



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)]: TECHNICAL - PROSPECTING

TOTAL COST: \$5400.00 5481.35

AUTHOR(S): KEN ELLERBECK SIGNATURE(S): [Signature]

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): \_\_\_\_\_ YEAR OF WORK: 2015

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5579959

PROPERTY NAME: KM 18

CLAIM NAME(S) (on which the work was done): 1036666 - 292616 5687011  
1037466 - KM18-SOUTH

COMMODITIES SOUGHT: Ag Au Pb Zn Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: \_\_\_\_\_

MINING DIVISION: KAMLOOPS NTS/BCGS: 082M UTM11, 292616E 5687011N

LATITUDE: 51 ° 17 ' 48 " LONGITUDE: 119 ° 58 ' 53 " (at centre of work)

OWNER(S):  
1) KEN ELLERBECK 2) GERALD LOCKE

MAILING ADDRESS:  
255 BATTLE STREET WEST, KAMLOOPS, BC V2C 1G8

OPERATOR(S) [who paid for the work]:  
1) KEN ELLERBECK 2) GERALD LOCKE

MAILING ADDRESS:  
255 BATTLE STREET WEST, KAMLOOPS, BC V2C 1G

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
rhyolite porphyry, alteration, silicification, silica flooding, felsic dome, Fennell Formation, Devonian, Permian, Barrière, Kamloops  
massive sulfide, gold, copper, Chu Chua deposit, Eagle Bay, Rea Gold, Samatosum,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 15856, 23816, 34307

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 _____			
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 _____			
<b>DRILLING (total metres; number of holes, size)</b>			
Core _____			
Non-core _____			
<b>RELATED TECHNICAL</b>			
Sampling/assaying _____			
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
PROSPECTING (scale, area) 20 ha		1036666, 1037466	<del>\$5400</del> \$5400
<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 _____			
TOTAL COST:			<del>\$5400</del> \$5400

**KEN ELLERBECK, GERALD LOCKE**  
(Owner & Operator)

**TECHNICAL EXPLORATION REPORT**

(Event 5579959)  
on

**PROSPECTING and EXPLORING**

Work done on

**Tenures 1036666 AND 1037764**

of the 2 Claim

**KM 18 CLAIM GROUP**

Kamloops Mining Division  
BCGS Maps 82M.021

Centre of Work  
UTM 11 292616E 5687011N

**AUTHOR KEN ELLERBECK, PMP**

**REPORT SUBMITTED November 27, 2015**

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## INTRODUCTION

### PURPOSE

In August 2015 a prospecting program was completed on Tenures 1036666 and 1037764 of the 2 Claim KM 18 CLAIM GROUP. The purpose of the prospecting program was to locate, if possible, historic reported geological features (typical copper, gold, silver bearing structures in particular) as well as to prospect for unidentified outcrops and showings of significance. Information for this report was obtained from sources cited under Selected References and from a property examination made on August 1-2, 2015.

### ACCESS AND LOCATION

Road access to the Property from Kamloops, BC is by Highway 5A north for 70 km. to Barriere, BC, then east for 2 km to Grenier Lake Road, north 0.5 km to Leonie Creek Forestry Road, then 19 km on Leonie Creek Forestry Road to claims. Driving time from Vancouver to Kamloops is 4 hours, and ~400 km and from Kamloops is 90 minutes.

A series of overgrown logging roads provide access for prospecting activities. However windfall made vehicle access difficult.

The area is part of the Shuswap Highlands, a region of rolling, wooded mountains cut by deep valleys that give way westward, across the North Thompson River Valley, to the more subdued Thompson Plateau physiographic region.

The Property is underlain by rolling forested mountains of the Shuswap Highlands physiographic region. Elevations range from 1300 to 14000 metres. Tree species include Lodgepole Pine (*Pinus contorta* var. *latifolia*), Trembling Aspen (*Populus tremuloides*), Interior Douglas Fir (*Pseudotsuga Menziesii* var. *glauca*), Engelmann Spruce (*Picea Engelmannii*), and at higher elevations, Subalpine Fir (*Abies lasiocarpa*).

The Property is located within the dry belt of British Columbia with rainfall between 25 and 30 cm per year. Temperatures during the summer months could reach a high of 35°C, with the winter temperatures reaching a low of -35°C.

Barriere, BC, and Kamloops, BC both historic mining centers, could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment.

## PROPERTY DESCRIPTION

### KM 18 Claim Group

Tenure 1036666 was acquired by staking by the Owners on June 12, 2016, and Tenure 1037764 was acquired by staking by the Owners on August 5, 2015.

<u>Tenure Number</u>	<u>Type</u>	<u>Claim Name</u>	<u>Good Until</u>	<u>Area (ha)</u>
<a href="#">1036666</a>	Mineral	292616 5687011	20160611	40.4216
<a href="#">1037764</a>	Mineral	KM18-SOUTH	20160805	20.2126

Total Area: 60.6342 ha

Figure 1 LOCATION MAP from MTO Mapbuilder



Map Center: 54.4781N 124.7082W

Figure 2 CLAIM LOCATION MAP (Base Map GOOGLE EARTH)

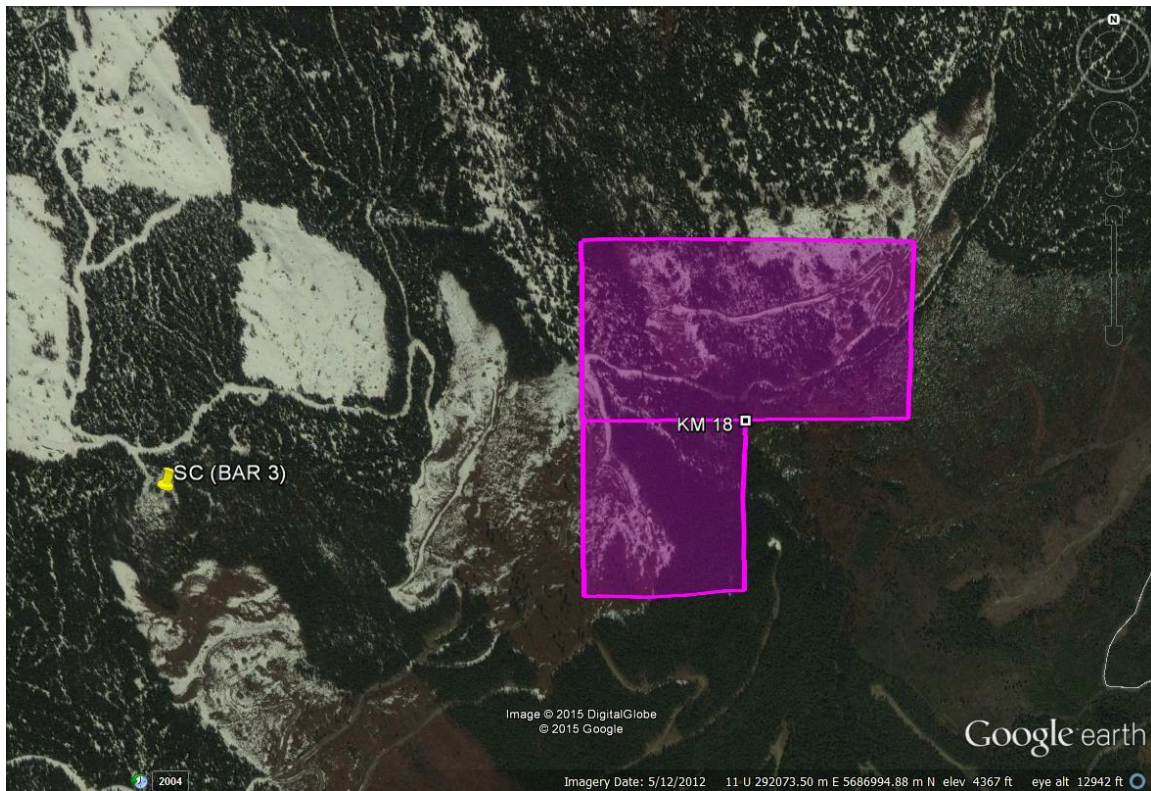


Figure 3 Regional Location Map (Base Map GOOGLE EARTH)

