

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

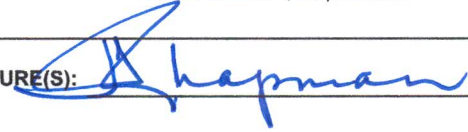
Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geochemical, Geological and Drilling

TOTAL COST: \$27,739.00

AUTHOR(S): John A. Chapman, B.Sc., P.Eng., FCIM

SIGNATURE(S):



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): NA

YEAR OF WORK: 2013

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Event Number 5480287

PROPERTY NAME: Boer Mineral Property

CLAIM NAME(S) (on which the work was done): Boer 1 to 15

COMMODITIES SOUGHT: Copper, Molybdenum, Silver and Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: MineFile Number 093K 144 ("Boer")

MINING DIVISION: Omineca Mining Division

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

LATITUDE: 54 ° 16 ' 02 " LONGITUDE: -125 ° 36 ' 34 " (at centre of work)

OWNER(S):

1) John A. Chapman (50% recorded owner)

2) Gerald G. Carlson (50% recorded owner)

MAILING ADDRESS:

43 - 1725 Southmere Cres.

Surrey, B.C., V4A 7A7

1740 Orchard Way

West Vancouver, B.C., V7V 4E8

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

1) Same

2) Same

MAILING ADDRESS:

Same

Same

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

Topley Intrusive Rocks, 184 m.y. to 137 m.y., Multi-Phase Intrusive and Extrusive Rocks, Chalcopyrite and Molybdenite in Hydrothermal Breccia (Boer Breccia), Ice Direction West to East, Extensive Glacial Till Cover (+95%), Extensive Faulting, Minor Propylitic Alteration, Several Quartz K-Spar Pegmatites.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: Assessment Report No. 33782 (2013)

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			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other	167 Bark Samples, multi-element analysis	Boer 1 to Boer 15	\$12,439.00
DRILLING (total metres; number of holes, size)			
Core	26.6 meters, Hole B13-1, 3.53 cm diameter core	Boer 4 (tenure no. 942369)	\$6,500.00
Non-core			
RELATED TECHNICAL			
Sampling/assaying	173 samples and analysis	Boer 1 to Boer 15	\$5,500
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other	Data Processing and Reporting		\$3,300
TOTAL COST:			\$27,739.00

Geochemical, Geological and Drilling Exploration Boer Property, Central British Columbia, Canada

Mineral Tenures (Boer 1 – 15)

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

Burns Lake, Omineca Mining Division

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

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

Owners and Operators:

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

c/o John A. Chapman

43 -1725 Southmere Cres.

Surrey, B.C. V4A 7A7

Report By:

John A. Chapman, B.Sc., P.Eng., FCIM

**BC Geological Survey
Assessment Report
34638**

February 25, 2014

Table of Contents

Table of Contents.....	2
SUMMARY.....	4
INTRODUCTION.....	6
PROPERTY DESCRIPTION AND LOCATION	8
Mineral Tenures.....	8
Location.....	9
ACCESS, CLIMATE, VEGETATION, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY.....	9
Access.....	9
Climate and Vegetation.....	10
Local Resources and Infrastructure.....	10
Physiography.....	10
HISTORY.....	10
General Mining History.....	10
Boer Property History.....	11
GEOLOGICAL SETTING	11
Regional and Local Geology	11
2013 EXPLORATION PROGRAM	13
INTERPRETATION AND CONCLUSIONS.....	16
RECOMMENDATIONS.....	17
REFERENCES.....	18
STATEMENTS OF QUALIFICATIONS.....	19
STATEMENT OF EXPENDITURES.....	20

APPENDIX A – ANALYTICAL PROCEDURES & ASSAY CERTIFICATES

APPENDIX B – BIOGEOCHEMICAL 2013 SURVEY MAPS & REFERENCE SPREADSHEET PLOT FILES

APPENDIX C – BIOGEOCHEMICAL SURVEYS, BOER VS MOUNT MILLIGAN

APPENDIX D - ANALYSES OF QUEST WEST LAKE SEDIMENTS, UTM SHEET 093K

APPENDIX E - DRILL CORE LOG

List of Tables

Table 1. Table of Boer Mineral Tenures.....	8
---	---

List of Figures

Figure 1. RGS2011 Silver in Lake Sediments	4
Figure 2. B.C. Location Map – Boer Property	7
Figure 3. Boer Tenures Map.....	7
Figure 4. Regional Geology, Topley Intrusives.....	12
Figure 5. Property Geology (from B.C. MapPlace)	13
Figure 6. Northwest Corner of GSC O.F. 2001-09 Biogeochemical Survey Map.....	14
Figure 7. General Location of 2013 Exploration Work.....	15
Figure 8. Residual Total Magnetic Field (from B.C. MapPlace)	15
Figure 9. Typical method of lake sediment sampling.....	16

List of Photographs

Photo 1. Field Equipment for Bark Sampling	6
Photo 2. Trevor Davidge, Bark Sampling	6

SUMMARY

The Boer property (8,728 hectares) is a grass-roots mineral exploration play in terrane with extensive glacial cover (~99%), and in a region with several large porphyry copper and molybdenum mineral deposits. In January 2012, John Chapman’s attention was drawn to the Boer area as a result of published RGS work done by B.C. GSB and most recently Geoscience B.C., whereby lakes sediments were determined to be highly anomalous in several metals, especially silver (see Figure 1, as at March 23, 2013). John Chapman and Gerald Carlson acquired, via BCMTO, the Boer 1 – 12 mineral claims in January 2012 and an additional claim (Boer 13) in August 2012, upon discovery of a sulfide mineralized breccia at km 13.2 of the Co-op Main logging road (now recorded as MinFile 093K 144, “Boer”). Further claims were added in early 2013 (Boer 14 and 15) to protect anomalies adjacent to the Boer property boundary. In early 2014 a further claim was acquired to the immediate south (Boer 16) as biogeochemical anomalies (copper, molybdenum and silver) were successfully defined, along the property’s southeast boundary, in a two phase 2013 survey sampling outer bark of Lodgepole pine. This biogeochemical survey was a follow on to Colin Dunn’s GSC Open File 2001-09 Report where highly anomalous copper was discovered at the southeast of the present Boer property (see Figure 6).

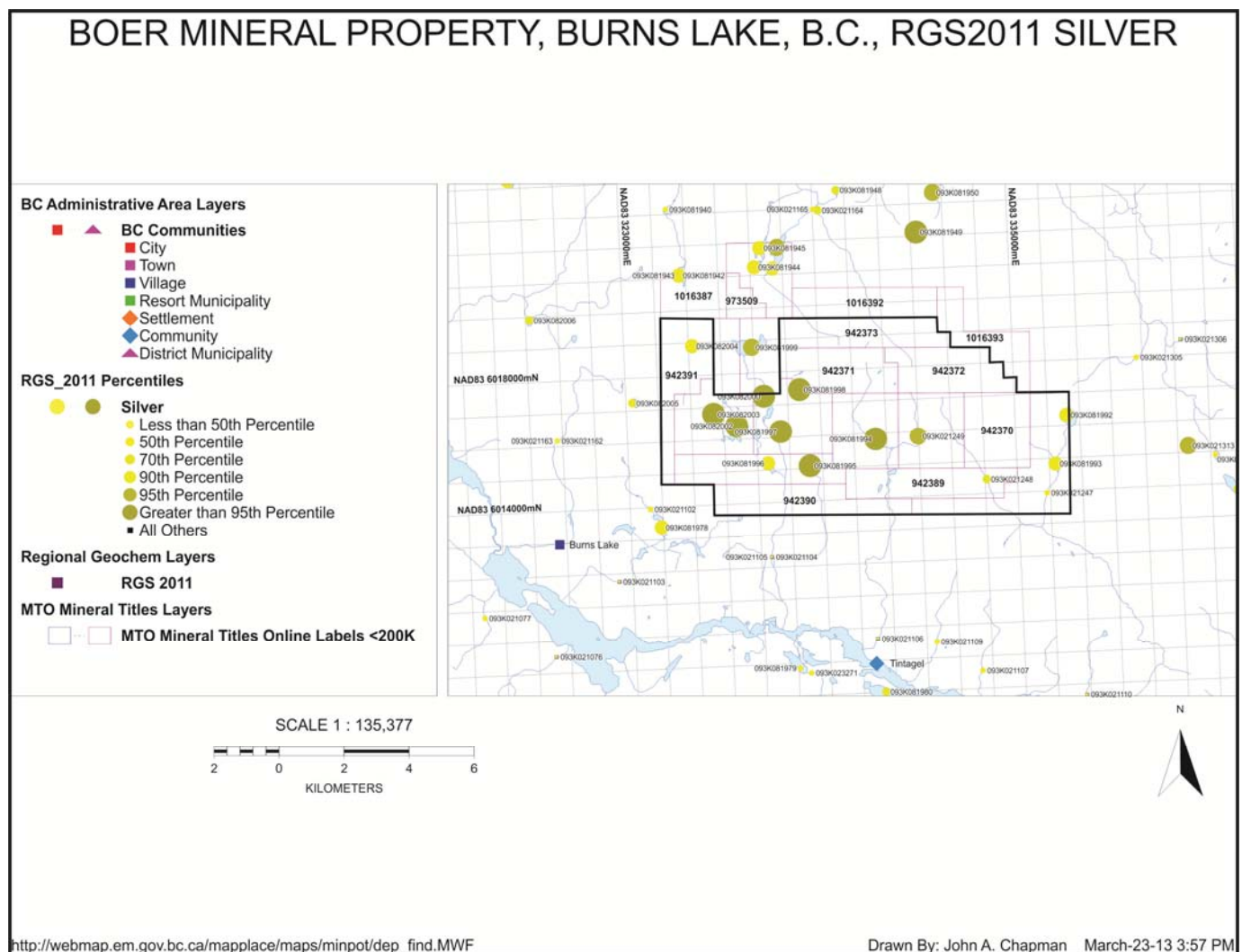


Figure 1. RGS2011 Silver in Lake Sediments (March 2013 claim map)

In August 2013 a 26.6 meter vertical core-hole was drilled in rock adjacent to the Boer Breccia showing.

Property main access is via Hwy 16, 20 kilometers east of Burns Lake then north by a mainline logging road network (Augier and Co-op) to and around the eastern 2/3 of the Property (see Figure 3). The western 1/3 of the Property is accessed via the Mercury road at 5.3 kilometers north of Burns Lake on the Babine Lake main road (junction: 319561mE/6018720mN). 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 Village of Burns Lake (resource service center), and related highways, grid power, natural gas pipeline and airport.

This report describes the results of a broad two phase biogeochemical survey, minor drilling and related sampling/analysis on the Boer property in 2013 which was conducted in an effort to explain the RGS anomalous silver, copper, molybdenum, manganese and mercury in lakes and swamps in and near the Boer claim area. Refer to Assessment Report No. 33782.

The total value of the work done on the Boer property in 2013 was \$27,739 (SOW filing \$37,773, including PAC). John Arthur Chapman filed a Statement of Work (SOW) using Mineral-Titles-Online (MTO) on December 9, 2013 (event 5480287) which changed the Good to Date for the then Boer claims to January 15, 2015. This assessment report has been prepared in support of these filings.

Based on literature review and the geological, geochemical and prospecting results obtained from the 2012 and 2013 work, the Boer property is a complex mix of mainly intrusive and extrusive rocks in an area with high Total Magnetic Field response that has been glaciated in a west to east direction. The first mineral discovery made on the Property was August 9, 2012, by John Chapman and Brian Remanda at kilometer 13.2 on the Co-op Main logging road, ~12km northeast of Burns Lake (see Figure 3, MinFile "Boer"). It is a large hydrothermal breccia mineralized with sulfides (abundant pyrite, 182.4ppm molybdenum, 279.5ppm copper and 3.4ppm silver) and iron carbonate; consisting of coarse fragments of aplite and andesite in a matrix of granite.

On June 9, 2013 Jon Rempel a Fort Fraser based earth-moving contractor and mineral prospector informed John Chapman of the metal enriched bark samples near the eastern end of the Boer property that are shown on MapPlace ("Focused Geochemical Surveys", "Bark Survey Data"). This information prompted John Chapman to contact Colin Dunn, biogeochemical expert to discuss this MapPlace data (see Figure 6) which is from Dunn's GSC Report (Open File 2001-09). This led to planning for the westerly extension of the Lodgepole pine outer bark survey across the Boer property in 2013 using the same sampling and analysis methods as Dunn in his 2001 survey. Significant copper, molybdenum and silver anomalies have been located in the 2013 biogeochemical surveys at Boer. The tenor and size of the copper and molybdenum anomalies at Boer are superior to those located at Mount Milligan, using similar methods, and reported in BSC Open File 3290 by Colin Dunn. These 2013 results and those from 2012 indicate a strong potential for a large porphyry copper, molybdenum, silver system at Boer (see Appendix C for a Biogeochemistry, Boer vs Mount Milligan comparison).



Photo 1. Field Equipment for Bark Sampling



Photo 2. Trevor Davidge Bark Sampling

The field program recommended in this report includes: 1) a helicopter-borne ZTEM survey by Geotech Ltd. (~\$110,000), and 2) detailed prospecting (hand trenches in areas of select 2013 metal anomalies) and where warranted development of grids for 3D-IP surveys (~\$125,000).

INTRODUCTION

The Boer property is a “virgin” mineral prospect in that it has had no prior known mineral exploration conducted upon it by companies or individuals. General area geosciences surveys have been conducted by governments over the Property and the surrounding region mainly since the early 1960s in step with the development of the large Endako open-pit molybdenum mine (1965) that lies 40km to the southeast of the Boer.

This assessment report has been prepared by John A. Chapman, P.Eng., a 50% registered owner of the Boer property. The writer has reviewed all general geological, geophysical and other mineral exploration data pertaining to the Property and the surrounding area. He was involved in the Boer 2012 and 2013 surface exploration surveys, and makes recommendations for further work in this report.

The writer visited the Boer property in August 2013 (6 days).

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.

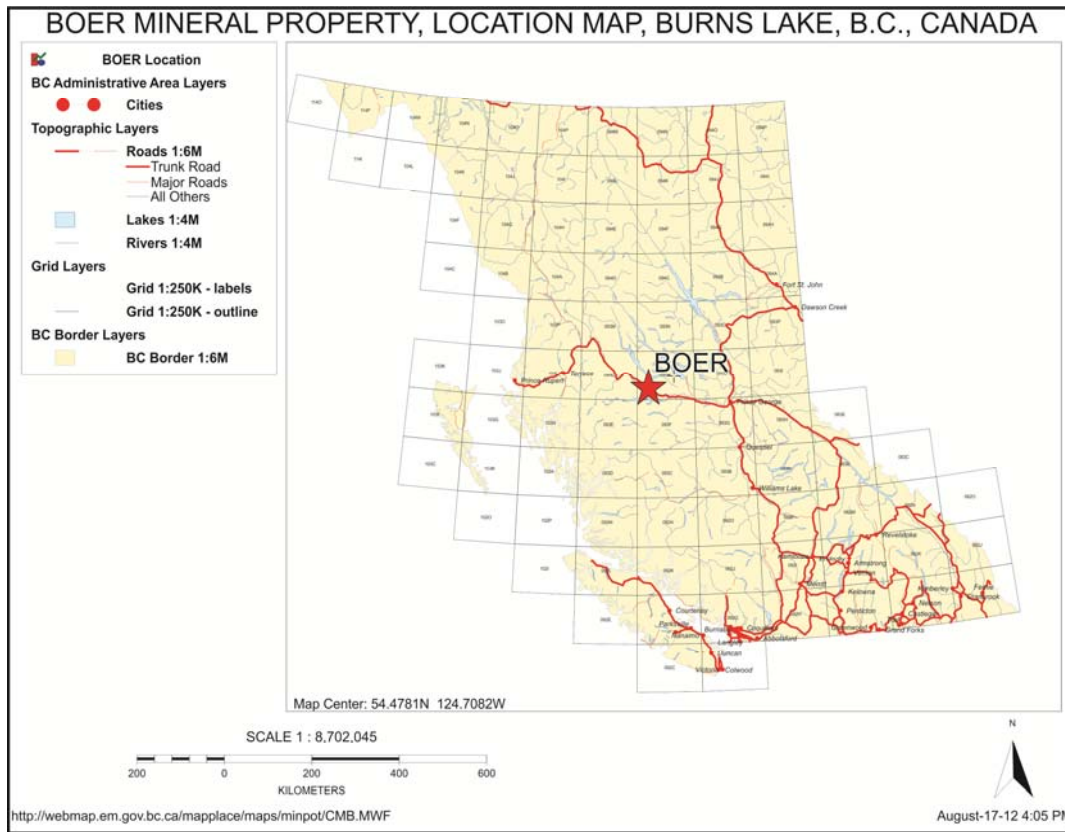


Figure 2. B.C. Location Map - Boer Property, Burns Lake, B.C.

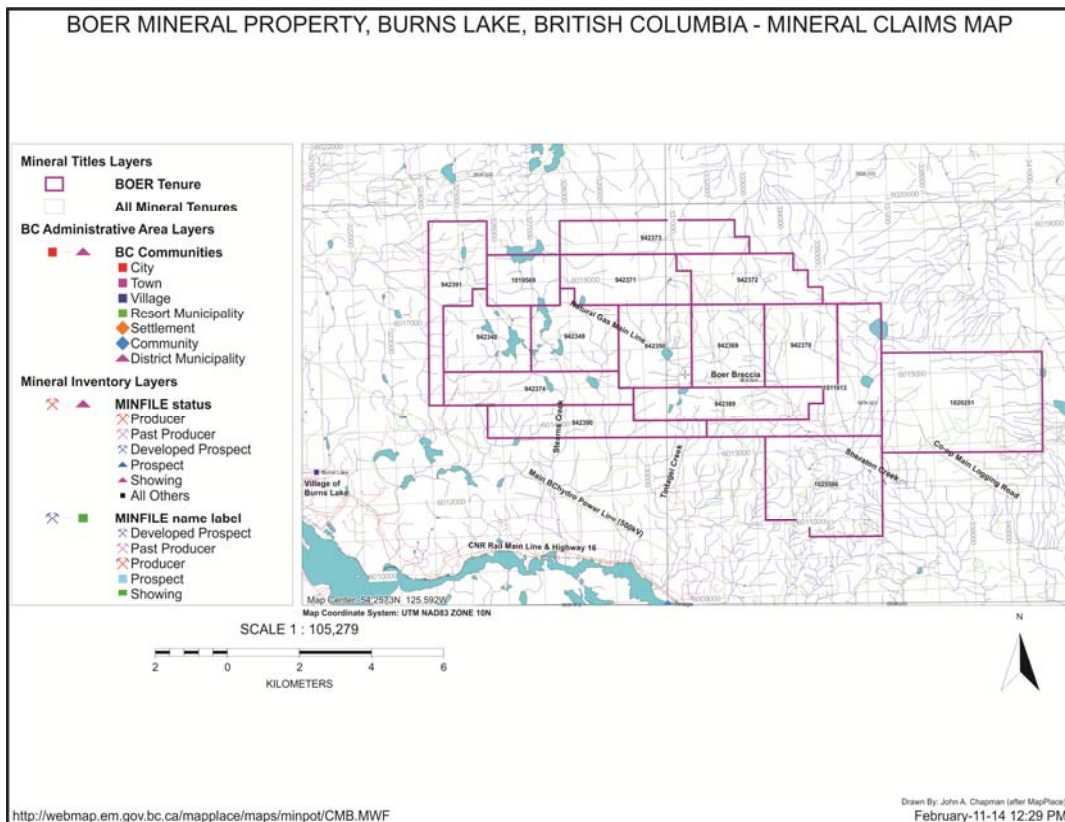


Figure 3. Boer Tenures Map & Infrastructure

PROPERTY DESCRIPTION AND LOCATION

The Boer 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 2).

The Property consists of 16 mineral tenures (8,728 hectares), with registered ownership by John A. Chapman (50%) and Gerald G. Carlson on behalf of KGE Management Ltd. (50%). The claims are in good standing until January 15, 2015 (after the SOW application of the 2013 exploration program – Event Number 5480287, December 9, 2013). 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 3 and listed in Table 1. The claim map shown in Figure 3 was generated from GIS spatial data downloaded from the Government of B.C., Integrated Land Management Branch (ILMB), Land and Resource Data Warehouse (LRDW, <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.

Claim details given in Table 1 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.

Table 1. Table of Boer Mineral Tenures

Tenure Number	Type	Claim Name	Good Until	Area (ha)
942348	Mineral	BOER 1	20150115	472.1982
942349	Mineral	BOER 2	20150115	472.2019
942350	Mineral	BOER 3	20150115	472.2271
942369	Mineral	BOER 4	20150115	472.2199
942370	Mineral	BOER 5	20150115	472.2201
942371	Mineral	BOER 6	20150115	472.0397
942372	Mineral	BOER 7	20150115	472.0342
942373	Mineral	BOER 8	20150115	471.9212
942374	Mineral	BOER 9	20150115	472.3462
942389	Mineral	BOER 10	20150115	472.3885
942390	Mineral	BOER 11	20150115	472.4516
942391	Mineral	BOER 12	20150115	472.0497
1011913	Mineral	BOER 13	20150115	680.1721
1019569	Mineral	BOER 14	20150115	283.2252
1020251	Mineral	BOER 15	20150115	1247.1262
1025586	Mineral	BOER 16	20150130	850.7052

Total Area: 8727.527 ha

All the claims have registered ownership as to 50% by each Owner: FMC no. 104271 Gerald George Carlson on behalf of KGE Management Ltd 50% and FMC no. 104633 John Arthur Chapman 50%. 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 2013 exploration work was filed (SOW with BCMTO) in December 2013, advancing all claim expiry dates, existing at that time, to January 15, 2015.

The claims have not been surveyed, but claim boundaries are referenced to exact positions of UTM coordinates or Lat/Long 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 the resource Village of Burns Lake, B.C., at UTM Zone 10N: 6017000mN/330000mE, NTS on maps: 093K/04 and 093K/05, in the Omineca Mining Division.

Figure 3 shows the Boer tenures relative to local infrastructure and physiography.

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

Access

Property main access is via Hwy 16 (The Yellowhead Highway), 20 kilometers 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 341217mE/6007706mN. The western 1/3 of the Property is accessed via the Mercury road at 5.3 kilometers north of Burns Lake on the Babine Lake main road (junction: 319561mE/6018720mN). 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 3 and Appendix B). 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.

Climate and Vegetation (MacIntyre, 2012)

Climate is typical of the Interior Plateau with a cool continental climate. Short, warm and moist summers are combined with temperatures often reaching 30 degrees Celsius. Winters can reach temperatures of -10 degrees, with extremes sometimes at -40 degrees. 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 metres.

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.

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.

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 metres above mean sea level over an area of 8,728 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. Bedrock exposure is sparse, forming less than one percent of the area.

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 mineral potential at Boer was first identified 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 (up to 2,160ppb) that are now covered by the Boer property claims. This large and intense Boer silver-in-sediments anomaly is ranked in the 98th percentile from RGS samples over a vast area of the B.C. Interior Plateau. This silver anomaly includes seven RGS2011 lake sediment samples, averaging 1,255ppb over a 6km E/W by 4km N/S area centered on the Boer property. In addition, the same sediment samples are anomalous in copper, molybdenum, manganese and mercury.

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 was conducted in the summer of 2012 following roads, natural gas pipeline, logging roads and clear-cuts. The Property is extensively covered with thin (<2 meters) glacial till (ice direction from west to east), with only minor bedrock outcrop (<1 percent). The first mineral discovery made on the Property was August 9, 2012, by John Chapman and Brian Remanda at kilometer 13.2 on the Co-op Main logging road, ~12km northeast of Burns Lake (see Figure 7). It is a 90m x 20m hydrothermal breccia (exposed in road right-of-way) mineralized with sulfides (abundant pyrite, 182.4ppm molybdenum, 279.5ppm copper and 3.4ppm silver) and iron carbonate; consisting of coarse fragments of aplite and andesite in a matrix of granite. The breccia is located upon a small topographic high that probably is caused by silicification of the local rocks, making them resistant to erosion (glacial and weather). The Boer Breccia discovery on the Co-op logging road is near a NW/SE regional fault, which has been mapped half way to the Endako mine, and is mapped as being close to the lakes containing anomalous metals-in-sediments (see Structural Analyses in Assessment Report 33782). This breccia discovery is now referred to as the "Boer" in BCGSB MinFile (MinFile No. 093K 144).

It was concluded in 2012 that there was potential for a large porphyry copper, molybdenum, silver (+/- gold) system at Boer. Hence exploration was planned for 2013.

GEOLOGICAL SETTING

Regional and Local Geology

The regional geological setting of the Boer property, within the important central area of the composite Topley Intrusions, is shown in Figure 4. The Jurassic Age Topley pluton rocks vary in composition and texture from acid, intermediate to basic and span a period of intrusion from 184 m.y. to 137 m.y. (Kimura, 1977).

