BRITISH COLUMBIA
The Best Place on Earth

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: $ 9,080.55

AUTHOR(S): Laurence Sookochoff, PEng **SIGNATURE(S):** Laurence Sookochoff

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

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5623026 October 21, 2016

PROPERTY NAME: Bertha

CLAIM NAME(S) (on which the work was done): 930152, 1019760, 1031886

COMMODITIES SOUGHT: Copper, Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092INE034, 092INE040, 092INE049

MINING DIVISION: Kamloops **NTS/BCGS:** 092I.056

LATITUDE: 50 ° 30 ' 15 " **LONGITUDE:** 120 ° 55 ' 57 " **(at centre of work)**

OWNER(S):

1) Christopher Delorme
2) Guy Delorme

MAILING ADDRESS:

340 Logan Lane
Merritt BC Canada V1K 1P7

808-470 Granville Street
Vancouver BC Canada V6C 1V5

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

1) Christopher Delorme
2) Guy Delorme

MAILING ADDRESS:

340 Logan Lane
Merritt BC Canada V1K 1P7

808-470 Granville Street
Vancouver BC Canada V6C 1V5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Triassic-Jurassic, Guicnon Creek Batholith, Highland Valley Phase, Border Phase, Granodiorite, Quartz diorite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 02114, 02281, 02282, 04984, 10783, 29164, 29173, 30458,31903, 32152, 32153, 32290, 32779, 32980, 33784, 34357, 34823, 35003

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation	80 hectares	930152, 1019760, 1031886	$ 6,000.00
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	2.7	930152, 1019760, 1031886	3,080.55
Electromagnetic			
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			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$ 9,080.55

GUY & CHRISTOPHER DELORME

(Owners & Operators)

GEOLOGICAL & GEOPHYSICAL

ASSESSMENT REPORT

(Event 5623026)

on

Tenures 930152, 1019760, & 1031886

of the eight claim

Bertha 930152 Claim Group

Kamloops Mining Divisions

BCGS Maps 092I.056

work done from

October 10, 2016 to October 21, 2016

Centre of Work

5,596,720N 646,610E
10 (NAD 83)

Author & Consultant

Laurence Sookochoff, PEng
Sookochoff Consultants Inc.

Submitted

April 23, 2017

TABLE OF CONTENTS

Table of Contents (cont'd)

ILLUSTRATIONS

TABLES

APPENDICES

SUMMARY

The seven claim Bertha 930152 Claim Group, covering an area of 2,526 hectares, is located in the Highland Valley of south central British Columbia within eight kilometres of the world-class Highland Valley Copper mine; one of the largest copper mining and concentrating operations in the world.

The Highland Valley copper/molybdenum deposit lies within the Guichon Creek batholith, a large, composite intrusion with a surface area of about 1,000 square kilometers. A cluster of nine major porphyry copper deposits lie within a 15 square kilometer zone in the center of the batholith where a central, steeply plunging root or feeder zone is inferred.

The major deposits lie around the projection of the feeder zone to the surface which could have been created by the intersection of the regional northerly trending Lornex Fault and the westerly trending Highland Valley Fault. Subsequent movement of the faults created a network of fractures which hosted the minerals arising from the feeder zone. Fracture density was apparently the most important single factor in influencing ore grades of the Highland Valley mineral deposits.

As indicated by the BC government supported MapPlace geological maps, the Bertha 930152 Claim Group is underlain by of the Guichon Creek Batholith with granodioritic rocks of the Highland Valley Phase (LTrJGH} in the west and quartz dioritic rocks of the Border Phase (LTrJGBo) in the east.

Tenures 930152, 1019760, and 1031886, contiguous claims and the subjects of the structural analysis, cover rocks of the Border Phase.

Of the three properties within the confines of the Bertha 930152 Claim Group, the Dansey property was the most extensively explored with exploration reported from a geochemical survey in 1965 to diamond drill programs in 2008, 2009, and 2010. The extensive mineralization was shown in a 2010 drill hole from which core sections from one drill hole returned assays of 0.101% copper over an interval of 179.37 metres with copper mineralization open at depth. Local copper grades greater than 1.00% were reported from another drill hole. Strong mineralization was reported concentrated in veins and shear zones (Garrow, 2011). The extensive and the type of mineralization in an intrusive supports the Dansey prospect as an indication of the potential for a porphyry Cu+/-Mo+/-Au resource in the area.

In the structural analysis of Tenure 930152, the exploration of the three cross-structural locations, as delineated from indicated major northerly, northeasterly, and northwesterly trending structures, may provide surficial geological information to the potential of a concealed mineral resource in the area within four kilometres southwest of the Dansey, within four kilometres east-northeast of the Bethlehem former producer, and within eight kilometres east-northeast of the Highland Valley mine which operates the third largest concentrator in the world.

The results of the localized magnetometer survey, which covered two of the cross-structures, support the indication of a potentially concealed porphyry resource in the two open-ended anomalous mag HI's which may indicate Au pyrrhotite veins with associated polymetallic quartz veins which are often occur peripheral to a mineralized porphyry, and the open-ended general mag LO with the inclusive anomalous mag LO which may indicate a hydrothermally altered major structure.

Excluding other variable geological conditions, the structures are essential in the localization of potentially economic porphyry mineral deposit within the Guichon Creek Batholith.

INTRODUCTION

Between October 10, 2016 and October 21, 2016, a structural analysis and a localized magnetometer survey were completed on Tenure 580992 of the eight claim Bertha 580992 claim group (Property). The purpose of the program was to delineate potential structures which may be integral in geological controls to potentially economic mineral zones that may occur on Tenure 580992 or other claims of the Bertha property and to determine the effectiveness of the magnetic results in locating a potential mineral resource.

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

Figure 1. **Location Map**
(from MapPlace)

PROPERTY LOCATION AND DESCRIPTION

Location

The Bertha 930152 Claim Group is located within BCGS Maps 092I.056 of the Kamloops Mining Division, 210 kilometres northeast of Vancouver, 44 kilometres north of Merritt, 45 kilometres southwest of Kamloops, and within eight kilometres east-northeast of the world-class producing Highland Valley Copper mine.

Description

The Property is comprised of eight contiguous claims covering an area of 2342.1125 hectares. Particulars are as follows:

Property Description and Location *(cont'd)*

Table I. **Tenures of Bertha 930152 Claim Group**

Tenure Number	Type	Claim Name	Good Until	Area (ha)
528848	Mineral	DANSEY	20170619	493.128
528849	Mineral	DAB	20170619	492.954
926529	Mineral	HIGHLAND VALLEY EAST	20221029	472.5509
930152	Mineral		20170619	20.5515
1019760	Mineral	BETHLEHEM EAST	20170619	20.5533
1031886	Mineral	BLUE	20170619	41.1047
1043336	Mineral	DANSEY WEST	20170619	328.6647
1043337	Mineral	DANSEY EAST	20170619	472.6054

Total Area: 2342.1125 ha

*Upon the approval of Event 5623026.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access

From Logan Lake, the Bertha 930152 claim group can be accessed by traveling two kilometres west from Logan Lake on Highway 97D to the junction with the Tunkwa Lake road which is taken for three kilometres northward to the eastern boundary of Tenure 1043337 of the Bertha 930152 claim group. Numerous secondary roads would provide access to most areas of the Property.

Climate

The local climate is typical of south central British Columbia. Annual temperatures range from 35^{o}C to -40^{o}C. Negative temperatures can be typically expected between late October and late March. Annual precipitation ranges around an average of 30 cm.

Local Resources & Infrastructure

Merritt, 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. Logan Lake, where many of the Highland Valley Copper Mine employees reside, has many facilities to accommodate any preliminary exploration crew.

Physiography

The topography of the Bertha 930152 Claim Group is of gentle forested slopes with localized clear-cut logged areas. Elevations range from 1,085 m within a river valley in the northeast to 1,460 m on hillcrests adjacent to the mid-western border.

WATER & POWER

There would be an ample water supply from the many lakes, rivers, or streams within the confines of the Property for the requirements of any exploration program. A 500KV power line skirts the eastern portion of the Bertha 930152 Claim Group.

HISTORY: BERTHA 930152 CLAIM GROUP AREA

The history on some MINFILE reported occurrences, prospects, and past producers peripheral to the Bertha 930152 Claim Group is reported as follows. The distance to the Minfile locations is relative to the Bertha 930152 Claim Group.

BETHLEHEM *past producer (Porphyry Cu+/-Mo+-Au)*
MINFILE 092ISW001
Seven kilometres west

Production from 1963 to 1982 totalled 96,324,510 tonnes, yielding 99,826,893 grams silver, 1,279,833 grams gold, 398,112,545 kilograms copper and 851,048 kilograms molybdenum.

The Bethlehem concentrator milled Valley ore (092ISW012) until its closure in June of 1989.

JERICHO showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 09ISE011
Seven kilometres south

The No. 1 zone was discovered in 1956 and subsequently developed by two adits. The upper adit, located on a low ridge, was driven 269.4 metres at a bearing of 084 degrees. Starting approximately 45.7 metres from the portal, the adit intersects mineralized quartz veins which generally strike west to northwest and dip 65 degrees to the north. The principal sulphides are bornite associated with primary chalcocite, chalcopyrite and seams and disseminations of molybdenite. The vein walls are sheared and strongly altered. From 190 metres to its end, the upper adit intersects the No. 1 zone. The lower adit was driven in a south direction. At 525.8 metres, the 1725 zone was intersected and crosscut for a short distance. The No. 1 zone is about 685 metres from the portal and was drifted on for short distances.

HIGHLAND VALLEY COPPER producer (Porphyry Cu+/-Mo+-Au)
MINFILE 092ISW012
Eight kilometres west-southwest

Highland Valley Copper was created in mid-1986 by bringing together the Highland Valley mining operations of Lornex Mining Corporation Ltd. and Cominco Ltd. into a new single entity, structured as a partnership.

On the south side of the valley was the Lornex mine which started mining in 1972. In 1981, the Lornex concentrator had been expanded to become one of the largest in the industry.

On the north side was Bethlehem Copper (092ISE001) which started mining in 1963. In 1981, this operation was absorbed by Cominco who already owned the Valley orebody (092ISW012) located west of the Lornex pit on the south side of the valley. Mining of the original Bethlehem Copper pits ceased in 1982.

