RICHARD BILLINGSLEY

(Owner & Operator)

GEOLOGICAL ASSESSMENT REPORT

(Event 5411190)

on a

STRUCTURAL ANALYSIS

Work done on

Tenures 504332, 524873, 530402

of the 10 Tenure

Porcupine 504332 Claim Group

Nicola Mining Division

BCGS Map 092H.097/.098, 092I.007/.008

Centre of Work
5540500N, 679800E

AUTHOR & CONSULTANT

Laurence Sookochoff, PEng
Sookochoff Consultants Inc.

TABLE OF CONTENTS

TABLE OF CONTENTS *(cont'd)*

ILLUSTRATIONS

SUMMARY

The Porcupine 504332 claim group is situated within the Intermontane belt of rocks traversing the extent of British Columbia and hosting some of the most historic and/or currently productive copper mines of North America such as at Copper Mountain, Craigmont, Afton/New Afton, and the Highland Valley/Lornex; all within 70 kilometres of the Porcupine Property.

The Porcupine Property is located in southern British Columbia within the historic Aspen Grove Camp where mineral exploration has been explored since the early 1900's. The result was an abundance of variable sized workings on mineral zones occurring predominantly as skarns, volcanogenic, polymetallic veins, and as porphyry mineralization within the Central Belt of the Nicola volcanic which has a greater intrusive activity than the paucity of intrusives in the Eastern Belt. The mineral zones currently remain as mineral showings, mineral prospects, or developed prospects. Some are classed as past producers, however, with limited production usually by hand sorting and shipping of the higher grade material. The discovery potential for a significant economic mineral resource in the area is substantial.

At the Porcupine, initial exploration was conducted in the early 1900's by the sinking of an inclined shaft on a mineralized zone hosted within a breccia top of a volcanic flow. Subsequent exploration of the mineral zone by diamond drill holes returned assays up to 6.25% copper over 3.7 metres. Two mineralized stratigraphic horizons were indicated. In 1969, after additional exploration, the Porcupine was reported (Minfile) to contain drill indicated reserves of 125,179 tonnes grading 2.0 per cent copper and inferred (possible) reserves of 453,550 tonnes grading 1.9 per cent copper and was classed as a developed prospect.

The most rewarding exploration of the localized Porcupine area was in 2009 when an underlying mineralized intrusive was indicated. The indications arose from surface hydrothermal alteration with minor mineralization within structures and from IP/Resistivity anomalies which suggested a mineralized cone shaped intrusive from near surface to a 500 metre depth. The strongest indication was at a depth of 300 metres where a 1,500 metre diameter intrusive was indicated. The configuration of the intrusive appears as a classic porphyry deposit with a barren core of phyllic alteration which may be indicated at surface by the k-spar coatings on fractures at the Porcupine.

The Structural Analysis of the Porcupine area indicated five cross structural locations; one of which is located proximal to the Porcupine shaft and was likely the vent for hydrothermal fluids which imprinted surface hydrothermal alteration. Likewise, the four other structural intersecting locations would be prime prospective areas to explore for surficial geological indicators of a potential sub surface mineral resource.

A diamond drill program should be initiated to test the IP/resistivity anomalies indicated for a mineralized intrusive. Initially, three 500 metre HQ drill holes are recommended at locations as displayed on Figure 19 and 20. The results from the drill holes should either intersect a mineralized porphyry system or provide information as to the effective interpretation of the 2009 IP/resistivity on which to base future exploration.

The diamond drilling should also provide information on the stratigraphy of the Nicola volcanics and possibly locate other zones of Porcupine type volcanogenic mineralization. There is also the potential of locating volcanic related mineralization within adjacent horizons or skarn mineralization proximal to the intrusive. The types and characteristics of mineralization that may be located by the diamond drill program are referred to in the 10 included MINFILE property descriptions contained herein.

INTRODUCTION

In October 2012 a Structural Analysis was completed on Tenures 504332, 524873, 530402of the ten claim Porcupine 504332 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 Tenures 504332, 524873, 530402 or other claims of the Property.

Information for this report was obtained from sources as cited under Selected References and from mineral exploration work the writer has done in the Aspen Grove Camp since 1980.

PROPERTY DESCRIPTION AND LOCATION

The Property is comprised of 10 claims covering an area of 3302.126 hectares. Particulars are as follows:

Tenure Number	Type	Claim Name	Good Until	Area (ha)
504332	Mineral		20130615	186.775
524873	Mineral	PORCUPINE 1	20130615	518.847
530397	Mineral	DOR 2	20130615	186.864
530401	Mineral		20130615	124.577
530402	Mineral		20130615	311.4
530407	Mineral	ROBIN	20130615	62.289
558838	Mineral	NEW PORCUPINE 2	20130615	539.5833
917409	Mineral	ASPEN GROVE WEST 1	20130615	498.469
917410	Mineral	ASPEN GROVE WEST 2	20130615	498.9208
917429	Mineral	ASPEN GROVE WEST 3	20130615	374.4009

Total Area: 3302.126 ha

*Upon the approval of the assessment work filing, Event 5411190.

The Property is located within BCGS Map 092H.097/.098 and 092I.007/.008 of the Nicola Mining Division, 204 direct kilometres from Vancouver and 26 direct kilometres from Merritt. The centre of the work area is at 5540500N, 679800E (NAD 83).

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

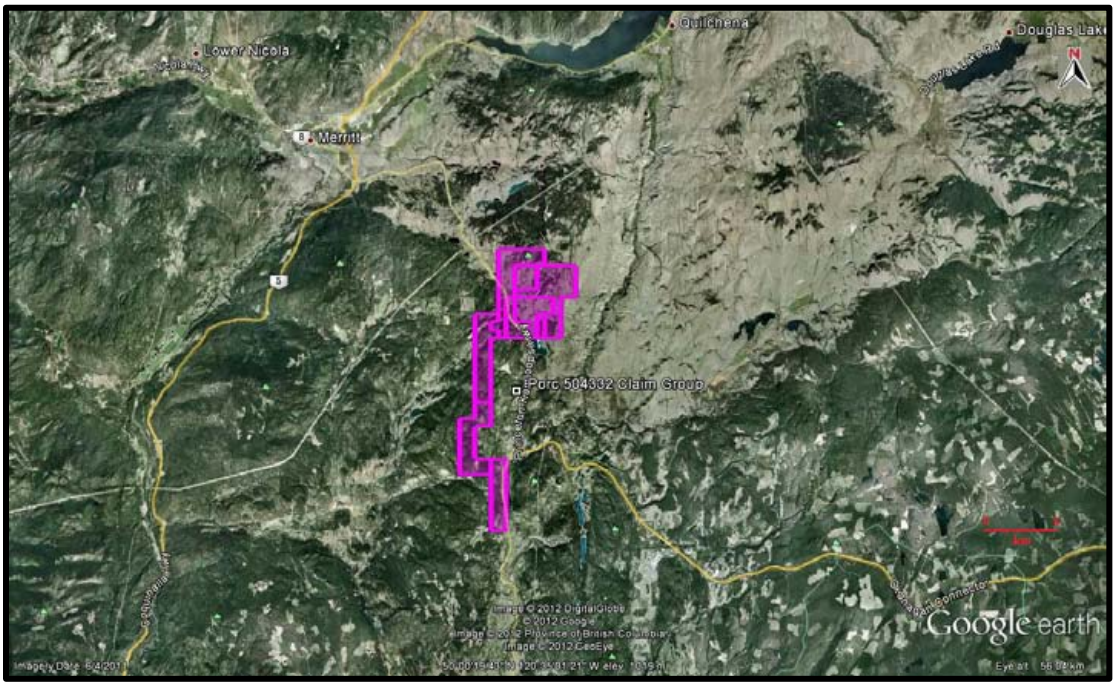
Access to the Property is southward from Merritt via Highway 5A/97C for 27 kilometres to the Aspen Grove Junction thence southward via Highway 5A to the Kentucky Lake Junction thence eastward and northward via graveled and dirt roads to the southwestern corner of Tenure 504332 of the Property. Secondary roads provide access to the central and northern portions of Tenure 504332.

The Property 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°C and average 25°C with the winter temperatures reaching a low of -10°C and averaging 8°C. On the Property snow cover on the ground could be from December to April and would not hamper a year-round exploration program.

Sufficient water for all phases of the exploration program could 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, would have to be transported.

Figure 1. **Location Map**

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



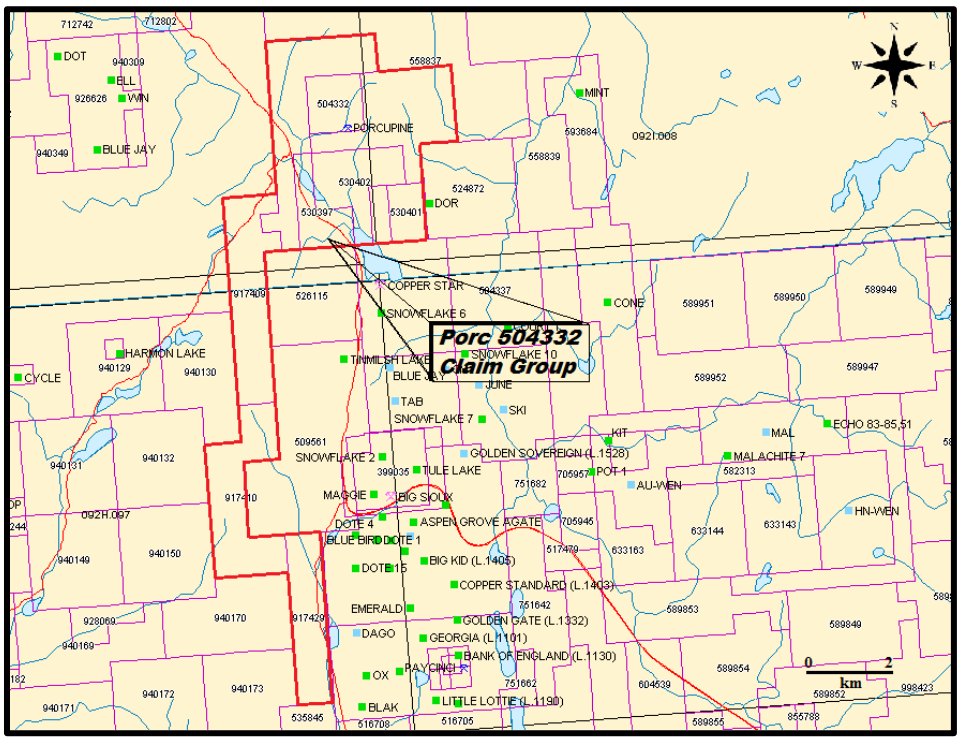
Accessibility, Climate, Local Resources, Infrastructure, and Physiography *(cont'd)*

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.

HISTORY: PROPERTY AREA

The history on some of the more significant mineral MINFILE reported occurrences, prospects, and past producers on and peripheral to the Property are reported in the Minfile published records as follows. The distance from the Property is relative to Tenure 504332, which is the subject of one of three contiguous claims of the structural analysis.

Figure 3. **Claim Map**



History: Property Area *(cont'd)*

COPPER STAR *past producer (Volcanic redbed Cu)*
MINFILE 092HNE036
Three kilometres south

A small amount of production from the old workings is reported in 1915, when 41 tonnes of hand-sorted ore were shipped to a smelter. According to the returns, this shipment graded 8.7 per cent copper and 75.4 grams per tonne silver (Minister of Mines Annual Report 1915, page 227). Tanjo Mines Ltd. completed geological, geophysical and soil geochemical surveys over the showings between 1970 and 1972. Similar surveys were conducted by Redding Gold Corporation in 1988.

History: Property Area *(cont'd)*

HN-WEN *prospect (Volcanic redbed Cu)*
MINFILE 092HNE058
Fourteen kilometres southeast

Adits and trenches were initially cut around 1900; later work included diamond drilling and trenching in the 1960s and 1970s.

BIG SIOUX *past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au*
MINFILE 092HNE073
Eight kilometres southwest

This deposit was one of the first showings to be explored in the Aspen Grove copper camp. It was staked in 1899, and investigated periodically by H.H. Schmidt up to 1914. One shaft, 10 metres deep, an adit, 46 metres long, and numerous pits and trenches were excavated during this time. Forty-four tonnes of ore were shipped in 1918 grading 9.78 per cent copper and 67.9 grams per tonne silver. David Minerals Ltd., Amax Exploration Inc. and Norranco Mining and Refining completed soil and rock geochemical and geophysical surveys over the deposit between 1968 and 1978. The occurrence was restaked in 1989 after copper mineralization was exposed in a roadcut along the north side of the recently completed Coquihalla Highway (Phase 3 - Okanagan Connector). The deposit was subsequently mapped and sampled by Amex Exploration Services Ltd. in 1990, Northair Mines Ltd. in 1991 and Placer Dome Inc. in 1992. Christopher James Gold Corp. drilled the area, including the Big Kidd (092HNE074) in 1997.

