

TYPE OF REPORT [type of survey(s)]: Geophysical

TOTAL COST: \$76,297.00

AUTHOR(S): Oliver Friesen

SIGNATURE(S): 

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

YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5773494 (2020/FEB/08)

PROPERTY NAME: Nimpkish

CLAIM NAME(S) (on which the work was done): 1067932

COMMODITIES SOUGHT: Cu, Zn, Pb, Ag

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: _____

MINING DIVISION: Nanaimo

NTS/BCGS: 092L/07

LATITUDE: 50 ° 22 ' 39.6 " LONGITUDE: 126 ° 52 ' 42.5 " (at centre of work)

OWNER(S):

1) Oliver J. Friesen (50%)

2) Christopher R. Paul (50%)

MAILING ADDRESS:

14520 Mann Park Crescent, White Rock, BC, V4B3A8, CA

371 Curlew Court, Kelowna, BC, V1W 4L3, Canada

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

1) Pacific West Exploration Services Inc.

2) _____

MAILING ADDRESS:

Unit 308 Sunray Close, Parksville, V9P 1A6, Canada

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

Quatsino Limestone, Parson Bay Formation, Lower Jurassic Bonanza Volcanics, Copper, Zinc, Skarn, Porphyry, Magnetite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 10337, 11147, 18704, 25763, 26173, 31718

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 454.31 line-km (magnetometer)			\$76,297.00
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
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:	\$76,297.00

2019 AIRBORNE GEOPHYSICAL REPORT

ON THE

NIMPKISH PROPERTY

**LOCATED IN THE NANAIMO MINING DIVISION
BRITISH COLUMBIA
NTS: 092L/07**

**CENTERED AT:
50°22'39.6" N Latitude
126°52'42.5" W Longitude
UTM: 650,841mE; 5,582,774mN
NAD 83, Zone 9**



**AUTHOR: Oliver Friesen, B.Sc., M.Sc. Geology
Date: February 24th, 2020**

TABLE OF CONTENTS

1. SUMMARY	1
2. INTRODUCTION	2
3. PHYSIOGRAPHY, SURVEY LOCATION AND SURVEY OPERATIONS	2
4. CLAIMS	3
5. SURVEY EQUIPMENT	8
6. QUALITY CONTROL AND IN-FIELD PROCESSING	9
7. DATA PROCESSING	10
8. EXPLORATION HISTORY	12
9. GEOLOGY SETTING	13
10. CURRENT WORK PROGRAM	20
11. PROGRAM RESULTS	20
12. CONCLUSIONS AND RECOMMENDATIONS	27
13. REFERENCES	31
14. STATEMENT OF QUALIFICATIONS	32
15. STATEMENT OF COSTS	33

LIST OF TABLES

Table 2.1 – Survey Coverage	2
Table 3.1 – Survey Data	3
Table 4.1 – Summary of Cash Payments	4
Table 4.2 – Summary of Exploration Expenditures	4
Table 4.3 – Summary of Tenure Data	4

LIST OF FIGURES

Figure 2.1 – Location Map	5
Figure 3.1 – Survey Data	6
Figure 4.1 – Claims Map	7
Figure 9.1 – Regional Geology	17
Figure 9.1.1 – Legend	18

Figure 9.2 – Property Geology	19
Figure 11.1 – TMI Results.....	22
Figure 11.2 – 1VD Results	23
Figure 11.3 – TDR Results.....	24
Figure 11.4 – THD Results	25
Figure 11.5 – AS Results	26
Figure 12.1 – Copper in Rock	28
Figure 12.2 – Zinc in Rock	29

LIST OF APPENDICES

Appendix A – List of Personnel.....	35
--	-----------

1. SUMMARY

The Nimpkish Property (the “Property”) is located in the Nanaimo Mining Division, approximately 3 km from the town of Nimpkish and 24km southeast of Port McNeil (straight-line distance). The property is centered at approximately 50°22’39.6” N latitude and 126°52’42.5” W longitude on NTS map sheet 092L/07. The property is comprised of one mineral claim covering 1,395.41-hectares, held by Oliver J. Friesen (50%) and Christopher R. Paul (50%) which is currently under option to Pacific West Exploration Services Inc. The claims are in good standing until November 10th, 2025, following a statement of work-filed for work documented in this report.

This report describes the logistics, data acquisition, processing and presentation of results of the airborne geophysical survey carried out of the property on Vancouver Island on behalf of Pacific West Exploration Services Inc. The survey was conducted from May 8th to 13th, 2019.

The purpose of the airborne survey was to map the magnetic properties of the survey area to aid in geological mapping as well as detect possible zones of bedrock mineralization and alteration. The survey was flown with a GEM Systems GSMP-35A(B) magnetometer (the “bird”), towed beneath an Astar 350 B2 helicopter and attached with a 60’ long line cable. A Novatel GPS sensor mounted on the bird ensured accurate positioning of the geophysical data. A real time differential GPS system utilizing the DAQNAV system from Scott Hogg & Associates Ltd. was used to fly this survey. The DAQNAV system is a turnkey data acquisition and 3D navigation product for airborne geophysical operators. A radar altimeter on the bottom of the bird measured the distance to the ground or top of canopy in tree-covered areas. An attitude sensor measured the yaw, pitch and roll of the bird throughout the survey. Following the field survey, the data was corrected, processed and interpolated using Geosoft Oasis Montaj software. A total of 454.31 line-km were flown during the 2019 field program.

The survey results contain many structural features, some of which may be considered exploration targets. Overall the dominant fabric highlighted by the survey is the northeast-southwest direction which is consistent with property scale mapping which identified multiple northeast-southwest trending contacts between Jurassic granodiorite and Triassic limestone which have locally shown skarn-style mineralization, located in the western part of the property (up to 54402nT gradient). The property is prospective for polymetallic (Au-Ag-Pb-Zn-Cu) skarn related mineralization. Magnetic highs coincident with a granodiorite unit currently mapped on the property indicate that

other intrusive bodies may exist within the property boundary representing excellent exploration targets. High-resolution (25m line spacing) ground magnetic data is required over the mineralized target zones. This data will define areas of skarn-related mineralization in contact with the granodiorite body as well as highlight any possible structural zones. Further areas of interest may be assigned priorities on the basis of supporting geophysical, geochemical and geological information. A Phase II field program consisting of mapping and prospecting of the identified magnetic high features identified in the survey is recommended; considering historic polymetallic (Au-Ag-Pb-Zn-Cu) mineralization noted in rocks proximal to this anomaly it is believed to be associated with skarn-related magnetite mineralization. If the phase II program is successful, a phase III field program consisting of high-resolution ground magnetics and 1000m of diamond drilling is recommended which will target the contact zone between the two units. The budgets for the Phase II, and III programs is estimated to be \$100,000, and \$500,000 respectively.

2. INTRODUCTION

The report documents the results of the magnetic survey flown over the Nimpkish Claim area in northeastern Vancouver Island centered at 50°22'39.6" N Latitude, and 126°52'42.5" W Longitude. The airborne geophysical survey was conducted from May 8th to 13th, 2019.

Survey coverage consisted of 454.31 line-km including 43.04 line-km of tie lines. Flight lines were flown in an east-west direction at 100m spacing. Tie lines were flown perpendicular to the flight lines, with a line spacing of 1000 meters. Survey details are given in Table 2.1 below.

Table 2.1 – Survey Coverage

Flight line direction	Tie line direction	Traverse Line (km)	Tie Line (km)	Total
090°/270°	000°/180°	411.27	43.04	454.31

The survey employed the GEM Systems GSMP-35A(B) magnetometer. Ancillary equipment consisted of a high-quality potassium “Fast Reading” (20 Hz) oscillatory sensor with a magnetometer PreAmp electronics box, radar altimeters, tilt sensors, radar antennas, digital data recorder and an electronic GPS system.

3. PHYSIOGRAPHY, SURVEY LOCATION AND SURVEY OPERATIONS

The climate is typical of coastal areas in British Columbia, relatively wet and windy, with moderate

temperatures. Based on Port Hardy weather data (sea level), rainfall is in the order of 50 inches and snowfall about 15 cm annually. The mean monthly temperature ranges from a low of 3° in January to 18° in August. Winds are predominantly from the southeast and blow, on average, 20 km per hour. The windiest months are April and October and the least windy month is July.

As the property elevations range from roughly 600m to 1300m near the peak of Mount Hoy, year-round work is typically not possible. The property has generally moderate to steep terrain, with some extremely steep sections along the Storey Creek Valley and near the peak of Mount Hoy. During the winter months heavy snow can prohibit access to the majority of the property. As a result, the property is most easily worked from May until October.

The weather during the exploration program, from May 8th to 13th was variable ranging from, 1) wet, with variable clouds and wind with intermittent visibility due to extensive cloud and fog cover to, 2) sunny with clear skies.

Typical vegetation includes thick growths of hemlock, red cedar, Douglas fir and pine, however the majority of the property has been logged and currently consist of clear cuts or second growth forest, approximately 15 years old.

Table 3.1 – Survey Data

Parameter	Specifications
Sample interval	10 Hz, 3.3 m @ 130km/h
Aircraft mean terrain clearance	~95 m
Mag sensor mean terrain clearance	~75 m
Navigation (guidance)	±3 m, Real-time GPS
Post-survey flight path	±3 m

4. CLAIMS

The Property consists of one (1) tenure covering 1395.41-hectares (Table 4.1, Figure 4.1). The claims are located in the Nanaimo Mining Division of NTS map sheets 092L/07. The claims are held by Oliver J. Friesen (50%) and Christopher R. Paul (50%; collectively the Optionor) and currently under option to Pacific West Exploration Services Inc (Optionee). Under the terms of the Option, the Optionee shall completed the following requirements on or before the dates indicated.