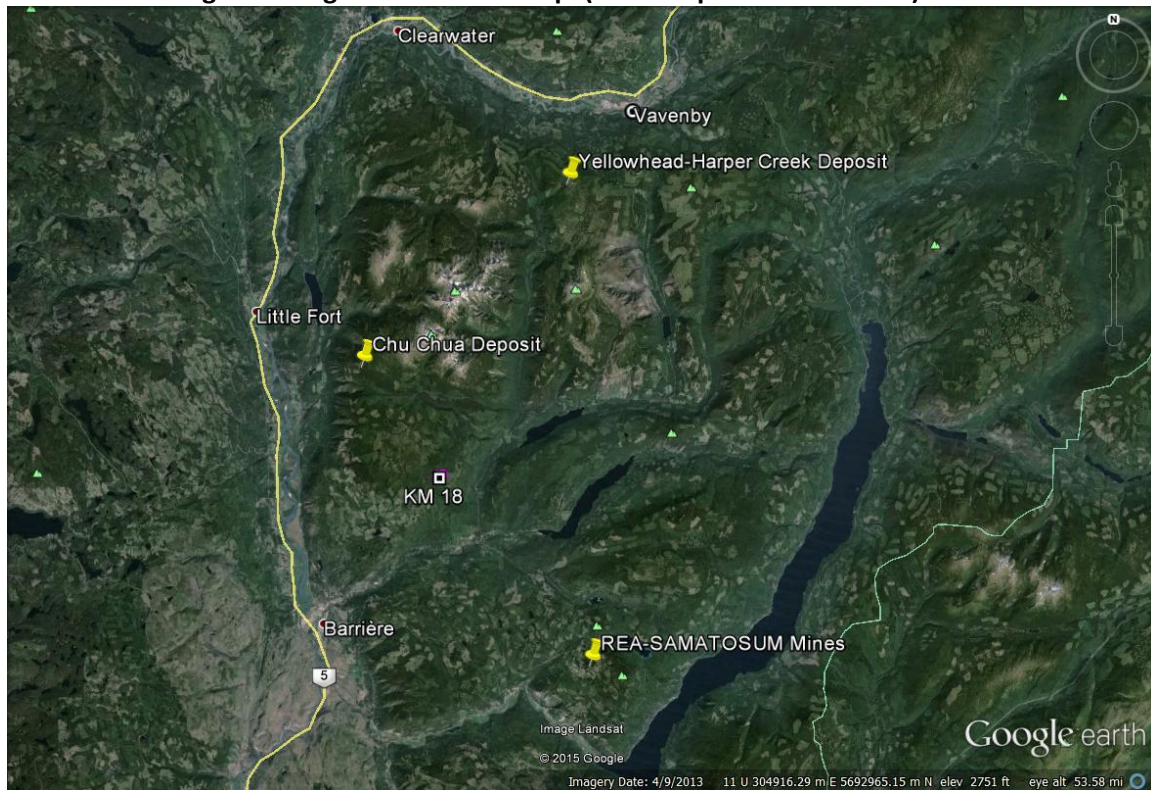
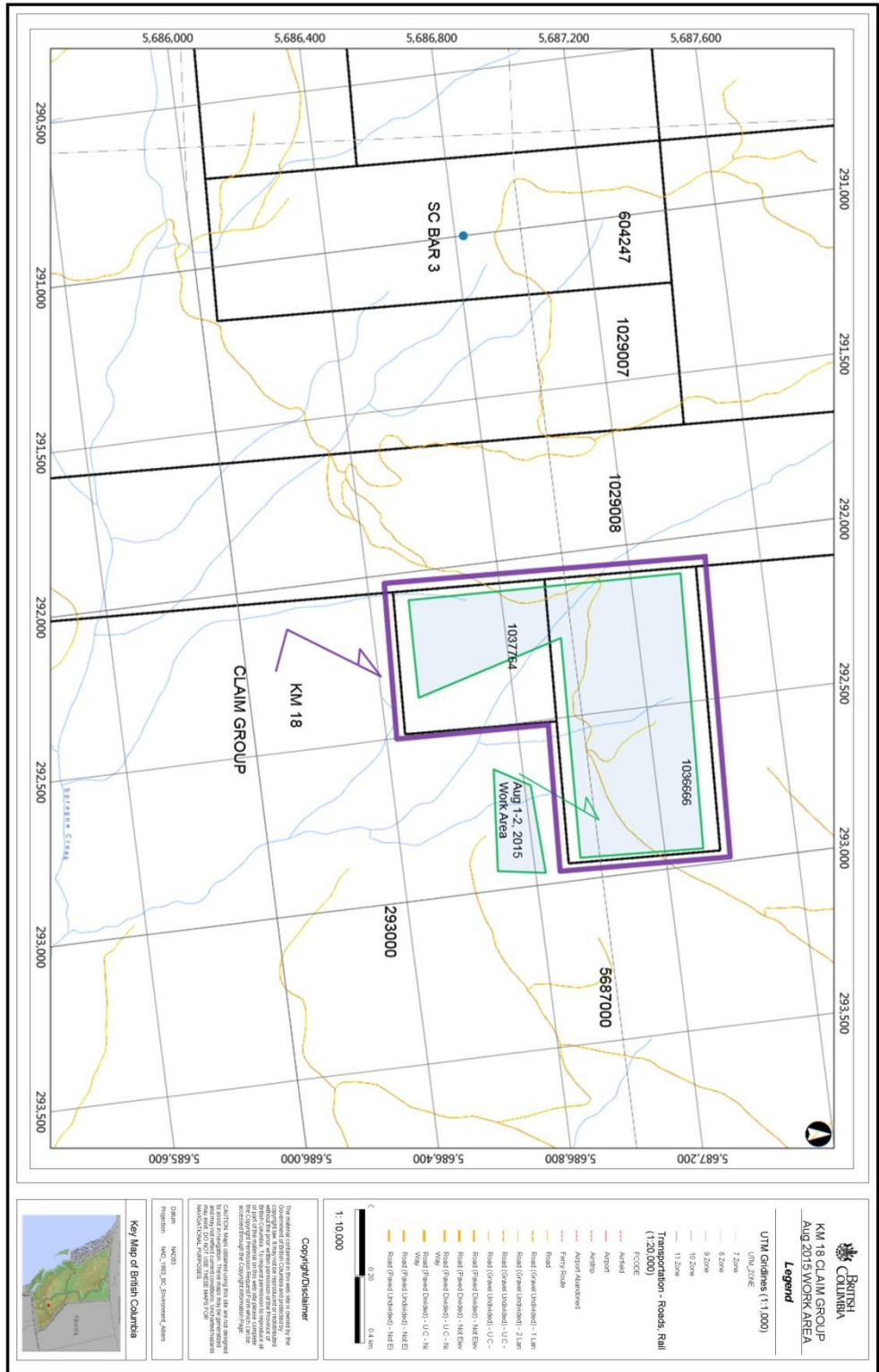


Figure 4 FM 18 Claim Map and Index Map – UTM 11 – iMapBC





## HISTORY

Exploration by others on land near the current KM 18 Claim Group has been reported.

The SC (BAR 3) Zone is located 1 km due west of the KM 18 Claim Group.

The Energite (Enargite) Past Producer is located 6 km north of the KM 18 Claim Group.

**Note** - The KM 18 Claim Group contains the geological contact between Lower Fennel and Eagle Bay rocks. The writer will provide background for the significance of both rock groups:

### SC (BAR 3) Zone

From AR34307, Thompson, R., 2013 First Americas Gold Corp.

*“The area is host to a large number and wide variety of mineral deposits; chief among them are volcanogenic massive sulfides, stratabound massive to semi-massive sulfides in sedimentary rocks, pyrite-fluorite replacements, disseminated sulfides in (Devonian) intrusive rocks, and disseminated copper-gold in the Cretaceous Baldy Batholith. The Kamloops Property surrounds the Chu Chua massive sulfide deposit; hence, the potential for additional pods of Chu Chua-like mineralization on the Property is significant. As well, gold in high-level, quartz-feldspar porphyry intrusions was explored in the 1980’s and ‘90’s and represents a 2nd class of deposit of particular interest to FAC.” .....and .....” Falconbridge explored the Property in 1984 and acquired the Chu Chua deposit in 1985. Drilling followed ground geophysical surveys with 3 holes drilled east of Chu Chua but to no effect. Falconbridge then extended their efforts south, along strike of Chu Chua and identified both conductors and soil anomalies; however, drill results were disappointing. Meanwhile, farther south, at the head of Sprague Creek, they explored a gold-bearing rhyolite porphyry and drilled 4 holes, one of which, **Bar 3**, intersected significant gold in a 59 m interval which returned assays of 4.45 g/t Au over 2.52 m, including 30 cm of massive pyrite assaying 17.6 g/t gold (Evans, 1987).....and*

#### **.....” Gold Potential of Devonian Quartz-Feldspar Porphyry**

*The focus of this report is a succession of quartz-feldspar porphyry derived from rhyolitic extrusion or hypabyssal intrusions that are concordant within argillite and siltstone of the lower division of the Fennell Formation. According the Schiarizza and Preto (1987), the intrusion sampled for gold content and reported on herein, is approximately 800 m thick and is located in and around the headwaters of Sprague Creek (Fig. 6.1). For the purposes of this report it will be termed **the SC Zone**.”.....and .....” The porphyry has a siliceous aphanitic matrix that varies from light grey to green to dark maroon which weathers to a chalky light-grey, white or pale green. Phenocrysts of feldspar and quartz are ubiquitous and may form up to 30% of the rock. The quartz is clear and round(ish) whereas the feldspar is white and anhedral to euhedral. The rhyolite outcrops as rounded, dense, hard masses that are very hard to break. Occasionally flow-like textures are observed. According to Schiarizza and Preto (1987, p. 40): “The phenocryst assemblage comprises either quartz-plagioclase or quartz-sanidine-plagioclase. The quartz and sanidine crystals are generally fresh and unaltered...and ....” [whereas] the plagioclase phenocrysts are commonly altered to a fine-grained assemblage of sericite, chlorite, calcite and quartz.”*

*The SC Zone (Fig. 6.1) is interpreted by Schiarizza and Preto (ibid) as a rhyolite dome or high-level intrusion. This author favors the latter interpretation.” .....and*

#### **.....” Alteration**

*The rhyolite porphyry is strongly altered by secondary silica as 1) replacements wholesale flooding, 2) apparent albitization distinguished by a chalky-white weathering rind, and 3) disseminated, secondary sericite (chlorite)-pyrite-epidote mineral growth. Veins and stockworks filled with white, grey and translucent quartz with or without pyrite, cut the silicified host rocks and their antecedents. It is the*

---

*opinion of this author that secondary silicification, accompanied by brecciation, veining, stockworks and the introduction of disseminated to massive pyrite, played an important role in gold emplacement.*

#### **Silicification**

*Silicification refers to zones in which country rock has been partially or entirely replaced by hydrothermal silica. Preservation of primary texture is inversely proportional to the intensity of silicification. Silica in the form of white or colourless quartz and smoky/grey quartz occurs in veins and stockworks in silicified zones.*

*Silica-matrix hydrothermal breccias, often dark grey to black due to the admixture of iron oxide occurs within zones of intense silicification. Angular fragments are typically strongly silicified country rock – in most cases altered rhyolite porphyry but occasionally argillite when close to the porphyry-argillite boundary. ”.....and*

#### **.....” Mineralization and Potential Deposit Types**

*No visible gold was encountered. It appears, based on the gold values returned from altered porphyry cuts by numerous late quartz veins and stockworks (Table 7.1), that gold deposition was a late-stage process associated with fracturing and brecciation.*

*Interpretation of the **SC Zone** as a felsic volcanic dome suggests a comparison with Noranda-type massive sulfide deposits (e.g. Franklin, 1993). Presence of high gold grades in association with massive pyrite (Bar-3 drill hole, ref. above) lends credence to the comparison; however, additional work is required before model associations are indicated.”*

#### **Energite (Enargite)**

MINFILE Number: 082M 065, Name(s): ENARGITE, NORTH STAR (SOUTH SHOWING)

