

**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 and Geological

TOTAL COST: \$14,134.00

AUTHOR(S): Gerald G. Carlson, PhD, PEng, John A. Chapman, BSc SIGNATURE(S): see Certification in Report

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): NA YEAR OF WORK: 2014

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Statement of Work, Event Number 5543747, February 22, 2015

PROPERTY NAME: Xama

CLAIM NAME(S) (on which the work was done): Skip#1, XAMA2014A, XAMA2014B, XAMA2014D

COMMODITIES SOUGHT: Mo, Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 93F 019 (Owl), 93F 020 (Gel)

MINING DIVISION: Omineca NTS/BCGS: 93F/10

LATITUDE: 53 ° 56 ' 30 " LONGITUDE: -124 ° 48 ' 30 " (at centre of work)

**OWNER(S):**

1) Gary G. Carlson (25%) 2) John A. Chapman (25%)  
1740 Orchard Way, West Vancouver, BC V7V 4E8 #43 -1725 Southmere Cres., Surrey, BC V4A 7A7

**MAILING ADDRESS:**

Gary W. Kurz (25%) Garry D. Bysouth  
Box 894, Fraser Lake, BC V0J 1S0 12340 Christie Road, Boswell, BC V0B 1A4

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

1) Gerald G. Carlson 2) John A. Chapman  
as above as above

**MAILING ADDRESS:**

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

The Property is underlain by Upper Jurassic Francois Lake Suite of the Endako Batholith, including Case Alaskite, the same suite hosting the nearby Endako porphyry Mo deposit. Mineralization includes vein and disseminated Mo in two zones - Gel and Owl. Mineralization has been defined by rare surface exposures and percussion drilling. Alteration is similar to Endako, including potassic, quartz-sericite-pyrite and late stage kaolinite.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 01002, 01107, 01108, 01216, 01689, 02368, 02455, 02668, 21587, 22061, 24798, 28350, 29601, 32400, 33221

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping	Eight rock samples	Skip#1, XAMA2014A, XAMA2014D	\$1,000
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other	Till Auger Sampling (68 samples)	Skip#1, XAMA2014A, XAMA2014D	\$7,434.00
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying	76 samples (51-Element ICP-MS) UT	Skip#1, XAMA2014A, XAMA2014D	\$3,000.00
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other	Planning and Report Preparation		\$2,700.00
		<b>TOTAL COST:</b>	<b>\$14,134.00</b>

**BC Geological Survey  
Assessment Report  
35361**

**ASSESSMENT REPORT**

**TILL & ROCK SAMPLING SURVEYS**

**XAMA MINERAL PROPERTY**

**CENTRAL BRITISH COLUMBIA, CANADA**

**Tenure Numbers**

574353, 1027264, 1027265, 1027267, 1027270, 1027284, 1027356

**Event Number**

5543747

**NTS 093F/15**

**UTM: 381500mE, 5978500mN, NAD 83, Zone 10N  
53°56'30" N LATITUDE, 124°48'30" W LONGITUDE  
OMINECA MINING DIVISION**

**by**

**Gerald G. Carlson, Ph.D., P.Eng.  
1740 Orchard Way  
West Vancouver, BC, V7V 4E8**

**and**

**John A. Chapman, B.Sc., FCIM  
43 – 1725 Southmere Cres.  
Surrey, B.C., V4A 7A7**

**March 25, 2015**

## TABLE OF CONTENTS

SUMMARY .....	1
INTRODUCTION .....	3
PROPERTY DESCRIPTION AND LOCATION .....	4
MINERAL TENURES AND OWNERSHIP .....	4
ACCESS, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, INFRASTRUCTURE ...	5
<i>ACCESS</i> .....	5
<i>CLIMATE</i> .....	5
<i>TOPOGRAPHY AND VEGETATION</i> .....	6
<i>LOCAL RESOURCES AND INFRASTRUCTURE</i> .....	6
EXPLORATION HISTORY.....	7
GEOLOGICAL SETTING AND MINERALIZATION.....	10
<i>REGIONAL GEOLOGY</i> .....	10
<i>PROPERTY GEOLOGY</i> .....	12
<i>MINERALIZATION</i> .....	16
2014 XAMA TILL AND ROCK SAMPLE SURVEY .....	16
CONCLUSIONS.....	20
RECOMMENDATIONS.....	21
STATEMENT OF EXPENDITURES.....	22
STATEMENTS OF QUALIFICATION.....	23
REFERENCES .....	25

## LIST OF FIGURES

FIGURE 1. XAMA LOCATION MAP.....	3
FIGURE 2. GOOGLE EARTH VIEW OVER XAMA, FRASER LAKE AND ENDAKO.....	4
FIGURE 3. GLACIAL FLOW OVER ENDAKO REGION.....	6
FIGURE 4. XAMA MINERAL TENURES & ROADS MAP.....	6
FIGURE 5. PHOTOGRAPH OF XAMA FROM NITHI MINERAL PROPERTY .....	7
FIGURE 6. TOPLEY PORPHYRY MINERAL BELT .....	9
FIGURE 7. XAMA GEOLOGY MAP .....	13
FIGURE 8. XAMA TOTAL FIELD MAGNETICS .....	15
FIGURE 9. & 10. AUGER SAMPLING .....	17
FIGURE 11. TILL 2014 MO IN PPM.....	18
FIGURE 12. TILL 2014 CU IN PPM.....	19
FIGURE 13. COMPOSITE EXPLORATION MAP.....	21

## LIST OF TABLES

TABLE I. XAMA PROPERTY TENURES.....	5
TABLE II. GEOCHRONOLOGY OF ENDAKO BATHOLITH .....	11
TABLE III. GEOLOGIC MAP UNITS .....	12
TABLE IV. 2014 XAMA EXPLORATION EXPENDITURES .....	22

## SUMMARY

The Xama property holds potential for the discovery of a porphyry molybdenum deposit similar to the world class Endako Molybdenum deposit, 21 km to the northwest. Anomalous molybdenum values in stream sediments and soils led to the discovery of porphyry style molybdenum mineralization within the Property at the Owl (Minfile 93F 019) and Gel (Minfile 93F 020) showings by Amax and Anaconda in the 1960's. The Property has been explored intermittently since that time with additional prospecting, geological mapping, soil, rock and stream sediment sampling, ground geophysics (IP surveys) and 875 m of percussion drilling in 18 holes.

This report describes an up to date analysis of the Xama property and its regional setting, including the 2014 till and rock sampling surveys. The Property is located in Central British Columbia, 160 km west of the City of Prince George, in the Omineca Mining Division. It consists of seven BCMTO mineral tenures covering 3,579 ha. Registered owners are John A. Chapman, Gerald G. Carlson, Garry D. Bysouth and Gary W. Kurz.

The Property is located in the Interior Plateau of British Columbia, within the Intermontane Belt, including late Paleozoic to late Tertiary sedimentary and volcanic rocks belonging to the Stikine, Cache Creek and Quesnel Terranes. The Property lies within the eastern edge of the Stikine Terrane, near its boundary with the Cache Creek Terrane and immediately south of the Skeena Arch. The Endako Batholith is the key geologic feature of the area, underlying much of the claim group and extending for almost 100 km in a northwestern direction, with a width of up to 40 km. It is a composite batholith that comprises five temporally distinct plutonic suites, only one of which is mineralized.

The Property is underlain by plutonic rocks of the Upper Jurassic Francois Lake Suite of the Endako Batholith. A few outcrops of Casey Alaskite, belonging to the Endako Suite, occur in the Southern and Central parts of the Property and quartz diorite is well exposed along the high ridge south of the claims. Two areas of molybdenite mineralization have been defined on the Property. The largest of these is the Gel Zone which lies in the Southeast part of the Property east of Skip Creek. It has been defined by soil geochemistry, an Induced Polarization (IP) survey and a line of eight percussion drill holes. The second area lies in the Southwest quadrant of the Property, west of Skip Creek and is referred to as the Owl Zone. It has been defined by three percussion holes drilled near two areas of surface quartz-molybdenite mineralization. Depth continuation was confirmed in both areas. The major host rock in both zones is a dark green rock of either dioritic or andesitic composition.

Gerald G. Carlson (Carlson, 2014) completed a Regional and Property Scale Structural Analysis of the Xama property. On a regional, 1,500,000 scale northeasterly linears, roughly parallel with the Skeena Arch, dominate, along with a significant north-south linear that corresponds with the Fraser River valley, through Prince George and Quesnel, and the strong east-west linear that cuts through Prince George and Vanderhoof, just to the south of Endako and just north of the Property. Of particular interest is a swarm of north-south linears through the Central portion of the study area. At the Property scale (1:100,000), many of the linears are sub-parallel to, but not exactly coincident with, mapped faults and contacts from the BCGS MapPlace geology map. In many cases, they are probably reflecting the same features, but in others, they are clearly distinct. According to Lowe et al, (2001), most of these, especially NE and NW structures, are Tertiary structures and therefore post-mineral. Not reflected in the mapped geology are north-south linears that appear to be important and potentially related to the known mineralization, as mainly reflected in the magnetics as lows, possibly caused by magnetite destruction due to

hydrothermal fluids and, more regionally, gravity trends. The most important of these linears cut directly through the Gel Zone.

The target deposit types at Xama are a porphyry Mo (Cu) deposit (Endako) with peripheral base metal zones still intact, secondarily, a bulk tonnage Au-Ag deposit (Blackwater) and thirdly an Eocene Cu-Ag-Mo porphyry deposit in a dioritic host rock with felsic dyke swarms. The three deposit types would be expected to be related to high level intrusive activity and demonstrate structural control. The key exploration target suggested by this study is defined by the known mineralization in the Owl and Gel Zones, the magnetic low embayment in the area of these showings that could be a reflection of magnetite destruction by mineralizing fluids and linears, likely structures, that are reflected in the magnetic data and may control the emplacement of intrusions and related hydrothermal activity. The 2014 glacial till survey program confirmed that multi-element till anomalies occur over much of the Central and Eastern parts of the Property. The most common anomalies are in Cu and Mo; but there are also anomalies in As, Bi, Cd, Zn, Pb, Ag, and Te. The dispersion trains of Mo and Cu are from west to east in glacial tills, down-ice from mineralized outcrops. This wide distribution of differing ore-related metals is indicative of a large mineralizing system within the Xama property. See, Figure 13 and Appendix A.

The Gel IP anomaly has been tested along a 900 m width by eight shallow percussion drill holes. The Mo grades and alteration intersected by the drilling are very similar to that of the Endako deposit pyrite zone. Further, the drilling indicates the 1,000 m wide by 2,000 m long IP anomaly is in fact a sulfide zone; therefore a high priority core drill target is indicated.

There are several drill ready targets based upon prior work. Three proposed 300 m vertical NQ core holes have been spotted along road R09196MB, each 500 m apart, to test the main Amax IP anomaly within the Gel Zone. Estimated Project cost is only ~\$130,000 as each hole will be collared on the shoulder of the logging road, which is readily accessible, year round, from Highway 16 at Lejac via mainline logging roads.

The Project would also benefit from the new deep penetration Tipper EM (AFMAG) geophysics that works well in porphyry copper and molybdenum environments. This modern helicopter-borne survey, known as ZTEM is flown exclusively by Geotech Ltd. (see, <http://www.geotech.ca/ztem>). This survey would include 140 line km of ZTEM and Magnetics with lines spaced at 400 m, costing ~\$40,000.

## INTRODUCTION

The Xama property (the “Property”) holds potential for the discovery of a porphyry molybdenum deposit similar to Endako, 21 km to the northwest. Anomalous molybdenum values in stream sediments and soils resulted in the discovery of porphyry style molybdenum mineralization at the Owl (Minfile 93F 019) and Gel (Minfile 93F 020) showing areas, both within the Property, by Amax and Anaconda in the late 1960’s. The Property has been prospected intermittently since that time with additional prospecting, geological mapping, soil, rock and stream/lake sediment sampling, ground geophysics (IP surveys) and 875 m of percussion drilling in 18 holes.

The Property, very near the resource Village of Fraser Lake, is ideally located for potential large scale mine development and operations, with subdued topography, extensive gravel and sand deposits, multiple roads to and on the Property, ample sites for milling and tailings infrastructure, extensive water resources, as well as close proximity to mainline: rail, airport, highway, natural gas, and grid power.

This report describes a Glacial Till and Rock Sampling survey on the Xama property conducted on behalf of the Property’s owners, John A. Chapman, Gerald G. Carlson, Garry D. Bysouth and Gary W. Kurz. The study was conducted during the period June 1, 2014 to February 22, 2015, at a cost of \$14,134.

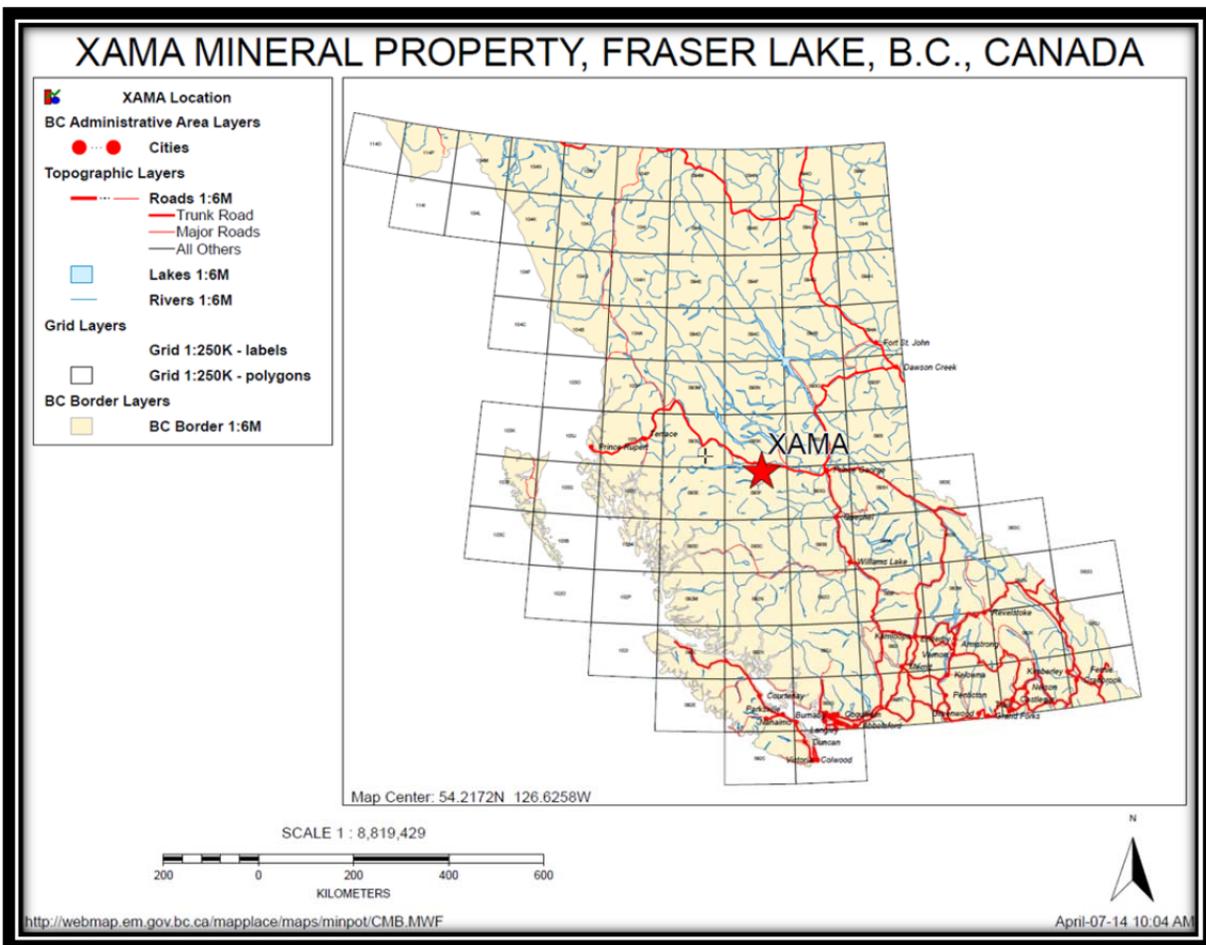


Figure 1 - Xama Property Location Map (from BC MapPlace)

## PROPERTY DESCRIPTION AND LOCATION

The Xama mineral Property is located in Central British Columbia, 160 km west of the City of Prince George, 12 km south of the resource (timber and mining) Village of Fraser Lake and 21 km southeast of the Endako Molybdenum Mine, the largest molybdenum mine in Canada, operating since 1965. It is possible to work all year round in the region, as the summers are warm and reasonably dry, and the winters are not too cold, nor the snowfall too heavy to prevent any mineral exploration or mining operations. See Figure 2.

The Property is located in the Omineca Mining Division, on NTS sheet 93F/15 and centred at UTM 381500mE, 5978500mN (NAD 83, Zone 10N), as shown on Figures 1 and 2.

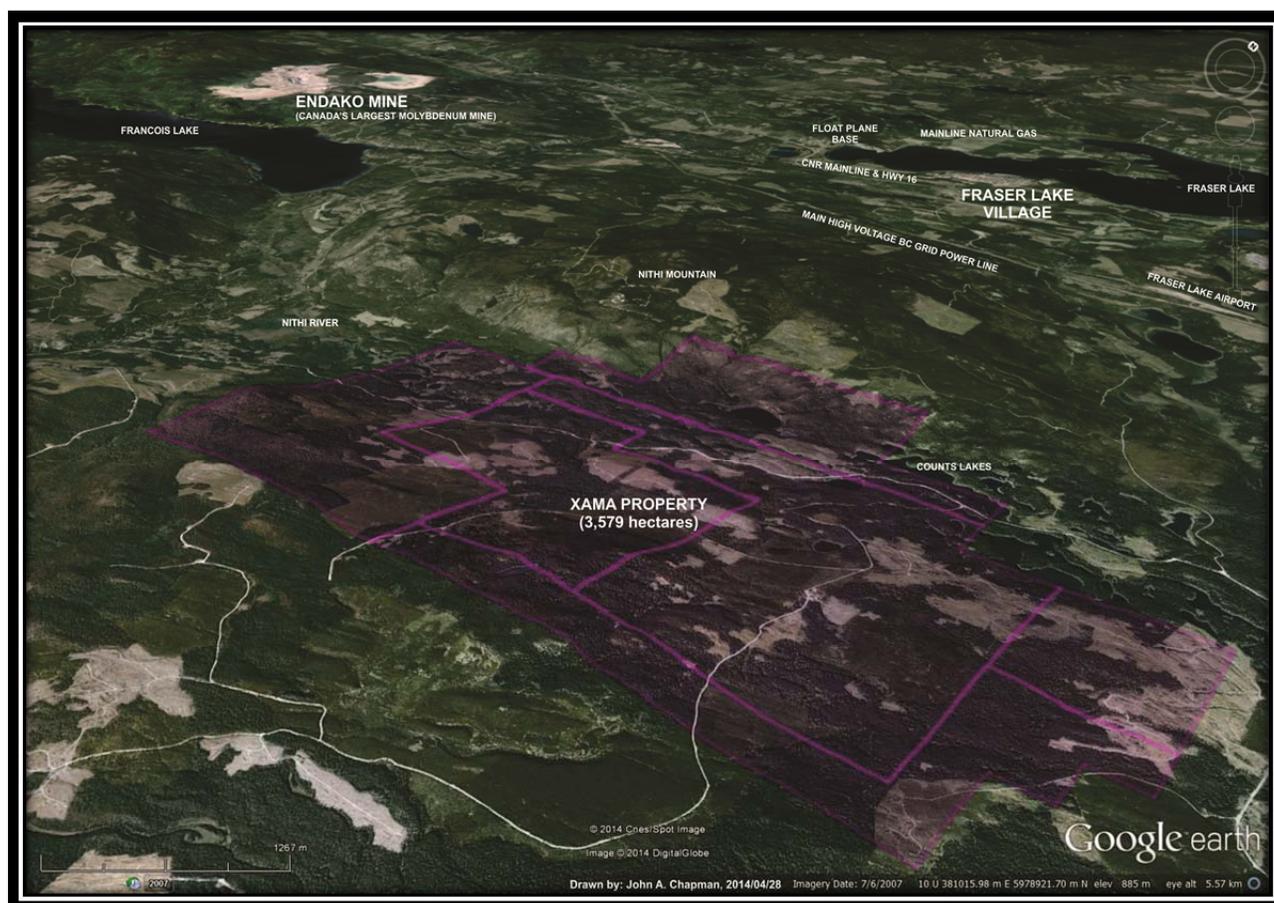


Figure 2 – View to NW over Xama Property and world class Endako Molybdenum Mine

## MINERAL TENURES AND OWNERSHIP

The Property consists of seven BCMTO mineral tenures covering 3,579ha. Registered owners are John A. Chapman (Free Miner Certificate no. 104633 – 25%), Gerald G. Carlson, (Free Miner Certificate no. 104271 – 25%), held by Carlson on behalf of KGE Management Ltd., Garry D. Bysouth (Free Miner Certificate no. 103905 – 25%) and Gary W. Kurz (Free Miner Certificate no. 114787 – 25%).

Table I. Xama Property Tenures

Tenure Number	Type	Claim Name	Good Until	Area (ha)
<a href="#">574353</a>	Mineral	SKIP#1	20180421	685.3169
<a href="#">1027264</a>	Mineral	XAMA2014A	20151015	989.8245
<a href="#">1027265</a>	Mineral	XAMA2014B	20151015	837.6758
<a href="#">1027267</a>	Mineral	XAMA2014C	20151015	171.3061
<a href="#">1027270</a>	Mineral	XAMA2014D	20151015	323.7134
<a href="#">1027284</a>	Mineral	XAMA2014E	20151015	513.7281
<a href="#">1027356</a>	Mineral	XAMA2014F	20151015	57.0846

Total Area: 3578.6494 ha

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

### ACCESS

The Property has excellent access via a network of all-weather logging roads that connect to Highway 16 near the community of Lejac, 2 km east of Fraser Lake Village. Secondary logging roads provide access to most parts of the Property (see Figure 4 and maps in Appendix A).

### CLIMATE

The climate is typical of central British Columbia with below freezing temperatures (0° C to -40° C) from November to April and periods of hot weather in the summer ranging from 5° to over 30° C. Precipitation averages 430 mm a year, with a substantial portion in the form of snow, averaging 90 cm per year. In typical years, field work can usually start in April and continue through October. Exploration and development Drilling can be carried out year round.

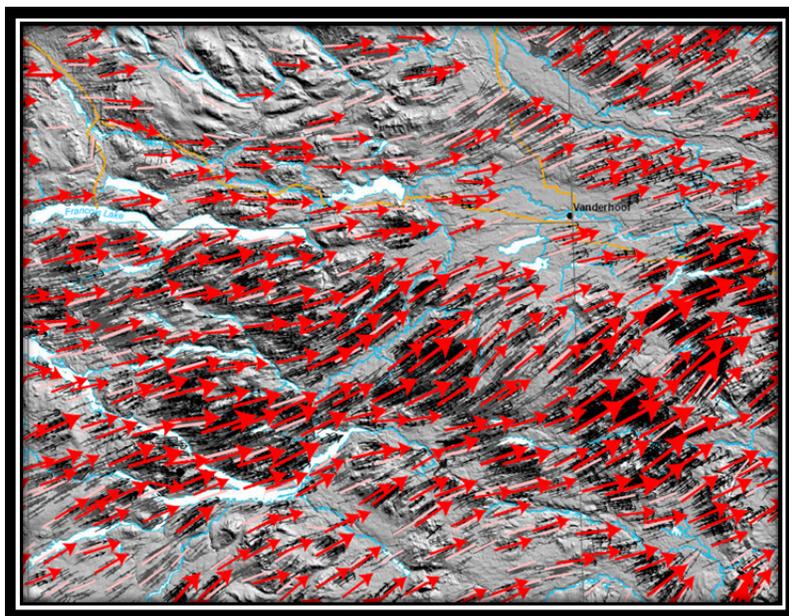


Figure 3 – Glacial Flow in Fraser Lake Region (from BCGSB)

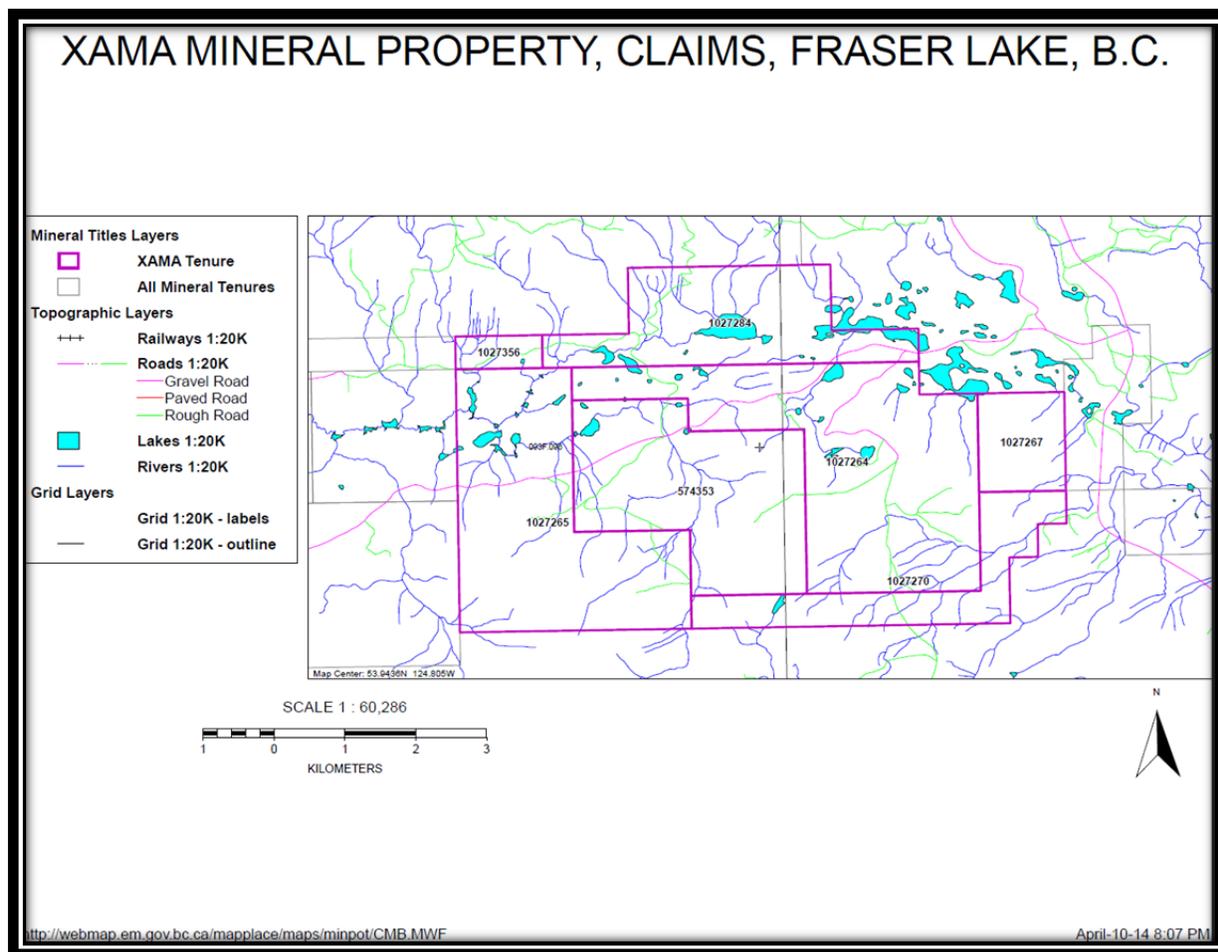


Figure 4 - Xama Property tenure map with roads (from BC MapPlace)

## TOPOGRAPHY AND VEGETATION

The topographic relief is moderate throughout the claim area, ranging from 800 m, in the valley to 1,500 m on the mountain tops. Vegetation is variable depending upon soil conditions and southerly exposure. Sparse pine and grasses are common on glacial outwash sands on south slopes. The valley bottom is marked with several "kettle" lakes and in some areas, with a near-surface water table, the deciduous vegetation is abundant. North slopes have good stands of spruce, but in some areas contain heavy windfalls. See Figure 5 showing gentle topographic relief at the Nithi and Xama properties as well as extensive clear cut logging.

