



## ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE OF REPORT:** Pine Bark, Till and Rock Sampling Exploration Report, Boer Property, Central British Columbia, Canada

**TOTAL COST:** \$37,002.87

AUTHOR(S): Gerald G. Carlson, Ph.D., P.Eng., John A. Chapman, B.Sc., FCIM  
SIGNATURE(S):

Two handwritten signatures in blue ink. The signature on the left is "John A. Chapman" and the signature on the right is "Gerald G. Carlson".

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): October 16, 2014 - event no. 5526848; November 12, 2014 - event no. 5530427

YEAR OF WORK: 2014

PROPERTY NAME: BOER

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

Boer 1 – 16, Copper Tree Property, Voortrekker Property, Voortrekker 2, Copper Tree 2 and Copper Tree Dreams

COMMODITIES SOUGHT: Ag, Au, Mo, Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093K 114

MINING DIVISION: Omineca

NTS / BCGS: 093K/04 and 093K/05

LATITUDE: 54° 16' 02"

LONGITUDE: 125° 36' 34" (at centre of work)

UTM Zone: 10 EASTING: 330000 NORTHING: 6017000

OWNER(S): John A. Chapman (FMC no. 104633) and Gerald G. Carlson (FMC no. 104271); Jonathan Barry Rempel (FMC no. 201283)

MAILING ADDRESS: Gerald G. Carlson, 1740 Orchard Way, West Vancouver, BC, V7V 4E8  
John Arthur Chapman, #43 1725 Southmere Cr., Surrey, BC, V4A 7A7  
Jonathan B. Rempel, PO Box 111, Fort Fraser, BC V6C 1N5

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

MAILING ADDRESS: as above

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**) Boer, geochemistry, pine bark lithogeochemistry, till geochemistry, rock geochemistry, porphyry, epithermal, breccia, molybdenite, chalcopyrite, gold, silver, Endako Batholith, Nechako Plateau

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 33782, 34638

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOFYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil	46	all	\$37,002.87
Silt		all	
Rock	47	all	
Other	35	all	
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other		TOTAL COST	\$37,002.87

# ASSESSMENT REPORT

## **Pine Bark, Till and Rock Sampling Exploration Report Boer Property, Central British Columbia, Canada**

### Mineral Tenures: Boer 1 – 16

Tenure Numbers: 942348, 942349, 942350, 942369, 942370, 942371, 942372, 942373, 942374, 942389, 942390, 942391, 1011913, 1019569, 1020251, 1025586

Owners: John A. Chapman (FMC no. 104633) and Gerald G. Carlson (FMC no. 104271)

### Mineral Tenures: Copper Tree Property, Voortrekker Property, Voortrekker 2, Copper Tree 2 and Copper Tree Dreams

Tenure Numbers: 1020156, 1020279, 1020280, 1023951, 1025614

Owner: Jonathan Barry Rempel (FMC no. 201283)

Burns Lake, Omineca Mining Division

NTS Maps: 093K/04 and 093K/05

UTM 10N (NAD 83) Northing 6017000 m; Easting 330000 m

### Report By:

Gerald G. Carlson, Ph.D., P.Eng.

John A. Chapman, B.Sc., FCIM

February 6, 2015

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## SUMMARY

The Boer property is a grass roots mineral exploration prospect that has no recorded mineral exploration prior to its acquisition by the current owners. Regional geoscience surveys have been conducted by governments over the area of the property since the early 1960's, stimulated at that time by the development of the large Endako open-pit molybdenum mine in 1965, 40 km to the southeast of the Boer.

The Boer property (the "Property") is located adjacent to Highway 16, and centered nine km northeast of the resource Village of Burns Lake, B.C. The Property consists of 21 mineral tenures 9,730 ha. According to a letter agreement dated February 17, 2014, beneficial ownership of all the claims comprising the Property is John A. Chapman as to 37.5%, KGE Management Ltd. as to 37.5%, Jon B. Rempel as to 15% and Omineca Diamond Drilling Ltd. as to 10%.

Property main access is via Hwy 16, 20 km east of Burns Lake then north by a mainline logging road network to and around the Property. The Property topography is gentle relief typical of the B.C. Interior Plateau, and has been extensively clear-cut logged. The Property is located near excellent infrastructure including the resource Village of Burns Lake, and related highways, grid power, natural gas pipeline and airport. There has been extensive clear-cut logging conducted within the Property. Access is available year round.

The area of the Property has seen very little historical exploration. Armstrong (1965) reported a gold occurrence in the northwestern corner of the Property and a molybdenum showing north of the Property. The gold showing, known as Hiyou, reportedly consisted of an intrusive dike containing disseminated pyrite.

The Property was staked by its current owners based on highly anomalous silver in lake sediments. This large and intense lake sediment anomaly is ranked in the 98<sup>th</sup> percentile silver from RGS samples that were collected over a vast area of the B.C. Interior Plateau. In addition, these samples are anomalous in copper, molybdenum, manganese and mercury.

Initial prospecting on the Property, including rock, soil and silt sampling, was conducted in the summer of 2012 following the natural gas pipeline, logging roads and clear-cuts. The first mineral discovery on the Property, the Boer Breccia, was made in August 2012 at km 13.2 on the Co-op Main logging road. It is a 90 m x 20 m exposure of hydrothermal breccia, mineralized with abundant finely disseminated pyrite and containing 182.4 ppm molybdenum, 279.5 ppm copper and 3.4 ppm silver.

The 2013 exploration program on the Property included two phases of biogeochemical sampling utilizing pine bark, additional prospecting and rock sampling and a single core drill hole at the Boer Breccia (Chapman, 2014). The pine bark survey was successful in outlining areas of anomalous base and precious metals while the drill hole confirmed the continuity of the breccia mineralization to depth.

The Property is located in the Interior Plateau of British Columbia, within the Intermontane Belt, late Paleozoic to late Tertiary sedimentary and volcanic rocks belonging to the Stikine, Cache Creek and Quesnel Terranes. The Property lies within eastern edge of the Stikine Terrane, near its boundary with the Cache Creek Terrane and immediately south of the Skeena Arch. Strata of the Stikine Terrane in central British Columbia include late Paleozoic to Tertiary island and continental margin arc assemblages and epicontinental sedimentary sequences. These rocks have been intruded by the Endako Batholith, which underlies much of the claim group and extends for almost 100 km in a northwestern direction, with a width

of up to 40 km. These intrusive rocks are associated with many showings and deposits in the area: The youngest phases host the Endako molybdenum deposit.

Within the Property, the Boer Breccia occurrence is a hydrothermal to magmatic breccia that includes coarse fragments of aplite and andesite in a matrix of granite. The breccia is a 90 m x 20 m exposure located on a small topographic high that probably is caused by silicification of the local rocks, making them resistant to erosion. It is mineralized with abundant finely disseminated pyrite and contains 182.4 ppm Mo, 279.5 ppm Cu and 3.4 ppm Ag. A second mineral occurrence, the LA Zone, consists of two angular pieces of float that are believed to be close to source. The samples are of a veined and polymict breccia mineralized with up to 10% disseminated pyrite in fragments and matrix. The two samples averaged 0.548 gpt Au, 11.7 gpt Ag and 0.121% Mo. These samples could represent very high level porphyry mineralization or epithermal mineralization overlying a buried porphyry system.

The 2014 exploration program included prospecting, rock sampling, including field petrographic descriptions and assaying, till geochemical sampling and pine bark biogeochemical sampling, extending the successful 2013 program. The combined 2013-2014 programs resulted in the definition of four high priority target areas, defined mainly by the pine bark biogeochemical results. Target A is a strong Mo anomaly, with strong Sb and Pb and weaker associated Cu, a signature that could represent porphyry Mo-Cu mineralization. Target B contains both the Boer Breccia and LA showing. It is also the most complex anomaly, with a strong Ag, Au, Cu, Zn, Fe and As signature with minor anomalous Cd, Mo and Pb. Target C is predominantly a north-south trending gold anomaly with supporting, but not necessarily coincident values in Cd, Cu, As and Zn and contains the highest grade silver value, 35.6 gpt Ag, collected from a float sample. Target D is predominantly a silver-arsenic anomaly with supporting anomalous Zn. Two strongly anomalous Cd values occur 1.5 km south of the target.

Exploration since 2012 has advanced from anomalous metals in lake sediments and the Boer breccia (MINFILE: 093K 114) to anomalous metals in pine bark, and now in 2014 to the discovery of significant mineralized float and bedrock/subcrop showings. The biogeochemical, till sample and rock sample results from the four priority target areas provide strong evidence for the existence of structural or intrusion related molybdenum, copper and/or precious metal mineralization, likely associated with the Endako Batholith (Endako porphyry deposit) or possibly younger sub-volcanic intrusive rocks (Blackwater, Equity Silver).

The next stage of exploration recommended for the Property includes an airborne ZTEM survey, followed by an Induced Polarization survey over key targets developed by the airborne survey in conjunction with the 2013-2014 prospecting and geochemical results. Zones of high resistivity, representing potential silicified zones, and high chargeability, representing zones of potential disseminated mineralization, should be tested by drilling.

## INTRODUCTION

The Boer property is a grass roots mineral exploration prospect that has no recorded mineral exploration prior to its acquisition by the current owners. Regional geoscience surveys have been conducted by governments over the area of the property since the early 1960's, stimulated at that time by the development of the large Endako open-pit molybdenum mine in 1965, 40km to the southeast of the Boer.

This assessment report has been prepared by John A. Chapman, B.Sc. and Gerald G. Carlson, Ph.D., P.Eng. The writers have reviewed all general geological, geophysical and other mineral exploration data pertaining to the property and the surrounding area. Chapman was involved in the planning, execution and interpretation of Boer property exploration programs in 2012, 2013 and 2014 (Chapman, 2013, 2014) and Carlson completed a structural study of the Property (in Chapman, 2013).

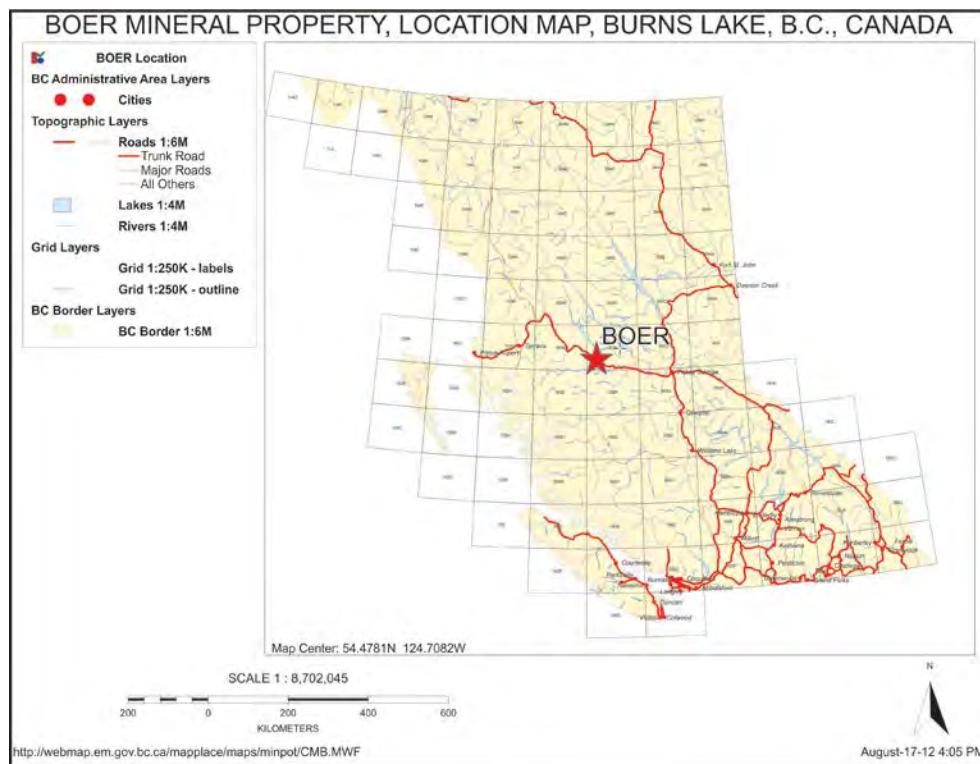
Chapman visited the Boer property several times in 2014 to plan, to assist and to manage the mineral exploration programs.

Units of measure in this report are metric; coordinates are UTM NAD83 Zone 10N, unless stated otherwise.

Monetary amounts referred to in this report are in Canadian dollars.

## PROPERTY DESCRIPTION AND LOCATION

The Boer property (the "Property") is located adjacent to Highway 16, and centered nine kilometers northeast of the resource Village of Burns Lake, B.C. UTM Zone 10N: 6017000N/330000E, NTS maps: 093K/04 and 093K/05, Omineca Mining Division (see Figure 1).

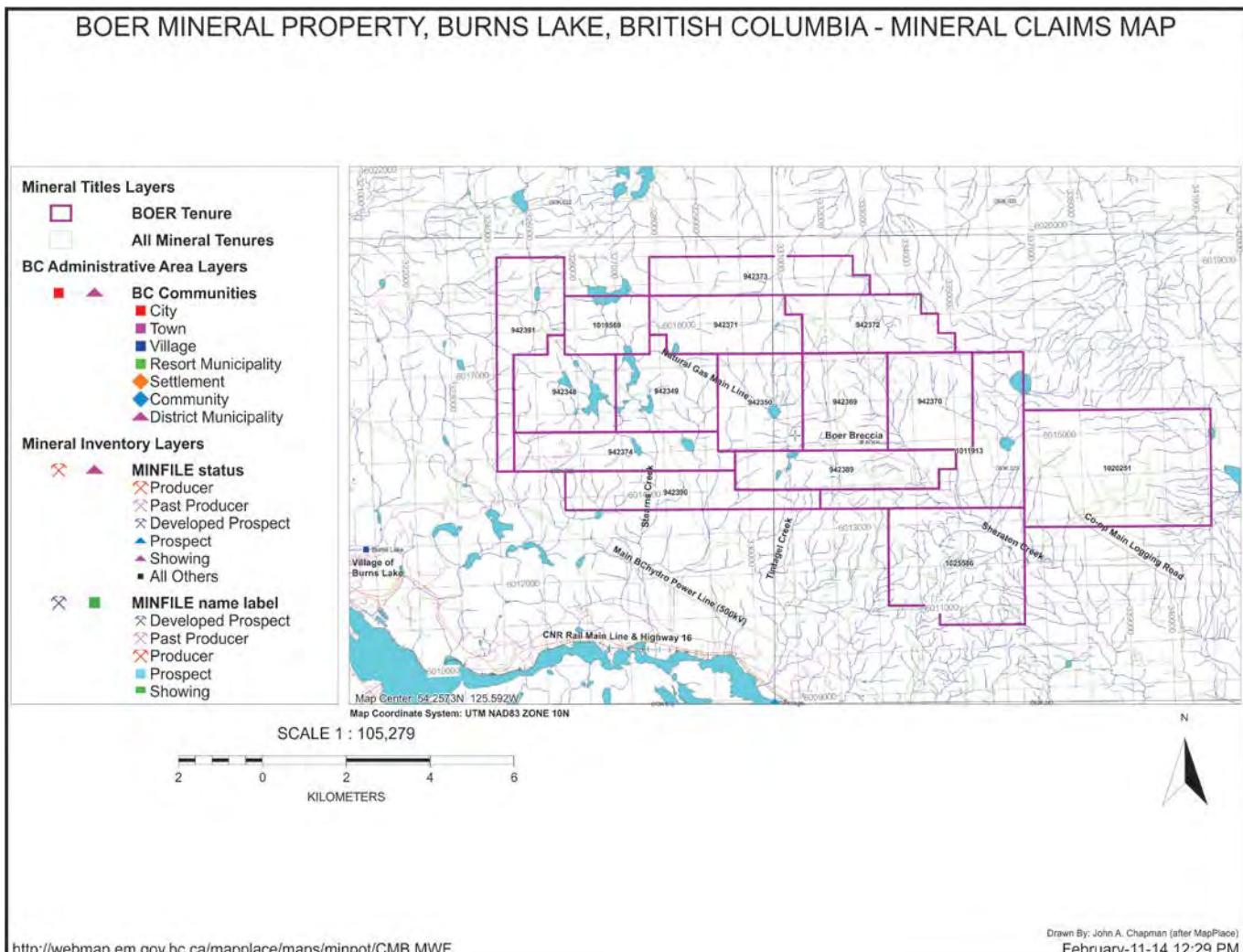


**Figure 1 - B.C. Location Map - Boer Property, Burns Lake, B.C.**

The Property consists of 21 mineral tenures covering an area of 9,730 ha as shown in Figure 2 and listed in Table I. The claims have not been surveyed, but cell corners are referenced to geographical coordinates (BCMTO) that may be precisely located in the field by GPS or theodolite surveys. A list of the Boer claims is provided in Table 1, below.

## ***Mineral Tenures and Ownership***

The mineral tenures comprising the Property are shown in Figure 2 and listed in Table 1. The claim map was generated from GIS spatial data downloaded from the Government of B.C., Integrated Land Management Branch, Land and Resource Data Warehouse (<http://archive.ilmb.gov.B.C.ca/lrdw/>). These spatial layers are generated by the Mineral Titles Online (MTO) electronic staking system that is used to locate and record mineral tenures in British Columbia.



***Figure 2 - Boer Tenures Map & Infrastructure***

Claim details were obtained using an online mineral tenure search engine available on the BC MapPlace web site (Aris MapBuilder). All claims listed in the table are in the Omineca Mining Division within NTS map sheets 093K/04 and 093K/05.

Registered owners of the Boer claims are Gerald George Carlson (50%), FMC no. 104271, on behalf of KGE Management Ltd. and John Arthur Chapman (50%), FMC no. 104633. The registered owner of the Copper Tree Property, Voortrekker Property, Voortrekker 2, Copper Tree 2 and Copper Tree Dreams claims is Jonathan Barry Rempel, FMC no. 201283. According to a letter agreement dated February 17, 2014, beneficial ownership of all the claims comprising the Property is John A. Chapman as to 37.5%, KGE Management Ltd. as to 37.5%, Jon B. Rempel as to 15% and Omineca Diamond Drilling Ltd. as to 10%.

Under new regulations, assessment work to the value of \$5 per hectare (first and second anniversary years) and \$10 per hectare (third and fourth anniversary years) is required by the expiry date or cash in lieu of work paid (at double the work rate, minimum six months). The 2014 exploration work was filed (SOW with BCMTO) on October 16, 2014 (event no. 5526848) and November 12, 2014 (event no. 5530427), advancing all claim expiry dates, existing at that time, to September 26, 2015.

**Table I - Table of Boer Mineral Tenures**

Tenure Number	Type	Claim Name	Good Until	Area (ha)
<a href="#">942348</a>	Mineral	BOER 1	20150926	472.1982
<a href="#">942349</a>	Mineral	BOER 2	20150926	472.2019
<a href="#">942350</a>	Mineral	BOER 3	20150926	472.2271
<a href="#">942369</a>	Mineral	BOER 4	20150926	472.2199
<a href="#">942370</a>	Mineral	BOER 5	20150926	472.2201
<a href="#">942371</a>	Mineral	BOER 6	20150926	472.0397
<a href="#">942372</a>	Mineral	BOER 7	20150926	472.0342
<a href="#">942373</a>	Mineral	BOER 8	20150926	471.9212
<a href="#">942374</a>	Mineral	BOER 9	20150926	472.3462
<a href="#">942389</a>	Mineral	BOER 10	20150926	472.3885
<a href="#">942390</a>	Mineral	BOER 11	20150926	472.4516
<a href="#">942391</a>	Mineral	BOER 12	20150926	472.0497
<a href="#">1011913</a>	Mineral	BOER 13	20150926	680.1721
<a href="#">1019569</a>	Mineral	BOER 14	20150926	283.2252
<a href="#">1020156</a>	Mineral	COPPER TREE PROPERTY	20150926	56.7076
<a href="#">1020251</a>	Mineral	BOER 15	20150926	1247.1262
<a href="#">1020279</a>	Mineral	VOORTREKKER PROPERTY	20150926	302.4541
<a href="#">1020280</a>	Mineral	VOORTREKKER 2	20150926	75.6064
<a href="#">1023951</a>	Mineral	COPPER TREE 2	20150926	283.5867
<a href="#">1025586</a>	Mineral	BOER 16	20150926	850.7052
<a href="#">1025614</a>	Mineral	COPPER TREE DREAMS	20150926	283.6401

Total Area: 9729.5219 ha

The claims have not been surveyed, but claim boundaries are referenced to exact positions of UTM coordinates or latitude and longitude points which may be located in the field. The claims have adequate area for exploration and, if warranted, development and operations.

## ***Location***

The Boer property is located adjacent to Highway 16, and centered nine kilometers northeast of Burns Lake, B.C., at UTM Zone 10N 6017000 N and 330000 E, on NTS maps 093K/04 and 093K/05, in the Omineca Mining Division.

Figure 2 shows the Boer tenures relative to local infrastructure and physiography.

## **ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE, CLIMATE, VEGETATION, AND PHYSIOGRAPHY**

### ***Access***

Property main access is via Hwy 16 (The Yellowhead Highway), 20 km east of Burns Lake then north by a mainline logging road network (Augier and Co-op) to and around the Property. The junction of Augier Main and Co-op Main is at 341217 E, 6007706 N. The western third of the Property is accessed via the Mercury road at 5.3 km north of Burns Lake on the Babine Lake main road (junction: 319561 E, 6018720 N). The Property topography is gentle relief typical of the B.C. Interior Plateau, and has been extensively clear-cut logged. The Property is located near excellent infrastructure including the resource Village of Burns Lake, and related highways, grid power, natural gas pipeline and airport (see Figure 2). There has been extensive clear-cut logging conducted within the Boer claims.

Four wheel drive vehicles are advised. Property access is available year round. It is common practice in the region for mineral resource operators to conduct winter drill programs.

### ***Local Resources and Infrastructure***

Supplies and services are available in the nearby Village of Burns Lake, B.C. The area is well served by regional infrastructure including a paved airstrip, heliport, mainline highways, rail (CNR), grid power (BC Hydro), natural gas (Pacific Northern Gas Ltd.) and an extensive logging road network. Active logging in and near the Boer property by Burns Lake Community Forest Ltd., based in Burns Lake B.C., is proceeding and radios are advised when traveling in these active logging areas. Other active logging operations in the region are conducted by Hampton Affiliates: Babine Forest Products and Decker Lake Forest Products.

### ***Climate and Vegetation***

Climate is typical of the Interior Plateau with a cool continental climate (MacIntyre, 2012). Short, warm and moist summers are combined with temperatures often reaching 30° Celsius. Winters can reach temperatures of -10° C, with extremes sometimes at -40° C. Precipitation is relatively low being in the east-side rain shadow of the Coast Range Mountains. Precipitation is mainly in the form of snow with average annual accumulation of between 1.0 and 2.0 m.

The Boer property is located within the Sub-Boreal Spruce bioclimatic zone of British Columbia. It extends along the highlands of the Nechako and Quesnel plateaus and the Fraser Basin, with long forested sections

into the valley bottoms of mountainous areas to the north, east, and west. The vast rolling landscape of the Sub-Boreal Spruce zone is lushly covered in coniferous forest. The dominant coniferous species are hybrid white spruce, subalpine fir, and occasionally, black spruce, along with Lodgepole pine and occasionally Douglas fir. Underbrush include: lilies, ferns, blueberries, devil's club, black huckleberry, thimbleberry, highbush cranberry, Sitka alder, velvet-leaved blueberry, black gooseberry, black twinberry, bunchberry, thimbleberry and queen's cup.

Several major lakes and rivers are located in this zone, including the Skeena, Bulkley, Fraser, Babine, and Nechako, as well as lakes such as Stuart, Francois, Burns, Trembleur, and the Nation Lakes. In addition, the flat plateaus in this zone are dotted with a variety of glacial meltwater channels, kettle depressions, river oxbows, and lakes that harbour wetland ecosystems which include marshes, fens, and swamps. The Boer project area is generally heavily forested. Several tree species occur on the claims and their occurrence may reflect the nature of the underlying materials. Aspen and cottonwood occur near the lakes; elsewhere spruce and jackpine tend to dominate with varying amounts of balsam fir.

## ***Physiography***

The claims are within the heavily glaciated Interior Plateau (ice direction from west to east) with gentle rolling relief and abundant creeks and small lakes. The Boer claim block exhibits low to modest relief with elevations ranging from 1,000 to 1,370 m above mean sea level over an area of 9,730 hectares. Most of the drainage on the Property is from north to south into the Endako River system; minor drainage is to the north into the Babine River system.

The Property is extensively covered with thin veneer of glacial till, estimated to be largely less than 2 m thick, and with less than one percent outcrop exposure. Ice direction was from west to east.

## **HISTORY**

### ***General Mining History in the Region***

Many large copper and molybdenum porphyry deposits were discovered in central British Columbia from the 1950's to the 1970's by major mining companies, particularly U.S.A. firms, searching for large copper deposits to replace production in the Southwest U.S.A. In many cases these majors were following up on small showings discovered by prospectors in prior years when there was no interest in low-grade bulk tonnage deposits.

The large low-grade mineral deposits of central British Columbia near Burns Lake in the Omineca Mining Division, such as Blackwater, Bell, Berg, Chu, Endako, Equity, Granisle, Huckleberry, Kemess, Morrison, and Mount Milligan make this area one of the most intensively mineralized (base and precious metals) in the world.

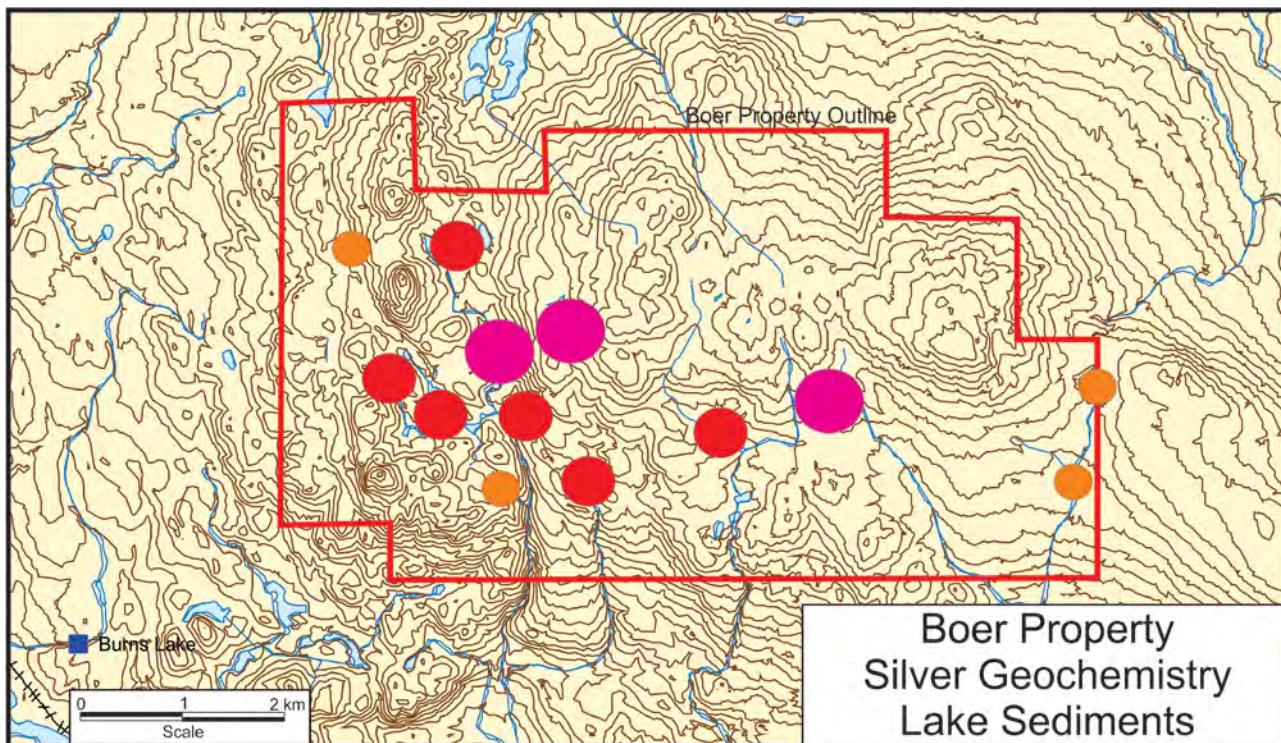
## Boer Property History

The area of the Property has seen very little historical exploration. Armstrong (1965) reported a gold occurrence in the northwestern corner of the Property and a molybdenum showing north of the Property. The gold showing, known as Hiyou, reportedly consisted of an intrusive dike containing disseminated pyrite.

The mineral potential within the area of the Property was confirmed by the Geoscience B.C., Quest West Project conducted from 2008 to present. The lake and stream sediment geochemistry component of that study discovered highly anomalous silver in lake sediments that are now covered by the Boer property claims. This large and intense lake sediment anomaly is ranked in the 98<sup>th</sup> percentile silver from RGS samples that were collected over a vast area of the B.C. Interior Plateau (see MapPlace). This silver anomaly includes seven RGS 2011 lake sediment samples, averaging 1,255 ppb, over a 6 km east-west by 4 km north-south area centered on the Boer property (Figure 3). In addition, these samples are anomalous in Cu, Mo, Mn and Hg.

The B.C. and Federal governments' Airborne Magnetic Survey, 1967 and 1968, over the Burns Lake region shows several magnetic anomalies in the areas now covered by the Boer property (refer to MapPlace and to GSC Magnetic Maps for Sheets 93K/04 (5303G) and 93K/05 (5306G)).

Prospecting, including rock, soil and silt sampling, was conducted in the summer of 2012 following the natural gas pipeline, logging roads and clear-cuts (Chapman, 2013). The first mineral discovery on the Property, the Boer Breccia, was made in August 2012 by John Chapman and Brian Remanda at km 13.2 on the Co-op Main logging road, approximately 12 km northeast of Burns Lake (Chapman, 2013; see Figure 22). It is a 90 m x 20 m exposure of hydrothermal breccia in the road right-of-way, mineralized with abundant finely disseminated pyrite and containing 182.4 ppm Mo, 279.5 ppm Cu and 3.4 ppm Ag.



**Figure 3 – Silver geochemistry from lake sediments (orange circles – 300-500 ppb; red circles – 500-1,000 ppb; purple circles – 1,000-2,160 ppb) – after BCGS MapPlace.**

In 2013, exploration on the Property included two phases of biogeochemical sampling utilizing Lodgepole Pine outer bark, additional prospecting and rock sampling and a single core drill hole at the Boer Breccia (Chapman, 2014). The pine bark survey was successful in outlining areas of anomalous base and precious metals while the drill hole confirmed the continuity of the breccia mineralization to depth.

Results of the 2013 exploration, described in Chapman (2014), have been integrated into the discussion of the 2014 results, below.

## GEOLOGICAL SETTING

### *Regional Geology*

The Property is located in the Interior Plateau of British Columbia, within the Intermontane Belt, late Paleozoic to late Tertiary sedimentary and volcanic rocks belonging to the Stikine, Cache Creek and Quesnel Terranes. The Yalakom and Fraser Fault systems bound the Interior Plateau to the southwest and northeast, respectively. The Property lies within eastern edge of the Stikine Terrane, near its boundary with the Cache Creek Terrane and immediately south of the Skeena Arch (Figure 4). Strata of the Stikine Terrane in central British Columbia include late Paleozoic to Tertiary island and continental margin arc assemblages and epicontinental sedimentary sequences.

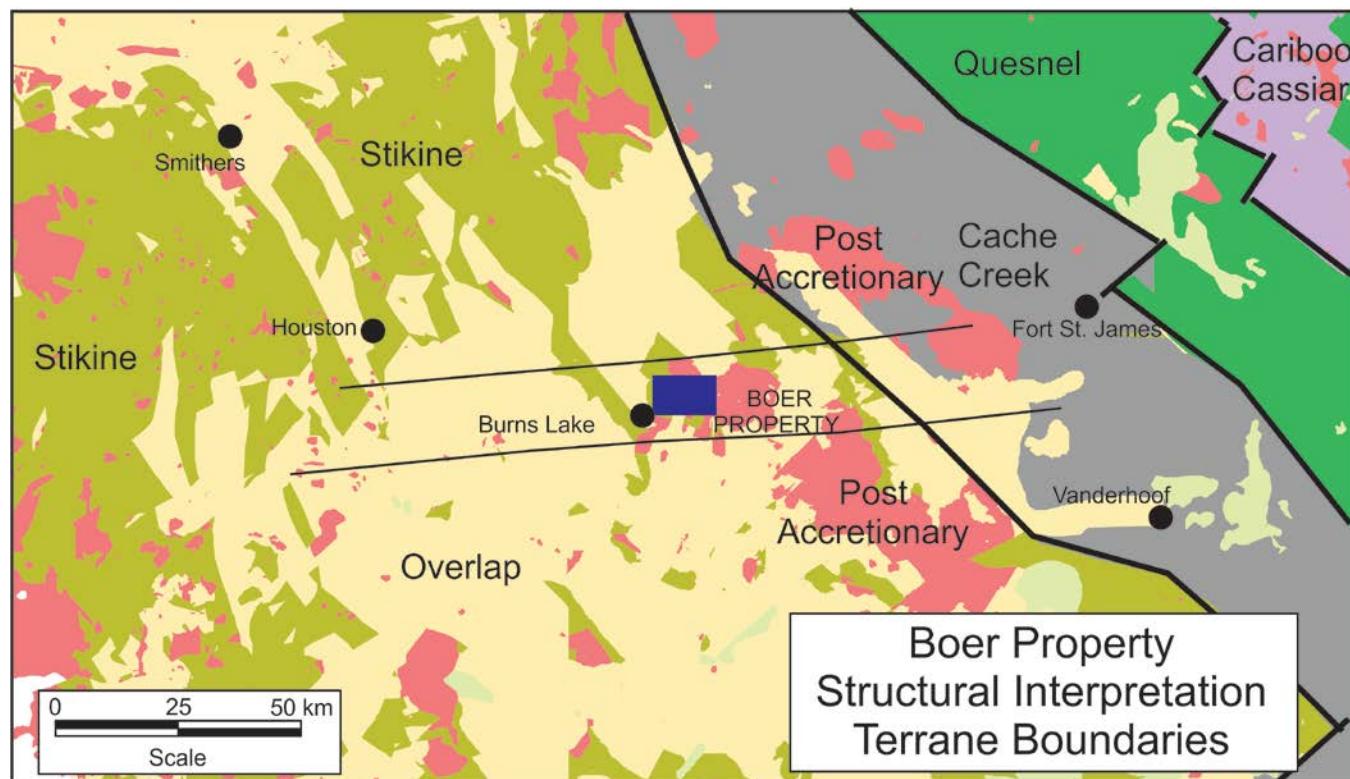


Figure 4 - Regional Geology of the Boer property (intrusive rocks in pink), showing terrane boundaries and the east-west magnetic disruption zone through the area discussed in Chapman (2013).

The oldest stratigraphic assemblages consist of Upper Triassic to Middle Jurassic island arc volcanics of the basaltic Stuhini Group and calc-alkaline Hazelton Group (Diakow et al. 1997). These rocks were intruded by the mainly Jurassic Topley plutonic rocks, including the Endako Batholith, and experienced at least two distinct cycles of uplift, erosion and related sediment deposition. These extensive sedimentary deposits include Upper Jurassic black mudstone, chert pebble conglomerate, and sandstone of the Bowser Lake Group (Ashman Formation) and the overlying Lower Cretaceous Skeena Group.

Rocks of the Hazelton and Bowser Lake groups are overlain by Upper Cretaceous and Paleocene continental volcanic arc intermediate volcanic rocks and related sedimentary rocks of the Kasalka Group (Diakow et al. 1997). Widespread Eocene volcanic arc related extensional felsic volcanic rocks and minor sedimentary rocks of the Ootsa Lake Group overlie the older rocks and are themselves overlain on higher ridges by basalt and andesite of the Eocene Endako Group (Diakow et al. 1997).

The Endako Batholith is the key geologic feature of the area, underlying much of the claim group and extending for almost 100 km in a northwestern direction, with a width of up to 40 km. It is a composite batholith that comprises five temporally distinct plutonic suites, only one of which is mineralized. These plutonic suites include early foliated hornblende ± biotite diorites, intermediate-age unfoliated hornblende ± biotite diorites, and late granodiorites to monzogranites. The youngest phases host the Endako molybdenite deposit.

Data presented by Villeneuve et al. (2001) and Whalen et al (2001) show that the batholith had a lengthy emplacement history, covering approximately 75 my (see Table II), with evidence for periods of magmatic quiescence between the major plutonic phases. The oldest magmatic suite of the Endako batholith, the Stern Creek suite, is dated at 220 Ma and comprises foliated gabbros and diorites. Mafic to intermediate plutons of the Stag Lake suite range in age from 180 Ma to 161 Ma. The Francois Lake suite is divided into two subsuites, the Glenannan subsuite dated at 157 Ma to 155 Ma and the 149 to 145 Ma Endako subsuite that hosts the Endako molybdenite deposit. Specifically, the Endako deposit is associated with the  $145.1 \pm 0.2$  Ma Casey phase monzogranite and local variations of this phase.

**Table II Geochronology of Endako Batholith (from Villeneuve et al, 2001)**

<u>Plutonic phase</u>	<u>Age (Ma)</u>
Late Triassic: Stern Creek plutonic suite	
Stern Creek phase	$219.3 \pm 0.4$
Early to Middle Jurassic: Stag Lake plutonic suite	
Boer phase	$181.0 \pm 0.6$
Stag Lake phase	$162.0 \pm 1.6$
Taltapin phase	
McKnab phase	$166-164$
Sugarloaf phase	$171.0 \pm 1.7$
Sheraton phase	
Stellako phase	
Caledonia phase	
Limit Lake phase	
Tintagel phase	

Late Jurassic: Francois Lake plutonic suite	
Glenannan subsuite	
Glenannan phase	157.2 ± 1.5
Tatin Lake subphase	
Nithi phase	~155
Leg Lake pluton	
Endako subsuite	
Endako phase	148.4 ± 1.5
Francois subphase	147.9 ± 1.5
Pre-ore dikes	147.4 ± 0.6
Casey phase	145.1 ± 0.2
Cretaceous stocks	
Hanson Lake phase	~126
Fraser Lake pluton	112.5 ± 0.31
Eocene Stock	
Sam Ross Creek phase	50.6 ± 0.2

Younger volcanic rocks and related sub-volcanic intrusives are also important from an economic geology perspective and include the Upper Cretaceous andesitic Kasalka Group, the felsic Ootsa Lake Group (both deposited in caldera environments and associated with granodiorite stocks and plugs of Quanchus and Bulkley Intrusions) and basaltic Eocene to Oligocene Endako Group. The Kasalka Group has been interpreted as the host to New Gold's Blackwater Davidson deposit, 40 km to the south, as well as the nearby Capoose deposit.

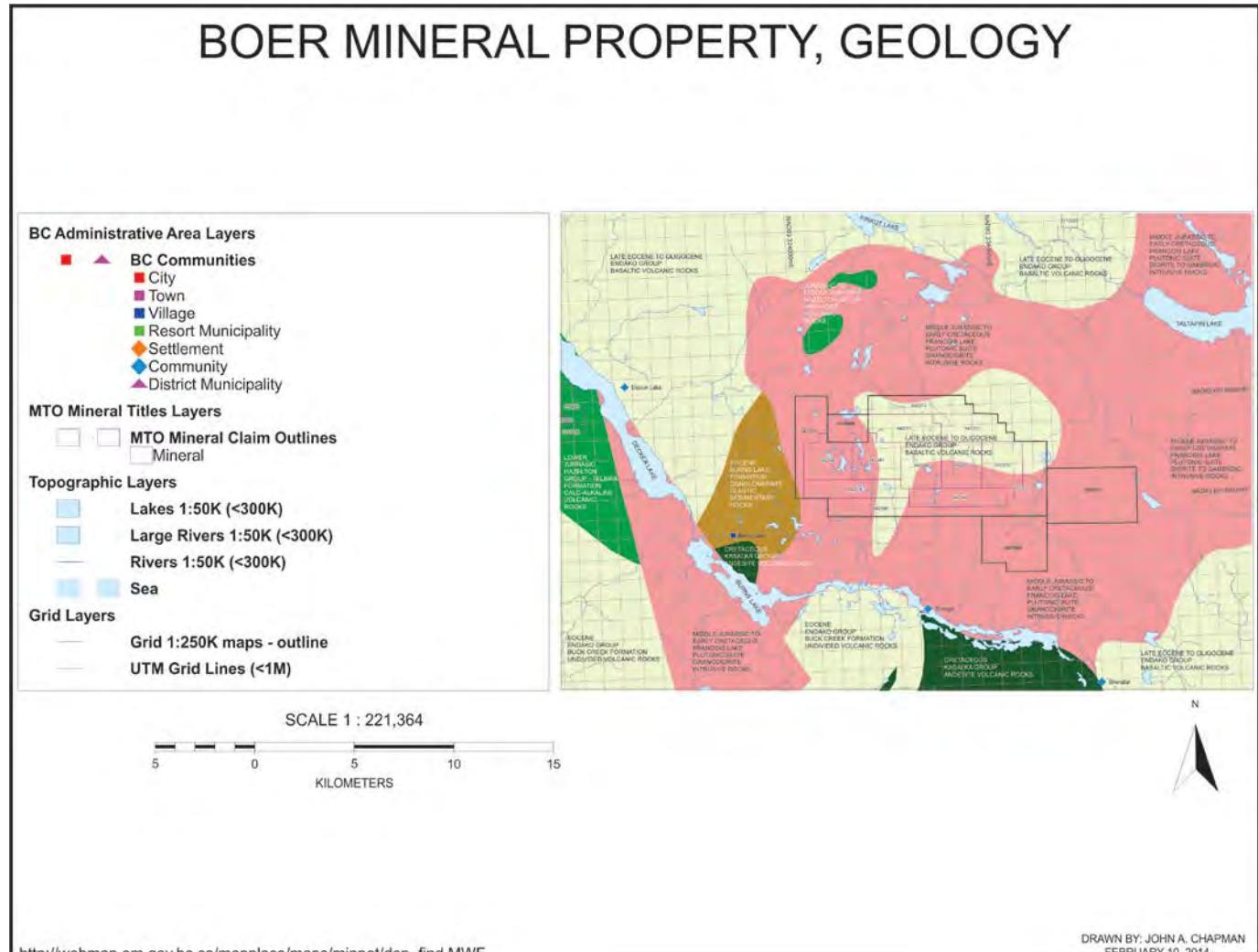
The structural elements of the Nechako Plateau area are part of a regional Tertiary extensional system that extends 1000 kilometres from northern Washington State, into the Babine district of north-central British Columbia. This belt crosses all major terrane boundaries and underlies the Quesnel, Kootenay and Omineca Terranes in the south and the Stikine Terrane in the north, crossing the oceanic Cache Creek Group.

In the Endako area, Lowe et al (2001) describe most of the observed faults being related to significant Tertiary transtensional deformation, with north to northeast-trending extensional faults and northwest-trending strike-slip faults. The localization of epithermal mineralization such as at Blackwater Davidson and Capoose may be related to such structures.

### ***Property Geology and Mineralization***

The Property, as shown on the B.C. Geological Survey's MapPlace is underlain mainly by granodioritic intrusive rocks of the Late Jurassic Francois Lake Suite of the Endako Batholith. Significantly, this suite is the same that hosts the Endako molybdenum porphyry deposit, 40 km to the southeast. These are cut and overlain to a minor extent in the southern part of the Property by andesitic volcanic rocks of the Eocene to Oligocene Endako Formation, belonging to the Nechako Plateau Group. Glacial till cover over the Property is extensive, leaving less than 1% outcrop exposure.

No recent mapping has been carried out on the Property. However, a number of float and outcrop samples have been collected and are described in Appendix A. Intrusive rocks, ranging from their field descriptions of granite to monzonite and quartz monzonite, are most likely Francois Suite plutonic rocks. Feldspar hornblende porphyry may be younger phases of the same intrusive suite. Three samples of mafic volcanic were collected and these may be Endako Formation rocks. It should be noted that these samples were collected by prospectors, in many cases because of observed alteration or mineralization, and so they may not be typical of the main bedrock lithologies within the Property.



**Figure 5 - Property Geology (from B.C. MapPlace)**

### Mineralization

The Boer Breccia is a hydrothermal to magmatic breccia that includes coarse fragments of aplite and andesite in a matrix of granite (Chapman, 2013). The breccia is a 90 m x 20 m exposure located on a small topographic high that probably is caused by silicification of the local rocks, making them resistant to erosion. It is mineralized with abundant finely disseminated pyrite and contains 182.4 ppm Mo, 279.5 ppm Cu and 3.4 ppm Ag. The occurrence is on the Co-op logging road near a NW/SE regional fault which extends towards the Endako mine and is aligned close to the lakes containing anomalous silver values (see Structural Analyses in

Chapman, 2013). This breccia discovery is now referred to as the “Boer” in BCGSB MinFile (MinFile No. 093K 144).

The second breccia discovery, the LA Zone, consists of two angular pieces of float that are believed to be close to source. They were discovered during follow up prospecting in the vicinity of Target A (Figure 22) as defined mainly by anomalous pine bark geochemistry results. The sample was examined in detail by Ariadne Hiller (pers. comm.) who recognized multiple veining and brecciation events in a polymict, hydrothermal breccia, mineralized with up to 10% disseminated pyrite in fragments and matrix. Her interpretation is that the sample could represent very high level porphyry mineralization or epithermal mineralization overlying a buried porphyry system.

## 2014 EXPLORATION PROGRAM

The 2014 exploration program included prospecting, rock sampling, including field petrographic descriptions and assaying, till geochemical sampling and pine bark biogeochemical sampling, extending the successful 2013 program. The combined 2013-2014 program resulted in the definition of four high priority target areas. The following discussion includes an integration of the 2013 and 2014 exploration results.

Project planning and field supervision was provided by John Chapman. Prospecting was carried out by Les Allen, Jon Rempel, Tony Clovis and Bruce Hiller. Jon Rempel carried out the auger sampling program with the help of John Chapman. Ariadne Hiller provided petrographic descriptions of hand specimens along with geological observations. The dates of this work and expenditures incurred, totaling \$37,002.87, are detailed in the Expenditures portion of this report.

The 2014 prospecting was concentrated in those areas that yielded biogeochemical metal anomalies in the 2013 surveys. This work resulted in the definition of four key targets shown in thematic bubble plot figures starting with Figure 7. Exploration since 2012 has advanced from anomalous metals in lake sediments and the Boer breccia (MINFILE: 093K 114) to anomalous metals in pine bark, and now in 2014 to the discovery of significant mineralized float and bedrock/subcrop showings.

### **Pine Bark Sampling**

Lodgepole Pine outer bark sampling in the till covered region of BC’s central interior was first investigated by Colin Dunn in 1991 in the vicinity of Mt. Milligan (Dunn et al, 1996). This work was expanded by the BC Geological Survey in the area of the Blackwater Davidson gold deposit (Dunn et al, 2010). In both cases, the pine bark geochemical results were anomalous over the known mineralization. In 2013, Jon Rempel informed John Chapman of metal enriched bark samples near the eastern end of the Boer property from the Colin Dunn survey work that are shown on BC Geological Survey’s MapPlace (“Focused Geochemical Surveys”, “Bark Survey Data”). Mr. Dunn has subsequently been very helpful in providing information on the design, execution, sample preparation and sample analysis for the pine bark biogeochemical survey work carried out over the Property in 2013 and 2014 (Chapman, 2014).

Following a successful 2013 pine bark sample program on the Property that involved the collection of 145 samples, an additional 32 samples were collected in 2014 in order to confirm and expand previous anomalous results (see Figure 6). Samples were collected following the standards outlined in area sampling programs carried out by Colin Dunn over a large area of the Nechako Plateau (1996, 2010). Approximately

80 gm of sample was collected at each site to fill a kraft soil sample bag and to provide at least 2 gm of ashed material for analysis. Analyses were carried out at Met-Solve Analytical Services Inc. of Langley, BC, using the same procedures employed by Dunn (1996), including ashing of the sample (prep code PRP-999) followed by ultra-trace level ICP-MS/AES (analysis code MS-330). Complete results and analytical method are shown in Appendix D.

As can be seen in Table III (below), there are significant correlations between Mo and Cu, Sb and Fe, between Sb and Pb, and Fe also correlates with Cu and As. Silver shows modest correlations with Mo, Cu, Sb and Fe while gold correlates weakly with Cu, As, Sb, Fe and Ag. Where base and precious metals correlate with iron, this could be an indication of underlying pyrite and base metal sulphide mineralization below, as was observed at Mt. Milligan (Dunn, 1996).

Bubble plots for the key elements analyzed in the survey are shown in figures 7 to 16 (below). Complete analytical results, sample locations and analytical procedures are shown in Appendix B.

An examination of the bubble plots, considering also the rock and till geochemistry, suggests the presence of four discrete target areas, Targets A through D, described below. It should be remembered that sampling was mainly restricted to roads and the pipeline corridor, resulting in a linear bias to the data diagonally across the Property.

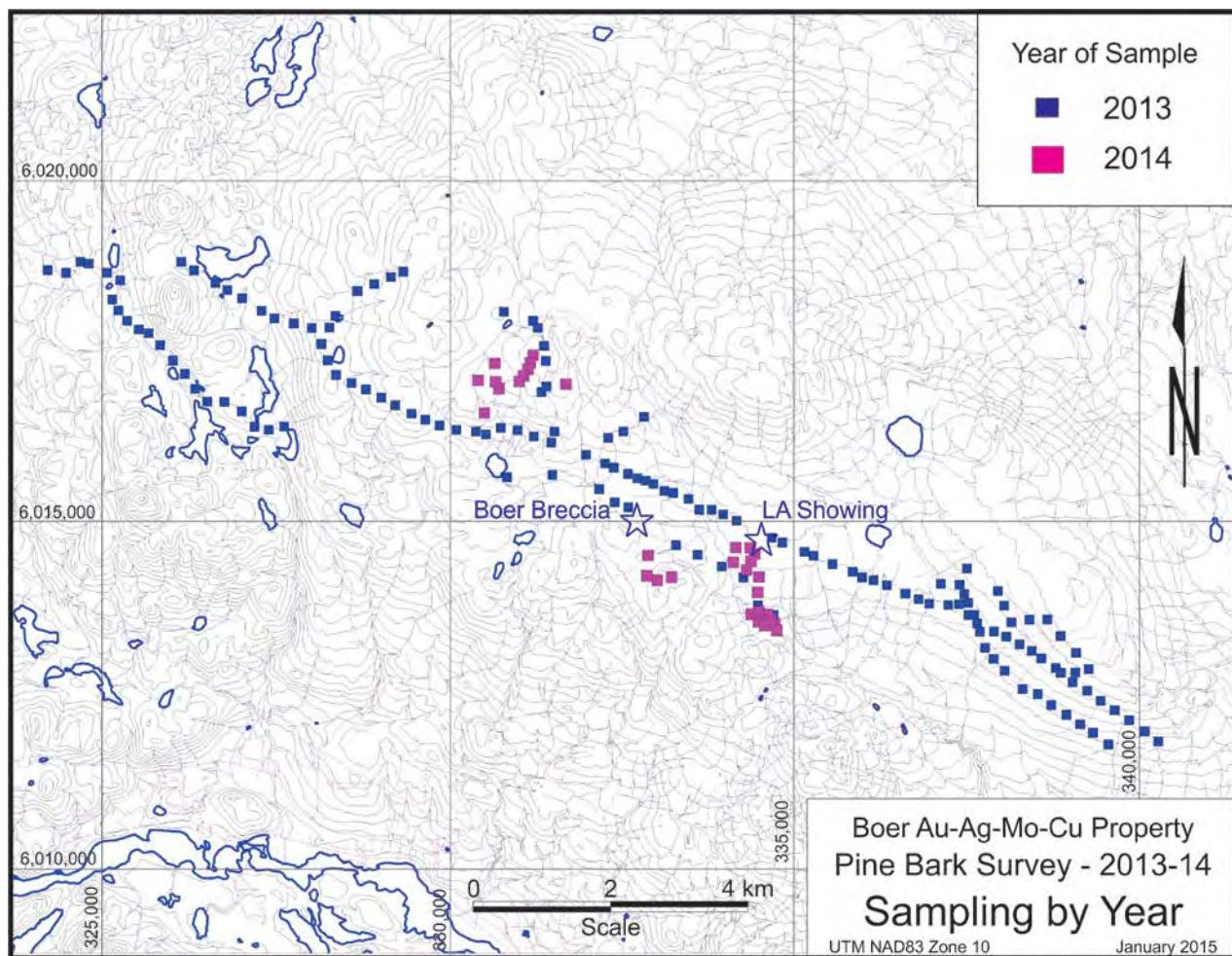


Figure 6 – Pine bark samples by year.

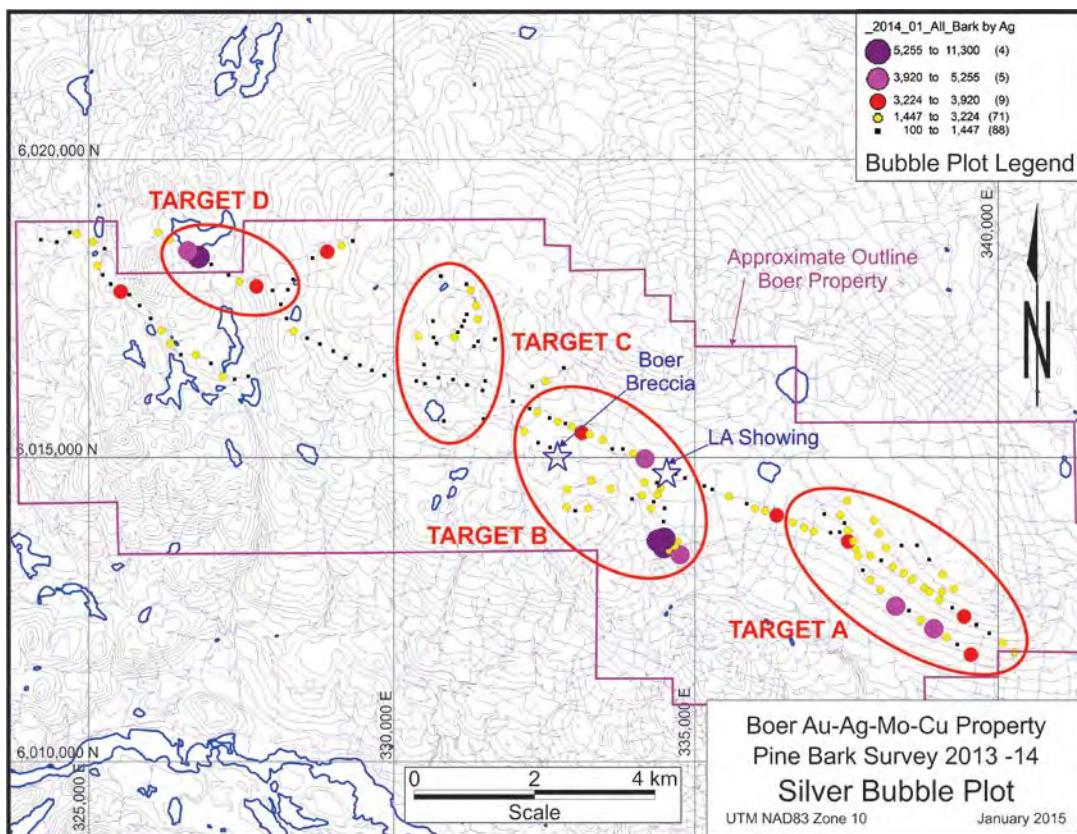


Figure 7- Pine bark bubble plot – silver.

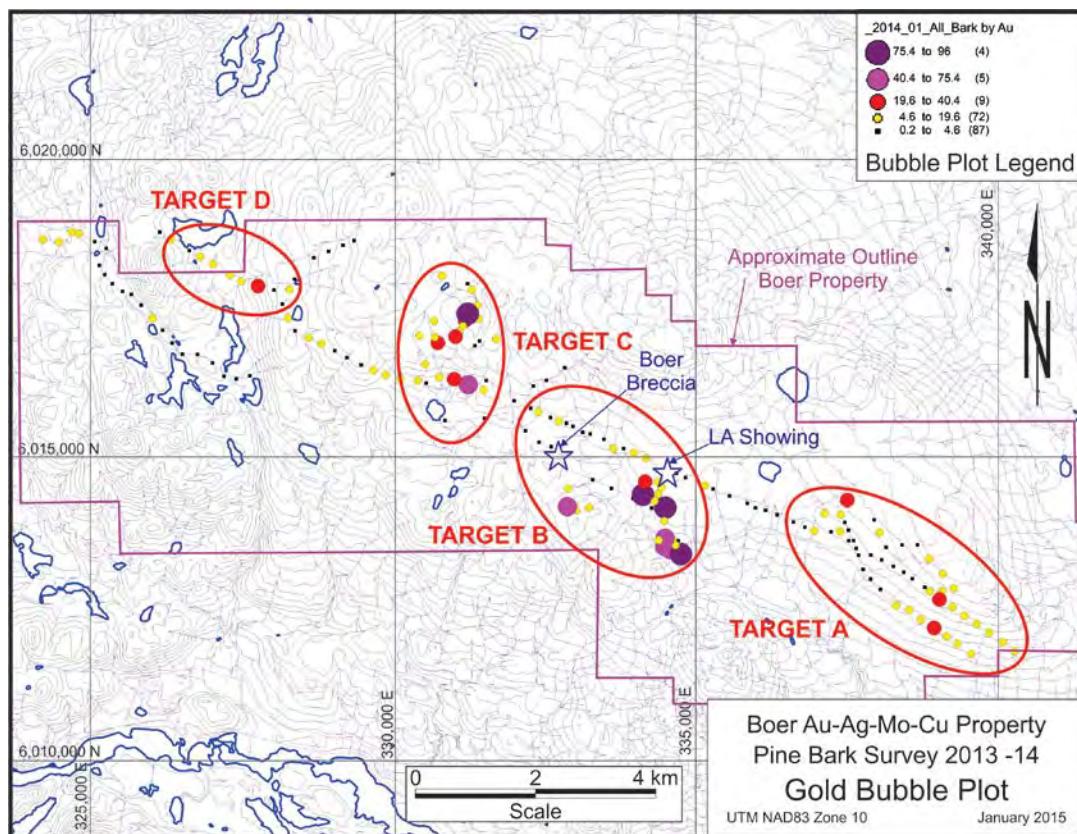


Figure 8 – Pine bark bubble plot – gold.

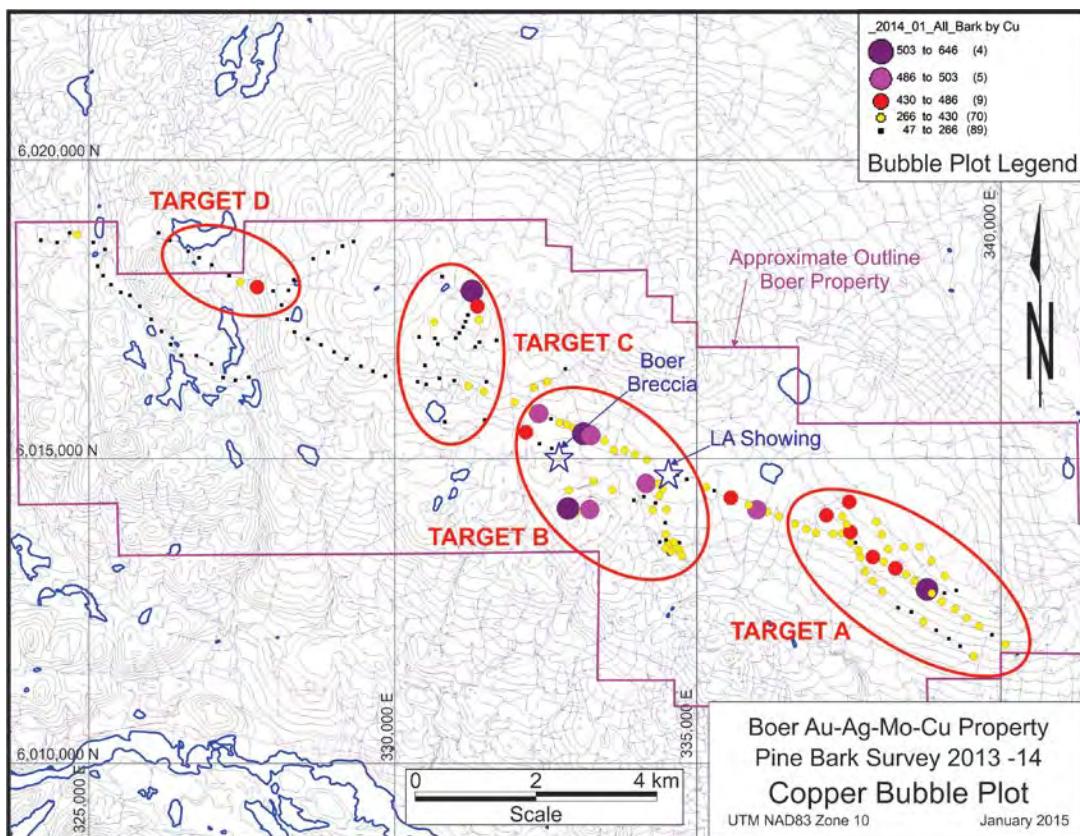


Figure 9 – Pine bark bubble plot – copper.

