

Ministry of Energy, Mines & Petroleum Resources Mining & Minerals Division

BC Geological Survey



TOTAL COST: \$ 6,700.00 TYPE OF REPORT [type of survey(s)]: Geological SIGNATURE(S Laurence Sookoche AUTHOR(S): Laurence Sookochoff, PEng NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): YEAR OF WORK: 2014 STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5523689 September 25, 2014 PROPERTY NAME: Kelly Creek CLAIM NAME(S) (on which the work was done): 547959 1014703 **COMMODITIES SOUGHT:** Copper Gold Silver MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 1031 092 / 156 / 159 / 160 / 161 / 162 / 214 MINING DIVISION: Skeena / Omineca NTS/BCGS: 1031.050 LONGITUDE: LATITUDE: 128 (at centre of work) OWNER(S): 1) Richard Billingsley 2) **MAILING ADDRESS:** 11114 147A Street Surrey BC V3R 3W2 OPERATOR(S) [who paid for the work]: 1) Richard Billingsley 2) **MAILING ADDRESS:** 11114 147A Street Surrey BC V3R 3W2 PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude): Lower Jurassic Hazelton Group Telkwa Formation. Lower Cretaceous granodiorite intrusive. North-northwest trending regional Kelly Creek structure. Major northerly and northwesterly trending structures. Two cross-structures. At the Kelly Creek developed prospect the Lower Showing consist of chalcopyrite, bornite, and minor chalcocite occurring as fracture fillings in

granodiorite in a 150 by 15 metre zone. Chip samples over four metres averaged 2 per cent Cu and 17.1 grams Ag per tonne.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 2394 8559 20743 34768

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
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Ground, mapping			
Photo interpretation	ı	547989 1014703	\$ 6,700.00
GEOPHYSICAL (line-kilometres)			
Ground			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric			
Road, local access (kilometres)/			
Trench (metres)			
Other			
		TOTAL COST:	\$ 6,700.00
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BC Geological Survey Assessment Report 35194

RICHARD BILLINGSLEY

(Owner & Operator)

GEOLOGICAL ASSESSMENT REPORT

(Event 5523689)

on a

STRUCTURAL ANALYSIS

Work done on

Tenures 547959 & 1014703

of the 13 claim

Kelly 547959 Claim Group

Skeena/Omineca Mining Divisions

BCGS Map 103I.050

Centre of Work 6,034,302N, 555,535E (NAD 83)

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SUMMARY

The 13 claim, 2106 hectare Kelly 547959 Claim Group ("Property") is located 675 kilometres north of Vancouver, 32 kilometres east of Terrace, 74 kilometres southwest of Smithers, and 143 kilometres east of Prince Rupert, a port city on the west coast of British Columbia.

The geology of the Property is of predominantly the Hazelton Group of volcanic rocks, comprised of intercalated andesitic and basaltic flows and pyroclastics which are locally intruded by stocks of granodiorite and a pre-mineral sill-like body of feldspar porphyry.

The Property includes seven Minfile reported mineral showings in addition to the Minfile Kelly Creek developed prospect. All these eight Minfiles in addition to four peripheral Minfiles are copied herein for reference to geological indicators of a potential mineral resource. One of these "potentials" was the original Zymoetz property now referred to as the Kelly Creek property.

Since the discovery and the staking of the Zymoetz property in 1962 progressive exploration and development work was performed by various companies. Drilling in 1980 established reserves of about 362,875 tonnes grading 3.18 per cent copper and 72.0 grams per tonne silver or 2,267,960 tonnes grading 1.03 per cent copper and 18.5 grams per tonne silver presumably within the Upper Kelly Creek showing where previous reserves were reported.

Copper mineralization at the Upper showing may not associated with the main north-northwest trending Kelly Creek structure as suggested it may be, as the showing is indicated 400 metres west of the structure. The showing however, could be associated with an en-echelon related structure which would explain its reported association and its limited size.

In the structural analysis, the Upper showing is indicated to be associated with the northwest trending structure AB 400 metres northwest of the delineated cross-structure A. The Upper showing may possibly be a minor accessory to a potentially larger zone of mineralization associated with cross-structure A.

Cross-structural location B, at the intersection of the major AB structure and an indicated major northerly trending structure and situated within a granodioritic intrusive, could be the location of a Brenda (MINFILE 092HNE047) type of a porphyry deposit where the ore deposit was hosted by an isolated earlier stock of the main intrusive and where primary mineralization was confined almost entirely to veins hosted by the fractures. The significance of an expansive fracture zone was here shown as the grade of the orebody was a function of fracture (vein) density and of the thickness and mineralogy of the filling material.

Thus, the two structurally analyzed claims show some very positive geological features to the presence of an economic mineral resource. The results of the structural analysis provided two cross-structural areas for primary exploration where the analysis of structural controls and the interpretation of surficial geological indicators could lead to the discovery of a concealed mineral resource.

INTRODUCTION

In August and September 2014 a Structural Analysis was completed on Tenures 547959 and 1014703 of the 13 claim Kelly 547959 Claim Group ("Property"). The purpose of the program was to delineate cross-structures which may be integral in geological controls to potentially economic mineral zones that may occur on Tenure 547959 or the other 11 claims of the Property.

Information for this report was obtained from sources as cited under Selected References, from drill supervisory work on the Zymoetz property in 1967, and information gained from the structural analysis of Tenures 547959 and 1014703.