Production from the Lornex mine (092ISW045) was combined with the Valley operations in 1987.

The Highmont mill on the south side of the valley was acquired in 1988 when Highmont Mining Company joined the partnership. This mill had been closed down in 1984 when the Highmont deposit (092ISE013) became uneconomical.

Lornex Mining Corporation Ltd. was wound up at the end of 1988 with the result that Rio Algom Limited, Teck Corporation and Highmont Mining Company obtained direct participation in the cash flow from the partnership.

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

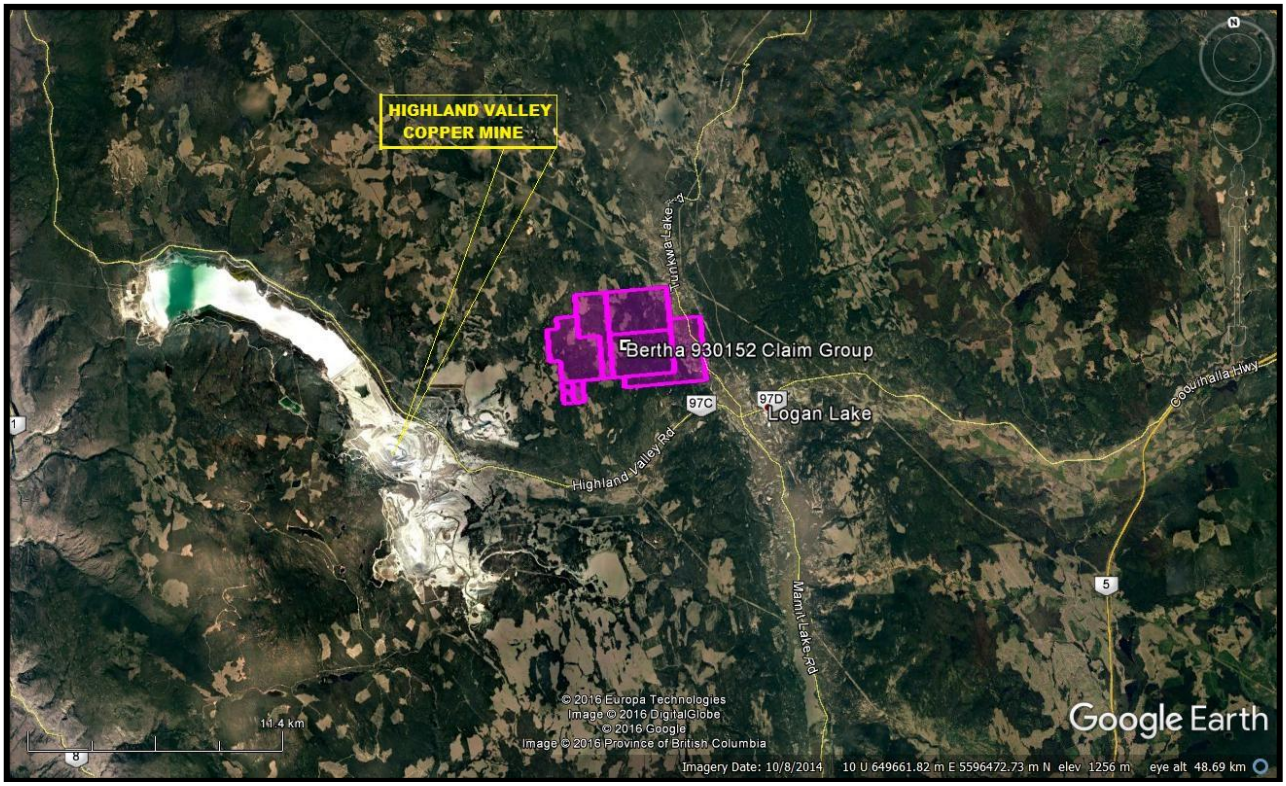
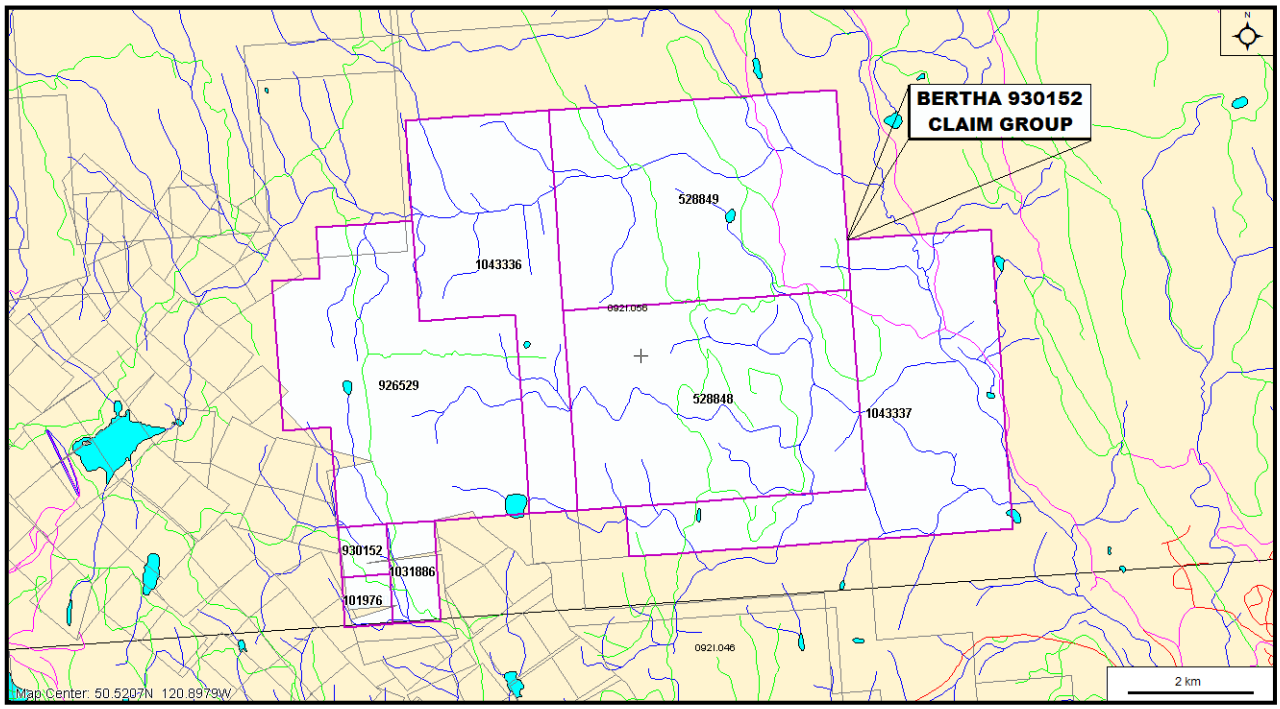


Figure 3. **Claim Map**
(Base map from MapPlace)



History: Property Area *(cont'd)*

Highland Valley Copper *(cont'd)*

In 1995, with Explore B.C. Program support, Highland Valley Copper carried out 197 line kilometres of high-powered induced polarization surveys for very deep penetration, and drilled 1701 metres in 4 holes. This work was done on the Lornex SW Extension, Roscoe Lake and JA zones. No anomalies of merit were detected in Lornex SW Extension, and Roscoe Lake gave only limited encouragement. IP work on the JA zone detected an anomaly extending to the south, well beyond the limits of known mineralization, and another anomaly 2000 by 1500 metres in size at the east end of the grid. Both anomalies warrant drill testing (Explore B.C. Program 95/96 - M80).

At the end of 1996, mine plans called for another 200 metres in depth in the Valley pit to the 2008. In addition, the partnership may consider mining the remaining 120 million tonnes grading 0.33 per cent copper estimated to exist in the Lornex pit (Information Circular 1997-1, page 8).

Highland Valley Copper suspended mining on May 15, 1999; they resumed August 30, 1999.

In September 2005, Highland Valley announced that mine life would be extended by five years to 2013. Very late in the year, Teck Cominco also announced that it is considering building a modern hydrometallurgical refinery on site.

Most ore comes from the Valley pit, augmented by a small amount from the Lornex pit. Following a successful 300,000 tonne bulk sample test, the Highmont East pit, closed since the mid-1980s, was re-opened in the fall of 2005 to take advantage of higher molybdenum prices. In addition, exploration drilling was conducted nearby in the Highmont South area and results are being evaluated.

GETTY SOUTH developed prospect (Porphyry Cu +/- Mo +/- Au)
MINFILE 09INW043
Five kilometres west

The showings were staked prior to 1903 as the Albatross group and were developed by trenches and two short adits. The claims were restaked in 1915 as the Canopus group but no exploration work was reported.

Trojan Exploration acquired the property in 1955 and became Trojan Consolidated Mines Ltd. in 1956. Work from 1955 to 1958 included geophysical surveys, a shaft to 49 metres with 268.5 metres of crosscutting and surface diamond drilling of 8934 metres in 44 holes. The property was under option to Newmont Mining Corporation in 1959 and 3 holes totalling 458 metres were completed. By August 1959, Rio Tinto Canadian Exploration Limited optioned the property and conducted an IP survey and diamond drilled one hole for 103.6 metres.

Trojan resumed operation in 1960 and from 1961 to 1962, diamond drilling was done underground in 14 holes totalling 598.3 metres and on surface 6 holes were completed totalling 580 metres. South Seas Mining Limited purchased 57 claims from Trojan in 1962 and excavated 408.4 metres of crosscuts and drifts in 1963. The Mitsui Mining and Smelting Company, Limited optioned the property in 1964 and 4033.8 metres of diamond drilling was done in 23 holes. South Seas extended the underground workings during 1966-67 by 787.9 metres.

Phelps Dodge Corporation optioned the property in 1968 and carried out 358.7 metres of underground development, 1242.9 metres of surface diamond drilling, 291.4 metres of underground diamond drilling and an IP survey.

History: Property Area *(cont'd)*

Getty South *developed prospect (cont'd)*

The option was dropped later in 1968. Pechiney Development Limited optioned the property and from 1969 to 1970 drilled 2945.4 metres in 18 diamond-drill holes and 588.2 metres in 8 percussion-drill holes.

