

# **TECHNICAL REPORT**

## **Peak Mineral Property Vancouver Island British Columbia Canada**

NTS 92F/02E - BCGS 092F018

49°10' 1.46" N Latitude 124°34' 10.9" W Longitude

UTM 385575E, 5447215N

NAD83 Zone 10

Nanaimo Mining Division

### **Prepared for:**

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Effective Date: October 3, 2020

## Date and Signature Page

Effective Date of this Report: October 3, 2020

Date of Signing: September 29, 2021



D.G. MacIntyre, Ph.D., P.Eng.

# Table of Contents

Title Page .....i

Date and Signature Page ..... ii

Table of Contents ..... iii

List of Tables .....v

List of Figures .....v

List of Photos ..... vi

1 Summary..... 1

2 Introduction ..... 3

3 Reliance on other Experts ..... 6

4 Property Description and Location ..... 6

    4.1 Mineral Titles ..... 8

    4.2 Claim Ownership ..... 8

    4.3 Underlying Option Agreement ..... 9

    4.4 Required Permits and Reporting of Work ..... 9

    4.5 Environmental Liabilities ..... 11

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography ..... 11

    5.1 Access ..... 11

    5.2 Climate and Vegetation ..... 12

    5.3 Local Resources ..... 13

    5.4 Infrastructure ..... 13

    5.5 Physiography ..... 13

6 History ..... 14

    6.1 Early History ..... 14

    6.2 1962 – Hunting Survey Corp. .... 15

    6.3 1963-1966 – Gunnex Ltd. .... 15

    6.4 1979 – Western Mines Ltd. .... 15

    6.5 1981 – Prism Resources Inc. .... 15

    6.6 1982 – Westmin Resources Ltd. .... 15

    6.7 1983-1988 – Au Resources Ltd. .... 16

    6.8 2016 – Karmamount Mineral Exploration Inc. .... 22

7 Geological Setting and Mineralization ..... 24

    7.1 Regional Geology ..... 24

        7.1.1 Sicker Group ..... 24

        7.1.2 Buttle Lake Group ..... 25

        7.1.3 Vancouver Group ..... 25

7.1.4	Island Plutonic Suite .....	26
7.1.5	Nanaimo Group.....	26
7.1.6	Mount Washington Intrusive Suite .....	27
7.1.7	Structures .....	27
7.2	Property Geology and Mineral Occurrences.....	30
7.2.1	Property Geology .....	30
7.2.2	Mineral Occurrences.....	31
8	Deposit Types .....	35
9	Exploration .....	37
9.1	Aircraft.....	37
9.2	Airborne Magnetometer .....	37
9.3	Magnetic Base Station.....	37
9.4	Radar Altimeter.....	37
9.5	Navigation Software .....	38
9.6	Flight Path .....	38
9.7	Clearance .....	38
9.8	Flying Speed.....	39
9.9	Magnetic Base Station.....	39
9.10	Aeromagnetic survey .....	39
9.10.1	Total Magnetic Intensity (TMI).....	40
9.10.2	Calculated Vertical Magnetic Gradient (First Vertical Derivative) .....	41
9.10.3	Total Horizontal Derivative (THD) .....	41
9.10.4	Tilt Derivative (TDR).....	41
9.10.5	Analytical Signal (AS).....	41
9.11	Survey Results .....	42
9.11.1	Residual Magnetic Intensity (RMI) .....	42
9.11.2	Calculated Vertical Magnetic Gradient (First Vertical Derivative) .....	43
9.11.3	Tilt Derivative (TDR).....	45
9.11.4	Total Horizontal Derivative (THD) .....	46
9.11.5	Analytical Signal (AS).....	47
10	Drilling.....	48
11	Sample Preparation, Analyses and Security .....	48
12	Data Verification.....	48
13	Mineral Processing and Metallurgical Testing .....	49
14	Mineral Resource and Mineral Reserve Estimates .....	50
15	Adjacent Properties.....	50
16	Other Relevant Data and Information.....	50
17	Interpretation and Conclusions .....	50
18	Recommendations .....	52

19 References..... 53

20 Certificate of Author ..... 55

**List of Tables**

Table 1. List of Mineral Titles, Peak Property ..... 7

Table 2. Significant drill intersections, High Grade zone. Table from Cope, 1988..... 18

Table 3. Significant drill intersections, Peak Lake zone. Table from Cope, 1988. .... 21

Table 4. Table of Formations (Massey and Friday, 1987) ..... 27

Table 5. Mineral occurrences, Peak Property..... 31

Table 6. Airborne survey coverage (Friesen, 2020) ..... 39

Table 7. Airborne survey parameters and specifications (Friesen, 2020)..... 40

Table 8. Projected costs for proposed exploration program, Peak Property ..... 52

**List of Figures**

Figure 1. Location map, Peak Property, Vancouver Island, British Columbia..... 4

Figure 2. Access and infrastructure map, Peak Property. Map prepared by D.G. MacIntyre from government geospatial data download September 1, 2020. .... 5

Figure 3. Mineral Titles Map, Peak Property. Map produced by D.G. MacIntyre from Province of B.C. geospatial data downloaded September 1, 2020..... 7

Figure 4. Compilation map and drill hole locations, High Grade Zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Map prepared by D.G. MacIntyre, September, 2020..... 18

Figure 5. Compilation map and drill hole locations, Peak Lake Zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Map prepared by D.G. MacIntyre, September, 2020..... 20

Figure 6. Regional geologic setting, Peak Property. Map prepared by D.G. MacIntyre from B.C. Ministry of Energy, Mines and Petroleum Resources geospatial data, September 2020..... 23

Figure 7. Property Geology, Peak Property. Map prepared by D.G. MacIntyre from B.C. Ministry of Energy, Mines and Petroleum Resources geospatial data, September 2020. .... 29

Figure 8. Detailed geology and drill hole locations, High Grade zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020. .... 32

Figure 9 Detailed geology and drill hole locations, Peak Lake zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020. .... 33

Figure 10 Detailed geology and geochemical sample locations, Emma 20 showing. Map modified from Lorenzetti, 1989. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020. Note: Au values in ppb, all other values ppm. .... 35

Figure 11. Flight lines for the 2020 aeromagnetic survey. Figure from Friesen, 2020. .... 36

Figure 12. 2020 Aeromagnetic Survey, Residual Magnetic Intensity (RMI). Figure from Friesen, 2020 ..... 43

Figure 13. 2020 Aeromagnetic Survey, 1<sup>st</sup> Vertical Derivative (1VD). Figure from Friesen, 2020 ..... 44

Figure 14. 2020 Aeromagnetic Survey, Tilt Derivative (TDR). Figure from Friesen, 2020. 45

Figure 15. 2020 Aeromagnetic Survey, Total Horizontal Derivative (THD). Figure from Friesen, 2020 ..... 46

Figure 16. 2020 Aeromagnetic Survey, Analytical Signal (AS). Figure from Friesen, 2020 47

Figure 17. First Vertical Derivative (1VD) compilation map showing interpreted magnetic linears and possible extent of a dioritic intrusive body. From Friesen, 2020. .... 51

**List of Photos**

Photo 1. Peak Lake. Photo taken by the writer, October 3, 2020. .... 3

Photo 2. Start of the old, overgrown logging road that leads to the High Grade showing. Photo taken by the writer, October 3, 2020 ..... 12

Photo 3. The writer examining outcrops near Peak Lake on the Copp Main forest service road. Photo taken October 3, 2020. .... 49

# 1 Summary

The Peak Property (“the Property” or “Peak Property”) is located approximately 18.6 kilometres southeast of the town of Port Alberni on Vancouver Island, British Columbia, Canada. The Property covers a northwest trending ridge located southwest of the Cameron River. Access to the Peak Property is via 16 kilometres of Forest Service roads (“FSR”) that connect to interprovincial Highway 4 approximately 11 kilometres east of the town of Port Alberni. The Property consists of two contiguous mineral titles covering an area of 887.13 hectares. These mineral titles were acquired by electronic staking on April 30, 2019 and are currently held 50% by Christopher Paul and 50% by Oliver Friesen.

Corcel Exploration Inc. (“Corcel”), a private company registered in the Province of British Columbia, has optioned the Property from the owners and is the operator. It is Corcel’s intention to use the Peak Property as a qualifying property for listing on the Canadian Securities Exchange (“CSE”). The Peak mineral titles are in good standing until January 30<sup>th</sup>, 2029, following a statement of work- (“SOW”) filed on August 27, 2020 by Mr. Friesen claiming \$101,319 in assessment credit for the airborne survey flown in August (MTO Event no. 5811159). An assessment report in support of this filing was submitted to and accepted by the B.C. Ministry of Energy, Mines and Petroleum Resources (Friesen, 2020).

Although the Peak Lake (Emma) showing was discovered around 1900, the main period of exploration on the Property was by Au Resources Ltd. between 1983 and 1988. This work led to the discovery of the High Grade, CM-240 and Emma 20 showings. Exploration programs included soil, rock and heavy mineral geochemical surveys, VLF-EM and IP geophysical surveys and 1511 metres of diamond drilling in 12 drill holes. Additional work was recommended but little was done on the Property after 1988.

The Peak Property is underlain by island arc volcanic rocks of the Duck Lake, Nitinat and McLaughlin Ridge formations of the Devonian age Sicker Group.. The Sicker rocks are cut by the Late Triassic Mount Hall Gabbro and Early to Middle Jurassic granodiorite intrusions of the Island Plutonic Suite. Rocks of the Fourth Lake Formation of the Mississippian to Early Permian Buttle Lake Group underlie the northeast corner of the Property..

The Property is prospective for structurally controlled Au and Ag bearing quartz vein deposits similar to the High Grade showing. The mineralized quartz veins and shear zones may be spatially associated with hornblende-feldspar porphyry dykes. Additionally, a number of northeast to east trending faults appear to localize the dykes and/or mineralized

quartz veins and altered shear zones which are oblique to the well-defined northwest-southeast structures within the area.

In 2020 an aeromagnetic survey covering the Property was done by Corcel Exploration Inc. The survey was conducted from August 10<sup>th</sup> to 13<sup>th</sup>, 2020. The results of this airborne survey are described in this Technical Report. 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 results contain many structural features, some of which may be considered exploration targets. Overall, the dominant fabric highlighted by the survey is in the northwest-southeast direction which is consistent with property- and regional-scale geological mapping within the Port Alberni area.

The three most dominant features defined by the 2020 airborne magnetic survey are magnetic highs which are associated with, 1) northwest-southeast trending contact of basalt-rich Karmutsen volcanics which parallel the northeastern part of the survey area, 2) a fault-bound north-northwest oriented wedge of basalt-rich Karmutsen volcanics which cross-cut the southern part of the survey area, and 3) a roughly concentric intrusion of gabbroic to dioritic rocks of the Late Triassic Mount Hall Gabbroic complex located immediately west of the Peak Property boundary.

A two phase, success driven exploration program is recommended. Phase 1 would involve digitizing of all historic data contained within property assessment reports and 75 line-kilometers of high-resolution ground magnetic surveying at 25m line spacing over the mineralized target zones, specifically over the High-Grade, Peak Lake and CM-240 Zones where the 2020 magnetic data highlighted weakly defined northeast-southwest oriented cross-structures. As the known veins are relatively narrow, high-resolution magnetic data will help in defining the location of these structures as they extend under cover from known showings. In addition to the historic data digitizing and magnetic surveying, approximately 850 soil samples and 40 stream sediment samples should be collected across the project area to further define the mineralized zones as well as detect any potentially undiscovered mineralization hidden beneath overburden cover. Further areas of interest may be assigned priorities on the basis of supporting geophysical, geochemical and geological information. The estimated cost of the recommended phase 1 program is \$100,975. Depending on the results of the Phase 1 program a recommended Phase 2 field program should involve detailed geologic mapping and prospecting of the identified magnetic targets. The estimated cost of the Phase 2 work is \$49,000.





*Photo 1. Peak Lake. Photo taken by the writer, October 3, 2020.*

## 2 Introduction

This Technical Report has been prepared at the request of Corcel Exploration Inc. (“Corcel” or “the Company”), a private company registered in the Province of British Columbia that is seeking listing on the Canadian Securities Exchange (the “CSE” or “Exchange”). The writer has been asked to review all data pertaining to the Property and to prepare a Technical Report that describes historical work completed on the Property, describes the results of a recent aeromagnetic geophysical survey completed by Corcel and makes recommendations for further work if warranted. The writer is responsible for all sections of this Technical Report.

The writer visited the Property on October 3, 2020. Access was via 4 wheel drive vehicle using a network of logging roads that connect to Highway 4 near the crest of the Alberni Pass. Although the known showings on the Property are no longer easily accessible because the old logging roads are now completely overgrown, there is still abundant outcrop along the Copp Main forest service road. The author spent the day examining these outcrops but no significant mineralization was observed and no samples were collected.

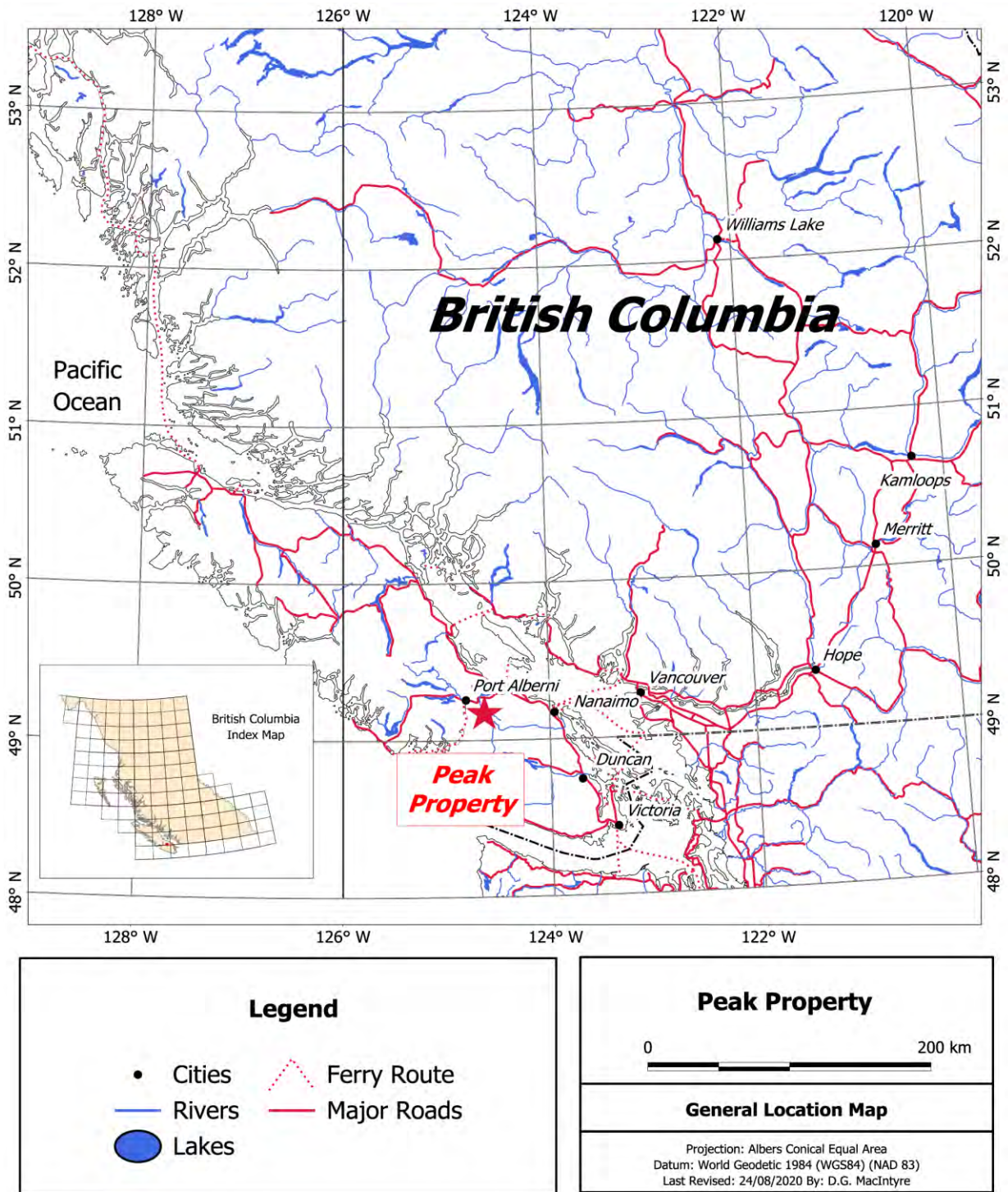


Figure 1. Location map, Peak Property, Vancouver Island, British Columbia.

