

Ministry of Energy, Mines & Petroleum Resources  
Mining & Minerals Division  
BC Geological Survey

Assessment Report  
Title Page and Summary

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

TOTAL COST: \$ 8,756.66

AUTHOR(S): Laurence Sookochoff, PEng

SIGNATURE(S): Digitally signed by Laurence Sookochoff  
Date: 2016.12.13.07:52:03 -08'00'

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): \_\_\_\_\_ YEAR OF WORK: 2016

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5625688 November 11, 2016

PROPERTY NAME: Ketchan Lake

CLAIM NAME(S) (on which the work was done): 1035451

COMMODITIES SOUGHT: Copper Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: \_\_\_\_\_

MINING DIVISION: Nicola Similkameen

NTS/BCGS: 092H.078 092H.088

LATITUDE: 49 ° 48 ' 53 " LONGITUDE: 120 ° 34 ' 22 " (at centre of work)

OWNER(S):

1) Christopher Delorme Guy Delorme 2) Stephen Scott Brian Scott

MAILING ADDRESS:

340 Logan Lane	818-470 Granville Street	Box 75	Box 77
Merritt, BC V1K 1P7	Vancouver, BC V6C 1V5	Clarksburg, ON NOH 1JO	Tagish YT YOB 1TO

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

1) Christopher Delorme Guy Delorme 2) Stephen Scott Brian Scott

MAILING ADDRESS:

340 Logan Lane	818-470 Granville Street	Box 75	Box 77
Merritt, BC V1K 1P7	Vancouver, BC V6C 1V5	Clarksburg, ON NOH 1JO	Tagish YT YOB 1TO

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

Triassic, Triassic-Jurassic, Nicola Group, Central Volcanic Facies, Diorites, Andesites, Summers Creek Fault, Cross-Structures

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 00977, 00978, 03107, 05331, 05601, 05824, 07543, 08309, 21746, 22555, 23509, 27086, 27534, 27564, 28484, 29453, 32884, 34674, 34708, 34718, 35065

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation	187 hectares	1035451	\$ 6,000.00
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic	2.0	1035451	2,756.66
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
<b>TOTAL COST:</b>			<b>\$ 8,756.66</b>

**BRIAN SCOTT, STEVEN SCOTT, CHRISTOPHER DELORME, GUY DELORME**

(Owners & Operators)

**GEOLOGICAL & GEOPHYSICAL**

**ASSESSMENT REPORT**

(Event 5625688)

**BC Geological Survey  
Assessment Report  
36348**

on

**Tenure 1035451**

of the three claim

**AG 1035451 Claim Group**

*(Work done from November 6, 2016 to November 11, 2016)*

Nicola/Similkameen Mining Divisions

BCGS 092H.078/.088

*Centre of Work*

5,520,864N 674,609E

(UTM 10 NAD83)

*Author & Consultant*

**Laurence Sookochoff, PEng**

**Sookochoff Consultants Inc.**

*Report Submitted*

**December 13, 2016**

## TABLE OF CONTENTS

	page
Summary -----	4.
Introduction -----	5.
Property Description and Location -----	5.
Accessibility, Climate, Local Resources, Infrastructure & Physiography -----	7.
Water and Power -----	7.
History: Property Area -----	7.
092HNE056 – PRIMER (NORTH ZONE) -----	7.
092HNE115 – KETCHAN LAKE NORTH -----	8.
092HNE118 – NORTH MDA -----	9.
092HNE132 – CONGLIN CREEK -----	9.
092HNE151 – THALIA -----	9.
092HNE152 – LOG 1 -----	10.
092HNE253 – ZIG 1 -----	10.
092HNE255 – ZIG -----	10.
Geology: Regional -----	10.
Geology: Property Area -----	11.
092HNE056 – PRIMER (NORTH ZONE) -----	11.
092HNE115 – KETCHAN LAKE NORTH -----	13.
092HNE118 – NORTH MDA -----	13.
092HNE132 – CONGLIN CREEK -----	13.
092HNE151 – THALIA -----	13.
092HNE152 – LOG 1 -----	14.
092HNE253 – ZIG 1 -----	14.
092HNE255 – ZIG -----	14.
Geology: Property -----	14.
Mineralization: Property Area -----	14.
092HNE056 – PRIMER (NORTH ZONE) -----	14.
092HNE115 – KETCHAN LAKE NORTH -----	15.
092HNE118 – NORTH MDA -----	15.
092HNE132 – CONGLIN CREEK -----	15.
092HNE151 – THALIA -----	15.
092HNE152 – LOG 1 -----	16.
092HNE253 – ZIG 1 -----	16.
092HNE255 – ZIG -----	16.
Structural Analysis -----	16.
Magnetometer Survey -----	19.
Interpretation and Conclusions -----	22.
Selected References -----	24.
Statement of Costs -----	25.
Certificate -----	26.

**Table of Contents (cont'd)****ILLUSTRATIONS**

Figure 1. Location Map -----	5.
Figure 2. Claim Location -----	6.
Figure 3. Claim Map -----	6.
Figure 4 . Geology, Claim, & Minfile -----	12.
Figure 5. Indicated Lineaments on Tenure 1047102 -----	17.
Figure 6. Rose Diagram from Lineaments of Tenure 1047102 ----	18.
Figure 7. Cross Structures on Google Earth -----	19.
Figure 8. Magnetometer Grid Index -----	20.
Figure 9. Magnetometer Survey Data -----	20.
Figure 10. Magnetometer Survey Data Contoured -----	21
Figure 11. Magnetometer Survey Data Colour Contoured -----	21.

**TABLES**

Table I. Tenures of the AG 1035451 Claim Group -----	5.
Table II. Approximate Location of Cross-Structures -----	19.

**APPENDICES**

Appendix I Magnetometer Survey Data -----	27.
---	-----

---

## **SUMMARY**

The three claim AG 1035451 Claim Group covers an area of 1,230 hectares located 192 kilometres east-northeast of Vancouver, and 100 metres west of the Ketchan Lake North (*MINFILE 092HNE115*) property in south-central British Columbia.

The Ketchan Lake North property is predominantly underlain by Nicola volcanics intruded by a west-trending mass of fine to medium-grained diorite (microdiorite) with copper mineralization occurring in a northwest-trending zone 1400 metres long and up to 600 metres wide, roughly paralleling the northeastern margin of the stock.

Mineralization is hosted in the diorite and consists of pyrite and chalcopyrite, usually as disseminations, but also as fracture fillings. Rare bornite and chalcocite are also reported. Seams, patches and blebs of orthoclase, epidote and/or magnetite are sometimes associated with this mineralization. Some malachite is also present in surface exposures. Chlorite, sericite and traces of secondary biotite occur with the sulphides at depth.

Thomson (2006) reports that, "Brecciated areas generally contain stronger overall alteration, mainly chlorite with increased concentrations of magnetite. The strongest areas of brecciated magnetite-rich rock, observed in most of the 2005 drill holes, generally contained the highest concentrations of pyrite/chalcopyrite."

Aulis, (1991) reports that, "Present drillhole spacing within the IP anomaly suggests the possibility) of a porphyry copper-gold deposit of significant size (> 80 million tons). This possibility may be in the making in that in 2015 Kaizen Discovery reported a 265.5 metre thick zone of copper-gold mineralization which included a 78 metre interval grading 0.50% copper and 0.15 grams per tonne gold from the drill results on the Ketchan Lake property.

The Ketchan Lake porphyry system is hosted in a diorite porphyry, and a hydrothermal breccia. The highest copper grades occur in the deepest part of the intersection, which from 248 to 262 metres returned 1.03% copper and 0.13 g/t gold. The best grades of copper and gold are generally associated with the margins of magnetic highs with associated moderate chargeability (Kaizen news release).

As a diorite stock is indicated some 200 metres west of Tenure 1035451 and the major Summers Creek Fault is some 600 metres east, Tenure 1035451 is likely to cover a variety of structures that would be amenable as mineral controls such breccia zones related to the margins of an intrusive or breccia pipes correlative with cross-structural locations. The diorite stock is on the northwestward projection of the Ketchan diorite porphyry stock which is within Tenure 1040310, one of the three claims of the AG 1035451 Claim Group, and both stocks appear to be controlled to the east by a major fault zone paralleling the Summers Creek Fault.

The anomalous mag HI located within a general northwesterly trend of the mag contours, may indicate one of the structures of cross-structure "A" with the localized mag HI indicating a breccia pipe hosting magnetite rich rock with associated pyrite/chalcopyrite. Likewise, the general location of cross-structure "A" on the margin of the mag HI, may represent a surficial indication of the best copper and gold grades as at Ketchan Lake.

## INTRODUCTION

From November 6, 2016 to November 11, 2016 a structural analysis and a localized magnetic survey were completed on Tenure 1035451 of the three claim AG 1035451 claim AG Claim Group ("Property"). The purpose of the program was to delineate potential mineral controlling structures and to determine correlative magnetic responses which may be integral in geological controls to potential mineral resources that may occur within Tenure 1035451 or other claims of the Property.

Information for this report was obtained from sources as cited under Selected References.