Figure 1. Location Map

PROPERTY LOCATION AND DESCRIPTION

Location

The Property is situated within BCGS Map 103I.050 of the Omineca and the Skeena Mining Divisions, 675 kilometres north of Vancouver, 32 kilometres east of Terrace, 74 kilometres southwest of Smithers, and 143 kilometres east of Prince Rupert, a port city on the west coast of British Columbia.

Description

The Property is comprised of 13 claims covering an area of 2106.5463 hectares. Particulars are as follows.

Property Location and Description (cont'd)

Table 1. Mineral Tenures of the Kelly 547959 Claim Group

<u>Tenure</u> <u>Number</u>	<u>Type</u>	<u>Claim Name</u>	<u>Good</u> <u>Until</u>	<u>Area</u> (ha)
<u>539053</u>	Mineral	KELLY NORTH	20150715	18.7987
<u>547959</u>	Mineral	KELLY CREEK	20150730	150.4155
<u>547960</u>	Mineral		20150715	18.7986
<u>1014701</u>	Mineral	2	20150715	37.6097
<u>1014702</u>	Mineral	Α	20150715	18.8062
<u>1014703</u>	Mineral	В	20150715	18.8043
<u>1014704</u>	Mineral	С	20150715	18.8138
<u>1014705</u>	Mineral	D	20150715	37.6307
<u>1014706</u>	Mineral	E	20150715	37.6355
<u>1014707</u>	Mineral	F	20150715	18.8182
<u>1014932</u>	Mineral	KELLY CREEK 1	20150715	864.9757
<u>1014933</u>	Mineral	KELLY CREEK 2	20150715	827.7998
<u>1014938</u>	Mineral	KELLY CREEK 4	20150715	37.6396

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access

Access to the Property is easterly from Terrace via a well maintained all-weather gravel road on the south side of the Zymoetz (Copper) River for 32 kilometres to the northern boundary of Tenure 1094923 which is one of the two northernmost claims of the Kelly 547959 Claim Group.

Numerous logging roads throughout the Property provide access to many areas.

Climate

The weather and temperature is typical of the central and northwestern regions of British Columbia. Snowfall can be expected from early October and lasting until late May with moderate rainfall during the summer season.

Local Resources and Infrastructure

All resources to sustain a preliminary exploration program would be available at Terrace.

Air Canada provides a daily service to Vancouver and the Canadian National Railway (CNR) links Terrace with Prince Rupert and Vancouver

Physiography

The topography on Tenure 547959, the main subject claim of structural analysis, is of gentle to steep forested slopes with localized clear-cut and second growth areas. Elevations range from 283 metres within the Kelly Creek valley in the north to 1,037 metres in the southwest corner.

Property Location and Description (cont'd)

Figure 2. Claim Location

(base map from MapPlace & Google Earth)

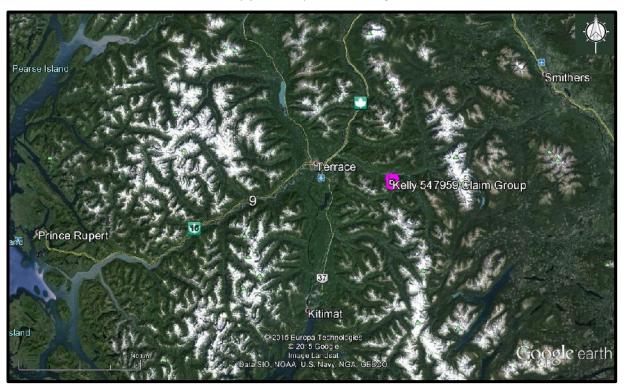
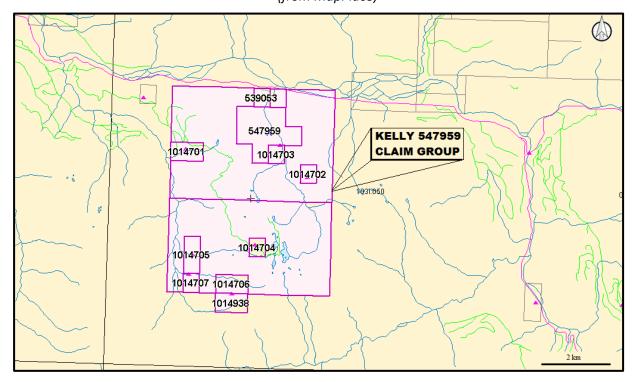


Figure 3. **Claim Map** (from MapPlace)



HISTORY: PROPERTY

The history on the MINFILE reported developed prospect on the Kelly 547959 Claim Group is reported as follows (from Minfile records).

KELLY CREEK (ZYMOETZ) Developed Prospect (Volcanic redbed Cu,

Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 092 Within Tenure 547959

The Zymoetz property was discovered and staked in 1962 before being optioned by Native Mines Limited in 1965. In 1966, an exploration program of prospecting, geochemical sampling, geological mapping and 900 metres of diamond drilling was performed on the property. Another 748 metres of diamond drilling was completed on the Upper showing in 1967.

GEOLOGY: REGIONAL

Campbell (1967) describes the regional geology as:

Terrace, B.C. is located in a broad intermontane basin formed by the crossing of the present Skeena Valley and what was probably a major preglacial river valley now partially occupied by the Kitimat River. West and south of Terrace the Coast Range Mountains rise to 6500 feet, and east of Terrace the Bulkley Ranges rise to 8000 feet. The elevation of the Terrace Basin is about 500 feet. The Zymoetz River flows westward from the Bulkley Ranges to join the Skeena River at the northeast corner of the basin. The Zymoetz Property is located in the Bulkley Mountains on the south side of the Zymoetz River 21 miles east of Terrace. The principal showings, comprised of copper mineralization in a sequence of volcanic rocks, are scattered over a distance of about one mile along the north flank of the mountain that forms the south wall of the Zymoetz valley just west of the Clore River.