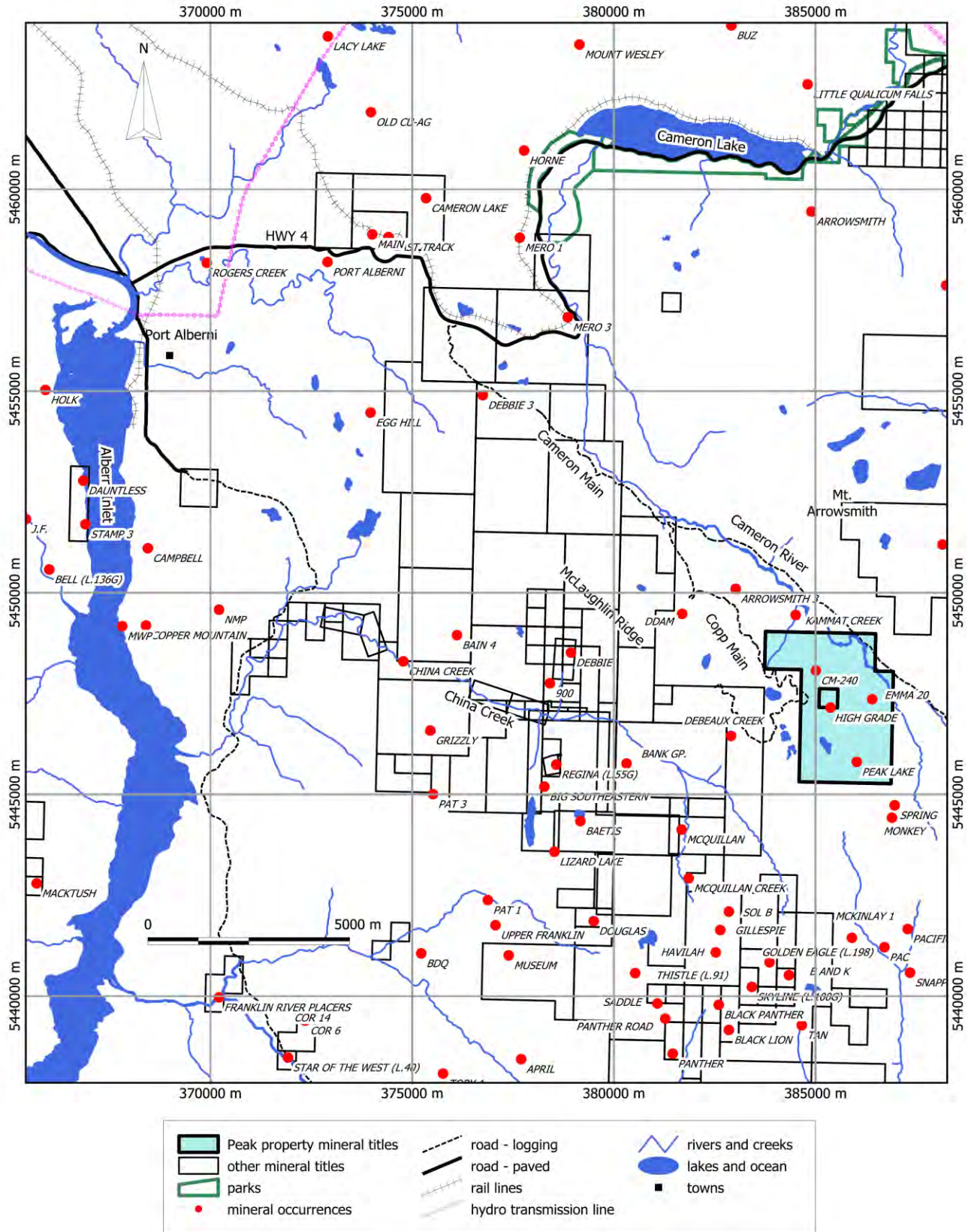


Figure 2. Access and infrastructure map, Peak Property. Map prepared by D.G. MacIntyre from government geospatial data download September 1, 2020.

This Technical Report has been prepared in compliance with the requirements of National Instrument 43-101 and Form 43-101F1 and is intended to be used as supporting documentation to be filed with the Canadian Securities Commissions and the CSE. The purpose of this filing is to support the listing of Corcel Exploration Inc. on the CSE.

In preparing this report, the author has reviewed the geological, geophysical and geochemical reports, maps and miscellaneous papers listed in the References section. Of particular value are a number of publically available assessment reports filed by previous operators on the Peak Property. This information is available as free, downloadable Adobe Portable Document Format (PDF) files from the B.C. Ministry of Energy and Mines Assessment Report Indexing System (ARIS). These reports contain detailed information on the results of geological mapping, prospecting, diamond drilling and geochemical sampling conducted on the Property since its initial discovery. The writer is satisfied that the information contained in these reports was collected and processed in a professional manner following industry best practices applicable at the time, and that the historical data gives an accurate indication of the nature, style and possible economic value of known mineral occurrences on the Property.

Units of measure in this report are metric; monetary amounts referred to are in Canadian dollars. Assay and geochemical values are given as grams per tonne (g/t), parts per million (ppm) or parts per billion (ppb)

### **3 Reliance on other Experts**

The writer has not relied on the opinions of non-qualified persons in the preparing of this report. All opinions expressed in this report are those of the writer based on personal observations and a review of historical work done on the Property including work done in 2020 by Corcel.

### **4 Property Description and Location**

The Peak Property is located approximately 18.6 kilometres southeast of the town of Port Alberni on Vancouver Island, British Columbia, Canada (Figure 2). The Property consists of two contiguous mineral titles covering an area of 887.13 hectares. These mineral titles were acquired by electronic staking on April 30, 2019 and are currently held 50% by Mr. Christopher Paul and 50% by Mr. Oliver Friesen. The Property covers a northwest trending ridge southeast of the Cameron River (Figure 3). The claims are in good standing until January 30<sup>th</sup>, 2029, following a statement of work (“SOW”) filed on August 27, 2020 by Mr.

Friesen claiming \$101,319 in assessment credit for the airborne survey flown in 2020 (MTO Event no. 5811159). The results of this airborne survey are discussed in this report.

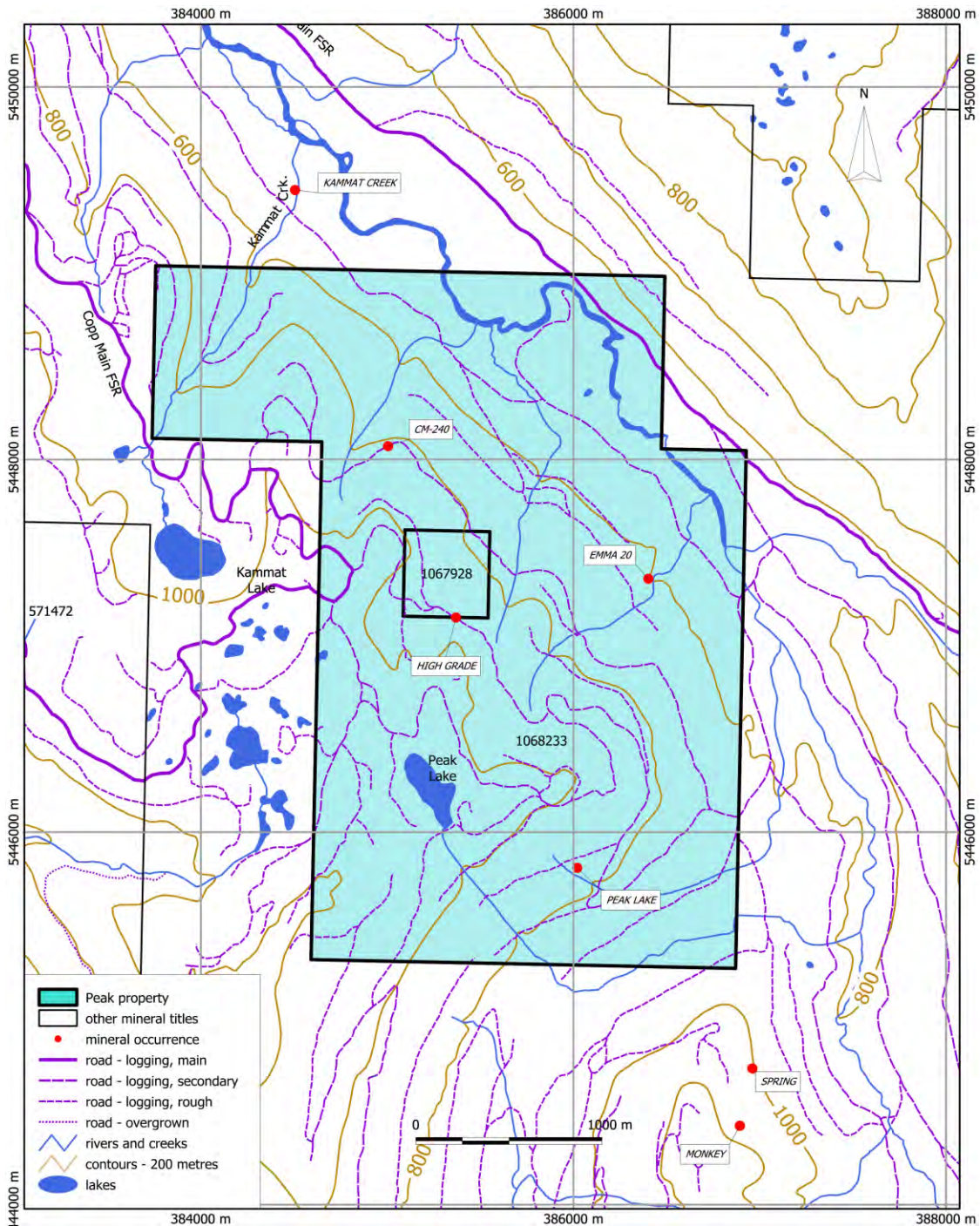


Figure 3. Mineral Titles Map, Peak Property. Map produced by D.G. MacIntyre from Province of B.C. geospatial data downloaded September 1, 2020.

**Table 1. List of Mineral Titles, Peak Property**

Title Number	Claim Name	Owners	Issue Date	Good To Date	Area (ha)
1067928	PEAK2019A	Paul (50%); Friesen (50%)	2019/APR/30	2029/JAN/30	21.12
1068233	PEAK2019B	Paul (50%); Friesen (50%)	2019/APR/30	2029/JAN/30	866.01

887.13

## 4.1 Mineral Titles

The Peak Property consists of two (2) contiguous mineral titles that are located within the Nanaimo Mining Division (Table 1). The area covered by these titles is shown in Figure 3 and is calculated to be 887.13 hectares in total. The map shown in Figure 3 was generated by the writer from geospatial data downloaded from the Government of BC, GeoBC website on September 1, 2020. These spatial layers are the same as those used by the Mineral-Titles-Online (MTO) electronic staking system managed by the Mineral Titles Branch of the B.C. Ministry of Energy, Mines and Petroleum Resources and are updated on a daily basis. The MTO system is used to locate and record mineral titles in British Columbia. This system uses a grid cell selection system that was introduced in 2005. Title boundaries are based on lines of latitude and longitude. There is no requirement to mark claim boundaries on the ground as these can be determined with reasonable accuracy using a GPS. The Peak claims have not been surveyed.

Mineral Title details listed in Table 1 were downloaded from the MTO web site and are current as of September 1, 2020. A Statement of Work for the aeromagnetic survey flown by Corcel in August 2020 was filed by Mr. Friesen on August 27, 2020. As a result of this filing the mineral titles comprising the Property are now in good-standing until January 30, 2029.

## 4.2 Claim Ownership

Information posted on the MTO website indicates that all of the claims listed in Table 1 are owned 50% by Mr. Christopher Paul (MTO Client No. 269478) and 50% by Mr. Oliver Friesen (MTO Client No. 283562). Corcel Exploration Inc. (“Corcel”) has optioned the Property from Mr. Paul and Mr. Friesen.

Maps generated by the MTO system show that the Peak mineral titles overlap Land Act Survey Parcels, Blocks 81 and 1324 (Dunsmuir District) established in 1887 as part of the Esquimalt and Nanaimo (“E&N”) railway land grant. The writer is not aware of any issues related to the overlap with these lots that would have a negative impact on access or on any future exploration and development of the Property.

### 4.3 Underlying Option Agreement

The mineral titles listed in Table 1 are under option to Corcel Exploration Inc. (“Corcel”) as outlined in a letter agreement signed on the August 4, 2020 between Corcel (“the Optionee”) and Mr. Christopher R. Paul and Mr. Oliver Friesen (“the Optionors”). Corcel provided the writer with a copy of this option agreement which specifies the terms whereby Corcel can earn a 100% undivided interest in the Peak Property, subject to a 2% Net Smelter Return (NSR) Royalty, by completing \$250,000 in exploration expenditures and issuing 1,000,000 shares at a deemed price of \$0.05/share.

The purchaser will issue common shares as follows:

- 500,000 common shares to Mr. Friesen upon signing of agreement
- 500,000 common shares to Mr. Paul upon signing of agreement

The Optionee will make the following exploration expenditures:

- \$CAD \$100,000 by December 31, 2020
- \$CAD \$150,000 by July 20, 2023

Corcel will also pay the Optionors a 2% net smelter return (NSR) royalty. Corcel has the right to purchase the first 1% of this NSR for \$1,000,000 any time before the 45<sup>th</sup> day of continuous production at a minimum of 70% of designed mill or mine capacity is reached.

### 4.4 Required Permits and Reporting of Work

Acquisition of mineral titles in British Columbia is done electronically through MTO. The electronic map used by MTO allows you to select single or multiple adjoining grid cells. Cells range in size from approximately 21 hectares (457m x 463m) in the south at the 49<sup>th</sup> parallel to approximately 16 hectares in the north at the 60<sup>th</sup> parallel. This is due to the longitude lines that gradually converge toward the North Pole. Clients are limited to 100 selected cells per submission for acquisition as one mineral title. The number of submissions is not limited, but each submission for a claim must be completed through to payment before another can commence. No two people can select the same cells simultaneously, since the database is live and updated instantly; once you make your selection, the cells you have selected will no longer be available to another person, unless the payment is not successfully completed within 30 minutes.

In British Columbia, the owner of a mineral title acquires the right to the subsurface minerals which were available at the time of title acquisition as defined in the Mineral Tenure Act of British Columbia. Surface rights and placer rights are not included with mineral titles and are treated separately. Mineral titles are initially valid for one year from

the time of acquisition (the “Issue Date”). Where mineral titles overlap private land, entry onto the private land must be with the agreement of the land owner. In the case of the Property there does not appear to be any restrictions on access although a formal agreement with the holder of timber rights may be required in order to use restricted logging roads in the area. The primary timber companies operating in the area are TimberWest and Island Timberlands. These companies have a contract with Mosaic Forest Management to manage their forest lands including the use of forest service roads for public and private access.

A mineral title has a set expiry date (the “Good To Date”), and in order to maintain the title beyond that expiry date, the recorded holder (or an agent) must, on or before the expiry date, register either exploration and development work that was performed on the title, or a payment instead of exploration and development (“PIED”). Failure to maintain a title results in automatic forfeiture at the end (midnight) of the expiry date; there is no notice to the title holder prior to forfeiture.

When exploration and development work or a PIED is registered, the title holder or agent may advance the title forward to any new date. With PIED the minimum requirement is 6 months, and the new date cannot exceed one year from the current expiry date; with work, it may be any date up to a maximum of ten years beyond the current anniversary year. All recorded holders of a mineral title must hold a valid Free Miners Certificate (“FMC”) when either work or PIED is registered on a mineral title.

The following are the current exploration expenditure or PIED amounts required to maintain a mineral title in good standing for one year:

Mineral Title - Work Requirement:

- \$5 per hectare for anniversary years 1 and 2;
- \$10 per hectare for anniversary years 3 and 4;
- \$15 per hectare for anniversary years 5 and 6; and
- \$20 per hectare for subsequent anniversary years

Mineral Title - PIED

- \$10 per hectare for anniversary years 1 and 2;
- \$20 per hectare for anniversary years 3 and 4;
- \$30 per hectare for anniversary years 5 and 6; and
- \$40 per hectare for subsequent anniversary years

Only work and associated costs for the current anniversary year of the mineral title may be applied toward that title. A report detailing work done and expenditures made must be filed with the B.C. Ministry of Energy and Mines within 90 days of filing of a Statement of Work



(“SOW”). After the report is review by ministry staff it is either approved or returned to the submitter for correction. Failure to produce a compliant report could result in loss of assessment credit and forfeiture of the mineral titles to which the credit was applied.

Prior to initiating any physical work such as drilling, trenching, bulk sampling, camp construction, access upgrading or construction and geophysical surveys using live electrodes (IP) on a mineral Property a Notice of Work permit application must be filed with and approved by the Ministry of Energy and Mines. The filing of the Notice of Work initiates engagement and consultation with all other stakeholders including First Nations. Because the work done in 2020 was an airborne survey that did not involve surface disturbance, there was no requirement to file a Notice of Work.

A Statement of Work for the aeromagnetic survey flown by Corcel in August 2020 was filed by Mr. Christopher Paul on August 27, 2020 claiming \$101,319.00 in exploration expenditures (MTO event 5811159). An assessment report in support of this filing has also been submitted as required by the regulations and is currently under review by the B.C. Mineral Titles Branch.

#### **4.5 Environmental Liabilities**

There has not been any mining or other exploration related physical disturbances on the Peak Property to date. Roads built for logging activities are not the responsibility of the mineral title holders. The author is not aware of any environmental issues or liabilities related to historical exploration or mining activities that would have an impact on future exploration on the Property.

