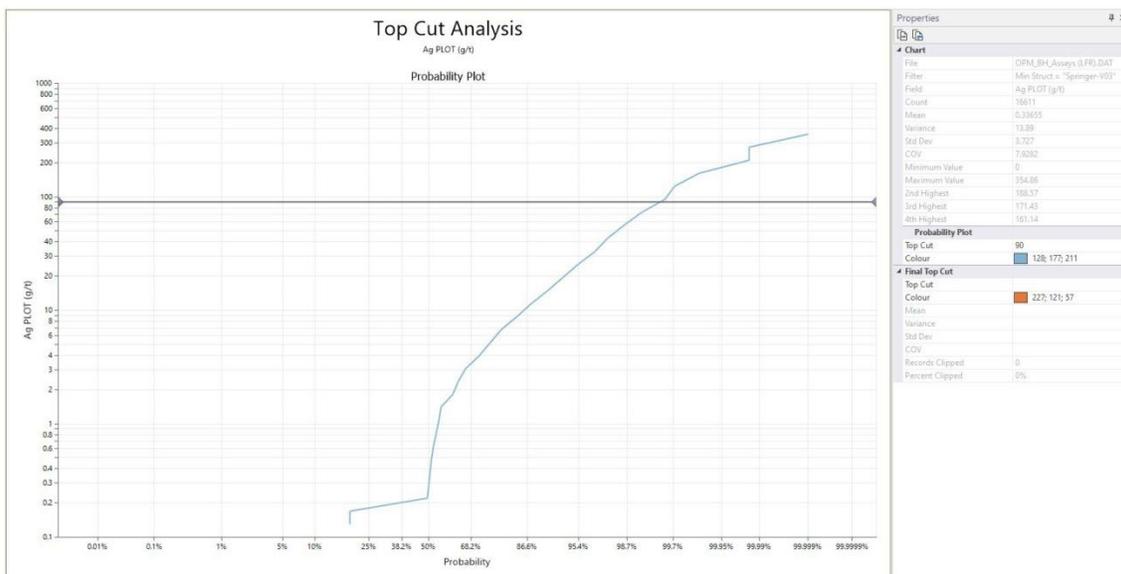
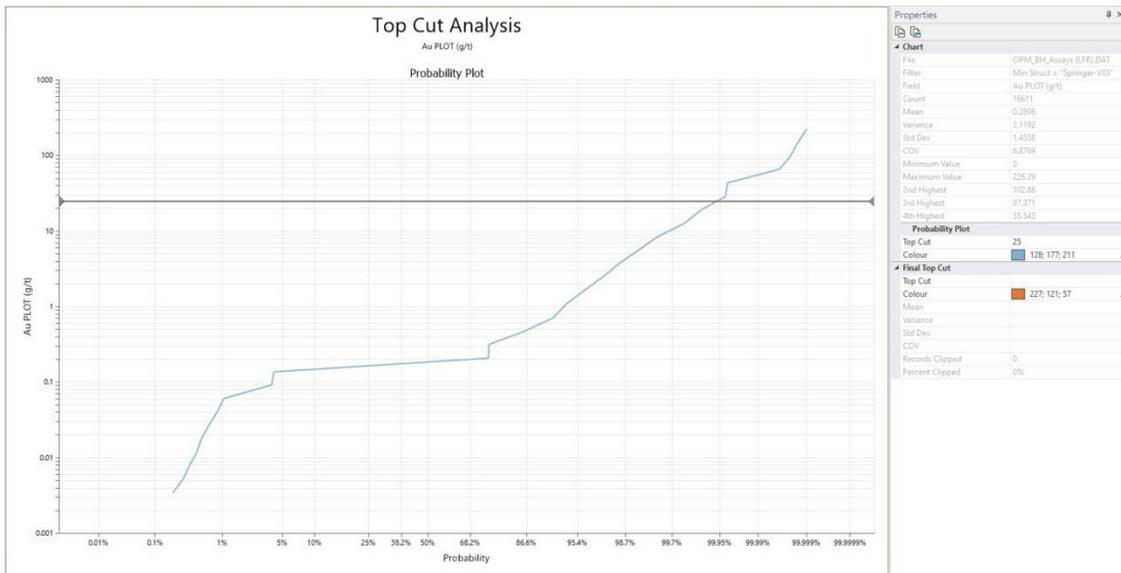
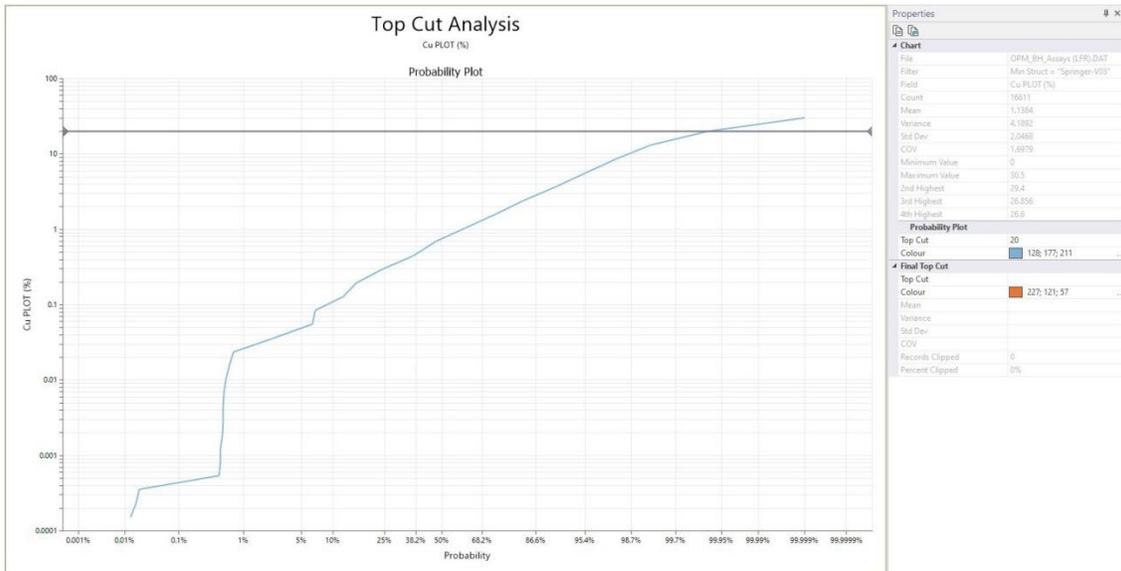
OPEMISKA COPPER-GOLD PROPERTY 3D DOMAINS

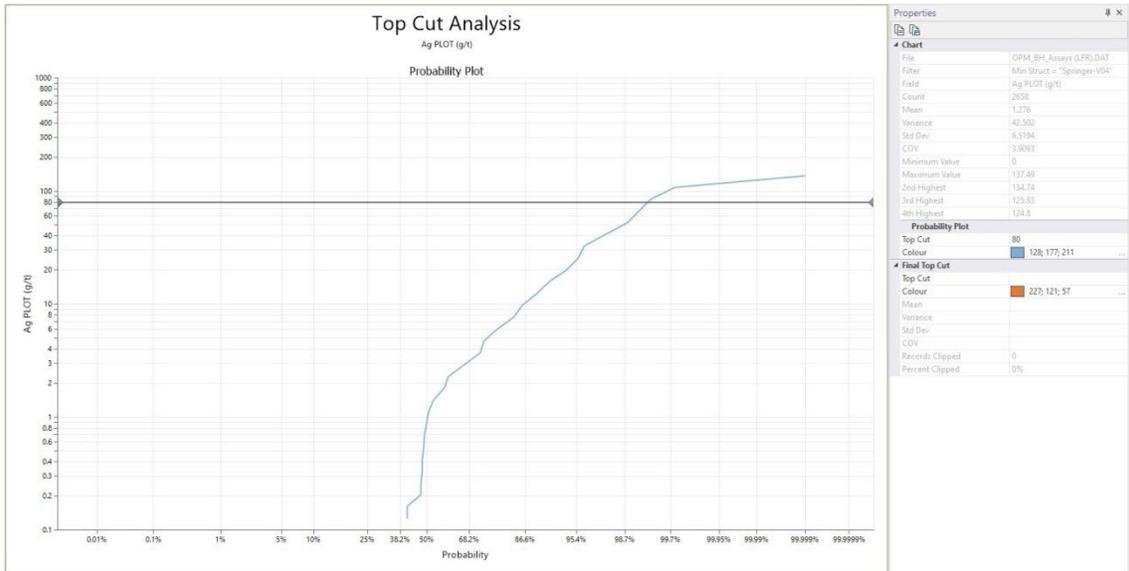
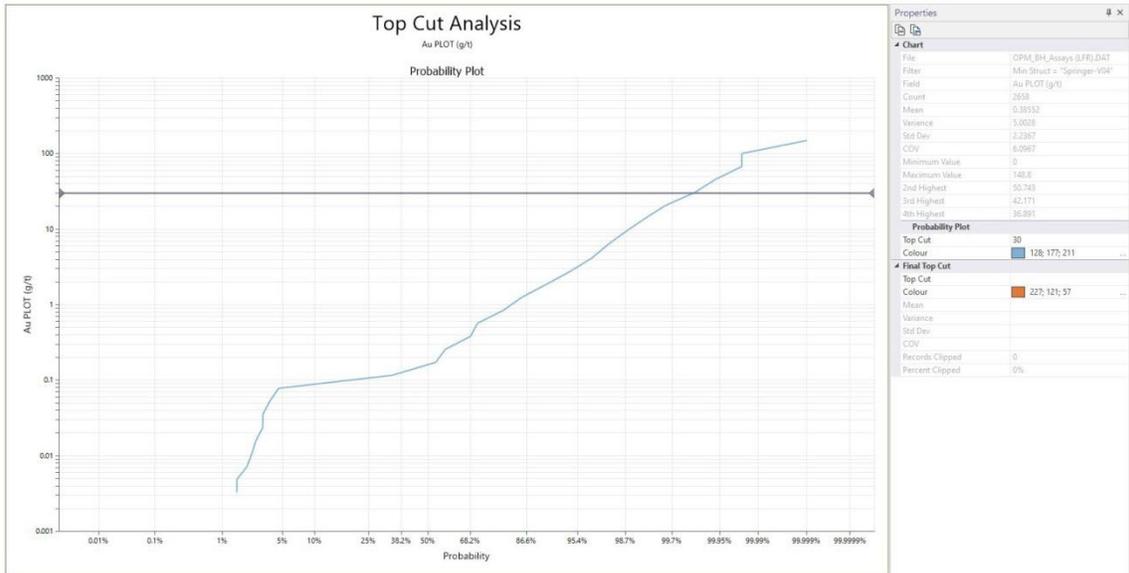
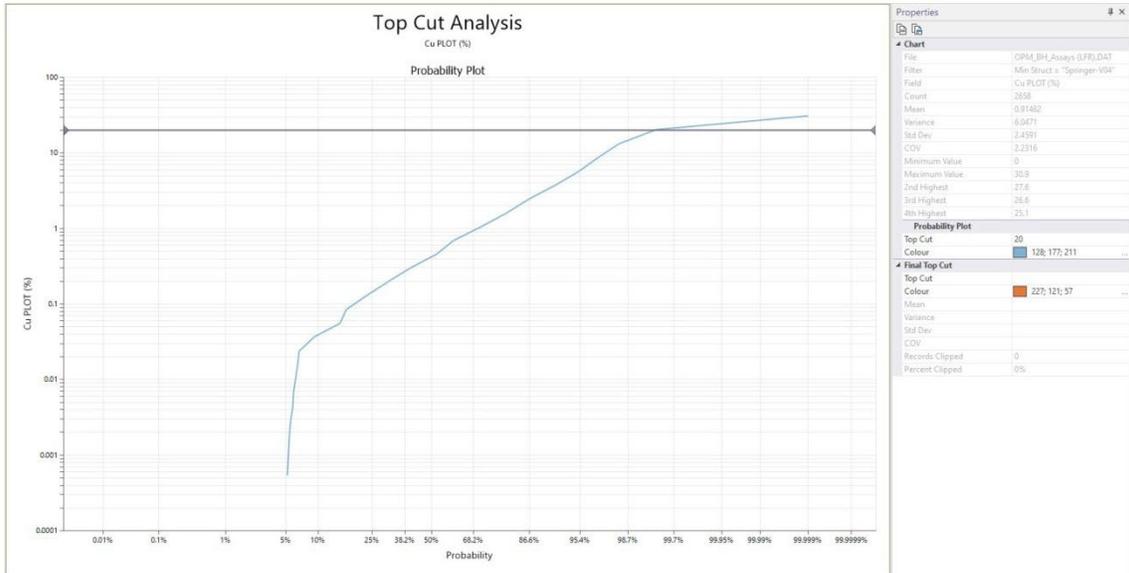


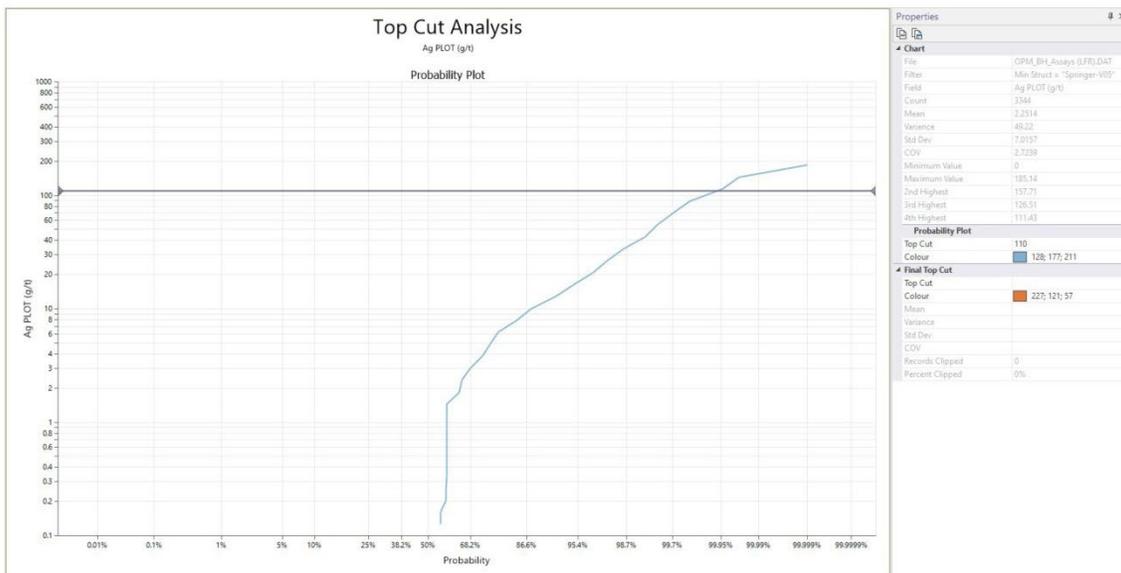
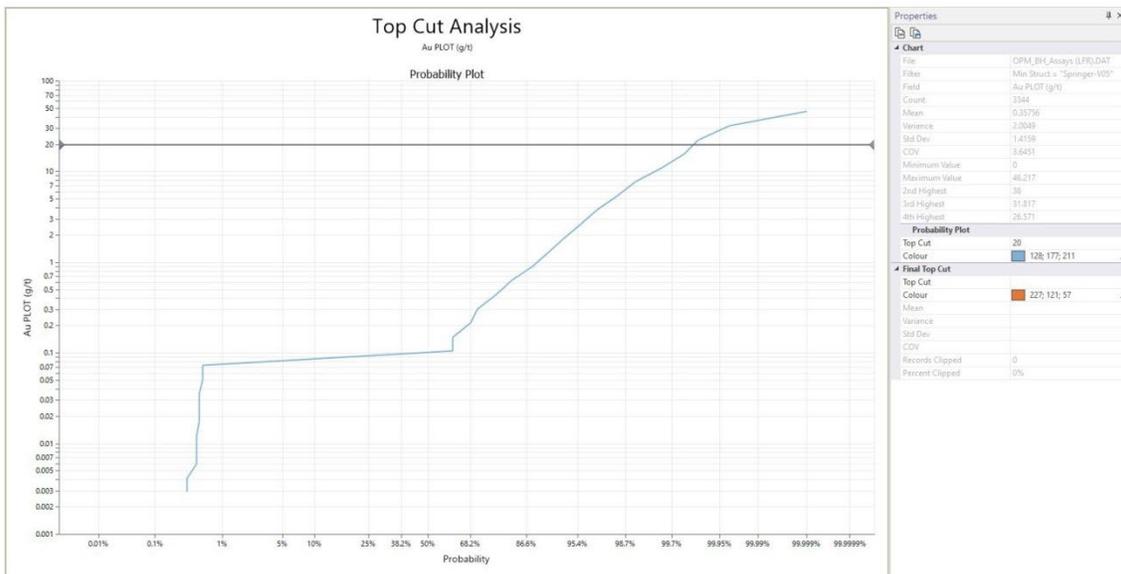
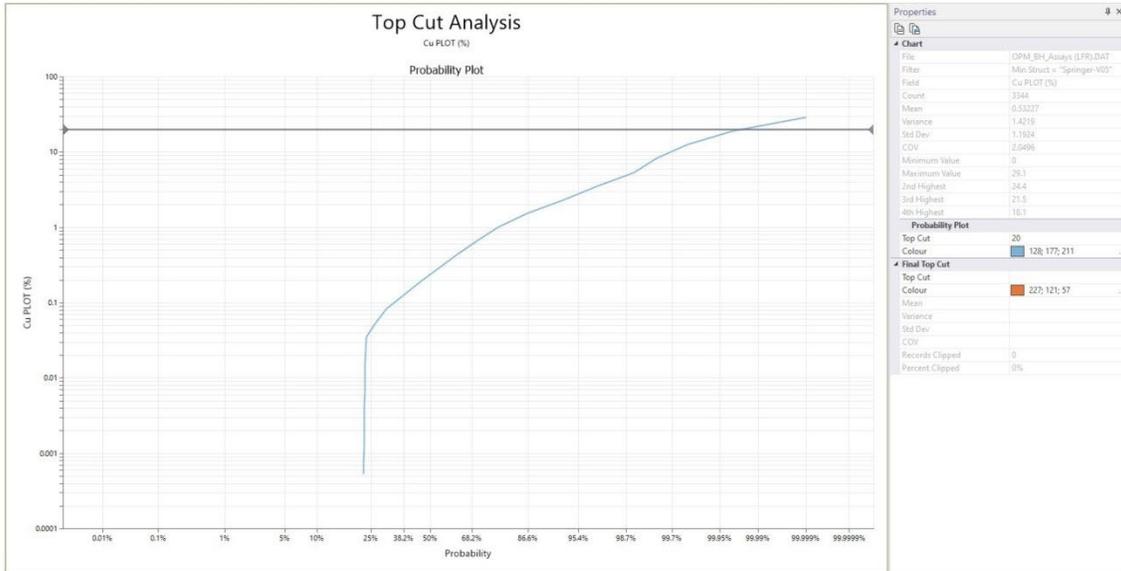
 **SPRINGER DOMAINS**
 **PERRY DOMAINS**

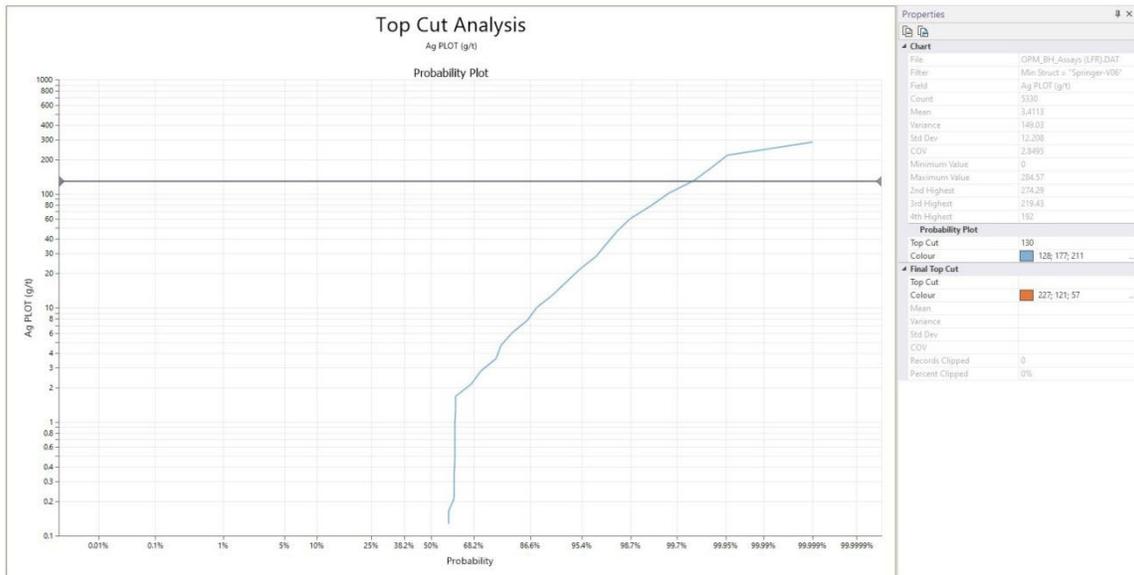
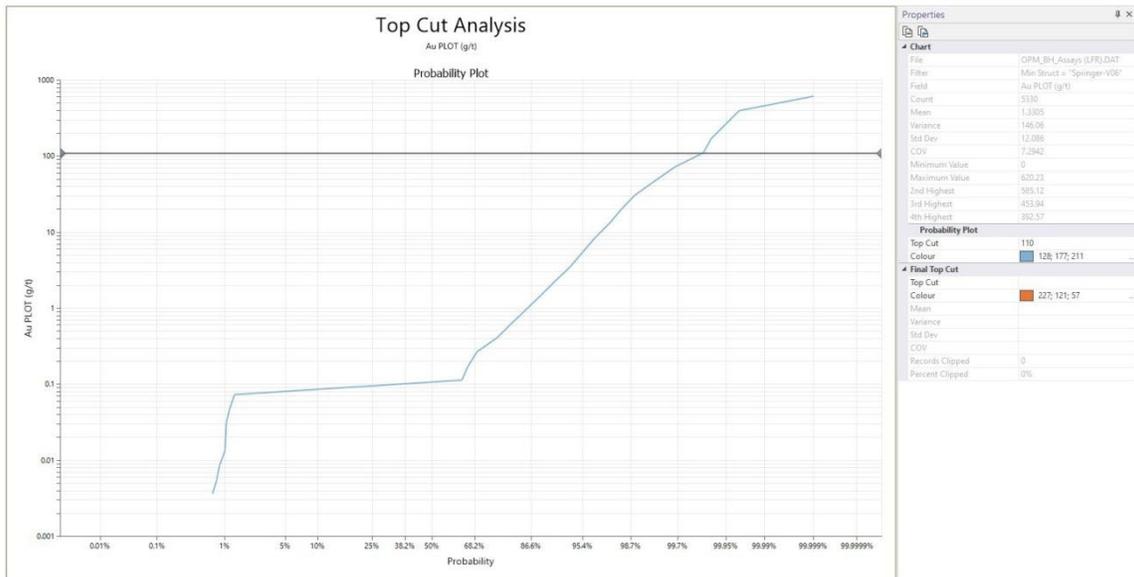
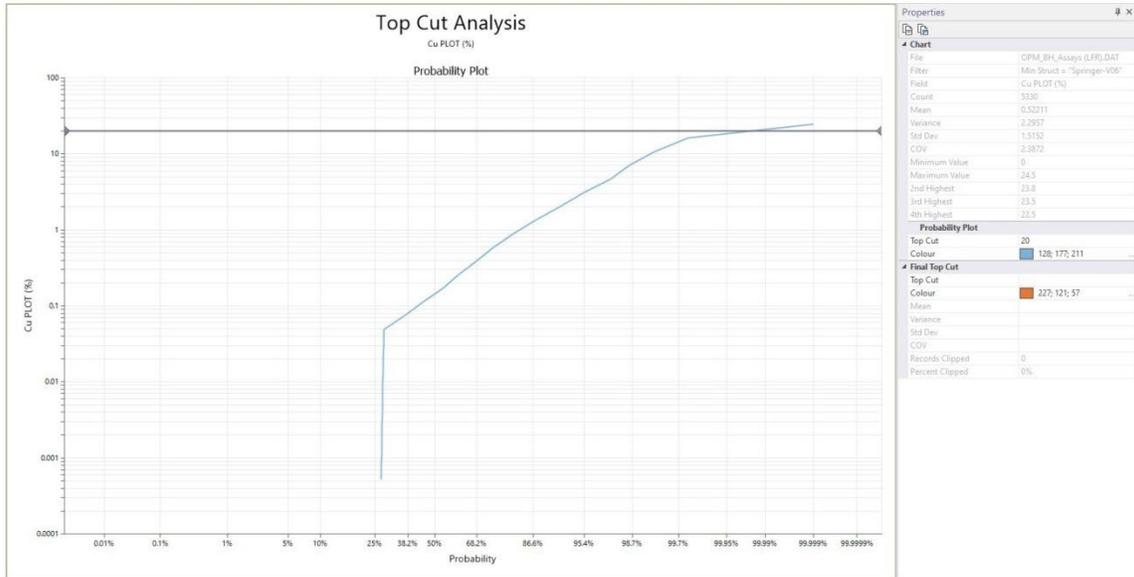
APPENDIX C PROBABILITY PLOTS

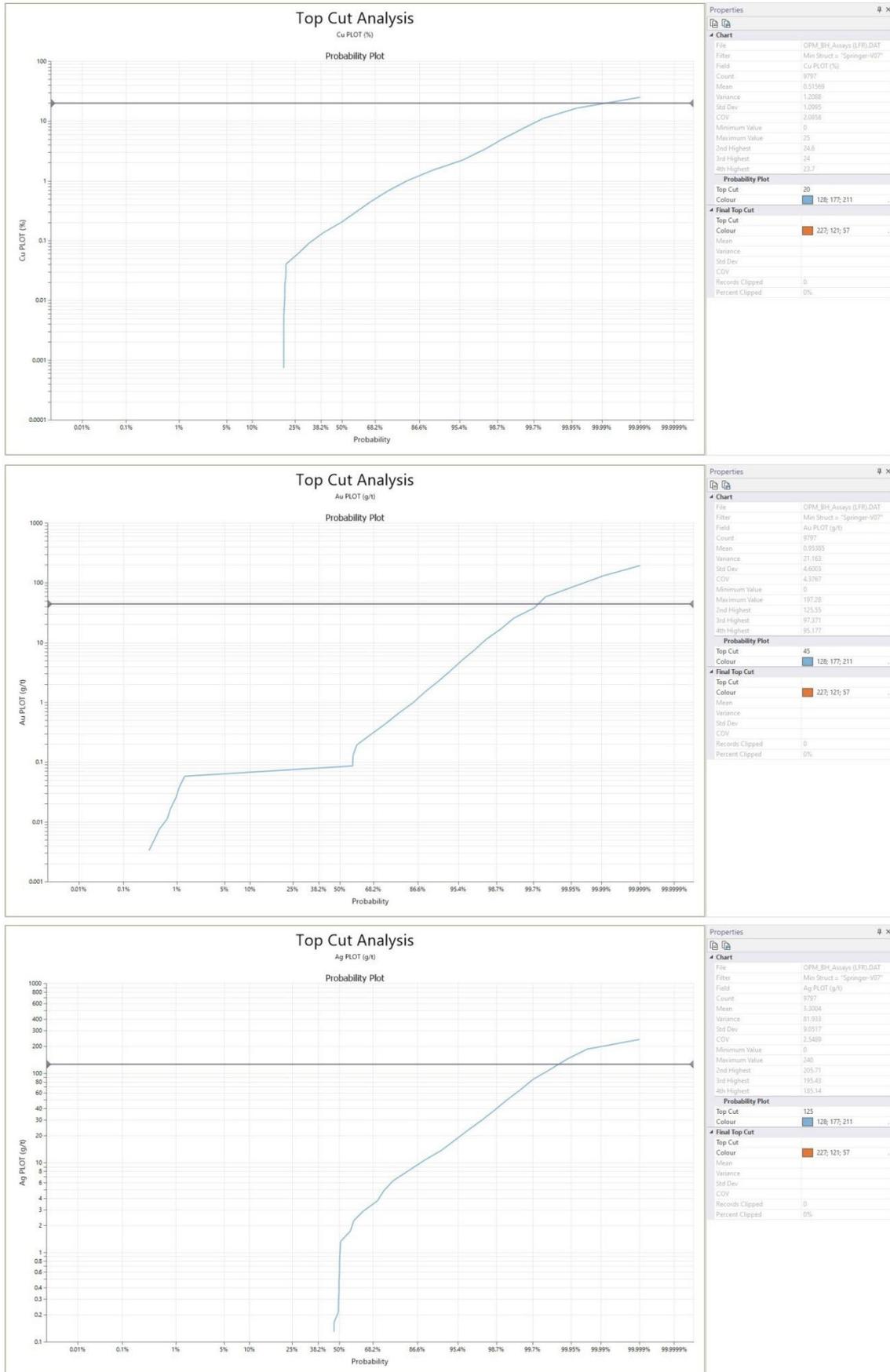


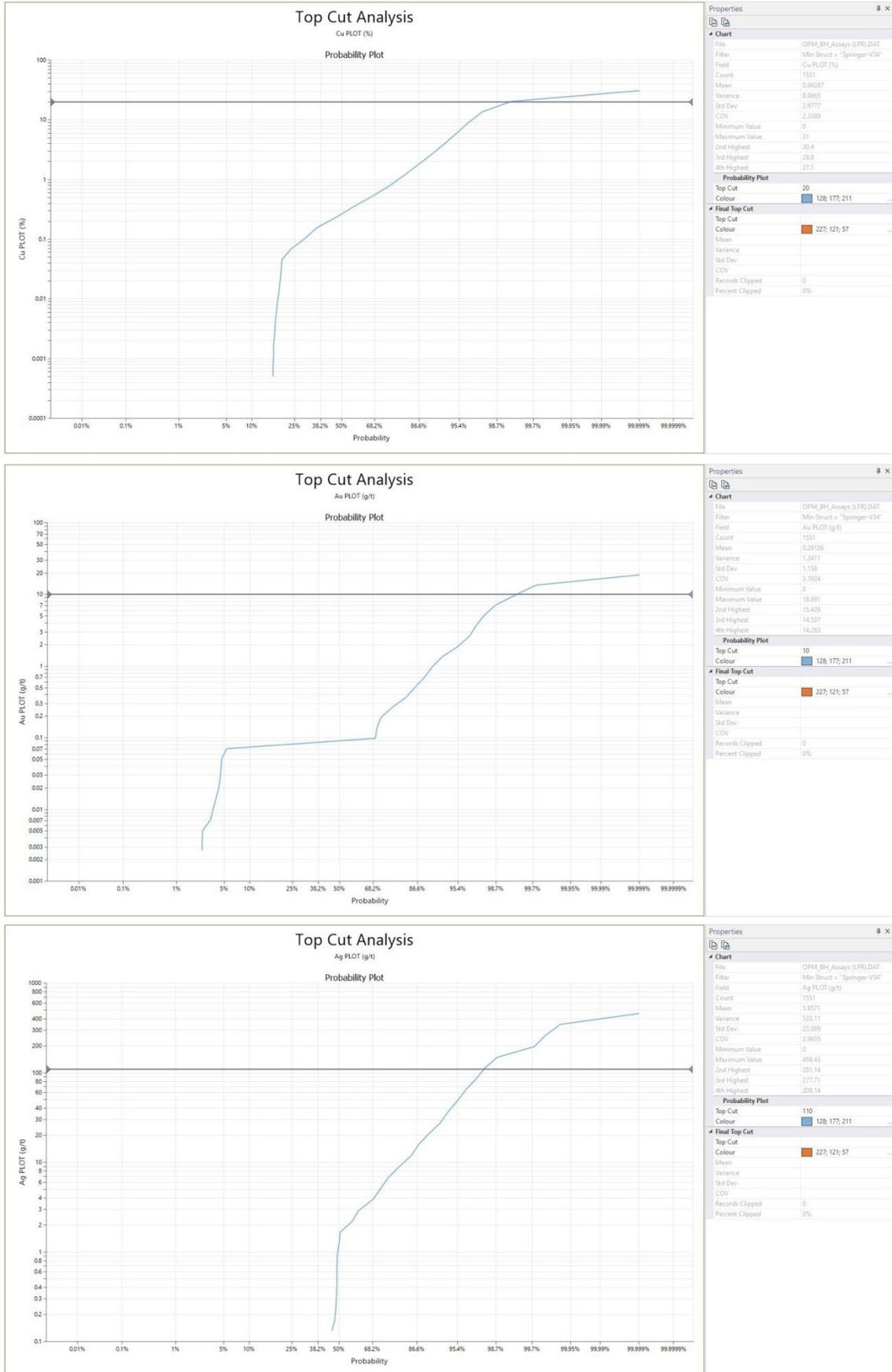




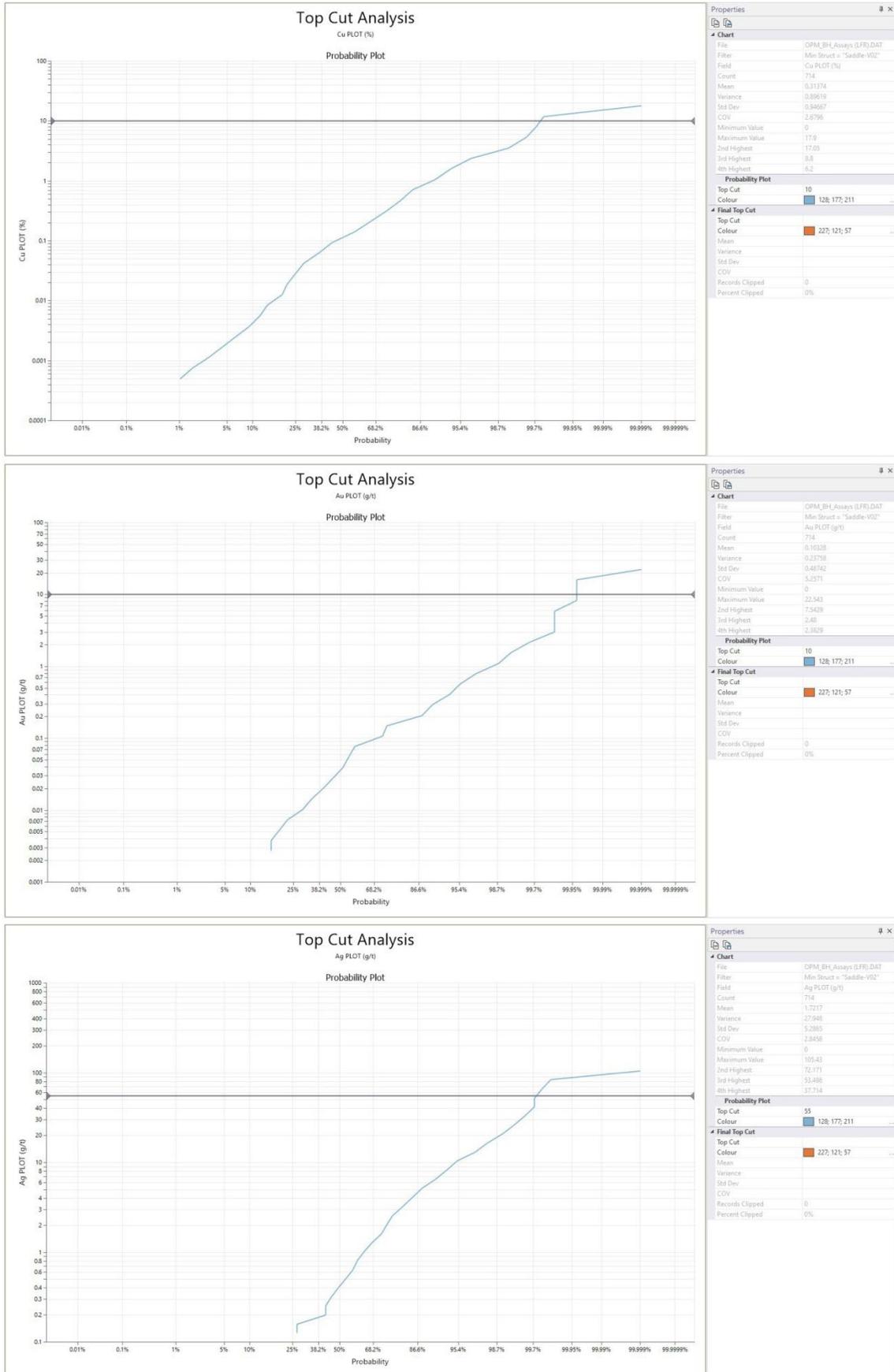




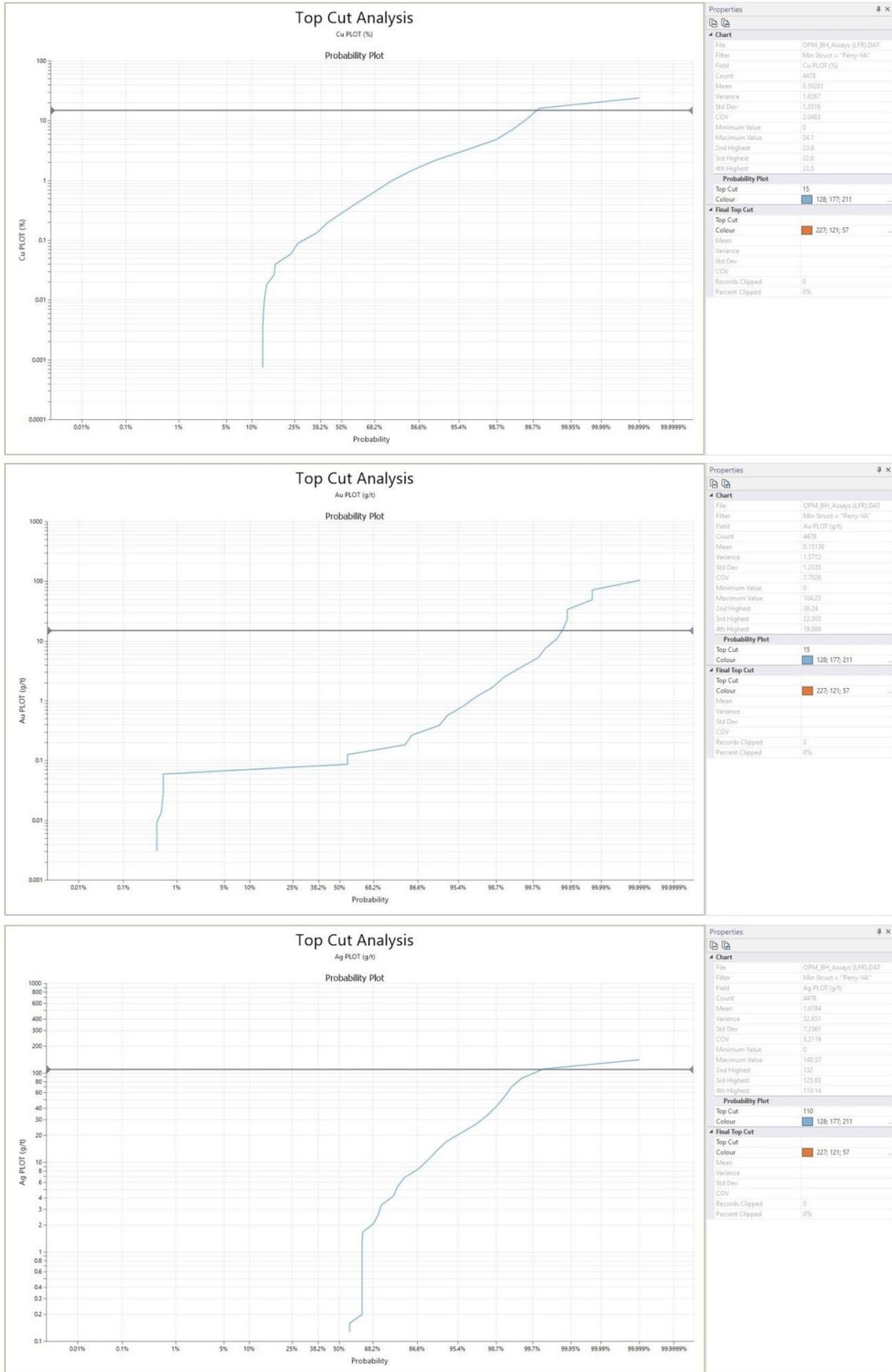




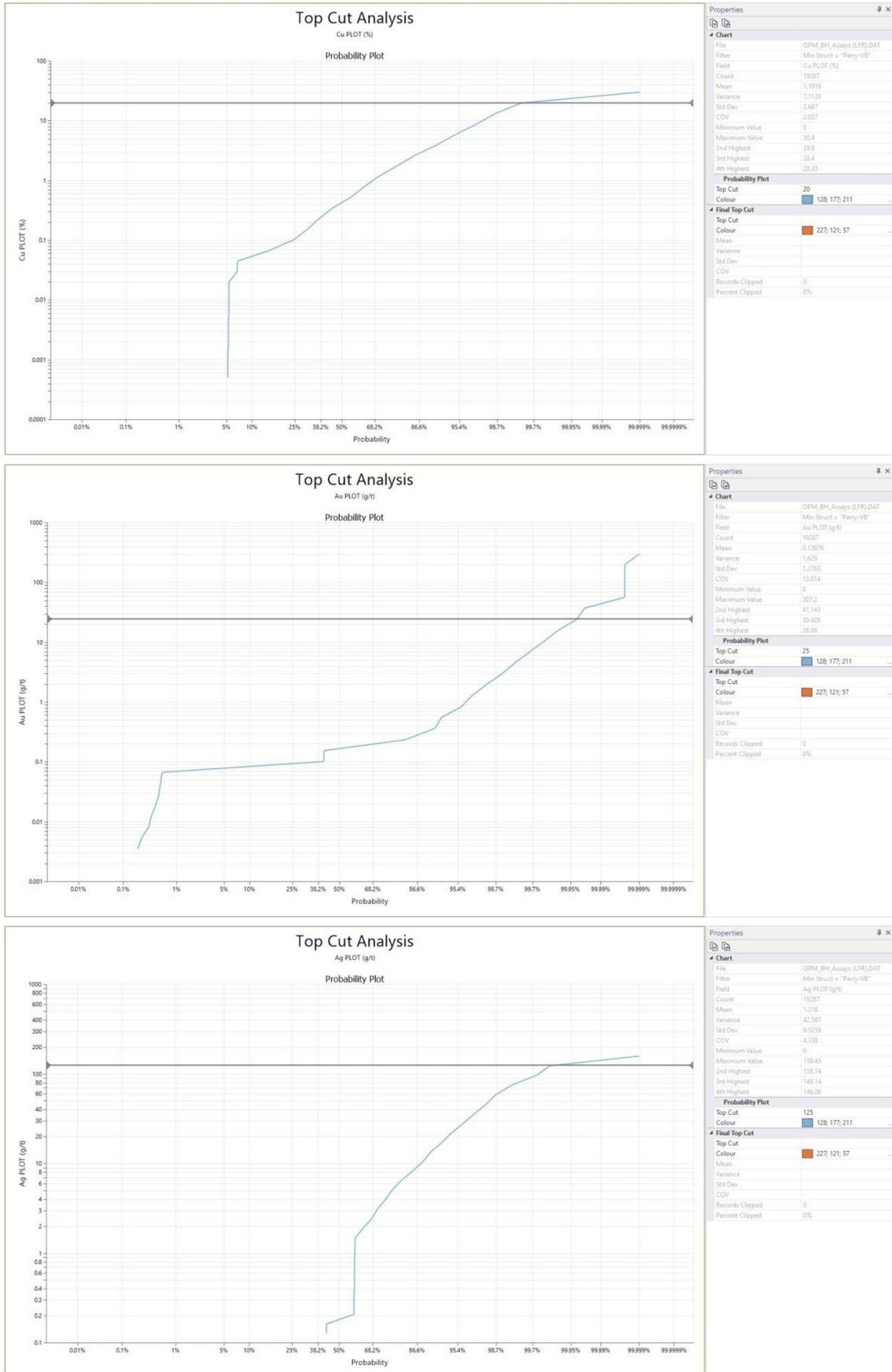
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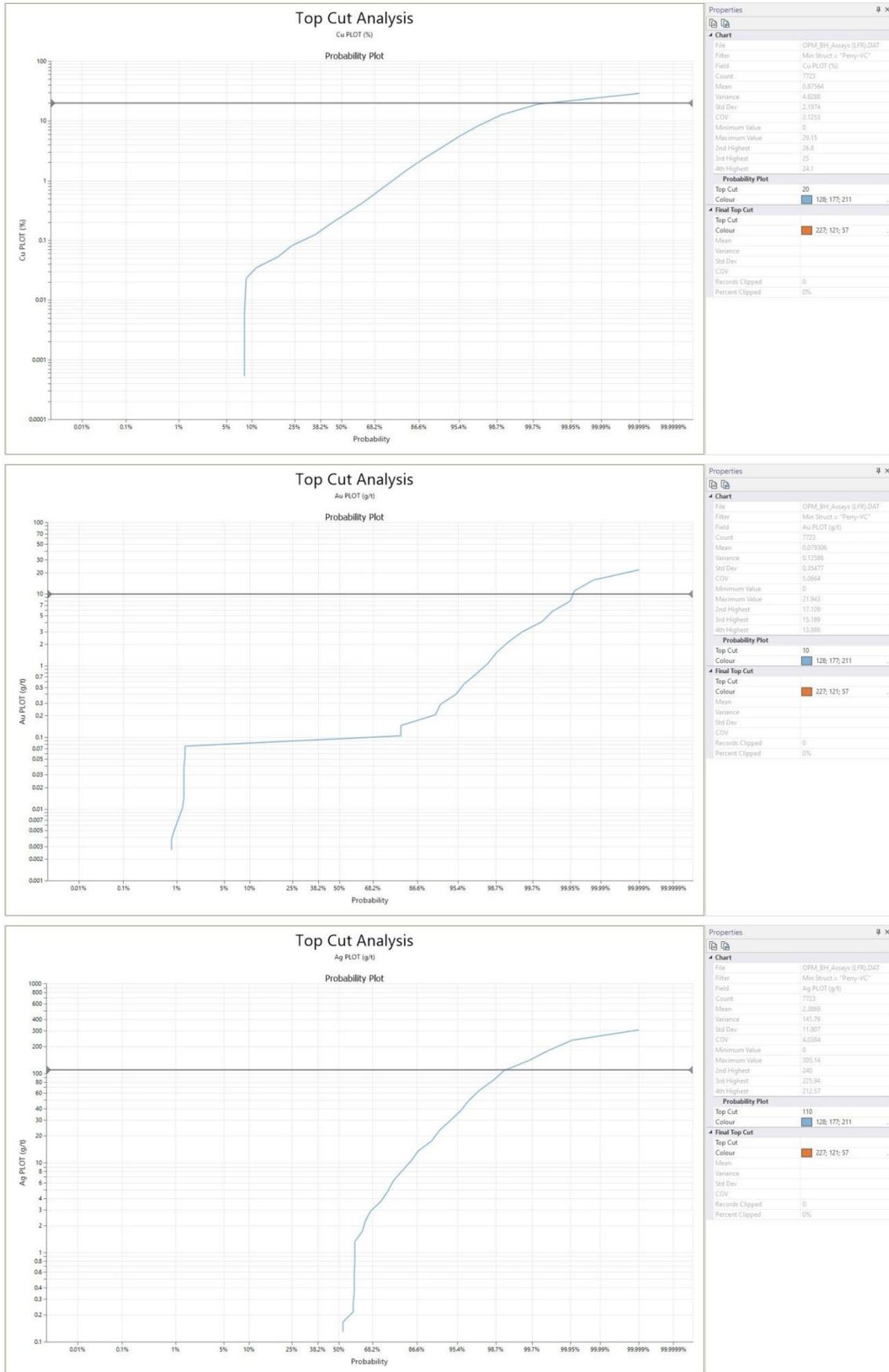


PERRY VA

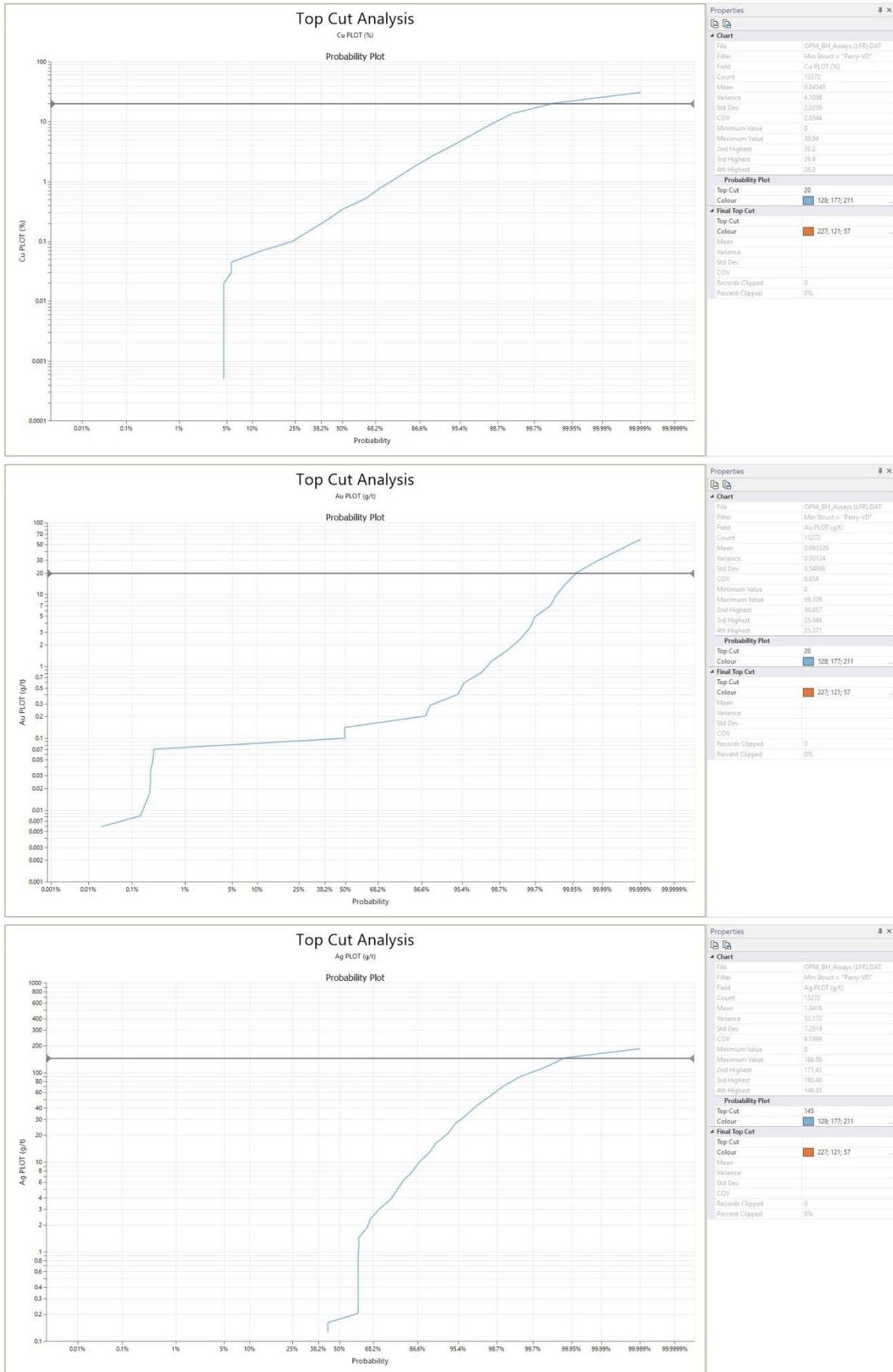


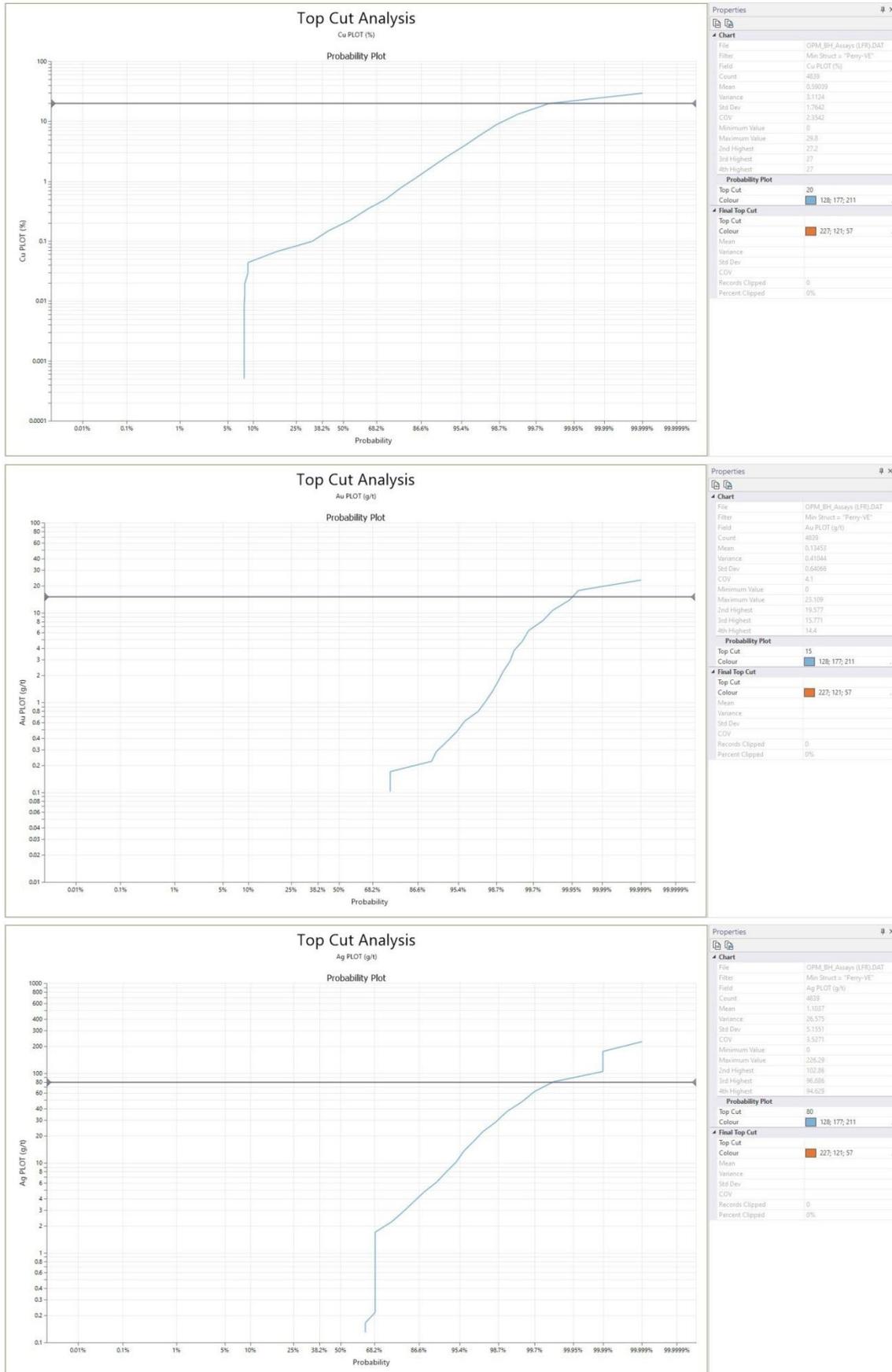
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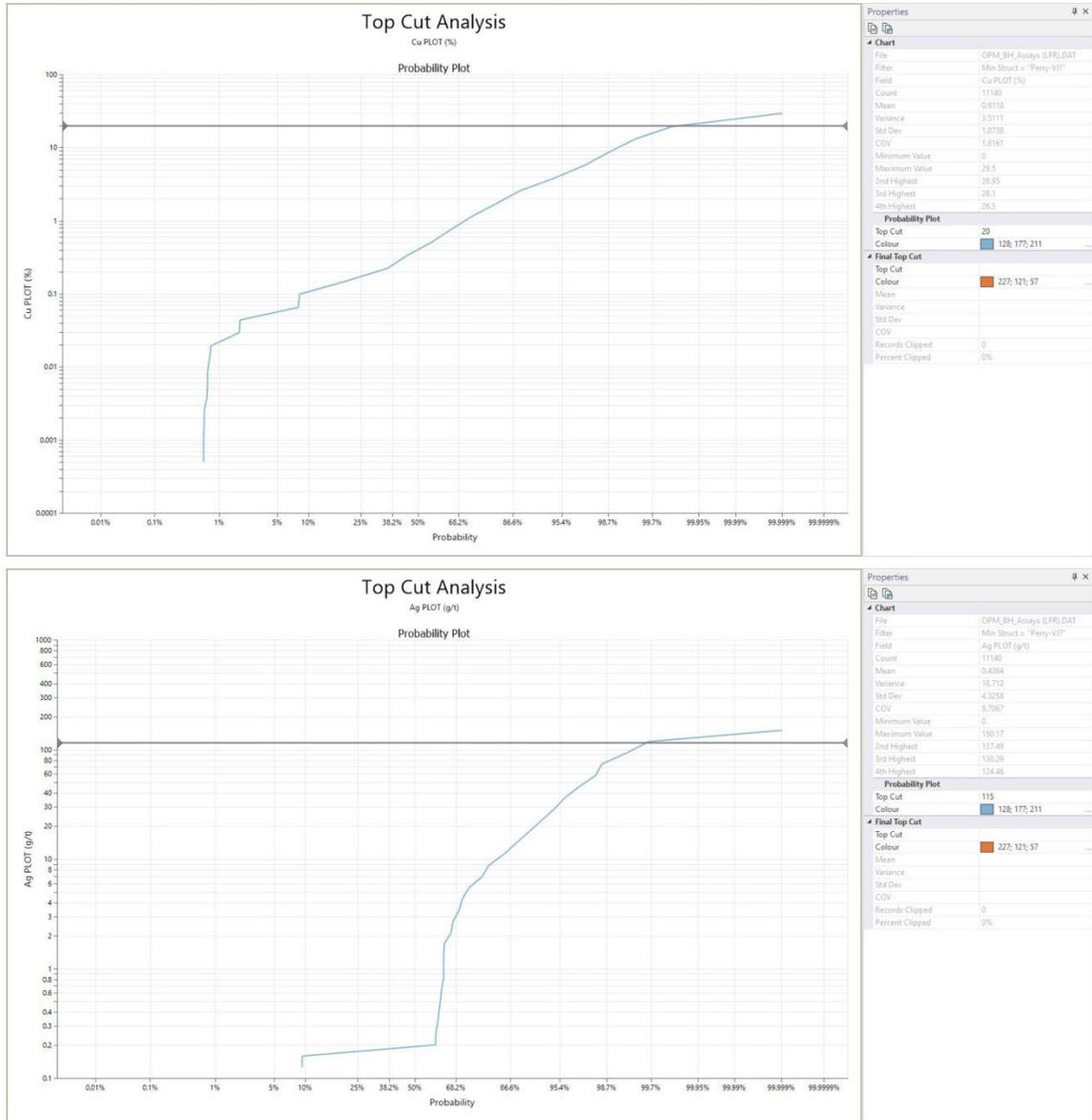




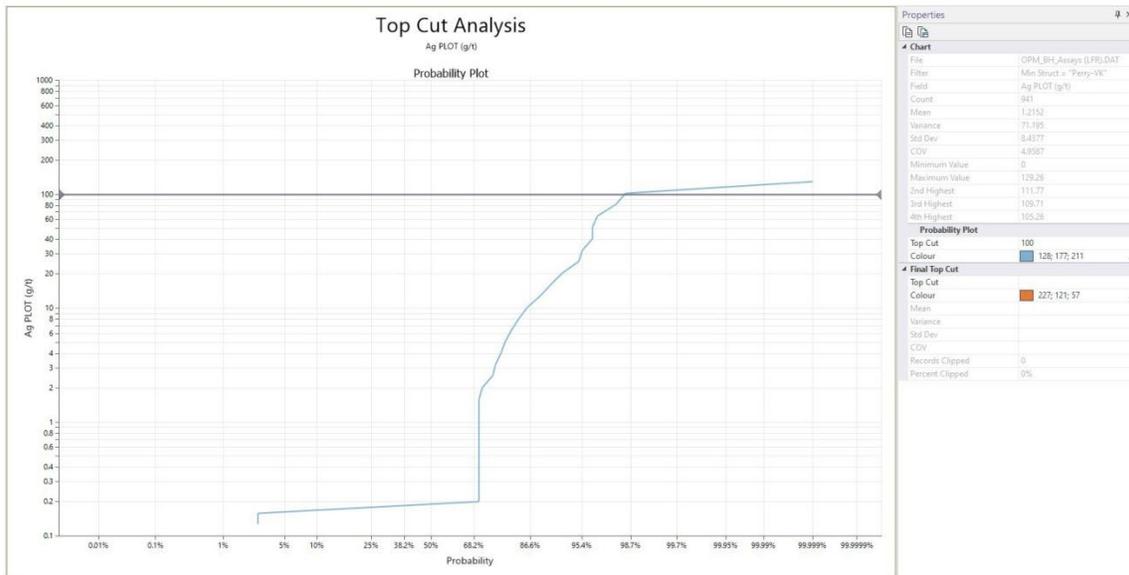
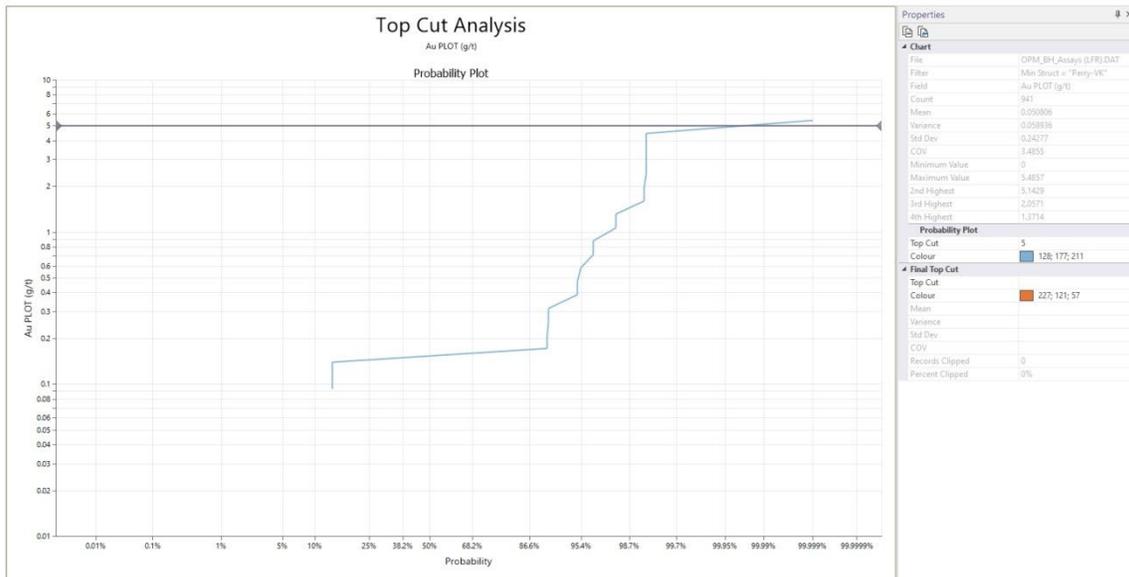
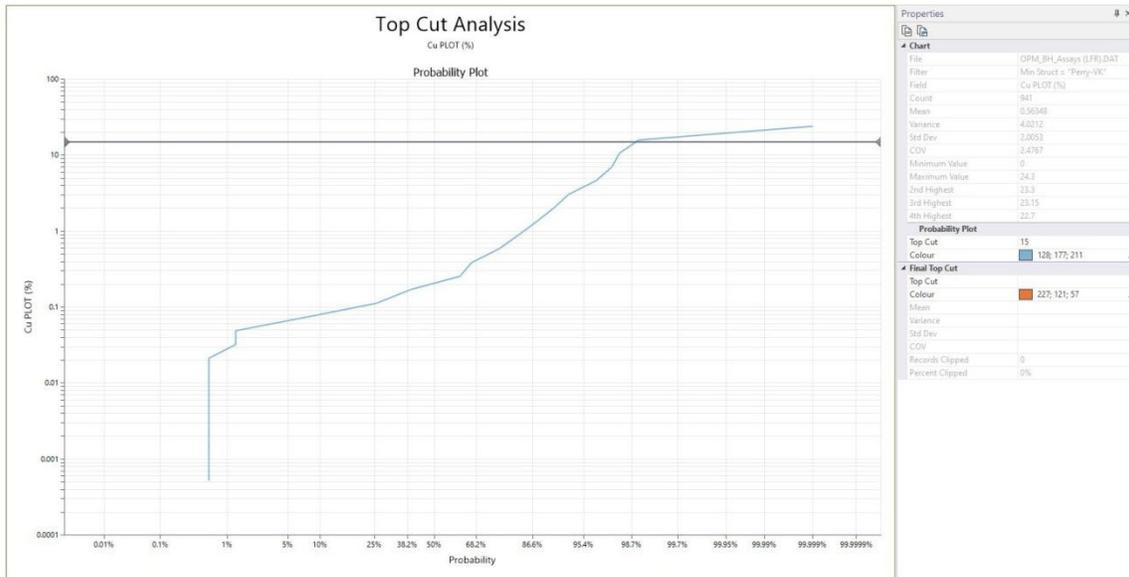
PERRY VD