## LOCAL RESOURCES AND INFRASTRUCTURE

Logging has been, and continues to be, very active in and around the Xama area as one of the world's largest sawmills is located at Lejac (Fraser Lake Sawmills, a division of West Fraser Mills Ltd.). Infrastructure in the area is primarily a well maintained network of logging roads that transect the area of the claims. The nearest major power line, major gas pipeline and major rail line are located at Fraser Lake along the Highway 16 corridor. Adjacent to the Village of Fraser Lake is an airport (1,189 meter asphalt landing strip – CBZ9) and a water aerodrome (CBJ8) at the Western end of Fraser Lake.



**Figure 5 – View South toward Xama Property from Delta Zone on Nithi Mountain (2014)**

Both Fraser Lake and Prince George are main supply centres for work on the Property. A large variety of geological contractors as well as all types of necessary heavy equipment, camp supplies, work personnel and expeditors is available for hire in both communities. Daily jet services link Prince George with Vancouver, B.C.

## **EXPLORATION HISTORY**

The first modern exploration in the vicinity of the Xama property occurred in the mid 1960's as part of the porphyry exploration boom in British Columbia and in particular in response to the discovery of the Endako ore body and its development by Placer Development Ltd. as a large world class open-pit molybdenum mine, 21 km northwest of the Property. Endako commenced commercial production in 1965. Refer to Figure 6 for a map showing Minfile occurrences in the Region.

The Owl and Bee claims (Minfile 93F 019) were staked by Anaconda American Brass Ltd. in 1967 and 1968, in what is now the Eastern portion of the Property. Soil and stream sediment surveys, including 262 mainly B soil horizon samples collected on 200 m by 130 m centres, detected poorly defined copper and molybdenum anomalies (Brown & Macrea, 1966; Hirst, 1968A). An Induced Polarization (IP) survey was conducted later in the summer (Hirst, 1968B),

with follow-up IP in 1969 (Macrea & Conto). Only weakly anomalous chargeability zones were observed.

During the same period, Amax Exploration Incorporated staked the Counts Lake property (GEL claims – Minfile 93F 020), in the Eastern portion of the Property, to cover anomalous silt and water samples over a magnetic low, with associated minor disseminated copper and molybdenum mineralization in float samples. In 1967, Amax completed 15.4 km of IP surveying over the claim group (Sutherland and Hallof, 1967) which detected weak chargeability. A 35 line km soil survey outlined a 750 m by 1,500 m area with Mo values greater than 10 ppm and bands of anomalous Cu in the 100 ppm to 650 ppm range. 2,700 m of tractor trenching was also carried out.

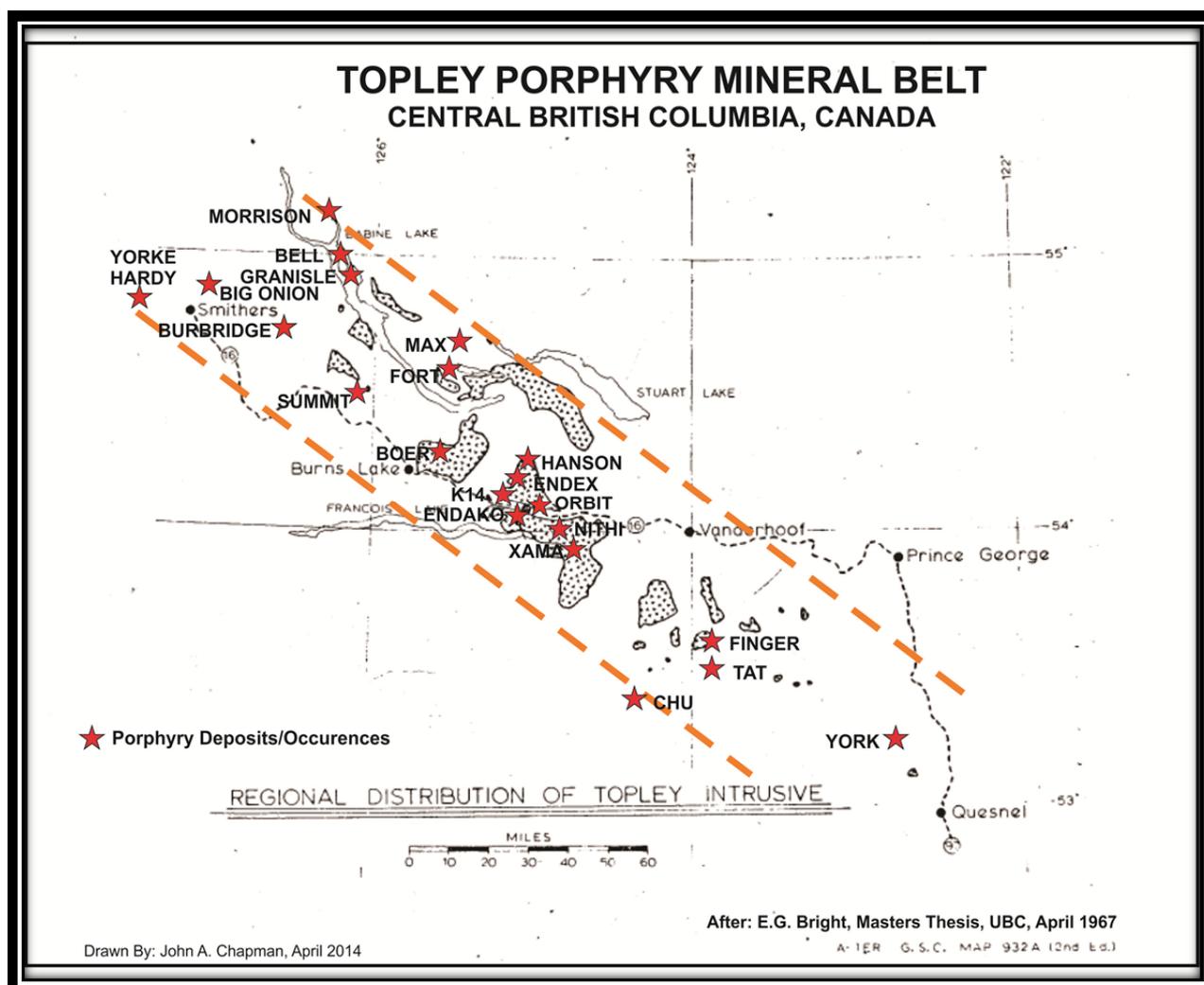
Mercury Explorations Limited acquired the Count claims in 1968, along the north side of Amax's Counts Lake property, and conducted 38.4 km of IP surveying (Chaplin, 1969). The survey detected a weak, 2,100 m by 300 m east-northeast trending chargeability anomaly. A five-hole drill program was recommended, but never undertaken.

In 1970, Taurus Exploration Corporation carried out a soil geochemical survey over the "I" claim group, in the north-central portion of the Property. Samples were taken at 61 m intervals over 39.5 km of grid. Discontinuous zones of anomalous Mo values were noted, particularly in the northwestern part of the grid.

Also in 1970, Cyprus Exploration Corporation, Ltd. acquired a very large group of mineral claims to the northeast of Xama. The scope and results of their work is not well known as there was little to no public disclosure.

#### **Special Historical Notes (Xama Team experience working at Endako Mine):**

- 1) Garry Bysouth, BSc (geologist), a 25% owner of Xama, worked at the Endako Mine from 1968 to 1977 as Mine Geologist (in addition, he supervised some regional exploration). In 1977 he was transferred by Placer Development Ltd. to Gibraltar Mine as Senior Mine Geologist and worked in that position until his retirement in 1993. Garry continues to be an important member of the Xama Team;
- 2) Gary Kurz, worked 30 years at Endako Mine as an Engineering Technologist in surveying and as drilling and blasting supervisor. He is a 25% owner of Xama and an important member of the Xama Team;
- 3) John Chapman, BSc. (Mining Engineer) worked at Endako Mine, from 1967 to 1974 as Open-Pit Supervisor, Senior Engineer and Assistant Open-Pit Superintendent. He is a 25% owner of Xama.



**Figure 6 – Historical Porphyry Deposits/Occurrences in Xama Property Region**

In the mid 1970's, due to a downturn in mineral exploration in British Columbia related to a Super Mineral Royalty adopted by the socialist government of the day, drill holes that had been recommended on the Property were never drilled. At this time most major mining companies left British Columbia.

In 1990 and 1991, Escondido Exploration Corporation acquired the Skip and Ven claims over the historical Anaconda, Amax and Mercury Explorations properties and completed a compilation of the prior exploration work (Chapman, 1991). They conducted reconnaissance prospecting, soil sampling, VLF-EM and self-potential (SP) surveys.

In 1996, G. W. Kurz acquired the Hen claim over the Amax exploration target area from 1967-68 and completed 760 m of SP surveying (Kurz, 1996). The survey defines a weakly anomalous north-northeast trending zone that might indicate weak underlying sulphide mineralization.

In 2005, Kurz acquired the Skip claim over the main Anaconda-Amax target area and, in 2006, completed a reconnaissance geochemical survey of 85 soil and silt samples and 4 rock samples (Bysouth, 2006). The survey defined two composite metal anomalies, suggesting a porphyry molybdenum target surrounded by anomalous base metal values. In 2007, an 875 m percussion drill program of 18 holes tested a portion of this anomaly that was underlain by a chargeability

anomaly that had been defined by Amax (Bysouth, 2008). The program confirmed that the IP chargeability anomaly is caused by disseminated pyrite mineralization with associated anomalous molybdenum values.

In 2010, G.W. Bysouth became a part owner in the Skip claim with Kurz. They completed a program of geological mapping and sampling carried out over the Central anomaly (Bysouth, 2011). The work defined two zones of molybdenite mineralization, with similarities to the nearby Nithi Mountain occurrence. The mapping program provided considerably greater detail regarding the geological setting and the alteration associated with the mineralized system.

In 2012, Bysouth and Kurz completed a program of additional soil and rock geochemical surveying designed to further define and characterize the main Owl and Gel anomalies.

In 2014, John A. Chapman and KGE Management Ltd. (Gerald G. Carlson, President) acquired a large block of mineral claims surrounding the Skip claim owned by Bysouth and Kurz. Subsequently, the two properties were combined as the Xama property.

In 2014 Gerald G. Carlson, Ph.D., P.Eng., completed a Regional and Property Scale Structural Analysis of the Xama property and submitted it as an Assessment Report on October 20, 2014.

## **GEOLOGICAL SETTING AND MINERALIZATION**

### **REGIONAL GEOLOGY**

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

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

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

The Endako Batholith is the key geologic feature of the area underlying much of the claim group and extending for almost 100 km in a northwestern direction, with a width of up to 40 km (see, Figure 6). It is a composite batholith that comprises five temporally distinct plutonic suites, only

one of which is mineralized. These plutonic suites include early foliated hornblende  $\pm$  biotite diorites, intermediate-age unfoliated hornblende  $\pm$  biotite diorites, and late granodiorites to monzogranites. The youngest phases host the Endako molybdenite deposit.

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

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

<u>Plutonic phase</u>	<u>Age (Ma)</u>
Late Triassic: Stern Creek plutonic suite	
Stern Creek phase	219.3 $\pm$ 0.4
Early to Middle Jurassic: Stag Lake plutonic suite	
Boer phase	181.0 $\pm$ 0.6
Stag Lake phase	162.0 $\pm$ 1.6
Taltapin phase	
McKnab phase	166–164
Sugarloaf phase	171.0 $\pm$ 1.7
Sheraton phase	
Stellako phase	
Caledonia phase	
Limit Lake phase	
Tintagel phase	
Late Jurassic: Francois Lake plutonic suite	
Glenannan subsuite	
Glenannan phase	157.2 $\pm$ 1.5
Tatin Lake subphase	
Nithi phase	~155
Leg Lake pluton	
Endako subsuite	
Endako phase	148.4 $\pm$ 1.5
Francois subphase	147.9 $\pm$ 1.5
Pre-ore dykes	147.4 $\pm$ 0.6
Casey phase	145.1 $\pm$ 0.2
Cretaceous stocks	
Hanson Lake phase	~126
Fraser Lake pluton	112.5 $\pm$ 0.31
Eocene Stock	

Sam Ross Creek phase

50.6 ± 0.2

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

The structural elements of the Nechako Plateau area are part of a regional Tertiary extensional system that extends 1,000 km from northern Washington State, into the Babine district of North-Central British Columbia. This belt crosses all major terrane boundaries and underlies the Quesnel, Kootenay and Omineca Terranes in the south and the Stikine Terrane in the north, crossing the oceanic Cache Creek Group.

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

## PROPERTY GEOLOGY

The Property, including an area extending from Endako to Nithi Mountain, is situated on the extreme southwest flank of a large batholith, formerly known as the Topley batholith and later renamed as the Francois Lake Intrusions (Carr, 1966) and now the Francois Lake Suite of the Endako Batholith (Villeneuve et al, 2001). The Property is underlain by younger phases of the batholith, from late Jurassic to early Cretaceous, in a geological setting similar to that of the nearby molybdenite deposits at Endako Mine and Nithi Mountain.

A few outcrops of Casey phase alaskite, belonging to the Endako subsuite, occur in the Southern and Central parts of the Property. Limit Lake phase quartz diorite is well exposed along the high ridge south of the claims. The contact between the two units is considered to lie along the Southeastern edge of the Property. Outcrops of Nithi phase quartz monzonite occur to the west. This contact may lie within or near the Western boundary of the Property.

**Table III. Geologic Map Units for the Xama Project Area (from BC MapPlace)**

### **Eocene to Oligocene**

EE Nechako Plateau Group, Endako Formation – andesitic volcanics

### **Eocene**

Evf undivided intrusive rocks

Efp feldspar porphyry intrusives

### **Late Cretaceous to Pliocene**

LKi Unnamed intrusives, undivided

### **Late Cretaceous**

uKK Kasalka Group – andesitic volcanics

LKCL Cabin Lake Pluton – quartz monzonite to monzogranite

LKH Holy Cross Pluton – feldspar porphyry intrusives

**Late Jurassic**

- LJF Endako Batholith, Francois Lake Suite
- LJFE Endako Subsuite - Endako Phase – granodiorite
- LJFF Endako Subsuite - Francois Subphase – granodiorite
- LJFN Francois Lake Suite - Nithi Phase – quartz monzonite to monzogranite

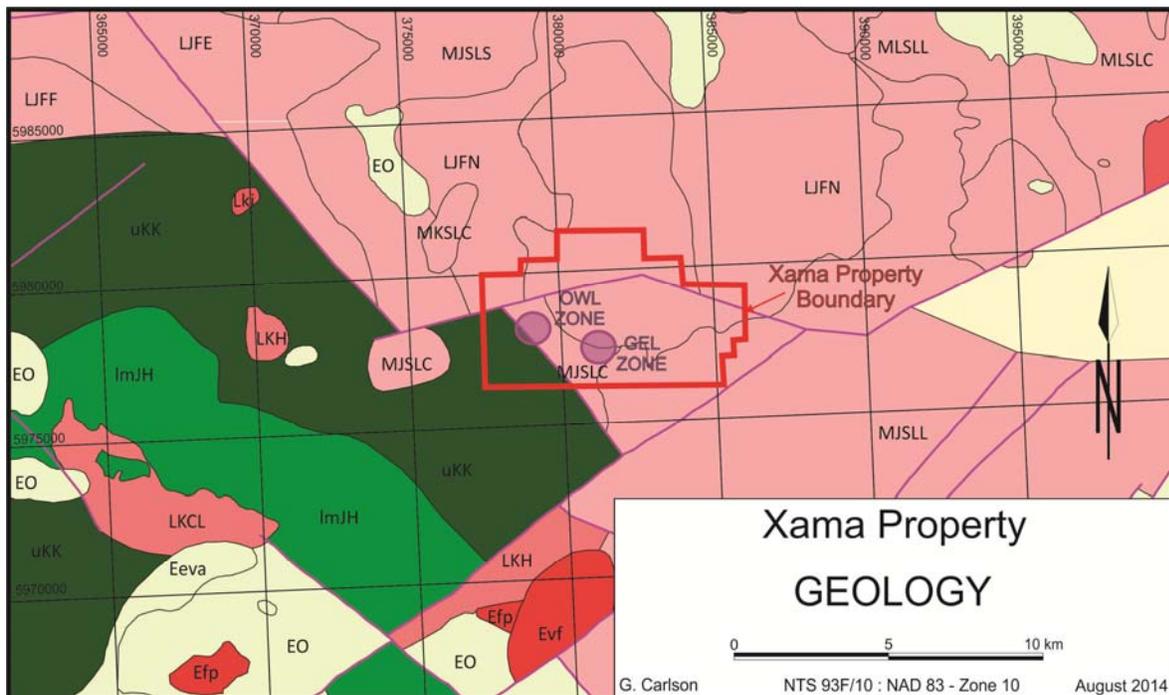
**Middle Jurassic**

- MJS Endako Batholith, Stag Lake Plutonic Suite
- MJSLS Sellako Phase – quartz diorite
- MJSLC Caledonia Phase – quartz monzonite to monzogranite
- MJSLL Limit Lake Phase – quartz diorite

**Early to Middle Jurassic**

- ImJH Hazelton Group – undivided volcanics

Bedrock geology of the Property is not well known due to minimal bedrock exposure. Four major plutonic rock groupings have been recognized. The oldest of these are dioritic rocks of the Jurassic Limit Lake phase of the Stag Lake Suite which underlies most of the high ground along the Southeast portion of the Property. Next are medium to coarse grained biotite quartz monzonites that occur in sparsely distributed rock exposures along the East and West flanks of the Property. Those to the east are correlative with the early Cretaceous Nithi quartz monzonite of the Glenannan subsuite and that classification is applied to all similar textured quartz monzonite within the Property. A younger unit includes leucocratic, fine grained granite or quartz monzonite that is correlative with the Casey quartz monzonite unit exposed at Nithi Mountain. The fourth unit is similar to Casey rocks but is pale red in colour and occurs at contacts with the older rocks and in dykes cutting the older rocks and it has a close association with hydrothermal alteration and mineralization.



**Figure 7 - Xama property area geology (from BCGS MapPlace). Faults in purple, contacts in black, see text (Table III) for lithology legend**

The oldest rocks are dark green pyroxene andesite or basalts of the Upper Triassic Takla Group. Exposures of these rocks occur in the upper valleys of Skip Creek and in road cuts west of the creek. At contacts with the granitic rocks, the andesites are variously altered by chlorite, epidote and saussurite.

The following lithology descriptions are taken from Property mapping as described in Bysouth (2011) and the reader is referred to that report for more detailed descriptions.

**Limit Lake Diorite** – This locally defined unit may be the oldest rock unit of the map area is a part of the GSC's Jurassic Limit Lake sequence (Anderson, et al 1997). These are fresh, dark rocks consisting essentially of hornblende and plagioclase in varying proportions. The unit ranges from diorite or gabbro consisting of about 65% subhedral interlocking hornblende prisms and 30% plagioclase to granitic textured quartz diorite made up of 40% hornblende in a matrix of mainly plagioclase and minor quartz, with minor pink orthoclase. The diorite is intruded in numerous places by alaskite dykes. Irregular patches of red and salmon red orthoclase alteration have been noted locally.

**Eastern Nithi Quartz Monzonite** – This is a medium to coarse grained biotite quartz monzonite similar to that mapped on Nithi Mountain (Anderson et al, 1997). A striking feature of the rock is an abundance of subhedral orthoclase crystals that reach lengths of about 15 mm. Most of the other minerals range in size from 3 mm to 9 mm.

**Western Nithi Quartz Monzonite** – On the west side of the Casey-Nithi contact, quartz monzonites and granites of varying textures and general appearance have been mapped in road excavations. To the south, the quartz monzonite appears as a medium grained (2 mm to 6 mm) grey rock with a slight pinkish tinge due to approximately equal proportions of pale gray plagioclase and pale pink orthoclase. Pink orthoclase megacrysts are also present as inconspicuous subhedral prisms up to 2.0 cm in length. About 30% quartz is also present as individual grains and segregations of grains up to 13 mm in diameter. Biotite and chloritized hornblende occur as a mafic component often exceeding 10%. To the north, within and around the Owl Zone molybdenite mineralization, the quartz monzonites are characterized by a deep pink to salmon red orthoclase feldspars and a general medium to coarse grain size. In most exposures, the rock has a bleached, crushed appearance with the plagioclase clay altered and the mafics converted to chloritic wisps. In the Owl Zone, fine grained dark green mafic rock is commonly observed. These are assumed to be large xenoliths of older rock that had been intruded by the quartz monzonite and later granitic dykes. Late stage basalt dykes also occur here but can be distinguished by an overall fresh appearance compared to the pervasive chlorite-epidote altered mafic rocks.

**Casey Quartz Monzonite** – This distinctive granitic rock has been identified within the central part of the Property where it is interpreted to form a core-like pluton intrusive to the older surrounding rock units. It has been classified as Casey quartz monzonite based on its low mafic content and total lack of hornblende. Most of the Casey rocks occur as fine grained leucocratic granites and quartz monzonites and a medium grey, slightly pinkish coloration. Textures appear aplitic in the finest grained rocks but with increased grain size, the inequigranular nature of the rock becomes more evident. Random megacrysts of grey quartz and pink orthoclase are common to the fine grained rocks but rare in the medium grained granites. The quartz megacrysts can occur as either large grains or as aggregates of smaller grains.

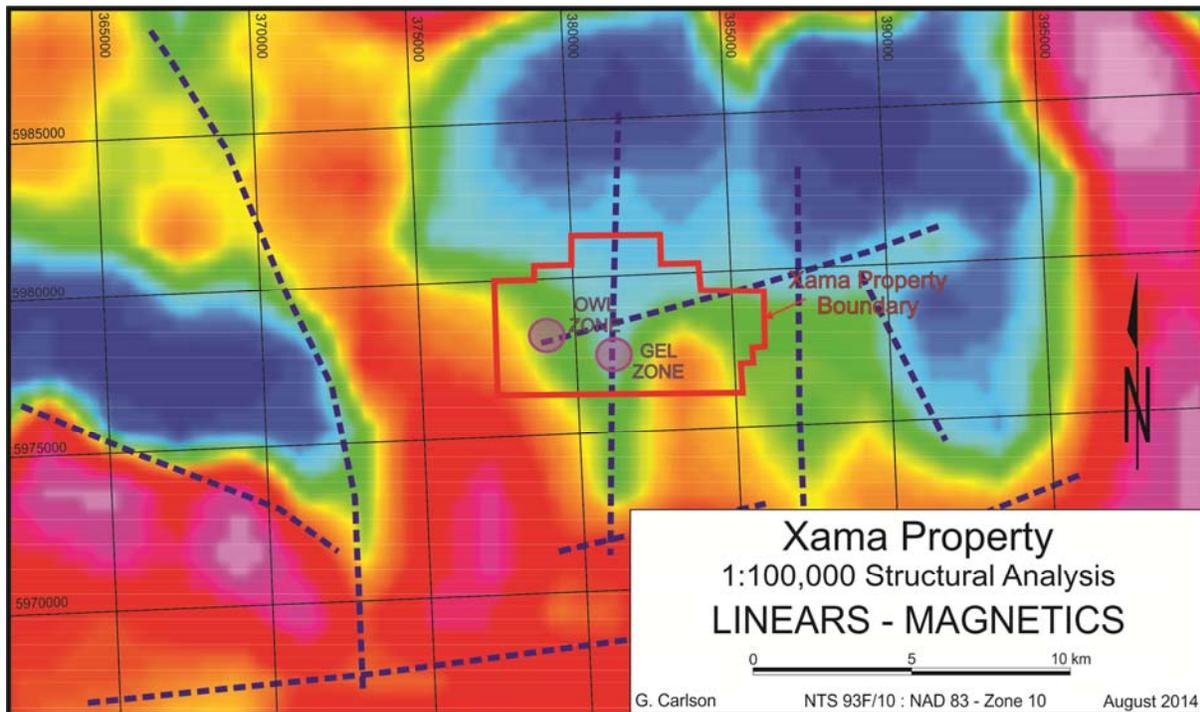
**Red Granite** - A distinctive red granitic rock occurs as dykes in the Owl Zone where it is closely associated with the molybdenite mineralization. It is considered to be related to the Casey intrusions, possibly as an earlier magmatic differentiate. In appearance, the red granite resembles Casey granite but differs from it in pale red colouration and greater mafic content

which may exceed 10% and include hornblende. It commonly contains remnants of corroded and engulfed red orthoclase megacrysts. The mafics include chloritic patches, usually with rounded outlines or, more rarely, prismatic outlines. Some relict biotite shows up as ragged black flakes but the true identity of the dark components is not evident. Overall the rock appears to consist mainly of quartz and orthoclase, with about 20% to 25% plagioclase.

