

### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: ROCK GEOCHEMICAL SAMPLING ON THE ACE PROPERTY

TOTAL COST: \$2,961.89

AUTHOR(S): HOOGENDOORN, PAUL PALIKOT, PETER

SIGNATURE(S): Paul Hoogendoorn, Peter Palikot

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A STATEMENT OF WORK EVENT NUMBER(S)/DATE(S ): 5555067 / May 19, 2015

YEAR OF WORK: 2015 PROPERTY NAME: ACE CLAIM NAME(S) (on which work was done): 680163 "1060 ZONE"

COMMODITIES SOUGHT: Zinc, Copper

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092HNE120 MINING DIVISION: Similkameen NTS / BCGS:092H/010 LATITUDE: 49°38'13.6" LONGITUDE: 120°37'4.5" (at centre of work) UTM Zone: 10 EASTING: 671990 NC

NORTHING: 5501010

OWNER(S): PAUL HOOGENDOORN (50%); PETER PALIKOT (50%)

MAILING ADDRESS: #103 – 9820 102<sup>nd</sup> Avenue, Fort St. John, B.C., V1J 2E1

OPERATOR(S) [who paid for the work]: PAUL HOOGENDOORN & PETER PALIKOT MAILING ADDRESS: #103 – 9820 102<sup>nd</sup> Avenue, Fort St. John, B.C., V1J 2E1

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. Do not use abbreviations or codes) Nicola group volcanics, Central Belt, Allison Pluton, andesite, zinc, copper, chalcopyrite, manganese, Triassic, Jurassic

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 4349, 6697, 32072

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
Rock	13 rock samples from 200 square meter trench face	680163	2,624.73
	•	680163	337.16
Sampling / Assayir	g	TOTAL COST	\$2,961.89

### ROCK GEOCHEMICAL SAMPLING ON THE ACE PROPERTY



Mineral tenure 680163

Map Sheet 092H/010 Similkameen Mining Division

NTS Zone 10, 671990 x 5501010 120°37'4.5 x 49°38'13.6

Statement of Work Event 5555067

Owners and operators:

Paul Hoogendoorn Peter Palikot

Authors:

Paul Hoogendoorn Peter Palikot

August 2015 Port Coquitlam, British Columbia

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#### **INTRODUCTION**

This Assessment Report describes a program of rock geochemical sampling on mineral tenure 680163 (the "Ace Property"). The work described in this report was conducted by the authors in 2015, and is being submitted for assessment filing purposes.

The Ace Property secures the zinc-copper AT Showing. The AT Showing is referred to in the provincial mineral inventory as MINFILE 092HNE120. Mineralization is present in a series of shears exposed in a surface working.

The work described herein was completed by Peter and Richard Palikot in May 2015 and by Paul Hoogendoorn in July 2015.

The goal of the 2015 work program was to systematically test the geochemistry of a number of individual shears, and in several instances the adjacent wall-rock, within a working referred to by past workers as Trench 2/3 (Allen). Historical sampling of this trench, circa 1977, did not include a full suite of 32 element geochemical analysis. Grab samples by the authors in 2010 (Assessment Report 32072) validated the mineralization, but this work did not include a rigorous examination of the host rock themselves. The 2015 work program was intended to address both gaps.

### **CLAIM INFORMATION**

#### Tenure

The Ace Property comprises a single four cell-unit claim, as follows:

Title Number	Claim Name	Registered Owner	Beneficial Owners	Good To Date	Area (ha)		
680163	1060 ZONE	P. Hoogendoorn (100%)	P. Hoogendoorn (50%) P. Palikot (50%)	2018 June 05	83.69		

The Ace Property is owned jointly by the authors, and is free of any royalty, option-agreement, earn-in right or other encumbrance. The Good to Date shown is subject to acceptance of this report

There are no surface rights on the work area, though surface lots may overlap slightly with the far north and east portion of the tenure, beyond the present project area.

The Ace Property is believed to fall within the following First Nations' consultative areas:

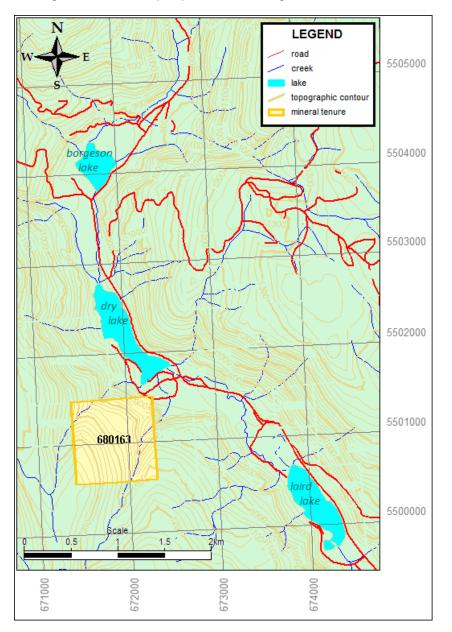
- Upper Nicola Band
- Nlaka'pamux Nation
- Upper Similkameen Indian Band
- Ashcroft Indian Band
- Okanagan Nation Alliance
- Nooaitch Indian Band

### **Location and Physiography**

The Ace Property is located in the Similkameen Mining Division, British Columbia. It is 22 air kilometers north-northwest of Princeton, on the west side of the Allison Creek valley.

The Ace Property is located on a steep mountain slope on the west side of the Allison Creek valley, within a steeply incised creek ravine.

Physiography is pine forest, typical of alpine areas of the Similkameen. Timber density is low enough to permit a pleasant grass forest floor, though underbrush is thick in disturbed areas such as dozer roads. Bedrock exposure is minimal on the side hill; however volcanic outcrops were encountered on the ridgeline running northwest and upslope of the showing.





### **Access and services**

Access is via the John Burns Forest Service Road network. Driving directions are provided as follows:

- Driving north along Hwy 5A (Princeton-Kamloops Hwy), turn left (northwest) at 672336 E x 5504440 N<sup>1</sup>.
- Travel 5.4km northwesterly along a fairly narrow and steeply climbing road, and turn left on a much more well-maintained gravel resource road. At this point the road traverses the plateau above the Allison Valley, at an elevation of approximately 1260 meters.
- Travel an addition 4.6km south, and then turn left (southeast), proceeding another 1.0km south. Turn left again on the so-called Hazelton Road, and travel an additional 7.3km to a staging point west of the property, within a large clear-cut. From this point, access to the property is by foot, 1.3km travelling east. Forest cover is pleasant, though the latter half of the walk involves a steep descent to the showing.

