



**Ministry of Energy and Mines**  
BC Geological Survey

**Assessment Report  
Title Page and Summary**

**TYPE OF REPORT [type of survey(s)]:** Prospecting and Geochemistry for the SBA property      **TOTAL COST:** \$46694.51

**AUTHOR(S):** Tom Kennedy

**SIGNATURE(S):** \_\_\_\_\_

**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):** \_\_\_\_\_ **YEAR OF WORK:** 2019

**STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):** 5740671, 5744182, 5744183, 5744185, 5744186, 5749805

**PROPERTY NAME:** SBA

**CLAIM NAME(S) (on which the work was done):** 1068199, 1062764, 1068200, 1066457, 1068408, 1066458, 1068414, 1068419  
1068422, 1068669, 1068560, 1068412, 1020126, 985682, 985683, and 984342

**COMMODITIES SOUGHT:** Lead and Zinc

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

**MINING DIVISION:** Fort Steele

**NTS/BCGS:** 82G021,11

**LATITUDE:** 49 ° 21 ' 46 "      **LONGITUDE:** 115 ° 88 ' 06 "      (at centre of work)

**OWNER(S):**

1) Craig Kennedy

2) \_\_\_\_\_

**MAILING ADDRESS:**

2290 DeWolfe Ave. Kimberley, BC V1A 1P5

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

1) Kootenay Silver Inc.

2) \_\_\_\_\_

**MAILING ADDRESS:**

1850-1075 W. Georgia St.

Vancouver, BC Canada V6E 3C9

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

Middle Proterozoic Aldridge formation sediments and gabbro intrusions -fragmental rocks and lead zinc mineralization

**REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:** \_\_\_\_\_

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil 486 XRF analysis	984342, 985682, 1068419, 1066458,		
Silt	1068422, 1068414, 1020126, 1068408		
Rock 77 Multi-element ICP and 120 XRF analysis	984342, 985682, 1068419, 1066458,		
Other	1068422, 1068414, 1020126, 1068408		
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area) 6kmx6km	1068408, 1068414, 10668419, 1068408		
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric			
(scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$46694.51

**Report on Prospecting and Geochemistry  
For**

**The SBA Property  
Spring/Summer of 2019**

**By  
Tom Kennedy**

**Fort Steele  
Mining Division**

**NTS  
82 G021,011**

**UTM Co-ordinates:  
581200E, 5449800N**

**August 2019**

## TABLE OF CONTENTS

	Page
1.00 SUMMARY	2
2.00 INTRODUCTION	2
1.10 Location and Access	2
1.20 Property	2
1.30 Physiography	2
1.40 History of Previous Work	2
1.50 Purpose of Work	6
3.00 GEOLOGY	6
4.00 2019 WORK PROGRAM	6-14
General Overview	6-8
Prospecting/Mapping	8-10
Geochemistry Rock XRF and Laboratory	10-12
Geochemistry Soils	12-16
5.00 CONCLUSIONS and RECOMMENDATIONS	16
6.00 STATEMENT OF EXPENDITURES	17
7.00 AUTHOR'S QUALIFICATIONS	18

## LIST OF ILLUSTRATIONS

Figure 1	Property Location Map	3
Figure 2	Claim Map	4
Figure 3	Regional Geology Map	5
Figure 4	Location of Figure 5 and 6	7
Figure 5	Prospecting Map	9
Figure 6	Rock Sample Locations With Values for Lead and Zinc	11
Figure 7	Soil Sample Locations	13
Figure 8	Soil Samples with values for Lead	14
Figure 9	Soil Samples with values for Zinc	15
Appendix 1	Rock Sample Descriptions and Co-Ordinates With Assays*both laboratory and XRF	
Appendix 2	Soil Sample locations and XRF assay results	
Appendix 3	Historic Assessment Report index	

## 1:00 SUMMARY

### 2.00 INTRODUCTION

This report describes the results of a prospecting and geochemistry program carried out on the SBA carried out in the spring and summer of 2019.

#### 2.10 Location and Access

The SBA property is located approximately 30 kilometers south-east of Cranbrook, B.C.(Figure 1), and straddles Stoney and Sundown creeks. Access to the property is gained leaving Highway 3/95 near the south end of Moyie Lake and travelling 3km on the Sunrise forest service road. The main Sundown road and lower Sundown road with their various spur roads provides excellent access to the majority of the claim group.

#### 2.20 Property

The SBA property includes mineral tenures 1068199, 1062764, 1068200, 1066457, 1068408, 1066458, 1068414, 1068419, 1068422, 1068669, 1068560, 1068412, 1020126, 985682, 985683, and 984342 (Figure 2). The claim group is located in the Fort Steele mining division and is owned by Craig Kennedy of Kimberley B.C.

.

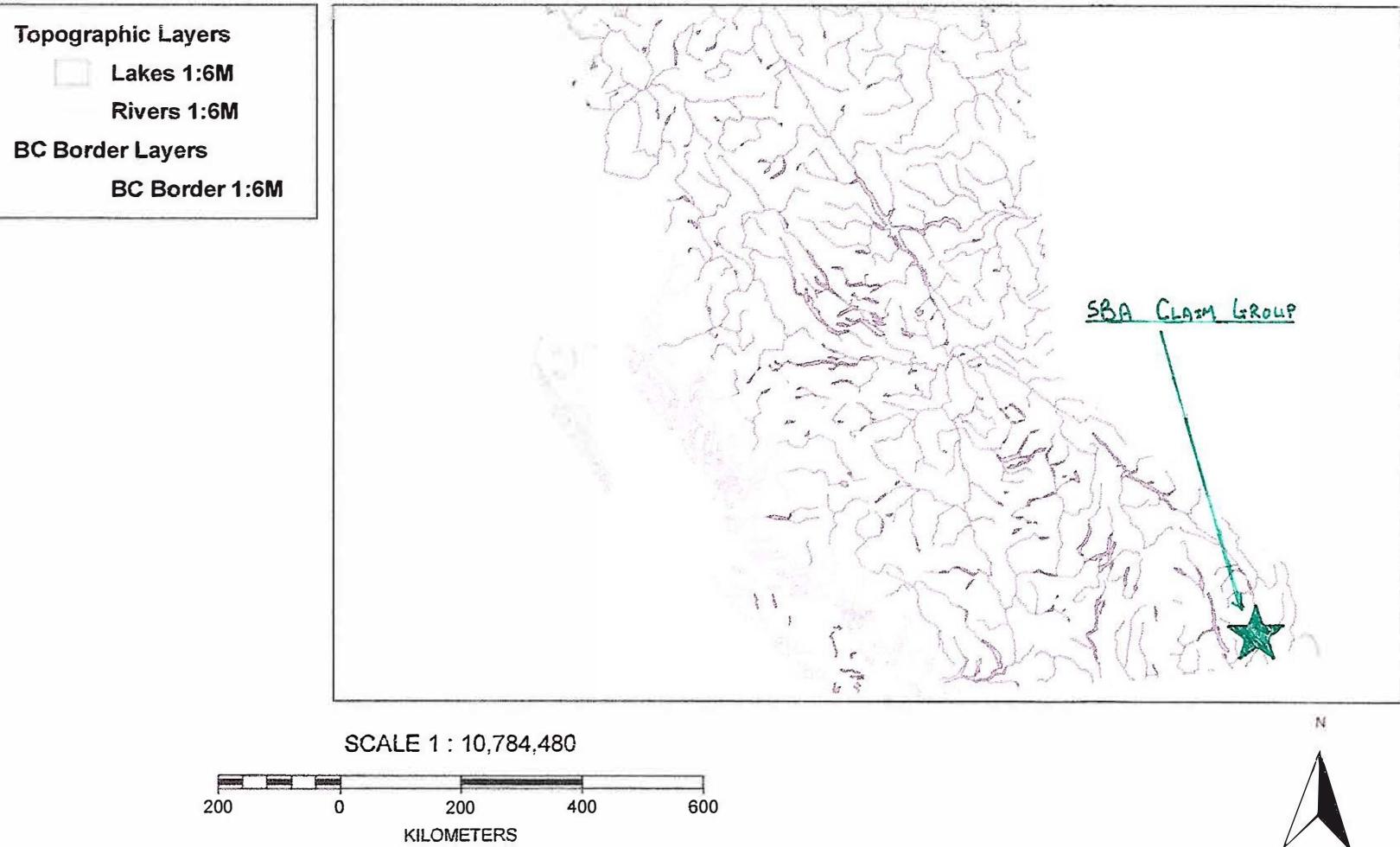
#### 2.30 Physiography

Topography on the SBA property is moderate with steep slopes along the creek of Sunrise, Sundown and Stoney. The majority of forest cover is comprised of a mix of immature larch, hemlock, and fir at lower elevations and spruce, balsam at higher elevations. Lodgepole pine occurs throughout the property. Vegetation and forest cover can be thick where logging has not occurred, and second growth and brush in older logging can be challenging. Overall moderate outcrop exists on the claims

