ASSESSMENT REPORT ON 2020 EXPLORATION ACTIVITIES INCLUDING A MINERAL RESOURCE UPDATE ON THE SILVER HART PROPERTY

Watson Lake Mining District, Yukon

NTS Mapsheet 105B-07
Latitude: 60 degrees 19 minutes N
Longitude: 130 degrees 45 minutes W

YMEP# 2020-033

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Report Date: January 31, 2021

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1 Executive Summary

CMC Metals Ltd. ("CMC" or the "Company") has engaged Longford Exploration Services Ltd. to prepare this assessment report (the "Report") on the Silver Hart Property (as described below) located in the Cassiar Mountains in the Canadian territory of Yukon (YT) near the northern border with the Province of British Columbia (BC). The data presented in this Report are related to the Silver Hart deposit and its recent Mineral Resource estimate.

The purpose of this Report is to present an update on the exploration activities conducted at Silver Hart in 2020 and details on the updated Mineral Resource estimate also completed for the Silver Hart Property. The data presented in the Report provides updated scientific and technical information regarding the Silvertip Property in compliance with NI 43-101 and Form 43-101F1.

The Silver Hart Property, 100% owned by CMC with no royalties or other encumbrances, is located in south-central Yukon Territory, 160 kilometers west of Watson Lake, Yukon (Figure 1). The property includes 116 un-surveyed contiguous claims covering an area of approximately 2,017 hectares. There is no record of production from the general property area. However, it has seen a long history of staking and exploration activity over the past century targeting silver-lead-zinc mineralization.

The Silver Hart Property has undergone varied exploration since the discovery of high-grade silver veins in 1982. Most recently in 2019-2020, exploration included 1050 meters of diamond drilling in 16 holes, excavator trenching, IP and magnetometer surveys, extensive soil sampling, rock sampling and trench mapping.

1.1 History

The area was staked as early as 1948 by Great Northern Exploration Company headed by Dr. F.W. Galbraith of the University of Arizona. The area was re-staked in 1971 by the Wolf Lake joint venture which carried out mapping and sampling in 1972. In the 1970's, exploration focused on finding tungsten skarns and several occurrences of skarn-hosted vein and replacement lead and zinc mineralization were found. The CMC claims were staked in 1980 by prospector A.W. Hyde and optioned to BRX Mining and Petroleum Ltd. A work program in 1982 included geological and geophysical work followed by two diamond drill holes (197m).

Prospectors T. McCrory and B. Preston partnered with A.W. Hyde in 1983 and discovered two zones of silver-lead-zinc mineralization, followed by an option to United Greenwood Exploration Ltd. in 1983. The option lapsed and analyses from one of the zones attracted the interest of Shakwak Exploration Company Limited and Silver Hart Mines Ltd in 1984, who added about 500 claims to the property. The 1984-1986 exploration programs focused on testing the continuity along strike and down dip of silver-lead zinc veins in two surface zones, labelled F and T, including surface geological mapping, preliminary grid geophysical (VLF) and geochemical surveys, 455 soil samples (1985), bulldozer trenching, as well as the completion of 50 diamond drill holes (3644 meters) and a 673 meter adit, (L. Carlyle, P. Geol., F.M. Smith P. Eng. 1985, 1986). A 43 kilometer access road was built to provide access to the site. The trenching program involved the use of an excavator and a bulldozer in removing 31,592 cubic yards (24,154 m3) of soil and rock and moving 7.5 miles (12 kilometers) of side-hill cuts for exploration and access routes (Read,1987).

Underground exploration was conducted during the winter of 1985-86 targeting the T vein system. The portal was located at an elevation of 4,600 feet (1402 meters). The contractor, Hartco, utilized trackless mining methods and openings on haulages were approximately 12-16 ft (3.6-4.9 meters) wide by 10 feet (3 meters) high. Slusher drifts and raises were approximately 5 feet (1.5 m) wide by 7 feet (2.1 meters) high. Approximately 2,208 feet (673 meters) of openings were driven. They consist of 1,215 feet (370 meters) of off-vein haulage, 488 feet (148.7 meters) of on-vein haulage drift, 221 feet (67 meters) of slusher drift and 284 feet (86.6 meters) in 3 raises (Read, 1987).

The 1986-1987 summer programs included line cutting, geological mapping, soil sampling, geophysical testing, and deep trenching of veins with excavator and bulldozer equipment, along with diamond drilling (609.6 meters), percussion drilling, and road building. Extensive grid geochemical surveys of 2,394 samples in 1986 delineated two anomalous trends, one narrow zone running northeast parallel to the known vein system, and another broader zone running north (Read, 1987 and F. M. Smith P. Eng. 1988). Surveying was done to upgrade earlier work including a legal survey of key claims.

Low silver prices in 1988 lead to reduced activity on the property and limited programs of geophysics, trenching, environmental reclamation and road work were performed for assessment purposes between 1988-2005. Of note, G. Lee, P. Eng. and R. Stack performed magnetometer and VLF-EM surveys in 1999, delineating five elongate anomalies that confirmed geological measurements of 45° to 60° for vein fault structures. Property ownership was returned to A. W. Hyde, T. McCrory and B. Preston.

In 2005, Bellevue Capital acquired a 100% interest in the Silver Hart property and completed a "Technical Report on the CMC Silver Hart Property" with National Instrument 43101 by Read and McCrae (2005). The company was renamed to CMC Metals Ltd in 2005. A summer geophysical and geological exploration program in 2005 was followed by annual diamond drill programs from 2005-2009 totaling 61 holes (4115 meters) targeting the TM, KL, S and M vein systems. A resource estimate incorporating the 2005-2009 drilling of 69,500 tonnes grading 555.66g/t Ag, 1.89% Pb, and 9.12% Zn at a cut-off grade of 900g/t AgEq was released in a technical report by Dahrouge Consultants (2010).

After a late season 2010 drill program of 21 holes (820 meters), reduced silver prices again led to a cessation of field work from 2011 to 2016.

1.2 Recent Exploration

Exploration picked up in 2017 with a diamond drill program of 843 meters in 14 holes, and core from the 2010 drill program was re-logged with additional samples collected. In 2019, the program consisted of 16 diamond drillholes for 1050 meters, soil geochemistry, trenching and rock sampling. In 2020, a comprehensive season long program consisted of excavator trenching and reclamation, rock and soil sampling, drill core re-sampling for a resource calculation, IP and magnetometer surveys, camp and road rehabilitation (Brewer, 2020). Drill result from the 2005-2019 period on Ag-Pb-Zn veins in the "Main Zone" were compiled and a new calculation of an inferred mineral resource prepared.

1.3 Mineral Resource

The inferred mineral resource has been completed by A. Celis, P. Geo. QP under the supervision and direction of Longford Exploration Services Ltd. Based on the most reliable historic exploration carried at the Silver Hart project, and the recent exploration carried by CMC Metals Ltd. (2005 to 2020), the new Inferred MRE prepared for the TM, S, M and KL vein systems totals 7.5 Moz @ 570 g/t silver equivalent (AgEq), in 346,800 tonnes utilizing a cut-off grade of 150 g/t AgEq. The new MRE incorporated an additional 51 holes totalling 2,713.1 meters that were drilled between 2010 and 2019. Table 1.1 below provides a summary of the MRE:

Table 1-1: Summary of the CIM-Compliant Mineral Resource Estimate of the Silver Hart Project.

		Average Grade				***Contained Metal***			
Domains	**Tonnage** t	**AgEq** g/t	**Ag** g/t	**Pb** %	**Zn** %	**AgEq** t. oz	**Ag** t. oz	**Pb** lb	**Zn** lb
TM Veins	157,199	843	438	2.3	6.1	4 ,260,080	2,212,384	8,004,967	21,109,320
S Veins	57,844	753	467	2.5	3.7	1 ,400,908	867,593	3,126,138	4,684,088
M Veins	64,078	315	114	1.4	2.8	6 48,709	234,844	1,939,203	4,015,360
KL Veins	67,623	368	186	0.5	3.2	8 01,010	403,473	700,974	4,764,855
Total Inferred Resources	**346,800**	**570**	**301**	**1.7**	**4.0**	**7,501,300**	**3,942,900**	**14,572,100**	**34,573,700**

1.4 Interpretations and Conclusions

Exploration to date at the Silver Hart Property has focused on Ag-Pb-Zn mineralization of economic interest in the Main Zone, including the TM, KL, S and M veins. The mineralization is generally restricted to southwest-northeast trending structures hosting veins or vein sets of several meters in width that extend for more than 200 meters along strike that continue to depths of at least 100 meters. The southwest-northeast trend is often crosscut by a second set of oblique northeast structures, where massive silver-bearing sulphide mineralization commonly occurs as lenses in brittle zones along structural intersections These deposits are considered typical of the Rancheria Silver District "High-grade" polymetallic silver-lead-zinc veins.

Bulk tonnage style carbonate replacement polymetallic silver-lead-zinc mineralization (CRD) is hosted in limestones and calcareous schist within the property area. In the KW and South zones conformable mineralization occurs in limestone and calcareous schist, exposed in excavator trenches, where the main northeast trending structures described above cross the calcareous sediments. The mineralization is overlain by siliceous schists that may cap the calcareous unit providing an impermeable boundary providing an excellent potential host for CRD mineralization (Wenzynowski, 2008).

1.5 Recommendations

Recommendations for subsequent exploration work at the Silver Hart project can be broken down into two phases independent from one another, but which may run concurrently, as they have different objectives.

Phase 1 is proposed to focus on continued exploration in the Main Zone where the current resource has been defined. Drilling to test the lateral and vertical extensions of the veins, as well as infill drilling is recommended. Metallurgical test work by means of a bulk sample, baseline environmental studies, and infrastructure improvements are also recommended for a total Phase 1 cost of $2,000,000.

Phase 2 is directed towards identifying new deposits outside of the Main Zone. Continued surface exploration work consisting of soil geochemical sampling, trenching and geophysics is recommended to build on previous efforts and delineate exploration drill targets. Data compilation should incorporate all available data from the adjacent Blue Heaven property where similar mineralization has been encountered which will provide additional exploration drill targets.
Additional engineering studies should be contemplated for a total Phase 2 cost of $2,500,000.

2 Introduction and Terms of Reference

2.1 Terms of Reference

CMC Metals Ltd. engaged Longford Exploration Services Ltd. on August 3, 2020 to prepare a mineral resource estimate for the Silver Hart Property and prepare an assessment report to be filed with Yukon Energy Mines and Resources.

Details of the Mineral Resource within this report were prepared in compliance with NI 43-101 and Form NI 43-101F1. CMC holds 100% of the Silver Hart Property and there are no related royalties and/or other encumbrances.

2.2 Qualified Persons

This Report has been prepared by a team of independent consultants as well as Kevin Brewer, P. Geo, President and CEO of the Company, a non-independent person who has co-authored a number of sections. The following individuals, by virtue of their education, experience, and professional association, serve as the QPs for this Report, as defined in NI 43-101. Table 2-1 lists the QPs and the sections each individual is responsible for in this Report.

Table 2-1: Qualified Person responsibilities.

Qualified Person	Registration	Title/Company	Sections of Responsibility
Graham Davidson	P. Geol. APEGA	President, 927852 Alberta Ltd.	9-12, 25-27
Kevin Brewer	P. Geo. APEGNL	President, CEO and Director, CMC Metals Ltd.	1 – 8, 13, 18, 20, 25-27
Antonio Celis	P. Geo, EGBC	President, Motherlode Consulting Inc.	12, 14, 25-27

2.3 Site Visits and Scope of Personal Inspection

The contributors to this Report are senior members of CMC's corporate and technical staff or relevantly experienced consultants under contract with the Company.

Kevin Brewer has directly supervised the exploration projects in the years of 2019 and 2020. During 2020 he spent most of the period from June 5- September 6 at the property site conducting a range of activities and supervising all geological and geophysical work efforts. During 2019 he directly supervised the drilling program.

Graham Davidson has participated in the most recent work programs on the Silver Hart Property from June 27-July 4, 2020 and August 27 - Sept. 1, 2020, undertaken by Longford Exploration Services Ltd. on behalf of the company; specifically drill core sampling for preparation of a new resource calculation, geological mapping, rock sampling and soil geochemistry. The author has performed past geological assessment work on the Silver Hart Property in the 1980's and 1990's.

2.4 Information Sources and References

Information sources and references include a combination of published and internal documents and are listed in the References section. All figures have been prepared by Longford Exploration Services Ltd. unless otherwise noted.

2.5 Abbreviations and Units of Measurement

Metric units are used throughout this report and all dollar amounts are reported in U.S. Dollars (USD$) unless otherwise stated. Coordinates within this report use NAD83 UTM Zone 9N (EPSG 26909) unless otherwise stated. The following is a list of abbreviations which may be used in this report:

Table 2-1: Abbreviations and Units of Measurement.

Description	Abbreviation or Acronym
percent	%
three dimensional	3D
silver	Ag
gold	Au
degrees Celsius	ºC
U.S. dollar	US$
cc	chalcocite
centimetre	cm
chlorite	Cl
CMC Metals Ltd.	CMC or The Company
cp	chalcopyrite
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
copper	Cu
diamond drill hole	DDH
east	E
electromagnetic	EM

Description	Abbreviation or Acronym
epidote	Ep
degrees Fahrenheit	ºF
feet	Ft
gram	G
grams per tonne	g/t
billion years ago	Ga
Global Positioning System	GPS
Geological Survey of Canada	GSC
gigawatt hours	GWh
hectare	Ha
mercury	Hg
inductively coupled plasma	ICP
inductively coupled plasma-mass spectrometry	ICP-MS
inductively coupled plasma-optical emission spectrometry- mass spectrometry	ICP-OES/MS
induced polarization	IP
kilogram	Kg
kilometre	Km
metre	m
meters above sea level	masl
million years ago	Ma
millimetre	mm
molybdenum	Mo
million ounces	Moz
million tonnes	Mt
megawatt	MW
north	N
not applicable	n/a
North American Datum	NAD
National Instrument 43-101	NI 43-101
net smelter return	NSR

Description	Abbreviation or Acronym
National Topographic System	NTS
ounces per tonne	opt
ounce	oz
ounces per tonne	oz/t
lead	Pb
Professional Geoscientist	P. Geo.
parts per billion	ppb
parts per million	ppm
quality assurance/quality control	QA/QC
qualified person	QP
reduced to pole	RTP
south	S
antimony	Sb
Silver Hart Property	The Property
specific gravity	SG
System for Electronic Document Analysis Retrieval	SEDAR
tonne	t
target zone	TZ
United States Geological Survey	USGS
versatile time domain electromagnetic	VTEM
x-ray fluorescence spectroscopy	XRF
west	W
Yukon Geological Survey	YGS
zinc	Zn

3 Property Description and Location

3.1 Location

The Silver Hart Property is accessible via a 43-kilometer seasonal road that leaves the Alaska Highway at Kilometer 1116 approximately 2 kilometers west of the Continental Divide Restaurant and gas station. The road follows a chain of lakes to Edgar Lake where it climbs steeply to the alpine and the location of the exploration camp and old workings. The property location is shown in Figure 3.1. It is located within NTS Map Sheet Area 105B-07 with coordinates at center of property at:

- Latitude: 60 degrees 19 minutes N
- Longitude: 130 degrees 45 minutes W

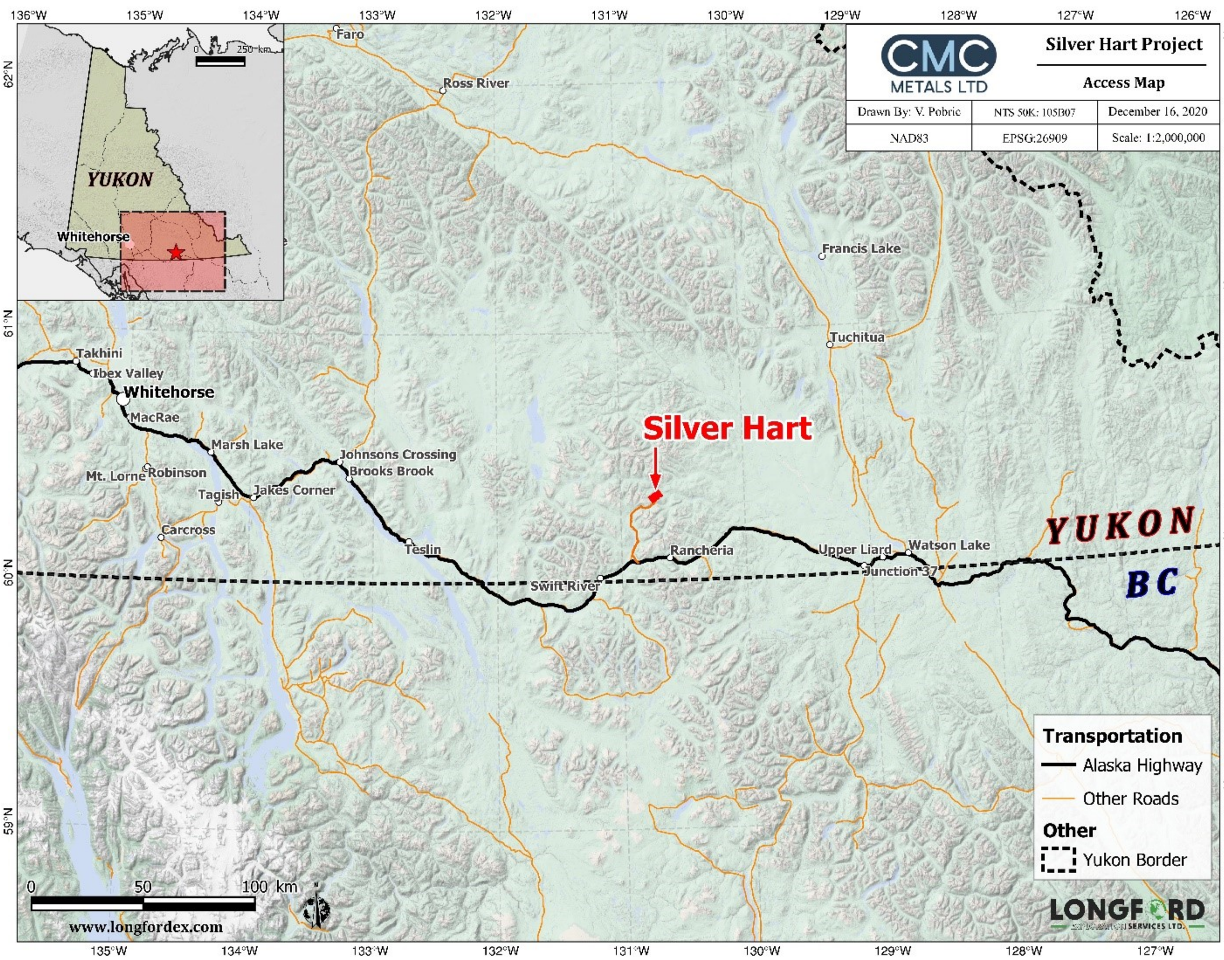

Figure 3.1: Silver Hart Property location map.

3.2 Mineral Titles

CMC has a 100% ownership of the Silver Hart Property. The property is comprised of one hundred and sixteen (116) contiguous mineral claims covering 2,017 hectares (Figure 3.2). Table

3.1 lists all claims included in the property with their associated expiry date. All claims are in good standing until October 27, 2025.

Based on published Government maps of First Nation traditional territory, the claims are located within the traditional territory of the Liard First Nation. The Liard First Nation has not settled its land claim agreement; however, they are generally supportive of mining developments. On the northeast side of the CMC claim block is an area comprising of five (5) partial claims that overlap traditional lands of the Liard First Nation denoted as LFN R-147B. The partial claims partially covered by LFN R-147B include CMC Claim Blocks 51, 55, 56, 103 and 104. The southwest side of this withdrawn area follows the Meister River.

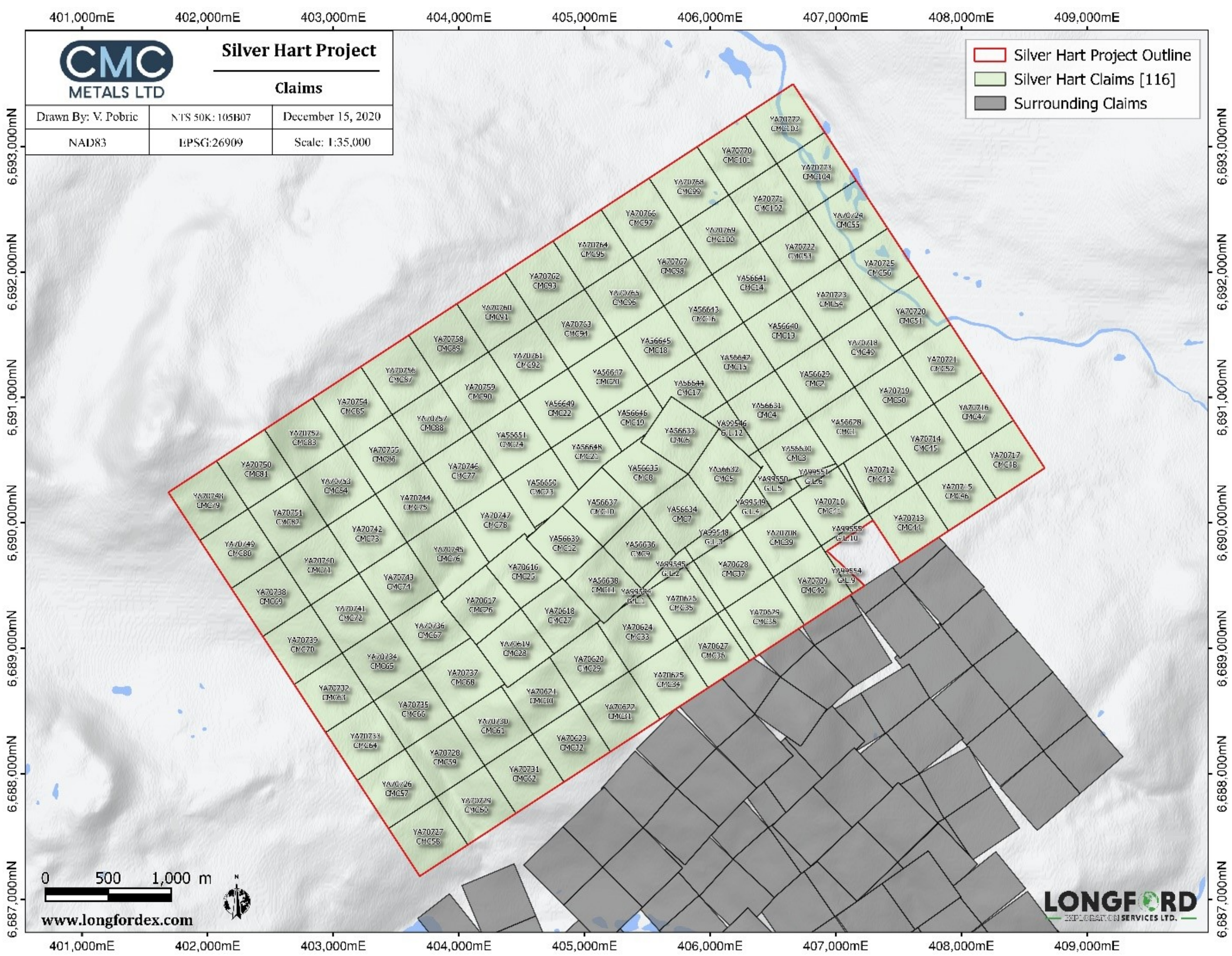

Figure 3.2: Silver Hart Property mineral tenures.

Table 3-1: Silver Hart Property mineral tenures (Whitehorse Mining Recorder, Yukon Energy, Mines and Resources, December 2, 2020).

Claim Name	Claim Number	Number of Claims	Grant/Record Number	Operation Recording Date Y/M/D	Claim Expiry Date Y/M/D
CMC	1-24	24	YA56628-YA56651	1980/09/11	2025/10/27
CMC	25-38	14	YA70616-YA70629	1983/09/30	2025/10/27
CMC	39-41	3	YA70708-YA70710	1983/10/25	2025/10/27
CMC	43-104	62	YA70712-YA70773	1983/10/25	2025/10/27
G.L.	1-2	2	YA99544-YA99545	1986/10/20	2025/10/27
G.L.	3-10	8	YA99548-YA99555	1986/10/22	2025/10/27
G.L.	11	1	YA99557	1986/10/27	2025/10/27
G.L.	12-13	2	YA99546-YA99547	1986/10/20	2025/10/27
Total	# Claims:	116			

3.3 Mineral Title Obligations

All mineral claims in Yukon are valid for one year after recording. To maintain a claim the recorded holder must, on or before the expiry date (or "good to date") of the claim, either perform, or have performed, exploration and development work on that claim and register such work online or register an online payment in lieu of exploration and development work. CMC has accrued enough work on claims so that their expiry dates are now October 27, 2025 (see Table 3.1 for specific expiry dates). On an annual basis, a property owner must expend $100 per claim to hold the claims in good standing. Claims can also be held in lieu of work by submitting a cash payment equivalent to the work requirement of $100 per claim.

Only work prescribed in the Yukon Quartz Mining Act is acceptable for registration as assessment credit on a claim. The necessary approvals and permits under the Mines Act must be obtained before any mechanical disturbance of the surface of the ground is performed by, or on behalf of, the recorded holder.

3.4 Surface Rights

Yukon Mine Land Use Permit LQ00552, valid until August 21, 2024 authorizes surface disturbance and works on any of the claim blocks. The Company has currently agreed not to engage in any activities with claim blocks overlapping Kaska First Nations Traditional R Block.

3.5 Encumbrances, Liens and Royalties

The Silver Hart Property has no encumbrances, liens and/or royalties associated with it. The property is 100% owned by the Company.

3.6 First Nations

According to the Yukon government, the Silver Hart Property is situated in area included within the traditional territory of the Liard First Nation and Kaska First Nation ("Kaska"). Approximately the first ten (10) kilometers of the unmaintained public access road to the property that is administered by the Yukon Department of Highways and Work Services, is located within the traditional territory of the Teslin Tlingit First Nations Council ("TTC").

As previously noted, there are portions of five (5) claim blocks in the northeastern portion of the Property area that overlap with Liard First Nation Traditional B Lands (LFNR-147B). Category B lands provide First Nations with surface rights to a denoted area prescribed under settlement agreements with Yukon and the Government of Canada. It is currently not the intent for the Company to conduct active exploration in any of the overlapped claim blocks with LFNR-147B area and furthermore recent Yukon legislation prohibits mine development on First Nations Settlement B Lands.

CMC is committed to maintaining a respectful and collaborative relationship with all First Nations (including the Kaska and TTC) and will continue to make efforts to engage with these First Nations governments and work to ensure that their communities and members support and share in the benefits of the exploration project.

It is the intent of the Company to initiate discussions in 2021 to work towards establishing a Socio-Economic Participation Agreement with the Kaska Nation. The Company will also enter into discussions with the Teslin Tlingit Council as to any concerns they may have relating to the access road.

3.7 Permits

The Silver Hart Property has all permits required for the current and proposed work through an existing Class 3 Yukon Quartz Mining Land Use Permit. The current permit issued allows activities for a five-year period and extends into 2023.

There are no significant environmental liabilities on the property. Under a security agreement with Yukon the Company has secured a letter of credit assigned to Yukon Energy Mines and Resources for the amount of $146,070 (CDN) and has also filed a reclamation and closure plan that has undergone environmental assessment.

3.8 Significant Factors and Risks

There are no known issues with mineral or land tenure that may affect access, title, or the right or ability to perform work on the Silver Hart Property. Existing permits and surface rights are sufficient to support current exploration activities on the Silver Hart Property as it is currently contemplated.

4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

4.1 Accessibility

The most immediate and direct access to the Silver Hart Property is via the Alaska Highway to Kilometer 1116 and from there by a seasonal road for 43 kilometers to the property (Figure 4.1). Access is limited to the snow free months of the year. The town of Watson Lake (population 350) is the closest centre for obtaining groceries, fuel, accommodation and some limited rental and contracted exploration services. Trans North Helicopters maintains a summer helicopter base in Watson Lake. The exploration season in this part of the Yukon normally extends from late May to late September but cool rainy conditions and snowstorms are not uncommon in late August and September. The months of June through September are normally free of snow cover.

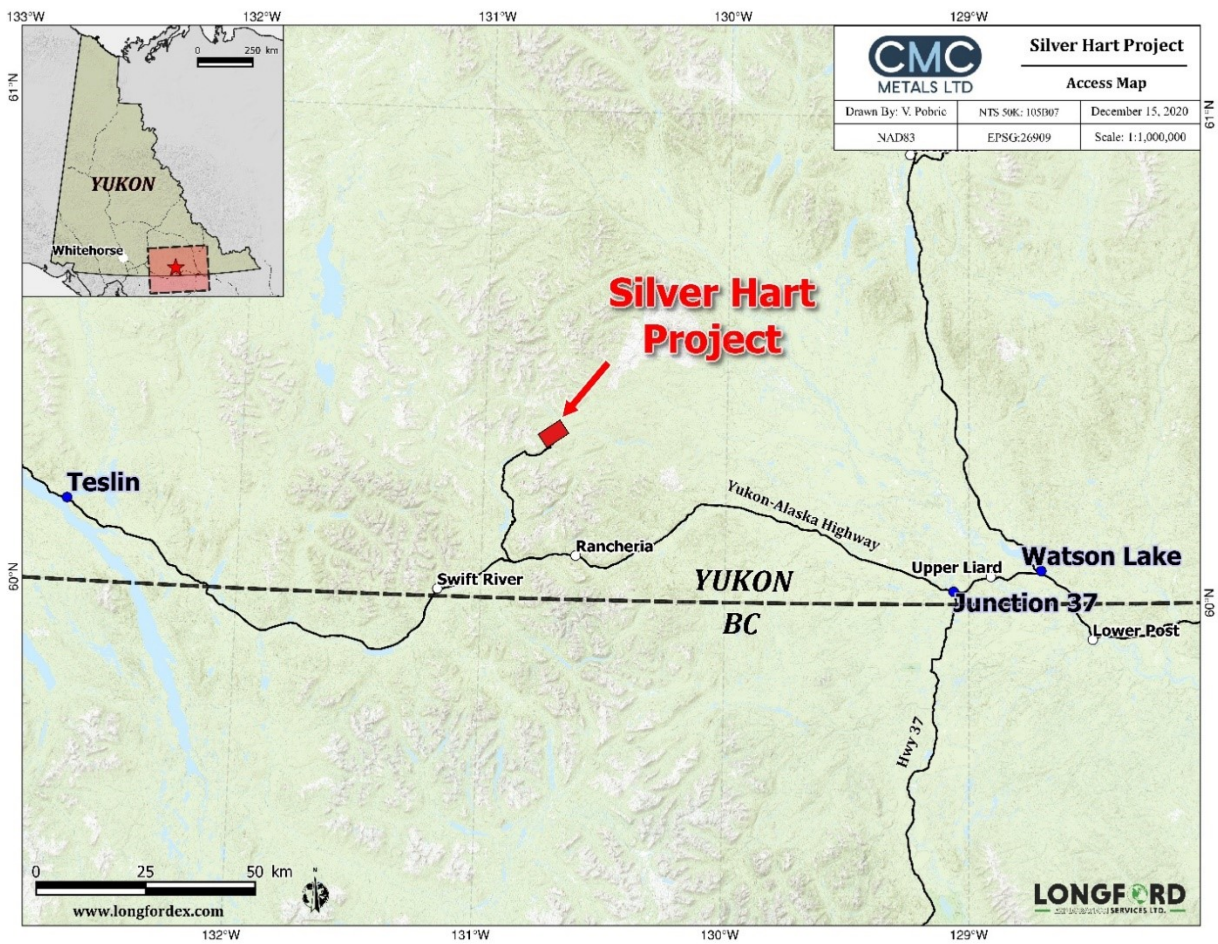

Figure 4.1: Silver Hart Property access map.

4.2 Climate and Physiography

Climate in the area is categorized as continental and is characterized by relatively long cold winters and warm dry summers. Daylight ranges from a minimum of about 6 hours per day in December to a maximum of 22 hours per day in June. Annual precipitation averages approximately 450 mm. Snow can occur in any month and normally covers the ground from October to May. Maximum snow depth is about 150 cm. Permafrost is common in the area but is not pervasive. The local streams usually break up in late May and freeze over in early November.

Temperatures on the property normally range from average highs/lows of 20 °C/8 °C (68 °F/46 °F) in July to average highs/lows of -20 °C/-30 °C (-4 °F/-22 °F) in January. Precipitation is moderate and averages approximately 500 mm/year occurring roughly half as rain and half as snow. Snowfall amounts are generally 5 to 10 times the water equivalent. The climate is suitable for year-round operation.

4.3 Local Resources and Infrastructure

The area around the Silver Hart Property has moderately well-developed infrastructure. The nearest town, Watson Lake, is a community of approximately 1,200 people and features grocery, fuel, accommodation, and medical services. The town is a one and a half-hour drive along the Alaska Highway from the end of the property access road. The town also features an airport with a 1.6-kilometer-long paved runway capable of accommodating passenger jets. The airport also features a terminal building, large warehouse, and space for further development.

Whitehorse, the capital and largest community in Yukon, is located 355 kilometers by road west of the property while Watson Lake, where most exploration services are also available, lies 180 km to the east. Whitehorse receives daily scheduled air service from Vancouver. The closest all-season deep-water seaport is at Skagway, Alaska 430 kilometers by road to the west-southwest. The nearest railhead is at Fort Nelson, B.C., 720 kilometers to the east-southeast.

Skilled operators are sourced externally and reside at site in a camp. Infrastructure at Silver Hart site currently includes a five-trailer all-season camp, consisting of a self-contained portable accommodation (30' x 52') with an attached dry (10' x 18') and kitchen-dining room (10' x 40') for use by up to 20 persons. A steel Quonset machine shop (26' x 54') is available for use on site. The camp was recently upgraded and needs only minor repairs and provides a reasonable base for future exploration programs.

There are three fuel tanks on site, one has a storage capacity of 9,000 gallons of diesel (34,000 litres), the others comprise of two 1000-gallon tanks. The tanks appeared to be in good condition and are currently empty.

Water is available for drilling and mining operations from either the Meister River or local creeks.

Adequate electrical power and personnel cannot be sourced from the local area. Power is provided using diesel fueled generators. Other operators in Yukon also have access to liquefied natural gas and that may be an option as a power source in the future. The use of diesel fuelled power will continue to accommodate all current and planned activities at the Silver Hart Property for the foreseeable future.

The existing gravel access road is adequate but can pose difficulties in bringing large loads to site. In 2020, Yukon Highways and Public Works who are responsible for the unmaintained public access road completed upgrading on the first 12 kilometers of the road including grubbing, road widening, installation of culverts and aggregate topping.

Detailed information on the project infrastructure is included in Section 18.

4.4 Physiography and Vegetation

The Silver Hart Property lies on the north-eastern flank of the Cassiar Mountains. The terrain is moderately mountainous, with generally rounded peaks and ridges separated by U-shaped valleys. The highest peaks are approximately 1,950 meters in elevation and topographic relief is typically 300 to 500 meters. Elevations on the property range from approximately 950 meters on the Meister River to 2049 meters. Creeks draining the property flow into the Meister River, a tributary of the Liard River.

Permafrost is sporadically and usually associated on the steeper north slopes. Vegetation includes thick stands of mature balsam, spruce and pine interspersed with willow below 1300 meters giving way to buckbrush and stunted balsam and finally grasses and lichen above 1500 meters. Linear vegetation-depleted zones up to 15 meters wide and 100 meters long are developed along the surface trace of some known and suspected mineral occurrences. Bedrock is generally obscured by talus above 1400 m or by glacial till at lower elevations.

The main developed site is located at approximately 1,200 meters above sea level (masl). Roughly 35% of the property is located above the tree line, which at the project's latitude occurs at approximately 1,450 meters (asl).

The climate is generally cool with moderate precipitation and an average annual temperature of — 2.9 degrees centigrade. Temperatures Range from -29.4^0 C to 21.2^0 C with extreme lows of -58.9^0

C. Average annual precipitation is approximately 404 millimeters with 196 millimeters as snow. Average snow depth is 20 centimeters. (Environment Canada, Canadian Climate Normals for Watson Lake).

5 History

The Silver Hart Property has a documented exploration history of approximately 50 years. The majority of exploration on the property occurred after 1971.

The first recorded claims were staked in August 1948 by Great Northern Exploration Company Ltd. No records of early work have been found (Smith, 1988). The claims were restaked in 1971 by the Wolf Lake Joint Venture who carried out grid soil sampling and detailed geological mapping in 1972.

Work in the 1970's focused on the discovery of tungsten skarns (Read, 1987). Detailed mapping and sampling in the area discovered skarn-hosted vein and replacement lead and zinc mineralization.

The original claims that now are a part of the Silver Hart property, were re-staked as CMC 1-24 by A. W. Hyde, a prospector from Whitehorse. The claims were subsequently optioned to BRX Mining and Petroleum Corp in 1982. Geophysical work was conducted along with the completion of two drill holes (Smith, 1985).

The option was terminated later that year and Hyde and T. McCrory and B. Preston completed additional trenching in 1983 and optioned the claims to United Greenwood Exploration Ltd. and Consolidated Montclerg Mines in late 1983. T. McCrory and B. Preston discovered two additional zones of silver-lead-zinc mineralization in 1983 and 1984.

In late 1984, the property was optioned to Silver Hart Mines Ltd., and Shakwak Exploration Company Ltd. (Smith, 1985). Silver Hart Mines performed extensive exploration work from 198587, including constructing a 43-kilometer access road to the site, undertaking geological, geochemical, and geophysical surveys, completing 50 diamond drill holes (3,658 meters), and constructing a 673-meter adit and two raises on the TM vein system.

The 1985 program focused on testing the continuity along strike and down dip of the silver-lead-zinc veins in two surface occurrences called the F and TM veins. The program was under the direction of Larry Carlyle, P. Geol., and included surface geological mapping, preliminary grid geophysical (VLF) and geochemical surveys, bulldozer trenching, as well as the completion of 50 diamond drill holes (Read, 1987).

During the winter of 1985-86, underground exploration was conducted on the TM vein, just above an elevation of 4,600 feet (1402 meters). The contractor, Hartco, utilized trackless mining methods. Openings on haulages were approximately 12-16 ft (3.6-4.9 meters) wide by 10 feet (3 meters) high. Slusher drifts and raises were approximately 5 feet (1.5 meters) wide by 7 feet (21 meters) high. Approximately 2,208 feet (673 meters) of openings were driven. They consist of 1,215 feet (370 meters) of off-vein haulage, 488 feet (148.7 meters) of on-vein haulage drift, 221 feet (67 meters) of slusher drift and 284 feet (86.6 meters) in 3 raises. Brain Fowler, P.Eng. and

R. Jones, a mining technologist, conducted face sampling and mapping during the underground mining program (Read, 1987).

In 1986, exploration focussed on outlining the surface strike length of potential mineralized veins, increasing mineral resource estimates, and upgrading and extending the plans and sections previously developed (Read, 1987). The program consisted of line cutting, geological mapping, detailed surveying, soil sampling, geophysical testing, and deep trenching of veins with excavator and bulldozer, along with diamond drilling, percussion drilling, and road extension and improvement. Considerable surveying was required to upgrade the 1985 work to the higher engineering standards necessary to correlate existing data and to accommodate the expanded 1986 work. A legal survey was conducted of key claims and the exploration grid. The trenching program involved the use of an excavator and a bulldozer in removing 31,592 cubic yards (24,154 rn^3) of soil and rock and constructing 7.5 miles (12 kilometers) of access routes (Read, 1987).

Grid geochemical surveys included 455 samples collected in 1985 and 2,394 samples taken in 1986. Samples were generally taken from the top of the 'B' soil horizon at 50-foot (15 meter) intervals and analyzed for silver, lead, zinc, and copper. The analytical data collected was plotted on grid maps at a scale of 1:1200. Two geochemical anomaly trends were determined, one long and narrow trend running northeast, parallel to a vein system, and another broader zone running north (Read, 1987).

In 1987, Silver Hart Mines submitted a development plan to the Federal Government (DIANA) to permit a 190 tonne per day mill. Documented mineral reserves in 1988 were stated to be 60,000 tonnes at a grade of 1,360 g/t silver (Smith and Read, 1988), but their methodologies have since been brought into question. Due to a decline in silver prices, the planned development was suspended, the claim option was terminated, and the property was returned to Mr. W. Hyde.

Between 1989 and 2004 Hyde conducted several small exploration programs consisting of bulldozer trenching and road work for assessment purposes. In 1999, Gary C. Lee, P. Eng. and Ron Stack of Whitehorse performed magnetometer and VLF geophysical surveys on the CMC and G.L. claims and re-established the former grid on the property (Lee, 1999). This grid utilized two different numbering systems, one pre-1986 and 1986-1999, and was converted by Lee and Stack from imperial to metric units. Eight wing lines were also extended a total of 4,000 meters to the NW. The baseline trended 45 degrees and totalled 1090 meters. Wing lines perpendicular to the baseline, totalled 12,675 meters on 11 lines with variable line spacing of 100, 120, 130, and 140 meters. Magnetometer stations were at a 5-meter spacing and were paced or measured between 25 meters spaced flagged pickets. VLF stations were at 12.5 meters spacing. The surveys identified five elongate anomalies and confirmed geological data of 45-to-60-degree trending structures. However, previous data such as drill results were not available to G. Lee and the 5 identified anomalies were recommended to be checked against previous data before planning a field program on them. Three of the five anomalies had nearby or overlapping trenching and two of the anomalies were considered new targets, as there were no visible workings. The two new anomalies were located on the NW and SE ends of the grid. IP and EM surveys were recommended to be completed to identify potential structural features (Lee, 1999).

The Silver Hart Property was then acquired from Hyde by Bellevue Capital Corp in 2004 and subsequently transferred to CMC Metals Ltd. in 2005. Bellevue Capital completed a "Technical Report on the CMC Silver Hart Property" with National Instrument 43101 by Read and McCrae (2005). A summer geophysical and geological exploration program in 2005 was followed by annual diamond drill programs from 2005-2009 totaling 61 holes (4,115 meters) targeting the TM, KL, S and M vein systems with the purpose of delineating a mineral resource. A resource estimate incorporating the 2005-2009 drilling was released in a "Technical Report" by Dahrouge Consultants (2010) of 69,500 tonnes grading 555.66g/t Ag, 1.89% Pb, and 9.12% Zn at a cut-off grade of 900g/t AgEq.

A late season 2010 drill program of 21 holes (820 meters) targeted the main occurrences to further define the mineral resource and to test areas along strike. A change in commodity prices led to a cessation of field work from 2011 to 2016.

Exploration work from 2017 to 2020 is described in later sections of this report.

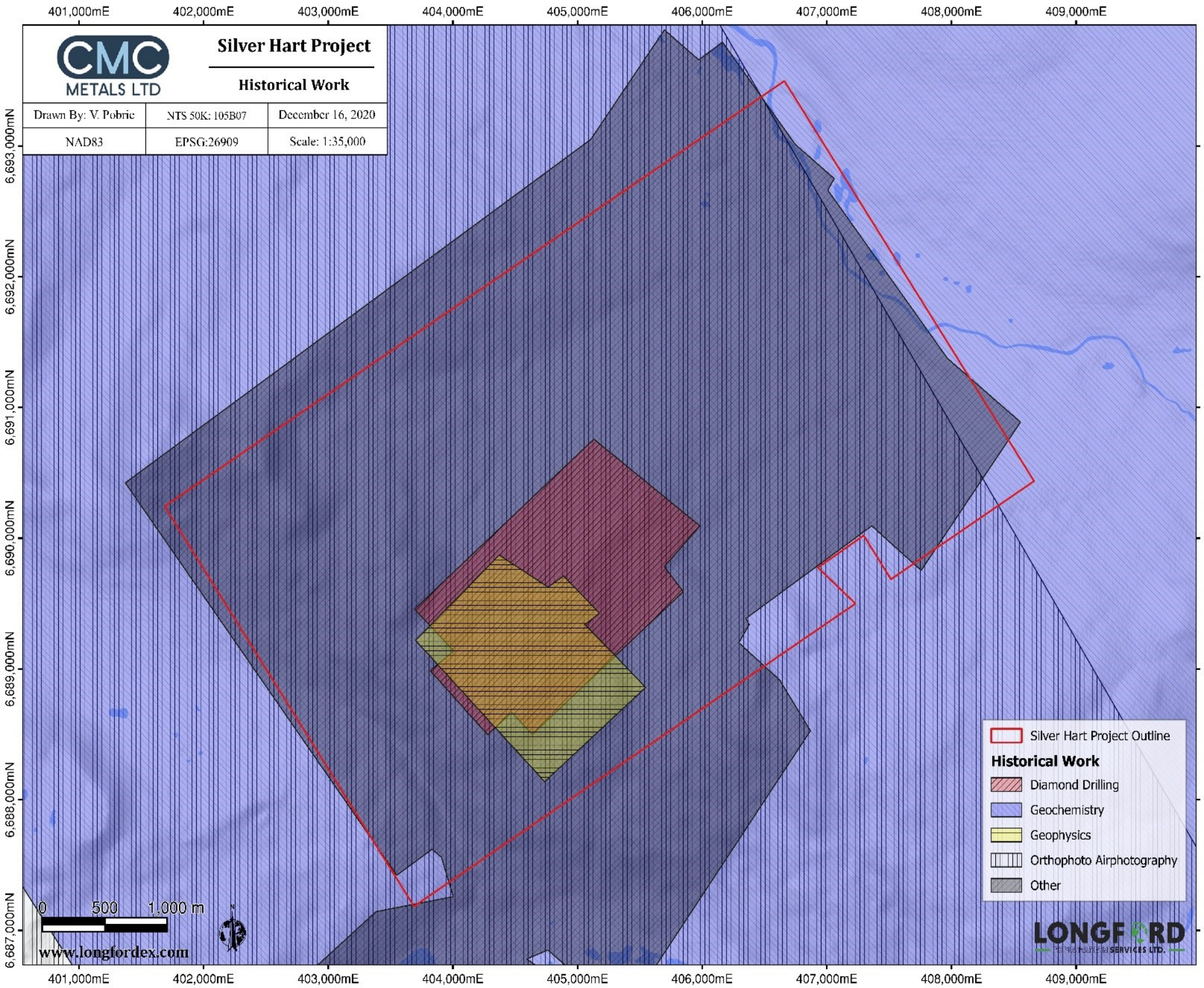

Figure 5.1: Silver Hart historical work.

6 Geological Setting and Mineralization

Gabrielse (1963), Nelson and Bradford (1993), Nelson and Bradford (1988), Abbott (1983), Amuken, S.E. et al (1987), Lowey, G.W et al (1986), recent regional aeromagnetic surveys, and numerous private sector reports have contributed significantly to the knowledge of the geology and geophysical nature of the Rancheria Silver District. This has led to an in-depth understanding of the local stratigraphy and its possible evolution and the style and formation of mineral deposits in this region of south-central Yukon and north-central British Columbia.

6.1 Regional Geology and Mineralization

The Silver Hart Property is situated in the northern Omineca Belt of the Canadian Cordillera within the Cassiar Platform of the Yukon Territory (Figure 6.1) is primarily underlain by Lower Cambrian to Devonian siliciclastic and carbonate rocks, derived schists and gneisses intruded by granitic batholiths and stocks of the Cretaceous Cassiar Batholith, (Akumun and Lowey, 1986). The area is known as the Rancheria Silver District, where a number of silver-lead-zinc vein and skarn occurrences have been located and extensively explored, while numerous veins systems although known to exist, have been subjected to only minimal exploration. Such is the case at Silver Hart where individual vein systems have seen extensive exploration while others are yet to be explored to any great degree.

The geology of the Rancheria region was mapped at 1:250,000 scale in the late 1950s, 1960s and 1970s by the Geological Survey of Canada (Poole, et al., 1960; and Gabrielse, 1969 and Tempelman-Kluit, et al., 1976). Various parts of the area have been remapped at 1:50,000 scale by geologists working for Indian and Northern Affairs Canada (Lowey and Lowey, 1986; and Amuken and Lowey, 1987), B.C. Ministry of Energy and Mines (Nelson and Bradford, 1986 and 1993), and the Yukon Geological Survey (Roots, et al., 2004).

The Rancheria District is largely underlain by calcareous and non-calcareous sedimentary and metasedimentary rocks belonging to the Cassiar Platform tectonic element (Figure 6.2). The belt of rocks extends through northern British Columbia into central Yukon. The northeastern edge of the belt is defined by the Tintina Fault Zone, a series of subparallel transcurrent faults that produced about 420 km to 460 km of dextral offset in the Early Tertiary times (Mortensen, et al., 2000). The southwest side is bound by the D' Abbadie Thrust fault (Keijzer, et al., 1999). Cassiar Platform rocks were mainly deposited as shallow water sediments during Paleozoic times along the margin of North America occurring as interbedded greywackes, arenites, quartz arenites (quartzite), and derived metamorphosed equivalents such as mica schists, quartz-feldspathic gneisses, schists, and quartzite. They were deformed and metamorphosed by arccontinent collision in the early Mesozoic and were subsequently intruded by various granitic suites ranging in age from Early Jurassic to Early Tertiary in age (Mihalynuk and Heaman, 2002) but most belong to the Mid-Cretaceous Cassiar Plutonic Suite (Mortensen, et al., 2000). The Cassiar Plutonic Suite intrusions include batholiths labelled Cassiar, Hake and Seagull, stocks and dyke complexes, predominantly granite, but range in composition from quartz diorite, granodiorite, to quartz monzonite. Mafic and felsic dykes are considered to be spatially and temporally associated with late Cretaceous and early Tertiary faults and mineralization (Amukum and Lowey, 1986). Green "andesite" dykes are found throughout the district and appear related to faults that host the silver-bearing veins (Read, 1987).

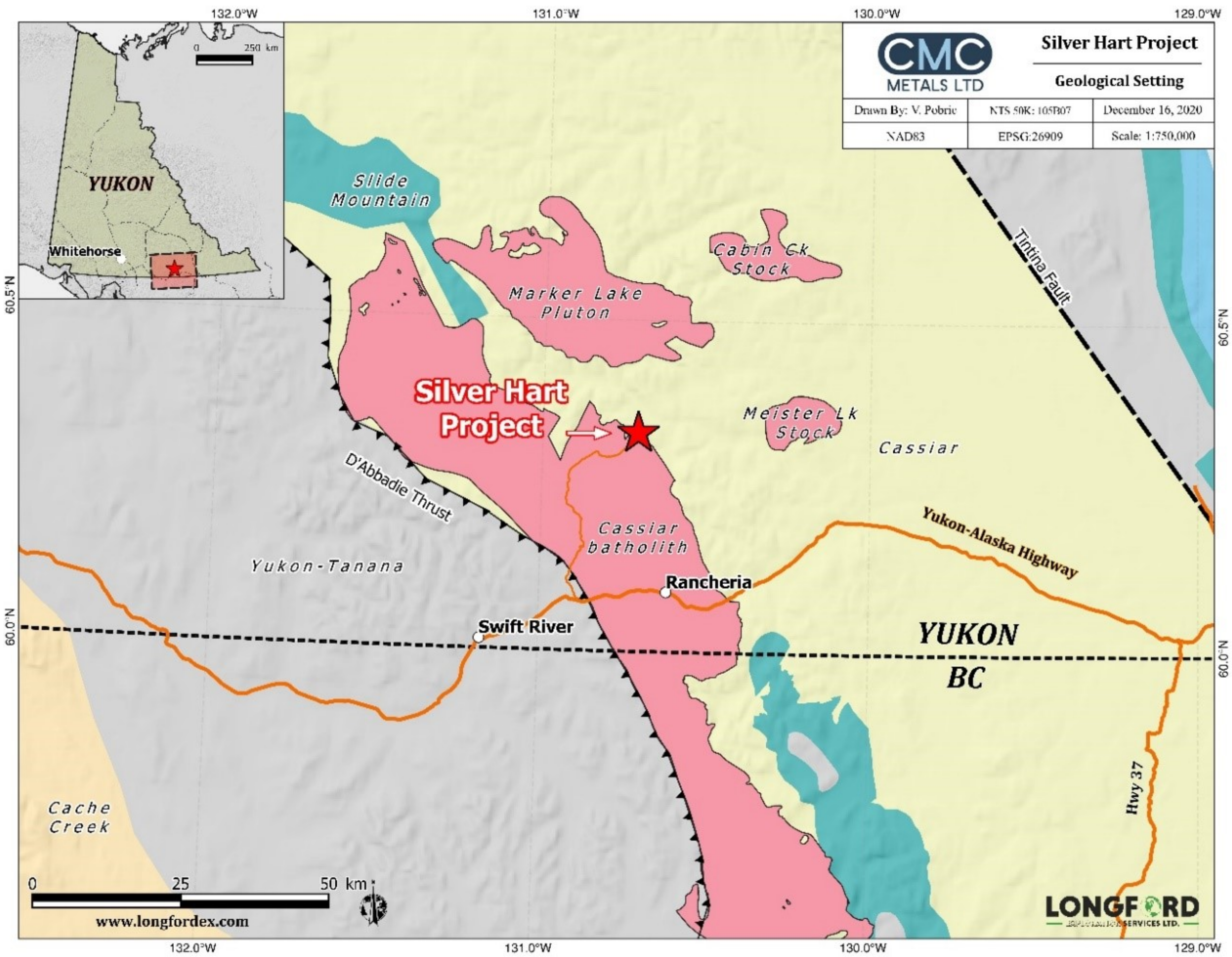

Figure 6.1: Silver Hart Property regional geological setting.

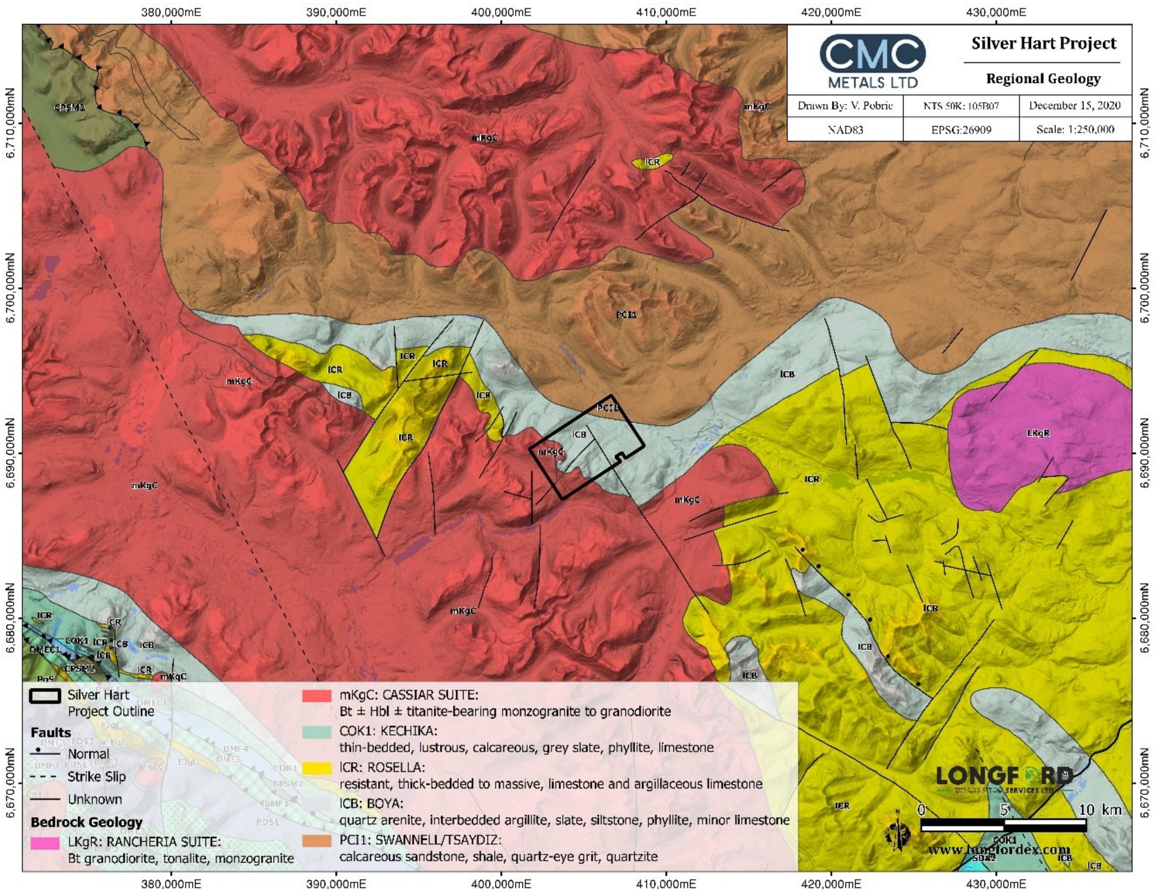

Figure 6.2: Silver Hart regional geology.