Access can also be obtained on foot by a cat road from Hwy 3. However, this road passes through private property within the Allison Creek valley. It appears that with some rehabilitation, and subject to the appropriate landowner notification and consent, this road could viably support a development program at the showing.

Logging is intensive on the plateaux upslope of the showing, providing good access to the project area from well-maintained resource roads.

Water for an exploration program is available from a creek downslope of the showing, and hydro-electric power and natural gas is available in the Allison Creek valley. All services necessary for an exploration program are available in Princeton and Merritt.

## GEOLOGY

### Regional

The Ace Property is underlain by a body of Nicola group (Central Belt) volcanic rocks adjacent the Jurassic aged Allison Pluton, near its southern edge.

The regional geological setting is described as the "Nicola belt", a north-south trending body of Triassic-Jurassic aged volcanic rock intruded by Triassic-Tertiary plutons and batholiths. The Nicola belt was formed on the Quesnel terrane, an island arc terrane which was accreted to North America in the Early to Middle Jurassic (Mihalynuk et al, 2014). The Nicola Belt, spanning much of British Columbia, is of significant economic interest, hosting many of the Mesozoic copper (+/- molybdenum +/- gold) porphyry deposits of the Cordillera. Long-lived, deep-seated faults are key structural controls.

In the Princeton-Aspen Grove area, the Nicola Belt is mapped as comprising three parallel north-south units: the Western Belt, the Central Belt, and the Eastern Belt (Preto).

The Central Belt is "typified by an abundance of massive pyroxene and plagioclase-rich flows of andesitic and basaltic composition, coarse volcanic breccia, conglomerate and lahar deposits and by lesser amounts of fine-grained pyroclastic and sedimentary rocks" (Preto and Northcote 1977).

The Allison pluton intrudes the Central Belt in the project area; it is an Upper Triassic to Lower Jurassic intrusive stock primarily comprising "reddish to reddish-grey biotite-hornblende granite and quartz

<sup>&</sup>lt;sup>1</sup> All UTM coordinates in Zone 10.

*monzonite*" (Preto). Mesozoic intrusion within the Nicola volcanic rocks is the typical host for porphyry copper mineralization in the Cordillera; therefore, the project area geology appears reasonably permissive.

West of the project, volcanic flows of the Spences Bridge Group predominate, overlaying the Mesozoic basement rock.

### Property geology

The property geology is complex, and it appears it has not been fully mapped and integrated into regional bedrock maps.

Prior workers located the AT showing within andesitic Nicola volcanic rocks, near the contact with plutonic rocks of the Late Triassic-Early Jurassic Allison Pluton. Overlaying volcanic flows of the Cretaceous Spences Bridge Group are mapped to the west.

The most recent mapping of the area locates the showing within a small outlying body of Nicola group andesite (perhaps 1km long in the long NW trending axis), marginal the southern edge of the Allison Pluton, and the Spences Bridge Group to the west (Mihalynuk et al 32).

There were two distinct volcanic rock types observed in Trench 2/3, ranging from a porphyritic green volcanic in the northeast, with ovoid inclusions that were difficult to distinguish as either ~1cm diameter dyke swarms or agglomerate inclusions, to a highly brecciated quartz-flooded rock to the southwest. Multiple stages of fracturing, veining and quartz flooding could be identified, obscuring the original rock.

### **EXPLORATION HISTORY**

While exploration in the district dates back to the late 19<sup>th</sup> century, the recorded exploration history on the Ace Property dates to 1971. The first documented work was reported in the <u>Geology, Exploration and Mining 1971</u> report, which described 425 meters of trenching, along with soil and silt geochemical surveying, at the AT occurrence (then referred to as the Sym-Sun occurrence).

Since that work program, the showing has been described in various assessment reports. Most work in the project area occurred in the 1970s, when exploration activity in the district was buoyed by the development of a resource at the Axe prospect, located across the Allison creek valley.

These relevant assessment reports are briefly summarized, in the context of the 2015 work program:

O'Grady, Frank P., Scott, A. and D.R. Cochrane. <u>Geophysical and Geochemical Report on the</u> <u>Magnetometer and Soil Sampling Surveys on the AT No. 1-29 and AT 31-54 Mineral Claims.</u> For Komo Explorations Ltd. Delta, B.C.: 1972. A.R. 3439

This assessment report describes a geochemical and magnetometer survey covering 23 line kilometers.

The work resulted in the identification of three anomalies of interest, oriented along a 2.1km NW-SE (approximately 310°) trend.

These showings are aligned along the plutonic-volcanic structural contact zone. From southeast to northwest, pertinent anomalies are summarized as followed (numbering from O'Grady and Cochrane):

Anomaly 4: This is the smallest anomaly reported. It is located 300 meters east of the southeast corner of the Ace Property, across the creek valley. It is defined by adjacent soil results of 76 and 66 ppm copper and 0.9ppm silver.

- Anomaly 3: This is the most relevant anomaly for the purposes of the 2015 Work Program. It includes the AT showing. It is described as a "strong" anomaly, 365m long (NW-SE axis) and 120 m wide. It comprises two copper peaks, one defined by adjacent samples of 280 ppm and 70 ppm, and the other by three adjacent samples of 140ppm, 102 ppm and 76 ppm, respectively. This copper-in-soil anomaly is believed to be entirely secured by tenure 680163.
- Anomaly 2: This anomaly appears to be partially within tenure 680163, straddling the north tenure boundary. It was defined by adjacent copper-in-soil responses of 520 ppm, 126 ppm, 480 ppm and 64 ppm, and a second cluster centered on copper-in-soil responses of 910 ppm and 120 ppm, respectively. This anomaly is located 800 metres northwest of Anomaly 3. It was characterized as a "strong" anomaly, and the largest on the survey at 480 m x 200 m.