**Pre-Mineral Dyke Rocks** – The pre-mineralization dyke rocks are likely of early Cretaceous age. The most important of these are the red granites associated with the Owl Zone quartz-molybdenite vein systems. Beyond the effects of hydrothermal alteration, the dykes are identical to the red granite found in road exposures in the East-Central part of the Property. Another dyke rock is a siliceous, pale grey, fine grained to aphanitic alaskite or quartz porphyry, commonly occurring in small dykes within the dioritic rock unit.

**Post-Mineral Dyke Rocks** - Felsite dykes occur within the Owl Zone and along the east side of Skip Creek Valley. The common occurrence of such small intrusions, in the very small areas of exposed rock, suggest a large number of dykes are present, probably as dyke swarms. The felsites can be readily identified by a pale grey colour, a fine grained texture and, above all, a chalk-like surface appearance. A general similarity with some Ootsa Lake Group tuffs suggest the dykes are of Eocene age. A few dykes of black basalt and grey hornblende porphyry occur with the felsite in both locations and are also considered to be of the Eocene age. None of the above dykes show any sign of sulphide mineralization or quartz veining which is consistent with a supposed post-mineralization age.

**Ootsa Lake Group** - Within the Property, these volcanic rocks are considered to form a thin cover over the older rocks. As such, they mark the present position of a pre-Eocene erosion surface. The high ground at the Southwestern corner of the map area is underlain by a sequence of grey volcanic tuffs and other pyroclastics. The rocks observed are pale grey tuffs of probable rhyolite to dacite composition.



**Figure 8 - Property scale linears based on total field magnetics (lows: possible magnetite destruction by hydrothermal activity)**

## **MINERALIZATION**

Within the Cordillera of Western North American, Endako is the oldest significant porphyry molybdenum deposit, at ~145 Ma and it is the largest mined granodiorite type molybdenum deposit (Whalen et al, 2001). Mineralization occurs in two distinct vein types, including stockwork veins and ribbon-textured veins. Three distinct alteration assemblages are recognized. The earliest includes K feldspar selvages, locally with hydrothermal biotite. Sericite alteration includes quartz-sericite-pyrite envelopes, primarily on the stockwork veins but also on the ribbon veins. Finally, late stage, low temperature kaolinite alteration is evident throughout the Endako phase granodiorite.

On the Property, two areas of molybdenite mineralization have been defined in limited surface exposures and with percussion drilling. The largest of these is the Gel Zone which lies in the Southeast part of the Property east of Skip Creek. It has been defined by a line of eight percussion drill holes. The second area lies in the Southwest quadrant west of Skip Creek and, in reference to earlier work, has been called the Owl Zone. It has been defined by three percussion holes drilled near two areas of surface quartz-molybdenite mineralization (Bysouth, 2008). Depth continuation of sulfides was confirmed in both areas.

Mineralization in road cuts at the Owl Zone consists of a quartz-molybdenite vein system in Casey quartz monzonite which has been hydrothermally altered to white kaolinite, greenish sericite and red secondary K-feldspar (Bysouth, 2008). To the north, quartz-molybdenite veins occur in Takla andesite near contacts with Casey quartz monzonite. At the Gel Zone, bleached and pyritized Casey quartz monzonite occurs associated with quartz veining, chlorite stock works and minor molybdenite in hairline fractures. Minor amounts of hematite occur in all the known showings, mainly as hairline fracture fillings without gangue.

Not reflected in the mapped geology are the north-south linears that appear to be important and potentially related to the known mineralization, as reflected mainly in the magnetics as lows (magnetite destruction due to hydrothermal fluids?) and, more regionally, Bouger gravity trends. The most important of these linears cuts directly through the Gel Zone. See Figure 8.

## **2014 XAMA TILL AND ROCK SAMPLE SURVEY**

The 2014 exploration program consisted of glacial till auger sampling (auger: 2.25 inch diameter by 92cm long) and grab sampling on rock outcrops in recently logged areas in the Central and Eastern parts of the Property. Till sampling was done on the high-bank side of roads, just above the lowest part of the ditch; thereby providing the deepest possible sample, within the glacial till profile, using the auger. No new disturbance of the land surface was created by this work. See Figures 9 and 10.

The till and rock samples were bagged, at the sample site, and delivered to Met-Solve Analytical Services Inc., in Langley, B.C for Aqua Regia leach, multi-element (51) ICP-MS analysis (at ultra-trace level).

Sixty-Eight till samples were taken in three days, along with eight grab rock samples. See Appendix A for Rock Sample Plot Spread Sheets, Statistics, Descriptions & Photographs, and Maps; Appendix B for Till Sample Plot Spread Sheets, Statistics and Maps; Appendix C for Rock and Till Sample Analysis.



Figure 9 – Auger sampling ~1km south of GEL Minfile (Gary Kurz, Jon Rempel)



Figure 10 – Kurz and Rempel auger sampling, Nithi Mountain in background (view to North)

The 2014 Till Survey results (Appendix A) indicate a possible mineralized (ore related metals) trend, along circa 1960s Mercury Explorations and Amax IP anomalies, that may be the trace of a porphyry Mo, Cu shell (see Figure 13) and AR01107 and AR02368.

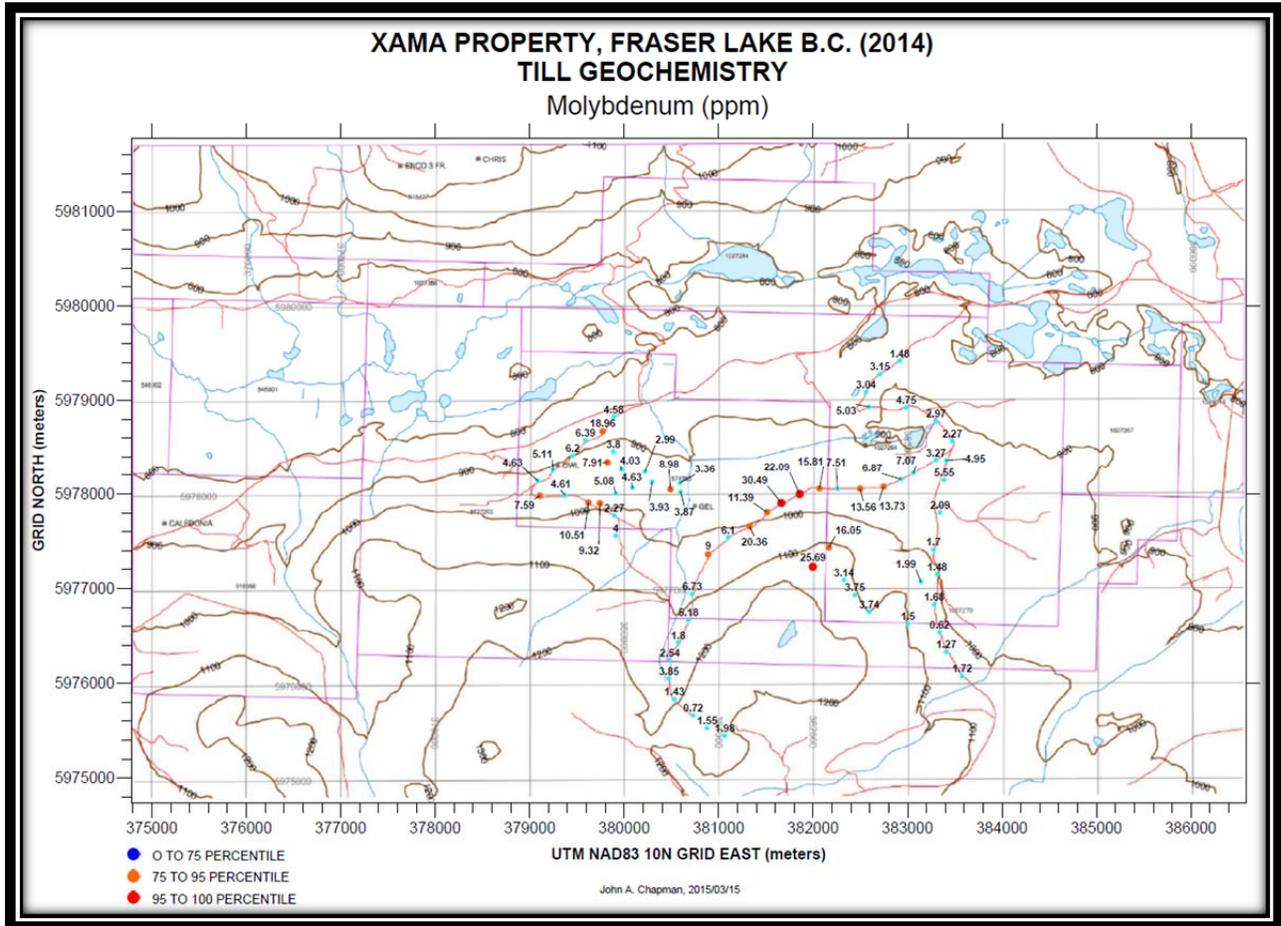
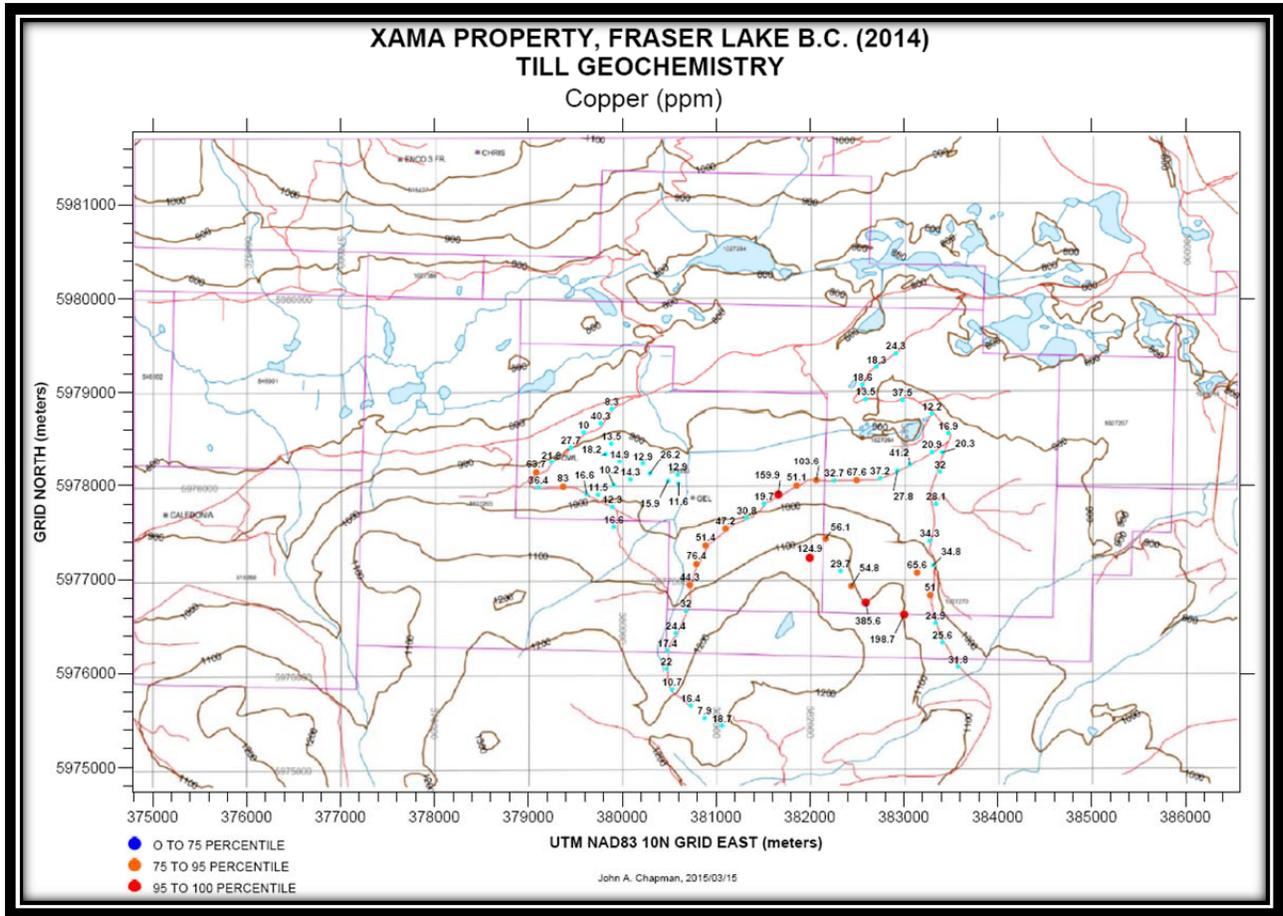


Figure 11 – Till 2014 Sampling, Mo (ppm)

The molybdenum in 2014 till samples reflects the known historical anomalous Mo in soils and percussion drill samples (Gel Zone). See, Figure 11 showing the 2014 Mo anomalies in glacial till.



**Figure 12 – Till 2014 Sampling Cu (ppm)**

The copper anomaly in 2014 till samples, supported by Fe and other metals (see, Appendix A), reflects the potential for a copper rich portion or centre within the porphyry system. See, Figure 12 showing the 2014 Cu anomalies in glacial till.

## CONCLUSIONS

The Xama property holds high potential for the discovery of a porphyry molybdenum deposit similar to Endako, 21 km to the northwest. Anomalous molybdenum values in stream sediments and soils resulted in the discovery of porphyry style molybdenum mineralization at the Gel and Owl showing areas by Amax and Anaconda in the late 1960's.

The Property lies within the Eastern edge of the Stikine Terrane, near its boundary with the Cache Creek Terrane and immediately south of the Skeena Arch. The Endako Batholith is the key geologic feature of the area, underlying much of the claim group and extending for almost 100 km in a northwestern direction, with a width of up to 40 km. It is a composite batholith that comprises five temporally distinct plutonic suites, only one of which is known to be mineralized.

The Property is underlain by plutonic rocks of the Upper Jurassic Francois Lake Suite of the Endako Batholith. A few outcrops of Casey quartz monzonite, belonging to the Endako Suite, the same suite that hosts the Endako deposit, occur in the Southern and Central parts of the Property and quartz diorite is well exposed along the high ridge south of the claims. Two areas of molybdenite mineralization have been defined on the Property. The largest of these is the Gel Zone which lies in the Southeast part of the Property east of Skip Creek. It has been defined by a line of eight percussion drill holes. The second area, the Owl Zone, lies in the Southwest quadrant west of Skip Creek. It has been defined by three percussion holes drilled near two areas of surface quartz-molybdenite mineralization. Depth continuation of molybdenite mineralization was confirmed in both areas.

The target deposit types at Xama are a porphyry Mo (Cu) deposit (Endako) with peripheral base metal zones still intact, secondarily, a bulk tonnage Au-Ag deposit (Blackwater) and thirdly an Eocene Cu-Ag-Mo porphyry deposit in a dioritic host rock with felsic dyke swarms. The three deposit types would be expected to be related to high level intrusive activity and demonstrate structural control. The key exploration target suggested by this study is defined by the known mineralization in the Owl and Gel Zones, the magnetic low embayment in the area of these showings that could be a reflection of magnetite destruction by mineralizing fluids and linears, likely structures, that are reflected in the magnetic data and may control the emplacement of intrusions and related hydrothermal activity. The 2014 glacial till survey program confirmed that multi-element till anomalies occur over much of the Central and Eastern parts of the Property. The most common anomalies are in Cu and Mo; but there are also anomalies in As, Bi, Cd, Zn, Pb, Ag, and Te. The dispersion trains of Mo and Cu are from west to east in glacial tills, down-ice from mineralized outcrops. This wide distribution of differing ore-related metals is indicative of a large mineralizing system within the Xama property. See, Figure 13 and Appendix A.

Plotting the main IP anomalies completed in the 1960s together with 2014 till anomalies (Figure 13) indicates a possible Cu and Mo "shell" around the core of a porphyry intrusion. This feature is further enhanced when viewed with RGS 2011 geochemistry layers on BC MapPlace.

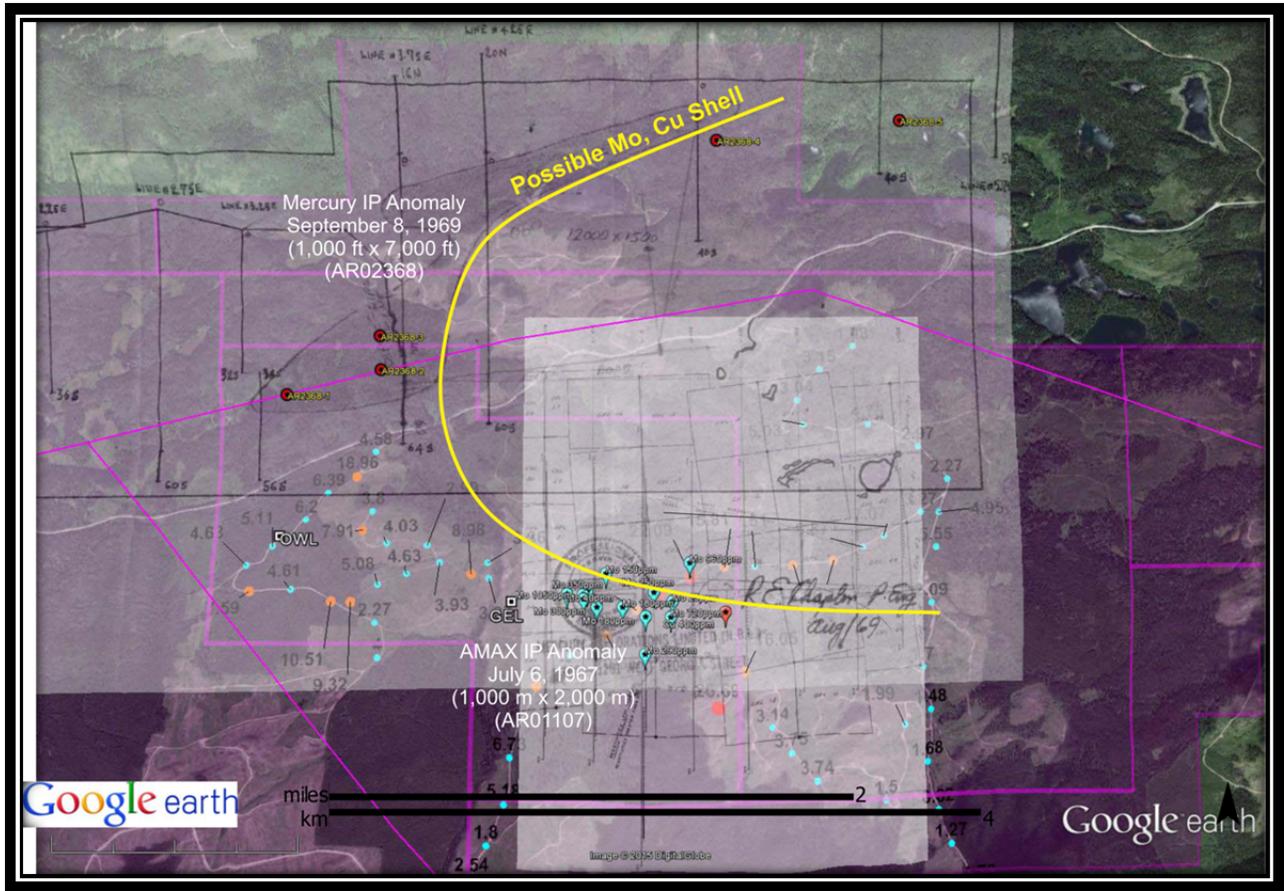


Figure 13 – Composite map showing historical IP surveys and 2014 till sampling (Mo)

## RECOMMENDATIONS

There are several drill ready targets at Xama based upon prior exploration work. Three proposed 300 m vertical NQ core holes have been spotted along road R09196MB, each 500 m apart, to test the main Amax IP anomaly within the Gel Zone. Estimated Project cost is only ~\$130,000 as each hole will be collared on the shoulder of the logging road, which is readily accessible, year round, from Highway 16 at Lejac via mainline logging roads.

The Project would also benefit from the new deep penetration Tipper EM (AFMAG) geophysics that works well in porphyry copper and molybdenum environments. This modern helicopter-borne survey, known as ZTEM is flown exclusively by Geotech Ltd. (see, <http://www.geotech.ca/ztem>). This survey would include 140 line km of ZTEM and Magnetics with lines spaced at 400 m, costing ~\$40,000.

## STATEMENT OF EXPENDITURES

**Table IV – 2014 Xama Expenditures**

XAMA PROPERTY 2014 MINERAL EXPLORATION EXPENDITURES					
		Prepared by: John A. Chapman, Date: March 25, 2015			
PERSONNEL:		DESCRIPTION	DAYS	COST/DAY	COST
Chapman, John	BSc, Mining Engineer/Manager, Surrey	July 7th; August 29th, 30th	3	\$800.00	\$2,400.00
Kurz, Gary	Prospector/Technician, Fraser Lake	July 7th; August 29th	2	\$700.00	\$1,400.00
Rempel, Jon	Prospector/Technician, Fort Fraser	August 29th, 30th	2	\$700.00	\$1,400.00
<b>OTHER:</b>					
VEHICLES (transport)	two 4x4 vehicles	2,360 km at \$0.65/km., one vehicle Vancouver to Property return			\$1,534.00
VEHICLE (auger support)	4x4 with compressor/jib./gen.	August 29th, 30th	2	\$800.00	\$1,600.00
AUGER (till sampling)	2.25 inches diameter, manual/pwr	maintenance (sharpening and extraction)	2	\$150.00	\$300.00
FIELD SUPPLIES		sample bags, ribbon, tie-wraps, etc.			\$150.00
ACCOMMODATION & MEALS	John Chapman	July 6th, July 7th, August 29th, 30th	4	\$150.00	\$600.00
SAMPLE ANALYSIS	Met-Solve Analytical Services Inc., Langley	68 till and 8 rock samples (\$26.97 per sample)			\$2,050.00
REPORT PREPARATION & PLANNING	G. Carlson, PhD.; J. Chapman, BSc.		4		\$2,700.00
			<b>TOTAL COST</b>		<b>\$14,134.00</b>

Event Number: 5543747  
 Work Filed: \$14,134.00  
 PAC Filed: \$6,049.99  
 Total Applied Work Value Filed: \$20,183.99  
 Work Recorded: February 22, 2015

## STATEMENTS OF QUALIFICATIONS

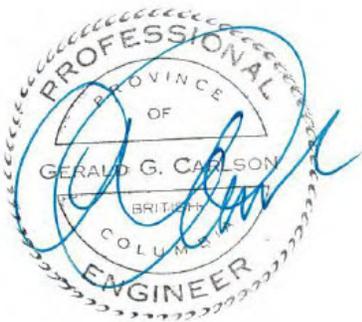
I, Gerald G. Carlson, hereby certify that:

1. I am a consulting mineral exploration geologist residing at 1740 Orchard Way, West Vancouver, B.C. V7V 4E8;
2. I am a graduate of the University of Toronto, with a degree in Geological Engineering (B.A.Sc., 1969). I attended graduate school at Michigan Technological University (M.Sc., 1974) and Dartmouth College (Ph.D., 1978). I have been involved in geological mapping, mineral exploration and the management of mineral exploration companies continuously since 1969, with the exception of time between 1972 and 1978 for graduate studies in economic geology;
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 12513 and of the Association of Professional Engineers of Yukon, Registration No. 0198;
4. I am the co-author of this report on the 2014 Till and Rock Sample Survey at Xama;
5. The report is based on a literature review, on assessment reports and on my analysis of linears related to topographical and geophysical data;
6. I am the registered owner of a 25% beneficial interest in the Xama property.

Dated at Vancouver, B.C. this 25<sup>th</sup> day of March 2015,



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



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

- (1) I am a mining engineer residing at #43 1725 Southmere Cr., Surrey, British Columbia, V4A 7A7;
- (2) I graduated with honours in Mining Technology from the British Columbia Institute of Technology, June 1967 and I graduated with honours in Mining Engineering (B.Sc.) from the Colorado School of Mines, January 1971;
- (3) I am a Fellow of the Canadian Institute of Mining and Metallurgy;
- (4) I have practised my mining profession continuously since 1971 in Canada, United States and Philippines;
- (5) Since 1983 I have provided services to the mining industry as the Principal of J.A. Chapman Mining Services;
- (6) Prior to 1983 I served five years with Manalta Coal Ltd., Canada's largest coal company, as Operations Manager then as Vice-President and General Manager. Prior to that, I served eleven years with Placer Development Limited in engineering, supervision and management at large open-pit copper and molybdenum mines;
- (7) I am the co-author of this Till and Rock Sample Survey on the Xama property, dated March 25, 2015. The report is based upon a literature review, discussions with neighboring claim owners and on Property visits during 1991 and 2014;
- (8) I am the beneficial owner of 25% interest in the Xama property;
- (9) I personally assisted in the planning for, managing and reviewing of the 2014 exploration program at the Xama property.

