

Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geochemical, Geological

TOTAL COST: \$17,647.43

AUTHOR(S): Connor Malek

SIGNATURE(S): 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2020

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): SOW Event # 5838758

PROPERTY NAME: Hisnit Property

CLAIM NAME(S) (on which the work was done): 1076209, 1076211, 1076212

COMMODITIES SOUGHT: Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092E-077, 092E-078, 092E-079, 092E-080

MINING DIVISION: Alberni

NTS/BCGS: NTS 92E/10

LATITUDE: 49 ° 44 '06 " LONGITUDE: 126 ° 31 '30 " (at centre of work)

OWNER(S):

1) Denis Pelletier

2)

MAILING ADDRESS:

OPERATOR(S) [who paid for the work]:

1) Denis Pelletier

2) First Geolas Consulting

P.O Box 2600 Chilliwack BC, V2R 1A8

MAILING ADDRESS:

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Eocene Mount Washington Pluton, Hisnit Stock, Clayoquot intrusive suite, West Coast Crystalline Complex, Cu Porphyry
Catface Copper, Quatsino Formation, Bonanza Formation

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 32165, 31749, 29909

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	_____	_____	_____
Photo interpretation	_____	_____	_____
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	_____	_____	_____
Electromagnetic	_____	_____	_____
Induced Polarization	_____	_____	_____
Radiometric	_____	_____	_____
Seismic	_____	_____	_____
Other	_____	_____	_____
Airborne			
_____		_____	_____
GEOCHEMICAL (number of samples analysed for...)			
Soil	_____	_____	_____
Silt	_____	_____	_____
Rock	53 Grab samples, 4 Whole Rock Samples	1076209, 1076211, 1076212	\$17,647.43
Other	_____	_____	_____
DRILLING (total metres; number of holes, size)			
Core	_____	_____	_____
Non-core	_____	_____	_____
RELATED TECHNICAL			
Sampling/assaying	_____	_____	_____
Petrographic	_____	_____	_____
Mineralographic	_____	_____	_____
Metallurgic	_____	_____	_____
PROSPECTING (scale, area)			
_____		_____	_____
PREPARATORY / PHYSICAL			
Line/grid (kilometres)	_____	_____	_____
Topographic/Photogrammetric (scale, area)	_____	_____	_____
Legal surveys (scale, area)	_____	_____	_____
Road, local access (kilometres)/trail	_____	_____	_____
Trench (metres)	_____	_____	_____
Underground dev. (metres)	_____	_____	_____
Other	_____	_____	_____
		TOTAL COST:	\$17,647.43

**ASSESSMENT REPORT
HISNIT PROPERTY**

VANCOUVER ISLAND, BRITISH COLUMBIA

ALBERNI MINING DIVISION

49° 44' 06" N LATITUDE, 126° 31' 30" W LONGITUDE

UTM: NAD 83 ZONE 9, 677440 E, 5512200 N

NTS 92E/10



Looking southwest from the Hisnit Property

For:

Mirva Properties Ltd.

Prepared by:

First Geolas Consulting

Connor Malek, B.Sc.

February 8, 2020

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Summary

The Hisnit Property is located on the west coast of Vancouver Island, a favorable district with historical mining and current exploration projects. The Property is close to the Town of Gold River, and has excellent road access.

The Hisnit Property has a limited exploration history that nevertheless has resulted in the discovery of copper mineralization associated with porphyry-style alteration on the Property. An economic deposit of porphyry copper, the Catface deposit, is located less than 50 km away and provides an analogue to guide exploration on the Hisnit Property. An intrusive body of likely Eocene age occurs directly east of the Hisnit Property and potentially is the source for the copper mineralization discovered on the Property so far.

Six days of field work completed on the Property in two phases in 2020 resulted in geochemical sampling of sulphide mineralization both at the existing showings as well as at two new areas of anomalous copper mineralization recently exposed by logging. Advanced geochemical analysis of four granodiorite dikes related to copper mineralization allows some comparisons to the Catface deposit. This report details the setting, geology, mineralization, history, and 2020 field work completed on the Hisnit Property and offers recommendations for future work.

1 Location, Infrastructure, and Tenure

The Hisnit Property is located on the west coast of Vancouver Island, an area with a rich resource extraction history including mining, forestry, and fishing operations. The Property is part of the Alberni Mining Division.

The Hisnit Property is located approximately 35 km west of Gold River, BC. The Property is accessed by numerous logging roads that begin from Head Bay Drive, which connects Gold River to Tahsis, BC. Room and board can be obtained in Gold River, which also hosts a primary health care facility. The Property is directly west of Hisnit Inlet, a northern branch off of Tlupana Inlet, providing access to tidewater. Tree cover consists of mature stands of Douglas Fir, Western Hemlock, and Western Red Cedar, with a dense undergrowth of salal, salmonberry, blackberry, and other shrubs and ferns. Terrain is moderate to rugged and relief varies from 0 to 760 m above sea level. Monthly average temperatures range from 4°C in January to 25°C in August, and precipitation averages over 285 cm per year, including about 100 cm of snow between December and March.

Approximately 47 km southeast of the Property lies the Catface Cu (Mo-Au) porphyry deposit, owned by Imperial Minerals Corporation. A low-grade copper resource has been delineated within the Cliff Zone estimated to contain an indicated resource of 56.9 million tonnes averaging 0.4% Cu and an additional inferred resource of 262.4 million tonnes grading 0.38% Cu (Simpson and Chapman, 2009)

Figure 1: Hisnit Property Location

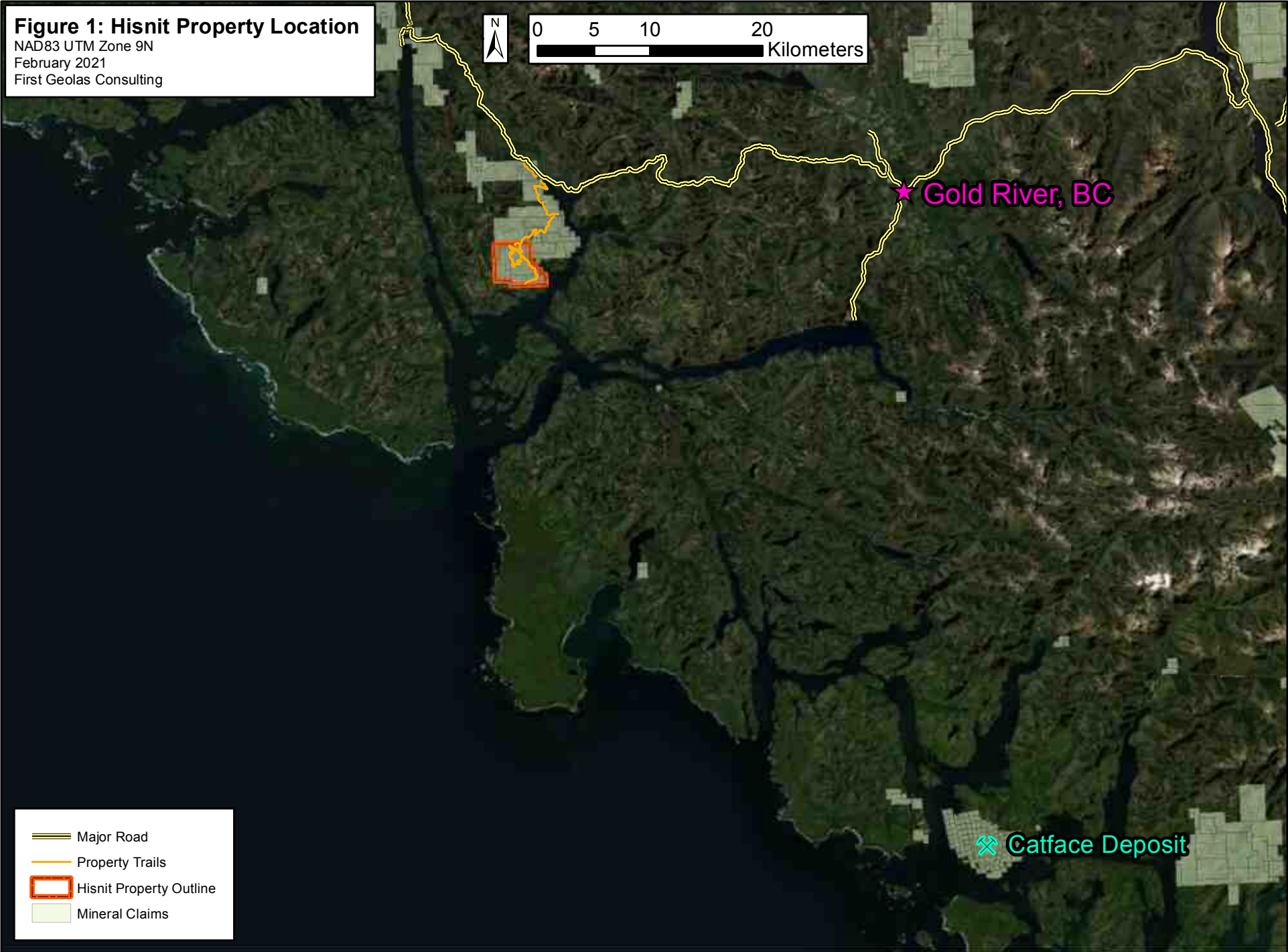
NAD83 UTM Zone 9N
February 2021
First Geolas Consulting



★ Gold River, BC

⚡ Catface Deposit

- Major Road
- Property Trails
- Hisnit Property Outline
- Mineral Claims



As shown in Table 1 below, the Hisnit Property comprises 5 mineral claims totaling 1,295 hectares that are 100% owned by Denis Pelletier. The core claim of the Property is subject to \$5 per hectare in assessment work and the remaining claims are older than six years and are therefore subject to \$20 per hectare of assessment work required annually to keep them in good standing, which results in a total annual expenditure amount of \$17,438.08.

Table 1: Hisnit Property Claim Status as of February 1, 2020

Tenure_ID	Claim Name	Owner	Issue Date	Good to Date	Hectares
1076209	NEW HISNIT	Denis Pelletier	May 14, 2020	June 2, 2020	563.80
1076210	New Hisnit 3	Denis Pelletier	November 25, 2009	June 2, 2020	250.60
1076211	New Hisnit 2	Denis Pelletier	November 25, 2009	June 2, 2020	187.92
1076212	New Hisnit 5	Denis Pelletier	November 25, 2009	June 2, 2020	167.11
1076213	New Hisnit 4	Denis Pelletier	November 25, 2009	June 2, 2020	125.33
					1294.76

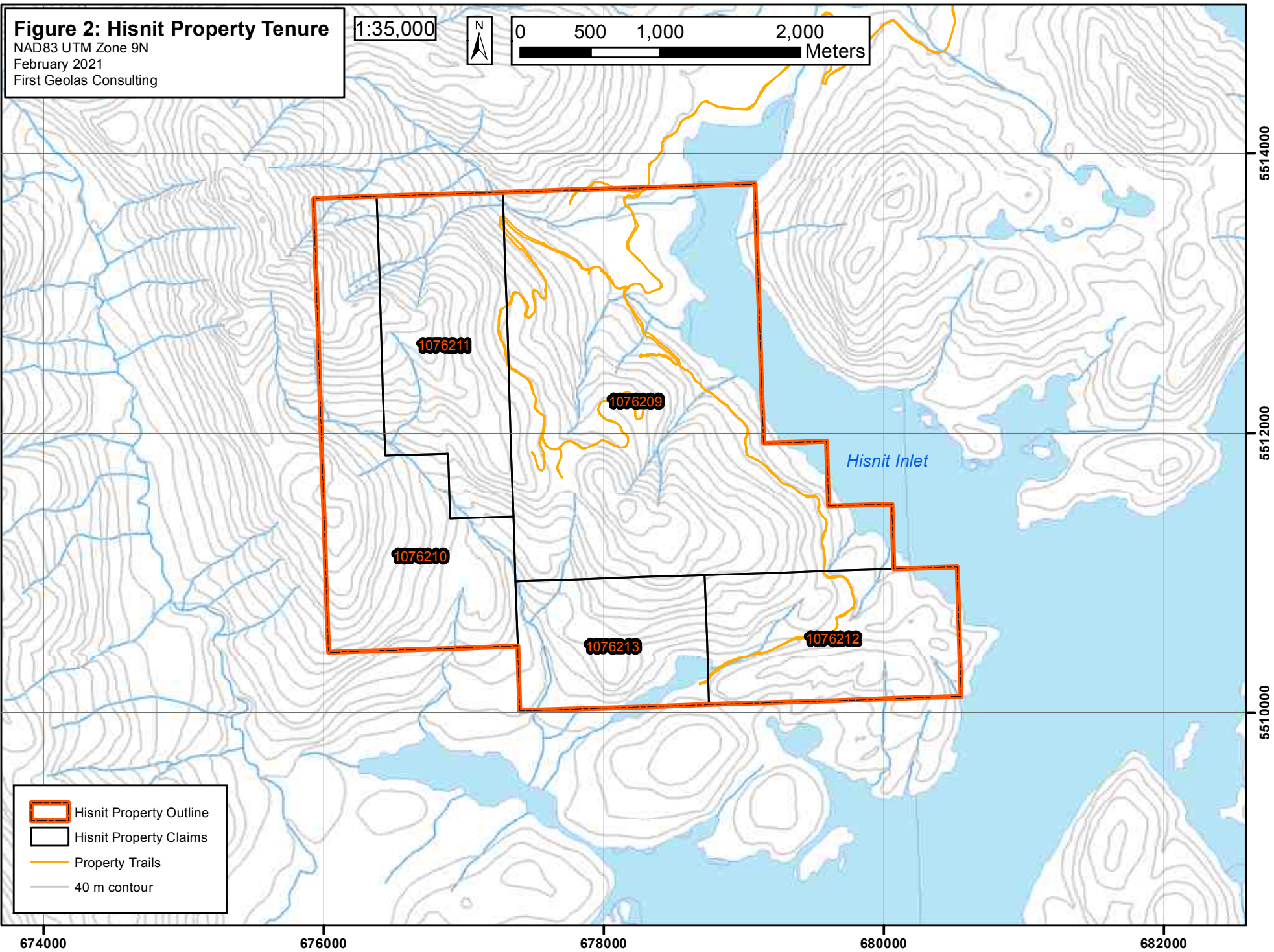
Figure 2: Hisnit Property Tenure

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0 500 1,000 2,000
Meters



-  Hisnit Property Outline
-  Hisnit Property Claims
-  Property Trails
-  40 m contour

674000 676000 678000 680000 682000

5510000 5512000 5514000

2 Geology

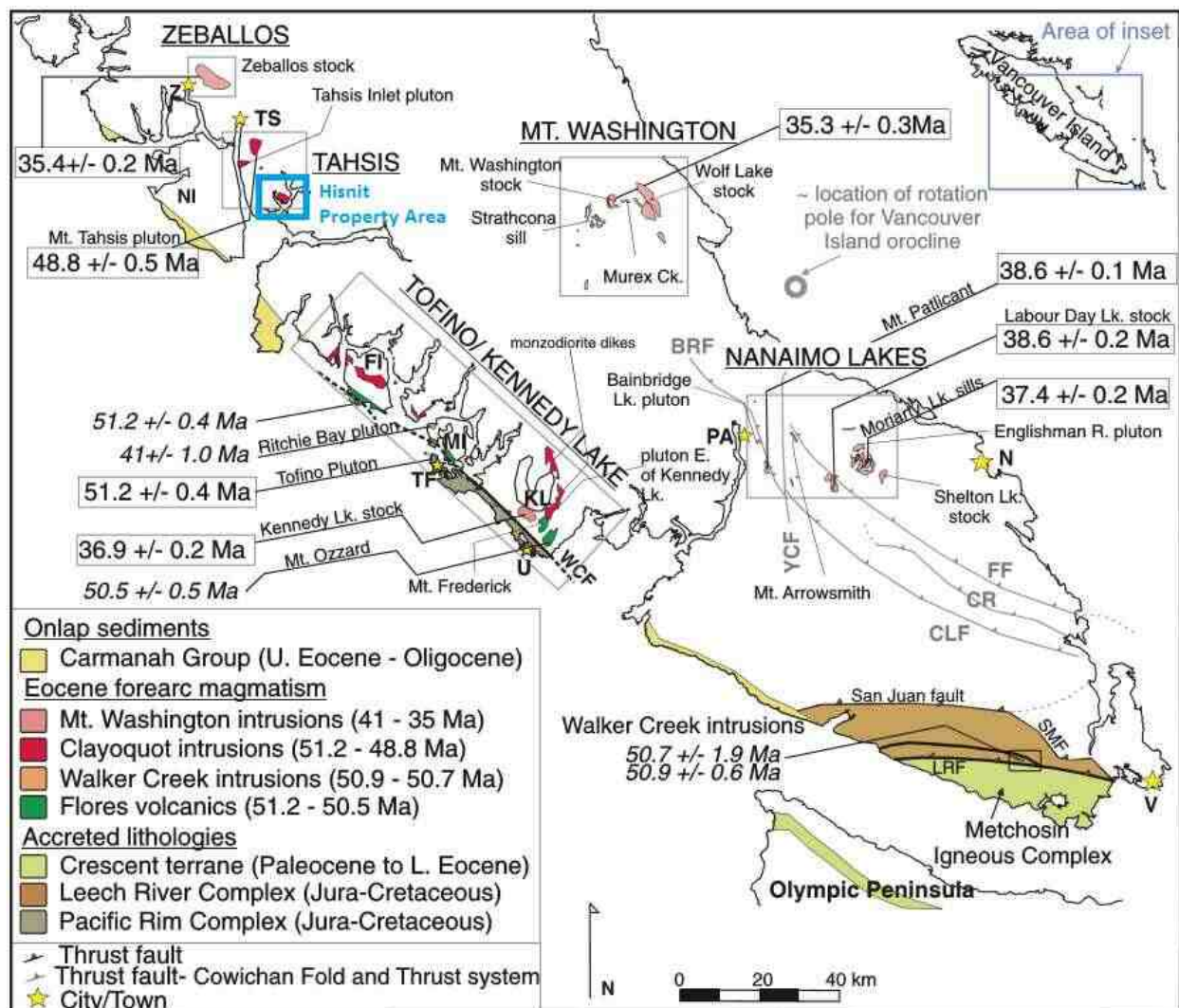
2.1 Regional Geology

The Hisnit Property lies within Wrangellia Terrane, a complex and variable terrane that extends from Vancouver Island to central Alaska (Figure 3). Triassic flood basalts of the Karmutsen Formation are the most distinct unit of the terrane and appear to represent a single flood basalt event that formed a once-continuous unit between Alaska and Vancouver Island (Greene et al., 2005).