Figure 1. Location Map



## PROPERTY DESCRIPTION AND LOCATION

### Description

The Property is comprised of three contiguous claims covering an area of 1,230.4232 hectares. Particulars are as follows:

Table 1: Tenures of AG 1035451 Claim Group  
(from MtOnline)

Tenure Number	Type	Claim Name	Good Until	Area (ha)
<a href="#">1035451</a>	Mineral		20180407	187.6344
<a href="#">1035452</a>	Mineral		20180407	271.0714
<a href="#">1040310</a>	Mineral	BROWNIE	20180407	771.7178

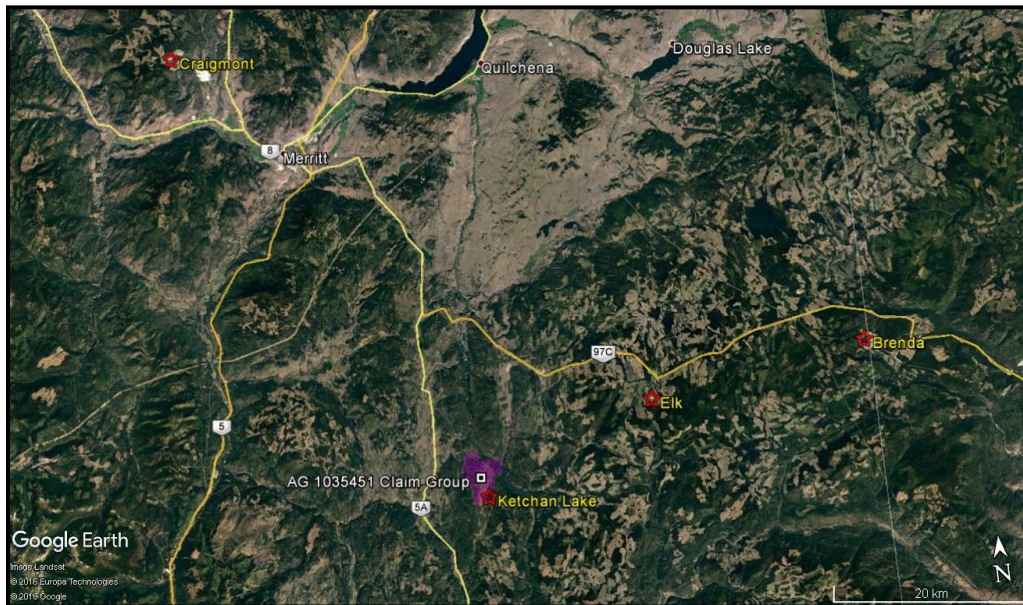
\*Upon the approval of the assessment work filing, Event Number 5625688.

**Property Description and Location (cont'd)**

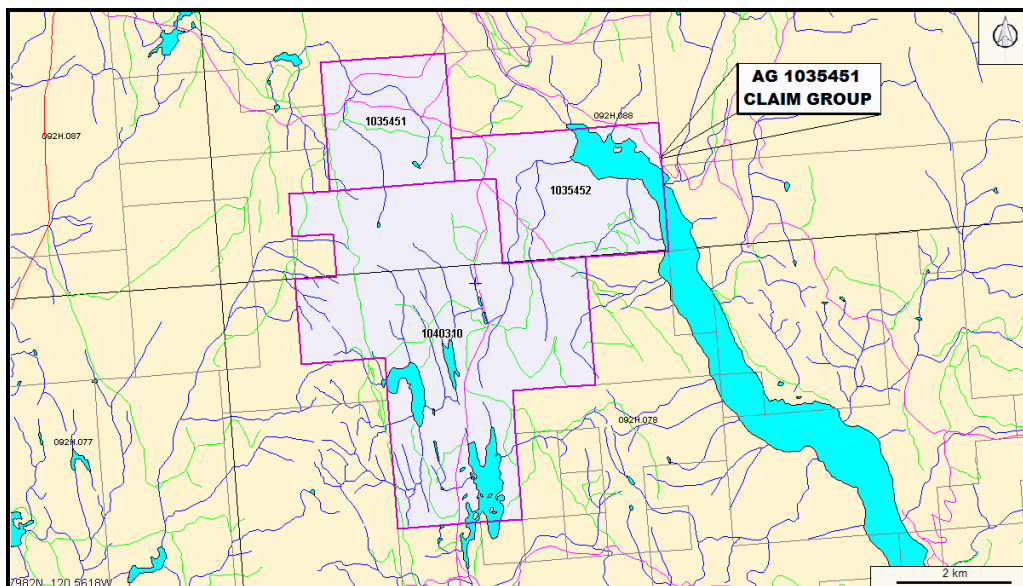
## Location

The Property is located within BCGS Map 092H.078/.088 of the Nicola/Similkameen Mining Divisions, 192 kilometres east-northeast of Vancouver, 38 kilometres south-southeast of Merritt, and 100 metres east of the Ketchikan Lake North property where, in 2015 Kaizen Discovery reported a diamond drill hole intersection of a 265.5 metre thick zone of copper-gold mineralization which included a 78 metre interval grading 0.50% copper and 0.15 grams per tonne gold.

**Figure 2. Claim Location**  
(Base map from MapPlace & Google)



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





---

## ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

### Access

Access to the Property is southward from Merritt via Highway 5A97C for 26 kilometres to the Aspen Grove junction thence southward via Highway 5A for eight kilometres to a junction with a secondary road. This road is taken east/south for six kilometres to a junction with a secondary road. This road is taken east/southeast for four kilometres to a power-line and the western boundary of Tenure 1035451 of the AG 1035451 Claim Group.

### Climate

The region is situated within the dry belt of British Columbia with rainfall between 25 and 30 cm per year. Temperatures during the summer months could reach a high of 35° and average 25°C with the winter temperatures reaching a low of -10° and averaging 8°. On the Property snow cover on the ground could be from December to April and would not hamper a year-round exploration program.

### Local Resources and Infrastructure

Merritt, and/or Kamloops, historic mining centres could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kamloops is serviced daily by commercial airline and is a hub for road and rail transportation. Vancouver, a port city on the southwest corner of, and the largest city in, the Province of British Columbia is four hours distant by road and less than one hour by air from Kamloops or three hours distant by road from Merritt.

### Physiography

Tenure 1035451 covers an area of gently rolling hills with approximately 15% clear-cut or selectively logged areas. Relief is of 218 metres from an elevation of 1,094 metres in the northeast corner to 1,312 metres along the southern boundary near the southwest corner and the power-line.

### WATER and POWER

Sufficient water for all phases of the exploration program should be available from the many lakes and creeks, which are located within the confines of the property. Water may be scarce during the summer months and any water required for exploratory purposes may have to be obtained from lakes on the Property and transported to the worksite.

A 150 KV power-line trends southerly through the westernmost portion of the Property.

### **HISTORY: PROPERTY AREA**

The history on some of the more significant mineral *MINFILE* reported occurrences, prospects, and past producers peripheral to the Property (Figure 4) are reported as follows:

**PRIMER (NORTH ZONE)** developed prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE056

Six kilometres east

*This occurrence was initially staked and trenched by local prospectors between 1937 and 1941. Primer Group Minerals Ltd. optioned the property to McIntyre Porcupine Mines Ltd in 1962, after acquiring the property in 1961. The company completed various geological, soil geochemical and geophysical surveys before giving up the option.*

**History: Property Area (cont'd)****Primer (North Zone) developed prospect (cont'd)**

*Primer Group Minerals continued to explore the deposit, drilling 15 diamond-drill holes totalling 1402 metres and seven percussion holes totalling 390 metres between 1965 and 1968. Additional geological, soil geochemical and magnetometer surveys were completed by the company in 1969. Giant Piper Exploration Inc. (formerly Piper Petroleum Ltd.) and Consolidated Silver Butte Mines Ltd. conducted minor surface exploration in 1977, 1978 and 1987.*

**KETCHAN LAKE NORTH** prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE115

100 metres east

*This prospect was first staked by Plateau Metals Ltd. in 1962, after copper mineralization was uncovered during a logging operation. The company completed a magnetometer survey and drilled three holes, totaling 145 metres, in 1962.*

*An additional seven holes, totaling 512 metres, were drilled in 1966 after the property was optioned to Adera Mining Ltd. Various geophysical and geological surveys and 768 metres of trenching were also completed in 1966. A channel sample of hard, well-fractured, silicified diorite, containing evenly disseminated fine crystals of chalcopyrite, yielded 1.36 per cent copper over 3.05 metres (National Mineral Inventory).*

*A section of gossan near the north end of the zone analysed 0.17 per cent copper and 8.23 grams per tonne silver over 29 metres (Assessment Report 977). Hole P3 was drilled in the vicinity and yielded 0.22 per cent copper over 39.6 metres (Assessment Report 977).*

*The deposit was restaked by Bethlehem Copper Corporation in 1973. The company drilled three percussion holes totaling 322 metres, two diamond drillholes totaling 227 metres and one rotary hole, 218 metres deep, in 1974 and 1975. Rotary drilling near the centre of the zone intersected disseminated chalcopyrite to a depth of 218 metres (Assessment Report 5824).*

*Cominco Ltd. completed 1067.3 metres of percussion drilling in 15 holes in 1991. A second hole drilled 695 metres south-southeast of hole P3 assayed 0.379 per cent copper and 0.076 gram per tonne gold over 86.6 metres (Assessment Report 21746).*

*In 1992, Cominco Ltd. conducted an eight-hole percussion drill program totaling 640 metres. Highlights include drillhole M92-4, which returned 81.4 metres grading 0.2595 per cent copper and 0.124 grams per tonne gold (Assessment Report 22555).*