Dated at Surrey, British Columbia this 25th day of March 2015,



John Arthur Chapman, B.Sc., FCIM

## REFERENCES

- Anderson, R.G., L'Heureux, R., Wetherup, S., and Letwin, J.M., 1997: Geology of the Hallet Lake map area, central British Columbia. Current Research 1997-A; Geological Survey of Canada.
- Billingsley, P.R., and Locke, A., 1941, Structure of ore deposits in the continental framework: Transactions of the American Institute of Mining Engineers, v. 144, p. 9–64.
- Bright, Edward Gordon, 1967, Geology of the Topley Intrusives in the Endako area, British Columbia: M.Sc. Thesis, University of British Columbia.
- Brown, D.L. and Macrae, R., 1966, Geochemical survey of the Owl claim group. B.C. Assessment Report No. 01002; for Anaconda American Brass Ltd.
- Bysouth, G.D. and Wong, G.Y., 1995, The Endako Molybdenum Mine, Central British Columbia, in Porphyry Deposits of the Northwestern Cordillera of North America, (ed.) T.G. Schroeter; CIMM Special Volume 46, p 697-703.
- Bysouth, G.D., 1996, Self-potential geophysical survey report on the Hen claim group. B.C. Assessment Report No. 24798, for G.W. Kurz.
- Bysouth, G.D., 2006. Geochemical survey report on the Skip claim group. B.C. Assessment Report, for G.W. Kurz.
- Bysouth, G.D., 2008. Percussion drilling report on the Skip mineral property. B.C. Assessment Report 29601, for G.W. Kurz.
- Bysouth, G.D., 2011. Geological and geochemical report on the Skip property. B.C. Assessment Report 32400, for G.W. Kurz and G.D. Bysouth.
- Bysouth, G.D., 1012. Geochemical report on the Skip property. B.C. Assessment Report 33221, for G.W. Kurz and G.D. Bysouth.
- Carlson, G.G., 2014, B.C. Assessment Report, Regional and Property Scale Structural Analysis of the Xama Property for G.G. Carlson, J.A. Chapman, G.D. Bysouth and G.W. Kurz.
- Carr, J.M., 1966. Geology of the Endako area, B.C. B.C. Minister of Mines and Petroleum Resources, Annual Report 1965, p. 114-135.
- Chaplin, R.E., 1969. Geophysical assessment report, Count mineral claims. BC Assessment Report No. 02368, for Mercury Explorations Ltd.
- Chapman, John A., 1991, Mineral exploration report: Geological, geochemical, geophysical prospecting, Nithi River project. BC Assessment Report No. 21587, for Escondido Resource Corporation.
- Chapman, John A., 1991, Mineral exploration report: Geological, geochemical, geophysical prospecting, Ven #1 mineral claim. BC Assessment Report No. 22061, for Escondido Resource Corporation.

- Diakow, L.J., and Webster, I.C.L., Richards, T.A. and Tipper, H.W., 1997, Geology of the Fawnie and Nechako Ranges, southern Nechako Plateau, central British Columbia. NTS: 93F/2,3,6,7. British Columbia Dept. of Mines, Geological Survey Branch, Paper 1997-2, pp 7-30.
- Ernst, Richard E. and Jowitt, Simon M., 2013, Large igneous provinces and metallogeny: Society of Economic Geologists Special Publication 17, pp. 17-51.
- Hirst, P.E., 1968, Geochemical report on the Owl claim group. B.C. Assessment Report No. 01216, for Anaconda American Brass Ltd.
- Hirst, P.E., 1969, Geophysical report on an Induced Polarization survey, Owl claim group. B.C. Assessment Report No. 01689, for Anaconda American Brass Ltd.
- Kimura, E.T., Bysouth, G.D., and Drummond, A.D., 1976, The Endako Molybdenum Mine in Porphyry Deposits of the Canadian Cordillera, (ed.) A. Sutherland Brown, CIMM Special Volume 15, p. 444-454.
- Kutina, Jan, and Hildenbrand, T.G., 1987, Ore deposits of the Western U.S.: Geological Society of America Bulletin, v. 99, p. 30–41.
- Lane, R.A. and Schroeter, T.G., 1997, A review of metallic mineralization in the Interior Plateau, central British Columbia (Parts of 93B, C and F); in Interior Plateau Geoscience Project: Summary of Geological, Geochemical and Geophysical Studies, L.J. Diakow and J.M. Newell (ed.); British Columbia Geological Survey Branch Open File 1996-2 and Geological Survey of Canada, Open File 3448, p. 237- 256.
- Lowe, Carmel, Enkin, Randolph J., and Struik, Lambertus C., 2001, Tertiary extension in the central British Columbia Intermontane Belt: magnetic and paleomagnetic evidence from the Endako region. CJES, v. 38, p. 657-678.
- Lowell, J.D., 1974, Regional characteristics of porphyry copper deposits in the southwest: Econ. Geol., v. 69, p. 601–617.
- Macrae, R., and Conto, T.A., 1969, A geophysical report on an Induced Polarization survey, Owl claim group. B.C. Assessment Report No. 02455, for Anaconda American Brass Ltd.
- Selby, David, Nesbitt, Bruce E., Muehlenbachs, Karlis, and Prochaska, Walter, 2000, Hydrothermal alteration and fluid chemistry of the Endako porphyry molybdenum deposit, British Columbia. Econ. Geol., v. 95, p. 183-202.
- Shepard, N., and Barker, G.A., 1967, Geochemical report on the Counts Lake property. BC Assessment Report No. 1108, for Amax Exploration Inc.
- Simpson, J.G., 1970, "I" project geochemical survey. BC Assessment Report No. 02668, for Taurus Exploration Corporation.
- Sutherland, M.A., and Hallof, P.G., 1967. Report on the Induced Polarization and Resistivity survey, Counts Lake property. BC Assessment Report No. 1107, for Amax Exploration Inc.

- Villeneuve, Mike, Whalen, Joseph B., Anderson, Robert G. and Struik, Lambertus C., 2001, The Endako Batholith: Episodic plutonism culminating in formation of the Endako porphyry molybdenum deposit, North-Central British Columbia. *Econ. Geol.*, v. 96, p. 171-196.
- Whalen, Joseph B., Anderson, Robert G., Struik, Lambertus C. and Villeneuve, Michael E., 2001, Geochemistry and Nd isotopes of the Francois Lake plutonic suite, Endako Batholith: Host and progenitor to the Endako molybdenum camp, central British Columbia. *CJES*, v. 38, p. 603-618.

**APPENDIX A**

**ROCK DESCRIPTIONS,  
PHOTOGRAPHS AND MAPS**

XAMA TILL SAMPLING 2014/08/29 and 30				John Chapman
				Gary Kurz
				Jon Rempel
UTM NAD83 ZONE 10N				
SAMPLE NO.	EASTING (m)	NORTHING (m)	DEPTH (cm)	DESCRIPTION
XA1401	382592	5978930	38	light grey
XA1402	382984	5978922	51	light brown
XA1403	383299	5978777	41	light brown
XA1404	383472	5978569	28	light brown
XA1405	383299	5978367	20	light brown
XA1406	383062	5978223	56	light brown
XA1407	382931	5978157	22	light brown
XA1408	382746	5978078	43	medium brown
XA1409	382496	5978057	52	medium brown
XA1410	382258	5978053	10	grey, light brown
XA1411	382067	5978058	34	light brown
XA1412	381858	5977999	21	light brown
XA1413	381663	5977904	21	light brown
XA1414	381512	5977807	18	light brown
XA1415	381327	5977656	44	medium brown
XA1416	381100	5977541	16	light brown
XA1417	380888	5977362	10	light to medium brown
XA1418	380790	5977165	23	light to medium brown
XA1419	380719	5976942	17	grey to light brown
XA1420	380679	5976668	25	medium brown
XA1421	380571	5976430	28	light brown, clay
XA1422	380482	5976242	36	light brown
XA1423	380472	5976050	30	grey brown
XA1424	380531	5975831	10	grey brown
XA1425	380730	5975661	21	grey, clay
XA1426	380877	5975526	10	light brown, clay
XA1427	381064	5975446	49	grey brown, sandy clay
XA1428	379889	5978827	10	light brown, clay
XA1429	379771	5978672	22	light brown, clay
XA1430	379589	5978577	32	rusty brown, clay
XA1431	379453	5978413	41	light brown, clay
XA1432	379246	5978254	18	light brown, clay
XA1433	379084	5978140	53	grey, rock rubble
XA1434	379107	5977981	20	light brown
XA1435	379371	5977988	10	light brown
XA1436	379621	5977908	15	grey to light brown, clay
XA1437	379894	5977773	20	light brown
XA1438	379910	5977560	17	grey to light brown
XA1439	379744	5977902	20	grey to light brown
XA1440	379911	5978004	0	light brown
XA1441	380089	5978065	31	light brown

XA1442	380296	5978129	31	medium brown
XA1443	380489	5978050	46	light brown
XA1444	380597	5978021	22	light brown
XA1445	380591	5978117	19	grey to light brown
XA1446	380221	5978237	30	grey
XA1447	379973	5978258	19	grey to light brown
XA1448	379823	5978343	18	grey to light brown
XA1449	379884	5978457	10	medium brown
XA1450	382915	5979418	26	light brown
XA1451	382707	5979277	32	grey to light brown
XA1452	382558	5979085	15	grey to light brown
XA1453	383409	5978363	29	light brown
XA1454	383385	5978148	10	light brown
XA1455	383343	5977805	40	grey to light brown
XA1456	383274	5977412	0	light brown
XA1457	383313	5977152	0	light brown
XA1458	383280	5976834	0	light brown
XA1459	383337	5976541	0	grey to light brown
XA1460	383410	5976334	10	light brown
XA1461	383577	5976074	34	medium brown, clay
XA1462	383140	5977073	0	medium brown
XA1463	383003	5976627	0	dark brown
XA1464	382593	5976756	0	dark brown
XA1465	382440	5976931	0	medium brown
XA1466	382326	5977091	0	light brown
XA1467	382167	5977435	0	grey
XA1468	381997	5977231	0	light brown
<b>XAMA ROCK SAMPLES 2014/08/29</b>				
XR1401	381663	5977904	na	outcrop
XR1402	379371	5977988	na	outcrop, visible Mo
XR1403	382801	5976831	na	outcrop
XR1404	382339	5977352	na	outcrop
XR1405	382339	5977352	na	float @ 35d azimuth, 100m
XR1406	382090	5977360	na	outcrop
XR1407	382070	5977231	na	outcrop
XR1408	382110	5977319	na	outcrop

XAMA PROPERTY ROCK SAMPLES 2014 - PLOT FILE													John A. Chapman, 2015/03/20	
	Type	EAST	NORTH	Ag	As	Bi	Cd	Cu	Fe	Mo	Pb	Te	Zn	
XR1401	Rock	381663	5977904	0.18	9.3	0.13	0.02	49.0	1.26	28.47	1.8	0.11	6	
XR1402	Rock	379371	5977988	2.45	3.0	23.36	0.17	85.5	4.25	147.69	47.7	0.18	94	
XR1403	Rock	382801	5976831	0.12	1.5	0.12	0.02	37.0	6.67	2.79	1.0	0.03	35	
XR1404	Rock	382339	5977352	0.17	7.0	0.34	0.02	31.6	3.20	20.61	2.6	0.17	28	
XR1405	Rock	382339	5977352	1.66	1.5	0.12	0.15	536.7	5.58	78.20	2.2	0.04	70	
XR1406	Rock	382090	5977360	0.16	2.2	0.09	0.03	87.5	5.82	3.58	0.7	0.02	39	
XR1407	Rock	382070	5977231	0.16	2.0	0.12	0.02	64.7	5.58	8.42	3.7	0.08	50	
XR1408	Rock	382110	5977319	0.02	0.8	0.03	0.01	9.5	0.46	3.26	0.7	0.01	4	
				ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
				Ag	As	Bi	Cd	Cu	Fe	Mo	Pb	Te	Zn	
			number of values	68	68	68	68	68	68	68	68	68	68	
			maximum	2.45	9.30	0.13	0.02	49.00	1.26	28.47	1.80	0.11	6.00	
			minimum	0.02	0.80	0.03	0.01	9.50	0.46	3.26	0.70	0.01	4.00	
			mean	0.62	3.41	3.04	0.06	112.69	4.10	36.63	7.55	0.08	40.75	
			median	0.17	2.10	0.12	0.02	56.85	4.92	14.52	2.00	0.06	37.00	
			standard deviation	0.86	2.86	7.68	0.06	162.20	2.12	48.13	15.21	0.06	28.58	
			skewness	1.65	1.43	2.83	1.44	2.69	-0.71	1.82	2.81	0.63	0.55	
			kurtosis	1.40	0.80	8.00	0.15	7.44	-0.98	2.91	7.90	-1.33	-0.14	
			geometric mean	0.23	2.50	0.22	0.03	58.72	3.14	14.41	2.34	0.05	27.22	
			25 percentile	0.15	1.50	0.11	0.02	35.65	2.72	3.50	0.93	0.03	22.50	
			50 percentile	0.17	2.10	0.12	0.02	56.85	4.92	14.52	2.00	0.06	37.00	
			<b>75 percentile</b>	<b>0.55</b>	<b>4.00</b>	<b>0.18</b>	<b>0.06</b>	<b>86.00</b>	<b>5.64</b>	<b>40.90</b>	<b>2.88</b>	<b>0.13</b>	<b>55.00</b>	
			90 percentile	1.90	7.69	7.25	0.16	222.26	6.08	99.05	16.90	0.17	77.20	
			<b>95 percentile</b>	<b>2.17</b>	<b>8.50</b>	<b>15.30</b>	<b>0.16</b>	<b>379.48</b>	<b>6.37</b>	<b>123.37</b>	<b>32.30</b>	<b>0.18</b>	<b>85.60</b>	
			98 percentile	2.34	8.98	20.14	0.17	473.81	6.55	137.96	41.54	0.18	90.64	
			<b>100 percentile</b>	<b>2.45</b>	<b>9.30</b>	<b>23.36</b>	<b>0.17</b>	<b>536.70</b>	<b>6.67</b>	<b>147.69</b>	<b>47.70</b>	<b>0.18</b>	<b>94.00</b>	
			mean + 1 x StDev	1.47	6.27	10.72	0.12	274.89	6.23	84.76	22.76	0.14	69.33	
			mean + 2 x StDev	2.33	9.13	18.40	0.18	437.09	8.35	132.89	37.96	0.21	97.91	

**Note: The small sample population here (eight) does not produce very meaningful statistics**



Granite, with minor disseminated pyrite



Diorite, containing epidote and minor sulfides (pyrite, molybdenite?)



Diorite, containing epidote and disseminated sulfides (mainly pyrite)



Diorite, silicified with minor sulfides (pyrite, molybdenite? and chalcopyrite?)



Diorite, with minor sulfides (pyrite?)



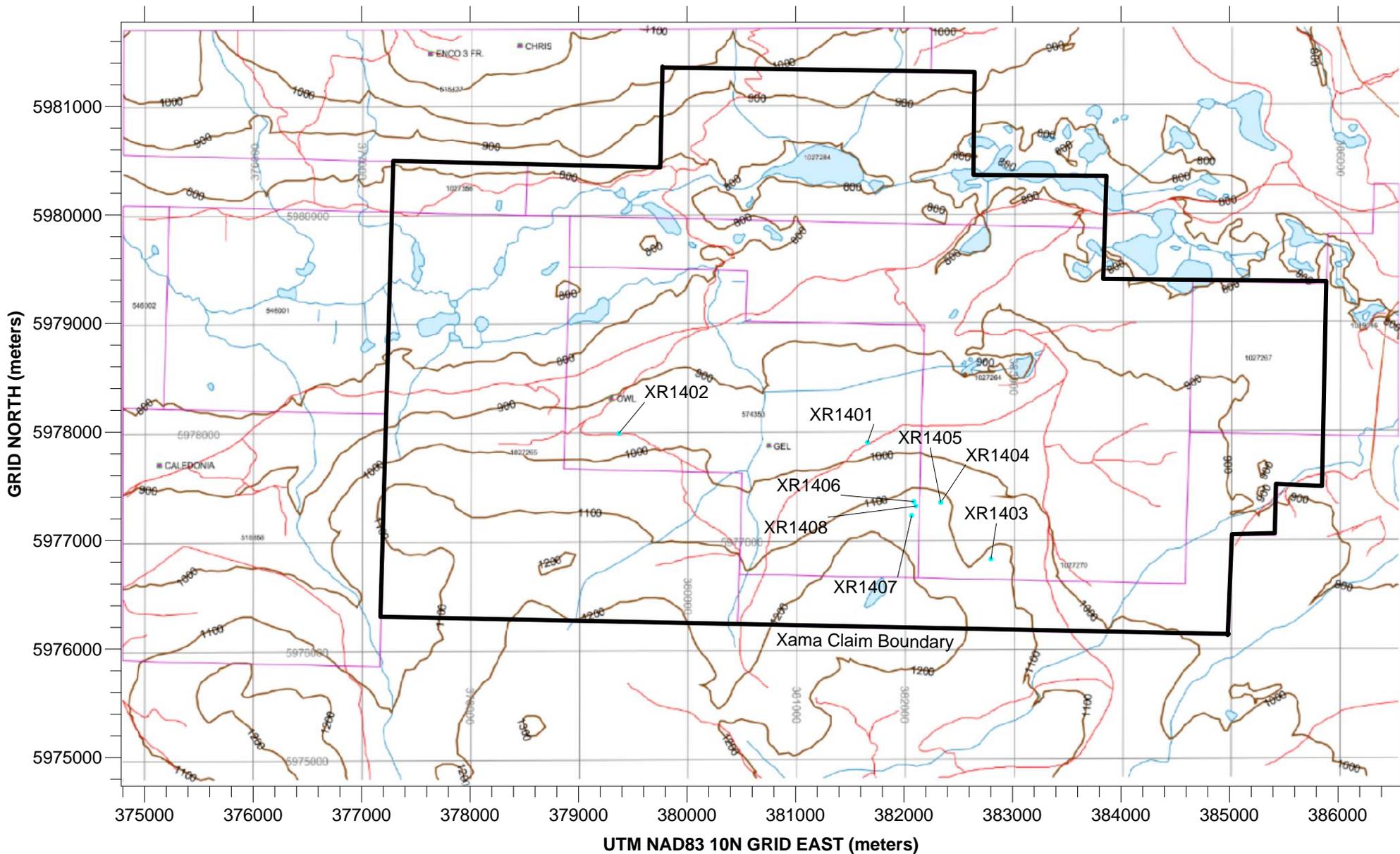
Diorite with disseminated and fracture filling pyrite



Alaskite, may be an end product of granitic fractional crystallization

# XAMA PROPERTY, FRASER LAKE B.C. (2014) ROCK GEOCHEMISTRY

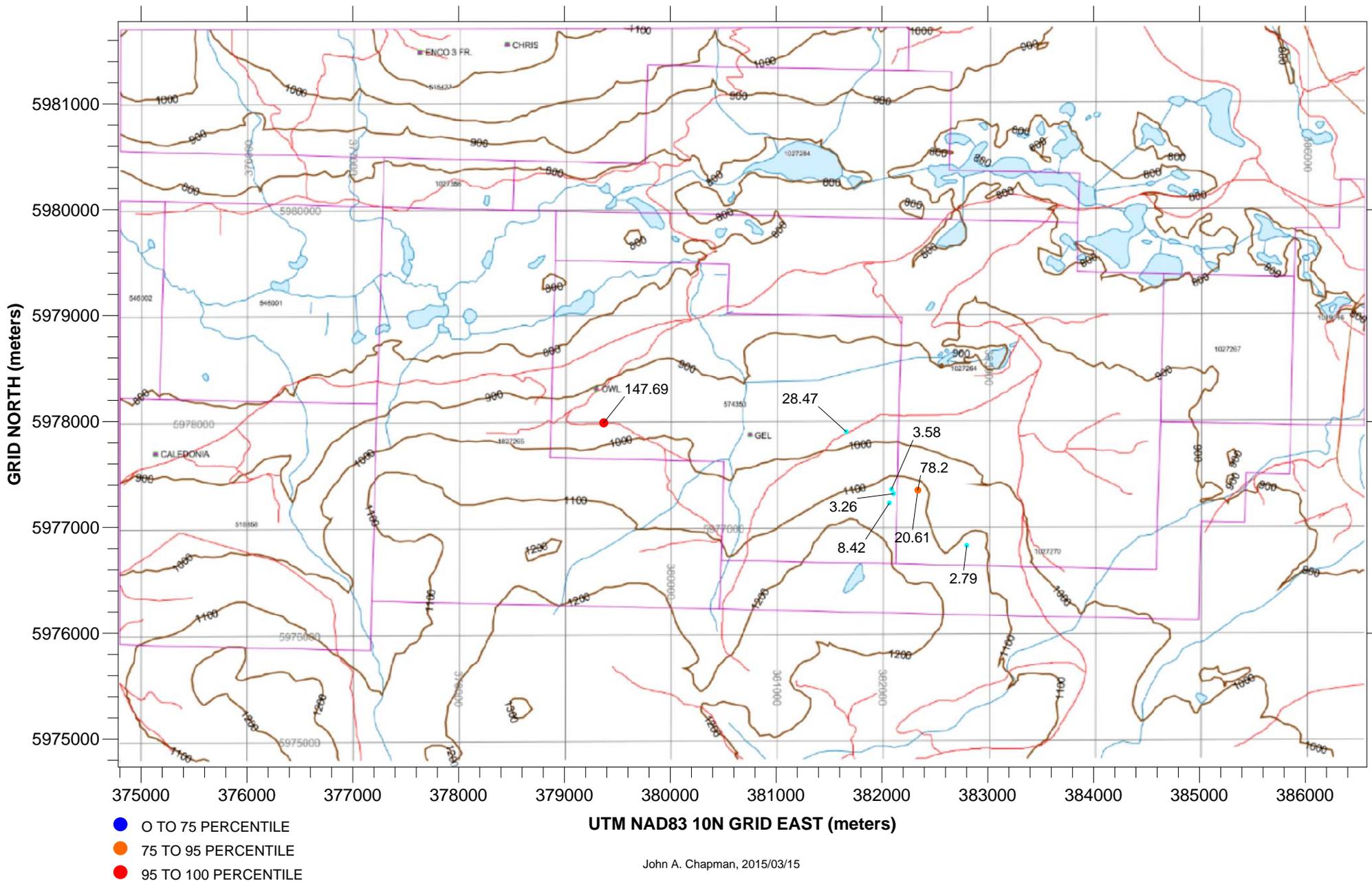
## Rock Sample Locations Showing Xama Mineral Claims



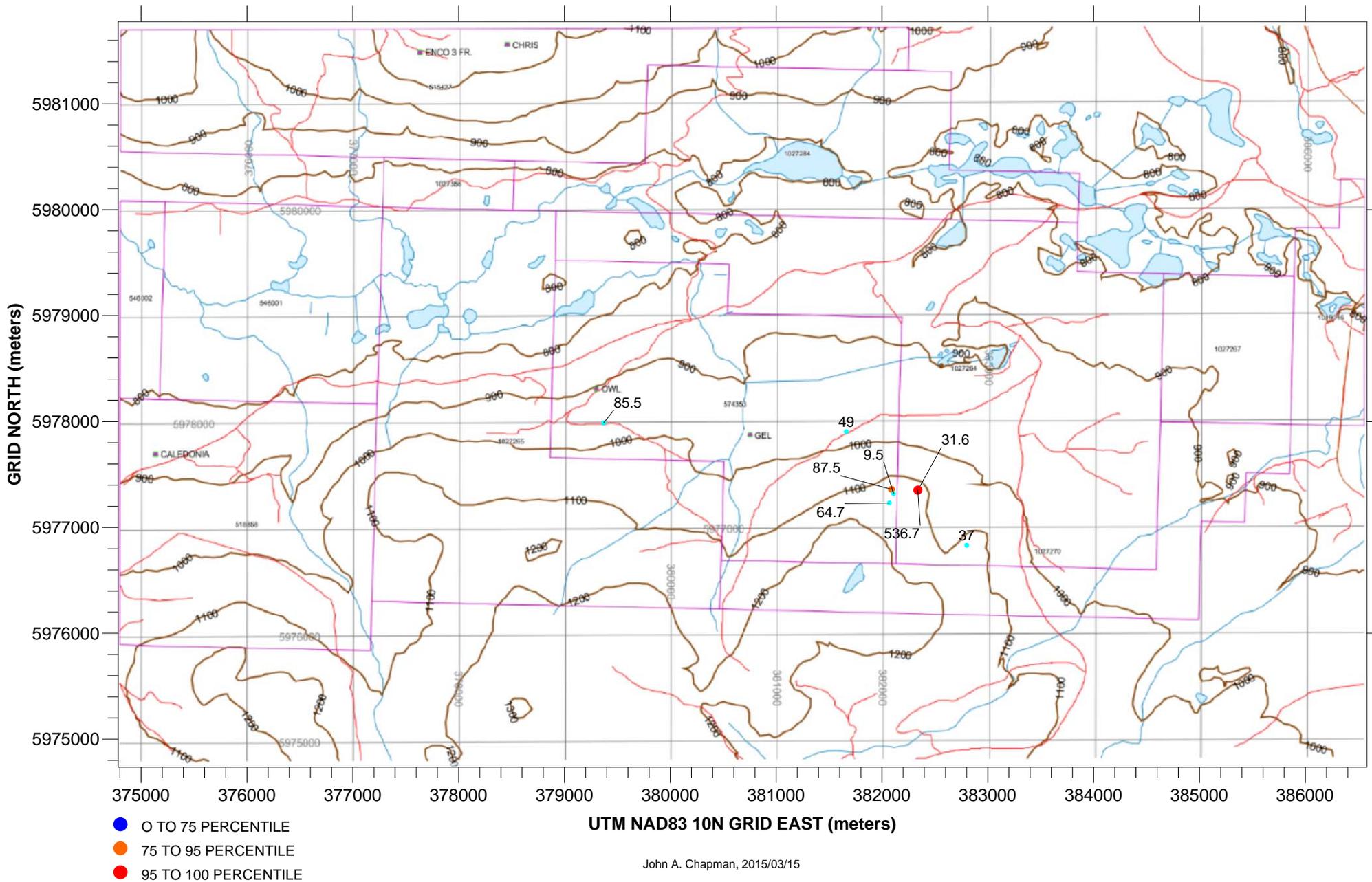
# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## ROCK GEOCHEMISTRY