Leemac Mines Ltd. optioned a 70 per cent interest from South Seas in 1972 and drilled 50 percussion-drill holes totalling 1708.3 metres. The option expired in 1974.

The property changed hands several more times in the 1970s and 1980s with the only work reported being a 1982 magnetometer survey conducted by TRV Minerals Corporation covering this zone and the Krain (Getty North) deposit (092INE038).

Getty Copper Corporation acquired the claims at some point prior to 1995 and resumed exploration on the Getty South in 1996. In 1996, Getty drilled 13 diamond-drill holes totalling 3236 metres. During 1997, the company conducted a 1500 metre bedrock trenching program which was reported to have encountered extensive oxidized mineralization of excellent grade, along with smaller exposures of fresh, high grade, copper sulphide mineralization.

More than 15,000 metres of diamond drilling and 1775 metres of underground development by previous operators has determined an initial deposit of 36 million tonnes of open-pittable oxide and sulphide mineralization grading 0.47 per cent copper.

Included in this deposit is 719,500 tonnes grading 1.41 per cent copper in three zones previously defined within the underground workings. The reserves were estimated by Gower, Thompson and Associates in 1992, and later confirmed by independent consultants Watts, Griffis and McOuat in 1996 (Northern Miner - March 10, 1997 (insert) and Getty Copper Corp. website, http://www.gettycopper.com/projects.html).

Please refer also to the Getty North deposit (092INE038), located 3 kilometres north, for further details and related bibliographic references.

HISTORY: PROPERTY

DANSEY prospect (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE034
Within Tenure 528848

Deerhorn Mines Ltd. held the Witches Brook group of 24 claims in the vicinity of the JB showing in 1956. Noranda Exploration Company Limited held the PG group of 99 claims along and mainly west of Guichon Creek to the north of Witches Brook in 1962. This property was partly a relocation of the claims held by Deerhorn Mines Ltd. Geological, geochemical and geophysical surveys were carried out during 1963. The CL group, apparently staked by C.W. Dansey in 1964, was located partially on ground formerly part of the PG group. North Pacific Mines Limited carried out a program of trenching, soil sampling, magnetometer and geological surveying on the property during 1964. In 1965, North Pacific Mines Ltd. carried out an induced polarization survey which outlined an anomaly about 914 metres long over a width of 244 metres. Other work consisted of trenching, road building and 8 diamond-drill holes totalling 1280 metres. In 1968, an airborne magnetometer survey (202 kilometres) was flown on behalf of North Pacific Mines Ltd. and Comet-Krain Mines Ltd.

History: Property *(cont'd)*

Dansey *prospect (cont'd)*

In 1969, Noranda Exploration Company Limited conducted a soil geochemical survey and induced polarization surveys over the Mike, Bill, Tom and JB claims. In 1974, North Pacific Mines Ltd. conducted percussion drilling in 5 holes totalling 384 metres on the Tom claims.

DAB showing (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE040
Within Tenure 528849

In 1967, an aeromagnetic survey was conducted over some of the Dab claims on behalf of Alwin Mining Company Limited and in 1968-69 a soil geochemical survey (969 samples) was run over 28 kilometres of grid.

BX prospect (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE042
Within Tenure 926529

Previous to 1958, the showing was trenched by B.X. Mining Company. In 1958, the Bob, Star, B.X. and Cow groups of claims were optioned by Noranda Exploration Company Limited and work consisted of a ground electromagnetic survey and geological mapping. Some bulldozer trenching was done on the showing on the B.X. claims and 8 kilometres of road was constructed; the options were dropped at the end of the summer. In 1965, an induced polarization survey (15 kilometres) was completed on the Cow claims on behalf of The Consolidated Mining and Smelting Company of Canada Limited.

In 1969, work done on behalf of Laura Mines Limited on the WJ claims, which covered the BX showing, consisted of 93 kilometres of line cutting, 1567 soil samples, 93 kilometres of ground magnetometer survey, 43 kilometres of induced polarization survey, geological mapping, 4 trenches totalling 152 metres were bulldozed and 9 diamond-drill holes totalling 853 metres were put down.

GEOLOGY: REGIONAL

The Bertha 930152 Claim Group is located on the southern Intermontane Belt of British Columbia on the southern extent of the Quesnel Trench. The central geological features of this region are the Late Triassic island-arc volcanic rocks of the Nicola Group, and Late Triassic mudstone, siltstone and shale clastic sedimentary rocks located to the east, and intrusive granodioritic rocks of the Late Triassic to early Jurassic. The Nicola Group is a succession of Late Triassic island-arc volcanic rocks. The Nicola Group volcanic rocks form part of a 30km to 60km wide northwest-trending belt extending from southern B.C. into the southern Yukon. This belt is enclosed by older rocks and intruded by batholiths and smaller intrusive rocks. Major batholiths in the area of the Bertha 930152 Claim Group include the Guichon Creek Batholith to the west, the Wild Horse Batholith to the east, and the Iron Mask Batholith to the north northeast.

The Guichon Creek batholith is a large, composite intrusion with a surface area of about 1,000 square kilometers. A cluster of nine major porphyry copper deposits lie within a 15 square kilometer zone in the center of the batholith. The Bertha 930152 Claim Group is situated partly on the eastern contact of the Guichon Creek Batholith and predominantly on the Nicola volcanics within 14 kilometres east of the Highland Valley Copper Mine.

Geology: Regional *(cont'd)*

The batholith is a semi-concordant composite intrusive that is elliptical and elongated slightly west of north. A central, steeply plunging root or feeder zone is inferred under Highland Valley, and the major deposits lie around the projection of the feeder zone to the surface.

The batholith has intruded and metamorphosed island-arc volcanic and associated sedimentary rocks of the Nicola Group, and a metamorphic halo up to 500 meters wide is developed adjacent to the contact. Rocks along the edge of the batholith are older and more mafic, and successive phases moving inward toward the core are younger and more felsic.

Although contacts can be sharp, they are generally gradational and chilled contacts are not common. Variations in the batholiths geochemistry indicate local areas of assimilated country rock in the border zone and roof pendants in the intrusion. Outcrop areas have inclusions of amphibolite and "granitized" metamorphic rocks and compositional variations.

Two younger volcanic-dominated successions are important in the area. First, a northwest trending belt of Cretaceous continental volcanic and sedimentary rocks of the Spences Bridge Group unconformably overlie both the Nicola Group country rock and intrusive rocks along the southwest flank of the batholith. Distribution of the Spences Bridge Group rocks was locally controlled by reactivation of older faults that were important mineralization conduits in the batholith, such as the Lornex fault. Second, continental volcanic and sedimentary rocks of the Tertiary Kamloops Group cover extensive areas of the batholith and also overlie Triassic and Jurassic rocks from north of Highland Valley to the Thompson River.

GEOLOGY: PROPERTY AREA

The geology of some MINFILE reported occurrences, prospects, and past producers peripheral to the Bertha 930152 Claim Group is reported as follows. The distance to the Minfile locations is relative to the Bertha 930152 Claim Group.

BETHLEHEM *past producer (Porphyry Cu+/-Mo+-Au)*
MINFILE 092ISW001
Seven kilometres west

The Bethlehem property lies within the Early Jurassic-Late Triassic Guichon Creek batholith and straddles an intrusive contact where younger Bethlehem phase rocks form an irregular embayment in older Guichon variety rocks. The Bethlehem phase is medium-grained granodiorite to quartz diorite which ranges from equigranular to hornblende-biotite porphyry. The Guichon variety is medium-grained granodiorite. Igneous breccias are postulated to have been forcefully emplaced.

Clasts up to 20 centimetres in diameter are subrounded and sit in a generally compact, but sometimes vuggy matrix. The granodiorites and breccias are intruded by north trending, steeply dipping dykes which are compositionally similar to the enclosing rocks; contacts are chilled. Most of the dykes are dacite porphyry and range in width from less than 1 metre to 60 metres.

The Bethlehem ore deposits (East Jersey (092ISE002), Huestis (092ISE004), Iona (092ISE006), and Snowstorm (092ISE005) are controlled by north trending faults and are localized in zones of closely-spaced fractures. Mineralization is concentrated in breccia bodies, faults and highly fractured areas. The Jersey fault cuts through the centre of the Jersey pit.

Hydrothermal alteration is restricted to the immediate area of the ore zones. The distribution of secondary biotite defines an inner potassic zone, sericite with kaolinite and montmorillonite define an intermediate phyllic zone, and epidote defines a peripheral propylitic zone.

Geology: Property *(cont'd)*

Bethlehem *past producer (cont'd)*

There is an outer halo of chloritized mafic minerals. Calcite, zeolite and quartz veining and vug-filling is common.

Metallic mineral zoning is very similar to alteration patterns. Bornite and chalcopyrite occur in the hydrothermal biotite zone, specularite in the epidote zone and minor pyrite in the outer halo. Molybdenite, chalcocite and magnetite occur in minor amounts. Malachite, azurite, chrysocolla, cuprite, native copper, hematite, goethite and manganese oxides occur to shallow depths. An age date from a sample of a mixture of magmatic and hydrothermal biotite from the Iona ore zone (092ISE006) returned 199 Ma +/- 8 Ma (Canadian Institute of Mining and Metallurgy Special Volume 15).

BETHLEHEM COPPER-SPUD LAKE showing (Porphyry Cu+/-Mo+-Au)
MINFILE 092ISE008
Two kilometres south

The property lies in the Lower Jurassic Guichon Creek batholith. The Spud Lake area is underlain primarily by medium-grained Guichon variety quartz diorite and granodiorite. This unit is cut by north trending dacite porphyry dykes up to 60 metres wide. To the west, at the Bethlehem mine (092ISE001), Guichon rocks have been intruded by Bethlehem phase granodiorite. Mineralization is controlled by intrusive contacts, north trending faults and closely spaced fractures.

Alteration is generally weak and consists of chlorite, epidote and sericite. Minor fault zones have sericite-kaolinite gouges. Quartz, calcite and zeolite (laumontite, heulandite) veining occurs sporadically. Oxidation consists of malachite and limonite.

FORD past producer *(*Volcanogenic)
MINFILE 092ISE009
Seven kilometres east

The Ford occurrence occupies the area north of Meadow Creek, which is underlain by dark grey to purplish red porphyritic amygdaloidal flows of the Upper Triassic Nicola Group. The lavas are typically amygdaloidal and vary in composition from olivine basalt to augite andesitic basalt.

