October 2021

PROSPECT RIDGE

The Holy Grail Geological Report

43-101

NI 43-101 TECHNICAL REPORT

on the

HOLY GRAIL PROPERTY

Ominica and Skeena Mining Divisions, British Columbia

NTS. Map No. 103I 10 and NTS. Map No. 103I 15
North Latitude 54.81°
West Longitude -128.77°

Prepared for

Loan Wolf Exploration Ltd. and
Mr. Jason Chornobay, Terrace, B.C. (President and owner)

Prepared by:

Rein Turna, P.Geo.

Effective Date: June 10, 2021

TABLE OF CONTENTS

LIST of TABLES

LIST of FIGURES

ITEM 1: SUMMARY

1.1 Property Description and Ownership

The Holy Grail Property mineral claims are located in the Skeena and Ominica Mining Divisions in British Columbia. The southern portion of the Property is approximately 10 km north of the City of Terrace and extends from there 58 km northward. The Holy Grail Property covers 45,907 hectares in 38 mineral claims and 1,229 hectares in 7 placer claims.

Mr. Jason Chornobay is the registered owner (100%) of all the claims of the Holy Grail Property and President and owner of Loan Wolf Exploration Ltd.

1.2 Geology and Mineralization

The property is underlain by a sequence of stratified argillites, sandstones and conglomerates of the Jurassic to Cretaceous age Bowser Lake Group and Jurassic age Hazelton Group. These are intruded by granodioritic units ranging from Cretaceous to Tertiary in age. Hornfels alteration halos are seen around the intruding granodioritic bodies. The Holy Grail Property lies in the “Golden Triangle” area of north western British Columbia where extensively occurring precious and base-metal mineralization have historically been discovered. The Property is crossed by several gold placer creeks. The source of the placer gold is believed to be attributed to erosion of local auriferous quartz veins in the surrounding bedrock.

1.3 Conclusions and Recommendations

There is potential for the discovery of the bedrock sources of the historic gold placers that occur on or adjacent to the Holy Grail Property. The possible sources are considered to be intrusion-related and structurally controlled polymetallic veins. Further work is required to determine the full mechanisms that resulted in the documented gold mineralization and potential new deposits on the Property.

Recommended future work would include expanded comprehensive geological, geochemical and geophysical surveys. The preferred target deposit type would be porphyry due to their typical large size. Many of the potential work areas would be road-supported. Those areas which cannot be accessed by road would be so by helicopter. The recommended exploration budget for exploration on the Holy Grail Property is $200,000.

ITEM 2: INTRODUCTION

This Technical Report has been prepared at the request of Mr. Jason Chornobay, owner of Loan Wolf Explorations Ltd., the issuer for whom this report is prepared. The Holy Grail Property was initially staked to cover the areas where samples with elevated geochemical values were taken from bedrock and where historical records indicated locations where further exploration work was merited.

The purpose of this report is to provide the current status of the Property, to review historical geological geochemical and geophysical data available in Ministry of Energy and Mines' Minfiles and mineral claim assessment reports and to report on the examinations of the geology, prospecting and rock sampling done by Loan Wolf Exploration Ltd., the vendor of the Property, during 2020. The sampled mineral showings are located in valleys accessible by forest service roads and in alpine locations accessible by helicopter. This author visited the Holy Grail Property on October 19 2020 to verify evidence of rock sampling done by Jason Chornobay in 2020. The primary sources of information for the historical work are the Ministry of Energy and Mines mineral claim assessment reports and Minfiles. Geochemical results of the 2020 work program are discussed in ITEM 9 of this report and shown on Figure Nos. 13 to 18. A detailed list of all references cited is in ITEM 27 in this report. Chemical abbreviations are used in this report for the elements discussed. These abbreviations and other terms are defined in ITEM 28 – Glossary of Technical Terms and Abbreviations.

ITEM 3: RELIANCE on OTHER EXPERTS

Information regarding historical work in the area of the present Holy Grail Property was obtained from the BC Government Ministry of Energy And Mines, from their website front counter Map Place:

> https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace

and from their Minfile Mineral Occurrence Database:

> https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mineralinventory

and from their online Assessment Report Indexing System (ARIS):

> https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/assessmentreports

and from their online mineral claim staking system Mineral Titles Online:

https://www.mtonline.gov.bc.ca/mtov/home.do

Venessa Bennet, Ph.D., P.Geo., created the maps for this report.

ITEM 4: PROPERTY DESCRIPTION and LOCATION

The Holy Grail Property mineral claims are located in the Skeena and Ominica Mining Divisions in northwestern British Columbia. The southern portion of the Property is approximately 10 km north of the City of Terrace and extends from there 58 km northward.

The geographic coordinates of the centre of the Holy Grail Property are at the north end of Kitsumkalum Lake: 54.81° North Latitude and -128.77° Longitude or 515000 m E and 6074000 N UTM coordinates (NAD 83, Zone 9). The relevant maps are: N.T.S. Map Nos. 103I/10, 103I/15 and 103P/02.

Figure No. 1. Holy Grail Property Location in British Columbia.

The Holy Grail Property consists of the mineral claim tenures listed in Table No. 1 next page, acquired and maintained under Mineral Titles Online (MTO), British Columbia's internet-based mineral titles administration system.

The Property covers 45,907 hectares in mineral claims and 1,229 hectares in placer claims within a claim group approximately 58 km north-south and between 5 km and 15 km east-west.

Figure Nos. 2 and 3 illustrate the configuration of the Holy Grail Property mineral claims and placer claims, respectively. Table No. 1 provides the list of Holy Grail mineral claims. Mr. Jason Chornobay (MTO Client ID 287402) is the registered owner (100%) of all the claims.

Table No. 1. Mineral and Placer claim details.

Claim Title No.	Area ha	Good to Date	Claim Name	Type
1078163	898.49	2021/AUG/24	THE LEGEND	mineral claim
1078280	1872.69	2021/AUG/30	LEGEND	mineral claim
1078327	1029.94	2021/SEP/03	THE LEGEND	mineral claim
1078543	1833.36	2021/SEP/10	THE LEGEND	mineral claim
1078577	298.97	2021/SEP/12	REAL DEAL	mineral claim
1078672	1513.63	2021/SEP/14	REAL DEAL	mineral claim
1078758	1867.47	2021/SEP/18	REAL DEAL	mineral claim
1078786	355.23	2021/SEP/20	REAL DEAL	mineral claim
1078894	223.80	2021/SEP/28	REALDEAL	mineral claim
1078934	74.58	2021/SEP/30	REAL DEAL	mineral claim
1078953	167.89	2021/SEP/30	REAL DEAL	mineral claim
1079037	93.69	2021/OCT/07	THE LEGEND	mineral claim
1079095	1867.28	2021/OCT/10	RDL	mineral claim
1079096	1027.86	2021/OCT/10	RDL	mineral claim
1079107	111.28	2021/OCT/11	BRIDGE	mineral claim
1079108	111.34	2021/OCT/11	EGALS NEST	mineral claim
1079115	1075.91	2021/OCT/12	EAGLES NEST BRIDGE	mineral claim
1079600	1862.84	2021/NOV/16	100 PERCENT	mineral claim
1080811	1848.42	2022/JAN/29	HOLY GRAIL	mineral claim
1080812	1869.83	2022/JAN/29	HG	mineral claim
1080813	1865.28	2022/JAN/29	HG	mineral claim
1080814	1551.99	2022/JAN/29	HG	mineral claim
1080816	1867.58	2022/JAN/29	HG	mineral claim
1080817	373.65	2022/JAN/29	HG	mineral claim
1080818	1869.09	2022/JAN/29	HG	mineral claim
1081993	1853.56	2022/APR/01	HOLY GRAIL	mineral claim
1081988	1861.27	2022/APR/01	YAY	mineral claim
1081990	1858.92	2022/APR/01	HOLY GRAIL	mineral claim
1081991	1855.43	2022/APR/01	HOLY GRAIL	mineral claim
1081994	1852.67	2022/APR/01	HOLY GRAIL	mineral claim
1081995	1856.35	2022/APR/01	HOLY GRAIL	mineral claim
1081996	1856.06	2022/APR/01	HOLLY GRAIL	mineral claim
1082024	557.79	2022/APR/04	HOLY GRAIL	mineral claim
1082025	1446.90	2022/APR/04	HOLY GRAIL	mineral claim
1082026	1853.76	2022/APR/04	HOLY GRAIL	mineral claim
1082027	1187.87	2022/APR/04	HOLY GRAIL	mineral claim
1082028	185.57	2022/APR/04	HOLY GRAIL	mineral claim
1082059	149.10	2022/APR/06	HOLY GRAIL	mineral claim
	45,907	(Total ha)		

1081937	464.87	2022/MAR/29	CLEARLY GOT OPTIONS	placer claim
1079631	167.6	2021/NOV/17		placer claim
1079650	55.88	2021/NOV/18	THIS IS MINE	placer claim
1079601	316.73	2021/NOV/16	NICE	placer claim
1079629	37.27	2021/NOV/17		placer claim
1082022	37.27	2022/APR/04	PRICE	placer claim
1082023	149.11	2022/APR/04	PRICE	placer claim
	1,229	(Total ha)		

The good-to dates for the mineral claims above range between August 24, 2021 and April 6, 2022.

The good-to dates for the placer claims above range between November 16, 2021 and April 4, 2022.

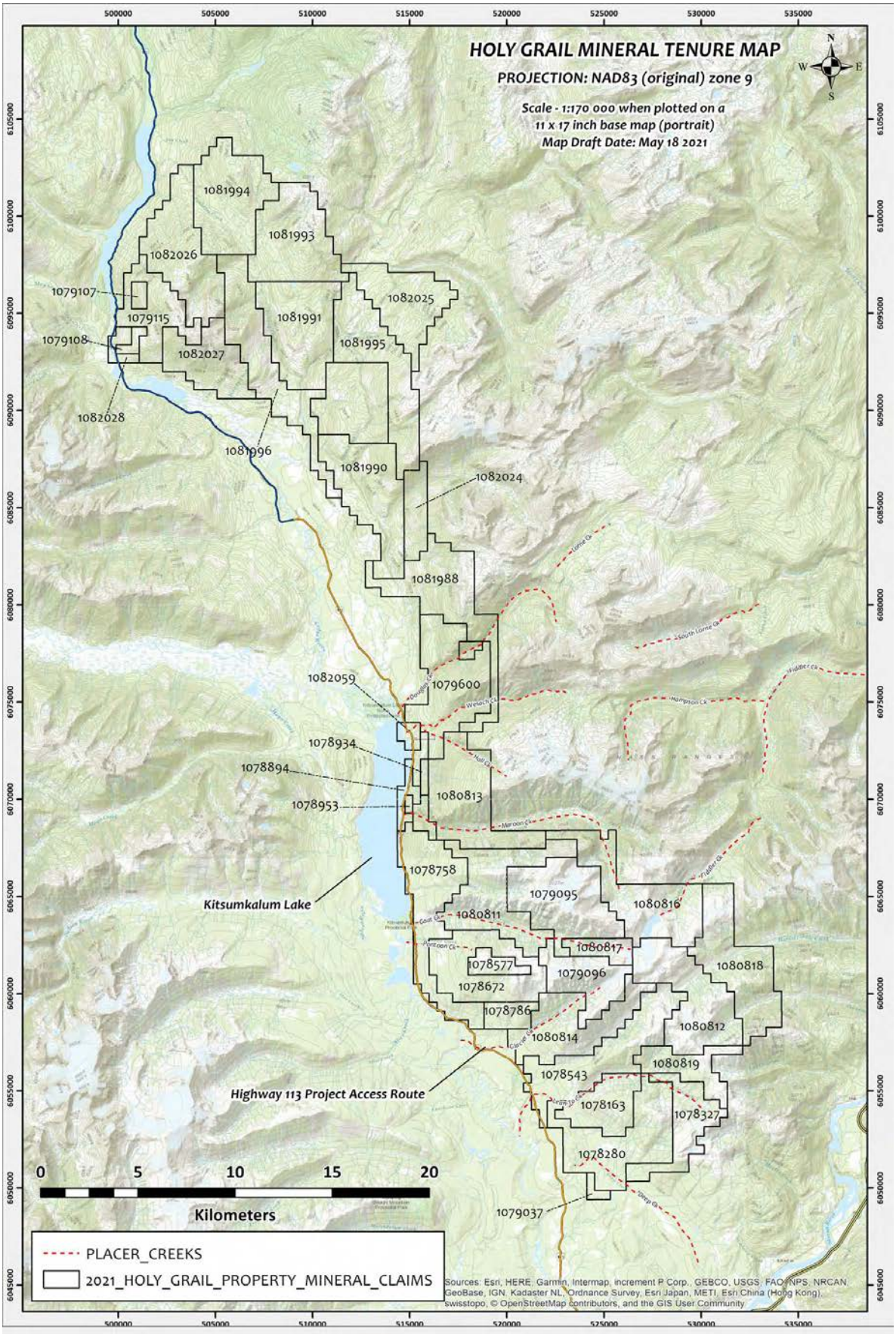


Figure No. 2. Holy Grail Property Mineral Claims.

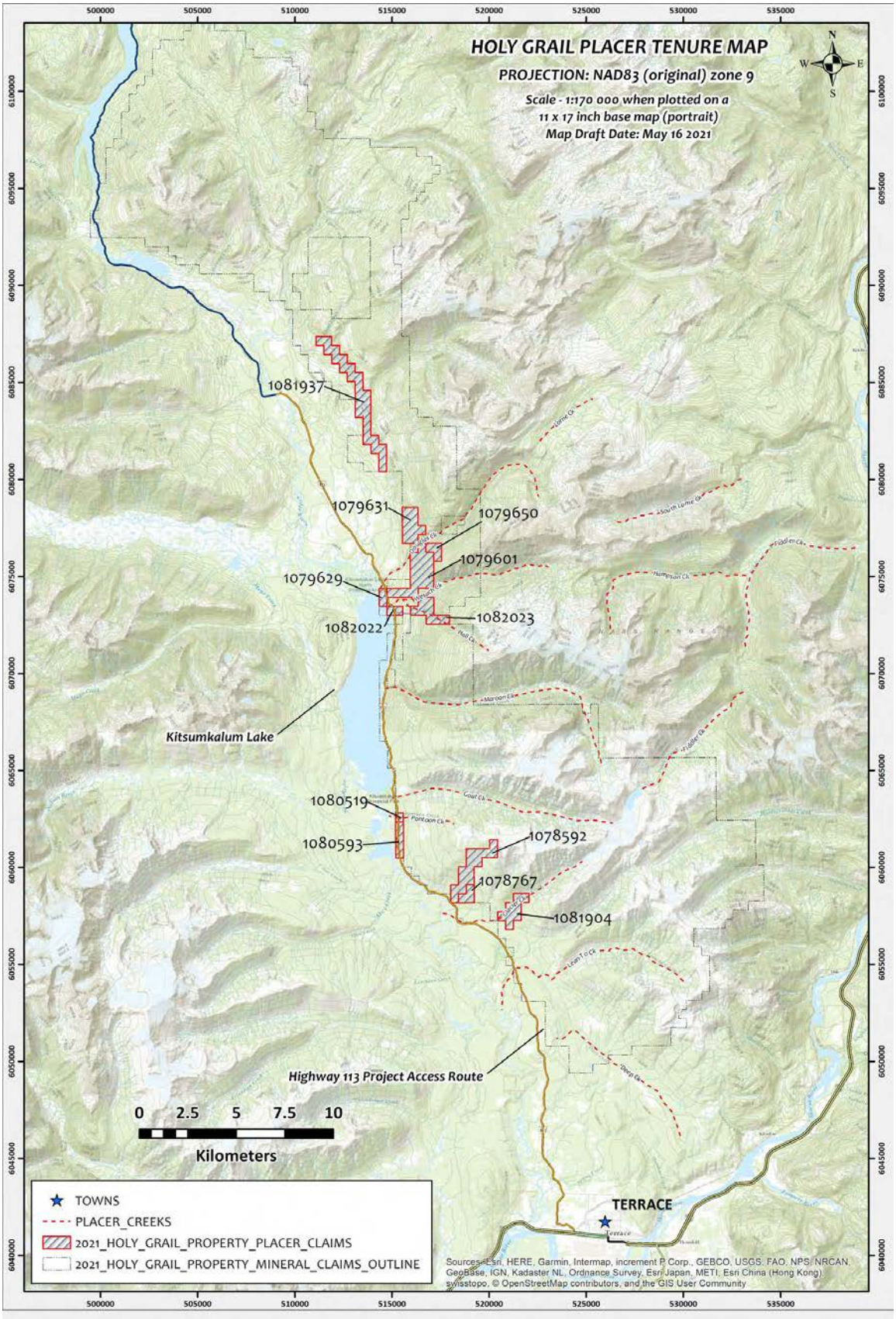


Figure No. 3. Holy Grail Property Placer Claims. Historical placer creeks are indicated.

The Holy Grail Property mineral claims are acquired and maintained under Mineral Titles Online (MTO), British Columbia's internet-based mineral titles administration system.

There are no known environmental liabilities to which the Holy Grail Property is subject. This author is not aware of any liabilities that may have potentially resulted from any historical activity, nor any other significant factors or risks that may affect access, title, or the right or ability to perform work on the property. A Notice of Work and Reclamation application is not necessary to acquire a permit for the work program recommended in this report. If positive results are made and future drilling is warranted, the necessary permits will be required.

The owner of a mineral claim gains the right to sub-surface minerals covered by that mineral claim as defined in the Mineral Tenure Act of British Columbia. Surface rights and placer rights are not included. Subject to the Mineral Tenure Act, a free miner or an agent of a free miner may legally enter mineral lands to explore for minerals. A free miner may be a company or an individual.

Mineral claims are valid for one year after staking. To maintain the mineral claim in good standing the claim holder must, on or before the anniversary date of the claim, pay a prescribed recording fee and record the exploration and development work that was carried out on that claim during the current anniversary year or pay cash in lieu of work. The value of exploration and development required to maintain a mineral claim for one year is at least:

$5 per hectare for each of the first and second anniversary years,
$10 per hectare for each of the third and fourth anniversary years,
$15 per hectare for each of the fifth and sixth anniversary years, and
$20 per hectare for each subsequent anniversary year.

Only work and associated costs for the current anniversary year of the mineral claim may be applied toward that claim unit. If the value of work performed in any year exceeds the required minimum, the value of the excess work can be applied to future anniversary years to a maximum of ten years.

An assessment report describing the work done and associated expenditures must be filed, and approved by the BC Ministry of Energy and Mines.

4.1 Ownership

The mineral claims that make up Holy Grail Property are in good standing and registered to Jason Chornobay with 100% ownership.

ITEM 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

The south end of the Holy Grail Property is located within the Omineca and Skeena mining divisions in west-central British Columbia. It is located approximately 10 km north of the City of Terrace, 90 km west of the Town of Smithers and 115 km northeast of the City of Prince Rupert. These resource-based communities can provide most of the services and supplies used in mining exploration. Deep Water Port and Railway Connections are at Prince Rupert, and at Kitimat 50 km south from Terrace.

The Property is accessible on its west side with many old forest service roads, classified as loose to rough gravel roads. Locally, patches of forest have been clear-cut adjacent to these roads. The roads' drivability has not been thoroughly investigated. The primary access road for north of Terrace is the Stewart-Cassiar Highway (British Columbia Hwy 37), also known as the Nisga'a Highway (British Columbia Hwy 113). It is paved with adjacent 3-phase power lines and runs along the western margin of the claim block. The Yellowhead Highway (Hwy 16) runs north-south on the east side of Skeena River, approximately 10 km east of the Property. There are several active and recent logging operations through the lower elevations of the claim block that have that have provided new access roads, clearings and bedrock exposures. Older logging roads are generally overgrown with willow and alder.

The operating season for the higher alpine regions of the claims is late spring to late summer when there is minimum snow cover (June to August). Majority of the claim block is in lower elevations and can be worked from early spring to late fall (April to November).

The Property is mountainous with elevations ranging between approximately 100 m and 2,000 m. Some of the Property is alpine where topography is variably moderate and rugged with patchy low vegetation. The climate is west coast rainforest. Lower elevation vegetation is characterized by dense coniferous forest. Precipitation in the region is heavy, as rain in the summer and snow in the winter. The Property lays mainly on the west side of a mountain range such that mostly westward flowing streams drain the property.

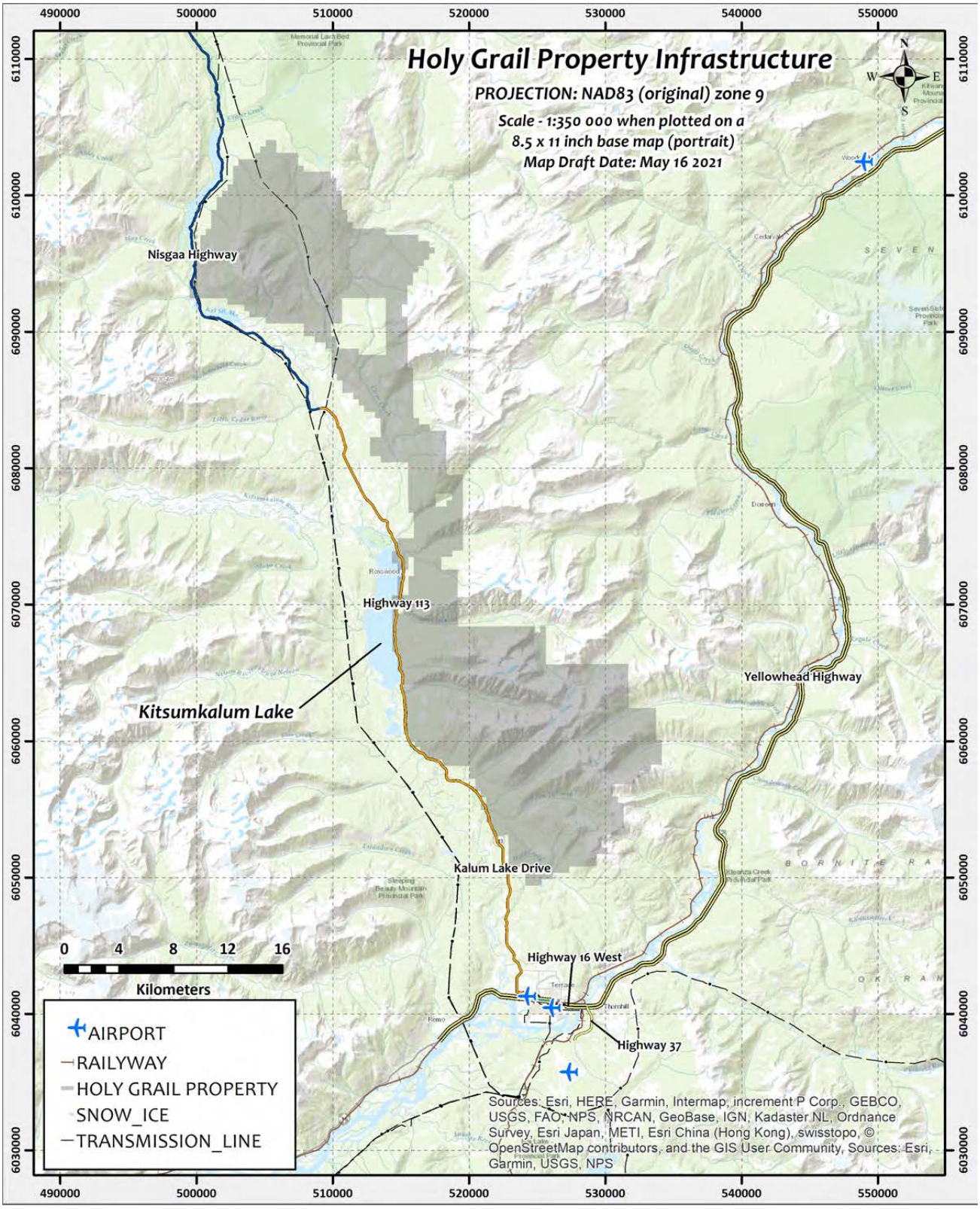


Figure No. 4. Holy Grail Property Infrastructure.

ITEM 6: HISTORY

This author cannot verify the quality or accuracy of historic geochemical results or descriptions quoted in this History section or in the References. The historical recommendations made by others do not necessarily accord with this author's.

The BC Ministry of Energy and Mines' approved mineral exploration Assessment Reports are filed by the exploration and mining industry on completion of an exploration program. These reports provide information on geological, geophysical, geochemical, drilling and other exploration-related activities throughout BC. The reports are scanned and available for viewing or printing from the British Columbia Geological Survey website:

https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/assessmentreports

The earliest recorded exploration work on the Holy Grail Property was from the late 1800s with the discovery of placer gold on Douglas Creek which drains westward through the north end of the property (Minfile 103I 204). Coarse gold with nuggets up to 195 g (6.27 oz) was recovered from Douglas Creek. Recorded production from 1886 to 1940 was 10,937 grams (352 oz). The source of the placer gold is believed to be attributed to erosion of local auriferous quartz veins in the surrounding bedrock.

A total of 6 historic past producing mines are situated within a 5-kilometer radius around the property. The deposit types are primarily polymetallic veins, including Au-Ag and Pb-Zn. These are designated Minfiles: 103I 019, 103I 022, 103I 030, 103I 039, 103I 040, 103I 204. Intrusion and porphyry related prospects have also been explored within and adjacent or near the present Holy Grail Property.

Detailed descriptions of the relevant Minfiles and deposit types in the area are in ITEM 27 REFERENCES. The Minfiles provide further references, including mineral claim assessment reports.

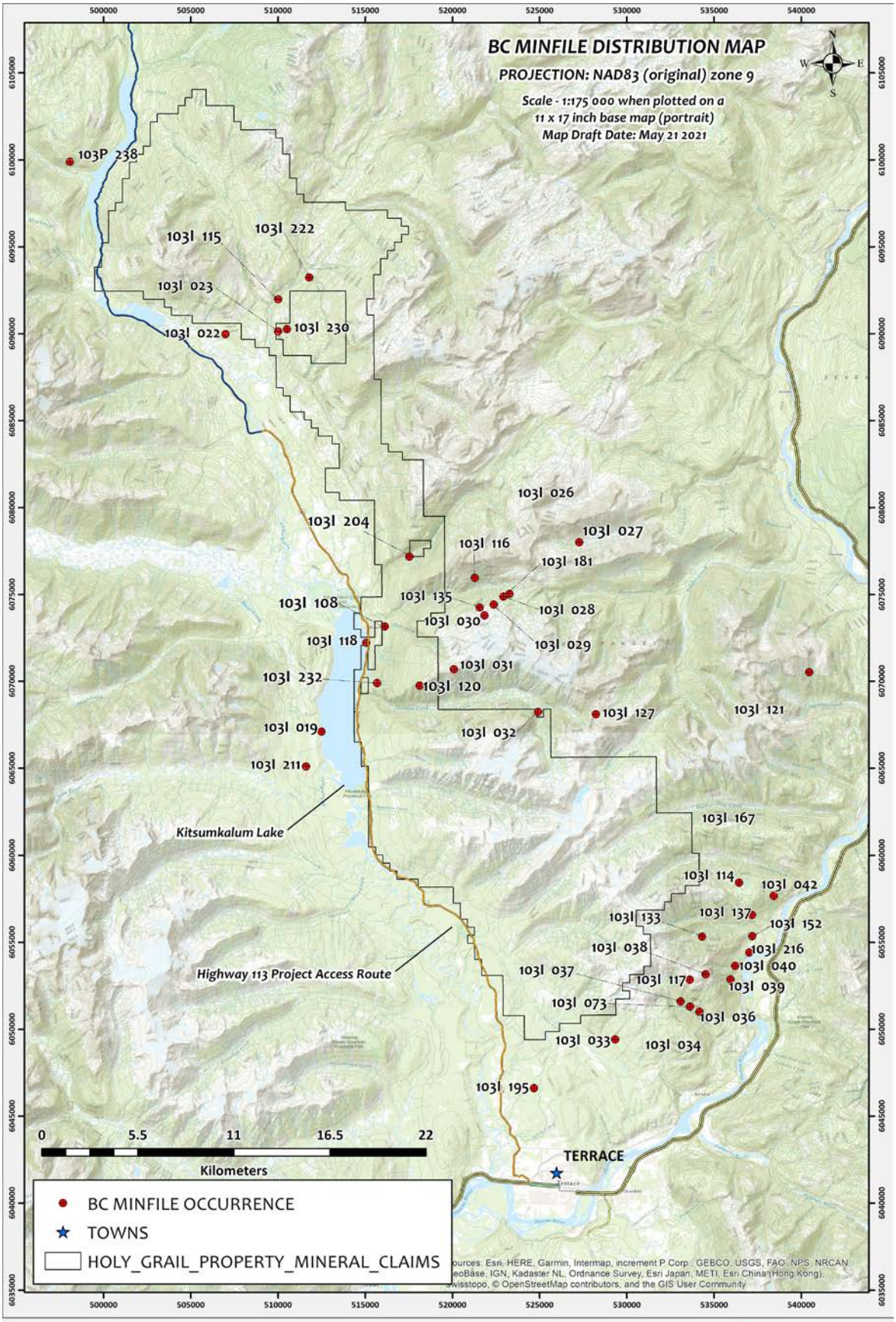


Figure No. 5. BCGS Minfiles in Holy Grail Property Area.