BIG KIDD *prospect (Alkalic porphyry Cu-Au; Volcanic redbed Cu)*
MINFILE 092HNE074
Nine kilometres south

This occurrence was first explored by H.H. Schmidt, with the excavation of several trenches and one adit, 69 metres long, between 1900 and 1915. An additional three adits, 12 to 90 metres long, were excavated some time between 1916 and the 1950s . The deposit was trenched and drilled by Noranda Mines Ltd. in 1956 after completing geological and geophysical surveys. Additional geophysical and soil geochemical surveys were carried out by Norranco Mining and Refining in 1969 and Amax Exploration Inc. in 1971. Amax also mapped and drilled the deposit in 1972. David Minerals Ltd. conducted geological and self potential surveys, trenching and 112 metres of diamond drilling in three holes between 1975 and 1980. The deposit was sampled by Northair Mines Ltd. in 1991 and Placer Dome Inc. in 1992. Drilling by Placer intersected 71 metres averaging 0.75 gram per tonne gold and 0.2 per cent copper in the north zone of the Big Kidd breccia.

Christopher James Gold Corp. drilled 10 holes, totalling 2074 metres in 1997. A 116-metre intersection graded 0.801 grams per tonne gold and 0.124 per cent copper, including a higher grade section of 19.46 metres grading 3.09 grams per tonne gold and 0.113 per cent copper (Exploration in B.C. 1997, page 38). This intersection is from the North zone. The Southwest zone, 350 metres to the south, and the Northeast zone also contained mineralization.

The next program by Christopher James Gold was a 2 staged drilling program completed during the fall in 1999. This program drilled a fan of three holes to the southwest and one parallel hole along the Big Kidd Breccia north contact. All four 1999 holes intersected significant lengths of gold-copper mineralized intrusion breccia with late porphyritic monzonite dyke and potassic (K-feldspar) alteration zones. In 2003, Christopher James Gold Corp. drilled 9 holes and dug three trenches to test alkalic porphyry hosted by the Big Kidd breccia. Broad intervals of low-grade mineralization were encountered

History: Property Area *(cont'd)*

PAYCINCI *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE084
Twelve kilometres south

The Cincinnatti deposit was first explored by the Bates brothers in the early 1900s. A number of trenches, and one adit 120 metres long, were excavated between 1899 and 1913. Payco Mines Ltd. and Alscope Consolidated Ltd. conducted geological and geophysical surveys, trenching and diamond and percussion drilling between 1963 and 1967. An additional 15 holes totalling 1000 metres were drilled by Gold River Mines and Enterprises Ltd. in 1973 and Sienna Developments Ltd. in 1979. The deposit was most recently sampled by Pacific Copperfields Ltd. in 1992.
In 1998, Christopher James Gold Corp. optioned the property. Reserves are estimated at 1.8 million tonnes grading 1 per cent copper (Tom Schroeter, 1998).

MINT *Showing (Porphyry Cu +/- Mo +/- Au)*
MINFILE 092ISE084
Three kilometres east

Rock chip samples assayed up to 0.67 per cent copper and 0.16 per cent molybdenum (Assessment Report 17277).

AU-WEN *prospect (Intrusion related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-Au)*
MINFILE 092HNE144
Nine kilometres southeast

Work on this showing dates back to the 1930s when visible gold was discovered in soil.

COURT 1 *showing (Volcanic redbed Cu; Cu Skarn)*
MINFILE 092HNE147
Five kilometres south-southeast

The Court 1 occurrence is a minor copper showing in part of the historical Aspen Grove copper camp, between Merritt and Princeton, where exploration dates back to the turn of the twentieth century. It is located on the former Ski group of claims (particularly Ski 13-16), on a tributary of Quilchena Creek, 3.5 kilometres east of Highway 5A, 7.5 kilometres northeast of the community of Aspen Grove (Assessment Report 925; Preliminary Map 15; Bulletin 69).

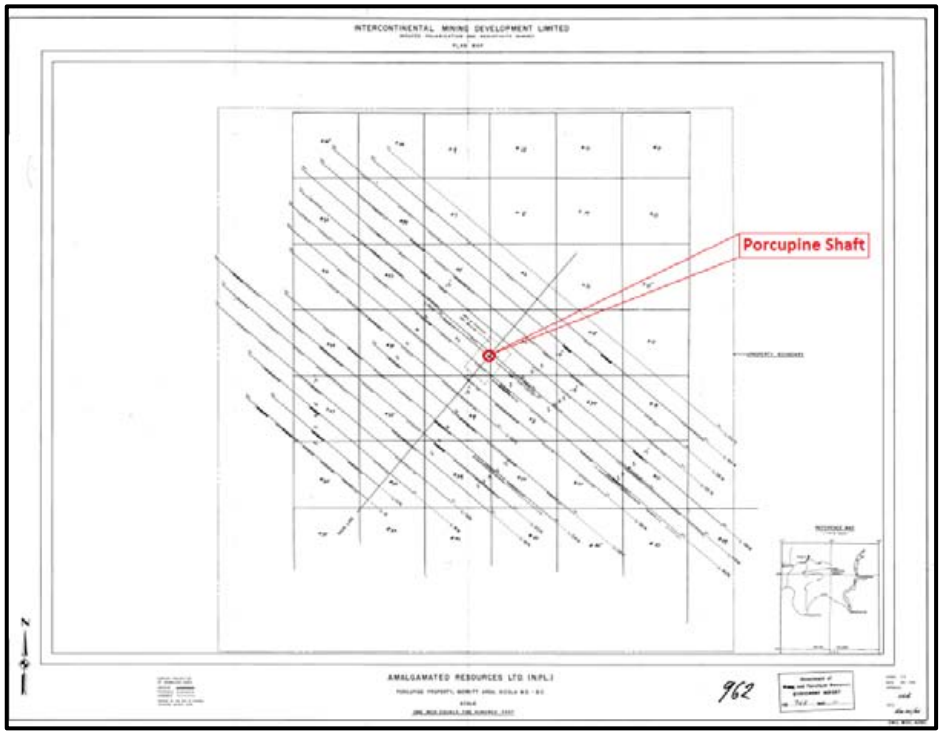
HISTORY: PROPERTY

PORCUPINE *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE054
Within Property

1966: Amalgamated Resources Ltd. completed an Induced Potential and Resistivity Survey (**AR 962)** over ground covered by the Porcupine shaft.

Bell (1966) reports that a large number of weak to moderate anomalies were indicated. In view of the nature of the copper mineralization, even weak anomalies may be of considerable economic importance and consequently a thorough drill test is recommended.

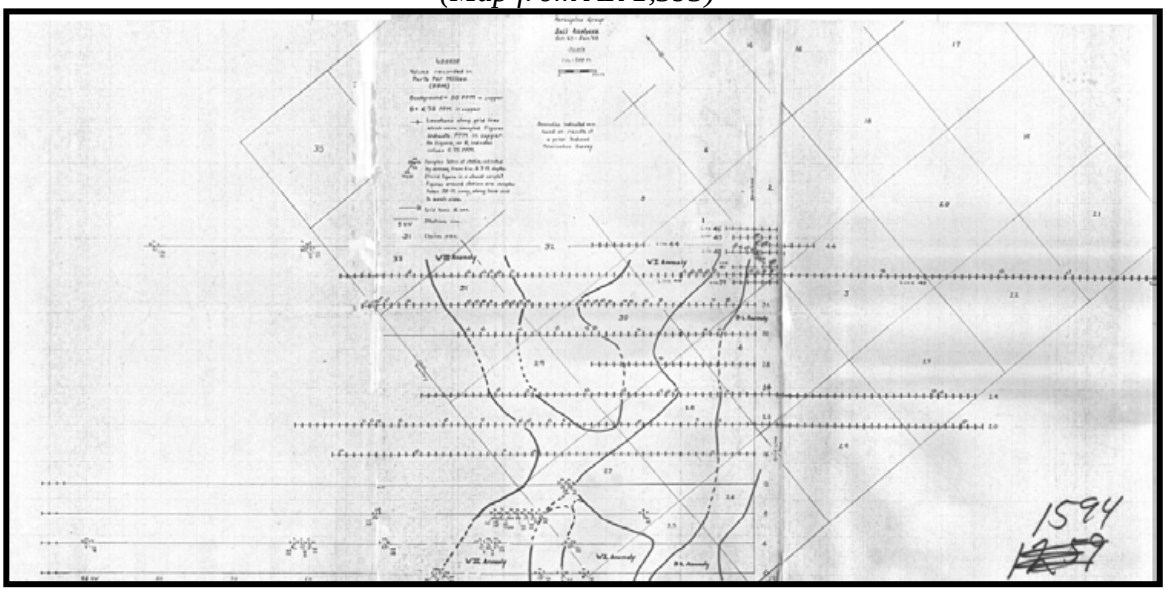
Figure 4. **1966 IP & Resistivity Survey Results**
(Base map from AR 962)



1968: Amalgamated Resources Ltd. completed a geochemical survey **(AR 1,595)** over ground covered by the Porcupine shaft.

Kelly (1968) reports that copper anomalies extending for some 300 ft. northwesterly from the shaft are almost certainly due to contamination by drainage from the well-mineralised dump around the shaft. The mineralisation exposed in trenches extending over four hundred feet southwesterly from the shaft is only reflected in only sporadic, weak to moderate readings on one line.

Figure 5. **1968 Geochemical Survey Results**
(Map from AR 1,595)

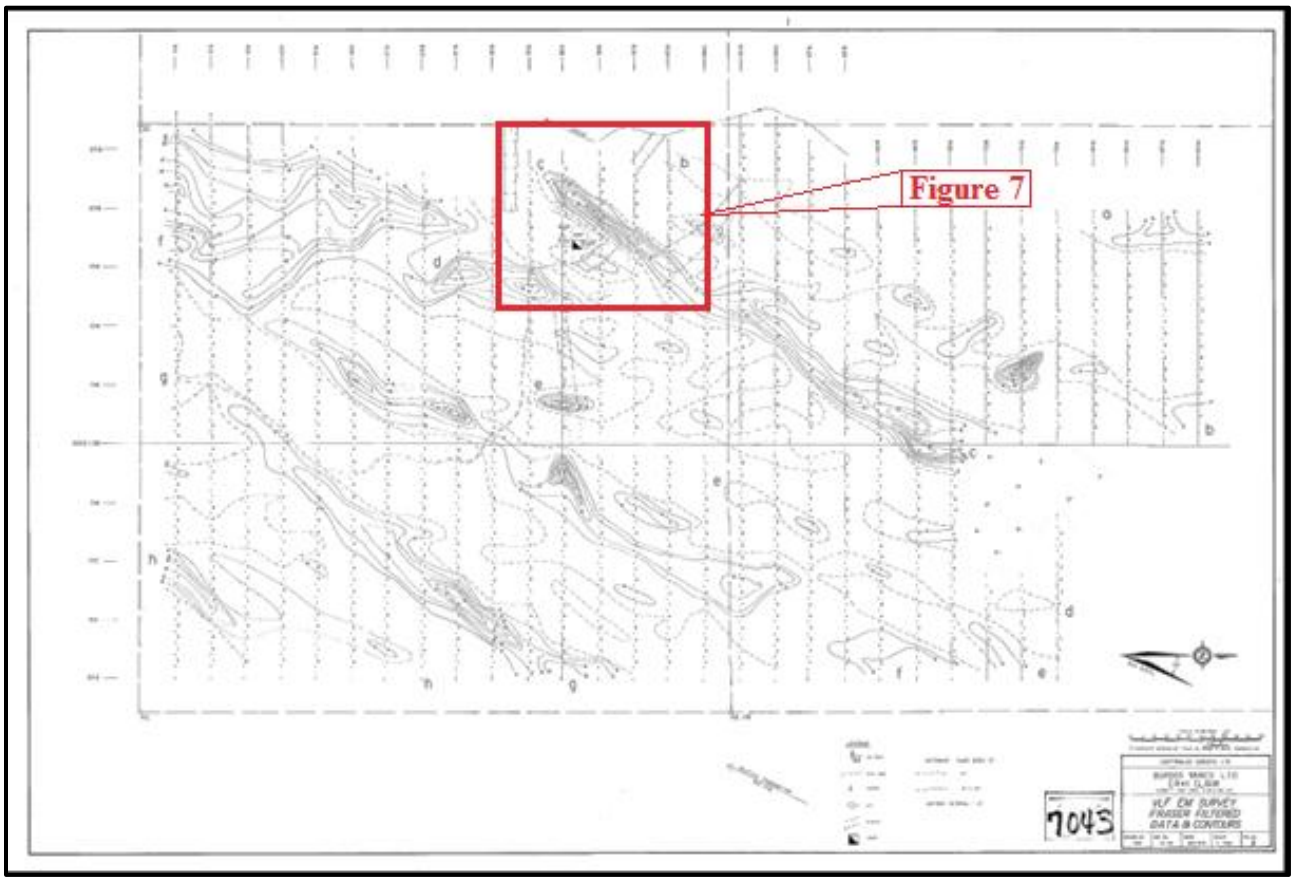


History: Property *(cont'd)*

1978: Burdos Mines Ltd. completed a VLF-EM survey **(AR 7,043)** over an area which covered the Porcupine shaft. The results indicated that the Porcupine shaft is located 50 metres west of the northern end of a 450 metre long 020 trending anomaly; the strongest anomaly of the survey.

