Technical Report and Mineral Resource Estimate on the Troilus Gold-Copper Project Quebec, Canada

27.08-2020

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IMPORTANT NOTICE

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Contents

Tables

Figures

Glossary

Units of Measure

Above mean sea level	amsl
Acre	ac
Ampere	A
Annum (year)	a
Billion	B
Billion tonnes	Bt
Billion years ago	Ga
British thermal unit	BTU
Centimetre	cm
Cubic centimetre	cm3
Cubic feet per minute	cfm
Cubic feet per second	ft3/s
Cubic foot	ft3
Cubic inch	in3
Cubic metre	m3
Cubic yard	yd3
Coefficients of Variation	CVs
Day	d
Days per week	d/wk
Days per year (annum)	d/a
Dead weight tonnes	DWT
Decibel adjusted	dBa
Decibel	dB
Degree	°
Degrees Celsius	°C
Diameter	ø
Dollar (American)	US$
Dollar (Canadian)	C$
Dry metric ton	dmt
Foot	ft
Gallon	gal
Gallons per minute (US)	gpm
Gigajoule	GJ
Gigapascal	GPa
Gigawatt	GW
Gram	g
Grams per litre	g/L
Grams per tonne	g/t
Greater than	>

Hectare (10,000 m2)	ha
Hertz	Hz
Horsepower	hp
Hour	h
Hours per day	h/d
Hours per week	h/wk
Hours per year	h/a
Inch	"
Kilo (thousand)	k
Kilogram	kg
Kilograms per cubic metre	kg/m3
Kilograms per hour	kg/h
Kilograms per square metre	kg/m2
Kilometre	km
Kilometres per hour	km/h
Kilopascal	kPa
Kilotonne	kt
Kilovolt	kV
Kilovolt-ampere	kVA
Kilovolts	kV
Kilowatt	kW
Kilowatt hour	kWh
Kilowatt hours per tonne (metric ton)	kWh/t
Kilowatt hours per year	kWh/a
Less than	<
Litre	L
Litres per minute	L/min
Megabytes per second	Mb/sec
Megapascal	MPa
Megavolt-ampere	MVA
Megawatt	MW
Metre	m
Metres above sea level	masl
Metres Baltic sea level	mbsl
Metres per minute	m/min
Metres per second	m/s
Metric ton (tonne)	t
Microns	µm
Milligram	mg
Milligrams per litre	mg/L
Millilitre	mL
Millimetre	mm
Million	M
Million bank cubic metres	Mbm3

Million tonnes	Mt
Minute (plane angle)	'
Minute (time)	min
Month	mo
Ounce	oz
Pascal	Pa
Centipoise	mPa·s
Parts per million	ppm
Parts per billion	ppb
Percent	%
Pound(s)	lb
Pounds per square inch	psi
Revolutions per minute	rpm
Second (plane angle)	"
Second (time)	sec
Specific gravity	SG
Square centimetre	cm2
Square foot	ft2
Square inch	in2
Square kilometre	km2
Square metre	m2
Thousand tonnes	kt
Three Dimensional	3D
Tonne (1,000 kg)	t
Tonnes per day	t/d
Tonnes per hour	t/h
Tonnes per year	t/a
Tonnes seconds per hour metre cubed	ts/hm3
Total	T
Volt	V
Week	wk
Weight/weight	w/w
Wet metric ton	wmt

Abbreviations and Acronyms

Absolute Relative Difference	ABRD
Acid Base Accounting	ABA
Acid Rock Drainage	ARD
Alpine Tundra	AT
Atomic Absorption Spectrophotometer	AAS
Atomic Absorption	AA
British Columbia Environmental Assessment Act	BCEAA
British Columbia Environmental Assessment Office	BCEAO
British Columbia Environmental Assessment	BCEA
British Columbia	BC
Canadian Dam Association	CDA
Canadian Environmental Assessment Act	CEA Act
Canadian Environmental Assessment Agency	CEA Agency
Canadian Institute of Mining, Metallurgy, and Petroleum	CIM
Canadian National Railway	CNR
Carbon-in-leach	CIL
Caterpillar's® Fleet Production and Cost Analysis software	FPC
Closed-circuit Television	CCTV
Coefficient of Variation	CV
Copper equivalent	CuEq
Counter-current decantation	CCD
Cyanide Soluble	CN
Digital Elevation Model	DEM
Direct leach	DL
Distributed Control System	DCS
Drilling and Blasting	D&B
Environmental Management System	EMS
Flocculant	floc
Free Carrier	FCA
Gemcom International Inc.	Gemcom
General and administration	G&A
Gold equivalent	AuEq
Heating, Ventilating, and Air Conditioning	HVAC
High Pressure Grinding Rolls	HPGR
Indicator Kriging	IK
Inductively Coupled Plasma Atomic Emission Spectroscopy	ICP-AES
Inductively Coupled Plasma	ICP
Inspectorate America Corp.	Inspectorate
Interior Cedar – Hemlock	ICH
Internal rate of return	IRR
International Congress on Large Dams	ICOLD
Inverse Distance Cubed	ID3

Land and Resource Management Plan	LRMP
Lerchs-Grossman	LG
Life-of-mine	LOM
Load-haul-dump	LHD
Locked cycle tests	LCTs
Loss on Ignition	LOI
Metal Mining Effluent Regulations	MMER
Methyl Isobutyl Carbinol	MIBC
Metres East	mE
Metres North	mN
Mineral Deposits Research Unit	MDRU
Mineral Titles Online	MTO
National Instrument 43-101	NI 43-101
Nearest Neighbour	NN
Net Invoice Value	NIV
Net Present Value	NPV
Net Smelter Prices	NSP
Net Smelter Return	NSR
Neutralization Potential	NP
Northwest Transmission Line	NTL
Official Community Plans	OCPs
Operator Interface Station	OIS
Ordinary Kriging	OK
Organic Carbon	org
Potassium Amyl Xanthate	PAX
Predictive Ecosystem Mapping	PEM
Preliminary Assessment	PA
Preliminary Economic Assessment	PEA
Qualified Persons	QPs
Quality assurance	QA
Quality control	QC
Rhenium	Re
Rock Mass Rating	RMR '76
Rock Quality Designation	RQD
SAG Mill/Ball Mill/Pebble Crushing	SABC
Semi-autogenous Grinding	SAG
Standards Council of Canada	SCC
Stanford University Geostatistical Software Library	GSLIB
Tailings storage facility	TSF
Terrestrial Ecosystem Mapping	TEM
Total dissolved solids	TDS
Total Suspended Solids	TSS
Tunnel boring machine	TBM
Underflow	U/F

Valued Ecosystem Components	VECs
Waste rock facility	WRF
Water balance model	WBM
Work Breakdown Structure	WBS
Workplace Hazardous Materials Information System	WHMIS
X-Ray Fluorescence Spectrometer	XRF

Forward Looking Statements

This Technical Report, including the economics analysis, contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian securities laws. While these forward-looking statements are based on expectations about future events as at the effective date of this Report, the statements are not a guarantee of Troilus Gold Corp.'s future performance and are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed or implied by such forward-looking statements. Such risks, uncertainties, factors, and assumptions include, amongst others but not limited to metal prices, mineral resources, smelter terms, labour rates, consumable costs, and equipment pricing. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

1 SUMMARY

1.1 Introduction

Troilus Gold Corp. (Troilus) is a Canadian exploration and development company, based in Toronto, Canada, and is publicly-listed on the Toronto Stock Exchange (TSX) (Ticker:TLG). Troilus is focused on the development of the Troilus Gold-Copper Project (Project), Quebec, which includes the historic Troilus Mine. Troilus holds a 100% interest in the mineral rights for the Project.

The Troilus Mine was an open pit operation producing gold, copper, and silver continuously from November 1996 to April 2009. The Troilus Mine produced over two million ounces (oz) of gold and approximately 70,000 tonnes (t) of copper. After the mine ceased production in 2009, the 20,000 tonnes per day (tpd) mill processed low grade stockpiles until June 29, 2010. Following this, the mill was sold and shipped to Mexico and the main camp facilities were dismantled in late 2010.

This Technical Report was prepared by AGP for Troilus to present the results of the updated Mineral Resources on the Project. This Technical Report was prepared in accordance with NI 43-101 and Form 43-101F1. The mineral resources were prepared on the Z87, J4/J5, and Southwest (SW) Zone.

1.2 Property Location and Description

The Troilus Gold Project (Property) is located in central Quebec and is situated approximately 120 km north of Chibougamau. The Troilus Gold Property is defined by the mineral rights that are 100% held by Troilus. The mineral rights for the Property are comprised of a single Mining Lease (*Bail Minier*), and 1,988 mineral claims (*Titres Miniers*) and covers a total area of approximately 107,321 ha. All mineral rights are in good standing.

1.3 History

Prior to 1985, the Project area was subject to regional exploration by Falconbridge Ltd. (now Glencore) and Selco Mining Corp. The Government of Quebec also conducted an airborne over a large area of the eastern portion of the Frotet-Evans belt.

In 1987, mineralization in the Project area was discovered by Kerr Addison and by 1993 a positive feasibility study was issued. The mine started commercial production in October 1996 and operated continuously up to April 2009 and the mill continued to process stockpile material up to June 29, 2010. From 1995 to 2010, approximately 69.6 million tonnes (Mt) averaging 1.00 g/t Au and 0.10% Cu of ore was mined and 7.6 Mt of lower grade mineralization had been stockpiled. A total of approximately 230.4 Mt had been excavated including 18.4 Mt of overburden and 134.7 Mt of waste rock.

1.4 Geology

The Troilus gold-copper deposit lies within the eastern segment of the Frotet-Evans Greenstone Belt (FEGB), in the Opatica Subprovince of the Superior Province in Quebec. The FEGB is largely dominated by tholeiitic basalts and magnesian basalts that occur in association with felsic and intermediate calc-alkaline pyroclastic rocks, lava flows, and local ultramafic layers. Syn- to post-deformational gabbroic to monzogranitic plutonic rocks occur throughout the greenstone belt.

The main mineralized zones at the Troilus Property occur around the margins of the Troilus Diorite, and comprise the Z87, Z87S, and the J zones (comprising J4 and J5). Other important mineralized zones discovered to date include the northern continuity of the J zones, named the Allongé Zone, and the southwestern margin of the metadiorite.

Troilus is primarily an Au-Cu deposit, but contains minor amounts of Ag, Zn and Pb, as well as traces of Bi, Te, and Mo. Gold-copper mineralization at the Troilus deposit comprises two distinct styles, disseminated and vein-hosted. Gold mineralization is spatially correlated with the presence of sulphides, even though the sulphide content does not directly correlate with gold and copper grade. The matrix of the diorite breccia, the diorite and the felsic dikes represent the main host rocks for the mineralized intervals.

1.5 Exploration and Drilling

Since the formation of Troilus, exploration activities have been focussed on exploration targets around the main Z87 and J4/J5 Zones. These targets included areas to the northeast of J4/J5 (J4N or Allongé, L'Ours, Carcajou), southwest of Z87 (Z87S, Z86, SW and Sand Pit)

In 2018 and 2019, field mapping and prospecting work supported Troilus' team to improve the understanding of the lithological and structural controls on gold mineralization across the property and confirmed the overall potential for extending the current known limits of the main mineralized zones.

In 2018, Troilus retained SRK Consulting (Canada) Inc. (SRK) was retained to conduct a structural geology investigation at the Project. The study focussed on the exposed geology in the Z87 open pit and the J4/J5 open pit.

Since 1986, there have been several drilling programs completed on the Property. There was no drilling on the property from 2008 to 2017 and Troilus' drill programs were completed from 2018 to 2020. Troilus completed 91 drill holes totalling 37,510 m in 2018; 75 drill holes totalling 35,685 m from 2019; and 17 drill holes totalling 6,037 in 2020. Most of the 2018 and 2019 drill holes targeted Z87 and the J zones at depth and along strike. In the SW Zone, 24 drill holes were completed, totalling 8,500 m.

The current resource drill hole database contains 829 drill holes totalling approximately 207,945 m where the majority of the drilling targeted Z87, J4/J5 and SW Zones and includes 69 exploration drill holes.

1.6 Mineral Resources

The Mineral Resources for the Project include the three principal mineralized zones: Z87, J4/J5 and SW Zones. The mineral resources were prepared and disclosed in accordance with the CIM Definitions for Mineral Resources and Mineral Reserves (2014). The QP responsible for the resource estimates is Mr. Paul Daigle, géo., Associate Resource Geologist for AGP. The effective date of these mineral resource is 20 July 2020.

The mineral resources were prepared using interpreted mineralized domains at each of the three zones. The resource estimates were completed using Geovia GEMS™ 6.8.3 resource estimation software. The blocks model grades were estimated using ordinary kriging interpolation method using 2m capped composites. Table 1-1 presents a summary of the mineral resources for the Project.

Table 1-1: Mineral Resources for the Troilus Project; combined open pit and underground resources

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (Moz)
Indicated	177.3	0.75	0.08	1.17	0.87	4.30	322.60	6.66	4.96
Inferred	116.7	0.73	0.07	1.04	0.84	2.76	189.73	3.91	3.15

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Open pit mineral resources are reported within optimized constraining shells.
- Open pit cut-off grade is 0.3 gpt AuEQ where the metal equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.0108 * Ag grade
  - SW Zone AuEq = Au grade + 1.2768 * Cu grade + 0.0106 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
  - Z87 Zone 82.5% for Au recovery, 90% for Cu recovery and 76% for Ag recovery
- The resource constraining shells were generated with:
  - Metal Prices: Gold $US 1600/oz, Copper $US 3.25/lb, Silver $US 20/oz
  - Mining Costs:
    J Zone and 87 Zone base cost $Cdn 1.71/t moved,
    SW Zone base cost $Cdn 1.66/t moved
    Incremental cost $Cdn 0.03/t waste moved, $Cdn 0.02/t feed moved
  - Process and G&A Costs: $Cdn 8.44/t processed
  - Wall slopes: varied between 49.5 to 60 degrees depending on pit area and slope sector
  - Metal Recoveries:
    Gold: 90% all zones except in lower grade (Au < 1.2 g/t) portions of SW zone = 88%
    Copper: 90% all zones except in higher grade (Cu > 0.13%) portions of SW zone = 92%
    Silver: all zones 40%
- Underground cut-off grade is 0.9 AuEQ at Z87 Zone below constraining pit
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag; and 1.00 %Cu; all on raw assay values depending on mineralized domain.
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone.

1.7 Conclusions

The Troilus Gold-Copper Project is made up of three main mineralized zones: Z87 Zone, J4/J5 Zone, and the SW Zone. The Z87 Zone and J4/J5 Zone were subject to open pit mining operations between 1996 to 2010. It has been established that there are still significant open pit and underground mineral resources in these zones. The SW Zone, situated approximately 2 km southwest of the Z87 Zone and was the subject of a recent drill program, was found to contain considerable mineralization and a preliminary mineral resource has been established. The gold grades within the interpreted mineralized zones are continuous and may still be open along strike and at depth.

Troilus is primarily a gold-copper deposit, but contains minor amounts of Ag, Zn and Pb, as well as traces of Bi, Te, and Mo. The gold and copper mineralization at the Troilus deposit comprises two distinct styles, disseminated and vein-hosted. Gold mineralization is spatially correlated with the presence of sulphides, even though the sulphide content does not directly correlate with gold and copper grade. The matrix of the diorite breccia, the diorite and the felsic dikes represent the main host rocks for the mineralized intervals.

Between 2018 and February 2020, Troilus completed several diamond drill core programs which support the mineral resources along strike and at depth at the Z87 Zone and the J4/5 Zone; and supports the initial mineral resources in the SW Zone. AGP is satisfied the drill programs conducted by Troilus on the Project meet industry standards and norms and that sample handling, preparation and analyses are appropriate for this style of deposit.

AGP is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

AGP concludes that further exploration and development is warranted and recommended for the Project.

1.8 Recommendations

It is recommended that continued delineation drilling continue at the Z87 and J4/J5 Zones. Specifically, within the area between the two Zone, and at depth and long strike at the Z87 and J4/J5 Zones. Current interpretations indicate a continuity of mineralization between the Z87 and J4/J5 Zone and does not have sufficient drilling information to determine the geology.

Both the Z87 and J4/J4 Zones seem to show continued mineralization along strike and at depth that both infill and delineation drilling would support the current interpretation and possibly show an increase the mineral resources. Approximately 45,000 m of drilling is proposed for these zones: between 85-95 drill holes

It is recommended further drilling continue at the SW Zone. The deposit seems to show continuity of mineralization along strike of both limbs of the interpreted synclinal fold. Both infill and delineation drilling is expected to upgrade the resources to an Indicated category. Approximately 16,000 m of drilling is proposed: between 55-60 drill holes.

Troilus has put forward a proposed regional exploration program that will include airborne and ground geophysical surveys, mapping, and reconnaissance sampling. AGP agrees these exploration activities are appropriate for the continued development of the Property. Approximately 20,000 line km for the airborne geophysical survey is proposed.

The estimated budget for these proposed exploration programs would be approximately $15.8 million.

2 INTRODUCTION

Troilus is a Canadian exploration and development company, based in Toronto, Canada, and is publicly-listed on the TSX (Ticker: TLG). Troilus is focused on the development of the Troilus Gold Project (Project), Quebec, which includes the historic Troilus Mine. Troilus holds a 100% interest in the mineral rights for the Project. The Project is located in central Quebec and is situated approximately 120 km north of Chibougamau.

The Troilus Mine was an open pit operation producing gold, copper, and silver continuously from November 1996 to April 2009. The Troilus Mine produced over two million ounces (oz) of gold and approximately 70,000 tonnes (t) of copper. After the mine ceased production in 2009, the 20,000 tonnes per day (tpd) mill processed low grade stockpiles until June 29, 2010. Following this, the mill was sold and shipped to Mexico and the main camp facilities were dismantled in late 2010.

2.1 Terms of Reference

This Technical Report was prepared by AGP for Troilus to present the results of the updated Mineral Resources on the Troilus Gold Project. This Technical Report was prepared in accordance with NI 43-101 and Form 43-101F1. The mineral resources were prepared on the Z87, J4/J5, and Southwest (SW) Zone. As of the date of this report, the mineral resources presented here are being used in a preliminary economic assessment (PEA) currently underway.

All units of measurement used in this technical report and resource estimate are in metric, unless otherwise stated. All grid references are based on the NAD83 Datum (NAD83) UTM coordinate system. All currency units are in Canadian dollars unless otherwise stated.

2.2 Qualified Persons

The QP responsible for this technical report and mineral resources is Mr. Paul Daigle, P.Geo., Senior Associate Geologist with AGP.

2.3 Site Visit

Mr. Daigle conducted a site visit to the Property from February 18 to February 20, 2020. The Project site was inspected for two days during the site visit. During the site visit, the 2019 – 2020 drill program was in progress on the SW Zone.

Drill core logging, sampling, and storage facilities were inspected during the site visit. The site visit also included verifying drill hole collar locations and a review of drill logs against selected drill core. Mr. Daigle was accompanied on the site visit by:

- M. Bertrand Brassard, Senior Project Geologist for Troilus
- M. Thiago Diniz, Technical Manager for Troilus

2.4 Effective Date

The effective date of the mineral resources for the Troilus Project is 20 July 2020.

2.5 Information Sources and References

The main sources of information in preparing this report are based on information located within internal reports obtained from Troilus. Information, conclusions, and recommendations contained herein are based on a field examination, including a study of relevant and available technical data, including, and not limited to the numerous reports listed in the Reference section. This report is prepared with the most recent information available at the time of study.

AGP validated the resource estimates for the Z87 Zone and J4/J5 Zone originally estimated by Roscoe Postle Associates Inc. (RPA). The resource estimates were described in a report authored by Luke Evans dated December 20, 2020, titled “Technical Report on the Troilus Gold-Copper Project Mineral Resource Estimate, Quebec, Canada” (RPA (2019b). Since the report was published, there has been no further work conducted on the Z87 Zone and J4/J5 Zone.

The review focused on the drill hole database validation, assay validation against the laboratory certificate, wireframe validation, and grade interpolation. The purpose of this review is to validate the current model and provide recommendations for improvement of the grade estimate and/or improve the model classification. AGP accepts the validity of the model, which was not re-interpolated; therefore, the text and tables for these two zones were extracted from the previous NI 43-101 report from RPA (2019b).

All mineral resources described herein have been reported within updated constraining shells.

2.6 Previous Technical Reports

The Troilus Mine and Troilus Gold Project has been the subject of several technical reports. The previous NI 43-101 technical reports are found in the References section and summarized in Table 2-1 below:

Table 2-1: Summary of Previous Technical Reports

Reference	Date	Company	Name
Balint et al., 2003	Apr 24, 2003	Inmet Mining Corp.	Technical Report on the Mineral Resource and Mineral Reserve Estimates at the Troilus Mine, Québec
RPA, 2014	Jun 30, 2014	Copper One Inc.	Technical Report on the Troilus Gold-Copper Mine Mineral Resource Estimate, Quebec, Canada,
RPA, 2016	Jun 30, 2016	Sulliden Mining Capital Inc.	Technical Report on the Troilus Gold-Copper Mine Mineral Resource Estimate, Quebec, Canada,
RPA, 2017	Nov 20, 2017	Pitchblack Resources Ltd.	Technical Report on the Troilus Gold-Copper Mine Mineral Resource Estimate, Quebec, Canada
RPA, 2019a	Jan 1, 2019	Troilus Gold Corp.	Technical Report on the Troilus Gold-Copper Mine Mineral Resource Estimate, Quebec, Canada
RPA, 2019b	Dec 20, 2019	Troilus Gold Corp.	Technical Report on the Troilus Gold-Copper Mine Mineral Resource Estimate, Quebec, Canada

3 RELIANCE ON OTHER EXPERTS

AGP has followed standard professional procedures in preparing the content of this report. Data used in this report has been verified where possible, and this report is based upon information believed to be accurate at the time of completion considering the status of the Troilus Project and the purpose for which the report is prepared. AGP has no reason to believe the data was not collected in a professional manner.

AGP has not verified the legal status or legal title to any claims and the legality of any underlying agreements that may exist concerning the Property. Troilus supplied the list of mineral rights and mineral claim maps presented in this report. AGP has examined the Quebec Ministère de l'Énergie et Ressources Naturelles (MERN) online GIS website (GESTIM) to correlate these mineral rights. The GESTIM website was most recently viewed on 26 July 2020 found here:
https://gestim.mines.gouv.qc.ca/MRN_GestimP_Presentation/ODM02101_login.aspx

4 PROPERTY DESCRIPTION AND LOCATION

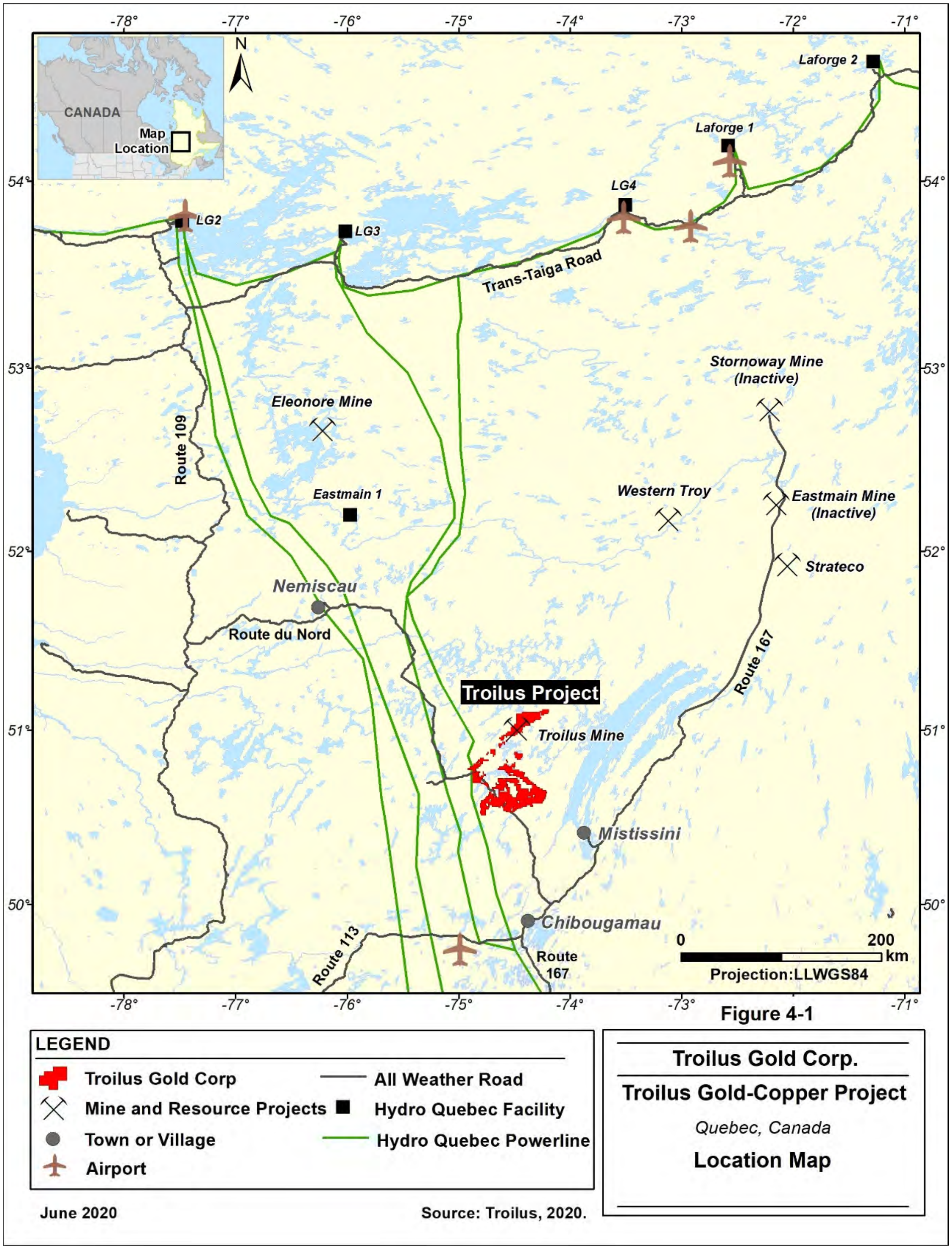
4.1 Property Location and Description

The Troilus Gold Property (Property) is defined by the mineral rights that are 100% held by Troilus. The mineral rights to the Property cover a total area of approximately 107,321 ha.
The Property is located:

- on 1:250,000 scale Mapsheets NTS 023O (Lac Mesgouez) and 023J (Lac Assinica)
- on 1:50,000 scale Mapsheets 32J/15 (Lac Troilus), 32J/16 (Lac Bueil), 32O/01 (Lac Miskittenau), and 32O/02 (Lac Montmort)
- at approximately 51°00' North and 74°30' West
- at approximately 538000 E; 4650400 N, Zone 18U (NAD83 datum) Universal Transverse Mercator (UTM) coordinates
- at approximately 600 km north of Montreal
- at approximately 175 km north (by road) of Chibougamau
- in the Province of Quebec
- in the Administrative Region Nord-du-Québec
- within the Wildlife Reserve (Réserve Faunique) Lacs Albanel Mistassini et Waconichi
- approximately 45 km west of Lac Mistassini

Figure 4-1 below shows the Property location in Quebec.

Figure 4-1: Location Map, Central Québec



Source: Troilus (2020)

The mineral rights for the Property are comprised of a single Mining Lease (*Bail Minier*), and 1,988 mineral claims (*Titres Miniers*). All mineral rights are in good standing.

The mineral rights for the Property are summarized in Table 4-1 below. Figure 4-2 presents a map showing all mineral rights held by Troilus. Figure 4-3 illustrates the mineral rights for the Troilus Gold Copper Project.

Table 4-1: Summary of Mineral Rights for the Troilus Gold Property

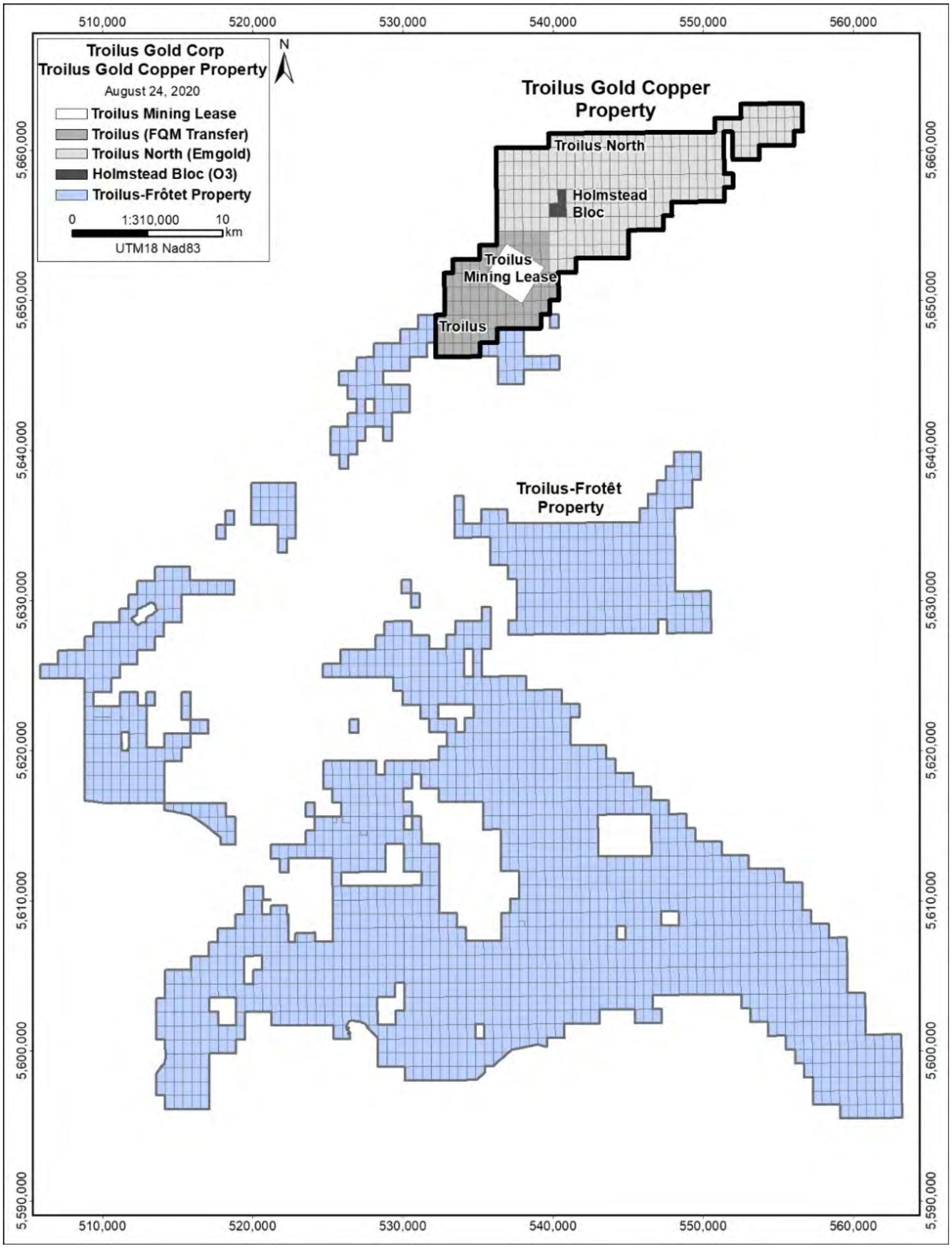
Mineral Rights	Mineral Claim Number*	Count	Expiry Date	Area (ha)
Mining Lease (Bail Minier)	BM 829	1	11 Mar 2026	835.46
Mineral Claims (Troilus Gold Copper Project)	2422145 – 2422147	3	Feb 2022	162.38
	2424713 – 2425732, 2424748 – 2424786, 2424958 – 2425037, 2488059	20 39 80 1	Mar 2022	7576.32
	1133905 – 1134008, 1133913 – 1133926, 1133929 – 1133930, 1133936 – 1133980, 1133982 – 1133985, 1133998 – 1134008, 2488138, 2488294 – 2488297	5 14 2 45 4 12 1 4	Apr 2022	4149.27
	2491523 – 2491527	5	May 2022	270.67
	2499212 – 2499223, 2500001 – 2500004	12 4	Aug 2022	865.28
	2502354 – 2502365	12	Sep 2022	648.78
	2504200 – 2504230	31	Oct 2022	1677.04
Mineral Claims (Troilus Frotet Project)		1,695	Apr 2021 – Jun 2023	91,135.78
	Total	**1,989**		**107,320.98**

*list shows groupings of sequential mineral claim numbers

The Property is divided into two projects: The Troilus Gold Copper Project and the Troilus Frotet Project.
The Troilus Gold Copper Project was acquired through three transactions. The first consisted of the acquisition of the one mining lease and 81 mineral claims, which collectively covered approximately 4,714 ha and included the former Troilus Mine from First Quantum Minerals Ltd. (First Quantum) in April 2018. The second transaction consisted of the acquisition of 209 mineral claims in the north half of the Property, covering approximately 11,309 ha from Emgold Mining Corp. (Emgold) in December 2018, whereby Troilus acquired the Troilus North property located immediately to the north and east of the Troilus property. The next transaction consisted of the acquisition of three mining claims, covering approximately 162 ha from O3 Mining Inc. (O3 Mining) in November 2019. These claims are labelled the Holmstead Bloc (Figure 4-3).

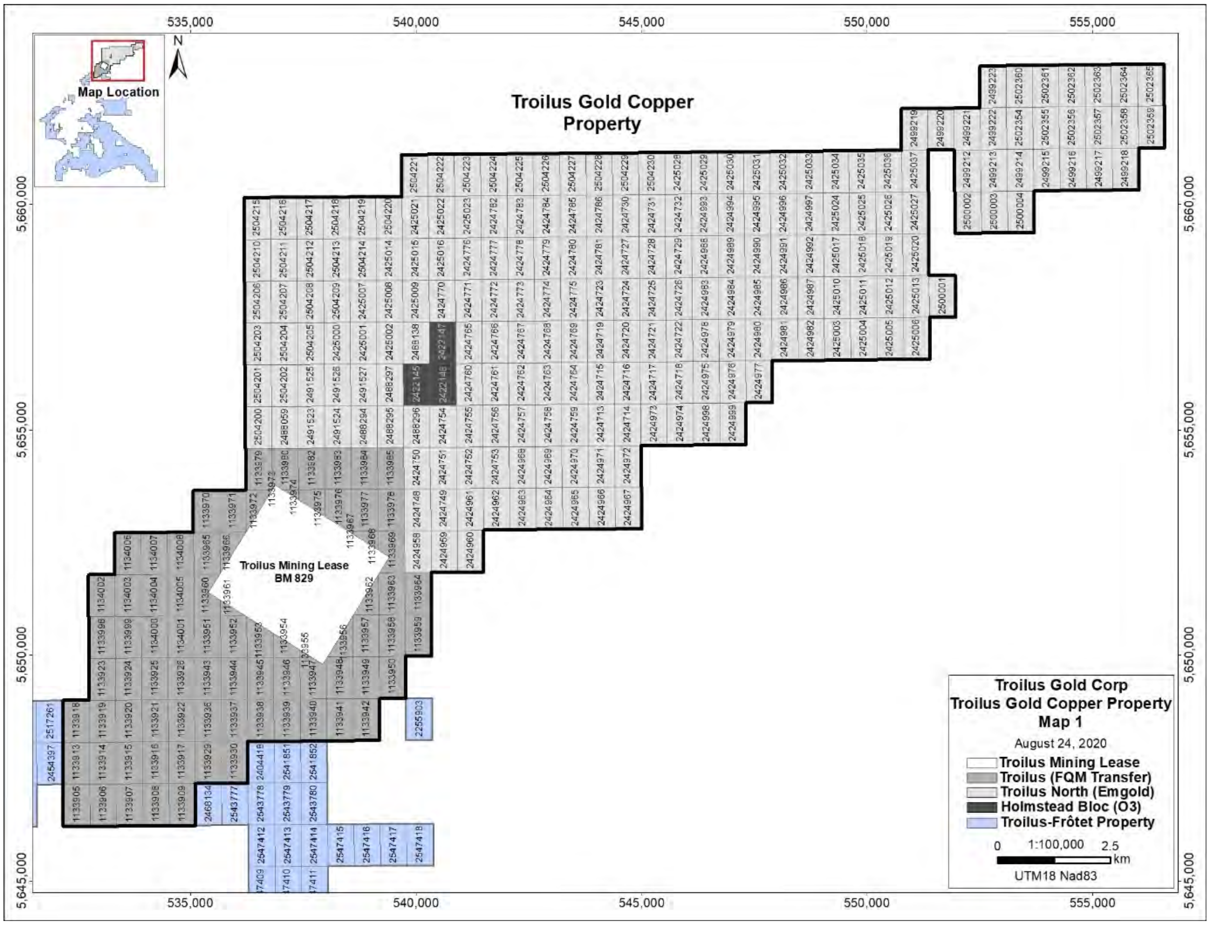
The Troilus Frotet Project consists of 1,695 mineral claims southwest and south of the Property that covers approximately 91,136 ha. In April 2020, Troilus acquired an additional 627 claims from O3 representing 33,410 hectares. In July 2020, the Company acquired 91 mineral claims covering an area of approximately 4,960 ha from Globex Mining Enterprises: and 21 mineral claims covering an area of approximately 1,140 ha from 9219-8845 Qc. Inc. doing business as (dba) Canadian Mining House. All minerals rights are in good standing. Additionally, Troilus has staked a total of 956 mineral claims covering an area of 51,626 ha.

Figure 4-2: Mineral Rights Map; held by Troilus



Source: Troilus (2020)

Figure 4-3: Mineral Rights Map for the Troilus Gold Copper Project



Source: Troilus (2020)

4.2 Project Ownership

On May 2, 2016, a wholly-owned subsidiary of Sulliden Mining Capital Inc., 2507868 Ontario Inc. (Sulliden Sub) entered into the Agreement with First Quantum to purchase a 100% interest in the Project, subject to a sliding scale NSR royalty. First Quantum had acquired the Troilus Mine as part of the takeover of Inmet Mining Corp. (Inmet) in March 2013.

To exercise the option under the Agreement, three cash payments of $100,000 were made to First Quantum and over $1,000,000 was spent by Troilus and its predecessors on engineering and technical studies to evaluate the economic viability of the Project. In addition, Troilus agreed to take on the existing liabilities of the Project.

On October 31, 2017, Pitchblack Resources Ltd. (Pitchblack), Sulliden Sub, and 2513924 Ontario Inc. (251 Ontario) entered into an amalgamation agreement. The amalgamation agreement closed on December 20, 2017 and Pitchblack was renamed Troilus.

Pursuant to the amalgamation agreement, Sulliden Sub, 251 Ontario, and a Pitchblack wholly owned subsidiary were amalgamated to form one wholly-owned subsidiary of Pitchblack. Every four existing Pitchblack shares were consolidated into one new common share of Troilus.

On April 12, 2018, Troilus formally exercised its option to acquire the Troilus property from First Quantum and title was transferred to Troilus. The 81 claims previously owned by First Quantum are subject to a variable NSR to First Quantum of 1.5% or 2.5% depending on whether the price of gold is above or below US$1,250 per ounce. In addition, Nomad Royalty Company. has an additional 1% royalty, acquired from an arm's length private company in October 2019.

On December 5, 2018, Troilus announced that it had completed the acquisition of the Troilus North Project from Emgold. As consideration for the acquisition, Troilus issued Emgold 3,750,000 common shares and paid Emgold $250,000 in cash. The shares were subject to a four-month statutory hold period. Until December 5, 2020, Troilus has a Right of First Refusal (ROFR)whereby Troilus has the opportunity to find a buyer at equal or superior terms in the event Emgold wishes to dispose of the shares. During the ROFR period, provided Emgold holds no less than 5% of Troilus' issued and outstanding shares, Emgold shall have the right to participate in transactions involving the issuance of equity securities of Troilus, in order to maintain its proportional interest in Troilus, subject to certain conditions.

The 209 claims acquired from Emgold Mining (formerly known as the Troilus North project) are subject to the following underlying royalties:

- a 1% NSR to Emgold Gold Corporation that Troilus has the right to purchase for $1,000,000

On November 11, 2019, Troilus announced that it had completed the acquisition of three claims from O3 Mining Inc. (Holmstead Claims, Figure 4-2). As consideration for the acquisition of these three claims, Troilus has issued 300,000 common shares and granted a 2% NSR to O3 Mining Inc. on these three claims. Troilus will have the right to repurchase 1% of the NSR at any time for $1,000,000. In addition, the three claims acquired from O3 Mining Inc. are subject to a 2% NSR to an individual, half of which can be purchased for $1,000,000.

On April 28, 2020, Troilus announced that it had completed the acquisition of a further 627 Claims from O3 Mining Inc. As consideration for the acquisition of the additional O3 Mining Inc. claims, the Company issued 1,700,000 common shares and granted a 2% NSR to O3 on the O3 Mining Inc. claims. Troilus has the right to repurchase a 1% NSR on the O3 Mining Inc. claims at any time for CAD$1,000,000. In addition, the O3 Mining Inc. claims are subject to a 2% NSR granted to Inco Limited (now Vale) on seven of the 627 claims and a 1% NSR granted to Falconbridge (now Glencore) on 73 claims comprising the Beaufield Property.

On July 21, 2020, Troilus announced that it had completed the acquisition of 91 claims from Globex Mining Enterprises Inc. (Globex) as consideration for the acquisition of the Globex claims Troilus issued 350,000 common shares and granted a 2% Gross Metals Royalty ("GMR") to Globex on the Globex claims. Troilus has the right to repurchase a 1% GMR on the Globex claims at any time for CAD$1,000,000. Troilus also announced that it had completed the acquisition of 21 claims from 9219-8845 Qc. Inc. dba Canadian Mining House ("CMH"). As consideration for the acquisition of the CMH claims Troilus paid cash consideration of CAD$69,000 and granted a 1% NSR to CMH on the CMH claims. Troilus has the right to repurchase a 0.5% NSR on the CMH claims at any time for CAD$500,000 and to purchase the remaining 0.5% NSR on at any time for CAD$1,500,000.

4.3 Quebec Mineral Tenure

In Quebec, the Mining Act (Loi sur les mines) regulates the management of mineral resources and the granting of exploration rights for mineral substances during the exploration phase. It also deals with the granting of rights pertaining to the use of these substances during the mining phase. The Mining Act establishes the rights and obligations of the holders of mining rights to ensure maximum development of Québec's mineral resources (website: Quebec Mining Act).

In Quebec, mineral claims have pre-established positions and a legal survey is not required. A map designated claim is valid for two years and can be renewed indefinitely, subject to the completion of necessary expenditure requirements. The map designated mineral claims are approximately 54 ha but may be smaller due to where other rights supersede the claim. Each claim gives the holder the exclusive right to explore for mineral substances, except sand, gravel, clay, and other unconsolidated deposits, on the land subject to the claim. The claim also guarantees the holder's right to obtain an extraction right upon the discovery of a mineral deposit. Ownership of the mining rights confers the right to acquire the surface rights.

Mining Leases (Baux Miniers) are initially granted for a 20 year period. The mining lease can be renewed for additional ten year periods.

4.4 Surface Rights

In addition to the surface rights covering the mining lease, there are surface right leases covering a number of areas with roads and infrastructure. The surface rights renewal fee for the mining lease totals more than $50,000 per year.

Troilus has complete access to all of the Property.

4.5 Royalties and Encumbrances

4.5.1 Royalties

The Royalties specifically affecting the Project are presented below.

The 81 claims previously owned by First Quantum are subject to a variable NSR to First Quantum of 1.5% or 2.5% depending on whether the price of gold is above or below US$1,250 per ounce. In addition, Nomad Royalty Company has an additional 1% royalty, acquired from an arm's length private company in July 2020.

The 209 claims acquired from Emgold Mining Corp. (Emgold) (formerly known as the Troilus North project) are subject to the following underlying royalties:

- a 1% NSR to Emgold that Troilus has the right to purchase for $1,000,000

The three (3) mineral claims acquired from O3 Mining Inc. in November 2019, the Holmstead Bloc, are subject to the following royalties:

- a 2% NSR to O3 Mining Inc. that Troilus has the right to repurchase 1% of the NSR at any time for $1,000,000
- a 2% NSR to an individual, that Troilus has the right to repurchase 1% of the NSR at any time for $1,000,000

The 627 claims acquired from O3 Mining Inc. in April 2020 are subject to the following royalties:

- 2% NSR to O3 Mining Inc., half of which can be purchased for $1,000,000
- 2% NSR granted to Inco Limited (now Vale) on seven of the 627 claims
- 1% NSR granted to Falconbridge (now Glencore) on 73 claims comprising the Beaufield Property

The 21 claims acquired from Canadian Mining House in July 2020 are subject a 1% NSR to CMH, 0.5% of which can be purchased by Troilus for $500,000 and 0.5% of which can be purchased by Troilus for $1,500,000.

The 91 claims acquired from Globex in July 2020 are subject to a 2% GMR (Gross Metal Royalty) to Globex, 1% of which can be purchased by Troilus at any time for $1,000,000.

4.5.2 Mine Restoration Plan

In 2007, the site restoration work began by Inmet with the re-vegetation of areas no longer used by Troilus (Figure 4-4 to Figure 4-7). The dismantling, cleaning, and grading work has largely been completed. Fertilization and seeding work is on-going, particularly in the tailings area. A water treatment plant has been functional since the end of 1998, after initial operation revealed suspended solid control problems. It uses a new technology (ACTIFLO) based on polymer addition and agitation followed by high speed sand assisted lamellar decantation and reduces suspended solids to concentrations below 15 ppm, the monthly average regulation limit. The length of time the water treatment plant will be required for is unclear.

The first version of the mine restoration plan was filed with the Ministère des Ressources Naturelles et de la Faune (MRNF) in 1996, followed by a first revision in 2002 and a second revision five years later in 2007.

The current mine restoration plan was produced by Genivar Inc. (Genivar) in November 2009 (Genivar, 2009). This restoration plan took into consideration the previous versions, however, was a completely new plan including the recent additional studies updating the information regarding the hydrology and hydrogeology, the acid rock drainage, the Phase 1-type site characterization, and the progressive restoration work carried out in 2007, 2008, and 2009. The Cree Nation of Mistissini (the Mistissini Cree) community was consulted throughout the process. The closure plan for the Troilus Mine was approved by the Quebec Ministry of Sustainable Development, Environment and Parks (Certificate of Authorization No. 3214-14-025) pursuant to modifications made November 3, 2010 and May 23, 2012. Surface and groundwater water samples are taken at regular intervals at a number of monitoring sites on the property and annual reports summarizing the results are submitted to the MRNF and the Ministère de l'Environnement et de la Faune (MDDEP).

Genivar (2009) estimated that the site restoration work would be completed in 2012 and that the post-restoration monitoring program would continue until 2016. AGP notes that the site restoration work is ongoing and may take longer than anticipated. AGP recommends that Troilus re-assess the timing and costs related to site restoration and monitoring and recommends an environmental expert be retained to review ongoing monitoring and site restoration work.

Figure 4-4: Troilus Z87 and J4 Open Pits and Waste Dumps; looking northwest

Source: Troilus (2018)

Figure 4-5: Troilus Z87 Open Pit; looking south

Source: Troilus (2018)

Figure 4-6: Troilus J4 Open Pit; looking north

Source: Troilus (2018)

Figure 4-7: Troilus J4 Open Pit; looking northwest

Source: Troilus (2019)

4.6 Permits

No permits are required to conduct exploration activities on the Property other than a permit for tree cutting pertaining to the installation of drill roads and drill setups. The permit for tree cutting is issued by the Ministère des Forêts, de la Faune et de Parcs (MFFP).

4.7 Environmental Liabilities

AGP is unaware of any environmental liabilities or other factors and risks that may affect access, title, or ability that would prevent Troilus from conducting exploration activities on the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Project is located 175 km by road, north of Chibougamau. From Chibougamau, the Project is easily accessed by driving 23 km east and northeast along 3e Rue and Highway 167, turning north on Route du Nord for approximately 108 km: and turning east and northeast along the mine access road (R1047) for roughly 44 km. Highway 167 is paved and in good condition. The Route du Nord and mine access road are well maintained year-round. The drive from Chibougamau is typically 2 hours.

There are regularly scheduled flights to Chibougamau from Montreal however, at the time of writing the flights are suspended due to the Covid-19 pandemic.

5.2 Climate

The regional of the Property is situated in a Continental Subarctic climate (Dfc; Köppen climate classification) characterized by long cold winters and short mild summers. Mean temperatures range from -20°C in January to 16°C in July. Mean annual precipitation ranges from 51 mm in February to 106 mm in August (Mistissini; worldclimate.com).

Exploration and mining activities may be carried out all year-round.

5.3 Local Resources and Infrastructure

The nearest town to the Property is Mistissini, a Cree community located approximately 90 km southeast of the mine. There are limited services available at Mistissini. In June 2018, Troilus opened an office at Mistissini. The provides a forum for exchanging information and liaising with the Cree on a variety of social, environmental, and economic aspects of the Project, in addition to the potential for future training, employment, and business opportunities. In October 2018, Troilus opened an exploration office in Chibougamau.

Chibougamau, population approximately 7,500 (est. 2016) is the largest town in Nord-du-Quebec, and offers most services, supplies and fuel required for the Project. Chibougamau is a well-established mining town and has a well-developed local infrastructure, services, and a mining industry workforce.

The Property is connected to the provincial hydroelectric grid via a 137 km 161 kV power line. Water on the Property is abundant and available for exploration activities.

Politically, the province is very supportive of mining. The Quebec government has demonstrated a will to encourage the development of natural resources through expeditious permitting, title security, and financial incentives.

Troilus maintains local infrastructure around the historic mine site. The key current infrastructure includes:

- a 50-person camp; accommodation and kitchen
- exploration office building
- core logging and sampling facility

- outdoor core storage area
- garage for snow removal and road maintenance contractor
- garage for site restoration employees
- electrical transformer station
- drinking water tank and pump house
- tailings water treatment plant
- a number of tailings water pump houses
- gatehouse and gate

In addition to the surface rights covering the mining lease, there are surface right leases covering a number of areas with roads and infrastructure. The extent of the surface rights was sufficient to operate the mine in the past, however, additional surface rights may be as mineral resources are added to the current Project.

5.4 Physiography

The Project area is primarily covered by black spruce forests, swamps, and lakes. The vertical relief in the area is moderate, between 370 m and 500 m above sea level (mASL). The historic Troilus Mine is situated on the western flank of a 500 m tall hill at a mean altitude of 375 mASL. Overburden consists of a thick layer (>10 m) of fluvio-glacial till. Outcrops are sparse, and very large boulders sitting on surface are common.

5.5 Sufficiency of Surface Rights

Troilus has sufficient surface rights to access and conduct exploration activities on the Property.

6 HISTORY

6.1 Regional Exploration, 1958 – 1983

Initial exploration in the area began in 1958 following the discovery of many erratic blocks containing copper and nickel anomalies. Some occurrences of copper and zinc were discovered between 1958 and 1967, including a massive sulphide deposit at Baie Moléon discovered by Falconbridge Ltd. in 1961. In 1971, the Lessard deposit was discovered by Selco Mining Corp. near Lac Domergue. It was geologically similar to Baie Moléon, consisting of massive sulphides. Following this discovery, an electromagnetic (EM) and magnetic geophysical survey was carried out over the Troilus and Frotet Lake area; however, this survey did not lead to any new significant discoveries.

The Baie Moléon and Lessard discoveries, located southwest of the Troilus deposit, improved the geological understanding of the Frotet-Evans greenstone belt, and opened the area to further exploration for base metal deposits.

In 1983, the results of an airborne INPUT survey carried out over a large area of the eastern portion of the Frotet-Evans belt were published by the Government of Quebec. Some exploration work was conducted following this survey; however, no important discoveries were made.

6.2 Exploration and Development, Troilus Mine, 1985 -2010

Table 6-1 below presents a summary of the exploration and development history of the Troilus Mine from 1985 to 2010.

Table 6-1: Summary of History of the Troilus Mine . 1985 - 2010

Date	Description
1985	Kerr Addison stakes over 1,500 claims in the Troilus area.
1987	Kerr Addison stakes Troilus Mine area and discovers gold and copper.
1988	Minnova options 50% interest from Kerr Addison and becomes operator.
December 1991	Kilborn Inc. Pre-Feasibility Study is negative (7,500 tpd).
February to May 1993	Metall acquires 100% interest in Troilus.
August 1993	Kilborn-Met-Chem-Pellemon Feasibility Study is positive (10,000 tpd).
September 1994	Metallgesellschaft AG sold its entire 50.1% interest in Metall Mining Corporation through the public sale of its shares.
Late 1994	Construction commenced.
May 4, 1995	Metall changed its name to Inmet.
1995	44 km access road from Route du Nord and a 137 km power line and two substations were completed.
October 1996	Construction completed.
November 1996	Production at the Troilus Mine starts.
April 1997	Mill achieves 10,000 tpd.
April 1998	Met-Chem 15,000 tpd mill expansion Feasibility accepted.
1999	Mill achieves 15,000 tpd.
2002	Mill achieves 16,000 tpd.
2004	Met-Chem 20,000 tpd mill expansion Feasibility accepted.
2005	Mill achieves 20,000 tpd.
2007	Underground ramp stopped at 519.1 m from portal on January 22, 2007.
2008	Mining at J4 Pit completed in May 2008.
2008	Dumping waste backfill at south end of J4 pit begins in April 2008.
2009	Mining at Z87 Pit completed, last truck load on April 13, 2009.
2010	Mill stopped on June 29, 2010.
2010	Mill sold and shipped to Mexico in September 2010.
2010	Camp sold on November 19, 2010 and subsequently dismantled.

6.2.1 Ownership History

Kerr Addison Mines Ltd. (Kerr Addison) staked two large blocks of claims in 1985 and 1987 that included the Project area. In 1988, Minnova Inc. (Minnova) became operator in a 50-50 joint-venture with Kerr Addison.

In February 1993, Metall Mining Corporation (Metall) acquired Minnova's interest and, in May 1993, Metall purchased all of Kerr Addison's mining properties. On May 4, 1995, Metall changed its name to Inmet Mining Corp. (Inmet).

Inmet was acquired by First Quantum in March 2013. On April 8, 2014, Copper One entered into a definitive purchase agreement with FQM (Akubra) Inc., a wholly-owned subsidiary of First Quantum, to acquire a 100% interest in the past producing Troilus Mine, however, the purchase was not completed.

6.2.2 Kerr-Addison Corp. and Minnova, 1985 – 1993

In 1985, Kerr Addison acquired a large block of claims following a geological mapping program by the Quebec Ministry of Natural Resources that indicated good potential for gold and base metal mineralization. More geochemical, geophysical, and geological work was carried out by Kerr Addison in 1985 and 1986. Drilling began in 1986 with 24 holes totalling 3,590 m, which led to the discovery of Zone 86 (Z86).

In 1987, more claims were added to the property to the north of the Z86 drilling, where the former Troilus Mine is currently located. A large gold float dispersion train was found by prospecting and 26 diamond drill holes totalling 4,413 m were completed. Hole KN-12, collared immediately up-ice from a glacial float dispersion train, intersected significant gold-copper mineralization over great widths, which turned out to be part of Z87, named after the year of its discovery.