Cash Payments. On or before May 1, 2020, The Optionee shall pay to the Optionor a cash payment in the aggregate amount of \$30,000, as follows:

Table 4.1 - Summary of Cash payments

Optionor	Cash Payment
Friesen	\$15,000
Paul	\$15,000

Exploration Expenditures. The Optionee shall make an aggregate of \$425,000 in Exploration Expenditures on the Property on or before the following dates:

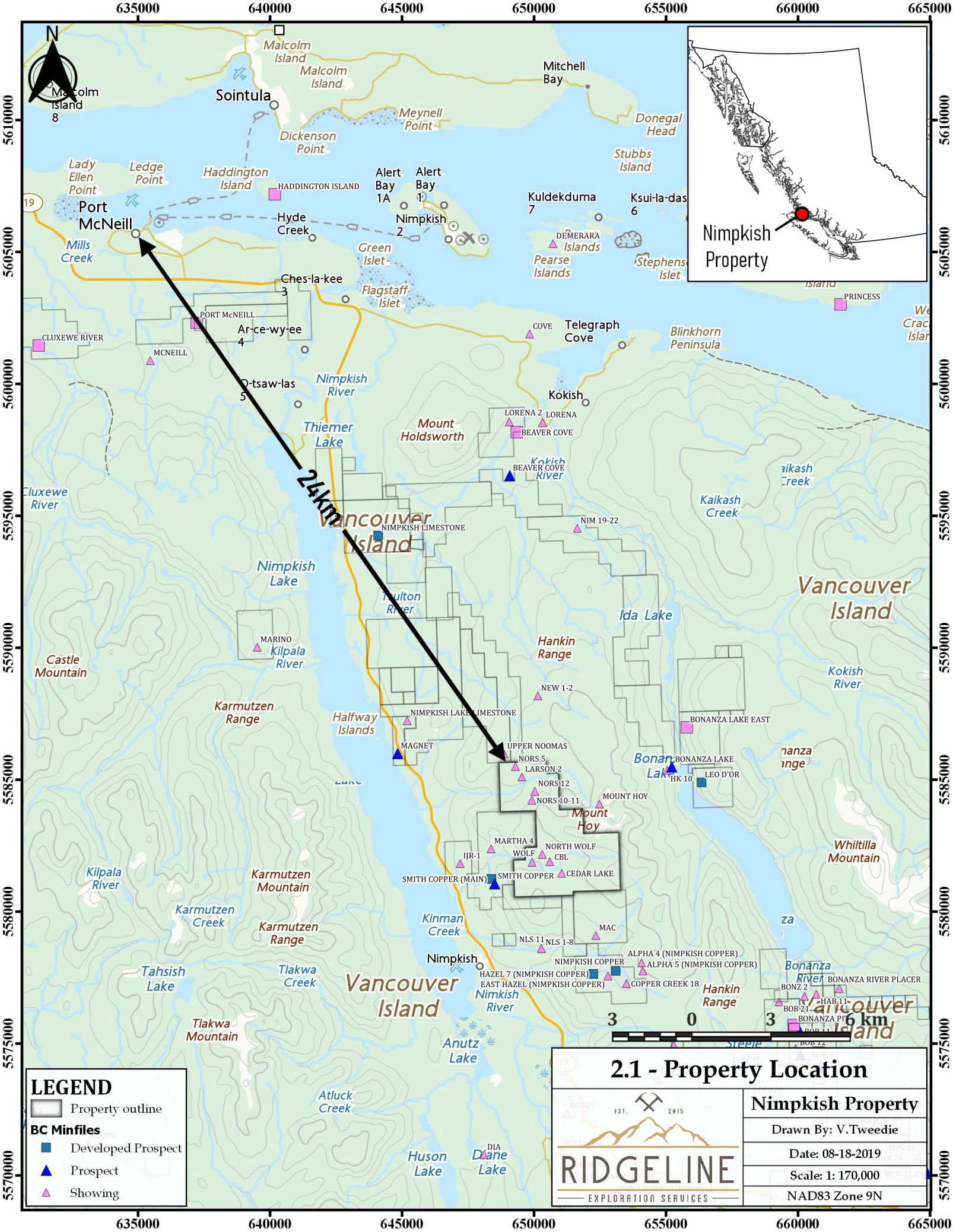
Table 4.2 - Summary of Exploration Expenditures

Date	Exploration Commitment
December 31, 2020	\$75,000
December 31, 2021	\$100,000
December 31, 2022	\$100,000
December 31, 2023	\$150,000

The Optionee shall also grant to the Optionor a 2.0% Net Smelter Returns royalty (“NSR”) on the Property. The Optionee shall have the right at any time to repurchase one-half of the NSR from the Optionor by paying \$1,000,000 to the Optionor at any time before the commencement of commercial production on the Property. Beginning on December 31, 2023, and annually thereafter, the Optionee will make annual advanced minimum royalty (“AAMR”) payments of \$7,500 to the Optionor, and any such AAMR payments shall be deducted from future NSR payments.

Table 4.3 - Summary of Tenure Data

Title Number	Claim Name	Issue Date	Good To Date	Status	Area (ha)
1067932	FLOW2019A	2019/APR/15	2025/NOV/10	Good	1421.87
				Total	1421.87



LEGEND

Property outline

BC Minfiles

- Developed Prospect
- Prospect
- Showing

2.1 - Property Location

RIDGELINE
EXPLORATION SERVICES

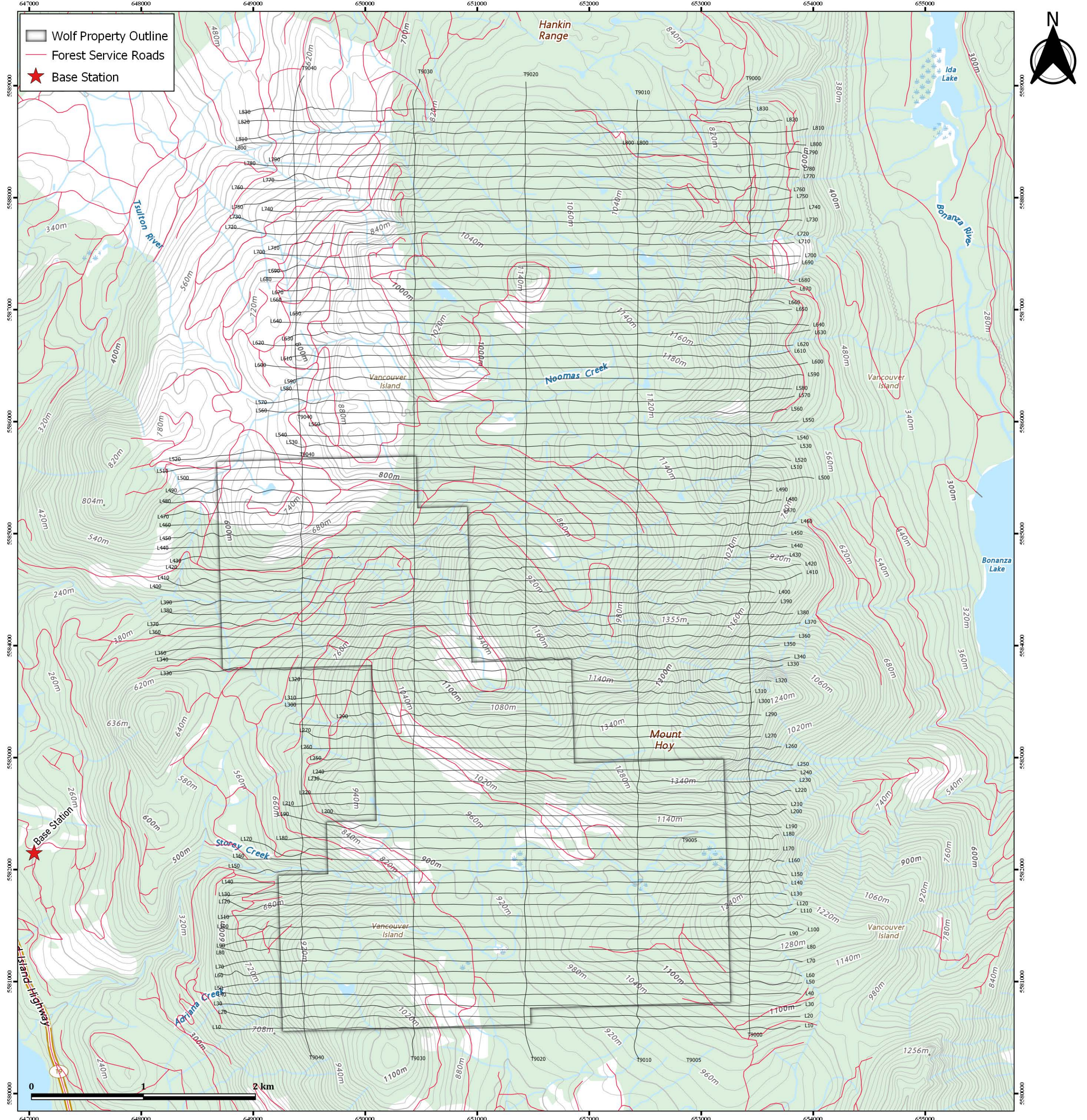
Nimpkish Property

Drawn By: V. Tweedie

Date: 08-18-2019

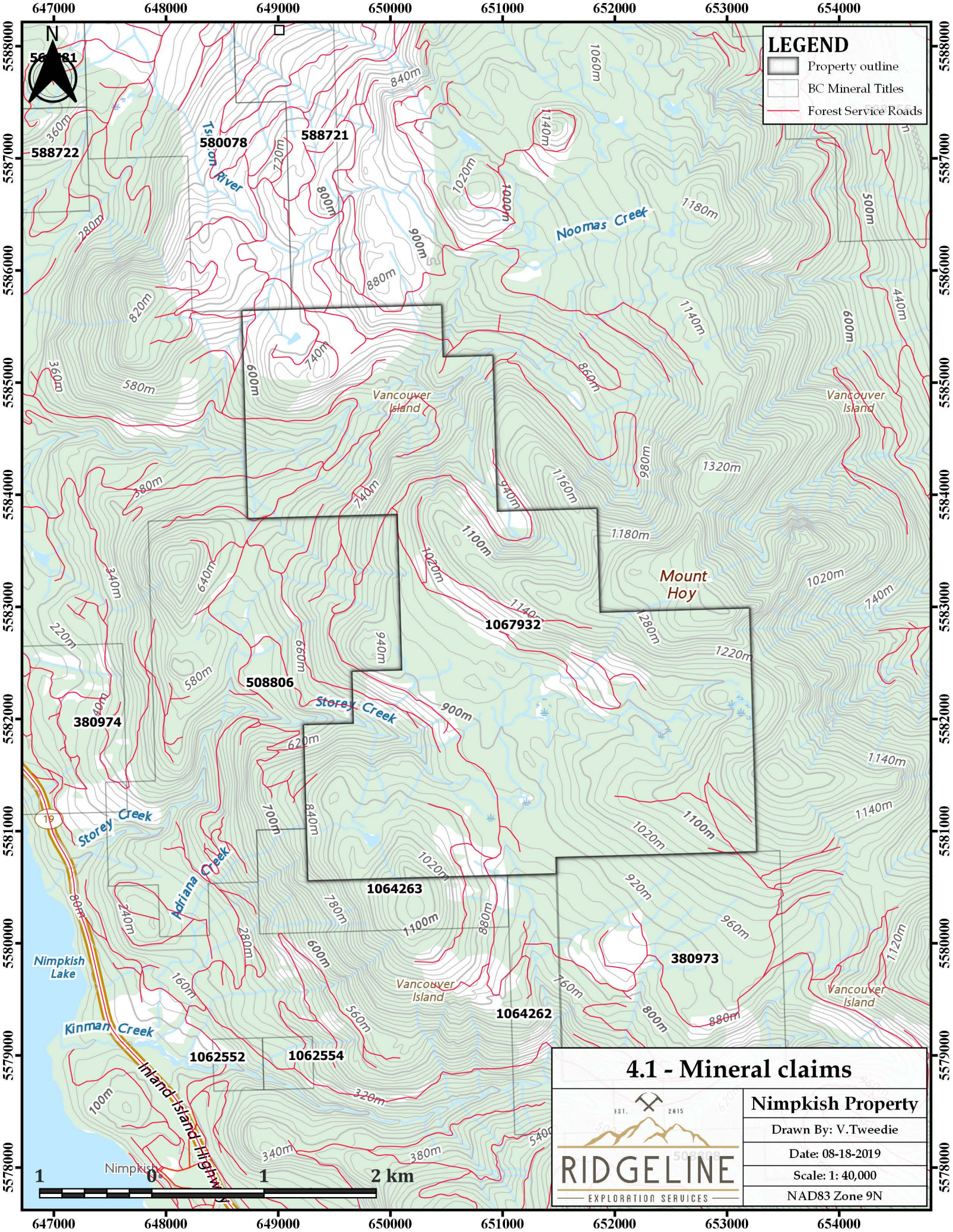
Scale: 1: 170,000

NAD83 Zone 9N



Magnetometer Sensor GEM Systems GSMP-35A
Configuration Towed Bird
Sample Rate 10 Hz
Sensitivity 0.0003 nT

Figure 3.1. Wolf 2019 Airborne Survey Lines



5. SURVEY EQUIPMENT

This section provides a brief description of the geophysical instruments used to acquire the survey data and the calibration procedures employed. The geophysical equipment was installed in an Astar 350 B2 helicopter operated by Silver King Helicopters Inc. out of Smithers, British Columbia.