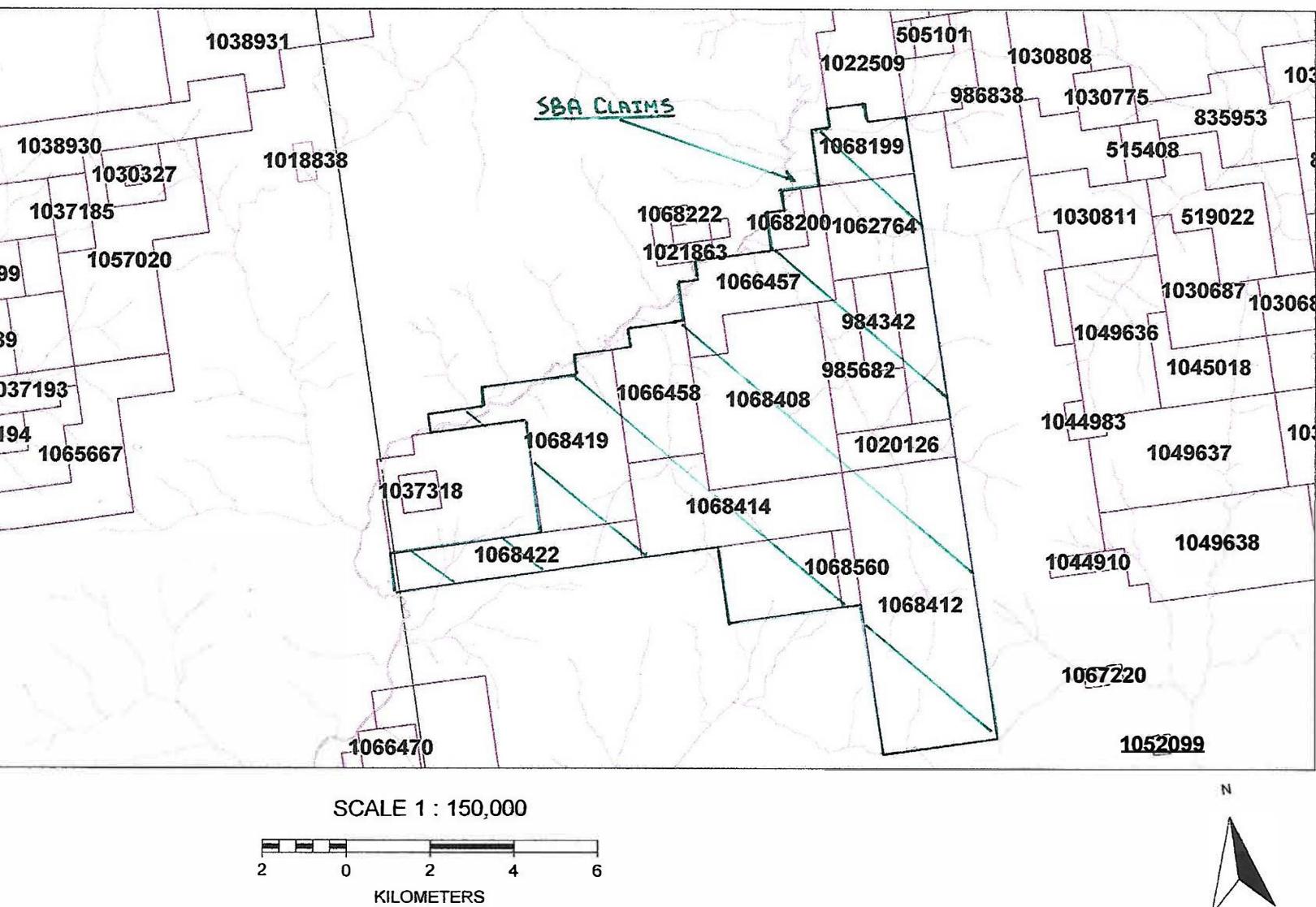
#### 2.40 History of Previous Exploration

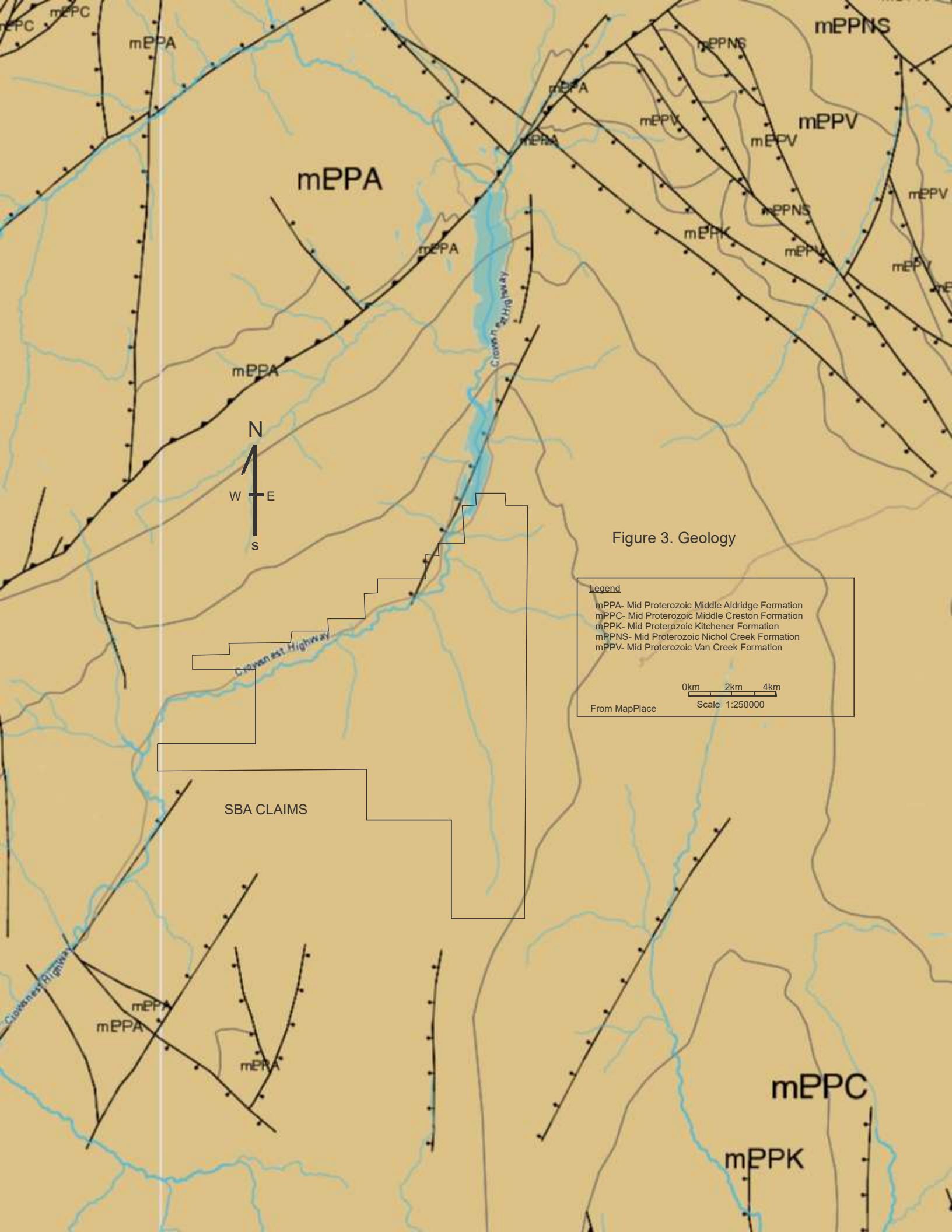
The area covered by the SBA claim group has received intermittent exploration work by Major and Junior mining companies as well as individuals over the last 80 plus years since the discovery of the St. Eugene deposit at the town of Moyie. A table of pertinent assessment reports referencing the area can be found in Appendix 3. The property adjoins Kootenay Silver Corp.'s Silver Fox property to the east where disseminated copper occurrences similar to those at Troy Montana have been explored. Adjoining the claim group to the west is the quartz vein hosted gold and silver Midway occurrence.

# Figure 1. SBA Location Map



# Figure 2. SBA Claim Group





## 2.50 Purpose of Work

The purpose of the prospecting and geochemical program done on the SBA property was to further establish the presence of mineralized structural features with evidence of synsedimentary activity in order to help in targeting for Sullivan style lead/zinc SEDEX mineralization and/or St. Eugene style massive sulfide vein deposits.

## 3.00 GEOLOGY

The SBA claim is underlain by sediments and gabbro intrusive rocks (sills and dykes) assigned to the Precambrian Middle Aldridge formation. The middle Aldridge formation on the claim group cores of the Moyie Anticline, a major north-northeast trending fold structure (Figure 3). The claims cover the broad hinge zone of this anticline and the eastern dipping flank.

The contact between the middle and lower Aldridge would underlie the majority of the claim block at a relatively shallow depth, under 1000m, and three drill holes on the property have pierced this contact which hosts the world class Sullivan lead/zinc deposit to the north at Kimberley BC.

The upper portion of the middle Aldridge exposed along the north and eastern portions of the property is roughly at the same position in the section that hosts the St. Eugene massive sulfide lead, zinc, silver deposit just off of the claim group to the north.

Several northerly trending fault systems trend from the area of the St. Eugene south through the claim group and are the locus to a number fragmental units and alteration. These fragmental units are thought to represent syn-sedimentary breccia/conglomerate features formed from hydrothermal sea floor venting, and as such have served as important exploration vectors.