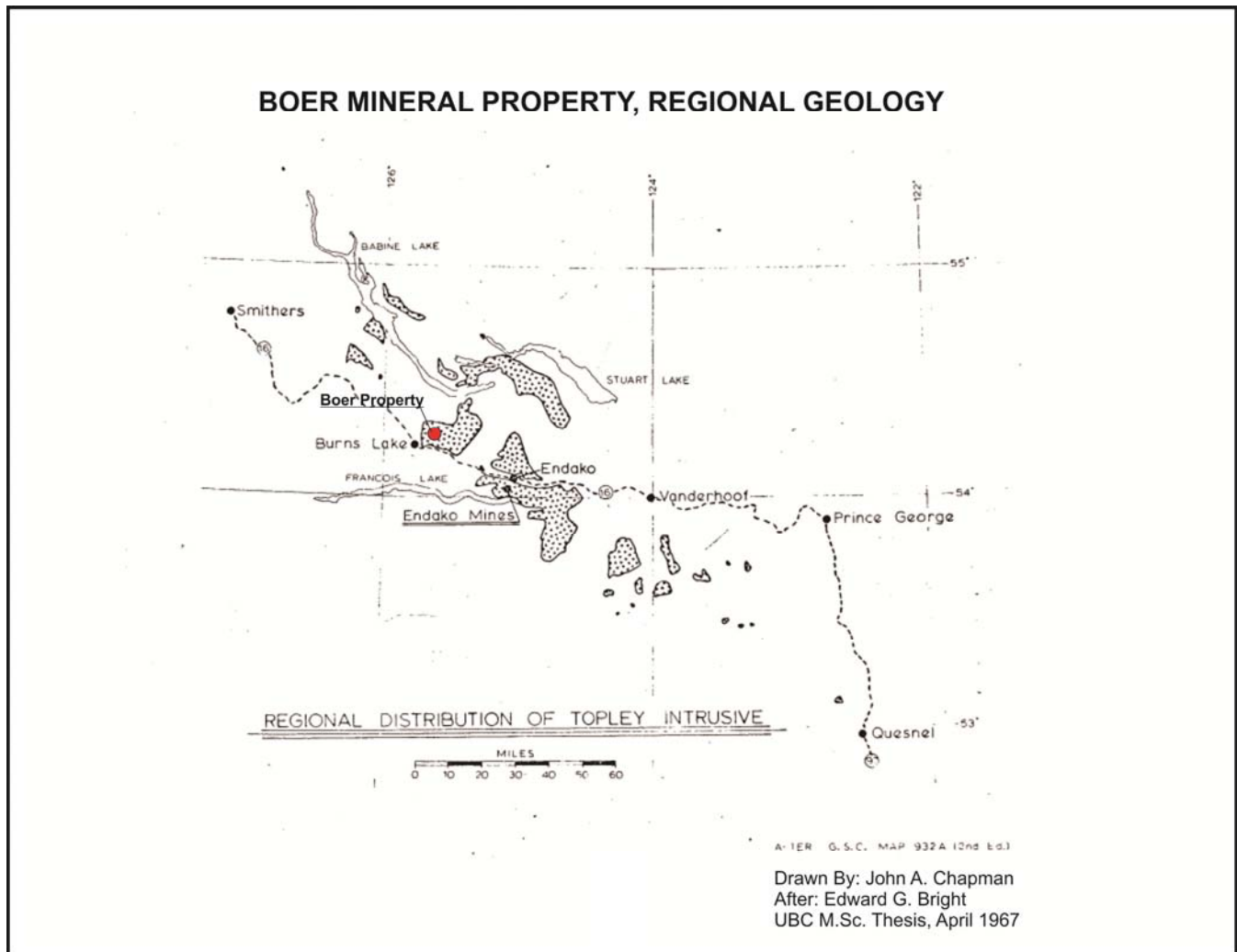


Figure 4. Regional Geology, Topley Intrusives

Regional distribution of the Topley rocks stretches from Babine Lake to Quesnel, a distance of about 288 kilometers along a regional northwesterly trend. These are differentiated (composite) intrusives in which granite, quartz monzonite, granodiorite, quartz diorite and diorite have been identified. The geology at the Boer property consists of mainly Topley intrusives (from granite to diorite to gabbro) that are covered in several areas by younger (Jurassic, Cretaceous, Eocene and Oligocene) volcanics. These volcanics vary in composition from andesite to basalt. Reference Figure 5, Geology.

There is no detailed geology available for the Boer property as there has never been any work reported by industry (no assessment reports filed).

The sampling done in the 2012 program (see Assessment Report 33782) indicates that there is an extensive area of granites and diorites (in some cases they appear coeval, no chilled contacts) with fairly abundant quartz and K-spar pegmatites within the Property's mineral claims. This bodes well for discovery as these rocks are within the anomalous lakes sediments area and they represent end phases of a differentiated intrusive that could be associated with sulfur and metal-rich fluids (Sillitoe, 2010).

BOER MINERAL PROPERTY, GEOLOGY

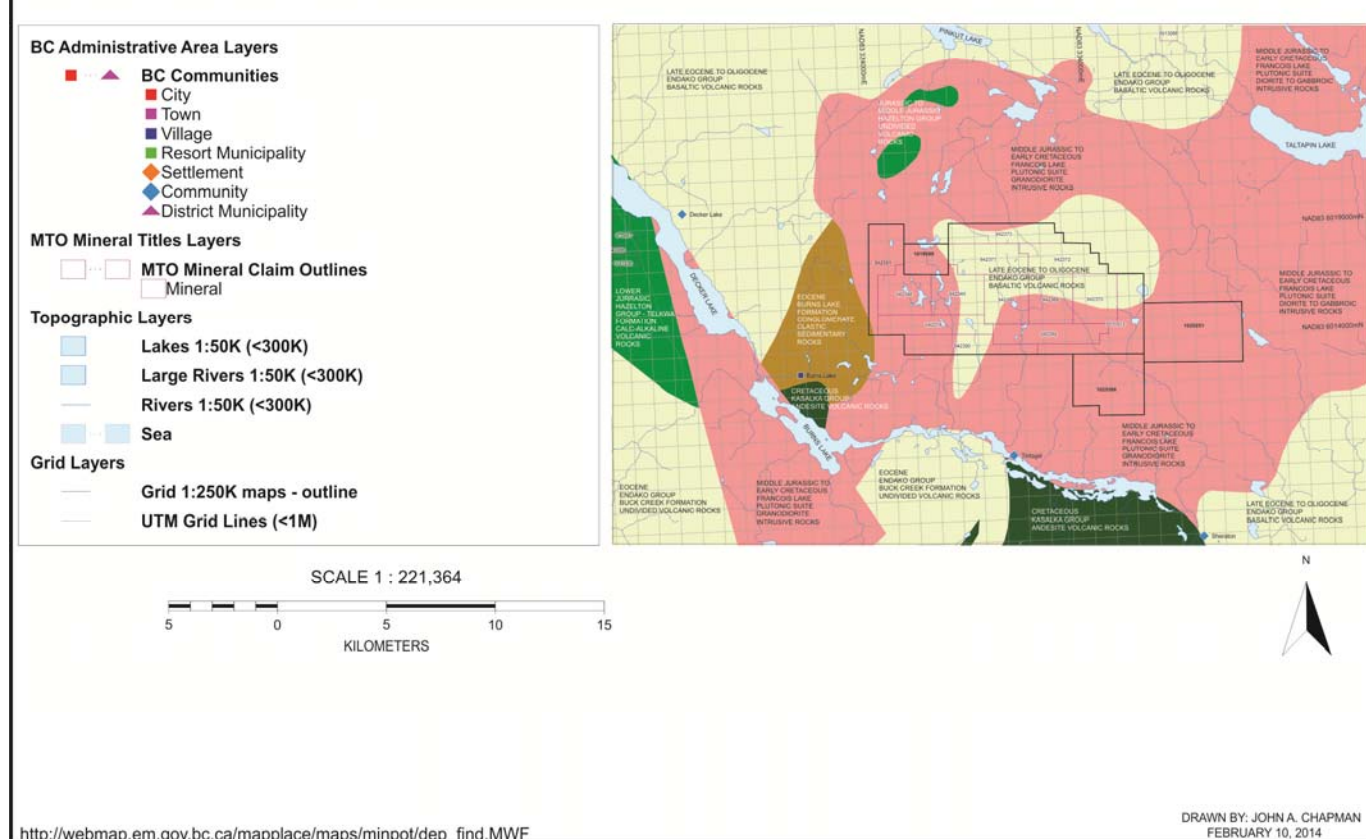


Figure 5. Property Geology (from B.C. MapPlace)

2013 EXPLORATION PROGRAM

The 2013 exploration program consisted of biogeochemical surveys, drilling and geological work in an effort to: (1) determine the sources of: (a) the metals-in-lake-sediment anomalies identified by recent government and Geoscience BC surveys, and (b) sources of metals-in-vegetation (ashed Lodgepole pine outer bark) identified by Colin Dunn in his GSB Open File Report No. 2001-09, and (2) to follow up on the 2012 Boer Breccia discovery.

On June 9, 2013 Jon Rempel a Fort Fraser based earth-moving contractor and mineral prospector informed John Chapman of the metal enriched bark samples near the eastern end of the Boer property that are shown on MapPlace ("Focused Geochemical Surveys", "Bark Survey Data"). This information prompted Chapman to contact Colin Dunn, biogeochemical expert to discuss this MapPlace data (see Figure 6) which is from Dunn's GSC Report (Open File 2001-09). This led to planning for the westerly extension of the Lodgepole pine outer bark survey across the Boer property in 2013, using the same sampling and analysis methods as Dunn in his 2001 survey. Significant copper, molybdenum and silver anomalies have been located in the 2013 biogeochemical surveys at Boer (131 Lodgepole outer bark samples, see Appendix B for results). The tenor

and size of the 2013 copper and molybdenum anomalies at Boer are superior to those located at Mount Milligan (134 samples), using similar methods, and reported in BSC Open File 3290 by Colin Dunn (1996). For example the 90 percentile and maximum copper grades at Boer (131 samples) are 432ppm and 646ppm, at Mount Milligan (134 samples) the grades are 292ppm and 409ppm. The 90 percentile and maximum molybdenum grades at Boer are 134ppm and 190ppm, at Mount Milligan the grades are 9ppm and 14ppm (see Appendix C for a Biogeochemistry, Boer vs Mount Milligan comparison).

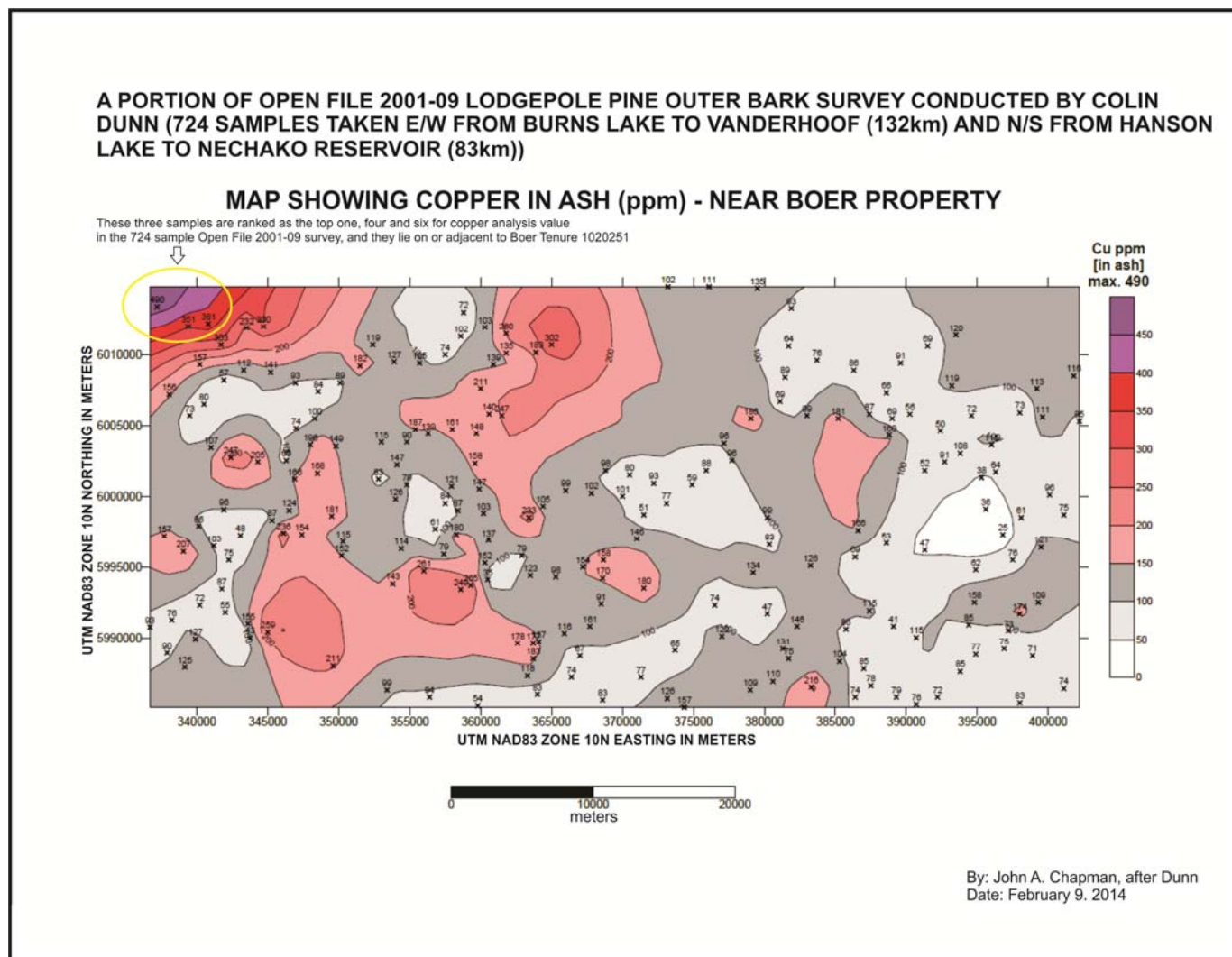


Figure 6. Northwest portion of GSC Open File 2001-09 Biogeochemical Survey by Colin Dunn

In addition to the large Lodgepole pine outer bark survey over the Boer property in 2013 a small White Spruce outer bark survey was done over and adjacent to the Boer Breccia. No Lodgepole pine was available to sample in the area around the Boer Breccia. Note that White Spruce has a very different metal uptake (metabolism) than Lodgepole pine so assay results cannot be reasonably compared between these species.

In August 2013 a 26.6 meter long vertical core-hole (B13-1) was drilled in rock adjacent to the Boer Breccia showing at UTM NAD 83 Zone10N: 332751mE/6015018mN. It indicated a multiphase intrusive system is present which supported the findings of outcrop sampling in the area in 2012 (see Appendix E for details of the drilling).

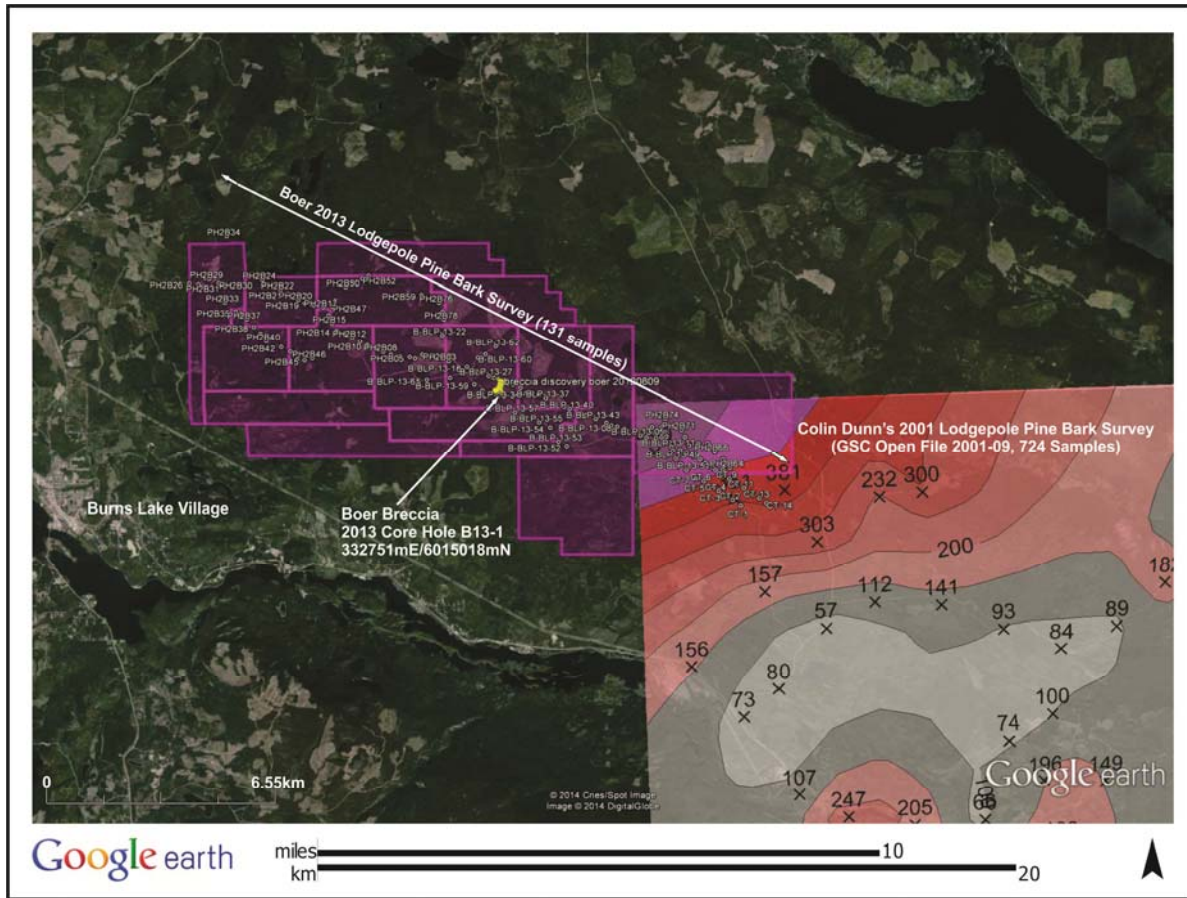


Figure 7. General Location of 2013 Exploration Work

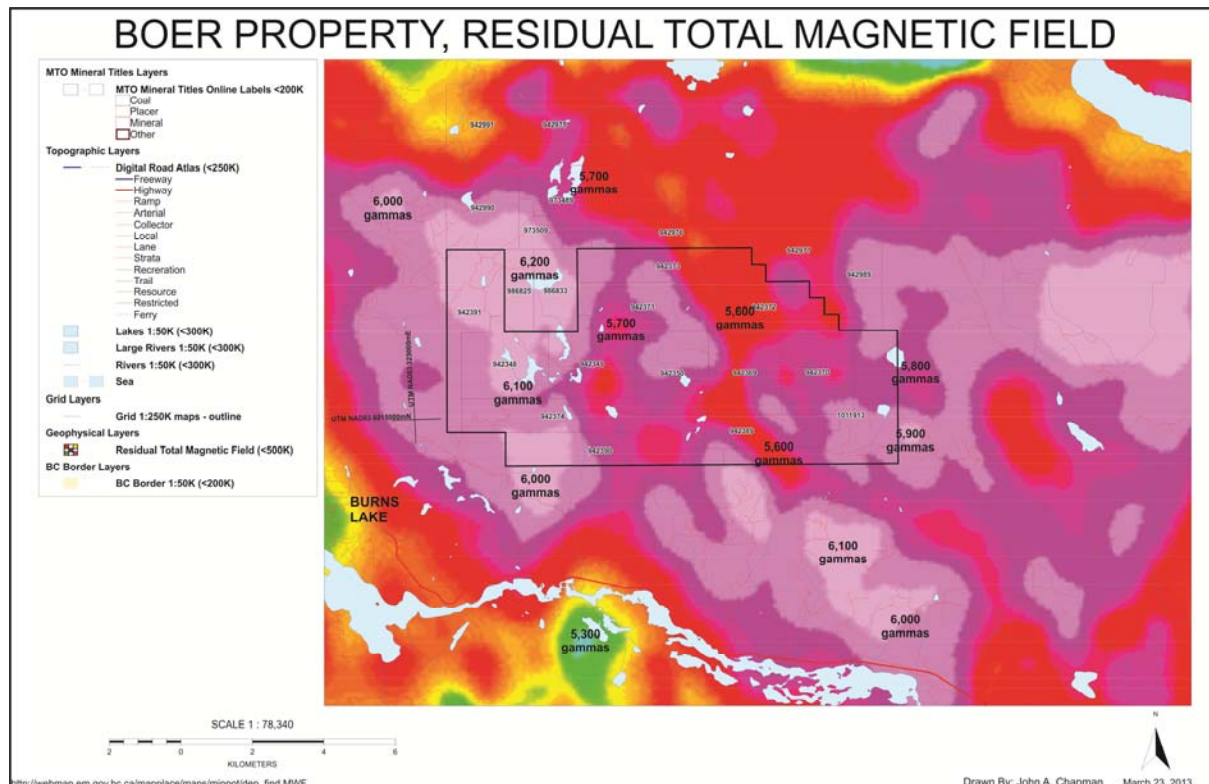


Figure 8. Residual Total Magnetic Field (from B.C. MapPlace, March 2013)



Figure 9. Typical method of lake sediment sampling

INTERPRETATION AND CONCLUSIONS

It was well established during the 2012 program that the glacial ice direction over the Boer property has been from west to east. However, the drainage through the main lakes with elevated metals-in-sediments has been from the height of land (divide between Babine and Endako drainages). The headwaters of the two main south draining creeks (Stearns and Tintagel) are from the height of land in the north central to north east portion of the Property. This complicates the tracing of anomalous metals from the lakes to the source.

In December 2013, statistical analysis of Lake Sediment Sample data from the Nechako Plateau (Quest West Report 2009-11), including the Boer property, was done by Dennis Arne, Principal Consultant – Geochemistry, CSA Global for Carlson and Chapman (see Appendix D). His analyses included a large area (NTS 093K) covering 115km N/S and 130km E/W, with the Boer property in the SW quadrant. He concluded that two lake sediment samples from the Boer property are clearly anomalous in silver and lie within the upper 99.5 percentile of the regional data set and are not likely to be associated with scavenging of silver into clay minerals. Also, silver does not show strong positive associations with iron, manganese or LOI (a surrogate for organic matter) in the samples.

Results from the GSB Open File Report 2001-09 and the extension of this survey (ashed Lodgepole pine outer bark) toward the northwest across the Boer property have identified several significant copper, molybdenum, silver, gold and zinc anomalies. This suggests the presence of a possible underlying (glacial overburden cover is extensive) porphyry system, similar to those at nearby Endako, Bell, Granisle and Morrison. In this prospective porphyry terrane recessive areas, especially over large circular swamp and lake features, should be considered as possible argillic (phyllic) alteration zones that have been deeply eroded by glacial action – base and precious metal rich zones may lay nearby as arcuate or circular “shells”.

Ariadne Holness de Hiller, Geologist, having worked on the Property in 2013 offered the following comment: “Taking into consideration the information provided: geology, geophysics, structural interpretation, lake sediments, lodge pole pine bark sampling, mineralization and alteration observed in the core of hole B13-1

and in the area of the Discovery breccia (Cu-Mo-Ag +/- Au? Porphyry), the Property could be genetically associated to a structural controlled multiphase hydrothermal system related to an (or several) apophyse(s) linked to the cupola of the Boer (Topley) intrusive with possible variances related to erosion, uplift rates and structural control at the time of the different phases of mineralization.”

RECOMMENDATIONS

In order to locate a buried metal (sulfide) deposit under glacial till or thin young volcanics at Boer it will be necessary to: 1) continue surficial prospecting (especially at 2013 biogeochemical metal anomalies), 2) gridding select areas anomalous in metals for 3D-IP surveys, and 3) conduct a Geotech Ltd. ZTEM airborne geophysical survey. Anomalies generated from this work should be mechanically trenched and/or drilled.

The relatively new ZTEM method is effective in identifying bulk conductivity contrasts in rocks to ~2km depths. This can outline the resistive potassic zone from the surrounding less resistive phyllic and propylitic zones related to porphyry copper and/or molybdenum deposits.

Consideration should also be given to drilling at least one “Hail Mary” deep vertical core hole at the breccia discovery at kilometer 13.2 on the Co-op Main road.

The field program recommended for 2014 includes: 1) a helicopter-borne ZTEM survey by Geotech Ltd. (~\$110,000), and 2) detailed prospecting including some hand trenching in areas of select 2013 metal anomalies (~\$10,000) and where warranted development of grids for 3D-IP surveys (~\$125,000).