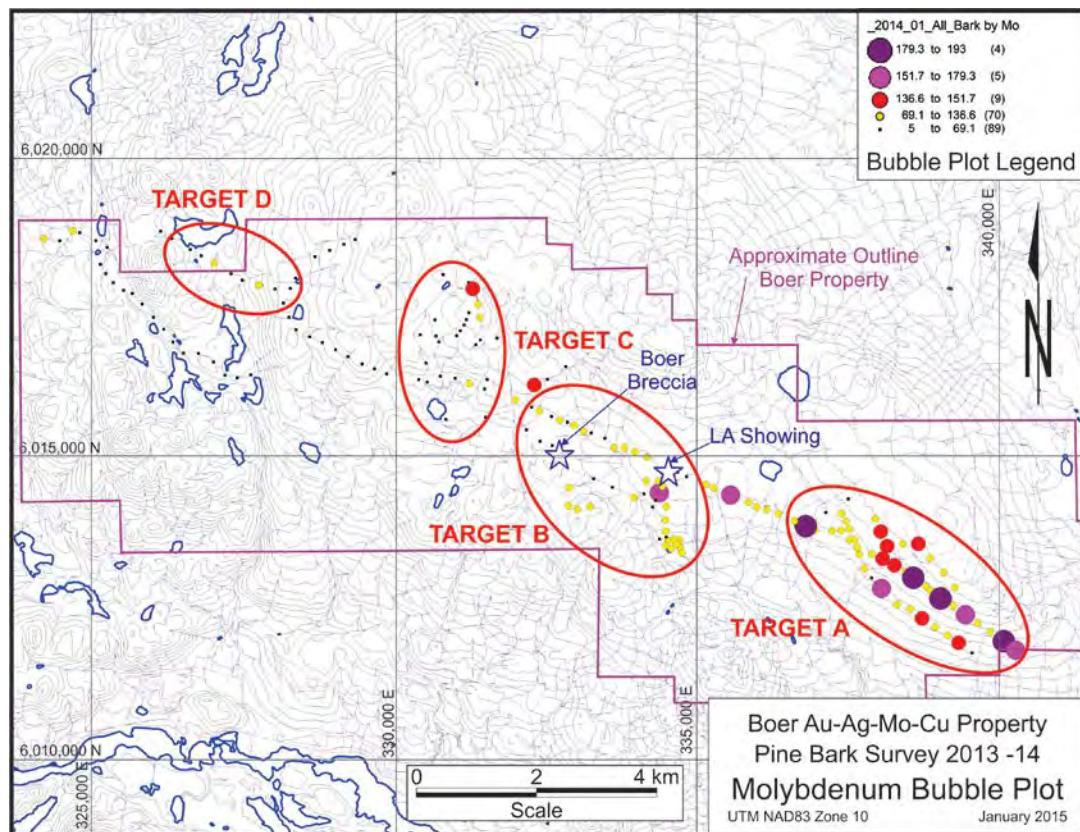


Figure 10 – Pine bark bubble plot – molybdenum.

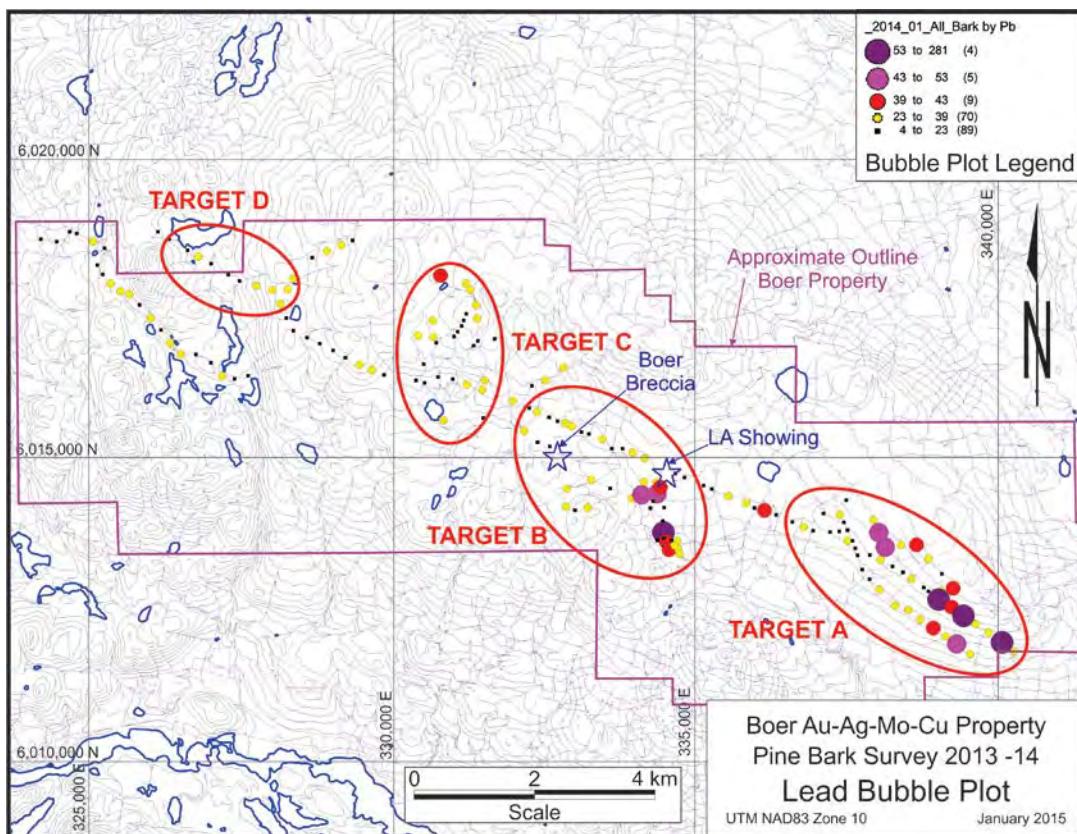


Figure 11 – Pine bark bubble plot – lead.

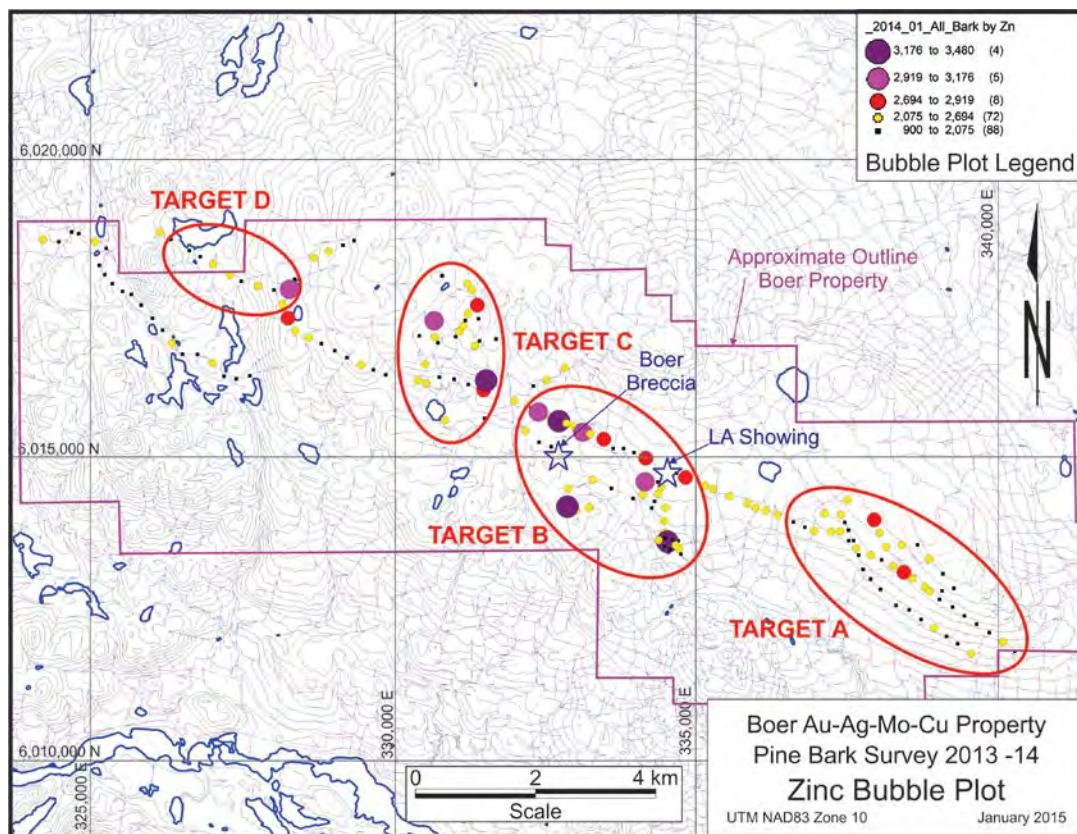


Figure 12 – Pine bark bubble plot – zinc.

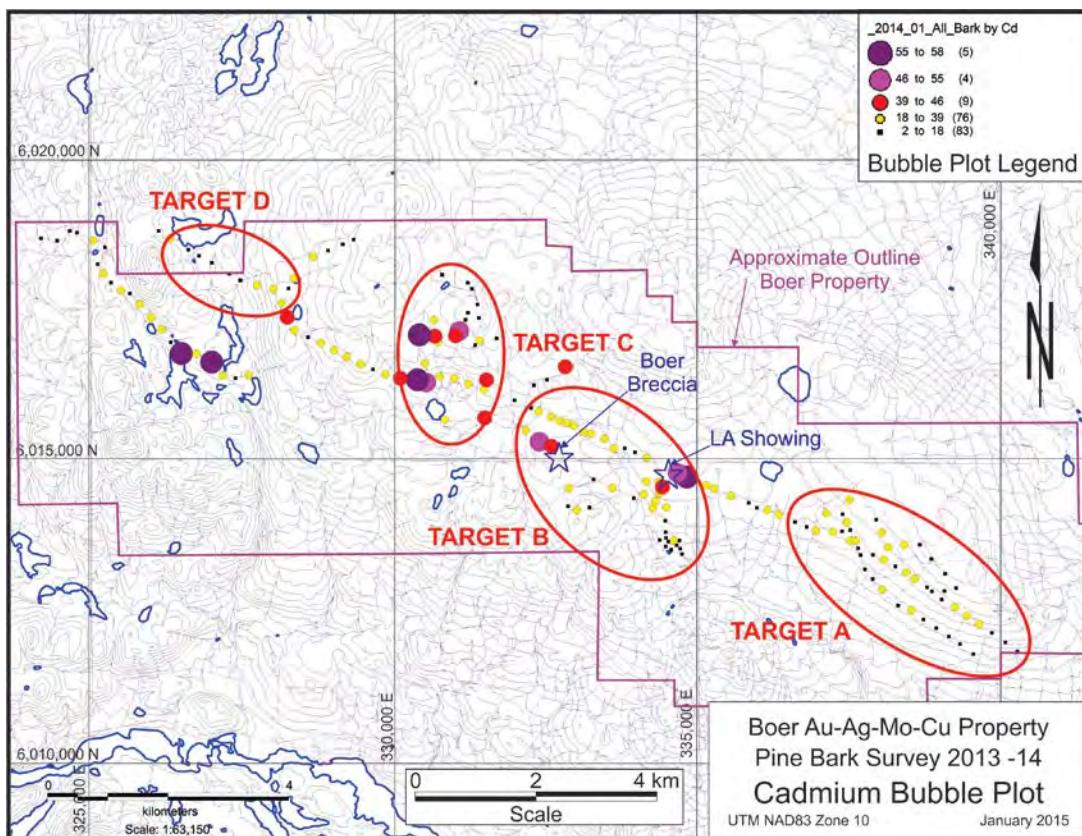


Figure 13 – Pine bark bubble plot – cadmium.

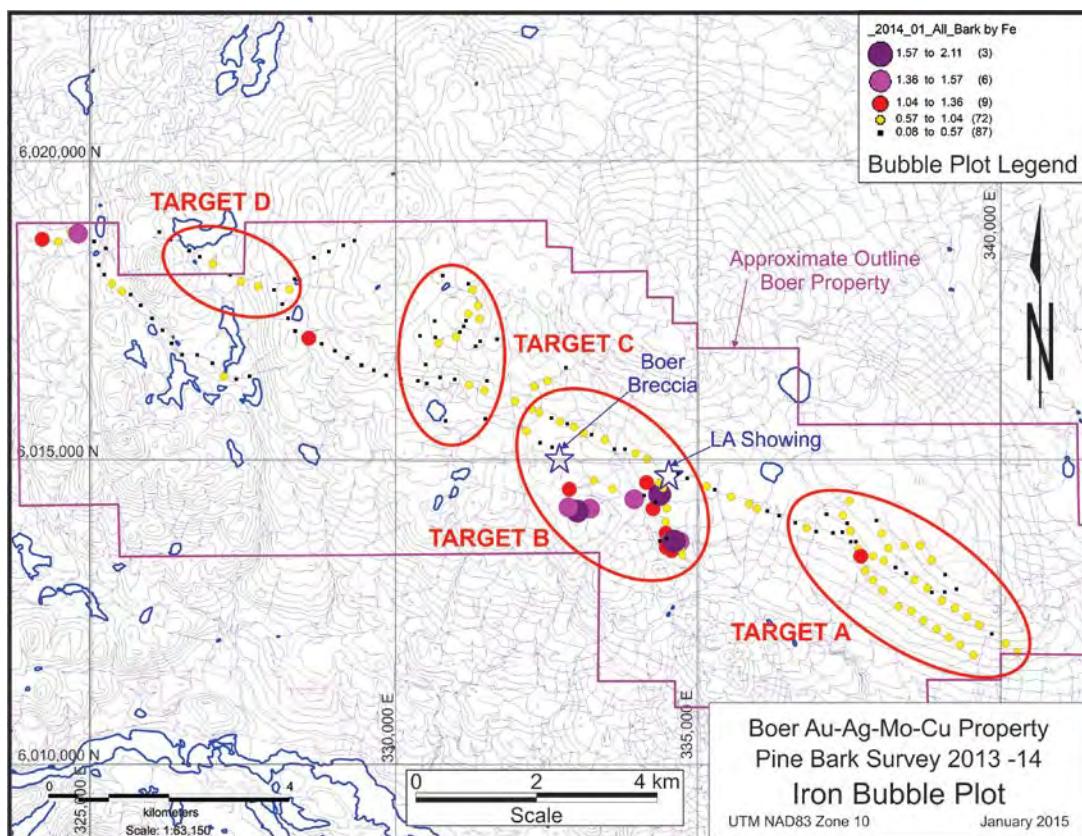


Figure 14 – Pine bark bubble plot – iron.

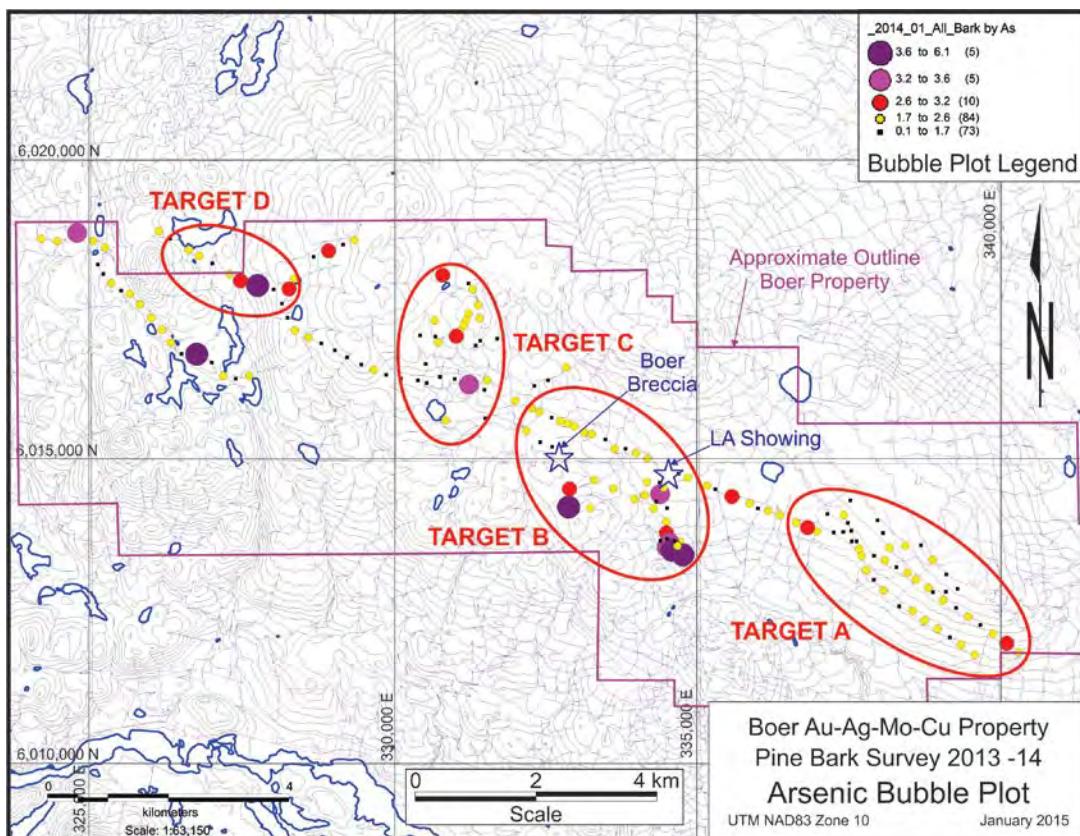


Figure 15 - Pine bark bubble plot - arsenic.

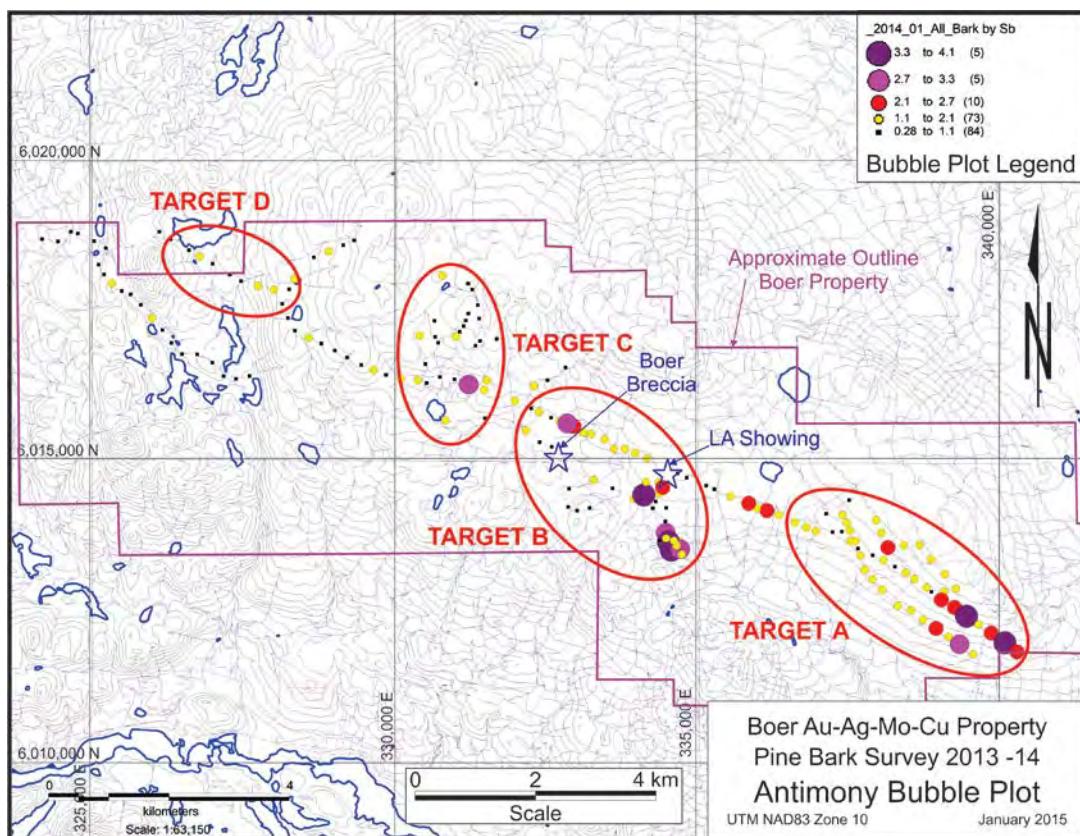


Figure 16 - Pine bark bubble plot - antimony.

**Table III – Pine bark geochemistry correlation coefficients.**

BOER BARK SURVEYS 2013 AND 2014 CORRELATION COEFFICIENT MATRIX (177 LODGEPOLE PINE OUTER BARK SAMPLES)											
	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
Mo	1										
Cu	0.621266	1									
Pb	0.304656	0.118915	1								
Zn	0.117481	0.367563	0.091686	1							
Cd	-0.30416	-0.29792	-0.07879	0.160847	1						
As	0.226413	0.296979	0.251723	0.1824	-0.20058	1					
Sb	0.58257	0.273071	0.533287	0.093357	-0.15665	0.328017	1				
Ca	-0.46226	-0.47285	-0.21197	-0.06129	0.335699	-0.26799	-0.31923	1			
Fe	0.534817	0.525384	0.271348	0.117507	-0.33897	0.401738	0.372237	-0.72889	1		
Ag	0.222967	0.255337	0.075553	0.050585	-0.31341	0.123872	0.236402	-0.27669	0.204078	1	
Au	0.069832	0.164442	0.015781	0.02368	-0.09359	0.220227	0.177722	-0.2859	0.200505	0.212063	1

### Target A

This Target, in the southeastern corner of the Property, is a strong Mo anomaly, with strong Sb and Pb and weaker associated Cu, a signature that could represent porphyry Mo-Cu mineralization. It is approximately 3.5 km in length and trends near the top of a west-southwest trending ridge, facing southerly. There is the possibility of down-slope dispersion or down-ice (west to east) dispersion of the anomaly. As a result, the source of the anomaly should be sought within or to the north and west of the anomaly. No mineral occurrences are known to occur in or near this anomaly.

### Target B

Target B contains both the Boer Breccia and LA showings. It is also the most complex anomaly, with a strong Ag, Au, Cu, Zn, Fe and As signature with minor anomalous Cd, Mo and Pb. It covers a large area, approximately 2 by 2.5 km. As discussed above under mineralization, the LA and Boer Breccia showings suggest that the source of this anomaly is hydrothermal, related to intrusive activity, possibly epithermal or high level porphyry mineralization.

### Target C

Target C is predominantly a north-south trending gold anomaly with supporting, but not necessarily coincident values in Cd, Cu, As and Zn. Interestingly, Cd and Zn do not correlate strongly, as might normally be expected. The anomaly is approximately 1.5 by 2 km in size. The highest grade silver value, 35.6 gpt Ag (float – silicified and argillic altered intrusive with disseminated pyrite), was collected from the northern part of this target area (see Figure 22).

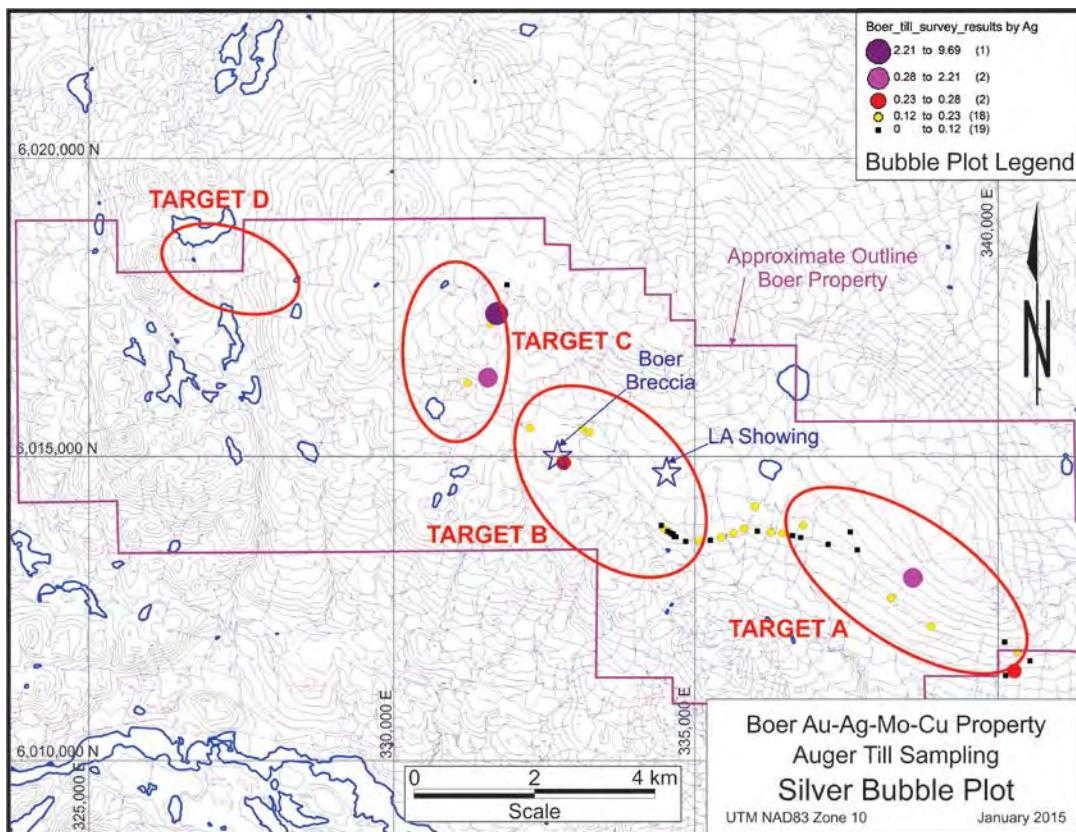
### Target D

Target D is predominantly a silver-arsenic anomaly with supporting anomalous Zn. Two strongly anomalous Cd values occur 1.5 km south of the target.

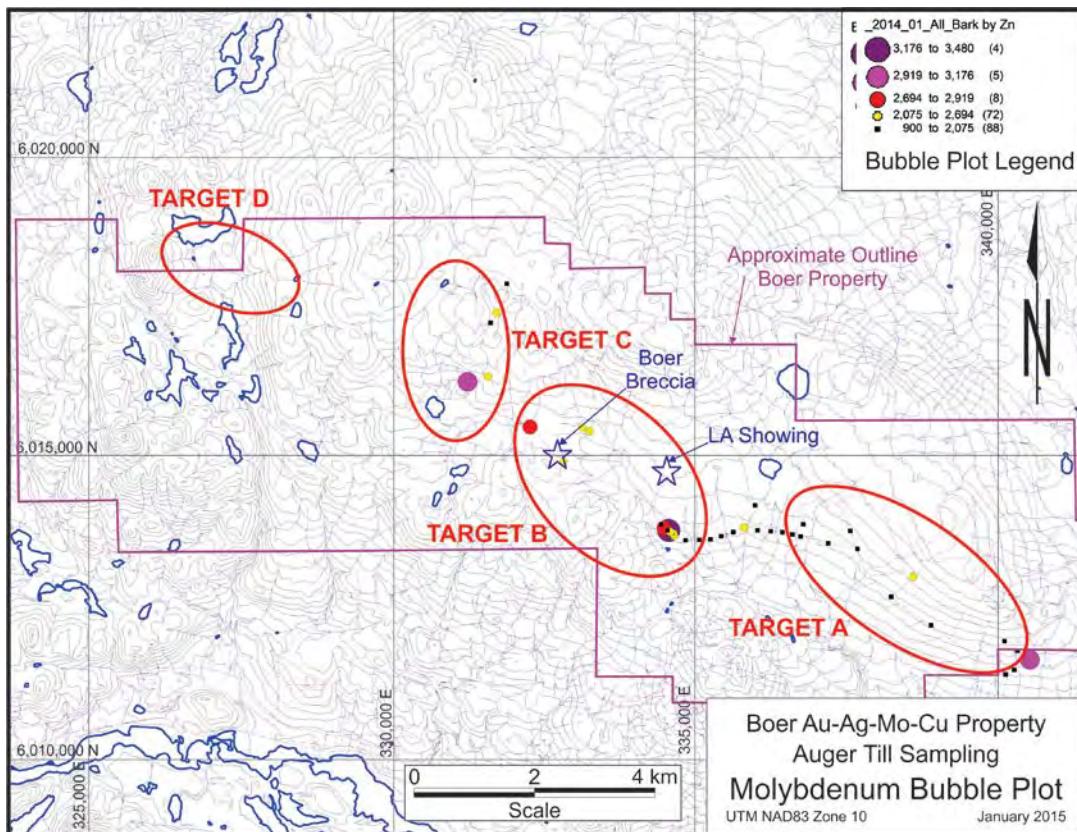
## Till Sampling

On July 4<sup>th</sup> and 5<sup>th</sup>, 2014, 41 auger till samples were collected from depths between 5 and 80 cm. Sampling was carried out along the uphill sides of road cuts and the gas pipeline right-of-way. Complete results and sample descriptions are included in Appendix C. Assay certificates and analytical methodology are included in Appendix D.

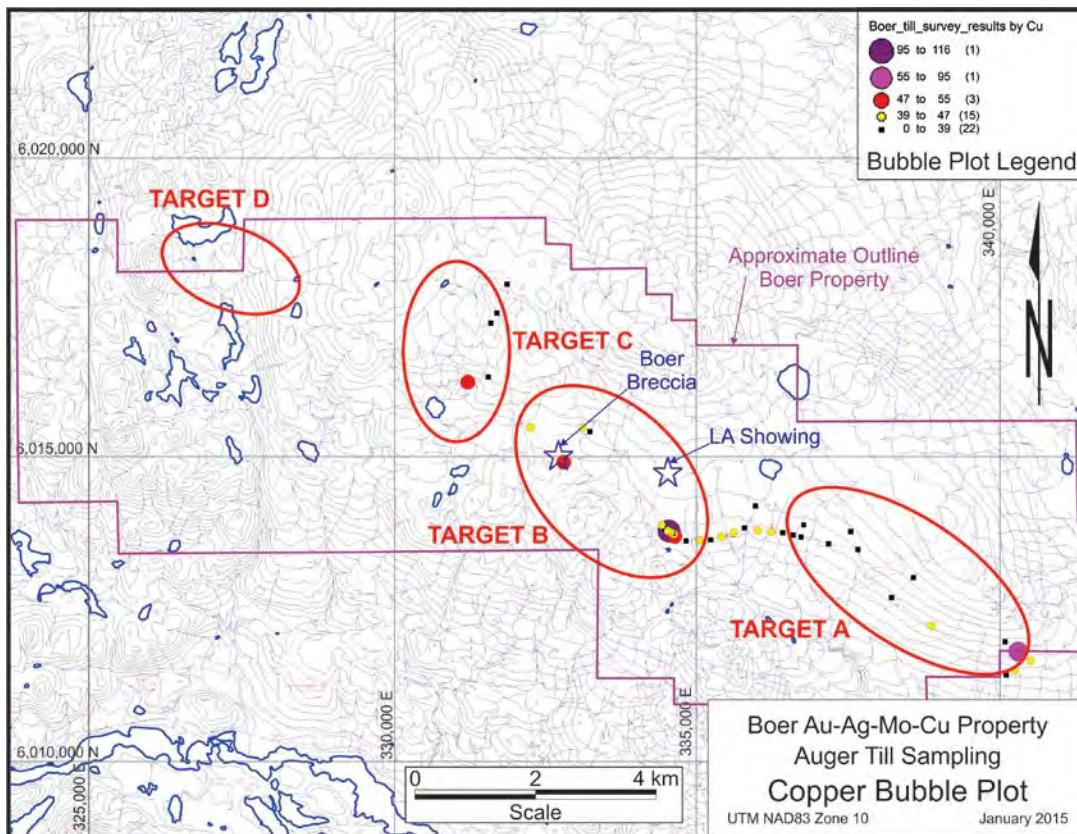
The survey produced anomalous metal values, but the anomalies tended to be lower in strength and in contrast when compared with the pine bark results. Results for Ag, Cu, Pb and Zn are presented in bubble plot format in Figures 17 to 21. The strongest anomaly was a 9.69 gpt Ag value from a sample located at the north end of Target C, near the 35.6 gpt Ag float sample. The highest Cu and Mo values, 115.1 ppm and 4.13 ppm respectively, are from the same sample site, approximately one km south of the LA Zone and in the area of some of the most anomalous pine bark samples within Target B. The highest Pb anomaly, 45.2 ppm, was collected adjacent to the Boer Breccia.



**Figure 17 – Glacial till bubble plot – silver.**



**Figure 18 – Glacial till bubble plot – molybdenum.**



**Figure 19 – Glacial till bubble plot – copper.**

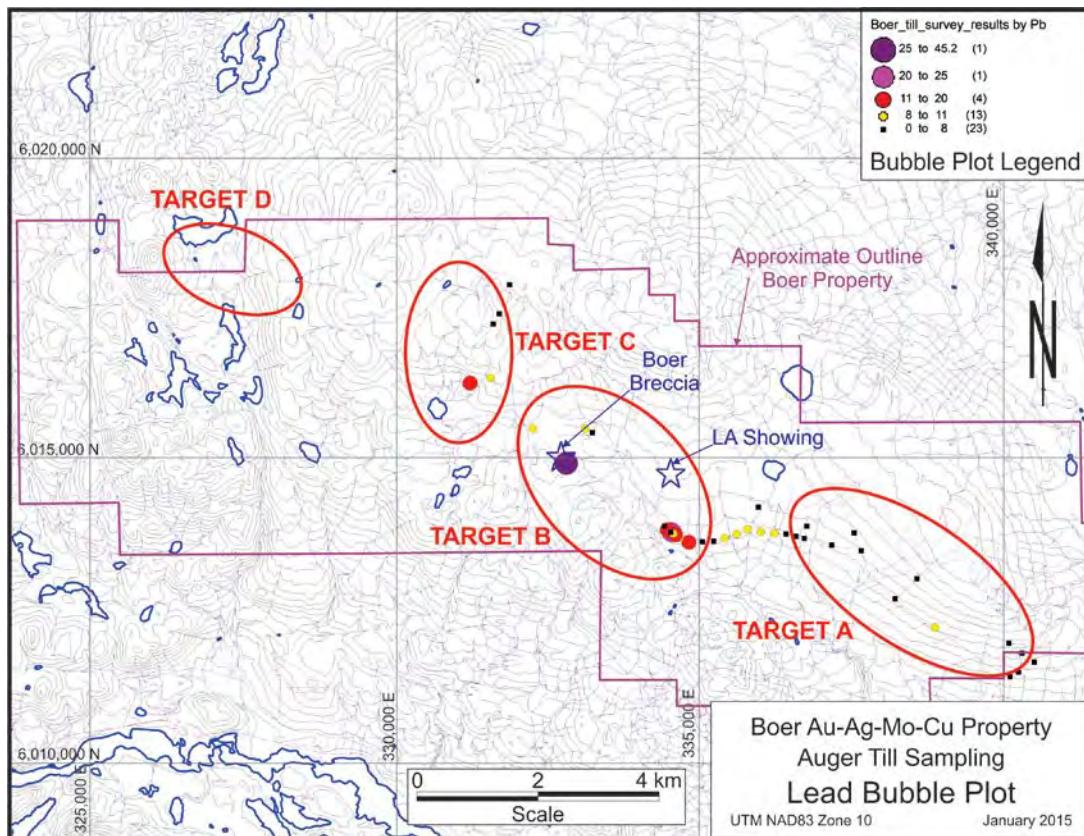


Figure 20 – Glacial till bubble plot – lead.

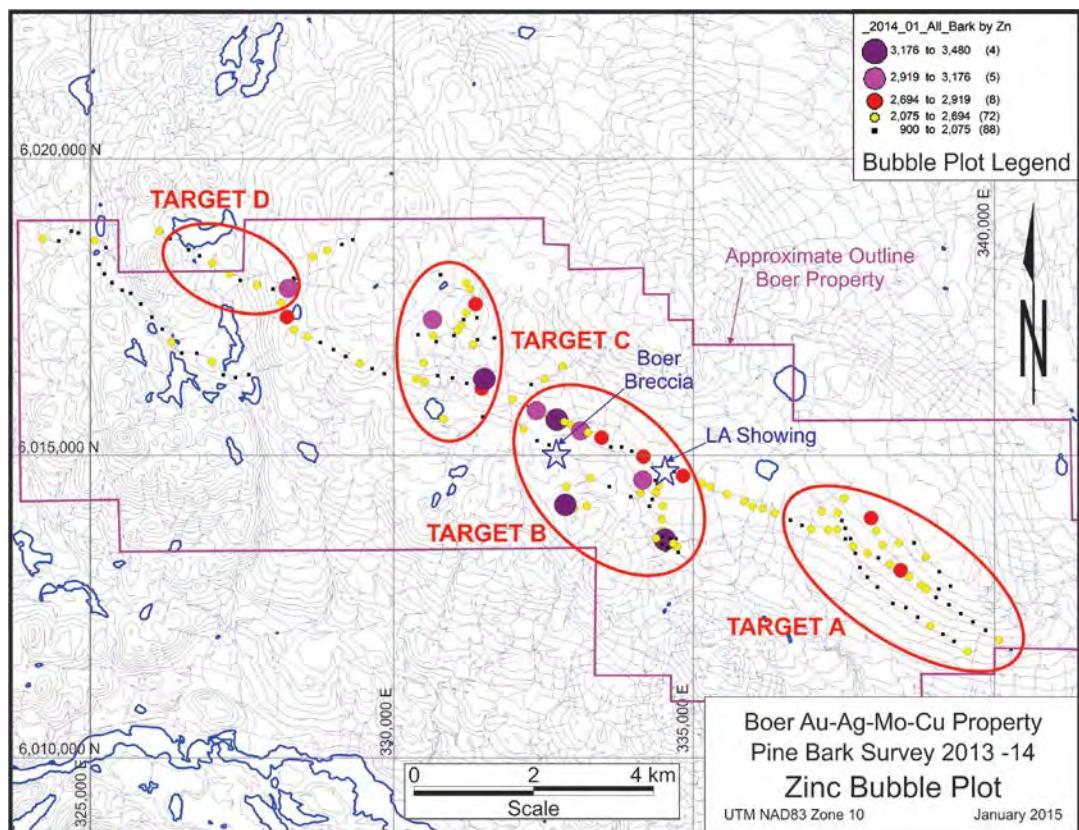


Figure 21 – Glacial till bubble plot – zinc.

## Rock Sampling

Prospecting was carried out by Les Allen, Jon Rempel, Tony Clovis and Bruce Hiller during the period July 1 to November 1, 2014, as detailed under the Statement of Expenditures. As previously noted, outcrop on the Property is rare. Most rock samples collected during the program are of float or subcrop (see Appendix A).

Sample descriptions are included in Appendix A and assay certificates and analytical methodology are included in Appendix D.

Highlights of the prospecting and rock sampling program are shown in Figure 22. The best results were obtained from two float samples collected from the LA Showing within Target B (samples LAB027 and LAB0028), as described above under Mineralization. This is a veined and polymict breccia mineralized with up to 10% disseminated pyrite in fragments and matrix. The two samples averaged 0.548 gpt Au, 11.7 gpt Ag and 0.121% Mo. These samples could represent very high level porphyry mineralization or epithermal mineralization potentially overlying a buried porphyry system.

Sample LAB019, another float sample, collected from the northern end of Target C, assayed 35.68 gpt Ag. This is an iron oxide coated, clay altered sample with quartz veining and pyrite mineralization, both disseminated and along fractures.

Samples LAB003 and LAB016, that assayed 11.76 gpt and 7.87 gpt Ag respectively, are both subcrop samples from the east end of Target D. LAB003 is a pyritic and iron stained altered volcanic rock while LAB016 is a pyritic hydrothermal breccia with intrusive fragments.

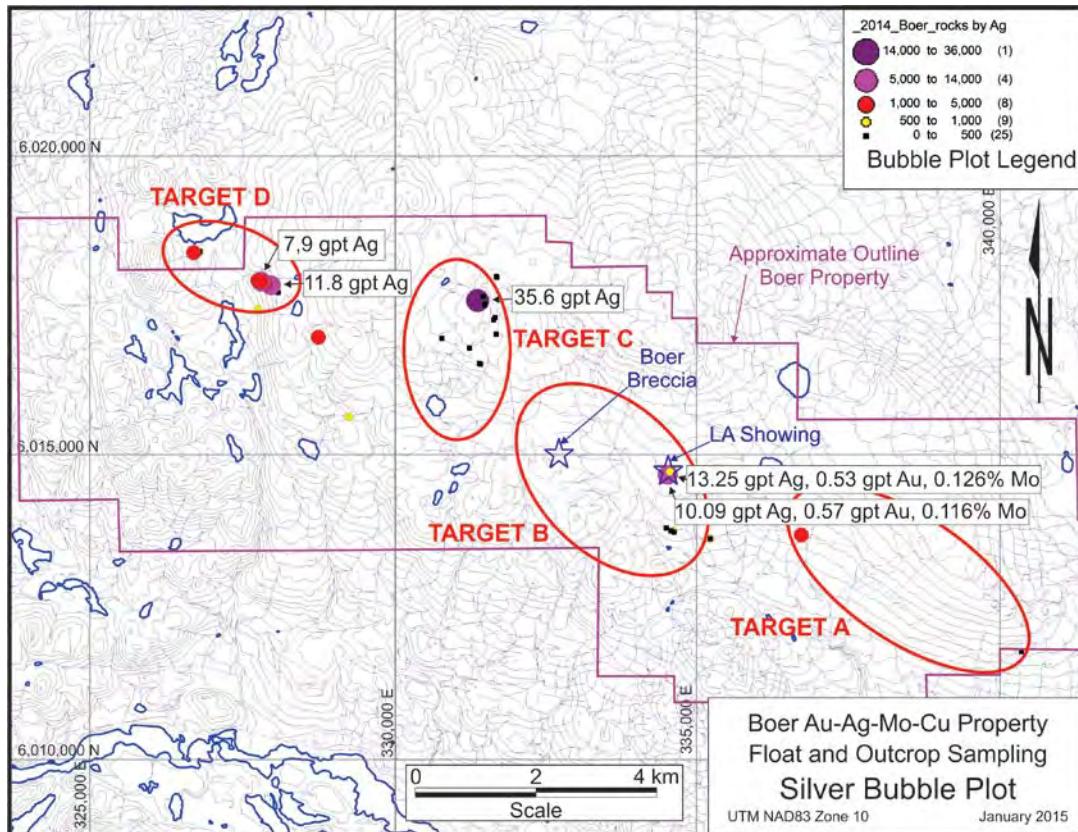


Figure 22 – Highlight assay results from prospecting samples over silver rock bubble plot.

## SUMMARY AND CONCLUSIONS

The 2014 exploration program on the Boer property included prospecting, rock sampling, including field petrographic descriptions and assaying, till geochemical sampling and pine bark biogeochemical sampling, extending the successful 2013 program. The combined 2013-2014 program resulted in the definition of four high priority target areas, defined mainly by pine bark biogeochemical results. Target A is a strong Mo anomaly, with strong Sb and Pb and weaker associated Cu, a signature that could represent porphyry Mo-Cu mineralization. Target B contains both the Boer Breccia and LA showings. It is also the most complex anomaly, with a strong Ag, Au, Cu, Zn, Fe and As signature with minor anomalous Cd, Mo and Pb. Target C is predominantly a north-south trending gold anomaly with supporting, but not necessarily coincident values in Cd, Cu, As and Zn. It contains the highest grade silver value, 35.6 gpt Ag, collected from a float sample. Target D is predominantly a silver-arsenic anomaly with supporting anomalous Zn. Two strongly anomalous Cd values occur 1.5 km south of the target.

The value of the Lodgepole Pine outer bark biogeochemical survey program has been confirmed as a valid exploration tool in this area, as it has already led to the discovery of the LA float occurrence.

Thus, the biogeochemical, till sample and rock sample results from these targets, when combined with the region's known high mineral potential, provide strong evidence for the existence of structural or intrusion related molybdenum, copper and/or precious metal mineralization, likely associated with the Endako Batholith (Endako porphyry Mo deposit) or possibly younger sub-volcanic intrusive rocks (Blackwater, Equity Silver).

## RECOMMENDATIONS

The next stage of exploration recommended for the Property includes an airborne ZTEM survey, followed by an Induced Polarization survey over focused targets developed through the interpretation of the airborne survey in conjunction with the 2013-2014 prospecting and geochemical results. Zones of high resistivity, representing potential silicified zones, and high chargeability, representing zones of potential disseminated mineralization, should be tested by drilling.

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## STATEMENTS OF QUALIFICATIONS

I, John Arthur Chapman of the City of Surrey, Province of British Columbia, Canada, do hereby certify as follows:

- (1) I am a mining engineer residing at #43 1725 Southmere Cr., Surrey, British Columbia, V4A 7A7;
- (2) I graduated with honours in Mining Technology from the British Columbia Institute of Technology, June 1967 and I graduated with honours in Mining Engineering (B.Sc.) from the Colorado School of Mines, January 1971;
- (3) I am a Fellow of the Canadian Institute of Mining and Metallurgy;
- (4) I have practised my profession continuously since 1971 in Canada, United States and Philippines;
- (5) Since 1983 I have provided services to the mining industry as the Principal of J.A. Chapman Mining Services;
- (6) Prior to 1983 I served five years with Manalta Coal Ltd., Canada's largest coal company, as Operations Manager then as Vice-President and General Manager. Prior to that, I served eleven years with Placer Development Limited. in engineering, supervision and management at large open-pit copper and molybdenum mines;
- (7) I am the co-author of this report on the Boer property, dated February 6, 2015. The report is based upon a literature review, discussions with neighboring claim owners and on Property visits during 2012, 2013 and 2014;
- (8) I am the beneficial owner of 37.5% interest in the Boer property;
- (9) I personally assisted in the planning for and reviewing of the 2014 exploration program at the Boer property.

Dated at Surrey, British Columbia this 6th day of February 2015.



John Arthur Chapman, B.Sc., FCIM

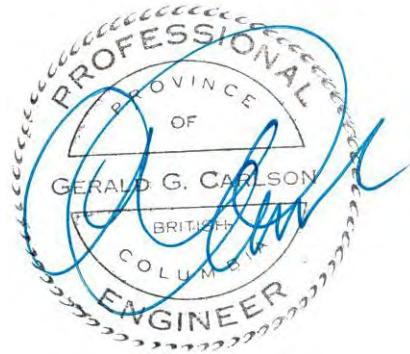
I, Gerald G. Carlson of the District of West Vancouver, Province of British Columbia, Canada, do hereby certify as follows:

1. I am a consulting mineral exploration geologist residing at 1740 Orchard Way, West Vancouver, B.C. V7V 4E8.
2. I am a graduate of the University of Toronto, with a degree in Geological Engineering (B.A.Sc., 1969). I attended graduate school at Michigan Technological University (M.Sc., 1974) and Dartmouth College (Ph.D., 1978). I have been involved in geological mapping, mineral exploration and the management of mineral exploration companies continuously since 1969, with the exception of time between 1972 and 1978 for graduate studies in economic geology.
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 12513 and of the Association of Professional Engineers of Yukon, Registration No. 0198.
4. I am a co-author of this report on the Pine Bark, Till and Rock Sampling Exploration Program on the Boer Property.
5. My contribution to this report is based on a literature review, on assessment reports and on my analysis of the results of the 2014 Boer property exploration program.
6. I am the registered owner of a 37.5% beneficial interest in the Boer property.

Dated at Vancouver, B.C. this 6<sup>th</sup> day of February, 2015,



Gerald G. Carlson, Ph.D., P. Eng.



## STATEMENT OF EXPENDITURES

*Table IV – 2014 Boer Expenditures*

BOER PROPERTY 2014 MINERAL EXPLORATION EXPENDITURES					
PERSONNEL		DESCRIPTION	DAYS	COST/DAY	COST
Allen, Les	Prospector	July 1st to 7th, 10th, 15th; October 11th, 12th, 27th; November 1st	13	\$300	\$3,900.00
Chapman, John	Mining Engineer/Manager	July 3rd, 4th, 5th, 6th, 8th; August 28th, 29th, 31st, September 1st, 2nd	10	\$1,000	\$10,000.00
Clovis, Tony	Prospector	August 31st; September 1st	2	\$300	\$600.00
Hiller, Ariadne	Geologist M.Sc.	August 16th, November 1st to 6th	8	\$800	\$6,400.00
Hiller, Bruce	Prospector	August 16th	1	\$300	\$300.00
Rempel, Jon	Prospector/Technician	July 4th, 5th; August 4th, 16th; October 12; November 1st	6	\$500	\$3,000.00
				<b>Cost Subtotal:</b>	<b>\$24,200.00</b>
VEHICLES	Four Vehicles (4x4)	5,575 km at \$0.65 per kilometer (on and off property travel)			<b>\$3,623.75</b>
AUGER (till sampling)	2.25 inches	2.25 inch diameter by 36 inches long	2	\$300	<b>\$600.00</b>
FIELD SUPPLIES		sample bags, tags, ribbon, tie-wraps, etc			<b>\$175.00</b>
FREIGHT (GREYHOUND)		rock, bark, soil and till samples from Boer project to Langley			<b>\$71.67</b>
ACCOMMODATION			12		<b>\$1,055.53</b>
MEALS			14	\$40	<b>\$560.00</b>
SAMPLE ANALYSIS		47 rock, 35 bark, 5 soil and 41 till			<b>\$2,716.92</b>
REPORT PREPARATION	G. Carlson, PhD; Chapman		4	\$1,000	<b>\$4,000.00</b>
				<b>Cost Total:</b>	<b>\$37,002.87</b>
					prepared by: John A. Chapman

Event Number: 5526848  
 Work Filed: \$14,650.00  
 PAC Filed: \$6,252.29  
 Work Recorded: October 16, 2014

Event Number: 5530427  
 Work Filed: \$22,352.87  
 PAC Filed: \$9,299.74  
 Work Recorded: November 1, 2014

# **APPENDIX A**

## **ROCK DESCRIPTIONS, PHOTOGRAPHS AND MAPS**

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

LAB001	328177	6017527	Outcrop	Quartz Monzonite	White/beige, brown, med. grain intrusive, exhibiting 2cm wide qtz vein, multiple phases of deposition- banded/saccharoidal with Ep+Chl. FeOx by millimeter fractures. wk- Magnetic	Wk	Qtz vein banded-saccharoidal with Ep+Chl	Mod argillic mod ser	Tr Py
LAB002	328073	6017721	Outcrop	Quartz Monzonite	Green/grey, medium grain, mafic minerals (specially hornblende) altered to Chl. Sample exhibits millimeter veinlets of Ep+Ca+- Chl. Red stains by fractures (oxidation of magnetite?) stains by fractures	Str	Veinlets with Ep+Ca +Chl	Mod-str propylitic	Py< 1%, Tr Cpy
LAB003	327953	6017840	Subcrop	Volcanic? (component of agglomerate?)	Grey/white/green non magnetic, str silicified (no original texture could be observed) fine grain to aphanitic-saccharoidal texture, with vugs filled with Qtz mm crystals (druzy) covered with FeOx, Py <1%. In places mm grey qtz	Non	Saccharoidal, mm veinlets and vugs with qtz drusy coated with FeOx	Str si	Py<1%

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					veinlets in different directions. Oxidized Py cubes -exhibiting goethite and hematite				
LAB004	327854	6017878	Subcrop	Felspar-Hornblende porphyry?	Beige/white, str silicified rock with porphyritic texture, relics of hornblende (?) on a siliceous groundmass. Ser-chl by hornblende with mm qtz-grey veinlets in diff. directions. Vugs with qtz drusy coated with FeOx, Py < 1%, saccharoidal texture	Non to wk	Porphyritic saccharoidal	Str si, wk argillic	Py< 1%
LAB005	327854	6017878	Subcrop	Felspar-Hornblende porphyry?	Beige/wh/maroon mod silicified/mod argillic, saccharoidal texture relics of hornblend altered to chl on a clayish, groundmass. Millimeter grey qtz veinlets. Few vugs observed with FeOx, tr Py Limonite>goethite	Non to wk	Saccharoidal, relic, vuggy	Mod si, mod argillic	Tr Py
LAB006	340380	6011784	Outcrop	Qtz-Hornblende Diorite	Grey/green, str mag, fresh, medium grain, well defined hornblende	Str	Medium grain	Wk chl/ep	Non

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					crystals (needle like) with magnetite and specularite forming small aggregates. Some hornblend crystals exhibit wk chloritic alteration and epidote is observed rarely forming small aggregates.				
LAB007	335228	6013649	Outcrop	Granite (Pink)	Pink colour with hmt stains, phaneritic massive texture, with orthoclase, plagioclase, quartz. Several parallel 1-3 cm wide quartz veins cut the granite, in places intersected with late hematite veinlets	Non	Phaneritic massive coarse grained	Qtz veinlets	Non
LAB008	335228	6013649	Outcrop	Andesite	Greenish/gray/bl, fine grain to aphanitic volcanic, str mag, wk propylitic altered with Ca+Ep+Py in veinlets and disseminated	Str	Fine grain to aphanitic	Wk propylitic on veinlets	Py<1%
LAB009	334616	6013781	Subcrop	Feldspar porphyry (?)	Greenish/wh/beige/maroon str silicified with appearance of relic texture (porphyritic texture-Felspars?) with diss Py (some oxidized	Non	Porphyritic (?)	Str si	Py 1-2%

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides
					cubes) and FeOx where hmt > goethite by mm fractures. Late grey qtz very fine veinlets in different directions cross cut the silicified rock. Small (1-2cm vugs with qtz druzy and FeOx.				
LAB010	334616	6013781	Subcrop	Monzonite	Greenish/grey/wh mod Si, mod-wk phyllitic alteration. FeOx +Ca fracture filling all in one direction. Limonite>hmt, Py<1%. Some sectors of the sample present sugary texture and some clay by fractures.	Non-wk	Saccharoid al, medium grain texture is observed	Mod si, mod phyllitic	Py<1%
LAB011	334629	6013759	Subcrop	Monzonite	Maroon/grey/beige, mod si-wk argillic altered, oxidized, Py 1-2% by .3 to .5mm qtz veinlets in one general direction, wk mag with specularite. Hmt stains on veinlets possible after magnetite.	Wk	Medium grain massive.	Mod si, Wk argillic	Py 1-2%
LAB012	334501	6013827	Subcrop	Monzonite	Green/grey, mod to str propylitic altered , wk silicified intrusive,	Wk	Medium grain-massive	Mod to str propylitic, wk si	Py < 1%

Rock Sample Description Boer Property						
Samples collected by	Les Allen, Jon Rempel			Period	Summer-Fall 2014	
Samples described by	Ariadne Holness de Hiller, John Chapman			UTM NAD	6km NE of Burns Lake	

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					disseminated Py<1%, few sericite by bio. Ca+Ep mm veinlets cross cutting sample. FeOx coating fracture zones				
LAB013	334581	6013779	Outcrop	Monzonite	Brown/grey/green wk propylitic, wk si. Py<1%, FeOx coating mm fractures in one major orientation, Limonite? hmt and goethite. Ep+Chl+Ca on small veinlets	Wk	Medium grain.	Wk propylitic, wk si	Py< 1%
LAB014	327796	6017904	Subcrop	Breccia (clast supported)	Clasts (probably Qtz-Monzonite) hydrothermally altered before brecciation-mod si, wk ser, with Py-10%, fine disseminated, in places the clasts exhibit porphyritic texture (?). Due to the sample size, cement appears to be silica flooded. FeOx coating late (post brecciation) fractures and small vugs filled with hexagonal qtz crystals.	Non	Clast supported breccia	Clast mod si, wk ser	Py~10% on premineralized clast
LAB015	327796	6017904	Subcrop	Breccia (cement)	Same description as before, but cement is	Non	Breccia	Str si	Py <1%

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

				supported)	siliceous, rock fragments are smaller (1-2 cm), str. silicified, with Py<1%				
LAB016	327796	6017904	Subcrop	Breccia (cement supported)	Same description as before, more vuggies (mm to 1 cm), multiple reopening of qtz veinlets, FeOx and MnOx coating. Vugs with qtz druzy. Sample is cross cut by mm grey qtz veinlets	Non	Breccia	Str si	Py<1%
LAB017	327737	6017924	Float	Dolomite?	Calcite and Qtz veinlets in a white massive rock		Breccia		
LAB018	326776	6018397	Float	Andesite?	Silicified very rusty fractured rock beside high-grade silver tree PH2B22			Str si	Abundant pyrite
LAB019	331375	6017591	Float	Quart Monzonite	Redish/pinkish/ocre/white, mod si, mod argillic altered, hematite>goethite stained. Fractures showed areas with cavities and open spaces (mm to 0.5cm) with qtz crystals and well formed Py cubes crystals. Some calcite by those fractures. Mafic minerals	Wk	Massive, medium grain	Mod si, mod argillic	Py<1 restricted to fractures, well defined cubes.

Rock Sample Description Boer Property						
Samples collected by	Les Allen, Jon Rempel			Period	Summer-Fall 2014	
Samples described by	Ariadne Holness de Hiller, John Chapman			UTM NAD	6km NE of Burns Lake	

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					are oxidized. Clay minerals after feldspars (Note: As rock is a float, not sure if argillic is by hydrothermal alteration or by weathering.)				
LAB020	327742	6017441	Float	Qtz vein(?)	Millimeter to a 3cm qtz vein and veinlets observed on a strongly silicified intrusive(?) Open cavities exhibit mm qtz hexagon crystals coated with FeOx, Some FeOx present cubic habit probably after Py	Non	Qtz vein	Str si	-
LAB021	331665	6017309	Outcrop	Andesite	Dark green/grey/black fine grain, wk to mod propylitic altered, Py <2% forming fine disseminations and aggregates, areas with fine Py veinlets	Str	Fine grain	Wk-mod propylitic	Py<2%
LAB022	331490	6017515	Outcrop	Qtz-Hornblende Diorite	Dark grey/green, mod propylitic altered, hornblende crystals chl altered, mm veinlets in different direction with Ep+Chl+Ca+Py <1%. Py form small aggregates and diss. Tr Cpy	Mod	Massive, coarse grain	Mod propylitic	Py<2% Tr Cpy

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

LAB023	331499	6017531	Outcrop	Qtz-Hornblende-Feldspar Porphyry	Grey/wh/ light greenish/black, str to mod Si, wk argilic, saccharoidal texture with vuggy quartz filled with crystals (druzy) and FeOx coating (goethite), rock is porous and abrasive to touch. Small square open spaces are observed (from the dissolution of honblende(?) Quartz eyes could be observed from the original rock fabric. Felspar crystal remnants are up to 1 cm long. Hornblende remnants are needle like shape. Matrix is fine grain mod to Str silicified	Wk	Porphyritic saccharoidal, vuggy silica. Not total replacement	Str-mod si, wk argillic	Non
LAB024	331466	6017656	Float	Breccia(?) Qtz Monzonite and Andesite fragment	Green/wh/brown, mod Si, overprinted by mod propylitic (wk argillic by weathering?). Rock has the appearance of a breccia as one area is med coarse (qtz Monzonite) and the other is more fine grain	Wk	Breccia (?)	Mod si overprinted by mod propylitic	Py ~5%

Rock Sample Description Boer Property						
Samples collected by	Les Allen, Jon Rempel			Period	Summer-Fall 2014	
Samples described by	Ariadne Holness de Hiller, John Chapman			UTM NAD	6km NE of Burns Lake	

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					(andesite), probably clast supported. Late qtz-Py veinlets cut the sample in different directions. Py up to 5% in areas of vugs with qtz hexagon crystals and FeOx coating.				
LAB025	334598	6014793	Float	Breccia(?)	Brown/rusted/redish, clast difficult to identify, str silicified with Py <3% with small veinlets with qtz+mt and Ca. Hematite, Limonite pseudomorph after Py and staining rock. Some silicified fragment showed earlier mm stockwork with veinlets covered with limonite and hematite. Some areas present vugs and corroded textures. Matrix silica flooded (as cement) with Py up to 5%. Py is abundant on the matrix forming aggregates, cubes and small veinlets. Limonite and hematite stains.	Wk	Breccia (?)	Str si (flooded)	Py <3% clast up to 5% in silica flooded (cement) matrix

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					Minor specularite (?) crystals observed by quartz vein. Clasts are not well defined, probably Qtz-Monzonite (?). Few small open spaces filled with qtz crystals coated with goethite.				
LAB026	334566	6014764	Float	Breccia	Same as above described				Tr Cpy, Py ~3%
LAB027	334521	6014707	Float	Breccia	Description and pictures at the end of this section	Non	Breccia	Str si, wk propylitic on andesite clast	Py up to 10%, trace Cpy (?)
LAB028	334520	6014709	Float	Breccia	Brown/rusty red/wh/grey matrix supported breccia, with andesitic clast (.3mm to 3cm) with abundant Py up to 5%, mod si, wk propylitic, clast are sub rounded to rounded (rotation of fragments, upper part of the breccia pipe?), matrix is fine grain silica flooded with Py <3%. Hmt (from oxidation of Py?) stains by late qtz fractures parallel to each other.	Non	Breccia	Str si, wk propylitic	Py up to 5%, tr Cpy (?)

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

LAB029	334558	6014760	Float	Breccia	Same as above, more rusted (hmt, limonite, jarosite, goethite stains) and Py up to 2 %. Calcite flooding by fractures	Non	Breccia	Str si	Py <2%
LAB030	330784	6016963	Outcrop	Qtz-Diorite	Gray/green, medium grain, mod-strong chlorite altered, calcite flooded, with Py <2% forming aggregates. Some Py are rusted and others showed iridescent colors (by oxidation)				
BRJT1401	326776	6018397	Subcrop	Pyroclastic	Feldspar phenocrysts, quartzose, should respond to VLF-EM as sulfides fill stockwork veinlets	Non			As+py
BRJT1402	326776	6018397	Float?	Rhyolite?	Small disseminated rust spots throughout rock	Non		Str si, iron oxides	
BRJT1402A	326776	6018397	Float?	Gabbro?	Fine grained	Non			Minor py
BRJT1403	326776	6018397		Hornblende Diorite	K-spar phenocrysts	Non			
BRJT1404	326677	6018382	Subcrop	Mafic flow?	Azurite and malachite stains. Strong fizz with HCL. Rock blasted from pipeline trench	Non		Chl & talc	Po+py+azu rite+malac hite
JR1	331501	6017528	Outcrop	Andesite	13 meter exposure of	Wk	Breccia		

Rock Sample Description Boer Property									
Samples collected by		Les Allen, Jon Rempel			Period		Summer-Fall 2014		
Samples described by		Ariadne Holness de Hiller, John Chapman			UTM NAD		6km NE of Burns Lake		

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

					green Andesite with quartz (porcelain like) phenocrysts, manganese stained				
JR2	331689	6017989	Float	Hornblende Diorite	Quartz pyrite vein cuts sample	Non		Oxidation (rusty)	Fine Py in quartz vein
JR3	331697	6017974	Outcrop	Granodiorite	30m exposure of massive Granodiorite with tiny disseminated flecks of a dark mineral. Strong fizz with HCL	Non		Str si	
JR9	331404	6016551	Outcrop	Andesite Dike	2m wide porphyritic Andesite dike trending SW. Strong fizz with HCL.	Str	Med grained	Moderate chlorite	Disseminated Py
JR10	331422	6016537	Outcrop	Andesite Dike	Porphyritic, strong fizz with HCL	Non	Med grained		
JR11	331422	6016537	Float	Granite	Massive Granite with small K-spar and quartz phenocrysts. Strong fizz with HCL. Located beside JR11 Dike	Non	Med grained		
JR12	331241	6016803	Outcrop	Andesite	Minor fizz with HCL	Str			Py >2%
JR13	331686	6017035	Outcrop	Diorite	50m wide massive silicified dome. Moderate fizz with HCL	Str	Med grained	Si flooding	Minor Disseminated Py
JR15	331640	6017271	Outcrop	Diorite	Massive	Mod	Med grained	Minor chlorite	Py ~3%
NS	328177	6017527	Outcrop	Biotite Granite				Fresh	
NS	326788	6018381	Float	Qtz Diorite				Fresh	

Rock Sample Description Boer Property						
Samples collected by	Les Allen, Jon Rempel			Period	Summer-Fall 2014	
Samples described by	Ariadne Holness de Hiller, John Chapman			UTM NAD	6km NE of Burns Lake	

Sample No.	Easting	Northing	Sample Type	Lithology	Description	Mag	Texture	Alteration	Sulphides

NS	326378	6018631	Outcrop	Granodiorite				Fresh	
NS	340225	6011899	Outcrop	Granodiorite & Andesite				Fresh	
NS	339684	6012276	Outcrop	Granodiorite & Volcanic				Fresh	
NS	330461	6016149	Outcrop	Qtz Monzonite				Epidote	Minor Py
NS	328171	6015049	Outcrop	Tuff				Fresh	
NS	331457	6017303	Outcrop	Hornblende Diorite & Granite				Fresh	
NS	331450	6017583	Outcrop	Granodiorite				Fresh	

**BOER MINERAL PROPERTY, BURNS LAKE, BC**

**FLOAT SAMPLE LAB027 (NAD83 Zone10N: 334521mE/6014707mN)**

**NEW  
DISCOVERY**

In November 2014, within an area of Lodgepole Pine outer bark samples anomalous in metals, two adjacent pieces of angular, near-source float of hydrothermal breccia with multiple stages of stockwork veining with average 0.548 gpt Au, 11.7 gpt Ag and 0.121 % Mo were discovered by Les Allen, Prospector. The float is believed to be close to source.