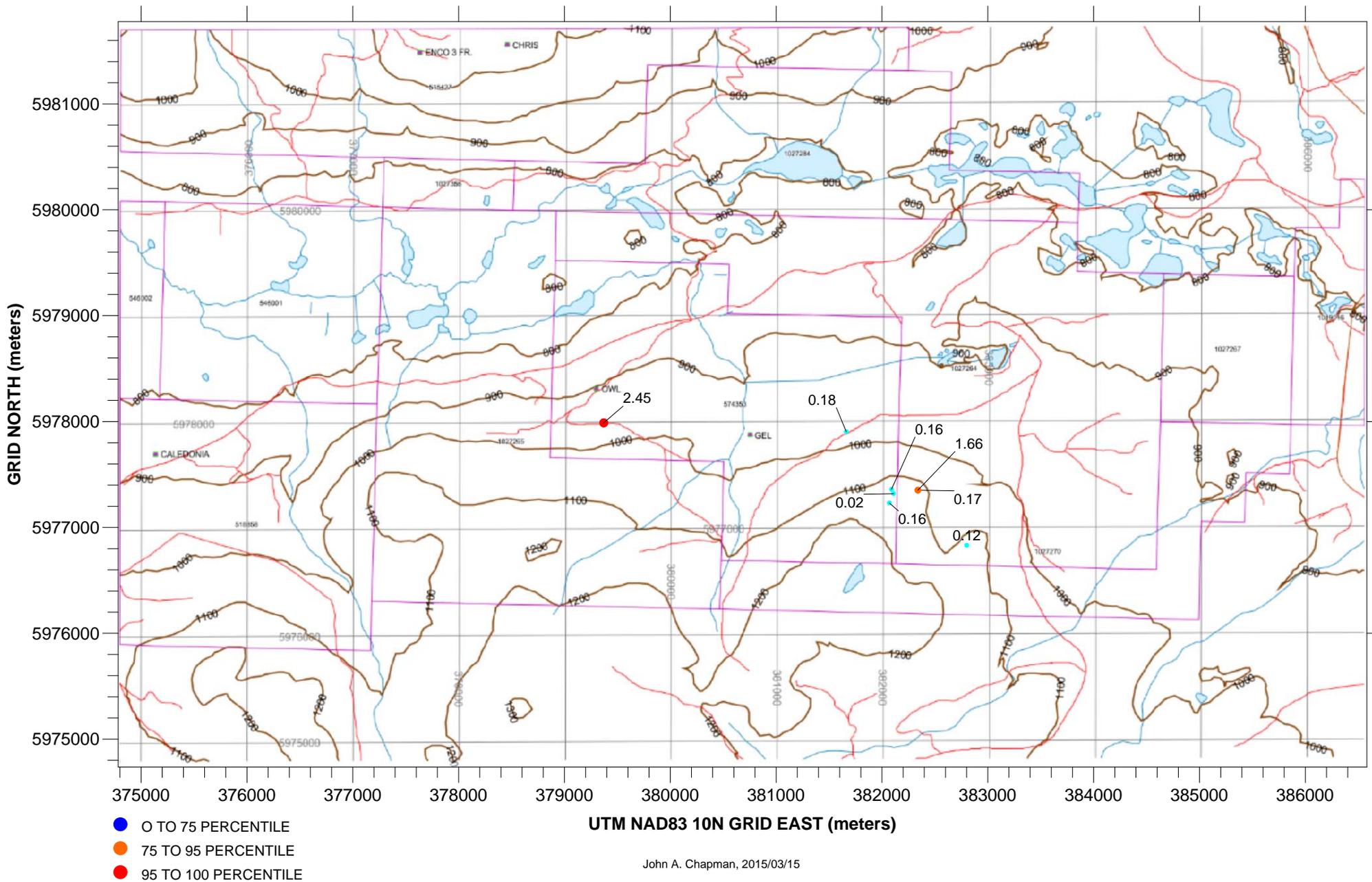
### Molybdenum (ppm)



# XAMA PROPERTY, FRASER LAKE B.C. (2014) ROCK GEOCHEMISTRY Copper (ppm)



# XAMA PROPERTY, FRASER LAKE B.C. (2014) ROCK GEOCHEMISTRY Silver (ppm)



**APPENDIX B**  
**TILL 2014 SURVEY MAPS**  
**&**  
**REFERENCE SPREAD SHEET PLOT**  
**FILES**

XAMA TILL SAMPLING 2014/08/29 and 30				John Chapman
				Gary Kurz
				Jon Rempel
UTM NAD83 ZONE 10N				
SAMPLE NO.	EASTING (m)	NORTHING (m)	DEPTH (cm)	DESCRIPTION
XA1401	382592	5978930	38	light grey
XA1402	382984	5978922	51	light brown
XA1403	383299	5978777	41	light brown
XA1404	383472	5978569	28	light brown
XA1405	383299	5978367	20	light brown
XA1406	383062	5978223	56	light brown
XA1407	382931	5978157	22	light brown
XA1408	382746	5978078	43	medium brown
XA1409	382496	5978057	52	medium brown
XA1410	382258	5978053	10	grey, light brown
XA1411	382067	5978058	34	light brown
XA1412	381858	5977999	21	light brown
XA1413	381663	5977904	21	light brown
XA1414	381512	5977807	18	light brown
XA1415	381327	5977656	44	medium brown
XA1416	381100	5977541	16	light brown
XA1417	380888	5977362	10	light to medium brown
XA1418	380790	5977165	23	light to medium brown
XA1419	380719	5976942	17	grey to light brown
XA1420	380679	5976668	25	medium brown
XA1421	380571	5976430	28	light brown, clay
XA1422	380482	5976242	36	light brown
XA1423	380472	5976050	30	grey brown
XA1424	380531	5975831	10	grey brown
XA1425	380730	5975661	21	grey, clay
XA1426	380877	5975526	10	light brown, clay
XA1427	381064	5975446	49	grey brown, sandy clay
XA1428	379889	5978827	10	light brown, clay
XA1429	379771	5978672	22	light brown, clay
XA1430	379589	5978577	32	rusty brown, clay
XA1431	379453	5978413	41	light brown, clay
XA1432	379246	5978254	18	light brown, clay
XA1433	379084	5978140	53	grey, rock rubble
XA1434	379107	5977981	20	light brown
XA1435	379371	5977988	10	light brown
XA1436	379621	5977908	15	grey to light brown, clay
XA1437	379894	5977773	20	light brown
XA1438	379910	5977560	17	grey to light brown
XA1439	379744	5977902	20	grey to light brown
XA1440	379911	5978004	0	light brown
XA1441	380089	5978065	31	light brown

XA1442	380296	5978129	31	medium brown
XA1443	380489	5978050	46	light brown
XA1444	380597	5978021	22	light brown
XA1445	380591	5978117	19	grey to light brown
XA1446	380221	5978237	30	grey
XA1447	379973	5978258	19	grey to light brown
XA1448	379823	5978343	18	grey to light brown
XA1449	379884	5978457	10	medium brown
XA1450	382915	5979418	26	light brown
XA1451	382707	5979277	32	grey to light brown
XA1452	382558	5979085	15	grey to light brown
XA1453	383409	5978363	29	light brown
XA1454	383385	5978148	10	light brown
XA1455	383343	5977805	40	grey to light brown
XA1456	383274	5977412	0	light brown
XA1457	383313	5977152	0	light brown
XA1458	383280	5976834	0	light brown
XA1459	383337	5976541	0	grey to light brown
XA1460	383410	5976334	10	light brown
XA1461	383577	5976074	34	medium brown, clay
XA1462	383140	5977073	0	medium brown
XA1463	383003	5976627	0	dark brown
XA1464	382593	5976756	0	dark brown
XA1465	382440	5976931	0	medium brown
XA1466	382326	5977091	0	light brown
XA1467	382167	5977435	0	grey
XA1468	381997	5977231	0	light brown
<b>XAMA ROCK SAMPLES 2014/08/29</b>				
XR1401	381663	5977904	na	outcrop
XR1402	379371	5977988	na	outcrop, visible Mo
XR1403	382801	5976831	na	outcrop
XR1404	382339	5977352	na	outcrop
XR1405	382339	5977352	na	float @ 35d azimuth, 100m
XR1406	382090	5977360	na	outcrop
XR1407	382070	5977231	na	outcrop
XR1408	382110	5977319	na	outcrop

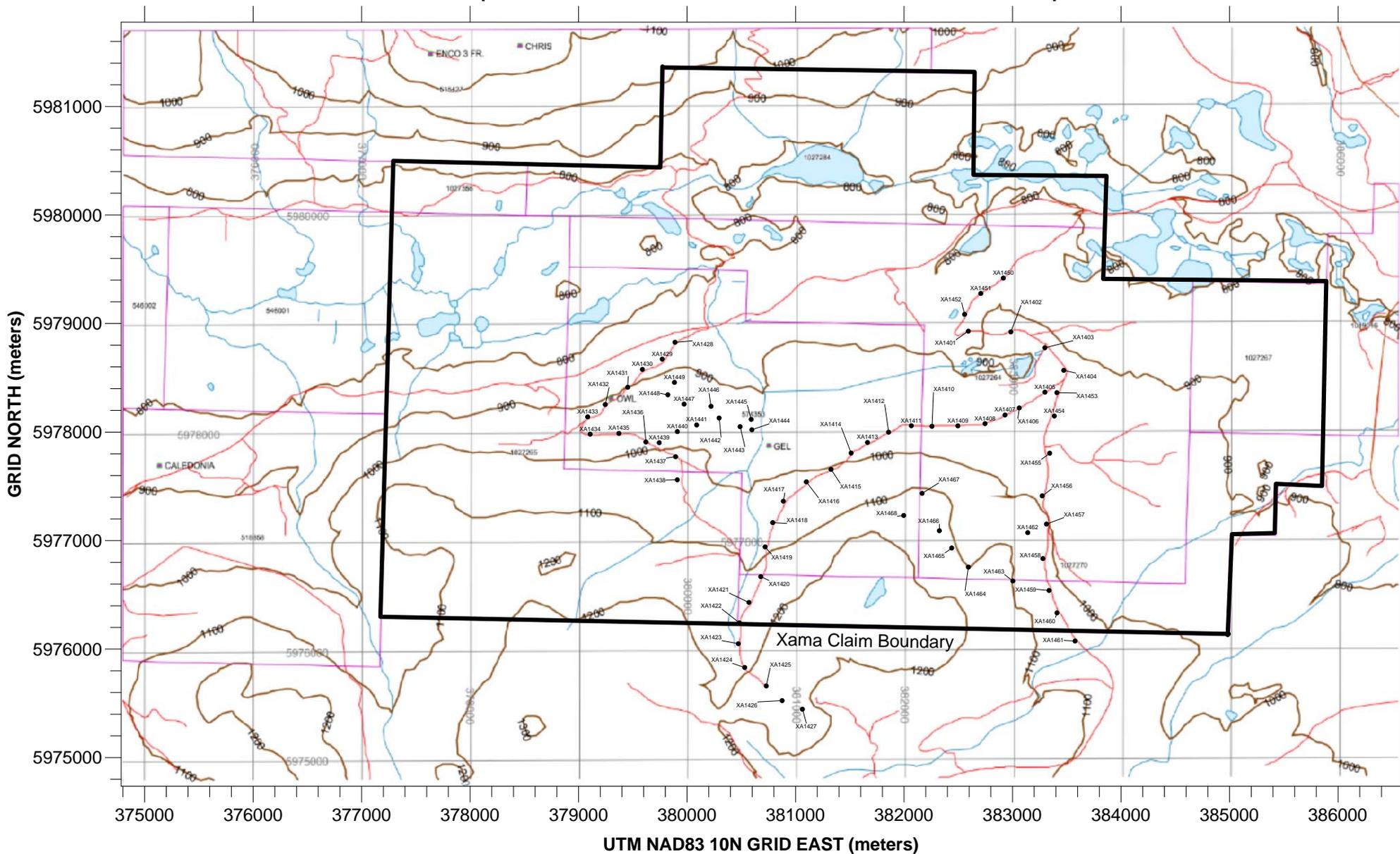
XAMA TILL AUGER SAMPLING 2014 - PLOT FILE															John A. Chapman, 2015/03/20			
		kg			ppm	ppm	ppm	ppm		ppm	%	ppm	ppm	ppm	ppm			
Type	Rec. Wt.	East	North	Ag	As	Bi	Cd	Co	Cu	Fe	Mo	Pb	Te	Zn				
XA1401	Auger	0.62	382592	5978930	0.11	4.4	0.20	0.07	5.9	13.50	2.47	5.03	14.7	0.03	64			
XA1402	Auger	0.35	382984	5978922	0.10	6.9	0.19	0.08	7.8	37.50	3.02	4.75	15.8	0.04	64			
XA1403	Auger	0.54	383299	5978777	0.09	3.1	0.20	0.07	5.4	12.20	2.08	2.97	13.7	0.03	53			
XA1404	Auger	0.48	383472	5978569	0.06	1.9	0.19	0.07	5.4	16.90	1.77	2.27	16.6	0.03	46			
XA1405	Auger	0.59	383299	5978367	0.09	1.2	0.16	0.14	5.8	20.90	1.51	3.27	13.5	0.04	46			
XA1406	Auger	0.56	383062	5978223	0.05	2.1	0.21	0.08	9.1	41.20	2.70	7.07	18.7	0.05	64			
XA1407	Auger	0.60	382931	5978157	0.06	1.7	0.31	0.09	7.0	27.80	1.99	6.87	19.2	0.05	52			
XA1408	Auger	0.71	382746	5978078	0.14	2.5	0.29	0.22	8.7	37.20	2.22	13.73	30.1	0.06	80			
XA1409	Auger	0.71	382496	5978057	0.14	1.8	0.35	0.34	9.5	67.60	2.38	13.56	40.8	0.08	83			
XA1410	Auger	0.66	382258	5978053	0.06	1.7	0.44	0.21	6.3	32.70	1.96	7.51	38.7	0.07	66			
XA1411	Auger	0.67	382067	5978058	0.25	1.5	0.38	1.78	8.4	103.60	2.17	15.81	45.3	0.11	324			
XA1412	Auger	0.66	381858	5977999	0.30	2.0	0.79	0.39	8.7	51.10	2.62	22.09	53.4	0.12	181			
XA1413	Auger	0.72	381663	5977904	0.23	1.8	1.15	0.68	10.6	159.90	2.88	30.49	184.2	0.19	267			
XA1414	Auger	0.81	381512	5977807	0.10	1.9	0.50	0.18	7.3	19.70	2.27	11.39	30.6	0.13	95			
XA1415	Auger	0.53	381327	5977656	0.16	1.1	0.66	0.13	6.0	30.80	1.81	20.36	24.4	0.07	50			
XA1416	Auger	0.82	381100	5977541	0.16	1.3	0.64	0.17	7.2	47.20	2.41	6.10	24.7	0.05	68			
XA1417	Auger	0.78	380888	5977362	0.26	1.8	3.39	0.15	6.2	51.40	2.40	9.00	46.1	0.15	59			
XA1418	Auger	0.74	380790	5977165	0.21	2.9	4.52	0.47	9.7	76.40	3.24	33.61	79.1	0.19	104			
XA1419	Auger	0.44	380719	5976942	0.28	2.4	0.62	0.29	8.4	44.30	2.43	6.73	27.8	0.05	66			
XA1420	Auger	0.47	380679	5976668	0.19	2.3	0.42	0.29	7.8	32.00	2.45	5.18	24.1	0.04	54			
XA1421	Auger	0.43	380571	5976430	0.05	3.1	0.28	0.13	7.1	24.40	2.56	1.80	29.7	0.05	70			
XA1422	Auger	0.52	380482	5976242	0.11	1.8	0.24	0.27	7.3	17.40	2.15	2.54	22.9	0.04	58			
XA1423	Auger	0.65	380472	5976050	0.21	2.8	0.21	0.19	7.8	22.00	2.55	3.85	22.3	0.04	66			
XA1424	Auger	0.71	380531	5975831	0.07	2.1	0.12	0.09	6.7	10.70	1.89	1.43	12.6	0.03	42			
XA1425	Auger	0.67	380730	5975661	0.05	3.0	0.12	0.06	7.5	16.40	2.51	0.72	14.1	0.03	48			
XA1426	Auger	0.54	380877	5975526	0.04	1.9	0.11	0.05	5.0	7.90	1.73	1.55	10.6	0.02	34			
XA1427	Auger	0.59	381064	5975446	0.13	2.7	0.14	0.10	8.1	18.70	2.44	1.98	11.7	0.03	45			
XA1428	Auger	0.73	379889	5978827	0.07	5.6	0.18	0.07	6.2	8.30	3.09	4.58	7.9	0.04	59			
XA1429	Auger	0.51	379771	5978672	0.17	4.4	0.28	0.10	6.6	40.30	2.45	18.96	25.3	0.04	80			
XA1430	Auger	0.63	379589	5978577	0.34	3.4	0.30	0.47	5.9	10.00	2.42	6.39	13.5	0.03	184			
XA1431	Auger	0.58	379453	5978413	0.08	1.6	0.32	0.11	5.8	27.70	1.81	6.20	37.8	0.05	51			
XA1432	Auger	0.70	379246	5978254	0.11	2.0	0.39	0.11	4.6	21.90	1.83	5.11	28.2	0.06	47			
XA1433	Auger	0.76	379084	5978140	0.56	1.2	0.55	0.10	3.8	63.70	1.45	4.63	62.6	0.09	43			
XA1434	Auger	0.78	379107	5977981	0.42	2.8	0.99	0.34	5.2	36.40	2.33	7.59	74.7	0.22	121			
XA1435	Auger	0.86	379371	5977988	0.06	1.8	1.07	1.02	5.0	83.00	1.91	4.61	69.6	0.20	178			
XA1436	Auger	0.67	379621	5977908	0.21	1.7	0.94	1.15	9.1	16.60	2.55	10.51	95.8	0.18	269			
XA1437	Auger	0.50	379894	5977773	0.10	1.1	0.61	0.14	4.9	12.30	1.26	2.27	45.2	0.10	79			
XA1438	Auger	0.58	379910	5977560	0.16	1.5	0.49	0.11	4.9	16.60	1.57	4.00	33.8	0.08	67			
XA1439	Auger	0.78	379744	5977902	0.23	1.6	0.50	0.45	4.3	11.50	1.92	9.32	53.0	0.14	180			
XA1440	Auger	0.63	379911	5978004	0.21	1.3	0.59	0.30	5.1	10.20	2.00	5.08	23.5	0.08	138			
XA1441	Auger	0.58	380089	5978065	0.14	1.2	0.70	0.22	6.5	14.30	2.02	4.63	33.5	0.15	119			
XA1442	Auger	0.59	380296	5978129	0.23	1.2	0.51	0.19	4.7	26.20	1.92	3.93	27.5	0.08	136			
XA1443	Auger	0.56	380489	5978050	0.21	1.1	0.39	0.18	5.0	15.90	1.65	8.98	20.9	0.04	87			
XA1444	Auger	0.75	380597	5978021	0.23	1.6	0.52	0.18	4.1	11.60	1.90	3.87	19.6	0.09	128			
XA1445	Auger	0.75	380591	5978117	0.06	1.3	0.38	0.09	4.8	12.90	1.74	3.36	16.8	0.04	77			
XA1446	Auger	0.58	380221	5978237	0.34	1.0	0.60	0.11	3.1	12.90	1.32	2.99	16.0	0.06	72			
XA1447	Auger	0.79	379973	5978258	0.10	1.1	0.51	0.11	3.9	14.90	1.59	4.03	26.0	0.08	63			
XA1448	Auger	0.58	379823	5978343	0.23	1.9	0.30	0.14	5.7	18.20	2.13	7.91	21.2	0.04	96			
XA1449	Auger	0.63	379884	5978457	0.53	1.7	0.23	0.26	5.2	13.50	2.37	3.80	23.7	0.01	190			
XA1450	Auger	0.25	382915	5979418	0.05	5.1	0.15	0.08	7.1	24.30	2.76	1.48	8.4	0.02	56			
XA1451	Auger	0.37	382707	5979277	0.03	4.9	0.15	0.06	6.1	18.30	2.73	3.15	10.2	0.02	54			
XA1452	Auger	0.32	382558	5979085	0.04	4.6	0.18	0.07	6.8	18.60	2.62	3.04	11.5	0.03	51			
XA1453	Auger	0.38	383409	5978363	0.08	1.5	0.22	0.10	6.8	20.30	1.90	4.95	18.6	0.03	54			
XA1454	Auger	0.33	383385	5978148	0.11	1.3	0.18	0.11	8.0	32.00	2.15	5.55	14.8	0.03	55			
XA1455	Auger	0.36	383343	5977805	0.18	2.7	0.18	0.29	9.6	28.10	3.33	2.09	13.3	0.04	67			
XA1456	Auger	0.24	383274	5977412	0.13	3.0	0.21	0.13	10.6	34.30	3.75	1.70	17.8	0.06	55			
XA1457	Auger	0.32	383313	5977152	0.11	2.7	0.19	0.09	12.5	34.80	4.21	1.48	14.6	0.05	55			
XA1458	Auger	0.29	383280	5976834	0.32	2.2	0.21	0.14	11.5	51.00	3.21	1.68	15.6	0.04	48			
XA1459	Auger	0.36	383337	5976541	0.03	1.9	0.17	0.06	5.0	24.90	2.25	0.62	9.5	0.04	28			
XA1460	Auger	0.33	383410	5976334	0.14	2.4	0.20	0.16	7.4	25.60	2.56	1.27	14.7	0.04	48			
XA1461	Auger	0.28	383577	5976074	0.08	2.9	0.22	0.07	8.5	31.80	2.74	1.72	13.7	0.04	58			
XA1462	Auger	0.24	383140	5977073	0.23	1.8	0.26	0.07	11.2	65.60	3.51	1.99	8.6	0.04	41			
XA1463	Auger	0.25	383003	5976627	0.64	1.8	0.21	0.18	12.5	198.70	3.42	1.50	14.4	0.04	63			
XA1464	Auger	0.42	382593	5976756	1.35	4.7	0.44	8.21	22.3	385.60	7.07	3.74	367.8	0.69	1143			
XA1465	Auger	0.33	382440	5976931	0.45	2.0	0.36	0.37	16.0	54.80	4.17	3.75	72.0	0.13	192			
XA1466	Auger	0.29	382326	5977091	0.33	1.6	0.44	0.78	13.8	29.70	4.09	3.14	54.8	0.21	204			
XA1467	Auger	0.33	382167	5977435	0.07	2.2	0.50	0.08	11.0	56.10	3.46	16.05	20.8	0.09	48			
XA1468	Auger	0.33	381997	5977231	0.18	2.2	0.35	0.08	22.0	124.90	5.54	25.69	12.5	0.07	57			
					ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm			
					Ag	As	Bi	Cd	Co	Cu	Fe	Mo	Pb	Te	Zn			
				number of values	68	68	68	68	68	68	68	68	68	68	68			
				maximum	1.35	6.90	4.52	8.21	22.3	385.60	7.07	33.61	367.80	0.69	1143.00			
				minimum	0.03	1.00	0.11	0.05	3.1	7.90	1.26	0.62	7.90	0.01	28.00			
				mean	0.19	2.31	0.49	0.35	7.7	41.17	2.52	6.75	34.93	0.08	104.26			
				median	0.14	1.90	0.32	0.14	6.9	25.90	2.39	4.60	21.75	0.05	64.00			
				standard deviation	0.19	1.19	0.65	1.00	3.5	53.86	0.94	6.86	48.65	0.09	140.66			
				skewness	3.70	1.73	4.84	7.34	2.2	4.51	2.32	2.19	5.28	4.80	6.15			
				kurtosis	19.24	3.11	26.01	57.31	6.6	25.05	8.06	4.84	33.10	30.21	44.17			
				geometric mean	0.14	2.08	0.35	0.17	7.1	28.25	2.39	4.57	24.43	0.06	78.16			
				25 percentile	0.08	1.60	0.21	0.09	5.3	16.60	1.91	2.34	14.45	0.04	52.25			
				50 percentile	0.14	1.90	0.34	0.14	6.9	25.90	2.38	4.31	22.60	0				