## **5 Accessibility, Climate, Local Resources, Infrastructure and Physiography**

### **5.1 Access**

As shown in Figure 2 access to the Property is via the Cameron Connector, Cameron Main and Copp Main Forest Service Roads, a distance of approximately 16 kilometres. This network of roads starts from Highway 4 in the Alberni pass, approximately 11 kilometres east of the town of Port Alberni. These logging roads are still active and in good condition and provide easy access to the Property.

The Copp Main access road is still in good repair and provides access to the Property and Peak Lake (Photo 1), a popular fishing locality in the area. Unfortunately, secondary logging roads that connect to the Copp Main and that were used during the main period of

exploration on the Property in the late 1980's are now completely overgrown with alder and difficult to find (Photo 2). Future work on the Property will need to refurbish these roads in order to provide access to the showings.



*Photo 2. Start of the old, overgrown logging road that leads to the High Grade showing. Photo taken by the writer, October 3, 2020*

## 5.2 Climate and Vegetation

The Property is located along the eastern side of the Vancouver Island Mountain Range. Rainfall on this side of the mountains, though less than on the Pacific Coast side, can be considerable. Severe winter storms can result in back country roads being blocked and washed out. Most heavy rainfall occurs between October and April with November being the wettest month. Based on Port Alberni weather data from Environment Canada ([climate.weather.gc.ca](http://climate.weather.gc.ca)), the average annual rainfall is 127 centimetres and snowfall is 15 centimetres. 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. The length of the operating season is twelve months.

The Property is in the Coastal Western Hemlock biogeoclimatic zone which is more commonly known as the Temperate Rainforest of B.C. The forests within this zone such as those in the Cameron River area are highly productive and are dominated by western

hemlock and Pacific silver fir tree species. There are also varying amounts of western red cedar, yellow cedar and Pacific yew. The hemlock forests have been logged, sometimes twice, and a wide network of old alder covered roads mark the earlier logging efforts. Old overgrown road metal quarries are located along some of these roads. Much of the area has been replanted. Off road, the landscape is rugged and the forest litter deep and difficult to traverse.

### 5.3 Local Resources

The nearest population center and place to acquire supplies and services for mineral exploration and development is the Town of Port Alberni (pop. 17,678 in 2016). This city provides support for the local logging industry. Port Alberni has all the necessary amenities to support resource development. It is the nearest location of police, hospitals, groceries, fuel, helicopter services, hardware and other service and supply businesses. As an industrial town there would also be a supply of suitable personnel that could be trained to work in a mining operation.

### 5.4 Infrastructure

Highway 4 is the main transportation corridor between Parksville and Port Alberni on Vancouver Island (Figures 2 and 3). As mentioned above a network of logging roads connects to this highway approximately 11 kilometres east of Port Alberni. These logging roads provide good access to most of the Property.

The nearest BC Hydro transmission line is located in the Alberni Pass (Figure 2) approximately 16 kilometres north of the Property.

Port Alberni is located at the head of the Alberni Inlet on the west coast of Vancouver Island and could be used as a deep water port for any future mining operation.

In the writer's opinion the Property covers a number of sites on public lands that would be suitable for the construction of a mill, development of a tailings pond and creation of waste dumps if the property should advance to the development stage. There is adequate water available on the property from spring fed lakes and creeks.

### 5.5 Physiography

The Property lies within the Vancouver Island Mountains physiographic region and has a moderately rugged topography with a lower elevation of 520 metres along the Cameron River rising to a high point of about 1080 metres at Peak Lake. The Property covers the southeast end of the northwest trending MacLaughlin Ridge that separates the Cameron

River and China Creek drainages (Figure 2). Outcrop on the Property is extensive with good exposures in road cuts, creek gullies and borrow pits along major logging roads. In the writer's opinion the surface rights and terrain are sufficient for an on-site mining operation including space for a mill, processing plant, tailings pond and waste disposal sites.

## 6 History

### 6.1 Early History

The earliest record of work in the area dates back to 1862 (Cope, 1988) when some small scale placer mining took place in the China Creek drainage (Figure 2). Hydraulic leases in the 1890's produced an estimated \$40,000 worth of gold. Active prospecting between 1892 and 1900 resulted in the discovery of gold-quartz veins at Mineral Creek (Debbie showing), approximately 7.6 kilometres northwest of the Peak Lake showing (Figure 2). Vancouver Island Gold Mines Ltd. constructed an 8 stamp mill on Mineral Creek in 1898. The first recorded work on the Property was at the turn of the century, when a short decline was sunk on a quartz vein at the Peak Lake (Emma) showing. Little work was done in the area between 1900 and 1933.

In 1933, Vancouver Island Gold Mines Ltd. resumed exploration on the Mineral Creek deposits and in 1936 built a 35 ton per day concentrator. This mill only operated for a short time. In 1936 the Havilah property, which is located 5.9 kilometres southwest of the Peak Lake (Emma) showing was developed. This property produced a small quantity of gold-bearing material over the next three years. Together the Vancouver Island Gold and Havilah properties produced 1,397 tonnes (1,565 tons) of material averaging 12.34 grams per tonne (0.36 ounces per ton) Au and 30.51 grams per tonne (0.89 ounces per ton) Ag.

Between 1938 and 1942, the Thistle property, located 2.1 kilometres southwest of the Havilah, is reported to have produced 6,131 tonnes (6,867 tons) of material averaging 13.4 grams per tonne (0.39 ounces per ton) Au, 8.2 grams per tonne (0.24 ounces per ton) Ag and 4.56 percent Cu.

In 1941 active prospecting was carried out by Bralorne Gold Mines and Pioneer Gold Mines of B.C. Ltd. (Cope, 1988) focussing on the Black Lion and Black Panther properties respectively (Figure 2). These properties are located approximately 1.6 kilometres south of the Havilah property.

## 6.2 1962 – Hunting Survey Corp.

In 1962, Hunting Survey Corp conducted an airborne magnetic survey over what was then referred to as the Emma property. There is no information on the results of this program in the public record.

## 6.3 1963-1966 – Gunnex Ltd.

From 1963 to 1966 Gunnex Ltd. carried out regional mapping, silt sampling, and prospecting in the vicinity of the Property (Gunnex, 1966). There is no publically available information on the results of this work.

## 6.4 1979 – Western Mines Ltd.

In June 1979, Harlan Meade of Western Mines Ltd. examined and sampled several showings of sulphide bearing quartz veins on the Emma claims (Meade, 1979). He recommended no additional work be done on the Property at that time. Subsequent to this work, the historic Property owners discovered a narrow quartz vein with very high gold and silver concentrations (Cope 1988).

## 6.5 1981 – Prism Resources Inc.

In 1981, R. Elander, K. Farrell, and A. Farrell discovered a narrow quartz vein with anomalous gold and silver concentrations. This discovery resulted in the staking of the Emma 1-15 claims. These claims were subsequently examined by G. Sivertz on behalf of Prism Resources Inc. Prism examined and sampled the area of the claims but no assessment report was filed for the work done. However, Phendler (1983) reports that Sivertz took samples “across the full thickness of the vein (15 centimetres) at one meter intervals along the 5 metre length. These averaged 3.09 ounces Au and 4.26 ounces Ag per ton”. Sivertz also collected a grab sample of heavily mineralized material (pyrite?) that assayed 6.10 ounces Au and 6.02 ounces Ag per ton (Phendler, 1983). Cope (1988) reports that Sivertz concluded that there was little potential for a large tonnage deposit and recommended no further work be done (Sivertz, 1981)

## 6.6 1982 – Westmin Resources Ltd.

In 1982, G. Benvenuto, on behalf of Westmin Resources Ltd., examined and sampled the showings on the Emma Property (Benvenuto, 1982). Based on three days of mapping and rock sampling, he noted that five mineralized, broadly folded bull quartz veins with a general northwest strike occur in the area east of Peak Lake. Mineralization included pyrite, molybdenum, sphalerite, chalcopyrite and galena. The narrow quartz vein sampled by Prism

in 1981 was re-sampled at the same 1 metre intervals along the vein. These samples assayed up to 105 grams per tonne Au, 146 grams per tonne Ag, 0.365 percent Cu, 0.9 percent Pb and 3.2 percent Zn thus confirming the results obtained by Prism Resources. Cope (1988) reports that Benvenuto recommended no further work by Westmin Resources due to there being too few veins of sufficient thickness and continuity to form an economic deposit on the Property (Benvenuto, 1982).

## 6.7 1983-1988 – Au Resources Ltd.

In 1983, Au Resources Ltd. purchased a 79% interest in the Emma Property from R. Elander, K. Farrell and A. Farrell, with the remaining 21% held by the original owners. R.W. Phendler recommended further work on the Property based on a one-day property examination and the presence of a number of auriferous quartz veins (Phendler, 1983). Two samples collected by Phendler from the High Grade Zone returned values of 47.7 grams per tonne (1.390 ounces per ton) Au and 68.9 grams per tonnes (2.01 ounces per ton) Ag and 16.7 grams per tonne (0.487 ounces per ton) Au and 41.1 grams per tonne (1.20 ounces per ton) Ag across a vein width of 15 centimetres.

In 1984, under the direction of Mr. Phendler, a small grid was established over known areas of interest. A total of 759 soil samples, 13 silt samples, and 28 rock samples were collected and analyzed for gold (selective samples assayed for silver). Several anomalous zones were delineated. Au Resources also did an EM/magnetometer survey, trenched and stripped several veins and carried out geologic mapping and prospecting.

In September of 1984 an additional 227 soil samples were collected on closely spaced lines extending some of the soil anomalies and outlining two new ones (Cope, 1988). Soil samples collected along logging roads at 50 metre intervals outlined the R-20 zone in the northeast corner of the Emma Property and Kammat Creek Zone. Phendler (1985) recommend additional VLF-EM work, soil geochemistry and trenching to better delineate anomalies, followed by a diamond drilling program

Later in 1985, under the supervision of T.E. Lisle, additional work was completed to fulfill assessment requirements for Au Resources Ltd. A total of 207 soil samples were collected and assayed for gold and silver. A 12.5 line-kilometre VLF-EM was conducted in October 1985. The VLF-EM was 'Fraser filtered' and plotted, indicating four weak to moderate conductors, some of which were coincident with soil geochemical anomalies (Lisle, 1985). A 7.6 line-kilometres magnetometer survey was also done but the instrument used was apparently not sensitive enough and only slightly higher than background readings were obtained (Cope, 1988).

In late 1985 the 900 zone was discovered at the Debbie property in the Mineral Creek Area thus resulting in a surge in exploration activity in the area.

In 1987-1988 Au Resources did detailed geological mapping, rock sampling, soil sampling and an induced polarization survey on the Property under the supervision of MPH Consulting Limited personnel. Subsequently, 1,511 metres of diamond drilling (12 holes) was carried out to test a number of anomalies outlined by the various surveys. Drill holes EM87-1 to 5 targeted the High Grade Zone (Figure 4) and drill holes EM87-6 to 12 targeted the Peak Lake Zone (Figure 5). Five areas of significant mineralization and gold enrichment were identified in the course of fieldwork (Cope, 1988). Figures 4 and 5 are compilation maps showing the geophysical and geochemical anomalies and drill hole locations in the vicinity of the High Grade and Peak Lake showings respectively. Tables 2 and 3 summarize significant drill hole intersections from the 1987 drilling program. An aggressive follow-up program was recommended to further define and examine the anomalous zones (Cope, 1988).

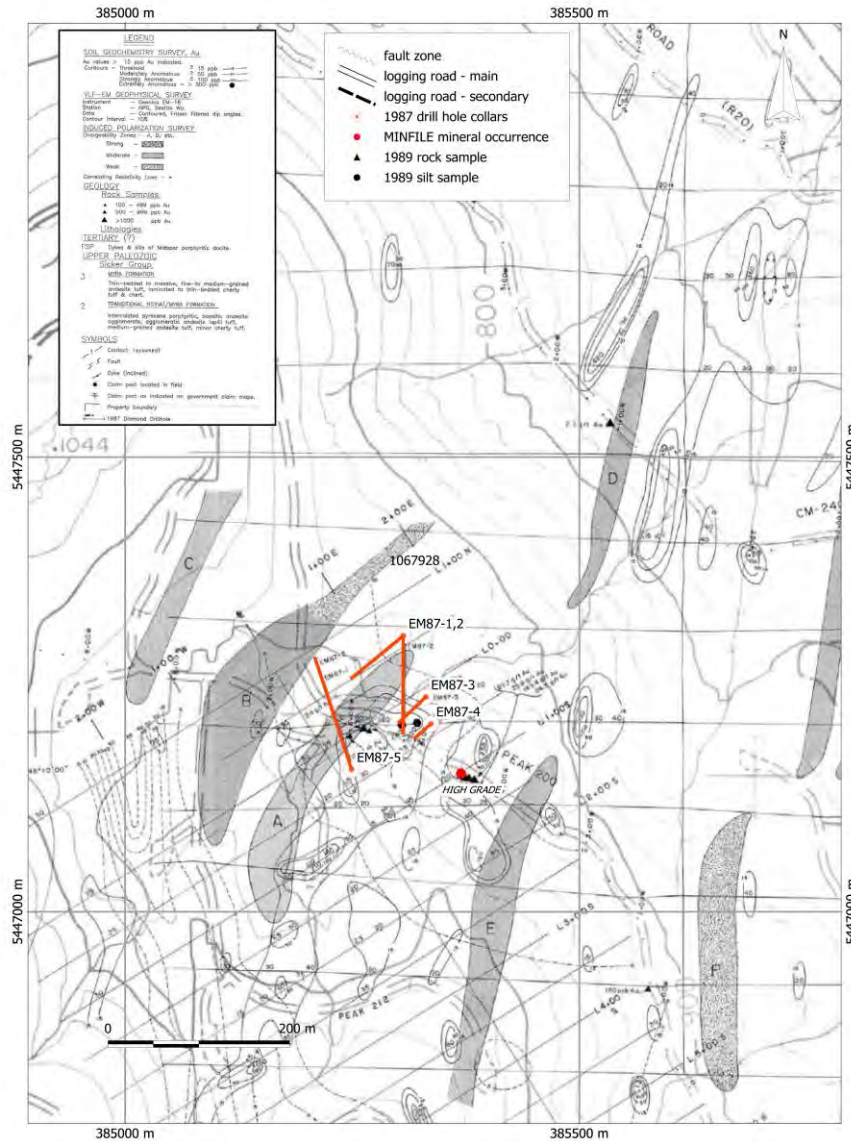


Figure 4. Compilation map and drill hole locations, High Grade Zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Map prepared by D.G. MacIntyre, September, 2020.

Table 2. Significant drill intersections, High Grade zone. Table from Cope, 1988.



(m) FROM	(m) TO	(m) LGTH	(ppb) Au	(ppm) Ag	(ppm) Cu	(ppm) Zn	(ppm) OTHER
<u>DDH - EM87-1</u> Target: Downdip-strike extension of High Grade vein.							
25.34	25.61	0.27	65	5.2	0.284%	95	
74.98	75.26	0.28	107	0.7	71	47	
103.23	103.28	0.05	1.40 g/t (0.041 oz/T)	4.1	335	0.54%	
107.67	107.74	0.07	65	2.1	0.355%	89	
<u>DDH - EM87-2</u> Target: Coincident anomalous soil gold geochemistry and induced polarization anomaly.							
73.87	73.97	0.10	25	5.9	0.363%	92	
77.30	77.43	0.13	1.18 g/t (0.034 oz/T)	22.3 g/t (0.65 oz/T)	410	111	
87.70	87.88	0.18	1.98 g/t (0.058 oz/T)	20.0	4320	64340	817 Pb
95.08	95.21	0.13	32	1.4	120	0.34%	
106.09	106.20	0.11	1.22 g/t (0.036 oz/T)	18.5 g/t (0.54 oz/T)	0.332%	124	
114.70	114.80	0.10	87	2.4	0.215%	3.73%	
115.06	115.20	0.14	112	1.1	774	0.32%	
<u>DDH - EM87-3</u> Target: Downdip-strike extension of High Grade vein.							
56.08	56.16	0.08	2.31 g/t (0.067 oz/T)	4.3	457	90	
<u>DDH - EM87-5</u> Target: Downdip extension of gold-bearing quartz veins sampled at surface, anomalous soil gold geochemistry, induced polarization anomaly.							
33.51	33.66	0.15	123	5.0	420	98	
34.82	34.89	0.07	3.28 g/t (0.096 oz/T)	1.1	81	43	
38.39	38.49	0.10	560	3.0	871	36	
39.19	39.39	0.20	370	0.8	36	47	