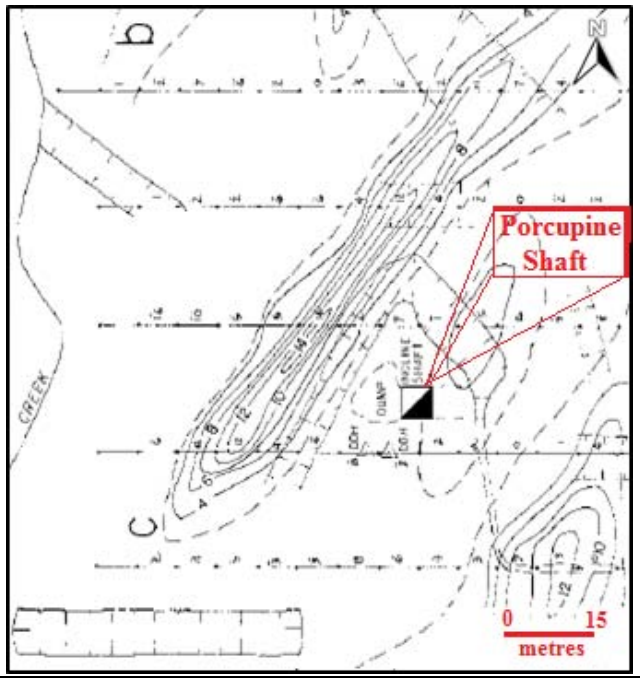
Mark (1978) reports that the most likely causative source of these VLF-EM anomalies are contact zones. However, it is entirely possible that some of these anomalies may alternately be caused by fault, shear or fracture zones.

Figure 6. **1978 VLF-EM Survey Results**
(Base map from AR 7,043)



History: Property *(cont'd)*

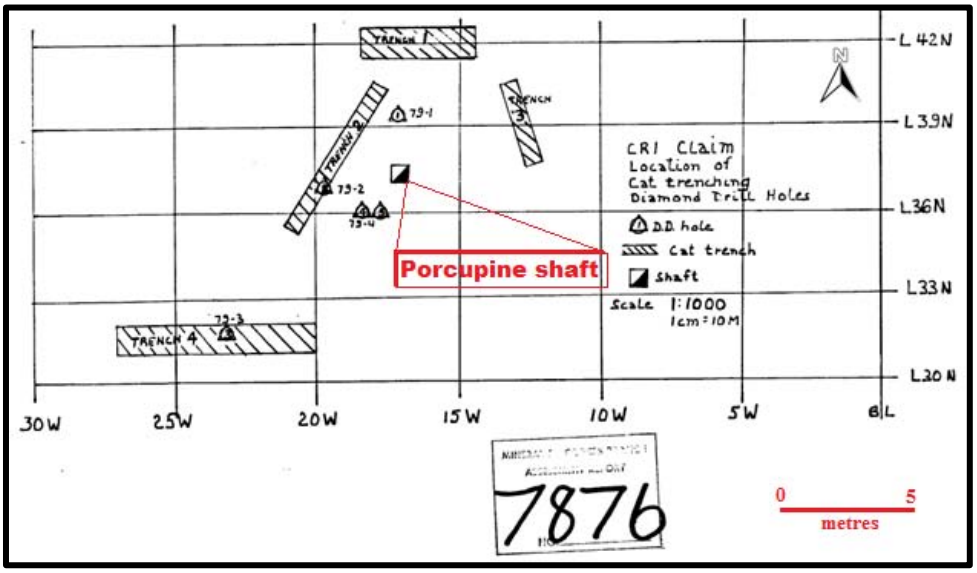
Figure 7. **1978 VLF-EM Survey Results**
(see figure 6 for location)



1979: Pentagon Resources Ltd. completed 5 diamond drill holes totalling 444.4 metres **(AR 7,876).**

Rolston (1979) reports that the logged results showed no significant mineralization therefore no core was sent in for assays.

Figure 8. **1979 Diamond Drill Hole & Trench Locations**
(Base map from AR 7,867)



History: Property *(cont'd)*

1999: Corbett Lake Minerals, Inc. completed prospecting and soil sampling **(AR 26,232).**over a localized area approximately 500 metres south of the Porcupine shaft

Diakow (2000) reports that the geology is similar to the adjacent Porcupine showing and that the 1999 soil sampling program indicates anomalous gold values associated with volcanic breccia and possibly along the fault extension from the "Porcupine" showing

Figure 9. **2000 Geology Prospecting Results**
(Base map from AR 26,232)

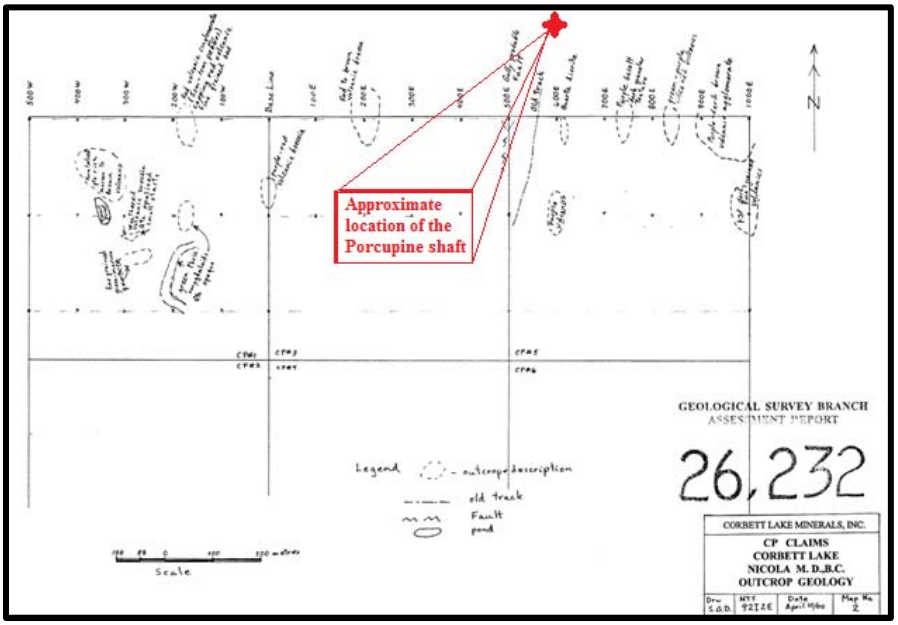
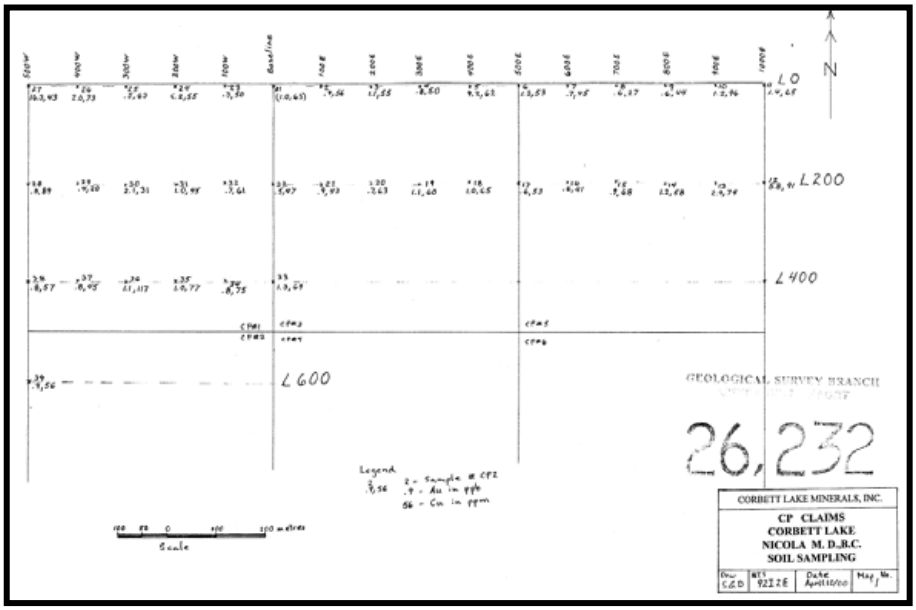


Figure 10. **2000 Soil Geochem Survey results**
(Base Map from AR 26,232)



History: Property *(cont'd)*

2009: Etna Resources Ltd. completed geological, geophysical, and geochemical surveys (**AR 31,213**) on the Aspen Grove property which included ground covered by the Porcupine 504332 Claim Group, the subject of this report. Specific to the exploration completed was a localized area which included the Porcupine mineral showing which was held almost continuously by individuals and/or companies, and has been a focus of exploration since the early 1900's.

The assessment report (31,213) authored by Kerr (2009) is a comprehensive report which includes an appended report on the Geology of the Aspen Grove Property by John Ostler, P. Geo and a Geophysical Report by Brian Chen.

Kerr (2009), in reporting on the exploration results of the Porcupine area, discounts the possibility of a viable resource associated with the showing.

Figure 11. **Grid (UTM) of 2009 Survey Area**
(Base map from AR 31,213 p72)