REFERENCES

- Armstrong, J.E. (1965), Fort St. James Map-Area, Cassiar and Coast Districts, British Columbia, Memoir 252, Geological Survey of Canada.
- Bright, E.G. (1967), Geology of the Topley Intrusives in the Endako Area British Columbia, a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science, Department of Geology, UBC.
- Chapman, J.A. (2013), B.C. Assessment Report No. 33782, Geochemical, Geological and Surface Prospecting of the Boer Property, Central British Columbia, Canada.
- Kimura, E.T and Cyr J.B. (1977), Geochronology and Petrogenesis of Topley Intrusions Endako-Babine Lake Area.
- Kimura, E.T. and Drummond, A.D. (1966), Geology of the Endako Molybdenum Deposit, Presented at CIM, B.C. Section Meeting Victoria, B.C.
- MacIntyre, D.G. (2012), B.C. Assessment Report No. 33278, Airborne ZTEM and Aeromagnetic Geophysical Survey of the Hanson Property, Central British Columbia, Canada.
- Peters, A.J. (1982), Geology and Geochemical Report Division Group of Mineral Claims, Omineca Mining Division, Placer Development Limited, Endako Mines Division (Assessment Report No. 10396).
- Sillitoe, R.H. (2010), Porphyry Copper Systems, Society of Economic Geologists, Inc., Economic Geology, v. 105, pp. 3-41.
- Wingert-Runge, B., and Andren, A.W., Adsorptive Behavior of Silver to Synthetic and Natural Systems in Aqueous Systems, University of Wisconsin-Madison.

STATEMENTS OF QUALIFICATIONS

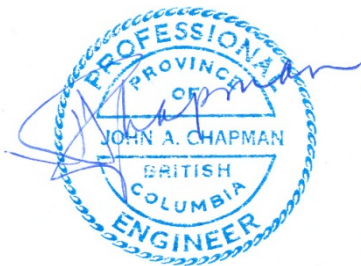
I, John Arthur Chapman of the City of Surrey, Province of British Columbia, Canada, do hereby certify as follows:

- (1) I am a consulting 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 Professional Engineer registered (No. 8840) in the Province of British Columbia, Canada, since 1973;
- (4) I am a Fellow of the Canadian Institute of Mining and Metallurgy;
- (5) I have practised my profession continuously since 1973 in Canada, United States and Philippines;
- (6) Since 1983 I have provided services to the mining industry as the Principal of J.A. Chapman Mining Services;
- (7) 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 Dome Inc. in engineering, supervision and management at large open-pit copper and molybdenum mines;
- (8) I am the author of this report on the Boer property, dated February 20, 2014. The report is based upon a literature review, discussions with neighboring claim owners and on Property visits during 2012 and 2013;
- (9) I am the registered owner of 50% interest in the Boer property.
- (10) I personally assisted in the planning for and reviewing of the 2013 exploration program at the Boer property.

Dated at Surrey, British Columbia this 25th day of February 2014.



John Arthur Chapman, B.Sc., P.Eng., FCIM



STATEMENT OF EXPENDITURES

Boer Property Phase One Exploration Program 2013 (August)			
Travel:			
Nissan Exterra 4x4 Vancouver to Burns Lake return plus work on Boer property (2,408km at \$0.65/km)	August 18 to 24, 2013		1,565.20
Accommodation and Meals	August 18 to 24, 2013		1,634.08
Work:			
Drilling - Omineca Drilling (26 meters B size core - 35.3mm diameter)	August 20 to 21, 2013 (\$130 per meter)		3,380.00
Core samples back to Burns Lake via Canada Post			21.39
Drilling - assay core (two samples at Met-Solve)	\$46.94 plus delivery \$15.00		61.94
Logging Core: Ariadne Holness de Hiller, BSc Geological Engineer (Honors)	1 day at \$700 per day		700.00
Boer field visit to Breccia: Ariadne Holness de Hiller (geologist)	time and travel one-half day		500.00
supplies			175.00
Bark Survey:			
Acme Analyses			2,254.27
Labour: John A. Chapman, P.Eng.	6 days at \$850 per day*		5,100.00
Labour: Trevor Davidge, BCIT Student	6 days at \$350 per day*		2,100.00
Supplies			250.00
Boer Property Phase Two Exploration Program 2013 (October & November)			
Bark Survey			
Labour: Les Allen (experienced prospector, Discovery Consultants, Vernon)	4 days at \$450 per day		1,800.00
Labour: Bruce Hiller	3 days at \$350 per day		1,050.00
Labour: Tony Clovis	1 day at \$350 per day		350.00
Honda Quad	14 hours at \$30 per hour		420.00
4x4 vehicles	4 vehicle days at \$250 per day		1,000.00
Greyhound Shipping of Samples	\$47.02 plus pickup \$15.00		62.02
Acme Analyses	\$2000 plus delivery of \$15.00		2,015.00
Planning, Data Compilation and Report			3,300.00
	Grand Total		\$27,738.90
	PAC		\$10,034.37
			\$37,773.27

Event Number: 5480287
 Work Filed: \$27,739.00
 PAC Filed: \$10,034.37
 Work Recorded: December 9, 2013

APPENDIX A

ANALYTICAL PROCEDURES

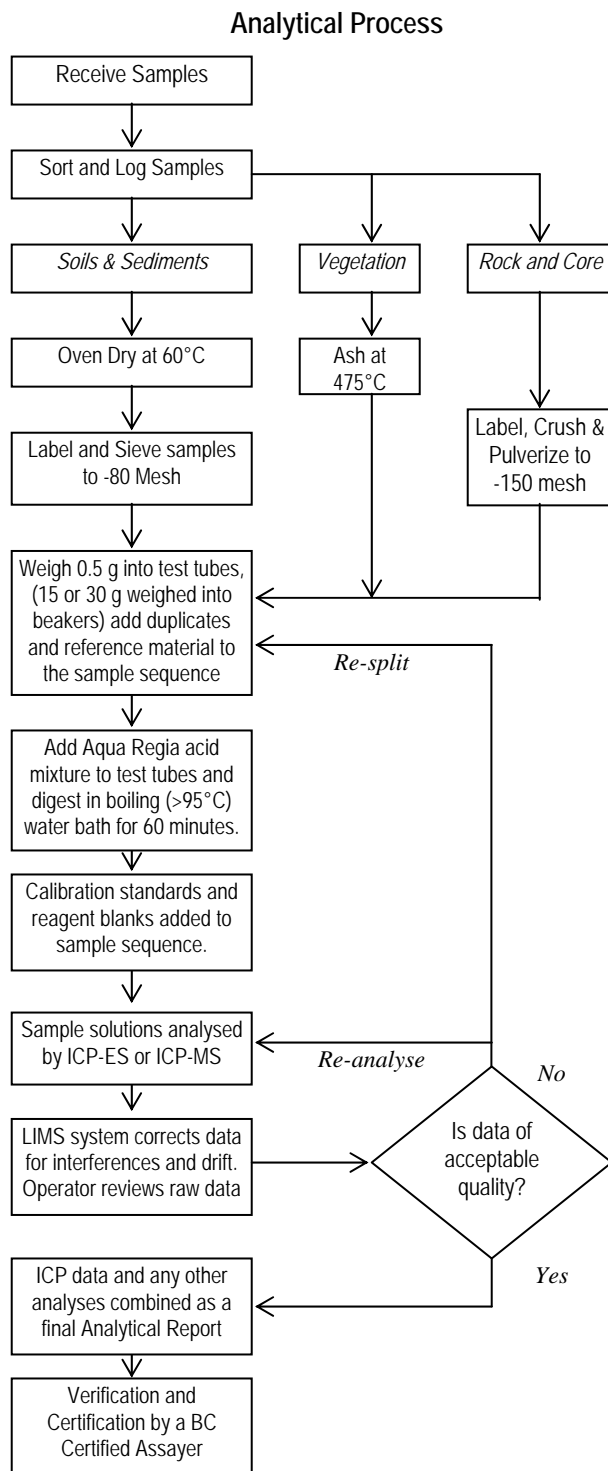
&

ASSAY CERTIFICATES

Note:

**There are assays in Met-Solve MA0044 from properties other than the Boer.
Only the two sample numbers starting with B are from the Boer property.**

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX – ICP & ICP-MS ANALYSIS – AQUA REGIA



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177 µm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 µm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes, 15 and 30 g splits are weighed into beakers.

Sample Digestion

A modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO₃ and de-mineralised H₂O is added to each sample to leach for one hour in a hot water bath (>95°C). After cooling the solution is made up to final volume with 5% HCl. Sample weight to solution volume is 1 g per 20 mL.

Sample Analysis

Group 1D: solutions aspirated into a Jarrel Ash AtomComp 800 or 975 ICP or Spectro Ciros Vision emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Group 1DX: solutions aspirated into a Perkin Elmer Elan 6000/9000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Tl, Sr, Th, Ti, U, V, W, Zn.

Quality Control and Data Verification

An Analytical Batch (1 page) comprises 36 samples. QA/QC protocol incorporates a sample-prep blank (G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), a reagent blank to measure background and an aliquot of in-house Standard Reference Materials like STD DS7 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client.



www.acmelab.com

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 DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

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

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

ADDITIONAL COMMENTS



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.

CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte	Rec. Wt	Ash Wt	ashed 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	0.1	0.2	0.1	0.5	0.01	0.02	0.02
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	0.16
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	0.43
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	0.40
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	0.33
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	0.26
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	0.38
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	0.27
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	0.17
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	0.39
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	0.27
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	0.28
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
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	0.48
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	0.57
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	0.28
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	0.21
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	0.35
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	0.26
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	0.25
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.	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	0.17
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	0.13
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	<0.02
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	0.11
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.	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	0.09
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	0.21
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	0.14
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	0.28
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	0.29

CERTIFICATE OF ANALYSIS

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	%	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	
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.	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.	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

CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte	Rec. Wt	Ash Wt	ashed 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	0.1	0.2	0.1	0.5	0.01	0.02	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.	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



www.acmelab.com

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: 3 of 4

Part: 2 of 2

CERTIFICATE OF ANALYSIS

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	%	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	
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.	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.

CERTIFICATE OF ANALYSIS

VAN13003533.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
Analyte	Rec. Wt	Ash Wt	Wtshed 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	0.1	0.2	0.1	0.5	0.01	0.02	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.	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

CERTIFICATE OF ANALYSIS

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	%	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	
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.	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

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	1F
Analyte	Rec. Wt	Ash	Wtshed 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	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	



www.acmelab.com

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: 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	Ti	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																					
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



www.acmelab.com

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 DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

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

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

ADDITIONAL COMMENTS



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.



www.acmelab.com

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

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte	Rec. Wt	Ash Wt	ashed 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.

CERTIFICATE OF ANALYSIS

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	%	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	
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

CERTIFICATE OF ANALYSIS

VAN13004744.1

Method	VA475	VA475	VA475	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte	Rec. Wt	Ash Wt	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	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
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

CERTIFICATE OF ANALYSIS

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	%	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	
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

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 Wt	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	ppm	ppb	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
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



www.acmelab.com

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	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	%	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	
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



www.acmelab.com

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
Analyte	Rec. Wt	Ash	Wtshed 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
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

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

CERTIFICATE OF ANALYSIS: MA0044-OCT13

Project Name: BC-1
Job Received Date: 11-Oct-2013
Job Finalized Date: 22-Oct-2013

SAMPLE PREPARATION	
METHOD CODE	DESCRIPTION
PWE-100	Received weight of samples
PRP-910	Crush, Pulverize to 85% passing 75micron

ANALYTICAL ANALYSES	
METHOD CODE	DESCRIPTION
ICP-130	Multi-element ICP-OES (Aqua Regia) - Include Au

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

Signature:

Mike Phillips, President, Met-Solve Analytical Services



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

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

CERTIFICATE OF ANALYSIS: MA0044-OCT13

Project Name: BC-1
 Job Received Date: 11-Oct-2013
 Job Finalized Date: 22-Oct-2013

Method	PWE-100	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130	ICP-130
Analyte	Rec. Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Co	Cr	
Units	Kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
Sample ID	LOR	0.02	0.1	0.01	5	2	20	5	0.5	5	0.01	1	1	1
B-CH02-85	0.56	0.2	1.99	<5	<2	<20	189	<0.5	<5	2.13	4	16	65	
B-CH02-87	0.42	0.3	1.74	<5	<2	<20	34	<0.5	<5	1.52	5	81	82	
JAC YTS13-01	0.92	0.2	3.55	<5	<2	<20	35	<0.5	<5	0.69	3	13	87	
JAC KRF13-01	0.83	0.1	2.20	<5	<2	<20	332	<0.5	<5	0.22	3	18	186	
JAC KRF13-02	0.25	0.3	0.37	<5	<2	<20	<5	<0.5	<5	0.03	3	59	228	
JAC KRF13-03	0.87	<0.1	0.37	6	<2	<20	27	<0.5	<5	0.15	2	55	453	
DUP B-CH02-85		0.1	1.88	<5	<2	<20	205	<0.5	<5	2.08	4	14	61	
STD BLANK		<0.1	<0.01	<5	<2	<20	<5	<0.5	<5	<0.01	<1	<1	<1	
STD OREAS 24b		<0.1	2.84	8	<2	<20	140	1.18	<5	0.37	3	17	87	



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

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

CERTIFICATE OF ANALYSIS:	MA0044-OCT13
---------------------------------	---------------------

Project Name: BC-1
 Job Received Date: 11-Oct-2013
 Job Finalized Date: 22-Oct-2013

Method Analyte Units LOR	ICP-130 Cu ppm 1	ICP-130 Fe % 0.01	ICP-130 Ga ppm 5	ICP-130 Hg ppm 5	ICP-130 K % 0.01	ICP-130 La ppm 10	ICP-130 Mg % 0.01	ICP-130 Mn ppm 5	ICP-130 Mo ppm 1	ICP-130 Na % 0.01	ICP-130 Ni ppm 1
Sample ID											
B-CH02-85	25	5.04	12	<5	0.33	14	1.36	808	<1	0.11	2
B-CH02-87	51	6.43	11	<5	0.15	11	1.16	684	94	0.08	3
JAC YTS13-01	62	4.33	11	<5	0.22	<10	0.74	385	2	0.21	13
JAC KRF13-01	78	3.44	13	<5	1.34	10	1.18	617	9	0.11	39
JAC KRF13-02	108	3.49	<5	<5	<0.01	<10	12.84	586	<1	<0.01	1624
JAC KRF13-03	101	2.62	<5	<5	0.01	<10	4.41	301	<1	<0.01	808
DUP B-CH02-85	23	4.94	11	<5	0.32	13	1.33	795	<1	0.11	2
STD BLANK	<1	<0.01	<5	<5	<0.01	<10	<0.01	<5	<1	<0.01	<1
STD OREAS 24b	36	4.00	14	<5	1.06	16	1.11	334	3	0.10	52



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

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

CERTIFICATE OF ANALYSIS:	MA0044-OCT13
---------------------------------	---------------------

Project Name: BC-1
 Job Received Date: 11-Oct-2013
 Job Finalized Date: 22-Oct-2013

Method Analyte Units LOR	ICP-130 P %	ICP-130 Pb ppm	ICP-130 S %	ICP-130 Sb ppm	ICP-130 Sr ppm	ICP-130 Ti %	ICP-130 Tl ppm	ICP-130 V ppm	ICP-130 W ppm	ICP-130 Zn ppm	ICP-130 Zr ppm
Sample ID	0.01	2	0.01	5	1	0.01	5	1	10	2	5
B-CH02-85	0.19	8	0.33	<5	310	0.09	<5	97	<10	61	<5
B-CH02-87	0.13	9	3.71	<5	96	0.04	<5	47	<10	45	<5
JAC YTS13-01	0.10	10	2.02	<5	59	0.03	<5	86	<10	68	<5
JAC KRF13-01	0.06	9	0.33	<5	14	0.26	<5	138	<10	131	<5
JAC KRF13-02	<0.01	4	0.03	<5	<1	<0.01	<5	7	<10	44	<5
JAC KRF13-03	<0.01	3	0.28	7	1	<0.01	<5	9	<10	20	<5
DUP B-CH02-85	0.18	7	0.30	<5	296	0.09	<5	95	<10	55	<5
STD BLANK	<0.01	<2	<0.01	<5	<1	<0.01	<5	<1	<10	<2	<5
STD OREAS 24b	0.07	14	0.20	<5	27	0.17	<5	76	<10	96	20



www.acmelab.com

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: January 13, 2014
Report Date: February 02, 2014
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14000135.1

CLIENT JOB INFORMATION

Project: BOER
Shipment ID:
P.O. Number
Number of Samples: 4

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	4	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX1	4	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 Dispose of Reject 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.



www.acmelab.com

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: February 02, 2014

Page: 2 of 2

Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14000135.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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	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	
B13-1-001	Drill Core	0.71	1.5	3.2	158.5	189	1.0	0.4	0.5	317	0.54	1.2	5.6	22.0	65	3.7	0.4	<0.1	<2	1.31	0.005
B13-1-002	Drill Core	0.51	1.5	3.5	38.6	178	0.4	0.6	0.3	219	0.56	1.3	2.1	15.7	34	3.0	0.1	0.1	2	0.75	0.013
B13-1-003	Drill Core	1.15	0.5	2.3	41.9	129	0.4	0.4	0.8	268	0.46	3.2	2.6	16.1	65	3.7	0.1	0.1	<2	1.05	0.005
B13-1-004	Drill Core	0.66	0.2	8.7	10.7	87	0.2	1.5	10.9	1512	3.67	1.4	1.3	2.1	216	0.5	0.1	0.1	38	4.95	0.138



www.acmelab.com

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: February 02, 2014

Page: 2 of 2

Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN14000135.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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	
B13-1-001	Drill Core	36	<1	0.07	150	<0.001	<20	0.18	0.030	0.14	<0.1	<0.01	0.5	<0.1	0.15	<1	<0.5	<0.2
B13-1-002	Drill Core	19	<1	0.12	43	<0.001	<20	0.23	0.037	0.13	<0.1	0.01	0.5	<0.1	0.09	<1	<0.5	<0.2
B13-1-003	Drill Core	21	<1	0.03	69	<0.001	<20	0.22	0.019	0.19	<0.1	<0.01	0.2	<0.1	0.29	<1	<0.5	<0.2
B13-1-004	Drill Core	10	<1	1.34	240	0.003	<20	1.03	0.020	0.24	<0.1	<0.01	5.6	<0.1	0.19	3	<0.5	<0.2

QUALITY CONTROL REPORT

VAN14000135.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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	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	
Pulp Duplicates																					
B13-1-004	Drill Core	0.66	0.2	8.7	10.7	87	0.2	1.5	10.9	1512	3.67	1.4	1.3	2.1	216	0.5	0.1	0.1	38	4.95	0.138
REP B13-1-004	QC		0.1	8.7	11.1	86	0.2	1.4	11.3	1432	3.55	2.0	3.1	2.1	208	0.6	<0.1	0.1	37	4.69	0.134
Reference Materials																					
STD DS10	Standard		13.9	157.2	159.3	369	2.2	76.0	12.4	844	2.64	45.2	58.6	7.4	68	2.7	8.3	12.2	42	1.03	0.073
STD OREAS45EA	Standard		1.3	650.5	15.6	30	0.3	357.3	47.5	372	22.97	8.4	50.4	10.9	4	<0.1	0.2	0.3	287	0.03	0.026
STD DS10 Expected			14.69	154.61	150.55	352.9	1.96	74.6	12.9	861	2.7188	43.7	91.9	7.5	67.1	2.48	7.8	11.65	43	1.0355	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	<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		<0.1	1.7	2.8	46	<0.1	3.5	4.1	551	1.90	<0.5	0.7	5.5	58	<0.1	<0.1	<0.1	37	0.42	0.076

QUALITY CONTROL REPORT

VAN14000135.1

Method		1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
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	
Pulp Duplicates																			
B13-1-004	Drill Core	10	<1	1.34	240	0.003	<20	1.03	0.020	0.24	<0.1	<0.01	5.6	<0.1	0.19	3	<0.5	<0.2	
REP B13-1-004	QC	9	<1	1.28	237	0.003	<20	0.98	0.019	0.23	<0.1	<0.01	5.9	<0.1	0.18	3	<0.5	<0.2	
Reference Materials																			
STD DS10	Standard	17	52	0.75	396	0.067	<20	0.95	0.060	0.32	3.4	0.36	2.7	5.1	0.28	4	1.5	5.5	
STD OREAS45EA	Standard	7	740	0.10	142	0.078	<20	2.83	0.017	0.05	<0.1	0.02	70.8	<0.1	<0.05	12	<0.5	<0.2	
STD DS10 Expected		17.5	54.6	0.7651	349	0.0817		1.0259	0.0638	0.3245	3.34	0.289	2.8	4.79	0.2743	4.3	2.3	4.89	
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	10	6	0.56	248	0.121	<20	0.94	0.086	0.49	<0.1	<0.01	2.3	0.3	<0.05	5	<0.5	<0.2	

APPENDIX B

BIOGEOCHEMICAL 2013 SURVEY MAPS

&

REFERENCE SPREADSHEET PLOT FILES

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

BC Administrative Area Layers

- BC Communities
 - City
 - Town
 - Village
 - Resort Municipality
 - Settlement
 - Community
 - District Municipality

Mineral Inventory Layers

MINFILE status

- Producer
- Past Producer
- Developed Prospect
- Prospect
- Showing
- All Others

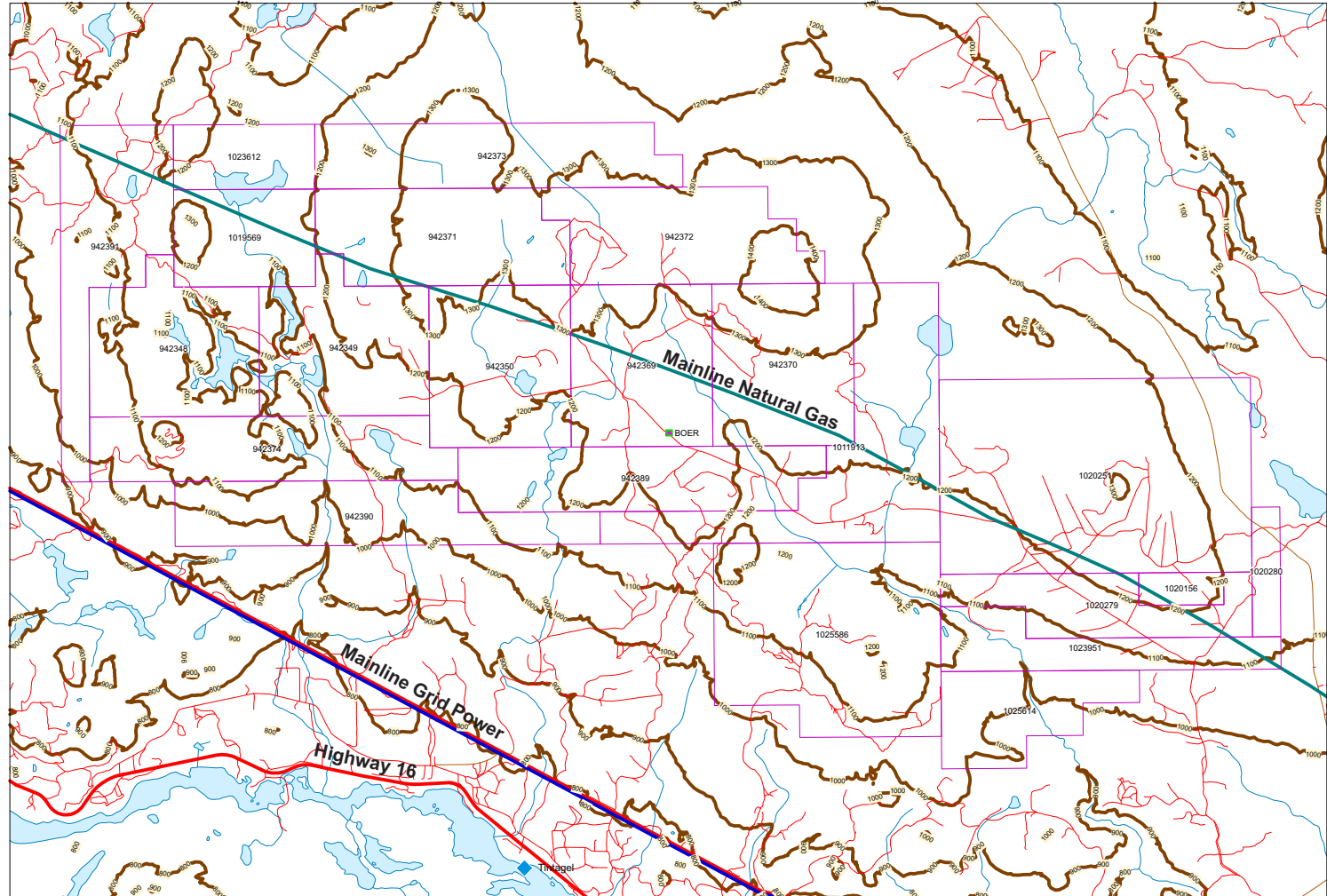
MINFILE name label

- Developed Prospect
- Past Producer
- Producer
- Prospect
- Showing
- All Others