The regional metamorphic fabric strikes northwesterly and dips moderately toward the northeast attributed to northeast-southwest compression resulting from accretion and obduction of allochthonous rocks during arc-continent collision in the Late Jurassic-Early Cretaceous (Mortensen, et al., 2000). Three phases of structures are identified. First phase structures include bedding and slaty cleavage, of which the latter is attributed to late-stage diagenetic recrystallization. Second phase structures trend northwest and include crenulation cleavage and related folds and lineations. Third phase structures are approximately 90° to the second phase structures and trend northeast, including joints and related folds and lineations attributed to dextral transcurrent movement on Tintina, Kechika and Cassiar faults, (Akumun and Lowey, 1986). The major high angle faults in the area are aligned subparallel to each other and exhibit primarily dextral strike-slip offsets. Movement on these structures produced a series of smaller, northeast trending extensional faults that are associated with silver bearing mineralization at a number of prospects in the area.

The main mineral deposits are syngenetic barite +/- lead, zinc prospects in Paleozoic sediments, high grade silver-lead-zinc veins, skarns, and replacement deposits related to Cretaceous intrusive and hydrothermal activity. An account of mineralization in the Rancheria district, including the Silver Hart area, is given by Abbott (1983). The Cassiar Platform and intrusive rocks of the

Rancheria area are host to numerous mineral occurrences including silver-lead-zinc ± copper ± gold veins, tin-tungsten-zinc skarns and lead-zinc- silver replacement bodies. The most significant discoveries in this region to date are the Silvertip (Midway), Logan and Silver Hart Deposits. The Silvertip Deposit is classified as a manto replacement body hosted in Devonian sediments. Diamond drilling and underground development have outlined a measured and indicted resource of 1.18 million tonnes at an average grade of 222 g/t silver, 4.09% lead, and 8.58% zinc (Silvertip Technical Report, H.M. Bolu et al, 2019). Vein and shear hosted mineralization at the Logan Deposit, approximately 40km northeast of Silver Hart, occurs within a Cretaceous granitic batholith with a historical resource estimate of 13.08 million tonnes grading 5.1% zinc and 23.7 g/t silver (Traynor, 2005).

Figure 6.3: Aerial view looking northeast showing Silver Hart camp and surface workings.

6.2 Local Geology

The Silver Hart Property covers a portion of the contact zone between the Cretaceous Cassiar Batholith and Lower Cambrian Atan Group sediments of the Cassiar Platform (Figure 6.4). The contact of the intrusion trends northwesterly with the intrusive to the west and the sediments to the east. Although some of the contacts are intrusive and contain small skarn zones in calcareous horizons, many of the contacts are believed to be faulted (Read, 1987). The sedimentary rocks are unsubdivided carbonate rocks and interbedded quartz rich clastic rocks with derived schists and gneisses. (Amukum and Lowey, 1986). The CMC Claims are in the Sab Lake Map Sheet (105 B/7) (OF 1987-1), mapped originally in 1951-59 by W.H. Poole, D.A. Roddick and J.H. Green of the G.S.C. and later by Amukum and Lowey in 1986.

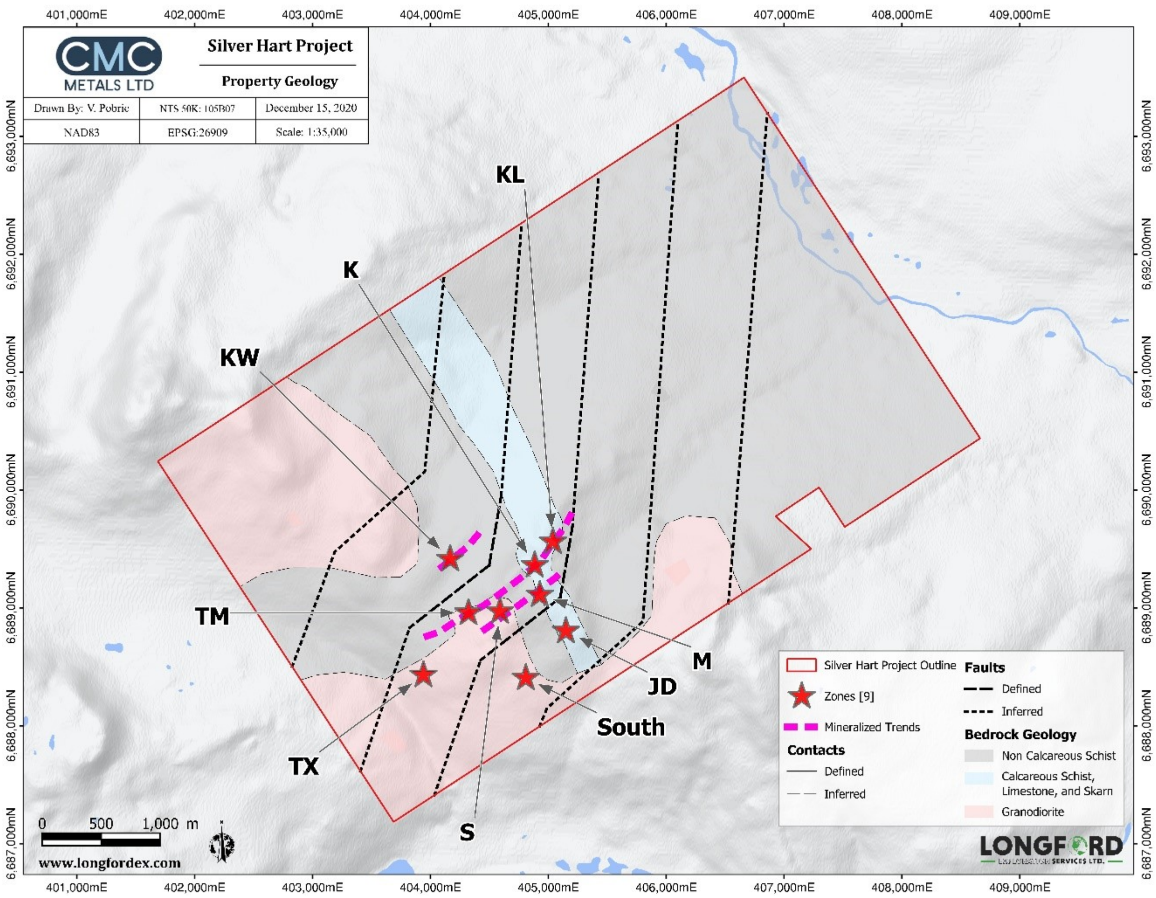

Figure 6.2: Silver Hart Property geology.

The oldest sedimentary rocks consist of quartzites, minor slate, phyllite, quartz grits and fine pebble conglomerates and phyllites, with hornfels developed from the sedimentary rocks of the Cassiar Platform. Next to the Cassiar Batholith are limestones, siliceous limestones, argillites, biotite schists, skarn, granitic dykes and occasionally mafic dykes or sills. Outcrop is common along higher ridges and alpine terrain. Gullies, lower slopes and valley bottoms feature glacial and fluvial deposits with boulders and organic material common in drainages.

Excavator trenching on the Silver Hart Property has exposed fine-grained carbonate rich clastic rocks and limestones which were variably metamorphosed to hornfels, schist, marble and calcsilicate assemblages dominated by pyroxene, garnet, and epidote in contact with quartz monzonite and granodiorite. The overall north to northwest (315° to 350°) trend of the foliation within the metamorphosed sedimentary units is parallel to bedding. The trend of local faults and fractures that host mineralization is dominantly north to northeast (020° to 045°), and folds. On a regional scale, folding follows a northwest trend. Rock units mapped on the properties include (Read, 1987; Wengzynowski, 2008):

Quartzite: massive white, limited outcrop east of the South zone.

Quartz Muscovite or Biotite Schist: tan to dark brown weathering, medium grained, well foliated and light grey to pale green, extensively exposed in upland trenches.

Limestone: white to pale blue grey, finely bedded, graphitic, commonly grades into garnet skarn, altered intervals of a buff-grey, medium-grained dolostone, or a pink or white, crystalline 'marble' with limited exposure in upland trenches.

Skarn: moderately banded, resistant weathering, reddish green to white, diopside and diopsidegarnet rich bands, extensively exposed on ridges and in upland trenches.

Granodiorite: grey, non-foliated and blocky weathering composition is relatively consistent with approximately 60% feldspar, 20% quartz, 15% biotite and 5% muscovite. Granitic rocks underlie the southwestern and northern part of the properties. The contact between plutonic and metasedimentary rocks is irregular and marked by increased weathering and fracturing.

Felsic or mafic dykes: aphanitic with the felsic dykes having quartz and albite phenocrysts in a light grey groundmass and the mafic dykes having biotite and rare augite phenocrysts in a dark green groundmass. The dykes are generally less than 1 m wide and altered to green clay near surface.

6.3 Property Mineralization

Exploration programs up to and including 2020 have identified three types of mineralization within numerous surface occurrences on the Silver Hart Property shown in Figure 6.4.

1. High grade silver-lead-zinc veins: numerous occurrences consist of galena and sphalerite with varying amounts of pyrite, arsenopyrite, tetrahedrite and chalcopyrite hosted in northeast trending quartz veins. These veins crosscut both intrusive and metasedimentary rocks. The best exposure of this style occurs in the TM and KL vein systems which are part of the same structure separated by approximately 1000 meters.

2. Carbonate replacement mineralization occurs as galena and sphalerite in strongly oxidized, manganiferous siderite and jasperoid replacement zones developed within the NNW trending belt of carbonate metasedimentary rocks. These zones occur on the property where the high-grade veins intersect limestone in the M, K and KL vein systems.

3. Skarns: consisting of tungsten ± copper skarn showings, four of which lay within the same belt of carbonate metasedimentary rocks that hosts the lead-zinc-silver replacement mineralization.

6.4 High Grade Silver-Lead-Zinc Veins

In general, the Main Zone veins (TM, S, M, K, KL) all lie near the contact of the sedimentary rocks and granodiorite of the Cassiar Batholith. To date only the TM vein/fault is filled in part with one of the andesite dykes. The veins strike close to the same direction at 225^0 to 240^0 with steep east dips from 45^0 to 80^0 NW. The veins consist of a wide shear zone containing lenses of galena, tetrahedrite and sphalerite mineralization. Mineralized veins up to widths of 1.0m have an alteration halo of up to 15 meters in width (including mineable grades) that have been traced over a strike length of 1,400 meters. The mineralization is considered epithermal type, with hanging wall alteration consisting of argillic claying proximal to the vein followed by a quartz-sericite alteration interval with a weak to intense propylitic alteration in the outer-most shell.

A distinctive feature of the vein faults is the pervasive flooding of the wall rock with manganiferous black gossan and limonite surrounding the sulphide veins. Manganese is also found in local carbonate replacement lenses hosting sphalerite and galena with lower silver content. Figure 6.6 shows the location of the Main Zone vein systems on the Silver Hart Property.

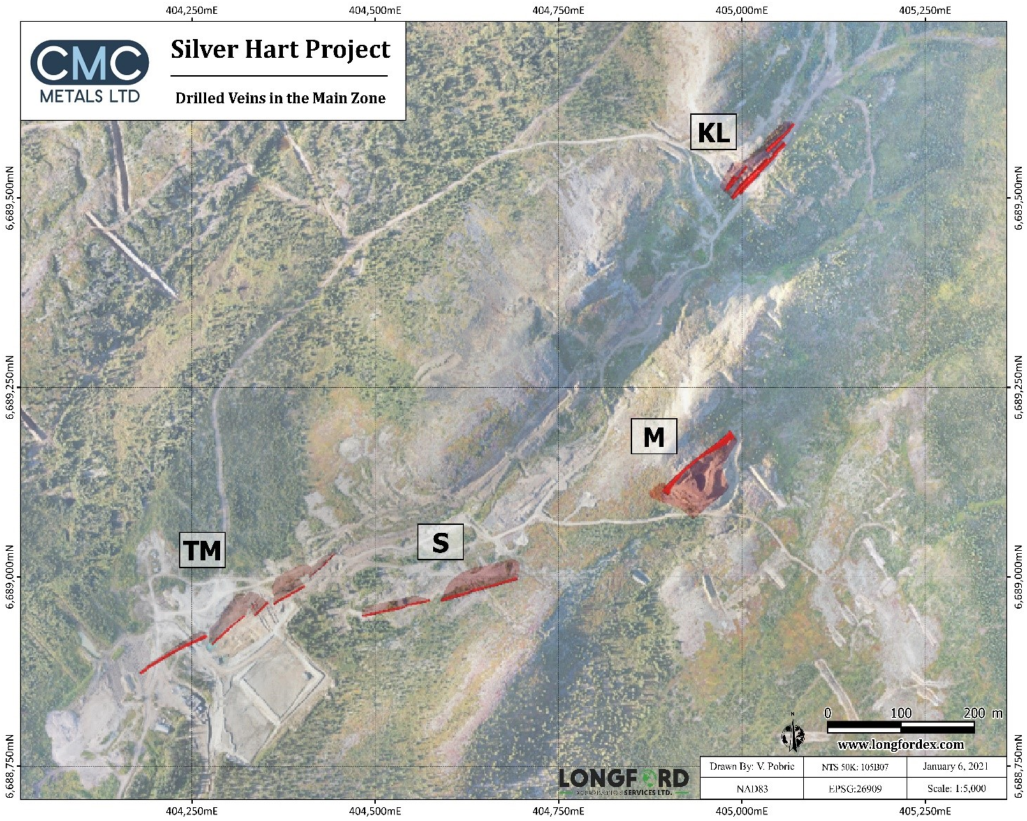

Figure 6.3: Main Zone vein systems on the Silver Hart Property.

6.4.1 TM Vein System - The 'TM' vein system strikes 225° to 240° E and dips from 40° to 80° NW. It consists of intensely fractured, oxidized, and silicified breccia of argillically altered granodiorite, with at least 5 stages of quartz and/or sulfide filling in right lateral shears. Metallic minerals present in the vein are sphalerite, galena, chalcopyrite, tetrahedrite (freibergite), pyrite, pyrargyrite, arsenopyrite, covellite, chalcocite, smithsonite and hematite (Salter and Jackman, 1987). Accessory minerals are quartz, calcite, dolomite, and manganese rich carbonates within a fractured, oxidized, and silicified breccia bounding the massive sulphide veins.

The TM vein system consists of a series of fault splays all to the west (hanging wall) of the main fault. These splay faults contain massive sulfides or grey quartz fillings. Based on cross-cutting relations there are about 5 ages of filling with the youngest (most western) having the most visible grey freibergite filling, and the next two older zones having the most galena. The early quartz fillings and the quartz zones associated with the galena all contain very fine-grained grey sulfides similar to the silver bearing quartz zone at the trench.

The hanging wall and foot wall of the altered granodiorite is occasionally mineralized, more where fault splays are present within the hanging wall at the north end of the TM vein system, which contains minor amounts of sulphide (Smith, 1988). A green andesite dike lies subparallel to the mineralized vein, and is intersected in parts by the vein, with some displacement of the vein near its south end (Read, 1987).

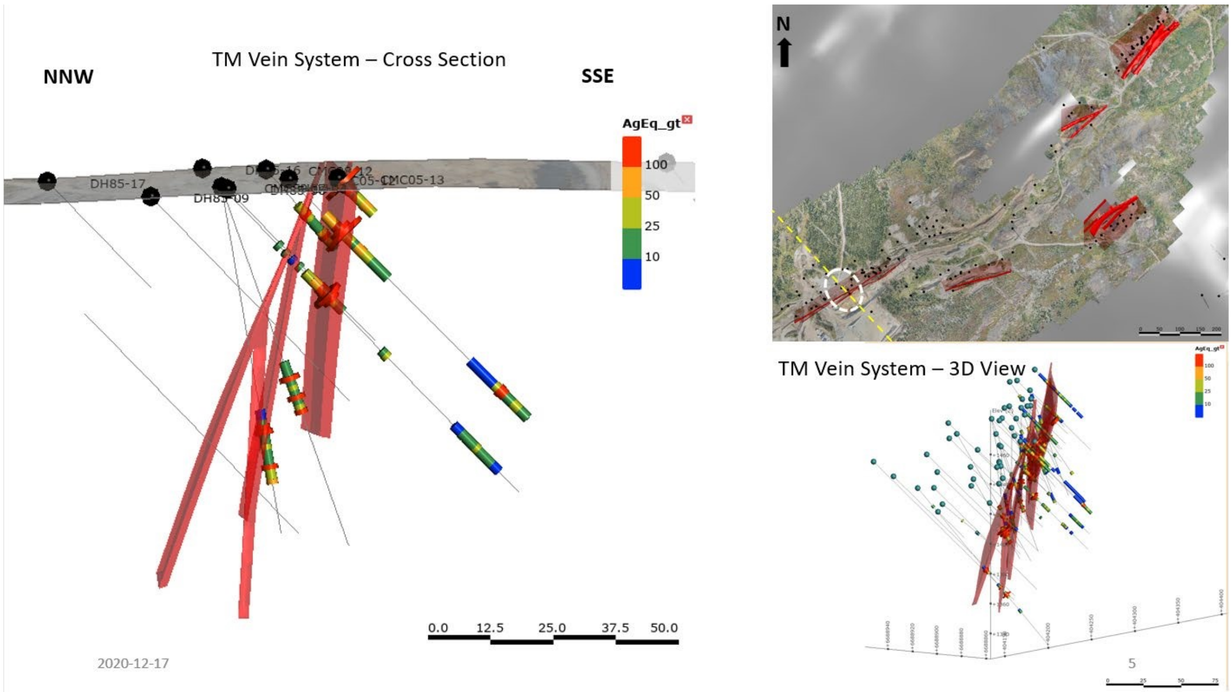

Figure 6.4: TM Vein cross-section and location (Celis, 2019).

6.4.2 KL and K Vein Systems - The KL vein system is directly along strike to the northeast of the TM Vein System. It is predominantly hosted by meta-sediments, consisting of interbedded quartz sericite schist, marble and dolomite, garnet- diopside skarn and lesser quartzite. It varies 0.3 to 4.7 meters wide, and dips 60° to 65º to the northwest (Read, 1987). Mineralization consists of a vein breccia system of banded, oxidized galena and sphalerite, with minor tetrahedrite, chalcopyrite, and pyrite. Gangue minerals consist of siderite and quartz, with intense manganese staining of the vein system and wall rocks. The high-grade mineralization is surrounded by a vein breccia that is host to lower grade silver- lead- zinc mineralization (Read, 1987). The K vein system is on trend with the KL vein system 150 meters to the SW and is also comprised of a vein structure crosscutting calcareous sediments where CRD style mineralization is present.

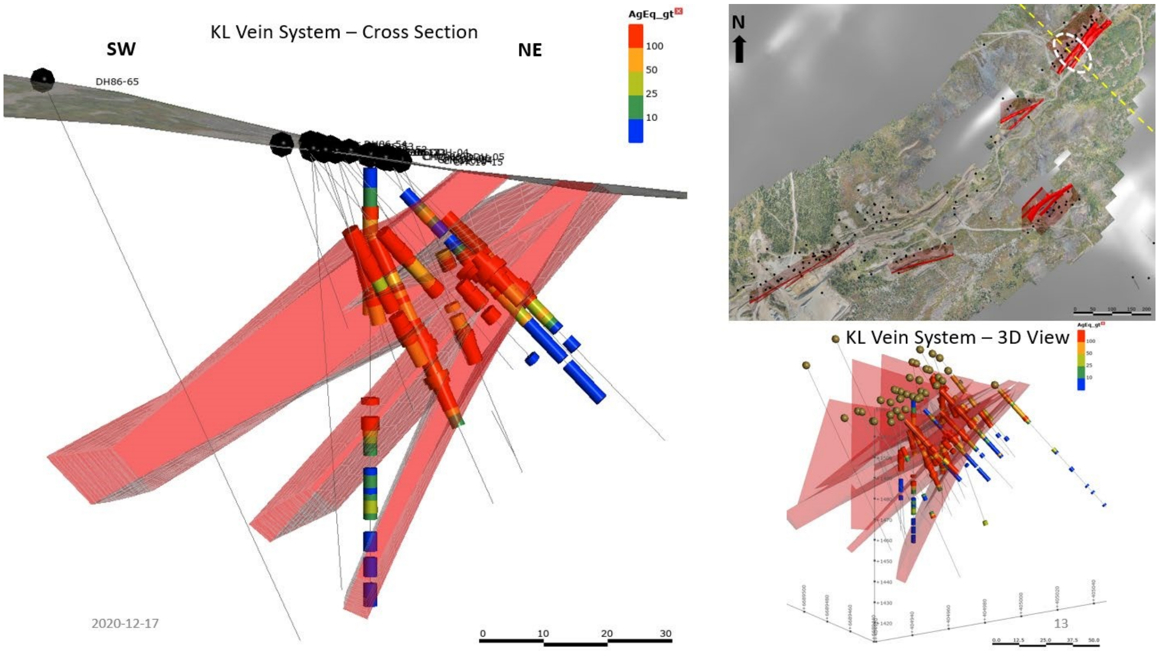

Figure 6.5: KL Vein cross section.

6.4.3 S Vein System - The S vein system located approximately 150 meters east of the TM vein system, strikes approximately 250° and is hosted by altered granodiorite. The S vein system mineralization appears restricted to a massive galena and sphalerite vein, within wall-rock alteration less developed than in the TM vein system. The 2005 to 2006 drilling defined the zone along a 100m strike length and was defined for an additional 50 meters along strike in 2017 and 2019. A detailed mineralogical investigation, including polished sections, has not been performed on the S vein system. To date, the mineralogy of the S vein system has only been documented by visual inspection of drill core. The main minerals present include galena and sphalerite; with minor pyrite, pyrrhotite, chalcopyrite and magnetite.

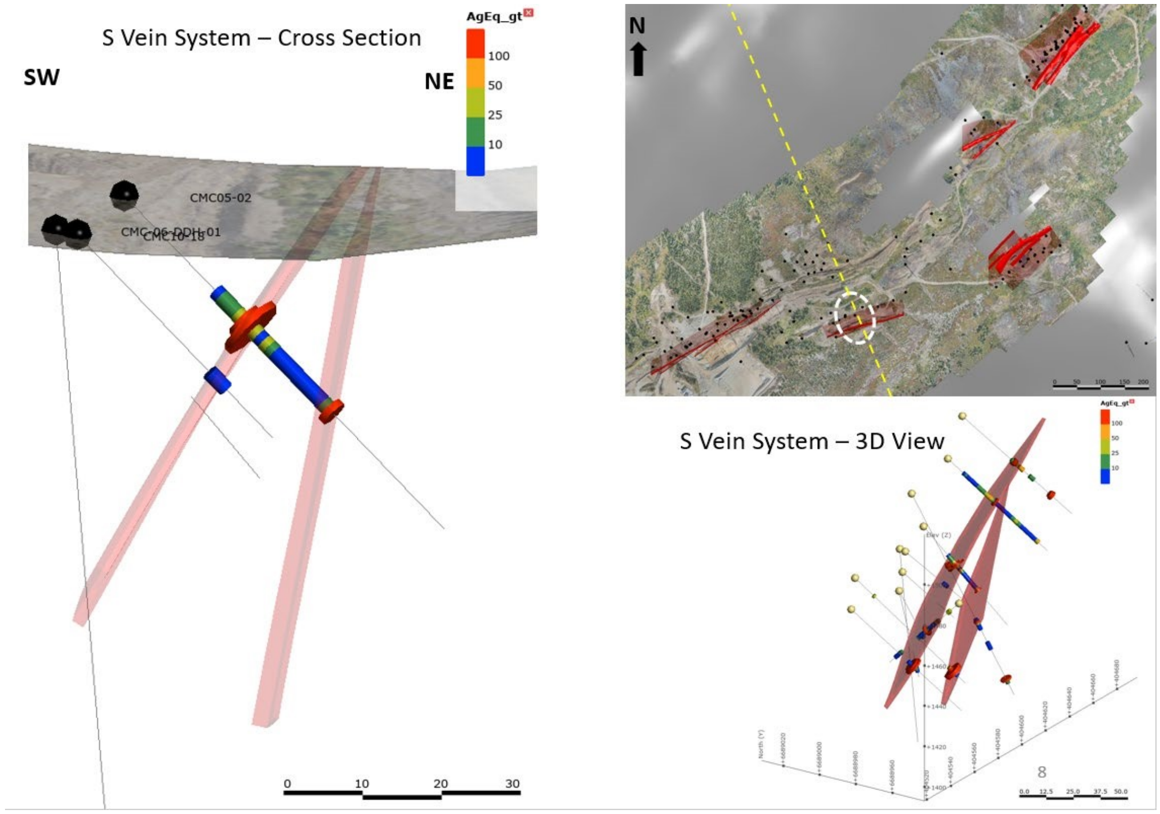

Figure 6.6: S Vein cross section.

6.4.4 M Vein System - The M vein system is located south of the KL vein system, east of the TM vein system, and is on-strike to the northeast of the S vein system. The M vein system strikes 060°, dips 65°S, has an approximate strike length of 160 meters, and is open at both ends. The massive galena-sphalerite vein was determined to have a true thickness of 0.9 meters, whilst the lower-grade alteration envelope, has a true thickness of between 7 to 9 meters (Anderson, 2008). This lower grade envelope comprises CRD mineralization along limestone bedding which warrants further structural studies and drill targeting. The host rocks and mineralization of the M Vein System are similar that of the KL Vein System, with pervasive black manganese and red ironoxide staining. A detailed mineralogical investigation, including polished sections, has not been performed on the M Vein System. To date, the mineralogy of has been best documented by visual inspection of drill core. Mineralization documented in drill logs include galena and sphalerite, with minor pyrite, pyrrhotite and chalcopyrite.

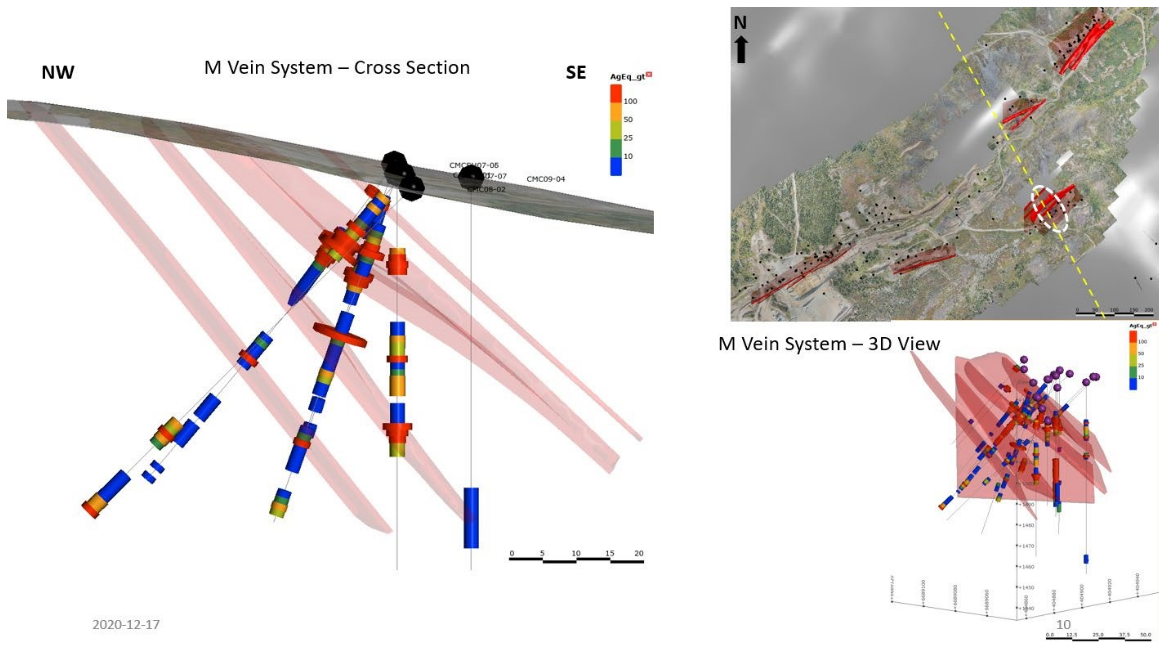

Figure 6.9: M Vein cross-section location above and cross section diagram below (Celis, 2019).

6.5 Structural Geology

The basic structure of the Silver Hart area is not complicated. Like the rest of the immediate region, it is dominated by faulting. Strata generally strike north to northwest and dip gently to moderately east to northeast. There are no fold closures affecting the local map pattern, which is characterized by a general younging of the units eastwards, broken up by faults.

The main regional ductile deformation resulted from crustal shortening in the Jurassic, when the Sylvester allochthon was tectonically emplaced onto the Cassiar stratigraphy and all units were subjected to folding, thrusting and foliation development, accompanied by very low-grade metamorphism. The main foliation is generally parallel to bedding. A prominent extension lineation, trending north-northwest, is represented by elongated clasts in the Earn conglomerates and is kinematically related to the foliation. North-northwest-striking, moderately dipping crenulations of this foliation is discernible in argillaceous laminae and locally on foliation surfaces. Drilling and mapping in the main Silver Hart deposit area indicates that no significant folds are present here, but minor thrusts do occur, and larger thrusts have been mapped farther west towards the Cassiar Batholith and elsewhere in the Cassiar terrane.

Structural mapping of the property with ortho-photo and aeromagnetic map interpretation have identified the primary northwest southeast trend with a secondary northeast-southwest orientation which is the main trend of the mineralized vein faults. Wengzynowski (2008) describes the local structure from measurements and air photo interpretation "foliation is well developed within the metasedimentary rocks and consistently strikes southeast with moderate dips toward the northeast. Jointing is well developed in all rock types and three sets of orientations predominate. The strongest jointing on the property strikes northeast and dips moderately northwest. The second set strikes east and dips steeply to the south. The weakest joints strike north and dip near vertical. Mineralized veins approximately parallel the strongest joint set, striking northeast and dipping to the northwest, while unmineralized veins strike east and dip moderately to the north. The veins postdate skarnification.

Two sets of topographic linears have been identified on air photos. The strongest linears trend northeast and are best developed on ridge tops within the granodiorite. On surface these zones are marked by depressions from 2 to 10 meters deep and up to 20 meters wide. They can be easily followed for up to 800 meters along strike. Most are U-shaped with flat bottoms that are mantled with angular granodiorite boulders. These linears are interpreted as zones of increased jointing adjacent to faults. They frequently parallel mineralized veins and the dominant joints. The second set of topographic linears trend southeast and occur within the metasedimentary units. These linears are found at lower elevations and range from 2 to 4 meters deep and average 5 meters wide. They are usually filled with intermittent streams, overburden, and thick vegetation. This set of linears appears to have developed due to differential weathering of the metasedimentary units."

7 Deposit Types

The Rancheria Silver District is host to three main deposit types, all of which are present on the Silver Hart Property and are widely believed to be related to the Mid-Cretaceous igneous activity, namely the Cassiar Batholith.

The deposit types in the Rancheria Silver District may grade into one another and each style may be a representation of temporally separate igneous events and/or host-rock characteristics. These deposit types include:

1. High-grade polymetallic veins
2. Carbonate Replacement Deposits (CRD)
3. Breccia, stock-work and skarn mineralization

7.1 High-Grade Polymetallic Veins

The Rancheria Silver District is known for its high-grade Ag-Pb-Zn ± Au vein deposits. This deposit type is one of the most prolific sources of silver worldwide and includes the adulariasericite (low-sulphidation) type (Read and McCrea, 2005), with galena, sphalerite, tetrahedrite- tennantite, other sulphosalts including pyrargyrite, stephanite, bournonite and acanthite, native silver, chalcopyrite, pyrite, arsenopyrite, and stibnite noted as the primary ore minerals.

The Silver Hart system exhibits silicification, propylitic, argillic and sericitic alteration along with the presence of pyrite, chalcopyrite, base metal sulphides, tetrahedrite and sulfosalts, which are commonly found in adularia-sericite type deposits. The propylitic and sericitic alteration proximal to veins found on the property supports an adularia-sericite type of deposit (Smith, 1988).

Examples of other adularia-sericite deposits include the Arcata District veins of Southern Peru, the Keno Hill District in Yukon, the Coeur Silver District in Idaho, and silver deposits in northern Mexico.

7.2 Carbonate Replacement Deposits (CRD)

Carbonate replacement mineralization (commonly referred to as “CRD” deposits) have also been noted in the Rancheria Silver District. This deposit type is limestone or dolomite-hosted, intrusion related, high temperature, and sulphide dominant. They typically feature lenses, elongate pipes or elongate tabular bodies referred to as mantos or chimneys (Hammarstrom, 2002). This deposit type is likely related to endo-skarn deposits and other replacement-style mineralization.

The mineralization within the KL and M vein systems appears to be typical of the CRD deposit type. Trenching has exposed mineralized manganese rich blowouts where high grade polymetallic veins have crosscut a carbonate rich unit. The CRD material is vuggy and contains disseminated sphalerite as well as galena stringers and occasional large galena blebs.
The Silvertip Deposit, located approximately 50 kilometers to the southeast of the Silver Hart Property, is an example of a CRD deposit. At Silvertip, mineralization consists of silver-lead-zinc massive sulphide, formed by hydrothermal replacement processes within limestone beds, Robertson and Belanger (2002). The Silvertip "Lower Zone" mineralization is a silver-zinc-lead Carbonate Replacement Deposit (CRD) with metals content, polyphase mineralization, abundant replacement textures, pyrite pseudomorphing pyrrhotite, and wall rock alteration reminiscent of many of the manto chimney CRD's of Mexico and the western US (Megaw, 1998).

These economically attractive, polymetallic systems can stretch continuously from copper-gold enriched skarns near intrusion contacts in the "proximal" part of the system, to massive sulfide manto and chimney deposits with no exposed igneous relationship in the "distal" areas. Traditionally these deposits have been considered difficult exploration targets due to a paucity of peripheral indicators to mineralization such as hydrothermal alteration or consistent relationship to breccia or structures.

In the case of Silvertip, mineralization and geology indicate that the resources identified to date likely represents the distal portions of the CRD system and that the higher-grade feeder 'chimneys' and the proximal copper-gold skarn portions of the system have not been found.

Within the Rancheria Silver District, similar mineralization has been found at Meister River, Jax, Head and Veronica as listed in Yukon MINFILE. These discoveries vary from drilled prospects (Meister River) to showings (Veronica) but, if genetically related to Silvertip and Silverknife, provide evidence for the presence of a larger scale mineralizing system centered in the area.

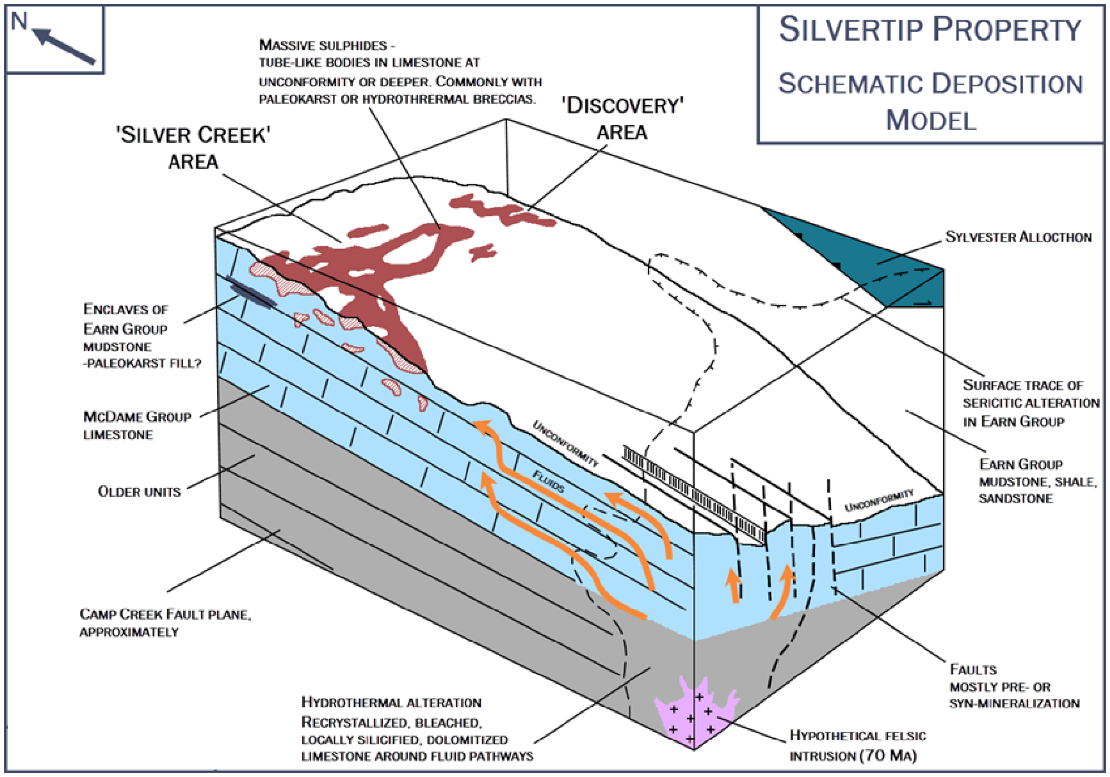

Figure 7.1: Schematic Block Diagram Illustrating the General Genetic Model of The Late Cretaceous Intrusive-Hydrothermal System and Mineralization at Silvertip (Rees, 1998).

7.3 Breccia. Stockwork and Skarn Mineralization

The high-grade polymetallic veins are often brecciated as they were emplaced within fault structures. A weak stockwork is occasionally noted surrounding these high-grade veins. Skarn mineralization in the area is primarily of interest for tungsten and does not play a role in the economics at Silver Hart.

8 Exploration

8.1 Recent Exploration - Summary

Exploration conducted prior to 2017 is described in section 5 entitled “History”. Work between 2017 and 2020 was conducted by CMC Metals Ltd. The 2017 season consisted of helicopter supported diamond drilling staged from the Rancheria Motel. There was no exploration conducted in 2018. The 2019 season included geological and geochemical exploration, trenching and diamond drilling also staged from the Rancheria Motel. The 2020 program was a season long campaign including, excavator trenching, geological mapping and sampling, soil geochemistry, geophysical surveys, camp rehabilitation, reclamation of previous workings and road upgrading. The program initially operated from the Rancheria Motel and moved to the Silver Hart camp by mid-summer.

8.2 Exploration in 2017

The 2017 drill program was carried out on the CMC 11, 27 and 28 claims from June 7 to July 8, 2017. A short section of the access road to the property had been washed out by flooding in 2012. Therefore, a helicopter was used to mobilize equipment and crews to and from the site. Drill core was flown to Rancheria for logging and sampling in a processing facility set up in wall tents at the core storage area. A total of 14 holes were drilled for 843 meters with the objective of expanding the known mineralized vein systems in the Main Zone. Secondary objectives were to clean and repair the camp facilities at the Silver Hart site in preparation for future use, re-log the 2010 drill core, and sample additional manganese breccia intervals in the 2010 drill core.

The 2017 exploration program on the Silver Hart property was successful in further defining the nature and extent of mineralization in the TM, M and KL vein systems. Recommendations arising from this work included modelling the various zones with 3D geological software such as Leapfrog to help with future drill site planning and resource evaluation. Future drilling campaigns should focus on defining the lateral and vertical extents, as well as infill drilling in areas of low confidence and areas previously only penetrated by pre 2005 drilling. Drill logistics and results for the 2017 program are described in section 10.2.

8.3 Exploration in 2019

The initial part of the exploration work focussed on re-establishing vehicular access to the site. The short (approximately 300 meters) section of the access road that had been washed out in the 2012 flood was repaired, allowing the mobilization of equipment and crew to and from the Silver Hart exploration site. Crews were housed at the Rancheria Motel and tents were utilized for logging and cutting core as the camp was not reopened.

A total of 16 diamond drill holes were completed (1050 meters) with the purpose of providing infill intersections of the main veins to allow a new resource calculation to be completed. Limited excavator trenching (190 meters), rock sampling and soil sampling (168 samples) were also undertaken during the program. Rock and soil sample locations and results were tabulated with the 2020 samples and will be described in the following sections. Drill logistics and results are described in section 9.2.

8.4 Exploration in 2020

8.4.1 Overview

The work program was initially staged from the Rancheria Motel starting on June 28, 2020 with soil geochemical sampling and road repair. An excavator and bulldozer upgraded washouts on the access road before initiating trenching and reclamation work. Geological mapping and sampling were undertaken on the new trenches. A great deal of time was spent on rehabilitating the Silver Hart Atco five-unit trailer camp, requiring electrical, plumbing and general repair with the crew moving to the camp in late July. In August, line cutting prepared the property for a geophysical crew to perform 10 kilometers of IP survey and 16 kilometers of magnetometer survey. The season ended on September 5, 2020 with camp closure and demobilization of equipment and personnel.

8.4.2 Soil Geochemistry

Detailed soil geochemical sampling focussed on areas along strike from the historic mineralized vein systems within the Main Zone and over prospective geology and geophysical anomalies. Soil lines were spaced 100 meters apart and samples collected at 25-meter intervals. A total of 1,197 samples were collected in 2020. The results are presented in Figures 8.1-8.3. Average and highest values per zone are given in Tables XX XXX. The assays and sample location and descriptions are presented in Appendix A.

Samples were collected using soil augers to collect B horizon soil which was well developed in forested areas except near drainages or low-lying ground where a thick organic interval was encountered. In sub-alpine terrain the B horizon is moderately and intermittently developed in flat and gradually sloping areas but is poorly developed on steeper slopes featuring felsenmeer or areas of glacial moraine. In areas underlain by glacial debris and shallow bedrock, soils were mainly A and C horizon. Average sample depth was 0.25 meters, with a wide range from 0.15 to 1.5 meters. Soil descriptions show that most samples were from the B horizon, others were mixtures of A, B and C horizons.

The field crew recorded GPS readings at all sample sites and data on the sample site characteristics including soil type, depth, slope, vegetation and moisture content. It was often necessary to dig several holes to get a good sample. Kraft soil bags labelled with the sample number had a sample tag placed in each bag and then filled with soil and closed by folding the tabs and tying with flagging tape. Groups of sample bags were placed in large plastic sample bags prior to being placed in rice bags which were sealed with a zip tie. The bags were transported by Longford Exploration personnel to the Bureau Veritas lab in Whitehorse. After the fieldwork was completed information from the sample tag was entered daily into an MS Excel spreadsheet.

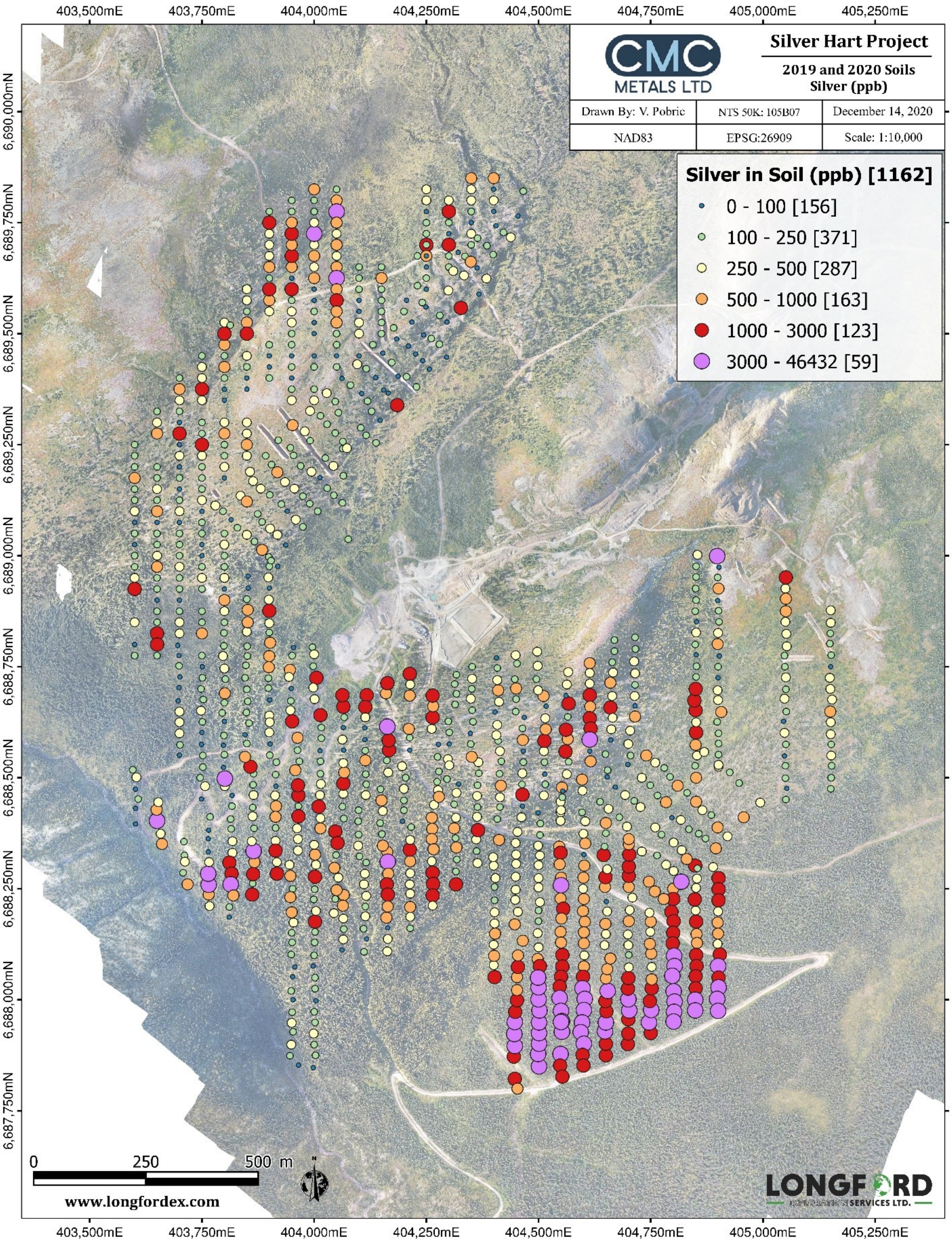

Figure 8.1: Silver Hart Property soil geochemical results from 2019 and 2020 (Ag ppm).

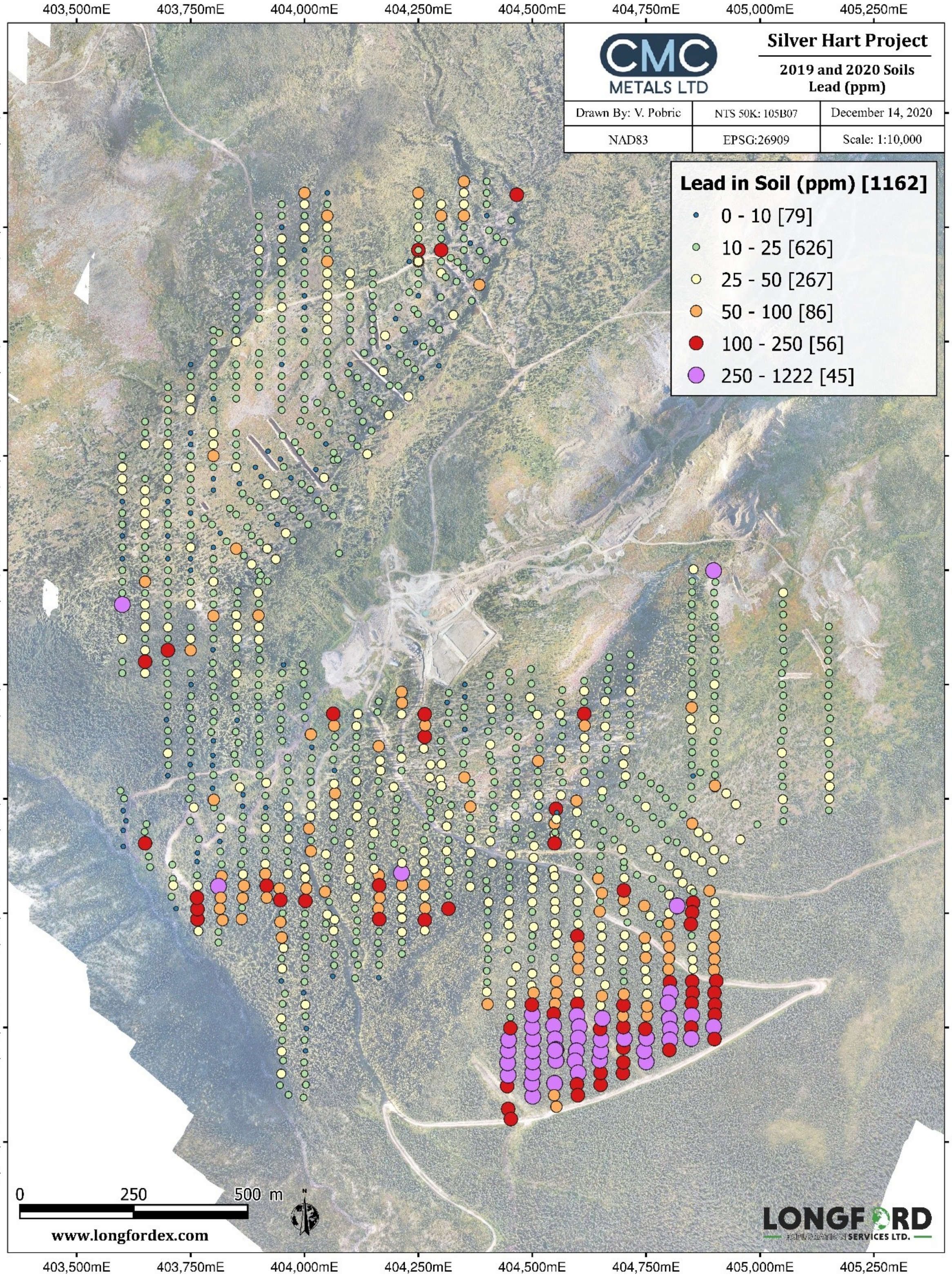

Figure 8.2: Silver Hart Property soil geochemical results from 2019 and 2020 (Pb ppm).

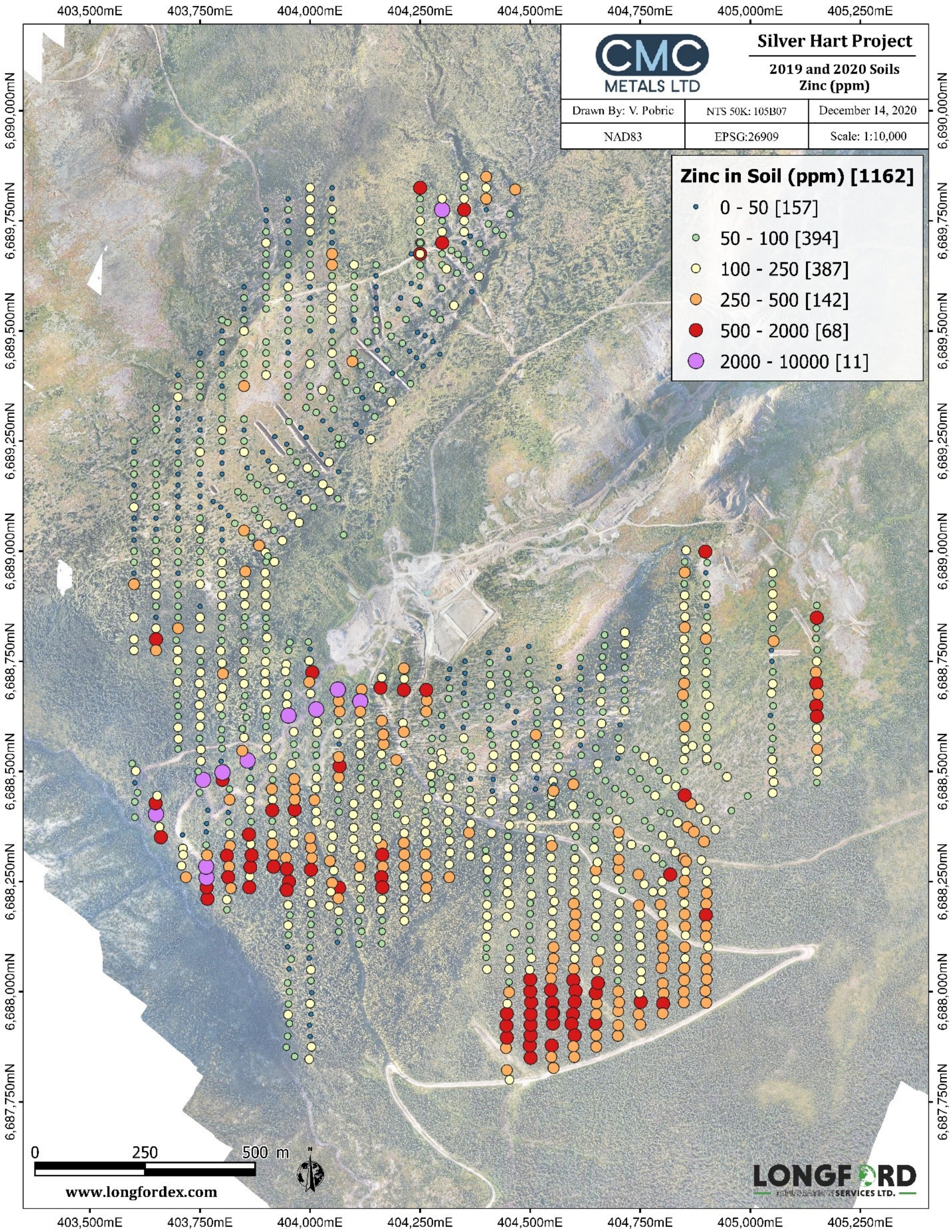

Figure 8.3: Silver Hart Property soil geochemical results from 2019 and 2020 (Zn ppm).

The geochemical sample results for soil collected in 2019 and 2020 show three areas of anomalous values. The most prominent anomaly is a silver-lead-zinc anomaly uphill of the access road and downslope of the South Zone in a forested area that has seen little previous exploration. This anomaly is likely underlain by granodiorite and warrants trenching. A second anomalous area lies to the southwest and downslope along strike of the vein structures of the TM, TX and S vein systems in the Main Zone. It has a northeast-southwest orientation that is similar to the overall orientation of the Main Zone and of the region as a whole. This anomaly may lie near the contact between granodiorite and schist. The third anomalous area is located in the northwest portion of the geochemical survey (KW Zone) and shows moderately anomalous silver values in a northeast southwest orientation with a weaker lead and zinc response. This anomaly lies near the base of the calcareous portion of the local stratigraphy.

Table 8-1: Average soil sample results by zone.

	Average Ag (ppb)	Average Zn (ppm)	Average Pb (ppm)
KW Zone	332.08	104.03	22.08
Main Zone	673.00	377.64	30.74
South Zone	1323.87	211.09	80.07

Table 8-2: Highest soils ample results by zone.

	Highest Ag (ppb)	Highest Zn (ppm)	Highest Pb (ppm)
KW Zone	5960.00	2766.50	388.14
Main Zone	16724.00	>10000.00	552.94
South Zone	46432.00	1791.50	1221.37

Geochemical sampling has proven an effective exploration tool for finding new prospective areas and it is proposed that the current sampling area be expanded and additional sampling be carried out in other parts of the claim block that have potential from the presence of surface alteration and/or are prospective from regional aeromagnetic data.

8.4.3 Excavator Trenching, Geological Mapping and Sampling

Twenty (20) excavator trenches were completed between July 1 and September 1, 2021, to facilitate geological mapping and sampling on geochemical and geophysical targets. A total of 1473m of trenching was carried out at an average width of 2.0m and an average depth of 1.5m for a total volume of 4,419m^3 of material excavated. Property scale geological mapping is shown in Figure 8.4 and trench maps are shown in Figures 8.5 - 8.13 and summarized in Table 8.3, Trenching in the Main Zone further exposed the TM and S vein systems which are hosted in granodiorite. The TM vein system contains a much stronger alteration halo which is weakly mineralized while the S vein system does not have a mineralized halo.