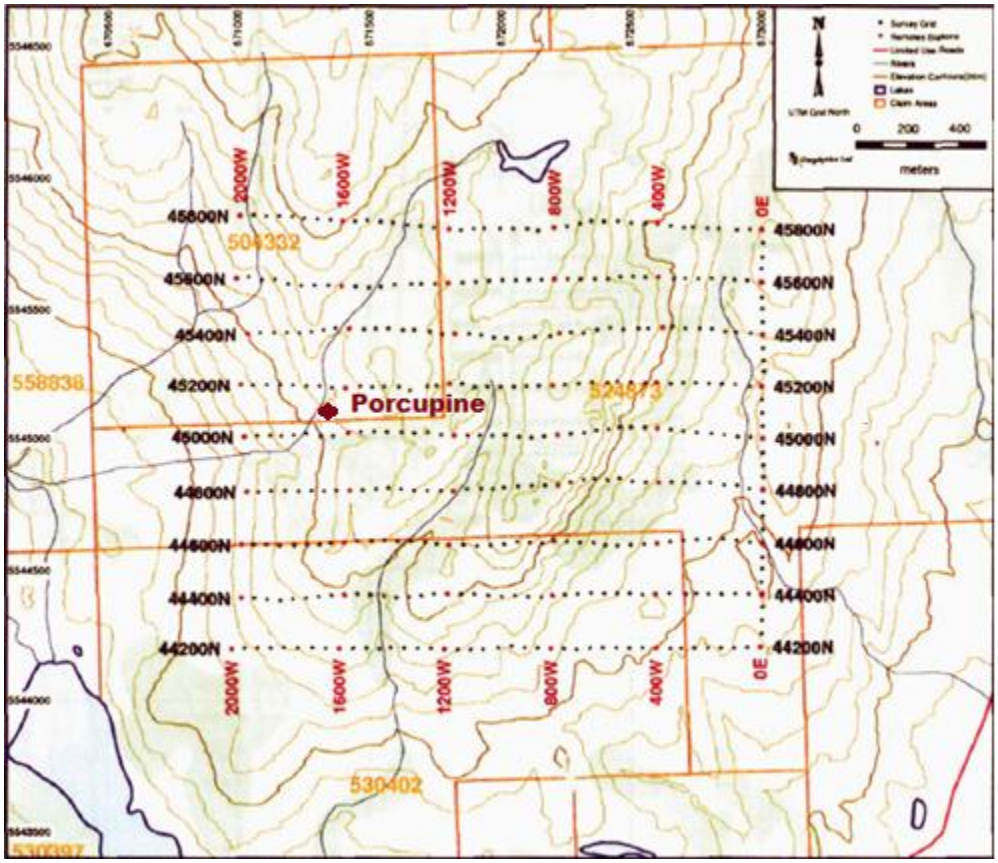
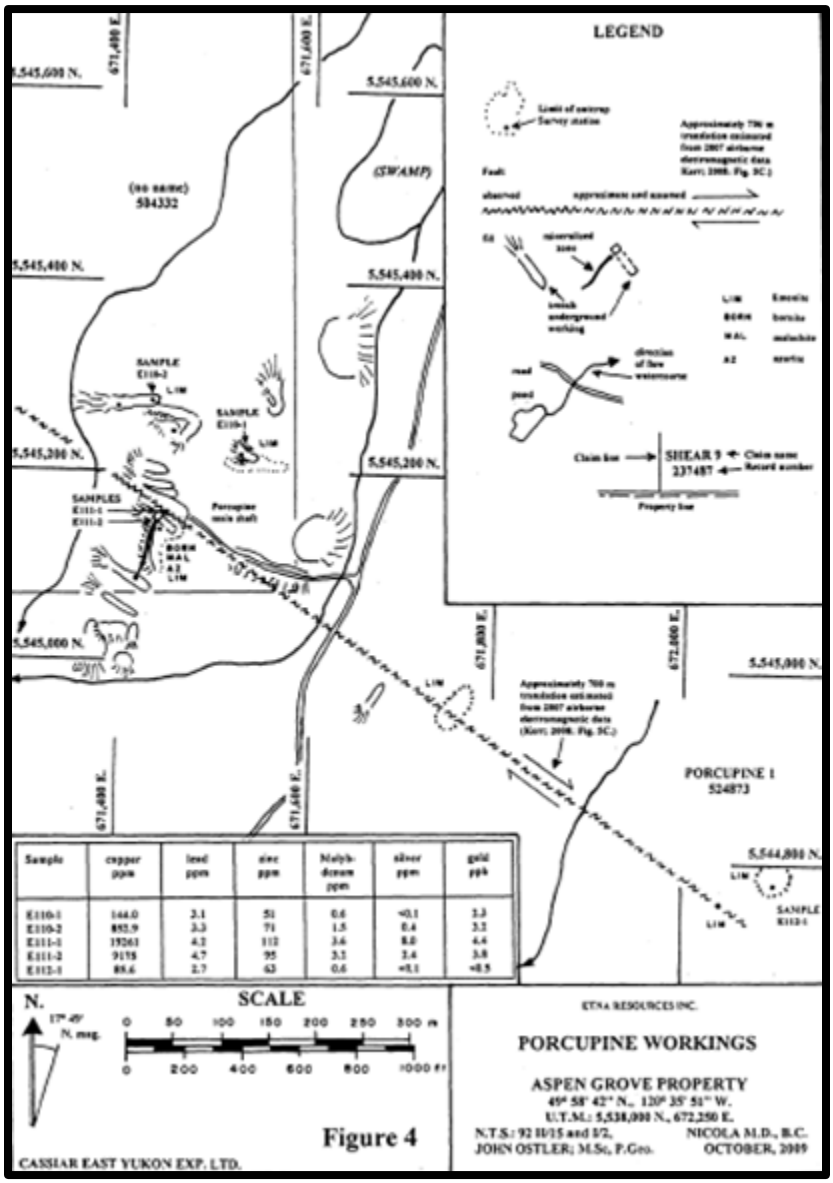
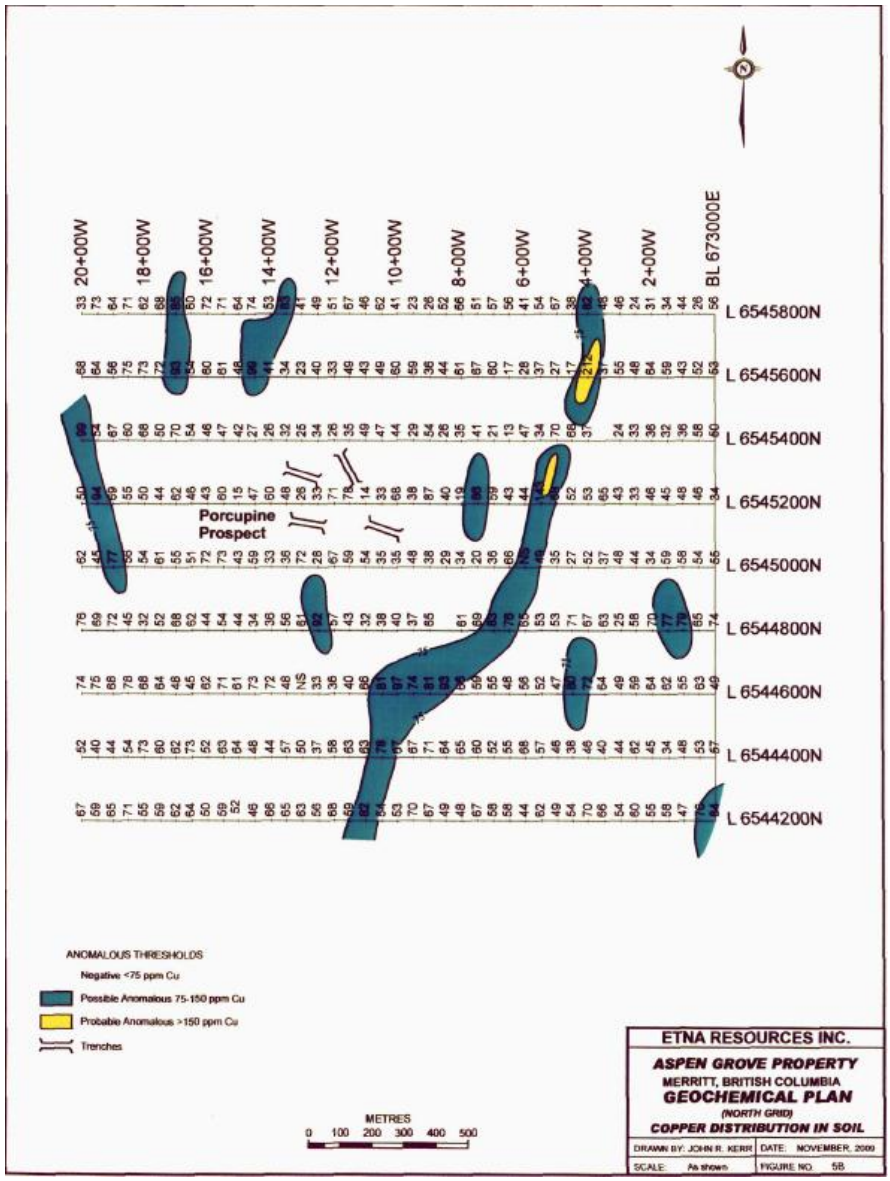


Figure 12. **2009 Mapping and Sampling Porcupine Shaft Area:**
(Map from AR 31,213 p61)



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

Figure 13: **2009 Geochemical Survey Results: Porcupine Shaft Area**
(Map from AR 31.213 p23)



Two selected maps on the results of the IP/Resistivity survey completed in 2009 over ground including the Porcupine are included herein as Figure 19 and 20. A complete report on the results of the geophysical surveys completed by SJ Geophysics is an attachment in Assessment Report 31,213.

The location of the Porcupine on Figures 11 and 19 was placed on a base map by the author on maps from Assessment Report 31,213 according to the UTM coordinates as reported in the Porcupine Minfile 092ISE054 (5,545,142N 671,374E). The location of the Porcupine on Figure 19 was set on the base maps obtained from Assessment Report 31,213 in which the location of the Porcupine is approximately 150 metres north.

History: Property *(cont'd)*

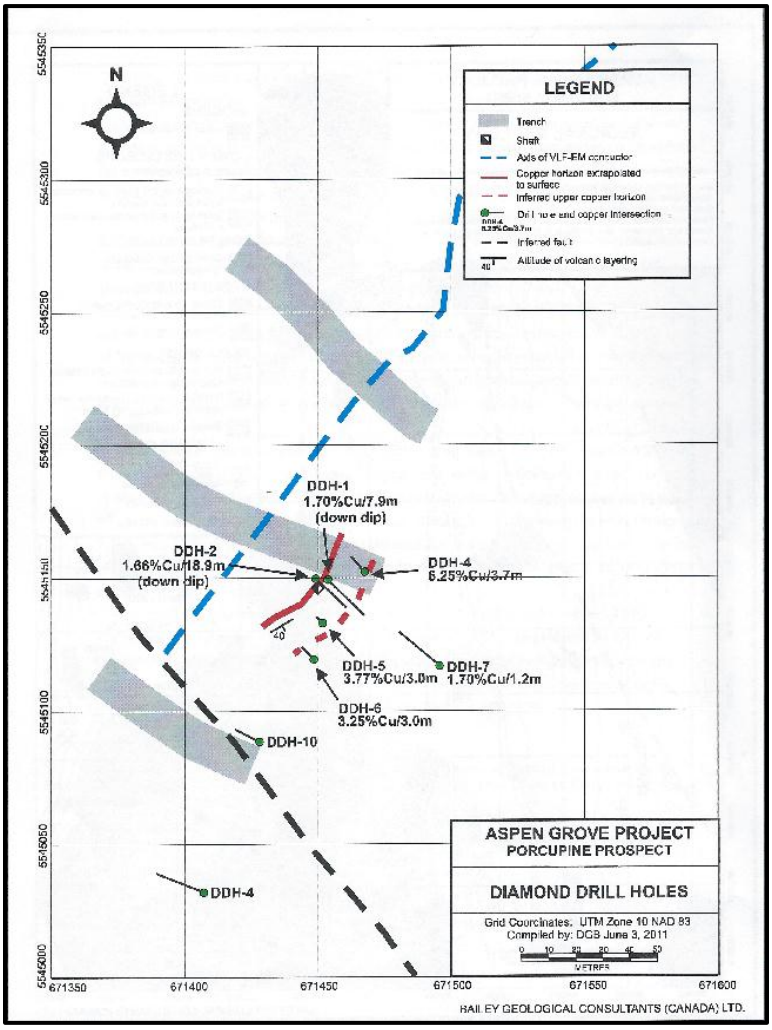
Kerr (2009) reports on the Porcupine as follows:

Porcupine Prospect: Located to the northeast of Corbett Lake in the northwestern portion of the property. The prospect is described to occur in a north trending shear zone, probably a splay related to the main structure just north of Corbett Lake.

The main feature of the prospect is the 15 meter deep shaft, several old cuts and evidence of several old drill pads. The only mineralization apparent in bedrock is in the shaft, however rubble at the bottom of trenches contains abundant malachite. Reported mineralization is chalcocite, chalcopyrite, bornite, cuprite and native copper, mainly associated with sheared volcanic rocks. Although there is a published reference to a small historical resource estimate, there has not been sufficient data review, compilation and verification work to determine data reliability, or the assumptions, parameters or procedures used for resource estimation. Because of the lack of data or verification, any historical resource quoted by old reports should not be relied on.

Geological mapping by Ostler (2009 report attached), the induced polarization survey and soil sampling results in this area of the property were all very negative, discounting the possibility of a viable resource associated with the showing. Further work in this area of the property is no warranted.

Figure 14. **Porcupine : Historic Drill Holes**
(Map from Bailey, 2011 p7)



GEOLOGY: REGIONAL

The Aspen Grove geological district is located within the regional Quesnel Trough, a 30 to 60, km wide belt of Lower Mesozoic volcanic and related strata enclosed between older rocks and much invaded by batholiths and lesser intrusions (Campbell and Tipper, 1970). The southern part is the well-known Nicola belt, continuing nearly 200 km to its termination at the U.S. border and containing the important copper deposits of Highland Valley, Craigmont, Copper Mountain, Afton, in addition to the historic Hedley gold camp.

The Nicola Group has been divided into western, central, and eastern belts on the basis of lithology and lithogeochemistry and by major fault systems. Variation from calc-alkaline to shoshinitic compositions from west to east has been interpreted to reflect eastward dipping subduction in the Nicola arc. The Property is situated within the central belt of the Nicola Group which is bounded on the east by the northerly striking Kentucky-Alleyne fault zone.

GEOLOGY: PROPERTY AREA

The geology on some of the more significant mineral MINFILE reported occurrences, prospects, and past producers on the Property and peripheral to the Property (Figure 4) are reported as follows. The distance from the Property is relative to Tenure 504332, which is the subject of one of three contiguous claims of the structural analysis.

COPPER STAR *past producer (Volcanic redbed Cu)*
MINFILE 092HNE036
Three kilometres south

The Copper Star occurrence is one of many in the Aspen Grove area. It lies in the Central belt or facies of the Nicola Group (after Preto, Bulletin 69). This belt mainly consists of subaerial and submarine, red or purple to green augite plagioclase porphyritic andesitic and basaltic flows, volcanic breccia and tuff, and minor argillite and limestone. The volcanics are locally intruded by bodies of comagmatic diorite to monzonite of Late Triassic to Early Jurassic age.