Airborne Magnetometer

Model:	GEM Systems Magnetometer GSMP-35A(B)
Sampling Rate:	20 Hz (0.1 sec)
Sensitivity:	0.0003 nT @ 1Hz*
Resolution:	0.0001 nT
Absolute Accuracy:	± 0.05 nT
Range:	15,000 to 120,000 nT
Gradient Tolerance:	50,000 nT/m

The magnetometer sensor is housed in the magnetic bird, 20m below the helicopter.

Magnetic Base Station

Model:	GEM Systems GSM-19T
Sampling Rate:	2 sec
Sensitivity:	0.022 nT @ 1 Hz
Resolution:	0.01 nT
Absolute Accuracy:	± 0.1 nT
Range:	20,000 to 120,000 nT
Gradient Tolerance:	over 10,000 nT/m

The magnetometer base station was located 5km from the center of the survey for the duration of the program (away from any areas of magnetic interference).

Radar Altimeter

Model:	Dual antenna RA-4000, FMCW
Altitude Range:	-20 to 2500 feet
Altitude Accuracy:	0 to 100 feet ± 3 feet, 100 to 500 feet $\pm 3\%$, Above 500 feet $\pm 5\%$
Frequency Range:	100 MHz sweep 4.25 – 4.35 GHz
Sweep Frequency:	100 Hz

Navigation Software

A real time differential GPS system utilizing the DAQNAV system from Scott Hogg & Associates

Ltd. was used to fly this survey. The DAQNAV system is a turnkey data acquisition and 3D navigation product for airborne geophysical operators.

During the survey flights, digital data output by the GEM35A towed bird is routed into the DAQNAV WireFree module and is transmitted wirelessly to a 10" DAQNAV tablet located in the cockpit of the aircraft. The DAQNAV system logs the data to a file and uses it to provide accurate 3D navigation to both pilot and operator to ensure precise survey flying. A Cross-Track bar indicates X,Y deviation from flight path, an Altimeter bar indicates ground clearance and a Terrain Display indicates Z deviation from a pre-planned drape surface.

Once a survey flight is complete, the DAQ2xyz application is used to convert the DAQNAV logfile into a Geosoft compatible XYZ database file for quality control and processing.

6. QUALITY CONTROL AND IN-FIELD PROCESSING

Flight lines and bird altitude were constantly monitored throughout the survey by the pilot and in-flight operator using DAQNAV navigation software. Receive (Rx) data from the magnetometer was split which allowed the data to be presented on a Panasonic Toughbook laptop computer for the operator as well as on a 10" DAQNAV tablet mounted in the cockpit for the pilot to use for navigation. Transmit (Tx) data was restricted to the laptop computer allowing the digital data to be collected and viewed in real time as well as direct communication between the geophysical operator and the sensors. The data viewed on the operator's laptop, as well as flight tracing and real-time raw magnetic data, included signal strength, data locking, 4th difference and magnetic readings in nT.

Flight Path

The flight lines did not deviate from the intended flight path by more than ~20% of the planned flight path over a distance of roughly 300 metres.

Clearance

Survey altitude typically did not deviate by more than $\pm 30\%$ (75m contracted bird clearance) over a distance of 400 metres from the mean contracted elevation. There were a few areas within the property boundary with vertical to sub-vertical glacially incised topographic features where the survey altitude would deviate by up to $\pm 80\%$ over relatively short distances. Ultimately, survey altitudes in these difficult areas were determined by the pilot's judgement of safe flying conditions.

Survey elevation is defined as the measurement of the helicopter radar altimeter to the tallest obstacle in the helicopter path. An obstacle is any structure or object which will impede the path of the helicopter to the ground and is not limited to and includes tree canopy, towers and power lines.

Flying Speed

Nominal aircraft indicated airspeed averaged between 40 and 70 knots, the nominal aircraft ground speed was approximately 2 to 5 metres per sample at a 0.10s sampling rate.

Magnetic Base Station

The base station was placed within 5 kilometers of the center of the survey area in a region of low magnetic gradient (area with no interference by moving steel objects, vehicles or power transmission lines). The base station internal time was synced with the airborne GSMP-35A(B) magnetometer internal clock using UTC standard time formatting.

7. DATA PROCESSING

A GSM-19T magnetometer was operated at the survey base at the helicopter staging area near a forest service road roughly 5km from the center of the survey area for the duration of the survey to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to permit subsequent removal of diurnal drift. The data were corrected for diurnal variations by subtracting the observed magnetic base station deviations. A GPS lag correction was applied based on a 2.2-meter separation of the magnetic sensor from the GPS antenna. A heading correction was applied to correct for the difference in signal strength received by the magnetometer when flown in different heading directions. A fourth difference editing routine was then applied to the magnetic data to remove any spikes. The results were then levelled using tie and traverse line intercepts. Manual adjustments were applied to any lines that required levelling, as indicated by shadowed images of the gridded magnetic data. The manually levelled data were then subjected to a microlevelling filter within Geosoft Oasis Montaj software.

The corrected magnetic data were processed in Oasis Montaj to produce the various interpolated products listed below.

Total Magnetic Intensity (TMI)

The residual magnetic intensity (RMI) was calculated by subtracting the IGRF gradient from the

corrected data. This product highlights the variance in magnetic intensity across the property after being adjusted for regional-scale magnetic variations.

Calculated Vertical Magnetic Gradient (First Vertical Derivative)

The IGRF-corrected magnetic data were subjected to a processing algorithm that enhances the response of magnetic bodies in the upper 500 metres and attenuates the response of deeper bodies. The resulting vertical gradient grid provides better definition and resolution of near-surface magnetic units. It also identifies weak magnetic features that may not be quite as evident in the total field data. Regional magnetic variations and changes in lithology, however, may be better defined on the total magnetic field parameter.

Total Horizontal Derivative (THD)

The total horizontal derivative is a tool for outlining the boundaries of magnetic sources. The filter is calculated from a pair of orthogonal horizontal derivatives, so that the resultant field consists of positive values only. The peaks of horizontal modulus (derivative or gradient) anomalies indicate the edges of a source body. The amplitude of the filtered anomaly retains information about the properties of the sources.

Tilt Derivative (TDR)

The tilt derivative enhances both strong and weak anomalies at their centres and also emphasizes the edges of broad anomalies. TDR produces similar shapes to the 1VD, although amplitudes are greatly condensed to a small range and anomalies appear sharper. For isolated sources, TDR is positive over the source, crosses through zero at or near the edge of a vertical sided source and is negative outside the source region. The TDR significantly enhances subtle anomalies in areas of relatively flat response, enabling the continuity of major structures to be interpreted.

Analytical Signal (AS)

The peaks of the analytic signal (AS) correlate directly with their respective magnetic causative bodies and are positioned symmetrically over them. The analytical signal calculation is immune to the IGRF field direction, that is, you do not need to precede this calculation with a reduction to the magnetic pole to properly shift the anomalies over top of the causative bodies. This avoids the difficulties that are often faced in the conventional process of reduction to pole for ΔT , when the direction of magnetization of the causative bodies is not known. In addition, the AS has

characteristics similar to derivative features of the magnetic field, so that it is very sensitive to edge effects of the causative magnetic bodies. Overall the analytical signal is very useful in locating the edges of magnetic source bodies, particularly where remanence and/or low magnetic latitudes complicate interpretation.

8. EXPLORATION HISTORY

Parts of this section are partially or wholly extracted from a 2012 assessment report by D. Perry from Selkirk Metals Corp.

Late 1920s to Early 1930s The property was first discovered in 1929 when trails and camps were built with some prospecting and trenching undertaken in 1930 and 1931. The Consolidated Mining and Smelting Company of Canada Ltd. took an option of the Smith Property in 1930 but dropped it after some exploratory work did not provide encouraging results (Gunning, 1930).

1966 -- Cominco Conducted a brief geological, geochemical and geophysical program, which according to Yeager and Ikona (1981) resulted in the recommendation to diamond drill geochemical anomalies.

1980's -- Mar-Gold Resources Ltd. Subsequent to acquiring the Joe claims in 1981 the owner conducted a nine hole diamond drilling program totaling 815.3m to defining the main ore body and estimated the reserve at 84,160 tonnes grading 1.69% copper, 3.7% lead, 12.5% zinc and 64.68 g/t silver (Yeager and Ikona, 1981). An additional eight holes totaling 646 m was completed between 1982 and 1985, but the reserve estimate was not updated. Of interest is drill hole 82N-1 which affects the 1981 reserve blocks, eliminating approximately 7000 tonnes grading 0.67% copper, 0.25% lead, 10.87% zinc and 17 g/t silver (Awmack, 1988).

1988 -- Hercules Ventures Inc. Hercules Ventures conducted a geophysical, geochemical and diamond drilling program that succeeded in discovering the Magnetite Hill Zone. This magnetite body displayed anomalous multi-element levels in soil and sediments down slope and high gold values in excess of 50 ppb Au well upslope of Magnetite Hill (Awmack, 1988). These anomalies were not further investigated.

1998 – Doublestar Resources Ltd. Joe 1-4 and PR 1-4-2-post claims are acquired from Mar-West Resources Ltd. (previously Mar-Gold Resources Ltd.) and Doublestar Resources subsequently undertook a regional prospecting program leading to the discovery of a massive sulfide boulder and the immediate staking of the Storey 1-2 claims. A geophysical program consisting of an IP, VLF-EM and Magnetometer surveys was conducted by Delta Geoscience Ltd. and Doublestar Resources Ltd. producing several drill targets Geochemical analysis of soil and creek sediments was also undertaken on the Storey Claim group.

1999 – Doublestar Resources Ltd. Doublestar expended its tenure holdings by acquiring the NEW 1 and NEW 2 claims and conducted geological mapping, prospecting and rock sampling. A detailed geophysical program and subsequent small diamond drill program was recommended following the discovery of high-grade mineralization in boulders (Gray, 1999).