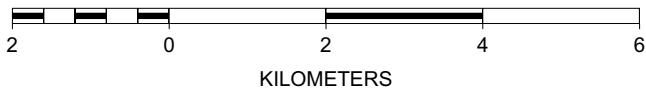
MTO Mineral Titles Layers

- MTO Mineral Claim Outlines
- Mineral

Topographic Layers

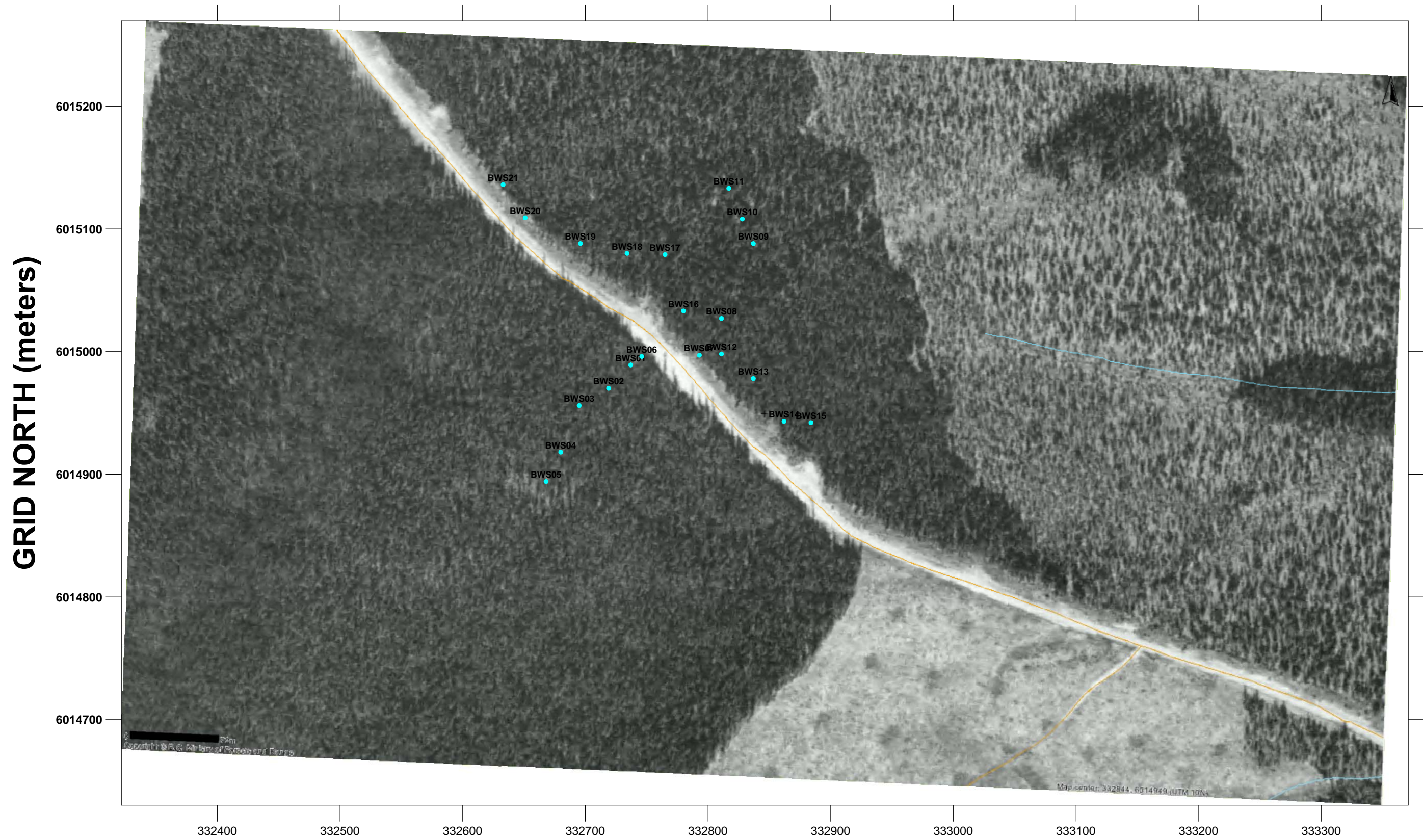


SCALE 1 : 96,310



BOER 2013 BRECCIA AREA WHITE SPRUCE OUTER BARK BIOGEOCHEMICAL SURVEY

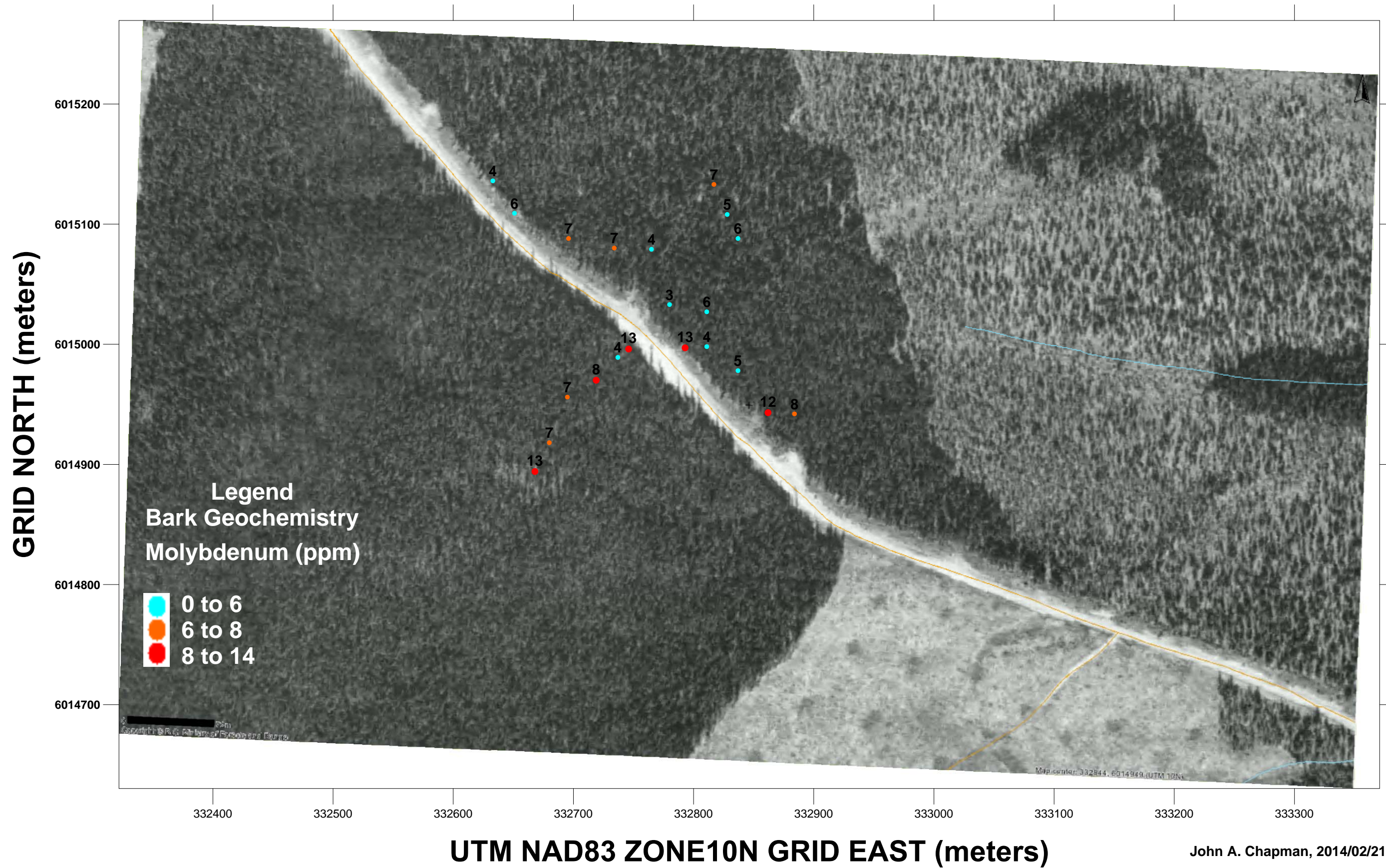
SAMPLE NUMBERS



UTM NAD83 ZONE10N GRID EAST (meters)

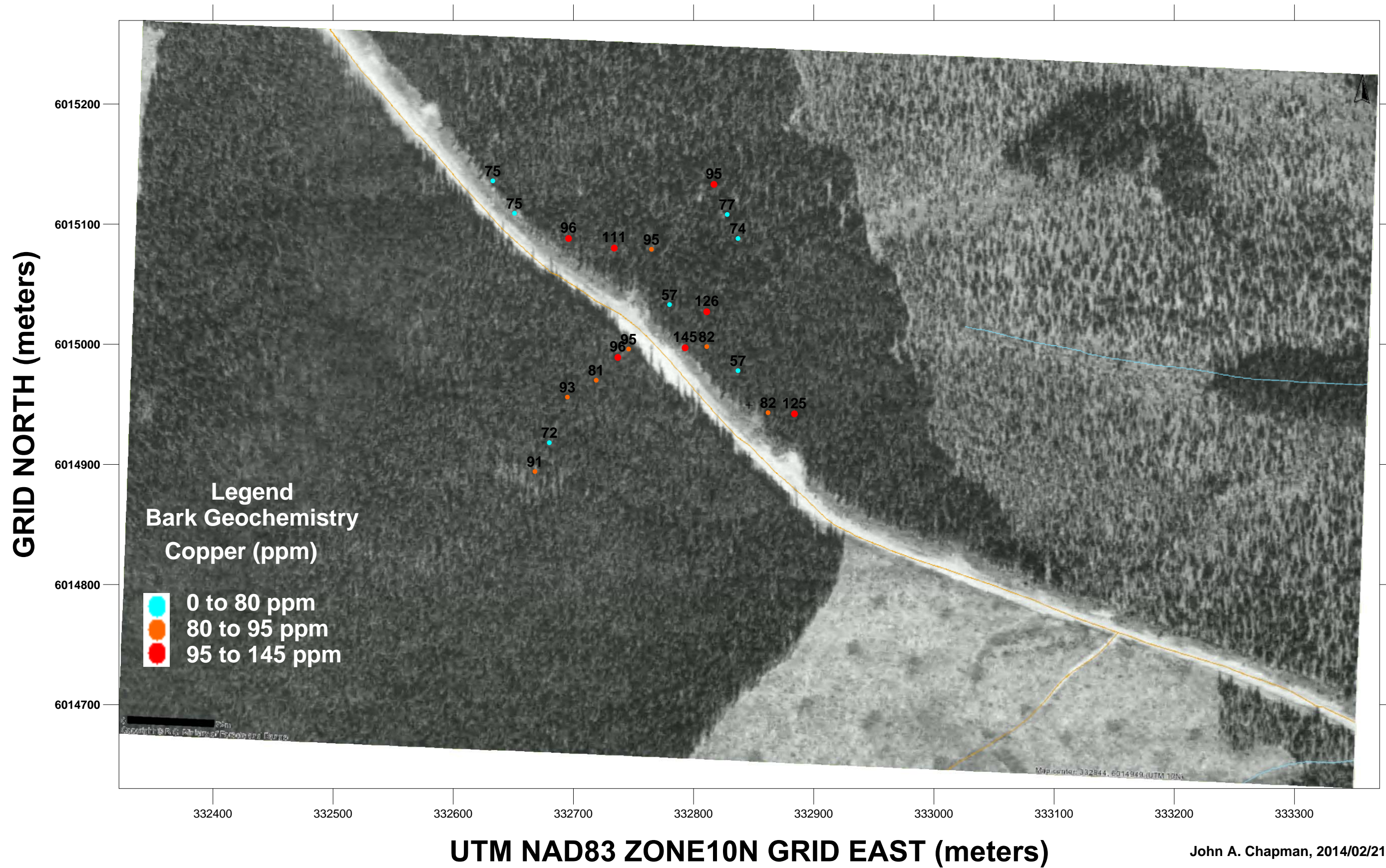
BOER 2013 BRECCIA AREA WHITE SPRUCE OUTER BARK BIOGEOCHEMICAL SURVEY

MOLYBDENUM IN ASHED BARK (ppm)



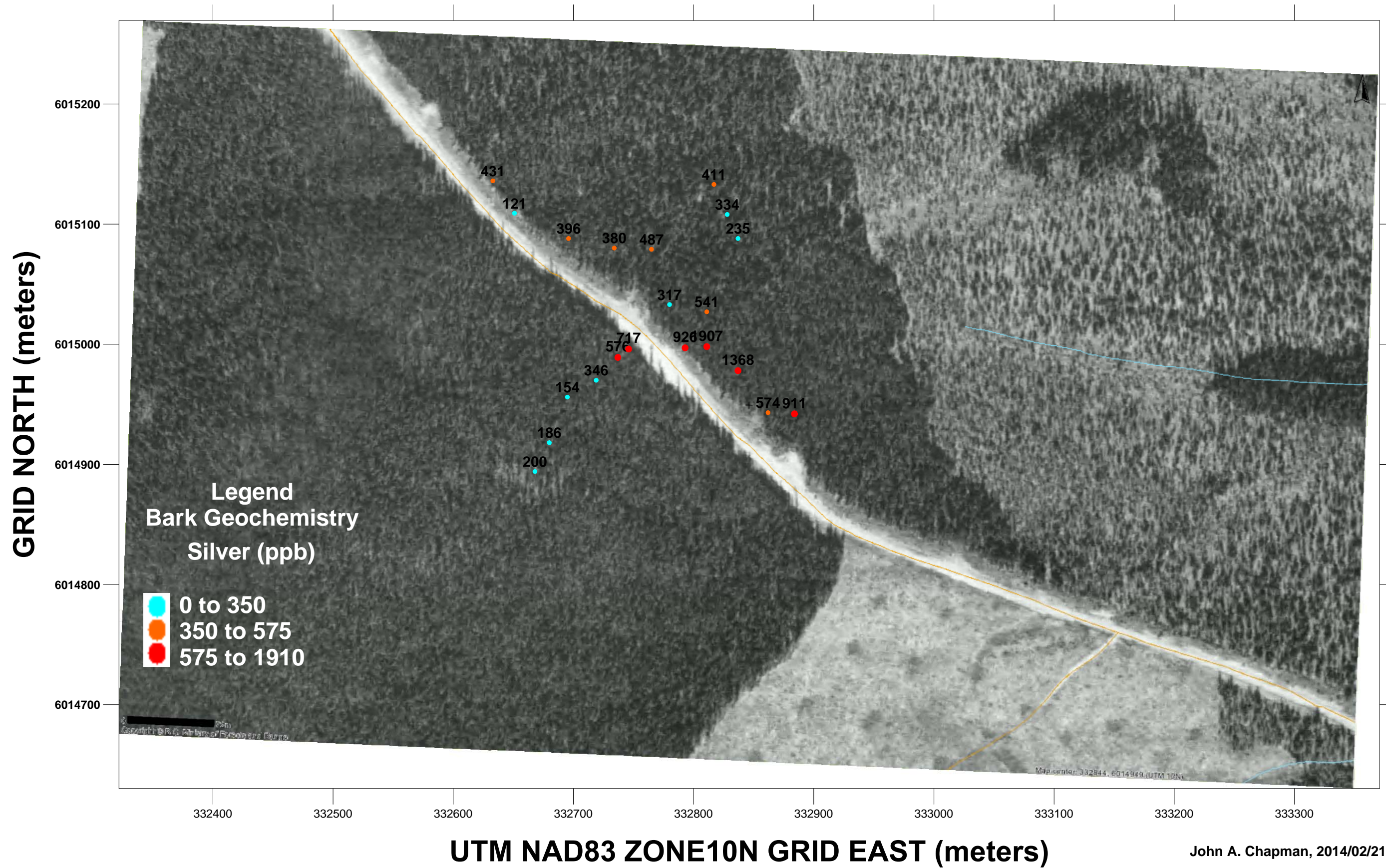
BOER 2013 BRECCIA AREA WHITE SPRUCE OUTER BARK BIOGEOCHEMICAL SURVEY

COPPER IN ASHED BARK (ppm)



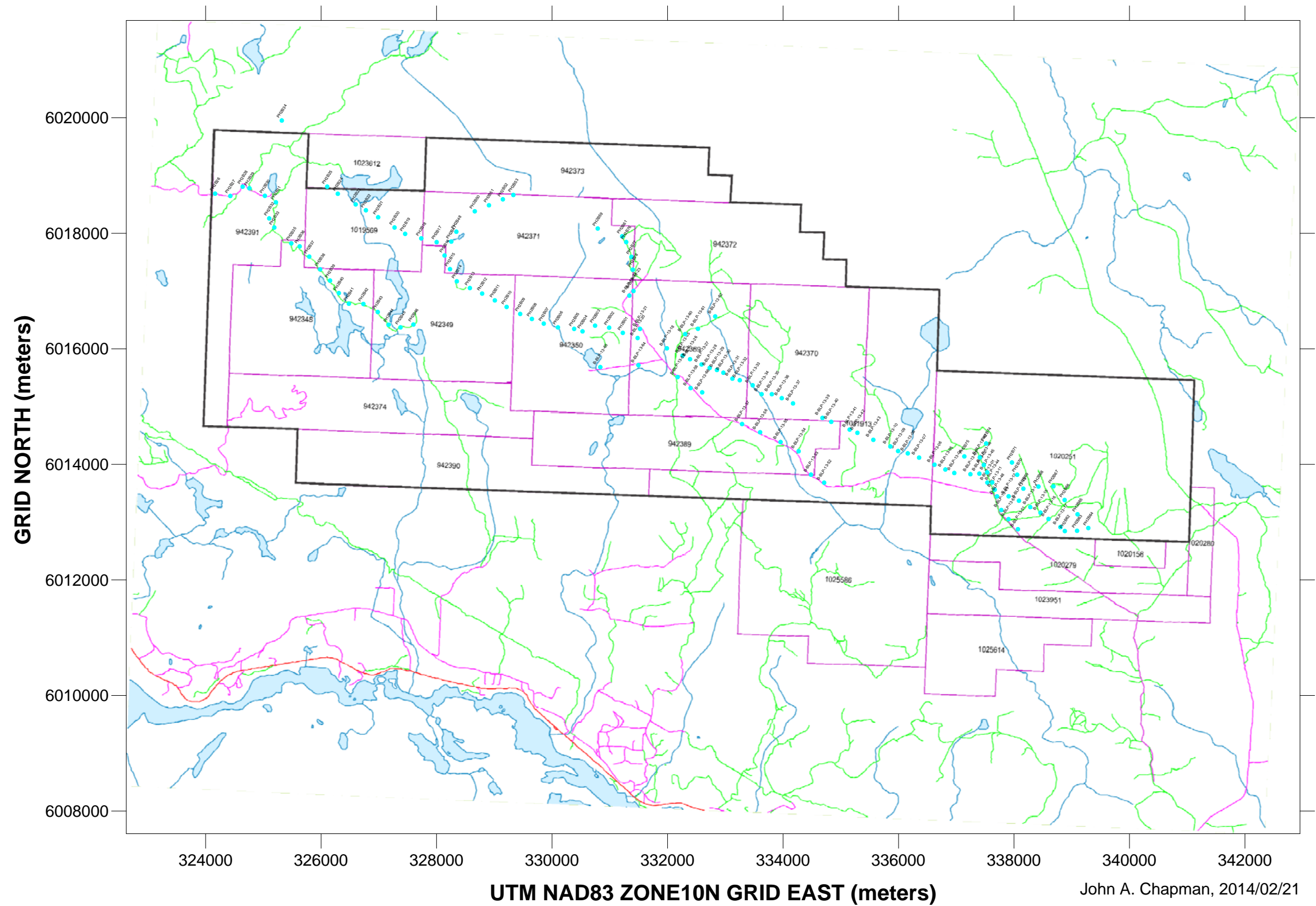
BOER 2013 BRECCIA AREA WHITE SPRUCE OUTER BARK BIOGEOCHEMICAL SURVEY

SILVER IN ASHED BARK (ppb)



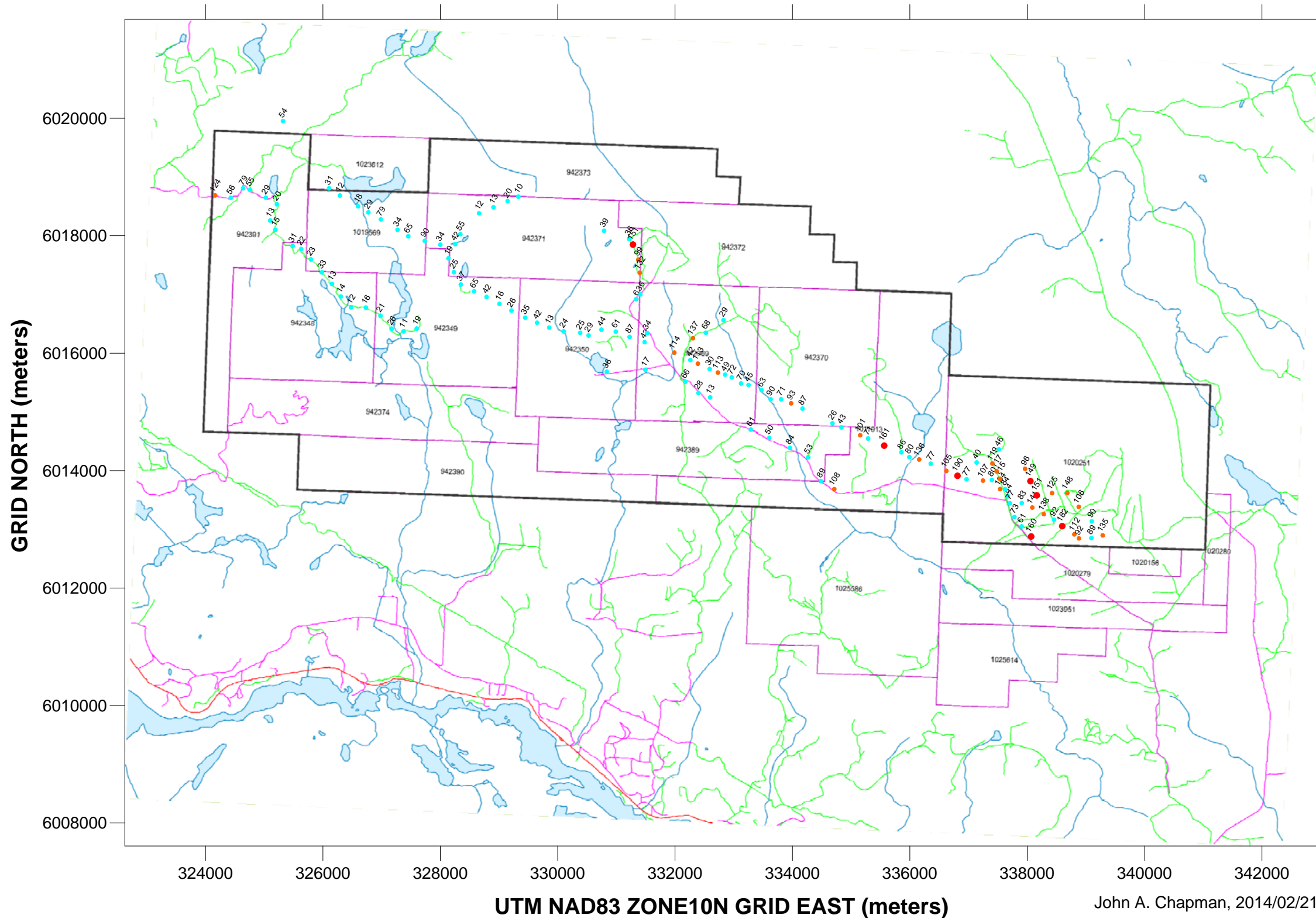
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

SAMPLE NUMBERS



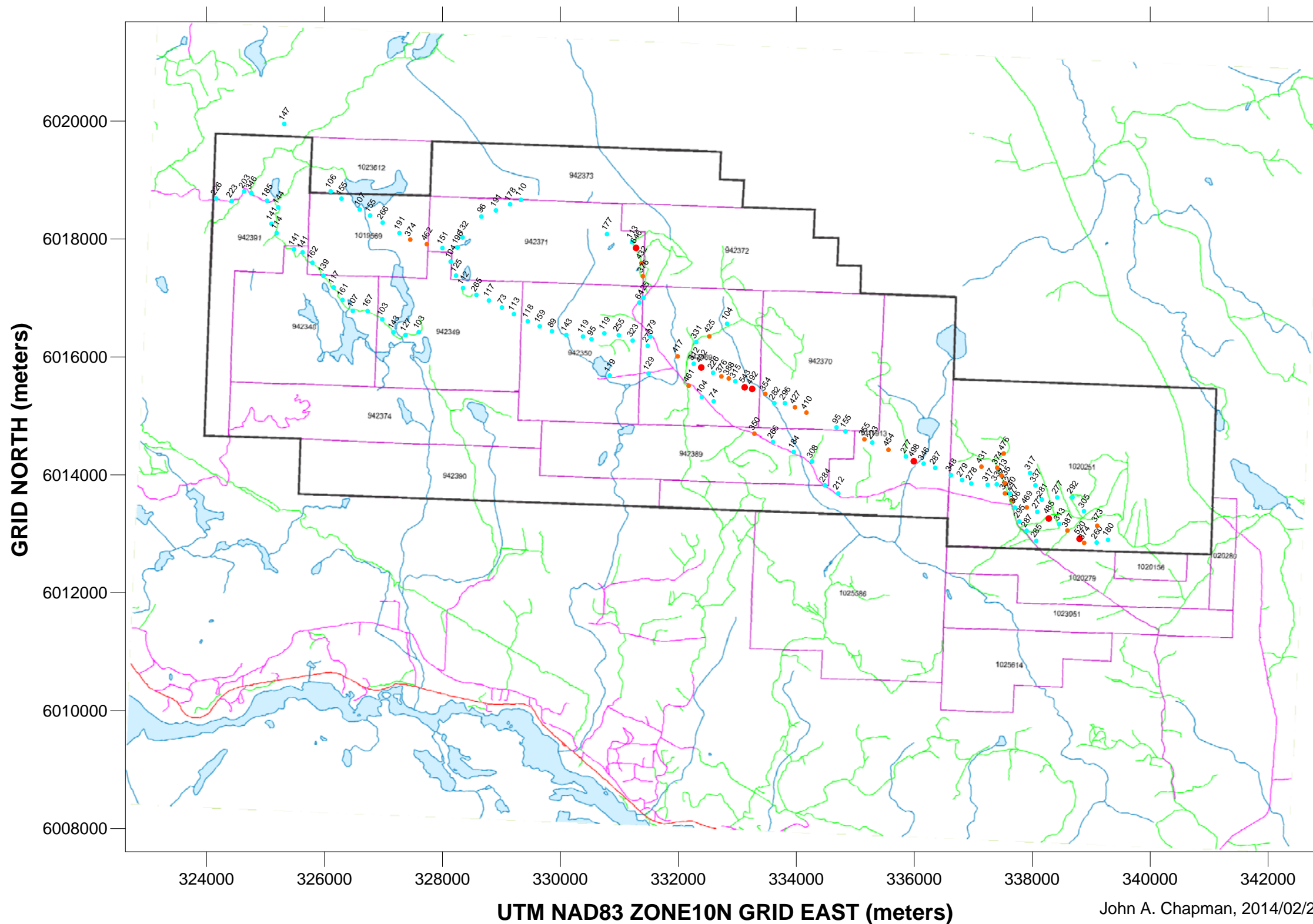
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