In 1988, 27 diamond drill holes totalling 6,567 m were completed. Initial drill testing of a nearby weak horizontal loop electromagnetic (HEM) anomaly intersected anomalous gold-copper mineralization in what was later confirmed to be J4 in 1991. The J4 name originates from its location on the "J" exploration grid. On October 1, 1988, a 50-50 joint-venture was formed between Kerr Addison and Minnova where Minnova became the operator.

Between 1989 and 2005, fourteen drilling programs comprising 887 diamond drill holes for a total of 159,538 m were carried out on the property. The drilling outlined five main areas of gold mineralization (Z87/Zone 87 South (Z87S), Z87 Deep, J4, J5, and Southwest), and a number of isolated gold intersections.

In 1991, a semi-permanent camp, which could accommodate 30 to 50 people, was set up between Z87 and J4. During 1991, a bulk sample of approximately 200 tonnes averaging 2.3 g/t Au was taken from the centre of Z87 and approximately 100 tonnes were treated at the pilot plant of the Centre de Recherche Minérale du Québec in Quebec City as part of a pre-feasibility study. The remaining 100 tonnes were treated at the pilot plant of SGS Lakefield Research Limited (Lakefield) as part of the 1993 feasibility study.

In 1992, an orientation Induced Polarization Survey (IP) carried out over Z87 and J4 produced strong IP anomalies. The IP survey covered the entire property and was also useful in planning of a condemnation drilling program in areas where the infrastructure and stockpiles were planned.

Between December 1992 and March 1993, a drilling program comprising 181 holes totalling 24,239 m was carried out to complete the feasibility study. The purpose of the drilling was to define Z87 and J4 as well as to test other IP anomalies.

6.2.3 Metall Mining Corp, Inmet Mining Corp, 1993 – 2005

In February 1993, Metall Mining Corp. (Metall) acquired Minnova's interest and, in May 1993, purchased all of Kerr Addison's mining property interests. In August 1993, a positive feasibility study was completed based on a 10,000 tpd open pit operation (Kilborn, 1993). In September 1993, the Coopers & Lybrand Consulting Group from Toronto, Ontario, audited the feasibility study and found no significant problems.

From August 1994 to April 1995, Mineral Resources Development Inc. (MRDI) from San Mateo, California, reviewed the reserves of both the feasibility and post-feasibility studies for financing purposes. Other kriging parameters were tested, and a check assay program was carried out on the 1992 to 1993 data set.

In May 1995, Metall changed its name to Inmet Mining Corp. (Inmet). Financing of the project was completed in June 1995. Later that year, the refurbishing of the 44 km access road from the Route du Nord and a 137 km power line and two substations were completed.

The construction of the mill complex and all facilities was completed in the fall of 1996, and milling started in November 1996. In April 1997, after some fine tuning, the mill capacity reached 10,000 tpd.

In April 1998, Inmet approved a 15,000 tpd mill expansion feasibility study by Met-Chem Canada Inc. (Met-Chem). Modifications to the mill started in December 1998, and the full 15,000 tpd capacity was achieved in 1999.

New sampling and assay protocols for the blastholes and future diamond drilling campaigns were proposed by Francis Pitard in January 1999 (Pitard, 1999). As a result, significant modifications to the Troilus assay laboratory were completed during the fall of 1999 and it became fully operational in May 2000, after a six month implementation and adjustment period.

In 2004, Inmet approved another mill expansion feasibility study by Met-Chem to increase mill capacity to 20,000 tpd. Modifications to the mill were completed in December 2004 and the full 20,000 tpd capacity was reached in 2005. In 2010, the mine was shut down as Inmet’s direction shifted to other assets.

6.3 Historic Production, Troilus Mine, 1996 – 2010

The Troilus Mine was a conventional open pit that operated on a continuous, year-round basis. The mill had a nominal capacity of 20,000 tpd with a flow sheet consisting of a gravimetric and flotation circuit. There was a permanent on-site camp with dining, sleeping, and recreational facilities for up to 450 workers, which has since been dismantled. Security personnel patrolled the site on a regular basis. When the former Troilus Mine was in operation bus transportation was provided for the workforce several times per week to and from Chibougamau and Mistissini.

The mine started commercial production in October 1996 and operated continuously up to April 2009 and the mill continued to process stockpile material up to June 29, 2010.

From 1995 to 2010, approximately 69.6 million tonnes (Mt) averaging 1.00 g/t Au and 0.10% Cu of ore was mined and 7.6 Mt of lower grade mineralization had been stockpiled. A total of approximately 230.4 Mt had been excavated including 18.4 Mt of overburden and 134.7 Mt of waste rock.

The overall mill recovery averaged 83% for gold and 89% for copper. The Troilus Mine produced over two million ounces of gold and almost 70,000 tonnes of copper. The mill processed the low grade stockpile material from 2009 up until June 29, 2010. The production history up to the end of the mine life in 2010 is summarized in Table 6-2.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

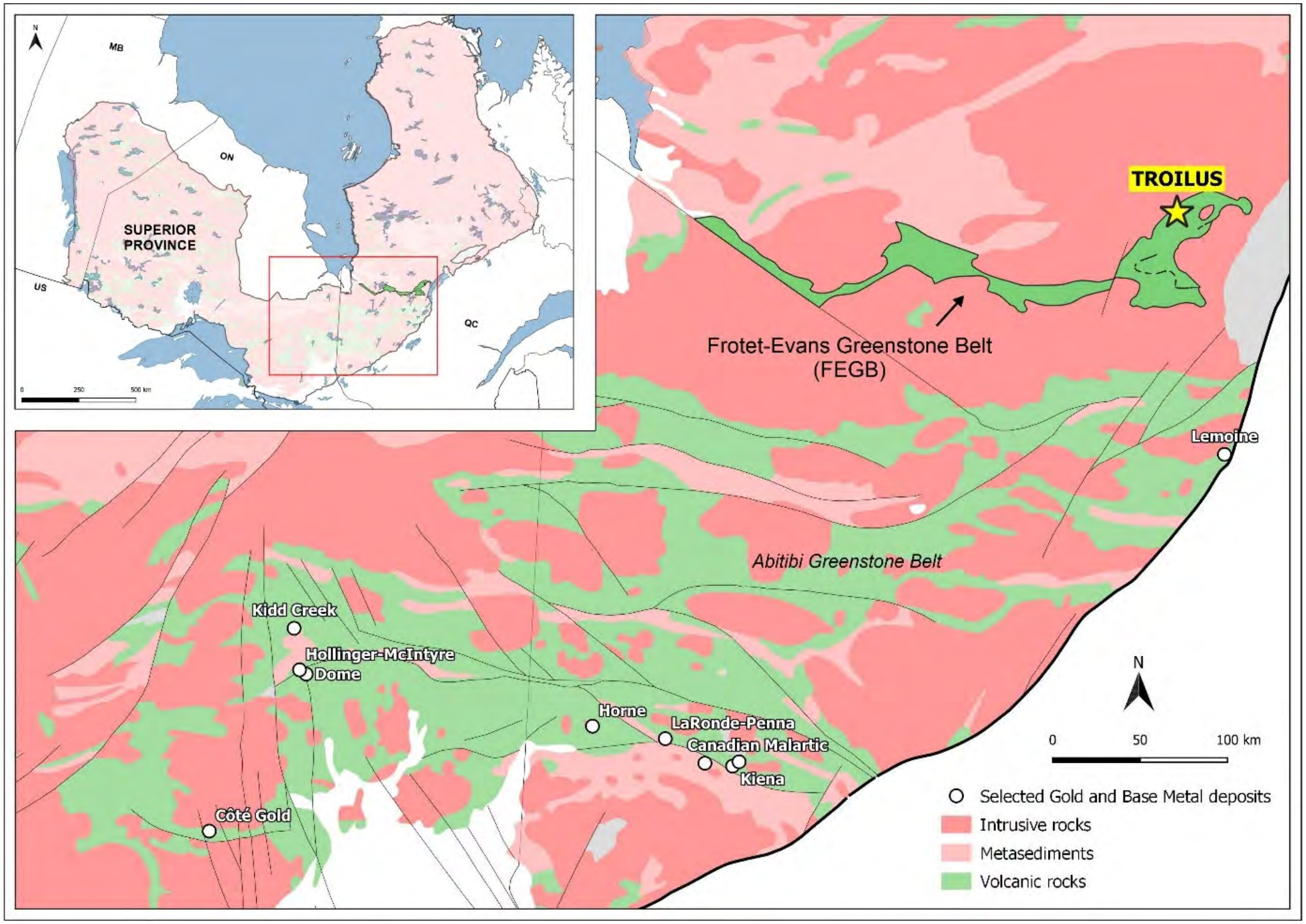
The Troilus gold-copper deposit lies within the eastern segment of the Frotet-Evans Greenstone Belt (FEGB), in the Opatica Subprovince of the Superior Province in Quebec (Figure 7-1).

The Frotet-Evans greenstone belt is centrally located in the Opatica Subprovince and extends for 300 km between James Bay, in the west, and Lake Mistissini, in the east, with variable widths, up to 45 km in its eastern extents (Carles, 2000). Its volcanic rocks define an east-west, fault-bounded trending synformal structure (Simard, 1987; Davis et al., 1995). The FEGB volcano-sedimentary sequence can be broadly divided in two similar domains, west and east. Detailed subdivisions have been made by Brisson et al., (1997a, b and 1998a, b, c), and Morin (1998 a, b, c) in a series of geological mapping initiatives developed throughout the greenstone belt by the Ministry of Natural Resources of Quebec (MERN). Boily and Dion (2002) divided the FEGB in four distinctive segments: (1) Evans-Ouagama, (2) Storm-Evans, (3) Assinica, and (4) Frotet-Troilus. The eastern domain is known as Frotet-Troilus (Simard, 1987) and has received most of the attention due to its larger economic potential (Figure 7-2).

The FEGB is largely dominated by tholeiitic basalts and magnesian basalts that occur in association with felsic and intermediate calc-alkaline pyroclastic rocks, lava flows, and local ultramafic layers. Syn- to post-deformational gabbroic to monzogranitic plutonic rocks occur throughout the greenstone belt.

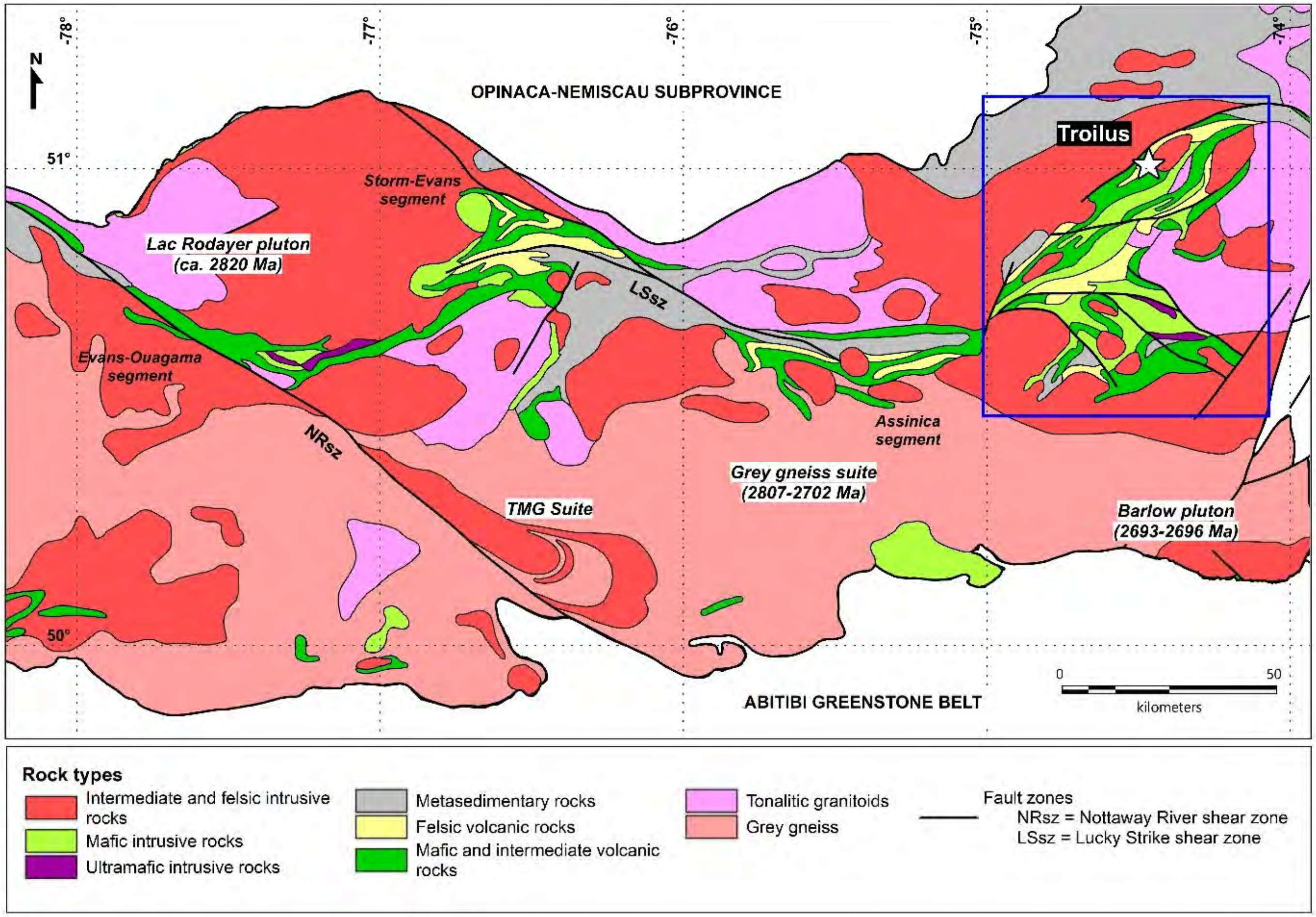
The few published U-Pb dates in zircon constrained the age of the FEGB between 2793 Ma and 2755 Ma (Pilote et al., 1997 in Boily and Dion, 2002). The circa 2793 Ma age is coincident with the dates obtained for the Troilus diorite.

Figure 7-1: Regional Geology Map



Source: Troilus (2019)

Figure 7-2: Regional Geology Map; Central Quebec



Source: Troilus (2019)

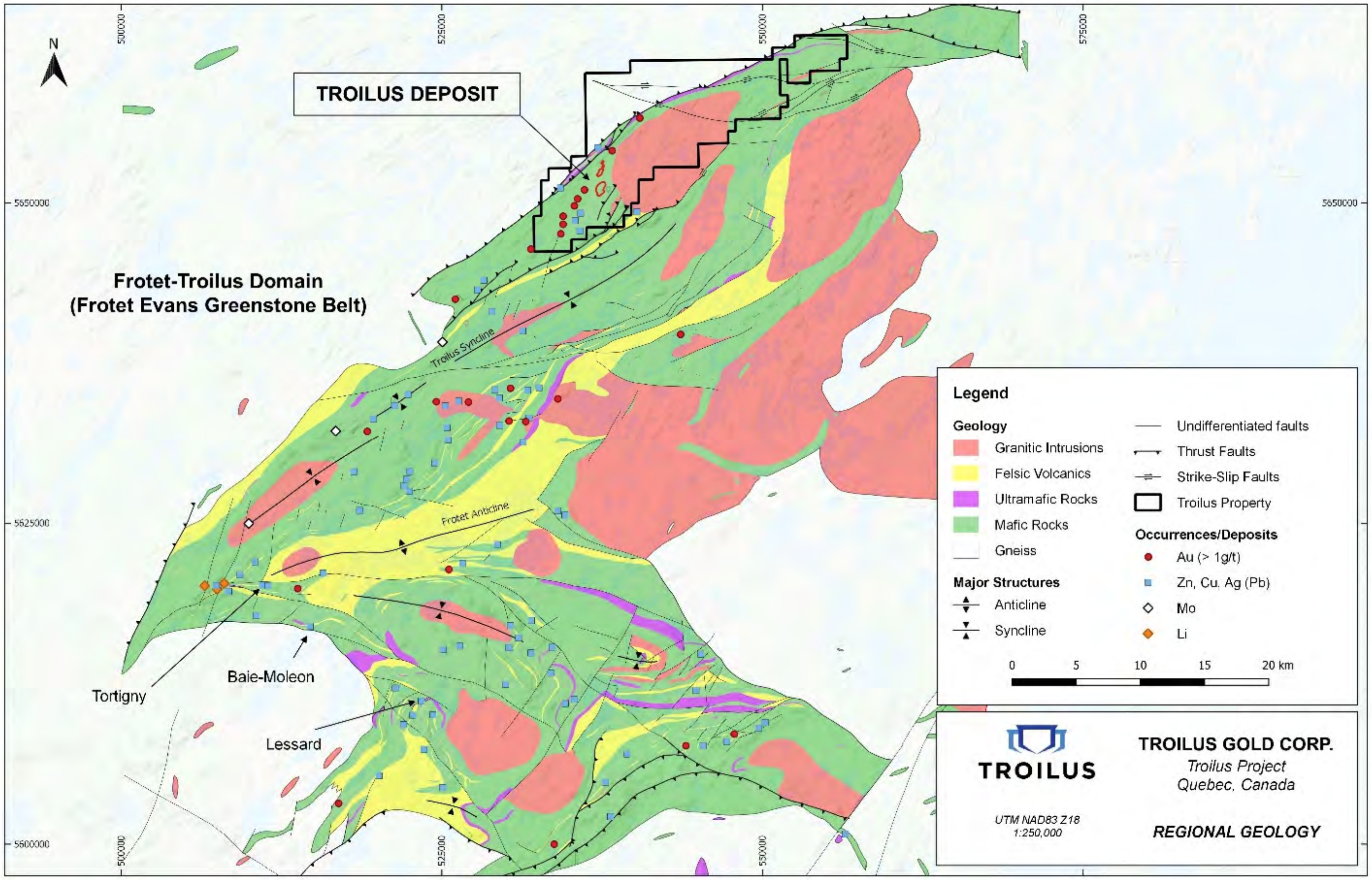
The Frotet-Troilus domain (Figure 7-3) comprises the east domain of the FEGB and hosts the Troilus deposit. It is characterized by a complex and variable volcano-magmatic history, dominated by mafic volcanic rocks and coeval, cogenetic mafic intrusions, intermediate to felsic volcanic rocks and associated pyroclastic rocks. Minor epiclastic sedimentary rocks and ultramafic units are locally observed.

The domain is divided in two structural regions, north and south, with the limit between them defined by the axial trace of the Frotet Anticline (approximately E-W direction). The rocks are variably deformed and are affected by a strong regional foliation. Sub horizontal mesoscopic to megascopic folds are common, affecting both regional foliation and primary layering. The main regional structures observed in the northern structural domain are: (i) Troilus Syncline; (ii) La Fourche and Dionne dextral fault zones; and (iii) Parker inverse fault zones (Gosselin, 1996). The Troilus deposit is hosted in the northern overturned limb of the Troilus syncline. The Troilus syncline is characterized as an isoclinal fold of northeast-southwest strike. The associated axial plane is parallel to the main foliation in the region, which strikes northeast and has a moderate to steep dip towards the northwest (Fraser, 1993). The La Fourche and Dionne fault zones locally cut and segment the Troilus Syncline and correspond to important deformation corridors with an interpreted dextral sense movement. They are characterized by local centimetric to metre-scale isoclinal folds that affect the main regional schistosity, forming a crenulation cleavage. A locally pronounced, sub horizontal stretching lineation can be observed in places. The Parker fault zones represent a complex array of inverse faults, that are oriented predominantly parallel to bedding and the main regional foliation. The southern domain shows a more complex structural style with a series of major folding systems cut by several fault zones. Faults, axial fold planes and the main schistosity have an overall west-northwest- east-southeast to northwest-southeast direction.

The regional metamorphic grade in the Troilus area varies from greenschist facies in the internal sectors of the belt to lower-amphibolite facies near the felsic intrusions and the borders of the belt (Gosselin, 1996). The higher metamorphic grade is apparent adjacent to boundaries of intrusions and margins of the greenstone belt.

The Troilus region contains many occurrences of gold, base metal, and molybdenite mineralization, with the Troilus gold deposit being the largest. The three largest base metal volcanogenic massive sulphide (VMS) occurrences are the Lessard, Tortigny, and Baie Moleon deposits.

Figure 7-3: Regional Geology Map; Frotet-Evans Greenstone Belt



Source: Troilus (2020)

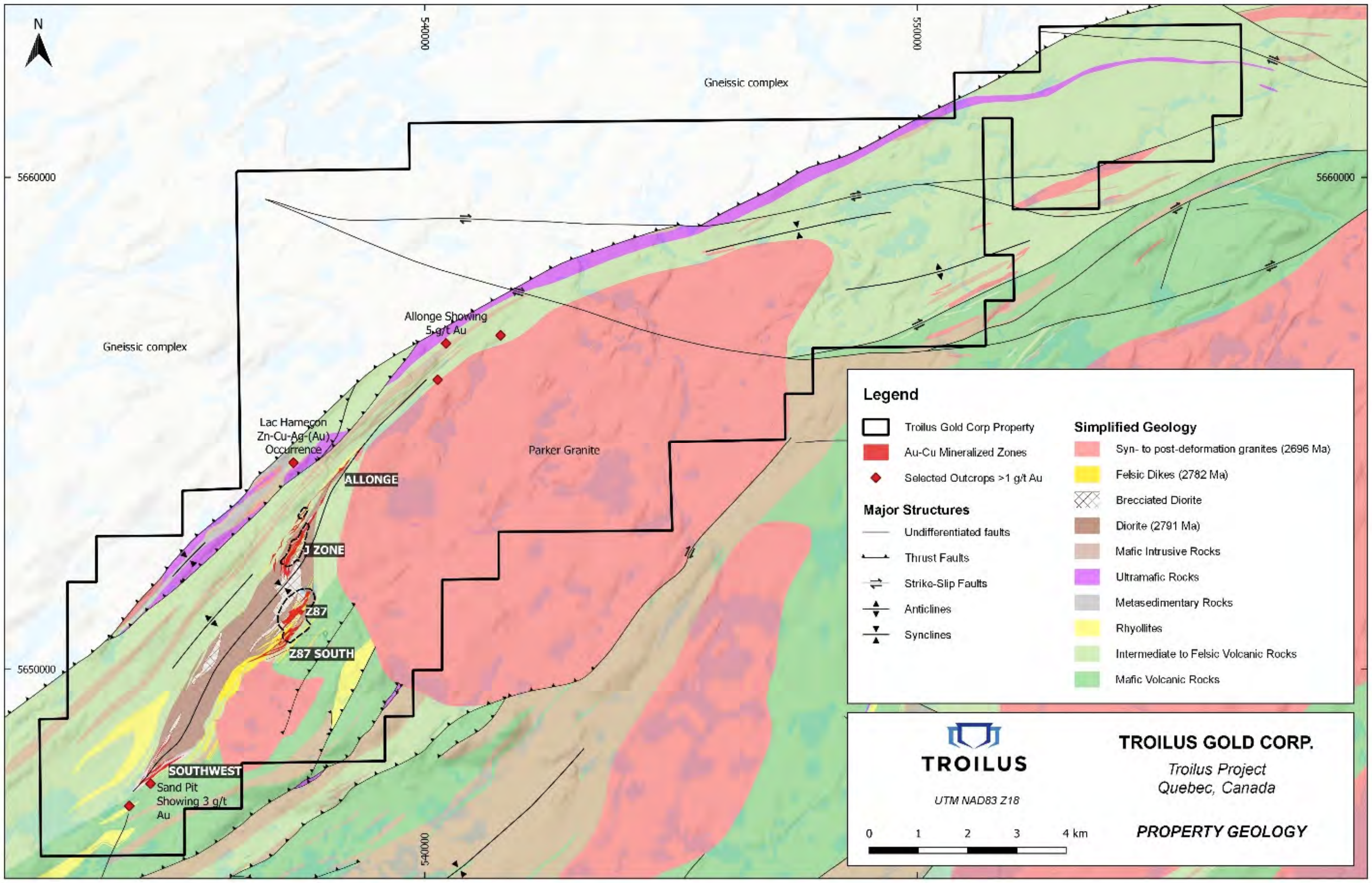
7.2 Project Geology

The Troilus deposit is located in the northeastern region of the Frotet-Troilus domain, and is hosted by volcanic and hypabyssal intrusive rocks of the Troilus Group in a region of intense deformation, known as the Parker domain (Gosselin, 1996). It is located within the overturned northern limb of the Troilus isoclinal syncline, which was transposed by a series of northeast- southwest striking thrust fault zones, parallel to the main regional foliation and to the volcanic bedding.

On the Project (Figure 7-4), the Troilus Group is represented by a thick volcanic sequence, predominantly mafic to intermediate in composition, with local felsic flows and tuffs. Synvolcanic magmatism is marked by a series of gabbro and ultramafic sills. The main lithotypes which comprise the Troilus deposit region are a metadioritic pluton, an amphibolite, and a brecciated unit, which are all crosscut by a series of felsic dikes (Figure 7-5). Late-stage dikes of mafic composition and syn- to post-tectonic granitic plutons crosscut all these rock types. The lithological contacts and a penetrative foliation steeply dip to the northwest. Figure 7-6 shows a schematic cross-section of the geology of the Project.

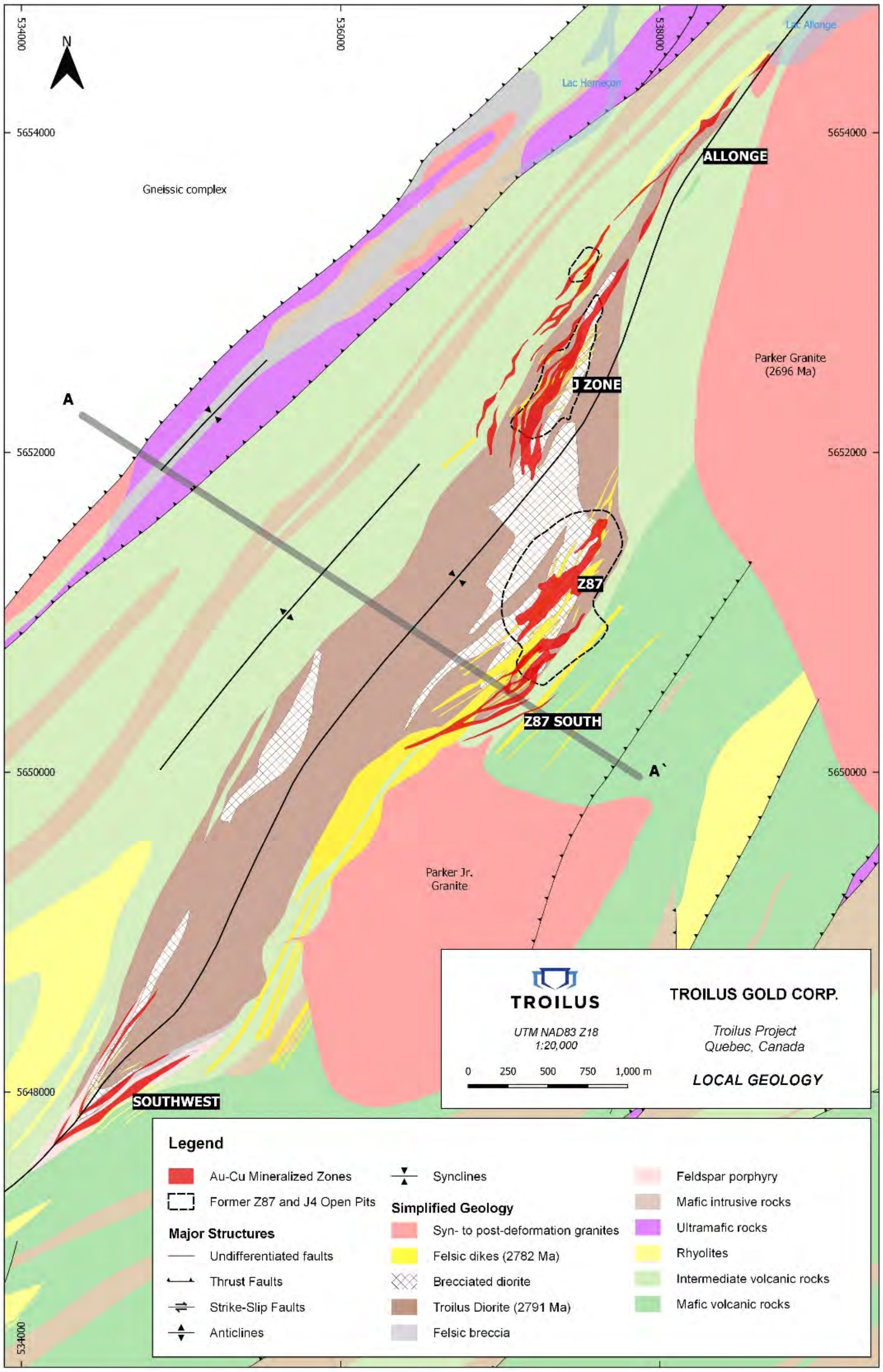
The following descriptions for the main lithologies, alteration, mineralization, and structural features are based mostly on a recent description of the 2018 and 2019 drill holes observations by the Troilus Gold geology team, as well as contributions from the works of Brassard (2018), Brassard & Hylands (2019), Diniz (2019), Laurentia Exploration (2018), and SRK (2018).

Figure 7-4: Property Geology Map



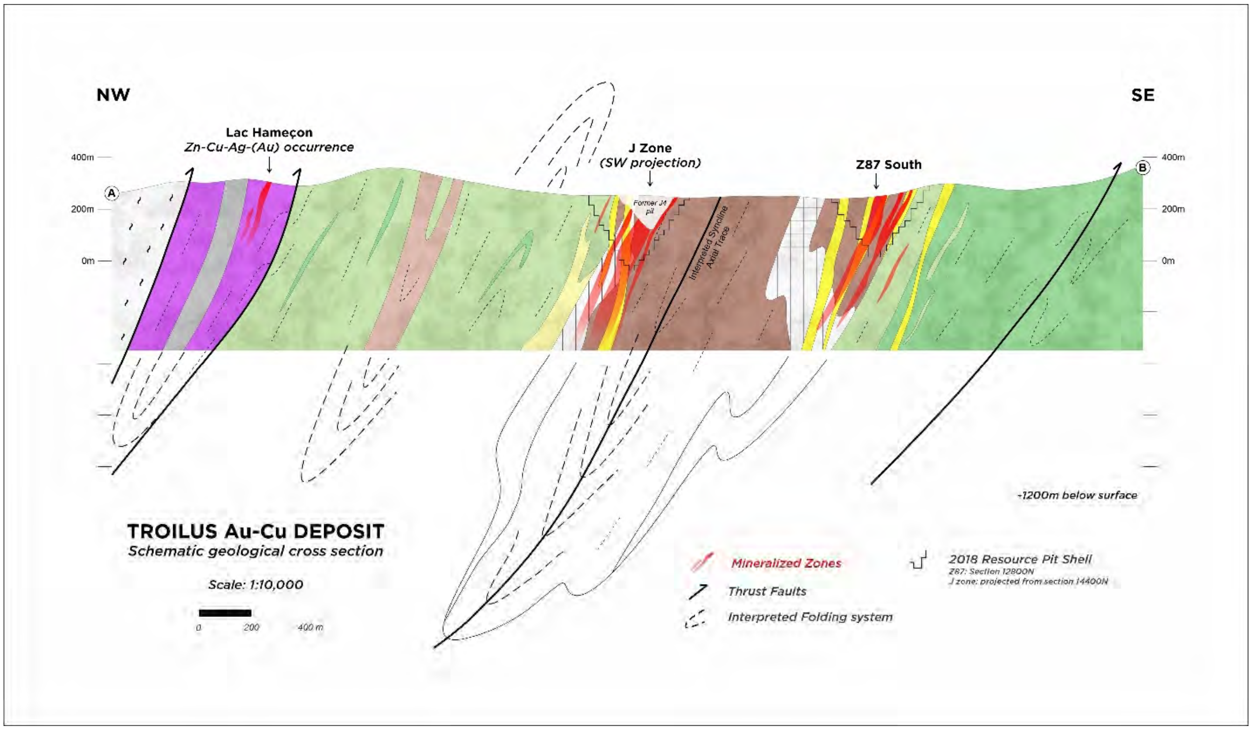
Source: Troilus (2020)

Figure 7-5: Troilus Project Geology Map



Source: Troilus (2020)

Figure 7-6: Troilus Project Geology Map; schematic cross-section



Source: Troilus (2020)

7.2.1 Local Lithological Units

Four main lithological units are recognized in the Troilus deposit region, broadly divided in: (i) mafic to felsic volcanic sequence; (ii) diorite and brecciated diorite; (iii) cross-cutting felsic dikes, and (iv) mafic to ultramafic intrusive. A series of distinct younger, post-deformation granitic intrusions crosscut all other lithotypes.

<u>Mafic to Felsic Volcanic Sequence</u>

Dominantly occurring throughout the entire Troilus property, and surrounding the Troilus deposit region, is a thick sequence of volcanic rocks of variable composition. The south-eastern region is dominated by mafic volcanics, essentially represented by massive and/or pillow basalts. The primary volcanic textures are rarely identified, being completely transposed by a strong regional foliation. Locally, and especially observed in drill cores, the mafic volcanic rocks often display a compositional millimetric to centimetric banding, marked by alternating amphibole-rich green- to dark-green layers, with light-green or white-greyish feldspar and epidote-rich bands (Figure 7-7, photo A). In the deposit region, this lithotype is recognized on the footwall zones of Z87 and Z87S.

The basalt sequence is overlain, in gradual contact, with a more intermediate to felsic composition banded and laminated sequence, as it can be observed in drill cores of Z87S (Figure 7-7, photo E). In this sequence, quartz-feldspar-rich bands and layers are dominant over light-green amphibole layers. Local garnet-rich quartz-rich intervals resembling volcaniclastic rocks occur towards the top of the sequence, as well as amorphous quartz-bands that could represent exhalative horizons.

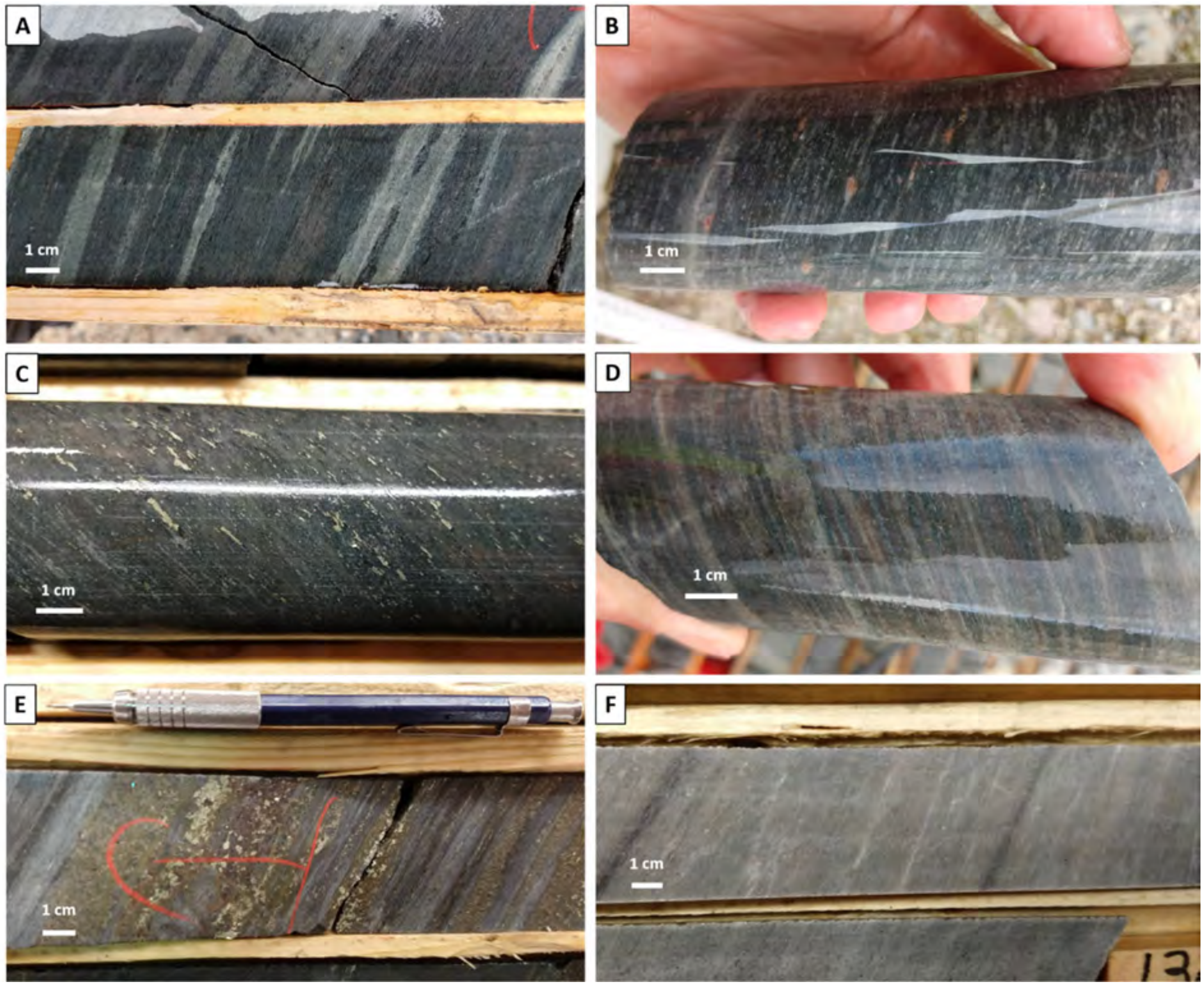
In the hanging wall portion of the J zones, the volcanic sequence is mainly represented by a finely laminated intermediate rock, grey to light-green in colour, often showing quartz and pink-garnet-rich horizons, that probably represent more volcaniclastic units of the sequence (Figure 7-7, photos B, C, and D). In the southern portion of the J4 pit, an amphibole-rich, volcaniclastic brecciated unit is present, containing intensely altered, irregularly shaped epidote-feldspar-rich clasts. The matrix is locally rich in magnetite.

Metric to decametric-scale lenses of rhyolite are identified within the volcanic sequence, and mainly occur bordering the diorite intrusion in its western margin. White, massive rhyolites outcrop in the southwestern region of the deposit, in the Southwest and Z86 zones, and have also been described in the hanging wall of the J4 pit (Figure 7-7). They often display an intense sericite alteration, and typically contain millimetric quartz-filled vugs, surrounded by an aphanitic quartz-feldspar matrix.

The contact between the volcanic sequence and the diorite intrusion in the Z87 and J zones region is difficult to identify and appears to be gradational, with fine to very fine grained and laminated rocks, affected and transposed by intense deformation and hydrothermal alteration. Previous geologists have described an amphibolitic unit immediately surrounding the diorite

intrusion, part of which could represent a metamorphic equivalent of mafic volcanic rocks. A foliated amphibole-rich rock with a penetrative schistosity has also been described in boreholes in the footwall of Z87 and amphibolite is observed in the footwall of Z86 South (Z86S) in the Sand Pit.

Figure 7-7: Drill Core Photographs; Showing Mafic to Felsic Volcanic Sequence



Source: Troilus (2019)

A. Mafic to intermediate volcanics; footwall of Z87 South

B. Volcaniclastic rocks, quartz-feldspar-garnet rich; hanging wall of J zones

C. Laminated intermediate volcanic rock, mineralized; hanging wall of J zones (J5 sequence)

D. Intermediate, laminated volcanics, Allonge Zone (northern continuity of J zones)

E. Felsic volcanics, sulfide rich (Py-Po-Sph), Z87 South

F. Rhyolite, J4

Diorite and Brecciated Diorite

The dioritic unit forms an elongated body oriented in the northeast-southwest direction with a six kilometre strike length and a one kilometre width, entirely surrounded by the volcanic sequence. It represents the main host rock for the mineralization at the Z87, Z87S and J zones. It comprises a pale to greenish-grey rock, composed predominantly of medium to coarse grained crystals of plagioclase and hornblende dispersed in a fine-grained groundmass of feldspar, amphibole, epidote, and quartz (Carles, 2000).

The Z87 hanging wall is mainly represented by brecciated diorite. Metre-scale intervals of massive, coarse to fine grained diorite, as well as porphyritic diorite, alternate with the typical brecciated diorite. The breccia is unsorted and predominantly matrix-supported (Figure 7-8), being characterized by two types of centimeter to decimeter scale pale coloured fragments: (i) massive diorite; and (ii) porphyritic diorite. Overall, fragments vary in size from less than one centimetre to over ten centimetres in diameter, are commonly rounded, and are usually elongated parallel to the main foliation. In less-deformed portions, the fragments are mostly subangular in shape. The matrix is amphibolitic, being primarily composed of fine-grained amphibole and biotite, and minor epidote, quartz, and feldspar grains. A transition from massive to fractured to brecciated diorite has been locally observed in drill core, as well as in boulders around the former open pits.

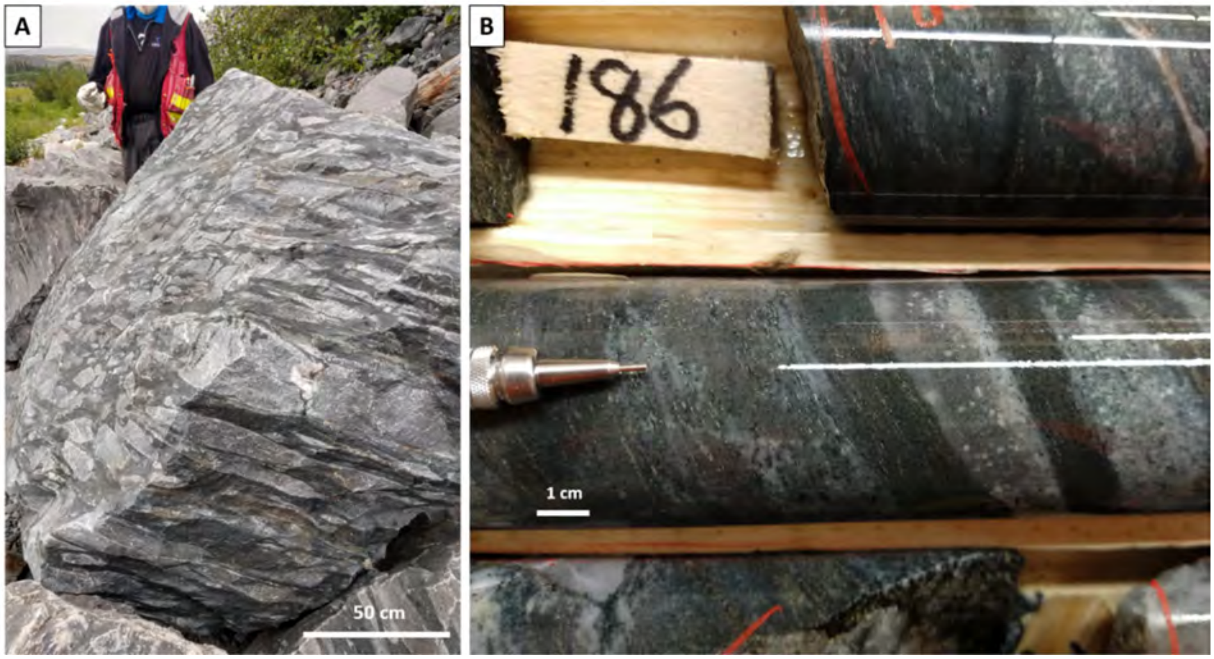
In the J zones, the diorite is predominantly fine grained, and biotite-rich, particularly within the mineralized intervals. Local metric to decametric-scale, coarse grained to porphyritic diorite are observed in drill core, particularly in the hanging wall of the mineralization. Deep drill holes in the southern portion of J4 displayed thick packages of brecciated diorite, which are shown to continue to depths of up to several hundreds of metres, as was observed in drill hole TLG-ZJ419-105. The sequence is interpreted as the northern continuity of the Z87 brecciated diorite sequence.

The mapped surface contact between the metadioritic pluton and the surrounding volcanic sequence is projected from drill cores, and it is described as a gradational contact. The outer margins of the metadiorite grade into the fine grained intermediate to mafic laminated rock.

The plutonic nature of this unit was first postulated by Carles (2000), which stated that “well-developed igneous textures” (coarse grained phases) and the absence of extrusive features would suggest a plutonic nature, possibly emplaced at shallow depth. The fine grained diorite could also locally be the result of grain size reduction during deformation. An analysis of the lithogeochemistry dataset available for the Troilus deposit (Carles, 2000; Larouche 2005) shows several distinct compositions among diorite samples that are associated with the observations of variable textures. These observations strongly suggest a polyphasic intrusive history for the Troilus Dioritic suite, yet a more comprehensive and detailed study is required (Diniz, 2019).

U-Pb zircon dating for the diorite yielded an age of 2791 Ma ± 1.6 Ma (D. Davis, pers. Commun. In Goodman et al., 2005), making it the oldest age-dated rock unit in the Troilus region.

Figure 7-8: Photographs; Showing Diorite and Brecciated Diorite



Source: Troilus (2019)

A. Brecciated diorite; block on the waste pile located north of the Z87 pit. Note the elongated aspect ratio of the dioritic fragments, parallel to the penetrative foliation.

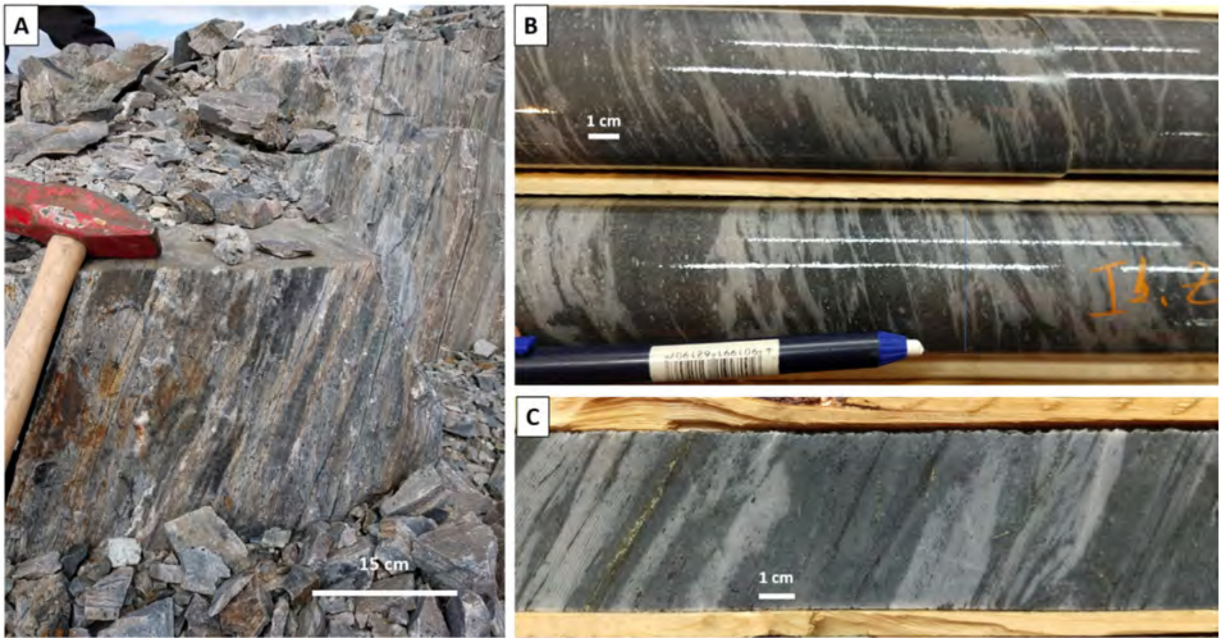
B. Typical mineralized brecciated diorite in a drill core; porphyritic diorite fragments in an amphibole-biotite-rich matrix

Felsic Dykes

Felsic dikes crosscut the volcanic sequence, diorite, and brecciated diorite, with sharp contacts transposed parallel to the foliation. They occur predominantly around the margins of the dioritic intrusion, consisting of several discontinuous bodies, elongated parallel to subparallel to the main foliation. The felsic dikes vary from massive or aphanitic to phaneritic and strongly foliated depending on the amount of sericite (Figure 7-9).

Two main decameter-thick felsic dikes occur at Z87, comprising the footwall and hanging wall of the main mineralized zone. In the J zone, the felsic dikes occur mainly in the immediate hanging wall of the mineralized diorite, are discontinuous, and occur in an anastomosing pattern, up to ten metres thick. The Z87S zone is dominated by felsic dikes, up to several metres thick, occurring in an anastomosing and locally stockwork-like pattern.

Figure 7-9: Photographs; Showing Diorite and Brecciated Diorite



Source: Troilus (2019)

A. Felsic dikes in outcrop, 87 pit; massive to slightly laminated

B. Porphyritic felsic dike showing sericite alteration overprint; apparently transposed by the main foliation, Zone 87 South

C. Mineralized massive felsic dike showing silicification and sericite alteration, Zone 87 South

They are variably affected by biotite alteration and by overprinting muscovite alteration. The latter forms a stockwork, probably corresponding to fracture networks. Increasing muscovite alteration may have reduced the competency of the felsic lithology resulting in it being preferentially deformed. Zones of intense muscovite alteration are strongly foliated, and give a banded texture, which can lead to confusing the dikes with a felsic tuff.

Magmatic zircons in one large felsic dike, in the footwall zone of the Z87-zone orebody have been dated and yielded an age of 2782 Ma ± 6 Ma (Dion et al., 1998 in Goodman et al., 2005; Pilote et al., 1997 in Carles, 2000).

Granitic Intrusions

The Troilus deposit is located in the vicinity of major granitic intrusions: to the east (the Parker pluton) and to the south (the Parker Junior pluton). Pegmatite, granite dikes, and large granite bodies are observed in drill core, and in the Z87 and J4 open pits. They are present over intervals measuring a few centimetres to over 100 m in thickness. The main granite bodies are observed at depth to the northeast of, and below the Z87 gold trend. They are referred to as the footwall granite.

These intrusive units generally overprint the regional foliation at the sample/core scale, but the foliation is observed to wrap around the competent granitic bodies at the regional scale. This suggest the granite bodies were emplaced during the formation of the foliation in a late- to post-tectonic timing. A preliminary U/Pb age date of 2698 Ma was determined for titanite from the Parker granite (Goodman et al., 2005).

7.2.2 Structural Geology

The Troilus deposit is hosted in a zone of intense deformation and experienced upper-greenschist to lower-amphibolite metamorphic conditions. At least two regional phases of deformation are recognized in the Troilus deposit region.

Deformation Phase D1

The main deformation features at Troilus correspond to a west-northwest to east-southeast ductile flattening event referred to here as D1. The main planar structure is a pervasive and ubiquitous foliation, S1. It affects most lithological units at Troilus, except for the post-tectonic granitic bodies. It is oriented N60°E on average, and dips 55° to 70° towards northwest, being slightly steeper in the J zones when compared to the Z87 and Z87S.

Local variations in the foliation orientation could be related to the foliation deforming in proximity to the competent Parker and Parker Junior intrusions. The intensity of the foliation also varies among the different lithologies. Coarse grained diorite is mostly unaffected to weakly foliated. The foliation is stronger in zones of biotite or muscovite alteration, suggesting the deformation is enhanced in altered, auriferous, and less competent zones.

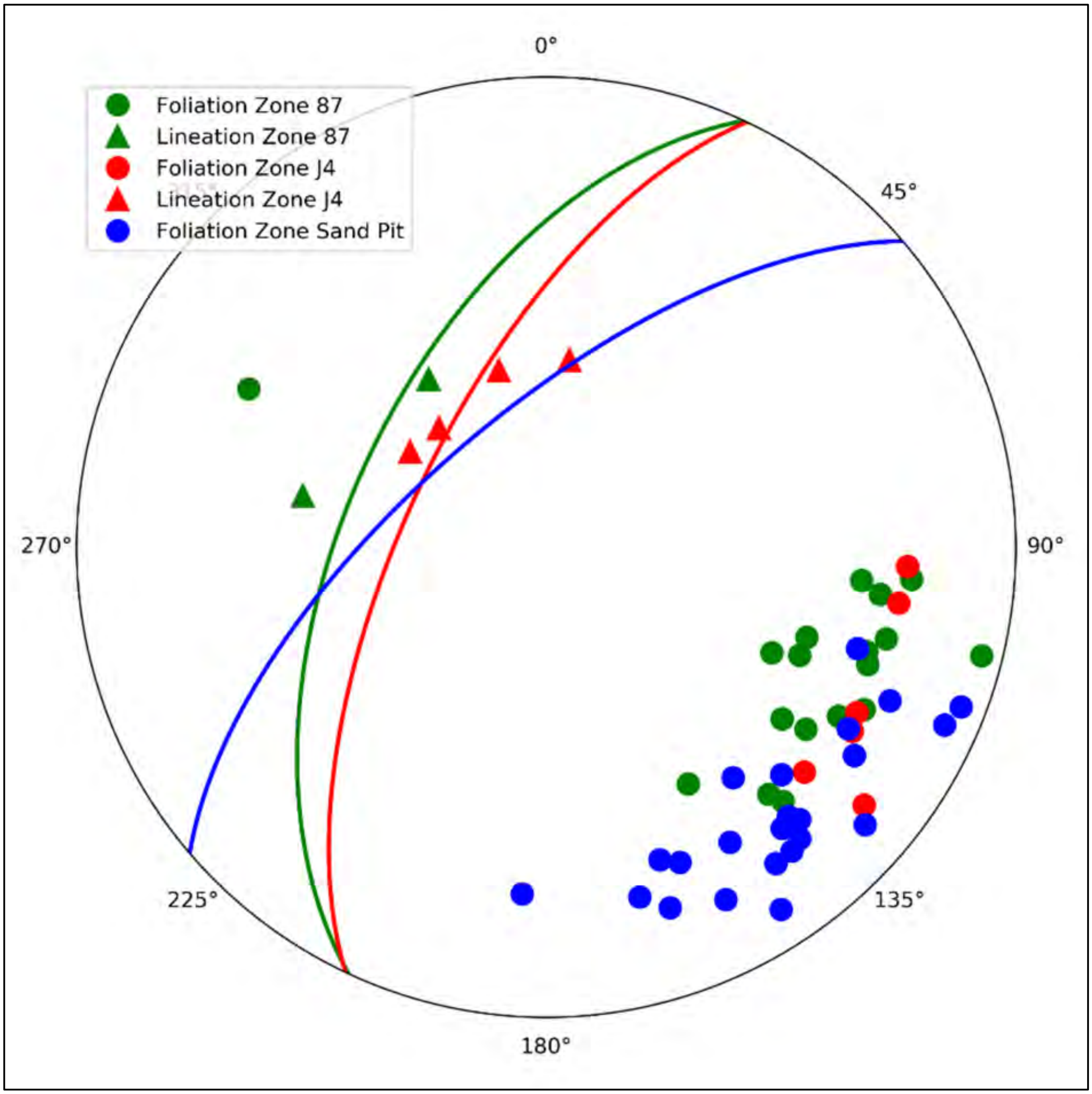
Pre-D1 planar features such as veins, veinlets, and stockworks are variably transposed parallel to the S1 foliation. Similarly, bedding or volcano-sedimentary layering, and geological contacts are transposed parallel to the S1 foliation.