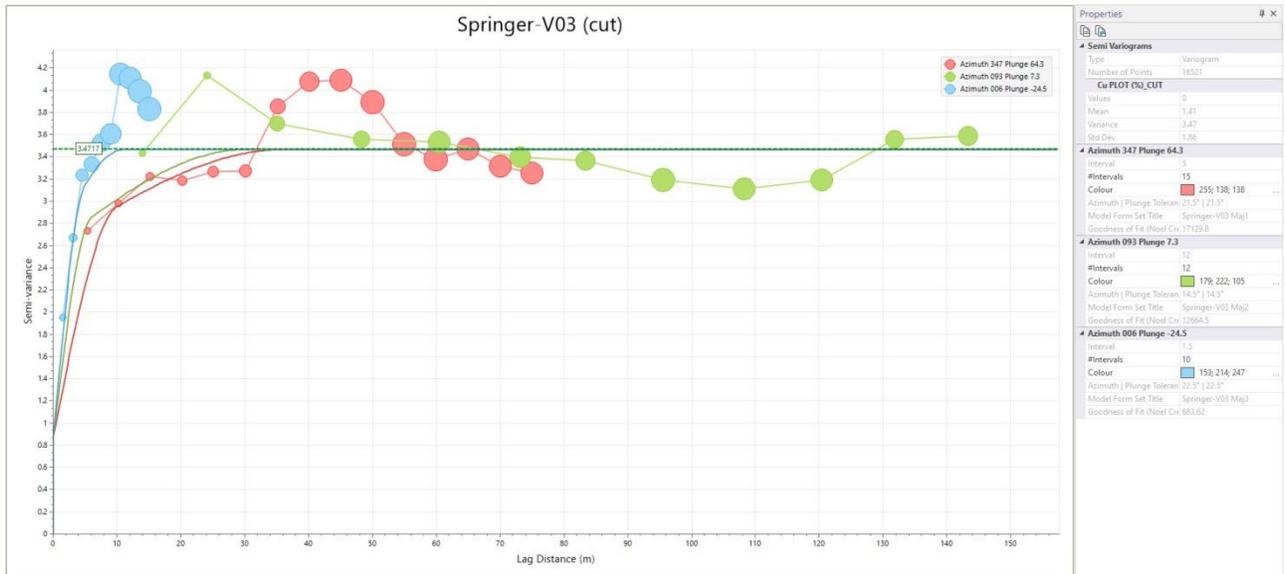
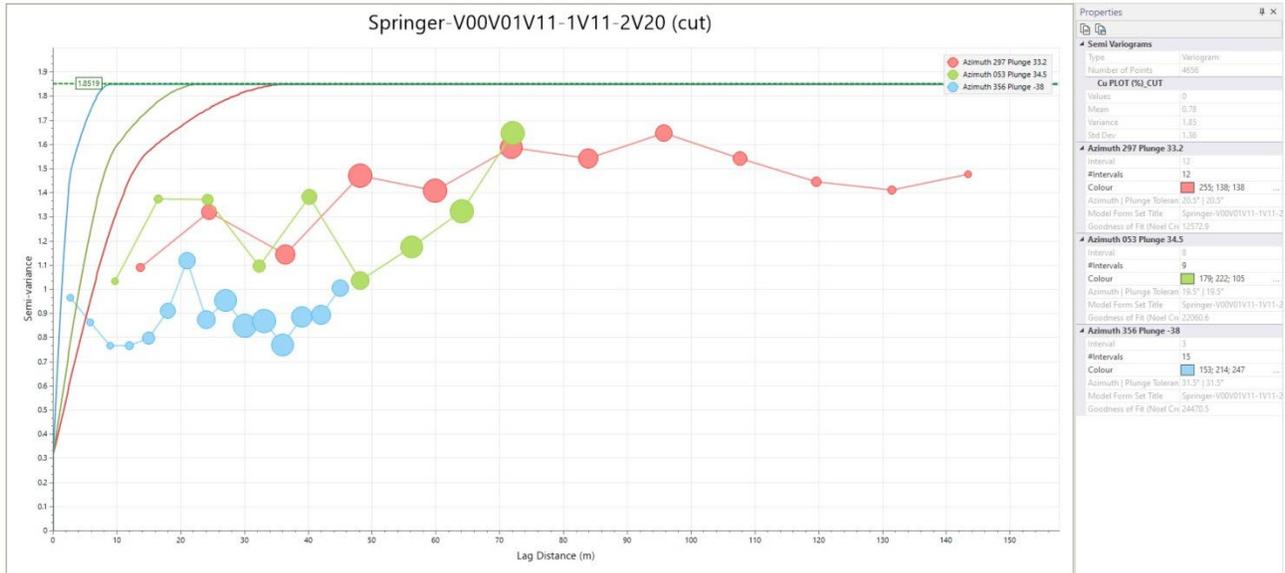


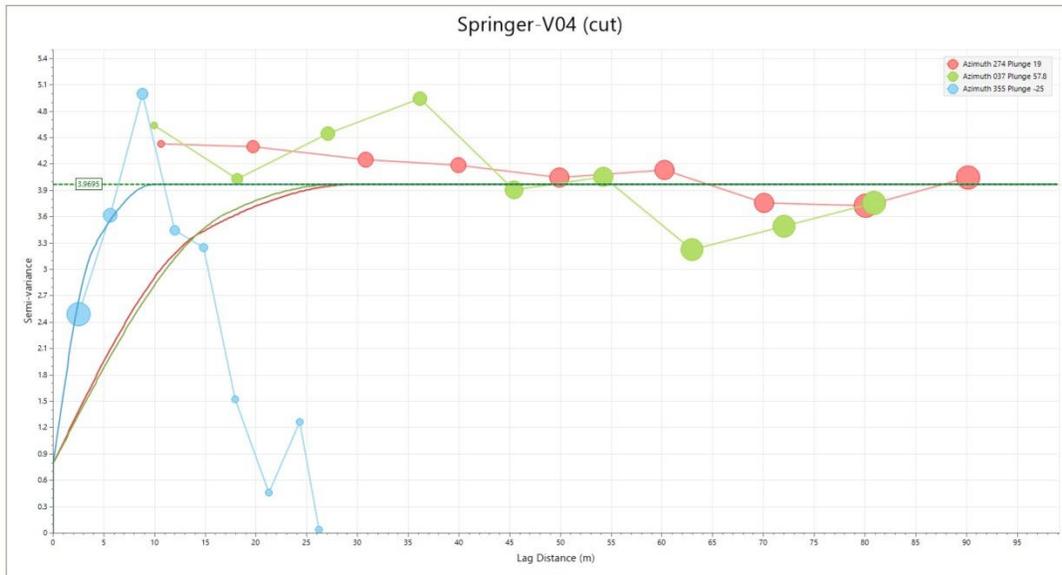
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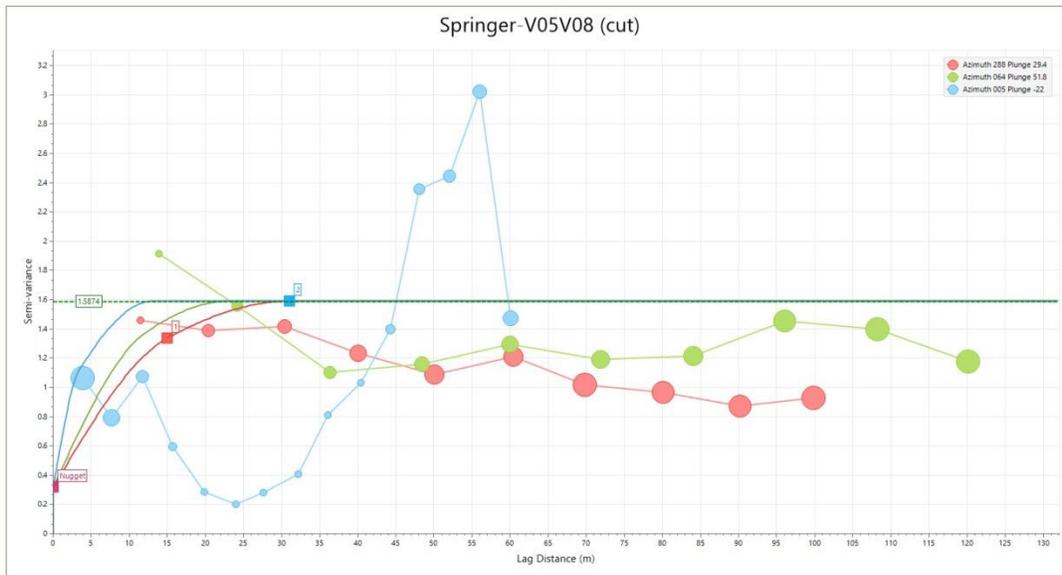
APPENDIX D SEMI-VARIOGRAMS

SPRINGER

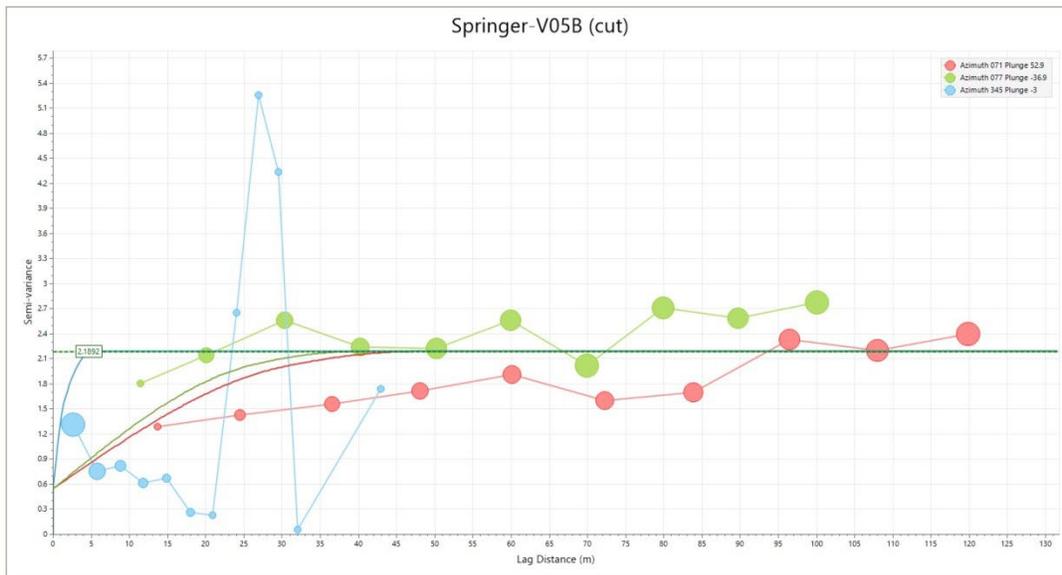




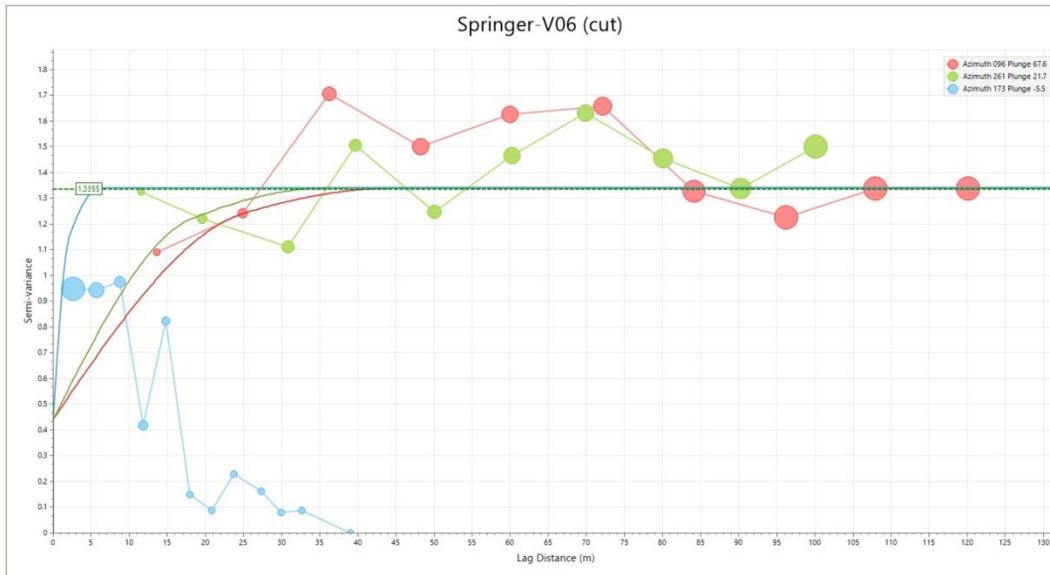
Properties	
Semi Variograms Type: Variogram Number of Points: 1336 Cu PLOT (%)_CUT Values: 0 Mean: 1.24 Variance: 3.97 Std Dev: 1.99	
Azimuth 274 Plunge 19 Interval: 10 #Intervals: 9 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 22.5° 22.5° Model Form Set Title: Springer-V04 Maj1 Goodness of Fit (Nodl Cw): 344.991	
Azimuth 037 Plunge 57.8 Interval: 9 #Intervals: 9 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 44.3° 44.3° Model Form Set Title: Springer-V04 Maj2 Goodness of Fit (Nodl Cw): 1032.08	
Azimuth 355 Plunge -25 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 33.3° 33.3° Model Form Set Title: Springer-V04 Maj3 Goodness of Fit (Nodl Cw): 70.1325	



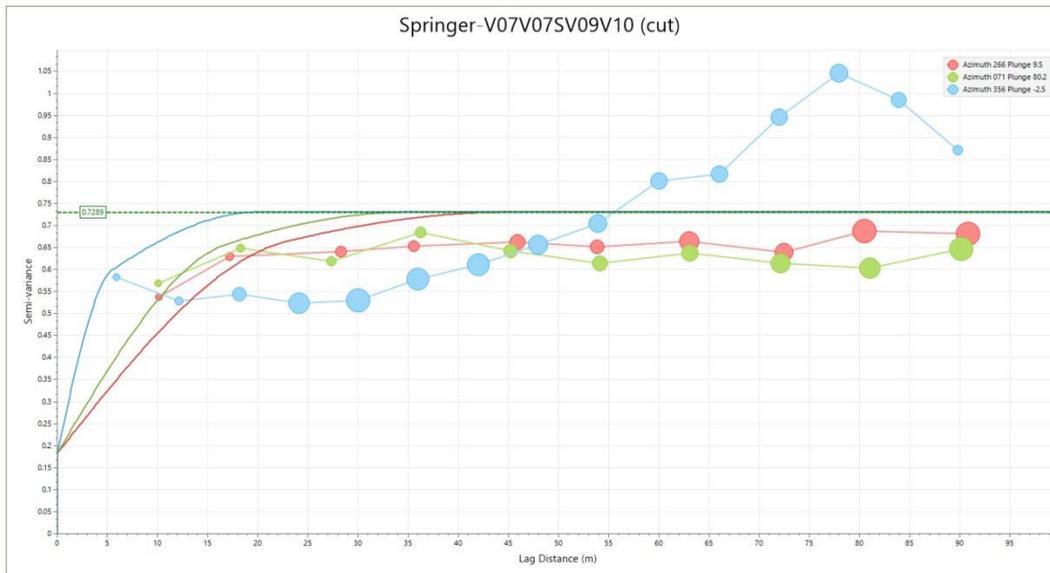
Properties	
Semi Variograms Type: Variogram Number of Points: 2413 Cu PLOT (%)_CUT Values: 0 Mean: 2.82 Variance: 1.39 Std Dev: 1.26	
Azimuth 288 Plunge 29.4 Interval: 10 #Intervals: 10 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 43.3° 43.3° Model Form Set Title: Springer-V05V08 Maj1 Goodness of Fit (Nodl Cw): 11073.6	
Azimuth 064 Plunge 51.8 Interval: 12 #Intervals: 10 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 21.3° 21.3° Model Form Set Title: Springer-V05V08 Maj2 Goodness of Fit (Nodl Cw): 6311.52	
Azimuth 005 Plunge -22 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 43.3° 43.3° Model Form Set Title: Springer-V05V08 Maj3 Goodness of Fit (Nodl Cw): 1632.71	



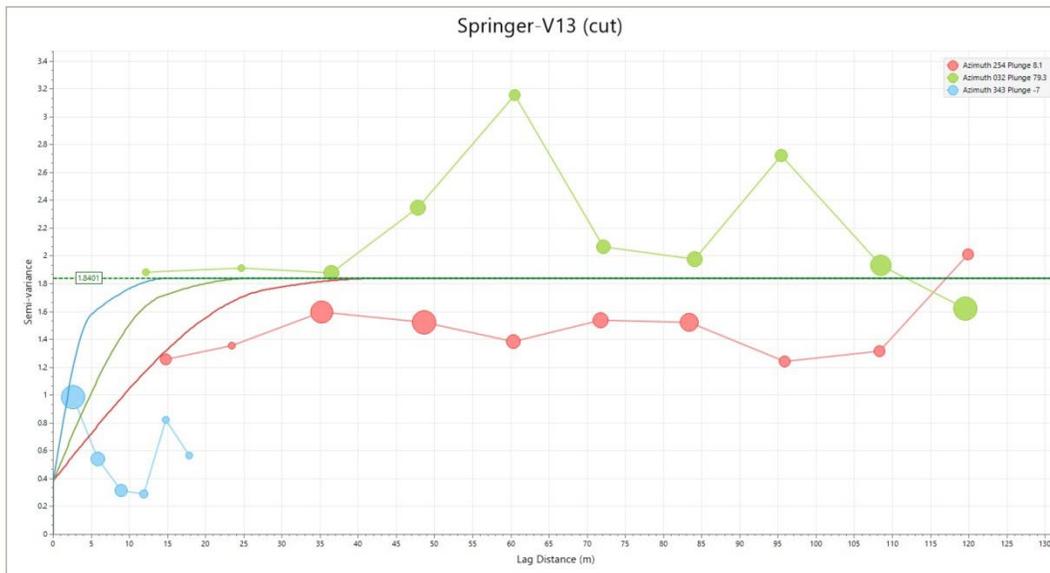
Properties	
Semi Variograms Type: Variogram Number of Points: 1338 Cu PLOT (%)_CUT Values: 0 Mean: 0.76 Variance: 2.19 Std Dev: 1.48	
Azimuth 071 Plunge 52.9 Interval: 12 #Intervals: 10 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 25.3° 20.3° Model Form Set Title: Springer-V05B Maj1 Goodness of Fit (Nodl Cw): 2361.05	
Azimuth 077 Plunge -36.9 Interval: 10 #Intervals: 10 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 23.5° 23.5° Model Form Set Title: Springer-V05B Maj2 Goodness of Fit (Nodl Cw): 1511.38	
Azimuth 345 Plunge -3 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 39° 29° Model Form Set Title: Springer-V05B Maj3 Goodness of Fit (Nodl Cw): 388.017	



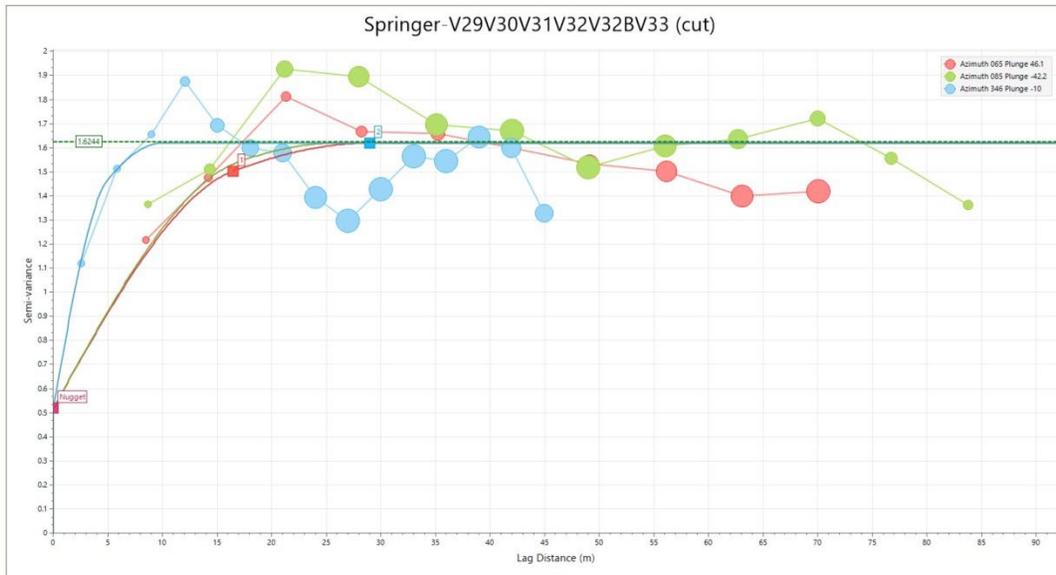
Properties	
Semi Variograms	
Type	Variogram
Number of Points	12946
Cu PLOT (%_CUT)	
Values	0
Mean	0.62
Variance	1.34
Std Dev	1.16
Azimuth 096 Plunge 67.6	
Interval	12
#Intervals	10
Colour	255; 138; 138
Azimuth Plunge Tolerance	13° 15°
Model Form Set Title	Springer-V06 Mag1
Goodness of Fit (Nodl Cw)	1672.42
Azimuth 261 Plunge 21.7	
Interval	10
#Intervals	10
Colour	179; 222; 105
Azimuth Plunge Tolerance	23.3° 20.3°
Model Form Set Title	Springer-V06 Mag2
Goodness of Fit (Nodl Cw)	1502.24
Azimuth 173 Plunge -5.5	
Interval	3
#Intervals	15
Colour	153; 214; 247
Azimuth Plunge Tolerance	40° 40°
Model Form Set Title	Springer-V06 Mag3
Goodness of Fit (Nodl Cw)	361.814



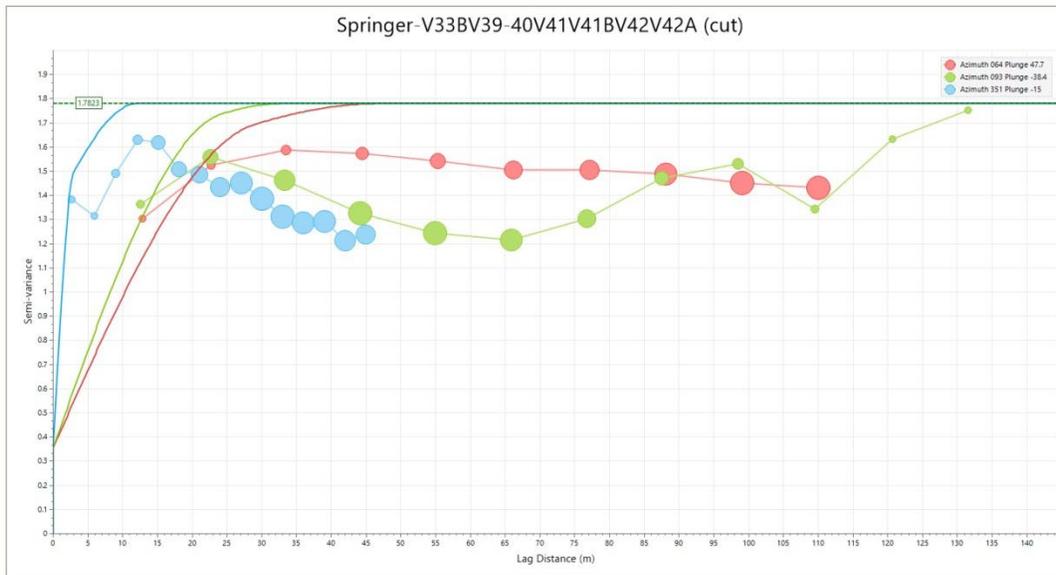
Properties	
Semi Variograms	
Type	Variogram
Number of Points	13965
Cu PLOT (%_CUT)	
Values	0
Mean	0.53
Variance	0.79
Std Dev	0.85
Azimuth 266 Plunge 9.5	
Interval	9
#Intervals	10
Colour	255; 138; 138
Azimuth Plunge Tolerance	13.3° 13.3°
Model Form Set Title	Springer-V07V07SV09V10 M
Goodness of Fit (Nodl Cw)	7866.95
Azimuth 071 Plunge 80.2	
Interval	9
#Intervals	15
Colour	179; 222; 105
Azimuth Plunge Tolerance	23.3° 23.3°
Model Form Set Title	Springer-V07V07SV09V10 M
Goodness of Fit (Nodl Cw)	33676
Azimuth 356 Plunge -2.5	
Interval	5
#Intervals	15
Colour	153; 214; 247
Azimuth Plunge Tolerance	45.3° 45.3°
Model Form Set Title	Springer-V07V07SV09V10 M
Goodness of Fit (Nodl Cw)	31803



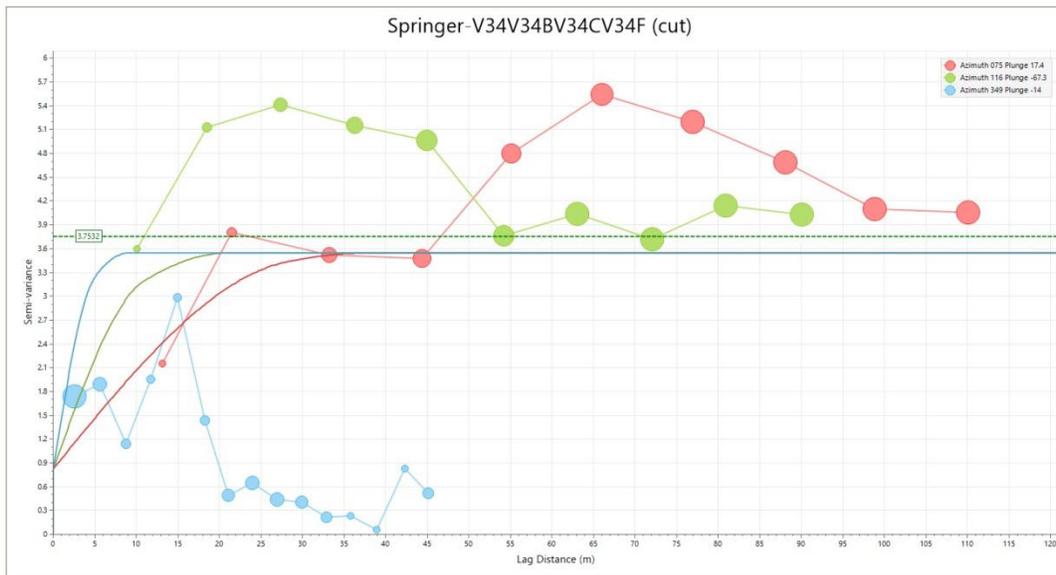
Properties	
Semi Variograms	
Type	Variogram
Number of Points	446
Cu PLOT (%_CUT)	
Values	0
Mean	0.88
Variance	1.64
Std Dev	1.36
Azimuth 254 Plunge 8.1	
Interval	12
#Intervals	10
Colour	255; 138; 138
Azimuth Plunge Tolerance	25.3° 20.3°
Model Form Set Title	Springer-V13 Mag1
Goodness of Fit (Nodl Cw)	463.959
Azimuth 032 Plunge 79.3	
Interval	12
#Intervals	10
Colour	179; 222; 105
Azimuth Plunge Tolerance	22.5° 22.5°
Model Form Set Title	Springer-V13 Mag2
Goodness of Fit (Nodl Cw)	658.894
Azimuth 343 Plunge -7	
Interval	3
#Intervals	15
Colour	153; 214; 247
Azimuth Plunge Tolerance	40° 40°
Model Form Set Title	Springer-V13 Mag3
Goodness of Fit (Nodl Cw)	223.412



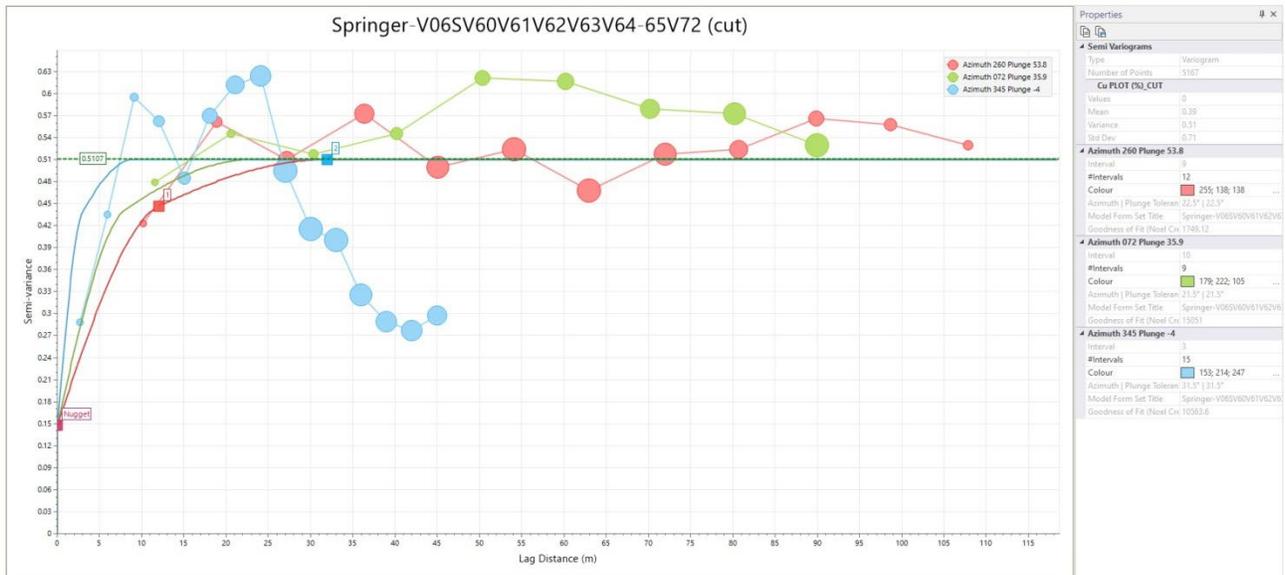
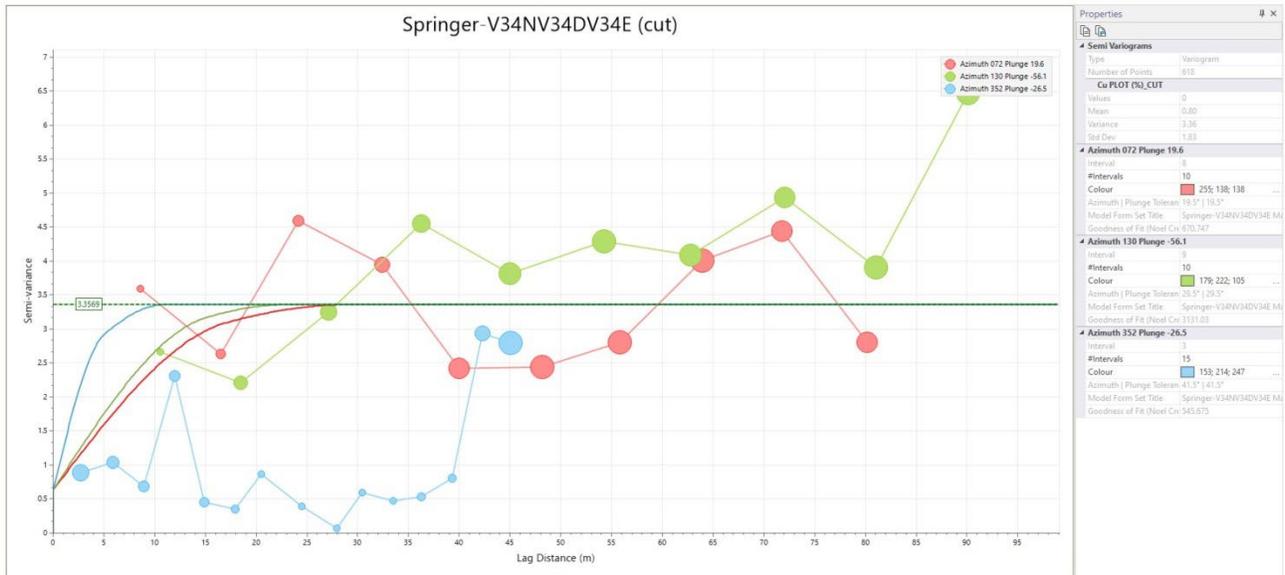
Properties	
Semi Variograms Type: Variogram Number of Points: 4764 Cu PLOT (%)_CUT Values: 0 Mean: 0.79 Variance: 1.62 Std Dev: 1.27	
Azimuth 065 Plunge -46.1 Interval: 7 #Intervals: 10 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 26.5° 26.5° Model Form Set Title: Springer-V29V30V31V32V33 Goodness of Fit (Nodl Cw): 3813.18	
Azimuth 085 Plunge -42.2 Interval: 7 #Intervals: 12 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 26.5° 26.5° Model Form Set Title: Springer-V29V30V31V32V33 Goodness of Fit (Nodl Cw): 1491.87	
Azimuth 346 Plunge -10 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 28.3° 28.3° Model Form Set Title: Springer-V29V30V31V32V33 Goodness of Fit (Nodl Cw): 1159.25	



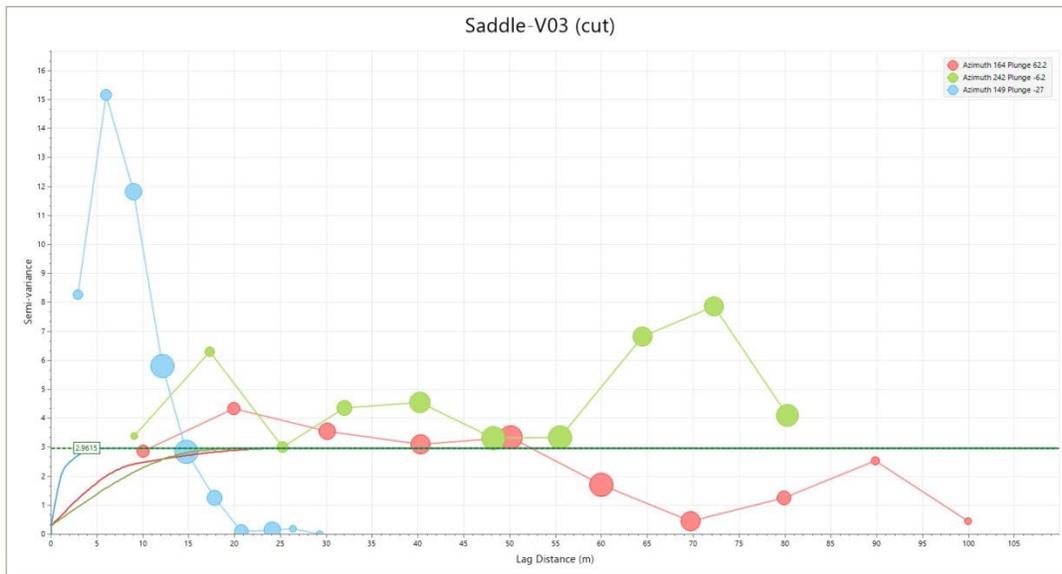
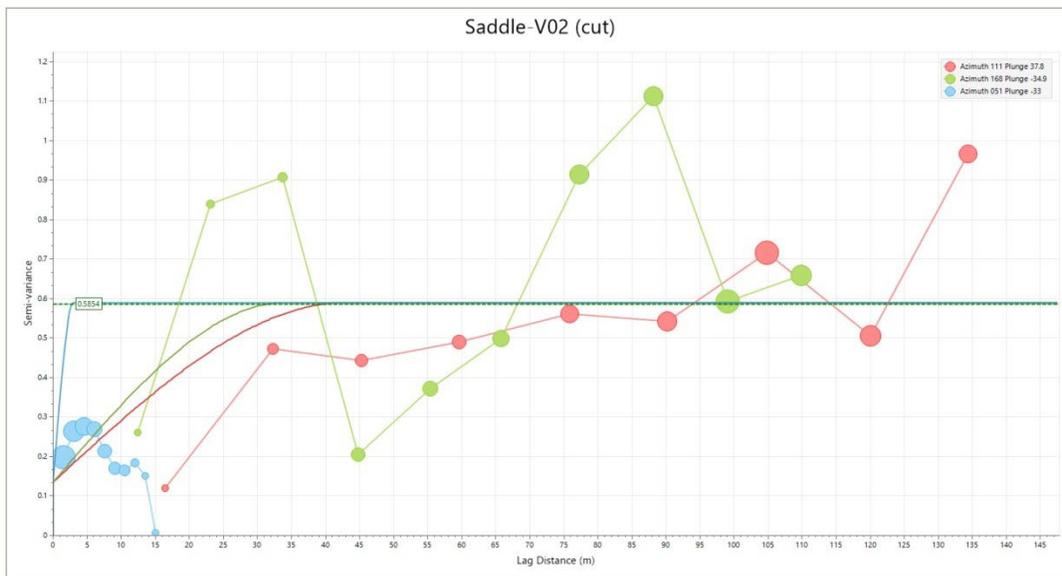
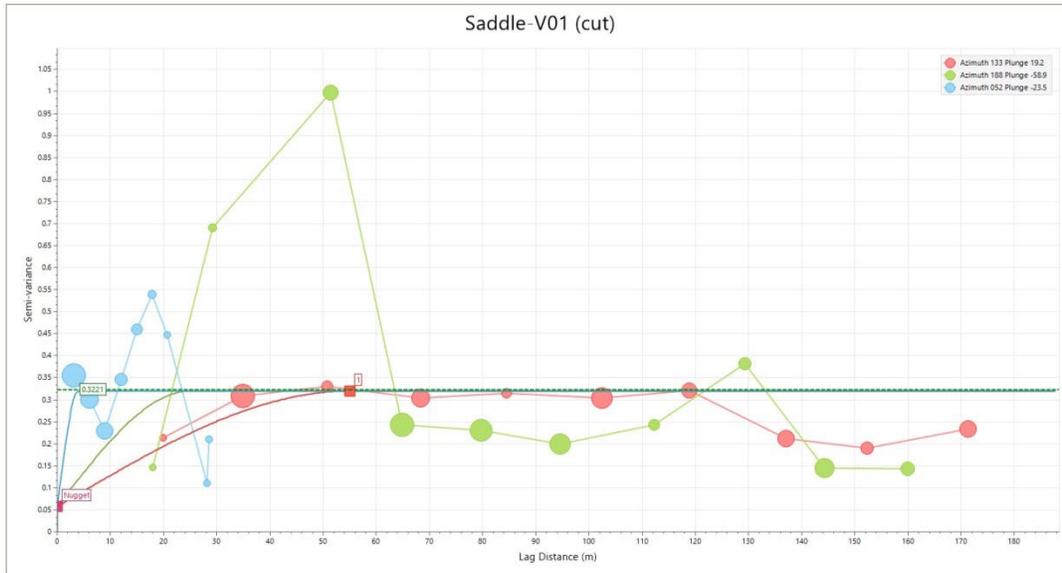
Properties	
Semi Variograms Type: Variogram Number of Points: 8956 Cu PLOT (%)_CUT Values: 0 Mean: 0.79 Variance: 1.78 Std Dev: 1.34	
Azimuth 064 Plunge -47.7 Interval: 11 #Intervals: 10 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 22.3° 22.3° Model Form Set Title: Springer-V33BV39-40V41V41BV42V42A Goodness of Fit (Nodl Cw): 122121	
Azimuth 093 Plunge -38.4 Interval: 3 #Intervals: 12 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 26.5° 26.5° Model Form Set Title: Springer-V33BV39-40V41V41BV42V42A Goodness of Fit (Nodl Cw): 72501.5	
Azimuth 351 Plunge -15 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 28.3° 28.3° Model Form Set Title: Springer-V33BV39-40V41V41BV42V42A Goodness of Fit (Nodl Cw): 19499.6	



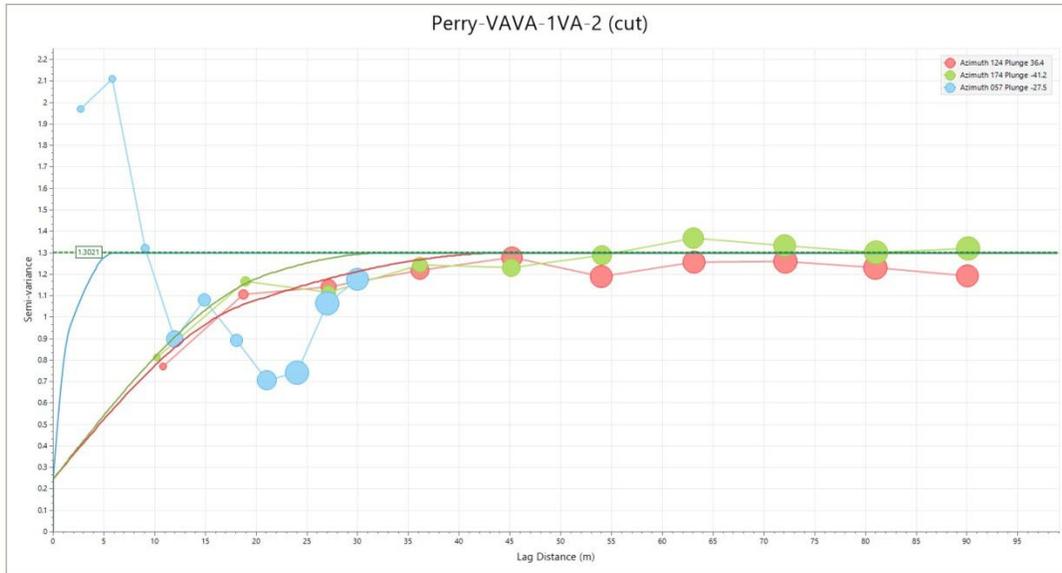
Properties	
Semi Variograms Type: Variogram Number of Points: 1152 Cu PLOT (%)_CUT Values: 0 Mean: 0.82 Variance: 3.75 Std Dev: 1.94	
Azimuth 075 Plunge -17.4 Interval: 11 #Intervals: 10 Colour: 255; 138; 138 Azimuth Plunge Tolerance: 22.3° 22.3° Model Form Set Title: Springer-V34V34BV34CV34F Goodness of Fit (Nodl Cw): 5385.8	
Azimuth 116 Plunge -67.3 Interval: 3 #Intervals: 10 Colour: 179; 222; 105 Azimuth Plunge Tolerance: 20.5° 20.5° Model Form Set Title: Springer-V34V34BV34CV34F Goodness of Fit (Nodl Cw): 2220.32	
Azimuth 349 Plunge -14 Interval: 3 #Intervals: 15 Colour: 153; 214; 247 Azimuth Plunge Tolerance: 28.3° 28.3° Model Form Set Title: Springer-V34V34BV34CV34F Goodness of Fit (Nodl Cw): 1715.53	



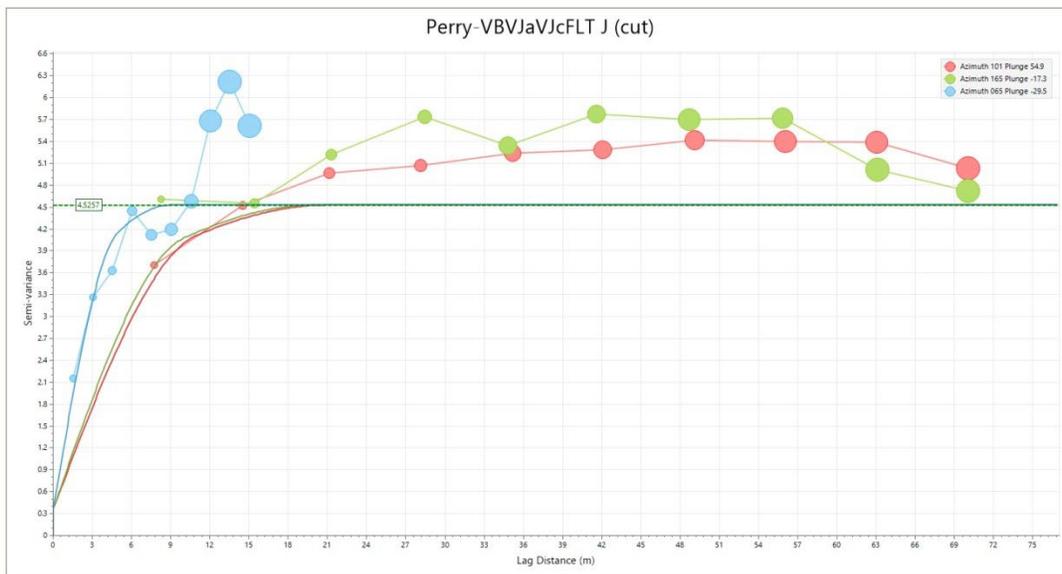
SADDLE ZONE



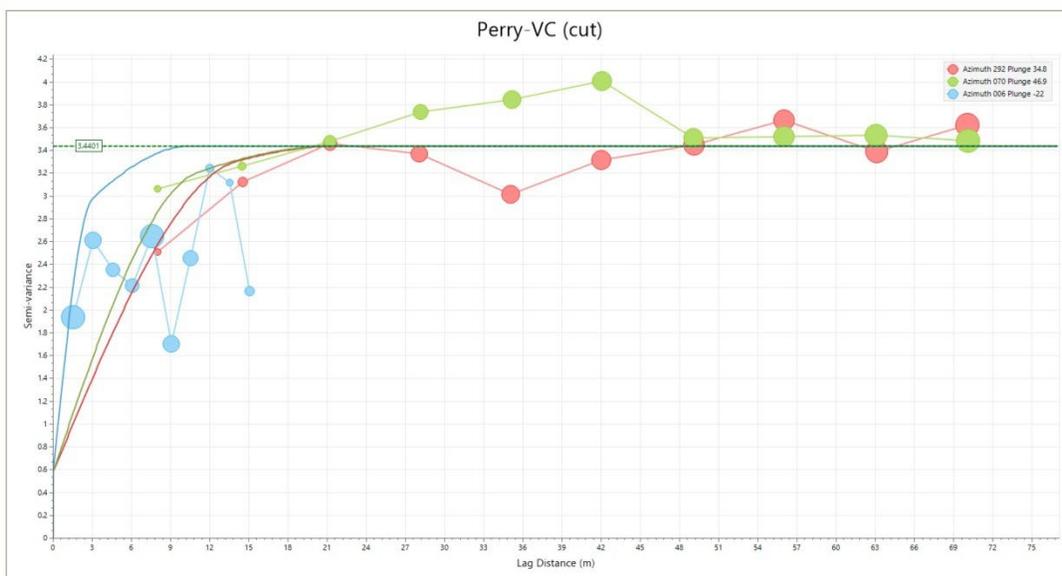
PERRY



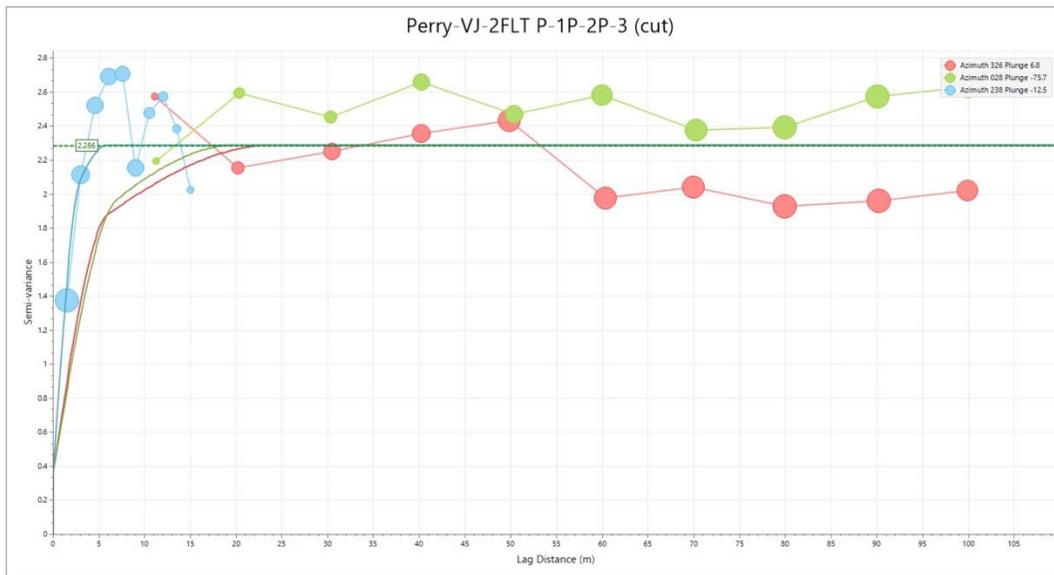
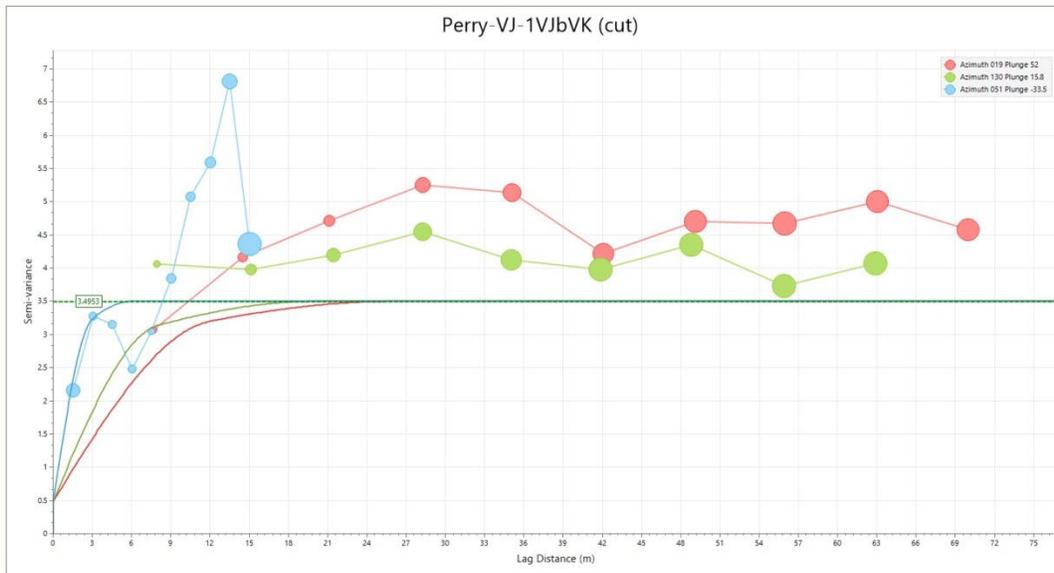
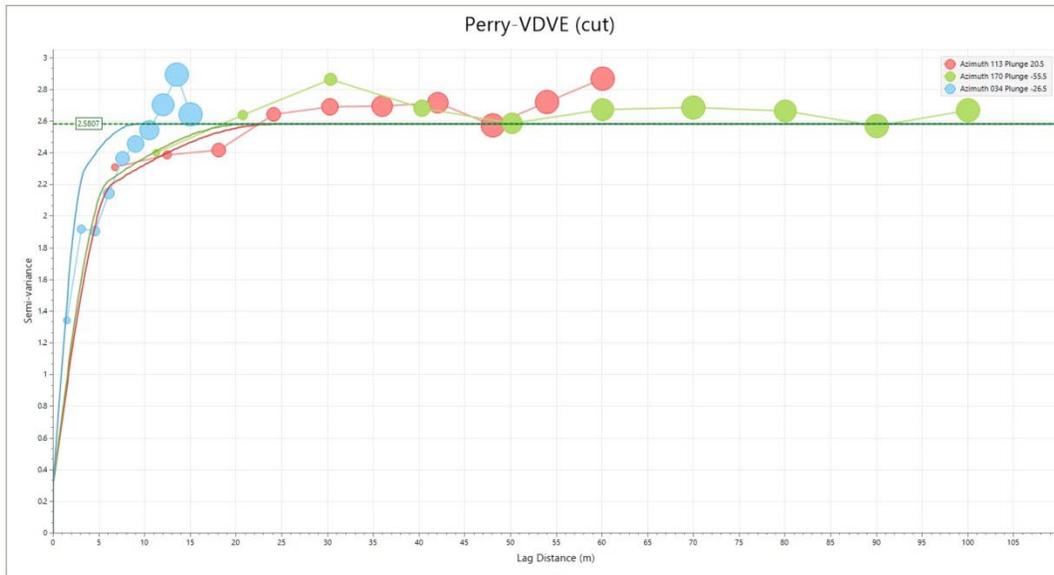
Properties	
Semi Variograms	
Type	Variogram
Number of Points	5208
Cu PLOT (X), CUT	
Values	0
Mean	0.69
Variance	1.30
Std Dev	1.14
Azimuth 124 Plunge 36.4	
Interval	5
#Intervals	10
Colour	255; 138; 138
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VAVA-1VA-2 (Mag)
Goodness of Fit (Nodl Cw)	933.829
Azimuth 174 Plunge 41.2	
Interval	5
#Intervals	10
Colour	179; 222; 105
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VAVA-1VA-2 (Mag)
Goodness of Fit (Nodl Cw)	704.43
Azimuth 057 Plunge 27.5	
Interval	3
#Intervals	10
Colour	155; 214; 247
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VAVA-1VA-2 (Mag)
Goodness of Fit (Nodl Cw)	2948.97



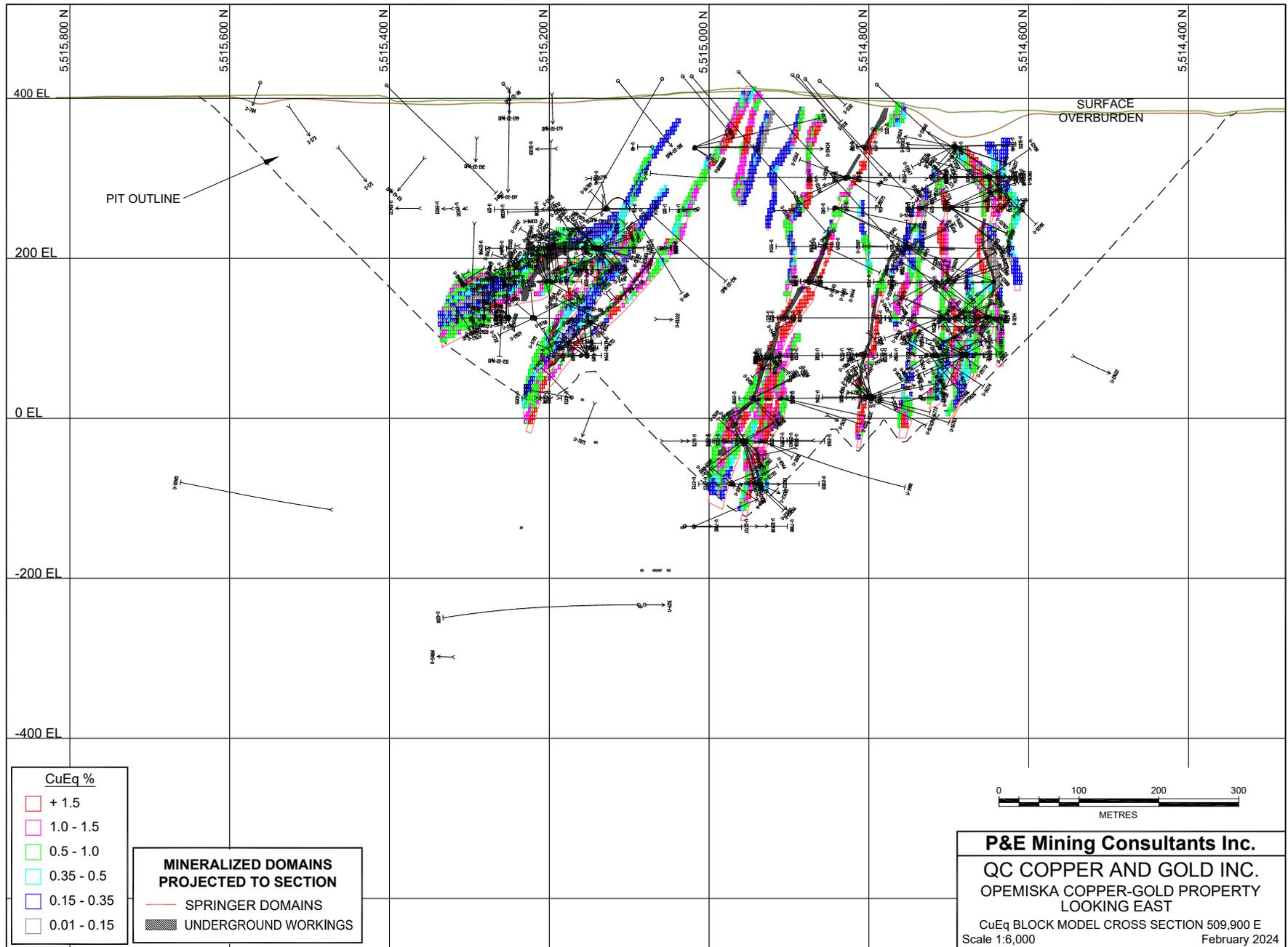
Properties	
Semi Variograms	
Type	Variogram
Number of Points	22798
Cu PLOT (X), CUT	
Values	0
Mean	1.27
Variance	4.53
Std Dev	2.13
Azimuth 101 Plunge 54.9	
Interval	7
#Intervals	10
Colour	255; 138; 138
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VBVJaVJcFLT J (Mag)
Goodness of Fit (Nodl Cw)	54056.3
Azimuth 165 Plunge 17.3	
Interval	7
#Intervals	10
Colour	179; 222; 105
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VBVJaVJcFLT J (Mag)
Goodness of Fit (Nodl Cw)	68789.3
Azimuth 065 Plunge 29.5	
Interval	1.5
#Intervals	10
Colour	155; 214; 247
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VBVJaVJcFLT J (Mag)
Goodness of Fit (Nodl Cw)	1456.23