Past Producer. *“The property is underlain by Devonian to Permian age **Fennell Formation rocks** consisting of cherts and phyllites in the west and Mississippian age **Eagle Bay Formation rocks** consisting of phyllites, siltstones and sandstones in the east. A fault striking 150 degrees and dipping steeply fault,*

*separating the two formations, has sheared and silicified the metasediments. The rocks generally strike 160 to 170 degrees and dip 50 to 90 degrees to the west, and in places, display rusty carbonate alteration. To the east is a Mississippian limestone unit.*

*Mineralization consisting of galena and pyrite and lesser sphalerite and chalcocopyrite, occurs within several quartz veins within a northerly trending zone measuring about 200 by 120 metres. Individual veins and lenses vary from a few centimetres to several metres wide and vary in orientation, although northerly strikes and moderate (40 to 50 degrees) easterly dips predominate.”*

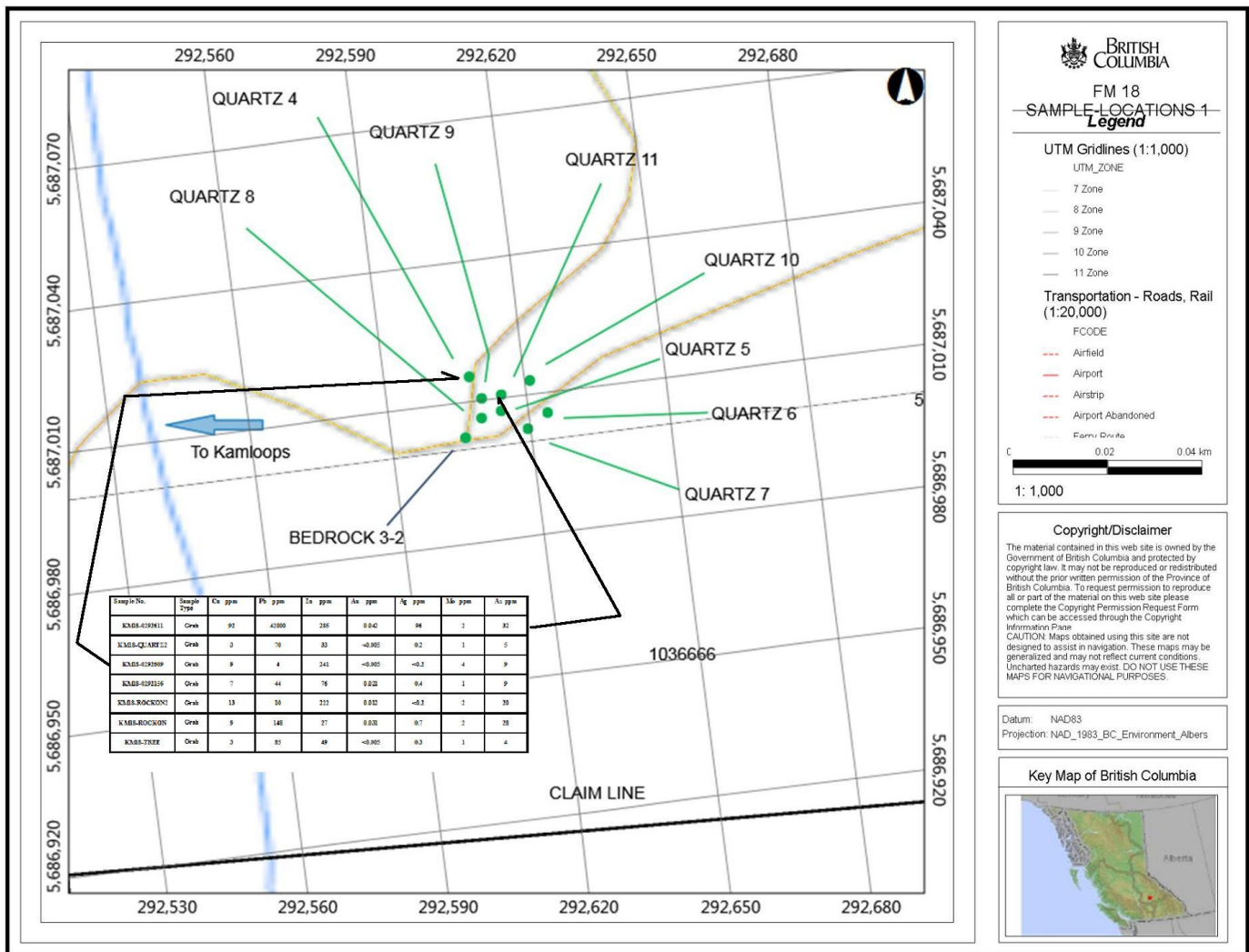
#### **SUMMARY OF WORK DONE 2015**

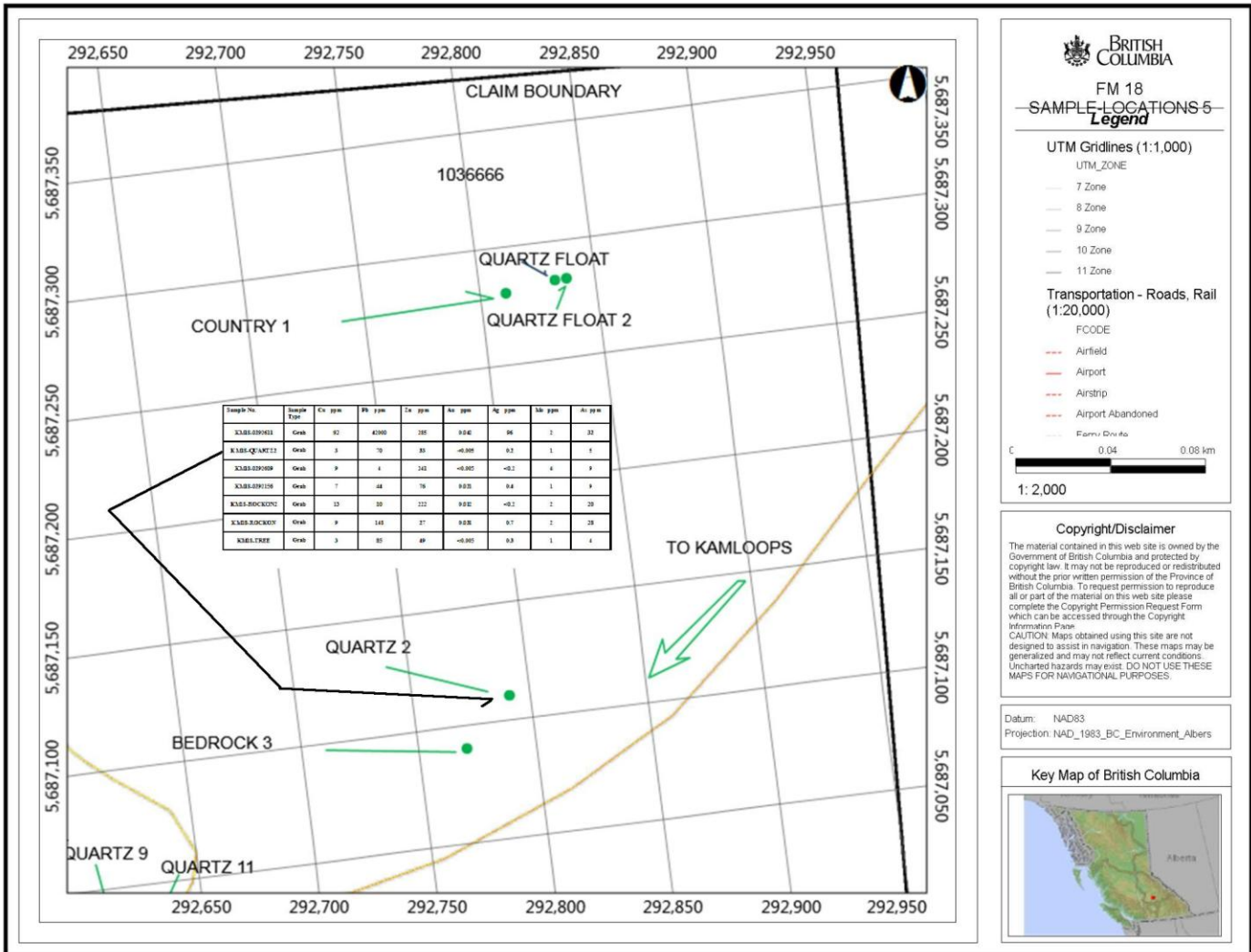
The Tenure Numbers in the KM 18 Claim Group on which work was performed:

Prospecting was conducted on 1036666 and 1037764 on August 1-2, 2015.(Figure 4 Index - Work Areas) to explore for similar geological features to the Kamloops Property (FAC).