2010 – Selkirk Metals Corp. A short geological program was completed in 2010 to evaluate the property as well as determine access the logistics for future work. In 2012 Selkirk performed a geological mapping and sampling program consisting of the collection of 171 B-Horizon soil samples, 15 silt sediment samples and 10 rock samples.

2019 – Pacific West Exploration Services Inc. Ridgeline Exploration Services Inc. on behalf of Pacific West Exploration Services Inc. completed a 411.27 line-km airborne geophysics survey.

9. GEOLOGY SETTING

The following sections on regional and property geology are extracted from a 2012 assessment report by D. Perry from Selkirk Metals Corp.

9.1 Regional Geological Setting

After the Wrangell Terrane collided and amalgamated with the Alexander Terrane during the Late Carboniferous Period it was intruded to the east by granitoids of the Coast Plutonic Complex. The present crustal appearance of the Nimpkish Lake area and Northern Vancouver Island in general is a result of strongly northwest-trending structural geology. A sequence of 5-7 km thickness consisting of Karmutsen Volcanics, Quatsino Limestone and the Parson Bay Formation make up the Vancouver Group and underlie a large part of Vancouver Island, including the Nimpkish Lake area. Historically the Vancouver group characterizes the Upper Triassic as suggested by Muller in 1974; this had been

generally accepted until Nixon et al. (2005) revised the stratigraphic nomenclature for Triassic-Jurassic lithostratigraphic units of the region.

According to Nixon, the Quatsino Limestone is now the youngest member of the Vancouver Group, while the Parson Bay and Bonanza Volcanics Formations belong to the Bonanza Group which is of Upper Triassic to Lower Jurassic age. For the updated stratigraphic section of these lithologies refer to Figure 2012-3. The author will use the updated terminology in terms of Formation and Group placement within the geologic timescale for this report.

The Karmutsen Formation consists of dark gray to black aphanitic basalt flows that are often weakly magnetic. Different flow sequences are generally marked by sharp and unbrecciated contacts and consist of pillow basalts, pillow breccias with bedded tuff and intravolcanic limestone near the top of the unit, underlying the Quatsino Limestone. Where the Quatsino Formation is missing, blocky plagioclase phenocrysts reportedly mark the upper part of the Karmutsen Formation and may be useful as stratigraphic indicators. The Karmutsen basalt may show alteration to epidote-amphibole assemblages near Island Plutonic Suite intrusion contacts.

The youngest member of the Vancouver Group and structurally above the Karmutsen Formation is the Quatsino Limestone Formation and mark the transition to conditions found in shallow marine environments. The Quatsino Formation is well exposed in the Nimpkish Lake area and reaches thickness of 350 m. Localized recrystallization to marble is evident in the lower part of the Formation or near local 10 granitoid intrusions; these hydrothermally altered sections are identified by banded and coarse, 1-3 mm white and grey interlocking crystal grains. In areas of skarn development such as those found on the 2 STAR property these marbleized limestone sections may be indicative of sulfide mineralization.

The Parson Bay Formation, now the oldest member of the Bonanza Group extends to the Lower Jurassic and is characterized by thinly bedded impure limestone, mudstone, shale and calcareous equivalents with interbedded basaltic breccias and tuffs with minor conglomerates (Nixon et al., 2005). In terms of contact, the Parson Bay Formation grades into the Quatsino Limestone over 0.5-5 m. The Parson Bay Formation can be fossil dated; thin shelled pelecypods from the Carnian to Middle Norian have been identified in lower parts of the formation.

Bonanza Volcanics overlie the above described units and mark a change in deposition from marine sedimentary to volcanic; only their lower parts are preserved, making an estimate of their thickness

difficult but has been approximated at over 2 km (Muller, 1974). Since the Bonanza formation and Parson Bay Formation both contain similar intercalated strata, differentiation may be challenging. All the above units have been locally or regionally intruded by granitoids of the Island Plutonic Suite, including the Nimpkish batholith which also trends north-west. In the Nimpkish Lake region these intrusions are gray pale, medium to coarse grained and consist of the rock types granodiorite and tonalite with minor quartz diorite (Nixon et al., 2005). Structurally the intrusions generally dip steeply and form sharp contacts with the surrounding rock. Skarn deposits containing metalliferous mineralization are frequent along the contact of the Island Plutonic Suite and Quatsino Limestone or Parson Bay Formation. The Storey Creek Property is outlined on the regional geology map in Figure 2012-4 and a full-size version of the map is appended in Appendix F as figure 2012-11.

9.2 Property Geology

Parts of the following section on property geology are extracted from a 2000 assessment report by P.D. Gray on behalf of Doublestar Resources Ltd.

The [Nimpkish] mineral claims are underlain by Karmutsen volcanics, in turn overlain by Quatsino Limestone, Parson's Bay Formation metasediments, and the Bonanza Volcanics. All these lithologies are intruded by a Jurassic granodiorite pluton and younger felsite dykes (See Figure 6). The entire sequence represents one limb of a northeast-southwest trending anticline truncated by the intrusive.

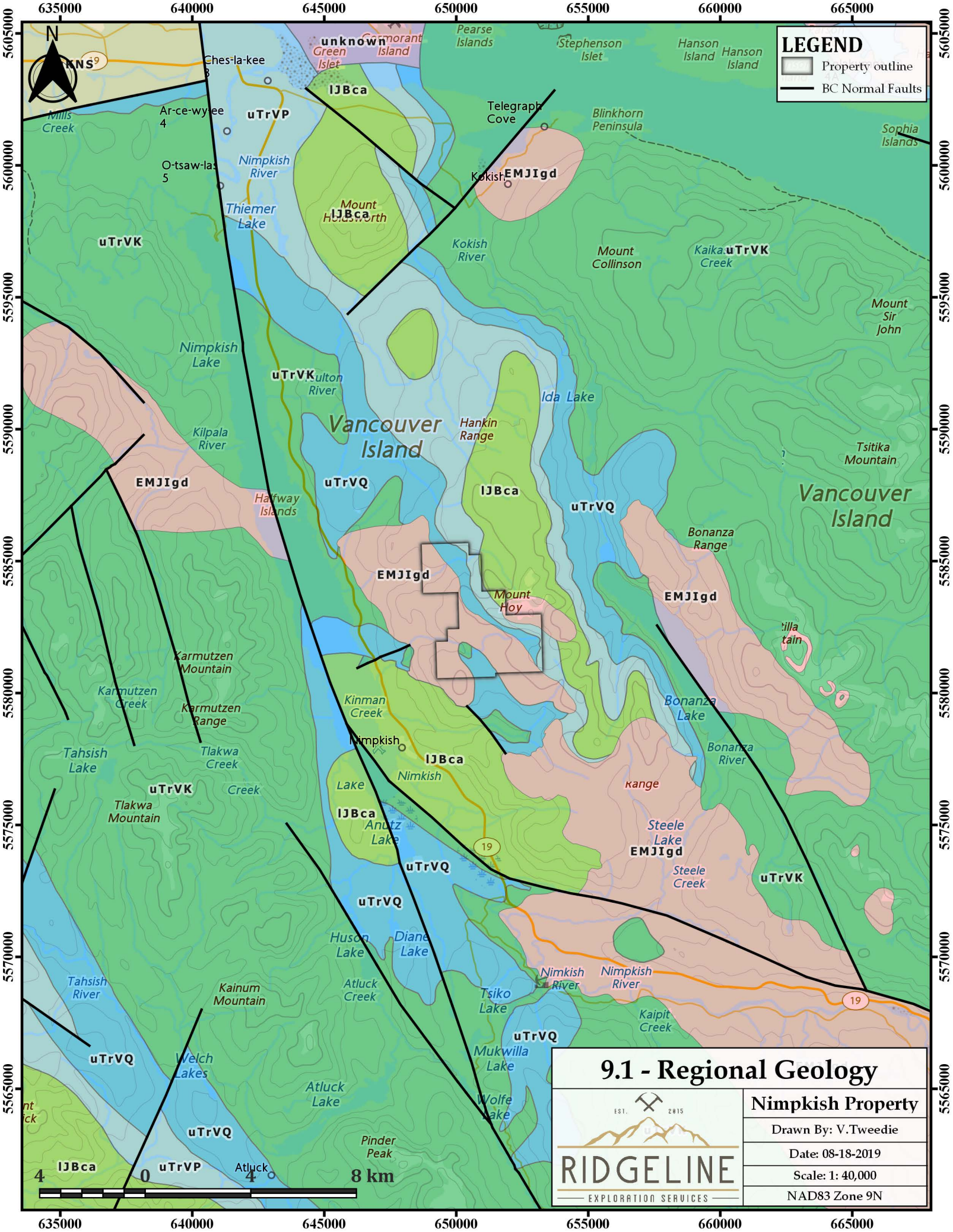
The Quatsino Limestone is the predominant lithology exposed within the [Nimpkish] mineral claims. The limestone is white to gray, crystalline to dense, largely unaltered, and strikes northwest (average 060°/50° SW). The best exposure of this lithology is a near vertical cliff that dominates the central portion of the claims, the "Cliff Zone" (Figure 6). The contacts between the limestone and granodiorite contain variably developed skarnified zones. Karst topography is evident in areas underlain by Quatsino Limestone, evidenced by several significant caves and sinkholes.

Thinly bedded metasediments and metavolcanics of the Parson's Bay Formation conformably overlie the Quatsino Limestone. This Formation consists of calcarenites, feldspathic wackes, and black laminated siliceous limestones and shales. The Unit is exposed in only the higher elevations of the property, above the "Cliff Zone", and where exposed exhibits substantial alteration indications (e.g. pervasive iron staining coincident with the presence of finely disseminated iron sulphides and preferential clay-like alteration to the limey intercalated horizons). The disseminated











iron sulphides present within the limey beds are dominantly pyrite (commonly 2%-5%) and occur as extremely fine grains, > 1-millimetre scale. These limey-cherty horizons are oxidized to a red-orange color that contrasts with the dark black of the confining shale layers intercalated within the stratigraphy. The well stratified Parson's Bay Formation strikes north south and dips moderately to the north (180°/38°).