The magnetometer survey suggested that copper-in-soil enrichment was associated with increased magnetic response, and that the inferred volcanic-intrusive contact along which copper-in-soil enrichment was localized is associated with higher magnetite content. The magnetic plan indicated a "major disruption to the magnetic pattern" near anomaly 3; the author hypothesized it may represent a fault running perpendicular to the inferred geological contact intersecting near the known showing (16).

Allen, Alfred R. Geological Survey, <u>Similkameen M.D., B.C., 92H-10E</u>, <u>Ace Claim #49.</u> For Cardero Resources Ltd. West Vancouver, B.C.: 1977. A.R. 6697.

This report describes geological mapping, rock sampling within 6 trenches at the showing area, a soil geochemical survey, and a magnetometer survey.

The work provides the most thorough description of the mineral showing available.

The AT Showing had previously been investigated by a series of trenches; the main mineralized showing is located in an approximately 60 meter open cut referred to as trench 2/3. Trenches were also dug to bedrock and examined downslope and approximately 50m south of this showing (Trench 1), upslope approximately 50m north (Trench 4) and 80 meters cross-slope and northeast (Trench 6). Bedrock was andesite, and key observations are summarized:

- "In trenches 2,3 and 6 there is alteration and silicification of faulted and sheared andesitic rocks with pyrite, chalcopyrite, sphalerite, galena, malachite and azurite" (10)
- "The alteration and silicification is also exposed in the southwest end of Trench #4" (10)
- In Trench 1 "highly altered and strongly sheared black, green and purple andesite is exposed" (4)

Several rock samples were assayed for silver, copper, lead and zinc, with key results as follows:

Location	Description	Cu	Zn
Trench 2/3 (east)	0.3 m	1.11%	2.14%
Trench 2/3 (central)	1.0m	0.14%	1.35%
Trench 2/3 (west)	Selected	0.17%	1.33%
Trench 6	1.0m	0.56%	0.80%

A 300 sample soil geochemical survey centered on the AT showing was carried out over a 500 hectare grid (300 soil samples taken at 100 meter station spacing and 150 meter line spacing). Samples were tested for copper values. Results indicated that a "weakly anomalous" copper-in-soil response (defined as >30 ppm, approximately 80 percentile) extended over 1,000 meters southeast (downslope) from the showing area to the Allison Creek valley bottom. This zone of weak enrichment was based on 31 samples averaging 46 ppm copper, to a high of 89 ppm. No other elements were analyzed for. This anomalous zone (comprising anomalies 3, 5 and 6) appears to underlay the northeastern 1/3 of the current Ace Property.

A single station high to 214 ppm Cu was located within or near the southwestern corner of the present-day Ace Property, and a two-station high of 80 ppm and 45 ppm Cu was located in the northwest corner, along the same trend observed in report 3439.

Hoogendoorn, Paul and Palikot, Peter. <u>Geological and geochemical report on the Dry Lake Property.</u> <u>Langley, B.C.</u>: 2010. A.R. 32072.

The authors of the current report previously investigated Trench 2/3, as well as Trench 6 to the east, and obtained grab samples from several shears. Historically reported mineralization was located in Trench 2/3, with results to >1% Zn and >1% Cu obtained in grab samples.

Grab samples revealed spot enrichment of molybdenum (275ppm) and gold (to 450ppb) in Trench 2/3. Tungsten values were a positive surprise, averaging 300ppm across 3 samples.

Grab sampling also confirmed that Trench 6 was mineralized, with two samples averaging 0.59% Zn and 0.34% Cu.

### 2015 EXPLORATION PROGRAM

#### Methodology

The 2015 Exploration Program involved the collection of chip and grab samples from several locations within the historical "Trench 2/3".

Samples were taken from visibly mineralized or altered areas, and in several instances from adjacent wallrock where there was no visual mineralization. By the nature of this method, samples were not representative of the units or structures sampled.

Nevertheless, this method was considered to be consistent with the purpose of the program, which was to identify the comparative magnitude of mineralization at each mineralized zone within the showing, and to better understand the elemental composition of each poly-metallic shear zone. The objective was to gain a more systematic understanding of the mineralization.

Samples were taken in the field by rock hammer, and location noted both in absolute terms by Global Positioning System (Garming 60<sup>™</sup>) and in relative terms within the trench.

Samples were collected in poly bags. After completion of field work, an approximately 1kg portion of each sample was submitted to Pioneer Laboratories Inc. for geochemical analysis.

Geochemical analysis comprised 32 element inductively coupled plasma mass spectrometry with an aqua regia digestion. Sample size was 0.5 grams. Gold was tested by graphite furnace atomic absorption, after an aqua regia digestion and methyl isobutyl ketone extraction. Gold analysis was performed on a 20 gram sample.

#### Results

Geochemical results indicated mineralization was present in each sample obtained. Zinc and copper were the primary elements of interest; associated elements of interest included lead, silver and gold.

Key result were as follows:

Element	Average Value	Maximum Value	Minimum Value	Correlation with zinc	Correlation with copper
Zinc	5,862 ppm <sup>2</sup>	14,112ppm	2,010ppm	-	(0.3)
Copper	4,005ppm	11,540ppm	64ppm	(0.3)	-
Manganese	4,153ppm	8,655pm	1,994ppm	0.3	(0.5)
Gold	75ppb	140ppb	21ppb	(0.3)	0.7
Lead	259ppb	1,987ppm	5ppm	0.1	(0.4)

There appear to be two primary geochemical associations of economic interest:

 Mafic zinc-manganese mineralization observed at the two northeastern stations (02-ACE-15 and 01-ACE-15), plus the transitional sample site 4B-ACE-15. These samples are characterized by n=5 averages of:

Zn	Cu	Mn	Au	Pb	AI	Fe	Mg	Р	V
ppm	ppm	ppm	ppb	ppm	%	%	%	%	ppm
6197	337	5894	46	634	2.6	6.2	2.3	0.13	130

 Copper-zinc mineralization observed at the southwestern sample sites, including the transitional site 4-ACE-15. These are characterized by n=8 averages of:

Zn	Cu	Mn			Mg %	P %	V		
ppm	ppm	ppm	ppb	ppm	70	70	70	70	ppm
5653	6297	3065	93	25	.4	4.1	.3	0.03	12

The bi-modal geochemical results are consistent with the geological observations, which suggest two distinct units are present: (a) the northeastern samples were a green-grey porphyritic andesite, whereas (b) the copper-bearing western samples were quartz rich and had been subject to multiple stages of intrusion and alteration. The eastern-most samples were characterized by a much higher aluminum and phosphorus content than the westerly samples.