LAB-027 Breccia (epithermal level), strongly silicified matrix (silica flooded cement). Clast are fine grain andesite str-mod silicified with Py up to 10% Pyrite mineralization is found on the andesitic fragments as well as on the siliceous matrix. Vuggy and layered textures can be found on the siliceous matrix with iron oxide coating. Also quartz veins fragments up to 3 cm long were found. Figure below is a picture of the sample. There is evidence in this sample of multiple events, most of them intermineralization and present remanent of previous hydrothermal deposition events.

1. Andesitic rock fragments, angular to sub angular, previously mineralized with Py up to 10% diss and in some veinlets with Qtz. Trace Cpy? This portion of the sample is fragment supported with siliceous matrix.
2. Small (>5 mm) angular andesitic fragments -matrix supported with Py
3. Previously brecciated (?) Amorphous quartz fragment. Notice chilled margin
4. Millimetre grey quartz veinlets of an earlier event on the quartz fragment
5. Millimetre quartz fragments in a siliceous matrix supported with Pyrite
- 6 and 7 Cross cutting veinlets super imposed into the brecciated structure.
8. Late Quartz vein cutting andesitic fragment and forming vuggy texture with Fe oxides coating. At least there are 7 different events or phases we can recognize



**Rock Description By:**

Ariadne Holness de Hiller,  
MSc (geology)

Float sample LAB027 (discovered November 2014), located ~2km east of Boer Breccia. Mo 1262ppm, Ag 13.7ppm and Au 531ppb.

## BOER ROCK SAMPLE PHOTOGRAPHS 2014



IMG\_1148



IMG\_1149



IMG\_1150



IMG\_1151



IMG\_1152



IMG\_1153



IMG\_1154



IMG\_1155



IMG\_1156



IMG\_1159



IMG\_1160



IMG\_1161



IMG\_1162



IMG\_1163



IMG\_1164



IMG\_1165



IMG\_1166



IMG\_1167



IMG\_1168



IMG\_1169



IMG\_1170



IMG\_1171



LAB019



LAB020



LAB021



LAB022



LAB023



LAB024



LAB025 BOER iphone



LAB026 BOER iphone



LAB026 BOER



LAB027 BOER iphone



LAB027 physical analyses 20141129 jac



LAB028 BOER iphone



LAB029 BOER iphone



LAB030 BOER iphone



LAB030 BOER



BOER  
JR1



BOER  
JR2



BOER  
JR3



BRJT1401



BRJT1402



BRJT1402A



BRJT1403



BRJT1404



JR9



JR10



JR11



JR12



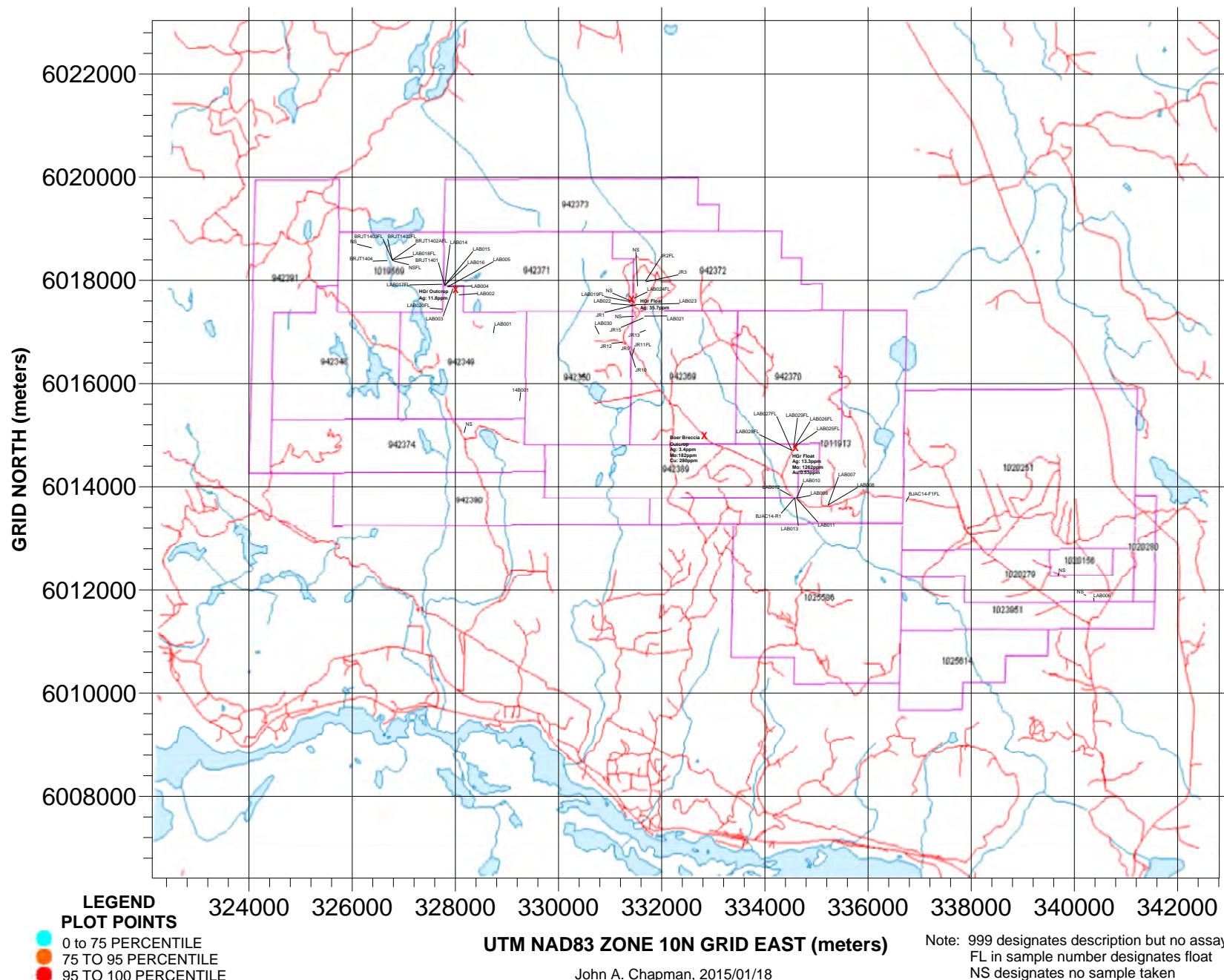
JR13



JR15

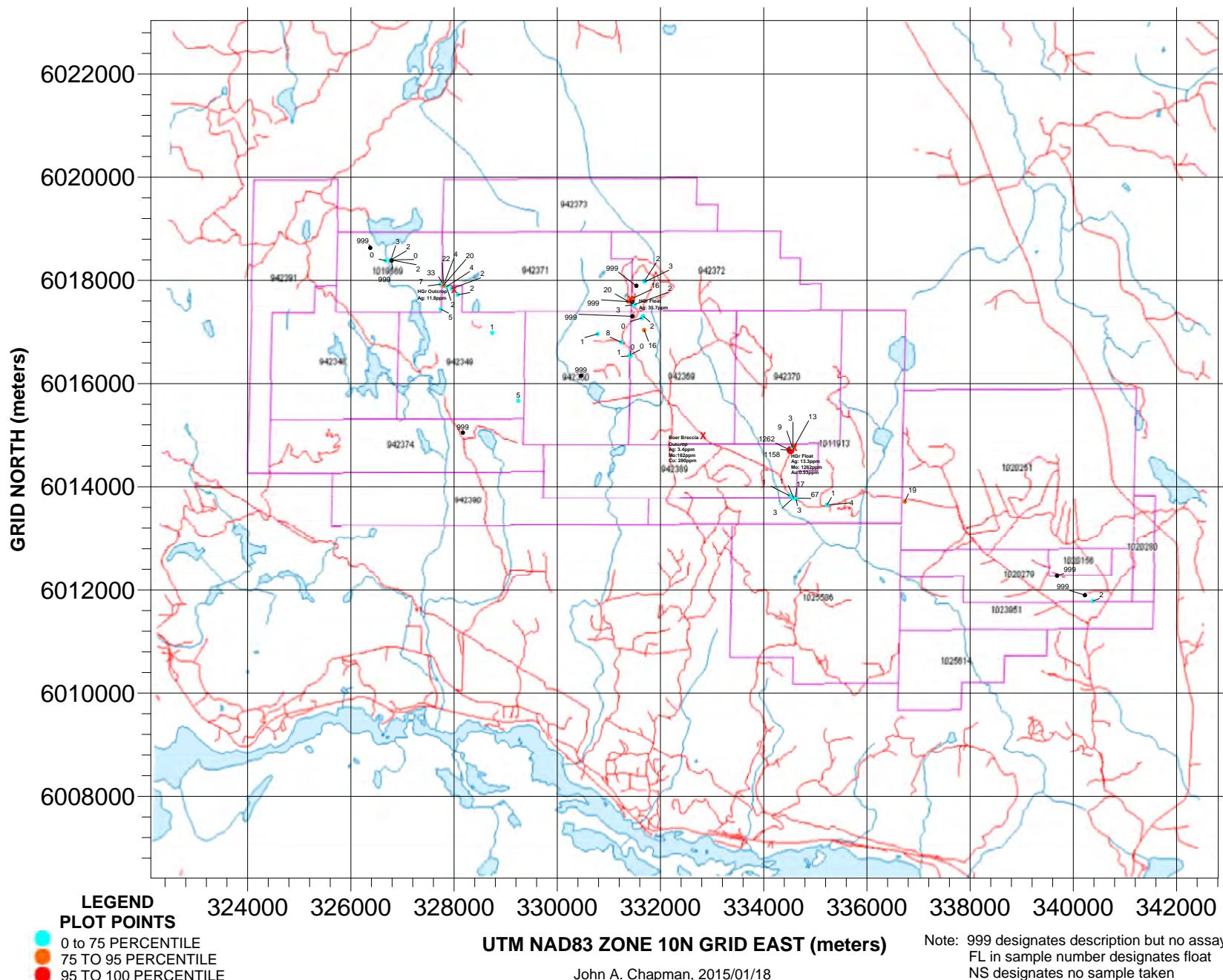
**BOER PROPERTY, BURNS LAKE, BC (2014)**  
**ROCK (FLOAT, OUTCROP & SUBCROP)**  
**LOCATIONS AND ASSAY VALUES**

SAMPLE NUMBERS

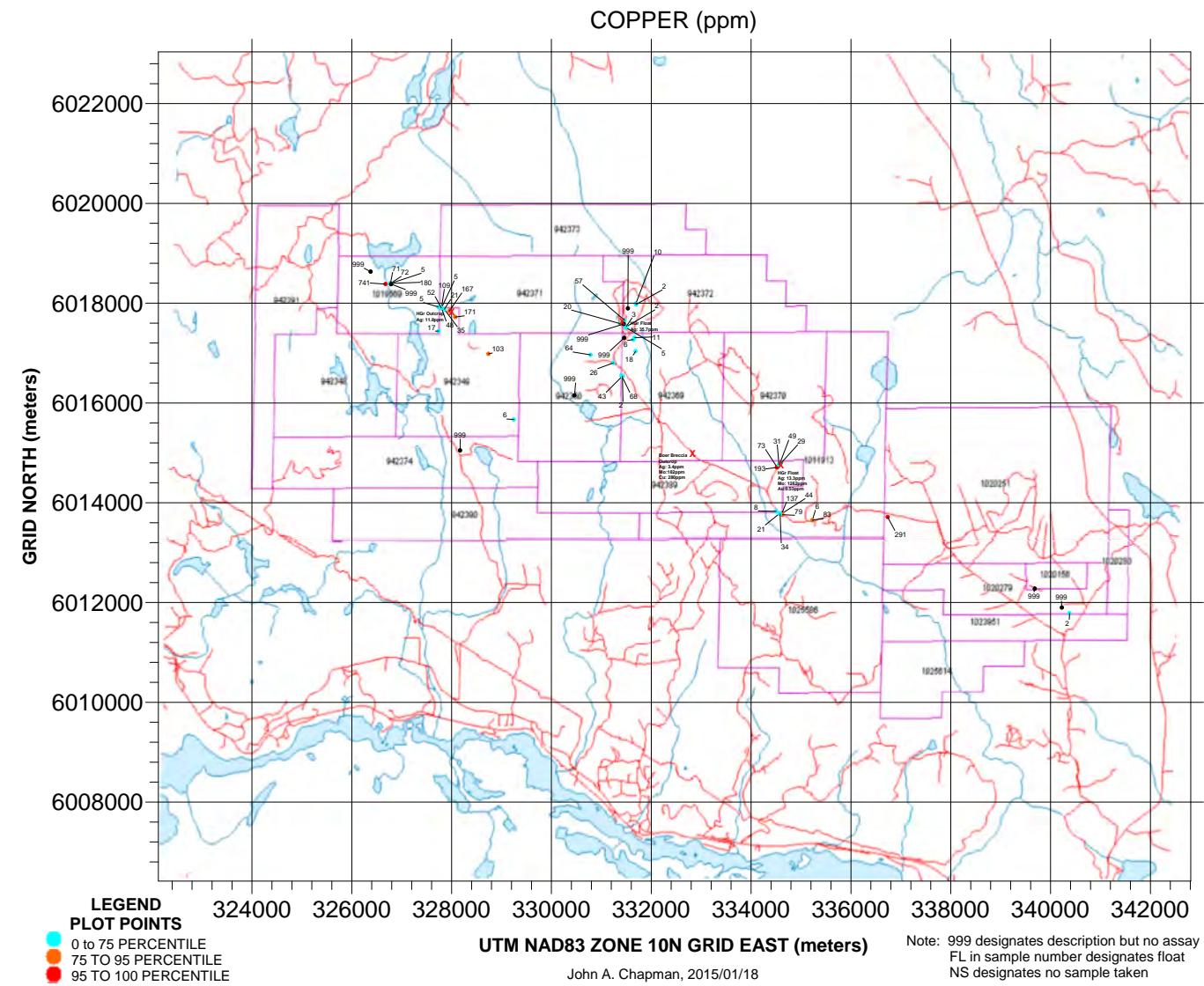


**BOER PROPERTY, BURNS LAKE, BC (2014)**  
**ROCK (FLOAT, OUTCROP & SUBCROP)**  
**LOCATIONS AND ASSAY VALUES**

MOLYBDENUM (ppm)

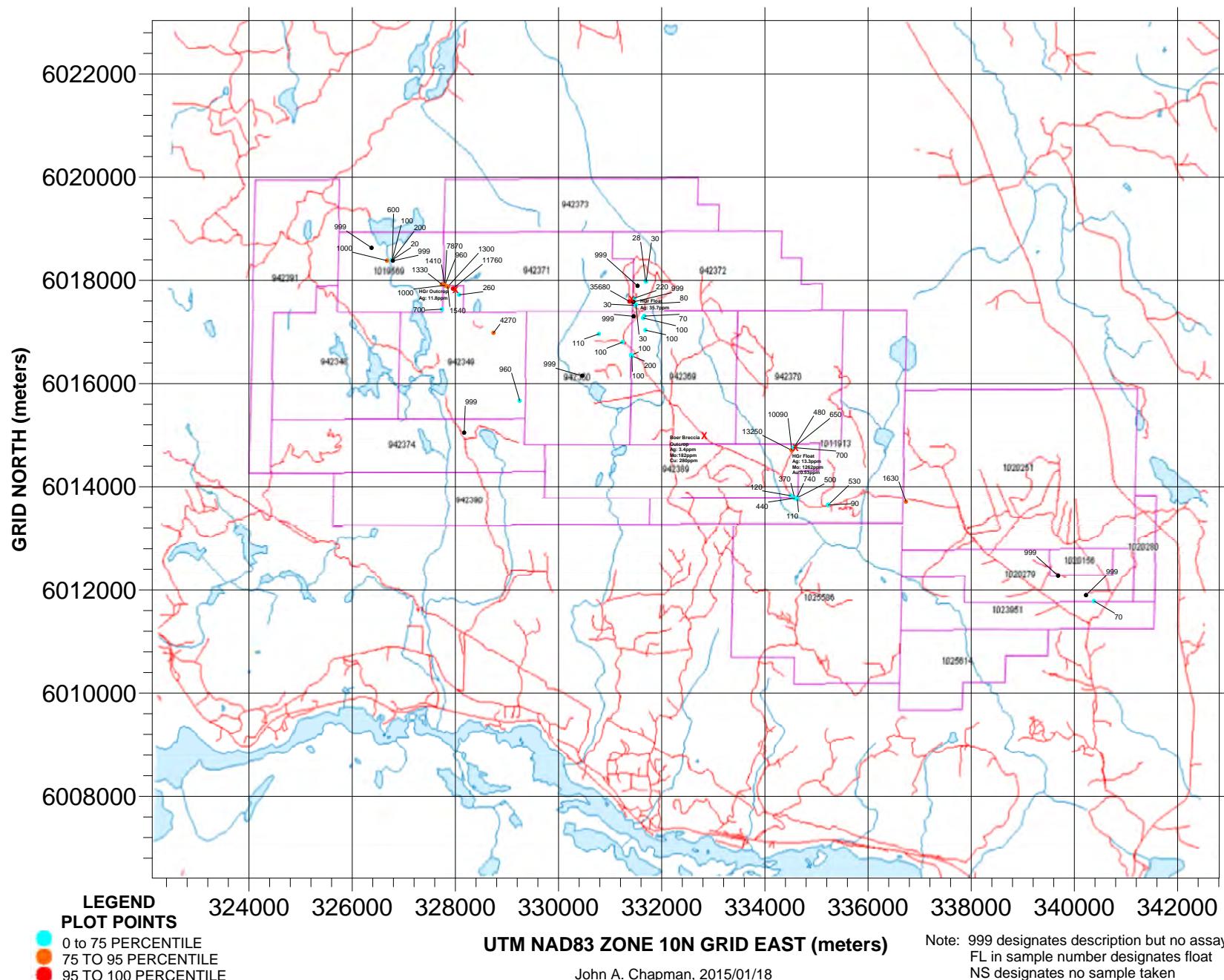


**BOER PROPERTY, BURNS LAKE, BC (2014)**  
**ROCK (FLOAT, OUTCROP & SUBCROP)**  
**LOCATIONS AND ASSAY VALUES**



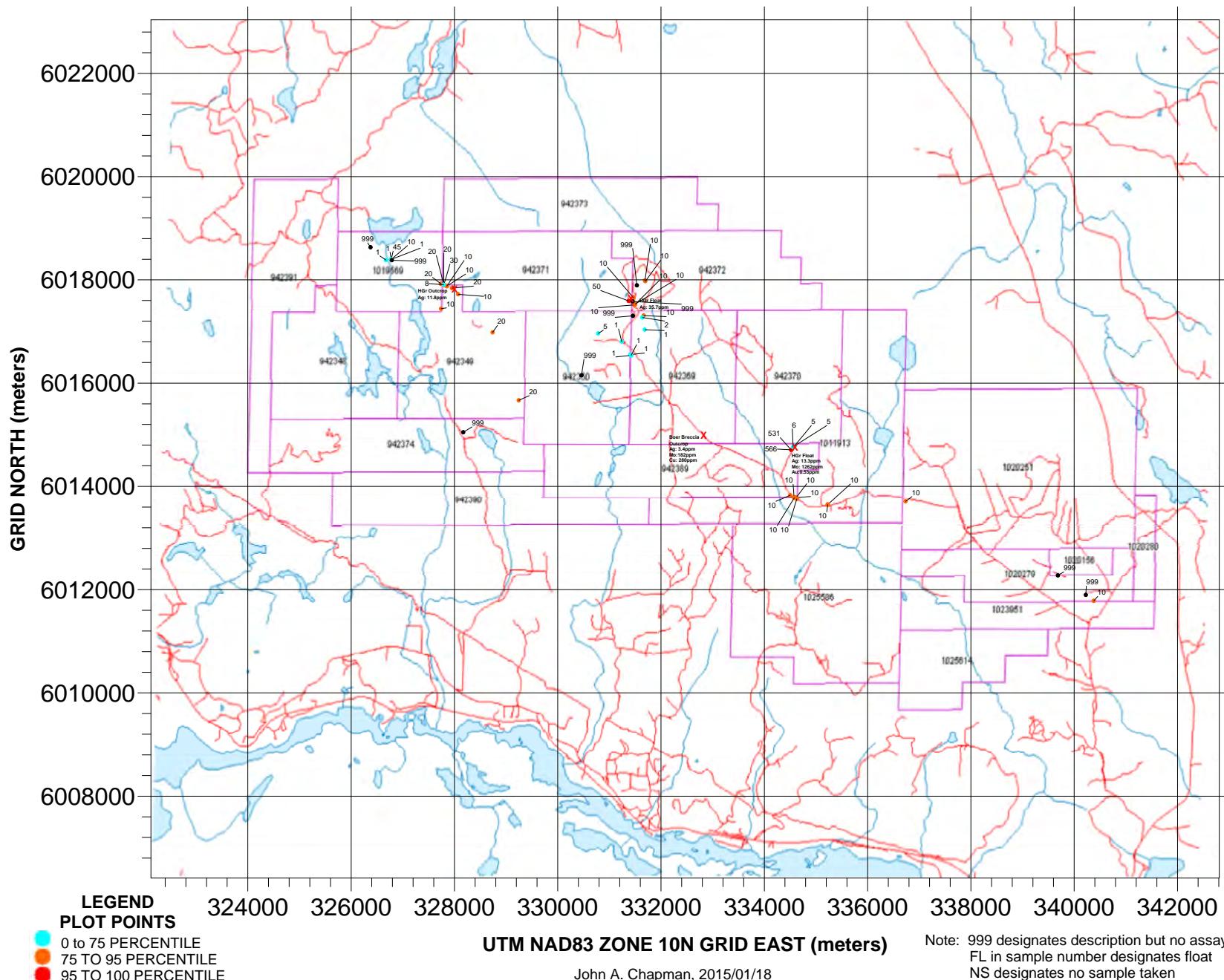
**BOER PROPERTY, BURNS LAKE, BC (2014)**  
**ROCK (FLOAT, OUTCROP & SUBCROP)**  
**LOCATIONS AND ASSAY VALUES**

SILVER (ppb)



**BOER PROPERTY, BURNS LAKE, BC (2014)**  
**ROCK (FLOAT, OUTCROP & SUBCROP)**  
**LOCATIONS AND ASSAY VALUES**

GOLD (ppb)



BOER ROCK SAMPLES 2014													
SAMPLE	UTM ZONE 10N, NAD83												
NUMBER	EAST (m)	NORTH (m)	TYPE										
				ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppb	ppb
				Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag
BJAC14-F1	336736	6013712	Float	19.30	290.7	111.5	385	14.57	3.2	0.44	2.56	5.30	1630
BJAC14-R1	334575	6013787	Subcrop	2.75	21.2	5.6	37	0.07	0.1	0.19	0.35	3.03	370
JR1	331501	6017528	Outcrop	2.50	2	8.1	14	0.04	0.4	0.06	0.41	0.89	80
JR2	331689	6017989	Float	2.32	9.7	2.7	43	0.02	1	0.09	0.80	5.93	28
JR3	331697	6017974	Outcrop	2.63	2.4	4	15	0.18	0.4	0.09	2.05	0.88	30
14B001	329247	6015667	Subcrop	5.24	6.1	13.1	32	0.03	48.3	0.58	0.06	0.91	960
LA8001	328739	6016983	Outcrop	0.93	102.5	11.0	16	0.08	3.8	0.22	0.15	0.65	4270
LA8002	328073	6017721	Outcrop	1.66	170.8	3.0	80	0.1	0.1	0.18	1.58	4.27	260
LA8003	327953	6017840	Subcrop	2.08	167.2	55.8	56	0.4	1.7	0.57	0.12	1.74	11760
LA8004	327854	6017878	Subcrop	2.18	35.1	20.4	102	0.55	0.4	1.03	0.10	0.84	1300
LA8005	327854	6017878	Subcrop	4.32	20.8	16.0	110	0.48	14.6	0.47	0.05	0.86	1540
LA8006	340380	6017184	Outcrop	1.94	2.3	2.1	68	0.07	0.1	0.07	1.08	4.45	70
LA8007	335228	6013649	Outcrop	3.63	5.8	3.1	3	0.03	0.1	0.25	0.03	0.32	530
LA8008	334616	6013649	Outcrop	0.80	82.9	2.0	51	0.05	0.1	0.18	1.88	5.00	90
LA8009	334616	6013781	Subcrop	66.53	44.2	3.3	8	0.25	0.1	0.72	0.11	0.52	500
LA8010	334616	6013781	Subcrop	17.19	137.0	4.1	44	0.28	2.1	0.55	0.39	3.05	740
LA8011	334629	6017359	Subcrop	3.46	78.9	4.1	79	0.33	0.6	0.38	0.32	4.23	110
LA8012	334501	6013827	Subcrop	1.16	7.9	4.3	97	0.36	0.1	0.14	3.93	4.36	120
LA8013	334581	6013779	Outcrop	1.43	33.8	5.9	38	0.2	0.1	0.16	0.55	3.27	440
LA8014	327796	6017904	Subcrop	22.41	47.8	15.4	50	0.08	87.8	1.02	0.15	4.2	1410
LA8015	327796	6017904	Subcrop	4.10	5.0	17.4	25	0.11	9.2	0.35	0.03	0.82	960
LA8016	327796	6017904	Subcrop	33.47	109.1	48.1	117	0.7	18.5	3.37	0.22	1.56	7870
LA8017	327737	6017924	Float	7.48	4.8	14.3	24	0.18	11	0.75	0.02	0.77	1330
LA8018	326776	6018397	Float	2.85	179.9	3.4	86	0.38	1.7	0.37	0.90	4.21	20
LA8019	331375	6017591	Float	19.62	20.2	26.9	12	0.06	0.6	0.23	0.10	1.58	35680
LA8020	327742	6017441	Float	5.15	17.33	9.2	77	0.3	4.5	0.42	0.30	2.05	700
LA8021	331665	6017309	Outcrop	2.23	11.19	1.7	72	0.02	1.1	0.16	1.57	5.36	70
LA8022	331490	6017515	Outcrop	1.20	5.29	2.5	65	0.04	1.3	0.09	2.03	5.07	30
LA8023	331499	6017531	Outcrop	2.25	2.58	7.7	22	0.02	0.5	0.05	0.10	1.09	30
LA8024	331466	6017656	Float	16.03	57.13	3.2	99	0.22	4.5	0.20	0.45	4.69	220
LA8025	334598	6014793	Float	12.86	29.1	224.4	551	25.85	2.1	0.50	0.95	1.64	650
LA8026	334566	6014764	Float	3.42	49.3	153	192	7.11	1.6	0.26	1.17	1.61	480
LA8027	334521	6014707	Float	1261.55	72.9	25	15	1.13	47.7	2.02	0.05	1.02	13250
LA8028	334520	6014709	Float	1157.94	192.5	22.1	16	1.09	50.5	1.83	0.04	1.17	10090
LA8029	334558	6014760	Float	9.38	30.6	189.2	548	21.15	1.8	0.27	0.25	1.91	700
LA8030	330784	6016963	Outcrop	1.05	63.5	1.2	37	0.13	1.3	0.11	3.81	3.26	110
BRIT1401	327794	6017905	Subcrop	19.80	52.3	9.8	58	0.10	63.7	1.30	0.22	4.03	1000
BRIT1402	326776	6018397	Float?	2.00	4.8	7.9	24	0.10	4.3	0.20	0.13	0.56	600
BRIT1402A	326776	6018397	Float?	0.40	71.7	5.5	63	0.10	1.6	0.40	2.59	5.14	200
BRIT1403	326776	6018397	Float?	1.50	70.5	3.0	77	0.10	1.7	0.10	1.12	3.31	100
BRIT1404	326677	6018382	Subcrop	0.10	741.4	1.3	68	0.10	0.9	0.10	3.14	2.94	1000
JR9	331404	6016551	Outcrop	0.30	67.9	0.6	48	0.10	1.1	0.10	3.46	3.83	100
JR10	331422	6016537	Outcrop	1.10	42.7	5.6	61	0.20	3.1	0.10	0.86	3.37	200
JR11	331422	6016537	Float	0.10	1.6	1.7	2	0.10	0.5	0.10	1.29	0.29	100
JR12	331241	6016803	Outcrop	8.10	26.2	2.9	53	0.10	1.2	0.20	0.85	4.75	100
JR13	331686	6017035	Outcrop	15.70	17.5	2.3	45	0.10	0.7	0.20	1.71	4.89	100
JR15	331640	6017271	Outcrop	0.40	6.4	2.8	41	0.10	1.0	0.10	1.19	4.47	100
				Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag
number of values				47	47	47	47	47	47	47	47	47	47
maximum				1261.55	741.40	224.40	551.00	25.85	87.80	3.37	3.93	5.93	35680.00
minimum				0.10	1.60	0.60	2.00	0.02	0.10	0.05	0.02	0.29	20.00
mean				58.61	68.56	23.15	81.40	1.66	8.57	0.45	0.96	2.77	2170.81
median				2.75	33.80	5.60	51.00	0.10	1.30	0.22	0.45	3.03	440.00
standard deviation				243.18	116.68	47.59	115.25	5.17	18.66	0.60	1.07	1.73	5771.28
skewness				4.68	4.38	3.15	3.30	3.79	2.87	3.14	1.36	0.10	4.61
kurtosis				20.91	23.46	9.52	10.91	13.99	7.89	11.62	1.08	-1.52	24.38
geometric mean				3.92	26.98	7.45	45.96	0.19	1.53	0.26	0.42	2.09	389.27
25 percentile				1.47	7.15	2.95	24.50	0.08	0.50	0.11	0.13	0.97	100.00
50 percentile				8.74	12.15	21.20	10.00	0.40	0.50	0.31	1.17	12.97	30.00
75 percentile				11.12	72.30	15.70	78.00	0.35	4.05	0.49	1.43	4.32	1000.00
90 percentile				20.84	168.64	51.18	112.80	1.11	30.18	1.02	2.57	5.03	5710.00
95 percentile				56.61	188.72	140.55	327.10	12.33	49.84	1.67	3.36	5.25	11259.00
98 percentile				1166.23	326.76	192.02	548.24	21.53	65.63	2.13	3.82	5.41	15044.40
100 percentile				1261.55	741.40	224.40	551.00	25.85	87.80	3.37	3.93	5.93	35680.00
BOER ROCK SAMPLES 2014, CORRELATION MATRIX													
Mo	1												
Cu	0.110820292	1											
Pb	0.00821374	0.029751645	1										
Zn	-0.115746445	0.095833869	0.903813041	1									
Cd	-0.016439168	0.051006159	0.940483749	0.964431	1								
As	0.467251142	-0.000413812	-0.029321079	-0.11196	-0.08008	1							
Sb	0.535301963	0.087164542	0.117924697	0.012066	0.005913	0.569318	1						
Ca	-0.193480973	0.308935553	-0.074492112	0.083594	0.024637	-0.31705	-0.35135	1					
Fe	-0.209748614	0.118583017	-0.172128234	0.078984	-0.05718	-0.08378	-0.25574	0.505226	1				
Ag	0.357806945	0.053151402	0.071982049	-0.11344	-0.04881	-0.152275	0.313896	-0.2617	-0.25454	1			
Au	0.992492777	0.10474573	0.001926047	0.13697	-0.03453	0.471459	0.525757	-0.22003	-0.2365	0.39837929	1		

**APPENDIX B**

**BIOGEOCHEMICAL 2014 SURVEY**

**MAPS**

**&**

**REFERENCE SPREAD SHEET PLOT**

**FILES**

## BOER PROPERTY SHOWING CONTOURS, ROADS, POWERLINE AND NATURAL GAS LINE

## BC Administrative Area Layers

- City
  - Town
  - Village
  - Resort Municipality
  - ◆ Settlement
  - ◆ Community
  - ▲ District Municipality

## Mineral Inventory Layers

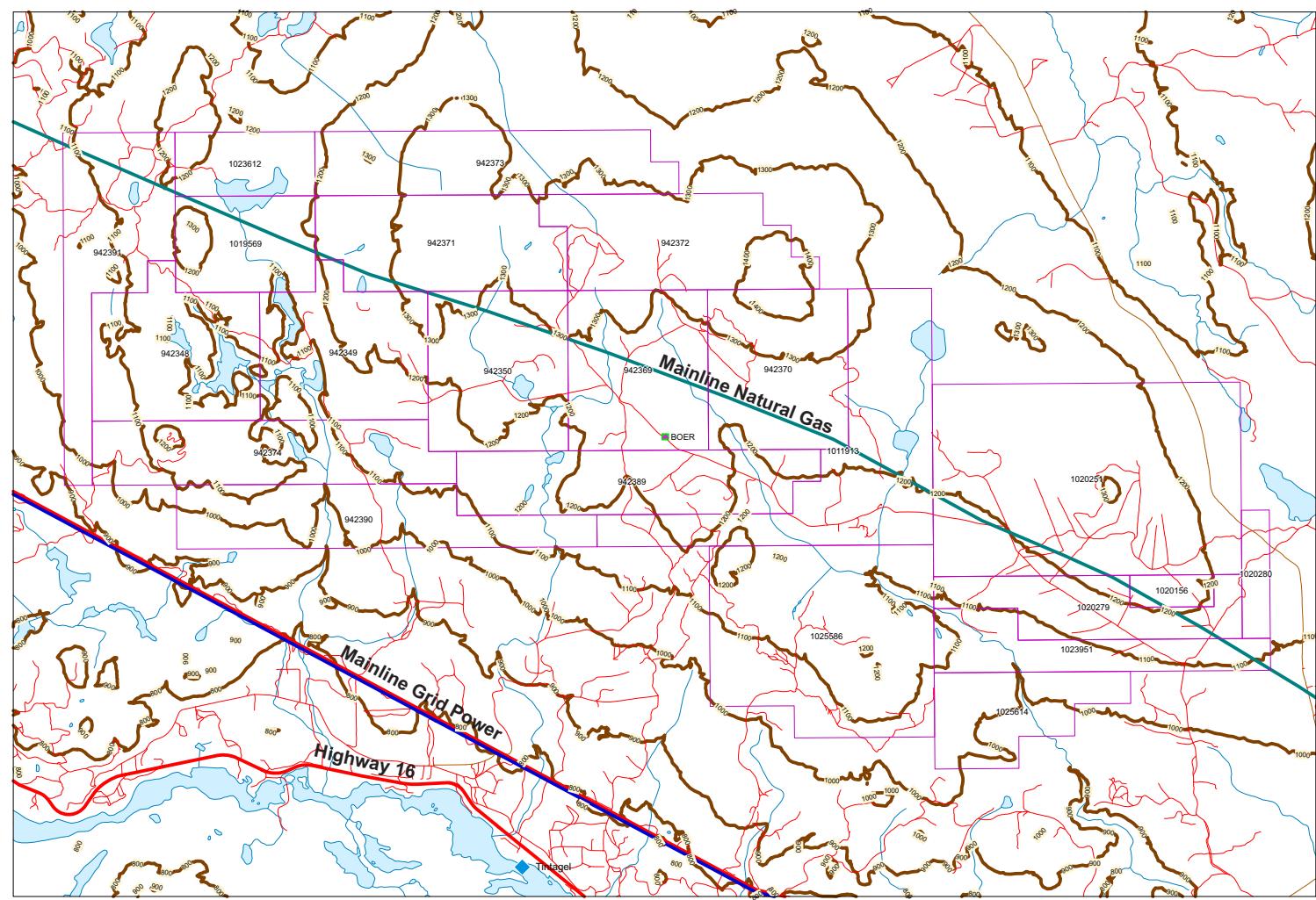
- ☒ ... ▲ MINFILE status
  - ☒ Producer
  - ☒ Past Producer
  - ☒ Developed Prospect
  - △ Prospect
  - ▲ Showing
  - All Others

- ✖ ... ■ MINFILE name label
- ✖ Developed Prospect
- ✖ Past Producer
- ✖ Producer
- Prospect
- Showing
- All Others

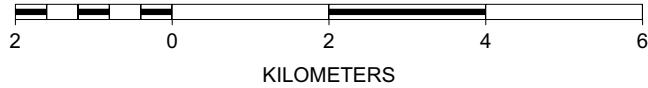
## MTO Mineral Titles Layers

- ...  MTO Mineral Claim Outlines  
 Mineral

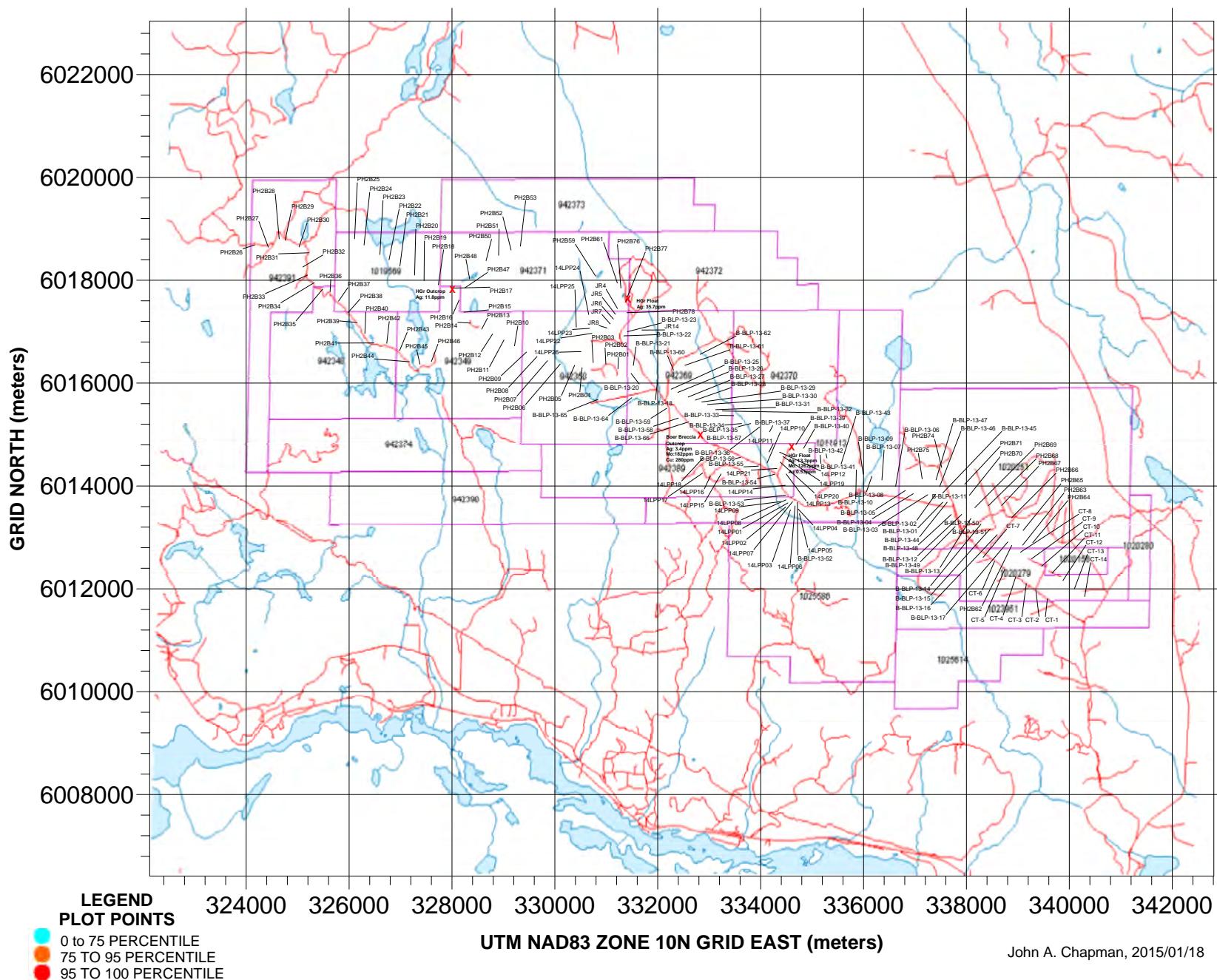
## Topographic Layers



SCALE 1 : 96,310

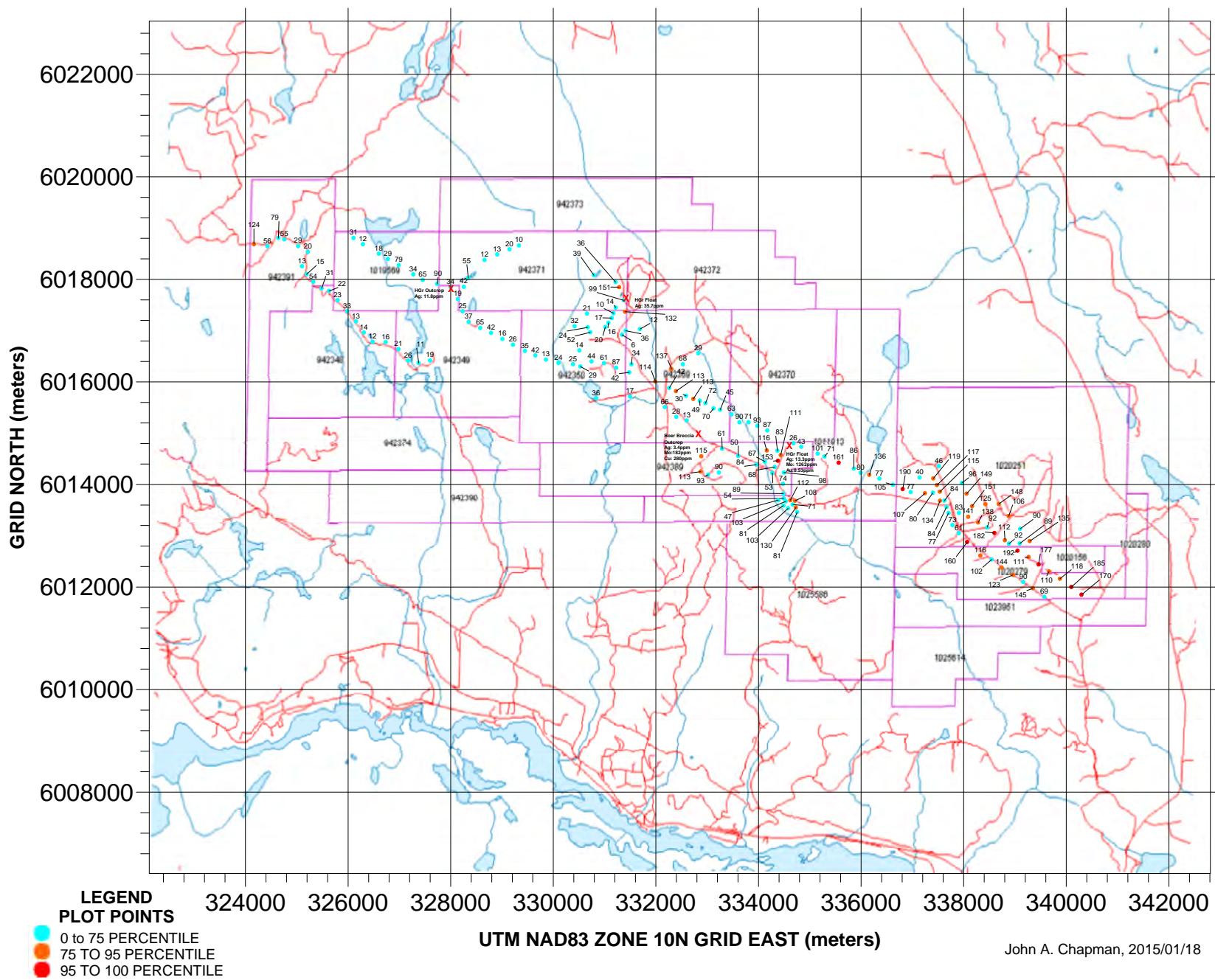


**BOER PROPERTY, BURNS LAKE, BC  
LOGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)  
BARK ASH ANALYSIS  
SAMPLE NUMBERS**



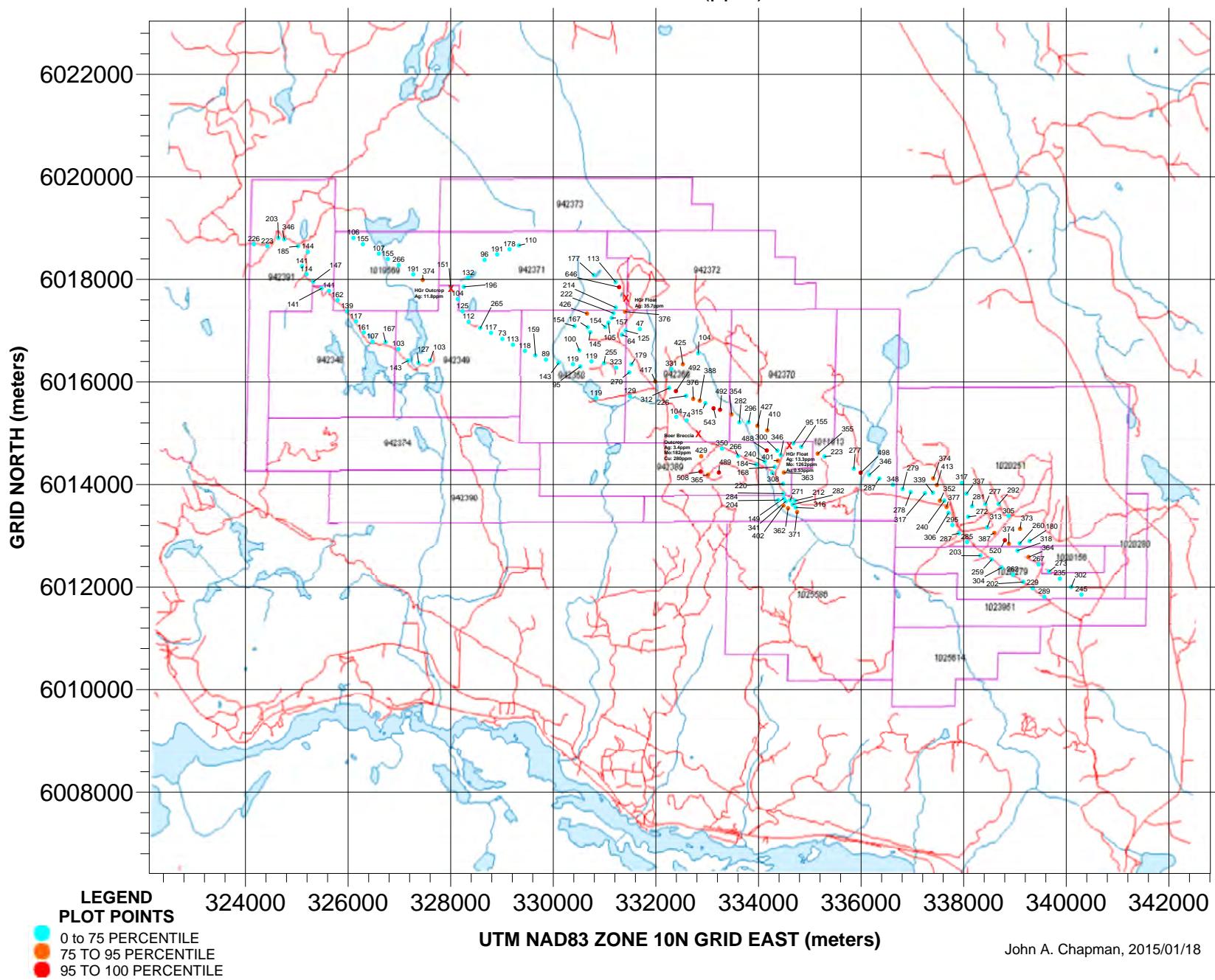
John A. Chapman, 2015/01/18

**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERRBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**  
**MOLYBDENUM (ppm)**



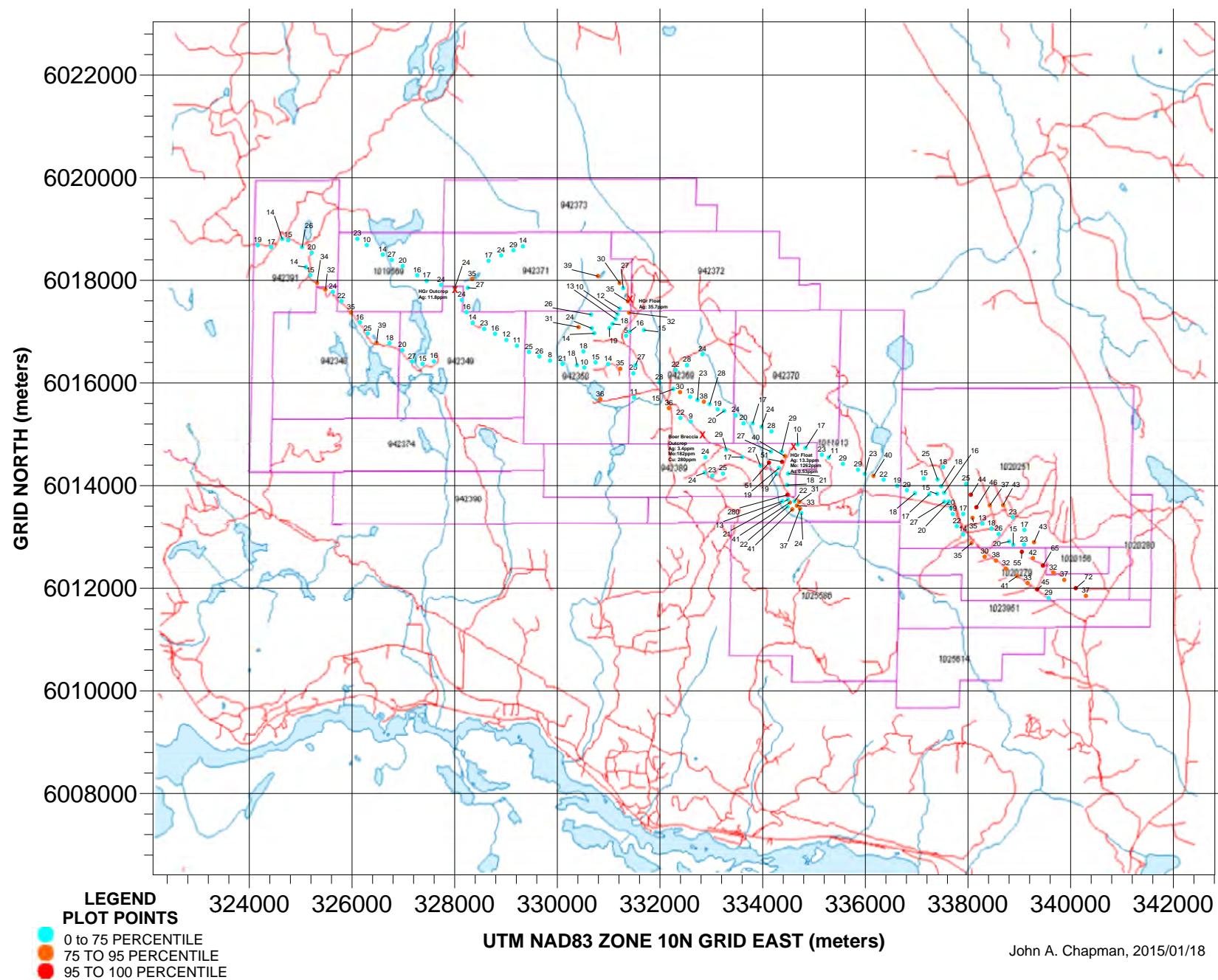
**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**

COPPER (ppm)



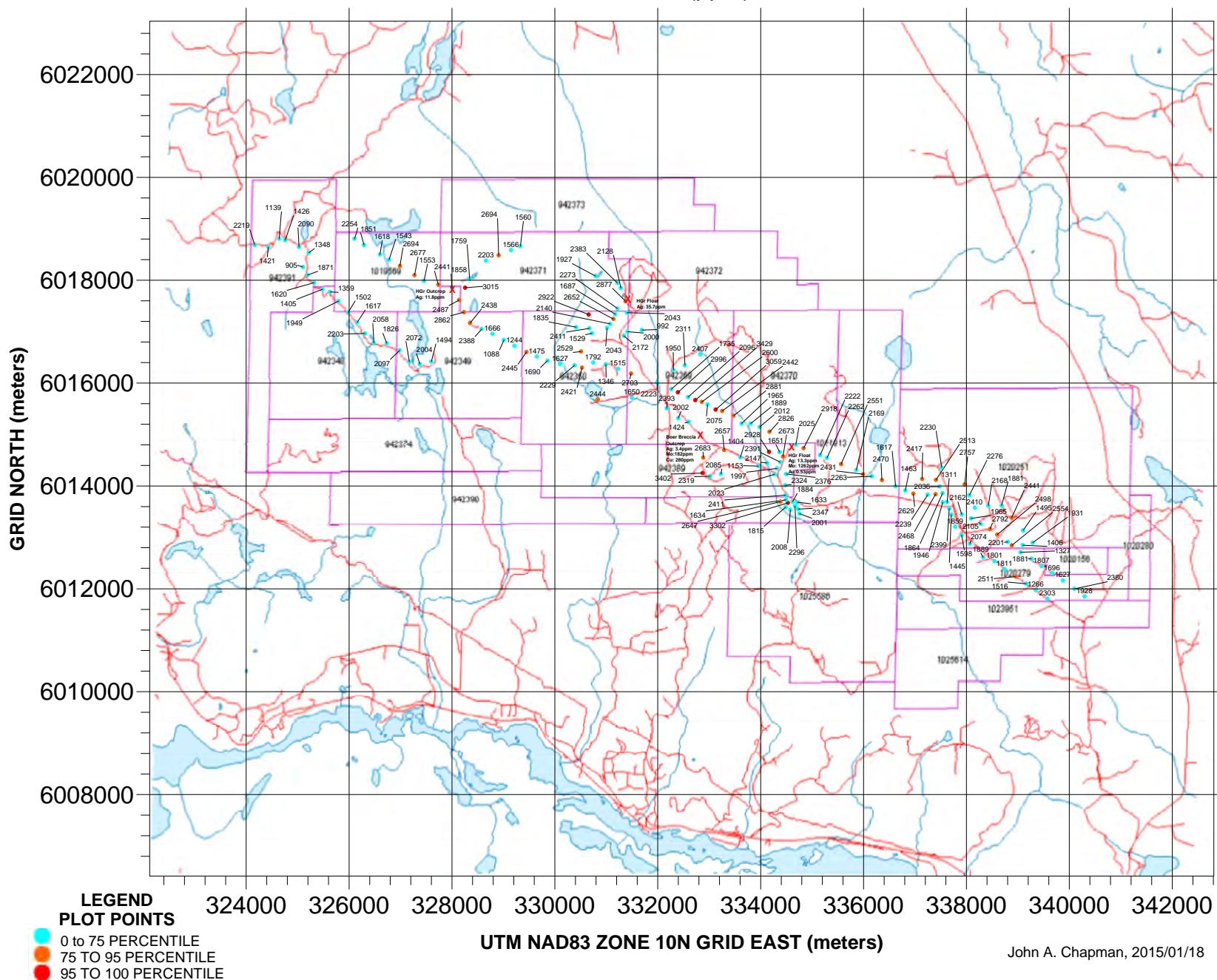
**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**

LEAD (ppm)

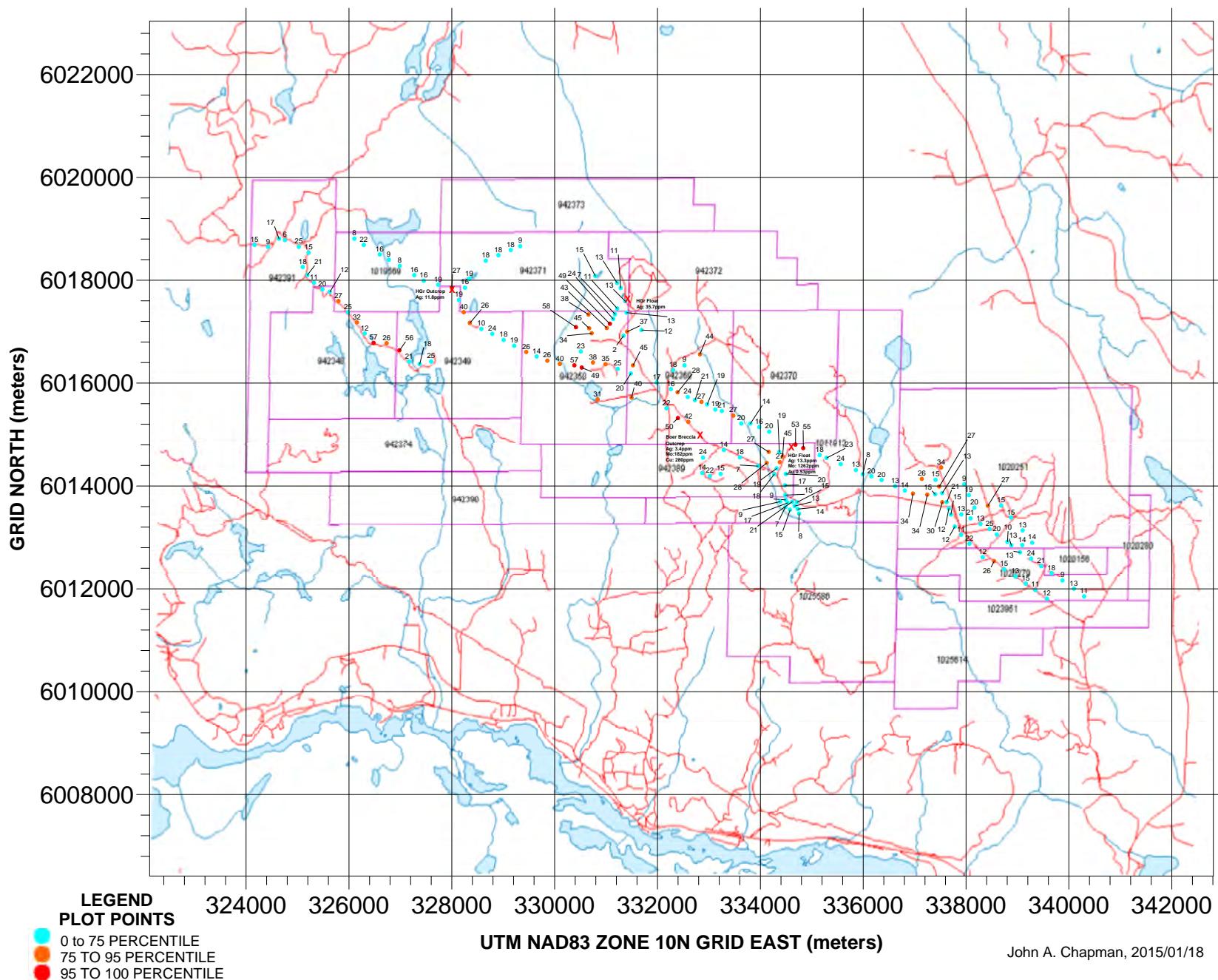


**BOER PROPERTY, BURNS LAKE, BC  
LOGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)  
BARK ASH ANALYSIS**

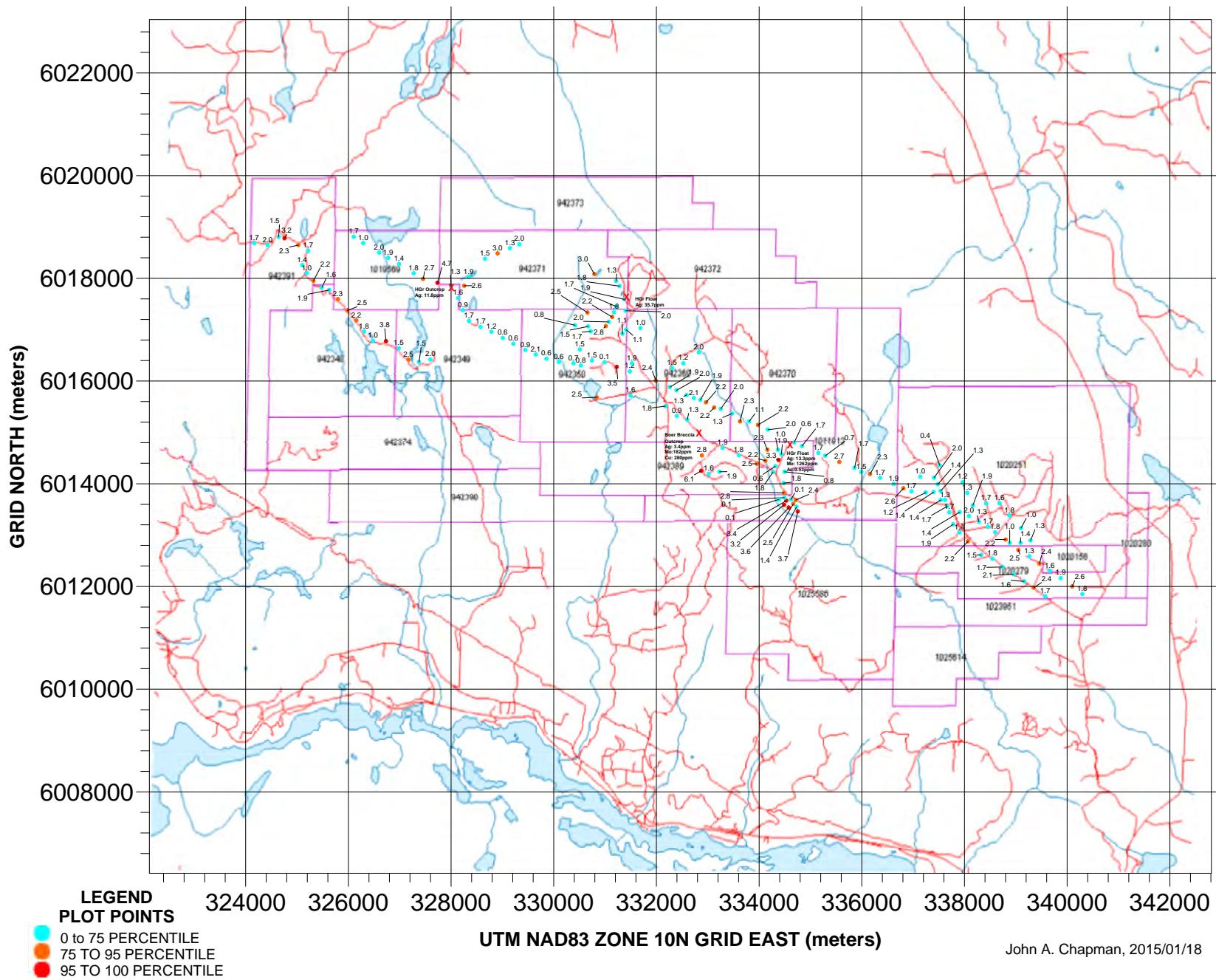
### ZINC (ppm)