Trenching on the South Zone exposed a package of limestone and skarn mixed in with schists. Mineralization was observed both in the dominant SW vein structures as well as bleeding out along bedding in limestone units. The limestone unit that hosts CRD style mineralization is approximately 150m wide in the South Zone.

Trenching in the KW Zone exposed exclusively schist which contained SW structures. Trace galena was occasionally observed with quartz carbonate veining in these structures.

A total of 53 bedding measurements were taken in either limestone, schist or skarn which had an average strike of 344º and an average dip of 60º. A total of 20 measurements of the mineralizing vein structure yielded an average strike of 224º and an average dip of 60º.

Rock samples were located by GPS in NAD83 UTM Zone 9N, the sample location was recorded in field notebooks, an assay sample tag book and as a waypoint on a Garmin 60CSX GPS unit. Each sample was collected into its own 18" x 12" poly bag labeled with the locale (i.e. "Silver Hart") and a unique 7-character sample ID (i.e. E6690306) assigned from a barcoded Tyvek sample book. Sample locations are denoted in Figure 8.5 – 8.13.

A tear-out tag with the barcode and unique sample ID was inserted in the bag with the sample and the bag sealed with a cable tie in the field. The sample locations are marked in the field with orange flagging type and the sample ID number written on the flagging tape.

Table 8-3: 2020 trench results summarized.

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-01	Schist with minor skarn and limestone	1811111	blocky, weakly schistose, quartz sericite schist, 1 m into hw of vein structure, not magnetic, hornblende on foliation, no acid reaction	0.80	0.03	0.05
		1811112	rusty black mn rich vein structure + calcite veining, limonite, non magnetic	176.00	0.06	24.44
		1811113	fw to vein, strongly silicified, quartz sericite schist, blocky, sph?	0.77	0.01	0.07
		1811114	25cm vein, mn rich, limonite, calcite growths, gal not as euhedral, siliceous gangue	247.00	1.00	23.66
		1811115	FW to CRD zone, near mn swell at joint, rusty quartz sericite schist	1.00	0.01	0.07
		1811118	top of skarn and fw of main structure, strongly silicified, calcite veinlets, mn stained	63.23	0.97	2.52
		1811950	mn rich vein structure, skarn adjacent, limonite	287.00	3.86	8.61
		1811120	ne extension of main structure in last trench, by ladder, no glaena, mn rich	11.12	0.07	4.35
		1811949	9m x 3m mn blowout by ladder, 15cm calcite vein in vein structure, 3m chip across	33.19	0.30	9.85

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-01a	Parallel to bed of limestone up to 1m thick	1811107	galena pod in bedding, 3m from main structure	1579.00	79.22	0.16
		1811108	manganese stained bedding along strike of galena blebs, original texture preserved	35.30	1.00	2.76
		1811109	60cm bed of mn rich carb replacement, original texture not preserved	179.00	9.96	10.88
		1811110	near 2nd galena swelll, mn stained, silicified host	41.39	1.00	13.85

		1811119	hg galena pod at far end of crd zone in trench	87.34	75.39	3.90
		1811948	chip across zone of strong arg alteration in hw of strong silicification	185.00	4.58	2.05

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-02	CRD zone in limestone	1811121	vuggy rusty black mn stained limestone, 10% sph, trace microcrystalline gal, trace aspy, trace magnetism	8.38	0.08	2.33
		1811122	vuggy rusty black limestone, gal stringers, trace aspy/py, felsic dyke at lower contact, upper contact under overburden?	40.98	1.00	2.40
		1811123	rusty black mn, vuggy, crosscutting feature striking 20 degrees, very weathered	168.00	8.37	3.32
		1811124	less rusty and vuggy, black limestone	127.00	5.35	3.12
		1811125	high grade galena gob, vuggy all around, sandy, in structure striking 20	1859.00	75.05	0.66
		1811126	vuggy rusty black mn stained limestone, high grade gal in vicinity, strongly weathered	120.00	4.69	3.87
		1811127	same rusty black mn stained limestone, vuggy, mm qtz-carb veinlets striking 240	12.00	0.43	2.84

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-03	Skarn with minor silicified limestone and schist	1811905	2m chip in strongly altered clay surrounding mn rich qtz-carb vnlt	1.24	0.04	0.17
		1811907	silicified limestone chip, mn rich, right below super silicified skarn structure	3.11	0.00	0.05
		1811908	40cm chip across structure, heavy skarn and clay	0.32	0.00	0.04
		1811909	1.4m chip acorss fw of structure, strongly silicified, mn, sph?	10.33	0.16	0.46

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-04	Silicified schist with minor skarn	1811901	grab for KB wishing for Au, at 30m in TRSH-04	0.14	0.00	0.00

		1811902	1m chip in hw of structure, rusty schist, trace mn	0.14	0.00	0.01
		1811903	vein structure in schist, arg altered, mn stained, minor qtz-carb vnlts, no obvious min	0.24	0.00	0.01
		1811904	fw to vein sructure, rusty schist, weakly silicified, no obvious min	0.10	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-05	Skarn with minor schist	1811912	rusty black mn rich vein structure + calcite veining, limonite, non magnetic	176.00	0.06	24.44
		1811913	fw to vein, strongly silicified, quartz sericite schist, blocky, sph?	0.77	0.01	0.07
		1811914	25cm vein, mn rich, limonite, calcite growths, gal not as euhedral, siliceous gangue	247.00	1.00	23.66
		1811915	FW to CRD zone, near mn swell at joint, rusty quartz sericite schist	1.00	0.01	0.07

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-06	Silicified schist	1811916	at intersection of main vein and crd, small splay, limonite rich, calcite veining, mn stained	2413.00	33.08	13.16
		1811917	skarn immediately above ore zone, strongly silicified, porrly formed garnet (or adualria?)	4.89	0.08	0.31
		1811918	top of skarn and fw of main structure, strongly silicified, calcite veinlets, mn stained	63.23	0.97	2.52
		1811919	hg galena pod at far end of crd zone in trench	87.34	75.39	3.90

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-07	Schist with minor skarn	1811920	TRSH-07, bright orange alteration zone in schist, no obvious min	0.17	0.00	0.01
		1811921	2m wide andesite dyke, moderately magnetic	0.11	0.00	0.01
		1811922	strongly clay altered, no obvious min	0.53	0.00	0.04
		1811923	strongly silicified schist with 3% py	0.72	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-08	Skarn and limestone grading to schist	1811924	TRSH-08Mn rich schist in vein structure, 1% gal	213.00	6.73	1.36
		1811925	Mn rich limestone, some vugs, gal in vnlts	13.35	0.23	2.27
		1811926	4m chip sample, mn rich limestone, limonite vugs, trace gal	12.09	0.04	1.95
		1811704	manganese skarn in limestone along wall and floor of trench. Trace sulphide minerals, limonite.	13.24	0.12	7.08
		1811106	quartz carb vein, brecciated, no obv sulphides, possible sulfosalts?	2.81	0.03	0.05

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-09	Schist	1811927	vein structure in schist, abundant muscovite, qtz-carb, arsenopyrite? Trace galena	8.08	0.05	0.74

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-10	Schist	1811928	mn and limonite in structure striking 200, bull quartz in shoulder, trace gal with quartz	14.42	0.15	0.44
		1811929	1.5m chip sample of mn rich silicified schist next to 0.5m clay fault structure	1.30	0.00	0.01
		1811930	1m wide vertical clay structure with mn rich core, limonite, @38.5m in TRSH-10	10.48	0.08	0.12
		1811931	andesite dyke, moderately magnetic, 3% pyrrhotite	0.13	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-11	Schist and skarn	1811932	beige-orange fault structure, no mienralization, increased sericite	0.28	0.00	0.01
		1811933	vein structure, all clay, silicified skarn adjacent, 10cm clacite vnlt included	0.37	0.01	0.23
		1811934	silicified rusty schist	0.13	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-12	Schist	1811937	0-3m, TRSH-12, whole trench sampled, chip through arg + siil, calcite vein, schist	0.64	0.00	0.06
		1811938	3-6m, strong arg + sil alteration, calcite vein, sph? Or potassic alt?	1.51	0.01	0.09
		1811939	6-9m, strongly silicified, mn rich zone	3.93	0.12	0.27
		1811940	9-12m, strongly silicified to skarn at start, clay rich in middle, rusty schist at end	12.53	0.05	0.14
		1811941	12-15m, strongly silicified biotite schist grading to mn stained and friable	0.97	0.00	0.11
		1811942	15-18m, strongly silicified schist, coated in mn, trace sph in mm vnlts?	1.59	0.00	0.09
		1811943	18-21m, strongly silicified zone, above clay, then back to rusty schist, calcite vnlt	0.41	0.00	0.03
		1811944	21-24m, boring rusty schist, mod silicified, weak mn, trace py	0.28	0.00	0.02
		1811945	24-27m, rusty biotite schist, mod silicified	0.12	0.00	0.01
		1811946	27-30m, increasing silicification, bull quartz	0.21	0.00	0.01
		1811947	30-33m, strongly silicified, biotite schist, prominent mound crosscutting trench, mod muscovite, trace calcite vnlts	0.06	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-13	Schist and till	2063951	very strongly silicified schist, mn stained, chlorite	0.24	0.00	0.03
		2063952	mn stained, silicified schist, limonite, not competent, chlorite, trace to 1% gal in vnlts	12.27	0.45	0.84
		2063953	mn stained schist + limonite	1.88	0.00	0.01
		2063954	very strongly silicified, mn stained, competent, 1% py, trace bornite? Episte? Porpylitic alt?	1.15	0.00	0.01
		2063955	light grey clay altered zone, mn, lim, bull quartz, 3 m chip	6.51	0.16	0.37

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-14	Schist	2063956	grab from 4m zone of increased manganese, some bull quartz	0.24	0.00	0.01
		2063957	mn + lim rich, start of trench, no sense of strcutre, recemented schist rubble?	0.72	0.00	0.01
		2063958	soft rusty schist under 2m of till, some lim and bull quartz, last bedrock before all till	0.13	0.00	0.01
		1811364	Grab near chargeability KW zone	0.44	0.00	0.00

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-15	Schist	2063959	1m chip across zone of structure inclusinf limonite, mn, minor clay	0.32	0.00	0.01
		2063960	silicified schist, bull quartz, mn staining, limonite, clay	0.19	0.00	0.01
		2063961	mn rich schist, limonite, calcite vnlt	0.26	0.00	0.01
		2063962	silicified schist with 3% py, limonite, subtle vein structure	0.61	0.00	0.03
		2063963	2m zone of increased fracturing, cleavage at vein structure angle, stained red-brown	0.27	0.00	0.01

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-16	Schist	2063964	1m of weak mn, strongly fractured, in broader 8m structure zone	0.40	0.00	0.01
		2063965	grab of schist with moderate mn, next to bull quarz	0.67	0.00	0.18
		2063966	moderately silicified biotite schist with 3% py, mn staining, next to bull quartz	0.12	0.00	0.03
		2063967	strongly silicified biotite schist, mn stained fractures with possible sph	0.04	0.00	0.01
		1811383	Another grab near KW chargeability zone, both siliceous and altered limestones	0.10	0.00	0.02

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)

TRSH-17	Schist	2063968	srongly silicified biotite schist with rusty blebs, sil structure orthogonal to trench	0.03	0.00	0.01
		2063969	mn rich schist near bull quartz	0.03	0.00	0.01
		2093670	quartz vein with mn, py blebs, trace gal	0.10	0.00	0.00

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-18	Granodiorite	2063971	long shoulder to vein, bleached grdr, weak mn, no mineralization	5248.00	74.95	1.35
		2063973	50cm vein of high grade galena, fine grained and cubic	4.26	0.04	0.06
		2063974	rusty grdr, footwall to vein, weak mn	0.49	0.01	0.06
		2063975	increased structure, altered to sand, oxidized	0.96	0.03	0.13
		21753	galena rich swell in 6m long mineralized part of structure dominantly striking @65	4784.00	74.44	4.18

Trench ID	Lithology	Sample	Description	Ag (ppm)	Pb (%)	Zn (%)
TRSH-19	Granodiorite	2063976	1m sandy oxidized zone, in hematite stained grdr	0.49	0.01	0.06
		2063977	moderately mn stained, oxidized, silicified, calcite vnlt with zn? Trace gal	0.96	0.03	0.13
		2063978	mn + lim, min zone, trace galena, at end of trench	3.16	0.06	0.28
		2063979	silicified and strong mn staining, limonite, min zone, 1% gal in 2cm calcite vnlt	26.85	0.72	0.28
		2063980	bleached and silicified with trace galena, mn stained fractures	1.62	0.07	0.26

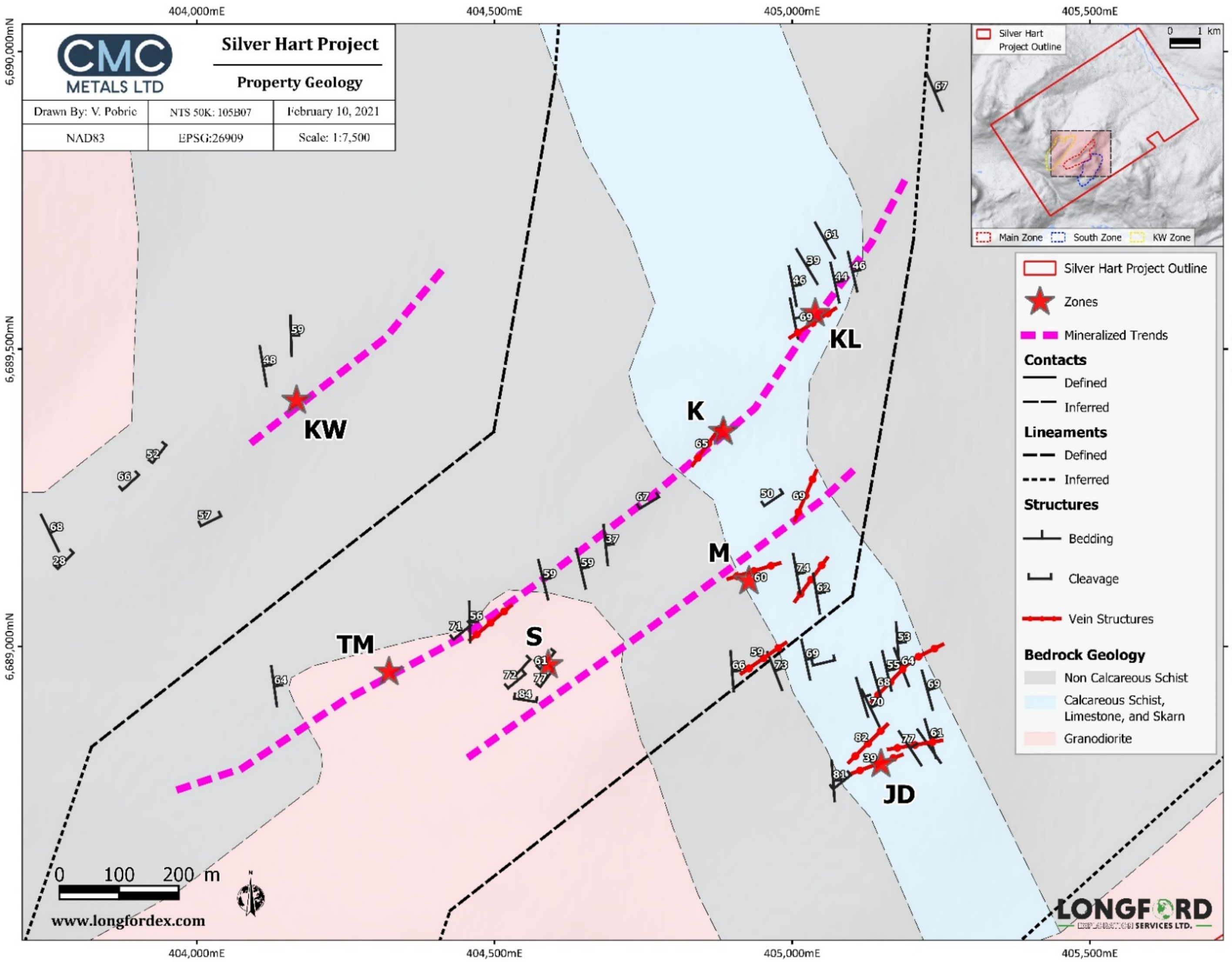

Figure 8.4: Silver Hart property geology.

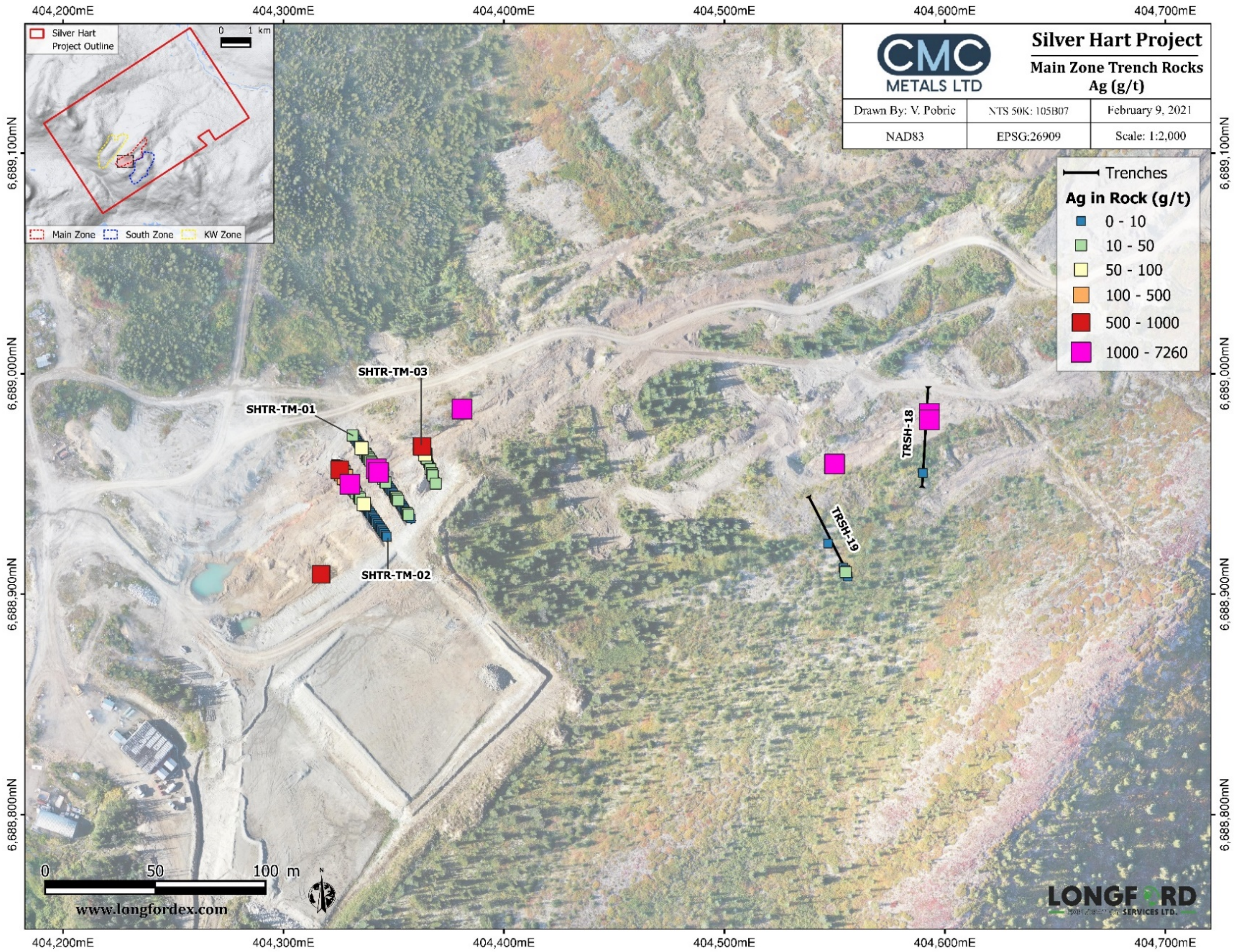

Figure 8.5: Main Zone trench and rock results for Ag (g/t).

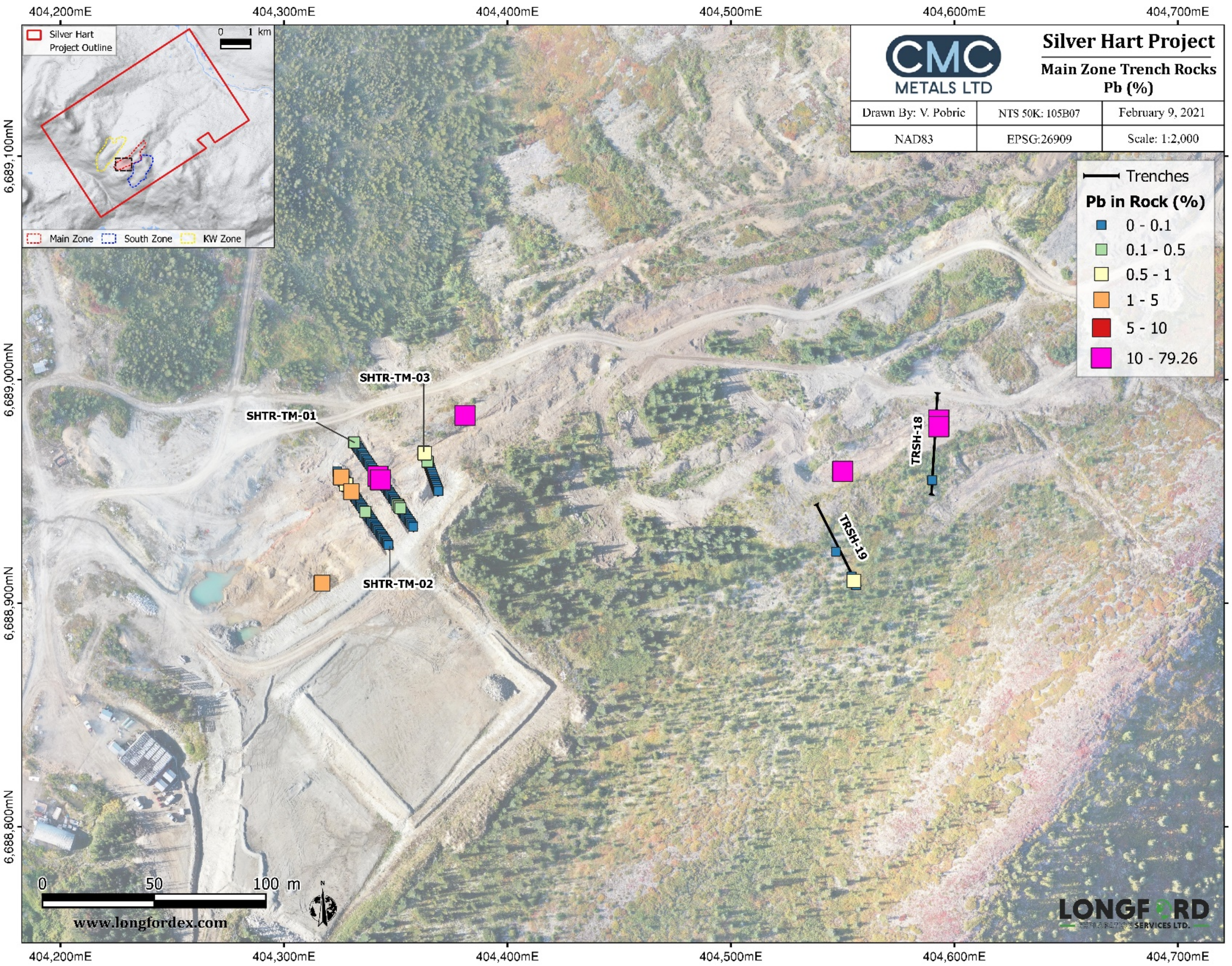

Figure 8.6: Main Zone trench and rock results for Pb (%).

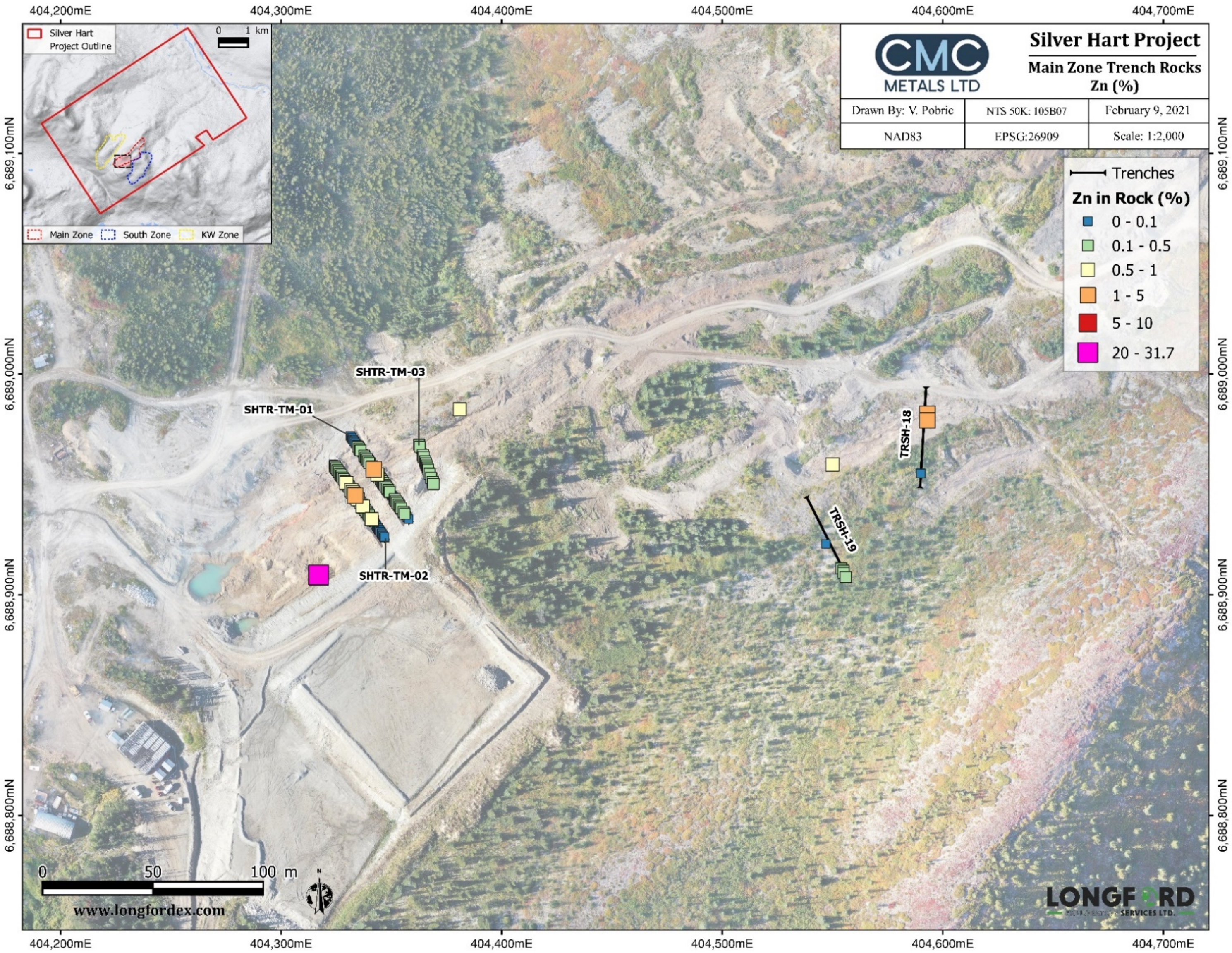

Figure 8.7: Main Zone trench and rock results for Zn (%).

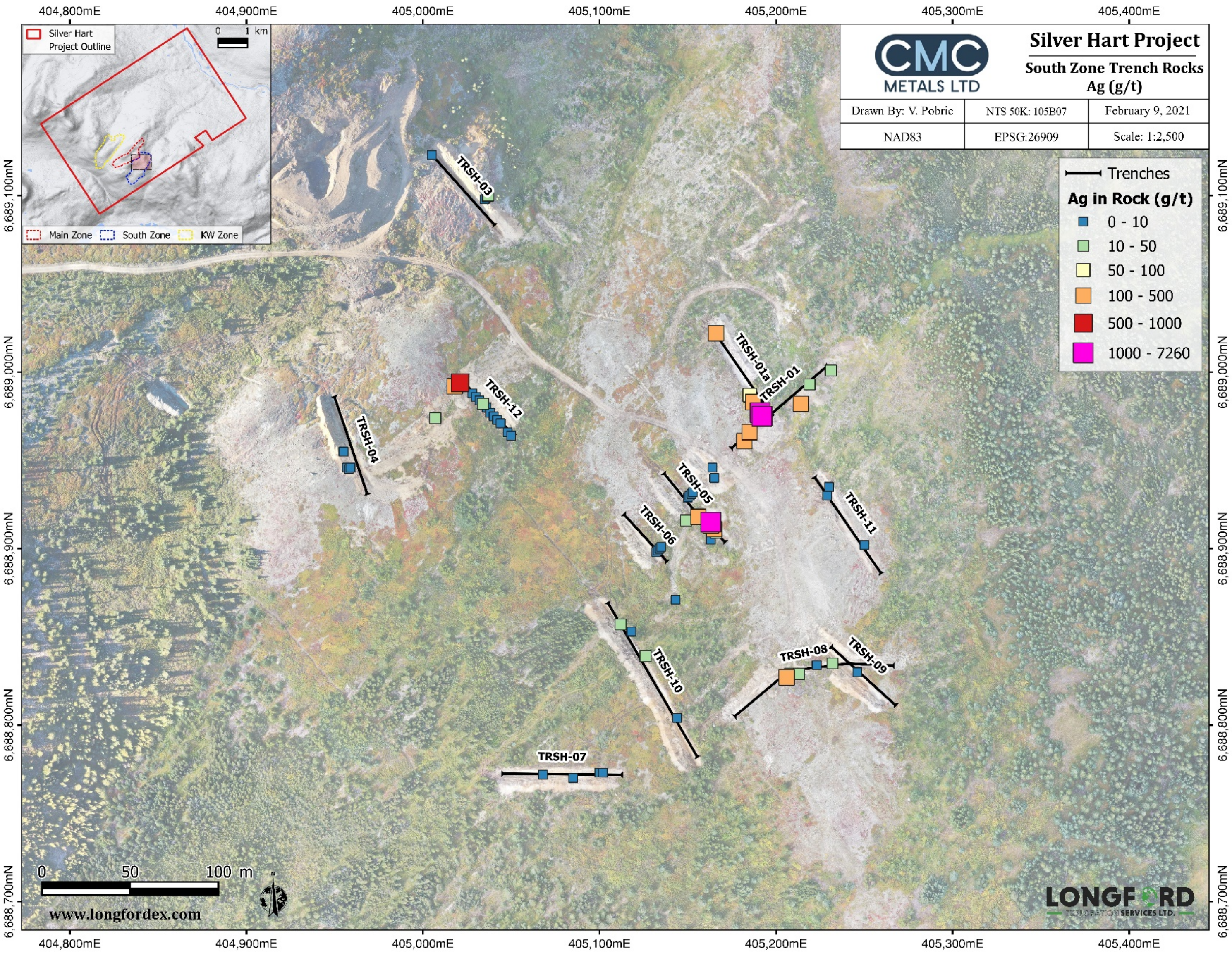

Figure 8.8: South Zone trench and rock results for Ag (g/t).

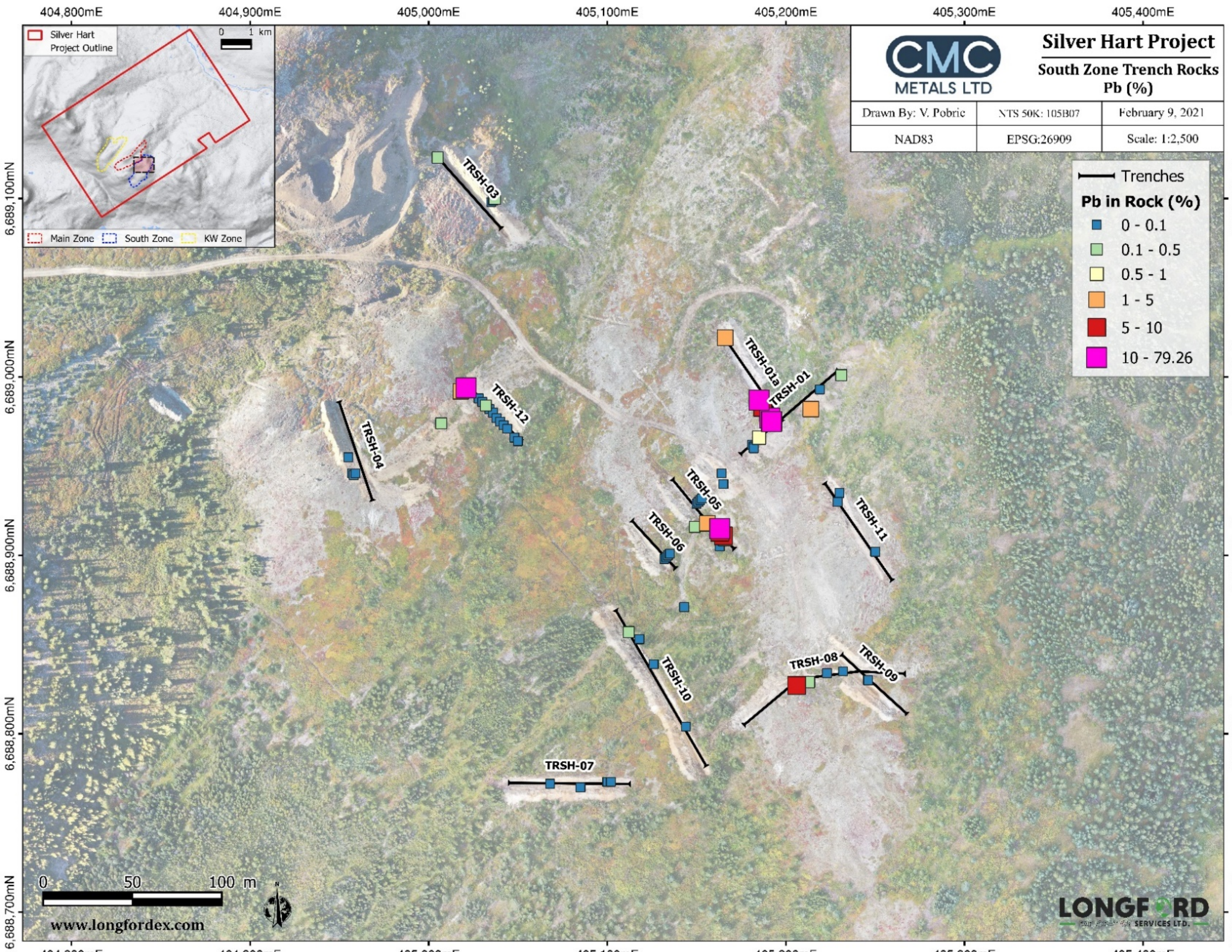

Figure 8.9: South Zone trench and rock results for Pb (%).

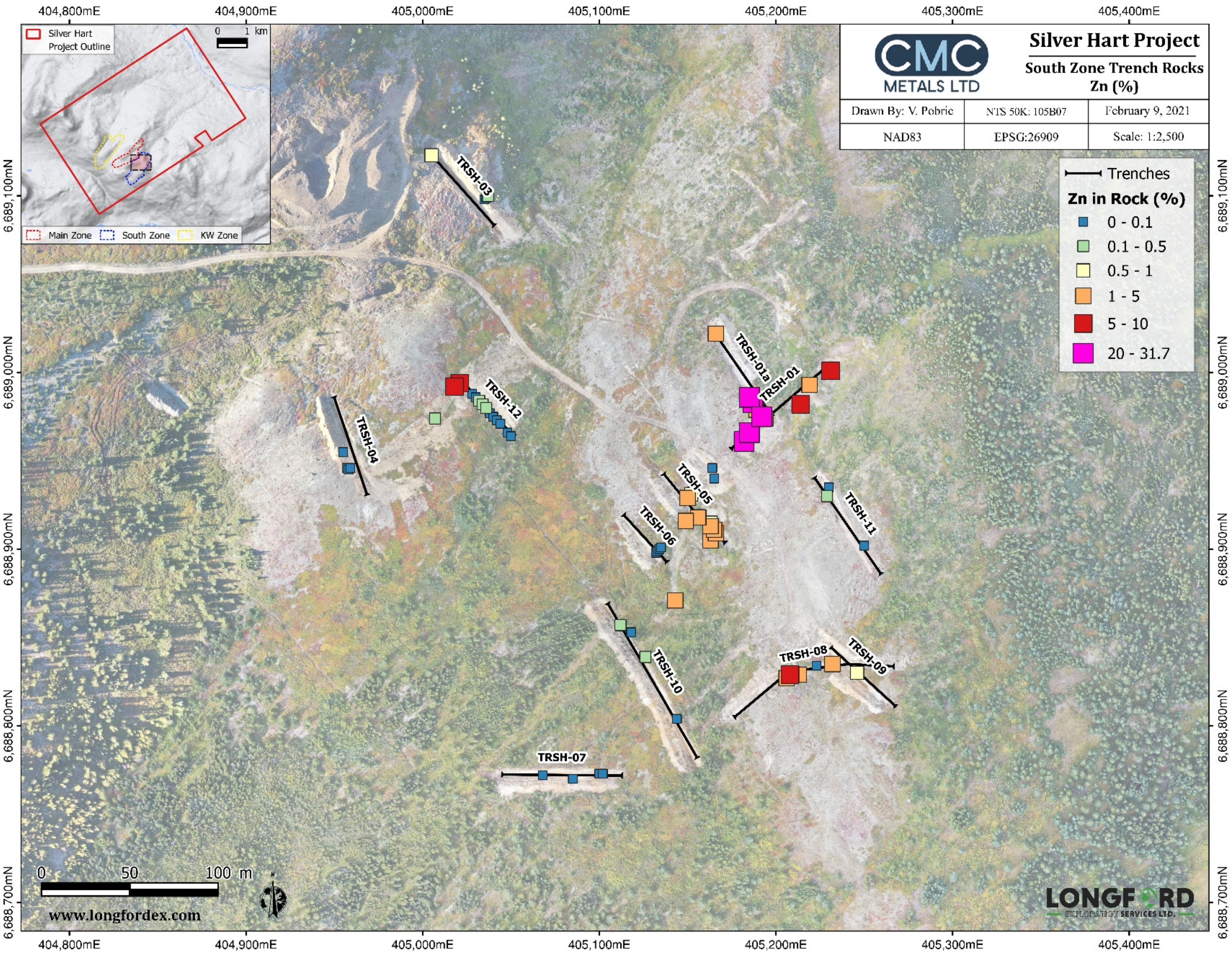

Figure 8.10: South Zone trench and rock results for Zn (%).

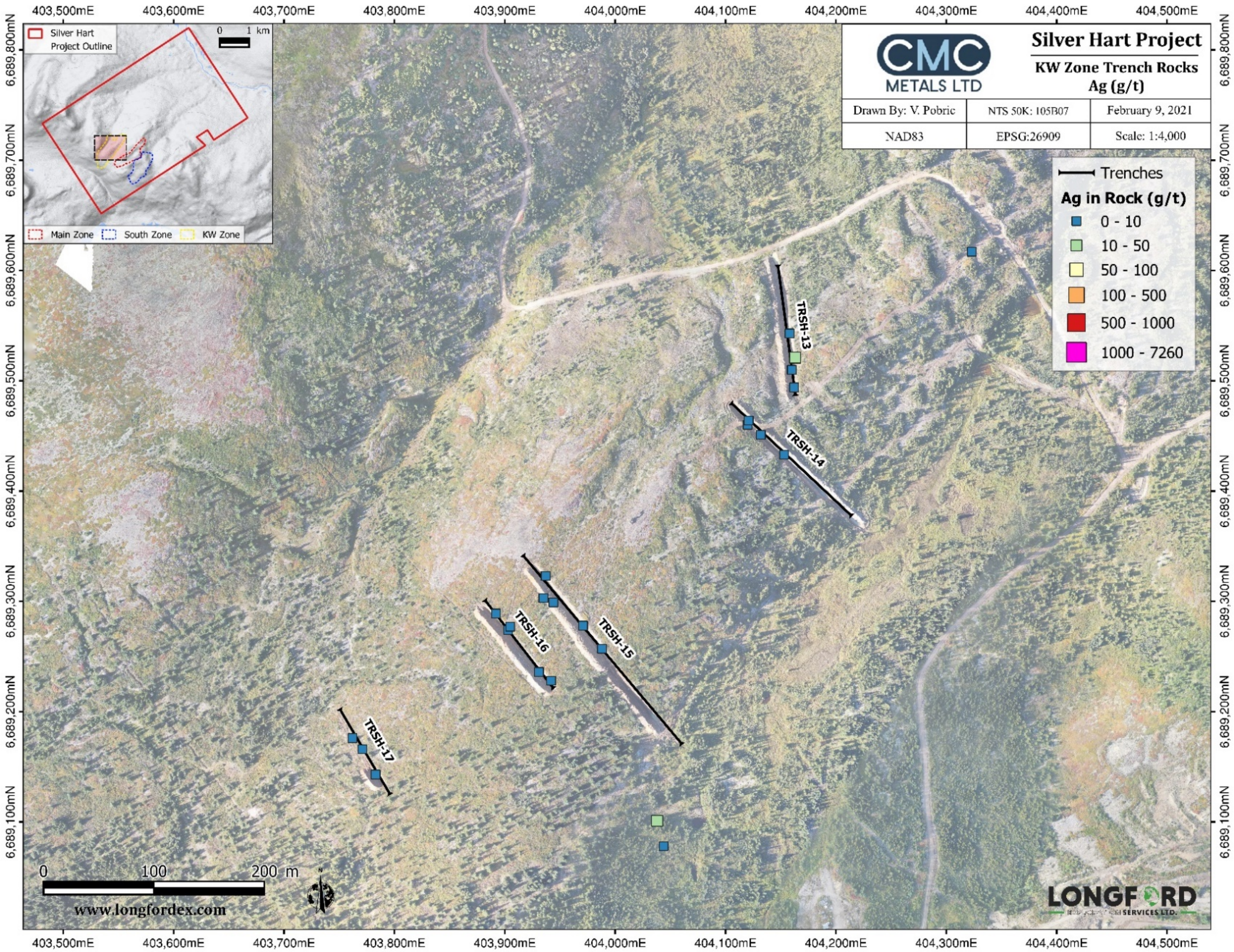

Figure 8.11: KW Zone trench and rock results for Ag (g/t).

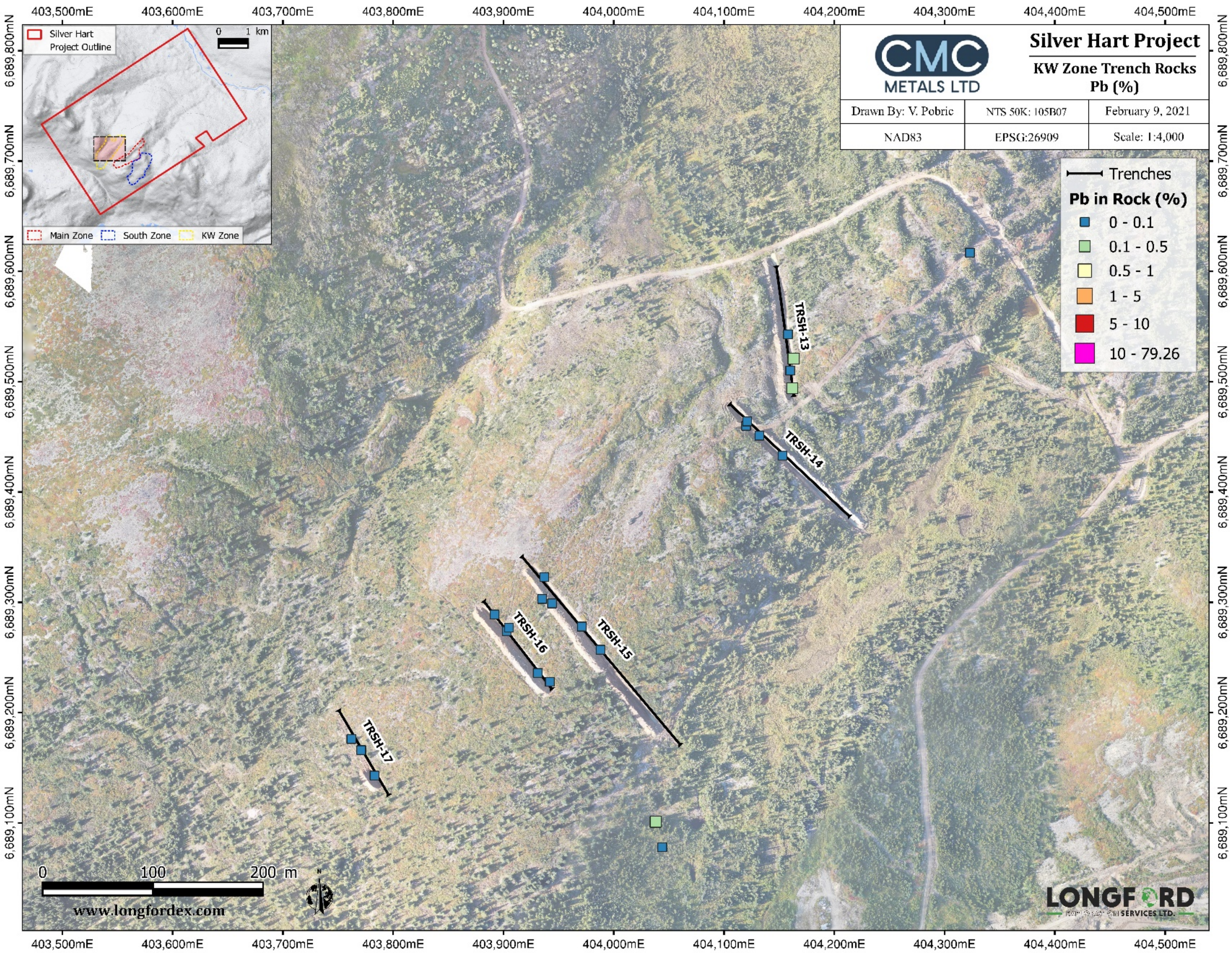

Figure 8.12: KW Zone trench and rock results for Pb (%).

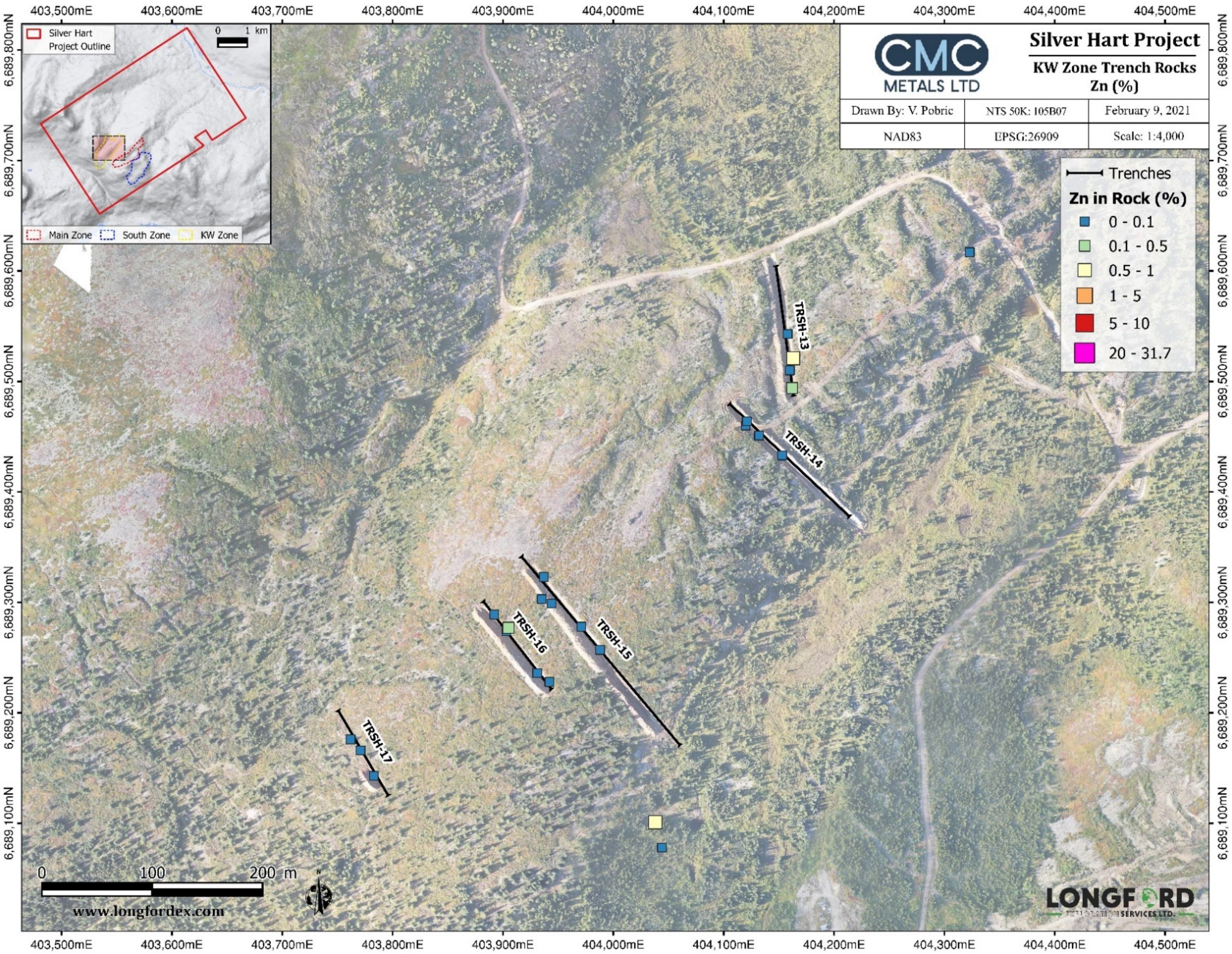

Figure 8.13: Main Zone trench and rock results for Zn (%).

8.4.4 Geophysical Surveys

CMC conducted Induced Polarization/Resistivity surveys ("IP/Res") and Magnetometers ("Mag") surveys at Silver Hart in 2020. Survey lines were cut and picketed by CMC in advance of the IP/Res and MAG surveys. West-northwest – East-southeast lines were extended from the 2005 core lines that were completed over known mineralization (see Figure 2, IE Geophysics Report, Appendix C). The following is a summary of the geophysics report prepared by Intelligent Exploration ("IE").

Induced Polarization/Resistivity Surveys

The IP/Res surveys were carried out by McKeown Exploration Services ("MES") and the program was designed and supervised by IE. The survey employed a combo pole-dipole array, with the receiver recording 8 diploes at each 50 meter station in Cole-Cole time domain mode. The surveys were completed on 9 lines for a total of 10.025 kilometers.

Magnetometer Surveys

GPS-controlled magnetometer surveys were also carried out by MES using a GEM Systems GSM-19 Overhauser Magnetometer. Approximately 16.125 kilometers of magnetic data were collected over 19 lines, including both the 2020 and 2005 lines.

Interpretation and Findings

Findings of the surveys were as follows:

Resistivity

- Resistivity correlates strongly with topographic relief.
- Resistivity highs largely indicate peaks where bedrock outcrop is more likely while resistivity lows extend north and south where valleys generally contain a greater thickness of conductive overburden.
- The highest resistivity seems to occur in areas that have been mapped as granodiorite or the prominent north-south trending carbonate band.
- Mineralized veins in the Main Zone (TM, S, M, KL etc,.) tend to occur as narrow resistivity lows.

Chargeability

- Chargeability is divided into two broad zones on the western and southeastern sides of the central north-south trending low.
- The mineralized veins in the Main Zone lie within a central low chargeability but are marked by subtle increases in the local chargeability. They tend to coincide with narrow peaks in the TMI profiles
- A strong chargeability zone in the northeast continues for a distance of almost 1,500 meters and coincides with a resistivity low and is also marked by a chain of TMI peaks suggesting possible veins. In addition, several chargeability highs occur in the southeastern part of the survey area and occur within resistivity lows that flank a resistivity high mapped as a north-south band of carbonate rocks or granodiorite. They also show a strong correlation with TMI peaks. Both of these chargeability anomalies

exhibit the same characteristics of known mineralized areas, have not been tested, and therefore offer attractive targets for future exploration.

IE identified four targets based on having low resistivity (at least locally), high chargeability (3X background), magnetic relief, proximity to structures, and coincident with anomalous silver-lead-zinc in soils. The four areas where additional follow-up was strongly recommended were as follows:

Target 1: Chargeability zone on the west side at line 380N. Peak chargeability at Station 650W coincides with the "KW Zone" of mineralization defined by trenching and geochemical sampling.

Target 2: A chargeability zone outlined in the 2005 survey at 75W where near surface chargeability coincides with a resistivity high and where a VLF-EM conductor is located immediately adjacent to the target.

Target 3: Located at 625E on line 780N, comprises of a strong chargeability anomaly at depth (approximately 100 meters below surface) in a zone that dips shallowly to the west. It coincides with narrow magnetic highs and VLF-EM conductors and lies immediately below and to the west of a broad resistivity high.

Target 4: The west end of a broad chargeability high located on line 1450N where it is coincident with a resistivity low and with narrow magnetic highs, and the anomaly is projected to occur at a depth of approximately 100 meters.

9 Drilling

The Silver Hart Property was first drilled in 1982, followed by periodic drilling from 1985-1987 and again from 2005-2010. Recent diamond drill programs were completed in 2017 and 2019 (Table 10.1).

Drill programs prior to 2010 were thoroughly reviewed in the 2010 Technical report by Dahrouge Consultants, (2010) and summarized as follows: "The drilling between 1985 and 1987 defined the mineralization within the TM and KL zones. Drilling by CMC Metals, from 2005 to 2010, attempted to verify the historic drilling on the TM and KL vein systems; as well as test previously trenched zones of mineralization, including the S, F, K, M, D and J veins. A few un-mineralized exploratory holes were drilled, and one condemnation hole was drilled at a location suitable for potential infrastructure developments."

Table 9-1: Summary table of drilling carried out over the Silver Hart Property.