The region is characterized by long-lived, primarily north-striking faults and related fracturing, which originally controlled intrusion emplacement. Two important fault systems in the Aspen Grove area, the Kentucky-Alleyne fault and a splay of the Allison fault converge in the Copper Star area, just south of Courtney Lake. Numerous shear zones which host mineralization, described below, are probably related to these structures.

The Copper Star group of showings is hosted in red and green, augite and/or plagioclase porphyritic flows, breccias and tuffs of andesitic or basaltic composition (Assessment Report 17554). The volcanics contain magnetite. The strata strike northwest and dip southwest.

Epidote alteration of the volcanics is pervasive, and is commonly accompanied by disseminated jasper or hematite. Alteration is greater in shear fractures, which may also contain quartz and calcite veins as well as jasper and hematite. Epidote alteration, grain size in the volcanics, and copper mineralization all tend to increase from east to west (Assessment Report 17554).

Geology: Property Area *(cont'd)*

HN-WEN *prospect (Volcanic redbed Cu)*
MINFILE 092HNE058
Fourteen kilometres southeast

The HN-WEN occurrence is hosted in the Upper Triassic Nicola Group, which regionally consists of alkalic and calcalkalic volcanics and intrusions of island arc origin, and which is the principal component of the Quesnel Terrane in southern British Columbia (Geological Survey of Canada Maps 41-1989, 1713A). This belt has been of major economic interest because of its potential for porphyry copper-gold mineralization.

The occurrence lies in the northern assemblage of the Eastern belt of the Nicola Group (after Preto, Bulletin 69). This assemblage mainly consists of well-bedded submarine volcaniclastic rocks and volcanic flows. The main Aspen Grove copper camp lies several kilometres to the west in the Central belt, separated by the north-striking Kentucky-Alleyne fault system (Bulletin 69).

The area of the occurrence is underlain by augite porphyritic volcanic flows of andesitic to basaltic composition, fragmental rocks including tuff and breccia, and argillites (Assessment Reports 1586, 4230). The argillites are dark grey to black, well bedded, and locally limy. They are somewhat carbonaceous and pyritic. Minor rock types present include feldspar porphyry and locally lenses of diorite. About 2.5 kilometres to the northeast is the contact with the Early Jurassic Pennask batholith, a large intrusion of medium-grained granodiorite to quartz diorite.

The contact between the volcanic rocks and the argillites passes through the centre of the mineralized area. The contact is parallel to bedding, striking 130 degrees and dipping 40 degrees southwest, with the volcanic rocks on the northeast side (Assessment Report 4230).

BIG SIOUX *past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au*
MINFILE 092HNE073
Eight kilometres southwest

The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite 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.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.
The occurrence is hosted in variably amphibole, augite and feldspar porphyritic basaltic andesite, subjected to extensive fracturing, shearing and faulting. Alteration minerals include abundant epidote, and minor silica and chlorite. Some microdiorite and diorite are also present.

Geology: Property Area *(cont'd)*

BIG KIDD *prospect (Alkalic porphyry Cu-Au; Volcanic redbed Cu)*
MINFILE 092HNE074
Nine kilometres south

The deposit is located along the northern margin of an area of hilly upland situated in the centre of the Aspen Grove copper camp, known as the Fairweather Hills. The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite porphyritic pyroclastics an 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.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.

A vertical or subvertical breccia pipe, nearly circular in outline and about 300 metres wide, is developed in a body of fine- grained diorite, which may in part be recrystallized volcanics. The pipe consists of angular to subrounded clasts of volcanics, fine- grained diorite (microdiorite) and pinkish grey monzonite and syenomonzonite porphyry in a matrix of altered diorite intrusive material and finely comminuted rock. The fragments are 1 centimetre to several metres in diameter.

Parts of the breccia, especially on the north and east sides of the pipe, show extensive late magmatic and/or hydrothermal alteration and recrystallization. Breccia clasts in these areas have pronounced grey and pinkish grey alteration rims, and the matrix is extensively replaced by epidote, chlorite and calcite.

PAYCINCI *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE084
Twelve kilometres south

The deposit is located in the southern portion of an area of hilly upland situated in the centre of the Aspen Grove copper camp, known as the Fairweather Hills. The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite 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.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.

Geology: Property Area *(cont'd)*

MINT *Showing (Porphyry Cu +/- Mo +/- Au)*
MINFILE 092ISE084
Three kilometres east

The property lies in the central belt of the Upper Triassic Nicola Group. Porphyritic quartz monzonite is the major rock type exposed on the east side of Quilchena Creek. A biotite-rich unit outcrops to the north. The intrusive is called the Quilchena pluton and is a subsidiary stock of the Lower Jurassic Pennask batholith which intrudes the Nicola Group volcanics. The Quilchena Creek fault is a major north-northeast trending fault system which approximately parallels Quilchena Creek. To the west, the monzonitic pluton is overlain by Eocene sandstone and conglomerate which are believed to be the basal member of the Coldwater Formation (Princeton Group). Farther to the west, these sediments are overlain by Pleistocene valley basalts.

AU-WEN *prospect (Intrusion related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-Au)*
MINFILE 092HNE144
Nine kilometres southeast

The occurrence lies in the northern assemblage of the Eastern belt of the Nicola Group (after Preto, Bulletin 69). This assemblage mainly consists of well-bedded submarine volcaniclastic rocks, ranging from tuffaceous volcanic siltstones characteristic of the lower part, to coarse volcanic conglomerate and laharic breccias in the upper part.

The assemblage is characterized by a paucity of intrusive rocks in comparison to the main Aspen Grove copper camp in the Central belt a few kilometres to the west, separated by the Kentucky-Alleyne fault system (Bulletin 69).

The AU occurrence is centred on the main gold showing, a small stripped, drilled and trenched area just off a gravel road south of Quilchena Creek (Assessment Reports 5766, 16008). This and most of the surrounding area is underlain by andesitic to dacitic tuff, cherty tuff, black argillite, and volcanic sandstone and siltstone.

The rocks are strongly fractured in a variety of orientations. Bedding in the tuff has been measured to strike 060 degrees and dip 54 degrees northwest, but it varies.

About 1 kilometre to the north of the main showing is biotite hornblende granodiorite and quartz monzonite of the Early Jurassic Pennask batholith, and about 500 metres to the west are porphyritic andesitic and basaltic volcanic rocks (Bulletin 69; Assessment Report 16008). Small bodies of diorite and micromonzonite, possibly subvolcanic, are quite common in the area, on the surface and in drill core (Assessment Report 16008). Some of the volcanics have sustained carbonate and epidote alteration, and locally they have pervasive hematite (Assessment Report 16008).

COURT 1 *showing (Volcanic redbed Cu; Cu Skarn)*
MINFILE 092HNE147
Five kilometres south-southeast

The Court 1 occurrence is located in the Upper Triassic Nicola Group, which regionally consists of alkalic and calcalkalic volcanics and intrusions of island arc origin, and which is the principal component of the Quesnel Terrane in southern British Columbia (Geological Survey of Canada Maps 41-1989, 1713A). This belt has been of major economic interest because of its potential for porphyry copper-gold mineralization.

Geology: Property Area *(cont'd)*

COURT 1 *showing (cont'd)*

The occurrence is one of many in the Aspen Grove area. It lies in the Central belt or facies of the Nicola Group (after Preto, Bulletin 69). This belt of rocks mainly consists of subaerial and submarine, red or purple to green augite plagioclase porphyritic andesitic and basaltic flows, volcanic breccia and tuff, and minor argillites and limestone. The volcanics are intruded by bodies of comagmatic diorite to monzonite of Late Triassic to Early Jurassic age. The area is characterized by long-lived, primarily north-striking faults and related fracturing, which originally controlled intrusion emplacement. East-striking faults are subordinate, and commonly offset intrusive contacts.

The Court 1 occurrence is centred on an outcrop of andesitic to basaltic volcanic rocks in a creek draining into Quilchena Creek (Bulletin 69). This coincides with a copper soil anomaly (Assessment Report 925). These rocks are intruded by aplite dikes (Assessment Report 925). A short distance away there is an outcrop of skarn alteration (Assessment Report 925).

GEOLOGY: PROPERTY

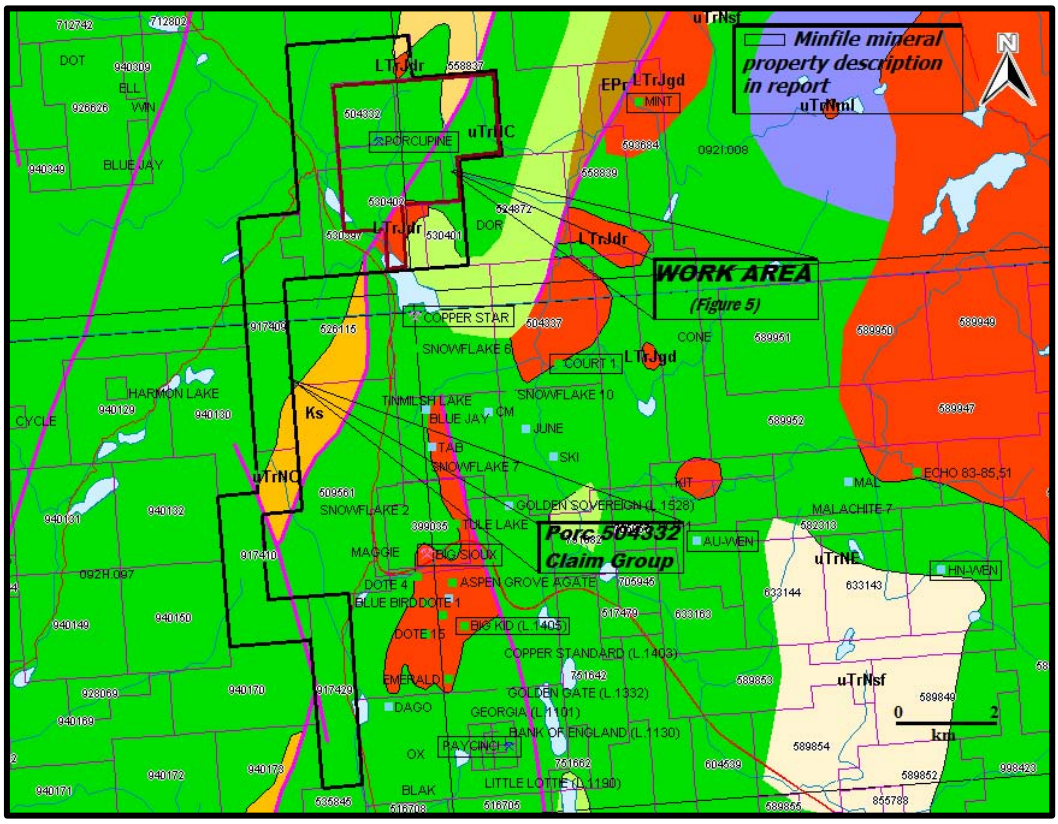
As indicated by the BC government supported MapPlace geological maps (Figure 15), the Porcupine 504332 clam group is underlain predominantly by the Central Facies of the upper Triassic Nicola Group of basaltic volcanic rocks (uTrNC). A major regional north-northeasterly trending structure, covered by portions of the Property in the northeast and the southwest, is in a fault contact with a band of Cretaceous undivided sedimentary rocks in the south. A dioritic stock is located at the northeast edge of Courtenay Lake and is also in a fault contact with the \Nicola rocks to the west. Six kilometres to the south-southwest, the northeasterly structure is displaced left laterally by a north-northwesterly structure for approximately four kilometres as evidenced by the displacement of Cretaceous (Ks) sediments. The structure continues south-southwestward within the Nicola rocks and as a fault contact with the Cretaceous sediments.

A southeasterly band of Pleistocene to Holocene volcanic rocks (Qvk) is bounded by the central dioritic stock to the west, by Courtenay Lake to the south, and in an unconformable contact with the Nicola rocks to the north.

PORCUPINE *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE054
Within Property

The Porcupine occurrence is located in a northeast trending, fault-bound belt of Lower Cretaceous intermediate to felsic continental volcanic rocks with associated sedimentary and intrusive rocks which correlate with the Kingsvale Group. Locally, stratigraphic contacts strike 030 degrees and dip 35 degrees to the southeast and unconformably overlie Upper Triassic Nicola Group volcanics. In the vicinity are reddish brown to maroon coloured andesitic to basaltic flows which are rich in plagioclase and, to a lesser extent, augite and zeolite (laumontite).