The contact zone between these two geochemical suites appears to occur just east of station 04-ACE-15, as that shear zone sample resembled the silicified unit to the west, whereas the wallrock sample taken 1m east at 04B-ACE-15 resembled the green volcanic unit which predominates the northeast portion of the trench.

The mafic zinc mineralization in the relatively unaltered volcanic rocks to the northeast end of the trench suggests there may be potential for mineralization beyond the known shear zones. Resolving the stratigraphic relationship between the two volcanic units may provide insights into the nature of the mineralization at the Ace Property.

<sup>&</sup>lt;sup>2</sup> ppm=parts per million; ppb=parts per billion

### **CONCLUSIONS AND RECOMMENDATIONS**

The AT showing within the Ace Property remains an intriguing exploration target, with zinc enrichment now known to occur beyond the visibly mineralized shear zones.

The 2015 work program suggests there are different modes of zinc enrichment, each attributable to a different geological unit. Based on these observations, the following recommendations are made:

- Chip sample the entire face of Trench 2/3 at fixed intervals, to better resolve the stratigraphy and geochemical zonation across exposure. If continuity of mineralization is demonstrated, shallow drilling to trace the mineralized shears along strike and dip is recommended.
- Chip sample and map Trench 6, to better identify the geological controls on zinc-copper mineralization encountered in 2010. It is not known which of the two mineralization "styles" (if either) mineralization in trench 6 is associated with.
- Once the geological and geochemical results from Trench 2/3 and Trench 6 have been fully integrated, conduct a thorough GPS supported bedrock mapping program across the Property.
- Conduct 2-3 north-south soil survey lines upslope and downslope of Trench 2/3, to attempt to trace surface mineralization under overburden. Tight station density (perhaps 25 meter spacing, increasing to 10m spacing on strike of known shears) should be employed, given the narrow mineralization sought. Given the possible impact of the steep topography, SGS Mobile Metal Ion soil sampling should be considered as an alternative to B-horizon sampling.

### REFERENCES

Allen, Alfred R. Geological Survey, <u>Similkameen M.D., B.C., 92H-10E</u>, <u>Ace Claim #49</u>. For Cardero Resources Ltd. West Vancouver, B.C.: 1977. A.R. 6697.

Hoogendoorn, Paul and Palikot, Peter. <u>Geological and geochemical report on the Dry Lake Property.</u> Langley, B.C.: 2010. A.R. 32072.

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Lefebure, D.V. and Church, B.N. (1996): Volcanic Redbed Cu, in Selected British Columbia Mineral Deposit Profiles, Volume 1 - Metallic Deposits, Lefebure, D.V. and Hõy, T, Editors, British Columbia Ministry of Employment and Investment, Open File 1996-13, pages 5-7.

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O'Grady, Frank P., Scott, A. and D.R. Cochrane. <u>Geophysical and Geochemical Report on the Magnetometer and Soil Sampling Surveys on the AT No. 1-29 and AT 31-54 Mineral Claims.</u> For Komo Explorations Ltd. Delta, B.C.: 1972. A.R. 3439

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### **AUTHORS' CERTIFICATES**

## **Paul Hoogendoorn**

I Paul Hoogendoorn, of Fort St. John, British Columbia, do hereby certify that:

- (1) I did visit the ACE Property and did conduct the work as described in the above report.
- (2) I did coauthor the above report and believe the contents of the report to be true and accurate.
- (3) I did complete the MINE 1001 course at the British Columbia Institute of Technology in 2002, and I have been active as a prospector since 2008.

1 H

Paul Hoogendoorn

September 7, 2015

## Peter Palikot

I Peter Palikot, of Port Coquitlam, British Columbia, do hereby certify that:

- (1) I did visit the ACE Property and did conduct the work as described in the above report.
- (2) I did coauthor the above reports and believe the contents of the report to be true and accurate.
- (3) I have been a prospector since 2008.