MOLYBDENUM IN ASHED BARK (ppm)



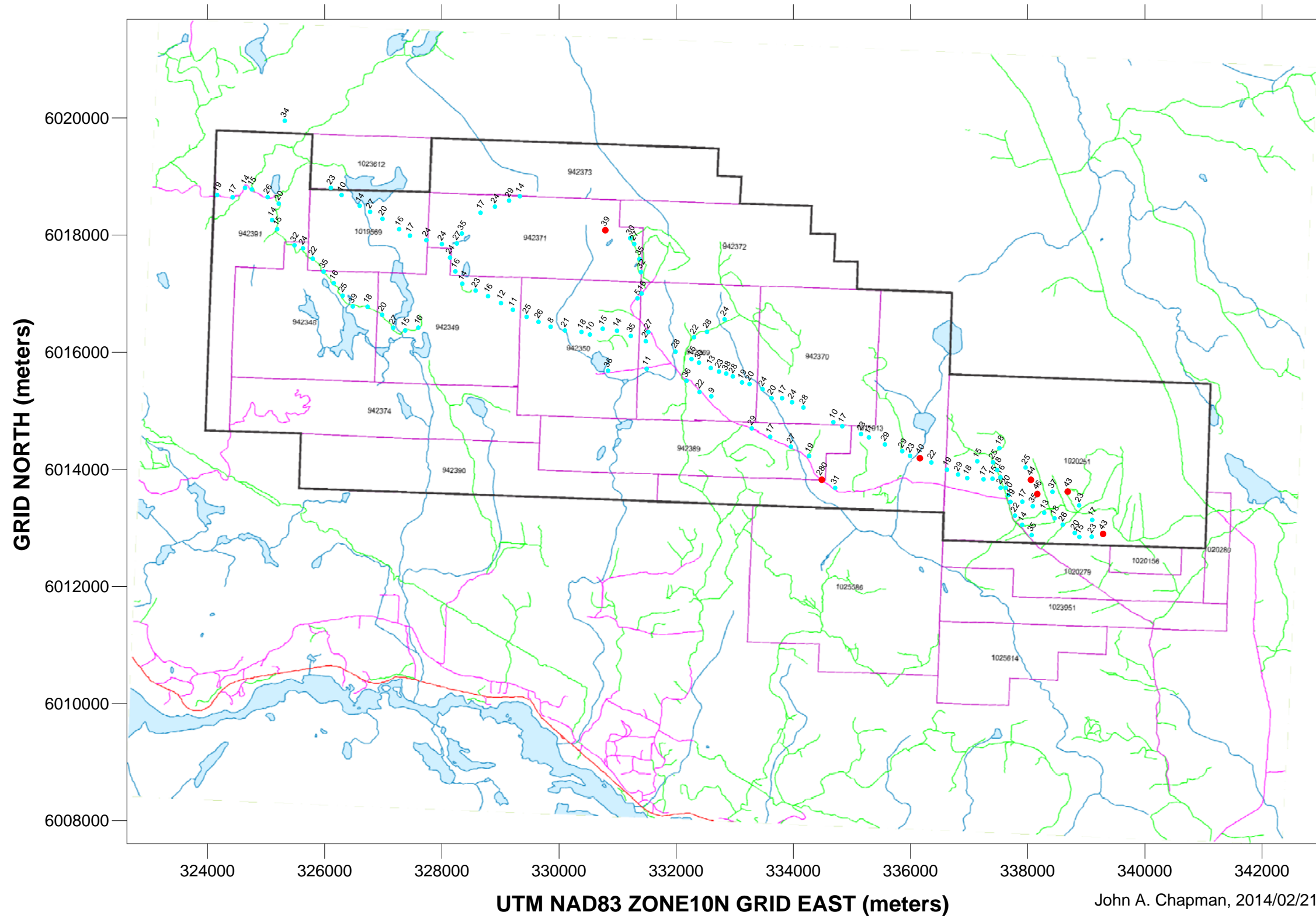
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

COPPER IN ASHED BARK (ppm)



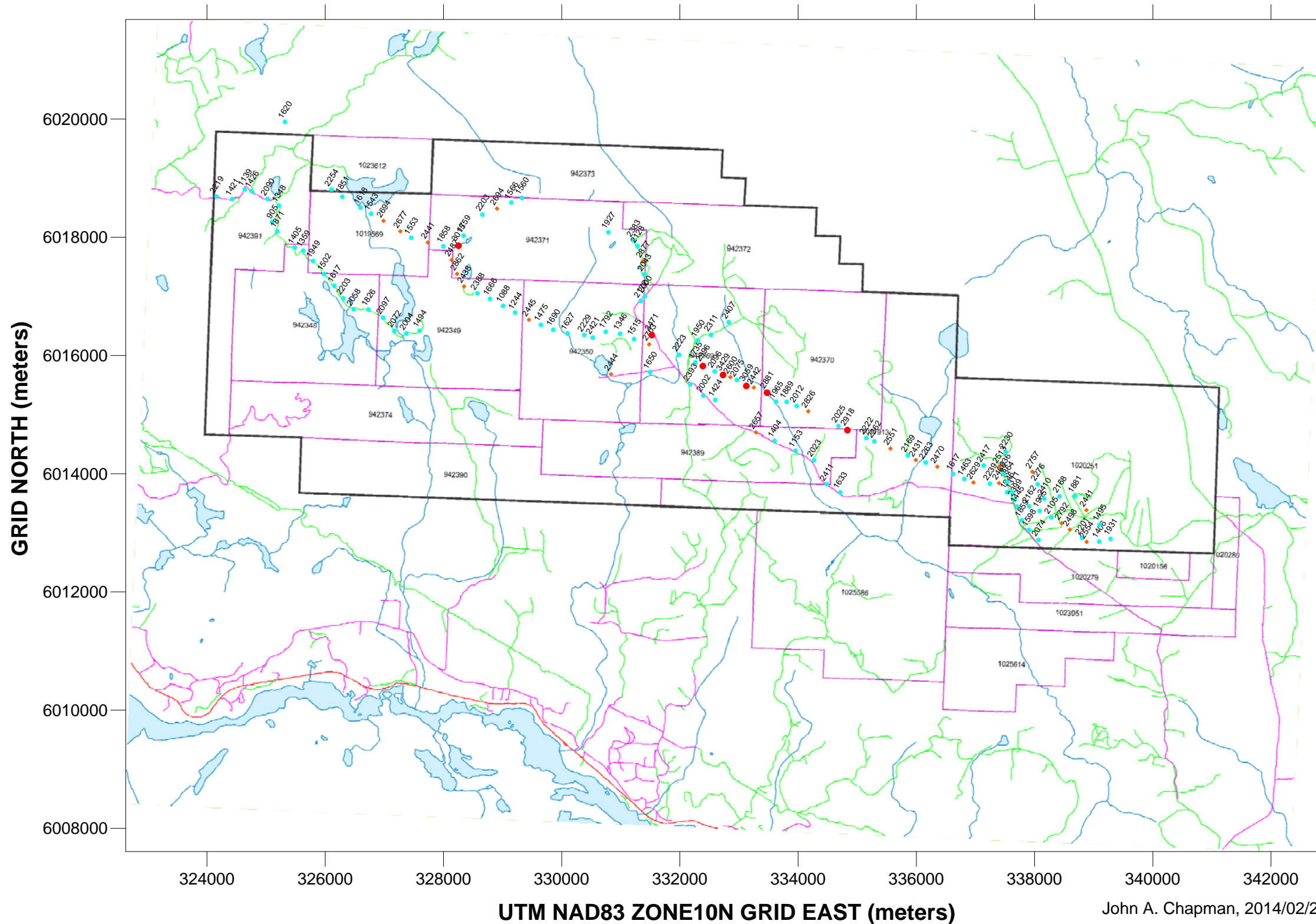
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

LEAD IN ASHED BARK (ppm)



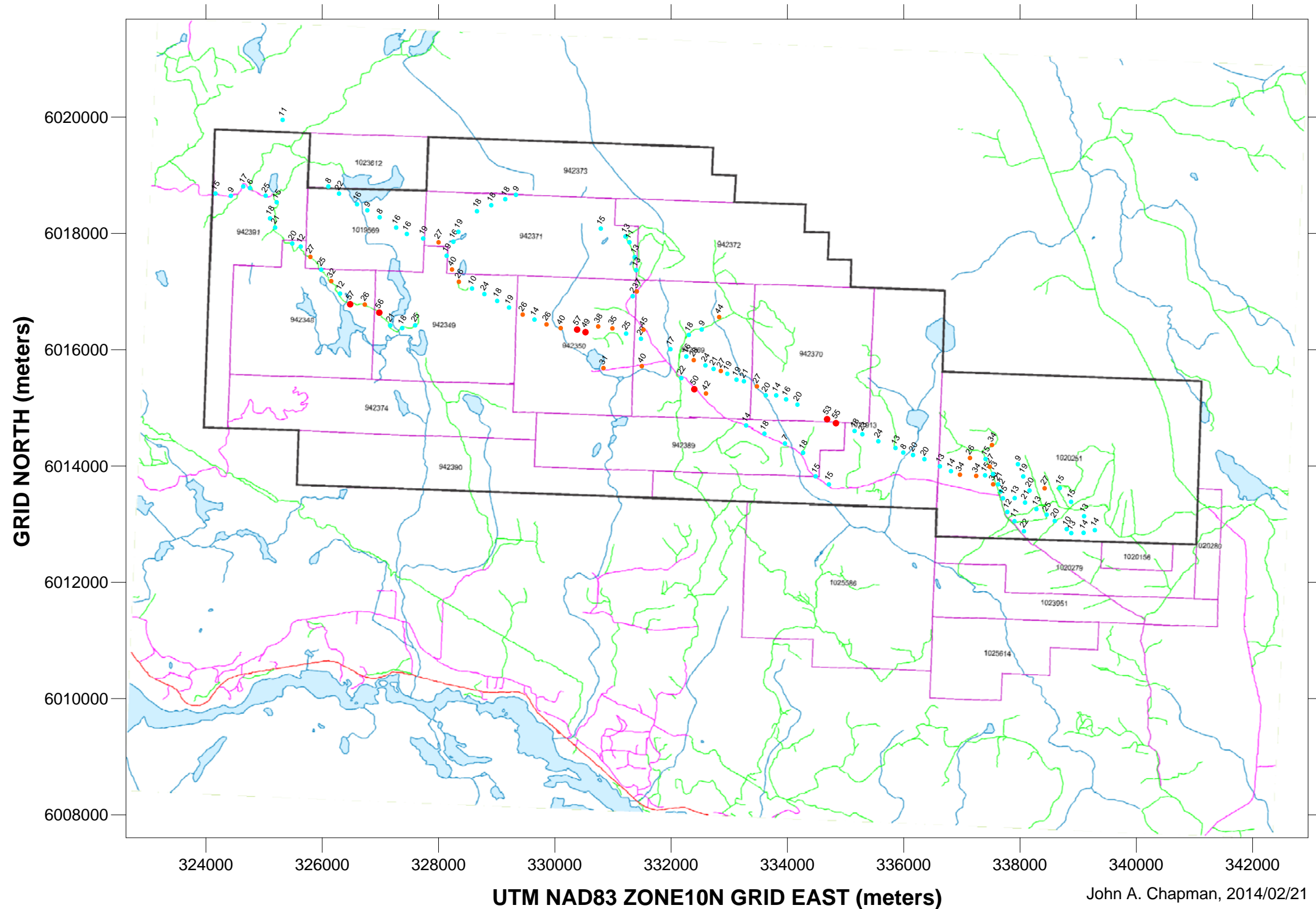
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

ZINC IN ASHED BARK (ppm)



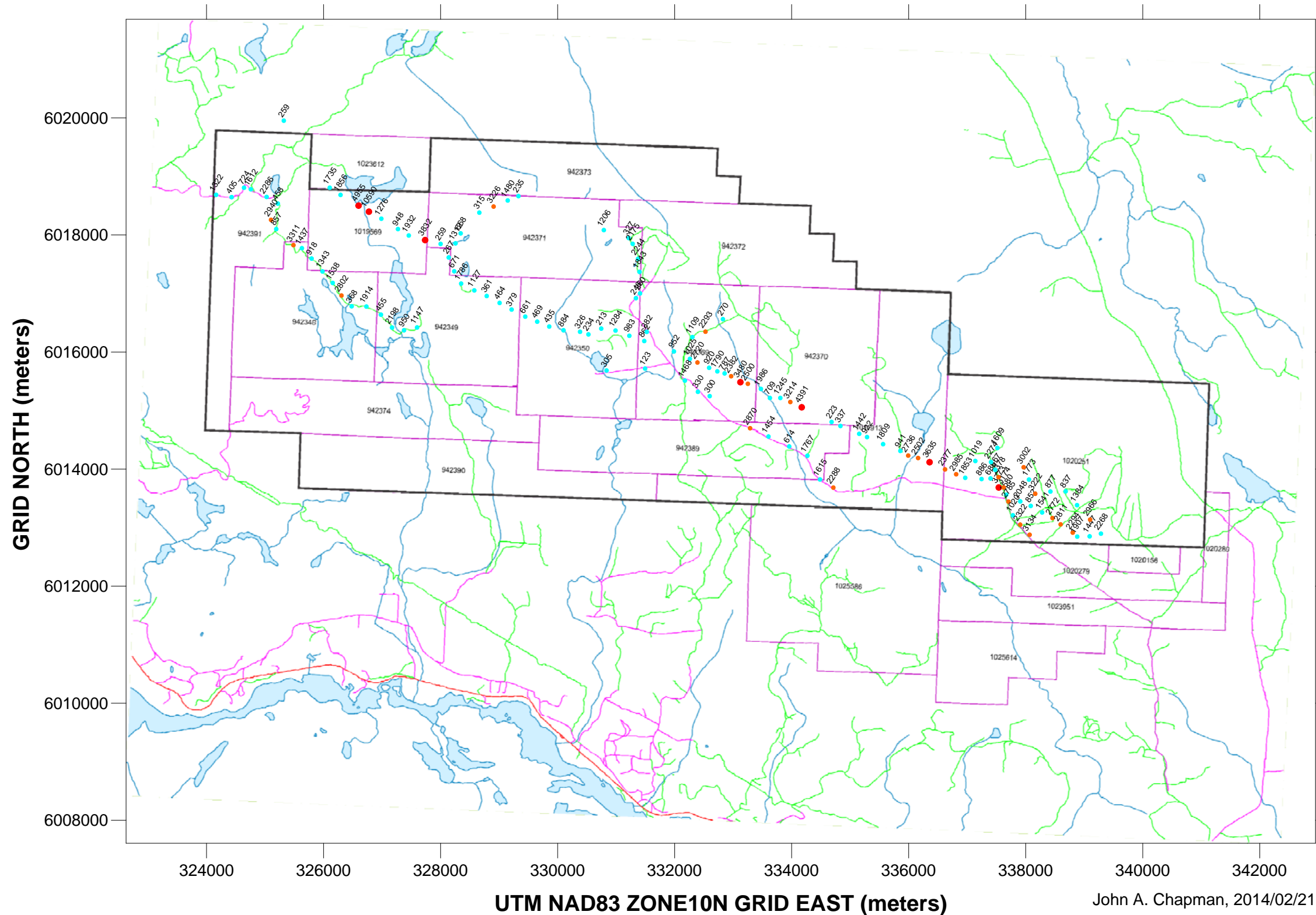
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

CADMIUM IN ASHED BARK (ppm)



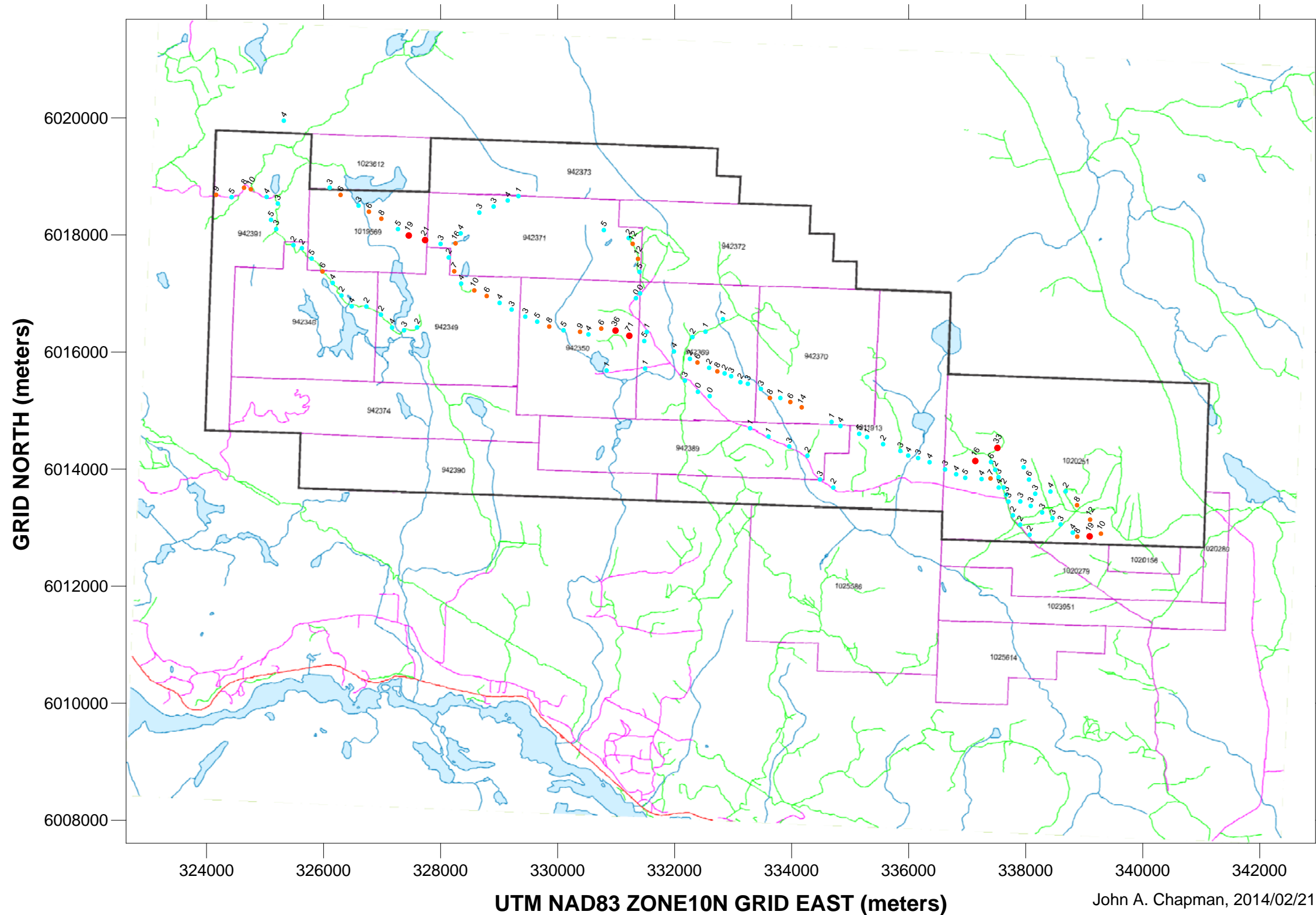
BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

SILVER IN BARK ASH (ppb)



BOER 2013 LODGEPOLE PINE OUTER BARK BIOGEOCHEMICAL SURVEY

GOLD IN ASHED BARK (ppb)



BOER PROPERTY PHASE ONE BARK SAMPLING AUGUST 2013					by: John A. Chapman
					February 9, 2014
	UTM NAD83 Zone 10				
Sample Number	Easting (m)	Northing (m)	tree circ. Cm	Tree Type	comment
B-BWS-13-01	332737	6014989	75	White Spruce	Breccia Area Survey
B-BWS-13-02	332719	6014970	42	White Spruce	Breccia Area Survey
B-BWS-13-03	332695	6014956	77	White Spruce	Breccia Area Survey
B-BWS-13-04	332680	6014918	66	White Spruce	Breccia Area Survey
B-BWS-13-05	332668	6014894	62	White Spruce	Breccia Area Survey
B-BWS-13-06	332746	6014996	55	White Spruce	Breccia Area Survey
B-BWS-13-07	332793	6014997	40	White Spruce	Breccia Area Survey
B-BWS-13-08	332811	6015027	94	White Spruce	Breccia Area Survey
B-BWS-13-09	332837	6015088	61	White Spruce	Breccia Area Survey
B-BWS-13-10	332828	6015108	43	White Spruce	Breccia Area Survey
B-BWS-13-11	332817	6015133	65	White Spruce	Breccia Area Survey
B-BWS-13-12	332811	6014998	70	White Spruce	Breccia Area Survey
B-BWS-13-13	332837	6014978	65	White Spruce	Breccia Area Survey
B-BWS-13-14	332862	6014943	80	White Spruce	Breccia Area Survey
B-BWS-13-15	332884	6014942	60	White Spruce	Breccia Area Survey
B-BWS-13-16	332780	6015033	70	White Spruce	Breccia Area Survey
B-BWS-13-17	332765	6015079	90	White Spruce	Breccia Area Survey
B-BWS-13-18	332734	6015080	65	White Spruce	Breccia Area Survey
B-BWS-13-19	332696	6015088	86	White Spruce	Breccia Area Survey
B-BWS-13-20	332651	6015109	95	White Spruce	Breccia Area Survey
B-BWS-13-21	332633	6015136	90	White Spruce	Breccia Area Survey
B-BLP-13-01	337539	6013684	95	Lodge Pole Pine	
B-BLP-13-02	337400	6013839	84	Lodge Pole Pine	
B-BLP-13-03	337246	6013830	85	Lodge Pole Pine	
B-BLP-13-04	336967	6013850	75	Lodge Pole Pine	
B-BLP-13-05	336812	6013911	79	Lodge Pole Pine	
B-BLP-13-06	336623	6013994	81	Lodge Pole Pine	
B-BLP-13-07	336357	6014116	59	Lodge Pole Pine	
B-BLP-13-08	336161	6014189	72	Lodge Pole Pine	
B-BLP-13-09	335993	6014229	70	Lodge Pole Pine	
B-BLP-13-10	335859	6014309	68	Lodge Pole Pine	
B-BLP-13-11	337667	6013561	97	Lodge Pole Pine	
B-BLP-13-12	337908	6013446	92	Lodge Pole Pine	
B-BLP-13-13	338087	6013370	88	Lodge Pole Pine	
B-BLP-13-14	338282	6013259	82	Lodge Pole Pine	
B-BLP-13-15	338459	6013163	86	Lodge Pole Pine	
B-BLP-13-16	338598	6013054	62	Lodge Pole Pine	
B-BLP-13-17	338804	6012913	62	Lodge Pole Pine	
B-BLP-13-18	331989	6016008	45	Lodge Pole Pine	
B-BLP-13-19	331773	6016094	30	Lodge Pole Pine	
B-BLP-13-20	331482	6016187	42	Lodge Pole Pine	
B-BLP-13-21	331524	6016344	69	Lodge Pole Pine	
B-BLP-13-22	331339	6016920	79	Lodge Pole Pine	
B-BLP-13-23	331410	6017000	60	Lodge Pole Pine	