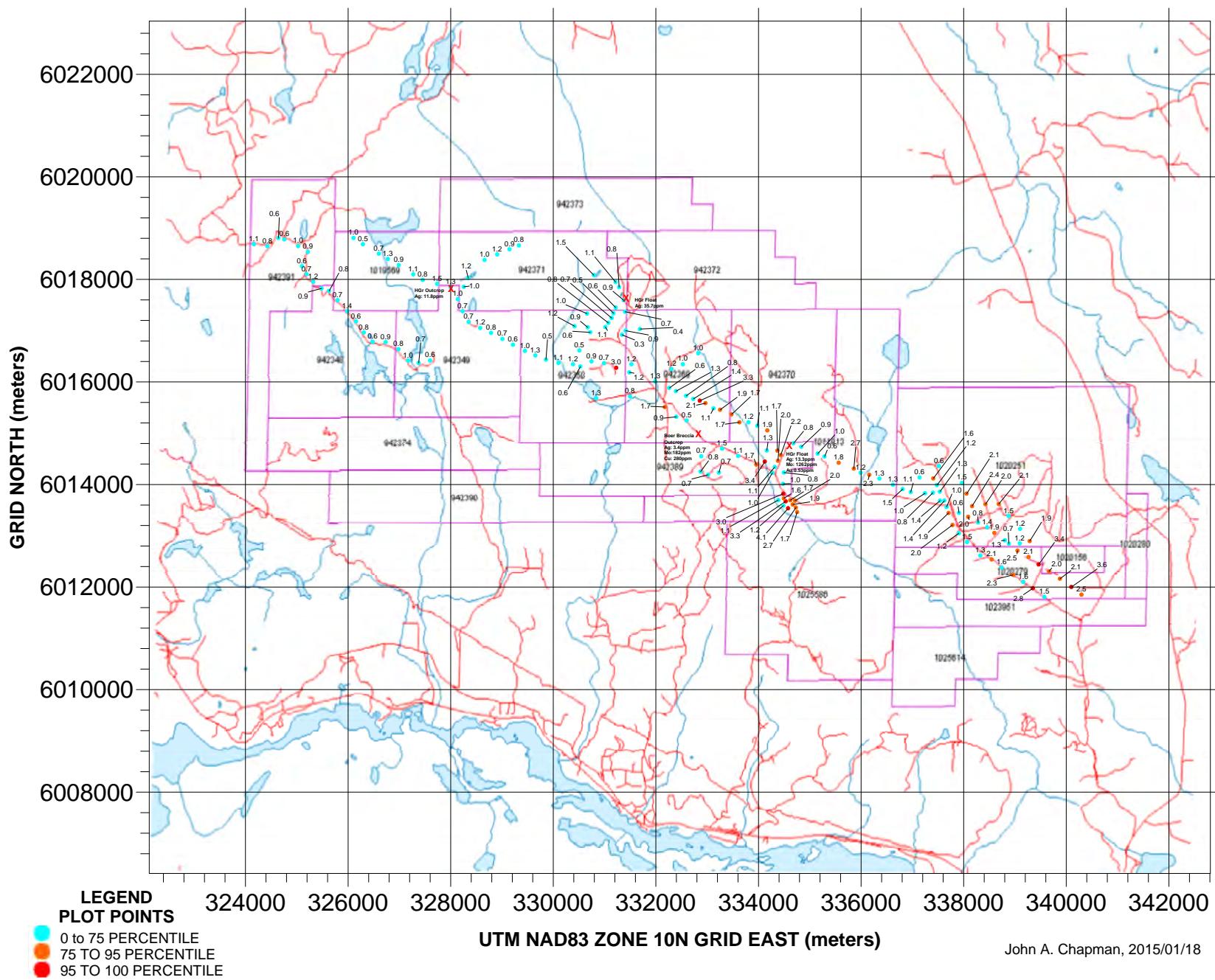
**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**  
**CADMIUM (ppm)**



**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**  
 ARSENIC (ppm)

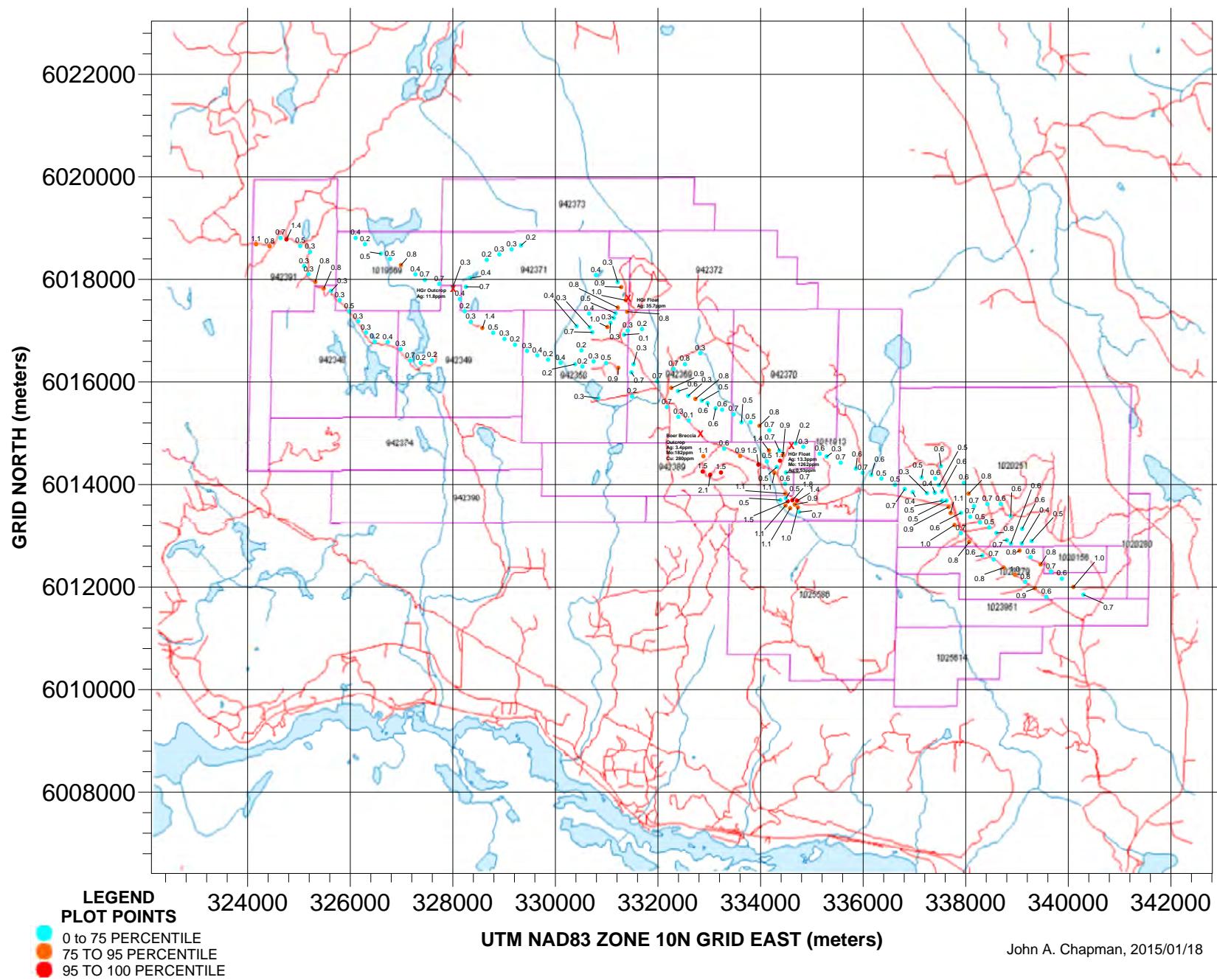


**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**  
**ANTIMONY (ppm)**



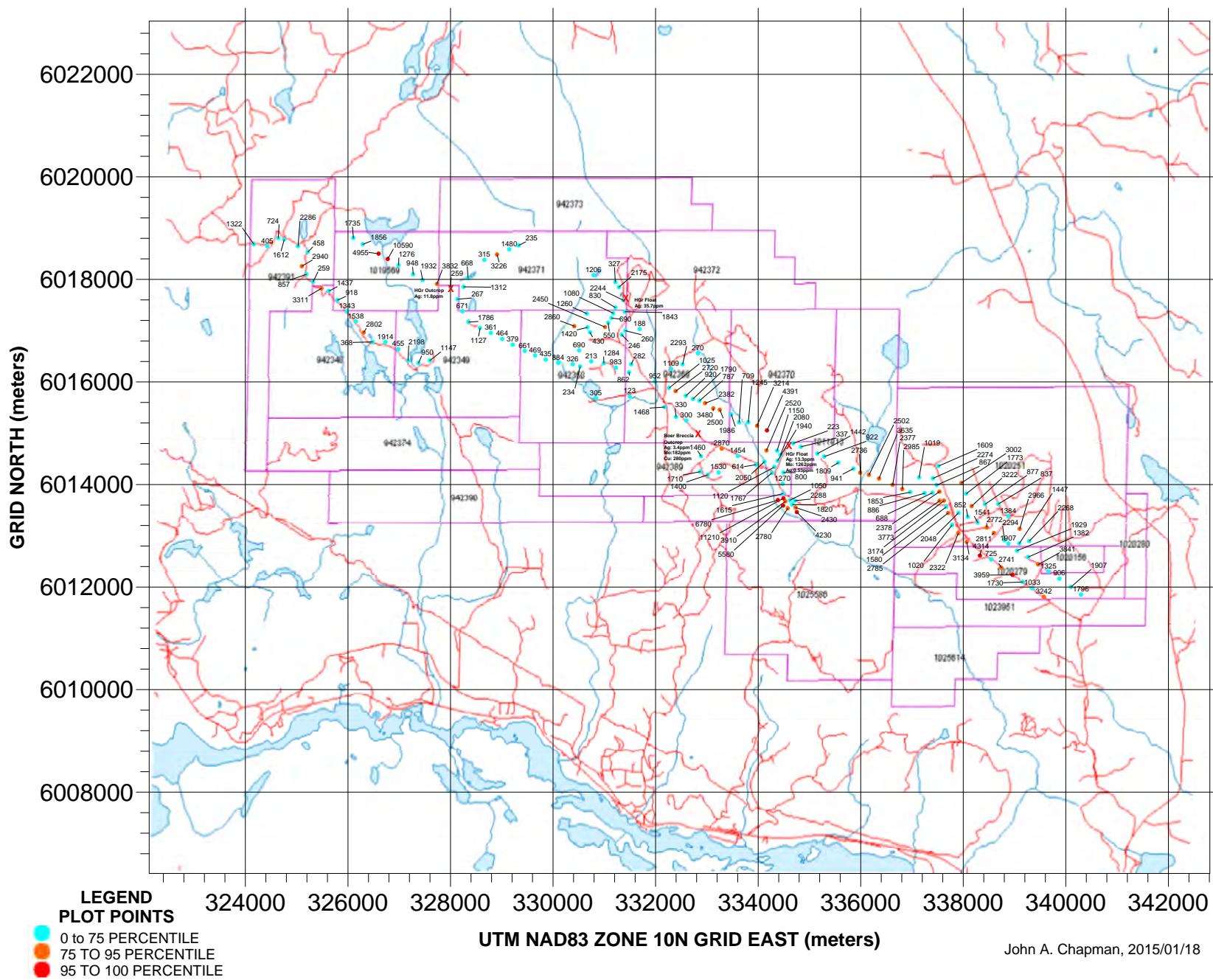
**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERRBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**

IRON (%)



John A. Chapman, 2015/01/18

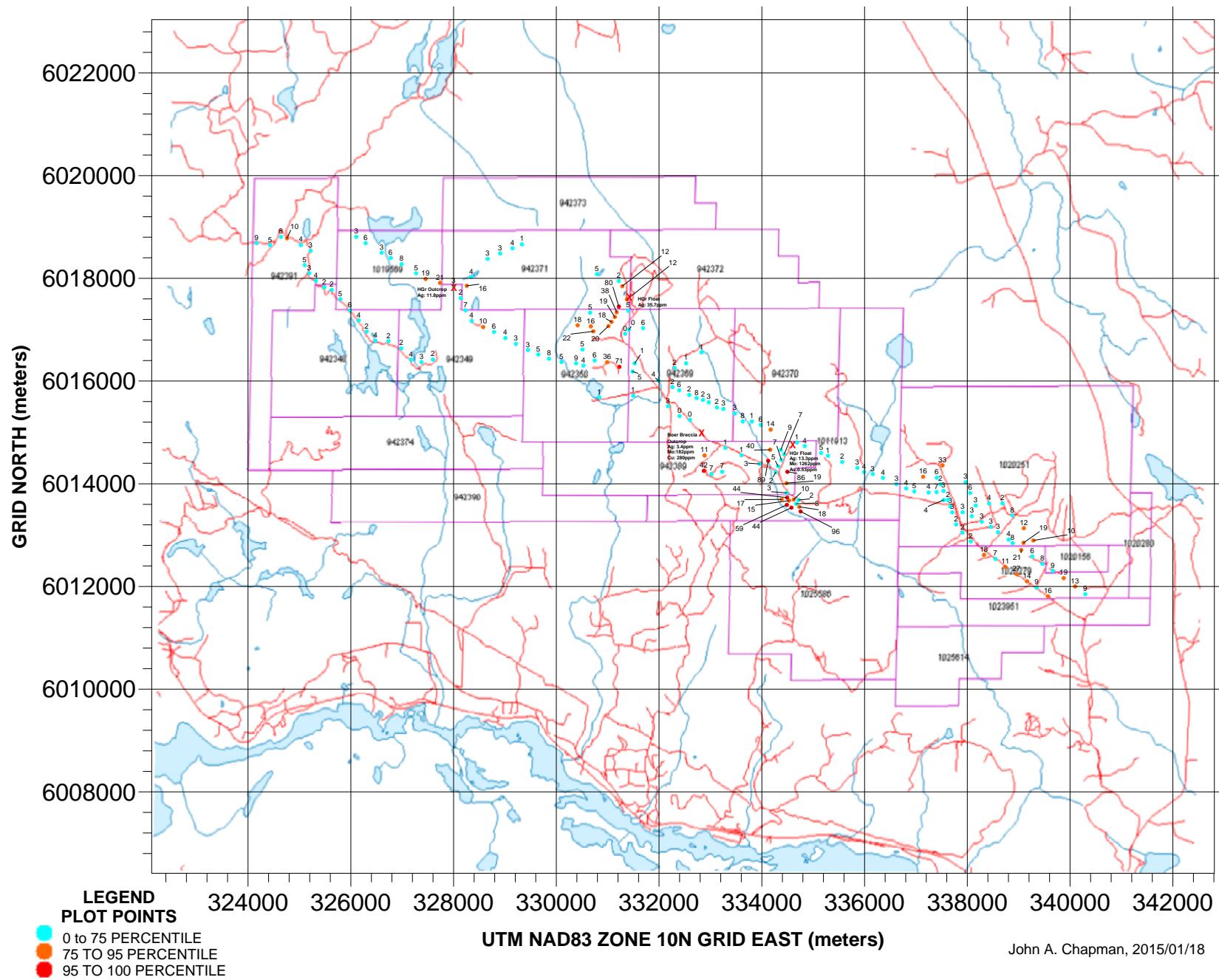
**BOER PROPERTY, BURNS LAKE, BC  
LOGGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)  
BARK ASH ANALYSIS  
SILVER (ppb)**



John A. Chapman, 2015/01/18

**BOER PROPERTY, BURNS LAKE, BC**  
**LODGEPOLE PINE OUTERBARK SURVEYS (2013 & 2014)**  
**BARK ASH ANALYSIS**

GOLD (ppb)



## ERRATA

### BOER PROPERTY ASSESSMENT REPORT NUMBER: 35218, FEBRUARY 6, 2015

- (1) The Lodgepole Pine Outer Bark sample surveys in 2013 and 2014 have been combined for this report as they cover the same area (overlapping and infill) – so one map best shows results.
- (2) The related 2013 Assessment reports that should be referenced are: No. 34638 and No. 34639.
- (3) Bark sample numbers for 2013 are: B-BLP-13-01 to B-BLP-13-66, PH2B01 to PH2B78 and CT-1 to CT-14.
- (4) Bark sample numbers for 2014 are: 14LPP01 to 14KPP26 and JR4 to JR14.
- (5) Bark ashing was on ~60 grams of dry bark at 475 degrees C for up to 48 hours in a pottery kiln, and then 0.5 grams of ash was analyzed by digestion in Aqua Regia followed by mass spectrometer analyses (ICP-MS) for 51 elements at Ultra Trace Level.
- (6) Bark sampling and analyses followed procedures established by Colin Dunn, PhD, biogeochemical expert on other Lodgepole Pine Outer Bark surveys in British Columbia. See Dunn's 2007 book, "Biogeochemistry in Mineral Exploration".
- (7) See Appendix D for assay certificates.



September 7, 2015

LOGEPOLE PINE OUTER BARK SAMPLING AT THE BOER PROPERTY, BURNS LAKE, BC, 2013 and 2014 SURVEYS COMBINED												by: John A Chapman		
ANALYSIS by ACME Labs and Met-Solve Labs: Ashing bark at 475 degrees C, Aqua Regia digestion, Ultratrace ICP-MS analysis on 0.50 grams												January 18, 2015		
Sample Number	UTM NAD83 Zone 10N		parts per million (ppm)						%		(ppb)		Count	
	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au	
B-BLP-13-01	337539	6013684	134	352	27	1946	30	1.4	1.44	24	0.54	3773	4.2	1
B-BLP-13-02	337400	6013839	80	339	15	2468	15	1.4	0.78	28	0.44	688	6.5	2
B-BLP-13-03	337246	6013830	107	317	17	2239	34	1.2	0.99	30	0.33	886	4.4	3
B-BLP-13-04	336967	6013850	77	278	18	2629	34	1.7	1.14	31	0.44	1853	4.6	4
B-BLP-13-05	336812	6013911	190	279	29	1463	14	2.6	1.52	30	0.68	2985	4.0	5
B-BLP-13-06	336623	6013994	105	348	19	1617	13	1.9	1.30	30	0.53	2377	2.9	6
B-BLP-13-07	336357	6014116	77	287	22	2470	20	1.7	1.33	31	0.45	3635	3.6	7
B-BLP-13-08	336161	6014189	136	346	40	2263	20	2.3	2.33	30	0.56	2502	2.7	8
B-BLP-13-09	335993	6014229	80	498	23	2431	8	1.5	1.17	25	0.65	2736	4.3	9
B-BLP-13-10	335859	6014309	86	277	29	2169	13	1.7	2.68	27	0.61	941	3.1	10
B-BLP-13-11	337667	6013561	84	377	20	2399	12	1.7	0.96	24	0.87	1580	3.1	11
B-BLP-13-12	337908	6013446	83	469	17	2162	13	1.4	0.55	26	0.64	2048	3.4	12
B-BLP-13-13	338087	6013370	141	272	35	1965	21	2.0	2.05	29	0.72	852	2.9	13
B-BLP-13-14	338282	6013259	138	485	13	2105	13	1.3	0.84	29	0.49	1541	3.2	14
B-BLP-13-15	338459	6013163	92	313	18	2792	25	1.7	1.42	29	0.53	2772	3.0	15
B-BLP-13-16	338598	6013054	182	387	26	2498	20	1.8	1.90	28	0.75	2811	2.9	16
B-BLP-13-17	338804	6012913	112	520	20	2201	10	2.2	1.25	26	0.72	2294	3.9	17
B-BLP-13-18	331989	6016008	114	417	28	2223	17	2.4	1.26	26	0.73	952	3.9	18
B-BLP-13-20	331482	6016187	42	270	25	2703	20	1.2	1.17	29	0.69	862	5.1	19
B-BLP-13-21	331524	6016344	34	179	27	3471	45	1.9	1.20	33	0.35	282	1.2	20
B-BLP-13-22	331339	6016920	6	64	5	2172	2	1.1	0.28	34	0.08	246	0.2	21
B-BLP-13-23	331410	6017000	36	125	16	2000	37	1.1	0.87	27	0.31	260	0.2	22
B-BLP-13-25	332261	6015882	42	312	15	1735	16	1.9	0.59	26	0.86	1025	2.3	23
B-BLP-13-26	332390	6015820	113	492	30	2996	28	2.0	1.32	29	0.57	2720	5.6	24
B-BLP-13-27	332590	6015729	30	226	13	2096	24	1.3	0.84	28	0.34	920	1.5	25
B-BLP-13-28	332730	6015669	113	376	23	3429	21	2.1	1.39	26	0.81	1790	8.2	26
B-BLP-13-29	332855	6015634	49	388	38	2600	27	1.9	3.25	25	0.48	787	2.3	27
B-BLP-13-30	332967	6015585	72	315	28	2075	19	2.2	2.15	29	0.62	2382	3.0	28
B-BLP-13-31	333124	6015484	70	543	19	3059	19	2.2	1.13	25	0.64	3480	2.0	29
B-BLP-13-32	333252	6015457	45	492	20	2442	21	2.0	1.86	28	0.55	2500	3.1	30
B-BLP-13-33	333475	6015368	63	354	24	2881	27	1.3	1.74	28	0.67	1986	3.1	31
B-BLP-13-34	333629	6015214	90	282	20	1965	20	2.3	1.66	26	0.47	709	7.8	32
B-BLP-13-35	333807	6015214	71	296	17	1889	14	1.1	1.24	30	0.45	1245	1.3	33
B-BLP-13-36	333978	6015145	93	427	24	2012	16	2.2	1.12	26	0.76	3214	6.2	34
B-BLP-13-37	334173	6015054	87	410	28	2826	20	2.0	1.92	24	0.69	4391	13.7	35
B-BLP-13-39	334683	6014804	26	95	10	2025	53	0.6	0.80	27	0.18	223	1.2	36
B-BLP-13-40	334835	6014735	43	155	17	2918	55	1.7	0.92	32	0.28	337	3.5	37
B-BLP-13-41	335155	6014602	101	355	23	2222	18	1.7	0.98	27	0.57	1442	5.3	38
B-BLP-13-42	335289	6014545	71	223	11	2262	23	0.7	0.60	31	0.32	922	1.4	39
B-BLP-13-43	335564	6014425	161	454	29	2551	24	2.7	1.78	26	0.71	1809	2.1	40
B-BLP-13-44	337624	6013685	84	240	20	1311	21	1.3	1.39	25	0.50	3174	1.9	41
B-BLP-13-45	337536	6013861	115	435	16	1864	13	1.3	1.26	25	0.57	2378	3.2	42
B-BLP-13-46	337479	6013988	117	413	18	2036	27	1.4	1.23	24	0.53	867	1.9	43
B-BLP-13-47	337408	6014119	119	374	25	2513	15	2.0	1.65	25	0.64	2274	5.5	44
B-BLP-13-48	337706	6013444	77	306	19	1445	15	1.7	1.87	22	1.10	2785	3.1	45
B-BLP-13-49	337782	6013209	73	295	22	1859	12	1.9	1.97	18	0.96	1020	1.7	46
B-BLP-13-50	337906	6013050	61	287	14	1598	11	1.4	1.20	21	0.72	2322	1.8	47
B-BLP-13-51	338068	6012877	160	285	35	2074	22	2.2	1.51	20	0.85	3134	2.1	48
B-BLP-13-52	334713	6013683	108	212	31	1633	15	2.4	1.98	18	1.39	2288	2.0	49
B-BLP-13-53	334485	6013822	89	284	280	2411	15	2.8	2.97	23	1.15	1615	2.6	50
B-BLP-13-54	334270	6014227	53	308	19	2023	18	1.8	0.96	19	1.12	1767	2.1	51
B-BLP-13-55	333958	6014386	84	184	27	1153	7	2.5	1.71	18	1.52	614	2.5	52
B-BLP-13-56	333604	6014555	50	266	17	1404	18	1.8	1.05	22	0.94	1454	1.1	53
B-BLP-13-57	333291	6014697	61	350	29	2657	14	1.9	1.47	22	0.61	2870	0.9	54
B-BLP-13-58	332399	6015320	28	104	22	2002	50	0.9	0.94	35	0.27	330	0.3	55
B-BLP-13-59	332175	6015510	66	461	36	2393	22	1.8	1.72	27	0.72	1468	3.3	56
B-BLP-13-60	332305	6016254	137	331	22	1950	18	1.5	1.24	26	0.68	1109	1.6	57
B-BLP-13-61	332527	6016346	68	425	28	2311	9	1.2	1.00	26	0.75	2293	1.4	58
B-BLP-13-62	332826	6016560	29	104	24	2407	44	2.0	0.98	32	0.27	270	0.8	59
B-BLP-13-64	331496	6015716	17	129	11	1650	40	1.6	0.78	35	0.17	123	0.7	60
B-BLP-13-65	330837	6015683	36	119	36	2444	31	2.5	1.29	33	0.33	305	0.8	61
B-BLP-13-66	332600	6015246	13	74	9	1424	42	1.3	0.50	30	0.14	300	0.2	62
PH2B01	331226	6016276	87	323	35	1515	25	3.5	2.99	25	0.93	983	71.1	63
PH2B02	330990	6016366	61	255	14	1346	35	0.1	0.65	28	0.52	1284	35.8	64
PH2B03	330746	6016400	44	119	15	1792	38	1.5	0.91	32	0.27	213	6.1	65
PH2B04	330528	6016301	29	95	10	2421	49	0.8	0.55	33	0.16	234	4.1	66
PH2B05	330384	6016345	25	119	18	2229	57	0.7	1.16	32	0.24	326	8.9	67
PH2B06	330102	6016370	24	143	21	1627	40	0.6	1.15	30	0.36	884	5.1	68
PH2B07	329857	6016435	13	89	8	1690	26	0.6	0.49	31	0.19	435	7.6	69
PH2B08	329651	6016517	42	159	26	1475	14	2.1	1.28	29	0.38	469	5.1	70
PH2B09	329448	6016604	35	118	25	2445	26	0.9	1.03	28	0.31	661	2.6	71
PH2B10	329214	6016724	26	113	11	1244	19	0.6	0.64	32	0.22	379	2.8	72

Sample Number	UTM NAD83 Zone 10N		parts per million (ppm)						%		(ppb)		Count	
	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au	
PH2B11	329009	6016838	16	73	12	1088	18	0.6	0.65	32	0.29	464	3.7	73
PH2B12	328789	6016956	42	117	16	1666	24	1.2	0.77	30	0.48	361	6.3	74
PH2B13	328577	6017051	65	265	23	2388	10	1.7	1.24	23	1.35	1127	9.5	75
PH2B14	328351	6017168	37	112	14	2438	26	1.7	0.69	29	0.29	1786	3.6	76
PH2B15	328233	6017379	25	125	16	2862	40	0.9	0.69	31	0.22	671	6.5	77
PH2B16	328139	6017614	19	104	24	2487	19	1.6	0.99	32	0.41	267	2.3	78
PH2B17	328001	6017846	34	151	24	1858	27	1.3	1.25	33	0.34	259	2.7	79
PH2B18	327736	6017911	90	462	24	2441	19	4.7	1.49	21	0.74	3832	20.7	80
PH2B19	327456	6017989	65	374	17	1553	16	2.7	0.85	25	0.70	1932	19.4	81
PH2B20	327272	6018099	34	191	16	2677	16	1.8	1.07	25	0.41	948	4.6	82
PH2B21	326988	6018277	79	266	20	2694	8	1.4	0.92	21	0.83	1276	8.4	83
PH2B22	326776	6018397	29	155	27	1543	9	1.9	1.30	26	0.54	10590	6.1	84
PH2B23	326599	6018500	18	107	14	1618	16	2.0	0.74	25	0.51	4955	2.7	85
PH2B24	326290	6018684	12	155	10	1851	22	1.0	0.54	31	0.24	1856	5.8	86
PH2B25	326106	6018806	31	106	23	2254	8	1.7	0.98	29	0.43	1735	3.4	87
PH2B26	324165	6018685	124	226	19	2219	15	1.7	1.09	20	1.10	1322	9.0	88
PH2B27	324429	6018645	56	223	17	1421	9	2.0	0.85	26	0.82	405	5.3	89
PH2B28	324642	6018806	79	203	14	1139	17	1.5	0.55	27	0.72	724	7.5	90
PH2B29	324758	6018779	55	346	15	1426	6	3.2	0.64	17	1.38	1612	10.1	91
PH2B30	325027	6018648	29	185	26	2090	25	2.3	1.04	26	0.48	2286	3.7	92
PH2B31	325218	6018535	20	144	20	1348	15	1.7	0.94	31	0.32	458	2.5	93
PH2B32	325102	6018257	13	141	14	905	18	1.4	0.55	32	0.30	2940	4.5	94
PH2B33	325191	6018100	15	114	15	1871	21	1.0	0.73	29	0.29	857	3.3	95
PH2B34	325320	6017951	54	147	34	1620	11	2.2	1.17	27	0.76	259	4.2	96
PH2B35	325485	6017825	31	141	32	1405	20	1.6	0.93	26	0.84	3311	2.2	97
PH2B36	325630	6017773	22	141	24	1359	12	1.9	0.83	31	0.31	1437	2.4	98
PH2B37	325796	6017595	23	162	22	1949	27	2.3	0.71	30	0.31	918	4.5	99
PH2B38	325983	6017375	33	139	35	1502	25	2.5	1.43	28	0.49	1343	6.0	100
PH2B39	326156	6017180	13	117	16	1617	32	2.2	0.55	31	0.30	1538	3.8	101
PH2B40	326307	6016964	14	161	25	2203	12	1.8	0.83	29	0.33	2802	2.1	102
PH2B41	326481	6016780	12	107	39	2058	57	1.0	0.55	30	0.23	368	3.7	103
PH2B42	326733	6016775	16	167	18	1826	26	3.8	0.89	28	0.41	1914	1.9	104
PH2B43	326982	6016637	21	103	20	2097	56	1.5	0.77	31	0.32	455	2.4	105
PH2B44	327171	6016416	26	143	27	2072	21	2.5	0.97	26	0.65	2198	4.3	106
PH2B45	327376	6016370	11	127	15	2004	18	1.5	0.65	29	0.23	950	3.1	107
PH2B46	327599	6016419	19	103	16	1494	25	2.0	0.58	33	0.23	1147	1.7	108
PH2B47	328256	6017855	42	196	27	3015	16	2.6	1.00	27	0.71	1312	16.2	109
PH2B48	328343	6018026	55	132	35	1759	19	1.9	1.22	31	0.43	668	4.2	110
PH2B50	328662	6018380	12	96	17	2203	18	1.5	0.98	30	0.22	315	3.4	111
PH2B51	328907	6018484	13	191	24	2694	18	3.0	1.19	27	0.30	3226	2.8	112
PH2B52	329148	6018587	20	178	29	1566	18	1.3	0.95	30	0.29	1480	3.8	113
PH2B53	329331	6018663	10	110	14	1560	9	2.0	0.80	30	0.20	235	0.9	114
PH2B59	330791	6018082	39	177	39	1927	15	3.0	1.52	29	0.43	1206	4.6	115
PH2B61	331215	6017947	36	113	30	2383	13	1.3	1.05	31	0.34	327	1.8	116
PH2B62	338881	6012845	92	374	15	2554	13	1.0	0.65	26	0.56	1907	7.7	117
PH2B63	339093	6012850	89	260	23	1406	14	1.4	1.17	32	0.39	1447	18.6	118
PH2B64	339287	6012897	135	180	43	1931	14	1.3	1.92	29	0.53	2268	10.4	119
PH2B65	339101	6013196	90	373	17	1495	13	1.0	1.17	26	0.55	2966	12.1	120
PH2B66	338878	6013383	106	305	23	2441	15	1.8	1.48	23	0.64	1384	7.7	121
PH2B67	338683	6013619	148	292	43	1881	15	1.6	2.07	27	0.58	837	2.4	122
PH2B68	338424	6013616	125	277	37	2168	27	1.7	2.02	24	0.70	877	4.1	123
PH2B69	338163	6013578	151	281	46	2410	20	1.9	2.40	24	0.66	3222	3.1	124
PH2B70	338056	6013820	149	337	44	2276	19	1.3	2.08	23	0.78	1773	5.5	125
PH2B71	337965	6014031	96	317	25	2757	9	1.2	1.46	27	0.56	3002	2.9	126
PH2B74	337518	6014360	46	476	18	2230	34	0.4	0.62	22	0.62	1609	33.0	127
PH2B75	337140	6014137	40	431	15	2417	26	1.0	0.62	26	0.49	1019	16.4	128
PH2B76	331284	6017848	151	646	27	2128	11	1.8	0.80	15	0.94	2175	11.7	129
PH2B77	331375	6017591	99	432	35	2877	13	1.9	0.87	19	0.98	2244	11.8	130
PH2B78	331400	6017369	132	376	32	2043	13	2.0	0.69	21	0.84	1843	5.3	131
CT-1	339573	6011807	69	289	29	2303	12	1.7	1.53	22	0.63	3242	15.8	132
CT-2	339348	6011975	145	229	45	1266	11	2.4	2.75	24	0.9	1033	9.0	133
CT-3	339163	6012099	90	202	33	1516	15	1.6	1.61	23	0.75	1730	14.0	134
CT-4	338959	6012237	123	262	41	2511	13	2.1	2.28	20	1.01	3959	26.5	135
CT-5	338742	6012379	144	304	32	1811	15	1.7	1.61	23	0.8	2741	11.1	136
CT-6	338546	6012538	102	259	38	1801	26	1.8	2.07	24	0.73	725	7.4	137
CT-7	338325	6012612	116	203	30	1889	12	1.5	1.3	22	0.63	4314	17.9	138
CT-8	339049	6012710	192	318	55	1327	13	2.5	2.52	22	0.79	1929	20.7	139
CT-9	339265	6012585	111	364	42	1881	24	1.3	2.12	26	0.63	1382	6.4	140
CT-10	339461	6012440	177	267	65	1807	21	2.4	3.42	22	0.8	3841	7.5	141
CT-11	339664	6012303	110	273	32	1696	18	1.6	1.95	24	0.67	1325	9.0	142
CT-12	339875	6012161	118	235	37	1627	9	1.9	2.15	26	0.55	906	18.8	143
CT-13	340098	6012000	185	302	72	2380	13	2.6	3.61	19	0.99	1907	13.3	144
CT-14	340297	6011851	170	245	37	1928	11	1.8	2.52	21	0.73	1796	8.9	145
14LPP01	334530	6013671	103	341	41	3302	17	3.4	3.33	25	1.48	3910	15.0	146
14LPP02	334487	6013589	81	402	22	1815	7	3.2	1.19	25	1.06	5580	59.0	147

Sample Number	UTM NAD83 Zone 10N		parts per million (ppm)						%		(ppb)		Count	
	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au	
14LPP03	334578	6013535	103	362	41	2008	15	3.6	4.10	21	1.06	2780	44.0	148
14LPP04	334729	6013551	130	316	37	2347	14	1.4	2.71	23	1.03	2430	18.0	149
14LPP05	334754	6013462	81	371	24	2001	8	3.7	1.71	25	0.68	4230	96.0	150
14LPP06	334667	6013610	71	282	33	2296	13	2.5	1.91	25	0.92	1820	8.0	151
14LPP07	334620	6013693	112	271	22	1884	21	0.1	1.71	22	1.80	1050	10.0	152
14LPP08	334493	6013729	54	149	21	1634	9	0.1	1.63	23	0.53	11210	44.0	153
14LPP09	334386	6013695	47	204	13	2647	9	0.1	1.08	24	0.48	6780	17.0	154
14LPP10	334124	6014448	67	240	51	2147	28	2.2	3.37	19	0.52	2050	89.0	155
14LPP11	334162	6014663	116	488	27	2928	27	2.3	1.26	19	1.35	2520	40.0	156
14LPP12	334369	6014658	83	300	29	1651	19	1.0	1.73	21	0.72	1150	9.0	157
14LPP13	334496	6014234	98	363	21	2376	20	0.8	0.78	22	0.66	800	86.0	158
14LPP14	334479	6014012	74	220	18	2324	17	1.8	0.97	21	0.60	1270	19.0	159
14LPP15	333229	6014233	90	489	25	2085	15	1.9	0.73	16	1.45	1530	7.0	160
14LPP16	333020	6014190	93	365	23	2319	22	1.6	0.73	17	2.11	1400	7.0	161
14LPP17	332871	6014251	113	508	24	3402	14	6.1	0.81	21	1.50	1710	42.0	162
14LPP18	332886	6014551	115	429	24	2683	24	2.8	0.71	20	1.14	1460	11.0	163
14LPP19	334434	6014573	111	346	40	2673	45	1.9	2.24	18	0.93	2080	7.0	164
14LPP20	334380	6014464	153	401	51	2391	27	3.3	2.03	17	1.74	1940	7.0	165
14LPP21	334317	6014340	68	168	19	1997	19	0.6	1.05	20	0.48	1120	5.0	166
14LPP22	330720	6016968	52	145	14	1529	34	1.7	0.58	25	0.69	430	22.0	167
14LPP23	330672	6017065	24	167	24	2411	45	1.5	0.91	25	0.35	1420	16.0	168
14LPP24	330658	6017333	21	426	26	2922	38	2.5	1.00	25	0.36	1260	5.0	169
14LPP25	330415	6017087	32	154	31	1835	58	0.8	1.23	25	0.42	2860	18.0	170
14LPP26	330509	6016614	14	100	18	2529	23	1.5	0.50	25	0.22	690	5.0	171
JR4	331217	6017450	14	214	12	2273	11	1.7	0.56	25	0.84	830	80.0	172
JR5	331175	6017339	10	222	10	1687	7	1.8	0.47	25	0.46	1080	38.0	173
JR6	331139	6017246	17	157	13	2652	24	2.2	0.66	25	0.34	690	19.0	174
JR7	331074	6017152	16	105	18	2140	49	2.0	0.82	25	0.28	550	18.0	175
JR8	331015	6017070	20	154	19	2043	43	2.8	1.14	25	0.98	2450	20.0	176
JR14	331690	6017031	12	47	15	992	12	1.0	0.39	17	0.16	188	6.0	177

Note: only lodgepole pine outer bark samples were used in this table - other tree species were deleted because they have different metal uptake

	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
number of values	177	177	177	177	177	177	177	177	177	177	177
maximum	192.43	645.59	280.30	3471.00	57.64	6.10	4.10	34.94	2.11	11210.00	96.00
minimum	5.72	47.49	4.90	905.30	2.04	0.10	0.28	15.18	0.08	123.00	0.20
mean	71.81	261.11	26.07	2087.80	21.23	1.79	1.30	25.94	0.63	1763.44	10.14
median	69.09	265.61	22.91	2075.40	18.38	1.70	1.15	25.71	0.57	1447.00	4.60
standard deviation	46.14	123.20	21.86	499.25	11.45	0.79	0.69	4.24	0.34	1509.64	15.73
skewness	0.52	0.41	9.05	0.21	1.39	1.28	1.43	-0.23	1.32	2.93	3.52
kurtosis	-0.56	-0.57	103.54	-0.11	1.66	5.19	2.22	-0.51	2.53	14.24	13.64
geometric mean	54.91	230.23	22.90	2025.99	18.64	1.58	1.15	25.58	0.54	1282.91	5.26
25 percentile	29.80	151.31	17.02	1689.70	13.46	1.30	0.81	23.19	0.35	837.00	2.80
50 percentile	69.09	265.61	22.91	2075.40	18.38	1.70	1.15	25.71	0.57	1447.00	4.60
75 percentile	105.71	350.37	29.63	2417.40	25.54	2.20	1.63	29.33	0.76	2322.00	9.50
90 percentile	136.61	429.56	39.05	2693.80	38.99	2.60	2.15	31.34	1.04	3223.60	19.64
95 percentile	151.69	485.96	43.06	2919.04	45.96	3.20	2.72	32.37	1.36	3919.80	40.40
98 percentile	179.27	502.77	52.75	3175.74	55.54	3.65	3.35	33.21	1.51	5255.00	75.37
100 percentile	192.43	645.59	280.30	3471.00	57.64	6.10	4.10	34.94	2.11	11210.00	96.00

BOER BARK SURVEYS 2013 AND 2014 CORRELATION COEFFICIENT MATRIX (177 LODGEPOLE PINE OUTER BARK SAMPLES)

	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
Mo	1										
Cu	0.621266	1									
Pb	0.304656	0.118915	1								
Zn	0.117481	0.367563	0.091686	1							
Cd	-0.30416	-0.29792	-0.07879	0.160847	1						
As	0.226413	0.296979	0.251723	0.1824	-0.20058	1					
Sb	0.58257	0.273071	0.533287	0.093357	-0.15665	0.328017	1				
Ca	-0.46226	-0.47285	-0.21197	-0.06129	0.335699	-0.26799	-0.31923	1			
Fe	0.534817	0.525384	0.271348	0.117507	-0.33897	0.401738	0.372237	-0.72889	1		
Ag	0.222967	0.255337	0.075553	0.050585	-0.31341	0.123872	0.236402	-0.27669	0.204078	1	
Au	0.069832	0.164442	0.015781	0.02368	-0.09359	0.220227	0.177722	-0.2859	0.200505	0.212063	1

**APPENDIX C**

**TILL 2014 SURVEY MAPS**

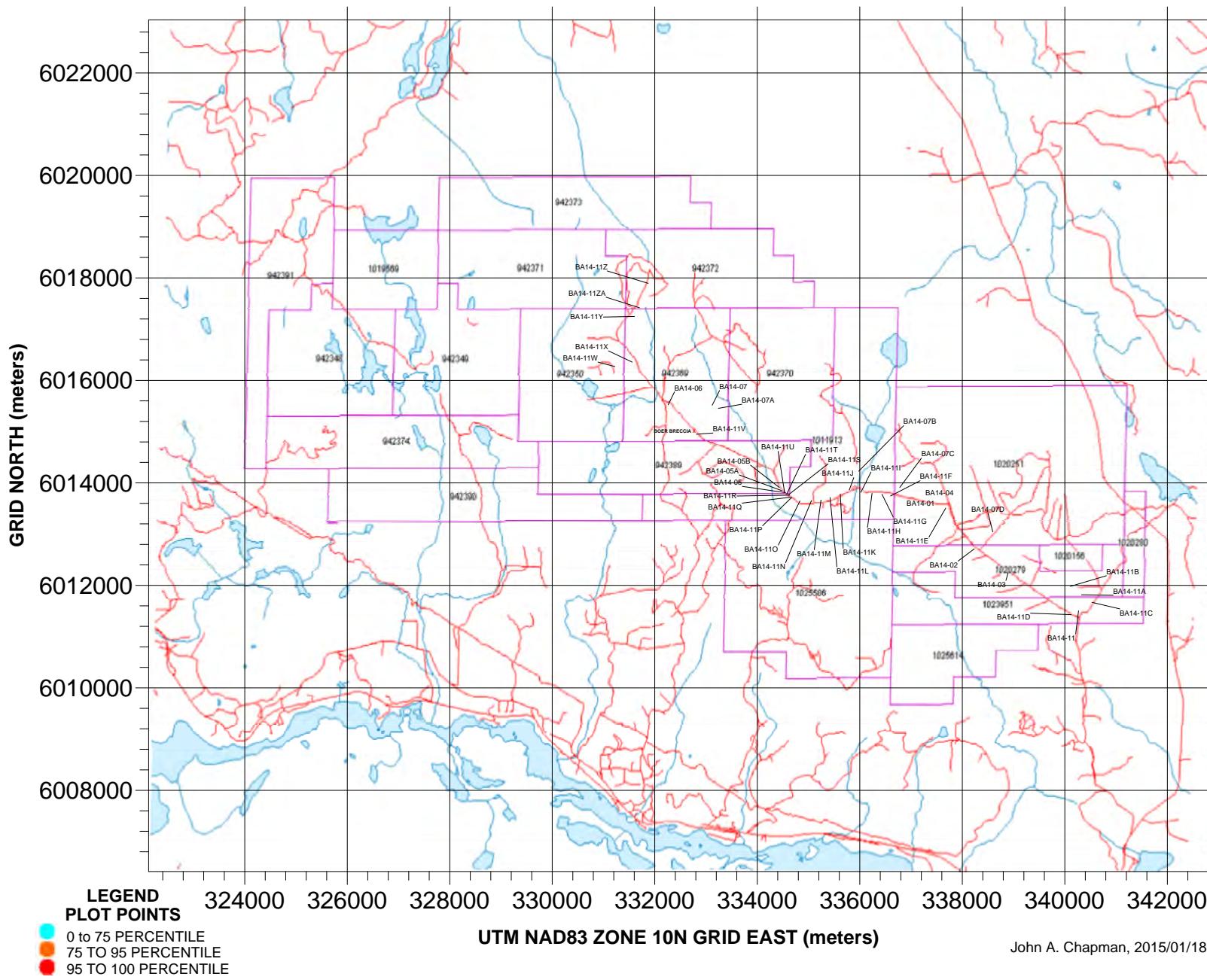
**&**

**REFERENCE SPREAD SHEET PLOT**

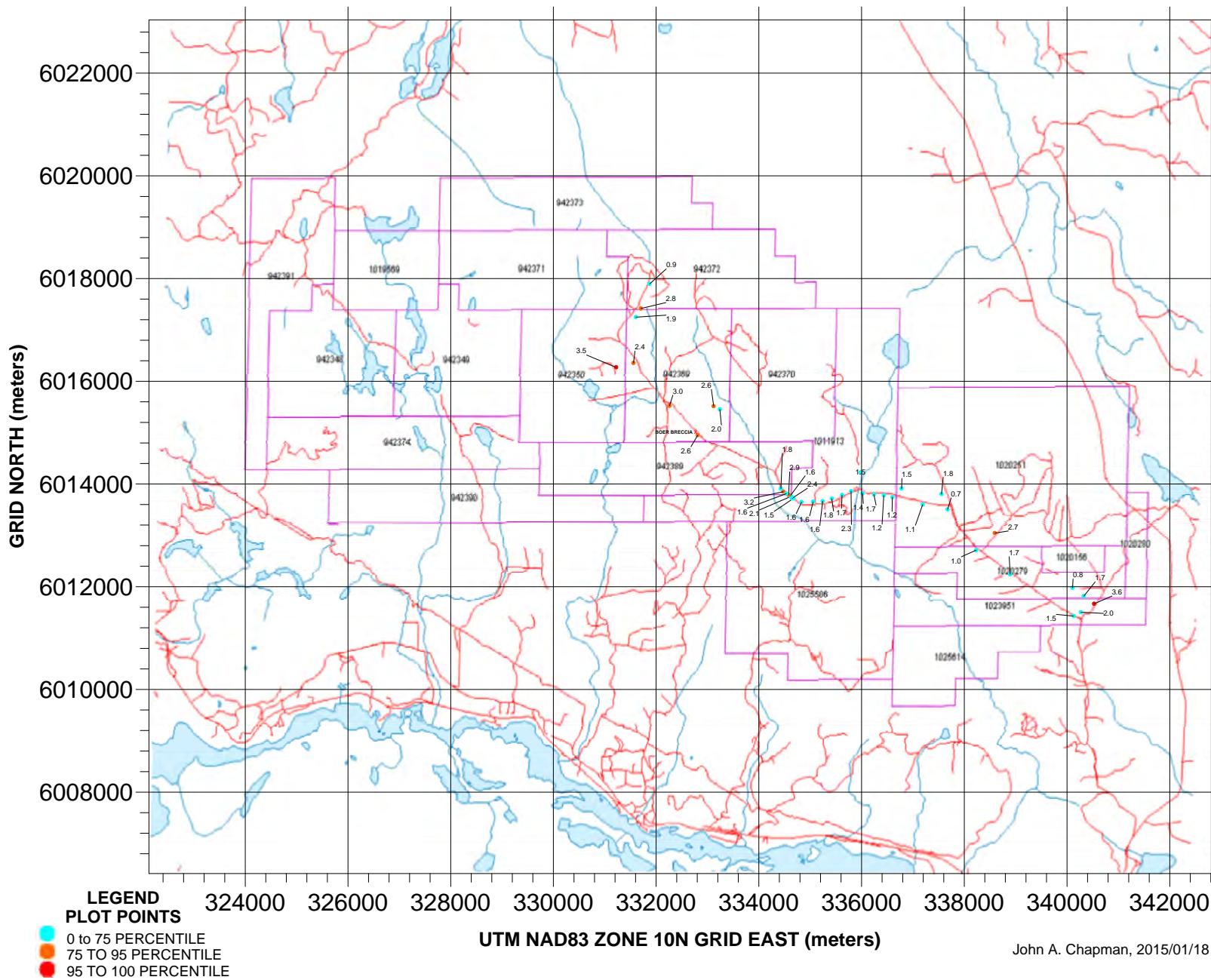
**FILES**

Boer Property, Assessment Report, 2014 Exploration

**BOER PROPERTY, BURNS LAKE, BC  
TILL SURVEY (2014)  
SAMPLE ANALYSIS  
SAMPLE NUMBERS**

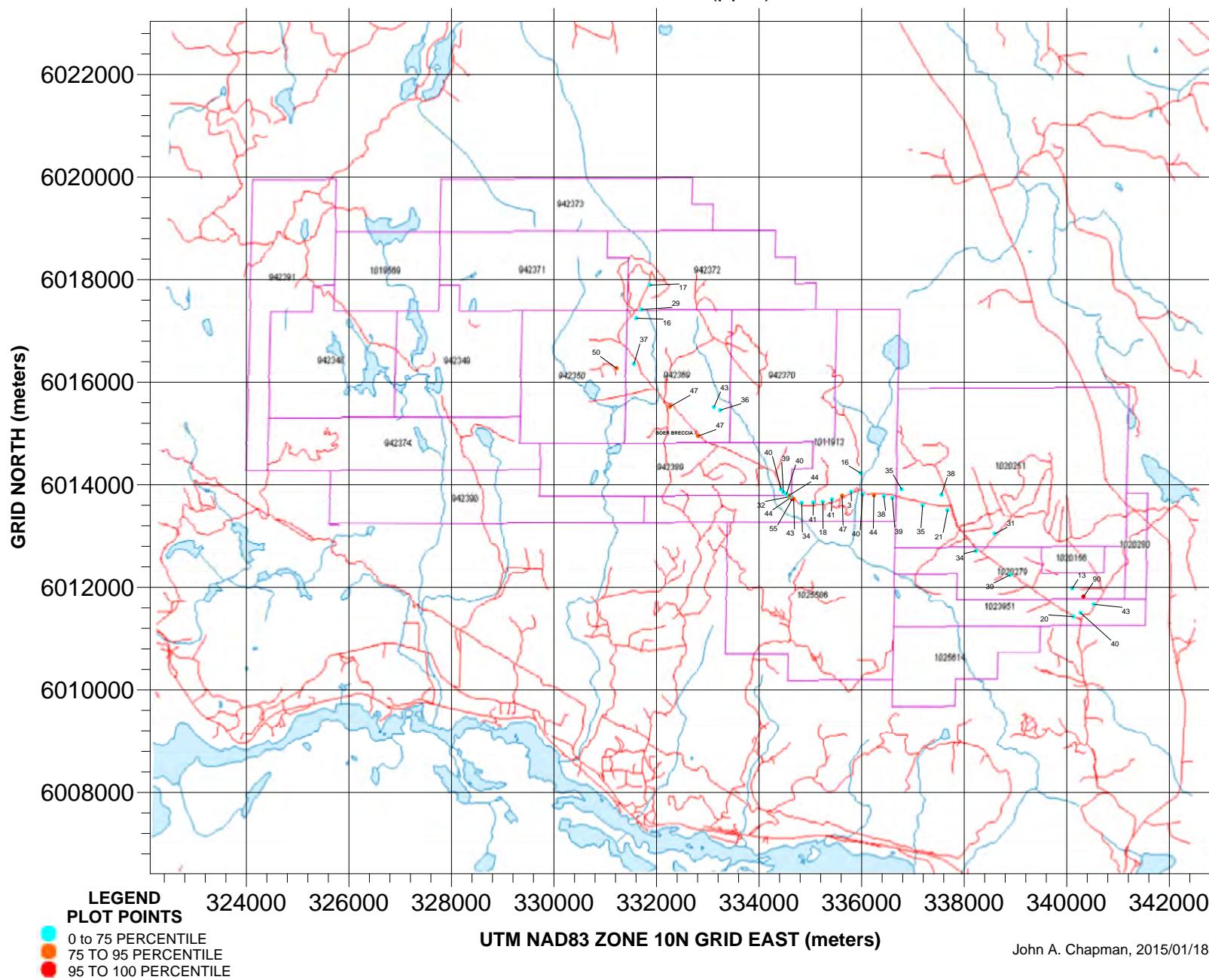


**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**  
**MOLYBDENUM (ppm)**



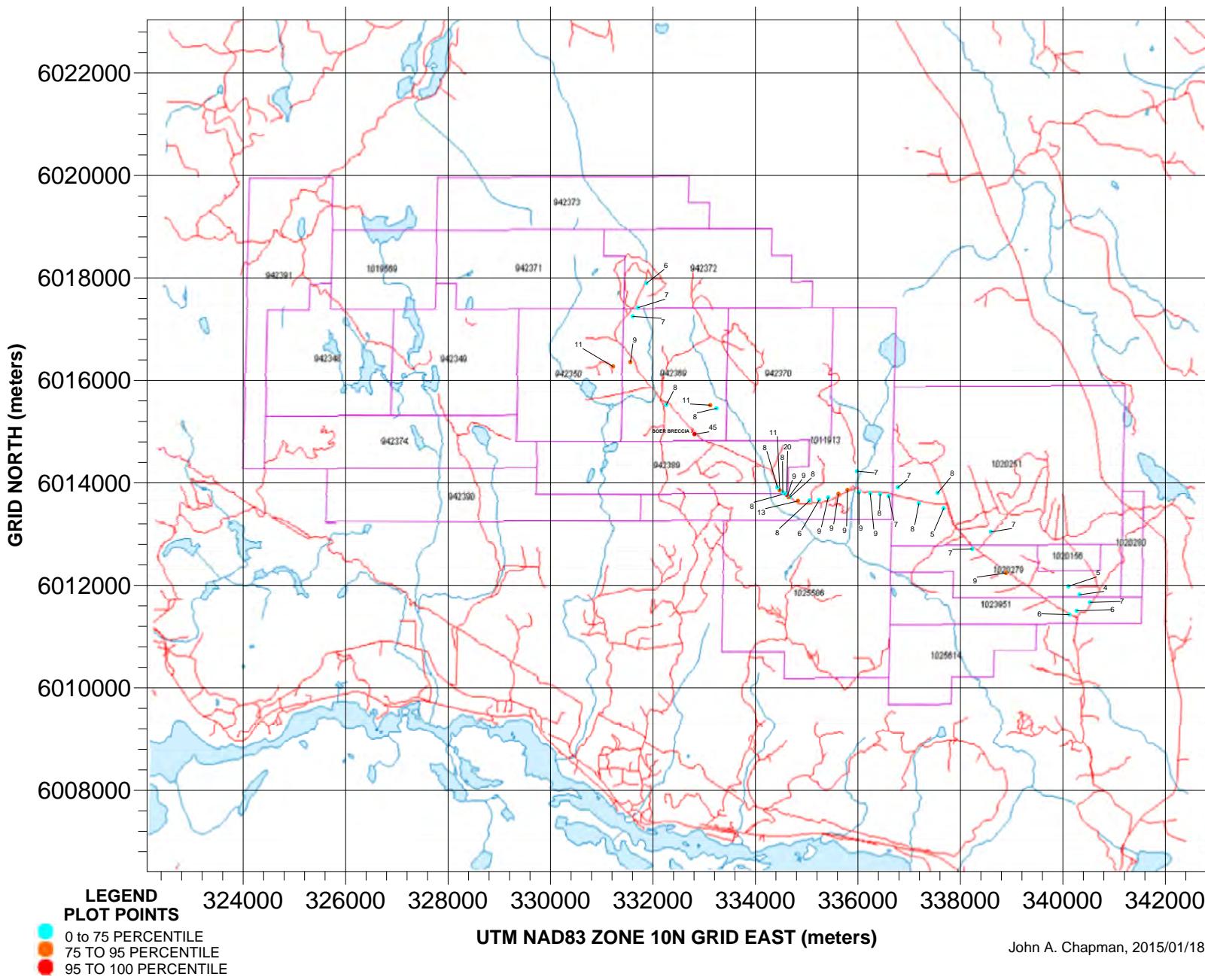
**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**

COPPER (ppm)



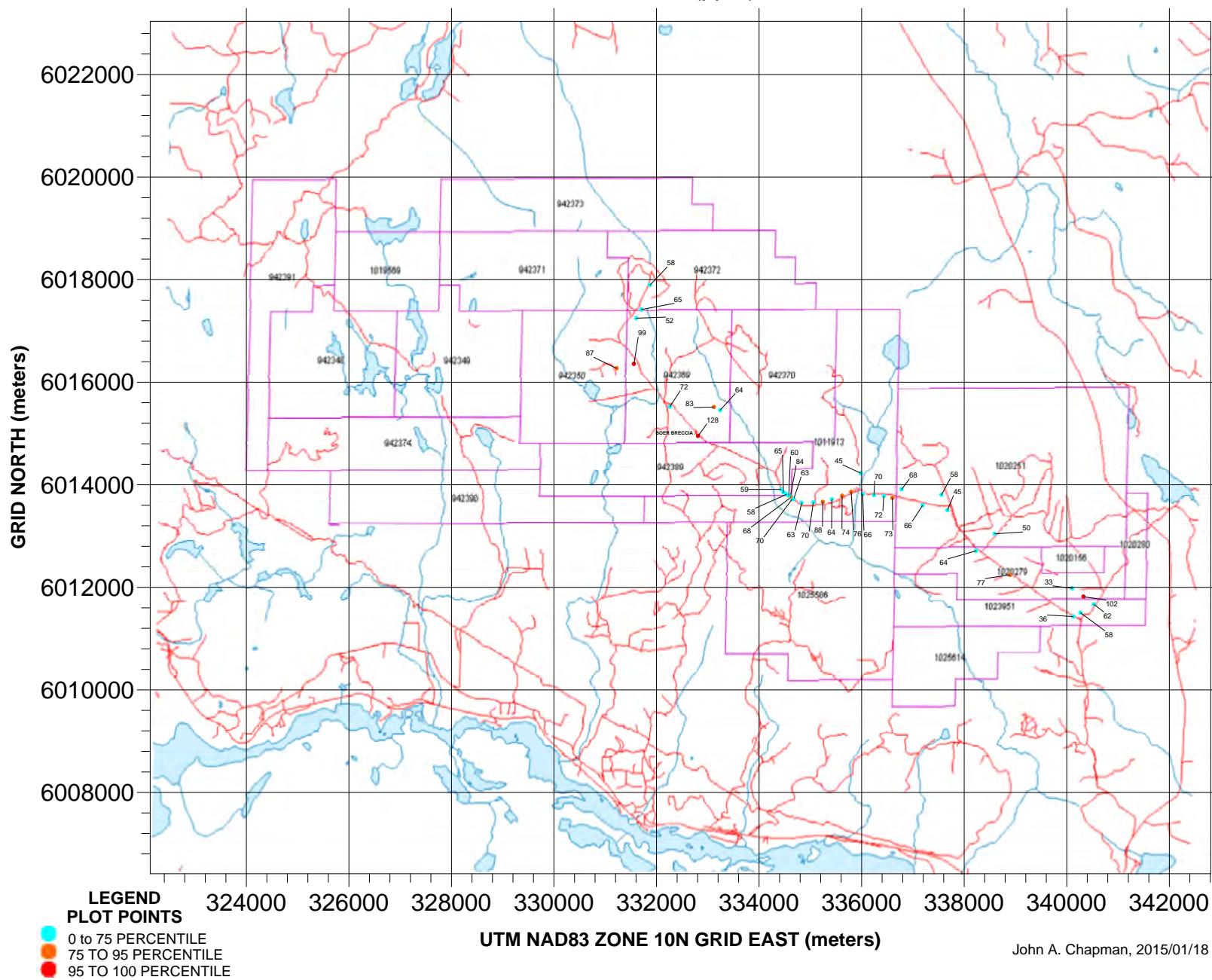
# **BOER PROPERTY, BURNS LAKE, BC TILL SURVEY (2014) SAMPLE ANALYSIS**