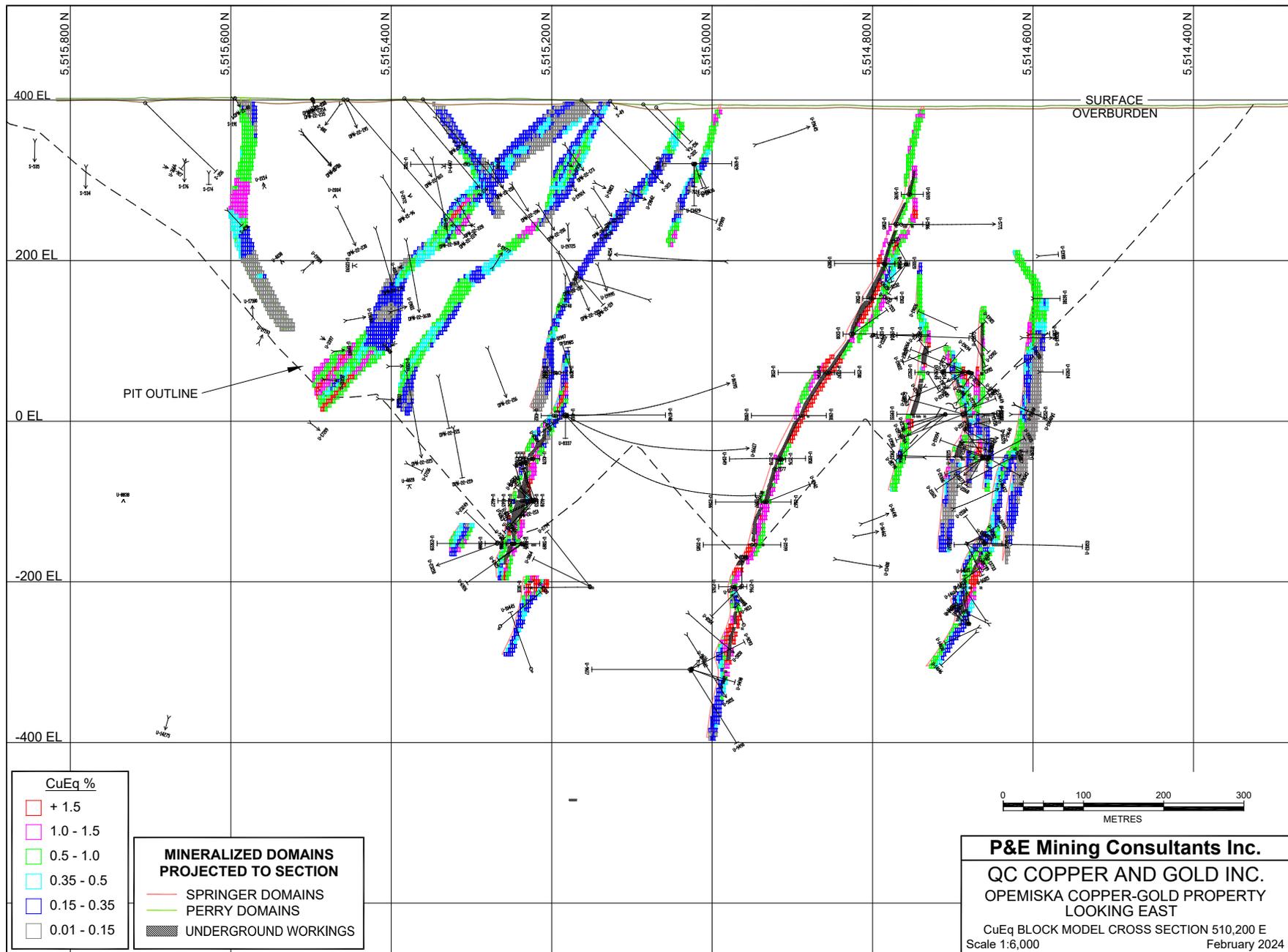


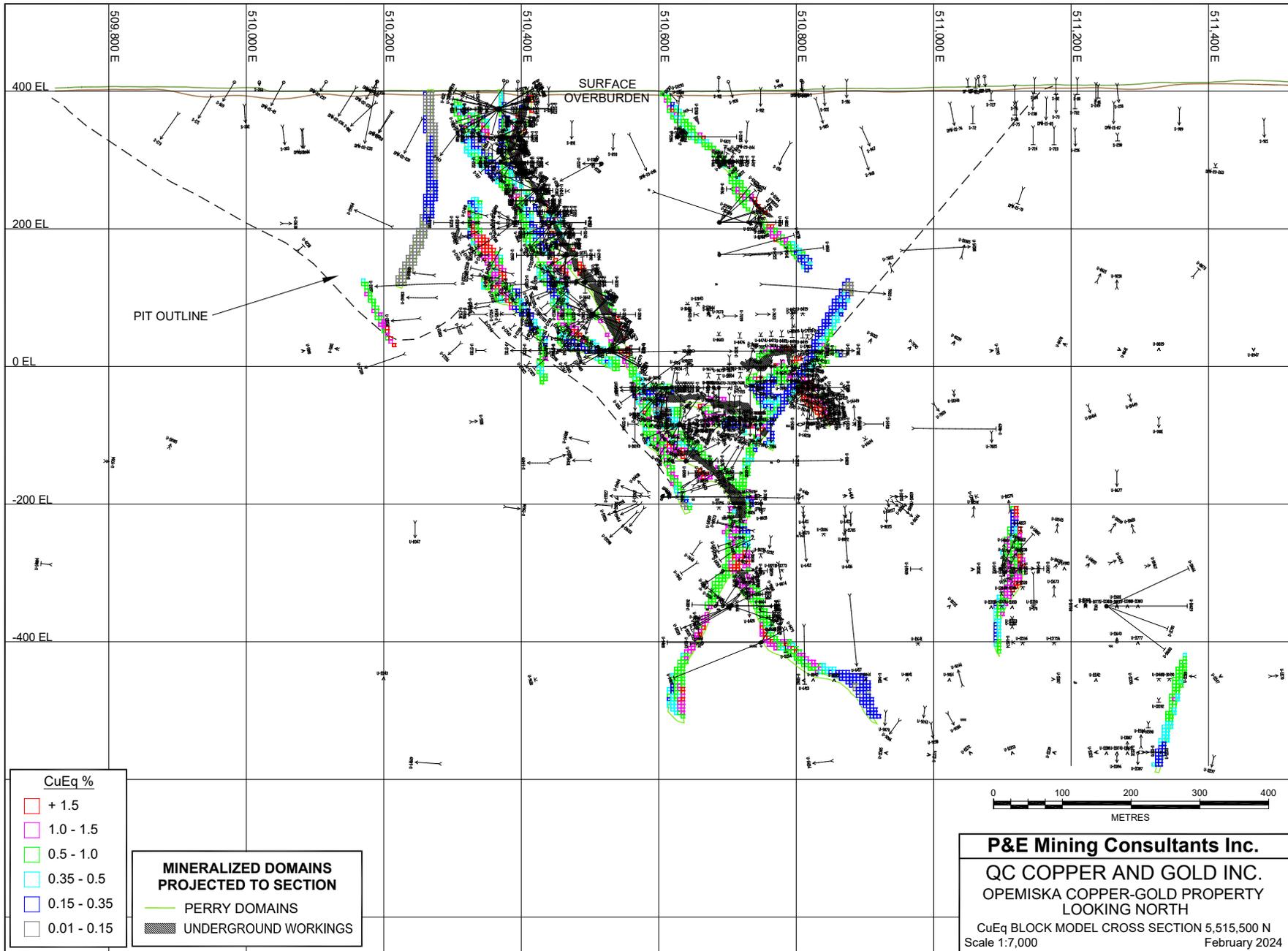
Properties	
Semi Variograms	
Type	Variogram
Number of Points	4919
Cu PLOT (X), CUT	
Values	0
Mean	1.03
Variance	3.44
Std Dev	1.85
Azimuth 292 Plunge 34.8	
Interval	7
#Intervals	10
Colour	255; 138; 138
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VC (Mag)
Goodness of Fit (Nodl Cw)	797.348
Azimuth 070 Plunge 46.9	
Interval	7
#Intervals	10
Colour	179; 222; 105
Acimuth Plunge Toleran	22.5° 22.5°
Model Form Set Title	Perry-VC (Mag)
Goodness of Fit (Nodl Cw)	1981
Azimuth 006 Plunge 22	
Interval	1.5
#Intervals	10
Colour	155; 214; 247
Acimuth Plunge Toleran	27.5° 27.5°
Model Form Set Title	Perry-VC (Mag)
Goodness of Fit (Nodl Cw)	802.112

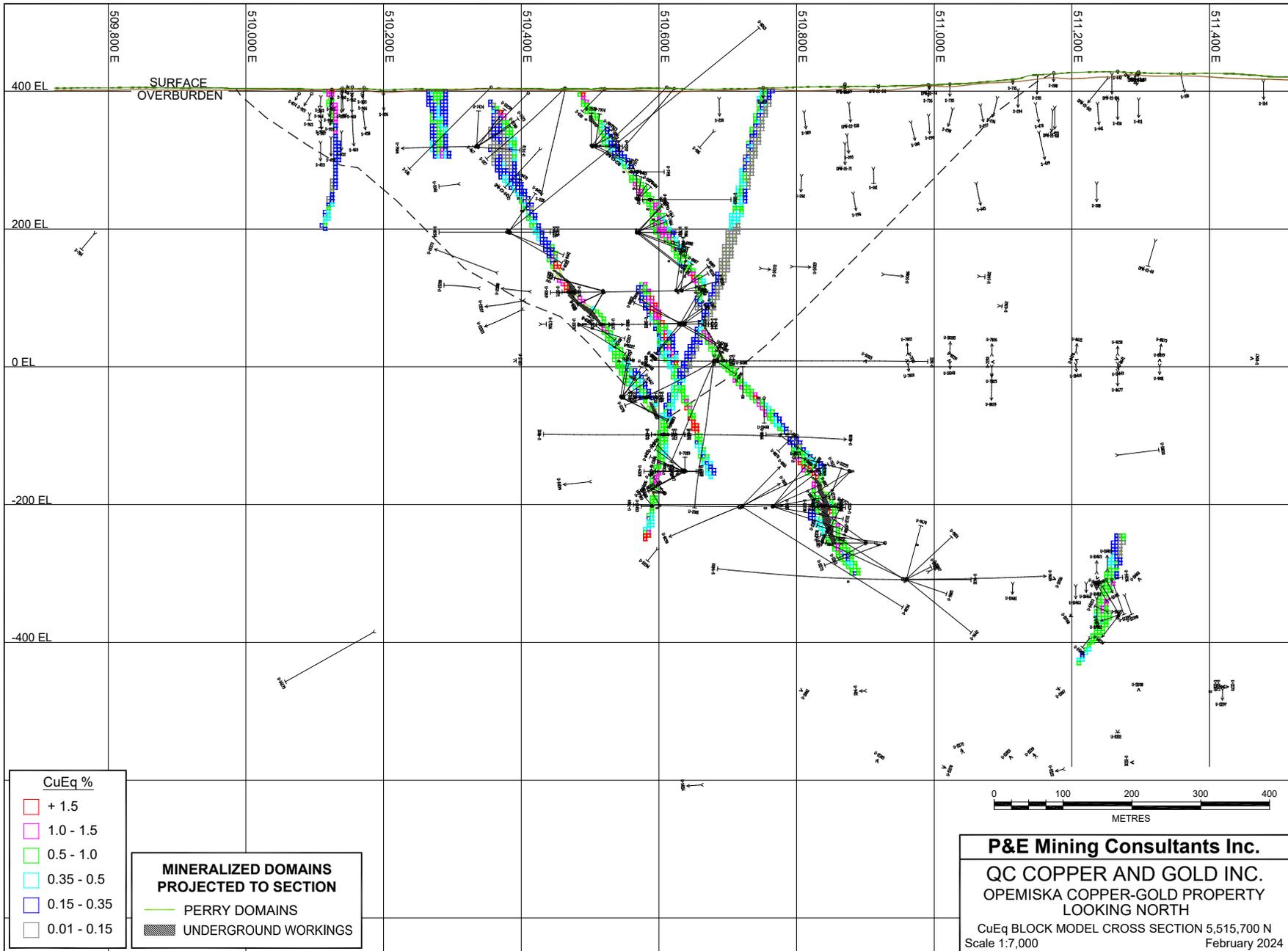


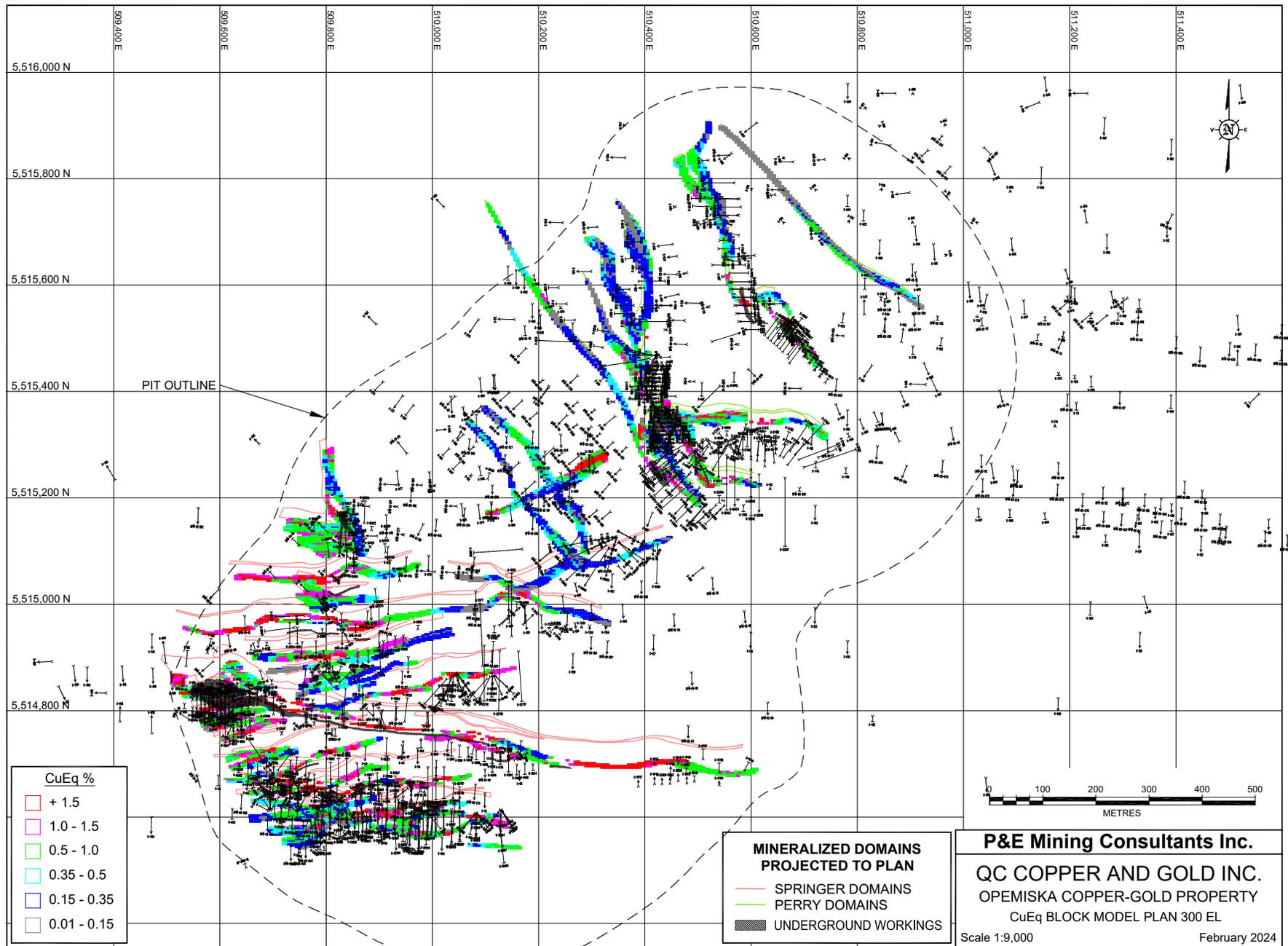
APPENDIX E CUEQ BLOCK MODEL CROSS SECTIONS AND PLANS

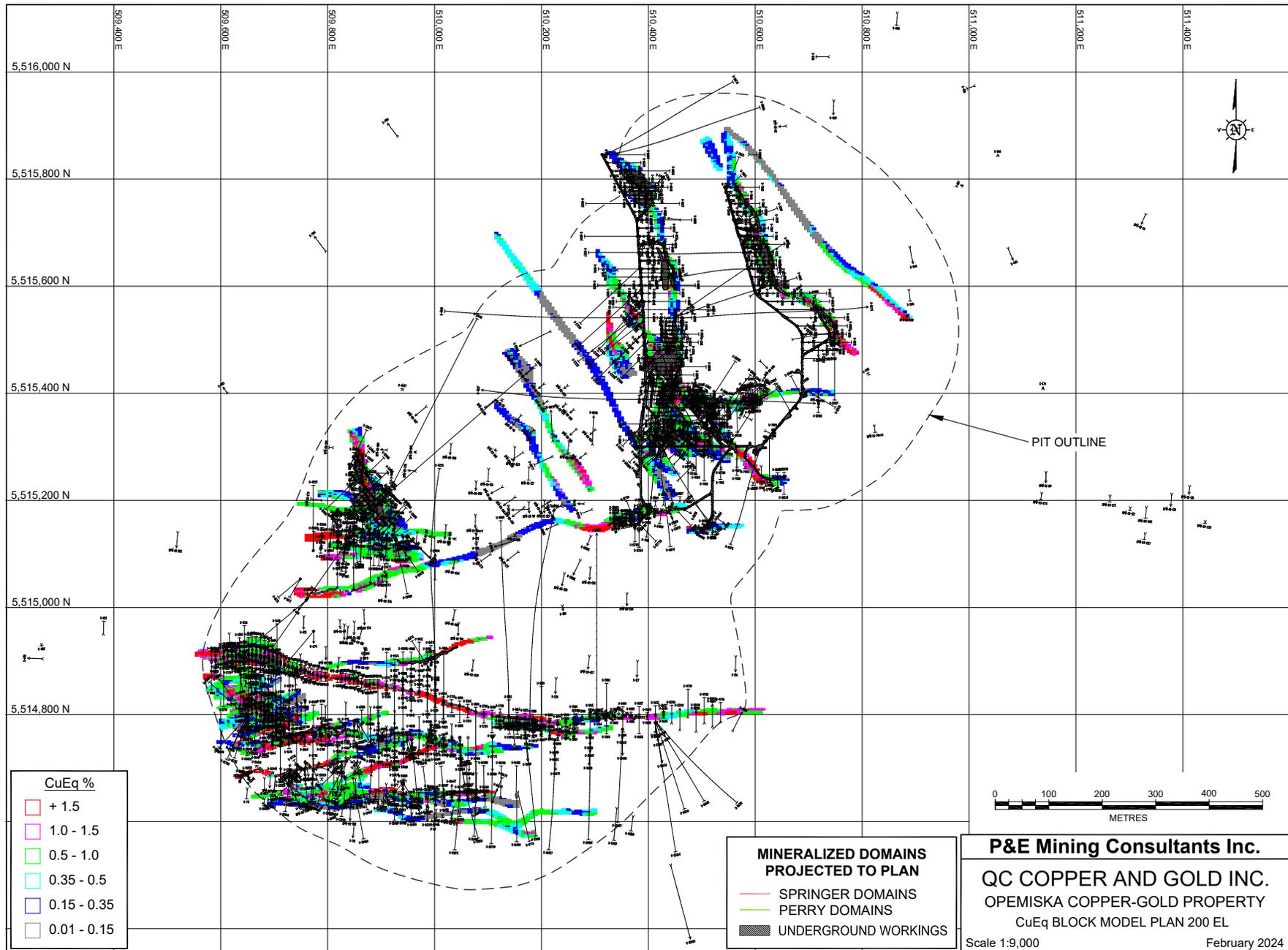


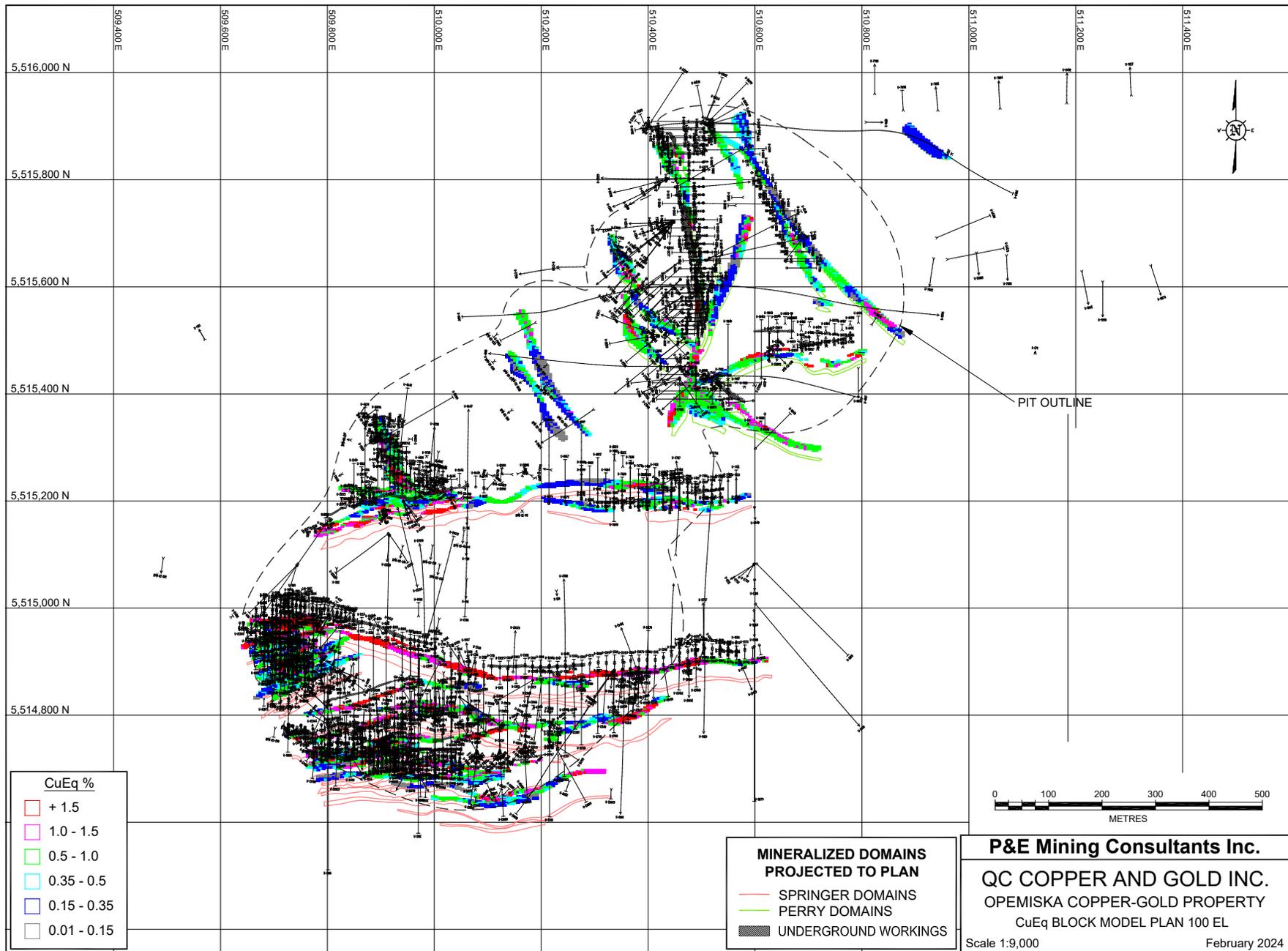


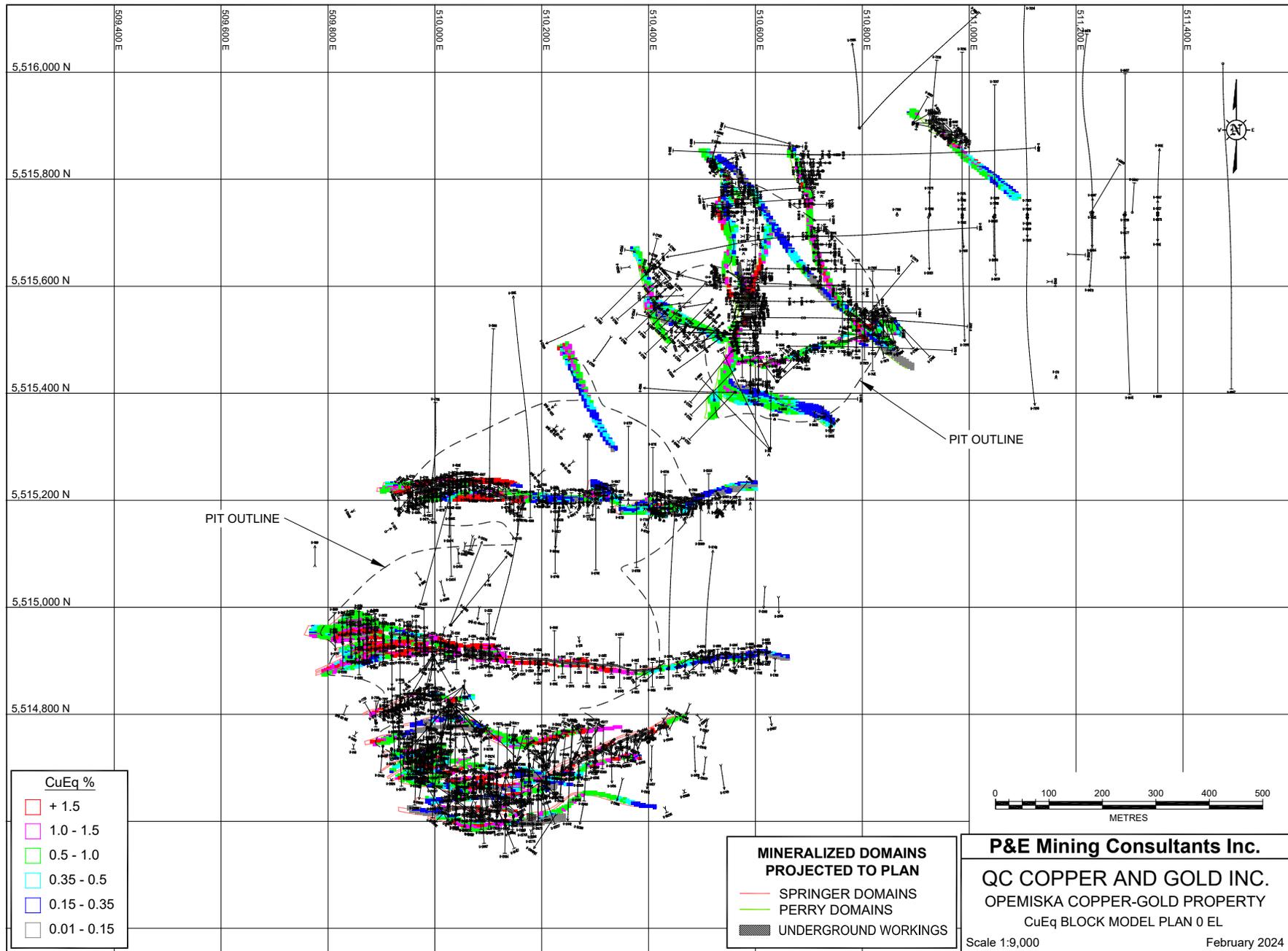




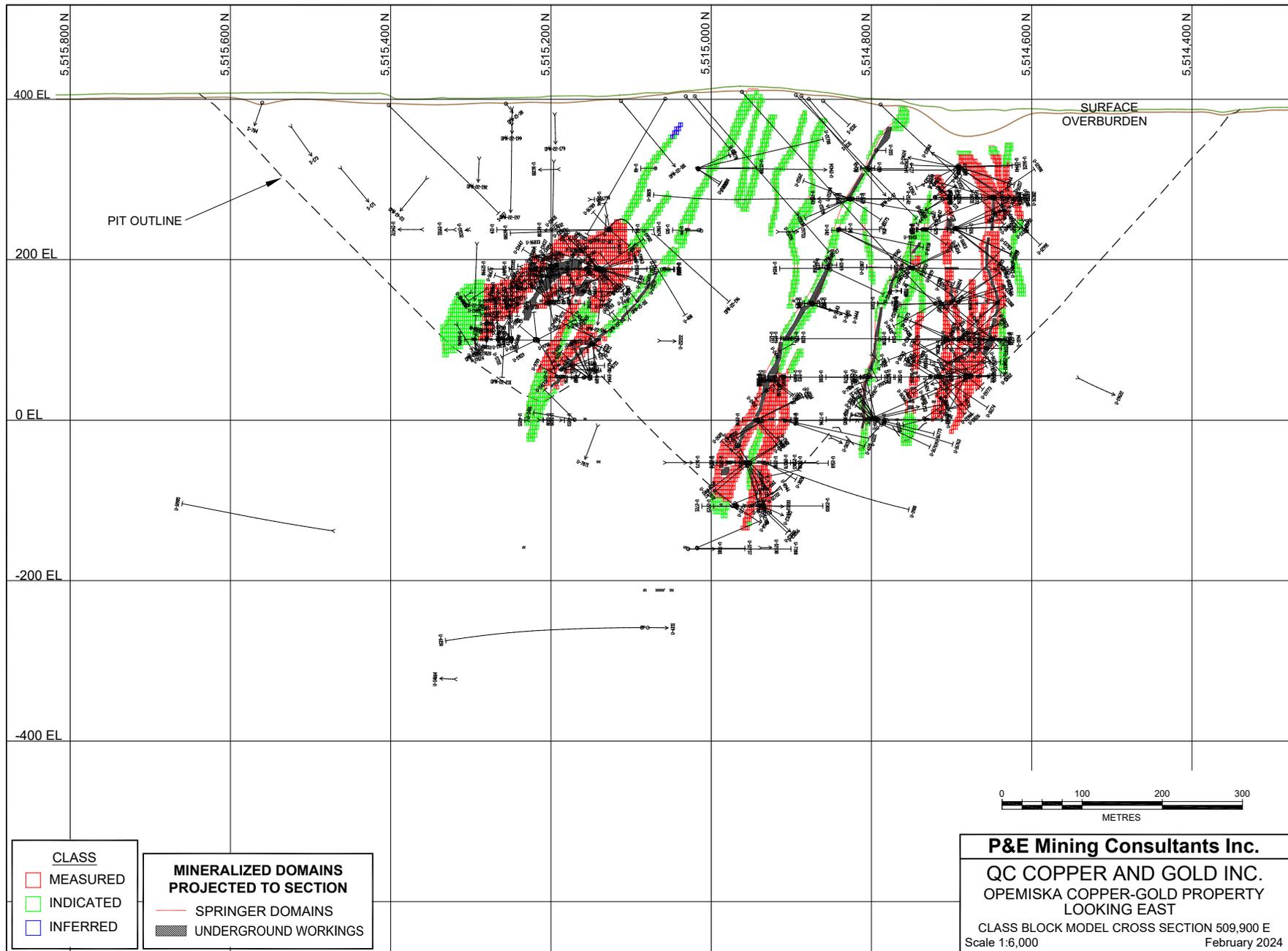


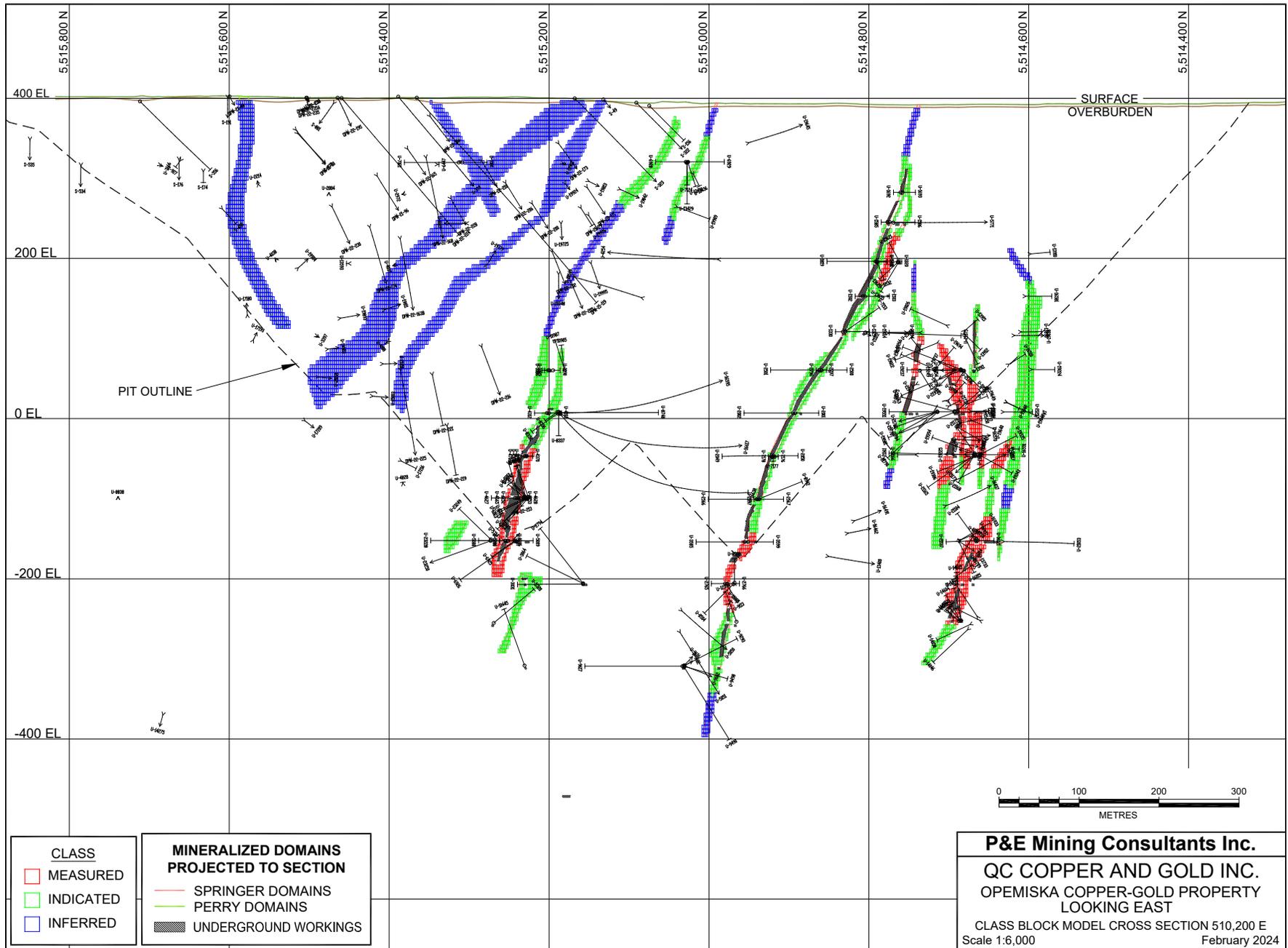


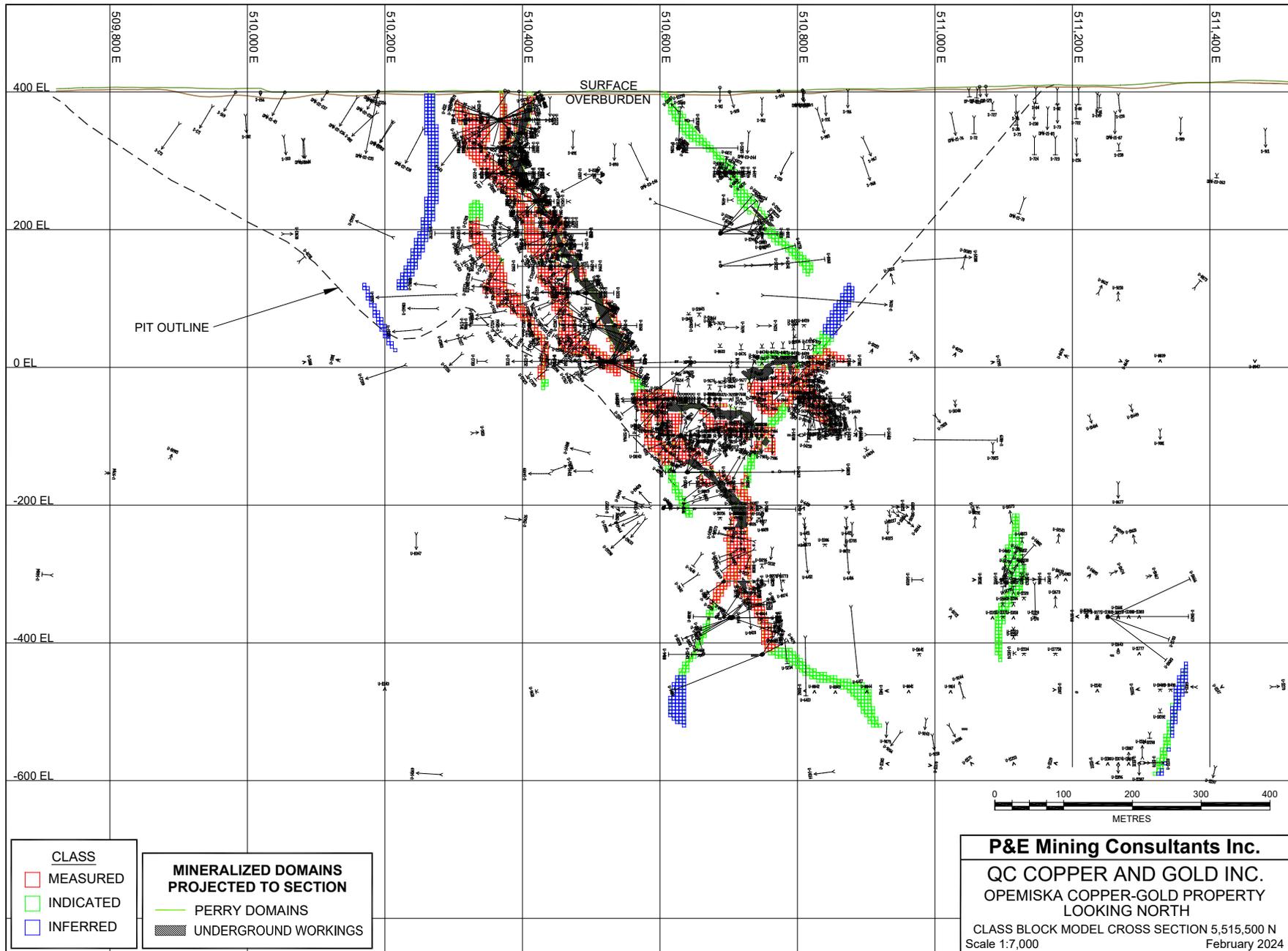


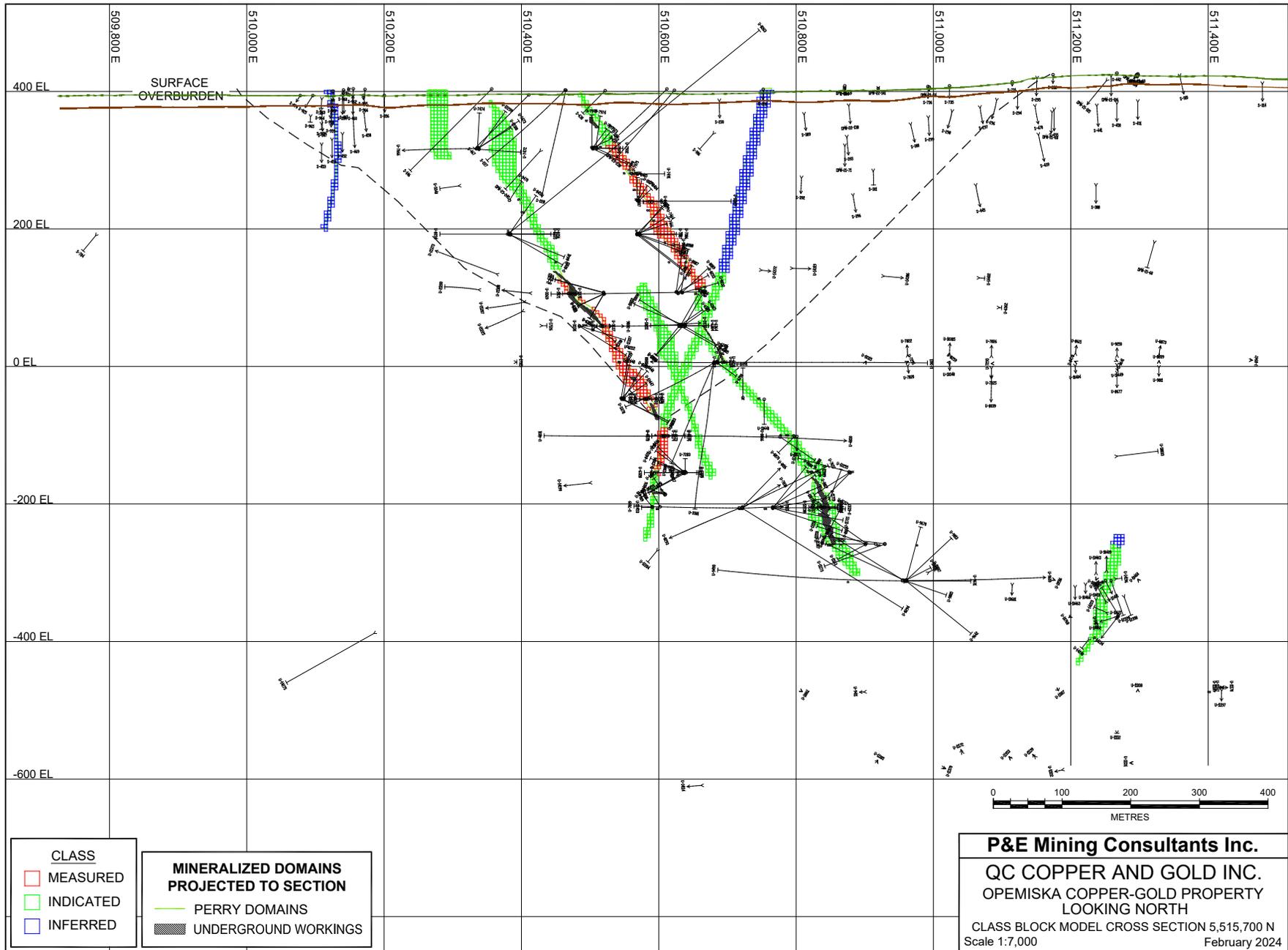


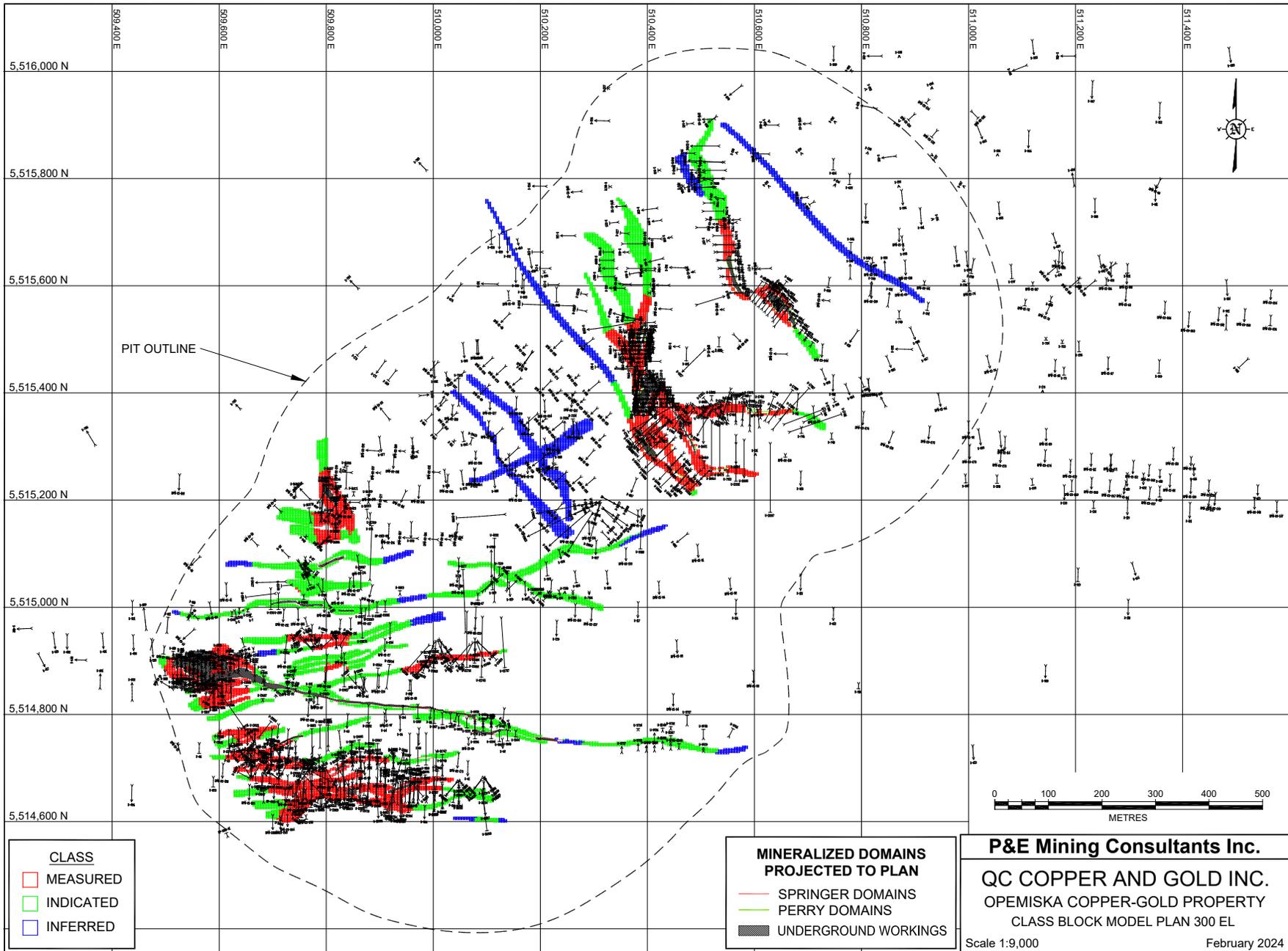
APPENDIX F CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS

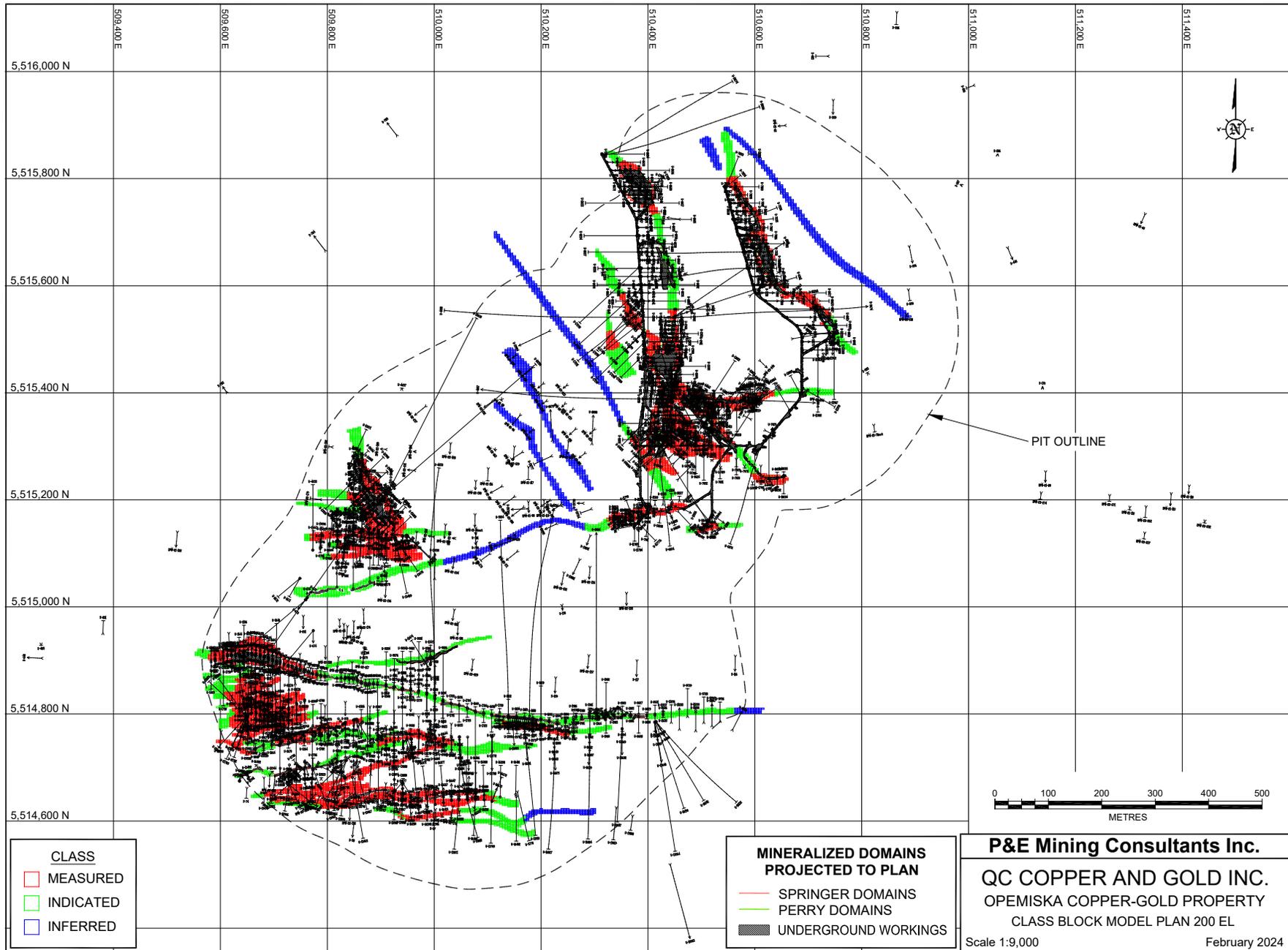


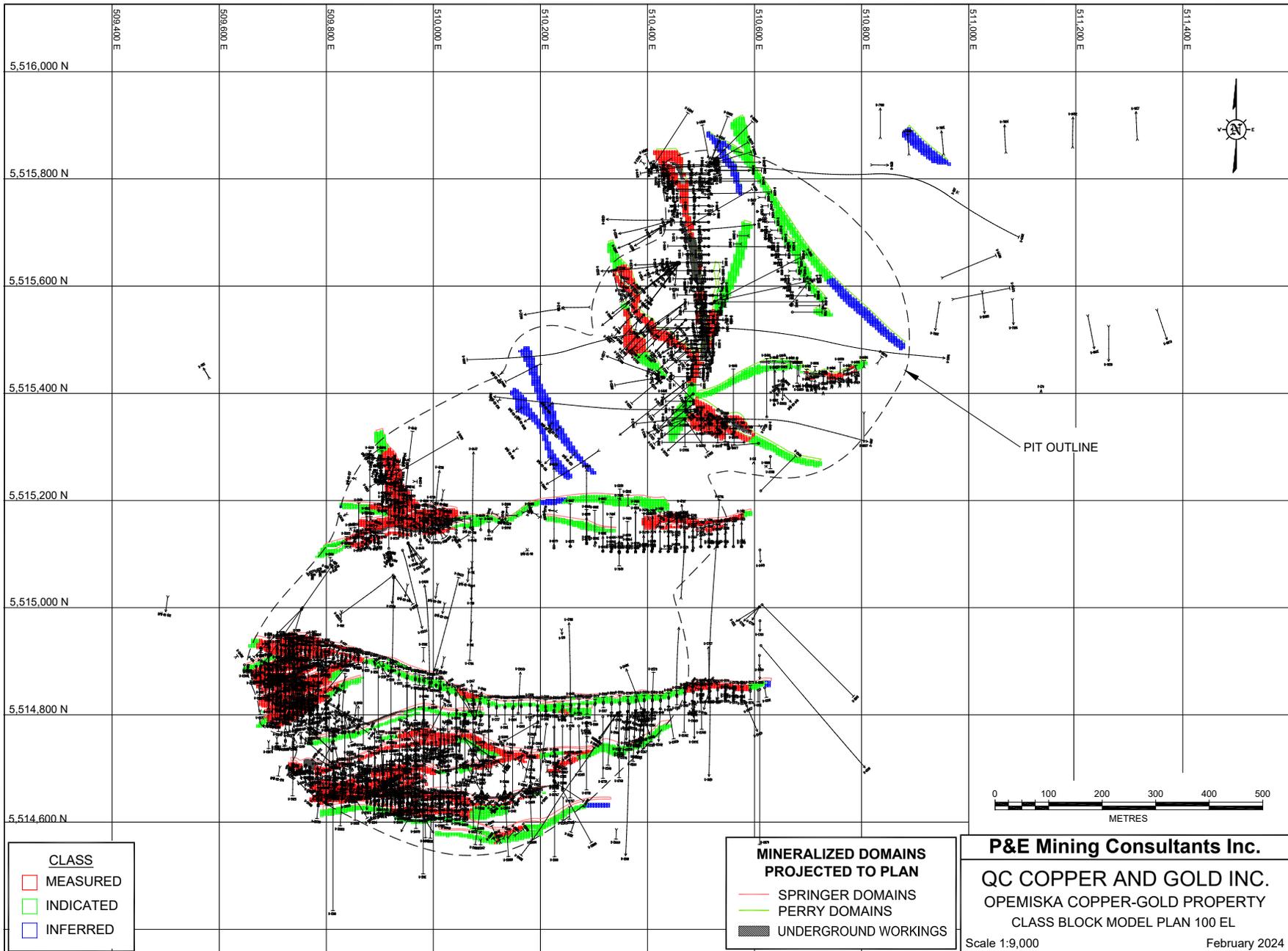


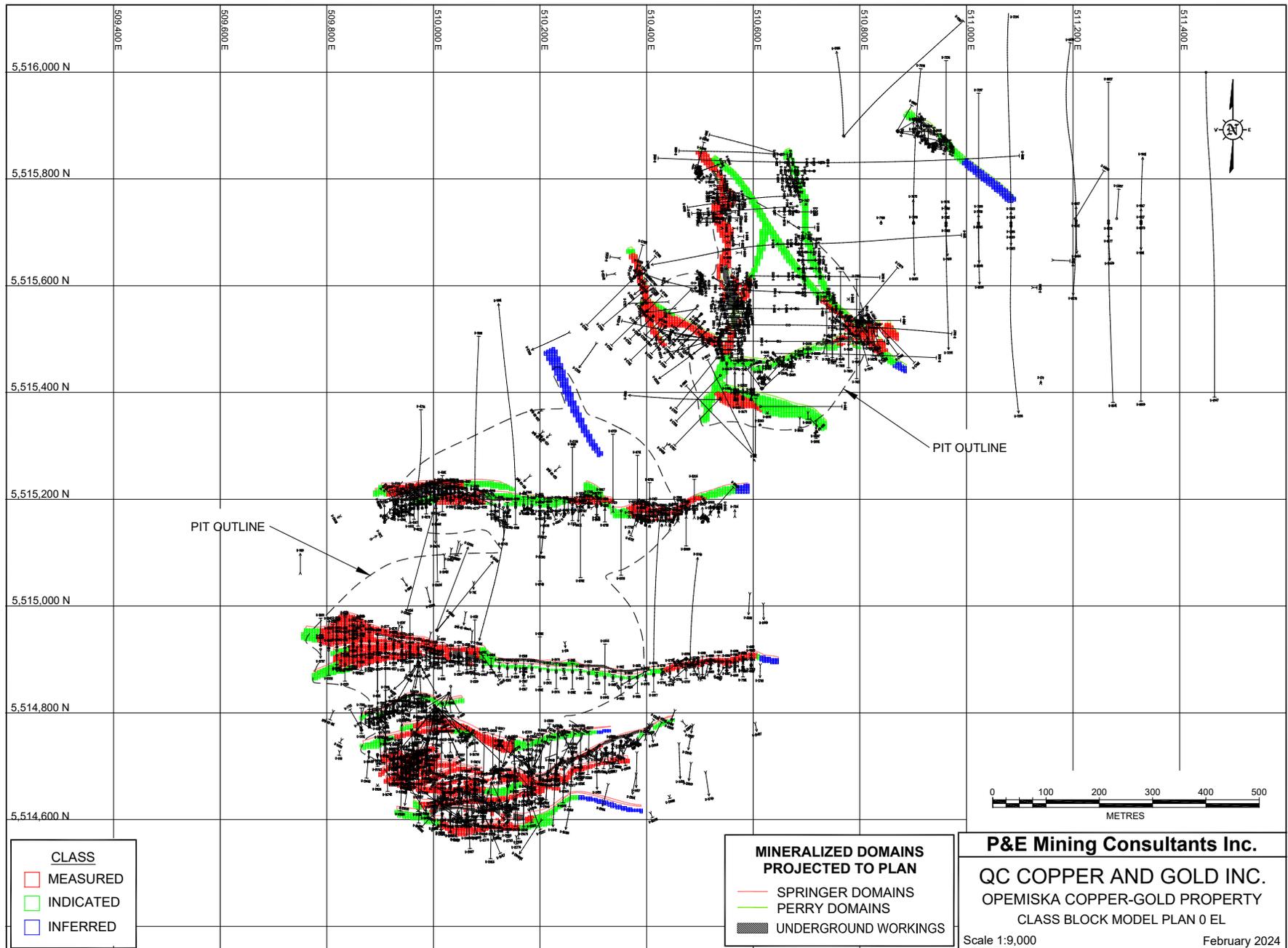






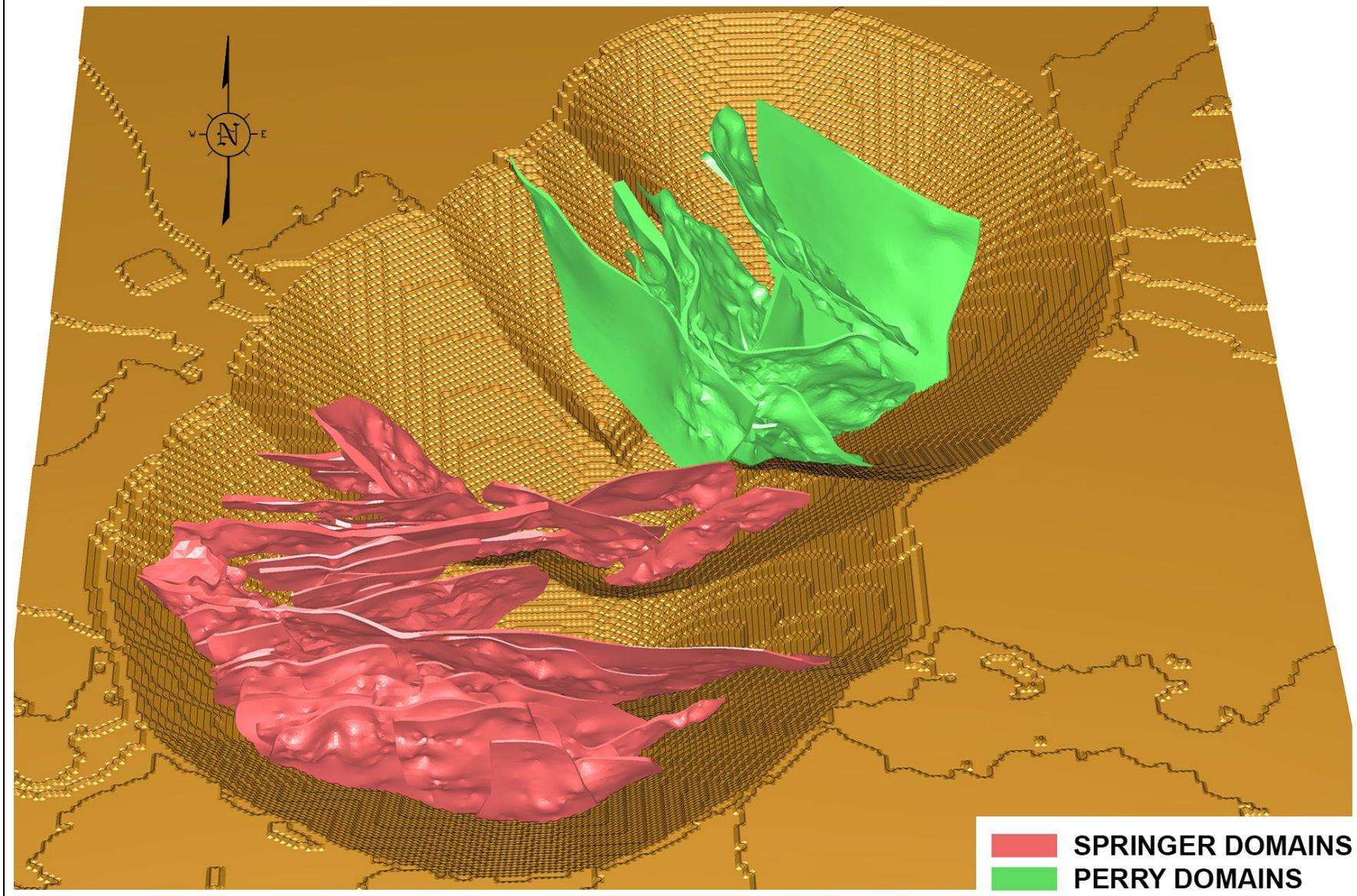






APPENDIX G OPTIMIZED PIT SHELL

OPEMISKA COPPER-GOLD PROPERTY OPTIMIZED PIT SHELL



APPENDIX H BULK DENSITY MEASUREMENTS COMPLETED ON DRILL CORE WITH CORRESPONDING LITHOLOGIES

TABLE H.1 DRILL CORE BULK DENSITY MEASUREMENTS					
Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-01	3.80	4.00	Pre-2021 MRE	2.96	Gabbro
OPM-19-01	6.60	6.78	Pre-2021 MRE	2.96	Gabbro
OPM-19-01	10.30	10.54	Pre-2021 MRE	2.95	Gabbro
OPM-19-01	13.50	13.71	Pre-2021 MRE	2.94	Gabbro
OPM-19-01	19.50	19.71	Pre-2021 MRE	2.98	Gabbro
OPM-19-01	22.90	23.15	Pre-2021 MRE	2.97	Gabbro
OPM-19-01	27.30	27.58	Pre-2021 MRE	3.01	Gabbro
OPM-19-01	30.90	31.15	Pre-2021 MRE	3.06	Gabbro
OPM-19-01	32.50	32.66	Pre-2021 MRE	2.91	Gabbro
OPM-19-01	35.80	35.97	Pre-2021 MRE	2.99	Gabbro
OPM-19-01	41.20	41.35	Pre-2021 MRE	2.90	Gabbro
OPM-19-01	44.20	44.34	Pre-2021 MRE	2.88	Gabbro
OPM-19-01	49.90	50.06	Pre-2021 MRE	2.97	Gabbro
OPM-19-01	53.60	53.8	Pre-2021 MRE	2.96	Gabbro
OPM-19-01	57.80	57.99	Pre-2021 MRE	2.83	Gabbro
OPM-19-01	60.80	60.99	Pre-2021 MRE	2.86	Gabbro
OPM-19-01	65.30	65.5	Pre-2021 MRE	2.82	Gabbro
OPM-19-01	70.30	70.52	Pre-2021 MRE	3.00	Gabbro
OPM-19-01	74.10	74.24	Pre-2021 MRE	4.03	Gabbro
OPM-19-01	78.00	78.14	Pre-2021 MRE	2.92	Gabbro
OPM-19-01	83.00	83.16	Pre-2021 MRE	2.98	Gabbro
OPM-19-01	87.60	87.78	Pre-2021 MRE	2.90	Gabbro
OPM-19-01	91.50	91.68	Pre-2021 MRE	2.93	Gabbro
OPM-19-01	96.90	97.08	Pre-2021 MRE	2.87	Gabbro
OPM-19-01	101.80	102.02	Pre-2021 MRE	2.90	Gabbro
OPM-19-01	105.10	105.29	Pre-2021 MRE	2.92	Gabbro
OPM-19-01	109.20	109.38	Pre-2021 MRE	2.94	Gabbro
OPM-19-01	114.40	114.57	Pre-2021 MRE	2.88	Gabbro
OPM-19-01	117.20	117.35	Pre-2021 MRE	2.91	Gabbro
OPM-19-01	121.40	121.55	Pre-2021 MRE	3.09	Gabbro
OPM-19-01	124.80	124.95	Pre-2021 MRE	3.01	Gabbro
OPM-19-01	128.50	128.67	Pre-2021 MRE	2.99	Gabbro
OPM-19-01	132.80	132.99	Pre-2021 MRE	3.05	Gabbro
OPM-19-01	136.70	136.90	Pre-2021 MRE	2.93	Gabbro
OPM-19-02	4.80	4.96	Pre-2021 MRE	2.93	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-02	9.70	9.88	Pre-2021 MRE	3.03	Gabbro
OPM-19-02	11.20	11.41	Pre-2021 MRE	2.93	Gabbro
OPM-19-02	21.00	21.15	Pre-2021 MRE	3.03	Gabbro
OPM-19-02	26.50	26.66	Pre-2021 MRE	2.98	Gabbro
OPM-19-02	29.50	29.72	Pre-2021 MRE	2.99	Gabbro
OPM-19-02	33.20	33.38	Pre-2021 MRE	2.95	Gabbro
OPM-19-02	35.50	35.69	Pre-2021 MRE	2.97	Gabbro
OPM-19-02	37.80	37.95	Pre-2021 MRE	2.99	Gabbro
OPM-19-02	42.00	42.14	Pre-2021 MRE	3.03	Gabbro
OPM-19-02	42.90	43.14	Pre-2021 MRE	3.02	Gabbro
OPM-19-02	46.90	47.03	Pre-2021 MRE	2.90	Gabbro
OPM-19-02	50.60	50.81	Pre-2021 MRE	3.89	Gabbro
OPM-19-02	51.70	51.90	Pre-2021 MRE	2.82	Gabbro
OPM-19-02	56.10	56.27	Pre-2021 MRE	2.74	Gabbro
OPM-19-02	59.80	59.93	Pre-2021 MRE	2.91	Gabbro
OPM-19-02	64.30	64.44	Pre-2021 MRE	2.97	Gabbro
OPM-19-02	67.10	67.26	Pre-2021 MRE	2.96	Gabbro
OPM-19-02	68.10	68.36	Pre-2021 MRE	2.89	Gabbro
OPM-19-02	75.40	75.60	Pre-2021 MRE	3.03	Gabbro
OPM-19-02	78.20	78.38	Pre-2021 MRE	2.89	Gabbro
OPM-19-02	81.50	81.73	Pre-2021 MRE	2.85	Gabbro
OPM-19-02	85.40	85.60	Pre-2021 MRE	2.88	Gabbro
OPM-19-02	90.00	90.20	Pre-2021 MRE	3.03	Gabbro
OPM-19-02	95.80	96.00	Pre-2021 MRE	2.87	Gabbro
OPM-19-02	100.00	100.22	Pre-2021 MRE	2.87	Gabbro
OPM-19-02	104.30	104.51	Pre-2021 MRE	3.17	Gabbro
OPM-19-02	106.00	106.18	Pre-2021 MRE	2.97	Gabbro
OPM-19-03	3.20	3.32	Pre-2021 MRE	2.70	Rhyolite
OPM-19-03	9.10	9.22	Pre-2021 MRE	2.70	Rhyolite
OPM-19-03	11.00	11.16	Pre-2021 MRE	2.68	Rhyolite
OPM-19-03	18.20	18.38	Pre-2021 MRE	2.69	Rhyolite
OPM-19-03	21.00	21.15	Pre-2021 MRE	2.74	Rhyolite
OPM-19-03	25.30	25.50	Pre-2021 MRE	2.70	Rhyolite
OPM-19-03	28.40	28.54	Pre-2021 MRE	2.68	Rhyolite
OPM-19-03	34.60	34.78	Pre-2021 MRE	2.67	Rhyolite
OPM-19-03	38.70	38.83	Pre-2021 MRE	2.71	Rhyolite
OPM-19-03	43.90	44.05	Pre-2021 MRE	2.64	Rhyolite
OPM-19-03	47.00	47.14	Pre-2021 MRE	2.70	Rhyolite
OPM-19-03	49.30	49.46	Pre-2021 MRE	2.68	Rhyolite
OPM-19-03	55.20	55.34	Pre-2021 MRE	2.64	Rhyolite
OPM-19-03	57.00	57.13	Pre-2021 MRE	2.76	Rhyolite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-03	59.2	59.35	Pre-2021 MRE	2.85	Rhyolite
OPM-19-03	61.0	61.19	Pre-2021 MRE	2.75	Rhyolite
OPM-19-03	66.8	66.96	Pre-2021 MRE	2.76	Rhyolite
OPM-19-03	72.0	72.17	Pre-2021 MRE	2.64	Rhyolite
OPM-19-03	77.0	77.17	Pre-2021 MRE	2.65	Rhyolite
OPM-19-03	81.5	81.73	Pre-2021 MRE	2.63	Rhyolite
OPM-19-03	85.0	85.17	Pre-2021 MRE	2.63	Rhyolite
OPM-19-03	88.3	88.49	Pre-2021 MRE	2.64	Rhyolite
OPM-19-03	91.7	91.85	Pre-2021 MRE	2.64	Rhyolite
OPM-19-03	98.0	98.15	Pre-2021 MRE	2.67	Rhyolite
OPM-19-03	99.2	99.31	Pre-2021 MRE	2.66	Rhyolite
OPM-19-03	102.2	102.34	Pre-2021 MRE	2.66	Rhyolite
OPM-19-03	109.4	109.54	Pre-2021 MRE	2.66	Rhyolite
OPM-19-03	110.4	110.57	Pre-2021 MRE	2.66	Rhyolite
OPM-19-04	5.4	5.56	Pre-2021 MRE	3.01	Gabbro; Foliated
OPM-19-04	10.5	10.64	Pre-2021 MRE	2.93	Gabbro; Foliated
OPM-19-04	12.2	12.41	Pre-2021 MRE	2.98	Gabbro; Foliated
OPM-19-04	16.4	16.61	Pre-2021 MRE	2.96	Gabbro; Foliated
OPM-19-04	19.3	19.46	Pre-2021 MRE	2.93	Gabbro; Foliated
OPM-19-04	23.5	23.71	Pre-2021 MRE	3.00	Gabbro; Foliated
OPM-19-04	29.4	29.64	Pre-2021 MRE	2.96	Gabbro; Foliated
OPM-19-04	35.0	35.20	Pre-2021 MRE	2.98	Gabbro; Foliated
OPM-19-04	39.0	39.18	Pre-2021 MRE	2.98	Gabbro; Foliated
OPM-19-04	41.8	41.95	Pre-2021 MRE	2.93	Gabbro; Foliated
OPM-19-04	47.3	47.51	Pre-2021 MRE	2.97	Gabbro; Foliated
OPM-19-04	51.0	51.15	Pre-2021 MRE	2.94	Gabbro; Foliated
OPM-19-04	55.5	55.69	Pre-2021 MRE	2.97	Gabbro; Foliated
OPM-19-04	58.5	58.74	Pre-2021 MRE	3.08	Gabbro
OPM-19-04	64.3	64.53	Pre-2021 MRE	2.97	Gabbro
OPM-19-04	68.8	68.95	Pre-2021 MRE	2.99	Gabbro
OPM-19-04	73.5	73.66	Pre-2021 MRE	2.95	Gabbro
OPM-19-04	75.6	75.78	Pre-2021 MRE	2.97	Gabbro
OPM-19-04	79.6	79.80	Pre-2021 MRE	2.82	Gabbro
OPM-19-04	83.7	83.88	Pre-2021 MRE	2.89	Gabbro
OPM-19-04	89.1	89.33	Pre-2021 MRE	3.02	Gabbro
OPM-19-04	92.8	93.03	Pre-2021 MRE	2.84	Gabbro
OPM-19-04	96.5	96.71	Pre-2021 MRE	2.92	Gabbro
OPM-19-04	100.4	100.56	Pre-2021 MRE	2.95	Gabbro
OPM-19-04	104.1	104.29	Pre-2021 MRE	2.84	Gabbro
OPM-19-04	107.6	107.78	Pre-2021 MRE	2.90	Gabbro
OPM-19-04	115.3	115.50	Pre-2021 MRE	2.90	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-04	121.5	121.73	Pre-2021 MRE	2.96	Gabbro
OPM-19-04	124.7	124.89	Pre-2021 MRE	2.99	Gabbro
OPM-19-04	129.8	130.01	Pre-2021 MRE	2.92	Gabbro
OPM-19-04	132.4	132.58	Pre-2021 MRE	2.97	Gabbro
OPM-19-04	137.6	137.79	Pre-2021 MRE	2.95	Gabbro
OPM-19-04	142.1	142.29	Pre-2021 MRE	2.96	Gabbro
OPM-19-04	146.8	146.99	Pre-2021 MRE	2.90	Gabbro
OPM-19-04	149.0	149.21	Pre-2021 MRE	2.96	Gabbro
OPM-19-04	158.3	158.48	Pre-2021 MRE	2.99	Gabbro
OPM-19-04	160.1	160.29	Pre-2021 MRE	2.98	Gabbro
OPM-19-04	167.0	167.23	Pre-2021 MRE	3.01	Gabbro
OPM-19-04	171.6	171.78	Pre-2021 MRE	3.01	Gabbro
OPM-19-04	176.0	176.20	Pre-2021 MRE	2.74	Gabbro
OPM-19-04	179.0	179.20	Pre-2021 MRE	2.92	Gabbro
OPM-19-04	188.3	188.46	Pre-2021 MRE	2.71	Gabbro
OPM-19-04	192.1	192.25	Pre-2021 MRE	2.85	Gabbro
OPM-19-05	5.2	5.35	Pre-2021 MRE	2.94	Gabbro; Foliated
OPM-19-05	8.8	8.98	Pre-2021 MRE	2.93	Gabbro; Foliated
OPM-19-05	13.8	14.00	Pre-2021 MRE	2.89	Gabbro; Foliated
OPM-19-05	17.7	17.90	Pre-2021 MRE	2.95	Gabbro
OPM-19-05	22.1	22.31	Pre-2021 MRE	2.90	Gabbro
OPM-19-05	24.3	24.47	Pre-2021 MRE	2.90	Gabbro
OPM-19-05	28.1	28.28	Pre-2021 MRE	2.88	Gabbro
OPM-19-05	33.2	33.40	Pre-2021 MRE	2.86	Gabbro
OPM-19-05	34.8	34.99	Pre-2021 MRE	2.91	Gabbro
OPM-19-05	40.4	40.61	Pre-2021 MRE	2.93	Gabbro
OPM-19-05	43.5	43.71	Pre-2021 MRE	2.83	Gabbro
OPM-19-05	48.0	48.18	Pre-2021 MRE	2.82	Gabbro
OPM-19-05	51.0	51.17	Pre-2021 MRE	2.85	Gabbro
OPM-19-05	57.0	57.18	Pre-2021 MRE	3.10	Gabbro
OPM-19-05	62.3	62.46	Pre-2021 MRE	2.94	Gabbro
OPM-19-05	65.8	65.98	Pre-2021 MRE	3.00	Gabbro
OPM-19-05	68.2	68.37	Pre-2021 MRE	2.92	Gabbro
OPM-19-05	75.2	75.41	Pre-2021 MRE	2.85	Gabbro
OPM-19-05	79.2	79.33	Pre-2021 MRE	2.83	Gabbro
OPM-19-05	82.5	82.69	Pre-2021 MRE	2.81	Gabbro
OPM-19-05	85.0	85.12	Pre-2021 MRE	2.87	Gabbro
OPM-19-05	90.0	90.12	Pre-2021 MRE	2.83	Gabbro
OPM-19-05	94.5	94.63	Pre-2021 MRE	2.82	Gabbro
OPM-19-05	97.4	97.63	Pre-2021 MRE	2.88	Gabbro
OPM-19-06	4.1	4.29	Pre-2021 MRE	2.77	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-06	7.6	7.74	Pre-2021 MRE	2.96	Gabbro
OPM-19-06	12.0	12.2	Pre-2021 MRE	2.85	Gabbro
OPM-19-06	17.5	17.7	Pre-2021 MRE	2.84	Gabbro
OPM-19-06	21.0	21.20	Pre-2021 MRE	2.94	Gabbro
OPM-19-06	23.1	23.33	Pre-2021 MRE	2.95	Gabbro
OPM-19-06	29.0	29.22	Pre-2021 MRE	3.02	Gabbro
OPM-19-06	34.7	34.90	Pre-2021 MRE	2.91	Gabbro
OPM-19-06	38.7	38.93	Pre-2021 MRE	2.96	Gabbro
OPM-19-06	42.1	42.31	Pre-2021 MRE	2.97	Gabbro
OPM-19-06	46.2	46.41	Pre-2021 MRE	2.96	Gabbro
OPM-19-06	49.9	50.09	Pre-2021 MRE	2.98	Gabbro
OPM-19-06	53.1	53.25	Pre-2021 MRE	2.82	Gabbro
OPM-19-06	56.8	56.96	Pre-2021 MRE	3.03	Gabbro
OPM-19-06	62.6	62.78	Pre-2021 MRE	2.98	Gabbro
OPM-19-06	66.1	66.33	Pre-2021 MRE	2.97	Gabbro
OPM-19-06	71.0	71.22	Pre-2021 MRE	3.02	Gabbro
OPM-19-06	74.4	74.63	Pre-2021 MRE	3.06	Gabbro
OPM-19-06	80.2	80.44	Pre-2021 MRE	3.04	Gabbro
OPM-19-06	83.0	83.19	Pre-2021 MRE	2.97	Gabbro
OPM-19-06	88.8	88.98	Pre-2021 MRE	2.92	Gabbro
OPM-19-06	91.5	91.70	Pre-2021 MRE	3.03	Gabbro
OPM-19-06	97.4	97.60	Pre-2021 MRE	3.01	Gabbro
OPM-19-06	100.0	100.16	Pre-2021 MRE	2.90	Gabbro
OPM-19-06	102.0	102.16	Pre-2021 MRE	2.87	Gabbro
OPM-19-06	108.8	108.98	Pre-2021 MRE	3.07	Gabbro
OPM-19-06	112.7	112.92	Pre-2021 MRE	2.79	Gabbro
OPM-19-06	116.4	116.61	Pre-2021 MRE	2.97	Gabbro
OPM-19-06	118.9	119.04	Pre-2021 MRE	2.94	Gabbro
OPM-19-06	122.8	122.98	Pre-2021 MRE	2.81	Gabbro
OPM-19-06	129.6	129.82	Pre-2021 MRE	2.94	Gabbro
OPM-19-06	132.8	132.99	Pre-2021 MRE	3.00	Gabbro
OPM-19-06	138.2	138.43	Pre-2021 MRE	2.94	Gabbro
OPM-19-06	140.0	140.20	Pre-2021 MRE	2.86	Gabbro
OPM-19-06	150.4	150.62	Pre-2021 MRE	2.92	Gabbro
OPM-19-06	152.7	152.91	Pre-2021 MRE	2.99	Gabbro
OPM-19-06	160.3	160.48	Pre-2021 MRE	2.89	Gabbro
OPM-19-06	163.3	163.53	Pre-2021 MRE	2.91	Gabbro
OPM-19-06	165.8	166.03	Pre-2021 MRE	2.78	Gabbro
OPM-19-06	171.9	172.10	Pre-2021 MRE	3.00	Gabbro
OPM-19-06	177.0	177.21	Pre-2021 MRE	2.99	Gabbro
OPM-19-06	180.2	180.42	Pre-2021 MRE	3.00	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-06	188.0	188.16	Pre-2021 MRE	3.06	Gabbro
OPM-19-06	191.3	191.46	Pre-2021 MRE	2.99	Gabbro
OPM-19-06	196.4	196.54	Pre-2021 MRE	2.99	Gabbro
OPM-19-06	200.3	200.51	Pre-2021 MRE	2.81	Gabbro
OPM-19-06	203.9	204.07	Pre-2021 MRE	2.85	Gabbro
OPM-19-06	209.2	209.42	Pre-2021 MRE	2.99	Gabbro
OPM-19-06	213.1	213.26	Pre-2021 MRE	2.92	Gabbro
OPM-19-06	215.6	215.78	Pre-2021 MRE	2.78	Gabbro
OPM-19-06	220.9	221.08	Pre-2021 MRE	2.97	Gabbro
OPM-19-06	224.3	224.46	Pre-2021 MRE	2.96	Gabbro
OPM-19-07	5.0	5.21	Pre-2021 MRE	2.97	Gabbro
OPM-19-07	7.8	7.97	Pre-2021 MRE	2.96	Gabbro
OPM-19-07	16.8	17.02	Pre-2021 MRE	2.97	Gabbro
OPM-19-07	21.2	21.38	Pre-2021 MRE	2.90	Gabbro
OPM-19-07	23.2	23.37	Pre-2021 MRE	2.94	Gabbro
OPM-19-07	30.4	30.58	Pre-2021 MRE	2.85	Gabbro
OPM-19-07	31.6	31.75	Pre-2021 MRE	2.89	Gabbro
OPM-19-07	38.3	38.45	Pre-2021 MRE	2.94	Gabbro
OPM-19-07	42.2	42.41	Pre-2021 MRE	2.90	Gabbro
OPM-19-07	46.1	46.33	Pre-2021 MRE	2.80	Gabbro
OPM-19-07	51.3	51.52	Pre-2021 MRE	2.95	Gabbro
OPM-19-07	55.0	55.18	Pre-2021 MRE	2.88	Gabbro
OPM-19-07	59.6	59.83	Pre-2021 MRE	2.98	Gabbro
OPM-19-07	63.4	63.62	Pre-2021 MRE	2.92	Gabbro
OPM-19-07	68.0	68.16	Pre-2021 MRE	2.99	Gabbro
OPM-19-07	71.5	71.73	Pre-2021 MRE	2.89	Gabbro
OPM-19-07	75.3	75.44	Pre-2021 MRE	2.91	Gabbro
OPM-19-07	79.7	79.86	Pre-2021 MRE	2.94	Gabbro
OPM-19-07	82.0	82.20	Pre-2021 MRE	2.93	Gabbro
OPM-19-07	87.6	87.73	Pre-2021 MRE	2.90	Gabbro
OPM-19-07	91.4	91.59	Pre-2021 MRE	2.93	Gabbro
OPM-19-07	94.8	94.99	Pre-2021 MRE	2.87	Gabbro
OPM-19-07	99.0	99.19	Pre-2021 MRE	2.89	Gabbro
OPM-19-07	101.2	101.40	Pre-2021 MRE	2.96	Gabbro
OPM-19-07	106.4	106.56	Pre-2021 MRE	2.90	Gabbro
OPM-19-07	109.1	109.26	Pre-2021 MRE	2.87	Gabbro
OPM-19-07	115.5	115.72	Pre-2021 MRE	2.95	Gabbro
OPM-19-07	119.3	119.44	Pre-2021 MRE	2.91	Gabbro
OPM-19-07	122.0	122.23	Pre-2021 MRE	2.93	Gabbro
OPM-19-07	124.3	124.51	Pre-2021 MRE	2.93	Gabbro
OPM-19-07	129.2	129.37	Pre-2021 MRE	2.89	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-07	134.0	134.15	Pre-2021 MRE	2.92	Gabbro
OPM-19-07	136.2	136.35	Pre-2021 MRE	2.82	Gabbro
OPM-19-08	3.3	3.51	Pre-2021 MRE	3.08	Gabbro; Foliated
OPM-19-08	5.6	5.78	Pre-2021 MRE	3.13	Gabbro; Foliated
OPM-19-08	10.7	10.87	Pre-2021 MRE	3.08	Gabbro; Foliated
OPM-19-08	15.7	15.88	Pre-2021 MRE	3.07	Gabbro; Foliated
OPM-19-08	19.3	19.50	Pre-2021 MRE	3.00	Gabbro; Foliated
OPM-19-08	25.1	25.30	Pre-2021 MRE	2.97	Gabbro; Foliated
OPM-19-08	27.6	27.79	Pre-2021 MRE	3.09	Gabbro; Foliated
OPM-19-08	30.8	30.95	Pre-2021 MRE	3.20	Gabbro; Foliated
OPM-19-08	38.0	38.18	Pre-2021 MRE	3.03	Gabbro; Foliated
OPM-19-08	42.9	43.03	Pre-2021 MRE	3.05	Gabbro; Foliated
OPM-19-08	45.5	45.69	Pre-2021 MRE	3.12	Gabbro; Foliated
OPM-19-08	49.4	49.55	Pre-2021 MRE	3.09	Gabbro; Foliated
OPM-19-08	53.0	53.15	Pre-2021 MRE	3.07	Gabbro; Foliated
OPM-19-08	57.2	57.37	Pre-2021 MRE	3.02	Gabbro; Foliated
OPM-19-08	63.1	63.27	Pre-2021 MRE	3.05	Gabbro; Foliated
OPM-19-08	67.0	67.17	Pre-2021 MRE	3.05	Gabbro; Foliated
OPM-19-08	69.8	69.98	Pre-2021 MRE	3.16	Gabbro; Foliated
OPM-19-08	75.2	75.41	Pre-2021 MRE	2.87	Gabbro; Foliated
OPM-19-08	78.3	78.48	Pre-2021 MRE	3.06	Gabbro; Foliated
OPM-19-08	81.5	81.68	Pre-2021 MRE	2.94	Gabbro; Foliated
OPM-19-08	85.9	86.05	Pre-2021 MRE	3.00	Gabbro; Foliated
OPM-19-08	90.3	90.46	Pre-2021 MRE	2.90	Gabbro; Foliated
OPM-19-08	95.0	95.13	Pre-2021 MRE	2.92	Gabbro; Foliated
OPM-19-08	97.0	97.11	Pre-2021 MRE	2.90	Gabbro; Foliated
OPM-19-08	103.0	103.15	Pre-2021 MRE	3.04	Gabbro; Foliated
OPM-19-08	110.0	110.19	Pre-2021 MRE	2.94	Pyroxenite
OPM-19-08	116.5	116.70	Pre-2021 MRE	2.91	Pyroxenite
OPM-19-08	117.4	117.59	Pre-2021 MRE	2.82	Pyroxenite
OPM-19-08	122.3	122.49	Pre-2021 MRE	2.89	Pyroxenite
OPM-19-08	131.8	132.01	Pre-2021 MRE	3.04	Pyroxenite
OPM-19-08	134.0	134.19	Pre-2021 MRE	3.00	Pyroxenite
OPM-19-08	139.6	139.83	Pre-2021 MRE	2.96	Pyroxenite
OPM-19-08	143.0	143.20	Pre-2021 MRE	3.00	Pyroxenite
OPM-19-08	147.1	147.28	Pre-2021 MRE	2.91	Pyroxenite
OPM-19-08	151.8	151.99	Pre-2021 MRE	3.02	Pyroxenite
OPM-19-08	156.3	156.48	Pre-2021 MRE	2.92	Pyroxenite
OPM-19-08	162.7	162.88	Pre-2021 MRE	2.91	Pyroxenite
OPM-19-08	164.6	164.74	Pre-2021 MRE	2.86	Pyroxenite
OPM-19-08	170.5	170.65	Pre-2021 MRE	2.91	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-08	172.2	172.40	Pre-2021 MRE	2.99	Pyroxenite
OPM-19-08	179.7	179.92	Pre-2021 MRE	2.90	Pyroxenite
OPM-19-08	183.2	183.36	Pre-2021 MRE	2.93	Gabbro; Foliated
OPM-19-08	187.8	188.01	Pre-2021 MRE	2.80	Gabbro; Foliated
OPM-19-09	9.4	9.58	Pre-2021 MRE	2.92	Pyroxenite
OPM-19-09	11.8	11.97	Pre-2021 MRE	2.81	Pyroxenite
OPM-19-09	17.8	17.97	Pre-2021 MRE	2.86	Pyroxenite
OPM-19-09	21.3	21.44	Pre-2021 MRE	2.92	Pyroxenite
OPM-19-09	25.0	25.22	Pre-2021 MRE	2.98	Pyroxenite
OPM-19-09	30.6	30.76	Pre-2021 MRE	2.87	Pyroxenite
OPM-19-09	33.3	33.52	Pre-2021 MRE	3.32	Pyroxenite
OPM-19-09	38.2	38.41	Pre-2021 MRE	3.28	Pyroxenite
OPM-19-09	42.6	42.84	Pre-2021 MRE	3.28	Pyroxenite
OPM-19-09	47.0	47.19	Pre-2021 MRE	3.08	Peridotite
OPM-19-09	51.1	51.33	Pre-2021 MRE	3.17	Peridotite
OPM-19-09	54.0	54.25	Pre-2021 MRE	3.17	Peridotite
OPM-19-09	59.7	59.92	Pre-2021 MRE	2.82	Peridotite
OPM-19-09	63.4	63.64	Pre-2021 MRE	2.84	Peridotite
OPM-19-09	68.3	68.53	Pre-2021 MRE	3.18	Peridotite
OPM-19-09	70.5	70.68	Pre-2021 MRE	3.20	Peridotite
OPM-19-09	75.8	75.99	Pre-2021 MRE	3.16	Peridotite
OPM-19-09	77.5	77.66	Pre-2021 MRE	3.17	Peridotite
OPM-19-09	85.5	85.72	Pre-2021 MRE	3.36	Pyroxenite
OPM-19-09	89.0	89.21	Pre-2021 MRE	3.35	Pyroxenite
OPM-19-09	92.1	92.27	Pre-2021 MRE	3.27	Pyroxenite
OPM-19-09	95.6	95.78	Pre-2021 MRE	3.07	Gabbro; Foliated
OPM-19-09	100.1	100.28	Pre-2021 MRE	2.95	Gabbro; Foliated
OPM-19-09	103.2	103.35	Pre-2021 MRE	3.01	Gabbro; Foliated
OPM-19-09	110.5	110.72	Pre-2021 MRE	3.06	Gabbro; Foliated
OPM-19-09	111.8	112.00	Pre-2021 MRE	3.14	Gabbro; Foliated
OPM-19-09	119.2	119.40	Pre-2021 MRE	3.22	Gabbro; Foliated
OPM-19-09	121.5	121.64	Pre-2021 MRE	3.08	Gabbro; Foliated
OPM-19-09	127.0	127.15	Pre-2021 MRE	3.04	Gabbro; Foliated
OPM-19-09	132.1	132.26	Pre-2021 MRE	3.01	Gabbro; Foliated
OPM-19-09	133.8	134.01	Pre-2021 MRE	2.97	Gabbro; Foliated
OPM-19-09	137.0	137.18	Pre-2021 MRE	3.02	Gabbro; Foliated
OPM-19-09	141.8	142.00	Pre-2021 MRE	3.14	Gabbro; Foliated
OPM-19-09	148.6	148.79	Pre-2021 MRE	2.90	Gabbro; Foliated
OPM-19-09	151.0	151.20	Pre-2021 MRE	2.99	Gabbro; Foliated
OPM-19-09	153.8	154.02	Pre-2021 MRE	2.98	Gabbro; Foliated
OPM-19-09	158.7	158.84	Pre-2021 MRE	2.77	Gabbro; Foliated

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-09	161.8	161.94	Pre-2021 MRE	3.05	Gabbro; Foliated
OPM-19-09	165.00	165.17	Pre-2021 MRE	2.85	Gabbro; Foliated
OPM-19-09	168.8	168.96	Pre-2021 MRE	2.90	Pyroxenite
OPM-19-09	171.4	171.62	Pre-2021 MRE	2.94	Pyroxenite
OPM-19-09	177.6	177.77	Pre-2021 MRE	2.99	Pyroxenite
OPM-19-09	180.00	180.23	Pre-2021 MRE	2.84	Pyroxenite
OPM-19-09	185.40	185.58	Pre-2021 MRE	2.84	Pyroxenite
OPM-19-09	189.30	189.45	Pre-2021 MRE	2.91	Pyroxenite
OPM-19-09	197.80	198.00	Pre-2021 MRE	2.79	Pyroxenite
OPM-19-09	200.60	200.80	Pre-2021 MRE	2.94	Pyroxenite
OPM-19-09	204.9	205.04	Pre-2021 MRE	2.96	Pyroxenite
OPM-19-09	207.5	207.71	Pre-2021 MRE	2.88	Pyroxenite
OPM-19-09	213.2	213.37	Pre-2021 MRE	2.99	Pyroxenite
OPM-19-09	216.0	216.16	Pre-2021 MRE	2.94	Pyroxenite
OPM-19-09	221.0	221.21	Pre-2021 MRE	2.88	Pyroxenite
OPM-19-09	225.0	225.19	Pre-2021 MRE	2.98	Pyroxenite
OPM-19-09	230.7	230.90	Pre-2021 MRE	2.95	Pyroxenite
OPM-19-09	234.1	234.26	Pre-2021 MRE	2.75	Pyroxenite
OPM-19-09	238.2	238.31	Pre-2021 MRE	2.85	Pyroxenite
OPM-19-09	243.3	243.43	Pre-2021 MRE	2.82	Pyroxenite
OPM-19-10	5.0	5.17	Pre-2021 MRE	3.11	Gabbro; Foliated
OPM-19-10	9.1	9.30	Pre-2021 MRE	3.09	Gabbro; Foliated
OPM-19-10	13.8	13.94	Pre-2021 MRE	3.07	Gabbro; Foliated
OPM-19-10	18.3	18.50	Pre-2021 MRE	3.21	Gabbro; Foliated
OPM-19-10	21.1	21.25	Pre-2021 MRE	3.01	Gabbro; Foliated
OPM-19-10	24.5	24.63	Pre-2021 MRE	3.12	Gabbro; Foliated
OPM-19-10	31.8	32.00	Pre-2021 MRE	3.02	Gabbro; Foliated
OPM-19-10	34.5	34.67	Pre-2021 MRE	2.99	Gabbro; Foliated
OPM-19-10	38.7	38.81	Pre-2021 MRE	3.10	Gabbro; Foliated
OPM-19-10	42.7	42.86	Pre-2021 MRE	3.01	Gabbro; Foliated
OPM-19-10	47.0	47.22	Pre-2021 MRE	2.95	Gabbro; Foliated
OPM-19-10	48.4	48.62	Pre-2021 MRE	3.12	Gabbro; Foliated
OPM-19-11	34.5	34.69	Pre-2021 MRE	2.93	Gabbro
OPM-19-11	35.7	35.92	Pre-2021 MRE	2.94	Gabbro
OPM-19-12	13.7	13.86	Pre-2021 MRE	2.96	Gabbro
OPM-19-12	18.7	18.86	Pre-2021 MRE	2.94	Gabbro
OPM-19-12	20.8	20.95	Pre-2021 MRE	2.96	Gabbro
OPM-19-12	24.3	24.46	Pre-2021 MRE	3.03	Gabbro
OPM-19-12	29.0	29.16	Pre-2021 MRE	2.98	Gabbro
OPM-19-12	34.6	34.81	Pre-2021 MRE	3.00	Gabbro
OPM-19-12	38.7	38.90	Pre-2021 MRE	3.05	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-12	43.0	43.19	Pre-2021 MRE	3.02	Gabbro
OPM-19-12	47.0	47.17	Pre-2021 MRE	3.01	Gabbro
OPM-19-12	50.0	50.20	Pre-2021 MRE	2.95	Gabbro
OPM-19-12	52.4	52.59	Pre-2021 MRE	2.92	Gabbro
OPM-19-12	56.1	56.30	Pre-2021 MRE	2.95	Gabbro
OPM-19-12	61.5	61.68	Pre-2021 MRE	3.01	Gabbro
OPM-19-12	64.4	64.60	Pre-2021 MRE	2.98	Gabbro
OPM-19-12	68.4	68.56	Pre-2021 MRE	3.02	Gabbro
OPM-19-12	73.3	73.47	Pre-2021 MRE	2.95	Gabbro
OPM-19-12	77.2	77.39	Pre-2021 MRE	2.97	Gabbro
OPM-19-12	81.2	81.38	Pre-2021 MRE	2.96	Gabbro
OPM-19-12	86.1	86.27	Pre-2021 MRE	3.02	Gabbro
OPM-19-12	89.7	89.84	Pre-2021 MRE	2.65	Rhyolite
OPM-19-12	90.6	90.78	Pre-2021 MRE	2.65	Rhyolite
OPM-19-12	99.8	99.93	Pre-2021 MRE	2.64	Rhyolite
OPM-19-12	103.2	103.44	Pre-2021 MRE	2.65	Rhyolite
OPM-19-12	106.4	106.60	Pre-2021 MRE	2.66	Rhyolite
OPM-19-12	111.1	111.29	Pre-2021 MRE	2.67	Rhyolite
OPM-19-12	115.4	115.62	Pre-2021 MRE	2.67	Rhyolite
OPM-19-12	119.4	119.63	Pre-2021 MRE	2.64	Rhyolite
OPM-19-13	12.6	12.72	Pre-2021 MRE	3.09	Gabbro
OPM-19-13	17.3	17.50	Pre-2021 MRE	3.00	Gabbro
OPM-19-13	20.1	20.32	Pre-2021 MRE	2.85	Gabbro
OPM-19-13	26.0	26.17	Pre-2021 MRE	2.75	Gabbro
OPM-19-13	29.3	29.46	Pre-2021 MRE	2.83	Gabbro
OPM-19-13	33.2	33.39	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	38.0	38.16	Pre-2021 MRE	3.01	Gabbro
OPM-19-13	43.5	43.66	Pre-2021 MRE	3.06	Gabbro
OPM-19-13	45.8	45.99	Pre-2021 MRE	2.97	Gabbro
OPM-19-13	51.0	51.18	Pre-2021 MRE	3.04	Gabbro
OPM-19-13	52.7	52.86	Pre-2021 MRE	2.95	Gabbro
OPM-19-13	56.6	56.82	Pre-2021 MRE	2.98	Gabbro
OPM-19-13	61.2	61.38	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	67.0	67.16	Pre-2021 MRE	2.89	Gabbro
OPM-19-13	68.3	68.48	Pre-2021 MRE	2.94	Gabbro
OPM-19-13	71.0	71.18	Pre-2021 MRE	2.85	Gabbro
OPM-19-13	76.7	76.84	Pre-2021 MRE	2.88	Gabbro
OPM-19-13	78.1	78.27	Pre-2021 MRE	2.84	Gabbro
OPM-19-13	82.1	82.27	Pre-2021 MRE	2.85	Gabbro
OPM-19-13	87.0	87.18	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	94.5	94.67	Pre-2021 MRE	2.99	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-13	96.4	96.61	Pre-2021 MRE	2.96	Gabbro
OPM-19-13	100.7	100.92	Pre-2021 MRE	3.04	Gabbro
OPM-19-13	106.3	106.49	Pre-2021 MRE	2.98	Gabbro
OPM-19-13	110.0	110.16	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	112.5	112.69	Pre-2021 MRE	3.00	Gabbro
OPM-19-13	118.3	118.43	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	121.8	121.97	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	126.1	126.24	Pre-2021 MRE	2.94	Gabbro
OPM-19-13	131.4	131.54	Pre-2021 MRE	3.04	Gabbro
OPM-19-13	134.5	134.70	Pre-2021 MRE	3.03	Gabbro
OPM-19-13	140.0	140.19	Pre-2021 MRE	2.96	Gabbro
OPM-19-13	144.1	144.27	Pre-2021 MRE	3.02	Gabbro
OPM-19-13	147.0	147.22	Pre-2021 MRE	2.99	Gabbro
OPM-19-13	151.5	151.71	Pre-2021 MRE	2.97	Gabbro
OPM-19-13	156.2	156.38	Pre-2021 MRE	2.74	Rhyolite
OPM-19-13	158.2	158.38	Pre-2021 MRE	2.75	Rhyolite
OPM-19-13	165.6	165.77	Pre-2021 MRE	2.74	Rhyolite
OPM-19-13	182.8	182.97	Pre-2021 MRE	2.69	Rhyolite
OPM-19-14	6.50	6.68	Pre-2021 MRE	2.95	Gabbro
OPM-19-14	10.7	10.91	Pre-2021 MRE	2.96	Gabbro
OPM-19-14	14.5	14.71	Pre-2021 MRE	2.88	Gabbro
OPM-19-14	15.7	15.90	Pre-2021 MRE	2.89	Gabbro
OPM-19-14	22.4	22.59	Pre-2021 MRE	2.91	Gabbro
OPM-19-14	27.0	27.16	Pre-2021 MRE	2.82	Gabbro
OPM-19-14	28.0	28.15	Pre-2021 MRE	2.97	Gabbro
OPM-19-14	35.5	35.73	Pre-2021 MRE	2.92	Gabbro
OPM-19-14	39.5	39.68	Pre-2021 MRE	2.96	Gabbro
OPM-19-14	43.8	43.98	Pre-2021 MRE	2.97	Gabbro
OPM-19-14	47.3	47.46	Pre-2021 MRE	2.97	Gabbro
OPM-19-14	52.5	52.71	Pre-2021 MRE	2.85	Gabbro
OPM-19-14	54.0	54.14	Pre-2021 MRE	2.99	Gabbro
OPM-19-14	58.9	59.06	Pre-2021 MRE	2.81	Gabbro
OPM-19-14	64.6	64.83	Pre-2021 MRE	2.84	Gabbro
OPM-19-14	66.3	66.47	Pre-2021 MRE	2.89	Gabbro
OPM-19-14	69.9	70.04	Pre-2021 MRE	3.03	Gabbro
OPM-19-14	76.6	76.80	Pre-2021 MRE	2.86	Gabbro
OPM-19-14	78.8	78.94	Pre-2021 MRE	2.82	Gabbro
OPM-19-14	82.5	82.70	Pre-2021 MRE	2.95	Gabbro
OPM-19-14	85.5	85.63	Pre-2021 MRE	2.82	Gabbro
OPM-19-14	90.5	90.68	Pre-2021 MRE	2.90	Gabbro
OPM-19-14	94.2	94.40	Pre-2021 MRE	2.91	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-14	98.0	98.17	Pre-2021 MRE	2.92	Gabbro
OPM-19-14	104.3	104.46	Pre-2021 MRE	2.65	Rhyolite
OPM-19-14	107.4	107.62	Pre-2021 MRE	2.71	Rhyolite
OPM-19-14	112.5	112.67	Pre-2021 MRE	2.70	Rhyolite
OPM-19-14	116.0	116.23	Pre-2021 MRE	2.71	Rhyolite
OPM-19-14	118.0	118.18	Pre-2021 MRE	2.68	Rhyolite
OPM-19-14	121.6	121.78	Pre-2021 MRE	2.71	Rhyolite
OPM-19-14	128.8	129.02	Pre-2021 MRE	2.70	Rhyolite
OPM-19-14	131.4	131.52	Pre-2021 MRE	2.69	Rhyolite
OPM-19-14	135.5	135.72	Pre-2021 MRE	2.65	Rhyolite
OPM-19-14	140.9	141.05	Pre-2021 MRE	2.72	Rhyolite
OPM-19-14	144.3	144.47	Pre-2021 MRE	2.68	Rhyolite
OPM-19-14	146.0	146.21	Pre-2021 MRE	2.70	Rhyolite
OPM-19-14	156.2	156.38	Pre-2021 MRE	2.67	Rhyolite
OPM-19-14	159.2	159.36	Pre-2021 MRE	2.67	Rhyolite
OPM-19-14	166.2	166.41	Pre-2021 MRE	2.67	Rhyolite
OPM-19-14	168.2	168.44	Pre-2021 MRE	2.74	Rhyolite
OPM-19-15	19.9	20.05	Pre-2021 MRE	2.92	Gabbro
OPM-19-15	21.4	21.59	Pre-2021 MRE	3.27	Gabbro
OPM-19-15	26.6	26.78	Pre-2021 MRE	2.98	Gabbro
OPM-19-15	30.5	30.67	Pre-2021 MRE	2.97	Gabbro
OPM-19-15	35.0	35.16	Pre-2021 MRE	2.98	Gabbro
OPM-19-16	5.0	5.19	Pre-2021 MRE	2.98	Gabbro
OPM-19-16	10.2	10.42	Pre-2021 MRE	2.87	Gabbro
OPM-19-16	14.5	14.68	Pre-2021 MRE	2.84	Gabbro
OPM-19-16	17.6	17.84	Pre-2021 MRE	2.90	Gabbro
OPM-19-16	21.0	21.22	Pre-2021 MRE	3.01	Gabbro
OPM-19-16	26.6	26.77	Pre-2021 MRE	2.86	Gabbro
OPM-19-16	29.7	29.88	Pre-2021 MRE	2.80	Gabbro
OPM-19-16	35.5	35.73	Pre-2021 MRE	2.84	Gabbro
OPM-19-16	39.4	39.54	Pre-2021 MRE	2.84	Gabbro
OPM-19-16	41.8	41.99	Pre-2021 MRE	2.93	Gabbro
OPM-19-16	45.2	45.39	Pre-2021 MRE	2.97	Gabbro
OPM-19-16	50.7	50.91	Pre-2021 MRE	2.92	Gabbro
OPM-19-16	56.3	56.46	Pre-2021 MRE	3.03	Gabbro
OPM-19-16	59.2	59.42	Pre-2021 MRE	3.00	Gabbro
OPM-19-16	64.1	64.33	Pre-2021 MRE	2.75	Gabbro
OPM-19-16	69.1	69.28	Pre-2021 MRE	2.99	Gabbro
OPM-19-16	70.6	70.83	Pre-2021 MRE	2.96	Gabbro
OPM-19-16	75.5	75.70	Pre-2021 MRE	2.99	Gabbro
OPM-19-16	81.6	81.76	Pre-2021 MRE	3.04	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-16	83.7	83.86	Pre-2021 MRE	2.89	Gabbro
OPM-19-16	90.9	91.09	Pre-2021 MRE	2.84	Gabbro
OPM-19-16	94.5	94.74	Pre-2021 MRE	2.93	Gabbro
OPM-19-16	98.1	98.27	Pre-2021 MRE	2.90	Gabbro
OPM-19-16	103.5	103.68	Pre-2021 MRE	2.85	Gabbro
OPM-19-16	107.1	107.33	Pre-2021 MRE	2.84	Gabbro
OPM-19-16	109.4	109.61	Pre-2021 MRE	2.98	Gabbro
OPM-19-16	115.3	115.52	Pre-2021 MRE	3.00	Gabbro
OPM-19-16	117.6	117.79	Pre-2021 MRE	2.91	Gabbro
OPM-19-16	124.1	124.34	Pre-2021 MRE	2.89	Gabbro
OPM-19-16	128.3	128.50	Pre-2021 MRE	2.73	Rhyolite
OPM-19-16	132.6	132.78	Pre-2021 MRE	2.69	Rhyolite
OPM-19-16	133.5	133.72	Pre-2021 MRE	2.72	Rhyolite
OPM-19-16	140.7	140.89	Pre-2021 MRE	2.72	Rhyolite
OPM-19-16	143.6	143.80	Pre-2021 MRE	2.68	Rhyolite
OPM-19-16	148.5	148.71	Pre-2021 MRE	2.80	Rhyolite
OPM-19-16	157.4	157.60	Pre-2021 MRE	2.67	Rhyolite
OPM-19-16	159	159.13	Pre-2021 MRE	2.68	Rhyolite
OPM-19-17	6.1	6.33	Pre-2021 MRE	2.97	Gabbro
OPM-19-17	7.4	7.59	Pre-2021 MRE	3.03	Gabbro
OPM-19-17	13.9	14.10	Pre-2021 MRE	3.13	Gabbro
OPM-19-17	18.7	18.85	Pre-2021 MRE	3.01	Gabbro
OPM-19-17	23.0	23.18	Pre-2021 MRE	3.06	Gabbro
OPM-19-17	26.7	26.91	Pre-2021 MRE	2.96	Gabbro
OPM-19-17	28.9	29.11	Pre-2021 MRE	3.05	Gabbro
OPM-19-17	36.0	36.17	Pre-2021 MRE	3.00	Gabbro
OPM-19-17	39.1	39.32	Pre-2021 MRE	3.08	Gabbro
OPM-19-17	40.8	40.94	Pre-2021 MRE	3.04	Gabbro
OPM-19-17	47.2	47.43	Pre-2021 MRE	3.06	Gabbro
OPM-19-17	51.1	51.32	Pre-2021 MRE	3.05	Gabbro
OPM-19-17	52.9	53.09	Pre-2021 MRE	3.03	Gabbro
OPM-19-17	58.2	58.42	Pre-2021 MRE	3.03	Gabbro
OPM-19-17	64.4	64.61	Pre-2021 MRE	3.00	Gabbro
OPM-19-17	66.2	66.39	Pre-2021 MRE	2.99	Gabbro
OPM-19-17	76.5	76.71	Pre-2021 MRE	2.70	Rhyolite
OPM-19-17	79.4	79.62	Pre-2021 MRE	2.68	Rhyolite
OPM-19-17	82.9	83.09	Pre-2021 MRE	2.69	Rhyolite
OPM-19-17	89.8	90.01	Pre-2021 MRE	2.70	Rhyolite
OPM-19-17	93.3	93.51	Pre-2021 MRE	2.93	Rhyolite
OPM-19-17	98.4	98.60	Pre-2021 MRE	2.67	Rhyolite
OPM-19-18	6.8	6.95	Pre-2021 MRE	3.07	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-18	9.4	9.55	Pre-2021 MRE	3.00	Gabbro
OPM-19-18	12.4	12.59	Pre-2021 MRE	3.02	Gabbro
OPM-19-18	16.0	16.16	Pre-2021 MRE	3.08	Gabbro
OPM-19-18	23.5	23.70	Pre-2021 MRE	3.00	Gabbro
OPM-19-18	27.2	27.35	Pre-2021 MRE	3.07	Gabbro
OPM-19-18	29.5	29.67	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	33.2	33.37	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	39.7	39.89	Pre-2021 MRE	3.03	Gabbro
OPM-19-18	42.7	42.90	Pre-2021 MRE	2.97	Gabbro
OPM-19-18	45.6	45.74	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	49.0	49.15	Pre-2021 MRE	2.94	Gabbro
OPM-19-18	54.0	54.21	Pre-2021 MRE	3.20	Gabbro
OPM-19-18	61.0	61.19	Pre-2021 MRE	3.64	Gabbro
OPM-19-18	63.7	63.90	Pre-2021 MRE	2.99	Gabbro
OPM-19-18	69.0	69.19	Pre-2021 MRE	2.90	Gabbro
OPM-19-18	70.6	70.79	Pre-2021 MRE	2.99	Gabbro
OPM-19-18	76.3	76.49	Pre-2021 MRE	2.95	Gabbro
OPM-19-18	80.0	80.13	Pre-2021 MRE	3.14	Gabbro
OPM-19-18	82.0	82.18	Pre-2021 MRE	3.64	Gabbro
OPM-19-18	88.2	88.37	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	90.1	90.24	Pre-2021 MRE	3.02	Gabbro
OPM-19-18	95.3	95.52	Pre-2021 MRE	2.91	Gabbro
OPM-19-18	97.7	97.92	Pre-2021 MRE	2.96	Gabbro
OPM-19-18	104.2	104.39	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	108.4	108.62	Pre-2021 MRE	3.05	Gabbro
OPM-19-18	112.7	112.91	Pre-2021 MRE	2.98	Gabbro
OPM-19-18	114.6	114.82	Pre-2021 MRE	3.04	Gabbro
OPM-19-18	120.9	121.12	Pre-2021 MRE	2.96	Gabbro
OPM-19-18	124.8	125.03	Pre-2021 MRE	2.95	Gabbro
OPM-19-18	126.5	126.67	Pre-2021 MRE	2.93	Gabbro
OPM-19-18	130.2	130.33	Pre-2021 MRE	2.68	Rhyolite
OPM-19-18	136.9	137.06	Pre-2021 MRE	2.76	Rhyolite
OPM-19-18	142.4	142.55	Pre-2021 MRE	2.90	Rhyolite
OPM-19-18	145.8	145.96	Pre-2021 MRE	2.70	Rhyolite
OPM-19-18	149.7	149.94	Pre-2021 MRE	2.65	Rhyolite
OPM-19-19	3.5	3.67	Pre-2021 MRE	2.99	Gabbro
OPM-19-19	5.6	5.82	Pre-2021 MRE	2.83	Gabbro
OPM-19-19	12.1	12.34	Pre-2021 MRE	3.06	Gabbro
OPM-19-19	15.3	15.53	Pre-2021 MRE	2.95	Gabbro
OPM-19-19	19.0	19.22	Pre-2021 MRE	2.91	Gabbro
OPM-19-19	25.4	25.62	Pre-2021 MRE	2.94	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-19	30.0	30.22	Pre-2021 MRE	3.00	Gabbro
OPM-19-19	33.2	33.39	Pre-2021 MRE	2.96	Gabbro
OPM-19-19	39.0	39.23	Pre-2021 MRE	2.97	Gabbro
OPM-19-19	43.2	43.38	Pre-2021 MRE	2.65	Gabbro
OPM-19-19	46.4	46.58	Pre-2021 MRE	2.99	Gabbro
OPM-19-19	48.4	48.56	Pre-2021 MRE	2.97	Gabbro
OPM-19-19	53.6	53.76	Pre-2021 MRE	2.98	Gabbro
OPM-19-19	57.5	57.66	Pre-2021 MRE	2.94	Gabbro
OPM-19-19	60.9	61.06	Pre-2021 MRE	2.88	Gabbro
OPM-19-19	66.2	66.39	Pre-2021 MRE	3.20	Gabbro
OPM-19-19	71.6	71.78	Pre-2021 MRE	2.81	Gabbro
OPM-19-19	76.3	76.50	Pre-2021 MRE	2.89	Gabbro
OPM-19-19	81.0	81.14	Pre-2021 MRE	2.71	Gabbro
OPM-19-19	85.2	85.43	Pre-2021 MRE	3.43	Gabbro
OPM-19-19	90.0	90.17	Pre-2021 MRE	2.99	Gabbro; Foliated
OPM-19-19	93.4	93.56	Pre-2021 MRE	2.99	Gabbro; Foliated
OPM-19-19	96.1	96.31	Pre-2021 MRE	2.92	Gabbro; Foliated
OPM-19-19	103.4	103.57	Pre-2021 MRE	2.95	Gabbro; Foliated
OPM-19-20	9.6	9.81	Pre-2021 MRE	3.01	Gabbro
OPM-19-20	13.9	14.08	Pre-2021 MRE	3.02	Gabbro
OPM-19-20	17.9	18.07	Pre-2021 MRE	3.00	Gabbro
OPM-19-20	20.6	20.77	Pre-2021 MRE	2.90	Gabbro
OPM-19-20	24.0	24.21	Pre-2021 MRE	2.91	Gabbro
OPM-19-20	31.4	31.60	Pre-2021 MRE	2.97	Gabbro
OPM-19-20	34.1	34.32	Pre-2021 MRE	2.93	Gabbro
OPM-19-20	37.7	37.89	Pre-2021 MRE	2.89	Gabbro
OPM-19-20	42.7	42.90	Pre-2021 MRE	2.95	Gabbro
OPM-19-20	45.6	45.78	Pre-2021 MRE	2.96	Gabbro
OPM-19-20	53.0	53.20	Pre-2021 MRE	2.90	Gabbro
OPM-19-20	55.4	55.60	Pre-2021 MRE	2.92	Gabbro
OPM-19-20	58.4	58.56	Pre-2021 MRE	2.91	Gabbro
OPM-19-20	63.2	63.39	Pre-2021 MRE	2.90	Gabbro
OPM-19-20	69.0	69.20	Pre-2021 MRE	2.93	Gabbro
OPM-19-20	73.1	73.25	Pre-2021 MRE	3.02	Gabbro
OPM-19-20	75.4	75.56	Pre-2021 MRE	2.99	Gabbro
OPM-19-20	81.4	81.55	Pre-2021 MRE	2.99	Gabbro
OPM-19-20	84.8	84.96	Pre-2021 MRE	2.88	Gabbro
OPM-19-20	89.7	89.92	Pre-2021 MRE	2.94	Gabbro
OPM-19-20	93.5	93.70	Pre-2021 MRE	3.00	Gabbro
OPM-19-20	96.1	96.30	Pre-2021 MRE	3.07	Gabbro
OPM-19-20	106.1	106.32	Pre-2021 MRE	3.01	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-20	108.1	108.25	Pre-2021 MRE	3.21	Gabbro
OPM-19-20	113.5	113.72	Pre-2021 MRE	2.99	Gabbro
OPM-19-20	117.5	117.68	Pre-2021 MRE	2.74	Rhyolite
OPM-19-20	120.6	120.79	Pre-2021 MRE	2.66	Rhyolite
OPM-19-20	129.2	129.39	Pre-2021 MRE	2.67	Rhyolite
OPM-19-20	138.0	138.18	Pre-2021 MRE	2.93	Rhyolite
OPM-19-20	138.8	138.95	Pre-2021 MRE	2.87	Rhyolite
OPM-19-20	146.4	146.63	Pre-2021 MRE	2.70	Rhyolite
OPM-19-21	3.4	3.58	Pre-2021 MRE	2.87	Gabbro
OPM-19-21	6.4	6.56	Pre-2021 MRE	3.03	Gabbro
OPM-19-21	12.2	12.38	Pre-2021 MRE	2.93	Gabbro
OPM-19-21	16.4	16.57	Pre-2021 MRE	3.02	Gabbro
OPM-19-21	20.7	20.89	Pre-2021 MRE	3.00	Gabbro
OPM-19-21	23.5	23.65	Pre-2021 MRE	2.98	Gabbro
OPM-19-21	29.4	29.61	Pre-2021 MRE	2.91	Gabbro
OPM-19-21	32.8	32.99	Pre-2021 MRE	2.96	Gabbro
OPM-19-21	39.3	39.46	Pre-2021 MRE	2.91	Gabbro
OPM-19-21	43.0	43.20	Pre-2021 MRE	2.88	Gabbro
OPM-19-21	47.3	47.49	Pre-2021 MRE	2.73	Gabbro
OPM-19-21	51.0	51.20	Pre-2021 MRE	2.90	Gabbro
OPM-19-21	53.0	53.18	Pre-2021 MRE	2.91	Gabbro
OPM-19-21	56.5	56.69	Pre-2021 MRE	2.92	Gabbro
OPM-19-21	61.4	61.59	Pre-2021 MRE	2.84	Gabbro
OPM-19-21	68.0	68.20	Pre-2021 MRE	2.87	Gabbro
OPM-19-21	69.4	69.59	Pre-2021 MRE	2.88	Gabbro
OPM-19-21	76.9	77.10	Pre-2021 MRE	2.80	Gabbro
OPM-19-21	80.8	80.93	Pre-2021 MRE	2.94	Gabbro
OPM-19-21	85.7	85.87	Pre-2021 MRE	2.93	Gabbro
OPM-19-21	92.0	92.17	Pre-2021 MRE	2.87	Gabbro
OPM-19-21	98.3	98.52	Pre-2021 MRE	2.90	Gabbro
OPM-19-21	103.5	103.69	Pre-2021 MRE	2.88	Gabbro
OPM-19-21	107.6	107.77	Pre-2021 MRE	2.86	Gabbro
OPM-19-21	111.3	111.48	Pre-2021 MRE	3.03	Gabbro
OPM-19-22	5.5	5.70	Pre-2021 MRE	2.97	Gabbro
OPM-19-22	9.0	9.21	Pre-2021 MRE	2.97	Gabbro
OPM-19-22	13.0	13.18	Pre-2021 MRE	2.98	Gabbro
OPM-19-22	15.0	15.18	Pre-2021 MRE	2.90	Gabbro
OPM-19-22	20.0	20.22	Pre-2021 MRE	3.03	Gabbro
OPM-19-22	26.8	27.02	Pre-2021 MRE	3.06	Gabbro
OPM-19-22	28.9	29.10	Pre-2021 MRE	2.97	Gabbro
OPM-19-22	32.4	32.61	Pre-2021 MRE	2.94	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-22	37.6	37.78	Pre-2021 MRE	2.87	Gabbro
OPM-19-22	42.0	42.17	Pre-2021 MRE	2.92	Gabbro
OPM-19-22	46.3	46.49	Pre-2021 MRE	2.94	Gabbro
OPM-19-22	49.7	49.88	Pre-2021 MRE	3.02	Gabbro
OPM-19-22	54.1	54.31	Pre-2021 MRE	2.95	Gabbro
OPM-19-22	58.5	58.69	Pre-2021 MRE	3.01	Gabbro
OPM-19-22	62.5	62.66	Pre-2021 MRE	2.99	Gabbro
OPM-19-22	68.9	69.07	Pre-2021 MRE	3.00	Gabbro
OPM-19-22	70.7	70.89	Pre-2021 MRE	3.07	Gabbro
OPM-19-22	74.3	74.46	Pre-2021 MRE	3.00	Gabbro
OPM-19-22	79.0	79.19	Pre-2021 MRE	3.02	Gabbro
OPM-19-22	83.6	83.83	Pre-2021 MRE	2.96	Gabbro
OPM-19-22	86.5	86.70	Pre-2021 MRE	3.15	Gabbro
OPM-19-22	91.1	91.25	Pre-2021 MRE	2.98	Gabbro
OPM-19-22	96.3	96.53	Pre-2021 MRE	3.07	Gabbro
OPM-19-22	101.8	101.98	Pre-2021 MRE	3.06	Gabbro
OPM-19-22	104.4	104.59	Pre-2021 MRE	3.08	Gabbro
OPM-19-22	108.2	108.34	Pre-2021 MRE	3.09	Gabbro
OPM-19-22	112.2	112.38	Pre-2021 MRE	2.99	Gabbro
OPM-19-22	117.4	117.59	Pre-2021 MRE	3.03	Gabbro
OPM-19-22	121.4	121.52	Pre-2021 MRE	3.01	Gabbro
OPM-19-22	125.6	125.81	Pre-2021 MRE	3.04	Gabbro
OPM-19-22	128.4	128.57	Pre-2021 MRE	2.94	Gabbro
OPM-19-22	132.0	132.21	Pre-2021 MRE	3.02	Gabbro
OPM-19-22	137.3	137.48	Pre-2021 MRE	2.99	Gabbro
OPM-19-22	138.5	138.70	Pre-2021 MRE	3.02	Gabbro
OPM-19-22	145.0	145.17	Pre-2021 MRE	3.05	Gabbro
OPM-19-22	148.2	148.34	Pre-2021 MRE	3.05	Gabbro
OPM-19-22	152.3	152.47	Pre-2021 MRE	2.66	Rhyolite
OPM-19-22	161.4	161.60	Pre-2021 MRE	2.73	Rhyolite
OPM-19-23	6.9	7.04	Pre-2021 MRE	2.89	Gabbro
OPM-19-23	9.9	10.08	Pre-2021 MRE	2.97	Gabbro
OPM-19-23	15.2	15.39	Pre-2021 MRE	2.96	Gabbro
OPM-19-23	22.0	22.18	Pre-2021 MRE	2.97	Gabbro
OPM-19-23	27.4	27.60	Pre-2021 MRE	2.93	Gabbro
OPM-19-23	33.8	33.97	Pre-2021 MRE	3.00	Gabbro
OPM-19-23	37.2	37.39	Pre-2021 MRE	3.01	Gabbro
OPM-19-23	40.2	40.36	Pre-2021 MRE	3.06	Gabbro
OPM-19-23	44.0	44.18	Pre-2021 MRE	2.92	Gabbro
OPM-19-23	49.4	49.59	Pre-2021 MRE	2.96	Gabbro
OPM-19-23	51.0	51.16	Pre-2021 MRE	3.10	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-19-23	56.8	57.01	Pre-2021 MRE	3.02	Gabbro
OPM-19-23	58.4	58.59	Pre-2021 MRE	2.95	Gabbro
OPM-19-23	64.3	64.48	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	66.5	66.71	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	73.6	73.78	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	78.0	78.17	Pre-2021 MRE	3.01	Gabbro
OPM-19-23	79.1	79.30	Pre-2021 MRE	2.94	Gabbro
OPM-19-23	83.2	83.41	Pre-2021 MRE	2.94	Gabbro
OPM-19-23	88.5	88.64	Pre-2021 MRE	2.93	Gabbro
OPM-19-23	93.0	93.13	Pre-2021 MRE	2.87	Gabbro
OPM-19-23	95.8	95.96	Pre-2021 MRE	2.92	Gabbro
OPM-19-23	102.3	102.50	Pre-2021 MRE	2.7	Gabbro
OPM-19-23	102.7	102.89	Pre-2021 MRE	2.89	Gabbro
OPM-19-23	109.4	109.55	Pre-2021 MRE	2.89	Gabbro
OPM-19-23	113.3	113.49	Pre-2021 MRE	3.02	Gabbro
OPM-19-23	117.2	117.40	Pre-2021 MRE	3.07	Gabbro
OPM-19-23	123.2	123.38	Pre-2021 MRE	3.01	Gabbro
OPM-19-23	126.1	126.29	Pre-2021 MRE	2.92	Gabbro
OPM-19-23	130.7	130.91	Pre-2021 MRE	2.92	Gabbro
OPM-19-23	135.1	135.33	Pre-2021 MRE	3.00	Gabbro
OPM-19-23	139.8	140.01	Pre-2021 MRE	3.02	Gabbro
OPM-19-23	144.0	144.14	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	149.0	149.21	Pre-2021 MRE	3.01	Gabbro
OPM-19-23	152.3	152.50	Pre-2021 MRE	2.96	Gabbro
OPM-19-23	155.3	155.52	Pre-2021 MRE	2.87	Gabbro
OPM-19-23	161.1	161.28	Pre-2021 MRE	2.96	Gabbro
OPM-19-23	165.4	165.60	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	169.0	169.17	Pre-2021 MRE	3.00	Gabbro
OPM-19-23	173.0	173.23	Pre-2021 MRE	2.98	Gabbro
OPM-19-23	176.0	176.19	Pre-2021 MRE	3.01	Gabbro
OPM-19-23	180.0	180.21	Pre-2021 MRE	3.03	Gabbro
OPM-19-23	187.4	187.62	Pre-2021 MRE	2.97	Gabbro
OPM-19-23	189.1	189.29	Pre-2021 MRE	3.04	Gabbro
OPM-19-23	195.0	195.21	Pre-2021 MRE	3.00	Gabbro
OPM-19-23	199.3	199.48	Pre-2021 MRE	3.00	Gabbro
OPM-19-23	201.7	201.91	Pre-2021 MRE	2.97	Gabbro
OPM-19-23	207.5	207.69	Pre-2021 MRE	3.27	Gabbro
OPM-19-23	217.4	217.59	Pre-2021 MRE	2.71	Rhyolite
OPM-19-23	222.2	222.39	Pre-2021 MRE	2.73	Rhyolite
OPM-21-100	12.25	12.36	Pre-2021 MRE	3.11	Gabbro
OPM-21-100	32.55	32.70	Pre-2021 MRE	2.80	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-100	82.65	82.80	Pre-2021 MRE	3.04	Gabbro
OPM-21-100	110.2	110.30	Pre-2021 MRE	2.80	Gabbro
OPM-21-100	159.5	159.60	Pre-2021 MRE	2.98	Gabbro
OPM-21-100	185.9	186.00	Pre-2021 MRE	2.97	Gabbro
OPM-21-100	236.3	236.40	Pre-2021 MRE	2.91	Gabbro
OPM-21-100	285.95	286.07	Pre-2021 MRE	2.89	Gabbro
OPM-21-101	50.65	50.84	Pre-2021 MRE	2.86	Gabbro
OPM-21-101	100.68	100.83	Pre-2021 MRE	2.90	Gabbro
OPM-21-101	150.0	150.15	Pre-2021 MRE	2.97	Gabbro
OPM-21-101	201.0	201.10	Pre-2021 MRE	2.99	Gabbro
OPM-21-101	251.4	251.55	Pre-2021 MRE	3.01	Gabbro
OPM-21-111	51.0	51.10	Pre-2021 MRE	3.14	Pyroxenite
OPM-21-111	102.0	102.10	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-111	150.0	150.10	Pre-2021 MRE	2.83	Peridotite
OPM-21-111	201.0	201.10	Pre-2021 MRE	2.89	Peridotite
OPM-21-26	48.0	48.25	Pre-2021 MRE	2.96	Gabbro
OPM-21-26	101.85	102.00	Pre-2021 MRE	2.97	Gabbro
OPM-21-26	153.0	153.15	Pre-2021 MRE	2.88	Gabbro
OPM-21-27	50.8	51.00	Pre-2021 MRE	2.83	Gabbro
OPM-21-27	72.0	72.2	Pre-2021 MRE	3.56	Gabbro
OPM-21-27	195.2	195.30	Pre-2021 MRE	3.52	Gabbro
OPM-21-28	50.2	50.40	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-28	157.85	158.00	Pre-2021 MRE	2.87	Gabbro
OPM-21-28	176.9	177.00	Pre-2021 MRE	3.07	Gabbro
OPM-21-29	30.0	30.10	Pre-2021 MRE	3.20	Pyroxenite
OPM-21-29	91.5	91.70	Pre-2021 MRE	3.01	Pyroxenite
OPM-21-29	144.0	144.20	Pre-2021 MRE	2.98	Gabbro
OPM-21-30	53.4	53.60	Pre-2021 MRE	3.01	Pyroxenite
OPM-21-30	113.2	113.35	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-30	186.0	186.15	Pre-2021 MRE	3.31	Pyroxenite
OPM-21-31	44.0	44.15	Pre-2021 MRE	3.24	Pyroxenite
OPM-21-31	133.7	133.90	Pre-2021 MRE	3.29	Pyroxenite
OPM-21-31	162.0	162.15	Pre-2021 MRE	2.85	Peridotite
OPM-21-32	52.3	52.50	Pre-2021 MRE	3.23	Pyroxenite
OPM-21-32	107.85	108.00	Pre-2021 MRE	3.20	Pyroxenite
OPM-21-32	197.85	198.00	Pre-2021 MRE	2.78	Peridotite
OPM-21-33	60.0	60.25	Pre-2021 MRE	3.26	Pyroxenite
OPM-21-33	174.0	174.25	Pre-2021 MRE	2.85	Peridotite
OPM-21-34	30.0	30.20	Pre-2021 MRE	3.24	Pyroxenite
OPM-21-34	47.0	47.20	Pre-2021 MRE	2.86	Peridotite
OPM-21-34	165.0	165.20	Pre-2021 MRE	3.21	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-35	40.8	42.00	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-35	128.4	128.60	Pre-2021 MRE	2.85	Peridotite
OPM-21-35	133.0	133.20	Pre-2021 MRE	3.03	Peridotite
OPM-21-36	60.0	60.15	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-36	129.0	129.20	Pre-2021 MRE	2.85	Peridotite
OPM-21-36	169.5	169.70	Pre-2021 MRE	2.99	Pyroxenite
OPM-21-37	15.0	15.20	Pre-2021 MRE	2.85	Peridotite
OPM-21-37	90.0	90.20	Pre-2021 MRE	2.96	Pyroxenite
OPM-21-38	186.0	186.20	Pre-2021 MRE	3.11	Gabbro
OPM-21-38	190.0	190.20	Pre-2021 MRE	4.05	Gabbro
OPM-21-39	37.8	38.00	Pre-2021 MRE	2.94	Gabbro
OPM-21-39	70.3	70.50	Pre-2021 MRE	2.87	Gabbro
OPM-21-39	74.8	75.00	Pre-2021 MRE	4.12	Gabbro
OPM-21-39	107.75	108.00	Pre-2021 MRE	3.01	Gabbro
OPM-21-39	136.0	136.20	Pre-2021 MRE	2.72	Rhyolite
OPM-21-40	68.2	68.40	Pre-2021 MRE	2.65	Rhyolite
OPM-21-40	93.3	93.50	Pre-2021 MRE	2.65	Rhyolite
OPM-21-40	110.8	111.00	Pre-2021 MRE	2.87	Rhyolite
OPM-21-41	34.2	34.40	Pre-2021 MRE	2.73	Rhyolite
OPM-21-41	172.0	172.20	Pre-2021 MRE	2.74	Rhyolite
OPM-21-41	250.0	250.15	Pre-2021 MRE	2.75	Rhyolite
OPM-21-41	279.6	279.75	Pre-2021 MRE	2.83	Rhyolite
OPM-21-41	317.2	317.40	Pre-2021 MRE	2.70	Rhyolite
OPM-21-42	30.15	30.25	Pre-2021 MRE	3.03	Gabbro
OPM-21-42	103.3	103.50	Pre-2021 MRE	3.15	Gabbro
OPM-21-42	148.6	148.80	Pre-2021 MRE	2.99	Gabbro
OPM-21-43	29.85	30.00	Pre-2021 MRE	3.11	Gabbro
OPM-21-43	98.6	98.80	Pre-2021 MRE	3.01	Gabbro
OPM-21-44	30.9	31.05	Pre-2021 MRE	3.07	Gabbro
OPM-21-44	110.9	111.00	Pre-2021 MRE	3.05	Gabbro
OPM-21-44	159.0	159.20	Pre-2021 MRE	2.90	Gabbro
OPM-21-44	247.5	247.65	Pre-2021 MRE	3.01	Gabbro
OPM-21-45	46.5	46.70	Pre-2021 MRE	3.04	Gabbro
OPM-21-45	118.35	118.50	Pre-2021 MRE	3.10	Gabbro
OPM-21-46	104.8	105.00	Pre-2021 MRE	2.87	Gabbro
OPM-21-46	152.8	153.00	Pre-2021 MRE	2.98	Gabbro
OPM-21-47	29.1	29.30	Pre-2021 MRE	3.17	Gabbro
OPM-21-47	124.3	124.50	Pre-2021 MRE	2.87	Gabbro
OPM-21-47	160.0	160.30	Pre-2021 MRE	3.09	Gabbro
OPM-21-48	46.0	46.15	Pre-2021 MRE	2.98	Gabbro
OPM-21-48	102.0	102.15	Pre-2021 MRE	3.09	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-48	156.0	156.15	Pre-2021 MRE	2.97	Gabbro
OPM-21-49	28.0	28.15	Pre-2021 MRE	2.93	Gabbro
OPM-21-49	93.5	93.70	Pre-2021 MRE	2.89	Gabbro
OPM-21-49	173.48	173.70	Pre-2021 MRE	2.99	Gabbro
OPM-21-50	52.0	52.20	Pre-2021 MRE	3.04	Gabbro
OPM-21-50	130.0	130.20	Pre-2021 MRE	2.94	Gabbro
OPM-21-50	224.0	224.15	Pre-2021 MRE	2.79	Gabbro
OPM-21-51	54.0	54.15	Pre-2021 MRE	3.06	Gabbro
OPM-21-51	132.0	132.20	Pre-2021 MRE	2.81	Rhyolite
OPM-21-51	153.0	153.20	Pre-2021 MRE	2.89	Gabbro
OPM-21-52	51.0	51.25	Pre-2021 MRE	2.92	Gabbro
OPM-21-52	126.0	126.20	Pre-2021 MRE	2.96	Gabbro
OPM-21-54	54.0	54.15	Pre-2021 MRE	2.83	Gabbro
OPM-21-54	131.0	131.15	Pre-2021 MRE	2.88	Gabbro
OPM-21-54	213.0	213.15	Pre-2021 MRE	2.89	Gabbro
OPM-21-55	50.0	50.20	Pre-2021 MRE	2.89	Gabbro
OPM-21-55	112.0	112.20	Pre-2021 MRE	2.87	Gabbro
OPM-21-55	183.0	183.20	Pre-2021 MRE	2.92	Gabbro
OPM-21-56	50.1	50.30	Pre-2021 MRE	3.16	Gabbro
OPM-21-56	100.6	100.80	Pre-2021 MRE	3.04	Gabbro
OPM-21-56	152.6	152.80	Pre-2021 MRE	2.99	Gabbro
OPM-21-57	33.0	33.15	Pre-2021 MRE	3.30	Gabbro
OPM-21-57	107.7	107.90	Pre-2021 MRE	2.94	Gabbro
OPM-21-57	197.8	197.90	Pre-2021 MRE	2.81	Gabbro
OPM-21-58	24.0	24.20	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-58	101.8	102.00	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-60	333.4	333.60	Pre-2021 MRE	2.78	Peridotite
OPM-21-61	20.8	21.00	Pre-2021 MRE	3.07	Pyroxenite
OPM-21-61	107.8	108.00	Pre-2021 MRE	3.39	Pyroxenite
OPM-21-61	194.7	195.00	Pre-2021 MRE	2.59	Gabbro
OPM-21-62	11.9	12.00	Pre-2021 MRE	2.83	Gabbro
OPM-21-62	97.5	97.70	Pre-2021 MRE	2.92	Gabbro
OPM-21-62	194.85	195.00	Pre-2021 MRE	2.88	Gabbro
OPM-21-63	23.8	24.00	Pre-2021 MRE	3.13	Pyroxenite
OPM-21-63	106.35	106.50	Pre-2021 MRE	3.01	Pyroxenite
OPM-21-63	191.0	191.15	Pre-2021 MRE	2.81	Peridotite
OPM-21-65	13.3	13.50	Pre-2021 MRE	2.99	Gabbro
OPM-21-65	94.5	94.7	Pre-2021 MRE	3.13	Gabbro
OPM-21-65	179.2	179.4	Pre-2021 MRE	2.90	Gabbro
OPM-21-68	159.9	160.1	Pre-2021 MRE	2.86	Peridotite
OPM-21-68	170.2	170.4	Pre-2021 MRE	3.15	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-68	211.4	211.6	Pre-2021 MRE	3.27	Pyroxenite
OPM-21-69	119.6	119.8	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-69	121.7	121.9	Pre-2021 MRE	4.01	Pyroxenite
OPM-21-69	150.8	151.0	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-69	192.9	193.1	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-70	17.3	17.5	Pre-2021 MRE	2.82	Peridotite
OPM-21-70	58.8	59.0	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-70	103.1	103.3	Pre-2021 MRE	3.20	Pyroxenite
OPM-21-70	143.1	143.3	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-70	172.0	172.2	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-70	207.5	207.7	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-70	210.0	210.2	Pre-2021 MRE	3.23	Pyroxenite
OPM-21-70	240.0	240.2	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-71	26.4	26.6	Pre-2021 MRE	3.03	Gabbro
OPM-21-71	50.0	50.2	Pre-2021 MRE	2.99	Gabbro
OPM-21-71	85.5	85.7	Pre-2021 MRE	2.91	Gabbro
OPM-21-71	122.8	123.0	Pre-2021 MRE	3.12	Gabbro
OPM-21-71	161.4	161.6	Pre-2021 MRE	3.10	Gabbro
OPM-21-71	191.8	192.0	Pre-2021 MRE	3.08	Pyroxenite
OPM-21-71	215.1	215.3	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-72	45.9	46.1	Pre-2021 MRE	3.00	Pyroxenite
OPM-21-72	49.6	49.8	Pre-2021 MRE	2.81	Peridotite
OPM-21-72	74.1	74.6	Pre-2021 MRE	2.98	Pyroxenite
OPM-21-72	75.6	75.8	Pre-2021 MRE	3.13	Pyroxenite
OPM-21-72	83.8	84.0	Pre-2021 MRE	2.82	Peridotite
OPM-21-72	117.1	117.3	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-72	148.7	148.9	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-73	5.2	5.4	Pre-2021 MRE	2.98	Gabbro
OPM-21-73	92.8	93.0	Pre-2021 MRE	3.13	Gabbro
OPM-21-73	129.2	129.4	Pre-2021 MRE	2.93	Gabbro
OPM-21-74	33.2	33.4	Pre-2021 MRE	3.15	Pyroxenite
OPM-21-74	93.1	93.3	Pre-2021 MRE	3.17	Pyroxenite
OPM-21-74	100.8	101.0	Pre-2021 MRE	2.93	Pyroxenite
OPM-21-74	134.1	134.3	Pre-2021 MRE	2.86	Peridotite
OPM-21-75	35.0	35.2	Pre-2021 MRE	4.56	Gabbro
OPM-21-75	58.3	58.5	Pre-2021 MRE	3.49	Gabbro
OPM-21-75	82.7	82.9	Pre-2021 MRE	2.86	Gabbro
OPM-21-75	116.0	116.2	Pre-2021 MRE	3.04	Gabbro
OPM-21-75	140.5	140.7	Pre-2021 MRE	2.79	Gabbro
OPM-21-76	11.5	11.7	Pre-2021 MRE	3.00	Pyroxenite
OPM-21-76	41.2	41.4	Pre-2021 MRE	3.22	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-76	86.5	86.7	Pre-2021 MRE	2.99	Pyroxenite
OPM-21-76	114.0	114.2	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-76	149.8	150	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-76	177.0	177.2	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-77	10.0	10.2	Pre-2021 MRE	3.13	Pyroxenite
OPM-21-77	44.3	44.5	Pre-2021 MRE	3.09	Pyroxenite
OPM-21-77	65.5	65.7	Pre-2021 MRE	3.12	Pyroxenite
OPM-21-77	102.6	102.8	Pre-2021 MRE	3.17	Pyroxenite
OPM-21-77	133	133.2	Pre-2021 MRE	3.04	Pyroxenite
OPM-21-77	152.8	153	Pre-2021 MRE	3.14	Pyroxenite
OPM-21-77	187.6	187.8	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-77	215.8	216	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-77	222.6	222.8	Pre-2021 MRE	2.82	Peridotite
OPM-21-78	8.8	9	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-78	38.3	38.5	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-78	78.0	78.2	Pre-2021 MRE	3.43	Pyroxenite
OPM-21-78	111.4	111.6	Pre-2021 MRE	3.14	Pyroxenite
OPM-21-78	142.5	142.7	Pre-2021 MRE	2.80	Peridotite
OPM-21-78	169.7	169.9	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-78	183.5	183.7	Pre-2021 MRE	3.17	Pyroxenite
OPM-21-79	18.2	18.4	Pre-2021 MRE	4.01	Peridotite
OPM-21-79	32.5	32.7	Pre-2021 MRE	3.10	Peridotite
OPM-21-79	61.1	61.3	Pre-2021 MRE	2.82	Peridotite
OPM-21-79	62.4	62.6	Pre-2021 MRE	3.18	Peridotite
OPM-21-79	96.6	96.8	Pre-2021 MRE	3.05	Pyroxenite
OPM-21-79	133.2	133.4	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-79	155.4	155.6	Pre-2021 MRE	3.23	Pyroxenite
OPM-21-79	184.2	184.4	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-80	12.3	12.5	Pre-2021 MRE	3.10	Pyroxenite
OPM-21-80	49.6	49.8	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-81	15.0	15.15	Pre-2021 MRE	2.83	Gabbro
OPM-21-81	66.4	66.6	Pre-2021 MRE	2.87	Gabbro
OPM-21-81	122.8	123	Pre-2021 MRE	2.93	Gabbro
OPM-21-82	9.0	9.2	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-82	111.0	111.2	Pre-2021 MRE	4.12	Pyroxenite
OPM-21-83	25.5	25.7	Pre-2021 MRE	2.68	Rhyolite
OPM-21-83	57.6	57.8	Pre-2021 MRE	2.80	Rhyolite
OPM-21-83	114.1	114.3	Pre-2021 MRE	2.64	Rhyolite
OPM-21-83	194.8	195	Pre-2021 MRE	2.68	Rhyolite
OPM-21-83	294.0	294.2	Pre-2021 MRE	2.76	Rhyolite
OPM-21-84	117.0	117.2	Pre-2021 MRE	3.15	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-84	189.0	189.2	Pre-2021 MRE	3.13	Pyroxenite
OPM-21-85	33.0	33.2	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-85	50.8	51	Pre-2021 MRE	2.85	Peridotite
OPM-21-85	102.0	102.2	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-85	153.0	153.2	Pre-2021 MRE	3.25	Pyroxenite
OPM-21-86	9.0	9.1	Pre-2021 MRE	3.02	Gabbro
OPM-21-86	48.0	48.1	Pre-2021 MRE	3.00	Gabbro
OPM-21-86	75.5	75.7	Pre-2021 MRE	2.76	Rhyolite
OPM-21-87	10.0	10.2	Pre-2021 MRE	3.16	Pyroxenite
OPM-21-87	51.0	51.1	Pre-2021 MRE	2.86	Peridotite
OPM-21-87	102.0	102.2	Pre-2021 MRE	3.20	Pyroxenite
OPM-21-87	157.3	157.5	Pre-2021 MRE	2.83	Pyroxenite
OPM-21-87	198.6	198.8	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-88	19.3	19.5	Pre-2021 MRE	2.70	Gabbro
OPM-21-88	59.8	60	Pre-2021 MRE	2.82	Gabbro
OPM-21-88	115.5	115.7	Pre-2021 MRE	3.33	Gabbro
OPM-21-88	165.0	165.2	Pre-2021 MRE	2.65	Rhyolite
OPM-21-89	13.8	14	Pre-2021 MRE	2.88	Pyroxenite
OPM-21-89	17.85	18	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-89	65.9	66	Pre-2021 MRE	2.89	Pyroxenite
OPM-21-89	72.0	72.15	Pre-2021 MRE	2.94	Pyroxenite
OPM-21-89	188.4	188.5	Pre-2021 MRE	3.04	Pyroxenite
OPM-21-89	238.7	238.8	Pre-2021 MRE	3.21	Pyroxenite
OPM-21-89	281.55	281.7	Pre-2021 MRE	3.19	Pyroxenite
OPM-21-90	103.95	104.2	Pre-2021 MRE	2.78	Gabbro
OPM-21-90	104.8	105	Pre-2021 MRE	2.89	Gabbro
OPM-21-90	146.9	147.1	Pre-2021 MRE	2.94	Gabbro
OPM-21-90	151.9	152.1	Pre-2021 MRE	2.87	Gabbro
OPM-21-90	153.95	154.2	Pre-2021 MRE	3.00	Gabbro
OPM-21-91	9.8	10	Pre-2021 MRE	2.99	Gabbro
OPM-21-91	72.0	72.2	Pre-2021 MRE	3.10	Gabbro
OPM-21-91	125.8	126	Pre-2021 MRE	2.88	Gabbro
OPM-21-92	17.0	17.2	Pre-2021 MRE	3.18	Pyroxenite
OPM-21-92	117.0	117.2	Pre-2021 MRE	3.11	Pyroxenite
OPM-21-92	144.7	144.9	Pre-2021 MRE	3.13	Pyroxenite
OPM-21-92	203.5	203.7	Pre-2021 MRE	3.22	Pyroxenite
OPM-21-93	13.1	13.3	Pre-2021 MRE	2.86	Gabbro
OPM-21-93	60.0	60.25	Pre-2021 MRE	2.83	Gabbro
OPM-21-93	95.7	95.9	Pre-2021 MRE	2.96	Gabbro
OPM-21-94	18.0	18.2	Pre-2021 MRE	3.15	Pyroxenite
OPM-21-95	81.24	81.4	Pre-2021 MRE	2.78	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-21-95	139.1	139.25	Pre-2021 MRE	2.88	Gabbro
OPM-21-96	20.85	21	Pre-2021 MRE	2.97	Gabbro
OPM-21-96	68.9	69	Pre-2021 MRE	2.99	Gabbro
OPM-21-96	218.88	219	Pre-2021 MRE	2.94	Gabbro
OPM-21-96	269.28	269.4	Pre-2021 MRE	2.96	Gabbro
OPM-21-97	150.84	150.95	Pre-2021 MRE	2.96	Gabbro
OPM-21-97	202.33	202.45	Pre-2021 MRE	2.89	Gabbro
OPM-21-97	233.8	234	Pre-2021 MRE	2.81	Gabbro
OPM-21-98	15.6	15.7	Pre-2021 MRE	3.11	Gabbro
OPM-21-98	56.29	56.4	Pre-2021 MRE	2.95	Gabbro
OPM-21-98	97.45	97.58	Pre-2021 MRE	3.19	Gabbro
OPM-21-98	129.0	129.1	Pre-2021 MRE	3.13	Gabbro
OPM-21-98	173.9	174	Pre-2021 MRE	3.12	Gabbro
OPM-21-98	227.9	228	Pre-2021 MRE	3.01	Gabbro
OPM-21-98	246.6	246.7	Pre-2021 MRE	2.86	Gabbro
OPM-21-98	294.2	294.3	Pre-2021 MRE	3.02	Gabbro
OPM-21-99	13.95	14.05	Pre-2021 MRE	3.10	Gabbro
OPM-21-99	63.63	63.75	Pre-2021 MRE	2.98	Gabbro
OPM-21-99	113.2	113.3	Pre-2021 MRE	2.97	Gabbro
OPM-21-99	159.0	159.15	Pre-2021 MRE	2.90	Gabbro
OPM-22-144	51.0	51.1	Post-2021 MRE	3.17	Pyroxenite
OPM-22-144	102.0	102.1	Post-2021 MRE	3.17	Pyroxenite
OPM-22-144	150.0	150.1	Post-2021 MRE	3.16	Pyroxenite
OPM-22-144	201.0	201.1	Post-2021 MRE	3.18	Pyroxenite
OPM-22-147	24.0.0	24.1	Post-2021 MRE	3.13	Basalt
OPM-22-147	60.0	60.1	Post-2021 MRE	3.17	Basalt
OPM-22-147	102.0	102.1	Post-2021 MRE	3.16	Basalt
OPM-22-147	150.0	150.1	Post-2021 MRE	3.21	Basalt
OPM-22-147	192.0	192.1	Post-2021 MRE	3.19	Basalt
OPM-22-158	51.0	51.1	Post-2021 MRE	2.89	Gabbro
OPM-22-158	102.0	102.1	Post-2021 MRE	2.98	Gabbro
OPM-22-158	150.0	150.1	Post-2021 MRE	2.95	Gabbro
OPM-22-159	51.0	51.1	Post-2021 MRE	3.05	Gabbro
OPM-22-159	102.0	102.1	Post-2021 MRE	2.76	Gabbro
OPM-22-159	150.0	150.1	Post-2021 MRE	2.93	Gabbro
OPM-22-159	201.0	201.1	Post-2021 MRE	2.82	Gabbro
OPM-22-159	252.0	252.1	Post-2021 MRE	3.00	Gabbro
OPM-22-159	300.0	300.1	Post-2021 MRE	2.82	Gabbro
OPM-22-159	351.0	351.1	Post-2021 MRE	2.85	Pyroxenite
OPM-22-160	51.0	51.1	Post-2021 MRE	2.96	Pyroxenite
OPM-22-160	102.0	102.1	Post-2021 MRE	3.23	Pyroxenite