Tight isoclinal F1 folds are associated with an axial planar S1 foliation, and some of these F1 folds can be rootless, illustrating that strong transposition occurred during D1. Fold axes are subparallel to the stretching lineation indicating a strong transposition. This orientation is likely to produce a downdip plunge of gold mineralization parallel to the stretching lineation. The intensity of the deformation and the tight and isoclinal nature of the folds hamper the observation of F1 fold hinges but folding in the Troilus deposit is probably ubiquitous at various scales.

A down-dip stretching lineation oriented -60 322° /°, within the foliation is observed to affect diorite breccia fragments. Biotite and amphibole are preferentially oriented parallel to this lineation. The X:Z stretching ratio from breccia fragments is estimated at 6:1 and the Y:Z flattening ratio is estimated at 3:1, illustrating a strong flattening perpendicular to the foliation combined with a moderate stretching component along the lineation.

Stereonets of main planar and linear structures at Troilus are shown in Figure 7-10.

Figure 7-10: Stereonet of Main Planar and Linear Structures



Source: Modified from SRK (2018)

Deformation Phase D2

At the deposit scale, the second phase of deformation, D2, is marked by northeast-southwest striking, steep-dipping shear zones, identified in the Z87, Southwest, and Z86S zones. These shear zones are at a low angle with the S1 foliation and crosscut the S1 foliation and quartz veins.

On a regional scale, this second deformation phase also corresponds to important deformation corridors with an interpreted dextral sense movement, La Fourche and Dionne fault zones (Simard, 1987; Gosselin, 1993; Gosselin, 1996), which locally cut and segmented the Troilus Syncline (F1 fold). The zones are characterized by local centimetric to metric isoclinal folds that affect the main regional schistosity, forming a crenulation cleavage. Locally a pronounced sub horizontal stretching lineation can be observed. The Parker fault zones may also have been formed during D2 and represent a complex array of inverse faults, oriented mainly parallel to bedding and to the main regional foliation, occurring in the north-northwest border of the region, marking the contact zone with the granite-gneiss terrane. A high angle stretching lineation verging to the southeast is normally observed (Gosselin, 1993).

Late NNE-SSW Brittle Faults

A series of sulphide-bearing brittle faults are present on the north wall of the Z87 pit. These faults are thin fault zones (less than 0.5 m in width) characterized by a strong muscovite alteration, silicification, and the presence of sulphides. These faults are oriented subparallel to the foliation and are regularly spaced in the pit, with one every 20 m to 50 m. They are commonly present at the contact between felsic dykes and the breccia. Down-dip slickensides, reverse displacement of pegmatite dykes, and sub horizontal to moderate northwest dipping quartz tension veins all indicate a reverse movement. The presence of muscovite, quartz, and sulphides suggests that these are sericitic faults zones that were interpreted as hosting part of the gold mineralization at Troilus, as described in Goodman et al. (2005). No significant increase in gold grade was associated with these fault zones in drill core however, suggesting they are not a significant host of the gold at Troilus. Their brittle nature, and the crosscutting relationship with pegmatite dykes indicate these faults are probably part of a possible younger D3 deformation phase.

Fractures

Three main fracture orientations are mapped in the deposit area (SRK, 2018). The first set, oriented at azimuth 025° and dipping at -65° west, is subparallel to the regional foliation and represents the major fracture system in the Z87 pit area. The other two sets (035°/25° and 320°/85°) cut the regional foliation almost at a right angle. The combined effect of these fractures has induced local instability in the Z87 pit. Faulting is observed locally in the pit. The main orientations of the faults are 240°/-55° and 160°/-60°. These two fault orientations do not cause any overall wall stability concerns but may create problems locally.

7.3 Mineralization

The main mineralized zones at the Troilus Property occur around the margins of the Troilus Diorite, and comprise the Z87 Zone (including Z87S), and the J4/J5 Zone. Other important mineralized zones discovered to date include the northern continuity of the J4/J5 Zone, named the Allongé Zone, and the southwestern margin of the metadiorite (including the Z86 zone).

Troilus is primarily an Au-Cu deposit, but contains minor amounts of Ag, Zn and Pb, as well as traces of Bi, Te, and Mo. Gold-copper mineralization at the Troilus deposit comprises two distinct styles, disseminated and vein-hosted. Gold mineralization is spatially correlated with the presence of sulphides, even though the sulphide content does not directly correlate with gold and copper grade. The matrix of the diorite breccia, the diorite and the felsic dikes represent the main host rocks for the mineralized intervals.

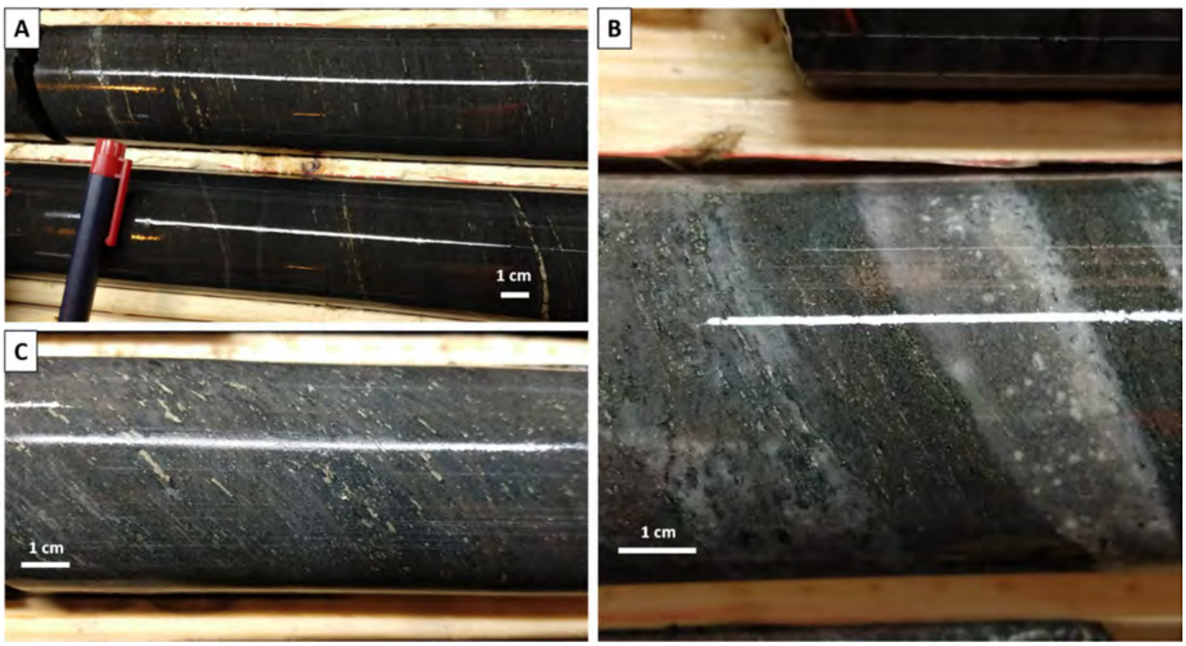
7.3.1 TYPE 1 – Disseminated Mineralization

Disseminated mineralization comprises the majority of the deposit's copper content (>90%, Goodman et al., 2005), particularly in the Z87 (Figure 7-11). Gold and copper are predominantly associated with fine grained disseminated sulfides and/or millimetre wide sulfide streaks and stringers parallel to the main foliation, comprising between 1 wt. % and 5 wt. % of the rock. The most abundant sulfides are pyrite, chalcopyrite, and pyrrhotite.

Gold occurs as fine grains of electrum, up to 20 µm wide along sulfide grain boundaries, and filling fractures within sulfide grains, containing up to 15 wt. % Ag (Goodman et al., 2005).

At Z87, the mineralization is developed within an amphibolitic unit and the brecciated unit, located between the two thickest felsic dikes (Goodman et al., 2005), and it is coincident with a zone of strong biotitic alteration.

Figure 7-11: Photographs; Showing Disseminated Mineralization



Source: Troilus (2019)

A. Disseminated pyrite in a fine grained, biotite-rich, diorite - J4 zone

B. Brecciated Diorite; fine sulfides disseminations in the amphibole-biotite-rich matrix - 87 zone

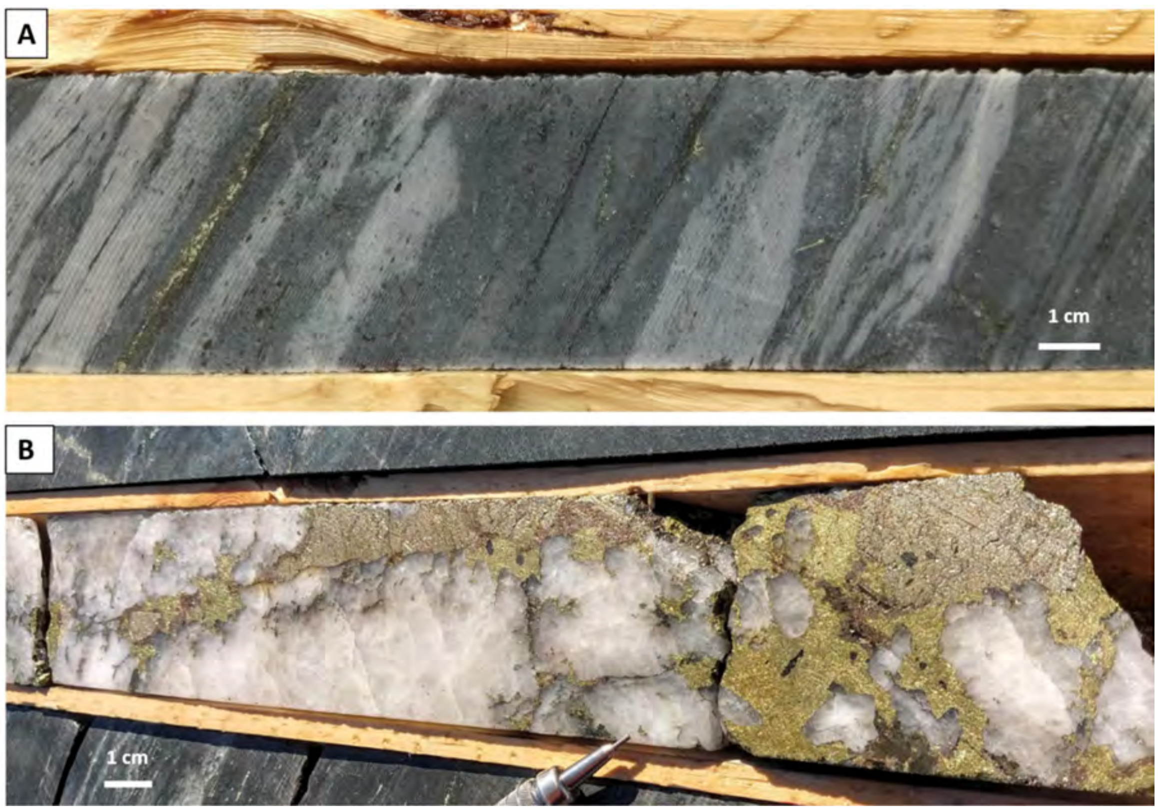
C. Disseminated medium grained pyrite in volcanic laminated rock - J5 zone

7.3.2 TYPE II – Vein-hosted Mineralization

This mineralization style is characterized by gold bearing veins, with gold mineralization restricted to the veins and veinlets, and is classified as gold-only, since copper mineralization is rare and erratic (Carles, 2000). This type of mineralization is reported to be hosted in all rock types occurring within the mineralized envelope in the Troilus deposit (Figure 7-12).

Several generations of gold-bearing veins have been identified and described by Goodman et al. (2005), and Larouche (2005), the latter especially focused on J4 zone. With regards to grade and abundance, the most significant are quartz-chlorite (±tourmaline) veins. These veins occur in silicified wall rocks to sericitized high strain zones which cut the main foliation and the margins of felsic dikes. Gold-bearing millimetre- to centimetre wide veinlets are locally present as swarms parallel or subparallel to spaced cleavage in the silicified rocks. The veinlets contain free gold and minor amounts of sulphide. Much of the gold is fine grained and contains up to 20% Ag, however, gold grains can be up to greater than 1,000 µm in size. Locally, a second set of gold bearing quartz veinlets cut the first. These carry fine grained gold (>95%) and minor pyrite, chalcopyrite, sphalerite, galena, and Te- and Bi-bearing minerals, including tellurobismuthite (Bi2Te3), calaverite (AuTe2), and hessite (Ag2Te). Although volumetrically much less significant than the main disseminated mineralization, the veinlets can contain grades greater than 50 g/t Au over a one metre interval. Coarse grained gold recovered by a gravity circuit in the mill accounted for about 30% of the gold produced. Presumably much of this coarse gold was derived from the veins. High grade shoots related to the veinlet zones are oriented 40° clockwise from the main disseminated mineralization.

Figure 7-12: Photographs; Showing Vein Hosted Mineralization



Source: Troilus (2019)

Millimetric Py-Po-rich veinlet in an altered felsic dike (sericitization and silicification) - Z87 South

B. Atypical very high grade quartz veins, up to over 1-m thick; remobilized pyrite-chalcopyrite-pyrrhotite - J zones

7.3.3 Alteration

Gold mineralization at Troilus is associated with various types of alteration described below.

Biotite

An early, pervasive, weak to strong biotite alteration affects the diorite, breccia, and felsic dykes. The matrix of the breccia is preferentially altered. This alteration style is widespread in the deposit and can extend up to tens of metres away from the main gold zones. Sulphide content in drill core increases with biotite alteration intensity, suggesting a genetic link between the two. The biotite is transposed parallel to the foliation, indicating alteration occurred prior or during the main deformation event. The foliation intensity increases in strongly biotite altered intervals, due to the lower competency of the biotite-bearing rocks.

Muscovite

The vein-hosted mineralization is spatially related to a strong sericitization within the high strain zones, better developed in the felsic dikes, reaching up to several centimetres (Carles, 2000). Sericitization is also present in the amphibolite and the matrix of the breccia. A weak to strong muscovite alteration is present in some felsic dykes and varies in texture from pervasive to stockwork. It also locally alters the diorite and the breccia. Gold mineralization can be present in muscovite altered rocks, but sulphide content does not increase with the presence of muscovite alteration. Muscovite stockwork-like textures are locally transposed by the main foliation, indicating muscovite alteration occurred after biotite alteration but prior or during the main deformation event. Zones of higher foliation intensity, and thus of higher deformation, occur in strongly muscovite-altered rocks, probably due to the lower competency of these lithologies compared to unaltered rocks. The most highly deformed and sericitized parts of the rock are commonly surrounded by a silicified envelope that could reach several metres in width.

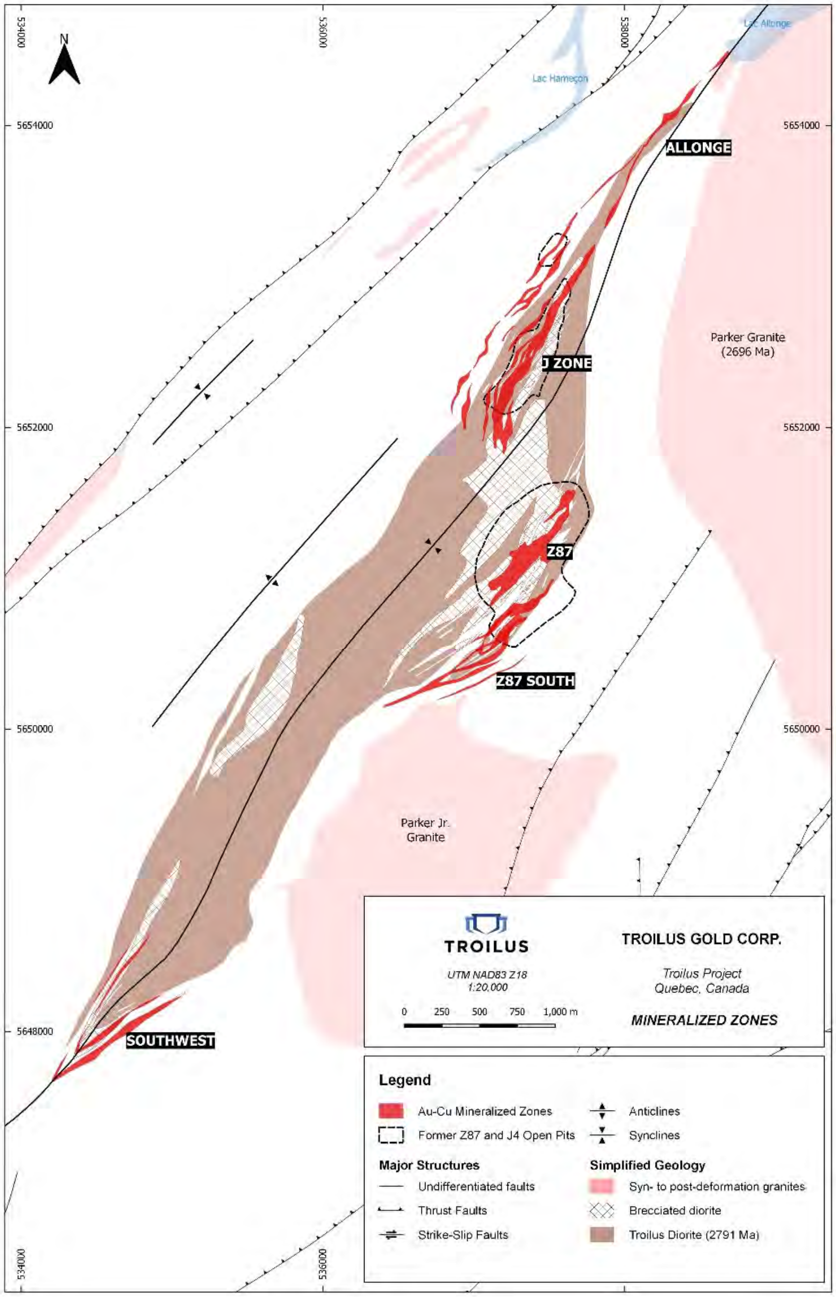
Calcic Metasomatism

A syn-deformation epidote-amphibole alteration occurs both pervasively and as veins in the deposit area. It consists of pervasive calcium-rich minerals such as calcium amphiboles, epidote, or calcite occurring in two metre- to ten metre intervals in drill core, or in discrete layers or bands measuring less than 20 cm. Veins of quartz, calcite, epidote, grossular garnet, and diopside may also be locally present. Gold mineralization is present locally in calc-silicate altered rocks, however, barren calc-silicate altered rocks also occur. Calc-silicate bands and veins can be parallel to the foliation, folded by the main deformation event, or can crosscut the foliation, all indicating that calc-silicate alteration occurred during the main deformation event.

7.4 Mineralized Zones

There are four main deposits that make up the Troilus Gold Project: Zone 87, Zone 87 South, J Zone and SW Zone (Figure 7-13).

Figure 7-13: Main Mineralized Zones



Source: Troilus (2019)

7.4.1 Zone 87

The main pit of the Troilus Mine, operated by Inmet from 1996 to 2010, was developed in the Z87 orebody. The mineralization in the Z87 occurs as a series of anastomosing lenses, extending for approximately 1,300 m along strike from 12,900N to 14,200N with variable thickness and locally reaching over 100m wide. With increasing depth, individual mineralized lenses coalesce to form a single sheet-like body that was approximately 40 m thick on average (Fraser, 1993).

The long axis in the Z87 is oriented N35°E with the orebody dipping to 55° to 65° northwest, from southwest- to northeastern portions, respectively. Detailed studies of Z87 blasthole data and diamond drill intersections revealed the presence of higher-grade shoots, which plunge to the west-northwest at -30° to -50°. The north and south extensions of Z87 “horsetail” out into narrower branches of mineralization. Two branches are well defined in the north, whereas three branches are less defined to the south.

In Z87, the peak of enrichment in gold and copper overlap but are not exactly coincident. A metal zonation is observed, associated with the sulfide content. The structural footwall is enriched in a chalcopyrite-pyrrhotite assemblage, with copper more abundant than gold. This zone grades into an intermediate pyrite-chalcopyrite zone, which comprises the main ore zone of the deposit and contains gold and copper. The structural hanging wall is dominated by pyrite, and it is gold-rich relative to copper.

7.4.2 Zone 87 South

Z87S is located directly southwest of the main former open pit mine, Z87. The two zones are separated by a felsic dyke and a zone of intense deformation dipping at 45° to 55° northwest. Z87S itself dips of ~50° northwest. This angle suggests Z87 and Z87S may merge at approximately 450 m below surface. The presence of a gold rich interval below Z87 in borehole TLG-Z8718-002 is probably the expression of Z87S at depth.

The 2019 drill program in Z87S was designed to follow-up on the positive few holes drilled in this zone in 2018. The new results have outlined extensions of mineralization to the south and down-dip of the previously known mineral envelope in Z87.

The mineralization at Z87S is visually comparable to what is seen in the main zone of Z87, however the geology can be characterised as more felsic (silicic) alteration and is distinctly transitioning into a unit of massive sulphides (primarily pyrite with chalcopyrite) in the footwall. A preliminary geochemical study of Z87S has a recognizable base metal signature that is unique to this area. This zone also exhibits the same structural pinch and swell nature of mineralization as the other main mineralized zones.

The host rock of that sulphide- rich zone is characterized by and intermediate to mafic volcanic unit similar to the sulphides rich zone of the hanging wall of J4 corresponding to the south-western extension of the J5 zone.

7.4.3 J4/J5 Zone

The J Zone orebody hosts two mineral zones: J4 and J5. J4 is the smaller of the two formerly mined open pits along with the main Z87 zone. The ore bodies in the J4 zone are hosted in the northern continuity of the Troilus Diorite and, similarly to what is observed in the main zones Z87 and Z87S, are elongated parallel to a penetrative northeast trending foliation, moderately to steeply dipping to the north west.

From top to bottom, the sequence comprises (i) a volcaniclastic unit, occurring along the hanging wall of the mineralization, and composed of well laminated intermediate to felsic rocks, locally mineralized, with semi-massive sulfide occurrences; and (ii) a thick metadioritic unit, comprising fine to coarse grained diorites that are locally brecciated. They are commonly crosscut by decametric to metric-scale felsic dikes, which are mostly concentrated in the upper parts of the sequence, in the immediate hanging wall of the mineralized intervals. Towards the bottom of the sequence, in the footwall, typical diorite breccias are present, displaying intense silicification and being locally importantly mineralized.

The main mineralized intervals in the J4 zone are characterized by sulfide stringers and fine sulfide disseminations along the foliation occurring within a very fine grained biotite-rich and silicified diorite. Pyrite is the main sulfide, and it is intrinsically associated with gold mineralization.

Results from hole TLG-J419-092 extended the limits of the gold-rich mineralization outside of the known mineral resource envelope both at depth and to the east. This zone located in the footwall of the main gold zone of J4 is characterized by a far less deformed texture than typical J Zone mineralization with clear brecciation and disseminated sulphides within the recognizable Troilus Diorite was identified in the stratigraphic footwall.

Compared to Z87, the J4 Zone has a lower copper grade, more free gold, and dips more steeply at -65°. J4 extends for approximately 1,200 m from 14,100N to 15,300N and is approximately 200 m wide from 9,500E and 9,700E. Individual mineralized shoots plunge steeper to the north. The north half of J4, from approximately 14,600N, contains one main corridor of mineralization, which is 20 m to 50 m in horizontal width. Grade-contoured blasthole data reveal the presence of closely spaced lenses, which strike to mine-grid northeast and dip towards mine-grid northwest. These lenses are located within and extend beyond the interpreted mineralized envelope limits. In the southern half of J4, three main lenses of generally lower grade and more diffused gold mineralization have been identified. The mineralization here averages approximately 100 m in horizontal width with intervening waste.

7.4.4 Southwest Zone (SW Zone)

The SW Zone is situated approximately 3 km southwest of the Z87 Zone. The current interpretation, based on recent drilling, is that the SW Zone appears to be the nose of a synclinal fold with a gentle plunge to the northwest (Figure 7-13).

As observed in all main mineralized zones on the Property, the SW Zone lithological sequence is comprised by a dominantly mafic footwall volcanic sequence, and a more intermediate to felsic hanging wall (Figure 7-14). This volcanic package is intruded by syn-volcanic dioritic and felsic rocks. Mineralization mainly associated with diorites, brecciated diorites, and felsic rocks. The SW Zone is located within the hinge zone of the interpreted Troilus Syncline, in a zone of tight folding. It has been divided in two distinct structural domains:

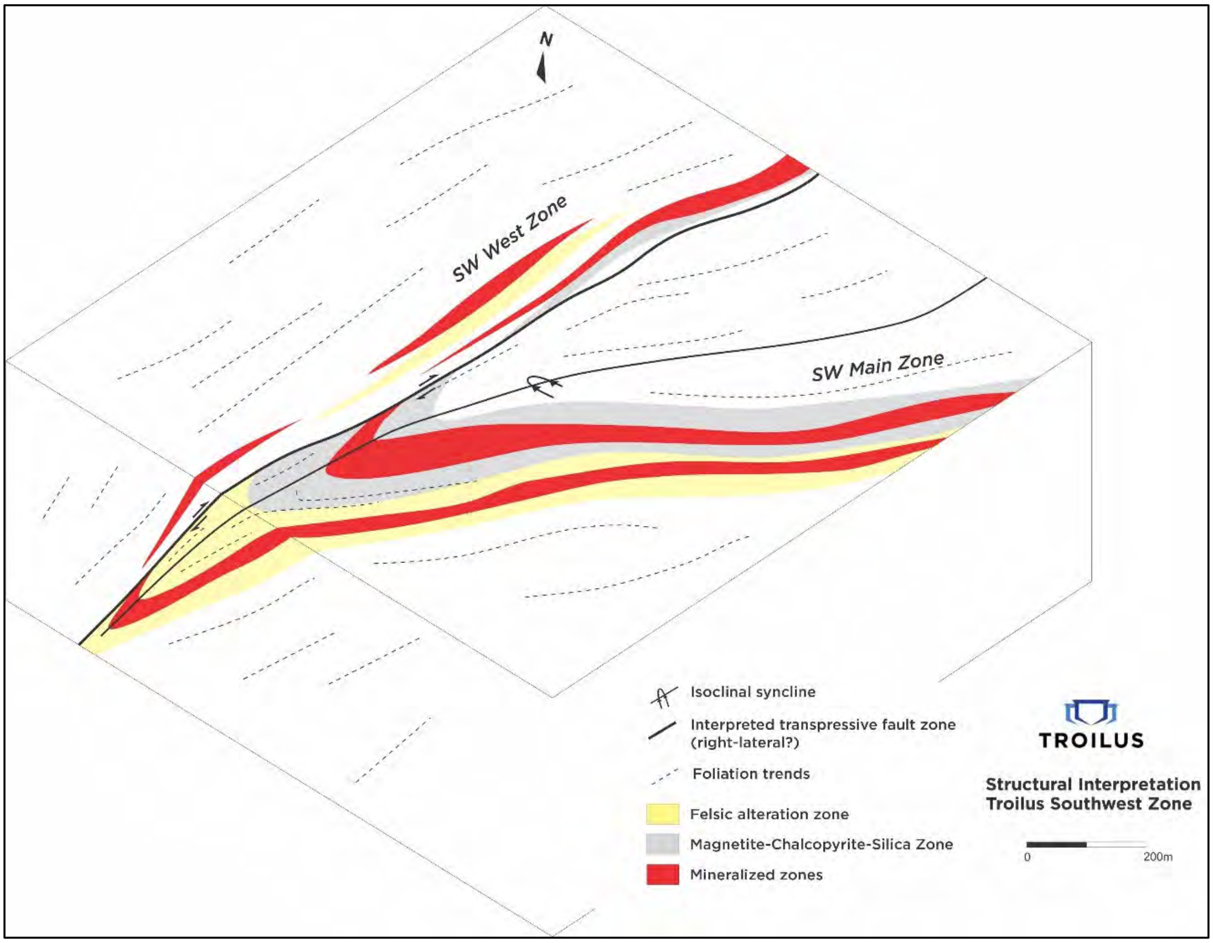
- the eastern domain, named the “Main Zone”, which hosts the largest part of the mineralized horizons, and received most of the drilling executed so far
- the western domain, which shows a narrower mineralized horizon, yet to be detailed drilled

The Eastern Domain, or Main Zone, dominantly strikes ENE and comprises the eastern limb of the interpreted syncline. The Western Domain clearly offset the eastern portion, striking slightly more NE. A major strike-slip shear zone is interpreted to have overprinted the folding system and characterizes a northeast dominant structure parallel to the fold axis, as can be observed in the local geological map and schematic block model (Figure 7-15). This shear zone is interpreted to be parallel to the main bedding and foliation, dipping to southwest. This structure is well marked by the geological distinction between east and west domains, as well as by a clear distinct strike angle of both limbs.

Figure 7-14: Geology Map of the SW Zone; showing drill hole traces

Source: Troilus (2020)

Figure 7-15: Geology Map of the SW Zone; showing drill hole traces



Source: Troilus (2020)

The footwall mafic volcanic sequence in the Southwest zone represents a homogeneous package, composed of dark green, amphibole-rich, fine- to locally coarse-grained rocks. Locally, it contains sericite and sulfide-rich metric to decametric intervals, laminated/banded, occurring mainly within the upper part of the sequence. These intervals are normally anomalous in Au, Zn, Ag, S. The dominant sulfide is pyrrhotite.

Intrusive felsic rocks occurring in the SW Zone comprise mainly two different lithotypes: (i) feldspar porphyry and (ii) felsic dikes. They share similar compositional and textural characteristics and are often mistaken due to the lithological similarities and alteration pattern. Both Felsic dikes and feldspar porphyry units show porphyritic textures, with felspar phenocrysts dispersed in a quartz-rich groundmass. Intense silica and sericite alteration are commonly observed in both units.

Felsic dikes are thinner and occur as “arrays” of several “dikes”, cross cutting the sequence, and often concentrated in the contact zone between mafic footwall and more intermediate to felsic hanging wall. The feldspar porphyry defines a continuous, with tens of meters thick unit, occurring immediately above the mafic footwall sequence. It hosts an important part of the mineralization found in the eastern domain of SW zone. It is generally lower grade, and relatively copper-poor, compared to the mineralized intervals observed in the magnetite-rich breccia occurring in the hanging wall of the feldspar porphyry unit.

A magnetite-rich and highly silicified brecciated unit represents the main host rock for gold and copper mineralization at the SW Zone and occurs within typical fine-grained, locally porphyritic diorites. The original textures and composition have completely been replaced by an intense silica alteration. The brecciated texture is characterized by dark grey, highly silicified fragments- or pseudo-fragments, occurring in a chalcopyrite- pyrite- and magnetite-rich biotitic "matrix".

Sulfides and quartz are often filling fracturing and locally forming stockwork-like textures within the magnetite-rich silicified fragments. High-grade zones are copper-rich and reach up to 10-20 meters thick.

Fine-grained, porphyritic diorites occur intercalated with the brecciated, sulfide and magnetite-rich intervals.

The SW Zone is defined by two key mineralized zones: the 'Main Zone' and the 'West Zone'. The Main and West Zone are predominantly differentiated by gold content and have been interpreted to represent opposite limbs of a major regional syncline that has likely been subjected to a primary, regionally emplaced phase of gold bearing mineralization (first major gold event). The Main Zone distinguishes itself from the West Zone having clearly been highly altered by a secondary/ later gold and copper bearing event, which is characterized by dark silica (quartz) flooding, brecciated (fractured) fragments, and intense fracture-filling chalcopyrite (main source of copper) and pyrite, pervasive magnetite, as well as free gold.

Higher grade intervals appear associated with the highly altered Main Zone resulting from local, focused structural controls and fluid traps acting as a conduit for alteration/mineral deposition.

The SW Zone and the Z87 show important similarities in terms of host rocks, mineralization style and geochemistry, as summarized below:

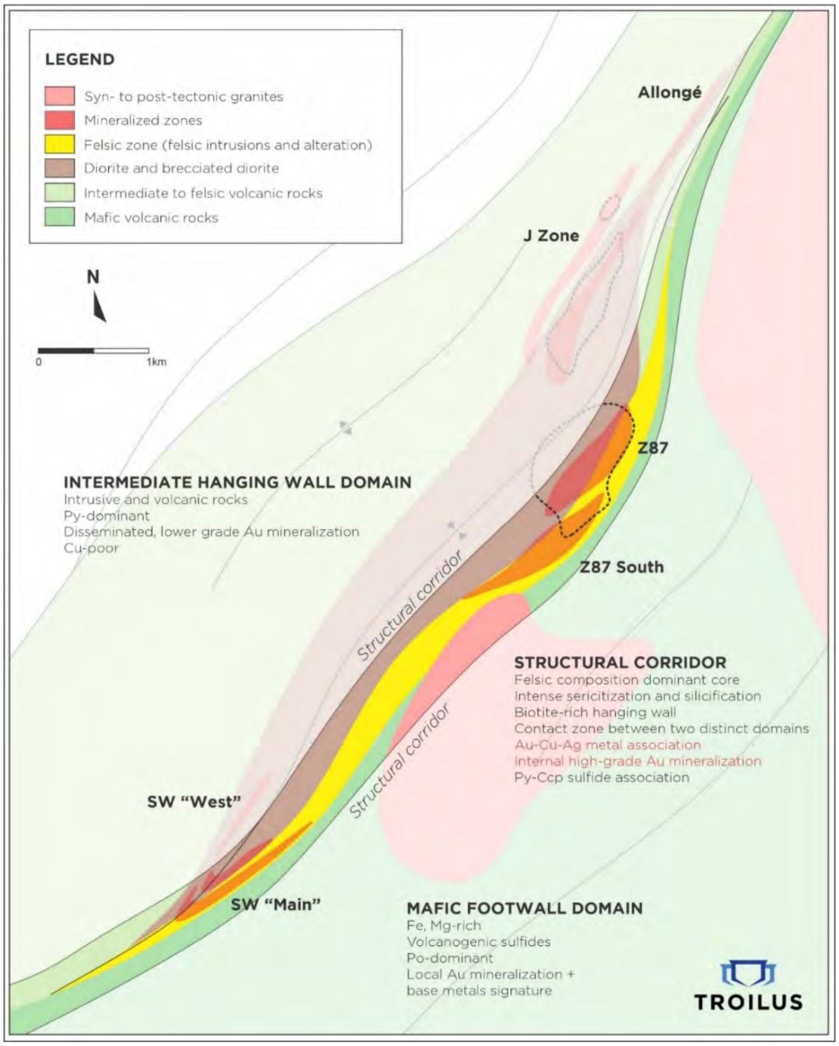
- similar Au-Cu-Ag metal association
- high-grade Au associated with chalcopyrite (filling micro-fracturing and in sulfide margins)
- zoning: py-rich hanging wall, py-Ccp core zone, py-Po footwall
- main host rocks:
  - brecciated/pseudo-brecciated upper ore body: higher grade, Au-Cu association
  - felsic unit/alteration: bottom ore body, lower grade, relatively Cu-poor; ("felsic dike" with porphyritic textures at Z87 & Feldspar Porphyry at SWZ)
- least altered, medium to coarse-grained typical diorite in the hanging wall
- mafic, amphibole-rich, volcanic sequence in the footwall

Both zones are located within the same structural corridor represented by the eastern limb of the interpreted Troilus syncline, comprising an intensely altered and deformed sequence, with a dominantly felsic "core", separating two distinct domains: a mafic-dominant footwall, and the intermediate intrusive package at the hanging wall (Figure 7-16).

The similarities between the two zones reinforce the potential to expand mineralization towards the underexplored 3.5km linear trend that separate Z87 and Southwest Zone.

Figure 7-16 presents a schematic and simplified representation of the different domains hosting mineralization on the Property. It also highlights a structural corridor that links the Z87 Zone and SW Zone marked by similar mineralization style, host rocks and geochemical signature.

Figure 7-16: Simplified Geology Map of the Mineralized Zones on the Property; highlighting the structural corridor



Source: Troilus (2020)

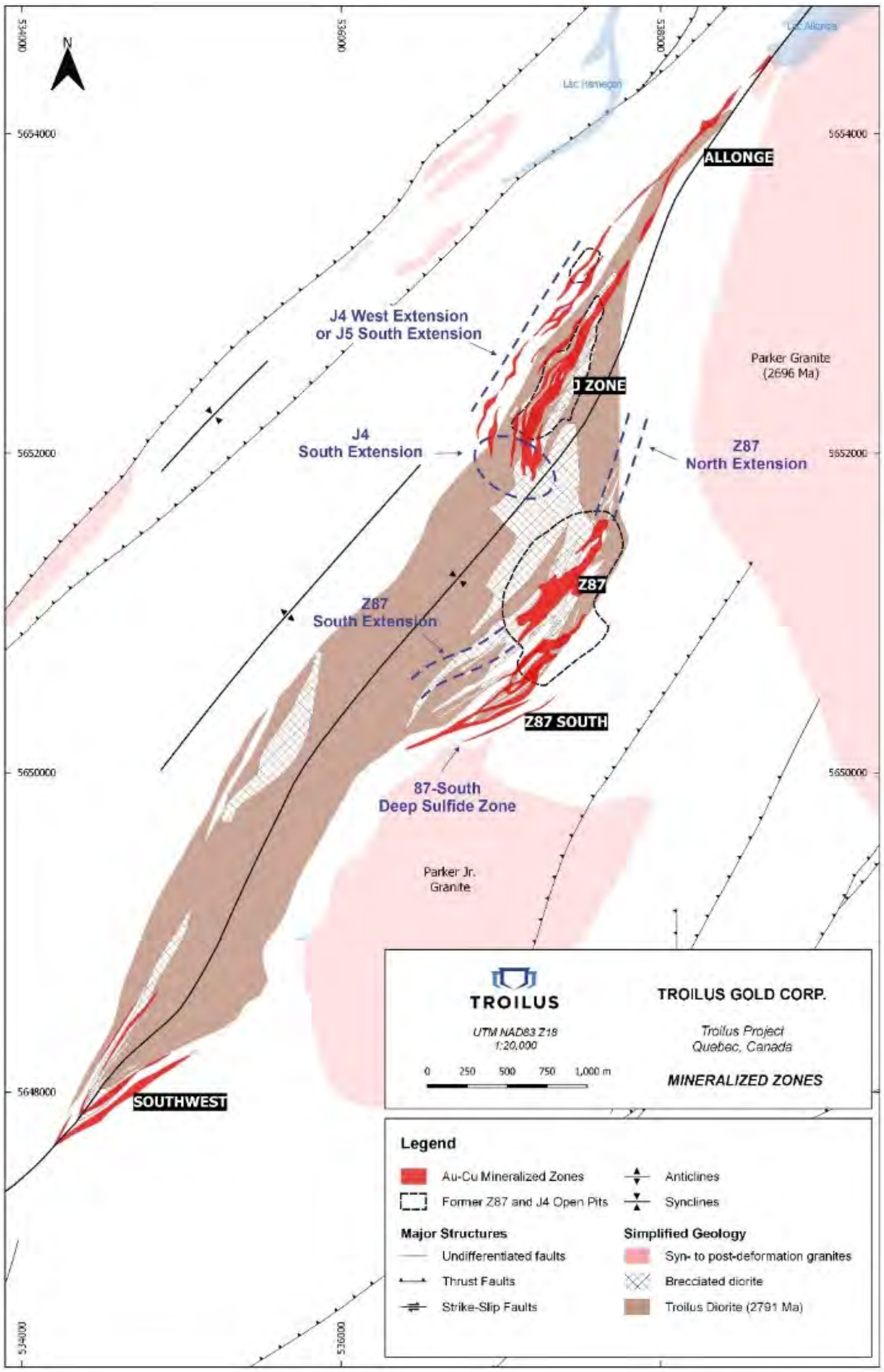
7.5 Prospects/Exploration Targets

This section details lithological and structural particularities of the following potential mineralized extension zones (Figure 7-17):

- Z87 North Extension
- J4 South Extension

- J4 West Extension (J5 South Extension)
- J4/J5 Zone North Extension (Allongé Zone)

Figure 7-17: Exploration Targets on the Property



Source: Troilus (2019)

7.5.1 Z87 North Extension

The northernmost current borehole at Z87 is TLG-Z8718-044W. The mineralized horizon is intersected near the bottom of the hole. The intersection includes 10.58 g/t Au equivalent over two metres, and 7.82 g/t Au equivalent over six metres (Troilus Gold press release, October 31, 2018), and could correspond to the downdip extension of a gold trend present at surface. The intersection of gold in TLG-Z8718044W opens the potential for an extension of the gold mineralization to the north.

Near Surface Potential: Most of historical holes drilled at the northern extension of Z87 Pit are enriched in gold. Holes KN 38, 39, 46, 101, 102, 139, 376, 397 and 398 show gold values that can be traced up to one kilometre and follow a 360° trend.

Deep Potential: Hole TLG-J419-105, drilled from the hanging wall of J4, confirmed that the same geological sequence from Z87 can be trace as far as 650 m to the north of the Z87 Pit at a vertical depth of 750 m.

7.5.2 J4 South Extension

The Zone J4 gold trend at surface bends to the south and toward Z87. In TLG-ZJ418-076 and 083, the best auriferous intersections are located at the bottom of the hole, which validates the interpreted change of direction of the main gold trend. The main potential for the extension of Zone J4 to the south lies in the area between J4 and Z87, however, the potential for gold mineralization is also open to the south-southwest and to the west.

7.5.3 J4 West Extension (J5 South Extension)

The results of the 2019 drilling program have significantly extended the boundaries of known mineralization at depth from the northeast to the southwest in the J4 Zone, well beyond the formerly mined J4 pit. The shallower intercepts of most holes are believed to be mineral extensions from the neighbouring J5 mineral zone. This is further evidence that suggest that J4 and J5 zones may prove to be one and the same. The J4 and J5 zones remain open at depth.

7.5.4 J Zone North Extension (Allongé Zone)

In October 2018, Troilus began a preliminary surface exploration program focused on applying its newly developed structural and geological model regionally to the Troilus belt. A total of 172 samples were collected from 157 outcrops and were sent for assay. Results have defined a clear extension of mineralization from J Zone over a strike length of 1.8 km extending from the edge of the J Zone to the northeast. Prospecting and mapping have identified additional gold-bearing mineralization located along the north-easterly strike projection of the J Zone. These newly discovered units, paired with minimal local historic drilling, have opened the potential to expand the Troilus deposit to the northeast. Highlights:

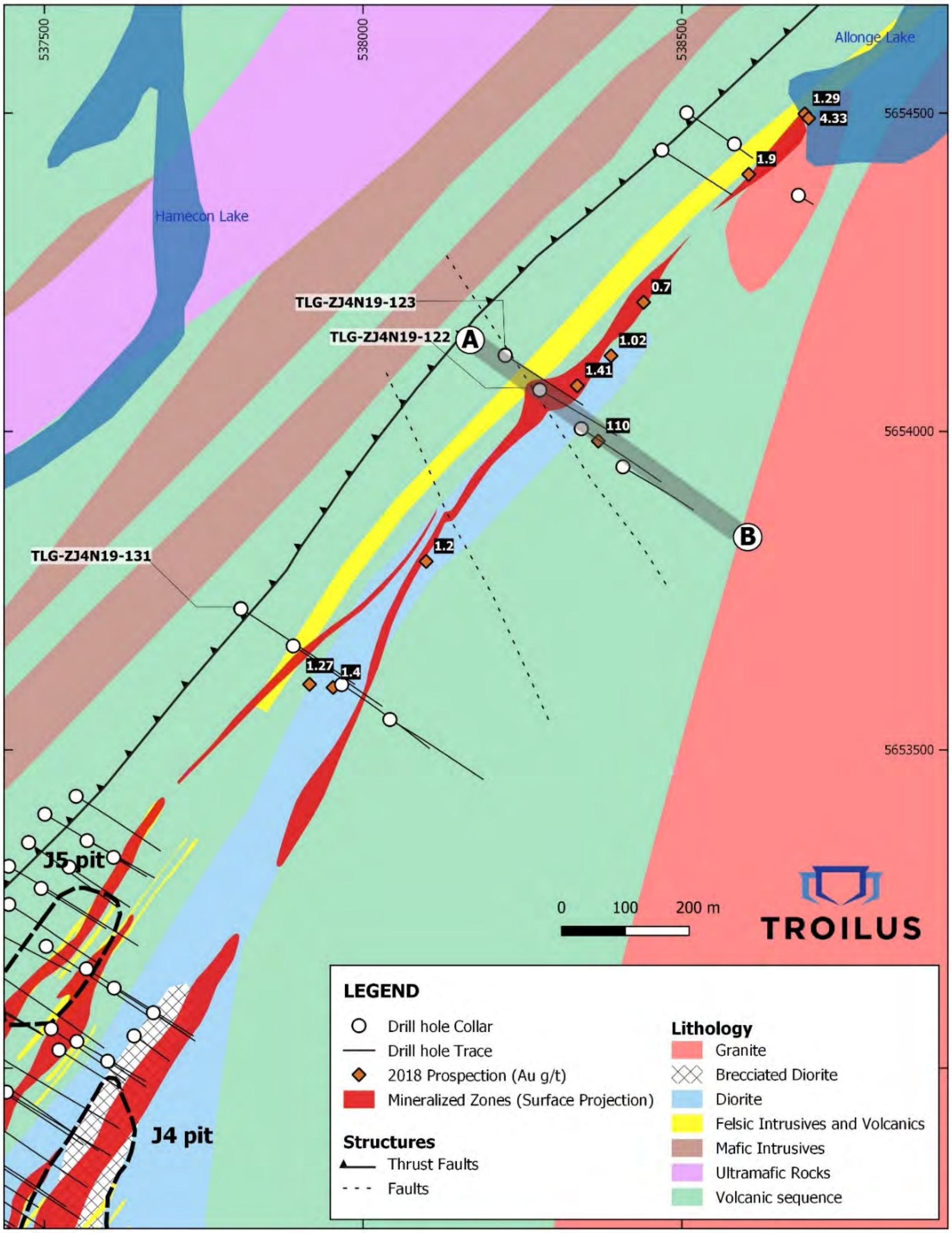
- 110 g/t Au (visible gold) from rock grab sample approximately one kilometre along strike from J4 open pit hosted in foliated diorite, the same host rock as the J Zone
- 4.33 g/t Au, 1% Cu, and 49.5 g/t Ag from channel sampling located directly adjacent to the Troilus North and 1.8 km northeast of J Zone
- 1.9 g/t Au, 0.3% Cu and 16.3 g/t Ag hosted in altered rhyolites from a grab sample located directly southwest of 4.33 g/t channel sample

- 1.4 g/t Au, 0.6% Cu, and 10.3 g/t Ag from channel sampling less than 400 m from the northeast limit of J4 open pit

Based on the positive 2018 surface results, an exploration drilling program was carried out in 2019, with a total of 12 DDHs on three sections spaced 500 m apart. The new results have successfully confirmed the potential to extend the J Zone mineralization to the northeast.

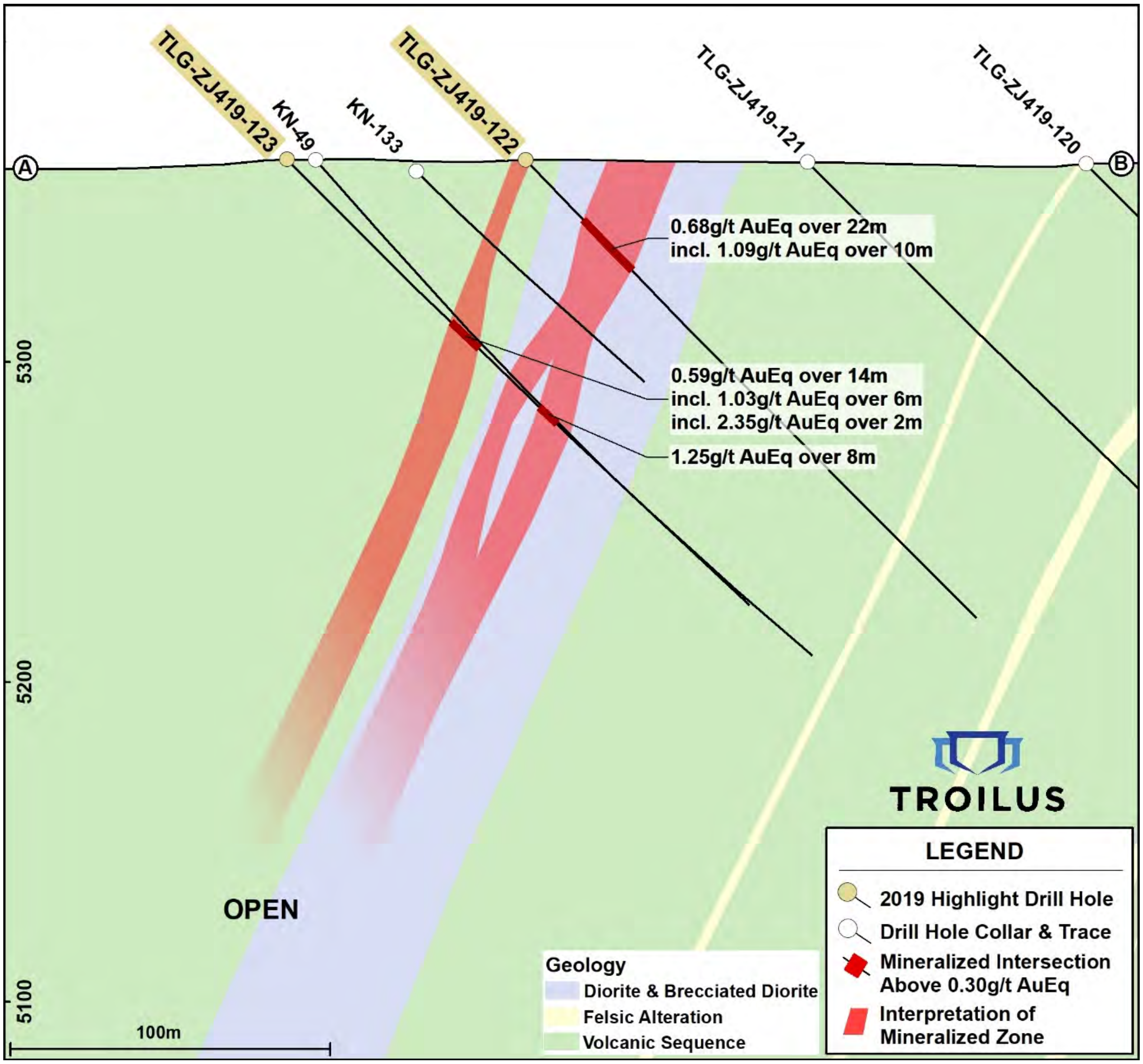
The mineralized intervals in the Allongé Zone lie within the same geological sequence present in the hanging wall of the J zones, comprising a finely laminated intermediate to mafic volcanic sequence, locally intercalated with rhyolite metric layers, and the Troilus Diorite, which continues north up to the southern margin of the Allongé Lake (Figure 7-18 and Figure 7-19). Gold mineralization is observed to be associated with pyrite-rich millimetric-scale layers and stringers that are oriented parallel to a penetrative northeast foliation, occurring both within the diorite and the volcanic sequence.

Figure 7-18: Geology Map, Allongé Zone; showing 2019 drill holes



Source: Troilus (2019)

Figure 7-19: Cross-section 16,500N, Allongé Zone; looking northeast



Source: Troilus (2019)

8 DEPOSIT TYPES

The Troilus deposit was known as an example of an Archean porphyry-type deposit as interpreted in the pioneering work of Fraser (1993). It is frequently cited as such, for example, Robert and Poulsen, 1997; Poulsen, 2000; Sinclair, 2007; Mercier-Langevin et al., 2012; Katz, 2016.

Other interpretations for its genesis include superimposed structurally controlled “orogenic” gold, proposed by Carles (2000) and Goodman et al., (2005). Table 8-1 presents a summary of the main geological characteristics that supported these two models (Diniz, 2019).

Table 8-1: Summary of Geological Characteristics Supporting the Proposed Genetic Models for the Troilus Deposits

Model	Timing	Host Rocks	Sulfides and Metal Associations	Texture/Style	Alteration	References
Au-Cu Porphyry-type	Single stage pre-deformation, pre-metamorphism	In situ hydrothermal breccia, amphibolite, and felsic dikes	Au-Cu zoning; Cu-rich footwall (ccp+po) Intermediate Main ore zone: Au-Cu (py+ccp); Au-rich hanging wall (py)	Disseminated and stringers along the foliation	Main stage potassic alteration (biotite), zoning outwards to a propylic alteration; and phyllic analogous sericitic alteration	Fraser (1993), Larouche (2005
Multi-stage syn-deformational	Early, pre-peal metamorphism and Late, post-peak metamorphism	Early stage restricted to magmatic breccia and amphibolite, Late stage veins in the breccia, amphibolite, and felsic dikes	Early stage Au-Cu (py+ccp+po) Late Au-only mineralization (py mainly, sp-gn locally)	Early disseminated and stringer zones Late Qtz-Chl-Tur veins	Main biotic alteration (early stage) Late stage sericitic alteration and silicification halo around quartz veins	Carles (2000), Goodman et al. (2005) Brassard and Hylands (2019)

*modified from Diniz (2019)

Note: (py)-pyrite, (ccp)-chalcopyrite, (po)-pyrrhotite, (gn)-galena, (sp)-sphalerite

The genetic model proposed by Fraser (1993) is based on similarities between Troilus and typical Phanerozoic porphyry deposits. The author interpreted that the biotite-rich zone that accompanied the bulk of mineralization at Troilus would be analogous to the typical potassic hydrothermal alteration core of porphyry deposits being that biotite, the main indicator mineral for this alteration, also occurs in the felsic dikes. Sericite would be the second most common potassium-rich mineral, largely dominant in the felsic dikes.

In Z87, this zone would be centered in the footwall dike and would grade outwards into a propylitic zone, defined by a gradual decrease in biotite and amphibole content, and increase in albite, epidote, and calcite. The alteration zoning would be asymmetric, being better developed towards the hanging wall. Associated with the asymmetrical alteration, a metal zoning marks a footwall dominated by biotitic alteration, and chalcopyrite-pyrrhotite assemblage, being copper-rich, whereas towards the hanging wall, gold would prevail over copper, and would be associated with potassium decrease and sodium increase, and pyrite would be the main sulfide. The in-situ hydrothermal breccia marked the transition, intermediate zone. In addition to what was proposed by Fraser (1993), Boily (1998) suggested that the observed sericitic-quartz association would represent an equivalent of typical phyllic alteration of a porphyry mineralizing system.

Larouche (2005) supports the magmatic-hydrothermal genetic model for the Troilus deposit, although presenting a slightly different chronology of alteration and copper and gold mineralization events. The felsic dikes would have intruded the amphibolite and diorite, followed by brecciation of the host rocks by hydraulic fracturing, and potassic alteration and gold-copper mineralization development. The potassic zone and the mineralization would have been subsequently superimposed by the propylitic alteration, forming late epidote-calcite-quartz veinlets. A final hydrothermal event would have released fluids via felsic dikes, originating a sericitic alteration, better developed in the felsic dikes, and mainly associated with gold mineralization.