## LEAD (ppm)

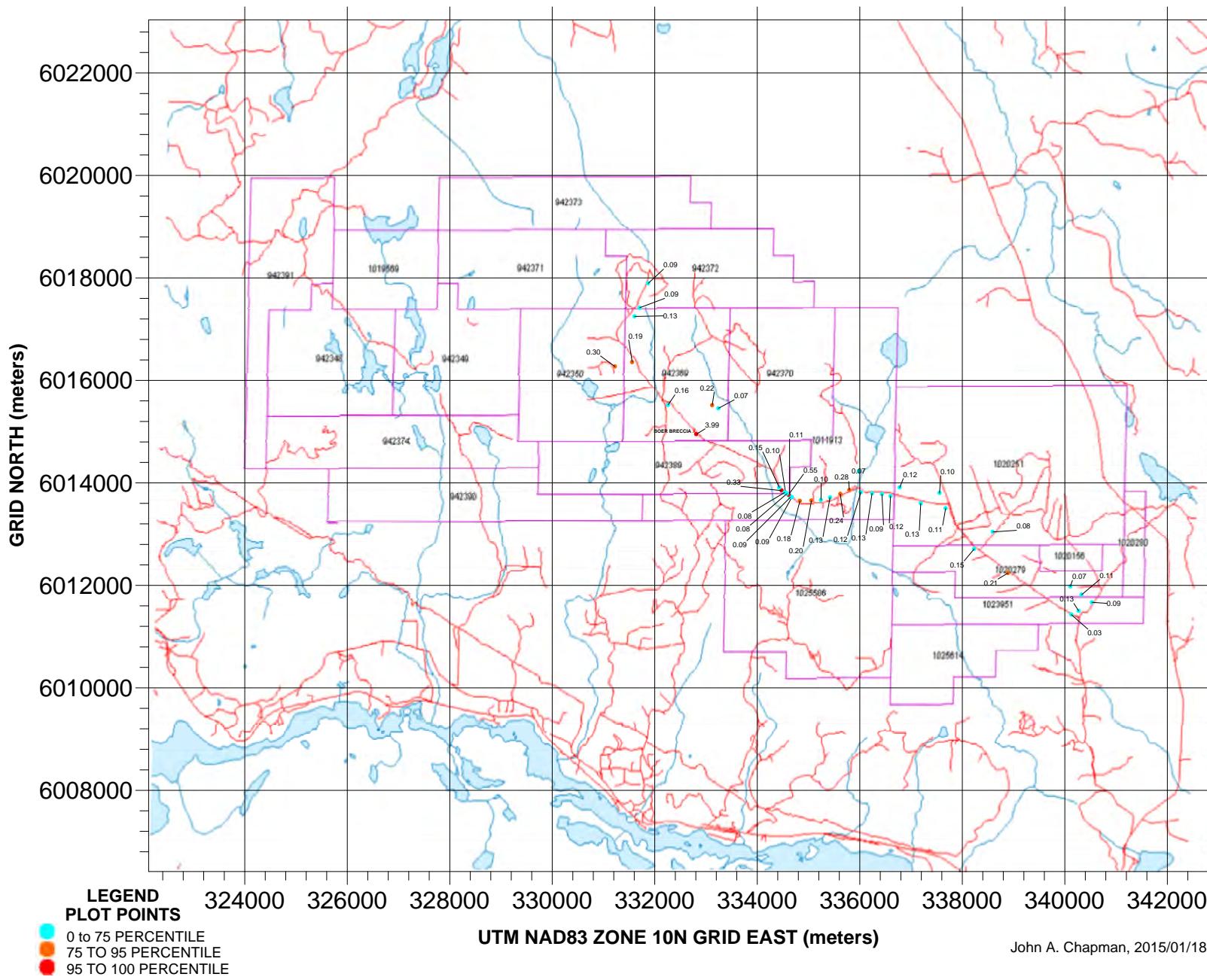


**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**

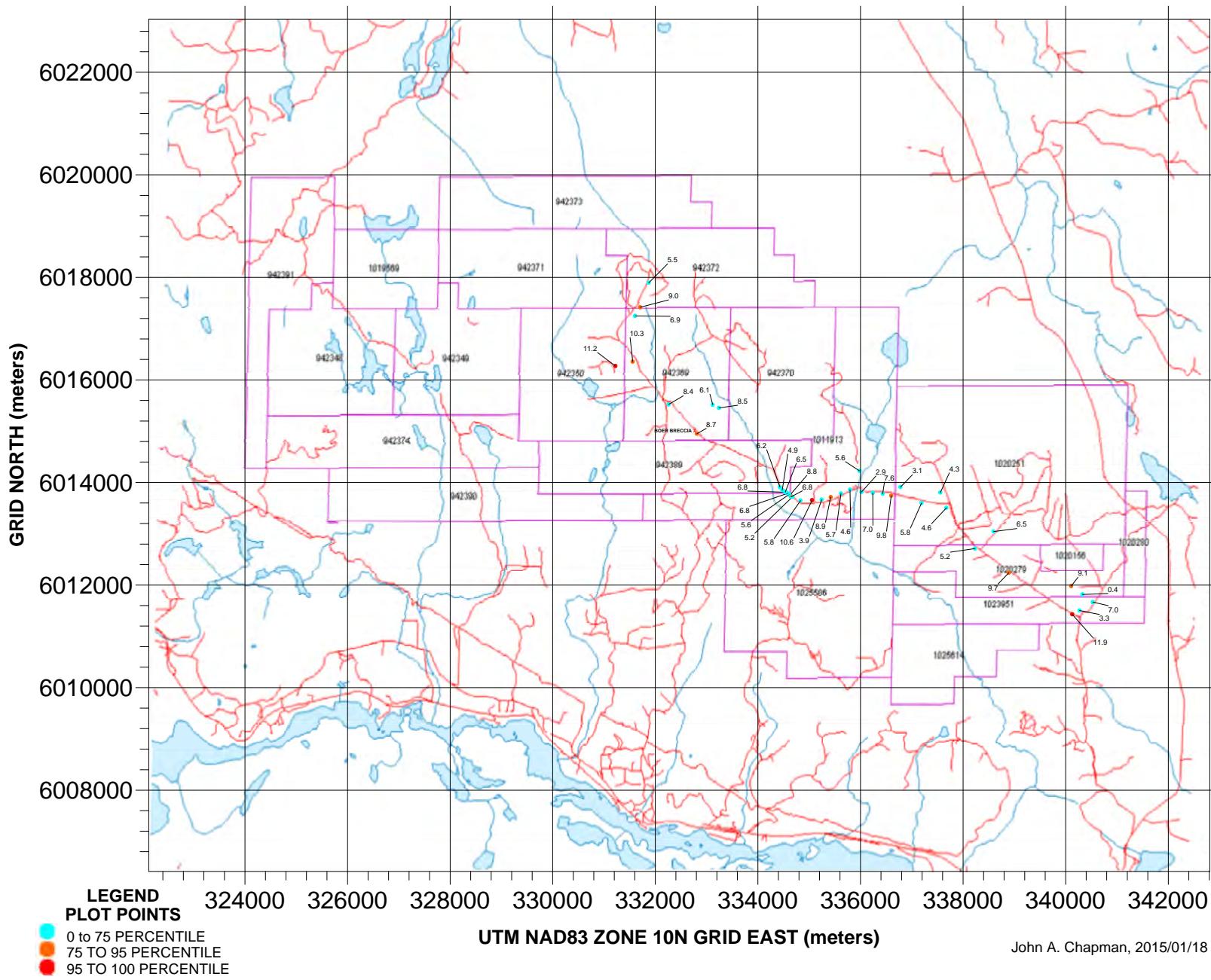
ZINC (ppm)



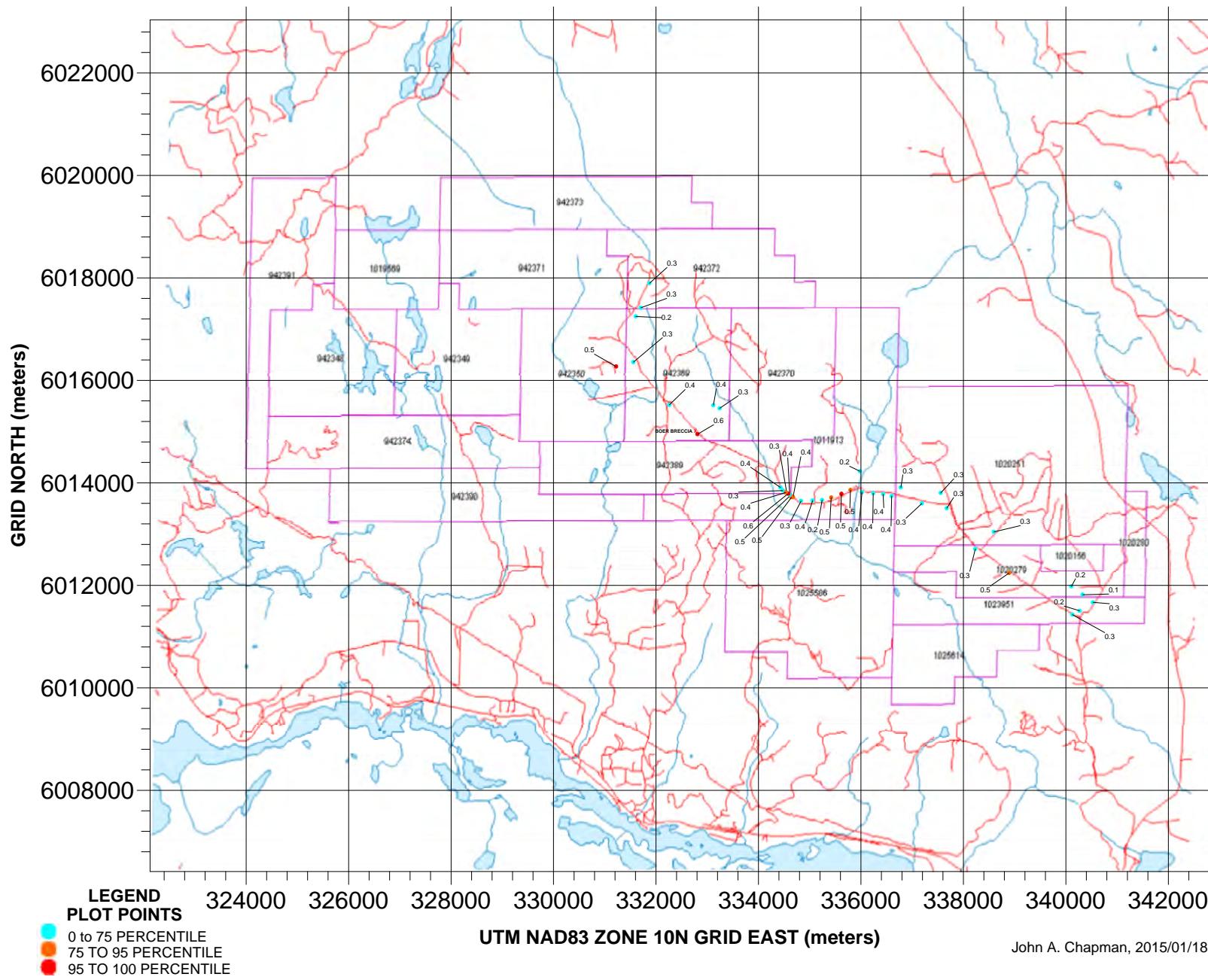
**BOER PROPERTY, BURNS LAKE, BC  
TILL SURVEY (2014)  
SAMPLE ANALYSIS  
CADMIUM (ppm)**



**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**  
**ARSENIC (ppm)**

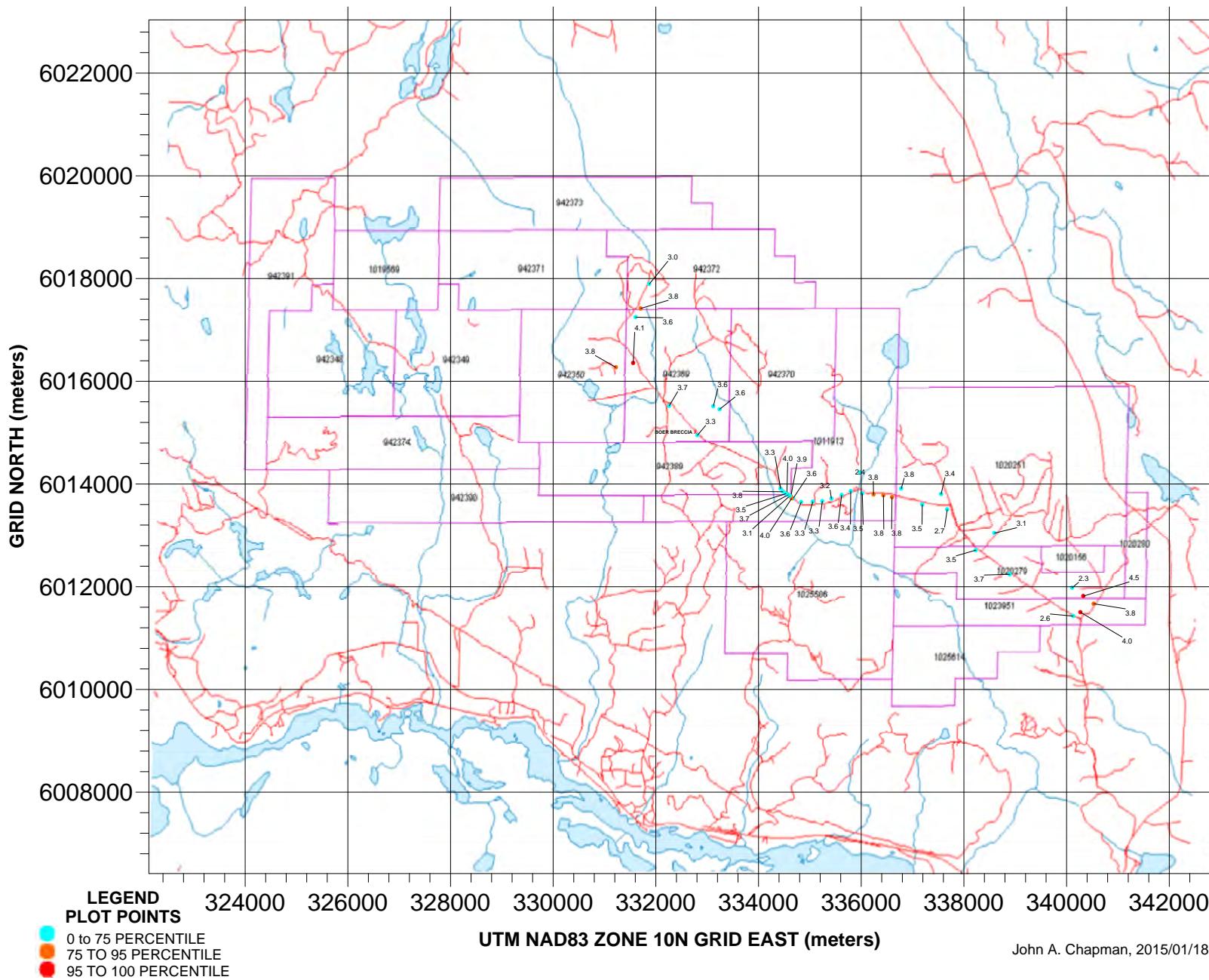


**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**  
**ANTIMONY (ppm)**

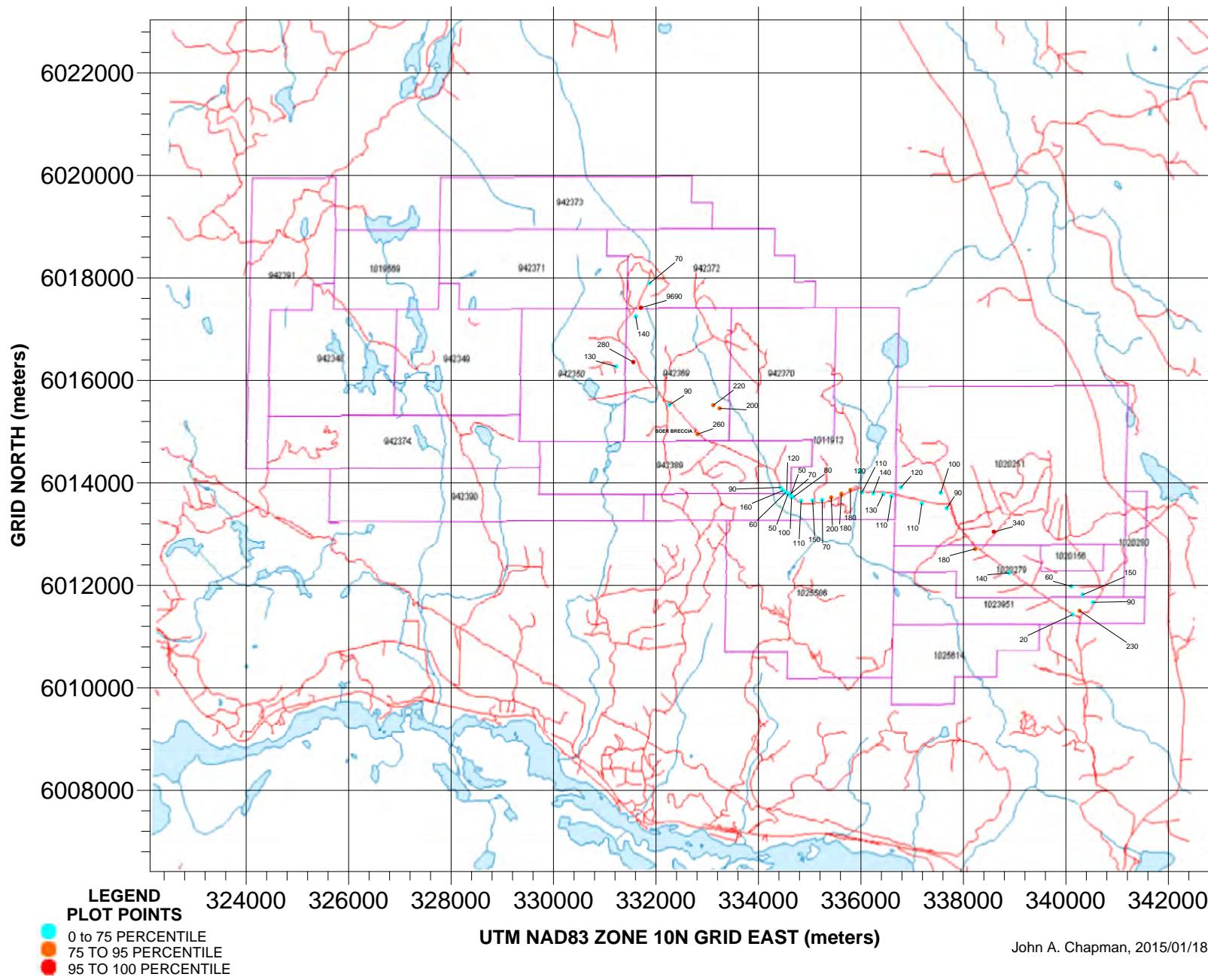


# **BOER PROPERTY, BURNS LAKE, BC TILL SURVEY (2014) SAMPLE ANALYSIS**

### IRON (%)

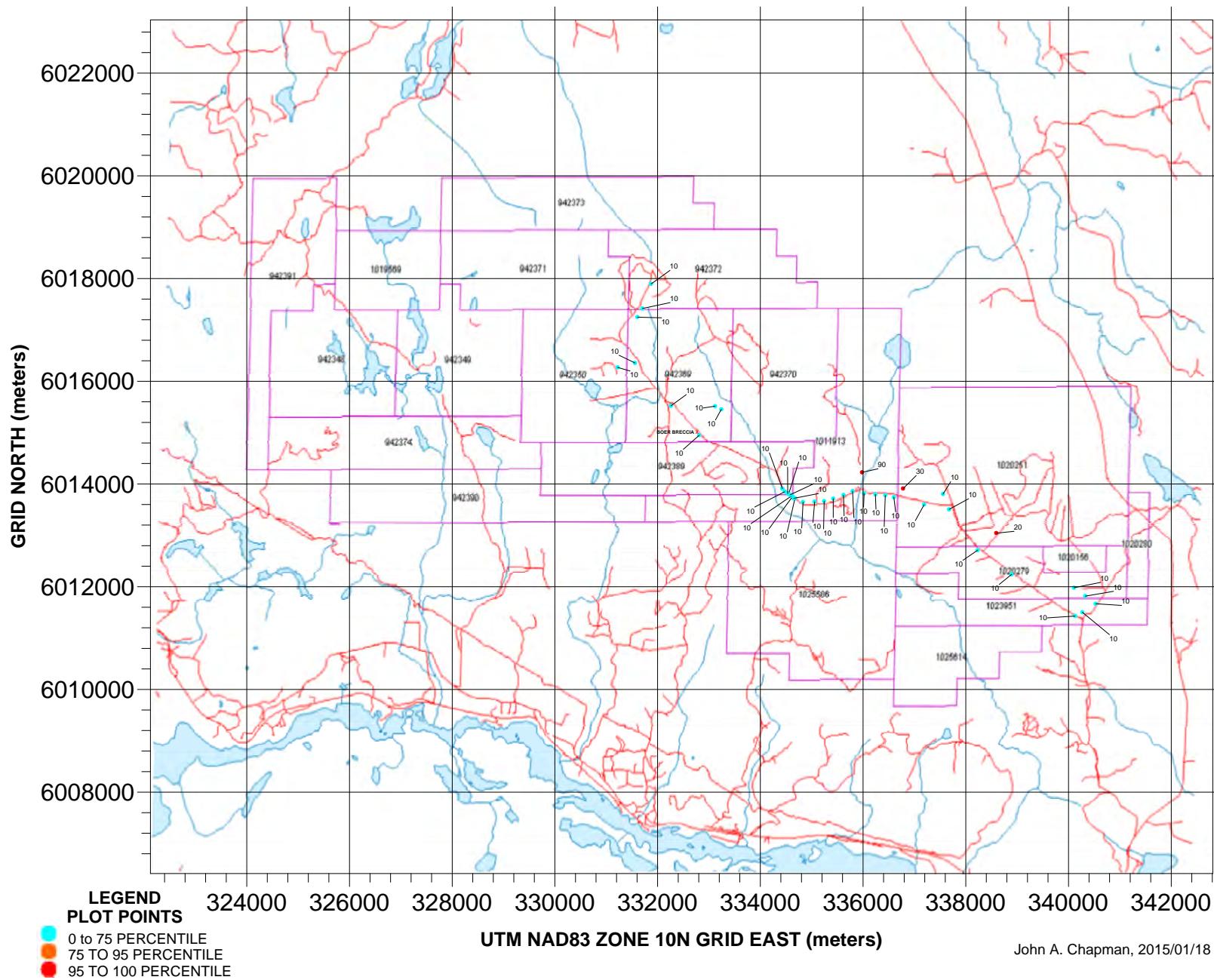


**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**  
**SILVER (ppb)**



**BOER PROPERTY, BURNS LAKE, BC**  
**TILL SURVEY (2014)**  
**SAMPLE ANALYSIS**

GOLD (ppb)



John A. Chapman, 2015/01/18

## BOER PROPERTY, TILL SAMPLING WITH AUGER, JULY 4TH AND 5TH, 2014

John A. Chapman, October 04, 2014

SAMPLE	NAD83 ZONE 10N		HOLE DEPTH	PHOTO	
NUMBER	EAST (m)	NORTH (m)	(cm)	NUMBERS	DESCRIPTION OF TILL
BA14-01	337190	6013599	60	11, 12	CLAY & COARSE SAND, LIGHT BROWN
BA14-02	338232	6012711	67	5, 6, 7, 8, 9, 10	CLAY, LIGHT BROWN, WET
BA14-03	338892	6012241	63	2, 3, 4	SANDY, LIGHT BROWN
BA14-04	337556	6013803	50	13, 14	SANDY CLAY, RED-BROWN
BA14-05	334551	6013810	66	15	SANDY CLAY, MEDIUM BROWN
BA14-05A	334475	6013850	70	16, 17	SANDY CLAY, LIGHT BROWN
BA14-05B	334429	6013910	24	18, 19	COARSE SANDY, GREY-BROWN
BA14-06	332259	6015523	85	20	SANDY CLAY, MEDIUM BROWN
BA14-07	333120	6015516	73	21, 22	FINE SANDY CLAY, LIGHT BROWN
BA14-07A	333241	6015454	50	23	MINOR FINE SAND AND CLAY, MEDIUM-DARK BROWN
BA14-07B	335979	6014227	43	24	SANDY MINOR CLAY, LIGHT BROWN SOME RED
BA14-07C	336779	6013911	54	25, 26	MINOR RED SAND AND CLAY, GREY LIGHT BROWN
BA14-07D	338594	6013044	27	27	SANDY MINOR CLAY MANY ROCKS, LIGHT BROWN
BA14-11	340269	6011503	10	1134	SANDY, GREY LIGHT BROWN, LOTS OF BOULDERS AT SITE
BA14-11A	340326	6011817	5	NIL	COURSE SAND, GREY LIGHT BROWN, BOULDERS AT SITE
BA14-11B	340108	6011980	5	1135	SANDY, GREY, LOTS OF BOULDERS AT SITE
BA14-11C	340528	6011668	52	1136	SANDY CLAY, MEDIUM BROWN
BA14-11D	340128	6011429	35	1137	SANDY MINOR CLAY, MEDIUM BROWN
BA14-11E	337675	6013506	30	1138	SANDY CLAY, LIGHT BROWN
BA14-11F	336599	6013744	60	1140	SANDY CLAY, LIGHT TO MEDIUM BROWN
BA14-11G	336433	6013780	57	1141	SANDY ABUNDANT CLAY, LIGHT BROWN
BA14-11H	336240	6013797	83	NIL	SANDY ABUNDANT CLAY, MEDIUM BROWN
BA14-11I	336020	6013816	53	NIL	SANDY CLAY, LIGHT BROWN
BA14-11J	335796	6013861	53	NIL	SANDY CLAY, MEDIUM BROWN
BA14-11K	335620	6013784	41	NIL	SANDY CLAY, LIGHT BROWN
BA14-11L	335420	6013715	57	NIL	SANDY CLAY, MEDIUM BROWN
BA14-11M	335242	6013666	15	NIL	SANDY, B HORIZON BROWN TO RED
BA14-11N	335057	6013655	68	NIL	SANDY CLAY, LIGHT BROWN
BA14-11O	334831	6013648	34	NIL	SANDY CLAY, LIGHT BROWN
BA14-11P	334674	6013721	37	NIL	SANDY CLAY, MEDIUM BROWN
BA14-11Q	334645	6013721	38	NIL	SANDY CLAY, MEDIUM BROWN MINOR RED
BA14-11R	334629	6013760	39	NIL	SANDY CLAY, MEDIUM BROWN
BA14-11S	334610	6013769	34	NIL	SANDY CLAY, MEDIUM BROWN (AT ALLEN SHOWING)
BA14-11T	334578	6013789	30	NIL	SANDY CLAY, RED-BROWN
BA14-11U	334533	6013813	30	NIL	SANDY CLAY, MEDIUM BROWN
BA14-11V	332810	6014950	22	NIL	SANDY CLAY, LIGHT BROWN (AT EAST END BOER BRECCIA)
BA14-11W	331222	6016271	53	NIL	SANDY CLAY, GREY LIGHT BROWN
BA14-11X	331559	6016357	50	1142	SANDY, RED-STRONG BROWN
BA14-11Y	331605	6017249	56	NIL	SANDY, RED-MEDIUM BROWN
BA14-11Z	331872	6017895	37	NIL	SANDY CLAY, GREY
BA14-11ZA	331704	6017417	47	NIL	SANDY CLAY, LIGHT BROWN

BOER 2014 TILL SURVEY: SAMPLE STATISTICS													
			ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppb	ppb	
Sample ID	Easting	Northing	Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
BA14-01	337190	6013599	1.06	35.0	7.9	66	0.13	5.8	0.33	0.7	3.47	110	10
BA14-02	338232	6012711	1.00	33.6	7.1	64	0.15	5.2	0.33	0.67	3.52	180	10
BA14-03	338892	6012241	1.71	39.0	9.4	77	0.21	9.7	0.47	0.59	3.70	140	10
BA14-04	337556	6013803	1.76	37.9	7.7	58	0.10	4.3	0.35	0.54	3.38	100	10
BA14-05	334551	6013810	4.13	115.1	20.2	68	0.10	6.8	0.34	0.48	3.98	120	10
BA14-05A	334475	6013850	3.22	38.7	11.4	65	0.33	4.9	0.28	0.61	3.75	160	10
BA14-05B	334429	6013910	1.77	40.3	7.5	59	0.15	6.2	0.37	0.51	3.25	90	10
BA14-06	332259	6015523	3.03	46.9	8.1	72	0.16	8.4	0.43	0.6	3.73	90	10
BA14-07	333120	6015516	2.63	42.7	10.5	83	0.22	6.1	0.39	0.51	3.62	220	10
BA14-07A	333241	6015454	2.00	36.1	7.6	64	0.07	8.5	0.33	0.43	3.60	200	10
BA14-07B	335979	6014227	1.50	16.1	6.9	45	0.07	5.6	0.2	0.28	2.44	120	90
BA14-07C	336779	6013911	1.46	35.0	7.4	68	0.12	3.1	0.34	0.64	3.75	120	30
BA14-07D	338594	6013044	2.74	31.2	7.2	50	0.08	6.5	0.28	0.66	3.10	340	20
BA14-11	340269	6011503	1.97	40.0	5.6	58	0.13	3.3	0.21	0.71	4.00	230	10
BA14-11A	340326	6011817	1.68	89.5	4.0	102	0.11	0.4	0.11	0.57	4.51	150	10
BA14-11B	340108	6011980	0.85	12.9	5.2	33	0.07	9.1	0.19	0.53	2.31	60	10
BA14-11C	340528	6011668	3.58	42.7	7.0	62	0.09	7.0	0.32	0.71	3.76	90	10
BA14-11D	340128	6011429	1.47	20.3	5.9	36	0.03	11.9	0.27	0.31	2.58	20	10
BA14-11E	337675	6013506	0.68	20.5	5.4	45	0.11	4.6	0.31	0.38	2.74	90	10
BA14-11F	336599	6013744	1.18	38.8	7.1	73	0.12	9.8	0.39	0.71	3.76	110	10
BA14-11G	336433	6013780	1.18	38.2	7.7	72	0.09	7.6	0.43	0.64	3.79	130	10
BA14-11H	336240	6013797	1.67	44.0	8.6	70	0.13	7.0	0.39	0.58	3.81	140	10
BA14-11I	336020	6013816	1.38	40.0	8.5	66	0.12	2.9	0.36	0.58	3.45	110	10
BA14-11J	335796	6013861	2.28	3.4	8.9	76	0.28	4.6	0.5	0.05	3.39	180	10
BA14-11K	335620	6013784	1.74	46.9	8.8	74	0.24	5.7	0.54	0.63	3.64	180	10
BA14-11L	335420	6013715	1.78	41.2	8.5	64	0.13	8.9	0.47	0.53	3.19	200	10
BA14-11M	335242	6013666	1.65	17.5	5.7	88	0.10	3.9	0.21	0.12	3.29	70	10
BA14-11N	335057	6013655	1.63	40.7	7.9	70	0.20	10.6	0.4	0.56	3.27	150	10
BA14-11O	334831	6013648	1.63	33.5	12.7	63	0.18	5.8	0.32	0.5	3.60	110	10
BA14-11P	334674	6013721	1.47	43.4	8.3	63	0.09	5.2	0.44	0.48	3.57	80	10
BA14-11Q	334645	6013721	2.39	54.7	8.8	70	0.09	6.8	0.5	0.55	3.98	100	10
BA14-11R	334629	6013760	2.09	43.8	8.5	68	0.11	8.8	0.5	0.51	3.86	50	10
BA14-11S	334610	6013769	1.62	32.2	19.6	84	0.55	5.6	0.39	0.28	3.14	70	10
BA14-11T	334578	6013789	2.94	44.1	8.1	60	0.08	6.8	0.58	0.54	3.71	50	10
BA14-11U	334533	6013813	1.56	40.3	7.9	58	0.08	6.5	0.44	0.44	3.47	60	10
BA14-11V	332810	6014950	2.63	47.1	45.2	128	3.99	8.7	0.56	0.4	3.29	260	10
BA14-11W	331222	6016271	3.51	49.6	11.4	87	0.30	11.2	0.54	0.69	3.83	130	10
BA14-11X	331559	6016357	2.40	37.3	8.9	99	0.19	10.3	0.3	0.16	4.06	280	10
BA14-11Y	331605	6017249	1.91	16.4	6.9	52	0.13	6.9	0.2	0.2	3.62	140	10
BA14-11Z	331872	6017895	0.95	17.3	6.1	58	0.09	5.5	0.25	0.44	3.05	70	10
BA14-11ZA	331704	6017417	2.83	29.3	6.6	65	0.09	9.0	0.3	0.62	3.81	9690	10
			Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
number of values			41	41	41	41	41	41	41	41	41	41	41
maximum			4.13	115.10	45.20	128.00	3.99	11.90	0.58	0.71	4.51	9690.00	90.00
minimum			0.68	3.40	4.00	33.00	0.03	0.40	0.11	0.05	2.31	20.00	10.00
mean			1.97	38.37	9.33	67.88	0.24	6.72	0.36	0.50	3.51	365.61	12.68
median			1.74	38.80	7.90	66.00	0.12	6.50	0.35	0.54	3.60	120.00	10.00
standard deviation			0.79	18.43	6.46	16.97	0.60	2.43	0.11	0.16	0.44	1475.79	12.69
skewness			0.82	1.95	4.51	1.02	6.18	-0.03	0.00	-1.07	-0.82	6.38	5.79
kurtosis			0.29	7.46	23.50	3.13	38.99	0.03	-0.46	0.65	1.23	40.82	34.94
geometric mean			1.82	33.94	8.36	65.85	0.14	6.07	0.34	0.46	3.48	129.39	11.02
25 percentile			1.47	32.20	7.00	59.00	0.09	5.20	0.30	0.44	3.29	90.00	10.00
50 percentile			3.86	16.25	43.50	18.50	1.73	0.57	0.44	1.51	12.26	40.00	10.00
75 percentile			2.40	43.40	8.80	73.00	0.18	8.70	0.44	0.62	3.76	180.00	10.00
90 percentile			3.03	47.10	11.40	87.00	0.28	9.80	0.50	0.69	3.98	230.00	10.00
95 percentile			3.51	54.70	19.60	99.00	0.33	10.60	0.54	0.71	4.00	280.00	20.00
98 percentile			3.69	94.62	25.20	107.20	1.24	11.34	0.56	0.71	4.15	2210.00	42.00
100 percentile			4.13	115.10	45.20	128.00	3.99	11.90	0.58	0.71	4.51	9690.00	90.00
			BOER TILL SAMPLES 2014, CORRELATION MATRIX										by: John A. Chapman
													Date: January 24, 2015
			Mo	Cu	Pb	Zn	Cd	As	Sb	Ca	Fe	Ag	Au
			1										
			0.481255	1									
			0.324626	0.270549	1								
			0.283085	0.379342	0.602061	1							
			0.1569	0.070174	0.913035	0.613245	1						
			0.2058	-0.08855	0.152772	-0.01984	0.123717	1					
			0.255787	0.153887	0.394839	0.329737	0.317884	0.348742	1				
			0.099355	0.379913	-0.1274	-0.09584	-0.11754	0.013911	0.143385	1			
			0.437929	0.626546	0.011598	0.527322	-0.06168	-0.15517	0.188185	0.333558	1		
			0.184594	-0.07413	-0.05508	-0.00979	-0.02489	0.148541	-0.08963	0.114264	0.119512	1	
			-0.09741	-0.2003	-0.0758	-0.22729	-0.05611	-0.12996	-0.24805	-0.1582	-0.37204	-0.03231	1

**APPENDIX D**

**ANALYTICAL PROCEDURES**

**&**

**ASSAY CERTIFICATES**



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Acme Analytical Laboratories (Vancouver) Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Submitted By: John A. Chapman  
Receiving Lab: Canada-Vancouver  
Received: September 05, 2013  
Report Date: October 08, 2013  
Page: 1 of 4

## CERTIFICATE OF ANALYSIS

VAN13003533.1

### CLIENT JOB INFORMATION

Project: BOER  
Shipment ID:  
P.O. Number  
Number of Samples: 88

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	88	Vegetation Ashing at 475	15	Completed	VAN
Split Ash from VA475	88	Analysis sample split/packet			VAN
1F01	84	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

### SAMPLE DISPOSAL

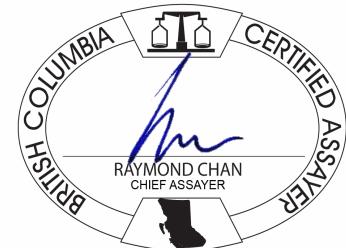
DISP-PLP Dispose of Pulp After 90 days

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: J.A.Chapman Mining Services  
18-1480 Foster Street  
White Rock BC V4B 3X7  
Canada

CC: Gerald G. Carlson



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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## Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** J.A.Chapman Mining Services

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 08, 2013

Page: 2 of 4

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	Analyte	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
		Rec.	Wt	Ash	Wt	ashed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01
OVEN STD-1	Vegetation		18.68	0.541	1.04	40.48	7.40	1385	845	11.3	0.6	>10000	0.18	2.5	2.0	4.1	0.6	554.0	0.23	0.39
B-BLP-13-01	Vegetation		54.48	0.512	134.0	352.5	27.20	1946	3773	21.5	5.6	7364	0.54	1.4	0.2	4.2	0.2	832.5	30.11	1.44
B-BLP-13-02	Vegetation		42.59	0.324	80.48	338.7	14.60	2468	688	13.9	5.7	5784	0.44	1.4	0.1	6.5	0.2	887.3	15.21	0.78
B-BLP-13-03	Vegetation		37.93	0.349	107.2	316.5	16.75	2238	886	16.8	4.2	>10000	0.33	1.2	0.2	4.4	0.2	925.2	34.34	0.99
B-BLP-13-04	Vegetation		40.02	0.383	76.70	278.3	18.31	2629	1853	12.3	3.5	8940	0.44	1.7	0.2	4.6	0.2	1041	33.99	1.14
B-BLP-13-05	Vegetation		35.97	0.434	189.9	278.6	28.87	1463	2985	25.3	5.0	>10000	0.68	2.6	0.3	4.0	0.3	560.2	13.95	1.52
B-BLP-13-06	Vegetation		36.54	0.362	104.6	348.2	18.91	1617	2377	17.9	3.5	9440	0.53	1.9	0.2	2.9	0.2	580.7	13.46	1.30
B-BLP-13-07	Vegetation		45.32	0.414	76.85	286.7	21.64	2470	3635	15.8	4.2	9922	0.45	1.7	0.2	3.6	0.2	801.2	19.56	1.33
B-BLP-13-08	Vegetation		45.44	0.423	136.1	345.9	40.24	2263	2502	31.7	5.2	>10000	0.56	2.3	0.3	2.7	0.2	738.6	20.16	2.33
B-BLP-13-09	Vegetation		37.72	0.277	80.05	498.0	22.77	2431	2736	25.2	5.4	6160	0.65	1.5	0.3	4.3	0.3	777.3	8.12	1.17
B-BLP-13-10	Vegetation		43.50	0.368	86.05	277.1	29.33	2169	941	27.8	5.9	6884	0.61	1.7	0.2	3.1	0.2	610.8	12.81	2.68
B-BLP-13-11	Vegetation		67.21	0.587	83.75	377.3	20.15	2399	1580	27.8	6.1	7435	0.87	1.7	0.2	3.1	0.4	896.4	12.49	0.96
B-BLP-13-12	Vegetation		35.99	0.239	82.69	469.0	16.74	2162	2048	20.1	4.7	9908	0.64	1.4	0.2	3.4	0.3	824.1	13.44	0.55
B-BLP-13-13	Vegetation		53.62	0.581	140.6	272.4	35.22	1965	852	20.6	4.4	7852	0.72	2.0	0.3	2.9	0.3	850.5	20.51	2.05
B-BLP-13-14	Vegetation		41.29	0.339	138.2	485.4	13.35	2105	1541	20.6	4.0	6614	0.49	1.3	0.2	3.2	0.2	694.1	12.62	0.84
B-BLP-13-15	Vegetation		61.44	0.504	91.66	313.0	17.60	2792	2772	10.5	2.5	4326	0.53	1.7	0.2	3.0	0.2	1306	25.22	1.42
B-BLP-13-16	Vegetation		45.95	0.421	182.2	386.7	26.20	2498	2811	17.6	4.1	6419	0.75	1.8	0.3	2.9	0.3	1068	19.77	1.90
B-BLP-13-17	Vegetation		42.36	0.295	112.1	520.3	20.49	2201	2294	22.7	4.9	8760	0.72	2.2	0.3	3.9	0.3	724.5	10.00	1.25
B-BLP-13-18	Vegetation		35.53	0.251	113.7	417.4	28.22	2223	952	18.8	5.2	>10000	0.73	2.4	0.3	3.9	0.3	1057	16.89	1.26
B-BLP-13-19	Vegetation		18.16	0.136	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-20	Vegetation		33.75	0.366	42.24	269.6	24.68	2703	862	17.0	5.1	7682	0.69	1.2	0.3	5.1	0.5	839.7	19.86	1.17
B-BLP-13-21	Vegetation		48.81	0.822	33.53	179.5	26.83	3471	282	11.0	8.9	>10000	0.35	1.9	0.1	1.2	0.2	1516	44.93	1.20
B-BLP-13-22	Vegetation		45.65	2.117	5.72	63.69	4.90	2172	246	2.6	1.9	5787	0.08	1.1	<0.1	0.2	<0.1	1371	2.04	0.28
B-BLP-13-23	Vegetation		55.80	1.105	36.35	125.2	16.01	2000	260	10.3	2.9	6685	0.31	1.1	0.2	<0.2	0.2	611.5	36.53	0.87
B-BLP-13-24	Vegetation		26.45	0.236	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-25	Vegetation		47.14	0.387	41.88	311.9	15.25	1735	1025	10.7	5.6	6573	0.86	1.9	0.5	2.3	0.6	1098	16.33	0.59
B-BLP-13-26	Vegetation		39.37	0.274	113.0	491.8	30.43	2996	2720	23.2	4.1	>10000	0.57	2.0	0.3	5.6	0.3	1584	28.10	1.32
B-BLP-13-27	Vegetation		65.52	0.703	29.80	226.0	12.55	2096	920	5.6	2.3	4818	0.34	1.3	0.1	1.5	0.2	1214	24.06	0.84
B-BLP-13-28	Vegetation		54.46	0.346	112.9	375.9	22.91	3429	1790	27.7	7.0	>10000	0.81	2.1	0.4	8.2	0.5	1216	21.01	1.39
B-BLP-13-29	Vegetation		58.07	0.656	49.44	387.6	38.08	2600	787	22.2	4.5	7052	0.48	1.9	0.2	2.3	0.2	767.8	26.73	3.25

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** **J.A.Chapman Mining Services**  
 18-1480 Foster Street  
 White Rock BC V4B 3X7 Canada

**Project:** BOER  
**Report Date:** October 08, 2013

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**CERTIFICATE OF ANALYSIS****VAN13003533.1**

Method	Analyte	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1
OVEN STD-1	Vegetation	<2	22.20	2.943	1.6	4.4	2.28	307.1	0.012	306	0.14	0.065	9.41	0.4	0.7	0.26	1.12	<5	0.2	0.05	0.9
B-BLP-13-01	Vegetation	12	23.50	1.777	3.2	4.5	2.73	496.3	0.018	356	3.98	0.111	4.03	0.2	1.0	0.23	1.12	<5	1.1	0.10	1.3
B-BLP-13-02	Vegetation	9	28.10	1.504	2.6	4.2	2.22	620.0	0.015	513	4.98	0.153	4.38	0.2	0.9	0.20	0.99	<5	0.7	<0.02	1.0
B-BLP-13-03	Vegetation	10	30.45	1.531	2.9	7.7	2.13	729.1	0.016	333	4.12	0.091	4.03	0.3	1.1	0.21	1.09	<5	0.9	0.07	1.1
B-BLP-13-04	Vegetation	10	31.06	1.286	2.7	3.9	2.73	462.5	0.015	396	2.07	0.120	3.88	0.3	0.8	0.10	1.06	10	0.6	0.07	1.2
B-BLP-13-05	Vegetation	16	29.75	1.746	5.0	5.0	1.43	456.9	0.022	263	3.44	0.092	4.55	0.3	1.2	0.08	1.18	6	1.5	<0.02	1.7
B-BLP-13-06	Vegetation	12	29.78	1.695	3.7	4.3	1.80	426.4	0.017	422	4.54	0.093	3.15	0.2	1.1	0.14	1.00	<5	0.6	<0.02	1.3
B-BLP-13-07	Vegetation	10	30.61	1.546	3.4	3.9	1.66	927.5	0.015	411	3.31	0.157	4.13	0.2	0.7	0.17	0.96	<5	0.7	<0.02	1.1
B-BLP-13-08	Vegetation	13	30.01	1.790	4.7	5.1	2.10	574.1	0.017	396	4.59	0.083	3.50	0.3	1.1	0.44	1.21	<5	1.2	0.03	1.4
B-BLP-13-09	Vegetation	15	24.96	2.308	4.6	5.5	2.33	578.1	0.022	316	7.31	0.117	5.11	0.1	1.1	0.63	1.46	<5	2.4	0.05	1.5
B-BLP-13-10	Vegetation	14	27.06	1.752	4.0	4.6	1.99	597.1	0.021	266	6.83	0.129	3.95	0.3	1.3	0.30	1.08	8	1.4	0.02	1.5
B-BLP-13-11	Vegetation	20	24.23	1.731	4.8	7.2	2.07	661.1	0.028	411	6.33	0.129	4.94	0.2	1.4	0.32	0.94	<5	0.6	0.02	1.8
B-BLP-13-12	Vegetation	14	25.85	2.212	3.6	6.4	2.38	494.9	0.024	740	5.78	0.131	6.10	0.2	1.2	0.11	1.08	<5	1.6	0.04	1.5
B-BLP-13-13	Vegetation	17	28.88	1.654	4.5	6.2	2.26	590.3	0.024	344	2.91	0.098	3.77	0.3	1.4	0.23	1.03	<5	0.9	0.07	1.6
B-BLP-13-14	Vegetation	10	29.33	1.875	2.9	4.2	2.25	315.6	0.018	599	4.37	0.119	3.80	0.2	1.0	0.11	1.14	<5	1.4	0.09	1.3
B-BLP-13-15	Vegetation	11	29.29	1.353	2.5	4.4	2.43	593.2	0.018	586	0.58	0.112	4.37	0.2	1.2	0.09	1.15	<5	1.0	0.09	1.2
B-BLP-13-16	Vegetation	18	27.88	1.866	3.6	6.3	2.60	457.1	0.027	379	0.95	0.143	5.16	0.3	1.5	0.09	1.28	<5	1.8	0.03	2.1
B-BLP-13-17	Vegetation	16	25.66	2.492	4.2	6.6	2.11	456.7	0.027	570	4.87	0.103	5.27	0.3	1.4	0.23	1.18	<5	1.6	0.05	1.8
B-BLP-13-18	Vegetation	16	25.99	2.130	5.8	6.9	1.83	660.3	0.024	429	7.26	0.124	4.46	0.3	1.5	0.32	1.09	<5	1.2	0.08	1.7
B-BLP-13-19	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-20	Vegetation	18	28.74	1.443	5.1	7.2	1.97	707.1	0.023	322	4.22	0.186	3.75	0.2	1.5	0.07	1.10	<5	0.7	<0.02	1.8
B-BLP-13-21	Vegetation	6	32.50	1.585	2.5	3.0	1.62	2160	0.013	212	2.98	0.095	3.32	0.2	0.6	0.19	1.30	10	1.0	0.11	1.3
B-BLP-13-22	Vegetation	<2	33.93	0.372	0.7	0.9	0.61	424.9	0.004	136	0.37	0.045	1.61	<0.1	0.3	0.05	0.36	<5	0.3	0.08	0.4
B-BLP-13-23	Vegetation	7	26.78	0.878	2.6	2.9	1.45	933.8	0.011	110	3.03	0.053	2.17	0.1	0.6	0.23	0.68	<5	0.7	<0.02	0.9
B-BLP-13-24	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-25	Vegetation	22	25.92	1.277	5.2	8.4	1.67	734.2	0.027	394	4.47	0.146	3.05	0.1	1.4	0.16	0.97	<5	1.0	<0.02	2.1
B-BLP-13-26	Vegetation	14	28.93	1.784	3.9	5.6	2.78	683.8	0.018	490	2.20	0.154	4.39	0.3	1.1	<0.02	1.34	<5	1.2	0.07	1.6
B-BLP-13-27	Vegetation	7	28.10	1.180	1.9	3.7	2.40	391.6	0.012	437	1.40	0.120	2.78	0.1	0.7	0.06	0.96	<5	0.8	0.07	0.9
B-BLP-13-28	Vegetation	20	26.29	2.163	5.5	7.9	2.43	678.1	0.027	484	4.73	0.169	5.52	0.2	1.8	0.09	1.36	<5	1.4	0.02	2.2
B-BLP-13-29	Vegetation	11	24.67	1.650	2.9	4.3	2.75	585.5	0.017	331	4.81	0.096	3.27	0.3	1.0	0.14	1.08	<5	1.0	0.03	1.4

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## Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** J A Chapman Mining Services

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 08, 2013

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	Analyte	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
		Rec.	Wt	Ash	Washed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	Cd	
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02
B-BLP-13-30	Vegetation		58.20	0.486	71.84	314.9	27.78	2075	2382	25.1	4.4	5586	0.62	2.2	0.2	3.0	0.2	840.8	18.60	2.15	0.30
B-BLP-13-31	Vegetation		48.27	0.264	69.98	542.6	19.46	3059	3480	20.3	5.9	>10000	0.64	2.2	0.2	2.0	0.3	833.0	18.67	1.13	0.20
B-BLP-13-32	Vegetation		60.33	0.473	44.87	491.8	20.01	2442	2500	27.6	4.2	5989	0.55	2.0	0.1	3.1	0.2	589.6	21.27	1.86	0.30
B-BLP-13-33	Vegetation		61.43	0.462	63.34	353.6	24.03	2881	1986	21.3	4.7	8146	0.67	1.3	0.2	3.1	0.2	1095	26.83	1.74	0.19
B-BLP-13-34	Vegetation		43.93	0.503	90.18	282.5	20.29	1965	709	9.3	2.9	5289	0.47	2.3	0.2	7.8	0.3	1079	19.82	1.66	0.26
B-BLP-13-35	Vegetation		55.70	0.541	71.48	296.2	16.91	1889	1245	15.3	2.9	6757	0.45	1.1	0.2	1.3	0.2	664.5	13.74	1.24	0.17
B-BLP-13-36	Vegetation		60.53	0.410	93.35	426.5	24.49	2012	3214	15.8	4.5	8735	0.76	2.2	0.3	6.2	0.4	938.7	15.59	1.12	0.52
B-BLP-13-37	Vegetation		57.55	0.367	87.49	409.9	27.63	2826	4391	15.4	4.1	>10000	0.69	2.0	0.2	13.7	0.3	1150	20.44	1.92	0.68
B-BLP-13-38	Vegetation		35.28	0.209	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-39	Vegetation		55.36	1.508	26.29	94.63	10.23	2025	223	4.4	4.2	>10000	0.18	0.6	<0.1	1.2	0.1	543.9	52.81	0.80	0.15
B-BLP-13-40	Vegetation		59.31	1.174	42.71	155.2	17.39	2918	337	9.6	5.6	>10000	0.28	1.7	<0.1	3.5	0.1	658.5	55.38	0.92	0.25
B-BLP-13-41	Vegetation		44.86	0.328	101.3	355.0	22.70	2222	1442	16.2	5.1	8221	0.57	1.7	0.2	5.3	0.2	993.3	18.38	0.98	0.25
B-BLP-13-42	Vegetation		44.17	0.432	71.47	222.5	11.18	2262	922	6.2	1.7	6948	0.32	0.7	0.1	1.4	0.2	1133	22.54	0.60	0.18
B-BLP-13-43	Vegetation		48.37	0.373	161.0	453.5	29.20	2551	1809	23.9	7.0	>10000	0.71	2.7	0.3	2.1	0.3	774.5	24.04	1.78	0.35
B-BLP-13-44	Vegetation		53.70	0.697	83.77	239.9	19.61	1311	3174	11.3	2.8	5109	0.50	1.3	0.2	1.9	0.2	724.1	20.88	1.39	0.24
B-BLP-13-45	Vegetation		33.98	0.252	114.7	435.1	16.15	1864	2378	23.1	4.2	9906	0.57	1.3	0.2	3.2	0.2	702.4	13.34	1.26	0.23
B-BLP-13-46	Vegetation		45.20	0.317	117.0	413.3	17.50	2036	867	27.0	5.2	8388	0.53	1.4	0.2	1.9	0.2	841.5	26.96	1.23	0.18
B-BLP-13-47	Vegetation		53.35	0.355	118.7	373.6	25.12	2513	2274	20.3	5.7	>10000	0.64	2.0	0.2	5.5	0.3	759.2	15.42	1.65	0.29
B-BLP-13-48	Vegetation		67.98	0.709	77.20	305.6	19.47	1445	2785	22.9	5.3	4348	1.10	1.7	0.4	3.1	0.5	561.5	14.50	1.87	0.28
B-BLP-13-49	Vegetation		63.74	0.735	73.27	294.9	22.19	1859	1020	22.3	5.9	5996	0.96	1.9	0.3	1.7	0.5	503.3	11.81	1.97	0.26
B-BLP-13-50	Vegetation		59.91	0.728	61.21	287.2	13.78	1597	2322	18.5	5.3	5545	0.72	1.4	0.2	1.8	0.3	549.9	10.53	1.20	0.17
B-BLP-13-51	Vegetation		66.01	0.709	160.3	285.1	34.69	2074	3134	36.4	10.3	5030	0.85	2.2	0.3	2.1	0.4	890.8	22.07	1.51	0.30
B-BLP-13-52	Vegetation		33.63	0.504	107.9	211.9	30.64	1633	2288	24.1	7.1	5891	1.39	2.4	0.5	2.0	0.7	456.6	15.37	1.98	0.38
B-BLP-13-53	Vegetation		38.88	0.435	88.75	284.0	280.3	2411	1615	42.7	8.7	>10000	1.15	2.8	0.5	2.6	0.6	738.8	15.32	2.97	0.35
B-BLP-13-54	Vegetation		54.69	0.511	52.57	307.6	18.99	2023	1767	18.4	6.3	5852	1.12	1.8	0.5	2.1	0.6	702.3	18.08	0.96	0.23
B-BLP-13-55	Vegetation		40.77	0.721	83.59	184.0	26.92	1153	614	23.5	7.7	6148	1.52	2.5	0.7	2.5	0.8	583.7	7.37	1.71	0.31
B-BLP-13-56	Vegetation		64.72	0.940	49.96	266.2	17.02	1404	1454	17.4	5.8	7467	0.94	1.8	0.3	1.1	0.5	424.1	18.02	1.05	0.18
B-BLP-13-57	Vegetation		54.18	0.585	60.75	350.4	29.01	2657	2870	25.7	6.1	7957	0.61	1.9	0.2	0.9	0.3	632.0	13.62	1.47	0.20
B-BLP-13-58	Vegetation		57.86	1.318	27.56	104.0	22.05	2002	330	8.0	4.6	8008	0.27	0.9	<0.1	0.3	0.2	446.9	49.78	0.94	0.11
B-BLP-13-59	Vegetation		59.39	0.445	65.95	461.0	36.48	2393	1468	23.2	5.0	>10000	0.72	1.8	0.3	3.3	0.3	732.9	21.88	1.72	0.20

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

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Part: 2 of 2

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Analyte	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1
B-BLP-13-30	Vegetation	13	29.09	1.609	4.1	4.6	1.79	691.1	0.018	327	6.70	0.157	3.76	0.2	0.9	0.39	1.05	<5	1.4	0.07	1.4
B-BLP-13-31	Vegetation	13	25.45	2.280	3.8	6.5	2.42	549.8	0.024	607	7.11	0.165	5.96	0.2	1.1	0.43	1.34	<5	1.4	0.07	1.6
B-BLP-13-32	Vegetation	10	27.96	1.659	3.3	4.8	1.77	396.7	0.017	370	8.11	0.187	3.94	0.2	0.7	0.41	1.09	<5	0.7	<0.02	1.3
B-BLP-13-33	Vegetation	11	28.38	1.744	3.3	6.9	2.66	436.7	0.018	384	4.29	0.195	4.95	0.2	1.0	0.22	1.28	<5	1.1	0.08	1.3
B-BLP-13-34	Vegetation	11	25.72	1.404	3.2	4.7	2.26	492.8	0.016	336	1.05	0.126	3.70	0.2	1.2	0.09	1.26	<5	1.4	0.03	1.3
B-BLP-13-35	Vegetation	10	30.27	1.425	3.0	4.5	1.25	392.7	0.016	311	3.93	0.126	3.31	0.1	0.9	0.20	0.96	<5	1.4	0.09	1.2
B-BLP-13-36	Vegetation	17	26.11	1.950	4.5	6.9	2.12	588.0	0.024	467	3.77	0.159	4.46	0.2	1.4	0.33	1.20	<5	1.1	<0.02	1.9
B-BLP-13-37	Vegetation	15	24.20	1.819	4.3	6.5	2.52	850.1	0.021	616	4.32	0.276	6.01	0.3	1.3	0.14	1.25	<5	1.2	<0.02	1.8
B-BLP-13-38	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-39	Vegetation	3	27.21	0.638	1.2	1.8	1.05	931.5	0.006	168	1.67	0.066	1.12	<0.1	0.3	0.21	0.53	<5	0.6	<0.02	0.9
B-BLP-13-40	Vegetation	5	32.43	0.852	1.8	2.4	1.11	940.1	0.009	200	2.68	0.082	1.39	0.1	0.4	0.38	0.68	<5	0.9	<0.02	1.0
B-BLP-13-41	Vegetation	12	26.91	1.866	3.9	5.7	1.89	891.1	0.018	557	5.84	0.222	4.55	0.2	1.0	0.30	1.08	<5	1.1	0.04	1.6
B-BLP-13-42	Vegetation	6	31.26	1.298	1.8	3.0	1.72	429.6	0.011	503	1.37	0.142	2.87	0.1	0.6	0.11	0.80	<5	0.5	0.11	0.9
B-BLP-13-43	Vegetation	16	25.90	2.249	4.4	6.2	1.54	820.5	0.024	271	4.02	0.209	4.28	0.3	1.4	0.21	1.23	7	2.2	0.04	2.0
B-BLP-13-44	Vegetation	12	25.04	1.231	3.2	4.1	1.23	424.1	0.016	315	2.71	0.124	2.76	0.2	1.0	0.09	0.93	<5	1.0	0.05	1.3
B-BLP-13-45	Vegetation	11	25.43	2.368	2.8	5.2	2.25	414.0	0.022	456	4.72	0.159	5.49	0.3	1.1	0.11	1.17	<5	1.8	<0.02	1.6
B-BLP-13-46	Vegetation	11	24.17	2.187	3.2	5.5	2.23	580.6	0.021	446	7.42	0.224	5.39	0.2	0.8	0.23	1.01	7	1.7	0.08	1.6
B-BLP-13-47	Vegetation	14	25.17	2.195	3.8	5.5	2.77	717.4	0.022	452	3.98	0.270	6.20	0.2	1.3	0.10	1.21	<5	1.0	0.03	2.1
B-BLP-13-48	Vegetation	27	22.47	1.340	5.7	9.8	1.73	401.5	0.035	321	3.88	0.192	3.76	0.2	1.9	0.14	0.67	<5	1.1	0.02	2.4
B-BLP-13-49	Vegetation	24	18.46	1.286	5.8	7.7	2.06	443.6	0.027	269	4.38	0.217	3.77	0.2	1.8	0.12	0.82	<5	0.9	0.05	2.2
B-BLP-13-50	Vegetation	19	20.51	1.342	4.3	5.8	1.25	361.6	0.025	255	4.36	0.180	5.36	0.2	1.4	0.08	0.81	<5	0.7	<0.02	1.8
B-BLP-13-51	Vegetation	23	19.83	2.121	4.0	6.5	2.62	737.3	0.027	367	2.21	0.188	5.36	0.3	1.7	0.12	0.91	<5	1.1	0.03	2.0
B-BLP-13-52	Vegetation	36	18.25	1.496	7.3	12.4	1.56	451.8	0.036	265	3.38	0.203	2.87	0.3	3.0	0.20	0.91	<5	1.2	<0.02	3.1
B-BLP-13-53	Vegetation	28	22.61	1.863	6.8	10.0	2.90	682.6	0.035	287	4.47	0.243	4.19	0.2	2.2	0.33	1.06	6	1.3	<0.02	2.9
B-BLP-13-54	Vegetation	28	19.18	1.536	7.0	9.5	2.07	547.2	0.033	376	3.65	0.229	4.06	0.3	2.2	0.12	0.91	7	1.0	0.10	2.6
B-BLP-13-55	Vegetation	41	18.14	1.205	10.3	12.1	1.50	576.5	0.041	138	4.58	0.178	2.96	0.2	2.8	0.22	1.00	<5	1.2	0.02	3.6
B-BLP-13-56	Vegetation	25	21.97	1.131	4.8	8.3	1.06	492.1	0.028	245	2.79	0.150	2.46	0.2	2.0	0.24	0.73	<5	0.8	<0.02	2.3
B-BLP-13-57	Vegetation	16	22.21	1.535	4.9	5.6	2.11	531.4	0.019	408	4.80	0.221	4.32	0.2	1.3	0.44	1.02	<5	1.1	<0.02	1.6
B-BLP-13-58	Vegetation	5	34.65	0.529	1.7	2.7	0.91	686.6	0.008	98	1.63	0.047	1.04	0.1	0.6	0.04	0.63	<5	0.6	0.06	1.0
B-BLP-13-59	Vegetation	16	26.90	2.419	4.5	6.7	1.68	727.5	0.024	357	4.73	0.217	5.12	0.2	1.4	0.17	1.19	<5	1.4	<0.02	2.0

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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## Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** J A Chapman Mining Services