Alteration consists of albitization of plagioclase and propylitization of pyroxene to epidote, zoisite and calcite, with or without chlorite. The rock is locally shot through with sericite and epidote. Flows averaging 1.8 metres thick strike 050 degrees and dip 30 degrees northeast.

RM showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 09INE011
Two kilometres north

The RM property lies near the northwesterly trending contact between Upper Triassic Nicola Group volcanic rocks in the east from Late Triassic-Middle Jurassic Guichon Creek batholith intrusive rocks to the west.

JERICHO showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 09ISE011
Seven kilometres south

Geology: Property *(cont'd)*

Jericho *showing (cont'd)*

The Jericho adit zone is situated on the eastern flank of the Lower Jurassic Guichon Creek batholith. The property is underlain by Guichon variety rocks of the older Highland Valley phase of the batholith. These rocks are medium to coarse-grained, cream grey-pink coloured granodiorite to quartz diorite, rich in biotite and plagioclase. Foliation strikes 305 degrees. Intense sericite, chlorite and clay alteration is associated with east-northeast striking and north dipping fault zones which host mineralized quartz veins.

HIGHLAND VALLEY COPPER producer (Porphyry Cu+/-Mo+-Au)
MINFILE 092ISW012
Eight kilometres west-southwest

The Valley deposit lies within the Late Triassic to Early Jurassic Guichon Creek batholith and is hosted by Bethsaida phase porphyritic quartz monzonite and granodiorite. Feldspar porphyry and quartz feldspar porphyry dykes 0.6 to 35 metres wide dip steeply eastward in the western and central areas, and northward in the southern area of the deposit. These dykes are cut by mineralized fractures and quartz veinlets, and have been dated at 204 Ma +/- 4 Ma.

The Bethsaida granodiorite is also intruded by aplite dykes up to 30 centimetres wide, tan-coloured felsite dykes up to 4.5 metres wide, and three types of lamprophyre dykes (spessartite, hornblende vogesite, vogesite).

The most prominent structural features are the north trending, west dipping Lornex fault and the east trending Highland Valley fault. Faults and fractures in the deposit comprise four main sets. Quartz veinlets are subparallel to two of the earlier formed fault and fracture sets.

Silicic, potassic, phyllic, argillic and propylitic alteration are intimately associated. Stockworks of quartz veinlets 1 to 2 centimetres in width are common.

Vuggy veinlets have envelopes of medium-grained sericite and/or potassic feldspar, and contain minor amounts of sericite, plagioclase, potassium feldspar, calcite, hematite, bornite, chalcopyrite, molybdenite, digenite and covellite.

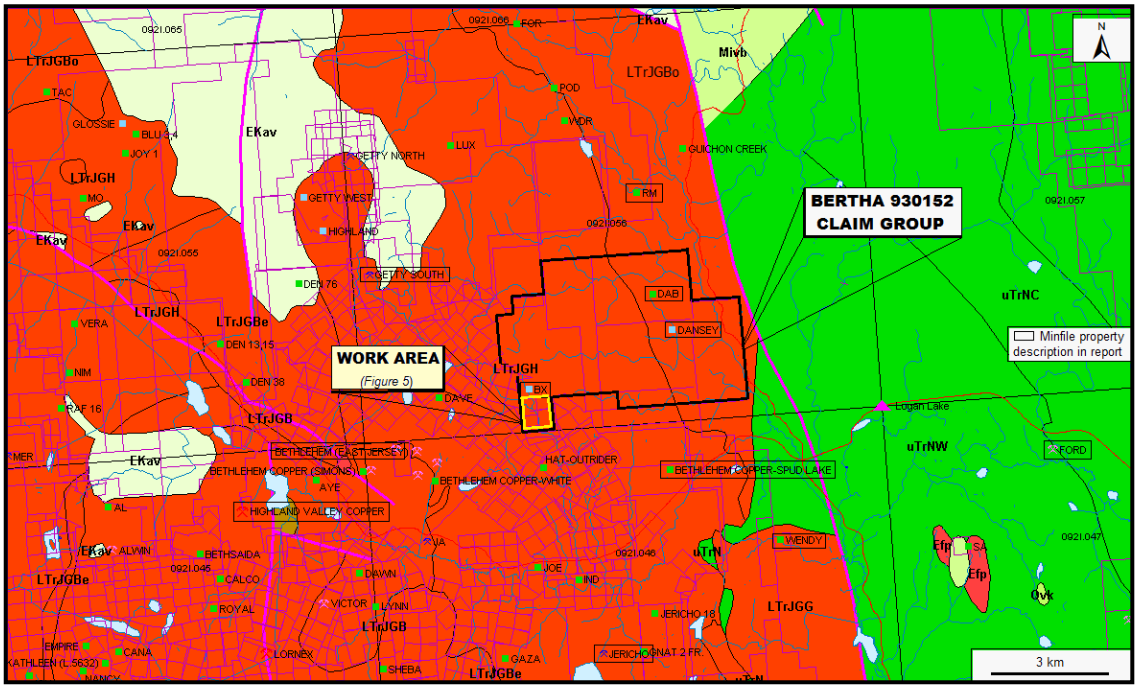
These veinlets are moderately abundant within the 0.3 per cent copper isopleth. An area of well-developed barren quartz veinlets, generally 0.5 to 1.3 millimetres wide, without alteration envelopes, occurs in the southeastern part of the deposit.

In the west-central part of the deposit, potassium feldspar is associated with vein sericite in some replacement zones, as veinlet envelopes along fractures, and disseminated in quartz veinlets. Hydrothermal biotite occurs in small amounts. Flaky sericite and quartz, both as replacement zones and as envelopes around quartz veinlets, constitute the most common type of alteration associated with copper mineralization.

Strong phyllic alteration coincides with the 0.5 per cent copper isopleth. Phyllic alteration is closely associated with pervasive argillization, which is strongest where fractures are most closely-spaced. Feldspars are altered to sericite, kaolinite, quartz and calcite. The phyllic-argillic zone grades outward to a peripheral zone of weak to moderate propylitization, characterized by clay, sericite, epidote, clinozoisite and calcite replacing plagioclase, and chlorite and epidote replacing biotite.

The age of hydrothermal alteration is approximately 191 Ma.

Figure 4. **Geology, Claim, Index & Minfile**
(Base Map from MapPlace)



GEOLOGY MAP LEGEND

Mivb
Miocene-unnamed
Basaltic volcanic rocks

EKav
Eocene-Kamloops Group
Undivided volcanic rocks

EPrb
Eocene-Penticton Group
Andesitic volcanic rocks

Upper Triassic-Nicola Group
uTrNW
Western Volcanic Facies
undivided volcanic rocks
uTrNc
Central Volcanic Facies
andesitic volcanic rocks
uTrNE
Eastern Volcanic Facies
basaltic volcanic rocks
uTrN
undivided volcanic rocks

Late Triassic to Early Jurassic
Guichon Creek Batholith
LTrJGBe – Bethlehem Phase
granodioritic intrusive rocks
LTrJGB – Bethsaida Phase
quartz monzonitic intrusive rocks
LTrJGH – Highland Valley Phase
granodioritic intrusive rocks
LTrJGG – Gump Lake Phase
granodioritic intrusive rocks
LTrJGBo – Border Phase
quartz dioritic intrusive rocks

Geology: Property Area *(cont'd)*

Highland Valley Copper *(cont'd)*

At the Valley deposit, gypsum is interpreted to be secondary and post-ore. It is commonly fibrous and white to orange but locally it forms large platy crystals or may be massive. Anhydrite, which is also present, provides indirect evidence for the secondary nature of the gypsum. It is apparently the same age as and associated with sericitic and potassic alteration. Quartz-gypsum veins and quartz-potash feldspar veins in which gypsum fills interstices provide more direct evidence for its secondary nature. Gypsum is believed to have formed at the expense of anhydrite which was deposited from the ore-forming fluids. Gypsum veins are common in the lower portion of the orebody (Open File 1991-15).

Sulphides occur chiefly as disseminations in quartz veinlets, and in phyllic (bornite) and potassic (chalcopyrite) alteration zones. Mineralization includes bornite and chalcopyrite, with minor digenite, covellite, pyrite, pyrrhotite, molybdenite, sphalerite and galena. The oxide zone averages 4.5 metres in thickness, and contains limonite, malachite, pyrolusite, digenite, native copper, and tenorite(?).

GETTY SOUTH developed prospect (Porphyry Cu +/- Mo +/- Au)
MINFILE 09INW043
Five kilometres west

The Getty South deposit lies on the southern boundary of an extensive area of post-mineral cover consisting of continental volcanic and interbedded sedimentary rocks of the Eocene Kamloops Group which overlie plutonic rocks of the Late Triassic-Early Jurassic Guichon Creek batholith.

The deposit occurs within a broad northwest trending zone which is host to a number of mineralized porphyry systems including the Getty North deposit (092INE038), 3 kilometres to the north, and the Bethlehem mine (092ISE001, approximately 5 kilometres south). Typically, mineralization occurs within quartz diorites of the Highland Valley phase (Guichon variety) of the Guichon Creek batholith, and within younger anastomosing dikes and small stocks.

The dikes and stocks resemble quartz diorites of the Bethlehem phase of the batholith. The Kamloops Group rocks cover the northern half of the mineralized zone, and have protected an older oxidized cap as much as 100 metres thick.

WENDY past producer *(*Volcanogenic)
MINFILE 092ISE154
Four kilometres south

The Wendy showing is situated along the eastern edge of the Guichon Creek batholith where Lower Jurassic quartz diorites and granodiorites have intruded Upper Triassic Nicola Group intermediate volcanics and sediments. These rocks were subsequently intruded by Gump Lake phase granodiorite to quartz monzonite.

The eastern portion of the property is underlain by hornfels, hornfelsed schists and granitic gneisses which have a rough north trending foliation of variable dip. The metamorphosed rocks are intruded by leucocratic, fine to medium-grained granitic dykes which increase in abundance to the west until the hornfelsic units grade into granitic units. The southwestern part of the property is underlain by fine to medium-grained diorite or granodiorite and coarse grey granite.