*In 2004, William Richard Bergey completed reconnaissance geological mapping on the Aspen Grove property.*

*In 2005, Copper Belt Resources Ltd. conducted geological mapping and a 10-hole diamond drill program totaling 1210.2 metres. Drillhole K05-07 intersected a 35.8 metre section that assayed 0.54 per cent copper and 0.19 grams per tonne gold (Assessment Report 28484).*

*In 2006 and 2007, Midland Resources Corp. completed 1416 metres of diamond drilling in seven holes. Highlights include drillhole K-06-11, which returned 36.75 metres grading 0.29 per cent copper and 0.17 grams per tonne gold (Assessment Report 29453).*

**History: Property Area (cont'd)****Ketchan Lake North prospect (cont'd)**

*In 2011, Moag Copper-Gold Resources Inc. completed a mobile metal ion geochemical sampling survey in areas throughout the Aspen Grove property.*

*In 2013, West Cirque Resources Ltd. acquired the Aspen Grove property, which consists of 37 mineral claims, totaling 5629 hectares, including the Ketchan Lake North prospect, and proceeded to complete an exploration program of geological mapping and rock sampling throughout the property. Twelve samples were taken from trenches and outcrops at the Ketchan Lake North prospect and assayed up to 1.07 per cent copper, 0.458 grams per tonne gold and 52.5 grams per tonne silver (Press Release, West Cirque Resources Ltd., June 11, 2013).*

**Update:** At the Ketchan copper-gold porphyry prospect Kaizen Discovery reports a 265.5 metre thick zone of copper-gold mineralization which included a 78 metre interval grading 0.50% copper and 0.15 grams per tonne gold. The porphyry system is hosted in a diorite porphyry, and a hydrothermal breccia. The highest copper grades occur in the deepest part of the intersection, which from 248 to 262 metres returned 1.03% copper and 0.13 g/t gold. The best grades of copper and gold are generally associated with the margins of magnetic highs with associated moderate chargeability (2015 Kaizen news release).

**NORTH MDA** showing (Alkalic porphyry Cu-Au)

MINFILE 092HNE118

Two kilometres east

*Sheba Copper Mines Ltd. geologically mapped, soil sampled and magnetically surveyed the showing in 1972. Vanco Explorations Ltd. and Laramide Resources Ltd. sampled and mapped the showing in 1985 and 1987.*

**CONGLIN CREEK** showing (Volcanic redbed Cu; Alkalic porphyry Cu-Au)

MINFILE 092HNE132

700 metres southeast

*The various showings comprising the Conglin Creek occurrence outcrop along the east side of Missezula Lake, north and south of Conglin Creek, over a distance of 1000 metres.*

**THALIA** prospect (Alkalic Porphyry Cu-Au; Volcanic redbed Cu)

MINFILE 092HNE151

Two kilometres north

*This prospect was initially investigated by Noranda Exploration Company Ltd., with the completion of geological and magnetometer surveys and one drillhole in 1972 and 1973. Cominco Ltd. drilled six percussion holes totaling 277 metres in 1979, after conducting geological and induced polarization surveys in 1978. The deposit was more recently sampled and prospected by Vanco Explorations Ltd. in 1985 and Rayrock Yellowknife Resources Ltd. in 1990.*

*In 2004, William Richard Bergey completed reconnaissance geological mapping on the Aspen Grove property. In 2013, West Cirque Resources Ltd. acquired the Aspen Grove property which consists of 37 mineral claims, totaling 5629 hectares, including the Thalia prospect, and proceeded to complete an exploration program of geological mapping and rock sampling throughout the property. Eight representative trench and outcrop grab samples were taken from the Thalia prospect and assayed 0.0116 to 4.6 per cent copper and less than 0.2 to 21*

**History: Property Area (cont'd)**

**LOG 1** showing (Volcanic redbed Cu)

MINFILE 092HNE152

100 metres west

*The Log 1 showing is 0.9 to 1.5 kilometres northwest of Hook Lake and about 3 kilometres southwest of the north end of Missezula Lake.*

**ZIG 1** showing (Surficial Placers)

MINFILE 092HNE253

400 metres north

*Three closely-spaced percussion holes were drilled by Rayrock Yellowknife Resources in 1991 to test an induced polarization conductor for copper mineralization.*

**ZIG** showing (Volcanic redbed Cu)

MINFILE 092HNE255

400 metres west

*The Zig showing is 4.8 kilometres south-southwest of the south end of Bluey Lake and 3.0 kilometres west-northwest of the north end of Missezula Lake.*

**GEOLOGY: REGIONAL**

Thomson (2011) aptly describes the regional geology as follows:

The Ketchan property is located in Quesnellia in the southern part of the Intermontane Belt of the Canadian Cordillera. In the southern part of Quesnellia, the dominantly magmatic arc sequence volcanic rocks of the Upper Triassic Nicola group crop out within a north trending belt, up to 50 kilometres in width, extending more than 200 kilometres from south of Princeton to north of Kamloops. This belt of rocks contains four major copper and copper-gold camps in the region (Afton-Ajax, Highland Valley, Craigmont and Copper Mountain). Copper deposits are particularly abundant, within the eastern part of the Nicola belt, in an area that trends north along Summers Creek and Missezula Lake, to just beyond the village of Aspen Grove.

These porphyry copper deposits are hosted in Nicola Group volcanic rocks, and tend to be associated with small fine-grained dioritic to monzonitic intrusions. One such occurrence is the Axe prospect (092HNE040), located 20 kilometres north of Princeton. This deposit contains 57.5 million tonnes grading 0.50 per cent copper in three zones of mineralization (092HNE040, 142, 143). A second occurrence, the Cincinnatti prospect (092HNE084), is located 4.5 kilometres southeast of Aspen Grove and contains 1.8 million tonnes grading 1.0 per cent copper.

The rocks of the Nicola Group were invaded by a large number of alkaline plutons that appear to be comagmatic in part with the volcanic assemblage that they intrude (e.g. Allison Lake pluton). The largest of these, the Iron Mask batholith, is the host for the Afton and Ajax copper-gold porphyry deposits. Large bodies of somewhat younger (Jurassic) calc-alkaline intrusive rocks are found along the margins of the Nicola volcanic belt. These include the Guichon batholith that hosts the immense copper deposits of the Highland Valley and appears to be the source for the copper at the Craigmont Mine, along the margin of the intrusion. These rocks are unconformably overlain by Cretaceous and Tertiary volcanic rocks and clastic sediments (e.g. Spences Bridge and Princeton groups).

**Geology: Regional (cont'd)**

During his detailed study of the group within the area between Merritt and Princeton, Preto (1979) divided the Nicola volcanic assemblage into three north-trending facies. His partitioning was based on field observations that indicated that major changes in the character of the volcanic assemblage took place at two regional north-south strike-slip fault zones, the Summers Creek Kentucky-Alleyne/Quilchena fault zone and the Allison fault zone. The Ketchan Lake copper-gold prospect lies within a central zone bounded on the west by the Allison Fault and on the east by the Summers Creek fault. It is speculated that the abundant faulting found at the Ketchan property is related to fault splays branching from the relatively proximal, Summers Creek Fault.

Preto (1979) believed that the sharply contrasting belts along these major fault systems was too systematic and complete to be due entirely to late fault displacement, unrelated in origin to Nicola volcanism, but probably the result of an old system of deep-seated crustal features, which dominated the structural framework of this region in Upper Triassic time. The Western Belt comprises a succession of calc-alkaline andesitic to dacitic volcanic rocks with minor amounts of limestone and chert. Alkalic basaltic and andesitic volcanic rocks dominate both the Central and Eastern Belts. However, the alkaline plutons that are coeval with the volcanic rocks are mainly confined to the Central Belt.

**GEOLOGY: PROPERTY AREA**

The geology on some of the more significant mineral *MINFILE* reported occurrences, prospects, and past producers peripheral to the Property are reported as follows:

**PRIMER (NORTH ZONE)** developed prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE056

Six kilometres east

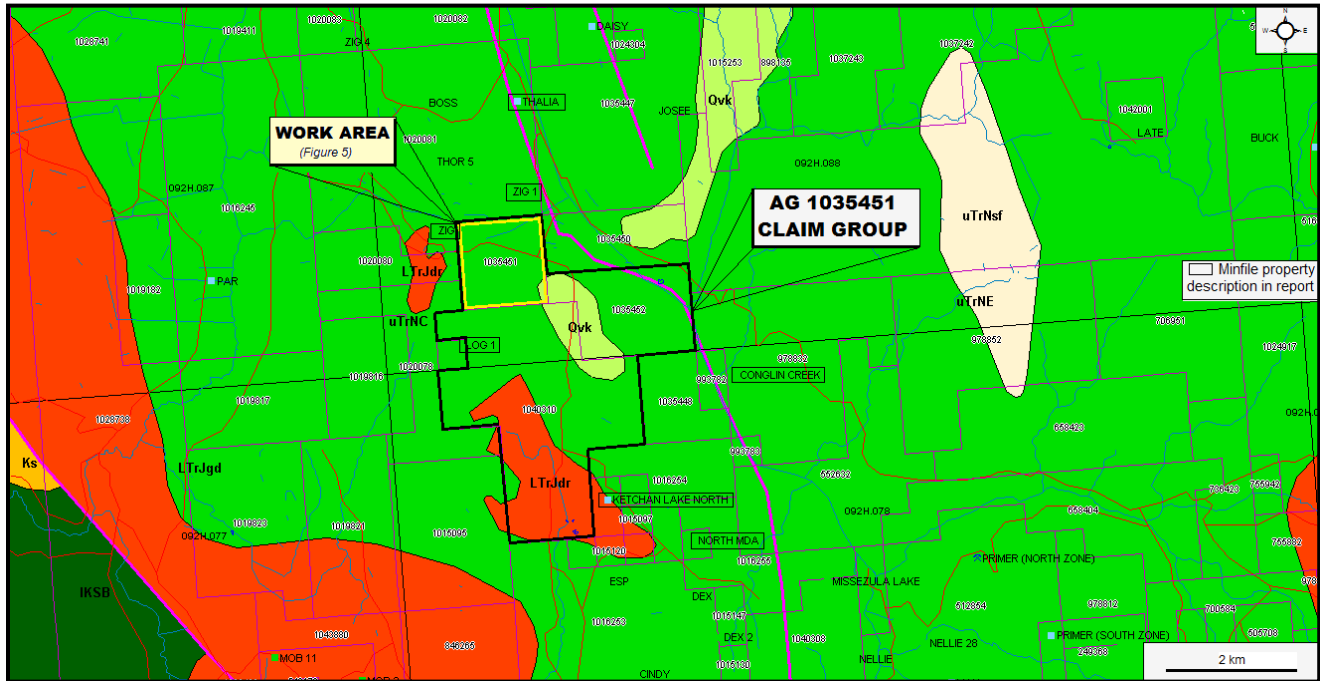
*The hostrocks are hydrothermally altered in areas of stronger shearing and fracturing. Secondary minerals include chlorite, epidote, albite, carbonate, sericite and kaolinite. The andesite is cut by a prominent set of steeply dipping, north-northwest striking shears and fractures. Numerous northwest and northeast striking shear zones are also evident. Gypsum (selenite) veins are frequent, while quartz and calcite veins are less common.*

*This region in the vicinity of Missezula Lake is underlain by the Eastern volcanic facies of the Upper Triassic Nicola Group, comprising mafic to intermediate, augite and hornblende porphyritic pyroclastics and flows, and associated alkaline intrusions. The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic. Much of the copper mineralization and associated alteration frequenting this portion of the Nicola belt can be attributed to the emplacement of such intrusions.*

*The deposit is largely hosted in variably plagioclase and hornblende porphyritic andesite of the Nicola Group (Eastern belt, Bulletin 69). A body of diorite and microdiorite, possibly related to the andesite, lies immediately northwest of the deposit. Short sections of schist and occasional hornblende porphyritic diorite dikes occur at depth in the andesite.*

**Geology: Property Area (cont'd)**

**Figure 4. Property, Index, Geology, & Minfile**  
(Base map from MapPlace)



**GEOLOGY MAP LEGEND**

**Pleistocene to Holocene**

- Qvk  
unnamed alkalic  
volcanic rocks

**Eocene**

- Egd  
unnamed granodioritic intrusive  
rocks

**Upper Triassic: Nicola Group**

**Eastern Volcanic Facies**

- uTrNE  
basaltic volcanic rocks
- uTtNsf  
mudstone, siltstone, shale, fine  
clastic sedimentary rocks

uTrNMI

lower amphibolite/kyanite grade  
metamorphic rocks

uTrJum

unnamed ultramafic rocks

**Central Volcanic Facies**

uTrNC

andesitic volcanic rocks

**Late Triassic to Early Jurassic**

LTrJgd

unnamed granodiorite intrusive  
rocks

LTrJdr

dioritic to gabbroic intrusive  
rocks

**Geology: Property Area (cont'd)****KETCHAN LAKE NORTH** prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE115

100 metres east

*Locally, the area is underlain by northwest-striking, moderately northeast-dipping andesitic flows, with lesser andesitic lapilli and crystal tuffs and minor lahar deposits of the Nicola Group (Central Belt, Bulletin 69). This sequence is intruded by a west-trending mass of fine to medium-grained diorite (microdiorite), roughly centred about Ketchan Lake, measuring 4000 by 2000 metres. The diorite commonly contains seams and irregular replacements of orthoclase. Epidote is widespread, and is frequently developed along northwest-striking, northeast-dipping fractures. Disseminations and veinlets of magnetite are also present in this stock.*

*This region southwest of Missezula Lake is underlain by the eastern volcanic facies of the Upper Triassic Nicola Group, comprising mafic to intermediate augite and hornblende porphyritic pyroclastics and flows, and associated alkaline intrusions.*

*The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic. Much of the copper mineralization and associated alteration frequenting this portion of the Nicola belt can be attributed to the emplacement of such intrusions.*

**NORTH MDA** showing (Alkalic porphyry Cu-Au)

MINFILE 092HNE118

Five kilometres southeast

*Chalcopyrite occurs together with magnetite and epidote in an elongate stock of fine-grained diorite, near its east end. Malachite occasionally accompanies this mineralization. The stock intrudes andesitic flows and pyroclastics of the Upper Triassic Nicola Group (Central belt, Bulletin 69). The andesites exhibit epidote alteration accompanied by some weak copper mineralization in a poorly defined area extending up to 600 metres north and 300 metres east of the stock.*

**CONGLIN CREEK** showing (Volcanic redbed Cu; Alkalic porphyry Cu-Au)

MINFILE 092HNE132

700 metres southeast

*Chalcopyrite, pyrite and minor bornite occur as veinlets and fine disseminations in small fracture zones in andesitic to basaltic flows and pyroclastics of the Upper Triassic Nicola Group (Eastern belt, Bulletin 69).*

**THALIA** prospect (Alkalic Porphyry Cu-Au; Volcanic redbed Cu)

MINFILE 092HNE151

Two kilometres north

*This region north of Missezula Lake is underlain by the eastern volcanic facies of the Upper Triassic Nicola Group, comprising mafic to intermediate augite and hornblende porphyritic pyroclastics and flows, and associated alkaline intrusions. The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic. Much of the copper mineralization and associated alteration frequenting this portion of the Nicola belt can be attributed to the emplacement of such intrusions.*

**Geology: Property Area (cont'd)**

**LOG 1** showing (Volcanic redbed Cu)  
MINFILE 092HNE152  
100 metres west

*Several occurrences of chalcopyrite, chalcocite and malachite are hosted in augite plagioclase porphyritic andesite and volcanic breccia of the Upper Triassic Nicola Group (Central belt, Bulletin 69).*

**ZIG 1** showing (Surficial Placers)  
MINFILE 092HNE253  
400 metres north

*A 17-metre thick section of consolidated gravel is overlain by 26 metres of fine grained vesicular basalt and underlain by fine-grained tuff of the Upper Triassic Nicola Group.*

**ZIG** showing (Volcanic redbed Cu)  
MINFILE 092HNE255  
400 metres west

*Copper mineralization occurs in volcanic breccia and lahar deposits of the Upper Triassic Nicola Group*

**GEOLOGY: PROPERTY**

The BC government supported MapPlace geological map indicates that the AG 1035451 Claim Group is predominantly underlain by rocks of the Central Belt of the upper Triassic Nicola Group (uTrNC) which is in a northwesterly trending fault contact with the Eastern Belt of the upper Triassic Nicola Group (uTrNC) in the northeastern corner. In the south, the Property covers the greater portion of a late Triassic to early Jurassic dioritic stock (LTrJgd). In the northeast the Property covers Pleistocene to Holocene volcanics (Qvk) which cap the Nicola volcanics.

**MINERALIZATION: PROPERTY AREA**

**PRIMER (NORTH ZONE)** developed prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE056

Six kilometres east

*Mineralization consists of pyrite and chalcopyrite, generally as veins and fracture fillings, but also as disseminations and blebs. Gossanous zones of stronger shearing, fracturing and alteration contain 3 to 20 per cent pyrite, 1 to 3 per cent magnetite and trace to 1 per cent chalcopyrite. Chalcopyrite to pyrite ratios are about 1 to 3. Malachite and azurite accompany chalcopyrite and pyrite in trenches with intensely fractured and sheared andesite. These surface exposures suggest stronger mineralization is controlled by shearing. Disseminated chalcopyrite and pyrite are also found in chloritized andesite. Magnetite occurs as veinlets and is present in chalcopyrite seams in minor amounts. Chalcopyrite is also associated with epidote alteration and to a minor extent, carbonate-quartz veining.*

*Exploration work has outlined a zone of erratic copper mineralization with anomalous gold values that trends west-southwest for 850 metres and varies from 150 to 170 metres wide over most of its length. Diamond drilling intersected significant copper mineralization to depths of 200 metres.*

*An angled drillhole in the eastern part of the deposit yielded 0.47 per cent copper over 30.5 metres (L. Manning and Associates Ltd, 1968, hole 65-1).*



**Mineralization: Property Area (cont'd)****Primer (North Zone) developed prospect (cont'd)**

Two other holes drilled 127 metres north and 440 metres west of hole 65-1 yielded 0.495 and 0.119 per cent copper over 43.1 and 128.0 metres respectively (Assessment Report 2354, core logs, holes 67-7, 68-2). Unclassified reserves are 23 million tonnes grading 0.20 per cent copper (CIM Special Volume 15, Table 1, Occurrence No. 20). Gold values in drill core ranged from nil to 1 gram per tonne (Assessment Report 2354).