Carles (2000), later supported by Goodman et al., (2005), suggested that the Troilus deposit is the result of two superimposed unrelated and structurally controlled mineralization events. The earliest event would be responsible for the introduction of disseminated Au-Cu mineralization in association with biotitic alteration and would be restricted to the mafic rocks (amphibolite, the matrix of the breccia and biotite-rich zones in the metadiorite), only occurring in the margins of the felsic dikes. In the Z87 the mineralization related to this stage would be restricted to a corridor bounded by the felsic dikes. Carles (2000) suggested that the “early stage” mineralization would represent an amphibolite-metamorphic-grade example of “orogenic” gold deposits. Carles (2000) also argued that the potassium enrichment would represent a typical characteristic of lode gold deposits in amphibolite facies conditions, according to Groves (1993).

The vein-hosted mineralization would be part of a second mineralizing event, or stage, and it is interpreted as a typical “orogenic” gold type by Carles (2000) and Goodman et al., (2005). It would have been caused by hydrothermal fluids focused into the wall rocks of the felsic dikes, and within deformation zones. Gold would have been either remobilized from previous stage concentrations or introduced from a new source and would have precipitated along with quartz-sulfide veins accompanied by sericitic alteration (Goodman et al., 2005).

8.1 Discussion – Current Genetic Models

The close spatial relationship between gold and copper mineralization and the porphyritic intrusions in the Troilus deposit are also described in a series of other large Archean gold deposits. Some of these deposits, such as the Canadian Malartic and the McIntyre, share, at least in part, similarities with porphyry and/or intrusion-related gold deposits and could be genetically related to the porphyritic intrusive host rocks (De Souza et al., 2017; Mason and Melnik; 1986, Melnik-Proud 1992; Brisbin 1997 in Dubé et al., 2017).

At the same time, a strong structural control of the main ore zones is observed, commonly associated with hydrothermal alteration typical of greenstone-hosted gold deposits (Groves, 1998, Poulsen, 2000; Dubé and Gosselin, 2007), which led to the interpretation that, at least in part, gold had been introduced to the system syn main deformation phases.

In early 2018, Troilus Gold began re-evaluating the geology in the historic pits at Z87 Zone and J4/J5 Zone (Brassard and Hylands, 2019). Recent results and geological interpretation from the diamond drilling campaign and field work confirmed that the emplacement of gold mineralization was first lithologically controlled by the presence of dioritic breccia acting as a preferential host and felsic dykes acting as fluids barriers. The deposit was subsequently affected by the main deformation event (D1). In addition to shortening, tilting, and stretching of the rock package, all mineralized zones have been affected by late, major folding, which had not ben previously recognized. This new evidence involves a complete re-evaluation of the metallic potential at local and regional scales.

9 EXPLORATION

The exploration and development of the Project is described in Section 6. Since acquisition of the Project, Troilus compiled historical exploration and drilling data and carried out field mapping and prospecting programs. Additionally, Troilus has completed several drilling programs on the Project and are described in Section 10.

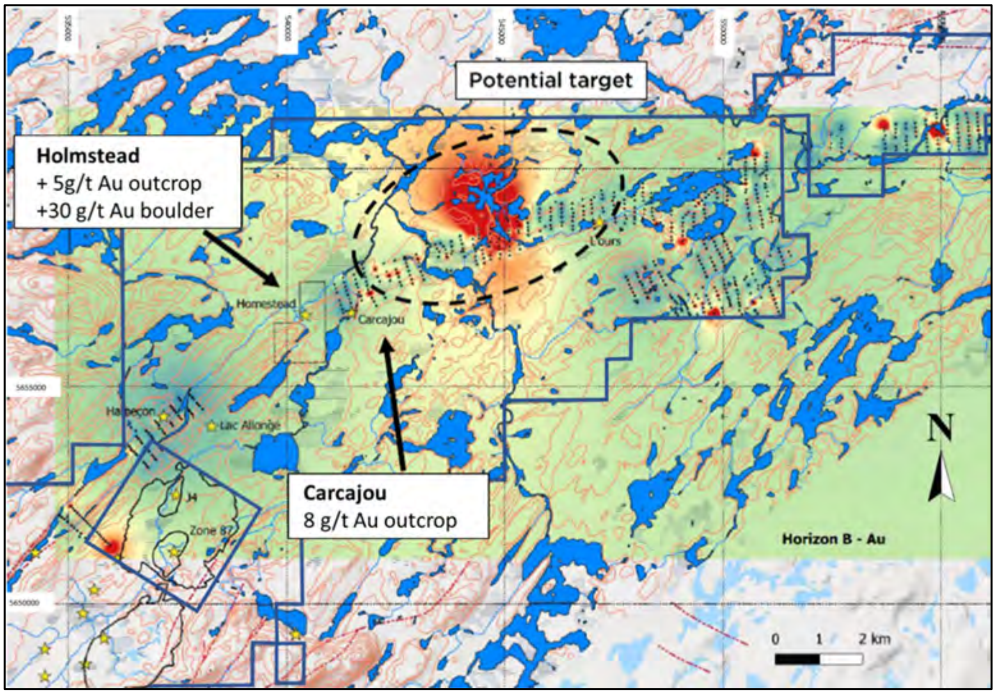
9.1 Exploration Review, pre-2018

A review of all the litho-geochemical data by Inmet indicated that a large halo with gold values greater than 200 ppb is present around Z87 and J4/J5 Zones. Compilation of drill hole data for holes drilled away from the Troilus deposit has shown that there are a number of holes with gold values greater than 200 ppb over ten metres. Systematic drilling of all these zones was undertaken by previous owner companies between 1997 and 2004. Some exploration drilling was completed during this period around the old mine, however, mineralization of the continuity and grade of the main were not found. In 2000, a 500 m long anomalous gold envelope, named the SW Zone, with similar characteristics to Z87 was discovered at the southwest end of the Troilus diorite. Several drill holes were drilled in early 2005 using Ingersoll Rand DML downhole hammer drill rigs (DML) to investigate the potential of having near surface mineralized material that could be mined and trucked to the Troilus mill.

9.2 Troilus, 2018 – Present

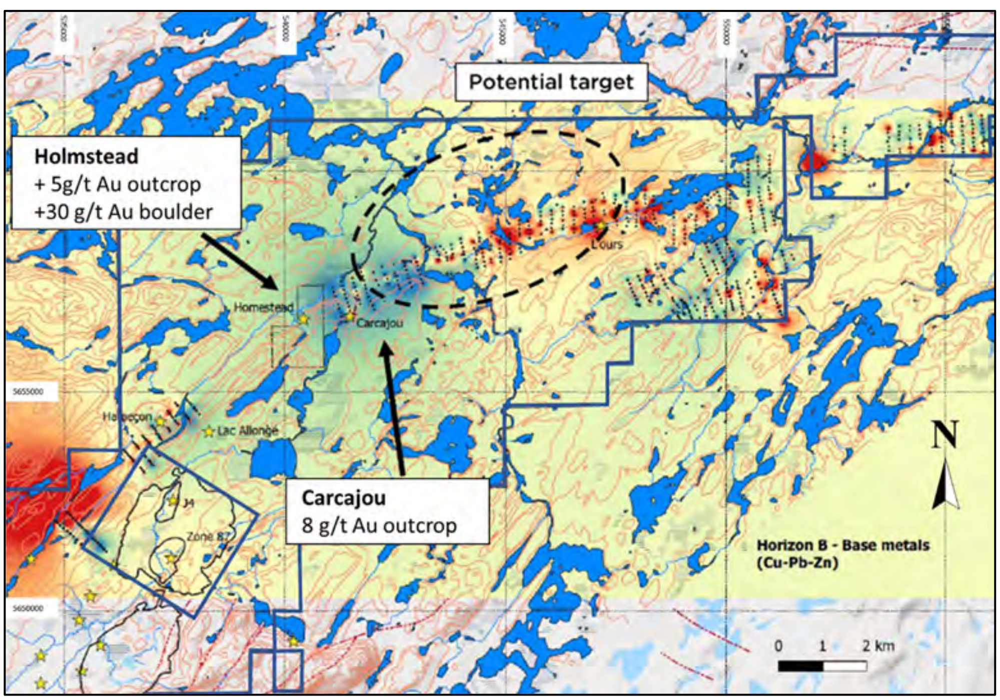
Field mapping and prospecting work in 2018 and 2019 supported Troilus' team to improve the understanding of the lithological and structural controls on gold mineralization across the property and confirmed the overall potential for extending the current known limits of the main mineralized zones. The field exploration programs on the northeastern half of the Property (formerly Troilus North), were to evaluate the overall mineralization potential along the trend from the known deposits and to the northeast. The field exploration included geological mapping, soil geochemistry sampling and channel sampling. The results of the soil geochemistry survey is shown in Figure 9-1 and Figure 9-2, for gold and base metals, respectively.
Surface exploration was also carried out over the Z86 Zone and SW Zone.

Figure 9-1: Gold in Soil Anomaly Map of the Property



Source: Troilus (2019)

Figure 9-2: Base Metal in Soil Anomaly Map of the Property



Source: Troilus (2019)

9.2.1 Structural Study, SRK (2018)

In early 2018, SRK Consulting (Canada) Inc. (SRK) was retained to conduct a structural geology investigation at the Project. The study focussed on the exposed geology in the Z87 open pit and the J4/J5 open pit. The results of this study are found in Section 7.2.2 of this report.

9.2.2 Southwest Zone

The Sand Pit, discovered in 2018, is located at the southern limit of the Southwest Zone and is dominantly composed of an auriferous breccia intruded by a series of intrusions, including felsic dikes. A series of amphibolite outcrops are present to the southeast, and diorite (un-brecciated) is present to the northwest. The breccia and sulphides are strongly transposed, and some remnants of folds can be observed, which indicates a pre- to early-D1 emplacement of the sulphides. They are preferentially hosted in the breccia matrix. The felsic dikes are altered, however, with only minor crosscutting quartz-sulphide veins, while the host breccia contains good disseminated sulphides content. All the observations suggest that Troilus-style gold mineralization is present in the southwestern extremity of the Troilus diorite intrusion.

Channel sampling results obtained in the Sand Pit, associated with historical mineralized boreholes, and a well know favorable lithological and structural characteristics, confirm that the southern portion of the Troilus intrusion represents a prospective exploration target. Additional diamond drill holes have been planned to test the full extent of the zone.

In late 2019 to early 2020, Troilus completed a preliminary drill campaign on the Southwest Zone.

9.2.3 Allongé and Carcajou Targets

Two main volcanic sequences are present on the Property. Occurring mainly in the northwestern region of the belt is a sequence consisting of basaltic to andesitic amphibolitized lavas, locally pillowed, likely of tholeiitic to ferro-tholeiitic affinities. These rocks typically display very little to no sulfide content, and little biotite and silica alteration.

The second major volcanic sequence, located south of the latter, is intruded by the massive Parker granitic intrusion, and is the same phase that hosts the Troilus diorite and mineralized occurrences in the southern portion of the corridor. This second volcanic series consists of volcaniclastic intermediate to felsic tuffs and lavas.

Overall, the entire sequence exhibits strong pervasive silicification and biotite and/or sericite alteration and comprises the hosting lithological unit for main mineralization occurrences in the northeast of the Property.

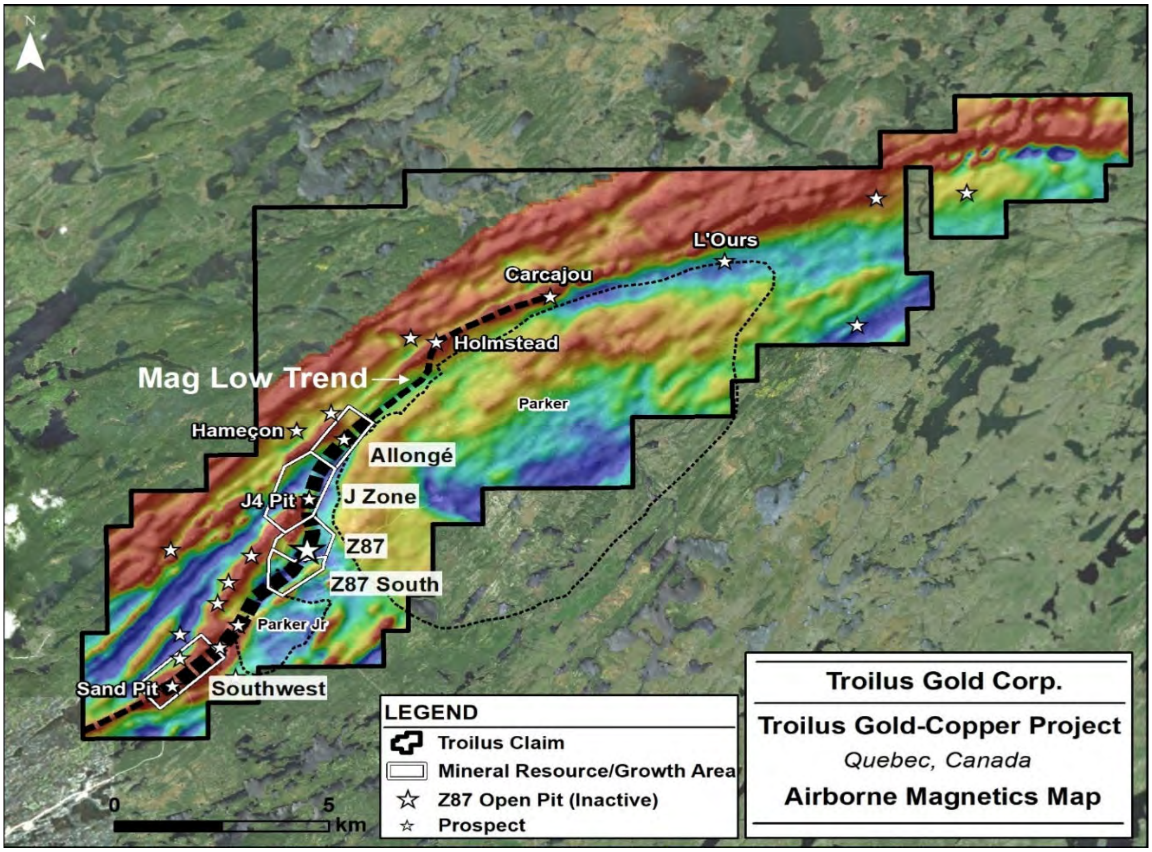
The Holmstead showing reported two grab samples over 5 g/t Au, situated one kilometre east of the north-northeast Lac Allongé. The Caracjou showing, situated four kilometres northeast and on strike with the Lac Allongé zone, reported a grab sample of 8 g/t Au. The mineralization consists of low content fine grained pyrite hosted in the felsic to intermediate volcanic rock, disseminated and stretched in the foliation, which is commonly observed in the J4 Zone.

Geophysical work and associated outcrop mapping show a general trend that hosts the Project that continues along Parker pluton (granite) to the east-northeast (ENE), of the Property. Recent mapping and data compilation demonstrate that potential for mineralized zones continue beyond the J4/J5 Zone.

Due to the size of the Property and limited exploration work, the area northeast of the known deposits remains open along a magnetic low trend which can be followed over 4.5 km from the J4/J5 Zone to the high-grade boulders outlined by Inmet in the 1980s (>10 g/t Au; Holmstead target), and over ten kilometres along the ENE trend (Figure 9-3).

Airborne magnetic geophysical surveys were completed in 2015 by High Sense Geophysics Ltd. (Toronto, Ontario based) for FQM, and in 2018 by Prospectair (Gatineau, Quebec based) for Emgold.

Figure 9-3: Airborne Magnetic Map of the Property



Source: Troilus (2020)

9.2.4 Troilus Frotet Property

Following a major compilation of historical data, Troilus re-evaluated the potential of the entire Frotet Domain by acquiring a major land position called Troilus-Frotet Property.

Several types of mineralization's are present on the Property. However, in the Eastern area of the actual compilation, two (2) main types of mineralization's are dominant:

1) Volcanogenic Massive Sulphide (VMS); and
2) Gold-Copper type, similar to the Troilus Mine.

As of the date of this report, Troilus has started a field exploration campaign in this area that includes prospecting, geological mapping, soil geochemical sampling and a detailed magnetic airborne survey.

10 DRILLING

10.1 Drill Summary

Since 1986, there have been several drilling programs completed on the Property. There was no drilling on the property from 2008 to 2017 and Troilus' drill programs were completed from 2018 to 2020. Table 10-1 summarizes the diamond drilling programs completed on the property to date.

Troilus completed 91 drill holes totalling 37,510 m in 2018; 75 drill holes totalling 35,685 m from 2019; and 17 drill holes totalling 6,037 in 2020 (Table 10-1). Most of the 2018 and 2019 drill holes targeted Z87 and the J zones at depth and along strike. In the SW Zone, 24 drill holes were completed in (November 2019 to February 2020), totalling 8,500 m.

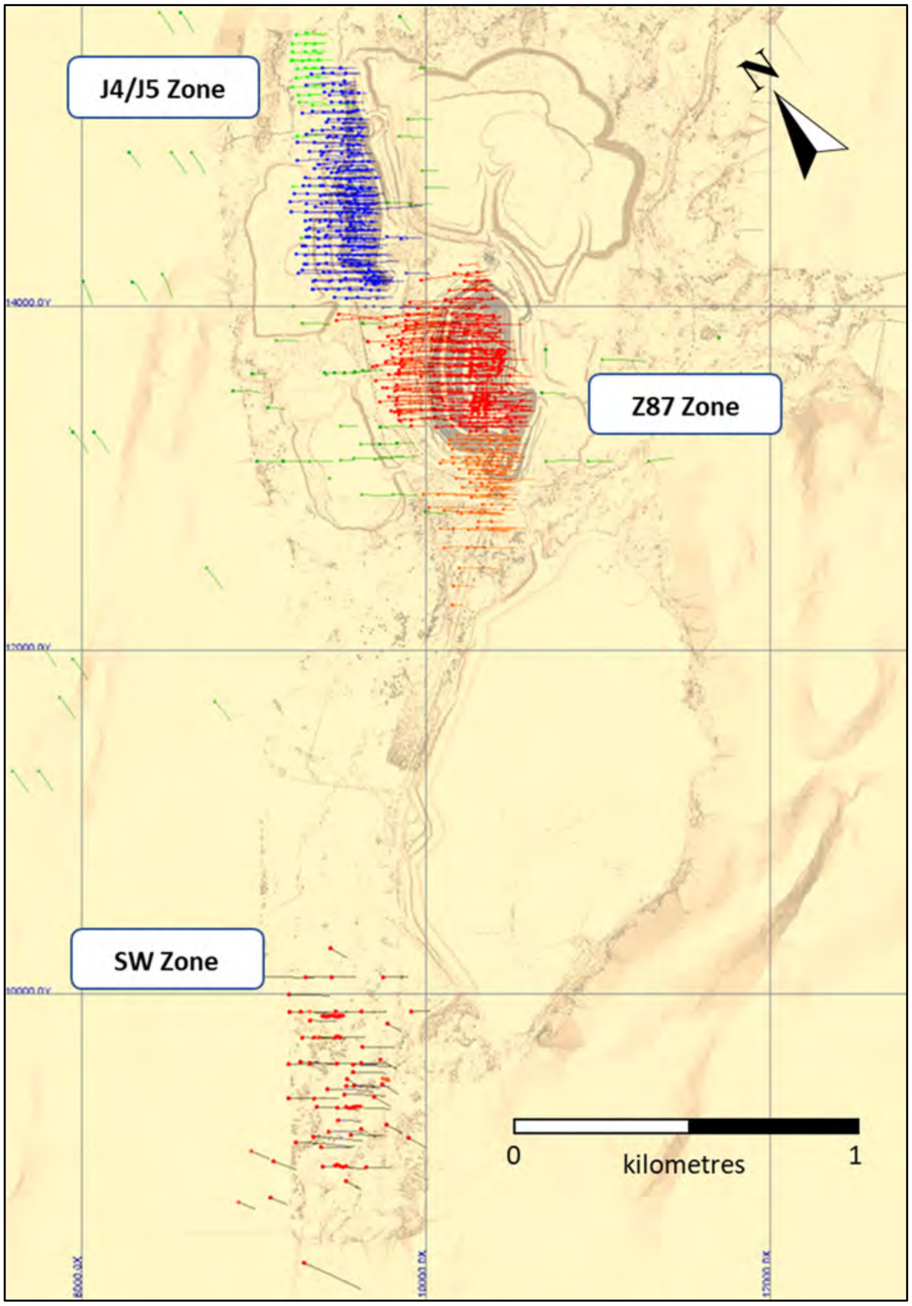
The current resource drill hole database contains 892 drill holes totalling approximately 215,347 m where the majority of the drilling targeted Z87, J4/J5 and SW Zones.

Table 10-1: Summary of Drilling

<table>
<tr><th>Year</th><th>Contractor</th><th>Core Size</th><th>No. Holes</th><th>No. Metres</th></tr>
<tr><td>1986-1989</td><td>Morrissette Diamond Drilling</td><td>BQ (36.5 mm)</td><td rowspan="14">698</td><td rowspan="14">134,068</td></tr>
<tr><td rowspan="3">1990</td><td>Morrissette Diamond Drilling</td><td rowspan="3">NQ (47.6 mm)</td></tr>
<tr><td>Benoit Diamond Drilling</td></tr>
<tr><td>Chibougamau Diamond Drilling</td></tr>
<tr><td rowspan="2">1991-1993</td><td>Benoit Diamond Drilling</td><td rowspan="2">NQ</td></tr>
<tr><td>Chibougamau Diamond Drilling</td></tr>
<tr><td rowspan="2">1995</td><td>Benoit Diamond Drilling</td><td>NQ ("KN" holes)</td></tr>
<tr><td>Morrissette Diamond Drilling</td><td>BQ ("TN" holes)</td></tr>
<tr><td>1997</td><td>Chibougamau Diamond Drilling</td><td>NQ ("KN" holes); BQ ("TN" holes)</td></tr>
<tr><td>1999</td><td>Forages Mercier</td><td>NQ</td></tr>
<tr><td>2000</td><td>Chibougamau Diamond Drilling</td><td>NQ (Z87 and J4 Zones); BQ (elsewhere)</td></tr>
<tr><td>2002</td><td>Chibougamau Diamond Drilling</td><td>NQ</td></tr>
<tr><td>2003-2005</td><td>Forages Mercier</td><td>NQ</td></tr>
<tr><td>2007</td><td>Forages Mercier</td><td>NQ</td></tr>
<tr><td>2018</td><td>Chibougamau Diamond Drilling</td><td>NQ</td><td>90</td><td>37,342</td></tr>
<tr><td>2019</td><td>Chibougamau Diamond Drilling</td><td>NQ</td><td>87</td><td>37,899</td></tr>
<tr><td>2020</td><td>Chibougamau Diamond Drilling</td><td>NQ</td><td>17</td><td>6,038</td></tr>
</table>

Figure 10-1 illustrates the drilling completed on the three mineralized zones of the Troilus Project. The red drill hole traces identify drilling in the Z87 Zone; blue traces in the J4/J5 Zone; and grey traces in the SW Zone.

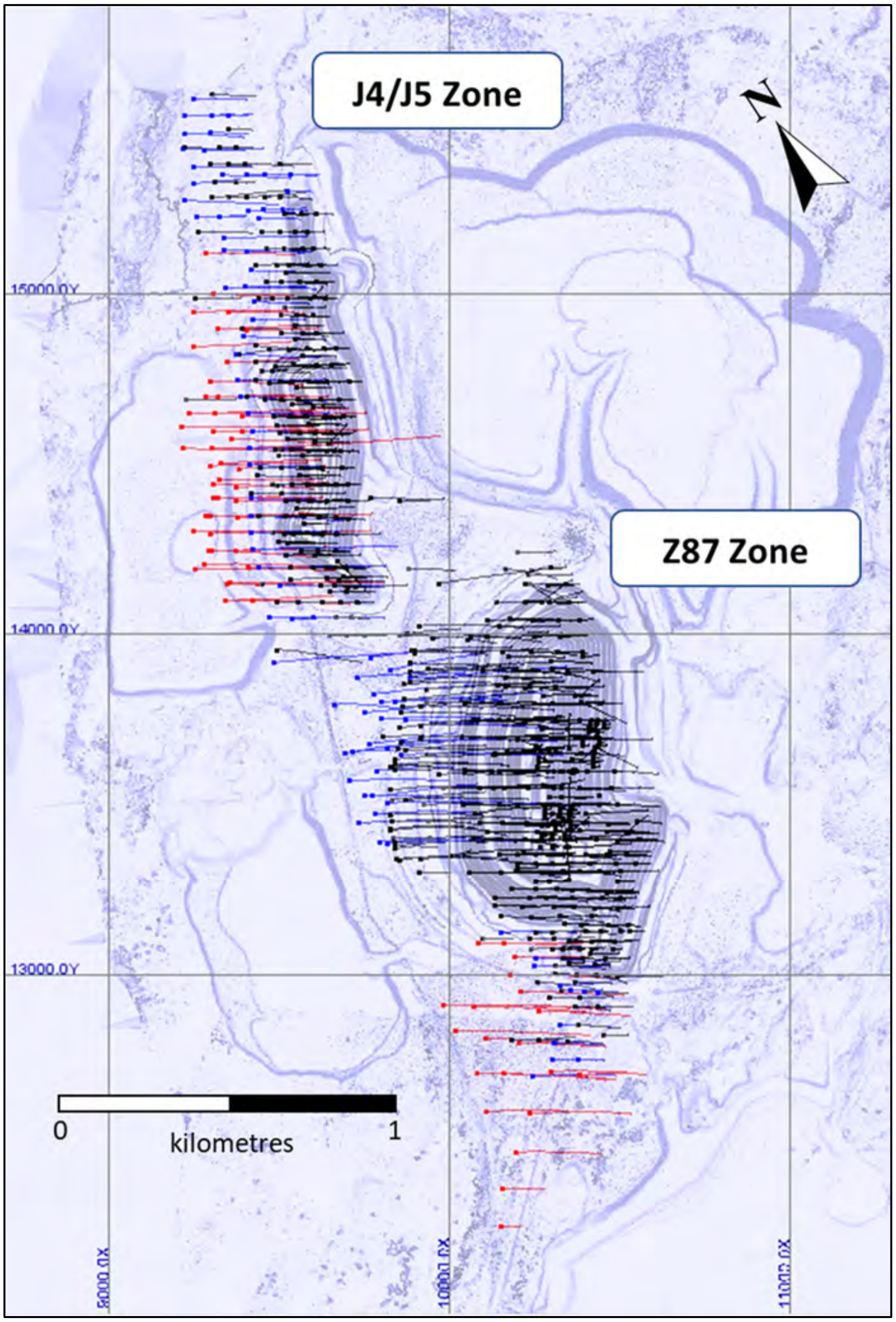
Figure 10-1: Drill Hole Map – Troilus Project



Source: Troilus (2020)

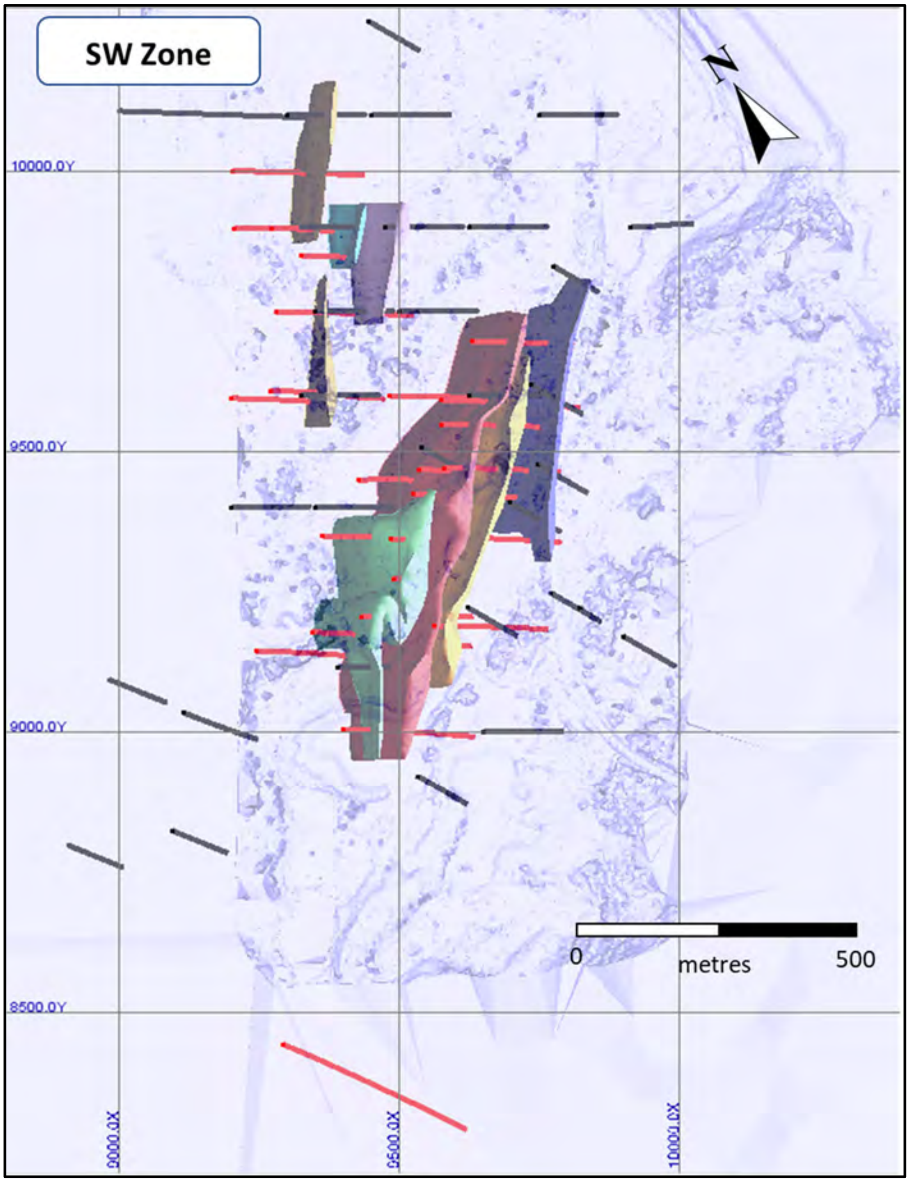
Figure 10-2 and Figure 10-3 present the drill hole locations on the Z87 and J4.J5 Zone and the SW Zone, respectively. Black drill hole traces are pre-2018, blue traces are from 2018, and red traces are from 2019 and 2020.

Figure 10-2: Drill Hole Location Map – Z87 and J4/J5 Zones



Source: AGP (2020)

Figure 10-3: Drill Hole Location Map – SW Zone



Source: AGP (2020)

10.2 Troilus, Drill Methods and Logging, 2018 - 2020

Troilus completed its own drilling on the Property between 2018 and 2020. Troilus contracted Chibougamau Diamond Drilling Ltd. (Forages Chibougamau Ltée), based in Chibougamau, Quebec. All drill core was NQ size diamond drill core.

Drill rigs were set up with siting stakes and marked with the azimuth and dip. Collar coordinates were initially measured using hand-held GPS units measuring in NAD83 Datum and converted to mine grid.

Once a set of drill holes, or program, is completed, drill holes were surveyed using a differential GPS by M. Paul Roy, a professional land surveyor based in Chibougamau. Coordinates for the drill collars are delivered in UTM NAD83 and Mine Grid.

Drill holes were surveyed downhole using either a Reflex or EZ Gyro device. A Multishot survey was carried out from the end of each hole (Reflex by 3 m increments: EZ GYRO by 20 m increments). Drill holes were initially located in the field using either a differential global positioning system (GPS) or a handheld GPS.

10.2.1 Drill Core Logging

Troilus maintains Standard Operating Procedures for all aspects of core handling, logging, sampling, and storage. AGP has reviewed these procedures and found they meet or exceed industry practice.

Drill holes completed by Troilus are labelled as:

$$TLG-< zone >< year > -< number >;\ for\ example\ TLG - Z8718 - 001$$

All drill core collected was placed in 1.5 m long, three-row wooden core boxes. Metrage is marked by drillers using wood blocks with the metre depth marked in black marker every three metres. Drill core boxes are marked on the left edge and top with the drill hole number and core box number. The drill core is transported to the core logging and sampling facility by the drillers, where it was laid out on steel sawhorses/trestles or tables.

Troilus personnel then align and rough log the drill core where meterage is reviewed and recorded for core recovery and Rock Quality Designation (RQD). In general, core recovery is high (> 95%) with little core loss. Drill core is moved to the core logging tables (Figure 10-4) where Troilus geologists log lithology, veins, mineralization, texture, veins, and faults/fractures directly on computer to the Geotic database. All drill logs are vetted by Troilus managers before being finalized in the Geotic database.

Drill core is marked using grease pencils where: red – sample interval, orange lithology contact, yellow – mineralization and white – alteration.

The Troilus geology personnel maintains a diamond drill core reference suite, or witness samples, of the main lithological units and alteration products on the property in order to maintain consistency in lithology nomenclature.

The core was then marked up for sampling in one or two-metre intervals. Earlier 2018 drill holes were broken up into more varied lengths. Sample tags are placed in the core box at the base of the sample interval and stapled to stay in the box.

Prior to sampling, all core is photographed wet and dry as part of the standard logging procedure. A special frame with white cover and lights is used to for the camera to maintain consistency in the photographs (Figure 10-5). A whiteboard is used to label the drill hole number, from and to, and core box number in the photograph.

Figure 10-4: Core Logging Tables

Source: AGP (2020)

Figure 10-5: Core Photo Set-up; fan is used to dry core.

Source: AGP (2020)

10.2.2 Drill Core Sampling

The sampling facility is adjoined to the logging area and is accessed by a garage door inside the building. Troilus has three core saws: two for the NQ drill core and one for PQ drill core.

Once the drill core has been marked up for sampling, it is stationed next to the sampling room, in the same facility, where the drill core is split by core saw. One half core is placed in the sample bag, the other is returned to the core box. The sample bag contains a copy of the sample tag and is marked with the sample number on the bag in permanent black marker.

The sample bag is sealed by zip tie and then placed with other sample bags in a larger white rice bags. The rice bags hold approximately 10 samples. The rice bags are reviewed by Troilus personnel and marked with the sample numbers and client code before the rice bag is sealed by zip tie and orange flagging tape. Rice bags are placed in wood pre-fabricated crates (on palettes) and is covered with a plywood cover and screwed closed and strapped. Once enough crates are filled (approximately 30 rice bags) the transport company, Groupe Transcol Inc. (Transcol), based in Chibougamau, is called in for pick up and transport directly to ALS Global in Sudbury.

The core saw is cleaned after each sample and the sampling room is cleaned every night. Core boxes of the sampled core are kept on temporary racks outside the sampling room for temporary storage until they are moved to the exterior core storage area. Here, the core boxes are tagged with aluminium tags with the drill hole number, from and to, and core box Number. The aluminium tag is stapled to the end of the core box. Drill core is stored on site in covered metal core racks outside the core logging facility.

10.3 Previous Drill Methods and Logging, pre-2018

In the earlier drilling programs on the Property, before 1990, AQ (27 mm) and BQ (36.5 mm) size core was used and, in the early 1990s, NQ (47.6 mm) drill core was used (Evans, 2019b).

From 1986 to 1996, all casings were left in the ground. From 1997 to 1999, all casings from "KN" holes drilled during that period and located in the Z87 Zone and J4 Zone areas were removed, while casings for other "KN" holes and all "TN" holes were left in place. Between 2000 and 2005, all casings for "KN" holes were removed after completion and those for "TN" holes were partly left in the ground.

From 1986 to 2002, acid dip tests and Tropari instruments were used systematically. In 2003, a Reflex Multishot digital survey started to be used. The collars of all holes drilled in the vicinity of the Troilus deposit were surveyed using the mine grid coordinate system. For exploration holes outside the mine area, cut line grid coordinates were converted to the mine grid system. The elevations for these holes was estimated from topographic maps.

Drill holes prior to 1990 were converted to the metric system and verified by Inmet prior to inserting them into the database.

10.3.1 Drill Core Logging

Drill core logging was done for major and minor lithologies, alteration type, and mineralization. Over the years, the lithological naming conventions evolved, generally from volcanic origins to more intrusive origins.

RQD measurements were systematically taken during the 1991 drilling campaign. In following drill programs, RQD was done only on a few holes selected on each section drilled. In 2005, RQD measurements were again systematically collected.

10.3.2 Drill Core Sampling

Since 1986, a consistent sample protocol was employed at Troilus prior to shipping samples for analysis.

From 1986 to 1997, drill core was split, with half of the core placed in wood boxes that were tagged with Dymo tape and the remaining half sent to the laboratory for assaying (Evans, 2019b). All core samples was marked, tagged, placed in plastic bags, sealed, and temporarily stored in the secure core shack. When sufficient samples were accumulated, they were shipped by truck to the assay laboratory. Before 1990, sample lengths in the earlier programs were not constant and depended on mineralization and geology, such as dykes, contacts, etc. (Evans, 2019b). In the subsequent programs, it was found that the mineralization was very diffuse throughout the geological units and systematic 1 m sample intervals were taken, regardless of the geology, within known mineralized zones: and up to 2 m sample intervals in surrounding intrusive rocks. Drill core samples were split into two parts with a hydraulic splitter: one half of the core was sent for assay and the other half was put back in the core boxes for future reference, metallurgical work, or additional check assaying. Since the mineralization consisted essentially of disseminated pyrite and given that there was not a good correlation between pyrite abundance and gold grade, the logging geologists found it virtually impossible to visually estimate gold grades.

From 1999 to 2002, most of the Z87 diamond drill core samples were three metres in length and most of the J4 Zone samples were 2.5 m in length. For the 2002 J4 Zone drilling, the mine laboratory adjusted the protocol to a 2.5 m length. In 2004, all sample lengths were reduced to two metre lengths.

In 1999, a new sampling and metallic sieve based assay protocol was introduced. This protocol included increasing the sample length to three metres and was applied to all samples located within mineralized zones. This was done systematically, without considering geological contacts or dikes. The sample length for samples located outside the mineralized zones was set at two metres. Starting in 1999, whole core was sent for assay and a 10 cm to 20 cm length of core was retained as a witness of the interval.

The drill core for holes drilled up to 1996 was stored outside in core racks at the Opemiska Mine site in the town of Chapais but are now destroyed. The more recent core (post-1997) is stored in racks and pallets at the Project site.

10.4 Summary of Drill Intercepts

10.4.1 Z87 Zone

Initial drilling in 2018 began at the Z87 Zone with the focus on mineralization at depth. A southern extension of the Z87 Zone was discovered in a later drill campaign in late 2019. The Z87 South Zone has now been incorporated into the Z87 Zone.

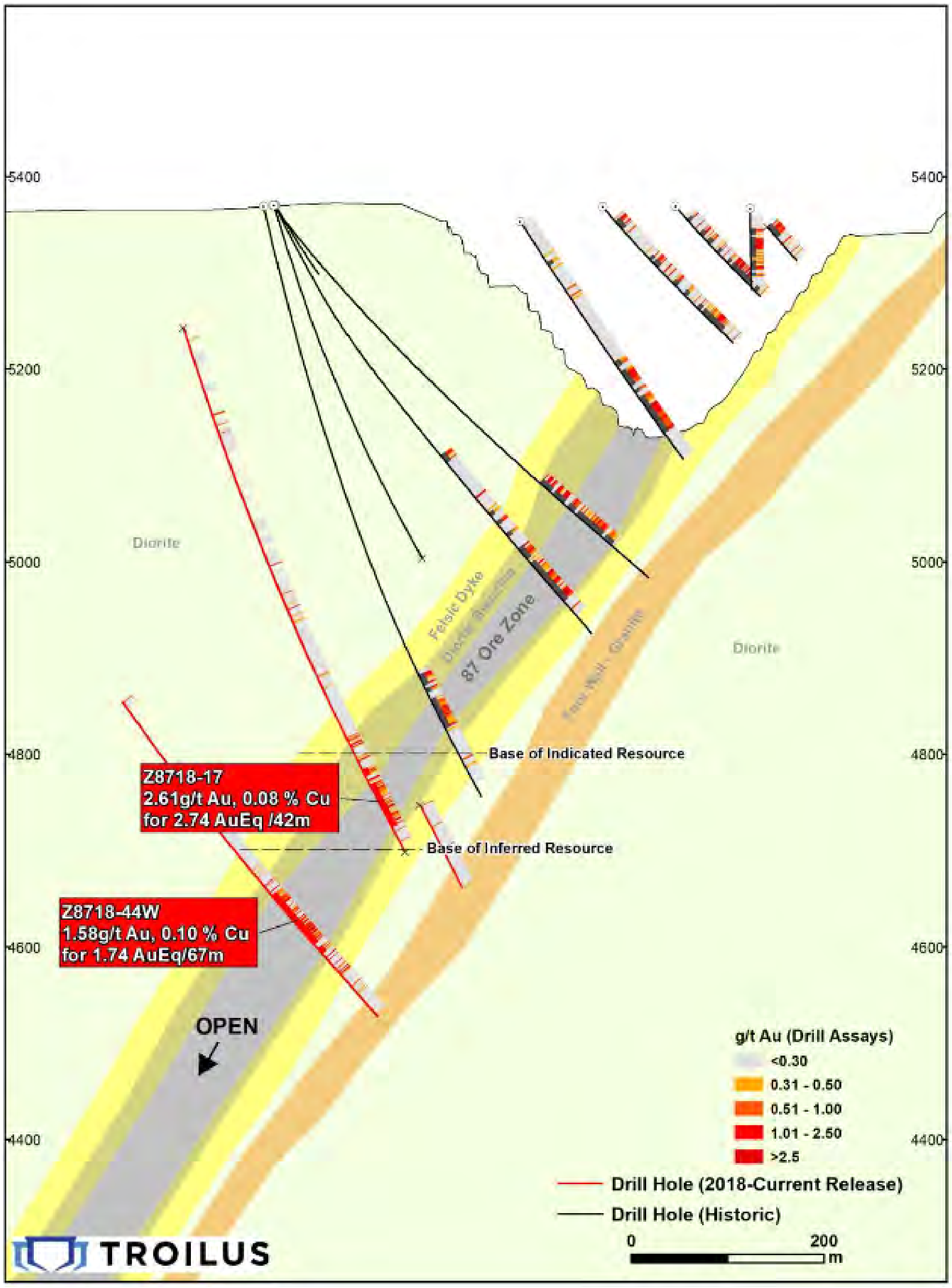
Table 10-2 lists selected drill hole intercepts with significant values. Figure 10-6 shows a cross-section of the 87 Zone at 13925 N.

Table 10-2: Summary of Significant Drill Intercepts – Z87 Zone

DH No	Section		From (m)	To (m)	Width (m)	Au (gpt)	Cu (%)
TLG-Z8718-001	13650N		464	509	45	1.7	0.21
		including	472	477	5	6.09	0.54
TLG-Z8718-002	13400N		476	524	48	1.49	0.14
		including	487	491	4	7.33	0.47
TLG-Z8718-005	13750N		439	529	90	1.02	0.12
		including	458	464	6	1.57	0.25
		including	472	477	5	3.03	0.57
		including	520	528	8	2.36	0.11
TLG-Z8718-007	13875N		432	520	88	0.93	0.08
		including	476	477	1	31.27	0.02
		including	503	507	4	3.55	0.49
TLG-Z8718-010	13600N		654	688	34	1.17	0.11
		including	660	666	6	1.88	0.08
		including	679	685	6	1.74	0.30
TLG-Z8718-017	13925N		625	632	7	0.61	0.09
			643	685	42	2.61	0.08
		including	671	673	2	42.30	0.12
			686	692	6	1.34	0.03
		including	686	688	2	3.02	0.02
TLG-Z8718-035	13875N		670	674	4	0.84	0.02
			689	770	81	1.44	0.13
		including	707	710	3	8.25	0.54
		including	751	753	2	2.77	0.37
		including	755	765	10	3.23	0.30
		including	767	769	2	2.91	0.04
			775	793	18	0.81	0.03
TLG-Z8718-044W	13925N		832	899	67	1.58	0.10
		including	874	876	2	10.03	0.35
		including	881	887	6	7.54	0.17
TLG-Z8718S-133	12800N		100	116	16	0.32	0.04
			214	282	68	0.86	0.03
		including	234	282	48	1.06	0.02
		including	270	276	6	5.02	0.02
TLG-Z8718S-136	12700N		177	183	6	1.35	0.03
			207	211	4	0.79	0.04
			223	243	20	0.43	0.11
		including	235	243	8	0.69	0.22
		including	239	241	2	1.80	0.27

Troilus Press releases: 24 May 2018; 9 Jul 2018; 12 Sep 2018; 31 Oct 2018; 19 Aug 2019 (most recently viewed 12 Jun 2020

Figure 10-6: Cross Section 13925N – Z87 Zone; looking southwest



Source: Troilus Press Release 31 Oct 2018

10.4.2 J4/J5 Zone

In 2019, the drill program focussed on the extension of the mineralization at J4/J5 zone. The drill results confirmed that the mineralization is in agreement with previous drill campaigns. Troilus drill holes have also shown that mineralization continues to the north and to the south of the J4/J5 Zone and at depth.

Table 10-3 lists selected drill hole intercepts in the J4/J5 Zone with significant values. Figure 10-7 shows a selected cross-section of the J4/J5 Zone at 14150N.

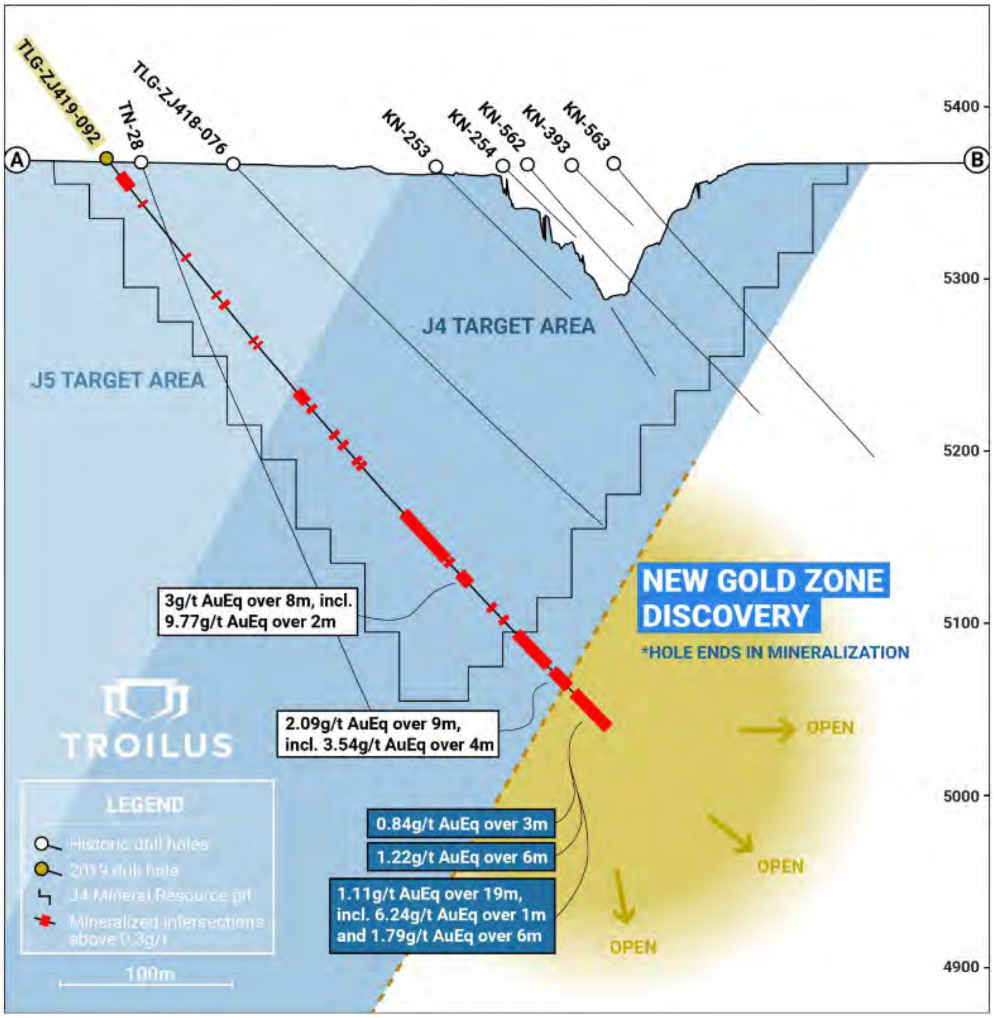
Table 10-3: Summary of Significant Drill Intercepts – J4/J5 Zone

DH No	Section		From (m)	To (m)	Width (m)	Au (gpt)	Cu (%)
TLG-ZJ418-064	14825N		258	262	4.00	1.30	0.07
			265	268	2.80	1.80	0.03
			272	283	10.72	2.20	0.05
		including	275	277	1.89	3.50	0.05
		including	282	283	0.72	7.50	0.03
			294	298	4.00	0.90	0.02
TLG-ZJ418-065	14750N		135	138	3.00	1.24	0.02
			244	247	2.60	1.00	0.07
			264	283	19.00	3.50	0.06
		including	276	282	5.65	9.40	0.07
			288	291	3.00	1.20	0.03
			303	312	9.00	0.80	0.04
TLG-ZJ418-066	14700N		136	139	3.00	2.10	0.06
			268	277	9.38	1.30	0.09
		including	274	277	3.38	2.30	0.09
TLG-ZJ418-067	14650N		246	257	11.00	0.80	0.07
			265	269	4.00	0.80	0.05
			288	292	4.00	0.50	0.08
TLG-ZJ418-068	14600N		137	139	1.59	1.50	0.07
			148	151	3.00	0.90	0.04
			218	221	3.00	3.10	0.07
		including	220	221	1.00	7.40	0.08
			225	227	2.00	1.30	0.05
			252	261	9.00	1.00	0.05
		including	257	261	4.00	1.60	0.05
			287	290	3.50	0.70	0.06
TLG-ZJ418-070	14500N		142	145	2.78	4.60	0.09
		including	143	145	1.78	6.60	0.10
			222	236	14.00	0.90	0.14
TLG-ZJ418-071	14400N		197	204	7.00	0.90	0.08
			207	210	3.00	0.90	0.04
			215	218	3.00	3.20	0.05

DH No	Section		From (m)	To (m)	Width (m)	Au (gpt)	Cu (%)
		including	215	216	1.00	7.70	0.04
			220	232	12.00	0.70	0.07
			236	245	9.00	1.00	0.08
		including	243	245	2.00	2.20	0.08
			249	256	7.00	1.00	0.09
			274	283	9.00	0.80	0.07
TLG-ZJ418-072	14350N		204	219	15.00	1.80	0.10
		including	205	207	2.00	8.30	0.15
			234	243	9.00	1.00	0.04
			246	258	12.00	1.20	0.05
		including	247	250	3.00	1.70	0.07
			266	268	2.00	1.60	0.70
			271	275	4.00	1.10	0.04
			279	291	12.00	1.00	0.07
		including	288	291	3.00	1.60	0.04
TLG-ZJ419-092	14150N		317	325	8.00	2.93	0.05
		including	317	319	2.00	9.61	0.10
			383	390	7.00	0.82	0.13
			397	406	9.00	1.96	0.08
		including	401	405	4.00	3.38	0.10
			422	441	19.00	0.95	0.10
		including	422	425	3.00	0.68	0.11
		including	427	433	6.00	1.06	0.10
		including	435	441	6.00	1.53	0.16
		including	439	440	1.00	5.22	0.64

Source: Troilus Press releases: 14 Nov 2018; 26 Mar 2019; (most recently viewed 12 Jun 2020)

Figure 10-7: Cross Section 14150N – J4/J5 Zone; looking north



Source: Troilus Press Release 31 Oct 2018

10.4.3 SW Zone

The SW Zone is situated approximately 3.5 km southwest of the Z87 Zone pit, or 3.5 km south on the mine grid. This zone covers an area approximately 1,200 m x 500 m where Troilus completed 24 drill holes. Of this drilling, 23 of the Troilus drill holes intersected the SW Zone.

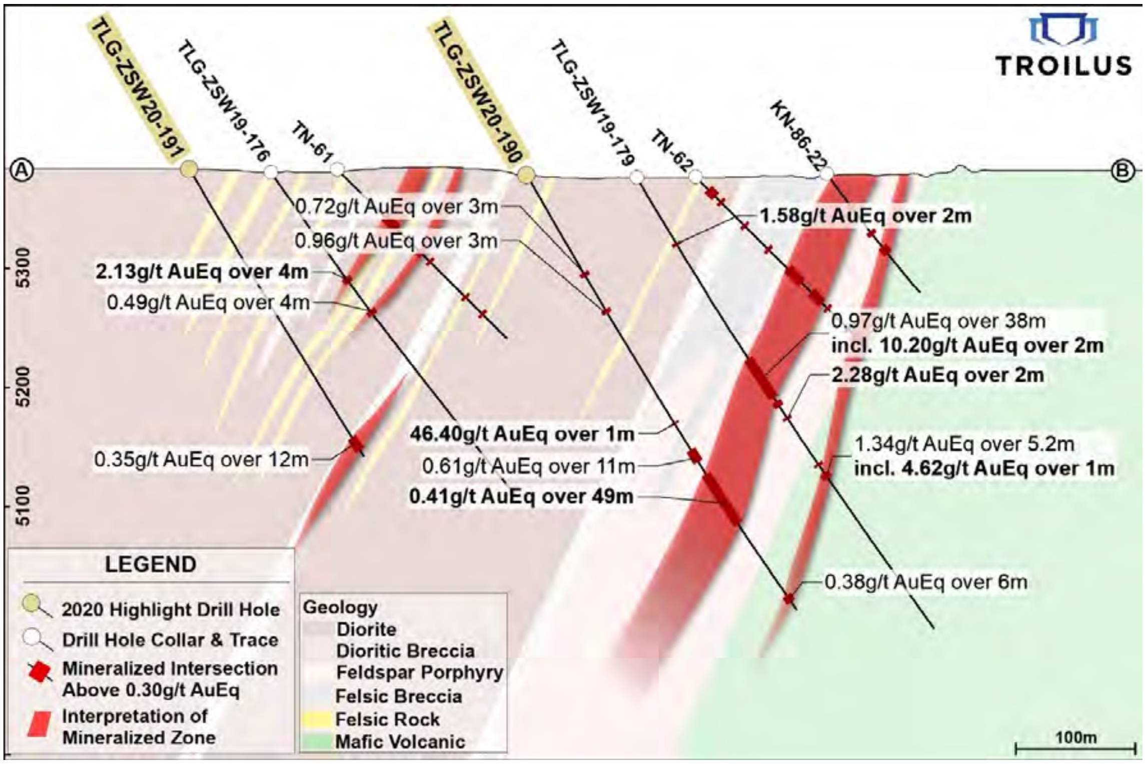
Table 10-4 lists selected drill hole intercepts in the SW Zone with significant values. The results demonstrate the presence of mineralization and, together with historical drilling, has sufficient information to complete a preliminary resource estimate. Figure 10-8 shows a selected cross-section of the SW Zone at 9600 N.