Period	Summary
1982	BRX Mining and Petroleum Ltd. 2 diamond drill holes (196.6m)
1985	Shakwak Exploration Ltd. and Silver Hart Mines Ltd. 50 diamond drill holes (3644m)
1986	Silver Hart Mines Ltd. 16 diamond drill holes (932m) and 11 percussion drill holes (436.6m)
1987	Silver Hart Mines Ltd. 4 diamond drill holes (609.6m)
2005	CMC Metals Ltd. 11 diamond drill holes (702m)
2006	CMC Metals Ltd. 11 diamond drill holes (725m)
2007	CMC Metals Ltd. 11 diamond drill holes (786m)
2008	CMC Metals Ltd. 12 diamond drill holes (808m)
2009	CMC Metals Ltd. 16 diamond drill holes (1094m)
2010	CMC Metals Ltd. 21 diamond drill holes (820m)
2017	CMC Metals Ltd. 14 diamond drill holes (843m)
2019	CMC Metals Ltd. 16 diamond drill holes (1050m)

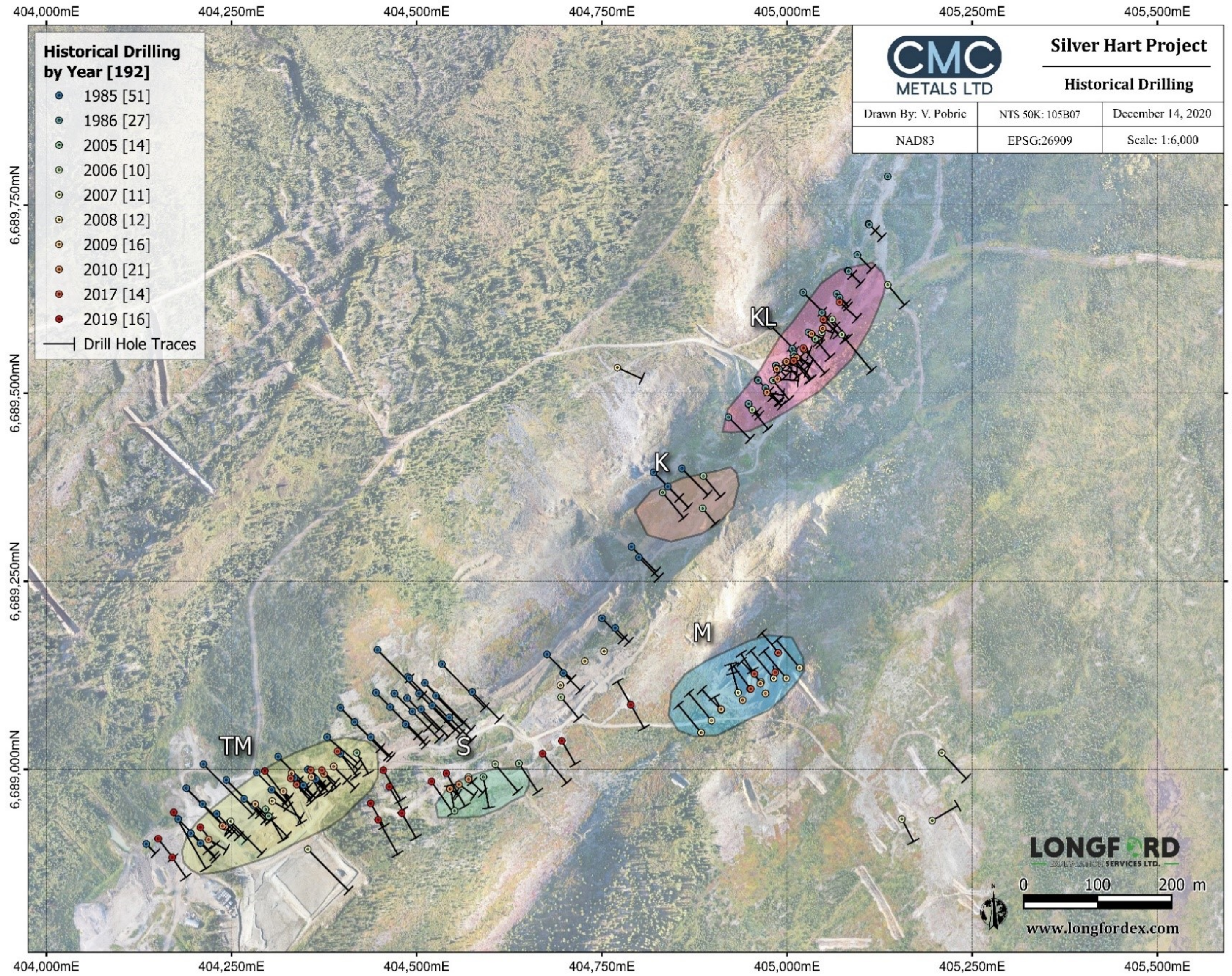

Figure 9.1: Silver Hart historical drilling.

10 Sample Preparation, Analysis, and Security

10.1 Pre-2005 Sampling and Analysis

A total of 692 core samples from 1985 and 1986 drill programs were collected by various operators previous to the involvement of the Company in the Silver Hart Project. No details are available for sample preparation and analysis of samples collected prior to 2005. This issue resulted in these samples and related results not being included in the 2020 resource estimate. Historical sampling, was conducted under the supervision of W.S. Read, P.Eng. and other mining professionals associated with these exploration programs and is assumed to be of fair quality.

10.2 2005-2009 Sampling and Analysis

A total of 1,419 core samples from the 2005-2009 drill programs were collected by various personnel contracted by CMC. The sampling and drill-logging procedures for the 2005 drill program were prepared by the project QP, Clinton Davis, P.Geo. and catalogued in un-reported company files and are summarized herein. "After re-arranging the core and converting the footage blocks, and prior to logging and sampling, the core was photographed and catalogued using a digital camera. Sample intervals were marked during logging of the core with a red marker. One part of the 3-part sample tag, in combination with a piece of flagging tape, was stapled to the core box at the start of every sample interval. The core was then split with a rock saw, ensuring that the same side of the core was consistently placed back in the box. The water tray, sliding table and blade were cleaned between every sample in order to avoid contamination. Core was then placed in a well-marked sample bag, with a piece of the 3-part tag in a separate portion of the sample bag, to ensure it was preserved." The core handling and sampling procedures were not documented in 2006. However, the drilling program was managed by Aurora Geosciences Ltd. of Whitehorse, YT, and is believed to be of high quality. In 2007, the core handling and sampling procedures were supervised and documented by independent QP, Farrel Anderson, P. Geol., and outlined within his internal technical report (Anderson, 2008). The same sampling procedures continued through to 2009, and were carried out in the field by Jennifer Simper, an independent subcontractor to CMC Metals Ltd. In years 2005 to 2010, the work was supervised by the President of CMC Metals Ltd., Don Wedman, P.Eng.

The 2010 drill core was not logged; however, some high-grade material was sampled. No QA/QC procedure was applied to these samples at the time. The 2010 core was logged and formally sampled in 2017, the details of which are presented below.

For all core and rock samples collected between 2005 and 2009, samples were prepared and analyzed by Acme Analytical Laboratories of Vancouver, BC; an ISO 9001:2000 certified laboratory. Sample preparation technique R150, which involved jaw crushing of the material until 70% passes 10-mesh, and then taking a 250 g riffle split and pulverizing in a mild steel ring mill until 90% passes 150 mesh, was used for all drill core and rock samples. Prior to analysis, samples were digested using 30 mL of Aqua Regia, a 2:2:2 mixture of ACS grade concentrated HCl, concentrated HNO3 and de-mineralized H2O, which is added to each sample. Samples are digested for one hour in a hot water bath (>95°C). After cooling for 3 hrs, solutions are made up to volume (100 mL) with dilute (5%) HCl. Very high-grade samples may require a 1 g to 250 mL or 0.25 g to 250 mL sample/solution ratio for accurate determination. Acmes QA/QC protocol requires simultaneous digestion of two reagent blanks inserted in each batch.

Various programs of QA/QC for the core sampling have been implemented between years 2005 and 2009. The program of standard and blank insertion is considered to be of good quality. CMC Metals Ltd. did not implement an acceptable program of core duplicates insertion. CMC has not verified analytical precision by check-analysis with another accredited laboratory. Three different pulp standards were used by CMC between 2005 and 2009. All were pulp-type standards from WCM Minerals Ltd. of Vancouver, BC. The grades and amount of each type of standard are summarized in the following tables.

Table 10-1: Grades of Standards used between 2005 and 2009.

	Standard Grade		
Standard	**Ag (g/t)**	**Pb (%)**	**Zn (%)**
PB120	19	1.43	2.87
PM1106	862	-	-
PB121	180	2.19	4.56

Table 10-2: Frequency of standards used between 2005 and 2009.

Year	Samples	Standards	Standards %
2005	447	18	4.03%
2006	227	8	3.52%
2007	276	34	12.32%
2008	145	18	12.41%
2009	249	31	12.45%

The sample material used as the blank sample is not noted for the 2005, 2006 and 2007 work. The table below summarizes the use of blanks during the 2005-2009 period.

Table 10-3: Frequency of blanks used between 2005 and 2009.

Year	Samples	Standards	Standards %
2005	447	18	4.03%
2006	227	8	3.52%
2007	276	35	12.32%
2008	145	18	12.41%
2009	249	31	12.45%

In 2005, 16 core duplicates were analyzed, and in 2006 nine core duplicates were analyzed. All were within un-mineralized rock. As a part of the Acme analytical QA/QC procedures, pulp samples were also duplicated to monitor analytical precision, though most were within unmineralized rock.

10.3 Core Sampling and Analysis in 2010, 2017 and 2019

A total of 270 core samples from the 2017 and 2019 drill programs were collected. Core from 2010 was not fully logged or sampled in 2010 and was therefore logged and 102 samples collected in 2017. Sample intervals were marked during logging of the core with flagging and then photographed. One part of the 3-part sample tag, in combination with a piece of flagging tape, was stapled to the core box at the start of every sample interval. The core was then split with a rock saw, ensuring that the same side of the core was consistently placed back in the box. The water tray, sliding table and blade were cleaned between every sample in order to avoid contamination. Core was then placed in a well-marked sample bag, with a piece of the 3-part tag in a separate portion of the sample bag, to ensure it was preserved. Core samples were then placed in rice bags, sealed with a zip tie and delivered directly to Bureau Veritas Laboratories in Whitehorse which is independent and ISO9001:2015 certified.

For chemical analysis, samples were crushed and pulverized by the laboratory to get 250g of representative material below 75µm (PRP70-250). Sieved fractions were then analyzed for 35 elements by inductively coupled plasma emission spectrometry (ICP-MS) after an aqua regia digestion (AQ250), after an aqua regia digestion (AQ374) for lead and zinc overlimits and after fire assay fusion (FA530) for silver overlimits. Extreme lead overlimits were digested after Pb Titration (GC817).

For QA/QC purposes, standards and duplicates were inserted at a rate of 1 for every 20 samples.

Table 10-4: Frequency of standards used in 2017 and 2019.

Year	Samples	Standards	Standards %
2010	102	4	3.92%
2017	170	8	4.71%
2019	130	6	4.62%

Table 10-5: Frequency of blanks used in 2017 and 2019.

Year	Samples	Blanks	Blanks %
2010	102	6	5.88%
2017	170	9	5.29%
2019	130	7	5.38%

In the author's opinion, the 2017 and 2019 core sampling procedures and security were adequately reliable for their purposes.

10.4 Core Resampling and Analysis in 2020

No drilling was conducted in 2020, but 42 core samples from 2005-2019 drilling campaigns were re-sampled as part of the data verification process for the new resource estimate. The 42 core samples are representative of high-grade mineralization at each of the domains (i.e. TM, S, M and KL vein systems) and were collected and inspected by co-author Graham Davidson, P. Geol.

High-grade intervals were carefully selected by inspecting the 3D model of the domains. The drill core was partially stored in a Quonset building on site or at a core storage area at The Rancheria Motel on the Alaska Highway. The required core sections were identified and then the remaining rock was halved with a diamond blade core saw and placed in a poly sample bag. Assay tickets were stapled to core boxes at the start of the selected intervals and a tag was placed in the poly bag prior to ceiling the bag with a zip tie. All samples were then placed in rice bags, sealed with zip ties and delivered to Bureau Veritas Laboratories in Whitehorse an independent and ISO9001:2015 certified laboratory.

For chemical analysis, samples were crushed and pulverized by the laboratory to get 250g of representative material below 75µm (PRP70-250). Sieved fractions were then analyzed for 35 elements by inductively coupled plasma emission spectrometry (ICP-MS) after an aqua regia digestion (AQ300) and a fire assay fusion (FA330).

A single standard and blank were inserted into this submission.

The results for the 42 samples are provided in the Certificate of Analysis WH120000361.3 which is included in Appendix A.

10.5 Rock Sampling and Analysis - 2019-2020

A total of 356 rock samples were collected and submitted for assay during the 2019 and 2020 programs. Prior to dispatch, the samples were sealed in poly bags and placed in rice bags for delivery directly to Bureau Veritas Laboratories in Whitehorse. For chemical analysis, samples were crushed and pulverized by the laboratory to get 250g of representative material below 75µm (PRP70-250). Sieved fractions were then analyzed for 35 elements by inductively coupled plasma emission spectrometry (ICP-MS) after an aqua regia digestion (AQ250), after an aqua regia digestion (AQ374) for lead and zinc over-limits and after fire assay fusion (FA530) for silver overlimits. Extreme lead over-limits were digested after Pb Titration (GC817).

No QA/QC samples were inserted into the rock sample submissions.

10.6 Soil Sampling and Analysis - 2019-2020

A total of 1,365 soil samples were collected and submitted for analysis during the 2019 and 2020 programs. Samples were sealed in kraft bags at the point of collection. Bagged samples were sealed in rice bags for delivery directly to Bureau Veritas Laboratories in Whitehorse.

For the chemical analysis, samples were dried, pulverized, and sieved to 80 mesh (SS80). Sieved fractions were then analyzed for 33 elements by inductively coupled plasma emission spectrometry (ICP-MS) after a aqua regia digestion (AQ300) and by fire assay fusion (FA330).

No QA/QC samples were inserted into the soil sample submissions however Bureau Veritas has a rigorous quality control process of pulp duplicates, standards and blanks (QA/QC) that in the QP’s opinion is adequate verification for the purpose of soil and rock sample analysis.

In the author’s opinion the sample preparation, quality control, security and analytical procedures are adequately reliable for their purposes.

11 Data Verification

A total of 42 core samples from 2005-2019 drill programs were re-sampled for data verification purposes of the new resource estimate. The samples were carefully selected to be representative of high-grade silver mineralization at each of the domains (i.e., the TM, S, M and KL vein systems within the Main Zone).

Samples were selected by identifying high-grade silver intercepts in the 3D domain model. Core samples are currently kept in a Quonset building on-site and at storage facility at The Rancheria Lodge located by the Alaska Highway. The selected 42 core samples were located and inspected by co-author Graham Davidson to visually confirm and describe the high-grade mineralization and were subsequently cut in half with a diamond saw and bagged for shipment to the Bureau Veritas Lab in Whitehorse for chemical analysis. The average sample length was 0.95 meters with an average sample weight of 0.91 kilograms.

For chemical analysis, samples were crushed, split and pulverized by the laboratory to get 250g of rock to 200 mesh. Sieved fractions were then analyzed for 35 elements by inductively coupled plasma emission spectrometry (ICP-MS) after a 1:1:1 aqua regia digestion (AQ250), for lead and zinc over-limits and after fire assay fusion (FA530) for silver over-limits. Extreme lead over-limits were digested after Pb Titration (GC817).

The QA/QC protocols for this re-sampling campaign included 1 standard and 1 blank. Comparison of the original assay with the 2020 re-assay is shown in Figures 11.1-11.3

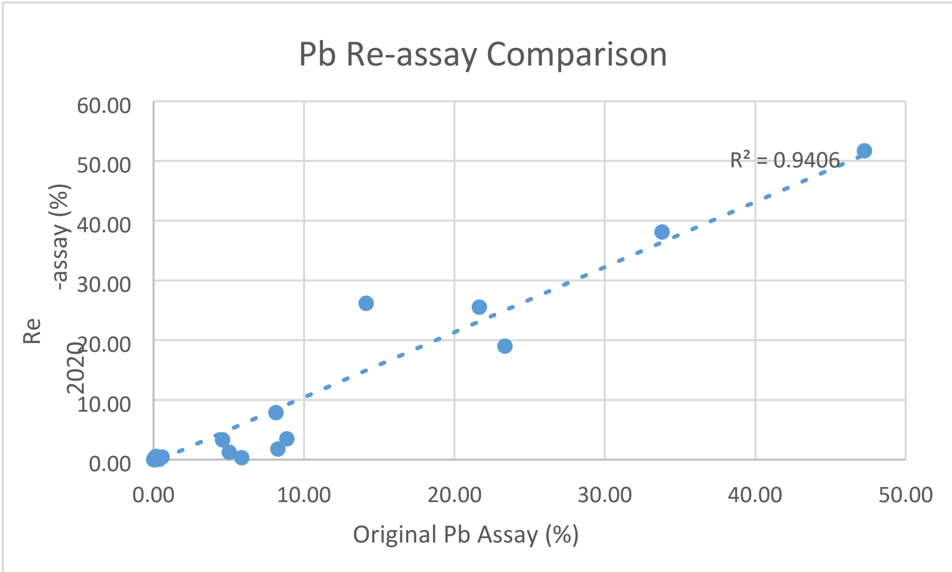

Figure 11.1: Comparison of original Pb assay vs. 2020 re-assay (%).

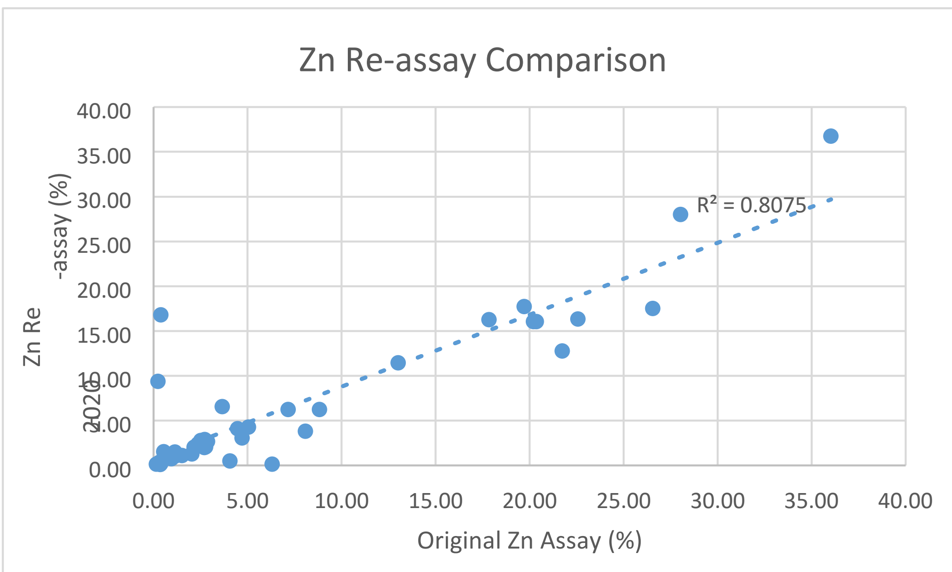

Figure 11.2: Comparison of original Zn assay vs. 2020 re-assay (%).

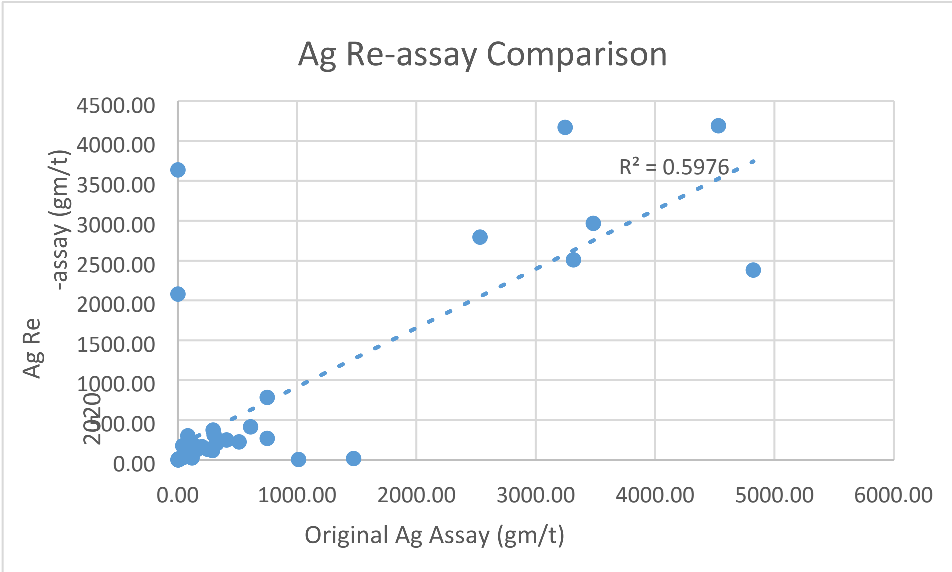

Figure 11.3: Comparison of original Ag assay vs 2020 re-assay (gm/t).

The authors have reviewed the Quality Control Report from Bureau Veritas Laboratories provided for the 42 core samples and agree that the data provided by laboratory is adequately reliable for the purposes of data verification. Certificates of Analysis and Quality Control Reports are provided in Appendices B and C.

Drill core storage for the 2005 to 2010 period needs to be reviewed with an updated inventory and restoration of core racks as it is currently stacked in several locations and in some cases the boxes are deteriorating in the weather.

The 30 collar locations of drill holes from the 2017 and 2019 programs were recorded using a Garmin handheld GPS and added to the master drill database totalling 114. A cursory review of collar locations from previous campaigns was undertaken in the field in 2017 with a Garmin handheld GPS and corresponded appropriately to previously recorded coordinates.

Rock and soil samples collected in 2019-2020 are not material to the resource calculation. Bureau Veritas has a rigorous quality control process of pulp duplicates, standards and blanks (QA/QC) that in the QP's opinion is adequate verification for the purpose of soil and rock sample analysis.

12 Mineral Resource Estimates

The mineral resource estimate (MRE) contained herein, was completed by co-author Antonio Celis, P. Geo of Motherlode Consulting Inc. The author is a qualified person as defined by NI 43-101 and is independent of CMC Metals Ltd. Modelling of the Silver Hart mineralized domains was completed using Leapfrog Geo software and the resource estimation was completed using Leapfrog's EDGE estimation module. In addition, the MRE was conducted with the support and peer review of experienced resource geologist, Mike O'Brien of Red Pennant Geoscience, also a qualified person as defined by NI 43-101 and independent of CMC Metals Ltd.

The new MRE and modelling of mineralized domains incorporated a total of 114 diamond drill holes totalling 6,829.8 meters completed from 2005 to 2019, where the average depth was 60 meters. The new MRE incorporated an additional 51 holes totalling 2,713.1 meters over the previous estimate that were drilled between 2010 and 2019 by CMC Metals Ltd. Data from diamond drill holes completed between 1985 and 1987 by Silver Hart Mines Ltd. was not incorporated into the model given the unavailability of assay certificates for these holes and un-surveyed locations of the collars. Domains representing each mineralized zone (i.e., TM, S, M and KL vein systems) were modelled based on 1.2 meter composites and using a cut-off grade of ≥ 90 g/t Ag. Silver (Ag), lead (Pb), and zinc (Zn) grades were separately estimated and reported for each zone. Silver equivalent (AgEq) grade was calculated from estimated Ag, Pb and Zn grades, metal recoveries and 36-month average prices for these metals.

Relevant assumptions, parameters and methods used to calculate the mineral resource estimates are contained herein are discussed below.

12.1 Collar Locations

Collar locations were surveyed by Longford Exploration Ltd. using a hand-held Global Positioning System (GPS) with a precision level of ± 3 to 10 meters from the true collar locations. Locations of pre-2005 collars were derived from available historical plan maps. To improve the consistency of elevations of the collars, the collars were matched to a drone-generated digital elevation model (DEM). More information of collar location protocols is outlined in the section entitled "Item 11: Data Verification".

12.2 Data Selection

The resource estimate and the modelling of mineralized domains incorporated data from 114 diamond drill holes totalling 6,829.8 meters completed from 2005 to 2019 and with an average depth of 60 meters. Data from diamond drill holes completed between 1985 and 1986 by Silver Hart Mines Ltd. was not incorporated into the MRE given the unavailability of assay certificates and uncertainties in the exact collar locations for these holes. Surface channel samples were also not included in the MRE given uncertainties in their exact location.

12.3 Methodology

A summary of the parameters and methodology used in the MRE is presented in Table 12.1 below. Further explanation of each parameter used is described after the table.

Table 12-1: Summary of the parameters and methodology used in the MRE.

Estimation Parameters	Parameters Used
Total samples used:	1,698
Composites length:	1.2 m
Domains cut-off grade:	> 90 g/t Ag
Estimation Method:	Ordinary Kriging (OK)
Search Definition Parameters:	minimum samples:4 and maximum: 20. The maximum number of samples per drillhole: 2
Outlier Treatment (capping):	TM vein: 1500 g/t Ag; 8% Pb; 17% Zn
	S vein: 800 g/t Ag; 7% Pb; 9% Zn
	M vein: 900 g/t Ag; 9% Pb; 8.5% Zn
	KL vein: 800 g/t Ag; 5.5% Pb; 11% Zn
Density:	2.9 g/cm^3
Block Model Dimensions:	5(m) x 5(m) x variable height (1.25 – 5m)

12.4 Exploratory Data Analysis

Exploratory data analysis (EDA) consists of understanding the statistical and spatial behaviour of the variables on which the estimate depends, detect possible errors and outliers, and recognize any information that is useful for validating the mineral resource estimate. Traditional univariate and bivariate statistical tools such as frequency histograms and cumulative probability plots were used to perform EDA over the given data set consisting of 1689 core intervals with an average length of 1.05 meters. The following Figures 12.1 to 12.3 represent EDA consisting of frequency histograms and cumulative probability plots for Ag, Pb and Zn grades distributed in log normal distribution for a better visualization of the data. Analogue figures spatially filtered by the TM, S, M and KL vein systems are included in Appendix B.

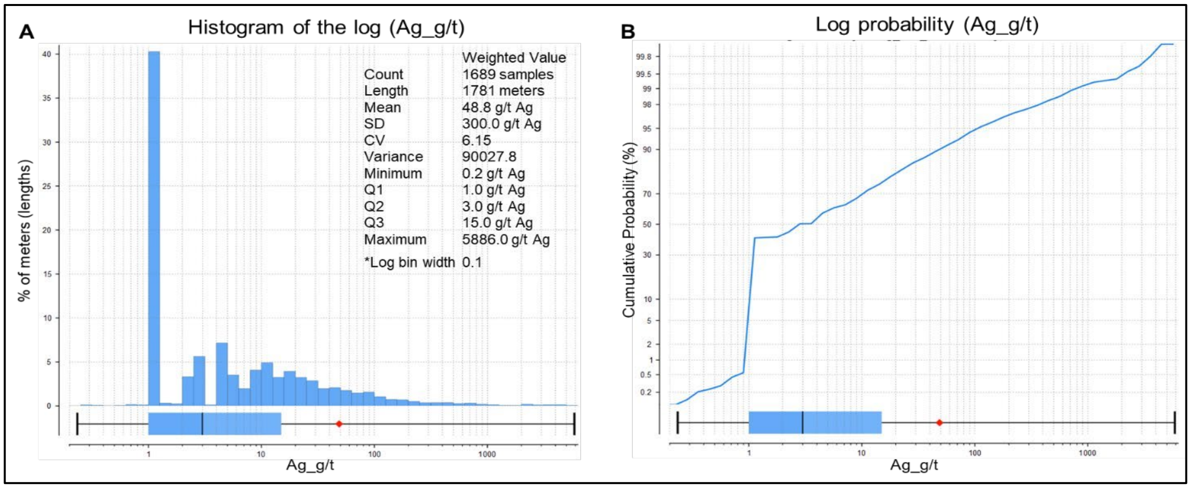

Figure 12.1: Exploratory Data Analysis for Silver Grade. A) Frequency Histogram of the log; B) Cumulative Probability Plot log-log weighted.

Figure 12.1 represents a frequency histogram of the log normal distribution of silver, where the long tail confirms that the silver distribution is positively skewed. The histogram also reveals that 40.3% of the population has silver grades ranging from 1 to 1.26 g/t Ag, which also confirmed by the steep slope in the log-log weighted cumulative probability plot of silver (Figure 12.1), also displayed in log normal distribution. Sections with shallow/flat slopes located at the top (i.e., 4798 – 5888 g/t Ag) or bottom (i.e., 0.2 – 0.3 g/t Ag) of the plot are an indication of possible outliers.

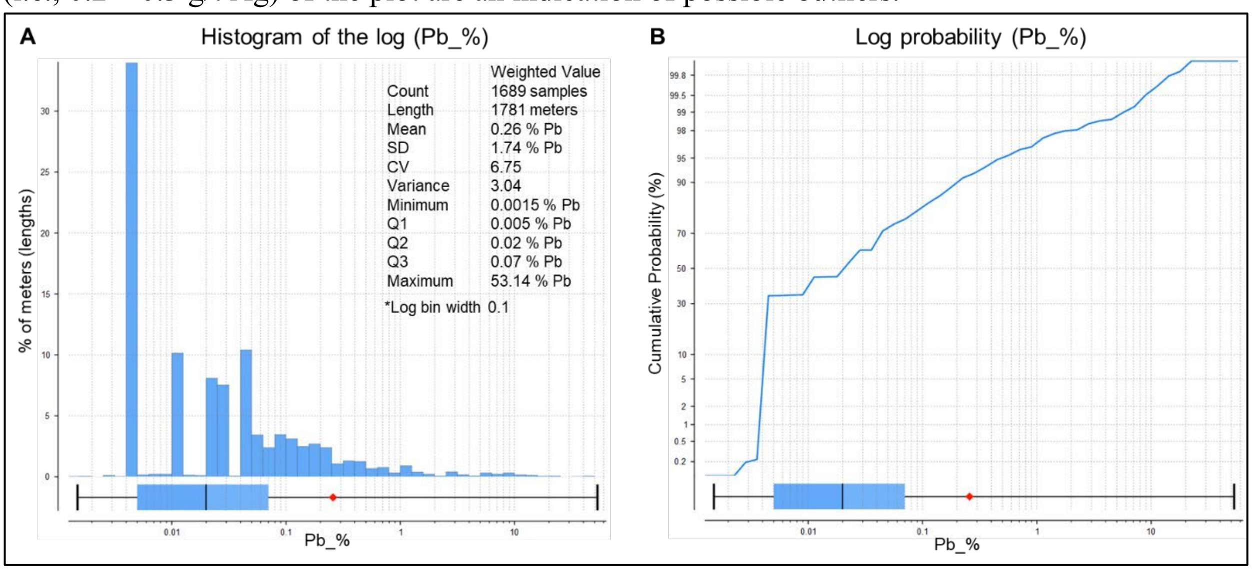

Figure 12.2: Exploratory Data Analysis for Lead Grade. A) Frequency Histogram of the log; B) Cumulative Probability Plot log-log weighted.

Figure 12.2 represents a frequency histogram of the log normal distribution of lead, where the long tail confirms that the lead distribution is also positively skewed. The histogram also reveals that 34% of the population has lead grades ranging from 0.004 to 0.005 % Pb, which is also confirmed by the steep slope in the log-log weighted cumulative probability plot of lead (Figure 12.2), also displayed in log normal distribution. Sections with shallow/flat slopes located at the top (i.e., 23.4 – 53.7% Pb) or bottom (i.e., 0.001 – 0.003 % Pb) of the plot are an indication of possible outliers.

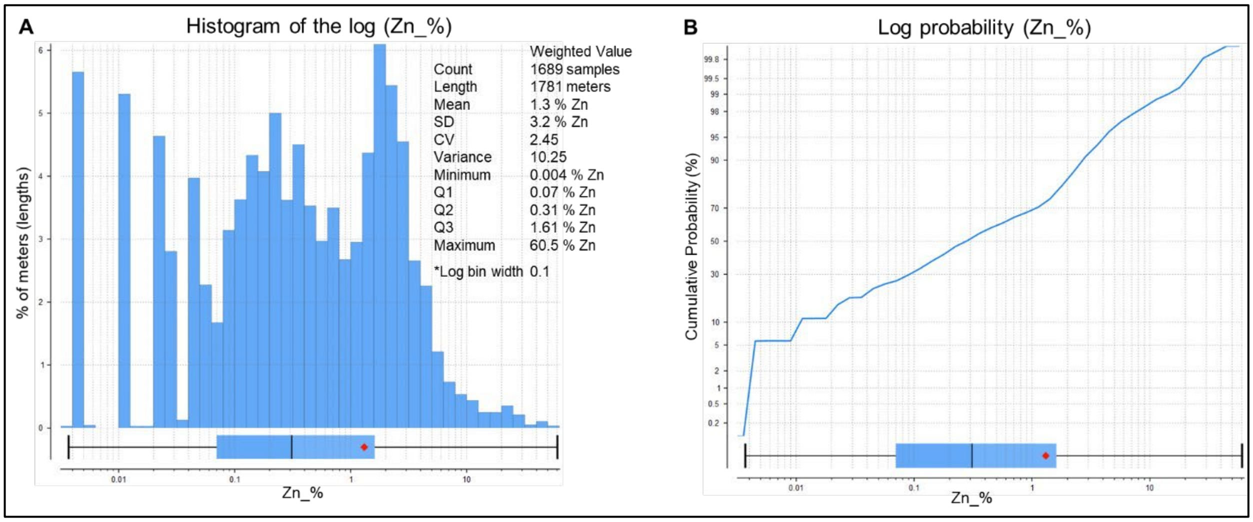

Figure 12.1: Exploratory Data Analysis for Zinc Grade. A) Frequency Histogram of the log; B) Cumulative Probability Plot log-log weighted.

Figure 12.3 represents a frequency histogram of the log normal distribution of zinc, which has a more uniform distribution compare to silver and lead as seen by a shorter tail of positively skewed values and by smaller sections of steep slopes in the log-log weighted cumulative probability plot (Figure 12.3). Sections with shallow/flat slopes located at the top (i.e., 38.9 – 60.5 % Zn) and bottom (i.e., 0.003 - 0.005 % Zn) of the plot are an indication of possible outliers.

12.5 Compositing

Imposing a standard composite length reduces the risk of biasing estimation towards high or low grades that might be restricted to short or long samples. Given a high variability in the sample lengths, varying from 0.03 to 5.45 m, a standard compositing length of 1.2 m was chosen based on statistics of sample lengths (Figure 12.4).

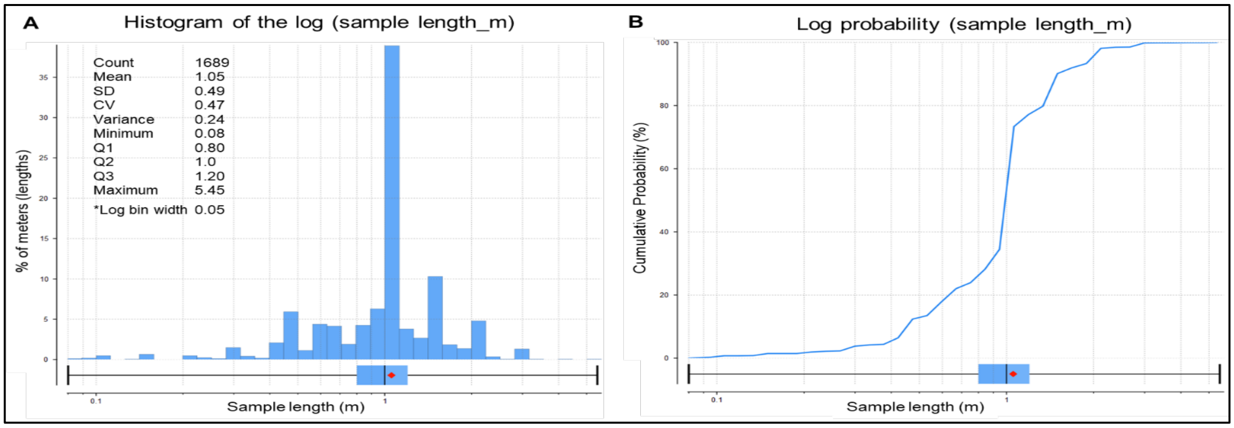

Figure 12.2: Distribution of Interval Lengths at Silver Hart. A) Frequency Histogram of log; B) Cumulative Probability Plot log-log weighted

The above frequency histogram (Figure 12.4) confirms that 38.9% of the population has sample lengths ranging from 1 to 1.12 meters, which is also reflected by the steep section in the log-log weighted cumulative probability plot of sample lengths (Figure 12.4). While the average length of samples is 1.05 meters, a length of 1.2 meters corresponding to the 75th percentile (i.e., Q3) of the population is considered better suited given that using the average length might introduce local high grade 'pods' that may not be realisable from a mining perspective. The previous resource estimate performed by Dahrouge Consulting (2010) used a standard compositing length of 1.22 meters.

12.6 Outlier Treatment (Capping)

Outlier treatment techniques reduce the risk of overestimation of the resource due to isolated and unrepresentative high-grade samples that unduly elevate local grade estimates. The previous resource estimate performed by Dahrouge Consulting in 2010 did not apply outlier treatment techniques. In 2020, grade capping was applied to treat Ag, Pb and Zn outliers in each of the mineralized domains. Capping was applied after compositing. Outliers that exceeded the capped grade were assigned with the relevant capped grade value. Figures 12.5 below shows the capping applied for silver grade at the TM, S, M and KL vein systems based on frequency histograms. Additional capping for lead and zinc grades can be found in Appendix B. Also, a summary of capping grades can be found in Table 12.1.

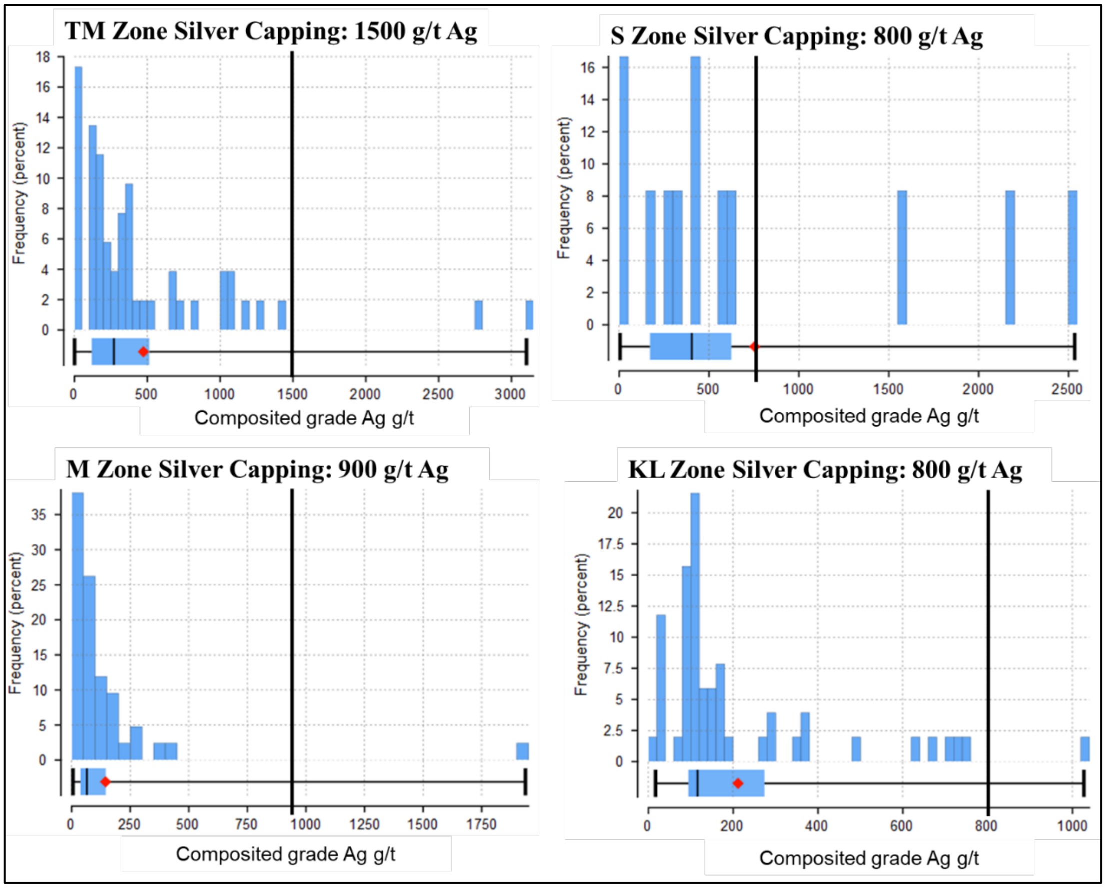

Figure 12.3: Silver grade capping

12.7 Domain Modelling

Domain modelling of the TM, KL, M and S vein systems was completed using Leapfrog Geo software and based on a classification of the 1.2 meter assay composites into categories of "ore" and "waste", also known as economic compositing. The resulting classification is ore and waste composites of various lengths, where only ore composites were selected for building the domains. The classification of ore composites was done using a cut-off grade of ≥ 90 g/t Ag, where high-grade composites were capped at 2000 g/t Ag. A minimum thickness for each domain was set to the shortest composite at each domain, being 1.2 meters the smallest interval length and a minimum of two adjacent ore composites were required to build continuity of the domains. Samples from pre-2005 drillholes were only used as a guidance for modelling the domains. The Figure 12.6 below shows the resulting domains for each mineralized zone and used for the present MRE.

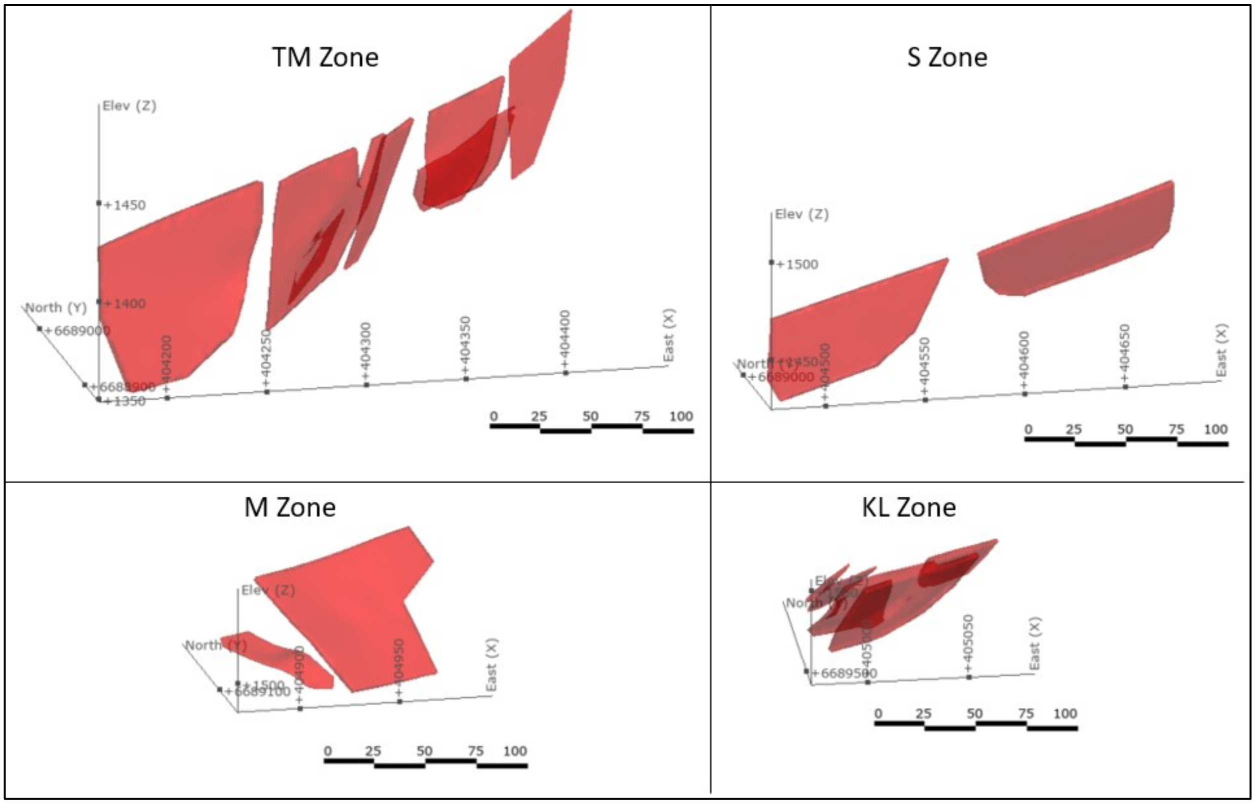

Figure 12.6: Domain Models for the TM, S, M and KL Zones at Silver Hart.

12.8 Estimation Method

Resource estimation and variography was conducted in Leapfrog's EDGE estimation module over the above-described domains and using a total of 1,698 samples from holes drilled between 2005 and 2019. Hard boundaries were established for each domain and no samples outside the relevant domains were considered for estimation. Ordinary Kriging (OK) was the main method used to calculate the estimate, but Inverse Distance Weighting power 2 (IDW2) and Nearest Neighbor (NN) methods were chosen for validation of the final estimate. For OK, a block discretization of 4x4x4 was chosen. Block discretization sets the number of discretization points in the X, Y and Z directions for each block in the block model and provides a means of emulating the 3D block geometry rather than estimating to a point at the center of the block.

12.9 Search Parameters and Ellipsoid Orientation

Search ellipsoid orientations were set to the average orientation of each Zone. Search definition parameters (i.e. number of samples required or used within the search neighborhood) were set to a minimum of 4 and maximum of 20. The maximum number of samples per drillhole, also known as the drillhole limit, was set to 2 samples. The drillhole limit constrains how many samples from the same drillhole will be used in the estimate before limiting the search to the closest samples in the drillhole and looking for samples from other drillholes. Figure 14.7 shows a summary of the ellipsoid orientations and associated search parameters.

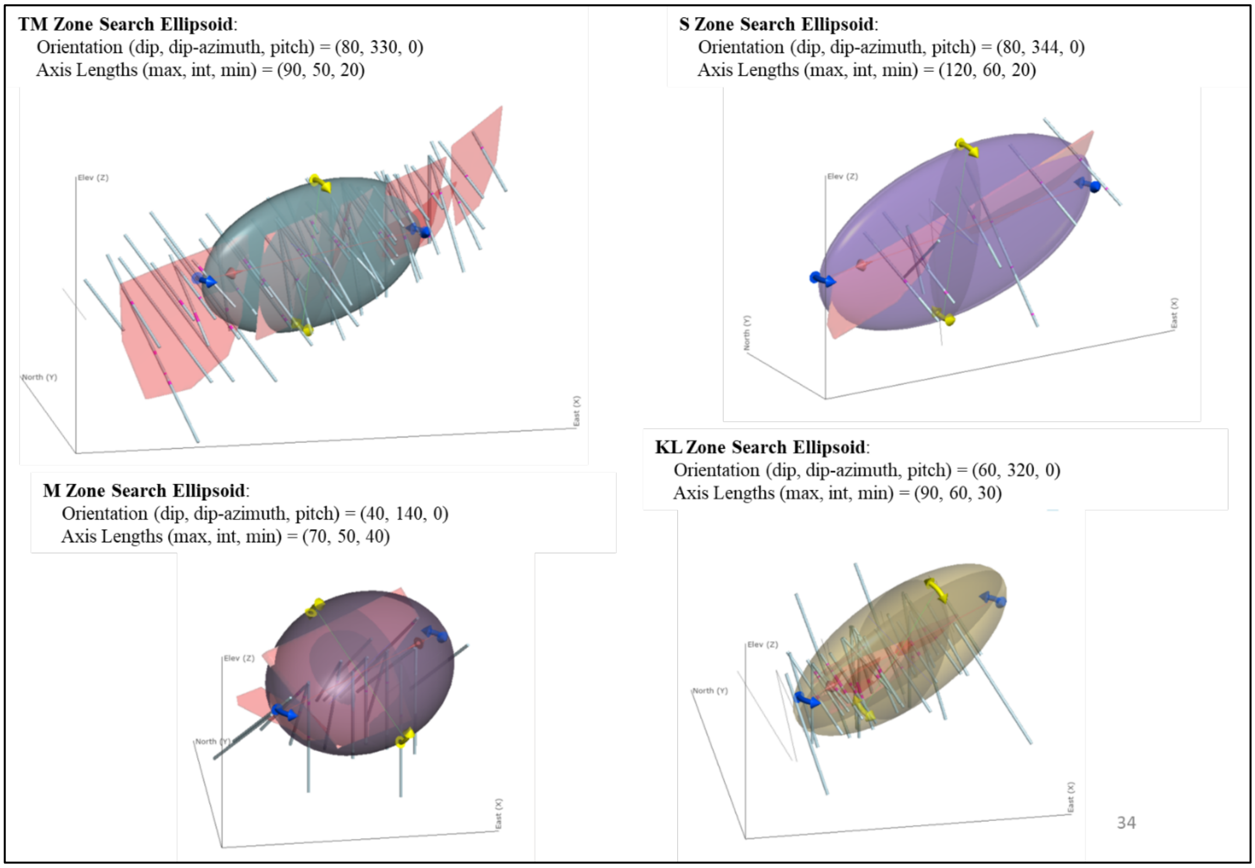

Figure 12.7: Search Ellipsoid Parameters used for the TM, S, M and KL Zones at Silver Hart.

12.10 Variography

Experimental variogram models were generated for Ag, Pb and Zn grades at each of the domains and following the search ellipsoid orientations and parameters above described. The variogram models allowed appropriate sample weight to be applied to the relevant composite grades to produce the best possible linear unbiased estimate for the target block. Normal Scores Transformed variography was used to fit the variogram models since raw silver grades have highly positively skewed distributions resulting in poorly structured experimental variograms for sparse data sets. The normal scores transformed variography was not used in the final estimate since transforming the data is solely for the purpose of fitting the variogram model. The final variogram models were back-transformed before Kriging the raw data. Figures 14.8 to 14.11 show the variogram models used to estimate silver grades at the TM, S, M and KL vein systems. Additional variography for lead and zinc grades can be found in Appendix B.

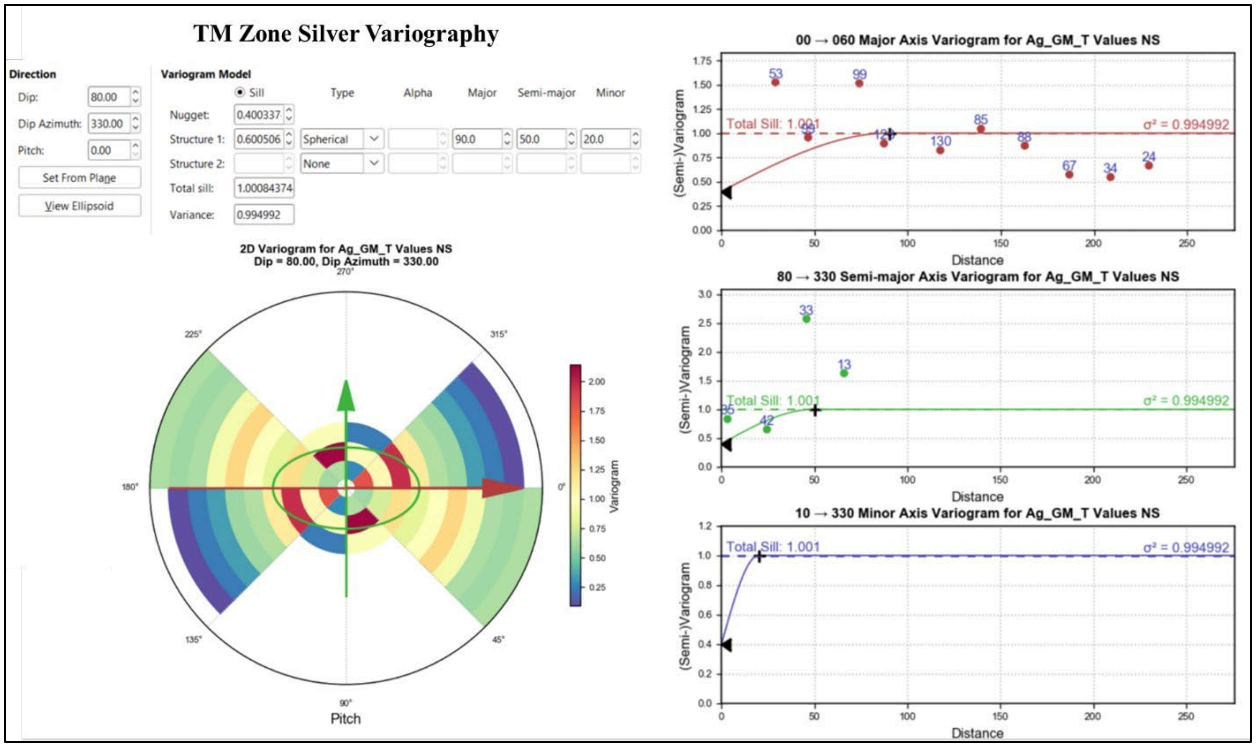

Figure 12.4: Silver Variography of the TM Zone.

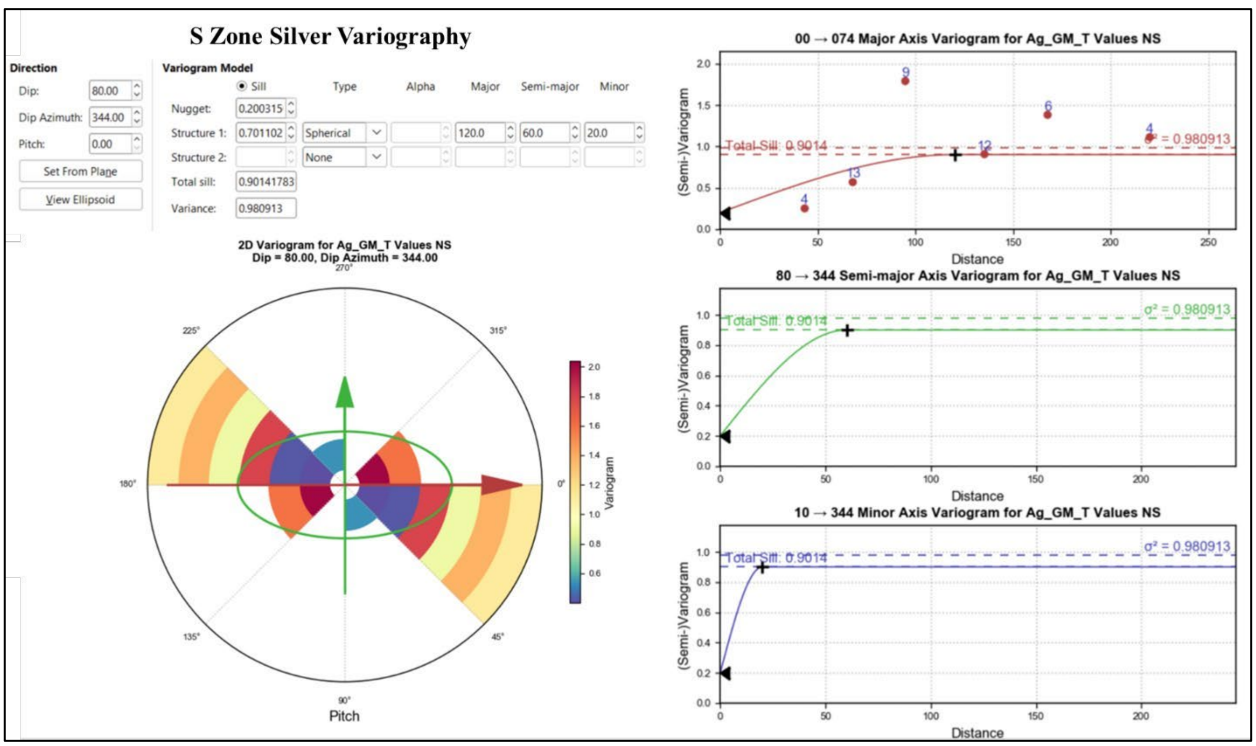

Figure 12.5: Silver Variography of the S Zone

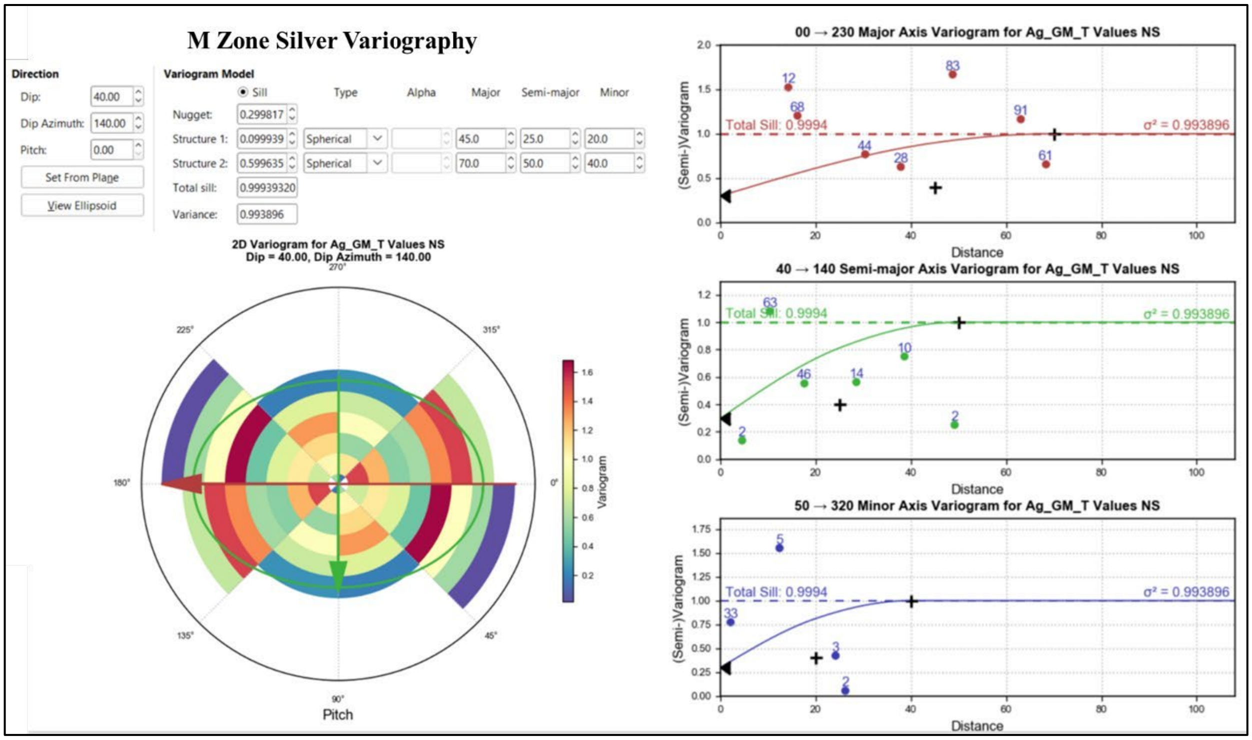

Figure 12.6: Silver Variography of the M Zone.