On Vancouver Island, the oldest rocks of Wrangellia, which lie at the top of an imbricated stack of northeast-dipping thrust sheets, are Late Silurian to Early Permian arc sequences. In the Late Triassic, rapid uplift associated with a rising plume head led to the eruption of voluminous flood basalts to form part of an extensive oceanic plateau. As volcanism ceased, the oceanic plateau soon began to subside and accumulate deep water carbonate sediments. Sedimentation within the Wrangellia Terrane lasted until the Early Jurassic, when the resurgence of arc volcanism developed in response to subduction, forming the Bonanza Arc (Greene et al., 2005, and references therein). The Bonanza Arc formed along the length of Vancouver Island during the accretion of Wrangellia. Owing to later tilting, products of this arc from various crustal depths are all preserved. These include the Westcoast Crystalline Complex, the Island Intrusions, and the Bonanza Group volcanic rocks. It appears that all these components have similar ages (ca. 190 to 169 Ma) and geochemical signatures, indicating that they are all parts of a single arc (DeBari et al., 1999). The Wrangellia Terrane was accreted to the North American Craton by the Late Jurassic or Early Cretaceous (Greene et al., 2005).

The eastern margin of the Pacific Basin has extensive magmatism and associated porphyry-style mineralization during the Paleogene, in a semi-continuous belt from Oregon to Alaska. On Vancouver Island, the first pulse is represented by the Clayoquot intrusions (51.2-48.8 Ma) and the second pulse is represented by the Mount Washington intrusions (41–35.3 Ma) (Madsen et al., 2006).

Figure 3: Hisnit Property Regional Geology Map (modified from Madsen et al., 2006)



2.2 Property Geology

The geology of the Hisnit Property area was summarized by Jacques Houle during the 2010 field program (ARIS #31749):

“The Hisnit Property is mainly underlain by metamorphic rocks of the Paleozoic to Jurassic West Coast Crystalline Complex. The northern portion of the property covers the southwest margin of a northwest-trending graben structure, defined topographically by the southwest side of Hisnit Inlet. The graben structure contains a northeast-striking and northwest-dipping stratigraphic succession from southeast to northwest consisting of Triassic Quatsino Formation Limestone, Triassic Parson Bay Formation Sediments, and Jurassic Bonanza Formation Volcanics. The graben structure and other rocks in the area are intruded and possibly underlain by granodiorite stocks and sills of both the Jurassic Island Plutonic Suite and the Eocene Mount Washington Plutonic Suite”

Further comments towards the Property geology resulting from the 2020 field work can be found below in section 4.

2.3 Deposit Model

The mapped Eocene Mount Washington Pluton directly east of the Hisnit Property (herein referred to as the “Hisnit Stock”) is of most interest in regards to copper mineralization. While it has not been directly dated, the Mt. Tahsis granodiorite stock north of the Property returned a concordant U-Pb age of 48.8 Ma, placing it within the Clayoquot intrusive suite (Madsen, 2004).

The Clayoquot intrusions on Vancouver Island are coincident with the approximate location of the Farallon-Resurrection ridge-trench triple junction at the time. From 49 to 45 Ma, the Farallon-Resurrection triple junction and slab window migrated southward to underlie parts of Washington and Oregon (Madsen et al., 2006). Subduction of a tectonic ridge may instigate slab melting, a potential precursor to the generation of post-subduction copper porphyry deposits (Richards, 2011).

The Catface Cu porphyry deposit located southeast of the Hisnit Property presents a potential analogue to the copper mineralization observed on the Property. It was historically recognized as being older. Muller and Carson (1969) reported a K–Ar age for the Hecate Bay quartz diorite of 48 ± 12 Ma, placing it likely within the Clayoquot intrusive suite.

Recent U–Pb age dating of zircons at the Catface Deposit shows two intrusive phases were emplaced at 41.26 and 41.15 Ma, and a second two at 40.93 and 40.88 Ma. The latter ages were identical to the Re–Os age of molybdenite mineralization of 40.9 ± 0.2 Ma. (Smith et al., 2012). This places the Catface deposit within the later Mount Washington intrusive suite.

The Zeballos gold camp lies approximately 38 km northwest of the Hisnit Property. There, quartz veins hosting high grade gold mineralization cross-cuts the Zeballos Stock, which has been dated to 35.4 Ma (Marshall et al., 2005). This results in the gold mineralization at Zeballos likely related to the Mount Washington intrusive suite.

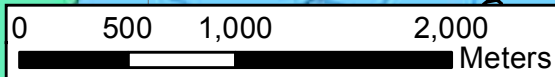
Furthermore, ten showings of quartz-carbonate veining hosting Au-Ag-As-Cu mineralization occur approximately 9 km north of the Hisnit Property. The highlight there is the Vivian Showing where material from the waste dump returned up to 271.7 g/t Au and 3,480 g/t Ag (ARIS #22335).

Eocene copper and gold mineralization occur to the southeast and northwest, respectively, of the Hisnit Property. U-Pb dating of the Mt. Tahsis Stock north of the Property suggests that the Hisnit Stock is within the Clayoquot intrusive suite age, but the Hisnit Stock itself has not been thoroughly investigated. Furthermore, in the region of the Catface porphyry deposit, there is an intimate spatial relationship with both the Clayoquot and Mt. Washington intrusive suite where both occur in close proximity to one another. There exists significant copper mineralization related to epidote alteration on the Hisnit Property, as well as indications of copper mineralization northeast of the Hisnit Stock. Given the indications of copper mineralization near the Hisnit Stock, and the Hisnit Stock potentially being of similar age to the Catface porphyry deposit, further investigation for Cu-Mo-Au porphyry mineralization on and around the current Hisnit Property is warranted.

Figure 4: Hisnit Property Geology

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uTrIBv:
Bonanza
Group
Volcanics

uTrVQ:
Quatsino
Limestone

EOIM:
Mt. Washington
Plutonic Suite

EMJlgd: Island Plutonic Suite

Hisnit Inlet

PzJWg: Westcoast Crystalline Complex

 Hisnit Property Outline

 Property Trails

674000

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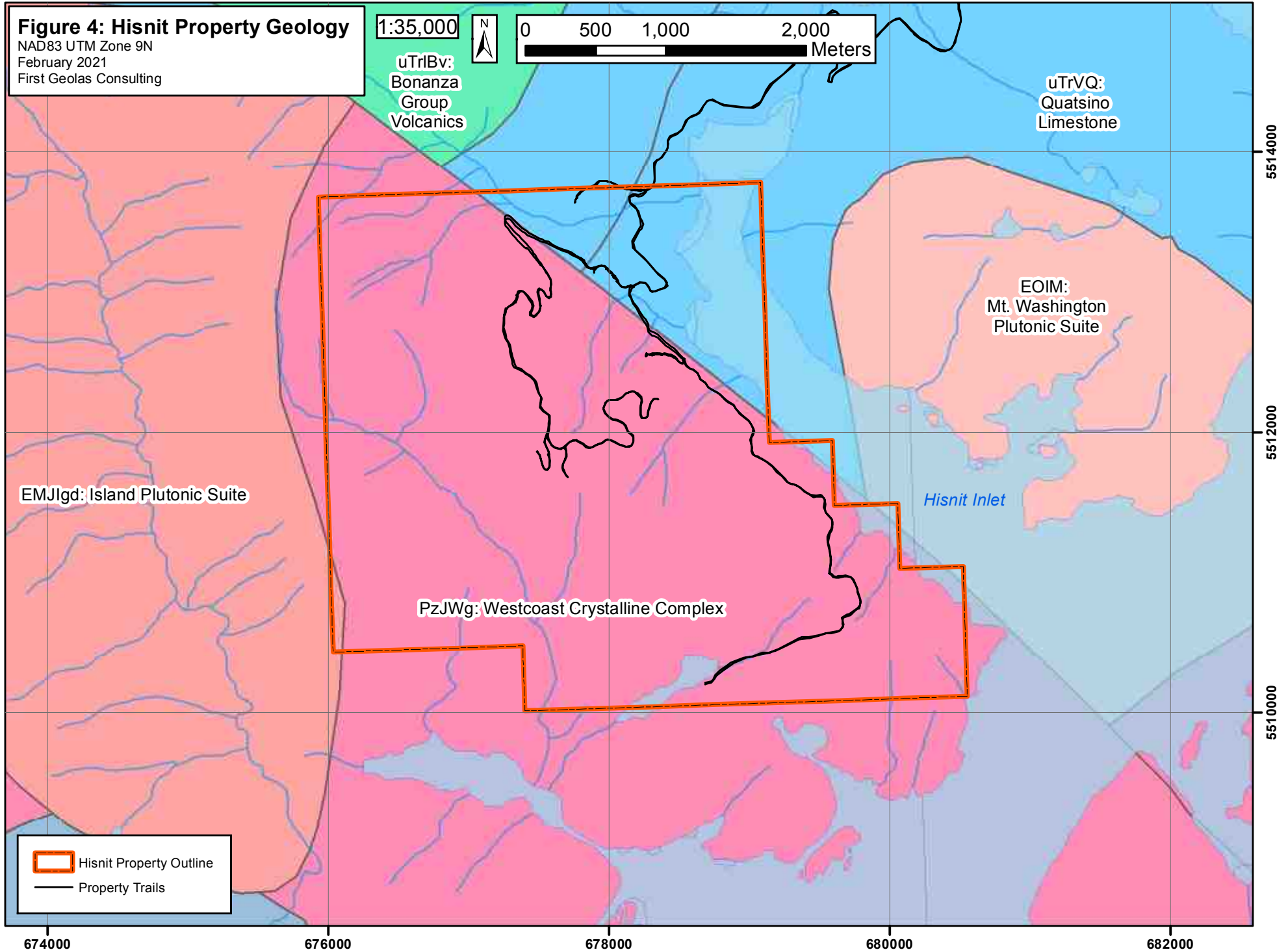
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3 Historical Technical Work

The geology shown in Figure 4 (Cui et al., 2017) is sourced from Muller et al. (1981) who produced a geological map at a scale of 1:250,000 for the Property area. Muller et al. (1981) also produced a report describing the geology, structure, and mineral occurrences in the Nootka Sound area. Besides the various research articles referenced above, the Hisnit Property has seen very little geological mapping, research, and exploration.

The following chronological summary of historical exploration efforts is sourced from assessment reports contained in the BC Ministry of Energy, Mines, and Petroleum Resources' Assessment Report Database ("ARIS").

The first report on the Hisnit Property area is from 2005 when Doublestar Resources completed rock chip sampling and limited ground magnetic surveys directly north of the Hisnit Property (ARIS #28386). A total of 475 rock chip samples were collected for the purpose of assessing the limestone potential, and results were generally favorable for potential limestone production.

In 2007, Dan Berkshire completed limited prospecting for copper mineralization on the Hisnit Property (ARIS #29909). This work discovered the Hisnit North and the Hisnit South showings, and included a spectral analysis of remote sensing data.

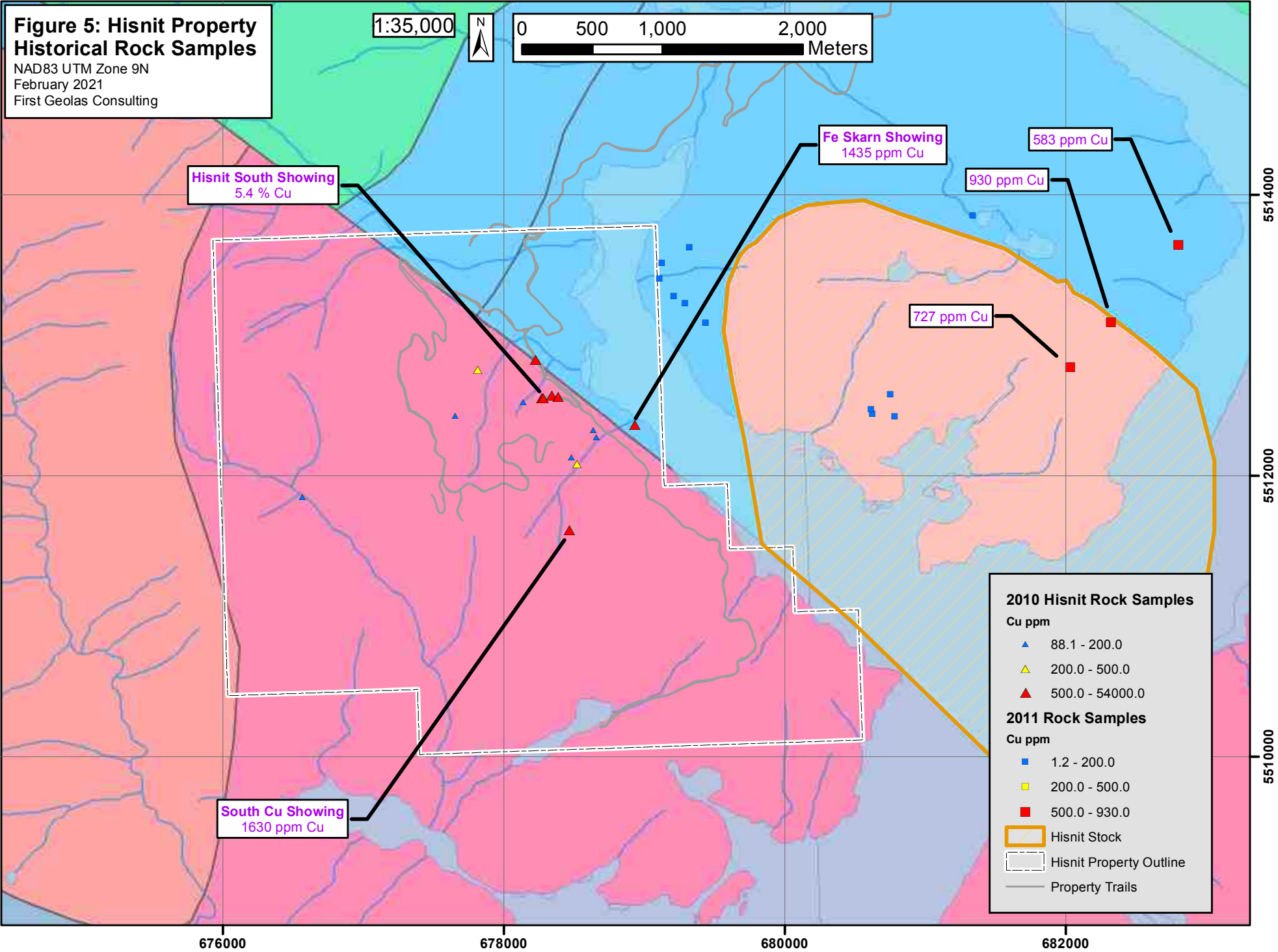
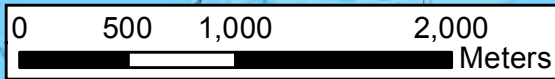
In 2010, Compliance Energy optioned the Hisnit Property from Dan Berkshire and completed a field work program that resulted in the collection of 15 rock samples, 180 soil samples, 37 moss mat samples (ARIS #31749). The Hisnit South Showing returned up to 3.69 ppm Ag, 1060 ppm Co, and 5.4% Cu. The South Cu Showing was discovered with a single sample returning 1630 ppm Cu. The Fe Skarn Showing was also discovered returning 1435 ppm Cu and 7.95 ppm Mo from a 1.0 m. thick iron skarn exposed in a creek bed close to its outflow into the Hisnit Inlet. The results of this program are shown on Figure 5 and 6 below.

In 2010, Compliance Energy commissioned Aeroquest to complete 190.8 line-km of combined magnetic, electromagnetic and radiometric airborne geophysics (100 m line-spacing) the Hisnit Property (ARIS #32165). The total magnetic intensity of the 2010 airborne survey is shown on Figure 7 below.

In 2011, RCR Mining completed a field program collecting 14 rock samples and 20 moss mat samples northeast of the Hisnit Property (ARIS #32853). This work discovered three separate occurrences of skarn-style sulphide mineralization northeast of the Hisnit Stock that assayed between 583 and 930 ppm Cu.