Peter Palikot

September 7, 2015

## **APPENDIX A – ROCK SAMPLE DESCRIPTIONS**

## Notes

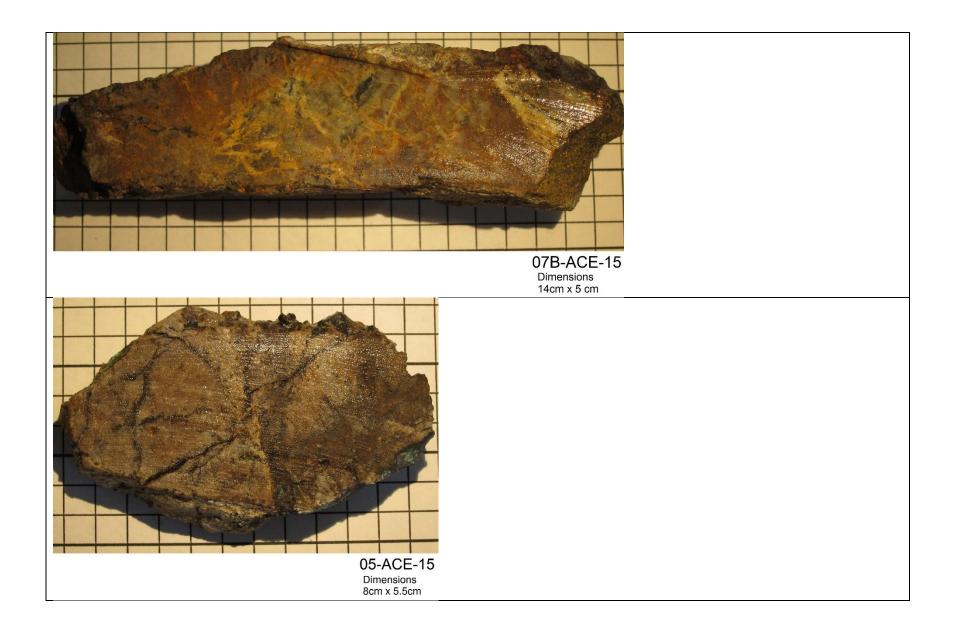
Sample	Relative location & field notes	Absolute Location	Description
02-ACE-15	Northeastern most sample site within trench, last area of visible oxidization within trench. Moderately oxidized outcrop, minor pyrite on fracture face, primary fracture set at 3100; secondary fracture set at 2600	671992 x 5501041	See 03-ACE-15 for description of rock type present at 02- ACE-15
03-ACE-15	3.2m west of 02-ACE-15; taken in oxidized fracture zone.	671994 x 5501028	Similar as 02-ACE-15; <1mm pinprick sized sulphide minerals visible, associated with very thin quartz-calcite veinlets
01-ACE-15	3.6m west of 03ACE-15 fault zone is 45cm across; sample taken across zone, minor malachite where oxidization is strongest, vein dips approximately 10°NW-SE, appears to strike 3100	671990 5501025	x Sample taken from highly oxidized vein. Original host rock, where identifiable, appears to be a fine grained blue-green- grey volcanic. Within vein, oxidization is associated with quartz-calcite forming very porous texture; malachite present on quartz; pin-point sized sulphides locally present.
01B-ACE-15	Footwall sample of vein tested at 01-ACE-15. Minor oxidization on fracture face, otherwise unaltered fine grained blue-grey andesite, footwall sampled 40cm from vein. (east side of vein)	5501025	<ul> <li>Material comprises two rock types in brecciated contact: a massive fine grained blue-violet coloured volcanic present in ~1cm oval masses (likely agglomerate, may reflect dyke swarm?) within a ground mass of light blue-green-grey rock rendered porphyritic with &lt;1mm white phenocrysts and veinlets. Specimen from 02-ACE-15 suggests the blue-violet "intrusion" has a well-defined contact with the lighter porphyritic rock.</li> <li>Oxidization is centered on fractures that follow the outside edge of the blue violet coloured volcanic mass; oxidized fractures cross cut the white veinlets, fault shifting the white veinlets 2mm. Minor specks of sulphide minerals. Similar to 02-ACE-15</li> </ul>
01C-ACE-15	Hanging wall sampled 60-70cm from vein (West side)	671990 5501025	x See 01
04-ACE-15	21 meters from 01-ACE-15	671991 5501000	x Sample included exposed malachite at base of intensely oxidized zone
04B-ACE-15	Taken 1 m east of trench 4	671991 5501000	x Taken from area of intense oxidization, with 3 cross-cutting sets of fractures. Green-grey volcanic rock, fine grained with

06-ACE-15	Taken 4.4 m west of sample 04-ACE-15. Taken from centre of band of black-orange oxidization with white-yellow mineral on weathered surface. Oxidized zone dips nearly vertical; minor malachite present where oxidization is strongest at centre of band	671986 5501004	x	white phenocrysts and veinlets <1mm size. Oxidization associated almost exclusively with phenocryst and veinlets. Overall, oxidization is minor and no visible mineralization. Purple-white quartz showing brecciation, some banding of the quartz present, unclear if this reflects separate intrusions or fractional segregation. Brecciation resulted in a finer matrix than was encountered elsewhere
06B-ACE-15	1.5m east of 06-ACE-15. Visible malachite near sample site. Sample site has intense fracturing (several directions), moderately oxidized. Within the main shear zone sampled there are two bands of mineralization.	671986 5501004	x	Original rock type appears to have been re-worked one or more times. A purple fine-grained volcanic rock to 5mm diameter appears to intrude a lighter grey volcanic rock; malachite associated with oxidized veinlets and 2mm voids in the rock that may be decayed quartz-calcite, similar to that seen at well-mineralized site 1B-ACE-15. Malachite bearing quartz-calcite (?) veinlets appear to be final event.
07-ACE-15	7m west of 06-ACE-15. Sampled a purple volcanic unit with pervasive white mineral. Sampled a heavily fractured fault zone (multiple fractures) with local silicification. Moderate pyrite at sample site, abundant malachite. Sampled structure dips SW to NE (steep dip)	671986 5500985	x	Quartz-feldspar flooded fine grained volcanic. 0.5mm wide, band of sulphide minerals, which are oxidized to malachite on weathered faces. Sulphide mineralization associated with a well oxidized veinlet that appears to be a late event, cutting brecciated quartz-rich country rock.
07B-ACE-15	Taken several meters above 07-ACE-15 from same shear zone; higher silica content; sulphide mineralization present at sample site.	671986 5500985	x	Heavily oxidized volcanic; quartz flooding and veining appears to be final event, pronounced brecciated texture; sulphide mineralization associated with areas of most intense brecciation; original rock appears to be green-grey unit, followed by intrusions of a purple unit, and followed by an explosive intrusion of a white (Quartz-calcite?) vein material that shattered the purple intrusive unit. This differs from prior specimens, where the veinlets skirted the perimeter of the purple intrusions without "cracking" that unit, as is the case here. Sulphides present to 2mm sized blebs which overprint all prior events.
05-ACE-15	5m west and 3 m higher from 07-ACE-15. 1 m chip sample taken along the 310° shear zone.	671983 5500978	x	Original rock type is obscured by successive events of brecciation and fracturing; rock has a distinct purple colour; sulphide mineralization present in blebs from pinprick to 3- 4mm size; mineralization appears to be a late stage event overprinting all phases of the rock; quartz content appears high

05B-ACE-15	1 m west of 05-ACE-15; 1 m chip sample taken along the vertical dipping shear zone.	671983 > 5500978	<ul> <li>Similar purple appearance to 05-ACE-15; notably less sulphide mineralization; rock as a distinct purple hue, a very basic and fine grained purple intrusion to 2mm diameter appears to be a late stage event.</li> <li>Sample included exposed malachite at base of intensely oxidized zone</li> </ul>
05C-ACE-15	1 m west of 05B-ACE-15; 1 m chip sample taken along the vertically dipping zone.	671983 > 5500978	Multiple stages of quartz-feldspar flooding and quartz-calcite veinlets cut and fault shifted 1-2mm by a later stage of oxidized veinlets. Sulphides present in all stages as pinpoint sized blebs. Highly brecciated appearance