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-22-160	150.0	150.1	Post-2021 MRE	3.19	Pyroxenite
OPM-22-160	198.0	198.1	Post-2021 MRE	3.19	Pyroxenite
OPM-22-164	51.0	51.1	Post-2021 MRE	2.93	Gabbro
OPM-22-164	102.0	102.1	Post-2021 MRE	2.89	Gabbro
OPM-22-164	150.0	150.1	Post-2021 MRE	3.05	Gabbro
OPM-22-164	201.0	201.1	Post-2021 MRE	2.84	Gabbro
OPM-22-164	252.0	252.1	Post-2021 MRE	2.99	Gabbro
OPM-22-164	300.0	300.1	Post-2021 MRE	2.78	Gabbro
OPM-22-164	351.0	351.1	Post-2021 MRE	2.97	Gabbro
OPM-22-164	402.0	402.1	Post-2021 MRE	2.96	Gabbro
OPM-22-164	471.0	471.1	Post-2021 MRE	2.74	Rhyolite
OPM-22-172	51.0	51.1	Post-2021 MRE	3.00	Gabbro
OPM-22-172	102.0	102.1	Post-2021 MRE	2.86	Gabbro
OPM-22-172	150.0	150.1	Post-2021 MRE	2.81	Gabbro
OPM-22-172	201.0	201.1	Post-2021 MRE	2.86	Gabbro
OPM-22-172	252.0	252.1	Post-2021 MRE	2.83	Gabbro
OPM-22-172	300.0	300.1	Post-2021 MRE	2.95	Gabbro
OPM-22-172	321.0	321.1	Post-2021 MRE	2.66	Rhyolite
OPM-22-175	51.0	51.1	Post-2021 MRE	3.04	Gabbro
OPM-22-175	97.3	97.5	Post-2021 MRE	2.98	Gabbro
OPM-22-175	150.0	150.1	Post-2021 MRE	2.96	Gabbro
OPM-22-175	201.0	201.1	Post-2021 MRE	2.81	Gabbro
OPM-22-175	252.0	252.1	Post-2021 MRE	2.90	Gabbro
OPM-22-175	300.0	300.1	Post-2021 MRE	2.84	Gabbro
OPM-22-175	351.0	351.1	Post-2021 MRE	2.70	Gabbro
OPM-22-178	51.0	51.1	Post-2021 MRE	2.86	Gabbro
OPM-22-178	102.0	102.1	Post-2021 MRE	2.81	Gabbro
OPM-22-185	51.0	51.1	Post-2021 MRE	3.01	Gabbro
OPM-22-185	102.0	102.1	Post-2021 MRE	2.97	Gabbro
OPM-22-185	150.0	150.1	Post-2021 MRE	2.94	Gabbro
OPM-22-185	201.0	201.1	Post-2021 MRE	2.89	Gabbro
OPM-22-185	252.0	252.1	Post-2021 MRE	3.01	Gabbro
OPM-22-185	300.0	300.1	Post-2021 MRE	2.95	Gabbro
OPM-22-188	51.0	51.1	Post-2021 MRE	3.03	Gabbro
OPM-22-188	102.0	102.1	Post-2021 MRE	2.84	Gabbro
OPM-22-188	150.0	150.1	Post-2021 MRE	2.88	Gabbro
OPM-22-188	201.0	201.1	Post-2021 MRE	3.04	Gabbro
OPM-22-188	252.0	252.1	Post-2021 MRE	3.01	Gabbro
OPM-22-188	300.0	300.1	Post-2021 MRE	2.98	Gabbro
OPM-22-190	51.0	51.1	Post-2021 MRE	2.86	Gabbro
OPM-22-190	102.0	102.1	Post-2021 MRE	2.84	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-22-190	150.0	150.1	Post-2021 MRE	2.93	Gabbro
OPM-22-190	201.0	201.1	Post-2021 MRE	2.89	Gabbro
OPM-22-190	252.0	252.1	Post-2021 MRE	3.02	Gabbro
OPM-22-190	300.0	300.1	Post-2021 MRE	2.87	Gabbro
OPM-22-190	351.0	351.1	Post-2021 MRE	2.96	Gabbro
OPM-22-190	402.0	402.1	Post-2021 MRE	2.62	Gabbro
OPM-22-190	471.0	471.1	Post-2021 MRE	2.84	Gabbro
OPM-22-190	531.0	531.1	Post-2021 MRE	3.01	Gabbro
OPM-22-193	51.0	51.1	Post-2021 MRE	2.84	Gabbro
OPM-22-193	102.0	102.1	Post-2021 MRE	2.87	Gabbro
OPM-22-193	150.0	150.1	Post-2021 MRE	2.90	Gabbro
OPM-22-193	201.0	201.1	Post-2021 MRE	2.95	Gabbro
OPM-22-193	252.0	252.1	Post-2021 MRE	3.04	Gabbro
OPM-22-193	300.0	300.1	Post-2021 MRE	2.87	Gabbro
OPM-22-193	351.0	351.1	Post-2021 MRE	3.03	Gabbro
OPM-22-193	402.0	402.1	Post-2021 MRE	2.72	Rhyolite
OPM-22-201	51.0	51.1	Post-2021 MRE	2.95	Gabbro
OPM-22-201	102.0	102.1	Post-2021 MRE	2.98	Gabbro
OPM-22-201	150.0	150.1	Post-2021 MRE	3.00	Gabbro
OPM-22-201	201.0	201.1	Post-2021 MRE	3.00	Gabbro
OPM-22-201	252.0	252.1	Post-2021 MRE	3.12	Gabbro
OPM-22-201	310.0	310.1	Post-2021 MRE	2.99	Gabbro
OPM-22-201	351.0	351.1	Post-2021 MRE	2.92	Gabbro
OPM-22-203	51.0	51.1	Post-2021 MRE	2.96	Gabbro
OPM-22-203	102.0	102.1	Post-2021 MRE	3.02	Gabbro
OPM-22-203	150.0	150.1	Post-2021 MRE	2.98	Gabbro
OPM-22-203	201.0	201.1	Post-2021 MRE	3.06	Gabbro
OPM-22-203	252.0	252.1	Post-2021 MRE	3.03	Gabbro
OPM-22-203	300.0	300.1	Post-2021 MRE	3.07	Gabbro
OPM-22-211	51.0	51.1	Post-2021 MRE	2.87	Gabbro
OPM-22-211	102.0	102.1	Post-2021 MRE	3.02	Gabbro
OPM-22-211	150.0	150.1	Post-2021 MRE	3.04	Gabbro
OPM-22-211	201.0	201.1	Post-2021 MRE	2.97	Gabbro
OPM-22-211	252.0	252.1	Post-2021 MRE	2.94	Gabbro
OPM-22-211	300.0	300.1	Post-2021 MRE	2.97	Gabbro
OPM-22-217	51.0	51.1	Post-2021 MRE	2.80	Gabbro
OPM-22-217	102.0	102.1	Post-2021 MRE	3.00	Gabbro
OPM-22-217	150.0	150.1	Post-2021 MRE	2.92	Gabbro
OPM-22-217	201.0	201.1	Post-2021 MRE	2.92	Gabbro
OPM-22-217	252.0	252.1	Post-2021 MRE	2.91	Gabbro
OPM-22-217	300.0	300.1	Post-2021 MRE	2.89	Gabbro

**TABLE H.1
DRILL CORE BULK DENSITY MEASUREMENTS**

Drill Hole ID	From (m)	To (m)	Phase of Drilling	Density (g/cc)	Lithology
OPM-22-217	351.0	351.1	Post-2021 MRE	2.86	Gabbro
OPM-22-217	402.0	402.1	Post-2021 MRE	3.01	Gabbro
OPM-22-218	51.0	51.1	Post-2021 MRE	2.84	Gabbro
OPM-22-218	102.0	102.1	Post-2021 MRE	2.87	Gabbro
OPM-22-218	150.0	150.1	Post-2021 MRE	2.89	Gabbro
OPM-22-218	201.0	201.1	Post-2021 MRE	2.94	Gabbro
OPM-22-222	51.0	51.1	Post-2021 MRE	2.92	Gabbro
OPM-22-222	102.0	102.1	Post-2021 MRE	2.89	Gabbro
OPM-22-222	150.0	150.1	Post-2021 MRE	2.89	Gabbro
OPM-22-226	51.0	51.1	Post-2021 MRE	2.93	Gabbro
OPM-22-226	102.0	102.1	Post-2021 MRE	2.83	Gabbro
OPM-22-226	150.0	150.1	Post-2021 MRE	3.05	Gabbro
OPM-22-226	201.0	201.1	Post-2021 MRE	3.02	Gabbro
OPM-22-226	252.0	252.1	Post-2021 MRE	2.75	Gabbro
OPM-22-226	285.0	285.1	Post-2021 MRE	2.73	Rhyolite
OPM-23-245	51.0	51.1	Post-2021 MRE	2.93	Gabbro
OPM-23-245	102.0	102.1	Post-2021 MRE	2.82	Gabbro
OPM-23-245	150.0	150.1	Post-2021 MRE	3.17	Gabbro
OPM-23-246	21.0	21.1	Post-2021 MRE	2.95	Peridotite
OPM-23-246	60.0	60.1	Post-2021 MRE	3.21	Pyroxenite
OPM-23-246	120.00	120.10	Post-2021 MRE	3.14	Pyroxenite
OPM-23-246	180.00	180.10	Post-2021 MRE	3.21	Pyroxenite
OPM-23-246	210.00	210.10	Post-2021 MRE	3.09	Pyroxenite
OPM-23-250	51.00	51.10	Post-2021 MRE	2.85	Gabbro
OPM-23-250	102.00	102.10	Post-2021 MRE	2.89	Gabbro
OPM-23-250	150.00	150.10	Post-2021 MRE	2.96	Gabbro
OPM-23-250	183.00	183.10	Post-2021 MRE	2.68	Rhyolite
OPM-23-252	51.00	51.10	Post-2021 MRE	3.11	Pyroxenite
OPM-23-252	102.00	102.10	Post-2021 MRE	3.15	Pyroxenite
OPM-23-252	150.00	150.10	Post-2021 MRE	3.11	Pyroxenite
OPM-23-252	201.00	201.10	Post-2021 MRE	3.20	Pyroxenite
OPM-23-256	51.00	51.10	Post-2021 MRE	3.20	Pyroxenite
OPM-23-256	102.00	102.10	Post-2021 MRE	2.81	Pyroxenite
OPM-23-256	150.00	150.10	Post-2021 MRE	3.20	Pyroxenite
OPM-23-263	51.00	51.10	Post-2021 MRE	3.22	Pyroxenite
OPM-23-263	102.00	102.10	Post-2021 MRE	2.85	Pyroxenite
OPM-23-263	150.00	150.10	Post-2021 MRE	3.23	Pyroxenite
OPM-23-263	201.00	201.10	Post-2021 MRE	3.30	Pyroxenite
OPM-23-275	51.00	51.10	Post-2021 MRE	3.20	Pyroxenite
OPM-23-275	102.00	102.10	Post-2021 MRE	2.88	Pyroxenite
OPM-23-275	150.00	150.10	Post-2021 MRE	3.11	Pyroxenite