Figure 5: Hisnit Property Historical Rock Samples
 NAD83 UTM Zone 9N
 February 2021
 First Geolas Consulting

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2010 Hisnit Rock Samples
 Cu ppm

- ▲ 88.1 - 200.0
- ▲ 200.0 - 500.0
- ▲ 500.0 - 54000.0

2011 Rock Samples
 Cu ppm

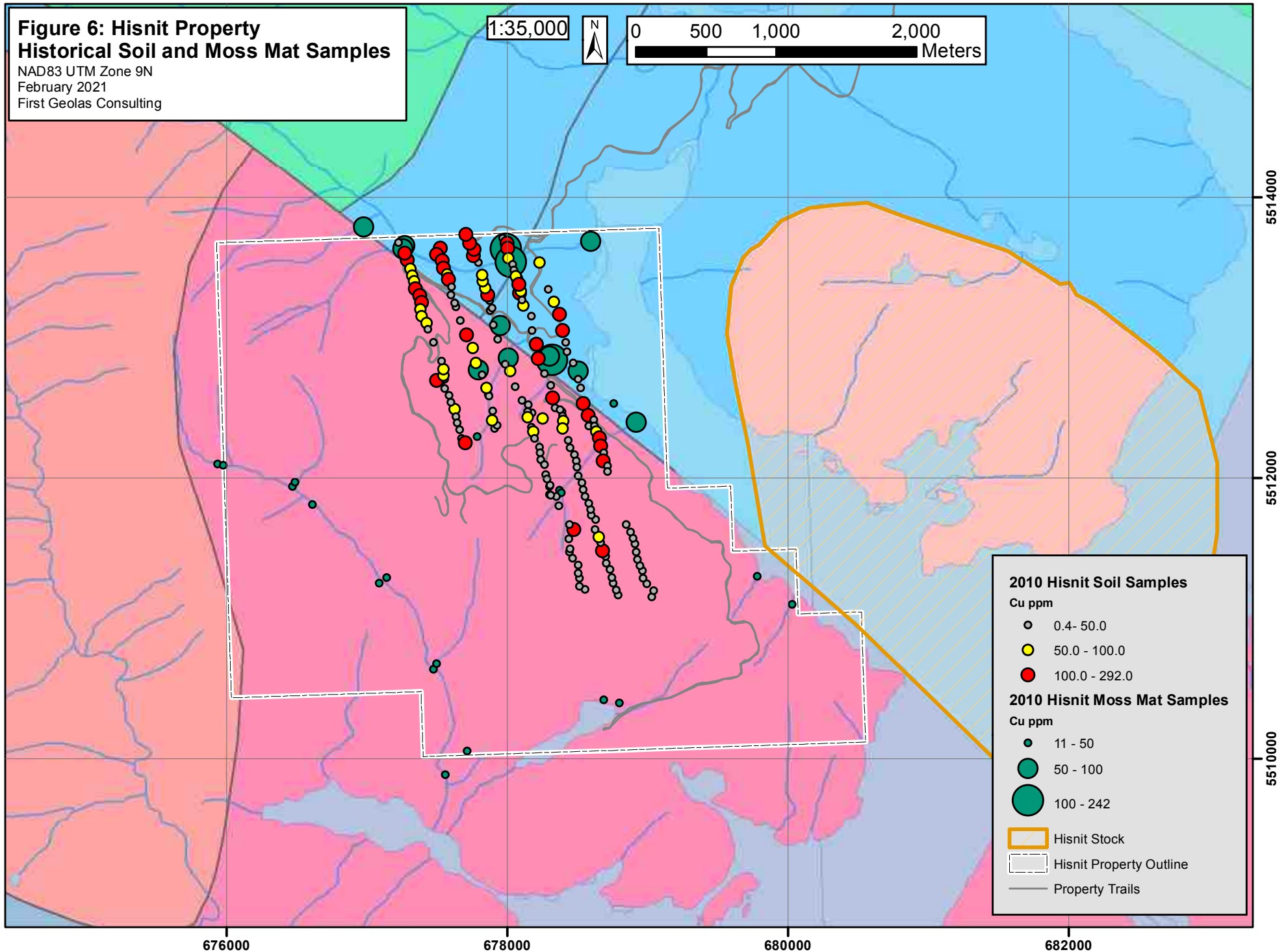
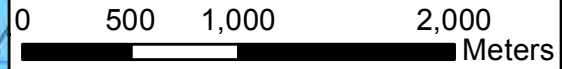
- 1.2 - 200.0
- 200.0 - 500.0
- 500.0 - 930.0

Hisnit Stock
 Hisnit Property Outline
 Property Trails

Figure 6: Hisnit Property Historical Soil and Moss Mat Samples

NAD83 UTM Zone 9N
February 2021
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2010 Hisnit Soil Samples

Cu ppm

- 0.4 - 50.0
- 50.0 - 100.0
- 100.0 - 292.0

2010 Hisnit Moss Mat Samples

Cu ppm

- 11 - 50
- 50 - 100
- 100 - 242

- ▭ Hisnit Stock
- ▭ Hisnit Property Outline
- Property Trails

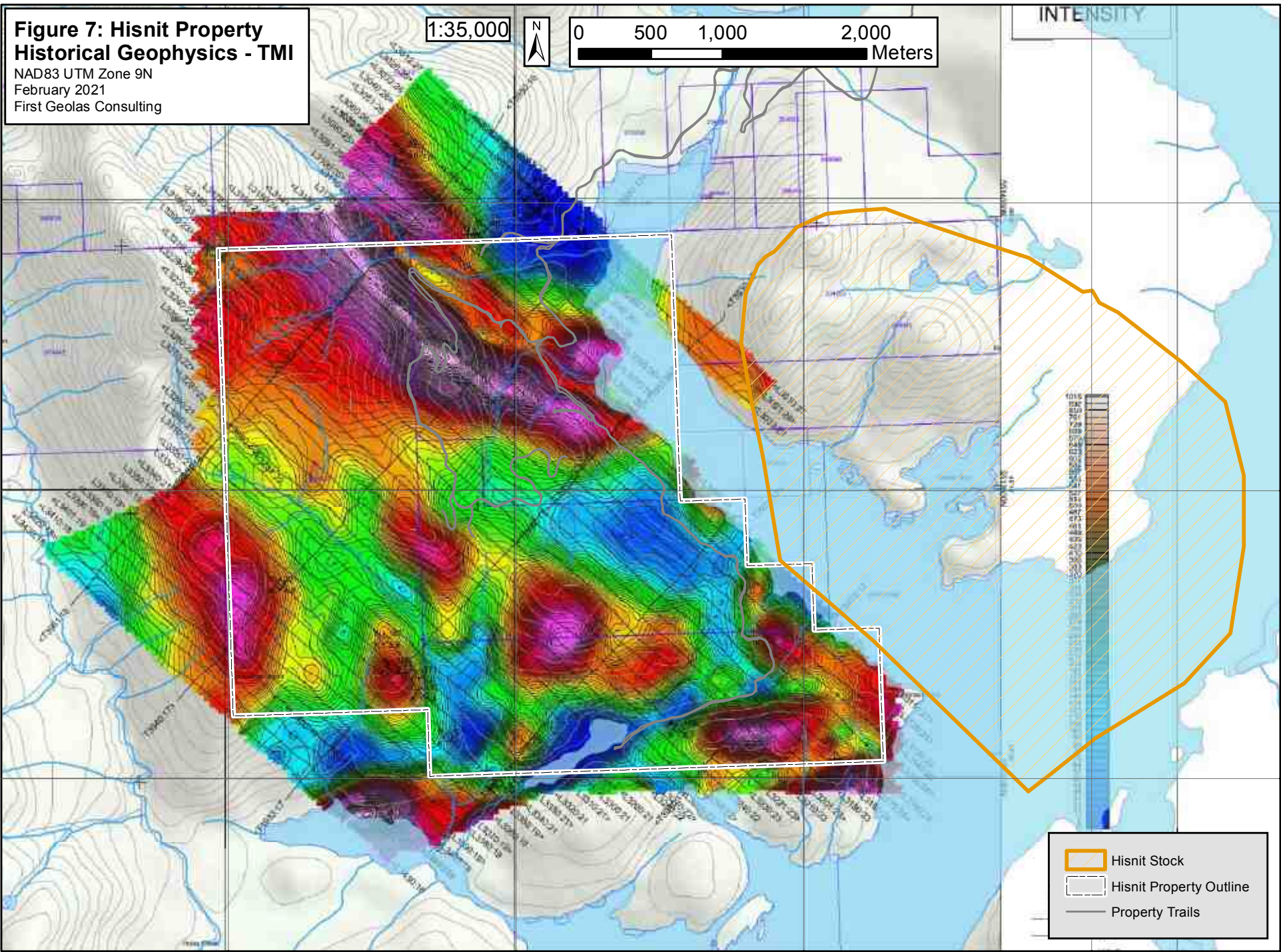
**Figure 7: Hisnit Property
Historical Geophysics - TMI**
NAD83 UTM Zone 9N
February 2021
First Geolas Consulting

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Meters

INTENSITY



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
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-  Hisnit Stock
-  Hisnit Property Outline
-  Property Trails

4 2020 Exploration Program

In 2020 two phases of field work were completed to explore the Hisnit Property. The first phase, between June 19th and 21st, was to primarily collect samples of intrusive dikes related to copper mineralization for whole rock analysis. There was three staff on site for the first phase, including Dan Berkshire. The second phase, between August 5th and 7th, was to map and collect rock samples along the new logging road that extends to the west above the Property showings. There was four staff on site for the second phase. During both programs 57 rock samples, including 4 whole rock samples, were collected for geochemical analysis. Lodging and food was secured in Gold River, and access to the Property was achieved daily using a pickup truck and ATV on forestry roads.

The 53 rock samples were shipped to ALS Geochemistry in North Vancouver for geochemical analysis. Sample preparation included being weighed, dried, and finely crushed to better than 70% passing a 2 mm screen. A split of up to 250 g was taken using a Boyd rotary splitter and pulverized to better than 85% passing a 75 micron screen (ALS Code: PREP-31Y). Gold concentrations were determined by 30 g fire assay with ICP-AES finish (Au-ICP21). The samples were also analyzed for 33 elements by four acid digestion with ICP-MS/ICP-AES finish (ME-ICP61 and ME-OG62). The sample submission included one low-grade multi-element standard reference material (CDN-ME-1409) sourced from CDN Resource Laboratories of Langley, BC.

An additional 4 rock samples were submitted for advanced litho-geochemistry and REE analysis. These samples were subject to a preparation of being weighed, dried, and finely crushed to better than 70% passing a 2 mm screen. A split of up to 250 g was taken using a Boyd rotary splitter and pulverized to better than 85% passing a 75 micron screen (ALS Code: PREP-31Y). The major oxides were determined by a Lithium Metaborate/Lithium Tetraborate Fusion and ICP-AES finish and the REE were determined by a Lithium Borate Fusion and ICP-MS finish (ME-MS81d). The samples were also analyzed for 48 elements by four acid digestion with ICP-MS/ICP-AES finish (ME-MS61).

4.1 Rock Sample Geochemistry

As expected, the rock samples collected from the Hisnit North and Hisnit South Showings host anomalous copper mineralization of up to 1.05 % Cu and 4.19 % Cu, respectively. The Hisnit South showing also features anomalous silver (23.10 g/t Ag) and cobalt (497 ppm Co) concentrations (Figure 8).

The Hisnit North Showing is an extensive (~200 m long) road-cut exposure of epidote- and hematite-altered volcanic rocks that features local centimeter-scale fractures and quartz veinlets that host pyrite, chalcopyrite, and malachite mineralization. The Hisnit South Showing is a road-cut exposure (~10 m wide) of strongly hematite- and limonite-altered volcanic rocks that host semi-massive pyrite-chalcopyrite mineralization. A 2.0 m wide, relatively unaltered, coarse grained biotite granodiorite dike is present in hanging wall to Hisnit South Showing.

The rock samples from the road-cuts of the new logging road that extends past the Hisnit North Showing returned two samples of anomalous copper concentrations of 0.21% Cu and 0.24 % Cu approximately 800 meters west of, and ~325 m vertically above, the Hisnit South Showing. There were another four samples that returned above 500 ppm Cu along the new logging road (Figure 8).

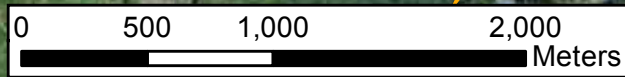
At the northern end of the new road-cut exposure, meter-scale granodiorite dikes with associated hematite-alteration are found intruding volcanic rocks. There was also a small (20 cm) occurrence of semi-massive magnetite adjacent to a diabase dike. Further south, similar granodiorite dikes are found intruding deformed metamorphosed bedded sedimentary rocks that likely represent the West Coast Crystalline Complex. At the southernmost end of the new logging road, multiple extensive (~15 m wide) gossanous zones related to fractures and granodiorite dikes are found within the hosting silicified and pyritic granodiorite. There are local exposures of intrusive brecciation and aplite-pegmatite dikes.

In addition to the copper mineralization, there is a sub-vertical seam of marbleized limestone along the new logging road with an approximate width of 200 meters that may be of interest for marble production (Figure 8).

**Figure 8: Hisnit Property
2020 Rock Samples**

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February 2021
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0.21 % Cu

Marble Seam

0.24 % Cu

Hisnit North
1.05 % Cu
6.40 g/t Ag
Two other samples >0.20 % Cu

Hisnit South
4.19 % Cu
23.10 g/t Ag
497 ppm Co

2020 Hisnit Rock Samples (Cu ppm)

- 6 - 500
- 500 - 1000
- 1000 - 41900
- ★ Mineral Showings
- Property Trails
- ▭ Hisnit Property Outline
- ▭ Hisnit Property Claims

676000

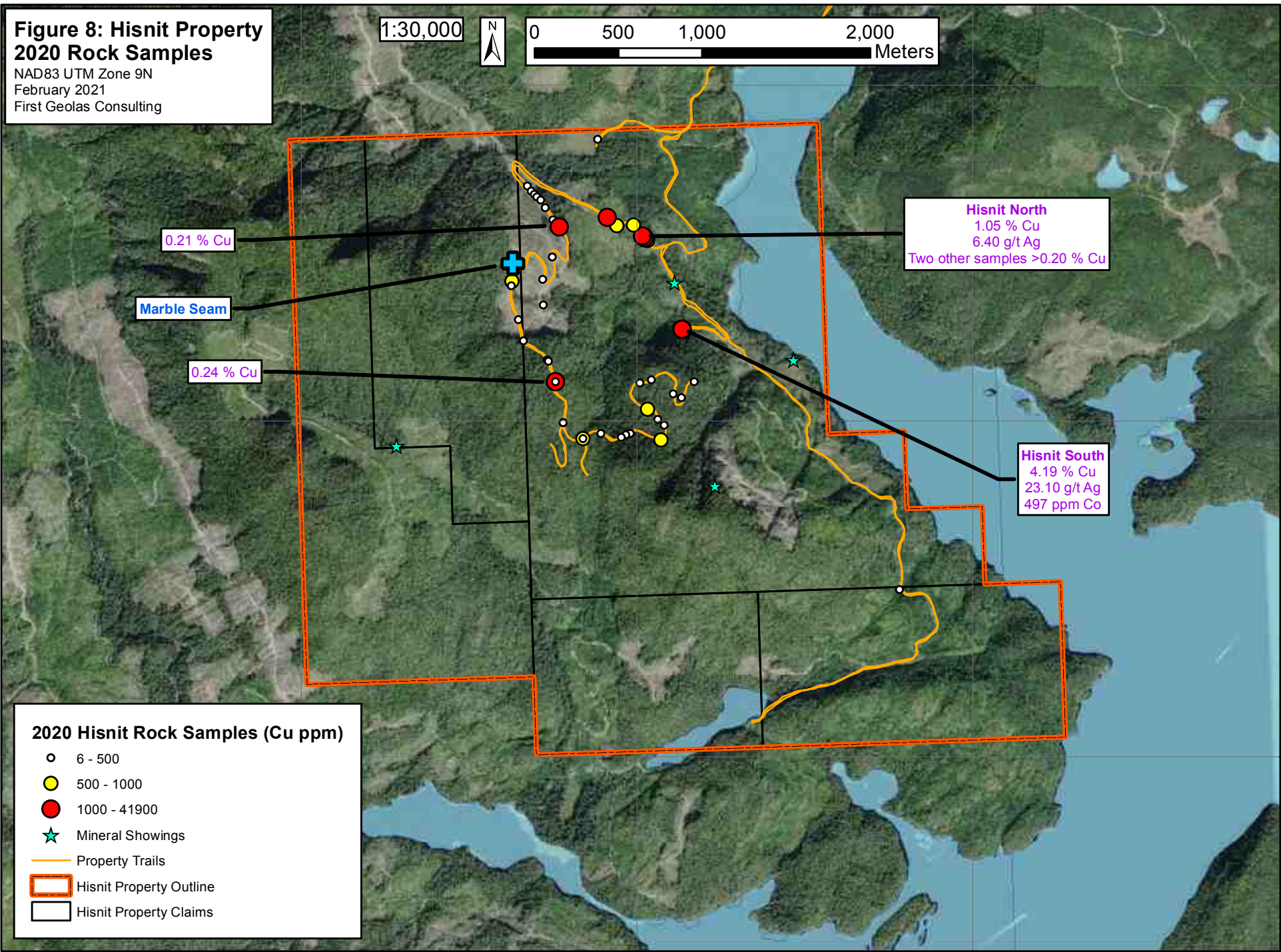
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4.2 Whole Rock Geochemistry

A total of 4 samples were collected for a first pass investigation of the geochemical signatures of the intrusive rocks on the Hisnit Property, and how they relate to the geological environment described at the Catface porphyry deposit (Smith et al., 2012). The four samples collected from the Hisnit Property were from outcropping dikes of biotite granodirite dikes with minimal alteration (Figure 9).

Smith et al. (2012) described the geochemistry of the Catface porphyry deposit:

“All of the intrusive phases at Catface are quartz diorite, are mostly metaluminous with Aluminum Saturation Indices ranging from 0.88 to 1.09, and plot within the calc-alkaline field on a FeO/MgO vs. SiO₂ diagram. All Catface intrusive phases show trace element patterns typical of arc magmas with enrichments in Ba and Th and depletions in Nb and Ti. There is considerable variation in K, Rb and Sr. On a Sr/Y versus Y diagram, only one sample (Cliff Porphyry) slightly overlaps the adakite field.”

The samples collected on the Hisnit Property are color coded to light green in the following figures.

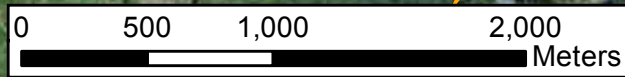
The samples from the Catface deposit are color coded as follows:

- Catface Intrusive: Red
- Cliff Porphyry: Purple
- Halo Porphyry: Pink
- Hectate Bay Intrusive: Grey
- ADP Dike: Black
- Island Intrusive: Yellow
- Karmutsen Volcanics: Light Blue

Figure 9: Hisnit Property 2020 Whole Rock Samples

NAD83 UTM Zone 9N
February 2021
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1:30,000



5514000

5512000






5510000

V725335

V725336

V725334

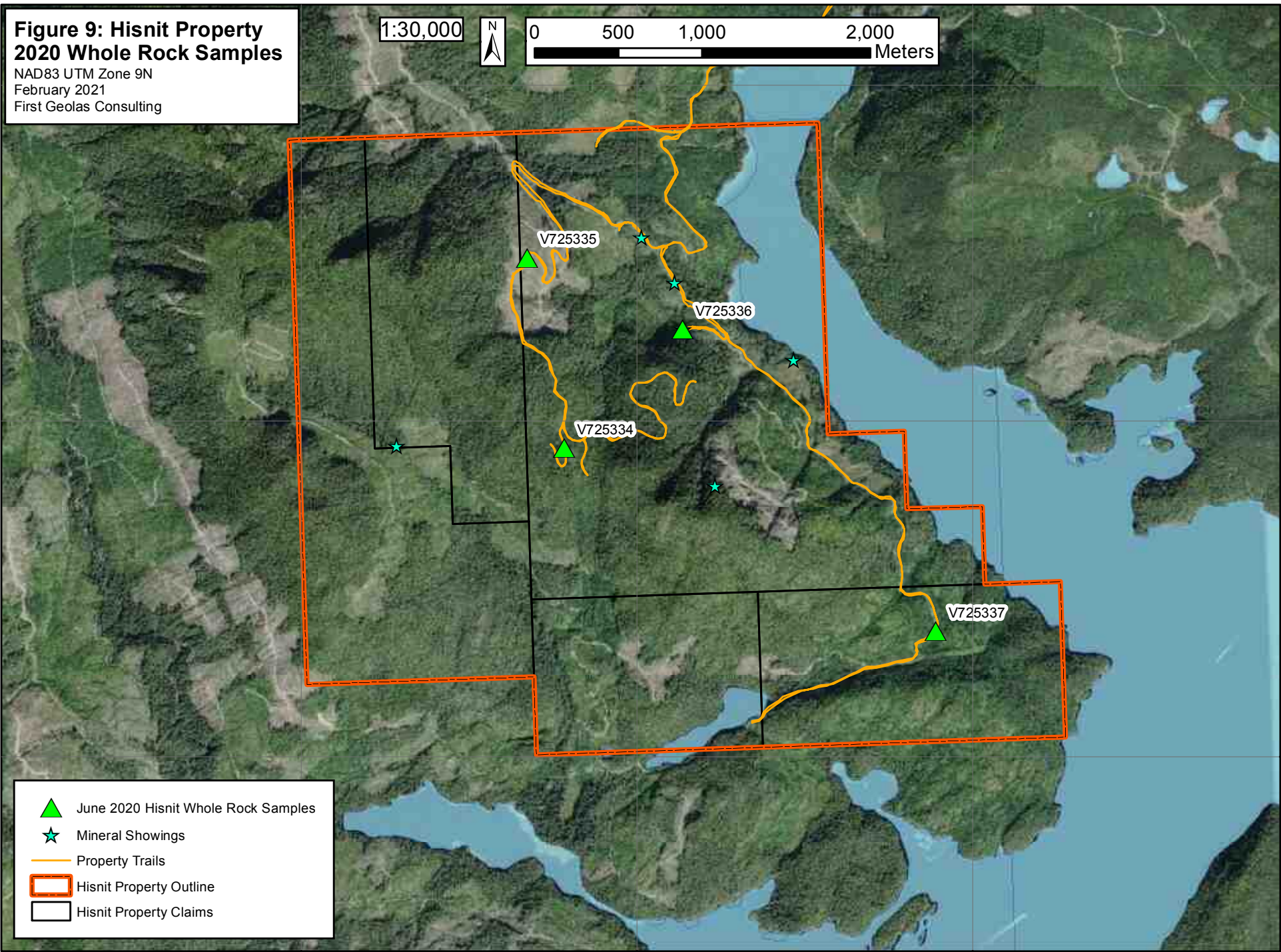
V725337

-  June 2020 Hisnit Whole Rock Samples
-  Mineral Showings
-  Property Trails
-  Hisnit Property Outline
-  Hisnit Property Claims