# Selected Photographs





## **APPENDIX B – ASSAY CERTIFICATE**

PIONEER LABO	RAT	ORIE	S IN	C.			#1	03-2	691	VIS	COUN	IT WA	Y	RICH	MONE	), B(	C C	ANAD	DA V	6V 21	R5				TEL	EPH	ONE	(604	) 231-8	3165		
						GΕ	0	СН	Ε	MI	CA	<u>L</u> /	A N	Α	LYS	SI	S	СЕ	R	TIF	IC	ΑΤ	E									
								Multi-	eleme	nt ICP	Analysi	s - 0.50	0 grar	n sam	ple is di	gested	l with	3 ml of	f aqua	regia, di	luted											
TATLA MINING PA	RTNE	ERS						to 10	ml wit	h wate	er. This	leach is	s parti	al for A	N, B, Ba	a, Cr,	Fe, I	Mg, Mi	n, Na,	P, S,	Sn, Ti											
								and li	mited	for Na	a and K.	*Au Ana	alysis	- 20 gr	am sam	ple is	digest	ted with	h aqua	regia,							Analy	lyst				
Project:								MBK	extrac	cted, a	nd is fin	ished b	y AA c	or grap	hite furn	ace A	A to 1	ppb de	etection	n.							Repo	rt No. 2	2151516			
Sample Type: Rocks																											Date:	Augus	st 25, 201	5		
																											_		<u> </u>			
ELEMENT	Aq	AI	As	В	Ва	Bi	Са	Cd	Co	Cr	Cu	Fe	К	Ma	Mn	Мо	Na	Ni	Р	Pb	S	Sb	Sn	Sr	Те	Ti	Т	V	Zn	*Au		
SAMPLE	ppm	%		ppm	ppm	ppm	%		ppm	ppm		%	%	%	ppm	ppm		ppm	%	ppm	%	ppm		ppm	ppm	%	ppm	ppm	ppm	ppb		
01-ACE-15	3.9	3.72	14	<5	87	<10	.09	10	18	18	812	9.56	.05	3.26	6086	15	.02	2	.11	586	1.54	5	<2	30	<5	.01	<5	188	6246	125		
01B-ACE-15	.3	3.67	46	<5	104	<10	.15	73	19	38	149	7.20	.10	2.94	6492	5	.04	3	.12	54	.32	<2	<2	53	<5	.02	<5	193	11907	32		
01C-ACE-15	.4	2.72	30	<5	28	<10	.18	10	14	61	64	5.99	.02	2.34	5976	5	.03	4	.09	515	.37	<2	<2	83	<5	.01	<5	120	2010	21		
02-ACE-15	.8	2.46	4	<5	28	<10	1.29	31	18	36	586	5.30	.01	2.60	8655	2	.04	2	.32	1987	.87	<2	<2	62	<5	.02	<5	131	7301	28		
04-ACE-15	.4	.36	13	<5	186	<10	.27	19	7	52	3271	2.67	.11	.22	2512	3	.03	3	.02	11	.14	<2	<2	13	<5	.01	<5	12	3230	46		
04B-ACE-15	.3	.61	9	<5	66	<10	.11	18	5	26	74	3.13	.17	.25	2262	3	.03	2	.03	28	.06	<2	<2	17	<5	.01	<5	17	3520	23		
05-ACE-15	.6	.35	4	<5	59	<10	.18	36	11	36	10521	3.17	.11	.13	3869	5	.02	3	.04	10	.35	<2	<2	15	<5	.02	<5	10	5812	80		
05B-ACE-15	.8	.42	5	<5	40	<10	.08	24	16	40	4439	3.58	.09	.14	4339	11	.02	4	.03	32	.34	<2	<2	14	<5	.01	<5	15	4447	45		
05C-ACE-15	.8	.35	4	<5	271	<10	1.65	97	12	58	1131	3.34	.00	.80	3042	5	.03	2	.05	24	.89	<2	<2	44	<5	.02	<5	11	14112	24		
06-ACE-15	.4	.46	29	<5	23	<10	.21	3	10	37	5708	3.83	.09	.51	3030	5	.03	4	.02	52	.63	<2	<2	16	<5	.01	<5	14	3116	130		
06B-ACE-15	7.9	.40	18	<5	30	<10	1.62	19	20	168	7162	7.02	.03	.58	3519	43	.01	5	.03	62	6.98	7	<2	46	<5	.02	<5	16	8410	140		
07-ACE-15	4.6	.38	46	<5	25	<10	.11	5	17	64	6603	5.35	.11	.14	1994	30	.03	2	.01	5	4.61	<2	<2	8	<5	.01	<5	10	3846	135		
07B-ACE-15	2.5	.31	14	<5	227	<10	.10	3	9	51	11540	3.80	.06	.21	2215	16	.03	3	.03	7	1.47	<2	<2	12	<5	.02	<5	11	2255	140		

### **APPENDIX C – NOTES ON REGIONAL ZINC EXPLORATION PERSPECTIVES**

The historical focus of exploration within the Princeton-Aspen Grove region has been on Nicola belt hosted copper.

The AT showing is located within the Princeton-Aspen Grove copper belt, a series of showings and prospects trending north over approximately 80km. The largest and most advanced occurrence in the district is the Axe deposit, located several kilometers southwest of the Ace Property, where a copper resource has been identified. Numerous other copper-gold prospects exist, and work programs remain ongoing. Along this island arc trend porphyry mineralization is aligned along deep-seated, epochal fault systems, and mineralization is associated with Mesozoic – Tertiary intrusions within the Triassic volcanic rock. This copper exploration model is well-documented and requires little additional comment.

However, less well-documented is the apparent SW-NE trend of minor zinc occurrences running 60km at 62°, and bisecting the copper-gold Nicola belt north of the AT showing. This exploration fairway comprises several "clusters" of zinc-bearing mineral occurrences. The visual continuity of this trend is interrupted by the overlaying Spences Bridge volcanic flows. While these showings may individually be of low economic value at this time, analyzing them from a regional perspective may yield new exploration insights, and may shed some light on the enigmatic AT showing.