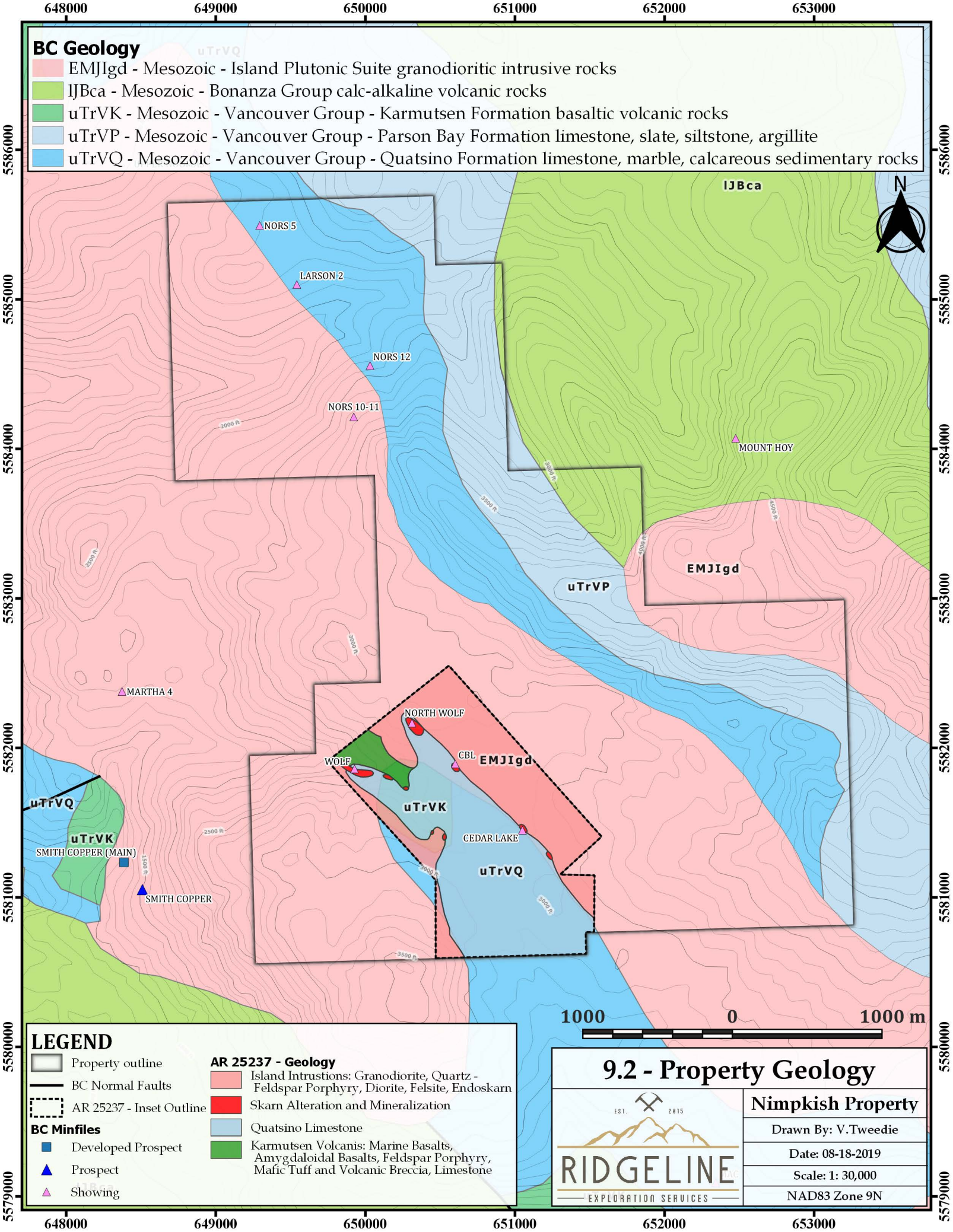
At higher elevations on the property (to the extreme East), the Parson's Bay Formation is unconformably overlain by the Bonanza Volcanics. This Formation outcrops over only modest intervals near the eastern most boundaries of the [Nimpkish] claims. It is not considered to have mineralization potential on the property, and as such was not studied in detail. The Bonanza Volcanics consist of interlayered andesites, rhyolites, and basalts, with minor breccias. Outcrops are gray to green in color, depending on their composition and weathering characteristics (e.g. degree of oxidation). The unit strikes approximately north with a shallow dip to the east (198°/20°). The Bonanza Volcanics contain abundant calcite veining and open space fillings (e.g. basaltic vesicles and fractures).

The Nimpkish Intrusion is a gray, medium grained granodiorite to quartz diorite pluton of Jurassic age. The granodiorite comprises the southern 1/3 of the property. The intrusive represents a typical granodiorite and is relatively undeformed, with chlorite filled fracture planes trending at 110°. The contact between the intrusive and the Karmutsen and Quatsino Formations appears sharp where exposed. In the author's opinion it seems probable that in places much of the volcanics and sediments exist as large-scale stopped blocks encapsulated within the intrusive complex's body. Numerous dykes varying in composition from diabase/andesite to felsite and feldspar porphyries cut all lithologies on the property (See Figure 6). Two main trends of dyke exist on the property, a dominant north-easterly trending steeply dipping (023°/65° South) and a cross-cutting dyke exhibiting an easterly trend with a steep dip to the south (093°/69°). The dykes' relationship to the intrusive and to each other is not clear at this time.



BC Geology

-  EMJIgd - Mesozoic - Island Plutonic Suite granodioritic intrusive rocks
-  IJBca - Mesozoic - Bonanza Group calc-alkaline volcanic rocks
-  IJBHa - Mesozoic - Bonaza Group - Harbledown Formation mudstone, siltstone, fine clastic sedimentary rocks
-  LJKgd - Mesozoic - Unnamed granodioritic intrusive rocks
-  LJKgr - Mesozoic - Unnamed granite, alkali feldspar granite intrusive rocks
-  uKNS - Mesozoic - Nanaimo Group - Suquash Sequence undivided sedimentary rocks
-  unknown - Age Unknown - Unnamed
-  uTrVK - Mesozoic - Vancouver Group - Karmutsen Formation basaltic volcanic rocks
-  uTrVP - Mesozoic - Vancouver Group - Parson Bay Formation limestone, slate, siltstone, argillite
-  uTrVQ - Mesozoic - Vancouver Group - Quatsino Formation limestone, marble, calcareous sedimentary rocks



10. CURRENT WORK PROGRAM

Ridgeline Exploration Services Inc., on behalf of Pacific West Exploration Services Inc. conducted an airborne magnetometer survey on the Nimpkish property from May 8th to 13th. The objectives of the program were as follows:

1. Map the magnetic properties over the Nimpkish property area to aid in geological and structural mapping as well as to detect possible zones of bedrock mineralization and alteration.

A total of 454.31 line-km were flown during the 2019 field program.

11. PROGRAM RESULTS

Residual Magnetic Intensity (RMI)

This product highlights the variance in magnetic intensity across the property after being adjusted for regional-scale magnetic variations.

The residual magnetic intensity map highlights several northwest-southeast parallel high magnetic anomalies in the southwestern portion of the survey in a region covering approximately 2.6 km by 5.8 km. The residual magnetic intensities range from 53376nT in the northeast portion of the survey area to ~54402nT near the southwest representing a total magnetic gradient of 1,026nT.

Calculated Vertical Magnetic Gradient (First Vertical Derivative)

The IGRF-corrected magnetic data were subjected to a processing algorithm that enhances the response of magnetic bodies in the upper 500 metres and attenuates the response of deeper bodies. The resulting vertical gradient grid provides better definition and resolution of near-surface magnetic units.

The 1st vertical derivative map is consistent with the TMI results highlighting the northwest-southeast feature in the southwestern part of the survey area. The dimensions outlined by this derivative product are the same size as that of the residual magnetic intensity map being approximately 2.6 km by 5.8 km. This is indication that the geological body causing the magnetic anomaly is near surface with sharply contacts. 1st vertical derivative intensities range from -1.462 nT/m to 2.178 nT/m across the survey area. This map highlights what appears to be four distinct northwest-southeast magnetic high ridges each which can be traced for over 4km.

Tilt Derivative (TDR)

The tilt derivative enhances both strong and weak anomalies at their centers and also emphasizes the edges of broad anomalies.

Tilt derivative (TDR) intensities range from -80 radians to 72 radians across the survey area.

Comparable to the TMI and 1VD datasets, the TDR dataset roughly outlines the same northwest-southeast trending magnetic high anomaly in the southwestern part of the survey area. This derivative product also highlights subtle features in the northeast part of the survey area (where RMI and 1VD products did not outline any noticeable features) which includes extremely subtle northwest-southeast trending bodies that somewhat parallels the main structures in the southwest. A high feature also is apparent in the far northeast part of the survey area and appears to be open in that direction.

Total Horizontal Derivative (THD)

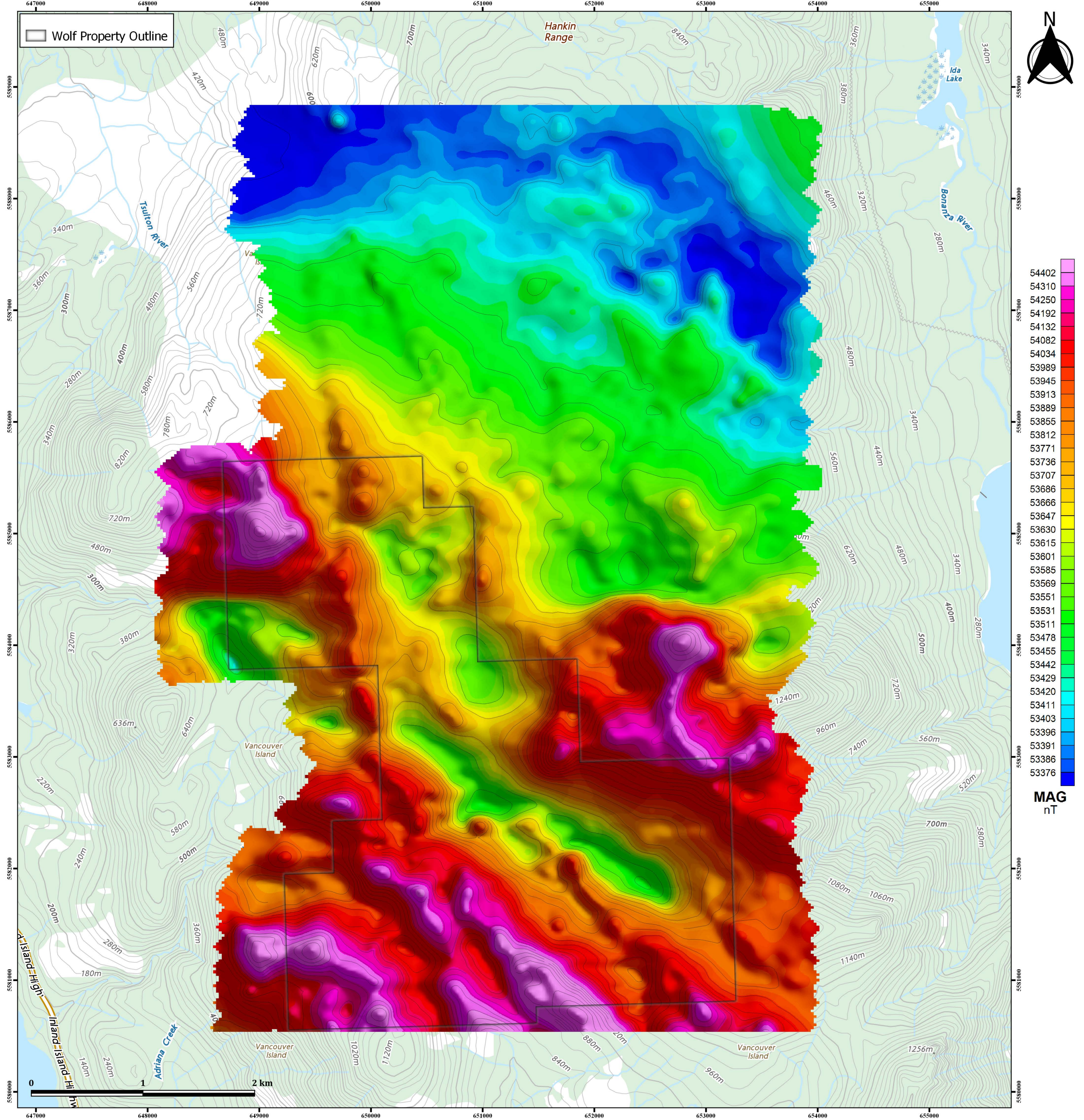
The total horizontal derivative is a tool for outlining the boundaries of magnetic sources.