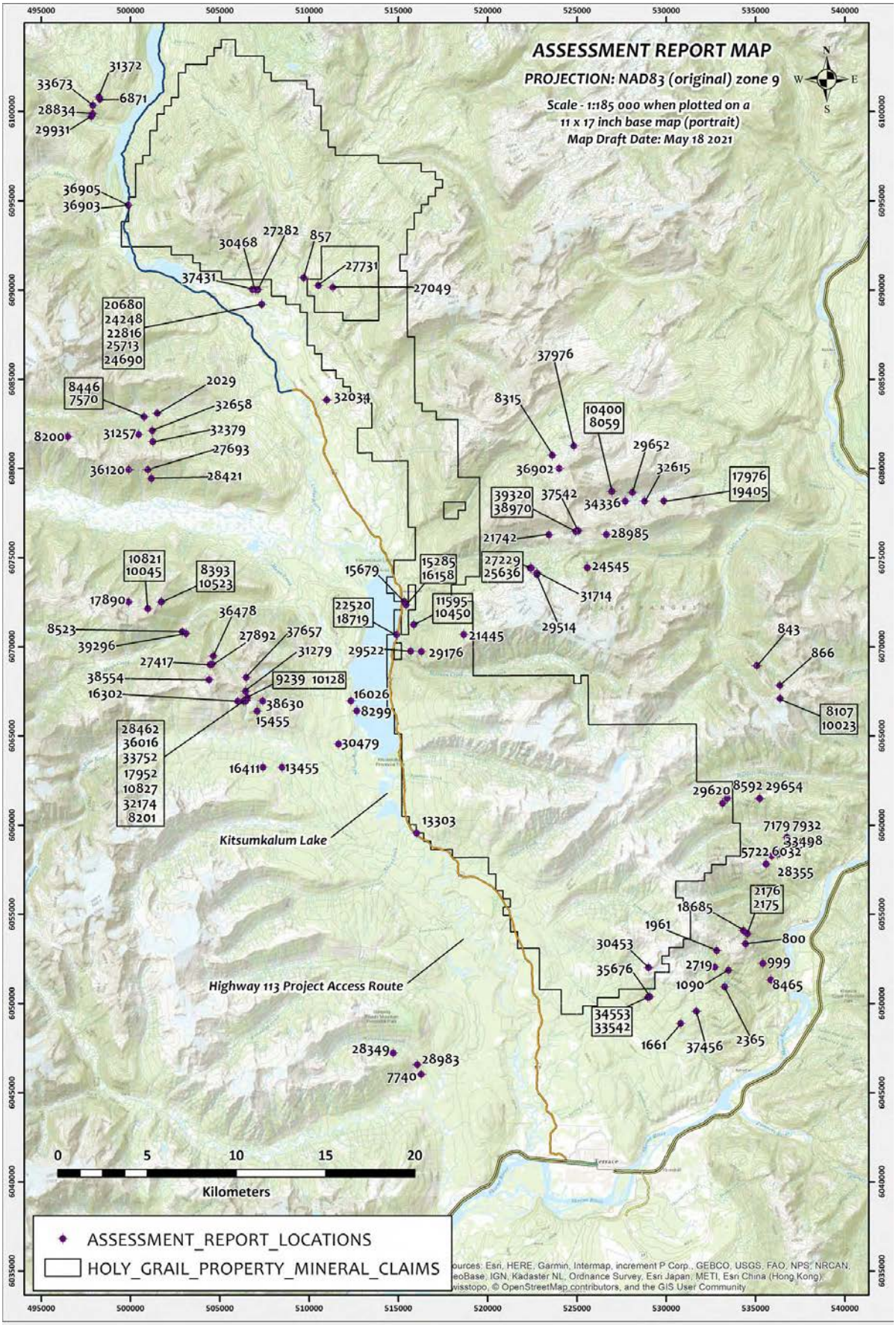


Figure No. 6. Historical Assessment Reports in Holy Grail Property Area.

ITEM 7: GEOLOGICAL SETTING and MINERALIZATION

Regional Geology

The Holy Grail Property is situated within the Stikine tectonic terrane (Stikinia) in the "Golden Triangle" area of northwestern British Columbia. The general area around the Property is underlain primarily by stratified sedimentary rocks of the Middle-Jurassic to mid-Cretaceous age Bowser Lake Group and Jurassic age Hazelton Group. These rocks are intruded by granitic rocks of the Mesozoic age Coast Plutonic Complex.

Kyba and Nelson (2015) emphasized the importance the Triassic-Jurassic unconformity contact in northern British Columbia as favourable toward the occurrence mineral deposits. They described the contact as being marked by a distinctive siliciclastic conglomerate unit and by significant faults.

Nelson (2017) stated *"Northerly and westerly fault and lineament sets...are characteristic of, and are apparently confined to, Stikinia. They appear to have exerted strong spatial and, in many cases, genetic control on mineral deposits, by creating conduits for magmas and hydrothermal fluids....Long-lived recurrent uplift of the Stikine and Skeena arches was triggered by differential movement across these deep crustal discontinuities. These discontinuities also likely provided conduits at times of high magmatic flux....Early Jurassic intrusions are interpreted as having evolved...in a structurally controlled permeability corridor corresponding to the Skeena Arch."*

Gagnon, et al. (2012) stated *"The upper Hazelton Group is also of great economic interest in that it contains mid-Jurassic polymetallic massive sulphide deposits*."

Figure No. 5 is after a map from the article by J. Nelson in the BCGS publication, Paper 2017-1 (Geological Fieldwork, 2016). It shows the locations of the Holy Grail Property (as a red star added to Nelson's map) in central Stikinia. The Holy Grail Property is well situated in Stikinia relative to the Skeena Arch, the Eskay Rift and several well-known porphyry, volcanogenic massive sulphide (VMS) and epithermal mines and deposits.

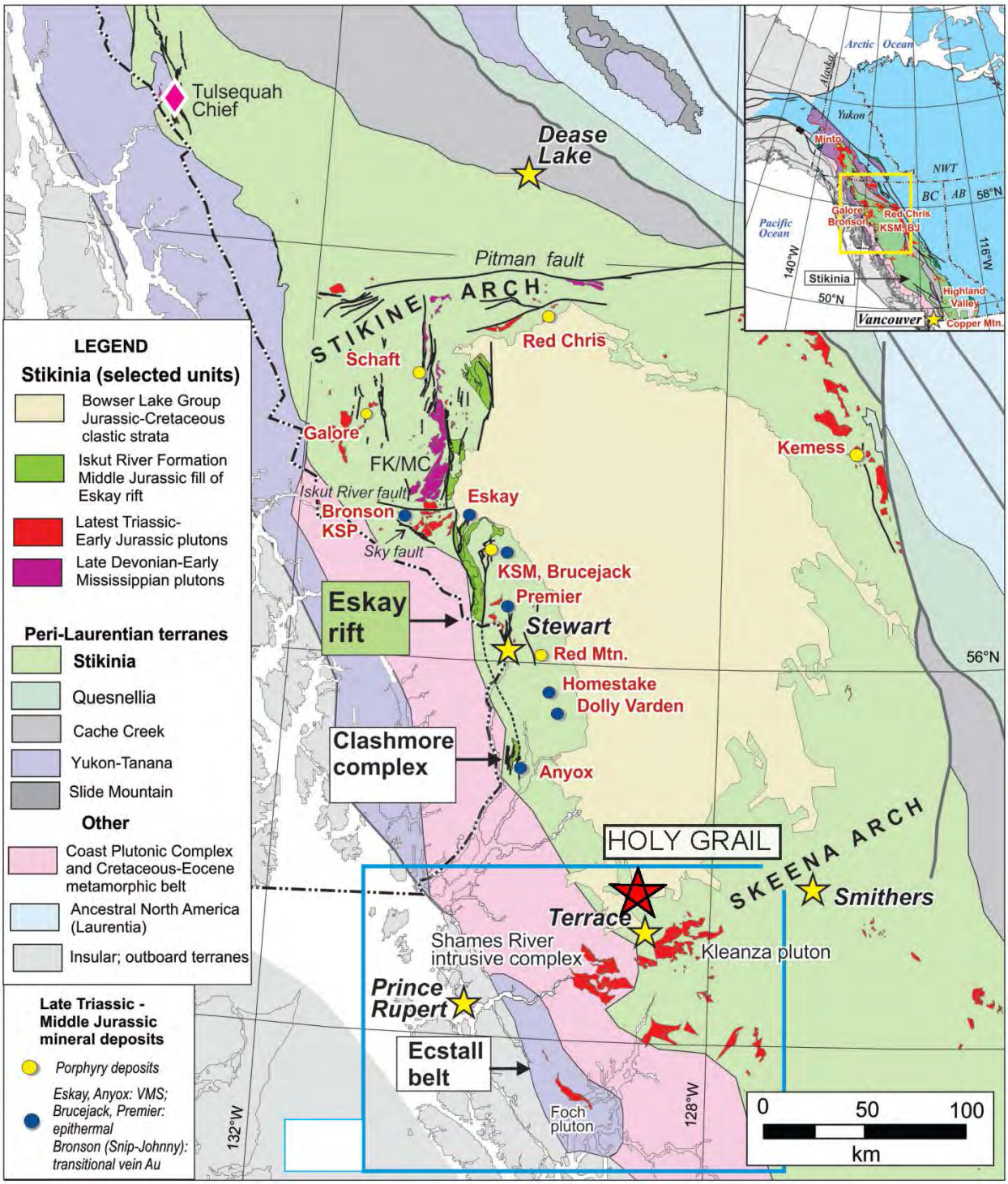


Figure No. 7. Holy Grail Property location in Stikinia Terrane. Holy Grail is located in the vicinity of the intersection of the Eskay rift and Skeena Arch tectonic structures. The map shows Triassic and Jurassic geology and several major porphyry and epithermal occurrences in northern Stikinia. (Map from J. Nelson, 2017).

Property Geology and Mineralization

The approximately 60 km x 10 km Holy Grail Property is underlain by a sequence of stratified argillites, sandstones and conglomerates. These are intruded by granitic rocks. Hornfels alteration halos are seen around the intruding granitoid bodies. Prospecting during 2020 in the Property identified Au-Ag polymetallic quartz veins in the sedimentary rocks and near to granitic rocks. The veins contained sulphide disseminations or globules of pyrite, chalcopyrite and galena. The continuity of the veins and mineralization have yet to be determined.

Extensively occurring precious and base-metal mineralization has been discovered through reconnaissance prospecting in 2020 by Jason Chornobay. Mineralization appears to be in association with several regional structures and contacts with mineralization hosted in granitic, sedimentary and metamorphic units in proximity to the favourable structures.

The mid-portion of the Holy Grail Property is situated over the middle and lower portion of a prolific placer creek, Douglas Creek, draining westward into the northern end of Kitsumkalum Lake. Coarse gold was recovered from Douglas Creek which had a production period of 1886 to 1940. A total of 10,937 g (352 oz) is recorded to have been produced with the largest nugget being 195 grams (6.27 oz). The source of the placer gold is believed to be attributed to erosion of local auriferous quartz veins in the surrounding bedrock including sedimentary, metamorphic rocks and granodiorite intrusions.

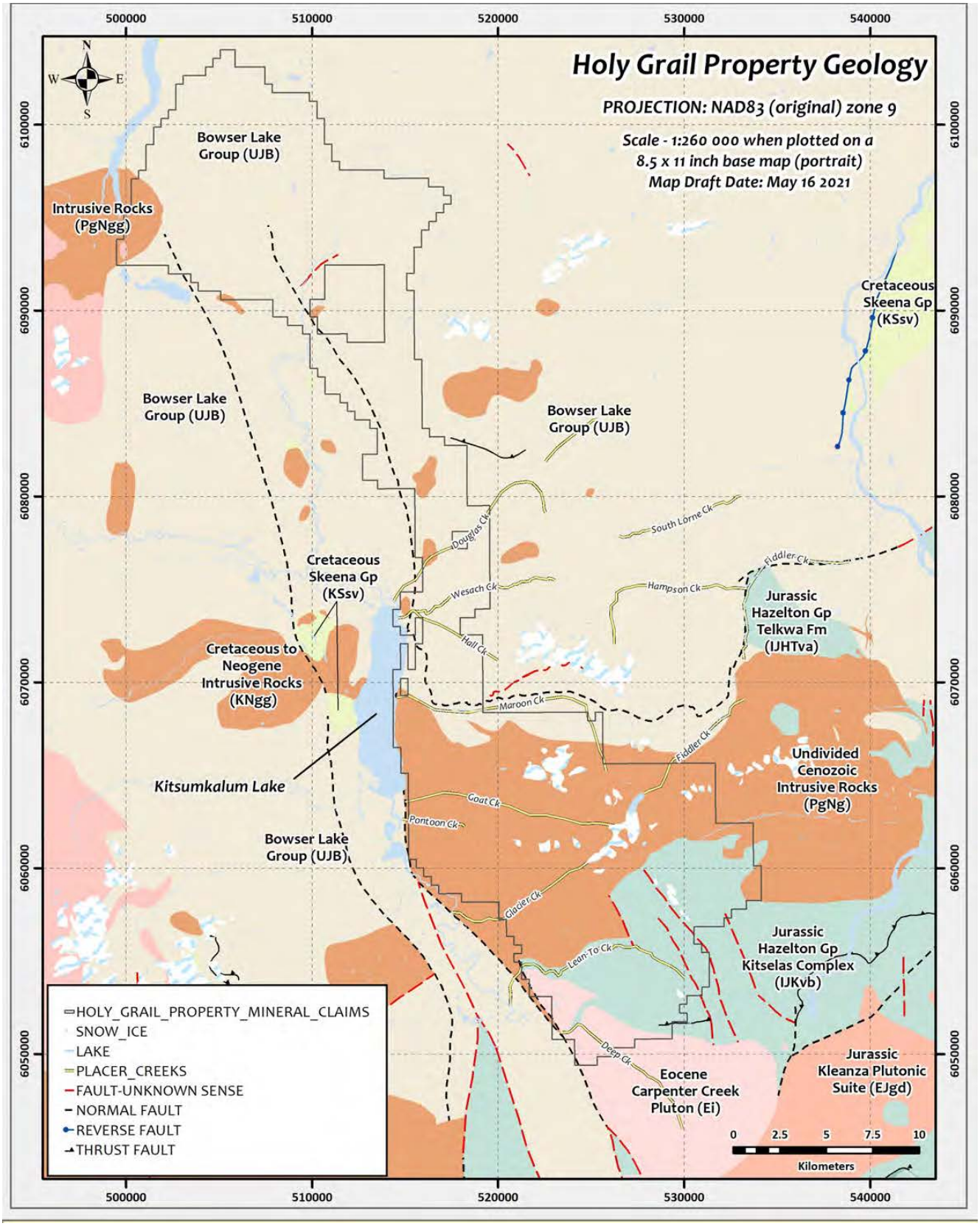


Figure No. 8. Holy Grail Property Geology.

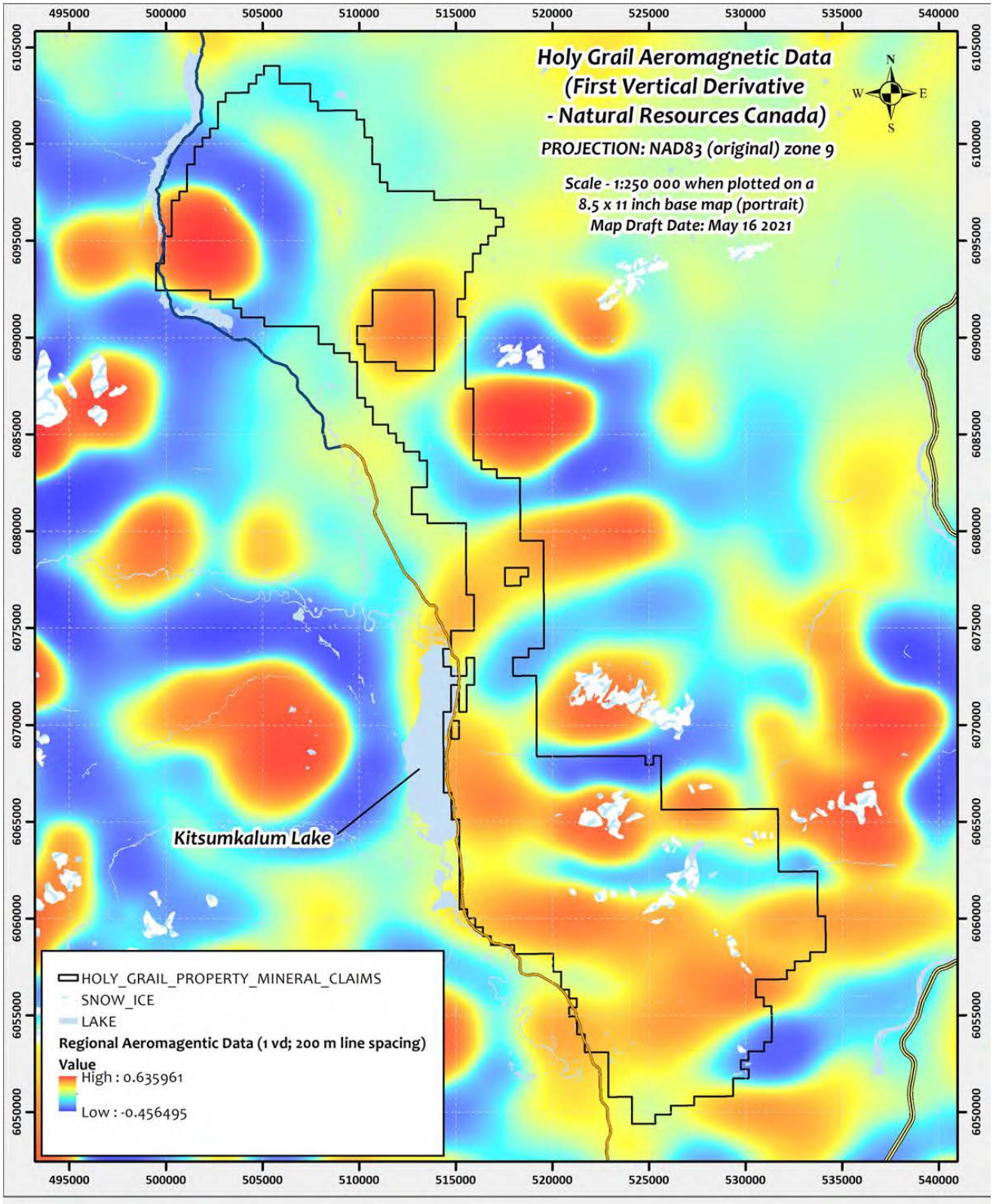


Figure No. 9. Holy Grail Property Aeromagnetic Intensity.

ITEM 8: DEPOSIT TYPES

The Holy Grail Property is being explored for potential porphyry and associated skarn and polymetallic veins within an orogenic geological environment. Twenty-two of the local Minfiles are associated to various extents with granitic intrusive bodies or classed as intrusion or porphyry-related. Placer deposits were mined on Douglas and other creeks on the east side of Kitsumkalum Lake during the early part of the 20th century.

8.1 Orogenic Epigenetic Veins

The orogenic class of gold deposit is defined here as syn-tectonic quartz-carbonate veins and wall rock replacement associated with regional-scale faults. Orogenic ores form at convergent plate margins in accretionary and collisional orogens. Orebodies are surrounded by carbonate-sericite-pyrite alteration. Gold, silver, antimony and arsenic occur in the ore fluids along with tungsten, boron, tellurium and bismuth.

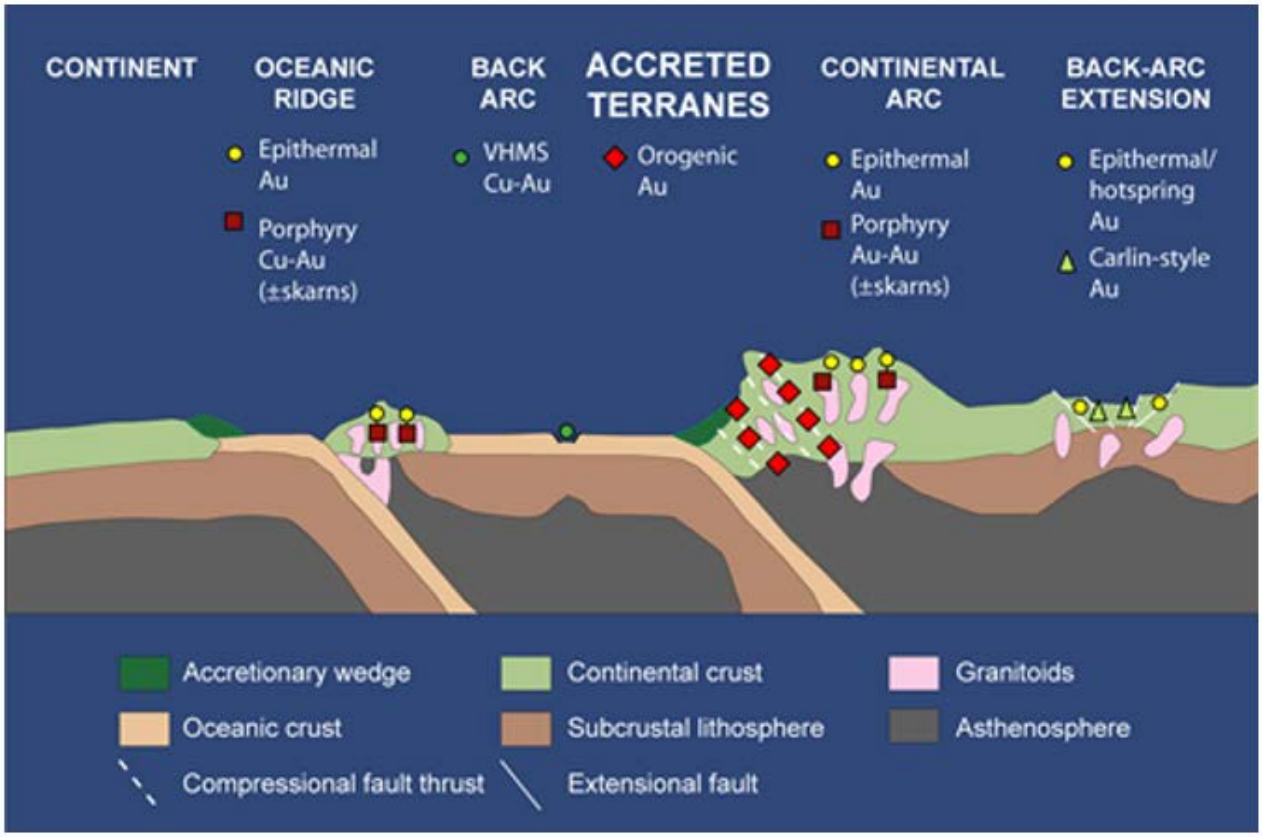


Figure No. 10. Tectonic settings of locations of various types of gold deposits. Orogenic Au deposits (red symbols in above illustration) occur in accretionary tectonic terranes in the western North American Cordillera. The Holy Grail Property is considered to be associated with an oceanic or island arc geological terrane.

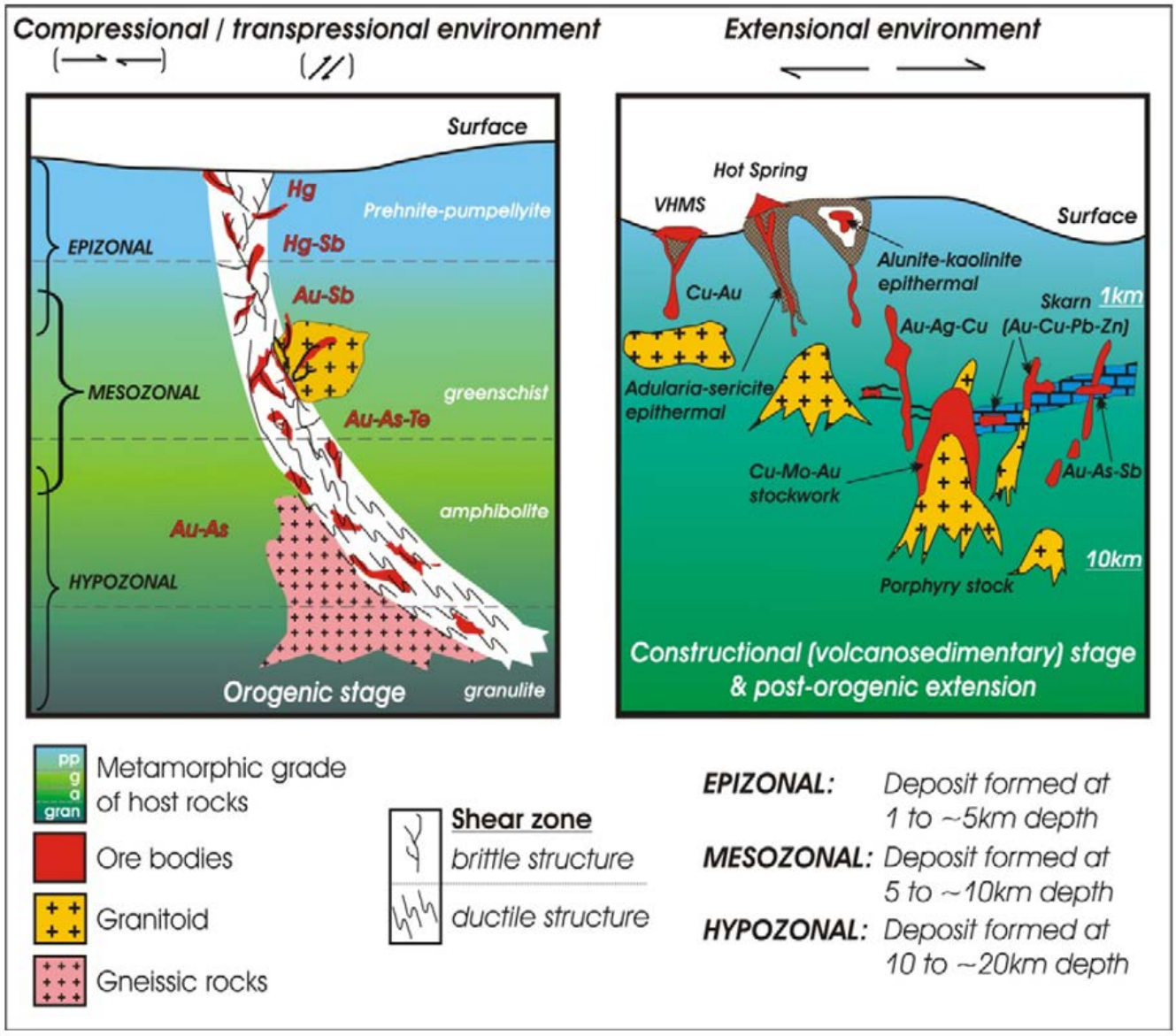


Figure No. 11. Orogenic gold deposits had previously mainly been called epithermal gold deposits. The newer concept is that these and related ore bodies occur throughout the middle to upper crust and are related to major shear zones. "Orogenic" is now somewhat an umbrella term for different depth-related gold deposits from intrusion related, mesothermal, shear zone hosted to epithermal. As such, orogenic gold deposits include porphyry, volcanogenic massive sulphide, epithermal and other sub-classes, potentially large deposits which include gold.