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

FIGURE I.1 2019 PERFORMANCE OF OREAS 61F CRM FOR AU

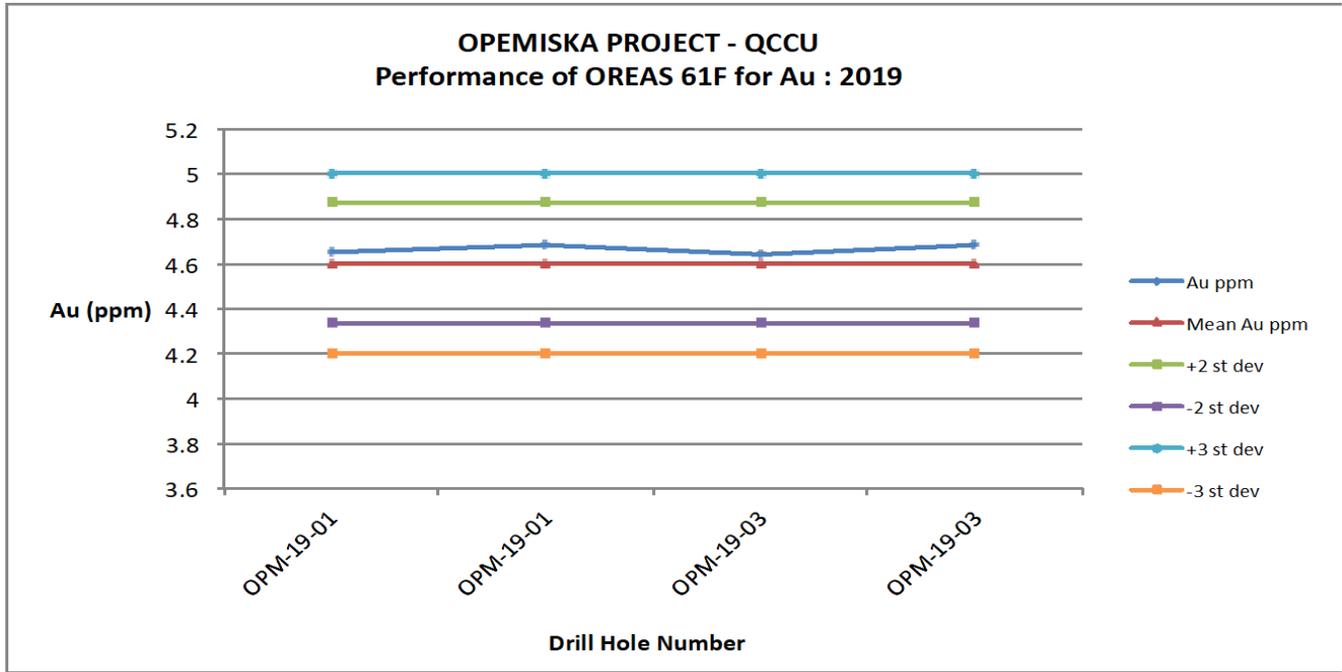


FIGURE I.2 2019 PERFORMANCE OF OREAS 61F CRM FOR AG

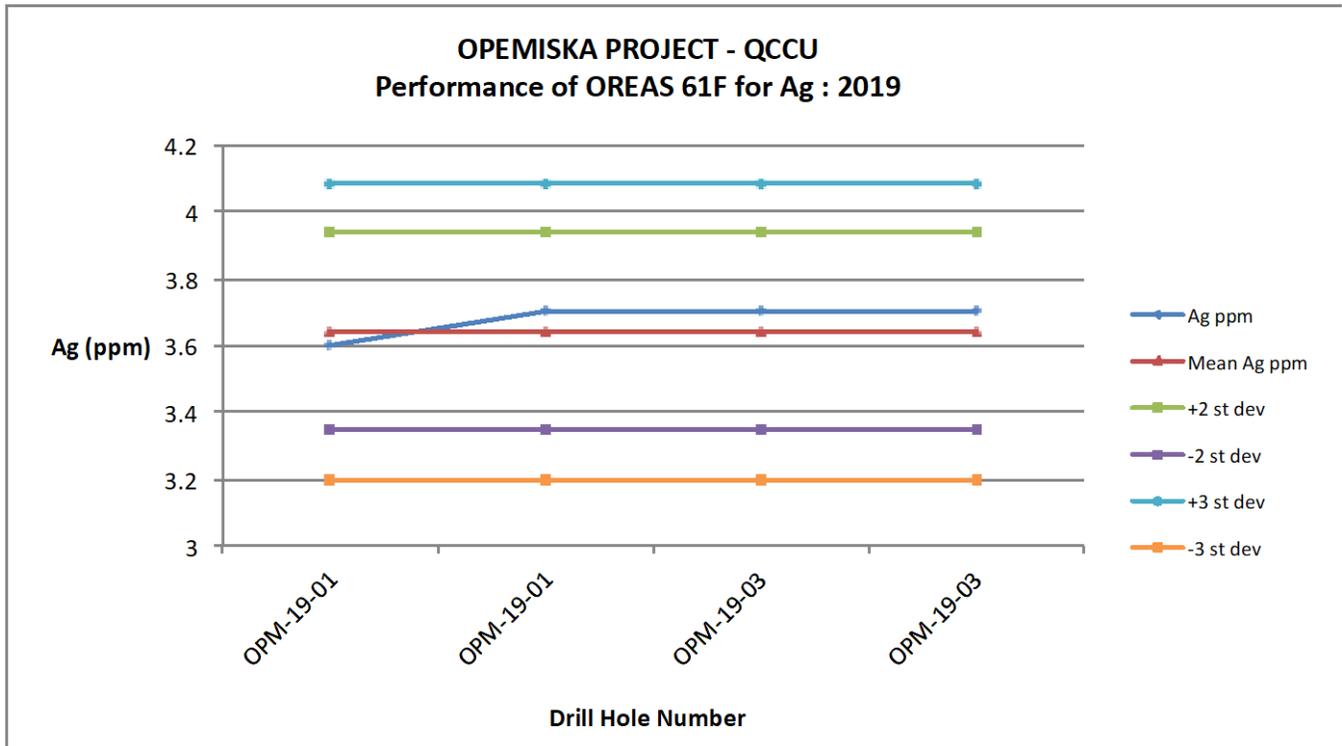


FIGURE I.3 2019 PERFORMANCE OF OREAS 112 CRM FOR CU

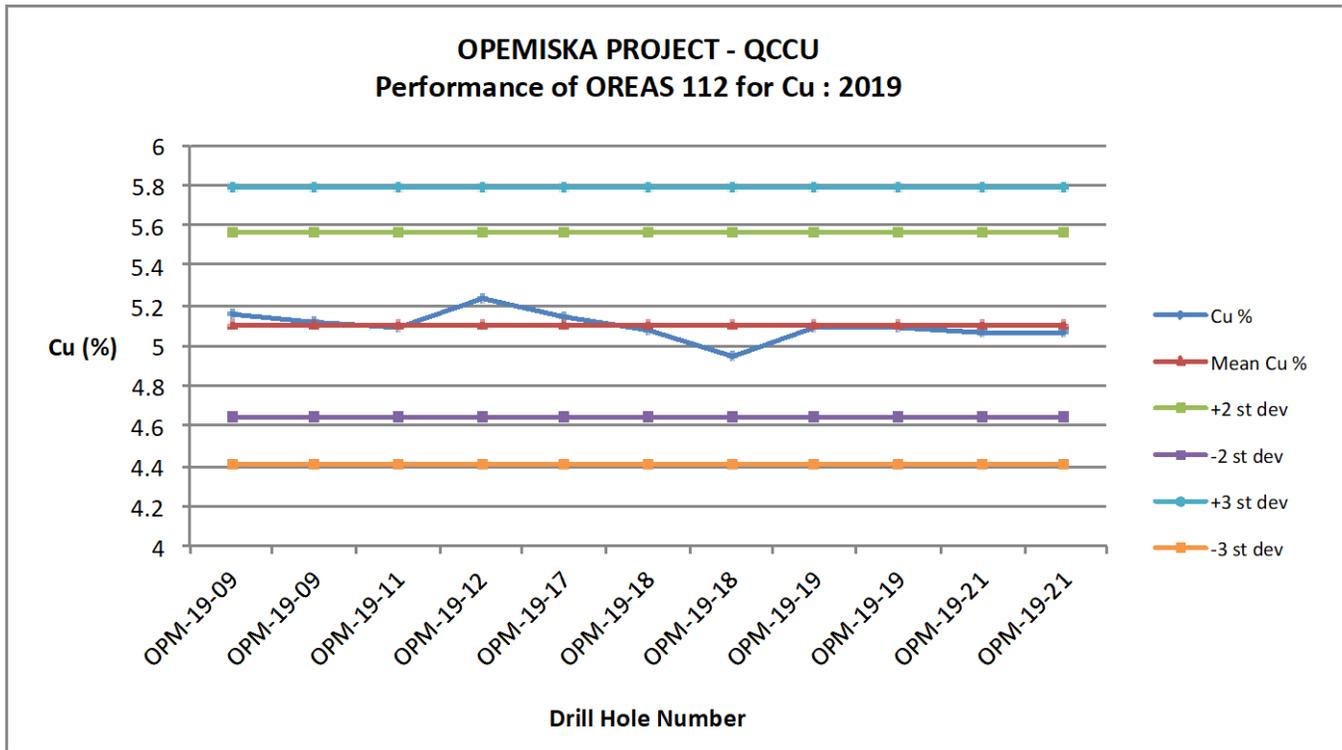


FIGURE I.4 2019 PERFORMANCE OF OREAS 112 CRM FOR AG

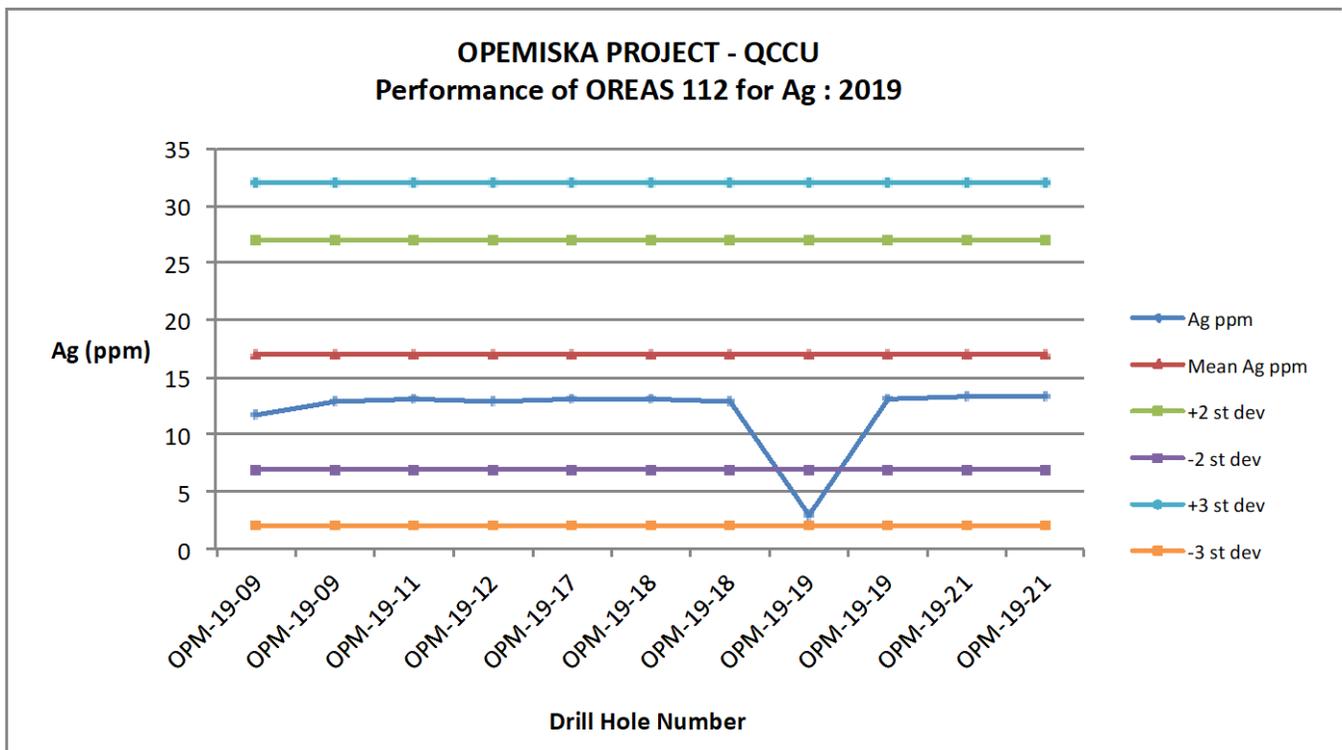


FIGURE I.5 2019 PERFORMANCE OF OREAS 112 CRM FOR Co

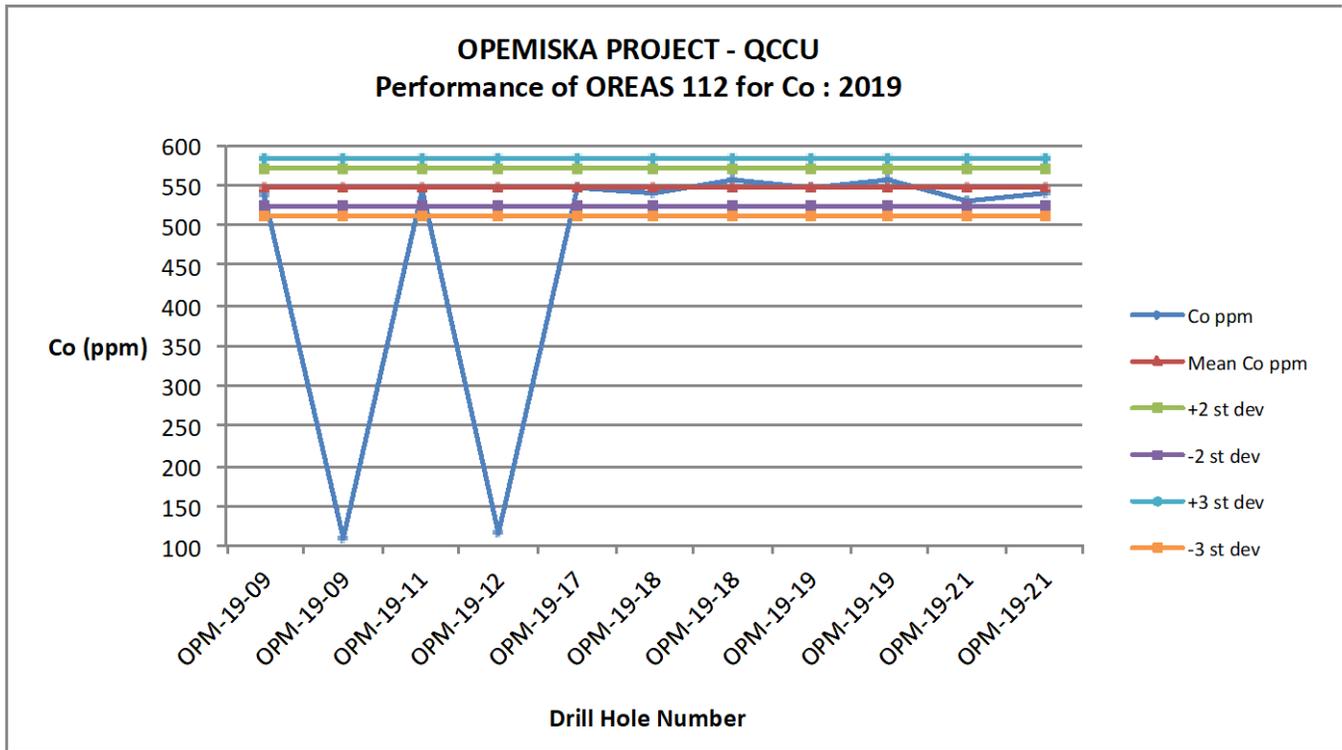


FIGURE I.6 2019 PERFORMANCE OF OREAS 112 CRM FOR Zn

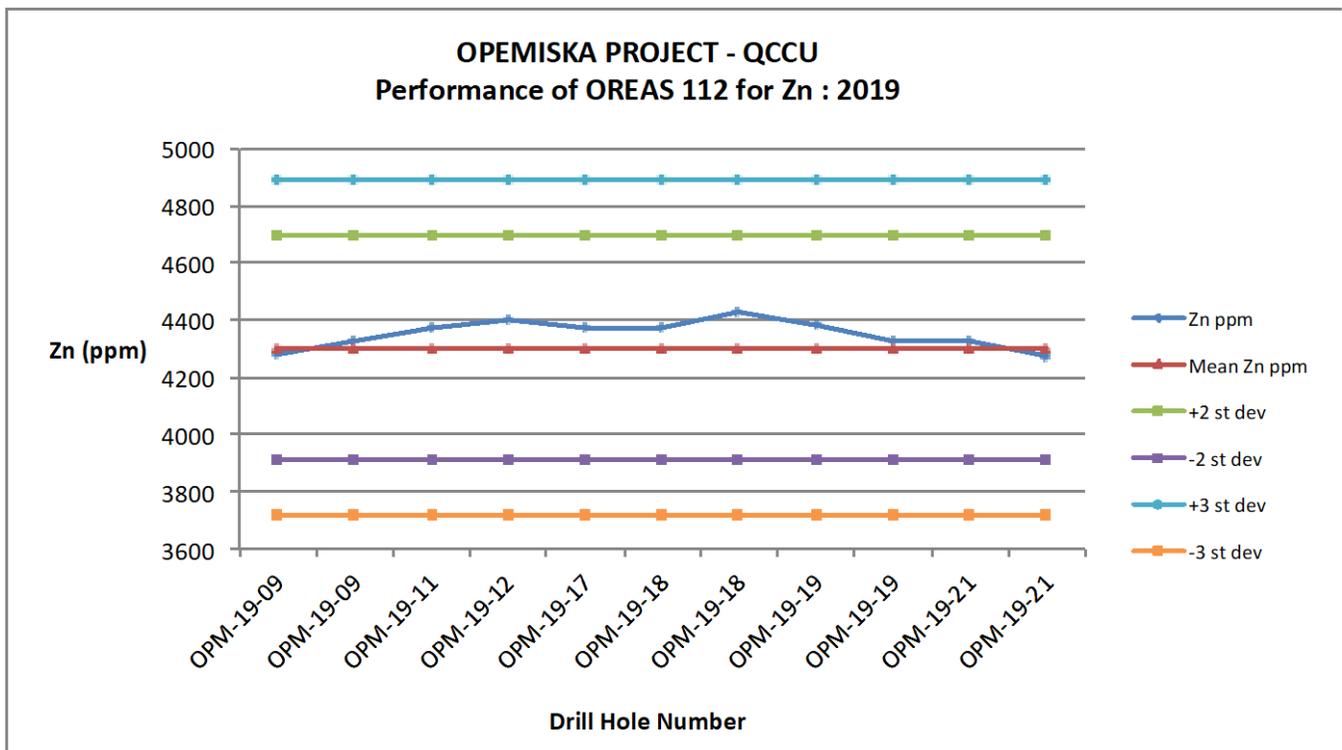


FIGURE I.7 2019 PERFORMANCE OF OREAS 601 CRM FOR CU

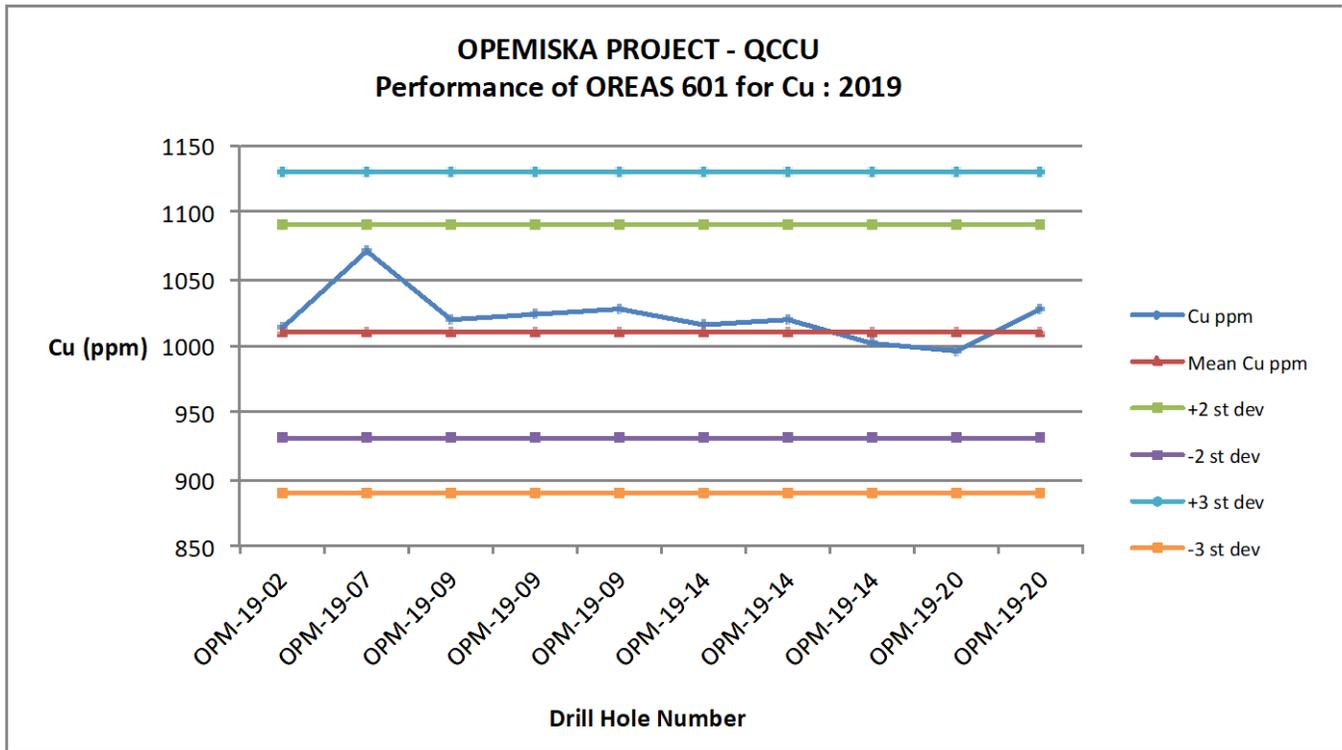


FIGURE I.8 2019 PERFORMANCE OF OREAS 601 CRM FOR AG

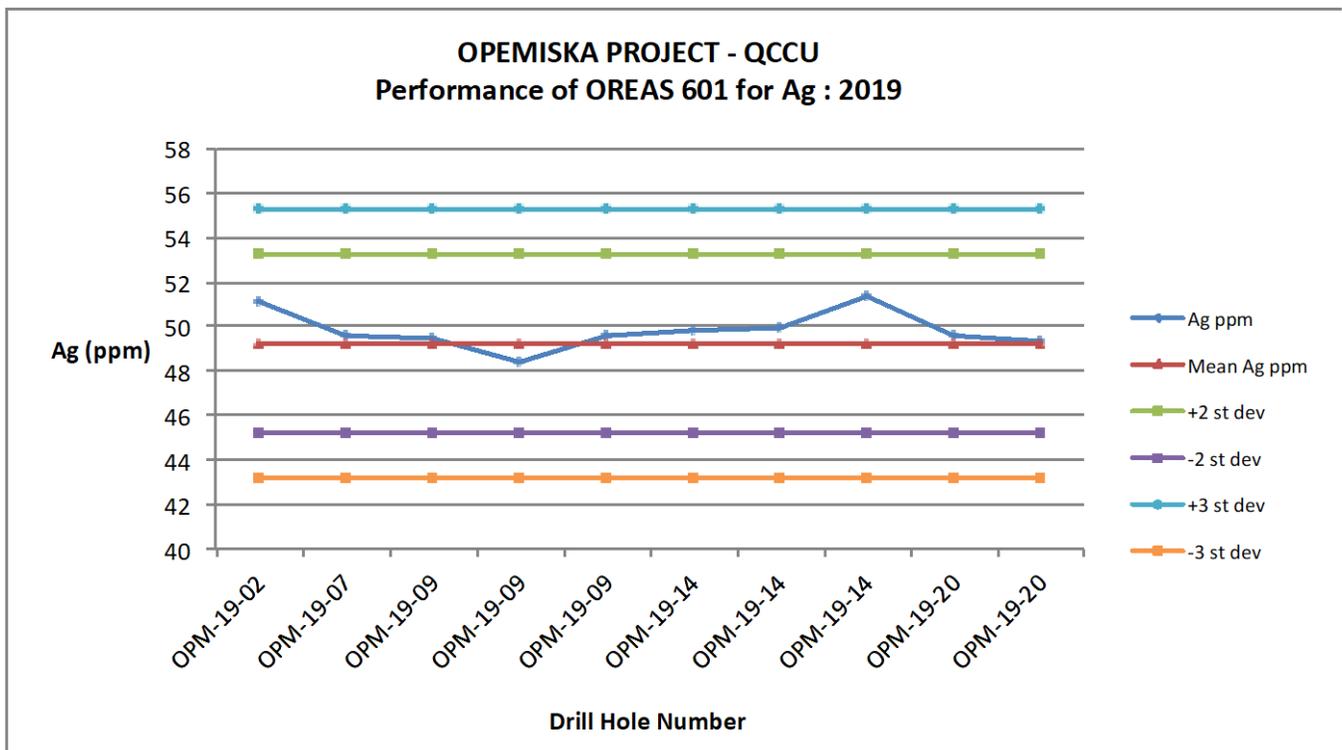


FIGURE I.9 2019 PERFORMANCE OF OREAS 601 CRM FOR Co

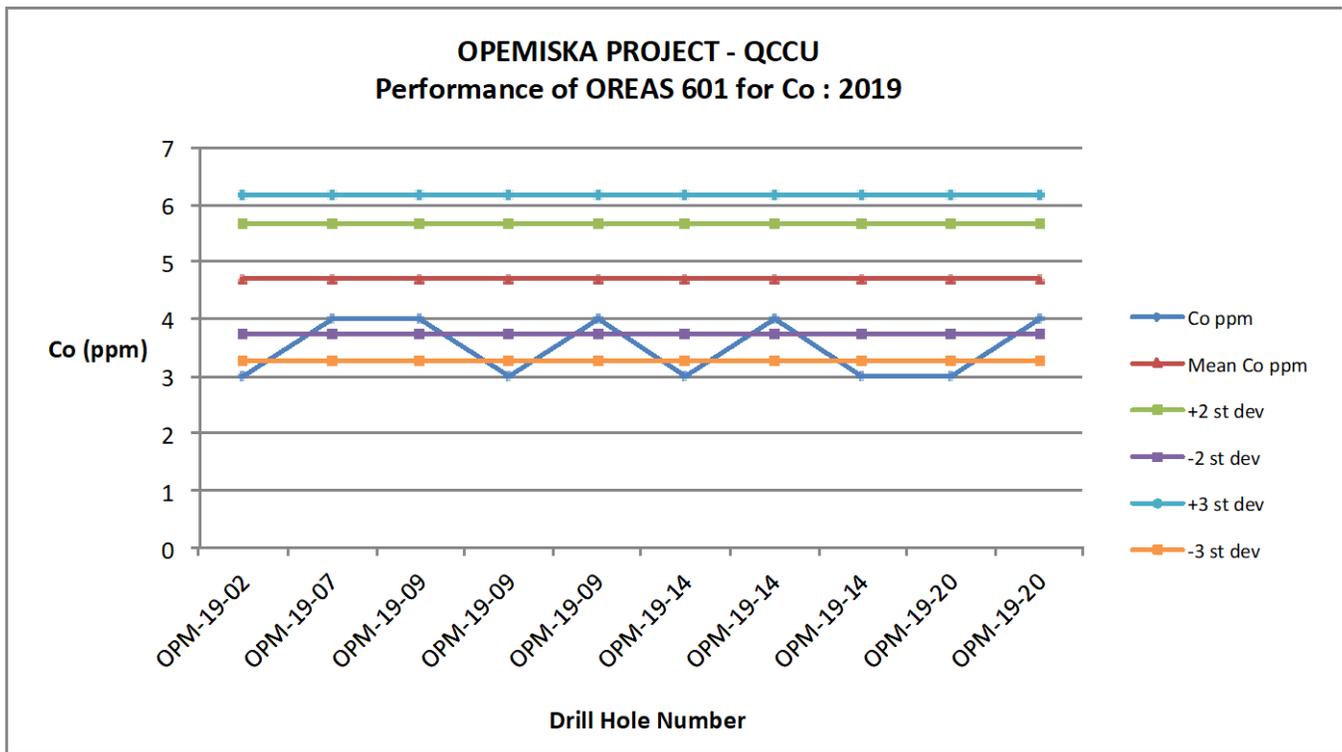


FIGURE I.10 2019 PERFORMANCE OF OREAS 601 CRM FOR Zn

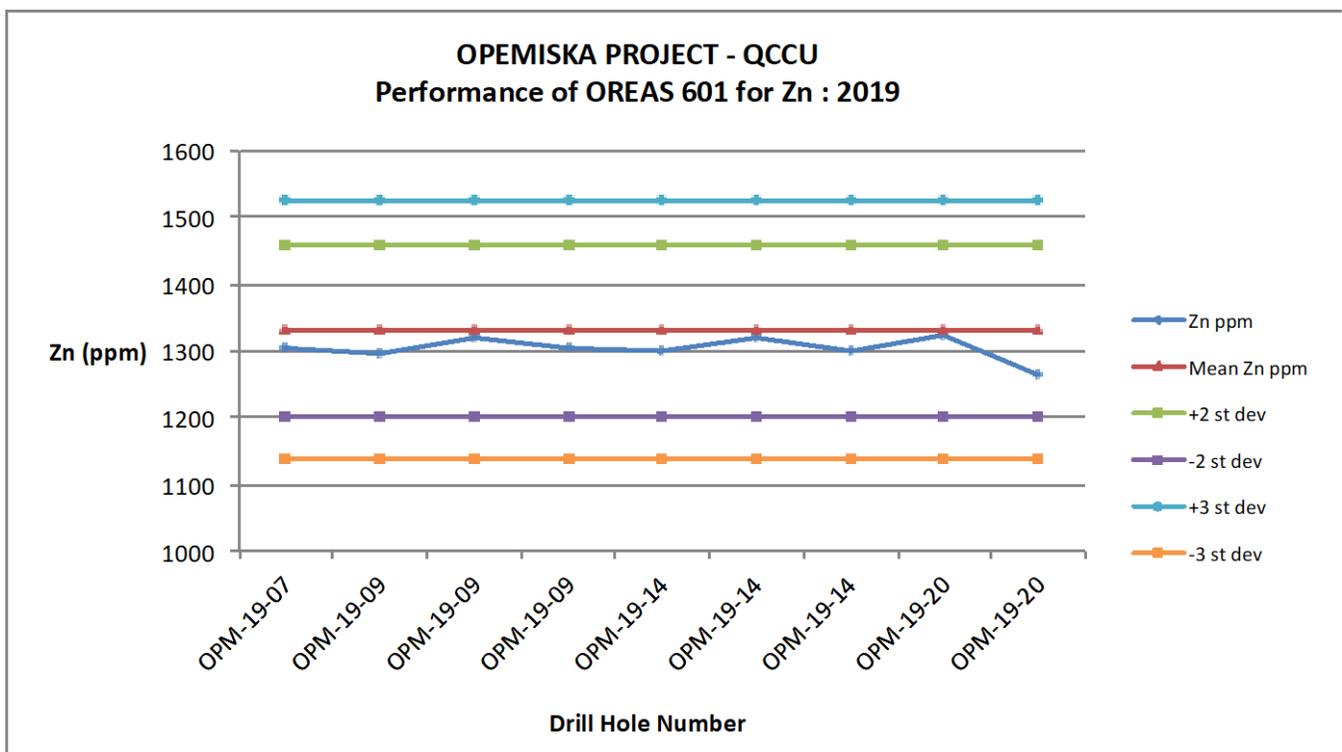


FIGURE I.11 2019 PERFORMANCE OF OREAS 601 CRM FOR AU

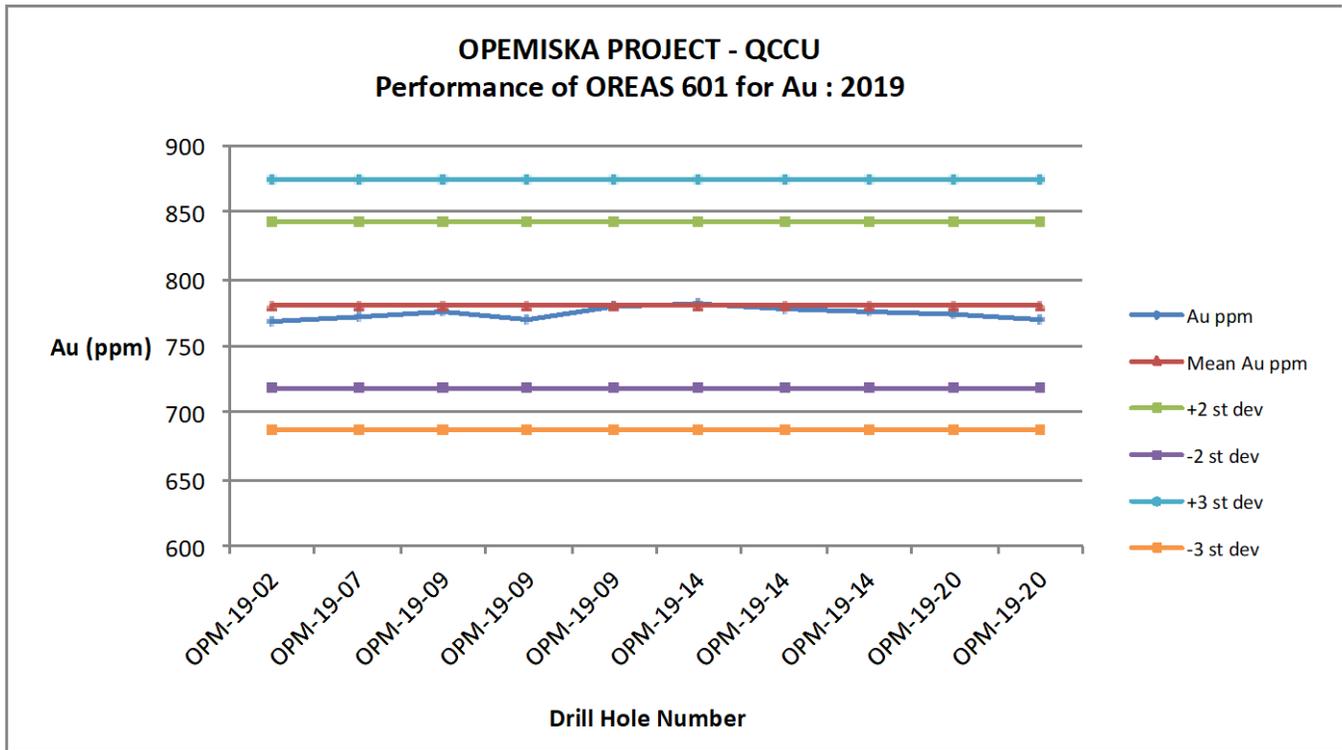


FIGURE I.12 2019 PERFORMANCE OF OREAS 924 CRM FOR CU

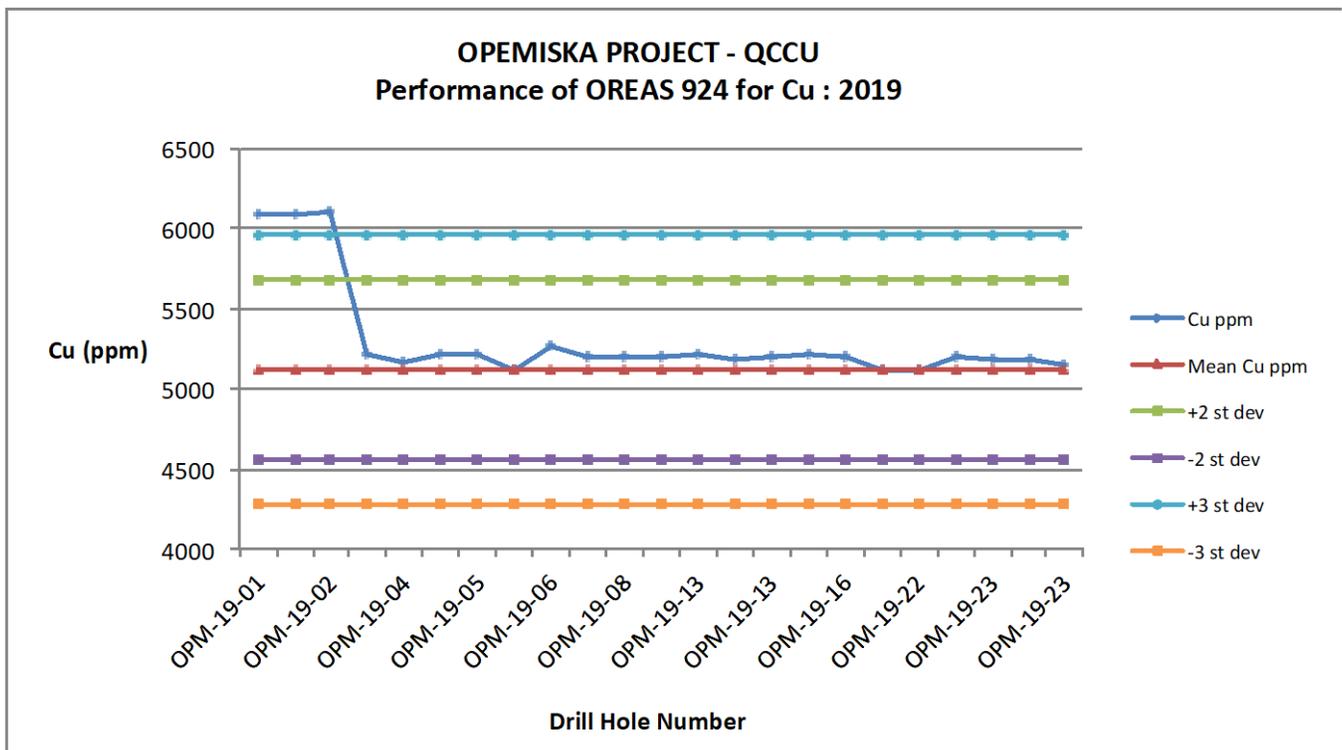


FIGURE I.13 2019 PERFORMANCE OF OREAS 924 CRM FOR AG

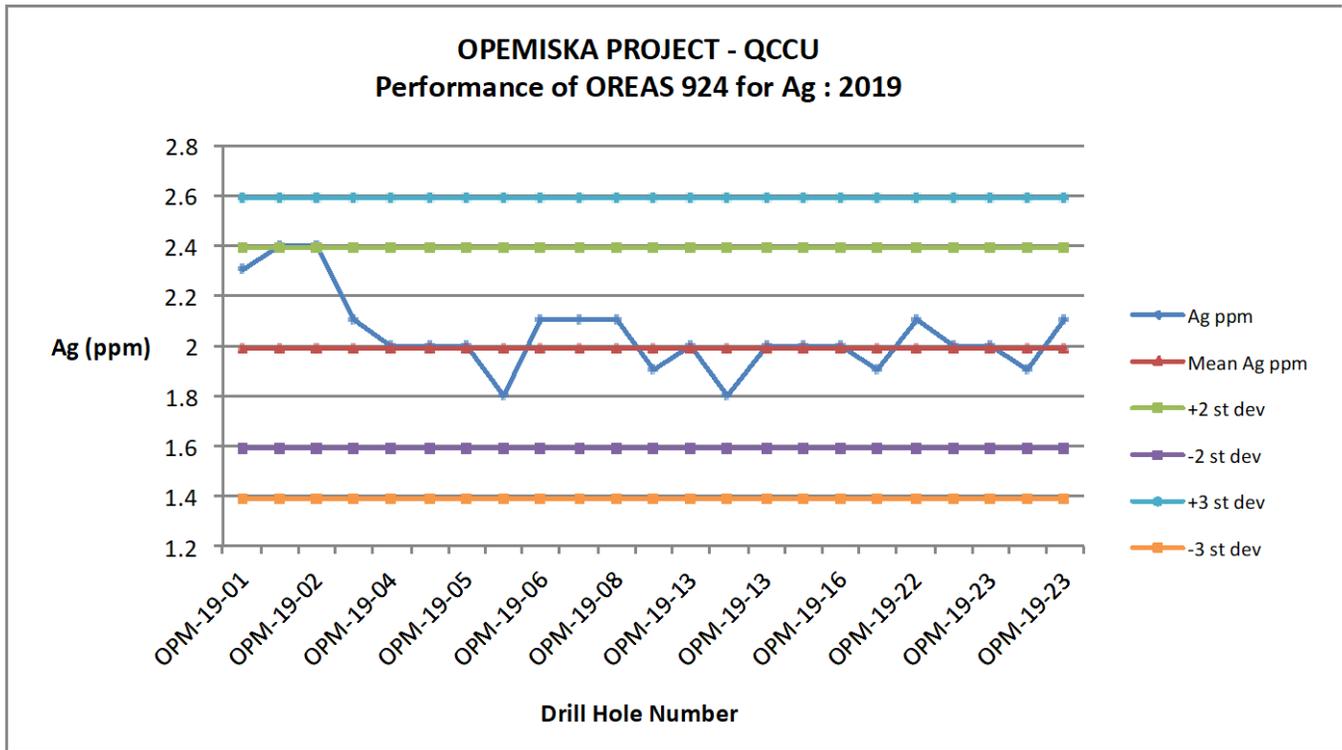


FIGURE I.14 2019 PERFORMANCE OF OREAS 924 CRM FOR CO

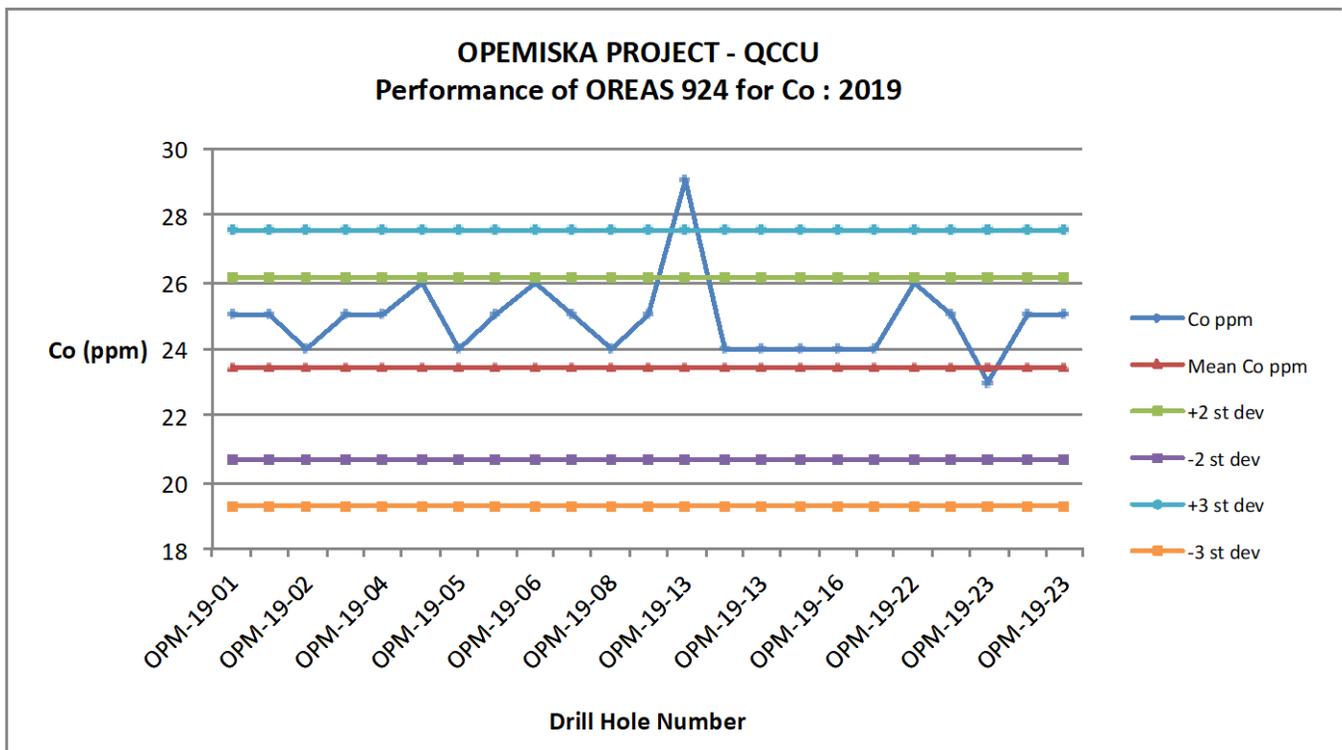
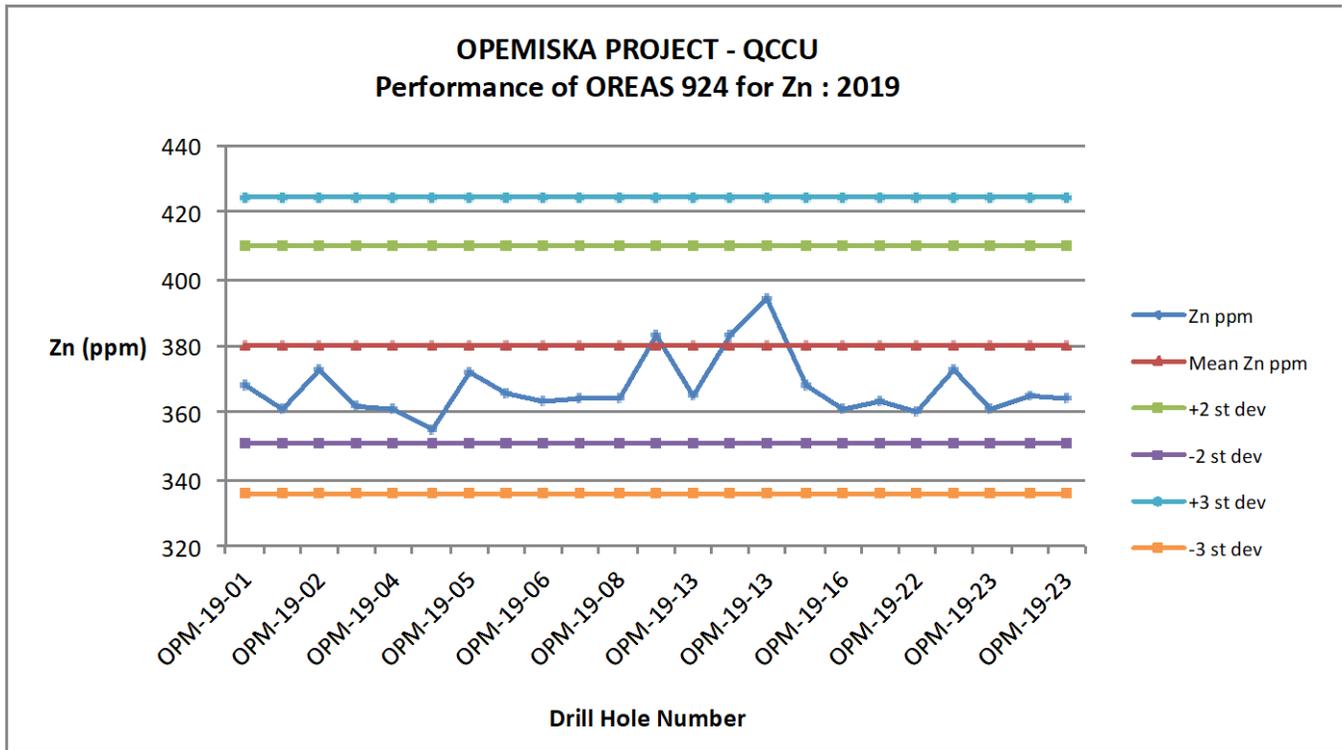