GEOLOGY: PROPERTY

As indicated by the BC government supported MapPlace geological maps, the Claim Group is underlain by of the Guichon Creek Batholith with granodioritic rocks of the Highland Valley Phase (LTrJGH} in the west and quartz dioritic rocks of the Border Phase (LTrJGBo) in the east.

DANSEY prospect (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE034
Within Tenure 528848

The Dansey property is located at the eastern edge of the Late Triassic-Middle Jurassic Guichon Creek batholith and overlies the contact between Hybrid phase and Guichon variety rocks. Three main rock types are evident and comprise diorite, quartz diorite and granodiorite. Fracturing and shearing are abundant in the diorite and quartz diorite but markedly less in the granodiorite.

DAB showing (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE040
Within Tenure 528849

The Dab property lies close to the northwest trending contact between Upper Triassic Nicola Group volcanics to the east from intrusive rocks of the Late Triassic-Middle Jurassic Guichon Creek batholith to the west. In this area Guichon rocks appear to be quartz diorite of the Hybrid phase.

BX prospect (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE042
Within Tenure 926529

The BX showing area is underlain by quartz diorite (Guichon variety) of the Late Triassic-Middle Jurassic Guichon Creek batholith which in places are cut by finer dike rocks correlated with the Witches Brook phase of the batholith. A long, north trending, altered shear zone has been exposed by trenching on the original BX claims. The shear zone is at least 762 metres long and 122 metres wide. The altered rock is chlorite rich and the shear zone is surrounded by partially brecciated, sheared, weathered or decomposed quartz diorite.

MINERALIZATION: PROPERTY AREA

The mineralization on MINFILE reported occurrences, prospects, and past producers peripheral to the Bertha 930152 Claim Group is reported as follows. The distance to the Minfile locations is relative to the Bertha 930152 Claim Group.

BETHLEHEM *past producer (Porphyry Cu+/-Mo+-Au)*
MINFILE 092ISW001
Seven kilometres west

The Jersey orebody hosts disseminated mineralization and occurs in an area of relatively evenly distributed and variously oriented pervasive fracturing. Irregular, discontinuous quartz veins also hosts mineralization. Production from the Jersey pit began in 1964 and from the Jersey pit extension in 1977.

Reserves for the Jersey deposit are 22.9 million tonnes of 0.40 per cent copper. Total reserves for the Bethlehem deposits (Jersey, East Jersey and Iona) are 43.5 million tonnes (plus 6 million tonnes oxide) grading 0.40 per cent copper, minor molybdenum and 0.013 grams per tonne gold (CIM Special Volume 46, page 175).

Mineralization: Property Area*(cont'd)*

BETHLEHEM COPPER-SPUD LAKE showing (Porphyry Cu+/-Mo+-Au)
MINFILE 092ISE008
Two kilometres south

Mineralization is spotty and consists of disseminations and veinlets of chalcopyrite, bornite and pyrite. Specularite and magnetite are also present in small amounts.

FORD past producer *(*Volcanogenic)
MINFILE 092ISE009
Seven kilometres east

The original open cuts (pre-1915) expose copper carbonate ore with occasional flecks of bornite and chalcocite along fracture planes in amygdaloidal flows. The adit follows a mineralized shear zone striking 040 degrees and intersects an east trending set of faults.

Chalcocite(?), bornite and some malachite occur in amygdules and associated veins in flow tops. Gangue minerals include chlorite, sericite, clinozoisite, zeolite and calcite. Some mineralization also occurs in calcite veins, calcite-epidote-sericite veins, sericite-zoisite veins and chlorite veins. Carbonate-zeolite veins are barren.

Drill core assays range from 0.22 to 2.8 per cent copper over an interval of less than one metre (Minister of Mines Annual Report 1973).

RM showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 09INE011
Two kilometres north

Disseminated copper mineralization (inferred to be chalcopyrite) occurs in altered quartz diorite of the Hybrid phase of the Guichon Creek batholith.

JERICHO showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 09ISE011
Seven kilometres south

Starting approximately 45.7 metres from the portal, the adit intersects mineralized quartz veins which generally strike west to northwest and dip 65 degrees to the north. The principal sulphides are bornite associated with primary chalcocite, chalcopyrite and seams and disseminations of molybdenite. The vein walls are sheared and strongly altered.

Approximate (indicated) reserves are 272,130 tonnes grading 1.0 per cent copper (Highmont Mining Corporation Annual Report 1977).

HIGHLAND VALLEY COPPER producer (Porphyry Cu+/-Mo+-Au)
MINFILE 092ISW012
Eight kilometres west-southwest

Highland Valley Copper operates two distinct mines, the Valley mine and the Lornex mine, and between the two has measured and indicated ore reserves of 761 million tonnes of 0.408 per cent copper and 0.0072 molybdenum.

The ore reserves of each mine are: Valley mine - 627 million tonnes at 0.418 per cent copper and 0.0056 per cent molybdenum; Lornex mine - 135 million tonnes at 0.364 per cent copper and 0.0144 per cent molybdenum.

Mineralization: Property Area*(cont'd)*

GETTY SOUTH developed prospect (Porphyry Cu +/- Mo +/- Au)
MINFILE 09INW043
Five kilometres west

This mineralized zone is characterized by numerous subparallel northwest trending porphyry dikes, as well as by prominent fracture-related, but non-pervasive, chlorite-epidote-chalcopyrite +/- pyrite +/- bornite hydrothermal vein and fracture selvage assemblages. Smaller zones of pervasive chlorite-clay alteration, some containing strong chalcopyrite mineralization, occur frequently at the margins of porphyry dikes.

The Getty South deposit, previously known as the Trojan or South Seas deposit, occurs within a breccia zone just east of a major, north striking regional fault. The breccia-hosted deposit is elliptical in shape and measures 575 by 550 metres. The deposit is hosted in Guichon variety quartz diorite, intruded by dacite and quartz diorite porphyritic dikes, and is cut by widespread faulting. The breccia consists of fragments of quartz diorite and feldspar porphyry set in a matrix of finely broken rock, specular hematite, tourmaline, brown biotite, quartz and calcite. Chalcopyrite occurs as stringers and coarse blebs in the breccia matrix. Bornite, native copper, malachite, chrysocolla, azurite and tenorite have also been reported.

WENDY past producer *(*Volcanogenic)
MINFILE 092ISE154
Four kilometres south

Minor chalcopyrite and malachite occur as narrow veins or along joint planes and as fine disseminations in the intrusive rocks.

MINERALIZATION: PROPERTY

The mineralization on the mineral MINFILE reported occurrences, prospects, and past producers within the Bertha 930152 Claim Group is reported as follows

DANSEY prospect (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE034
Within Tenure 528848

Mineralization on the Dansey property is associated with diorite and quartz diorite. Most of the mineralization occurs along fractures but the majority of it is associated with a second group of fractures that strike from 040 to 080 degrees.

The main minerals include chalcopyrite and pyrite, with minor amounts of molybdenite, specularite, chalcocite and bornite. Malachite, azurite and chrysocolla occur as secondary minerals. Areas of moderate copper-molybdenum mineralization (>0.1 per cent copper) occur near the contact between diorite and quartz diorite with weak zones of copper-molybdenum mineralization scattered throughout the diorite.

Trenching has exposed disseminations and blebs of chalcopyrite, pyrite, bornite, hematite, magnetite and molybdenite mineralization in and adjacent to several northeast faults and shear zones in quartz diorite. The faults and shears mostly dip northwest at moderate to high angles. The shears are characterized by intensely chloritized and sericitized quartz diorite and vary from 1.5 to 9 metres wide. Near the shears are random fractured zones with pyrite and minor chalcopyrite on fracture planes.

Mineralization: Property *(cont'd)*

DAB showing (Porphyry Cu+/-Mo+-Au)
MINFILE 092INE040
Within Tenure 528849

Very low grade copper mineralization (inferred to be disseminated chalcopyrite) occurs in mafic intrusive rocks (Nicola?). The mineralization was found by drilling but is not reported in assessment reports (W.J. McMillan, 1970).

BX showing *(*Porphyry Cu +/- Mo +/- Au)
MINFILE 092ISE042
Within Tenure 926529

Mineralization is not obviously related to the sericitic and limonitic alteration of the aplite and the granodiorite. Chalcopyrite occurs as disseminations in relatively fresh quartzose or biotite- rich zones in the granodiorite, as disseminations in biotite aplite, and in veins or pockets with quartz, alone or with pyrite, potassium feldspar or epidote.

Some veins parallel foliation, others dip gently. A chip sample across a 75 centimetre veined, rusty mineralized zone assayed 0.35 per cent copper with traces of gold and silver (Geology, Exploration and Mining in British Columbia 1974). Some molybdenite was reported when the showing was first discovered (1915).

EXPLORATION PROGRAM

Structural Analysis

a) Purpose

The purpose of the structural analysis was to delineate any area of relative 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 should 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 expression of sub-surface mineralization that originated from a potentially developed mineral resource. 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 DEM image hillshade map of Tenures 930152, 1019760, and 1031886 by viewing of the map and marking the lineaments as indicated structures thereon. A total of 52 lineaments were marked (*Figure 5*), compiled into a 10 degree class interval, and plotted as a rose diagram as indicated on *Figure 6.*