The Terrace basin is located on the eastern edge of the Coast Range batholith of granodioritic intrusive rocks. The region west and south of Terrace is underlain predominantly by granodiorite intrusive rocks. The area north and east of Terrace is underlain by Mesozoic formations that have been extensively intruded by apophyses of granodiorite related to the batholith to the west.

The western fringe of the intruded rocks, within 16 miles east of Terrace, is comprised predominantly of Triassic sedimentary rocks including limestones, sandstones and cherts. East of these rocks the underlying formations are volcanic and sedimentary rocks of the Hazelton Group of Jurassic age. The western border of this group lies approximately two miles west and north of the Zymoetz Group property.

GEOLOGY: PROPERTY AREA

The geology of some MINFILE reported developed prospects and showings peripheral to the Kelly 547959 Claim Group is reported by Minfile as follows. The distance is relative to the Kelly 547959 Claim Group.

SNOW Developed Prospect (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 098

Seven kilometres northeast

The area is underlain by volcanic rocks of the Jurassic Hazelton Group which include 020 degree north trending, 35 to 50 degree east dipping purple lapilli tuff and vitrophyre. A brown feldspar porphyry sill intrudes the volcanics. Chalcocite, bornite and minor chalcopyrite occur as disseminations and veinlets along a bed of the pyroclastic rock. The mineralized block is about 60 metres long, 10 metres true width and 36 metres down dip length. A gouge-filled shear zone cuts the zone to the east, with a continuation of the zone east of the fault (drill intersections).

Geology: Property Area (cont'd)

DARDENELLES Developed Prospect (Polymetallic veins Ag-Pb-Zn+/-Au, Intrusion-related

Au pyrrhotite veins) MINFILE 103I 107

Four kilometres northwest

A 5.5 to 7.3 metre wide quartz-albite dyke trending 075 degrees and dipping 75 degrees north occurs in granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Quartz veins, 0.3 to 2 metres wide, occur intermittently along both contacts of the dyke for 700 metres and a vertical depth of 180 metres. Minerals observed in the quartz veins include pyrite, sphalerite, chalcopyrite, argentite, galena, arsenopyrite, bornite, covellite and gold.

CALONA Showing (Volcanic redbed Cu)

MINFILE 103I 158

One kilometre west

Agglomerate of the Jurassic Hazelton Group is cut by east striking diorite dykes. The agglomerate is very hard and contains fragments of andesite in a matrix of feldspar and amphibole.

T Showing (Subvolcanic Cu-Ag-Au (As-Sb), Noranda/Kuroko massive sulphide Cu-Pb-Zn)

MINFILE 103I 191

Five kilometres east

The area is underlain by andesites, basalts and rhyolites of the Jurassic Hazelton Group.

GEOLOGY: PROPERTY

Campbell (1967) describes the Zymoetz property geology as:

<u>The Zymoetz Property</u> is underlain by Hazelton Group volcanic rocks locally intruded by stocks of granodiorite which crop out on the lower elevations of the mountain sides. The Hazelton rocks are comprised of intercalated andesitic and basaltic flows and pyroclastics. The thicknesses of the volcanic beds, as well as their attitude, are not evident in the limited exposures on the Zymoetz Property but in the region the beds generally range up to 100 feet in thickness and strike north-north east and dip 35-60 degrees eastward. Regional faults or shear zones with minor displacements have been mapped in the area but as yet none have been noted on the Zymoetz Property.

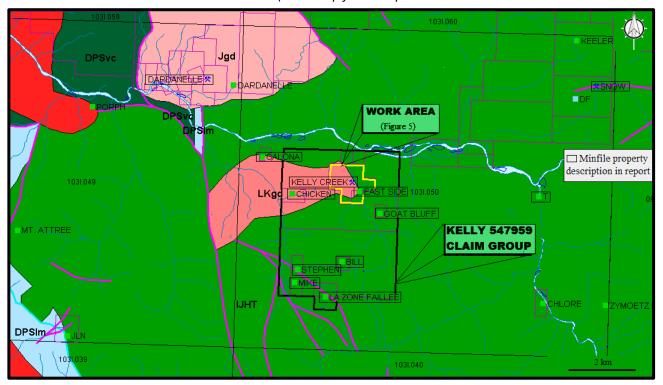
The Zymoetz claims are largely blanketed by forest covered glacial outwash and thin till deposits but bedrock crops out commonly as cliffs and subdued bluffs,, In addition a large number of shallow trenches and pits have been excavated in the area of the main showings by crews of Native Explorations Ltd.

The portion of the Zymoetz Property that has been geologically mapped is confined to the eastern side of the claim block from the Zymoetz River southeastward up the valley of Kelly Creek for a distance of about 15,000 feet, in a strip about 3000 feet in width spanning a vertical interval of about 4000 feet. The upper elevations of this strip are covered by the Native Claims and the lower elevations by the Zymoetz Claims. The copper occurrences that have been trenched and drilled are all located on the Zymoetz Claims.