The Total Horizontal Derivative results are somewhat consistent with the TMI results, in that they define several roughly northwest-southeast trending magnetic high features in the southwestern part of the survey area. THD results range from 2.410nT/m within the highs of these features, to 0.027nT/m at the margins. The result of this product well defines the exact margins of the magnetic high anomaly found within the survey boundaries. There appears to be no readily apparent magnetic source in the northeast portion of the study area based on the THD results.

Analytical Signal (AS)

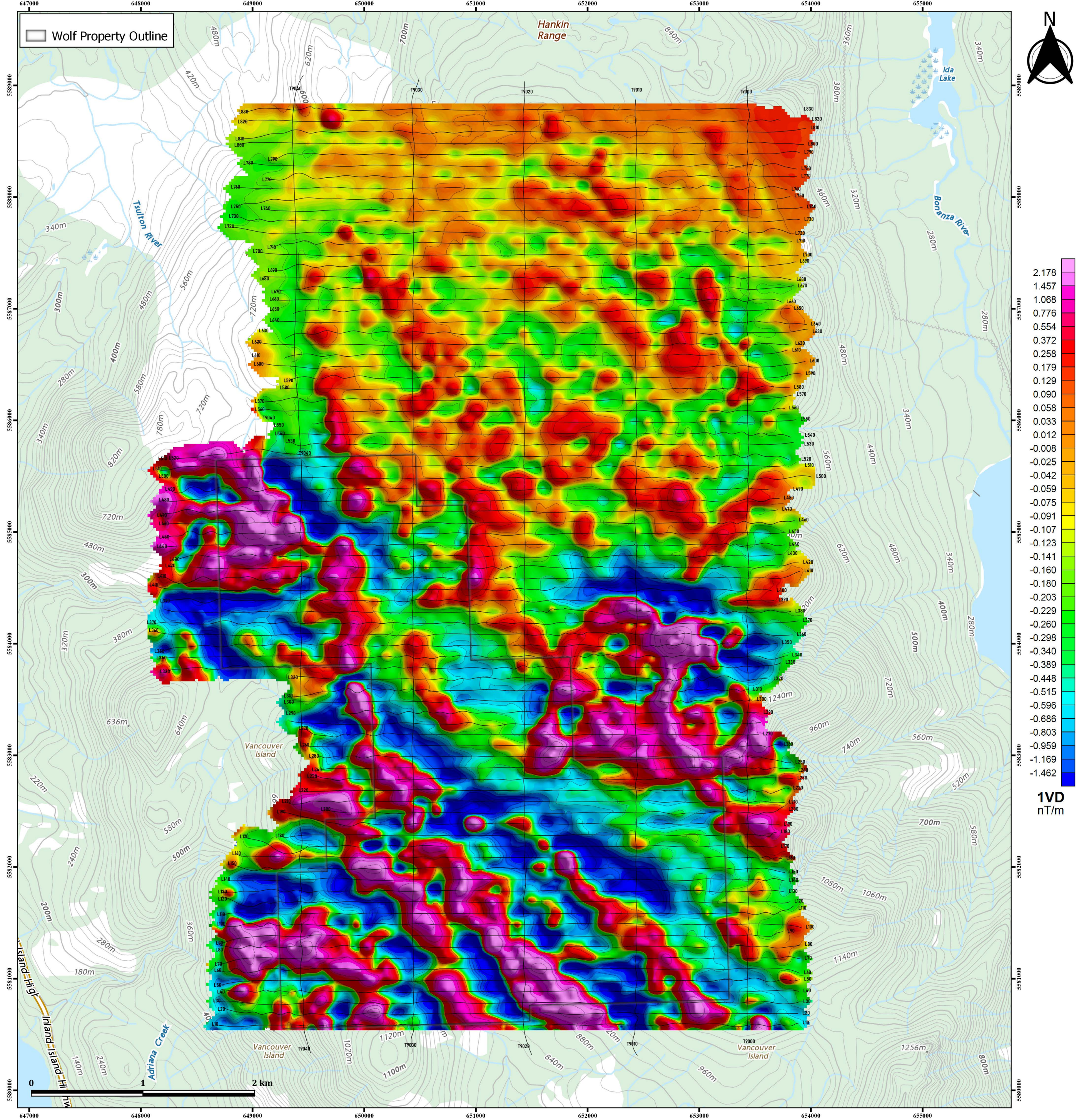
The peaks of the analytic signal (AS) correlate directly with their respective magnetic causative bodies and are positioned symmetrically over them.

The analytical signal results are somewhat consistent with the TMI results, in that they well define several northwest-southeast trending magnetic high features in the southwestern part of the survey areas. AS results range from 3.185nT/m within the highs of these features, to 0.058nT/m in the far eastern, and western corners of the survey. The dataset highlights very broad, shallow shoulders to the magnetic features with a steady gradual gradient from high to low.



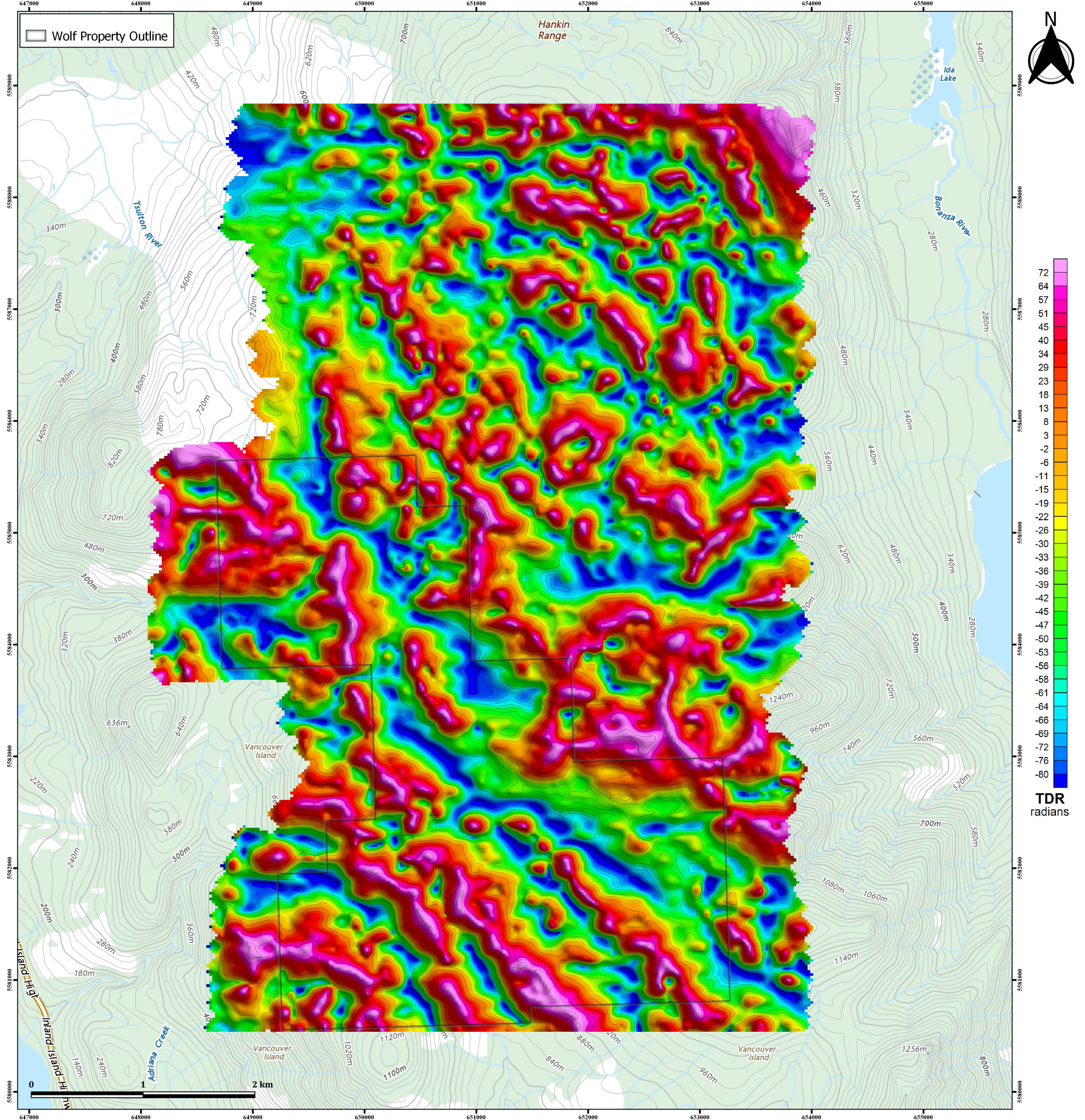
Magnetometer Sensor GEM Systems GSMP-35A
Configuration Towed Bird
Sample Rate 10 Hz
Sensitivity 0.0003 nT

Figure 11.1. Wolf 2019 Residual Magnetic Intensity (RMI)