### Cluster 1: ("Brenda")

092HNE033	JESSIE	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE108	тс	Cu skarn
092HNE285	BOOMER	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE303	PEACHLAND CREEK	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE283	WH 2	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE279	R.T.	Porphyry Cu +/- Mo +/- Au
092HNE284	SPRING	Epithermal Au-Ag: low sulphidation
092HNE301	PEN 8	Cu skarn
092HNE300	PEN 5	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE051	CRESCENT LAKE	Polymetallic veins Ag-Pb-Zn+/-Au

#### Cluster 2: ("Fisher Maiden/Dillard)

092HNE032	SNOWSTORM	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE030	EL PASO	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE028	MABEL	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE178	V.M. 4	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE001	FISHER MAIDEN	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE172	WESTERN TRENCHES	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE063	AMANDA	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE245	GOLD CORE	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE042	DILLARD ZONE	Alkalic porphyry Cu-Au
092HNE071	GAVIN CREEK	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE315	DON SLASH	Polymetallic veins Ag-Pb-Zn+/-Au

## Cluster 3: ("AT")

092HNE226	DRY	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE120	AT	Volcanic redbed Cu
092HNE025	DRY CREEK	Polymetallic veins Ag-Pb-Zn+/-Au
092HNE157	MISS	Polymetallic veins Ag-Pb-Zn+/-Au

## Cluster 4: ("Independence-St. Lawrence")

092HNE065	ST. LAWRENCE (L.258)	Besshi mass
092HNE018	COUSIN JACK	Polymetallic
092HNE016	JAMES X	Polymetallic
092HNE209	WHITE GOLD	Polymetallic
092HNE208	BLUE GOLD	Polymetallic
092HNE217	DEN	Polymetallic
092HNE211	LOGAN'S	Polymetallic
092HNE212	WELDEN 1	Polymetallic
092HNE007	NORTH COPPER	Polymetallic
092HNE097	RED GOLD	Polymetallic
092HNE006	INDEPENDENCE (L.1696)	Porphyry Cu

Besshi massive sulphide Cu-Zn Polymetallic veins Ag-Pb-Zn+/-Au Polymetallic veins Ag-Pb-Zn+/-Au