Table 10-4: Summary of Significant Drill Intercepts – SW Zone

DH No	Section		From (m)	To (m)	Width (m)	Au (gpt)	Cu (%)
TLG-ZSW19-173	9150N		232.3	264	31.7	1.00	0.01
		including	253	260	7	2.26	0.03
			269	277	8	1.10	0.03
		including	272	275	3	2.36	0.03
			317	321	4	0.47	0.35
TLG-ZSW19-174	9200N		8.5	14	5.5	0.74	0.02
		including	10	11	1	2.31	0.06
			31	43	12	0.83	0.01
		including	31	33	2	2.16	0.00
		including	40	41	1	2.06	0.02
			63	81	18	0.70	0.04
		including	63	65	2	1.28	0.04
		including	77	81	4	1.41	0.10
			168	171	3	1.06	0.01
TLG-ZSW19-175	9350N		99	116	17	1.32	0.06
		including	99	101	2	1.94	0.03
		including	104	105	1	6.73	0.09
		including	112	114	2	3.30	0.24
			124	126	2	0.67	0.08
			134	143	9	0.43	0.01
			168	173	5	2.46	0.03
		including	172	173	1	10.60	0.11
TLG-ZSW20-185	9450N		52	6	14	0.85	0.09
TLG-ZSW20-189	9450N		14	20	6	0.80	0.24
			158	171.2	13.2	0.75	0.13
		including	158	161	3.	1.41	0.27
		including	169	171.2	2.2	1.81	0.19
			193.15	266	72.85	1.27	0.14
			210	258	48	1.7	0.17
TLG-ZSW20-190	9600N		95	98	3	0.63	0.05
			131	134	3	0.85	0.05
			242	243	1	46.30	0.04
			268	280	11	0.48	0.07

Source: Troilus Press releases: 28 Jan 2020; 21 Apr 2020; 14 May 2020 (most recently viewed 12 Jun 2020)

Figure 10-8: Cross Section 9600 N – SW Zone; looking northeast



Source: Troilus (2020)

10.4.4 J4N Zone (Allongé Zone)

To follow up on results of surface grab samples and a single historic drill hole (KN-684), Troilus completed 12 drill holes, totalling 2,193 m, in the J4N (Allongé) Zone along three fences. This zone is situated approximately 350 m to 1400 m northeast of the J4/J5 Zone. Six of the drill holes had intersections, between 2m and 12 m, of greater 0.3 gpt Au. The most significant intersections found in the Troilus drilling, approximately 900 m northeast of the J4/J5 Zone (Section 16525N), and roughly 100 m northeast of the historic KN-684 drill hole. These are positive indications of gold mineralization and warrant further investigation.

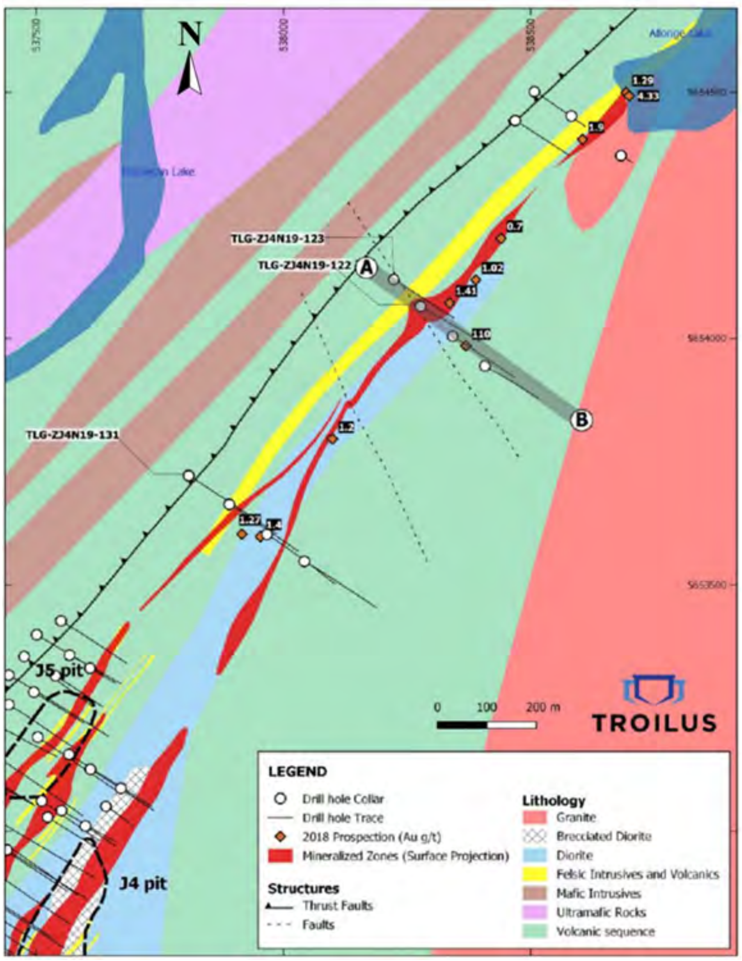
Table 10-5 summarizes the significant intersections in J4N Zone. Figure 10-9 shows the location of the J4N Zone drilling.

Table 10-5: Summary of Significant Drill Intercepts – J4N (Allongé) Zone

DH No	Section		From (m)	To (m)	Width (m)	Au (gpt)	Cu (%)
TLG-ZJ4N19-122	61525N		26	48	38	0.47	0.14
		including	44	48	4	1.05	0.31
TLG-ZJ4N19-123	61525N		71	85	14	0.57	0.01
			97	105	8	0.23	0.06
			111	119	8	1.03	0.14
		including	113	115	2	2.50	0.17

Source: Troilus Database (2020)

Figure 10-9: Plan View – J4N or Allongé Zone



Source: Troilus (2019)

10.5 AGP Opinion

AGP believes drilling was undertaken in accordance with industry standards and best practices without any major adverse aspects that could have materially impacted the accuracy and reliability of the resource estimate.

11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Troilus, 2018 - 2020

11.1.1 Analytical Laboratories

For the drilling completed in 2018, samples were sent to the following independent certified assay laboratories, AGAT Laboratories Ltd. (AGAT), based in Mississauga, Ontario; and ALS Ltd. (ALS), based in Sudbury, Ontario. For drilling completed in 2019 and 2020, all samples were sent to ALS in Sudbury. Both labs, AGAT and ALS, have been assessed by the Standards Council of Canada (SCC), and conform to the requirements of ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories standard; and ISO 9001:2015. The labs are recognized as an Accredited Testing Laboratory for a number of specific tests, including gold fire assaying, that are listed on the SCC website (www.scc.ca).

11.1.2 Sampling Preparation and Analysis

In 2018, Troilus had their samples prepared and analyzed by AGAT and by ALS. From December 2018, Troilus only used ALS for sample preparation and analysis.

At AGAT and ALS, all samples were weighed prior to preparation and all samples were prepared by crushing the sample to 85% passing 75 microns on 500 g splits. Samples sent to ALS were prepared at their laboratory in Sudbury and the analysis was completed at the laboratory in Vancouver.

At AGAT, samples were assayed for gold by fire assay (AGAT Code: 202-552) with a 50 g charge with an Induced Coupled Plasma – Optical Emission Spectroscopy (ICP-OES) finish. Sample results greater than 3.5 ppm Au were re-analyzed with a gravimetric finish. This was changed to an Atomic Absorption (AA) finish in May 2018. A multi-element analysis was used for 23 elements (AGAT Code: 201-079). Samples underwent a sodium peroxide fusion followed by ICP-OES finish. Copper was analyzed as part of the multi-element suite; however, silver was not included.

At ALS, samples were assayed for gold by fire assay (ALS Code: Au-AA24) with a 50 g charge with an AA finish. Sample results greater than 3.5 ppm Au were re-analyzed with a gravimetric finish (ALS Code: . Au-GRA22). A multi-element analysis was used for 33 elements (ALS Code: ME-ICP61). Samples underwent a four acid digestion followed by Induced Coupled Plasma – Optical Atomic Spectroscopy (ICP-AES) finish. Copper and silver were analyzed as part of the multi-element suite.

In December 2018, Troilus retained an external consultant, Jack Stanley of JS Analytical Laboratory Consultant Ltd., to carry out an audit of both laboratories, who concluded that both facilities were following industry standards.

For the 2019 – 2020 drill programs, all samples were sent to ALS in Sudbury for preparation and for specific gravity measurements. Prepared samples were forwarded to ALS in Vancouver for analysis.

In February 2019, Troilus requested specific gravity to be measured by ALS (Sudbury) (ALS Code: OA-GRA08).

In May 2019, a decision was made to use two metres of split NQ core and apply the metallic sieve gold assaying protocol for all core samples. A fine crushing to 70% less than 2 mm was performed. The sample was divided so that 1.2 kg to 1.5 kg was used for analysis. The sample of 1.2 kg to 1.5 kg was then pulverized to 95% passing 106 mesh. Approximately 50 g was recovered for ME-ICP61 analysis of

33 elements by four acid inductively coupled plasma atomic emission spectroscopy (ICP-AES). The remainder of the sample was screened to divide the fraction larger and smaller than 106 mesh. The portion smaller than 106 mesh was analyzed in 50 g by fire assay. The portion larger than 106 mesh was fully analyzed. The values were then combined by weighted calculation. Both results were transmitted to Troilus by a certificate certified by the laboratory.

11.2 Pre-2018

11.2.1 Analytical Laboratories

Prior to 1997, samples were shipped off site to certified assay laboratories. During mining operations, from 1997 to 2007, samples were assayed on-site.

During the first drilling programs (1986 to 1991), several independent laboratories, including Swastika Laboratories (Swastika), based in Swastika, Ontario, were used for assaying the core samples. Bondar-Clegg and Chimitec (now part of ALS) were also used.

Following an extensive assaying comparison program in 1992 between several laboratories using different techniques, Swastika was retained to do most of the analyses from 1992 to 1997.

From 1997 to 2007, when Troilus was in operation, Inmet used their own laboratory set up at the mine. The mine laboratory was equipped with modern state-of-the-art equipment and staffed with highly qualified personnel.

11.2.2 Sample Preparation and Analysis

Before 1992, Bondar-Clegg and Chimitec used a half assay-ton fire assay technique with a direct coupling plasma (DCP) finish. At Swastika, it was determined that the one-assay tonne fire assay with gravimetric finish technique used by Swastika was more accurate for assaying gold than the half assay ton method used at the other laboratories. Consequently, from 1992 to 1999, all samples were assayed for gold by one-assay tonne fire assay with a gravimetric or AA finish depending on the size of the "doré bead". If the bead was visually judged too small to be weighed, then the bead was dissolved, and an AA finish was used. Copper and silver were analyzed by AA spectrometry.

Prior to assaying, the original one metre split core sample, weighing approximately 2.7 kg, was entirely crushed down to 0.25 in. Then, 350 g was pulverized to –150 mesh (105 microns) and a one-assay ton (29.17 g) fire assay was done. The rest of the sample (pulp and reject) was stored for future use.

In 1999, a new sampling and metallic sieve based assay protocol was introduced following the studies and recommendations by Pitard (1999) (Pitard protocol) and included increasing the sample length to three metres and was applied to all samples located within mineralized zones. The Pitard protocol involved assaying a much larger sample than that used for the standard fire assay in the previous programs (1,000 g versus 30 g). This protocol was designed to reduce the Fundamental Error (i.e., error generated by sample and subsample weights), the Grouping and Segregation Error (i.e., error generated by gold segregation and the way samples and subsamples are split), the Extraction Error (i.e., error generated by poor sample recovery), and the Preparation Error (i.e., error generated by excessive loss of fines). The Pitard Protocol for assaying Troilus diamond drill core involved:

- crush the entire three metre NQ core sample (14 kg) down to 16 mesh (0.04 in.)
- split a one kilogram sample using a rotary divider

- pulverize the entire one kilogram sample for no longer than 90 seconds to minimize smearing
- screen the entire one kilogram sample using a 150 mesh screen
- perform as many one-AT fire assay on the +150 mesh fraction as needed to assay the whole +150 fraction
- perform two one-AT fire assays on the –150 mesh fraction
- the final assay value is the weighted average of the results from both fractions

Starting in 2004, the Pitard Protocol for diamond drill core was adjusted to two metre core length (ten kilograms). The rest of the procedure remained the same. Assay data compilation from the 2004 and 2005 diamond drilling programs showed that reducing the sampling length to two metres did not increase the sampling error significantly.

11.3 Density Determinations

11.3.1 Z87 Zone

Historically, density measurements from 2,721 core samples in the 30 deep drill holes (KN-648 to KN-677) were collected by Inmet (RPA, 2006). The core samples tested were generally whole core pieces ranging in length from approximately 10 to 20 cm. Mine personnel weighed samples in air and in water, and the density results were adjusted to account for water temperature. Measurements on 496 resource related samples range from 2.57 g/cm³ to 3.42 g/cm³ and average 2.86 g/cm³. The same average is obtained when the lowest ten and highest ten density measurements are excluded (RPA, 2019a). These measurements are used for the current resource estimate.
The historic density measurements were unavailable at the time of writing. AGP recommends a review of this data when it becomes available.

Z87 South, 2019

During the 2019 drill program on Z87S Zone, Troilus began their density measurements core samples in the Z87S Zone. Density measurements were carried out by ALS (Sudbury) (ALS Code: OA-GRA08) on samples sent for assay analysis using water immersion (wet/dry) method. A total of 4,255 measurements were collected from 22 drill holes; 526 of these values intersect eight domains. These density records were received late and were not included in the current resources. AGP reviewed the data and location of the measurements and determined that they represent less than 1% of the total Z87 Zone resources. Figure 11-1 presents the descriptive statistics for density measurements in Z87 South.

Table 11-1: Descriptive Statistics for Density – Z87 South

	Domain Density (g/cm^3)	Country Rock Density (g/cm^3)
Count	526	3,729
Minimum	2.46	2.07
Maximum	3.18	3.23
Mean	2.75	2.77
Median	0.09	0.11
St Dev	0.01	0.01
CV	0.03	0.04

AGP recommends a review of all available density data in the Z87 and Z87S areas be carried out collectively to determine the best possible representation of density for this Zone. AGP also recommends the collection of density data from 2018 drilling in the Z87 Zone as well.

11.3.2 J4/J5 Zones

During the drill program on the J4/J5 Zone, Troilus has density measurements compiled on core samples. Density measurements were carried out by ALS (Sudbury) (ALS Code: OA-GRA08) on selected drill core samples set for assay analysis using water immersion (wet/dry) method. A total of 13,409 measurements were collected from 46 drill holes; 3,356 of these values intersect all 13 of the interpreted mineralized domains. For the current resource estimate, densities were assigned to the J4 and J5 mineralized domains. Table 11-2 presents the statistics for density in the J4/J5 Zone.

Table 11-2: Descriptive Statistics for Density by Mineralized Domain – J4/J5 Zone

	J4 Domains Density (g/cm^3)	J5 Domains Density (g/cm^3)	Country Rock Density (g/cm^3)
Count	2376	980	10053
Minimum	2.18	2.17	2.10
Maximum	3.03	3.17	3.63
Mean	2.77	2.80	2.77
Median	2.78	2.77	2.77
St Dev	0.06	0.10	0.07
CV	0.02	0.03	0.03

AGP recommends a review of the spatial distribution of the density data in the J4/J5 Zone to determine if density may be estimated or assigned by mineralized domain.

11.3.3 SW Zone, 2019 – 2020

During the 2019-2020 drilling campaign, Troilus collected density readings collected for all sample intervals.

During the drill program on the SW Zone, density measurements carried out by ALS (Sudbury) on drill core samples sent for assay analysis using water immersion (wet/dry) method. A total of 8,524 measurements were collected from all 24 drill holes; 1,222 of these values intersect all 8 of the interpreted mineralized domains.

For the current resource estimate density was assigned by mineralized domain for the SW Zone. AGP recommends continued collection of density measurements to further characterize both mineralized domains and country rock. A review of the spatial distribution of the density data in the SW Zone can then be carried out to determine if density may be estimated or assigned by mineralized domain.

Table 11-3 presents the statistics for density in the SW Zone, by mineralized domain.

Table 11-3: Descriptive Statistics for Density (g/cm^3) by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
201	321	2.64	3.85	2.81	2.80	0.10	0.04
202	377	2.42	2.97	2.72	2.70	0.07	0.03
203	70	2.66	2.83	2.72	2.71	0.04	0.01
204	149	2.08	3.07	2.91	2.92	0.11	0.04
205	199	2.61	2.98	2.80	2.80	0.05	0.02
206	8	2.68	2.93	2.84	2.85	0.09	0.03
207	25	2.56	2.81	2.75	2.77	0.06	0.02
208	73	2.66	2.88	2.79	2.80	0.06	0.02
Country Rock	7302	1.81	3.71	2.81	2.79	0.11	0.04

11.4 Quality Assurance / Quality Control

Troilus follows their internal Quality Assurance and Quality Control (QA/QC) procedures to assess drilling results. Troilus maintains written Standard Operating Procedures that lay out the
. The protocol used for insertions of these samples were as follows:

- blank (1 in every 25 samples)
- standard (SRM) (1 in every 25 samples)

Analytical QAQC failures are identified as:

- any blank sample that reported >0.1 g/t Au
- any CRM result that reported with a difference >3 standard deviations from the certified mean or recommended value for the standard
- more than two sequential CRM results that reported with differences >2 standard deviations from the certified mean or recommended value, having the same positive or negative bias

Results were tracked as part of the standard QA/QC procedures. Failures were investigated and samples were re-assayed as required.

Blanks

Coarse blank materials were inserted into the sample stream at a rate of one each for every 25 samples for all drill programs. The material for the blanks came from the Parker Lake Granite, situated to the southeast of the mineralized zones. For the 2018 drilling, Troilus employed the granite material from the end of drill holes; or broken rock coming from an outcrop located well inside the Parker Lake Granite. For the 2019 and 2020 drilling, Troilus used exclusively coarse material from the Parker Lake granite outcrop.

Standards

Troilus used five commercially produced Certified (or Standard) Reference Materials (CRMs) during the drill programs from Ore Research & Exploration PL, based in Perth, Australia.
These CRMs are summarized with their 'recommended values' in Table 11-4 below.

Table 11-4: Standard Reference Materials (SRMs) and recommended values

Troilus Number	SRM	Source	Au (gpt)	Cu (ppm)	Ag (gpt)
S1	OREAS 209	Ore Research & Exploration PL	1.58	76	0.264
S2	OREAS 215		3.54	-	-
S3	OREAS 217		0.338	-	-
S4	OREAS 92		-	2294	0.70
S5	OREAS 922		-	2122	0.888

The CRMs were chosen to represent different grade ranges for gold and copper on the Project. All the CRMs are individually packaged in 30 g packets and were inserted with the drill core samples with sequential sample tags at a rate of one for every 25 samples.
The results were plotted in chronological order on graphs depicting the 'recommended value' as well as plus/minus two and three times the standard deviation of the dataset to provide a check of the precision of the assays.

Duplicates

Duplicates were collected in through out all drilling programs. Due to the variable nature of gold within the sample pulps and rejects, duplicate samples were deemed too inconsistent to be of use and stopped in July 2019.

11.4.1 QA/QC, 2018 – 2019

The QA.QC program included blank materials and CRMs. Four CRM's were used during all drill programs on the Property. A fifth CRM (S4) was only used in the initial seven drill holes of 2018.
Table 11-5 shows a summary of the QA/QC samples submitted during the 2018 and 2019 drilling program on the Z87 Zone and J4/J5 Zone. Table 11-6 shows a summary of the QA/QC samples submitted during the 2019-2020 drilling program on the SW Zone

Table 11-5: Summary of Troilus QAQC Program, 2018 – 2019

Description	2018 Number of Samples (% of database)	2019 Number of Samples (% of database)
Total Number of Samples	28,334	18,729
Number of Control Samples	6,449 (22.8%)	2,492 (13.3%)
Distribution		
Blanks	1,294 (4.6%)	829 (4.4%)
Blanks (BP)	383	829
Blanks (other)	912	-
Lab Duplicates	3,708 (13.1%)	815 (4.4%)
CRM samples	1,447 (5.1%)	848 (4.5%)
OREAS 209 (S1)	283	200
OREAS 215 (S2)	329	207
OREAS 217 (S3)	340	239
OREAS 92 (S4) *	32	-
OREAS 922 (S5)	463	202

* OREAS 92 was used for the initial seven drill holes of 2018

Blanks

For the 2018 drilling, the Parker Lake Granite material used for blanks was taken from the ends of selected drillholes, outcrop and in a few instances from silica sand from nearby Lac a la Croix (BSS). The drill holes ends were labeled:

- BP Parker Lake Granite outcrop
- B1 TLG-Z8718-002
- B2 TLG-Z8718-009
- B3 TLG-Z8718-010
- B4 TLG-Z8718-011
- B5 TLG-Z8718-020
- B6 TLG-Z8718-037
- B7 TLG-Z8718-049
- BSS silica sand (Lac à la Croix)

Results from the blanks found 11 failures out of 1294 blanks (less than 1%). The results were verified and not considered significant.

In 2018, third-party check assays are on pulps from the primary laboratory that are re-assayed by a third party laboratory, that is, AGAT pulps were re-assayed by ALS and vice versa. In 2019, ALS was the primary laboratory and SGS was used for the third party check assays.

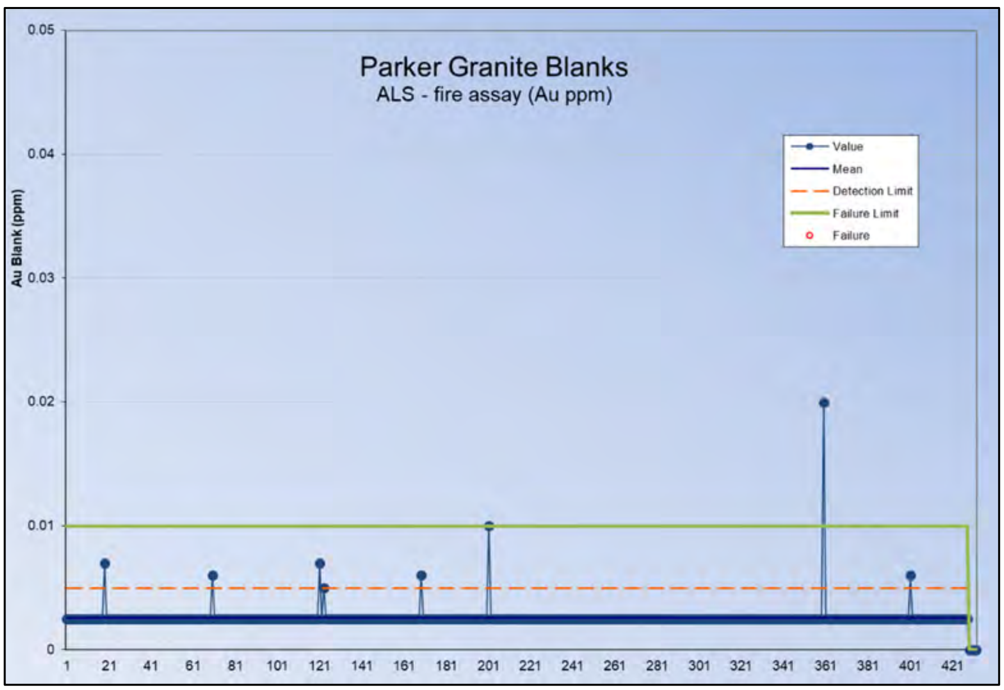
Table 11-6 shows the results of the blanks used in the 2018 – 2019 drilling. Figure 11-1 and Figure 11-2 present plots for fire assay blanks and metallic sieve assay blanks, respectively.

Table 11-6: Blanks values, 2018 – 2019 Drilling

Troilus Number	Total	Failures	Comment
B1	158	1	
B2	122	2	
B3	194	2	
B4	21	1	
B5	255	1	
B6	97	1	
B7	40	1	
BP	428	1	ALS fire assay
BP	730	1	ALS metallic sieve
BSS	25	0	-

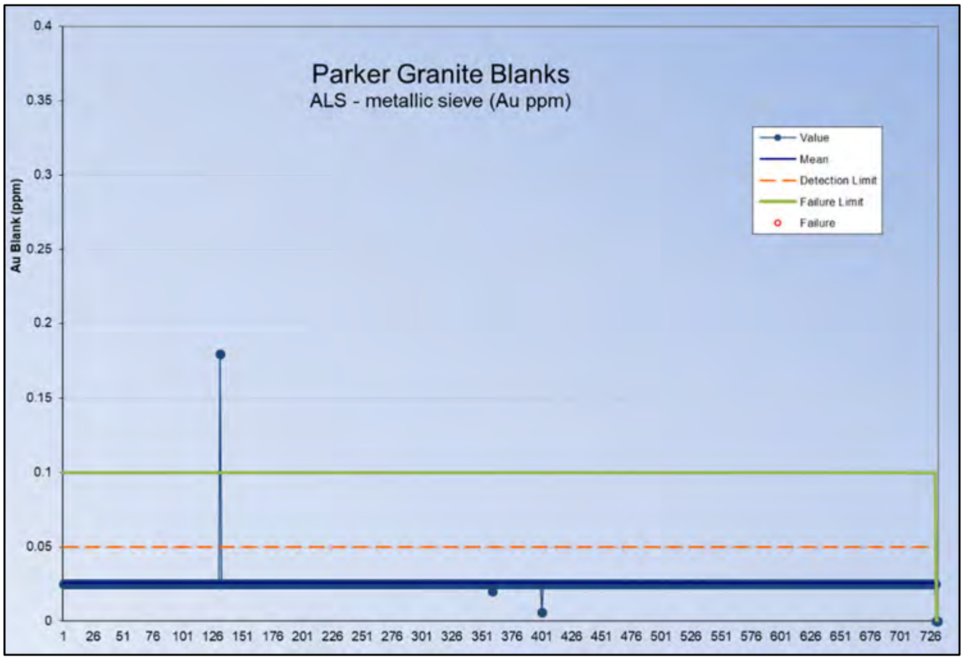
BP -Parker Granite Coarse Blank

Figure 11-1: BP Blanks (fire assay) – Gold (ppm Au); 2018 – 2019 drilling



Source: AGP (2020)

Figure 11-2: BP Blanks (fire assay) – Gold (ppm Au); 2018 – 2019 drilling



Source: AGP (2020)

Standards

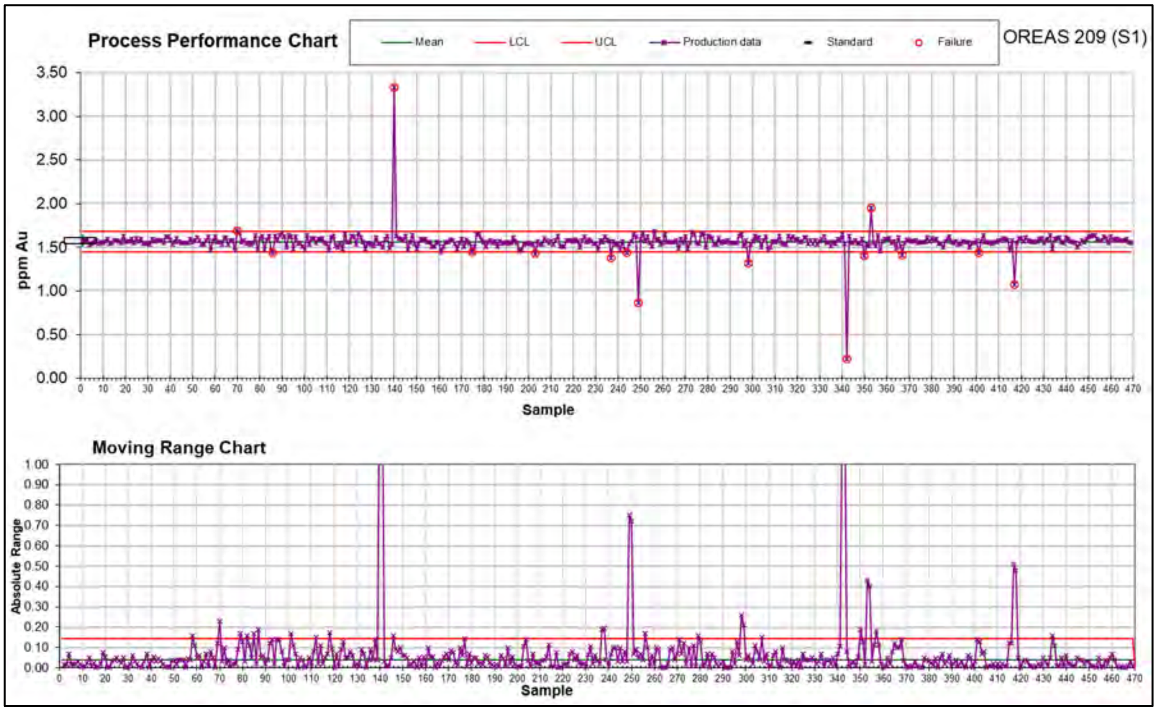
Table 11-7 presents the results of the CRMs used in the 2018-2019 drilling. Figure 11-3 presents accuracy plot for gold from the 2018 and 2019 drilling.

Table 11-7: CRM Results, 2018 – 2019 Drilling

CRM	Recommended Value	Standard Deviation	Number of Samples	Number of Failures	Percent Failure
OREAS 209 (S1) ppm Au	1.580	0.044	469	15	3.2%
OREAS 215 (S2) ppm Au	3.540	0.097	329	5	1.5%
OREAS 217 (S3) ppm Au	0.338	0.010	500	23	4.6%
OREAS 92 (S4) %Cu	0.229	0.010	32	1	3.1%
OREAS 922 (S5) %Cu	0.212	0.044	479	38	7.9%
OREAS 922 (S5) ppm Ag	0.888	0.109	328	15	4.6%

BP -Parker Granite Coarse Blank

Figure 11-3: Standard OREAS 209 – Gold Accuracy Plot



Source: AGP (2020)

11.4.2 QA/QC, 2019 – 2020 (SW Zone)

During the 2019 – 2020 drill program on the SW Zone, Troilus continued with the same QA/QC protocols in place: including blank sample materials and CRM's. Table 11-8 shows a summary of the QA/QC samples submitted during the drilling program.

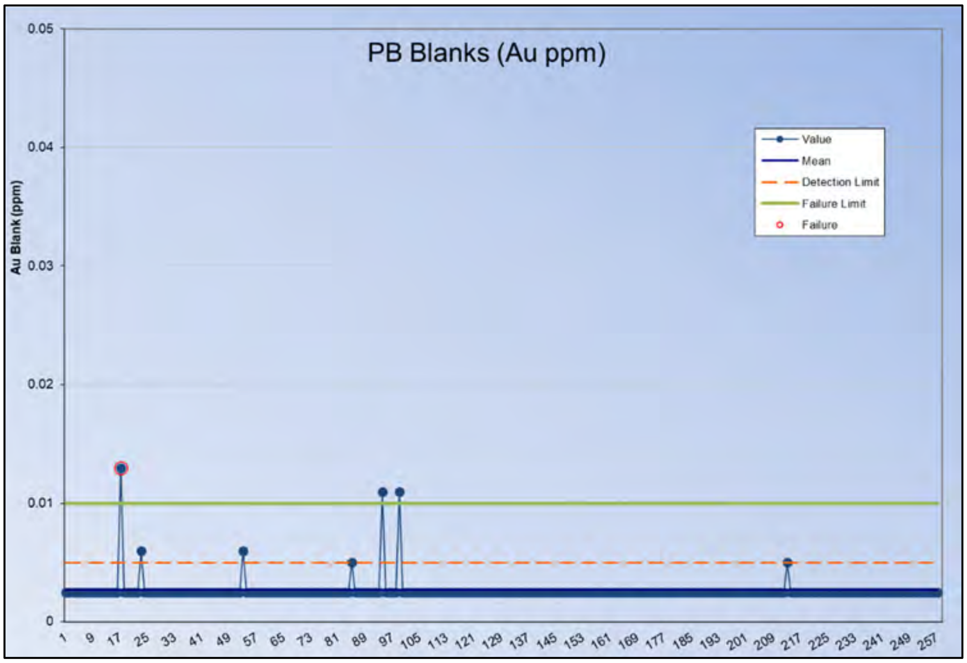
Table 11-8: Summary of Troilus QAQC Program, 2019 – 2020

Description	Number of Samples (% of database)
Total Number of Samples	8,525
Number of Control Samples	743 (8.7%)
Distribution	
Blanks (BP)	376 (4.4%)
CRM samples	376 (4.3%)
OREAS 209 (S1)	99
OREAS 215 (S2)	110
OREAS 217 (S3)	90
OREAS 922 (S5)	68

Blanks

During the 2019 – 2020 drilling on the SW Zone, only 3 failures occurred. These were verified and all were less than 0.014 ppm Au and determined not to have a significant impact on the sample batches. Figure 11-4 presents the plots for the gold assay blanks.

Figure 11-4: BP Blanks – Gold (ppm Au); 2019 – 2020 drilling



Source: AGP (2020)

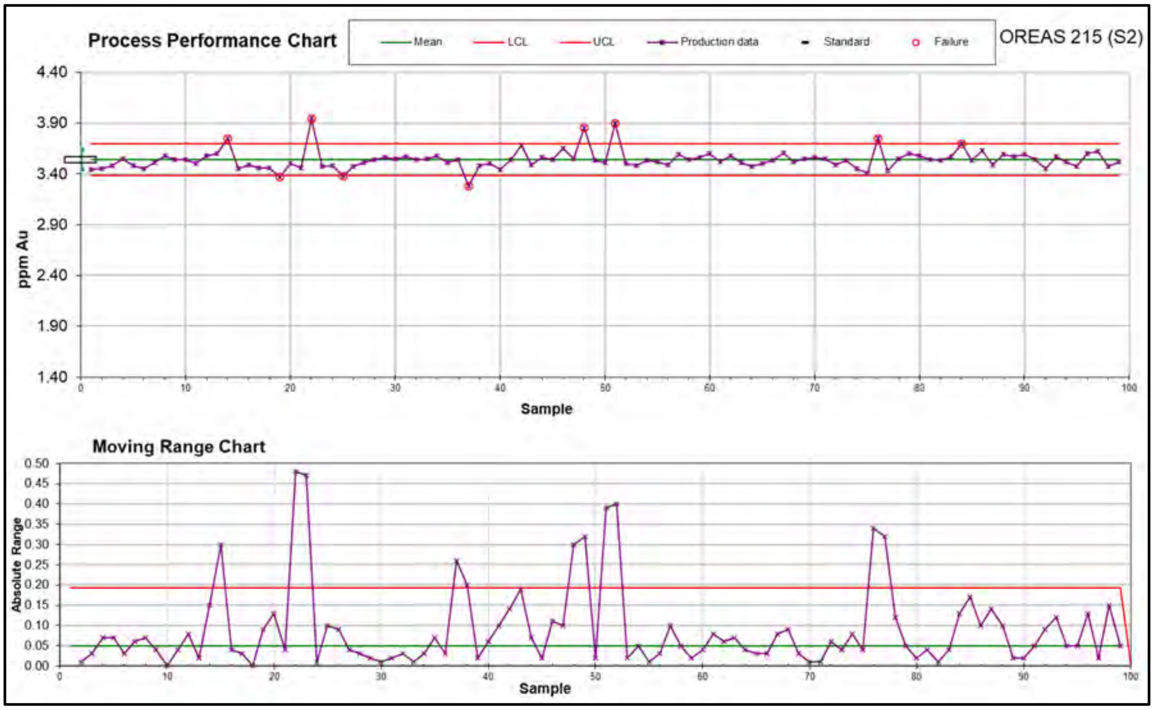
Standards

Table 11-9 presents the results of the CRMs used in the 2019-2020 drilling. Figure 11-5 presents the accuracy plot for gold for the OREAS 215 CRM.

Table 11-9: CRM Results, 2018 – 2019 Drilling

CRM	Recommended Value	Standard Deviation	Number of Samples	Number of Failures	Percent Failure
OREAS 209 (S1) ppm Au	1.58	0.044	55	0	-
OREAS 215 (S2) ppm Au	3.54	0.097	99	9	9.1%
OREAS 217 (S3) ppm Au	0.338	0.010	87	2	2.3%
OREAS 922 (S5) %Cu	0.212	0.009	64	3	4.7%
OREAS 922 (S5) ppm Ag	0.888	0.109	64	2	3.1%

Figure 11-5: Standard OREAS 215 – Gold Accuracy Plot



Source: AGP (2020)

11.4.3 QA/QC, pre-2018

The following is taken from RPA (2019b):

> *Several laboratories and assay methods were used in the course of the different drilling programs, and a number of re-assay and check assay programs were carried out over the years. Also, several studies on the heterogeneity and/or nugget effect of gold were carried out and are listed in Boily et al. (2008). From 1997 onward, Inmet operated an internal assay laboratory where gold and copper grades were reconciled with head grades from the operating mill (RPA, 2019b).*
>
> *Prior to 1999, during the assaying process, each laboratory did a systematic check assay every 10 to 15 samples. All samples assaying more than 1.0 g/t Au were re-assayed from a second pulp and all those assaying greater than 2.0 g/t Au were assayed a second time from the rejects. All assay laboratories routinely inserted in-house reference materials and certified standards.*
>
> *Since 1993, Inmet used in-house reference materials, CANMET Mining and Mineral Sciences Laboratories (Department of Natural Resources Canada) (CANMET), CRMs and blanks in each shipment to the assay laboratories. Over 20 different in-house reference materials and CRMs were used by Inmet over time. All these in-house control samples were first pulverized and bagged (35 g) and then inserted after every 50 samples using the same sequential numbers as the core samples. After*

approximately every 10 control samples, a CANMET CRM or a blank was inserted instead of the in-house control sample.

Results from quality control programs (reference samples, CRMs, re-assays, and duplicate assays) are used to qualify reliable assay data. There are no data on the standards used by the off-site laboratories prior to 1993 and/or the results of their quality control. However, no major problems were reported in the assays from the drilling programs and differences between the original values and the second assays and/or duplicates were judged to be acceptable.

In a report dated March 1994, the Coopers & Lybrand Consulting Group compiled the different studies on the accuracy and precision of the assays carried out by Inmet and concluded that the relative accuracy for the gold grade at Troilus is ±15%. After 1994, a number of tests and studies on the heterogeneity of gold at Troilus were carried out for Inmet by various consulting firms. Pitard (1999) reviewed this work and concluded that a target of ±15% variance in the gold assay results was achievable and that a sampling protocol modification was required to reduce sampling error to this level.

In late 1998 and early 1999, approximately 1,427 m of core from the mineralized zones from 12 holes were re-sampled and assayed in two separate programs. Independent laboratories used for the assaying included SGS Lakefield Research Ltd. (SGS) and the Centre de Recherche Minérale. This program was designed to compare the newly introduced 1,000 g screen metallic sampling and assays (Pitard Protocol) with the historical 30 g sampling assay protocol. From this program, Inmet concluded that the relative difference between the two data sets was less than 2% and that there was no overall bias between the two protocols. It was concluded that the 1,000 g screen metallic protocol reduced the sampling error and therefore provided a much better estimate of the gold contained in any given sample and improved the ability to estimate grades locally. This protocol was adopted as the sampling protocol going forward.

In 1997, external check assays at Swastika Laboratories (Swastika), based in Swastika, Ontario, and Chimitec (now part of ALS) indicated that the Troilus laboratory was underestimating gold values by approximately 10% to 15%. The Swastika and Chimitec assays were within 5%. The 1997 drilling program targeted Z87 close to the pit limits.

Following the introduction of a new sampling and assay protocol in 1999 (Pitard Protocol), modifications were made to their quality control procedures. In addition to the insertion of in-house reference material and/or CRMs, approximately 10% of all the samples assayed were randomly selected and their rejects sent back to the laboratory to be re-assayed using the same assay protocol (duplicates).

An internal Inmet report (Boily, 2005), based on external check assays and the mine laboratory gold reference standards, concluded that the Troilus laboratory assays were not biased.

11.5 Databases

Troilus maintains their exploration data in a Geotic database and employs a database manager to maintain the integrity of the database. Only senior level technicians have access to the database.

11.6 Sample Security

Samples are kept secure in the core logging and sampling facility until they are shipped. Troilus maintains a strict chain of custody of their samples from core shed to the transport company to the assay laboratory.

11.7 AGP Opinion

AGP reviewed the QA/QC program and is of the opinion it is in accordance with standard industry practice and CIM Exploration Best Practice Guidelines. Troilus personnel have taken all reasonable measures to ensure the sample analysis completed is accurate and precise. AGP considers the assay results and database acceptable for use in the estimation of mineral resources.

It is the opinion of the QP that the preparation and analyses are satisfactory for this type of the deposit and that the sample handling and chain of custody meet or exceed industry standards.

Density measurements collected during the Troilus drilling program are acceptable and reasonable. AGP recommends that the initial drilling at Z87 Zone be submitted to ALS for density measurements and that a review of the Inmet and Troilus density data be undertaken. AGP recommends that density measurements continue to be collected in future drill programs.

12 DATA VERIFICATION

12.1 Data Verification

12.1.1 Z87 Zone, J4/J5 Zone

AGP received the database for all drill holes in the J4/J5, Z87 and SW Zones as a Geovia GEMS project database. AGP also received the exported CSV files of the Troilus drill holes from the Geotic database. the database for the J4/J5 Zone and the Z87 Zone as a Geovia GEMS project database; and CSV files, exported from Troilus' Geotic database.

AGP verified the database for the J4/J5 Zone and the Z87 Zone using GEMS validation tool to determine whether there were missing overlapping intervals. The drill holes were also checked visually for any misplaced drill hole collars. No errors were found. AGP verified approximately 5% of the J4/J5 and Z87 Zone drill holes comparing the gold, copper, and silver assays to the laboratory certificates. No errors were found.

12.1.2 SW Zone

AGP received the database for the SW Zone as a Geovia GEMS project database; and as csv files, exported from Troilus' Geotic database. AGP verified the database using the GEMS validation tool to determine whether there were missing and/or overlapping intervals. The drill holes were also checked visually for any misplaced drill hole collars. No errors were found.

For the Troilus drill holes, the assay values in the database were compared against the assay certificates provided to Troilus by ALS. AGP verified approximately 14% of Troilus' assay values and no errors were found.

AGP verified four historic drill logs in the SW Zone to review on site to compare drill collar and assay values in the database and no errors were found. AGP also visually checked the historic drill hole in the GEMS database and found no issues.

12.2 AGP Site Visit

The site visit to the Project was conducted by the QP from 18 February to 20 February for two days. The 2020 drill program was in progress and near completion during the site visit. The author was accompanied on the site visit by M. Thiago Diniz, Technical Manager for Troilus and M. Bertrand Brossard, Senior Project Geologist for Troilus. The site visit included an inspection of core logging, sampling, and core storage facilities, checking of drill hole collar coordinates, and reviewing drill core logs against selected drill core.

12.2.1 Drill Core Logging and Sampling and Storage Facilities

Drill core for the Project is logged, sampled, and stored in the rear of a permanent warehouse on the mine site (Figure 12-1) where the front serves as a garage. This facility also serves as an office work stations for Troilus exploration personnel. A semi-permanent exploration office is situated next to the warehouse (Figure 12-2). Outside the warehouse, Troilus has constructed covered drill core racks for the storage of drill core.

The interior the core logging and sampling facility is kept clean and well-maintained. All field and sampling supplies are kept orderly and organized on shelves and in filing cabinets.
Figure 12-1 shows the three warehouses used for core logging and core storage. Figure 12-2 shows the interior of the core logging facility.

Figure 12-1: Drill Core Logging and Sampling Facility

Source: AGP (2020)

Figure 12-2: Exploration Office

Source: AGP (2020)

12.2.2 Drill Hole Collar Locations

AGP located 13 drill hole collars at the SW Zone, 87 Zone and J Zone. Due to severe cold and wind and snow coverage at the time of the site visit, additional drill holes were not spotted.

The locations of diamond drill hole collars were measured in the field using a hand-held Global Positioning System (GPS) device (Garmin GPS map 62s) using NAD 83 datum, the same datum used by Troilus.

Drill hole collars are capped by an aluminium screw cap that is punched with the drill hole number. The drill hole is marked by a metal rod topped by a red- painted metal rod and, in some cases with a wood stake (marking the planned drill hole) can be seen above the level of snow (Figure 12-3).

Figure 12-3: Drill Hole Collars for TLG ZSW20-191 (SW Zone) and TLG Z87S19-146 (Z87 Zone)

Source: AGP (2020)

The collar coordinates measured by AGP fell within a 4 m tolerance of those reported by Troilus. It is the QP's opinion the coordinates are acceptable, given the accuracy of the handheld GPS used to review the drill hole collar locations.

Table 12-1 presents the comparison of the AGP and Troilus drill hole coordinates for checked drill holes.

Table 12-1: Comparison of Collar Location Coordinates at the Troilus Project; NAD83 Zone 18U

Drill Holes	Troilus Easting (m UTM)	Troilus Easting (m UTM)	AGP Easting (m UTM)	AGP Easting (m UTM)	Δ Easting (m)	Δ Northing (m)
SW Zone						
TLG-ZSW19-173	534,232	5,647,957	534,234	5,647,957	-2	0
TLG-ZSW19-174	534,423	5,647,852	534,419	5,647,854	4	-2
TLG-ZSW19-176	534,397	5,648,362	534,397	5,648,363	0	-1
TLG-ZSW20-181	534,322	5,647,934	534,320	5,647,936	2	-2
TLG-ZSW20-182	534,129	5,647,982	534,129	5,647,985	0	-3
TLG-ZSW20-183	534,405	5,647,961	534,402	5,647,964	3	-3
TLG-ZSW20-191	534,333	5,648,387	534,330	5,648,388	3	-1
TLG-ZSW20-192	534,481	5,648,476	534,483	5,648,477	-2	-1
Z87 Zone						
TLG-Z8718-004	536,931	5,651,372	536,932	5,651,373	-1	-1
TLG-Z8718-007	537,183	5,651,645	537,183	5,651,646	0	-1
TLG-Z87S19-139	536,999	5,650,838	536,999	5,650,841	0	-3
TLG-Z87S19-140	536,935	5,650,879	536,933	5,650,879	2	0
J Zone						
TLG-ZJ418-077	537,038	5,651,946	537,034	5,651,949	4	-3

12.2.3 Drill Core Log Review

The site visits also included a review of the drill core logs and comparison to selected drill core intervals. The lithology descriptions and sample intervals in the drill logs were consistent with the drill core intervals reviewed. Table 12-2 lists the selected drill core intervals examined during the site visit.

Table 12-2: Selected Drill Core Intervals Examined

Deposit	Drill Hole	From (m)	To (m)
SW Zone			
	TLG-ZSW19-173	249.69	288.35
	TLG-ZSW19-175	97.59	127.70
	TLG-ZSW19-177	119.75	145.58
	TLG-ZSW19-179	183.26	213.60
	TLG-ZSW20-184	100.44	
J Zone			
	TLG-ZJ518-029	159.95	177.26
	TLG-ZJ518-030	157.72	179.24
Z87 Zone			
	TLG-Z8719-119	349.69	375.12
	TLG-Z8719-132	319.92	358.55
	TLD-Z8719-134	305.55	335.69

12.2.4 Independent Samples

The collection of independent samples is meant to demonstrate that mineralization exists on the property in similar ranges as reported by the issuer. These samples are not intended to act as duplicate samples. AGP collected three samples selected from the available drill core during the site visit.

The sample intervals were selected from the 2019 drilling on the SW Zone. The samples were collected from the same sample intervals as those of Troilus for a direct comparison.

AGP supervised the quartering of the selected samples by rock saw and placed each sample in a marked sample bag, sealed with a zip tie. A sample tag was stapled in the core box at the location of the AGP sample. Collected samples were transported by AGP to Toronto and couriered to Activation Laboratories Ltd. (ActLabs) in Ancaster, Ontario for assay analysis.

Once received at ActLabs, samples were prepared by crushing the sample to 80% passing 10 mesh and then a split of 250 g was pulverized to 85% passing 200 mesh (ActLabs code: RX1). Samples were analyzed for 42 elements by four acid digestion and ICPOES/ICPMS method (ActLabs code UT-4M). Gold was analyzed separately by fire assay and atomic absorption (ActLabs Code 1A2B-30). The list of independent samples is shown in Table 12-3 and the comparison of results are presented in Table 12-4.

Table 12-3: Summary of Independent Samples

AGP Sample No.	Troilus Sample No.	Drill Hole	Core Box(es)	Sample Interval (m)
AO266259	AO265751	TLG-ZSW19-173	57	261 – 262
AO269424	AO265752	TLG-ZSW19-177	27	131 – 132

Table 12-4: Independent Sample Results

Sample No.	Drillhole	Au (gpt)	Ag (gpt)	Cu (%)
AGP				
	TLG-ZSW19-173	0.95	0.40	0.010
	TLG-ZSW19-177	2.90	0.80	0.28
Troilus				
	TLG-ZSW19-173	0.67	0.25	0.004
	TLG-ZSW19-177	1.23	0.70	0.30
Difference				
	TLG-ZSW19-173	-0.29	-0.15	-0.01
	TLG-ZSW19-177	-1.67	-0.10	0.02

AGP considered the grade range of the representative samples to be acceptable and demonstrated the presence of mineralization on the Property in the same tenure as reported by Troilus. AGP interprets the differences of gold grades of the independent samples to be due to the degree of variability of the gold mineralization.

12.3 QP Opinion

The QP is of the opinion the database is representative and adequate to support the resource estimates for the Troilus deposits. The QP is also of the opinion the core descriptions, sampling procedures, and data entries were conducted in accordance with industry standards.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Metallurgical Testwork, Troilus Mine

The mill was originally designed to treat gold, copper, and silver at a rate of 10,000 tpd using a flowsheet consisting of a gravimetric, flotation, and cyanidation circuit. Copper concentrate and doré bars were produced on site. The Troilus mill was commissioned in 1996, with commercial production achieved in April 1997 at a rate of 10,000 tpd, with recoveries of 86% Au and 90% Cu and a concentrate grade of 18% Cu. At the end of 1998, the plant reached production of 10,850 tpd with similar metallurgical results.

At the beginning of 1998, a decision was made to increase mill capacity to 15,000 tpd using a coarser grind. A crushing and screening plant was constructed and became operational in early 1999. The objective was to reduce the critical size material in the feed down to less than two inches. The cyanidation portion of the flowsheet was dropped in 1999, since it was found to be uneconomic. Removing the cyanidation circuit decreased the gold recovery by 2%, while coarser grind was responsible for approximately a 1% to 1.5% decrease. Since 1999, the plant has been operational with gold recoveries in the 82.5% to 84% range.

At the end of 2001, after replacement of the pebble crusher and ball mill pump and the successful implementation of instrumentation upgrade and flowsheet changes, the plant reached its target tonnage capacity. Similarly, steps were undertaken in 2000 to improve copper metallurgy, particularly concentrate grade. A column cell was commissioned, and modifications were carried out to the copper cleaner and thickening circuit. These changes led to improvements in the concentrate grade by 3% copper and recovery improvements by 1% to 2%. More importantly, this permitted the mill to operate more efficiently in a wider range of copper feed grades.

Plant recoveries in 2005 were approximately 82% for gold and 90% for copper (Figure 13-1 and Table 13-1). In 2004, the plant reached a new milestone of 18,000 tpd.

Figure 13-1: Historic Gold and Copper Mill Recoveries, Troilus Gold Mine

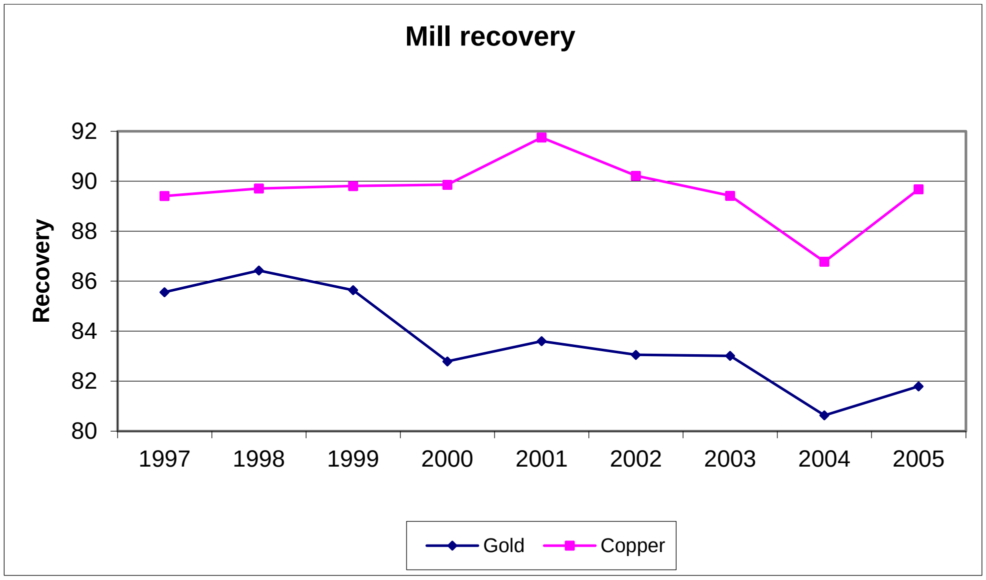


Table 13-1: 2005 Metallurgy Summary

Material	Weight %	Assays		Distribution	
		(% Cu)	(gpt Au)	(% Cu)	(% Au)
Mill Feed	100	0.07	0.98	100	100
Concentrate	0.40	17.33	128.76	89.68	54.43
Gravity					27.36
Final Tails	99.60	0.008	0.17	10.32	18.21

13.1.1 Crushing

The run-of-mine ore was hauled by 150 t trucks and dumped directly to a 54 in. x 74 in. gyratory AC crusher. Prior to crushing, large blocks were broken by a rock hammer in the crusher chamber to less than 1.2 m. The product from the crusher at 100% -200 mm was temporarily accumulated in a pocket, which is fed to a conveyor through an apron feeder. The dust generated in the crushing area is controlled by three dust collectors. Crushed material was conveyed to a dual deck vibrating screen to remove the +2 in. and –7 in. size fraction for secondary crushing. Pre-crusher discharge was then returned to the screen oversize and undersize fractions and conveyed to the coarse ore stockpile.

13.1.2 Grinding

The reclaim circuit was supplied by three variable speed belt feeders located under the stockpile. The disposition of the belt feeders minimized the segregation effect on the stockpile by feeding the conveyor of the semi-autogenous grinding (SAG) mill with a relatively stable ratio of fine particles.
The SAG mill (30 ft x 13 ft) was driven by a 7,000 hp fixed speed synchronous motor, which was operational in a bi-directional mode. The mill was lined with chrome-molybdenum steel.

The mill was typically operated with a 20% to 25% volume using a steel charge of 10% to 12% 5.25 in. grinding balls. Grate discharge at 2.5 in. overflowed on a dual deck vibrating screen. The +12 mm screen oversize was recycled to the pebble crusher by conveyor. Pebble crusher discharge was added to the SAG mill feed conveyor. The –12 mm screen undersize was pumped to the ball mill circuit. This operation was carried out to relieve the mill of critical sized material.

The primary ball mill (18 ft x 28.5 ft) was driven by a 6,000 hp synchronous motor that was in closed circuit (450% C.L.) with a cluster of 26 in. cyclones. The primary cyclone overflow fed the secondary ball mill circuit. This ball mill (16 ft by 22 ft), driven by a 4,300 hp synchronous motor, was in closed circuit (250% C.L.) with a cluster of 15 in. cyclones. The product (80% passing 90 µm) fed the flotation circuit.

13.1.3 Gravity Concentration

A 15% bleed of primary ball mill circulating load fed a gravimetric circuit consisting of four 30 in. Knelson concentrators. Screen feed at 2,000 µm was supplied to the Knelson concentrators on three hour cycles. The concentrate from the Knelson concentrators was accumulated in a storage tank to be later fed to a magnetic separator and further upgraded on a Gemini table. Middlings from the Gemini table were fed in a 12 in. closed circuit Knelson. Gold concentrates were produced at 40% Au to 70% Au and refined in an induction furnace. The gravimetric circuit generally recovered 24% Au to 32% Au.