All of the mapped area is principally underlain by a sequence of volcanic rocks that show few structural features in outcrop exposures and which are largely andesitic in composition, with minor basalts, and which range in texture from aphanitic to porphyritic to fragmental. The predominant rock types of this sequence are purple and maroon-hued rocks that include massive tuffs, agglomerates and aphanitic flows. These rocks are generally massive, hard, competent, aphanitic to medium grained and dense. Locally they contain feldspar phenocrysts, amygdules and fragments (agglomeratic).

Figure 4. Property Geology & Index Map

(Base map from MapPlace



GEOLOGY MAP LEGEND

Tertiary Lgd

unnamed

granodioritic intrusive rocks

Lower Jurassic

IJHT

Hazelton Group – Telkwa Formation Calc-alkaline volcanic rocks

Lower Jurassic

IJHE

Hazelton Group – Eagle Creek Formation volcaniclastic rocks

Upper Jurassic

uJBA

Bowser Lake Group
Dishman Formation
mudstone, siltstone, shale, fine
clastic sedimentary rocks

Devonian to Permean

DPSvc

Stikine Assemblage volcaniclastic rocks

Devonian to Permean

DPSIm

Stikine Assemblage

Geology: Property (cont'd)
Campbell (1967) (cont'd)

Intrusive into this volcanic sequence are two other rock types, both of which are exposed only on the Zymoetz Claims lower down the mountain side. The oldest of these intrusives is a sill-like body of feldspar porphyry which crops out on Zymoetz No. 2 M.C. as a west-trending band 1600 feet in length and 200-300 feet in width and which disappears under overburden at Kelly Creek to the east and is terminated to the west by intrusive granodiorite (Fig. 2). The feldspar porphyry is a massive, dense, dark green to pink-grey and white rock comprised of a green-grey andesitic matrix within which are holo-crystalline white plagioclase phenocrysts up to 2 inches in length which comprise up to 50% of the rock. The phenocrysts in this rock are commonly grouped in star clusters and rarely show any preferred flow orientation. A similar porphyry body, mapped by the writer on the north side of the Zymoetz River, several miles to the east, proved to be intrusive into the volcanic sequence as a crosscutting sill-like sheet. It is only sparsely mineralized by copper on both properties but it is definitely pre-copper mineralization in age.

<u>The youngest intrusive exposed</u> on the Zymoetz Claims is an irregular-shaped stock of <u>medium crystalline</u> <u>granodiorite</u>. This rock is composed principally of feldspar and hornblende and is a uniform grey and black to pink and black typical Coast Range-type of granodiorite.

The granodiorite crops out as an elongate stock, about 1000 feet in north-south width, that is open to the west and that fingers out to the east near Kelly Creek. It is evidently an outlier of a larger intrusive mass that underlies much of the river-level outcrops further west.

The intruded volcanic rocks are intensely granitized within tens of feet of the granodiorite and are variously feldspathized with pink potash feldspar for distances up to 100 feet from the contact. This feldspathization is first evidenced as patches and veinlets and then becomes so pervasive as to convert the recrystallized rock to a pseudosyenite. The granodiorite and the granitized rocks are very sparsely mineralized with chalcopyrite and rarely bornite; however, the feldspathized "metavolconics" are locally richly mineralized with bornite, chalcocite and, less commonly, chalcopyrite.

The geology on the MINFILE reported developed prospects and showings within the Kelly 547959 Claim Group is reported as follows (from Minfile records).

KELLY CREEK (ZYMOETZ) Developed Prospect (Volcanic redbed Cu,

Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 092 Within Tenure 547959

Lower–Middle Jurassic Hazelton Group volcanic rocks, consisting of basalts, andesites and rhyolite-dacites and their fragmental equivalents, occupy a north striking antiform. The west limb of the fold has been intruded by an east trending elliptical stock of quartz diorite and granodiorite, measuring 2400 by 1500 metres. Associated andesitic feldspar porphyry sills cut the volcanics in the axial region of the antiform. The intrusives are part of the Tertiary–Jurassic Coast Plutonic Complex.

The Upper showing contains disseminations, stringers and blebs of bornite and chalcopyrite within intensely fractured rhyolite tuffs and breccias. The east striking, moderately south dipping zone is limited on both sides by weakly mineralized andesitic feldspar porphyry and measures about 150 by 120 by 30 metres. A 15.2 metre drill intersection assayed 4.83 per cent copper, 163.5 grams per tonne silver and 2.7 grams per tonne gold (George Cross News Letter #245, 1979) and a 34.7 metre drill intersection assayed 1.22 per cent copper and 27.5 grams per tonne silver (George Cross News Letter #169, 1980).

The Lower showing, 400 metres to the northwest, consists of chalcopyrite, bornite and minor chalcocite occurring as fracture- fillings in granodiorite. The zone is about 150 metres long and 15 metres wide.

Kelly Creek (Zymoetz) (cont'd)

Chip sampling averaged 2 per cent copper and 17.1 grams per tonne silver over 4 metres (George Cross News Letter #225, 1981).

The East Side showing is 300 metres southeast of the Upper showing and consists of a similar mineralization. In 1966, a six metre sample from the showing assayed 0.97 per cent copper (Property File Cyprus Anvil Native Explorations Ltd., 1967).

The Goats Bluff showing located 1.14 kilometres to the southeast of the East Side showing. In 1966, five samples representing a zone of 2.1 metres wide by 24 metres long assayed 1.22 per cent copper (Property File Cyprus Anvil Native Explorations Ltd., 1967).

The Native showings, 300 metres to the southeast of the Goats Bluff showing, were discovered by trenching in 1966. Samples from these showings assayed 0.47 to 0.52 per cent copper (Property File Cyprus Anvil Native Explorations Ltd., 1967).