A grab sample of brecciated calcic volcanics with abundant chalcopyrite assayed 4.81 per cent copper, 2.7 grams per tonne gold and 51.1 grams per tonne silver (Assessment Report 21198, section 11.0 - analytical results, sample PN-R3).

**KETCHAN LAKE NORTH** prospect (Alkalic porphyry Cu-Au)

MINFILE 092HNE115

100 metres east

Trenching and drilling have intersected copper mineralization in a northwest-trending zone 1400 metres long and up to 600 metres wide, roughly paralleling the northeastern margin of the stock.

Mineralization is hosted in the diorite and consists of pyrite and chalcopyrite, usually as disseminations, but also as fracture fillings. Rare bornite and chalcocite are also reported. Seams, patches and blebs of orthoclase, epidote and/or magnetite are sometimes associated with this mineralization. Some malachite is also present in surface exposures. Chlorite, sericite and traces of secondary biotite occur with the sulphides at depth.

**NORTH MDA** showing (Alkalic porphyry Cu-Au)

MINFILE 092HNE118

Two kilometres east

A rock sample assayed 3.1 grams per tonne silver and 0.1452 per cent copper (Assessment Report 14141, Drawing 13a, sample 88611).

**CONGLIN CREEK** showing (Volcanic redbed Cu; Alkalic porphyry Cu-Au)

MINFILE 092HNE132

700 metres southeast

Chalcopyrite, pyrite and minor bornite occur as veinlets and fine disseminations in small fracture zones in andesitic to basaltic flows and pyroclastics of the Upper Triassic Nicola Group (Eastern belt, Bulletin 69). This mineralization is developed along the west flank of a northwest-trending body of monzonite and syenite of Late Triassic to Early Jurassic age, some 2 kilometres in length. Chalcocite is also reported. Malachite accompanies this mineralization in a number of places.

One chip sample assayed 0.25 per cent copper over 13.4 metres (Assessment Report 4694, page 3). A second sample yielded 0.08 gram per tonne gold, 7.1 grams per tonne silver and 3.71 per cent copper (Assessment Report 14141, Figure 12, sample 2022).

**THALIA** prospect (Alkalic Porphyry Cu-Au; Volcanic redbed Cu)

MINFILE 092HNE151

Two kilometres north

**Mineralization: Property Area (cont'd)****Thalia prospect (cont'd)**

*Erratic copper mineralization is hosted in fine-grained diorite/andesite porphyry and basalt of the Nicola Group (Central Belt, Bulletin 69) in an elongate area trending north-northwest for 1050 metres. Mineralization consists primarily of chalcocite and malachite along fractures and associated with calcite stringers. Pyrite and chalcopyrite are also present. The strongest mineralization occurs in the most southerly exposures, where one trench sample analyzed 0.38 per cent copper over 15 metres (Assessment Report 7724, Plate 1).*

*An adjacent vertical percussion hole graded 0.14 per cent copper over 32.0 metres (Assessment Report 7724, hole TPH-79-5). Analyses of three grab samples taken 480 metres north-northeast of the showing averaged 0.23 per cent copper (Assessment Report 21406, Figure 4, site C). A sample of brecciated red basalt with chalcocite, 1000 metres north-northeast of the showing, assayed 10 grams per tonne silver and 2.6 per cent copper over 1 metre (Assessment Report 7724, Plate 1). Chalcocite forms scattered blebs and semimassive lenses at this northernmost exposure.*

**LOG 1** showing (Volcanic redbed Cu)

MINFILE 092HNE152

100 metres west

*A sample across one occurrence of chalcocite and malachite assayed 0.7 per cent copper over 2 metres (Assessment Report 7724, Plate 1). A second sample taken nearby analysed 0.263 per cent copper and 1.9 grams per tonne silver (Assessment Report 14141, Figure 9, sample 2096).*

**ZIG 1** showing (Surficial Placers)

MINFILE 092HNE253

400 metres north

*A sample of cuttings from the gravel analysed 1.29 grams per tonne gold and 0.042 per cent copper over 3.0 metres (Assessment Report 21406, Figure 10, hole 91-08, 42.7 to 45.7 metres).*

**ZIG** showing (Volcanic redbed Cu)

MINFILE 092HNE255

400 metres west

*Copper mineralization occurs in volcanic breccia and lahar deposits of the Upper Triassic Nicola Group. A sample analysed 0.975 per cent copper and 3.4 grams per tonne silver (Assessment Report 17118, Figures 6a, 6b, sample 3780).*

**STRUCTURAL ANALYSIS****a) Purpose**

The purpose of the structural analysis was to delineate any area of major fault intersections which location could be the centre of maximum brecciation and be depth intensive to provide the most favourable feeder zone to any convective hydrothermal fluids sourced from a potentially mineral laden reservoir. The fluid constituents and/or the indications thereof could be etched in the surface material; where, by means of standard exploratory procedures, the source and location may be identified and a foundation on which to warrant any follow-up exploration. These surficial indications such as prime minerals, indicator minerals, or alteration patterns, may be an indication of a masked mineral resource.

## Structural Analysis (cont'd)

### Purpose (cont'd)

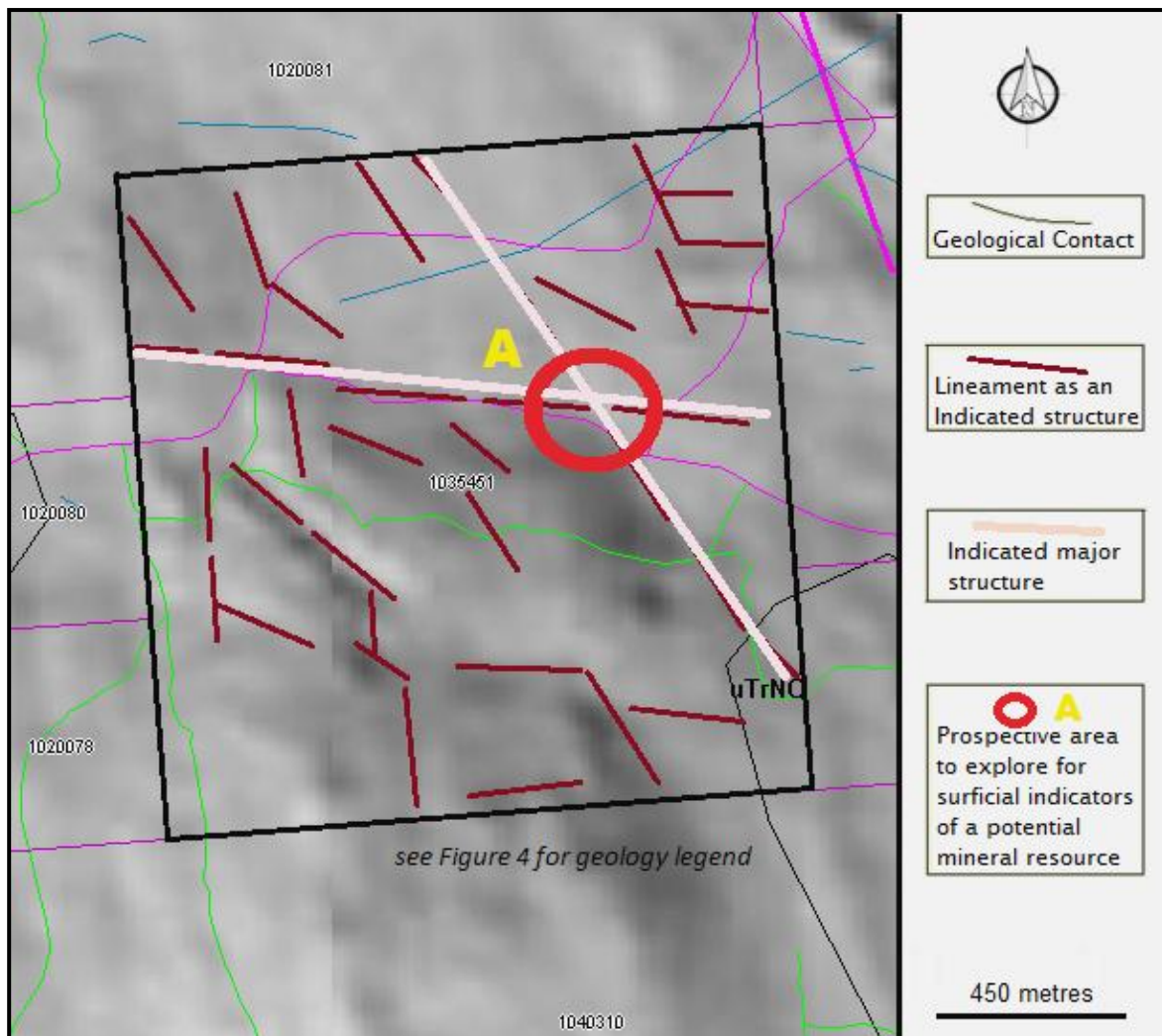
Thus, a cross-structural location would be the prime area to initially prospect for the surficial indicators which may be revealed as pathfinder minerals, minerals and/or alteration products that would be subject to interpretation as economic mineral indicators.