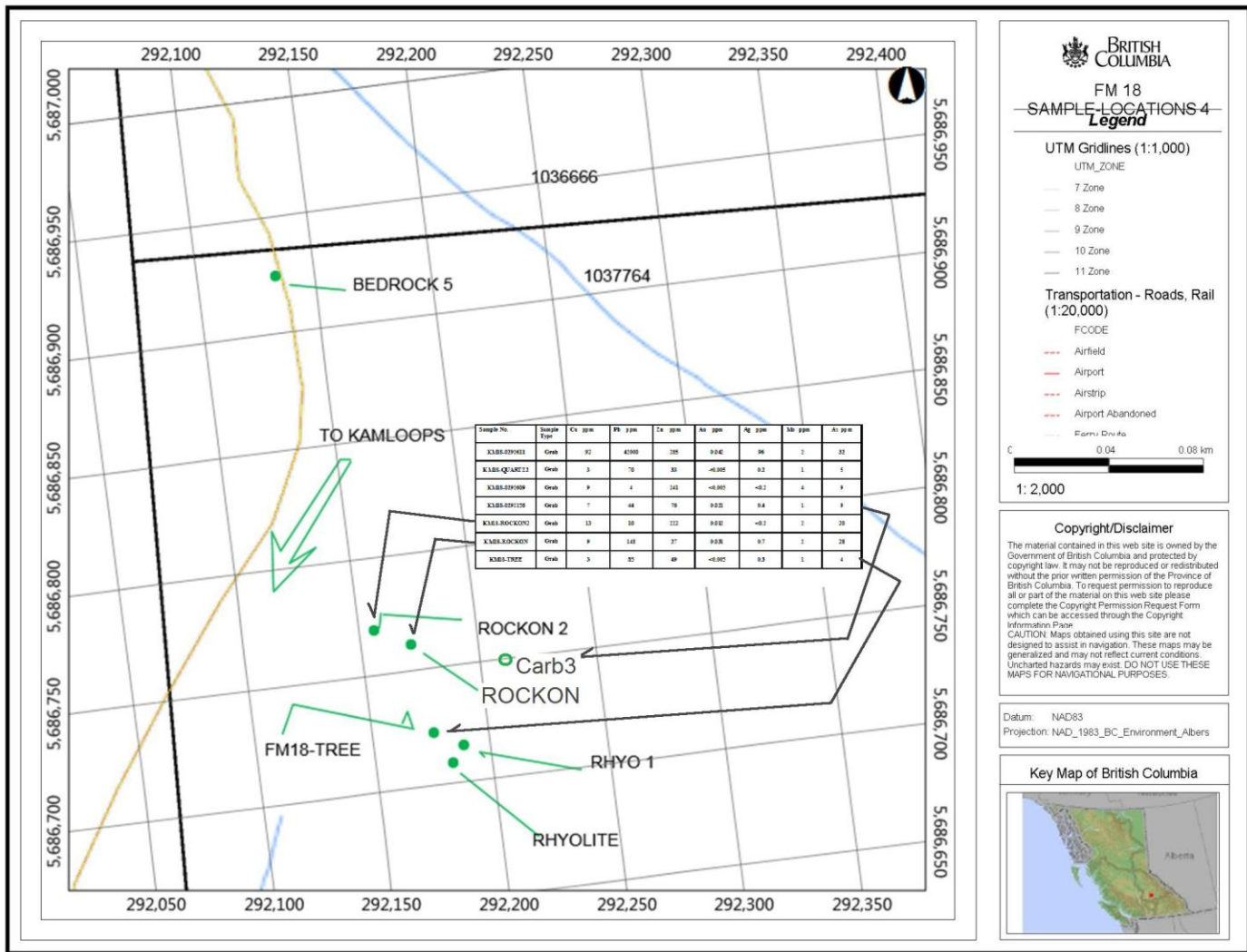
Two (2) field days were spent on the KM 18 Claim Group, including prospecting and travelling to and from the property. One (1) day was spent researching reference material, and a further one (1) day was spent compiling data, drafting and writing this report.

Figure 5 Sample Location Area Maps





Sample No.	Sample Type	Cu ppm	Pb ppm	Zn ppm	As ppm	Ag ppm	Sb ppm	Bi ppm
XX85-020061	Geol	82	4000	285	0.24	36	2	22
XX85-020121	Geol	3	70	20	<0.001	0.2	1	1
XX85-020109	Geol	9	1	242	<0.001	<0.2	8	9
XX85-020110	Geol	7	44	76	0.03	0.4	1	9
XX85-020320	Geol	13	30	22	0.02	<0.2	2	20
XX85-020321	Geol	9	141	27	0.03	0.7	2	20
XX85-020322	Geol	3	85	49	<0.001	0.3	1	4



**2015 WORK PROGRAM**

**Sampling Program** - The author was on the KM 18 Claim Group in August 2015 to select rock samples for verification of the reported mineralization and geology on the Property. Twenty four (24) grab samples were taken within the 2015 work area and seven (7) grab samples were submitted for assay.

**Table 1. Particulars of 24 Grab Samples taken by ELLERBECK (2015) in KM 18 Group**

No.	LOCATION / SAMPLE #	UTM LOCATION		DESCRIPTION
				All OUTCROP unless indicated
1	QUARTZ 7	0292619	5687003	Rotten layered quartz-galena, malachite, vugs
2	QUARTZ 9	0292611	5687010	Vuggy quartz, galena, wall rock
3	QUARTZ 11	0292611	5687010	Honeycomb quartz, galena, iron veinlets, diorite
4	QUARTZ FLOAT	0292839	5687283	Layered quartz, iron cubes, iron staining, wall rock
5	QUARTZ 8	0292611	5687006	Quartz - Iron staining, no visible mineral

6	QUARTZ 4	0292609	5687012	Quartz - Heavy iron stain, pyrite, wall rock
7	QUARTZ FLOAT 2	0292839	5687283	Quartz - Heavy iron staining, iron veinlets
8	QUARTZ 5	0292611	5687007	Quartz - Minor galena, malachite
9	QUARTZ 6	0292612	5687007	Quartz - Iron staining, vugs, wall rock
10	BEDROCK 3-2	0292613	5687010	Shale / Slate, layered
11	QUARTZ 10	0292611	5687010	Quartz – rotten, layered, iron veinlets, vugs, wall rock
12	CARB 3	0292156	5686750	Quartz carbonate? Iron veinlets, layered, chalcopyrite
13	CARB 1	0292172	5686750	Quartz carbonate?- banded, iron veinlets
14	CARB 2	0292170	5686746	Quartz – vuggy, iron cubes, iron staining
15	KM18 TREE	0292171	5686747	Quartz carbonate? – layers, iron veins, iron staining, arsenopyrite?
16	QUARTZ 2	0292793	5687111	Quartz – heavy iron staining, wall rock
17	ROCK ON 2	0292157	5686770	Quartz carbonate – pyrite, arsenopyrite?
18	EAGLE 1	0293131	5687608	Slate – large iron cubes – EAGLE BAY-OFF CLAIMS
19	ROCK ON	0292174	5686761	Quartz carbonate – heavily mineralized, pyrite, arsenopyrite?
20	BEDROCK 5	0292146	5686924	Dark – Quartz banding, large pyrite cubes
21	COUNTRY 1	0292838	5687284	Sediment-EAGLE BAY grey–deformed, quartz veinlets
22	BEDROCK 3	0292771	5687092	Dark – iron inclusions, layered
23	RHYO 1	0292191	5686712	Rhyolite – light green, iron specs, very hard, altered edges (soft)
24	RHYOLITE	0292188	5686712	Rhyolite – light brown, pyrite, quartz veinlets, weathering rind

**FIGURE 6 LOCATION AND TYPICAL ROCK PICTURES  
QUARTZ 7 TYPICAL ROCK PICTURE**



**QUARTZ 9 TYPICAL ROCK PICTURE**



**QUARTZ 11 LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ FLOAT LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ 8 TYPICAL ROCK PICTURE**





**QUARTZ 4 LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ FLOAT 2 LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ 5 LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ 6 TYPICAL ROCK PICTURE**