EAST SIDE Showing (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 156

Within Tenure 1014703

A small granodiorite stock intrudes red silicified andesites, grey-green andesites and red tuff of the Jurassic Hazelton Group. These rocks are intruded by rhyolitic porphyry dykes. The volcanics strike north-south and dip 70 degrees east.

CHICKEN Showing (Porphyry Cu +/- Mo +/- Au, Volcanic redbed Cu)

MINFILE 103I 159

Within Tenure 1014701

A granodiorite stock of the Cretaceous to Tertiary Coast Plutonic Complex is cut by andesite, rhyolite, and lamprophyre dykes and exhibits varying degrees of brecciation and chlorite-sericite and potash feldspar alteration.

STEPHEN Showing (Volcanic redbed Cu)

MINFILE 1031 160

Within Tenure 1014705

The area is underlain by agglomerates and andesitic tuffs of the Jurassic Hazelton Group.

MIKE Showing (Volcanic redbed Cu)

MINFILE 103I 161

Within Tenure 1014707

Grey-green andesites and agglomerates of the Jurassic Hazelton Group are intruded by a granite plug to the south. The agglomerates are interbedded with andesitic tuffs which dip 40 to 60 degrees south-southwest. Several faults cut the rocks.

LA SALLE FAILLEE Showing (Volcanic redbed Cu)

MINFILE 1031 162

Within Tenure 1014938

The area is underlain by volcanic rocks of the Jurassic Hazelton Group. Red andesites are separated to the east from grey-green andesites by a northeast striking, 75 degrees west dipping fault.

BILL Showing (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 214
Within Tenure 1014704

The area is underlain by felsic to basic tuffs, breccias, flows and fragmental volcanic rocks of the Jurassic age Hazelton Group. The strata trends generally north-south and dips moderately to the east. Several fault related, felsic to basic dykes cut the volcanics.

MINERALIZATION: PROPERTY AREA

The mineralization of some MINFILE reported developed prospects and showings peripheral to the Kelly 547959 Claim Group is reported from the Minfile records as follows. The distance is relative to the Kelly 547959 Claim Group.

SNOW Developed Prospect (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 098

Seven kilometres northeast

A 26 metre surface chip sample assayed 2.44 per cent copper and 0.4 grams per tonne silver (Minister of Mines Annual Report 1965). The mineralized block is estimated to contain 40,820 tonnes of about 2 per cent copper (Property File: Campbell, 1964). Unclassified reserves are 28,120 tonnes grading 1.7 per cent copper (Statement of Material Facts June 19, 1973 - Spectroair Explorations Ltd., T. Sadler-Brown, October 1972).

A parallel zone, similar in character and 60 metres to the west, measures 30 by 10 metres. Surface samples average 3.26 per cent copper (Property File: Campbell, 1964).

DARDENELLES Developed Prospect (Polymetallic veins Ag-Pb-Zn+/-Au, Intrusion-related

Au pyrrhotite veins)

MINFILE 103I 107

Four kilometres northwest

A 1.2 metre sample from the bottom of a shaft assayed 9.3 grams per tonne gold, 61.7 grams per tonne silver, and 1.8 per cent copper (Minister of Mines Annual Report 1918). A 0.4 metre adit sample assayed 13.0 grams per tonne gold and 361.4 grams per tonne silver (Geological Survey of Canada Memoir 205). A 25.4 kilogram sample of ore sent for testing assayed 27.9 grams per tonne gold, 624.7 grams per tonne silver, 0.64 per cent copper, 8.16 per cent lead and 3.15 per cent zinc (Geological Survey of Canada Memoir 329).

In August 1983, a report by S. Reamsbottom suggested that the property contains reserves of approximately 181,440 tonnes grading about 7.5 grams per tonne gold and 17.1 grams per tonne silver (George Cross Newsletter Nov.13, 1984).

CALONA Showing (Volcanic redbed Cu)

MINFILE 103I 158

One kilometre west

Patches of chalcopyrite and bornite occur over 4.3 metres within the agglomerate and a sample over this length assayed 0.05 per cent copper and 3.4 grams per tonne silver (Assessment Report 2394).

Mineralization: Property Area (cont'd)

T Showing (Subvolcanic Cu-Ag-Au (As-Sb), Noranda/Kuroko massive sulphide Cu-Pb-Zn)

MINFILE 103I 191

Five kilometres east

Chalcopyrite, malachite, azurite, bornite and barite occur in a northwest trending, steeply dipping shear zone within the volcanics. The shears range up to 1.0 metre in width.

MINERALIZATION: PROPERTY

Campbell (1976) describes the mineralization on the Zymoetz property as:

The mineralization of economic interest on the Zymoetz Property is copper I It occurs as fine grained bornite, chalcocite and chalcopyrite disseminated along fracture planes and throughout the groundmass of the host rock. The most favourable host rocks in order of importance are: pyroclastic volcanics, feldspathized volcanics and andesitic flow rocks. All other rocks are hosts to the copper mineralization but in relatively meagre and insignificant amounts. The copper minerals are so finely dispersed that they are inconspicuous and are generally detected by malachite staining on surface exposures. Assays of core indicate about 3/4 oz/ton of silver per percent of copper in the ore material. The chalcopyrite appears to be confined to the granodiorite and the granitized rocks.