### b) Method

The structural analysis was performed on a MapPlace DEM image hillshade map of Tenure 1047102, by viewing of the map and marking the lineaments, or indicated structures, thereon. A total of 49 lineaments were marked as shown on Figure 5. The lineaments were compiled into a 10 degree class interval and plotted as a rose diagram as shown on Figure 6. The indicated primary structural trend was then plotted on the lineament map with the general trend influenced by the predominant lineaments as shown on the Rose Diagram.

The centre of the work area is at 5520864N, 674609E (10) (NAD 83).

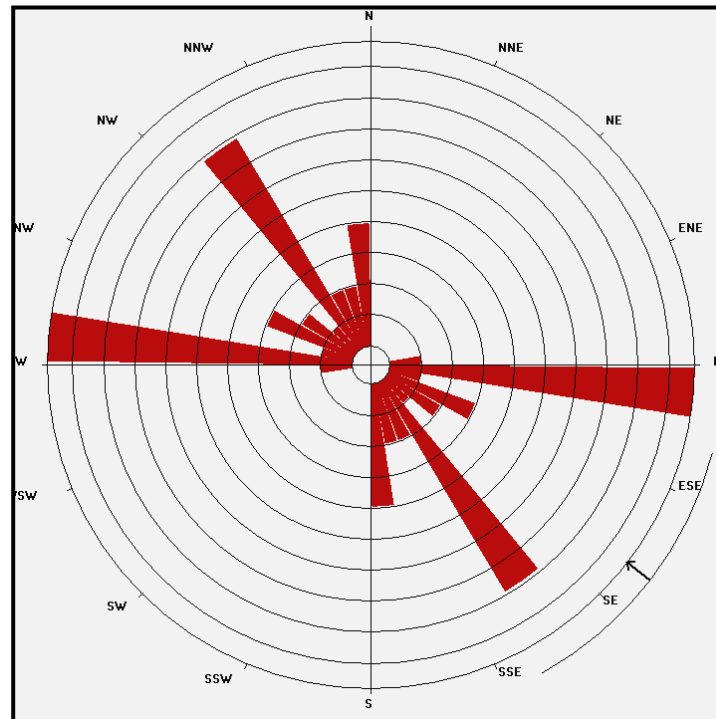
Figure 5. Indicated Lineaments on Tenure 1035451



**Structural Analysis (cont'd)****c) Results**

One cross-structure designated as "A" was delineated from indicated general northwesterly and westerly trending intersecting structures.

Figure 6. Rose Diagram from lineaments of Figure 5

**STATISTICS**

*Axial (non-polar) data*

No. of Data = 34

Sector angle = 10°

Scale: tick interval = 3% [1.0 data]

Maximum = 29.4% [10 data]

Mean Resultant dir'n = 128-308

[Approx. 95% Confidence interval = ±23.4°]

(valid only for unimodal data)

Mean Resultant dir'n = 127.7 - 307.7

Circ. Median = 130.5 - 310.5

Circ. Mean Dev. about median = 26.8°

Circ. Variance = 0.14

Circular Std. Dev. = 32.03°

Circ. Dispersion = 1.39

Circ. Std Error = 0.2022

Circ. Skewness = -0.69

Circ. Kurtosis = -35.14

kappa = 1.27

(von Mises concentration param. estimate)

Resultant length = 18.20

Mean Resultant length = 0.5353

'Mean' Moments: Cbar = -0.1356; Sbar = -0.5178

'Full' trig. sums: SumCos = -4.611; Sbar = -17.6064

Mean resultant of doubled angles = 0.2034

Mean direction of doubled angles = 171

(Usage references: Mardia & Jupp,

'Directional Statistics', 1999, Wiley;

Fisher, 'Statistical Analysis of Circular Data',

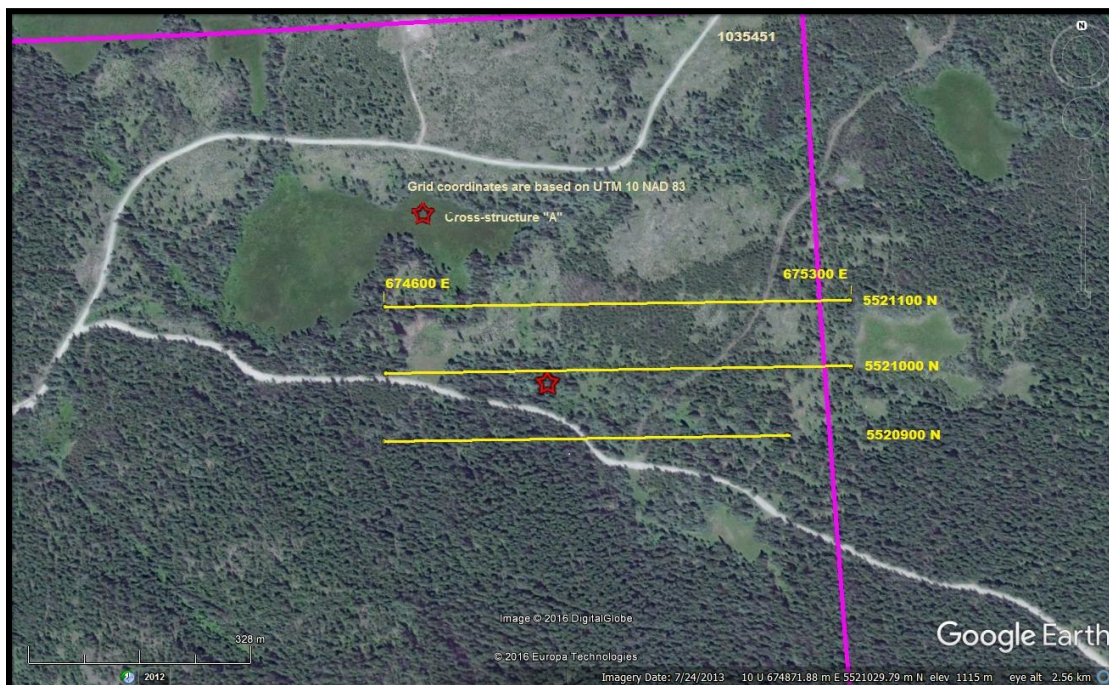
1993, Cambridge University Press)

Note: The 95% confidence calculation uses

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

**Structural Analysis (cont'd)**

**Figure 7. Cross-structural location on Google Earth**  
(Base map from MapPlace & Google Earth)



**Table II. Approximate UTM location of cross-structure**

Location	UTM East	UTM North	Elevation (metres)
A	674,853	5,520,983	1,111

**Magnetometer Survey****a) Instrumentation**

A Scintrex MF 2 Model magnetometer was used for the magnetometer survey. Diurnal variations were corrected by taking repeated readings at a base point throughout the day. Magnetometer values are total intensity and relative.

**b) Theory**

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite; magnetic surveys are therefore used to detect the presence of these minerals in varying concentrations. Magnetics is also useful as a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

**c) Survey Procedure**

From station 5,521,100N 674,600E, a southerly base-line was established with two additional base-line stations at 100 metre station intervals to 5,520,900N. Magnetometer readings were taken at 25 metre intervals along the two northern grid lines to 675,300E and the southern line to 675,200E. The grid line stations were established by the use of a GPS instrument. Line kilometres of magnetometer survey completed was 2.0. The field data is reported herein in Appendix I.

Magnetometer Survey (cont'd)

Figure 8. Magnetometer Survey Grid  
(Base map from MapPlace and Google)