## LOCAL GEOLOGY MAP

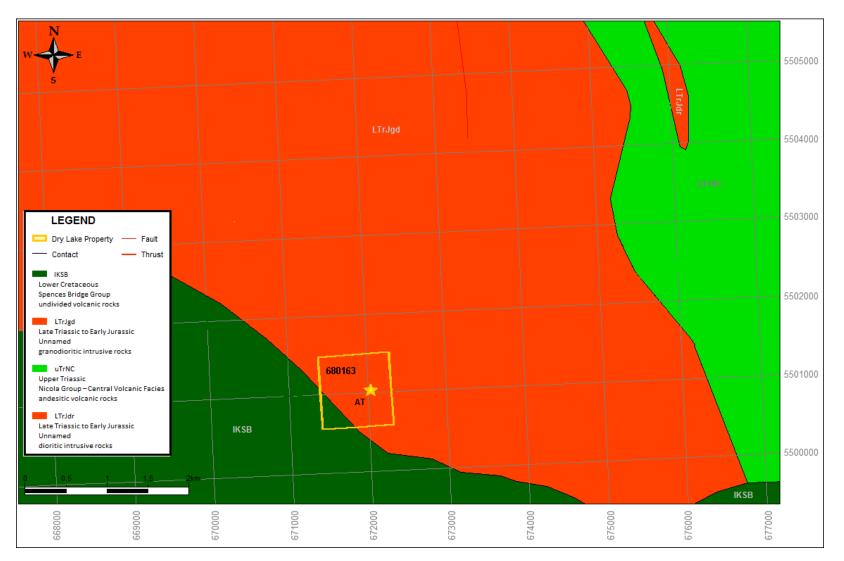


Figure 2 - Local Geology from BC MAPPLACE

## **REGIONAL GEOLOGY MAP**

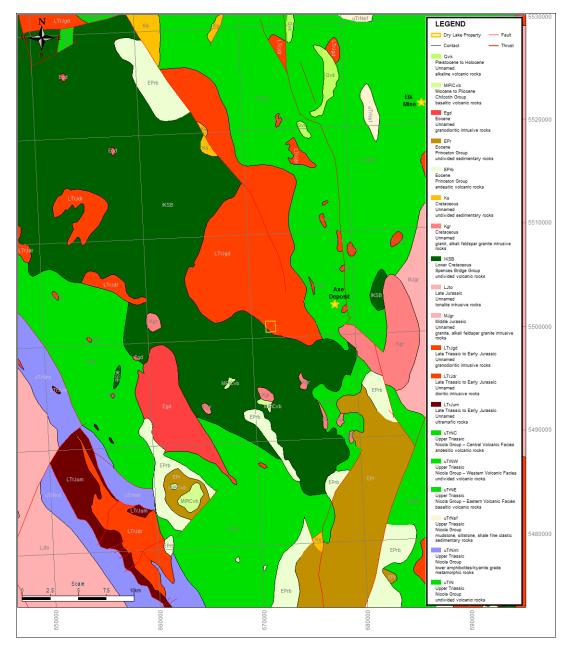


Figure 3 - Regional Geology from BC MAPPLACE

## **PROJECT AREA**

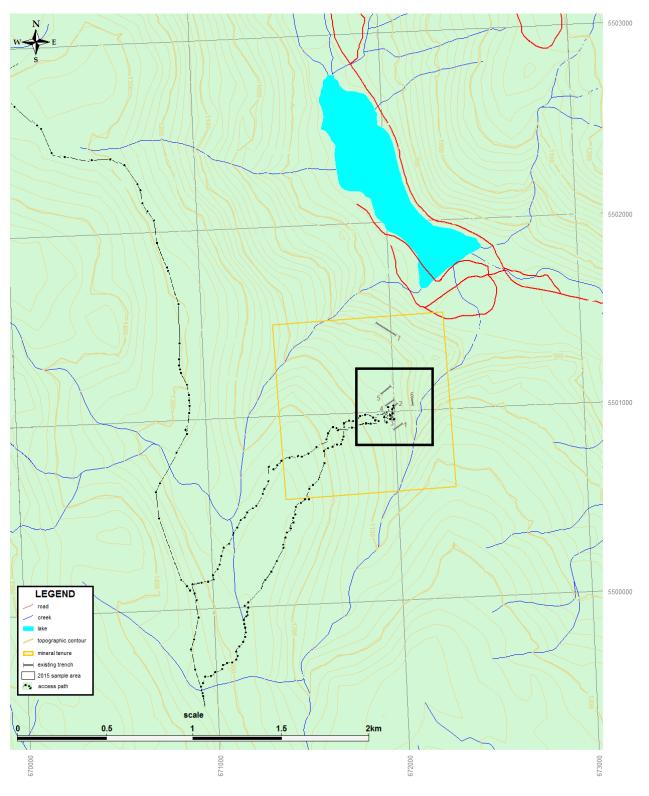


Figure 4 - Project Area Map, showing access path

SAMPLE LOCATION MAP

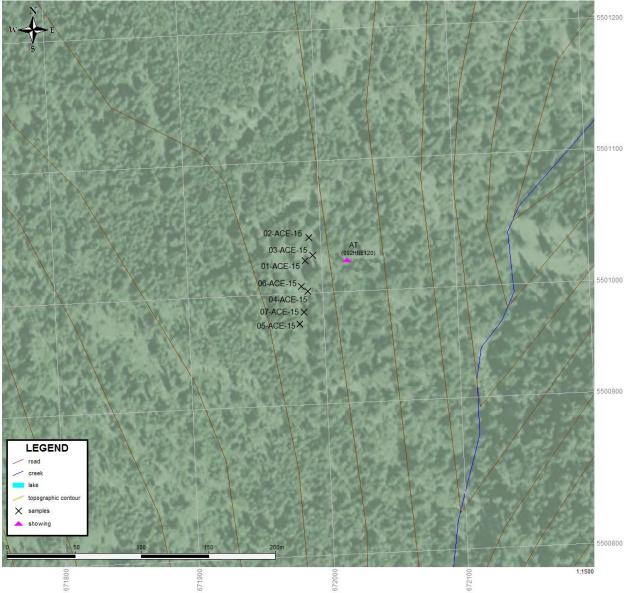


Figure 5 - Sample locations, satellite imagery provided by Google Earth  $^{\rm TM}$ 

### SAMPLE LOCATION MAP WITH RESULTS

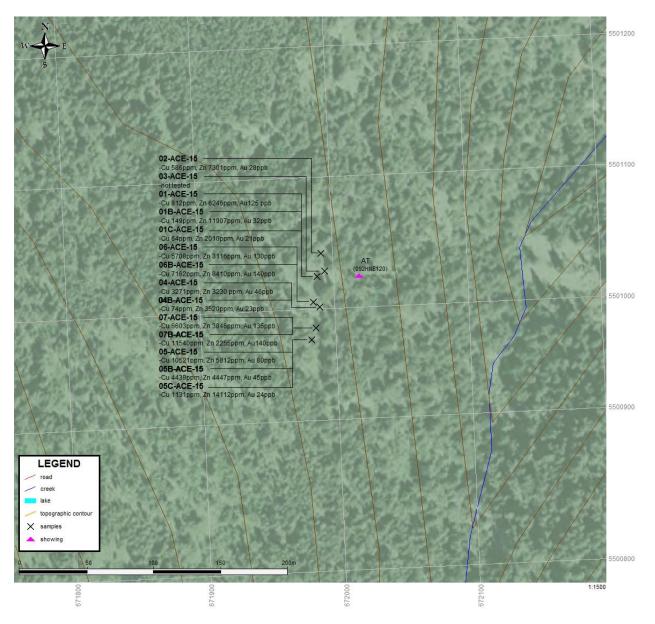


Figure 6 - Sample locations with key results - Satellite imagery provided by Google arth  $^{\rm TM}$ 



Figure 7 - Station 04-ACE-15

## **COST STATEMENT**

Exploration Work type	Comment	Days		
	<b></b>	_		<b>.</b>
Personnel (Name)* / Position	Field Days	Days	Rate	Subtotal
Peter Palikot	July 25th 2015	1.0	\$320.00	\$320.00
Paul Hoogendoorn	May 18th 2015	1.0		
Mieczysław Palikot	May 18th 2015	1.0	\$320.00	
		D	Dete	\$960.00
Office Studies	List Personnel	Days	Rate	Subtota
Sample preparation	Paul Hoogendoorn/Peter Palikot	1.00	\$250.00	\$250.00
Program planning/General Administration	Paul Hoogendoorn/Peter Palikot	0.25		
Database compilation	Paul Hoogendoorn/Peter Palikot	0.50		
General research	Paul Hoogendoorn	0.50		
Report preparation	Paul Hoogendoorn	1.50	\$250.00	\$375.00
			-	\$937.50
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal
Geochemical Au Analysis - 20GM		13.0	\$8.75	\$113.75
Rock Sample Preparation		13.0		
Geochemical ICP Analysis		13.0		
			40.00	<b></b>
				\$318.50
Transportation		No.	Rate	Subtotal
			<b>00 5</b> 4	<b>*</b> ~~~~~~
kilometres (inclusive of fuel) - two trips to pro	perty	1174.0	\$0.54	\$633.96
				\$633.96
Accommodation, Food and Supplies				Subtotal
Meals				\$ 58.27
Sample bags, flagging tape and other field c	onsumables			\$ 18.66
		_		\$76.93
Equipment Rentals		Days	Rate	Subtotal
Lob tools and an immant				
Lab tools and equipment (scales, screens and measuring tools)		1.0	\$ 5.00	\$ 5.00
Field tools and equipment				
(2 GPS, 2 bear spray, 2 carmera and Spot t	rackor)	1.0	\$ 30.00	\$ 30.00
(2 Gr 0, 2 bear spray, 2 carriera and Spot t				
				\$35.00
TOTAL Expenditure	es			\$2,961.89