The distribution of the copper mineralization as is known thus far is concentrated in the vicinity of the major topographic lineament previously described as trending up Kelly Creek, Fig. 2. Significant copper mineralization has been exposed at six locations along a 11,000 ft. strike length and 4000 ft, vertical interval of this lineament. Two of these showings are on the Zymoetz Claims and four are at the upper elevations of the Native Claims. All of the drilling and trenching done to date have been concentrated on the Lower and Upper Showings on the Zymoetz No. 2 M.C., representing a very small portion of the staked length of the lineament but chosen because it is the most readily accessible portion.

The decision was made in 1966 to explore the Lower and Upper Showings with a reconnaissance program of diamond drill holes designed primarily to determine the grade, the extent and the structural controls, if any, of the copper mineralization in that local area of the regional lineament. This program was completed in 1967 and the results have revealed that the mineralization occurs both as fracture fillings and as disseminations within the volcanic rocks. There appears to be some spatial relation of the copper mineralization to the vicinity of the porphyry intrusive and also the granodiorite intrusive, but these relationships are not well established, merely inferred. The mineralization does not appear to be controlled by any particular fault or fracture sets/ at least none are exposed in the trenches or the drill cores; it does seem to be concentrated on the regional lineament.

The mineralization of the MINFILE reported developed prospects and showings on the Kelly 547959 Claim Group is reported from the Minfile records as follows. The distance is relative to the Kelly 547959 Claim Group.

KELLY CREEK (ZYMOETZ) Developed Prospect (Volcanic redbed Cu,

Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 092

Within Tenure 547959

Drilling in 1980 established reserves of about 362,875 tonnes grading 3.18 per cent copper and 72.0 grams per tonne silver (Northern Miner January 22, 1981), or 2,267,960 tonnes grading 1.03 per cent copper and 18.5 grams per tonne silver (Northern Miner, November 27, 1980).

Kelly Creek (Zymoetz) (cont'd)

In 1985, unclassified reserves for the Kelly Creek property are 545,167 tonnes grading 2.23 per cent copper and 45.9 grams per tonne silver at a cutoff grade of 1.5 per cent copper (Vancouver Stock Exchange Filing Statement, Imperial Metals Corp., July 1985).

EAST SIDE Showing (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 156

Within Tenure 1014703

The East Side showing, which lies 300 metres east of the Upper showing (1031 092), is mineralized with chalcopyrite and bornite within the redsilicified andesites. A 4.7 metre channel sample assayed 0.70 per cent copper, 10.3 grams per tonne silver and trace gold (Assessment Report 2394).

GOAT BLUFF Showing (Volcanic redbed Cu)

MINFILE 103I 157

Within Tenure 1014932

Chalcopyrite and bornite are disseminated in red andesites and grey-green andesites of the Jurassic Hazelton Group.

CHICKEN Showing (Porphyry Cu +/- Mo +/- Au, Volcanic redbed Cu)

MINFILE 103I 159

Within Tenure 1014701

Mineralization, observed over 30 metres, consists of chalcopyrite, pyrite, and bornite as disseminations, fracture fillings, and patches within the granodiorite. Minor molybdenite occurs on chloritic slip planes. A 2.1 metre sample assayed 3.38 per cent copper, 30.9 grams per tonne silver, and 0.34 grams per tonne gold (Assessment Report 2394).

STEPHEN Showing (Volcanic redbed Cu)

MINFILE 103I 160

Within Tenure 1014705

Disseminated chalcopyrite occurs in a 1 metre wide bed of andesitic tuff. The mineralization has been traced for 1 metre in length. Major faults cut the rocks in the vicinity.

MIKE Showing (Volcanic redbed Cu)

MINFILE 103I 161

Within Tenure 1014707

Patches of chalcopyrite occur in epidotized agglomerates over widths less than 30 centimetres. A 10 centimetre sample assayed 0.92 per cent copper, 10.3 grams per tonne silver and 0.7 grams per tonne gold (Assessment Report 2394).

LA SALLE FAILLEE Showing (Volcanic redbed Cu)

MINFILE 103I 162

Within Tenure 1014938

Disseminated chalcopyrite and bornite occur in the broken and fractured zone. A 2.0 metre channel sample assayed 0.82 per cent copper, 24 grams per tonne silver and 0.34 grams per tonne gold (Assessment Report 2394).

BILL Showing (Volcanic redbed Cu, Subvolcanic Cu-Ag-Au (As-Sb)

MINFILE 103I 214
Within Tenure 1014704

Mineralization, consisting of pyrite, chalcopyrite, bornite, native copper, and malachite, occurs as disseminations and in quartz- carbonate veins, related to major north-south, steeply east dipping structural trends. The quartz-carbonate veins are accompanied by intense epidote and carbonate alteration of the wallrock. Isolated showings occur over an area of about 1 kilometre. A 0.3 metre chip sample of a pod of native copper in a quartz-carbonate vein assayed 1.24 per cent copper and 1.7 grams per tonne silver (Assessment Report 12728).

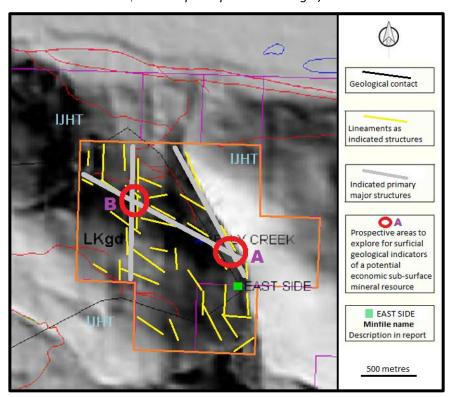
A fault related breccia zone, 650 metres to the east, assayed 0.04 per cent copper and 0.5 grams per tonne silver over 5 metres and a 2.0 metre sample, 440 metres to the southeast assayed 0.28 per cent copper and 2.6 grams per tonne silver (Assessment Report 12728). A sample 700 metres to the northwest assayed 1.06 per cent copper (Assessment Report 10541) and trenching on the south side of a creek, 200 metres to the south, revealed zones of mineralization, earlier known as the Mountain Goat Showing. A 1.5 metre sample assayed 0.35 per cent copper, 17.1 grams per tonne silver and 2.4 grams per tonne gold (Assessment Report 2394).