XAMA PROPERTY: 2014 TILL SURVEY, CORRELATION COEFFICIENTS MATRIX																																By: John A. Chapman September 30, 2014								
	Ag	Al	As	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb	Sb	Sc	Sn	Sr	Te	Th	Ti	U	V	W	Y	Zn		
Ag	1.000																																							
Al	0.463	1.000																																						
As	0.021	0.281	1.000																																					
Ba	-0.132	0.145	0.301	1.000																																				
Bi	0.105	-0.099	-0.113	0.237	1.000																																			
Ca	0.454	0.752	0.239	0.005	-0.111	1.000																																		
Cd	0.757	0.362	0.183	-0.055	0.056	0.514	1.000																																	
Ce	0.135	0.251	0.260	0.133	0.350	0.390	0.013	1.000																																
Co	0.478	0.822	0.194	-0.017	0.000	0.799	0.514	0.222	1.000																															
Cr	0.377	0.718	0.174	-0.018	-0.111	0.541	0.331	0.061	0.829	1.000																														
Cs	0.329	0.307	0.154	0.368	0.560	0.108	0.092	0.366	0.248	0.227	1.000																													
Cu	0.755	0.480	0.133	-0.167	0.139	0.665	0.807	0.270	0.701	0.430	0.284	1.000																												
Fe	0.527	0.845	0.418	0.049	0.019	0.754	0.578	0.202	0.930	0.753	0.303	0.688	1.000																											
Ga	0.492	0.901	0.152	0.166	-0.109	0.737	0.397	0.292	0.818	0.756	0.387	0.487	0.802	1.000																										
Ge	0.508	0.428	0.432	0.074	0.203	0.685	0.665	0.526	0.530	0.230	0.229	0.757	0.571	0.446	1.000																									
K	0.031	0.438	0.306	0.406	0.115	0.393	-0.028	0.441	0.297	0.146	0.210	0.026	0.351	0.480	0.272	1.000																								
La	0.544	0.463	0.385	0.036	0.232	0.652	0.650	0.567	0.540	0.250	0.290	0.741	0.575	0.474	0.959	0.234	1.000																							
Li	0.540	0.808	-0.011	0.056	0.078	0.712	0.417	0.171	0.877	0.799	0.455	0.631	0.787	0.873	0.394	0.256	0.423	1.000																						
Mg	0.525	0.840	0.111	0.011	0.020	0.793	0.558	0.235	0.959	0.822	0.257	0.694	0.891	0.865	0.528	0.328	0.530	0.903	1.000																					
Mn	0.361	0.669	0.130	0.200	0.230	0.666	0.457	0.537	0.740	0.575	0.299	0.526	0.658	0.742	0.614	0.417	0.659	0.657	0.780	1.000																				
Mo	0.027	-0.050	-0.071	0.019	0.538	0.002	0.039	0.209	0.243	0.213	0.381	0.257	0.139	0.103	0.155	-0.139	0.158	0.199	0.174	0.218	1.000																			
Na	-0.133	-0.062	0.142	-0.082	-0.261	0.300	0.003	0.330	-0.080	-0.204	-0.402	0.067	-0.110	-0.118	0.346	0.126	0.266	-0.180	-0.052	0.078	-0.161	1.000																		
Ni	0.400	0.685	0.362	0.137	-0.078	0.546	0.388	0.115	0.818	0.930	0.317	0.517	0.771	0.700	0.358	0.196	0.352	0.769	0.786	0.540	0.264	-0.164	1.000																	
P	0.362	0.683	0.346	0.098	-0.139	0.617	0.484	0.091	0.649	0.468	0.032	0.443	0.724	0.551	0.475	0.270	0.451	0.478	0.609	0.524	-0.081	0.050	0.452	1.000																
Pb	0.727	0.257	0.085	-0.035	0.254	0.396	0.889	0.098	0.476	0.320	0.180	0.802	0.504	0.356	0.591	-0.029	0.579	0.391	0.503	0.465	0.258	-0.035	0.379	0.331	1.000															
Rb	0.233	0.365	-0.045	0.271	0.049	0.114	-0.099	-0.110	0.183	0.273	0.358	-0.086	0.207	0.482	-0.156	0.531	-0.118	0.413	0.196	0.050	-0.132	-0.336	0.260	-0.010	-0.088	1.000														
Sb	0.198	0.407	0.311	0.431	0.409	0.405	0.272	0.472	0.546	0.478	0.502	0.380	0.557	0.554	0.410	0.475	0.360	0.484	0.561	0.619	0.396	-0.175	0.551	0.297	0.368	0.154	1.000													
Sc	0.591	0.743	0.430	0.036	-0.019	0.821	0.668	0.392	0.817	0.621	0.324	0.832	0.836	0.701	0.813	0.250	0.802	0.716	0.811	0.699	0.120	0.126	0.697	0.599	0.569	0.016	0.507	1.000												
Sn	-0.020	-0.127	-0.139	0.360	0.669	-0.159	-0.064	0.419	-0.071	-0.063	0.530	0.669	-0.144	0.128	0.135	0.118	0.151	0.064	-0.018	0.261	0.593	-0.204	0.017	-0.286	0.116	0.058	0.470	-0.035	1.000											
Sr	0.332	0.512	0.213	0.655	0.155	0.613	0.433	0.281	0.470	0.248	0.309	0.398	0.503	0.571	0.500	0.525	0.432	0.495	0.538	0.563	-0.050	0.108	0.319	0.466	0.395	0.253	0.582	0.523	0.154	1.000										
Te	0.715	0.290	0.054	-0.043	0.329	0.392	0.886	0.045	0.484	0.338	0.205	0.750	0.534	0.419	0.555	-0.031	0.543	0.442	0.540	0.492	0.213	-0.129	0.368	0.327	0.934	-0.034	0.417	0.551	0.145	0.392	1.000									
Th	0.186	0.109	0.285	-0.015	0.100	0.164	0.088	0.733	0.056	0.026	0.284	0.212	0.125	0.093	0.309	0.241	0.333	0.005	0.102	0.231	-0.017	0.221	0.065	-0.065	0.135	-0.130	0.382	0.284	0.204	0.116	0.104	1.000								
Ti	-0.160	0.177	0.473	0.123	-0.480	0.154	-0.205	-0.108	-0.041	-0.033	-0.280	-0.230	0.084	-0.012	0.022	0.226	-0.052	-0.133	-0.109	-0.248	-0.482	0.323	0.024	-0.191	-0.342	0.187	-0.315	-0.001	-0.519	0.057	-0.400	-0.088	1.000							
U	0.189	0.044	0.293	0.036	0.049	0.164	0.153	0.275	0.076	0.022	0.159	0.218	0.125	0.113	0.387	0.009	0.387	0.079	0.083	0.112	0.235	0.261	0.081	-0.012	0.159	-0.019	0.099	0.240	0.091	0.149	0.118	0.283	0.122	1.000						
V	0.419	0.845	0.364	0.021	-0.158	0.749	0.445	0.114	0.911	0.782	0.197	0.558	0.957	0.784	0.432	0.332	0.438	0.781	0.871	0.590	0.016	-0.086	0.764	0.680	0.331	0.258	0.462	0.760	-0.275	0.449	0.371	0.076	0.205	0.118	1.000					
W	0.093	0.045	-0.127	0.291	0.124	0.059	0.061	0.156	0.091	0.008	0.132	0.056	0.015	0.150	0.201	0.089	0.301	0.128	0.087	0.283	0.144	-0.042	0.039	-0.021	0.121	0.121	0.107	0.023	0.332	0.243	0.099	-0.087	-0.143	0.034	-0.001	1.000				
Y	0.692	0.478	0.357	-0.050	0.077	0.679	0.832	0.328	0.608	0.341	0.242	0.890	0.653	0.469	0.915	0.086	0.905	0.509	0.616	0.571	0.116	0.202	0.451	0.499	0.734	-0.136	0.341	0.880	-0.008	0.462	0.699	0.256	-0.082	0.399	0.521	0.099	1.000			
Zn	0.782	0.359	0.142	-0.030	0.074	0.443	0.970	-0.078	0.494	0.377	0.133	0.773	0.557	0.417	0.566	-0.070	0.551	0.438	0.531	0.406	0.111	-0.080	0.429	0.455	0.911	-0.008	0.259	0.605	-0.027	0.401	0.896	0.002	-0.218	0.139	0.418	0.068	0.756	1.000		

NOTE: Mercury was not included as it was consistently very low in value

# XAMA PROPERTY, FRASER LAKE B.C. (2014) TILL GEOCHEMISTRY

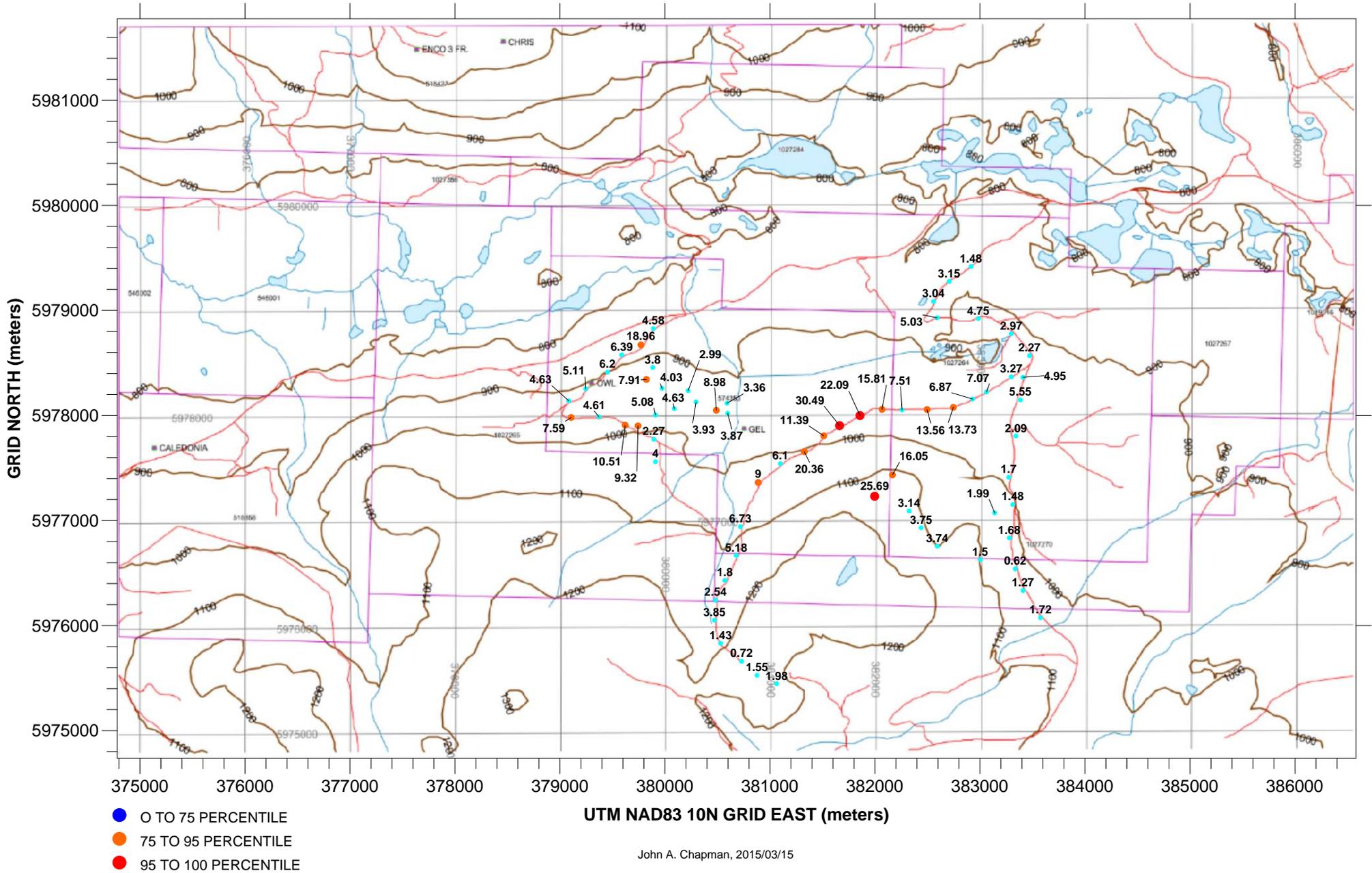
## Till Sample Locations and Xama Mineral Claims Map



# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## TILL GEOCHEMISTRY

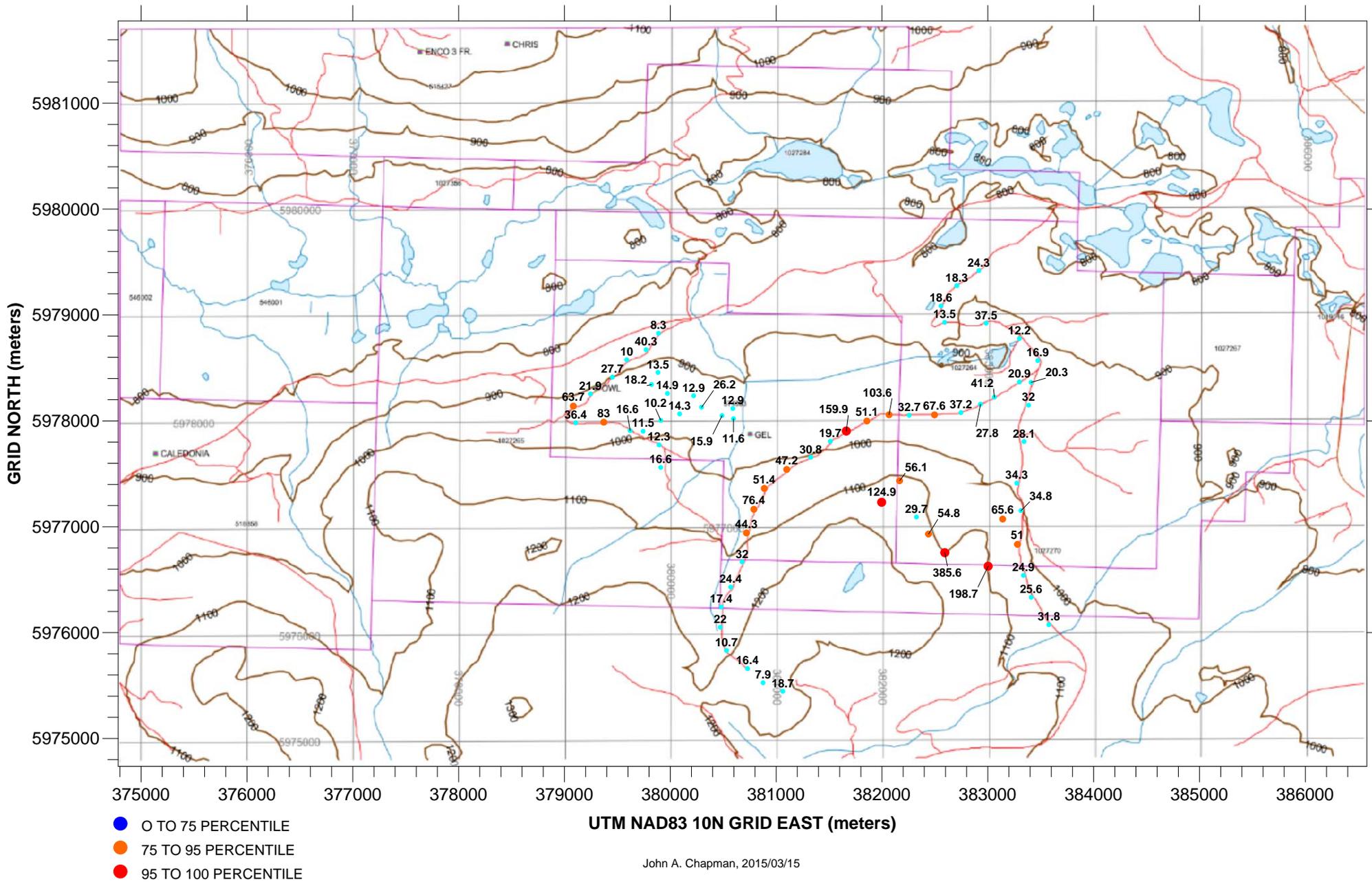
### Molybdenum (ppm)



# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## TILL GEOCHEMISTRY

### Copper (ppm)



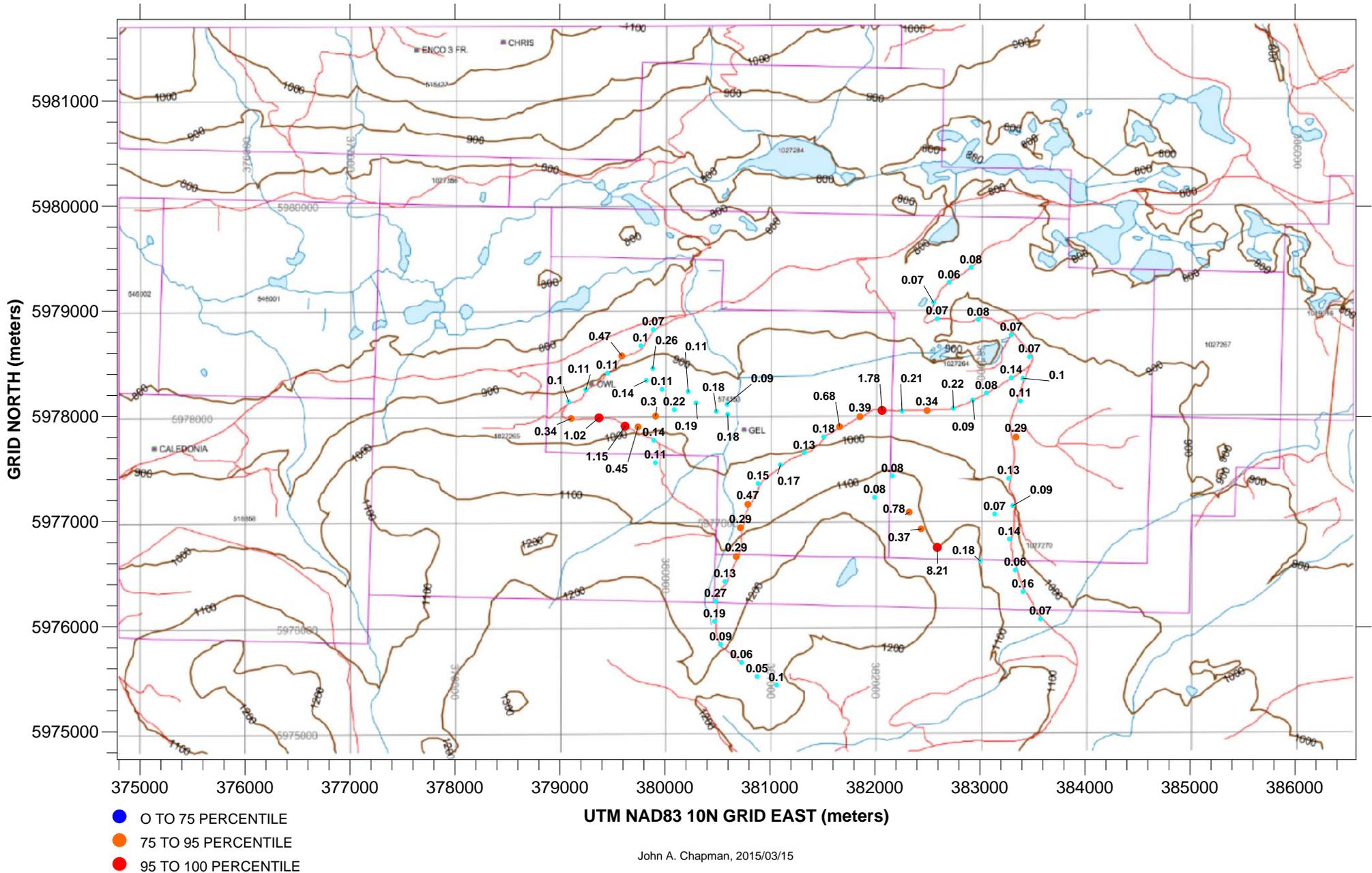




# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## TILL GEOCHEMISTRY

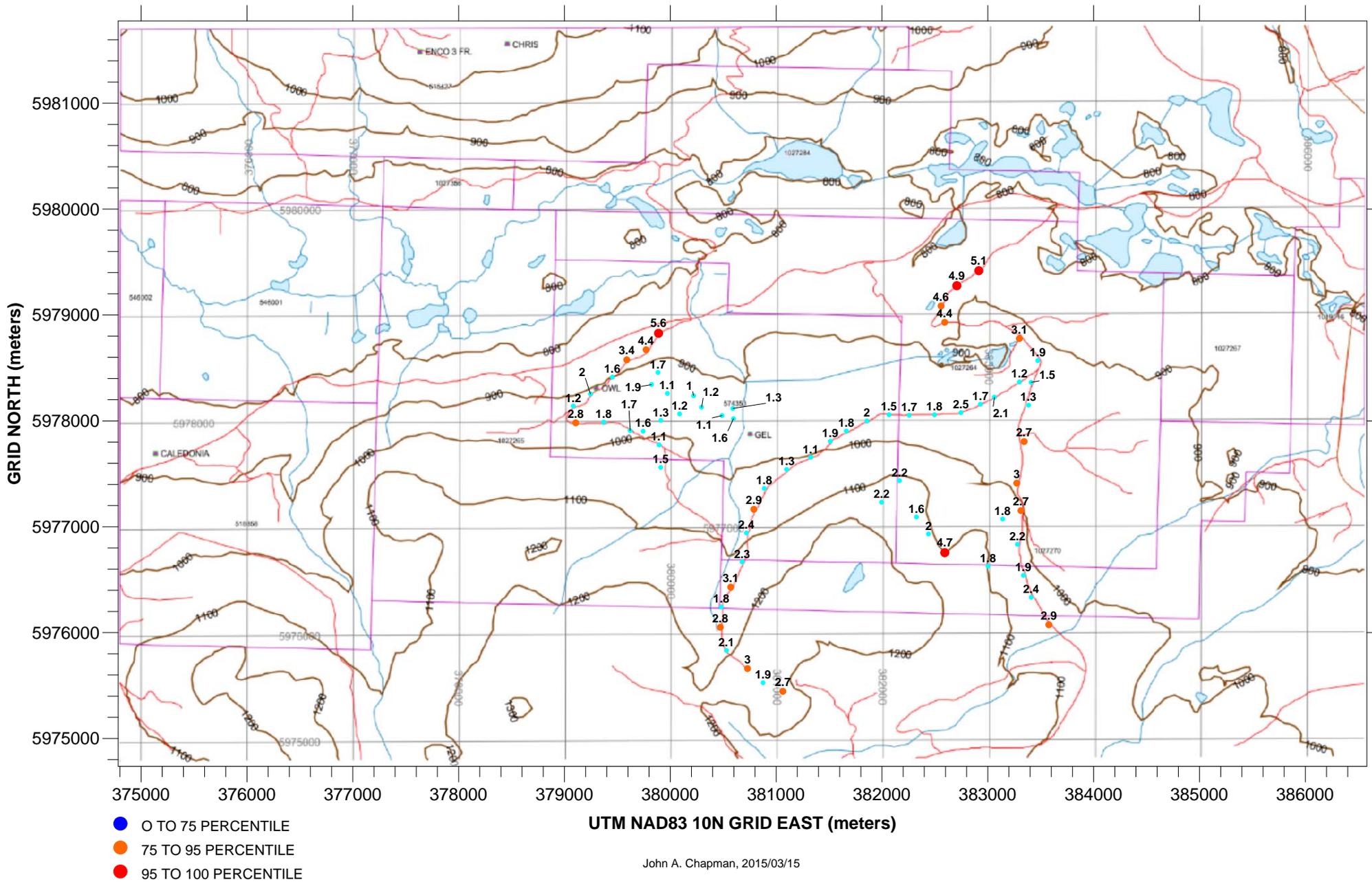
### Cadmium (ppm)



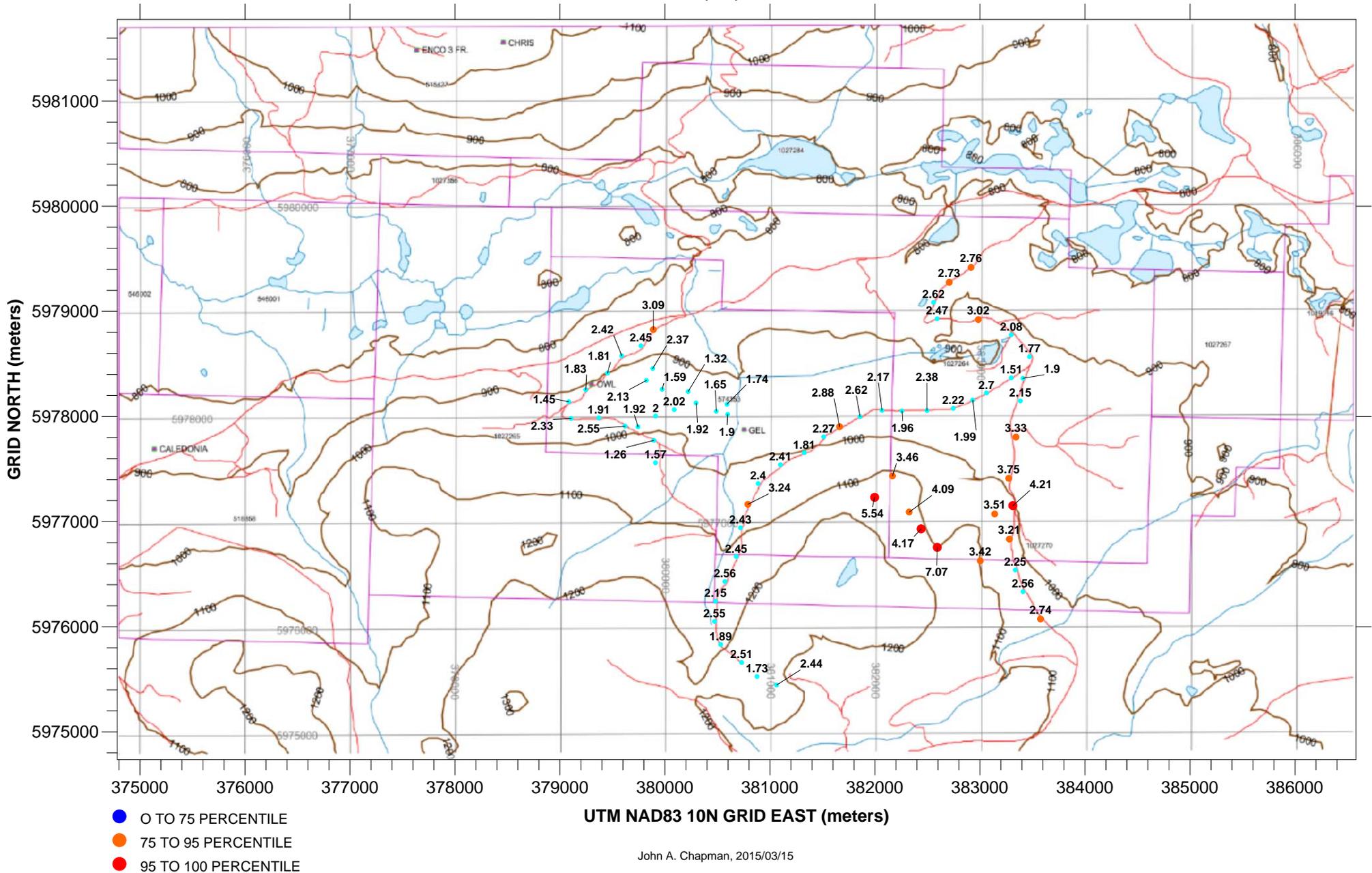
# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## TILL GEOCHEMISTRY

### Arsenic (ppm)



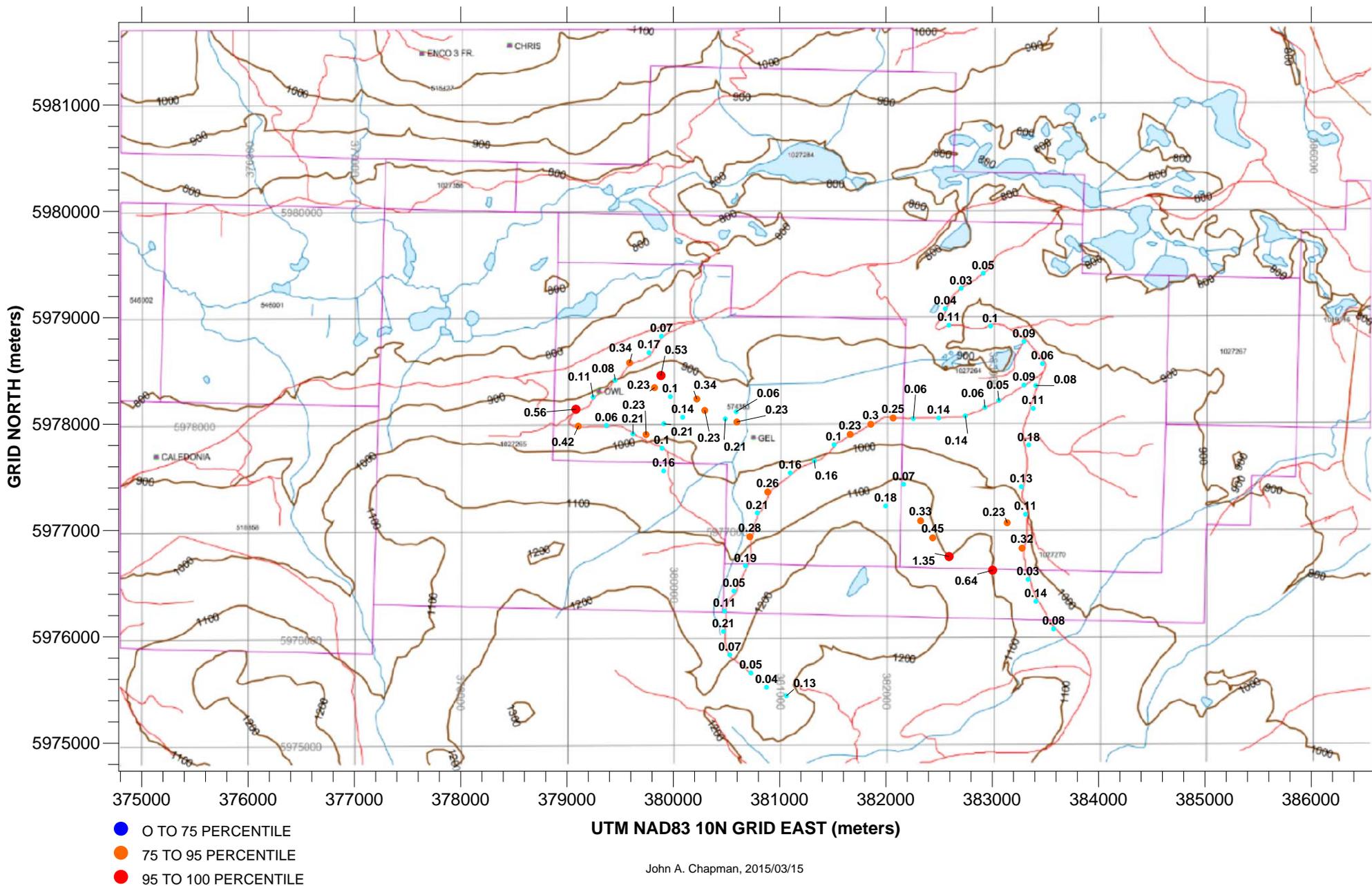
# XAMA PROPERTY, FRASER LAKE B.C. (2014) TILL GEOCHEMISTRY Iron (%)



# XAMA PROPERTY, FRASER LAKE B.C. (2014)

## TILL GEOCHEMISTRY

### Silver (ppm)



**APPENDIX C**  
**ANALYTICAL PROCEDURES**  
**&**  
**ASSAY CERTIFICATES**



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

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

**CERTIFICATE OF ANALYSIS: MA0020-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

**COMMENTS:**

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

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

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

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer  
 Senior Analytical Chemist  
 Met-Solve Analytical Services Inc.