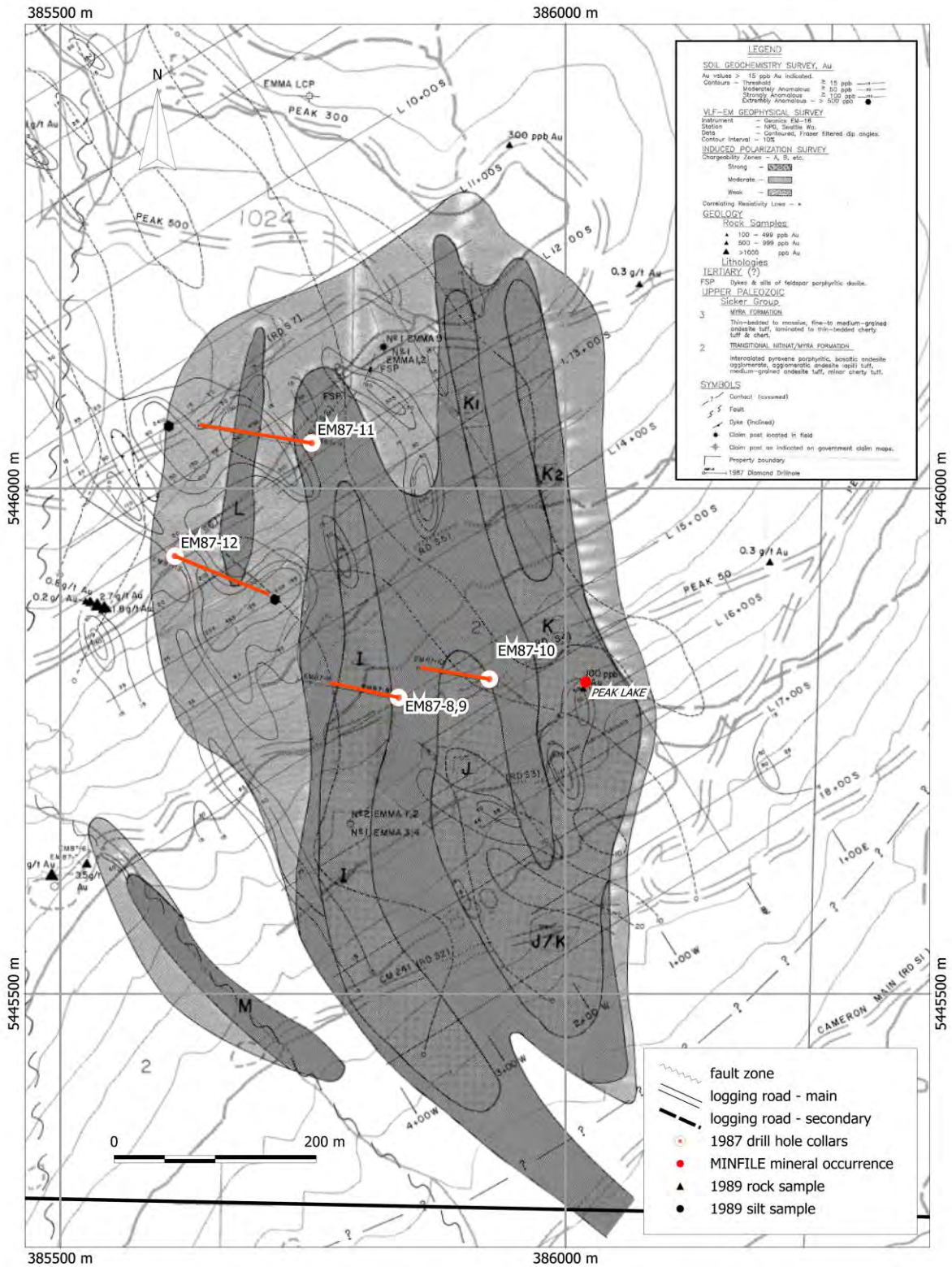


Figure 5. Compilation map and drill hole locations, Peak Lake Zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Map prepared by D.G. MacIntyre, September, 2020.

**Table 3. Significant drill intersections, Peak Lake zone. Table from Cope, 1988.**

(m) FROM	(m) TO	(m) LGTH	(ppb) Au	(ppm) Ag	(ppm) Cu	(ppm) Zn	(ppm) OTHER
<u>DDH - EM87-6</u> Target: Downdip extensions of gold-bearing quartz veins sampled at surface.							
5.89	5.96	0.07	102	1.6	116	83	
10.00	10.05	0.05	405	7.2	411	247	
22.59	22.74	0.15	30	16.4 g/t (0.48 oz/T)	735	63	
29.15	29.27	0.12	200	76.4 g/t (2.23 oz/T)	228	1249	419 Pb
40.84	40.94	0.10	54	18.5 g/t (0.54 oz/T)	53	164	236 Pb
46.35	46.49	0.14	0.53 g/t (0.015 oz/T)	20.0 g/t (0.58 oz/T)	343	1001	380 Pb
49.60	49.76	0.16	156	37.9 g/t (1.11 oz/T)	166	191	501 Pb
64.97	65.04	0.07	17.8 g/t (0.519 oz/T)	316.0 g/t (9.22 oz/T)	0.263%	0.96%	2658 Pb
65.14	64.29	0.15	19	4.6	128	0.43%	1807 Pb
65.29	65.37	0.08	22	5.0	153	0.31%	3629 Pb
<u>DDH - EM87-7</u> Target: Downdip extensions of gold-bearing quartz veins sampled at surface.							
6.58	6.78	0.20	2.80 g/t (0.082 oz/T)	34.0 g/t (0.99 oz/T)	675	295	
19.98	20.03	0.05	157	5.3	0.758%	228	
34.40	34.52	0.12	62	114.5 g/t (3.34 oz/T)	339	532	786 Pb
62.59	62.67	0.08	208	4.9	368	156	
79.40	79.96	0.56	24	1.5	94	0.34%	
81.02	81.21	0.19	182	6.5	132	75	
<u>DDH - EM87-10</u> Target: Induced polarization anomaly.							
8.38	8.55	0.17	145	1.5	17	125	
<u>DDH - EM87-11</u> Target: Coincident soil gold geochemistry anomaly and induced polarization anomaly.							
127.73	127.80	0.07	48	1.9	0.252%	106	227 Ni
147.82	147.87	0.05	118	16.8 g/t (0.49 oz/T)	548	0.69%	

DDH – EM87–12 Target: Soil gold geochemistry anomaly.

7.87	8.65	0.78	110	1.2	224	107	
20.53	20.65	0.12	292	10.3 g/t (0.30 oz/T)	0.850%	0.60%	
36.20	36.32	0.12	44	38.0 g/t (1.11 oz/T)	1.315%	605	711 As
38.69	38.90	0.21	90	58.3 g/t (1.70 oz/T)	0.429%	4.37%	1616.8 Cd, 585 Pb, 840 As
39.12	39.39	0.27	148	2.6	666	1058	
39.97	40.12	0.15	240	53.7 g/t (1.57 oz/T)	0.570%	9.2%	455 As, 567 Pb, 3582.5 Cd
43.41	43.56	0.15		0.58 g/t (0.017 oz/T)	6.5	1051	1427 569 As
58.93	59.22	0.29		0.65 g/t (0.019 oz/T)	2.3	483	170 1466 As
87.17	87.72	0.55	375	6.6	630	302	
91.18	91.24	0.06		0.81 g/t (0.024 oz/T)	1.9	111	540

Cope (1988) describes the results of the 1987 drilling program but does not indicate whether the drill intersections listed in tables 2 and 3 are true width or not.

In 1989, MPH Consulting Limited, on behalf of Au Resource Ltd., collected 13 heavy mineral concentrate (HMC) stream samples and 17 rock samples from the Emma 20 zone. Ten of the HMC silt samples collected yielded elevated to anomalous gold values, ranging from 50 to 5775ppb gold (Lorenzetti, 1989). Follow up work consisting of prospecting of areas which returned anomalous HMC silt values, as well as extending the previously established High-Grade Zone soil sampling grid to the east in order to cover the area which yielded highly anomalous HMC stream sediment results (up to 5775ppb Au). This work resulted in the discovery of the Emma 20 showing.

## 6.8 2016 – Karmamount Mineral Exploration Inc.

In 2016 Karmamount Mineral Exploration examined quartz veins and shear zones identified by previous operators in the area south of the Property. Of the 61 rock samples collected only 6 were from the current Peak Lake Property. All 6 of these samples were collected near the Peak Lake showing (Eden and Li, 2016). The best value obtained was 0.238 ppm Au for sample RAR1561.

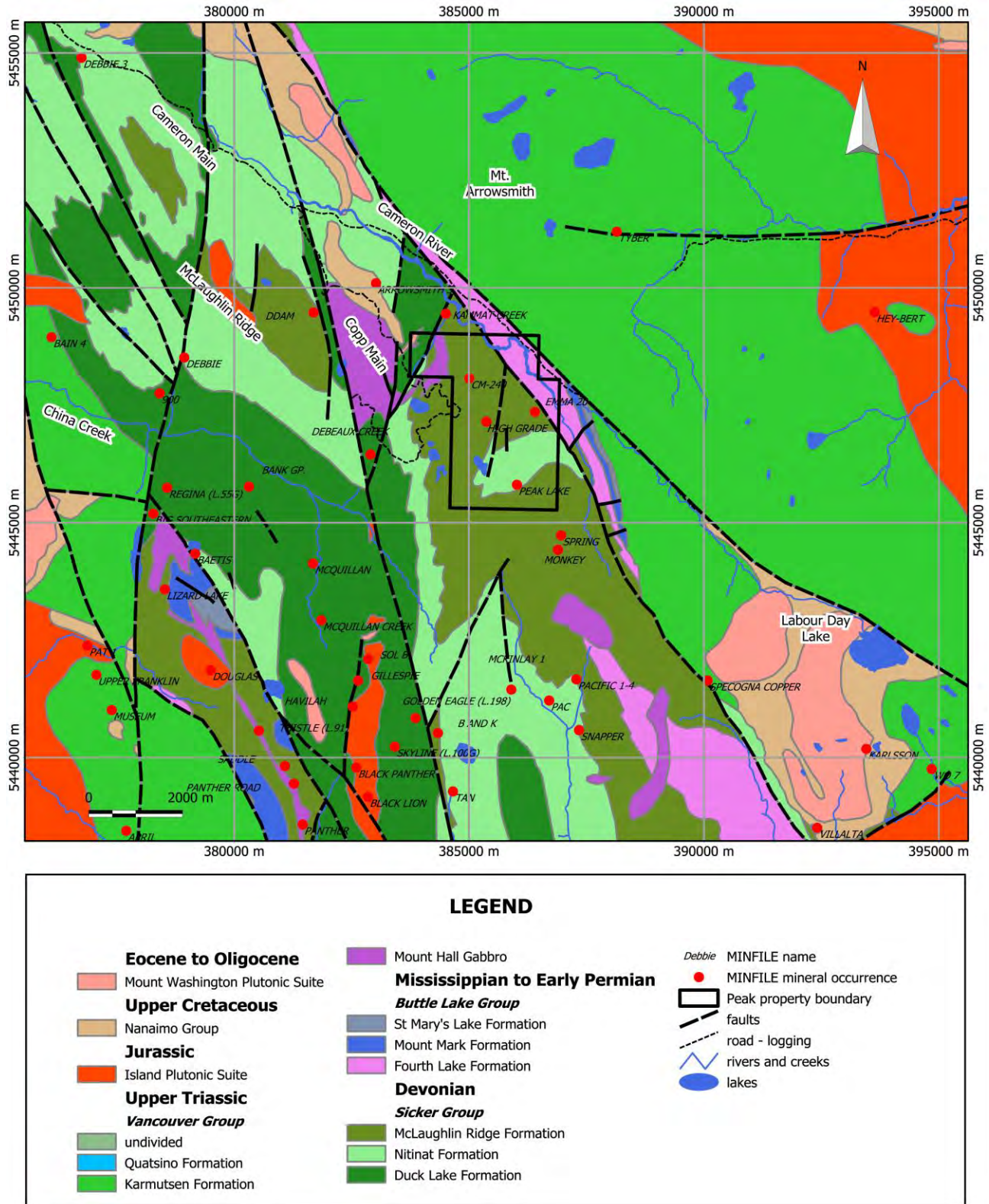


Figure 6. Regional geologic setting, Peak Property. Map prepared by D.G. MacIntyre from B.C. Ministry of Energy, Mines and Petroleum Resources geospatial data, September 2020.

## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

The following is a description of the regional geology in the vicinity of the Peak Lake Property. Mapping in the area was done by the Geological Survey Branch of the B.C. Ministry of Energy, Mines and Petroleum Resources (Massey and Friday, 1987)

#### 7.1.1 Sicker Group

The oldest rocks in the Alberni - Nanaimo Lakes area belong to the Paleozoic Sicker and Buttle Lake groups which contain volcanic and sedimentary units ranging from Middle Devonian to Early Permian age. The Devonian Sicker Group is a thick package of lower greenschist metavolcanic and volcanoclastic rocks that formed in an oceanic island-arc environment .

#### Duck Lake Formation

The lowest unit is the Duck Lake Formation which comprises a suite of grey to maroon and green pillowed basalts and basaltic breccias with chert, jasper and cherty tuff interbeds near the top of the sequence. Well-bedded felsic tuffs and lapilli tuffs are associated with the cherts and jaspers. Massive dacite-rhyolite dikes and sills intrude the pillowed basalts. The pillowed basalts can be divided into two subunits on the basis of geochemistry. The apparently lowermost flows are tholeiitic with an affinity to enriched-type mid-ocean ridge basalts and probably represent the oceanic substrate upon which the Sicker arc developed. The uppermost lavas, and dacite intrusions, are of high-potassium calcalkaline chemistry and mark the initiation of arc construction. These two suites were not recognized nor distinguished in the field.

#### Nitinat Formation

Overlying the Duck Lake Formation is the Nitinat Formation characterized by pyroxene-feldspar-porphyrific basalts and basaltic andesites. These typically occur as agglomerates, breccias, lapilli tuffs and crystal tuffs that formed as pyroclastic flows, debris flows and lahars. Pyroxene-phyric, amygdaloidal, pillowed and massive flows are also developed.

#### McLaughlin Ridge Formation

The Nitinat Formation passes upwards transitionally (over a thickness of about 150 metres ) into the McLaughlin Ridge Formation, a sequence of volcanoclastic sediments dominated by thickly bedded, massive tuffites and lithic tuffites, interbedded with thinly bedded tuffites

and laminated tuffaceous sandstone, siltstone and argillite. The beds tend to form fining-upward cycles from tuffite to argillite, but overall the sequence becomes coarser towards the top with more frequent development of lithic tuffite and coarse pyroclastic horizons. The sequence probably formed as a volcanoclastic apron around a volcanic island and grades eastwards into more proximal volcanic-dominated facies in the Duncan area. The Nitinat and McLaughlin Ridge formations form a coherent suite of sodium-potassium calcalkaline chemistry typical of island arcs. The McLaughlin Ridge formation is equivalent to the Myra formation found further north in the Buttle Lake area.

### **7.1.2 Buttle Lake Group**

The Buttle Lake Group is made up of a dominantly epiclastic and bioclastic limestone sedimentary sequence ranging from Mississippian to Early Permian in age. This sedimentary package is apparently conformable on the underlying volcanics along the northeastern limb of the Cowichan uplift, for example, in the upper Cameron River valley and St Mary's Lake area, but is unconformable along the southwestern limb and in the Fourth Lake area. The Buttle Lake Group is subdivided into two formations: the Fourth Lake and Mount Mark.

#### **Fourth Lake Formation**

The Fourth Lake Formation comprises mostly thin-bedded often cherty sediments. These vary from green and red ribbon cherts, black cherty argillites, green and white cherty tuffs, grey and green siltstones and argillites, to thicker bedded green volcanic sandstones. The upper part of the formation is characterized by thinly bedded, turbiditic sandstone-siltstone-argillite intercalations, with some thicker beds of volcanic sandstone. These pass upwards into argillite-calcarenite interbeds at the top of the sequence.

#### **Mount Mark and St. Mary's Lake Formations**

The Mount Mark Formation conformably overlies and laterally interfingers with the Fourth Lake Formation. It consists of well-bedded bioclastic calcarenite and calcirudite with minor argillite and chert interbeds. The overlying St Mary's Lake Formation is sporadically preserved beneath the Triassic unconformity. It comprises clastic sediments varying from polymictic conglomerates to volcanic sandstones and argillites.

### **7.1.3 Vancouver Group**

Rocks of the Upper Triassic Vancouver Group are exposed throughout the map area, flanking the Paleozoic core of the Cowichan uplift. The group is subdivided into a thick lower basaltic volcanic package (Karmutsen Formation) and a thin upper sedimentary package (Quatsino and Parson Bay formations).

## **Karmutsen Formation**

The lower Karmutsen Formation basalts rest unconformably on the underlying Paleozoic rocks. The basalts form pillowed flows, pillow breccias and hyaloclastite breccias interbedded with massive flows and sills. There is a tendency for the massive flows to dominate the sequence towards the top and the pillowed flows the lower parts. The Karmutsen Formation basalts show amygdule infillings and alteration assemblages typical of the prehnite-pumpellyite facies.

## **Mount Hall gabbro**

The mafic bodies of the Mount Hall gabbro, intrusive into the Paleozoic rocks, are coeval and consanguineous with the Karmutsen Formation basalts. The basalts formed from an iron-titanium enriched tholeiitic magma, similar to continental tholeiite or enriched mid-ocean ridge basalt, probably in an oceanic flood-basalt province. Succeeding limestones, argillites and tuffaceous sediments of the Quatsino and Parson Bay formations are poorly developed in the map area.