## 2019 WORK PROGRAM

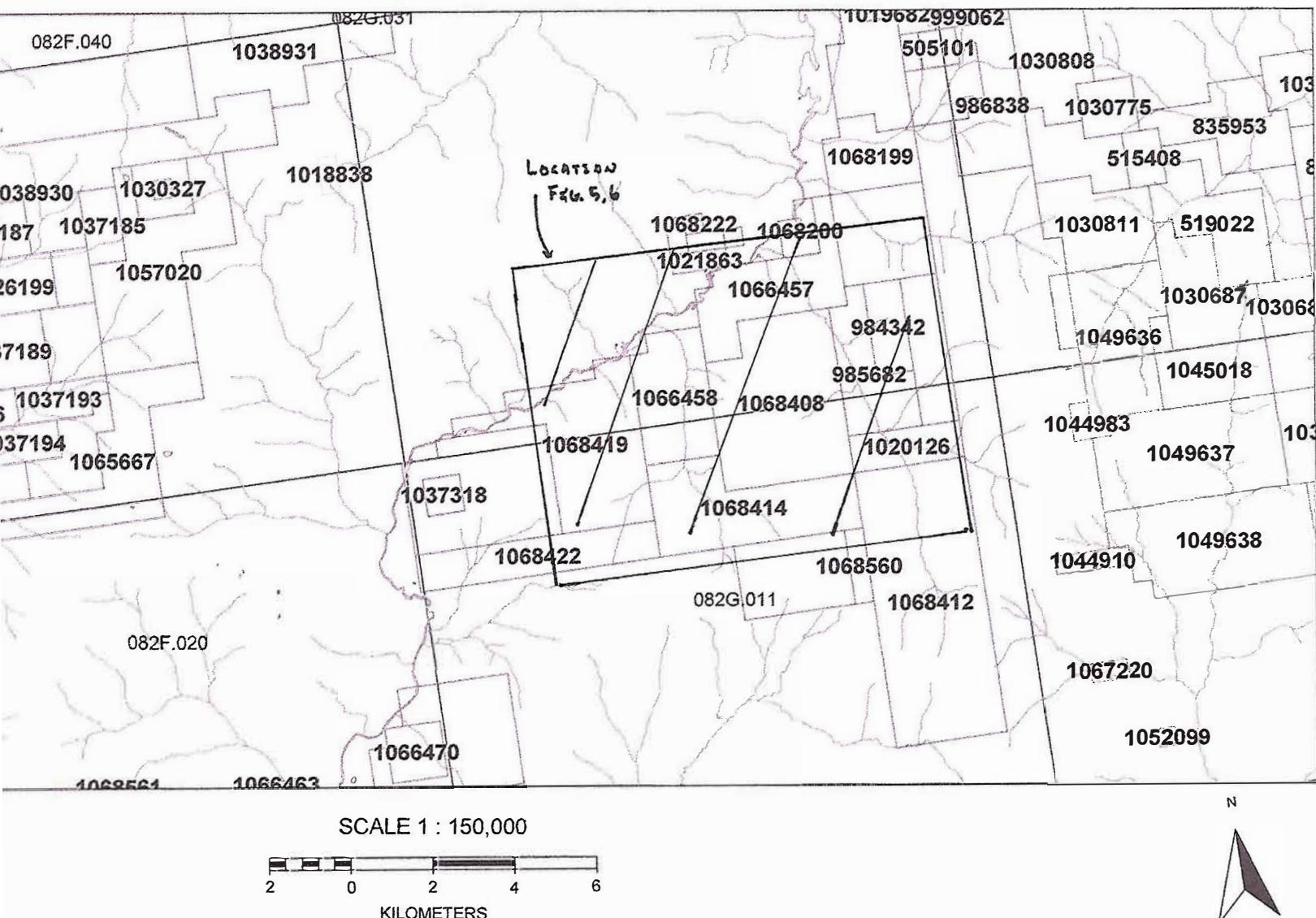
### General Overview

The SBA property adjoins crown granted claims owned by Teck Resources covering the past producing St. Eugene massive lead, zinc, silver vein system at Moyie. The St. Eugene ore bodies roughly cut perpendicular to the hinge of the Moyie Anticline. Structures hosting the vein system have little observable off-set. On the eastern side of Moyie Lake the St. Eugene vein structures appear to have some control on the development of cross-cutting and bedding conformable fragmental rocks with several of the historic lodes intimately developed with fragmental features.

The vein deposits and fragmental rocks occur where the more east-west trending fracture set intersects northerly trending faults. These northerly trending faults trend to the south on to the claim group.

Several fragmental occurrences have previously been identified on the claim group and form a corridor like feature trending to the north-south along faults projected from the St.

FIGURE 4. LOCATION of FIGURES 5 and 6



Eugene area. Several parallel faults to this set have been projected onto the property from mineralized occurrences to the south.

Previous alteration and mineralization has been found with these fault systems and drilling has occurred on two of these (the Cruz showing and the Midway vent), with the largest occurrence of fragmental and alteration; the SBA showing area, never having received any drilling. The claim group was expanded to the north and to the south to cover the above areas of drilling as well as extensions of the SBA corridor.

This year's exploration program has placed the emphasis on further defining these features. Prospecting, mapping, rock sampling and targeted soil sampling has been undertaken and is described below.

## PROSPECTING/MAPPING

Highlights of the 2019 program include:


- A) Newly discovered fragmental dykes
- B) Anomalous zinc mineralization
- C) Better definition of the structural picture in the northern portion of the claims

### A) Fragmental Dykes

Prospecting on the property in 2019 has found three new fragmental occurrences (Figure 5). Two of the fragmental bodies are hosted in stratigraphy in the hangingwall of the "Sundown" gabbro sill and below the "Meadowbrook" gabbro sill in "Ginty" marker stratigraphy. One of these dyke occurrences is proximal to disseminated lead and zinc mineralization in coarse grained quartzite beds at the "Jackson Fors/Sundown" showing (disseminated galena and sphalerite in coarse a grained quartzite bed). It consists of a dyke like feature 2-4m wide composed of numerous sharp fragments cm to mm in size of siltstone/argillite in a coarser grained quartzite matrix. Disseminated pyrite is common and the dyke appears to trend roughly north/south.

A second fragmental was found in this stratigraphic interval near the southern end of the property. This fragmental trends in a northerly direction and is composed of numerous small fragments in a wacke matrix. The fragmental is weakly albitic/sericitic with some pyrrhotite.

The third cross-cutting fragmental body is situated just below the "Sundown" marker laminate interval well into the footwall of the "Sundown" gabbro sill and occurs roughly near the center of the property. As with the other fragmental units a general north/south orientation to the dyke was observed. This fragmental unit is strongly sericitically altered and has small waxy fragments in a whitish grey quartzitic matrix. Minor reddish iron staining can be seen and XRF assays of this material have given lead values just over 1484ppm lead with laboratory rock sampling of this material giving results of 1982 ppm. Two samples gave values of molybdenum of 172ppm and 423ppm. Interestingly zinc levels are relatively low with no samples giving values above 100ppm.



## ROCK SAMPLING

### Procedure

A total of 77 rock samples were collected out of structural features as well as out of various lithologies. Samples from structural features consist of brecciation and/or veining with iron staining and manganese. Sample sites were marked in the field using flagging and UTM co-ordinates taken using handheld GPS units. These samples were sent to Bureau Veritas Labs of Vancouver, B.C. for assay and a copy of results as well as descriptions with UTM co-ordinates can be found in Appendix 2. Results for lead and zinc are plotted on Figure 5.

### Discussion of Results

Several interesting result for lead and zinc were obtained from the samples collected. CK19-11 returned values of 216ppm lead and 2124ppm lead from sulfidic glassy quartzites. Similar material gave values of 824ppm zinc(CK19-14) and 1139ppm zinc(CK19-16). Sample CK19-17 returned 444ppm lead from similar quartzite material as above samples.

Samples CK19-43 returned 214.9ppm lead and CK19-50 gave values of 425ppm for lead both out of veined/brecciated material with quartz and chlorite/limonite. The highest zinc value obtained out of vein/breccia samples was out of CK19-52(289ppm).


Samples sent from a sericitically altered fragmental outcrop gave the highest values for Lead (1982ppm-CK19-76) and two samples CK19-75, and 76 gave molybdenum levels of 423.5ppm and 172.3ppm respectively.

A string of samples CK19-80 to 87 gave weakly elevated levels of arsenic; between 18 and 68.6ppm, and were collected out of leisegang altered brecciated sediments in the hangingwall and along strike of a tourmalinized fragmental unit.

## XRF ROCK SAMPLING

### Procedure

Samples of various lithologies; marker laminate units to coarse grained quartz wacke beds, were collected in the field. Samples consisted of pieces of outcrop or float/subcrop and were labelled with felt pen. Ribbons with sample numbers were left at some locations in the field. UTM co-ordinates were taken with hand held GPS units. Samples were analysed using the same portable XRF unit used to analyse the soil samples. Three, thirty second random shots were taken on fresh surfaces of rock samples using the main filter band and an average was created by the XRF unit. These samples were compiled into a similar data set with UTM co-ordinates and descriptions as well as values for Zinc, Lead, Copper, Arsenic, Iron, Manganese and Nickel (Appendix 2)\*note all values for



elements are given in PPM. Results for Lead and Zinc plotted on Figure 5 along with those of laboratory assayed rock samples.

## Discussion of Results

In general XRF samples can be grouped into three populations; marker laminate units, dark silicified quartzite beds and coarser grained quartzite and wacke. As discussed in the prospecting section, marker laminate units and the dark silicified quartzites gave the best results. Marker laminates commonly gave values in the 100ppm range for zinc and 50 plus ppm for lead. The highest values were obtained from the “Sundown” marker and consist of 463ppm lead and 575ppm zinc(SB-142) and 160ppm lead with 375ppm zinc(SB-220). XRF analysis of TM-2B gave levels of 115ppm for lead and 228ppm for zinc material from this area was collected and analysed at the lab(sample CK19-73) which gave values of 360ppm lead and 85 ppm zinc.

The dark silicified quartzite with disseminated garnet and actinolite gave values of up to 868 ppm for zinc. The quartzite and wacke beds tested with the XRF were commonly leached of sulfide with only iron staining left and in general gave low results for lead and zinc.

## SOIL SAMPLING


### Procedure:


A Total of 486 soil samples were collected on the property. Soil sampling was done in a more targeted manner than previous large grid style surveys, in part aided by recent logging development and the recognition of areas with abundant till cover. Samples were specifically collected in areas of known geological features of interest as well as close to bedrock containing anomalous stratigraphic intervals. Soil samples were collected from the “B” horizon soil profile and samples were placed in labelled Kraft paper bags. A GPS co-ordinate was taken at each site and flagging with sample number left at the sample location. Soil samples were dried and sieved and this material was put into labelled plastic sandwich bags. These bags were subsequently analysed using Thermo-Fischer Scientific Niton XLT3 portable XRF unit. A thirty second shot using the main filter band was taken of each sample and results for Zinc, Lead, Copper, Arsenic, Iron, Manganese, and Nickel were recorded and compiled into a data set with sample number and UTM co-ordinate (Appendix 1) and values for Lead and Zinc can be found in figures \*note all values recorded represent ppm


### Results:

Soil samples in general gave results that corresponded favorably with known showing and elevated levels for lead and zinc in rocks. Two areas in particular, one around the black silicified alteration zone near the mouth of Stoney Creek, and the other at the headwaters of Stoney Creek along the “Sundown” marker stratigraphy are of interest.