Sample Number	UTM NAD83 Zone 10		tree circ. Cm	Tree Type	comment
	Easting (m)	Northing (m)			
B-BLP-13-24	331688	6016105	61	Lodge Pole Pine	
B-BLP-13-25	332261	6015882	56	Lodge Pole Pine	
B-BLP-13-26	332390	6015820	70	Lodge Pole Pine	
B-BLP-13-27	332590	6015729	60	Lodge Pole Pine	
B-BLP-13-28	332730	6015669	48	Lodge Pole Pine	
B-BLP-13-29	332855	6015634	83	Lodge Pole Pine	
B-BLP-13-30	332967	6015585	80	Lodge Pole Pine	
B-BLP-13-31	333124	6015484	54	Lodge Pole Pine	
B-BLP-13-32	333252	6015457	129	Lodge Pole Pine	
B-BLP-13-33	333475	6015368	80	Lodge Pole Pine	
B-BLP-13-34	333629	6015214	56	Lodge Pole Pine	bog
B-BLP-13-35	333807	6015214	56	Lodge Pole Pine	
B-BLP-13-36	333978	6015145	72	Lodge Pole Pine	
B-BLP-13-37	334173	6015054	72	Lodge Pole Pine	
B-BLP-13-38	334403	6014952	47	Lodge Pole Pine	
B-BLP-13-39	334683	6014804	96	Lodge Pole Pine	
B-BLP-13-40	334835	6014735	96	Lodge Pole Pine	
B-BLP-13-41	335155	6014602	69	Lodge Pole Pine	
B-BLP-13-42	335289	6014545	41	Lodge Pole Pine	
B-BLP-13-43	335564	6014425	72	Lodge Pole Pine	
B-BLP-13-44	337624	6013685	97	Lodge Pole Pine	
B-BLP-13-45	337536	6013861	40	Lodge Pole Pine	
B-BLP-13-46	337479	6013988	43	Lodge Pole Pine	
B-BLP-13-47	337408	6014119	72	Lodge Pole Pine	
B-BLP-13-48	337706	6013444	102	Lodge Pole Pine	
B-BLP-13-49	337782	6013209	105	Lodge Pole Pine	
B-BLP-13-50	337906	6013050	101	Lodge Pole Pine	
B-BLP-13-51	338068	6012877	114	Lodge Pole Pine	
B-BLP-13-52	334713	6013683	85	Lodge Pole Pine	
B-BLP-13-53	334485	6013822	64	Lodge Pole Pine	
B-BLP-13-54	334270	6014227	67	Lodge Pole Pine	
B-BLP-13-55	333958	6014386	56	Lodge Pole Pine	
B-BLP-13-56	333604	6014555	89	Lodge Pole Pine	
B-BLP-13-57	333291	6014697	94	Lodge Pole Pine	
B-BLP-13-58	332399	6015320	83	Lodge Pole Pine	
B-BLP-13-59	332175	6015510	65	Lodge Pole Pine	
B-BLP-13-60	332305	6016254	67	Lodge Pole Pine	
B-BLP-13-61	332527	6016346	66	Lodge Pole Pine	
B-BLP-13-62	332826	6016560	98	Lodge Pole Pine	
B-BLP-13-63	331859	6015895	46	Lodge Pole Pine	
B-BLP-13-64	331496	6015716	80	Lodge Pole Pine	
B-BLP-13-65	330837	6015683	66	Lodge Pole Pine	
B-BLP-13-66	332600	6015246	131	Lodge Pole Pine	bog

BOER PROPERTY PHASE TWO BARK SAMPLING OCTOBER AND NOVEMBER 2013						by: John A. Chapman February 9, 2014	
	UTM NAD83 ZONE 10N		Tree				Tree
Sample	Easting (m)	Northing (m)	Circumference	comments		Slope	Species
ph2b01	331226	6016276	41cm	Dominant spruce and fir small pine rocky glacial till		southeast	pine
ph2b02	330990	6016366	37cm	ditto		"	"
ph2b03	330746	6016400	75cm	"		"	"
ph2b04	330528	6016301	106cm	""		south	"
ph2b05	330384	6016345	106cm	"		flat	"
ph2b06	330102	6016370	80cm	"		south	"
ph2b07	329857	6016435	98cm	Dominant pine near o outcrop - dead tree		"	"
ph2b08	329651	6016517	120 cm	Dominant pine near outcrop - dead tree		east steep	"
ph2b09	329448	6016604	98 cm	"		"	"
ph2b10	329214	6016724	108 cm	"		southwest steep	"
ph2b11	329009	6016838	106 cm	Fir and pine rocky glacial till		"	"
ph2b12	328789	6016956	80 cm	mixed fir spruce and pine glacial till		flat	"
ph2b13	328577	6017051	55cm	"		southwest steep	"
ph2b14	328351	6017168	106cm	mixed dead pine fir and spruce near outcrop		flat near swamp	"
ph2b15	328233	6017379	130cm	"		east steep	"
ph2b16	328139	6017614	75cm	"		west slope	"
ph2b17	328001	6017846	91cm	mixed live pine fir and spruce		west slope	"
ph2b18	327736	6017911	51cm	dominant fir		west steep	"
ph2b19	327456	6017989	58cm	dominant fir clay rocky		south	"
ph2b20	327272	6018099	66cm	"		"	"
ph2b21	326988	6018277	86 cm	mixed dead pine fir and spruce near outcrop		southeast	"
ph2b22	326776	6018397	94cm	"		flat	"
ph2b23	326599	6018500	98cm	glacial overburden fir and pine		"	"
ph2b24	326290	6018684	114cm	fir and pine		northeast	"
ph2b25	326106	6018806	108 cm	"		"	"
ph2b26	324165	6018685	60cm	dominant pine near outcrop		southwest steep	"
ph2b27	324429	6018645	74cm	dominant pine glacial overburden		"	"
ph2b28	324642	6018806	71cm	dead pine dominant fir glacial over burden		"	"
ph2b29	324758	6018779	61cm	dominant pine some fir glacial till		south	"
ph2b30	325027	6018648	124cm	dominant spruce glacial till		"	"
ph2b31	325218	6018535	94cm	"		"	"
ph2b32	325102	6018257	96cm	dead pine dominant fir glacial over burden		flat	"
ph2b33	325191	6018100	118cm	dead pine mixed fir and spruce glacial overburden		"	"
ph2b34	325320	6019951	76cm	"		"	"
ph2b35	325485	6017825	73cm	dominant dead pine near outcrop		southeast	"
ph2b36	325630	6017773	83cm	"		southeast	"
ph2b37	325796	6017595	141cm	dead pine mix near outcrop		flat	"
ph2b38	325983	6017375	122cm	pine and fir mix glacial overburden		southeast	"
ph2b39	326156	6017180	87cm	"		east	"
ph2b40	326307	6016964	73cm	"		flat	"
ph2b41	326481	6016780	83cm	"		"	"
ph2b42	326733	6016775	96cm	"		"	"
ph2b43	326982	6016637	102cm	"		"	"
ph2b44	327171	6016416	86cm	"		flat	"
ph2b45	327376	6016370	92cm	"		south	"
ph2b46	327599	6016419	81cm	"		"	"
ph2b47	328256	6017855	54cm	swampy small pine		flat	"
ph2b48	328343	6018026	58cm	mossy swamp pine		"	"
ph2b49	328468	6018289	210cm	no pine spruce sample		flat	spruce
ph2b50	328662	6018380	110cm	dominant spruce lone dead pine		southwest	pine
ph2b51	328907	6018484	94cm	dominant spruce lone dead pine		"	"
ph2b52	329148	6018587	73cm	dominant spruce pine swamp		flat	"
ph2b53	329331	6018663	120cm	dominant spruce dead pine		west	"
ph2b54	329551	6018557	190cm	dom. Fir and spruce no pine		northwest	spruce
ph2b55	329802	6018445	65cm	"		swampy flat	"
ph2b56	330086	6018332	145cm	"		northwest	"
ph2b57	330316	6018260	100cm	no pine swamp		flat	"
ph2b58	330545	6018172	114cm	"		"	"
ph2b59	330791	6018082	85cm	pine dominant spruce and fir		"	pine
ph2b60	331024	6018016	109cm	spruce sample dom. Fir		northwest	spruce

Sample	UTM NAD83 ZONE 10N		Tree	comments	Slope	Tree
	Easting (m)	Northing (m)				
ph2b61	331215	6017947	80cm	dead pine	flat	pine
ph2b62	338881	6012845	46cm	mixed pine fir glacial till	"	pine
ph2b63	339093	6012850	106cm	"	southwest	"
ph2b64	339287	6012897	124cm	mixed glacial till near outcrop	"	"
ph2b65	339101	6013136	96cm	"	"	"
ph2b66	338878	6013383	82cm	mixed glacial till near outcrop	"	"
ph2b67	338683	6013619	122cm	"	flat	"
ph2b68	338424	6013616	80cm	"	southwest	"
ph2b69	338163	6013578	119cm	"	flat	"
ph2b70	338056	6013820	107cm	"	south	"
ph2b71	337965	6014031	92cm	"	"	"
ph2b72	337856	6014270	93cm	spruce sample no pine	flat	spruce
ph2b73	337590	6014232	96cm	swampy	south	"
ph2b74	337518	6014360	32cm	glacial till small pine	"	pine
ph2b75	337140	6014137	40cm	"	"	"
ph2b76	331284	6017848	44cm	glacial till small pine plantation	southwest	"
ph2b77	331375	6017591	36cm	pine near outcrop	"	"
ph2b78	331400	6017369	50cm	dominant pine glacial till	southeast	"

WHITE SPRUCE OUTER BARK SURVEY AT BOER BRECCIA, BOER PROPERTY, BURNS LAKE, B.C., AUGUST 2013										
ANALYSIS by ACMElabs: Ashing bark at 475 degrees C, Aqua Regia digestion, Ultratrace ICP-MS analysis on 0.5 grams										
Note: (1) there were no Lodgepole pine trees near the Boer Breccia, so White Spruce was used as the sample species										
(2) do not compare these results with those of the larger Lodgepole bark survey, as these species have different metal uptakes										
		UTM NAD83 ZONE10N		ppm	ppm	ppm	ppm	ppb	%	ppb
sample no	plot ID	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Ag	Fe	Au
B-BWS-13-01	BWS01	332737	6014989	3.82	95.92	2.92	1540.9	576	0.05	0.2
B-BWS-13-02	BWS02	332719	6014970	8.36	80.51	5.61	1340.1	346	0.01	0.2
B-BWS-13-03	BWS03	332695	6014956	6.74	93.39	4.10	1329.1	154	0.06	0.2
B-BWS-13-04	BWS04	332680	6014918	6.70	71.62	7.89	1396.3	186	0.07	0.2
B-BWS-13-05	BWS05	332668	6014894	13.48	91.04	10.00	863.6	200	0.12	0.6
B-BWS-13-06	BWS06	332746	6014996	13.20	94.92	50.10	1618.3	717	0.53	1.8
B-BWS-13-07	BWS07	332793	6014997	13.19	144.73	47.64	2818.3	926	0.27	2.2
B-BWS-13-08	BWS08	332811	6015027	5.81	126.21	6.15	1388.9	541	0.08	0.9
B-BWS-13-09	BWS09	332837	6015088	5.56	74.14	4.30	1455.3	235	0.06	0.2
B-BWS-13-10	BWS10	332828	6015108	4.86	76.77	4.12	922.6	334	0.06	0.8
B-BWS-13-11	BWS11	332817	6015133	6.83	95.24	4.00	1709.2	411	0.07	0.9
B-BWS-13-12	BWS12	332811	6014998	4.12	81.88	24.69	1346.1	1907	0.11	0.7
B-BWS-13-13	BWS13	332837	6014978	5.26	56.59	6.46	1464.8	1368	0.08	1.0
B-BWS-13-14	BWS14	332862	6014943	11.56	82.20	12.51	2638.8	574	0.17	0.6
B-BWS-13-15	BWS15	332884	6014942	7.57	125.10	5.14	1763.8	911	0.07	0.6
B-BWS-13-16	BWS16	332780	6015033	3.28	57.04	3.24	1675.9	317	0.08	0.4
B-BWS-13-17	BWS17	332765	6015079	4.28	94.65	3.01	1427.1	487	0.05	0.3
B-BWS-13-18	BWS18	332734	6015080	7.47	111.34	4.40	2117.1	380	0.08	0.5
B-BWS-13-19	BWS19	332696	6015088	6.79	95.76	4.57	2657.4	396	0.09	0.6
B-BWS-13-20	BWS20	332651	6015109	5.69	75.45	2.46	1637.8	121	0.07	0.6
B-BWS-13-21	BWS21	332633	6015136	3.68	75.00	2.40	1702.6	431	0.05	0.2

LODGEPOLE PINE OUTER BARK SAMPLING AT THE BOER PROPERTY, BURNS LAKE, BC, AUGUST TO NOVEMBER 2013											by: John A Chapman
ANALYSIS by ACME Labs: Ashing bark at 475 degrees C, Aqua Regia digestion, Ultratrace ICP-MS analysis on 0.50 grams											February 9, 2014
UTM NAD83 Zone 10N			parts per million (ppm)					%	ppb		
Sample Number	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Cd	Fe	Ag	Au	Count
B-BLP-13-01	337539	6013684	134	352	27	1946	30.11	0.54	3773	4.2	1
B-BLP-13-02	337400	6013839	80	339	15	2468	15.21	0.44	688	6.5	2
B-BLP-13-03	337246	6013830	107	317	17	2239	34.34	0.33	886	4.4	3
B-BLP-13-04	336967	6013850	77	278	18	2629	33.99	0.44	1853	4.6	4
B-BLP-13-05	336812	6013911	190	279	29	1463	13.95	0.68	2985	4.0	5
B-BLP-13-06	336623	6013994	105	348	19	1617	13.46	0.53	2377	2.9	6
B-BLP-13-07	336357	6014116	77	287	22	2470	19.56	0.45	3635	3.6	7
B-BLP-13-08	336161	6014189	136	346	40	2263	20.16	0.56	2502	2.7	8
B-BLP-13-09	335993	6014229	80	498	23	2431	8.12	0.65	2736	4.3	9
B-BLP-13-10	335859	6014309	86	277	29	2169	12.81	0.61	941	3.1	10
B-BLP-13-11	337667	6013561	84	377	20	2399	12.49	0.87	1580	3.1	11
B-BLP-13-12	337908	6013446	83	469	17	2162	13.44	0.64	2048	3.4	12
B-BLP-13-13	338087	6013370	141	272	35	1965	20.51	0.72	852	2.9	13
B-BLP-13-14	338282	6013259	138	485	13	2105	12.62	0.49	1541	3.2	14
B-BLP-13-15	338459	6013163	92	313	18	2792	25.22	0.53	2772	3.0	15
B-BLP-13-16	338598	6013054	182	387	26	2498	19.77	0.75	2811	2.9	16
B-BLP-13-17	338804	6012913	112	520	20	2201	10.00	0.72	2294	3.9	17
B-BLP-13-18	331989	6016008	114	417	28	2223	16.89	0.73	952	3.9	18
B-BLP-13-20	331482	6016187	42	270	25	2703	19.86	0.69	862	5.1	19
B-BLP-13-21	331524	6016344	34	179	27	3471	44.93	0.35	282	1.2	20
B-BLP-13-22	331339	6016920	6	64	5	2172	2.04	0.08	246	0.2	21
B-BLP-13-23	331410	6017000	36	125	16	2000	36.53	0.31	260	0.2	22
B-BLP-13-25	332261	6015882	42	312	15	1735	16.33	0.86	1025	2.3	23
B-BLP-13-26	332390	6015820	113	492	30	2996	28.10	0.57	2720	5.6	24
B-BLP-13-27	332590	6015729	30	226	13	2096	24.06	0.34	920	1.5	25
B-BLP-13-28	332730	6015669	113	376	23	3429	21.01	0.81	1790	8.2	26
B-BLP-13-29	332855	6015634	49	388	38	2600	26.73	0.48	787	2.3	27
B-BLP-13-30	332967	6015585	72	315	28	2075	18.60	0.62	2382	3.0	28
B-BLP-13-31	333124	6015484	70	543	19	3059	18.67	0.64	3480	2.0	29
B-BLP-13-32	333252	6015457	45	492	20	2442	21.27	0.55	2500	3.1	30
B-BLP-13-33	333475	6015368	63	354	24	2881	26.83	0.67	1986	3.1	31
B-BLP-13-34	333629	6015214	90	282	20	1965	19.82	0.47	709	7.8	32
B-BLP-13-35	333807	6015214	71	296	17	1889	13.74	0.45	1245	1.3	33
B-BLP-13-36	333978	6015145	93	427	24	2012	15.59	0.76	3214	6.2	34
B-BLP-13-37	334173	6015054	87	410	28	2826	20.44	0.69	4391	13.7	35
B-BLP-13-39	334683	6014804	26	95	10	2025	52.81	0.18	223	1.2	36
B-BLP-13-40	334835	6014735	43	155	17	2918	55.38	0.28	337	3.5	37
B-BLP-13-41	335155	6014602	101	355	23	2222	18.38	0.57	1442	5.3	38
B-BLP-13-42	335289	6014545	71	223	11	2262	22.54	0.32	922	1.4	39
B-BLP-13-43	335564	6014425	161	454	29	2551	24.04	0.71	1809	2.1	40
B-BLP-13-44	337624	6013685	84	240	20	1311	20.88	0.50	3174	1.9	41
B-BLP-13-45	337536	6013861	115	435	16	1864	13.34	0.57	2378	3.2	42
B-BLP-13-46	337479	6013988	117	413	18	2036	26.96	0.53	867	1.9	43
B-BLP-13-47	337408	6014119	119	374	25	2513	15.42	0.64	2274	5.5	44
B-BLP-13-48	337706	6013444	77	306	19	1445	14.50	1.10	2785	3.1	45
B-BLP-13-49	337782	6013209	73	295	22	1859	11.81	0.96	1020	1.7	46
B-BLP-13-50	337906	6013050	61	287	14	1598	10.53	0.72	2322	1.8	47
B-BLP-13-51	338068	6012877	160	285	35	2074	22.07	0.85	3134	2.1	48
B-BLP-13-52	334713	6013683	108	212	31	1633	15.37	1.39	2288	2.0	49
B-BLP-13-53	334485	6013822	89	284	280	2411	15.32	1.15	1615	2.6	50
B-BLP-13-54	334270	6014227	53	308	19	2023	18.08	1.12	1767	2.1	51
B-BLP-13-55	333958	6014386	84	184	27	1153	7.37	1.52	614	2.5	52
B-BLP-13-56	333604	6014555	50	266	17	1404	18.02	0.94	1454	1.1	53
B-BLP-13-57	333291	6014697	61	350	29	2657	13.62	0.61	2870	0.9	54
B-BLP-13-58	333299	6015320	28	104	22	2002	49.78	0.27	330	0.3	55
B-BLP-13-59	332175	6015510	66	461	36	2393	21.88	0.72	1468	3.3	56
B-BLP-13-60	332305	6016254	137	331	22	1950	17.56	0.68	1109	1.6	57
B-BLP-13-61	332527	6016346	68	425	28	2311	8.94	0.75	2293	1.4	58
B-BLP-13-62	332826	6016560	29	104	24	2407	43.86	0.27	270	0.8	59
B-BLP-13-64	331496	6015716	17	129	11	1650	39.87	0.17	123	0.7	60
B-BLP-13-65	330837	6015683	36	119	36	2444	30.80	0.33	305	0.8	61
B-BLP-13-66	332600	6015246	13	74	9	1424	41.66	0.14	300	0.2	62
PH2B01	331226	6016276	87	323	35	1515	25.04	0.93	983	71.1	63
PH2B02	330990	6016366	61	255	14	1346	34.91	0.52	1284	35.8	64
PH2B03	330746	6016400	44	119	15	1792	38.40	0.27	213	6.1	65
PH2B04	330528	6016301	29	95	10	2421	48.85	0.16	234	4.1	66
PH2B05	330384	6016345	25	119	18	2229	57.08	0.24	326	8.9	67
PH2B06	330102	6016370	24	143	21	1627	40.26	0.36	884	5.1	68
PH2B07	329857	6016435	13	89	8	1690	25.54	0.19	435	7.6	69
PH2B08	329651	6016517	42	159	26	1475	13.94	0.38	469	5.1	70
PH2B09	329448	6016604	35	118	25	2445	26.24	0.31	661	2.6	71
PH2B10	329214	6016724	26	113	11	1244	18.75	0.22	379	2.8	72
PH2B11	329009	6016838	16	73	12	1088	18.10	0.29	464	3.7	73
PH2B12	328789	6016956	42	117	16	1666	24.23	0.48	361	6.3	74
PH2B13	328577	6017051	65	265	23	2388	10.05	1.35	1127	9.5	75
PH2B14	328351	6017168	37	112	14	2438	26.07	0.29	1786	3.6	76

Sample Number	UTM NAD83 Zone 10N		parts per million (ppm)					%	ppb		Count
	Easting (m)	Northing (m)	Mo	Cu	Pb	Zn	Cd	Fe	Ag	Au	
PH2B15	328233	6017379	25	125	16	2862	40.25	0.22	671	6.5	77
PH2B16	328139	6017614	19	104	24	2487	18.95	0.41	267	2.3	78
PH2B17	328001	6017846	34	151	24	1858	27.45	0.34	259	2.7	79
PH2B18	327736	6017911	90	462	24	2441	18.92	0.74	3832	20.7	80
PH2B19	327456	6017989	65	374	17	1553	16.19	0.70	1932	19.4	81
PH2B20	327272	6018099	34	191	16	2677	15.57	0.41	948	4.6	82
PH2B21	326988	6018277	79	266	20	2694	8.15	0.83	1276	8.4	83
PH2B22	326776	6018397	29	155	27	1543	8.55	0.54	10590	6.1	84
PH2B23	326599	6018500	18	107	14	1618	16.02	0.51	4955	2.7	85
PH2B24	326290	6018684	12	155	10	1851	21.62	0.24	1856	5.8	86
PH2B25	326106	6018806	31	106	23	2254	8.48	0.43	1735	3.4	87
PH2B26	324165	6018685	124	226	19	2219	14.53	1.10	1322	9.0	88
PH2B27	324429	6018645	56	223	17	1421	8.56	0.82	405	5.3	89
PH2B28	324642	6018806	79	203	14	1139	17.13	0.72	724	7.5	90
PH2B29	324758	6018779	55	346	15	1426	6.05	1.38	1612	10.1	91
PH2B30	325027	6018648	29	185	26	2090	25.19	0.48	2286	3.7	92
PH2B31	325218	6018535	20	144	20	1348	15.35	0.32	458	2.5	93
PH2B32	325102	6018257	13	141	14	905	17.67	0.30	2940	4.5	94
PH2B33	325191	6018100	15	114	15	1871	20.51	0.29	857	3.3	95
PH2B34	325320	6019951	54	147	34	1620	10.54	0.76	259	4.2	96
PH2B35	325485	6017825	31	141	32	1405	19.80	0.84	3311	2.2	97
PH2B36	325630	6017773	22	141	24	1359	12.20	0.31	1437	2.4	98
PH2B37	325796	6017595	23	162	22	1949	26.61	0.31	918	4.5	99
PH2B38	325983	6017375	33	139	35	1502	25.13	0.49	1343	6.0	100
PH2B39	326156	6017180	13	117	16	1617	31.89	0.30	1538	3.8	101
PH2B40	326307	6016964	14	161	25	2203	11.77	0.33	2802	2.1	102
PH2B41	326481	6016780	12	107	39	2058	56.94	0.23	368	3.7	103
PH2B42	326733	6016775	16	167	18	1826	25.70	0.41	1914	1.9	104
PH2B43	326982	6016637	21	103	20	2097	55.72	0.32	455	2.4	105
PH2B44	327171	6016416	26	143	27	2072	21.49	0.65	2198	4.3	106
PH2B45	327376	6016370	11	127	15	2004	17.82	0.23	950	3.1	107
PH2B46	327599	6016419	19	103	16	1494	24.65	0.23	1147	1.7	108
PH2B47	328256	6017855	42	196	27	3015	15.87	0.71	1312	16.2	109
PH2B48	328343	6018026	55	132	35	1759	19.09	0.43	668	4.2	110
PH2B50	328662	6018380	12	96	17	2203	18.14	0.22	315	3.4	111
PH2B51	328907	6018484	13	191	24	2694	17.80	0.30	3226	2.8	112
PH2B52	329148	6018587	20	178	29	1566	17.80	0.29	1480	3.8	113
PH2B53	329331	6018663	10	110	14	1560	9.35	0.20	235	0.9	114
PH2B59	330791	6018082	39	177	39	1927	15.28	0.43	1206	4.6	115
PH2B61	331215	6017947	36	113	30	2383	13.49	0.34	327	1.8	116
PH2B62	338881	6012845	92	374	15	2554	13.35	0.56	1907	7.7	117
PH2B63	339093	6012850	89	260	23	1406	13.94	0.39	1447	18.6	118
PH2B64	339287	6012897	135	180	43	1931	13.85	0.53	2268	10.4	119
PH2B65	339101	6013136	90	373	17	1495	12.90	0.55	2966	12.1	120
PH2B66	338878	6013383	106	305	23	2441	14.80	0.64	1384	7.7	121
PH2B67	338683	6013619	148	292	43	1881	14.65	0.58	837	2.4	122
PH2B68	338424	6013616	125	277	37	2168	27.46	0.70	877	4.1	123
PH2B69	338163	6013578	151	281	46	2410	20.18	0.66	3222	3.1	124
PH2B70	338056	6013820	149	337	44	2276	19.09	0.78	1773	5.5	125
PH2B71	337965	6014031	96	317	25	2757	9.14	0.56	3002	2.9	126
PH2B74	337518	6014360	46	476	18	2230	33.57	0.62	1609	33.0	127
PH2B75	337140	6014137	40	431	15	2417	25.54	0.49	1019	16.4	128
PH2B76	331284	6017848	151	646	27	2128	10.87	0.94	2175	11.7	129
PH2B77	331375	6017591	99	432	35	2877	13.26	0.98	2244	11.8	130
PH2B78	331400	6017369	132	376	32	2043	13.23	0.84	1843	5.3	131
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	Fe	Ag	Au	
number of values			131	131	131	131	131	131	131	131	
maximum			189.91	645.59	280.30	3471.00	57.08	1.52	10590.00	71.10	
minimum			5.72	63.69	4.90	905.30	2.04	0.08	123.00	0.20	
mean			66.11	256.18	24.61	2075.38	21.48	0.56	1603.29	5.51	
median			60.75	265.19	21.85	2075.40	18.67	0.53	1384.00	3.40	
standard deviation			43.69	128.19	23.92	498.50	11.29	0.28	1302.97	7.79	
skewness			0.66	0.49	9.43	0.16	1.41	0.96	2.80	5.55	
kurtosis			-0.39	-0.60	100.53	-0.22	1.85	1.17	16.05	40.11	
geometric mean			50.74	223.27	21.52	2013.12	18.94	0.49	1165.95	3.55	
25 percentile			28.82	140.72	16.16	1641.30	13.90	0.33	698.50	2.30	
50 percentile			60.75	265.19	21.85	2075.40	18.67	0.53	1384.00	3.40	
75 percentile			92.04	349.27	27.48	2426.15	25.54	0.72	2287.00	5.55	
90 percentile			134.00	432.23	35.21	2693.80	38.40	0.87	3002.00	10.10	
95 percentile			148.19	480.51	39.08	2879.10	46.89	1.10	3395.50	16.30	
98 percentile			160.57	506.95	43.22	3032.86	55.52	1.36	4055.60	25.62	
100 percentile			189.91	645.59	280.30	3471.00	57.08	1.52	10590.00	71.10	