### **7.1.4 Island Plutonic Suite**

All of the Paleozoic and Triassic sequences have been intruded by granodioritic stocks of the Early to Middle Jurassic Island Plutonic Suite. These bodies are usually elongate in shape, although the Fourth Lake stock is roughly circular. The intrusions are dominantly equigranular quartz diorite to granodiorite but show considerable lithological variation. The Corrigan pluton in particular is heterogeneous and composite, comprising a mix of diorite, quartz diorite, granodiorite and monzogranite phases with abundant minor intrusive dikes. Most of the large intrusive bodies are rich in inclusions, especially in marginal agmatitic intrusive breccias. Contact metamorphic aureoles are developed around the intrusions causing hornfelsing and skarning in Paleozoic rocks. A variety of dikes and small irregular intrusions that are probably coeval with the Island Plutonic Suite occur throughout the area. Lithologically they include intermediate feldspar porphyry, hornblende feldspar porphyry and minor diabase. The Jurassic intrusions form a metaluminous, medium to high-potassium calcalkaline suite typical of a convergent-margin environment.

### **7.1.5 Nanaimo Group**

Clastic sediments of the Upper Cretaceous Nanaimo Group lie unconformably on the older rocks. They are most thickly developed in the Alberni Valley, though only exposed around the margins due to Quaternary cover. The lower Benson Formation comprises basal conglomerates and overlying medium to coarse-grained sandstones. These are succeeded by



the black argillites and siltstones of the Haslam Formation. Younger formations of the Nanaimo Group are absent.

### 7.1.6 Mount Washington Intrusive Suite

Tertiary dacite porphyries of the Mount Washington Intrusive Suite occur throughout the area. Where the magma has penetrated the Nanaimo Group sediments, it has spread out laterally to form thick sills.

### 7.1.7 Structures

Southern Vancouver Island has a complex structural history with frequent rejuvenation of previous structures. All Paleozoic rocks are affected by a series of southeast-trending, upright to overturned, southwest-verging folds. Associated schistosity and lineation are absent from most of the area, only occurring to the west of the Mineral Creek fault. Regional-scale warping of Vancouver Island occurred during the Early to Middle Jurassic, facilitating the emplacement of the Island Plutonic Suite intrusions and producing the geanticlinal Cowichan uplift. The present map pattern is dominated by the northwesterly trending contractional faults of the Tertiary Cowichan fold and thrust system.

These are high angle reverse faults that become listric at mid-crustal levels. They generally place older rocks over younger. The deformation probably took place during the crustal shortening accompanying the formation and emplacement of the Pacific Rim and Crescent terranes out-board of Wrangellia. The north-trending Mineral Creek fault and associated northwest-trending faults, such as the Stokes fault, are subvertical with small, apparently sinistral offsets. They may have formed during minor extension accompanying late-stage post-contractional relaxation.

**Table 4. Table of Formations (Massey and Friday, 1987)**

<b>Age</b>	<b>Unit</b>	<b>Description</b>
Eocene to Oligocene	Mount Washington Plutonic Suite	Quartz diorite, feldspar-hornblende dacite porphyry (42 - 32 Ma)
Upper Cretaceous	Nanaimo Group	Boulder, cobble and pebble conglomerate, coarse to fine sandstone, siltstone, shale, coal
Early Jurassic to Middle Jurassic	Island Plutonic Suite	Granodiorite, quartz diorite, quartz monzonite, diorite, agmatite, feldspar porphyry, minor gabbro and aplite (170 - 185 Ma).
Lower Jurassic	Bonanza Group	Massive amygdaloidal and pillowed basalt to andesite flows, dacite to rhyolite massive or laminated lava, green and maroon tuff, feldspar crystal tuff, breccia, tuffaceous sandstone, argillite, pebble conglomerate and minor limestone

<b>Age</b>	<b>Unit</b>	<b>Description</b>
Late Triassic	Mount Hall Gabbro	Gabbro, diabase, feldspar diabase, glomeroporphyritic diabase and gabbro, minor diorite (215 - 230 Ma). Coeval with Karmutsen Formation.
Middle Triassic to Upper Triassic	Vancouver Group	Undifferentiated Parson Bay and Quatsino formations
Middle Triassic to Upper Triassic	Vancouver Group - Karmutsen Formation	Basalt pillowed flows, pillow breccia, hyaloclastite tuff and breccia, massive amygdaloidal flows, minor tuffs, interflow sediment and limestone lenses (Carnian).
Middle Triassic to Upper Triassic	Vancouver Group - Quatsino Formation	Thick bedded, grey to black, micritic and stylonitic limestone, medium to thin bedded limestone and calcareous siltstone, minor oolitic and bioclastic limestone, garnet-epidote-diopside skarn (Carnian)
Lower Permian	Buttle Lake Group - St Mary's Lake Formation	Volcanic sandstone and conglomerate, graded sandstone-argillite, cherty argillite, chert, limestone-argillite (Lower Permian)
Mississippian to Lower Permian	Buttle Lake Group - Mount Mark Formation	Massive crinoidal limestone, bedded calcirudite and calcarenite, chert, cherty argillite and siltstone, marble (Upper Pennsylvanian to Lower Permian)
Mississippian to Pennsylvanian	Buttle Lake Group - Fourth Lake Formation	Ribbon chert, cherty tuff, graphitic argillite, thinly bedded intercalated sandstone-siltstone-argillite, volcanic sandstone and conglomerate, interbedded argillite and crinoidal limestone, massive and pillowed basalt with intercalated cherty sed
Middle Devonian to Upper Devonian	Sicker Group - Duck Lake Formation	Pillowed and massive basalt flows, monolithic basalt breccia and pillow breccia, chert, jasper and cherty tuff, felsic tuffs, massive dacite and rhyolite, magnetite-hematite-chert iron formation
Middle Devonian to Upper Devonian	Sicker Group - McLaughlin Ridge Formation	Thickly bedded tuffite and lithic tuffite, breccia, tuff, feldspar and quartz-feldspar crystal tuff, lapilli tuff, rhyolite, dacite, laminated tuff, jasper, chert, hematite-chert iron formation
Middle Devonian to Upper Devonian	Sicker Group - Nitinat Formation	Pyroxene-feldspar phyric agglomerate, breccia, lapilli tuff, massive and pillowed flows, massive tuffite, laminated tuff, jasper and chert

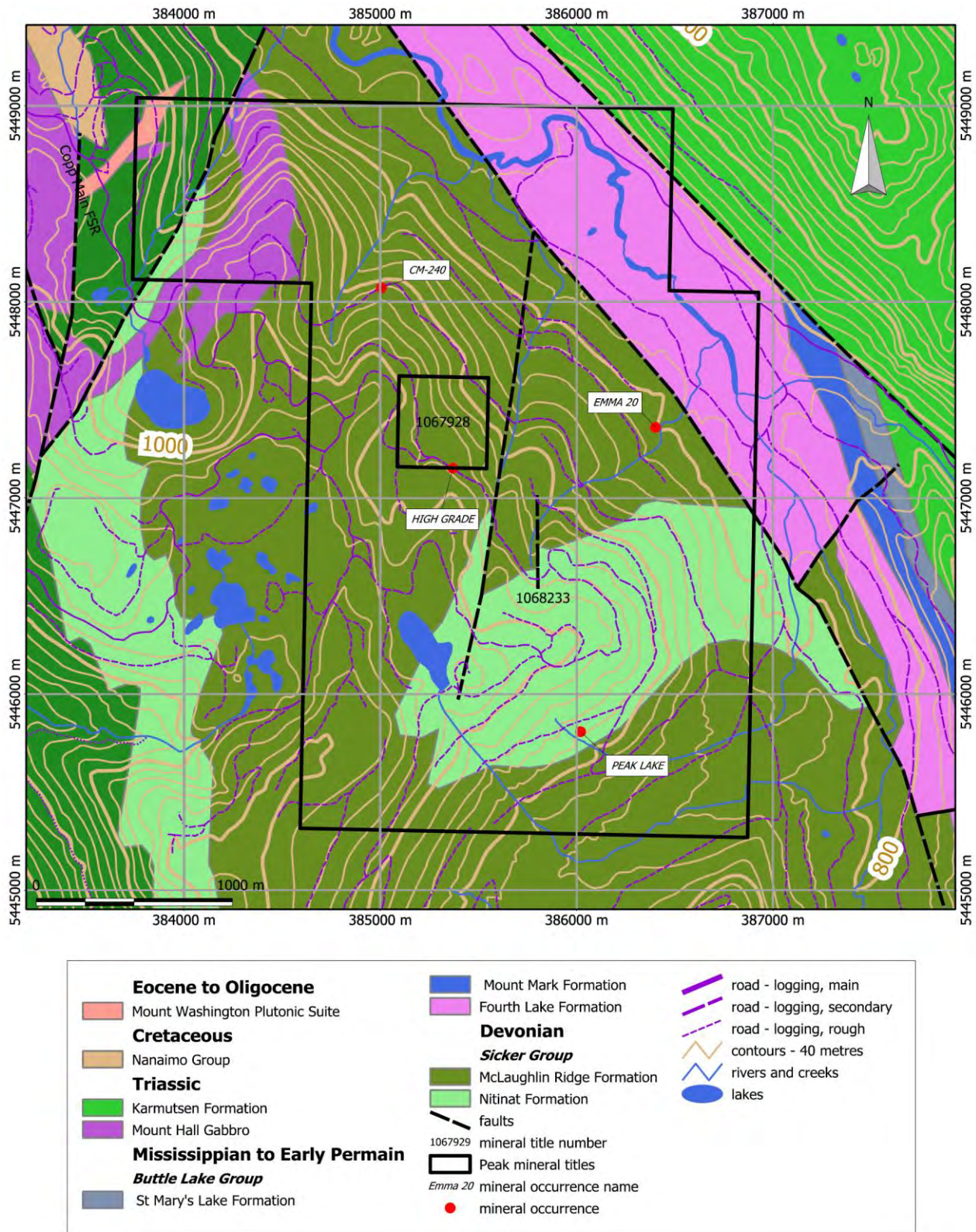


Figure 7. Property Geology, Peak Property. Map prepared by D.G. MacIntyre from B.C. Ministry of Energy, Mines and Petroleum Resources geospatial data, September 2020.

## 7.2 Property Geology and Mineral Occurrences

### 7.2.1 Property Geology

The Peak Lake Property is predominantly underlain by the Nitinat and McLaughlin Ridge (Myra) formations of the Devonian Sicker Group, the Fourth Lake Formation of the Mississippian to Permian Buttle Lake Group and the Triassic Mount Hall gabbro (Cope, 1987, 1988; Lorenzetti, 1989; Figure 7). The Nitinat Formation comprises pyroxene-rich massive basalt flows, pillow lava and flow breccia with intra-flow exhalite packages. The basalt flows are dark green to green-grey, massive, pyroxene-rich (phenocrysts partially altered to hornblende), and moderately epidotized and carbonatized. Locally, the pyroxene is altered to apple-green mica. The pillow lavas are tightly packed, oblate, and amygdaloidal, ranging in size from 10 to 30 centimetres. The amygdules are infilled with quartz, calcite, and chlorite. Pillow interstices are extremely altered to hematite. The flow breccia consists of angular clasts of amygdaloidal basalt (to 8centimetres in size) and is variably chloritized, hematized and silicified. The exhalite package is up to 3 metres thick and consists of brick-red, pyritic jasper with minor black chert.

Medium-grained diabasic gabbro has been intruded along north and northeast trending faults in the northwest corner of the Property. Locally, the gabbro is extensively altered by serpentine with minor exposures of magnetite/ilmenite-rich serpentinite.

A transitional unit has been mapped to define lithologies of a mixed origin, as mappable contacts between Nitinat Formation and McLaughlin Ridge Formation lithologies are rarely observed on the Property. The unit consists of intercalated pyroxene porphyritic, basaltic andesite agglomerate, agglomerate lapilli tuff, medium-grained andesitic tuff and minor cherty tuff. The agglomerate consists predominantly of clast-supported, angular clasts (to 20 centimetres in size), with lesser amygdaloidal basalt and fine-grained tuff. Tuffs are typically thick bedded to massive.

The McLaughlin Ridge Formation (Myra Formation) consists of thin-bedded to massive, fine to medium grained andesite tuff and laminated to thin-bedded cherty tuff and chert. The tuffs exhibit open to isoclinal folds and fault offsets (at both an outcrop and a regional scale).

Structurally, the Property is very complex exhibiting tight, open to isoclinal folding, with abundant fractures, shears and fault zones. The dominant fault trends are northerly, steeply dipping to the east, and northeasterly with steep dips to the northwest. Generally, the faults have developed an alteration envelope to within a few metres of the fault. Fuchsitic pseudomorphs after pyroxene phenocrysts are common within these alteration envelopes.

**Table 5. Mineral occurrences, Peak Property.**

<b>Minfile No.</b>	<b>Name</b>	<b>Commodities</b>	<b>Easting</b>	<b>Northing</b>
092F 143	HIGH GRADE	Au, Ag, Cu, Zn	385370	5447152
092F 564	PEAK LAKE	Au, Ag, Cu, Zn, Mo	386020	5445808
092F 606	CM-240	Au, Ag, Cu	385005	5448072
092F 607	EMMA 20	Au, Ag, Pb, Zn	386402	5447360

### 7.2.2 Mineral Occurrences

Four zones of significant mineralization and/or alteration have previously been outlined on the Property and include the High Grade, Peak Lake, CM-240, and Emma 20 zones (Table 5). The area around the High-Grade vein was mapped in detail by MPH consultants for Au Resources Ltd. in 1987 (Cope, 1988). The results of this mapping and the location of rock samples and drill holes are shown in Figure 8. The High Grade vein occurs within a zone of extensive quartz and quartz carbonate veining in a tightly folded sequence of cherty tuffs. The south-trending milky white quartz vein, referred to as the High-Grade vein, contains up to 40% sulphides, including sphalerite, pyrite, chalcopyrite and minor arsenopyrite. The vein strikes approximately 175 degrees and dips 32 degrees to the east. A highly anomalous soil gold anomaly (yielding values up to 2620 ppb Au) near the exposed vein is flanked by two zones of moderate to strongly anomalous chargeability anomalies. (Figure 4).

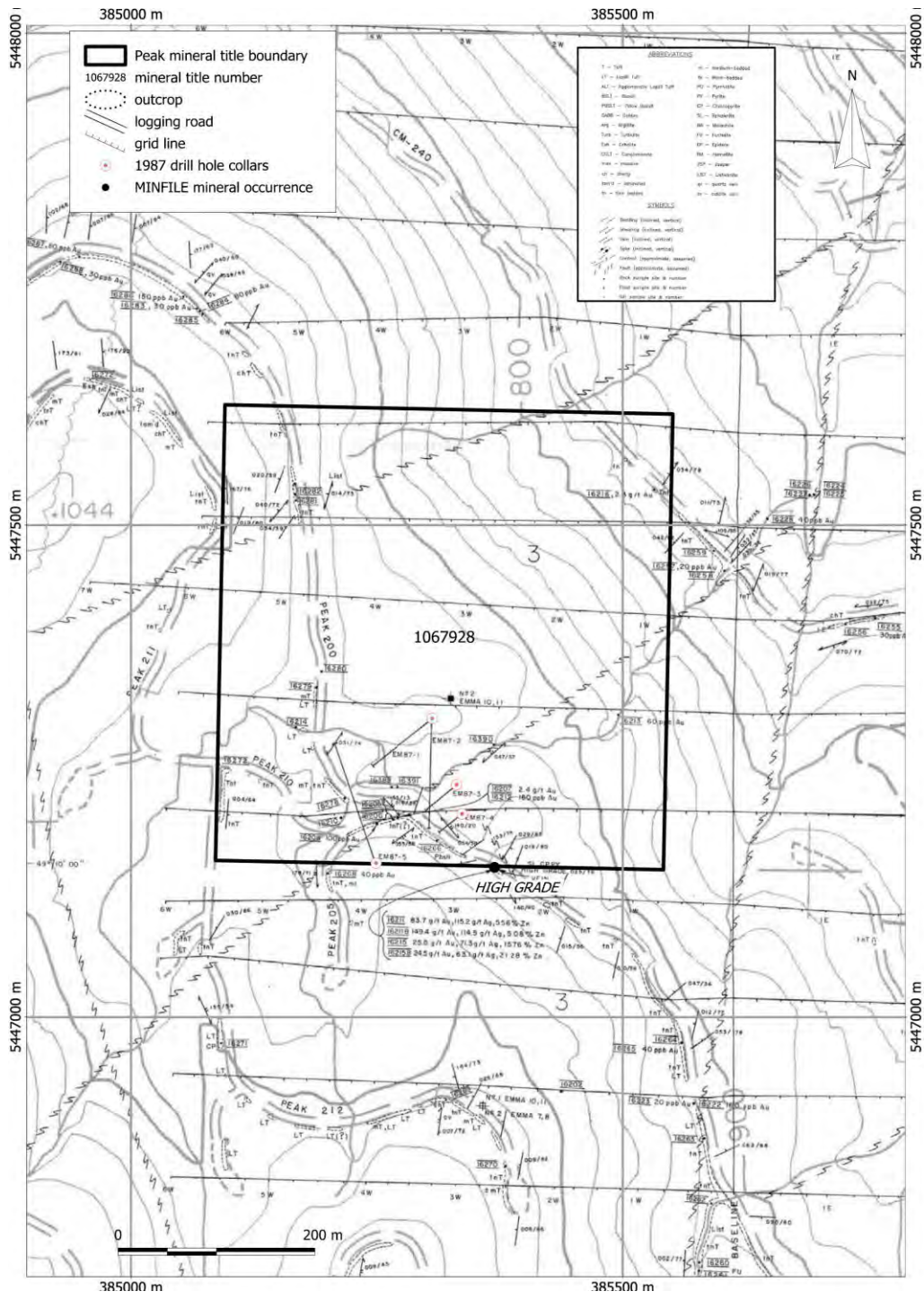


Figure 8. Detailed geology and drill hole locations, High Grade zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020.