**BEDROCK 3-2 LOCATION AND TYPICAL ROCK PICTURE**



**QUARTZ 10 TYPICAL ROCK PICTURE**



**CARB 3 TYPICAL ROCK PICTURE**



**CARB 1 TYPICAL ROCK PICTURE**



**CARB 2 LOCATION AND TYPICAL ROCK PICTURE**



**KM 18 TREE TYPICAL ROCK PICTURE**



**QUARTZ 2 LOCATION AND TYPICAL ROCK PICTURE**



**ROCK ON 2 LOCATION AND TYPICAL ROCK PICTURE**



**EAGLE 1 LOCATION AND TYPICAL ROCK PICTURE**



**ROCK ON TYPICAL ROCK PICTURE**



**BEDROCK 5 LOCATION AND TYPICAL ROCK PICTURE**



**COUNTRY 1 LOCATION AND TYPICAL ROCK PICTURE**





**BEDROCK 3 LOCATION AND TYPICAL ROCK PICTURE**



**RHYO 1 LOCATION AND TYPICAL ROCK PICTURE**

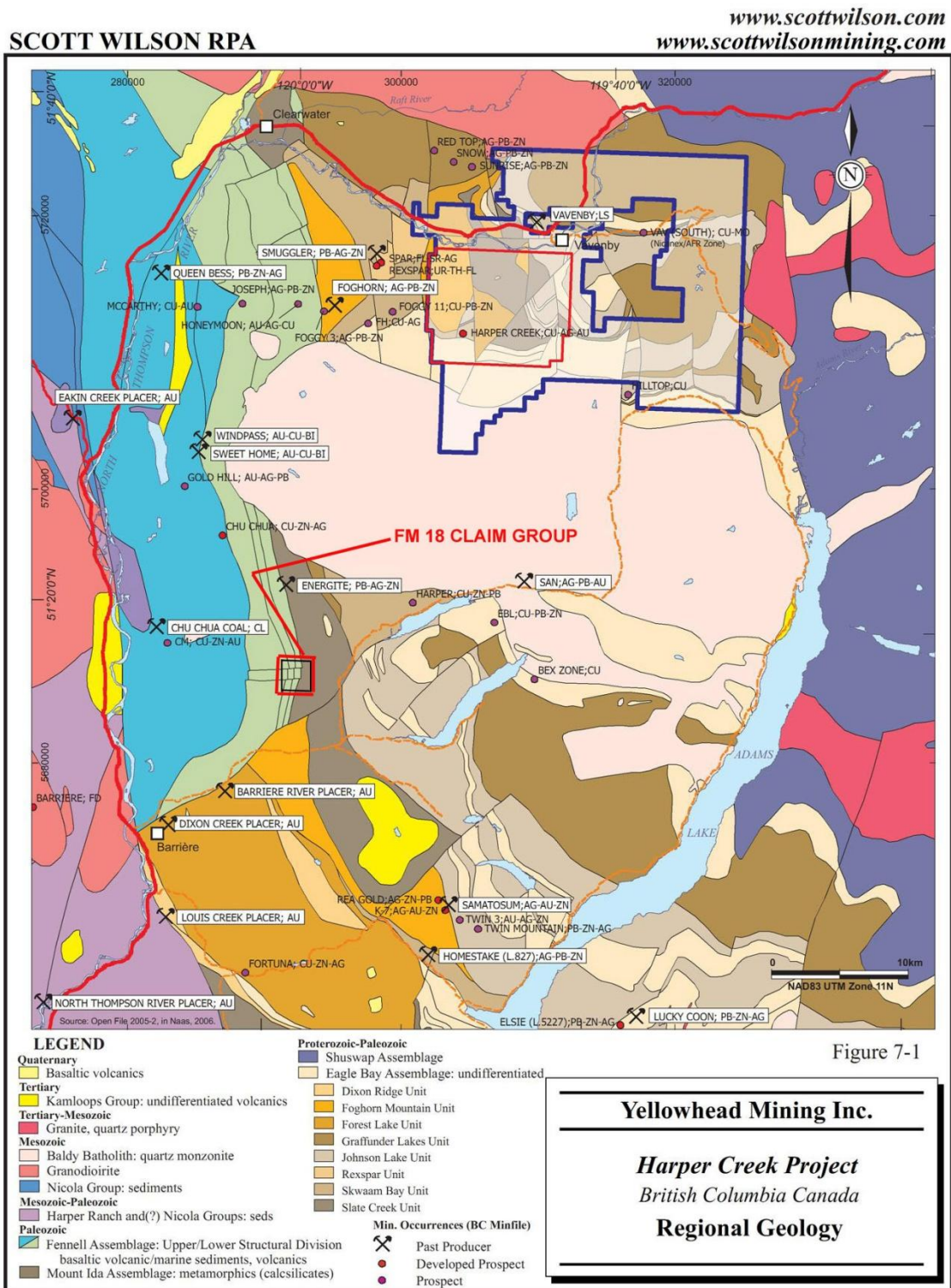


**RHYOLITE LOCATION AND TYPICAL ROCK PICTURE**



SUMMARY OF REGIONAL AND PROPERTY GEOLOGY

REGIONAL GEOLOGY Figure 7 KM 18 CLAIM GROUP Regional Geology



**From Thompson, R., AR 34307, Kamloops Property, First Americas Gold Corp, 2013.**

.....” *The Property is in an area of past producing mines including Samatosum and Homestake; the area also contains deposits with 43-101 compliant resource estimates having production potential: Chu Chua, Rea and Harper Creek. The region is underlain by the metal-rich Eagle Bay Group of rocks. The Property occurs at the boundary between the Eagle Bay Assemblage (blue, unit CEB) and the Fennell Formation (grey, unit DTS). West of the Property is an important metallogenic boundary, separating Triassic volcanic and Early Jurassic intrusions which host porphyry copper deposits, from the older Eagle Bay assemblage which is host to volcanogenic, replacement and stratabound-type poly-metallic deposits.”..... and “...According to previous authors, the Chu Chua Property is underlain by the upper and lower divisions of the Fennell Formation. The upper division is dominated by mafic pillowed basalt and greenstone (Fig. 6.3) with mafic sills some argillite and rare chert; the lower division consists of carbonaceous greywacke and argillite (Fig. 6.4), ribbon chert, intraformational conglomerate, and rhyolite porphyry. This succession was intruded by quartz monzonite belonging to the Cretaceous Baldy Batholith. The cherts are fossiliferous and from them a pattern of internal thrust imbrications is derived (Fig. 6.2; Schiarizza and Preto, 1987).”*

The Author’s inspection of the KM 18 tenure area in August 2015 confirmed the presence of the Fennell Formation rocks as well as Eagle Bay rocks, and mineralization.

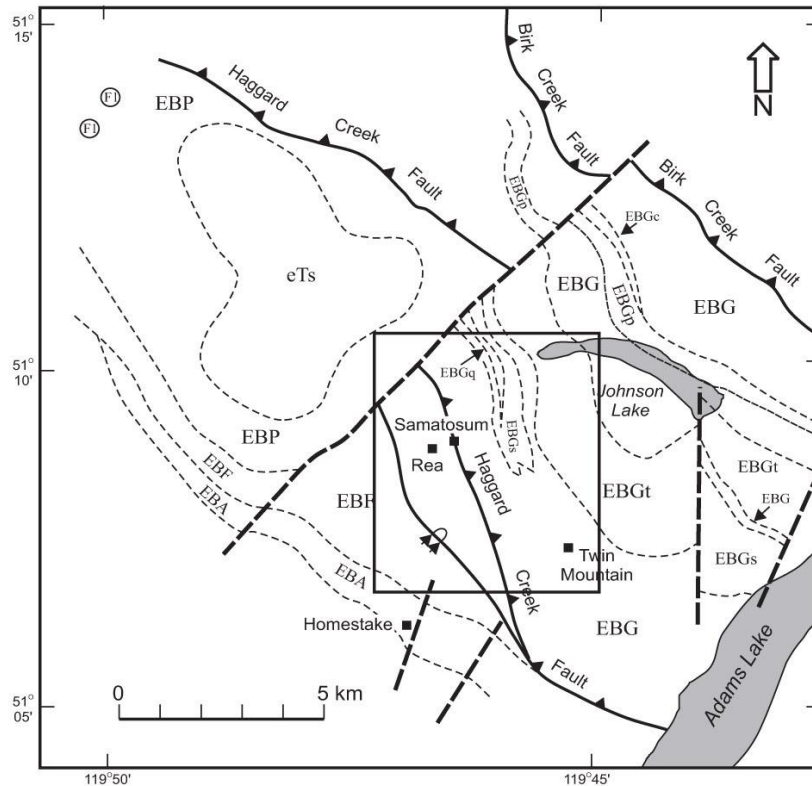
Previous geological mapping by others has provided some detail of the contact between the Fennell and Eagle Bay rocks.

Of particular note is that rocks of the Eagle Bay assemblage host significant deposits – REA and SAMATOSUM, Yellowhead’s Harper Creek deposit (in Environmental Review process), and the ENARGITE (Past Producer).

The Yellowhead Mining Inc. Regional Geology Map (Fig. 7) is a good reference.

(Fig. 8) – Geology of the REA-SAMATOSUM Deposits indicates that the Eagle Bay Assemblage rock unit EBP may be host to those deposits. The EBP unit is present in the FM 18 Claim Group in the vicinity of the Fennell Formation rocks.

**Figure 8 KM 18 CLAIM GROUP Regional Geology – REA-SAMATOSUM DEPOSITS**  
**From Geologic Setting of the Devonian-Mississippian, Rea and Samatosum VMS Deposits of**  
**the Eagle Bay Assemblage, Adams Lake Area, South Central British Columbia**  
*Sean L. Bailey<sup>2</sup>, Suzanne Paradis<sup>3</sup>, Stephen T. Johnston<sup>2</sup>, and Trygve Höy, 1999 BCGS*



**LEGEND**

- - - Geological contacts
- ⌒ Overturned syncline
- ▲ Thrust fault
- Fault
- ⊕ Conodont fossil locality; Mississippian
- Mineral occurrence

**EOCENE**  
 eTs Kamloops Group:  
 Andesite and basalt

**EAGLE BAY ASSEMBLAGE**  
**MISSISSIPPIAN**  
 EBP Phyllite, sandstone, grit; minor conglomerate, limestone and metavolcanic rocks  
**DEVONIAN and/or MISSISSIPPIAN**  
 EBF Feldspathic phyllite and schist derived from intermediate tuff and volcanic breccia  
**DEVONIAN**  
 EBA Chlorite - sericite - quartz phyllite and schist derived from felsic to intermediate volcanic rocks  
**LOWER CAMBRIAN**  
 EBG Calcareous chlorite schist and greenstone derived from mafic volcanic rocks; EBGc - marble  
 EBGt - Tshinakin limestone; EBGs - phyllite, limestone, quartzite; EBGq - quartzite; EBGp - phyllite and limestone

Figure 2. Geological map of the Johnson Lake area, modified after Schiarizza and Preto (1987)

.....”Highly deformed Cambrian to Mississippian metasedimentary and metavolcanic rocks of the Eagle Bay Assemblage in the Adams Lake area host numerous polymetallic sulphide deposits. The region has long been recognized as favorable for various types of sulphide deposits, and is still today a prospective “ground” for mineral exploration. The Homestake barite-sulphide deposit was discovered in 1893. Since then numerous sulphide occurrences have been found in the district. Some of these, including Samatosum, Rea and Homestake, have had limited production, and others, such as Twin Mountain, have had extensive exploration work over the years. This paper briefly describes the Samatosum, Rea, and Twin Mountain sulphide deposits located in the Adams Lake area of south central British Columbia, approximately 80 kilometers northeast of Kamloops (Figure 1). It defines their geological settings, and addresses some fundamental structural and stratigraphic problems in the region. This study was initiated during the summer of 1999 as the M.Sc. project of the first author (Sean L. Bailey) and included 1: 5000 scale regional mapping of an approximately 30 km<sup>2</sup> area conducted over a 7 week period. It is part of the Ancient Pacific Margin NATMAP metallogenic study of syngenetic sulphide deposits of the Kootenay Terrane and the correlative Yukon-Tanana Terrane in northern British Columbia and Yukon..... The first documented discovery of sulphide occurrence in the Adams Lake area dates back to 1893 with the discovery of the Homestake barite-sulphide deposit. The Homestake mine was worked intermittently between 1893 and 1984. In the 1920s, numerous sulphide occurrences were found in the Birk Creek and Harper Creek areas. In 1978, the Chu Chua massive cupriferous pyrite deposit was discovered in basalts of the Fennell Formation. However, none of these discoveries resulted in significant production. In 1983, A. Hilton and R. Nicholls discovered the Rea massive sulphide deposit. They optioned it to Rea Gold Corporation who in turn optioned it to Corporation Falconbridge Copper (presently Inmet Mining Corporation). Drilling carried out by Corporation Falconbridge Copper in the 1980s outlined two small but fairly high-grade massive sulphide lenses (known as the “Discovery zone” or the “Rea horizon”). The most recent published estimate of the mineralization was 376,000 tonnes grading 0.33 percent copper, 2.2 percent lead, 2.3 percent zinc, 6.1 grams per tonne gold, and 69.4 grams per tonne silver (Northern Miner – November 30, 1987).....