The soils collected in the black silica area gave a number of values greater than







200ppm for zinc, and a high of 579ppm was obtained. Lead in this area was weakly elevated and this matches well with XRF rock samples collected from outcrops of alteration.

The anomalous string of samples along the “Sundown” marker stratigraphy near the headwaters of Stoney Creek gave elevated levels for both zinc and lead with samples returning up to 382ppm for zinc and 101ppm for lead.

Additional soil sampling should be carried out in both of these areas to help further define the limits of the anomalies.

## CONCLUSIONS AND RECOMMENDATIONS

The 2019 exploration program has identified a number of new significant features on the SBA property. Three fragmental occurrence and anomalous lead and zinc mineralization in rock and soil sampling.

Markers collected while prospecting and mapping should be matched to tighten down the stratigraphic and structural control of the geology. Additional mapping and soil/rock sampling should also be carried out in the areas of the black silicification to better define the limits of this alteration and potential controls, as well as around the areas with fragmental dykes.

Geophysics targeted around the fragmental occurrences should be undertaken. Both near surface and deeper concordant and discordant massive sulfide mineralization potential exist and suitable methods for both should be employed.

This year’s program results should be compiled along with previous mapping and sampling to more fully understand the geological features identified to date.

Spike's BA Prospecting & Geochem 2019					
Exploration Work type	Comment	Days			Totals
<b>Personnel</b>	<b>Field Days 2017</b>	<b>Days</b>	<b>Rate</b>	<b>Subtotal</b>	
Craig Kennedy, Prospecting	Apr 23-30, May 3-29, Jun 1-29, Jul 2-23	43	\$400.00	\$17,200.00	
Tom Kennedy, Prospecting, XRF Operator	May 8-31, Jun 1-21, Jul 11, 19	22	\$400.00	\$8,800.00	
Mike Kennedy, Prospector	Apr 24 - 30, May 17 - 22	7	\$400.00	\$2,800.00	
Sean Kennedy, Prospector	Apr 24 - 30, May 17 - 22	7	\$400.00	\$2,800.00	
Isaac Crombach, Junior Prospector	Apr 24 - 30	2	\$285.00	\$570.00	
				\$32,170.00	<b>\$32,170.00</b>
<b>Office Studies</b>	<b>List Personnel</b>				
Data Compilation	Sean Kennedy, Prospector	3	\$400.00	\$1,200.00	
Report preparation	Tom Kennedy, Prospector	1	\$2,300.00	\$2,300.00	
				\$3,500.00	<b>\$3,500.00</b>
<b>Transportation</b>	<b>4X4 Trucks</b>	<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
Truck 1-CK	@ 150/d	39	\$150.00	\$5,850.00	
Truck 2-TK	@ 150/d	4	\$150.00	\$600.00	
Truck 3-MK	@ 150/d	4	\$150.00	\$600.00	
Truck 4-SK	@ 150/d	3	\$150.00	\$450.00	
				\$7,500.00	<b>\$7,500.00</b>
<b>Miscellaneous</b>					
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	<b>\$0.00</b>
<b>Assays &amp; XRF</b>					
Rock- Assays	BV Acme Labs	1	\$2,124.51	\$2,124.51	
XRF Analyzer	Kootenay Silver daily rate	7	\$200.00	\$1,400.00	
				\$3,524.51	<b>\$3,524.51</b>
<b><i>TOTAL Expenditures</i></b>					<b>\$46,694.51</b>

## 6.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Tom Kennedy certifies that:

- 1) I am an independent consulting prospector residing at 1082 Cote Rd, South Slocan, B.C.
- 2) I have been actively involved in mining and mineral exploration for the past 26 years.
- 3) I have been employed by individuals as well as Junior and Major mining companies.
- 4) I have created and optioned numerous grass-roots mineral exploration properties.

Tom Kennedy

---

Prospector

**APPENDIX 1**  
**ROCK**  
**Sample Locations and Descriptions**  
**With XRF and Laboratory results**

Sample No.	UTM E	UTM N	Utm Zone	Description
CK19-11	583077	5454340	11	Clear glassy quartzite with narrow clear silica veins -sphalerite, pyrite and mauve quartz eyes
CK19-12	583094	5454354	11	Siltstone narrow fractures and vugs- rusty with some limonite
CK19-13	583094	5454355	11	Same as above but more quartz
CK19-14	583089	5454358	11	Glassy quartzite similar to CK19-11 with a purple colouration
CK19-15	583089	5454357	11	Completely manganese altered quartzite with some purple colouration
CK19-16	583089	5454356	11	Vitreous layered quartzite with some purple colour and rare sphalerite
CK19-17	583054	5454363	11	1m thick band of quartzite "Ginty" -vitreous and coarse grained with sericite, pyrite in vugs -narrow quartz fractures
CK19-18	583017	5454350	11	Ugly narrow coarse crystalline quartz vein - cuts quartzite with manganese, limonite and mica in vugs
CK19-19	583323	5454259	11	Float of narrow ugly vuggy limonitic quartz vein with no chlorite cutting altered quartzite
CK19-20	583294	5454291	11	Narrow chlorite/limonite quartz vein in silicified fine-grained quartzite
CK19-21	583295	5454302	11	Altered sediments with silica, sericite and pyrite
CK19-22	583742	5453542	11	Coarse grained white quartzite with narrow quartz fractures and rare sphalerite?
CK19-23	583736	5453517	11	Coarse grained quartzite with splotches of limonite
				Collage bed black/grey silica with chlorite, pyrite and bornite? -next to MK13-160
CK19-24	584107	5452970	11	Similar to above with rare sphalerite
CK19-25	584107	5452957	11	10cm silicified bed with pyrite
CK19-26	584110	5452953	11	Same as above but less pyrite and darker colour with sericite
CK19-27	584110	5452954	11	Mini collage bed with chlorite and pyrite in "Marker" stratigraphy -weathered carbonate look
CK19-28	584130	5452881	11	Marker stratigraphy with crackle type breccia -next to SK19-30
CK19-29	584663	5453552	11	
CK19-30	584674	5453548	11	More brecciated material with limonite and manganese by soil plot SV-3+1800
CK19-31	584690	5453536	11	Weakly brecciated sediments
CK19-32	584692	5453529	11	Brecciated sediments with ferricrete
CK19-33	584695	5453526	11	Same as above
CK19-34	584700	5453518	11	Marker type breccia with carbonate, limonite and manganese
CK19-35	583797	5452658	11	Fault zone - weak limonite and silica alteration with brecciated sediments
CK19-36	583797	5452659	11	Same as above
CK19-37	584754	5452933	11	Thin-bedded crackle type breccia - weak limonite and chlorite with little bits of broken quartz
CK19-38	584756	5452935	11	Same as above
CK19-39	584804	5452950	11	Same as above
CK19-40	584933	5452776	11	Same as above -without quartz
CK19-41	585545	5453046	11	Clastic dyke with some vugs/limonite- narrow quartz vein fracture with chlorite
CK19-42	585543	5453005	11	Same as above
CK19-43	585554	5452967	11	Same as above but with greyish quartz vein stockwork
CK19-44	585563	5452906	11	Same as above but with more quartz/vugs and limonite
CK19-45	585563	5452905	11	Same as above
CK19-46	585561	5452906	11	Same as above
CK19-47	585561	5452907	11	Reddish breccia with rare magnetite - vuggy quartz, limonite and manganese - 60 degree trending joints
CK19-48	585236	5452708	11	Tectonic breccia with live hematite, carbonate, sericite, limonite, chlorite and manganese
CK19-49	585335	5452663	11	Tectonic breccia with chlorite, limonite, muscovite and quartz
CK19-50	585294	5452630	11	Same as above but with lots of gypsum on fractures
				Marker stratigraphy with weak chloritic breccia -some manganese, next to CK18-290
CK19-51	584662	5452719	11	*Pegmatite slip with chlorite, limonite -Moive Fault trend -240/65
CK19-52	584663	5452741	11	Weak brecciation-vugs with fresh pyrite -gypsum on fractures
CK19-53	584711	5452741	11	Altered dio-gabbro with some limonite, manganese and pyrite
CK19-54	584714	5452757	11	Silicified green/blue breccia with fresh pyrite in vugs
CK19-55	584714	5452746	11	Joint veining with goethite developed in a 1m thick turbidite bed
CK19-56	581574	5451372	11	Limonitic/goethitic fractures cutting turbidite
CK19-57	581529	5451323	11	