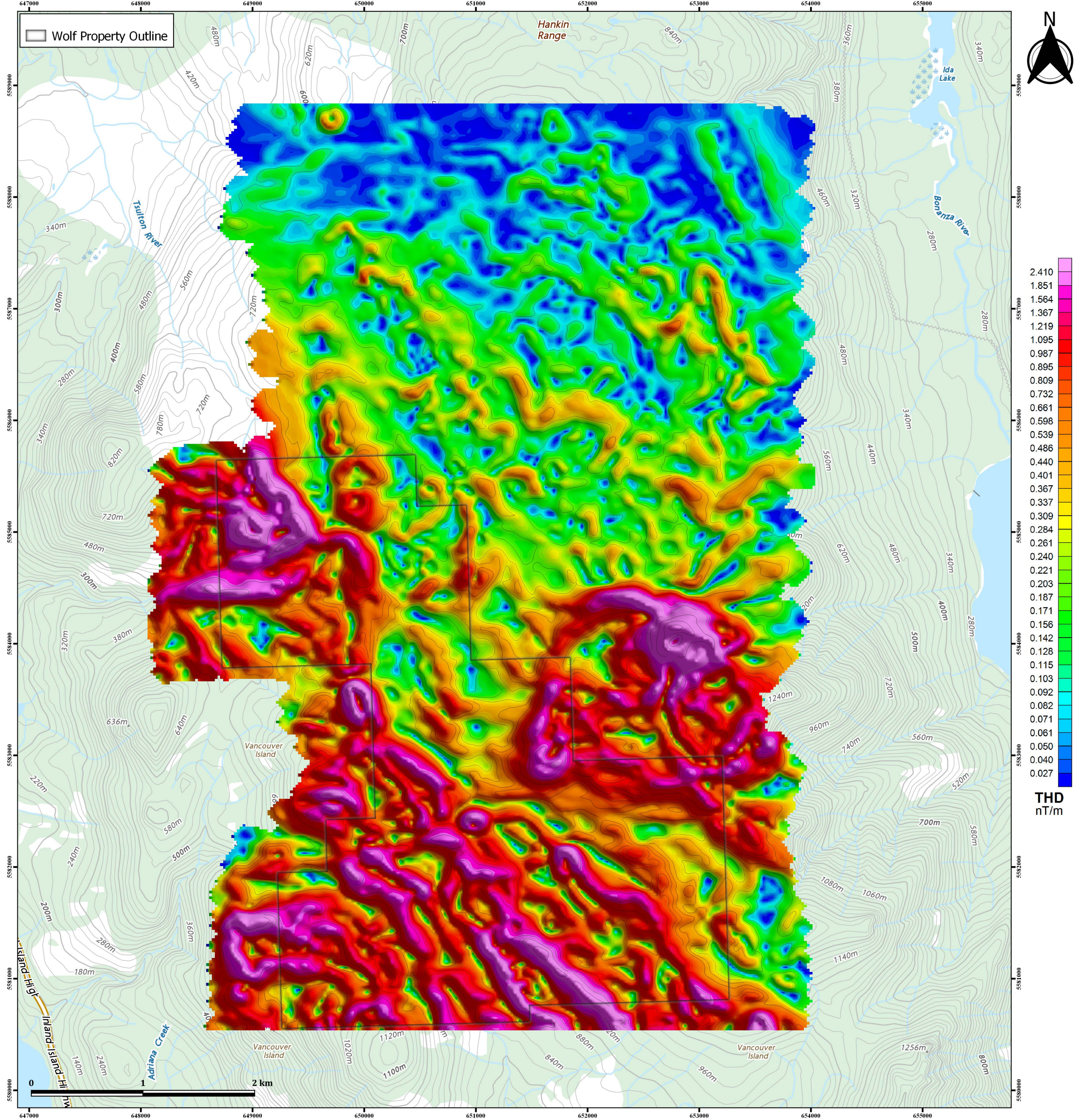
Magnetometer Sensor GEM Systems GSMP-35A
Configuration Towed Bird
Sample Rate 10 Hz
Sensitivity 0.0003 nT

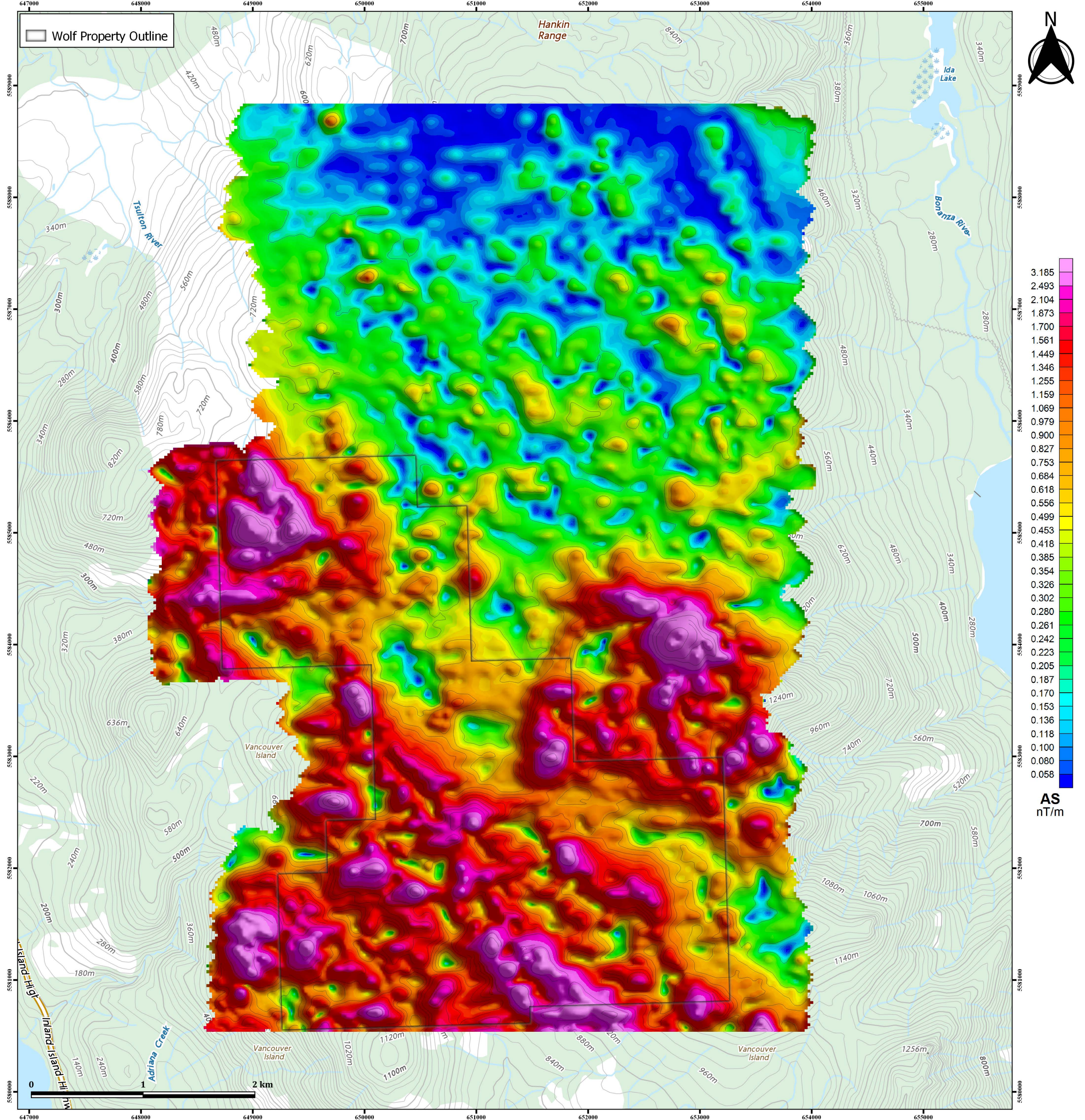
Figure 11.2. Wolf 2019 1st Vertical Derivative (1VD)



Magnetometer Sensor GEM Systems GSMP-35A
Configuration Towed Bird
Sample Rate 10 Hz
Sensitivity 0.0003 nT

Figure 11.3. Wolf 2019 Tilt Derivative (TDR)





Magnetometer Sensor GEM Systems GSMP-35A
Configuration Towed Bird
Sample Rate 10 Hz
Sensitivity 0.0003 nT

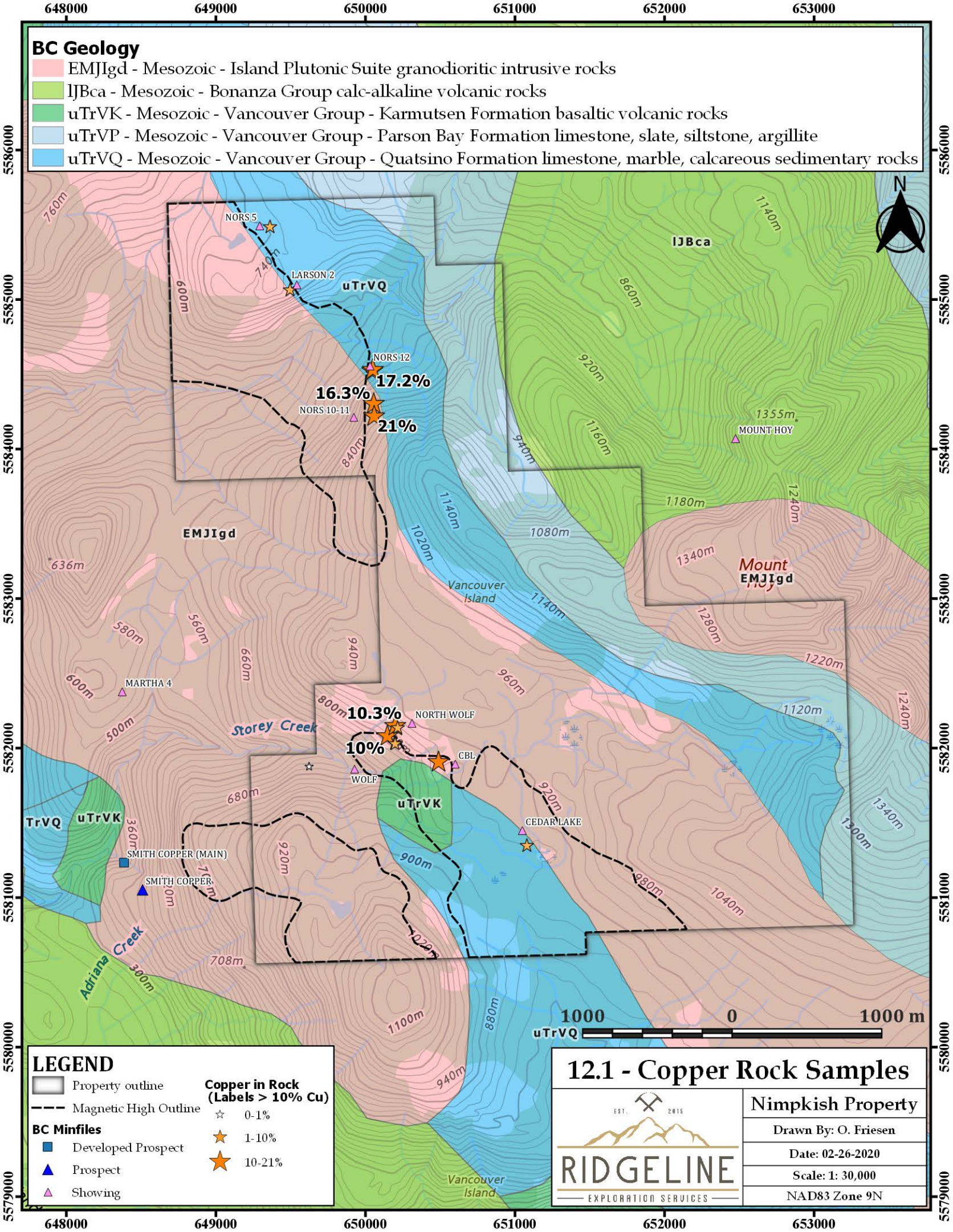
Figure 11.5. Wolf 2019 Analytical Signal (AS)

12. CONCLUSIONS AND RECOMMENDATIONS

Overall, this report provides a brief description of the survey results and describes the equipment, data processing procedures and logistics of the survey. It is recommended that a complete assessment and detailed evaluation of the survey results be carried out in conjunction with all available geophysical, geological and geochemical information. The interpreted structural features defined by the survey should be subjected to further field investigation.