13.1.4 Flotation

The overflow from the secondary cyclones went to rougher column flotation before supplying two parallel banks of 43 m³ flotation cells (GL&V). Each bank had seven cells in a 2+2+3 arrangement. The seven cells operated as a bulk sulphide flotation. The collection was done in an alkaline (pH 10.0) circuit.

The floating sulphides containing gold and copper from the flash flotation cell, the rougher column flotation, and the rougher/scavenger cells were further liberated in a regrind mill (10.5 ft x 12 ft). This 600 HP regrind mill was in closed circuit with a cluster of 10 in. cyclones. Cleaner circuit feed was typically 89% passing 40 µm. A Falcon concentrator was fed by one cyclone underflow to recover the fine free gold before feeding the cleaning circuit. Cleaning circuit pH was maintained at 10.5 to 11 to depress pyrite.

The cleaning circuit was comprised of four stages. The first and second stages had five cells of 2.8 m³, the third stage had four cells of 1.4 m³, and the fourth stage was a column flotation. Concentrate from the column was typically 22% and was shipped as final concentrate.

13.1.5 On-Stream Analyzer

At the beginning of 1998, an on-stream analyzer (Courier 30 AP) was purchased in order to improve the flotation control and copper concentrate grade. Six streams were analyzed for process control. Better control permitted an increase of 1% to 2% in concentrate grade.

13.1.6 Filtering

The copper concentrate was filtered by a pressure filter. The filter was a 25 m² Larox that produced a concentrate with less than 8% humidity. It was stored in a 400 t capacity bunker and shipped to

Chibougamau by truck and further to the Horne Smelter by rail. Production was typically 2,500 t per month.

13.1.7 Tailings Disposal

The pond was constructed with a 2.5 km till starter dike. Winter discharge was done linearly with a single high spot. Beaches were produced in the summer by spigotting along the dike and were further raised with a granular material on a yearly basis, with follow-up spigotting.

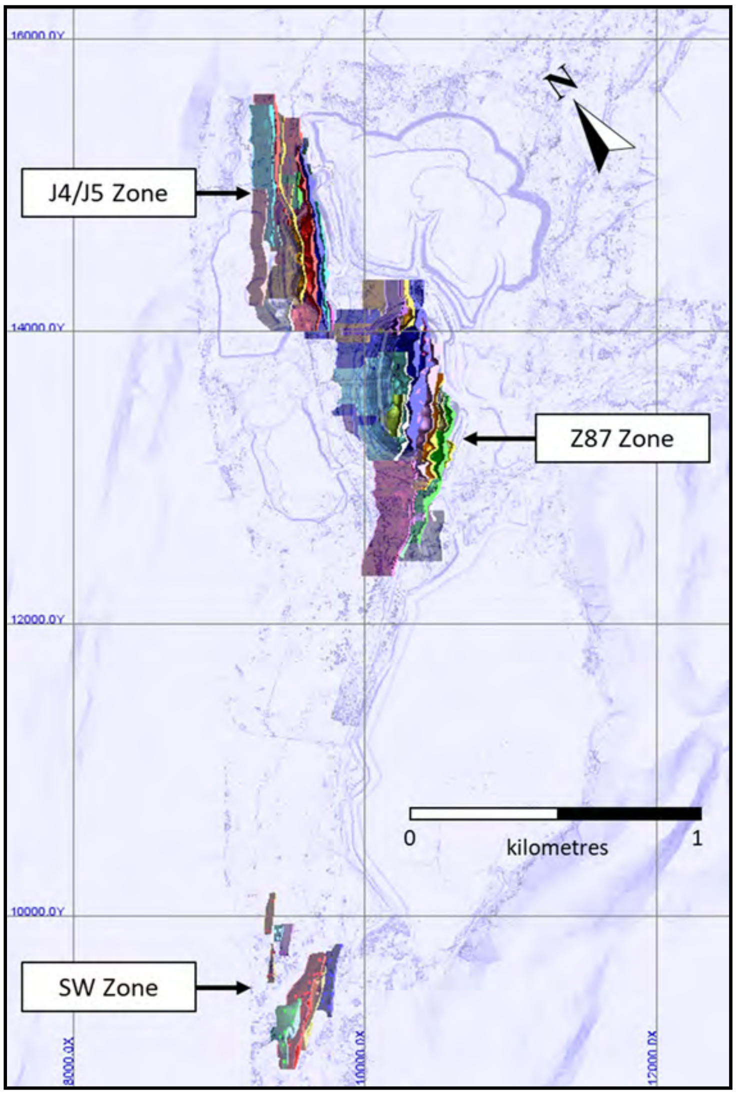
A water treatment plant has been functional since the end of 1998, after initial operation revealed suspended solid control problems. It uses a new technology (ACTIFLO) based on polymer addition and agitation followed by high speed sand assisted lamellar decantation and reduces suspended solids to concentrations below 15 ppm, the monthly average regulation limit.

14 MINERAL RESOURCE ESTIMATES

This section discloses the mineral resources for the Project, prepared and disclosed in accordance with the CIM Standards and Definitions for Mineral Resources and Mineral Reserves (2014). The QP responsible for these resource estimates is Mr. Paul Daigle, P.Geo., Senior Resource Geologist for AGP. The effective date of this mineral resource is 20 July 2020.

The current mineral resources for Troilus includes open pit resources for Z87, J4/J5, and SW Zones and underground resources for Z87 Zone. The resource estimate has been prepared using interpreted mineralized domains at the three deposits that comprise the Project (Figure 14-1).

Figure 14-1: Z87, J4/J5 and SW Zones of the Troilus Project



Source: AGP (2020)

14.1.1 AGP Validation, Z87 Zone, J4/J5 Zone

AGP validated the resource estimates for the Z87 Zone and J4/J5 Zone originally estimated by Roscoe Postle Associates Inc. (RPA). The resource estimates were described in a report authored by Luke Evans dated December 20, 2020, titled "Technical Report on the Troilus Gold-Copper Project Mineral Resource Estimate, Quebec, Canada" (RPA (2019b). Since the report was published, there was no further work conducted on the Z87 Zone and J4/J5 Zone.

The review focused on the drill hole database validation, assay validation against the laboratory certificate, wireframe validation, and grade interpolation. The purpose of this review is to validate the current model and provide recommendations for improvement of the grade estimate and/or improve the model classification. AGP accepts the validity of the model, which was not re-interpolated; therefore, the text and tables were extracted from the previous NI 43-101 report from RPA (2019b).

All mineral resources described herein have been reported within updated constraining shells.

14.2 Mineral Resources Summary

The resource estimates were completed using Geovia GEMS™ 6.8.3 resource estimation software. The coordinate system used a mine grid, rotated approximately 35° Az from the UTM coordinate NAD83 system. The Z87 and J4/J5 resource estimate used a block matrix of 5m x 5m x 5m and the SW Zone used a block matrix of 10m x 10m x 10m. The blocks model grades were estimated using ordinary kriging interpolation method using 2m capped composites. Metal grades were capped post compositing for Z87, and J4/J5 Zones, and prior to compositing for the SW Zone. Capping levels vary based on mineralized domain, however, and not all domains required capping or metal grades.

The mineral resources amenable to open pit extraction are reported within optimized constraining shells for each mineralized zone at a 0.3 gpt AuEQ cut off grade; and mineral resources amenable to underground at the Z87 Zone are reported based on a 0.9 gpt AuEQ cut-off grade for contiguous blocks, below 4900 m elevation; and below the constraining shell for J4/J5 Zone.

The optimized constraining shells were developed for each deposit by AGP using Hexagon Mining MineSight 3D software and incorporates metal recovery, geotechnical parameters, and assumed costs for each mineralized zone. The mineral resources are classified as Indicated Resources or Inferred Resources in accordance with the CIM Definitions of Mineral Resources and Mineral Reserves (2014). Table 14-1 presents the Mineral Resources for the combined mineral resources amenable to open pit and underground resources for the Troilus Project.

Table 14-1: Mineral Resources for the Troilus Project; Combined Open Pit and Underground Resources

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Indicated	177.3	0.75	0.08	1.17	0.87	4.30	322.60	6.66	4.96
Inferred	116.7	0.73	0.07	1.04	0.84	2.76	189.73	3.91	3.15

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Open pit mineral resources are reported within optimized constraining shells.
- Open pit cut-off grade is 0.3 gpt AuEQ where the metal equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.0108 * Ag grade
  - SW Zone AuEq = Au grade + 1.2768 * Cu grade + 0.0106 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
  - Z87 Zone 82.5% for Au recovery, 90% for Cu recovery and 76% for Ag recovery
- Underground cut-off grade is 0.9 AuEQ at Z87 Zone and J4/J5 Zone, contiguous blocks below constraining shell.
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag on raw assays; and 1.00 %Cu on raw assays
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone.

14.2.1 Open Pit Mineral Resources

The mineral resources for the Troilus Project deposit amenable to open pit extraction at a 0.3 gpt AuEQ cut-off grade are: an Indicated Resource of 164.2 Mt at 0.68 g/t Au, 0.08 %Cu, 1.20 gpt Ag and 0.80 gpt AuEQ; and an Inferred Resource of 101.2 Mt at 0.60 g/t Au, 0.07 %Cu, 1.12 gpt Ag and 0.70 gpt AuEQ. Table 14-2 presents the Mineral Resources amenable to open pit extraction

Table 14-2: Open Pit Mineral Resources for Troilus Project at a 0.3 gpt AuEQ Cut-off Grade – All Deposits

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Z87 Zone									
Indicated	84.6	0.79	0.09	1.39	0.92	2.15	169.54	3.77	2.50
Inferred	32.7	0.60	0.07	1.50	0.70	0.63	49.34	1.57	0.73
J4/J5 Zone									
Indicated	79.6	0.57	0.07	1.00	0.67	1.47	115.16	2.55	1.71
Inferred	45.9	0.55	0.07	0.96	0.65	0.82	65.94	1.42	0.96
SW Zone									
Inferred	22.6	0.70	0.07	0.89	0.80	0.51	35.73	0.65	0.58
TOTALS									
Indicated	164.2	0.68	0.08	1.20	0.80	3.62	284.69	6.32	4.21
Inferred	101.2	0.60	0.07	1.12	0.70	1.95	151.01	3.65	2.27

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Open pit mineral resources are reported within optimized constraining shells.
- Open pit cut-off grade is 0.3 gpt AuEQ.
- AuEQ equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.0108 * Ag grade
  - SW Zone AuEq = Au grade + 1.2768 * Cu grade + 0.0106 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
  - Z87 Zone 82.5% for Au recovery, 90% for Cu recovery and 76% for Ag recovery
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag; and 1.00 %Cu; all on raw assay values depending on mineralized domain.
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone or domain.

14.2.2 Underground Mineral Resources

The mineral resources for the Troilus Project deposit amenable to underground extraction are: An Indicated Resource of 13.1 Mt at 1.61 g/t Au, 0.13 %Cu, 0.81 gpt Ag and 1.79 gpt AuEQ; and an Inferred Resource of 15.5 Mt at 1.62 g/t Au, 0.1 %Cu, 0.52 gpt Ag and 1.77 gpt AuEQ.
Table 14-3 presents the Mineral Resources amenable to underground extraction.

Table 14-3: Underground Mineral Resources for the Troilus Project at a 0.9 gpt AuEQ Cut-off Grade – Z87 Zone

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Z87 Zone									
Indicated	13.1	1.61	0.13	0.81	1.79	0.68	37.90	0.34	0.75
Inferred	13.5	1.70	0.12	0.37	1.85	0.74	34.48	0.16	0.80
J4/J5 Zone									
Indicated	0.01	1.03	0.03	0.47	1.07	0.0002	0.01	0.0001	0.0003
Inferred	2.0	1.06	0.10	1.55	1.21	0.07	4.24	0.10	0.08
TOTALS									
Indicated	13.1	1.61	0.13	0.81	1.79	0.68	37.91	0.34	0.75
Inferred	15.5	1.62	0.11	0.52	1.77	0.81	38.72	0.26	0.88

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Underground cut-off grade is 0.9 gpt AuEQ
- AuEQ equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.01083 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4/J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
- Capping of grades varied between 5.00 g/t Au and 26.00 g/t Au; between 10.00 g/t Ag and 20.00 g/t Ag; all on raw assay values depending on mineralized domain.
- The density of the mineralized domains at Z87 Zone is 2.86 g/cm^3: and 2.77 and 2.78 g/cm^3 at J4/J5 Zone

AGP is not aware of any information not already discussed in this report, which would affect their interpretation or conclusions regarding the subject property. AGP is required to inform the public that the quantity and grade of reported Inferred resources in this estimation must be regarded as conceptual in nature and are based on limited geological evidence and sampling. The geological evidence is sufficient to imply, but not verify, geological grade or quality of continuity. For these reasons, an Inferred resource has a lower level of confidence than an Indicated resource. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. The rounding of values, as required by the reporting guidelines, may result in apparent differences between tonnes, grade, and metal content.
Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

14.3 Database

The Troilus drill hole database for the Troilus Project contains 892 surface diamond drill holes with a total length of 215,347 m. Of these drill holes, 724 drillholes, totalling 184,762 m, are attributed to the Z87 and J4/J5 Zones, and for the SW Zone, 87 surface diamond drill holes with a total length of 16,121 m.

Table 14-4 presents a summary of drill holes in the database and drill holes used in the estimation of resources for the three deposits.

Table 14-4: Summary of Drill Hole Database for the Project; up to February 2020

Deposit	Year	All Drill Holes		Drill Holes used for Resources	
		Number	Metres	Number	Metres
Z87 Zone	< 2018	387	86,420.05	374	84,189.58
	2018	38	23,226.58	38	23,226.58
	2019	22	8,863.00	21	8,767.00
	Total	**447**	**118,509.63**	**433**	**116,183.16**
J4/J5 Zone	< 2018	184	28,801.30	173	27,538.71
	2018	47	13,290.40	47	13,290.40
	2019	46	24,161.00	46	24,161.00
	Total	**277**	**66,252.70**	**266**	**64,990.11**
SW Zone	< 2018	63	7,401.64	12	2,203.98
	2019	7	2,682.00	7	2,682.00
	2020	17	6,037.50	16	5,521.50
	Total	**87**	**16,121.14**	**35**	**10,407.48**

AGP received the database as a GEMS project for all deposits of the Project, as well as the Geotic database export files for the SW Zone. The database was made up of several tables that included, but are not limited to, collar, survey, assay, composite, and density. The GEMS validation tool was used to verify the databases for the collar, survey, and assay tables; there were no errors found.

All data received was in the local grid coordinate system for the Troilus Project, which is rotated approximately 55 degrees to the east of magnetic north. Coordinates for all drill holes are available in NAD83 datum in the Geotic database. As described in Section 12 of this report, AGP reviewed approximately 15% of the assay database distributed over the three deposits comparing the results from the assay certificates issued by the laboratory. No errors found. The author is of the opinion that the database is adequate for the purposes of mineral resource estimation for the Project.

14.4 Z87 Zones

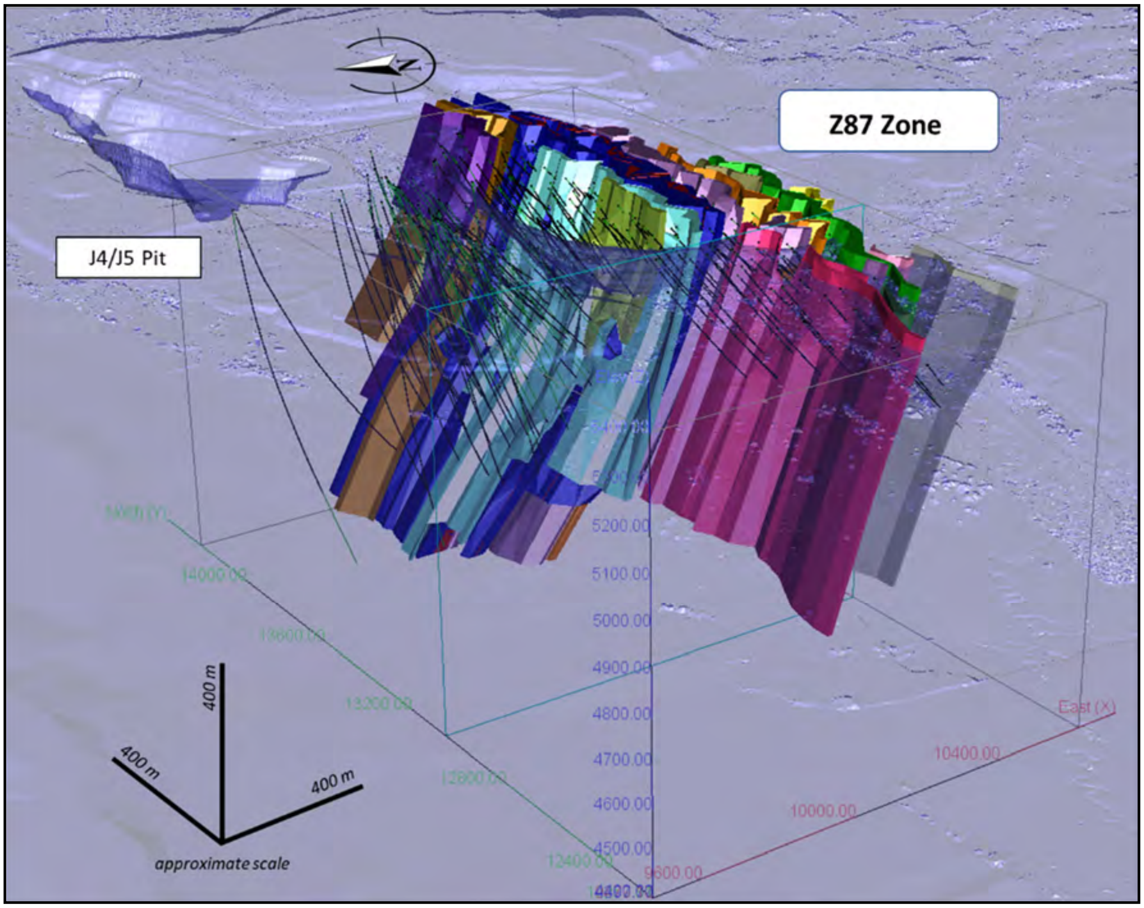
14.4.1 Geological Models

The mineralized zones at Z87 Zone were interpreted by Troilus personnel. The interpreted wireframes were completed using conventional polylines on vertical sections defined along 25 m spaced sections. The polylines capture a minimum nominal grade of 0.3 gpt AuEQ to a minimum width of 4 m. One higher grade domain was created to capture a minimum nominal grade of 0.9 gpt AuEQ. The polylines were 'wobbled' (GEMS function) and snapped to drill hole intercepts. The polylines were then joined together using tie lines in order to create 3D solid wireframes. The mineralized envelops were created above topography and extended approximately 600 m to 900 m below surface. A total of 16 wireframes were created for the Z87 Zone. The high grade domain was subdivided into three subdomains.

AGP reviewed the Z87 Zone wireframes and found no errors. AGP agrees that these wireframes are suitable to estimate resources for the Z87 Zone. AGP notes that the wireframes exhibit some zig-zag, or sawtooth, shapes when viewed in plan view. While these shapes are not overly exaggerated, it is recommended that these wireframes be revisited to adjust along plan views in plan view. AGP anticipates these changes would not have affect the current mineral resources but may show a better representation of the mineralization.

Figure 14-2 shows the mineralized wireframes for the Z87 Zone.

Figure 14-2: Mineralized Domains – Z87 Zone



Source : AGP (2020)

Table 14-5 lists the mineralized domain wireframes and subdomains for the Z87 Zone.

Table 14-5: Domains and Subdomains – Z87 Zone

Mineralized Zone		Rock Type	Subdomain Zone	Rock Type	Comment
10		10	1001	1001	0.9 gpt AuEQ subdomain
			1002	1002	0.9 gpt AuEQ subdomain
			1003	1003	0.9 gpt AuEQ subdomain
11		11			
12		12			
13		13			
14		14			
15		15			
16		16			
17		17			
18		18			
19		19			
20		20			
21		21			
22		22			
23		23			
24		24			
25		25			

14.4.2 Exploratory Data Analysis

Raw Assays

The drill hole database for Z87 Zone data, consists of 387 drill holes and 66,195 assay values for each metal: gold, copper, and silver. Any assay values reported below detection limit were assigned half the detection limit for statistical analysis and grade estimation. Any missing values were assigned a zero. Table 14-6 presents the overall statistics for the Z87 Zone. Out of this total, 15,270 assay values are captured by the mineralized domains.

Table 14-6: Descriptive Statistics on all raw assays – Z87 Zone (no zeroes)

	Au (gpt)	Cu (%)	Ag (gpt)	Length (m)
Count	25525	25525	25525	25525
Minimum	0.001	0.00	0.00	0.03
Maximum	133.70	11.27	259.90	20.00
Mean	0.46	0.09	1.19	1.25
Median	0.12	0.04	0.60	1.00
Std. Deviation	1.70	0.19	3.79	0.54
CV	3.73	2.06	3.18	0.43

Table 14-7 to Table 14-9 presents the descriptive statistics for raw gold, copper, and silver assays, respectively, by mineralized domain.

Table 14-7: Descriptive Statistics for Raw Gold Assays (gpt Au) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	5,987	0.00	103.01	1.65	1.02	3.09	1.88
1002	430	0.00	32.35	1.65	0.94	2.72	1.65
1003	78	0.04	10.69	2.11	1.17	2.50	1.18
11	6,406	0.00	36.70	0.56	0.35	1.00	1.80
12	399	0.00	10.70	0.44	0.25	0.84	1.93
16	223	0.00	13.90	0.33	0.19	1.00	3.03
18	298	0.00	29.07	0.81	0.29	2.13	2.64
20	1,621	0.00	19.94	0.62	0.36	0.95	1.52
21	288	0.00	4.07	0.53	0.36	0.56	1.05
13	4,249	0.00	133.70	0.82	0.32	3.69	4.49
14	2,842	0.00	87.40	0.79	0.36	2.45	3.09
15	26	0.03	1.81	0.55	0.35	0.52	0.94
17	1,907	0.00	35.04	0.63	0.30	1.65	2.62
19	194	0.00	17.68	0.70	0.33	1.63	2.32
22	76	0.00	3.09	0.36	0.24	0.41	1.16
23	34	0.00	2.62	0.47	0.29	0.57	1.20
24	34	0.03	1.49	0.40	0.32	0.36	0.90
25	343	0.00	12.20	0.54	0.31	0.91	1.67

Table 14-8: Descriptive Statistics for Raw Copper Assays (%Cu) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	5,987	0.00	9.58	0.16	0.10	0.24	1.50
1002	430	0.00	2.89	0.21	0.14	0.26	1.20
1003	78	0.01	1.05	0.14	0.09	0.17	1.20
11	6,406	0.00	3.33	0.06	0.04	0.10	1.59
12	399	0.00	0.75	0.10	0.06	0.10	1.09
16	223	0.00	1.01	0.09	0.07	0.10	1.10
18	298	0.00	0.29	0.03	0.02	0.04	1.22
20	1,621	0.00	0.83	0.04	0.02	0.05	1.46
21	288	0.00	0.20	0.02	0.01	0.03	1.28
13	4,249	0.00	10.00	0.10	0.04	0.24	2.27
14	2,842	0.00	0.92	0.05	0.03	0.06	1.30
15	26	0.01	0.14	0.05	0.03	0.04	0.77
17	1,907	0.00	11.27	0.08	0.03	0.30	3.88
19	194	0.00	2.00	0.04	0.02	0.15	3.34
22	76	0.01	0.36	0.09	0.06	0.07	0.86
23	34	0.01	0.19	0.05	0.04	0.04	0.83
24	34	0.00	0.14	0.03	0.02	0.03	0.88
25	343	0.00	0.83	0.03	0.02	0.06	1.87

Table 14-9: Descriptive Statistics for Raw Silver Assays (gpt Ag) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	5,987	0.00	109.50	1.51	0.80	3.69	2.44
1002	430	0.00	52.00	3.23	1.40	6.04	1.87
1003	78	0.00	4.13	0.24	0.00	0.64	2.65
11	6,406	0.00	259.90	0.92	0.46	3.70	4.04
12	399	0.00	15.10	2.12	1.40	2.44	1.15
16	223	0.00	11.30	1.33	0.90	1.58	1.19
18	298	0.00	9.50	0.61	0.30	1.00	1.64
20	1,621	0.00	253.56	0.70	0.20	6.42	9.15
21	288	0.00	12.20	0.53	0.20	1.02	1.91
13	4,249	0.00	122.00	1.16	0.40	3.71	3.20
14	2,842	0.00	159.54	1.32	0.70	3.60	2.72
15	26	0.25	7.20	1.28	0.95	1.47	1.15
17	1,907	0.00	59.20	1.10	0.56	2.31	2.09
19	194	0.00	39.20	1.13	0.65	2.92	2.59
22	76	0.25	7.70	1.39	1.10	1.28	0.92
23	34	0.25	2.30	0.78	0.70	0.56	0.72
24	34	0.25	5.70	1.80	1.45	1.53	0.85
25	343	0.00	14.50	0.65	0.35	1.11	1.71

Capping Analysis

Capping analysis was carried out on each mineralized domain for gold, copper, and silver. Capping was applied to gold and silver assay values in several mineralized domains. Not all domains required capping levels. No capping was applied to copper assay values. AGP reviewed the capping levels by domain using histogram and disintegration plots and found the capping levels to be reasonable and adequate.

Table 14-10 presents the capping levels for gold and silver, by domain, for the Z87 Zone. Table 14-11 and Table 14-12 present the descriptive statistics for capped gold and silver assay values, respectively.

Table 14-10: Capping Levels – Z87 Zone

Domain	Au (gpt)	% Loss	Cu (%)	% Loss	Ag (gpt)	% Loss
1001 1002 1003	26.00 (16)	2.8	-		20.00 (29)	7.4
11	10.00 (7)	2.0	-		15.00 (16)	7.1
12	5.00 (5)	5.6	-		10.00 (4)	0.9
16	5.00 (2)	12.0	-		-	
18	8.00 (2)	11.0	-		-	
20	7.00 (3)	1.6	-		10.00 (8)	25.0
21	-		-		-	
13	20.00 (14)	13.0	-		20.00 (13)	7.8
14	15.00 (7)	6.7	-		15.00 (10)	5.7
15	-		-		-	
17	10.00 (8)	7.4	-		12.00 (10)	5.1
19	6.00 (2)	13.0	-		10.00 (1)	13
22	-		-		-	
23	-		-		-	
24	-		-		-	
25	5.00 (1)	3.9	-		10.00 (1)	2

(X) – number of assays capped

Table 14-11: Descriptive Statistics for Capped Raw Assay Values for Gold (gpt Au) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	5987	0.00	20.00	1.41	0.80	2.11	1.50
1002	430	0.00	20.00	2.87	1.40	4.03	1.41
1003	78	0.00	4.13	0.24	0.00	0.63	2.65
11	6406	0.00	15.00	0.85	0.46	1.40	1.64
12	399	0.00	10.00	2.10	1.40	2.36	1.12
16	223	0.00	11.30	1.33	0.90	1.58	1.19
18	298	0.00	9.50	0.61	0.30	1.00	1.64
20	1621	0.00	10.00	0.53	0.20	1.01	1.92
21	288	0.00	12.20	0.53	0.20	1.02	1.91
13	4249	0.00	20.00	1.07	0.40	2.11	1.97
14	2842	0.00	15.00	1.25	0.70	1.77	1.42
15	26	0.25	7.20	1.28	0.95	1.47	1.15
17	1907	0.00	12.00	1.05	0.56	1.61	1.54
19	194	0.00	10.00	0.98	0.65	1.18	1.21
22	76	0.25	7.70	1.39	1.10	1.28	0.92
23	34	0.25	2.30	0.78	0.70	0.56	0.72
24	34	0.25	5.70	1.80	1.45	1.53	0.85
25	343	0.00	10.00	0.64	0.35	0.97	1.51

Table 14-12: Descriptive Statistics for Capped Raw Assay Values for Silver (gpt Ag) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	5987	0.00	20.00	1.41	0.80	2.11	1.50
1002	430	0.00	20.00	2.87	1.40	4.03	1.41
1003	78	0.00	4.13	0.24	0.00	0.63	2.65
11	6406	0.00	15.00	0.85	0.46	1.40	1.64
12	399	0.00	10.00	2.10	1.40	2.36	1.12
16	223	0.00	11.30	1.33	0.90	1.58	1.19
18	298	0.00	9.50	0.61	0.30	1.00	1.64
20	1621	0.00	10.00	0.53	0.20	1.01	1.92
21	288	0.00	12.20	0.53	0.20	1.02	1.91
13	4249	0.00	20.00	1.07	0.40	2.11	1.97
14	2842	0.00	15.00	1.25	0.70	1.77	1.42
15	26	0.25	7.20	1.28	0.95	1.47	1.15
17	1907	0.00	12.00	1.05	0.56	1.61	1.54
19	194	0.00	10.00	0.98	0.65	1.18	1.21
22	76	0.25	7.70	1.39	1.10	1.28	0.92
23	34	0.25	2.30	0.78	0.70	0.56	0.72
24	34	0.25	5.70	1.80	1.45	1.53	0.85
25	343	0.00	10.00	0.64	0.35	0.97	1.51

Composites

Composites were created after capping of assay values. The assay intervals situated within the mineralization wireframe were composited to two metre lengths within each mineralized domain wireframe. Composite lengths shorter than 0.5 m were discarded.

The Z87 Zone composites average 1.96 m in length. Of the 16,189 composites, only 647 composites (approximately 4%) are lengths less than two metres.

Table 14-13 to Table 14-15 present the descriptive statistics for the capped 2 m composites for gold, copper, and silver, respectively.

Table 14-13: Descriptive Statistics for 2 m Composite Values for Gold (gpt Au) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	3750	0.00	26.00	1.56	1.12	1.75	1.12
1002	283	0.03	14.90	1.54	1.08	1.73	1.12
1003	48	0.11	10.69	1.97	1.10	2.13	1.08
11	4069	0.00	7.92	0.53	0.39	0.56	1.06
12	249	0.00	5.00	0.42	0.28	0.53	1.25
16	144	0.01	5.00	0.31	0.20	0.60	1.89
18	165	0.00	7.54	0.75	0.39	1.05	1.41
20	1054	0.00	7.00	0.62	0.40	0.74	1.19
21	174	0.00	3.61	0.52	0.39	0.51	0.97
13	2622	0.00	20.00	0.70	0.39	1.25	1.79
14	1792	0.00	15.00	0.69	0.38	1.00	1.44
15	26	0.03	1.81	0.55	0.35	0.52	0.94
17	1284	0.00	10.00	0.59	0.35	0.87	1.48
19	131	0.00	3.76	0.61	0.38	0.76	1.24
22	60	0.00	3.09	0.37	0.24	0.43	1.18
23	22	0.00	1.56	0.45	0.34	0.44	0.97
24	34	0.03	1.49	0.40	0.32	0.36	0.90
25	282	0.00	5.00	0.53	0.33	0.62	1.18

Table 14-14: Descriptive Statistics for 2 m Composite Values for Copper (%Cu) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	3750	0.00	3.13	0.16	0.11	0.17	1.07
1002	283	0.00	1.18	0.21	0.15	0.19	0.90
1003	48	0.01	0.61	0.13	0.09	0.13	0.97
11	4069	0.00	1.23	0.06	0.04	0.07	1.15
12	249	0.00	0.53	0.09	0.07	0.08	0.91
16	144	0.00	0.54	0.09	0.07	0.08	0.88
18	165	0.00	0.18	0.04	0.02	0.04	1.01
20	1054	0.00	0.56	0.04	0.02	0.05	1.23
21	174	0.00	0.18	0.02	0.02	0.03	1.09
13	2622	0.00	2.17	0.10	0.05	0.14	1.47
14	1792	0.00	0.55	0.05	0.03	0.06	1.13
15	26	0.01	0.14	0.05	0.03	0.04	0.77
17	1284	0.00	2.54	0.07	0.03	0.15	2.02
19	131	0.00	0.33	0.04	0.02	0.05	1.27
22	60	0.01	0.36	0.08	0.07	0.07	0.82
23	22	0.01	0.16	0.05	0.04	0.04	0.79
24	34	0.00	0.14	0.03	0.02	0.03	0.88
25	282	0.00	0.60	0.03	0.02	0.05	1.47

Table 14-15: Descriptive Statistics for 2 m Composite Values for Silver (gpt Ag) – Z87 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
1001	3750	0.00	20.00	1.44	1.09	1.65	1.14
1002	283	0.00	20.00	2.79	1.67	3.32	1.19
1003	48	0.00	4.13	0.39	0.00	0.78	1.99
11	4069	0.00	15.00	0.91	0.60	1.17	1.29
12	249	0.00	9.10	2.00	1.51	1.90	0.95
16	144	0.00	6.80	1.21	0.89	1.20	0.99
18	165	0.00	8.50	0.65	0.35	0.93	1.44
20	1054	0.00	10.00	0.63	0.35	1.01	1.60
21	174	0.00	12.20	0.60	0.35	1.13	1.89
13	2622	0.00	20.00	1.11	0.65	1.73	1.57
14	1792	0.00	15.00	1.37	0.90	1.79	1.30
15	26	0.25	7.20	1.28	0.95	1.47	1.15
17	1284	0.00	12.00	1.15	0.77	1.47	1.28
19	131	0.00	5.17	1.08	0.85	0.92	0.85
22	60	0.25	5.20	1.38	1.11	1.08	0.78
23	22	0.25	1.70	0.77	0.65	0.52	0.67
24	34	0.25	5.70	1.80	1.45	1.53	0.85
25	282	0.00	9.70	0.63	0.41	0.81	1.29

Density Assignment

Density test work, completed by Inmet, was collected from 2,721 core samples in 30 drill holes (KN-648 to KN-677). The core samples tested were generally whole core pieces ranging in length from approximately 10 cm to 20 cm. Samples were weighed in air and in water by mine personnel, and the density results were adjusted to account for water temperature. Measurements on 496 resource related samples range from 2.57 g/cm³ to 3.42 g/cm³ and average 2.86 g/cm³. The mean value was assigned to the mineralized domains
Table 14-16 shows the densities used in the Z87 Zone

Table 14-16: Bulk Density – Z87 Zone

	Mineralized Domains	Country/Waste Rock	Overburden
Density (g/cm3)	**2.86**	**2.77**	**2.20**

It is AGP's opinion, the bulk densities assigned to the mineralized domains are reasonable and acceptable. AGP recommends the collection of bulk density measurements from any future drilling program to further characterize the Z87 Zone.
During the 2019 drilling program, Troilus collected 4255 density measurements from 22 drill holes in the southern end of the Z87 Zone (Z87S area). Of these, 526 measurements are captured by the mineralized domains. These measurements were not included in the current resource estimate and are available for the next resource update.

Spatial Analysis

Spatial analysis was performed on 2 m composites from domains 11 and 12 for Z87. Experimental variograms were calculated for gold, copper, and silver and were oriented along the overall strike, dip, and across strike directions of the mineralized wireframes. The down dip and along strike gold ranges of approximately 80 to 90 m were similar, with no significant anisotropy.
Table 14-17 to Table 14-19 presents the variography parameters for Z87 for gold, copper, and silver, respectively.

Table 14-17: Gold Variogram parameters – Z87 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.35								
C_1 = 0.10	Az.Dip.Az.	90	60	0	25	20	4	Spherical
C_2 = 0.10	Az.Dip.Az.	90	-30	0	70	80	10	Spherical

Table 14-18: Silver Variogram parameters – Z87 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.10								
C_1 = 0.25	Az.Dip.Az.	90	60	0	28	35	4	Spherical
C_2 = 0.65	Az.Dip.Az.	90	-30	0	90	90	18	Spherical

Table 14-19: Silver Variogram parameters – Z87 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.10								
C_1 = 0.30	Az.Dip.Az.	90	60	0	28	70	2	Spherical
C_2 = 0.60	Az.Dip.Az.	90	-30	0	90	100	16	Spherical

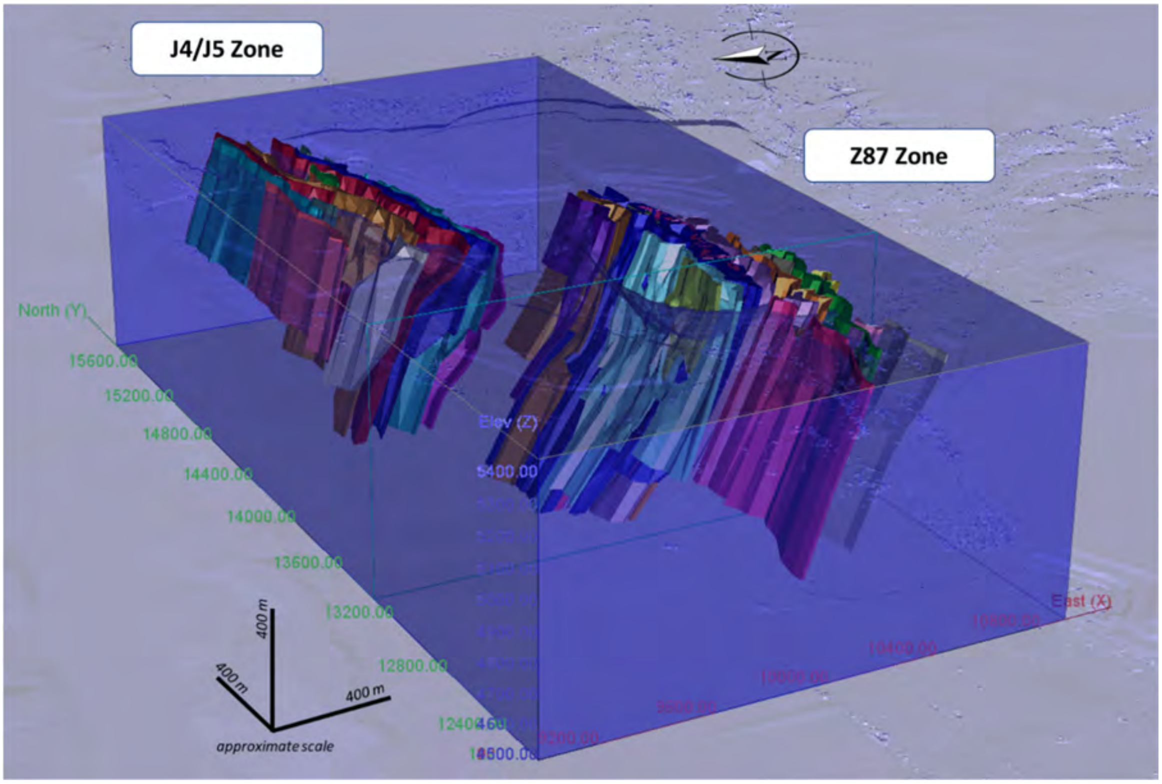
14.4.3 Block Model

The block model for the Z87 Zone was set up to cover both the Z87 and J4/J5 Zones. The block model was created with a block matrix of 5 m long by 5 m long by 5 m high and is not rotated (mine grid coordinates). The block matrix was selected as appropriate based on the drill spacing and the block height and in consideration of an open pit and underground scenarios.
Table 14-20 summarizes the block model parameters and Figure 14-3 illustrates the block model over the interpreted mineralized domains for the Z87 Zone.

Table 14-20 Block Model Parameters – Z87 and J4/J5 Zones

	Parameters
Easting	9000 mE
Northing	12200 mN
Maximum Elevation	5455 m
Rotation Angle	No rotation°
Block Size (X, Y, Z in metres)	5m x 5m x 5m
Number of blocks in the X direction	380
Number of blocks in the Y direction	730
Number of blocks in the Z direction	191

Figure 14-3: Block Model – Z87 and J4/J5 Zones



Source : AGP (2020)

The block model is a whole block model where blocks are assigned a specific rock type code. Any block with greater than 48% within the mineralized domain wireframe was assigned that code.
Block model attributes in the block model include:

- rock type
- density
- metal grades for gold, copper, silver, and calculated gold-equivalent grades for mineralized blocks
- classification
- distance to the nearest composite
- number of composites used in estimation of block
- number of drill holes used for estimation of block
- pass number
- open pit or underground tag

<u>Estimation/Interpolation Methods</u>

The metal grades were interpolated in two passes using the 2 m capped composites. The metal grades were interpolated using OK interpolation method in two passes. The search ellipse ranges resemble the variogram ranges. ID2 and NN interpolations were also run for validation purposes.

Each pass required the same minimum and maximum number of composites with a maximum of three composites per drill hole, therefore, two drill holes were required to populate a block. Table 14-21 shows estimation parameters for each pass used to estimate metal grades.

Table 14-21: Estimation Parameters – Z87 Zone

Pass	Min No Composites	Max No Composites	Max Composites per Drill Holes	Min No of Drill Holes
Pass 1	4	12	3	2
Pass 2	2	12	3	1

Each pass increased the search ellipse where Pass 2 was doubled that of Pass 1. Hard boundaries were kept between all domains and blocks within each domain were estimated only be composites withing the domain wireframe. Table 14-22 shows the search ellipse parameters for the Z87 Zone

Table 14-22: Search Ellipse Parameters – Z87 Zone

Pass	Anisotropy	Azimuth (°)	Dip (°)	Azimuth (°)	Range X (m)	Range Y (m)	Range Z (m)	Search
PASS 1	Az,Dip,Az	90	60	0	70	80	18	Ellipsoidal
PASS 2	Az,Dip,Az	90	60	0	150	160	30	Ellipsoidal

Az,Dip,Az – Azimuth, Dip, Azimtuh

Block Model Validation

AGP validated the Z87 Zone resource estimate and have accepted it. Various methods to validate the block model included:

- statistical comparison of resource assay and block grade distributions
- visual inspection and comparison of block grades with composite and assay grades
- inspection of swath plots with composites and block grades elevations and northings

The block grades were compared with the composite grades on sections and plans and found good overall visual correlation. Occasional minor grade smearing and banding occur locally when changes in wireframe dip or strike restrict the access to composites. As the Project advances and closer spaced definition drilling becomes available, additional refinements would be possible to the mineralized domains and interpolation procedure.

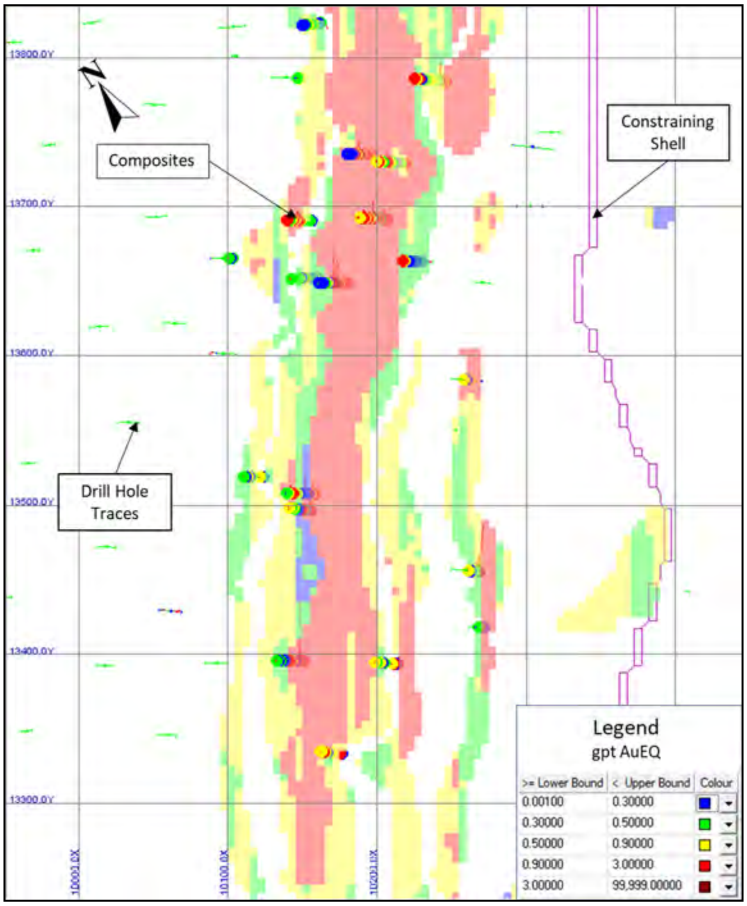
Table 14-23 presents a comparison of the gold and copper averages by lens between capped assays, composites, and estimated average block grades. The comparison between composites and interpolated block values shows a slight, normal decrease of average grades for both gold and copper. The differences in average grade of the different types of data are minimal, while occasional larger differences are observed in the case for the south extension of Z87 mineralized domains, where drill hole spacing is wider and the lenses are thinner, however, the comparison includes all the interpolated blocks, prior to classification.

Table 14-23: Comparison of Assay, Composite and Block Mean Gold Grades – Z87 Zone

Domain	Assay Au (g/t)	Comp Au (g/t)	Block Au (g/t)	Assay Cu (%)	Comp Cu (%)	Block Cu (%)	Assay Ag (g/t)	Comp Ag (g/t)	Block Ag (g/t)
1001	1.596	1.560	1.627	0.161	0.159	0.147	1.409	1.445	1.176
1002	1.630	1.538	1.434	0.214	0.207	0.170	2.868	2.789	2.298
1003	2.114	1.974	2.078	0.138	0.130	0.153	0.240	0.390	0.420
11	0.545	0.531	0.464	0.064	0.063	0.061	0.850	0.909	0.908
12	0.412	0.420	0.456	0.095	0.091	0.097	2.099	1.995	2.130
16	0.292	0.315	0.394	0.090	0.085	0.091	1.326	1.211	1.512
18	0.719	0.745	0.620	0.034	0.035	0.028	0.608	0.648	0.604
20	0.612	0.619	0.604	0.037	0.037	0.035	0.525	0.634	0.748
21	0.531	0.524	0.429	0.024	0.023	0.023	0.531	0.596	0.993
13	0.714	0.702	0.616	0.103	0.097	0.083	1.068	1.107	0.873
14	0.740	0.695	0.550	0.050	0.049	0.056	1.248	1.371	1.138
15	0.551	0.551	0.506	0.045	0.045	0.048	1.275	1.275	1.917
17	0.583	0.587	0.603	0.077	0.072	0.071	1.047	1.152	1.094
19	0.615	0.614	0.684	0.044	0.035	0.037	0.977	1.076	1.093
22	0.356	0.367	0.369	0.086	0.083	0.086	1.389	1.383	1.282
23	0.472	0.451	0.510	0.049	0.046	0.045	0.779	0.772	0.783
24	0.403	0.403	0.429	0.030	0.030	0.026	1.796	1.796	1.576
25	0.523	0.532	0.580	0.033	0.031	0.031	0.638	0.633	0.636

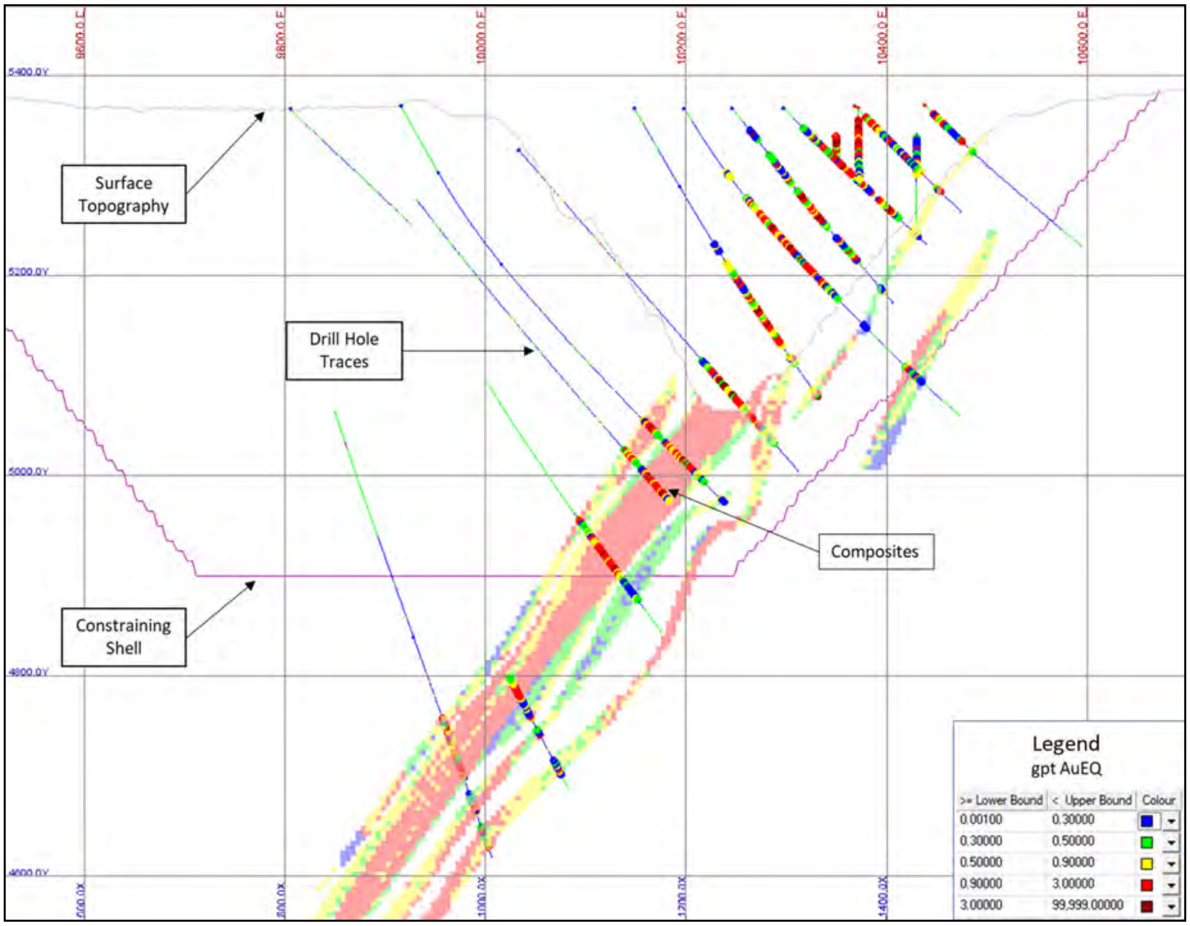
Figure 14-4 and Figure 14-5 present plan section and cross section views for Z87 (plan view elevation 5,005 and cross section 13,700N).

Figure 14-4: Z87 Zone - Plan View Elevation 5,005 m



Source : AGP (2020)

Figure 14-5: Z87 Zone – Cross Section 13,700N



Source : AGP (2020)

Swath plots by northing and by elevation reviewed in the Z87 Zone. The distribution of gold and copper composite and interpolated block grades were compared. No issues were found with the distribution of interpolated grades. and Figure 14-7 present the swath plots by northing for gold and copper.

Figure 14-6: Gold Swath Plot by Northing

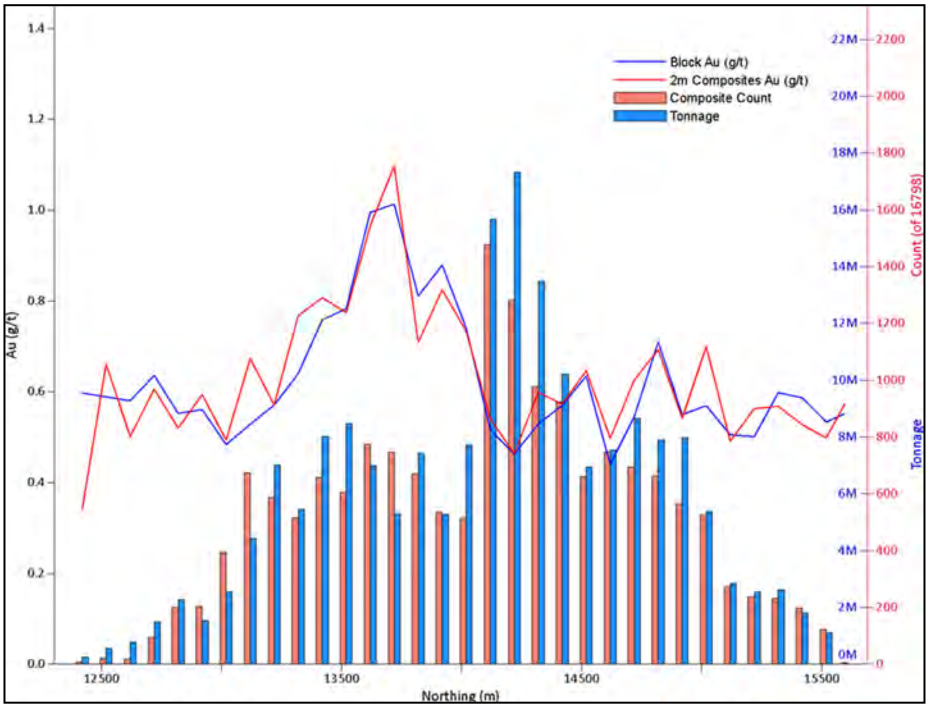
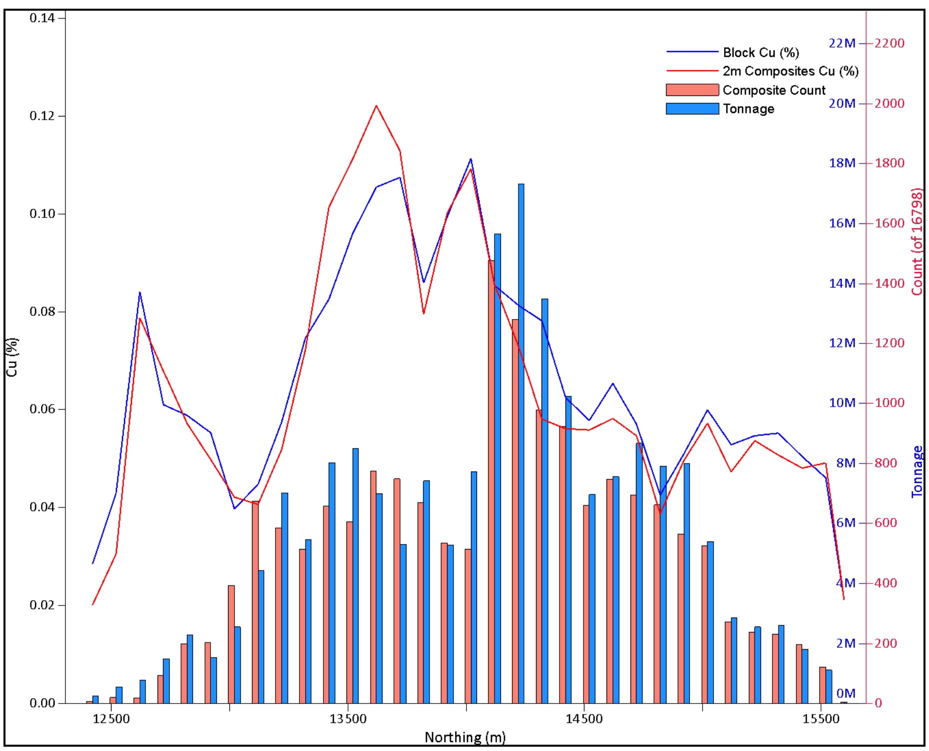


Figure 14-7: Copper Swath Plot by Northing



14.5 J4/J5 Zones

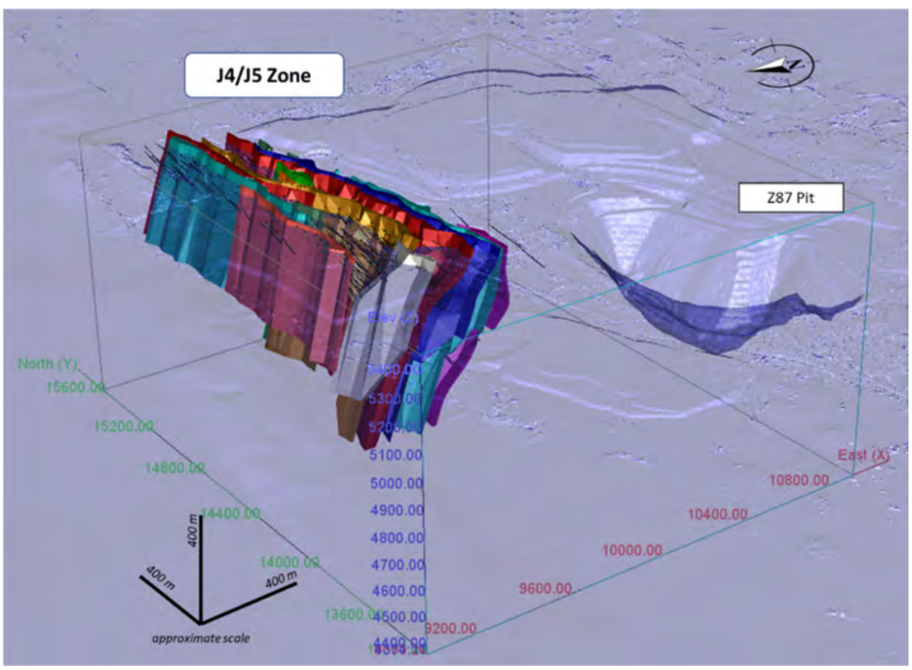
14.5.1 Geological Models

The mineralized domains at J4/J5 Zone were interpreted by Troilus personnel. The interpreted wireframes were completed using conventional polylines on vertical sections defined along 25 m spaced sections. The polylines capture a minimum nominal grade of 0.3 gpt AuEQ to a minimum width of 4 m. The polylines were 'wobbled' (GEMS function) and snapped to drill hole intercepts. The polylines were then joined together using tie lines in order to create 3D solid wireframes. The mineralized envelops were created above topography and extended approximately 600 m below surface. A total of 16 wireframes were created for the J4/J5 Zone.