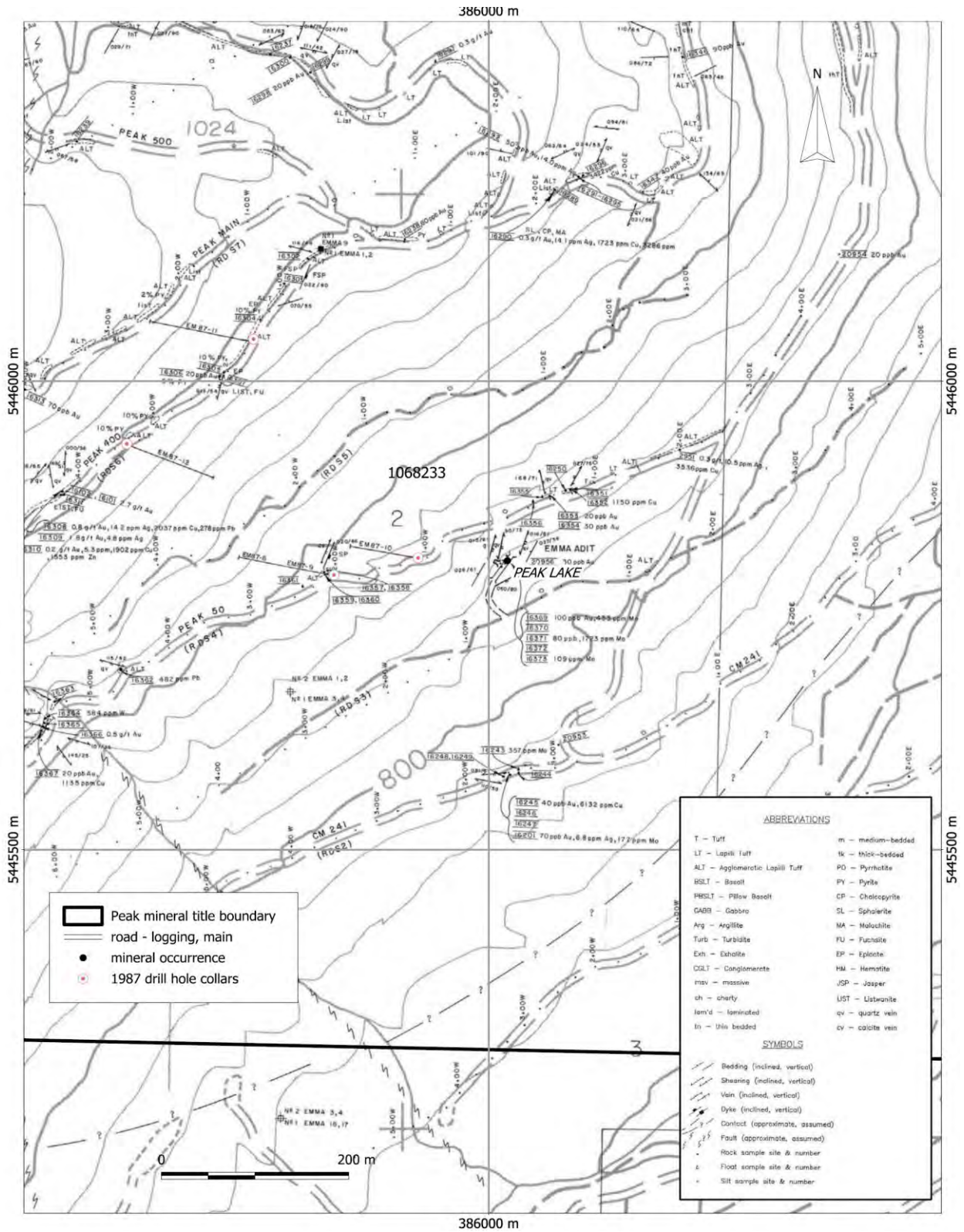


Figure 9 Detailed geology and drill hole locations, Peak Lake zone. Base map from Cope (1988). Note: roads shown on this map are now completely overgrown. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020.

The Peak Lake zone was mapped and sampled in detail in 1987 by MPH Consultants on behalf of Au Resources Ltd. (Cope, 1987). Seven short diamond drill holes were also completed. A detailed geologic map showing the location of rock samples and drill holes is shown in Figure 9. The Peak Lake zone is characterized by widespread pyrite and pyrrhotite mineralization in McLaughlin Ridge and possibly Nitinat Formation lithologies and quartz veins. Extensive alteration in the zone varies from quartz-epidote flooding to carbonatization proximal to the Peak Lake fault. The quartz veins locally contain sphalerite and chalcopyrite in addition to pyrite. Three very strong, elongated induced polarization anomalies roughly parallel the fault, while chargeability anomalies flank soil gold geochemistry anomalies (values up to 2410 ppb Au). Quartz veins have yielded assays of up to 2.7 grams per tonne Au (Figure 9).

The CM-240 zone consists of north-northeast trending quartz and quartz carbonate veins with up to 20% pyrite and 1% sphalerite (yielding values of up to 2.3 grams per tonne Au and 6939 ppm zinc).

In 1989, MPH Consulting Limited, on behalf of Au Resources Ltd., collected 13 heavy mineral concentrate (HMC) stream samples and 17 rock samples from the Emma 20 zone (Lorenzetti, 1989). The Emma 20 zone is located over 1 kilometre east of the High-Grade zone and is characterized by extremely anomalous pan concentrate silt results collected along a 200 metres strike-length from a northeast trending creek which assayed 480 ppb Au, and 5775 ppb Au (Figure 10). A rock sample (IR-7) also yielded 800 ppb Au and 9.9 ppm Ag. The creek follows a fault separating transitional rocks to the southeast from McLaughlin Ridge Formation rocks to the northwest. During the same field program in 1989, silt samples were collected immediately downstream of the High-Grade zone which ran up to 600 ppb Au, highlighting the discovery potential of the Emma 20 Zone (Lorenzetti, 1989).



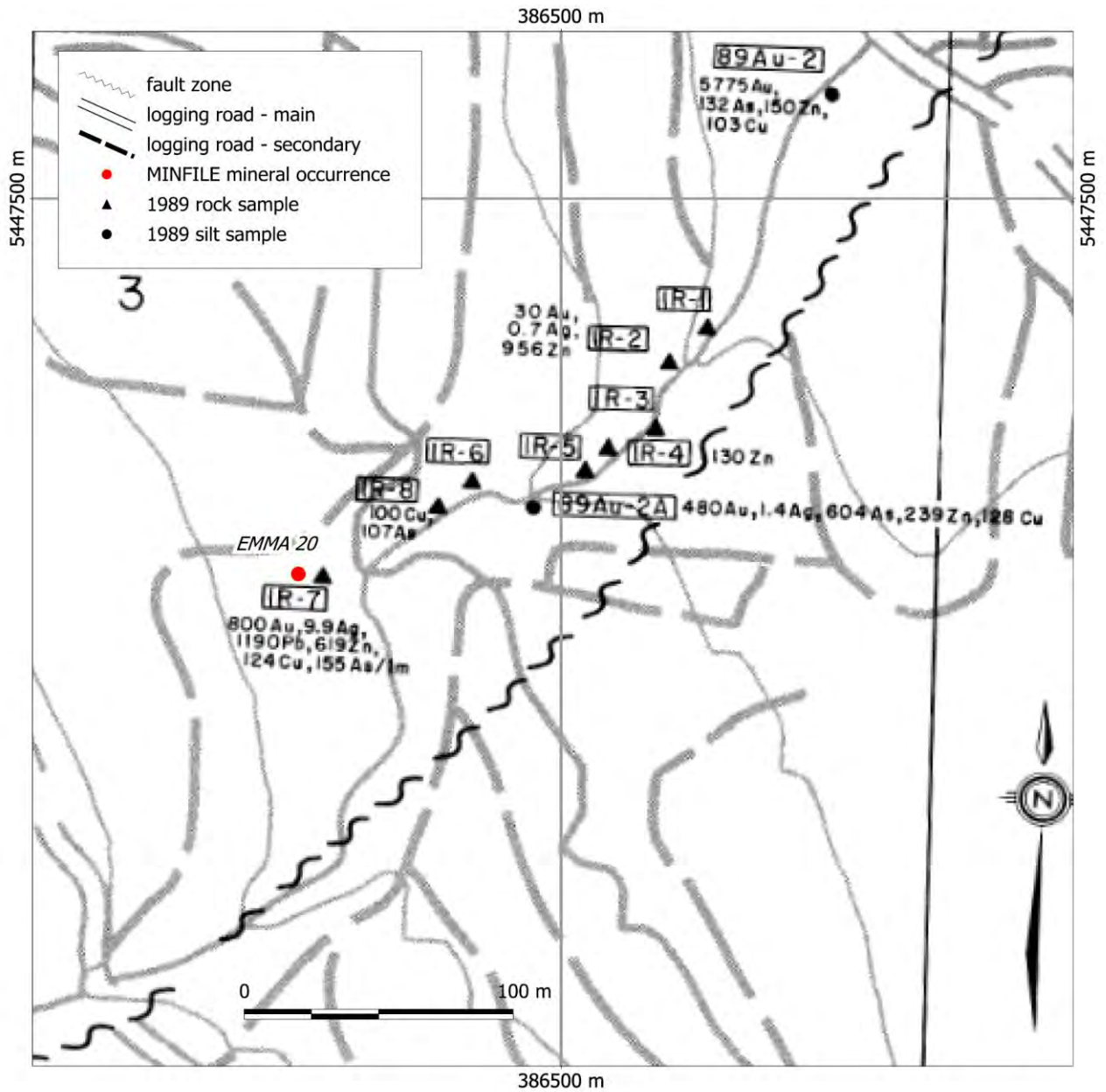


Figure 10 Detailed geology and geochemical sample locations, Emma 20 showing. Map modified from Lorenzetti, 1989. Georeferencing and addition of current mineral title boundaries by D.G. MacIntyre, September 2020. Note: Au values in ppb, all other values ppm.

## 8 Deposit Types

Anomalous Au and Ag values on the Peak Lake Property occur in narrow, structurally controlled quartz veins. Although the High Grade and Peak Lake showings are classified in the Minfile database as Cu<sup>±</sup>-Ag quartz veins (deposit model I06), in the writer’s opinion they are better classified as Au-quartz veins (deposit model I01). Gold-bearing quartz veins and veinlets of this type have minor sulphides and crosscut a wide variety of hostrocks.

They are typically localized along major regional faults and related splays. The wallrock is typically altered to silica, pyrite and muscovite within a broader carbonate alteration halo. Gold-quartz veins are found within zones of intense and pervasive carbonate alteration along second order or later faults marginal to transcrustal breaks. They are commonly closely associated with, late syncollisional, structurally controlled intermediate to felsic magmatism.

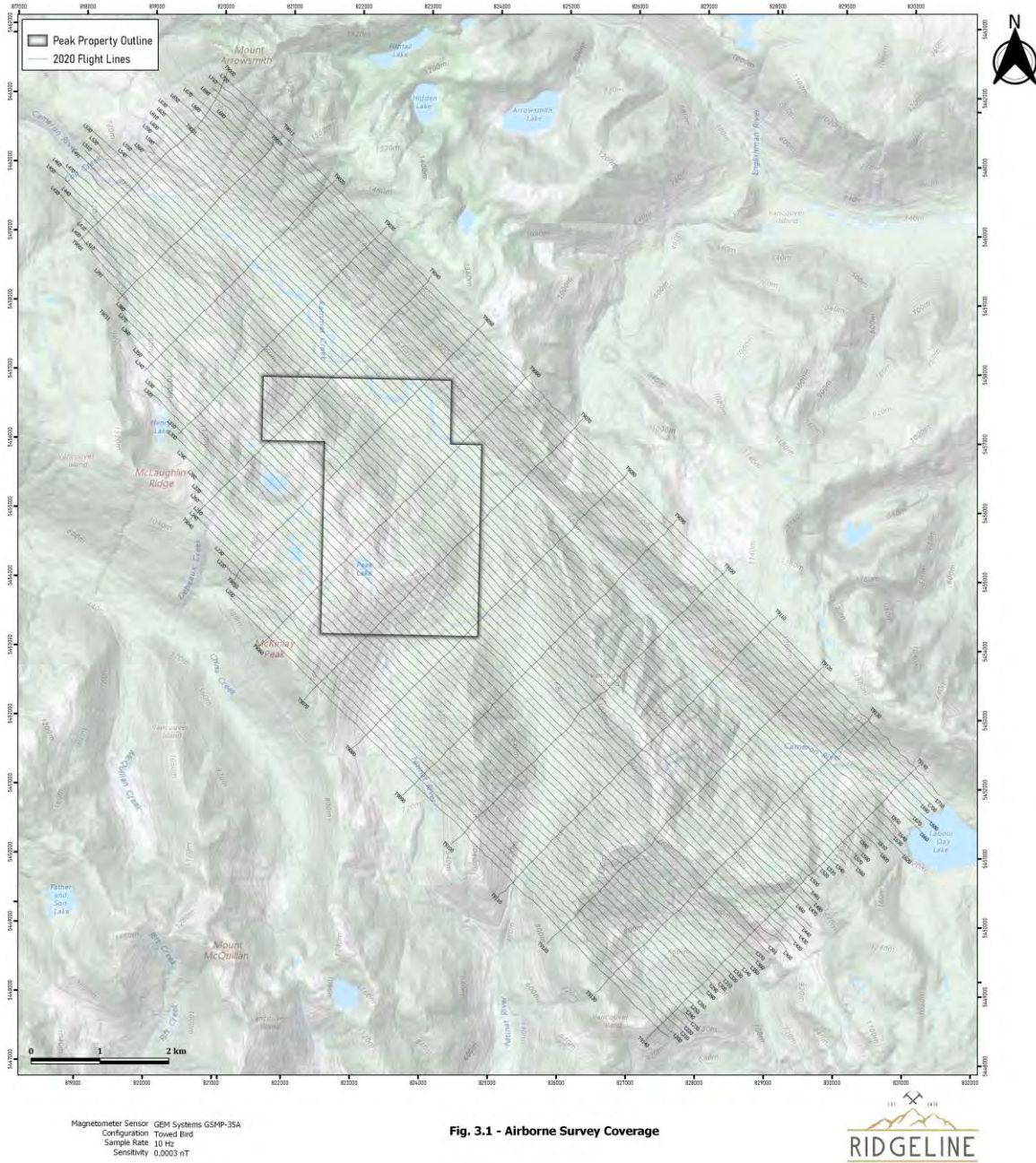


Figure 11. Flight lines for the 2020 aeromagnetic survey. Figure from Friesen, 2020.

## 9 Exploration

Corcel Exploration Inc. conducted an airborne magnetometer survey over the Peak Property and surrounding area from August 10th to 13th, 2020. The objectives of the program were to map the magnetic properties over the Peak Property area to aid in geological and structural mapping as well as to detect possible zones of bedrock mineralization and alteration.

### 9.1 Aircraft

The geophysical equipment was installed in an Astar 350 B2 helicopter operated by TRK Helicopters Ltd. out of Langley, British Columbia.

### 9.2 Airborne Magnetometer

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

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

### 9.3 Magnetic Base Station

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

The magnetometer base station was located 30km from the center of the survey for the duration of the program (away from any areas of magnetic interference).

### 9.4 Radar Altimeter

<i>Model:</i>	<i>Dual antenna RA-4000, FMCW</i>
<i>Altitude Range:</i>	<i>-20 to 2500 feet</i>

<i>Altitude Accuracy:</i>	<i>0 to 100 feet ± 3 feet</i> <i>100 to 500 feet ± 3%,</i> <i>+500 feet ± 5%</i>
<i>Frequency Range:</i>	<i>100 MHz sweep 4.25 – 4.35 GHz</i>
<i>Sweep Frequency:</i>	<i>100 Hz</i>

## 9.5 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.

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, 4<sup>th</sup> difference and magnetic readings in nT.

## 9.6 Flight Path

The flight lines did not deviate from the intended flight path by more than ~50% of the planned flight path over a distance of roughly 300 metres.

## 9.7 Clearance

Survey altitude typically did not deviate by more than ±30% (65m 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  $\pm 120\%$  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.

**9.8 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.

**9.9 Magnetic Base Station**

The base station was placed within 30 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.

**9.10 Aeromagnetic survey**

Survey coverage consisted of 811.3 line-km including 75.6 line-km of tie lines. Flight lines were flown in a northwest-southeast direction at 100m spacing (Figure 11). 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 6. Airborne survey coverage (Friesen, 2020)**

<i>Flight line direction</i>	<i>Tie line direction</i>	<i>Traverse Line (km)</i>	<i>Tie Line (km)</i>	<i>Total</i>
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<i>135°/315°</i>	<i>045°/225°</i>	<i>735.7</i>	<i>75.6</i>	<i>811.3</i>
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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.