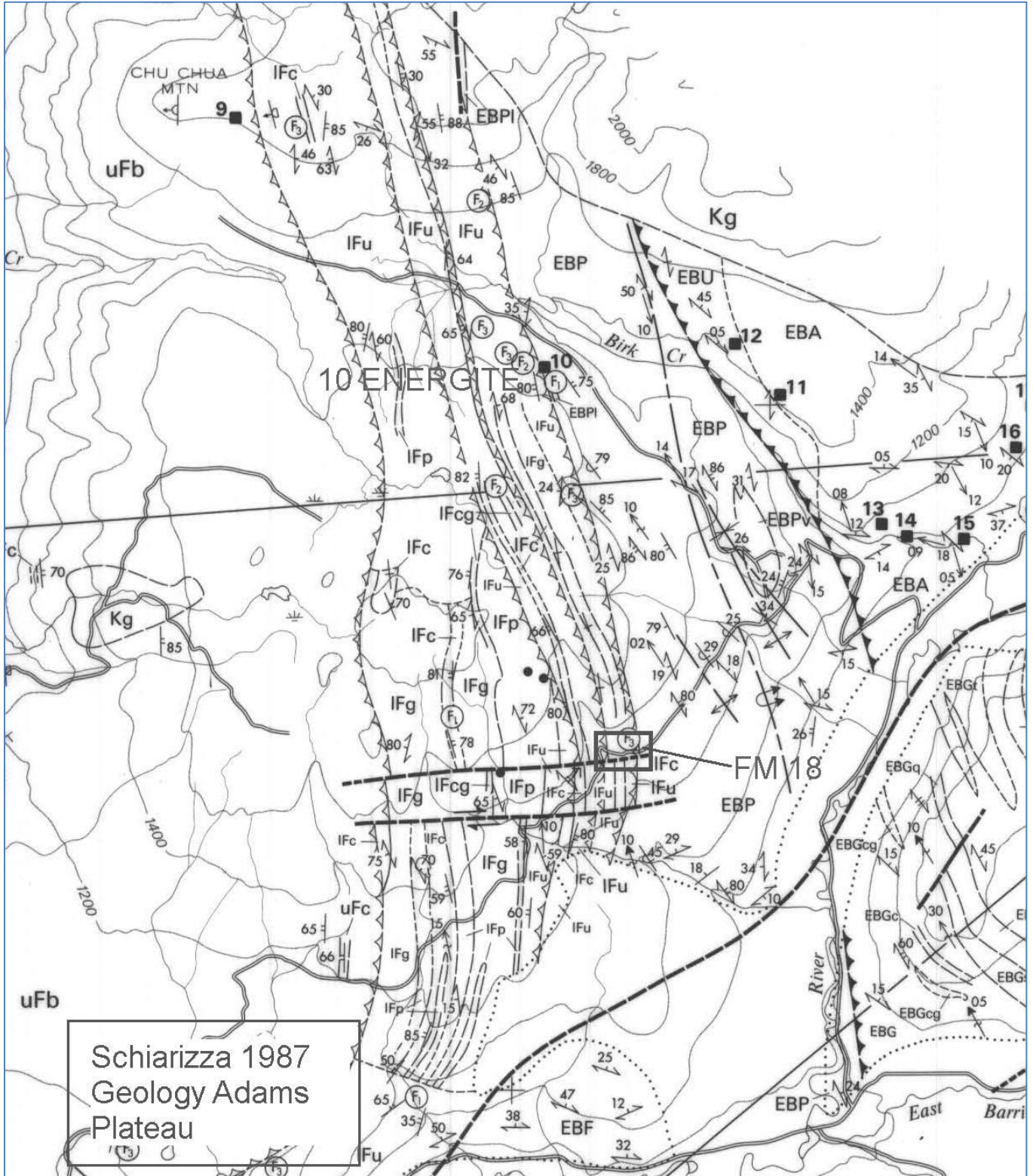
### **Regional Geology**

Metavolcanic and metasedimentary rocks of the Eagle Bay Assemblage of the Kootenay Terrane host the Rea and Twin Mountain sulphide deposits and the Samatosum vein deposit. The Kootenay Terrane and correlative rocks of the Yukon-Tanana Terrane farther north comprise dominantly Paleozoic sedimentary and volcanic rocks that are inferred to have been deposited on the distal western edge of ancestral North America. The successions of the Kootenay Terrane include the Lardeau Group, the Eagle Bay Assemblage, eastern assemblages of the Late Paleozoic Milford Group, and equivalent rocks within the Shuswap metamorphic complex (Höy, 1999). The Eagle Bay Assemblage, described by Schiarizza and Preto (1987), comprises Lower Cambrian to Mississippian rocks that are intruded by Late Devonian orthogneiss and Jurassic-Cretaceous granodiorite and quartz monzonite of the Raft and Baldy batholiths. Within the study area, the Eagle Bay Assemblage is contained within four west-directed thrust slices. The assemblage consists of clastic metasedimentary rocks (units EBH and EBQ Schiarizza and Preto 1987), mafic metavolcanic rocks and limestone (unit EBG), and structurally overlying clastic metasedimentary rocks, with minor carbonate and volcanic rocks (unit EBS), all of which are interpreted as Cambrian in age. These are in turn overlain by Devonian-Mississippian mafic to intermediate metavolcanic and metasedimentary rocks (units EBA and EBF, respectively),

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*which are overlain by metaclastic rocks (unit EBP). Numerous volcanogenic sulphide occurrences of the Eagle Bay Assemblage, including Rea, Homestake, Samatosum and Twin Mountain are within mafic to intermediate metavolcanic and metasedimentary rocks of units EBA, EBF, and EBG (Figure 2). Regional mapping by Schiarizza and Preto (1987) and this study indicate that units EBA, EBF, and EBP between the Samatosum and Homestake deposits are apparently right-way-up regionally but locally overturned (Figure 2). These are structurally overlain by mafic metavolcanic rocks of EBG and the Tshinakin Limestone Member which is assigned a Lower Cambrian age (Schiarizza and Preto, 1987). These stratigraphic and structural relationships led to the inference by Schiarizza and Preto (1987) of the Haggard Creek Thrust Fault, which places Cambrian rocks on Devonian–Mississippian rocks. The Samatosum and Rea deposits are located near the inferred trace of this fault, and controversy exists over which package(s) of rocks hosts the deposits and whether or not a major thrust fault exists. This study will attempt to resolve these matters.....”*

**LOCAL GEOLOGY** Figure 9 **KM 18 CLAIM GROUP Local Geology-Legend**





<p>DEVONIAN TO PERMIAN</p> <p>ALLOCHTHONOUS INTERNALLY IMBRICATED OCEANIC ASSEMBLAGE</p> <p>FENNELL FORMATION</p> <p>UPPER STRUCTURAL DIVISION</p> <p><b>uFb</b> GREY AND GREEN PILLOWED AND MASSIVE META-BASALT; MINOR AMOUNTS OF BASALTIC BRECCIA, TUFF, DIABASE, GABBRO, AND CHERT</p> <p><b>uFc</b> GREY AND GREEN BEDDED CHERT</p> <p>LOWER STRUCTURAL DIVISION</p> <p><b>IFc</b> GREY AND GREEN BEDDED CHERT, CHERTY ARGILLITE, SLATE, AND PHYLLITE</p> <p><b>IFb</b> GREY AND GREEN PILLOWED AND MASSIVE META-BASALT; MINOR AMOUNTS OF BASALTIC BRECCIA AND TUFF</p> <p><b>IFg</b> GABBRO, DIORITE, DIABASE</p> <p><b>IFp</b> LIGHT TO MEDIUM GREY QUARTZ-FELDSPAR PORPHYRY RHYOLITE</p> <p><b>IFs</b> LIGHT TO DARK GREY SANDSTONE, SILTSTONE, SLATE, PHYLLITE, AND QUARTZITE; MINOR AMOUNTS OF LIMESTONE AND CHERT; IN PLACES INCLUDES GREY TO GREEN QUARTZOSE AND FELDSPATHIC PHYLLITE (METATUFF)</p> <p><b>IFcg</b> INTRAFORMATIONAL CONGLOMERATE; CLASTS DERIVED EXCLUSIVELY FROM FENNELL FORMATION LITHOLOGIES</p> <p><b>IFu</b> UNDIVIDED; MAINLY IFc, IFg, and IFb, BUT MAY INCLUDE ANY OR ALL OF ABOVE ROCK TYPES</p>	<p>DEVONO-MISSISSIPPIAN AND OLDER PARAUTOCHTHONOUS ROCKS (EBP TO SDQ)</p> <p>EAGLE BAY FORMATION (EBP TO EBG)</p> <p>MISSISSIPPIAN</p> <p><b>EBP</b> DARK GREY PHYLLITE AND SLATE WITH INTER-BEDDED SILTSTONE, SANDSTONE, AND GRIT; MINOR AMOUNTS OF CONGLOMERATE, LIMESTONE, AND METATUFF; <b>EBPi</b>-LIMESTONE; <b>EBPv</b>-METAVOLCANIC BRECCIA AND TUFF</p> <p>DEVONIAN AND/OR MISSISSIPPIAN</p> <p><b>EBF</b> LIGHT TO MEDIUM GREY, RUSTY WEATHERING FELDSPATHIC PHYLLITE AND FRAGMENTAL PHYLLITE DERIVED FROM INTERMEDIATE TO FELSIC TUFF AND VOLCANIC BRECCIA; MINOR AMOUNTS OF DARK GREY PHYLLITE AND SILTSTONE; <b>EBFq</b>-LIGHT GREY MASSIVE "CHERTY QUARTZITE" (SILICEOUS EXHALITE ?)</p> <p>DEVONIAN</p> <p><b>EBA</b> LIGHT SILVERY GREY TO MEDIUM GREENISH GREY SERICITE-QUARTZ PHYLLITE AND SERICITE-CHLORITE-QUARTZ PHYLLITE DERIVED FROM FELSIC TO INTERMEDIATE VOLCANIC AND VOLCANICLASTIC ROCKS INCLUDING PYRITIC, FELDSPATHIC, AND COARSELY FRAGMENTAL VARIETIES; LESSER AMOUNTS OF DARK GREY PHYLLITE, SILTSTONE, AND GREEN CHLORITIC PHYLLITE; INCLUDES BIOTITE-FELDSPAR-QUARTZ SCHIST AND GNEISS, BIOTITE-QUARTZ HORNFELS AND AMPHIBOLITE ADJACENT TO BALDY BATHOLITH; <b>EBAf</b>-FELDSPAR PORPHYRY, FELDSPATHIC PHYLLITE, PYRITIC SERICITE-FELDSPAR-QUARTZ PHYLLITE, METAVOLCANIC BRECCIA; <b>EBAi</b>-SERICITIC QUARTZO-FELDSPATHIC SCHIST AND GNEISS DERIVED FROM FELSIC INTRUSIVE ROCKS; <b>EBAu</b>-UNDIVIDED EBA and EBAi</p>
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**From Thompson, R., AR 34307, Kamloops Property, First Americas Gold Corp, 2013.**  
*... "The Kamloops Property is underlain by mafic volcanic rocks belonging to the Permian Fennell Formation; carbonaceous argillite and siltstone along with rhyolite porphyry that are part of the mid-Paleozoic Eagle Bay assemblage (Scharizza and Preto, 1987; Thompson et. al. 2006); and Cretaceous granodiorite and quartz-monzonite of the Raft and Baldy batholiths which intrude the whole."*

The Author confirmed the presence of both Fennell Formation Lower Structural Division rocks and Eagle Bay Formation EBP unit rocks within the FM 18 claim group.