Structural Analysis *(cont'd)*

Figure 5. **Indicated Lineaments on Tenure 930152**

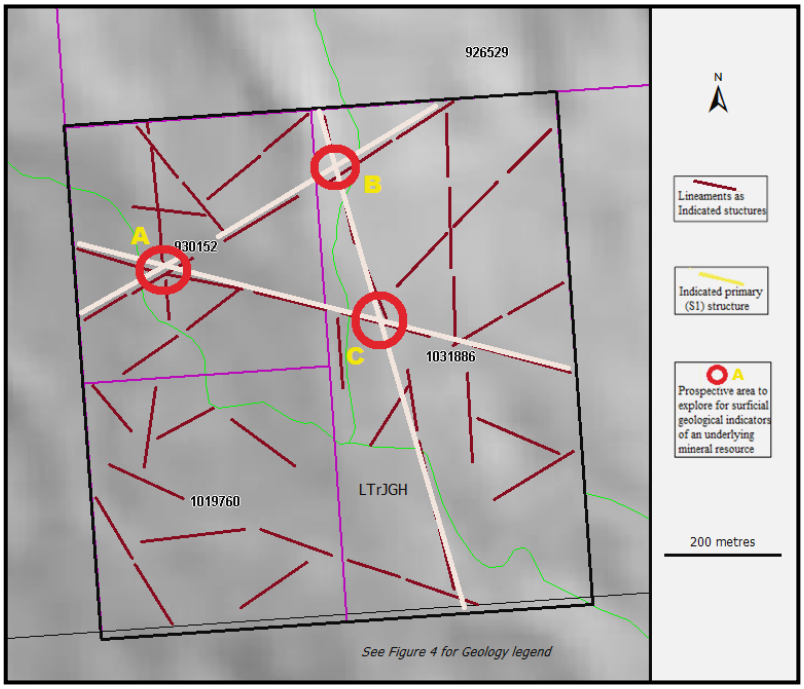
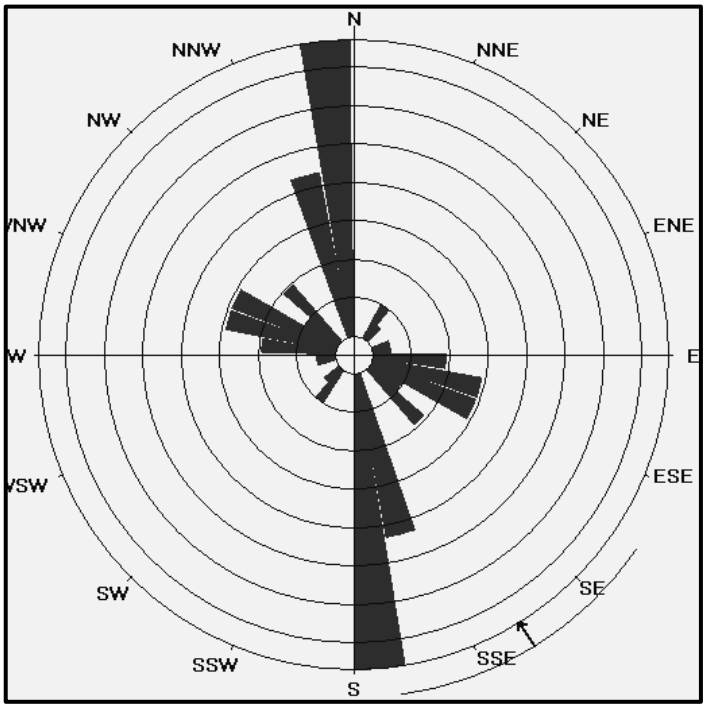


Figure 6. **Rose Diagram from lineaments of Tenure 930152**



STATISTICS

Axial (non-polar) data
No. of Data = 52
Sector angle = 10°
Scale: tick interval = 4% [2.1 data]
Maximum = 30.8% [16 data]
Mean Resultant dir'n = 148-328
[Approx. 95% Confidence interval = ±23.7°]
(valid only for unimodal data)

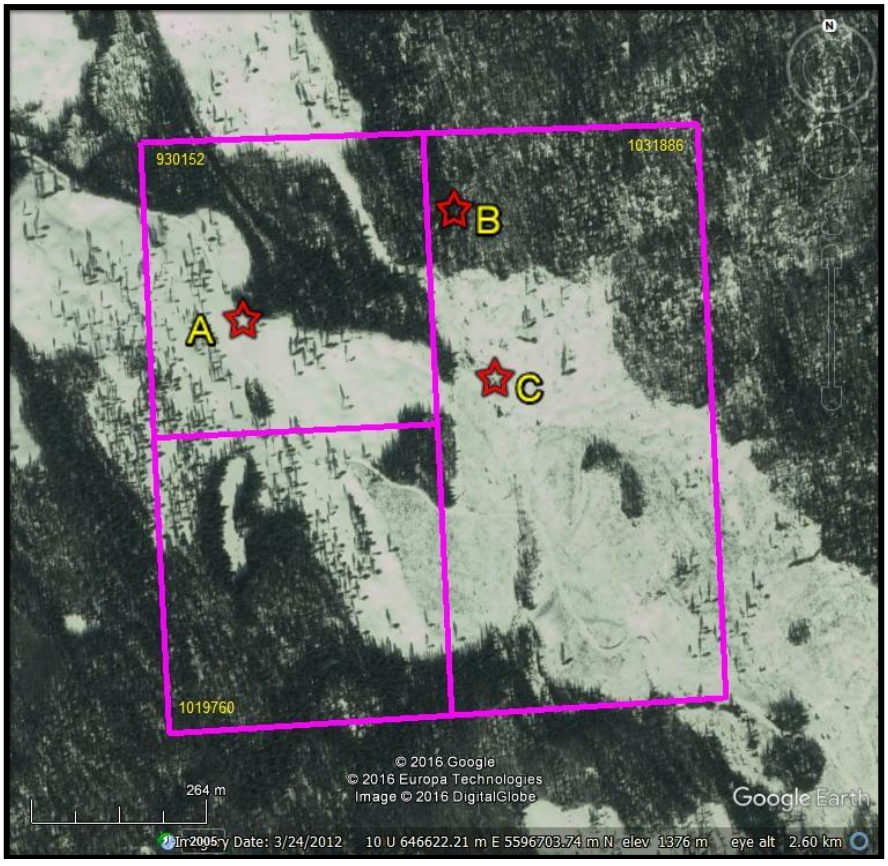
Mean Resultant dir'n = 148.2 - 328.2
Circ.Median = not calculated
Circ.Mean Dev.about median = not calculated
(Not calculated if too many data, or data are
axial (non-polar), and too coarsely grouped
Circ. Variance = 0.21
Circular Std.Dev. = 39.82°
Circ. Dispersion = 2.19
Circ.Std Error = 0.2054
Circ.Skewness = 2.82
Circ.Kurtosis = -13.33
kappa = 0.82
(von Mises concentration param. estimate)

Resultant length = 19.79
Mean Resultant length = 0.3806

'Mean' Moments: Cbar = 0.1692; Sbar = -0.341
'Full' trig. sums: SumCos = 8.7964; Sbar = -17.7303
Mean resultant of doubled angles = 0.3644
Mean direction of doubled angles = 001

(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'

Figure 7. **Cross structural locations on Tenure 930152**
(Base Map: Google Earth)



Structural Analysis *(cont'd)*

Table II. **Approximate UTM locations of cross-structures**
(UTM-10NAD 83)

Location	UTM East	UTM North	Elevation
A	646,287	5,596,910	1,402
B	646,644	5,597,060	1,388
C	646,705	5,596,805	1,434

c) Results

Three cross-structural locations, "A", "B", & "C" were delineated from indicated major northerly, northeasterly, and northwesterly trending structure. The cross-structure is located within quartz dioritic rocks of the Border Phase Guichon Creek Batholith.

Magnetometer Survey

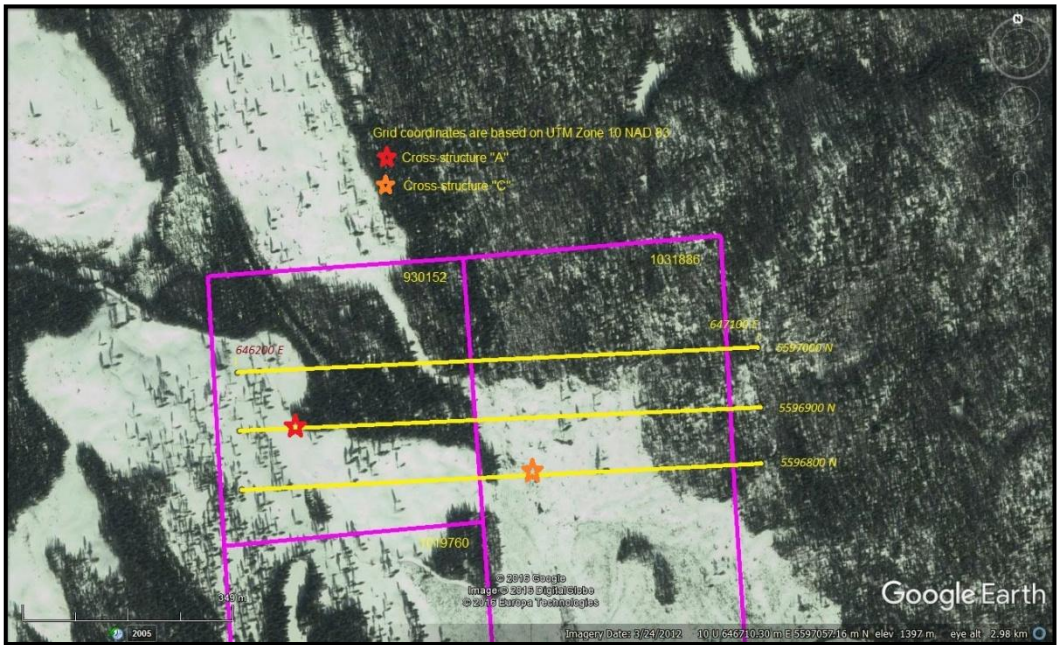
a) Instrumentation

A Scintrex MF 2 Model magnetometer was used in the survey which was performed by Christopher Delorme, an experienced and knowledgeable operator who has completed magnetometer surveys for over 20 years.

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 is a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

Figure 8. **Magnetometer Grid Index Map**
(Base from MapPlace)



Magnetometer Survey *(cont'd)*

c) Survey Procedure

From UTM location 5,597,000N 646,200E, a southerly base line was established with two more stations at 5,596,900N and 5,596,800N. From each of these main stations magnetometer readings were taken at 25 metre intervals westerly for one kilometer to 647,100E. Magnetometer values are total intensity and relative. Diurnal variation was corrected by taking repeated readings at a base point throughout the day.
The grid stations were located by a GPS instrument. Line kilometres of magnetometer survey completed was 2.7. The field data is reported herein in Appendix I.

d) Data Reduction

The field results were initially input to an Exel spreadsheet whereupon a Surfer 31 program was utilized to create maps from the data results. The field results are included as Appendix I.

e) Results
The outstanding results from the magnetometer survey are two anomalous magnetometer high's (mag HI) and one anomalous magnetometer low (mag LO).

One central anomalous mag HI is up to 50 metres wide, open-ended to the north, in an indicated northerly trend, with the approximate location of cross-structure "C" within a background area at the general southerly projection.