Figure 15. **CLAIMS, GEOLOGY, & MINFILE**
(Base Map from MapPlace)



GEOLOGY MAP LEGEND

(For Figure 15)

Pleistocene to Holocene

Qvk

Unnamed alkalic volcanic rocks

Upper Triassic: Nicola Group

Eastern Volcanic Facies

uTrNE

basaltic volcanic rocks

uTtNsf

mudstone, siltstone, shale, fine clastic sedimentary rocks

uTrNMl

lower amphibolite/kyanite grade metamorphic rocks

uTrJum

unnamed ultramafic rocks

Central Volcanic Facies

uTrNc

andesitic volcanic rocks

Late Triassic to Early Jurassic

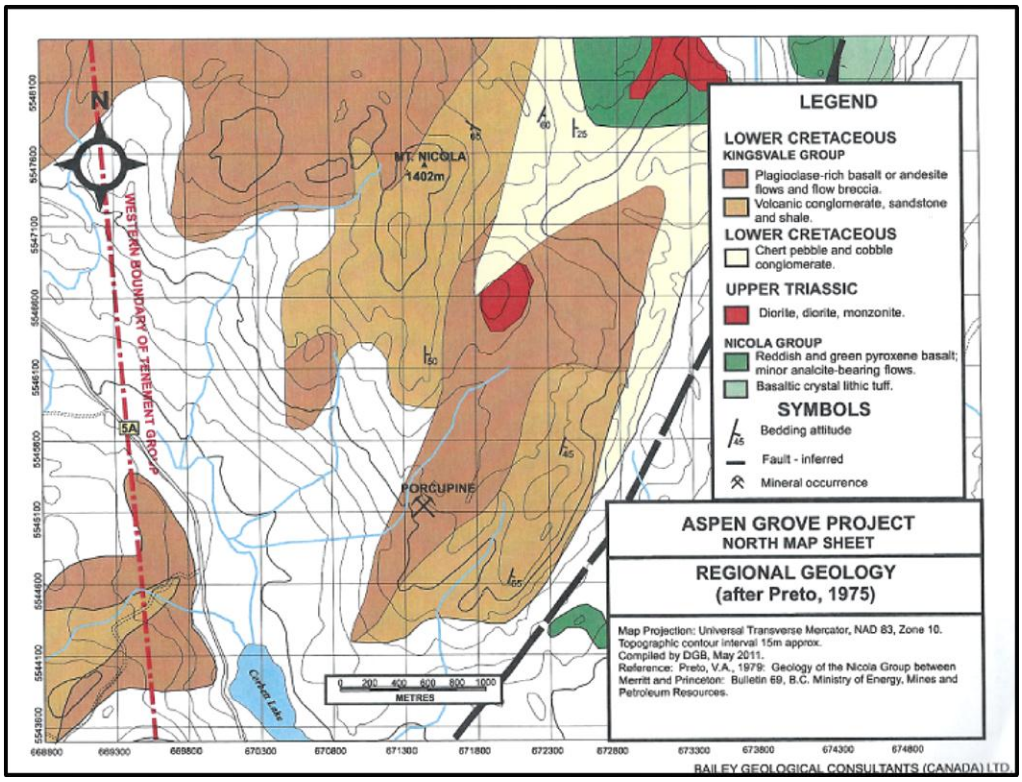
LTrJgd

unnamed granodiorite intrusive rocks

LTrJdr

dioritic to gabbroic intrusive rocks

Figure 16. **Aspen Grove Property Geology**
(showing location of the Porcupine)
(Map from Bailey, 2011 p5)



MINERALIZATION: PROPERTY AREA

The mineralization on some of the more significant mineral MINFILE reported showings, prospects, and past producers on and peripheral to the Property are reported as follows. The distance from the Toni 504332 Claim Group is relative to Tenure 504332, which is the subject of one of three contiguous claims of the structural analysis.

COPPER STAR *past producer (Volcanic redbed Cu)*
MINFILE 092HNE036
Three kilometres south

> Mineralization is most commonly hosted in the shear zones or in brecciated fracture zones. Here, alteration minerals are accompanied by malachite and pyrite, and smaller amounts of chalcopyrite, bornite, chalcocite, and locally minor native copper (Annual Report 1915; Assessment Report 17554; Geological Survey of Canada Memoir 243). Outside the shear zones, there are local concentrations of disseminated chalcopyrite and up to 10 per cent pyrite in volcanic tuff and breccia.

Mineralization: Property Area *(cont'd)*

COPPER STAR *past producer (cont'd)*

A number of old trenches, adits and opencuts exist in the area, and are most commonly located on the altered and mineralized shear zones or fractures in augite porphyry volcanics. The various old workings are scattered about an area, 200 metres wide, trending northeast for 290 metres. Copper values from these areas are generally not high; however, one sample was analysed at 0.29 per cent copper, and another grab sample assayed 0.7 per cent copper (Assessment Reports 4779, 17554). Silver values are also low, the maximum being 2 grams per tonne (Assessment Report 17554).

A small amount of production from the old workings is reported in 1915, when 41 tonnes of hand-sorted ore were shipped to a smelter. According to the returns, this shipment graded 8.7 per cent copper and 75.4 grams per tonne silver (Minister of Mines Annual Report 1915, page 227). Tanjo Mines Ltd. completed geological, geophysical and soil geochemical surveys over the showings between 1970 and 1972. Similar surveys were conducted by Redding Gold Corporation in 1988.

HN-WEN *prospect (Volcanic redbed Cu)*
MINFILE 092HNE058
Fourteen kilometres southeast

The mineralization is restricted to the volcanics. It is exposed in 3 adits and at least 8 trenches, and is marked by alteration, mainly epidotization, silicification, carbonatization, moderate chloritization and local pyritization. Chalcopyrite is the only copper mineral: it is disseminated, or concentrated in quartz and calcite veins and veinlets between 0.3 and 30 centimetres thick, usually about 8 centimetres thick. Pyrite, pyrrhotite and rare specular hematite are also present in the veins. Locally oxidation has produced abundant malachite, azurite and limonite.

The mineralized zone measures 760 by 90 metres and has a depth of about 75 metres. Diamond drilling indicates that it strikes 160 degrees and dips vertically or steeply east, so it is not parallel to the volcanic-sedimentary contact, indicating that the contact is not the controlling factor.

Rather, the veins hosting the mineralization are structurally controlled by numerous faults and fractures which consistently strike 160 degrees and dip 85 degrees east (Assessment Report 4230). Incidentally, the Echo occurrence (092HNE059) lies on this trend, 2 kilometres to the north-northwest, and the mineralization may also extend south-southeast of the HN-WEN occurrence (Assessment Report 4230).

Some significant copper and silver values have been obtained from the workings and diamond drill core. A 1.5-metre chip sample from Adit Number 1 was assayed at 4.39 per cent copper, 92.6 grams per tonne silver, and 0.7 gram per tonne gold (Assessment Report 4230).

Mineralization: Property Area *(cont'd)*

HN-WEN *prospect (cont'd)*

A grab sample from here was assayed at 4.84 per cent copper, 46.6 grams per tonne silver and 0.7 gram per tonne gold (Assessment Report 4230). Both samples were from oxidized material and may not be representative of grade throughout the deposit (Assessment Report 4230). A drill core sample (hole HNS 72-1) assayed 1.12 per cent copper and 3.4 grams per tonne silver (Assessment Report 4230).

The average grade of the whole deposit has been estimated at 0.08 per cent copper, with a generally low gold and silver content (Assessment Report 4230).

BIG SIOUX *past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au*
MINFILE 092HNE073
Eight kilometres southwest

Copper mineralization is exposed along a 300-metre long roadcut and in various old workings north of the roadcut, in an area 500 metres long and 300 metres wide. Mineralization consists primarily of pyrite and chalcopyrite, as disseminations, blebs, fracture fillings, and in calcite and epidote veins. Pyrite also forms thin bands, comprising up to 25 per cent of the hostrock. Malachite occurs along fractures in many surface exposures. Chalcocite forms fracture fillings in one prominent 1.8-metres wide shear zone, striking 075 degrees and dipping 75 degrees north. Minor bornite is also reported. One chip sample taken along the roadcut assayed 3.27 per cent copper, 14.45 grams per tonne gold and 34.1 grams per tonne silver over 10 metres (Assessment Report 20834, page 5).

Channel sampling along a trench analysed 0.223 per cent copper, 0.106 gram per tonne gold and 1.26 grams per tonne silver over 27 metres (Assessment Report 7100, page 11, trench 4). A composite grab sample from the dump of a shaft, excavated in the chalcocite-bearing shear zone, assayed 12.6 per cent copper, 0.7 gram per tonne gold and 82 grams per tonne silver (Minister of Mines Annual Report 1901, page 1181).

BIG KIDD *prospect (Alkalic porphyry Cu-Au; Volcanic redbed Cu)*
MINFILE 092HNE074
Nine kilometres south

Mineralization is erratic and consists of abundant magnetite, and pyrite, lesser chalcopyrite, and traces of bornite and chalcocite, as disseminations, lenses, scattered blebs and veinlets. Cuprite and native copper are also reported. This mineralization tends to favour the zones of alteration, but is not proportional to the intensity of alteration. The sulphides are in part controlled by zones of shearing and fracturing in the northeastern portion of the deposit. Limonite, malachite and azurite are present at or near surface. Pyrite occurs primarily as disseminations up to 5 millimetres in diameter. The mineral also occurs along fractures in association with chalcopyrite, orthoclase, quartz and/or carbonate. Chalcopyrite tends to be finely disseminated and is usually associated with magnetite, intimately associated with pyrite, and forms pseudomorphs after pyrite. Pyrite-chalcopyrite intergrowths are prevalent along fractures. Bornite is often found in magnetite-chalcopyrite blebs and veinlets, which often display epidote halos.

Mineralization: Property Area *(cont'd)*

BIG KIDD prospect (cont'd)

Copper content is quite variable, and precious metal values are low but anomalous. Channel sampling of an adit yielded 0.901 per cent copper, 0.141 gram per tonne gold and 13.66 grams per tonne silver over 14 metres (Assessment Report 7100, page 8, adit no. 1) Channel sampling of a trench, 90 to 190 metres west of the adit, yielded 0.237 per cent copper, 0.095 gram per tonne gold and 3.37 gram per tonne silver over 35 metres (Assessment Report 7100, page 9, trench no. 12). Trenching and sampling of the northern margin of the breccia pipe yielded gold values of up to 1.97 grams per tonne over 6 metres (Assessment Report 8743, Figure 3, samples 3413, 3414).

PAYCINCI *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE084
Twelve kilometres south

Hypogene and supergene copper mineralization occurs in green laharic breccia, near the contact with red laharic breccia to the east. This mineralization consists primarily of disseminated and fracture controlled chalcocite and native copper, accompanied by lesser malachite and azurite, and minor chalcopyrite, bornite, cuprite and pyrite. Drilling indicates chalcopyrite becomes more abundant at depth at the expense of chalcocite. This mineralization is exposed along the crest and east flank of a small northerly trending ridge, over a north-south distance of 400 metres.

Drill indicated reserves are 54,000 tonnes grading 0.876 per cent copper (Assessment Report 7654, page 1). Precious metal values are generally low. Six rock samples analysed 1.1 to 2.4 per cent copper, 0.005 to 0.010 gram per tonne gold and 1.3 to 5.7 grams per tonne silver (Assessment Report 14108, Figure 5, samples 2051 to 2056). One chip sample taken along a trench yielded 0.89 per cent copper over 49 metres (George Cross News Letter No. 90 (May 8), 1992).

MINT Showing (Porphyry Cu +/- Mo +/- Au)
MINFILE 092ISE084
Three kilometres east

The Quilchena pluton exhibits alteration and mineralization characteristics of porphyry copper environments. Three overlapping hydrothermal alteration zones comprise an area with a 1500 metre radius. A central 800 metre wide zone of intense potassic and kaolinitic alteration is characterized by close-spaced microveinlet- fillings of quartz and potassium feldspar. Chalcopyrite and molybdenite occur as disseminations and are associated with fractures. The potassic zone grades into sericitized and kaolinized zones which also host chalcopyrite but have less abundant veins. Occasional epidote-filled veins are suggestive of an outer zone of propylitic alteration. Pyrite occurs throughout the intrusive unit as disseminations and fracture-fillings and it is usually weathered to limonite. Malachite and azurite are on fracture planes surrounding the veins.

AU-WEN *prospect (Intrusion related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-Au)*
MINFILE 092HNE144
Nine kilometres southeast

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

AU-WEN *prospect (cont'd)*

Pyrite, pyrrhotite, chalcopyrite and arsenopyrite are disseminated sporadically in the tuffaceous rocks and argillite, up to about 1 per cent, and also occur in fractures (Assessment Reports 11241, 16008). Native gold is associated with the sulphides in narrow quartz-filled fractures in these rocks (Assessment Report 16008). Minor malachite occurs in volcanics. The overall extent of the mineralization has not been determined, although diamond drilling has demonstrated that minor pyrite, pyrrhotite and chalcopyrite, disseminated or associated with quartz or calcite fracture veinlets, does persist below the surface (Assessment Reports 11241, 16008).