STRUCTURAL ANALYSIS

The Structural Analysis of Tenures 547959and 1014703 was accomplished marking the observed lineaments on a DEM Image hillshade map downloaded from MapPlace. A total of 37 lineaments were indicated. A Georient 32v9 software program was used to create a Rose Diagram reflecting the grouping of the lineaments into an individual 10° class sector angle interval.

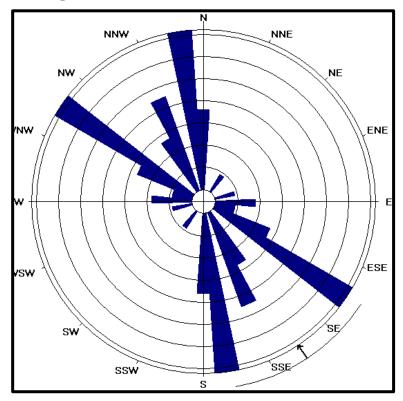
The centre of the work is at 6,034,302N 555,535E (NAD 83).

Figure 5 Indicated Structures on Tenures 547959 & 1014703 (Base map: MapPlace & Google)



Structural Analysis (cont'd)

Figure 6. Rose Diagram from Lineaments of Tenures 547959 & 1014703



STATISTICS (for Figure 5)

Axial (non-polar) data

No. of Data = 37

Sector angle = 8°

Scale: tick interval = 3% [1.1 data]

Maximum = 21.6% [8 data]

Mean Resultant dir'n = 147-327

[Approx. 95% Confidence interval = ±23.5°]

(valid only for unimodal data)

Mean Resultant dir'n = 146.5 - 326.5

Circ.Median = 147.0 - 327.0

Circ.Mean Dev.about median = 26.3°

Circ. Variance = 0.14

Circular Std.Dev. = 31.84°

Circ. Dispersion = 1.54

Circ.Std Error = 0.2038

Circ.Skewness = 1.76

Circ.Kurtosis = -28.64

kappa = 1.28

(von Mises concentration param. estimate)

Resultant length = 19.95

Mean Resultant length = 0.5392

'Mean' Moments: Cbar = 0.2115; Sbar = -0.496

'Full' trig. sums: SumCos = 7.8247; Sbar = -

18.3509

Mean resultant of doubled angles = 0.1065

Mean direction of doubled angles = 171

(Usage references: Mardia & Jupp,

'Directional Statistics', 1999, Wiley;

Fisher, 'Statistical Analysis of Circular Data',

1993, Cambridge University Press)

Note: The 95% confidence calculation uses

Fisher's (1993) 'large-sample method'

Structural Analysis (cont'd)

Figure 7. Cross-structure & Minfile locations on Google Earth

(Base map from MapPlace & Google Earth)

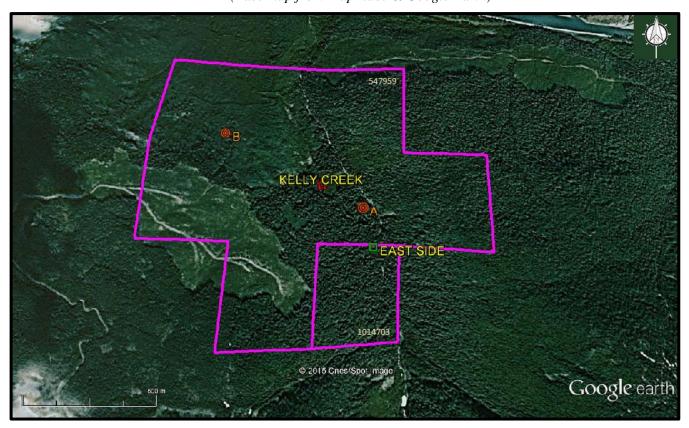


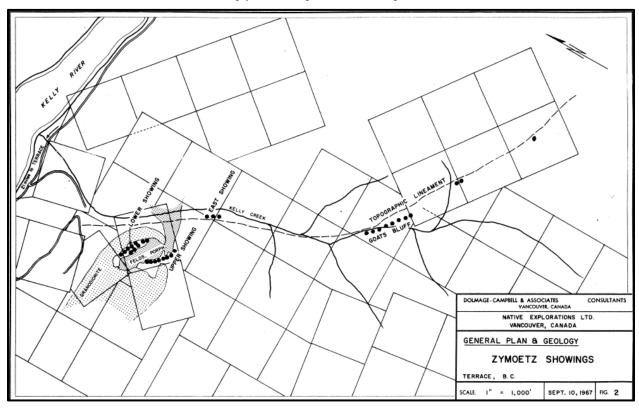
Table 2. Approximate UTM locations of cross-structures and Minfile (UTM-NAD 83 Zone 9)

Area	UTM East	UTM North	Elevation (metres)
Α	556,029	6,034,100	505
В	555,312	6,034,438	574
Kelly Creek	555,813	6,034,210	550
East Side	556,087	6,033,904	550

December 19, 2014

Figure 8. 1967 Plan Map showing the Upper and Lower Showings (Kelly Creek Minfile), East Showing (East Side Minfile) and the Goats Bluff (Goat Bluff Minfile) and a topographical lineament on the Kelly Creek Property

Map from Campbell (1967) report)



INTERPRETATION and CONCLUSIONS

The structural analysis of Tenures 547959 and 1014703 of the 13 Tenure Kelly Claim Group (Property) resulted in the delineation of two cross-structural locations, A & B. These locations should be the primary areas to explore for surficial geological indicators of a potential sub-surface economic mineral resource related to an intrusive.