APPENDIX C

BIOGEOCHEMICAL SURVEYS

BOER VS MOUNT MILLIGAN

COMPARISON OF BOER WITH MOUNT MILLIGAN - ASHED LODGEPOLE PINE OUTER BARK

BOER 2013 LODGEPOLE PINE OUTER BARK SURVEY (ashed)								
					Percentiles			
	Number	Mean	Std. Dev.	Minimum	50	75	90	Maximum
Mo (ppm)	131	66	44	6	61	92	134	190
Cu (ppm)	131	256	128	64	265	349	432	646
Pb (ppm)	131	25	24	5	22	27	35	280
Zn (ppm)	131	2075	499	905	2075	2426	2694	3471
Cd (ppm)	131	21	11	2	19	26	38	57
Ag (ppb)	131	1603	1303	123	1384	2287	3002	10590
Au (ppb)	131	5.5	7.8	0.2	3.4	5.6	10.1	71.1

MT. MILLIGAN 1996 LODGEPOLE PINE OUTER BARK SURVEY (ashed) (GSC O.F. 3290, COLIN DUNN)								
					Percentiles			
	Number	Mean	Std. Dev.	Minimum	50	75	90	Maximum
Mo (ppm)	134	5	3	1	4	7	9	14
Cu (ppm)	134	185	75	66	174	234	292	409
Pb (ppm)	134	59	29	11	55	73	89	216
Zn (ppm)	134	2278	679	420	2300	2800	3100	4100
Cd (ppm)	134	21	22	0.1	16	29	45	161
Ag (ppb)	no silver analysis in study							
Au (ppb)	134	9.4	24.4	2.5	2.5	6.0	13.5	185.0

APPENDIX D

ANALYSES OF QUEST WEST UTM SHEET

093K, LAKE SEDIMENTS

DENNIS ARNE PRINCIPAL CONSULTANT –
GEOCHEMISTRY, CSA GLOBAL



CSA Global
Resource Industry Consultants

Lake Sediment Samples from the Nechako Plateau (QUEST West Report 2009-11)



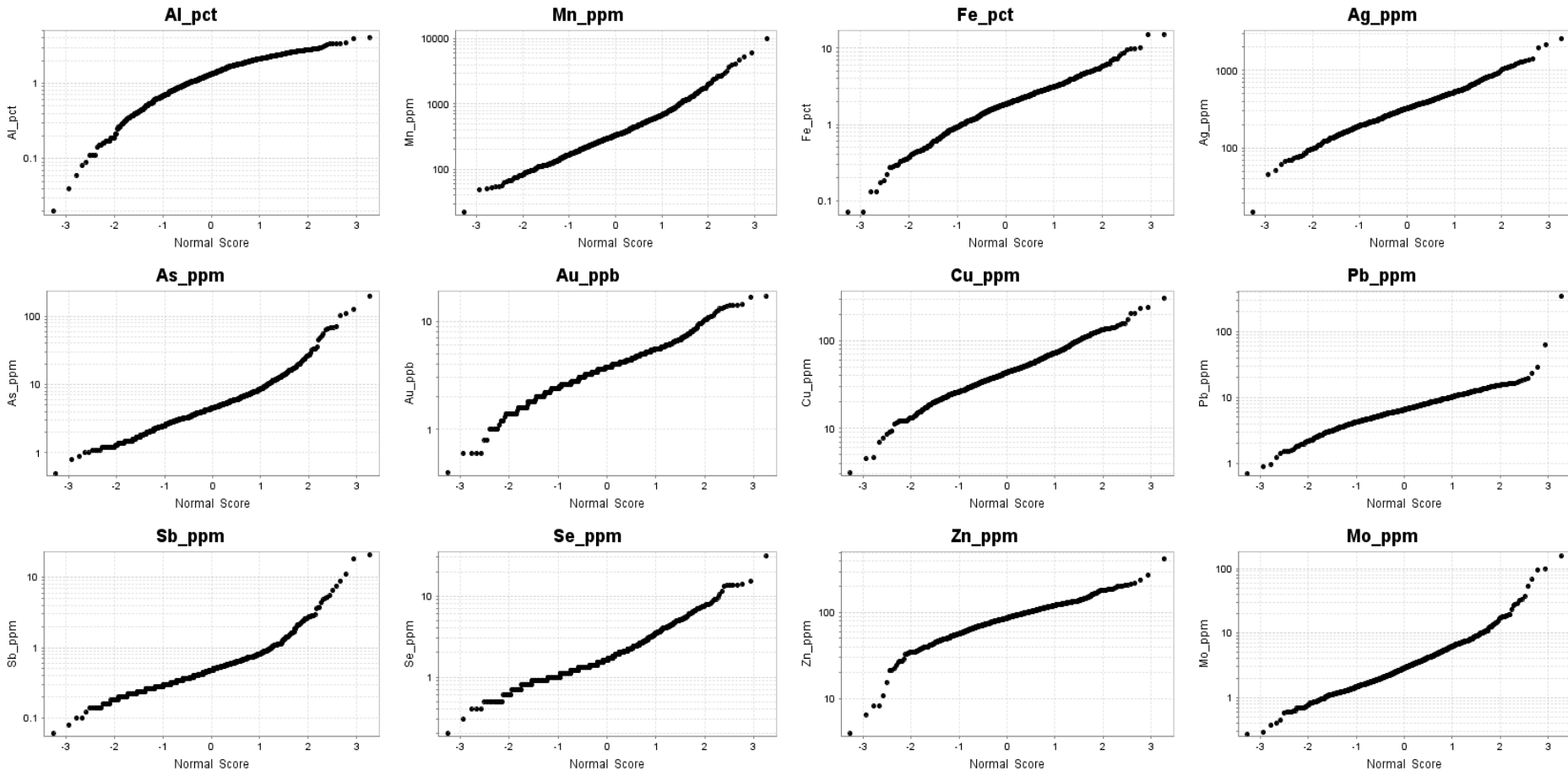
Dennis Arne
Principal Consultant - Geochemistry

Data



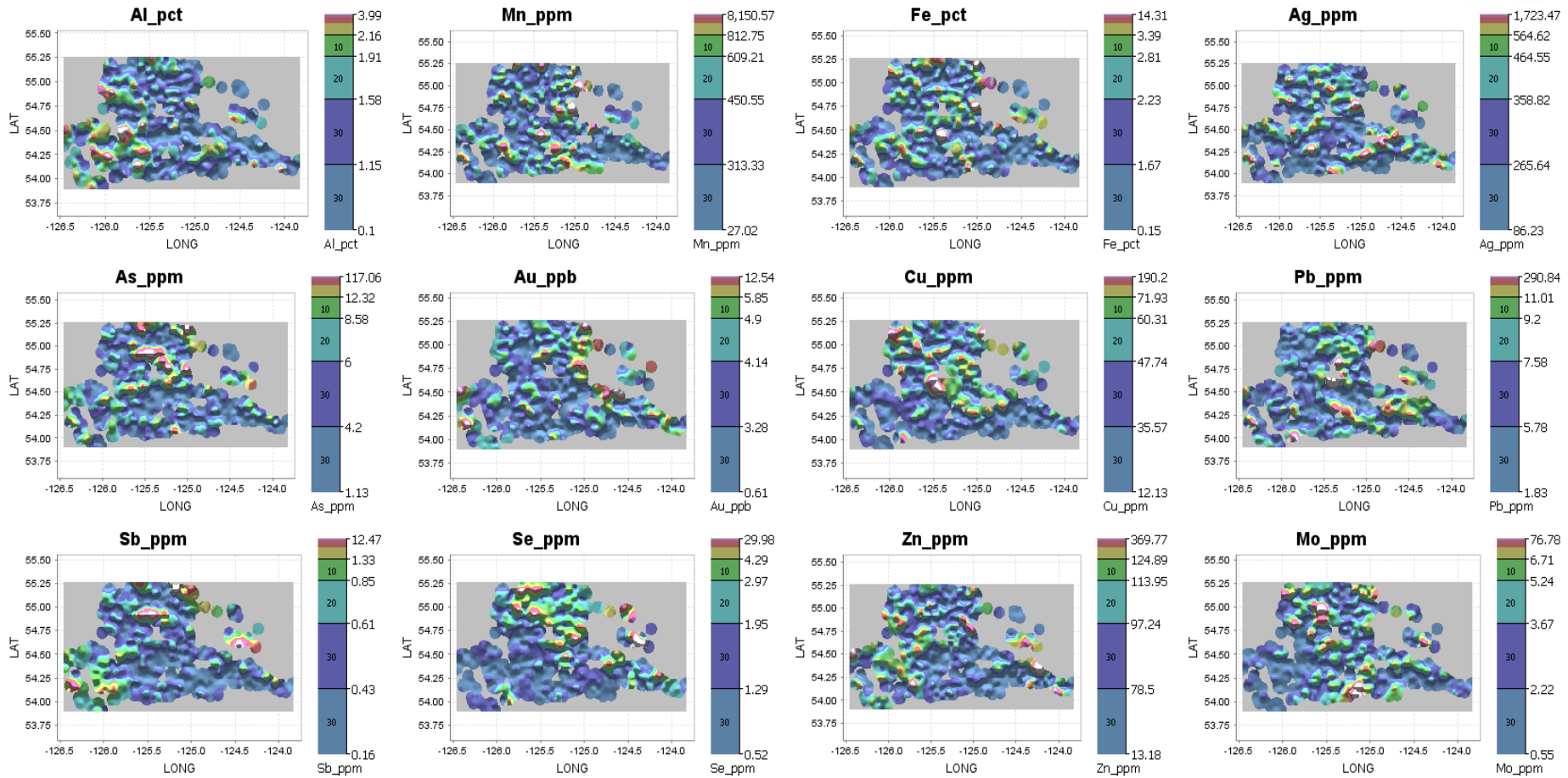
- Compiled data set from Geoscience BC Report 2009-11 Lake sediments uploaded into ioGAS for analysis “as is” (GBCR09_11 LAKE DATA.xlsx).
- The data are from new samples collected on map sheet O93K and were analyzed by ICP-MS and INA.
- The following maps are presented in NAD83 Lat/Long to account for data in both Zones 9 and 10 of the NAD83 grid.

Data Quality



Calcium data have maxed out at the upper limit of 10 %; the quality of data from most of the other major commodity or pathfinder elements looks good. Note the high Ag values overall, with a 50th percentile at 325 ppb

Spatial Patterns



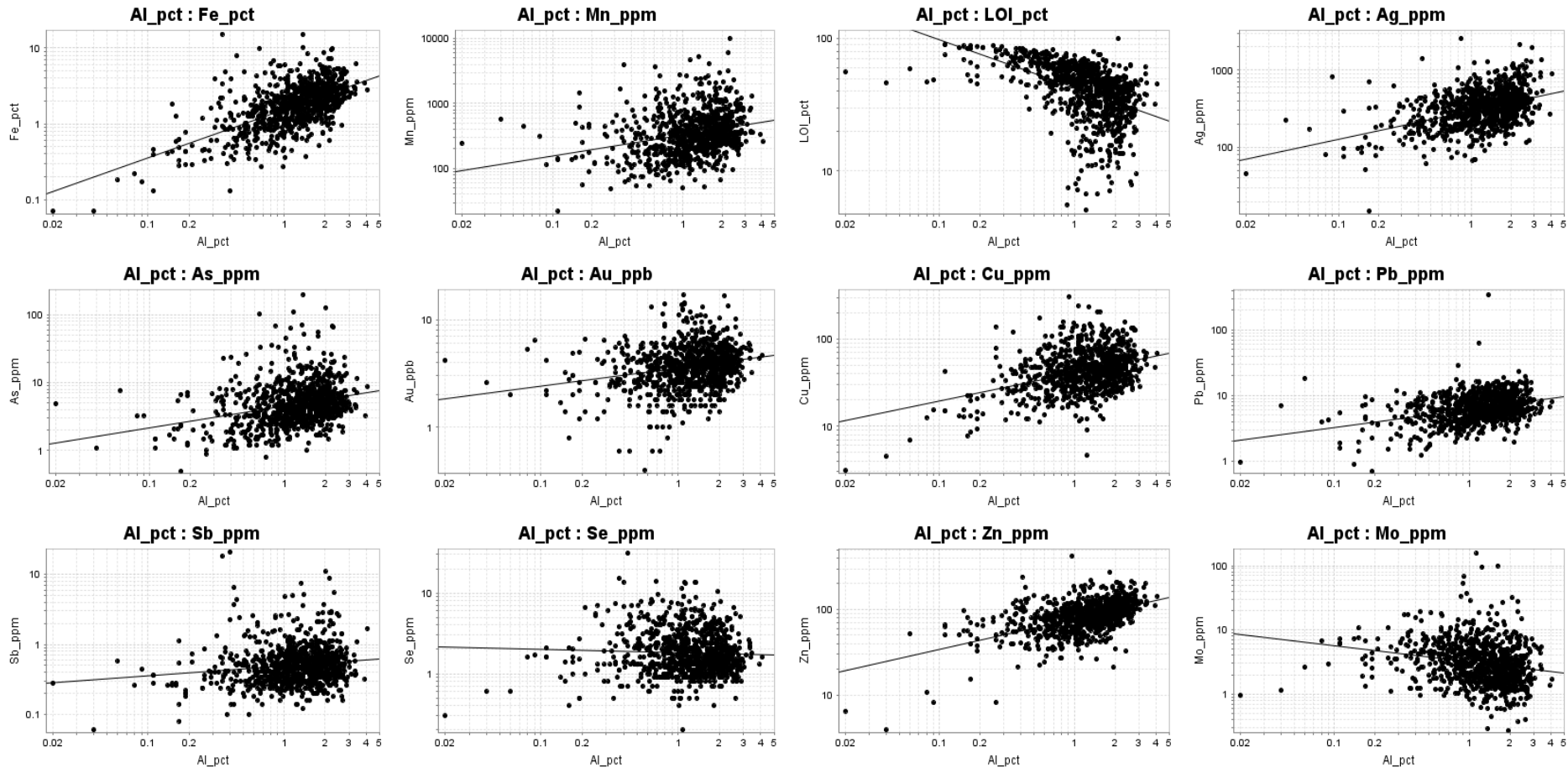
Some coarse spatial associations are immediately apparent in the data, including coincident elevated As-Sb-Au in the north-central part of the survey area.

Spearman Rank Correlation

Spearman	Al_pct	Fe_pct	Mn_ppm	LOI_pct	Ag_ppm	As_ppm	Au_ppb	Cu_ppm	Pb_ppm	Sb_ppm	Se_ppm	Zn_ppm	Mo_ppm
Al_pct	1	0.55	0.31	-0.58	0.4	0.3	0.22	0.27	0.3	0.15	-0.079	0.51	-0.26
Fe_pct	0.55	1	0.68	-0.43	0.25	0.69	0.25	0.43	0.39	0.38	0.17	0.58	0.085
Mn_ppm	0.31	0.68	1	-0.24	0.2	0.5	0.15	0.25	0.29	0.2	0.065	0.39	0.12
LOI_pct	-0.58	-0.43	-0.24	1	-0.0021	-0.28	-0.12	-0.0054	-0.45	0.031	0.22	-0.15	0.31
Ag_ppm	0.4	0.25	0.2	-0.0021	1	0.12	0.38	0.43	0.32	0.12	0.37	0.32	0.13
As_ppm	0.3	0.69	0.5	-0.28	0.12	1	0.24	0.32	0.33	0.58	0.18	0.45	0.16
Au_ppb	0.22	0.25	0.15	-0.12	0.38	0.24	1	0.28	0.26	0.24	0.27	0.27	0.03
Cu_ppm	0.27	0.43	0.25	-0.0054	0.43	0.32	0.28	1	0.07	0.42	0.43	0.36	0.31
Pb_ppm	0.3	0.39	0.29	-0.45	0.32	0.33	0.26	0.07	1	0.13	0.089	0.25	-0.059
Sb_ppm	0.15	0.38	0.2	0.031	0.12	0.58	0.24	0.42	0.13	1	0.34	0.45	0.26
Se_ppm	-0.079	0.17	0.065	0.22	0.37	0.18	0.27	0.43	0.089	0.34	1	0.17	0.44
Zn_ppm	0.51	0.58	0.39	-0.15	0.32	0.45	0.27	0.36	0.25	0.45	0.17	1	0.017
Mo_ppm	-0.26	0.085	0.12	0.31	0.13	0.16	0.03	0.31	-0.059	0.26	0.44	0.017	1

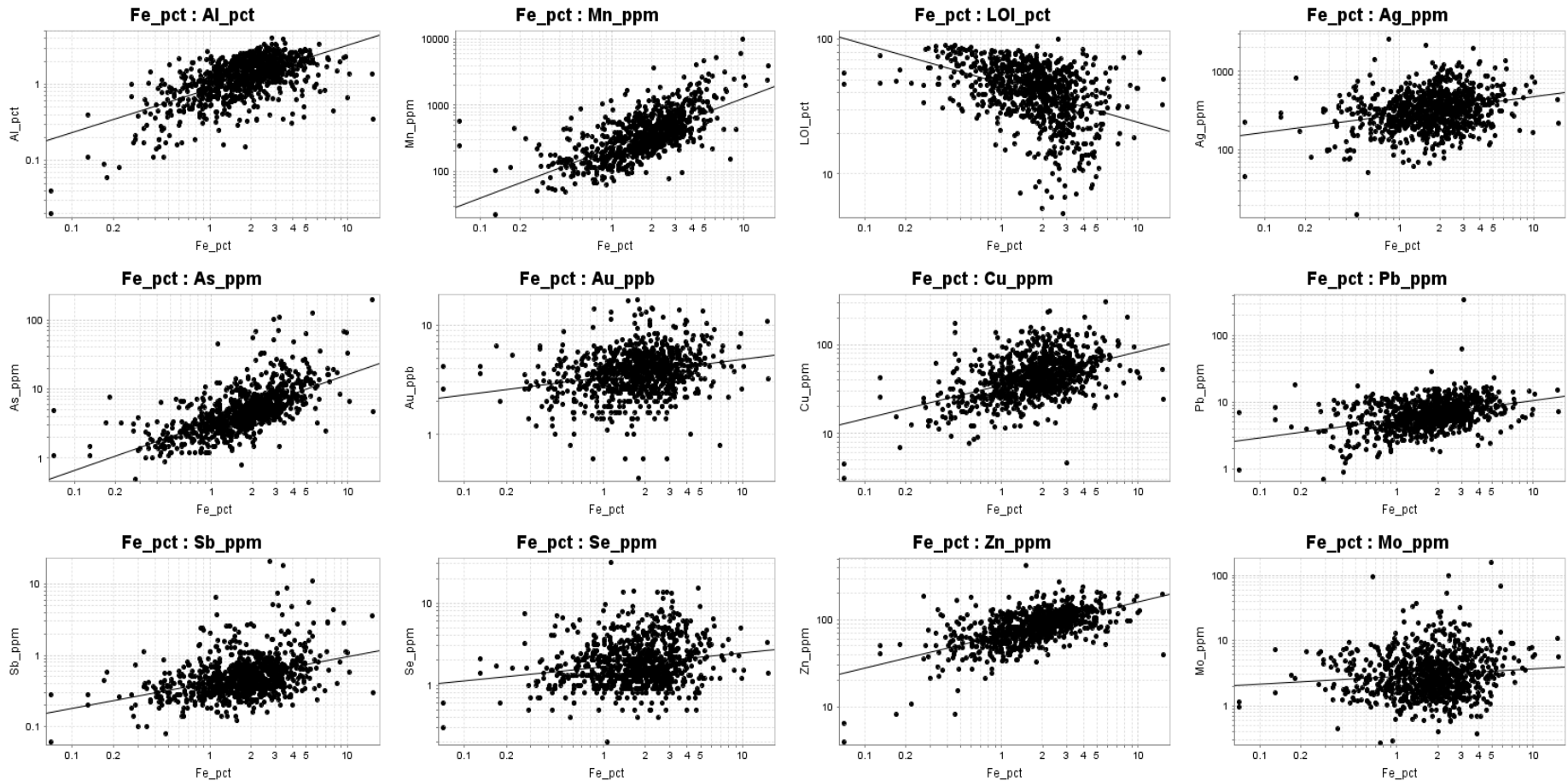
The pathfinder correlation coefficients have been calculated with the common “regolith control” elements (Fe, Mn, Al, LOI) that might be reflect scavenging of metals in lake sediment samples onto clays, secondary oxides or organics.

Adsorption onto Clay Minerals



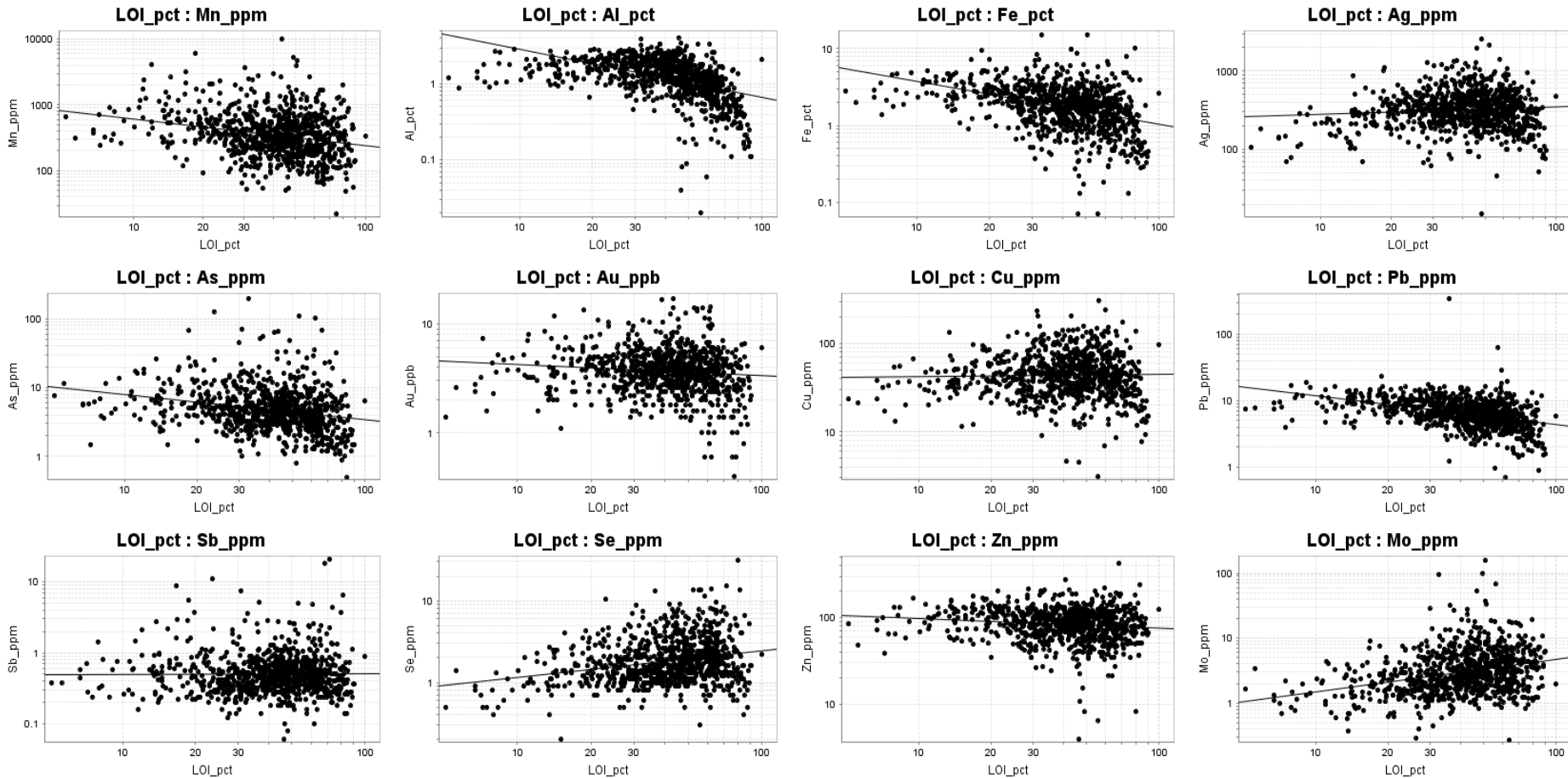
Fe, Ag and, to a lesser extent, As, Sb and the base metals show positive associations with Al, although caution must be applied in relating these associations to the presence of clay in the samples.