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

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

**CERTIFICATE OF ANALYSIS: MA0020-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01	LOR	0.01	0.01	0.1	0.01	10	10	0.05	0.01	0.01
XR1401	Rock	0.75		0.18	0.35	9.3	0.01	<10	86	0.10	0.13	0.09
XR1402	Rock	0.49		2.45	2.12	3.0	<0.01	<10	88	0.91	23.36	1.17
XR1403	Rock	0.64		0.12	2.11	1.5	<0.01	<10	17	0.62	0.12	2.47
XR1404	Rock	0.71		0.17	1.37	7.0	<0.01	<10	34	0.28	0.34	0.51
XR1405	Rock	0.38		1.66	2.23	1.5	<0.01	<10	64	0.52	0.12	1.64
XR1406	Rock	0.40		0.16	2.03	2.2	<0.01	<10	33	0.24	0.09	1.24
XR1407	Rock	0.81		0.16	2.72	2.0	<0.01	<10	11	0.57	0.12	0.83
XR1408	Rock	0.73		0.02	0.37	0.8	<0.01	<10	70	0.20	0.03	0.08
DUP XR1401				0.20	0.34	10.0	0.03	<10	83	0.10	0.12	0.08
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	0.01	<0.01
STD OREAS 24b				0.07	3.12	8.7	<0.01	<10	142	1.72	0.73	0.44

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0020-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005
XR1401	0.02	3.64	19.1	133	0.20	49.0	1.26	2.60	<0.05	<0.02	<0.01	<0.005
XR1402	0.17	23.24	20.6	105	3.80	85.5	4.25	8.83	0.18	0.15	<0.01	0.03
XR1403	0.02	30.90	20.6	36	1.75	37.0	6.67	10.31	0.15	0.15	<0.01	0.06
XR1404	0.02	18.66	9.6	53	0.47	31.6	3.20	6.42	0.11	0.05	<0.01	<0.005
XR1405	0.15	26.47	22.1	74	2.29	536.7	5.58	9.54	0.15	0.13	<0.01	0.09
XR1406	0.03	28.42	20.8	44	1.46	87.5	5.82	9.91	0.16	0.11	<0.01	0.02
XR1407	0.02	12.81	23.5	28	1.17	64.7	5.58	9.84	0.12	0.12	<0.01	0.03
XR1408	<0.01	19.20	1.7	206	0.53	9.5	0.46	1.45	<0.05	0.04	<0.01	<0.005
DUP XR1401	0.02	3.66	19.2	129	0.20	47.9	1.24	2.61	<0.05	<0.02	<0.01	<0.005
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD OREAS 24b	0.05	65.08	16.7	105	9.76	35.4	3.99	11.55	0.20	0.56	0.01	0.06

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0020-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

Sample ID	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
XR1401	0.12	1.6	2.9	0.09	42	28.47	0.12	0.07	5.5	142	1.8	2.58
XR1402	0.38	9.9	49.0	1.99	1015	147.69	0.08	0.12	16.4	798	47.7	43.50
XR1403	0.11	14.9	47.8	1.73	863	2.79	0.07	0.05	3.5	1980	1.0	7.69
XR1404	0.12	8.4	36.3	0.98	398	20.61	0.06	0.11	2.4	1717	2.6	6.29
XR1405	0.21	9.8	46.6	2.14	1035	78.20	0.10	0.08	15.6	1115	2.2	20.31
XR1406	0.19	12.9	44.2	1.72	655	3.58	0.09	0.21	5.0	2454	0.7	14.77
XR1407	0.08	5.4	62.2	1.94	978	8.42	0.07	<0.05	9.5	1146	3.7	6.37
XR1408	0.16	10.4	3.8	0.07	68	3.26	0.07	0.17	5.6	77	0.7	4.65
DUP XR1401	0.12	1.6	2.8	0.08	41	28.76	0.12	0.07	5.8	139	1.7	2.71
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD OREAS 24b	1.18	31.2	47.3	1.41	338	3.62	0.10	0.25	59.7	619	9.5	120.15

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0020-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm	MS-130 S %	MS-130 Sb ppm	MS-130 Sc ppm	MS-130 Se ppm	MS-130 Sn ppm	MS-130 Sr ppm	MS-130 Ta ppm	MS-130 Te ppm	MS-130 Th ppm	MS-130 Ti %	MS-130 Tl ppm
XR1401	0.001	0.37	0.12	0.5	0.3	0.4	22.0	<0.01	0.11	1.5	0.007	0.03
XR1402	0.006	0.59	0.28	10.1	0.7	5.3	97.7	<0.01	0.18	4.1	0.112	0.43
XR1403	<0.001	0.29	0.06	19.2	<0.2	0.6	65.1	<0.01	0.03	4.0	0.122	0.05
XR1404	<0.001	0.42	0.37	2.7	0.3	0.3	24.9	<0.01	0.17	3.2	0.055	0.06
XR1405	0.001	0.33	0.10	16.3	0.7	3.4	63.9	<0.01	0.04	1.2	0.153	0.16
XR1406	<0.001	0.39	0.09	11.4	<0.2	1.2	37.0	<0.01	0.02	1.4	0.245	0.10
XR1407	<0.001	0.99	0.07	13.3	0.3	0.7	37.4	<0.01	0.08	1.3	0.084	0.06
XR1408	<0.001	<0.01	<0.05	0.6	<0.2	0.3	11.4	<0.01	<0.01	3.8	0.009	0.04
DUP XR1401	0.001	0.36	0.13	0.5	0.3	0.4	21.1	<0.01	0.11	1.5	0.007	0.02
STD BLANK	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD OREAS 24b	<0.001	0.19	0.39	10.1	0.3	2.4	31.1	<0.01	0.03	13.0	0.199	0.66

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0020-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 19-Sep-2014  
 Report Version: Final

Sample ID	MS-130 U ppm	MS-130 V ppm	MS-130 W ppm	MS-130 Y ppm	MS-130 Zn ppm	MS-130 Zr ppm
	0.05	1	0.05	0.05	2	0.5
XR1401	0.40	9	3.47	1.12	6	<0.5
XR1402	2.03	110	3.53	8.93	94	3.3
XR1403	0.66	205	0.87	20.51	35	2.3
XR1404	0.80	41	1.49	8.48	28	1.6
XR1405	0.51	185	7.31	17.56	70	3.1
XR1406	0.57	144	3.14	17.32	39	2.5
XR1407	0.67	193	1.06	8.17	50	3.0
XR1408	0.44	6	4.21	4.26	4	1.3
DUP XR1401	0.39	8	3.32	1.14	7	<0.5
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	1.65	82	1.16	13.13	92	26.4

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



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
Job Received Date: 09-Sep-2014  
Job Report Date: 18-Sep-2014  
Report Version: Final

**COMMENTS:**

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

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

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

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer  
Senior Analytical Chemist  
Met-Solve Analytical Services Inc.



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01	LOR	0.01	0.01	0.1	0.01	10	10	0.05	0.01	0.01
XA1401	Soil	0.62		0.11	1.33	4.4	<0.01	<10	115	0.48	0.20	0.36
XA1402	Soil	0.35		0.10	1.44	6.9	<0.01	<10	137	0.71	0.19	0.58
XA1403	Soil	0.54		0.09	1.30	3.1	<0.01	<10	103	0.45	0.20	0.26
XA1404	Soil	0.48		0.06	0.93	1.9	<0.01	<10	65	0.41	0.19	0.32
XA1405	Soil	0.59		0.09	0.74	1.2	<0.01	<10	46	0.31	0.16	0.36
XA1406	Soil	0.56		0.05	1.18	2.1	<0.01	<10	78	0.58	0.21	0.48
XA1407	Soil	0.60		0.06	0.94	1.7	<0.01	<10	57	0.41	0.31	0.39
XA1408	Soil	0.71		0.14	1.22	2.5	<0.01	<10	55	0.58	0.29	0.48
XA1409	Soil	0.71		0.14	1.15	1.8	<0.01	<10	49	0.82	0.35	0.52
XA1410	Soil	0.66		0.06	0.78	1.7	<0.01	<10	39	0.51	0.44	0.34
XA1411	Soil	0.67		0.25	0.98	1.5	<0.01	<10	40	0.53	0.38	0.65
XA1412	Soil	0.66		0.30	1.21	2.0	<0.01	<10	56	0.49	0.79	0.50
XA1413	Soil	0.72		0.23	0.87	1.8	<0.01	<10	42	0.81	1.15	0.49
XA1414	Soil	0.81		0.10	0.87	1.9	<0.01	<10	56	0.38	0.50	0.30
XA1415	Soil	0.53		0.16	0.76	1.1	<0.01	<10	58	0.44	0.66	0.41
XA1416	Soil	0.82		0.16	1.17	1.3	<0.01	<10	105	0.67	0.64	0.51
XA1417	Soil	0.78		0.26	1.30	1.8	<0.01	<10	159	1.06	3.39	0.43
XA1418	Soil	0.74		0.21	1.19	2.9	<0.01	<10	120	1.27	4.52	0.45
XA1419	Soil	0.44		0.28	1.39	2.4	<0.01	<10	79	0.89	0.62	0.59
XA1420	Soil	0.47		0.19	1.28	2.3	<0.01	<10	84	0.73	0.42	0.53

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01	LOR	0.01	0.01	0.1	0.01	10	10	0.05	0.01	0.01
XA1421	Soil	0.43		0.05	1.87	3.1	<0.01	<10	97	0.90	0.28	0.77
XA1422	Soil	0.52		0.11	1.46	1.8	<0.01	<10	71	0.67	0.24	0.75
XA1423	Soil	0.65		0.21	1.55	2.8	0.02	<10	76	0.65	0.21	0.73
XA1424	Soil	0.71		0.07	1.18	2.1	<0.01	<10	53	0.37	0.12	0.55
XA1425	Soil	0.67		0.05	1.58	3.0	<0.01	<10	75	0.59	0.12	0.65
XA1426	Soil	0.54		0.04	1.16	1.9	<0.01	<10	62	0.30	0.11	0.65
XA1427	Soil	0.59		0.13	1.39	2.7	<0.01	<10	67	0.59	0.14	0.62
XA1428	Soil	0.73		0.07	1.08	5.6	<0.01	<10	75	1.86	0.18	0.31
XA1429	Soil	0.51		0.17	1.16	4.4	<0.01	<10	87	0.76	0.28	0.53
XA1430	Soil	0.63		0.34	1.29	3.4	<0.01	<10	78	0.42	0.30	0.31
XA1431	Soil	0.58		0.08	0.76	1.6	<0.01	<10	35	0.45	0.32	0.38
XA1432	Soil	0.70		0.11	0.87	2.0	<0.01	<10	43	0.36	0.39	0.28
XA1433	Soil	0.76		0.56	1.00	1.2	<0.01	<10	28	0.56	0.55	0.41
XA1434	Soil	0.78		0.42	1.07	2.8	<0.01	<10	47	0.58	0.99	0.32
XA1435	Soil	0.86		0.06	0.86	1.8	<0.01	<10	37	0.68	1.07	0.39
XA1436	Soil	0.67		0.21	1.53	1.7	<0.01	<10	369	0.76	0.94	0.50
XA1437	Soil	0.50		0.10	0.79	1.1	<0.01	<10	39	0.33	0.61	0.26
XA1438	Soil	0.58		0.16	0.84	1.5	<0.01	<10	47	0.38	0.49	0.28
XA1439	Soil	0.78		0.23	1.14	1.6	<0.01	<10	64	0.36	0.50	0.28
XA1440	Soil	0.63		0.21	1.22	1.3	<0.01	<10	60	0.47	0.59	0.32

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



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units LOR	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01		0.01	0.01	0.1	0.01	10	10	0.05	0.01	0.01
XA1441	Soil	0.58		0.14	1.11	1.2	<0.01	<10	54	0.68	0.70	0.39
XA1442	Soil	0.59		0.23	1.37	1.2	<0.01	<10	73	0.51	0.51	0.34
XA1443	Soil	0.56		0.21	1.02	1.1	<0.01	<10	57	0.44	0.39	0.34
XA1444	Soil	0.75		0.23	1.16	1.6	<0.01	<10	66	0.40	0.52	0.20
XA1445	Soil	0.75		0.06	0.98	1.3	<0.01	<10	55	0.34	0.38	0.32
XA1446	Soil	0.58		0.34	0.94	1.0	<0.01	<10	56	0.37	0.60	0.21
XA1447	Soil	0.79		0.10	1.01	1.1	<0.01	<10	59	0.27	0.51	0.26
XA1448	Soil	0.58		0.23	1.42	1.9	<0.01	<10	72	0.41	0.30	0.32
XA1449	Soil	0.63		0.53	1.45	1.7	<0.01	<10	60	0.41	0.23	0.28
XA1450	Soil	0.25		0.05	1.25	5.1	<0.01	<10	147	0.48	0.15	0.58
XA1451	Soil	0.37		0.03	1.31	4.9	<0.01	<10	143	0.54	0.15	0.47
XA1452	Soil	0.32		0.04	1.16	4.6	<0.01	<10	99	0.61	0.18	0.41
XA1453	Soil	0.38		0.08	0.97	1.5	<0.01	<10	59	0.40	0.22	0.43
XA1454	Soil	0.33		0.11	1.17	1.3	<0.01	<10	52	0.42	0.18	0.46
XA1455	Soil	0.36		0.18	1.40	2.7	<0.01	<10	69	0.55	0.18	0.56
XA1456	Soil	0.24		0.13	1.61	3.0	<0.01	<10	69	0.50	0.21	0.45
XA1457	Soil	0.32		0.11	1.89	2.7	<0.01	<10	77	0.58	0.19	0.56
XA1458	Soil	0.29		0.32	1.56	2.2	<0.01	<10	60	0.55	0.21	0.66
XA1459	Soil	0.36		0.03	0.83	1.9	<0.01	<10	48	0.33	0.17	0.55
XA1460	Soil	0.33		0.14	1.38	2.4	<0.01	<10	68	0.53	0.20	0.50

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01	LOR	0.01	0.01	0.1	0.01	10	10	0.05	0.01	0.01
XA1461	Soil	0.28		0.08	1.79	2.9	<0.01	<10	88	0.63	0.22	0.63
XA1462	Soil	0.24		0.23	1.76	1.8	<0.01	<10	82	0.44	0.26	0.72
XA1463	Soil	0.25		0.64	1.99	1.8	<0.01	<10	65	1.16	0.21	0.99
XA1464	Soil	0.42		1.35	2.60	4.7	<0.01	<10	32	2.69	0.44	1.33
XA1465	Soil	0.33		0.45	2.33	2.0	<0.01	<10	62	0.67	0.36	0.59
XA1466	Soil	0.29		0.33	1.86	1.6	<0.01	<10	50	0.39	0.44	0.98
XA1467	Soil	0.33		0.07	1.60	2.2	<0.01	<10	58	0.54	0.50	0.48
XA1468	Soil	0.33		0.18	2.86	2.2	<0.01	<10	44	2.49	0.35	1.00
DUP XA1401				0.11	1.30	4.5	<0.01	<10	111	0.47	0.19	0.35
DUP XA1436				0.18	1.55	1.4	<0.01	<10	379	0.67	0.83	0.50
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD BLANK				<0.01	<0.01	<0.1	<0.01	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.08	3.38	8.3	<0.01	<10	154	1.71	0.72	0.47
STD GBM908-10				2.87	1.04	54.8	0.47	<10	107	0.31	1.11	0.77

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
Sample ID	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005
XA1401	0.07	22.46	5.9	20	3.58	13.5	2.47	3.66	0.08	0.04	0.02	0.021
XA1402	0.08	39.38	7.8	23	2.08	37.5	3.02	4.68	0.14	0.10	0.03	0.029
XA1403	0.07	23.31	5.4	17	1.87	12.2	2.08	3.86	0.07	0.11	0.01	0.020
XA1404	0.07	23.13	5.4	13	1.56	16.9	1.77	3.37	0.08	0.05	0.01	0.015
XA1405	0.14	19.74	5.8	15	0.96	20.9	1.51	2.77	0.07	0.03	<0.01	0.013
XA1406	0.08	27.64	9.1	26	1.32	41.2	2.70	4.09	0.10	0.11	<0.01	0.019
XA1407	0.09	25.08	7.0	21	1.28	27.8	1.99	3.47	0.08	0.08	0.01	0.017
XA1408	0.22	29.63	8.7	30	2.67	37.2	2.22	4.43	0.10	0.09	0.01	0.020
XA1409	0.34	35.72	9.5	27	2.31	67.6	2.38	4.60	0.11	0.04	<0.01	0.020
XA1410	0.21	25.19	6.3	20	1.68	32.7	1.96	3.29	0.08	<0.02	<0.01	0.015
XA1411	1.78	27.51	8.4	22	1.58	103.6	2.17	4.10	0.09	<0.02	0.02	0.023
XA1412	0.39	18.75	8.7	28	2.57	51.1	2.62	4.54	0.06	<0.02	0.01	0.022
XA1413	0.68	31.18	10.6	21	2.64	159.9	2.88	3.57	0.10	0.02	<0.01	0.022
XA1414	0.18	12.53	7.3	16	1.66	19.7	2.27	3.27	0.06	<0.02	<0.01	0.020
XA1415	0.13	19.59	6.0	18	1.60	30.8	1.81	3.44	0.10	0.03	<0.01	0.018
XA1416	0.17	30.70	7.2	13	2.34	47.2	2.41	5.32	0.12	0.04	0.01	0.026
XA1417	0.15	52.92	6.2	9	5.61	51.4	2.40	6.20	0.11	0.03	0.01	0.026
XA1418	0.47	58.46	9.7	17	6.40	76.4	3.24	4.79	0.17	0.11	<0.01	0.059
XA1419	0.29	50.43	8.4	17	2.41	44.3	2.43	5.38	0.17	0.04	0.02	0.035
XA1420	0.29	45.15	7.8	16	1.13	32.0	2.45	4.86	0.11	0.04	0.01	0.026

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005
XA1421	0.13	47.63	7.1	18	2.30	24.4	2.56	6.14	0.12	0.13	<0.01	0.024
XA1422	0.27	43.20	7.3	16	1.21	17.4	2.15	5.11	0.11	0.04	0.01	0.020
XA1423	0.19	40.47	7.8	17	1.55	22.0	2.55	5.06	0.12	0.12	0.01	0.020
XA1424	0.09	28.04	6.7	11	1.12	10.7	1.89	3.88	0.09	0.07	<0.01	0.015
XA1425	0.06	31.60	7.5	14	1.53	16.4	2.51	4.69	0.11	0.16	<0.01	0.016
XA1426	0.05	29.04	5.0	12	0.93	7.9	1.73	3.79	0.09	0.05	<0.01	0.013
XA1427	0.10	33.67	8.1	15	1.38	18.7	2.44	4.52	0.11	0.08	<0.01	0.016
XA1428	0.07	28.72	6.2	24	5.37	8.3	3.09	3.90	0.07	0.08	<0.01	0.023
XA1429	0.10	36.23	6.6	19	2.16	40.3	2.45	4.69	0.15	0.10	0.01	0.023
XA1430	0.47	20.01	5.9	19	2.06	10.0	2.42	4.36	0.07	0.06	0.01	0.022
XA1431	0.11	24.35	5.8	17	1.14	27.7	1.81	3.17	0.08	0.11	<0.01	0.019
XA1432	0.11	22.21	4.6	14	1.25	21.9	1.83	3.47	0.07	0.07	<0.01	0.025
XA1433	0.10	75.57	3.8	12	3.40	63.7	1.45	3.57	0.07	0.30	<0.01	0.029
XA1434	0.34	37.14	5.2	18	2.05	36.4	2.33	4.22	0.08	0.08	<0.01	0.040
XA1435	1.02	30.63	5.0	12	1.86	83.0	1.91	4.29	0.13	0.21	<0.01	0.045
XA1436	1.15	25.31	9.1	27	4.95	16.6	2.55	5.99	0.08	0.03	0.01	0.039
XA1437	0.14	21.37	4.9	11	1.07	12.3	1.26	3.40	0.07	0.05	0.01	0.028
XA1438	0.11	25.64	4.9	12	0.94	16.6	1.57	3.42	0.07	0.03	0.01	0.025
XA1439	0.45	17.72	4.3	13	1.99	11.5	1.92	4.01	0.07	0.04	0.01	0.028
XA1440	0.30	17.66	5.1	20	4.16	10.2	2.00	4.76	0.06	0.02	0.02	0.026

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005
XA1441	0.22	26.98	6.5	20	1.85	14.3	2.02	4.16	0.08	0.03	0.01	0.029
XA1442	0.19	20.05	4.7	14	1.69	26.2	1.92	4.06	0.07	0.04	0.01	0.028
XA1443	0.18	19.28	5.0	14	1.67	15.9	1.65	3.55	0.06	0.02	0.01	0.023
XA1444	0.18	13.26	4.1	14	1.34	11.6	1.90	3.65	<0.05	0.03	0.02	0.029
XA1445	0.09	16.11	4.8	15	1.95	12.9	1.74	3.42	0.06	0.06	0.01	0.021
XA1446	0.11	11.19	3.1	10	4.05	12.9	1.32	2.95	<0.05	0.04	0.01	0.018
XA1447	0.11	11.34	3.9	13	1.45	14.9	1.59	3.07	<0.05	0.06	<0.01	0.021
XA1448	0.14	18.82	5.7	18	1.78	18.2	2.13	4.41	0.07	0.04	0.01	0.022
XA1449	0.26	16.12	5.2	22	3.68	13.5	2.37	5.45	0.06	0.04	0.02	0.025
XA1450	0.08	33.03	7.1	23	1.24	24.3	2.76	3.82	0.12	0.08	0.02	0.023
XA1451	0.06	34.60	6.1	23	1.70	18.3	2.73	3.86	0.11	0.15	0.03	0.023
XA1452	0.07	36.05	6.8	22	3.03	18.6	2.62	3.85	0.09	0.14	0.01	0.022
XA1453	0.10	24.47	6.8	20	1.10	20.3	1.90	3.58	0.07	0.05	<0.01	0.015
XA1454	0.11	18.83	8.0	20	1.25	32.0	2.15	3.91	0.06	0.03	<0.01	0.015
XA1455	0.29	25.99	9.6	24	1.42	28.1	3.33	4.57	0.08	0.03	0.01	0.017
XA1456	0.13	20.06	10.6	22	1.77	34.3	3.75	4.92	0.07	0.09	0.01	0.021
XA1457	0.09	21.80	12.5	22	2.15	34.8	4.21	5.45	0.07	0.04	0.01	0.019
XA1458	0.14	40.85	11.5	30	1.88	51.0	3.21	4.72	0.11	0.10	0.02	0.017
XA1459	0.06	26.53	5.0	13	0.76	24.9	2.25	2.94	0.10	0.20	<0.01	0.012
XA1460	0.16	28.12	7.4	15	1.65	25.6	2.56	4.19	0.08	0.04	0.01	0.018