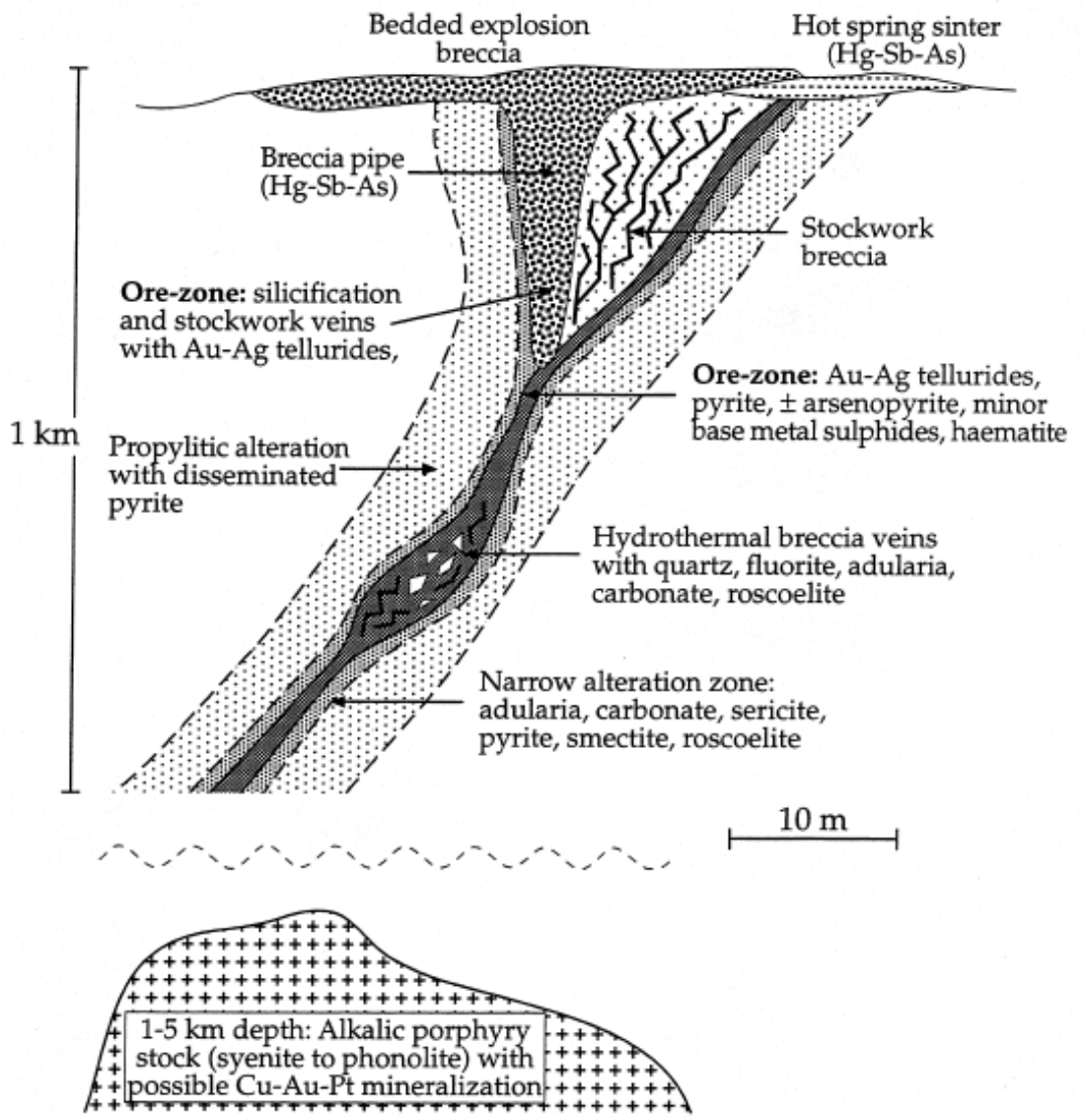


Figure No. 12. Schematic model of an alkalic-type epithermal epigenetic gold system associated with an intrusive stock.

Deposit types historically explored for in the Holy Grail area are listed below and in ITEM 27: REFERENCES.

Deposit Type C01 – Surficial placers
Deposit Type I02 – Intrusion-related Au pyrrhotite veins
Deposit Type I05 – Polymetallic veins Ag-Pb-Zn +/- Au
Deposit Type L01 – Subvolcanic Cu-Ag-Au (As-Sb)
Deposit Type L04 – Porphyry Cu +/- Mo +/- Au
Deposit Type L05 – Porphyry Mo (Low F - type

ITEM 9: EXPLORATION

Economic Target and Work Done

The majority of historic exploration done in the area of the Holy Grail Property has included the mining of placer gold in Douglas Creek and Lorne Creek eastward. Historical exploration, outlined in ITEM 6 in this report, determined the existence of polymetallic veins throughout the placer areas and the presence of granodiorite stocks, which suggest the potential for porphyry-style mineralization underlying the known veined deposits.

Exploration Results in 2020

Forty-one rock samples were collected on the Holy Grail Property during 2020. The higher geochemical analysis results occurred in polymetallic quartz veins or breccia or as disseminations. Gold results were up to 117.0 ppm (g/t) and silver up to 578 ppm (g/t).

Sample No.	East	North	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
W389751	523864	6051292	2.95	<0.2	<1	<1	21
W389752	525279	6052907	9.29	0.2	16	6	110
W501706	516088	6062283	0.030	3.9	26	2100	178
W501707	516085	6062401	0.53	30.6	8110	517	28
W501708	516086	6062331	0.32	59.0	869	1.36 %	6300
W501709	516080	6062383	3.78	72.8	846	1.43 %	7400
W501711	517066	6060277	40.3	578	3.97 %	3.32 %	2.64 %
W501712	516932	6060535	0.196	35.4	1155	9870	782
W501715	519628	6061871	117.0	29.3	8100	9.55 %	4.85 %

Table No. 2 Best geochemical results from 2020 sampling. Above values are in ppm unless stated as %. The geochemical results are depicted in Figure Nos. 14 to 18 for:

Au values higher than 0.05 ppm (g/t)
Ag values higher than 10 ppm
Cu values higher than 0.1%
Pb values higher than 0.1%
Zn values higher than 0.1%

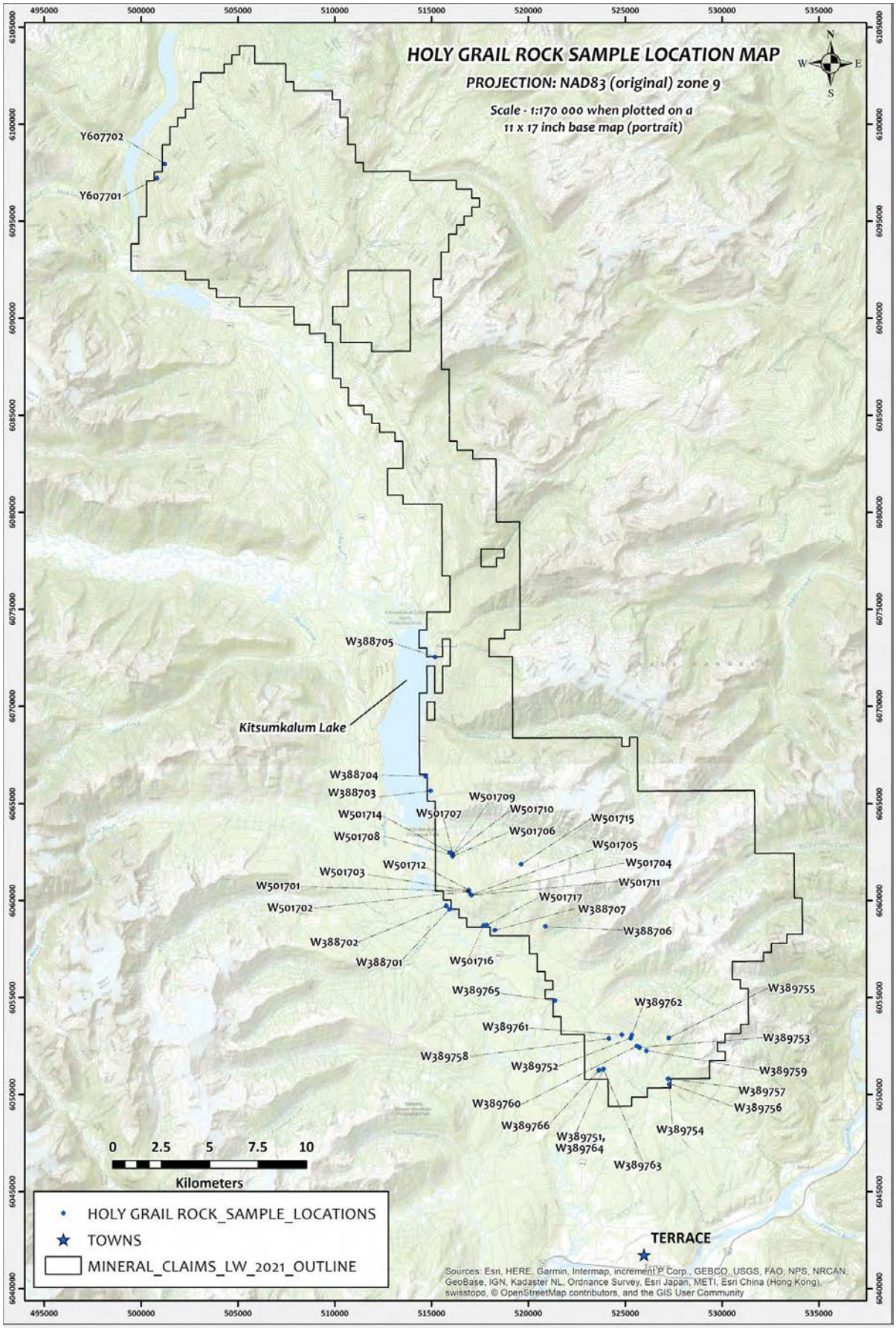


Figure No. 13. Holy Grail Property 2020 Rock Sample Locations.

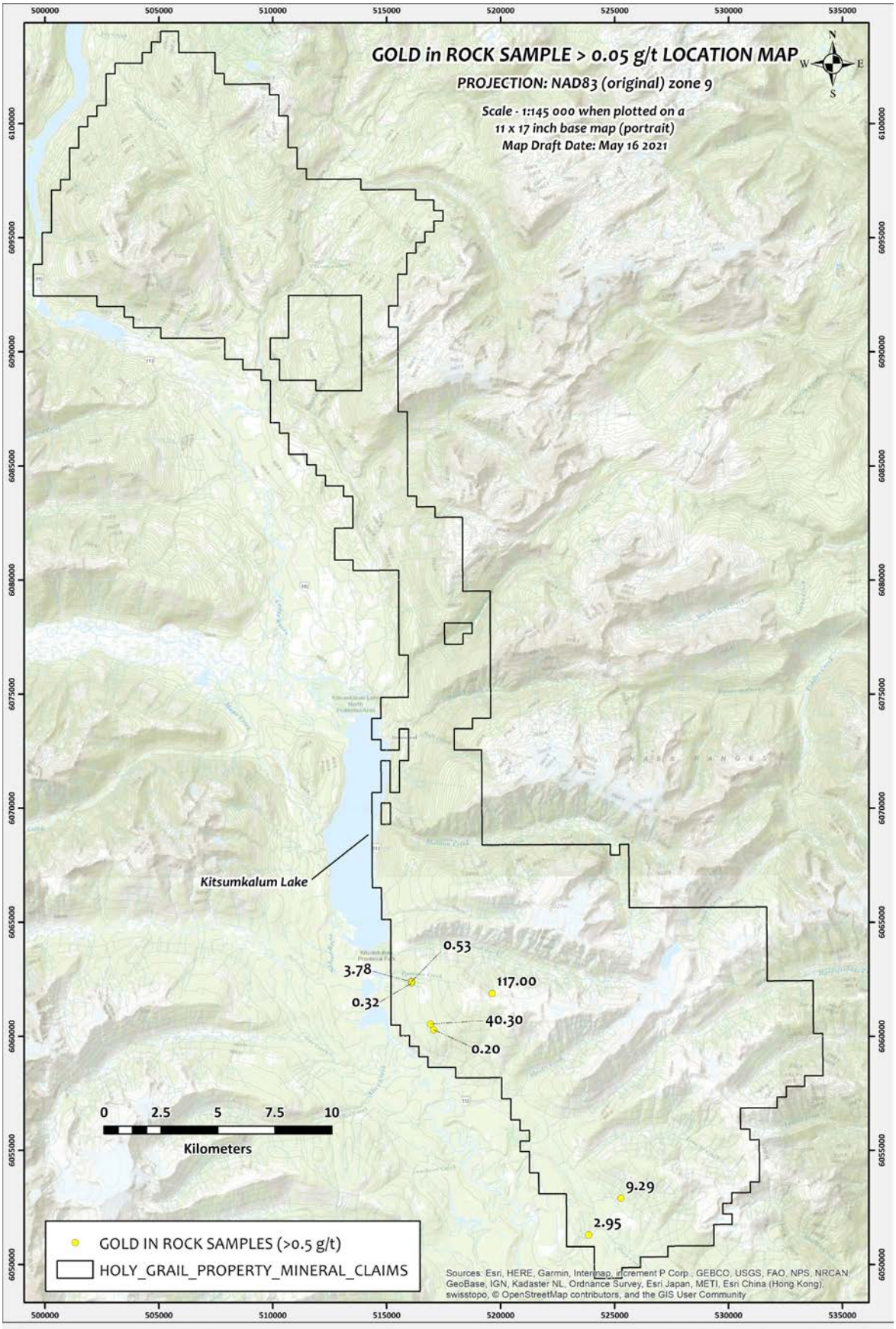


Figure No. 14. Gold Geochemistry, 2020, Holy Grail Property.
Values are in ppm (g/t).

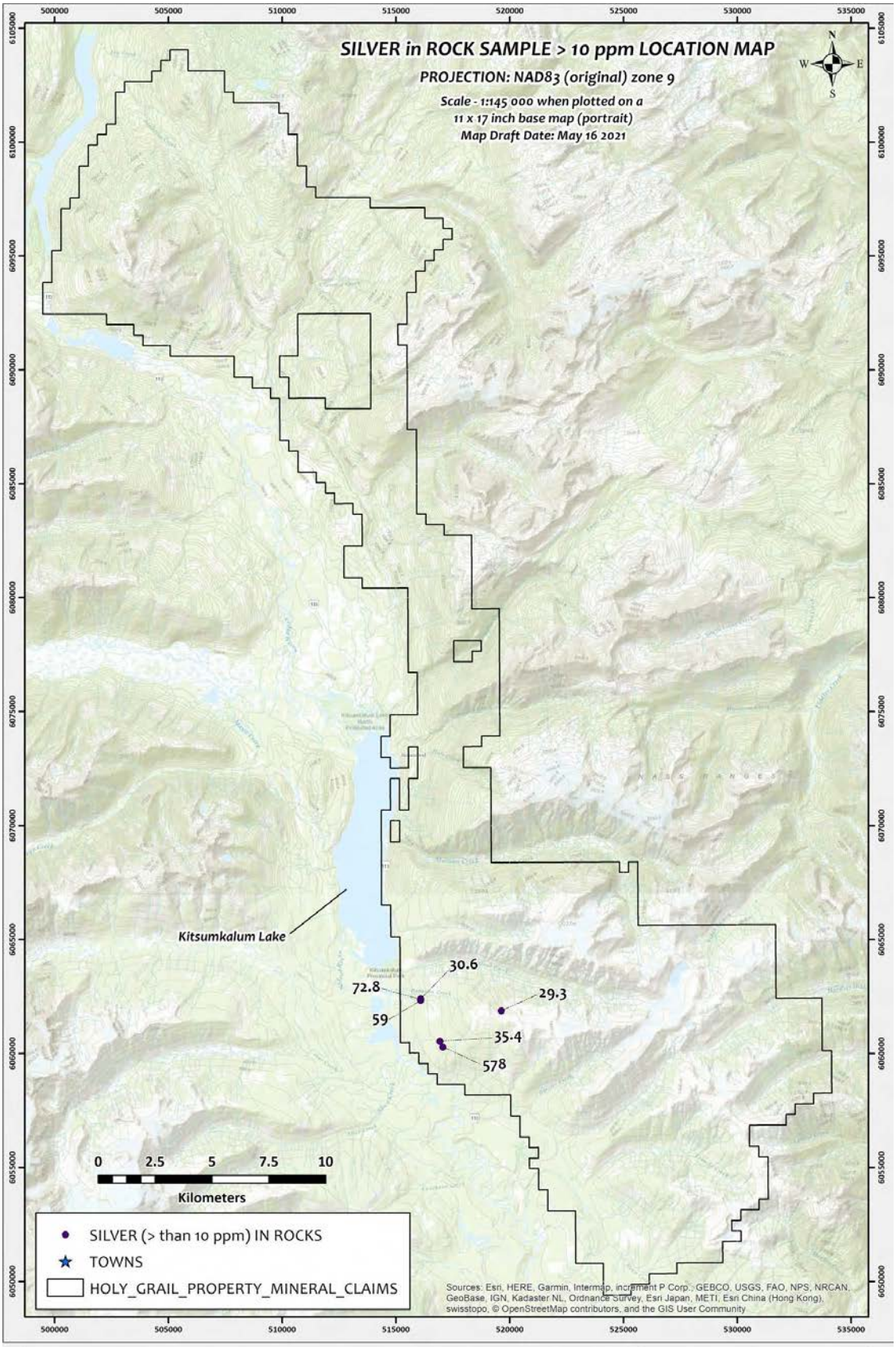


Figure No. 15. Silver Geochemistry, 2020, Holy Grail Property.
Values are in ppm.

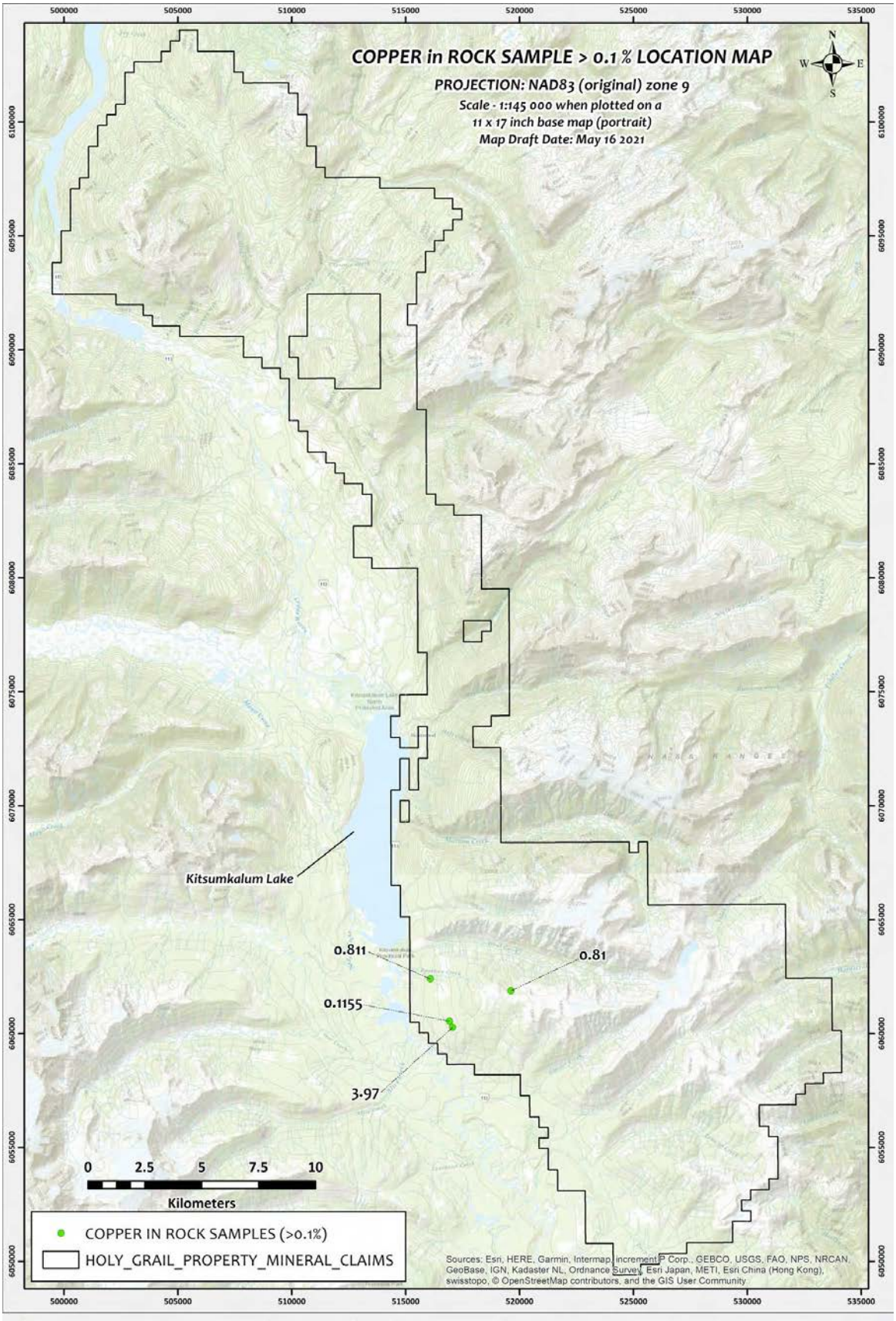


Figure No. 16. Copper Geochemistry, 2020, Holy Grail Property. Values are in %.

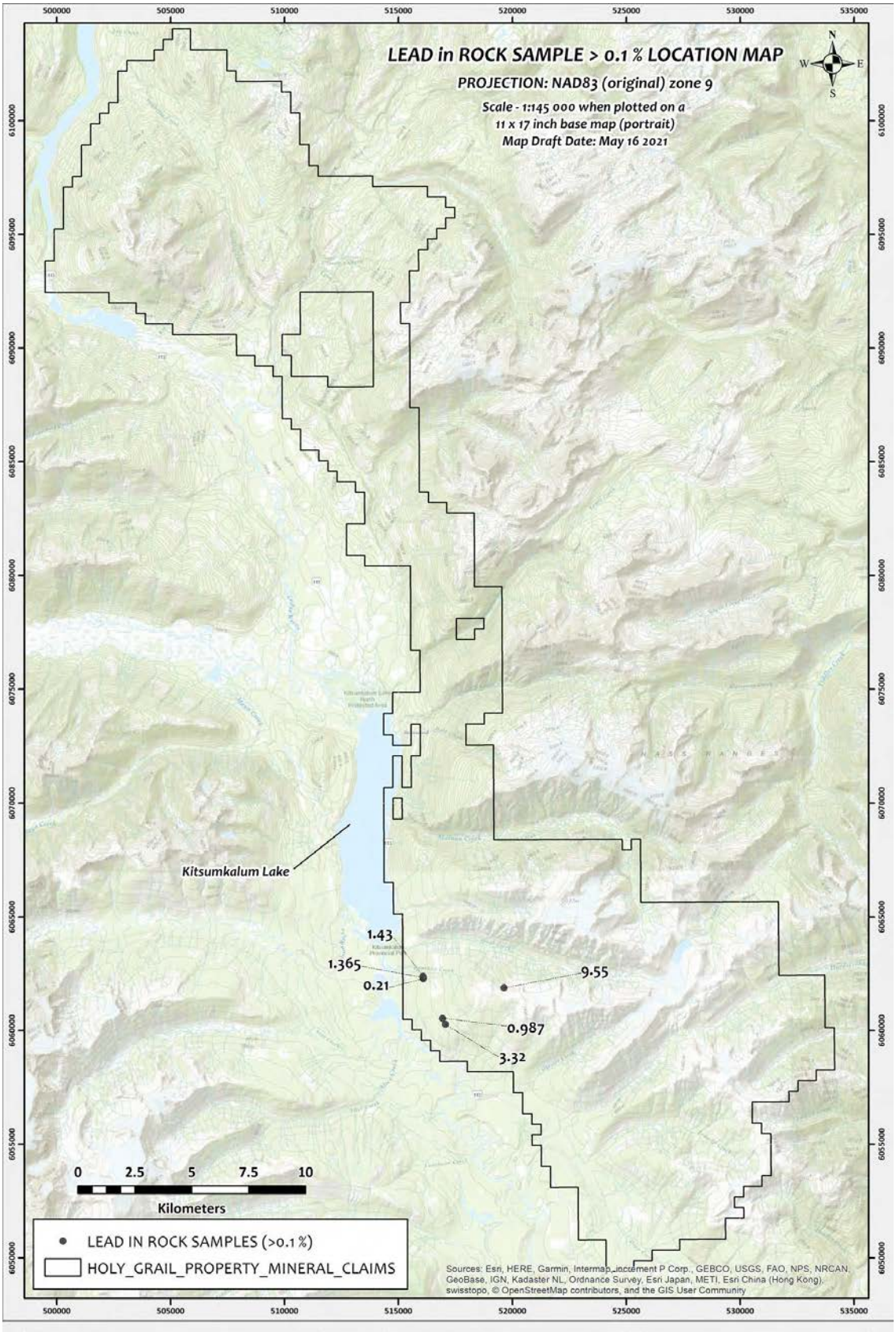


Figure No. 17. Lead Geochemistry, 2020, Holy Grail Property.
Values are in %.

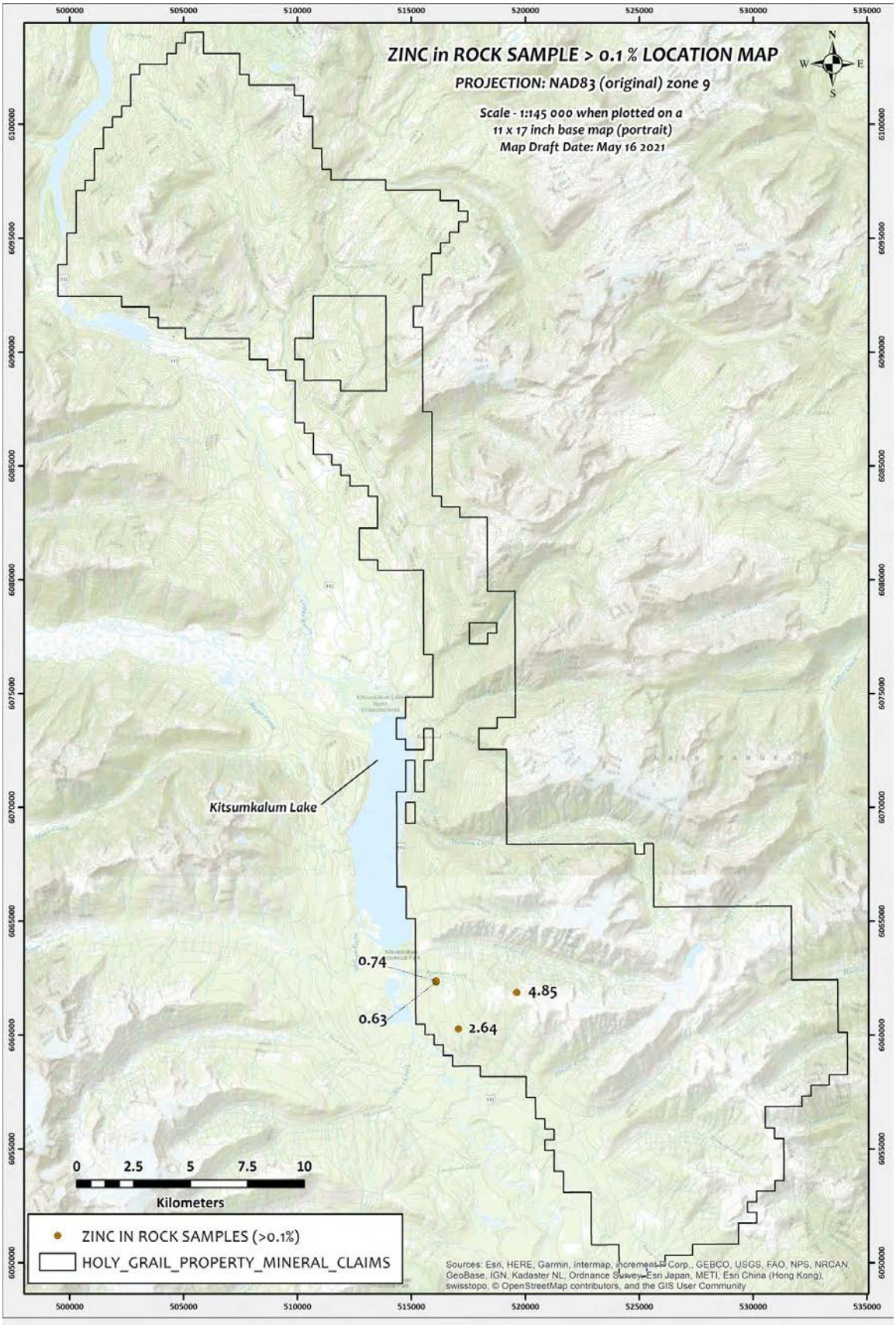


Figure No. 18. Zinc Geochemistry, 2020, Holy Grail Property.
Values are in %.

ITEM 10: DRILLING

This Item is not applicable. No drilling has been done by Loan Wolf Exploration Ltd. on the Holy Grail Property.

ITEM 11: SAMPLE PREPARATION, ANALYSIS and SECURITY

Samples were stored at a secure facility near Terrace, BC which served as the base of the 2020 field program of Loan Wolf Exploration Ltd. Rock samples were placed into sturdy, labeled, woven-polyethylene bags, sealed with a cable tie prior to shipping and were subsequently transported by the crew from camp to Terrace, BC.