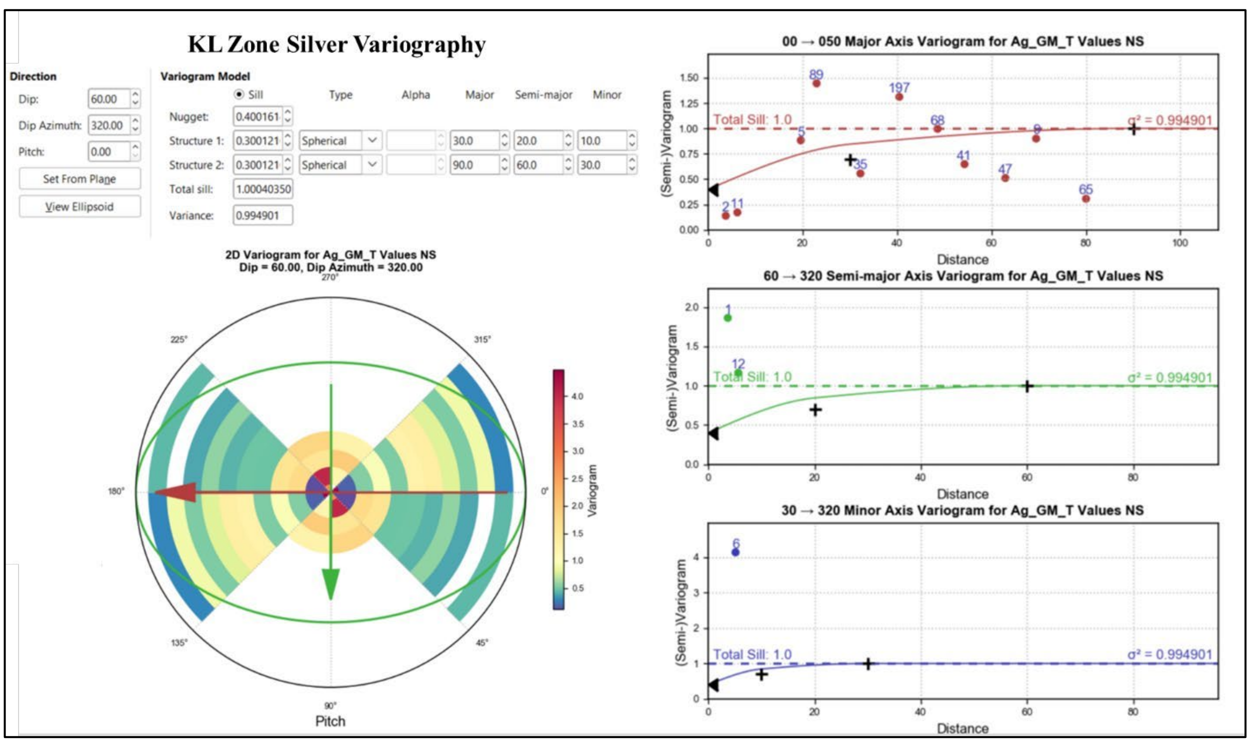

Figure 12.7: Silver Variography of the KL Zone

12.11 Bulk Density Measurements

The previous resource estimate conducted by Dahrouge Consulting in 2010 did not include localized bulk density measurements and used a density of 2.9 g/cm^3 throughout based on historical estimates at the Silver Hart Property. In 2020, Longford Exploration selected 42 samples representing high-grade silver mineralization to validate (re-assay) Ag, Zn and Pb grades at each of the domains as well as for bulk density determination. Bureau Veritas conducted density measurements with air pycnometer over the pulps of the 42 re-assayed samples. Results of the average density at each of the domains are summarized below in Table 12.2.

Table 12-2: Summary of Bulk Densities measured in 2020.

Avg. Density g/cm^3	Vein System	Survey
3.19	TM	Longford, 2020
3.58	S	Longford, 2020
3.29	M	Longford, 2020
3.27	KL	Longford, 2020
3.33	All	Longford, 2020

These pulp-based pycnometer bulk density measurements represent only the high-grade material of each domain, are likely to be biased high, as unlike core-based determinations, they do not represent the texture of the rock and included voids. They also represent only 2.5% of the overall dataset totalling 1,698 samples. Based on these shortcomings, the QP decided to retain the historical average density of 2.9 g/cm^3 for the 2020 mineral resource estimations.

12.12 Block Model

Block model grids with parent blocks of 10 meters x 10 meters x 10 meters were set for each of the domains. Parent blocks were subdivided in sub-blocks of 5 meters x 5 meters x variable height (minimum height of 1.25 meters) to improve the anticipated mine selectivity and better capture the geometry of the domains. Sub-blocks were rotated and tilted following the geometry of each of the domains (Table 12.3).

Table 12-3: Sub-block model orientations.

Domain	Azimut	Dip
TM vein	330°	-80°
S vein	344°	-80°
M vein	140°	-40°
KL vein	320°	-65°

Estimator parameters were evaluated in the parent blocks to allow a better reproducibility of the estimates. The following Figure 12.12A-D represent the sub-block models for Ag, Pb, Zn and AgEq grades at the TM vein system. Figures of block models for the remaining zones can be found in Appendix B.

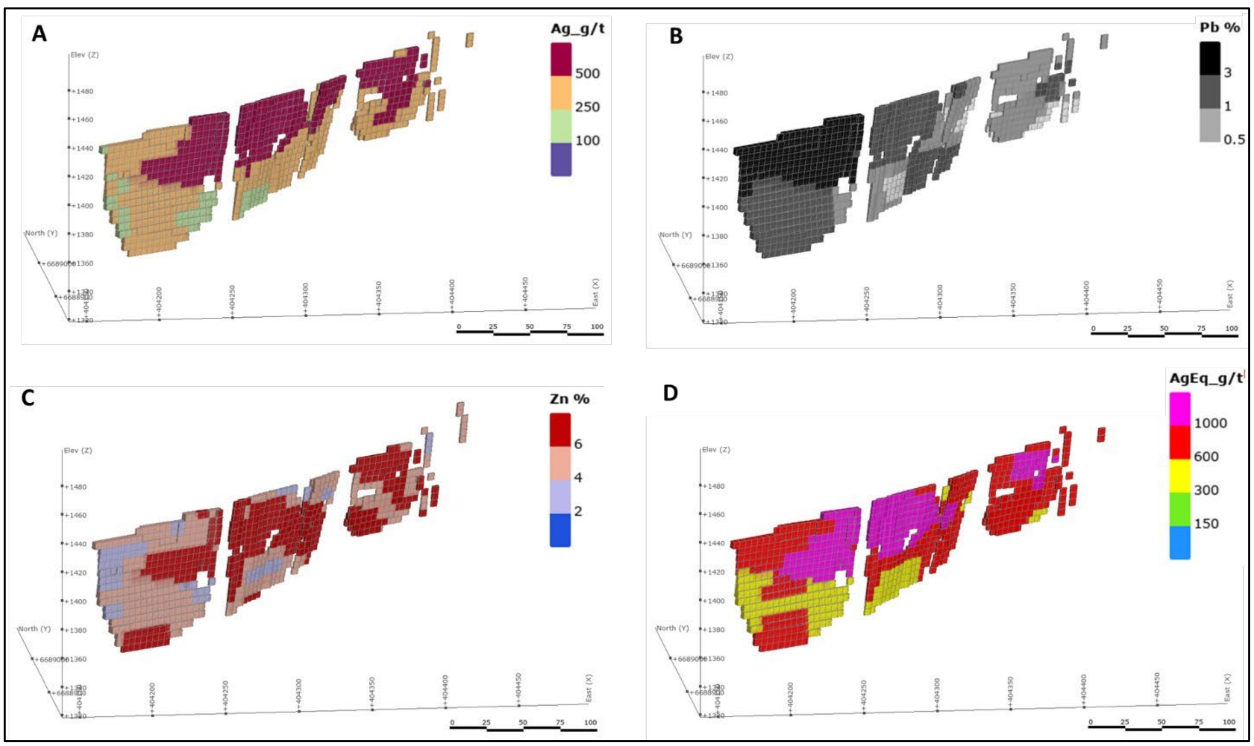

Figure 12.8: Sub-block models for the TM vein system. A. Sub-block model for Ag grade. B. Sub-block model for Pb grade. C. Sub-block model for Zn grade. D. Sub-block model for AgEq grade.

12.13 Estimation Validation

Swath plots were used to compare the effects OK, IDW2 and NN estimation methods over the Ag, Pb and Zn estimates at each of the domains. Swath plots allow to identify any bias towards underestimation or over-estimation or any unexpected smoothing in the final estimate. While a swath is a sectional slice through the block model with a specified swath size thickness, a swath plot is a one-dimensional chart in a specific direction of interest, X, Y or Z. The swath plot shows the average grade for the blocks in the swath, along with the averaged sample values in the swath. Figures 12.13A-D represents swath plots for silver grade at the TM, S, M and KL Zones along the Y direction and with a swath size thickness of 1 m.

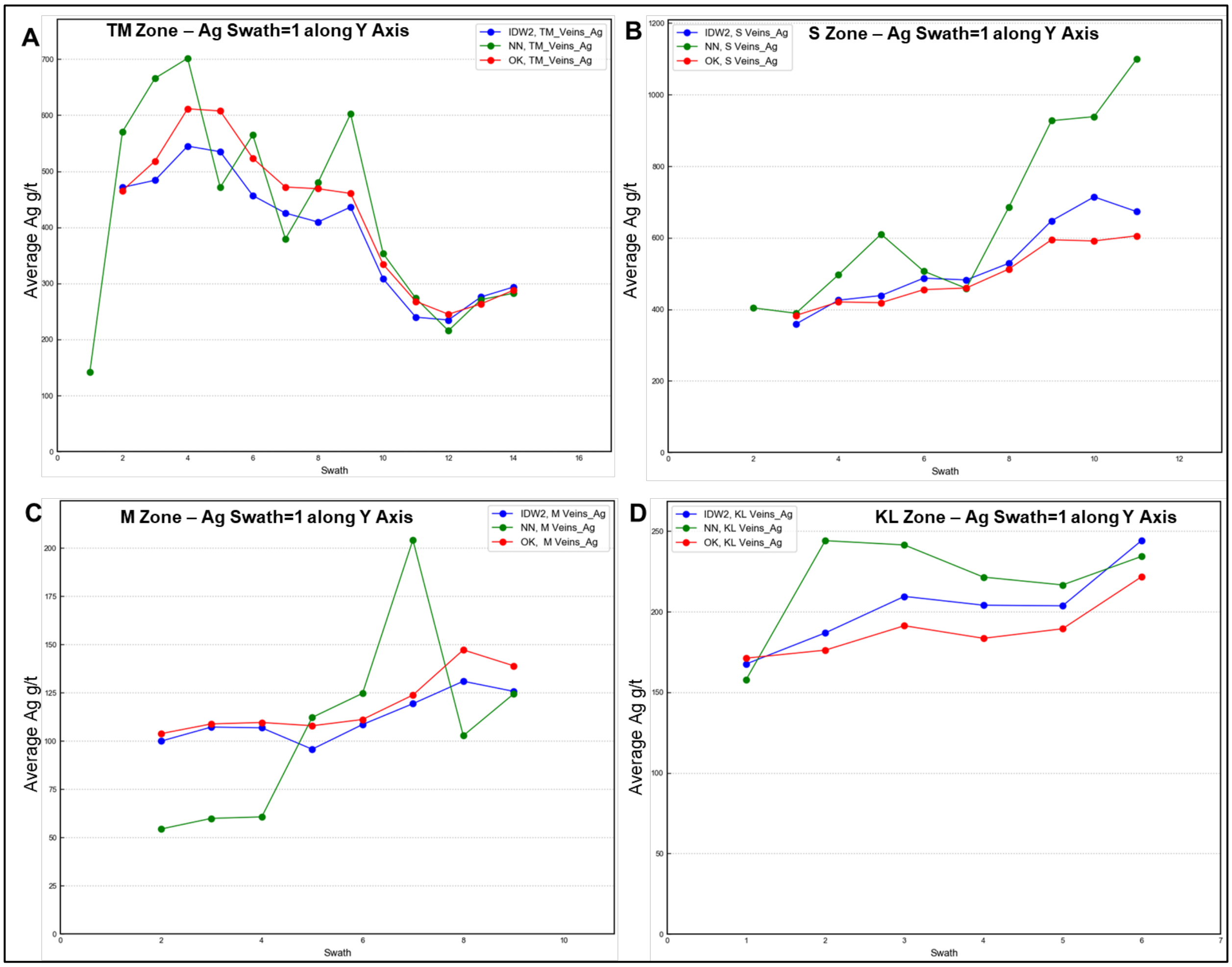

Figure 12.13: Silver Swath Plots along the Y axis of A); TM vein system block model; B) S vein system block model; C) M vein system block model; D) KL vein system block model.

As expected, given their similar mathematical principles, OK and IDW2 estimation methods show similar patterns and correlate well. NN estimates, which are point grade assignments and do not have change of support characteristics appropriate to blocks, show abrupt grade changes that are likely due to locally over- or under-estimate silver grades reflecting high variability. OK estimates of silver grade are marginally higher at the TM and M Zones, while OK estimates at the S and KL vein systems are marginally lower. Figure 12.14 represents the same swath plots but along the X axis and with a swath size thickness of 2 meter. Additional swath plots for lead and zinc grades are included in Appendix B.

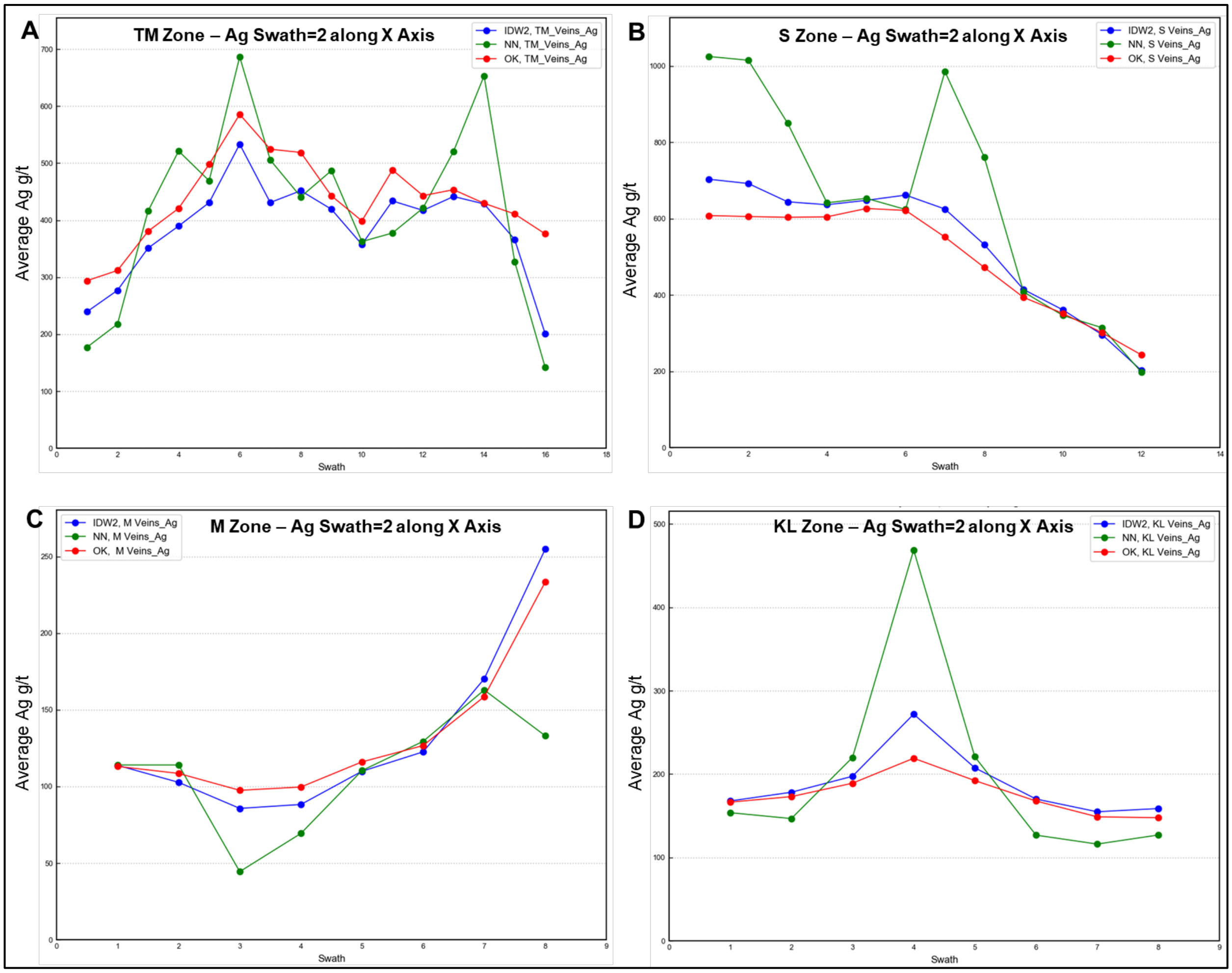

Figure 12.14: Silver Swath Plots along the X axis of A) TM vein ssytem block model; B) S vein sysem block model; C) M vein system block model; D) KL system block model.

Swath plots along the X axis also show a tight correlation of OK and IDW2 estimators, with OK also slightly overestimating silver grade relative to IDW2 at the TM and M Zones and underestimating relative to IDW2 at the S and KL Zones. The NN pattern also tends to sharply spike reflecting high local variability due to the lack of block support.

12.13.1Block Model Comparison with Data

In addition to swath plots, estimation validation was also visually checked by comparing the composited drillhole data against the block models. Figure 12.15 shows silver data plotted against the block models for the TM, S, M and KL vein systems. Areas were high-grade intercepts are surrounded by block models of a lower grade means that there is limited sample support to meet the search definition parameters (see Table 12-1) and allow to trigger high-grade blocks. Block model comparisons against lead and zinc data are provided in Appendix B.

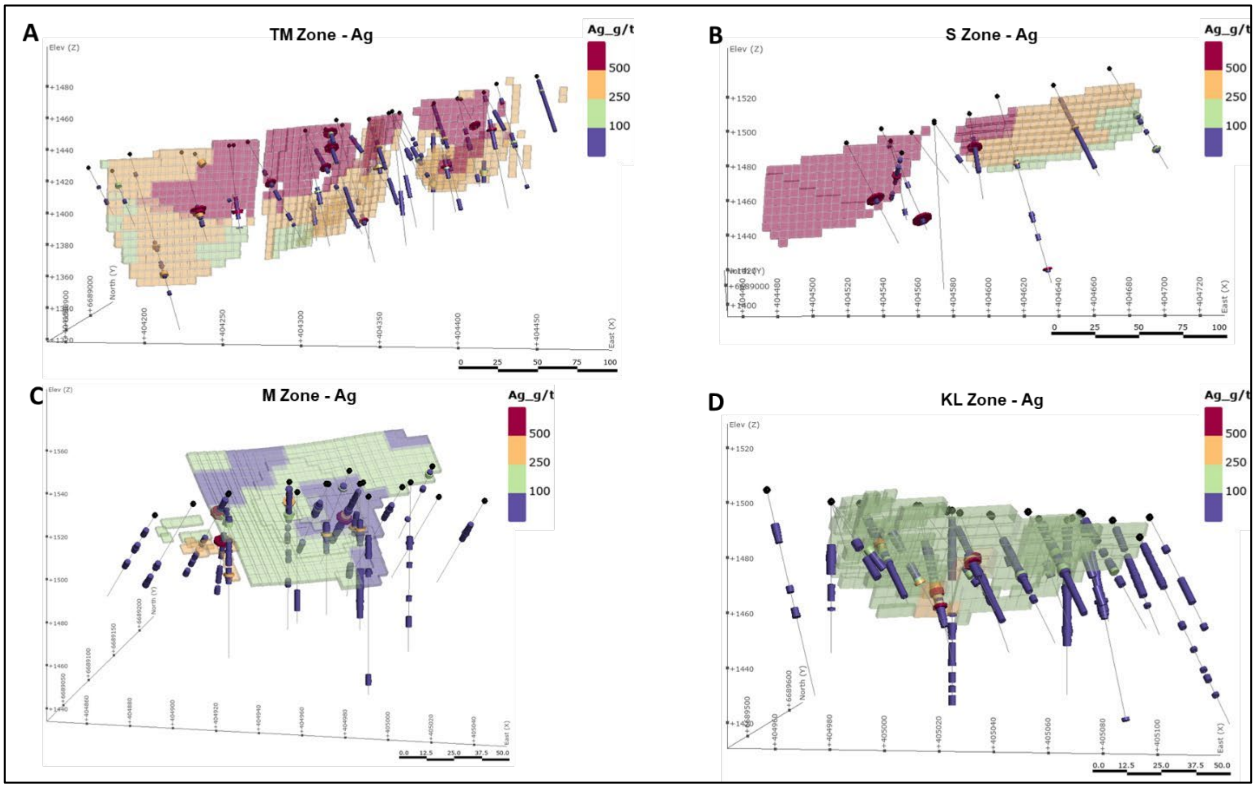

Figure 12.15: Block Model comparison against Silver Data. A) TM vein ssytem block model; B) S vein system block model; C) M vein system block model; D) KL vein system block model.

12.14 Cut-Off Grade

Cut-off grade is the minimum grade required in order for a mineral or metal to be economically mined (or processed). Material found to be above this grade is considered to be ore, while material below this grade is considered to be waste. Selection of adequate cut-off grade for the Silver Hart deposit was chose based on the average cut-off grade of 9 active silver mines (Table 12.4), where data was extracted from public filings of the companies operating such mines.

In addition, grade-tonnage curves were generated for silver equivalent (AgEq) at each of the domains Figure 14.16A-D since they are considered to be a useful tool to visualize the impact that various cut-off grades have on the mineral resource.

Table 12-4: Compilation of Cut-off Grades of Silver Mines.

Company	Mine	Zone	Cut-off AgEq (g/t)
Endeavour Silver	Guanecevi	*- El Curson* *- North Porvenir* *- Santa Cruz*	340 218 182
	Bolantis	*- Lucero* *- La Luzo* *- San Miguel*	166 206 168
	El Cubo	*- Area II* *- Areas I and IV*	196 238
	Terronea		165
	La Luz		222
Silver One	La Frazada		60
SilverCorp Metals	Ying	*- SGX* *- HPG -* *LME -* *LMW* *-TZP*	140 125 125 130 120
Fortuna Silver	San Jose		138
Americas Silver	Nuestra Señora		90
Average Cut-Off			**151.5**

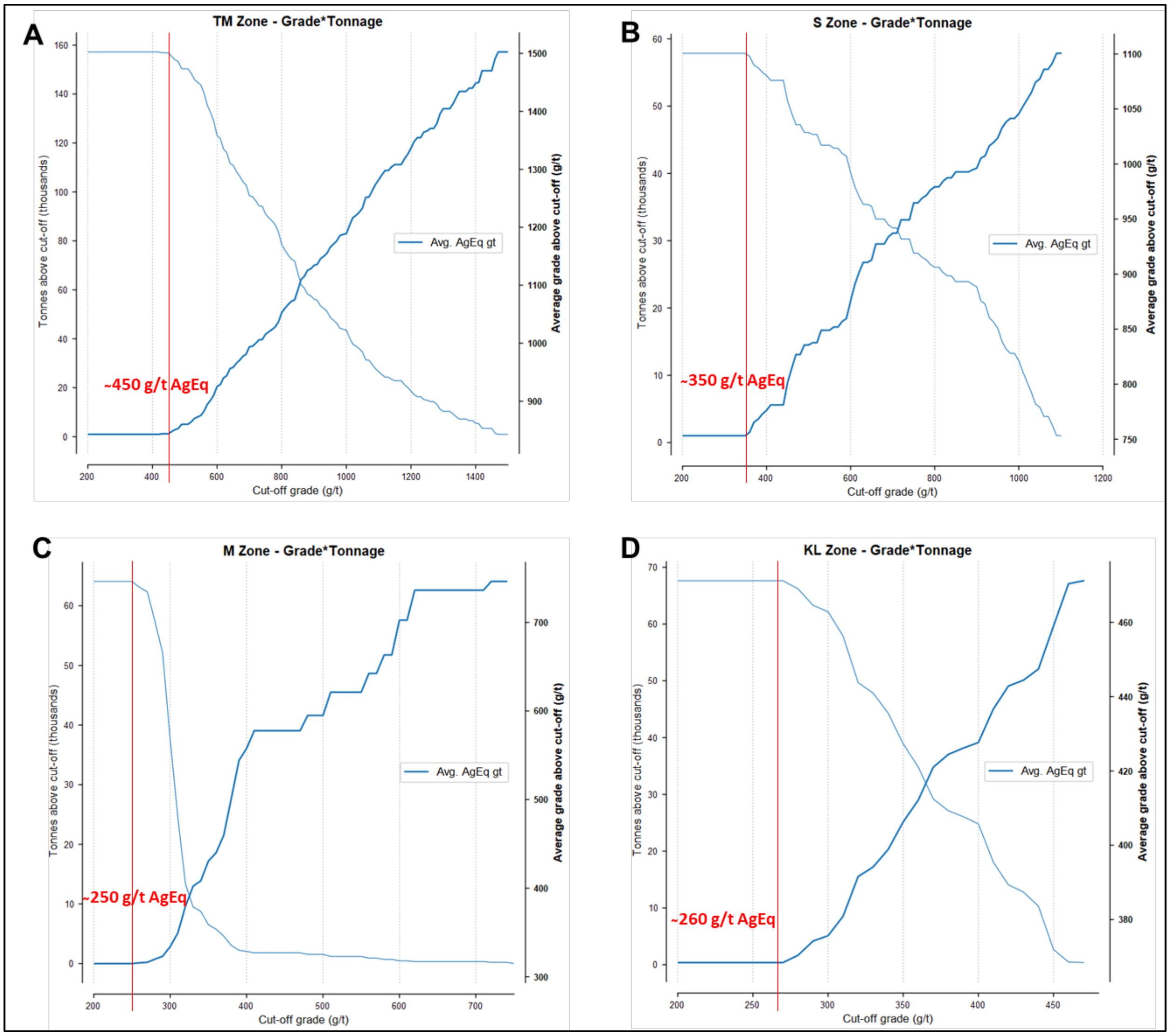

Figure 12.16: Grade-tonnage curves for silver equivalent (AgEq). A) TM vein system grade-tonnage curves; B) S vein system grade-tonnage curves; C) M vein system grade-tonnage curves; D) KL vein system grade-tonnage curves.

The figure above shows that 450 g/t, 350 g/t, 250 g/t and 260 g/t are the highest applicable AgEq cut-off grades for the TM, S, M and KL vein systems respectively before the tonnage drops substantially.

12.15 Resource Classification

In accordance with the CIM Definition Standards - For Mineral Resources and Mineral Reserves (adopted May 10, 2014) and CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines Prepared by the CIM Mineral Resource and Mineral Reserve Committee Adopted by the CIM Council on November 29, 2019:

"*An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.*

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed pre- feasibility or feasibility studies, or in the life of mine plans and cash flow models of developed mines."

The resource estimate contained in this report is classified as an Inferred Mineral Resource, partly due to the following:

- Low precision level of collar locations
- Wide spacing of drill holes throughout most of the domains
- Lack of sufficient drilling to characterize mineralized domains
- Lack of adequate bulk density measurements

12.16 Resource Statement

Based on the most reliable historic exploration carried at the Silver Hart project, and the recent exploration carried by CMC Metals Ltd. (2005 to 2020), the new Inferred MRE prepared for the TM, S, M and KL vein systems totals 7.5 Moz @ 570 g/t silver equivalent (AgEq), in 346,800 tonnes utilizing a cut-off grade of 150 g/t AgEq. The new MRE incorporated an additional 51 holes totalling 2,713.1 meters that were drilled by CMC Metals Ltd. between 2010 and 2019. The Table 12.5 below provides a summary of the MRE:

Table 12-5: Summary of the CIM-Compliant Mineral Resource Estimate of the Silver Hart Project.

Domains	Tonnage	*Average Grade*				*Contained Metal*			
	t	**AgEq** g/t	**Ag** g/t	**Pb** %	**Zn** %	**AgEq** t. oz	**Ag** t. oz	**Pb** lb	**Zn** lb
TM Veins	157,199	843	438	2.3	6.1	4,260,080	2,212,384	8,004,967	21,109,320
S Veins	57,844	753	467	2.5	3.7	1,400,908	867,593	3,126,138	4,684,088
M Veins	64,078	315	114	1.4	2.8	648,709	234,844	1,939,203	4,015,360

KL Veins	67,623	368	186	0.5	3.2	801,010	403,473	700,974	4,764,855
Total Inferred Resources	**346,800**	**570**	**301**	**1.7**	**4.0**	**7,501,300**	**3,942,900**	**14,572,100**	**34,573,700**

NOTES:

- *CIM Definition standards (2014) were used for reporting the Mineral Resources.*
- *Mineral resource estimate prepared by Motherlode Consulting.*
- *Inferred mineral resources are considered too speculative geologically to have economic consideration applied to them that would enable them to be categorized as mineral reserves. There is also no certainty that these inferred mineral resources will be converted to the measured and indicated categories through further drilling, or into mineral reserves, once economic considerations are applied.*
- *A base cut-off of 150 g/t AgEq was assumed to meet the NI43-101 requirement for mineral resource estimates to demonstrate "reasonable prospects for eventual economic extraction". Only blocks 2 meters below surface were considered as being likely to be accessed and exploited.*
- *Silver-equivalent (AgEq) ounces were calculated using the formula:*

$$AgEq = \frac{(Est.\ Ag\ ppm) * (90\%\ recovery) * (Ag\ \$/g) + (Est. Zn\ ppm) * (97\%\ recovery) * (Zn\ \$/g) + (Est. Pb\ ppm) * (97\%\ recovery) * (Pb\$/g)}{(Ag\ \$/g) * (90\%\ recovery)}$$

Where Est.= estimated metal grade at block centroids using Ordinary Kriging.

- *Silver equivalent calculation used a 36-month average daily metal prices of Silver - $17.14/oz, Zinc - $1.19/lb, and Lead - $0.93/lb (in US Dollars, extracted from S&P Market Intelligence).*
- *Silver equivalent ounces were based on recovery rates of 90% for silver, and 97% for lead and zinc.*
- *Specific gravity of 2.9 g/cm^3 was used for the estimate of all metals as in previous resource estimates.*
- *Mineral resources are diluted to a minimum width of 1.2 meters.*
- *Effective date: December 2, 2020*
- *Totals may not sum due to rounding to the nearest hundred.*

13 Environmental Studies, Permitting and Social or Community Impact

13.1 Environmental Studies

Preliminary baseline studies required to support future permit applications have been completed by CMC. This includes fisheries investigations, wildlife monitoring and surveys, hydrological and water quality testing.

During 2019 and 2020 fisheries investigations and hydrological investigations were completed on the four main creek crossings along the access route and other smaller creeks were investigated for the presence of fish.

Wildlife monitoring is ongoing and there have been occasional survey efforts.

Water quality testing has recently been completed in both 2019 and 2020. Sporadic water quality testing has been completed at the site since 2005.

The highlights of these environmental and baseline investigations will now be outlined in the following sections.

13.1.1 Fisheries Investigations

Fisheries investigations were completed by Environmental Dynamics Inc. (EDI) of Whitehorse, Yukon. They investigated streams along the access road that flow into upper Rancheria and Meister River drainages. Fish presence was noted at the major creek crossings along the access route at designated sites 2 (km 12.2), 5 (km 17.0), 9 (km 24.5), McCrory Creek (km 40), and creek drainage form the former adit (EDI, 2019, 2020). All other sites tested were determined to be non fish-bearing.

At site 2, Goat Creek, is located approximately 12.2 kilometers up the access road and the surveys identified the presence of slimy sculpin, arctic grayling, and bull trout. This area was noted to have limited spawning potential at the crossing.

At site 5, located approximately 17.0 kilometers up the access road identified the presence of arctic grayling and bull trout and the area was noted to have limited spawning potential at the crossing.

At site 9, located approximately 24.5 kilometers up the access road, the site is comprised of a moderate sized crossing. Only slimy sculpin was identified at this site and the stream was noted to contain moderate spawning and overwintering habitat potential.

The creek crossing at McCrory Creek, is located approximately 40 kilometers up the access road. McCrory Creek is a stream flowing southward in proximity to the western boundary of the Silver Hart project site. The creek flows into Oake Creek, which flows into the Meister River, a tributary of the Rancheria River. In McCrory Creek, arctic grayling was captured downstream and upstream of the bridge crossing on the access road. However, from 300-500 meters upstream of the bridge, there are four noteworthy features that are considered to be barriers to fish passage.

A small unmapped tributary that partially originates from the former adit at the Silver Hart site flows into McCrory Creek approximately 1.75 kilometers upstream of the bridge crossing. The drainage from the adit is approximately 750 meters away from its confluence with McCrory Creek. For the first 200 meters from the adit, surface flow has been found to be discontinuous and is poorly defined. Additional drainages from the area eventually connect to this small tributary and at 400 meters from the adit it becomes more complex with increased water flow and alluvial materials approximately 650 meters from the adit, flow becomes more channelized and stream-like characteristics are prevalent. From a fisheries perspective, the stream is shallow and fish rearing habitat is considered poor for Arctic Grayling. It is also located upstream of the previously mentioned barriers on McCrory Creek (EDI, 2020).

Previous fisheries fieldwork in the Silver Hart area had focused on the creeks and lakes immediately downstream of the project area, namely in the Meister River, Oake Creek, and in Edgar Lake. These investigations completed by Access Consulting Group of Whitehorse, Yukon in the period 2005-2007 noted that a number of species were captured in these waterways including lake trout, bull trout, Arctic grayling, mountain whitefish, longnose sucker, burbot and slimy sculpin.

EDI recommended that crossings over demonstrated or defaulted fish-bearing streams should be designed to ensure fish passage is maintained. Furthermore, upgrade works on all streams should be planned and completed in a manner that uses best practices to minimize impacts to water quality.

13.1.2 Wildlife Monitoring

CMC has conducted a variety of desktop studies and annually completes a report on any observations of wildlife on the Silver Hart Property. There have been no sightings of wildlife on the property during exploration activities in 2019 and 2020. There have been anecdotal reports of wildlife sightings of moose, caribou and bear from recreational user and local hunters visiting the property area.

13.1.3 Overview of Wildlife in the Silver Hart Area

The Pelly Mountains provide habitat for a variety of wildlife and bird species typical of the boreal forest (Smith et al. 2004). Mammal species known to occur in this region include grizzly and black bears, woodland caribou, moose, wolverine, marten, wolf, stone sheep, lynx, fox, beavers and other small mammals. The Project is located in the Cassiar Mountains Moose Management Unit (MMU). The Silver Hart Road travels through Game Management Subzone (GMS) 1028 and borders GMS 1026, two of the three GMS that make up the Cassiar Mountains MMU. According to Government of Yukon's Department of Environment, the Cassiar Mountains MMU is identified as being subject to very high estimated total moose harvest pressure (YOR 2019-0013-036-1).

Current estimates for licenced and First Nation moose harvest suggests harvest numbers have exceeded sustainable harvest levels over the past five years. While harvest rates for this MMU should be 3%, harvest rates for GMS 1028 and GMS 1026 are estimated at 6% and 3.8% respectively.

13.1.3.1 Wildlife Key Areas

A desktop review of the project area was conducted in relation to Wildlife Key Areas (WKAs). WKAs are mapped geographical locations used by wildlife for important, seasonal life functions. The Silver Hart Property overlaps two WKAs: an upland fall (i.e., August to October) rutting habitat for the Wolf Lake Caribou Herd and a year-round upland habitat for mountain goats. A winter range (in use from October to April) for the Wolf Lake Caribou Herd is located approximately 6.5 kilometers southwest of the claim block's western property and is bisected by the Silver Hart Road. Two to three kilometers south of the Project is a winter range for thinhorn sheep. Finally, year-round wetland habitats for beaver are located along the waterbodies surrounding the claim block, namely, along the Meister River, Beaver Creek and, further southwest, Rancheria River.

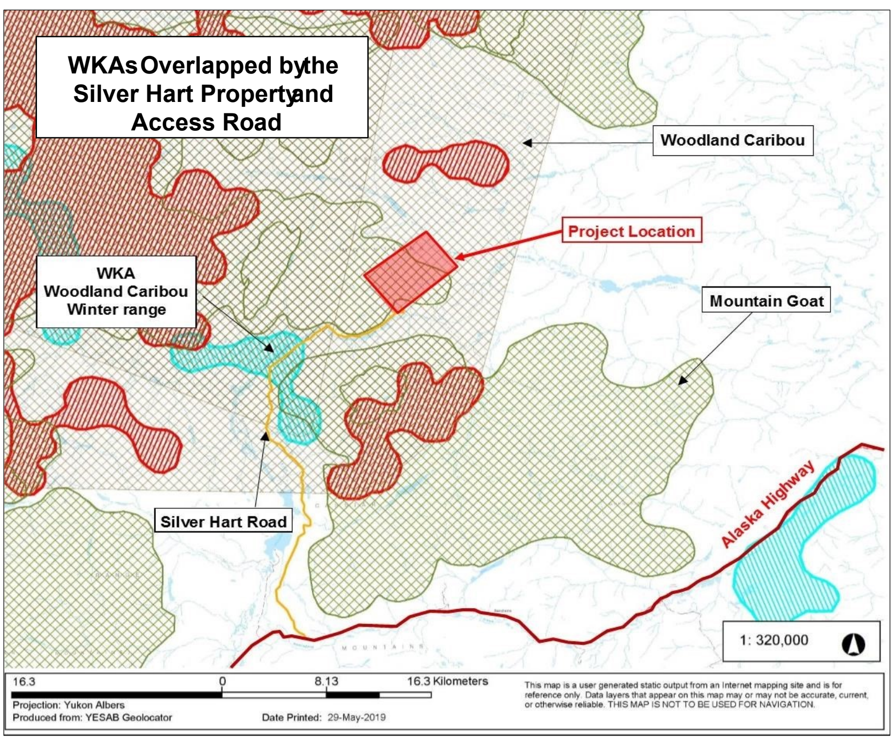

Figure 13.1: WKAs overlapped by the project area.

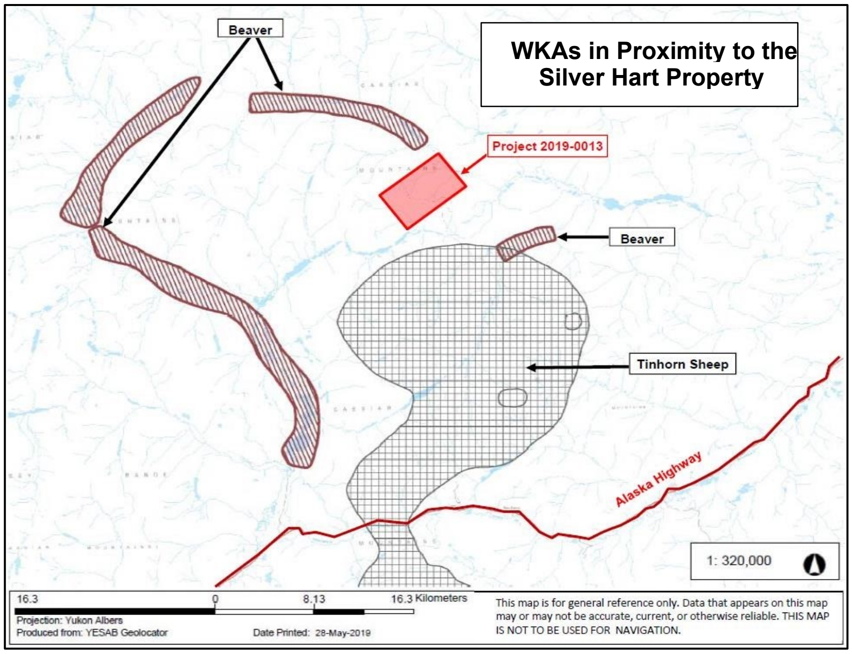

Figure 13.2: WKAs in proximity to the project area.

13.1.3.2 Wolf Lake Caribou Herd

The Wolf Lake caribou herd is a woodland caribou herd with a 1998 population estimate of 1,500 animals (YG, 2018). Whether the population is increasing, stable or decreasing is unknown. As per Government of Yukon's State of the Environment Interim Report 2019, it noted that in 2014, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) reassessed all Northern Mountain woodland caribou in Canada as a Species of Special Concern. These caribou were designated as a Species of Special Concern under Canada's *Species at Risk Act*" (YG, 2019).

In general, woodland caribou can be found in lichen-rich mature forest with their associated bogs, muskeg, lakes and rivers. Given the energetic demands of winter, winter habitat is usually considered the most important of caribou habitat types. Woodland caribou tend to search for optimum feeding conditions in relation to prevailing snow conditions in the winter months. The winter range for most woodland caribou, as appears to be the case with the Wolf Lake caribou herd, is relatively small in comparison to total habitat, traditionally used, and ecologically specific.

13.1.3.3 Mountain Goats

The proposed project directly overlaps with mountain goat habitat. There is also goat habitat immediately south of the project area. Government of Yukon's Department of Environment has identified these habitat areas as year-round use. Figure 20.2 shows the overlap of the proposed project with mountain goat habitat. Mountain goat distribution is limited in Yukon due to the scarcity of suitable goat habitat. Mountain goat populations are found in southern Yukon only and inhabit small windswept ledges well above the treeline. In spring, goats give birth in places sheltered by caves or rock overhangs. They spend the summer feeding on grasses and sedges, foraging mainly at dawn and dusk. Although goats are non-migratory, on occasion, they will visit mineral licks in the valleys.

13.1.4 Hydrological Studies

In 2020, CMC retained Associated Engineering (AE) to assess four stream crossings along the project access road. Tasks included visual inspections of three railcar subframe structures, load rating of the existing railcar bridges, stream measurements and hydrologic assessment.

The project sites are along the small tributary creeks at the western edge of the Rancheria watershed. None of these creeks have water gauges and therefore required a detailed hydrologic assessment to determine design flow rates (Associated Engineering, 2020a).

AE derived design flow rates for the crossings by analyzing previous hydrology studies conducted in the region including utilization of data from the National Hydro Network (NHN), Yukon Government, and Water Survey of Canada. The final design rates calculated were determined following the guidelines outlined in the Regional Analysis and Data Transfer section of the TAC Guide to Bridge Hydraulics (TAC, 2004) and determined the 1;2-year and 1:100 -year design flows for the bridge sites as follows:

Table 13-1: Design Flow Rates at Major Creek Crossings for the Site Access Road.

Bridge Site	2-year Peak Flow (m^3/s)	100-year Peak Flow (m^3/s)
1	24.6	45.6
2	15.8	29.3
3	15.8	29.3
4	10.7	19.8

13.1.5 Water Quality Studies

An EDI field crew visited the Silver Hart Property in 2019 and 2020 to complete water quality monitoring from the McCrory Creek watershed.

Sample locations included the adit seep, the unmapped drainage which the adit drainage flows into (adit drainage) and McCrory Creek. The complete scope of this sampling project included several surface water quality sampling sites and in addition EDI was asked to collect a water sample from the camp water source to submit for drinking water analysis.

At each of the water surface sites, in-situ data collected included water temperature, pH, specific conductivity and dissolved oxygen using a YSI multi-parameter meter. Site location data (GPS waypoints and site photos were also collected. All samples were delivered for analysis to ALS Environmental in Whitehorse within the recommended sample holding times.

The drinking water sample was collected from the main source pipe that feeds water to the site camp. The drinking water sample was sent for laboratory analysis and including testing of the parameters including pH, anions (fluoride/chloride), conductivity, nitrate, nitrite and sulphate levels, hardness, ammonia content, alkalinity, and total metals.

13.1.6 Water Quality Sampling at the Silver Hart Property

Highlights of water quality results at Silver Hart from the adit drainage and in McCrory Creek were as follows:

- Water temperatures at the time of sampling ranged from 3.6°C at the adit seep to a high of 6.5°C of a site located just upstream of the bridge;
- In situ pH values ranged from 7.96 at approximately 1.5 kilometer downstream from the adit mouth to 9.20 at approximately 100 meters downstream of the mouth of the adit drainage;
- Dissolved oxygen was high at all sites, ranging from 10.06 mg/L 625 meters downstream from the adit to 11.65 mg/L at the adit site;
- Specific conductivity was highest at the adit at 496.3 µS/cm, at 625 meters downstream in the adit drainage it was 213.8 µS/cm, and was less than 100 µS/cm at all McCrory Creek sites;
- Total suspended solids (TSS) concentrations were below laboratory detection levels at all sites besides the adit site at 4.6 mg/L and 625 meters downstream from the adit site at 25.6 mg/L;
- Most sites had total dissolved solids ranging between 37 mg/L at 50 meters upstream from where the adit drainage enters McCrory Creek and 43 mg/L at 1.5 kilometers from the adit mouth in McCrory Creek, except at the adit site and 625 meters downstream from the adit site where TDS values of 384 mg/L and 144 mg/L, respectively, were found;
- Concentrations of nutrients (nitrate, nitrite, total phosphorus) and ammonia were low across all sample sites, often below laboratory detection;
- Other anions were present at low concentrations in all samples;

- Fluoride concentration in the sample collected at the adit site exceeded the CCME guideline for the protection of freshwater aquatic life, CCME-AL (CCME 2007);
- Samples collected from all sites besides the site 1.5 kilometers downstream from the adit mouth in McCrory Creek, had total aluminum concentrations that slightly exceeded the CCME aluminum guideline. Dissolved aluminum concentrations at McCrory Creek 50 meters above the entrance of the adit creek also exceeded the CCME Aluminum guideline suggesting that natural elevated levels of aluminum may occur in the region; and,
- Aside from aluminum, the total and dissolved metals concentrations were low at all sites except at the adit entrance and 625 meters downstream from the adit entrance. At these site, multiple metals were present at concentrations that exceeded the CCME guidelines these metals present at concentrations that exceeded the CCME AL guidelines included:
- Arsenic (dissolved and total)
- Lead (total)
- Cadmium (dissolved and total)
- Silver (total)
- Copper (total)
- Iron (total)
- Uranium (dissolved and total); and
- Zinc (dissolved)

In addition, previous water quality investigations in the Silver Hart area had focused on the creeks and lakes immediately downstream of the project area, namely in the Meister River, Oake Creek, and in Edgar Lake. These investigations completed by Access Consulting Group of Whitehorse, Yukon in the period 2005-2007. The results were collected but never properly analyzed and it is recommended that this data be reviewed as a part of a more comprehensive examination of possible water quality issues at the Silver Hart site.

The sampling results from 2019 and 2020 suggest that the poorest water quality on site was collected at the adit seep and the at 625 meters downstream from the adit entrance prior to the adit stream entering McCrory Creek. Total and dissolved aluminum are the only concentrations to exceed CCME guidelines across all sites except for at 1.5 kilometers downstream from the adit mouth in McCrory Creek. However, the presence of aluminum in McCrory Creek upstream of the adit drainage confluence site in excess continues to support previous conclusions of water quality sampling efforts that these are likely naturally sourced concentrations. From these data, it appears that the adit seep has minimal influence on the water quality in McCrory creek, and the naturally occurring flow and dilution are sufficient to minimize risk.

13.1.7 Water Quality of Water Well at Silver Hart Property

To date, water from the well has only been used in the washroom facilities and for dishwashing in the camp facility. The water has never been used for direct human consumption or in food preparation.

Water sampled from the well in 2020 returned with turbidity levels of 8.34 NTU and exceeded the suggested 0.1 NTU outlined in the Canadian Drinking Water Quality guidelines (CDWQ2020). Metals present at concentrations that exceeded the CDWQ guidelines included arsenic and uranium. In all other parameters the sample met the drinking water guidelines.

13.2 Permitting

Currently regulatory environmental monitoring requirements and permitting governing recent exploration activities are limited to:

- Yukon Mining Land Use Permit – Class 3 issued by the Yukon Department of Energy, Mines and Resources ("Yukon EMR") through the Yukon Quartz Mining Act;
- Yukon Water Use Permit: Issued by the Yukon Water Board through the Yukon Waters Act; and,
- Yukon camp occupational notification that is submitted to the Yukon Department of Environment.

To obtain these permits, the Company filed application documents that were subjected to a public environmental assessment process administered by the Yukon Environmental and Socio-Economic Assessment Board (YESAB) through the Yukon Environmental and Socio-Economic
Assessment Act (YESAA). Upon completion of the review process, YESAB issues a Decision Document that is then rejected, accepted or modified by Yukon EMR who then conduct a consultation with affected Yukon First Nations before drafting and issuing a permit if it is approved. This process typically takes 160-240 days to complete. The Company also makes efforts to provide First Nations with advance notice of their exploration and permitting intentions.

13.3 Social and Community Impact

Several consultation activities with local First Nations governments and communities have been initiated by the various exploration companies that have been active at Silver Hart. However, to date there have been no formal consultation processes undertaken.

Now that Silver Hart is an advanced exploration project with potential to generate a viable mine, it is the desire of CMC to enter into negotiations with local First Nations and in particular with the Liard First Nation (Kaska) to establish the framework for an eventual Socio-Economic Participation Agreement (SEPA). The purpose of the SEPA would likely be to provide Kaska with benefits from the successful exploration and development of the Silver hart Property as well as other key issues such as:

- Promoting environmental stewardship
- Understanding and respect for the Kaska heritage
- Understanding and respect for the Kaska culture

It is expected that in 2021 and beyond the Company will engage in a variety of activities and consultation efforts with the Liard First Nation, other affected First Nations and local communities such as:

- Meetings
- Site visits
- Advisory committee meetings with the Kaska
- Community newsletters
- Socio-economic and community impact studies and
- Other activities, as deemed appropriate

13.4 Environmental Liabilities

CMC is responsible for conducting on going environmental sampling, as part of issued permits and ongoing permit amendment applications. Based on the results of these environmental sampling programs (aquatic, surface water, groundwater, air quality, sediment, benthic invertebrate, etc.) there is no indication of any outstanding environmental issues.

14 Interpretation and Conclusions

Exploration to date at the Silver Hart Property has focused on Ag-Pb-Zn mineralized areas of economic interest in the Main Zone, including the TM, KL, S and M vein systems. The mineralization is generally restricted to southwest-northeast trending structures hosting veins or vein sets of several meters in width that extend for more than 200 meters along strike, and continue to depths of at least 100 meters. The southwest-northeast trend is often crosscut by a second set of oblique northeast structures, where massive silver-bearing sulphides mineralization commonly occurs as lenses in brittle zones along structural intersections These deposits are considered typical of the Rancheria Silver District "High-grade" polymetallic Ag-Pb-Zn veins.

Bulk tonnage style carbonate replacement polymetallic Ag-Pb-Zn mineralization (CRD) is hosted in limestones and calcareous schist within the property area. In the KW and South zones conformable mineralization occurs in limestone and calcareous schist, exposed in excavator trenches, where the main northeast trending structures described above cross the calcareous sediments. The mineralization is overlain by siliceous schists that may cap the calcareous unit providing an impermeable boundary providing an excellent potential host for CRD mineralization (Wenzynowski, 2008).

14.1 Resource Calculation

There are several risks and uncertainties concerning the mineral resource estimate, including but not limited to: 1) Discontinuity of vein domains that could introduce significant dilution of the resource. Additional infill drilling to test grade continuity in between the various vein domains and subdomains is recommended. 2) Variability of silver grade throughout the vein domains. Some domains are more silver dominant (TM and S), whereas others are more lead and zinc dominant (M and KL). This risk can also introduce dilution of the resource. Additional metallurgical testing is recommended to check for silver, lead, and zinc recoveries. 3) Limited availability of density measurements to correctly characterize the ore body. Failing in accurately documenting the density can result in either an a) over estimation of the true resource by keep using the legacy average density of 2.9 g/cm^3 or b) under estimation of the true resource if a new density average is greater than the value used to date. Therefore, additional density measurements using traditional water immersion method should be carried as part of the core logging and handling routine. 4) Precision level of collar locations. Having collar locations surveyed with a handheld GPS is not ideal as it can introduce errors ranging from 3 to 10m, which can compromise the true location of the vein domains. Therefore, it is recommended that the Company utilizes a high-precision Real Time Kinematic (RTK) GPS to survey the collar locations, which will provide precision to the centimetre.

From the above, if the Company wishes to either a) improve the classification of the resource to an indicated/measured category and/or b) expand its current resource, it is imperative that the Company improves its collar surveying methods, routinely records density measurements, performs additional metallurgical testing and allocates additional budget for infill drilling.

Table 14-1: Summary of the 2020 CIM-Compliant Mineral Resource Estimate of the Silver Hart Project.

Domains	Tonnage	Average Grade				Contained Metal			
		AgEq	Ag	Pb	Zn	AgEq	Ag	Pb	Zn
	t	g/t	g/t	%	%	t. oz	t. oz	lb	lb
TM Veins	157,199	843	438	2.3	6.1	4,260,080	2,212,384	8,004,967	21,109,320
S Veins	57,844	753	467	2.5	3.7	1,400,908	867,593	3,126,138	4,684,088
M Veins	64,078	315	114	1.4	2.8	648,709	234,844	1,939,203	4,015,360
KL Veins	67,623	368	186	0.5	3.2	801,010	403,473	700,974	4,764,855
Total Inferred Resources	**346,800**	**570**	**301**	**1.7**	**4.0**	**7,501,300**	**3,942,900**	**14,572,100**	**34,573,700**

14.2 Trenching, Geological Mapping and Rock Sampling

Excavator trenching, mapping and rock sampling have continued to define the mineralized vein systems and off shoots in the TM, M and S vein systems and identified occurrences of carbonate replacement type mineralization. The mineralization at M, K, and KL is controlled by vein emplacement within sediments which alters the controlling factors of the sulphide veins (ductile emplacement in the sediment, brittle in the granodiorite). Potential CRD mineralization consisting of a conformable 25cm wide lens of galena was uncovered by trenching in limestone southeast of the M zone near an IP anomaly.

Initial surface work at the South and KW zones has also uncovered structural features and mineralization that should be followed up in subsequent programs.

14.3 Soil Geochemistry

The geochemical sample results for soil collected in 2019 and 2020 show three areas of anomalous values, the strongest being a Ag-Pb-Zn anomaly uphill of the access road and downslope of the South Zone in a forested area that has seen little previous exploration. A second anomalous area with a northeast southwest orientation lies to the southwest and downslope along strike of the vein structures of the TM, TX and S vein systems. The third anomalous area in the northwest portion of the geochemical survey shows moderately anomalous silver values in a northeast southwest orientation with a weaker lead and zinc response. Geochemical sampling has proven an effective exploration tool for finding new prospective areas.

14.4 Geophysical Surveys

The processing of the 2020 geophysical surveys has not been completed as of the effective date of this report. Preliminary interpretations have shown areas of low resistivity corresponding to areas of high chargeability which, when correlated to other surficial observation, point towards four target areas (Figure 14.1).