FIGURE I.15 2019 PERFORMANCE OF OREAS 924 CRM FOR ZN



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

FIGURE J.1 2021 PERFORMANCE OF OREAS 166 CRM FOR CU

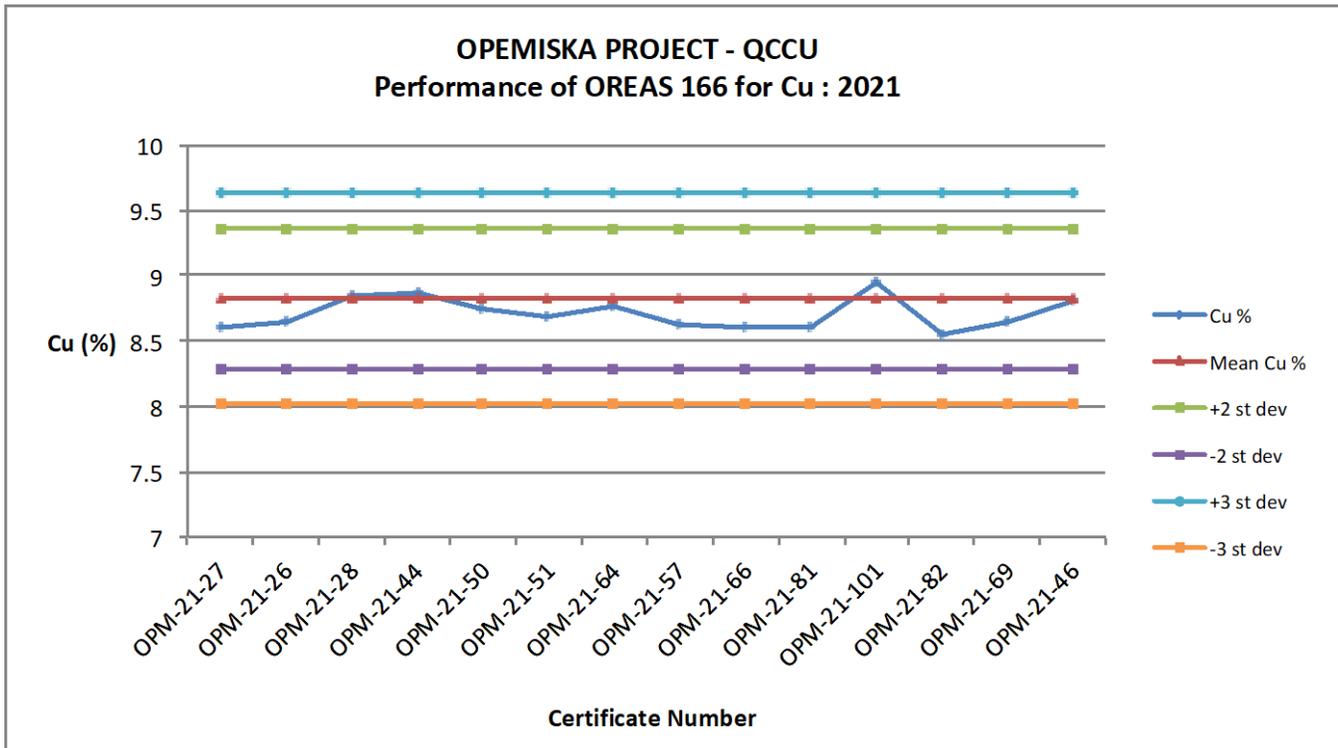


FIGURE J.2 2021 PERFORMANCE OF OREAS 166 CRM FOR AG

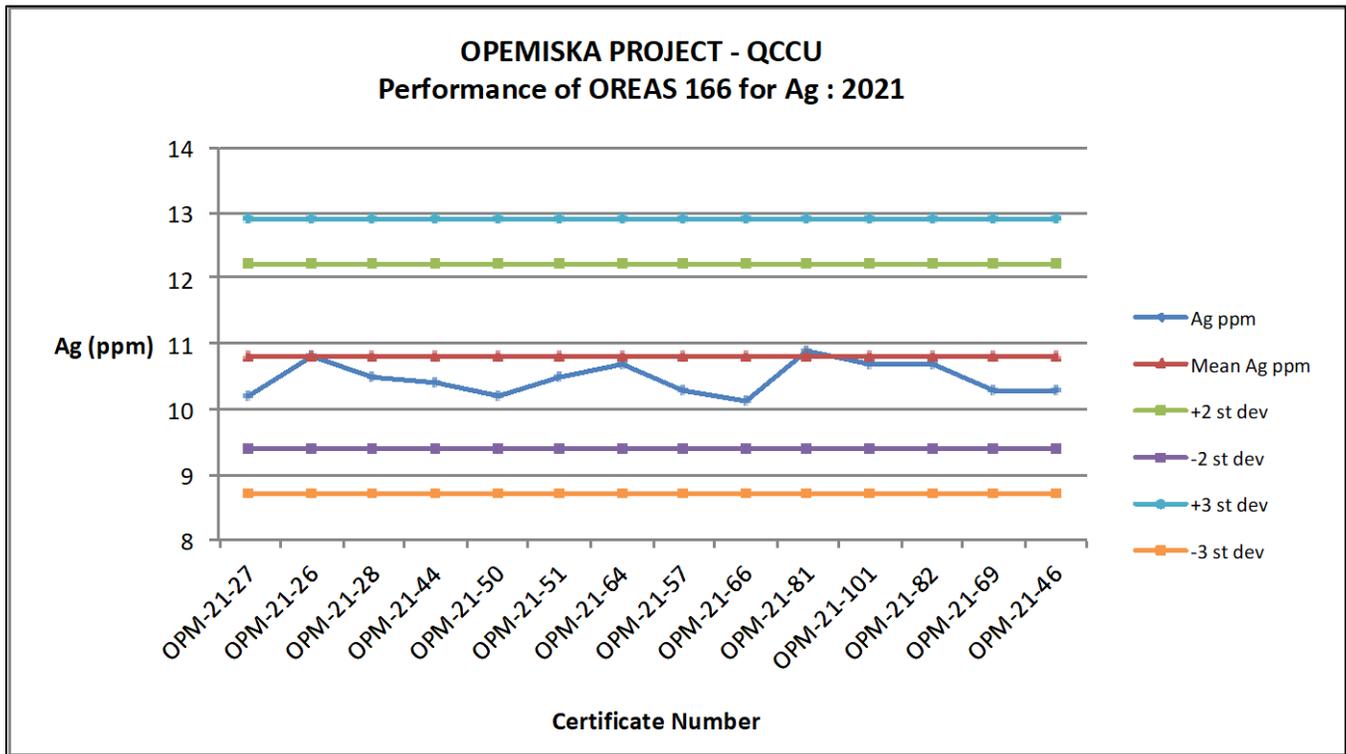


FIGURE J.3 2021 PERFORMANCE OF OREAS 166 CRM FOR CO

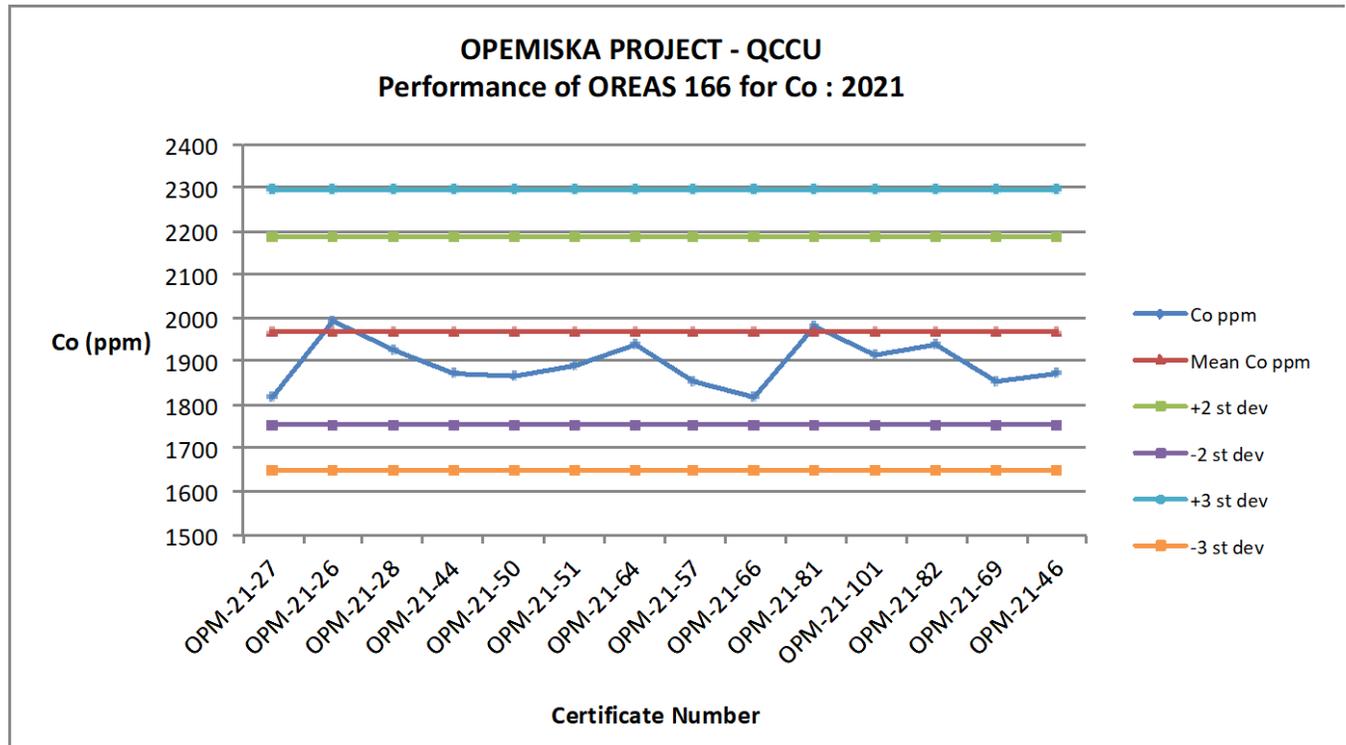


FIGURE J.4 2021 PERFORMANCE OF OREAS 166 CRM FOR ZN

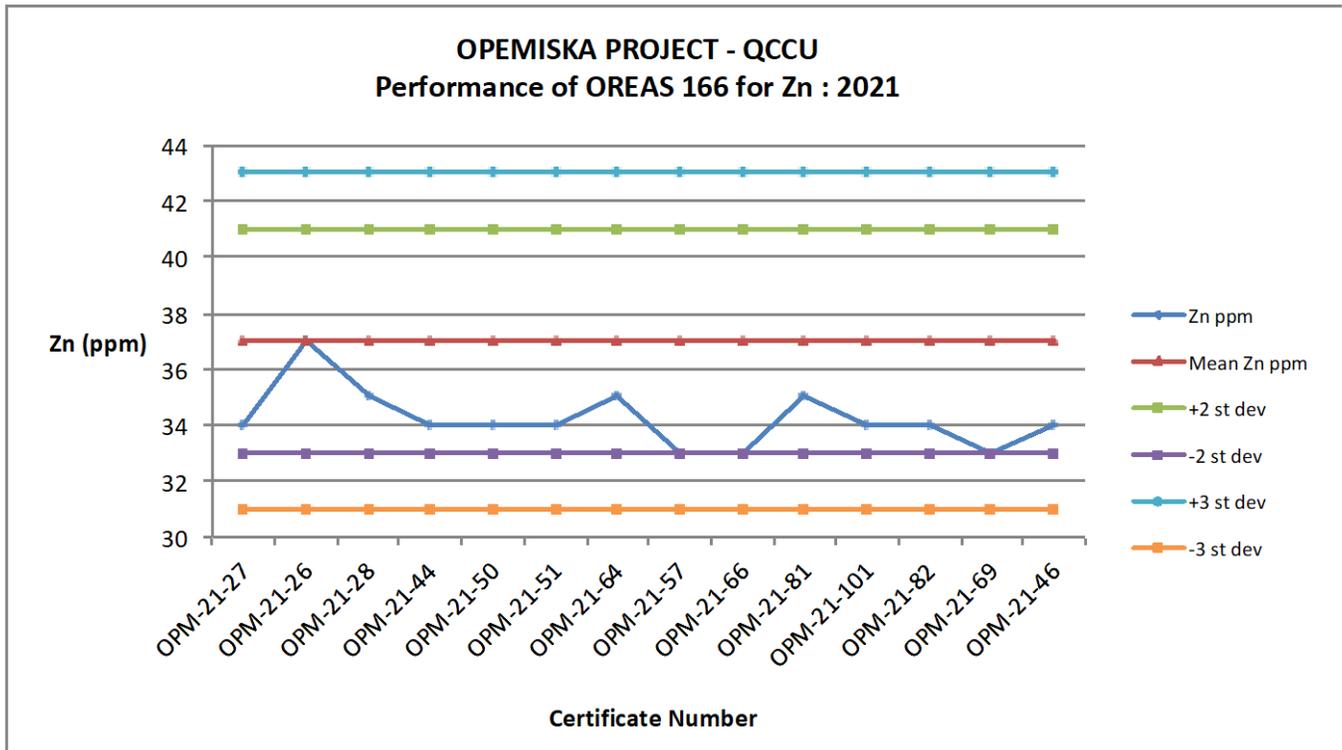


FIGURE J.5 2021 PERFORMANCE OF OREAS 502c CRM FOR CU

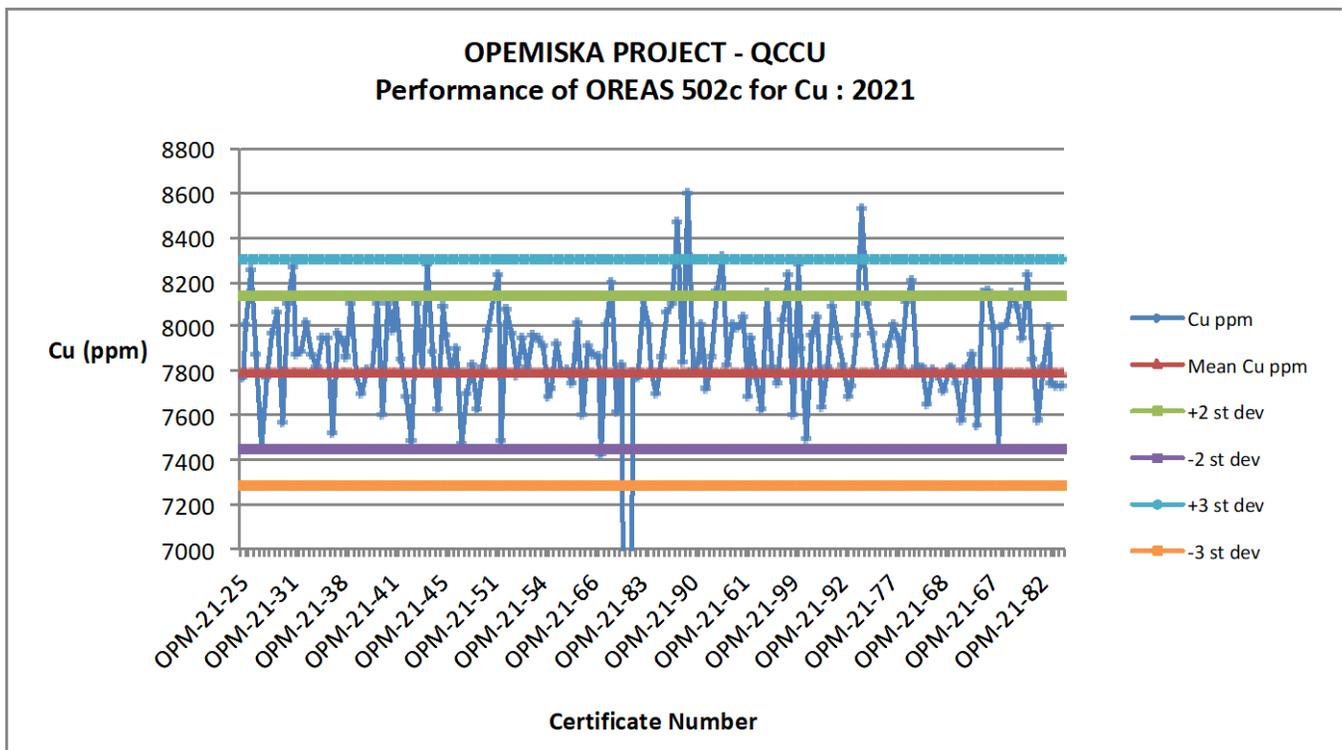


FIGURE J.6 2021 PERFORMANCE OF OREAS 502C CRM FOR AG

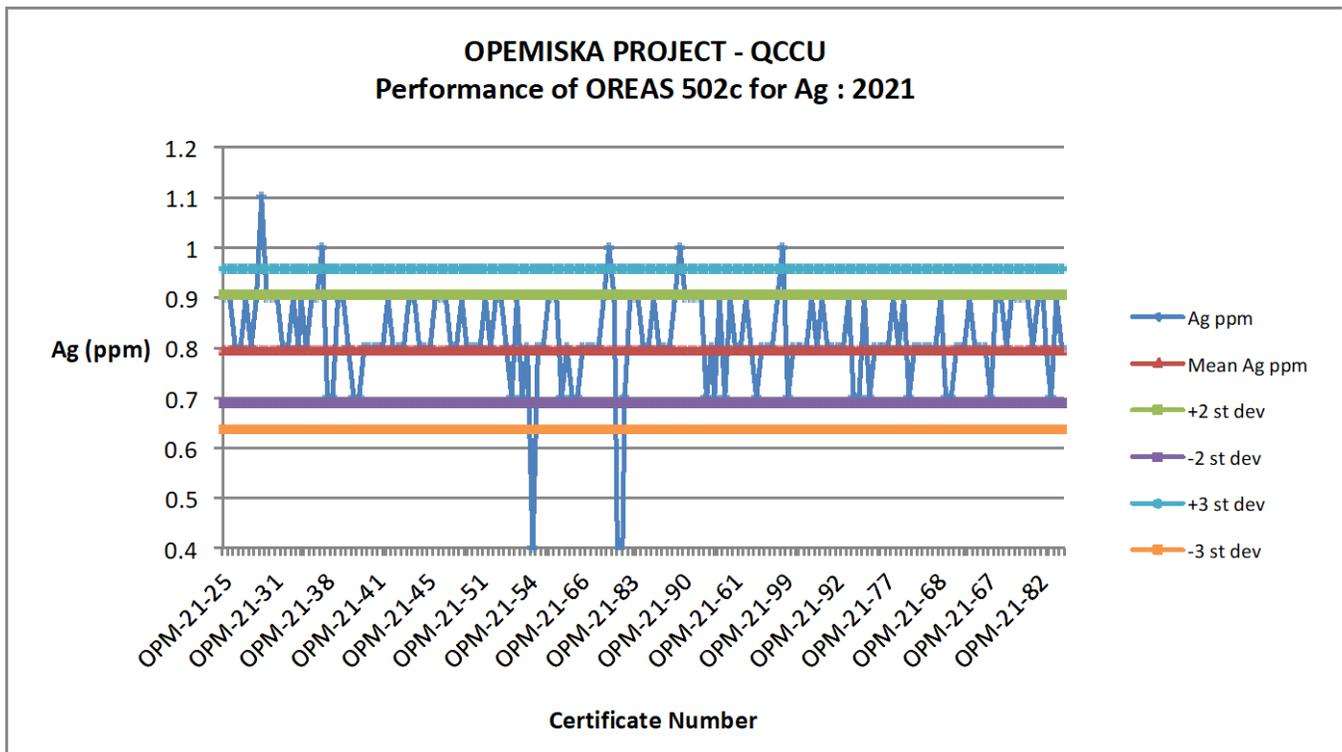


FIGURE J.7 2021 PERFORMANCE OF OREAS 502C CRM FOR Co

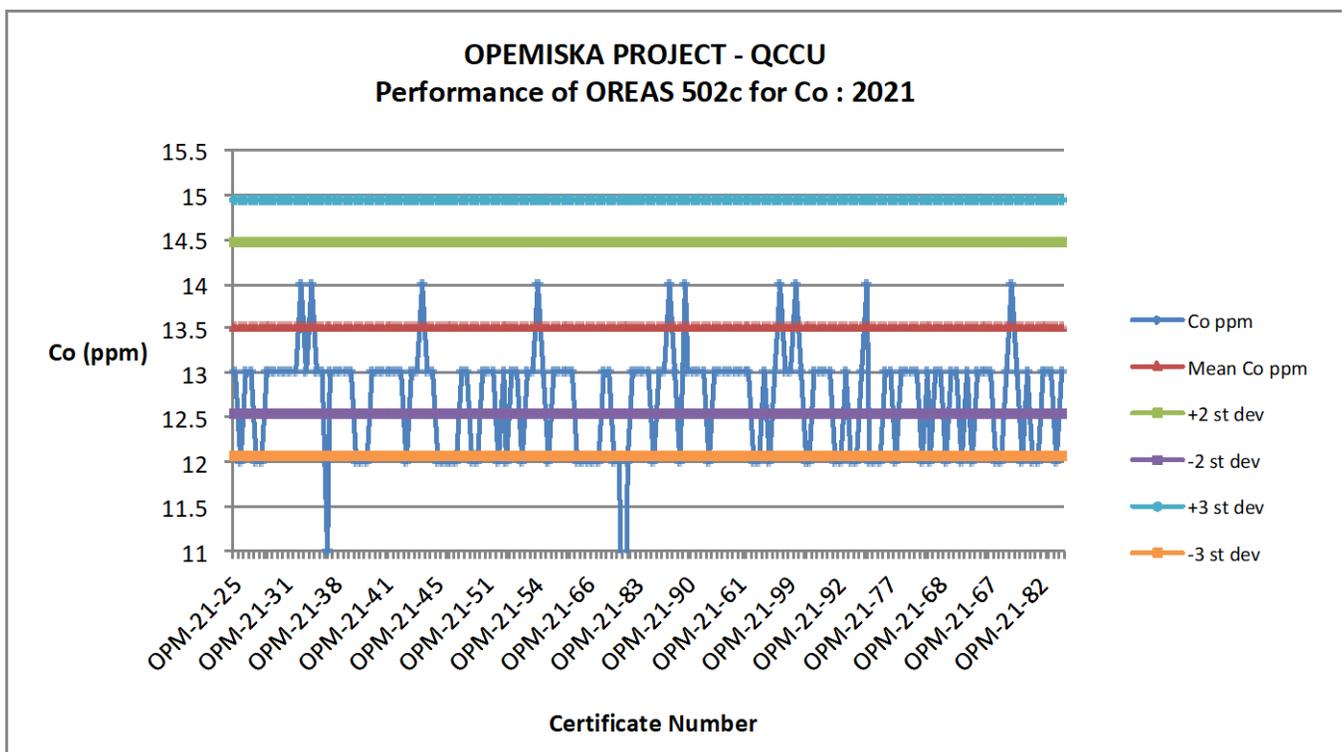


FIGURE J.8 2021 PERFORMANCE OF OREAS 502C CRM FOR ZN

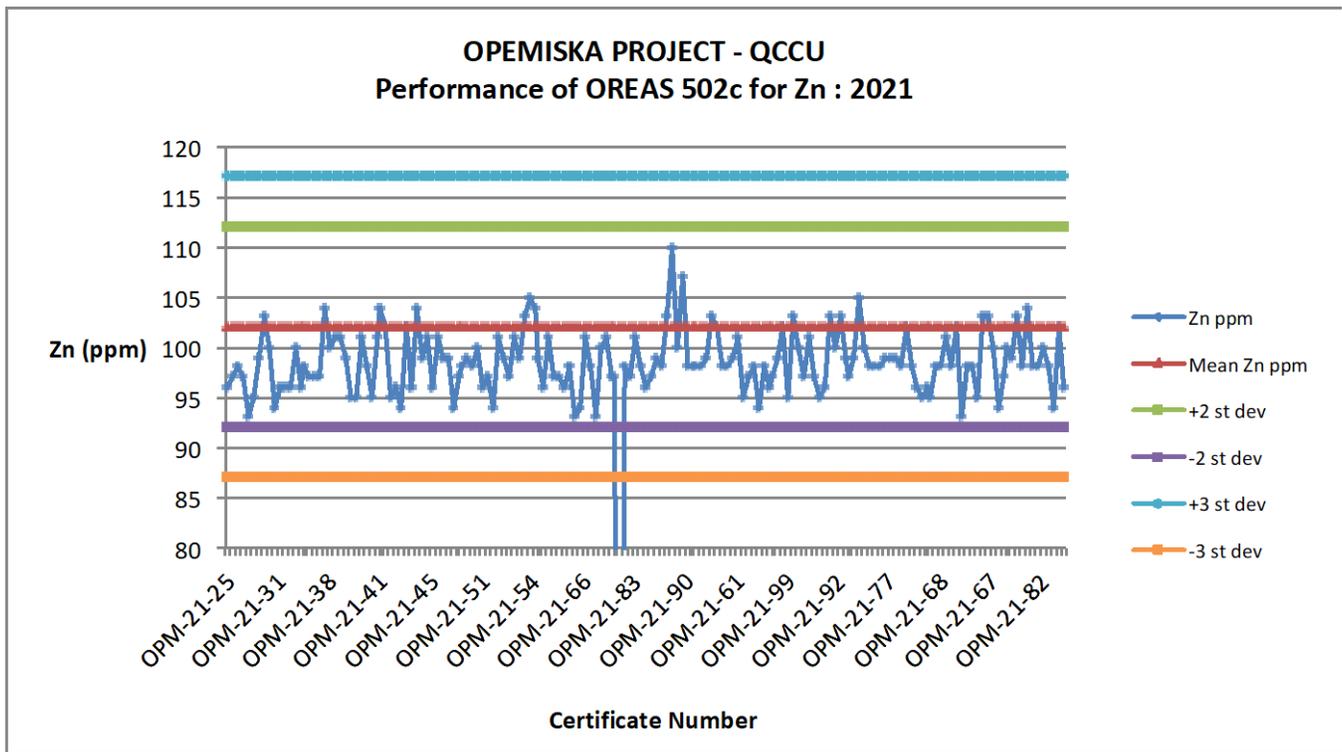


FIGURE J.9 2021 PERFORMANCE OF OREAS 502C CRM FOR AU

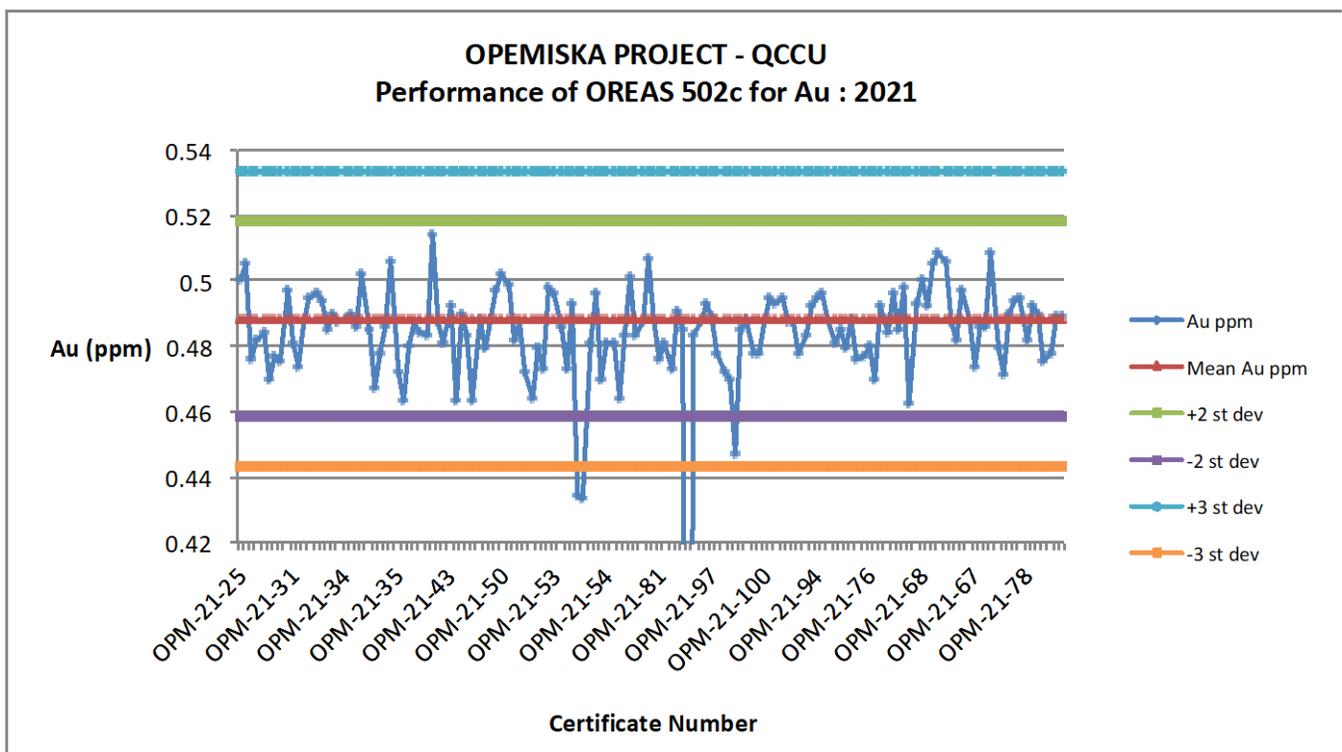


FIGURE J.10 2021 PERFORMANCE OF OREAS 504C CRM FOR CU

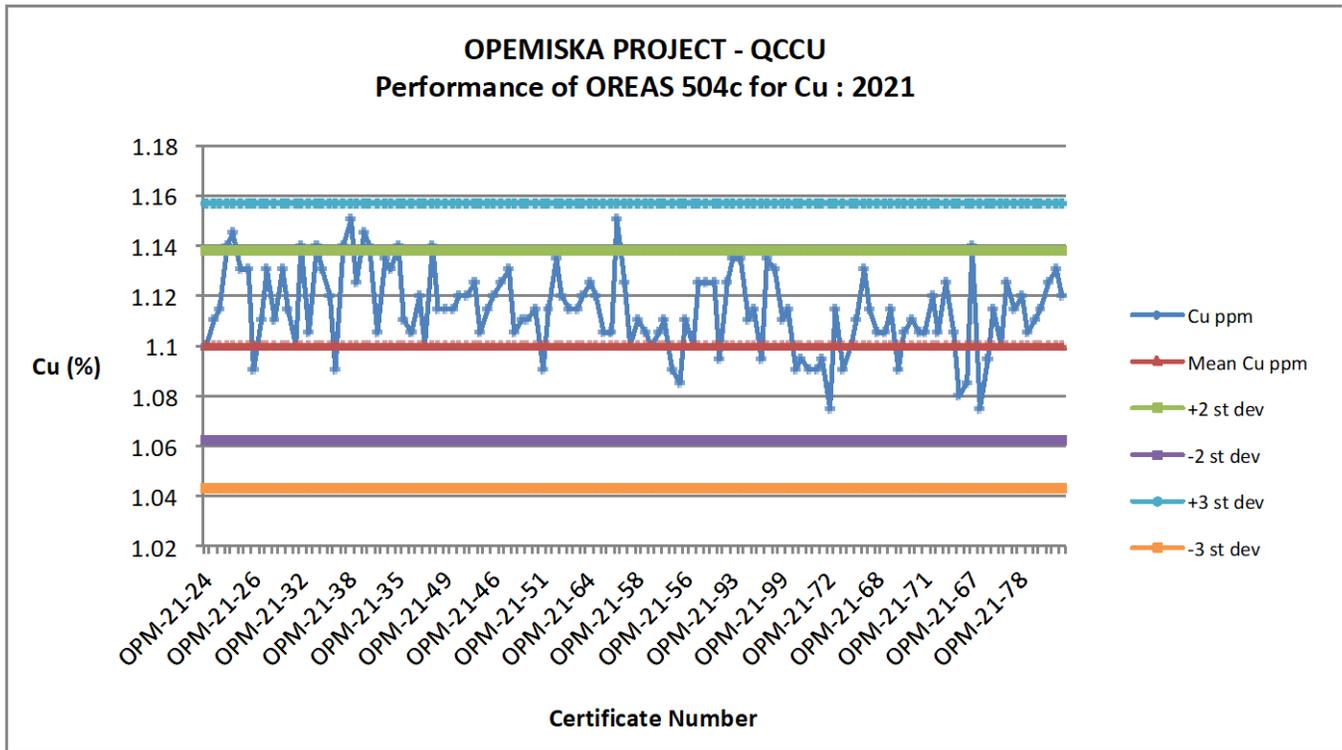


FIGURE J.11 2021 PERFORMANCE OF OREAS 504C CRM FOR AG

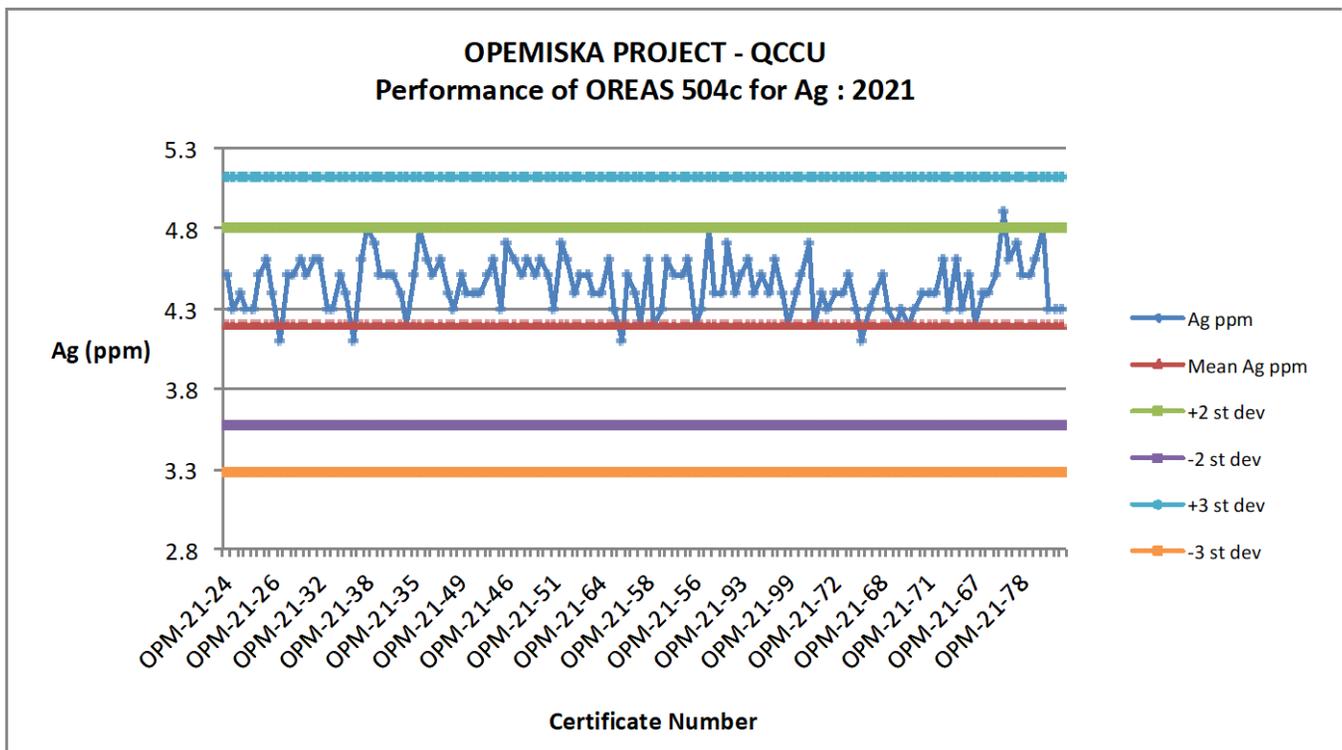


FIGURE J.12 2021 PERFORMANCE OF OREAS 504C CRM FOR Co

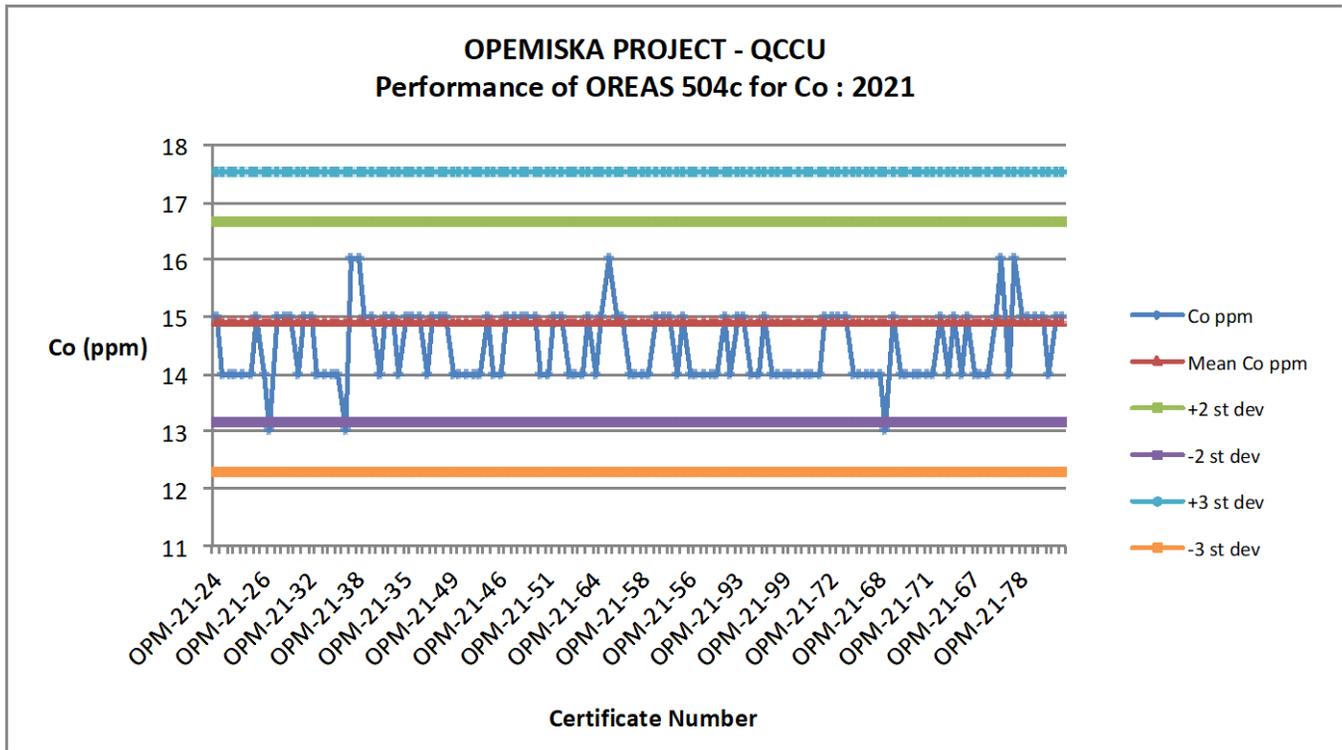


FIGURE J.13 2021 PERFORMANCE OF OREAS 504C CRM FOR Zn

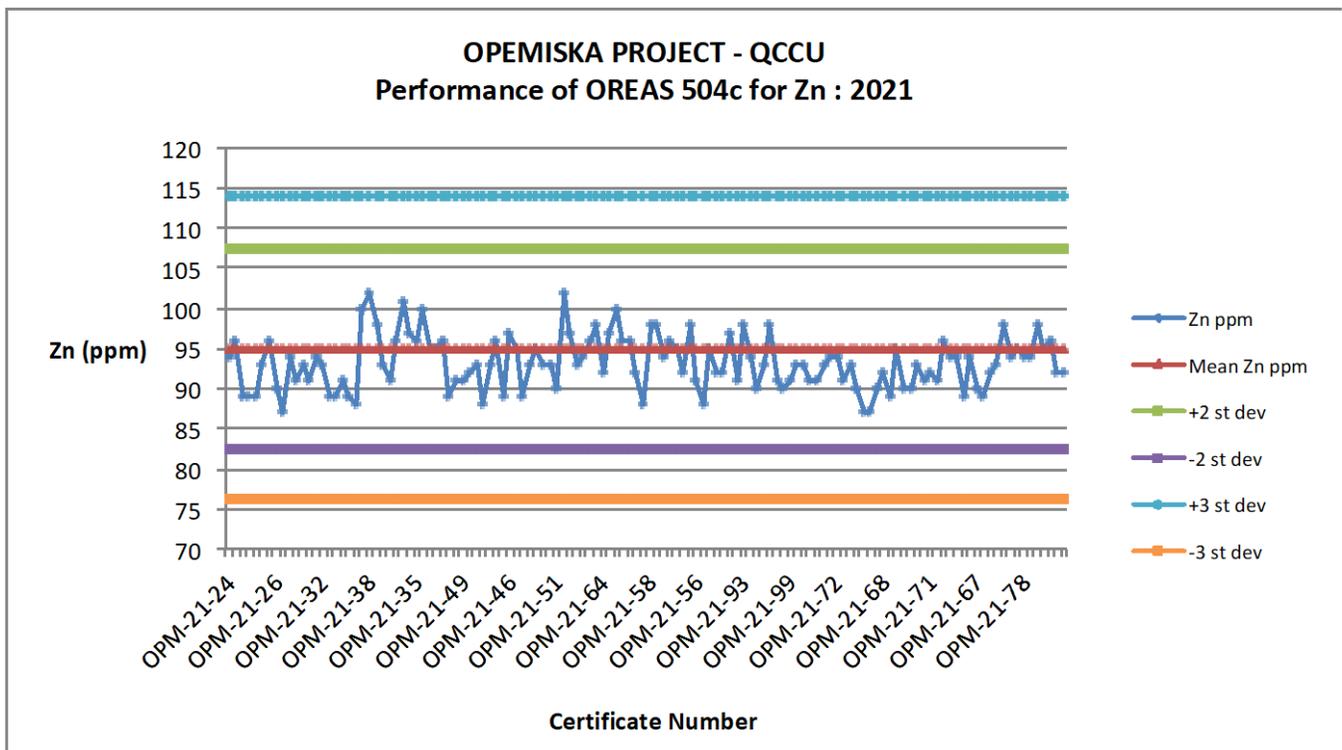


FIGURE J.14 2021 PERFORMANCE OF OREAS 504C CRM FOR AU

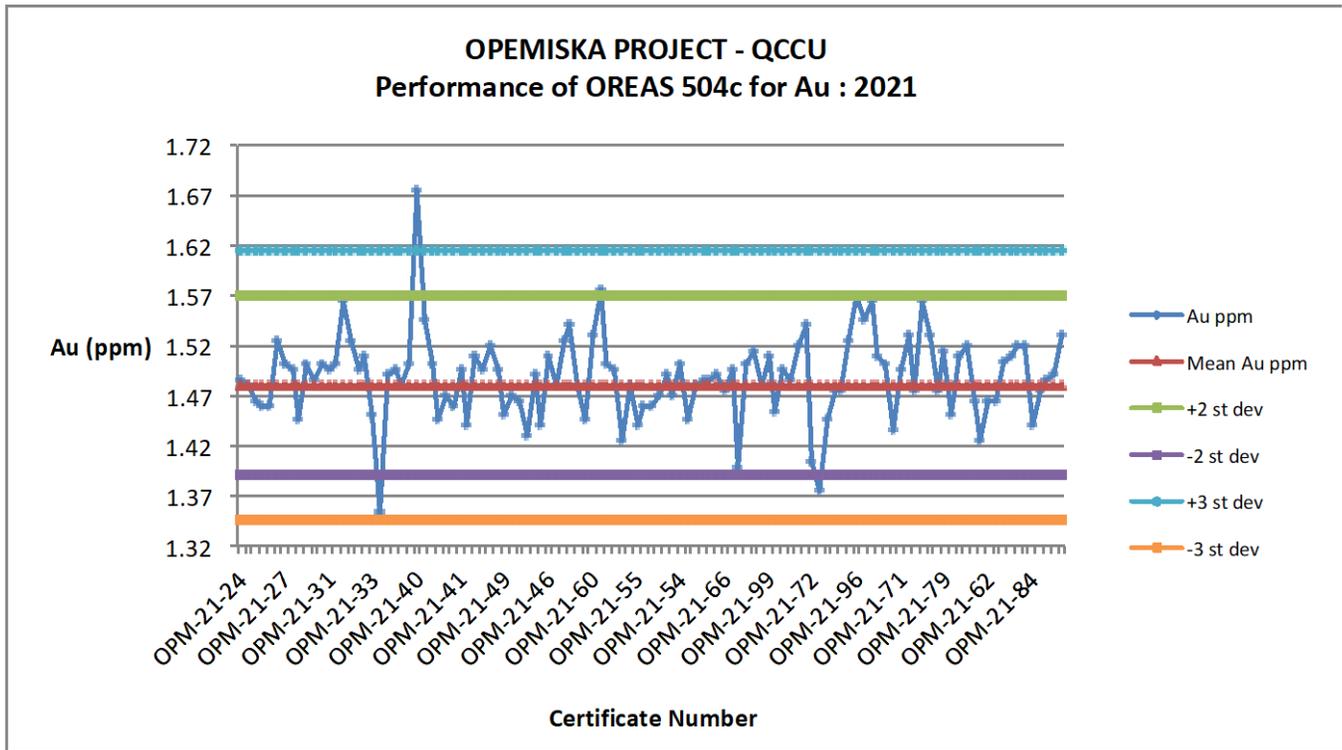


FIGURE J.15 2021 PERFORMANCE OF OREAS 505 CRM FOR CU

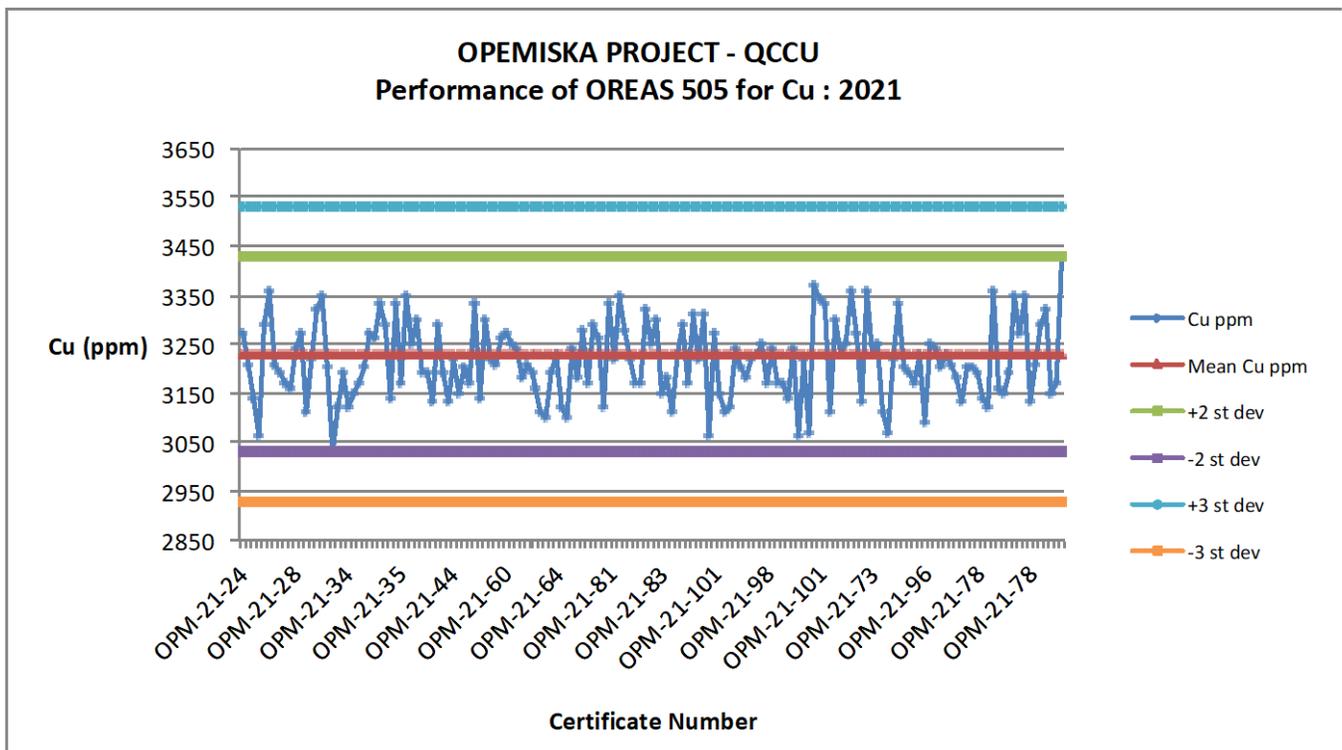


FIGURE J.16 2021 PERFORMANCE OF OREAS 505 CRM FOR AG

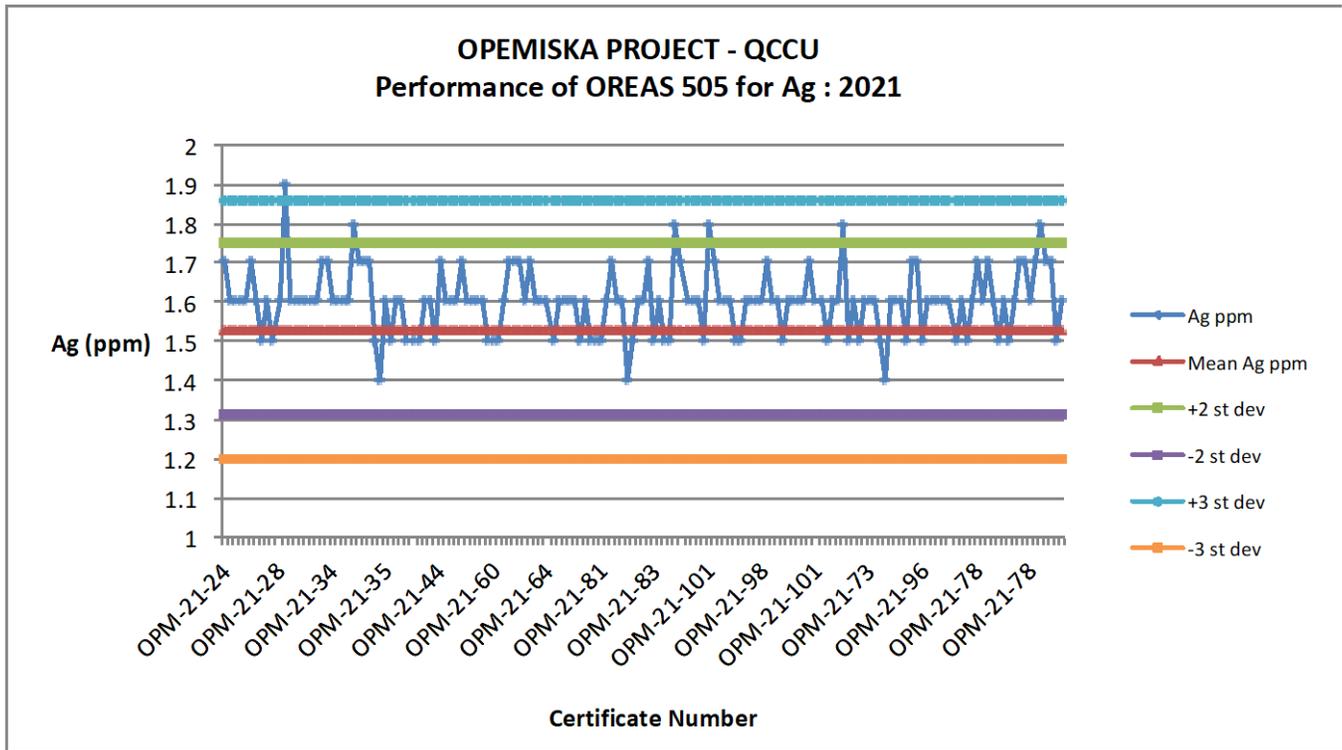


FIGURE J.17 2021 PERFORMANCE OF OREAS 505 CRM FOR CO

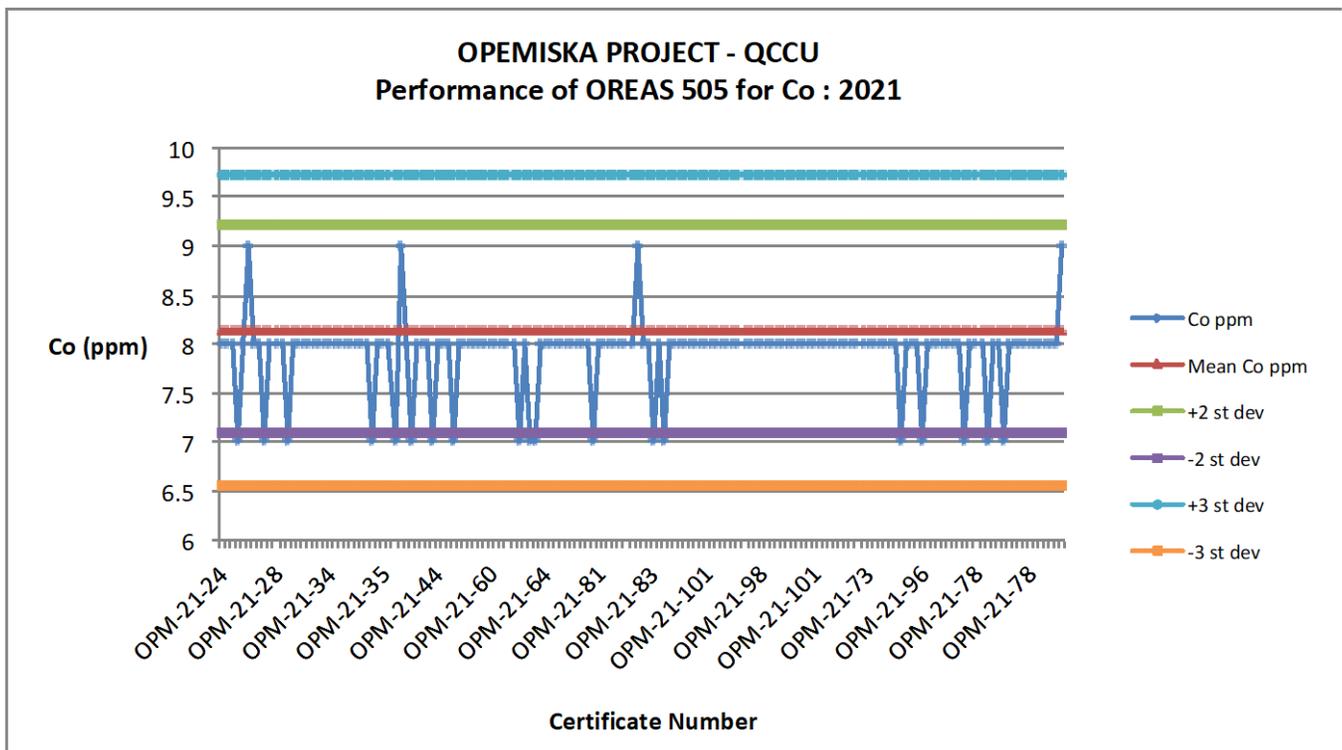


FIGURE J.18 2021 PERFORMANCE OF OREAS 505 CRM FOR ZN

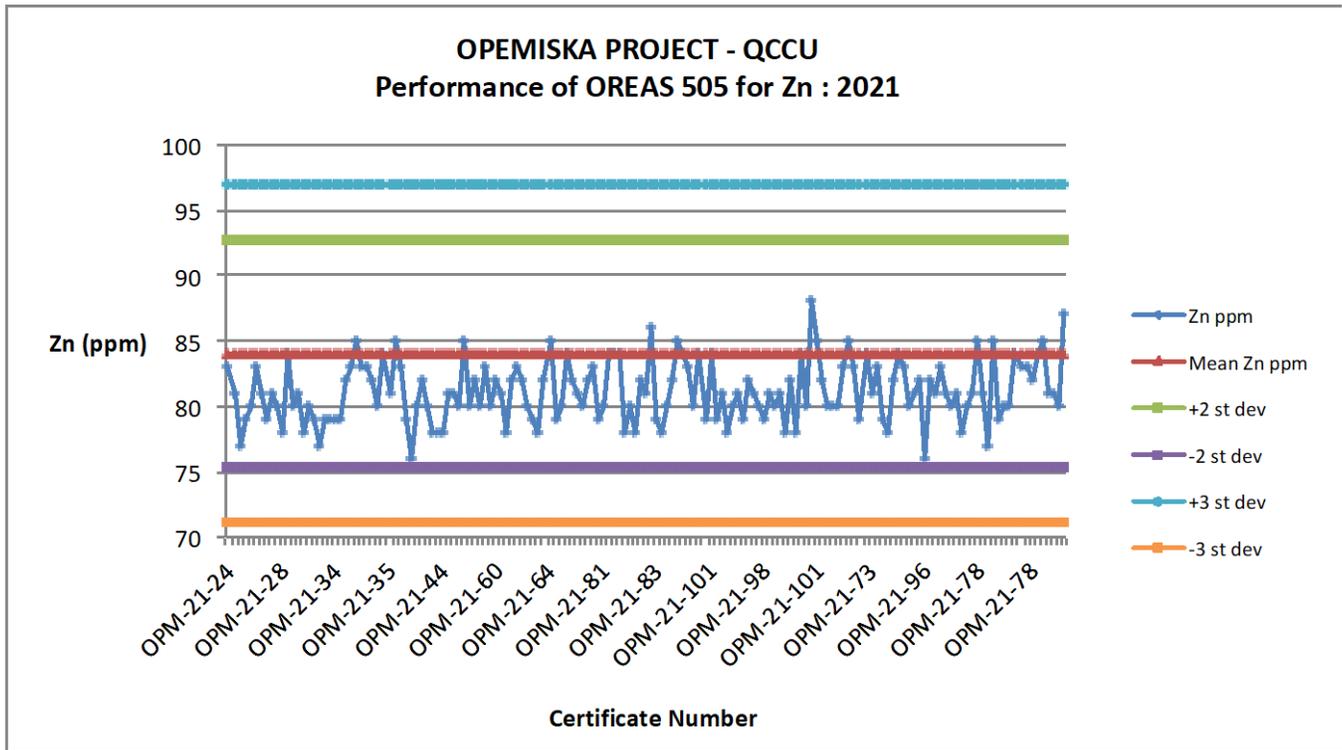
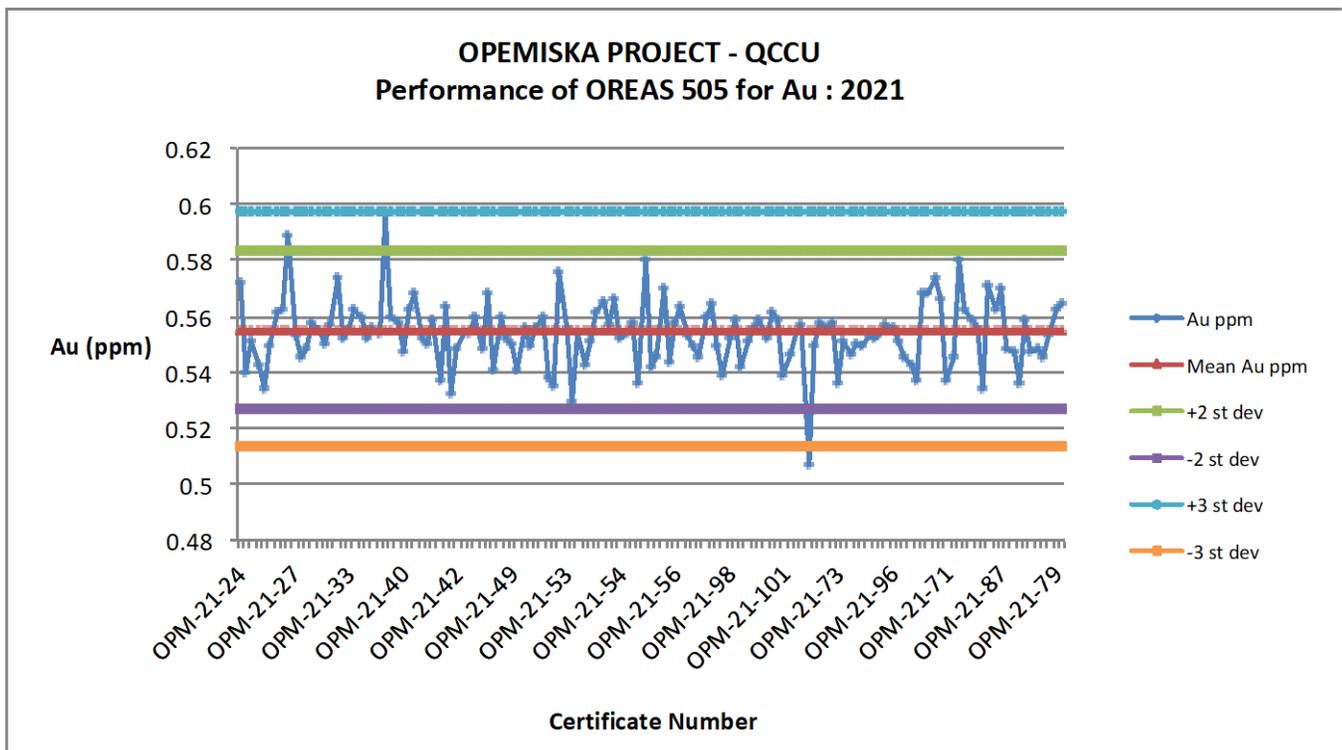


FIGURE J.19 2021 PERFORMANCE OF OREAS 505 CRM FOR AU



APPENDIX K POST-SEPTEMBER 2021 CRM RESULTS FOR CU, AG, CO, ZN AND AU)

FIGURE K.1 POST-SEPTEMBER 2021 PERFORMANCE OF BLANK FOR CU

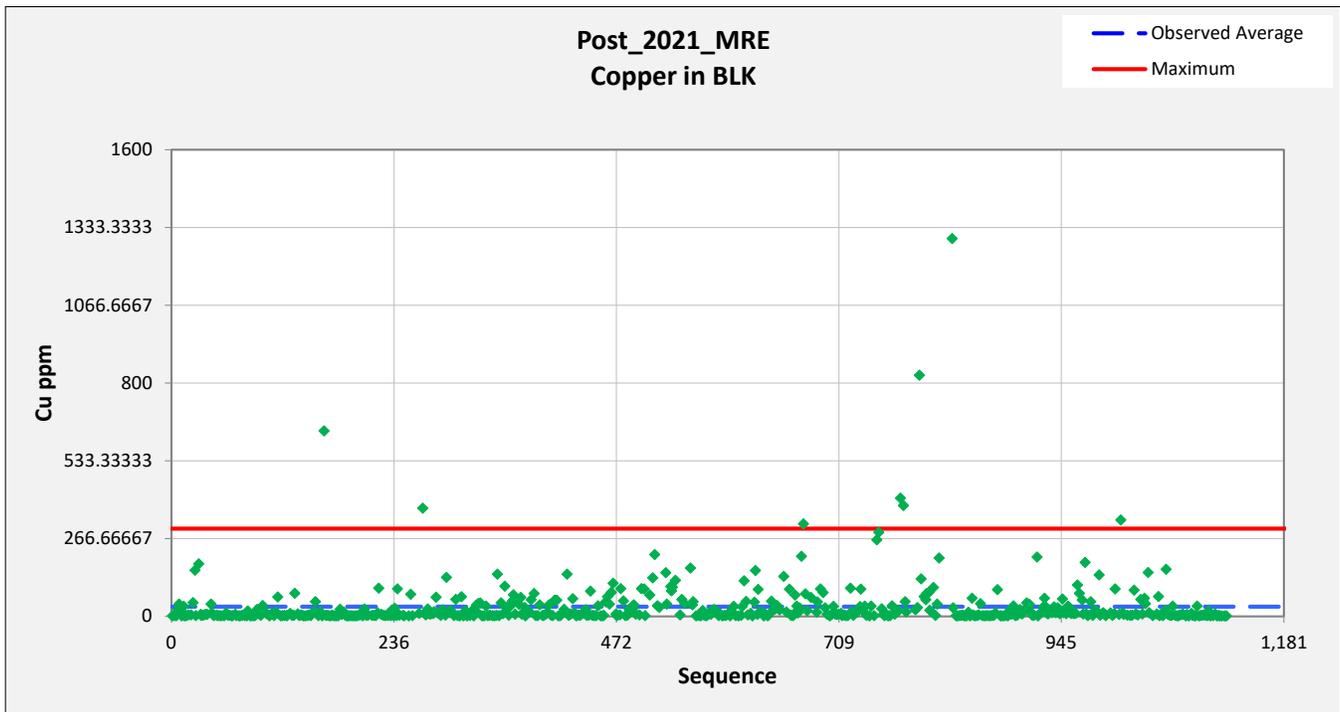


FIGURE K.2 POST-SEPTEMBER 2021 PERFORMANCE OF BLANK FOR AU

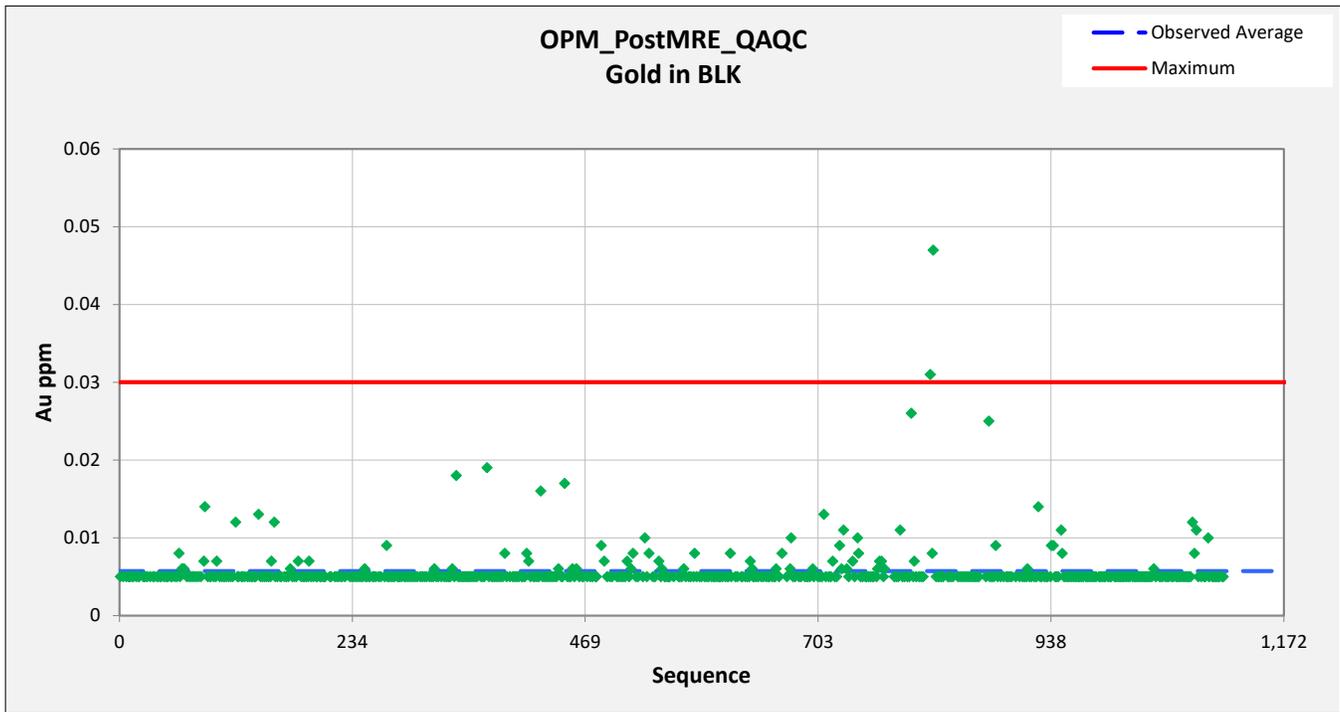


FIGURE K.3 POST-SEPTEMBER 2021 PERFORMANCE OF BLANK FOR AG

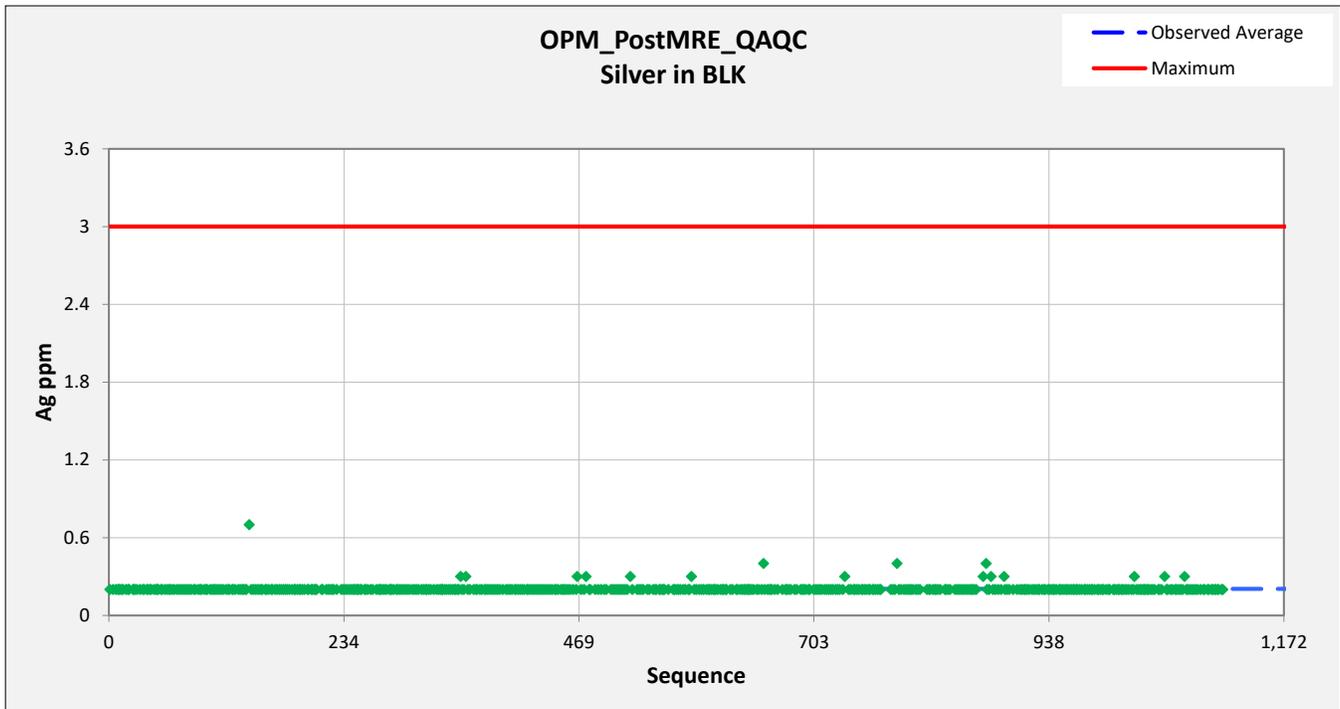


FIGURE K.4 POST-SEPTEMBER 2021 PERFORMANCE OF BLANK FOR CO

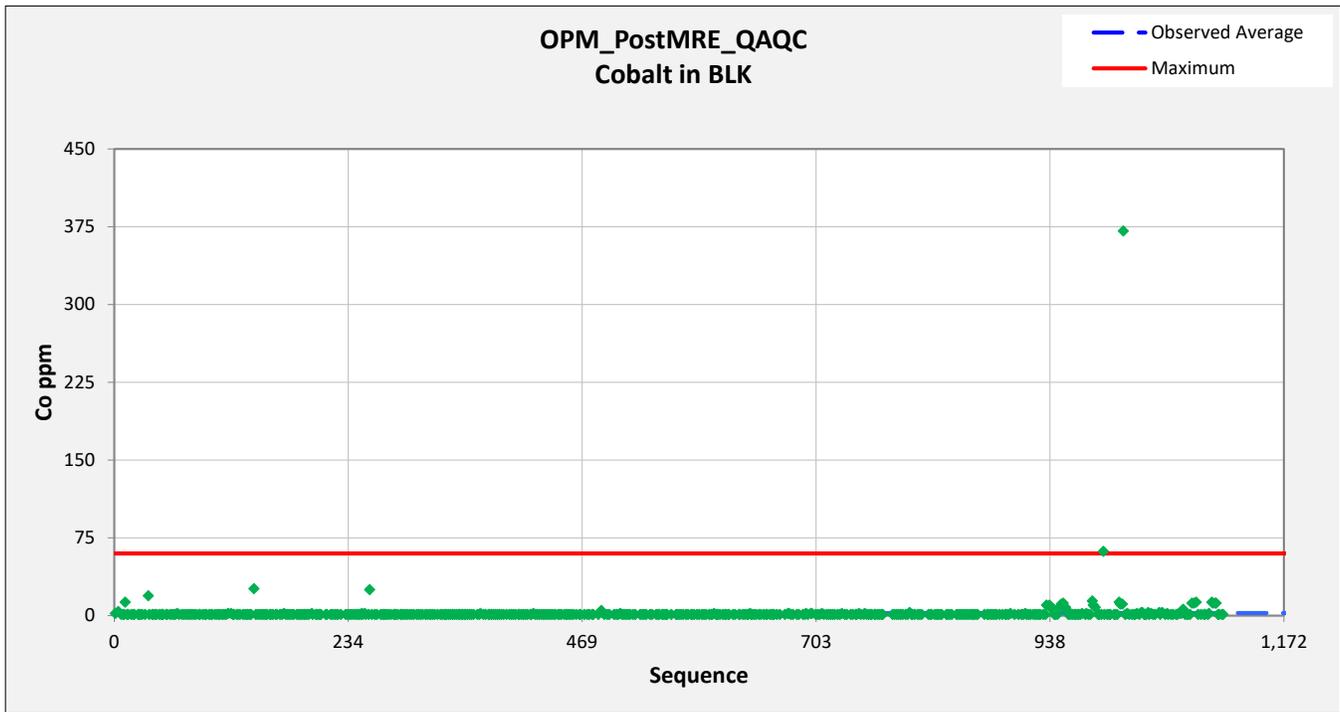


FIGURE K.5 POST-SEPTEMBER 2021 PERFORMANCE OF BLANK FOR ZN

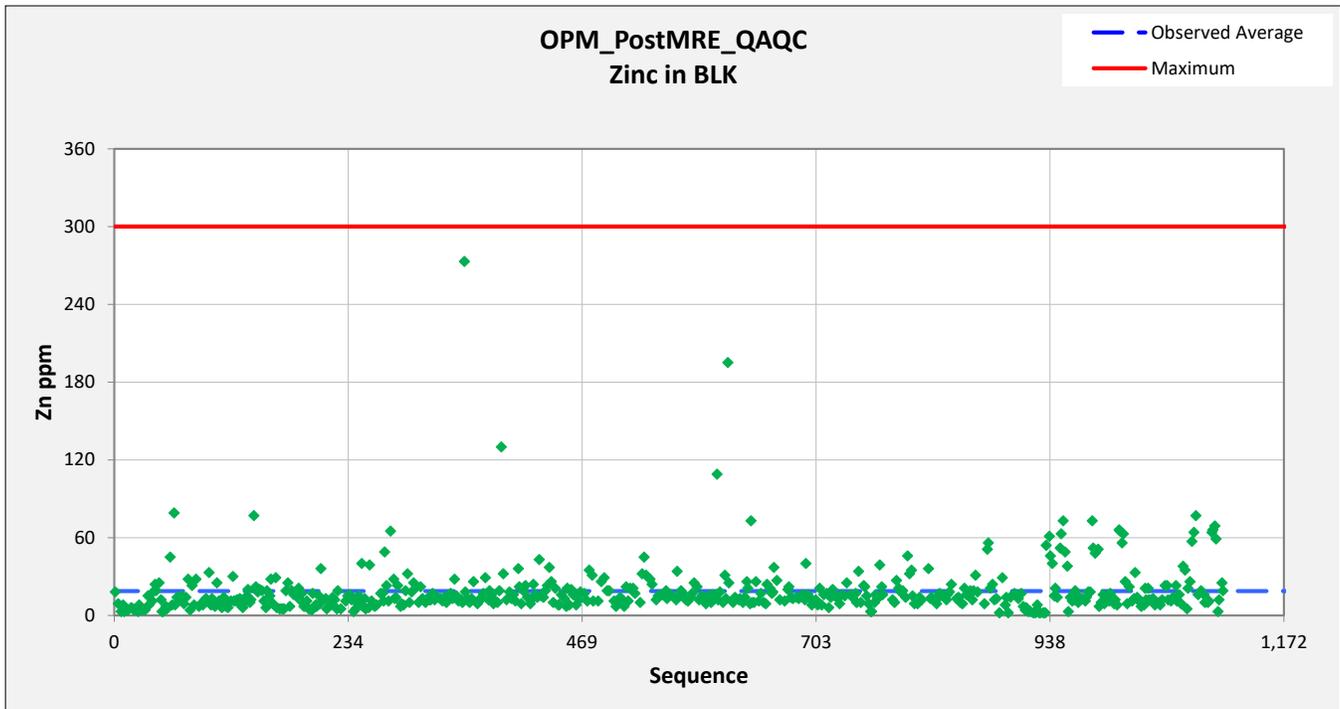


FIGURE K.6 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 166 CRM FOR CU

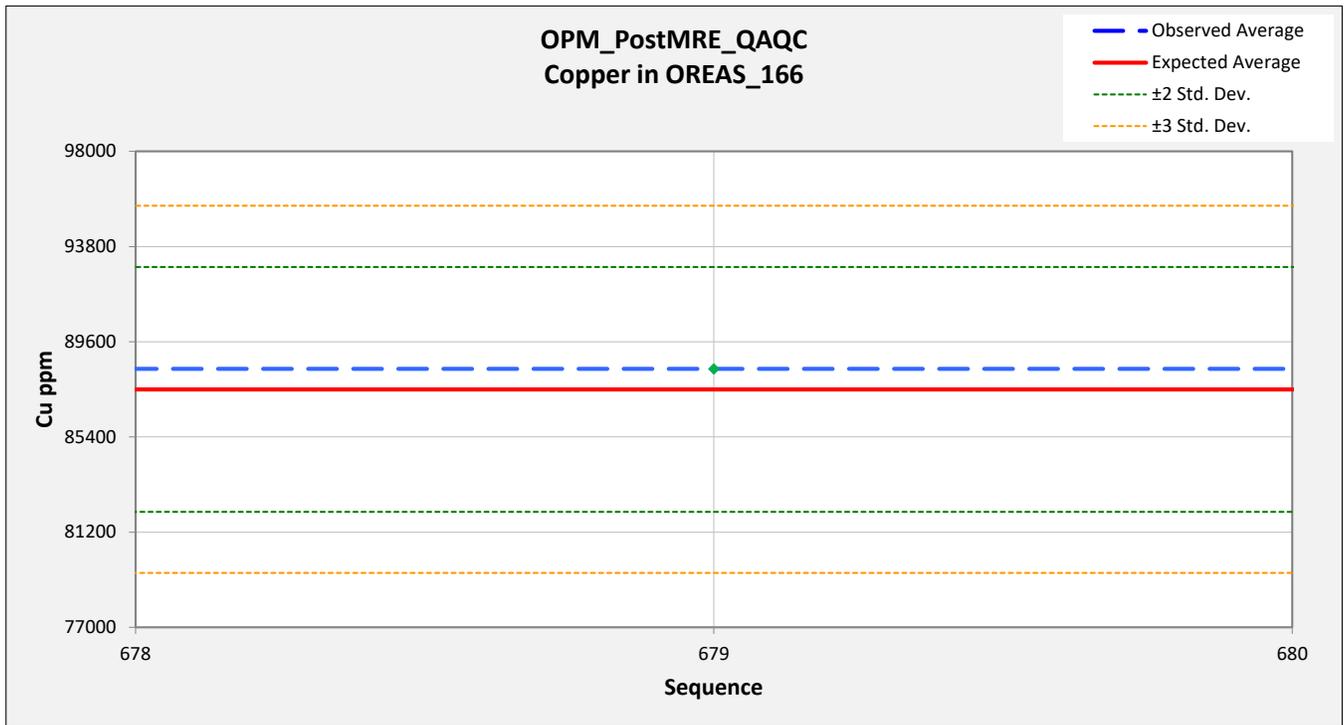


FIGURE K.7 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 166 CRM FOR AG

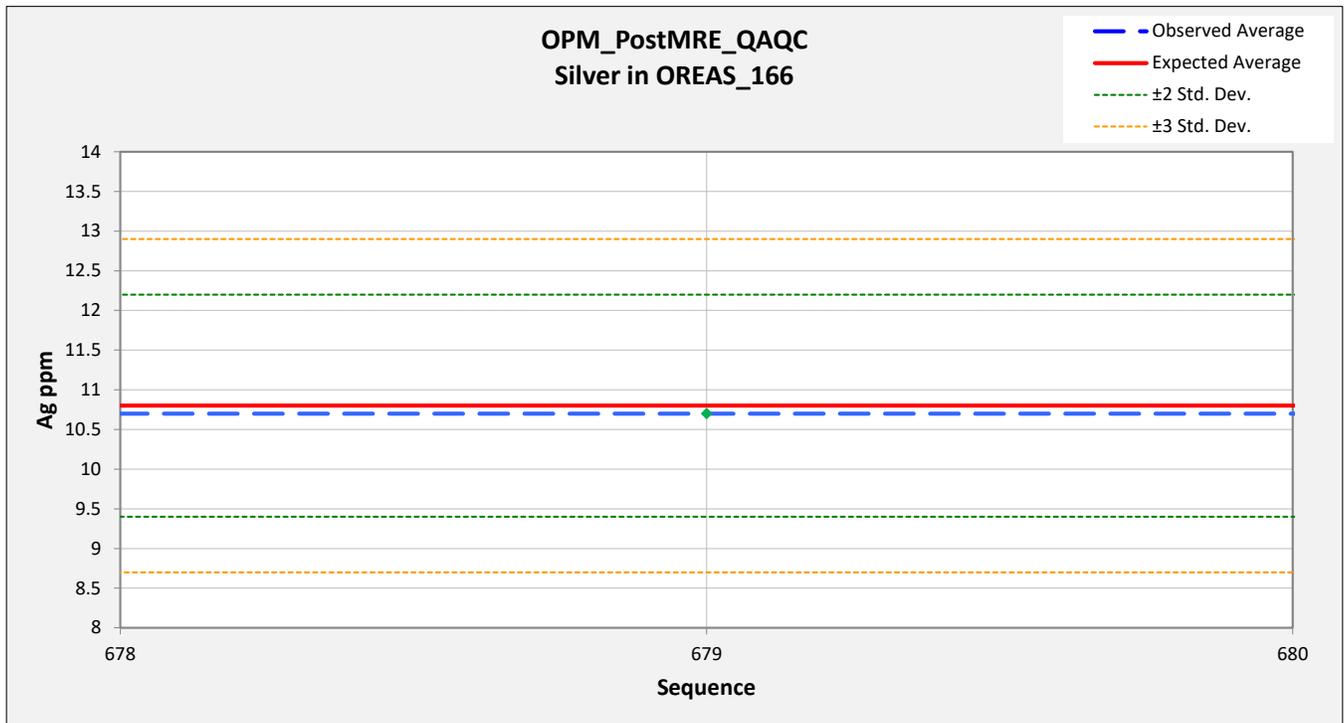


FIGURE K.8 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 166 CRM FOR CO

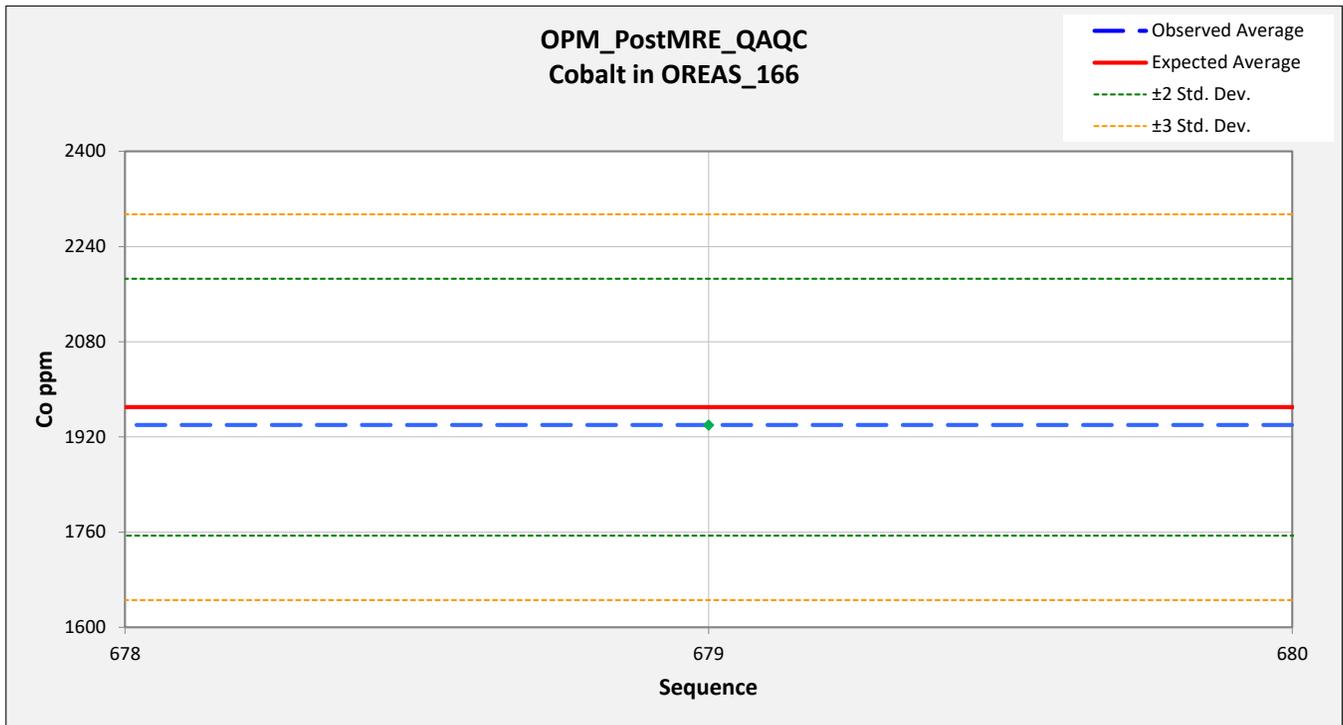


FIGURE K.9 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 166 CRM FOR ZN

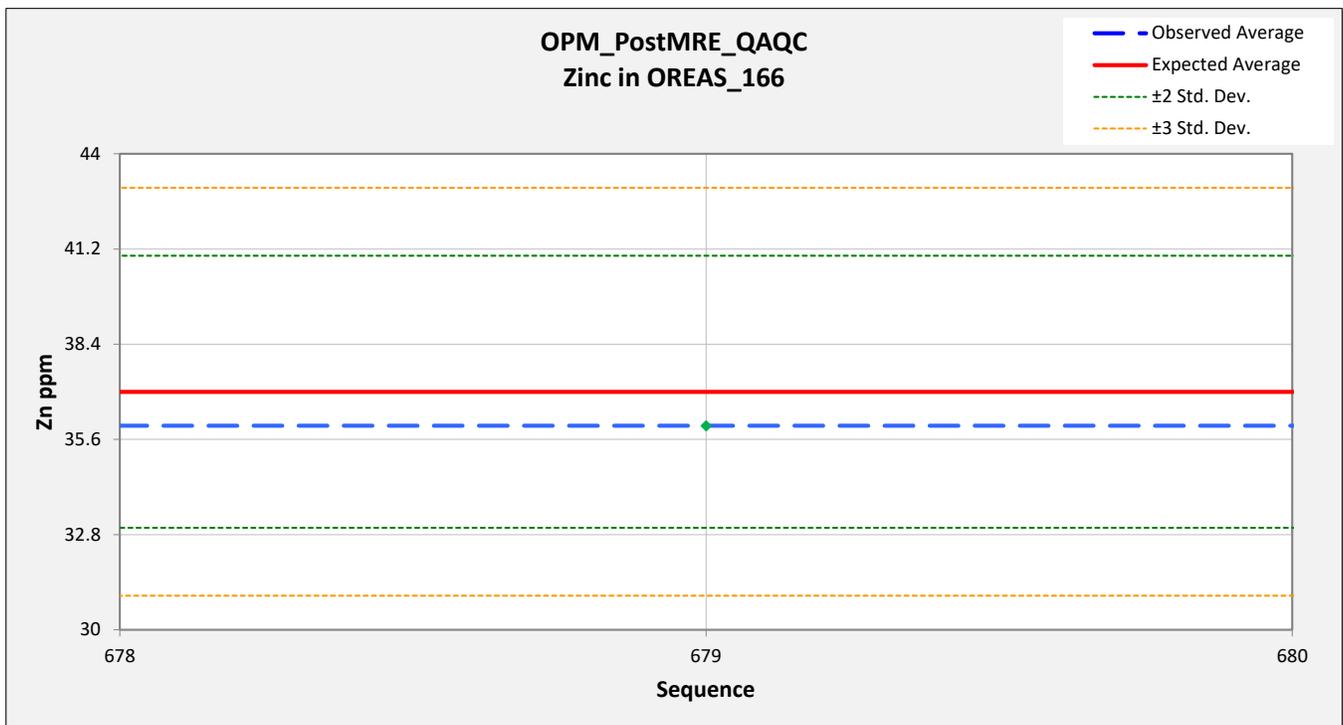


FIGURE K.10 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 502C CRM FOR CU

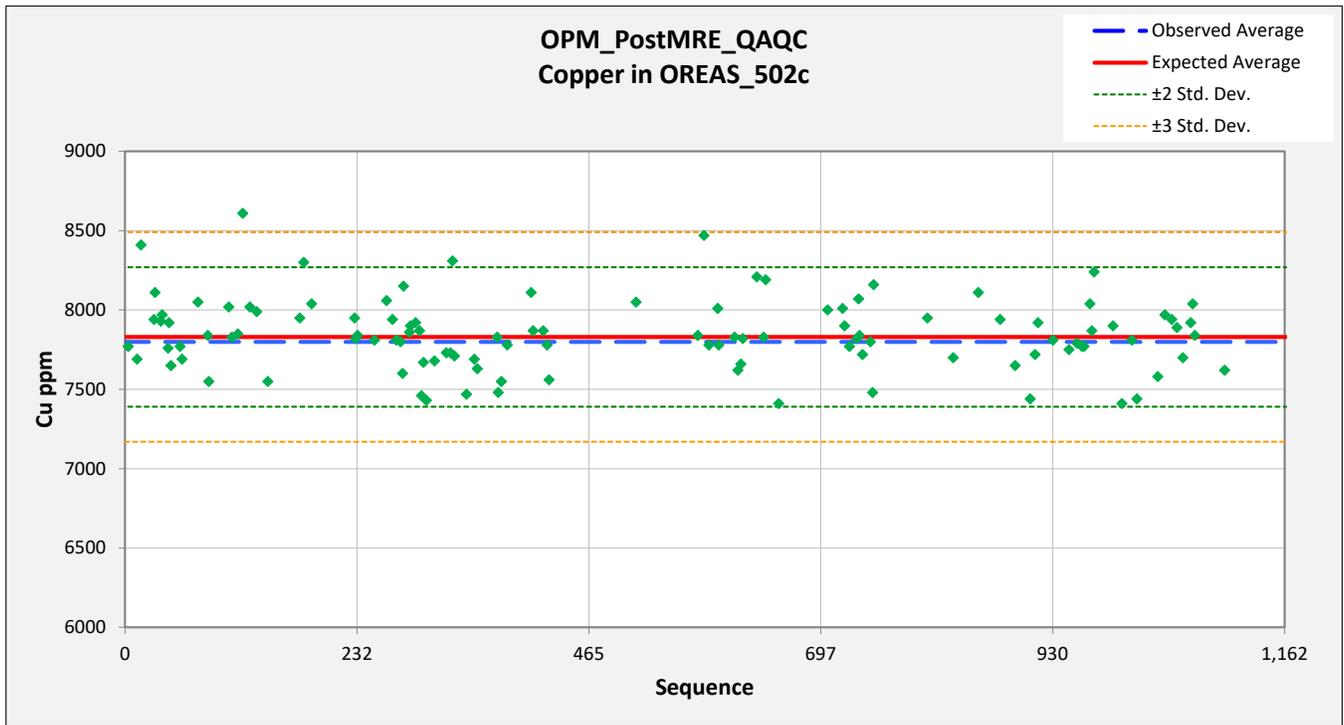


FIGURE K.11 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 502C CRM FOR AU

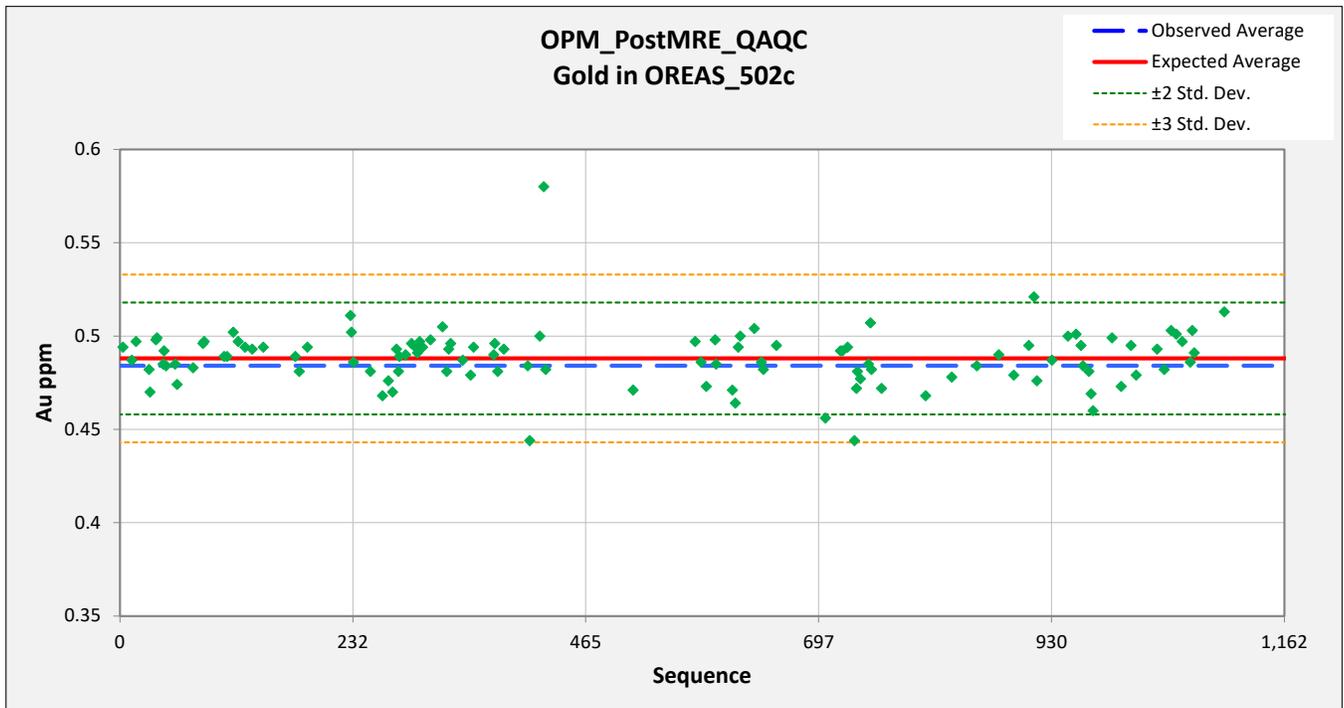


FIGURE K.12 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 502C CRM FOR AG

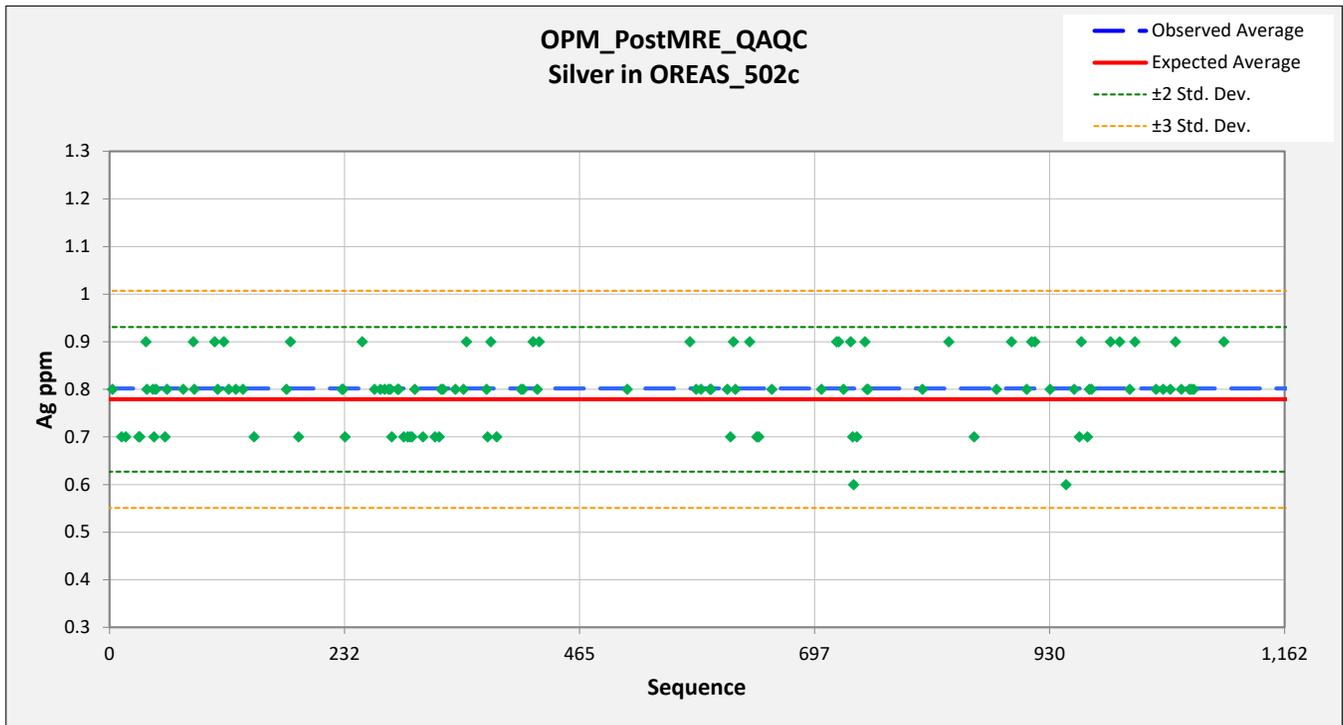


FIGURE K.13 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 502C CRM FOR Co

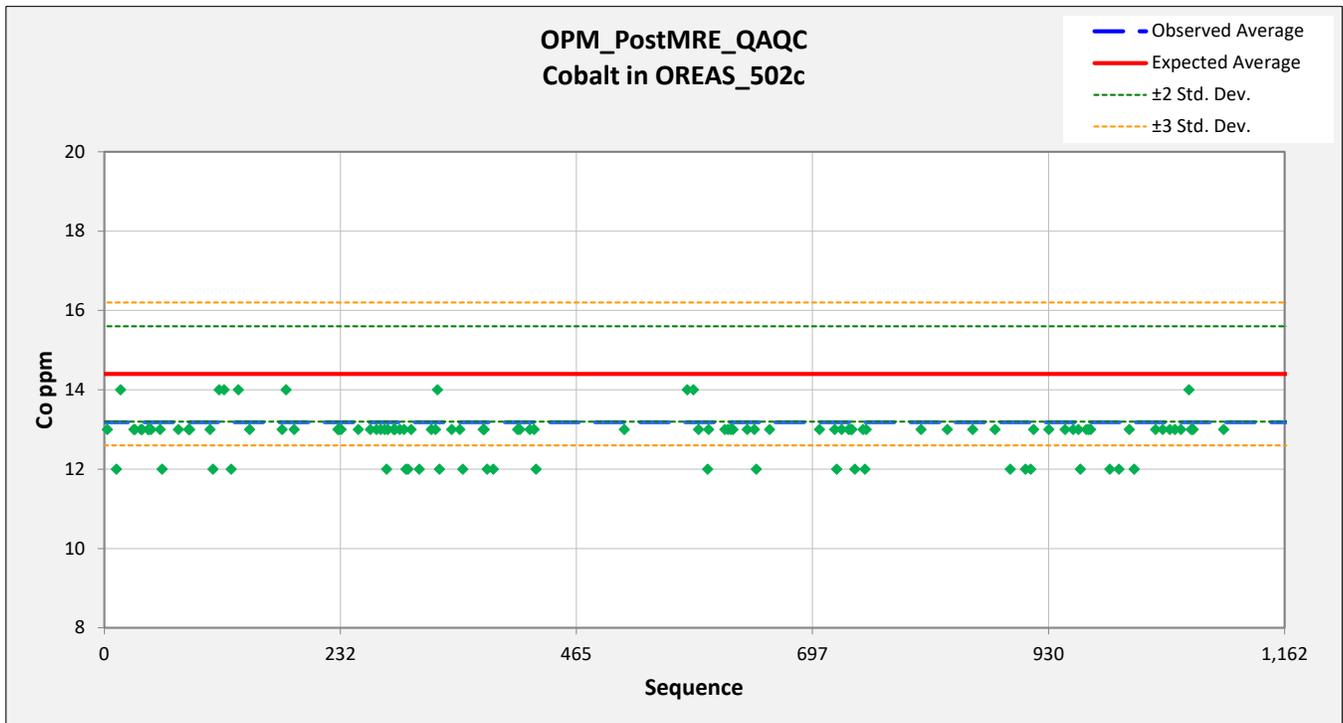


FIGURE K.14 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 502C CRM FOR ZN

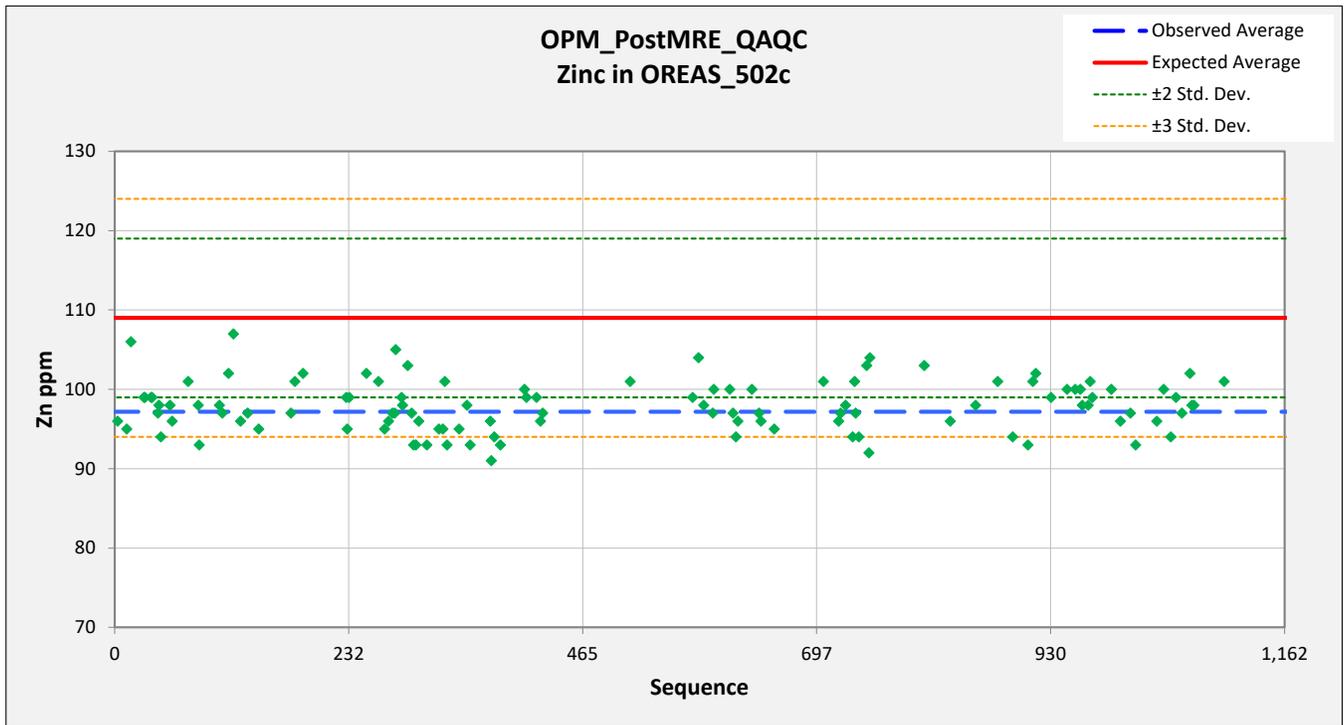


FIGURE K.15 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 504C CRM FOR CU