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 08, 2013

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## CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	Analyte	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
		Rec.	Wt	Ash	Washed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	Cd	
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02
B-BLP-13-60	Vegetation		58.10	0.405	137.4	331.0	21.85	1950	1109	15.0	3.9	4805	0.68	1.5	0.3	1.6	0.4	772.8	17.56	1.24	0.57
B-BLP-13-61	Vegetation		47.38	0.334	67.78	425.4	28.28	2311	2293	22.7	4.6	7093	0.75	1.2	0.3	1.4	0.3	591.0	8.94	1.00	0.47
B-BLP-13-62	Vegetation		37.76	0.824	28.88	104.4	24.18	2407	270	9.5	3.3	>10000	0.27	2.0	<0.1	0.8	0.2	975.9	43.86	0.98	0.28
B-BLP-13-63	Vegetation		27.53	0.160	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-64	Vegetation		41.92	0.968	16.96	129.1	10.77	1650	123	5.6	1.6	9194	0.17	1.6	<0.1	0.7	0.1	844.5	39.87	0.78	0.17
B-BLP-13-65	Vegetation		41.57	0.873	35.99	118.6	35.50	2444	305	9.5	5.1	>10000	0.33	2.5	0.1	0.8	0.2	633.5	30.80	1.29	0.20
B-BLP-13-66	Vegetation		59.69	1.435	13.20	74.00	9.47	1424	300	4.7	3.4	8831	0.14	1.3	<0.1	0.2	<0.1	429.2	41.66	0.50	0.09
B-BWS-13-01	Vegetation		35.15	1.470	3.82	95.92	2.92	1541	576	3.9	1.5	6067	0.05	0.5	<0.1	<0.2	<0.1	990.5	7.70	0.09	<0.02
B-BWS-13-02	Vegetation		37.84	1.214	8.36	80.51	5.61	1340	346	2.7	1.4	6524	0.01	1.0	<0.1	<0.2	<0.1	1247	2.53	0.27	<0.02
B-BWS-13-03	Vegetation		41.59	1.567	6.74	93.39	4.10	1329	154	3.6	1.5	5938	0.06	0.9	<0.1	<0.2	<0.1	1020	1.43	0.22	<0.02
B-BWS-13-04	Vegetation		49.74	1.741	6.70	71.62	7.89	1396	186	4.5	1.1	5820	0.07	0.8	<0.1	<0.2	<0.1	1500	0.36	0.23	<0.02
B-BWS-13-05	Vegetation		27.31	0.747	13.48	91.04	10.00	863.6	200	3.9	1.4	3593	0.12	0.9	<0.1	0.6	<0.1	603.5	10.49	0.34	0.05
B-BWS-13-06	Vegetation		51.57	0.944	13.20	94.92	50.10	1618	717	5.8	3.2	>10000	0.53	1.7	0.2	1.8	0.5	557.0	4.55	0.45	1.32
B-BWS-13-07	Vegetation		40.47	1.311	13.19	144.7	47.64	2818	926	11.7	2.6	>10000	0.27	0.9	0.1	2.2	0.3	1278	14.09	0.44	0.56
B-BWS-13-08	Vegetation		49.91	1.943	5.81	126.2	6.15	1389	541	4.8	2.2	9116	0.08	0.6	<0.1	0.9	<0.1	994.6	5.25	0.18	0.04
B-BWS-13-09	Vegetation		48.43	1.940	5.56	74.14	4.30	1455	235	2.3	0.7	4025	0.06	0.9	<0.1	0.2	<0.1	874.5	0.33	0.14	0.21
B-BWS-13-10	Vegetation		45.10	1.903	4.86	76.77	4.12	922.6	334	1.4	0.4	1731	0.06	1.2	<0.1	0.8	<0.1	5488	0.42	0.18	0.17
B-BWS-13-11	Vegetation		41.52	1.853	6.83	95.24	4.00	1709	411	3.5	0.4	1539	0.07	0.4	<0.1	0.9	<0.1	3067	0.29	0.19	0.13
B-BWS-13-12	Vegetation		50.51	2.373	4.12	81.88	24.69	1346	1907	5.7	1.2	7044	0.11	0.4	<0.1	0.7	0.2	1351	4.03	0.17	0.11
B-BWS-13-13	Vegetation		31.98	1.461	5.26	56.59	6.46	1465	1368	5.2	1.6	6840	0.08	1.1	<0.1	1.0	<0.1	1358	9.30	0.15	0.06
B-BWS-13-14	Vegetation		28.41	0.817	11.56	82.20	12.51	2639	574	5.4	1.9	8575	0.17	1.4	<0.1	0.6	<0.1	1251	195.0	0.21	0.09
B-BWS-13-15	Vegetation		43.31	1.336	7.57	125.1	5.14	1764	911	3.3	0.7	4298	0.07	1.3	<0.1	0.6	<0.1	1369	10.05	0.21	<0.02
B-BWS-13-16	Vegetation		43.16	2.316	3.28	57.04	3.24	1676	317	2.6	1.3	5178	0.08	0.7	<0.1	0.4	<0.1	1169	0.71	0.12	<0.02
B-BWS-13-17	Vegetation		54.45	2.154	4.28	94.65	3.01	1427	487	3.1	0.9	3150	0.05	0.7	<0.1	0.3	<0.1	1295	0.32	0.15	<0.02
B-BWS-13-18	Vegetation		54.95	2.019	7.47	111.3	4.40	2117	380	4.6	0.5	3337	0.08	0.8	<0.1	0.5	<0.1	2037	0.87	0.33	0.02
B-BWS-13-19	Vegetation		56.36	1.861	6.79	95.76	4.57	2657	396	5.8	1.4	7149	0.09	1.5	<0.1	0.6	<0.1	1205	0.59	0.22	<0.02
B-BWS-13-20	Vegetation		45.72	1.673	5.69	75.45	2.46	1638	121	4.2	2.1	6831	0.07	0.8	<0.1	0.6	<0.1	1528	0.22	0.15	<0.02
B-BWS-13-21	Vegetation		57.01	2.042	3.68	75.00	2.40	1703	431	4.0	2.8	7391	0.05	0.9	<0.1	<0.2	<0.1	1184	14.90	0.15	<0.02

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 CanadaProject: BOER  
Report Date: October 08, 2013

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**CERTIFICATE OF ANALYSIS****VAN13003533.1**

Method	Analyte	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1
B-BLP-13-60	Vegetation	15	25.63	1.653	4.0	6.5	1.47	629.0	0.024	327	3.14	0.174	3.74	0.3	1.3	0.25	1.20	<5	1.4	0.06	1.6
B-BLP-13-61	Vegetation	16	25.69	2.086	4.5	5.3	2.09	566.0	0.023	444	4.00	0.113	5.40	0.3	1.2	0.34	1.44	8	2.1	0.02	1.9
B-BLP-13-62	Vegetation	5	31.51	0.992	1.6	3.0	1.26	753.7	0.010	180	3.40	0.041	2.12	0.1	0.5	0.36	0.86	<5	1.0	0.04	1.2
B-BLP-13-63	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
B-BLP-13-64	Vegetation	3	34.94	0.694	1.2	2.1	0.80	1013	0.006	172	1.57	0.059	1.69	<0.1	0.3	0.09	0.78	6	0.5	0.09	0.8
B-BLP-13-65	Vegetation	6	32.80	0.902	2.3	3.4	1.15	1212	0.012	175	2.33	0.070	1.90	0.2	0.7	0.21	0.96	<5	1.0	<0.02	1.3
B-BLP-13-66	Vegetation	2	29.84	0.397	0.7	1.2	0.84	506.8	0.004	180	1.99	0.071	1.31	<0.1	0.2	0.17	0.54	<5	0.3	0.05	0.6
B-BWS-13-01	Vegetation	<2	32.78	0.330	<0.5	<0.5	0.51	456.1	0.002	153	0.16	0.035	2.23	<0.1	0.2	0.15	0.36	7	0.4	0.04	0.4
B-BWS-13-02	Vegetation	<2	32.44	0.454	0.8	0.7	0.49	356.6	0.004	164	0.18	0.056	2.33	<0.1	0.3	0.17	0.47	6	0.4	0.07	0.5
B-BWS-13-03	Vegetation	<2	30.48	0.395	<0.5	0.5	0.52	433.7	0.003	131	0.24	0.086	4.66	<0.1	0.2	0.15	0.46	<5	0.2	0.10	0.4
B-BWS-13-04	Vegetation	<2	31.03	0.380	0.6	0.6	0.65	820.2	0.003	198	0.41	0.065	2.11	<0.1	0.2	0.07	0.31	<5	0.3	0.09	0.4
B-BWS-13-05	Vegetation	2	31.58	0.614	0.8	0.9	0.96	494.2	0.005	268	0.79	0.080	2.08	<0.1	0.3	0.16	0.67	<5	0.3	0.05	0.4
B-BWS-13-06	Vegetation	7	17.64	0.536	2.2	2.3	0.54	277.3	0.009	133	0.33	0.030	1.49	0.1	0.7	0.22	0.28	6	<0.1	0.28	1.1
B-BWS-13-07	Vegetation	4	30.69	0.822	2.0	1.9	0.58	307.4	0.008	162	0.24	0.055	2.13	0.1	0.4	0.19	0.50	<5	0.3	0.20	0.8
B-BWS-13-08	Vegetation	<2	31.63	0.424	<0.5	0.7	0.57	421.5	0.003	183	0.16	0.053	2.93	<0.1	0.2	0.08	0.53	<5	0.1	0.05	0.5
B-BWS-13-09	Vegetation	<2	31.61	0.413	<0.5	0.7	0.70	491.1	0.003	190	0.06	0.048	3.32	<0.1	0.1	<0.02	0.55	<5	<0.1	<0.02	0.2
B-BWS-13-10	Vegetation	<2	32.01	0.325	<0.5	0.7	0.35	467.8	0.003	178	0.04	0.046	2.31	<0.1	<0.1	0.04	0.33	<5	0.1	0.33	0.2
B-BWS-13-11	Vegetation	<2	32.08	0.345	<0.5	0.7	0.45	423.9	0.003	152	0.05	0.032	2.43	<0.1	0.1	0.06	0.41	<5	0.2	0.16	0.2
B-BWS-13-12	Vegetation	<2	32.88	0.355	0.9	0.7	0.48	906.4	0.003	128	0.23	0.043	1.65	<0.1	0.2	0.35	0.32	<5	<0.1	0.08	0.5
B-BWS-13-13	Vegetation	<2	33.06	0.344	0.6	0.8	0.45	499.2	0.003	127	0.35	0.035	1.38	<0.1	<0.1	0.07	0.34	<5	0.2	0.05	0.4
B-BWS-13-14	Vegetation	3	30.41	0.499	1.0	1.5	0.91	432.6	0.006	218	0.20	0.023	1.09	<0.1	0.3	0.13	0.35	<5	0.3	0.04	0.7
B-BWS-13-15	Vegetation	<2	32.28	0.588	<0.5	0.7	0.51	305.6	0.003	179	0.11	0.058	2.81	<0.1	0.1	<0.02	0.45	<5	0.4	0.08	0.4
B-BWS-13-16	Vegetation	<2	33.05	0.295	0.5	0.8	0.47	773.1	0.003	161	0.10	0.033	1.84	<0.1	0.2	0.05	0.38	<5	<0.1	0.09	0.4
B-BWS-13-17	Vegetation	<2	33.25	0.416	<0.5	0.6	0.49	388.0	0.003	142	0.08	0.051	2.34	<0.1	<0.1	0.19	0.42	<5	0.2	0.04	0.3
B-BWS-13-18	Vegetation	<2	32.86	0.446	<0.5	0.8	0.45	363.1	0.004	182	0.07	0.063	2.66	<0.1	0.2	0.07	0.39	<5	0.2	0.17	0.3
B-BWS-13-19	Vegetation	<2	32.12	0.600	0.5	1.0	0.47	724.1	0.004	173	0.25	0.062	3.37	<0.1	0.2	0.12	0.58	<5	0.4	0.02	0.6
B-BWS-13-20	Vegetation	<2	32.14	0.518	0.6	0.8	0.77	956.2	0.003	196	0.30	0.068	2.42	<0.1	0.1	<0.02	0.49	<5	0.3	0.04	0.4
B-BWS-13-21	Vegetation	<2	33.08	0.301	<0.5	0.5	0.50	392.2	0.002	144	0.06	0.050	1.80	<0.1	<0.1	0.06	0.44	<5	0.3	0.05	0.4



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: October 08, 2013

Page: 1 of 1

Part: 1 of 2

**QUALITY CONTROL REPORT****VAN13003533.1**

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
	Rec. Wt	Wt	Ash	Washed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
	Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02
Pulp Duplicates																					
B-BLP-13-11	Vegetation	67.21	0.587	83.75	377.3	20.15	2399	1580	27.8	6.1	7435	0.87	1.7	0.2	3.1	0.4	896.4	12.49	0.96	0.18	
REP B-BLP-13-11	QC			82.67	369.1	19.13	2487	1480	29.7	7.2	7556	0.85	1.6	0.2	5.8	0.4	918.1	12.80	0.90	0.22	
B-BLP-13-39	Vegetation	55.36	1.508	26.29	94.63	10.23	2025	223	4.4	4.2	>10000	0.18	0.6	<0.1	1.2	0.1	543.9	52.81	0.80	0.15	
REP B-BLP-13-39	QC			27.42	94.65	10.30	2080	222	4.1	4.2	>10000	0.18	0.9	<0.1	1.7	0.1	574.0	54.87	0.80	0.23	
B-BWS-13-08	Vegetation	49.91	1.943	5.81	126.2	6.15	1389	541	4.8	2.2	9116	0.08	0.6	<0.1	0.9	<0.1	994.6	5.25	0.18	0.04	
REP B-BWS-13-08	QC			5.40	123.8	5.98	1424	497	4.7	2.4	9386	0.08	0.9	<0.1	0.6	<0.1	977.1	4.97	0.17	0.03	
Reference Materials																					
STD DS9	Standard			13.96	110.5	127.2	319.5	1709	39.8	7.3	626	2.40	26.5	2.6	103.8	6.1	76.4	2.45	5.30	5.23	
STD DS9	Standard			11.35	104.4	122.1	308.2	1715	39.2	7.1	571	2.29	26.4	2.7	107.9	5.5	66.8	2.49	4.74	5.57	
STD DS9	Standard			12.16	108.4	125.4	334.9	1786	38.8	7.5	609	2.46	26.7	2.6	97.4	6.1	71.9	2.37	4.63	5.37	
STD OREAS45EA	Standard			1.41	702.5	15.26	27.8	302	396.5	49.6	413	25.44	10.3	1.8	57.4	11.2	4.7	0.03	0.17	0.33	
STD OREAS45EA	Standard			1.30	662.4	14.28	27.6	247	373.8	46.8	392	23.71	8.9	1.7	54.6	10.3	4.3	0.03	0.15	0.20	
STD OREAS45EA	Standard			1.40	674.0	14.57	31.4	254	373.5	49.1	417	23.83	10.5	1.8	52.6	10.8	6.1	0.03	0.19	0.25	
STD DS9 Expected				12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	
STD OREAS45EA Expected				1.39	709	14.3	28.9	260	381	52	400	23.51	9.1	1.73	53	10.7	3.5	0.02	0.2	0.26	
BLK	Blank			<0.01	0.02	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	
BLK	Blank			<0.01	0.03	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	0.6	<0.01	<0.02	<0.02	
BLK	Blank			<0.01	0.13	0.02	1.5	<2	<0.1	<0.1	4	<0.01	0.1	<0.1	<0.2	<0.1	5.4	<0.01	<0.02	<0.02	



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: October 08, 2013

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Part: 2 of 2

**QUALITY CONTROL REPORT****VAN13003533.1**

Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1		
Pulp Duplicates																					
B-BLP-13-11	Vegetation	20	24.23	1.731	4.8	7.2	2.07	661.1	0.028	411	6.33	0.129	4.94	0.2	1.4	0.32	0.94	<5	0.6	0.02	1.8
REP B-BLP-13-11	QC	20	24.41	1.814	4.5	6.6	2.10	689.6	0.027	478	6.56	0.124	5.01	0.1	1.2	0.32	0.97	<5	1.3	0.07	1.8
B-BLP-13-39	Vegetation	3	27.21	0.638	1.2	1.8	1.05	931.5	0.006	168	1.67	0.066	1.12	<0.1	0.3	0.21	0.53	<5	0.6	<0.02	0.9
REP B-BLP-13-39	QC	3	28.18	0.626	1.3	1.8	1.07	943.4	0.006	167	1.70	0.064	1.12	0.1	0.3	0.24	0.55	<5	0.8	0.02	0.9
B-BWS-13-08	Vegetation	<2	31.63	0.424	<0.5	0.7	0.57	421.5	0.003	183	0.16	0.053	2.93	<0.1	0.2	0.08	0.53	<5	0.1	0.05	0.5
REP B-BWS-13-08	QC	<2	31.86	0.412	<0.5	0.6	0.58	356.9	0.003	196	0.15	0.051	2.90	<0.1	<0.1	0.08	0.53	<5	<0.1	0.04	0.4
Reference Materials																					
STD DS9	Standard	41	0.70	0.084	13.2	116.0	0.62	312.3	0.112	<20	0.96	0.087	0.39	2.5	2.3	5.16	0.17	188	5.4	5.02	4.7
STD DS9	Standard	38	0.63	0.084	10.5	109.4	0.59	312.5	0.099	<20	0.89	0.078	0.38	2.8	2.1	5.11	0.17	197	5.1	4.97	4.2
STD DS9	Standard	42	0.65	0.085	12.9	117.0	0.63	319.1	0.108	<20	0.99	0.090	0.41	2.6	2.2	5.07	0.18	173	5.4	5.26	4.7
STD OREAS45EA	Standard	304	0.05	0.028	6.9	758.3	0.10	143.1	0.090	<20	3.28	0.024	0.05	<0.1	81.9	<0.02	0.04	10	0.6	0.07	12.3
STD OREAS45EA	Standard	285	0.08	0.028	6.5	761.3	0.09	133.7	0.088	<20	3.11	0.023	0.05	<0.1	81.2	<0.02	0.04	13	0.7	0.09	11.3
STD OREAS45EA	Standard	286	0.07	0.030	6.8	801.4	0.10	153.0	0.090	<20	3.15	0.023	0.06	<0.1	82.2	<0.02	0.04	12	0.7	0.06	12.5
STD DS9 Expected		40	0.7201	0.0819	13.3	121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59
STD OREAS45EA Expected		303	0.036	0.029	6.57	849	0.095	148	0.0875		3.13	0.02	0.053		78	0.072	0.036	10	0.63	0.07	11.7
BLK	Blank	<2	0.02	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	0.04	<0.1
BLK	Blank	<2	0.02	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
BLK	Blank	<2	0.06	<0.001	<0.5	<0.5	<0.01	9.2	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1



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Acme Analytical Laboratories (Vancouver) Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: Kluskus North Contracting Ltd  
PO Box 111  
Fort Fraser BC V0J 1N0 CANADA

Submitted By: Jon Rempel  
Receiving Lab: Canada-Vancouver  
Received: October 29, 2013  
Report Date: November 22, 2013  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13004599.1

### CLIENT JOB INFORMATION

Project: Copper Tree  
Shipment ID:  
P.O. Number  
Number of Samples: 15

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	15	Vegetation Ashing at 475	15		VAN
Split Ash from VA475	15	Analysis sample split/packet			VAN
1F01	15	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Kluskus North Contracting Ltd  
PO Box 111  
Fort Fraser BC V0J 1N0  
CANADA

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** Kluskus North Contracting Ltd

Klusas North Contracting  
PO Box 111  
Fort Fraser BC V0J 1N0 CANADA

Project: Copper Tree  
Report Date: November 22, 2013

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13004599.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
	Rec.	Wt	Ash	Washed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb
Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm
MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	0.02
CT-1	Vegetation	68.151	0.781	69.09	288.84	28.90	2302.9	3242	16.2	7.7	4613	0.63	1.7	0.2	15.8	0.4	961.8	11.59	1.53	0.16	
CT-2	Vegetation	68.291	0.856	144.60	229.42	45.33	1266.3	1033	23.2	14.2	4535	0.90	2.4	0.4	9.0	0.6	701.2	11.35	2.75	0.37	
CT-3	Vegetation	70.579	0.905	90.48	202.38	33.26	1516.0	1730	14.6	6.8	3559	0.75	1.6	0.3	14.0	0.4	1232.1	15.25	1.61	0.19	
CT-4	Vegetation	70.765	0.800	123.47	262.36	40.66	2511.4	3959	28.4	8.2	7236	1.01	2.1	0.3	26.5	0.6	989.3	13.11	2.28	0.33	
CT-5	Vegetation	70.948	0.893	143.82	303.87	32.02	1810.6	2741	30.4	6.0	5785	0.80	1.7	0.3	11.1	0.4	872.5	14.87	1.61	0.27	
CT-6	Vegetation	69.757	0.882	102.41	258.78	37.68	1801.1	725	19.9	5.9	4506	0.73	1.8	0.3	7.4	0.4	749.2	25.70	2.07	0.25	
CT-7	Vegetation	66.134	0.789	115.54	203.33	29.94	1889.3	4314	27.8	5.7	6223	0.63	1.5	0.2	17.9	0.4	980.5	12.36	1.30	0.19	
CT-8	Vegetation	70.786	0.717	192.43	318.32	54.65	1327.1	1929	17.8	6.7	4544	0.79	2.5	0.3	20.7	0.4	543.8	12.86	2.52	0.40	
CT-9	Vegetation	70.125	0.931	111.43	363.93	41.54	1881.4	1382	15.2	4.1	4285	0.63	1.3	0.2	6.4	0.3	889.0	23.79	2.12	0.28	
CT-10	Vegetation	70.214	0.866	176.60	266.99	65.23	1806.8	3841	33.2	5.0	4254	0.80	2.4	0.3	7.5	0.4	760.5	21.30	3.42	0.44	
CT-11	Vegetation	70.165	0.833	110.39	272.66	31.58	1695.6	1325	11.5	4.4	2869	0.67	1.6	0.2	9.0	0.3	626.1	18.03	1.95	0.28	
CT-12	Vegetation	68.028	0.912	117.80	234.83	37.36	1627.3	906	6.6	4.4	2538	0.55	1.9	0.2	18.8	0.3	402.1	9.36	2.15	0.26	
CT-13	Vegetation	70.165	0.723	184.79	302.36	71.88	2379.7	1907	17.1	6.3	4414	0.99	2.6	0.4	13.3	0.6	518.1	13.25	3.61	0.47	
CT-14	Vegetation	70.972	0.802	169.87	245.37	36.91	1927.5	1796	31.7	9.5	7661	0.73	1.8	0.3	8.9	0.4	476.2	10.60	2.52	0.37	
OVEN STD-1	Vegetation	18.790	0.537	0.18	39.10	7.48	1540.3	951	11.0	0.9 >10000	0.13	2.4	2.0	1.2	0.8	576.7	0.24	0.43	0.11		



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **Kluskus North Contracting Ltd**

PO Box 111

Fort Fraser BC V0J 1N0 CANADA

Project: Copper Tree

Report Date: November 22, 2013

Page: 2 of 2

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN13004599.1

Method	Analyte	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1
CT-1	Vegetation	16	22.04	1.435	4.2	6.5	2.63	475.5	0.016	755	4.54	0.175	5.64	0.2	1.2	0.10	1.05	<5	0.5	<0.02	1.4
CT-2	Vegetation	27	23.56	1.588	5.7	8.3	2.37	376.6	0.024	301	1.40	0.144	4.26	0.4	2.4	0.10	1.26	<5	1.0	<0.02	2.1
CT-3	Vegetation	20	22.52	1.544	4.1	8.7	2.21	363.0	0.022	372	1.24	0.196	7.43	0.3	1.8	0.14	0.91	<5	0.4	<0.02	2.1
CT-4	Vegetation	28	19.75	1.679	5.9	10.4	2.74	423.9	0.026	418	3.17	0.170	4.81	0.3	2.3	0.16	1.06	<5	0.8	<0.02	2.4
CT-5	Vegetation	20	23.35	2.142	4.4	7.6	1.65	411.3	0.022	478	3.09	0.109	3.92	0.2	1.9	0.16	1.06	<5	1.1	<0.02	1.7
CT-6	Vegetation	20	24.26	1.530	4.8	7.9	1.63	323.3	0.020	224	3.37	0.126	3.92	0.3	1.8	0.11	0.99	<5	1.0	<0.02	1.8
CT-7	Vegetation	16	21.79	4.062	3.9	6.4	2.75	689.4	0.020	560	3.20	0.116	7.95	0.4	1.4	0.14	1.20	<5	0.8	0.06	1.8
CT-8	Vegetation	20	22.29	2.509	4.4	8.7	2.16	351.2	0.022	355	2.08	0.174	7.80	0.3	2.1	0.11	1.21	<5	1.1	<0.02	2.3
CT-9	Vegetation	15	26.28	1.367	2.9	6.5	1.46	384.5	0.017	325	1.76	0.102	3.18	0.2	1.7	0.13	0.90	<5	1.3	<0.02	1.3
CT-10	Vegetation	22	22.04	1.685	4.5	10.1	2.15	358.4	0.024	269	3.54	0.103	3.77	0.4	2.3	0.16	1.00	<5	1.2	<0.02	2.4
CT-11	Vegetation	16	23.92	1.626	2.8	8.4	2.22	323.7	0.020	277	0.71	0.153	4.50	0.3	1.7	0.08	0.99	<5	0.9	<0.02	1.7
CT-12	Vegetation	14	26.27	1.549	2.9	6.3	1.57	343.0	0.018	377	0.49	0.175	4.80	0.4	1.5	0.10	0.95	5	0.7	0.02	1.5
CT-13	Vegetation	25	19.29	2.881	4.5	9.6	3.05	417.2	0.027	229	1.05	0.195	8.44	0.4	2.5	0.17	1.36	<5	1.1	<0.02	2.8
CT-14	Vegetation	19	20.69	2.277	5.0	7.7	2.18	480.4	0.022	286	4.43	0.101	4.90	0.4	1.6	0.18	1.03	<5	1.1	0.05	2.1
OVEN STD-1	Vegetation	<2	21.36	2.948	1.4	4.5	2.38	1142.5	0.010	405	0.12	0.213	>10	0.4	1.7	0.09	1.32	<5	0.3	<0.02	2.6



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:**

Kluskus North Contracting Ltd

PO Box 11

Fort Fraser BC V0J 1N0 CANADA

Project: Copper Tree

Report Date: November 22 2013

Page: 1 of 1

Part: 1 of 2

## QUALITY CONTROL REPORT

VAN13004599.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
	Analyte	Rec.	Wt	Ash	Wt	shed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
	Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	0.1	0.01	0.1	0.1	0.2	0.1	0.1	0.5	0.01	0.02	0.02	0.02	
Pulp Duplicates																								
OVEN STD-1	Vegetation Pu	18.790	0.537	0.18	39.10	7.48	1540.3	951	11.0	0.9	>10000	0.13	2.4	2.0	1.2	0.8	576.7	0.24	0.43	0.11				
REP OVEN STD-1	QC			0.19	40.47	7.45	1545.5	1000	12.5	1.1	>10000	0.14	2.5	2.0	0.8	0.8	596.6	0.19	0.37	0.09				
Reference Materials																								
STD DS10	Standard			15.17	161.79	155.34	392.3	2119	81.4	14.0	921	2.83	46.8	2.9	65.9	7.8	70.4	2.78	7.20	10.41				
STD OREAS45EA	Standard			1.17	683.77	12.84	25.7	236	392.7	46.1	411	21.61	8.2	1.5	46.2	8.9	3.3	<0.01	0.12	0.28				
STD DS10 Expected				14.69	154.61	150.55	352.9	1960	74.6	12.9	861	2.7188	43.7	2.59	91.9	7.5	67.1	2.48	9.51	11.65				
STD OREAS45EA Expected				1.39	709	14.3	28.9	260	381	52	400	23.51	9.1	1.73	53	10.7	3.5	0.02	0.2	0.26				
BLK	Blank			<0.01	0.04	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02				



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client:

**Kluskus North Contracting Ltd**

PO Box 111

Fort Fraser BC V0J 1N0 CANADA

Project:

Copper Tree

Report Date:

November 22, 2013

Page:

1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN13004599.1

Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	
Pulp Duplicates																					
OVEN STD-1	Vegetation Pu	<2	21.36	2.948	1.4	4.5	2.38	1142.5	0.010	405	0.12	0.213	>10	0.4	1.7	0.09	1.32	<5	0.3	<0.02	2.6
REP OVEN STD-1	QC	<2	21.19	3.167	1.6	5.4	2.36	1143.3	0.010	426	0.13	0.214	>10	0.5	2.0	0.07	1.33	<5	0.5	<0.02	3.1
Reference Materials																					
STD DS10	Standard	45	1.11	0.080	17.5	57.2	0.82	432.9	0.072	21	1.07	0.070	0.35	2.3	3.1	5.39	0.29	281	2.3	5.36	4.7
STD OREAS45EA	Standard	305	0.03	0.025	5.7	756.3	0.08	126.2	0.073	<20	3.16	0.023	0.05	<0.1	66.2	0.05	0.04	5	0.4	0.05	10.4
STD DS10 Expected		43	1.0355	0.073	17.5	54.6	0.7651	349	0.0817		1.0259	0.0638	0.3245	3.34	2.8	4.79	0.2743	289	2.3	4.89	4.3
STD OREAS45EA Expected		303	0.036	0.029	6.57	849	0.095	148	0.0875		3.13	0.02	0.053	78	0.072	0.036	10	0.63	0.07	11.7	
BLK	Blank	<2	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1



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Acme Analytical Laboratories (Vancouver) Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Submitted By: John A. Chapman  
Receiving Lab: Canada-Vancouver  
Received: November 08, 2013  
Report Date: December 06, 2013  
Page: 1 of 4

## CERTIFICATE OF ANALYSIS

VAN13004744.1

### CLIENT JOB INFORMATION

Project: BOER  
Shipment ID:  
P.O. Number  
Number of Samples: 79

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	79	Vegetation Ashing at 475	15		VAN
Split Ash from VA475	79	Analysis sample split/packet			VAN
1F01	79	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: J.A.Chapman Mining Services  
18-1480 Foster Street  
White Rock BC V4B 3X7  
Canada

CC: Gerald G. Carlson



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

Page: 2 of 4

Part: 1 of 2

**CERTIFICATE OF ANALYSIS****VAN13004744.1**

Analyte	Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Rec. Wt	Wt	Ash	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.05	0.2	0.1	0.5	0.01	0.02	0.02
PH2B01	Vegetation		41.866	0.419	86.96	322.96	35.06	1514.7	983	17.0	3.5	3350	0.93	3.5	0.49	71.1	0.5	741.5	25.04	2.99	0.35	
PH2B02	Vegetation		74.125	0.781	61.01	254.57	13.86	1346.1	1284	10.0	2.0	6571	0.52	<0.1	0.19	35.8	0.3	1060.3	34.91	0.65	0.16	
PH2B03	Vegetation		73.992	1.759	44.18	119.16	15.10	1792.1	213	6.6	3.2	5326	0.27	1.5	0.13	6.1	0.2	894.0	38.40	0.91	0.18	
PH2B04	Vegetation		86.681	1.675	29.25	94.63	10.42	2420.9	234	6.8	2.4	>10000	0.16	0.8	0.07	4.1	0.2	769.6	48.85	0.55	0.07	
PH2B05	Vegetation		67.079	1.381	25.03	118.59	17.89	2229.1	326	8.6	1.6	6061	0.24	0.7	0.14	8.9	0.2	1373.3	57.08	1.16	0.10	
PH2B06	Vegetation		64.713	1.400	24.31	142.87	20.58	1626.9	884	9.2	2.9	6316	0.36	0.6	0.16	5.1	0.3	876.3	40.26	1.15	0.12	
PH2B07	Vegetation		76.651	1.843	13.48	89.34	8.44	1689.7	435	8.6	2.1	9097	0.19	0.6	0.08	7.6	0.1	727.2	25.54	0.49	0.05	
PH2B08	Vegetation		90.449	1.543	42.31	159.25	25.95	1474.6	469	16.7	4.6	>10000	0.38	2.1	0.17	5.1	0.2	682.8	13.94	1.28	0.13	
PH2B09	Vegetation		67.396	1.673	34.91	118.33	24.85	2444.5	661	16.3	5.7	>10000	0.31	0.9	0.13	2.6	0.2	652.2	26.24	1.03	0.08	
PH2B10	Vegetation		84.186	1.893	26.37	112.66	10.95	1244.3	379	7.3	2.0	8286	0.22	0.6	0.12	2.8	0.1	624.5	18.75	0.64	0.06	
PH2B11	Vegetation		87.549	2.686	15.76	72.82	11.93	1088.3	464	5.4	2.1	4156	0.29	0.6	0.19	3.7	0.3	477.1	18.10	0.65	0.08	
PH2B12	Vegetation		64.105	1.394	42.23	117.24	15.66	1665.6	361	7.8	2.7	5103	0.48	1.2	0.28	6.3	0.4	747.4	24.23	0.77	0.13	
PH2B13	Vegetation		42.519	0.679	64.90	265.19	22.54	2387.8	1127	33.7	5.5	>10000	1.35	1.7	0.26	9.5	0.4	427.2	10.05	1.24	0.23	
PH2B14	Vegetation		65.966	1.387	37.02	111.75	13.74	2437.7	1786	12.7	5.0	>10000	0.29	1.7	0.11	3.6	0.2	601.5	26.07	0.69	0.07	
PH2B15	Vegetation		78.004	1.327	24.60	124.50	15.72	2862.2	671	12.1	4.7	>10000	0.22	0.9	0.08	6.5	0.2	667.4	40.25	0.69	0.06	
PH2B16	Vegetation		64.313	1.581	18.58	104.22	23.98	2486.9	267	14.9	5.1	8297	0.41	1.6	0.14	2.3	0.3	593.1	18.95	0.99	0.10	
PH2B17	Vegetation		71.718	1.696	33.60	151.31	24.44	1858.1	259	7.0	2.0	8864	0.34	1.3	0.12	2.7	0.2	649.4	27.45	1.25	0.12	
PH2B18	Vegetation		76.652	0.511	90.35	461.94	24.11	2440.8	3832	29.2	5.9	>10000	0.74	4.7	0.28	20.7	0.3	536.7	18.92	1.49	0.23	
PH2B19	Vegetation		40.536	0.774	64.59	374.10	17.24	1552.9	1932	27.2	3.5	7666	0.70	2.7	0.20	19.4	0.3	769.5	16.19	0.85	0.16	
PH2B20	Vegetation		78.645	1.242	34.10	191.01	16.16	2677.1	948	20.2	3.8	9555	0.41	1.8	0.11	4.6	0.2	569.2	15.57	1.07	0.10	
PH2B21	Vegetation		94.822	0.848	78.58	265.61	19.50	2693.8	1276	39.2	6.9	>10000	0.83	1.4	0.23	8.4	0.2	682.1	8.15	0.92	0.20	
PH2B22	Vegetation		84.308	1.685	28.64	154.73	26.75	1542.5	10590	16.0	4.0	7492	0.54	1.9	0.15	6.1	0.2	603.1	8.55	1.30	0.11	
PH2B23	Vegetation		79.915	1.597	17.79	107.28	13.97	1618.0	4955	13.2	4.9	>10000	0.51	2.0	0.09	2.7	1.0	631.6	16.02	0.74	0.06	
PH2B24	Vegetation		75.010	1.669	11.98	155.17	9.99	1850.6	1856	22.5	6.5	7580	0.24	1.0	<0.05	5.8	<0.1	780.4	21.62	0.54	0.03	
PH2B25	Vegetation		74.324	1.461	31.00	105.64	22.55	2254.0	1735	16.7	6.5	>10000	0.43	1.7	0.13	3.4	0.2	756.4	8.48	0.98	0.08	
PH2B26	Vegetation		81.556	0.891	123.75	226.39	19.22	2219.4	1322	28.9	8.3	8160	1.10	1.7	0.36	9.0	0.4	601.9	14.53	1.09	0.25	
PH2B27	Vegetation		89.120	1.264	56.18	223.13	16.96	1420.9	405	16.8	5.2	8023	0.82	2.0	0.23	5.3	0.3	761.2	8.56	0.85	0.14	
PH2B28	Vegetation		95.703	0.996	79.07	202.90	13.63	1139.2	724	27.6	3.7	5378	0.72	1.5	0.17	7.5	0.3	718.3	17.13	0.55	0.13	
PH2B29	Vegetation		92.258	0.655	54.78	345.83	15.40	1425.8	1612	17.2	5.9	5672	1.38	3.2	0.27	10.1	0.5	1213.7	6.05	0.64	0.15	
PH2B30	Vegetation		94.660	1.581	28.76	184.76	26.30	2090.4	2286	25.1	4.5	>10000	0.48	2.3	0.11	3.7	0.2	907.7	25.19	1.04	0.10	

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: December 06, 2013

Page: 2 of 4

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN13004744.1

Analyte	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.05	0.1	0.02	0.02	5	0.1	0.02
PH2B01	Vegetation	17	24.55	2.164	4.3	15.1	1.57	573.1	0.023	331	0.69	0.143	6.19	0.96	1.5	0.06	1.83	29	1.0	0.07	1.7
PH2B02	Vegetation	9	28.03	1.536	2.5	5.5	1.97	406.7	0.016	422	0.75	0.086	3.95	0.16	1.1	<0.02	1.12	7	0.4	0.03	1.6
PH2B03	Vegetation	5	31.78	0.707	1.8	2.7	0.76	682.3	0.008	138	1.12	0.062	1.79	0.14	0.5	0.04	0.82	<5	<0.1	0.06	0.8
PH2B04	Vegetation	3	32.78	0.578	0.9	1.7	1.59	668.0	0.005	213	0.82	0.082	2.46	0.10	0.3	0.02	0.83	9	0.4	<0.02	1.0
PH2B05	Vegetation	5	32.28	0.636	1.6	3.2	1.88	455.5	0.008	167	0.44	0.071	2.31	0.12	0.5	<0.02	0.92	10	0.6	0.04	0.9
PH2B06	Vegetation	7	29.83	1.015	2.4	3.6	1.01	158.4	0.010	151	2.86	0.078	2.68	0.23	0.8	0.04	1.18	11	0.8	0.05	1.2
PH2B07	Vegetation	4	31.16	0.603	1.0	2.1	1.21	713.8	0.006	145	2.40	0.059	2.70	0.82	0.3	0.09	0.67	<5	0.2	0.10	0.7
PH2B08	Vegetation	8	29.22	1.000	2.2	3.8	1.20	347.5	0.010	140	3.45	0.090	3.32	0.21	0.6	0.06	0.92	20	1.1	0.05	1.3
PH2B09	Vegetation	7	27.52	0.786	2.7	3.2	1.84	818.9	0.010	165	2.45	0.090	4.91	0.13	0.5	0.04	0.75	<5	0.6	<0.02	1.1
PH2B10	Vegetation	4	32.36	0.779	1.7	2.8	1.25	540.8	0.008	108	1.05	0.072	3.37	0.11	0.4	0.04	0.66	12	0.7	<0.02	0.9
PH2B11	Vegetation	6	31.69	0.567	1.7	3.5	0.74	672.2	0.008	101	1.06	0.070	3.06	0.16	0.9	<0.02	0.60	<5	<0.1	<0.02	1.0
PH2B12	Vegetation	9	29.56	0.950	3.3	4.2	0.94	144.0	0.012	102	2.45	0.055	1.86	0.11	0.7	0.11	0.94	<5	0.6	<0.02	1.4
PH2B13	Vegetation	16	22.68	1.778	4.6	8.0	1.72	264.5	0.020	252	4.46	0.106	4.18	0.19	1.4	0.17	1.24	<5	1.7	<0.02	2.1
PH2B14	Vegetation	5	29.33	0.926	1.8	2.4	1.89	755.9	0.009	161	2.72	0.072	3.91	0.12	0.4	0.04	0.72	10	0.8	<0.02	1.2
PH2B15	Vegetation	5	31.13	0.847	1.5	2.5	1.43	290.9	0.008	255	2.17	0.085	3.67	0.15	0.5	0.03	0.93	<5	0.5	0.02	1.1
PH2B16	Vegetation	9	32.06	0.918	3.2	3.5	0.97	112.6	0.011	153	2.34	0.061	1.47	0.15	0.9	0.13	0.92	<5	0.4	0.08	1.3
PH2B17	Vegetation	6	33.26	0.885	1.6	2.6	1.05	234.7	0.009	174	1.11	0.076	2.13	0.13	0.6	<0.02	1.10	7	0.3	<0.02	1.1
PH2B18	Vegetation	15	21.20	3.380	4.9	7.2	1.88	120.9	0.024	683	4.74	0.329	7.56	0.30	1.6	0.06	2.27	<5	1.6	<0.02	2.0
PH2B19	Vegetation	14	25.37	2.627	3.6	6.3	1.93	323.7	0.023	326	0.75	0.225	7.29	0.23	1.5	0.03	1.39	<5	1.6	0.04	1.8
PH2B20	Vegetation	9	25.03	1.456	2.5	4.1	2.49	559.4	0.016	276	3.73	0.149	9.13	0.14	0.8	0.03	1.06	6	0.6	0.07	1.5
PH2B21	Vegetation	20	20.89	1.769	5.1	7.4	1.55	129.2	0.024	336	5.03	0.206	6.71	0.19	1.7	0.14	1.25	5	1.6	<0.02	2.4
PH2B22	Vegetation	14	25.64	1.442	3.4	4.9	1.67	746.1	0.018	167	2.55	0.137	7.87	0.54	1.3	<0.02	1.00	<5	0.7	<0.02	1.5
PH2B23	Vegetation	13	25.20	1.038	2.3	4.6	1.64	727.9	0.016	193	3.52	0.144	6.68	0.15	1.1	0.03	0.94	<5	0.8	0.11	1.4
PH2B24	Vegetation	4	30.62	1.259	1.1	1.9	1.98	846.1	0.010	212	1.73	0.114	6.72	0.08	0.6	<0.02	0.81	<5	0.7	<0.02	0.8
PH2B25	Vegetation	10	28.70	1.147	2.3	4.4	1.75	236.8	0.015	200	1.38	0.125	5.41	0.24	1.1	0.04	1.00	<5	0.7	0.09	1.9
PH2B26	Vegetation	29	20.01	1.574	7.2	10.0	1.84	208.9	0.029	214	3.94	0.168	4.62	0.29	2.5	<0.02	1.32	<5	1.9	<0.02	3.1
PH2B27	Vegetation	20	25.61	1.048	5.5	8.4	1.09	588.6	0.023	199	3.29	0.137	2.90	0.14	1.7	<0.02	0.86	<5	0.7	0.11	1.9
PH2B28	Vegetation	15	27.41	1.159	3.6	7.6	1.46	479.2	0.018	233	2.24	0.141	3.30	0.14	1.4	0.07	0.79	<5	0.6	<0.02	1.5
PH2B29	Vegetation	33	16.58	1.555	6.4	12.4	1.82	179.4	0.037	554	3.58	0.286	5.94	0.18	2.9	0.04	1.08	<5	0.9	<0.02	2.6
PH2B30	Vegetation	11	26.20	0.964	2.7	5.0	1.84	300.2	0.016	218	3.45	0.140	5.78	0.21	1.0	0.02	1.09	8	0.8	<0.02	1.2

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## Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** J A Chapman Mining Services

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13004744.1

Method	Analyte	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		Rec.	Wt	Ash	Wt	ashed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.05	0.2	0.1	0.5	0.01	
PH2B31	Vegetation		74.414	2.220	20.04	144.20	20.13	1348.3	458	15.0	4.7	>10000	0.32	1.7	0.08	2.5	0.2	662.5	15.35	0.94	0.09
PH2B32	Vegetation		92.914	2.210	13.13	140.77	14.02	905.3	2940	7.9	3.7	9948	0.30	1.4	0.06	4.5	0.1	441.9	17.67	0.55	0.04
PH2B33	Vegetation		72.466	1.809	14.95	114.36	15.30	1870.7	857	14.4	4.6	>10000	0.29	1.0	0.08	3.3	0.2	940.2	20.51	0.73	0.06
PH2B34	Vegetation		84.935	1.826	53.76	146.94	34.41	1620.1	259	28.6	7.7	>10000	0.76	2.2	0.20	4.2	0.4	724.0	10.54	1.17	0.16
PH2B35	Vegetation		90.677	1.661	31.11	140.81	31.82	1405.0	3311	20.1	5.5	7380	0.84	1.6	0.16	2.2	0.3	695.9	19.80	0.93	0.10
PH2B36	Vegetation		101.833	2.209	22.28	140.67	23.68	1359.4	1437	13.8	3.5	7583	0.31	1.9	0.08	2.4	0.1	491.1	12.20	0.83	0.06
PH2B37	Vegetation		102.333	1.721	22.50	161.92	21.72	1949.3	918	14.6	4.1	7595	0.31	2.3	0.11	4.5	0.2	690.0	26.61	0.71	0.09
PH2B38	Vegetation		102.067	1.935	32.98	138.99	34.67	1501.5	1343	14.5	3.8	7264	0.49	2.5	0.14	6.0	0.2	747.9	25.13	1.43	0.13
PH2B39	Vegetation		77.308	1.773	12.87	117.17	15.85	1616.9	1538	7.7	3.4	>10000	0.30	2.2	0.07	3.8	0.2	586.4	31.89	0.55	0.18
PH2B40	Vegetation		82.045	1.462	13.80	160.68	25.39	2202.5	2802	12.5	5.6	>10000	0.33	1.8	0.09	2.1	0.2	1096.6	11.77	0.83	0.15
PH2B41	Vegetation		87.298	1.849	11.72	106.74	38.93	2057.5	368	9.1	2.6	>10000	0.23	1.0	0.06	3.7	0.2	717.2	56.94	0.55	0.07
PH2B42	Vegetation		99.689	1.597	15.72	166.99	18.40	1826.1	1914	13.1	4.7	>10000	0.41	3.8	0.09	1.9	0.2	606.8	25.70	0.89	0.12
PH2B43	Vegetation		65.300	1.761	20.84	102.62	19.76	2096.8	455	11.5	6.7	>10000	0.32	1.5	0.09	2.4	0.1	675.2	55.72	0.77	0.11
PH2B44	Vegetation		75.019	1.658	26.27	142.74	26.53	2072.0	2198	16.6	4.6	>10000	0.65	2.5	0.16	4.3	0.3	776.6	21.49	0.97	0.15
PH2B45	Vegetation		93.824	1.834	10.56	127.28	15.32	2003.8	950	14.3	2.2	>10000	0.23	1.5	0.07	3.1	0.1	790.9	17.82	0.65	0.06
PH2B46	Vegetation		92.313	2.015	18.61	102.53	16.12	1494.1	1147	6.4	1.8	4838	0.23	2.0	0.07	1.7	0.1	981.4	24.65	0.58	0.07
PH2B47	Vegetation		66.811	0.738	41.58	196.45	27.33	3015.3	1312	14.9	4.4	>10000	0.71	2.6	0.24	16.2	0.4	938.3	15.87	1.00	0.21
PH2B48	Vegetation		74.607	1.930	55.04	131.71	35.21	1759.1	668	10.8	5.0	>10000	0.43	1.9	0.17	4.2	0.3	630.1	19.09	1.22	0.16
PH2B49	Vegetation		112.211	2.233	7.89	163.27	4.85	4030.4	226	4.8	1.0	4240	0.13	1.2	<0.05	4.9	<0.1	2294.8	0.71	0.23	<0.02
PH2B50	Vegetation		71.756	1.508	12.06	95.57	17.02	2203.4	315	14.4	3.6	>10000	0.22	1.5	0.07	3.4	0.2	816.1	18.14	0.98	0.05
PH2B51	Vegetation		72.456	1.127	13.24	191.49	24.46	2693.8	3226	9.9	6.0	>10000	0.30	3.0	0.10	2.8	0.2	899.6	17.80	1.19	0.09
PH2B52	Vegetation		85.200	1.323	20.12	177.78	29.11	1566.2	1480	8.5	3.3	>10000	0.29	1.3	0.11	3.8	0.1	712.2	17.80	0.95	0.09
PH2B53	Vegetation		77.769	1.499	9.81	109.63	14.07	1560.1	235	9.2	2.7	8572	0.20	2.0	0.06	0.9	0.1	486.0	9.35	0.80	0.04
PH2B54	Vegetation		71.981	2.298	3.66	79.14	7.14	2852.6	195	7.4	2.8	5188	0.10	1.7	<0.05	1.0	<0.1	1174.7	0.54	0.34	<0.02
PH2B55	Vegetation		92.879	3.206	9.29	151.36	9.18	2119.9	423	4.0	1.3	6760	0.14	1.3	<0.05	1.0	<0.1	2378.5	1.15	0.37	<0.02
PH2B56	Vegetation		97.596	3.650	6.94	158.28	6.67	2604.9	241	4.7	4.5	>10000	0.11	1.3	<0.05	1.7	<0.1	1140.1	3.93	0.37	<0.02
PH2B57	Vegetation		79.805	2.988	5.11	108.17	6.38	3029.6	357	6.8	2.1	6169	0.11	1.3	<0.05	2.4	<0.1	1635.4	1.04	0.29	<0.02
PH2B58	Vegetation		96.758	2.666	5.06	102.01	8.64	2165.3	135	12.3	2.8	>10000	0.10	0.8	<0.05	6.9	<0.1	868.6	1.20	0.32	<0.02
PH2B59	Vegetation		68.874	1.222	38.89	176.99	39.22	1926.8	1206	20.1	4.5	7926	0.43	3.0	0.16	4.6	0.3	605.8	15.28	1.52	0.16
PH2B60	Vegetation		83.187	1.730	7.24	95.11	6.36	3672.6	402	5.8	2.5	>10000	0.11	1.2	<0.05	2.4	<0.1	1720.2	3.53	0.22	<0.02

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

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Part: 2 of 2

**CERTIFICATE OF ANALYSIS****VAN13004744.1**

Analyte	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.05	0.1	0.02	0.02	5	0.1	0.02
PH2B31	Vegetation	6	30.87	0.825	1.8	3.0	1.17	723.5	0.010	198	1.60	0.059	4.07	0.12	0.6	<0.02	0.84	<5	0.2	<0.02	1.1
PH2B32	Vegetation	6	31.64	0.802	1.7	2.5	1.05	470.9	0.009	206	1.47	0.042	3.67	<0.05	0.8	0.19	0.58	8	<0.1	<0.02	1.1
PH2B33	Vegetation	6	29.19	0.952	1.7	4.6	1.79	1062.0	0.010	194	2.65	0.078	5.72	0.10	0.5	0.14	0.66	<5	0.2	0.05	1.0
PH2B34	Vegetation	18	26.92	1.109	4.1	7.0	1.13	786.3	0.019	134	3.06	0.053	1.94	0.13	1.5	0.42	0.74	<5	0.8	<0.02	2.0
PH2B35	Vegetation	20	25.84	0.764	4.1	6.2	1.20	789.5	0.019	131	2.02	0.072	4.48	0.12	1.6	0.20	0.73	<5	0.6	<0.02	2.2
PH2B36	Vegetation	7	31.07	0.876	1.9	3.2	1.29	566.2	0.010	167	1.45	0.061	4.28	0.15	0.9	0.04	0.75	7	0.4	<0.02	1.1
PH2B37	Vegetation	7	29.73	0.967	1.6	1.8	1.55	494.2	0.009	257	3.54	0.091	4.98	0.12	0.4	0.07	0.86	<5	0.4	<0.02	0.9
PH2B38	Vegetation	11	27.72	1.082	3.0	4.1	1.79	503.1	0.014	144	2.46	0.102	7.29	0.16	1.0	0.03	0.86	<5	0.9	<0.02	1.3
PH2B39	Vegetation	6	31.44	0.755	1.6	2.2	1.19	758.4	0.008	178	1.94	0.054	3.66	0.07	0.4	0.06	0.68	<5	0.7	0.05	1.0
PH2B40	Vegetation	8	29.25	0.825	2.1	3.0	1.80	150.6	0.010	176	3.24	0.082	4.12	0.17	0.7	0.16	0.95	<5	1.0	<0.02	1.1
PH2B41	Vegetation	5	29.81	0.655	1.3	3.2	1.86	453.0	0.007	223	1.20	0.073	4.81	0.07	0.4	0.04	0.91	<5	0.5	0.04	1.2
PH2B42	Vegetation	8	27.70	0.871	1.9	3.1	1.81	642.8	0.011	241	2.89	0.175	6.31	0.13	0.8	0.03	1.15	<5	1.2	0.02	1.2
PH2B43	Vegetation	6	31.28	0.809	1.7	2.9	1.48	186.3	0.009	104	0.75	0.064	3.26	0.09	0.6	<0.02	0.83	<5	0.7	<0.02	1.3
PH2B44	Vegetation	16	25.71	0.832	3.0	6.1	1.21	232.1	0.015	137	3.29	0.078	2.02	0.14	1.2	0.34	0.87	<5	0.9	0.04	1.8
PH2B45	Vegetation	5	28.77	0.865	1.4	2.2	1.74	739.1	0.008	232	2.62	0.121	6.50	0.06	0.4	<0.02	0.88	<5	0.4	<0.02	1.0
PH2B46	Vegetation	5	33.17	0.644	1.3	2.0	1.50	643.9	0.007	152	0.37	0.124	3.64	0.08	0.4	<0.02	0.88	<5	0.4	<0.02	0.8
PH2B47	Vegetation	15	26.96	1.254	4.3	6.3	1.99	180.1	0.017	342	1.54	0.175	3.92	0.25	1.4	0.02	1.35	<5	1.0	<0.02	2.0
PH2B48	Vegetation	9	30.54	0.925	2.8	5.6	1.16	311.2	0.013	168	1.24	0.146	3.61	0.17	0.9	<0.02	1.00	<5	0.7	<0.02	1.0
PH2B49	Vegetation	<2	34.27	0.439	<0.5	1.7	0.99	290.1	0.003	262	0.08	0.069	3.29	0.07	0.2	<0.02	0.32	<5	0.4	0.04	0.4
PH2B50	Vegetation	5	29.71	0.956	1.2	2.3	1.41	483.1	0.008	223	1.44	0.144	6.36	0.12	0.4	<0.02	0.97	<5	0.8	0.04	1.3
PH2B51	Vegetation	6	26.87	1.094	1.6	3.0	2.27	243.6	0.010	285	2.94	0.149	6.26	0.16	0.6	<0.02	1.46	<5	1.0	<0.02	1.3
PH2B52	Vegetation	6	30.11	0.982	1.9	2.6	1.23	266.9	0.010	139	1.55	0.138	4.51	0.12	0.7	<0.02	1.16	<5	0.9	<0.02	1.2
PH2B53	Vegetation	4	30.33	0.870	1.1	1.8	1.35	738.6	0.007	186	2.33	0.144	6.25	0.10	0.4	<0.02	0.80	<5	0.4	0.03	0.9
PH2B54	Vegetation	2	36.13	0.395	0.7	1.0	0.85	172.7	0.003	144	0.17	0.063	1.56	0.05	0.2	<0.02	0.45	<5	0.1	<0.02	0.5
PH2B55	Vegetation	3	35.50	0.490	0.6	1.7	0.61	238.4	0.005	203	0.09	0.074	2.63	0.06	0.3	<0.02	0.38	<5	0.3	0.06	0.7
PH2B56	Vegetation	2	34.67	0.465	0.6	1.7	0.65	180.2	0.005	168	0.11	0.109	3.98	0.07	0.3	<0.02	0.61	<5	0.3	0.02	0.6
PH2B57	Vegetation	2	37.23	0.406	0.6	1.4	0.74	175.0	0.004	154	0.10	0.061	2.08	0.05	0.2	<0.02	0.51	<5	0.2	<0.02	0.6
PH2B58	Vegetation	2	35.47	0.447	0.6	1.2	0.66	171.1	0.004	162	0.28	0.056	1.35	0.05	0.2	<0.02	0.55	<5	0.5	<0.02	0.8
PH2B59	Vegetation	9	29.27	1.089	3.1	4.3	1.10	185.3	0.013	113	3.64	0.117	2.61	0.18	0.8	<0.02	1.62	<5	1.7	<0.02	1.5
PH2B60	Vegetation	<2	33.72	0.547	0.5	1.0	0.85	184.4	0.004	241	0.21	0.092	3.73	0.08	0.3	<0.02	0.58	<5	0.5	0.04	0.6

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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** J.A.Chapman Mining Services

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

Page: 4 of 4

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13004744.1

Method	Analyte	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
		Rec.	Wt	Ash	Washed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	
		Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	Cd	
		MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	0.1	2	0.1	0.1	0.01	0.1	0.05	0.2	0.1	0.5	0.01	0.02
PH2B61	Vegetation		87.022	1.551	35.70	112.99	29.63	2382.5	327	7.6	3.7	>10000	0.34	1.3	0.14	1.8	0.3	632.3	13.49	1.05	0.11
PH2B62	Vegetation		82.060	0.567	92.41	373.89	14.96	2553.8	1907	11.0	3.8	4850	0.56	1.0	0.27	7.7	0.3	751.7	13.35	0.65	0.15
PH2B63	Vegetation		109.101	1.429	89.06	259.58	23.22	1405.6	1447	7.7	1.8	3850	0.39	1.4	0.14	18.6	0.2	607.5	13.94	1.17	0.17
PH2B64	Vegetation		85.919	1.337	135.05	180.03	42.89	1930.5	2268	18.4	2.3	5506	0.53	1.3	0.23	10.4	0.4	576.0	13.85	1.92	0.41
PH2B65	Vegetation		102.089	0.794	90.18	373.14	17.33	1494.8	2966	11.7	3.1	3808	0.55	1.0	0.20	12.1	0.3	640.7	12.90	1.17	0.19
PH2B66	Vegetation		95.782	0.710	105.71	304.61	23.18	2441.3	1384	23.6	9.4	7514	0.64	1.8	0.21	7.7	0.4	718.4	14.80	1.48	0.33
PH2B67	Vegetation		85.378	0.961	147.78	291.50	42.70	1880.5	837	24.4	7.0	8066	0.58	1.6	0.24	2.4	0.4	486.1	14.65	2.07	0.38
PH2B68	Vegetation		91.735	0.889	124.77	277.17	37.19	2167.5	877	24.5	4.5	>10000	0.70	1.7	0.28	4.1	0.2	698.9	27.46	2.02	0.40
PH2B69	Vegetation		91.113	1.114	150.56	281.04	45.73	2410.1	3222	36.7	4.2	>10000	0.66	1.9	0.28	3.1	0.3	481.7	20.18	2.40	0.49
PH2B70	Vegetation		100.507	0.930	148.59	337.37	43.72	2276.0	1773	29.1	4.7	8706	0.78	1.3	0.30	5.5	0.3	470.9	19.09	2.08	0.44
PH2B71	Vegetation		94.412	0.858	96.36	316.72	24.80	2757.0	3002	11.4	2.7	3911	0.56	1.2	0.20	2.9	0.2	684.0	9.14	1.46	0.30
PH2B72	Vegetation		78.604	3.664	3.15	56.02	2.52	1625.3	218	3.7	2.0	7381	0.03	1.0	<0.05	2.7	<0.1	1646.1	0.31	0.10	<0.02
PH2B73	Vegetation		82.434	3.354	12.32	93.85	4.11	1482.3	234	3.2	2.0	5147	0.06	<0.1	<0.05	5.1	<0.1	1417.8	0.32	0.17	0.09
PH2B74	Vegetation		62.404	0.362	46.32	475.61	18.07	2230.1	1609	18.9	2.5	8906	0.62	0.4	0.23	33.0	0.4	1291.3	33.57	0.62	0.23
PH2B75	Vegetation		77.535	0.467	39.63	431.01	15.45	2417.4	1019	15.0	2.8	9129	0.49	1.0	0.19	16.4	0.3	1031.0	25.54	0.62	0.18
PH2B76	Vegetation		68.719	0.297	151.37	645.59	26.90	2127.5	2175	33.8	5.2	5435	0.94	1.8	0.33	11.7	0.4	597.4	10.87	0.80	0.57
PH2B77	Vegetation		54.078	0.376	99.02	432.23	34.93	2877.4	2244	30.6	6.6	>10000	0.98	1.9	0.36	11.8	0.4	723.1	13.26	0.87	0.61
PH2B78	Vegetation		73.800	0.617	132.21	376.45	31.87	2042.7	1843	24.4	4.7	4446	0.84	2.0	0.31	5.3	0.4	643.1	13.23	0.69	0.43
OVEN STD-1	Vegetation		18.041	0.532	1.12	38.86	7.06	1466.7	787	12.1	0.5	>10000	0.14	2.8	1.60	2.4	0.7	529.0	0.21	0.34	0.02



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

Page: 4 of 4

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN13004744.1

Method	Analyte	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F		
		V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
		MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.05	0.1	0.02	0.02	5	0.1	0.02
PH2B61	Vegetation	7	30.96	0.918	1.8	4.2	1.04	414.9	0.010	107	0.90	0.071	4.31	0.15	0.7	0.03	0.99	<5	1.2	<0.02	1.3
PH2B62	Vegetation	11	26.46	1.880	3.0	7.2	1.94	321.0	0.018	447	0.91	0.097	5.59	0.21	1.1	0.03	1.42	<5	1.7	0.03	1.4
PH2B63	Vegetation	7	31.53	1.080	2.0	3.3	1.74	208.8	0.011	294	0.67	0.052	3.21	0.17	0.7	0.05	1.01	<5	0.7	0.05	1.0
PH2B64	Vegetation	12	29.41	1.399	3.5	4.0	1.60	384.9	0.015	227	2.63	0.058	3.36	0.20	1.0	0.03	1.13	<5	1.5	<0.02	1.4
PH2B65	Vegetation	10	25.60	1.893	3.0	4.8	1.70	295.2	0.017	441	3.89	0.075	5.73	0.31	0.9	0.06	1.42	<5	2.3	<0.02	1.2
PH2B66	Vegetation	13	23.37	1.599	3.7	5.1	2.11	318.2	0.018	370	4.53	0.089	5.14	0.28	1.2	0.12	1.52	<5	0.8	<0.02	1.6
PH2B67	Vegetation	13	27.07	1.463	3.4	4.5	1.59	391.4	0.015	197	3.19	0.074	4.39	0.24	1.3	0.04	1.17	<5	1.2	0.08	1.7
PH2B68	Vegetation	16	24.36	1.831	4.2	5.5	2.18	384.9	0.019	158	3.88	0.076	5.26	0.34	1.2	0.08	1.21	<5	0.9	0.08	2.0
PH2B69	Vegetation	15	24.13	1.533	4.3	5.2	2.17	324.0	0.018	120	4.81	0.061	4.37	0.35	1.3	0.11	1.21	<5	1.2	0.02	2.0
PH2B70	Vegetation	15	23.00	1.748	5.0	4.9	1.46	340.0	0.019	205	5.34	0.085	5.08	0.31	1.3	0.12	1.63	<5	1.5	<0.02	1.9
PH2B71	Vegetation	11	27.13	1.561	2.5	4.0	2.14	345.0	0.016	239	0.51	0.078	5.84	0.24	1.0	0.08	1.64	<5	1.4	0.02	1.3
PH2B72	Vegetation	<2	37.32	0.185	<0.5	0.7	0.47	466.6	0.001	159	0.11	0.023	1.06	<0.05	<0.1	0.03	0.19	<5	0.3	0.10	0.4
PH2B73	Vegetation	<2	35.80	0.326	0.5	<0.5	0.50	1207.6	0.003	108	0.28	0.027	1.12	0.05	0.1	<0.02	0.30	8	0.3	<0.02	0.2
PH2B74	Vegetation	12	22.43	3.029	3.0	5.6	3.30	587.8	0.025	672	1.55	0.124	6.55	0.27	1.7	0.14	1.80	<5	1.9	<0.02	1.5
PH2B75	Vegetation	9	25.54	1.968	2.4	5.4	2.38	483.7	0.018	702	1.83	0.122	6.09	0.18	1.1	0.03	1.69	<5	1.2	0.19	1.0
PH2B76	Vegetation	16	15.18	3.973	4.2	8.0	2.63	500.7	0.034	710	5.41	0.197	>10	0.32	1.8	0.29	1.74	15	1.9	<0.02	1.7
PH2B77	Vegetation	20	19.34	2.976	4.8	8.9	2.60	869.9	0.033	429	3.38	0.154	6.98	0.32	2.4	0.49	1.68	20	2.0	0.03	2.2
PH2B78	Vegetation	17	20.88	2.721	3.7	7.7	2.14	401.0	0.028	458	3.32	0.112	7.75	0.27	1.6	0.16	1.34	5	1.4	0.10	2.0
OVEN STD-1	Vegetation	<2	23.98	2.638	1.4	4.9	2.16	1050.0	0.011	325	0.13	0.098	>10	0.35	1.1	0.19	1.43	<5	<0.1	<0.02	1.2



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

Page: 1 of 1

Part: 1 of 2

**QUALITY CONTROL REPORT****VAN13004744.1**

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
	Rec. Wt	Wt	Ash	Washed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
	Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.05	0.2	0.1	0.5	0.01	0.02	0.02
Pulp Duplicates																					
PH2B10	Vegetation	84.186	1.893	26.37	112.66	10.95	1244.3	379	7.3	2.0	8286	0.22	0.6	0.12	2.8	0.1	624.5	18.75	0.64	0.06	
REP PH2B10	QC			27.88	113.71	11.74	1237.1	361	6.5	2.5	8288	0.23	0.7	0.11	3.2	0.1	687.2	18.28	0.66	0.05	
PH2B46	Vegetation	92.313	2.015	18.61	102.53	16.12	1494.1	1147	6.4	1.8	4838	0.23	2.0	0.07	1.7	0.1	981.4	24.65	0.58	0.07	
REP PH2B46	QC			18.29	101.60	16.02	1489.8	1244	5.3	1.8	4825	0.23	1.1	0.07	1.6	0.1	1000.6	24.56	0.57	0.05	
OVEN STD-1	Vegetation Pu	18.041	0.532	1.12	38.86	7.06	1466.7	787	12.1	0.5	>10000	0.14	2.8	1.60	2.4	0.7	529.0	0.21	0.34	0.02	
REP OVEN STD-1	QC			1.04	38.44	7.23	1475.7	813	12.8	0.6	>10000	0.14	3.6	1.65	3.7	0.6	524.0	0.19	0.34	<0.02	
Reference Materials																					
STD DS10	Standard			13.02	149.18	146.18	348.9	2244	71.5	13.2	847	2.61	44.4	2.30	78.5	6.6	63.4	2.39	6.06	9.79	
STD DS10	Standard			15.56	162.52	153.83	385.3	2042	81.8	13.6	934	2.80	46.6	2.43	75.3	7.5	69.4	2.69	6.81	10.99	
STD DS10	Standard			13.97	152.46	139.75	346.9	2491	71.3	12.2	833	2.58	44.8	2.60	67.2	6.4	61.1	2.50	6.60	10.06	
STD OREAS45EA	Standard			1.25	616.72	12.85	25.9	259	344.3	42.6	352	22.04	6.8	1.58	51.1	9.3	3.7	<0.01	0.15	0.20	
STD OREAS45EA	Standard			1.25	663.29	14.90	35.1	270	368.6	50.2	434	22.92	8.6	1.74	50.5	10.6	2.8	0.04	0.17	0.26	
STD OREAS45EA	Standard			1.26	652.27	13.64	27.1	233	363.6	49.3	371	22.72	8.5	1.66	53.7	10.0	3.5	0.01	0.15	0.21	
STD DS10 Expected				14.69	154.61	150.55	352.9	1960	74.6	12.9	861	2.7188	43.7	2.59	91.9	7.5	67.1	2.48	9.51	11.65	
STD OREAS45EA Expected				1.39	709	14.3	28.9	260	381	52	400	23.51	9.1	1.73	53	10.7	3.5	0.02	0.2	0.26	
BLK	Blank			<0.01	<0.01	<0.01	<0.1	<2	0.3	<0.1	<1	<0.01	<0.1	<0.05	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	
BLK	Blank			<0.01	0.05	<0.01	0.3	<2	<0.1	<0.1	1	<0.01	0.3	<0.05	<0.2	<0.1	<0.5	0.01	<0.02	<0.02	
BLK	Blank			<0.01	0.04	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.05	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	



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Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: December 06, 2013

Page: 1 of 1

Part: 2 of 2

**QUALITY CONTROL REPORT****VAN13004744.1**

Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.05	0.1	0.02	0.02	5	0.1	0.02	0.1	
Pulp Duplicates																					
PH2B10	Vegetation	4	32.36	0.779	1.7	2.8	1.25	540.8	0.008	108	1.05	0.072	3.37	0.11	0.4	0.04	0.66	12	0.7	<0.02	0.9
REP PH2B10	QC	5	32.22	0.764	1.3	2.5	1.24	536.2	0.008	128	1.04	0.070	3.41	0.14	0.5	0.03	0.68	5	0.4	0.09	0.9
PH2B46	Vegetation	5	33.17	0.644	1.3	2.0	1.50	643.9	0.007	152	0.37	0.124	3.64	0.08	0.4	<0.02	0.88	<5	0.4	<0.02	0.8
REP PH2B46	QC	5	33.36	0.696	1.4	2.1	1.50	640.1	0.007	154	0.37	0.153	3.72	0.09	0.4	<0.02	0.88	<5	0.7	0.06	0.7
OVEN STD-1	Vegetation Pu	<2	23.98	2.638	1.4	4.9	2.16	1050.0	0.011	325	0.13	0.098	>10	0.35	1.1	0.19	1.43	<5	<0.1	<0.02	1.2
REP OVEN STD-1	QC	<2	24.38	2.827	1.4	5.0	2.20	1065.3	0.011	324	0.13	0.093	>10	0.45	1.2	0.18	1.51	<5	<0.1	0.02	1.3
Reference Materials																					
STD DS10	Standard	40	1.02	0.075	14.4	47.7	0.75	380.4	0.065	<20	0.96	0.057	0.31	2.27	2.5	4.44	0.28	271	3.1	5.06	4.0
STD DS10	Standard	42	1.08	0.073	16.6	51.4	0.79	377.2	0.070	<20	1.03	0.064	0.32	2.41	2.7	4.92	0.28	248	1.7	4.70	4.2
STD DS10	Standard	40	1.03	0.071	15.0	51.7	0.76	376.8	0.068	<20	0.99	0.061	0.32	2.57	2.7	4.75	0.27	288	3.0	4.40	4.1
STD OREAS45EA	Standard	293	0.05	0.025	5.9	722.6	0.09	139.1	0.073	<20	2.77	0.013	0.04	<0.05	70.4	<0.02	0.02	13	0.3	0.05	10.2
STD OREAS45EA	Standard	312	0.02	0.027	6.6	757.0	0.10	151.5	0.084	<20	3.00	0.015	0.04	<0.05	78.6	<0.02	0.03	<5	0.6	0.08	12.3
STD OREAS45EA	Standard	313	0.04	0.029	6.1	729.1	0.09	136.8	0.077	<20	2.91	0.016	0.05	<0.05	73.5	<0.02	0.03	18	0.8	0.22	11.7
STD DS10 Expected		43	1.0355	0.073	17.5	54.6	0.7651	349	0.0817		1.0259	0.0638	0.3245	3.34	2.8	4.79	0.2743	289	2.3	4.89	4.3
STD OREAS45EA Expected		303	0.036	0.029	6.57	849	0.095	148	0.0875		3.13	0.02	0.053	78	0.072	0.036	10	0.63	0.07	11.7	
BLK	Blank	<2	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.05	<0.1	<0.02	<0.02	<5	<0.1	0.04	<0.1
BLK	Blank	<2	<0.01	<0.001	<0.5	0.6	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.05	<0.1	<0.02	<0.02	<5	0.2	<0.02	<0.1
BLK	Blank	<2	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.05	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John A. Chapman**  
**18-1480 Foster St**  
**White Rock, BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS: MA0033-JUL14-R1**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

**COMMENTS:**

R1 certificate of analysis supercedes previously released CofA for MSA workorder  
MA0033-JUL14.