All rock samples were delivered to ALS Limited (ALS or ALS Labs) laboratory in Terrace, British Columbia for processing or trans-shipment to their laboratory in North Vancouver. The samples were processed at ALS' lab in Terrace or in North Vancouver depending upon the geochemical procedure to be used. ALS is Certified to ISO 9001 and ISO 17025. All rock samples were crushed and pulverized and subsequently analysed for multiple elements, up to 35, using their ME-ICP41, ME-ICP61 or ME-MS81 geochemical procedures. Gold was analysed in their procedure Au-AA24. Ore grade elements were analysed in package ME-OG46 or Au-SCR21. Platinum group elements were analysed with ALS's PGM-ICP23 procedure or Rh-MS25 if Rhodium was included. Rare earths were analysed using with their MS41L-REE package. The coarse reject portions of the rock samples and the pulps, were kept in a storage facility in Terrace, BC.

Details regarding ALS's services, accreditations and technical notes can be downloaded from their website at:

https://www.alsglobal.com/en/services-and-products/geochemistry/geochemistry-downloads.

This author considers that the sampling and storage methods by Loan Wolf Exploration Ltd. have been in accordance with normal practice in the mineral exploration industry and have been done in an ethical manner. In the author's opinion, all samples were prepared and assayed using appropriate techniques at the laboratories.

ITEM 12: DATA VERIFICATION

This writer has compared the analytical results from the 2020 exploration programs as presented by Loan Wolf Exploration Ltd. with the analytical results provided by ALS certified laboratory. This writer considers that the data as presented by Loan Wolf Exploration accords with the ALS laboratory's certificates.

This author visited the Holy Grail Property and Loan Wolf Exploration campsite north of Terrace, BC on October 19, 2020 in order to examine representative outcrops and example specimens of rock samples collected in 2020.

ITEMS 13 to 22:

These Items are not applicable.

ITEM 23: ADJACENT PROPERTIES

Certain past production or sampling results on adjacent properties are historical in nature and were compiled before NI 43-101. The historical results have not been independently analyzed the and therefore they should not be relied upon. The author believes these historical results may help to provide an indication of the potential of the Holy Grail Property and are relevant to ongoing exploration. The author has been unable to verify the historical information and that the information is not necessarily indicative of the mineralization on the Holy Grail Property.

Kitsumkalum Provincial Park (40 hectares size), is a public campsite located at the southern tip of Kitsumkalum Lake.

A large number of current mineral claims owned by others cluster the east side of the 58 km long Holy Grail Property. A smaller, 10 km x 10 km group of mineral claims owned by others occur on the west side of Kitsumkalum Lake. The history of mineral exploration and placer mining in the Holy Grail area goes back over 100 years.

The BCGS Minfiles and mineral claim assessment reports are the best primary source for historical information related to these files and reports. ITEM 27: REFERENCES lists these and other sources. More detailed information from Minfiles is provided in ITEM 29: BCGS MINFILES RELEVANT to the HOLY GRAIL AREA.

ITEM 24: OTHER RELEVANT DATA and INFORMATION

This Item is not applicable.

ITEM 25: INTERPRETATION and CONCLUSIONS

The Holy Grail Property covers portions of documented historical productive placer streams including in particular Douglas Creek (historic production 10,937 grams gold). There is significant potential for the discovery of the bedrock source of the historical gold placers. The potential placer sources are considered to be porphyry-type deposits and associated skarn and polymetallic veins.

The failure of 1930's prospectors to discover the hardrock sources of the gold placers suggests the sources could be porphyry-type deposits of insufficient grade to have been economic then. As well, porphyry-type deposits were an unrecognized type of ore deposit in the 1930's.

ITEM 26: RECOMMENDATIONS

Recommended future work

A systematic exploration program consisting of prospecting, drone surveys, geologic mapping, geophysics and hand trenching and rock chip/channel sampling is recommended to follow up on the historic and 2020 discoveries in preparation for follow-up drilling. Prospecting should be done to expand on areas of known mineralization. Drone surveys would aid in prospecting and geological mapping. Geological mapping is recommended to be carried out on recently discovered mineralized bedrock exposures in conjunction with chip and channel sampling in preparation for subsequent drilling. The preferred target deposit type would be porphyry due to their typical large size.

Recommended Budget

This author recommends a budget of $200,000 for early-stage exploration on the Holy Grail Property.

ITEM 27: REFERENCES

Mineral Claim Assessment Reports listed below are available for free download at the Ministry of Energy, Mines and Petroleum Resources' website for the Assessment Report Indexing System (ARIS).

https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/assessmentreports

Figure No. 6 shows the locations of historical work associated with assessment reports. The assessment reports' ID numbers are on the map and point toward their work area. Assessment References below are for those which describe work done on the present Holy Grail Property area. The locations of assessment reports related to work done outside but near to the Holy Grail are indicated on the map.

BCGS Minfile references are fully presented in ITEM 29 in this report. These were download at the Ministry of Energy, Mines and Petroleum Resources' below website.

https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mineralinventory

Belik, Gary D, Geological and Geochemical Assessment Report on the Kalum Group. November 19, 1993. (Assessment Report 11595. Located near Holy Grail tenure no. 1078934).

Bulmer, WR, Assessment Report for the 1998 Diamond Drilling Programme on the Silver Ghost Mineral Property. October 1998. (Assessment Report 25713. Located near Holy Grail tenure no. 1081996).

Bulmer, WR, Geology and Rock Geochemistry on the Bambino and Money Claims, Perri Gold Mineral Property. December 2010. (Assessment Report 32034 Located near Holy Grail tenure no. 1079600 .

Burmeister, Norman W, Geochemical Report on the Big Joe Claimgroup. November 1966. (Assessment Report 857. Located near Holy Grail tenure no. 1081996).

Burton, Alex, Technical Assessment Report on the Kshish Molybdenum Property. December 2008, Revised November 24, 2009. (Assessment Report 30453. Located on Holy Grail tenure no. 1078327).

Carne, RC, Assessment Report describing Diamond Drilling on the Silver Ghost Mineral Tenure 508169. December 2008. (Assessment Report 30468. Located near Holy Grail tenure no. 1081996).

Carter, NC, Geological and Geochemical Report on the Maroon # 1 Mineral Claim. August 20, 1998. Assessment Report 25636. Located east of Holy Grail tenure no. 1081988).

Carter, NC, Diamond Drilling Report on the Maroon # 1 Mineral Claim Bear Gold-Silver Claim. August 25, 2003. (Assessment Report 27229. Located east of Holy Grail tenure no. 1081988).

Carter, NC, Geological Sampling Report on the Maroon Gold-Silver Property. November 23, 2007. (Assessment Report 29514. Located east of Holy Grail tenure no. 1081988).

Cavey, George, et al., Report on the Kalum Mineral Claim Group. November 19, 1984. (Assessment Report 13,303. Located near to Holy Grail tenure no. 10787508).

Downing, BW, Geochemical Report on the Frankie Blue Claim. September 5, 1980. (Assessment Report 8315). Located near Holy Grail tenure no. 1081988).

Gagnon, JF, et al., Stratigraphy of the upper Hazelton Group and the Jurassic evolution of the Stikine terrane, British Columbia, Canadian Journal of Earth Science, Vol. 49, 2012.

Goeppel N. and Turna R., Geological, Geochemical and Geophysical Assessment Report on the Lucky Strike Property, July 18, 2017. (Assessment Report 36902. Located east of Holy Grail tenure no. 1081988.

Hanson, DJ, Assessment Report for the 1990 Geological and Geophysical Surveys on the Silver Ghost Mineral Claim. December, 1990. (Assessment Report 20680. Located near Holy Grail tenure no.1082027).

Hanson, DJ, 1992 Soil Geochemistry Assessment Report on the Silver Ghost Mineral Property. February 1993. (Assessment Report 22816. Located near Holy Grail tenure no. 1081996).

Hanson, Daryl J, Diamond Drilling Report on the Silver Ghost Mineral Property. November 30, 2003. (Assessment Report 27282. Located near Holy Grail tenure no. 1082027).

Hanson, Daryl J, Assessment Report Diamond Drilling on the Clear Creek Mineral Property. February 19, 2005. (Assessment Report 27731. Located near Holy Grail tenure no. 1081996).

Harivel, Colin, Geological and Geochemical Report on the Josh Mineral Claim. August 25, 2002. (Assessment Report 27049. Located near Holy Grail tenure no. 1081996).

Holland, SS., Placer Gold Production of British Columbia, Ministry of Energy, Mines and Petroleum Resources, Bulletin No. 28, 1950, reprinted 1983.

Howell, WA, et al., Diamond Drilling and Geochemical Report on the Kalum No.1, Ken No.1 and Ken No. 2 Claims. May 15, 1987. (Assessment Report 16158. Located near Holy Grail tenure no. 1082059).

Jamieson, MD, et al., Geological and Geochemical Assessment Report on the Berma 1 to 9 Claims. October 15, 1991. (Assessment Report 21742. Located east of Holy Grail tenure no. 1081998).

Kindle, ED., Usk to Cedarvale, Terrace Area, Coast District, British Columbia, Geological Survey of Canada Memoir 212, 1937.

Kyba, J. and Nelson, J., Stratigraphic and Tectonic Framework of the Khyber-Sericite-Pins Mineralized Trend, Lower Iskut River, Northwestern British Columbia, from Geological Fieldwork 2014, BCGS Paper 2015-1.

Lambert, Ellen, Drill Report, Kalum Claim. 1986. (Assessment Report 15285. Located near Holy Grail tenure no. 1082059).

Lambert, EE, et al., Geological, Geophysical Report on the Kalum No.1, Ken No.1 and Ken No. 2 Claims. November 17, 1986. (Assessment Report 15679. Located near Holy Grail tenure no. 1082059).

Lambert, Ellen, Geophysical and Geochemical Report on the Kalum Property. May 10, 1989. (Assessment Report 18719. Located near Holy Grail tenure no. 1078894).

Ledwon, A., Geological, Geochemical and Geophysical Assessment Report on the Lucky Strike Property, February 18, 2019. (Assessment Report 37976. Located near Holy Grail tenure no. 1081988).

MacGearailt, Daithi, 2010 Diamond Drilling, Trenching and Rock Sampling Report on the Maroon #1 Claim. September 25, 2010. (Assessment Report 31714. Located east of Holy Grail tenure no. 1081988).

McKeown, M., Nelson, J. and Friedman, R. (2008). Newly Discovered Volcanic-Hosted Massive Sulphide Potential within Paleozoic Volcanic Rocks of the Stikine Assemblage, Terrace Area, Northwestern British Columbia (NTS 103I/08). BC Geological Survey, Geological Fieldwork 2007, Paper 2008-1, p. 103-116.

Moll, John Wesley, Assessment Report for the 2017 Diamond Drilling Program for the Silver Ghost Mineral Claims. (Assessment Report 37431. Located near Holy Grail tenure no. 1082027).

Moll, Richard, Assessment Report for the 2006 Prospecting of the Krystal 532662 Mineral Claim. June 28, 2007. (Assessment Report 29176. Located near Holy Grail tenure no. 1078953).

Moll, Richard, Assessment Report for the 2007 Prospecting of the Krystal 2-543813 Mineral Claim. January 3, 2008. (Assessment Report 29522. Located near Holy Grail tenure no. 1078953).

Nelson, J., Composite pericratonic basement of west-central Stikinia and its influence on Jurassic magma conduits: Examples from the Terrace-Ecstall and Anyox areas, from Geological Fieldwork 2016, BCGS Paper 2017-1.

Smith, HV, Assessment Report on the Sight Crown-Granted Mineral Claim, June 20, 1991. (Assessment Report 21445. Located near Holy Grail tenure no. 1080813).

Syberg, Fred JR, Report on VLF-EM and IP Surveys [on] Kalumken Property. November 1991. (Assessment Report 22520. Located near Holy Grail tenure no. 1078894).

Robb, Warren, Geophysical Assessment Report on the Shannon Creek Property. December 31, 2007. (Assessment Report 29620. Located near Holy Grail tenure no. 1080818).

Weymark, WJ, Kalum Mineral Claims Group Prospecting Examination Report. July 22, 1981. (Assessment Report 10450. Located near Holy Grail tenure no. 1080813).

ITEM 28: GLOSSARY OF TECHNICAL TERMS AND ABBREVIATIONS

Ag	Silver.
Al	Aluminum.
Anomalous	Chemical and mineralogical changes and higher than typical background values in elements in a rock resulting from reaction with hydrothermal fluids or increase in pressure or temperature.
Anomaly	The geographical area corresponding to anomalous geochemical or geophysical values.
As	Arsenic.
ATV	All-terrain vehicle
Au	Gold.
Background	The typical concentration of an element or geophysical response in an area, generally referring to values below some threshold level, above which values are designated as anomalous.
BCGS	British Columbia Geological Survey
cm	Centimetre.
Cu	Copper.
DDH	Diamond drill hole.
EM	Electromagnetic.
Fe	Iron.
Float	Loose rocks or boulders; the location of the bedrock source is not known.
Grab sample	A sample of a single rock or selected rock chips collected from within a restricted area of interest.
g/t	Grams per metric tonne. 34.286 g/t (grams per metric tonne) = 1.00 oz/T (Troy oz per short ton)
Ha	Hectare - an area totaling 10,000 square metres, e.g., an area 100 metres by 100 metres.
Hectare	An area of 10,000 square metres.
Hg	Mercury.
HLEM	Horizontal loop electromagnetic geophysical survey.
Hornfels	A set of contact metamorphic rocks that have been baked and hardened by the heat of intrusive igneous masses.
ICP-AES	Inductively-coupled plasma atomic emission spectrometry. An ALS Labs geochemical analysis procedure.
ICP-MS	Inductively-coupled plasma mass spectrometry. An ALS Labs geochemical analysis procedure.
Intrusive	A magmatic rock that cuts into and alters older rocks and may be the source of minerals deposited into the rocks intruded, creating skarn or porphyry type mineral deposits.
IP	Induced polarization geophysical survey.
K	Potassium.
kg	Kilogram.

km	Kilometre.
LIDAR	An acronym of light detection and ranging. It is a surveying method that measures distance to a target by illuminating the target with laser light and measuring the reflected light with a sensor.
m	Metre.
Mag/vlf	Magnetic and VLF-EM geophysical surveys.
Max-min	An HLEM technique to test for resistivity and conductivity of rocks.
ME-ICP	Multiple elements inductively-coupled plasma. An ALS Labs geochemical analysis procedure.
ME-MS	Multiple elements mass spectrometry. An ALS Labs geochemical analysis procedure.
µm	Micron, micro-metre, one millionth of a metre.
Minfile	BCGS Mineral deposit profiles provide brief summaries of the types of mineral deposits found in British Columbia. They include descriptions of host rocks, mineralogy, alteration, tectonic setting, associations, genetic models, and exploration guides, and give typical examples with grades and tonnages.
Mg	Magnesium.
Mn	Manganese.
Mo	Molybdenum.
MS-REE	Mass spectrometry rare earth elements. An ALS Labs geochemical analysis procedure.
Na	Sodium.
N.T.S.	National Topographic System
NW-SE	Northwest - southeast.
OG	Ore grade samples analysis method particular to each element. An ALS Labs geochemical analysis procedure.
Orogenic	The physical manifestations of the process of mountain building. Orogens are usually long, thin, arcuate tracts of rock that are geologically active and have a pronounced linear structure resulting in geological terranes.
oz/T	Ounces per short ton (Imperial measurement). 34.286 g/t (grams per metric tonne) = 1.00 oz/T (Troy oz per short ton).
oz/st	Ounces per short ton (Imperial measurement, same as oz/T). 1.00 oz/T (Troy oz per short ton = 34.286 g/t (grams per metric tonne).
Pathfinder	Elements that occur in anomalous amounts together with the economic element being explored for.
PGM-ICP	Platinum group metals inductively-coupled plasma. An ALS Labs geochemical analysis procedure.
Pb	Lead.
Placer	A deposit of sand or gravel in the bed of a river, containing particles of gold.

Pd	Paladium.
Porphyry	A deposit where primarily Cu-bearing minerals occur in disseminated grains or veinlets through a large volume of rock within or in close association with intrusive igneous rocks. Au and Mo are also important products of porphyry deposits.
Propylitic alteration	Alteration of rocks due to hot fluids that have a high sodium ion composition. It typically results in epidote–chlorite-albite alteration with pyrite.
Potassic alteration	Typical of porphyry copper and lode gold deposits, results in production of micaceous, potassic minerals such as biotite in iron-rich rocks, muscovite mica or sericite in felsic rocks, and orthoclase (adularia) alteration, often quite pervasive and producing distinct salmon-pink alteration zones.
ppb	Parts per billion.
ppm	Parts per million (1 ppm = 1,000 ppb = 1 g/t)
Pt	Platinum.
Rh-MS	Rhodium mass spectrometry. An ALS Labs geochemical analysis procedure.
S	Sulphur.
Sb	Antimony.
Showing	Visible mineralization in a rock outcrop.
Skarn	Forms by chemical metasomatism of rocks in the contact zone of intrusive rocks with rocks often containing carbonate minerals. Skarns in the igneous environment are associated with hornfels and wider zones of calc-silicate rocks. Skarns are often hosts for copper, lead, zinc, iron, gold, molybdenum, tin, and tungsten ore deposits.
Talus	A collection of rock fragments at the base of crags or mountain cliffs, that has accumulated through rock fall from adjacent cliff faces. Also called scree.
Te	Tellurium
Terrain	An arbitrarily defined geographic location.
Terrane	A major crustal block with a particular geologic history.
VLF-EM	Very low frequency electromagnetic. A geophysical survey method for metallic conductors.
VMS	Volcanogenic massive sulphide.
VHMS	Volcanic-hosted massive sulphide. Same as VMS.
W	Tungsten.
Zn	Zinc

Certificate of Qualified Person

To accompany the report titled: “NI 43-101 Technical Report on the Holy Grail Property, Skeena, Ominica Mining Divisions, British Columbia” dated effective June 10 , 2021 (the “Technical Report”).

I, Rein Turna, B.Sc., P.Geo. do hereby certify that:

1. I am a geological consultant, independent of the issuer, Loan Wolf Exploration Ltd. as described in section 1.5 of National Instrument 43-101.

2. My address and email are:
   5818 Falcon Road
   West Vancouver, B.C., Canada, V7W 1S3

   Email: geocon002@shaw.ca

3. I graduated with a degree Bachelor of Sciences in Geological Sciences from the University of British Columbia in 1975.

4. I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.

5. I have worked as a geologist, in field and office, over 40 years since graduation from university. I worked primarily in British Columbia, Yukon and Ontario and also in Saskatchewan, Northwest Territories and Arizona. The work involved exploration for precious and base metals in epithermal, sedimentary exhalative, volcanogenic massive sulphide, skarn, porphyry and shear zone-hosted deposits.

6. I am a “Qualified Person” as defined in Part 1.1 of National Instrument 43-101.

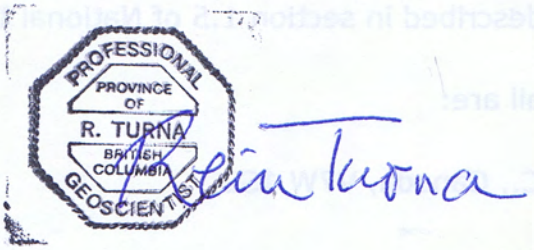
7. I have had no prior involvement with the property that is the subject of the Technical Report. I visited the Holy Grail Property on October 19, 2020 to examine representative rocks and verify evidence of rock sampling done by the owner of the Property.

8. I am responsible for all Items of the Technical Report.

9. I have read National Instrument 43-101 and Form 43-101F1. The Technical Report has been prepared in compliance with that instrument and form.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

-- Signed and Stamped --Dated this 10th Day of June, 2021



Signature: Rein Turna, B.Sc., P.Geo.

Consent of Author

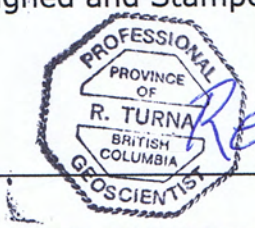
Rein Turna, B.Sc., P.Geo.
5818 Falcon Road, West Vancouver, B.C., Canada, V7W 1S3
Email: geocon002@shaw.ca

To: Securities Regulatory Authorities:
_____TSX Venture Exchange

I, Rein Turna, P.Geo., do hereby consent to the public filing of the Technical Report titled "NI 43-101 Technical Report on the Holy Grail Property, Ominica and Skeena Mining Divisions, British Columbia" and dated June 10, 2021 (the "Technical Report").

I acknowledge that the Technical Report will become part of the Issuer's public record.

-- Signed and Stamped --Dated this 10th Day of June, 2021



Signature: **Rein Turna, B.Sc., P.Geo.**

ITEM 29: BCGS MINFILES RELEVANT to the HOLY GRAIL AREA

Below are brief summaries of the British Columbia Geological Survey (BCGS) Minfiles within a 5 km radius of the Holy Grail Property area. The BCGS deposit types are:

Deposit Type C01 – Surficial placers
Deposit Type I02 – Intrusion-related Au pyrrhotite veins
Deposit Type I05 – Polymetallic veins Ag-Pb-Zn +/- Au
Deposit Type L01 – Subvolcanic Cu-Ag-Au (As-Sb)
Deposit Type L04 – Porphyry Cu +/- Mo +/- Au
Deposit Type L05 – Porphyry Mo (Low F - type)

Minfile 103I 019 (past producer – 15.75 tonnes ore)
Polymetallic Veins Ag-Pb-Zn+/-Au
The Kalum Lake showing area is underlain by Upper Jurassic to Lower Cretaceous sedimentary rocks of the Bowser Lake Group. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. High grade gold-bearing quartz veins fringe the Allard stock composed of granodiorite to diorite. This stock is also described as a composite pluton with an eastern syenitic phase. Mineralization within veins consists of sulphides and gold within a quartz gangue.

Minfile 103I 022 (past producer - 5 tonnes ore)
Polymetallic Veins Ag-Pb-Zn+/-Au
The area is underlain by sedimentary rocks of the Jurassic to Cretaceous Bowser Lake Group. The sediments are intruded by andesite and quartz monzonite dikes. Quartz veins are mineralized with sulphides and trace gold. In 1990, a geophysical survey consisting of electromagnetic (VLF-EM) and magnetic surveys identified three conductor groups.

Minfile 103I 023
Porphyry Mo (Low F- type)
Sedimentary rocks of the Jurassic to Cretaceous Bowser Lake Group are intruded by a 300 by 800 metre size stock consisting of granodiorite and quartz monzonite. A hornfels halo extends from the northeast trending stock. Molybdenite mineralization occurs in the intrusive as selvages along widely spaced, 1.2 to 2.5 centimetre wide milky white quartz veins, as disseminations in aplite stringers, and as coatings on fracture planes.

Minfile 103I 026

Polymetallic Veins Ag-Pb-Zn+/-Au

The Bermaline (Prosperity Trend) occurrence is located between Douglas and Lorne creeks. the area is underlain by Jurassic to Cretaceous Bowser Lake Group sediments which have been intruded by Late Cretaceous granodiorite and quartz monzonite stocks and sills. Locally, two zones of mineralization, the Bermaline and Prosperity Trend zones, have been identified.

The original Bermaline occurrence, identified in the early 1930s, comprises sediments cut by shear zones and mineralized quartz veins between the headwaters of Douglas and Lorne Creeks. Mineralization consists of sulphides in quartz veins and disseminated molybdenite near shear zones.

The Prosperity Trend zone, identified in 2016 comprises polymetallic quartz veins, up to 2 metres wide, hosting massive sulphides in intensely altered (hornfelsed) sedimentary rocks and granodiorite. The mineralized veins occur in faults and shear zones. Mineralization has been identified over an area of approximately 650 by 250 metres. The area has been explored in conjunction with the South Lorne Creek (MINFILE 103I 027) and a completed regional exploration history can be found there.

Minfile 103I 027

Polymetallic Veins Ag-Pb-Zn+/-Au

This occurrence is situated along the South Lorne Creek headwaters. The area is underlain by Jurassic to Cretaceous Bowser Group sedimentary rocks. And flanked to the southwest by Cretaceous to Tertiary Coast Plutonic Complex granitoid intrusions. Locally, Bowser Basin argillites are intruded by quartz diorite, quartz monzonite and granodiorite. Molybdenite, chalcopyrite, galena, stibnite, sphalerite and pyrrhotite occur in quartz veining within intrusive rocks and hornfelsed argillites, with widespread pyrite associated with contact zones.

Minfile 103I 028

Polymetallic Veins Ag-Pb-Zn+/-Au

The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a conglomerate bed. The veins are mineralized with galena, sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite.

Minfile 103I 029

Polymetallic Veins Ag-Pb-Zn+/-Au

The showing area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a conglomerate bed. The veins are mineralized with galena, sphalerite, pyrite and pyrrhotite and minor chalcopyrite.

Minfile 103I 030 (past producer - 23 tonnes ore)
Polymetallic Veins Ag-Pb-Zn+/-Au
The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a conglomerate bed. The veins are mineralized with galena, sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite.

Minfile 103I 031
Polymetallic Veins Ag-Pb-Zn+/-Au
The area is underlain by slates and argillites of the Jurassic to Cretaceous Bowser Lake Group. The sediments are intruded by a small quartz diorite stock and a coarsely crystalline hornblende gabbro dyke.

Minfile 103I 032
Polymetallic Veins Ag-Pb-Zn+/-Au
A quartz vein, mineralized with pyrite and chalcopyrite, occurs in massive grey diorite of the Cretaceous to Tertiary Coast Plutonic Complex. The vein is alongside of a diabase dyke.

Minfile 103I 033
Porphyry Mo (Low F- type)
The property is underlain by Lower Jurassic volcanics and Eocene and Paleocene plutons. A granite pluton is cut by aplite and basalt dikes. Molybdenite occurs in quartz veins filling flat, widely spaced joint fractures.

Minfile 103I 034
Porphyry Mo (Low F- type)
The property is underlain by Lower Jurassic volcanics and Eocene and Paleocene plutons. Molybdenite occurs in quartz veins within a granite pluton along a zone of intense shearing, and argillic and K-feldspar alteration. Less commonly, it occurs along fractures in aplitic dikes. Chalcopyrite is sometimes associated with the molybdenum and pyrite occurs in all rock types. Molybdenum mineralization occurs in highly altered granite of the Newtown Creek pluton. The exposure exhibits shearing of the granite as well as intense hydrothermal alteration.

A series of four parallel faults runs through the main Newtown Creek showing. The alteration includes K-feldspar, argillization, chloritization and silicification to the host granite. The altered zone, as defined by the 1967-68 soil and sediment values along with molybdenum showings, is a northwest trending ellipse, roughly 4 kilometres long by 2 kilometres wide. The fault along Newtown Creek provides the best exposure of molybdenite mineralization on the property. One area of feldspar breccia has been found which has significant mineralization. The widespread nature of the mineralization suggest that several centres of intense

alteration are present with the intervening zones exhibiting multiple phases of alteration.

Minfile 103I 036

Subvolcanic Cu-Ag-Au (As-Sb)

Andesite and andesite feldspar porphyry of the Jurassic Hazelton Group are intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcocite and bornite and malachite. Occasional specks of free gold occur. Veins are exposed in creek beds over an area measuring 300 by 150 metres.

Minfile 103I 037

Subvolcanic Cu-Ag-Au (As-Sb)

The area is underlain by andesite and andesite feldspar porphyry of the Jurassic Hazelton Group and is intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcopyrite, pyrite, bornite, and minor chalcocite. The mineralization is usually close to, or associated with the granodiorite. The mineralized zones are mainly exposed in north trending streams over an area measuring 600 by 300 metres.

Minfile 103I 038

Subvolcanic Cu-Ag-Au (As-Sb)

Kitselas Mountain is underlain by volcanics and metavolcanics of probable Permian age. The metavolcanics, derived from rhyodacite crystal-lithic tuffs and fragmental tuffs, are cut by basic dykes. The volcanics consist of massive basalts and basaltic andesites. The rocks are complexly folded and cut by a northwest striking fault. Northeast of the fault is a 600 by 450 metre mineralized area containing bornite and chalcopyrite as fracture fills and disseminations in the metavolcanics. In the A zone, mineralization is confined to closely spaced northeast and northwest vertical fractures and shear planes. The A zone is about 30 metres wide with an east-west strike length of 85 metres and a vertical expression of 45 metres.

Minfile 103I 039 (past producer - 119 tonnes ore)

Polymetallic Veins Ag-Pb-Zn+/-Au

The area is underlain by andesite flows, porphyritic andesite and chlorite schist of probable Triassic age. The rocks are cut by aplitic dikes and shear zones. At the Lucky Luke showing, a 1 to 2 metres wide shear zone trending 110 degrees and dipping 65 degrees north contains narrow lenticular quartz veins mineralized with bornite, chalcopyrite, pyrite, chalcocite, and visible free gold.

Minfile 103I 040 (past producer - 73 tonnes ore)

Polymetallic Veins Ag-Pb-Zn+/-Au

The area is underlain by andesite flows, chlorite schists, and tuffs of probable Triassic age. The rocks are cut by lamprophyre dikes. Several quartz veins contain sparse bornite, chalcocite, chalcopyrite, and gold. The veins are up to 30 metres long and up to 3.0 metres wide. The vein system extends for about 150 metres along strike.