Adsorption onto Secondary Fe Oxides



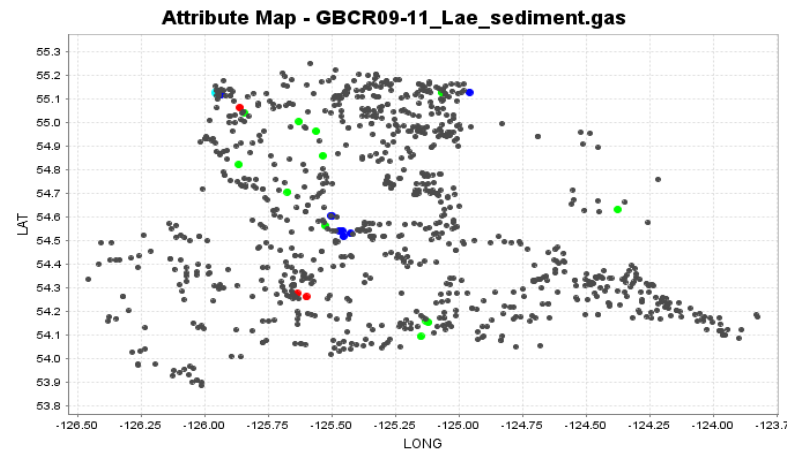
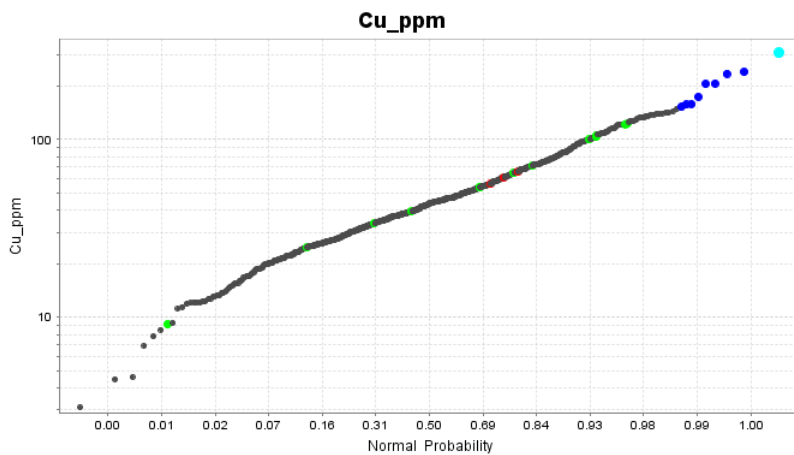
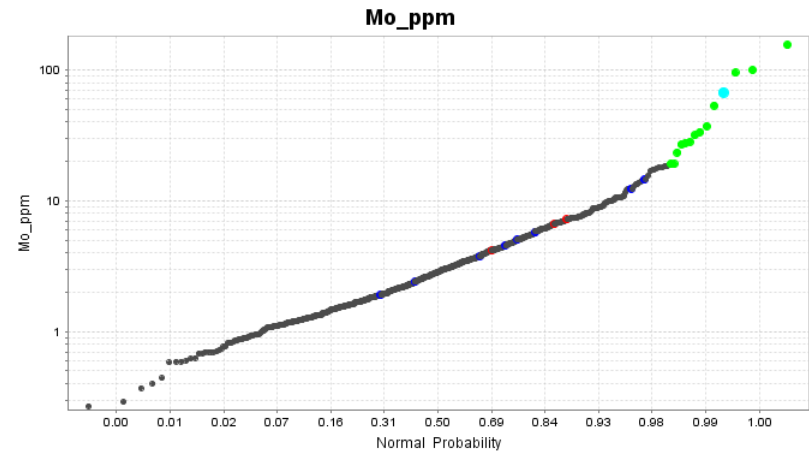
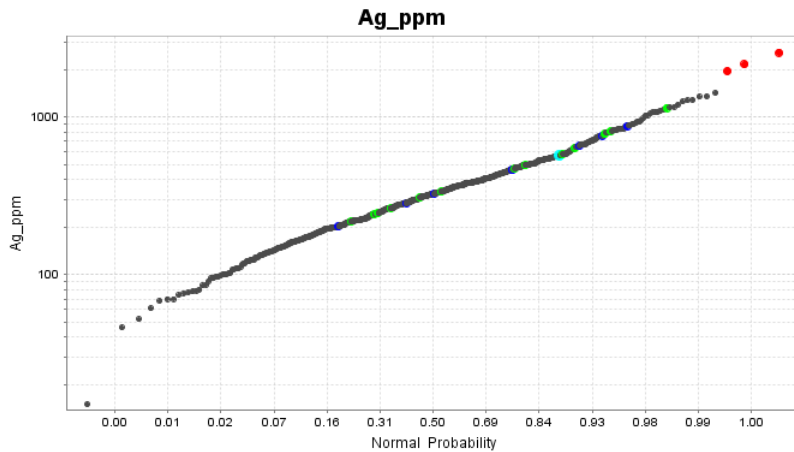
The positive associations of Fe with As and the base metals suggest secondary iron oxides are more effective at absorbing metals than clays.

Adsorption onto Organic Matter



In most cases metal contents decrease with increasing Los on Ignition (LOI), a common surrogate measurement for organic matter in lake sediments. This reflects a relative decrease in mineral content with increasing organic content.

RGB Analysis Ag-Mo-Cu



Very few Ag, Mo or Cu values are clearly anomalous, and of those, few overlap. Two of the anomalous Ag values are located within the Boer property.

Combined (5)			
RGB Classification	Ag_ppm	Mo_ppm	Cu_ppm
•	None meet RGB criteria,	0 meet RGB criteria	
■	Ag_ppm > 99.5%	, 1 meet RGB criteria	
■	Mo_ppm > 98.5%	, 1 meet RGB criteria	
■	Cu_ppm > 99.0%	, 1 meet RGB criteria	
■	Mo_ppm > 98.5%	Cu_ppm > 99.0%	, 2 meet RGB criteria

Summary & Recommendations

- Silver values in two lake sediment samples from the Boer property are clearly anomalous and lie within the upper 99.5 percentile of the data.
- Overall, Ag levels in lake sediment samples from the Nechako Plateau appear to be high, with a 50th percentile of 350 ppb. The majority of data appear to lie within a single, log-normally distributed population.
- Clearly anomalous Mo or Cu are not associated with anomalous Ag within the data set. Overlap does occur when the 95th or 98th percentile values for Ag, Cu and Mo are used.
- Ag shows a weak positive correlation with Al (a surrogate for clay in the samples). Regression analysis of Ag against Al indicates that the two anomalous Ag samples on the Boer property also have anomalous positive residuals and are therefore not likely to be associated with scavenging of Ag onto clay minerals. Silver does not show strong positive associations with either Fe, Mn or LOI (a surrogate for organic matter) in the samples.
- Residuals should be calculated for Cu, Pb, Zn, As and Sb following regression against Fe to identify subtle base metal and orogenic gold anomalies.

APPENDIX E

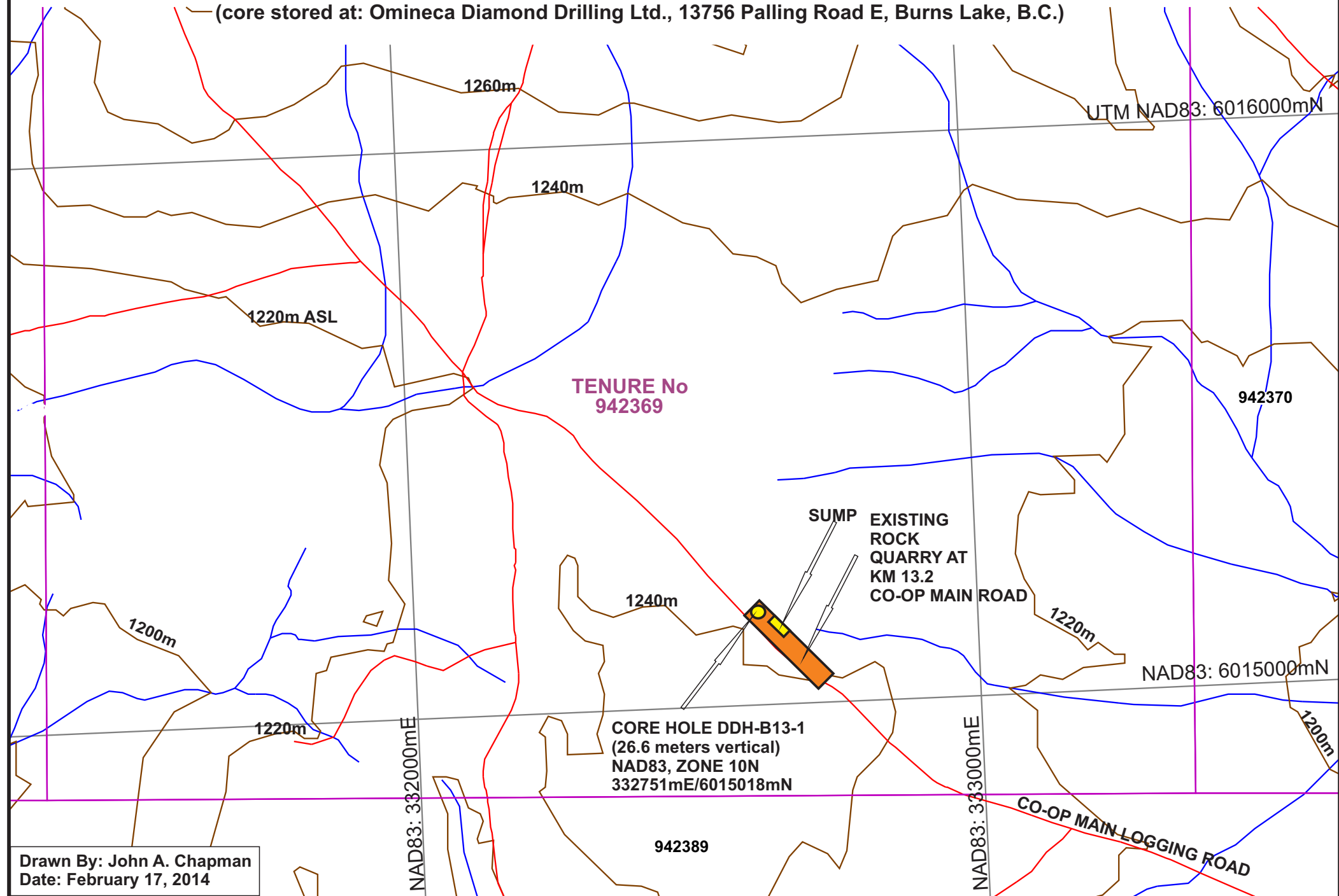
DRILL CORE LOG

BY

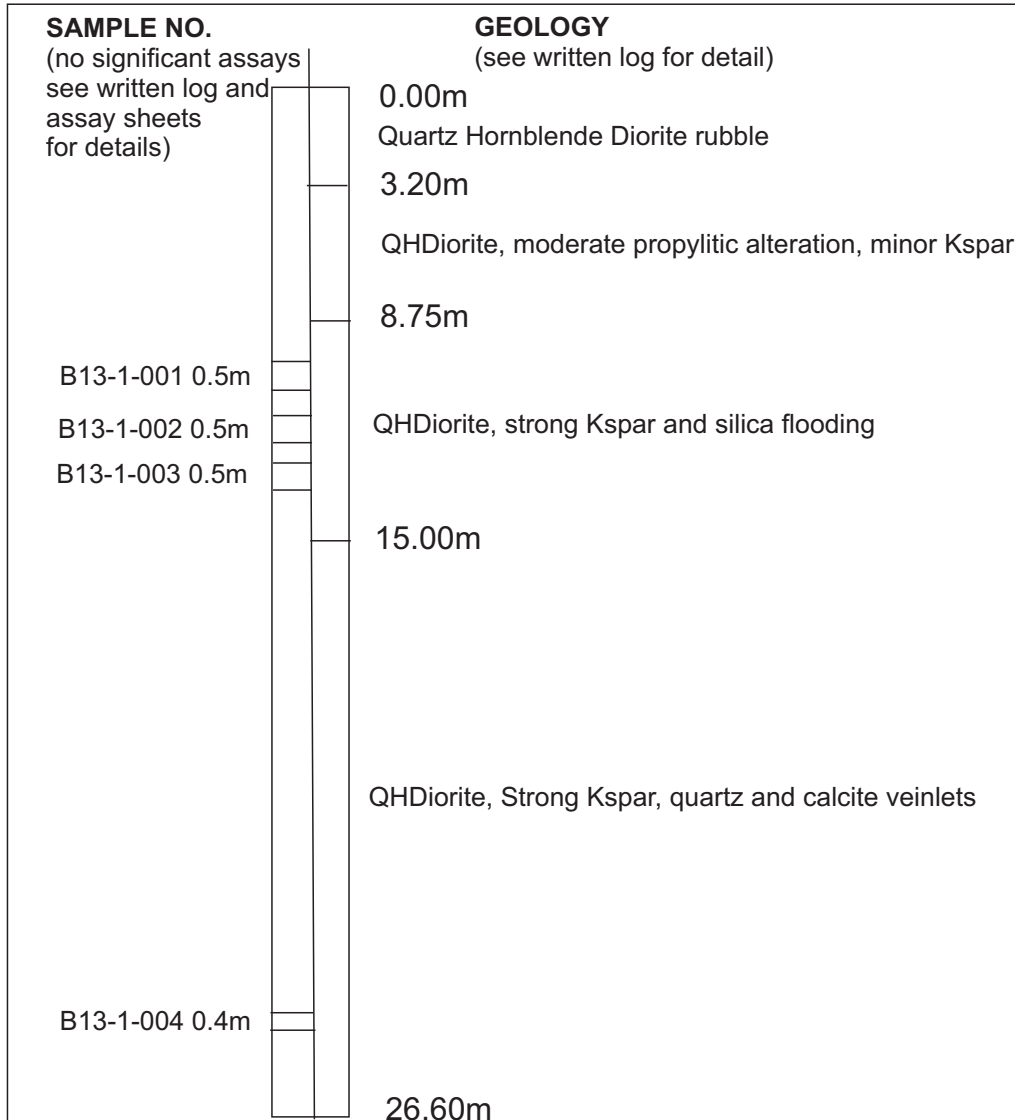
ARIADNE HOLNESS DE HILLER
HONOURS BSC, GEOLOGICAL
ENGINEERING
IMG, SOFIA, BUGARIA (1987)

BOER PROPERTY, CORE DRILL SITE 2013

(core stored at: Omineca Diamond Drilling Ltd., 13756 Palling Road E, Burns Lake, B.C.)



**BOER PROPERTY
BURNS LAKE, B.C.
CORE DRILLING 2013
AT MINFILE: "BOER"
HOLE: DDH-B13-1 (vertical)
332751mE/6015018mN**



Drawn By: John A. Chapman
February 17, 2014

Boer Property, February 14, 2014

Samples for Lab Analysis

Vertical Core Hole No. DDH-B13-1

Location: UTM NAD83 Zone 10N: 332751mE/6015018mN

Lithological unit: Quartz-Hornblende Diorite (Rock description on log)

By: A. Hiller, Geologist

Sample No.	From	To	Length	Alteration
B13-1-001	9.0m	9.5m	0.5m	Ks-Alt zone
Description: Zone of multiple (Qtz+Py+(Mo?)+silvery/blackish metallic (not magnetic) mineral on edges of the veinlets forming small aggregates. Veinlets are mm, frequency 10 to 20 on 20 cm, on multiple directions (20 to 70-80ish to CA) Some areas showed multiple re-opening of fractures				
B13-1-002	10.75m	11.25m	0.5m	Ks-Alt zone
Description: Zone of multiple mm Qtz,+Py+Mt+(Mo?) 40-65 to CA, cut by later Ep+Ch+Ca veinlets in different directions. Secondary Bio aggregates by Ks alteration. Very fine black silvery mineral aggregate by Qtz+Py veinlets. Trace Cpy.				
B13-1-003	12.3m	12.90m	0.6m	Ks-Alt zone
Description: Zone of Qtz+Py+(Mo?) veinlets, 1-3mm parallel to CA cut by randomly oriented late Ep+Ch+Ca.				
B13-1-004	22.30m	22.70m	0.4m	Prop. Alt, overprinting Qtz-Ser-Py. Ks-Alt. patchy close to vns.
Alternate Sample Description: 20 cm -55 degrees to CA Qtz+Py+Mt+(Mo?) showing multiple re-openings and on the middle of the vein later Ch+Ep+ abundant Ca. Bluish metallic mineral forming small aggregates.				

Acme Analysis:

	Method	Analyte	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
				Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd
		Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	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
B13-1-001	Drill Core		0.71	1.5	3.2	158.5	189	1.0	0.4	0.5	317	0.54	1.2	5.6	22.0	65	3.7
B13-1-002	Drill Core		0.51	1.5	3.5	38.6	178	0.4	0.6	0.3	219	0.56	1.3	2.1	15.7	34	3.0
B13-1-003	Drill Core		1.15	0.5	2.3	41.9	129	0.4	0.4	0.8	268	0.46	3.2	2.6	16.1	65	3.7
B13-1-004	Drill Core		0.66	0.2	8.7	10.7	87	0.2	1.5	10.9	1512	3.67	1.4	1.3	2.1	216	0.5

Boer Property Burns Lake, B.C. Hole ID: B13-1 Started: Aug 15, 2013 Finished: Aug 15, 2013 Twinned Casing: Removed Size Units				UTM NAD83 ZONE10N Easting 332751 meters Northing 6015018 meters Elevation 1243 meters ASL Azimuth: 0 Inclination: -90 Length 26.6 meters RQD Recovery				Drilled by: Omineca Diamond Drilling Ltd. Logged by: A. Hiller Core Diameter: 3.53 centimeters Downhole testing Survey Depth Dip Az T-Trace W-weak M-Moderate S-Strong													
Lithology				Description	Alteration Minerals										% Mt	Sulphides %					
Fro m	To	Sam ple No.	Rock Code		Si	Se	K	Bio	Ch	Ep	Ca	Hm	Ot he	Mo		Cp	Bn	Py	Oth er	Tot al	
0	26.6		QHDio	Quartz-Hornblende Diorite Dark grey-greenish, medium grain, phaneritic, in places showing a inequigranular appearance. Qtz eyes<5%, hornblende crystals up to 1- 3mm prismatic, and elongated (needle like) shapes. Plagioclase is granular. Pink/salmon colour at intervals with strong Ks alteration, next to veins and veinlets and patchy spots. Areas with secondary Bio aggregates. Overprint by later Qtz-Ch, Qtz-Ser alt. Ch by hornblende crystals. Strong propylitic alteration overprint with Ep+Ca+Py veinlets from parallel to CA to 45°-70°. Late and abundant Ca flooding. Rock is strong magnetic. (1-3%)	W	M	S- W	W	M	M	M	T		3	T	T		1-3			
0	3.2		QHDio	Rubble, up to 5-8 cm rock fragments, rounded to sub-angular, weathered, soils material																	
3.2	8.75		QHDio	Moderate propylitic, patchy small sections with Ks alt. Late Ch+Ep+Ca (Ca flooding) mm veinlets 30° to 40° to CA, Hm stains on fractures. Py 2 %, Str Mt. Trace Cpy	W	W	W		M	M	M	W		3		T		2			

Lithology				Description	Alteration Minerals										% Mt	Sulphides %					
From	To	Sam ple No.	Rock Code		Si	Se	K	Bio	Ch	Ep	Ca	Hm	Ot he	Mo		Cp	Bn	Py	Oth er	Tot al	
4.30	4.38			Ks alt overprinted by Ch+Ep+Ca veinlets (3) parallel to CA			W		M	M	M							>1			
4.5				3mm Ca vein (60°-70° CA) cutting earlier Ch+Ep+ Ca vein parallel to CA					M	M	M							1			
4.7				(2 mm) Hm coating fractures parallel to CA by Ep+Ca veinlets.								M									
6.2				Earlier Qt+Mt veinlet (mm) 40° to CA cut by a series of by late Ch+Ep+ Ca mm veinlets at 50°-70° to CA										2							
7.45	8.75			Rock appear more silicified (Qtz-Ser alt) with patchy Ks alteration sections	M	M	W							3				2			
7.50	7.70			Interval 40° to 50° to CA of Qtz+Mt and later Ca 1-3 mm fracture filling veinlets,										2							
8.75	15.0			Zone strong Ks alteration, Pink/salmon, greenish, wk Mt, original rock fabric could be seen, on a few intervals is total replacement by Ks. Secondary Bio by fractures and forming aggregates (replacing hornblendes (?)) Two generations Qt+Py +/-Mt +(Mo?) veins 60°-45° to parallel to CA, 1-3 mm wide. (5-10 in 20 cm) Late Ch+Ep+ Ca observed in different direction, frequency 10 in 20 cm (sub-mm). Ks alteration next to fractures has a Qtz-Ser halo.	W	W	S	W	W					>1	T	T		1-2			

Lithology				Description	Alteration Minerals										% Mt	Sulphides %					
From	To	Sam- ple No.	Rock Code		Si	Se	K	Bio	Ch	Ep	Ca	Hm	Ot he	Mo		Cp	Bn	Py	Oth er	Tot al	
9.0	9.5	B13-1-001		Zone of multiple (Qtz +Py+ (Mo?)+silvery/blackish metallic (not magnetic) mineral on edges of the veinlets forming small aggregates. . Veinlets are mm, frequency 10 to 20 on 20 cm, on multiple directions (20 to 70-80ish to CA) Some areas showed multiple re-opening of fractures	W	W	S		W	W								3	T		
10.75	11.75	B13-1-002		Zone of multiple mm Qtz,+Py +Mt+(Mo?) 40-65 to CA, cut by later Ep+Ch+ Ca veinlets in different directions. Secondary Bio aggregates by Ks alteration. Very fine black silvery mineral aggregate by Qtz +Py veinlets. Trace Cpy			S		W	W	W							3	T		
12.3	12.9	B13-1-003		Zone of Qtz+Py + (Mo?) veinlets, 1-3mm parallel to CA cut by randomly oriented late Ep+Ch+Ca. Secondary Bio			S	W	W	W	W							2	T		
15.00	26.6		QHDio	Patchy Ks, Qtz-Ser alteration overprinted by Ch+Ep+Ca (calcite flooding)	M	M	W	W	M	M	M				3	T		2-3			
15.00				3 cm Ks vn 70°																	
15.15				4 cm Ks+Qtz 60° vein, cut by late Ch+Ep+Ca																	
15.40				5 cm Ks+Qtz 50° vein cut by 40° series of Ch+EP+Ca veinlets (mm)																	

Lithology				Description	Alteration Minerals										% Mt	Sulphides %					
From	To	Sam ple No.	Rock Code		Si	Se	K	Bio	Ch	Ep	Ca	Hm	Ot he	Mo		Cp	Bn	Py	Oth er	Tot al	
18.5				10cm Ks with Qtz in the middle (reopen). Str Qtz+Ser alteration halo next to vein with secondary Bio aggregates	S		S	W													
22.30	22.7	B13-1-004		20 cm-55 degrees to CA Qtz+Py+Mt+ (Mo?) showing multiple re-openings and on the middle of the vein later Ch+Ep+ abundant Ca. Bluish metallic mineral forming small aggregates.	M	W			W	W	M		1	T			2	Bluish metallic? T			
26.5	26.6			Qtz+Py (on center) vn 3cm wide parallel to CA, trace Mo, cut by late Ep+Ch+Ca veinlets @ 40° End of Hole	M				W	W	W						5				



2013 Drilling adjacent to Boer Breccia, Hole B13-1



Boer Breccia at km 13.2 Co-op Road