Gold values in the area are generally low, but high values have been obtained from trench sampling and drill core at the main showing. Significant gold assays in chip samples range from 6.8 grams per tonne over 5.1 metres to 10.8 grams per tonne over 4.9 metres (Assessment Report 16008).

Copper is associated with the gold mineralization; one rock sample from the main trench yielded 0.29 per cent copper (Assessment Report 7293). Another sample yielded 26 grams per tonne silver and 0.14 per cent lead (Assessment Report 7293). Silver in diamond drill core is generally under 1 gram per tonne (Assessment Report 11241).

Grab and select samples assayed between 14.4 and 91 grams per tonne gold (Assessment Reports 5766, 16008). The best drill core intersection assayed 4.97 grams per tonne gold over 1.5 metres (Assessment Report 16008).

COURT 1 *showing (Volcanic redbed Cu; Cu Skarn)*
MINFILE 092HNE147
Five kilometres south-southeast

Mineralization at the showing is exposed by stripping, and consists of chalcopyrite, pyrite, malachite and azurite. Chalcopyrite and molybdenite are present at the skarn-altered outcrop. The nature of the mineralization is not specified but in showings in the area minerals are characteristically disseminated or hosted in quartz veinlets.

MINERALIZATION: PROPERTY

PORCUPINE *developed prospect (Volcanic redbed Cu)*
MINFILE 092HNE054
Within Property

Mineralization consists of disseminations of chalcocite, native copper, cuprite, bornite, chalcopyrite, pyrite, magnetite and specular hematite in brecciated tops of subaerial flows. Minerals occur in amygdules and thin fractures. Minor malachite and azurite occur near the surface. The main showing contains a 15 metre deep inclined shaft sunk on a mineralized amygdaloidal, dark grey basaltic flow which is overlain by red tuffs.
Drill indicated reserves are reported as 125,179 tonnes grading 2.0 per cent copper and inferred (possible) reserves as 453,550 tonnes grading 1.9 per cent copper (Northern Miner - 1967, 1969).

MINERALIZATION: PROPERTY *(cont'd)*

Ostler (2009) reports (AR 31,213) that mineralization near the Porcupine main shaft comprises mostly bornite, malachite, and azurite deposited in a matrix of basaltic flow breccia in Late Cretaceous-age Kingsvale group volcanic rocks. The surface exposure of mineralization extends south-southwestward from the main shaft for 80 metres (262 feet). A composite chip sample on a 1.2 metre thickness of autobreccia on the northern wall of the inclined shaft contained: 1.93% copper, 8.0 ppm silver, and 4.4 ppb gold. Another composite chip sample taken from a 1.0 m thickness of autobreccia from the southern wall of the shaft contained: 0.92% copper, 2.4 ppm silver, and 3.8 ppb gold. In a trench about 30 m south of the shaft, the thickness of mineralization in the autobreccia was less than 0.5m. The last trace of malachite was observed in a trench about 80m south of the shaft.

The main shaft is located about 3m south of a sub-vertical fault that trends about 126 (306) degrees in the workings area. The extensively trenched area near the shaft northeast of the fault hosts no mineralization. Three 1979 percussion drill holes located north of the fault within 25m of the main shaft also contained no significant copper mineralization.

Bailey (2011) reports that copper grade intersected in drill holes (Figure 12) ranged from 1.66% to greater than 6.0% over a true thickness of about 3 metres. A second, overlying mineralized horizon is suggested by the intersection in DDH-7 of 1.70% copper over a true thickness of 1.2 metres. A log of lithologies intersected by DDH-7 indicates that other mineralized horizons may be present.

The fault that bounds mineralization at the Porcupine workings is an extensive structure that can be traced both by limonitic soils and outcrops on the ground and by the 2007 airborne electromagnetic survey results of the area. It was concluded that mineralization at the Porcupine workings was the result of fluids that ascended the fault plane and deposited copper mineralization in a favourable horizon in the Kingsvale Group volcanics. Orthoclase and quartz deposited on fracture planes adjacent to mineralization at the Porcupine main shaft indicates that mineralizing fluids were scavenged Triassic-age porphyry copper mineralization at depth.

Figure 17. **Indicated Lineaments on Tenure 504332**

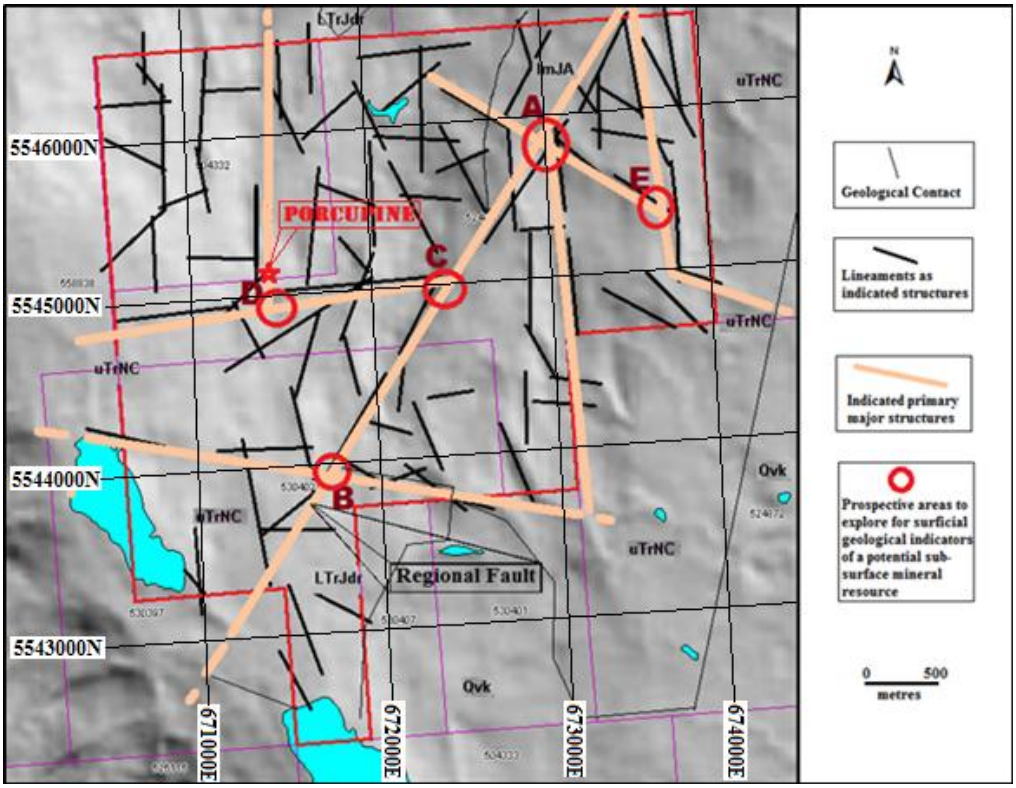
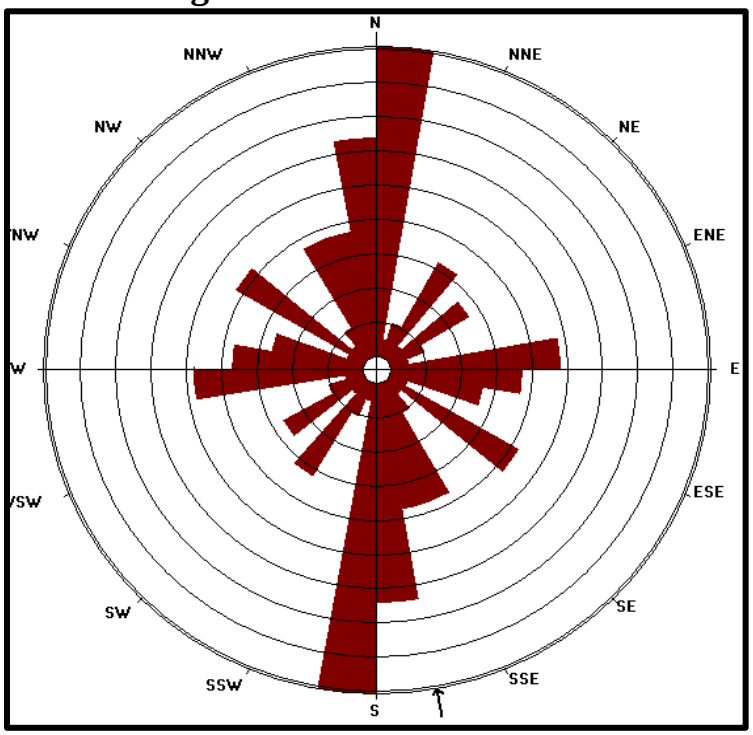


Figure 18. **Rose Diagram from Lineaments of Tenure 504332**



STATISTICS *(for Figure 18)*

Axial (non-polar) data
No. of Data = 94
Sector angle = 10°
Scale: tick interval = 2% [1.9 data]
Maximum = 18.1% [17 data]
Mean Resultant dir'n = 170-350
[Approx. 95% Confidence interval = ±36.3°]
(valid only for unimodal data)

Mean Resultant dir'n = 169.6 - 349.6
Circ.Median = 169.0 - 349.0
Circ.Mean Dev.about median = 37.3°
Circ. Variance = 0.33
Circular Std.Dev. = 51.36°
Circ. Dispersion = 8.58
Circ.Std Error = 0.3022
Circ.Skewness = 0.99
Circ.Kurtosis = 0.43

kappa = 0.41
(von Mises concentration param. estimate)
Resultant length = 18.84
Mean Resultant length = 0.2004
'Mean' Moments: Cbar = 0.1875; Sbar = -0.0709
'Full' trig. sums: SumCos = 17.6242; Sbar = -6.6611
Mean resultant of doubled angles = 0.3103
Mean direction of doubled angles = 178

(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

INTERPRETATION

The controls to mineralization controls at the Porcupine workings are two-fold;

1) Stratigraphic (volcanogenic):
    a) Mineralization associated with volcanic horizons oriented at 030/35SE (Figure 12) and explored by the Porcupine shaft;
2) Structural:
    a) Porcupine Northeast Structure (Figures 6 & 7): Possible mineralization in this structure bounding the Porcupine shaft to the west as indicated by a VLF-EM anomaly that extends for 400 metres and open to the northeast from 50m south of the shaft.

       This structure is one of many parallel array set of faults that resulted from the the regional fault. The array of faults is shown by the magnetic survey results of Figure 6. The regional structure is prominently displayed in the IP/resistivity results of Figure 19.

       Ostler (2009) reports that … *'Reported mineralization is chalcocite, chalcopyrite, bornite, cuprite and native copper, mainly associated with sheared volcanic rocks."* It is not clear whether the shear refers to the mineralization or to the shear of the structure.

***INTERPRETATION** (cont'd)*

A 350 metre soil anomaly from 1850 metres southeast of the Porcupine Shaft (Figure 5) is potentially an extension of the Structure to the southwest with the central barren 1500 metre portion offset as a block fault for 700 metres to the northwest.

b) Porcupine Northwest Structure (Figures 12 & 14): Indicated mineralization in this sub-vertical structure trending at about 306 degrees that bounds the Porcupine shaft and … "can be traced both by limonitic soils and outcrops on the ground and by the 2007 airborne electromagnetic survey results of the area." (Ostler, 2009). Osler (2009) estimates a 700 metre right lateral displacement on this structure

The volcanic (volcanogenic) stratigraphic mineralization, indicated as hosted by a flow breccia at the flow contact, was likely sourced from the volcanic fluids and was precipitated along the flow breccia cooling contacts under favourable chemical and temperature conditions.

The structurally hosted mineralization was likely sourced from a deep-seated mineral bearing IP/resistivity indicated intrusive (Figure 20). The surficial limonitic trace of the Porcupine Northwest Structure is likely an indication of hydrothermal alteration from initially vented via cross structure D (Figure 17) and feathered out to the associated structures including the Porcupine workings where fractures are reported to host orthoclase and quartz.

The mineralized intrusive is indicated by the IP chargeability at a depth of 300 metres (Figure 20). The structures at the Porcupine workings are surficially projected to be located above a typical k-spar rich, mineral barren core of a porphyry system.

The results of the 2012 Structural Analysis (Figure 17) indicates five cross structures A to E with three of the cross structures associated with the major northeast trending regional structure as indicated on Figure 14.