The second anomalous mag HI is open-ended at the northeast corner of the 300 metre by 900 metre survey area with an indicated general northeasterly trend.

An anomalous mag LO is located within a general 100 metre wide mag LO which is open-ended to the north, south, and west at the western portion of the survey area.

Magnetometer Survey *(cont'd)*

Figure 9. **Magnetometer Survey Data**

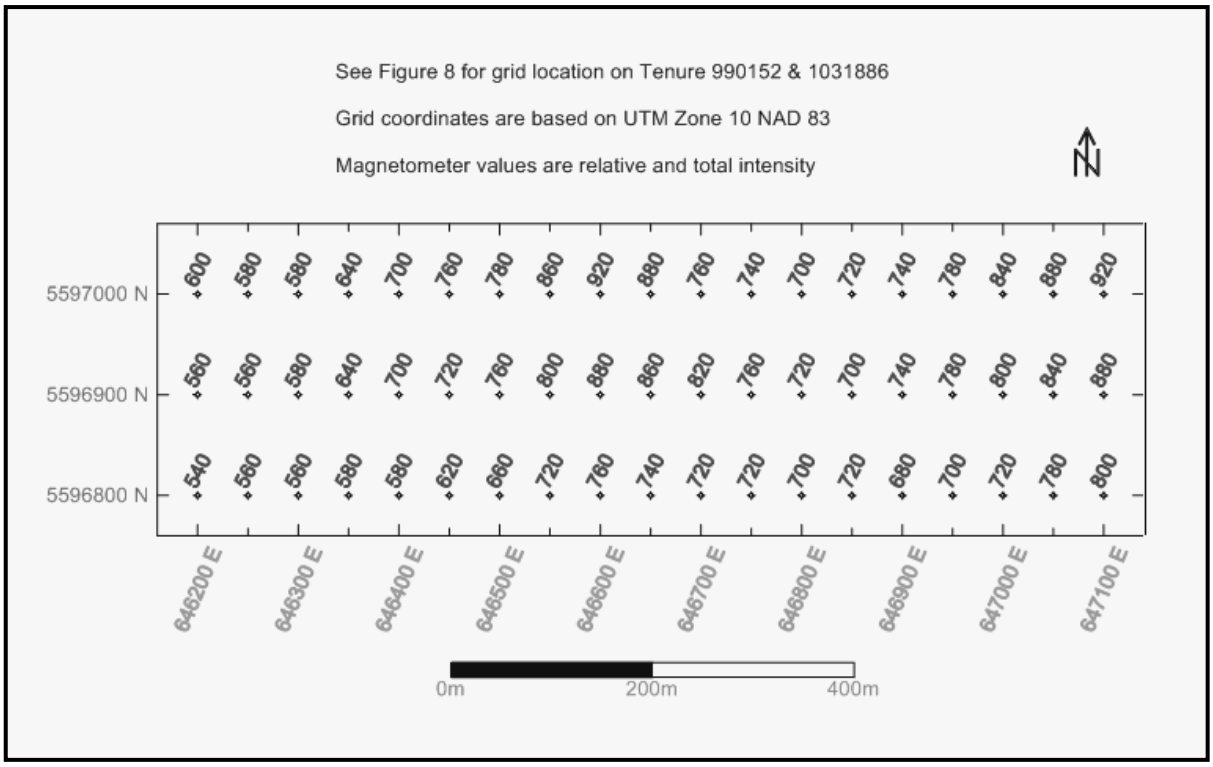


Figure 10. **Magnetometer Survey Data Contoured**

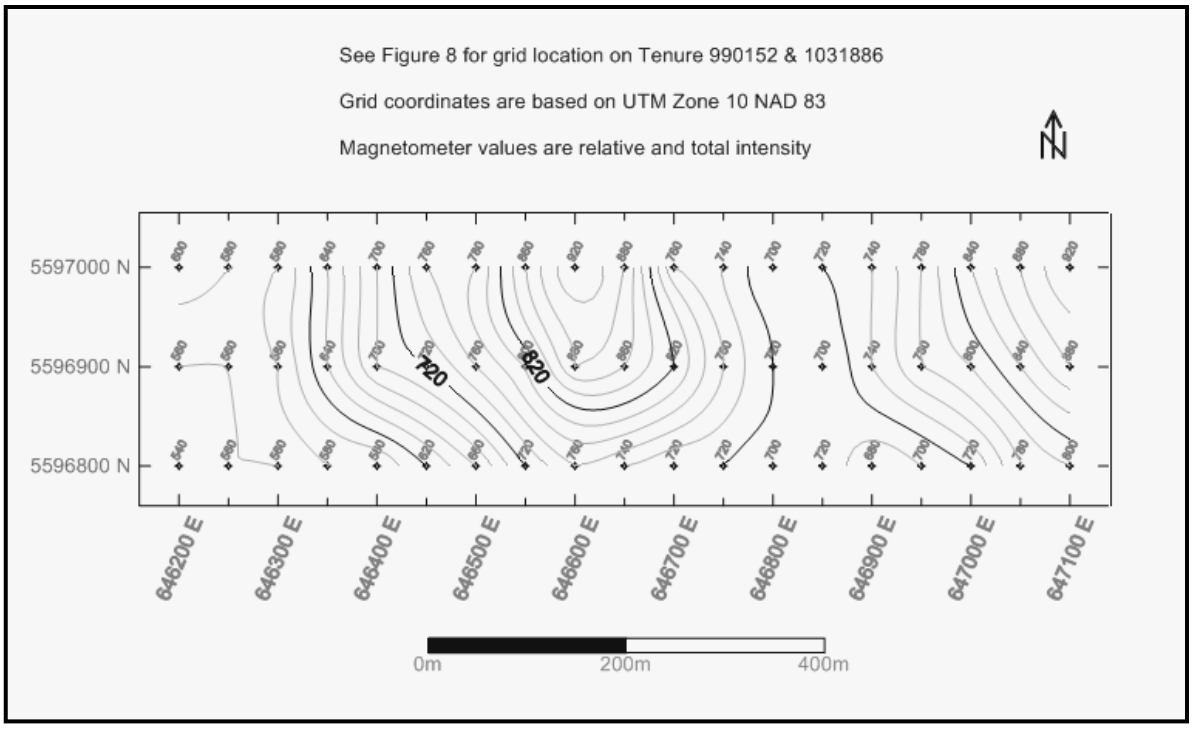
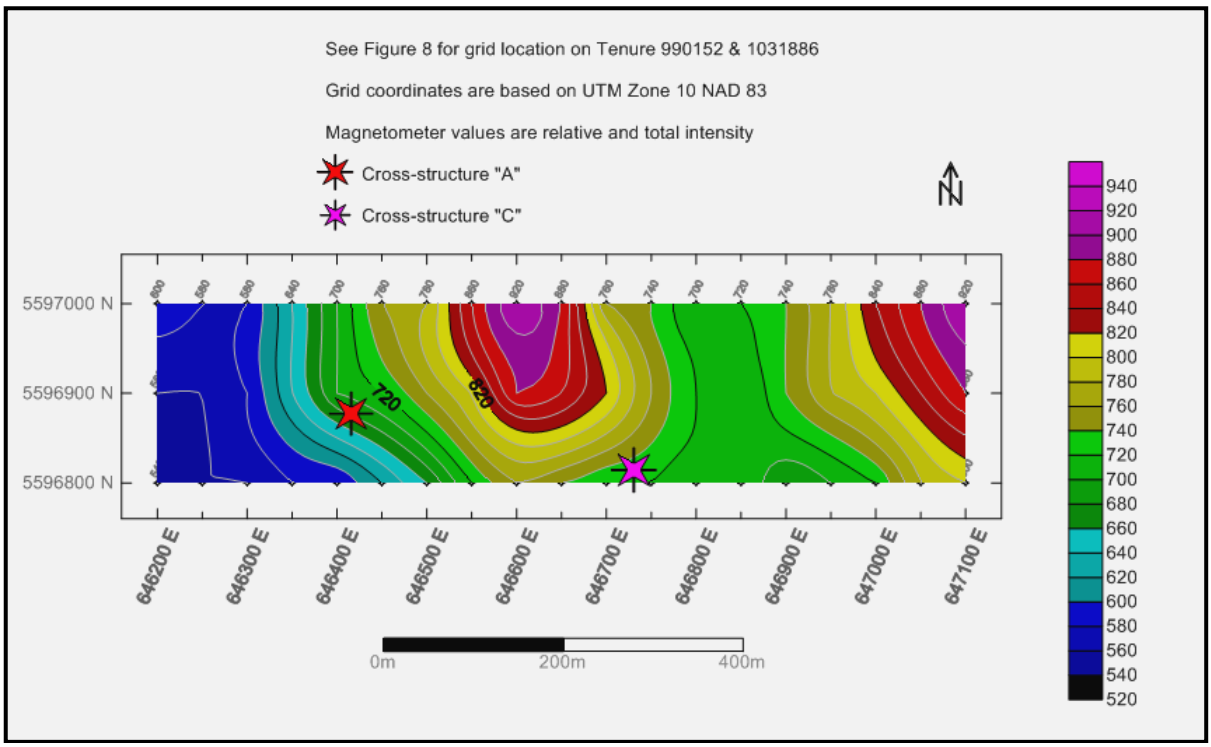


Figure 11. **Magnetometer Survey Data Colour Contoured**



INTERPRETATION and CONCLUSIONS

The three cross-structures delineated from indicated major northerly, northeasterly, and northwesterly trending structure within the Guichon Creek Batholith would be the prime prospective area to explore for surficial geological indicators of a potential mineral resource for reasons as detailed in the Structural Analysis section of this report.

Structures are the key to mineral controlling resources at major mineral deposits within the Guichon Creek Batholith where structures are the main mineral controlling geological aspect to a mineral resource. At the Bethlehem Copper-Spud Lake mineral showing (Minfile 092ISE008) north trending faults and closely spaced fractures control the mineralization; at the Bethlehem past producer (Minfile 092ISW001) mineralization is concentrated in breccia bodies, faults and highly fractured areas related to major structures.