676000

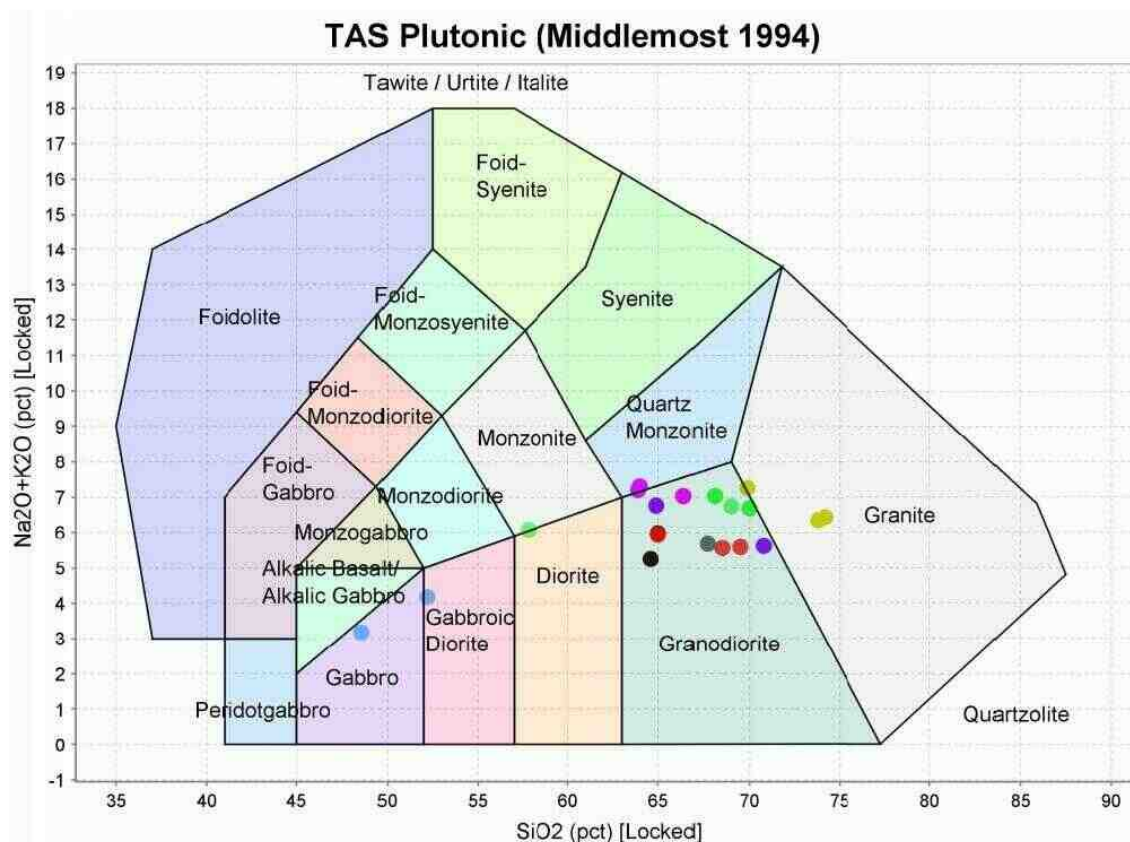
678000

680000



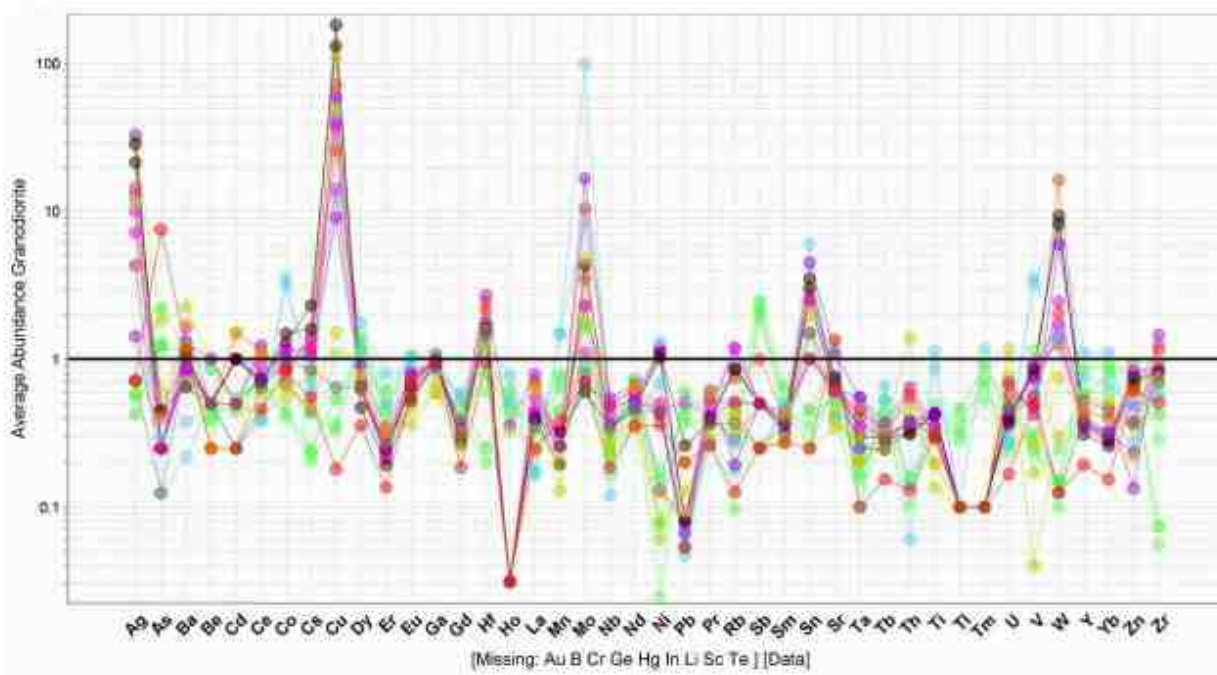
Three samples from the Hisnit Property plot within the granodiorite field, and one (sample V725337) plots at the boundary between the diorite and monzonite field, on the total alkalis versus silica plot. The intrusive phases from the Catface deposit plot largely within the granodiorite field (Figure 10).

Figure 10: Total Alkalis Versus Silica Plot



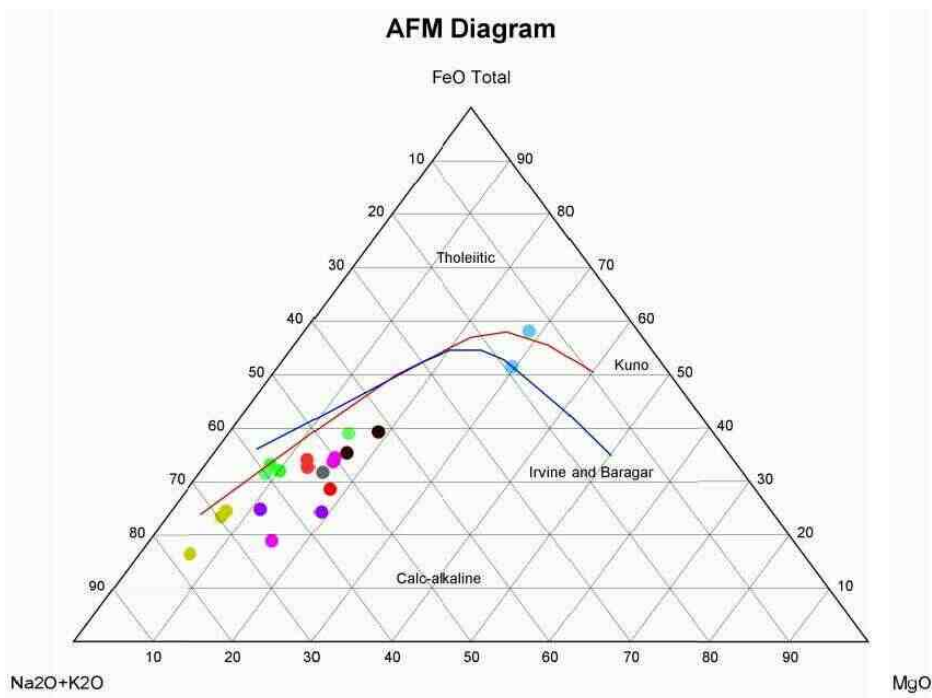
Comparing the samples collected to the average element abundances in granodiorite shows that the the samples from the Hisnit Property are aligned with the samples from Catface in being enriched in Ba and Th and depleted in Nb and Ti (Figure 11). Note that the Catface samples are all highly enriched in copper and silver, suggesting that there is likely some sulphide mineralization thus likely alteration associated with the Catface sample data.

Figure 11: Samples Compared to Average Element Abundances in Granodiorite



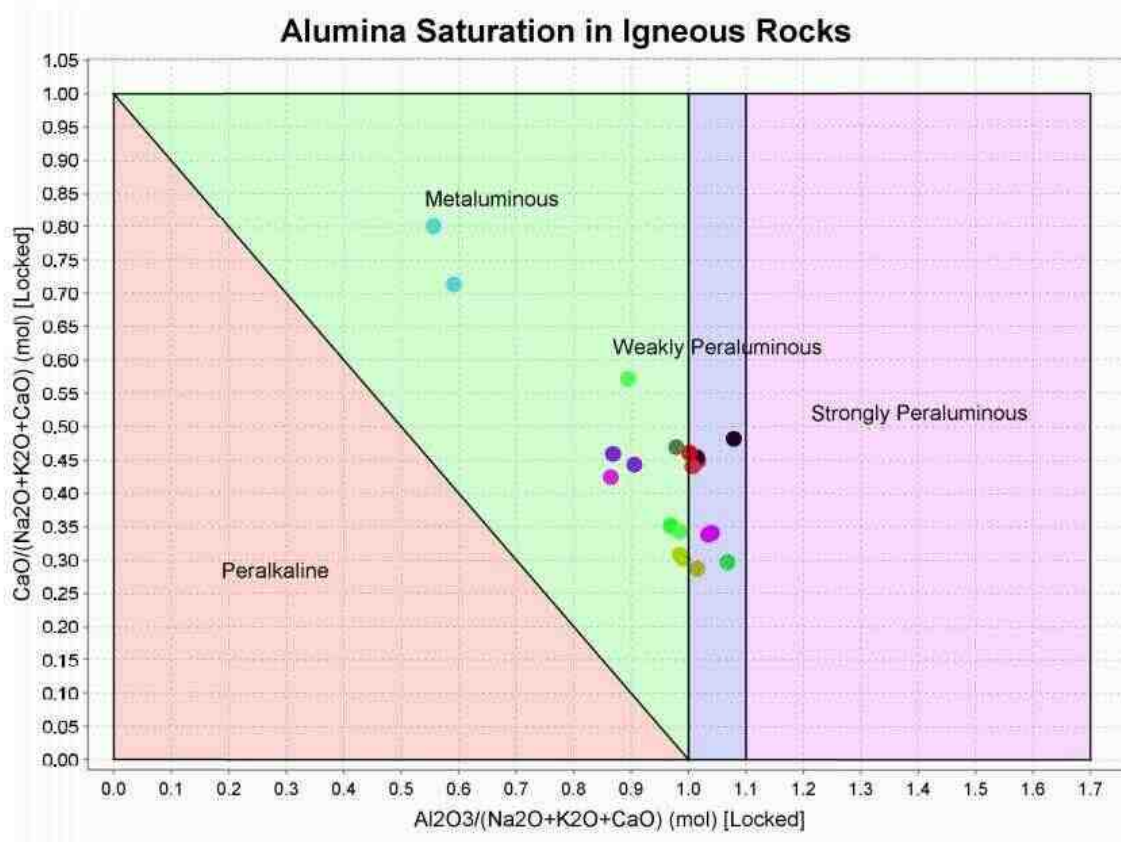
The AFM Plot shows that both the Hisnit samples and Catface samples are classified as Calc-alkaline (Figure 12).

Figure 12: AFM Plot



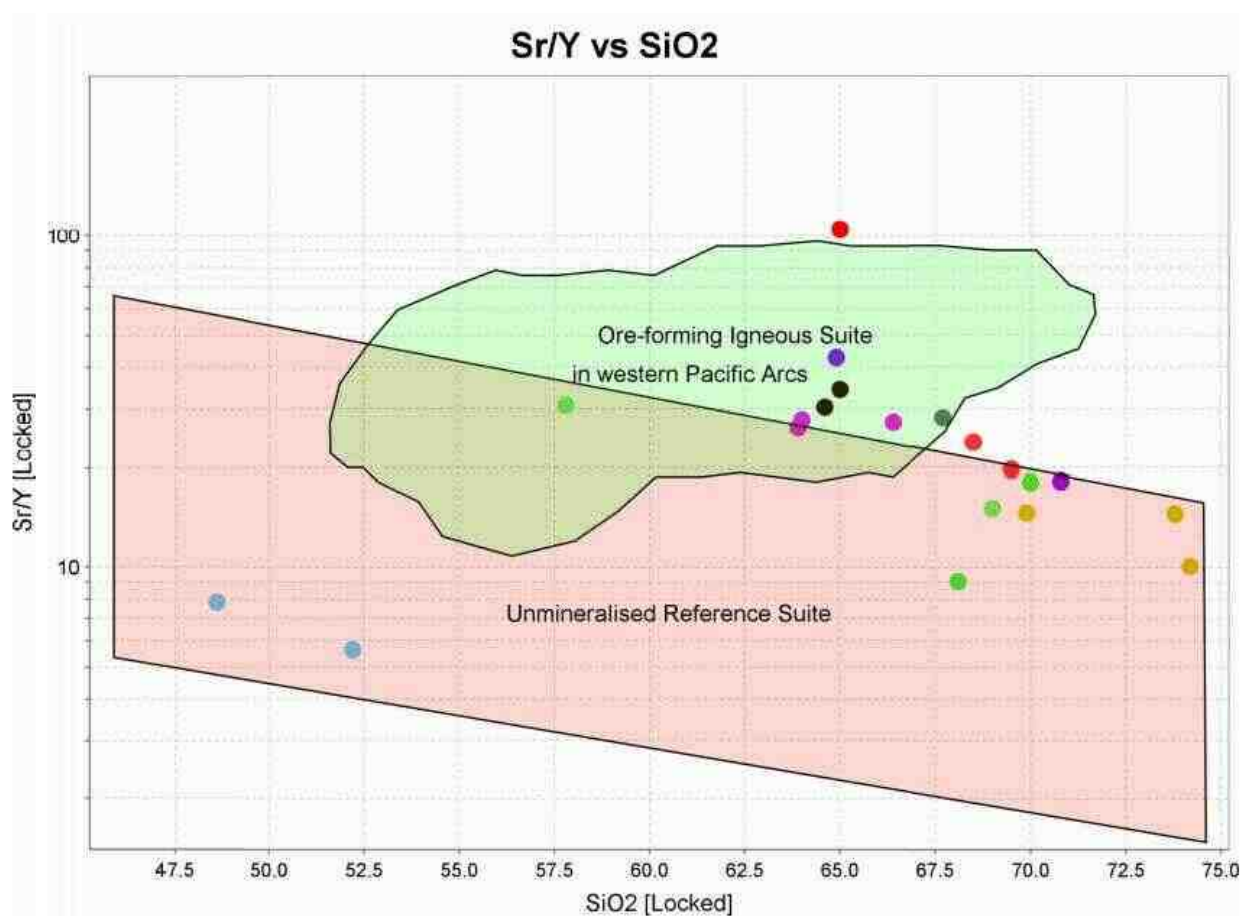
The Alumina Saturation Plot shows that both the Hisnit samples and Catface samples are classified as weakly peraluminous to metaluminous (Figure 13).

Figure 13: Alumina Saturation Plot



Cohen et al. (2010) formulated a plot of Sr/Y versus SiO₂ to assess porphyry potential derived from data from northwest Pacific arcs. Figure 14 below shows that only some of the Catface samples plot within the favorable high Sr/Y field. One of the Hisnit samples (sample V725337) plots within the high Sr/Y field, while the rest are encouragingly close to the compositions of the Catface and Cliff intrusive phases.

Figure 14: Sr/Y versus SiO₂ Plot



Overall, the 2020 samples from the Hisnit Property and the samples from the Catface porphyry deposit have some geochemical similarities and differences. Both areas host granodiorite intrusives related to copper mineralization that are calc-alkaline and peraluminous-metaluminous. There are similarities in trace element concentrations between the two areas, such as barium, strontium, yttrium, and thorium. There are also differences such as the Hisnit samples have lower concentrations of zircon and nickel, and higher concentrations of manganese, lead, and erbium.