Recorded production for the period 1915-1922 totals 73 tonnes of ore milled and/or shipped from this property. From this ore, 1151 grams of gold, 6875 grams of silver and 15,881 kilograms of copper were recovered. No documented work since 1930 has been recorded on this property.

In 1989, a mineral exploration program including geochemical soil sampling and a VLF-EM (electromagnetic) survey was carried out in order to further delineate mineral targets. Results showed that the claim group was conducive to hosting copper and gold mineralized quartz veins (Assessment Report 18685).

In late fall 2012, Argonaut Exploration Inc. conducted two separate field examinations to locate the remnants of the Cordillera gold mine. Old rail tracks, a waste dump, one upper adit and a lower adit were located.

Minfile 103I 042

Subvolcanic Cu-Ag-Au (As-Sb)

Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic andesite flows, and minor basalt. All rocks are cut by feldspar porphyry dykes, faults, and shear zones with associated quartz veins. The volcanics and veins carry pyrite, bornite and chalcopyrite, minor skarn minerals and some scheelite.

Minfile 103I 073

Subvolcanic Cu-Ag-Au (As-Sb)

Andesite and basalt of the probable Jurassic age Hazelton Group, are intruded by a porphyritic gabbro sill, about 17 metres wide, of the Cretaceous to Tertiary Coast Plutonic Complex. All rocks are cut by northeast trending faults. Chalcopyrite, pyrrhotite, and pyrite occur as disseminations and blebs within the intrusive.

Minfile 103I 108

Porphyry Cu +/- Mo +/- Au

Porphyry Mo (Low F- type)

Veins in a porphyritic granitic rock carry chalcopyrite and molybdenite. The granitic intrusive is part of the Cretaceous to Tertiary Coast Plutonic Complex.

Minfile 103I 114

Porphyry Mo (Low F- type)

Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic flows and minor basalt. All rocks are cut by faults and shear zones with associated quartz veins. Molybdenite and pyrite occur as disseminations, rosettes and smears in widely spaced quartz veins and shears over a 900 by 400 metre area. Several mineralized veins measure up to 100 metres long and 3 metres wide.

Minfile 103I 115

Polymetallic Veins Ag-Pb-Zn+/-Au

Quartz filled shear zones occur in Jurassic to Cretaceous Bowser Lake Group sedimentary rocks which have been tightly folded. The folds have associated shears and faults with quartz veins. Pyrite, galena, sphalerite and chalcopyrite occur in the veins as disseminations and coarse blebs.

Minfile 103I 116

Polymetallic Veins Ag-Pb-Zn+/-Au

The area is underlain by argillite, greywacke and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below conglomerate bed. The veins are mineralized with galena, sphalerite, pyrite, pyrrhotite and minor chalcopyrite.

Minfile 103I 117

Polymetallic Veins Ag-Pb-Zn+/-Au

Subvolcanic Cu-Ag-Au (As-Sb)

Meta-rhyolite of probable Permian age is cut by a basic dyke. A shear zone occurs alongside of the dyke. The shear contains a quartz vein with disseminated chalcopyrite, galena, sphalerite and magnetite.

Minfile 103I 118

Subvolcanic Cu-Ag-Au(As-Sb)

Intrusion-related Au pyrrhotite veins

The area is underlain by metavolcanic and metasedimentary rocks of the Bowser Lake Group. The volcanic rocks consist of dacitic crystal tuffs, andesites and basalts, which are metamorphosed to muscovite schists, biotite-chlorite schists, and gneisses. The rocks have undergone varying degrees of sericite, epidote and chlorite alteration.

Bornite and chalcopyrite with low gold and silver values occur locally in narrow shear zones in quartz stringers; in quartz-epidote-hematite lenses and veins; in magnetite-rich, partly silicified tuff bands; and along planes of schistosity in the biotite-chlorite schists.

Minfile 103I 120

Subvolcanic Cu-Ag-Au (As-Sb)

Intrusion-related Au pyrrhotite veins

Sericite and hornblende schist of the Jurassic to Cretaceous Bowser Lake Group are intruded by a diorite mass. Quartz veins mineralized with pyrite and chalcopyrite occur in the diorite and concordant with the metasediments underlying the diorite. The concordant veins are hosted within a 10 metre wide zone, which also contains disseminated chalcopyrite.

Minfile 103I 121

Porphyry Mo (Low F- type)

Porphyry Cu +/- Mo +/- Au

Molybdenite occurs in the southern half of a granitic intrusive, measuring 750 by 150 metres, localized at the contact between granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex and volcanics and sediments of the Hazelton and Bowser Lake Groups. The intrusive is in contact with a quartz-feldspar biotite porphyry dike, granodiorite and porphyritic granite.

Molybdenite and minor chalcopyrite mineralization occurs over a length of 460 metres, a width of 150 metres and through a vertical range of 300 metres. It is closely associated with the granitic intrusive and occurs in narrow quartz-pyrite veins, in high grade multiple-banded quartz-pyrite veins, in silicified shears, disseminated and as fracture fillings. A fault truncates the mineralized zone. Alteration includes wide spread sericitization and local K-feldspathization.

Minfile 103I 127

Polymetallic Veins Ag-Pb-Zn+/-Au

Argillites of the Jurassic to Cretaceous Bowser Lake Group are intruded by numerous greenstone dykes. Diorite of the Cretaceous to Tertiary Coast Plutonic Complex occurs to the south. A 2 metre wide silicified zone occurs in the sediments. A quartz vein mineralized with pyrite and chalcopyrite occurs and a vein of brecciated quartz and country rock is mineralized with galena, sphalerite and chalcopyrite.

Minfile 103I 133

Polymetallic Veins Ag-Pb-Zn+/-Au

A shear zone in silicified volcanics and schists of probable Triassic age, is mineralized with sphalerite, pyrite and galena.

Minfile 103I 135

Polymetallic Veins Ag-Pb-Zn+/-Au

A quartz vein in argillite of the Jurassic to Cretaceous Bowser Lake Group contains galena and sphalerite.

Minfile 103I 137

Subvolcanic Cu-Ag-Au (As-Sb)

A quartz vein occurs in sheared volcanic rock of probable Triassic age. The veins are mineralized with probable chalcopyrite.

Minfile 103I 152

Intrusion-related Au pyrrhotite veins

Subvolcanic Cu-Ag-Au (As-Sb)

The area is underlain by granite to diorite intrusions related to the Cretaceous to Tertiary Coast Plutonic Complex. A shear zone in diorite contains a quartz vein mineralized with bornite and possibly free gold.

Minfile 103I 167

Porphyry Mo (Low F- type)

Volcanics of probable Triassic age are cut by quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex. Molybdenite occurs as flakes and disseminations within a 75 by 35 metre zone of altered and fractured quartz diorite. Alteration minerals include kaolinite and sericite. Quartz veins are present but are unmineralized. Scattered malachite was observed. About 900 metres to the southwest are quartz veins with molybdenite and pyrite within unaltered quartz diorite.

Minfile 103I 181

Polymetallic veins Ag-Pb-Zn+/-Au

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie below a conglomerate bed.

Minfile 103I 204 (past producer – 10,937 grams of placer gold)

Surficial placers

The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Auriferous quartz veins are probable sources of placer gold in the Douglas Creek bed. The largest nugget recovered was 195 grams. Coarse gold has been recovered from gravels above bedrock in the creek bed and from remnants of old channel ground on low bench and bar sections. Recorded production for the period 1886-1940 totals 10,937 grams of placer gold.

Minfile 103I 211

Polymetallic veins Ag-Pb-Zn+/-Au

Intrusion-related Au pyrrhotite veins

The area is underlain by Upper Jurassic to Lower Cretaceous sediments of the Bowser Lake Group comprised mainly of argillite, greywackes and conglomerates. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late

Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. High grade gold-bearing quartz veins fringe the Allard stock composed of granodiorite to diorite. This stock is also described as a composite pluton with an eastern syenitic phase.

Locally, mineralization consisting of epigenetic quartz veining with pyrite, chalcopyrite, tetrahedrite and galena with associated values in gold and silver occurs on the west shore of Kitsumkalum Lake. This vein-type mineralization is exposed on the Kalum Lake-Portland property (refer to Portland, 103I 019).

Minfile 103I 216

Polymetallic veins Ag-Pb-Zn+/-Au

Volcanic rocks of the Jurassic Hazelton Group are intruded by an aplite dyke. A shear zone is mineralized with pyrite, galena, sphalerite, and quartz.

Minfile 103I 222

Polymetallic veins Ag-Pb-Zn+/-Au

The area is underlain by Jurassic to Cretaceous Bowser Lake Group sediments comprised of bedded sandstones, greywacke, graphitic shales and breccia. Locally, a fine-grained aplite dyke cuts the sediments. Mineralization consists of irregular patches and specks of tetrahedrite, chalcopyrite, galena and sphalerite.

Minfile 103I 230

Coarse gold occurs in a quartz vein in coarse grit and pebble conglomerate and greywacke which contains metamorphic muscovite.

Minfile 103I 238

Porphyry Mo (Low F- type)

Porphyry Cu+/-Mo+/-Au

The Lucky showing is underlain mainly by Middle Jurassic to Upper Cretaceous Bowser Lake Group argillaceous siltstones, sandstones, greywackes and lesser conglomerates. Granitic rocks of the Early Tertiary Coast Plutonic Complex intrude the sedimentary rocks. Other intrusions known on the property include dike and sill-like bodies of granodiorite porphyry which intrude hornfelsed Bowser Lake Group siltstones. The intrusions are described as being typical of the Alice Arm-type being a crowded porphyry with phenocrysts of plagioclase making up 40 per cent of the rock by volume and set in a fine-grained matrix of quartz and minor K-feldspar.

Molybdenite and lesser chalcopyrite and bornite occur in quartz veinlets and hairline fractures best developed near the contacts between the intrusive rocks and hornfelsed siltstones. Quartz-banded gangue zones were found to cut earlier veins and dike contacts. Pyrite is widely disseminated in both the intrusion and hornfelsed sediments and a prominent gossan is exposed for several hundred

metres.

BCGS Minfiles are available for free download at the Ministry of Energy, Mines and Petroleum Resources' website below.

https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mineralinventory

Minfiles relevant in the Holy Grail area are on the following pages.

MINFILE Record Summary
MINFILE No 103I 019

XML Extract / Production Report / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 23-Sep-1986 by Larry Jones (LDJ)
Last Edit: 28-Apr-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

ame	KALUM LAKE, PORTLAND, BAV, GOLD BAR, BURN, KALUM	**Mining Division**	Skeena
		BCGS Map	103I076
Status	Past Producer	**NTS Map**	103I15W
Latitude	054° 45' 04''	**UTM**	09 (NAD 83)
Longitude	128° 48' 21''	**Northing**	6067113
		Easting	512497
Commodities	Gold, Silver, Copper, Lead, Zinc	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Coast Crystalline	**Terrane**	Plutonic Rocks, Bowser Lake

Capsule Geology

The Kalum Lake occurrence is located on the west side of Kitsumkalum Lake about 29 kilometres north of Terrace.

The Kalum Lake showing area is underlain by Upper Jurassic to Lower Cretaceous sediments of the Bowser Lake Group comprised mainly of argillite, greywackes and conglomerates. Generally, the sediments strike west and dip 75 degrees to the north. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. High grade gold-bearing quartz veins fringe the Allard stock near its contact with Bowser Lake Group country rocks. The stock consists of hornblende-biotite granodiorite to diorite. The Allard stock is also described as a composite pluton with an eastern syenitic phase.

Alteration in the granodioritic intrusion is directly related to the density of veining and shearing. The predominant type is propylitic with lesser silicification and epidote-hematite alteration.

Two granodioritic stocks, about 2.25 kilometres apart, are exposed and exhibit extensive hydrothermal alteration with associated mineralization. Two epigenetic, steeply dipping, auriferous quartz veins, termed the #1 and #2 veins, are exposed at the main showing. The #1 vein is approximately 30 centimetres wide, strikes 037 degrees and dips 45 degrees southeast. Selected samples from a dump site assayed up to 193 grams per tonne gold and 477 grams

per tonne silver (Assessment Report 13303).

A parallel vein (#2 vein), 150 metres southwest of the #1 vein, dips 65 degrees southeast and is exposed for about 30 metres along strike with variable thicknesses ranging between 15 to 60 centimetres. Drilling reports indicate that both the #1 and #2 veins steepen to subvertical at depth.

Mineralization within these veins consists of pyrite, chalcopyrite, tetrahedrite, galena, sphalerite and occasional visible gold within a quartz gangue. Selected trench samples assayed up to 251 grams per tonne gold and 226 grams per tonne silver (Assessment Report 13303). A third sub-parallel vein, 10 centimetres in width, parallels the north wall and comes to within 5 centimetres of the #2 vein.

A 52.4 kilogram bulk sample taken from these veins assayed 11.86 grams per tonne gold and 15.43 grams per tonne silver. Reserves reported for the two main veins are estimated at 9434 tonnes grading 16.1 grams per tonne gold to a depth of 45 metres (Collins and Arnold, 1987).

In addition to the main site, a subsidiary mineralized zone is exposed about 2.25 kilometres to the southwest within an intensely altered granodiorite intrusive (refer to Burn, 103I 211).

Shipments of selected ore were made in 1940, 1941 and 1945, totalling 15.75 tonnes with 781 grams of gold, 1223 grams of silver and 2173 kilograms of copper recovered (Minister of Mines Annual Reports 1940, 1941 and 1945).

In 1919, C.A. Smith of Terrace staked the original Lakeside claims. The Portland and West Portland claims were staked in 1922. Between 1923 and 1925, the newly formed Kalum Mines Ltd. conducted considerable work on the property which consisted of shaft sinking and drift development along the main (Portland - #1) vein discovered in 1919. Two shafts were sunk with the east shaft reaching 9.1 metres depth and the main or west shaft developed to 18.2 metres with 64 metres of drifting westerly along the vein. Approximately 90 metres southeast of the main vein, Kalum Mines Ltd. put in a 26-metre adit along a second vein (#2 Vein). Assay values from samples of this vein collected in 1937 contained only minor amounts of gold and silver.

In 1972, the original claims were restaked as the Bav 1-4 by J. Apolczer of Terrace. One drillhole 114 metres in length was drilled in an attempt to intersect the main vein and a zone of silicification lying adjacent to the known mineralized structure and workings. Drill records indicate that the main vein was not located but granodiorite

with areas of quartz veining and weak alteration were intersected.

By the end of 1983, the property owner was Bradner Resources. Kalum Lake Mining Group was formed at this time and they trenched and sampled along the Main and #2 veins. Five trenches were dug using a tracked hoe accompanied by blasting and hand trenching.

In 1984, OreQuest Consultants was retained by Bradner Resources to complete a soil geochemical survey over the southwestern portion of the claim block (Burn Showing area). A total of 576 soil samples and 17 rock samples were collected. A 4 kilometre cut base line was used for control. Results from the survey indicated a coincident gold-silver-arsenic anomaly in the area of a granodiorite knob.

In 1987, a 395 metre NQ diamond drilling program was undertaken on the Kalum property under the supervision of OreQuest Consultants Ltd. At the time, the claims were owned by Terracamp Development Limited through an option with the Kalum Lake Mining Group. The objective of the program was to test the known gold bearing quartz veins and to locate additional mineralized zones. Two holes were drilled from one setup, with a third hole collared approximately 60 metres southeast. The continuity of the vein systems and mineralization was established to a depth of 120 metres and 65 metres for the #1 and #2 veins, respectively. Strike extensions of 150 metres on the #1 vein and 60 metres on the #2 vein were also proven. Visible gold was encountered in the #2 vein in holes DDH-TR-87-1 and 87-2, and was also present at surface in the #1 vein.

A 52.4 kilogram bulk sample taken from these veins and an inferred reserve reported for the two main veins were estimated in 1987. Reconnaissance sampling of historical trenches in the area of the Burn showing was also done in 1987.

The last work recorded on the Kalum Lake property was in 1988 by Terracamp Developments Ltd. who planned a significant underground development program. A bulkhead was placed in front of the break into the old drift and a slash was started to turn on the #2 vein. The work was halted for financial reasons. OreQuest Consultants Ltd. surveyed, mapped and sampled the crosscut and sampled the old drift. However, the area where the crosscut broke into the old drift was very unstable and no detailed mapping or sampling program was attempted.

By 2003, Eagle Plains Resources Ltd. had acquired the 500-unit Kalum property to cover the Allard stock, a 4 by 11 kilometre intrusion that has been mapped west of Kitsumkalum Lake. The Kalum property encompasses several historically documented occurrences referred to in their 2003 Assessment Report 27417: Kalum (103I 019), Burn (103I 211), Quartz Silver (103I 018), Allard (103I 151), Misty (103I

213), Chris (103I 174), Martin (103I 020) and Hat (103I 173). Several new discoveries were also described.

In 2004, Eagle Plains Resources Ltd. continued exploration for an intrusion-related gold deposit on its Kalum property. The program comprised a 1500 line kilometre airborne geophysical survey, on-the-ground evaluation of targets and the drilling of 19 holes, totaling 1958 metres. The geophysical survey recovered magnetic and time-domain electromagnetic data. Five holes at the Kalum prospect (103I 019) returned a best intercept of 16.6 grams per tonne gold in a 1.1 metre wide vein (Exploration and Mining in British Columbia 2004, page 33).

In 2005, Eagle Plains Resources completed a program of soil, silt and rock sampling and geological mapping on the area. A select grab sample (KALPOR-12) from the waste dump assayed 811.1 grams per tonne gold (Daignault, P.M., Sharp, R.J. (2007-12-27): 2007 Exploration and Geological Report for the Kalum Property).

In 2007, Mountain Capital Inc. optioned the property and in 2008 undertook a program of soil and rock sampling, a 4.1 line-kilometre induced polarization survey and 11 diamond drill holes on the Burn (MINFILE 103I 211) occurrence area. The option was terminated in May of 2009.

In 2008, an exploration program on behalf of Eagle Plains Resources Ltd. was directed towards exploring and attempting to define a broad zone of gold mineralization in a satellite granodiorite “stock” located in the southeast corner of the property. The work program consisted of 7.75 line kilometres of grid establishment, collection of 55 soil and 8 rock samples, 4.1 line kilometres of induced polarization survey and the drilling of 11 NQ diamond-drill holes totalling 1390 metres. The results from this exploration program revealed that the granodiorite “stock” is in fact a thrust emplaced granodiorite mass overlying a sequence of argillite/greywacke. Weak but pervasive gold mineralization associated with pyritic quartz stringers and veinlets is widespread in the stock (Assessment Report 30479).

In 2009, Windstorm Resources Inc. entered into a Letter of Intent with Eagle Plains Resources to earn a 60 per cent interest in the property and completed a program of prospecting, geochemical sampling and an induced polarization survey on the area.

In 2010, a program of geological mapping and six diamond drill holes, totalling 419.11 metres, were completed on the Tuppie-Cirque (MINFILE 103I 228) occurrence.

In early 2012, Clemson Resources Corp. entered into an Option Agreement with Eagle Plains Resources to acquire a 60 per cent interest in the property.

Bibliography

EMPR AR 1922-47-49; 1923-48; 1924-48; 1925-69; 1926-74; 1927-63; 1928-422; 1930-74; 1940-53; 1941-41,42; 1945-52
EMPR ASS RPT 8299, *13303, *16026, *27417, 27892, *30479
EMPR EXPL 1980-397; 1984-377; 1987-C359; *2003-12,13; *2004-32,33
EMPR MAP 8
EMPR PF (*Collins, D.A. and Arnold, R.R. (1987): Report on the Kalum Lake Property, in Statement of Material Facts #31/88 for Terracamp Developments Ltd., Apr. 25, 1988; *Cavey, G. and Chapman, J. (1987): Report on the 1987 Drilling Program for the Kalum Lake Claims, in Prospectus for Terracamp Developments Ltd., Jul. 22 , 1987; Statement of Material Facts #52/88 for Terracamp Developments Ltd., Jun. 15, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp.15-17; 329, p. 75
GSC P 36-17, p. 22-24; 36-20, p. 31
GSC SUM RPT 1923A, p. 42
GCNL #214, 1985; #174, 1987
PR REL Eagle Plains Resources Ltd., Feb.20, Mar.24, Jun.4, Aug.19, Sept.*30, 2003; Dec.12, 2004; Aug.5, 2005; Jan.18, 2006; Nov.4, 2009; Mountain Capital Inc., Dec.12, 2008; Windstorm Resources Inc., Oct.8, 2010
*Daignault, P.M., Sharp, R.J. (2007-12-27): 2007 Exploration and Geological Report for the Kalum Property
Murton, J.W. (2009-11-20): 2009 Exploration and Geological Report for the Kalum Property
Hutter, J.M. (2012-02-22): Technical Report for the Kalum Property
EMPR
PFD 902822, 17997, 17998, 17999, 18000, 18001, 884463, 884464, 884465, 884466, 884467, 801367, 801365, 670999, 521640

MINFILE Record Summary
MINFILE No 103I 022

File Created: 25-Sep-1986 by Larry Jones (LDJ)
Last Edit: 16-Jul-2009 by Sarah Meredith-Jones (SMJ)

SUMMARY

Summary Help

Name	HOPE SILVER, SILVER COIN, SILVER DOLLAR, IONA, SILVER PLATE, SILVER CUP	**Mining Division**	Skeena
		BCGS Map	103I096
Status	Past Producer	**NTS Map**	103I15W
Latitude	054° 57' 24''	**UTM**	09 (NAD 83)
Longitude	128° 53' 27''	**Northing**	6089975
		Easting	506991
Commodities	Silver, Copper, Lead, Zinc, Gold	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The Hope Silver occurrence is located 50 kilometres north of Terrace, 4 kilometres southeast of Sand Lake.

The area is underlain by northeast striking, moderately north- west dipping siltstones and greywackes of the Jurassic to Cretaceous Bowser Lake Group. The sediments are intruded by andesite and quartz monzonite dikes.

A 6 to 9 metre wide breccia zone, bounded by 0.3 to 0.6 metre wide quartz veins, follow a northeast striking, southeast steeply dipping shear zone within the sediments. The quartz veins are exposed for about 100 metres and are mineralized with pyrite, chalcopyrite, galena, sphalerite and tetrahedrite. A 4.5 metre chip sample assayed 432 grams per tonne silver, 6.7 per cent zinc, 1.9 per cent lead, 0.76 per cent copper and trace gold (Geology, Exploration and Mining in B.C. 1969).

Shear zones of similar strike and dip, with associated quartz- breccia veins occur over several hundred metres southeast of the main showing.

In 1966, 5 tonnes of sorted ore were shipped from this property. From this ore 7,527 grams of silver, 151 kilograms of copper, and 292 kilograms of lead were recovered. In 1990, Equity Silver Mines Limited conducted a geophysical program consisting of

electromagnetic (VLF-EM) and magnetic surveys on the Silver Ghost claim group. Three conductor groups were identified from the surveys.

Bibliography

EMPR AR 1913-78; 1914-109; 1918-50; 1921-44,45; 1922-49; 1923-49; 1924-48; 1925-70; 1926-74; 1966-51

EMPR GEM *1969-70,71; 1970-95; 1971-118; 1972-501

EMPR MAP 8

EMPR PF (Kleanza Mines Ltd. (unknown): Plan Map of Trenches - Hope Silver Property)

EMPR PF Chevron (Sharp (1969): Geological Report Kleanza Mtn. and Hope Properties, Kleanza Mines Ltd.)

EMPR PF Placer Dome (Matich (1990): Summary Report on Geophysical Surveys 1990; J.R. Woodcock (1982): Terrace Gossan Project for Dome Exploration Canada Ltd.; J.R. Woodcock (1981): Correspondence re Gossan Target in NW BC)

EMR MP CORPFILE (Kendal Mining & Exploration Company Limited)

GSC MAP 11-1956; 278A; 1136A; 1385A

GSC MEM *205, pp. 11-13; 329, p. 73

GSC P 36-17, pp. 18,19

GSC SUM RPT 1922A, p. 48

EMPR

PFD 840116, 860100, 860117, 18003, 18004, 801437, 801392, 801391, 801411, 801377, 801375, 801374, 801373, 801372, 801371, 800800, 800801, 800802, 800805, 800855, 830352, 830353, 830354, 830355, 830356

MINFILE Record Summary
MINFILE No 103I 023

XML Extract

Print Preview | PDF | -- SELECT REPORT --

File Created: 25-Sep-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	BIG JOE, BIG, JOE	**Mining Division**	Skeena
		BCGS Map	103I096
Status	Showing	**NTS Map**	103I15W
Latitude	054° 57' 29''	**UTM**	09 (NAD 83)
Longitude	128° 50' 37''	**Northing**	6090135
		Easting	510014
Commodities	Molybdenum	**Deposit Types**	L05 : Porphyry Mo (Low F- type)
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

Thin-bedded, argillaceous siltstones and greywackes of the Jurassic to Cretaceous Bowser Lake Group are intruded by a 300 by 800 metre size stock consisting of mainly granodiorite with gradations to quartz monzonite. A 45 to 60 metre hornfels halo extends from the northeast trending stock.

Molybdenite mineralization occurs in the intrusive as selvages along widely spaced, 1.2 to 2.5 centimetre wide milky white quartz veins, as disseminations in aplite stringers, and as coatings on fracture planes with sericite.

Bibliography

EMPR AR 1966-51; 1967-53
EMPR ASS RPT 857
EMPR GEM *1971-116-118
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CIM Special Vol. 15, 1976, Map B
EMPR
PFD 889377, 889378, 889379, 801472, 801405, 670981, 670982, 670983

MINFILE Record Summary
MINFILE No 103I 026

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 14-Oct-1986 by Larry Jones (LDJ)
Last Edit: 03-Jun-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	BERMALINE, GRANITE, FRANKIE BLUE, PROSPERITY TREND, PT, LUCKY STRIKE	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054º 52' 19''	**UTM**	09 (NAD 83)
Longitude	128º 38' 06''	**Northing**	6080603
		Easting	523423
Commodities	Silver, Lead, Copper, Gold, Zinc, Molybdenum	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Bermaline (Prosperity Trend) occurrence is located on a north west facing slope between Douglas and Lorne creeks, approximately 11 kilometres north east of the north end of Kitsumkalum Lake.

Regionally, the area is underlain by Jurassic to Cretaceous Bowser Lake Group sediments which have been intruded by Late Cretaceous granodiorite and quartz monzonite stocks and sills.

Locally, two zones of mineralization, referred to as the Bermaline and Prosperity Trend zones, have been identified.

The original Bermaline occurrence, identified in the early 1930s, comprises sediments cut by shear zones and mineralized quartz veins, between 1470 and 1650 metres elevation and between the headwaters of Douglas and Lorne Creeks. Mineralization consists of galena, pyrite, chalcopyrite and minor sphalerite in the quartz veins and disseminated molybdenite near shear zones.

A 1.0 metre sample taken in 1932, across a vein, assayed 3 per cent lead, 103 grams per tonne silver and 20.6 grams per tonne gold (Bulletin 1). In 1937, a 1.2 metre chip sample assayed 9.06 per cent lead, 4.44 per cent copper, 108 grams per tonne silver, 0.4 per cent zinc and 2.1 grams per tonne gold (Geological Survey of Canada

Memoir 212).

The Prosperity Trend (PT) zone, identified in 2016 and located approximately 300 metres to the north east of the previous sampling on the Bermaline zone, comprises polymetallic quartz veins, up to 2 metres wide, hosting massive sulphides consisting of disseminated or globules of pyrite, chalcopyrite, arsenopyrite and galena in an intensely altered (hornfelsed) sedimentary rocks (argillite, sandstone and conglomerate) and granodiorite. Generally, the mineralized veins occur in or parallel to northwest-southeast and northeast-southwest trending faults and shear zones. The wall rock adjacent to the structures is silicified with rusty brown weathering and limonitic clots in weathered vein material. Mineralization has been identified over an area of approximately 650 by 250 metres.

In 2016, samples yielded up to 24.7 grams per tonne gold, 188 grams per tonne silver, 2.04 per cent copper, 8.34 per cent lead and 6.3 per cent zinc (Turna, R. (2017-08-31): NI 43-101 Technical Report on the Lucky Strike Property).

Work History

The area has been explored in conjunction with the South Lorne Creek (MINFILE 103I 027) and a completed regional exploration history can be found there.

In 2016, a Goliath Resources Inc. completed a program of prospecting, geological mapping, hand trenching and rock and stream sediment sampling on the area as the Lucky Strike property.