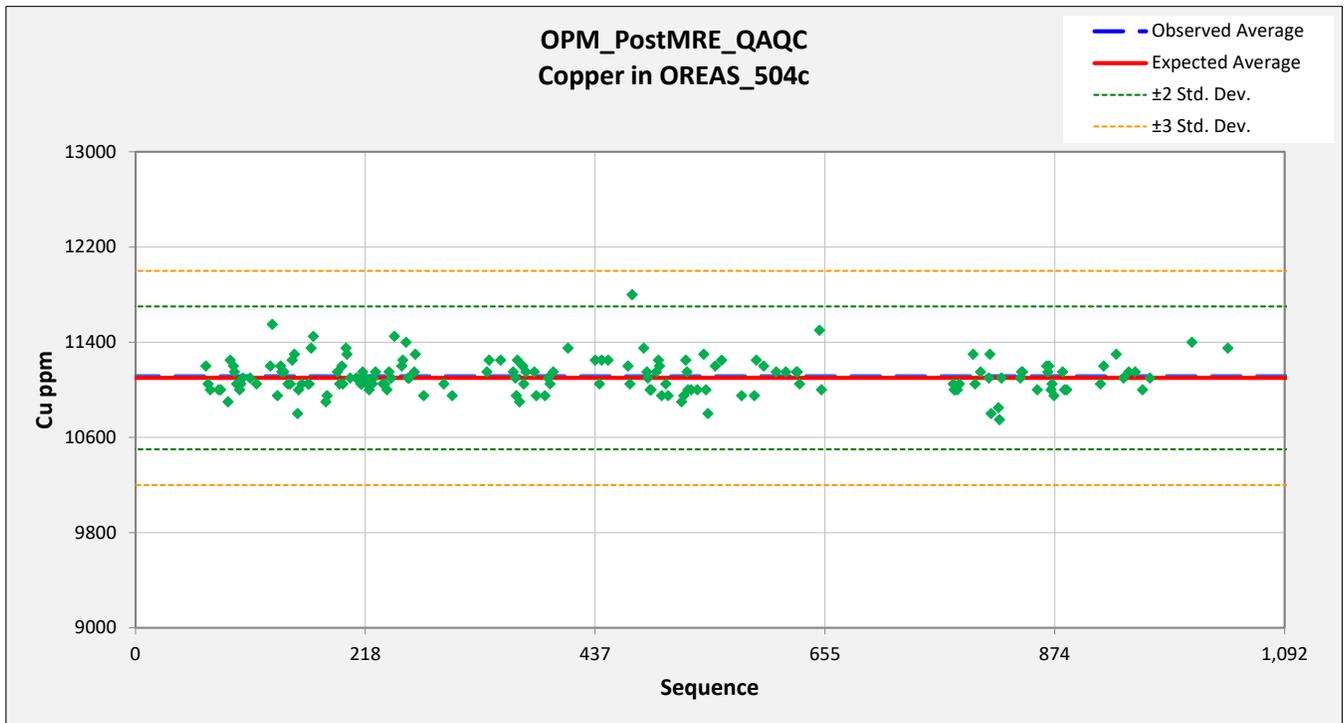


FIGURE K.16 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 504C CRMRR FOR AU

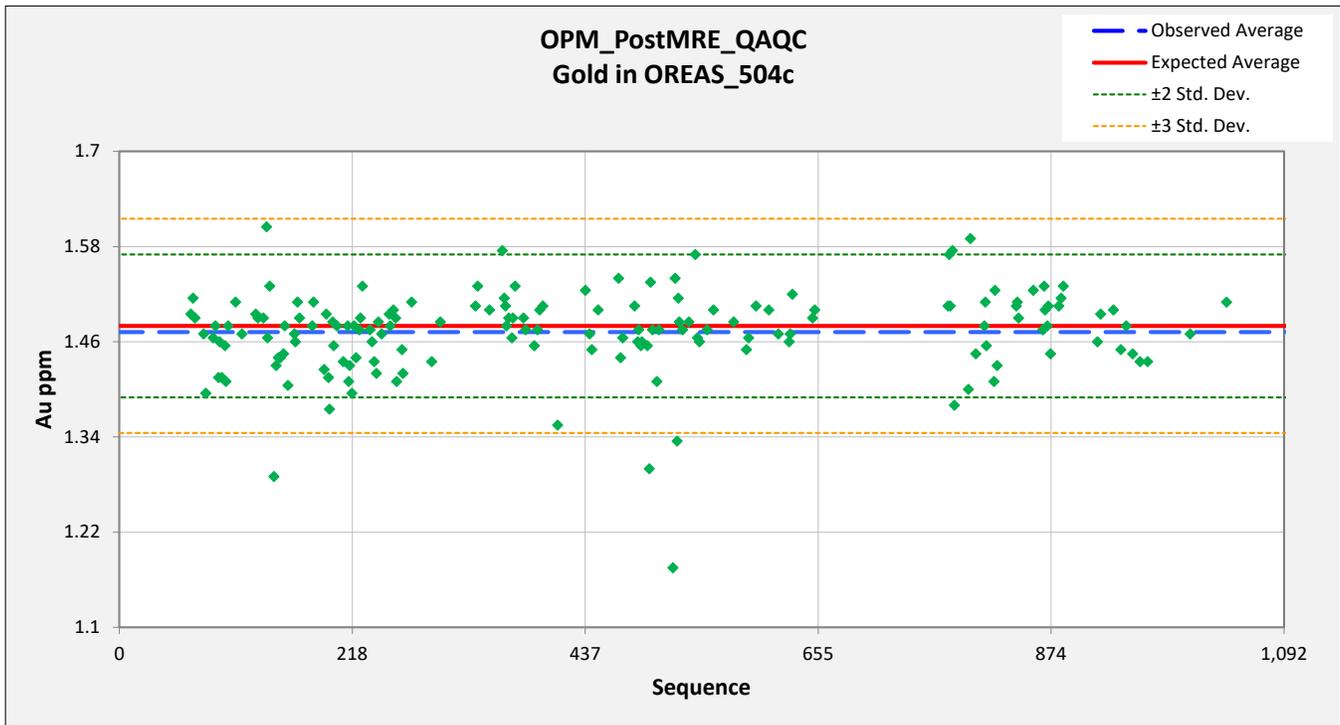


FIGURE K.17 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 504C CRM FOR AG

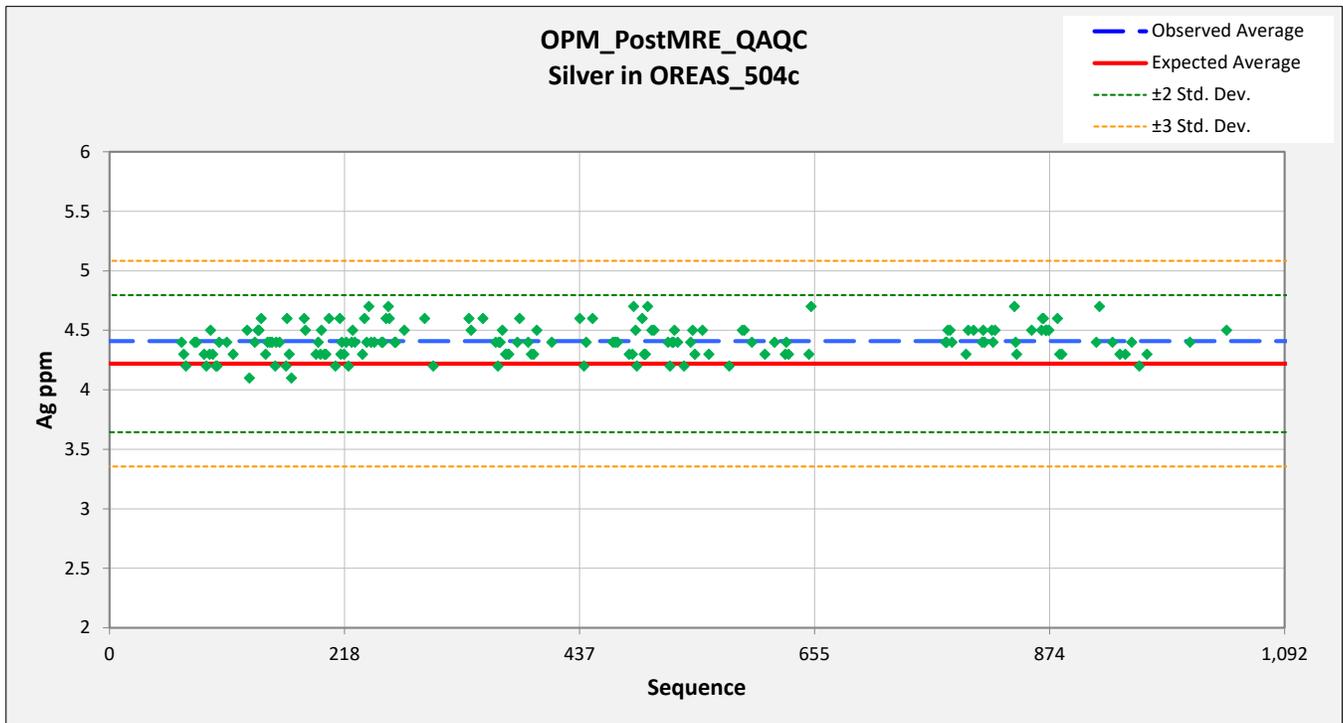


FIGURE K.18 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 504C CRM FOR Co

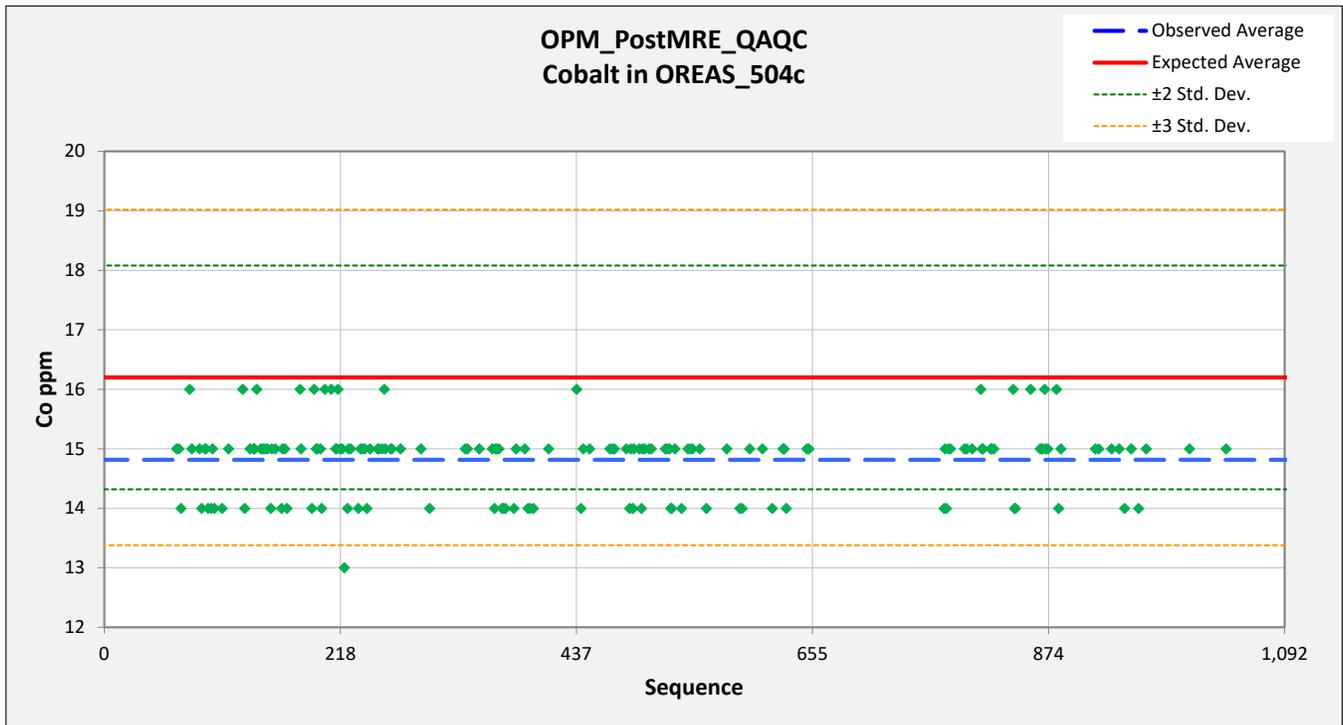


FIGURE K.19 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 504C CRM FOR Zn

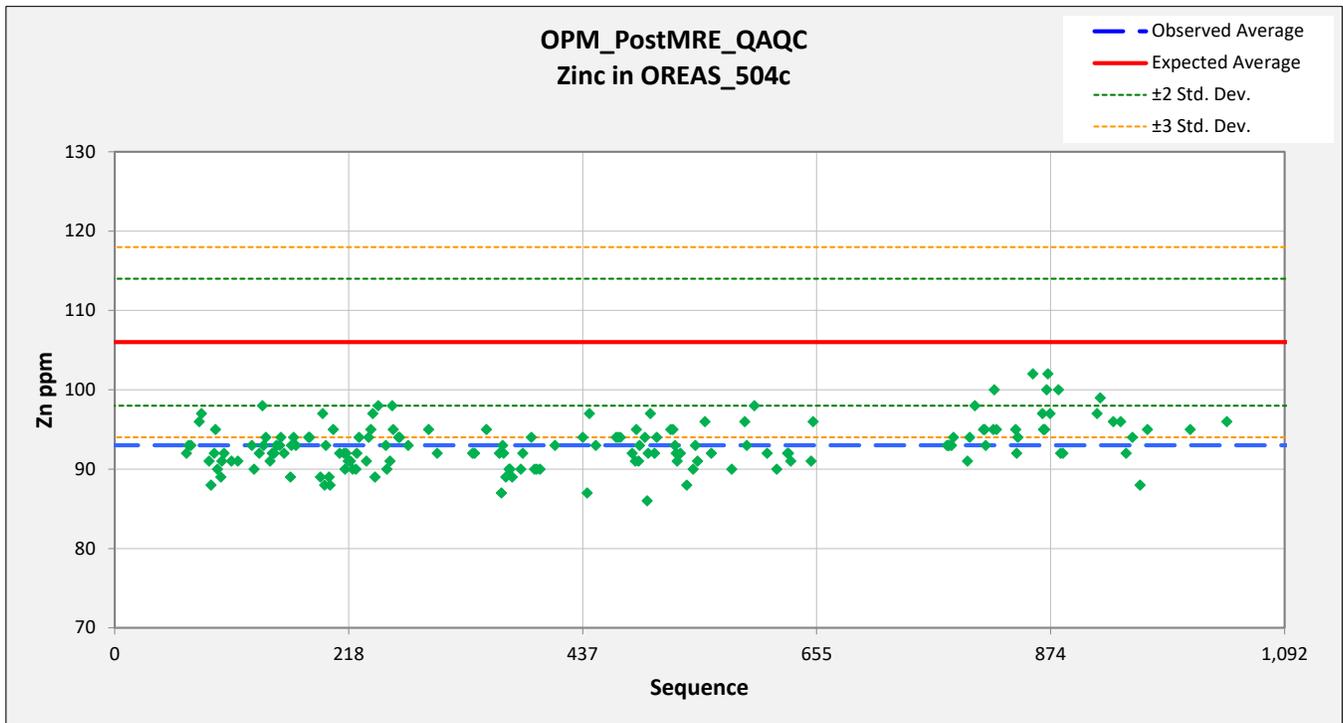


FIGURE K.20 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 505 CRM FOR CU

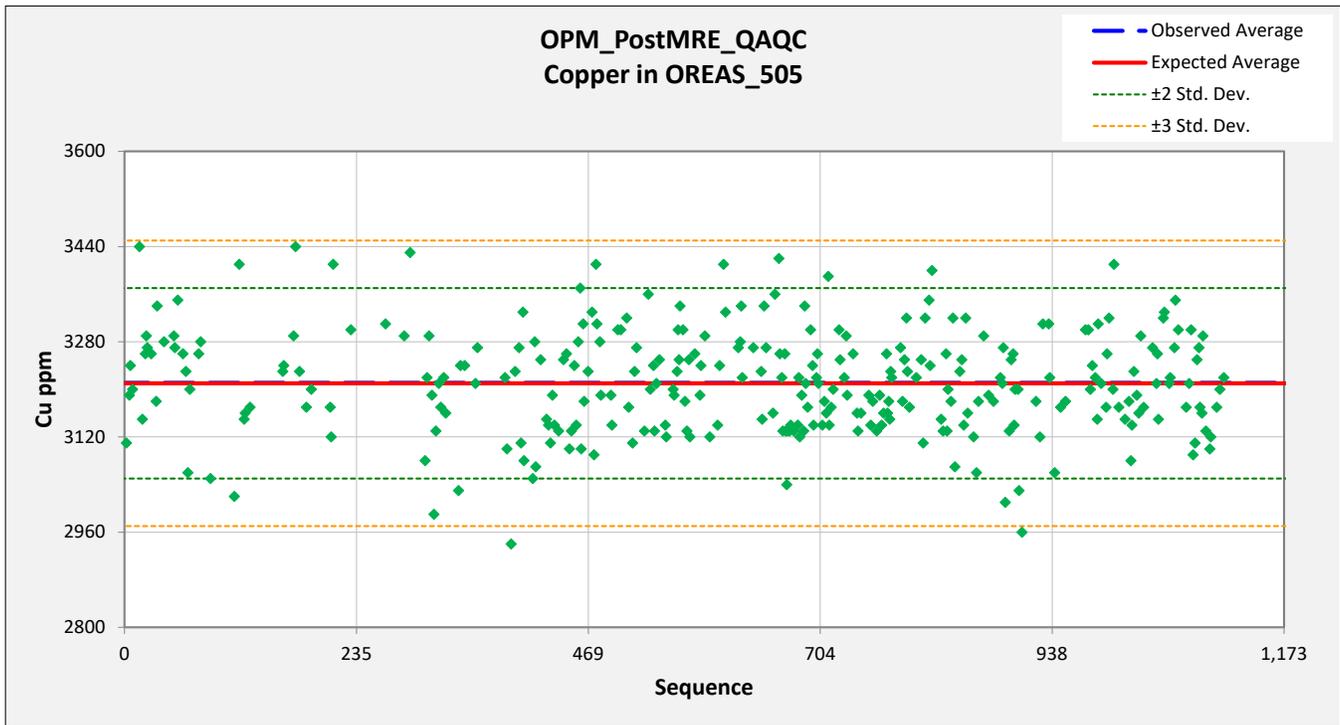


FIGURE K.21 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 505 CRM FOR AU

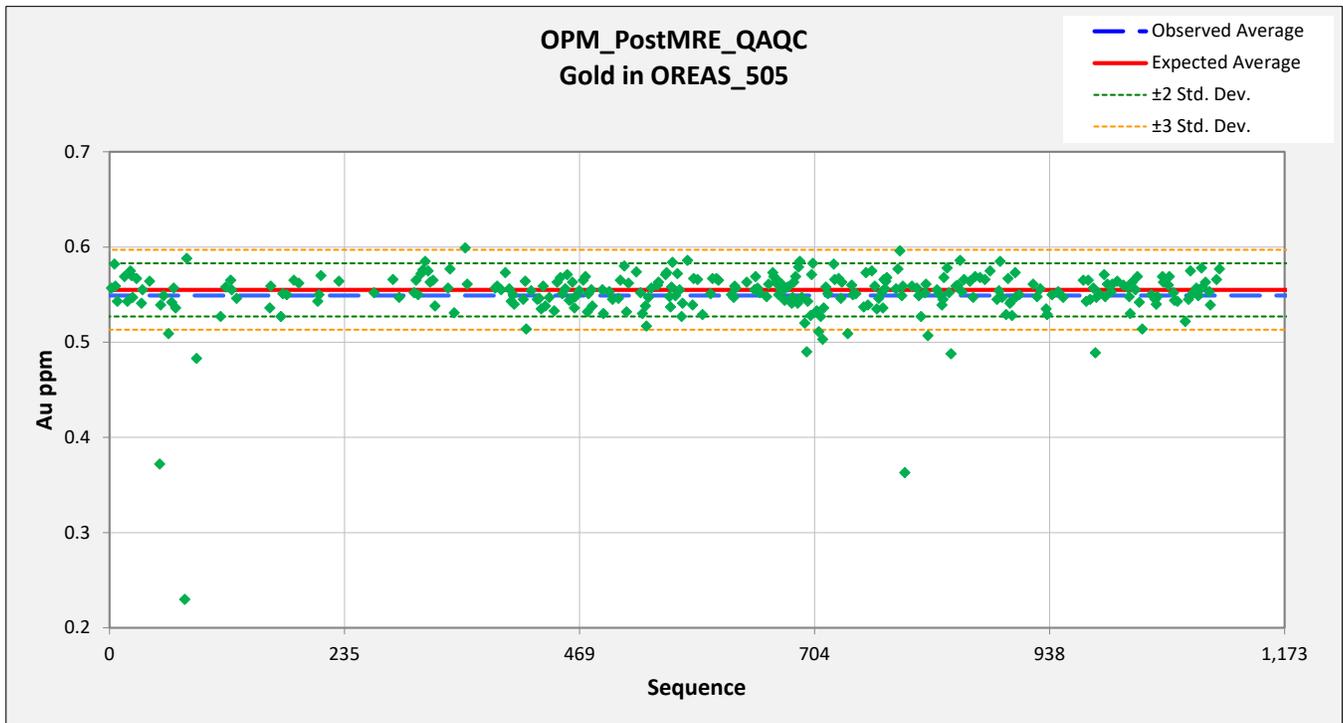


FIGURE K.22 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 505 CRM FOR AG

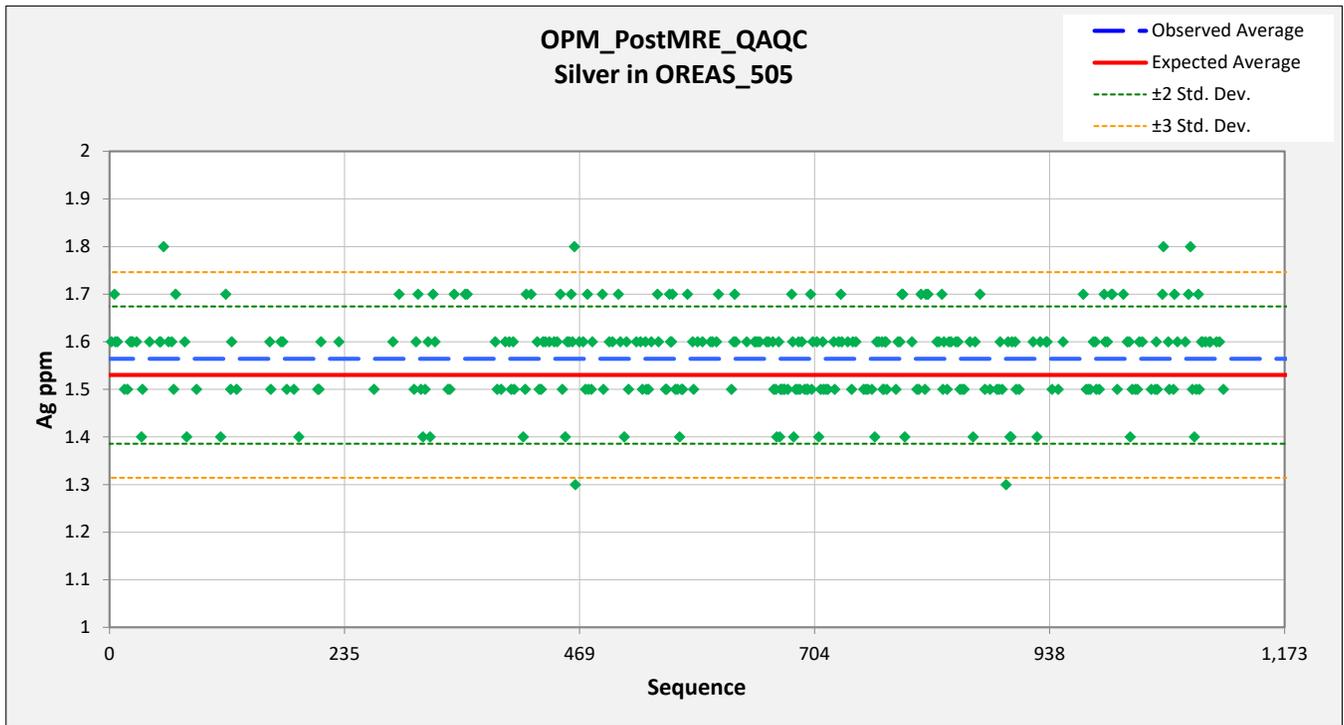


FIGURE K.23 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 505 CRM FOR CO

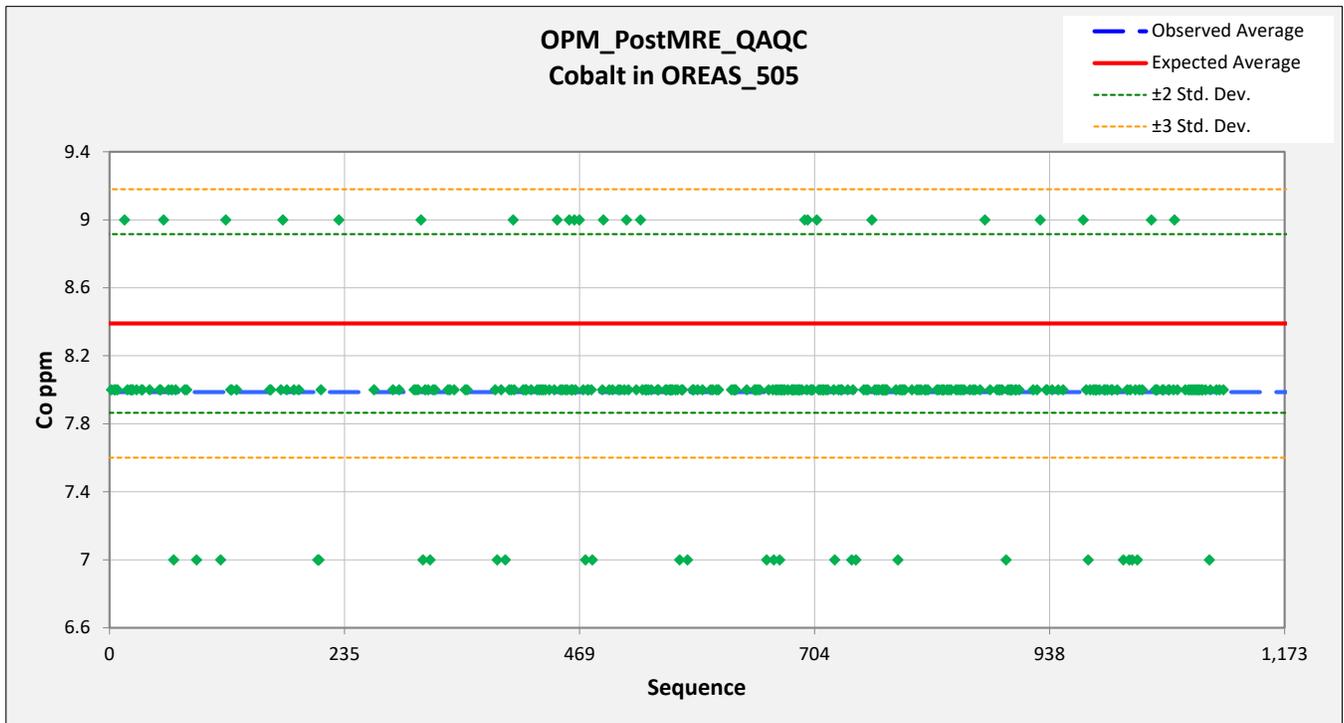


FIGURE K.24 POST-SEPTEMBER 2021 PERFORMANCE OF OREAS 505 CRM FOR ZN

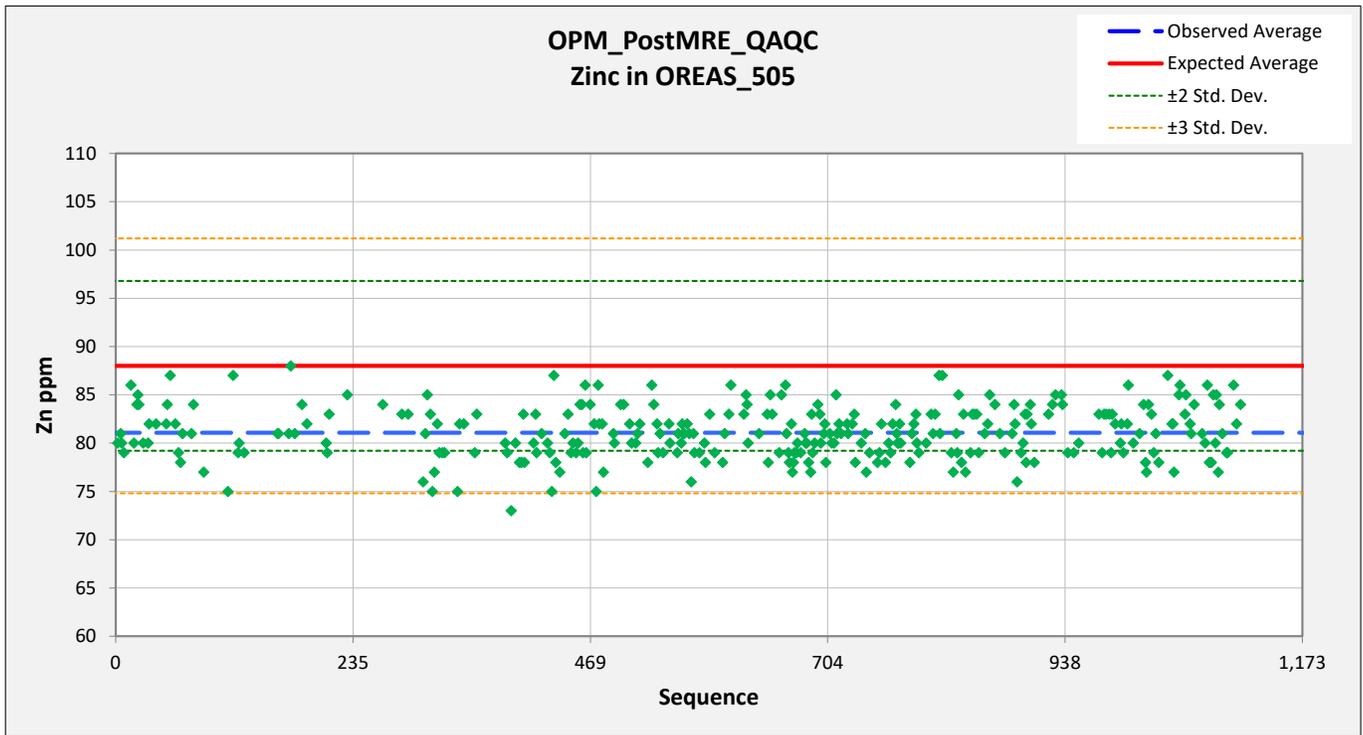


FIGURE K.25 POST-SEPTEMBER 2021 PERFORMANCE OF CDN-CM-44 CRM FOR CU

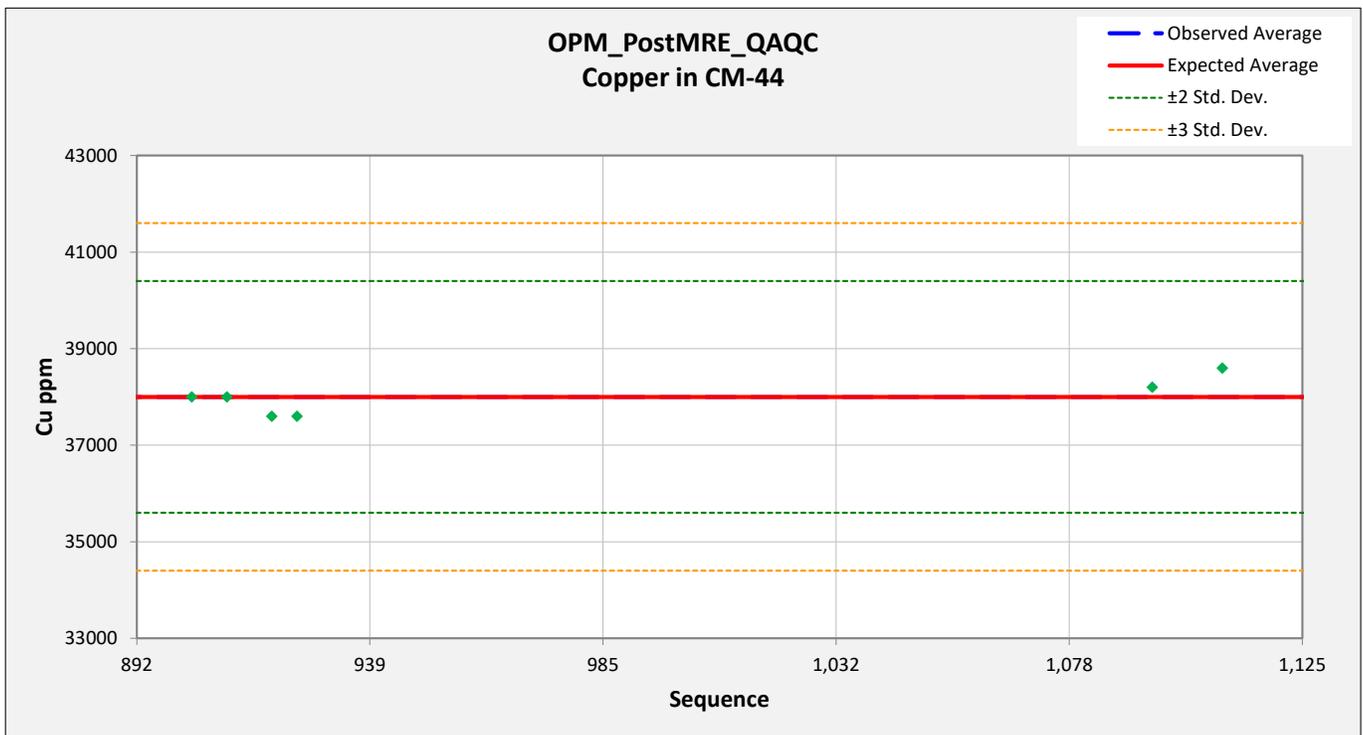


FIGURE K.26 POST-SEPTEMBER 2021 PERFORMANCE OF CDN-CM-44 CRM FOR AU

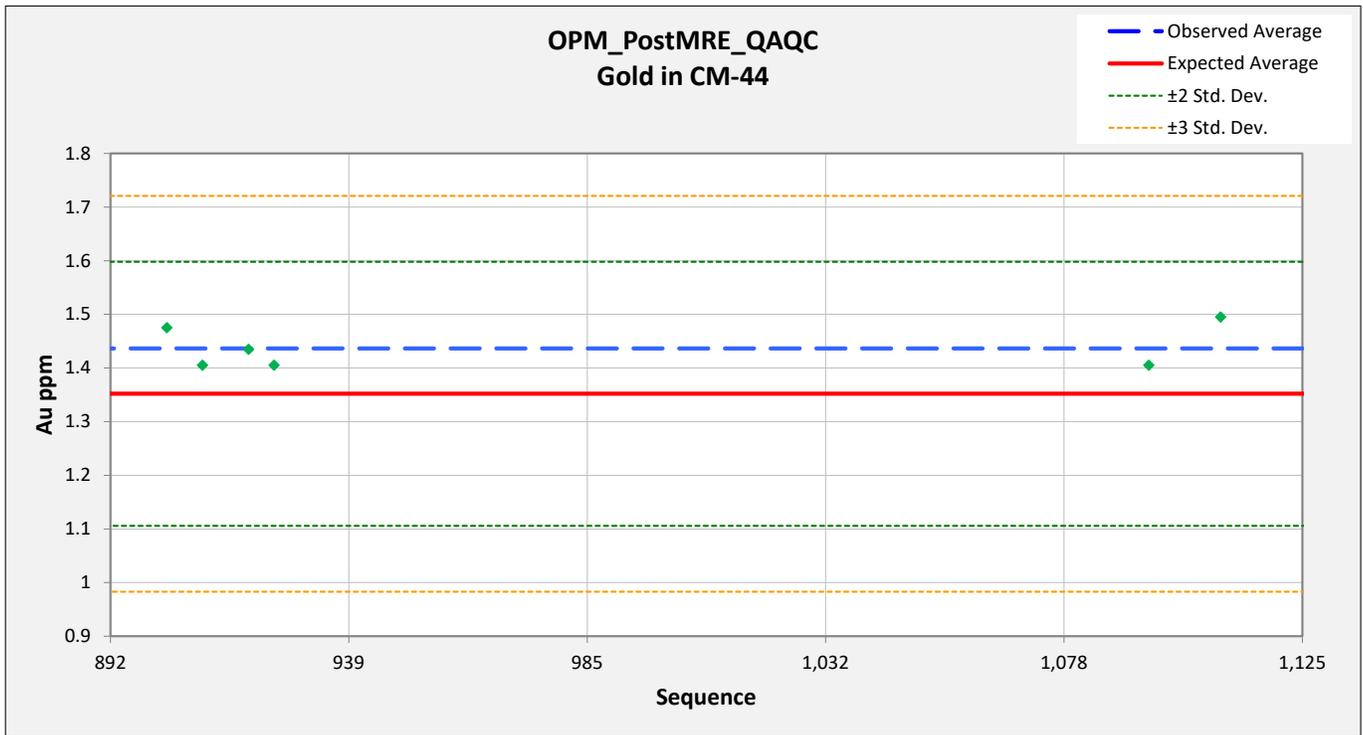


FIGURE K.27 POST-SEPTEMBER 2021 PERFORMANCE OF CDN-CM-44 CRM FOR AG

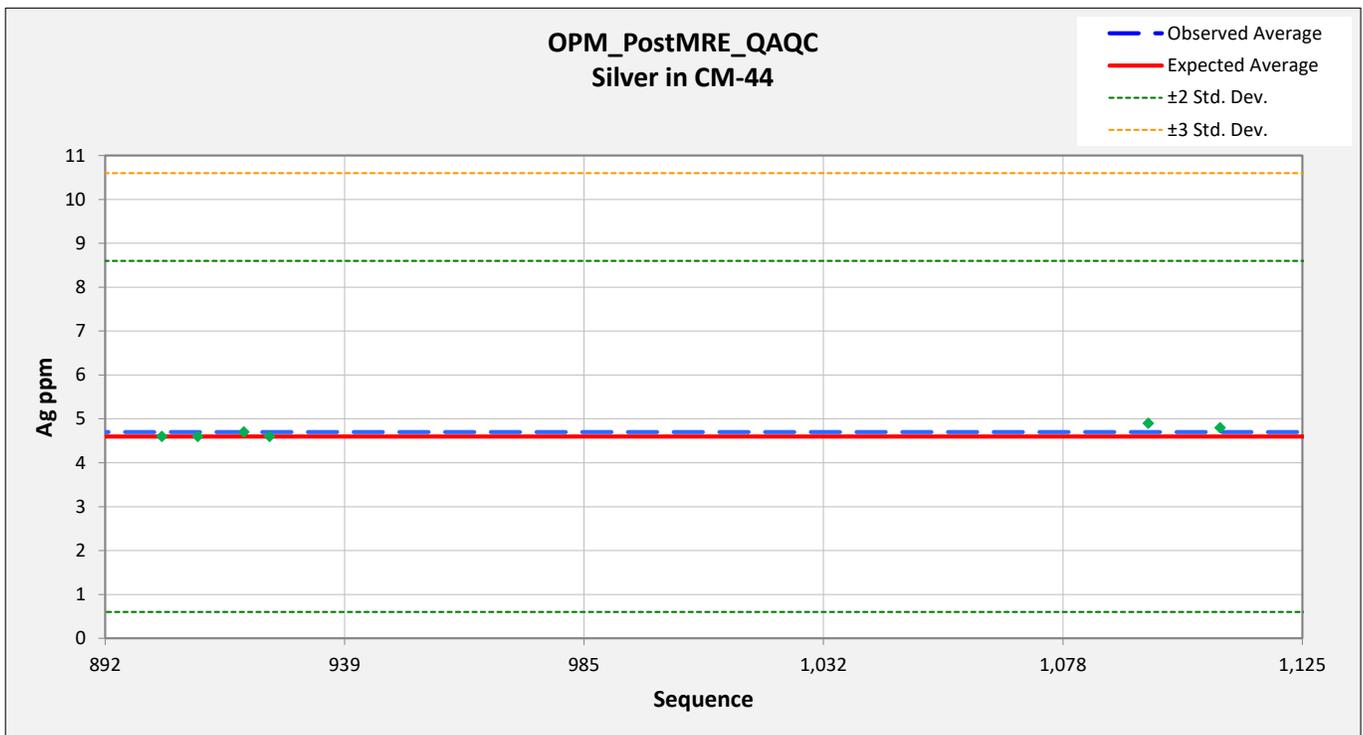


FIGURE K.28 POST-SEPTEMBER 2021 PERFORMANCE OF CDN-CM-44 CRM FOR CO

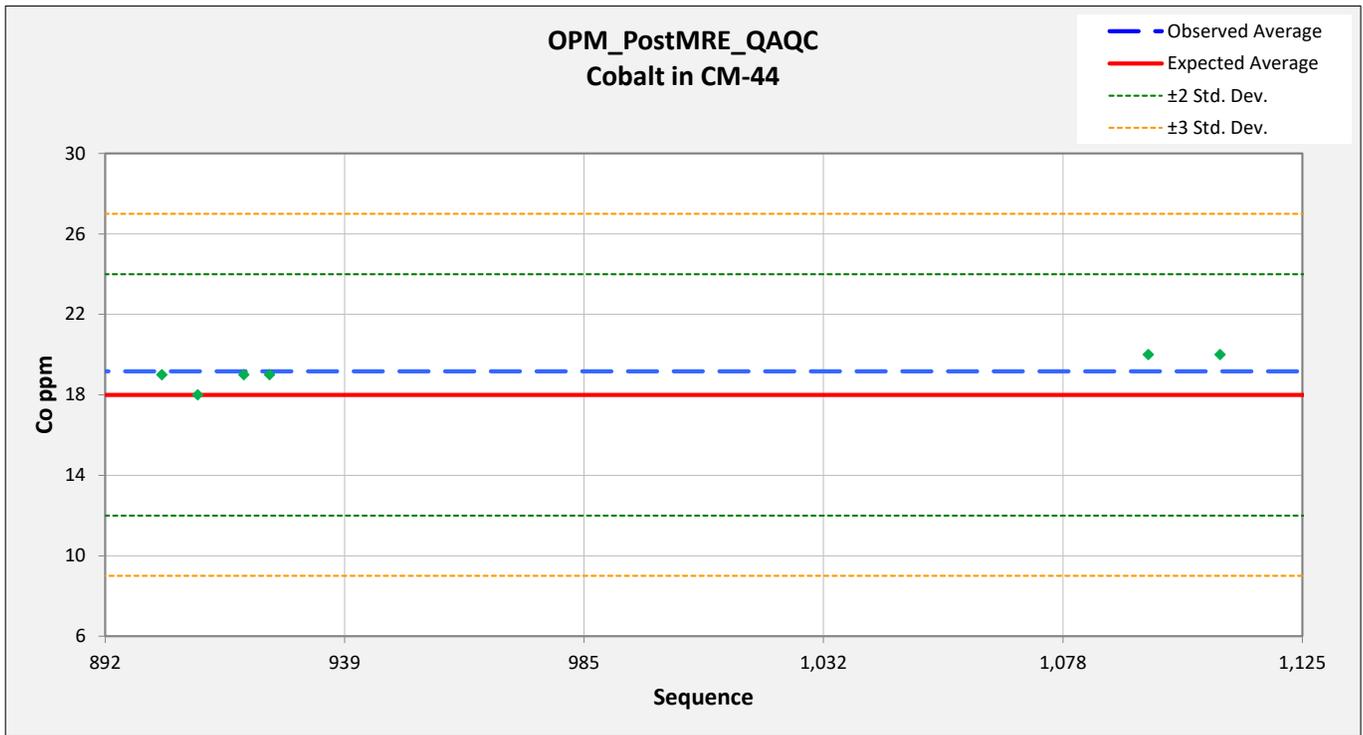
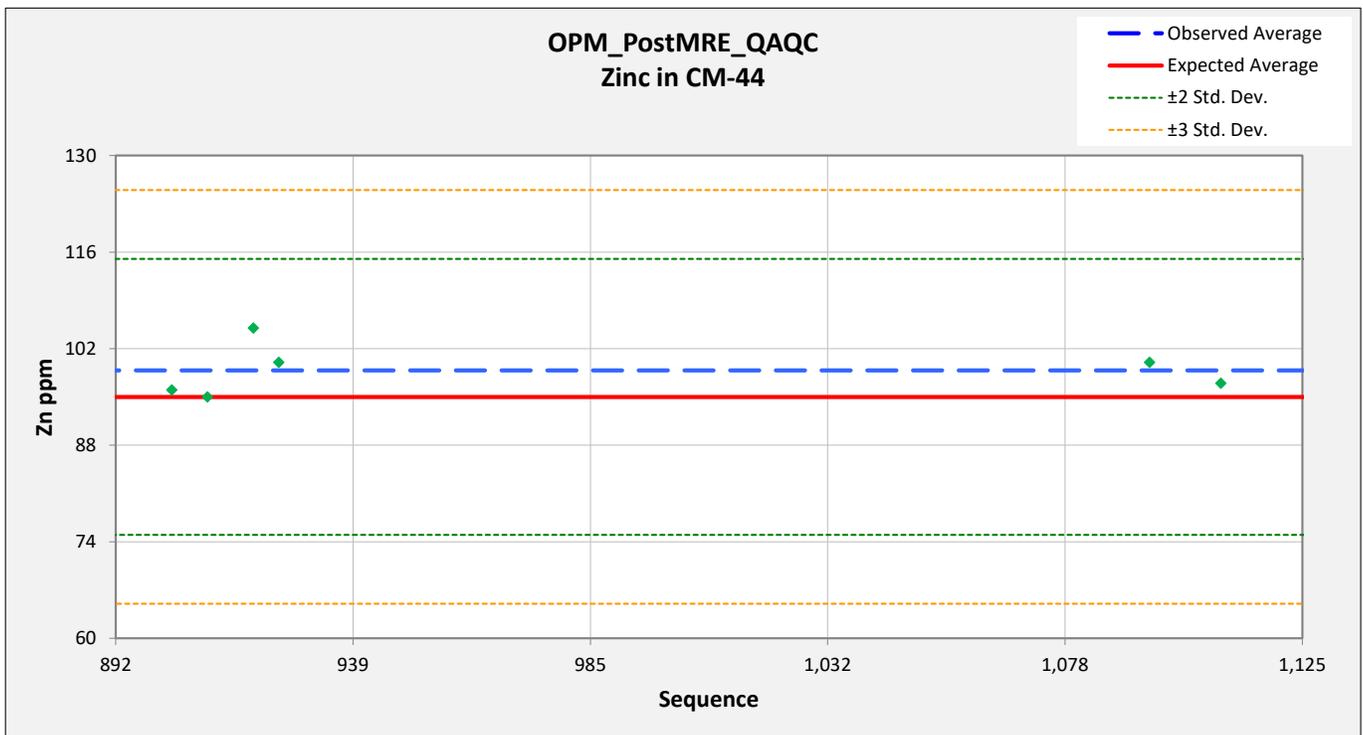


FIGURE K.29 POST-SEPTEMBER 2021 PERFORMANCE OF CDN-CM-44 CRM FOR ZN



APPENDIX L ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

<p style="text-align: center;">TABLE L.1 ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023</p>								
ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
VO21307142	12/25/2021	OPM-21-103	C872962	502c	Low value for Cu. Standard probably 505	Re-label CRM to 505	No further action required	Resolved
VO21307142	12/25/2021	OPM-21-104	C873053	505	Very low value for Cu. Probably a blank	Re-label CRM to BLK	No further action required	Resolved
VO21314757	1/11/2022	OPM-21-110	C873787	505	Very low value for Cu. Following samples C873788 is CRM 505.	Relabel sample C873787 as a sample and re-label C873788 as CRM 505	No further action required	Resolved
VO21307300	1/13/2022	OPM-21-105	C873200	505	Low value for Au ≤ 3 std	Low value for gold CRM and in all surrounding samples and no other failures.	No further action required	Resolved
VO21316073	1/18/2022	OPM-21-111	C874043	505	High value for Ag. Greater than +3 std.	All surrounding assays results for Ag are trace or very low. Failure not	No further action required.	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
						worth correcting.		
VO21319320	1/31/2022	OPM-21-111	C874097	505	Major failure of both CRMs in batch, but gold is acceptable	Request for re-assay all elements except gold.	Re-assay of 5 samples before and 5 samples after CRM returned similar results. Re-imported re-assayed samples. All elements replaced except for Au ppm	Resolved
VO21319320	1/31/2022	OPM-21-111	C874145	505				Resolved
VO21356484	2/7/2022	OPM-21-114	C874584	502c	Zn value ≤ 3 std, but no other failures	CRM value is low and near detection limit	No further action required	Resolved
ML22001529	2/14/2022	OPM-21-119	A0957806	502c	Cu value ≥ 3 std, but no other failures and surrounding values below nominal cut-off grade	Minor failure. No action required.	No further action required	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
ML22001438	2/14/2022	OPM-21-117	A0957536	502c	Co value ≤ 3 std but no other failures.	Minor failure, CRM value near detection limit.	No further action required	Resolved
ML22001449	2/14/2022	OPM-21-117	A0957636	505	Co value ≤ 3 std, but no other failures.	Minor failure, CRM value near detection limit.	No further action required	Resolved
ML22001542	2/15/2022	OPM-21-120	A0957939	502c	Co value ≤ 3 std, but no other failures.	Minor failure, CRM value near detection limit.	No further action required	Resolved
VO22025422	3/10/2022	OPM-22-128	E320646	BLK	Cu value too high (636 ppm)	Minor failure, talk to the lab	No further action required	Resolved
LQ22066442	4/17/2022	OPM-22-143	E360116	BLK	All values are too high	Minor failure, talk to the lab	No further action required	
LQ22066417	4/17/2022	OPM-22-149	E322805	502c	Values too low. Inversion of number with E322804, wrong std, should be 504C	Change it in log.	No further action required	Resolved
Several		several		all	Zinc values are too low	Talk to the lab	No further action required	
LQ22066442	4/29/2022	OPM-22-143	E360115, 117 & +	none	Values do not correspond with the results. More	Talk to the lab	No further action required	

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
					than one sample mixed			
LQ22113073	6/15/2022	OPM-22-179	E325788	505	Value a little low. Nothing around	Minor failure, talk to the lab	No further action required	Resolved
LQ22141867	6/14/2022		E363599	core	Bag open and part of core lost	Analyse what's left	Core cutters notified	Resolved
LQ22152497	7/13/2022	OPM-22-197	E328386	CRM	Wrong CRM name	Change name in log	No further action required	Resolved
LQ22152506	8/11/2022	OPM-22-199	E328541	502c	Wrong CRM name	Change to 504c in log	No further action required	Resolved
LQ22160251	8/11/2022	OPM-22-201	E328717	502c	Wrong CRM name	Change to 504c in log	No further action required	Resolved
LQ22152418	7/12/2022	OPM-22-196	E328080	504c	Wrong CRM name	Change to 505 in log	No further action required	Resolved
LQ22180812	8/6/2022	OPM-22-212	F661962	BLK	High value for Cu ppm. Blank follows sequence of high values	Minor failure. Notify laboratory that blanks are failing. No other action required.	No further action required	
LQ22200336	8/27/2022	OPM-22-215	F705184	505	Gold value 27% below average. No other failure in batch.	Request re-analysis from pulps of sample numbers	Results for Au ppm re-imported and replaced	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
						F705178 to F705198, inclusively.	existing results.	
LQ22200359	8/25/2022	OPM-22-220	F705800 and F705848	BLK	High copper values in blank. High grade samples nearby.	Contamination not excessive given the high grades of adjacent samples. No action recommended.	No further action required	Resolved
LQ22200336	8/27/2022	OPM-22-217	F705284	502c	Zinc value 15% below accepted value. Surrounding samples have very low zinc. Failure is minor.	No action required.	No further action required	Resolved
LQ22200345	8/26/2022	OPM-22-217	F705545	505	Cobalt value 17% below accepted value, but near detection limit. Minor failure	No action required.	No further action required	Resolved
LQ22200336	8/27/2022	OPM-22-215	F705187	505	Cobalt value 17% below accepted value but near detection limit. Minor failure	No action required.	No further action required	Resolved

**TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023**

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
LQ22200400	8/25/2022	OPM-22-214	E323370	505	Cobalt value 17% below accepted value, but near detection limit. Minor failure	No action required.	No further action required	Resolved
LQ22200349	8/24/2022	OPM-22-218	F705680	502c	Cobalt value 17% below accepted value, but near detection limit. Minor failure	No action required.	No further action required	Resolved
LQ22200345	8/26/2022	OPM-22-217	F705485	502c	Cobalt value 17% below accepted value, but near detection limit. Minor failure	No action required.	No further action required	Resolved
LQ22200336	8/26/2022	OPM-22-217	F705284	502c	Cobalt value 17% below accepted value, but near detection limit. Minor failure	No action required.	No further action required	Resolved
LQ22239203	10/7/2022	OPM-22-229	F706711	BLK	High copper values in blank. High grade samples nearby.	Request analysis samples F706706 F706720,	re-of all samples listed and replaced existing values.	Resolved

**TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023**

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
						inclusive, from coarse reject.		
LQ22239263	10/3/2022	OPM-22-231	F707131	BLK	High copper values in blank. High grade samples nearby.	Request re-analysis of samples F707121 to F707140, inclusive, from coarse reject.	Re-imported all samples listed and replaced existing values.	Resolved
VO21317820	9/1/2022	OPM-21-108	C873573	502c	Low copper value, even too low for 505. All elements wrong except gold. Not sample switch. No explanation. Not discovered at the time. Too late to re-assay.	No reasonable action possible. Gold probably OK.	Results questionable except for gold.	Unresolved
ML23034132	3/5/2023	OPM-23-245	G327798	502c	Low value for copper. Probably 505.	Re-label as 505	No further action required	Resolved
VO23057625	3/27/2023	OPM-23-275	G322379	502c	Low value for copper. Probably 505.	Re-label as 505	No further action required	Resolved
VO21307300	1/13/2022	OPM-21-105	C873200	505	Gold is ≤ 3 std but other elements OK. Not discovered in a timely	No reasonable action possible. Copper probably OK.	Results OK except for gold.	Unresolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
					fashion. Too late to fix.			
VO21314757		OPM-21-110	C873787	505	Sample Switch with adjacent sample C873788	Re-Label C873787 as C873788 and vice versa.	No further action required.	Resolved
VO21356484	2/7/2022	OPM-21-114	C874645	505	Gold is ≤ 3 std but all other elements OK. Not discovered in a timely fashion and too late to fix.	No reasonable action possible. Copper probably OK.	Results OK except for gold.	Unresolved
ML21336316	1/30/2022	OPM-21-116	C874782	505	Gold is ≤ 3 std but close and all other elements OK. Not discovered in a timely fashion and too late to fix.	No reasonable action possible. Copper probably OK.	Results OK except for gold.	Unresolved
VO21345146	2/5/2022	OPM-21-121	A0969579	505	Gold is ≤ 3 std but all other elements OK. Not discovered in a timely fashion and too late to fix.	No reasonable action possible. Copper probably OK.	Results OK except for gold.	Unresolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
ML23034132	3/5/2023	OPM-23-245	G327798	502c	Low value for Cu. CRM probably 505	Re CRM to 505	No further action required	Resolved
VO23030592	2/28/2023	OPM-23-259	G321470	505	Low value for Cu. All other elements OK.	Re-analyse Cu only from pulp for samples G321465 to G321475	Samples re-assayed and imported	Resolved
VO23030535	2/28/2023	OPM-23-255	G328339	502c	High value for Au but all other elements OK. Probably a fire assay problem.	Re-analyse for gold only from pulp for samples G328334 to G328344	Samples re-assayed and imported	Resolved
VO23030597	2/28/2023	OPM-23-252	F708294	505	Low value for Ag but close to LDL and other elements OK.	No action necessary	No further action required	Resolved
ML23034149	3/11/2023	OPM-23-247	F708127	504c	Low value for Zn but all other elements OK. Zinc value is low and won't affect results	No action necessary	No further action required	Resolved
ML23035337	3/6/2023	OPM-23-238	G320091	504c	Low value for Zn but all other elements OK. Zinc value is low and won't affect results	No action necessary	No further action required	Resolved

**TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023**

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
VO23052863	3/28/2023	OPM-23-272	F709305	502c	Low value for Cu and Co and high for Ag. CRM probably 505	Re-label CRM to 505	No further action required	Resolved
VO23057626	3/28/2023	OPM-23-277	G322571	505	High value of Ag ≥ 3 std but value near detection limit. Other elements OK.	No action necessary.	No further action required	Resolved
VO23052853	3/28/2023	OPM-23-267	F708693	505	Low value of Co ≤ 3 std but near detection limit. Other elements OK.	No action necessary.	No further action required	Resolved
VO23052859	3/28/2023	OPM-23-269	F708937	505			No further action required	Resolved
VO23052859	3/28/2023	OPM-23-271	F709038	505			No further action required	Resolved
VO23052853	3/28/2023	OPM-23-262	F708653	BLK	Over threshold for copper and high values for cobalt and silver. Adjacent sample (F708654) is likely sample switch.	Re-label F708653 as F708654 and vice versa.	No further action required	Resolved
ML23034094	3/21/2023	OPM-23-240	G327383	166	CRM is actually 505	Change CRM to 505	No further action required	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
ML23034094	3/21/2023	OPM-23-240	G327427	CM-44	CRM is actually 505.	Change CRM to 505	No further action required	Resolved
ML23035385	3/23/2023	OPM-23-246	G320883	505	Gold is ≤ 3 std but all other elements OK.	Re-assay surrounding samples for gold only. Samples G320878 to G320888	Samples re-assayed and imported	Resolved
VO23030535	2/28/2023	OPM-23-255	G328339	502c	Gold is ≥ 3 std but close and other elements all OK.	Re-assay surrounding samples for gold only. Samples G328334 to G328344	Samples re-assayed and imported	Resolved
ML23034119		OPM-23-245	G327710	BLK	Value for cobalt high but other elements acceptable. Not sample switch. No explanation for high cobalt.	No action required.	No further action required	Resolved
LQ22066469	4/20/2022	OPM-22-146	E360532	505	Sample switched with E360531.	Re-label E360532 to E360531 and vice versa	No further action required	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
LQ22113073	6/9/2022	OPM-22-179	E325788	505	Copper value slightly $\leq 3\text{Std}$, but other elements OK and no anomalous values nearby. Not likely to have an impact.	No action required.	No further action required	Resolved
VO23030592	2/28/2023	OPM-23-259	G321470	505	Copper value slightly $\leq 3\text{Std}$, but other elements OK and no anomalous values nearby. Not likely to have an impact.	No action required.	No further action required	Resolved
VO22025422	3/10/2022	OPM-22-128	E320646	BLK	High copper blank but surrounding values very low. No explanation but failure inconsequential.	No action required.	No further action required	Resolved
LQ22066483	4/16/2022	OPM-22-152	E360646	BLK	Moderately high copper blank immediately following sample with 17.5% Cu.	No action required.	No further action required	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
LQ22180812	8/6/2022	OPM-22-212	F661962	BLK	Moderately high copper blank immediately following multiple samples with >1% Cu.	No action required.	No further action required	Resolved
LQ22214976	9/4/2022	OPM-22-223	F706128	BLK	Moderately high copper blank immediately following sample with 10.6% Cu. Next Blank also failed.	Re-assay from Coarse rejects, surrounding samples for both blanks. I.E. samples F706121 to F706133 and F706218 to F706228	Samples re-assayed and imported	Resolved
LQ22214980	9/17/2022	OPM-22-223	F706223	BLK				
LQ22215000	9/10/2022	OPM-22-226	F706377	BLK	High copper and gold blank with elevated copper in surrounding samples	Re-assay from Coarse rejects, surrounding samples. I.E. samples F706372 to F706382.	Samples re-assayed and imported	Resolved
LQ22239263	10/3/2022	OPM-22-231	F707131	BLK	High copper blank with highly elevated copper in surrounding samples	Re-assay from coarse rejects, surrounding samples. I.E. samples F707126 to F707136.	Samples re-assayed and imported	Resolved

**TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023**

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
VO23052850		OPM-23-257	F708388	BLK	Moderately high copper blank immediately following multiple samples with slightly elevated Cu.	No action required.	No further action required	Resolved
LQ22215008	9/17/2022	OPM-22-226	F706451	BLK	Moderately high gold blank immediately following multiple samples high Au.	Originally described as a sample switch but review shows it to be minor failure. No action required.	No further action required	Resolved
LQ22066442	4/17/2022	OPM-22-143	E360116	BLK	Sample switch with adjacent sample E360115	Re-label F360116 to F360115 and vice versa.	No further action required	Resolved
ML22046712	5/3/2022	OPM-22-129	E320824	502c	Zero value for gold due to insufficient sample for analysis.	Minor failure. No action required.	No further action required	Resolved
LQ22119767	6/24/2022	OPM-22-181	E362841	502c	Gold value slightly above +3 std, but other elements all OK.	Minor failure. No action required.	No further action required	Resolved

**TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023**

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
LQ22141888	7/9/2022	OPM-22-193	E363830	504c	Gold assay near to but ≤ 3 std. Other elements OK.	Minor failure. No action required.	No further action required	Resolved
LQ22151575	7/7/2022	OPM-22-190	E327579	504c	Gold assays ≤ 3 std, whereas other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. E327574 to E327584; E363616 to E363626; E320476 to E320486.	Samples re-assayed and imported	Resolved
LQ22141872	7/5/2022	OPM-22-191	E363621	504c				
VO22025405	3/11/2022	OPM-22-127	E320481	504c				
VO21307300	1/13/2022	OPM-21-105	C873200	505	Gold assays ≤ 3 std, whereas other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. C873196 to C873206.	Samples re-assayed and imported	Resolved
VO21356484	2/7/2022	OPM-21-114	C874645	505	Gold assays ≤ 3 std, whereas other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. C874640 to C874650.	Samples re-assayed and imported	Resolved

TABLE L.1
ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
ML21336316	1/30/2022	OPM-21-116	C874782	505	Gold assay near to but ≤ 3 std, but other elements OK.	Minor failure. No action required.	No further action required	Resolved
VO21345146	2/5/2022	OPM-21-121	A0969579	505	Gold assays ≤ 3 std, but other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. A0969574 to A0969584.	Samples re-assayed and imported	Resolved
LQ22199231	8/17/2022	OPM-22-216	F662589	505	Gold assays ≤ 3 std, but other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. F662584 to F662594.	Samples re-assayed and imported	Resolved
LQ22199288	8/18/2022	OPM-22-216	F662793	505	Gold assay near to but ≤ 3 std, but other elements OK.	Minor failure. No action required.	No further action required	Resolved
LQ22199301	8/18/2022	OPM-22-219	F662884	505				
LQ22200400	8/25/2022	OPM-22-222	F706060	505				
LQ22214980	9/17/2022	OPM-22-223	F706260	505				
LQ22215000	9/10/2022	OPM-22-223	F706332	505	Gold assays ≤ 3 std, whereas other elements OK.	Re-assay gold only from pulps for samples surrounding CRMs. F706327 to	Samples re-assayed and imported	Resolved
LQ22238508	9/18/2022	OPM-22-236	F664837	505				
ML23035385	3/23/2023	OPM-23-246	G320883	505				

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ANALYTICAL TABLE OF FAILURES – FALL 2021 TO 2023

ID	Date	Drill Hole Number	Sample Number	Sample Type	Description of Failure	Recommended Action	Follow-up	Status
						F706337, F664832 to F664842 and G320878 to G320888.		
LQ22138724	7/3/2022	OPM-22-189	E327098	BLK	Most likely a sample switch.	Re-label E327098 to E327097 and vice versa.	No further action required	Resolved