**A previously unmapped occurrence of Rhyolite (10m X 30m) bedrock was discovered at 0292191E 5686712N in Tenure 1037764.** There is no mention of this rock unit in the earlier mapping done by Scharizza/Preto circa 1987. (Fig. 9).

The Author assumes that recent logging and road construction have just now revealed the Rhyolite, assumed to be the Fennell Formation IFp unit. From physical inspection of rocks of the neighbouring SC (BAR 3) area, the author is of the opinion that there is a distinct similarity between the rhyolite rocks of both areas. Highly altered rhyolite was noted in both locations.

**SUMMARY OF REGIONAL AND PROPERTY GEOLOGY (.....continued)**

Prospecting on the FM 18 CLAIM GROUP revealed the presence of mineral bearing veins in the Work Area.

Elevated levels of Au were found in **KM18-0292611, KM18-0292156, KM18-ROCKON2, KM18-ROCKON;**

Elevated levels of Cu, Pb, Zn were found in **KM18-0292611, KM18-ROCKON2, KM18-0292609;**

Elevated levels of As were found in **KM18-0292611, KM18-ROCKON2, KM18-ROCKON.**

**Table I. Particulars of Grab Samples taken by ELLERBECK LOCKE (2015) KM-18**

No.	LOCATION / SAMPLE #	UTM LOCATION		DESCRIPTION
				All OUTCROP unless indicated
1	QUARTZ 7	0292619	5687003	Rotten layered quartz-galena, malachite, vugs
2	QUARTZ 9	0292611	5687010	Vuggy quartz, galena, wall rock
3	QUARTZ 11	0292611	5687010	Honeycomb quartz, galena, iron veinlets, diorite
4	QUARTZ FLOAT	0292839	5687283	Layered quartz, iron cubes, iron staining, wall rock
5	QUARTZ 8	0292611	5687006	Quartz - Iron staining, no visible mineral
6	QUARTZ 4	0292609	5687012	Quartz - Heavy iron stain, pyrite, wall rock
7	QUARTZ FLOAT 2	0292839	5687283	Quartz - Heavy iron staining, iron veinlets
8	QUARTZ 5	0292611	5687007	Quartz - Minor galena, malachite
9	QUARTZ 6	0292612	5687007	Quartz - Iron staining, vugs, wall rock
10	BEDROCK 3-2	0292613	5687010	Shale / Slate, layered
11	QUARTZ 10	0292611	5687010	Quartz – rotten, layered, iron veinlets, vugs, wall rock
12	CARB 3	0292156	5686750	Quartz carbonate? Iron veinlets, layered, chalcopyrite
13	CARB 1	0292172	5686750	Quartz carbonate?- banded, iron veinlets
14	CARB 2	0292170	5686746	Quartz – vuggy, iron cubes, iron staining
15	KM18 TREE	0292171	5686747	Quartz carbonate? – layers, iron veins, iron staining, arsenopyrite?
16	QUARTZ 2	0292793	5687111	Quartz – heavy iron staining, wall rock
17	ROCK ON 2	0292157	5686770	Quartz carbonate – pyrite, arsenopyrite?
18	EAGLE 1	0293131	5687608	Slate – large iron cubes
19	ROCK ON	0292174	5686761	Quartz carbonate – heavily mineralized, pyrite, arsenopyrite?
20	BEDROCK 5	0292146	5686924	Dark – Quartz banding, large pyrite cubes
21	COUNTRY 1	0292838	5687284	Sedimentary- grey– deformed, quartz veinlets
22	BEDROCK 3	0292771	5687092	Dark – iron inclusions, layered
23	RHYO 1	0292191	5686712	Rhyolite – light green, iron specs, very hard, altered edges (soft)
24	RHYOLITE	0292188	5686712	Rhyolite – light brown, pyrite, quartz veinlets, weathering rind

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**TECHNICAL DATA AND INTERPRETATION**
**Table II. Summarized Assay Results- Grab Samples-Ellerbeck (2015) – KM 18**

Sample No.	Sample Type	Cu ppm	Pb ppm	Zn ppm	Au ppm	Ag ppm	Mo ppm	As ppm
KM18-0292611	Grab	92	42000	285	0.042	96	2	32
KM18-QUARTZ2	Grab	3	70	33	<0.005	0.2	1	5
KM18-0292609	Grab	9	4	241	<0.005	<0.2	4	9
KM18-0292156	Grab	7	44	76	0.021	0.4	1	9
KM18-ROCKON2	Grab	13	10	222	0.012	<0.2	2	20
KM18-ROCKON	Grab	9	148	27	0.031	0.7	2	28
KM18-TREE	Grab	3	85	49	<0.005	0.3	1	4

**PURPOSE**

In August 2015 a prospecting program was completed on Tenures 1036666 and 103764 of the 2 Claim KM 18 CLAIM GROUP. The purpose of the prospecting program was to locate, if possible, historic reported geological features (copper, gold, silver bearing structures in particular) as well as to prospect for unidentified mineralized outcrops and showings of significance. Information for this report was obtained from sources cited under Selected References and from a property examination made on August 1-2, 2015.

**PROSPECTING RESULTS** – Outcrops/Bedrock observance confirmed local/property and regional geological mapping. Mineralization was noted and sampled.

**ASSAY RESULTS**

Elevated levels of Au were found in **KM18-0292611, KM18-0292156, KM18-ROCKON2, KM18-ROCKON;**

Elevated levels of Cu, Pb, Zn were found in **KM18-0292611, KM18-ROCKON2, KM18-0292609;**

Elevated levels of As were found in **KM18-0292611, KM18-ROCKON2, KM18-ROCKON.**

**INTERPRETATIONS AND CONCLUSIONS**

The reported (in various ARIS assessment reports) presence of mineralization in proximity to the KM 18 Claim Group was researched, as well as the host rock type for that mineralization.

Sampling and assaying rocks from various outcroppings within the KM 18 on the August 1-2, 2015 prospecting program revealed significant mineralization.

Assays of samples revealed the presence of significant mineralization.

The presence of arsenic (As) in significant amounts in at least 3 of the samples is of interest because of the association of As with the Rea-Samatosum deposit and the rock type (Eagle Bay Formation).

**FM 18 Mineralization:** Ag Au Pb Zn Cu As

Host rock type - FENNEL FORMATION and EAGLE BAY FORMATION rocks noted.

**Proximal Mineralization:**

SC (BAR 3) - Au

ENARGITE – Pb Zn Ag Au

REA – SAMATOSUM – Ag Au

CHU CHUA – Cu Pb Zn

Host rock type - FENNEL FORMATION and EAGLE BAY FORMATION rocks noted.

**CONCLUSIONS**

The KM 18 CLAIM GROUP contains both FENNEL FORMATION and EAGLE BAY FORMATION rocks and significant mineralization. The rock-type setting for mineralization within the KM 18 is similar to that of known deposits and past producers in the area.

**SUMMARY AND RECOMMENDATIONS**

The 2015 field program showed that mineralization is present in rocks of the host Fennel Formation of the KM 18 property in proximity to rocks of the Eagle Bay formation which hosts the REA, SAMATOSUM and HARPER CREEK deposits as well as the ENARGITE (ENERGITE) past producer .

The 2015 field program assay results justify a detailed geological examination of the FM 18 Claim Group.

Therefore it is recommended by the Author that a comprehensive prospecting plan be created and executed in the field as soon as practical in order to confirm and map the extent of the mineralized areas herein reported and to locate and understand the Fennell and Eagle Bay Formations' contact within the KM 18.