In the Porcupine area the northeasterly structure as delineated by the VLF-EM survey (Figure 6) is generally correlative to one of the parallel relay set of faults arising from the regional structure to the east. This structure is indicated to extend 50 to 100 metres southerly from the Porcupine to an east-west structure resulting in cross structure D (Figure 17). This cross-structure location generally correlates with the location as indicated on Figure 14; however, in the structural analysis the northeasterly structure intersection is not with a northwest structure but with a dominant east-west structure which is prominently displayed topographically (Figure 17). Nevertheless, a cross-structure is indicated at D (Figure 17) which location is in the immediate area of the Porcupine workings structures where surficial indicators of a potential sub-surface mineralized intrusive occur.

***INTERPRETATION** (cont'd)*

The other four cross-structure locations could reflect similar surficial mineral indicator features with locations A & B the prime prospective areas as they are associated with a regional structure. Location A, with three structural intersections potentially resulting in a mineral hosting breccia pipe would be a favourable site to host a hydrothermal mineral deposit such as at the BIG KIDD prospect (Minfile 092HNE074). Location B, for the intersection of two structural intrusive-volcanic contacts); the northerly regional structure and an east-west structure (Figure 17. The intersection location is positioned for venting any indications of surficial mineral indicated geological features the adjacent intrusive or from greater depths.

CONCLUSIONS

Surficially, two distinct types of mineralization occur at the Porcupine; volcanogenic (red-bed copper) mineralization sourced from the volcanic flow and occurring in an auto-brecciated top of a volcanic flow; and structural hosted hypogenic mineralization probably sourced from a sub-surface mineralized intrusive.

Even though the volcanogenic mineralization returned significant copper values in diamond drill core, the historic exploration results have indicated that the mineral zone may be localized and the directional avenue for additional exploration is not definitive except for possibly a down-dip extension to the mineralization. Conversely, the structural hosting mineral indicators and the IP/resistivity anomaly display the potential of a sub-surface mineralized intrusive. These historic exploration results provide more definitive targets on which to warrant a diamond drill program to test for a sub-surface potential bulk tonnage copper-silver-gold porphyry resource.

RECOMMENDATIONS

A diamond drill program should be initiated to test the IP/resistivity anomalies indicated for a mineralized intrusive. Initially, three 500 metre HQ drill holes are recommended at locations as displayed on Figure 19 and 20. The results from the drill holes should either intersect a mineralized porphyry system or provide information as to the effective interpretation of the 2009 IP/resistivity on which to base future exploration.

The diamond drilling should also provide information on the stratigraphy of the Nicola volcanics and possibly intersect the Porcupine type of volcanogenic mineralization. There is also the potential of locating volcanic related mineralization within adjacent horizons or skarn mineralization proximal to the intrusive. The types and characteristics of mineralization that may be located by the diamond drill program are referred to in the 10 included MINFILE property descriptions contained herein.

Figure 19. **Proposed Location of Diamond Drill Holes over Chargeability 300 metres below surface**
(Base Map from AR 31.213 p162)

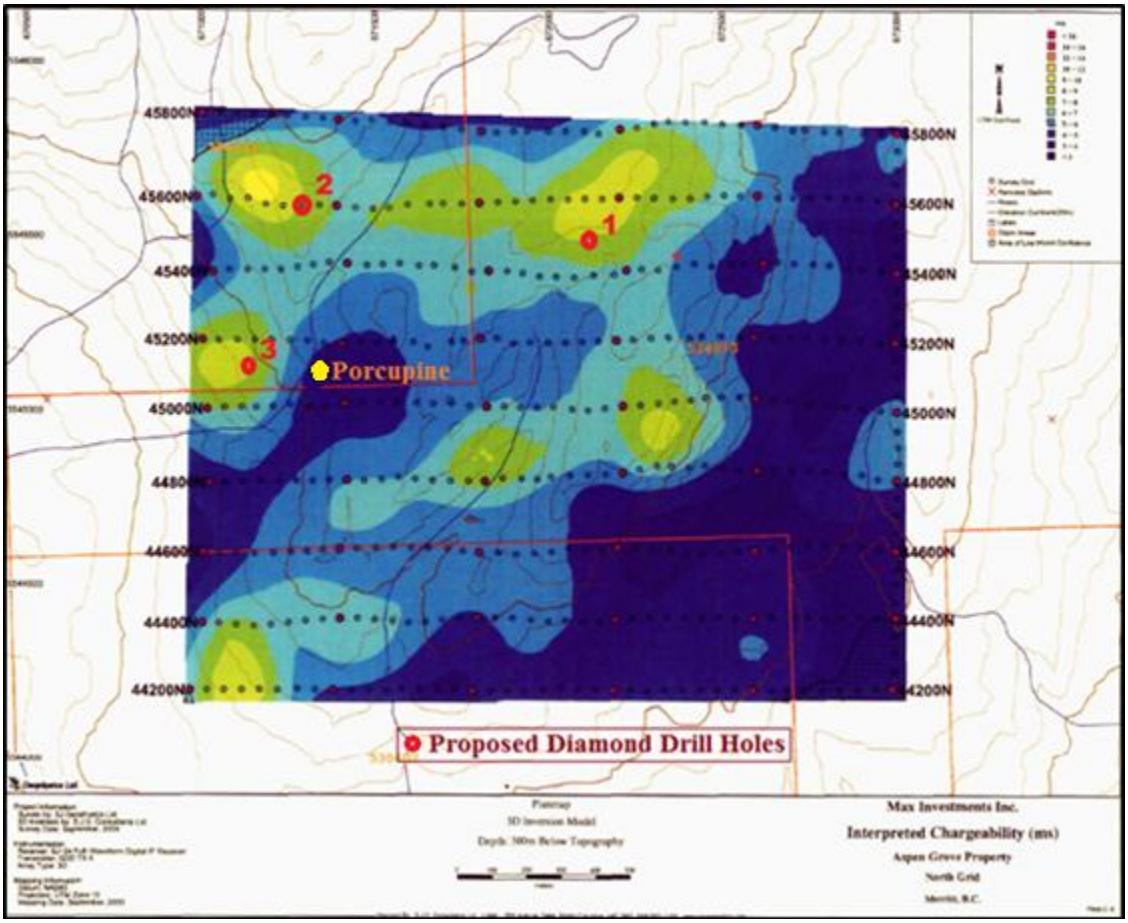


Figure 20. **Proposed Location of Diamond Drill Holes over IP/Resistivity** (see Figures 19 & 11 for UTM grid)
(Base Map from AR 31,213 p95)

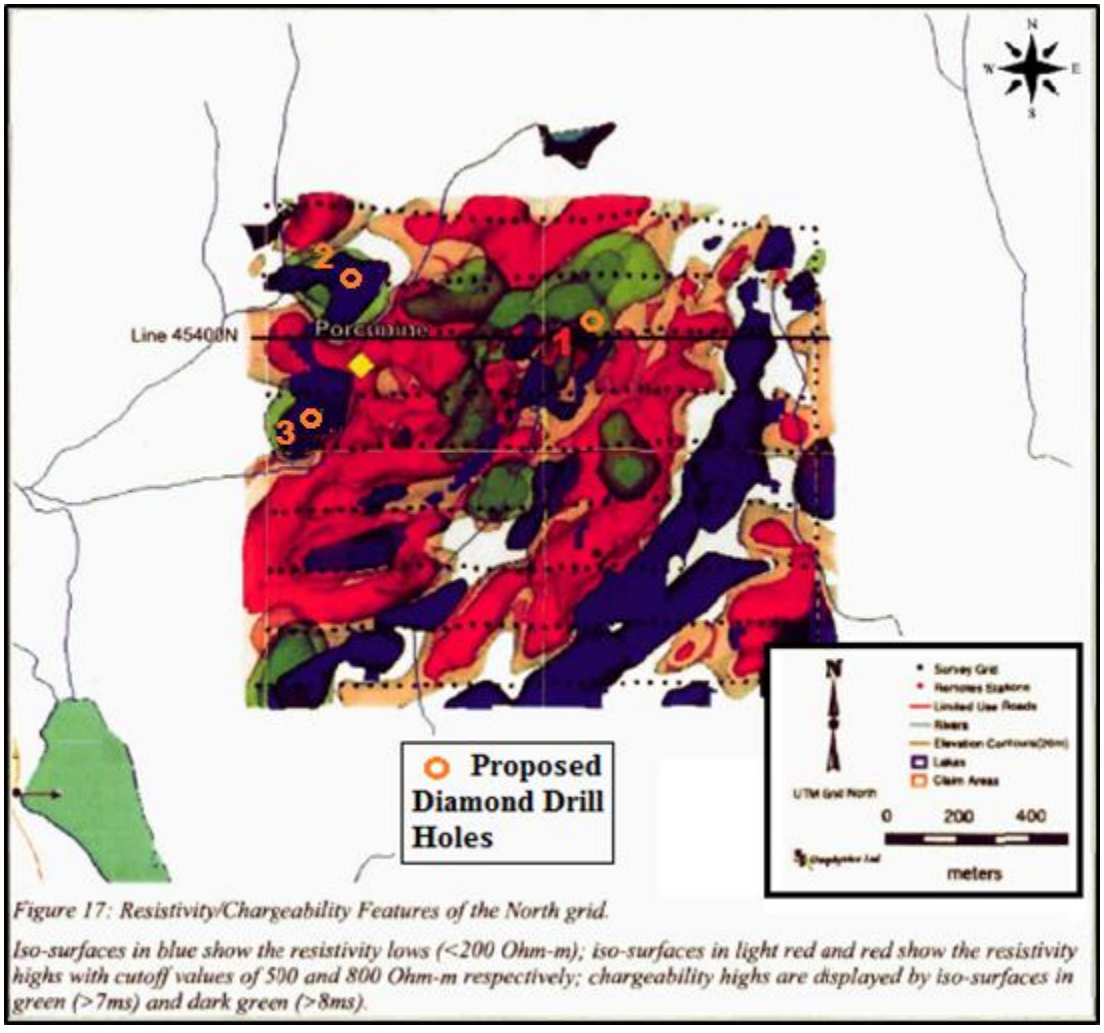


Figure 17: Resistivity/Chargeability Features of the North grid.

Iso-surfaces in blue show the resistivity lows (<200 Ohm-m); iso-surfaces in light red and red show the resistivity highs with cutoff values of 500 and 800 Ohm-m respectively; chargeability highs are displayed by iso-surfaces in green (>7ms) and dark green (>8ms).

Drill Hole	Location NAD 83		Azimuth	Depth (m)	
	UTM North	UTM East			
1	5,545,425	672,200	-90	500	
2	5,545,600	671,250	-90	500	
3	5,545,100	671,125	-90	500	

Porcupine	5,545,142	671,374

Respectfully submitted
Sookochoff Consultants Inc.

Laurence Sookochoff, PEng

SELECTED REFERENCES

Bailey, D.G. – Summary Review of the Aspen Grove Property for Richard Billingsley. June 12, 2011.

Bell, R.A., Sutherland, D.B. – Report on Induced Potential and Resistivity Survey of the Porcupine Claim Group for Amalgamated Resources Ltd. December 21, 1966. **AR 962**.

Chen, B. – Geophysical Report, 3D IP and Magnetometer Surveys on Aspen Grove Project for Max Investments Inc. October 2009. **AR 31,213**.

Diakow, G. – Prospecting Report on Soil Sampling over the CP Property for Corbett Lake Minerals, Inc. April 10, 2000. **AR 26,232**.

Kelly, S. – Report on a Geochemical Survey on the Porcupine Claims for Amalgamated Resources Ltd. April 1968. **AR 1,595.**

Kerr, J.R. – Geological, Geophysical, and Geochemical Report on the Aspen Grove Property for Etna Resources Inc. November 17, 2009. AR **31,213**.

MapPlace – Map Data downloads

Mark, D.G. – Geophysical Report on a VLF-EM Survey CR No 1 Claim for Burdos Mines Ltd. December 11, 1978. **AR 7,043.**

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

MtOnline - MINFILE downloads.

Ostler, J. – Geology of the Aspen Grove Property with Emphasis on the Tinmilsh Hydrothermal System. October 12, 2009. **AR 31,213**.

Rolston, T. – 1979 Drill Program on CR 1 Clam for Pentagon Resources Ltd. October, 1979. **AR 7,876.**

STATEMENT OF COSTS

Work on Tenure 504332 of the Toni 504332 Claim Group was done from October 2, 2012 to October 15, 2012 to the value as follows:

Structural Analysis

Laurence Sookochoff, PEng. 2 1/2 days @ $ 1,000.00/day ----	$ 2,500.00
Maps ----------	700.00
Report ----------	4,500.00
	$ 7,700.00
	======

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 forty-six 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 periodic work the author has performed in the Aspen Grove area since 1980.

5) I have no interest in the Property as described herein.

Laurence Sookochoff, P. Eng.