Sample No.	UTM E	UTM N	Utm Zone	Description
CK19-58	581491	5451279	11	Subcrop of leisgang altered bleached/leached sediment with limonitic slips *at point 1.5m thick very coarse grained quartzite-mauve eyes, leached
CK19-59	581393	5451087	11	Rebrecciated sediments with crystalline quartz veining -limonite staining
				Crush quartzite breccia and gouge with iron staining -core zone 1m wide with similar alteration across a 15m plus section of road bank to the south -leached
CK19-60	581353	5451029	11	Joint veining and some disrupted beds
CK19-61	581353	5451029	11	Same as above
CK19-62	580526	5449494	11	Goethitic crush breccia with bleached wacke/siltstone -side cast material in road
CK19-63	580529	5449499	11	Same as above
CK19-64	584573	5448537	11	Albitized sediments next to finer grained gabbro/diorite dyke with some iron staining
CK19-65	584573	5448537	11	Albitic crush material with some disseminated fine pyrite and maybe arsenopyrite
CK19-66	584573	5448537	11	Gouge zone of crushed sediments with iron staining -.5m wide -composite
CK19-67	582903	5448129	11	Brecciated rotten sediments next to lamprophyre dyke with some iron sulfides and biotite
CK19-68	582903	5448129	11	Mafic lamprophyre? intrusion -calcite and pyrite clots and disseminations
CK19-69	580974	5452736	11	1.5m wide zone of argillic alteration of sediments (punk) with limonite/goethite -not much movement?
CK19-70	580974	5452736	11	Same as above
CK19-71	580974	5452736	11	Same as above
CK19-72	580410	5451500	11	Narrow shear material with limonite and manganese
CK19-73	580652	5449672	11	Altered marker with green sericite zones -coarse mica, pyrite and chlorite with manganese fractures
CK19-74	581207	5449771	11	Phyllitic silvery bleached white fragmental
CK19-75	581204	5449772	11	Same as above
CK19-76	581207	5449768	11	Same as above
CK19-77	581209	5449770	11	Same as above -more massive
CK19-78	579541	5447875	11	Marker with narrow slips -some crystalline quartz -coarse green mica and limonite
CK19-79	579523	5447963	11	Marker bed with quartz veins -limonitic and vuggy
CK19-80	578719	5450199	11	Mix of leisgang bleaching and reworked joint veins
CK19-81	578719	5450199	11	Same as Above
CK19-82	578719	5450199	11	Same as Above
CK19-83	578719	5450199	11	Same as Above
CK19-84	578700	5450230	11	Limonitic bedding parallel quartz vein/gouge
CK19-85	579047	5450466	11	Similar to above
CK19-86	579047	5450455	11	Northwest striking limonitic gouge zone -10cm wide
CK19-87	579047	5450455	11	Bleached leisgang alteration with minor quartz and iron staining



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

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

**Client:** Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Submitted By: Email Distribution List - Soil & Rock  
Receiving Lab: Canada-Vancouver  
Received: August 01, 2019  
Report Date: August 15, 2019  
Page: 1 of 4

## CERTIFICATE OF ANALYSIS

VAN19002063.1

### CLIENT JOB INFORMATION

Project: SPIKES  
Shipment ID:  
P.O. Number  
Number of Samples: 62

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Ship	1	Shipping charges for collect packages			VAN
PRP70-250	62	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ201	62	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT Dispose of Reject After 60 days

### ADDITIONAL COMMENTS

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

Invoice To: Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9  
Canada

CC:

*Jeffrey Cannon*  
JEFFREY CANNON  
Geochemistry Department Supervisor

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



**BUREAU**  
**VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

**Client:** Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: SPIKES  
Report Date: August 15, 2019

Page: 2 of 4

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	Analyte	WGHT	AQ201																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%								
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
CK19-11	Rock	0.34	0.3	32.1	216.3	2124	0.8	5.1	4.2	70	1.45	11.8	3.7	2.4	3	9.3	1.2	2.8	2	0.02	0.012
CK19-12	Rock	0.21	0.9	29.4	7.9	111	<0.1	17.3	7.8	540	6.29	2.5	1.1	11.6	27	0.3	0.6	0.3	33	0.12	0.054
CK19-13	Rock	0.32	1.1	33.6	17.4	77	<0.1	20.2	11.9	782	6.55	4.9	1.2	11.2	24	0.2	0.9	0.3	33	0.21	0.047
CK19-14	Rock	0.24	0.6	91.7	10.6	824	<0.1	5.9	5.7	201	3.08	2.9	1.7	3.4	11	3.1	0.4	0.1	4	0.02	0.020
CK19-15	Rock	0.41	0.8	17.9	21.4	71	<0.1	4.2	7.9	649	3.99	2.7	1.1	2.0	9	0.4	0.3	0.1	6	0.02	0.017
CK19-16	Rock	0.37	0.5	63.1	10.9	1139	<0.1	9.5	10.3	394	3.54	3.4	1.1	2.6	5	5.5	0.3	0.2	5	0.04	0.018
CK19-17	Rock	0.22	1.9	22.5	444.4	115	0.2	14.9	14.7	968	1.97	11.9	0.8	1.7	3	1.2	0.8	2.1	10	0.03	0.014
CK19-18	Rock	0.39	3.4	27.9	13.0	33	<0.1	12.1	6.4	272	2.44	1.2	<0.5	0.5	1	0.3	1.6	0.2	5	<0.01	0.012
CK19-19	Rock	0.30	0.8	36.3	12.1	16	<0.1	5.2	4.0	124	1.17	5.7	<0.5	3.3	3	<0.1	1.0	0.4	9	0.02	0.009
CK19-20	Rock	0.24	1.4	36.4	2.6	45	<0.1	11.1	6.1	269	3.46	5.3	<0.5	14.6	8	<0.1	0.5	0.2	9	0.03	0.023
CK19-21	Rock	0.34	0.4	26.5	16.7	28	<0.1	4.5	3.9	133	1.53	4.5	<0.5	12.3	6	<0.1	0.2	0.2	10	0.03	0.012
CK19-22	Rock	0.24	0.2	5.0	6.6	4	<0.1	0.9	0.3	38	0.37	1.0	0.5	1.9	2	<0.1	<0.1	<0.1	<2	0.02	0.011
CK19-23	Rock	0.26	0.2	5.6	26.2	12	<0.1	2.6	0.6	83	0.59	0.7	<0.5	2.7	4	<0.1	0.2	<0.1	3	0.02	0.013
CK19-24	Rock	0.34	0.5	69.4	13.7	40	<0.1	26.7	4.4	176	1.51	3.7	1.7	9.8	24	0.3	0.2	0.3	17	0.19	0.013
CK19-25	Rock	0.22	1.1	26.9	19.0	146	<0.1	48.5	18.8	310	2.42	2.6	<0.5	10.4	37	0.3	0.2	0.2	26	0.67	0.018
CK19-26	Rock	0.36	1.3	48.2	17.6	103	0.1	28.8	9.9	294	2.68	2.5	<0.5	10.9	45	0.6	0.2	0.2	24	0.51	0.017
CK19-27	Rock	0.23	1.3	25.1	20.7	72	<0.1	17.0	4.1	352	3.61	2.2	<0.5	14.2	46	0.3	0.4	0.2	22	0.50	0.017
CK19-28	Rock	0.33	0.3	24.4	24.5	70	<0.1	15.2	6.6	395	2.18	2.6	0.7	10.5	39	0.3	0.3	0.4	20	0.60	0.017
CK19-29	Rock	0.35	0.3	21.8	17.4	59	<0.1	4.0	6.4	144	5.63	3.5	0.7	11.6	6	<0.1	0.6	0.3	6	0.01	0.019
CK19-30	Rock	0.28	1.0	29.0	15.8	122	<0.1	12.9	7.5	480	7.72	1.9	<0.5	21.2	20	<0.1	0.6	0.2	11	0.02	0.019
CK19-31	Rock	0.28	1.5	24.0	17.9	103	<0.1	10.2	5.5	542	5.28	0.6	0.7	13.9	40	<0.1	0.7	0.4	17	0.03	0.040
CK19-32	Rock	0.36	0.4	21.7	14.0	87	<0.1	3.6	2.5	106	12.18	2.1	0.8	12.7	23	<0.1	0.5	0.2	9	0.02	0.031
CK19-33	Rock	0.26	1.4	14.0	35.2	74	<0.1	3.3	1.9	109	10.19	0.9	<0.5	15.2	8	<0.1	1.3	0.3	12	0.04	0.036
CK19-34	Rock	0.25	1.2	22.6	15.3	50	<0.1	5.0	3.1	133	7.65	3.8	<0.5	13.2	6	<0.1	0.8	0.2	11	0.03	0.052
CK19-35	Rock	0.45	0.3	7.4	23.0	32	<0.1	9.6	5.0	264	1.60	1.5	<0.5	10.1	5	0.1	0.2	0.2	12	0.04	0.013
CK19-36	Rock	0.34	0.2	10.9	15.1	32	<0.1	6.3	4.3	196	1.39	1.9	<0.5	9.7	6	<0.1	0.8	0.5	12	0.05	0.011
CK19-37	Rock	0.26	2.4	20.4	17.7	38	<0.1	3.5	2.9	353	2.41	1.2	<0.5	12.9	43	<0.1	1.3	0.3	16	0.29	0.041
CK19-38	Rock	0.21	3.2	23.4	27.8	50	<0.1	25.2	11.9	552	3.34	1.0	0.6	11.8	30	<0.1	0.6	<0.1	16	0.28	0.031
CK19-39	Rock	0.29	5.5	30.0	89.1	74	0.2	3.0	1.8	436	4.30	0.6	1.7	12.1	15	<0.1	0.7	0.9	38	0.05	0.050
CK19-40	Rock	0.29	3.3	29.8	20.3	136	<0.1	5.6	2.4	94	8.73	0.5	1.0	18.0	28	0.2	0.5	0.3	26	0.09	0.104