The survey results contain primary geophysical targets along the contact of the Jurassic granodiorite and Triassic limestone, which can be considered strong exploration targets. The dominant features highlighted northwest-southeast oriented, magnetic high located in the western part of the survey area. Historic sampling near the margin of this anomaly highlighted variably mineralized Cu-Zn mineralization at the contact (Figures 12.1 and 12.2). As bedrock cover and access is difficult in this area it is recommend that ground-truthing over the extent of this now well-defined geological contact be completed.

The results from the 2019 program are extremely encouraging. The magnetic high identified by the Phase I geophysical survey are very likely caused by magnetite-rich skarn-related mineralization in potentially economic quantities. High-resolution (25m line spacing) ground magnetic data is required over the mineralized target zones. This data will outline zones of increased magnetite quantities within the granodiorite as well as highlight any possible structural zones related to emplacement of the causative intrusive. Further areas of interest may be assigned priorities on the basis of supporting geophysical, geochemical and geological information. A Phase II field program consisting of high-resolution ground magnetics, prospecting and geological mapping program to define the contact zone and extent of skarn-related mineralization outline by the magnetic anomalies. The budget for this Phase II is estimated to be \$100,000. Geological mapping prior to drilling will assist in defining surficial contacts and ground-truthing the source of high magnetic intensities. Additionally, 3D inversion modelling of the 2019 magnetic survey data should be considered in order to model the magnetics in 3D, leveraging advanced voxel modeling software in order to better determine extents, continuity and probable depth to source of magnetic features.



EMJIGd	Mesozoic - Island Plutonic Suite granodioritic intrusive rocks
IJBca	Mesozoic - Bonanza Group calc-alkaline volcanic rocks
uTrVK	Mesozoic - Vancouver Group - Karmutsen Formation basaltic volcanic rocks
uTrVP	Mesozoic - Vancouver Group - Parson Bay Formation limestone, slate, siltstone, argillite
uTrVQ	Mesozoic - Vancouver Group - Quatsino Formation limestone, marble, calcareous sedimentary rocks

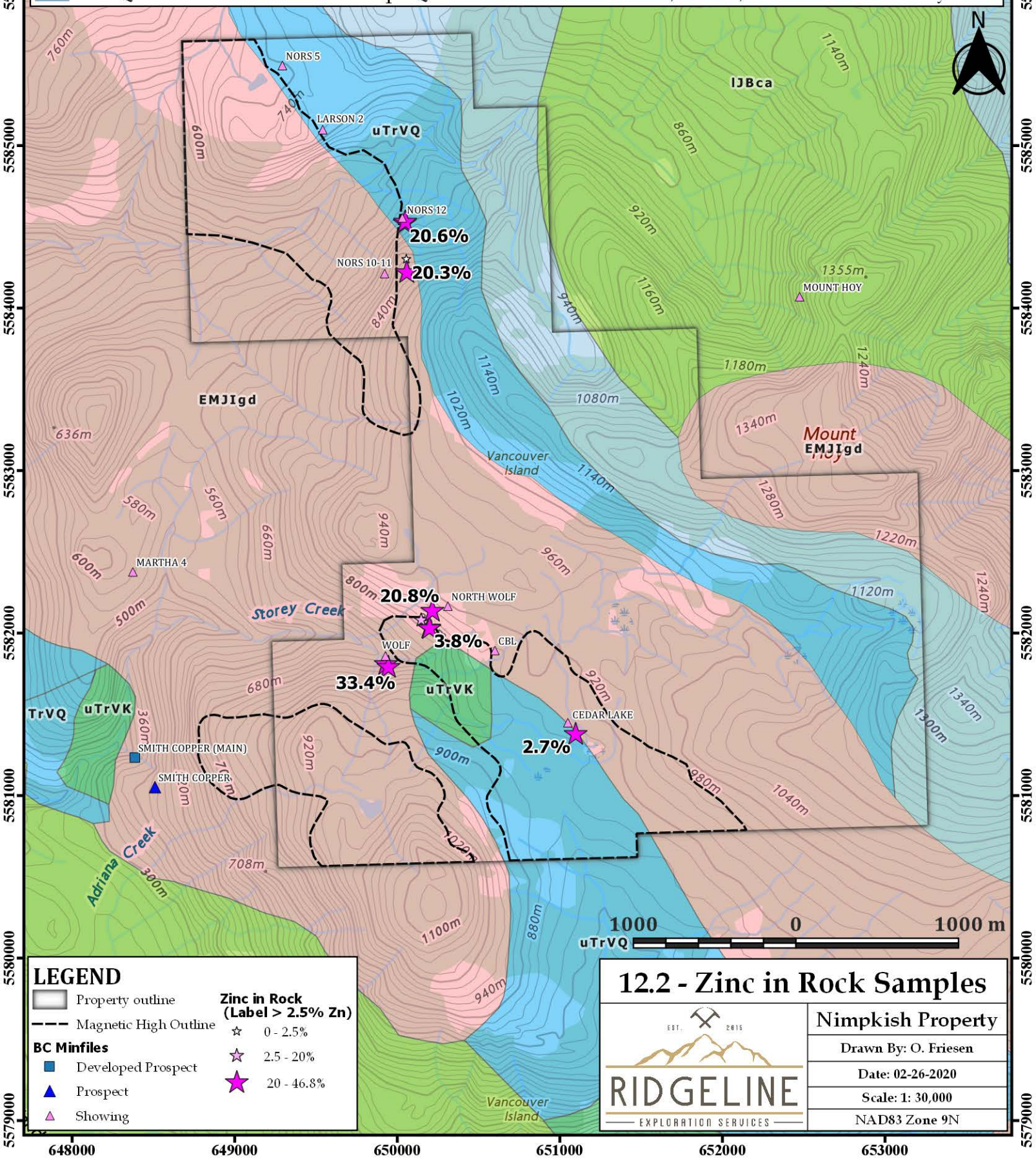




Image 1: Chris Paul and Jacob Fort Prepare the GEM Systems Magnetometer



Image 2: Ridgeline Exploration Services Inc. Mobilizes Gear to the staging site

13. REFERENCES


- Awmack, H. J., 1988: Summary Report on the Nimpkish Project for Hercules Venture Inc.
- Gunning, H. C., 1930: Annual Reports of the B. C. Department of Mines. pp 30-32.
- Gray, P. D., 1998: Geological and Geophysical Assessment Report on the Storey Claim Group. British Columbia Assessment Report No. 25763.
- Gray, P. D., 1999: Prospecting Assessment Report on the New 1 and New 2 Mineral Claims. British Columbia Assessment Report No. 26173.
- Hartmann, S., 2010: Geological Assessment Report on the Storey Creek Property, Tenure 508806. British Columbia Assessment Report No. 31718.
- McGoran, J., 1983: Diamond Drilling Report on the Joe 1 - 4, Andy JAF 1 & 2 and FR 1 - 4 Mineral Claim. British Columbia Assessment Report No.11147.
- Muller, J. E., Northcote, K. E. And Carlisle, D. (1974): Geology and Mineral Deposits of Alert Bay Cape Scott Map-Area, Vancouver Island, British Columbia; Geological Survey of Canada, Paper 74-8.
- Nixon, G. T., Kelman M. C., Stevenson, D., Stokes, L. A. and Johnston K. A. (2005): Preliminary Geology of the Nimpkish Area (NTS 092L/07), Northern Vancouver Island, British Columbia; in Geological Fieldwork 2005, BC Ministry of Energy, Mines and Petroleum Resources, Paper 2006-1.
- Perry, D., Geochemistry and Geological Mapping Assessment Report on the Storey Creek Property. British Columbia Assessment Report No. 33323.
- Kasper, B., Awmack, H. J, 1989: Diamond Drill and Trenching Report on the Nimpkish Project. British Columbia Assessment Report No. 18704.
- Yearer, D. A., Ikona, C. K., 1981: Diamond Drilling Report on the Joe 1 - 4, Andy Mineral Claim. British Columbia Assessment Report No. 10337.

14. STATEMENT OF QUALIFICATIONS

I, Oliver Friesen of the City of White Rock, Province of British Columbia, Canada, do hereby certify as follows:

1. I graduated with a Bachelor of Science degree in Geology (hons.) from the University of British Columbia in June 2013.
2. I graduated with a M.Sc in sedimentology from Simon Fraser University in August 2015.
3. I am a GIT member in good standing with the Association of Professional Engineers and Geoscientist of British Columbia (APEGBC).
4. I have worked in mineral exploration since 2011, in the Yukon Territory, Newfoundland and Labrador, Nevada, and British Columbia.
5. I am the author and am responsible for the preparation of the report titled “2019 Airborne Geophysical Report on the Nimkish Property.”
6. To the best of my knowledge, information and belief, this report contains all the scientific and technical information necessary to make this report not misleading.

Dated this 24th day of February 2020



Oliver Friesen

15. STATEMENT OF COSTS

NIMPKISH PROJECT - AIRBORNE MAGNETIC SURVEY CHARGES

	Dates	Quantity	Rate	Amount
Survey Planning/Preparation				\$3,000
Mobilization/De-Mobilization (crew/equipment)	May 8,13			\$5,000
Mobilization/De-Mobilization (helicopter)	May 8,13			\$14,000
Reconnaissance Flight	May-09			\$2,500
Airborne Magnetic Survey Flight Line-Kilometers (Moderate Terrain - \$90/km)	May 9,10,12	454.31	92.00	\$41,797
Daily Ferry Charges	Included in line-km rate			\$0
Fuel and Fuel Positioning	Included in line-km rate			\$0
Meals and Accommodation	Included in line-km rate			\$0
Daily Standby Charges ¹		0	\$7,500	\$0
Data Post-Processing (includes all deliverables, maps)				\$5,000
Prepare Assessment Report for BC MTO				\$5,000
TOTAL SURVEY COST				\$76,297

¹ Standby day is defined by any day on site where any of the following takes place:

- survey production is less than 100 km after the equipment is installed (standby is not in force if the equipment is inoperable for any reason);
- weather conditions prevent the crew from completing the installation;
- weather conditions prevent the crew from completing the equipment (or fuel drums) retrieval from field locations, de-installation and packing;
- weather conditions prevent the crew from arriving at the survey base or leaving the base site, after all lines are flown.
- any delays due to forest fires in the area.

RUGGEDNESS	LINE KM RATE
Flat	\$85.00
Moderate	\$92.00
Extreme	\$99.00

APPENDIX A

LIST OF PERSONNEL

The following personnel were involved in the acquisition, processing, interpretation and presentation of data, relating to the airborne magnetic survey carried out over the Penece Claim Group in southwestern, B.C.

Dev Rishy-Maharaj	Operator / Geophysical Data Processor – Field
Christopher Paul	Operator / Geophysical Data Processor – Field
Jacob Fort	Pilot (Silverking Helicopters) from Smithers, BC
Kit Campbell	Geophysical Data Processor
Kit Campbell	Geophysical Interpolation

The survey consisted of 454.31 line-km flown from May 8th to 13th, 2019.