The interpretation of the target locations are:

- T-1 is chosen to test the KW zone of mineralization where the geophysical response is supported by 2020 soil geochemical data that indicate a local source of mineralization, likely at a higher elevation toward the northeast. Upon favourable results from drilling T1, an extension of the 2005 IP/Res lines 800N, 1000N and 1210N toward the northwest to fill in the gap where the T-1 anomaly should be considered as it appears to project toward the open anomaly to the north on L1450. IP/Res coverage extended to the north of L1450N could possibly serve to close the anomaly.

- T-2 is well defined geophysically, and possibly shows an extension of the main TM Zone mineralization toward the northeast toward the K zone where limited diamond drilling has taken place.
- T-3 is also well-defined geophysically and provides a broad new target area in close proximity to the historically inferred granodiorite contact. High resistivity values to the east probably reflect the intrusion and it is likely that the well-correlated magnetic NNE trend reflects secondary magnetite formed during contact metamorphism. The proximity to the North-trending band of carbonate rocks is unclear but increases the potential for the development of skarn or carbonate replacement mineralization.
- T-4 tests the NNE extension of the contact zone that is also to be tested at T-3, but on the eastern side of the carbonate band. The strong T-4 anomaly has not been closed by the IP/Res or magnetic surveys. Additional magnetic and IP/Res coverage to extend the grid to the east and north of T-4 is suggested.

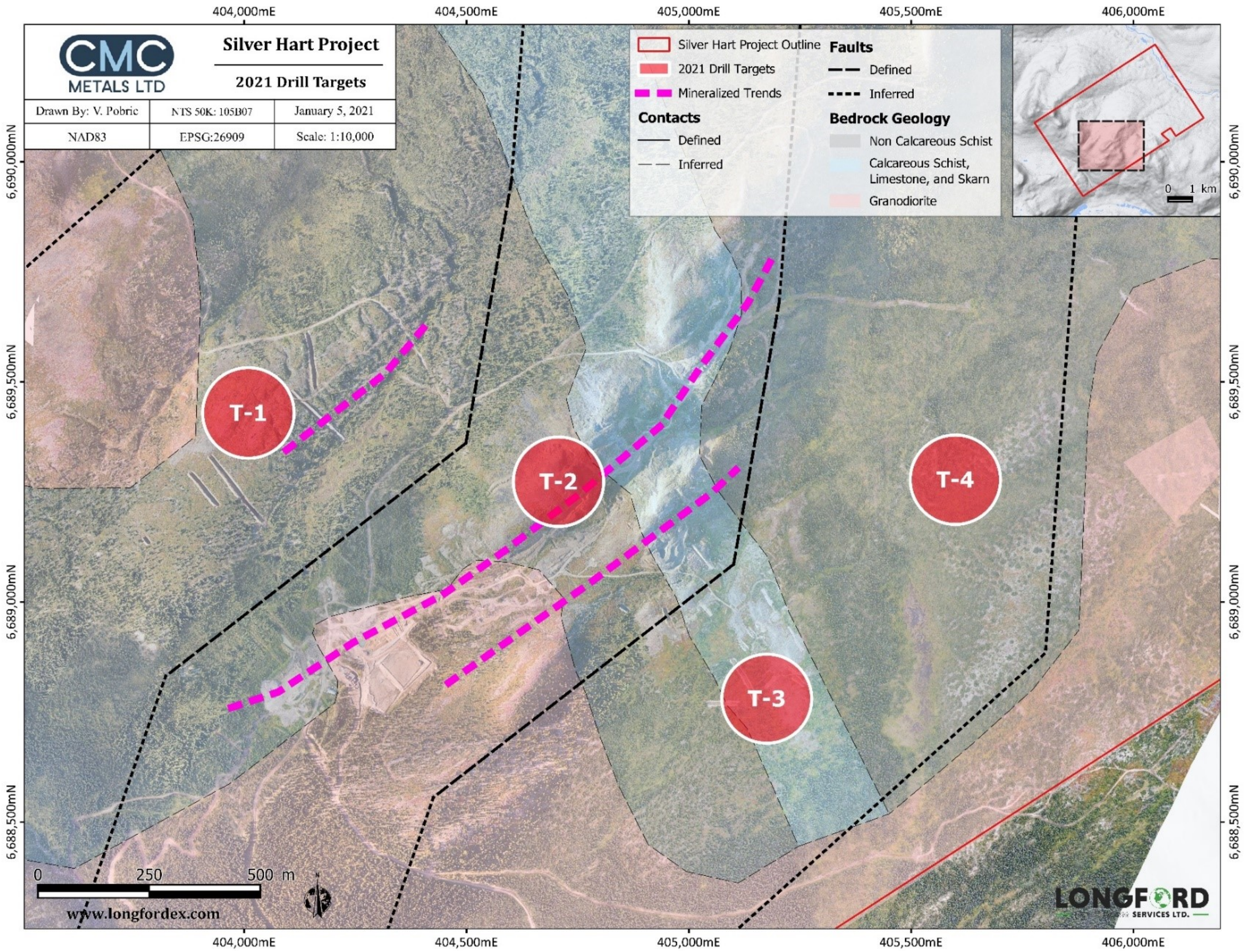

Figure 14.1: Drill targets identified through geophysics and surface exploration work at Silver Hart.

14.5 Diamond Drilling

The recent diamond drill programs provided infill drilling on the TM and S vein systems to facilitate deposit delineation using Leapfrog software and assist in the new resource calculation. Holes 19-01 and 19-02 on the TM vein system provided promising drill results that show a continuity of high-grade mineralization from surface to the projected base of the TM zone. In addition, results from holes 19-05 and 19-06 in the southern portion of the S zone included grades of silver exceeded 1,100 g/t along with 4.25-11.38% lead and 8.61-13.48% zinc; in both the TM and S vein systems, zinc grades are increasing at depth (K. Brewer, 2020). Overall high-grade silver-lead-zinc mineralization has been identified in the TM and S vein systems of the Main Zone for a strike length in excess of 500 meters and remains open to the southwest and at depth. These veins remain unexplored at depths below 85 meters and therefore have potential for further resource expansion.

Drilling of the M and KL vein systems in 2017 and prior has also yielded consistent high grade results which should be further defined along strike and at depth in subsequent programs.

Table 14-2: Silver Hart 2019 drill results

Hole #	From (m)	To (m)	Interval (m)	Lead (%)	Zinc (%)	Silver (g/t)
19-01	56.5	71.2	14.7	1.51	6.94	250.1
Including	67.4	71.2	3.8	5.76	18.57	914.6
19-02	38.25	49.95	11.7	4	9.6	993.7
19-03	70.05	74.0	3.95	0.97	7.94	300
And						
19-03	90.7	94.25	3.55	2.71	12.9	384.2
Including	92.2	92.75	0.55	6.12	31.24	900
19-04	10.9	13.10	2.2	10.16	1.99	595.2
19-05	61.95	66.25	4.3	4.25	13.48	1257.2
19-06	37.5	43.0	5.5	11.38	8.61	1139.9
19-07	33.0	35.70	2.7	1.45	6.69	132.95
19-08	No significant intercept					
19-09	No significant intercept					
19-10	44.4	46.2	1.8	19.7	15.84	2636.5

Comprehensive modeling of previous drilling using Leapfrog combined with the IP geophysical survey have provided a number of promising drill targets for the 2021 season including infill drilling in the currently modelled resource, extensions of the current resource and the four geophysical targets (T-1 to T-4) discussed above. Geochemical surveys have outlined three anomalous areas for ground follow up and the success of the recent soil sampling shows it is a good basic exploration tool especially on southerly facing slopes. Excavator trenching is an effective method of testing geochemical and geophysical anomalies and linear topographic features.

15 Recommendations

Recommendations for subsequent exploration work at the Silver Hart project can be broken down into two phases independent from one another, but which may run concurrently, as they have different objectives:

15.1 Phase 1 – Exploration and Related Activities in the Main Zone

This phase will focus in increasing the size and confidence level of the existing resource which is required in the event that a subsequent Preliminary Economic Assessment (PEA) study is contemplated for the project. The following are recommendations pertaining to Phase 1 of the proposed future exploration of the Silver Hart Project, including the adjacent Blue Heaven property

1. **Infill and Extension Drill Program in the Main Zone**: an infill drill program should focus on improving the confidence level of the existing resource by testing the continuity of existing vein domains and eventually improve the resource classification to an indicated category. The current average drill hole spacing is approximately 25 meters and subsequent infill drilling should aim for appropriate spacing and hole placement to fulfill CIM guidelines to increase the confidence level of the current resource estimate. Infill drilling should also focus in testing the continuity of the TM, S, M and KL vein systems both at depth and along strike. Infill drilling of the TM vein system should be prioritized as this zone accounts for most of the resource. Special attention should be given to filling the gaps between the various subdomains of this vein system. This should include, but not be limited to:
    - *Twinning of drill holes*: Twinning of some of the holes drilled during the 1985 and 1986 campaigns, which were not included in the current estimate given the absence of assay certificates, but where high grades were partly used as a guidance to model the vein domains evaluated in this resource estimate.
    - *Testing of Extensions at Depth and Along Strike in the Main Zone*: Testing of extensions at depth and along strike should particularly focus on the TM and KL vein systems extensions and the nature of that vein system in between these particular areas of more intense mineralization. These areas are referred

to as the F and K areas, respectively, which are both aligned along the main SW-NE trend of this vein system. Priority should be given to the F mineralized section of the vein system as it is yet to be subjected to drill exploration, is likely to be more silver dominant given its level of placement and could thereby serve to increase the overall resource in this vein system.

- *Azimuth and Drill Directions*: Infill and extension holes should be drilled at a general azimuth of 130◦ with average dips of -50◦ to -60◦ and aim to perpendicularly intercept the vein domains to test their true widths.
  Estimated cost: (5,000 meters of drilling @ estimated cost of $300/meter all in cost for a total of $1,500,000)

2. **Density measurements**: additional density measurements using the traditional water immersion method should be carried as part of the core logging and handling routine. This procedure shood be supplemented with density testing, of a representative sampling of all drill core submitted for analysis as well as any geochemical rock samples, by a certified testing laboratory such as Bureau Veritas. (Estimated cost: $15,000).
3. **High-precision collar survey**: it is recommended that the Company rents a high-precision Real Time Kinematic (RTK) GPS to survey the collar locations and/or hires a local surveying company to provide precision on the location of all drill holes. (Estimated cost: $25,000).
4. **QAQC Improvements**: a full review and documentation of the existing QAQC protocols and procedures should be documented in greater detail to provide guidance and direction to the geological field team. This should include specifics on matters such as the use of blanks, standards and duplicates in sampling and testing methods and to ensure all QA/QC procedures are understood and followed. A budget for documentation preparation and the insertion of blanks, standards and duplicated should be allocated. (estimated cost: $25,000).
5. **Data Verification**: Develop a core logging verification program to validate previous logging interpretations (estimated cost: $10,000).
6. **Bulk sample and Metallurgical testing**: additional metallurgical testing is recommended to check for silver, lead, and zinc recoveries which will provide a study of the variability of silver grade throughout the vein domains and ultimately give a more accurate calculation of the silver equivalent grades. This can be accomplished as part of a bulk sample which should target the high-grade polymetallic veins and CRD styles of mineralization through a representative sample of the vein systems in the Main Zone. SGS Lakefield have been involved in metallurgical testing for Coeur on evaluating the ore and recommending improvements in the processing flowsheet at SilverTip and therefore this testing group should be considered to conduct the test of material from Silver Hart. (estimated cost: $100,000).

7. **Centralization and Improvements in Core storage**: core boxes from all drilling at Silver Hart should be and stored in a centralized location for adequate preservation and availability for any subsequent sampling required. The 2005-2010 drill core should be fully inventoried. Construction of core racks in the centralized facility should be completed to provide improved core storage and access (estimated cost: $50,000).
8. **Environmental studies:** Ongoing baseline environmental studies should be undertaken during all subsequent phases. This should be expanded in the near future and include a continuation and expansion of water quality studies, wildlife and bird investigations, ARD investigations on waste material, and other studies as required for pre-development assessments. (estimated cost: $75,000).
9. **Site Reclamation:** restoration of historic trenches and general reclamation of the site in the Main Zone should be completed. Other reclamation activities should include removal of some of the legacy infrastructure such as an old tank and general site clean up as detailed in the Company's reclamation and closure plan. (Estimated cost: $25,000)
10. **Camp Upgrading:** The current camp facility is only suited to house maximum of 20 persons. It is necessary to upgrade and construct new housing and camp related facilities to be able to support the proposed exploration efforts. (Estimated cost: $100,000)
11. **Access Road Upgrades:** The access road near the site has existing steep gradients that need to be addressed. Preliminary engineering studies have identified the need to construct switchbacks on the last hill to the project site from kilometer 40-41. Additional upgrades of the access road should be pursued through existing government program funding in cooperation with the Yukon department of Highways and Public Services. (Estimated cost of improvements by the Company: $100,000).

The total estimated cost for Phase 1 is $2,000,000.

15.2 Phase 2 – Exploration and Related Studies of Other Zones at the Silver Hart and Preliminary Exploration of Blue Heaven

This phase will focus on identifying new deposits in the zones and anomalous areas identified in the 2019 and 2020 survey efforts through additional surface exploration and drill testing of targets in what is commonly referred to as the KW Zone and the South Zone.

The following activities are recommended:

1. **Drilling Geophysical and Geochemical Targets**: this drill program will focus in testing geochemical and geophysical anomalies identified in the 2019 and 2020 field programs. Drilling should further investigate both targets identified within the KW and South Zones. Many of these targets have similar geological, geochemical, and

geophysical characteristics to the vein and CRD mineralogy in the Main Zone. They also appear to be in a similar structural setting being parallel to the north and south of the SW-NE main trend respectively. Additional structural mapping and a ground IP geophysical survey are recommended to improve the accuracy of subsequent drilling. Up to 5,000 meters of drilling is proposed to investigate these areas at an estimated all-in exploration cost of $300/meter. (Estimated cost: $1,500,000).

2. **Surface Exploration**: Trenching as a follow-up to geochemical and/or geophysical anomalies has been found to be a highly effective exploration tool in the Silver Hart area due to limited overburden and ease of access to most areas by heavy equipment. This should be combined with detailed geological and structural mapping, geochemical sampling, and a combination of airborne and ground geophysical surveys. These efforts should be designed to provide a better understanding and define drill targets within the known zones and/or identify areas of new prospectivity within the Silver Hart claims and the Blue Heaven claims. These efforts should target the key mineralization styles in the Silver Hart area including (i) high-grade silver-lead-zinc veins at or near the intrusivesedimentary contact and (ii) CRD mineralization in limestones and calcareous schist ($750,000).
3. **Data compilation**: Prior to any further work on the Blue Heaven claims, efforts should be undertaken to compile and geo-reference historical data from past exploration efforts on these claims to facilitate detailed GIS and 3D analysis (estimated cost: $20,000).
4. **Preliminary Engineering Studies**: Preliminary engineering studies should be conducted to evaluate possible mining techniques initially within the Main Zone. (estimated cost: $50,000).
5. **Other Studies**: There are typically a range of technical and geological studies that are ongoing during different phases of the exploration of a project like Silver Hart. These monies also provide for possible contingency costs. (estimated cost: $180,000).

Total estimated cost of Phase 2: $2,500,000

16 Expenditure Summary

YMEP Expense Claim - Client Copy Yukon

YMEP no: 20-033	project name: Silver Hart	applicant name: CMC Metals Ltd	
expense claim no: Final	program type: hard rock	program module: target evaluation	
date submitted: JAN 31	phone: 604 6050166	email: Kbrewer80@hotmail.com	
address: 605-369 Terminal Ave, Vancouver B.C. V6A 4C4			
start/end dates of fieldwork for this claim:	start June 6 2020	end Sept 6 2020	no. of field days/this claim: 90

eligible expenses item	Please refer to rate guidelines. Provide photocopy of receipts.	unit/days	rate	total
daily field expenses	no persons:		total ~~$100/day~~	#273,637.33
personnel and equipment	Name (supply statement of qualifications)			
	Longford Exploration Services			$105,923.45
	Iyon Kechika			$106,997.63
	Intelligent Exploration			$15,750.00
	McKeown Exploration			$44,966.25

equipment (rental)	private or commercial	unit/days	rate	total
	private			
	private			
	private			
	private			
	private			
	private			
	private			
	private			
	private			
	private			
	private			
other	*Please provide details.*			
			Total this claim:	#6,582.17 (1) [redacted]

(1) for remaining YMEP holdback amount

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18 Signature Page

I, Graham Davidson of 53 Grandin Woods, St. Albert, Alberta T8N 2Y4, do hereby certify the following:

- I am a member in good standing with Association of Professional Engineers, Geologists and Geophysicists of Alberta (# 42308);
- For the purposes of the Assessment Report entitled: "ASSESSMENT REPORT ON 2020 EXPLORATION ACTIVITIES INCLUDING A MINERAL RESOURCE UPDATE ON THE SILVER HART PROPERTY", effective date January 28, 2021 of which I am a co-author and responsible person;
- I hold a Bachelor of Science (Honours) degree in Geology (1981) from the University of Western Ontario and have practiced my profession as a geologist since graduation;
- I have worked in the Yukon and northern British Columbia since 1981 and been involved in mineral exploration programs on prospects at and around the Silver Hart Property; I have worked on Ag-Pb-Zn occurrences in the southeastern and central Yukon including prospects in the Rancheria Silver District at Spencer Creek and Logjam Creek; in the Keno Hill area at Mount Hinton and Lightning Creek; along the South and North Canol Roads and at Cantung; have worked on Au-Ag bearing quartz veins in the Moosehorn Range, the Klondike, the Wheaton River Valley, Montana Mountain, Engineer Mine, Venus Mine and Atlin areas; on Cu-Au porphyry prospects in the Dawson Range-Freegold Mountain district, including exploration programs at Nucleus, Revenue, Freegold, Caribou Creek, Tad-Toro, Prospector; extensively in the Kluane region on Ni-Cu PGE occurrences.
- I participated in the 2020 work programs on the Silver Hart Property from June 27 - July 3rd, 2020 and from August 27-Sept. 1, 2020 working for Longford Exploration Services Ltd. on behalf of CMC Metals Ltd.;
- I am responsible for sections 1, 9-12 & 25-27 of this report and have prepared maps and charts with personnel from Longford Exploration Services Ltd.;
- That at the effective date of the assessment report, to the best of my knowledge, information, and belief, the report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

Date: Jan. 28, 2021, Graham Davidson P.Geol. #42308

I, Marco Antonio Celis, of suite 1405, 1260 Nelson Street., Vancouver, BC, do hereby certify that:

- I am a co-author of the technical report titled 'Technical Report and Mineral Resource Update on the Silver Hart Property' dated January 15, 2020, relating to the Silver Hart Property, Watson Lake Mining District, Yukon.
- I have been a registered professional geologist with the Engineers & Geoscientists of British Columbia since 2019, member # 180379.
- I am a graduate of the University of Concepcion, Concepcion. Chile with a B.Sc. in geology, 2011 and graduate of the University of British Columbia, Vancouver, Canada with a M.Sc. in geology, 2015.
- I have practiced in the field of mineral exploration for copper and gold deposits since 2010. I have practiced my profession continuously since 2010.
- I am responsible for the preparation of sections 14, Mineral Resource Estimates of the technical report titled 'Technical Report and Mineral Resource Update on the Silver Hart Property' dated January 15, 2020 relating to the Silver Hart Property, Watson Lake Mining District, Yukon.
- I am independent of CMC Metals Ltd., as described in Section 1.4 of NI 43101. I am not an employee of the issue or a related party of the issuer. I do not hold securities either directly or indirectly of the issuer or a related party of the issuer and expect to receive none for this work.
- I am a "qualified person" for the purposes of NI 43-101.
- I have not visited the Silver Hart property and I have had no prior involvement with the Silver Hart Property.
- I have read National Instrument 43-101 and Form 43-101 F1 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101 F1.
- As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Marco Antonio Celis, M.Sc., P.Geo.

ENGBC M # 180379

Dated: January 15th 2020

PROFESSIONAL
PROVINCE OF
M. A. CELIS CALONGE
180379
BRITISH COLUMBIA
ENGINEER

I, Kevin John Brewer, am a Professional Geologist residing at 122 Old Petty Hr. Road, St. John's NL. and do state that:

- I have a B.Sc. (Honors) in Geology/Biology from Memorial University of Newfoundland in 1984.
- I have a Masters of Business and Administration from Memorial University of Newfoundland in 1990.
- I have a Diploma in Mine Engineering Studies from the University of British Columbia/EDUMINE Program in 2014
- That I have been a registered professional geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia since December 14, 2007
- I am a "qualified person" for the purposes of NI 43-101.
- I am the President, CEO and a Director of CMC Metals Ltd. since February, 2019 and have been directly responsible for all exploration programs conducted by that Company including all exploration since 2019 on the Silver Hart Property. These services are provided to CMC Metals Corp. through my 100% owned exploration management consulting services company 39627 Yukon Inc.
- I have visited the Silver Hart Property on numerous occasions and spent no less than 80 days on the property during the 2020 exploration program
- I am responsible for the contents of this report
- I am not aware of any material fact or material change related to this report that is not reflected in this report
- I have read National Instrument 43-101 and Form 43-1 OIFI and the resource estimation details included in this report and previously detailed in a recently released Technical Report were prepared in compliance with this Instrument and Form 43-101 Fl.

Signed this day of January 28, 2019

Association of Professional Engineers and Geoscientists of the Province of British Columbia
K. J. BREWER
ENGINEERING LICENSEE
Limited Licence
149312

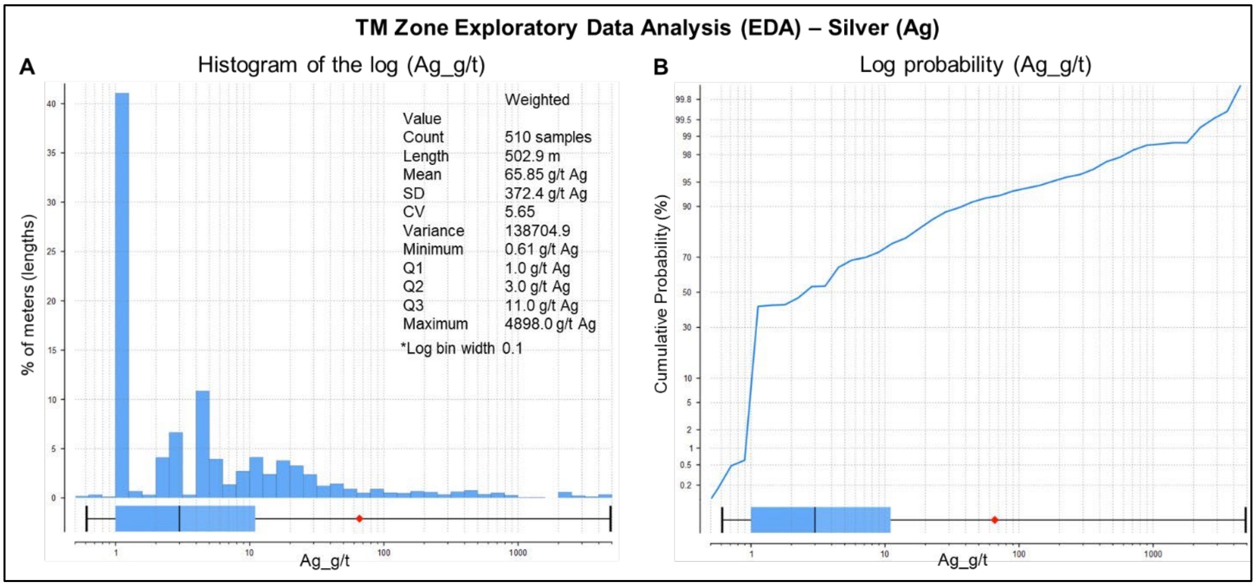
Kevin Brewer

APPENDIX A Assay Certificates

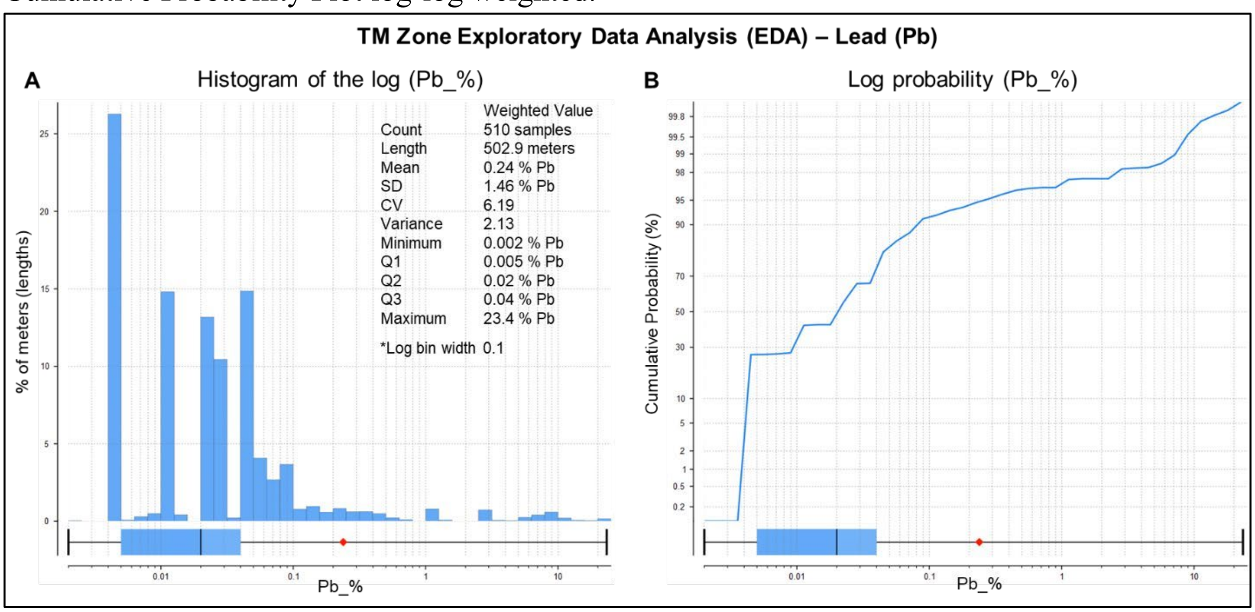
PDF's and Excel files submitted electronically.

APPENDIX B Additional Resource Estimate Figures

TM Zone Exploratory Data Analysis for Silver Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



TM Zone Exploratory Data Analysis for Lead Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



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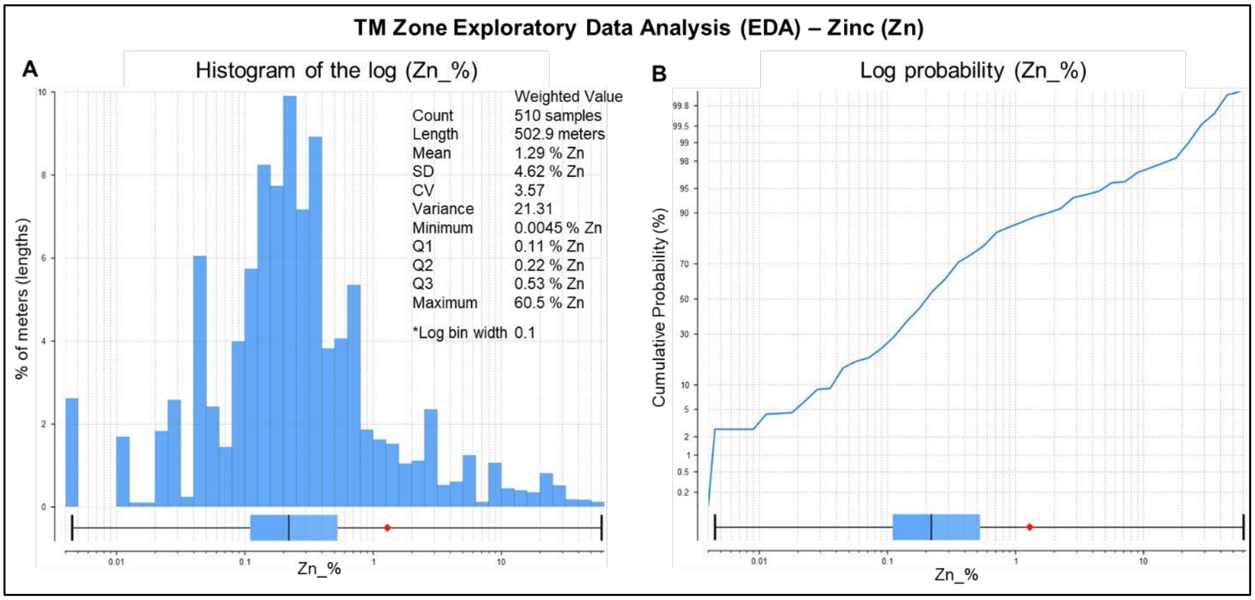
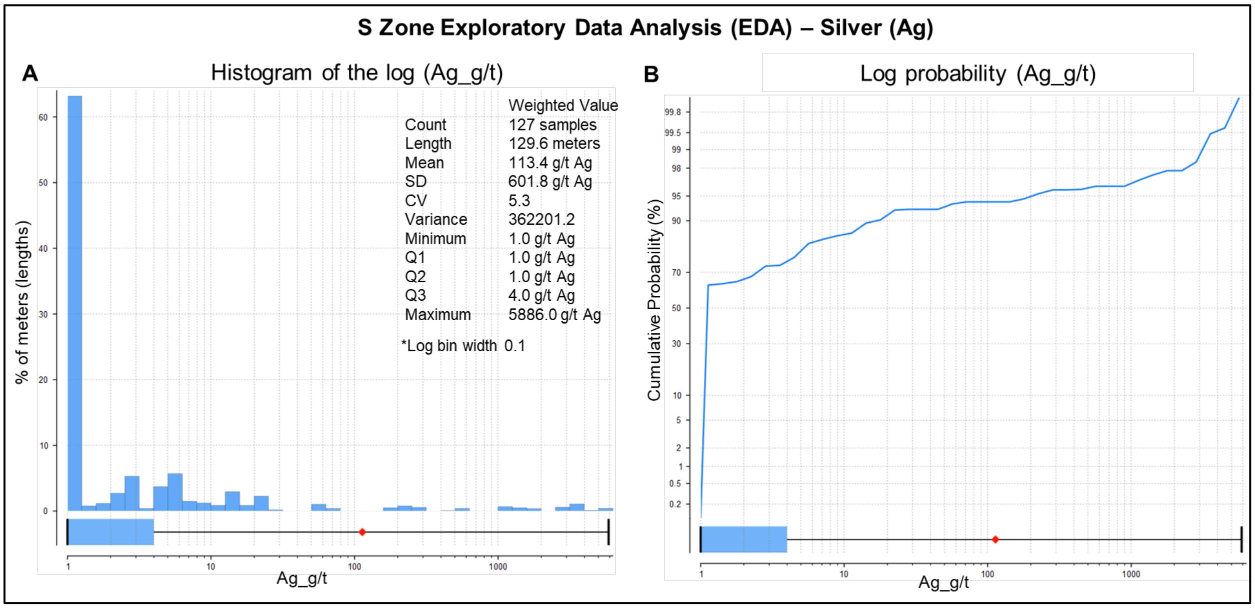
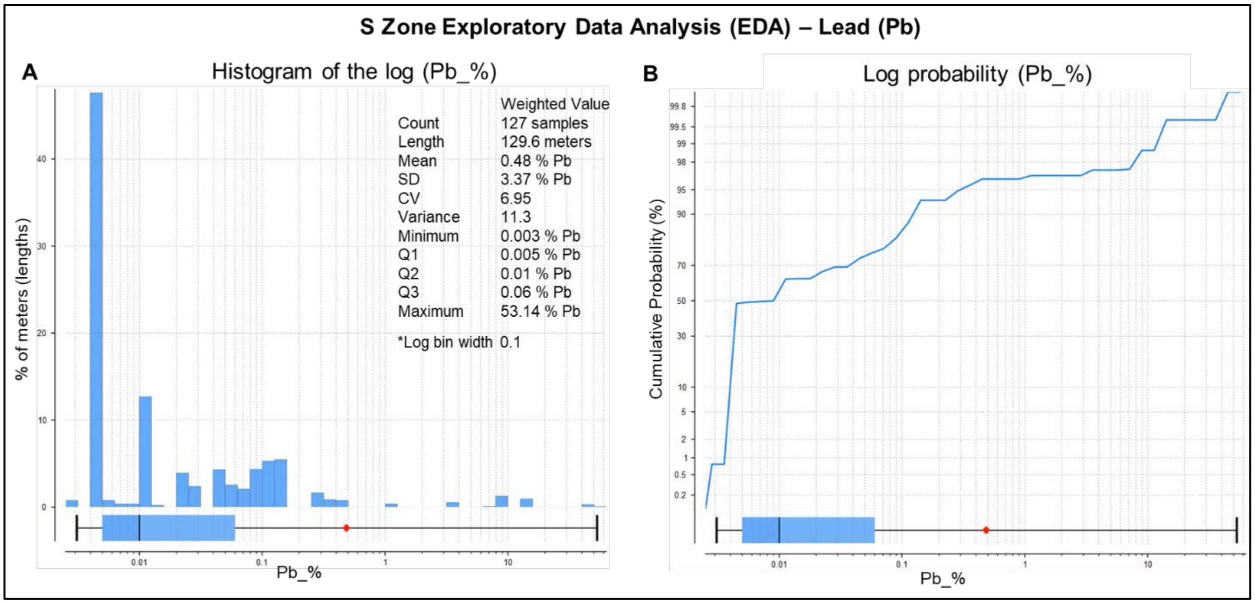


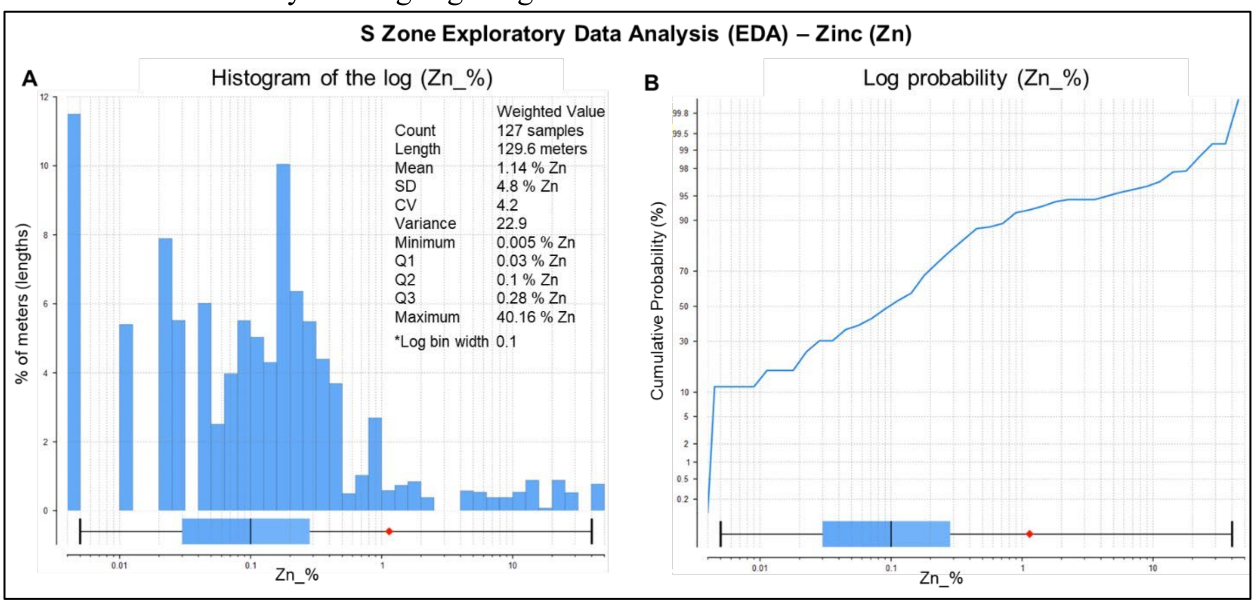
S Zone Exploratory Data Analysis for Silver Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



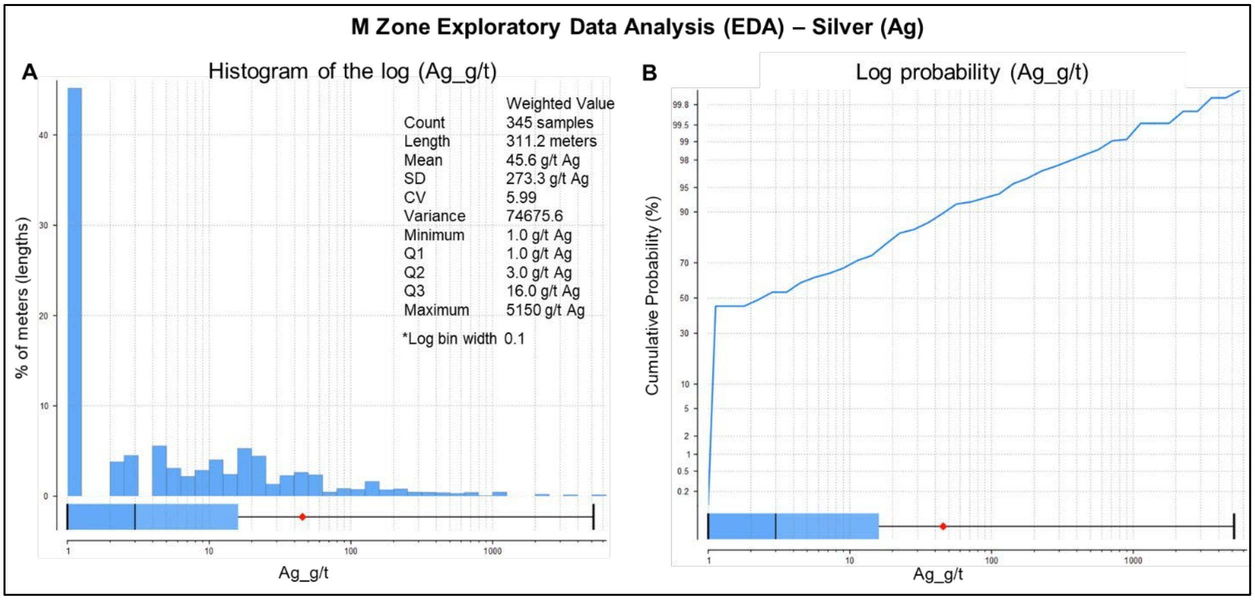
S Zone Exploratory Data Analysis for Lead Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



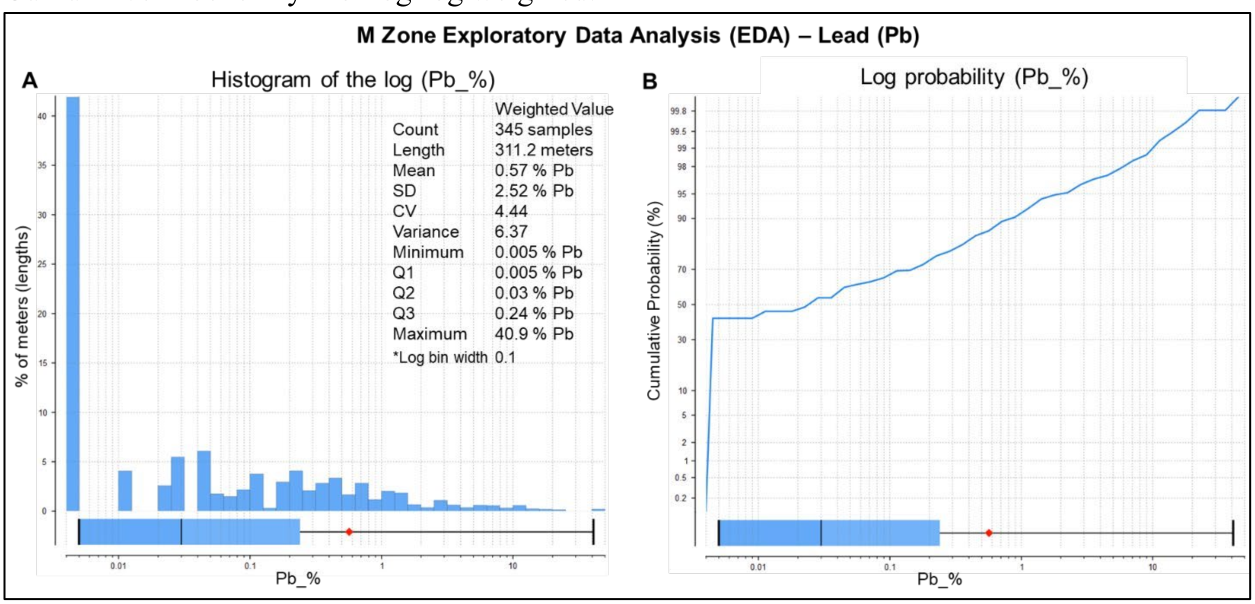
S Zone Exploratory Data Analysis for Zinc Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



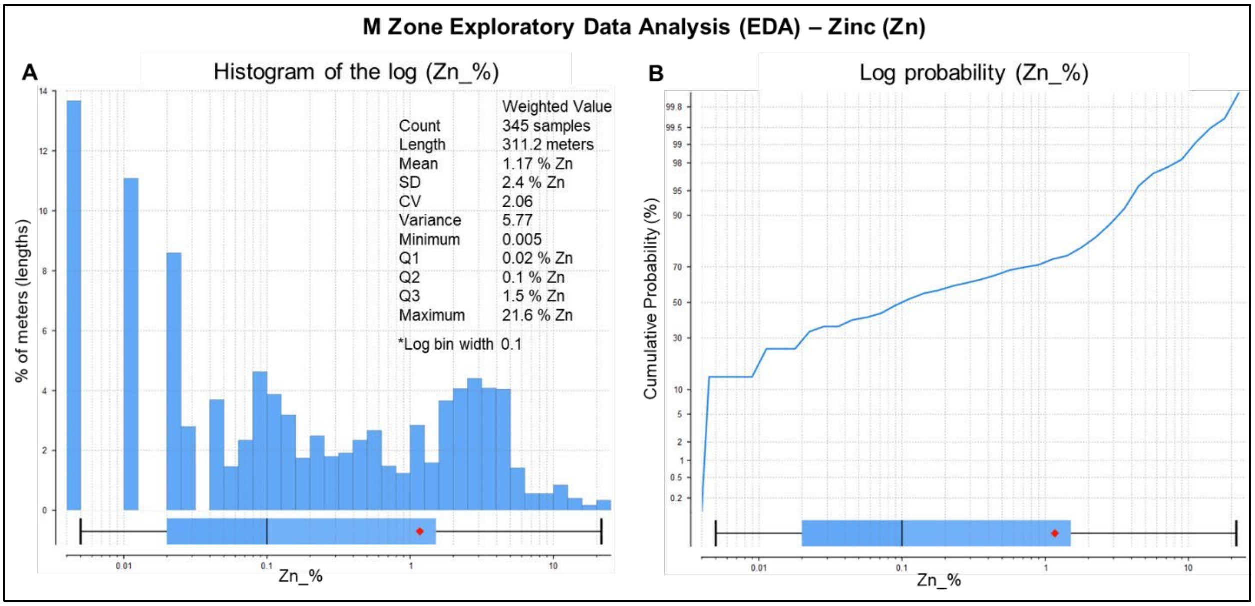
M Zone Exploratory Data Analysis for Silver Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



M Zone Exploratory Data Analysis for Lead Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



M Zone Exploratory Data Analysis for Zinc Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



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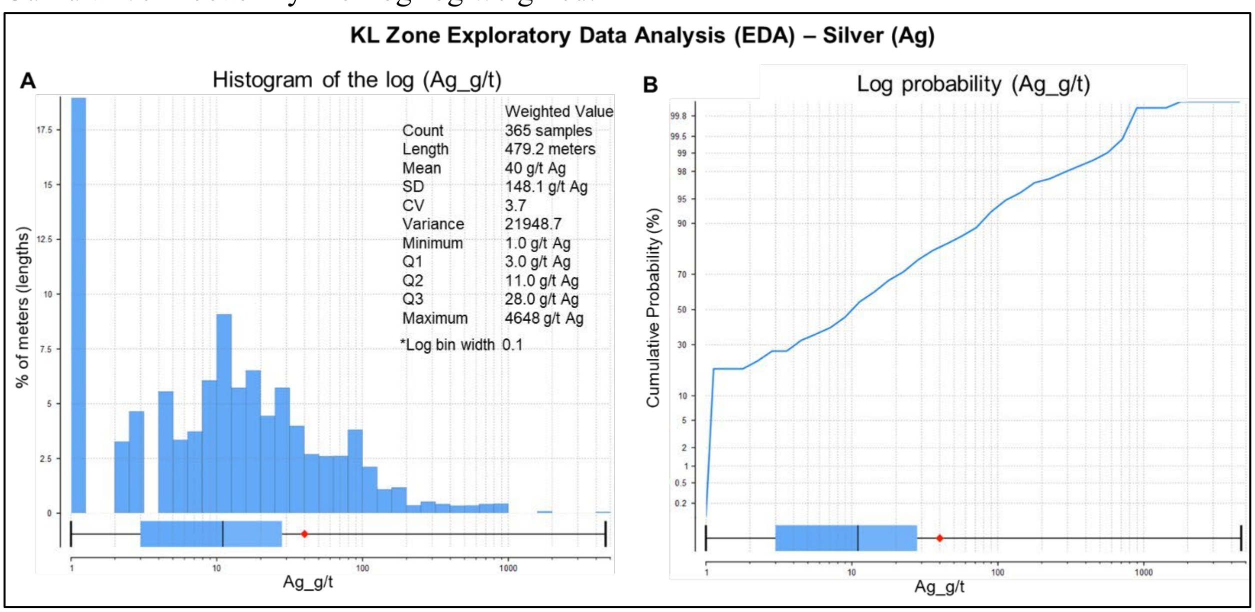

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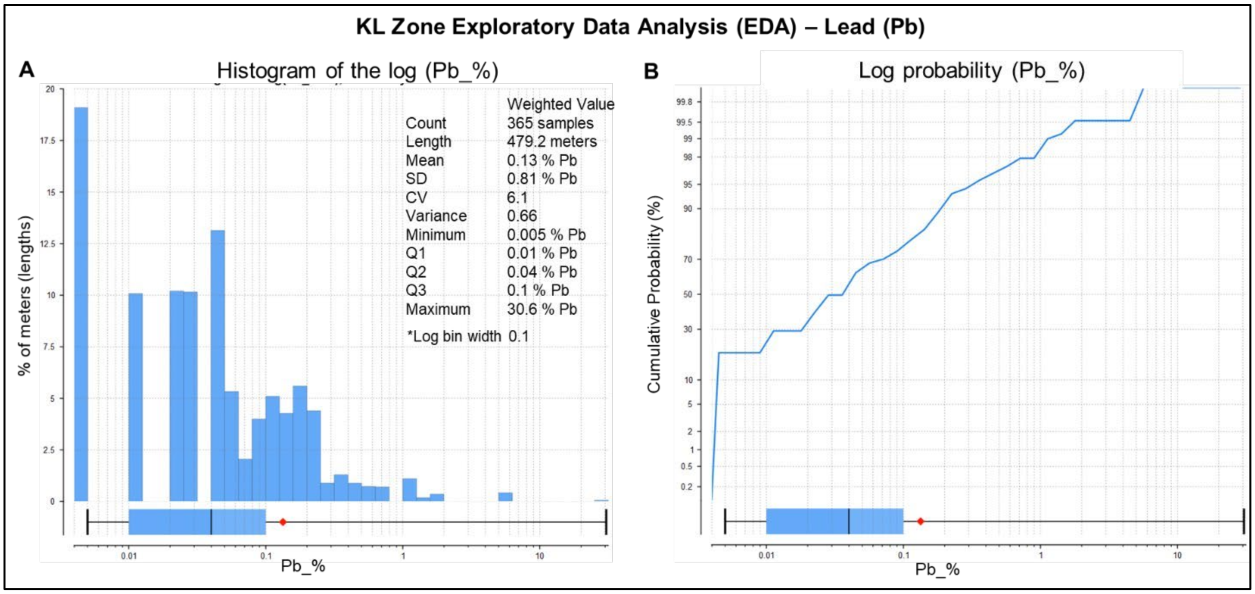
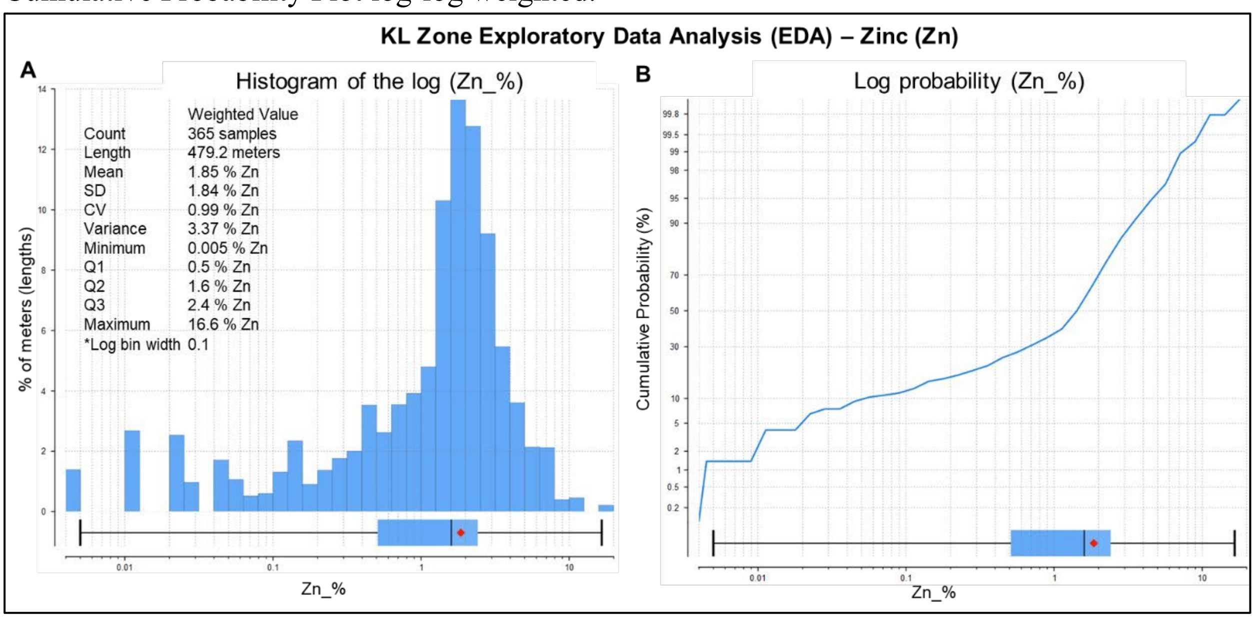
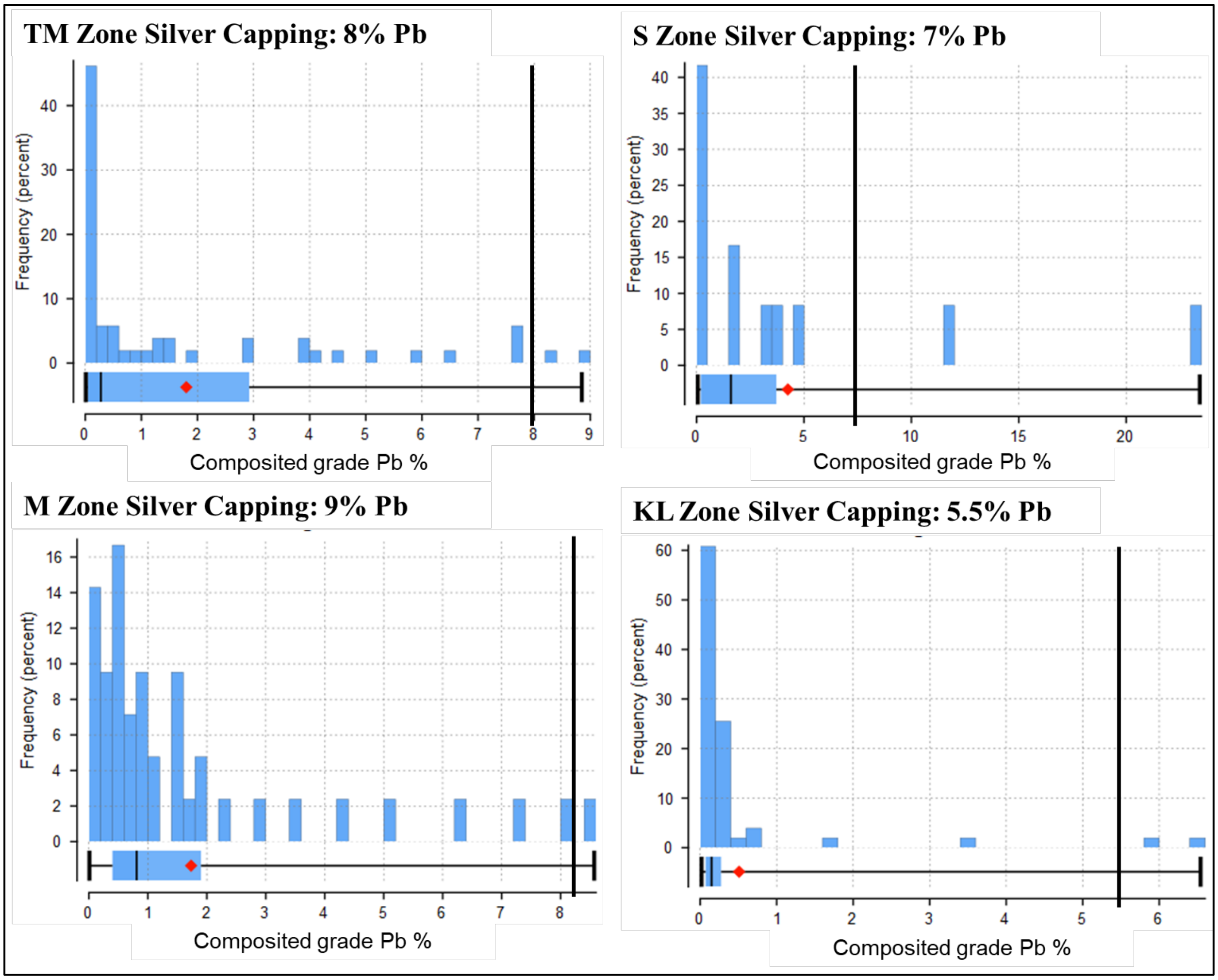


KL Zone Exploratory Data Analysis for Zinc Grade. A. Frequency Histogram of the log. B. Cumulative Probability Plot log-log weighted.



Lead grade capping.