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review.

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-757	Dry, Screen to 80 mesh, save plus fraction

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-MS, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, Senior Analytical Chemist

Met-Solve Analytical Services



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
BA14-01	Soil	0.36		0.11	2.22	5.8	0.01	<10	193	0.72	0.10	0.70
BA14-02	Soil	0.41		0.18	2.05	5.2	<0.01	<10	193	0.65	0.09	0.67
BA14-03	Soil	0.40		0.14	2.04	9.7	<0.01	<10	186	0.76	0.24	0.59
BA14-04	Soil	0.38		0.10	2.06	4.3	<0.01	<10	199	0.73	0.16	0.54
BA14-05	Soil	0.48		0.12	2.29	6.8	<0.01	<10	196	0.82	0.30	0.48
BA14-05A	Soil	0.37		0.16	1.77	4.9	<0.01	<10	190	0.64	0.29	0.61
BA14-05B	Soil	0.48		0.09	1.77	6.2	<0.01	<10	210	0.76	0.20	0.51
BA14-06	Soil	0.46		0.14	1.96	8.4	<0.01	<10	231	0.83	0.23	0.60
BA14-07	Soil	0.36		0.22	2.35	6.1	<0.01	<10	234	0.94	0.32	0.51
BA14-07A	Soil	0.34		0.20	2.51	8.5	<0.01	<10	192	0.81	0.18	0.43
BA14-07B	Soil	0.23		0.12	2.02	5.6	0.09	<10	105	0.41	0.13	0.28
BA14-07C	Soil	0.38		0.12	2.11	3.1	0.03	<10	212	0.79	0.11	0.64
BA14-07D	Soil	0.12		0.34	2.45	6.5	0.02	<10	181	0.89	0.09	0.66
BA14-11	Soil	0.47		0.23	2.20	3.3	0.01	<10	133	0.66	0.08	0.71
BA14-11A	Soil	0.46		0.15	2.48	0.4	0.01	<10	381	0.50	0.05	0.57
BA14-11B	Soil	0.47		0.06	1.23	9.1	<0.01	<10	87	0.44	0.05	0.53
BA14-11C	Soil	0.35		0.09	2.42	7.0	<0.01	<10	157	0.88	0.10	0.71
BA14-11D	Soil	0.28		0.02	1.39	11.9	<0.01	<10	92	0.52	0.09	0.31
BA14-11E	Soil	0.66		0.09	1.30	4.6	<0.01	<10	158	0.53	0.09	0.38
BA14-11F	Soil	0.47		0.11	2.39	9.8	0.01	<10	210	0.85	0.11	0.71



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
BA14-11G	Soil	0.44		0.13	2.36	7.6	<0.01	<10	218	0.85	0.15	0.64
BA14-11H	Soil	0.44		0.14	2.15	7.0	<0.01	<10	223	0.94	0.20	0.58
BA14-11I	Soil	0.46		0.11	2.12	2.9	<0.01	<10	204	0.79	0.23	0.58
BA14-11J	Soil	0.45		0.18	0.19	4.6	<0.01	<10	212	0.77	0.23	0.05
BA14-11K	Soil	0.40		0.18	1.98	5.7	<0.01	<10	211	0.86	0.21	0.63
BA14-11L	Soil	0.53		0.20	1.90	8.9	<0.01	<10	220	0.84	0.32	0.53
BA14-11M	Soil	0.45		0.07	3.03	3.9	<0.01	<10	107	0.72	0.18	0.12
BA14-11N	Soil	0.46		0.15	1.93	10.6	<0.01	<10	204	0.88	0.19	0.56
BA14-11O	Soil	0.36		0.11	1.80	5.8	<0.01	<10	207	0.69	0.16	0.50
BA14-11P	Soil	0.41		0.08	2.16	5.2	<0.01	<10	231	0.84	0.22	0.48
BA14-11Q	Soil	0.36		0.10	2.35	6.8	<0.01	<10	283	1.06	0.29	0.55
BA14-11R	Soil	0.32		0.05	2.06	8.8	<0.01	<10	261	0.90	0.29	0.51
BA14-11S	Soil	0.59		0.07	1.78	5.6	<0.01	<10	150	0.72	0.21	0.28
BA14-11T	Soil	0.39		0.05	1.92	6.8	<0.01	<10	228	1.09	0.20	0.54
BA14-11U	Soil	0.45		0.06	1.95	6.5	<0.01	<10	248	0.90	0.22	0.44
BA14-11V	Soil	0.37		0.26	2.03	8.7	0.02	<10	256	0.89	0.31	0.40
BA14-11W	Soil	0.41		0.13	2.39	11.2	0.01	<10	221	1.02	0.30	0.69
BA14-11X	Soil	0.42		0.28	4.55	10.3	<0.01	<10	199	1.70	0.25	0.16
BA14-11Y	Soil	0.36		0.14	2.47	6.9	<0.01	<10	116	0.73	0.11	0.20
BA14-11Z	Soil	0.49		0.07	2.29	5.5	<0.01	<10	114	0.60	0.10	0.44



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White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
BA14-11ZA	Soil	0.34		9.69	2.32	9.0	<0.01	<10	213	0.94	0.11	0.62
BJAC14-S1	Soil	0.20		0.11	0.16	0.8	<0.01	<10	80	0.46	0.08	0.02
BJAC14-S2	Soil	0.24		0.11	1.81	6.0	<0.01	<10	123	0.64	0.08	0.34
BJAC14-S3	Soil	0.31		0.09	1.86	6.9	<0.01	<10	186	0.68	0.09	0.50
BJAC14-S4	Soil	0.31		0.15	1.70	3.6	<0.01	<10	139	0.29	0.46	0.16
DUP BA14-07B				0.14	1.94	5.3	<0.01	<10	98	0.43	0.13	0.27
DUPBA14-11V				0.26	2.18	8.1	<0.01	<10	258	0.90	0.28	0.41
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.09	3.48	9.6	<0.01	<10	160	1.99	0.51	0.47
STD OREAS 504				3.63	1.84	5.5	1.47	<10	84	0.55	4.18	1.74



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White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01	MS-130 In ppm 0.005
BA14-01	0.13	37.08	14.3	40	1.58	35.0	3.47	8.29	0.09	0.22	0.01	0.021
BA14-02	0.15	35.07	14.3	34	1.54	33.6	3.52	7.89	0.09	0.17	0.01	0.020
BA14-03	0.21	33.82	14.7	36	1.80	39.0	3.70	7.93	0.09	0.26	<0.01	0.028
BA14-04	0.10	37.86	15.5	29	2.01	37.9	3.38	7.93	0.10	0.14	0.02	0.021
BA14-05	0.10	51.84	15.8	30	2.28	115.1	3.98	8.66	0.12	0.04	<0.01	0.026
BA14-05A	0.33	40.45	15.3	29	2.05	38.7	3.75	7.08	0.12	0.14	0.01	0.023
BA14-05B	0.15	39.69	15.1	32	1.52	40.3	3.25	6.92	0.09	0.12	0.01	0.024
BA14-06	0.16	39.19	16.0	33	1.99	46.9	3.73	7.80	0.11	0.25	0.03	0.024
BA14-07	0.22	35.75	13.6	31	2.24	42.7	3.62	8.74	0.09	0.04	0.01	0.032
BA14-07A	0.07	34.73	13.6	36	1.93	36.1	3.60	9.40	0.08	0.06	0.01	0.025
BA14-07B	0.07	21.34	7.9	22	1.05	16.1	2.44	7.36	<0.05	0.04	0.02	0.017
BA14-07C	0.12	36.89	15.4	34	1.56	35.0	3.75	8.50	0.06	0.20	0.13	0.028
BA14-07D	0.08	35.70	16.5	36	1.50	31.2	3.10	9.39	0.09	0.15	0.06	0.022
BA14-11	0.13	31.36	13.0	28	1.45	40.0	4.00	8.13	0.10	0.07	0.05	0.017
BA14-11A	0.11	17.26	18.5	5	3.03	89.5	4.51	12.63	0.18	0.04	0.02	0.014
BA14-11B	0.07	25.06	8.6	23	0.79	12.9	2.31	5.38	0.08	0.10	0.01	0.012
BA14-11C	0.09	35.11	15.8	35	1.43	42.7	3.76	8.44	0.11	0.22	0.03	0.021
BA14-11D	0.03	27.75	10.8	23	0.88	20.3	2.58	5.72	0.05	0.10	<0.01	0.014
BA14-11E	0.11	31.23	10.2	24	0.95	20.5	2.74	5.69	0.10	0.07	0.02	0.017
BA14-11F	0.12	39.09	14.8	37	1.67	38.8	3.76	8.86	0.10	0.22	0.03	0.022

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01	MS-130 In ppm 0.005
BA14-11G	0.09	38.40	14.8	35	1.87	38.2	3.79	8.82	0.10	0.21	<0.01	0.023
BA14-11H	0.13	40.09	15.5	32	1.99	44.0	3.81	8.78	0.13	0.25	0.02	0.027
BA14-11I	0.12	34.50	13.6	32	1.67	40.0	3.45	7.60	0.10	0.19	0.02	0.026
BA14-11J	0.28	37.62	14.9	3	2.07	3.4	3.39	7.64	0.10	0.26	0.01	0.026
BA14-11K	0.24	37.18	15.5	33	2.37	46.9	3.64	7.55	0.11	0.24	0.03	0.024
BA14-11L	0.13	36.04	13.5	29	1.91	41.2	3.19	7.72	0.09	0.17	0.02	0.023
BA14-11M	0.10	17.60	10.4	27	1.77	17.5	3.29	9.30	<0.05	0.02	0.02	0.022
BA14-11N	0.20	37.77	14.3	30	1.99	40.7	3.27	7.97	0.11	0.16	0.03	0.027
BA14-11O	0.18	39.89	15.3	27	1.26	33.5	3.60	7.16	0.09	0.11	<0.01	0.018
BA14-11P	0.09	40.34	13.8	33	1.80	43.4	3.57	8.20	0.09	0.08	0.02	0.025
BA14-11Q	0.09	50.08	16.7	35	1.94	54.7	3.98	9.44	0.14	0.11	0.02	0.030
BA14-11R	0.11	47.31	15.8	31	2.05	43.8	3.86	8.49	0.12	0.16	0.02	0.024
BA14-11S	0.55	38.96	11.9	28	1.25	32.2	3.14	6.77	0.07	0.10	<0.01	0.021
BA14-11T	0.08	45.64	13.5	28	1.99	44.1	3.71	7.54	0.11	0.07	0.02	0.024
BA14-11U	0.08	43.86	13.4	26	1.71	40.3	3.47	8.22	0.10	0.07	0.01	0.025
BA14-11V	3.99	40.95	14.4	29	1.95	47.1	3.29	7.75	<0.05	0.03	0.01	0.025
BA14-11W	0.30	41.69	17.1	33	2.67	49.6	3.83	9.46	0.08	0.16	0.02	0.032
BA14-11X	0.19	31.67	15.6	31	2.83	37.3	4.06	10.63	<0.05	0.10	0.04	0.037
BA14-11Y	0.13	20.29	9.7	22	1.62	16.4	3.62	9.19	<0.05	<0.02	0.02	0.019
BA14-11Z	0.09	22.05	12.4	26	1.68	17.3	3.05	10.18	0.05	<0.02	0.01	0.019

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01	MS-130 In ppm 0.005
BA14-11ZA	0.09	31.65	14.9	27	1.97	29.3	3.81	8.84	0.08	0.11	0.01	0.019
BJAC14-S1	0.10	15.36	8.6	2	1.97	1.5	0.28	7.39	<0.05	<0.02	0.02	0.015
BJAC14-S2	0.08	23.46	11.2	25	1.92	23.5	3.12	7.05	0.05	0.04	0.01	0.019
BJAC14-S3	0.08	32.28	14.0	29	2.14	36.2	3.59	7.26	0.10	0.09	0.02	0.019
BJAC14-S4	0.11	13.84	6.8	22	1.25	14.1	2.88	10.28	<0.05	0.03	0.02	0.015
DUP BA14-07B	0.06	20.42	7.8	21	1.00	15.3	2.39	7.20	<0.05	0.04	0.02	0.015
DUPBA14-11V	3.98	40.61	14.3	28	1.83	44.1	3.28	7.76	0.06	0.04	0.02	0.026
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD OREAS 24b	0.04	58.21	16.7	121	9.55	36.2	4.19	13.87	0.19	0.69	<0.01	0.035
STD OREAS 504	0.67	22.28	21.5	47	1.56	>10000	7.07	11.30	0.10	0.43	0.04	0.541



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V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	MS-130 K %	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg %	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na %	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1
BA14-01	0.11	18.7	12.9	0.88	845	1.06	0.03	0.23	23.7	1051	7.9	8.7
BA14-02	0.10	17.2	12.6	0.83	853	1.00	0.03	0.25	20.5	1055	7.1	8.5
BA14-03	0.11	17.5	12.8	0.86	901	1.71	0.03	0.20	23.9	916	9.4	8.6
BA14-04	0.13	18.9	11.4	0.89	945	1.76	0.02	0.27	14.8	860	7.7	9.5
BA14-05	0.09	25.5	10.4	0.79	914	4.13	0.02	0.29	16.2	798	20.2	8.7
BA14-05A	0.11	20.9	10.6	0.81	878	3.22	0.03	0.18	16.4	950	11.4	10.4
BA14-05B	0.10	19.1	9.5	0.77	909	1.77	0.02	0.34	18.9	820	7.5	9.1
BA14-06	0.11	19.9	11.9	0.87	917	3.03	0.03	0.16	22.1	917	8.1	8.8
BA14-07	0.10	19.1	13.9	0.81	738	2.63	0.02	0.45	21.9	813	10.5	10.9
BA14-07A	0.10	17.9	12.8	0.90	643	2.00	0.02	0.56	19.7	825	7.6	10.2
BA14-07B	0.06	10.3	9.6	0.53	359	1.50	0.02	1.33	11.9	687	6.9	8.7
BA14-07C	0.11	18.0	13.1	0.85	890	1.46	0.03	0.18	22.3	1017	7.4	8.9
BA14-07D	0.11	16.5	13.5	0.89	885	2.74	0.02	0.73	17.2	741	7.2	10.3
BA14-11	0.15	17.3	17.7	0.86	761	1.97	0.02	1.30	15.4	919	5.6	19.5
BA14-11A	0.38	8.6	18.2	1.10	594	1.68	0.02	2.50	6.6	1217	4.0	35.4
BA14-11B	0.05	12.5	7.2	0.51	535	0.85	0.01	1.14	9.2	797	5.2	5.7
BA14-11C	0.13	19.0	14.9	0.91	1270	3.58	0.02	0.35	20.8	963	7.0	9.8
BA14-11D	0.06	12.6	6.9	0.53	626	1.47	0.02	0.51	9.6	468	5.9	5.3
BA14-11E	0.06	15.3	5.8	0.47	432	0.68	0.01	0.39	12.4	988	5.4	5.4
BA14-11F	0.12	19.0	15.4	0.89	906	1.18	0.04	0.22	24.1	1136	7.1	8.4

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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 23-Jul-2014

Report Version: R1

Sample ID	MS-130 K %	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg %	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na %	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1
BA14-11G	0.11	18.4	12.3	0.88	871	1.18	0.03	0.26	22.4	1036	7.7	9.0
BA14-11H	0.11	20.7	11.8	0.80	859	1.67	0.02	0.19	21.3	971	8.6	9.1
BA14-11I	0.10	18.0	11.4	0.84	867	1.38	0.03	0.26	17.7	892	8.5	7.9
BA14-11J	<0.01	18.5	0.8	0.08	74	2.28	<0.01	0.20	19.5	888	8.9	9.5
BA14-11K	0.13	18.4	12.5	0.90	971	1.74	0.03	0.21	19.5	949	8.8	9.6
BA14-11L	0.11	19.2	7.9	0.74	760	1.78	0.02	0.28	17.8	792	8.5	9.5
BA14-11M	0.05	9.0	14.6	0.48	289	1.65	0.01	1.58	14.6	1167	5.7	11.7
BA14-11N	0.12	19.1	11.9	0.77	808	1.63	0.03	0.25	19.0	899	7.9	10.2
BA14-11O	0.09	19.6	9.5	0.82	861	1.63	0.03	0.27	17.6	977	12.7	7.7
BA14-11P	0.09	22.2	10.6	0.79	716	1.47	0.02	0.35	19.1	810	8.3	9.0
BA14-11Q	0.11	29.3	11.7	0.83	952	2.39	0.02	0.30	21.8	840	8.8	10.1
BA14-11R	0.11	25.3	10.2	0.80	939	2.09	0.02	0.28	20.2	904	8.5	9.6
BA14-11S	0.07	18.0	1.4	0.63	606	1.62	0.01	0.35	15.0	446	19.6	7.6
BA14-11T	0.10	25.7	9.5	0.73	808	2.94	0.02	0.35	16.2	863	8.1	8.7
BA14-11U	0.08	25.2	8.8	0.72	728	1.56	0.01	0.42	17.0	774	7.9	8.1
BA14-11V	0.08	20.8	<0.1	0.71	848	2.63	0.03	0.42	15.9	634	45.2	8.4
BA14-11W	0.12	21.3	2.8	0.92	1147	3.51	0.03	0.35	22.6	855	11.4	10.5
BA14-11X	0.07	15.3	11.0	0.66	512	2.40	0.01	1.70	22.8	1380	8.9	12.6
BA14-11Y	0.06	9.7	15.7	0.60	368	1.91	0.01	1.08	10.1	1020	6.9	13.0
BA14-11Z	0.05	10.8	18.9	0.87	529	0.95	0.02	0.98	14.7	809	6.1	7.8

\*\*\*Please refer to the cover page for comments  
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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

CERTIFICATE OF ANALYSIS:

MA0033-JUL14-R1

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 K % 0.01	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg % 0.01	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na % 0.01	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1
BA14-11ZA	0.09	17.4	14.5	0.90	1429	2.83	0.02	0.60	17.2	919	6.6	8.7
BJAC14-S1	<0.01	8.3	16.7	0.53	368	0.92	<0.01	0.72	11.9	619	5.3	8.1
BJAC14-S2	0.06	11.2	2.9	0.69	575	1.06	<0.01	0.68	16.9	711	6.3	8.7
BJAC14-S3	0.10	15.9	2.4	0.77	751	1.18	0.02	0.42	21.6	905	6.7	9.3
BJAC14-S4	0.04	7.1	2.1	0.39	226	1.55	<0.01	1.11	11.0	606	5.5	11.4
DUP BA14-07B	0.04	9.8	10.4	0.50	350	1.40	0.01	1.32	10.8	657	6.4	8.0
DUPBA14-11V	0.08	21.0	<0.1	0.73	855	2.39	0.01	0.40	16.9	656	45.0	8.3
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD OREAS 24b	1.18	29.4	42.3	1.50	372	4.26	0.10	0.27	59.4	643	9.5	129.2
STD OREAS 504	0.25	11.2	0.8	1.45	398	834.62	0.12	0.22	20.2	890	20.4	19.2



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V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Ti ppm 0.02
BA14-01	<0.001	<0.01	0.33	6.4	<0.2	0.7	78.8	<0.01	0.05	5.7	0.098	0.09
BA14-02	<0.001	<0.01	0.33	6.3	<0.2	0.7	76.0	<0.01	0.03	4.9	0.096	0.09
BA14-03	0.001	<0.01	0.47	6.9	<0.2	0.6	51.6	<0.01	0.13	6.1	0.077	0.10
BA14-04	<0.001	<0.01	0.35	6.7	<0.2	0.7	51.4	<0.01	0.04	6.1	0.081	0.10
BA14-05	<0.001	<0.01	0.34	7.4	<0.2	0.8	44.9	<0.01	0.12	5.9	0.072	0.10
BA14-05A	<0.001	<0.01	0.28	7.0	<0.2	0.7	69.1	<0.01	0.07	7.0	0.078	0.10
BA14-05B	<0.001	<0.01	0.37	6.6	<0.2	0.7	52.8	<0.01	0.07	6.0	0.066	0.10
BA14-06	<0.001	<0.01	0.43	7.5	<0.2	0.7	75.6	<0.01	0.06	6.7	0.060	0.10
BA14-07	<0.001	<0.01	0.39	6.9	0.3	0.7	55.1	<0.01	0.17	5.6	0.058	0.10
BA14-07A	<0.001	<0.01	0.33	6.7	<0.2	0.8	45.7	<0.01	0.08	5.2	0.077	0.09
BA14-07B	<0.001	<0.01	0.20	3.4	<0.2	0.8	24.4	<0.01	0.02	2.5	0.106	0.07
BA14-07C	<0.001	<0.01	0.34	7.0	<0.2	0.8	80.3	<0.01	0.03	5.1	0.086	0.09
BA14-07D	<0.001	<0.01	0.28	6.6	<0.2	0.9	65.7	<0.01	0.04	4.6	0.112	0.09
BA14-11	0.002	0.03	0.21	6.2	<0.2	1.3	43.5	<0.01	0.01	3.3	0.118	0.10
BA14-11A	<0.001	0.02	0.11	3.9	<0.2	1.4	43.9	<0.01	0.04	1.2	0.236	0.12
BA14-11B	<0.001	<0.01	0.19	3.6	<0.2	0.6	38.0	<0.01	0.07	2.8	0.101	0.04
BA14-11C	0.001	<0.01	0.32	6.8	<0.2	0.7	46.1	<0.01	0.06	5.7	0.090	0.10
BA14-11D	<0.001	<0.01	0.27	3.9	<0.2	0.6	32.2	<0.01	0.03	4.1	0.098	0.05
BA14-11E	0.001	<0.01	0.31	4.8	<0.2	0.6	44.5	<0.01	<0.01	3.8	0.077	0.06
BA14-11F	0.001	<0.01	0.39	7.1	<0.2	0.7	83.3	<0.01	0.08	5.5	0.108	0.09

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Langley, BC V1M 4B4  
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To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

CERTIFICATE OF ANALYSIS:

MA0033-JUL14-R1

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Ti ppm 0.02
BA14-11G	<0.001	<0.01	0.43	7.2	<0.2	1.3	62.5	<0.01	0.06	5.7	0.089	0.10
BA14-11H	<0.001	<0.01	0.39	7.8	<0.2	0.7	61.1	<0.01	0.08	6.7	0.078	0.10
BA14-11I	<0.001	<0.01	0.36	6.8	<0.2	0.6	55.6	<0.01	0.11	5.7	0.088	0.10
BA14-11J	<0.001	<0.01	0.50	6.8	<0.2	0.6	60.1	<0.01	0.14	6.4	0.008	0.10
BA14-11K	<0.001	<0.01	0.54	7.0	<0.2	0.6	55.6	<0.01	0.11	6.3	0.071	0.10
BA14-11L	<0.001	<0.01	0.47	7.0	<0.2	0.6	53.4	<0.01	0.10	6.3	0.063	0.09
BA14-11M	<0.001	0.01	0.21	3.6	<0.2	0.6	13.5	<0.01	0.03	3.1	0.052	0.06
BA14-11N	0.001	<0.01	0.40	7.1	<0.2	0.6	56.9	<0.01	0.06	5.9	0.080	0.09
BA14-11O	0.001	<0.01	0.32	5.8	<0.2	0.6	49.3	<0.01	0.08	5.8	0.074	0.08
BA14-11P	<0.001	<0.01	0.44	7.2	<0.2	0.6	52.8	<0.01	0.04	6.0	0.067	0.09
BA14-11Q	<0.001	<0.01	0.50	8.9	<0.2	0.7	61.0	<0.01	0.10	7.2	0.055	0.10
BA14-11R	<0.001	<0.01	0.50	7.9	<0.2	0.6	60.5	<0.01	0.13	7.0	0.064	0.10
BA14-11S	<0.001	<0.01	0.39	5.9	<0.2	0.5	33.6	<0.01	0.07	6.5	0.073	0.07
BA14-11T	0.001	<0.01	0.58	7.3	<0.2	0.6	44.7	<0.01	0.09	5.9	0.061	0.09
BA14-11U	<0.001	<0.01	0.44	7.2	<0.2	0.6	47.5	<0.01	0.06	6.1	0.054	0.09
BA14-11V	<0.001	<0.01	0.56	6.2	0.2	0.6	49.3	<0.01	0.22	11.3	0.062	0.08
BA14-11W	0.002	<0.01	0.54	7.9	<0.2	0.6	66.4	<0.01	0.16	7.7	0.075	0.11
BA14-11X	<0.001	0.02	0.30	5.6	0.3	0.6	23.9	<0.01	0.20	8.2	0.044	0.10
BA14-11Y	<0.001	<0.01	0.20	3.4	<0.2	0.6	28.3	<0.01	0.03	3.6	0.053	0.06
BA14-11Z	<0.001	<0.01	0.25	4.0	<0.2	0.6	38.0	<0.01	0.08	1.5	0.067	0.06

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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

CERTIFICATE OF ANALYSIS:

MA0033-JUL14-R1

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 TI ppm 0.02
BA14-11ZA	<0.001	<0.01	0.30	6.3	<0.2	0.5	65.1	<0.01	0.04	6.3	0.074	0.09
BJAC14-S1	<0.001	<0.01	0.24	2.9	<0.2	0.4	17.0	<0.01	0.02	1.1	0.042	0.04
BJAC14-S2	<0.001	<0.01	0.29	4.0	0.2	0.4	34.2	<0.01	0.05	1.5	0.067	0.06
BJAC14-S3	<0.001	<0.01	0.57	6.4	<0.2	0.9	51.4	<0.01	0.11	2.9	0.090	0.09
BJAC14-S4	<0.001	<0.01	0.36	3.1	<0.2	0.7	22.3	<0.01	0.14	1.3	0.072	0.06
DUP BA14-07B	<0.001	<0.01	0.19	3.1	<0.2	0.7	23.8	<0.01	<0.01	2.4	0.081	0.05
DUPBA14-11V	<0.001	<0.01	0.53	6.1	<0.2	0.5	49.6	<0.01	0.14	4.6	0.064	0.08
STD BLANK	<0.001	<0.01	<0.05	<0.2	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD BLANK	<0.001	<0.01	<0.05	<0.2	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD OREAS 24b	<0.001	0.19	0.58	8.9	0.3	2.5	31.1	<0.01	0.05	13.0	0.200	0.68
STD OREAS 504	0.014	1.32	0.72	7.1	12.7	10.9	123.6	<0.01	0.50	3.6	0.172	0.10



Met-Solve Analytical Services  
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Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
BA14-01	0.96	83	0.28	9.12	66	9.9
BA14-02	1.01	80	0.19	9.50	64	8.2
BA14-03	1.31	83	0.31	10.65	77	10.6
BA14-04	1.30	84	0.33	10.04	58	6.4
BA14-05	1.43	82	7.66	13.34	68	1.7
BA14-05A	1.41	91	0.49	11.60	65	7.6
BA14-05B	1.09	79	0.33	9.71	59	6.1
BA14-06	2.26	81	0.18	11.75	72	10.1
BA14-07	2.41	72	0.34	10.72	83	1.9
BA14-07A	1.45	85	0.19	8.32	64	3.3
BA14-07B	0.81	66	0.41	3.95	45	1.4
BA14-07C	1.45	80	0.34	10.14	68	9.6
BA14-07D	1.66	80	0.33	7.79	50	6.9
BA14-11	6.21	103	0.44	11.71	58	2.4
BA14-11A	0.75	126	0.29	4.48	102	1.5
BA14-11B	1.21	68	0.25	5.88	33	3.8
BA14-11C	3.98	85	0.25	10.10	62	9.0
BA14-11D	0.94	65	0.19	4.51	36	4.4
BA14-11E	0.85	63	0.32	8.02	45	3.8
BA14-11F	1.07	87	0.35	10.41	73	10.4

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**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
BA14-11G	1.28	85	0.47	9.98	72	9.6
BA14-11H	1.31	84	0.46	11.83	70	10.5
BA14-11I	1.35	91	0.36	10.41	66	8.6
BA14-11J	1.43	8	0.34	10.69	76	10.5
BA14-11K	1.20	85	0.33	10.86	74	10.1
BA14-11L	1.99	75	0.42	11.31	64	7.5
BA14-11M	0.90	71	0.26	2.95	88	1.0
BA14-11N	1.32	79	0.22	10.86	70	7.7
BA14-11O	0.96	80	0.50	10.30	63	5.3
BA14-11P	1.31	83	0.27	11.55	63	3.5
BA14-11Q	1.49	81	0.37	18.68	70	5.1
BA14-11R	1.27	79	0.42	14.89	68	7.7
BA14-11S	1.22	73	0.34	6.89	84	4.8
BA14-11T	1.33	77	0.67	13.86	60	4.0
BA14-11U	1.39	70	0.93	13.93	58	3.4
BA14-11V	1.72	75	0.37	10.41	128	1.4
BA14-11W	3.22	81	0.47	13.69	87	7.4
BA14-11X	2.95	75	0.29	7.24	99	4.4
BA14-11Y	0.95	77	0.29	4.12	52	0.6
BA14-11Z	0.84	72	0.25	4.65	58	<0.5

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White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0033-JUL14-R1**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 23-Jul-2014  
Report Version: R1

Sample ID	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
BA14-11ZA	6.30	78	0.23	10.73	65	4.4
BJAC14-S1	0.41	64	0.18	2.88	52	0.6
BJAC14-S2	0.69	72	0.16	4.92	53	1.5
BJAC14-S3	0.72	83	0.19	9.35	63	4.9
BJAC14-S4	0.41	77	0.24	2.03	66	1.6
DUP BA14-07B	0.80	66	0.40	3.75	41	1.4
DUPBA14-11V	1.65	77	0.38	9.94	131	1.5
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	1.69	82	1.92	8.60	95	24.6
STD OREAS 504	1.00	130	1.61	8.10	91	11.7



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To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS: MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

**COMMENTS:**

R1 includes correction of misidentified sample type.

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-910	Dry, Crush to 2mm, Split 250g, Pulverize to 85% passing 75µm

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-MS, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, Senior Analytical Chemist

Met-Solve Analytical Services



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:****MA0032-JUL14**

Project Name: Boer

Job Received Date: 11-Jul-2014

Job Report Date: 22-Jul-2014

Report Version: R1

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
LAB001	Rock	1.21		4.27	0.55	3.8	0.02	<10	39	0.40	18.08	0.15
LAB002	Rock	1.17		0.26	1.52	<0.1	<0.01	<10	66	0.45	0.35	1.58
LAB003	Rock	1.48		11.76	0.93	1.7	0.02	<10	39	0.42	0.43	0.12
LAB004	Rock	1.03		1.30	0.46	0.4	0.01	<10	71	0.26	0.08	0.10
LAB005	Rock	1.22		1.54	0.39	14.6	<0.01	<10	59	0.31	0.15	0.05
LAB006	Rock	1.08		0.07	1.14	<0.1	<0.01	<10	131	0.36	0.02	1.08
LAB007	Rock	1.06		0.53	0.26	<0.1	<0.01	<10	46	0.19	0.03	0.03
LAB008	Rock	1.15		0.09	1.87	<0.1	<0.01	<10	163	0.39	0.09	1.88
LAB009	Rock	1.07		0.50	0.61	<0.1	<0.01	<10	34	0.23	0.31	0.11
LAB010	Rock	1.28		0.74	1.31	2.1	<0.01	<10	106	0.71	0.16	0.39
LAB011	Rock	1.33		0.11	1.27	0.6	<0.01	<10	150	0.85	0.07	0.32
LAB012	Rock	1.38		0.12	1.29	<0.1	<0.01	<10	347	0.67	0.11	3.93
LAB013	Rock	1.04		0.44	1.54	<0.1	<0.01	<10	257	0.99	0.47	0.55
LAB014	Rock	1.35		1.41	1.57	87.8	0.02	<10	68	0.91	0.18	0.15
LAB015	Rock	1.15		0.96	0.43	9.2	0.03	<10	76	0.48	0.07	0.03

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:****MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
LAB016	Rock	0.62		7.87	0.62	18.5	0.03	<10	74	0.60	0.23	0.22
LAB017	Rock	1.50		1.33	0.30	11.0	0.02	<10	258	0.53	0.05	0.02
LAB018	Rock	0.70		0.20	1.82	1.7	<0.01	<10	194	0.57	0.29	0.90
LAB019	Rock	1.72		35.68	0.35	0.6	0.05	<10	139	0.24	18.94	<0.01
14B001	Rock	0.79		0.96	0.68	48.3	0.02	<10	64	0.90	0.39	0.06
BJAC14-R1	Rock	0.57		0.37	1.66	<0.1	<0.01	<10	127	1.43	0.23	0.35
BJAC14-F1	Rock	1.01		1.63	1.24	3.2	<0.01	<10	97	0.74	1.45	2.56
DUP LAB011				0.13	1.31	0.6	<0.01	<10	145	0.80	0.07	0.34
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.09	3.22	8.0	<0.01	<10	156	2.41	0.65	0.46
STD OREAS 504				3.04	1.67	2.3	1.45	<10	78	0.59	4.44	1.91

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**CERTIFICATE OF ANALYSIS:****MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01
LAB001	0.08	26.65	1.3	116	1.39	102.5	0.65	2.36	0.08	0.18	<0.01
LAB002	0.10	25.51	21.4	77	0.79	170.8	4.27	9.38	0.16	0.28	<0.01
LAB003	0.40	23.31	7.6	107	2.30	167.2	1.74	4.74	0.08	0.11	<0.01
LAB004	0.55	38.51	1.7	113	1.81	35.1	0.84	3.16	0.09	0.27	<0.01
LAB005	0.48	39.67	0.9	120	3.90	20.8	0.86	2.23	0.07	0.21	<0.01
LAB006	0.07	44.19	13.3	44	0.77	2.3	4.45	9.49	0.26	0.31	<0.01
LAB007	0.03	11.97	1.7	151	0.23	5.8	0.32	1.12	0.06	1.19	<0.01
LAB008	0.05	27.05	19.1	39	3.30	82.9	5.00	9.80	0.17	0.20	<0.01
LAB009	0.25	7.29	6.9	119	0.65	44.2	0.52	2.19	0.05	0.07	<0.01
LAB010	0.28	45.77	13.5	32	0.78	137.0	3.05	4.68	0.21	0.06	<0.01
LAB011	0.33	45.11	14.6	38	0.33	78.9	4.23	4.70	0.19	0.06	<0.01
LAB012	0.36	39.52	13.8	18	1.04	7.9	4.36	5.16	0.06	0.03	<0.01
LAB013	0.20	55.50	32.3	40	0.92	33.8	3.27	5.72	0.22	0.08	<0.01
LAB014	0.08	27.16	8.5	49	6.82	47.8	4.20	7.80	0.12	0.05	0.01
LAB015	0.11	18.92	1.7	127	2.40	5.0	0.82	2.16	0.05	0.09	<0.01

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Langley, BC V1M 4B4  
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To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:****MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01
LAB016	0.70	20.36	4.5	114	16.45	109.1	1.56	3.58	0.09	0.12	0.05
LAB017	0.18	16.54	2.7	158	2.80	4.8	0.77	1.76	0.03	0.07	<0.01
LAB018	0.38	27.15	21.0	62	1.56	179.9	4.21	10.25	0.20	0.13	<0.01
LAB019	0.06	16.31	1.5	110	0.55	20.2	1.58	1.45	0.07	0.42	<0.01
14B001	0.03	62.55	2.1	54	1.46	6.1	0.91	5.49	0.08	0.46	<0.01
BJAC14-R1	0.07	46.21	6.1	40	3.14	21.2	3.03	7.01	0.18	0.06	<0.01
BJAC14-F1	14.57	16.98	27.2	48	1.13	290.7	5.30	6.01	0.05	0.13	<0.01
DUP LAB011	0.32	43.72	14.4	40	0.32	82.8	4.25	4.50	0.17	0.06	<0.01
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01
STD OREAS 24b	0.06	67.27	17.3	108	9.97	38.6	4.04	13.63	0.31	0.76	<0.01
STD OREAS 504	0.67	22.82	22.5	46	1.59	>10000	7.43	10.85	0.17	0.45	0.04

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White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 In ppm 0.005	MS-130 K %	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg %	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na %	MS-130 Nb ppm 0.01	MS-130 Ni ppm 0.05	MS-130 P ppm 0.2	MS-130 P ppm 10
LAB001	0.012	0.18	12.6	2.5	0.10	172	0.93	0.09	0.08	4.5	195	
LAB002	<0.005	0.16	10.3	13.9	1.53	813	1.66	0.11	0.14	7.4	847	
LAB003	0.010	0.18	11.1	19.7	0.65	250	2.08	0.02	<0.05	15.1	332	
LAB004	0.009	0.32	19.6	4.4	0.10	270	2.18	0.01	0.07	4.2	183	
LAB005	0.012	0.30	19.9	0.7	0.03	97	4.32	0.01	0.06	4.3	162	
LAB006	0.008	0.32	18.2	7.9	0.88	649	1.94	0.19	0.82	1.9	1945	
LAB007	0.015	0.19	5.3	<0.1	0.01	40	3.63	0.09	0.26	4.3	35	
LAB008	<0.005	0.38	10.7	13.9	1.54	837	0.80	0.15	0.09	2.1	1149	
LAB009	<0.005	0.12	3.4	3.7	0.02	95	66.53	<0.01	<0.05	3.6	388	
LAB010	0.010	0.24	19.1	7.5	0.05	644	17.19	0.01	<0.05	4.1	1602	
LAB011	0.011	0.06	19.7	8.2	0.04	496	3.46	<0.01	<0.05	2.0	1575	
LAB012	<0.005	0.38	16.7	7.9	0.85	1703	1.16	0.03	<0.05	0.5	2096	
LAB013	0.014	0.31	26.4	8.9	0.09	621	1.43	0.01	<0.05	2.8	1523	
LAB014	0.030	0.33	12.2	39.3	0.76	392	22.41	<0.01	<0.05	3.9	883	
LAB015	<0.005	0.24	9.4	1.8	0.03	167	4.10	<0.01	<0.05	4.4	80	

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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 In ppm 0.005	MS-130 K %	MS-130 La ppm 0.01	MS-130 Li ppm 0.2	MS-130 Mg %	MS-130 Mn ppm 0.01	MS-130 Mo ppm 5	MS-130 Na %	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10
LAB016	0.049	0.23	9.2	3.7	0.08	137	33.47	<0.01	<0.05	6.0	871
LAB017	0.034	0.19	7.7	1.8	0.02	861	7.48	<0.01	0.07	6.3	66
LAB018	0.012	0.15	11.3	9.1	0.99	756	2.85	0.16	0.15	10.6	947
LAB019	<0.005	0.28	6.2	<0.1	0.01	30	19.62	0.01	0.57	2.6	83
14B001	<0.005	0.27	19.5	12.0	0.09	191	5.24	0.02	0.57	2.0	167
BJAC14-R1	0.012	0.15	16.0	8.5	0.24	660	2.75	0.03	0.05	5.0	758
BJAC14-F1	<0.005	0.28	7.1	15.5	1.17	1555	19.30	0.04	<0.05	24.1	1004
DUP LAB011	0.008	0.07	19.2	8.7	0.04	516	3.52	<0.01	<0.05	2.3	1610
STD BLANK	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10
STD OREAS 24b	0.042	1.12	30.5	48.3	1.47	345	4.01	0.12	0.33	60.2	567
STD OREAS 504	0.094	0.25	10.6	21.4	1.50	407	759.26	0.14	0.26	21.5	899

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White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1	MS-130 Re ppm 0.001	MS-130 S %	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01
LAB001	11.0	8.6	<0.001	<0.01	0.22	0.9	<0.2	0.4	10.4	<0.01	0.38
LAB002	3.0	8.7	0.001	0.01	0.18	11.1	<0.2	0.8	80.8	<0.01	0.08
LAB003	55.8	13.4	<0.001	0.06	0.57	2.4	0.2	0.4	11.4	<0.01	4.24
LAB004	20.4	14.6	<0.001	<0.01	1.03	0.8	<0.2	0.4	18.0	<0.01	0.13
LAB005	16.0	14.6	<0.001	<0.01	0.47	0.6	<0.2	0.3	10.4	<0.01	0.07
LAB006	2.1	14.9	0.002	<0.01	0.07	7.5	<0.2	1.0	61.8	<0.01	<0.01
LAB007	3.1	6.1	0.001	<0.01	0.25	0.5	<0.2	0.2	9.1	<0.01	<0.01
LAB008	2.0	22.0	<0.001	0.17	0.18	12.9	<0.2	0.6	93.7	<0.01	0.04
LAB009	3.3	4.7	0.004	0.09	0.72	1.2	<0.2	0.2	10.4	<0.01	0.03
LAB010	4.1	9.6	0.001	0.18	0.55	7.2	<0.2	0.3	15.6	<0.01	0.02
LAB011	4.1	3.5	<0.001	0.25	0.38	8.7	<0.2	0.6	16.9	<0.01	<0.01
LAB012	4.3	14.8	<0.001	0.24	0.14	4.3	<0.2	<0.2	113.5	<0.01	0.03
LAB013	5.9	12.2	0.001	0.54	0.16	5.2	0.3	0.4	23.5	<0.01	0.09
LAB014	15.4	21.3	0.001	0.80	1.02	6.3	0.7	0.3	10.3	<0.01	0.43
LAB015	17.4	12.8	<0.001	<0.01	0.35	0.6	<0.2	0.2	6.7	<0.01	0.25

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To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1	MS-130 Re ppm 0.001	MS-130 S %	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01
LAB016	48.1	24.2	<0.001	0.01	3.37	2.2	0.3	0.5	18.9	<0.01	0.23
LAB017	14.3	11.4	<0.001	<0.01	0.75	0.4	<0.2	0.2	8.3	<0.01	0.17
LAB018	3.4	10.2	0.001	0.08	0.37	15.5	0.2	0.8	88.9	<0.01	0.12
LAB019	26.9	8.7	<0.001	0.16	0.23	0.4	0.4	0.2	4.9	<0.01	16.79
14B001	13.1	18.8	<0.001	<0.01	0.58	1.4	<0.2	0.8	7.7	<0.01	0.24
BJAC14-R1	5.6	7.3	<0.001	<0.01	0.19	7.9	<0.2	0.3	31.2	<0.01	0.21
BJAC14-F1	111.5	10.2	0.001	2.08	0.44	7.8	0.9	0.3	179.5	<0.01	1.13
DUP LAB011	4.0	3.3	<0.001	0.27	0.39	8.3	0.2	0.6	16.4	<0.01	<0.01
STD BLANK	0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01
STD OREAS 24b	10.2	115.5	0.001	0.20	0.49	9.5	<0.2	2.3	30.6	<0.01	0.04
STD OREAS 504	20.0	17.1	0.013	1.40	0.63	8.1	11.4	10.0	155.2	<0.01	0.49

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V4B 3X7

**CERTIFICATE OF ANALYSIS:****MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Tl ppm 0.02	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
LAB001	10.2	<0.005	0.08	0.99	2	0.12	4.87	16	4.3
LAB002	4.4	0.131	0.06	1.16	138	0.27	11.20	80	4.4
LAB003	1.4	<0.005	0.12	0.32	14	0.14	3.01	56	3.0
LAB004	2.4	0.005	0.25	0.56	5	0.25	2.91	102	9.0
LAB005	3.3	<0.005	0.22	1.22	4	0.20	2.94	110	6.7
LAB006	1.8	0.195	0.08	0.72	107	0.21	15.99	68	5.6
LAB007	24.3	<0.005	0.04	5.34	<1	0.73	3.81	3	31.2
LAB008	2.5	0.125	0.16	0.63	129	0.22	12.25	51	3.2
LAB009	1.5	<0.005	0.05	2.77	6	0.28	5.13	8	1.7
LAB010	2.0	<0.005	0.10	1.84	53	0.83	12.15	44	1.5
LAB011	1.9	<0.005	0.03	0.93	55	1.15	9.90	79	1.4
LAB012	1.9	<0.005	0.16	0.73	29	0.21	13.91	97	0.6
LAB013	2.2	<0.005	0.08	1.46	35	0.72	14.57	38	2.1
LAB014	3.1	<0.005	0.21	0.73	54	0.14	7.03	50	0.9
LAB015	1.2	<0.005	0.18	0.40	8	0.38	1.69	25	3.3

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White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0032-JUL14**

Project Name: Boer  
Job Received Date: 11-Jul-2014  
Job Report Date: 22-Jul-2014  
Report Version: R1

Sample ID	MS-130 Th ppm 0.2	MS-130 Ti %	MS-130 Tl ppm 0.02	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
LAB016	1.5	<0.005	0.20	2.01	14	0.19	2.79	117	5.5
LAB017	0.9	<0.005	0.28	0.30	6	3.02	1.26	24	2.9
LAB018	4.3	0.062	0.08	0.87	135	0.25	12.12	86	2.3
LAB019	2.9	<0.005	0.11	0.84	<1	0.49	2.10	12	12.2
14B001	13.6	<0.005	0.13	4.94	6	0.15	11.70	32	16.5
BJAC14-R1	5.2	<0.005	0.08	0.82	39	0.69	11.49	37	2.3
BJAC14-F1	3.6	<0.005	0.09	1.54	49	0.30	10.96	385	4.4
DUP LAB011	1.7	<0.005	0.03	0.89	62	1.17	9.83	81	1.4
STD BLANK	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	12.9	0.204	0.69	1.66	78	1.36	9.23	97	27.9
STD OREAS 504	3.4	0.181	0.11	0.91	131	1.55	9.16	95	13.3

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

**CERTIFICATE OF ANALYSIS: MA0103-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 15-Aug-2014  
Report Version: Final

**COMMENTS:**

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

To: **John A. Chapman**  
**18-1480 Foster St**  
**White Rock, BC**  
**V4B 3X7**

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-910	Dry, Crush to 2mm, Split 250g, Pulverize to 85% passing 75µm

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-AES/MS, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, Senior Analytical Chemist  
Met-Solve Analytical Services



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0103-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 15-Aug-2014  
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %	MS-130 Cd ppm	MS-130 Ce ppm
LAB020	Rock	0.71		0.70	0.68	4.5	<0.01	<10	65	0.42	0.09	0.30	0.30	18.76
LAB021	Rock	0.93		0.07	2.49	1.1	<0.01	<10	129	0.25	0.47	1.57	0.02	15.50
LAB022	Rock	0.93		0.03	2.55	1.3	<0.01	<10	48	0.30	0.07	2.03	0.04	14.50
LAB023	Rock	1.08		0.03	1.20	0.5	<0.01	<10	55	0.80	0.76	0.10	0.02	74.61
LAB024	Rock	1.59		0.22	2.35	4.5	<0.01	<10	88	0.80	0.75	0.45	0.22	21.46
DUP LAB020				0.66	0.68	4.1	<0.01	<10	67	0.40	0.08	0.29	0.29	18.15
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02
STD OREAS 24b				0.09	3.27	8.6	<0.01	<10	152	1.75	0.69	0.48	0.05	63.99

\*\*\*Please refer to the cover page for comments  
regarding this certificate. \*\*\*



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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0103-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 15-Aug-2014  
Report Version: Final

Sample ID	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01	MS-130 In ppm 0.005	MS-130 K % 0.01	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg % 0.01
LAB020	6.9	232	7.17	17.33	2.05	3.08	0.11	0.15	0.01	0.012	0.20	7.0	9.2	0.17
LAB021	25.2	73	3.37	11.19	5.36	7.94	0.15	0.13	<0.01	0.012	0.88	6.4	17.6	1.58
LAB022	10.3	54	0.99	5.29	5.07	9.49	0.16	0.13	<0.01	0.019	0.11	6.0	20.1	2.00
LAB023	2.6	129	3.01	2.58	1.09	4.11	0.11	0.32	<0.01	0.024	0.49	34.4	26.4	0.11
LAB024	8.8	165	1.14	57.13	4.69	10.82	0.13	0.45	<0.01	0.128	0.40	9.9	34.6	1.48
DUP LAB020	6.9	226	6.88	17.86	2.07	3.03	0.11	0.15	<0.01	0.011	0.21	6.6	9.2	0.17
STD BLANK	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01
STD OREAS 24b	17.0	112	9.39	37.77	3.79	11.70	0.21	0.71	0.01	0.049	1.24	31.2	46.3	1.40

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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0103-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 15-Aug-2014  
Report Version: Final

Sample ID	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na % 0.01	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2
LAB020	619	5.15	0.01	0.11	7.2	507	9.2	10.0	<0.001	0.02	0.42	1.7	0.2	0.4
LAB021	992	2.23	0.11	0.19	1.1	1591	1.7	65.3	<0.001	0.39	0.16	4.6	0.2	0.4
LAB022	1257	1.20	0.08	0.12	0.5	1857	2.5	6.4	<0.001	0.08	0.09	5.6	<0.2	0.5
LAB023	422	2.25	0.02	0.06	3.2	279	7.7	37.0	<0.001	0.02	0.05	1.3	<0.2	0.4
LAB024	1302	16.03	0.07	0.14	20.6	558	3.2	39.8	0.004	1.71	0.20	10.7	0.2	1.4
DUP LAB020	625	5.13	0.01	0.11	7.1	522	9.1	9.9	<0.001	0.02	0.43	1.6	0.4	0.3
STD BLANK	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2
STD OREAS 24b	371	3.88	0.11	0.31	55.4	626	14.8	145.6	<0.001	0.20	0.36	12.5	0.2	2.2

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock, BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0103-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 15-Aug-2014  
Report Version: Final

Sample ID	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Tl ppm 0.02	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
LAB020	26.8	<0.01	0.06	0.6	0.020	0.09	0.49	25	3.66	2.88	77	4.5
LAB021	124.0	<0.01	0.18	1.8	0.185	0.39	0.84	85	2.40	11.69	72	1.7
LAB022	66.1	<0.01	<0.01	1.5	0.130	0.04	0.60	87	1.36	12.36	65	1.8
LAB023	4.5	<0.01	<0.01	24.5	<0.005	0.22	3.56	14	2.05	23.03	22	12.0
LAB024	19.3	<0.01	0.40	14.1	0.107	0.32	12.36	100	4.16	9.68	99	10.7
DUP LAB020	25.6	<0.01	0.05	0.5	0.021	0.09	0.48	25	3.85	2.76	78	4.2
STD BLANK	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	27.4	<0.01	0.01	14.1	0.206	0.70	1.81	84	1.29	14.17	98	25.9

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regarding this certificate. \*\*\*



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Bureau Veritas Commodities Canada Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Submitted By: John A. Chapman  
Receiving Lab: Canada-Vancouver  
Received: September 11, 2014  
Report Date: September 23, 2014  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002989.1

### CLIENT JOB INFORMATION

Project: BOER

Shipment ID:

P.O. Number NA

Number of Samples: 11

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
BAT01	1	Batch charge of <20 samples			VAN
PRP70-250	11	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ200	11	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
DRPLP	11	Warehouse handling / disposition of pulps			VAN
DRRJT	11	Warehouse handling / Disposition of reject			VAN

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: J.A.Chapman Mining Services  
18-1480 Foster Street  
White Rock BC V4B 3X7  
Canada

CC: Gerald G. Carlson



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**

18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: September 23, 2014

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002989.1

Method	Analyte	WGHT	AQ200																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%								
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
BRJT1401	Rock	1.21	19.8	52.3	9.8	58	1.0	3.9	8.8	635	4.03	63.7	8.1	3.4	14	<0.1	1.3	0.3	75	0.22	0.106
BRJT1402	Rock	0.89	2.0	4.8	7.9	24	0.6	0.8	0.7	93	0.56	4.3	45.1	1.2	9	<0.1	0.2	<0.1	3	0.13	0.028
BRJT1402A	Rock	1.02	0.4	71.7	5.5	63	0.2	25.2	22.7	760	5.14	1.6	0.6	0.5	316	<0.1	0.4	0.2	169	2.59	0.137
BRJT1403	Rock	0.51	1.5	70.5	3.0	77	<0.1	6.7	20.7	1052	3.31	1.7	<0.5	4.2	101	0.1	0.1	0.1	98	1.12	0.109
BRJT1404	Rock	1.08	0.1	741.4	1.3	68	1.0	27.2	14.0	884	2.94	0.9	<0.5	0.3	72	<0.1	<0.1	<0.1	66	3.14	0.109
JR9	Rock	0.99	0.3	67.9	0.6	48	<0.1	46.6	26.2	672	3.83	1.1	0.6	0.5	164	<0.1	<0.1	<0.1	140	3.46	0.076
JR10	Rock	0.65	1.1	42.7	5.6	61	0.2	34.7	15.5	725	3.37	3.1	0.7	3.8	33	0.2	<0.1	0.1	56	0.86	0.167
JR11	Rock	0.83	0.1	1.6	1.7	2	<0.1	0.8	0.3	428	0.29	0.5	<0.5	16.2	30	<0.1	<0.1	<0.1	<2	1.29	0.035
JR12	Rock	0.87	8.1	26.2	2.9	53	<0.1	2.4	18.8	633	4.75	1.2	1.2	3.4	62	0.1	0.2	1.0	127	0.85	0.124
JR13	Rock	0.46	15.7	17.5	2.3	45	<0.1	0.5	15.9	754	4.89	0.7	<0.5	1.2	71	<0.1	0.2	0.2	90	1.71	0.140
JR15	Rock	0.82	0.4	6.4	2.8	41	<0.1	0.5	17.8	698	4.47	1.0	1.5	1.8	59	<0.1	<0.1	0.8	82	1.19	0.184



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 23, 2014

Page: 2 of 2

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN14002989.1

Analyte	Method	AQ200																	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
BRJT1401	Rock	11	6	1.09	37	0.002	<20	1.74	0.005	0.16	<0.1	0.01	6.0	<0.1	0.73	6	0.5	0.2	
BRJT1402	Rock	21	2	0.07	36	<0.001	<20	0.38	0.004	0.23	<0.1	<0.01	0.4	<0.1	<0.05	1	<0.5	<0.2	
BRJT1402A	Rock	4	12	1.59	437	0.199	<20	4.54	0.500	0.69	<0.1	0.01	2.8	0.1	0.11	10	<0.5	<0.2	
BRJT1403	Rock	7	3	1.63	72	0.074	<20	1.96	0.038	0.04	<0.1	<0.01	10.3	<0.1	0.05	7	<0.5	<0.2	
BRJT1404	Rock	2	40	1.95	9	0.108	<20	2.17	0.031	0.05	<0.1	<0.01	5.1	<0.1	<0.05	5	<0.5	<0.2	
JR9	Rock	4	107	1.97	68	0.121	<20	4.25	0.341	0.10	<0.1	<0.01	6.8	<0.1	0.11	8	<0.5	<0.2	
JR10	Rock	27	19	1.34	153	0.003	<20	1.99	0.015	0.24	<0.1	<0.01	5.5	<0.1	<0.05	6	<0.5	<0.2	
JR11	Rock	15	2	0.07	65	0.001	<20	0.34	0.020	0.24	<0.1	<0.01	0.6	<0.1	<0.05	<1	<0.5	<0.2	
JR12	Rock	8	<1	1.69	83	0.155	<20	1.81	0.099	0.07	10.0	<0.01	6.8	<0.1	0.18	8	<0.5	<0.2	
JR13	Rock	4	1	1.44	69	0.150	<20	1.65	0.062	0.31	0.2	<0.01	2.2	<0.1	0.16	6	<0.5	<0.2	
JR15	Rock	7	<1	1.09	110	0.157	<20	1.40	0.103	0.19	8.4	<0.01	5.3	<0.1	1.40	5	<0.5	0.3	

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER

Report Date: September 23, 2014

Page: 1 of 1

Part: 1 of 2

**QUALITY CONTROL REPORT****VAN14002989.1**

Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Reference Materials																					
STD DS10	Standard		14.6	156.7	152.0	363	2.0	71.7	12.6	830	2.65	43.9	49.7	7.9	63	2.4	8.6	12.5	42	1.02	0.074
STD OREAS45EA	Standard		1.6	691.2	15.4	30	0.3	377.6	50.7	380	23.28	12.2	52.5	10.7	4	<0.1	0.4	0.3	294	0.04	0.031
STD DS10 Expected			14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9	7.5	67.1	2.49	8.23	11.65	43	1.0625	0.073
STD OREAS45EA Expected			1.39	709	14.3	28.9	0.26	381	52	400	23.51	9.1	53	10.7	3.5	0.02	0.2	0.26	303	0.036	0.029
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	
Prep Wash																					
G1	Prep Blank		0.5	4.2	2.5	28	<0.1	1.2	3.9	409	1.68	1.3	<0.5	2.2	28	<0.1	<0.1	<0.1	23	0.60	0.044
G1	Prep Blank		0.6	4.4	1.0	27	<0.1	1.3	3.9	430	1.78	1.2	<0.5	2.1	27	<0.1	<0.1	<0.1	25	0.62	0.044



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 23, 2014

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN14002989.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Reference Materials																		
STD DS10	Standard	17	54	0.73	409	0.076	<20	0.97	0.065	0.32	2.6	0.42	2.6	4.7	0.27	4	1.7	4.6
STD OREAS45EA	Standard	8	849	0.09	150	0.100	<20	3.12	0.023	0.05	<0.1	<0.01	81.3	<0.1	<0.05	12	1.1	<0.2
STD DS10 Expected		17.5	54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3	2.3	5.01
STD OREAS45EA Expected		6.57	849	0.095	148	0.0875		3.13	0.02	0.053			78	0.072	0.036	11.7	0.6	0.07
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
G1	Prep Blank	6	3	0.41	74	0.072	<20	0.86	0.078	0.08	<0.1	<0.01	2.7	<0.1	<0.05	3	<0.5	<0.2
G1	Prep Blank	6	3	0.44	70	0.075	<20	0.90	0.080	0.08	<0.1	0.01	2.6	<0.1	<0.05	4	<0.5	<0.2



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

**CERTIFICATE OF ANALYSIS: MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

**COMMENTS:**

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

To: **John A. Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-910	Dry, Crush to 2mm, Split 250g, Pulverize to 85% passing 75µm

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer

Senior Analytical Chemist

Met-Solve Analytical Services Inc.