5 Conclusions

The geological environment of Eocene intrusive bodies on the west coast of Vancouver Island is prospective for economic porphyry copper deposits, as evidenced by the Catface Cu (Mo-Au) porphyry deposit approximately 47 km southeast of the Property. The Hisnit Property is proximal to the Hisnit Stock, an Eocene intrusive likely within the Clayoquot intrusive suite but potentially within the Mount Washington intrusive suite. The Hisnit Property has a short and limited history of exploration that has resulted in encouraging copper results from very little work. The work in 2020 confirmed the copper mineralization at the historic showings with up to 4.19 % Cu. Rock sampling discovered new zones of copper mineralization along a recent road-cut resulting in the lateral extent of anomalous copper on the Property to measure approximately 1,700 m x 1,700 m. The limited whole rock analysis completed in 2020 provided insight that the intrusive phases on the Hisnit Property share geochemical similarities with the intrusive phases found associated with the Catface deposit.

6 Recommendations

- Further staking east of the current Hisnit property to extend over and beyond the mapped extent of the Mount Washington Plutonic Suite intrusion.
- A prospecting/mapping program to collect rock and moss mat samples. Detailed alteration mapping, likely employing the use of a spectrometer such as a Terraspec Halo, is recommended to be a part of this field work. Collecting samples for petrographic analysis is also recommended to assess the nature of the copper mineralization.
- Collecting samples from the Hisnit stock east of the current Property for U-Pb geochronology. This work can potentially be coordinated with academia.
- An airborne magnetic and radiometric survey to cover the new claim acquisitions described above.

References

- Cohen, D.R., Kelley, D.L., Anand, R. and Coker, W.B., 2010. Major advances in exploration geochemistry, 1998–2007. *Geochemistry: Exploration, Environment, Analysis*, 10(1), pp.3-16.
- Cui, Y., Miller, D., Schiarizza, P., and Diakow, L.J., 2017. British Columbia digital geology. British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Open File 2017-8, 9p. Data version 2019-12-19.
- DeBari, S.M., Anderson, R.G., and Mortensen, J.K., 1999. Correlation among lower to upper crustal components in an island arc: the Jurassic Bonanza arc, Vancouver Island, Canada. *Canadian Journal of Earth Sciences*, 36(8), pp.1371-1413.
- Greene, A.R., Scoates, J.S., and Weis, D., 2005. Wrangellia Terrane on Vancouver Island, British Columbia: Distribution of Flood Basalts with Implications for Potential Ni-Cu-PGE Mineralization in Southwestern British Columbia. British Columbia Geological Survey, Geological Fieldwork 2004, Paper 2005-1.
- Madsen, J.K., 2004. Geochemistry and Geochronology of Eocene Forearc Magmatism on Vancouver Island: Implications for Cenozoic to Recent Plate Configurations in the Pacific Basin (Doctoral dissertation, Department of Earth Sciences-Simon Fraser University).
- Madsen, J.K., Thorkelson, D.J., Friedman, R.M. and Marshall, D.D., 2006. Cenozoic to Recent plate configurations in the Pacific Basin: Ridge subduction and slab window magmatism in western North America. *Geosphere*, 2(1), pp.11-34.
- Marshall, D., Close, S., Podstawskyj, N., Aichmeier, A. 2005. Gold Mineralization and Geology in the Zeballos Area, Nootka Sound, Southwestern British Columbia. in *Geological Fieldwork 2004*, B.C. Ministry of Energy and Mines, Paper 2005-01, Rocks to Riches pages 301 to 310.
- Mihalasky, M.J., Bookstrom, A.A., Frost, T.P. and Ludington, S., 2011. Porphyry copper assessment of British Columbia and Yukon Territory, Canada: Chapter C in Global mineral resource assessment (No. 2010-5090-C). US Geological Survey.
- Muller, J E; Cameron, B E B; Northcote, K E. 1981. *Geology and Mineral Deposits of Nootka Sound map area Vancouver Island, British Columbia*. Geological Survey of Canada, Paper 80-16, 1981.
- Muller, J.E., Carson, D.J., 1969. *Geology and mineral deposits of Alberni map-area, British Columbia (92 F)*. Geological Survey of Canada, Paper 68–50.
- Richards, J.P., 2011. Magmatic to hydrothermal metal fluxes in convergent and collided margins. *Ore Geology Reviews*, 40(1), pp.1-26.

- Simpson, R.G. and Chapman, J. 2009. Mineral Resource Estimate Catface Copper Project. Selkirk Metals Corp. SEDAR filings.
- Smith, C.M., Canil, D., Rowins, S.M. and Friedman, R., 2012. Reduced granitic magmas in an arc setting: the Catface porphyry Cu–Mo deposit of the Paleogene Cascade Arc. *Lithos*, 154, pp.361-373.

Statements of Qualifications

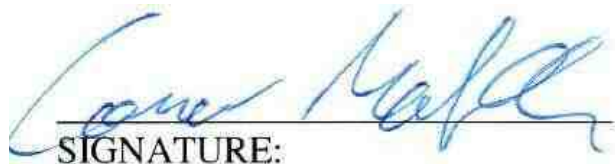
Statement of Qualifications

I, Connor Malek do hereby certify that:

1. I am currently working with First Geolas Consulting under the business address:

P.O Box 2600
Chilliwack, British Columbia
V2R 1A8
2. I am a graduate of the University of Saskatchewan with the degree of Bachelor of Science (high honors) in Geology (2015).
3. I have worked as a geologist continuously since my graduation for myself and for various resource exploration companies on a variety of commodities and deposit types.
4. I participated in and completed field work during the 2020 exploration program on the Hisnit Property in June and August 2020.
5. This report, authored by myself, is based on personal examination of all available company and government reports pertinent to the Hisnit Property.

Dated this 8th Day of February, 2021, in Chilliwack, British Columbia.



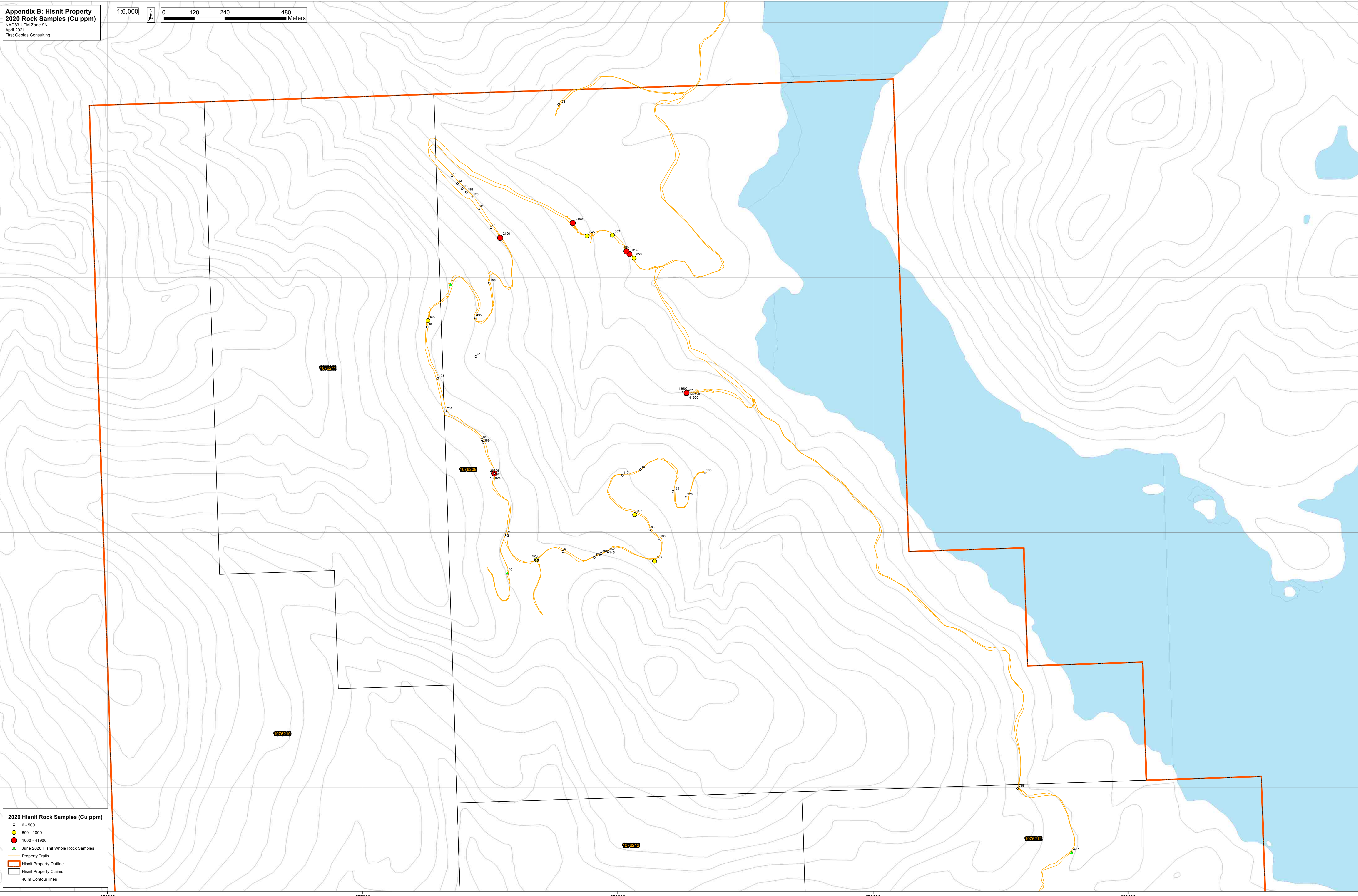
SIGNATURE:

Connor W. Malek, B.Sc.

Appendices

Appendix A: Hisnit Property 2020 Field Work Cost Table

Field Work	Days	Unit Cost	Total
Connor Malek	6.0	\$600.00	\$3,600.00
Dan Berkshire	3.0	\$600.00	\$1,800.00
Jonas Rigaux	6.0	\$300.00	\$1,800.00
Lindsay Richards	3.0	\$250.00	\$750.00
Colby Green	3.0	\$250.00	\$750.00
Office Work	Days	Unit Cost	Total
First Geolas Consulting: 2 days Planning, 2 days Assessment Report writing	4.0	\$400.00	\$1,600.00
Food, Hotel, Travel	Units	Unit Cost	Total
Food			\$483.44
Gold River Hotel			\$875.95
Ferry and sample shipping			\$336.95
Fuel for Truck			\$381.14
Sample Bags, Flagging Tape, etc.			\$7.45
Rentals	Days	Unit Cost	Total
First Geolas Geological Gear Rental	6.0	\$65.00	\$390.00
First Geolas Truck Rental	6.0	\$100.00	\$600.00
Quad and Chainsaw Rental	6.0	\$225.00	\$1,350.00
Geochemistry and Sample Prep.	Units	Unit Cost	Total
ALS Geochemistry Sample Analysis (53 Rock Samples, 4 Whole Rock Samples)	57.0		\$2,922.50
Grand Total			\$17,647.43



2020 Hisnit Rock Samples (Cu ppm)

- 6 - 500
- 500 - 1000
- 1000 - 41900
- ▲ June 2020 Hisnit Whole Rock Samples
- Property Trails
- ▭ Hisnit Property Outline
- ▭ Hisnit Property Claims
- 40 m Contour lines

Waypoint	UTM_Zone	UTM_Easting_m	UTM_Northing_m	Elevation_m	Date	Notes	Geochemistry_Sample_ID	Geochemistry_Sample_Description	Au_ppm	Ag_ppm	Al_pct	As_ppm	Ba_ppm	Ba_ppm	Bi_ppm	Ca_pct	Ca_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_pct	Ga_ppm	K_pct	Li_ppm	Mg_pct	Mn_ppm	Mo_ppm	Nb_pct	Ni_ppm	P_ppm	Pb_ppm	S_pct	Sb_ppm	Sc_ppm	Sr_ppm	Tb_ppm	Ti_pct	Ti_ppm	U_ppm	V_ppm	W_ppm	Zn_ppm
2020-204	9	678063.73	5513076.01	79.81	2020-06-20	Hairt North. Strongly epidote-altered volcanic with disseminated pyrite, chalcopyrite, and malachite	X987035	Strongly epidote-altered volcanic with disseminated pyrite, chalcopyrite, and malachite	0.036	0.5	7.73	11	50	0.25	1	7.99	1	132	81	856	16	30	0.12	5	2.11	946	2	1.47	57	710	7	3.26	2.5	36	1330	10	0.86	5	5	372	5	51
2020-205	9	678045.75	5513092.12	83.71	2020-06-20	Hairt North. Strongly epidote-altered volcanic with disseminated pyrite, chalcopyrite, and malachite	X987036	Hairt North. Strongly epidote-altered volcanic with disseminated pyrite, chalcopyrite, and malachite	0.088	1.7	8.61	6	20	0.25	3	10.75	1.6	97	117	5430	10.1	30	0.06	5	2.51	1175	1	1.72	67	850	17	0.53	5	38	1830	10	1.19	5	5	455	5	82
2020-206	9	678033.42	5513102.95	85.96	2020-06-20	Hairt North. Semi-massive pyrite-chalcopyrite in mm-scale veinlet	X987037	Semi-massive pyrite-chalcopyrite in mm-scale veinlet	0.011	6.4	8.06	2.5	10	0.6	6	9.04	5.5	65	64	10500	11.2	30	0.04	5	3.24	1240	1	1.37	70	1100	11	1.92	2.5	38	995	10	1.22	10	5	398	5	268
2020-208	9	677978.76	5513166.38	99.45	2020-06-20	Hairt North. 30 cm wide posson zone in volcanics with disseminated pyrite-chalcopyrite	X987038	Volcanics with disseminated pyrite-chalcopyrite	0.004	0.6	8.3	5	10	0.6	1	11.25	1.4	109	127	803	12.2	30	0.05	5	3.57	1360	4	0.54	81	850	11	1.79	2.5	36	1460	10	1.02	10	5	340	5	113
2020-209	9	677879.70	5513163.54	113.56	2020-06-20	Hairt North. Strongly epidote-altered volcanics with disseminated pyrite	X987039	Strongly epidote-altered volcanics with disseminated pyrite	0.005	0.5	8.55	2.5	30	0.5	5	9.48	1.1	35	144	645	10.2	30	0.06	10	2.71	1360	1	1.38	74	960	6	0.17	2.5	46	1875	10	1.44	5	5	463	5	77
2020-210	9	677823.96	5513213.79	126.34	2020-06-20	Hairt North. Moderately epidote-altered volcanics with hematite alteration	X987040	Moderately epidote-altered volcanics with hematite alteration	0.023	1.1	7.91	2.5	50	0.5	3	6.72	1.2	46	136	2490	9.53	20	0.23	10	4.29	1045	1	2.97	90	860	6	0.32	2.5	42	356	10	1.3	5	5	411	5	125
2020-214	9	678289.08	5512547.73	141.66	2020-06-20	Hairt South. Semi massive pyrite-chalcopyrite-magnetite in volcanic hosting stockwork qtzr-carbonate veinlets.	X987041	Hairt South. Semi massive pyrite-chalcopyrite-magnetite in volcanic hosting stockwork qtzr-carbonate veinlets.	0.006	0.25	8.19	8	50	0.7	1	13.85	0.8	33	166	155	9.55	30	0.09	5	3.37	1605	0.5	0.58	98	890	3	0.29	2.5	21	280	10	0.57	5	5	169	5	64
2020-214	9	678289.08	5512547.73	141.66	2020-06-20	Hairt South. Semi massive pyrite-chalcopyrite-magnetite in volcanic hosting stockwork qtzr-carbonate veinlets.	X987042	Hairt South. Semi massive pyrite-chalcopyrite-magnetite in volcanic hosting stockwork qtzr-carbonate veinlets.	0.066	23.1	0.28	22	10	0.25	3	3.44	9.6	497	0.5	41900	50	10	0.01	5	0.43	1100	2	0.04	94	180	5	7.74	2.5	0.5	4	10	0.01	10	5	16	5	717
2020-216	9	679566.92	5510996.86	84.70	2020-06-20	Argonaut Quartz vein with hematite alteration subcrop. Showing along road is very green in	X987043	Argonaut Quartz vein with hematite alteration subcrop.	0.0005	0.25	1.39	6	40	0.25	1	0.26	0.25	4	44	245	1.52	5	0.22	5	0.29	182	2	0.38	5	180	1	0.07	2.5	3	15	10	0.09	5	5	27	5	17
2020-217	9	677767.91	5513679.22	75.80	2020-06-20	Epidote-altered volcanics. Up new spur road, under soil sample copper anomaly according to Dan	X987044	Epidote-altered volcanics	0.003	0.25	6.85	2.5	10	0.25	1	8.68	0.8	51	183	158	8.81	30	0.05	5	4.5	1455	0.5	2.09	120	160	6	0.12	2.5	42	622	10	0.92	5	5	341	5	104

Appendix D: Geochemical Analysis Details, Assay Certificates, and Standard Reference Material
Information



Sample Preparation Package

PREP- 31Y

Standard Sample Preparation: Dry, Crush, Rotary Split and Pulverize

Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

The sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken using a Boyd rotary splitter and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. This method is appropriate for rock chip or drill samples.

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
CRU-31	Fine crushing of rock chip and drill samples to better than 70 % of the sample passing 2 mm.
SPL-22Y	Rotary split using a Boyd rotary splitter.
PUL-31	A sample split of up to 250 g is pulverized to better than 85 % of the sample passing 75 microns.