As for cross-structural mineralization controls, perhaps the most classic example is at the Highland Valley Copper (Minfile 092ISW012) and the Lornex mineral deposits where the intersection of the major northerly trending Lornex fault and west-northwesterly trending Highland Valley fault created a central intensive and expansive breccia zone which hosted a mineral deposit that was subsequently displaced by five to six kilometres by the right lateral Lornex Fault..

Some other mineral properties with controlling structural/cross-structural mineralization within the Guichon Batholith or within the Nicola volcanics are reported in the copied Minfile descriptions as set out in this report.

Interpretation and Conclusions *(cont'd)*

As for the results of the magnetometer (mag) survey, should an anomalous mag indicate a hydrothermally, and/or mineralized structure as indicated by some of the major structures of the Highland Valley, namely the Lornex fault, the general open-ended mag LO with the inclusive anomalous mag LO, may indicate a vague cross-structure that was not apparent in the structural analysis.

The two relative anomalous mag HI's as determined from the magnetometer survey, may indicate the relative maximum location of intrusion-related Au pyrrhotite veins and/or associated polymetallic Ag-Pb-Zn+/-Au; Au-quartz veins which are often occur peripheral to a mineralized porphyry.

Accordingly, the area of the three structural intersections, which would include the two anomalous mag HI locations, should be explored for surficial geological indicators of a potential mineral resource. The approximate UTM locations of the intersections are shown in Table II. The mag LO area is also a priority area for exploration.

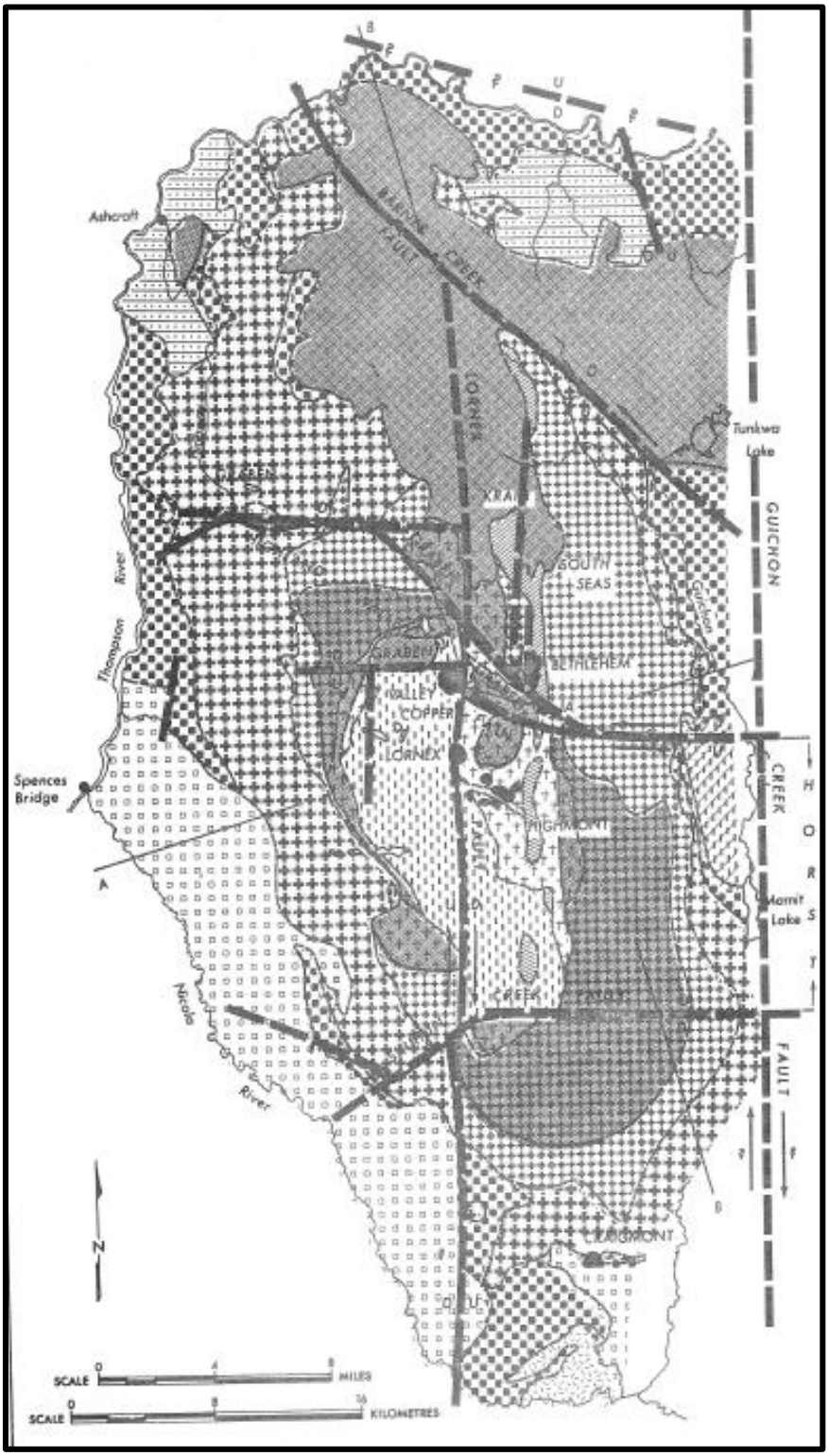
The Minfile descriptions copied herein from a BC Government supported Minfile directory, provide information as to the geological indicators for a productive mineral deposit or for surficial geological indicators of a potential underlying mineral resource.

Respectfully submitted
Sookochoff Consultants Inc.

Laurence Sookochoff, PEng

Figure 12. **Tectonic Fabric of the Guichon Batholith**

(Figure 6 - CIM Special Volume No. 15)



SELECTED REFERENCES

Baird, S.J. - Report on Induced Polarization Survey on some CL Claims for New Indian Mines & Vananda Exploration Ltd. November 14, 1969. AR 2114

Fountain, D.K. - Report on the Induced Polarization and Resistivity Survey on the Dansey Property for Noranda Exploration Company Limited. December 23, 1969. AR 2282

Garrow, T. – 2010 Diamond Drilling Assessment Report on the Dansey Project for Logan Copper Inc. May 31, 2011. AR 32,290.

Garrow, T. – 2010 Diamond Drilling Assessment Report on the Dansey Project for Logan Copper Inc. January 20, 2012. AR 32,980.

Holcombe, R. – 2009: GEOrient, ver 9.4.4. Stereographic Projections and Rose Diagram Plots

John, D.A. - Porphyry Copper Deposit Model. Scientific Investigations Report 2010-5070-B. U.S. Department of the Interior. U.S. Geological Survey, Reston, Virginia: 2010.

MapPlace – Map Data downloads

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

Mark, D.G. - Geochemistry Report on MMI Soil Sampling Surveys on the Dansey, Noname, and Last SNL Grids for SNL Enterprises Ltd. September 10, 2008. AR 30458.

McMillan, W.J. – Geology and Genesis of the Highland Valley Ore Deposits and the Guichon Creek Batholith. British Columbia Ministry of Mines and Petroleum Resources, Victoria, B.C. Geological Association of Canada Society of Economic Geologists. Joint Annual Meeting, 1977 Vancouver, B.C. Field Trip No.3: Guidebook. Guichon Creek Batholith and Mineral Deposits. April 27-29, 1977

McMillan, W.J., Osatenko, M.J. – Guichon Creek Batholith and Mineral Deposits. Geological Association of Canada. Society of Economic Geologists. Joint Annual Meeting, 1977. British Columbia Ministry of Mines and Petroleum Resources.

MtOnline - MINFILE downloads.

092ISE001 – BETHLEHEM
092ISE008 – BETHLEHEM COPPER SPUD LAKE
092INE009 – FORD
092INE011 – RM
092ISE011 – JERICHO
092ISW012 – HIGHLAND VALLEY COPPER
092INW043 – GETTY SOUTH
092INE154 – WENDY
092INE034 – DANSEY
092INE040 – DAB
092INE042 – BX

Sookochoff, L., Zhonghua, P. – Dansey Project Technical Report for Logan Copper Inc. January 16, 2010.

Sookochoff, L. – Geological Assessment Report on the Dansey Claim Tenure No.528848. June 10, 2007. AR 29164.

Sookochoff, L. – Geological Assessment Report on the DAB claim Tenure No.528849. June 27, 2007. AR 29173.

Sookochoff, L. – Geological Assessment Report for Guy and Christopher Delorme on Tenure 585384 of the Bertha 585384 Claim Group. November 20, 2013. AR 35003

STATEMENT OF COSTS

Work on Tenures 930152, 1019760, & 1031886 was done from October 10, 2016 to October 21, 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	
October 10-21, 2016	
Four man days @ $300.00 per day ----------	1,200.00
Truck rental, kilometre charge, fuel, room & board,	
mag rental ----------	1,130.55
	$ 5,330.55
Maps ----------	750.00
Report ----------	3,000.00
	$ 9,080.55
	======

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 Bertha Property area.

5) I have no interest in the Bertha 930152 Claim Group as described herein.

Laurence Sookochoff, P. Eng.

Appendix I

Magnetometer Data

		E5623026 T930152						
647100	5597000	920	647100	5596900	880	647100	5596800	800
647050	5597000	880	647050	5596900	840	647050	5596800	780
647000	5597000	840	647000	5596900	800	647000	5596800	720
646950	5597000	780	646950	5596900	780	646950	5596800	700
646900	5597000	740	646900	5596900	740	646900	5596800	680
646850	5597000	720	646850	5596900	700	646850	5596800	720
646800	5597000	700	646800	5596900	720	646800	5596800	700
646750	5597000	740	646750	5596900	760	646750	5596800	720
646700	5597000	760	646700	5596900	820	646700	5596800	720
646650	5597000	880	646650	5596900	860	646650	5596800	740
646600	5597000	920	646600	5596900	880	646600	5596800	760
646550	5597000	860	646550	5596900	800	646550	5596800	720
646500	5597000	780	646500	5596900	760	646500	5596800	660
646450	5597000	760	646450	5596900	720	646450	5596800	620
646400	5597000	700	646400	5596900	700	646400	5596800	580
646350	5597000	640	646350	5596900	640	646350	5596800	580
646300	5597000	580	646300	5596900	580	646300	5596800	560
646250	5597000	580	646250	5596900	560	646250	5596800	560
646200	5597000	600	646200	5596900	560	646200	5596800	540