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



**BUREAU**  
**VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

**Client:** Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: SPIKES  
Report Date: August 15, 2019

Page: 2 of 4

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
CK19-11	Rock	4	6	0.35	10	0.015	1	0.43	0.011	0.28	<0.1	0.03	0.4	0.1	0.85	<1	0.7	0.2
CK19-12	Rock	40	27	1.47	47	0.032	2	2.04	0.028	0.45	<0.1	<0.01	5.9	0.3	0.09	6	<0.5	<0.2
CK19-13	Rock	32	20	1.12	39	0.014	3	1.73	0.012	0.27	<0.1	<0.01	6.6	0.2	<0.05	6	<0.5	<0.2
CK19-14	Rock	11	5	0.37	16	0.016	<1	0.62	0.006	0.32	<0.1	0.02	1.6	0.2	0.71	<1	<0.5	<0.2
CK19-15	Rock	8	5	0.14	17	0.011	<1	0.30	0.010	0.15	<0.1	<0.01	1.6	0.1	0.05	<1	<0.5	<0.2
CK19-16	Rock	20	4	0.37	14	0.017	<1	0.60	0.007	0.29	<0.1	0.02	2.5	0.2	0.87	<1	0.6	<0.2
CK19-17	Rock	14	6	0.19	21	0.002	<1	0.42	0.011	0.07	<0.1	<0.01	2.3	0.1	<0.05	<1	<0.5	0.2
CK19-18	Rock	3	3	<0.01	2	0.002	<1	0.06	0.003	0.01	<0.1	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2
CK19-19	Rock	27	7	0.06	45	0.021	<1	0.22	0.023	0.13	<0.1	<0.01	1.6	<0.1	<0.05	<1	<0.5	<0.2
CK19-20	Rock	27	10	0.45	55	0.007	<1	1.13	0.009	0.29	<0.1	<0.01	1.7	0.2	<0.05	3	<0.5	<0.2
CK19-21	Rock	16	12	0.30	47	0.040	<1	0.75	0.033	0.26	<0.1	<0.01	1.4	0.3	0.24	2	<0.5	<0.2
CK19-22	Rock	7	2	<0.01	18	<0.001	<1	0.09	0.019	0.04	<0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2
CK19-23	Rock	10	7	0.09	62	0.009	<1	0.23	0.021	0.13	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2
CK19-24	Rock	13	17	0.37	99	0.048	<1	1.58	0.022	0.26	<0.1	<0.01	3.5	0.3	0.10	4	<0.5	<0.2
CK19-25	Rock	18	25	0.82	150	0.107	<1	2.70	0.084	0.68	<0.1	<0.01	5.1	0.5	0.43	7	<0.5	<0.2
CK19-26	Rock	13	23	0.77	104	0.093	<1	2.31	0.045	0.55	<0.1	<0.01	5.2	0.4	0.23	6	<0.5	<0.2
CK19-27	Rock	12	21	0.70	69	0.083	<1	2.03	0.022	0.34	<0.1	<0.01	4.4	0.2	0.08	5	<0.5	<0.2
CK19-28	Rock	22	23	0.39	174	0.067	<1	2.13	0.115	0.33	0.1	<0.01	4.2	0.3	0.09	5	<0.5	<0.2
CK19-29	Rock	16	8	0.06	39	0.021	<1	0.39	0.025	0.15	<0.1	<0.01	0.9	0.1	0.08	<1	<0.5	<0.2
CK19-30	Rock	14	8	0.23	37	0.017	<1	0.99	0.021	0.21	<0.1	<0.01	2.6	0.2	0.05	2	<0.5	<0.2
CK19-31	Rock	26	18	0.85	52	0.023	<1	1.43	0.020	0.27	<0.1	<0.01	1.9	0.2	<0.05	5	<0.5	<0.2
CK19-32	Rock	37	8	0.28	53	0.039	<1	0.94	0.010	0.37	<0.1	<0.01	1.8	0.3	0.06	2	<0.5	<0.2
CK19-33	Rock	20	11	0.28	58	0.038	<1	1.05	0.011	0.40	<0.1	<0.01	1.5	0.3	0.06	3	<0.5	<0.2
CK19-34	Rock	12	9	0.27	95	0.069	<1	1.04	0.014	0.53	<0.1	<0.01	1.9	0.4	<0.05	3	<0.5	<0.2
CK19-35	Rock	20	8	0.15	48	0.025	<1	0.53	0.031	0.14	<0.1	<0.01	1.3	<0.1	<0.05	1	<0.5	<0.2
CK19-36	Rock	19	11	0.18	60	0.030	<1	0.63	0.031	0.21	<0.1	<0.01	1.8	0.1	<0.05	2	<0.5	<0.2
CK19-37	Rock	21	21	0.81	37	0.122	<1	1.31	0.031	0.16	<0.1	<0.01	1.7	<0.1	<0.05	5	<0.5	<0.2
CK19-38	Rock	16	19	0.87	47	0.128	<1	1.45	0.023	0.29	<0.1	<0.01	2.4	0.2	<0.05	5	<0.5	<0.2
CK19-39	Rock	48	28	0.96	50	0.072	<1	1.63	0.023	0.14	<0.1	<0.01	3.4	<0.1	0.07	8	<0.5	0.2
CK19-40	Rock	25	22	0.31	60	0.050	<1	1.20	0.020	0.33	<0.1	<0.01	1.7	0.2	0.08	4	<0.5	<0.2

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



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client:

**Kootenay Silver Inc.**

1650 - 1075 W. Georgia St.

Vancouver British Columbia V6E 3C9 Canada

Project: SPIKES

Report Date: August 15, 2019

Page: 3 of 4

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	Analyte	WGHT	AQ201																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%								
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	2	0.01	0.001	
CK19-41	Rock	0.31	0.9	57.8	25.2	83	<0.1	12.7	7.6	402	3.93	<0.5	<0.5	18.6	12	0.1	0.4	0.9	21	0.08	0.037
CK19-42	Rock	0.31	0.2	20.5	21.9	137	<0.1	11.4	3.7	174	1.97	1.3	<0.5	6.5	3	0.1	0.4	0.5	<2	0.02	0.016
CK19-43	Rock	0.33	0.2	3.9	214.9	59	0.3	1.2	0.4	36	0.58	6.0	2.7	7.0	3	<0.1	0.8	0.2	2	0.01	0.012
CK19-44	Rock	0.29	0.4	16.3	5.2	39	<0.1	8.8	5.6	148	2.28	11.5	2.8	14.2	14	0.1	1.0	<0.1	3	0.01	0.024
CK19-45	Rock	0.26	0.8	35.4	8.8	158	<0.1	47.4	26.8	879	13.02	20.2	6.3	9.9	3	0.3	0.7	<0.1	6	0.02	0.040
CK19-46	Rock	0.39	0.3	23.4	3.1	88	<0.1	28.4	19.2	658	3.83	11.9	1.4	10.1	4	0.2	1.0	<0.1	3	0.02	0.025
CK19-47	Rock	0.29	0.3	11.8	48.5	46	0.1	5.5	1.3	206	2.40	6.8	<0.5	11.3	6	<0.1	0.4	0.5	6	0.01	0.025
CK19-48	Rock	0.26	0.7	37.0	46.0	15	0.2	1.5	1.1	150	2.21	0.5	0.8	15.4	13	<0.1	0.3	0.6	18	0.08	0.026
CK19-49	Rock	0.45	0.5	25.5	11.0	30	<0.1	6.9	4.8	373	3.06	0.9	1.0	13.3	9	<0.1	0.7	6.2	26	0.13	0.026
CK19-50	Rock	0.40	0.8	48.5	425.0	103	0.9	3.1	3.5	309	3.52	<0.5	3.3	18.6	22	1.2	0.5	2.2	20	0.05	0.034
CK19-51	Rock	0.23	0.8	12.8	21.3	50	<0.1	3.1	1.6	447	2.88	<0.5	<0.5	13.7	16	<0.1	0.8	0.3	26	0.04	0.056
CK19-52	Rock	0.21	2.7	71.0	29.2	289	<0.1	59.0	22.2	677	5.25	2.6	6.0	13.1	85	0.9	1.7	0.5	29	0.07	0.113
CK19-53	Rock	0.33	5.8	77.4	18.2	24	<0.1	8.7	6.5	185	2.35	<0.5	1.9	10.3	34	<0.1	1.2	1.1	24	0.23	0.064
CK19-54	Rock	0.32	1.1	27.9	11.8	75	<0.1	11.9	8.6	486	4.70	2.6	<0.5	1.6	112	<0.1	1.4	0.2	47	0.87	0.150
CK19-55	Rock	0.35	1.8	22.7	14.7	49	<0.1	9.9	6.7	389	2.75	<0.5	<0.5	13.5	14	<0.1	0.5	0.3	35	0.28	0.043
CK19-56	Rock	0.25	1.2	41.5	63.9	57	0.1	13.0	15.3	413	3.20	5.8	12.3	8.5	22	0.1	0.9	17.5	14	0.03	0.036
CK19-57	Rock	0.25	0.6	35.2	36.3	84	<0.1	16.2	12.2	241	4.97	2.6	0.8	17.0	26	0.1	1.5	1.0	30	0.06	0.074
CK19-58	Rock	0.22	0.9	22.1	7.1	43	<0.1	6.7	6.2	131	2.50	10.9	0.5	16.3	40	0.2	0.7	<0.1	10	0.02	0.057
CK19-59	Rock	0.34	0.4	14.6	46.7	39	<0.1	7.7	2.6	154	2.60	6.5	0.7	15.7	24	<0.1	2.6	0.3	15	0.02	0.063
CK19-60	Rock	0.37	1.4	33.6	4.5	26	<0.1	7.8	1.8	67	2.25	5.7	0.6	8.3	6	<0.1	2.4	1.4	4	0.02	0.054
CK19-61	Rock	0.29	2.6	44.4	27.2	46	<0.1	12.6	6.9	112	3.66	5.1	<0.5	15.7	23	0.2	2.1	0.5	16	0.01	0.088
CK19-62	Rock	0.43	0.8	35.4	12.2	42	<0.1	8.1	5.6	122	4.54	11.8	<0.5	15.9	12	0.1	1.2	0.4	15	0.02	0.062
CK19-63	Rock	0.44	1.1	55.0	33.2	51	<0.1	8.5	7.7	106	4.33	15.8	<0.5	13.7	13	0.2	1.0	1.0	18	0.03	0.073
CK19-64	Rock	0.38	1.3	10.1	7.4	30	<0.1	2.0	6.4	224	2.66	2.8	1.0	7.7	84	<0.1	0.4	1.7	99	1.98	0.305
CK19-65	Rock	0.47	0.7	7.3	5.2	25	<0.1	2.1	5.9	118	1.05	4.5	<0.5	13.0	11	<0.1	0.3	0.8	27	0.23	0.045
CK19-66	Rock	0.58	3.9	8.2	3.7	77	<0.1	14.0	77.7	2531	1.29	9.2	0.8	18.7	9	0.2	0.5	0.3	28	0.14	0.053
CK19-67	Rock	0.43	0.5	83.7	9.1	91	0.1	35.8	21.9	582	5.00	100.8	<0.5	6.0	59	0.2	0.5	0.4	342	0.65	0.040
CK19-68	Rock	0.40	0.2	136.3	14.1	77	0.2	68.8	40.1	1085	6.90	2.0	1.2	3.7	97	0.6	0.6	0.7	371	4.03	0.050
CK19-69	Rock	0.30	1.7	36.1	27.4	35	<0.1	2.1	0.8	23	3.98	<0.5	<0.5	16.4	18	<0.1	0.8	0.5	17	0.04	0.021
CK19-70	Rock	0.30	0.5	47.5	96.5	88	0.2	5.8	1.5	48	13.95	4.5	0.6	22.9	7	<0.1	4.7	0.2	44	0.04	0.065