**Table 7. Airborne survey parameters and specifications (Friesen, 2020)**

<i>Parameter</i>	<i>Specifications</i>
<i>Sample interval</i>	<i>10 Hz, 3.3 m @ 130km/h</i>
<i>Aircraft mean terrain clearance</i>	<i>~85 m</i>
<i>Mag sensor mean terrain clearance</i>	<i>~65 m</i>
<i>Navigation (guidance)</i>	<i>±3 m, Real-time GPS</i>
<i>Post-survey flight path</i>	<i>±3 m</i>

A GSM-19T magnetometer was operated at the survey base at the helicopter staging area near a forest service road roughly 30km 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 described below.

**9.10.1 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.

### **9.10.2 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.

### **9.10.3 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.

### **9.10.4 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.

### **9.10.5 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  $\Delta T$ , 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.

## 9.11 Survey Results

### 9.11.1 Residual Magnetic Intensity (RMI)

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

The magnetic intensities range from 53200nT to 53783nT across the study area representing a total magnetic gradient of 583nT (Figure 12). Magnetic intensities are highest along a NW-SE trending linear which is located at the most northeastern part of the survey area and parallels the survey boundary (Figure 12). This magnetic high is consistent with the location of mapped basalt-rich Karmutsen Formation volcanics. In general, the magnetic intensity map highlights several northwest-southeast trending magnetic high anomalies that parallel to sub-parallel the general structural fabric within broader Port Alberni area.

The most prominent magnetic feature defined by this survey product is a north-northwest trending ~6km long magnetic ridge with magnetic intensities up to 53575nT which is coincident with a fault bounded wedge of basalt-rich Karmutsen Formation Volcanics. In the vicinity of the Property, the CM-240, High-Grade and Peak Lake showings are located within an area of relatively low magnetic intensity. The EMMA-20 showing is located along a 1 kilometre long northwest-southeast trending narrow, moderate intensity, magnetic lineament (Figure 12). This lineament is located along trend of two similar intensity magnetic features, possibly representing an extension of the favorable geological unit.

To the west of the Property is an area of relative complexity with multiple, generally north-south oriented, magnetic high features which are proximal to the Arrowsmith 3, DDAM, Debeaux Creek and Kammat Creek Minfiles.



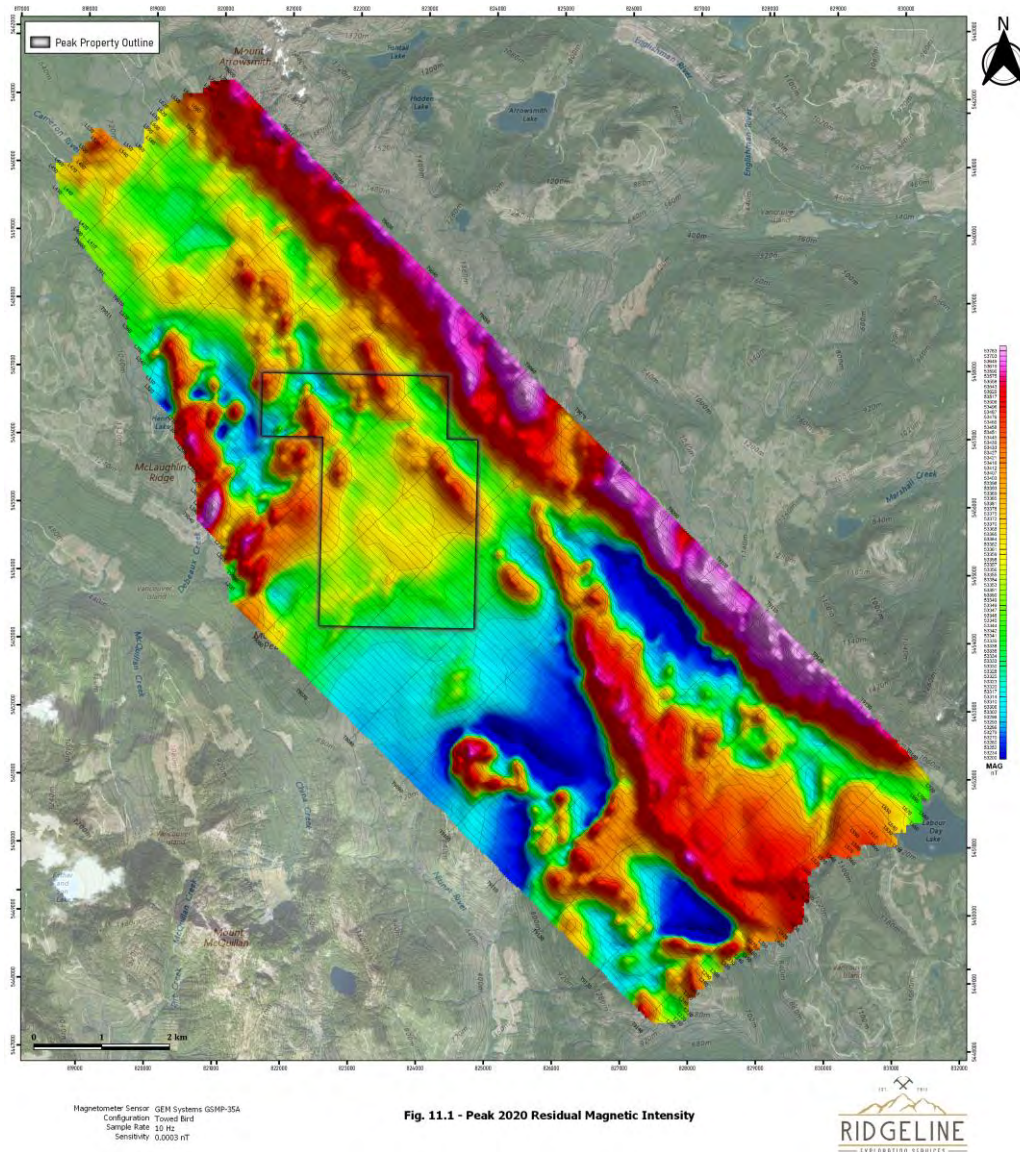


Fig. 11.1 - Peak 2020 Residual Magnetic Intensity

Figure 12. 2020 Aeromagnetic Survey, Residual Magnetic Intensity (RMI). Figure from Friesen, 2020

### 9.11.2 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.

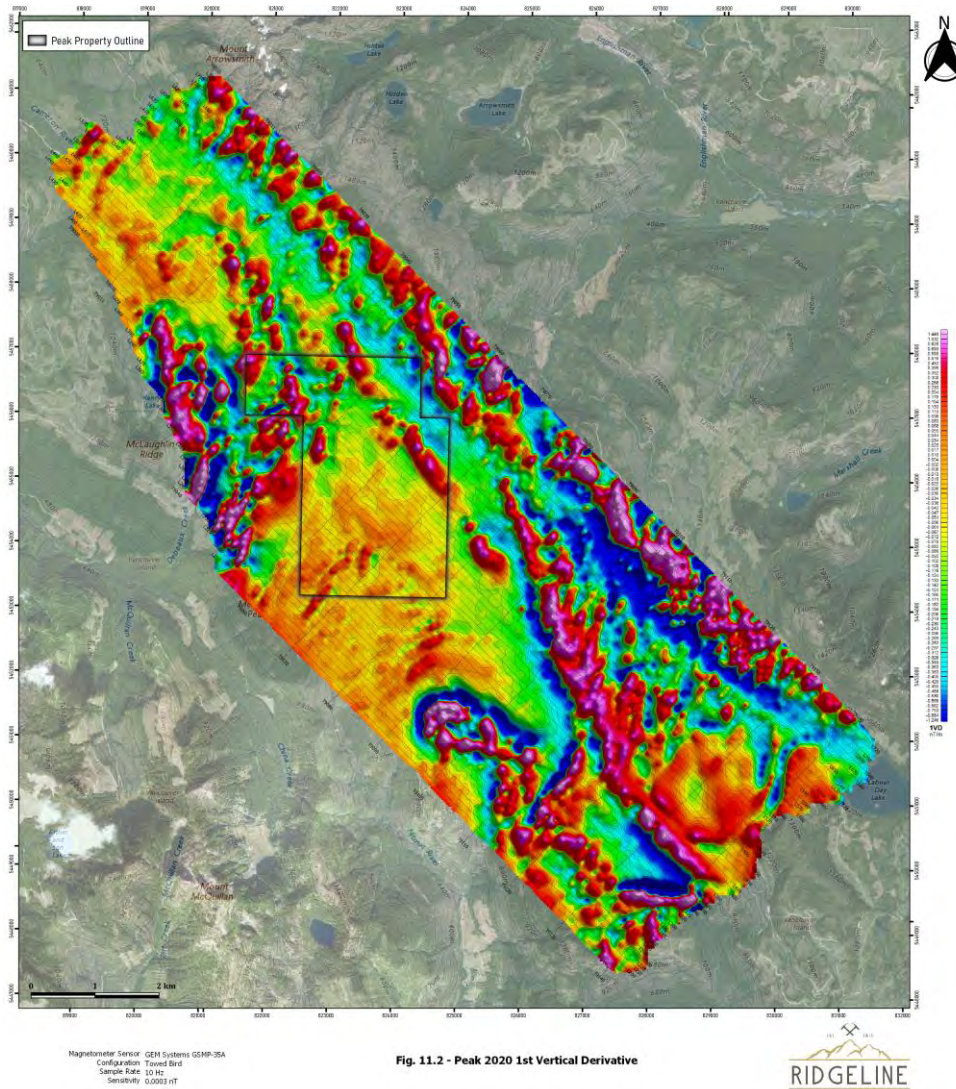


Fig. 11.2 - Peak 2020 1st Vertical Derivative

Figure 13. 2020 Aeromagnetic Survey, 1<sup>st</sup> Vertical Derivative (IVD). Figure from Friesen, 2020

The 1<sup>st</sup> vertical derivative map is consistent with the TMI results highlighting the general northwest-southeast trending structural/magnetic fabric across the survey area (Figure 13). 1<sup>st</sup> vertical derivative intensities range from -1.246 nT/m to 1.449 nT/m across the survey area. The strongest response defined by the first vertical derivative magnetic product is along the same north north-northwest trending ~6km long magnetic ridge highlighted by the RMI results which crosscuts the southern portion of the survey area. The ridge is an extremely prominent topographic feature and therefore it is expected that is a surrounded by an extremely low magnetic 1<sup>st</sup> vertical derivative response.

Additional magnetic fabric is defined by the 1<sup>st</sup> vertical derivative near the most southwestern part of the claim area. The Peak Lake showing is associated with narrow,

northeast-southwest oriented, moderate intensity magnetic features which were not easily visible within the RMI map. This feature is roughly 1.4km long.

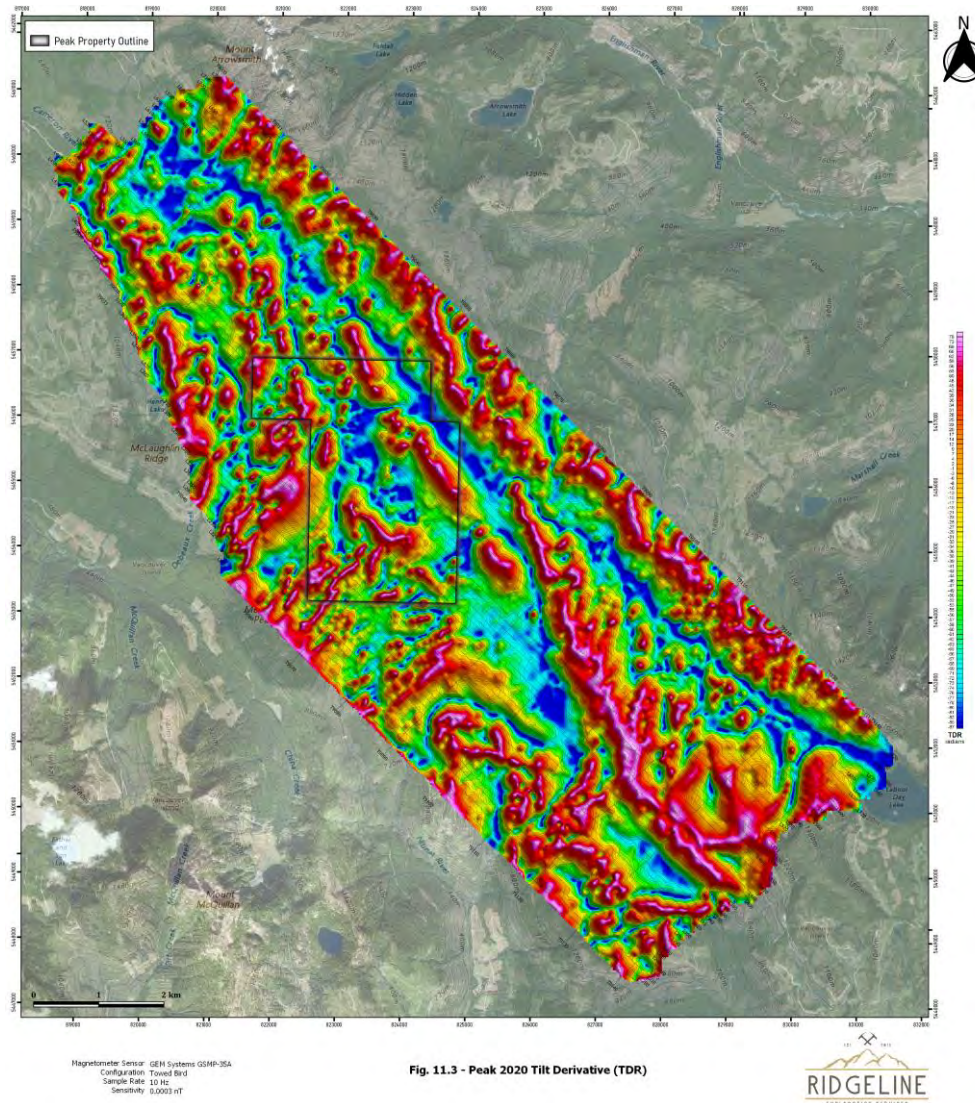


Fig. 11.3 - Peak 2020 Tilt Derivative (TDR)

Figure 14. 2020 Aeromagnetic Survey, Tilt Derivative (TDR). Figure from Friesen, 2020

### 9.11.3 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 -87 radians to 79 radians across the survey area. Comparable to the TMI and 1VD datasets, the TDR dataset roughly outlines the same northwest-southeast trending magnetic high anomalies across the survey area (Figure 14). This derivative product also highlights subtle features within the Peak Property boundary (where RMI and 1VD products only outlined weakly defined features) which includes subtle

northeast-southwest trending bodies that are coincident with the Peak Lake and High-Grade Showings.

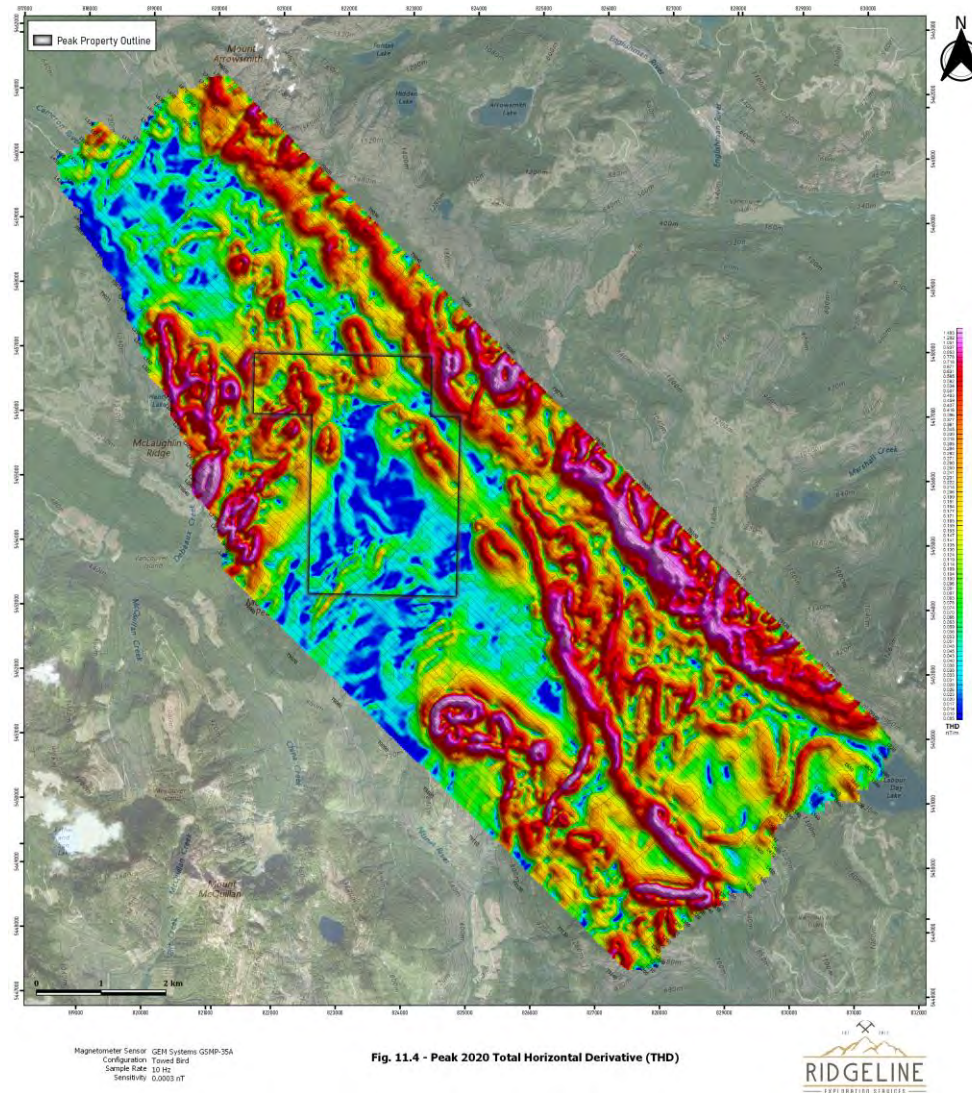


Fig. 11.4 - Peak 2020 Total Horizontal Derivative (THD)

Figure 15. 2020 Aeromagnetic Survey, Total Horizontal Derivative (THD). Figure from Friesen, 2020

### 9.11.4 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 across the survey area (Figure 15). THD results range from 1.483nT/m within the highs of these features, to 0.005nT/m at the margins. The result of this product well defines the exact margins of the magnetic high anomaly found within the survey boundaries. The major

magnetic sources defined by these results, which is consistent with mapped at surface geological units are, 1) The northwest-southeast oriented magnetic high lineament which parallels the northeast survey boundary, 2) the ~6km north-northwest oriented magnetic high ridge coincident with a fault-bound wedge of basalt-rich Karmutsen Formation volcanics, and 3) a roughly concentric intrusion of Mount Hall gabbro which partially outcrops within the Peak Property boundary. Much of the structural and magnetic complexity immediately west of the Property is associated with this intrusive unit which is spatially associated with the Debeaux Creek, Arrowsmith 3, Kammat Creek and DDAM showings.