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
Sample ID	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005
XA1461	0.07	35.64	8.5	16	1.91	31.8	2.74	5.46	0.10	0.10	0.02	0.020
XA1462	0.07	23.26	11.2	25	1.72	65.6	3.51	5.28	0.07	0.05	0.01	0.021
XA1463	0.18	39.85	12.5	21	5.39	198.7	3.42	5.84	0.17	0.07	0.03	0.025
XA1464	8.21	31.49	22.3	50	2.77	385.6	7.07	8.33	0.31	0.10	0.05	0.029
XA1465	0.37	21.42	16.0	77	2.42	54.8	4.17	8.31	0.07	<0.02	0.03	0.029
XA1466	0.78	12.38	13.8	44	1.74	29.7	4.09	8.23	0.06	0.03	0.03	0.022
XA1467	0.08	28.45	11.0	22	1.94	56.1	3.46	5.19	0.09	0.06	<0.01	0.028
XA1468	0.08	54.74	22.0	72	4.85	124.9	5.54	9.20	0.12	0.06	0.02	0.050
DUP XA1401	0.07	22.29	5.8	20	3.44	13.0	2.40	3.58	0.08	0.04	<0.01	0.021
DUP XA1436	0.99	21.37	7.7	27	4.20	17.3	2.57	5.06	0.07	<0.02	<0.01	0.032
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD OREAS 24b	0.06	64.81	14.8	111	9.97	34.8	4.09	11.28	0.19	0.54	0.01	0.052
STD GBM908-10	1.77	84.65	14.8	25	0.69	3768.8	2.89	4.68	0.19	0.63	<0.01	0.023

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
Sample ID	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
XA1401	0.09	10.2	8.8	0.37	366	5.03	0.01	0.64	14.4	751	14.7	8.1
XA1402	0.11	23.0	10.5	0.49	595	4.75	0.02	0.59	16.3	952	15.8	8.3
XA1403	0.07	10.7	8.7	0.30	375	2.97	0.01	0.77	9.7	558	13.7	9.2
XA1404	0.07	11.0	10.5	0.37	408	2.27	0.02	0.83	7.7	599	16.6	7.5
XA1405	0.05	9.1	9.1	0.34	364	3.27	0.02	0.90	7.5	573	13.5	5.7
XA1406	0.05	14.9	14.5	0.59	470	7.07	0.02	0.37	15.6	811	18.7	4.9
XA1407	0.05	11.8	11.3	0.41	435	6.87	0.02	0.61	10.1	682	19.2	5.4
XA1408	0.08	13.3	18.1	0.60	586	13.73	0.02	0.58	14.7	781	30.1	8.9
XA1409	0.07	17.8	20.1	0.67	714	13.56	0.02	0.78	14.8	872	40.8	6.3
XA1410	0.06	12.4	11.7	0.44	466	7.51	0.01	0.45	8.9	616	38.7	4.9
XA1411	0.05	11.8	18.3	0.57	391	15.81	0.02	0.88	11.4	705	45.3	5.3
XA1412	0.05	7.1	21.2	0.54	384	22.09	0.01	1.23	13.4	697	53.4	9.0
XA1413	0.06	13.9	15.2	0.53	528	30.49	0.02	0.77	12.4	699	184.2	5.1
XA1414	0.05	6.0	12.1	0.40	330	11.39	0.01	0.96	9.6	784	30.6	6.1
XA1415	0.06	11.1	11.7	0.46	355	20.36	0.02	0.69	8.6	561	24.4	4.7
XA1416	0.14	15.9	19.0	0.67	524	6.10	0.02	0.84	7.6	571	24.7	13.7
XA1417	0.11	17.8	21.7	0.67	733	9.00	0.01	0.51	5.7	616	46.1	9.4
XA1418	0.09	38.9	16.4	0.52	831	33.61	0.01	0.41	9.9	858	79.1	8.2
XA1419	0.09	45.5	16.5	0.54	861	6.73	0.02	1.53	9.1	708	27.8	9.6
XA1420	0.09	23.2	13.1	0.50	825	5.18	0.02	1.38	8.3	701	24.1	8.2

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
XA1421	0.12	24.7	18.4	0.64	680	1.80	0.04	0.54	10.4	984	29.7	8.2
XA1422	0.09	18.3	14.6	0.53	734	2.54	0.02	1.69	7.3	989	22.9	7.4
XA1423	0.10	18.2	13.0	0.55	794	3.85	0.03	0.83	7.6	1014	22.3	6.8
XA1424	0.07	13.1	9.8	0.42	634	1.43	0.02	1.25	5.1	877	12.6	5.8
XA1425	0.09	15.5	11.6	0.51	521	0.72	0.02	0.50	5.4	1016	14.1	6.3
XA1426	0.05	12.8	9.3	0.37	389	1.55	0.02	1.37	4.5	1020	10.6	4.6
XA1427	0.06	18.7	13.0	0.47	473	1.98	0.02	1.46	7.1	985	11.7	5.6
XA1428	0.05	12.0	19.2	0.34	296	4.58	0.01	0.51	13.1	546	7.9	8.6
XA1429	0.07	26.7	11.3	0.46	464	18.96	0.03	0.62	10.0	757	25.3	7.5
XA1430	0.06	9.3	9.7	0.33	318	6.39	0.01	1.44	11.2	1253	13.5	9.7
XA1431	0.07	10.8	8.8	0.41	397	6.20	0.02	0.43	8.1	576	37.8	6.1
XA1432	0.07	9.8	7.1	0.31	296	5.11	0.01	0.78	6.9	498	28.2	7.9
XA1433	0.09	13.7	8.1	0.33	511	4.63	0.02	0.37	5.6	223	62.6	7.9
XA1434	0.06	11.5	11.1	0.41	531	7.59	0.02	0.69	8.8	595	74.7	6.5
XA1435	0.06	19.2	10.1	0.38	628	4.61	0.02	0.24	6.5	635	69.6	4.8
XA1436	0.10	10.3	26.7	0.75	963	10.51	<0.01	1.15	15.4	1026	95.8	12.8
XA1437	0.05	9.8	8.7	0.27	537	2.27	0.02	1.31	5.1	491	45.2	6.3
XA1438	0.05	12.3	8.2	0.27	468	4.00	0.02	1.22	5.1	648	33.8	6.3
XA1439	0.05	8.4	10.6	0.33	482	9.32	0.01	1.11	6.2	858	53.0	7.2
XA1440	0.07	8.9	15.9	0.39	465	5.08	0.01	1.53	7.3	841	23.5	9.9

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
Sample ID	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
XA1441	0.08	10.8	16.1	0.57	728	4.63	0.02	1.35	8.5	574	33.5	9.3
XA1442	0.06	9.5	12.9	0.37	405	3.93	0.02	1.74	7.2	728	27.5	7.2
XA1443	0.06	11.2	11.5	0.33	517	8.98	0.02	1.23	6.2	352	20.9	9.4
XA1444	0.05	6.3	10.3	0.23	310	3.87	0.01	1.53	6.4	942	19.6	7.4
XA1445	0.05	7.5	13.3	0.38	439	3.36	0.02	0.96	6.3	517	16.8	9.5
XA1446	0.04	5.4	8.0	0.25	295	2.99	0.01	1.52	5.2	388	16.0	8.3
XA1447	0.05	5.0	8.1	0.30	322	4.03	0.01	0.76	5.3	509	26.0	6.1
XA1448	0.06	8.6	12.6	0.41	335	7.91	0.02	1.47	9.2	674	21.2	10.6
XA1449	0.07	7.5	13.9	0.29	252	3.80	0.01	1.70	9.0	963	23.7	13.7
XA1450	0.09	16.6	7.4	0.40	549	1.48	0.03	0.66	12.6	911	8.4	6.0
XA1451	0.09	17.4	7.0	0.36	420	3.15	0.02	0.35	12.4	972	10.2	7.6
XA1452	0.10	14.0	8.6	0.39	457	3.04	0.02	0.67	11.9	616	11.5	9.1
XA1453	0.06	10.7	12.9	0.46	375	4.95	0.02	1.09	8.7	667	18.6	6.5
XA1454	0.07	9.5	17.5	0.63	506	5.55	0.02	1.03	9.9	669	14.8	7.2
XA1455	0.10	12.4	15.3	0.60	680	2.09	0.02	1.15	9.7	1750	13.3	7.7
XA1456	0.08	9.2	17.6	0.68	494	1.70	0.01	0.89	9.9	945	17.8	7.5
XA1457	0.13	11.4	19.0	0.82	637	1.48	0.01	0.67	10.0	1337	14.6	12.8
XA1458	0.12	14.9	20.2	0.88	707	1.68	0.02	0.85	13.3	1152	15.6	8.7
XA1459	0.04	13.8	7.2	0.32	376	0.62	0.03	0.31	4.5	1044	9.5	2.4
XA1460	0.09	11.8	15.4	0.47	488	1.27	0.02	0.99	7.0	1573	14.7	9.4

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



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
Sample ID	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
XA1461	0.09	17.2	17.1	0.61	630	1.72	0.02	0.92	7.2	999	13.7	7.1
XA1462	0.06	9.2	23.5	0.88	440	1.99	0.02	1.01	12.6	852	8.6	7.5
XA1463	0.08	34.0	40.8	0.80	494	1.50	0.02	1.54	14.0	918	14.4	14.2
XA1464	0.07	70.4	41.5	1.85	1298	3.74	0.02	0.59	23.9	2116	367.8	4.5
XA1465	0.08	9.7	42.3	1.31	802	3.75	0.01	1.28	29.0	1112	72.0	14.4
XA1466	0.12	5.7	32.2	0.98	612	3.14	0.01	1.41	16.6	721	54.8	20.7
XA1467	0.08	11.2	20.9	0.85	558	16.05	0.02	0.56	10.7	922	20.8	7.7
XA1468	0.07	27.5	46.5	1.70	1443	25.69	0.01	0.20	26.5	1469	12.5	5.6
DUP XA1401	0.09	10.2	8.8	0.36	354	4.89	0.01	0.70	14.9	726	14.6	8.1
DUP XA1436	0.10	8.2	22.3	0.75	972	9.29	<0.01	1.03	12.8	1039	84.1	10.2
STD BLANK	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD OREAS 24b	1.25	31.8	48.3	1.48	358	3.83	0.11	0.29	55.9	640	8.4	124.2
STD GBM908-10	0.46	43.3	6.3	0.59	313	67.36	0.16	0.56	2262.4	913	1983.1	30.1

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



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm	MS-130 S %	MS-130 Sb ppm	MS-130 Sc ppm	MS-130 Se ppm	MS-130 Sn ppm	MS-130 Sr ppm	MS-130 Ta ppm	MS-130 Te ppm	MS-130 Th ppm	MS-130 Ti %	MS-130 Tl ppm
	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02
XA1401	<0.001	<0.01	0.34	3.3	<0.2	0.6	34.1	<0.01	0.03	2.5	0.096	0.06
XA1402	<0.001	<0.01	0.51	6.4	<0.2	0.6	58.0	<0.01	0.04	3.5	0.112	0.08
XA1403	<0.001	<0.01	0.29	3.0	<0.2	0.6	27.4	<0.01	0.03	3.4	0.080	0.07
XA1404	<0.001	<0.01	0.26	2.7	<0.2	0.5	28.6	<0.01	0.03	2.9	0.065	0.07
XA1405	<0.001	0.01	0.22	2.4	<0.2	0.5	25.0	<0.01	0.04	1.8	0.056	0.05
XA1406	<0.001	<0.01	0.29	4.0	<0.2	0.6	39.7	<0.01	0.05	3.7	0.092	0.07
XA1407	<0.001	<0.01	0.28	3.3	<0.2	0.6	30.3	<0.01	0.05	2.9	0.071	0.05
XA1408	<0.001	<0.01	0.36	3.7	<0.2	0.7	33.8	<0.01	0.06	3.5	0.071	0.07
XA1409	<0.001	0.01	0.54	4.0	0.3	0.8	34.7	<0.01	0.08	3.5	0.054	0.07
XA1410	<0.001	<0.01	0.38	2.5	<0.2	0.6	31.2	<0.01	0.07	2.5	0.050	0.05
XA1411	0.002	0.03	0.30	3.0	0.4	0.6	39.8	<0.01	0.11	1.5	0.051	0.05
XA1412	<0.001	0.02	0.29	2.7	<0.2	0.7	37.9	<0.01	0.12	1.3	0.058	0.05
XA1413	<0.001	0.02	0.40	4.0	0.4	0.6	40.0	<0.01	0.19	1.7	0.052	0.07
XA1414	<0.001	<0.01	0.39	1.9	<0.2	0.6	28.2	<0.01	0.13	1.3	0.042	0.04
XA1415	<0.001	0.01	0.38	2.6	<0.2	0.7	37.2	<0.01	0.07	1.9	0.048	0.05
XA1416	<0.001	0.01	0.46	4.0	<0.2	0.8	61.6	<0.01	0.05	2.5	0.071	0.10
XA1417	<0.001	<0.01	0.61	3.6	<0.2	1.1	103.7	<0.01	0.15	3.8	0.024	0.09
XA1418	<0.001	<0.01	0.56	4.2	0.2	1.2	37.3	<0.01	0.19	4.1	0.047	0.11
XA1419	<0.001	0.02	0.26	4.1	<0.2	0.8	43.9	<0.01	0.05	2.6	0.076	0.10
XA1420	<0.001	<0.01	0.27	3.8	<0.2	0.6	41.7	<0.01	0.04	3.0	0.082	0.09

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



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

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

**CERTIFICATE OF ANALYSIS: MA0021-SEP14**

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Tl ppm 0.02
XA1421	<0.001	<0.01	0.28	5.0	<0.2	0.6	58.7	<0.01	0.05	4.2	0.082	0.11
XA1422	<0.001	0.02	0.26	3.5	<0.2	0.5	54.2	<0.01	0.04	2.5	0.080	0.08
XA1423	<0.001	<0.01	0.29	4.2	<0.2	0.5	58.5	<0.01	0.04	3.4	0.089	0.09
XA1424	<0.001	<0.01	0.24	3.1	<0.2	0.5	42.1	<0.01	0.03	2.3	0.103	0.05
XA1425	<0.001	<0.01	0.30	4.0	<0.2	0.5	57.8	<0.01	0.03	3.3	0.099	0.07
XA1426	<0.001	<0.01	0.25	2.8	<0.2	0.5	56.9	<0.01	0.02	1.9	0.103	0.04
XA1427	<0.001	0.01	0.29	3.7	<0.2	0.5	51.3	<0.01	0.03	2.7	0.104	0.06
XA1428	<0.001	<0.01	0.30	3.7	<0.2	0.5	25.3	<0.01	0.04	4.7	0.092	0.05
XA1429	<0.001	<0.01	0.35	4.5	<0.2	0.6	54.6	<0.01	0.04	4.2	0.111	0.10
XA1430	<0.001	<0.01	0.26	2.8	<0.2	0.5	28.5	<0.01	0.03	1.9	0.086	0.05
XA1431	<0.001	<0.01	0.19	2.6	<0.2	0.6	37.1	<0.01	0.05	2.6	0.072	0.06
XA1432	<0.001	<0.01	0.20	2.2	<0.2	0.6	27.6	<0.01	0.06	2.4	0.076	0.05
XA1433	<0.001	<0.01	0.48	2.7	<0.2	0.8	37.3	<0.01	0.09	12.1	0.037	0.08
XA1434	<0.001	<0.01	0.39	2.5	<0.2	0.7	26.1	<0.01	0.22	3.1	0.067	0.05
XA1435	<0.001	<0.01	0.42	3.4	<0.2	0.8	34.0	<0.01	0.20	4.0	0.053	0.05
XA1436	<0.001	0.01	0.66	3.5	<0.2	1.1	153.6	<0.01	0.18	1.9	0.058	0.07
XA1437	<0.001	<0.01	0.16	1.9	<0.2	0.5	22.4	<0.01	0.10	2.1	0.065	0.05
XA1438	<0.001	<0.01	0.16	1.7	<0.2	0.5	24.1	<0.01	0.08	2.1	0.066	0.05
XA1439	<0.001	<0.01	0.28	1.9	<0.2	0.6	25.5	<0.01	0.14	2.0	0.071	0.04
XA1440	<0.001	0.01	0.23	2.2	<0.2	0.6	28.6	<0.01	0.08	2.1	0.071	0.06

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm 0.001	MS-130 S % 0.01	MS-130 Sb ppm 0.05	MS-130 Sc ppm 0.1	MS-130 Se ppm 0.2	MS-130 Sn ppm 0.2	MS-130 Sr ppm 0.2	MS-130 Ta ppm 0.01	MS-130 Te ppm 0.01	MS-130 Th ppm 0.2	MS-130 Ti % 0.005	MS-130 Tl ppm 0.02
XA1441	<0.001	<0.01	0.26	2.3	<0.2	0.6	40.0	<0.01	0.15	2.5	0.066	0.06
XA1442	<0.001	<0.01	0.20	2.2	<0.2	0.6	35.9	<0.01	0.08	1.8	0.083	0.05
XA1443	<0.001	0.01	0.17	2.0	<0.2	0.4	38.2	<0.01	0.04	1.2	0.068	0.05
XA1444	<0.001	0.01	0.20	1.6	<0.2	0.4	20.0	<0.01	0.09	1.5	0.062	0.04
XA1445	<0.001	<0.01	0.24	2.0	<0.2	0.5	32.3	<0.01	0.04	2.4	0.075	0.06
XA1446	<0.001	<0.01	0.20	1.4	<0.2	0.4	24.7	<0.01	0.06	2.4	0.046	0.04
XA1447	<0.001	<0.01	0.20	1.6	<0.2	0.4	27.6	<0.01	0.08	1.8	0.059	0.04
XA1448	<0.001	<0.01	0.18	2.5	<0.2	0.5	31.8	<0.01	0.04	1.5	0.099	0.05
XA1449	<0.001	0.01	0.18	2.4	<0.2	0.7	33.4	<0.01	0.01	1.8	0.101	0.06
XA1450	<0.001	0.01	0.41	4.7	<0.2	0.4	62.8	<0.01	0.02	3.1	0.110	0.08
XA1451	<0.001	<0.01	0.38	5.0	<0.2	0.3	51.1	<0.01	0.02	4.2	0.107	0.07
XA1452	<0.001	<0.01	0.42	4.2	<0.2	0.4	43.3	<0.01	0.03	4.3	0.114	0.08
XA1453	<0.001	0.01	0.23	2.7	<0.2	0.4	34.5	<0.01	0.03	2.6	0.073	0.05
XA1454	<0.001	0.02	0.22	2.8	<0.2	0.4	35.6	<0.01	0.03	1.7	0.077	0.05
XA1455	<0.001	0.02	0.31	2.9	<0.2	0.3	55.1	<0.01	0.04	1.8	0.094	0.05
XA1456	<0.001	<0.01	0.36	3.2	<0.2	0.3	48.0	<0.01	0.06	2.8	0.096	0.05
XA1457	<0.001	0.02	0.47	3.5	<0.2	0.3	65.6	<0.01	0.05	2.5	0.078	0.06
XA1458	<0.001	0.02	0.32	3.9	<0.2	0.3	54.0	<0.01	0.04	3.3	0.116	0.06
XA1459	<0.001	<0.01	0.29	2.9	<0.2	0.2	56.7	<0.01	0.04	3.5	0.093	0.04
XA1460	<0.001	0.02	0.29	2.7	<0.2	0.3	42.4	<0.01	0.04	2.0	0.072	0.05

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm	MS-130 S %	MS-130 Sb ppm	MS-130 Sc ppm	MS-130 Se ppm	MS-130 Sn ppm	MS-130 Sr ppm	MS-130 Ta ppm	MS-130 Te ppm	MS-130 Th ppm	MS-130 Ti %	MS-130 Tl ppm
XA1461	<0.001	0.01	0.30	3.8	<0.2	0.4	57.6	<0.01	0.04	4.0	0.091	0.08
XA1462	<0.001	0.02	0.25	3.8	<0.2	0.3	44.9	<0.01	0.04	2.2	0.115	0.05
XA1463	0.001	0.04	0.25	9.4	0.5	0.4	72.9	<0.01	0.04	2.8	0.105	0.08
XA1464	<0.001	0.04	0.53	16.4	0.8	0.3	113.4	0.01	0.69	4.6	0.053	0.07
XA1465	<0.001	0.02	0.44	5.0	<0.2	0.4	45.5	<0.01	0.13	2.0	0.090	0.04
XA1466	<0.001	0.02	0.49	4.4	<0.2	0.4	68.4	<0.01	0.21	1.7	0.090	0.03
XA1467	<0.001	<0.01	0.32	3.8	0.3	0.7	49.9	<0.01	0.09	3.4	0.088	0.05
XA1468	<0.001	0.02	0.67	11.7	0.3	0.8	48.3	<0.01	0.07	4.1	0.018	0.10
DUP XA1401	<0.001	<0.01	0.35	3.2	<0.2	0.5	32.6	<0.01	0.03	2.4	0.094	0.06
DUP XA1436	<0.001	0.01	0.58	3.0	<0.2	0.8	151.3	<0.01	0.13	1.6	0.059	0.06
STD BLANK	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD BLANK	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD OREAS 24b	<0.001	0.19	0.40	10.3	0.3	2.4	30.7	<0.01	0.04	13.2	0.195	0.64
STD GBM908-10	<0.001	0.40	1.00	1.9	0.4	1.5	43.5	<0.01	0.03	18.5	0.338	0.21

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 U ppm	MS-130 V ppm	MS-130 W ppm	MS-130 Y ppm	MS-130 Zn ppm	MS-130 Zr ppm
Sample ID	0.05	1	0.05	0.05	2	0.5
XA1401	0.79	58	0.10	6.76	64	1.9
XA1402	1.43	67	0.09	17.49	64	5.2
XA1403	0.92	49	0.10	5.41	53	5.5
XA1404	0.75	42	0.13	6.81	46	2.8
XA1405	1.00	39	0.21	5.56	46	1.3
XA1406	1.17	69	0.31	12.13	64	5.8
XA1407	0.88	53	0.17	8.68	52	4.1
XA1408	1.34	51	0.25	11.99	80	5.0
XA1409	1.49	52	0.25	19.03	83	1.9
XA1410	0.81	44	0.21	7.92	66	0.7
XA1411	1.43	52	0.30	11.14	324	0.8
XA1412	1.44	54	0.31	5.72	181	0.6
XA1413	2.09	52	0.77	15.95	267	0.7
XA1414	0.79	44	0.25	3.98	95	0.9
XA1415	1.10	41	0.94	8.78	50	1.3
XA1416	1.20	59	0.29	11.38	68	1.9
XA1417	2.37	38	0.30	14.08	59	1.1
XA1418	2.26	54	0.34	19.55	104	6.3
XA1419	2.93	55	4.74	24.20	66	1.6
XA1420	4.65	59	0.22	14.70	54	1.7

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 U ppm	MS-130 V ppm	MS-130 W ppm	MS-130 Y ppm	MS-130 Zn ppm	MS-130 Zr ppm
Sample ID	0.05	1	0.05	0.05	2	0.5
XA1421	1.39	56	0.14	13.98	70	8.2
XA1422	1.36	51	0.18	11.19	58	2.1
XA1423	1.34	62	0.15	11.61	66	5.8
XA1424	0.73	49	0.17	6.40	42	2.9
XA1425	0.82	55	0.15	9.73	48	7.1
XA1426	0.85	45	0.18	6.40	34	1.8
XA1427	1.46	58	0.29	12.43	45	3.3
XA1428	4.81	80	0.07	11.33	59	3.6
XA1429	17.86	64	0.17	28.60	80	5.7
XA1430	0.71	54	0.15	4.64	184	2.9
XA1431	0.87	42	0.23	5.94	51	5.2
XA1432	0.80	40	0.28	4.44	47	3.2
XA1433	3.23	29	0.27	5.53	43	13.9
XA1434	1.19	50	0.38	6.16	121	4.2
XA1435	1.17	39	0.48	14.60	178	7.9
XA1436	1.18	61	2.40	5.38	269	0.8
XA1437	0.95	33	0.71	4.59	79	2.1
XA1438	0.98	38	0.30	5.25	67	1.6
XA1439	0.87	42	0.22	3.92	180	2.1
XA1440	1.06	45	0.26	4.13	138	1.0

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 U ppm	MS-130 V ppm	MS-130 W ppm	MS-130 Y ppm	MS-130 Zn ppm	MS-130 Zr ppm
Sample ID	0.05	1	0.05	0.05	2	0.5
XA1441	2.64	46	0.29	7.16	119	1.5
XA1442	1.91	42	0.26	5.93	136	1.5
XA1443	1.39	39	0.18	5.32	87	1.0
XA1444	0.70	42	0.56	2.87	128	1.4
XA1445	0.92	42	0.20	4.35	77	3.0
XA1446	0.85	30	0.27	3.27	72	1.5
XA1447	0.64	36	0.23	2.55	63	3.0
XA1448	0.82	49	0.24	4.15	96	1.7
XA1449	0.70	53	0.25	3.57	190	2.0
XA1450	1.08	64	0.08	14.61	56	4.0
XA1451	1.28	62	0.07	11.57	54	8.7
XA1452	1.22	62	0.07	7.49	51	7.0
XA1453	1.95	49	0.21	6.34	54	2.3
XA1454	0.88	52	0.24	5.92	55	1.4
XA1455	0.78	81	0.23	6.23	67	1.1
XA1456	0.77	99	0.18	4.56	55	4.3
XA1457	0.75	109	0.44	5.07	55	1.7
XA1458	1.14	83	0.29	10.02	48	4.7
XA1459	0.90	60	0.22	9.14	28	8.6
XA1460	0.84	59	0.19	6.11	48	1.7

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



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

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

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0021-SEP14</b>
---------------------------------	---------------------

Project Name: XAMA  
 Job Received Date: 09-Sep-2014  
 Job Report Date: 18-Sep-2014  
 Report Version: Final

	MS-130 U ppm	MS-130 V ppm	MS-130 W ppm	MS-130 Y ppm	MS-130 Zn ppm	MS-130 Zr ppm
Sample ID	0.05	1	0.05	0.05	2	0.5
XA1461	1.16	61	0.17	11.33	58	4.9
XA1462	1.80	102	0.48	5.72	41	2.1
XA1463	3.23	84	0.31	40.88	63	2.1
XA1464	4.70	150	0.34	103.71	1143	2.5
XA1465	0.85	107	0.24	4.90	192	0.8
XA1466	0.74	113	0.34	3.32	204	1.5
XA1467	0.85	78	0.73	6.62	48	2.8
XA1468	1.18	143	0.40	25.06	57	1.0
DUP XA1401	0.76	56	0.10	6.36	61	1.8
DUP XA1436	1.03	61	0.98	4.60	271	0.7
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	1.57	84	1.07	13.37	91	26.0
STD GBM908-10	1.49	50	2.36	21.72	1022	38.8

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