Bibliography

EMPR AR *1930-137,138; 1931-71; 1954-64
EMPR ASS RPT 8315
EMPR BULL *1, 1932, pp. 51,56,57
EMPR EXPL 1980-399
EMPR MAP 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, pp. 45,46,Fig. 10; 329
GSC P 36-20, p. 49; 36-17
*Turna, R. (2017-08-31): NI 43-101 Technical Report on the Lucky Strike Property
EMPR PFD 905711

MINFILE Record Summary
MINFILE No 103I 027

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 10-Oct-1986 by Larry Jones (LDJ)
Last Edit: 03-Jun-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	SOUTH LORNE CREEK, HART, LORNE, LUCKY STRIKE	**Mining Division**	Omineca
		BCGS Map	103I088
Status	Showing	**NTS Map**	103I15E
Latitude	054º 50' 54''	**UTM**	09 (NAD 83)
Longitude	128º 34' 31''	**Northing**	6077997
		Easting	527271
Commodities	Molybdenum, Copper, Gold, Silver, Lead, Zinc, Nickel	**Deposit Types**	L05 : Porphyry Mo (Low F- type) I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks, Bowser Lake

Capsule Geology

The South Lorne Creek occurrence is situated along the South Lorne Creek headwaters, 13 kilometres east of Kitsumkalum Lake and about 37 kilometres north of Terrace.

Regionally, the area is underlain by Middle Jurassic to Lower Cretaceous Bowser Group clastic sediments. To the southwest, Cretaceous to Tertiary Coast Plutonic Complex granitoid intrusions flank the Bowser Basin.

Locally, Bowser Basin argillites are intruded by dikes and irregular masses of quartz diorite, quartz monzonite and granodiorite. Though limited, exposed contacts generally trend east-west, and argillites have generally been metamorphosed to biotite hornfels.

Molybdenite and chalcopyrite occur in quartz veining within intrusive rocks and hornfelsed argillites, with widespread pyrite associated with contact zones. Minor galena, stibnite, sphalerite and pyrrhotite have also been observed in quartz veins.

In 1967, Amax conducted geological mapping and soil sampling. The area was reported to be staked by R. Woodcock in 1971 (Assessment Report 8059).

In 1979, Newmont Exploration of Canada Ltd. staked the SLC claims following the release of British Columbia Department of Mines' Accelerated Geochemical Survey. The company conducted geological mapping and soil sampling. Molybdenum soil anomalies were found to be generally coincident with molybdenite, chalcopyrite and galena-mineralized quartz veins cutting feldspar-hornblende porphyry and biotite hornfels on the SLC 2 claim (Assessment Report 8059).

In 1981, Newmont completed two diamond-drill holes totalling 664.2 metres. Though the holes tested prospective surface exposures postulated to extend at depth, no significant economic mineralization was encountered (Assessment Report 10400).

In 1988, Eric A. Shaede prospected the claims, conducting silt and rock float sampling. Along a north-flowing stream near the centre of the claims, angular pyritized and quartz-veined boulders reported up to 9.8 grams per tonne gold, 214 grams per tonne silver, 3.4 per cent copper and 0.15 per cent lead (Assessment Report 17976).

In 1988, Eric A. Shaede conducted sampling and prospecting, locating a quartz vein approximately 1 metre in width, hosting small pockets of sulphide mineralization (pyrite with some chalcopyrite and minor galena). A vein sample reported anomalous silver, gold, copper, lead and zinc values, but precious metals were still lower in abundance than in float found the previous season (Assessment Report 19405).

In 2005, BCM Resources Corp. (BCM) acquired the Lorne claims. In 2006, BCM conducted a reconnaissance-scale geological survey including rock and biogeochemical sampling. Rock samples reported up to 194 parts per billion gold, 899 parts per million (ppm) copper, 610 ppm molybdenum, 800 ppm lead and 32 ppm tungsten.

Biogeochemical samples are anomalous in copper, molybdenum, lead, tungsten and gold, with molybdenum up to 10 times higher than background. During the reconnaissance program, an area of intense iron staining in outcrops along the banks of South Lorne Creek was identified 2 kilometres east of the known mineralization, roughly on strike. This 930-hectare area of interest known as “East Lorne” was

added to the Company's claim group, bringing the total area to 1825 hectares (Assessment Report 28985).

In 2007, BCM carried out a 326.7-line kilometre aeromagnetic survey outlining northwest- and east-northeast trending relative magnetic lows, suggestive of possible molybdenum mineralization and structural controls (Assessment Report 29652).

In 2009, BCM conducted prospecting and stream sediment sampling, with sediment samples assaying up to 401 ppm molybdenum in addition to elevated copper, lead, zinc and silver. Results of this study expanded upon known areas of soil anomalies (Press Release, BMC Resources Corp., January 4, 2010).

In 2011, BCM conducted geological reconnaissance and float sampling, reconfirming areas of anomalous molybdenum, gold, silver and base metals (Assessment Report 32615).

In 2013, BCM conducted bedrock sampling on a ridge top between South Lorne Creek and a northerly flowing tributary of Lorne Creek in the northern property area; 13 samples were taken and analyzed.

In 2016, a Goliath Resources Inc. completed a program of prospecting, geological mapping, hand trenching and rock and stream sediment sampling on the area as the Lucky Strike property

Bibliography

EMPR ASS RPT 8059,
*10400, 17976, 21742, 28985, 29652, 32615, 34336
EMPR EXPL 1979-255,256
EMPR GEM 1967-83,84
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
PR REL BCM Resources Corp., Jan.4, 2010
WWW http://www.bcmresources.com
Turna, R. (2017-08-31): NI 43-101 Technical Report on the Lucky Strike Property

MINFILE Record Summary
MINFILE No 103I 028

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Oct-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	GOLD CAP, GOLDEN EAGLE, GOLD CUP	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054º 49' 14''	**UTM**	09 (NAD 83)
Longitude	128º 38' 36''	**Northing**	6074882
		Easting	522917
Commodities	Gold, Silver, Lead, Zinc, Copper	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite.

The Gold Cap veins consist of a 90 metre continuation of the Bear vein (103I 029), to the west and a 30 metre long vein, 120 metres to the east. The vein to the west is 5 to 15 centimetres wide and strikes 030 degrees with a 15 degree south east dip. It follows a narrow seam of soft, black, carbonaceous shale, overlain by greywacke. A 0.82 kilogram sample assayed 2.06 grams per tonne gold and 18.5 grams per tonne silver (Geological Survey of Canada Memoir 205).

Bibliography

EMPR AR 1921-43; 1922-49; 1923-47; 1924-47; 1930-76
EMPR ASS RPT 21742
EMPR BULL 1, 1932, pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *205, p. 19; 329, pp. 75,76
GSC P 36-17, p. 28

GSC SUM RPT 1923, pp. 42-44
EMPR PFD 801429, 801431, 801366, 830129

MINFILE Record Summary
MINFILE No 103I 029

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Oct-1986 by Larry Jones (LDJ)
Last Edit: 13-Aug-2018 by George Owsiacki (GO)

SUMMARY

Summary Help

Name	BEAR, BLACK BEAR, HAWK (L.6792), MAROON	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Prospect	**NTS Map**	103I15E
Latitude	054º 48' 59''	**UTM**	09 (NAD 83)
Longitude	128º 39' 07''	**Northing**	6074415
		Easting	522366
Commodities	Gold, Silver, Lead, Zinc, Copper, Tungsten	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The Bear occurrence is located east of Kitsumkalum Lake about 35 kilometres due north of the community of Terrace. This property area covers the northern and southern slopes of Maroon Mountain and Wesach Mountain, respectively.
The showing area is underlain by argillite, greywacke and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite and pyrrhotite and minor chalcopyrite.

The Bear vein system is 0.5 to 2.0 metres wide and is about 350 metres long. It strikes 060 to 070 degrees and dips across foliation at 50 to 80 degrees southeast, parallel to subparallel to bedding, for at least 24 metres. Foliation in the argillite strikes 074 to 084 degrees, dipping 55 to 60 degrees north. The veining is disrupted by a 1.2 to 3.6 metre wide aplite dike which crosses and recrosses the vein. Wherever the dike crosses the veining, folding of the veins and concentrations of sulphides (galena, sphalerite, pyrite, chalcopyrite) occur.

A 40-centimetre sample of the vein assayed 17 grams per tonne gold,

69 grams per tonne silver, 1.2 per cent lead and 6.0 per cent zinc (Minister of Mines Annual Report 1930). A grab sample of the dump assayed 14.4 grams per tonne gold, 823 grams per tonne silver, 4.24 per cent lead, 4.40 per cent zinc and 0.02 per cent copper (Geological Survey of Canada Memoir 329). Scheelite has been reported occurring in the vein.
In 1991, rock saw channel cuts were sampled across the mineralization in five separate locations along the length of the shear/vein system. One sample across 1.5 metres assayed 8.5 grams per tonne gold and 16.7 grams per tonne silver (Assessment Report 21742).

The Bear vein was historically explored by a number of trenches and by three adits comprising 85 metres of underground workings. The polymetallic vein prospects on the north slope of Maroon Mountain, now within the current Maroon property area, were investigated by geochemical and geophysical surveys and detailed trench sampling by Skeena Resources Ltd. in 1990 and 1991. The Maroon #1 claim was located by Richard T. Heard in June of 1995 as part of a larger claim group which effectively covered the ground previously held by Skeena Resources. A limited investigation of the 1995 claims, undertaken in late May of 1998, was severely hampered by extensive snow cover. Work completed consisted of the collection of rock, stream sediment and soil samples. Additional work in 1997 was directed to geological mapping and the collection and analyses of chip and character samples from a number of trenches along the Bear vein structure in the central part of the current Maroon #1. The Maroon #1 mineral claim has been maintained in good standing since its initial location in 1995. The owners of the claim entered into an option agreement with Seymour Exploration Corp. mid-2002 and this company undertook a drilling program in September and October. The Maroon #2, #3,#4, #5 and #8 claims were located in September of 2002.

Seymour Exploration Corp. drilled two core holes in 2002 from a set up 65 metres southeast of the uppermost adit. One hole intersected 0.61-metre of vein grading 26 grams per tonne gold. The second hole intersected two smaller veins (Press Release - Seymour Exploration Corp., October 23, 2002).

Bibliography

EMPR AR 1914-111; 1919-43; 1920-41,42; 1921-43,44; 1922-47; 1923-47; 1924-47; 1925-68; 1926-73; 1927-63,64; *1928-72; 1930-75,76; 1931-36; 1932-51

EMPR ASS RPT *21742, 25636, *27229
EMPR BULL 1, pp. 22,30; 10, p. 58
EMPR GEM 1970-97
EMPR MAP 8
EMPR OF 1991-17; 1994-14
GSC MAP 11-1956; 36-17; 1136A; 278A; 1385A
GSC MEM *205, pp. 17-19; 329, pp. 75,76
GSC P 36-17, pp. 25-27; *36-20, pp. 44-47
GSC SUM RPT 1922A, p. 49; 1923A, pp. 42-44
PR REL Seymour Exploration Corp., Oct.23, 2002
EMPR PFD 17961, 801429, 801366, 830129

MINFILE Record Summary
MINFILE No 103I 030

XML Extract / Production Report / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Oct-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	BLACK WOLF	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Past Producer	**NTS Map**	103I15E
Latitude	054° 48' 39''	**UTM**	09 (NAD 83)
Longitude	128° 39' 37''	**Northing**	6073794
		Easting	521834
Commodities	Gold, Silver, Lead, Zinc, Copper	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite.

The Black Wolf quartz veins occur parallel to the bedding in underlying argillaceous sandstones and slates about 15 metres below a conglomerate bed which dips 15 degrees to the east. One vein occurs in a fracture cutting the conglomerate. The vein averages 30 centimetres wide, is 60 metres long, and strikes 110 degrees with a 40 degree north dip. A 30 centimetre sample assayed 36.3 grams per gold, 68.6 grams per tonne silver, 1 per cent lead, and 5 per cent zinc (Minister of Mines Annual Report 1927).

The concordant veins are 180 to 280 metres to the north and strike southeast. They are up to 120 metres long and 10 to 25 centi- metres wide. An 18 centimetre sample assayed 2.1 grams per tonne gold and 7.5 grams per tonne silver (Geological Survey of Canada Memoir 205). A one metre wide aplite dyke occurs 90 metres to the west and

carries minor gold and silver.

In 1928, 23 tonnes of ore were shipped from this property. From this ore 1151 grams of gold, 3577 grams of silver, 1103 kilograms of lead and 1905 kilograms of zinc were recovered.

Bibliography

EMPR AR 1914-111; 1921-43; 1922-49; 1923-48; 1924-47,48; 1925-68,69; 1926-73; 1927-64,397; 1928-73; 1930-74,75; 1931-36; 1932-51
EMPR ASS RPT 21742
EMPR BULL 1, 1932, pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 20,21; 329, pp. 75,76
GSC P 36-17, pp. 30-32; *36-20, pp. 44-46
GSC SUM RPT 1923, pp. 42-44
EMPR PFD 17961, 830129

MINFILE Record Summary
MINFILE No 103I 031

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Oct-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	MOTHERLODE	**Mining Division**	Skeena
		BCGS Map	103I077
Status	Showing	**NTS Map**	103I15E
Latitude	054° 46' 59''	**UTM**	09 (NAD 83)
Longitude	128° 41' 16''	**Northing**	6070695
		Easting	520080
Commodities	Silver, Gold, Zinc, Copper, Lead	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake, Plutonic Rocks

Capsule Geology

The area is underlain by slates and argillites of the Jurassic to Cretaceous Bowser Lake Group. The sediments, which strike 40 degrees and dip 25 degrees northwest, are intruded by a small quartz diorite stock and a coarsely crystalline hornblende gabbro dyke.

Talus blocks of vein quartz are mineralized with pyrite, sphalerite, galena, and tetrahedrite. A sample assayed 651 grams per tonne silver, 1.4 grams per tonne gold, 4.4 per cent zinc, 0.03 per cent copper and trace lead (Minister of Mines Annual Report 1930). The source vein has not been located.

Bibliography

EMPR AR 1920-41; 1921-43; 1922-49; 1923-48; 1924-48; 1925-69; 1926-74; 1927-64,397; 1930-74; 1931-36; 1932-51
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 21,22; 329, pp. 76,77
GSC P 36-17, pp. 33,34
GSC SUM RPT 1923A, pp. 42-44
EMPR PFD 17961, 830125

MINFILE Record Summary
MINFILE No 103I 032

File Created: 16-Oct-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	LUCY O'NEILL, KEYSTONE	**Mining Division**	Skeena
		BCGS Map	103I077
Status	Showing	**NTS Map**	103I15E
Latitude	054° 45' 39''	**UTM**	09 (NAD 83)
Longitude	128° 36' 46''	**Northing**	6068246
		Easting	524917
Commodities	Copper, Silver, Gold	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb) I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks

Capsule Geology A 0.9 to 1.4 metre wide quartz vein, mineralized with pyrite and chalcopyrite, occurs in massive grey diorite of the Cretaceous to Tertiary Coast Plutonic Complex. The vein is on the lower side of a dark, fine-grained diabase dyke, about 1 metre wide, that strikes 150 degrees and dips 60 degrees northeast. A 1.37 metre channel sample assayed 27.6 grams per tonne silver, 2.68 per cent copper and 0.5 grams per tonne gold (Geological Survey of Canada Memoir 205).

Bibliography

EMPR AR *1921-44; 1922-49; 1923-48; 1924-48; 1925-70
EMPR MAP 8
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 22,23; 329, p. 77
GSC P 36-17, pp. 35,36
GSC SUM RPT 1923, pp. 42-44

MINFILE Record Summary
MINFILE No 103I 033

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 09-Oct-1986 by Larry Jones (LDJ)
Last Edit: 03-Jun-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	NAR 26, KSHISH, NAR, NEWTOWN CREEK, VANARSDOLL	**Mining Division**	Skeena
		BCGS Map	103I058
Status	Showing	**NTS Map**	103I10E
Latitude	054° 35' 29''	**UTM**	09 (NAD 83)
Longitude	128° 32' 46''	**Northing**	6049418
		Easting	529329
Commodities	Molybdenum	**Deposit Types**	L05 : Porphyry Mo (Low F- type)
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks

Capsule Geology

The Nar 26 showing is located north of the Skeena River, about 10 kilometres northeast of Terrace. The Nar 44 showing, or Kshish, is located 2 kilometres east. The Kshish property currently (ca. 2015) covers both showings.

The southern portions of the Kshish property are underlain by the Eocene Newtown Creek pluton (53 Ma) and the Paleocene Kitsumkalum Intrusive Suite (60 Ma), while the northern portion is underlain by the Lower Jurassic, volcanic dominated Kitselas Facies of the Telkwa Group.

White biotite granite of the Newtown Creek pluton are cut by aplite and basalt dikes. Molybdenite occurs in quartz veins filling flat, widely spaced joint fractures. A rock chip sample (K596) assayed 4800 parts per million (0.48 per cent) molybdenum (Assessment Report 1661). Refer to Nar 44 occurrence (103I 034) for a detailed work history of the area.

Bibliography

EMPR AR 1967-53; 1968-68
EMPR ASS RPT *1661, 30453, *33542, *34553, 35676
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

PR REL Jet Gold Corp., Apr.6, 2009
Burton, A. (2009-03-03): NI 43-101 Technical Report on the Jet Gold Corp. Kshish Molybdenum Property

MINFILE Record Summary
MINFILE No 103I 034

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 09-Oct-1986 by Larry Jones (LDJ)
Last Edit: 03-Jun-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	NAR 44, KSHISH, NAR, NEWTOWN CREEK, VANARSDOLL	**Mining Division**	Omineca
		BCGS Map	103I058
Status	Prospect	**NTS Map**	103I10E
Latitude	054º 35' 34''	**UTM**	09 (NAD 83)
Longitude	128º 30' 46''	**Northing**	6049587
		Easting	531482
Commodities	Molybdenum, Copper	**Deposit Types**	L05 : Porphyry Mo (Low F- type)
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks

Capsule Geology

The Kshish occurrence occurs along Newtown Creek, north of the Skeena River, about 10 kilometres northeast of Terrace.

The southern portions of the Kshish property are underlain by the Eocene Newtown Creek pluton (53 Ma) and the Paleocene Kitsumkalum Intrusive Suite (60 Ma), while the northern portion is underlain by the Lower Jurassic, volcanic dominated Kitselas Facies of the Telkwa Group.

Molybdenite occurs in quartz veins within Newtown Creek pluton granite, along a 600 metre, northwest-trending zone of intense shearing, and argillic and K-feldspar alteration. Less commonly, it occurs along fractures in aplitic dikes. Chalcopyrite, in trace amounts, is sometimes associated with the molybdenum and pyrite occurs in all rock types.

Molybdenum mineralization appears in deeply incised, juvenile streams which cut through highly altered granite of the Newtown Creek pluton. The Newtown Creek exposure exhibits northwest trending shearing of the granite as well as intense hydrothermal alteration. A series of four parallel faults, approximately 300-400 metres apart, runs due north through the main Newtown Creek

showing. A fault, along Newtown Creek at this point, crosscuts the parallel faults at 302 degrees and it is at this location that the most intensive alteration is evident in the creek canyon. Other faults are evident on the property and trend 030 to 040 degrees. The alteration includes K-feldspar, argillization, chloritization and silicification to the host granite. The altered zone, as defined by the 1967-68 soil and sediment values along with molybdenum showings, is a northwest trending ellipse, roughly 4 kilometres long by 2 kilometres wide.

The fault along Newtown Creek provides the best exposure of molybdenite mineralization on the property. One area of feldspar breccia has been found which has significant mineralization. The molybdenite appears as small veinlets and blebs within the matrix. Chalcopyrite and pyrite have also been observed. This is located adjacent to the zone which appears to have the most intense K-feldspar alteration. Silica (quartz) infill of horizontal fracture sets and sericitic alteration is also evident near molybdenite mineralization. The widespread nature of the mineralization suggest that several centres of intense alteration are present with the intervening zones exhibiting multiple phases of alteration.

To test for uniformity of the high grade molybdenite mineralization, large samples were broken down into four separate aliquots for processing and assay. Grab samples E5394912-19 were collected as two large samples which were crushed and then subdivided into four aliquots each for assay. The first of these, samples E5394912-15, yielded values of 4890 parts per million (ppm), 4800 ppm, 4830 ppm and 5040 ppm molybdenum, respectively. Samples E5394916-19 returned values of 1960 ppm, 2030 ppm, 2120 ppm and 1950 ppm, respectively (Assessment Report 33542).

The original Nar 44 showing was recorded for a molybdenite mineralized rock sample collected from Newtown Creek. It is located on Newtown Creek near where a diamond-drill hole was attempted in 1967-68. A piece of drill rod was located (ca. 2012) near the coordinates recorded in MINFILE but the hole was not located. Molybdenum is common in the stream bed and in several new showings.

In 1966, molybdenite mineralization was discovered along the headwaters of Newtown Creek. Geochemical sampling and geological mapping was undertaken in 1967 and 1968 by Amax Exploration.

Work in 1967 by Amax included geochemical soil sampling and mapping in and around the headwaters of Newtown Creek. This work also included general prospecting of the major tributaries of Deep Creek. In total, 675 soil samples were collected along with various rock samples. The 1968 work was completed as a follow up to the 1967 sampling and it is assumed that the short drillhole reported was attempted as part of this follow up work. The 1968 X-ray drillhole is reportedly 12.8 metres with only 1.5 metres of recovery as the core was too small diameter to obtain core recovery.

The property had no further work and was staked in 2007 after a review of new logging roads that were built in the area in 2002. Work in 2008 included stream sediment sampling, mapping, prospecting and digitally incorporating the 1966 geochemical data onto a modern map base. Prospecting in 2008 expanded the area of mineralization of the Newtown Creek showing with mineralization being traced over a length of approximately 650 metres.

In 2008, rock samples from an intrusive breccia zone along Newton Creek yielded from trace to 0.233 per cent molybdenum, while rock samples of molybdenum and mica in-filled fractures from an altered granite yielded from 0.004 to 0.086 per cent molybdenum (Burton, A. (2009-03-03): NI 43-101 Technical Report on the Jet Gold Corp. Kshish Molybdenum Property).

In 2012, a late summer work program by Arrowstar Resources Ltd.comprised rock sampling (43), mapping and general reconnaissance.

In 2015, Barkley Resources Ltd. completed four geochemical soil sampling traverses; a total of 76 samples were analysed. In addition to this work, a “Shaw” diamond drill was used for outcrop sampling to collect molybdenite mineralization; total depth drilled from the solid bedrock surface for all the 5 holes is 2.45 metres.

Bibliography

EMPR AR 1967-53; 1968-68
EMPR ASS RPT *1661, 30453, *33542, 34553, 35676
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
PR REL Jet Gold Corp., Apr.6, 2009
*Burton, A. (2009-03-03): NI 43-101 Technical Report on the Jet Gold Corp. Kshish Molybdenum Property

MINFILE Record Summary
MINFILE No 103I 036

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 12-Dec-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	NUGGET, GOLD STAR	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054° 36' 19''	**UTM**	09 (NAD 83)
Longitude	128° 28' 16''	**Northing**	6050997
		Easting	534163
Commodities	Copper, Gold, Silver	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine, Plutonic Rocks

Capsule Geology

Andesite and andesite feldspar porphyry of the Jurassic Hazelton Group are intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcocite and bornite and copper staining (malachite). Occasional specks of free gold occur.

The main vein strikes north for 12 metres, adjacent a fault, and dips 35 degrees west. It is about 1 metre wide and a 1.4 kilogram sample assayed 9.6 grams per tonne gold, 150.9 grams per tonne silver and 4.6 per cent copper (Geological Survey of Canada Memoir 205). Other veins are exposed in creek beds over an area measuring 300 by 150 metres.

Bibliography

EMPR AR 1928-146; *1937-C9,C10; 1939-69; 1967-81
EMPR ASS RPT 999, *1090, 1961, 2719
EMPR GEM 1969-76,77
EMPR MAP 69-1; 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *205, p. 52; 329, p. 86
GSC P 36-17, p. 91; 36-20, pp. 22,23
EMPR PFD 18005, 18006, 18007, 18008, 18009

MINFILE Record Summary
MINFILE No 103I 037

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 12-Dec-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	COPPER KING, GOLD STAR	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Prospect	**NTS Map**	103I09W
Latitude	054° 36' 39''	**UTM**	09 (NAD 83)
Longitude	128° 29' 16''	**Northing**	6051607
		Easting	533082
Commodities	Copper, Gold, Silver	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine, Plutonic Rocks

Capsule Geology

The area is underlain by andesite and andesite feldspar porphyry of the Jurassic Hazelton Group and is intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcopyrite, pyrite, bornite, and minor chalcocite. The mineralization is usually close to, or associated with the granodiorite.

The main vein strikes 065 degrees for 40 metres and dips 65 degrees to the northwest. It is 5.5 to 8.2 metres wide and a 76 centimetre wide sample assayed 11.7 grams per tonne gold, 37.7 grams per tonne silver and 1.0 per cent copper (Minister of Mines Annual Report 1928). The mineralized zones are mainly exposed in north trending streams over an area measuring 600 by 300 metres.

Bibliography

EMPR AR *1914-142,143,Map p. 120; 1923-105; *1928-145,146; 1967-81
EMPR ASS RPT 999, *1090, 1961, 2719
EMPR GEM 1969-76,77
EMPR MAP 69-1; 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, pp. 52,53; 329, p. 86
GSC P 36-17, pp. 92,93; 36-20, pp. 22,23
EMPR PFD 18010

MINFILE Record Summary
MINFILE No 103I 038

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 12-Dec-1986 by Larry Jones (LDJ)
Last Edit: 15-Apr-2009 by Nicole Barlow (NB)

SUMMARY

Summary Help

Name	GOLD STAR, FRYING PAN, TRIUNE	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Prospect	**NTS Map**	103I09W
Latitude	054º 37' 29''	**UTM**	09 (NAD 83)
Longitude	128º 27' 56''	**Northing**	6053163
		Easting	534506
Commodities	Copper, Silver	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Gold Star claims are located on Kitselas Mountain, three kilometres southwest of Usk. The claims were originally staked and developed by New Gold Star Mines Limited in the late 1960s.

Kitselas Mountain is underlain by volcanics and metavolcanics of probable Permian age. The metavolcanics, derived from rhyodacite crystal-lithic tuffs and fragmental tuffs, are cut by basic dykes. The volcanics, consisting of massive basalts and basaltic andesites, apparently unconformably overlie the metavolcanics. The rocks are complexly folded and cut by a northwest striking fault. Northeast of the fault is a 600 by 450 metre mineralized area containing bornite and chalcopyrite as fracture fills and disseminations in the metavolcanics.

In the A zone, mineralization is confined to closely spaced northeast and northwest vertical fractures and shear planes. Channel samples of average width 1.2 metres taken every 3.0 metres over a length of 31 metres assayed 1.07 per cent copper and 27.4 grams per tonne silver. A 6.7 metre chip sample, 85 metres to the east, assayed 1.33 per cent copper and 3.4 grams per tonne silver (Assessment Report 2365). The A zone is about 30 metres wide with an east-west strike length of 85 metres and a vertical expression of 45 metres.

In the B zone, 250 metres southwest of the A zone, disseminated bornite and chalcopyrite occurs along the margins of, and adjacent to basic dykes. Chip sampling over 26.5 metres assayed 0.51 per cent copper and 27.4 grams per tonne silver. Channel samples in the lower B zone assayed 0.02 per cent copper and 41.1 grams per tonne silver over 1.4 metres and 0.02 per cent copper and 6.9 grams per tonne silver over 1.7 metres (Assessment Report 2365).

In the C zone, 500 metres west-southwest of the A zone, minor chalcopyrite occurs in metarhyolites adjacent to basic dikes. A 4.6 chip sample assayed 0.08 per cent copper and 13.7 grams per tonne silver (Assessment Report 2365).

The K to M zones, 650 metres south of the A zone, occurs in a felsite rock, which represents bleaching and pyritization of the finer grained grey crystal tuffs adjacent to the major northwest fault zone. A 3 metre sample assayed 0.47 per cent copper and 10.3 grams per tonne silver in one zone (Property File: White, 1970).

Bibliography

EMPR AR 1919-99; 1929-151
EMPR ASS RPT *2365, 2719
EMPR GEM *1969-76,77; *1970-195-197
EMPR MAP 8; 69-1
EMPR PF (Rpts by *G.E.P. White, 1969,1970; *P.G. Marshall, 1970)
EMPR PF Cyprus Anvil (Gold Star (1969): Progress Report on the Gold Star and Lou Claim Groups, Terrace Area, BC; E.A. Schiller, H. Mogensen (1970): Property Submission - Geological Review of Goosely Lake Area, BC)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 23
EMPR PFD 18011, 811709, 811710, 671652

MINFILE Record Summary
MINFILE No 103I 039

File Created: 16-Dec-1986 by Larry Jones (LDJ)
Last Edit: 13-Aug-2018 by George Owsiacki (GO)

SUMMARY

Summary Help

Name	LUCKY LUKE (L.7424)	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Past Producer	**NTS Map**	103I09W
Latitude	054° 37' 19''	**UTM**	09 (NAD 83)
Longitude	128° 26' 36''	**Northing**	6052865
		Easting	535943
Commodities	Copper, Gold, Silver, Tungsten	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Lucky Luke occurrence is located 870 metres west of the Skeena River about 15.5 kilometres north-northeast of Terrace.