Revision 01.00
Aug 08, 2007

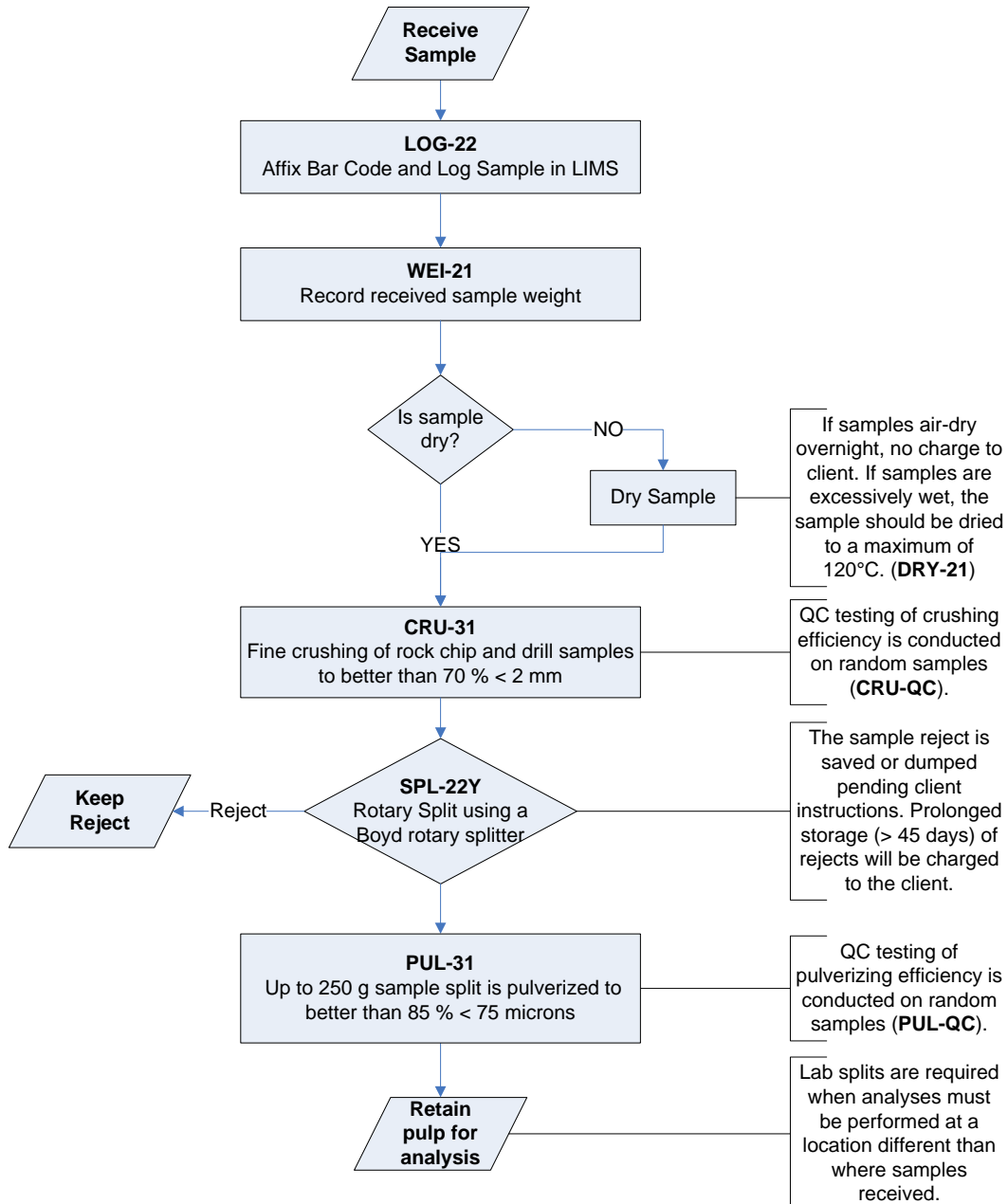
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Sample Preparation Package

Flow Chart - Sample Preparation Package - PREP- 31Y Standard Sample Preparation: Dry, Crush, Rotary Split and Pulverize



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Au-ICP21/Au-ICP22 – Fire Assay Fusion – ICP-AES Finish

Sample Decomposition:

Fire Assay Fusion (FA-FUSPG1 & FA-FUSPG2)

Analytical Method:

Inductively Couple Plasma – Atomic Emission Spectrometry

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

Method Code	Element	Symbol	Units	Sample Weight (g)	Lower Limit	Upper Limit	Default Overlimit Method
Au-ICP21	Gold	Au	ppm	30	0.001	10	Au-GRA21
Au-ICP22	Gold	Au	ppm	50	0.001	10	Au-GRA22



Whole Rock Geochemistry

ME-ICP06 and OA-GRA05 Analysis of major oxides by ICP-AES

ME-ICP06

Sample Decomposition:

Lithium Metaborate/Lithium Tetraborate ($\text{LiBO}_2/\text{Li}_2\text{B}_4\text{O}_7$) Fusion* (FUS-LI01)

Analytical Method:

Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES)

A prepared sample (0.100 g) is added to lithium metaborate/lithium tetraborate flux, mixed well and fused in a furnace at 1000°C. The resulting melt is then cooled and dissolved in 100 mL of 4% nitric acid/2% hydrochloric acid. This solution is then analyzed by ICP-AES and the results are corrected for spectral inter-element interferences. Oxide concentration is calculated from the determined elemental concentration and the result is reported in that format.

Element	Symbol	Units	Lower Limit	Upper Limit
Aluminum	Al_2O_3	%	0.01	100
Barium	BaO	%	0.01	100
Calcium	CaO	%	0.01	100
Chromium	Cr_2O_3	%	0.01	100
Iron	Fe_2O_3	%	0.01	100
Magnesium	MgO	%	0.01	100
Manganese	MnO	%	0.01	100
Phosphorus	P_2O_5	%	0.01	100
Potassium	K_2O	%	0.01	100
Silicon	SiO_2	%	0.01	100
Sodium	Na_2O	%	0.01	100

Revision 07.00
January 10th, 2014



Whole Rock Geochemistry

Element	Symbol	Units	Lower Limit	Upper Limit
Strontium	SrO	%	0.01	100
Titanium	TiO ₂	%	0.01	100

***Note:** For samples that are high in sulphides, we may substitute a peroxide fusion in order to obtain better results.

OA-GRA05, ME-GRA05

Sample Decomposition: Thermal decomposition Furnace or TGA (OA-GRA05 or ME-GRA05)
Analytical Method: Gravimetric

If required, the total oxide content is determined from the ICP analyte concentrations and loss on ignition (L.O.I.) values. A prepared sample (1.0 g) is placed in an oven at 1000°C for one hour, cooled and then weighed. The percent loss on ignition is calculated from the difference in weight.

Method Code	Parameter	Symbol	Units	Lower Limit	Upper Limit
OA-GRA05	Loss on Ignition (Furnace)	LOI	%	0.01	100
ME-GRA05	Loss on Ignition (TGA)	Moisture	%	0.01	100
		LOI	%	0.01	100

Revision 07.00
January 10th, 2014

ME-MS61: Ultra-Trace Level Method Using ICP MS and ICP-AES

Sample Decomposition:

HF-HNO₃-HClO₄ acid digestion, HCl leach (GEO-4A01)

Analytical Method:

Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES)

Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

The ME-MS61 Ultra Trace method combines a four-acid digestion with ICP-MS instrumentation. A four acid digestion quantitatively dissolves nearly all minerals in the majority of geological materials.

A prepared sample (0.25 g) is digested with perchloric, nitric and hydrofluoric acids. The residue is leached with dilute hydrochloric acid and diluted to volume.

The final solution is then analyzed by inductively coupled plasma-atomic emission spectrometry and inductively coupled plasma-mass spectrometry. Results are corrected for spectral inter-element interferences.

List of Reportable Analytes:

Analyte	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	50
Arsenic	As	ppm	0.2	10000
Barium	Ba	ppm	10	10000
Beryllium	Be	ppm	0.05	1000
Bismuth	Bi	ppm	0.01	10000
Calcium	Ca	%	0.01	50
Cadmium	Cd	ppm	0.02	1000
Cerium	Ce	ppm	0.01	500
Cobalt	Co	ppm	0.1	10000
Chromium	Cr	ppm	1	10000
Cesium	Cs	ppm	0.05	500
Copper	Cu	ppm	0.2	10000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.1	500
Indium	In	ppm	0.005	500
Potassium	K	%	0.01	10
Lanthanum	La	ppm	0.5	10000
Lithium	Li	ppm	0.2	10000
Magnesium	Mg	%	0.01	50
Manganese	Mn	ppm	5	100000
Molybdenum	Mo	ppm	0.05	10000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.1	500
Nickel	Ni	ppm	0.2	10000

Analyte	Symbol	Units	Lower Limit	Upper Limit
Phosphorous	P	ppm	10	10000
Lead	Pb	ppm	0.5	10000
Rubidium	Rb	ppm	0.1	10000
Rhenium	Re	ppm	0.002	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10000
Scandium	Sc	ppm	0.1	10000
Selenium	Se	ppm	1	1000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10000
Tantalum	Ta	ppm	0.05	100
Tellurium	Te	ppm	0.05	500
Thorium	Th	ppm	0.01	10000
Titanium	Ti	%	0.005	10
Thallium	Tl	ppm	0.02	10000
Uranium	U	ppm	0.1	10000
Vanadium	V	ppm	1	10000
Tungsten	W	ppm	0.1	10000
Yttrium	Y	ppm	0.1	500
Zinc	Zn	ppm	2	10000
Zirconium	Zr	ppm	0.5	500

NOTE: Four acid digestions are able to dissolve most minerals. However, depending on the sample matrix, not all elements are quantitatively extracted. For example:

- This digestion may not be complete for minerals such as corundum (Al₂O₃), kyanite (Al₂SiO₅) and more complex silicates such as garnet, staurolite, topaz and tourmaline.*
- Potassium may bias low due to the formation of the insoluble perchlorate, which may not be completely decomposed during the leaching process.*
- Low recoveries of Al and Ca may occur if their insoluble fluorides are not completely decomposed during the leaching process.*
- Scandium may not be fully solubilized and may show lower recovery by this digestion. Sc-ICP06 (Lithium Metaborate Fusion, ICP-AES Finish), a method developed for Scandium, can be used as an alternative for this analyte.*
- Four acid digestions can also volatilize certain exploration pathfinder elements, in particular mercury. Mercury is better analyzed by an aqua regia digestion and can be added as a package to this analysis (Package: ME-MS61m).*



Geochemical Procedure

ME-MS81 Litho geochemistry

Sample Decomposition:

Lithium Borate ($\text{LiBO}_2/\text{Li}_2\text{B}_4\text{O}_7$) Fusion (FUS-LI01)*

Analytical Method:

Inductively Coupled Plasma - Mass Spectroscopy (ICP - MS)

A prepared sample (0.100 g) is added to lithium metaborate/lithium tetraborate flux, mixed well and fused in a furnace at 1025°C. The resulting melt is then cooled and dissolved in an acid mixture containing nitric, hydrochloric and hydrofluoric acids. This solution is then analyzed by inductively coupled plasma - mass spectrometry.

Element	Symbol	Unit	Lower Limit	Upper Limit
Barium	Ba	ppm	0.5	10000
Cerium	Ce	ppm	0.5	10000
Chromium	Cr	ppm	10	10000
Cesium	Cs	ppm	0.01	10000
Dysprosium	Dy	ppm	0.05	1000
Erbium	Er	ppm	0.03	1000
Europium	Eu	ppm	0.03	1000
Gallium	Ga	ppm	0.1	1000
Gadolinium	Gd	ppm	0.05	1000
Hafnium	Hf	ppm	0.2	10000
Holmium	Ho	ppm	0.01	1000
Lanthanum	La	ppm	0.5	10000
Lutetium	Lu	ppm	0.01	1000
Niobium	Nb	ppm	0.2	2500

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January 10th, 2014



Geochemical Procedure

Element	Symbol	Unit	Lower Limit	Upper Limit
Neodymium	Nd	ppm	0.1	10000
Praseodymium	Pr	ppm	0.03	1000
Rubidium	Rb	ppm	0.2	10000
Samarium	Sm	ppm	0.03	1000
Tin	Sn	ppm	1	10000
Strontium	Sr	ppm	0.1	10000
Tantalum	Ta	ppm	0.1	2500
Terbium	Tb	ppm	0.01	1000
Thorium	Th	ppm	0.05	1000
Thallium	Tl	ppm	0.5	1000
Thullium	Tm	ppm	0.01	1000
Uranium	U	ppm	0.05	1000
Vanadium	V	ppm	5	10000
Tungsten	W	ppm	1	10000
Yttrium	Y	ppm	0.5	10000
Ytterbium	Yb	ppm	0.03	1000
Zirconium	Zr	ppm	2	10000

***Note:** Minerals that may not recover fully using the lithium borate fusion include zircon, some metal oxides, some rare-earth phosphates and some sulphides. Basemetals also do not fully recover using this method.

Basemetals determined by either aqua regia or 4-acid digestion and ICP-AES may be added to the ME-MS81 package. See following page.



Geochemical Procedure

Addition of Basemetals

Sample Decomposition: Aqua Regia (GEO-AR01) or 4-Acid (GEO-4ACID)

Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES)

The lithium borate fusion is not the preferred method for the determination of base metals. Many sulfides and some metal oxides are only partially decomposed by the borate fusion and some elements such as cadmium and zinc can be volatilized.

Base metal and additional elements more appropriately analysed by acid digestion can be reported with ME-MS81 by either an aqua regia (**ME-AQ81**) or four acid digestion (**ME-4ACD81**). The four acid digestion is preferred when the targets include more resistive mineralization such as that associated with nickel and cobalt. Mercury is only offered with the aqua regia digestion.

ME-4ACD81

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0.5	100
Arsenic	As	ppm	5	10000
Cadmium	Cd	ppm	0.5	1000
Cobalt	Co	ppm	1	10000
Copper	Cu	ppm	1	10000
Lithium	Li	ppm	10	10000
Molybdenum	Mo	ppm	1	10000
Nickel	Ni	ppm	1	10000
Lead	Pb	ppm	2	10000
Scandium	Sc	ppm	1	10000
Zinc	Zn	ppm	2	10000

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Geochemical Procedure

ME-AQ81

Note: Mercury is only available via the aqua regia digestion

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0.5	100
Arsenic	As	ppm	5	10000
Cadmium	Cd	ppm	0.5	1000
Cobalt	Co	ppm	1	10000
Copper	Cu	ppm	1	10000
Mercury	Hg	ppm	1	10000
Molybdenum	Mo	ppm	1	10000
Nickel	Ni	ppm	1	10000
Lead	Pb	ppm	2	10000
Zinc	Zn	ppm	2	10000

ME-OG62- Ore Grade Elements by Four Acid Digestion Using Conventional ICP-AES Analysis

Sample Decomposition:

HNO₃-HClO₄-HF-HCl Digestion (ASY-4A01)

Analytical Method:

Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES)

Assays for the evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations. Ultra high concentration samples (> 15 -20%) may require the use of methods such as titrimetric and gravimetric analysis, in order to achieve maximum accuracy.

A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water is added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry. Results are corrected for spectral interelement interferences.

*NOTE: ICP-AES is the default finish technique for ME-OG62. However, under some conditions and at the discretion of the laboratory an AA finish may be substituted. The certificate will clearly reflect which instrument finish was used.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	1	1500
Arsenic	As	%	0.001	30
Bismuth	Bi	%	0.001	30
Cadmium	Cd	%	0.0001	10
Cobalt	Co	%	0.0005	30
Chromium	Cr	%	0.002	30
Copper	Cu	%	0.001	50
Iron	Fe	%	0.01	100
Magnesium	Mg	%	0.01	50
Manganese	Mn	%	0.01	60
Molybdenum	Mo	%	0.001	10
Nickel	Ni	%	0.001	30
Lead	Pb	%	0.001	20
Sulphur	S	%	0.01	50
Zinc	Zn	%	0.001	30



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 27-JUL-2020
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CERTIFICATE VA20132416

Project: HT
 P.O. No.: 2020-HT-01
 This report is for 14 Rock samples submitted to our lab in Vancouver, BC, Canada on 23-JUN-2020.
 The following have access to data associated with this certificate:
 CONNOR MALEK

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-22Y	Split Sample - Boyd Rotary Splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
ME-MS61	48 element four acid ICP-MS	
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
OA-GRA05	Loss on Ignition at 1000C	WST-SEQ
ME-MS81	Lithium Borate Fusion ICP-MS	ICP-MS
TOT-ICP06	Total Calculation for ICP06	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Saa Traxler, General Manager, North Vancouver



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Sample Description	Method Analyte Units LOD	WEI-21	Au-ICP21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.02	0.001	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	
X987035		2.20	0.036	0.5	7.73	11	50	<0.5	<2	7.99	1.0	132	81	856	16.00	30
X987036		2.04	0.088	1.7	8.61	6	20	<0.5	3	10.75	1.6	37	117	5430	10.10	30
X987037		3.52	0.011	6.4	8.06	<5	10	0.6	6	9.04	5.5	65	64	>10000	11.20	30
X987038		3.14	0.004	0.6	8.30	5	10	0.6	<2	11.25	1.4	109	127	803	12.20	30
X987039		2.52	0.005	0.5	8.55	<5	30	0.5	5	9.48	1.1	35	144	645	10.20	30
X987040		2.74	0.023	1.1	7.91	<5	50	0.5	3	6.72	1.2	46	136	2490	9.53	20
X987041		2.02	0.006	<0.5	8.19	8	50	0.7	<2	13.85	0.8	33	166	155	9.55	30
X987042		3.18	0.066	23.1	0.28	22	10	<0.5	3	3.44	9.6	497	<1	>10000	>50	10
X987043		1.76	<0.001	<0.5	1.39	6	40	<0.5	<2	0.26	<0.5	4	44	245	1.52	<10
X987044		2.80	0.003	<0.5	6.85	<5	10	<0.5	<2	8.68	0.9	51	183	158	8.81	20
V725334		1.44														
V725335		2.16														
V725336		1.44														
V725337		0.96														



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Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
X987035		0.12	<10	2.11	946	2	1.47	57	710	7	3.26	<5	36	1330	<20	0.86
X987036		0.06	<10	2.51	1175	1	1.72	67	810	17	0.53	5	38	1810	<20	1.19
X987037		0.04	<10	3.24	1240	1	1.37	70	1100	11	1.92	<5	38	995	<20	1.22
X987038		0.05	<10	3.57	1360	4	0.54	81	850	11	1.79	<5	36	1460	<20	1.02
X987039		0.06	10	2.71	1360	1	1.38	74	960	6	0.17	<5	46	1875	<20	1.44
X987040		0.23	10	4.29	1945	1	2.97	90	860	6	0.32	<5	42	356	<20	1.30
X987041		0.09	<10	3.37	1605	<1	0.58	98	890	3	0.29	<5	21	280	<20	0.57
X987042		0.01	<10	0.43	1100	2	0.04	94	180	5	7.74	<5	<1	4	<20	0.01
X987043		0.22	<10	0.29	182	2	0.38	5	180	<2	0.07	<5	3	15	<20	0.09
X987044		0.05	<10	4.50	1455	<1	2.09	120	560	6	0.12	<5	42	622	<20	0.92
V725334 V725335 V725336 V725337																



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Sample Description	Method Analyte Units LOD	ME-ICP61 Tl ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01
X987035		<10	<10	372	<10	51										
X987036		<10	<10	455	<10	82										
X987037		10	<10	398	<10	268	1.050									
X987038		10	<10	340	<10	113										
X987039		<10	<10	463	<10	77										
X987040		<10	<10	411	<10	125										
X987041		<10	<10	169	<10	64										
X987042		10	<10	16	<10	717	4.19									
X987043		<10	<10	27	<10	17										
X987044		<10	<10	341	<10	104										
V725334								0.04	7.76	4.4	570	1.72	0.04	2.20	0.10	32.4
V725335								0.03	7.87	2.4	570	0.92	0.02	1.69	0.09	29.1
V725336								0.04	7.53	2.6	620	0.80	0.04	2.02	0.11	27.4
V725337								0.04	9.20	2.5	340	0.77	0.08	5.01	0.11	16.10