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



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

**Project:** SPIKES  
**Report Date:** August 15, 2019

**Page:** 3 of 4

**Part:** 2 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	Analyte	AQ201																	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
CK19-41	Rock	29	20	0.43	59	0.087	<1	1.66	0.010	0.29	<0.1	<0.01	3.0	0.2	<0.05	6	<0.5	<0.2	
CK19-42	Rock	18	2	0.02	25	<0.001	<1	0.68	0.018	0.11	<0.1	<0.01	1.6	<0.1	<0.05	<1	<0.5	<0.2	
CK19-43	Rock	26	3	0.01	29	<0.001	1	0.35	0.024	0.18	<0.1	<0.01	0.7	<0.1	<0.05	<1	<0.5	<0.2	
CK19-44	Rock	50	4	0.03	60	0.004	1	0.61	0.017	0.26	0.1	<0.01	1.7	<0.1	<0.05	1	<0.5	<0.2	
CK19-45	Rock	35	6	0.05	49	0.003	3	0.69	0.007	0.26	0.1	0.01	6.8	0.1	<0.05	1	<0.5	<0.2	
CK19-46	Rock	34	3	0.03	49	0.002	1	0.87	0.026	0.24	<0.1	<0.01	3.5	<0.1	<0.05	<1	<0.5	<0.2	
CK19-47	Rock	36	6	0.10	55	0.003	2	0.57	0.028	0.27	<0.1	<0.01	2.1	0.1	<0.05	2	<0.5	<0.2	
CK19-48	Rock	21	17	0.25	59	0.165	<1	0.76	0.030	0.28	<0.1	<0.01	4.0	0.1	0.15	5	<0.5	<0.2	
CK19-49	Rock	38	19	0.49	48	0.110	<1	1.38	0.031	0.25	<0.1	<0.01	3.8	<0.1	<0.05	6	<0.5	<0.2	
CK19-50	Rock	31	17	0.54	85	0.139	1	1.47	0.021	0.39	<0.1	0.04	3.1	0.2	0.17	5	<0.5	<0.2	
CK19-51	Rock	28	21	1.45	65	0.024	<1	1.94	0.022	0.31	<0.1	<0.01	3.1	0.1	<0.05	7	<0.5	<0.2	
CK19-52	Rock	52	31	0.99	68	0.025	1	2.03	0.045	0.22	<0.1	0.01	3.2	0.2	0.13	7	<0.5	0.4	
CK19-53	Rock	27	21	0.69	56	0.142	<1	1.19	0.027	0.38	<0.1	<0.01	3.4	0.3	0.49	5	0.6	0.3	
CK19-54	Rock	7	36	1.69	36	0.263	<1	2.66	0.029	0.08	0.2	<0.01	4.1	<0.1	0.05	9	<0.5	<0.2	
CK19-55	Rock	25	37	1.35	36	0.181	<1	1.71	0.038	0.28	<0.1	<0.01	4.6	0.3	0.26	7	<0.5	<0.2	
CK19-56	Rock	21	14	0.12	39	0.032	<1	0.77	0.029	0.12	<0.1	0.02	2.0	0.2	<0.05	3	<0.5	0.9	
CK19-57	Rock	59	24	0.36	96	0.041	<1	1.73	0.040	0.51	<0.1	<0.01	4.3	0.4	0.05	5	<0.5	<0.2	
CK19-58	Rock	70	9	0.12	87	0.043	<1	0.90	0.018	0.35	<0.1	<0.01	1.9	0.3	<0.05	2	<0.5	<0.2	
CK19-59	Rock	59	16	0.14	61	0.056	<1	0.75	0.028	0.27	<0.1	<0.01	2.8	0.2	<0.05	2	<0.5	<0.2	
CK19-60	Rock	10	5	<0.01	16	0.016	<1	0.53	0.018	0.06	<0.1	<0.01	1.6	<0.1	<0.05	1	<0.5	<0.2	
CK19-61	Rock	25	10	0.01	45	0.028	<1	0.71	0.023	0.10	<0.1	<0.01	2.0	0.2	0.06	2	<0.5	<0.2	
CK19-62	Rock	30	13	0.18	69	0.051	<1	1.12	0.016	0.45	<0.1	<0.01	1.7	0.4	<0.05	3	<0.5	<0.2	
CK19-63	Rock	44	15	0.11	52	0.023	<1	0.93	0.020	0.23	<0.1	<0.01	1.8	0.2	<0.05	3	<0.5	<0.2	
CK19-64	Rock	57	7	0.35	81	0.302	<1	0.86	0.031	0.25	0.1	<0.01	7.0	0.2	0.08	4	<0.5	<0.2	
CK19-65	Rock	17	26	0.17	75	0.153	<1	0.50	0.042	0.33	<0.1	<0.01	5.4	0.2	<0.05	2	<0.5	<0.2	
CK19-66	Rock	41	24	0.22	61	0.053	<1	0.74	0.032	0.15	<0.1	<0.01	5.1	0.1	<0.05	3	<0.5	<0.2	
CK19-67	Rock	7	89	1.80	448	0.319	<1	3.47	0.249	1.68	0.1	<0.01	41.6	0.6	0.34	13	<0.5	<0.2	
CK19-68	Rock	7	90	1.56	58	0.338	<1	3.42	0.286	1.57	0.2	<0.01	38.6	0.7	2.06	12	<0.5	<0.2	
CK19-69	Rock	18	13	0.04	63	0.004	<1	0.83	0.016	0.32	<0.1	<0.01	1.2	0.2	0.05	2	<0.5	<0.2	
CK19-70	Rock	22	20	0.03	45	0.001	<1	0.82	0.012	0.19	<0.1	<0.01	2.8	0.1	0.06	3	0.6	<0.2	

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



**BUREAU** MINERAL LABORATORIES  
**VERITAS** Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

**Project:** SPIKES  
**Report Date:** August 15, 2019

**Page:** 4 of 4

**Part:** 1 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	WGHT	AQ201																			
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit	kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%									
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
CK19-71	Rock	0.34	1.0	115.9	15.9	147	<0.1	23.6	37.2	854	10.75	2.2	1.0	6.1	3	0.5	0.7	0.5	23	0.02	0.052
CK19-72	Rock	0.55	1.6	44.6	27.9	249	<0.1	13.3	16.3	101	21.54	10.1	<0.5	7.5	52	1.3	0.3	0.4	35	0.05	0.328



**BUREAU**  
**VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Project: SPIKES  
Report Date: August 15, 2019

Page: 4 of 4

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN19002063.1

Method	AQ201																	
	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
CK19-71	Rock	3	11	0.02	34	0.006	<1	0.65	0.002	0.02	<0.1	<0.01	3.5	0.3	<0.05	2	<0.5	<0.2
CK19-72	Rock	24	6	0.02	119	0.003	<1	0.77	0.006	0.14	<0.1	<0.01	2.1	0.2	0.14	1	<0.5	<0.2



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Client:

**Kootenay Silver Inc.**

1650 - 1075 W. Georgia St.

Vancouver British Columbia V6E 3C9 Canada

Project:

SPIKES

Report Date:

August 15, 2019

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Page: 1 of 1

Part: 1 of 2

## QUALITY CONTROL REPORT

VAN19002063.1

Method Analyte Unit MDL	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%		
	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
CK19-19	Rock	0.30	0.8	36.3	12.1	16	<0.1	5.2	4.0	124	1.17	5.7	<0.5	3.3	3	<0.1	1.0	0.4	9	0.02	0.009
REP CK19-19	QC		0.8	36.7	11.9	17	<0.1	5.2	3.8	119	1.15	5.5	<0.5	3.8	3	<0.1	1.0	0.4	9	0.02	0.009
CK19-53	Rock	0.33	5.8	77.4	18.2	24	<0.1	8.7	6.5	185	2.35	<0.5	1.9	10.3	34	<0.1	1.2	1.1	24	0.23	0.064
REP CK19-53	QC		5.9	80.1	18.5	24	<0.1	9.0	6.7	182	2.33	<0.5	2.9	11.3	34	<0.1	1.2	1.1	24	0.22	0.064
Reference Materials																					
STD BVGEO01	Standard	10.7	4248.8	184.3	1678	2.6	162.6	24.0	704	3.59	116.1	215.6	17.2	60	6.2	3.9	25.5	72	1.31	0.072	
STD DS11	Standard	15.6	151.3	135.7	342	1.7	79.0	13.2	1009	3.12	43.7	81.4	8.3	70	2.5	9.3	12.4	48	1.05	0.078	
STD OREAS262	Standard	0.6	116.9	56.0	147	0.5	61.0	27.3	514	3.27	36.2	78.0	10.4	37	0.7	6.5	1.1	22	2.95	0.044	
STD OREAS262	Standard	0.6	113.0	54.2	152	0.4	62.2	26.9	514	3.23	36.2	73.7	10.7	36	0.7	6.3	1.0	25	2.87	0.041	
STD DS11 Expected		14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	8.74	12.2	50	1.063	0.0701	
STD BVGEO01 Expected		11.2	4415	187	1741	2.53	163	25	733	3.7	121	219	14.4	55	6.5	3.39	25.6	73	1.3219	0.0727	
STD OREAS262 Expected		0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	65	9.33	36	0.61	5.06	1.03	22.5	2.98	0.04	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	0.2	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	
Prep Wash																					
ROCK-VAN	Prep Blank	1.2	3.5	1.2	33	<0.1	0.9	3.4	483	1.78	1.6	1.7	2.6	27	<0.1	<0.1	<0.1	24	0.67	0.045	
ROCK-VAN	Prep Blank	1.0	3.4	1.2	30	<0.1	1.1	3.4	476	1.77	1.3	1.1	2.9	24	<0.1	<0.1	<0.1	23	0.66	0.043	