The area is underlain predominently by andesite flows and lesser porphyritic andesite and chlorite schist of probable Triassic age. The rocks are cut by aplitic dikes and shear zones.

At the Lucky Luke showing, a shear zone trending 110 degrees and dipping 65 degrees north contains narrow lenticular quartz veins mineralized with bornite, chalcopyrite, pyrite, chalcocite, and visible free gold. The shear zone is 1 to 2 metres wide and the quartz veins average 20 centimetres wide. A 51-centimetre channel sample of schist assayed 8.9 grams per tonne gold and 57.7 grams per tonne silver, and a 1.6-kilogram sample from an old ore bin assayed 50 grams per tonne gold, 80.2 grams per tonne silver and 2.78 per cent copper (Geological Survey of Canada Memoir 205). The presence of tungsten has also been reported.

Recorded production for the period 1924-1938 totals 26 tonnes of ore shipped or treated. From this ore, 622 grams of gold, 11,011 grams of silver and 5801 kilograms of copper were recovered.

In 1964, the workings were re-opened and about 90 tonnes of ore was mined from a small stope in 1965. From this portion, the highest gold content was sorted and shipped, and in 1967 about 3 tonnes of sorted ore produced 93 grams of gold, 3359 grams of silver, and 1158 kilograms of copper.

In 2012, Argonaut Exploration Inc. completed two late fall geologic field examinations directed at locating and sampling the historic Lucky Luke and Cordillera (103I 040) gold mines. The Lucky Luke mine was located through the discovery of the lower and upper adits, ore dump, and remnants of old facilities including a cabin, small mill and Wilfley table. The ore dump was randomly sampled for a representative bulk assay on the remaining unshipped ore tonnage. The ten randomly taken samples, ranging from 0.49 to 2.02 kilograms, totalled 9.98 kilograms and returned a weight-corrected average grade of 9.47 grams per tonne gold, 119.3 grams per tonne silver and 4.16 per cent copper. The ore contains broken quartz with common malachite and rare occurrences of sulphides, mainly tarnished pyrite with some chalcopyrite (Press Release - Argonaut Exploration Inc., December 14, 2012).

Bibliography

EMPR AR 1918-110,111; 1919-98; 1923-104; 1924-88; 1925-125; 1928-146; 1931-70; 1934-C4; *1937-C7-C9; 1938-B36,C48; 1939-69; 1964-47; 1965-70; 1967-A54
EMPR BULL 10(Rev.), p. 58
EMPR MAP 69-1; 8
EMPR OF 1991-17
EMR MP CORPFILE (Lucky Gold Quartz Inc.)
GSC EC GEOL 17, p. 44
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 49-51; *329, pp. 85,86
GSC P 36-17, pp. 87-89; 36-20, pp. 20,21
GSC SUM RPT 1925A, p. 116
CANMET IR 66-30; 66-31
N MINER Jun.25, 1942, p. 26
PR REL Argonaut Exploration Inc., Dec.*14, 2012
EMPR PFD 831101

MINFILE Record Summary
MINFILE No 103I 040

XML Extract / Production Report / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 16-Dec-1986 by Larry Jones (LDJ)
Last Edit: 13-Aug-2018 by George Owsiacki (GO)

SUMMARY

Summary Help

Name	CORDILLERA, KITSALAS MOUNTAIN COPPER CO.	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Past Producer	**NTS Map**	103I09W
Latitude	054º 37' 44''	**UTM**	09 (NAD 83)
Longitude	128º 26' 21''	**Northing**	6053640
		Easting	536206
Commodities	Copper, Silver, Gold, Tungsten	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Cordillera occurrence is located about 520 metres west of the Skeena River approximately 16 kilometres north-northeast of Terrace. The Luck Luke workings (103I 039) are 800 metres south of the Cordillera workings.

The area is underlain by andesite flows, chlorite schists, and tuffs of probable Triassic age. The rocks are cut by lamprophyre dikes. Several quartz veins, striking 040 degrees and dipping 25 to 45 degrees northwest, contain sparse bornite, chalcocite, chalcopyrite, and gold. The veins are up to 30 metres long and up to 3.0 metres wide. The vein system extends for about 150 metres along strike. A 1.0-metre sample of one vein assayed 13.7 grams per tonne gold, 130.3 grams per tonne silver and 7.1 per cent copper (Geological Survey of Canada Summary Report 1925A). Tungsten has also been reported.

Recorded production for the period 1915-1922 totals 73 tonnes of ore milled and/or shipped from this property. From this ore, 1151 grams of gold, 6875 grams of silver and 15,881 kilograms of copper were recovered. No documented work since 1930 has been recorded on this property.

In 1989, a mineral exploration program including geochemical soil sampling and a VLF-EM (electromagnetic) survey was carried out in order to further delineate mineral targets. Results showed that the claim group was conducive to hosting copper and gold mineralized quartz veins (Assessment Report 18685).

In late fall 2012, Argonaut Exploration Inc. conducted two separate field examinations to locate the remnants of the Cordillera gold mine. Old rail tracks, a waste dump, one upper adit and a lower adit were located. A quartz-bearing shear zone with a mineralized quartz lens 1 by 3 metres was located directly beside the upper adit at 141 metres elevation within altered chloritic schist. Patchy areas within the quartz lens contain significant sulphides that include bornite and pyrite with common green malachite. A 1.4-kilogram bulk sample composed of three separate samples was collected from the quartz vein and analyzed. The resultant weight-corrected average grade returned 6.64 grams per tonne gold, 94.0 grams per tonne silver and 3.9 per cent copper, which is similar in grade and composition to the weight-corrected average grade result obtained from the Lucky Luke (103I 039) ore dump 820 metres southwest (Press Release - Argonaut Exploration Inc., December 14, 2012).

Bibliography

EMPR AR *1914-141,142,174; *1917-97-99; 1918-110; 1919-98; *1920-80,81; 1921-95; 1922-97,353; 1923-101; 1925-125; 1926-124; 1930-136; 1938-B37,C48; 1939-68
EMPR ASS RPT *18685
EMPR BULL 10(Rev.), p. 58
EMPR MAP 69-1; 8
EMPR OF 1991-17
N MINER Jun.25, 1942, p. 26
PR REL Argonaut Exploration Inc., Dec.*14, 2012
GSC EC GEOL 17, p. 44
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 46-49; 329, pp. 85,86
GSC P 36-17, pp. 83-86; *36-20, pp. 21,22
GSC SUM RPT *1925, pp. 115,116
EMPR PFD 18012, 820068, 820069

MINFILE Record Summary
MINFILE No 103I 042

XML Extract / Production Report / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 19-Dec-1986 by Larry Jones (LDJ)
Last Edit: 10-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY Summary Help

Name	MAC SHANNON, NICHOLSON CREEK, KOKANEE, DIADEM	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Developed Prospect	**NTS Map**	103I09W
Latitude	054° 39' 54''	**UTM**	09 (NAD 83)
Longitude	128° 24' 16''	**Northing**	6057677
		Easting	538413
Commodities	Copper, Silver, Gold, Tungsten	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine, Plutonic Rocks

Capsule Geology

Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic andesite flows, and minor basalt. All rocks are cut by feldspar porphyry dykes, faults, and shear zones with associated quartz veins.

The volcanics and veins carry pyrite, sparse bornite and chalcopyrite, minor skarn minerals, and, in places, some scheelite. A 75 centimetre sample of a silicified zone assayed trace gold, 34.3 grams per tonne silver and 1.2 per cent copper (Minister of Mines Annual Report 1939).

Bulk samples shipped to the Provincial Sampling Plant at Prince Rupert in 1941 and 1945 assayed as follows:

Tonnes Gold (grams) Silver (grams) Copper (per cent)
0.44 nil nil nil
0.469 13.71 397.7 8.38

(Minister of Mines Annual Reports for 1941, page 41; and 1945, page 52). In 1953, about 1.0 tonne of ore from this property produced 62 grams of silver and 59 kilograms of copper.

Bibliography

EMPR AR 1930-134,135; 1938-B39; 1939-68,69; *1941-41; *1945-52,63
EMPR ASS RPT 5722, 6032
EMPR EXPL 1975-176; 1976-163
EMPR MAP 8; 69-1
EMPR OF 1991-17
EMPR PF (Rpt by N.G. Freshwater, 1946; Maps by J.A. Siefert, 1946, and F. Nash, 1931)
EMR MP CORPFILE (International Shasta Resources Ltd.)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, pp. 56,57; 329, pp. 86,87
GSC P 36-17, pp. 97,98
CIM Spec. Vol. 15, 1976, Map B
EMPR PFD 18018, 18019, 18020

MINFILE Record Summary
MINFILE No 103I 073

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Dec-1986 by Larry Jones (LDJ)
Last Edit: 15-Apr-2009 by Nicole Barlow (NB)

SUMMARY

Summary Help

Name	GOLD STAR - 4A CREEK	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054º 36' 29''	**UTM**	09 (NAD 83)
Longitude	128º 28' 46''	**Northing**	6051302
		Easting	533623
Commodities	Copper, Silver	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Gold Star claims are located on Kitselas Mountain, three kilometres southwest of Usk. The claims were originally staked and developed by New Gold Star Mines Limited in the late 1960s.

Andesite and basalt of the probable Jurassic age Hazelton Group, are intruded by a porphyritic gabbro sill of the Cretaceous to Tertiary Coast Plutonic Complex. The sill strikes 070 degrees for about 50 metres, dips 30 degrees northwest and is about 17 metres wide. All rocks are cut by northeast trending faults.

Chalcopyrite, pyrrhotite, and pyrite occur as disseminations and blebs within the intrusive. A 6.9 metre channel sample assayed 0.28 per cent copper, 13.7 grams per tonne silver and trace nickel (Assessment Report 2365).

On #4 Creek, 400 metres northwest of the above 4A Creek zone, bornite and chalcopyrite occur as disseminations, associated with mafic minerals in a porphyritic gabbro. A 4.6 metre chip sample assayed 0.33 per cent copper and 1.7 grams per tonne silver (Assessment Report 2365).

Bibliography

EMPR ASS RPT 999, 1090, *2365, 2719
EMPR GEM *1969-76,77
EMPR MAP 8; 69-1
EMPR PF (Rpt by G.P. White, 1969)
EMPR PF Cyprus Anvil (Gold Star (1969): Progress Report on the Gold

Star and Lou Claim Groups, Terrace Area, B.C.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
EMPR PFD 811709

MINFILE Record Summary
MINFILE No 103I 108

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 10-Oct-1986 by Larry Jones (LDJ)
Last Edit: 25-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	RAY	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054° 48' 19''	**UTM**	09 (NAD 83)
Longitude	128° 44' 57''	**Northing**	6073152
		Easting	516123
Commodities	Copper, Molybdenum	**Deposit Types**	L04 : Porphyry Cu +/- Mo +/- Au L05 : Porphyry Mo (Low F-type)
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks

Capsule Geology Veins in a porphyritic granitic rock carry chalcopyrite and molybdenite. The granitic intrusive is part of the Cretaceous to Tertiary Coast Plutonic Complex.

Bibliography

EMPR GEM 1970-46
EMPR MAP 8
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

MINFILE Record Summary
MINFILE No 103I 114

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 19-Dec-1986 by Larry Jones (LDJ)
Last Edit: 01-May-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	SHAN SOUTH, LAS MARGARITAS, SAK, NICHOLSON CREEK, PHOENIX, KOKANEE, CAMP, TRIANGLE	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Prospect	**NTS Map**	103I09W
Latitude	054º 40' 19''	**UTM**	09 (NAD 83)
Longitude	128º 26' 06''	**Northing**	6058433
		Easting	536436
Commodities	Molybdenum	**Deposit Types**	L05 : Porphyry Mo (Low F- type)
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Shan South occurrence is located about 3 kilometres west of the Skeena River approximately 25 kilometres northeast of Terrace, and 4 kilometres north of Usk.
Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic flows and minor basalt. All rocks are cut by faults and shear zones with associated quartz veins.

Molybdenite, associated with pyrite, occurs as disseminations, rosettes and smears in widely spaced quartz veins and shears over a 900 by 400 metre area that trends south-southwest. The mineralized zone, occurring mainly in the intrusive rocks, exhibits quartz-sericite-clay alteration. In the north part of the zone, several north-northwest trending mineralized veins occur. These veins measure up to 100 metres long and 3 metres wide. At a higher elevation 600 metres to the south, several drillholes intersected molybdenite within quartz

veins and veinlets. One hole intersected 15 metres of 0.218 per cent molybdenite and a second hole, 270 metres to the west, intersected 49 metres of 0.108 per cent molybdenite (Property File - Drilling notes, 1970).

In 1967, Kokanee Moly Mines Limited conducted a program of diamond drilling on the Shannon Creek claims. This included 1624 metres of drilling over 11 holes. In 1971, New Star Gold Mines conducted a soil survey. Between 1979 and 1980, Rio Tinto Canadian Exploration Ltd. conducted an exploration program that included geological mapping, a soil survey, a stream sample survey, an induced polarization survey and two drillholes.

In 2005, BCM Resources Corp. (formerly known as BC Moly Ltd.) acquired the property. In November 2006, BCM Resources reported initial assay results for the Las Margaritas zone of the Shan South property, including 0.118 per cent molybdenum over 59.65 metres (Press Release - BCM Resources Corp., November 30, 2006). In January 2007, further results included 0.107 per cent molybdenum over 122.8 metres (Press Release - BCM Resources Corp., January 5, 2007).

In 2011, BCM Resources Corp. completed 3421.4 metres of diamond drilling in 16 holes. Highlights include drillhole LM054, which assayed 0.064 per cent molybdenum over 189 metres, including a 42-metre section that assayed 0.119 per cent molybdenum (Press Release - BCM Resources Corp., August 29, 2011).

Bibliography

EMPR AR 1928-145; 1934-C5; *1935-C7-C9; 1936-C37; 1940-54; 1941-41; 1945-63; 1948-76
EMPR ASS RPT 4298, 5722, 6032, 7197,
*7932, 8592, 28355, 29654, 33498
EMPR EXPL 1975-176; 1976-163; 1979-253; 1980-394
EMPR FIELDWORK 2008, pp. 35-44
EMPR GEM *1973-487
EMPR MAP 69-1; 8
EMPR PF (Rpt. by N.G. Freshwater, 1946, Maps by J.A. Siefert, 1946 and F. Nash, 1931, 1935; Drilling Notes, author unknown, 1970)
EMPR PF Cyprus Anvil (GSB (1960-01-01): Topographic Map of Shannon Creek, with Geochemical layer; Bottoms, K.P. (1968-03-01): Report on Diamond drilling programme Shannon Creek claims, Usk, B.C. for Kokanee Moly Mines Ltd.; Simpson, J.G. (1970-10-20): Letters re: Usk Moly, Shannon Creek, assays, maps, field notes;

Kokanee Moly Mines Ltd. (unknown): Geochemical Map of Shannon Creek; GSB (unknown): Claim map of Shannon Creek; unknown (unknown): Map No.6 Phoenix Tunnel Area)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 53-56; *329, pp. 86,87
GSC P 36-17, pp. 94-96; 36-20, pp. 35,36
PR REL BCM Resources Corp., Oct.2,12,26, Nov.30, 2006; Jan.5, Jun.15, Oct.4, 2007; Jan.22, Mar.13, 2008; Jun.20, Jul.*28, Aug.*29, Nov.*16, 2011
WWW http://www.bcmresources.com
Hanson, D.J. (2008-07-08): Technical Report on the Shan Property
EMPR
PFD 18014, 18016, 811717, 811718, 811719, 811720, 811721, 811722

MINFILE Record Summary
MINFILE No 103I 115

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 26-Sep-1986 by Larry Jones (LDJ)
Last Edit: 25-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	LOU	**Mining Division**	Skeena
		BCGS Map	103I096
Status	Showing	**NTS Map**	103I15W
Latitude	054° 58' 29''	**UTM**	09 (NAD 83)
Longitude	128° 50' 37''	**Northing**	6091990
		Easting	510010
Commodities	Zinc, Lead, Copper, Silver, Gold	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

Quartz filled shear zones, striking north to northeast, occur in Jurassic to Cretaceous Bowser Lake Group sedimentary rocks. The rocks consist of coarsely interbedded black argillites, impure greenish quartzites, and fine-grained, grey greywackes which have been tightly folded along a northeast trending axis. The folds have associated shears and faults with quartz veins. Pyrite, galena, sphalerite, chalcopyrite, possibly smithsonite, and secondary hydrozincite occur in the veins as disseminations and coarse blebs.

Drill hole #1 intersected 3.75 per cent zinc, 0.27 per cent copper, 0.02 per cent lead, 20.6 grams per tonne silver and 0.3 grams per tonne gold over 2.4 metres. Drill hole #3, 180 metres to the northeast, intersected 5.00 per cent zinc, 0.69 per cent copper, 0.10 per cent lead, 37.7 grams per tonne silver and trace gold over 50.8 centimetres (Property File: White, 1969).

Bibliography

EMPR GEM 1969-71
EMPR MAP 8
EMPR PF (*Rpt by G.P.E. White, 1969 in GOLD STAR property - 103I 038)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
EMPR PFD 670982, 670983

MINFILE Record Summary
MINFILE No 103I 116

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 16-Oct-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	MARMOT, SUNLIGHT	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054° 49' 49''	**UTM**	09 (NAD 83)
Longitude	128° 40' 07''	**Northing**	6075955
		Easting	521288
Commodities	Lead, Silver, Zinc, Gold, Copper	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by argillite, greywacke and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, pyrrhotite and minor chalcopyrite.

A concordant quartz vein, striking 080 degrees and dipping 35 degrees north, is up to 3.5 metres wide and 12 metres long. The ore reportedly assayed 30 per cent lead, 5 per cent zinc and 480 grams per tonne silver (Minister of Mines Annual Report 1926).

Bibliography

EMPR AR 1920-42; 1922-49; 1923-48; 1924-48; 1925-70; 1926-73; 1927-64; *1928-73
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1922A, pp. 48,49; 1923A, pp. 42-44
EMPR PFD 830129

MINFILE Record Summary
MINFILE No 103I 117

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 12-Dec-1986 by Larry Jones (LDJ)
Last Edit: 12-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	PAYSTREAK, GOLD STAR, TRUE BLUE	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054° 37' 19''	**UTM**	09 (NAD 83)
Longitude	128° 28' 46''	**Northing**	6052848
		Easting	533611
Commodities	Copper, Silver, Lead, Gold	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

Meta-rhyolite of probable Permian age is cut by a 1.5 metre wide basic dyke. A 1 metre east trending shear zone occurs on the hangingwall side of the dyke. The shear contains a 15 to 90 centimetre quartz vein with disseminated chalcopyrite, galena, sphalerite and magnetite. A 90 centimetre sample assayed trace gold, 55 grams per tonne silver, and 1.5 per cent copper and a selected sample assayed 1.4 grams per tonne gold, 233 grams per tonne silver, 7.1 per cent copper and 14 per cent lead (Minister of Mines Annual Report 1919).

A nearby showing called "Big Lead" contained chalcopyrite, minor bornite and galena in a basic dyke and metavolcanics.

Bibliography

EMPR AR *1919-98,99; 1929-151
EMPR GEM *1970-195-197
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

MINFILE Record Summary
MINFILE No 103I 118

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 10-Oct-1986 by Larry Jones (LDJ)
Last Edit: 07-May-2007 by Nicole Robinson (NR)

SUMMARY

Summary Help

Name	KALUM, KEN, BELWAY AND REX, TREADWELL NO. 2, JUNEAU, MALOYA, LAKE SHORE, SHAFT, SOUTH ADIT, ROAD	**Mining Division**	Skeena
		BCGS Map	103I077
Status	Showing	**NTS Map**	103I15W
Latitude	054° 47' 49''	**UTM**	09 (NAD 83)
Longitude	128° 45' 57''	**Northing**	6072221
		Easting	515055
Commodities	Copper, Gold, Silver	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb) I02 : Intrusion-related Au pyrrhotite veins
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by metavolcanic and metasedimentary rocks of the Upper Jurassic Bowser Lake Group. The volcanic rocks consist of dacitic crystal tuffs, andesites and basalts, which are metamorphosed to muscovite schists, biotite-chlorite schists, and gneisses. The units strike east and dip 25 to 35 degrees north and have undergone varying degrees of sericite, epidote and chlorite alteration.

Bornite and chalcopyrite with low gold and silver values occur locally in narrow shear zones in quartz stringers; in quartz-epidote-hematite lenses and veins; in magnetite-rich, partly silicified tuff bands; and along planes of schistosity in the biotite-chlorite schists.

Three showings (Shaft, South Adit and Road) occur over a 240 metre, north trending zone. The Shaft occurrence contains malachite along

shear zones in metabasalt, which overlies muscovite schist. A 2.4 metre sample assayed 14.4 grams per tonne gold and 17.1 grams per tonne silver (Minister of Mines Annual Report 1914). The South Adit occurrence, 110 metres southeast of the shaft, showed strata- bound mineralization with magnetite. A grab sample assayed 0.78 per cent copper, 0.3 grams per tonne gold and 14 grams per tonne silver (Fieldwork 1984). The recent Road showing, 85 metres south-south-east of the adit, is mineralized with bornite, specularite and chalco-pyrite. A grab sample assayed 4.80 per cent copper, 4.1 grams per tonne gold and 100 grams per tonne silver (Fieldwork 1984).

The Christmas vein, 600 metres south of the North adit, contains quartz, magnetite, pyrite and chalcopyrite. A one metre length of drill core assayed 1.18 grams per tonne gold, 1.19 grams per tonne silver and 0.05 per cent copper (Assessment Report 16158).

Bibliography

EMPR AR *1915-105-107; 1918-49; 1920-41; 1923-49; 1924-48; 1925-70;
1926-74; 1927-63; 1931-36
EMPR ASS RPT *10450, 11595, 15285, *15679, *16158
EMPR BULL 1, 1932, pp. 22,30
EMPR EXPL 1983-503; 1986-C429; 1987-C360,C361
EMPR FIELDWORK *1984, pp. 303-307
EMPR GEM 1970-96
EMPR MAP 8
EMPR PF (Superintendent of Brokers and Vancouver Stock Exchange Statement of Material Facts #72/90, July 23, 1990)
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM *205, pp. 13-15; 329, p. 74
GSC P 36-17, pp. 20,21; 36-20, pp. 47,48
GSC SUM RPT 1922A, p. 49
EMPR
PFD 671653, 671654, 671655, 671656, 671657, 671658, 671659, 671660, 671661,
671662, 671663, 671664, 671665, 671666, 671667, 671668, 671669

MINFILE Record Summary
MINFILE No 103I 120

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 16-Oct-1986 by Larry Jones (LDJ)
Last Edit: 15-Apr-2009 by Nicole Barlow (NB)

SUMMARY

Summary Help

Name	CROWN, COPPER, COPPERAS, M.A.R., MAROON NO.1	**Mining Division**	Skeena
		BCGS Map	103I077
Status	Showing	**NTS Map**	103I15E
Latitude	054º 46' 29''	**UTM**	09 (NAD 83)
Longitude	128º 43' 06''	**Northing**	6069760
		Easting	518119
Commodities	Copper	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb) I02 : Intrusion-related Au pyrrhotite veins
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

In 1964, the Crown area was staked as the M.A.R. Group of claims by Purdex Minerals Limited. The claims fallowed from east to west, starting at Kitsumkalum Lake, along the north side of Maroon Creek for a distance of 8 kilometres to cover low-grade copper mineralization.

Sericite and hornblende schist of the Jurassic to Cretaceous Bowser Lake Group are intruded by a 50 metre wide diorite mass. Quartz veins mineralized with pyrite and chalcopyrite occur in the diorite and concordant with the metasediments underlying the diorite. The concordant veins are hosted within a 10 metre wide zone, which also contains disseminated chalcopyrite. A sample across the zone assayed 0.5 per cent copper and traces of gold and silver (Minister of Mines Annual Report 1918). The schists strike east and dip 40 degrees north.

The Maroon No. 1 showing, part of the M.A.R. Group, was described as one or more fracture zones containing quartz and fine chalcopyrite. The width of the zone varied from 3 to 9 metres and had been exposed over 75 metres. Two 1.5 meter chip samples across the zone

assayed 0.60 and 0.98 per cent copper. Chip samples from outside of the zone varied from 0.11 to 0.58 per cent copper. Another similar showing, the Maroon No. 2, is reported to be located 800 metres to the west of the Maroon No. 1 showing (Property File Cyprus Anvil D.D. Campbell, 1964).

Bibliography

EMPR AR *1918-49; 1919-43; 1925-Fig. OP. p. 68
EMPR MAP 8
EMPR PF Placer Dome (J.R. Woodcock (1981): Correspondence RE: Gossan Targets in Northwestern British Columbia; J.R. Woodcock (1982): Terrace Gossan Project (103I, 103J) for Dome Exploration (Canada) Ltd.)
GSC MAP 11-1956; 1136A; 1385A; 278A
GSC MEM 329
GSC P 36-20, pp. 41,48
EMPR PFD 20867, 885265, 885266, 830126, 830127, 830128, 20865

MINFILE Record Summary
MINFILE No 103I 121

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 20-Oct-1986 by Larry Jones (LDJ)
Last Edit: 14-May-2020 by Karl A. Flower (KAF)

SUMMARY Summary Help

Name	LYNDA, SNO, FIDDLER	**Mining Division**	Omineca, Skeena
		BCGS Map	103I078
Status	Prospect	**NTS Map**	103I16W
Latitude	054º 45' 39''	**UTM**	09 (NAD 83)
Longitude	128º 26' 36''	**Northing**	6068320
		Easting	535820
Commodities	Molybdenum, Copper	**Deposit Types**	L05 : Porphyry Mo (Low F-type) L04 : Porphyry Cu +/- Mo +/- Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

The Lynda occurrence is located in the south eastern head waters of Fiddler Creek, approximately 9.0 kilometres northwest of the Skeena River.

Molybdenite occurs in the southern half of a granitic intrusive, measuring 750 by 150 metres, localized at the contact between granodiorite of the Legate Creek apophysis of the Cretaceous to Tertiary Coast Plutonic Complex and volcanics and sediments of the Hazelton and Bowser Lake Groups. The intrusive, which strikes 140 degrees and dips 45 to 50 degrees southwest, is in contact with a quartz-feldspar biotite porphyry dike, granodiorite and porphyritic granite, along the southwest hanging wall. The regional granodiorites lie to the northeast and andesites and greywackes lie to the southwest.

Molybdenite and minor chalcopyrite mineralization occurs over a length of 460 metres, a width of 150 metres and through a vertical range of 300 metres. It is closely associated with the granitic intrusive and occurs in narrow quartz-pyrite veins, in high grade multiple-

banded quartz-pyrite veins (up to 30 centimetres wide), in silicified shears, disseminated and as fracture fillings. A north-south fault truncates the mineralized zone to the east. Alteration includes wide spread sericitization and local K-feldspathization.

A 26 metre chip sample assayed 0.09 per cent molybdenite and 0.04 per cent copper (Assessment Report 866). Two drill holes, 300 metres apart, intersected over 50 metres of stockwork mineralized with molybdenite. Float samples assayed up to 1.58 per cent molybdenite (Assessment Report 866).

In 2007, El Toro Mining completed a program of photo-geological interpretations on the area. During 2008 through 2013, Casa Minerals Inc. completed programs of prospecting, geological mapping, geochemical (rock and soil) sampling and ground magnetometer surveys on the area as the Pitman property. In 2014, Abcana Capital Inc. entered into an agreement with Casa Minerals to acquire the Pitman property. During 2015 through 2017, Abcana and Casa Minerals completed programs of prospecting, reconnaissance geological mapping, and soil and rock sampling on the Pitman property.

Bibliography

EMPR AR 1966-80; 1967-83
EMPR ASS RPT 842,
*866, 8107, 10023, 29151, 30900, 31853, 32596, 34330
EMPR EXPL 1980-399,400
EMPR MAP 8; 69-1
EMPR Monthly Rpt. (T.Schroeter), Sept. 1976
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM 329
CIM Special Vol. 15, 1976, Map B
Ostensoe, E.A., Payie, G. (2011-05-04): Technical Report – Pitman Property
Payie, G. (2012-01-10): Technical Report – Pitman Property
Payie, G. (2012-07-06): Technical Report – Pitman Property
Payie, G., Ostensoe, E.A. (2014-11-18): Technical Report – Pitman Property
Ostensoe, E.A., Johnston, R. (2017-09-12): Technical Report – Pitman Property
EMPR PFD 882899, 882900, 882901, 882902

MINFILE Record Summary
MINFILE No 103I 127

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 16-Oct-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	SCENIC, LOG CABIN	**Mining Division**	Omineca, Skeena
		BCGS Map	103I078
Status	Showing	**NTS Map**	103I15E
Latitude	054° 45' 34''	**UTM**	09 (NAD 83)
Longitude	128° 33' 41''	**Northing**	6068111
		Easting	528225
Commodities	Gold, Silver, Copper	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

Argillites of the Jurassic to Cretaceous Bowser Lake Group are intruded by numerous greenstone dykes. Diorite of the Cretaceous to Tertiary Coast Plutonic Complex lies to the south. On the west side of the divide, is a 2 metre wide silicified zone in the sediments. A 20 centimetre wide quartz vein mineralized with pyrite and chalcopyrite occurs on the hangingwall. At the divide, a vein of brecciated quartz and country rock is mineralized with galena, sphalerite and chalcopyrite.