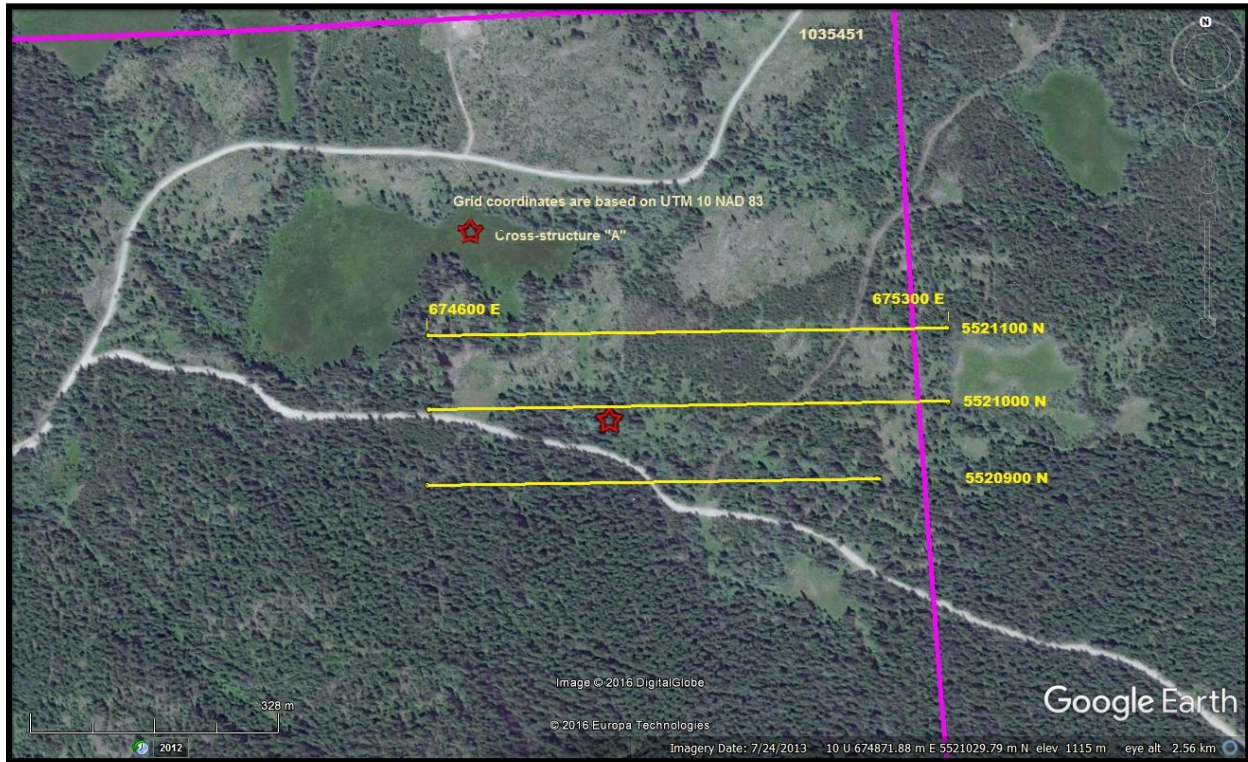
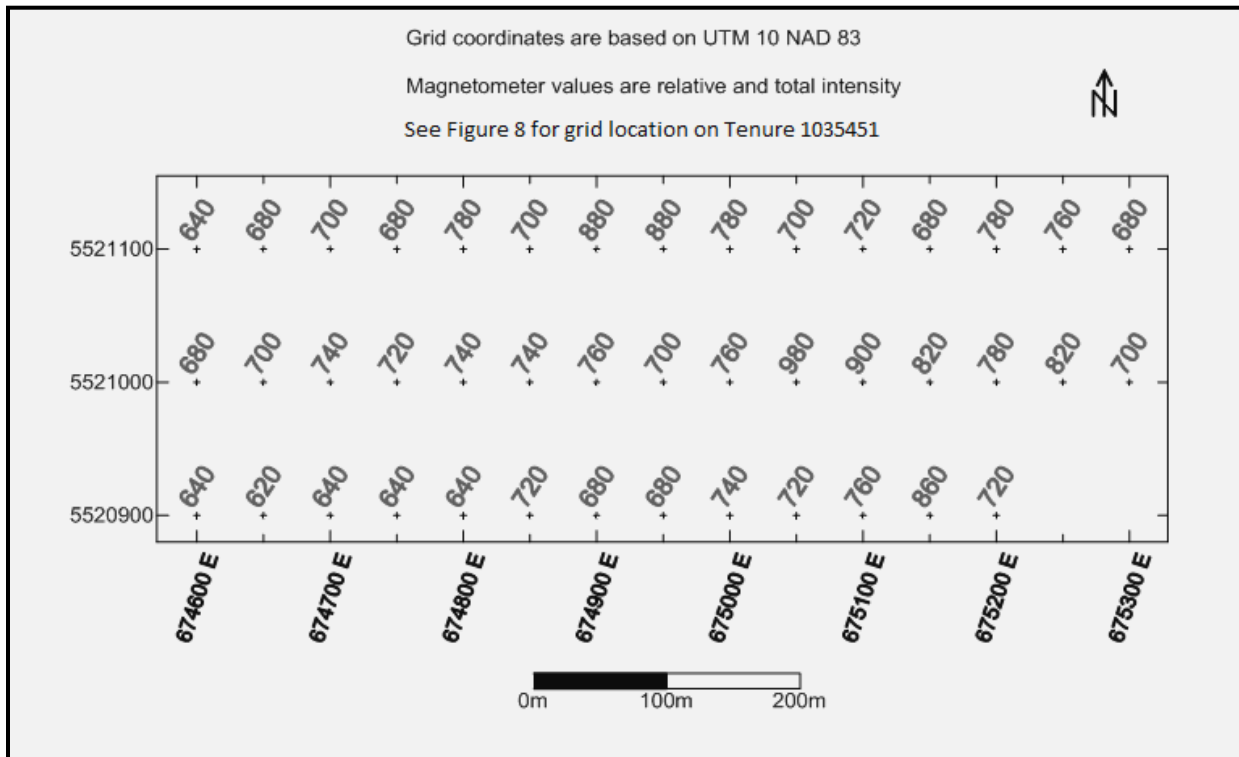


Figure 9. Magnetometer Survey Data



Magnetometer Survey (cont'd)

Figure 10. Magnetometer Survey Data Contoured

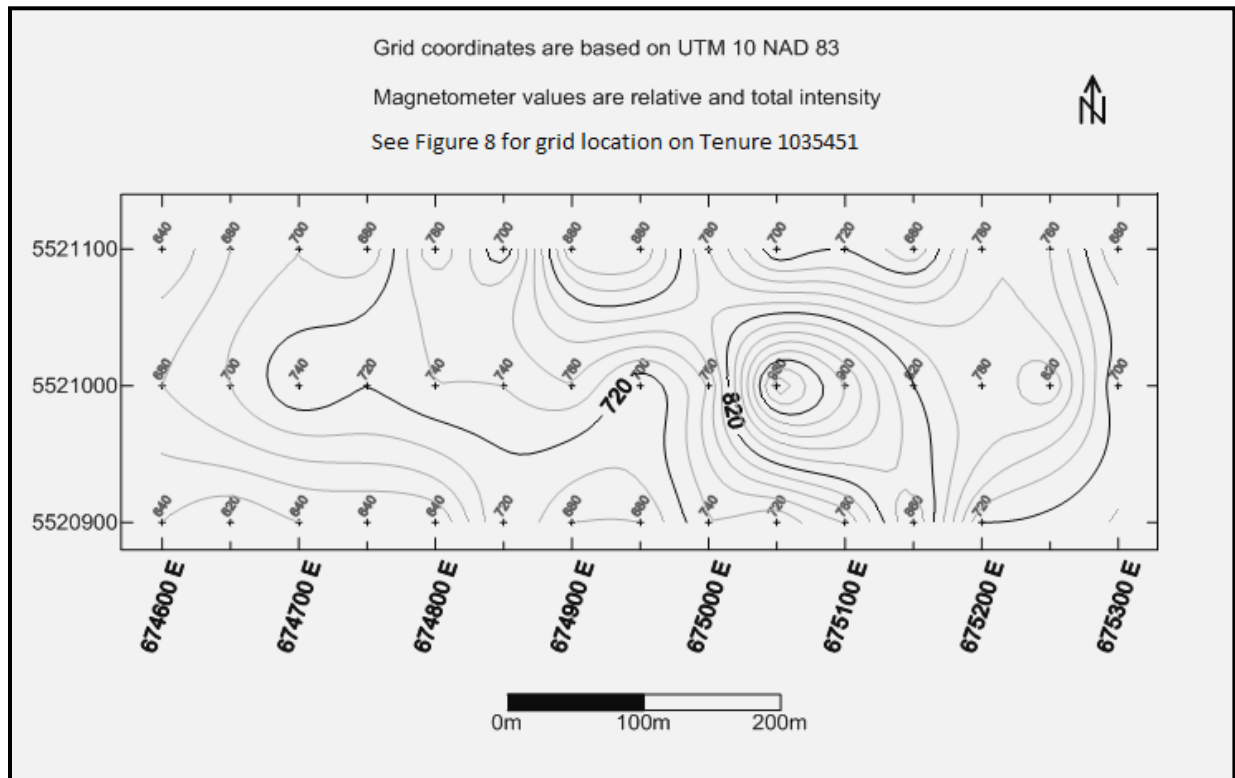
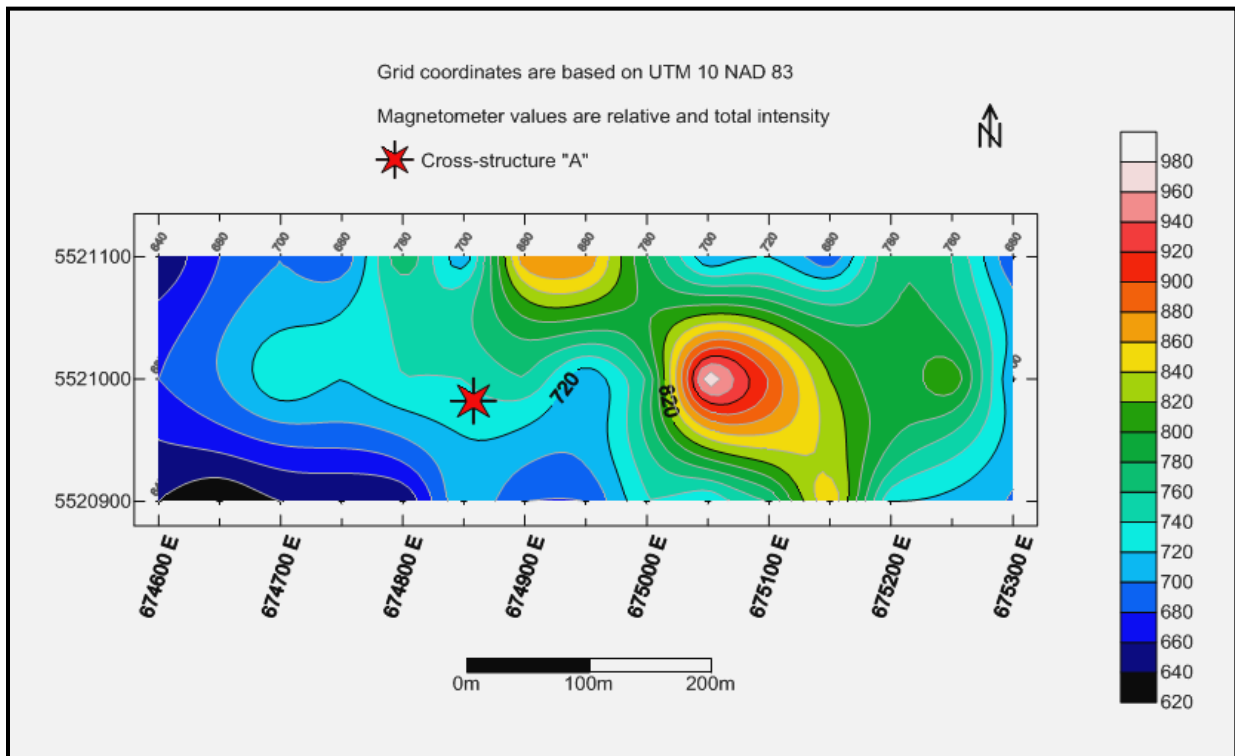


Figure 11. Magnetometer Survey Data Colour Contoured



---

**Magnetometer Survey (cont'd)****d) Data Reduction**

The field results were initially input to an Excel spreadsheet whereupon a Surfer 31 program was utilized to create the maps exemplified herein as Figures 9, 10, & 11.