## ITEMIZED COST STATEMENT

Exploration Work type	Comment - 103666 - 103764	Days			Totals
<b>PROSPECTING &amp; EXPLORATION</b>					
<b>Personnel (Name)* / Position</b>	<b>Field Days (list actual days)</b>	<b>Days</b>	<b>Rate</b>	<b>Subtotal*</b>	
Ken Ellerbeck / Owner	August 1, 2015	1	\$400.00	\$400.00	
Gerald Locke/ Owner	August 1, 2015	1	\$400.00	\$400.00	
			\$0.00	\$0.00	
Gerald Locke/ Owner	August 2, 2015	1	\$400.00	\$400.00	
Ken Ellerbeck / Owner	August 2, 2015	1	\$400.00	\$400.00	
			\$0.00	\$0.00	
				\$1,600.00	<b>\$1,600.00</b>
<b>Office Studies</b>	<b>List Personnel (Office only - field days not included)</b>				
Literature search	Ken Ellerbeck	0.5	\$400.00	\$200.00	
Database compilation	Ken Ellerbeck	0.5	\$400.00	\$200.00	
General research	Ken Ellerbeck	0.5	\$400.00	\$200.00	
Report preparation	Ken Ellerbeck	1.0	\$400.00	\$400.00	
Other (specify)				\$0.00	
				\$1,000.00	<b>\$1,000.00</b>
<b>Ground Exploration Surveys</b>	<b>Area in Hectares/List Personnel</b>				
Prospect	see Personnel Field Days				
Underground					
Trenches				\$0.00	<b>\$0.00</b>
<b>Geochemical Surveying</b>	<b>Number of Samples</b>	<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
Soil	ALS MINERALS Vancouver	0.0	\$0.00	\$0.00	
Rock	ALS MINERALS Vancouver	7.0	\$45.00	\$315.00	
				\$315.00	<b>\$315.00</b>
<b>Transportation</b>		<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
Ft St John-Kamloops-return	kilometres	2100.00	\$0.95	\$1,995.00	
Kamloops-Property-return-2 days		390.00	\$0.95	\$370.50	
Kamloops-Assay Lab-return		43.00	\$0.95	\$40.85	
				\$2,406.35	<b>\$2,406.35</b>
<b>Accommodation &amp; Food</b>	<b>Rates per day</b>				
Hotel			\$0.00	\$0.00	
Camp			\$0.00	\$0.00	
Meals	4 man-days @\$40/day	4.00	\$40.00	\$160.00	
				\$160.00	<b>\$160.00</b>
<b>Miscellaneous</b>					
Telephone			\$0.00	\$0.00	
Other (Specify)					
				\$0.00	<b>\$0.00</b>
<b>Equipment Rentals</b>					
Field Gear (Specify)			\$0.00	\$0.00	
Other (Specify)					
				\$0.00	<b>\$0.00</b>
<b>Freight, rock samples</b>					
			\$0.00	\$0.00	
			\$0.00	\$0.00	
				\$0.00	<b>\$0.00</b>
<b>TOTAL Expenditures</b>					<b>\$5,481.35</b>

**STATEMENT OF AUTHOR'S QUALIFICATIONS**

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**STATEMENT OF AUTHOR'S QUALIFICATIONS**

**KENNETH C. ELLERBECK, PMP**

I hold a BSc in Mechanical Engineering, University of Alberta, Edmonton, 1973.

I have completed University level introductory geology courses.

I hold a Certificate in Project Management from University of British Columbia, Sauder School of Business, 2010.

I hold a Project Management Professional designation – PMP – 1391810 – 2011.

I have been actively involved in all aspects of mineral exploration since 1980 in the Province of British Columbia.

I have managed staking and exploration programs since 1980 on my own mineral tenures as well as for tenures held by both private and publicly-held junior exploration companies.

My mineral exploration experience includes staking, prospecting, trenching, trench mapping, line cutting and grid construction, geochemical surveys, geophysical surveys, diamond drilling supervision and general exploration program supervision.

SIGNED



KENNETH C. ELLERBECK

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**LIST OF SELECTED REFERENCES**

BC Geological Survey, Ministry of Energy, Mines & Petroleum Resources – MINFILE

British Columbia Survey Branch, The Map Place.

TECHNICAL REPORT ON THE HARPER CREEK PROJECT, BRITISH COLUMBIA, CANADA, PREPARED FOR YELLOWHEAD MINING INC. NI 43-101 Report, David W. Rennie, P.Eng., Kevin Scott, P.Eng., November 2007.

Geologic Setting of the Devonian-Mississippian, Rea and Samatosum VMS Deposits of the Eagle Bay Assemblage, Adams Lake Area, South Central British Columbia, bc Geological Fieldwork 1999. Sean L. Bailey<sup>2</sup>, Suzanne Paradis<sup>3</sup>, Stephen T. Johnston<sup>2</sup>, and Trygve Höy.

Schiarizza, P. and Preto, V.A. (1987): Geology of the Adams Plateau-Clearwater-Vavenby Area; *British Columbia Ministry of Energy, Mines and Petroleum Resources*, Paper 1987-1, 88 pages.

Preliminary Map 56, Geology of the Adams Plateau-Clearwater Area, Schiarizza, P., Preto, V. 1987.

Thompson, R., AR 34307, Kamloops Property, First Americas Gold Corp, 2013.

REPORT KEYWORDS: massive sulfide, gold, copper, Chu Chua deposit, rhyolite porphyry, alteration, silicification, silica flooding, felsic dome, Fennell Formation, Devonian, Permian, Barrière.

Thompson, R., Cook, F., Assessment Report, Kamloops Property, First Americas Gold Corp, 2014.

Thompson, R., Assessment Report, Kamloops Property, Ellerbeck and Locke, 2014.

Belik, G., AR23816, Eighty-Eight Resources Limited, KB Property, 1995.

Evans, G., Corporation Falconbridge Copper, Diamond Drill Report, Holes BAR 1-4, Bar Property (SC Croup), 1987

**LIST OF SOFTWARE PROGRAMS USED**

ADOBE PHOTOSHOP 7.0

PAINT for WINDOWS

ARIS MAPBUILDER – Map Data downloads

Imap BC – Map Data downloads

MtOnline - MINFILE downloads.

## APPENDIX 1 SAMPLE PREPARATION AND METHOD OF ANALYSIS

Page: 1  
 Total # Pages: 2 (A - C)  
 Plus Appendix Pages  
 Finalized Date: 17-AUG-2015  
 Account: ELLERK

To: **KEN ELLERBECK**  
**255 WEST BATTLE STREET**  
**KAMLOOPS BC V2C 1G8**

ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218  
 www.alsglobal.com



**CERTIFICATE KL15117189**

Project: KM18

This report is for 7 Rock samples submitted to our lab in Kamloops, BC, Canada on 5-AUG-2015.

The following have access to data associated with this certificate:

KEN ELLERBECK

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS

To: **KEN ELLERBECK**  
**ATTN: KEN ELLERBECK**  
**255 WEST BATTLE STREET**  
**KAMLOOPS BC V2C 1G8**

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:

Colin Ramshaw, Vancouver Laboratory Manager





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Page: Appendix 1  
 Total # Appendix Pages: 1  
 Finalized Date: 17-AUG-2015  
 Account: ELLERK

Project: KM18

**CERTIFICATE OF ANALYSIS KL15117189**

CERTIFICATE COMMENTS									
<b>LABORATORY ADDRESSES</b>									
Applies to Method:	<p>Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.</p> <table border="0"> <tr> <td>CRU-31</td> <td>CRU-QC</td> <td>LOG-22</td> <td>PUL-31</td> </tr> <tr> <td>PUL-QC</td> <td>SPL-21</td> <td>WEI-21</td> <td></td> </tr> </table>	CRU-31	CRU-QC	LOG-22	PUL-31	PUL-QC	SPL-21	WEI-21	
CRU-31	CRU-QC	LOG-22	PUL-31						
PUL-QC	SPL-21	WEI-21							
Applies to Method:	<p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <table border="0"> <tr> <td>Au-AA23</td> <td>ME-ICP41</td> <td>ME-OG46</td> <td>Pb-OG46</td> </tr> </table>	Au-AA23	ME-ICP41	ME-OG46	Pb-OG46				
Au-AA23	ME-ICP41	ME-OG46	Pb-OG46						

APPENDIX 2 CERTIFICATE OF ANALYSIS - ASSAY RESULTS

Page: 2 - A  
 Total # Pages: 2 (A - C)  
 Plus Appendix Pages  
 Finalized Date: 17-AUG-2015  
 Account: ELLERK

To: KEN ELLERBECK  
 255 WEST BATTLE STREET  
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Project: KM18

CERTIFICATE OF ANALYSIS KL15117189



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Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt.	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	
0292156-5686750		1.86	0.021	0.4	0.07	9	<10	10	<0.5	<2	0.08	<0.5	1	14	7	1.38
0292157-5686770		0.95	0.012	<0.2	0.17	20	<10	40	<0.5	<2	0.34	1.3	7	13	13	2.94
0292174-5686761		0.81	0.031	0.7	0.14	28	<10	50	<0.5	<2	0.01	<0.5	3	11	9	3.54
0292609-5687012		0.57	<0.005	<0.2	0.02	9	<10	20	<0.5	<2	0.04	0.8	<1	13	9	0.79
0292611-5687010		0.85	0.042	96.0	0.12	32	<10	120	<0.5	67	0.01	0.9	<1	11	92	2.10
0292793-5687111		1.19	<0.005	0.2	0.05	5	<10	20	<0.5	<2	0.01	<0.5	3	16	3	1.33
KM18-TREE		1.58	<0.005	0.3	0.12	4	<10	50	<0.5	<2	1.35	<0.5	2	14	3	2.54

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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Page: 2 - B  
 Total # Pages: 2 (A - C)  
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 Account: ELLERK

Project: KM18

**CERTIFICATE OF ANALYSIS KL15117189**

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm
0292156-5686750		<10	1	<0.01	<10	0.01	181	1	0.02	6	440	44	0.35	2	2	12
0292157-5686770		<10	<1	0.01	<10	0.02	436	2	0.04	27	910	10	0.97	<2	3	25
0292174-5686761		<10	<1	0.03	20	0.01	45	2	0.07	10	400	148	0.54	2	2	23
0292609-5687012		<10	1	0.01	<10	0.01	76	1	<0.01	7	170	4	0.11	3	1	8
0292611-5687010		<10	1	0.01	<10	0.01	37	2	0.01	6	130	>10000	0.63	23	1	9
0292793-5687111		<10	<1	0.03	<10	0.02	197	1	<0.01	11	80	70	0.05	<2	1	2
KM18-TREE		<10	<1	0.01	10	0.21	687	1	0.02	9	1690	85	0.25	<2	7	107

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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 Plus Appendix Pages  
 Finalized Date: 17-AUG-2015  
 Account: ELLERK

Project: KM18

**CERTIFICATE OF ANALYSIS KL15117189**

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Pb-OG46
		Th ppm	Ti %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm	Pb %
0292156-5686750		<20	<0.01	<10	<10	4	<10	76	
0292157-5686770		<20	<0.01	<10	<10	9	<10	222	
0292174-5686761		<20	<0.01	<10	<10	8	<10	27	
0292609-5687012		<20	<0.01	<10	<10	1	<10	241	
0292611-5687010		<20	<0.01	<10	<10	13	<10	285	4.24
0292793-5687111		<20	<0.01	<10	<10	1	<10	33	
KM18-TREE		<20	<0.01	<10	<10	12	<10	49	

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*