East of the divide, a 2.4 to 3.0 metre stringer zone contains pyrite and minor chalcopyrite. A 1.5 metre sample assayed 18.5 grams per tonne gold, 137 grams per tonne silver and 0.5 per cent copper (Minister of Mines Annual Report 1928).

Bibliography

EMPR AR 1921-44; *1922-49; 1923-48; 1924-48; 1925-70; 1926-72,73; *1928-74,75; 1931-36
EMPR MAP 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 48; 36-17
GSC SUM RPT 1923A, pp. 42-44

MINFILE Record Summary
MINFILE No 103I 133

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 16-Dec-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	JACKIE	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054° 38' 39''	**UTM**	09 (NAD 83)
Longitude	128° 28' 06''	**Northing**	6055326
		Easting	534310
Commodities	Zinc, Silver	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology A shear zone in silicified volcanics and schists of probable Triassic age, is mineralized with sphalerite, pyrite and galena. The shear zone, striking 160 degrees and dipping northeast is about 100 metres long and 1 metre wide. A sample assayed 7 per cent zinc, 41.1 grams per tonne silver and trace gold (Minister of Mines Annual Report 1928). Another showing occurs about 355 metres higher in elevation on an adjoining creek to the south.

Bibliography

EMPR AR *1928-145
EMPR MAP 8; 69-1
EMPR PF (Sketch of Mineral Claims in Usk District, J. Willman, 1929)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 23

MINFILE Record Summary
MINFILE No 103I 135

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 16-Oct-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	GOAT	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054° 48' 54''	**UTM**	09 (NAD 83)
Longitude	128° 39' 52''	**Northing**	6074257
		Easting	521564
Commodities	Lead, Zinc, Silver	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology A concordant quartz vein in argillite of the Jurassic to Cretaceous Bowser Lake Group contains galena and sphalerite. The vein is 5 to 15 centimetres wide and is exposed along the face of a bluff for about 30 metres. A sample assayed 49 per cent lead and 686 grams per tonne silver (Property File: Assays, 1926).

Bibliography

EMPR AR 1920-41; 1921-43; 1923-47; *1926-73
EMPR ASS RPT 21742
EMPR MAP 8; 69-1
EMPR OF 1994-14
EMPR PF (Assays, 1926)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1923A, pp. 42-44
EMPR PFD 18105, 830129

MINFILE Record Summary
MINFILE No 103I 137

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 16-Dec-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	LITTLE WONDER	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054° 39' 19''	**UTM**	09 (NAD 83)
Longitude	128° 25' 26''	**Northing**	6056585
		Easting	537168
Commodities	Copper	**Deposit Types**	L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology A quartz vein, up to 1.5 metres wide, occurs in sheared volcanic rock of probable Triassic age. The veins are mineralized with probable chalcopyrite. Higher in elevation are altered and silicified rocks containing pyrite and specularite.

Bibliography

EMPR AR 1930-136
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

MINFILE Record Summary
MINFILE No 103I 152

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 15-Dec-1986 by Larry Jones (LDJ)
Last Edit: 28-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

NMI 103I9 Au9

Name	POOR BOY	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054° 38' 39''	**UTM**	09 (NAD 83)
Longitude	128° 25' 26''	**Northing**	6055348
		Easting	537178
Commodities	Gold, Silver, Copper	**Deposit Types**	I02 : Intrusion-related Au pyrrhotite veins L01 : Subvolcanic Cu-Ag-Au (As-Sb)
Tectonic Belt	Intermontane	**Terrane**	Plutonic Rocks

Capsule Geology

The area is underlain by granite to diorite intrusions related to the Cretaceous to Tertiary Coast Plutonic Complex.

An east trending, north dipping shear zone in diorite contains a 0.5 metre wide quartz vein mineralized with bornite and possibly free gold. A sample assayed 2.0 grams per tonne gold, 54.9 grams per tonne silver and 0.3 per cent copper (Minister of Mines Annual Report 1914).

Bibliography

EMPR AR *1914-141,Map p. 120
EMPR ASS RPT 2719
EMPR MAP 8
GSC MAP 1136A; 1385A; 11-1956
GSC MEM 329

MINFILE Record Summary
MINFILE No 103I 167

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 19-Dec-1986 by Larry Jones (LDJ)
Last Edit: 01-May-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	SHAN, CAMP, LAS MARGARITAS	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Prospect	**NTS Map**	103I09W
Latitude	054° 41' 59''	**UTM**	09 (NAD 83)
Longitude	128° 25' 16''	**Northing**	6061531
		Easting	537306
Commodities	Molybdenum, Copper	**Deposit Types**	L05 : Porphyry Mo (Low F- type)
Tectonic Belt	Intermontane	**Terrane**	Stikine, Plutonic Rocks

Capsule Geology

The Shan occurrence is located west of the Skeena River about 23 kilometres northeast of Terrace.

Volcanics of probable Triassic age are cut by quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex. Molybdenite occurs as flakes and disseminations within a 75 by 35 metre zone of altered and fractured quartz diorite. Alteration minerals include kaolinite and sericite. Quartz veins are present but are unmineralized. Scattered malachite was observed in three areas.

About 900 metres to the southwest are quartz veins with molybdenite and pyrite within unaltered quartz diorite.

Historical data dating from the 1930s show exploration work conducted as follows (http://www.bcmresources.com):

1930s: Adit dug into the side of Shan South Ridge, exploration focus was on gold. Narrow quartz veins of visible molybdenum were reported and with assays values of up to 0.42 per cent molybdenum.

1960s: Narrow diameter, shallow holes drilled, shallow trenches dug, with more indications of molybdenum.

1970s: Soil survey conducted using auger with values commonly in the 100s of parts per million molybdenum and up to 700 parts per million.

Since BCM Resources Corp. acquired 100 per cent of the original Shan South claims, (comprising 1386 acres) in early 2006, the Company has substantially increased its land position surrounding the original molybdenum discovery and conducted extensive exploration work. In 2008, the total area at Shan South comprised 3933 acres.
The Company has conducted several field exploration programs including two aeromagnetic surveys; 26 line kilometres, 200 metre spacing over the original Shan South claims and 1110 line kilometres, 100 metre spacing encompassing Shan South, Shan North and McRae claims. It has also completed three diamond drill programs comprising 41 holes, totalling 10,312 metres. Bedrock sampling on the Shan South property, which covered a 1000 by 500 metre northeast-trending area, identified molybdenum mineralization throughout the area. Results ranged up to 0.80 per cent molybdenum and commonly exceeded 0.05 per cent molybdenum (http://www.bcmresources.com).

The Phase 1 drill program, consisting of 20 holes totalling 3550 metres, was designed to test near-surface mineralization discovered in a preceding mapping/sampling exploration program. Seventeen of the 20 holes drilled tested a new zone of mineralization (Las Margaritas zone) not explored by previous drilling. The remaining three holes were located in the Camp zone which received limited drilling in the 1960s. The results of the Phase 1 program are highly encouraging. The newly recognized Las Margaritas zone remains open in all directions. Compilation of historic data including underground work in the 1930s suggests that mineralization may extend for at least 500 metres to the north and to depths of 500 metres below the surface of the Las Margaritas zone.

The Phase 2 drill program of 17 holes totalling 5682 metres was designed to expand and deepen the coverage as well as build on the Phase 1 results. The drillholes completed in the first two programs tested a 750 by 450 metre area near the top of the ridge. Drill core samples returned values averaging up to 0.103 per cent molybdenum over a length of 190 metres in hole LM-027. The interval included two higher grade sections grading 0.168 per cent molybdenum over 26.9

metres and 0.362 per cent molybdenum over 14.5 metres. A higher grade section intersected in the final 15 metres of this hole had an average grade of 0.152 per cent molybdenum. Twenty-six of the 36 holes contained intervals with grades of at least 0.1 per cent molybdenum and thirty-one of the holes included samples with grades of at least 0.06 per cent molybdenum. All of the drillholes intersected visible molybdenum mineralization and all included intervals above 0.01 per cent molybdenum (http://www.bcmresources.com). Seventeen of the twenty holes drilled tested a new zone of mineralization (Las Margaritas Zone) not explored by previous drilling

The Phase 3 drill program at Shan South tested a 500 by 500 metre area north and down-slope from previous drilling. Five holes totalling 1080 metres were completed. This area (referred to as the "Triangle Zone") is in the vicinity of the historical adit. A pattern of scattered high-grade mineralization similar to that at the nearby Camp zone was observed.

Bibliography

EMPR ASS RPT *7932, 8592, 29654
EMPR EXPL 1980-394
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CMJ Jan.5, 2007
PR REL BCM Resources Corp., Nov.29, 2006
Hanson, D.J. (2008-07-08): Technical Report on the Shan Property
WWW http://www.bcmresources.com

MINFILE Record Summary
MINFILE No 103I 181

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 15-Oct-1986 by Larry Jones (LDJ)
Last Edit: 29-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	GULD, ALICE	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Showing	**NTS Map**	103I15E
Latitude	054º 49' 19''	**UTM**	09 (NAD 83)
Longitude	128º 38' 16''	**Northing**	6075038
		Easting	523273
Commodities	Gold, Silver	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast.

A 6 metre long, 0.5 metre wide quartz vein occurs in a sheared zone in the conglomerate. It strikes 030 degrees and dips 65 degrees west. A 1 metre sample assayed 12 grams per tonne gold (Annual Report 1930).

Bibliography

EMPR AR *1930-76
EMPR ASS RPT 21742
EMPR BULL 1 (1932) pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *205, pp. 19,20; 329, pp. 75,76
GSC P 36-17, p. 29
GSC SUM RPT 1923, pp. 42-44
EMPR PFD 801429, 801431, 830129

MINFILE Record Summary
MINFILE No 103I 195

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 08-Dec-1986 by Larry Jones (LDJ)
Last Edit: 01-Jan-0001 by BC Geological Survey (BCGS)

SUMMARY

Summary Help

Name	TURNER'S RANCH	**Mining Division**	Skeena
		BCGS Map	103I057
Status	Showing	**NTS Map**	103I10E
Latitude	054º 33' 59''	**UTM**	09 (NAD 83)
Longitude	128º 37' 06''	**Northing**	6046608
		Easting	524677
Commodities	Clay	**Deposit Types**	B06 : Fireclay E07 : Sedimentary kaolin
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology Glacial clay is exposed north of Terrace. It is a fine, very plastic chocolate-brown clay.

Bibliography

EMPR AR *1930-79
EMPR BULL *30, pp. 16,55
EMPR MAP 8
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

MINFILE Record Summary
MINFILE No 103I 204

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 26-Sep-1986 by Larry Jones (LDJ)
Last Edit: 01-Jan-0001 by BC Geological Survey (BCGS)

SUMMARY Summary Help

Name	DOUGLAS CREEK	**Mining Division**	Skeena
		BCGS Map	103I087
Status	Past Producer	**NTS Map**	103I15E
Latitude	054º 50' 29''	**UTM**	09 (NAD 83)
Longitude	128º 43' 37''	**Northing**	6077176
		Easting	517536
Commodities	Gold	**Deposit Types**	C01 : Surficial placers
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Auriferous quartz veins are probable sources of placer gold in the Douglas Creek bed. The largest nugget recovered was 195 grams in 1933 (Bulletin 21). Coarse gold has been recovered from gravels above bedrock in the creek bed and from remnants of old channel ground on low bench and bar sections.

Recorded production for the period 1886-1940 totals 10,937 grams of placer gold.

Bibliography

EMPR AR 1886-201,table; *1914-107-108; 1918-49-50; 1923-48; 1924-48; 1925-70; 1926-73; 1927-65; 1930-76-77; 1931-36; *1932-51; 1933-45; 1934-B11
EMPR BULL 1, 1931, pp. 47-48; 1, 1933, p. 25; 21, p. 17; *28, p. 48
EMPR MAP 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 205, pp. 1,8; *329, pp. 69,71
GSC P 36-20, p. 11
GSC SUM RPT 1922A, p. 49; 1923A, pp. 42-44

MINFILE Record Summary
MINFILE No 103I 211

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 23-Sep-1988 by Larry Jones (LDJ)
Last Edit: 28-Apr-2020 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	BURN, KALUM LAKE, PORTLAND	**Mining Division**	Skeena
		BCGS Map	103I076
Status	Prospect	**NTS Map**	103I10W
Latitude	054º 43' 59''	**UTM**	09 (NAD 83)
Longitude	128º 49' 11''	**Northing**	6065102
		Easting	511609
Commodities	Gold, Silver, Copper, Lead	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au I02 : Intrusion-related Au pyrrhotite veins
Tectonic Belt	Coast Crystalline	**Terrane**	Plutonic Rocks, Bowser Lake

Capsule Geology

The Burn occurrence is located just west of Kitsumkalum Lake about 27 kilometres north of Terrace.

The Burn showing area is underlain by Upper Jurassic to Lower Cretaceous sediments of the Bowser Lake Group comprised mainly of argillite, greywackes and conglomerates. Generally, the sediments strike west and dip 75 degrees to the north. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. High grade gold-bearing quartz veins fringe the Allard stock near its contact with Bowser Lake Group country rocks. The stock consists of hornblende-biotite granodiorite to diorite. The Allard stock is also described as a composite pluton with an eastern syenitic phase. Alteration in the granodioritic intrusive is directly related to the density of veining and shearing. The predominant type is propylitic with lesser silicification and epidote-hematite alteration.

Locally, mineralization consisting of epigenetic quartz veining with pyrite, chalcopyrite, tetrahedrite and galena with associated values in gold and silver occurs on the west shore of Kitsumkalum Lake. This

vein-type mineralization is exposed on the Kalum Lake-Portland property (refer to Portland, 103I 019).

Similar mineralization occurs about 2.25 kilometres southwest of the main Portland showing. The area is underlain by granodiorite which shows intense propylitic alteration caused by a high density of quartz veining and shearing. The quartz veining hosts pyrite and chalcopyrite and a grab sample from a trench assayed up to 16.8 grams per tonne gold and 242.1 grams per tonne silver (Cavey and Chapman, 1987). The history of Burn occurrence is linked to that of the Kalum ((103I 019) and the reader is referred to that MINFILE description for historical details prior to 2003.

By 2003, Eagle Plains Resources Ltd. had acquired the 500-unit Kalum property to cover the Allard stock, a 4 by 11 kilometre intrusion that has been mapped west of Kitsumkalum Lake. The Kalum property encompasses several historically documented occurrences referred to in the 2003 Assessment Report 27417: Kalum (103I 019), Burn (103I 211), Quartz Silver (103I 018), Allard (103I 151), Misty (103I 213), Chris (103I 174), Martin (103I 020) and Hat (103I 173). Several new discoveries were also described.
In 2004, Eagle Plains Resources Ltd. continued exploration for an intrusion-related gold deposit on its Kalum property. The program comprised a 1500 line kilometre airborne geophysical survey, on-the-ground evaluation of targets and the drilling of 19 holes, totalling 1958 metres. The geophysical survey recovered magnetic and time-domain electromagnetic data.

In 2005, Eagle Plains Resources completed a program of soil, silt and rock sampling and geological mapping on the area.

In 2007, Mountain Capital Inc. optioned the property and in 2008 undertook a program of soil and rock sampling, a 4.1 line-kilometre induced polarization survey and 11 diamond drill holes, totalling 1390 metres, on the Burn occurrence area. The option was terminated in May of 2009. This work indicated that the granodiorite “stock” that was the focus of exploration was a sill-like thrust emplaced mass overlying a sequence of argillite and greywacke. Weak but pervasive gold mineralization was reported associated with pyritic quartz stringers and veinlets in the granodiorite. Diamond drilling yielded intercepts of 0.973 gram per tonne gold over 10.55 metres, including 28.700 grams per tonne gold over 0.30 metre in hole KKM08-01,

59.600 grams per tonne gold over 0.15 metre in hole KKM08-02, 11.950 grams per tonne gold over 2.30 metres in hole KKM08-03 and 5.410 grams per tonne gold over 0.20 metre in hole KKM08-05 (Murton, J.W. (2009-11-20): 2009 Exploration and Geological Report for the Kalum Property).

In 2009, Windstorm Resources Inc. entered into a Letter of Intent with Eagle Plains to earn a 60 per cent interest in the property and completed a program of prospecting, geochemical sampling and an induced polarization survey on the area. Rock samples (H148007) are reported to have yielded from 0.250 to 0.994 gram per tonne gold (Murton, J.W. (2009-11-20): 2009 Exploration and Geological Report for the Kalum Property).

In 2010, a program of geological mapping and six diamond drill holes, totalling 419.11 metres, were completed on the Tuppie-Cirque (MINFILE 103I 228) occurrence.
In early 2012, Clemson Resources Corp. entered into an Option Agreement with Eagle Plains Resources to acquire a 60 per cent interest in the property.

Bibliography

EMPR AR 1922-47; 1923-47; 1925-69; 1927-63; 1930-74
EMPR ASS RPT 8299, *13303, *16026, *27417, 27892, 30479
EMPR EXPL 1980-397; 1984-377; 1987-C359; *2003-12,13; *2004-32,33
EMPR MAP 8; 69-1
EMPR PF (*Collins, D.A. and Arnold, R.R. (1987): Report on the Kalum Lake Property, in Statement of Material Facts #31/88 for Terracamp Developments Ltd., Apr. 25, 1988; *Cavey, G. and Chapman, J. (1987): Report on the 1987 Drilling Program for the Kalum Lake Claims, in Prospectus for Terracamp Developments Ltd., Jul.22 , 1987; Statement of Material Facts #52/88 for Terracamp Developments Ltd., Jun.15, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 205; 329
GSC P 36-17, p. 22
GCNL #174, 1987
PR REL Eagle Plains Resources Ltd., Feb.20, Mar.24, Jun.4, Aug.19, Sept.*30, 2003; Dec.12, 2004; Aug.5, 2005; Nov.4, 2009; Mountain Capital Inc., Dec.12, 2008; Windstorm Resources Inc., Oct.8, 2010
Daignault, P.M., Sharp, R.J. (2007-12-27): 2007 Exploration and

Geological Report for the Kalum Property
*Murton, J.W. (2009-11-20): 2009 Exploration and Geological Report for the Kalum Property
Hutter, J.M. (2012-02-22): Technical Report for the Kalum Property
EMPR PFD 521640

MINFILE Record Summary
MINFILE No 103I 216

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 24-Dec-1986 by Larry Jones (LDJ)
Last Edit: 29-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	APRIL AND MAY	**Mining Division**	Omineca
		BCGS Map	103I068
Status	Showing	**NTS Map**	103I09W
Latitude	054º 38' 09''	**UTM**	09 (NAD 83)
Longitude	128º 25' 36''	**Northing**	6054420
		Easting	537007
Commodities	Lead, Zinc	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology Volcanic rocks of the Lower Jurassic Hazelton Group are intruded by an aplite dyke. A 1.5 metre wide shear zone is mineralized with pyrite, galena, sphalerite, and quartz.

Bibliography

EMPR AR *1932-83
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 23

MINFILE Record Summary
MINFILE No 103I 222

XML Extract / Inventory Report

Print Preview | PDF | -- SELECT REPORT --

File Created: 08-Aug-1989 by Laura L. Duffett (LLD)
Last Edit: 29-Aug-1989 by Laura L. Duffett (LLD)

SUMMARY

Summary Help

Name	HUNTER, BLUE GROUSE, RELIEF	**Mining Division**	Skeena
		BCGS Map	103I096
Status	Showing	**NTS Map**	103I15W
Latitude	054° 59' 09''	**UTM**	09 (NAD 83)
Longitude	128° 48' 57''	**Northing**	6093230
		Easting	511785
Commodities	Silver, Lead, Zinc, Copper	**Deposit Types**	I05 : Polymetallic veins Ag-Pb-Zn+/-Au
Tectonic Belt	Coast Crystalline	**Terrane**	Bowser Lake

Capsule Geology

The area is underlain by Jurassic to Cretaceous Bowser Lake Group sediments comprised of bedded sandstones, greywacke, graphitic shales and breccia. Locally, a fine-grained aplite dyke cuts the sediments.

On the Hunter claim group, a quartz vein cuts brecciated sediments and strikes 310 degrees and dips 55 degrees to the northeast. The vein averages about 76 centimetres in width, and locally contains calcite. Mineralization consists of irregular patches and specks of tetrahedrite, chalcopyrite, galena and sphalerite. In 1930, a 0.6 metre sample of the best mineralized section of the vein assayed trace gold, 78.85 grams per tonne silver, 3.2 per cent lead, 0.5 per cent zinc and 0.8 per cent copper (Minister of Mines Annual Report 1930, page 76).

Bibliography

EMPR AR 1918-50; 1919-43; 1920-42; 1921-45; 1922-49; 1923-48; 1924-48;1925-70; 1927-64; *1928-73; *1930-76
EMPR BULL 1, 1932 p. 21
EMPR MAP 8
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM 205, pp. 9-11; 329
GSC SUM RPT 1922A, p. 48
EMPR PFD 670982, 670983, 670984, 670985

MINFILE Record Summary
MINFILE No 103I 230

XML Extract / Inventory Report

Print Preview PDF -- SELECT REPORT --

File Created: 28-Sep-2011 by Ted Fuller (TAF)
Last Edit: 30-Nov-2011 by Ted Fuller (TAF)

SUMMARY

Summary Help

Name	WADSWORTH VEIN	**Mining Division**	Skeena
		BCGS Map	
Status	Showing	**NTS Map**	103I15W
Latitude	054º 57' 33''	**UTM**	09 (NAD 83)
Longitude	128º 50' 09''	**Northing**	6090260
		Easting	510512
Commodities	Gold, Tungsten	**Deposit Types**	
Tectonic Belt	Intermontane	**Terrane**	Stikine

Capsule Geology

Paul Wadsworth discovered coarse gold in a quartz vein on May 23, 1998. The vein was exposed on a logging road. This area was previously explored for molybdenum at the Big Joe (103I 023 MINFILE). This vein was hand mined from a 14 metres length to a depth of about 1 metre. The hostrock is coarse grit and pebble conglomerate and greywacke which contains metamorphic muscovite. The strata strike 060 degrees and dip 30 degrees southeast. The Wadsworth vein strikes 175 degrees and dips 80 degrees east. Granodiorite is exposed 150 metres southwest of the vein.

Vein Interval Gold in Wallrock (ppb) Gold in Vein (ppb) Tungsten in Vein %
0 m South 6 16 10.5
3 m South 5 14 17.3
6 m South 338 27 2.31
9 m South 1840 10993 g/t 0.78
12 m South 11 792 0.34
15 m South 36 33 2.23
(Exploration and Mining in BC 1999, page 55)

Bibliography

EMPR EXPL 1999 p.9, 53-57
EMPR PFD 801472, 801405, 670981, 670982, 670983

MINFILE Record Summary
MINFILE No 103I 232

XML Extract

Print Preview | PDF | -- SELECT REPORT --

File Created: 15-Jun-2012 by Karl A. Flower (KAF)
Last Edit: 08-Jul-2012 by Karl A. Flower (KAF)

SUMMARY

Summary Help

Name	KRYSTAL	**Mining Division**	Skeena
		BCGS Map	103I077
Status	Showing	**NTS Map**	103I15W
Latitude	054° 46' 34''	**UTM**	09 (NAD 83)
Longitude	128° 45' 22''	**Northing**	6069905
		Easting	515688
Commodities	Andalusite, Garnet	**Deposit Types**	
Tectonic Belt	Intermontane	**Terrane**	Bowser Lake

Capsule Geology

The Krystal andalusite-garnet occurrence is located 1 kilometre from the eastern shore of Kitsumkalum Lake, approximately 800 metres north of Maroon Creek.
The area is underlain by metavolcanic and metasedimentary rocks of the Upper Jurassic Bowser Lake Group. The volcanic rocks consist of dacitic crystal tuffs, andesites and basalts, which are metamorphosed to muscovite schists, biotite-chlorite schists, and gneisses. The units strike east, dip 25 to 35 degrees north and have undergone varying degrees of sericite, epidote and chlorite alteration.

Locally, andalusite and garnet occurs in a mica schist of the Bowser Lake Group sediments where they come in contact with a metamorphosed zone.

The andalusite crystals range in size from 0.6 to 2.5 centimetres in size and garnets range in colour from yellow to red.

Bibliography EMPR ASS RPT 29522

MINFILE Record Summary
MINFILE No 103P 238

XML Extract

Print Preview PDF -- SELECT REPORT --

File Created: 24-Jul-1985 by BC Geological Survey (BCGS)
Last Edit: 19-Jul-2018 by George Owsiacki (GO)

SUMMARY

Summary Help

Name	LUCKY, TWIN, ALDER CREEK, LAVA LAKE, ALDER	**Mining Division**	Skeena
		BCGS Map	103P005
Status	Showing	**NTS Map**	103P03E
Latitude	055º 02' 45''	**UTM**	09 (NAD 83)
Longitude	129º 01' 49''	**Northing**	6099890
		Easting	498061
Commodities	Molybdenum, Copper	**Deposit Types**	L05 : Porphyry Mo (Low F- type) L04 : Porphyry Cu +/- Mo +/- Au
Tectonic Belt	Coast Crystalline	**Terrane**	Plutonic Rocks, Bowser Lake

Capsule Geology

The Lucky property is situated 60 kilometres north-northwest of the community of Terrace in west-central British Columbia. The claims comprising the property are between 0.5 and 4 kilometres west of Lava Lake and cover a south-facing slope above Alder Creek which flows easterly into Lava Lake.

The Lucky showing is underlain mainly by Middle Jurassic to Upper Cretaceous Bowser Lake Group argillaceous siltstones, sandstones, greywackes and lesser conglomerates. Granitic rocks of the Early Tertiary Coast Plutonic Complex which intrude the sedimentary rocks, are immediately south of, and parallel to Alder Creek. Other intrusions known on the property include northwest striking, dike and sill-like bodies of granodiorite porphyry which intrude hornfelsed Bowser Lake Group siltstones 1 kilometre north of the aforementioned Coast Plutonic Complex contact. These are exposed in several open cuts immediately east of a deeply incised, southwesterly flowing tributary of Alder Creek just below the point where the drainage abruptly takes on a northwest trend. The intrusions are described as being typical of the Alice Arm-type being a crowded porphyry with 1 to 2 millimetre

euhedral phenocrysts of plagioclase making up 40 per cent of the rock by volume and set in a fine-grained matrix of quartz and minor K-feldspar. Original biotite and hornblende are altered to chlorite.

Molybdenite and lesser chalcopyrite and bornite occur in drusy quartz veinlets and hairline fractures best developed near the contacts between the intrusive rocks and hornfelsed siltstones. Quartz-banded gangue zones were found to cut earlier veins and dike contacts. Pyrite is widely disseminated in both the intrusion and hornfelsed sediments and a prominent gossan, visible from the Nass highway, is exposed in rocky bluffs extending westerly from the showings area for several hundred metres.

Molybdenum showings were originally staked as the Lucky property by local prospectors prior to 1971. Exploratory work during this time included hand trenching and sampling near a southerly flowing tributary of Alder Creek between elevations of 490 and 520 metres above sea level. The property was re-staked in the late 1970s when a limited prospecting and sampling program was carried out. The Alder and Alder 2 mineral claims were located in January and July of 2005 and were acquired by BCM Resources Corporation in mid-2005 and exploratory work was undertaken by this company in 2006 and 2007. Work included geological reconnaissance and the collection of one stream sediment and a number of rock samples for geochemical analysis. In 2009, BCM Resources conducted a geochemical sampling program consisting of 34 silt and 46 rock samples. In 2012, a work program was undertaken on behalf of BCM Resources Corporation and included revisions to a base map of the claims area that was prepared in 2009, and twelve rock samples were collected from the southern property area.

Bibliography

EMPR ASS RPT *6871, 28834, 29931, 31372, 33673
EMPR BULL 63; 64
EMPR EXPL 1978-E236
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1971-119
EMPR MAP 8
GSC MAP 1385A
GSC OF 864
PR REL BCM Resources Corp., Jan.4, 2010
EMPR
PFD 811932, 670894, 670896, 670897, 670898, 670899, 670902