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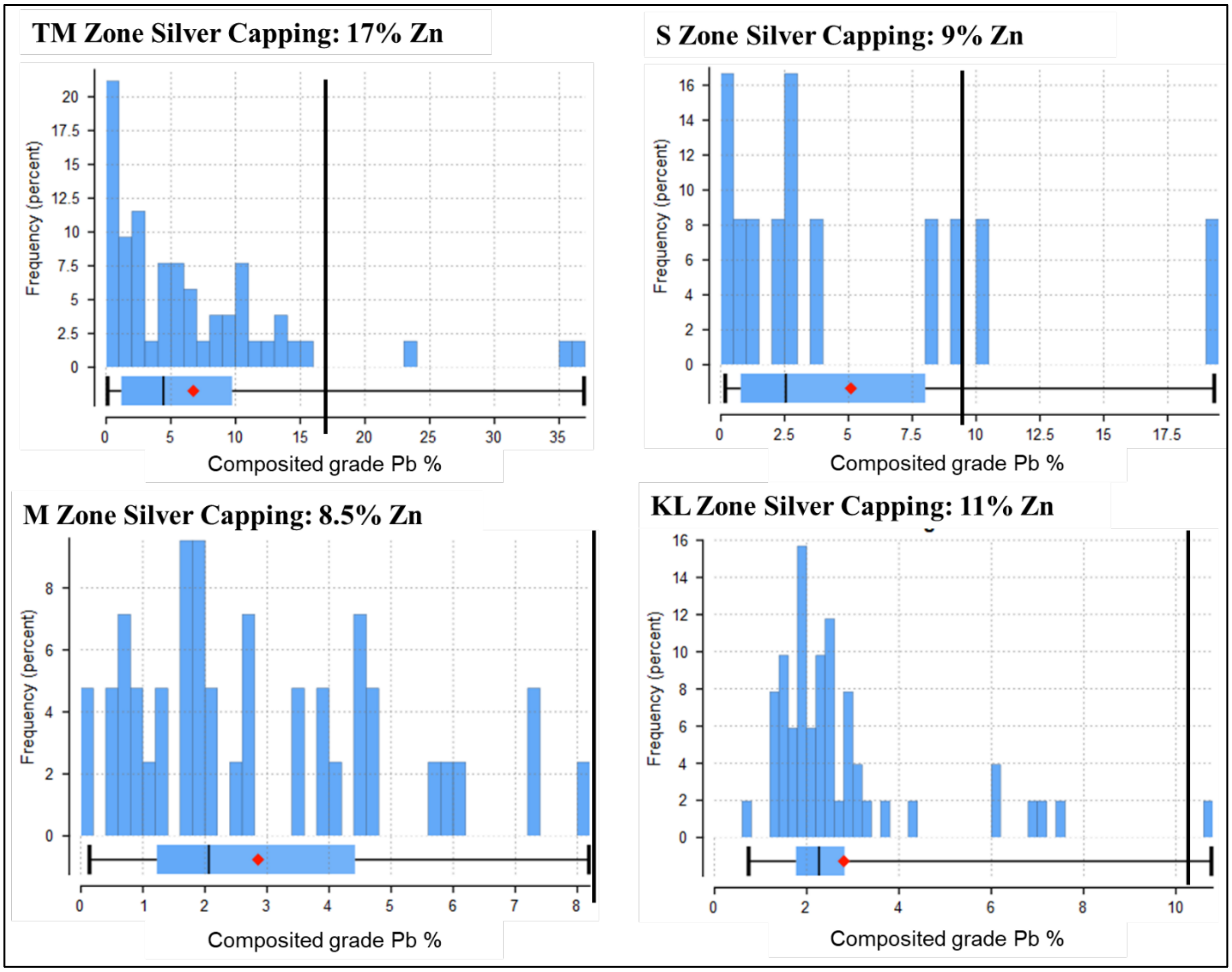
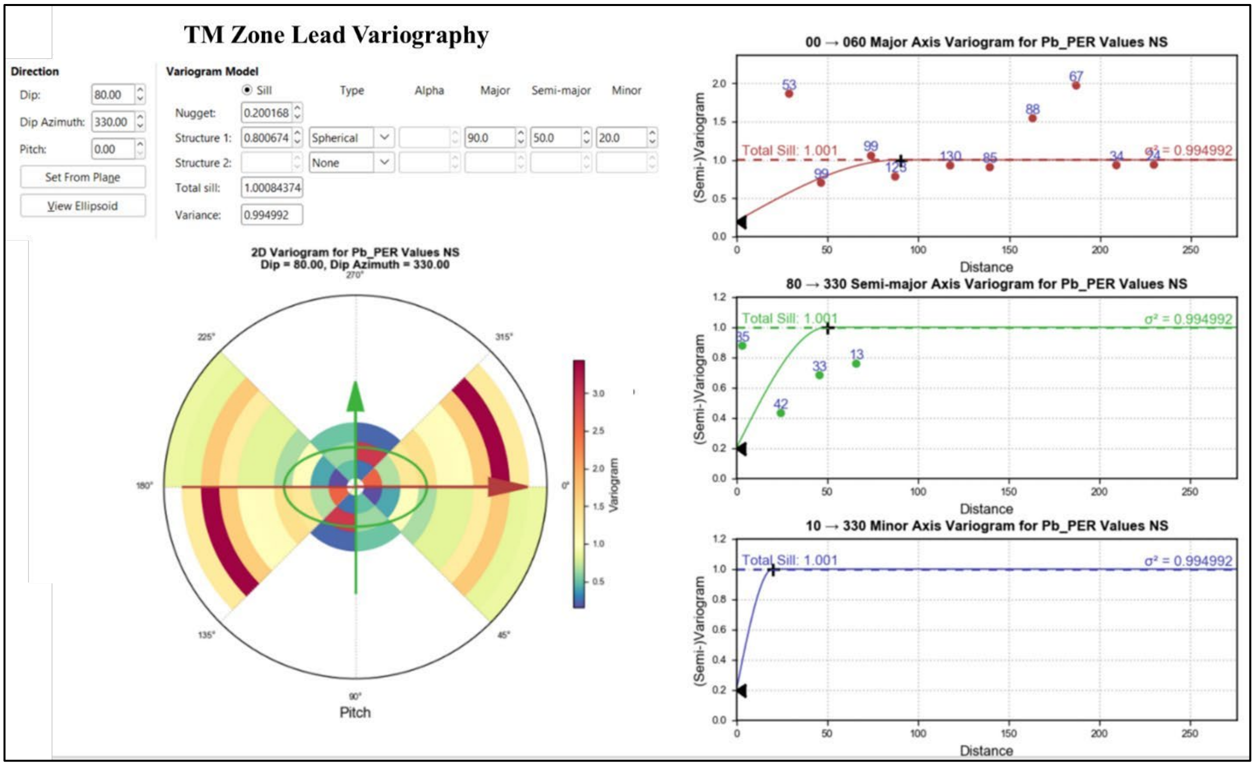
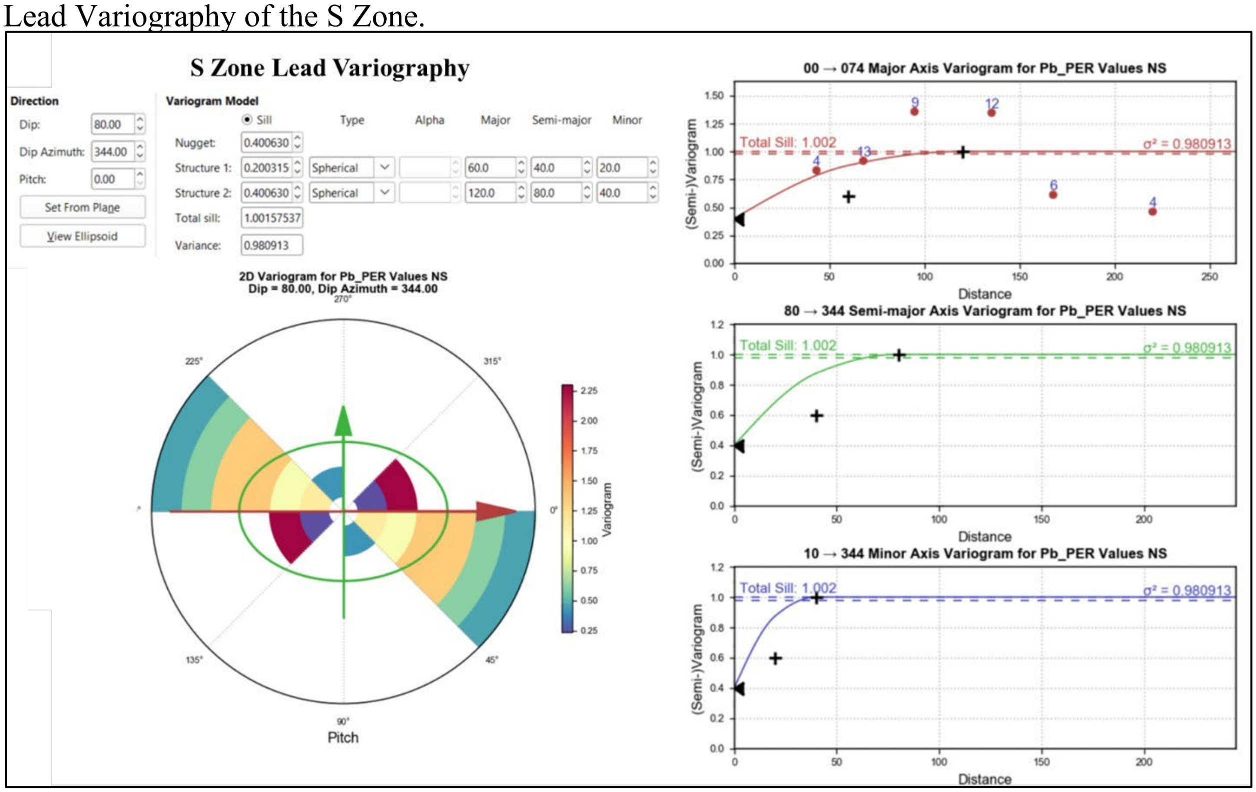


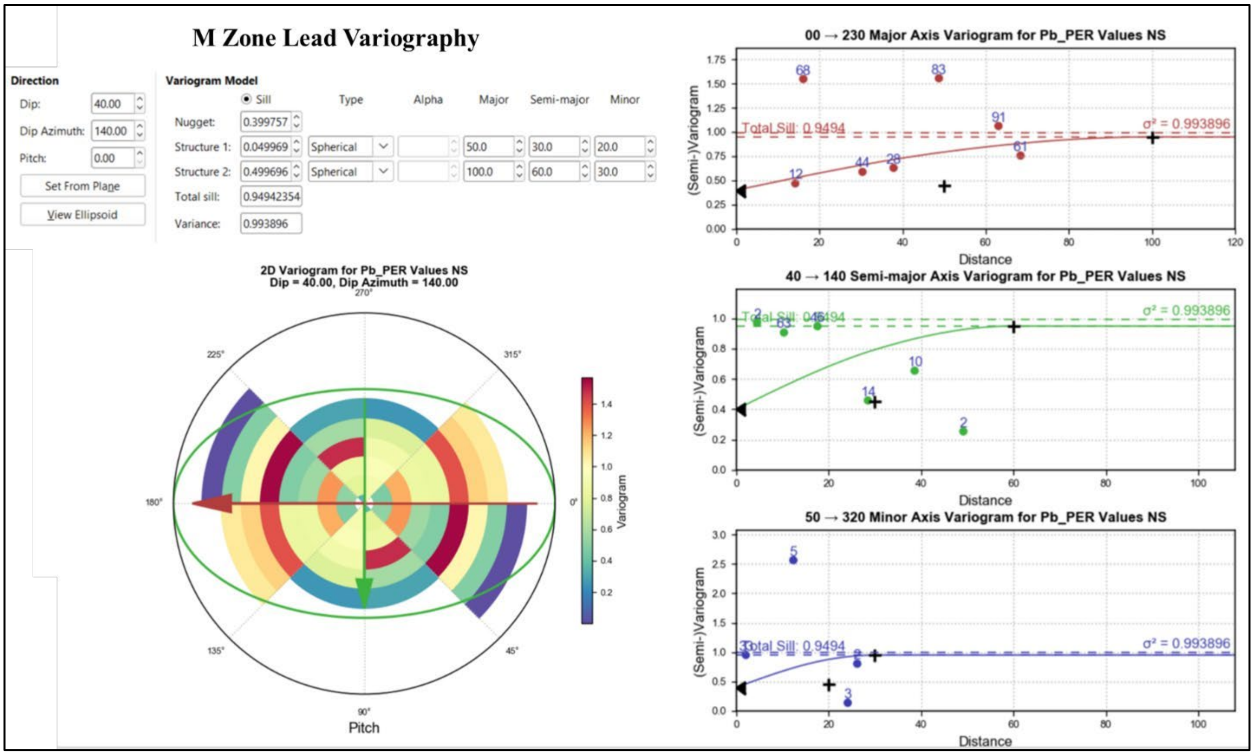
Lead Variography of the TM Zone.



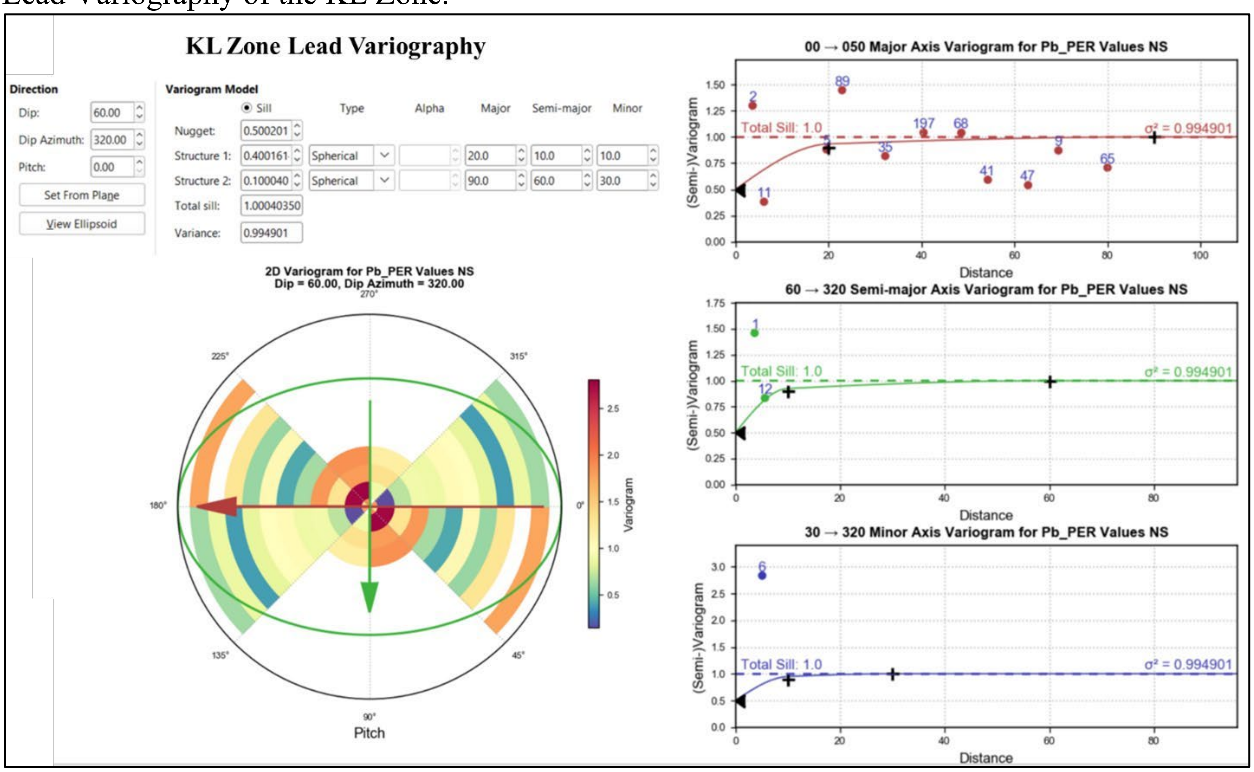
Lead Variography of the S Zone.



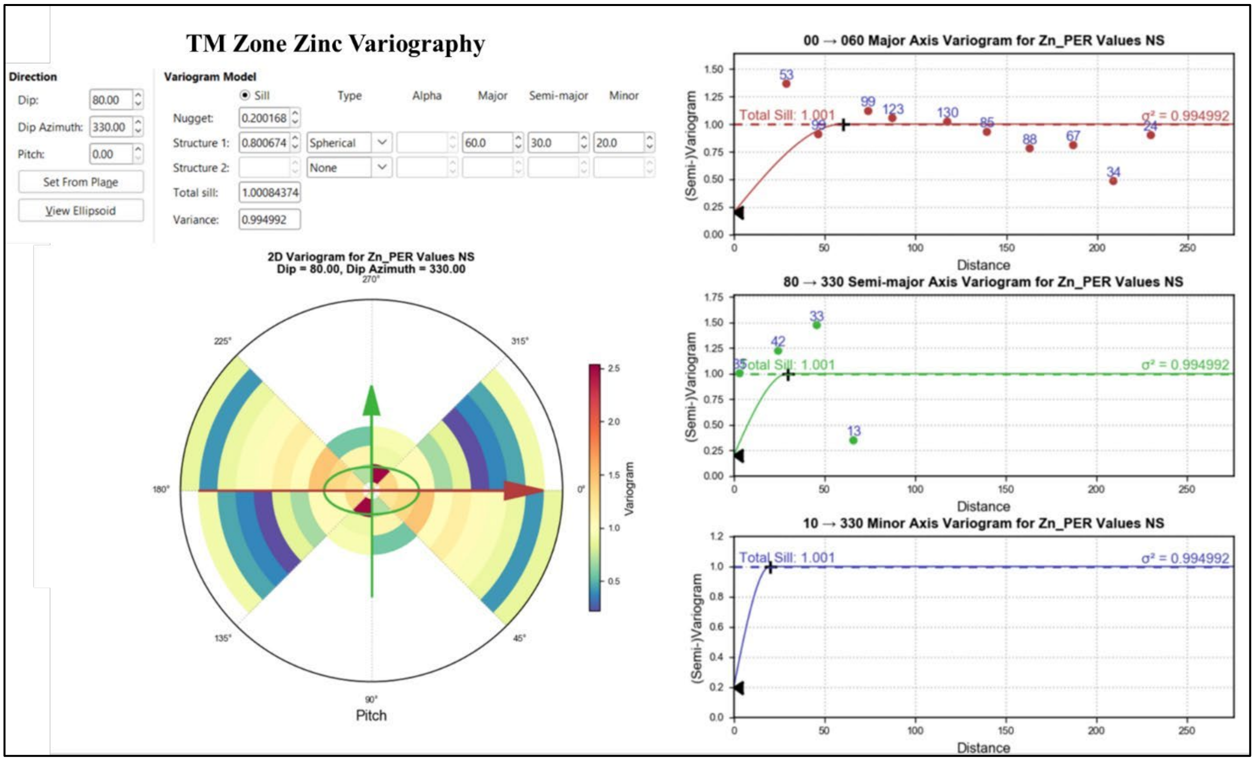
Lead Variography of the M Zone.



Lead Variography of the KL Zone.



Zinc Variography of the TM Zone.



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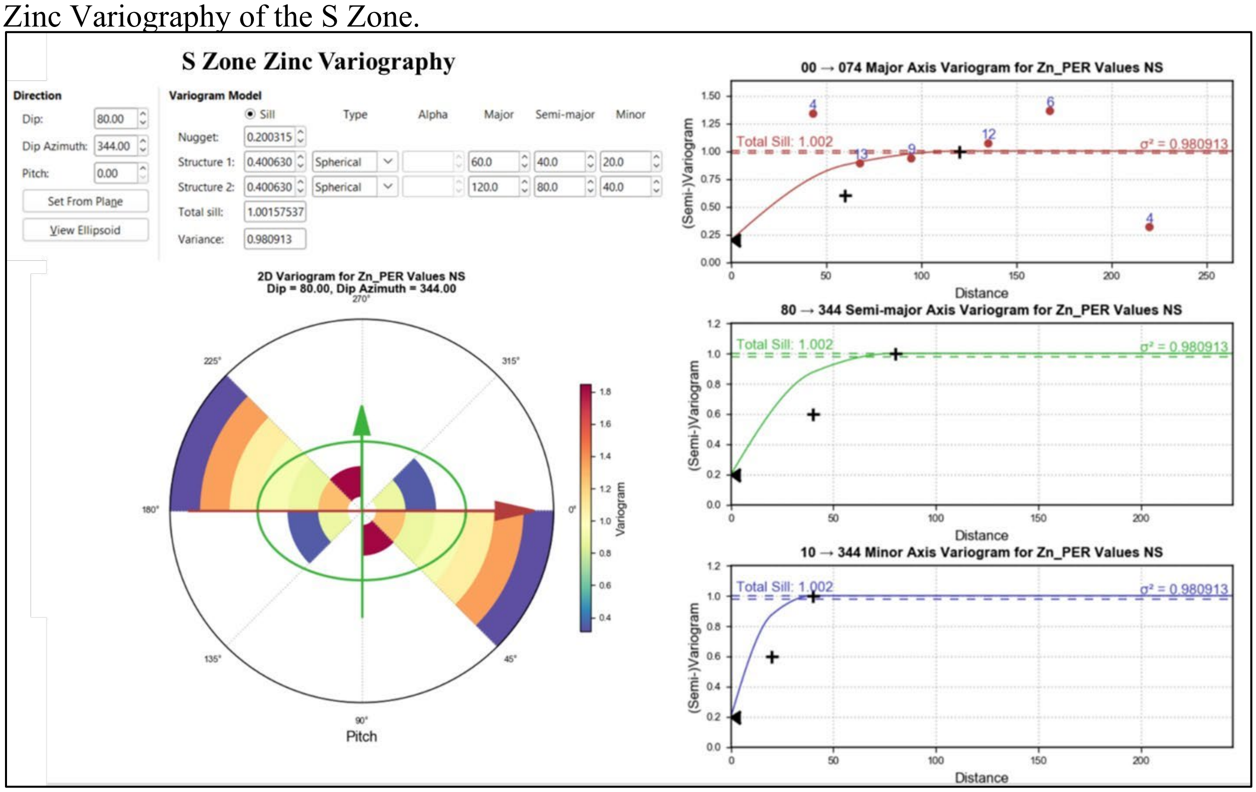
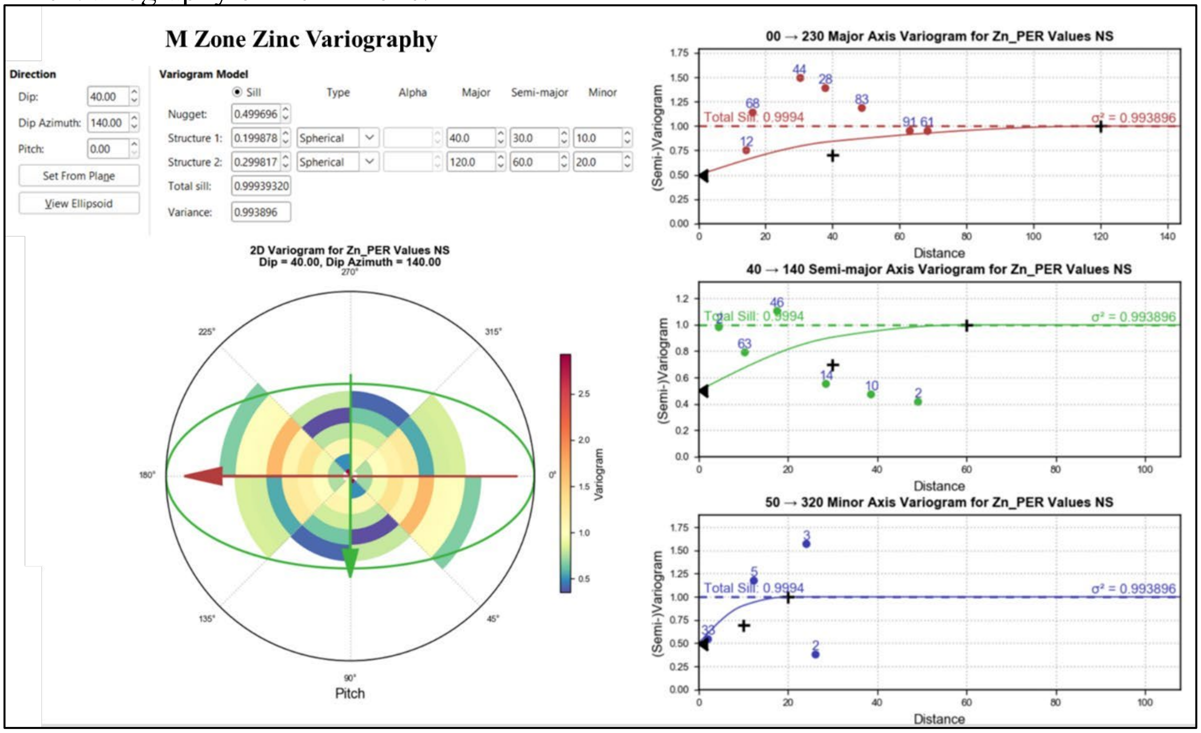
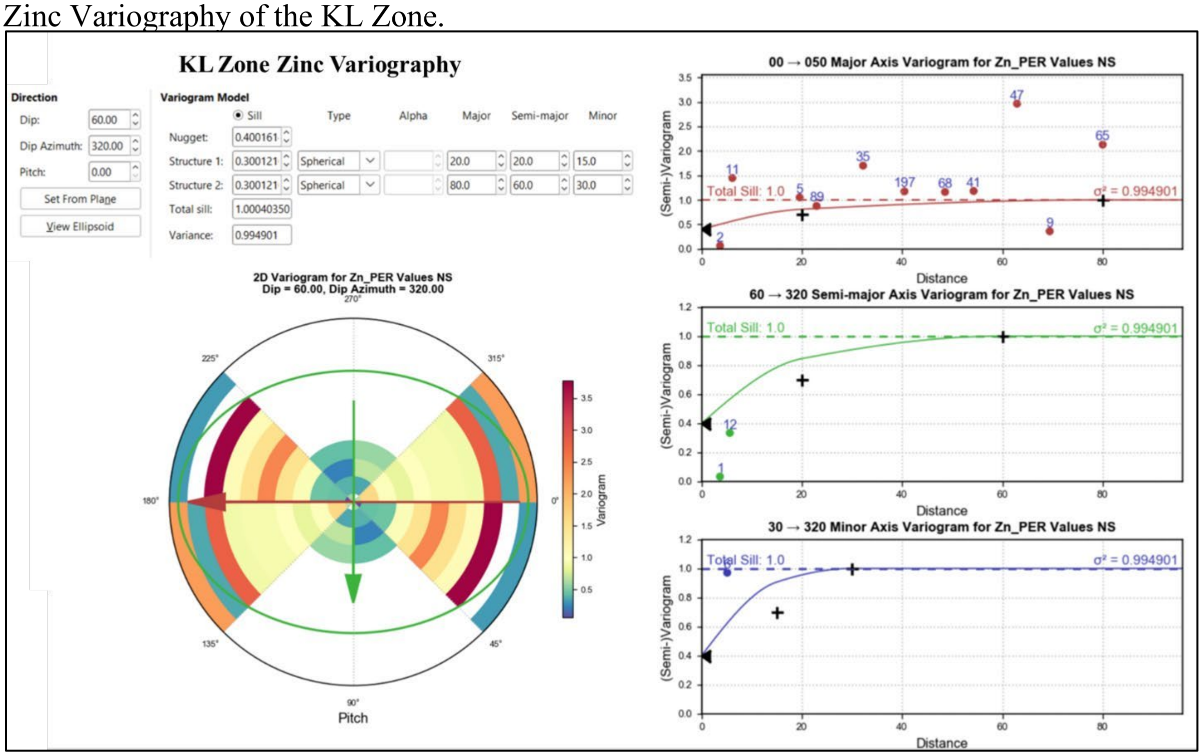


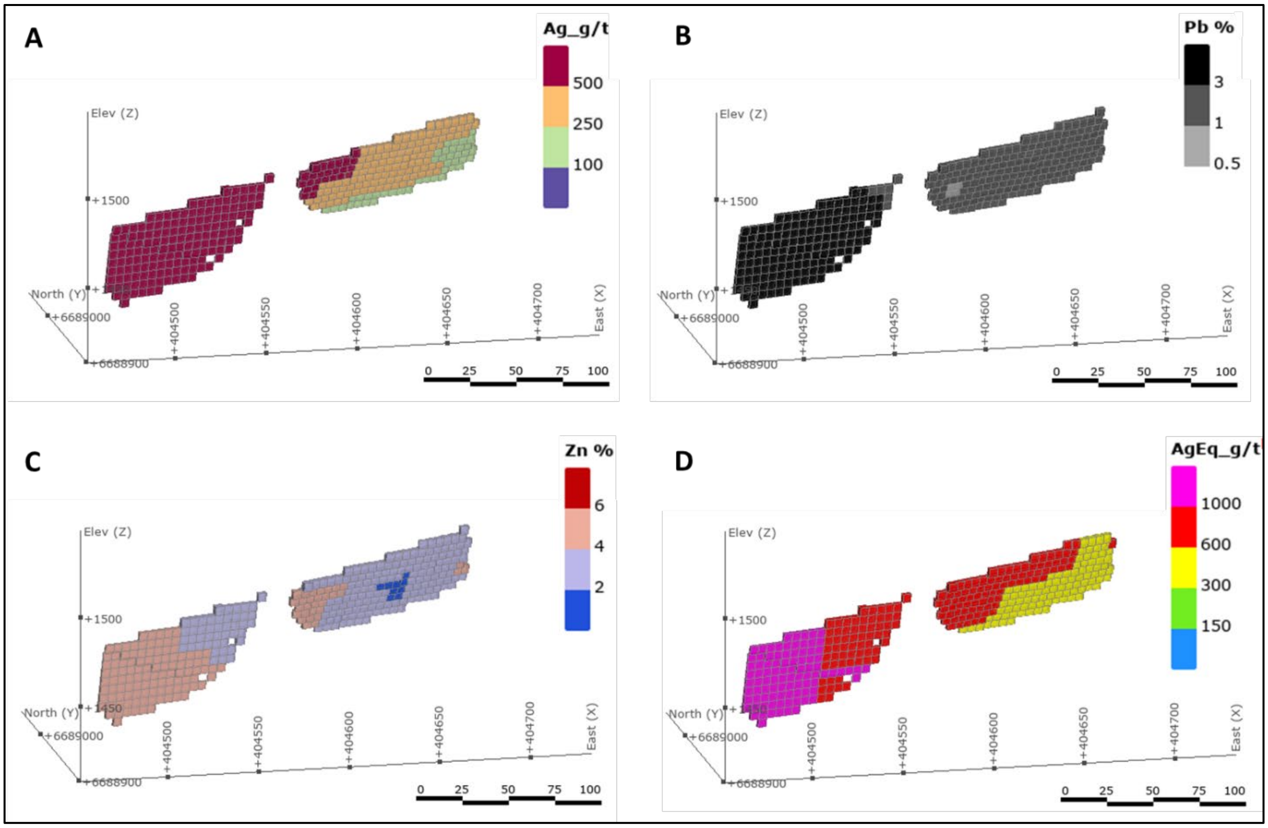
Zinc Variography of the M Zone.



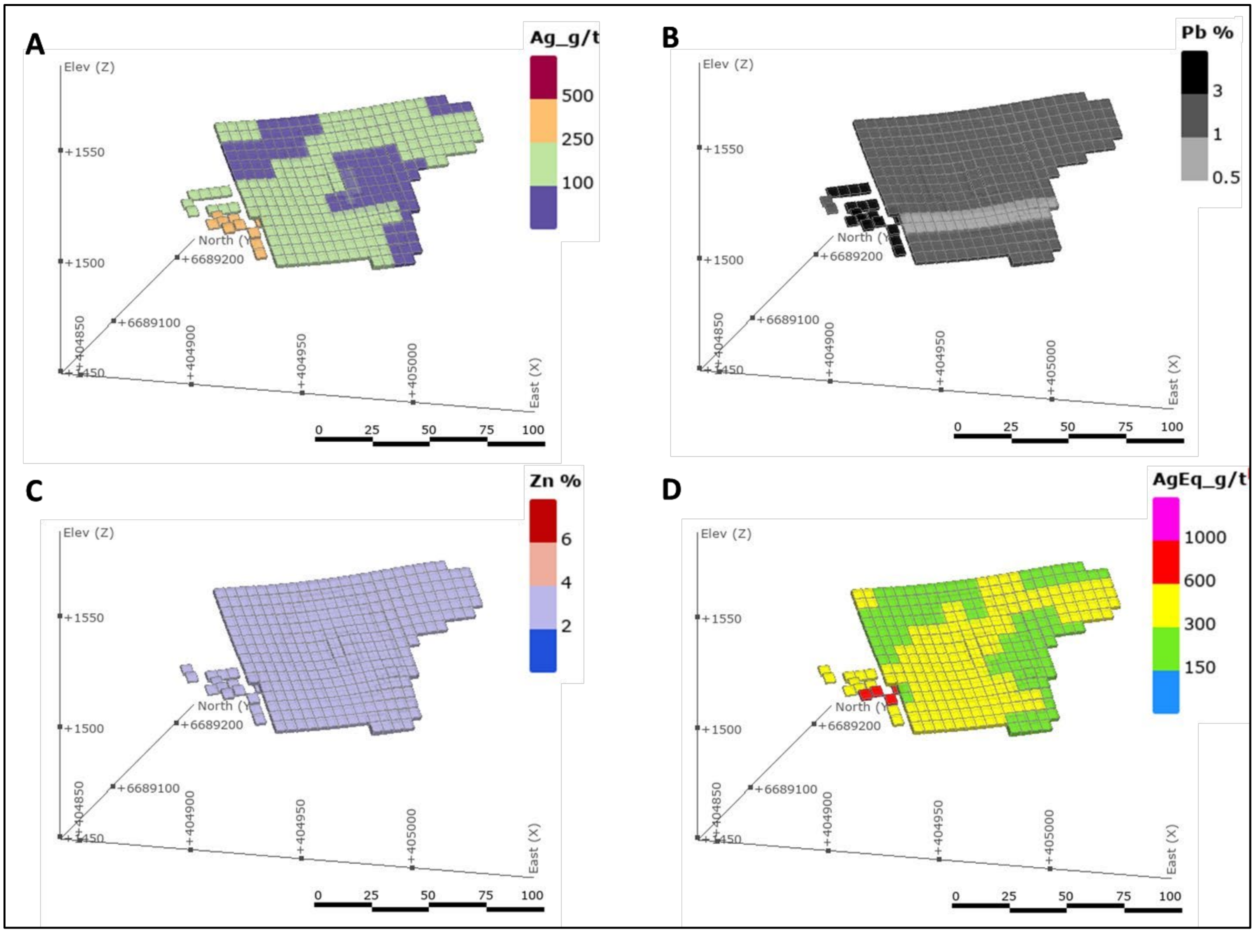
Zinc Variography of the KL Zone.



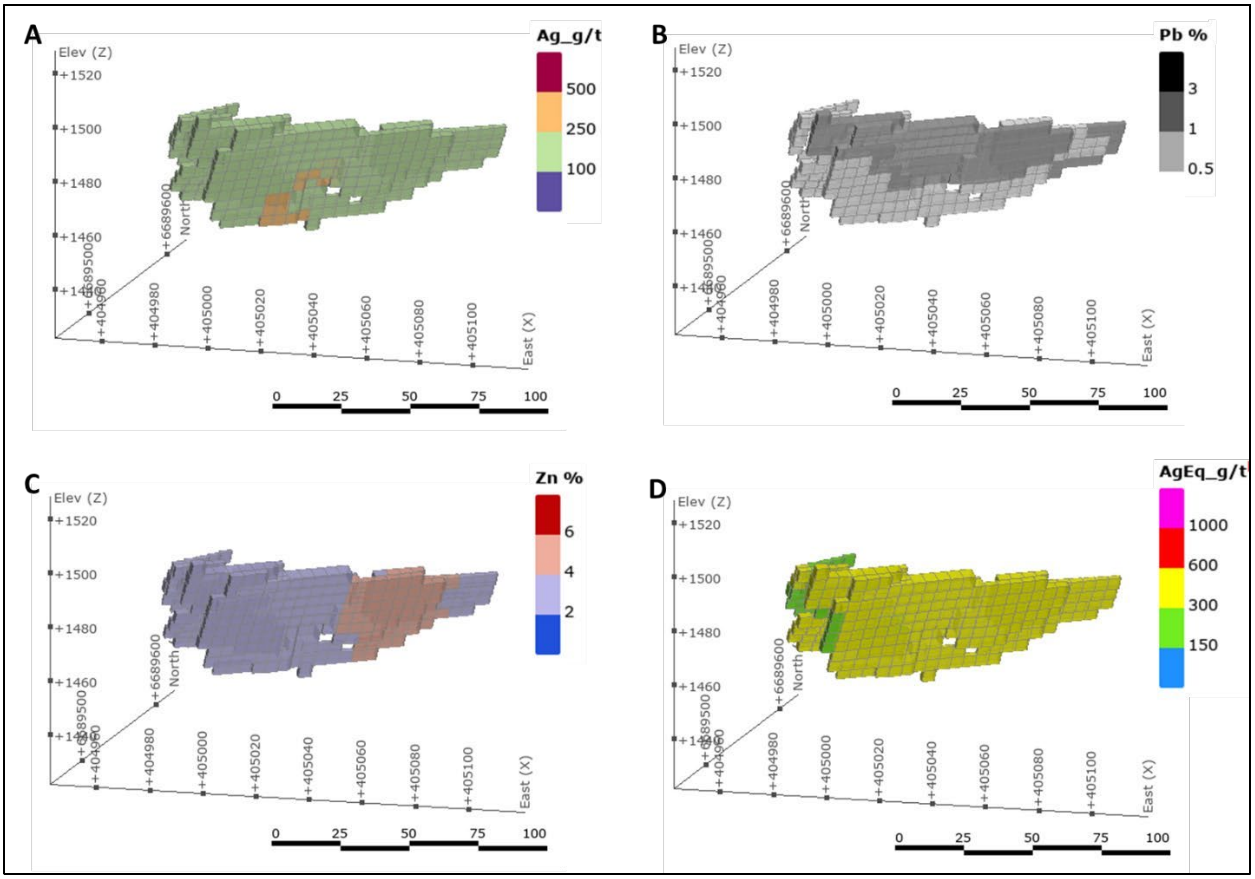
Sub-block models for the S Zone. A. Sub-block model for Ag grade. B. Sub-block model for Pb grade. C. Sub-block model for Zn grade. D. Sub-block model for AgEq grade.



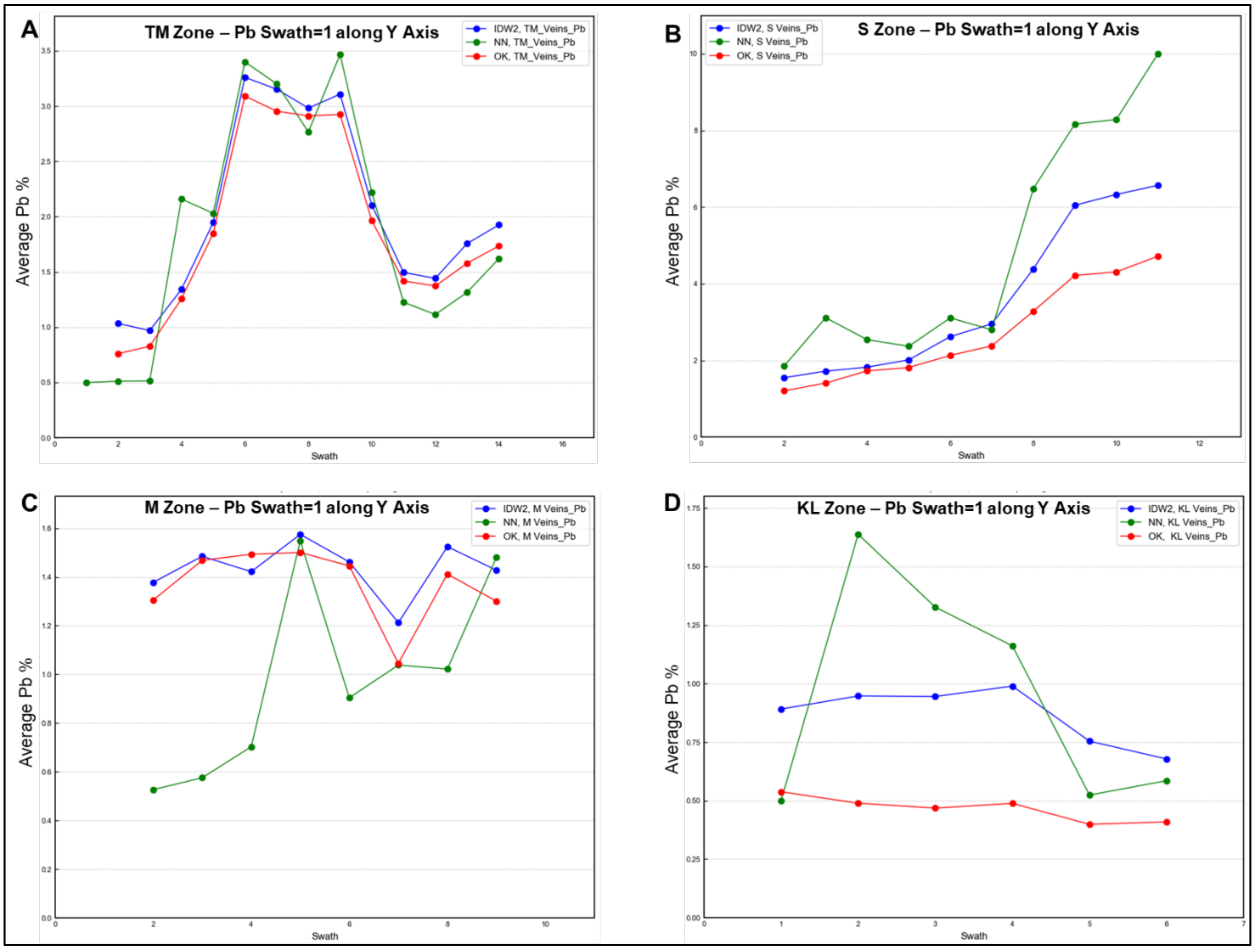
Sub-block models for the M Zone. A. Sub-block model for Ag grade. B. Sub-block model for Pb grade. C. Sub-block model for Zn grade. D. Sub-block model for AgEq grade.



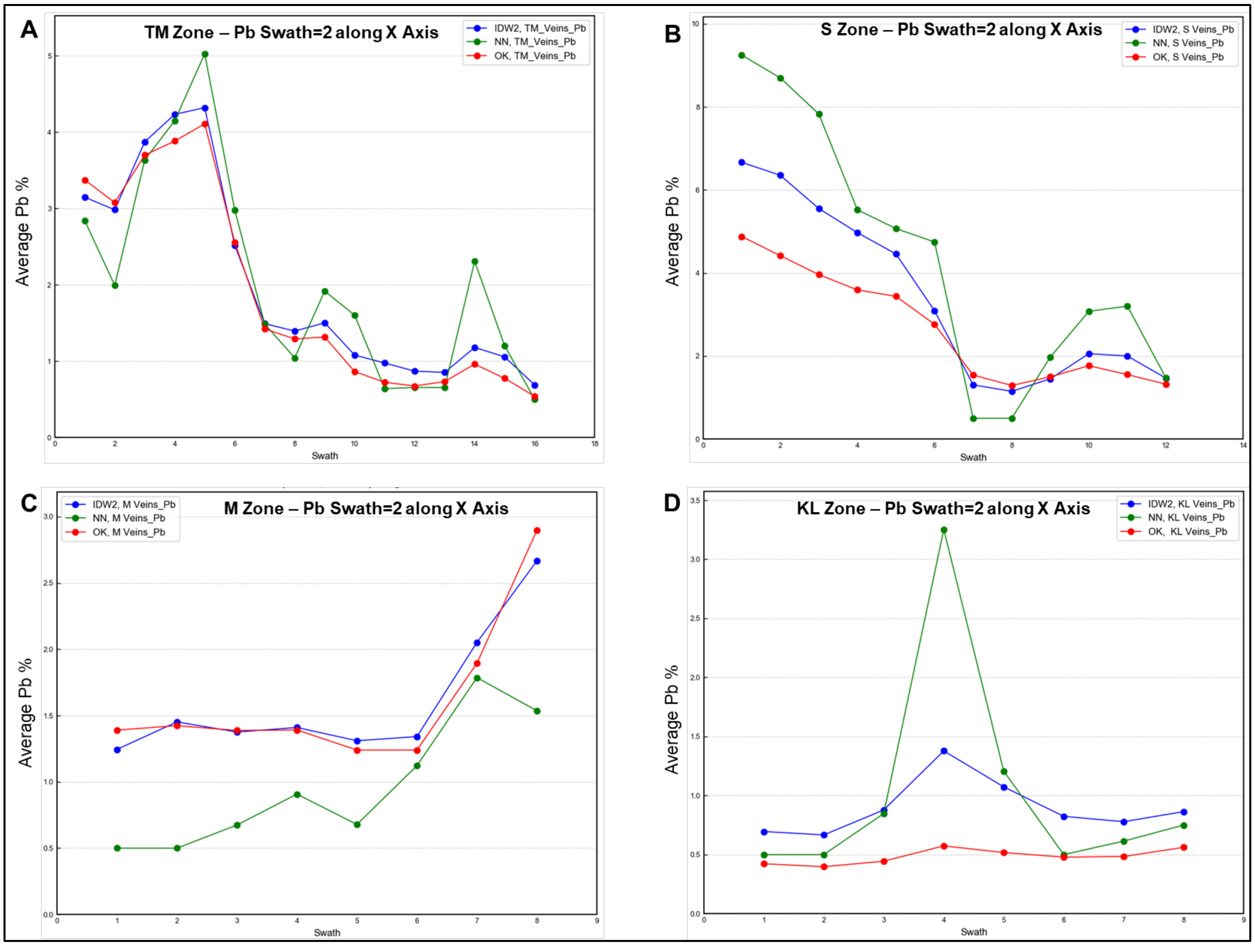
Sub-block models for the KL Zone. A. Sub-block model for Ag grade. B. Sub-block model for Pb grade. C. Sub-block model for Zn grade. D. Sub-block model for AgEq grade.



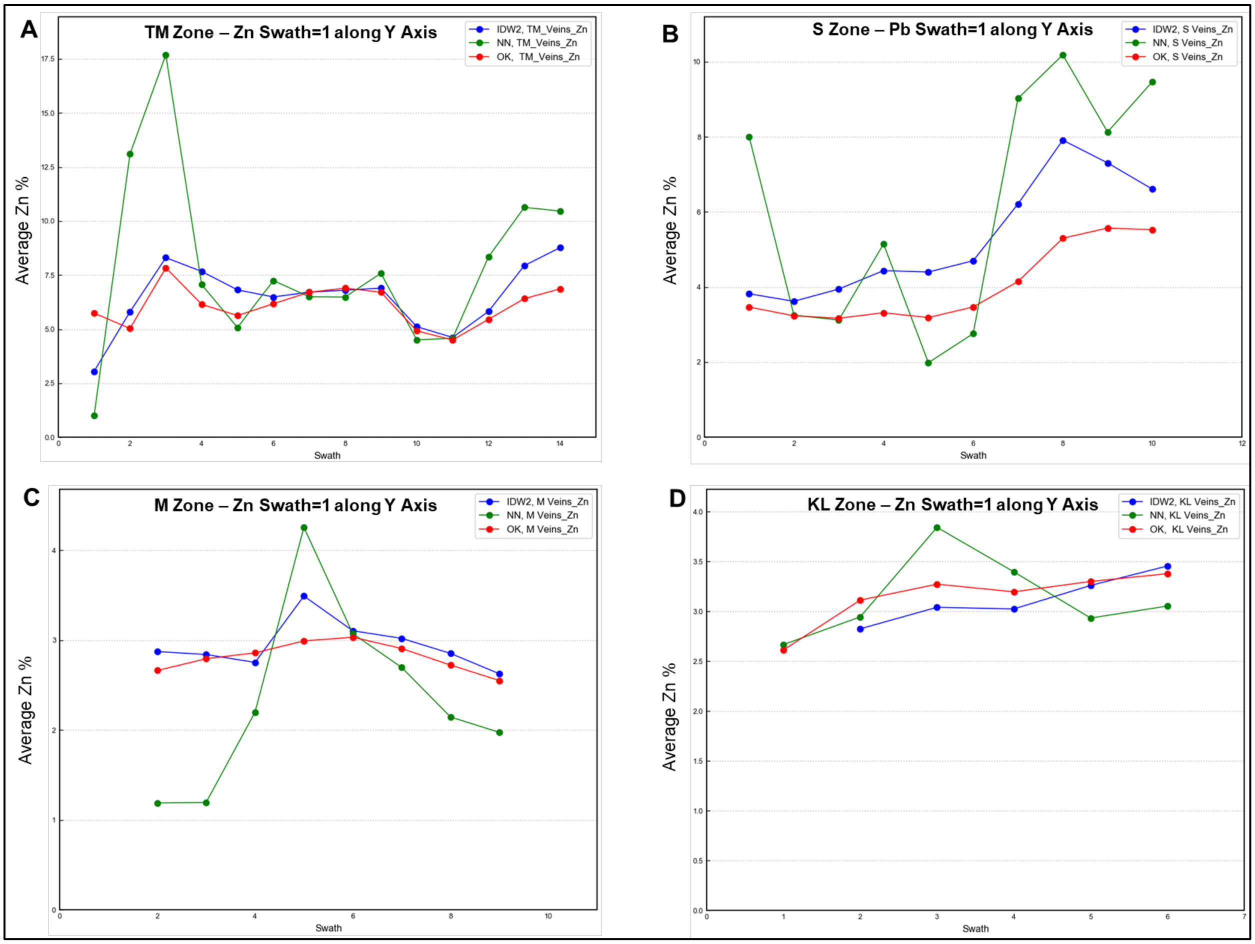
Lead Swath Plots along the Y axis of A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



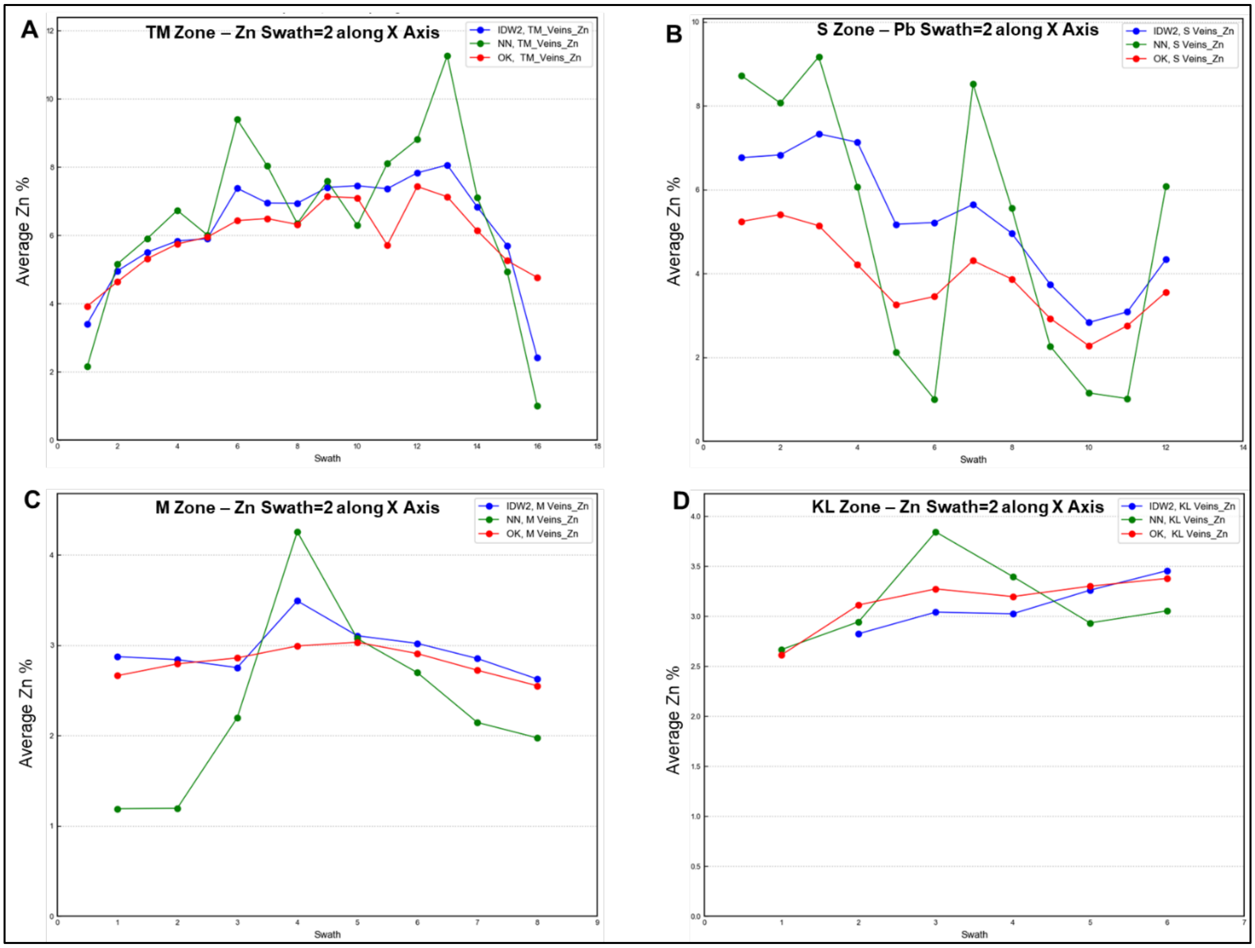
Lead Swath Plots along the X axis of A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



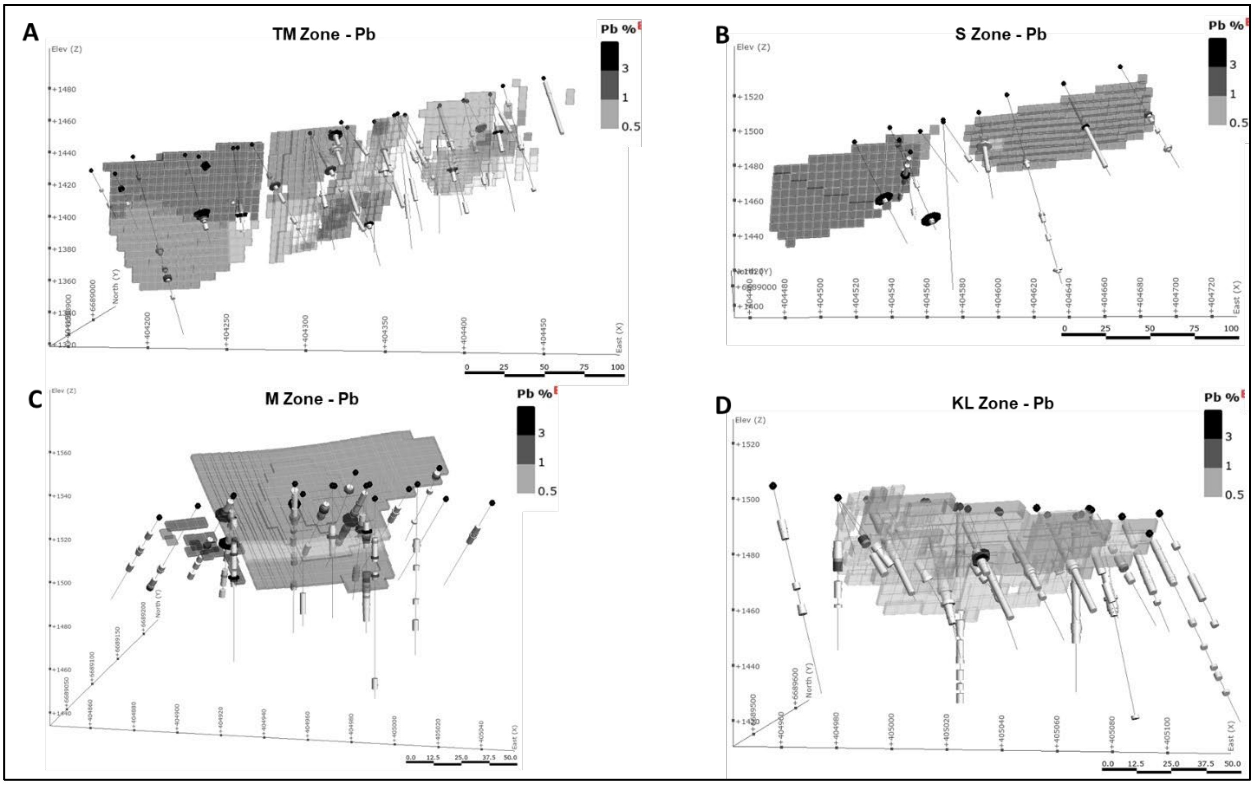
Zinc Swath Plots along the Y axis of A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



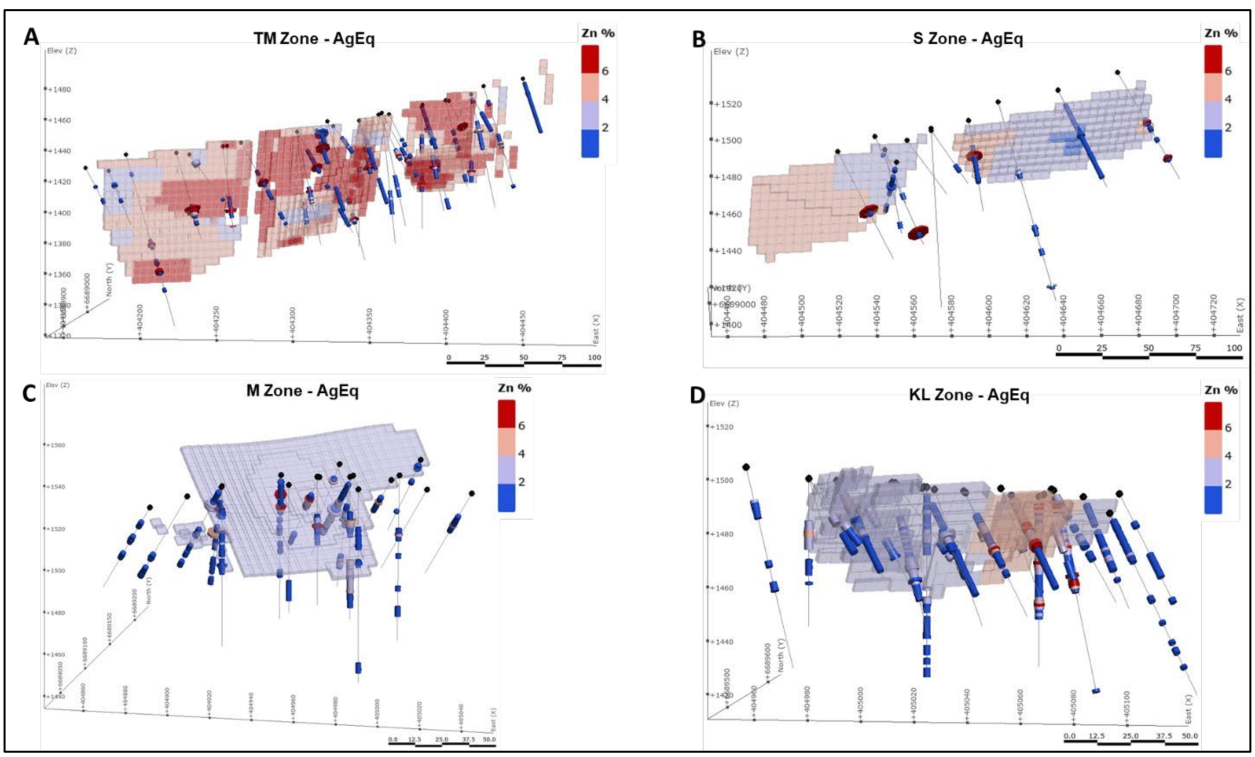
Zinc Swath Plots along the X axis of A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



Block Model comparison against Lead Data. A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



Block Model comparison against Zinc Data. A. TM Zone block model. B. S Zone block model. C. M Zone block model. D. KL Zone block model.