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Sample Description	Method Analyte Units LOD	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	
		Co ppm 0.1	Cr ppm 1	Cs ppm 0.05	Cu ppm 0.2	Fe % 0.01	Ga ppm 0.05	Ge ppm 0.05	Hf ppm 0.1	In ppm 0.005	K % 0.01	La ppm 0.5	Li ppm 0.2	Mg % 0.01	Mn ppm 5	Mo ppm 0.05
X987035 X987036 X987037 X987038 X987039																
X987040 X987041 X987042 X987043 X987044																
V725334		6.9	19	0.85	10.0	3.04	17.55	0.06	0.5	0.027	1.61	14.7	9.2	0.53	542	1.69
V725335		4.4	9	0.48	16.2	2.87	15.50	0.08	1.6	0.035	1.45	13.4	6.7	0.64	863	0.92
V725336		4.0	8	0.41	11.0	2.71	14.90	0.06	1.2	0.042	1.45	12.8	4.9	0.51	755	0.63
V725337		10.4	10	0.46	32.7	3.96	19.75	0.06	0.4	0.057	0.71	6.0	5.9	1.03	870	0.66



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Sample Description	Method Analyte Units LOD	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	
		Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
		%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
X987035		0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05
X987036																
X987037																
X987038																
X987039																
X987040																
X987041																
X987042																
X987043																
X987044																
V725334		3.63	5.5	3.1	770	6.9	56.3	<0.002	0.01	0.49	5.6	<1	0.9	234	0.43	<0.05
V725335		3.56	4.5	1.5	590	8.9	35.1	<0.002	0.01	0.43	9.9	1	0.5	301	0.33	<0.05
V725336		3.50	4.4	0.5	550	5.5	31.2	<0.002	<0.01	0.38	9.4	<1	0.7	270	0.31	<0.05
V725337		3.81	3.3	3.5	760	6.1	11.6	<0.002	0.01	0.41	16.3	1	0.9	542	0.20	<0.05



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Sample Description	Method	Analyte	Units	LOD	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81		
					Th	Ti	Tl	U	V	W	Y	Zn	Zr	Ba	Ce	Cr	Cs	Dy	Er	
					ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
					0.01	0.005	0.02	0.1	1	0.1	0.1	2	0.5	0.5	0.1	10	0.01	0.05	0.03	
X987035																				
X987036																				
X987037																				
X987038																				
X987039																				
X987040																				
X987041																				
X987042																				
X987043																				
X987044																				
V725334					3.93	0.247	0.23	1.5	24	0.3	25.8	48	10.3	584	35.2	20	0.85	4.51	2.92	
V725335					1.60	0.250	0.16	0.8	31	0.3	16.7	56	59.2	574	28.9	20	0.43	3.67	2.31	
V725336					1.48	0.235	0.19	0.8	27	0.2	17.9	50	40.1	576	26.1	10	0.42	3.53	2.16	
V725337					1.04	0.391	0.14	0.7	114	0.5	17.6	50	7.8	338	17.9	10	0.49	3.35	1.96	

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Sample Description	Method Analyte Units LOD	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	
		Eu ppm 0.02	Ga ppm 0.1	Gd ppm 0.05	Hf ppm 0.1	Ho ppm 0.01	La ppm 0.1	Lu ppm 0.01	Nb ppm 0.1	Nd ppm 0.1	Pr ppm 0.02	Rb ppm 0.2	Sm ppm 0.03	Sn ppm 1	Sr ppm 0.1	Ta ppm 0.1
X987035 X987036 X987037 X987038 X987039																
X987040 X987041 X987042 X987043 X987044																
V725334		1.23	17.8	3.90	6.3	1.00	16.9	0.53	5.8	19.2	4.64	65.9	4.43	1	224	0.6
V725335		0.97	15.7	3.01	4.2	0.79	14.4	0.44	4.9	16.1	3.50	37.9	3.43	1	283	0.5
V725336		0.82	14.6	3.04	3.4	0.72	13.1	0.39	4.4	13.5	3.33	32.0	3.07	1	239	0.4
V725337		1.24	19.2	3.02	2.5	0.70	9.0	0.32	3.4	11.6	2.33	24.4	2.61	1	511	0.3



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Sample Description	Method Analyte Units LOD	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06
		Tb ppm 0.01	Th ppm 0.05	Tm ppm 0.01	U ppm 0.05	V ppm 5	W ppm 1	Y ppm 0.1	Yb ppm 0.03	Zr ppm 2	SiO2 % 0.01	Al2O3 % 0.01	Fe2O3 % 0.01	CaO % 0.01	MgO % 0.01	Na2O % 0.01
X987035 X987036 X987037 X987038 X987039																
X987040 X987041 X987042 X987043 X987044																
V725334		0.69	5.70	0.45	2.12	28	1	28.8	3.26	246	68.1	15.60	4.43	3.11	0.98	5.04
V725335		0.56	3.11	0.36	1.26	38	1	22.0	2.84	141	70.0	15.20	4.12	2.32	1.14	4.92
V725336		0.53	2.82	0.34	1.22	30	1	20.0	2.16	131	69.0	15.05	3.94	2.88	0.94	4.90
V725337		0.50	1.63	0.27	0.78	127	1	18.1	1.76	115	57.8	19.80	5.75	6.96	1.98	5.13



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Sample Description	Method	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	OA-GRA05	TOT-ICP06
	Analyte	K2O	Cr2O3	TiO2	MnO	P2O5	SrO	BaO	LOI	Total
	Units LOD	%	%	%	%	%	%	%	%	%
		0.01	0.002	0.01	0.01	0.01	0.01	0.01	0.01	0.01
X987035										
X987036										
X987037										
X987038										
X987039										
X987040										
X987041										
X987042										
X987043										
X987044										
V725334		1.99	0.004	0.42	0.07	0.19	0.03	0.07	1.07	101.10
V725335		1.77	0.002	0.43	0.12	0.12	0.03	0.06	1.60	101.83
V725336		1.84	<0.002	0.40	0.10	0.12	0.03	0.07	1.49	100.76
V725337		0.95	<0.002	0.66	0.11	0.18	0.06	0.04	1.65	101.07



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CERTIFICATE OF ANALYSIS VA20132416

CERTIFICATE COMMENTS																	
	ANALYTICAL COMMENTS																
Applies to Method:	REEs may not be totally soluble in this method. ME-MS61																
	LABORATORY ADDRESSES																
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.																
	<table border="0"> <tr> <td>Au-ICP21</td> <td>CRU-31</td> <td>CRU-QC</td> <td>Cu-OG62</td> </tr> <tr> <td>LOG-21</td> <td>ME-ICP06</td> <td>ME-ICP61</td> <td>ME-MS61</td> </tr> <tr> <td>ME-MS81</td> <td>ME-OG62</td> <td>OA-GRA05</td> <td>PUL-31</td> </tr> <tr> <td>PUL-QC</td> <td>SPL-22Y</td> <td>TOT-ICP06</td> <td>WEI-21</td> </tr> </table>	Au-ICP21	CRU-31	CRU-QC	Cu-OG62	LOG-21	ME-ICP06	ME-ICP61	ME-MS61	ME-MS81	ME-OG62	OA-GRA05	PUL-31	PUL-QC	SPL-22Y	TOT-ICP06	WEI-21
Au-ICP21	CRU-31	CRU-QC	Cu-OG62														
LOG-21	ME-ICP06	ME-ICP61	ME-MS61														
ME-MS81	ME-OG62	OA-GRA05	PUL-31														
PUL-QC	SPL-22Y	TOT-ICP06	WEI-21														



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CERTIFICATE VA20181722

Project: HT
 P.O. No.: 2020-HT-02
 This report is for 44 Rock samples submitted to our lab in Vancouver, BC, Canada on 21-AUG-2020.
 The following have access to data associated with this certificate:
 CONNOR MALEK

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
OA-HSUL10	Handling of High Sulphide Samples
CRU-31	Fine crushing - 70% <2mm
SPL-22Y	Split Sample - Boyd Rotary Splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Saa Traxler, General Manager, North Vancouver



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CERTIFICATE OF ANALYSIS VA20181722

Sample Description	Method	WEI-21	Au-ICP21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
Units		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
LOD		0.02	0.001	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
X987093		1.12	0.004	<0.5	3.25	53	130	0.7	4	13.90	0.7	24	62	165	12.10	10
X987094		2.32	0.001	<0.5	6.97	8	420	0.6	8	7.23	<0.5	31	21	270	8.68	10
X987095		1.68	<0.001	<0.5	3.97	<5	160	0.5	2	11.30	0.6	24	44	136	10.80	10
X987096		1.80	<0.001	<0.5	4.48	<5	120	0.6	3	8.97	0.8	30	94	48	12.25	10
X987097		1.78	0.004	<0.5	7.27	5	320	<0.5	5	6.99	0.5	18	35	119	5.14	10
X987098		1.78	<0.001	<0.5	6.97	<5	230	<0.5	4	6.73	0.6	69	47	926	11.85	10
X987099		1.94	0.002	<0.5	7.15	<5	530	0.6	3	6.60	<0.5	12	19	85	4.92	10
X987100		0.12	0.739	11.6	2.97	221	180	<0.5	16	1.91	39.8	18	48	2350	9.07	10
Y993818		2.00	0.001	<0.5	5.56	28	600	0.6	3	16.30	0.7	8	30	160	4.67	10
Y993819		1.28	<0.001	<0.5	6.54	<5	300	1.0	7	4.12	0.6	47	79	589	10.25	20
Y993820		1.14	<0.001	<0.5	7.64	<5	730	0.8	12	7.04	<0.5	21	8	145	5.91	20
Y993821		2.06	<0.001	<0.5	7.87	<5	660	0.7	10	7.11	<0.5	21	26	152	5.97	20
Y993822		1.32	<0.001	<0.5	4.50	<5	20	0.5	7	12.90	0.8	43	27	365	15.40	10
Y993823		1.40	0.001	<0.5	8.04	5	610	<0.5	5	5.52	0.5	46	62	379	9.48	10
Y993824		2.08	<0.001	<0.5	5.50	<5	<10	1.5	5	14.55	0.7	26	32	6	11.30	10
Y993825		1.68	0.002	1.1	2.70	<5	<10	<0.5	2	15.10	1.0	98	19	923	21.2	10
Y993826		1.56	<0.001	<0.5	5.39	<5	520	<0.5	5	17.55	1.1	5	22	55	12.70	10
Y993827		1.52	<0.001	<0.5	5.67	6	30	0.7	5	16.00	0.8	14	54	35	9.62	10
Y993857		1.88	0.001	<0.5	8.47	<5	20	0.5	12	12.60	0.5	23	59	79	8.78	40
Y993858		1.76	0.001	<0.5	6.92	<5	200	0.5	6	2.63	<0.5	40	120	43	9.18	20
Y993859		1.48	0.023	<0.5	6.81	12	50	<0.5	5	5.15	0.6	43	155	105	8.39	20
Y993860		2.12	0.081	<0.5	8.35	<5	10	<0.5	11	13.00	0.7	27	84	498	10.05	40
Y993861		2.52	0.002	<0.5	8.33	<5	80	<0.5	10	12.05	0.9	32	102	123	9.40	40
Y993862		2.30	0.002	<0.5	5.50	<5	30	<0.5	5	7.23	0.8	33	67	31	7.37	20
Y993863		3.08	0.004	<0.5	8.09	<5	10	0.6	3	10.80	0.7	35	65	78	9.47	30
Y993864		3.90	0.074	0.9	4.56	92	40	<0.5	6	6.38	1.7	116	69	2100	14.60	20
Y993865		2.66	0.004	<0.5	6.84	5	10	0.5	10	7.45	0.9	39	8	168	9.03	20
Y993866		2.46	0.006	<0.5	1.74	14	10	<0.5	<2	8.43	1.7	45	11	495	26.7	10
Y993867		2.56	0.001	<0.5	0.48	15	<10	0.6	<2	14.65	1.4	77	3	592	12.90	10
Y993868		3.36	<0.001	<0.5	6.24	6	10	0.7	3	14.35	0.9	14	13	18	11.10	20
Y993869		2.76	0.001	<0.5	6.26	460	190	0.6	3	15.70	1.4	32	167	193	10.00	10
Y993870		2.26	<0.001	<0.5	7.87	16	220	0.8	5	5.69	0.5	33	30	201	6.41	20
Y993871		3.28	<0.001	<0.5	7.19	<5	530	1.0	6	9.47	<0.5	13	38	64	4.97	10
Y993872		2.48	0.007	<0.5	3.97	5	40	<0.5	3	11.15	0.9	55	61	389	12.05	10
Y993873		3.40	0.001	<0.5	2.28	<5	80	<0.5	2	3.36	1.8	164	7	1660	30.5	<10
Y993874		2.92	<0.001	<0.5	7.23	<5	860	0.6	3	9.43	0.6	15	32	95	5.14	10
Y993875		3.30	<0.001	<0.5	7.58	<5	280	0.8	10	7.30	0.6	63	11	481	9.21	20
Y993876		2.66	0.002	0.6	1.12	<5	60	<0.5	<2	1.88	1.5	258	3	2400	42.7	<10
Y993877		2.76	<0.001	<0.5	7.20	<5	180	0.7	4	5.44	0.5	19	14	250	8.18	10
Y993878		1.90	<0.001	<0.5	6.63	<5	720	1.6	<2	1.19	<0.5	2	13	21	3.11	20



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CERTIFICATE OF ANALYSIS VA20181722

Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
X987093		0.35	10	3.58	2620	7	0.22	60	390	2	1.39	<5	9	227	<20	0.19
X987094		0.68	10	1.15	447	3	2.59	31	1030	2	5.15	<5	14	635	<20	0.33
X987095		0.34	10	0.84	3370	3	1.16	34	900	<2	1.21	<5	10	185	<20	0.19
X987096		0.46	10	1.23	2310	3	2.61	29	960	<2	0.90	<5	13	86	<20	0.21
X987097		0.48	10	1.45	793	3	4.08	25	920	2	1.21	<5	15	695	<20	0.29
X987098		0.73	10	0.90	1110	6	1.28	55	800	<2	4.41	<5	18	432	<20	0.37
X987099		0.74	10	0.91	1010	1	3.29	9	990	<2	0.91	<5	13	483	<20	0.29
X987100		0.43	10	2.50	471	13	0.07	38	320	646	6.92	32	6	56	<20	0.11
Y993818		0.76	10	0.95	1530	2	0.89	22	860	<2	1.65	<5	12	270	<20	0.23
Y993819		1.02	20	1.84	1860	3	2.95	53	1300	<2	5.32	<5	22	292	<20	0.59
Y993820		0.83	10	2.38	615	1	3.00	11	2070	3	2.12	<5	33	759	<20	1.27
Y993821		0.75	10	2.61	798	1	3.18	12	1670	<2	1.73	<5	31	840	<20	1.00
Y993822		0.04	10	1.64	3870	1	0.94	28	850	3	2.39	<5	12	263	<20	0.27
Y993823		0.84	10	2.05	782	3	2.52	47	1100	2	4.55	<5	24	756	<20	0.45
Y993824		0.01	10	1.36	4660	1	0.31	19	230	4	0.49	<5	11	41	<20	0.28
Y993825		0.01	10	0.39	1790	1	0.02	71	710	2	5.78	<5	5	11	<20	0.14
Y993826		0.68	10	1.22	1570	2	0.27	8	190	<2	0.40	<5	14	88	<20	0.28
Y993827		0.02	10	2.10	4180	1	0.15	23	1190	<2	0.15	<5	13	288	<20	0.25
Y993857		0.11	10	1.93	1010	1	0.16	39	530	<2	0.10	<5	27	2030	<20	0.76
Y993858		1.09	10	3.35	803	1	0.83	86	770	<2	0.05	18	43	226	<20	1.12
Y993859		0.13	10	4.37	1380	<1	2.57	90	620	<2	0.14	<5	38	191	<20	0.85
Y993860		0.01	10	1.43	715	2	0.16	48	660	<2	0.27	<5	36	3090	<20	0.93
Y993861		0.13	10	1.99	1025	2	0.57	55	630	4	0.03	<5	28	3600	<20	0.95
Y993862		0.34	10	3.13	1150	1	1.40	51	530	2	0.18	<5	29	470	<20	0.81
Y993863		0.04	10	2.59	1140	1	0.46	53	650	<2	0.08	<5	34	1235	<20	0.95
Y993864		0.11	10	0.75	881	2	0.39	66	410	3	3.00	<5	25	238	<20	0.59
Y993865		0.11	10	2.61	1170	2	2.67	12	1900	<2	3.00	<5	36	362	<20	1.19
Y993866		0.01	<10	2.36	1700	<1	0.04	21	190	82	5.07	<5	3	321	<20	0.06
Y993867		0.01	<10	4.64	3080	1	0.08	86	100	4	1.41	<5	1	16	<20	0.03
Y993868		0.01	10	1.74	2950	2	0.04	28	180	3	0.09	<5	2	738	<20	0.09
Y993869		0.23	10	1.74	2310	2	0.38	41	1330	3	1.04	<5	18	107	<20	0.39
Y993870		0.43	10	1.40	930	2	3.91	24	950	<2	1.36	<5	20	783	<20	0.42
Y993871		1.26	10	1.98	1040	9	2.49	35	1170	<2	0.64	<5	13	796	<20	0.26
Y993872		0.05	10	1.29	1220	11	0.27	57	1600	3	4.76	<5	16	93	<20	0.29
Y993873		1.14	<10	1.07	338	63	0.64	66	590	5	>10.0	<5	8	73	<20	0.13
Y993874		1.00	10	1.73	862	6	2.17	19	1040	<2	1.65	<5	15	562	<20	0.30
Y993875		1.18	10	1.68	401	34	2.63	16	1490	<2	5.07	<5	22	711	<20	0.75
Y993876		0.08	<10	0.38	120	56	0.25	94	150	6	>10.0	<5	3	29	<20	0.05
Y993877		1.69	10	1.61	542	3	3.28	21	1050	4	5.05	<5	12	479	<20	0.27
Y993878		2.21	20	0.30	809	4	3.81	3	250	<2	0.15	<5	5	158	<20	0.19



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CERTIFICATE OF ANALYSIS VA20181722

Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	Cu-OG62
		Tl ppm 10	U ppm 10	V ppm 1	W ppm 10	Zn ppm 2	Cu % 0.001
X987093		<10	<10	107	<10	110	
X987094		<10	<10	125	<10	40	
X987095		<10	<10	69	<10	91	
X987096		<10	<10	101	<10	63	
X987097		<10	<10	162	<10	74	
X987098		<10	<10	181	<10	71	
X987099		<10	<10	141	<10	95	
X987100		10	<10	66	<10	7470	
Y993818		<10	<10	96	<10	124	
Y993819		<10	<10	98	<10	79	
Y993820		<10	<10	276	<10	35	
Y993821		<10	<10	258	<10	50	
Y993822		<10	<10	156	<10	116	
Y993823		<10	<10	210	<10	32	
Y993824		<10	<10	66	<10	141	
Y993825		<10	10	58	<10	82	
Y993826		<10	<10	110	<10	78	
Y993827		<10	<10	116	<10	85	
Y993857		10	<10	342	<10	48	
Y993858		<10	<10	368	10	63	
Y993859		<10	<10	298	<10	83	
Y993860		<10	<10	356	<10	29	
Y993861		<10	<10	403	<10	46	
Y993862		<10	<10	286	<10	65	
Y993863		<10	<10	375	<10	64	
Y993864		10	<10	236	<10	69	
Y993865		<10	<10	306	<10	72	
Y993866		10	<10	83	<10	75	
Y993867		<10	<10	44	<10	79	
Y993868		<10	<10	91	<10	50	
Y993869		<10	<10	196	<10	131	
Y993870		<10	<10	200	<10	46	
Y993871		<10	<10	116	<10	92	
Y993872		10	<10	136	<10	84	
Y993873		<10	<10	87	<10	25	
Y993874		<10	<10	126	<10	79	
Y993875		<10	<10	196	<10	32	
Y993876		<10	10	32	<10	18	
Y993877		<10	<10	116	<10	35	
Y993878		<10	<10	16	<10	38	



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CERTIFICATE OF ANALYSIS VA20181722

Sample Description	Method	Analyte	Units	LOD	WEI-21	Au-ICP21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61			
					Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
					kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
					0.02	0.001	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
Y993879					1.94	<0.001	<0.5	8.03	5	10	0.6	7	16.80	0.6	14	50	71	5.58	20
Y993880					2.08	0.007	<0.5	5.68	<5	30	0.5	3	10.60	0.9	37	240	267	9.58	20
Y993881					4.06	0.067	3.9	0.57	<5	20	<0.5	3	10.70	3.9	253	7	>10000	30.6	10
Y993882					3.04	0.100	7.1	2.42	7	10	<0.5	3	11.85	2.2	69	29	>10000	18.85	20

***** See Appendix Page for comments regarding this certificate *****



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To: FIRST GEOLAS CONSULTING
 414-333 1ST STREET E
 NORTH VANCOUVER BC V7L 4W9

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 Total # Pages: 3 (A - C)
 Plus Appendix Pages
 Finalized Date: 29-SEP-2020
 Account: LASFIR

Project: HT

CERTIFICATE OF ANALYSIS VA20181722

Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K % 0.01	La ppm 10	Mg % 0.01	Mn ppm 5	Mo ppm 1	Na % 0.01	Ni ppm 1	P ppm 10	Pb ppm 2	S % 0.01	Sb ppm 5	Sc ppm 1	Sr ppm 1	Th ppm 20	Ti % 0.01
Y993879		0.01	10	1.75	982	2	0.08	17	890	4	0.09	<5	21	66	<20	0.44
Y993880		0.14	10	4.85	1610	1	0.69	122	1070	<2	0.09	<5	26	54	<20	0.77
Y993881		0.01	<10	2.18	3180	<1	0.08	38	630	2	2.86	<5	2	13	<20	0.05
Y993882		0.04	<10	2.20	2400	<1	0.10	14	370	3	2.95	<5	11	49	<20	0.14



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Project: HT

CERTIFICATE OF ANALYSIS VA20181722

		ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	Cu-OG62
Sample Description	Method Analyte Units LOD	Tl ppm 10	U ppm 10	V ppm 1	W ppm 10	Zn ppm 2	Cu % 0.001
Y993879		<10	<10	149	<10	120	
Y993880		<10	<10	206	<10	92	
Y993881		10	<10	12	<10	248	1.295
Y993882		<10	10	85	<10	123	1.435



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Finalized Date: 29-SEP-2020
Account: LASFIR

Project: HT

CERTIFICATE OF ANALYSIS VA20181722

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	Au-ICP21	CRU-31	CRU-QC	Cu-OG62
	LOG-21	LOG-23	ME-ICP61	ME-OG62
	OA-HSUL10	PUL-31	PUL-QC	SPL-22Y
	WEI-21			

CDN Resource Laboratories Ltd.

#2, 20148 – 102nd Ave, Langley, B.C., Canada, V1M 4B4, 604-882-8422, Fax: 604-882-8466 (www.cdnlabs.com)

REFERENCE MATERIAL: CDN-ME-1409

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>0.646 g/t</i>	<i>±</i>	<i>0.070 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>11.6 g/t</i>	<i>±</i>	<i>1.6 g/t</i>	<i>Provisional value</i>
<i>Copper</i>	<i>0.242 %</i>	<i>±</i>	<i>0.010 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>0.065 %</i>	<i>±</i>	<i>0.002 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>0.771 %</i>	<i>±</i>	<i>0.038 %</i>	<i>Certified value</i>

Note: Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are Provisional; RSD's over 15% are Indicated. Provisional and Indicated values cannot be used to monitor accuracy with a high degree of certainty.

PREPARED BY: CDN Resource Laboratories Ltd.
CERTIFIED BY: Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia
INDEPENDENT GEOCHEMIST: Dr. Barry Smee., Ph.D., P. Geo.
DATE OF CERTIFICATION: November 17, 2014

METHOD OF PREPARATION:

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone mixer. Splits were taken and sent to 15 laboratories for round robin assaying.

ORIGIN OF REFERENCE MATERIAL:

The ore was supplied by Farallon Resources from their Campo Morado property in Mexico. The Campo Morado precious-metal-bearing, volcanogenic massive sulphide deposits occur in a lower Cretaceous bimodal, calc-alkaline volcanic sequence. Most deposits occur in the upper part of a sequence of felsic flows and heterolithic volcanoclastic rocks or at its contact with overlying chert and argillite. Gold, silver, zinc, and lead are associated with pyrite, quartz, ankerite, sphalerite, chalcopyrite and galena, with minor tennantite-freibergite, arsenopyrite, and pyrrhotite. Standard CDN-ME-1409 was made by combining 797 kg of Farallon material with 3 kg of a high grade gold ore.

Approximate chemical composition (from whole rock analysis) is as follows:

	Percent		Percent
SiO ₂	61.7	MgO	4.5
Al ₂ O ₃	6.0	K ₂ O	0.5
Fe ₂ O ₃	13.5	TiO ₂	0.2
CaO	2.7	LOI	9.3
Na ₂ O	0.1	S	7.6
C	1.2		

Statistical Procedures:

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ± 2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual “between-laboratory” standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

Assay Procedures:

Au: Fire assay pre-concentration, AA or ICP finish.
Ag, Cu, Pb, Zn: 4-acid digestion, AA or ICP finish.

REFERENCE MATERIAL CDN-ME-1409

Results from round-robin assaying:

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
ME-1409-1	0.692	0.661	0.704	0.570	0.676	0.702	0.668	0.706	0.720	0.656	0.641	0.543	0.710	0.584	0.600
ME-1409-2	0.674	0.626	0.705	0.585	0.645	0.761	0.651	0.618	0.630	0.650	0.628	0.581	0.704	0.612	0.600
ME-1409-3	0.662	0.677	0.729	0.610	0.642	0.683	0.682	0.598	0.600	0.615	0.635	0.593	0.674	0.636	0.590
ME-1409-4	0.655	0.675	0.696	0.595	0.681	0.766	0.677	0.622	0.550	0.678	0.685	0.637	0.647	0.661	0.640
ME-1409-5	0.629	0.677	0.692	0.606	0.633	0.760	0.675	0.583	0.640	0.626	0.665	0.600	0.617	0.645	0.620
ME-1409-6	0.655	0.628	0.657	0.573	0.690	0.739	0.657	0.599	0.620	0.652	0.704	0.643	0.626	0.625	0.640
ME-1409-7	0.668	0.665	0.697	0.628	0.615	0.701	0.678	0.650	0.660	0.650	0.701	0.564	0.612	0.647	0.650
ME-1409-8	0.676	0.693	0.710	0.588	0.689	0.753	0.672	0.606	0.670	0.681	0.627	0.585	0.616	0.629	0.630
ME-1409-9	0.729	0.660	0.693	0.613	0.635	0.713	0.661	0.655	0.660	0.678	0.683	0.586	0.641	0.629	0.620
ME-1409-10	0.668	0.701	0.712	0.598	0.636	0.678	0.653	0.613	0.650	0.639	0.645	0.645	0.676	0.619	0.660
Mean	0.671	0.666	0.700	0.597	0.654	0.726	0.667	0.625	0.640	0.653	0.661	0.598	0.652	0.629	0.625
Std. Devn.	0.0263	0.0245	0.0186	0.0183	0.0271	0.0340	0.0112	0.0362	0.0452	0.0222	0.0300	0.0343	0.0366	0.0213	0.0232
% RSD	3.92	3.67	2.66	3.06	4.14	4.68	1.67	5.80	7.06	3.40	4.54	5.73	5.61	3.39	3.71
	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t
ME-1409-1	9.1	12	11	11	13.0	12.4	12.3	10	10	12	12	11	10.6	12.1	11.5
ME-1409-2	9.5	13	11	11	13.1	12.2	12.0	10	12	12	11	11	10.9	12.3	11.5
ME-1409-3	9.6	12	11	11	12.9	12.7	12.1	11	12	12	12	11	10.3	11.7	11.5
ME-1409-4	9.6	12	12	12	12.5	12.2	12.1	10	12	12	12	11	10.5	12.0	11.5
ME-1409-5	9.4	13	11	11	13.6	12.1	12.1	9	12	12	11	11	10.4	11.3	12.0
ME-1409-6	9.5	12	11	11	13.2	12.1	12.2	11	14	13	12	11	10.3	11.5	11.5
ME-1409-7	10.2	13	11	12	13.1	12.3	12.4	10	12	12	11	11	11.1	12.3	11.5
ME-1409-8	9.2	12	11	12	13.1	12.4	12.1	11	11	12	12	11	10.9	11.6	11.5
ME-1409-9	10.8	13	11	11	13.1	12.5	12.0	10	13	12	12	11	10.4	11.9	11.5
ME-1409-10	8.6	12	12	11	12.4	12.3	12.3	10	10	12	11	11	10.8	12.1	11.0
Mean	9.6	12.4	11.2	11.3	13.0	12.3	12.2	10.2	11.8	12.1	11.6	11.0	10.6	11.9	11.5
Std. Devn.	0.6005	0.5164	0.4216	0.4830	0.3432	0.1874	0.1350	0.6325	1.2293	0.3162	0.5164	0.0000	0.2860	0.3425	0.2357
% RSD	6.29	4.16	3.76	4.27	2.64	1.52	1.11	6.20	10.42	2.61	4.45	0.00	2.69	2.88	2.05

Notes: Au data from laboratory 6 was removed for failing the t test.
Ag data from laboratory 1 was removed for failing the t test.

REFERENCE MATERIAL CDN-ME-1409

Results from round-robin assaying:

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
ME-1409-1	0.237	0.249	0.232	0.240	0.234	0.243	0.24	0.245	0.253	0.244	0.237	0.234	0.250	0.238	0.245
ME-1409-2	0.237	0.244	0.236	0.235	0.231	0.238	0.24	0.238	0.245	0.237	0.240	0.238	0.250	0.241	0.256
ME-1409-3	0.251	0.248	0.234	0.239	0.235	0.241	0.24	0.244	0.248	0.239	0.241	0.227	0.260	0.238	0.249
ME-1409-4	0.247	0.250	0.242	0.240	0.235	0.240	0.24	0.238	0.246	0.239	0.236	0.243	0.250	0.240	0.248
ME-1409-5	0.243	0.251	0.236	0.237	0.237	0.242	0.24	0.241	0.248	0.239	0.234	0.237	0.250	0.241	0.251
ME-1409-6	0.247	0.258	0.241	0.238	0.230	0.240	0.24	0.243	0.249	0.236	0.240	0.247	0.250	0.241	0.252
ME-1409-7	0.246	0.253	0.241	0.241	0.237	0.242	0.24	0.240	0.246	0.240	0.235	0.237	0.250	0.243	0.244
ME-1409-8	0.243	0.256	0.233	0.241	0.238	0.242	0.24	0.241	0.252	0.238	0.240	0.241	0.250	0.246	0.255
ME-1409-9	0.251	0.256	0.243	0.246	0.236	0.249	0.24	0.239	0.253	0.243	0.241	0.232	0.250	0.246	0.242
ME-1409-10	0.248	0.251	0.236	0.237	0.233	0.250	0.24	0.244	0.247	0.240	0.239	0.243	0.250	0.248	0.245
Mean	0.245	0.252	0.237	0.239	0.235	0.243	0.242	0.241	0.249	0.240	0.238	0.238	0.251	0.242	0.249
Std. Devn.	0.0050	0.0042	0.0040	0.0030	0.0026	0.0040	0.0018	0.0026	0.0030	0.0025	0.0026	0.0059	0.0032	0.0035	0.0048
% RSD	2.05	1.69	1.69	1.26	1.12	1.64	0.76	1.07	1.23	1.03	1.08	2.49	1.26	1.44	1.91
	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb
ME-1409-1	0.070	0.06	0.064	0.063	0.066	0.064	0.066	0.065	0.065	0.065	0.064	0.064	0.07	0.065	0.066
ME-1409-2	0.072	0.06	0.065	0.064	0.066	0.064	0.067	0.063	0.063	0.064	0.063	0.062	0.07	0.067	0.066
ME-1409-3	0.072	0.06	0.064	0.063	0.066	0.065	0.066	0.065	0.065	0.065	0.064	0.062	0.07	0.065	0.066
ME-1409-4	0.071	0.06	0.066	0.064	0.067	0.066	0.067	0.064	0.060	0.066	0.063	0.064	0.07	0.066	0.066
ME-1409-5	0.071	0.07	0.066	0.064	0.067	0.064	0.066	0.063	0.065	0.064	0.063	0.065	0.07	0.065	0.065
ME-1409-6	0.069	0.06	0.067	0.063	0.066	0.065	0.065	0.063	0.063	0.065	0.064	0.063	0.07	0.066	0.066
ME-1409-7	0.068	0.06	0.065	0.064	0.066	0.066	0.066	0.063	0.065	0.065	0.063	0.064	0.07	0.065	0.065
ME-1409-8	0.064	0.06	0.065	0.064	0.066	0.065	0.067	0.064	0.064	0.064	0.064	0.062	0.06	0.065	0.067
ME-1409-9	0.066	0.06	0.064	0.065	0.066	0.067	0.067	0.064	0.064	0.066	0.064	0.063	0.07	0.067	0.066
ME-1409-10	0.067	0.06	0.063	0.064	0.066	0.066	0.065	0.065	0.067	0.065	0.063	0.064	0.07	0.067	0.067
Mean	0.069	0.061	0.065	0.064	0.066	0.065	0.066	0.064	0.064	0.065	0.064	0.063	0.069	0.066	0.066
Std. Devn.	0.0027	0.0032	0.0012	0.0006	0.0004	0.0009	0.0008	0.0009	0.0018	0.0007	0.0005	0.0011	0.0032	0.0009	0.0007
% RSD	3.92	5.18	1.84	0.99	0.61	1.37	1.19	1.37	2.82	1.14	0.83	1.77	4.58	1.39	0.99
	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn
ME-1409-1	0.790	0.780	0.750	0.763	0.740	0.752	0.756	0.783	0.773	0.797	0.779	0.74	0.80	0.772	0.760
ME-1409-2	0.779	0.780	0.765	0.763	0.738	0.751	0.759	0.774	0.755	0.764	0.780	0.73	0.80	0.766	0.769
ME-1409-3	0.822	0.790	0.751	0.769	0.760	0.760	0.754	0.772	0.754	0.762	0.792	0.74	0.82	0.765	0.769
ME-1409-4	0.812	0.800	0.776	0.767	0.753	0.756	0.760	0.762	0.759	0.777	0.777	0.71	0.80	0.770	0.758
ME-1409-5	0.804	0.810	0.766	0.762	0.747	0.753	0.758	0.771	0.754	0.764	0.780	0.71	0.81	0.769	0.762
ME-1409-6	0.801	0.830	0.777	0.769	0.736	0.747	0.750	0.783	0.763	0.766	0.790	0.71	0.81	0.770	0.754
ME-1409-7	0.816	0.810	0.779	0.774	0.767	0.758	0.755	0.766	0.775	0.775	0.782	0.73	0.82	0.770	0.742
ME-1409-8	0.804	0.810	0.750	0.769	0.753	0.754	0.751	0.767	0.761	0.780	0.777	0.72	0.74	0.768	0.773
ME-1409-9	0.818	0.810	0.773	0.780	0.746	0.773	0.753	0.767	0.775	0.791	0.796	0.71	0.83	0.779	0.765
ME-1409-10	0.827	0.810	0.751	0.762	0.743	0.765	0.751	0.785	0.776	0.755	0.780	0.73	0.81	0.788	0.758
Mean	0.807	0.803	0.764	0.768	0.748	0.757	0.755	0.773	0.764	0.773	0.783	0.723	0.804	0.772	0.761
Std. Devn.	0.0148	0.0157	0.0123	0.0058	0.0100	0.0075	0.0035	0.0081	0.0093	0.0134	0.0068	0.0125	0.0246	0.0068	0.0089
% RSD	1.84	1.95	1.61	0.76	1.33	0.99	0.47	1.05	1.22	1.74	0.87	1.73	3.06	0.88	1.17

**Notes: Pb data from laboratories 1, 2 and 13 was removed for failing the t test.
Zn data from laboratory 12 was removed for failing the t test.**

REFERENCE MATERIAL CDN-ME-1409

Participating Laboratories:

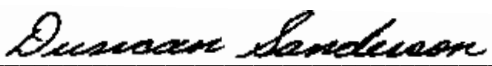
(not in same order as listed in table of results)

Bureau Veritas, Vancouver, BC, Canada
Actlabs, Ancaster, Ontario, Canada
Actlabs, Thunder Bay, Ontario, Canada
AGAT, Mississauga, Ontario, Canada
ALS Canada Inc., North Vancouver, BC, Canada
ALS, Loughrea, Ireland (Omac)
American Assay Laboratories, Nevada, USA
Certimin, Lima, Peru
Intertek - Genalysis, Perth, Australia
Met-Solve, Langley, B.C., Canada
SGS, Lima, Peru
SGS Canada Inc., Burnaby, BC, Canada
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Certified by


Duncan Sanderson, Certified Assayer of B.C.

Geochemist


Dr. Barry Smee, Ph.D., P. Geo.