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.01	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
JR1	Rock	1.23		0.08	0.67	0.4	<0.01	<10	50	1.45	0.34	0.41
JR2	Rock	1.21		0.28	1.47	1.0	0.01	<10	37	0.18	37.50	0.80
JR3	Rock	1.27		0.03	0.86	0.4	<0.01	<10	676	0.37	0.40	2.05
DUP JR1				0.07	0.67	0.2	<0.01	<10	50	1.37	0.35	0.41
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.07	3.25	8.1	<0.01	<10	148	1.62	0.75	0.47

\*\*\*Please refer to the cover page for comments  
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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John A. Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01
JR1	0.04	91.99	1.7	122	3.03	2.0	0.89	3.45	0.12	0.59	<0.01
JR2	0.02	18.40	198.1	127	0.35	9.7	5.93	6.02	0.11	0.16	<0.01
JR3	0.18	24.61	5.7	166	0.69	2.4	0.88	1.94	<0.05	0.09	<0.01
DUP JR1	0.04	93.45	1.7	120	3.07	2.1	0.88	3.36	0.11	0.62	<0.01
STD BLANK	<0.01	<0.02	<0.1	1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01
STD OREAS 24b	0.05	58.62	16.3	110	9.06	36.9	3.98	11.70	0.16	0.68	<0.01

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**CERTIFICATE OF ANALYSIS:**

**MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

Sample ID	MS-130 In ppm 0.005	MS-130 K %	MS-130 La ppm 0.2	MS-130 Li ppm 0.1	MS-130 Mg %	MS-130 Mn ppm 5	MS-130 Mo ppm 0.05	MS-130 Na %	MS-130 Nb ppm 0.05	MS-130 Ni ppm 0.2	MS-130 P ppm 10
JR1	0.012	0.34	45.5	0.2	0.09	362	2.50	0.03	0.14	4.3	247
JR2	0.009	0.10	8.7	7.5	1.03	550	2.32	0.13	0.38	7.1	1084
JR3	0.011	0.48	12.9	<0.1	0.11	481	2.63	0.03	0.08	4.1	395
DUP JR1	0.013	0.33	46.7	<0.1	0.09	361	2.39	0.03	0.15	3.9	250
STD BLANK	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10
STD OREAS 24b	0.042	1.19	30.2	41.1	1.40	350	3.88	0.11	0.29	60.7	632

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V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

Sample ID	MS-130 Pb ppm 0.2	MS-130 Rb ppm 0.1	MS-130 Re ppm 0.001	MS-130 S %	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01
JR1	8.1	21.5	<0.001	<0.01	0.06	0.9	<0.2	0.4	13.2	<0.01	0.01
JR2	2.7	4.3	<0.001	3.11	0.09	5.3	1.0	0.5	57.9	<0.01	24.09
JR3	4.0	13.0	<0.001	0.03	0.09	0.8	<0.2	0.2	58.0	<0.01	0.23
DUP JR1	8.0	21.2	<0.001	<0.01	0.06	0.9	<0.2	0.5	13.0	<0.01	0.02
STD BLANK	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	0.2	<0.2	<0.01	<0.01
STD OREAS 24b	8.4	127.8	<0.001	0.19	0.53	9.9	0.2	2.1	30.1	<0.01	0.03

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White Rock BC  
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**CERTIFICATE OF ANALYSIS:**

**MA0024-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 21-Aug-2014  
Report Version: Final

Sample ID	MS-130 Th ppm 0.2	MS-130 Ti %	MS-130 Tl ppm 0.02	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
JR1	21.8	<0.005	0.13	2.82	11	2.92	22.24	14	23.3
JR2	2.1	0.132	0.02	0.62	61	4.05	9.83	43	3.3
JR3	10.9	0.008	0.07	1.16	7	4.07	7.77	15	2.3
DUP JR1	21.6	<0.005	0.13	2.79	11	2.96	22.69	13	23.6
STD BLANK	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	13.1	0.202	0.61	1.62	81	1.30	11.76	94	25.7

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**CERTIFICATE OF ANALYSIS: MA0025-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 24-Sep-2014  
Report Version: Final

**COMMENTS:**

Samples were subcontracted for ashing prior to analysis.

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-999	Preparation Package-Client Specifications

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-330	Multi-Element, Vegetation, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer

Senior Analytical Chemist

Met-Solve Analytical Services Inc.



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0025-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 24-Sep-2014  
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	PWE-999 Ash Wt. g 0.01	Method Analyte Units LOR	MS-330 Ag ppm 0.01	MS-330 Al % 0.01	MS-330 As ppm 0.1	MS-330 Au ppm 0.005	MS-330 B ppm 10	MS-330 Ba ppm 10	MS-330 Be ppm 0.05
JR4	Lodgepole Pine Bark	0.17	2.62		0.83	5.81	1.7	0.008	200	512	0.07
JR5	Lodgepole Pine Bark	0.19	3.00		1.08	5.91	1.8	0.038	287	557	0.07
JR6	Lodgepole Pine Bark	0.13	2.13		0.69	2.57	2.2	0.019	264	370	0.06
JR7	Lodgepole Pine Bark	0.14	3.55		0.55	2.77	2.0	0.018	166	652	0.08
JR8	Lodgepole Pine Bark	0.13	2.10		2.45	2.12	2.8	0.020	182	610	0.09
DUP JR4					1.07	6.21	2.3	0.017	205	545	0.10
STD BLANK					<0.01	<0.01	<0.1	0.005	<10	<10	<0.05
STD SRM 1573a					<0.01	0.02	<0.1	<0.005	35	55	<0.05

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V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0025-AUG14**

Project Name: Boer

Job Received Date: 11-Aug-2014

Job Report Date: 24-Sep-2014

Report Version: Final

Sample ID	MS-330 Bi ppm 0.01	MS-330 Ca % 0.01	MS-330 Cd ppm 0.01	MS-330 Ce ppm 0.02	MS-330 Co ppm 0.01	MS-330 Cr ppm 1	MS-330 Cs ppm 0.05	MS-330 Cu ppm 0.2	MS-330 Fe % 0.01	MS-330 Ga ppm 0.05	MS-330 Ge ppm 0.05	MS-330 Hf ppm 0.02
JR4	0.08	>25.00	11.02	2.26	10.40	27	2.28	214.0	0.84	0.88	<0.05	<0.02
JR5	0.06	>25.00	7.26	2.39	6.68	28	2.57	221.5	0.46	0.96	0.06	0.04
JR6	0.07	>25.00	23.52	2.29	7.87	42	2.99	157.2	0.34	0.90	<0.05	0.03
JR7	0.09	>25.00	48.96	3.43	5.91	22	2.38	104.7	0.28	1.05	<0.05	0.03
JR8	0.13	>25.00	42.65	4.40	16.15	58	1.89	153.7	0.98	1.39	<0.05	0.05
DUP JR4	0.16	>25.00	14.24	3.26	13.71	30	3.07	230.9	0.95	1.32	0.13	<0.02
STD BLANK	<0.01	<0.01	<0.01	0.04	<0.01	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02
STD SRM 1573a	<0.01	4.71	1.43	1.56	0.62	1	<0.05	4.9	0.02	0.18	<0.05	0.03

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Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0025-AUG14**

Project Name: Boer

Job Received Date: 11-Aug-2014

Job Report Date: 24-Sep-2014

Report Version: Final

Sample ID	MS-330 Hg ppm 0.01	MS-330 In ppm 0.05	MS-330 K %	MS-330 La ppm 0.2	MS-330 Li ppm 0.1	MS-330 Mg %	MS-330 Mn ppm 5	MS-330 Mo ppm 0.05	MS-330 Na %	MS-330 Nb ppm 0.01	MS-330 Ni ppm 0.2	MS-330 P %	MS-330 0.001
JR4	<0.01	<0.05	3.52	1.6	1.1	1.75	11370	14.40	0.44	0.45	113.3	1.290	
JR5	<0.01	<0.05	6.13	1.3	1.0	2.00	8934	9.64	0.21	0.19	109.4	1.239	
JR6	<0.01	<0.05	3.92	1.3	0.8	2.19	11477	17.05	0.09	<0.05	261.8	0.785	
JR7	<0.01	<0.05	3.28	2.1	0.8	1.82	9008	15.67	0.07	0.09	76.7	0.846	
JR8	<0.01	<0.05	5.31	2.4	1.5	1.44	10519	19.82	0.41	1.33	100.5	0.893	
DUP JR4	<0.01	<0.05	3.76	2.2	1.5	1.85	12055	18.29	0.50	0.72	125.0	1.380	
STD BLANK	0.01	<0.05	<0.01	<0.2	0.1	<0.01	<5	<0.05	0.01	<0.05	<0.2	<0.001	
STD SRM 1573a	0.03	<0.05	2.50	2.2	0.3	1.09	226	0.37	0.02	<0.05	1.7	0.214	

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V4B 3X7

**CERTIFICATE OF ANALYSIS: MA0025-AUG14**

Project Name: Boer

Job Received Date: 11-Aug-2014

Job Report Date: 24-Sep-2014

Report Version: Final

Sample ID	MS-330 Pb ppm 0.2	MS-330 Re ppm 0.001	MS-330 S %	MS-330 Sb ppm 0.05	MS-330 Sc ppm 0.1	MS-330 Se ppm 0.2	MS-330 Sn ppm 0.2	MS-330 Sr ppm 0.2	MS-330 Ta ppm 0.01	MS-330 Te ppm 0.01	MS-330 Th ppm 0.2	MS-330 Ti %	MS-330 0.005
JR4	11.6	0.021	0.95	0.56	0.8	0.6	0.8	668.4	0.02	0.06	0.2	0.011	
JR5	9.9	0.021	1.13	0.47	0.9	0.5	1.1	812.3	0.01	0.04	<0.2	0.008	
JR6	13.1	0.028	1.04	0.66	0.7	0.7	1.0	1181.4	<0.01	0.06	<0.2	0.005	
JR7	18.1	0.007	0.99	0.82	0.9	0.6	2.0	587.6	<0.01	0.04	<0.2	0.006	
JR8	18.5	0.026	1.26	1.14	1.3	0.8	1.4	776.0	0.05	0.08	0.3	0.015	
DUP JR4	15.5	0.030	1.02	0.74	1.0	0.6	1.4	714.8	0.02	0.06	0.3	0.012	
STD BLANK	<0.2	<0.001	<0.01	0.06	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	
STD SRM 1573a	3.1	0.002	0.96	0.07	0.3	<0.2	0.5	80.3	0.02	0.01	<0.2	<0.005	

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To: **John Chapman**  
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**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS: MA0025-AUG14**

Project Name: Boer  
Job Received Date: 11-Aug-2014  
Job Report Date: 24-Sep-2014  
Report Version: Final

Sample ID	MS-330 Tl ppm 0.02	MS-330 U ppm 0.05	MS-330 V ppm 1	MS-330 W ppm 0.05	MS-330 Y ppm 0.05	MS-330 Zn ppm 2	MS-330 Zr ppm 0.5
JR4	<0.02	0.86	8	0.65	0.88	2273	14.1
JR5	<0.02	1.05	7	0.48	0.88	1687	7.8
JR6	<0.02	1.25	8	0.48	0.97	2652	1.2
JR7	<0.02	0.63	9	0.42	1.26	2140	1.8
JR8	<0.02	0.95	11	1.02	1.63	2043	11.3
DUP JR4	<0.02	0.91	9	0.96	1.20	2441	16.1
STD BLANK	<0.02	<0.05	<1	<0.05	<0.05	<2	<0.5
STD SRM 1573a	0.03	<0.05	3	<0.05	0.74	34	0.8



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Bureau Veritas Commodities Canada Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Submitted By: John A. Chapman  
Receiving Lab: Canada-Vancouver  
Received: September 11, 2014  
Report Date: September 24, 2014  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002990.1

### CLIENT JOB INFORMATION

Project: BOER  
Shipment ID:  
P.O. Number NA  
Number of Samples: 1

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	1	Dry at 60C			VAN
SS80	1	Dry at 60C sieve 100g to -80 mesh			VAN
AQ200	1	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: J.A.Chapman Mining Services  
18-1480 Foster Street  
White Rock BC V4B 3X7  
Canada

CC: Gerald G. Carlson



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 24, 2014

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002990.1

Method	AQ200																				
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Analyte	ppm	%	ppm	ppb	ppm	%	%	ppm													
Unit	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	0.1	2	0.01	0.001
MDL																					1
BSJT1401	Soil	1.4	17.9	5.4	62	<0.1	15.1	8.2	280	2.73	4.5	3.9	1.6	20	<0.1	0.2	0.1	66	0.16	0.073	7



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9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
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Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 24, 2014

Page: 2 of 2

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN14002990.1

Method	AQ200																
Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
BSJT1401	Soil	22	0.51	135	0.048	<20	1.97	0.007	0.04	<0.1	0.05	3.5	<0.1	<0.05	6	<0.5	<0.2



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9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

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Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 24, 2014

Page: 1 of 1

Part: 1 of 2

## QUALITY CONTROL REPORT

VAN14002990.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Analyte	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
Unit	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1	
MDL																					
Reference Materials																					
STD DS10	Standard	12.3	150.2	146.9	349	1.8	73.3	12.5	864	2.75	43.5	58.5	6.9	65	2.6	9.0	13.0	41	0.97	0.070	15
STD OREAS45EA	Standard	1.9	640.4	13.9	28	0.2	333.4	48.1	394	24.39	10.3	41.3	10.6	4	<0.1	0.4	0.2	281	0.04	0.025	7
STD DS10 Expected		14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9	7.5	67.1	2.49	8.23	11.65	43	1.0625	0.073	17.5
STD OREAS45EA Expected		1.39	709	14.3	28.9	0.26	381	52	400	23.51	9.1	53	10.7	3.5	0.02	0.2	0.26	303	0.036	0.029	6.57
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: September 24, 2014

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN14002990.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
Reference Materials																	
STD DS10	Standard	53	0.75	380	0.069	<20	0.90	0.054	0.31	3.2	0.25	2.7	4.7	0.29	4	1.6	4.4
STD OREAS45EA	Standard	801	0.09	134	0.089	<20	2.71	0.018	0.05	<0.1	0.01	72.8	<0.1	<0.05	12	1.0	<0.2
STD DS10 Expected		54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3	2.3	5.01
STD OREAS45EA Expected		849	0.095	148	0.0875		3.13	0.02	0.053		78	0.072	0.036	11.7	0.6	0.07	
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS: MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

**COMMENTS:**

Samples were subcontracted for ashing prior to analysis.

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-999	Preparation Package-Client Specifications

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-330	Multi-Element, Vegetation, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer

Senior Analytical Chemist

Met-Solve Analytical Services Inc.



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
18-1480 Foster St  
White Rock BC  
V4B 3X7

**CERTIFICATE OF ANALYSIS:**

**MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	PWE-999 Ash Wt. g 0.01	Method Analyte Units LOR	MS-330 Ag ppm 0.01	MS-330 Al % 0.01	MS-330 As ppm 0.1	MS-330 Au ppm 0.005	MS-330 B ppm 10	MS-330 Ba ppm 10	MS-330 Be ppm 0.05
14LPP01	Lodgepole Pine Bark	0.08	1.04		3.91	3.70	3.4	0.015	215	764	0.19
14LPP02	Lodgepole Pine Bark	0.10	0.85		5.58	1.10	3.2	0.059	458	581	0.16
14LPP03	Lodgepole Pine Bark	0.08	1.04		2.78	5.95	3.6	0.044	293	600	0.21
14LPP04	Lodgepole Pine Bark	0.07	0.68		2.43	2.81	1.4	0.018	264	546	0.22
14LPP05	Lodgepole Pine Bark	0.14	1.14		4.23	1.76	3.7	0.096	264	681	0.14
14LPP06	Lodgepole Pine Bark	0.09	0.96		1.82	1.13	2.5	0.008	140	564	0.13
14LPP07	Lodgepole Pine Bark	0.08	0.83		1.05	2.68	<0.1	0.010	257	546	0.14
14LPP08	Lodgepole Pine Bark	0.09	1.62		11.21	2.95	<0.1	0.044	288	348	0.09
14LPP09	Lodgepole Pine Bark	0.09	1.53		6.78	5.29	<0.1	0.017	393	467	0.09
DUP 14LPP01 STD BLANK STD SRM 1573a					3.40 0.01 <0.01	3.05 <0.01 0.02	2.9 <0.1 <0.1	0.019 <0.005 <0.005	227 <10 35	609 <10 65	0.17 <0.05 <0.05

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:****MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

Sample ID	MS-330 Bi ppm 0.01	MS-330 Ca % 0.01	MS-330 Cd ppm 0.01	MS-330 Ce ppm 0.02	MS-330 Co ppm 0.01	MS-330 Cr ppm 1	MS-330 Cs ppm 0.05	MS-330 Cu ppm 0.2	MS-330 Fe % 0.01	MS-330 Ga ppm 0.05	MS-330 Ge ppm 0.05	MS-330 Hf ppm 0.02
14LPP01	0.36	>25.00	16.71	9.52	9.31	91	2.88	340.5	1.48	2.56	<0.05	0.12
14LPP02	0.20	24.79	6.79	7.39	21.96	323	1.74	402.0	1.06	1.95	0.06	0.13
14LPP03	0.53	21.19	15.14	10.96	7.58	27	4.74	361.8	1.06	2.69	0.19	0.10
14LPP04	0.38	22.64	14.18	10.22	17.57	29	2.05	315.9	1.03	2.47	0.06	0.11
14LPP05	0.17	24.52	7.50	6.87	7.39	68	1.56	371.1	0.68	1.78	0.05	0.07
14LPP06	0.27	>25.00	12.87	6.80	13.77	25	2.16	282.4	0.92	1.81	<0.05	0.09
14LPP07	0.27	22.04	21.08	7.10	49.34	45	2.90	271.3	1.80	2.00	<0.05	0.10
14LPP08	0.15	23.19	8.55	4.11	8.21	85	1.46	148.8	0.53	1.61	<0.05	0.06
14LPP09	0.15	23.67	9.29	4.15	7.19	137	1.15	203.8	0.48	1.14	0.11	0.04
DUP 14LPP01	0.31	>25.00	12.68	9.19	9.15	75	2.61	269.1	1.27	2.69	0.08	0.11
STD BLANK	<0.01	<0.01	5.51	1.38	1.60	0.62	1	<0.05	<0.2	<0.05	<0.05	<0.02
STD SRM 1573a	<0.01						2	<0.05	4.9	0.03	<0.05	0.04

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:****MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

Sample ID	MS-330 Hg ppm 0.01	MS-330 In ppm 0.05	MS-330 K %	MS-330 La ppm 0.2	MS-330 Li ppm 0.1	MS-330 Mg %	MS-330 Mn ppm 5	MS-330 Mo ppm 0.05	MS-330 Na %	MS-330 Nb ppm 0.01	MS-330 Ni ppm 0.2	MS-330 P %	MS-330
14LPP01	<0.01	<0.05	4.16	4.8	3.6	2.70	17095	102.61	0.50	0.62	110.0	2.001	
14LPP02	0.02	<0.05	4.29	4.8	3.9	2.79	6350	81.19	2.24	1.08	545.6	1.677	
14LPP03	0.01	<0.05	3.91	5.6	3.3	2.47	13496	102.90	0.32	0.40	72.0	2.027	
14LPP04	<0.01	<0.05	5.12	6.3	2.8	3.71	10915	130.45	0.29	0.50	82.3	2.001	
14LPP05	<0.01	<0.05	4.45	3.8	2.3	3.19	8695	80.92	0.14	0.14	172.6	1.535	
14LPP06	<0.01	<0.05	3.14	4.7	2.8	2.75	5229	71.18	1.24	0.59	99.4	1.166	
14LPP07	0.01	<0.05	4.37	6.4	2.4	2.71	14046	111.76	0.70	0.72	254.5	1.316	
14LPP08	<0.01	<0.05	7.02	3.0	1.6	3.37	16343	54.08	0.15	0.32	208.3	1.508	
14LPP09	0.01	<0.05	8.48	2.8	1.3	3.86	4832	46.77	0.15	0.13	209.9	2.013	
DUP 14LPP01	<0.01	<0.05	3.28	5.9	3.2	2.14	13631	100.69	0.43	0.54	102.4	1.580	
STD BLANK	<0.01	<0.05	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	0.001	
STD SRM 1573a	0.03	<0.05	2.95	2.2	<0.1	1.21	261	0.37	0.02	<0.05	1.7	0.228	

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:** **MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

Sample ID	MS-330 Pb ppm 0.2	MS-330 Rb ppm 0.1	MS-330 Re ppm 0.001	MS-330 S %	MS-330 Sb ppm 0.05	MS-330 Sc ppm 0.1	MS-330 Se ppm 0.2	MS-330 Sn ppm 0.2	MS-330 Sr ppm 0.2	MS-330 Ta ppm 0.01	MS-330 Te ppm 0.01	MS-330 Th ppm 0.2
14LPP01	40.9	102.2	0.005	1.49	3.33	2.5	1.3	1.4	2288.9	0.04	0.13	0.5
14LPP02	21.5	86.8	0.007	1.06	1.19	2.7	1.0	1.8	1557.6	0.06	0.12	0.6
14LPP03	41.3	124.1	0.005	1.35	4.10	2.3	1.5	1.8	777.9	0.02	0.09	0.5
14LPP04	36.5	206.6	0.005	1.31	2.71	2.4	1.0	2.0	1411.2	0.02	0.11	0.5
14LPP05	24.3	134.5	0.007	1.36	1.71	1.9	1.2	1.6	1439.2	0.01	0.12	0.4
14LPP06	33.3	127.0	0.003	1.08	1.91	2.0	1.1	2.0	1157.5	0.05	0.10	0.4
14LPP07	22.3	175.9	0.004	1.35	1.71	2.1	<0.2	0.2	737.1	0.06	0.07	0.6
14LPP08	21.2	167.1	0.014	0.78	1.63	1.6	0.5	0.3	849.3	0.01	0.08	0.3
14LPP09	13.0	120.8	0.014	0.94	1.08	1.2	0.2	1.7	945.7	0.01	0.08	0.2
DUP 14LPP01	37.1	125.9	0.005	1.18	3.02	2.4	1.1	1.9	1824.8	0.03	0.13	0.6
STD BLANK	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	0.02	<0.2
STD SRM 1573a	0.4	13.5	0.001	1.06	<0.05	0.1	<0.2	<0.2	91.6	0.03	0.01	<0.2

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: **John Chapman**  
**18-1480 Foster St**  
**White Rock BC**  
**V4B 3X7**

**CERTIFICATE OF ANALYSIS:**

**MA0104-JUL14**

Project Name: Boer  
Job Received Date: 31-Jul-2014  
Job Report Date: 25-Sep-2014  
Report Version: Final

Sample ID	MS-330 Ti %	MS-330 Tl ppm	MS-330 U ppm	MS-330 V ppm	MS-330 W ppm	MS-330 Y ppm	MS-330 Zn ppm	MS-330 Zr ppm
14LPP01	0.030	0.05	5.06	26	2.23	3.79	3302	7.7
14LPP02	0.027	<0.02	6.77	20	2.30	2.60	1815	10.3
14LPP03	0.026	0.02	8.84	24	1.17	4.62	2008	6.2
14LPP04	0.023	0.02	8.95	23	1.34	4.54	2347	9.0
14LPP05	0.017	0.03	4.50	18	1.22	2.87	2001	2.9
14LPP06	0.024	<0.02	2.50	19	0.78	2.54	2296	12.0
14LPP07	0.038	<0.02	1.64	24	0.82	2.89	1884	11.1
14LPP08	0.018	<0.02	1.41	12	0.74	1.57	1634	3.0
14LPP09	0.014	<0.02	2.11	14	1.01	1.64	2647	1.9
DUP 14LPP01	0.026	0.03	5.13	22	1.14	3.70	2603	7.1
STD BLANK	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<2	<0.5
STD SRM 1573a	<0.005	0.02	<0.05	2	0.20	0.35	31	<0.5

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Bureau Veritas Commodities Canada Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Submitted By: John A. Chapman  
Receiving Lab: Canada-Vancouver  
Received: September 11, 2014  
Report Date: October 01, 2014  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002991.1

### CLIENT JOB INFORMATION

Project: BOER  
Shipment ID:  
P.O. Number NA  
Number of Samples: 2

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	2	Vegetation Ashing at 475	50		VAN
Split Ash from VA475	2	Analysis sample split/packet			VAN
VG104	2	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.25	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: J.A.Chapman Mining Services  
18-1480 Foster Street  
White Rock BC V4B 3X7  
Canada

CC: Gerald G. Carlson



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

**Client:** **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 01, 2014

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14002991.1

Method	VA475	VA475	VA475	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	
	Rec.	Wt	Ash	Wtshed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
Analyte	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	0.02
OVEN STD-1	Vegetation	0.52	18.479	0.572	0.89	33.33	7.91	1186.7	863	10.4	0.9	>10000	0.12	2.2	1.8	1.0	0.7	471.7	0.15	0.32	0.18
JR14	Vegetation	2.31	50.674	2.315	11.83	47.49	14.78	991.8	188	5.6	3.2	7238	0.16	1.0	<0.1	6.2	0.1	374.4	12.21	0.39	0.07



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9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 01, 2014

Page: 2 of 2

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN14002991.1

Method	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	
	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Se	Te	Ga	
Analyte	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
Unit	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	0.1	0.02	0.1	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	0.1	0.02	0.1	
OVEN STD-1	Vegetation	2	22.23	2.531	1.3	4.1	2.11	999.8	0.004	344	0.13	0.124	9.15	0.3	0.8	0.35	1.25	0.3	<0.02	0.9
JR14	Vegetation	4	17.34	0.465	0.9	1.7	1.06	490.5	0.004	82	0.91	0.030	3.45	<0.1	0.3	0.29	0.45	0.3	<0.02	0.6



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 01, 2014

Page: 1 of 1

Part: 1 of 2

## QUALITY CONTROL REPORT

VAN14002991.1

Method	VA475	VA475	VA475	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104
	Rec. Wt	Ash	Washed Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi		
	Unit	g	g	g	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	
	MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02		
Pulp Duplicates																						
JR14	Vegetation	2.31	50.674	2.315	11.83	47.49	14.78	991.8	188	5.6	3.2	7238	0.16	1.0	<0.1	6.2	0.1	374.4	12.21	0.39	0.07	
REP JR14	QC				10.05	41.90	12.19	898.3	139	5.9	2.7	6470	0.13	0.6	<0.1	2.3	<0.1	342.8	10.18	0.31	0.05	
Reference Materials																						
STD ASH-1	Standard				0.81	70.78	9.26	158.9	35	132.0	17.5	1107	2.54	3.9	0.6	4.8	3.9	880.3	0.24	0.11	0.11	
STD DS10	Standard				14.36	154.97	161.62	379.4	1823	79.0	12.9	896	2.72	42.9	2.9	78.0	7.9	65.1	2.51	7.71	12.12	
STD ASH-1 Expected					0.84	73	8.83	175	35	133	17.2	1134	2.28	4.1	0.6	5	3.7	944	0.27	0.17	0.13	
STD DS10 Expected					14.69	154.61	150.55	370	2020	74.6	12.9	875	2.7188	43.7	2.59	91.9	7.5	67.1	2.49	8.23	11.65	
BLK	Blank				<0.01	<0.01	<0.01	0.1	<2	<0.1	<0.1	5	<0.01	0.2	<0.1	<0.2	<0.1	<0.5	0.03	<0.02	<0.02	



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **J.A.Chapman Mining Services**  
18-1480 Foster Street  
White Rock BC V4B 3X7 Canada

Project: BOER  
Report Date: October 01, 2014

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN14002991.1

Method	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	
Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	0.1	0.02	0.1	
Pulp Duplicates																				
JR14	Vegetation	4	17.34	0.465	0.9	1.7	1.06	490.5	0.004	82	0.91	0.030	3.45	<0.1	0.3	0.29	0.45	0.3	<0.02	0.6
REP JR14	QC	3	15.15	0.399	0.7	1.3	0.96	415.3	0.004	72	0.78	0.027	3.03	<0.1	0.3	0.25	0.39	0.2	<0.02	0.5
Reference Materials																				
STD ASH-1	Standard	57	16.58	0.224	13.0	165.2	1.94	97.2	0.021	321	2.70	0.574	1.27	<0.1	9.2	0.14	0.41	0.2	<0.02	6.2
STD DS10	Standard	43	1.11	0.075	18.3	58.0	0.83	433.8	0.079	5	1.05	0.063	0.35	3.6	2.9	5.48	0.29	2.5	5.07	4.2
STD ASH-1 Expected		49	18.54	0.24	12.8	159	1.91	94.5	0.02	294	2.95	0.55	1.17	0	8.5	0.12	0.41	0.5	0.06	6.1
STD DS10 Expected		43	1.0625	0.073	17.5	54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	2.8	5.1	0.29	2.3	5.01	4.3
BLK	Blank	<2	0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<0.1	<0.02	



Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 21-Nov-2014  
Report Version: Final

**COMMENTS:**

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

To: **John Chapman**  
**43 – 1725 Southmere Cres.**  
**Surrey, B.C.**  
**V4A 7A7**

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-910	Dry, Crush to 2mm, Split 250g, Pulverize to 85% passing 75µm

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer

Senior Analytical Chemist

Met-Solve Analytical Services Inc.



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Langley, BC V1M 4B4  
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43 – 1725 Southmere Cres.  
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V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 21-Nov-2014  
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	MS-130 Ag ppm 0.01	MS-130 Al % 0.01	MS-130 As ppm 0.1	MS-130 Au ppm 0.005	MS-130 B ppm 10	MS-130 Ba ppm 10	MS-130 Be ppm 0.05	MS-130 Bi ppm 0.01	MS-130 Ca % 0.01
LAB025	Rock	1.31		0.65	0.62	2.1	<0.005	<10	198	0.32	0.41	0.95
LAB026	Rock	1.01		0.48	0.58	1.6	<0.005	<10	164	0.28	0.44	1.17
LAB027	Rock	1.06		13.25	0.52	47.7	0.531	<10	201	0.13	0.10	0.05
LAB028	Rock	1.16		10.09	0.57	50.5	0.566	<10	279	0.14	0.11	0.04
LAB029	Rock	1.29		0.70	0.65	1.8	0.006	<10	257	0.37	0.50	0.25
LAB030	Rock	1.24		0.11	4.53	1.3	<0.005	<10	57	0.15	0.12	3.81
DUP LAB025				0.65	0.57	2.3	<0.005	<10	191	0.30	0.38	0.93
STD BLANK				<0.01	<0.01	<0.1	<0.005	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.09	3.17	8.3	<0.005	<10	150	1.72	0.66	0.46

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Langley, BC V1M 4B4  
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**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 21-Nov-2014  
Report Version: Final

Sample ID	MS-130 Cd ppm 0.01	MS-130 Ce ppm 0.02	MS-130 Co ppm 0.1	MS-130 Cr ppm 1	MS-130 Cs ppm 0.05	MS-130 Cu ppm 0.2	MS-130 Fe % 0.01	MS-130 Ga ppm 0.05	MS-130 Ge ppm 0.05	MS-130 Hf ppm 0.02	MS-130 Hg ppm 0.01	MS-130 In ppm 0.005
LAB025	25.85	23.46	5.3	109	0.58	29.1	1.64	1.67	0.07	0.22	0.01	0.032
LAB026	7.11	21.15	4.4	106	0.62	49.3	1.61	1.55	0.06	0.13	<0.01	0.023
LAB027	1.13	8.21	2.1	180	2.22	72.9	1.02	1.69	<0.05	0.03	0.03	0.010
LAB028	1.09	10.64	2.2	188	2.11	192.5	1.17	1.79	<0.05	0.04	0.03	0.016
LAB029	21.15	23.40	8.4	108	0.58	30.6	1.91	1.70	0.07	0.18	<0.01	0.041
LAB030	0.13	11.25	20.9	78	1.05	63.5	3.26	8.01	0.14	0.17	<0.01	0.025
DUP LAB025	27.50	24.52	4.9	105	0.53	27.2	1.60	1.58	0.06	0.22	0.01	0.034
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD OREAS 24b	0.08	69.97	16.8	102	9.64	36.0	3.95	11.21	0.25	0.59	<0.01	0.049

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V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
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Report Version: Final

Sample ID	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
LAB025	0.37	12.3	0.6	0.14	918	12.86	0.07	0.07	7.7	298	224.4	13.4
LAB026	0.37	10.6	0.3	0.17	1016	3.42	0.07	0.08	7.0	305	153.0	14.1
LAB027	0.24	3.8	4.7	0.14	84	1261.55	0.03	<0.05	5.7	159	25.0	18.5
LAB028	0.24	5.1	6.5	0.18	97	1157.94	0.03	<0.05	6.4	153	22.1	17.8
LAB029	0.40	11.9	0.4	0.05	892	9.38	0.06	0.07	9.5	379	189.2	15.1
LAB030	0.12	4.5	11.1	1.28	530	1.05	0.52	0.10	23.7	878	1.2	5.5
DUP LAB025	0.35	12.7	0.6	0.14	901	12.74	0.07	0.05	7.2	295	210.4	13.2
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD OREAS 24b	1.16	31.7	48.5	1.35	347	3.86	0.12	0.45	56.2	613	9.3	121.4

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 21-Nov-2014  
Report Version: Final

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Tl ppm 0.02
LAB025	<0.001	0.58	0.50	1.4	0.3	0.2	38.3	<0.01	0.46	12.0	<0.005	0.10
LAB026	<0.001	0.53	0.26	1.4	0.3	0.4	37.2	<0.01	0.40	12.7	<0.005	0.10
LAB027	0.002	0.30	2.02	1.5	1.2	0.2	12.2	<0.01	0.54	1.3	<0.005	0.75
LAB028	0.002	0.32	1.83	1.5	1.1	0.3	15.9	<0.01	0.61	1.7	<0.005	0.91
LAB029	<0.001	0.65	0.27	1.6	0.2	0.3	13.6	<0.01	0.54	11.3	<0.005	0.11
LAB030	<0.001	0.15	0.11	7.5	<0.2	0.3	252.2	<0.01	0.04	0.6	0.186	0.04
DUP LAB025	<0.001	0.57	0.45	1.5	0.3	0.3	39.7	<0.01	0.47	10.8	<0.005	0.09
STD BLANK	<0.001	<0.01	<0.05	<0.1	<0.2	0.3	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD OREAS 24b	<0.001	0.17	0.50	9.7	0.2	2.4	30.1	<0.01	0.03	15.0	0.199	0.63

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Met-Solve Analytical Services  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
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**CERTIFICATE OF ANALYSIS: MA0022-NOV14**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 21-Nov-2014  
Report Version: Final

Sample ID	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
LAB025	3.29	8	1.09	8.37	551	7.8
LAB026	3.85	7	1.04	7.96	192	4.4
LAB027	0.50	17	1.52	1.54	15	1.2
LAB028	0.46	16	1.63	1.75	16	1.5
LAB029	2.99	8	0.97	8.69	548	6.4
LAB030	0.20	90	0.29	9.43	37	7.6
DUP LAB025	2.91	7	1.08	8.43	545	7.6
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	1.75	76	1.20	13.11	93	25.2



Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: **John Chapman**  
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**Surrey, B.C.**  
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**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

**COMMENTS:**

R1 includes ashed weight of samples

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

<b>SAMPLE PREPARATION</b>	
METHOD CODE	DESCRIPTION
PRP-999	Ashing Procedure, Sub-Let to SRC

<b>ANALYTICAL METHODS</b>	
METHOD CODE	DESCRIPTION
MS-330	Multi-Element, Vegetation, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer

Senior Analytical Chemist

Met-Solve Analytical Services Inc.



Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

Check

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	PWE-999 Ash Wt. g 0.01	Method Analyte Units LOR	MS-330 Ag ppm 0.01	MS-330 Al % 0.01	MS-330 As ppm 0.1	MS-330 Au ppm 0.005	MS-330 Au ppm 0.005	MS-330 B ppm 10	MS-330 Ba ppm 10	MS-330 Be ppm 0.05	MS-330 Bi ppm 0.01
14LPP10	Bark	0.12	2.05		2.05	3.12	2.2	0.089	0.012	211	413	0.06	0.17
14LPP11	Bark	0.11	0.65		2.52	6.91	2.3	0.040	0.038	318	390	0.12	0.28
14LPP12	Bark	0.12	1.28		1.15	2.89	1.0	0.009		131	249	0.08	0.22
14LPP13	Bark	0.11	0.80		0.80	5.12	0.8	0.086	0.016	239	456	0.10	0.22
14LPP14	Bark	0.12	1.31		1.27	2.95	1.8	0.019		246	514	0.10	0.16
14LPP15	Bark	0.08	0.63		1.53	3.68	1.9	0.007		321	374	0.19	0.32
14LPP16	Bark	0.12	0.66		1.40	3.99	1.6	0.007		322	395	0.16	0.25
14LPP17	Bark	0.07	0.43		1.71	3.63	6.1	0.042		494	616	0.20	0.31
14LPP18	Bark	0.08	0.53		1.46	5.27	2.8	0.011		415	535	0.16	0.30
14LPP19	Bark	0.10	0.87		2.08	4.26	1.9	0.007		105	426	0.13	0.33
14LPP20	Bark	0.09	0.71		1.94	4.29	3.3	0.007		144	568	0.18	0.40
14LPP21	Bark	0.11	1.61		1.12	2.77	0.6	<0.005		164	271	0.08	0.14
14LPP22	Bark	0.11	1.81		0.43	0.42	1.7	0.022	0.035	66	496	0.07	0.08
14LPP23	Bark	0.09	1.44		1.42	6.27	1.5	0.016	0.019	178	474	0.09	0.10
14LPP24	Bark	0.13	1.77		1.26	3.41	2.5	0.005	0.009	227	492	0.09	0.17
14LPP25	Bark	0.10	1.70		2.86	3.65	0.8	0.018		88	484	0.09	0.16
14LPP26	Bark	0.12	2.46		0.69	2.69	1.5	<0.005	<0.005	50	1005	0.07	0.05
DUP 14LPP21 STD BLANK STD SRM 1573a					1.23 <0.01 0.05	2.91 <0.01 0.02	0.5 <0.1 1.0	<0.005 <0.005 <0.005		176	283 <10 61	0.08 <0.05 <0.05	0.15 <0.01 0.01

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Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

Sample ID	MS-330 Ca %	MS-330 Cd ppm 0.01	MS-330 Ce ppm 0.02	MS-330 Co ppm 0.01	MS-330 Cr ppm 1	MS-330 Cs ppm 0.05	MS-330 Cu ppm 0.2	MS-330 Fe %	MS-330 Ga ppm 0.01	MS-330 Ge ppm 0.05	MS-330 Hf ppm 0.02	MS-330 Hg ppm 0.01
14LPP10	19.36	28.32	6.02	4.67	12	1.38	239.7	0.52	1.19	0.10	<0.02	<0.01
14LPP11	19.49	26.94	15.06	22.72	327	2.20	488.2	1.35	1.78	0.16	<0.02	<0.01
14LPP12	20.96	18.51	8.36	7.94	21	1.43	299.5	0.72	1.16	0.10	<0.02	<0.01
14LPP13	22.02	19.93	11.56	8.85	13	2.32	362.6	0.66	1.32	0.11	<0.02	<0.01
14LPP14	20.75	17.07	8.65	8.13	113	1.67	219.5	0.60	1.27	0.12	<0.02	<0.01
14LPP15	15.90	14.92	13.88	13.94	33	5.46	489.2	1.45	2.37	0.13	<0.02	<0.01
14LPP16	17.09	21.73	12.55	32.34	72	1.70	364.9	2.11	2.01	0.15	<0.02	<0.01
14LPP17	20.64	13.85	13.51	24.62	339	5.23	507.9	1.50	2.51	0.22	<0.02	<0.01
14LPP18	20.10	23.73	12.37	9.08	373	5.25	428.6	1.14	1.99	0.12	<0.02	<0.01
14LPP19	18.27	45.24	14.46	7.58	38	4.28	345.7	0.93	1.81	0.14	<0.02	<0.01
14LPP20	17.05	26.61	17.10	14.70	29	3.12	401.0	1.74	2.40	0.16	<0.02	<0.01
14LPP21	20.05	18.60	6.10	5.57	62	1.64	168.4	0.48	1.07	0.14	<0.02	<0.01
14LPP22	>25.00	34.13	4.25	5.90	23	4.89	145.0	0.69	0.78	0.10	<0.02	<0.01
14LPP23	>25.00	44.66	4.81	4.82	49	1.59	167.2	0.35	1.01	0.11	<0.02	<0.01
14LPP24	>25.00	38.28	4.57	7.51	11	2.62	425.8	0.36	1.02	0.09	<0.02	<0.01
14LPP25	>25.00	57.64	6.63	3.06	34	2.37	153.6	0.42	1.16	0.10	0.03	<0.01
14LPP26	>25.00	23.29	3.87	4.83	9	2.82	100.2	0.22	0.83	0.09	<0.02	<0.01
DUP 14LPP21	20.88	20.33	5.64	6.46	62	1.76	176.6	0.50	1.35	0.20	<0.02	<0.01
STD BLANK	<0.01	<0.01	<0.02	<0.01	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01
STD SRM 1573a	4.72	1.61	1.44	0.52	<1	<0.05	5.4	0.03	0.09	0.11	0.05	0.03

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Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
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To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

Sample ID	MS-330 In ppm 0.05	MS-330 K %	MS-330 La ppm 0.2	MS-330 Li ppm 0.1	MS-330 Mg %	MS-330 Mn ppm 5	MS-330 Mo ppm 0.05	MS-330 Na %	MS-330 Nb ppm 0.01	MS-330 Ni ppm 0.2	MS-330 P %	MS-330 Pb ppm 0.001
14LPP10	<0.05	>10.00	3.0	1.1	4.48	15037	67.30	0.22	0.11	25.2	>1.000	50.7
14LPP11	<0.05	7.63	6.9	1.9	2.95	13769	116.03	0.37	0.67	390.4	>1.000	27.0
14LPP12	<0.05	4.30	3.9	1.3	1.68	9957	82.60	0.27	0.39	39.7	>1.000	28.8
14LPP13	<0.05	6.20	5.1	1.5	2.08	8840	98.38	0.23	0.14	44.9	>1.000	20.5
14LPP14	<0.05	4.38	4.1	1.7	2.11	11766	73.92	0.19	0.07	94.3	>1.000	18.3
14LPP15	<0.05	7.43	6.8	4.1	2.28	7541	89.96	0.43	0.34	76.2	>1.000	25.4
14LPP16	<0.05	6.46	6.1	3.4	2.72	9984	92.59	0.64	0.78	154.4	>1.000	22.8
14LPP17	<0.05	7.28	6.5	4.1	2.84	19150	113.36	0.42	0.65	407.6	>1.000	24.3
14LPP18	<0.05	6.94	6.0	2.9	2.60	14608	115.34	0.28	0.21	183.3	>1.000	23.5
14LPP19	<0.05	5.64	6.8	2.2	2.29	11446	110.93	0.34	0.17	65.8	>1.000	39.7
14LPP20	<0.05	6.34	8.3	3.4	2.17	10066	152.97	0.57	0.44	65.0	>1.000	51.0
14LPP21	<0.05	>10.00	2.8	1.4	3.49	10604	68.27	0.17	0.08	93.2	>1.000	18.7
14LPP22	<0.05	4.13	2.1	1.3	1.47	2248	52.01	0.27	0.39	57.8	0.775	14.4
14LPP23	<0.05	5.11	2.5	1.2	1.94	11656	24.22	0.28	0.06	37.3	>1.000	24.2
14LPP24	<0.05	3.90	2.3	1.5	2.61	16939	21.24	0.32	0.07	22.3	>1.000	25.5
14LPP25	<0.05	1.94	3.6	1.6	1.12	8048	32.15	0.22	0.08	30.9	0.919	30.9
14LPP26	<0.05	4.74	2.5	0.8	1.65	12159	14.21	0.28	0.10	14.8	0.840	17.6
DUP 14LPP21	<0.05	>10.00	2.6	1.4	3.66	11046	73.29	0.18	0.09	94.1	>1.000	19.9
STD BLANK	<0.05	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<0.001	<0.2
STD SRM 1573a	<0.05	2.54	2.1	0.3	1.03	222	0.44	0.03	0.07	1.7	0.211	1.5

\*\*\*Please refer to the cover page for comments

regarding this certificate. \*\*\*



Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

Sample ID	MS-330 Rb ppm 0.1	MS-330 Re ppm 0.001	MS-330 S %	MS-330 Sb ppm 0.05	MS-330 Sc ppm 0.1	MS-330 Se ppm 0.2	MS-330 Sn ppm 0.2	MS-330 Sr ppm 0.2	MS-330 Ta ppm 0.01	MS-330 Te ppm 0.01	MS-330 Th ppm 0.2	MS-330 Ti % 0.005
14LPP10	159.7	0.006	1.71	3.37	0.9	1.4	5.4	995.4	0.01	<0.01	0.4	0.015
14LPP11	148.8	0.006	1.86	1.26	1.3	2.7	8.6	941.8	0.01	<0.01	0.6	0.023
14LPP12	132.0	0.006	1.64	1.73	0.8	1.5	6.0	440.5	0.03	<0.01	0.4	0.015
14LPP13	139.7	0.004	1.51	0.78	1.0	1.6	2.9	735.2	<0.01	<0.01	0.4	0.014
14LPP14	113.6	0.004	1.18	0.97	1.0	1.0	2.8	910.3	<0.01	<0.01	0.4	0.013
14LPP15	190.5	0.005	1.59	0.73	2.0	2.3	3.8	552.0	0.03	<0.01	0.9	0.029
14LPP16	92.1	0.004	1.74	0.73	1.8	1.5	5.0	530.9	0.08	<0.01	0.8	0.034
14LPP17	150.9	0.012	1.80	0.81	2.0	1.7	9.3	718.7	0.02	<0.01	0.9	0.029
14LPP18	120.0	0.006	1.69	0.71	1.5	1.6	5.8	652.8	<0.01	<0.01	0.6	0.023
14LPP19	158.8	0.005	1.74	2.24	1.5	2.9	4.9	571.1	<0.01	<0.01	0.6	0.018
14LPP20	145.6	0.007	1.65	2.03	2.2	2.2	5.1	706.0	0.04	<0.01	0.8	0.035
14LPP21	174.8	0.012	1.33	1.05	1.0	1.3	3.8	676.8	<0.01	<0.01	0.8	0.013
14LPP22	144.2	0.005	1.11	0.58	1.1	0.5	2.0	1352.1	0.03	<0.01	0.4	0.013
14LPP23	127.3	0.010	1.30	0.91	0.9	1.0	3.6	597.2	<0.01	<0.01	0.4	0.010
14LPP24	133.3	0.024	1.82	1.00	0.9	1.5	2.1	595.5	<0.01	<0.01	0.5	0.008
14LPP25	43.2	0.009	1.30	1.23	1.1	1.0	4.6	937.5	<0.01	<0.01	0.4	0.011
14LPP26	135.1	0.002	1.03	0.50	0.7	0.8	1.4	851.3	<0.01	<0.01	0.3	0.008
DUP 14LPP21	216.1	0.012	1.39	1.18	1.2	1.6	4.2	710.5	<0.01	<0.01	0.3	0.013
STD BLANK	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	0.2	0.02	<0.01	<0.2	<0.005
STD SRM 1573a	13.7	0.002	0.92	0.09	0.1	<0.2	<0.2	83.4	0.09	<0.01	<0.2	<0.005

\*\*\*Please refer to the cover page for comments

regarding this certificate. \*\*\*



Met-Solve Analytical Services Inc.  
Unit 1, 20120 102nd Avenue  
Langley, BC V1M 4B4  
Phone: +1-604-888-0875

To: John Chapman  
43 – 1725 Southmere Cres.  
Surrey, B.C.  
V4A 7A7

**CERTIFICATE OF ANALYSIS: MA0023-NOV14-R1**

Project Name: Boer  
Job Received Date: 12-Nov-2014  
Job Report Date: 15-Dec-2014  
Report Version: R1

Sample ID	MS-330 Ti ppm 0.02	MS-330 U ppm 0.05	MS-330 V ppm 1	MS-330 W ppm 0.05	MS-330 Y ppm 0.05	MS-330 Zn ppm 2	MS-330 Zr ppm 0.5
14LPP10	<0.02	0.30	10	0.27	1.60	2147	1.0
14LPP11	0.03	0.63	22	3.26	4.67	2928	1.0
14LPP12	<0.02	0.31	11	0.45	2.44	1651	0.5
14LPP13	<0.02	0.42	13	0.29	3.55	2376	0.5
14LPP14	0.02	0.45	13	0.28	2.47	2324	0.5
14LPP15	0.04	0.60	22	0.66	3.38	2085	0.9
14LPP16	0.03	0.69	21	0.86	3.41	2319	1.1
14LPP17	0.03	0.96	28	2.94	3.61	3402	<0.5
14LPP18	0.05	0.55	27	1.67	3.24	2683	<0.5
14LPP19	0.03	0.51	17	0.38	4.11	2673	<0.5
14LPP20	0.03	0.58	25	0.88	4.64	2391	1.2
14LPP21	<0.02	0.21	10	0.28	1.66	1997	0.6
14LPP22	<0.02	0.39	8	0.29	1.30	1529	0.9
14LPP23	0.02	0.25	7	<0.05	1.46	2411	0.6
14LPP24	<0.02	0.57	6	<0.05	1.32	2922	0.8
14LPP25	<0.02	1.36	10	0.08	1.77	1835	1.0
14LPP26	<0.02	0.17	5	<0.05	1.23	2529	0.8
DUP 14LPP21	<0.02	0.23	10	0.25	1.99	2082	0.7
STD BLANK	<0.02	<0.05	<1	0.11	<0.05	<2	<0.5
STD SRM 1573a	0.04	<0.05	1	0.14	0.71	29	1.6

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Bureau Veritas Commodities Canada Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

**Client:** Kluskus North Contracting Ltd  
PO Box 111  
Fort Fraser BC V0J 1N0 CANADA

Submitted By: Jon Rempel  
Receiving Lab: Canada-Vancouver  
Received: November 12, 2014  
Report Date: January 05, 2015  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14003676.1

### CLIENT JOB INFORMATION

Project: BOER/TAHVL

Shipment ID:

P.O. Number

Number of Samples: 3

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	3	Vegetation Ashing at 475	50		VAN
Split Ash from VA475	3	Analysis sample split/packet			VAN
VG104	3	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.25	Completed	VAN
DRPLP	3	Warehouse handling / disposition of pulps			VAN

### ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Kluskus North Contracting Ltd  
PO Box 111  
Fort Fraser BC V0J 1N0  
CANADA

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **Kluskus North Contracting Ltd**  
PO Box 111  
Fort Fraser BC V0J 1N0 CANADA

Project: BOER/TAHVL  
Report Date: January 05, 2015

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14003676.1

Method	VA475	VA475	VA475	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104
	Rec. Wt	Wt	Ash	Washed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	
Unit	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	0.1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	0.15	
JR9	Vegetation	89.312	1.555	49.57	117.68	18.37	1286.8	370	3.1	1.6	2681	0.35	2.4	0.2	18.6	0.4	1106.4	27.83	0.76	0.44	0.21	
OVEN STD-1	Vegetation	21.793	0.498	1.38	45.61	10.23	1614.5	981	13.6	0.8	>10000	0.24	4.1	2.2	1.1	0.9	628.0	0.30	0.44	0.21		
JR10	Vegetation	84.249	1.527	28.98	155.12	23.43	1847.5	1594	6.0	2.8	>10000	0.43	3.9	0.2	17.2	0.3	988.4	54.01	1.66	0.27		



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **Kluskus North Contracting Ltd**  
PO Box 111  
Fort Fraser BC V0J 1N0 CANADA

Project: BOER/TAHVL  
Report Date: January 05, 2015

Page: 2 of 2

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN14003676.1

Method	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	
	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	0.1	0.02	0.1	
JR9	Vegetation	9	34.34	0.805	1.9	3.4	1.52	572.5	0.018	274	0.41	0.234	3.28	0.2	1.2	0.02	0.78	<0.1	0.08	1.0
OVEN STD-1	Vegetation	6	28.06	2.787	2.2	6.5	2.76	1420.5	0.025	973	0.19	0.708	9.38	0.5	2.5	<0.02	1.38	<0.1	<0.02	2.0
JR10	Vegetation	11	32.78	0.994	3.2	5.0	1.33	575.7	0.019	364	4.11	0.252	1.68	0.3	1.2	<0.02	1.07	0.8	0.05	1.4



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client:

**Kluskus North Contracting Ltd**

PO Box 111

Fort Fraser BC V0J 1N0 CANADA

Project:

BOER/TAHVL

Report Date:

January 05, 2015

Page:

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Part: 1 of 2

## QUALITY CONTROL REPORT

VAN14003676.1

Method	VA475	VA475	VA475	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104
	Rec. Wt	Ash	Washed Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi		
	Unit	g	g	g	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	
	MDL	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02		
Pulp Duplicates																						
JR10	Vegetation	84.249	1.527	28.98	155.12	23.43	1847.5	1594	6.0	2.8	>10000	0.43	3.9	0.2	17.2	0.3	988.4	54.01	1.66	0.27		
REP JR10	QC			28.49	156.89	22.29	1824.5	1619	6.3	2.8	>10000	0.41	4.0	0.2	16.4	0.2	1001.6	52.40	1.61	0.27		
Reference Materials																						
STD ASH-1	Standard			0.78	75.98	9.88	169.7	46	132.8	16.6	1144	2.31	5.2	0.6	4.1	3.4	958.5	0.24	0.13	0.10		
STD DS10	Standard			12.39	158.86	150.75	399.4	2266	78.9	13.0	865	2.69	45.9	2.2	67.9	6.0	63.6	2.61	8.04	10.97		
STD ASH-1 Expected				0.84	73	8.83	175	35	133	17.2	1134	2.28	4.1	0.6	5	3.7	944	0.27	0.17	0.13		
STD DS10 Expected				14.69	154.61	150.55	370	2020	74.6	12.9	875	2.7188	43.7	2.59	91.9	7.5	67.1	2.49	8.23	11.65		
BLK	Blank			<0.01	0.05	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	0.3	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02		



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client:

**Kluskus North Contracting Ltd**

PO Box 111

Fort Fraser BC V0J 1N0 CANADA

Project:

BOER/TAHVL

Report Date:

January 05, 2015

Page:

1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN14003676.1

Method	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	VG104	
Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Se	Te	Ga	
Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	0.1	0.02	0.1	
Pulp Duplicates																				
JR10	Vegetation	11	32.78	0.994	3.2	5.0	1.33	575.7	0.019	364	4.11	0.252	1.68	0.3	1.2	<0.02	1.07	0.8	0.05	1.4
REP JR10	QC	10	32.81	0.984	3.1	4.8	1.32	591.9	0.018	376	4.17	0.255	1.67	0.2	1.2	<0.02	1.02	0.6	0.06	1.5
Reference Materials																				
STD ASH-1	Standard	56	17.04	0.231	13.4	157.7	1.90	99.5	0.022	278	2.87	0.623	1.27	<0.1	9.0	0.12	0.43	0.2	0.05	6.1
STD DS10	Standard	42	1.02	0.082	16.6	56.8	0.75	419.1	0.079	2	0.93	0.060	0.32	3.3	2.8	4.67	0.29	1.9	4.96	4.3
STD ASH-1 Expected		49	18.54	0.24	12.8	159	1.91	94.5	0.02	294	2.95	0.55	1.17	0	8.5	0.12	0.41	0.5	0.06	6.1
STD DS10 Expected		43	1.0625	0.073	17.5	54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	2.8	5.1	0.29	2.3	5.01	4.3
BLK	Blank	<2	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<0.1	<0.02	<0.1



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Bureau Veritas Commodities Canada Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

**Client:** **KGE Management Ltd.**  
1740 Orchard Way  
West Vancouver BC V7V 4E8 CANADA

Submitted By: Gerry Carlson  
Receiving Lab: Canada-Vancouver  
Received: December 01, 2014  
Report Date: January 05, 2015  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN14003863.1

### CLIENT JOB INFORMATION

Project: BOER

Shipment ID:

P.O. Number

Number of Samples: 2

### SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps

PICKUP-RJT Client to Pickup Rejects

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
BAT01	1	Batch charge of <20 samples			VAN
PUL85	2	Pulverize to 85% passing 200 mesh			VAN
AQ200	2	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
DRPLP	2	Warehouse handling / disposition of pulps			VAN
DRRJT	2	Warehouse handling / Disposition of reject			VAN

### ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: KGE Management Ltd.  
1740 Orchard Way  
West Vancouver BC V7V 4E8  
CANADA

CC: John Chapman



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

**Client:** **KGE Management Ltd.**  
1740 Orchard Way  
West Vancouver BC V7V 4E8 CANADA

**Project:** BOER  
**Report Date:** January 05, 2015

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## CERTIFICATE OF ANALYSIS

VAN14003863.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1	
LAB027	Rock Chip	931.6	69.2	19.4	11	13.7	3.5	1.6	95	1.15	36.5	746.5	1.2	11	0.6	1.3	0.1	10	0.04	0.014	5
LAB028	Rock Chip	934.0	217.0	20.9	13	12.3	3.2	1.8	84	1.06	43.2	1681.7	1.4	14	0.5	1.4	<0.1	10	0.03	0.014	5



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VAN14003863.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
LAB027	Rock Chip	18	0.12	193	<0.001	<20	0.28	0.002	0.15	<0.1	0.04	0.9	0.6	0.28	<1	<0.5	0.4
LAB028	Rock Chip	22	0.17	258	<0.001	<20	0.33	0.001	0.12	<0.1	0.02	0.9	0.7	0.34	<1	0.8	0.6



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## QUALITY CONTROL REPORT

VAN14003863.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	2	0.01	0.001	1	
Pulp Duplicates																					
LAB028	Rock Chip	934.0	217.0	20.9	13	12.3	3.2	1.8	84	1.06	43.2	1681.7	1.4	14	0.5	1.4	<0.1	10	0.03	0.014	5
REP LAB028	QC	956.3	217.5	21.3	12	14.3	3.1	1.8	89	1.09	44.6	772.1	1.5	14	0.5	1.4	<0.1	9	0.04	0.015	5
Reference Materials																					
STD DS10	Standard	13.0	160.9	160.8	381	2.0	81.7	13.6	938	2.80	45.1	85.3	7.4	62	2.5	7.6	13.2	43	1.05	0.080	17
STD OREAS45EA	Standard	1.6	718.2	15.9	33	0.3	390.5	56.4	395	26.44	9.7	57.0	10.5	4	<0.1	0.3	0.2	307	0.04	0.032	8
STD DS10 Expected		14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9	7.5	67.1	2.49	8.23	11.65	43	1.0625	0.073	17.5
STD OREAS45EA Expected		1.39	709	14.3	28.9	0.26	381	52	400	23.51	9.1	53	10.7	3.5	0.02	0.2	0.26	303	0.036	0.029	6.57
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
Prep Wash																					
ROCK-VAN	Prep Blank	0.6	6.6	1.0	33	<0.1	2.2	4.7	482	2.10	1.3	1.1	2.0	38	<0.1	<0.1	<0.1	25	0.69	0.043	5



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VAN14003863.1

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
Pulp Duplicates																	
LAB028	Rock Chip	22	0.17	258	<0.001	<20	0.33	0.001	0.12	<0.1	0.02	0.9	0.7	0.34	<1	0.8	0.6
REP LAB028	QC	18	0.17	260	<0.001	<20	0.34	0.001	0.12	<0.1	0.02	0.9	0.7	0.33	<1	0.7	0.7
Reference Materials																	
STD DS10	Standard	56	0.83	425	0.075	<20	1.02	0.067	0.33	2.9	0.34	2.8	5.2	0.28	4	1.8	4.6
STD OREAS45EA	Standard	939	0.11	157	0.100	<20	3.22	0.019	0.05	<0.1	0.01	81.5	<0.1	<0.05	13	0.5	<0.2
STD DS10 Expected		54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3	2.3	5.01
STD OREAS45EA Expected		849	0.095	148	0.0875		3.13	0.02	0.053		78	0.072	0.036	11.7	0.6	0.07	
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																	
ROCK-VAN	Prep Blank	10	0.52	76	0.070	<20	0.96	0.073	0.07	<0.1	<0.01	2.4	<0.1	<0.05	4	<0.5	<0.2