**e) Results**

The magnetometer survey which covered andesitic volcanic rocks of the Nicola Volcanics indicated one spotty anomalous mag HI and an anomalous LO zone on the western limits of the survey area as indicated by open-ended mag LO's in the northwest and the southwest corners.

The anomalous mag HI is located within a general northwesterly trend of the mag contours with the general location of cross-structure "A" located within a lower mag background area between the anomalous mag HI and the anomalous mag LO and favouring the anomalous mag LO.

**INTERPRETATION and CONCLUSIONS**

The one cross-structure delineated on Tenure 1035451 indicates a general parallelism to the structural orientation of the regional Summers Creek Fault system 600 metres to the east as shown on Figures 4 & 5. Just as, "It is speculated that the abundant faulting found at the Ketchan property is related to fault splays branching from the relatively proximal, Summers Creek Fault." (Thomson, 2006), the structures making up the cross-structure on Tenure 1035451 are probably similarly related.

The configuration of the diorite stock at the Ketchan property also indicates that the major structures played a role in its emplacement resulting in additional structural variants. This is indicated at the Ketchan Lake North property (*Minfile 092HNE115*) where mineralization is hosted by a northwest trending zone paralleling the northwest margin of a diorite stock. The mineralization is usually of disseminations and fracture fillings in the diorite. The zone of copper mineralization trends northwest for 1400 metres and is up to 600 metres wide.

The significance of the brecciation to increased mineralization on the Ketchan Lake North property is related by Thomson (2006) in an assessment report wherein it is reported that:

"Brecciated areas generally contain stronger overall alteration, mainly chlorite with increased concentrations of magnetite. The strongest areas of brecciated magnetite-rich rock, observed in most of the 2005 drill holes, generally contained the highest concentrations of pyrite/chalcopyrite."

Aulis, (1991) reports that, "Present drillhole spacing within the IP anomaly suggests the possibility of a porphyry copper-gold deposit of significant size (> 80 million tons). This possibility may be in the making in that in 2015 Kaizen Discovery reported a 265.5 metre thick zone of copper-gold mineralization which included a 78 metre interval grading 0.50% copper and 0.15 grams per tonne gold from the drill results on the Ketchan Lake property.

At Ketchan Lake, the mineral zone is hosted by a diorite porphyry and an intrusive hydrothermal breccia. The highest copper grades occur in the deepest part of the intersection, which from 248 to 262 metres returned 1.03% copper and 0.13 g/t gold. This interval also returned 126 ppm (parts per million) molybdenum. The best grades of copper and gold are generally associated with the margins of magnetic highs with associated moderate chargeability (Kaizen news release).



***Interpretation and Conclusions (cont'd)***

As a diorite stock is indicated some 200 metres west of Tenure 1035451 and the major Summers Creek Fault is some 600 metres east, Tenure 1035451 is likely to cover a variety of structures that would be amenable as mineral controls such breccia zones related to the margins of an intrusive or breccia pipes correlative with cross-structural locations. The diorite stock is on the northwestward projection of the Ketchan diorite porphyry stock which is within Tenure 1040310, one of the three claims of the AG 1035451 Claim Group, and appears to be controlled to the east by a major fault zone paralleling the Summers Creek Fault.

The anomalous mag HI located within a general northwesterly trend of the mag contours, may indicate one of the structures of cross-structure "A" with the localized mag HI indicating a breccia pipe hosting magnetite rich rock with associated pyrite/chalcopyrite. Likewise, the general location of cross-structure "A" on the margin of the mag HI, may indicate the location of the best copper and gold grades as at the Ketchan Lake property.

Excluding other variable geological conditions, the structures are essential in the localization of potentially economic mineral zones on the Property. Other mineral deposit types such as skarn or porphyry mineralization are evident in the area as reported by the Minfile reports included herein.

Respectfully submitted

Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

---

**SELECTED REFERENCES**

- Aulis, R.J.** – Report on Percussion Drilling Missezula Property for Cominco Ltd. June 30, 1991. AR 21746.
- Bergey, W.R.** - Report on the Ketchan Property for Copper-Hill Exploration Corporation. September 15, 2004. AR 27534.
- Bergey, W.R.** - Geological Report on the Ketchan Property for Copper-Hill Exploration Corporation. November 23, 2004. AR 27564.
- Bergey, W.R.** - Geological and Geochemical Report on the Ketchan Property for Moag Copper-Gold Resources Inc. November 7, 2011. AR 32884.
- Bradford, J.** - Rock Geochemistry and Geological Mapping on the Aspen Grove Property for West Cirque Resources Ltd. November 2013. AR 34718.
- Hall, D.**, 1994: Assessment Report IP/Resistivity Survey on the Nails Property for Cominco Ltd. AR 23509.
- Kaizen Discovery Inc.** - News Releases dated July 20, 2015 and November 3, 2015.
- MapPlace** – Map Data downloads
- Marshak, S., Mitra, G.** – Basic Methods of Structural Geology. pp 258-259, 264\*.Prentice-Hall Inc. 1988
- MtOnline** - MINFILE downloads.
- 092HNE056 – PRIMER (NORTH ZONE)
  - 092HNE115 – KETCHAN LAKE NORTH
  - 092HNE118 – NORTH MDA
  - 092HNE132 – CONGLIN CREEK
  - 092HNE151 – THALIA
  - 092HNE152 – LOG 1
  - 092HNE253 – ZIG 1
  - 092HNE255 – ZIG
- Sookochoff, L.** - Geological Assessment Report on Tenure 1025142 of the AG 105142 Claim Group for Steven Scott, Brian Scott and Christopher Delorme. September 13, 2014. AR 35065
- Thomson, G.** – Diamond Drilling Assessment Report on the Ketchan Lake Property for Copper Belt Resources Corporation. April 28, 2006. AR 28484.
- Thomson, G.** – Diamond Drilling Assessment Report on the Ketchan Lake Property for Midland Resources Corporation. November 22, 2007. AR 29453.

**STATEMENT OF COSTS**

The work on Tenure 1035451 was completed from November 6, 2016 to November 11, 2016 to the value as follows:

**Structural Analysis**

Laurence Sookochoff, P Eng. 3 days @ \$ 1,000.00/day----- \$ 3,000.00

**Magnetometer Survey**

Christopher Delorme & Guy Delorme

November 10-11, 2016

Four man days @ \$300.00 per day ----- 1,200.00

Kilometre charge: 323@ \$0.70 ----- 226.10

Fuel ----- 60.56

Room & board 4 man days @ \$90.00 ----- 360.00

Mag rental 2 days @ \$80.00 ----- 160.00 806.66

\$ 5,006.66

Maps ----- 750.00

Report ----- 3,000.00

\$ 8,756.66

=====

## **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 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 my profession for the past fifty 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 and from work the author has performed in the Aspen Grove area since 1985
- 5) I have no interest in the Property as described herein.



Laurence Sookochoff, P. Eng.

Appendix I

**Magnetometer Survey Data**

E5625688 T1035451								
E	N	Mag	E	N	Mag	E	N	Mag
674600	5520900	640	674600	5521000	680	674600	5521100	640
674650	5520900	620	674650	5521000	700	674650	5521100	680
674700	5520900	640	674700	5521000	740	674700	5521100	700
674750	5520900	640	674750	5521000	720	674750	5521100	680
674800	5520900	640	674800	5521000	740	674800	5521100	780
674850	5520900	720	674850	5521000	740	674850	5521100	700
674900	5520900	680	674900	5521000	760	674900	5521100	880
674950	5520900	680	674950	5521000	700	674950	5521100	880
675000	5520900	740	675000	5521000	760	675000	5521100	780
675050	5520900	720	675050	5521000	980	675050	5521100	700
675100	5520900	760	675100	5521000	900	675100	5521100	720
675150	5520900	860	675150	5521000	820	675150	5521100	680
675200	5520900	720	675200	5521000	780	675200	5521100	780
			675250	5521000	820	675250	5521100	760
			675300	5521000	700	675300	5521100	680