This assumption is based primarily on the structural locations being depth intensive to source potential mineralized hydrothermal fluids, on the creation of a structurally prepared location of breccia and fracture zones for the deposition of the hydrothermal fluids, and on the provision of an unrestricted access to surface where the "fingerprints" of the hydrothermal fluids would be etched.

On the Kelly Creek (Zymoetz) main zone of mineralization there is a strong indication of a mineralized porphyry deposit in the area that could be hosted by an intrusive and adjacent volcanics. The indications are in the Upper showing which contains significant copper-silver-gold mineralization in intensely fractured rhyolite tuffs and breccias, and the Lower showing, 400 metres distant, where a four metre chip sample from a copper (chalcopyrite) mineralized zone of fracture fillings in granodiorite averaged 2% copper and 17.2 grams per tonne silver.

Interpretation and Conclusions (cont'd)

Campbell (1967) reports that,

"There appears to be some spatial relation of the copper mineralization to the vicinity of the porphyry intrusive and also the granodiorite intrusive, but these relationships are not well established, merely inferred. The mineralization does not appear to be controlled by any particular fault or fracture sets/ at least none are exposed in the trenches or the drill cores; it does seem to be concentrated on the regional lineament."

These two Kelly Creek mineral zones appear to be located on a primary northwest trending major lineament or structure as delineated by the structure analysis of the two claims which cover two (Kelly Creek and East Side) of the eight Minfiles on the Kelly 547959 Claim Group. The Kelly Creek Minfile location, although possibly generalized from the centre of work at a specific time and possibly not the specific location of the Upper showing where a drill reserve of about 362,875 tonnes grading 3.18 per cent copper and 72.0 grams per tonne silver or 2,267,960 tonnes grading 1.03 per cent copper and 18.5 grams per tonne silver is reported.

The Upper showing is 300 metres west of the Kelly Creek structure (Figure 8) and 400 metres northwest of cross-structure A (Figure 8) on the AB structure. The Upper showing could be structurally controlled and localized by minor Kelly Creek en-echelon structures intersecting with the major AB northwest trending structure. Thus, the Upper showing may possibly be a minor accessory to a potentially larger zone of mineralization associated with cross-structure A.

Cross-structural location B, at the intersection of the major AB structure and an indicated major northerly trending structure and situated within a granodioritic intrusive, could indicate a Brenda (MINFILE 092HNE047) type of a porphyry deposit where the copper-molybdenum deposit was hosted by an isolated earlier stock of the main intrusive. Primary chalcopyrite and molybdenite mineralization was confined almost entirely to veins hosted by the fractures. The grade of the orebody was a function of fracture (vein) density and of the thickness and mineralogy of the filling material.

Thus, the two structurally analyzed claims show some very positive geological features to the presence of an economic mineral resource. The results of the structural analysis provided two cross-structural areas for primary exploration where the analysis of structural controls and the interpretation of surficial geological indicators could lead to the discovery of a concealed mineral resource.

Respectfully submitted Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

SELECTED REFERENCES

Beck, R. – 2013 Technical Assessment Report on Prospecting and Sampling on the Kelly Creek Property for Richard Billingsley. November 2013. AR 34,768.

Campbell, D.D. – Summary Report for Native Mines on the Zymoetz Property. Oct. 1, 1967.

Delancey, P.R., Gore, D. – Geological and Geochemical Report on the Kelly Creek Property for Imperial Metals Corporation. December 1990. AR 20,743

MapPlace – Downloads

Marshak, S., Mitra, G. – Basic Methods of Structural Geology. pp 258-259, 264*.Prentice-Hall Inc. 1988.

MtOnline - MINFILE downloads.

- 103I 191 T
- 103I 092 KELLY CREEK (ZYMOETZ)
- 103I 098 SNOW
- 103I 107 DARDENELLES
- 103I 156 EAST EDEN
- 103I 158 CALONA
- 103I 159 CHICKEN
- 103I 160 STEPHEN
- 103I 161 MIKE
- 103I 162 LA SALLE FAILEE
- 103I 214 BILL

STATEMENT OF COSTS

The structural analysis was done from August 25, 2014 to September 25, 2014 to the value as follows:

	\$ 6,700.00
Report	3,000,00
Maps	700.00
Laurence Sookochoff, PEng. 3 days @ \$ 1,000.00/day	\$ 3,000.00
Structural Analysis	

CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with an address at Suite 120 125A-1030 Denman Street, Vancouver, BC V6G 2M6.

- I, Laurence Sookochoff, further certify that:
- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing on profession for the past forty-eight years.
- 3) I am registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report, from drill supervisory work on the Zymoetz property in 1967, and information gained from the structural analysis of Tenures 547959 and 1014703.
- 5) I have no interest in the Property as described herein.



Laurence Sookochoff, P. Eng.