AGP reviewed the J4/J5 Zone wireframes and found no errors. AGP agrees that these wireframes are suitable to estimate resources for the J4/J5 Zone. AGP notes that the wireframes exhibit some zig-zag, or sawtooth, shapes when viewed in plan view. While these shapes are not overly exaggerated, it is recommended that these wireframes be revisited to adjust along plan views in plan view. AGP anticipates these changes would not have a significant affect on the current mineral resources but may show a better representation of the mineralization.

Figure 14-8 shows the mineralized wireframes for the J4/J5 Zone. Table 14-24 lists the mineralized domains and rock type code.

Figure 14-8: Mineralized Domains – J4/J5 Zone



Source : AGP (2020)

Table 14-24: Domains – J4/J5 Zone

Zone	Domain	Rock Type
J4	40	40
	41	41
	42	42
	43	43
	44	44
	45	45
	46	46
	47	47
J5	50	50
	51	51
	52	52
	54	54
	55	55

14.5.2 Exploratory Data Analysis

Raw Assays

The drill hole database for J4/J5 Zone data, consists of 277 drill holes and 46,026 assay values for each metal: gold, copper, and silver. Any assay values reported below detection limit were assigned half the detection limit for statistical analysis and grade estimation. Any missing values were assigned a zero. Out of this total, 15,270 assay values are captured by the mineralized domains.
Table 14-25 presents the descriptive statistics for all assays in the J4/J5 Zone.

Table 14-25: Descriptive Statistics of Ray Assays within all Mineralized Domains – J4/J5 Zone

	Au (gpt)	Cu (%)	Ag (gpt)	Length (m)
Count	15270	15270	15270	15270
Minimum	0.00	0.00	0.00	0.10
Maximum	94.13	3.91	206.00	5.25
Mean	0.65	0.06	0.95	1.38
Median	0.33	0.04	0.60	1.00
Std. Deviation	1.68	0.07	2.11	0.57
CV	2.60	1.22	2.22	0.41

Table 14-26 to Table 14-28 present the descriptive statistics for raw gold, copper, and silver assays, respectively, by mineralized domain.

Table 14-26: Descriptive Statistics for Raw Gold Assays (gpt Au) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	319	0.00	3.12	0.34	0.23	0.36	1.09
41	3618	0.00	30.29	0.58	0.33	1.26	2.16
42	4888	0.00	94.13	0.88	0.42	2.50	2.85
43	2157	0.00	28.69	0.70	0.38	1.32	1.89
44	343	0.00	4.74	0.50	0.32	0.59	1.17
45	202	0.00	7.91	0.35	0.24	0.59	1.72
46	150	0.02	3.08	0.52	0.34	0.53	1.01
47	168	0.01	6.45	0.50	0.29	0.76	1.51
50	711	0.01	20.84	0.44	0.28	0.91	2.05
51	488	0.00	8.05	0.56	0.31	0.89	1.57
52	101	0.00	0.79	0.18	0.14	0.14	0.77
54	2036	0.00	15.40	0.41	0.24	0.82	2.02
55	89	0.02	5.88	0.42	0.25	0.73	1.73

Table 14-27: Descriptive Statistics for Raw Copper Assays (%Cu) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	319	0.00	0.44	0.06	0.05	0.06	0.95
41	3618	0.00	2.01	0.07	0.05	0.08	1.16
42	4888	0.00	1.37	0.05	0.03	0.05	1.10
43	2157	0.00	3.91	0.06	0.04	0.10	1.84
44	343	0.00	0.51	0.07	0.05	0.07	1.00
45	202	0.00	0.37	0.09	0.08	0.06	0.67
46	150	0.00	0.64	0.09	0.04	0.12	1.27
47	168	0.00	0.09	0.02	0.02	0.02	0.86
50	711	0.00	0.43	0.06	0.04	0.05	0.89
51	488	0.00	0.64	0.05	0.04	0.06	1.07
52	101	0.00	0.50	0.14	0.11	0.09	0.69
54	2036	0.00	0.85	0.07	0.05	0.06	0.92
55	89	0.01	0.25	0.08	0.07	0.05	0.67

Table 14-28: Descriptive Statistics for Raw Silver Assays (gpt Ag) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	319	0.00	6.00	0.64	0.40	0.70	1.10
41	3618	0.00	46.90	1.11	0.80	1.49	1.35
42	4888	0.00	206.00	0.91	0.60	3.15	3.45
43	2157	0.00	62.80	1.06	0.70	1.76	1.66
44	343	0.00	7.30	1.34	1.00	1.24	0.93
45	202	0.25	8.60	0.78	0.60	0.83	1.06
46	150	0.10	11.60	1.49	0.70	1.86	1.25
47	168	0.10	2.00	0.36	0.25	0.27	0.76
50	711	0.00	12.20	0.87	0.60	1.01	1.16
51	488	0.00	4.60	0.53	0.30	0.59	1.11
52	101	0.00	2.40	0.62	0.55	0.44	0.71
54	2036	0.00	15.40	0.82	0.60	0.94	1.15
55	89	0.10	3.70	0.76	0.25	0.77	1.02

Capping Analysis

Capping analysis was carried out on each mineralized domain for gold, copper, and silver. Capping was applied to gold and silver assay values in several mineralized domains. Not all domains required capping levels. No capping was applied to copper assay values. AGP reviewed the capping levels by domain using histogram and disintegration plots and found the capping levels to be reasonable and adequate.

Table 14-29 presents the capping levels for gold and silver, by domain, for the J4/J5 Zone.

Table 14-29: Capping Levels – J4/J5 Zone

Domain	Au (gpt)	% Loss	Cu (%)	% Loss	Ag (gpt)	% Loss
40	2.00 (2)	1.1	-		3.00 (5)	2.9
41	8.00 (14)	5.2	-		9.00 (12)	2.5
42	14.00 (9)	7.1	-		9.00 (4)	5.8
43	8.00 (9)	4.2	-		9.00 (6)	2.9
44	-		-		6.00 (3)	0.7
45	2.00 (2)	18.7	-		3.00 (2)	4.8
46	-		-		6.00 (6)	5.1
47	3.00 (2)	6.2	-		1.00 (5)	2.5
50	4.00 (2)	5.6	-		6.00 (4)	1.3
51	-		-		-	
52	-		-		-	
54	7.00 (8)	3.4	-		8.00 (3)	0.7
55	3.00 (1)	7.7	-		-	

(X) – number of assays affected

Table 14-30 and Table 14-31 presents the descriptive statistics for capped gold and silver assay values, respectively. There is no change to copper values as no capping was applied.

Table 14-30: Descriptive Statistics for Capped Gold Assays (gpt Au) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	319	0.00	2.00	0.33	0.23	0.34	1.01
41	3618	0.00	8.00	0.55	0.33	0.81	1.47
42	4888	0.00	14.00	0.81	0.42	1.37	1.68
43	2157	0.00	8.00	0.67	0.38	0.96	1.44
44	343	0.00	4.74	0.50	0.32	0.59	1.17
45	202	0.00	2.00	0.31	0.24	0.27	0.85
46	150	0.02	3.08	0.52	0.34	0.53	1.01
47	168	0.01	3.00	0.47	0.29	0.58	1.22
50	711	0.01	4.00	0.42	0.28	0.50	1.19
51	488	0.00	8.05	0.56	0.31	0.89	1.57
52	101	0.00	0.79	0.18	0.14	0.14	0.77
54	2036	0.00	7.00	0.39	0.24	0.65	1.65
55	89	0.02	3.00	0.39	0.25	0.50	1.29

Table 14-31: Descriptive Statistics for Capped Silver Assays (gpt Ag) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	319	0.00	6.00	0.64	0.40	0.70	1.10
41	3618	0.00	9.00	1.08	0.80	1.10	1.02
42	4888	0.00	9.00	0.86	0.60	0.86	1.00
43	2157	0.00	9.00	1.03	0.70	1.12	1.09
44	343	0.00	6.00	1.33	1.00	1.20	0.90
45	202	0.25	2.70	0.74	0.60	0.58	0.78
46	150	0.10	6.00	1.41	0.70	1.58	1.11
47	168	0.10	1.20	0.35	0.25	0.25	0.71
50	711	0.00	6.00	0.86	0.60	0.92	1.07
51	488	0.00	4.60	0.53	0.30	0.59	1.11
52	101	0.00	2.40	0.62	0.55	0.44	0.71
54	2036	0.00	8.00	0.81	0.60	0.88	1.08
55	89	0.10	3.70	0.76	0.25	0.77	1.02

Composites

Composites were created after capping of assay values. The assay intervals situated within the mineralization wireframe were composited to two metre lengths within each mineralized domain wireframe. Composite lengths shorter than 0.5 m were discarded.

The J4/J5 Zone composites average 1.99 m in length. Of the 32,578 composites, only 273 composites (approximately 1%) are less than two metre lengths.

Table 14-32 to Table 14-34 present the descriptive statistics for the capped 2 m composites for gold, copper, and silver, respectively.

Table 14-32: Descriptive Statistics for 2 m Composite Values for Gold (gpt Au) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	217	0.00	1.82	0.33	0.26	0.28	0.85
41	2560	0.00	8.00	0.54	0.35	0.67	1.24
42	3261	0.00	14.00	0.79	0.47	1.11	1.39
43	1611	0.00	8.00	0.65	0.41	0.79	1.22
44	289	0.00	3.81	0.52	0.33	0.56	1.07
45	171	0.00	2.00	0.31	0.25	0.23	0.74
46	140	0.03	3.08	0.53	0.36	0.52	0.98
47	93	0.02	2.27	0.48	0.33	0.46	0.96
50	423	0.01	3.84	0.41	0.30	0.40	0.98
51	313	0.00	7.33	0.55	0.32	0.72	1.32
52	79	0.00	0.79	0.18	0.16	0.14	0.74
54	1496	0.00	7.00	0.40	0.26	0.62	1.54
55	68	0.03	2.58	0.37	0.25	0.41	1.09

Table 14-33: Descriptive Statistics for 2 m Composite Values for Copper (%Cu) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	0.00	0.33	0.06	0.05	0.05	0.78	0.00
41	0.00	2.01	0.06	0.05	0.07	1.10	0.00
42	0.00	0.70	0.04	0.04	0.04	0.96	0.00
43	0.00	0.91	0.05	0.04	0.06	1.05	0.00
44	0.00	0.51	0.07	0.05	0.07	0.90	0.00
45	0.00	0.37	0.10	0.09	0.06	0.61	0.00
46	0.00	0.64	0.10	0.05	0.12	1.21	0.00
47	0.00	0.07	0.02	0.02	0.02	0.73	0.00
50	0.00	0.27	0.06	0.05	0.04	0.76	0.00
51	0.00	0.64	0.06	0.04	0.06	1.09	0.00
52	0.01	0.50	0.14	0.12	0.09	0.68	0.01
54	0.00	0.85	0.07	0.05	0.06	0.89	0.00
55	0.01	0.25	0.08	0.07	0.04	0.57	0.01

Table 14-34: Descriptive Statistics for 2 m Composite Values for Silver (gpt Ag) – J4/J5 Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
40	0.00	2.80	0.67	0.50	0.54	0.81	0.00
41	0.00	9.00	1.10	0.09	0.94	0.85	0.00
42	0.00	8.05	0.94	0.75	0.80	0.84	0.00
43	0.00	9.00	1.10	0.09	1.07	0.98	0.00
44	0.00	6.00	1.32	1.10	1.09	0.82	0.00
45	0.25	2.50	0.76	0.60	0.55	0.73	0.25
46	0.15	6.00	1.48	0.88	1.58	1.07	0.15
47	0.10	1.00	0.35	0.30	0.21	0.59	0.10
50	0.00	5.20	0.88	0.62	0.84	0.95	0.00
51	0.00	3.55	0.58	0.36	0.57	0.98	0.00
52	0.06	2.40	0.64	0.60	0.42	0.65	0.06
54	0.00	8.00	0.84	0.60	0.85	1.01	0.00
55	0.10	3.40	0.82	0.50	0.77	0.94	0.10

<u>Density Assignment</u>

Density test work, completed by Troilus, was collected from 13,409 core samples in 46 drill holes from the 2019 drill programs. Of this total, 3,356 measurements were used for the mineralized domains. Measurements were carried out by ALS by weight in air and weight in water method. There is a slight variation in the bulk densities between the J4 and J5 domains therefore: 2.77 g/cm^3 was assigned to the mineralized domains at J4 domains and 2.80 g/cm^3 was assigned to J5 domains.
Table 14-35 shows the densities used in the J4/J5Zone

Table 14-35: Assigned Densities – J4/J5 Zone

	Mineralized Domains	Country/Waste Rock	Overburden
J4 Domains	2.77	2.77	2.20
J5 Domains	2.80	2.77	2.20

Table 14-36 presents the descriptive statistics for the density values assigned to the mineralized domains in J4/J5 Zone.

Table 14-36: Bulk Density – J4/J5 Zone

	J4 Domains Density (g/cm^3)	J5 Domains Density (g/cm^3)	Country Rock Density (g/cm^3)
Count	2376	980	10053
Minimum	2.18	2.17	2.10
Maximum	3.03	3.17	3.63
Mean	2.77	2.80	2.77
Median	2.78	2.77	2.77
St Dev	0.06	0.10	0.07
CV	0.02	0.03	0.03

It is AGP's opinion, the bulk densities assigned to the mineralized domains is reasonable and acceptable. AGP recommends the continued collection of bulk density measurements from any drilling program to continue to characterize the J4/J5 Zone.

Spatial Analysis

Spatial analysis was performed on 2 m composites from domain 42. Experimental variograms were calculated for gold, copper, and silver and were oriented along the overall strike, dip, and across strike directions of the mineralized wireframes. The down dip and along strike gold ranges of approximately 80 m to 90 m were similar, with no significant anisotropy. Along strike, ranges for copper and silver were approximately twice the down dip ranges.

Table 14-37 to Table 14-39 presents the variography parameters for J4/J5 for gold, copper, and silver, respectively.

Table 14-37: Gold Variogram parameters – J4/J5 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.35								
C_1 = 0.40	Az.Dip.Az.	90	60	0	35	55	4	Spherical
C_2 = 0.25	Az.Dip.Az.	90	-30	0	85	85	10	Spherical

Table 14-38: Silver Variogram parameters – J4/J5 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.30								
C_1 = 0.70	Az.Dip.Az.	90	60	0	177	100	8	Spherical

Table 14-39: Silver Variogram parameters – J4/J5 Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.30								
C_1 = 0.20	Az.Dip.Az.	90	60	0	36	61	4	Spherical
C_2 = 0.50	Az.Dip.Az.	90	-30	0	205	105	9	Spherical

14.5.3 Block Model

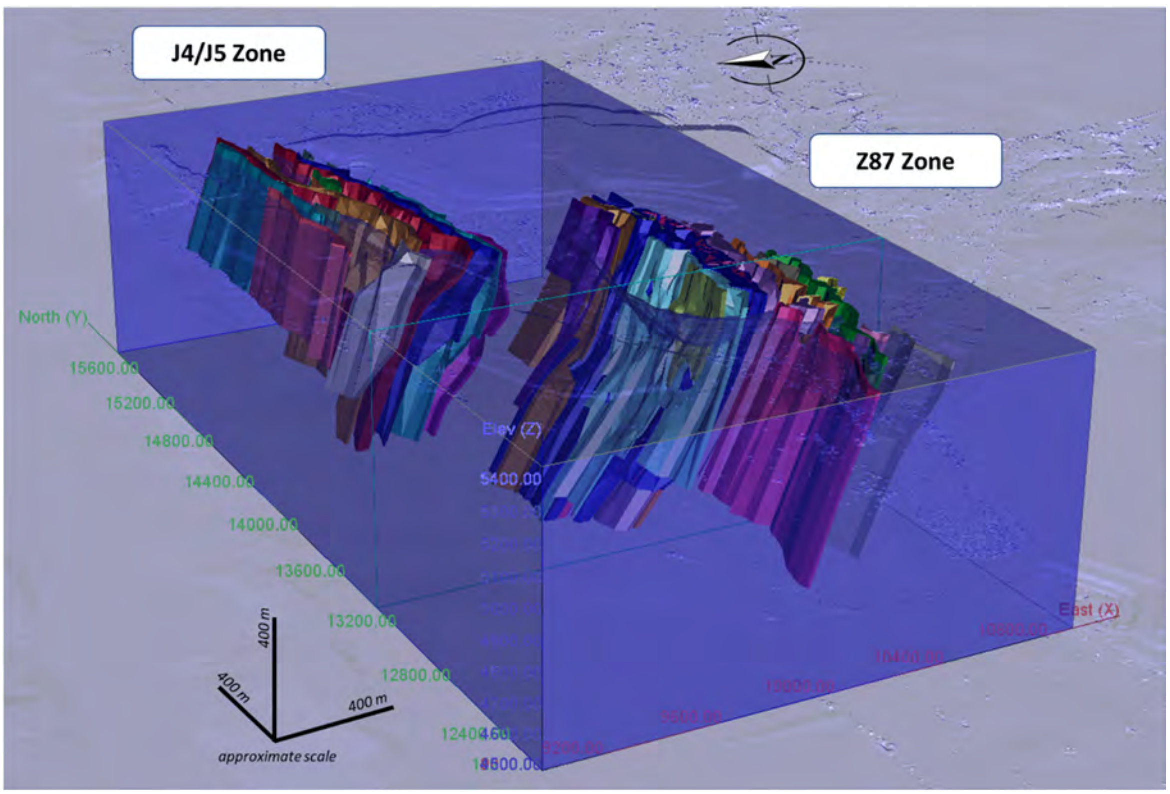
The block model for the J4/J5 Zone was set up to cover both the Z87 and J4/J5 Zones. The block model was created with a block matrix of 5 m long by 5 m long by 5 m high and is not rotated (mine grid coordinates). The block matrix was selected as appropriate based on the drill spacing and the block height and in consideration of an open pit and underground scenarios.

Table 14-40 summarizes the block model parameters and Figure 14-9 illustrates the block model over the interpreted mineralized domains for the Z87 Zone.

Table 14-40: Block Model Parameters – Z87 and J4/J5 Zones

	Parameters
Easting	9000 mE
Northing	12200 mN
Maximum Elevation	5455 m
Rotation Angle	No rotation°
Block Size (X, Y, Z in metres)	5m x 5m x 5m
Number of blocks in the X direction	380
Number of blocks in the Y direction	730
Number of blocks in the Z direction	191

Figure 14-9: Block Model – Z87 and J4/J5 Zones



Source : AGP (2020)

The block model is a whole block model where blocks are assigned a specific rock type code. Any block with greater than 48% and 50% in J4, depending on the domain wireframe, was assigned that code.

Any block with greater than 45% to 48%, in J5, with narrower overall domain wireframes, was assigned that code .
Block model attributes in the block model include:

- rock type
- density
- metal grades for gold, copper, silver, and calculated gold-equivalent grades for mineralized blocks
- classification
- distance to the nearest composite
- number of composites used in estimation of block
- number of drill holes used for estimation of block
- pass number
- open pit or underground tag

Estimation/Interpolation Methods

The metal grades were interpolated in two passes using the 2 m capped composites. The metal grades were interpolated using OK interpolation method in two passes. The search ellipse ranges resemble the variogram ranges. ID2 and NN interpolations were also run for validation purposes.
Each pass required the same minimum and maximum number of composites with a maximum of three composites per drill hole, therefore, two drill holes were required to populate a block. Table 14-41 shows estimation parameters for each pass used to estimate metal grades.

Table 14-41: Estimation Parametres – J4/J5 Zone

Pass	Min No Composites	Max No Composites	Max Composites per Drill Holes	Min No of Drill Holes
Pass 1	4	12	3	2
Pass 2	2	12	3	1

Each pass increased the search ellipse where Pass 2 was doubled that of Pass 1. Hard boundaries were kept between all domains and blocks within each domain were estimated only be composites withing the domain wireframe. Table 14-42 shows the search ellipse parameters for the J4/J5 zone.

Table 14-42: Search Ellipse Parameters – J4/J5 Zone

Pass	Anisotropy	Azimuth (°)	Dip (°)	Azimuth (°)	Range X (m)	Range Y (m)	Range Z (m)	Search
Pass 1	Az,Dip,Az	90	70	0	85	85	10	Ellipsoidal
Pass 2	Az,Dip,Az	90	70	0	150	160	30	Ellipsoidal

Az,Dip,Az – Azimuth, Dip, Azimtuh

Block Model Validation

AGP validated the J4/J5 Zone resource estimate and have accepted it. The various methods used to validate the block model included:

- visual inspection and comparison of block grades with composite and assay grades
- statistical comparison of resource assay and block grade distributions
- inspection of swath plots with composites and block grades elevations and northings

The block grades were compared with the composite grades on sections and plans and found good overall visual correlation. Occasional minor grade smearing and banding occur locally when changes in wireframe dip or strike restrict the access to composites. As the Project advances and closer spaced definition drilling becomes available, additional refinements would be possible to the mineralized domains and interpolation procedure.

Table 14-43 presents a comparison of the gold and copper averages by lens between capped assays, composites, and estimated average block grades. The comparison between composites and interpolated block values shows a slight, normal decrease of average grades for both gold and copper. For J4-J5, the differences in average grade of the different types of data are minimal, while for Z87 occasional larger differences are observed as is the case for the South extension mineralized lenses, where drill hole spacing is wider and the lenses are thinner, however, the comparison includes all the interpolated blocks, prior to classification.

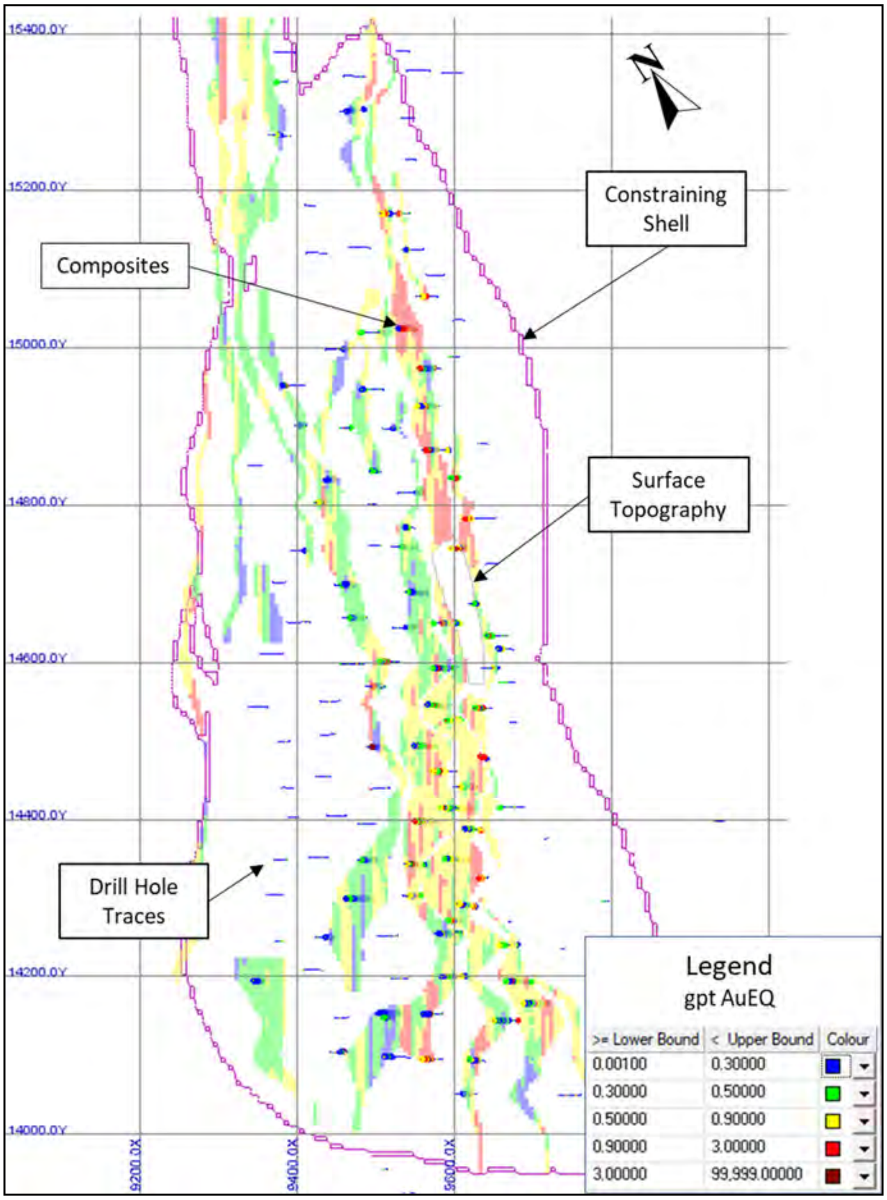
Table 14-43: Comparison of Assay, Composite and Block Mean Gold Grades – Z87 Zone

Domain	Assay Au (g/t)	Comp Au (g/t)	Block Au (g/t)	Assay Cu (%)	Comp Cu (%)	Block Cu (%)	Assay Ag (g/t)	Comp Ag (g/t)	Block Ag (g/t)
40	0.329	0.330	0.350	0.063	0.064	0.065	0.616	0.674	0.688
41	0.551	0.543	0.500	0.065	0.063	0.069	1.078	1.102	1.053
42	0.811	0.792	0.741	0.046	0.040	0.048	0.861	0.943	0.894
43	0.669	0.648	0.579	0.054	0.053	0.056	1.027	1.096	1.100
44	0.504	0.520	0.552	0.072	0.072	0.084	1.333	1.321	1.382
45	0.313	0.314	0.329	0.092	0.098	0.090	0.742	0.761	0.790
46	0.520	0.531	0.577	0.093	0.098	0.101	1.412	1.483	1.483
47	0.472	0.482	0.478	0.021	0.020	0.018	0.352	0.352	0.335
50	0.418	0.411	0.423	0.055	0.055	0.058	0.861	0.881	0.855
51	0.564	0.547	0.506	0.053	0.055	0.055	0.526	0.584	0.490
52	0.177	0.182	0.165	0.135	0.139	0.129	0.617	0.641	0.651
54	0.407	0.403	0.426	0.066	0.065	0.072	0.815	0.836	0.876
55	0.421	0.374	0.352	0.078	0.078	0.076	0.755	0.815	0.802

Notes: Comp - composite

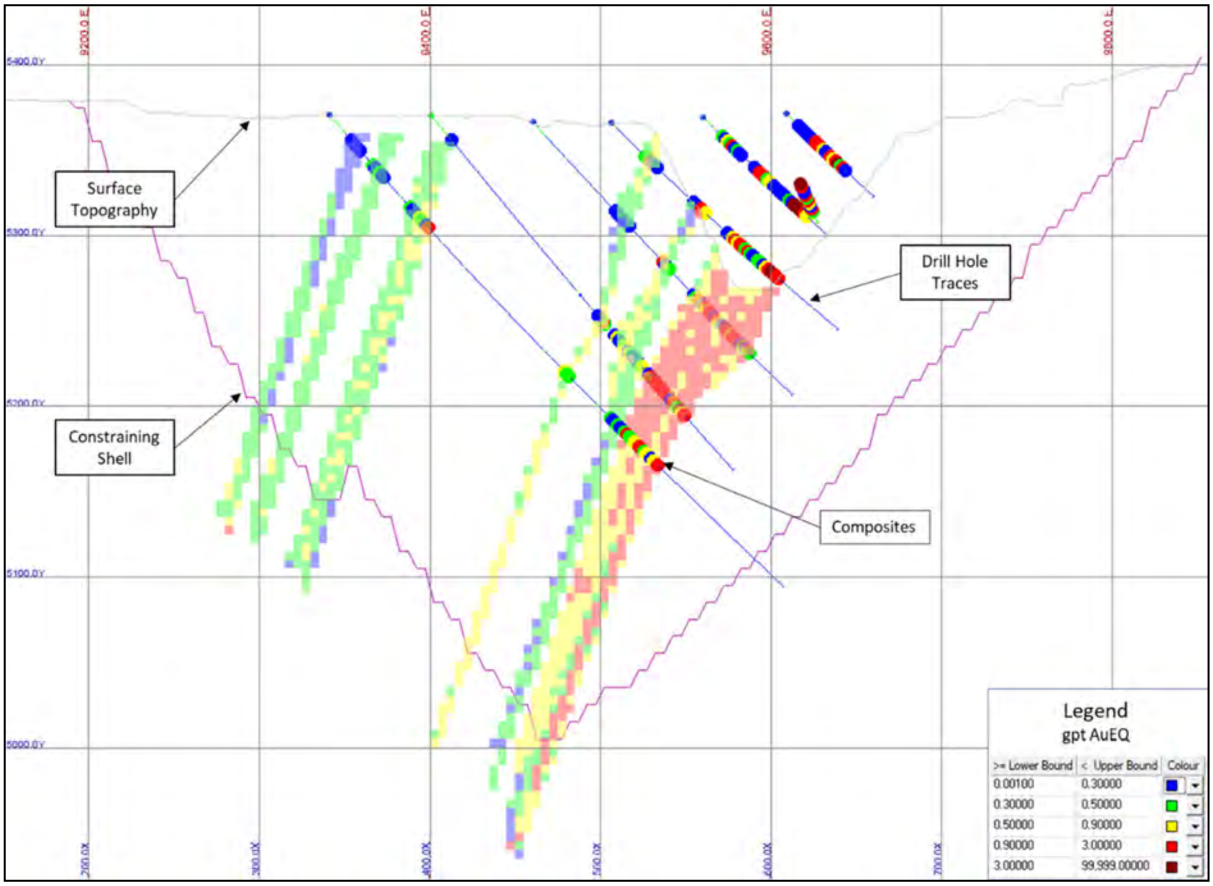
Figure 14-10 and Figure 14-11 plan section and cross section views for J4/J5 Zone (plan view elevation 5,205 and cross section 15,025N), respectively.

Figure 14-10: J4-J5 Plan View Elevation 5,205 N



Source : AGP (2020)

Figure 14-11: J4-J5 Vertical Section 15,025 N



Source : AGP (2020)

Swath plots by northing and by elevation reviewed in the Z87 Zone. The distribution of gold and copper composite and interpolated block grades were compared. No issues were found with the distribution of interpolated grades. Figure 14-12 and Figure 14-13 present the swath plots by northing for Au and Cu for all the classified blocks.

Figure 14-12: Gold Swath Plot by Northing

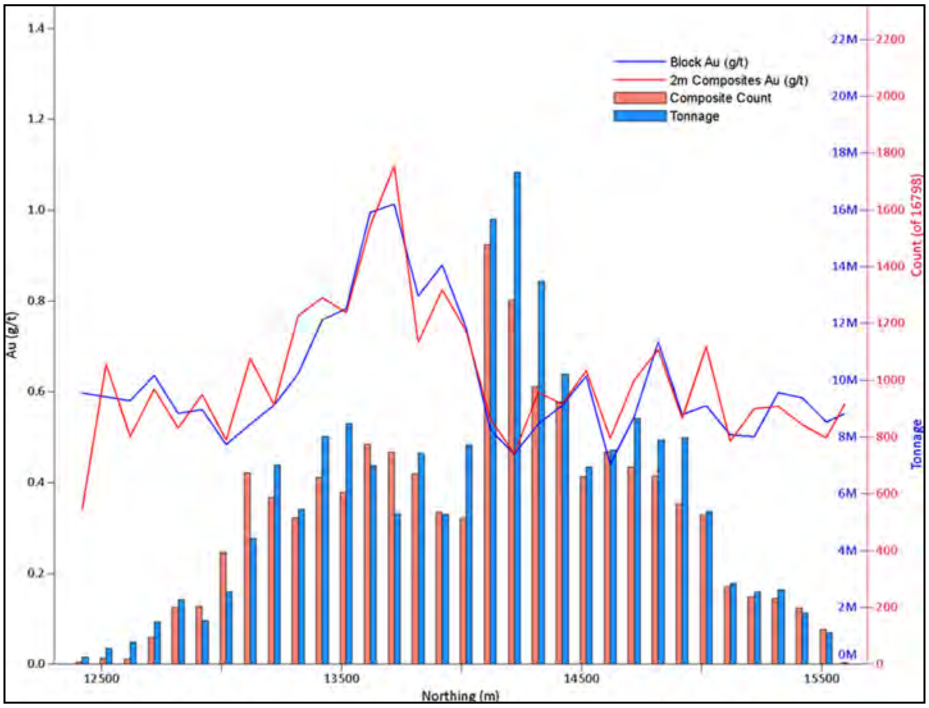
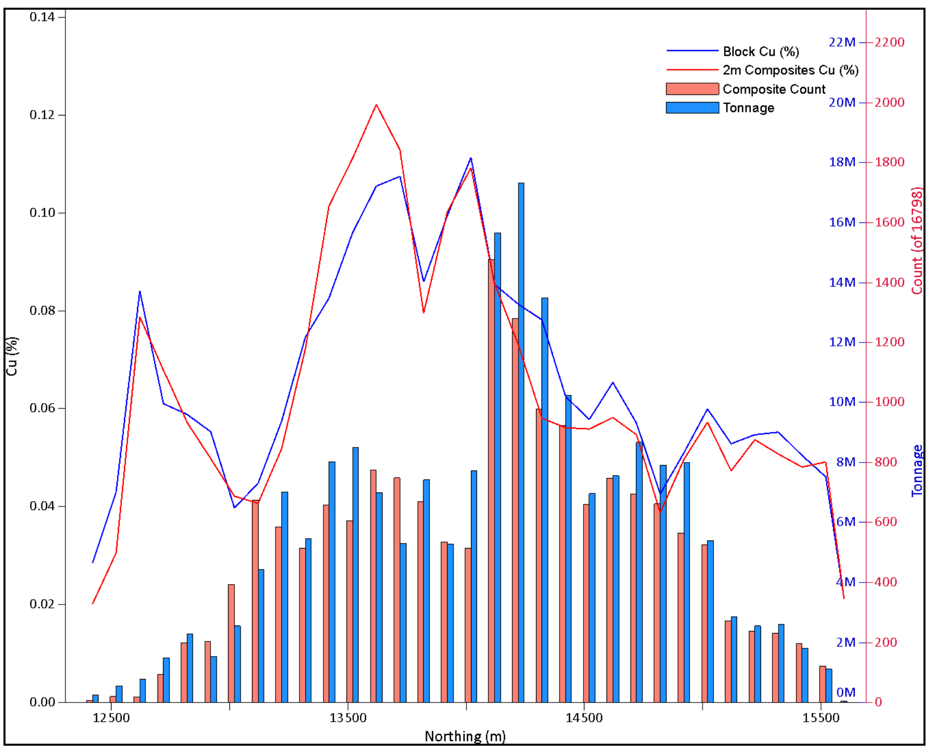


Figure 14-13: Copper Swath Plot by Northing



14.6 SW Zone

14.6.1 Geological Models

The open pit and underground resources for the Z87 zone are based on mineralization wireframes built at nominal cut-off grades of 0.3 g/t AuEq and 0.8 g/t AuEq, respectively. The open pit resources at the J zones are based on mineralization wireframes built at approximately 0.3 g/t AuEq. A minimum thickness of approximately four metres was used to build all of the mineralization wireframes.

The wireframes were built by Troilus personnel using polylines on plan and on cross section, using travers lines in GEMS. The polylines were then joined together using tie lines in order to create 3D solids. The mineralized wireframes start above topographic surface and extend to a maximum of 500 m below surface, approximately 300 m to 500 m vertically. The domains are interpreted as on two limbs of a fold and has an approximate strike length of 1,200m. The SW Zone uses the local mine grid reference system and extends from approximately 9,000 m to 10,200 m northing, 9,300 m to 9,800 easting.

Figure 14-14 shows the mineralized wireframes grouped by general area and the existing drilling. Table 14-44 lists the mineralized domains and subdomains.

Figure 14-14: Mineralized Domains – SW Zone

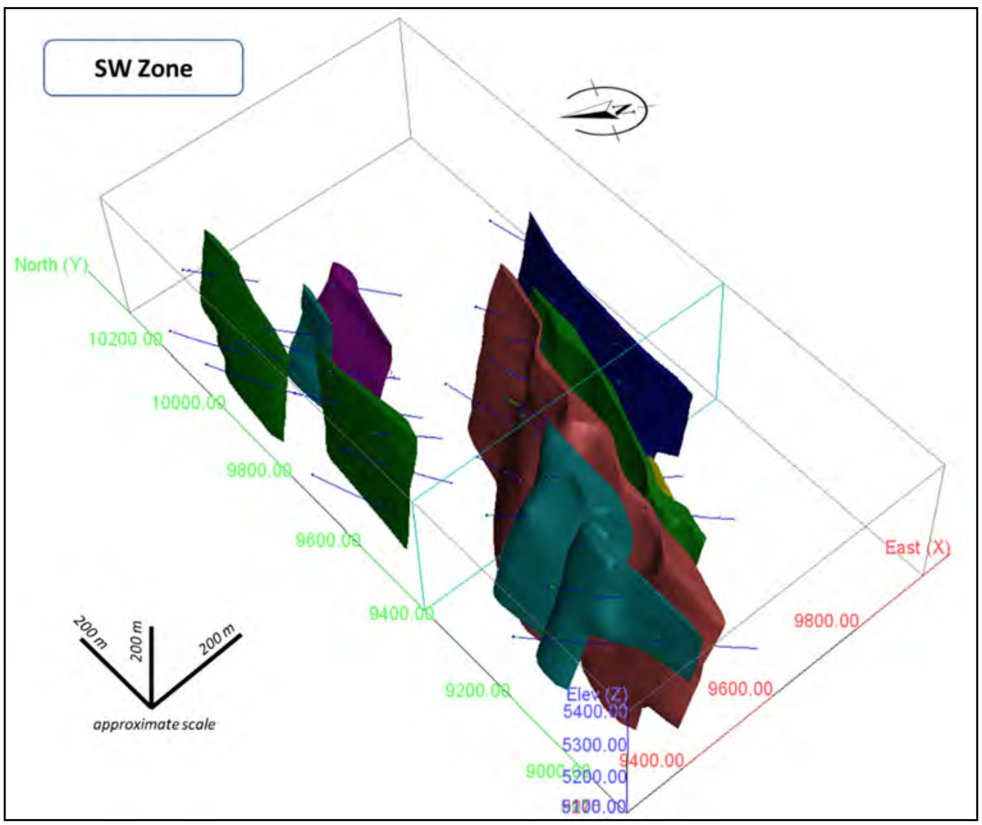


Table 14-44: Domains – SW Zone

Domain	Rock Type	Subdomain	Subdomain Type
201	201		
202	202		
203	203		
204	204		
205	205	205NT	1
		205N	2
		205S	3
206	206		
207	207		
208	208		

14.6.2 Exploratory Data Analysis

Raw Assays

The drill hole database for the SW Zone data, consists of 63 drill holes and 1,362 assay values for each metal: gold, copper, and silver. The assay values reported below detection limit were assigned half the detection limit for statistical analysis and grade estimation. Any missing values were assigned a zero. Table 14-45 presents the descriptive statistics of the drill holes in the in the SW Zone within the mineralized domains.

Table 14-45: Descriptive Statistics on all raw assays – SW Zone

	Au (gpt)	Cu (%)	Ag (gpt)	Length (m)
Count	1362	1362	1362	1362
Minimum	0	0	0	0.21
Maximum	18.11	2.11	60.70	2.00
Mean	0.65	0.07	1.08	1.07
Median	0.30	0.03	0.25	1.00
Std. Deviation	1.23	0.12	3.06	0.281
CV	1.90	1.91	2.84	0.26

Table 14-46 to Table 14-48 present the descriptive statistics for each metal by mineralized domains in the SW Zone.

Table 14-46: Descriptive Statistics for Gold by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	StDev	CV
201	368	0.007	18.11	0.91	0.45	1.47	1.62
202	384	0.003	14.15	0.59	0.26	1.29	2.21
203	69	0.003	11.65	0.70	0.31	1.49	2.13
204	190	0	15.10	0.46	0.22	1.20	2.60
205	198	0.005	5.04	0.46	0.28	0.59	1.27
206	30	0.017	3.63	0.81	0.41	0.93	1.14
207	32	0.02	2.23	0.57	0.34	0.58	1.03
208	91	0.018	4.27	0.58	0.32	0.77	1.33

Table 14-47: Descriptive Statistics for Copper by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	StDev	CV
201	368	0	2.11	0.12	0.04	0.21	1.79
202	384	0	0.55	0.04	0.02	0.06	1.43
203	69	0	0.24	0.04	0.02	0.05	1.30
204	190	0	0.42	0.08	0.06	0.07	0.92
205	198	0	0.32	0.05	0.03	0.06	1.12
206	30	0.001	0.54	0.04	0.00	0.10	2.88
207	32	0.001	0.29	0.02	0.00	0.06	2.50
208	91	0.001	0.28	0.01	0.00	0.04	2.88

Table 14-48: Descriptive Statistics for Silver by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	StDev	CV
201	368	0.10	28.30	1.39	0.25	2.84	2.03
202	384	0.02	6.60	0.55	0.25	0.75	1.37
203	69	0.25	5.60	0.64	0.25	0.93	1.45
204	190	0	48.40	1.46	0.70	3.77	2.59
205	198	0.25	3.60	0.52	0.25	0.52	0.99
206	30	0.20	12.90	1.38	0.30	2.75	1.99
207	32	0.20	7.10	1.01	0.25	1.52	1.50
208	91	0.20	60.70	2.68	0.30	8.14	3.04

Capping Analysis

Capping analysis was carried out on each mineralized domain for gold, copper, and silver by disintegration analysis, histogram, and probability plots. Capping was applied to gold and silver assay values in several mineralized domains. Not all domains required capping levels. No capping was applied to copper assay values. AGP reviewed the capping levels by domain using histogram and disintegration plots and found the capping levels to be reasonable and adequate.

Historically, all high grade gold resource assays at Z87 have been capped to 6.0 g/t Au prior to compositing. High grade copper assays are rare and copper assays have not historically been capped at Troilus. Reconciliation work in 2003 and 2004 indicated that the 6.0 g/t Au capping level was appropriate, however, RPA considers the 6.0 g/t Au capping level to be conservative for higher grade areas such as the deeper parts of Z87. Accordingly, a gold and silver assay capping strategy by mineralized lens was used for the current estimate. No capping was applied to copper assays. Gold and silver assays were capped before compositing. Table 14-49 presents the selected gold and silver capping levels by domain. Descriptive statistics for capped gold, copper, and silver assays are presented in Table 14-50, Table 14-51, and Table 14-52 respectively.

Table 14-49: Capping Levels – SW Zone

Domain	Au (gpt)	% Loss	Cu (%)	% Loss	Ag (gpt)	% Loss
201	8.00 (1)	2.4	1.00 (2)	4.1	14.00 (3)	4.7
202	8.00 (3)	6.2	-	-	-	-
203	4.00 (1)	16.0	-	-	-	-
204	5.00 (1)	12.0	-	-	8.00 (2)	18.0
205	3.00 (1)	2.2	-	-	-	-
206	-	-	-	-	3.00 (3)	41.0
207	-	-	-	-	3.00 (2)	18.0
208	-	-	-	-	10.00 (4)	41.0

(X) – number of assays capped

Table 14-50: Descriptive Statistics for Capped Gold Assays by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
201	**368**	**0.007**	**8.00**	**0.88**	**0.45**	**1.22**	**1.39**
202	384	0.003	8.00	0.55	0.26	0.97	1.76
203	69	0.003	4.00	0.59	0.31	0.78	1.33
204	190	0	5.00	0.41	0.22	0.64	1.57
205	198	0.005	3.00	0.45	0.28	0.52	1.16
206	30	0.017	3.63	0.81	0.41	0.93	1.14
207	32	0.02	2.23	0.57	0.34	0.58	1.03
208	91	0.018	4.27	0.58	0.32	0.77	1.33

Table 14-51: Descriptive Statistics for Capped Copper Assays by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
201	**368**	**0**	**1.00**	**0.11**	**0.04**	**0.17**	**1.56**
202	384	0	0.55	0.04	0.02	0.06	1.43
203	69	0	0.24	0.04	0.02	0.05	1.30
204	190	0	0.42	0.08	0.06	0.07	0.92
205	198	0	0.32	0.05	0.03	0.06	1.12
206	30	0.001	0.54	0.04	0.00	0.10	2.88
207	32	0.001	0.29	0.02	0.00	0.06	2.50
208	91	0.001	0.28	0.01	0.00	0.04	2.88

Table 14-52: Descriptive Statistics for Capped Silver Assays by Mineralized Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
201	**368**	**0.1**	**14.00**	**1.33**	**0.25**	**2.37**	**1.78**
202	384	0.2	6.60	0.55	0.25	0.75	1.37
203	69	0.25	5.60	0.64	0.25	0.93	1.45
204	190	0	8.00	1.20	0.70	1.35	1.12
205	198	0.25	3.60	0.52	0.25	0.52	0.99
206	30	0.2	3.00	0.82	0.30	0.94	1.16
207	32	0.2	3.00	0.83	0.25	0.94	1.13
208	91	0.2	10.00	1.58	0.30	2.65	1.67

Composites

The assays situated within the mineralization wireframe were composited to two metre lengths starting at domain boundary. Composites were adjusted across the intersection of the domain.
Table 14-53 to Table 14-55 show the descriptive statistics for the 2 m capped composite values for the SW Zone by domain.

Table 14-53: Descriptive Statistics for 2m Capped Composites

Domain	Count	Min	Max	Mean	St Dev	CV
201	195	0.011	8.00	0.86	0.52	1.02
202	200	0.009	6.99	0.55	0.36	0.81
203	35	0.038	2.27	0.57	0.43	0.50
204	104	0.035	2.93	0.41	0.28	0.47
205	101	0.07	2.27	0.45	0.33	0.39
206	27	0.059	3.63	0.82	0.39	0.94
207	20	0.02	1.58	0.56	0.43	0.43
208	57	0.022	2.73	0.56	0.38	0.54

Table 14-54: Descriptive Statistics for 2m Capped Composites

Domain	Count	Min	Max	Mean	St Dev	CV
201	195	0	0.99	0.10	0.04	0.15
202	200	0.001	0.29	0.04	0.03	0.04
203	35	0.003	0.15	0.04	0.03	0.04
204	104	0.007	0.32	0.08	0.06	0.06
205	101	0.001	0.26	0.05	0.04	0.05
206	27	0.001	0.43	0.03	0.00	0.08
207	20	0.001	0.16	0.02	0.01	0.04
208	57	0.001	0.24	0.01	0.00	0.03

Table 14-55: Descriptive Statistics for 2m Capped Composites

Domain	Count	Min	Max	Mean	St Dev	CV
201	195	0.1	13.32	1.24	0.48	2.03
202	200	0.2	3.87	0.55	0.33	0.55
203	35	0.25	2.93	0.63	0.40	0.62
204	104	0.17	5.35	1.21	0.95	0.94
205	101	0.25	1.97	0.54	0.37	0.40
206	27	0.2	3.00	0.73	0.30	0.82
207	20	0.2	2.90	0.82	0.42	0.81
208	57	0.2	10.00	1.57	0.50	2.38

Density Assignment

A total of 8,525 density measurements were collected by Troilus from drill core during the 2019 -2020 drill program. Of this total, 1,222 measurements are attributed to the eight domains of the SW Zone and mean densities were assigned to each domain.

Table 14-56 shows the densities assigned to each mineralized domain in the SW Zone. Table 14-57 shows the descriptive statistics for the SW Zone by domain.

Table 14-56: Assigned Densities – SW Zone

Domain	Density (g/cm3)
201	**2.81**
202	2.72
203	2.72
204	2.91
205	2.80
206	2.84
207	2.75
208	2.79

Table 14-57: Descriptive Statistics for Density by Domain – SW Zone

Domain	Count	Min	Max	Mean	Median	St Dev	CV
201	**317**	**2.64**	**3.85**	**2.81**	**2.80**	**0.10**	**0.04**
202	373	2.42	2.97	2.72	2.70	0.07	0.03
203	69	2.66	2.83	2.72	2.71	0.04	0.01
204	147	2.08	3.07	2.91	2.92	0.11	0.04
205	195	2.69	2.98	2.80	2.80	0.05	0.02
206	7	2.68	2.93	2.84	2.84	0.09	0.03
207	25	2.56	2.81	2.75	2.77	0.06	0.02
208	70	2.66	2.88	2.79	2.80	0.06	0.02

It is the opinion of AGP that the assigned densities are reasonable and acceptable for this resource estimate.

Spatial Analysis

Spatial analysis was performed on 2 m composites on domains 201, 202 and 203. Experimental variograms were established for gold, copper, and silver and were oriented along the overall strike, dip, and across strike directions of the mineralized wireframes. .
Table 14-58 to Table 14-60 presents the variography parameters for the SW Zone for gold, copper, and silver, respectively.

Table 14-58: Gold Variogram parameters – SW Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.15								
C_1 = 0.55	Az.Dip.Az.	120	60	0	85	80	2.8	Spherical
C_2 = 0.30	Az.Dip.Az.	120	60	0	120	100	6	Spherical

Table 14-59: Copper Variogram parameters – SW Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.15								
C_1 = 0.85	Az.Dip.Az.	120	60	0	100	100	12	Spherical

Table 14-60: Silver Variogram parameters – SW Zone

Sill = 1.00	Search Anisotropy	Az (°)	Dip (°)	Az (°)	X Range (m)	Y Range (m)	Z Range (m)	Variogram Type
C_0 = 0.15								
C_1 = 0.85	Az.Dip.Az.	120	60	0	140	110	9	Spherical

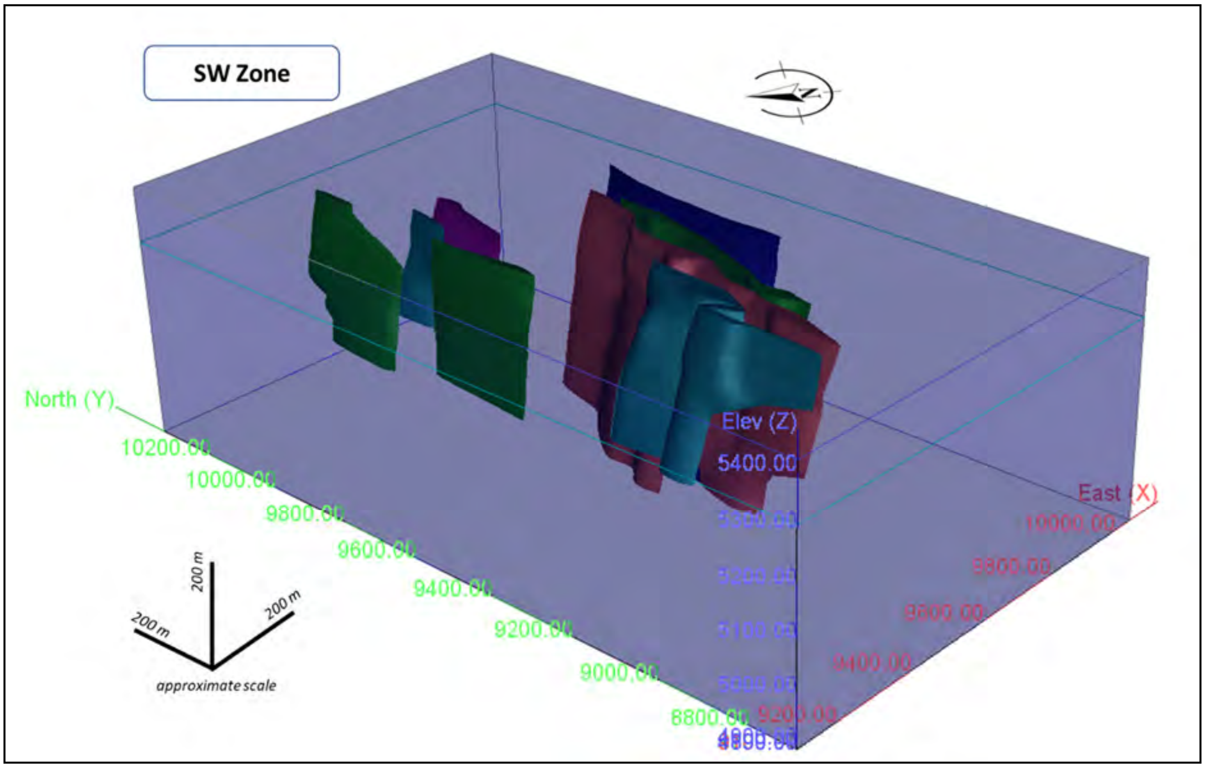
14.6.3 Block Model

The block model for the SW Zone deposit was set up with a block matrix of 10 m long by 10 m long by 10 m high. The block model is not rotated. The block matrix was selected as appropriate for the wide spaced drill pattern and the block height was selected in consideration of an open pit operation. Table 14-61 summarizes the block model parameters and Figure 14-15 presents the block model over the interpreted mineralized domains for the SW Zone.