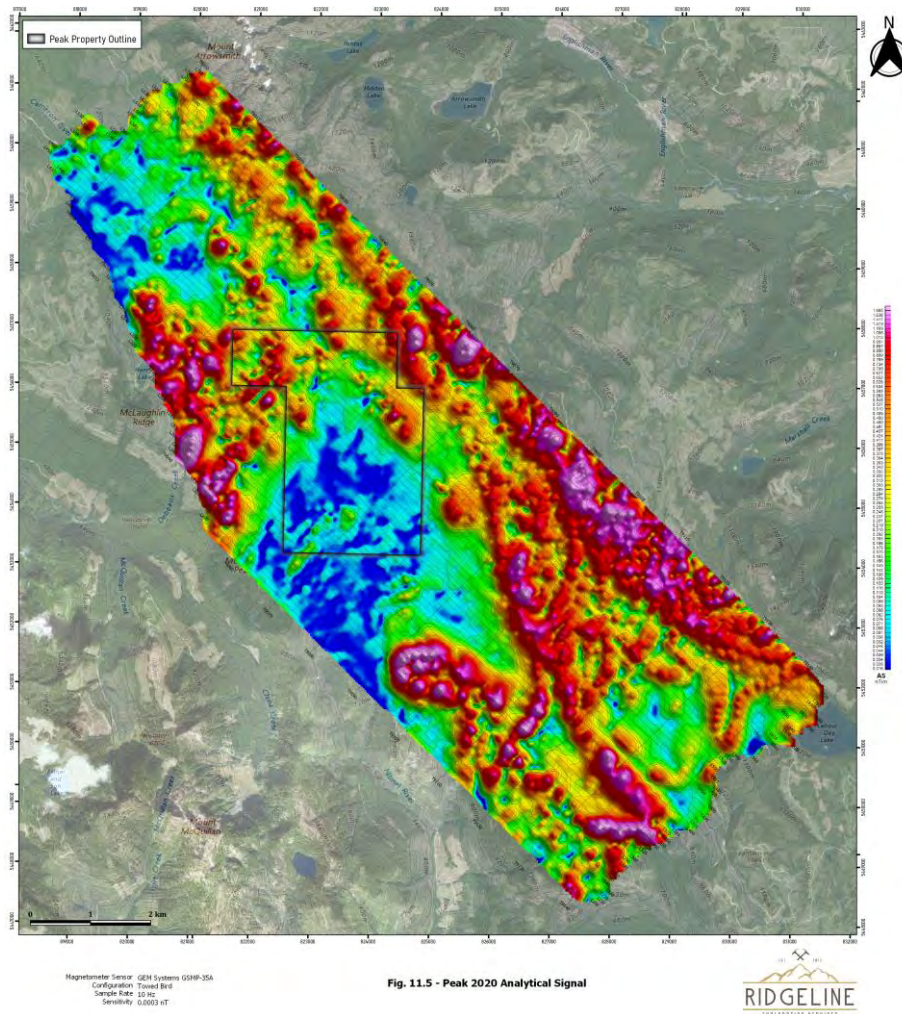


Figure 16. 2020 Aeromagnetic Survey, Analytical Signal (AS). Figure from Friesen, 2020

### 9.11.5 Analytical Signal (AS)

The peaks of the analytic signal (Figure 16) correlate directly with their respective magnetic causative bodies and are positioned symmetrically over them.

The analytical signal results are somewhat consistent with the THD results, in that they outline the three at surface causative magnetic bodies. AS results range from 1.985nT/m within the highs of these features, to 0.016nT/m at the margins. The dataset highlights very broad, shallow shoulders to the magnetic features with a steady gradual gradient from high to low. The southern portion of the Property area, in the vicinity of the Peak Lake, High Grade, and Emma 20, has a relatively low AS response (with only a weakly defined northeast-southwest oriented ridge associated with the Peak Lake showing) which is consistent with the THD dataset.

## 10 Drilling

Only limited diamond drilling has been done on the Peak Property and this work is described in the History section of this report. No recent diamond drilling has been done on the Property which is still in the early stages of exploration.

## 11 Sample Preparation, Analyses and Security

No samples were collected from the Property in 2020 by the issuer.

## 12 Data Verification

Work done on the Property in 2020 involved an airborne magnetometer survey. In the writer's opinion the procedures and equipment as outlined in the previous section of this report, were appropriate for the purposes intended. No obvious errors were noted in examination of the raw magnetic data or the resultant plotting of this data to form the aeromagnetic maps described in this report. The writer is confident that the data accurately reflects the magnetic properties of the rocks exposed on the Property and surrounding areas and can be used as a guide to future exploration.

The writer visited the Property on October 3, 2020. Although the known showings on the Property are no longer easily accessible because the old logging roads are now completely overgrown, there is still abundant outcrop along the Copp Main forest service road (Photo 3). The writer examined several of these outcrops which are also shown on maps prepared by MPH in 1987 (Cope, 1988). No obvious discrepancies were noted.

*Photo 3. The writer examining outcrops near Peak Lake on the Copp Main forest service road.  
Photo taken October 3, 2020.*

## **13 Mineral Processing and Metallurgical Testing**

There is no record of any mineral processing or metallurgical testing having been done on samples from the Peak Property.

## **14 Mineral Resource and Mineral Reserve Estimates**

There has not been sufficient work done on the Property to determine the subsurface extent and overall grade of mineralization. Therefore, there are no mineral resource estimates for the Property.

## **15 Adjacent Properties**

There are no properties immediately adjacent to the Peak Property. The mineral titles that comprise the Property do not adjoin other mineral titles.

## **16 Other Relevant Data and Information**

The author has reviewed all public and private reports pertaining directly to the Property. The writer is not aware of any additional sources of information that might significantly change the conclusions presented in this Technical Report.

## **17 Interpretation and Conclusions**

The mineral showings on the Property are structurally controlled Au and Ag bearing quartz veins hosted by Devonian age volcanoclastic rocks of the Sicker Group. In order to advance the Property, additional veins of sufficient width, extent and grade to be of economic interest need to be discovered. Although the veins discovered on the Property to date have returned encouraging assay values for Au and Ag, they are too small to be of economic interest. Additional exploration is required to find larger and more continuous Au and Ag bearing veins. Quartz veins of the type found on the Property are typically characterized by an erratic distribution of precious metals – the so called “nugget effect”. This makes evaluation of the veins difficult by conventional diamond drilling. Underground drifting and bulk sampling are usually required to get a more accurate indication of the grades that might be returned from a particular vein or set of veins. In some cases, where the density of veins is high enough, the possibility of a bulk tonnage target can be considered, however this possibility has not yet been evaluated on the Property.

The purpose of the aeromagnetic survey done in 2020 was to map the magnetic properties of the survey area to aid in geological mapping as well as detect possible structures that might control the distribution of mineral occurrences. The aeromagnetic survey defined several magnetic linears that may be related to geologic features such as faults that could potentially



host additional vein occurrences (Figure 17). Future exploration programs should focus on these structures and any mineralization associated with them. Additionally, a mapped dioritic intrusion located immediately west of the Property, which is highlighted by several of the magnetic datasets, should be further evaluated as several showings are spatially associated with this feature.

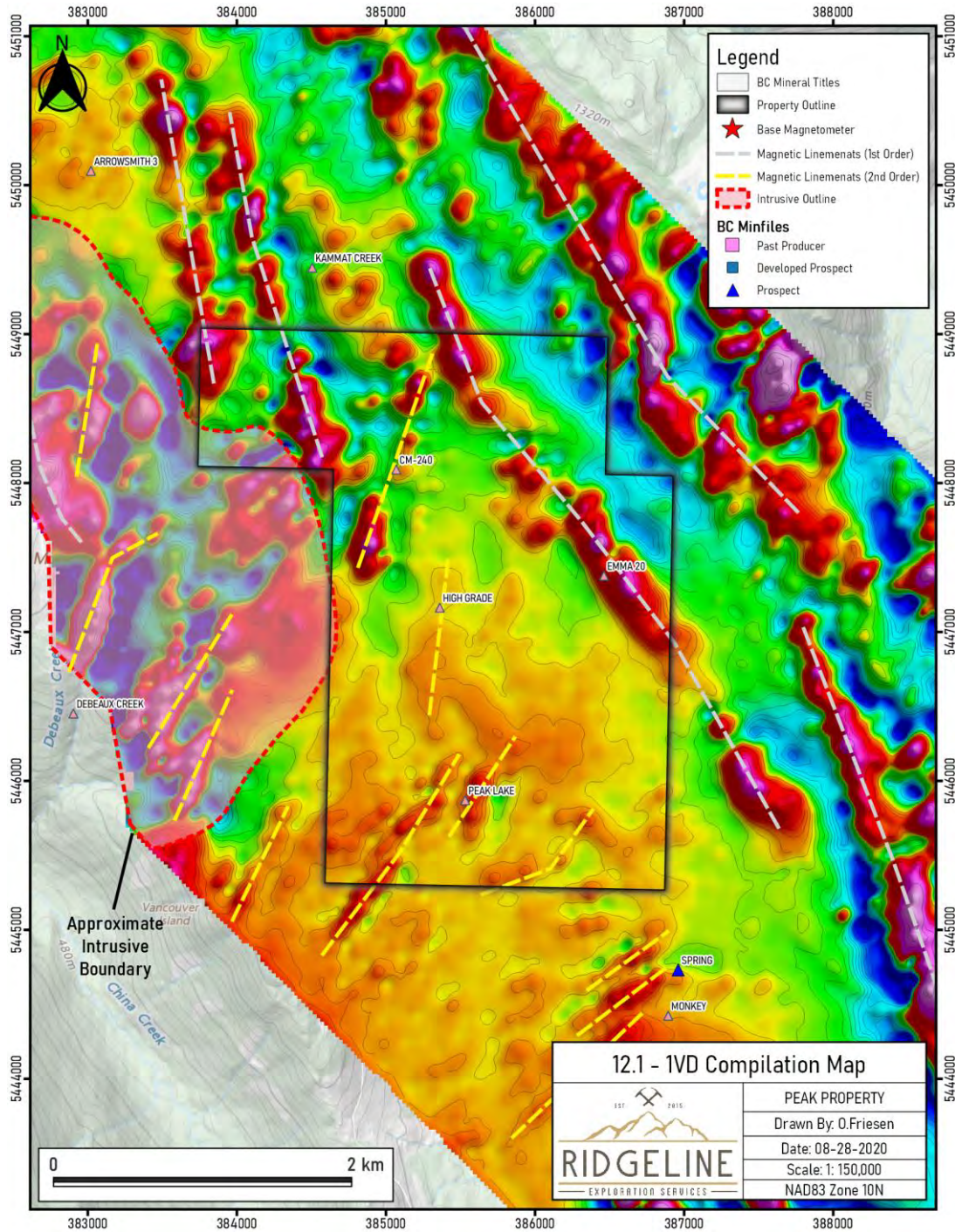


Figure 17. First Vertical Derivative (IVD) compilation map showing interpreted magnetic linears and possible extent of a dioritic intrusive body. From Friesen, 2020.

## 18 Recommendations

In the writer’s opinion, the Peak Property is a property of merit and additional exploration expenditures are warranted. Specifically, the focus of future exploration should be on finding additional Au and Ag bearing quartz veins on the Property that are of sufficient grade, width and extent to be of economic interest. The possibility of defining an area of sufficient vein density that might be amenable to a bulk tonnage target should also be considered. All historic data contained within assessment reports on the Property should be digitized to a GIS database in order to be used as a guide towards future exploration. To better define the airborne magnetic anomalies associated with the historic mineral occurrences, a 75 line-km ground magnetic survey should be carried out, covering the linear magnetic anomalies at 25m line spacing. In addition, a 50 meter spaced soil sampling survey focused on the High-Grade, Peak Lake and CM-240 Zones should also be carried out where the 2020 magnetic data highlighted subtle northeast-southwest oriented cross-structures. Reconnaissance soil and stream sediment sampling should also be done over unexplored areas of the Property at 150 metre sample spacing. Depending on the results of the Phase I program, a Phase 2 field program would focus on mapping and prospecting of the geochemical and geophysical targets generated from the Phase I survey.

**Table 8. Projected costs for proposed exploration program, Peak Property**

Phase 1				
Expense		Units	Unit cost	Total
historic data digitization	30	hours	\$120	\$3,600
ground magnetic survey	75	line-km	\$285	\$21,375
soil sampling survey	850	samples	\$80	\$68,000
stream sediment sampling survey	40	samples	\$125	\$5,000
report preparation	5	person days	\$600	\$3,000
Total				\$100,975
Phase 2				
Expense		Units	Unit cost	Total
prospecting, geologic mapping	60	person days	\$500	\$30,000
food and lodging	60	person days	\$100	\$6,000
analytical	100	analyses	\$40	\$4,000
equipment rental	30	days	\$200	\$6,000
report preparation	5	person days	\$600	\$3,000
Total				\$49,000
Total Phase 1 + 2				\$149,975

## 19 References

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## 20 Certificate of Author

I, Donald George MacIntyre, Ph.D., P.Eng., do hereby certify that:

1. I am an independent consulting geologist providing services through D.G. MacIntyre and Associates Ltd. a wholly owned company incorporated December 10, 2004 in the Province of British Columbia (registration no. BC0710941). My residence and business address is 4129 San Miguel Close, Victoria, British Columbia, Canada, V8N 6G7.
2. I graduated with a B.Sc. degree in geology from the University of British Columbia in 1971. In addition, I obtained M.Sc. and Ph.D. degrees specializing in Economic Geology from the University of Western Ontario in 1975 and 1977 respectively.
3. I have been registered with the Association of Professional Engineers and Geoscientists of British Columbia since September, 1979, registration number 11970. I am a Fellow of the Geological Association of Canada and a member of the British Columbia Association for Mineral Exploration.
4. I have practiced my profession as a geologist, both within government and the private sector, in British Columbia and parts of the Yukon for over 35 years. Work has included detailed geological investigations of mineral districts, geological mapping, mineral deposit modeling and building of geoscientific databases. I have directly supervised and conducted geologic mapping and mineral property evaluations, published reports and maps on different mineral districts and deposit models and compiled and analyzed data for mineral potential evaluations.
5. I have used aeromagnetic data as a tool in the interpretation of geological structures particularly as they apply to the search for mineral resources both as a government geologist and as a mineral exploration geologist. My honours B.Sc. thesis at the University of British Columbia, completed in 1971, was a study of the correlation between rock magnetic susceptibilities and aeromagnetic data in the Yukon Territory, Canada.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirement to be a “qualified person” for the purposes of NI 43-101.
7. I am responsible for all sections of the Technical Report titled “Technical Report: Peak Mineral Property, Vancouver Island, British Columbia, Canada” dated September 29, 2021 (the “Technical Report”). The effective date of this Technical Report is October 3, 2020. I visited and inspected the Peak Property on October 3, 2020.
8. I have not had prior involvement with the Property that is the subject of the Technical Report.
9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report the omission of which would make the Technical Report misleading.
10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
12. I consent to the filing of the Technical Report by Corcel with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 29th day of September, 2021



D.G. MacIntyre, Ph.D. P.Eng.