APPENDIX C Geophysics Report

I.E. Intelligent Exploration
59 Nicholas Road RR#4
Campbellford, ON K0L 1L0

REPORT ON TIME-DOMAIN INDUCED POLARIZATION And TOTAL FIELD MAGNETOMETER SURVEYS

For

CMC Metals Ltd.

Silver Hart Property,
Watson Lake Mining District, South Yukon
NTS 105B/07

Surveyed By

McKeown Exploration Services Ltd.
August 2020

Report By

Intelligent Exploration
John Gilliatt B. Sc., P. Geo.
C. J. Hale Ph. D., P. Geo.

November 16, 2020

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Appendix A: Daily Production Summary (IP/Res & MAG Surveys)

Appendix B: Digital Data and Deliverables

Appendix C: Instrument Specification Sheets (IP/Res & MAG Surveys)

Appendix D: Maps and Sections

1. **Introduction**

In August and September 2020, Time-Domain Induced Polarization (IP/Res) and Total Field Magnetometer (MAG) Surveys were completed on CMC Metals Ltd.'s Silver Hart Property.

The geophysical surveys were carried out to build on a 2005 IP/Res survey to provide broader systematic coverage in an area of the property that hosts:

1) high-grade polymetallic veins;

2) breccia, stock-work, fracture controlled intrusive-hosted mineralization;

and,

3) carbonate replacement mineralization. (Brewer, 2020)

These deposit styles are considered typical of the Rancheria Mineral District.

The survey work was contracted to McKeown Exploration Services Ltd. (MES) of St. John's, NL. The IP/Res surveys were conducted between August 17 and August 31, 2020 with the MAG Surveys completed on September 1 and 2, 2020.

This report describes the survey plan, procedures, and data processing and then presents the results. It also includes an interpretation with recommendations for follow-up drill testing.

2. Property Location and Access

The Silver Hart property is located in the southeast Yukon approximately 100 km west-northwest of Watson Lake (Figure 1).

The property is accessible in the summer months by traveling north on a 43 km-long gravel road that connects with the Alaskan Highway at kilometer marker 1116 approximately one km east of the Continental Divide Lodge and Service Station.

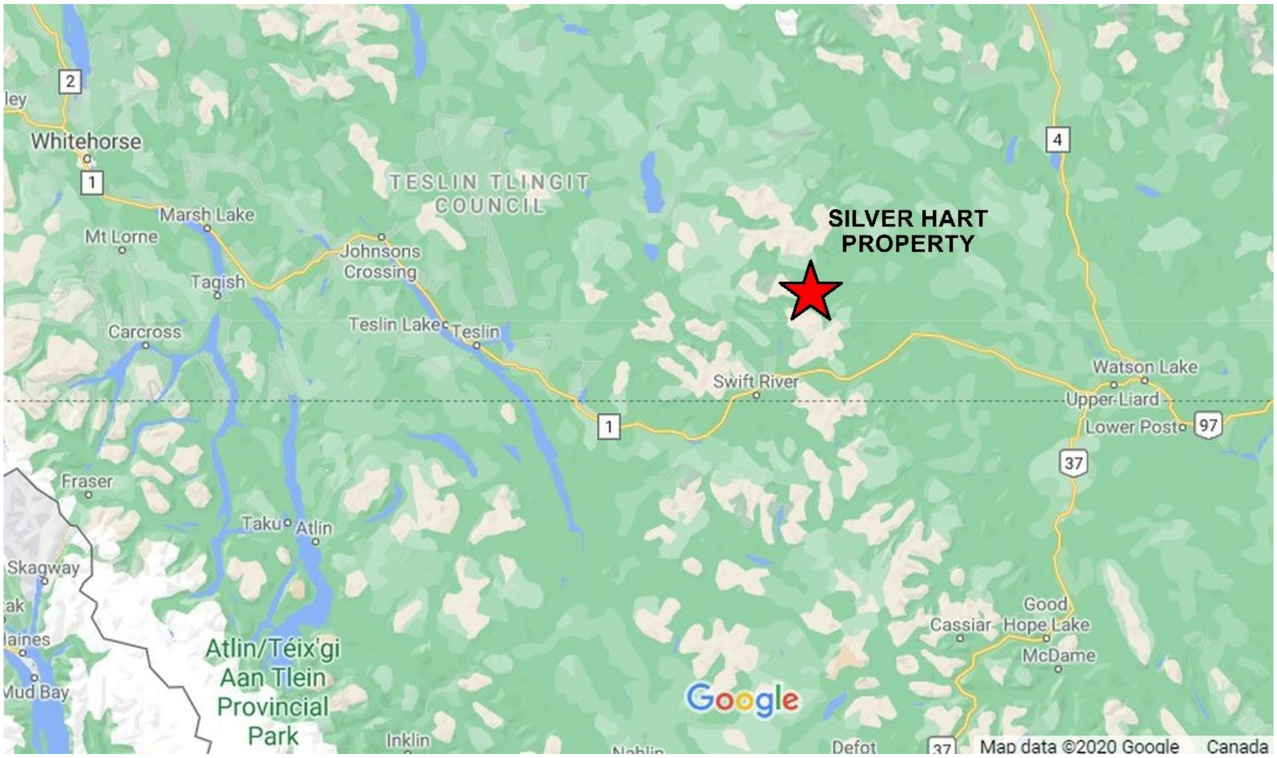


Figure 1: Silver Hart Property Location Map

3. Survey Method and Procedures

3.1 Line Preparation

Survey lines were cut and picketed by CMC Metals in advance of the IP/Res & MAG Surveys. WNW-ESE Lines were extended from the core lines over known mineralization that was surveyed in 2005. Some variation in the line azimuths arose because of difficult topography. The 2020 lines have been numbered to maintain a recognizable separation between the old and new data but to facilitate their inclusion in combined maps and models (Figure 2).

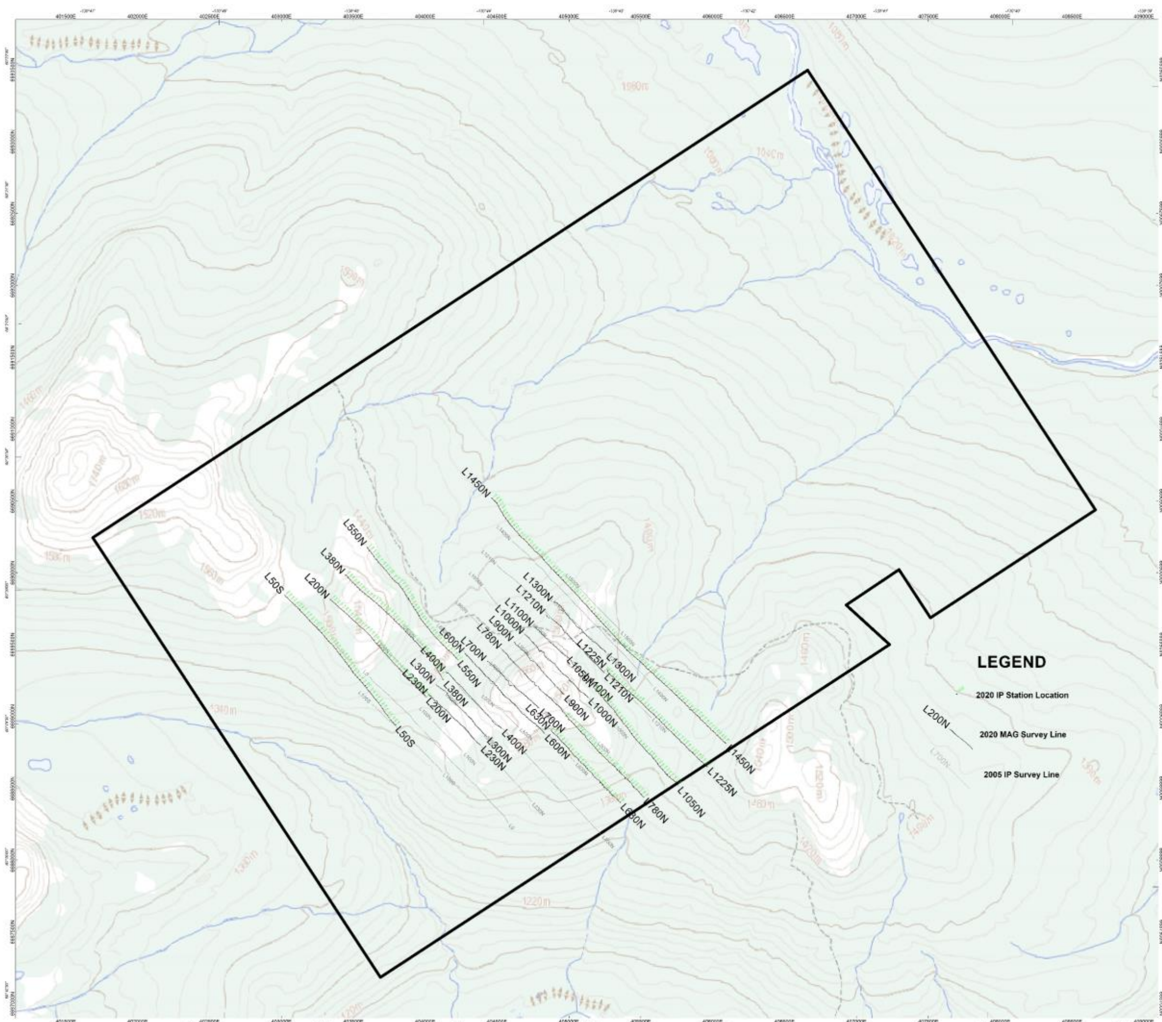


Figure 2: 2020 IP/Res and MAG Surveys Location Map

3.2 IP/Res Surveys

The IP/Res surveys were carried out by MES supervised by Intelligent Exploration (IE). An IRIS Instruments (IRIS) ELREC-PRO Receiver and a GDD Tx-II 3600W transmitter (powered by a Honda 5kW generator) were used for the survey. The MES survey team included Mr. Rob McKeown, P. Geo., (Project Supervisor, Party Chief & transmitter operator), Mr. Rowan Laver (receiver operator), Mr. Eric Luzar, and several local helpers supplied by CMC Metals. The IP/Res Survey data were downloaded from the Elrec Pro receiver to a portable computer (using Prosys II software from IRIS) at the completion of each survey day. Mr. McKeown performed an initial QA/QC and then emailed the data to IE for final QA/QC, processing and plotting of preliminary map products.

Stainless steel rods (150 cm x 2 cm) were used for the current electrodes. Porous ceramic pots containing a copper sulphate solution were used for the potential electrodes. All of the lines were surveyed from to west-northwest to the east-southeast with the local current electrode(s) trailing the receiver electrodes. The “infinity” current electrodes were located northwest of the survey lines. Potential electrodes were connected to the receiver using a seismic cable. 16- or 18-gauge wire was used to connect the current electrodes to the transmitter.

The surveys employed a “combo” pole-dipole array. This configuration was chosen because it provides a reasonable depth of penetration while at same time providing good lateral resolution. The survey parameters consisted of ‘a’ = 25 m for n=1 to 4 and ‘a’ = 50 m for n=5 to 8. A transmitting pulse width of 2 seconds was used with alternating polarity, separated by a 2 second “off time” during which the chargeability data were collected.

The receiver recorded 8 dipoles at each station in Cole-Cole time domain mode. This mode provided the maximum number of samples early in each decay cycle for calculation of the initial chargeability M_{IP} in addition to the M_X bulk chargeability. Multiple readings were averaged at each station until the standard deviation of the average was less than a specified tolerance. The entire reading and averaging process was repeated for a station if the data failed to reach the quality specified.

The surveys were completed on 9 lines for total of 10.025 km. A daily production summary is provided in Appendix A.

3.3 MAG Surveys

The GPS-Controlled MAG surveys were also carried out by MES using a GEM Systems GSM-19 Overhauser Magnetometer. The survey was conducted in “Walk Mode” with 5 measurements per second. Mr. Eric Luzar operated the magnetometer with Mr. Rowan Laver collecting GPS points to guide the survey on the historical lines. 16.125 km of the magnetic data were collected on 19 lines. This included both 2020 and 2005 lines. A daily production summary is provided in Appendix A.

4. Data Processing and Presentation

4.1 IP/Res Surveys

The edited and corrected instrument data files were imported into a Geosoft Oasis Montaj® (OM) database (.gdb) using the IP module. The IP Module automatically calculates the apparent resistivities in ohm-m from the current, primary voltage and electrode locations for each measurement. The IP module also converts the twenty normalized secondary voltages (in mV/V) into a single array channel. A separate channel was created to store the average IP value (Average Chargeability) of the 20 time slices.

Preliminary pseudosections of average chargeability and apparent resistivity were plotted as each line was completed. Separate plan maps, showing the contoured chargeability and apparent resistivity data for N=2 (corresponding to a depth of about 25m) and N=4 (50m), were also prepared

After completing the IP/Res Surveys, the chargeability and apparent resistivity data were exported to separate ASCII text files. A third text file contained elevation data (SRTM V2) for each line. These files were used as inputs for calculating 2D inverse models of chargeability and apparent resistivity for each line.

The 2D inverse models were calculated using DCIP2D software developed by the Geophysical Inversion Facility at the University of British Columbia (UBC-GIF). This program uses a Gauss-Newton approach to minimize the misfit of an iterative series of models compared to the measured data, balancing the misfit against the requirement to produce a smooth, compact model of the resistivity distribution. This resistivity model is used in a second calculation to minimize the misfit of the chargeability. A consequence of this inverse modelling is that there is a tendency to calculate a single source model that explains the measured data even though the actual source may involve more than one centre of chargeability. Interpretation requires the comparison of the resulting models with measured data (as pseudosections) to ensure that the model anomalies are adequately constrained by data in the volume of interest and to determine whether the original distribution of chargeability might be better explained by a less smooth model.

4.2 MAG Surveys

A final edited and processed database was provided to IE by MES. The data were stored with both Lat/Long and WGS84 (Zone 9N) coordinates and then transformed to NAD83.

Contoured Total Magnetic Intensity (TMI) and Analytical Signal of the TMI Maps were prepared from the database. TMI Profiles were also generated and they plotted on the compilation.

4.3 Final Products

Final pseudosections of average chargeability, modeled chargeability, apparent resistivity and modeled resistivity were plotted for each line.

Data from the 2005 IP/Res survey were digitized from pseudo sections, geo-referenced and then merged with the geo-referenced 2020 data to produce combined N=2 and N=4 plan maps.

The map products have been plotted in NAD83 (Zone 9N) coordinates. The plans and sections are provided with this report as Geosoft (. map's) and as JPG's.

5. Interpretation

Historical geophysical surveys on the Silver Hart Property included Mag and Very Low Frequency Electromagnetics (VLF-EM) Surveys in 1999 and IP/Res surveys in 2005. Lines were oriented west-northwest to be roughly perpendicular to the azimuth of known veins. The VLF-EM and IP/Res data were combined with the results of the 2020 Mag and IP/Res surveys to produce the compilation map.

The 2020 IP/Res surveys extended coverage to the west-northwest and to the east-southeast of the 2005 IP/Res surveys. The 2020 surveys used a combination of 25 and 50 m dipoles to provide a deeper depth of investigation than the 25 m dipoles used in the 2005 survey. The 25 m dipoles provide high resolution near surface while the 50 m dipoles extend the depth of investigation to approximately 150 m.

The data from the 2005 and 2020 surveys were combined to produce N2 maps. These are shown in Figures 2 and 3.

Apparent Resistivity

Figure 3 shows the N2 Apparent Resistivity corresponding to an approximate depth of 25 m. The black contours show that the resistivity correlates strongly with the topographic relief. Resistivity highs largely indicate peaks where bedrock outcrop is more likely while resistivity lows extend north and south where valleys generally contain a greater thickness of conductive overburden. One exception occurs at the north end of Line 1450N where the resistivity high appears to trend north-northwest but the topographic contours diverge to the northeast. The highest resistivity seems to occur in areas that have been mapped as granodiorite or the prominent north-south trending carbonate band.

The veins that have historically been the main focus of this project (TM, S, M and KL) tend to occur as narrow resistivity lows.

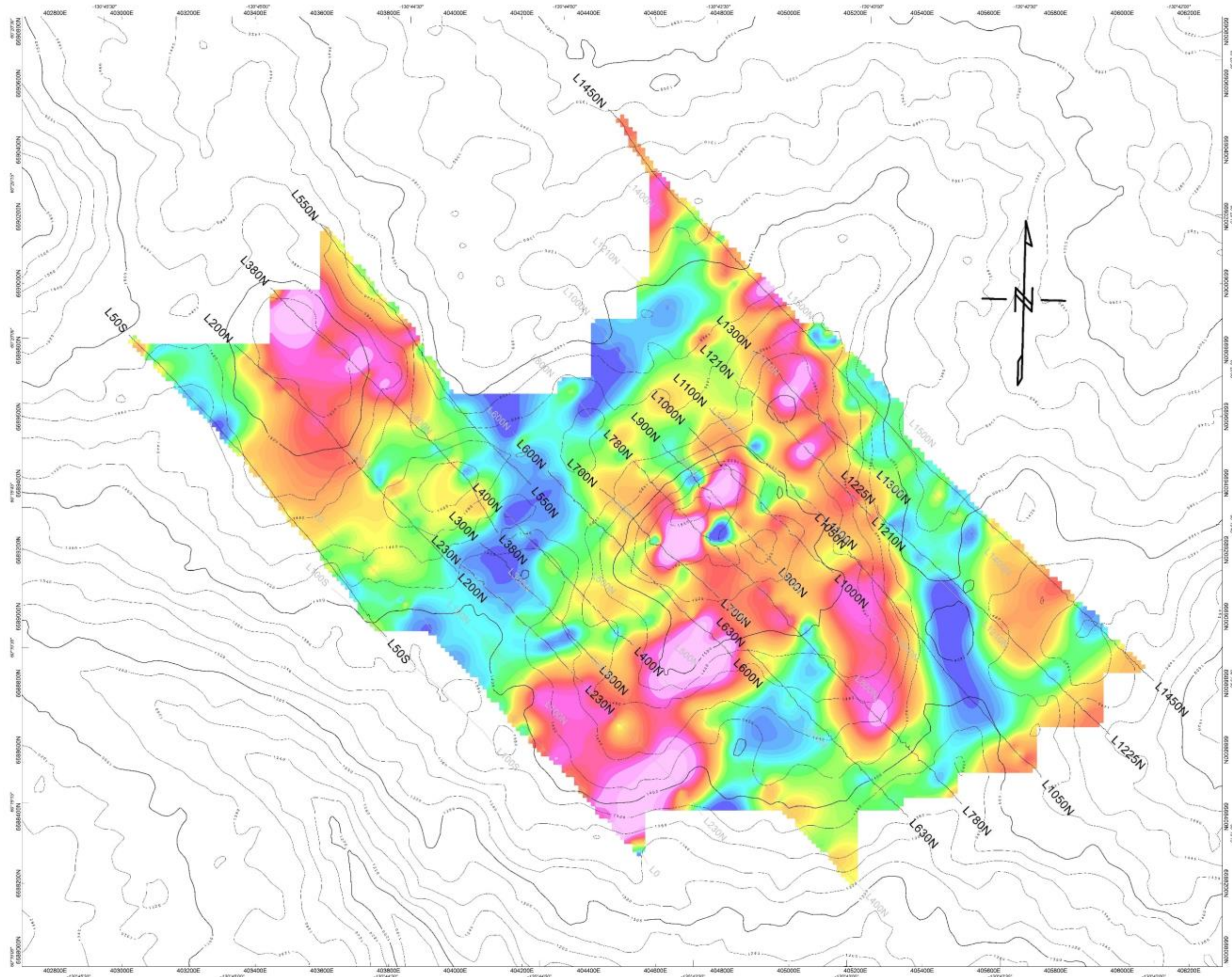


Figure 3: N2 Apparent Resistivity with Topographic Contours

Chargeability

Figure 4 shows that the N2 Chargeability is divided into two broad zones on the western and southeastern sides of central north-south trending low. The historical veins lie within the central low but are marked by subtle increases in the local chargeability. They tend to coincide with narrow peaks in the TMI Profiles. They have been amply tested by historical drilling.

On the west side, a clearly defined, strong chargeability zone extends from Line 0 to the north-northeast to Line 550N and possibly continues to Line 1450N for a total distance of almost 1500 m. It coincides with a resistivity low and is also marked by a chain of TMI peaks.

Several chargeability highs in the southeastern part occur within resistivity lows that flank the resistivity high mapped as a north-south band of carbonate rocks or granodiorite. They also show a strong correlation with TMI peaks.

While these chargeability anomalies exhibit the same characteristics that defined the historically drilled veins they have not been tested yet and they offer attractive targets for future exploration.

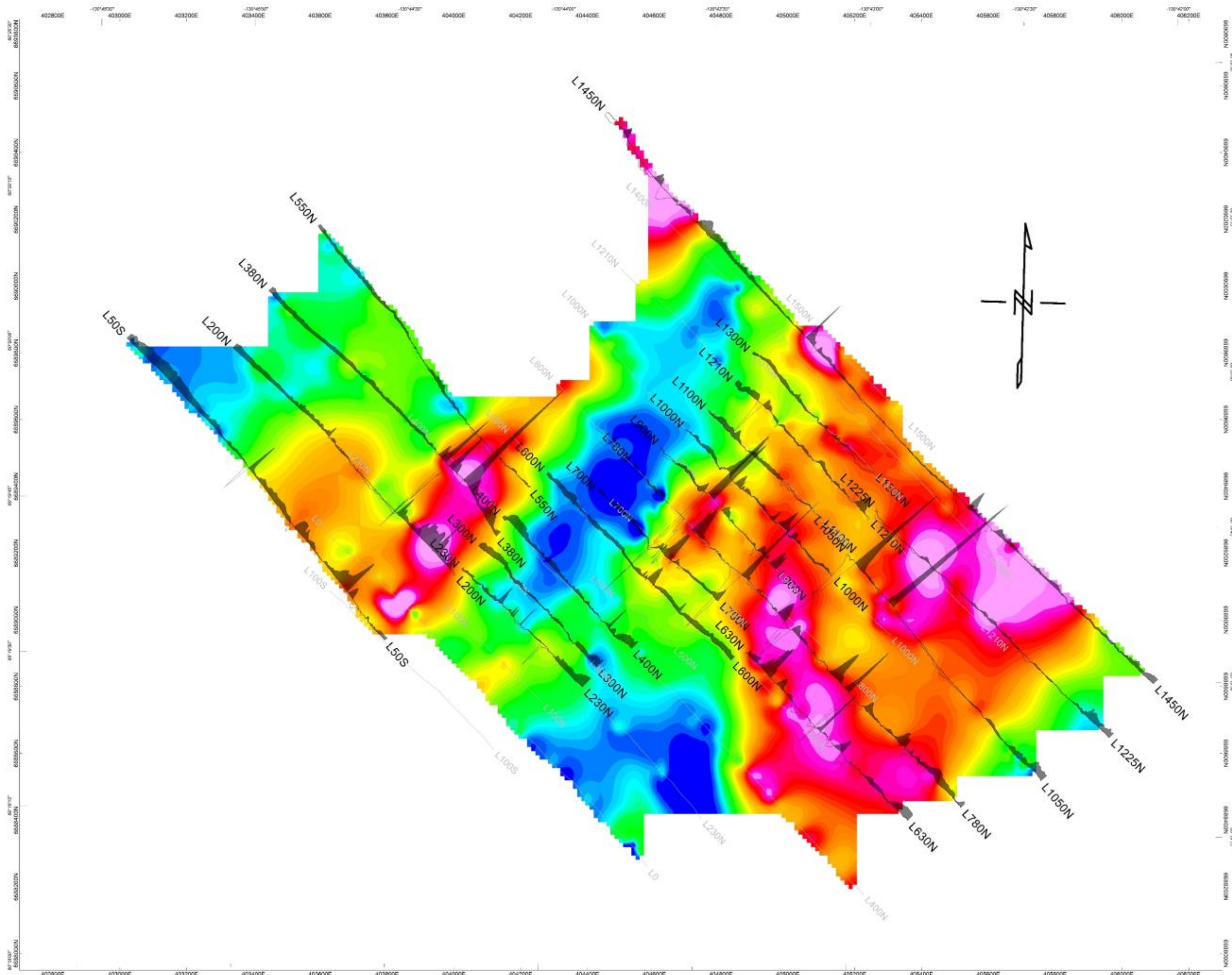


Figure 4: N2 Chargeability with TMI Profiles

6. Exploration Targets

The 2020 IP/Res survey has identified four exploration targets where additional follow-up is strongly recommended.

The positions of these four targets are shown on the compilation map.

T-1

T-1 targets the chargeability zone on the west side at Line 380N. The N2 chargeability indicates that the center of the anomaly is at 600W. The 2D inverse model places the maximum chargeability near the surface at 650W and suggests a moderate dip to the southeast where a second peak occurs at a depth of approximately 60 m below 575W. The peak chargeability at 650W coincides with the KW zone of mineralization defined by trenching and geochemical sampling. Anomalous magnetic highs occur between 700W and 550W on Line 380N. These can be correlated along an axis that parallels the chargeability anomaly.

T-2

T-2 targets a chargeability zone outlined by the 2005 survey. The peak, near surface chargeability occurs at 75W where it coincides with a resistivity high. However, the pseudo section shows a deeper chargeability anomaly 25 m farther to west-northwest that likely extends deeper than the 75 m depth of investigation of the 2005 survey. A narrow conductive zone occurs on the southeast side of the chargeability high. A VLF-EM conductor is located immediately adjacent to this target. TMI profiles show a well defined high coincident with the maximum chargeability. The Target was selected on this line to be near the middle of a 400 m long zone that extends from 600N to 1000N.

T-3

T-3 is located at approximately 625E on Line 780N. The target is a strong chargeability anomaly at depth (~100m below surface). 2D Inverse Modeling indicates that this zone dips shallowly to the west. It coincides with narrow magnetic highs and VLF-EM conductors and lies immediately below and to the west of a broad resistivity high.

T-4

T-4 targets the west end of a broad chargeability high located on Line 1450N where it is coincident with a resistivity low and with narrow magnetic highs. Similar to T-3, the anomaly is deep with the 2D Inverse Model indicating a depth of 100 m.

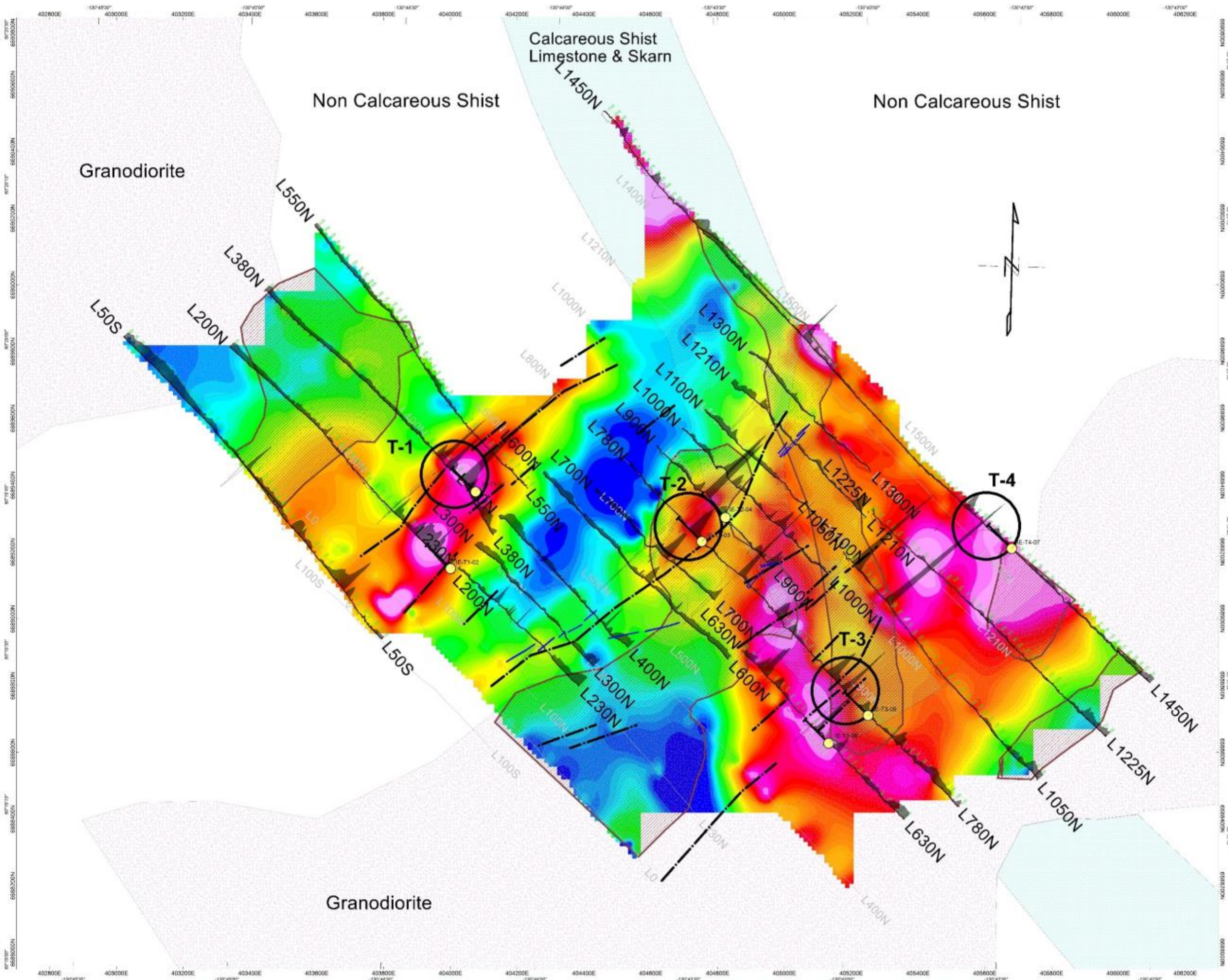


Figure 5: Compilation with Targets and Recommended DDH's

7. Recommendations

We have chosen four target areas for follow-up based on these criteria:

1. Low Resistivity (at least locally)
2. High Chargeability (> 3 x background)
3. Magnetic Relief (with line-to-line correlation)
4. Proximity to Structures (including faults, known mineralization, intrusive contacts)
5. Anomalous Ag-Pb-Zn in-soils

We recommend all of these for drill testing.

T-1 is chosen to test the KW zone of mineralization. The geophysical data are supported by 2020 soil geochemical data that indicate a local source of mineralization in soils, likely at a higher elevation toward the Northeast (c.f. Jackson et al., 1991). Upon favourable results from drilling T-1 we would recommend an extension of the 2005 IP/Res lines 800N, 1000N and 1210N toward the northwest to fill in the gap where the T-1 anomaly appears to project toward the open anomaly on 2020 Line 1450N. IP/Res coverage should also be extended north of L1450N to close the anomaly.

T-2 is well defined geophysically. It probably shows an extension of the Main Zone mineralization toward the northeast where there has been no drilling to date.

T-3 is also well-defined geophysically and provides a broad new target area in close proximity to the historically inferred granodiorite contact. High resistivity values to the east probably reflect the intrusion and it is likely that the well-correlated magnetic NNE trend reflects secondary magnetite formed during contact metamorphism. The proximity to the North-trending band of carbonate rocks is not yet clear but increases the prospectivity for the development of skarn or carbonate replacement mineralization.

T-4 tests the NNE extension of the contact zone that is discussed that is also to be tested at T-3, but on the eastern side of the carbonate band. The strong T-4 anomaly has not been closed by the IP/Res or magnetic surveys and we recommend additional magnetic and IP/Res coverage to extend the grid to the east and north of T-4.

Drill recommendations are summarized in Table 1. The Eastings and Northings are for the DDH collar positions in UTM Coordinates (NAD83). Holes have been chosen to intersect steeply dipping mineralization at a depth over 100m. The 200m length is a minimum and holes should be extended as necessary, not to end in mineralization. DDH trajectories are shown in plan view on the compilation map.

Table 1: Preliminary DDH Recommendations

Target	Line	Station	Easting	Northing	Azimuth	Dip	Length
1	380N	550W	404075	6689380	315	-60	200
1	200N	475W	404000	6689150	315	-60	200
2*	800N	0E	404752	6689231	315	-60	200
2*	900N	0E	404823	6689303	315	-60	200
3	780N	725E	405250	6688710	315	-60	200
3	630N	675EE	405132	6688627	315	-60	200
4	1450N	725E	405680	6689210	315	-60	200
					Total	Meters	1400

The first DDH recommended for each target offers the optimum collar position to test the anomaly with the indicated dip and azimuth. The second DDH is a strike step-out as far as the next line in the direction indicated by the anomaly. In each case the second DDH is contingent on successful results from the first hole and following the first hole a less aggressive, between-line step out may be desirable.

Target T-2 is marked with an asterisk because it is based on the 2005 survey alone and those data provide information only to a depth of approximately 75m. Line 900N does not extend far enough to the west to define this anomaly fully. This target could be improved with additional, deeper IP/Res coverage like the 2020 survey.

No step out is provided for target T-4 because this target is not closed by the surveys to date and additional geophysics is recommended to extend the grid to the north and east before additional drilling is planned.

Respectfully submitted,

John Gilliatt B. Sc., P.Geoph., P. Geo.
Partner, Intelligent Exploration

Christopher J. Hale Ph. D., P. Geo.
Partner, Intelligent Exploration

8. Statements of Qualifications

I, John Gilliatt, declare that:

1. I am a geophysicist with residence in Guelph, Ontario and presently employed in this capacity as a partner of Intelligent Exploration of Campbellford, Ontario.

2. I obtained a Bachelor's Degree with Specialization in Geophysics from the University of Alberta in 1986.

3. I am a registered as Professional Geoscientist (P.Geo., #1624) with the Association of Professional Geoscientists of Ontario and a Professional Geophysicist (P. Geoph., #44967) with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. I have practiced my profession in Canada for 30 years since graduation.

5. I am a member of the Canadian Exploration Geophysical Society (KEGS) and the Prospectors and Developers Association of Canada.

6. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of preparing this report

Guelph, Ontario
November 16, 2020

John Gilliatt

John Gilliatt, B.Sc., P. Geo
Partner

I, Christopher James Hale, declare that:

1. I am a geoscientist with residence in Campbellford, Ontario and presently employed as a partner of Intelligent Exploration of Campbellford, Ontario.

2. I obtained a B. Sc. in Earth and Planetary Sciences from Erindale College, University of Toronto in 1974, an M. A. in Geology from the University of California, Santa Barbara in 1978 and a Ph. D. from the University of Toronto in 1987. From 1984 to 1996 I held faculty appointments at McMaster University (1984-1990) and the University of Toronto (1989-1996) teaching Geophysics, Exploration Geophysics, and Geology while researching applications of Rock Magnetism and Paleomagnetism to problems in Economic and Structural Geology.

3. I am a registered as Professional Geoscientist (P. Geo., #1394) with the Association of Professional Geoscientists of Ontario and a Professional Geoscientist (P. Geo., #05769) with the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador.

4. I have practiced my profession in Canada for 45 years.

5. I am a member of the Canadian Exploration Geophysical Society.

6. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of preparing this report

Campbellford, Ontario
November 16, 2020

C. J. Hale, Ph. D., P. Geo.
Partner
Intelligent Exploration

9. References

Brewer, K., Personal Communication, March 2019

Jackson, L. E., Ward, B., Duk-Rodkin, A. & Hughes, O. L. (1991). The Last Cordilleran Ice Sheet in Southern Yukon Territory. Géographie physique et Quaternaire, 45 (3), 341–354. https://doi.org/10.7202/032880a

APPENDIX A: Daily Production Summary (IP/Res & MAG Surveys)

IP/Res Surveys

Date	Line	From	To	Production (m)	Note
200817					-IP Setup, 1/2 weather day
200818					-IP Setup, 1/2 weather day
200819	50S	1650W	1050W	600	-production IP survey
200820	50S	1050W	450W	600	-production IP survey
200821	200N	1425W	1200W	225	-1/2 production, 1/2 weather day
200822	200N	1200W	450W	750	-production IP survey
200823	380N	1450W	850W	600	-production IP survey
200824	380N	850W	450W	400	-production IP survey
	550N	1475W	925W	550	
200825	550N	925W	450W	475	-1/2 production, 1/2 weather day
200826	1450N	1100W	25E	1125	-production IP survey
200827	1450N	25E	1300E	1275	-production IP survey
200828	1225N	300E	1300E	1000	-production IP survey
200829	1050N	300E	1200E	900	-production IP survey
200830	780N	300E	1125E	825	-production IP survey
	630N	300E	575E	275	
200831	630N	575E	1000E	425	
			Total:	**10025**	

MAG Surveys

Date	Line		Production (m)	Note
200901	1450N		2400	-production MAG survey
	1225N		975	
	1210N		575	
	1050N		900	
	1000N		625	
	780N		1425	
	630N		700	
	600N		650	
200902	1300N		500	-production MAG survey
	1100N		475	
	900N		500	
	700N		475	
	600N		150	
	550N		1025	
	400N		575	
	380N		1000	
	300N		500	
	230N		525	
	200N		950	
		Total:	**16125**	

Appendix B: Digital Data and Deliverables

The following digital information is provided on a DVD provided with this report:

1) Geosoft databases of the IP/Res and MAG Survey data (.GDB)
2) Geosoft grid files (.GRD)
   - N=2 and N=4 Apparent Resistivity
   - N=2 and N=4 Mx Chargeability
   - TMI
   - Analytical Signal of the TMI
3) Maps and Sections as Geosoft Map Files (.MAP) and as JPG'S (.JPG)
4) Report (.PDF)

The IP/Res Survey database (SH_2020 IP FINAL.gdb) is formatted as follows:

Column	Units	Description
T1X	m	Current Electrode Position
R1X	m	1st Potential Electrode Position
R2X	m	2nd Potential Electrode Position
Vp	mV	Primary Voltage
I	A	Transmitted Current
Sp	mV	Self Potential
QC_IP		Quality Control for IP_Avg Channel ("1" accept or "*" reject)
QC_Res		Quality Control for ResCalc Channel ("1" accept or "*" reject)
IP_Index		Data Identifier in Receiver
IP	mSec	IP array channel (for Elrec Pro Receiver = 20 time windows)
ResMeas	Ohm-m	Apparent Resistivity (Measured)
Chg	mV/V	Average Chargeability value
Q	%	Error in Measurement
Time	ms	Sampling Rate
Stack		Number of Stacks Performed
RsCheck	Ohm-m	Contact Resistance of Current Electrodes
RxBat	V	Voltage level of Receiver Battery
Temp	°C	Internal Temperature of the Receiver
Date		Date of Measurement
DayTime		Time of Measurement
ResCalc	Ohm-m	Apparent Resistivity (Calculated)
IP_Avg	mV/V	Same as "Chg"
MF		Metal Factor

N		Dipole Number
Stn		Station position on pseudosections
X	m	Line Number
Y	m	Same as “Stn”
Z	m	Depth position on pseudosections
Topo	m	Station Elevation
X_NAD83	m	Station Easting in UTM Coordinates (NAD83)
Y_NAD83	m	Station Easting in UTM Coordinates (NAD83)
Mxn2	mV/V	N=2 Chargeability Value
Resn2	Ohm-m	N=2 Resistivity Value
Mxn4	mV/V	N=4 Chargeability Value
Resn4	Ohm-m	N=4 Resistivity Value

The MAG Survey database (SH_2020 Mag FINAL.gdb) is formatted as follows:

Lat	Deg.	Latitude in decimal degrees
Long	Deg.	Longitude in decimal degrees
elevation	m	Elevation of Measurement
nT	nT	Raw TMI
Sq		Quality Factor
Cor_nT	nT	Base Station Corrected TMI
int		Interpolation ranges
sat		Number of Satellites used for GPS location
time		Time of Measurement
Date		Date of Measurement
X_WGS84	m	Easting (NAD27)
Y_WGS84	m	Northing (WGS84)
X_NAD83	m	Easting (NAD83)
Y_NAD83	m	Northing (NAD83)
Line		Line Number

Appendix C: Instrument Specification Sheets (IP/Res & MAG Surveys)

IRIS INSTRUMENTS

ELREC Pro

ELREC Pro unit with its graphic LCD screen

10 CHANNELS

IP RECEIVER FOR

MINERAL EXPLORATION

- **10 simultaneous dipoles**
- **20 programmable chargeability windows**
- **High accuracy and sensitivity**

ELREC Pro: this new receiver is a new compact and low consumption unit designed for high productivity Resistivity and Induced Polarization measurements. It features some high capabilities allowing to work in any field conditions.

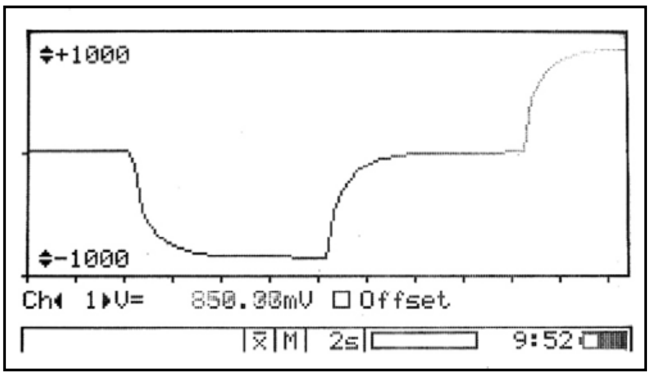
Reception dipoles: the ten dipoles of the ELREC Pro offer an high productivity in the field for dipole-dipole, gradient or extended poly-pole arrays.

Programmable windows: beside classical arithmetic and logarithmic modes, ELREC Pro also offers a Cole-Cole mode and a twenty fully programmable windows for a higher flexibility in the definition of the IP decay curve.

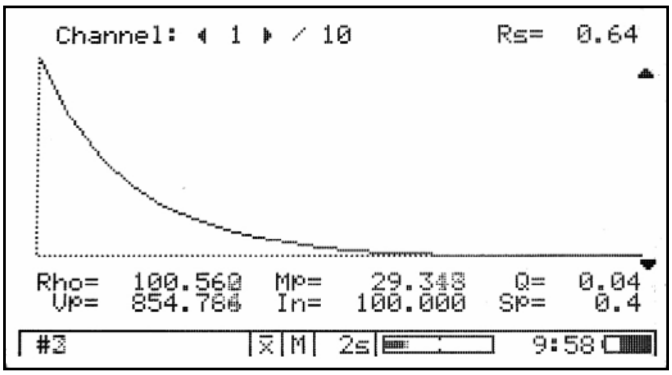
IP display: chargeability values and IP decay curves can be displayed in real time thanks to the large graphic LCD screen. Before data acquisition, the ELREC Pro can be used as a one channel graphic display, for monitoring the noise level and checking the primary voltage waveform, through a continuous display process.

Internal memory: the memory can store up to 21 000 readings, each reading including the full set of parameters characterizing the measurements. The data are stored in flash memories not requiring any lithium battery for safeguard.

Switching capability: thanks to extension *Switch* Pro box(es) connected to the ELREC Pro unit, the 10 reception electrodes can be automatically switched to increase the productivity in-the-field.



Monitoring of the Primary voltage waveform before acquisition



Display of numeric values and IP decay curve during acquisition

ELREC Pro

FIELD LAY-OUT OF AN ELREC PRO UNIT

The ELREC Pro unit has to be used with an external transmitter, such as a VIP transmitter.
The automatic synchronization (and re-synchronization at each new pulse) with the transmission signal, through a waveform recognition process, gives an high reliability of the measurement.
Before starting the measurement, a grounding resistance measuring process is automatically run ; this allows to check that all the electrodes are properly connected to the receiver.

Extension *Switch* Pro box(es), with specific cables, can be connected to the ELREC Pro unit for an automatic switching of the reception electrodes according to preset sequence of measurements ; these sequences have to be created and uploaded to the unit from the ELECTRE II software.

Extension Switch Pro box able to drive 24 - 48 - 72 or 96 electrodes

The use of such boxes allows to save time in case of the user needs to measure more than 10 levels of investigation or in case of large 2D or 3D acquisition.

DATA MANAGING

PROSYS software allows to download data from the unit. From this software, one has the opportunity to visualize graphically the apparent resistivity and the chargeability sections together with the IP decay curve of each data point. Then, one can process the data (filter, insert topography, merge data files…) before exporting them to "txt" file or to interpretation software: RES2DINV or RESIX software for pseudo-section inversion to true resistivity (and IP) 2D section.
RES3DINV software, for inversion to true resistivity (and IP) 3D data.

FEATURES

TECHNICAL SPECIFICATIONS

- Input voltage:
  Max. input voltage: 15 V
  Protection: up to 800V
- Voltage measurement:
  Accuracy: 0.2 % typical
  Resolution: 1 µV
  Minimum value: 1 µV
- Chargeability measurement:
  Accuracy: 0.6 % typical
- Induced Polarization (chargeability) measured over to 20 automatic or user defined windows
- Input impedance: 100 MΩ
- Signal waveform: Time domain (ON+,OFF,ON-,OFF) with a pulse duration of 500 ms - 1 s - 2 s - 4 s - 8 s
- Automatic synchronization and re-synchronization process on primary voltage signals
- Computation of apparent resistivity, average chargeability and standard deviation
- Noise reduction: automatic stacking number in relation with a given standard deviation value
- SP compensation through automatic linear drift correction
- 50 to 60Hz power line rejection
- Battery test

GENERAL SPECIFICATIONS.

- Data flash memory: more than 21 000 readings
- Serial link RS-232 for data download
- Power supply: internal rechargeable 12V, 7.2 Ah battery ; optional external 12V standard car battery can be also used
- Weather proof
- Shock resistant fiber-glass case
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 21 x 21 cm
- Weight: 6 kg

IRIS INSTRUMENTS - 1, avenue Buffon, B.P. 6007 - 45060 Orléans Cedex 2, France
Phone: +33 (0)2 38 63 81 00 - Fax: +33 (0)2 38 63 81 82
E-mail: info@iris-instruments.com - Web site: www.iris-instruments.com

Induced Polarization Transmitters

TxII - 3600W Model

3600W-2400V-10A

Its power (3600W) combined with a Honda generator makes it particularly suitable for pole-dipole induced polarization surveys. Link two 3600W IP transmitters together and transmit up to 7200W-4800V-10A.

TxII - 5000W Model

5000W-2400V-10A

Its high power (5000W) makes it particularly suitable for deep pole-dipole induced polarization surveys or in very resistive ground. Link two 5000W IP transmitters together and transmit up to 10,000W-4800V-10A.

Link two GDD IP 3600W or 5000W transmitters together to double power.

Protection against short circuits even at zero (0) ohm
Output voltage range: 150V – 2400V / 14 steps
Power source: 220-240V / 50-60 Hz
Displays electrode contact, transmitting power and current

GDD 3600W or 5000W Induced Polarization (IP) transmitters work from a standard 220-240V source and are well adapted to rocky environments where a high output voltage of up to 2400V is needed. Moreover, in highly conductive overburden, the highly efficient GDD transmitter is able to send current up to 10 A. By using this IP transmitter, you obtain fast and high-quality IP readings even in the most difficult conditions.

Manufactured in Canada by Instrumentation GDD inc.

Control Panel

← TxII - 3600W

TxII - 5000W →

SPECIFICATIONS

TxII - 3600W

- Size : 27 cm x 40 cm x 20 cm
- Weight : approximately 32 kg
- Operating temperature : -40 °C to 65 °C

TxII - 5000W

- Size : 55 cm x 45 cm x 26 cm
- Weight : approximately 40 kg
- Operating temperature : -40 °C to 65°C

COMPONENTS INCLUDED

- Tx built in a Pelican transportation box
- 20A power cable extension
- 20/30A cable adaptor
- Instruction manual
- Blue carrying case
- Yellow Master-Slave cable (optional)

ELECTRICAL CHARACTERISTICS

- Time base : 2 seconds ON, 2 seconds OFF /
  0.5, 1, 2, 4 sec. / 1, 2, 4, 8 sec. / DC
- Output current : 0.030 to 10 A (normal operation)
  0.000 to 10 A (with cancel open loop)
- Output voltage : 150 to 2400V / 14 steps
- Ability to link two transmitters together to double power

←Link together two 3600W-2400V IP transmitters and transmit up to 7200W-4800V.
Link together two 5000W-2400V IP transmitters and transmit up to 10,000W-4800V.

DISPLAYS

- Output current, 0.001 A resolution
- Output power
- Ground resistance (when the Tx is turned off)

CONTROLS

- Switch ON / OFF
- Output voltage selector : 150V, 180V, 350V, 420V, 500V, 600V, 700V, 840V, 1000V, 1200V, 1400V, 1680V, 2000V, 2400V

POWER SOURCE

- Standard 220-240V / 50-60 Hz Honda regulated generator

PURCHASE
Can be shipped anywhere in the world.

RENTAL-available in Canada and USA only
Starts on the day the instrument leaves our office in Quebec to the day of its return to our office. 50% of the rental fee up to a maximum of 4 months can be credited towards the purchase of the rented instrument.

WARRANTY
GDD's instruments are covered by a one-year warranty. Repair to be done free of charge at our office in Quebec, Qc, Canada.

SERVICE
If an instrument manufactured by GDD breaks down while under warranty or service contract, it will be replaced free of charge during repairs (upon request and subject to instruments availability).

OTHER COSTS
Shipping, insurance, duties and taxes are extra if applicable.

PAYMENT
Visa, Mastercard, American Express, checks or money transfer.

INSTRUMENTATION GDD INC.

860, boul. de la Chaudière, suite 200
Québec (Québec), Canada, G1X 4B7
Phone: +1 (418) 877-4249
Fax: +1 (418) 877-4054
Web Site: www.gdd.ca
Email: gdd@gdd.ca

Specifications subject to change without notice.

Printed in Quebec, Canada, 2009

Overhauser

Version 7.0

Magnetometer GSM-19 / Gradiometer GSM-19G
Walking Magnetometer GSM-19W / Gradiometer GSM-19GW

GEM SYSTEMS
ADVANCED MAGNETOMETERS

Our World is **Magnetic.**

Overhauser (GSM-19W) Walking Magnetometer console. Can also be configured with additional sensor for gradiometer (simultaneous) readings.

GEM's unique Overhauser system combines data quality, survey efficiency and options into an instrument that takes the leading place in the industry.

And the latest v7.0 technology upgrades provide even more value:

- Data export in standard XYZ (i.e. line-oriented) format for easy use in standard commercial software programs
- Programmable export format for full control over output
- GPS elevation values provide input for geophysical modeling Enhanced GPS positioning resolution
- Standard GPS Option B:
  - 1m SBAS (WAAS, EGNOS, MSAS)

  High resolution GPS Option D:
  - 0.6m SBAS (WAAS, EGNOS, MSAS)
  - 0.6m CDGPS (Canada, USA, Mexico)
  - 0.6m OmniStar (VBS2 subscription)
- Multi-sensor capability and VLF-EM Option for advanced surveys
- Picket and line marking / annotation for capturing related surveying information on-the-go

And all of these technologies come complete with the most attractive savings and warranty in the business!

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment -- representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

- **Mineral exploration** (airborne and ground base station)
- **Environmental and engineering**
- **Pipeline mapping**
- **Unexploded Ordnance Detection**
- **Archeology**
- **Magnetic observatory measurements**
- **Volcanology and earthquake prediction**

Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices - except that they produce an order-of magnitude greater sensitivity.

These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal -- that is ideal for very highsensitivity total field measurements.

In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and eliminates noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

Please refer to the back of this brochure for contact information and GSM-19 specifications.

Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

Sensor Technology

GEM's sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-tonoise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

Data Acquisition / Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easyto-use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via the GEMLinkW software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to GEM -- resulting in both timely implementation of updates and reduced shipping / servicing costs.

Specifications

Performance

Sensitivity:	0.022 nT / √Hz
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Range:	20,000 to 120,000 nT
Gradient Tolerance:	< 10,000 nT/m
Samples at:	60+, 5, 3, 2, 1, 0.5, 0.2 sec
Operating Temperature:	-40C to +50C

Operating Modes

Manual: Coordinates, time, date and reading stored automatically at minimum 3 second interval.
Base Station: Time, date and reading stored at 1 to 60 second intervals.
Remote Control: Optional remote control using RS-232 interface.
Input / Output: RS-232 or analog (optional) output using 6-pin weatherproof connector with USB adapter.

Storage - (# of Readings)

Mobile:	1,465,623
Base Station:	5,373,951
Gradiometer:	1,240,142
Walking Mag:	2,686,975

Dimensions

Console:	223 x 69 x 240 mm
Sensor:	175 x 75mm diameter cylinder

Weights

Console with Belt:	2.1 kg
Sensor and Staff Assembly:	1.0 kg

Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232 cable and USB adapter, staff, instruction manual and shipping case.

Optional VLF-EM

Frequency Range: Up to 3 stations between 15 to 30.0 kHz. Parameters: Vertical in-phase and out-of-phase components as % of total field. 2 components of horizontal field amplitude and total field strength in pT.
Resolution: 0.1% of total field

Our World is Magnetic.

About GEM Advanced Magnetometers

GEM Systems, Inc. delivers the world's only magnetometers and gradiometers with built-in GPS for accurately positioned ground, airborne and stationary data acquisition. The company serves customers in many fields including mineral exploration, hydrocarbon exploration, environmental and engineering, Unexploded Ordnance Detection, archeology, earthquake hazard research and magnetic observatory research.

Key products include the Proton Precession, Overhauser and Optically-Pumped Potassium instruments.

Each system offers unique benefits in terms of sensitivity, sampling, and acquisition of high-quality data. These core benefits are complemented by GPS technologies that provide metre to sub-metre positioning.

With customers in more than 150 countries and over a Quarter Century of continuous technology R&D, GEM is known as the only geophysical instrument manufacturer that focuses exclusively on magnetic technology advancement.

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ADVANCED MAGNETOMETERS

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Appendix D: Maps and Sections