Table 14-61: Block Model Parameters – SW Zone

	Parameters
Easting	9100 mE
Northing	8700 mN
Maximum Elevation	5420 m
Rotation Angle	No rotation°
Block Size (X, Y, Z in metres)	10 x 10 x 10
Number of blocks in the X direction	95
Number of blocks in the Y direction	165
Number of blocks in the Z direction	53

Figure 14-15: Block Model Parameters – SW Zone



Source : AGP (2020)

The block model extents cover the SW Zone and a minimum of approximately 200 m beyond the interpreted mineralized domains. The block model uses a percent model for each domain.
Block model attributes in the block model includes:

- rock type
- percent (in wireframe)
- density
- metal grades for gold, copper, silver, and calculated gold-equivalent grades for mineralized blocks
- classification
- distance to the nearest composite
- number of composites used in estimation of block
- number of drill holes used for estimation of block
- pass number
- open pit or underground tag

Estimation/Interpolation Methods

The metal grades were interpolated in three passes using the 2 m capped composites. The metal grades were interpolated using OK interpolation method. Variogram parameters for each metal was used in each of these passes and aligned to the domain wireframe. ID2 and NN interpolations were also run for validation purposes.

Each pass required the same minimum and maximum number of composites with a maximum of three composites per drill hole, therefore, two drill holes were required to populate a block. Table 14-62 shows estimation parameters for each pass used to estimate metal grades.

Table 14-62: Estimation Parameters – SW Zone

Pass	Min No Composites	Max No Composites	Max Composites per Drill Holes	Min No of Drill Holes
Pass 1	4	12	3	2
Pass 2	4	12	3	2
Pass 3	4	12	3	2

Each pass increased the search ellipse where Pass 2 was doubled that of Pass 1 and Pass 3 was approximately doubled that of Pass 2. Hard boundaries were kept between all domains and blocks within each domain were estimated only be composites withing the domain wireframe. Table 14-63 shows search ellipse parameters for each pass used to estimate metal grades.

Table 14-63: Search Ellipse Parameters – SW Zone

Domain	Anisotropy	Azimuth (°)	Dip (°)	Azimuth (°)	Range X (m)	Range Y (m)	Range Z (m)	Search
PASS 1								
201	Az,Dip,Az	110	65	20	30	40	10	Ellipsoidal
202	Az,Dip,Az	110	70	20	30	40	10	Ellipsoidal
203	Az,Dip,Az	110	70	20	30	40	10	Ellipsoidal
204	Az,Dip,Az	100	75	10	30	40	10	Ellipsoidal
205NT	Az,Dip,Az	90	50	10	30	40	10	Ellipsoidal
205N	Az,Dip,Az	90	68	5	30	40	10	Ellipsoidal
205S	Az,Dip,Az	90	70	0	30	40	10	Ellipsoidal
206	Az,Dip,Az	85	57	0	30	40	10	Ellipsoidal
207	Az,Dip,Az	90	75	0	30	40	10	Ellipsoidal
208	Az,Dip,Az	90	80	5	30	40	10	Ellipsoidal
PASS 2	Az,Dip,Az	same as Pass 1			60	80	10	Ellipsoidal
PASS 3	Az,Dip,Az	same as Pass 1			120	145	25	Ellipsoidal

Az,Dip,Az – Azimuth, Dip, Azimtuh

Domain 205 was split into three block selections representing a south, north, and north tip of the wireframe. This was done to honour the changes in orientation of the domain. Current interpretation shows a reverse fold in the wireframe based on one drill hole. Due to the block size it was determined that an unfolding of the wireframe for estimation purposes would not significantly impact the estimation and that further drilling and information is required to confirm the current interpretation or whether this may be a set of offset splays in the domain.

Block Model Validation

The block model was validated using the following methods:

- visual inspection and comparison of block grades with composite and assay grades
- statistical comparison of resource assay and block grade distributions
- inspection of swath plots with composites and block grades elevations and northings

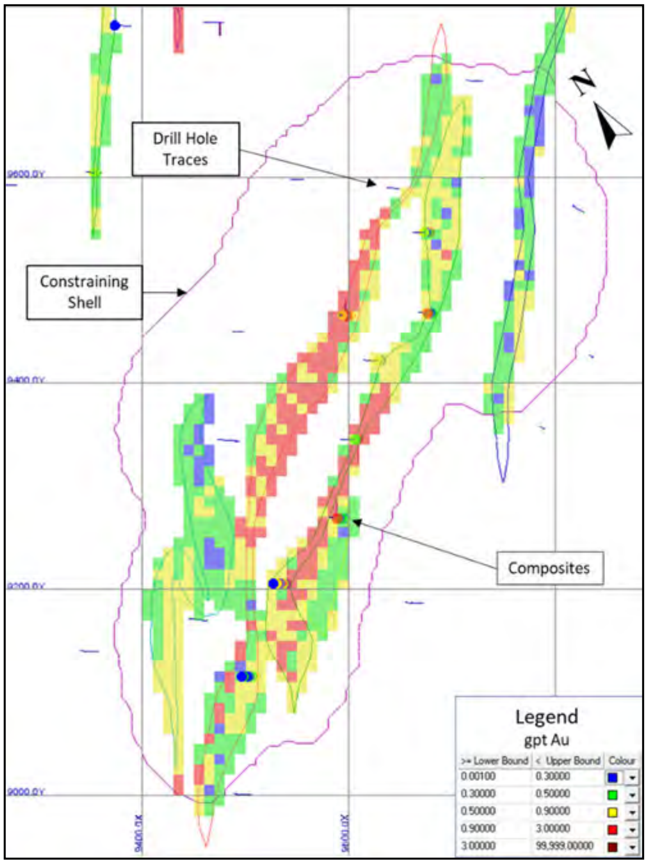
Table 14-64 presents a comparison of the mean gold grades comparing composites to OK, ID2 and NN interpolated mean grades by mineralized domain. AGP is satisfied that the block model gold grades reflect the gold grades from the drill core samples.

Table 14-64: Mean Gold Grades – SW Zone (no zeroes)

	OK	ID	NN	Comp
201	0.83	0.83	0.84	0.91
202	0.63	0.61	0.66	0.65
203	0.49	0.50	0.58	0.64
204	0.42	0.47	0.41	0.50
205	0.50	0.46	0.48	0.46
206	0.94	0.82	0.91	0.82
207	0.42	0.45	0.52	0.56
208	0.59	0.58	0.66	0.56

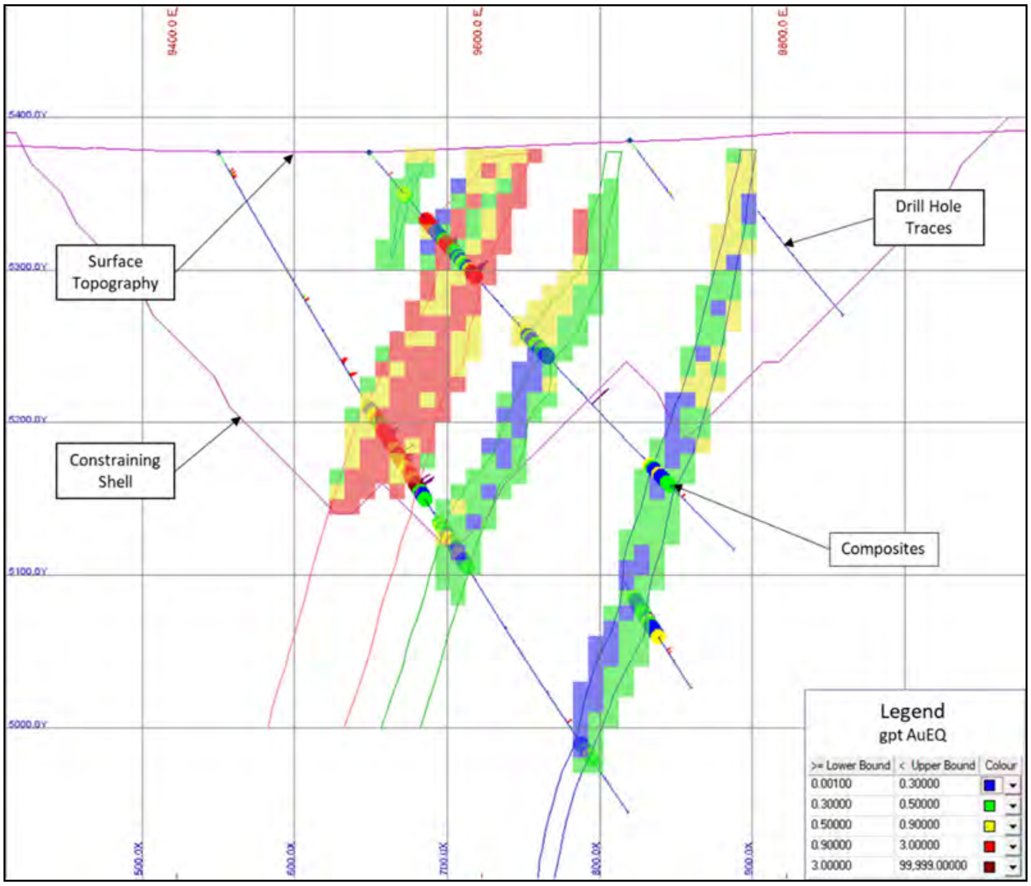
Figure 14-16 and Figure 14-17 present plan section and cross section views for SW Zone (plan view elevation 5,265 and cross section 13,700N).

Figure 14-16: SW Zone - Plan View Elevation 5,205 m



Source : AGP (2020)

Figure 14-17: Z87 Zone - Plan View Elevation 5,005 m



Source : AGP (2020)

Swath plots were reviewed by northing easting and elevation. The distribution of gold and copper composite and interpolated block grades were compared to the OK, ID2 and NN grades. No issues were found with the distribution of interpolated grades. Figure 14-18 to Figure 14-20 present the swath plots for gold in the SW Zone by northing, easting and elevation, respectively.

Figure 14-18: SW Zone – Swath Plot for Gold, by Easting

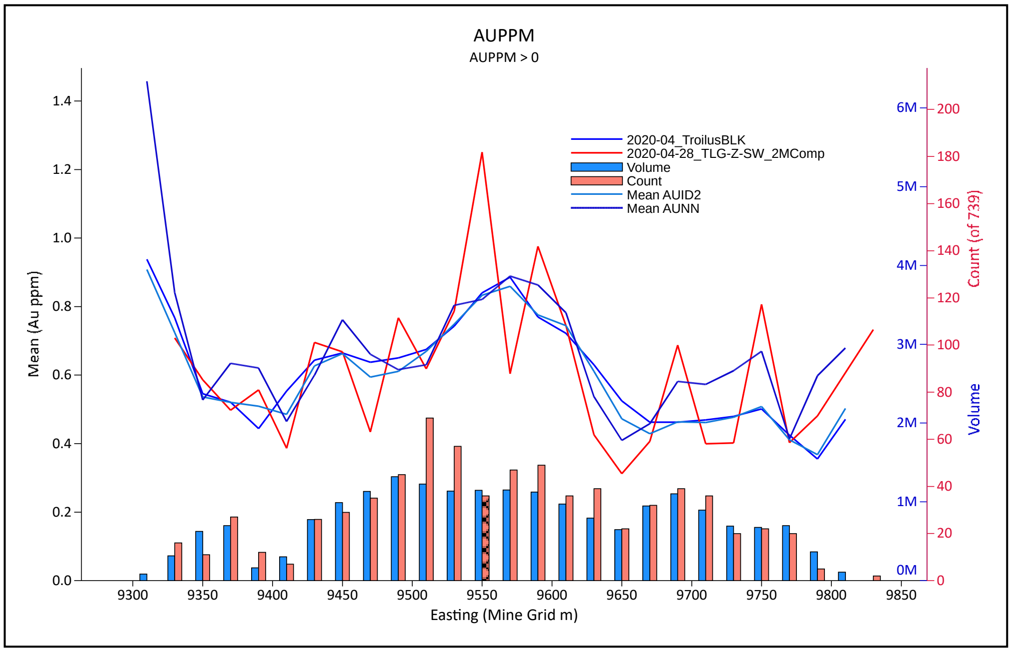


Figure 14-19: SW Zone – Swath Plot for Gold, by Easting

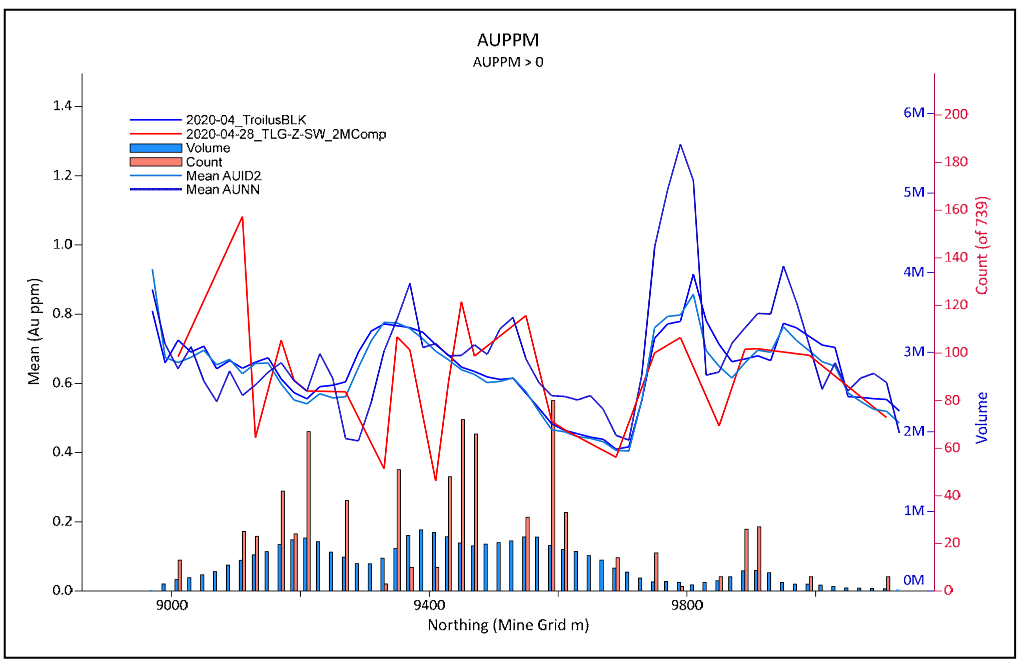
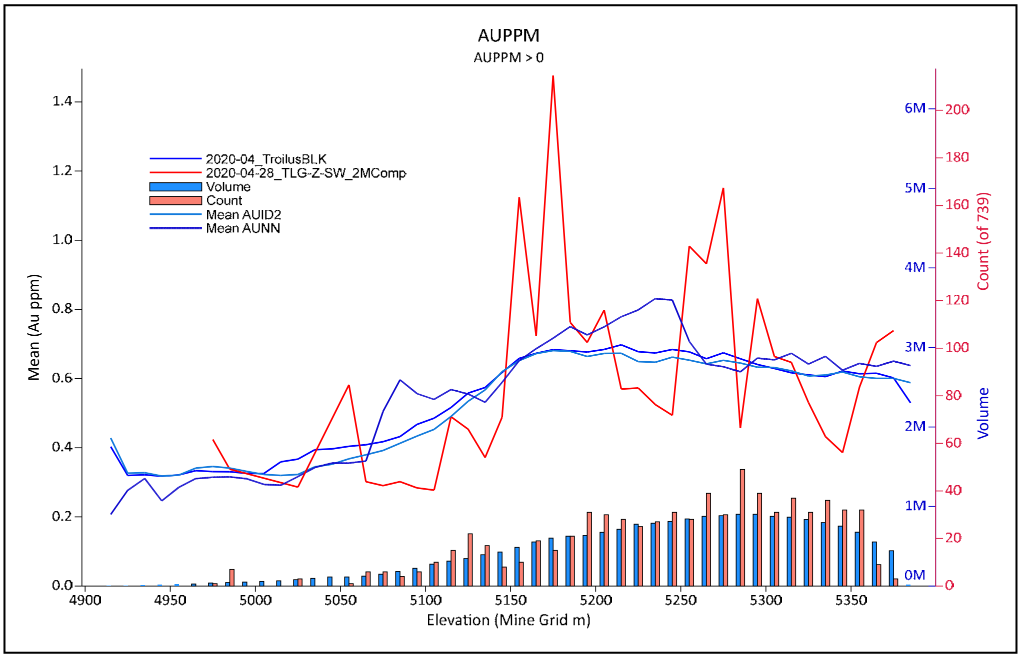


Figure 14-20: SW Zone – Swath Plot for Gold, by Easting



14.7 Mineral Resources

14.7.1 Classification of Mineral Resources

Classification

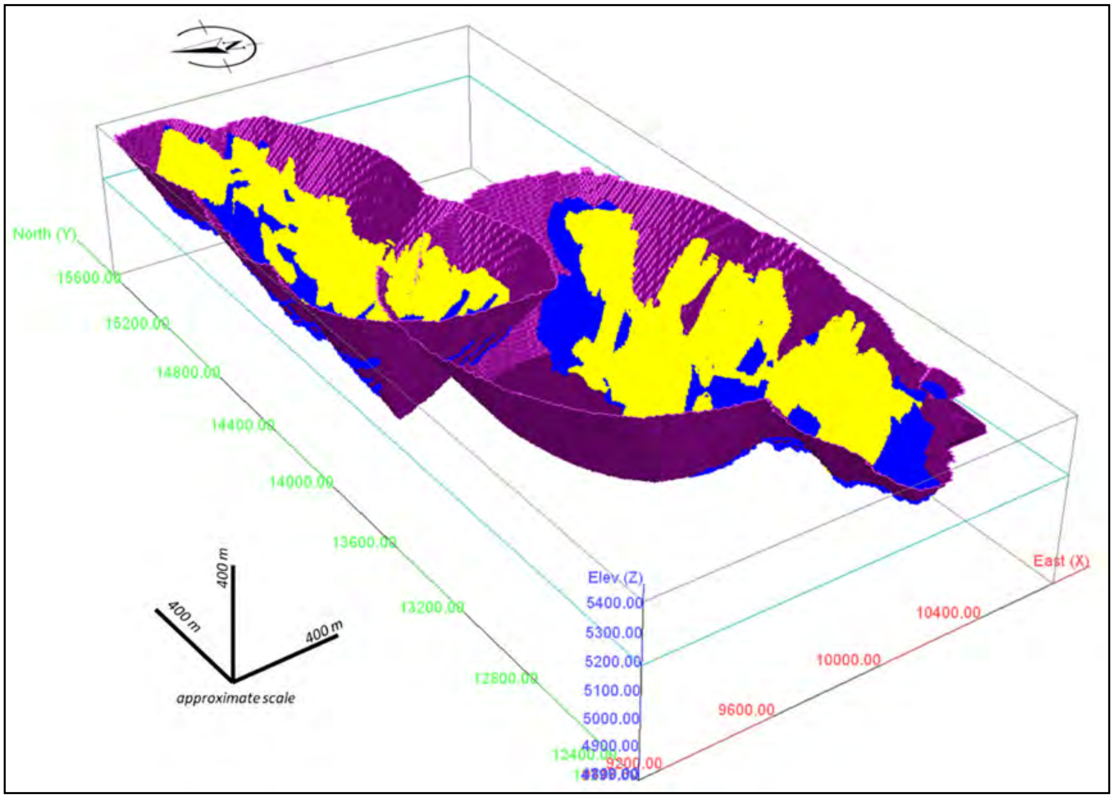
Definitions for Mineral Resource categories used in this report are consistent with those defined by CIM (2014) and referenced by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study". Mineral Reserves are classified into Proven and Probable categories. No Mineral Reserves have been estimated for Project.

Z87 and J4/J5 Zones

For the Z87 and J4/J5 Zones, blocks interpolated in the first pass, requiring at least two holes, and within 60 m from a drill hole were initially considered for classification into the Indicated Mineral Resource category. A manual contour was then digitized, on a domain by domain basis, consolidating the areas with contiguous candidate blocks and discarding isolated blocks or patches of blocks retained with the numerical approach. The manual contours were used to classify the blocks retained inside the contours into the Indicated Mineral Resource category. Out of the remaining interpolated blocks, those within 120 m from a drill hole were classified into the Inferred Mineral Resource category.

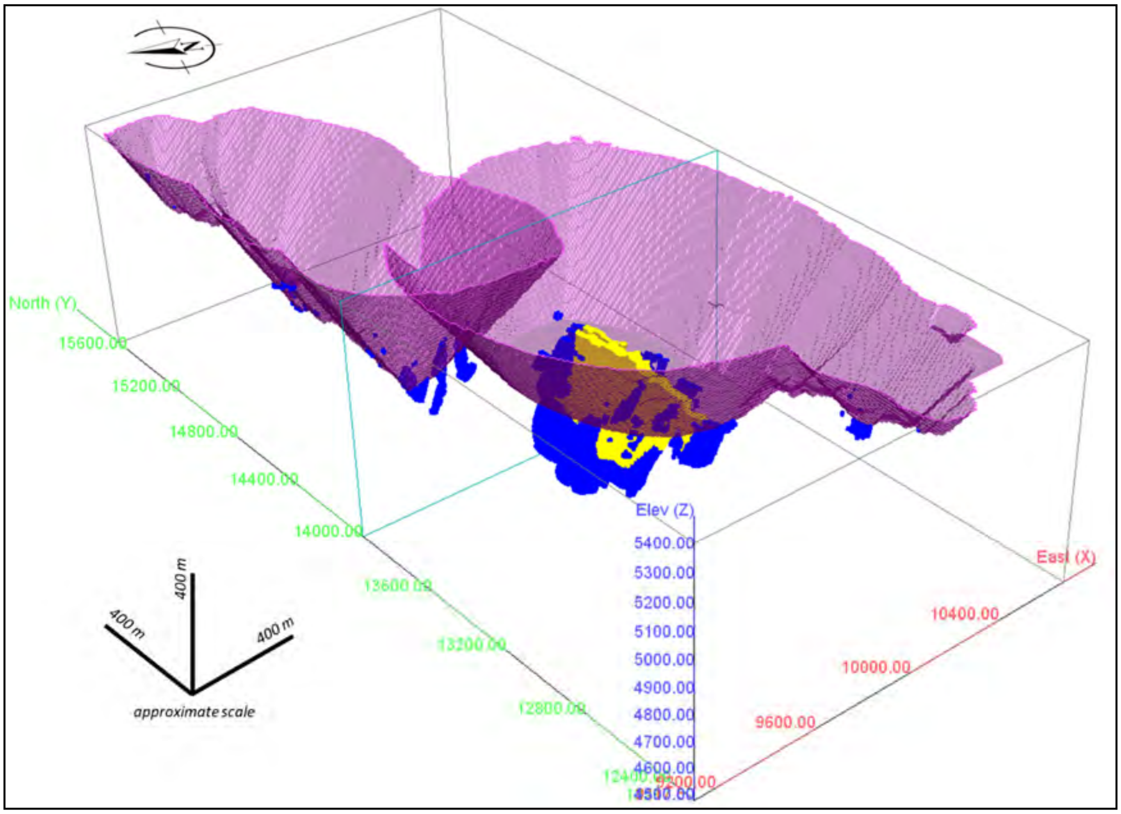
Figure 14-21 presents the open pit resource classified blocks in Z87 Zone and J4/J5 Zone, respectively. Figure 14-22 presents the underground classified blocks in Z87 Zone. Figure 14-23 presents the open classified blocks in the SW Zone.

Figure 14-21: Open Pit Mineral Resources – Z87 Zone and J4/J5



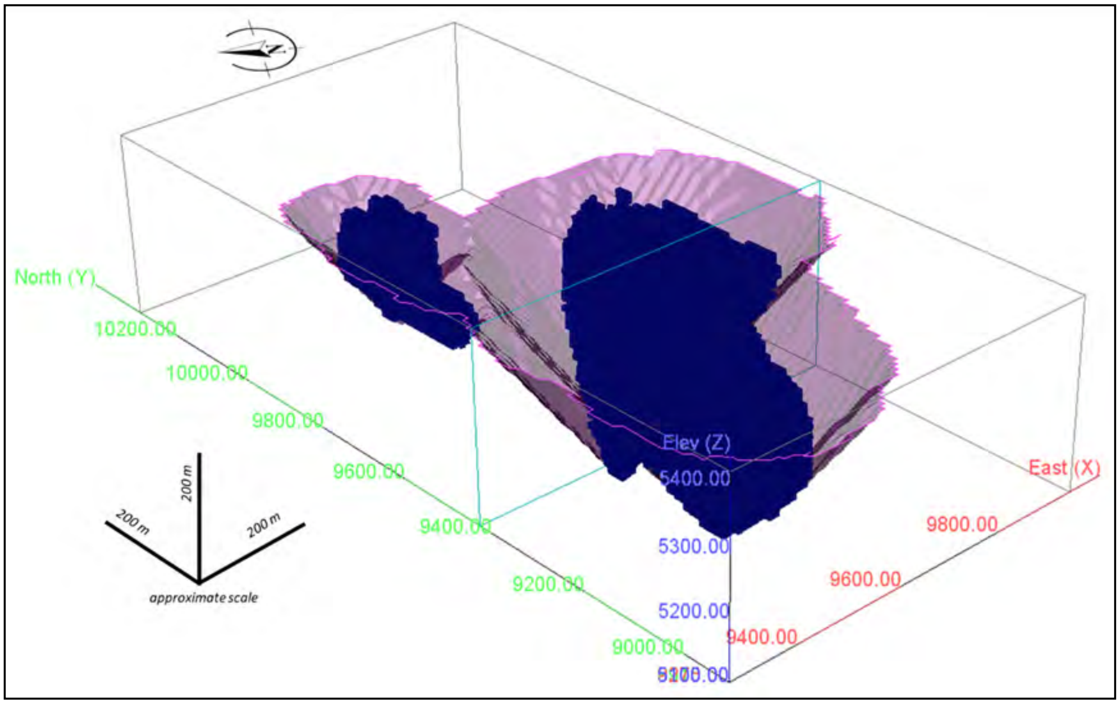
Yellow Indicated; Blue - Inferred
Source: AGP 2020

Figure 14-22: Underground Mineral Resources – Z87 Zone and J4/J5 zone



Yellow – Indicated; Blue - Inferred
Source: AGP 2020

Figure 14-23: Underground Mineral Resources – SW Zone



Blue - Inferred
Source: AGP 2020

14.7.2 Reasonable Prospects of Economic Extraction

Mineral Resource Classification

Mineral resources were classified in accordance with definitions provided by CIM (2014) Standards and Definitions. The mineral resources at the Project were classified as Inferred and Indicated mineral resources.

For the Z87 and J4/J5 Zones, blocks interpolated in the first pass with a minimum of two drill holes, and a nearest distance of 60 m were initially classified as Indicated resources. Polylines were made, on a lens by lens basis, to consolidate contiguous blocks and downgrading isolated blocks. The manual contours were used to classify the blocks retained inside the contours into the Indicated Mineral Resource category. Block interpolated with a nearest distance of 120 m from a drill hole were classified as Inferred resources.

For the SW Zone, Blocks were classified as Inferred resources estimated with a minimum of two drill holes and with a nominal distance to the closest point of less than 120 m. Very few blocks were populated on the first pass, therefore, these blocks were included as Inferred Resources.

Metal Equivalent

A metal equivalent grade was used to determine cut-off grades for the Troilus Project. Metal equivalent grades are used in determining an equivalent value for a block by including the influence of other metal grades in the same block. The principal credit for the Troilus Project is gold therefore a gold equivalent (AuEQ) was used.

The AuEQ grades were calculated based on the capped grades from the OK interpolation for all Zone. The AuEQ grades were calculated for each block after metal grade interpolations were completed using the following:

$$Z87\ Zone \quad AuEq = Au\ grade + (1.2566\ x\ Cu\ grade) + (0.0103\ x\ Ag\ grade)$$
$$J4/J5\ Zone \quad AuEq = Au\ grade + (1.2979\ x\ Cu\ grade) + (0.0108\ x\ Ag\ grade)$$
$$SW\ Zone \quad AuEq = Au\ grade + (1.2768\ x\ Cu\ grade) + (0.0106\ x\ Ag\ grade)$$

The parameters used in the above formula are listed in Table 14-65.

Table 14-65: Parameters for the AuEQ Formula

Metal	Price ($US)	Recovery (%)		
	All Zones	Z87	J4/J5	SW
Gold	$1,600.00/oz.	83	82	82.5
Copper	$3.25/lb	92	88	90
Silver	$20.00/oz.	76	76	76

The metal prices used are based on consensus, the three-year rolling average between 12 May 2017 and 12 May 2020 and metal forecasts. The metal recoveries is based on historic recoveries at the Troilus Mine.

Cut-off Grade

For all Zones at the Troilus Project, AGP has determined a resource cut-off grade of 0.3 gpt AuEQ to be used for reporting of the mineral resources within constraining shells for the material amenable to open pit extraction. For the Z87 Zone and J4/J5 Zone, a resource cut-off grade of 0.9 gpt AuEQ for material that may be amenable to underground extraction, for contiguous blocks below the constraining shells. The cut-off grades are based on the parameters defined below.

Constraining Shell Parameters

The AGS block model was exported for further economic analysis by Willie Hamilton, Open Pit Mine Engineer with AGP. The model was exported in ASCII format and imported into Hexagon MineSight® for use in developing the constraining shell for the reported mineral resources. Table 14-66 shows the economic assumptions made to constrain the reported mineral resources at the AGS deposit.

Table 14-66: Parameters for Constraining Shells, by Zone

Parameter	Units	Z87	J4/J5	SW
Metal Prices				
Au	$US/oz Au	1600.00	1600.00	1600.00
Cu	$US/lb Cu	3.25	3.25	3.25
Ag	$US/oz Ag	20.00	20.00	20.00
Metal Recoveries				
Au	% (HG/LG)	88/90	88/90	88/90
Cu	% (HG/LG)	90/92	90/92	90/92
Ag	%	40	40	40
$CAD: $US		1.30	1.30	1.30
Mining Rate – OP	tpd	35,000	35,000	35,000
Mining Cost – OP	$US/t total	1.71	1.71	1.66
Mining Cost – UG	$US/t total			-
Processing Cost	$/t mill feed	6.99	6.99	6.99
G&A Cost	$/t mill feed	1.45	1.45	1.45
OP Wall Slope Angles				
030°Az	degrees	56	60	56
0450°Az	degrees	49.5	50	49.5
135°Az	degrees	49.5	50	49.5
150°Az	degrees	56	60	56
210°Az	degrees	56		56
225°Az	degrees	53		53
315°Az	degrees	53		53
330°Az	degrees	56		56

OP – Open Pit; UG – Underground; G&A – General and Administration;
HG – high grade Au >= 1.2 gpt Au; Cu > 0.13 %Cu
LG – low grade Au < 1.2 gpt Au; Cu <= 0.13 %Cu

14.8 Mineral Resource Statement

14.8.1 Mineral Resource Statement

The mineral resources for the Troilus Project are: Indicated Resources of 177.1 Mt at 0.75 gpt Au, 0.08 %Cu, 1.17 gpt Ag and 0.87 gpt AuEQ; and Inferred Resources of 116.7 Mt at 0.32 gpt Au, 0.05 %Cu, 0.69 gpt Ag and 0.36 gpt AuEQ. The effective date of the Mineral Resources is 20 July 2020.
Table 14-67 presents the Mineral Resources for the combined mineral resources amenable to open pit and underground resources for the Troilus Project.

Table 14-67: Mineral Resources for the Troilus Project; combined open pit and underground resources

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Indicated	177.3	0.75	0.08	1.17	0.87	4.30	322.60	6.66	4.96
Inferred	116.7	0.73	0.07	1.04	0.84	2.76	189.73	3.91	3.15

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Open pit mineral resources are reported within optimized constraining shells.
- Open pit cut-off grade is 0.3 gpt AuEQ where the metal equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.0108 * Ag grade
  - SW Zone AuEq = Au grade + 1.2768 * Cu grade + 0.0106 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
  - Z87 Zone 82.5% for Au recovery, 90% for Cu recovery and 76% for Ag recovery
- Underground cut-off grade is 0.9 AuEQ at Z87 Zone below constraining pit
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag on raw assays; and 1.00 %Cu on raw assays
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone.
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag; and 1.00 %Cu; all on raw assay values depending on mineralized domain.
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone.

14.8.2 Open Pit Mineral Resources

The mineral resources for the Troilus Project deposit amenable to open pit extraction at a 0.3 gpt AuEQ cut-off grade are: an Indicated Resource of 164.2 Mt at 0.68 g/t Au, 0.08 %Cu, 1.20 gpt Ag and 0.80 gpt AuEQ; and an Inferred Resource of 101.2 Mt at 0.60 g/t Au, 0.07 %Cu, 1.12 gpt Ag and 0.70 gpt AuEQ. Table 14-68 presents the Mineral Resources amenable to open pit extraction

Table 14-68: Open Pit Mineral Resources for Troilus Project at a 0.3 gpt AuEQ Cut-off Grade – All Deposits

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Z87 Zone									
Indicated	84.6	0.79	0.09	1.39	0.92	2.15	169.54	3.77	2.50
Inferred	32.7	0.60	0.07	1.50	0.70	0.63	49.34	1.57	0.73
J4/J5 Zone									
Indicated	79.6	0.57	0.07	1.00	0.67	1.47	115.16	2.55	1.71
Inferred	45.9	0.55	0.07	0.96	0.65	0.82	65.94	1.42	0.96
SW Zone									
Inferred	22.6	0.70	0.07	0.89	0.80	0.51	35.73	0.65	0.58
TOTALS									
Indicated	164.2	0.68	0.08	1.20	0.80	3.62	284.69	6.32	4.21
Inferred	101.2	0.60	0.07	1.12	0.70	1.95	151.01	3.65	2.27

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Open pit mineral resources are reported within optimized constraining shells.
- Open pit cut-off grade is 0.3 gpt AuEQ.
- AuEQ equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.0108 * Ag grade
  - SW Zone AuEq = Au grade + 1.2768 * Cu grade + 0.0106 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
  - SW Zone 82.5% for Au recovery, 90% for Cu recovery and 76% for Ag recovery
- Capping of grades varied between 2.00 g/t Au and 26.00 g/t Au; between 1.00 g/t Ag and 20.00 g/t Ag; and 1.00 %Cu; all on raw assay values depending on mineralized domain.
- The density varies between 2.72 g/cm^3 and 2.91 g/cm^3 depending on mineralized zone or domain.

14.8.3 Underground Mineral Resources

The mineral resources for the Troilus Project deposit amenable to underground extraction are: An Indicated Resource of 13.1 Mt at 1.61 g/t Au, 0.13 %Cu, 0.81 gpt Ag and 1.79 gpt AuEQ; and an Inferred Resource of 15.5 Mt at 1.62 g/t Au, 0.1 %Cu, 0.52 gpt Ag and 1.77 gpt AuEQ.
Table 14-69 presents the Mineral Resources amenable to underground extraction.

Table 14-69: Underground Mineral Resources for the Troilus Project at a 0.9 gpt AuEQ Cut-off Grade – Z87 Zone

Classification	Tonnes (,000t)	Grade				Contained Metal			
		Au (gpt Au)	Cu (% Cu)	Ag (gpt Ag)	AuEQ (gpt AuEQ)	Au (Moz)	Cu (Mlbs)	Ag (Moz)	AuEQ (M oz)
Z87 Zone									
Indicated	13.1	1.61	0.13	0.81	1.79	0.68	37.90	0.34	0.75
Inferred	13.5	1.70	0.12	0.37	1.85	0.74	34.48	0.16	0.80
J4/J5 Zone									
Indicated	0.01	1.03	0.03	0.47	1.07	0.0002	0.01	0.0001	0.0003
Inferred	2.0	1.06	0.10	1.55	1.21	0.07	4.24	0.10	0.08
TOTALS									
Indicated	13.1	1.61	0.13	0.81	1.79	0.68	37.91	0.34	0.75
Inferred	15.5	1.62	0.11	0.52	1.77	0.81	38.72	0.26	0.88

Notes:

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Summation errors may occur due to rounding.
- Underground cut-off grade is 0.9 gpt AuEQ
- AuEQ equivalents were calculated as follows:
  - Z87 Zone AuEq = Au grade + 1.2566 * Cu grade + 0.0103 * Ag grade
  - J4/J5 Zone AuEq = Au grade + 1.2979 * Cu grade + 0.01083 * Ag grade
- Metal prices for the AuEQ formulas are: $US 1,600/ oz Au; $3.25/lb Cu, and $20.00/ oz Ag; with an exchange rate of US$1.00: CAD$1.30.
- Metal recoveries for the AuEQ formulas are:
  - Z87 Zone 83% for Au recovery, 92% for Cu recovery and 76% for Ag recovery
  - J4/J5 Zone 82% for Au recovery, 88% for Cu recovery and 76% for Ag recovery
- Capping of grades varied between 5.00 g/t Au and 26.00 g/t Au; between 10.00 g/t Ag and 20.00 g/t Ag; all on raw assay values depending on mineralized domain.
- The density of the mineralized domains at Z87 Zone is 2.86 g/cm^3: and 2.77 and 2.78 g/cm^3 at J4/J5 Zone

AGP is not aware of any information not already discussed in this report, which would affect their interpretation or conclusions regarding the subject property. AGP is required to inform the public that the quantity and grade of reported Inferred resources in this estimation must be regarded as conceptual in nature and are based on limited geological evidence and sampling. The geological evidence is sufficient to imply, but not verify, geological grade or quality of continuity. For these reasons, an Inferred resource has a lower level of confidence than an Indicated resource. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. The rounding of values, as required by the reporting guidelines, may result in apparent differences between tonnes, grade, and metal content. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

14.8.4 Grade Sensitivity

The Mineral Resources for the Project are reported below to demonstrate the sensitivity to various AuEQ cut-off grades for each Zone.

Z87 Zone

Table 14-70 and Table 14-71 present the deposit sensitivity to various AuEQ cut-off grades in Z87 for the open pit and underground Mineral Resources, respectively.

Table 14-70: Open Pit Indicated and Inferred Mineral Resources for the Z87 Zone; at various cut-off grades

Cut-off (gpt AuEQ)	Tonnage ('000 t)	Au (gpt)	Cu (%)	Ag (gpt)	AuEQ (gpt)	Contained Au (oz Au)	Contained Cu (lb Cu)	Contained Ag (oz Au)	Contained AuEQ (oz Au)
Indicated									
0.6	48.4	1.10	0.12	1.62	1.26	1,709,000	127,092,000	2,527,000	1,968,000
0.5	60.7	0.97	0.11	1.53	1.12	1,890,000	143,283,000	2,980,000	2,183,000
0.4	73.8	0.86	0.10	1.45	1.00	2,047,000	158,973,000	3,439,000	2,374,000
0.3	84.6	0.79	0.09	1.39	0.92	2,147,000	169,537,000	3,769,000	2,497,000
0.2	88.3	0.76	0.09	1.36	0.89	2,172,000	172,433,000	3,868,000	2,528,000
0.1	88.8	0.76	0.09	1.36	0.89	2,174,000	172,663,000	3,878,000	2,530,000
Inferred									
0.6	15.3	0.86	0.08	1.64	0.98	421,000	27,072,000	805,000	479,000
0.5	21.1	0.74	0.08	1.59	0.86	506,000	35,506,000	1,076,000	582,000
0.4	27.5	0.66	0.07	1.52	0.76	580,000	43,626,000	1,342,000	674,000
0.3	32.7	0.60	0.07	1.50	0.70	627,000	49,340,000	1,574,000	733,000
0.2	34.3	0.58	0.07	1.47	0.68	637,000	50,669,000	1,619,000	746,000
0.1	34.6	0.57	0.07	1.46	0.67	638,000	50,876,000	1,625,000	748,000

Table 14-71: Underground Indicated and Inferred Mineral Resources for the Z87 Zone; at various cut-off grades

Cut-off (gpt AuEQ)	Tonnage ('000 t)	Au (gpt)	Cu (%)	Ag (gpt)	AuEQ (gpt)	Contained Au (oz Au)	Contained Cu (lb Cu)	Contained Ag (oz Au)	Contained AuEQ (oz Au)
Indicated									
1.1	11.0	1.75	0.14	0.88	1.93	619,000	33,663,000	313,000	684,000
1.0	12.2	1.67	0.13	0.83	1.85	656,000	36,304,000	328,000	726,000
0.9	13.1	1.61	0.13	0.81	1.79	680,000	37,904,000	340,000	753,000
0.8	13.7	1.58	0.13	0.79	1.75	694,000	38,827,000	348,000	768,000
0.7	14.0	1.55	0.13	0.79	1.72	701,000	39,350,000	355,000	777,000
Inferred									
1.1	9.3	2.09	0.12	0.45	2.25	622,000	24,857,000	134,000	669,000
1.0	10.8	1.92	0.12	0.42	2.07	668,000	28,403,000	148,000	722,000
0.9	13.5	1.70	0.12	0.37	1.85	740,000	34,479,000	162,000	804,000
0.8	14.0	1.66	0.12	0.37	1.81	751,000	35,587,000	165,000	818,000
0.7	14.2	1.65	0.11	0.36	1.80	754,000	35,850,000	166,000	821,000

J4/J5 Zone

Table 14-72 and Table 14-73 present the deposit sensitivity to various AuEQ cut-off grades in the J4/J5 Zone for the open pit and underground Mineral Resources, respectively.

Table 14-72: Open Pit Indicated and Inferred Mineral Resources for the J4/J5 Zone; at various cut-off grades

Cut-off (gpt AuEQ)	Tonnage ('000 t)	Au (gpt)	Cu (%)	Ag (gpt)	AuEQ (gpt)	Contained Au (oz Au)	Contained Cu (lb Cu)	Contained Ag (oz Au)	Contained AuEQ (oz Au)
Indicated									
0.6	34.9	0.85	0.07	1.15	0.95	953,000	54,892,000	1,289,000	1,071,000
0.5	48.3	0.74	0.07	1.11	0.84	1,150,000	73,729,000	1,721,000	1,308,000
0.4	65.0	0.64	0.07	1.05	0.74	1,341,000	96,515,000	2,198,000	1,547,000
0.3	79.6	0.57	0.07	1.00	0.67	1,469,000	115,157,000	2,554,000	1,714,000
0.2	84.9	0.55	0.06	0.97	0.64	1,502,000	120,759,000	2,655,000	1,759,000
0.1	85.7	0.55	0.06	0.97	0.64	1,505,000	121,259,000	2,666,000	1,763,000
Inferred									
0.6	19.6	0.82	0.07	1.11	0.92	516,000	29,271,000	699,000	579,000
0.5	27.2	0.72	0.07	1.07	0.81	626,000	40,545,000	939,000	713,000
0.4	37.4	0.62	0.07	1.01	0.71	743,000	54,888,000	1,221,000	860,000
0.3	45.9	0.55	0.07	0.96	0.65	816,000	65,939,000	1,423,000	956,000
0.2	49.2	0.53	0.06	0.94	0.62	836,000	69,954,000	1,488,000	985,000
0.1	49.7	0.52	0.06	0.94	0.62	838,000	70,194,000	1,494,000	987,000

Table 14-73: Underground Indicated and Inferred Mineral Resources for the J4/J5 Zone; at various cut-off grades

Cut-off (gpt AuEQ)	Tonnage ('000 t)	Au (gpt)	Cu (%)	Ag (gpt)	AuEQ (gpt)	Contained Au (oz Au)	Contained Cu (lb Cu)	Contained Ag (oz Au)	Contained AuEQ (oz Au)
Indicated									
1.1	0.002	1.26	0.06	0.52	1.35	80	3,000	30	90
1.0	0.002	1.26	0.06	0.52	1.35	80	3,000	30	90
0.9	0.007	1.03	0.03	0.47	1.07	240	5,000	110	250
0.8	0.010	0.96	0.03	0.56	1.01	310	8,000	180	330
0.7	0.029	0.77	0.04	0.64	0.83	720	25,000	600	770
Inferred									
1.1	1.1	1.23	0.10	1.57	1.38	43,000	2,452,000	55,000	48,000
1.0	1.5	1.15	0.10	1.56	1.30	54,000	3,244,000	73,000	61,000
0.9	2.0	1.06	0.10	1.55	1.21	67,000	4,237,000	97,000	76,000
0.8	2.6	0.99	0.09	1.43	1.12	82,000	5,128,000	119,000	93,000
0.7	3.6	0.89	0.08	1.34	1.01	103,000	6,566,000	156,000	118,000

SW Zone

Table 14-74 presents the deposit sensitivity to various AuEQ cut-off grades in SW for the open pit Mineral Resources.

Table 14-74: Open Pit Inferred Mineral Resources for the SW Zone; at various cut-off grades

Cut-off (gpt AuEQ)	Tonnage ('000 t)	Au (gpt)	Cu (%)	Ag (gpt)	AuEQ (gpt)	Contained Au (oz Au)	Contained Cu (lb. Cu)	Contained Ag (oz Au)	Contained AuEQ (oz Au)
Inferred									
0.6	12.0	0.97	0.09	1.12	1.10	374,000	25,082,000	435,000	425,000
0.5	15.7	0.85	0.08	1.02	0.97	430,000	29,139,000	516,000	490,000
0.4	20.1	0.75	0.08	0.94	0.86	485,000	33,596,000	604,000	554,000
0.3	22.6	0.70	0.07	0.89	0.80	509,000	35,731,000	649,000	583,000
0.2	23.3	0.69	0.07	0.88	0.79	514,000	36,170,000	659,000	589,000
0.1	23.3	0.69	0.07	0.88	0.79	514,000	36,172,000	659,000	589,000

14.9 Factors That May Affect the Mineral Resource Estimate

In order to constrain the mineralization, current geological domains capture the mineralization within a 0.3 gpt AuEQ limit. However, it has been observed in plan views that several of the domains do have a 'saw-tooth' shape in some areas in both Z87 and J4/J5 Zones. It was recommended that the mineralized domains be revisited in both plan and cross-sections to better reflect the overall trend of the mineralization in these areas. At the time of writing, this is being carried out. This is anticipated to have a relatively small impact on the mineral resources and will show a more accurate representation of the mineralization.

In the SW Zone, domain 205 has been interpreted as a reverse fold based on the intersection in one drill hole. While a reverse fold may exist, further drilling will be able to confirm this interpretation. Additional drilling in this zone is recommended and is expected to provide a higher degree of confidence in the continuity of geology and mineral resources are anticipated to expand, but not decrease, in this zone.

15 MINERAL RESERVE ESTIMATES

This section is not relevant to this report.

16 MINING METHODS

This section is not relevant to this report.

17 RECOVERY METHODS

This section is not relevant to this report.

18 PROJECT INFRASTRUCTURE

This section is not relevant to this report.

19 MARKET STUDIES AND CONTRACTS

This section is not relevant to this report.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section is not relevant to this report.

21 CAPITAL AND OPERATING COSTS

This section is not relevant to this report.

22 ECONOMIC ANALYSIS

This section is not relevant to this report.

23 ADJACENT PROPERTIES

There are no significant properties adjacent to the Troilus Gold Project.

24 OTHER RELEVANT DATA AND INFORMATION

There is no additional information or explanation necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

The Troilus Gold-Copper Project is made up of three main mineralized zones: Z87 Zone, J4/J5 Zone, and the SW Zone. The Z87 Zone and J4/J5 Zone were subject to open pit mining operations between 1996 to 2010. It has been established that there are still significant open pit and underground mineral resources in these zones. The SW Zone, situated approximately 2 km southwest of the Z87 Zone and was the subject of a recent drill program, was found to contain considerable mineralization and a preliminary mineral resource has been established. The gold grades within the interpreted mineralized zones are continuous and may still be open along strike and at depth.

The main mineralized zones on the Property occur around the margins of the Troilus Diorite, and comprise the Z87 Zone and the J4/J5 Zone. The SW Zone lies along strike of the Z87 Zone and may comprise two limbs of a synclinal fold. Other important mineralization discovered to date include the northern continuity of the J4/J5 Zone, the Allongé Zone, and the southwestern margin of the metadiorite (including the Z86).

Troilus is primarily a gold-copper deposit, but contains minor amounts of Ag, Zn and Pb, as well as traces of Bi, Te, and Mo. The gold and copper mineralization at the Troilus deposit comprises two distinct styles, disseminated and vein-hosted. Gold mineralization is spatially correlated with the presence of sulphides, even though the sulphide content does not directly correlate with gold and copper grade. The matrix of the diorite breccia, the diorite and the felsic dikes represent the main host rocks for the mineralized intervals.

Between 2018 and February 2020, Troilus completed several diamond drill core programs which support the mineral resources along strike and at depth at the Z87 Zone and the J4/5 Zone; and supports the initial mineral resources in the SW Zone. AGP is satisfied the drill programs conducted by Troilus on the Project meet industry standards and norms and that sample handling, preparation and analyses are appropriate for this style of deposit.

The mineral resources for the Troilus Project, within an optimized constraining shell, at a 0.3 gpt AuEQ cut-off grade are: Indicated resources of 164.2 Mt at 0.68 gpt Au, 0.08 %Cu, 1.20 gpt Ag and 0.80 gpt AuEQ; and Inferred resources of 101.2 Mt at 0.60 gpt Au, 0.07 %Cu, 1.12 gpt Ag and 0.70 gpt AuEQ.

The mineral resources amenable to underground mining scenario, for contiguous blocks below the optimized constraining shells, at a 0.9 gpt AuEQ cut-off grade are: Indicated resources of 13.1 Mt at 1.61 gpt Au, 0.13 %Cu, 0.91 gpt Ag and 1.79 gpt AuEQ; and Inferred resources of 15.5 Mt at 1.62 gpt Au, 0.11 %Cu, 0.52 gpt Ag and 1.77 gpt AuEQ. The effective date of the Troilus Project Mineral Resources is 20 July 2020.

AGP is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

AGP concludes that further exploration and development is warranted and recommended for the Project.

26 RECOMMENDATIONS

AGP recommends the following exploration programs to further define and develop the known mineralized zones of the Project. Pending positive results from these proposed drill programs, further studies may be proposed.

26.1 Drilling

26.1.1 Z87 Zone - J4/J5 Zone

It is recommended that continued delineation drilling continue at the Z87 and J4/J5 Zones; specifically, within the area between the two zones, at depth and along strike at the Z87 and J4/J5 Zones. Current interpretations indicate a continuity of mineralization between the Z87 and J4/J5 Zone that has not been fully investigated in the past. Additional delineation drilling will also upgrade current Inferred Resources and investigate the continuity of mineralization at depth. Approximately 19,000 m of drilling is proposed for the Z87 Zone and the area between the two zones (between 40-45 drill holes); and approximately 25,000 m of drilling for the J4/J5 Zone, mainly at depth (between 45-50 drill holes).

It is also recommended that bulk density and assay analysis for silver be completed for the initial drilling at Z87 Zone (approximately 4,000 samples). The early 2018 drilling did not include these analyses at the time will be important for an underground mining scenario.

26.1.2 SW Zone

It is recommended further drilling continue at the SW Zone. The deposit seems to show continuity of mineralization along strike of both limbs of the interpreted synclinal fold. Both infill and delineation drilling is expected to upgrade the resources to an Indicated category. Approximately 16,000 m of drilling is proposed, between 55 - 60 drill holes.

26.1.3 Regional Exploration

Troilus has put forward a proposed regional exploration program that will include airborne and ground geophysical surveys, mapping, and reconnaissance sampling. AGP agrees these exploration activities are appropriate for the continued development of the Property. Approximately 20,000 line km for the airborne geophysical survey is proposed.

26.1.4 Additional Recommendations

The collection of density measurements is recommended to continue on all future drill programs. Additionally, density measurements is recommended to be collected from the initial 2018 drill holes in the Z87 Zone. Density values, acquired in the southern end of the Z87 Zone in 2019, should be included in the next updated of mineral resources.

Also, for the initial 2018 drill holes, it is recommended that the pulps be re-analysed for silver assays.

With regards to interpreted mineralized domains in the Z87 and J4/J5 Zones, some of these domains show a ‘saw-tooth’ along the lateral boundaries. It is recommended that further refining of the domains be carried out to remove these shapes to better represent the trend of the mineralization. As of the writing of this report, Troilus was undertaking this review at the J4/J5 Zone.

26.1.5 Advanced Studies

At the time of writing, the Project was subject of a PEA study by AGP.
In the summer of 2020, metallurgical testwork and geotechnical drilling were also being carried out in support of a possible pre-feasibility study. AGP has reviewed these programs and concur that these studies are appropriate for any advanced economic studies on the Project.

26.2 Estimated Budget

The following is the estimated budget for the proposed drilling programs for the continued development of the mineral resources. The estimated budget for these proposed exploration programs would be approximately $15.8 million.
Table 26-1 presents an estimated budget of the proposed exploration and development work.

Table 26-1: Estimated Budget of Proposed Work

Proposed Work		Approximate Cost ($Cad)
Z87 and J4/J5 Zones		
Diamond Drilling (~45,000 m)	$200/m	$ 9,000,000
Re-analysis (Z87 Ag analysis, bulk density); ~ 4,000 samples	$50/sample	$ 200,000
SW Zone		
Diamond Drilling (16,000 m)	$200/m	$ 3,200,000
Regional Exploration		
Airborne Geophysical Survey (20,000 line km)	$50/line km	$ 1,000,000
Reconnaissance Sampling (10,000 samples)	$50/sample	$ 500,000
Ground Geophysical Survey		$ 300,000
Camp Support		$ 200,000
Subtotal		**$14,400,000**
Contingency		$ 1,100,000
TOTAL		**$ 15,800,000**

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28 CERTIFICATE OF AUTHORS

28.1 Paul J. Daigle, géo., P. Geo.

I, Paul Daigle of Toronto, Canada, as one of the authors of this technical report titled "Technical Report and Mineral Resource Estimate on the Troilus Gold-Copper Project, Quebec, Canada" dated 27 August 2020, do hereby certify that, and make the following statements:

- I am an Associate Senior Geologist with AGP Mining Consultants Inc., with a business address at Toronto, Ontario, Canada.
- I am a graduate of Concordia University, Montreal, Canada (B.Sc. Geology) in 1989.
- I am a member in good standing of the Ordre des géologues du Québec (No. 1632).
- I have practiced my profession in the mining industry continuously since graduation.
- My relevant experience includes over 30 years in the mining sector in the exploration and diamond drill programs, managing data, and estimating resources. I have been involved in numerous precious metal projects in similar precious metal deposits within Archean/Proterozoic greenstone belts. My most recent experience includes the Boto Gold Project, Senegal and Detour Gold Deposit, Canada.
- I am responsible for all Sections of this technical report, except Section 13, titled "Technical Report and Mineral Resource Estimate on the Troilus Gold-Copper Project, Quebec, Canada", and dated 27 August 2020.
- I have had no prior involvement with the Troilus Gold Project that is the subject of the Technical Report.
- My most recent site visit to the Troilus Gold Project described in this report was from the 18 to 20 of February 2020 for two days.
- As of the date of this Certificate, to my knowledge, information, and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- I am independent of Troilus Gold Corp. as defined by Section 1.5 of the Instrument.

As of the effective date of the technical report, to the best of my knowledge, information, and belief, the sections of the technical report that I am responsible for, contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Signed and dated this 27th day of August 2020, at Toronto, Ontario.

"electronically signed"

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Paul J. Daigle, géo, P. Geo.