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: SPIKES  
Report Date: August 15, 2019

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN19002063.1

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
Pulp Duplicates																		
CK19-19	Rock	27	7	0.06	45	0.021	<1	0.22	0.023	0.13	<0.1	<0.01	1.6	<0.1	<0.05	<1	<0.5	<0.2
REP CK19-19	QC	26	7	0.06	45	0.021	<1	0.22	0.023	0.12	<0.1	<0.01	1.6	<0.1	<0.05	<1	<0.5	<0.2
CK19-53	Rock	27	21	0.69	56	0.142	<1	1.19	0.027	0.38	<0.1	<0.01	3.4	0.3	0.49	5	0.6	0.3
REP CK19-53	QC	28	21	0.68	54	0.140	<1	1.19	0.026	0.37	0.1	<0.01	3.5	0.3	0.49	6	1.1	0.2
Reference Materials																		
STD BVGEO01	Standard	26	197	1.30	277	0.223	4	2.41	0.204	0.88	5.3	0.09	6.6	0.6	0.66	8	4.7	1.0
STD DS11	Standard	20	60	0.83	383	0.091	8	1.21	0.073	0.41	3.0	0.26	3.4	4.9	0.28	5	2.1	4.3
STD OREAS262	Standard	18	43	1.17	252	0.002	3	1.41	0.068	0.32	0.2	0.15	3.3	0.5	0.26	4	<0.5	0.3
STD OREAS262	Standard	20	47	1.18	255	0.003	4	1.53	0.069	0.35	0.2	0.15	3.6	0.5	0.27	5	<0.5	0.2
STD DS11 Expected		18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56
STD BVGEO01 Expected		25.9	187	1.2963	260	0.233	3.8	2.347	0.1924	0.89	5.3	0.1	5.97	0.62	0.6655	7.37	4.84	1.02
STD OREAS262 Expected		15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	3.73	0.4	0.23
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
ROCK-VAN	Prep Blank	7	4	0.44	61	0.083	3	0.90	0.096	0.09	<0.1	<0.01	3.1	<0.1	<0.05	4	<0.5	<0.2
ROCK-VAN	Prep Blank	7	3	0.43	55	0.076	2	0.87	0.087	0.09	<0.1	<0.01	3.1	<0.1	<0.05	4	<0.5	<0.2



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

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

**Client:** Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Submitted By: Email Distribution List - Soil & Rock  
Receiving Lab: Canada-Vancouver  
Received: August 01, 2019  
Report Date: August 13, 2019  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN19002066.1

### CLIENT JOB INFORMATION

Project: SPIKES  
Shipment ID:  
P.O. Number  
Number of Samples: 15

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	15	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ201	15	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT Dispose of Reject After 60 days

### ADDITIONAL COMMENTS

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

Invoice To: Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9  
Canada

CC:

*Jeffrey Cannon*  
JEFFREY CANNON  
Geochemistry Department Supervisor

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



**BUREAU**  
**VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** Kootenay Silver Inc.  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Project: SPIKES  
Report Date: August 13, 2019

Page: 2 of 2

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN19002066.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
CK19-73	Rock	0.44	1.8	24.2	360.2	85	0.4	5.4	3.4	520	2.32	1.2	1.1	12.1	19	0.6	1.2	0.5	33	0.24	0.042
CK19-74	Rock	0.50	5.2	3.8	62.2	7	<0.1	0.6	0.2	46	0.52	43.3	<0.5	9.4	10	<0.1	0.3	<0.1	3	<0.01	0.007
CK19-75	Rock	0.47	423.5	6.3	538.9	8	0.3	0.6	0.1	40	0.44	0.7	0.9	5.5	3	0.2	0.3	<0.1	<2	<0.01	0.004
CK19-76	Rock	0.51	172.3	16.6	1982.4	35	0.3	1.1	0.4	54	0.54	0.7	<0.5	9.5	4	0.1	0.6	0.2	4	<0.01	0.038
CK19-77	Rock	0.74	8.2	22.9	304.5	24	0.2	0.7	0.3	51	0.62	1.2	<0.5	4.3	8	<0.1	0.2	0.4	3	<0.01	0.010
CK19-78	Rock	0.22	2.0	80.3	75.7	115	0.2	11.1	7.0	487	7.57	3.2	1.9	8.7	5	<0.1	1.5	1.8	22	<0.01	0.033
CK19-79	Rock	0.41	0.7	22.2	125.7	66	0.2	12.4	5.8	219	2.43	<0.5	1.0	4.8	12	0.3	0.8	0.3	9	0.14	0.064
CK19-80	Rock	0.27	0.6	17.1	31.1	21	0.4	1.8	1.1	43	2.11	18.4	0.9	6.1	3	<0.1	2.2	0.3	3	<0.01	0.027
CK19-81	Rock	0.31	0.6	17.3	17.1	21	0.5	1.7	1.7	37	1.49	18.3	0.8	11.6	2	<0.1	1.4	<0.1	3	<0.01	0.013
CK19-82	Rock	0.18	0.7	18.0	44.8	28	0.7	2.5	0.7	60	3.36	28.7	1.1	8.9	12	0.2	2.7	0.2	4	<0.01	0.056
CK19-83	Rock	0.23	0.7	21.0	61.9	49	0.6	3.9	1.2	40	5.18	45.8	<0.5	8.9	29	0.4	5.4	0.2	9	<0.01	0.105
CK19-84	Rock	0.36	2.1	35.6	29.8	41	<0.1	6.2	9.1	84	4.38	49.0	0.5	21.5	7	<0.1	4.2	0.8	9	<0.01	0.074
CK19-85	Rock	0.36	2.9	65.6	19.3	84	<0.1	15.1	34.2	442	8.41	36.3	0.7	13.8	32	0.3	2.2	0.3	14	0.03	0.168
CK19-86	Rock	0.52	4.6	85.3	26.8	139	<0.1	26.3	24.3	337	16.00	68.6	1.7	20.5	13	0.5	1.0	0.3	17	0.05	0.244
CK19-87	Rock	0.28	1.0	27.3	12.8	62	<0.1	6.1	6.5	97	6.91	20.6	0.6	6.1	24	0.2	1.7	<0.1	19	0.01	0.111



**BUREAU**  
**VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

**Project:** SPIKES  
**Report Date:** August 13, 2019

**Page:** 2 of 2

**Part:** 2 of 2

## CERTIFICATE OF ANALYSIS

VAN19002066.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
CK19-73	Rock	19	36	1.16	41	0.119	1	1.39	0.059	0.24	0.1	<0.01	3.4	0.1	0.14	6	<0.5	<0.2
CK19-74	Rock	11	5	0.03	65	0.019	1	0.39	0.024	0.24	<0.1	<0.01	0.6	0.2	0.06	1	<0.5	<0.2
CK19-75	Rock	6	4	<0.01	46	0.016	<1	0.35	0.014	0.19	0.4	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2
CK19-76	Rock	15	6	0.03	48	0.025	<1	0.48	0.008	0.21	0.3	<0.01	0.7	0.1	<0.05	1	<0.5	<0.2
CK19-77	Rock	9	7	0.03	27	0.019	<1	0.32	0.017	0.12	<0.1	<0.01	0.4	0.2	<0.05	<1	<0.5	<0.2
CK19-78	Rock	12	24	1.53	38	0.014	<1	2.62	0.020	0.22	<0.1	<0.01	2.1	0.1	<0.05	7	0.6	<0.2
CK19-79	Rock	13	10	0.48	28	0.067	<1	0.82	0.028	0.16	0.2	<0.01	0.8	0.1	0.68	2	0.7	<0.2
CK19-80	Rock	14	4	0.01	14	0.001	2	0.29	0.006	0.12	<0.1	<0.01	0.7	<0.1	<0.05	<1	<0.5	<0.2
CK19-81	Rock	42	6	0.01	35	<0.001	3	0.54	0.018	0.26	<0.1	<0.01	0.7	<0.1	<0.05	<1	<0.5	<0.2
CK19-82	Rock	26	6	<0.01	24	0.001	1	0.54	0.027	0.13	<0.1	0.02	1.1	<0.1	<0.05	<1	<0.5	<0.2
CK19-83	Rock	28	8	0.01	31	0.002	1	0.61	0.021	0.12	0.1	0.01	1.4	<0.1	<0.05	<1	<0.5	<0.2
CK19-84	Rock	47	9	0.02	62	0.003	<1	1.32	0.005	0.24	<0.1	0.01	2.7	0.2	<0.05	2	<0.5	<0.2
CK19-85	Rock	55	7	0.04	147	0.002	<1	0.89	0.006	0.37	<0.1	<0.01	2.0	0.6	0.19	1	<0.5	<0.2
CK19-86	Rock	21	11	0.03	55	0.002	<1	1.35	0.004	0.17	<0.1	0.01	3.4	0.3	<0.05	2	<0.5	<0.2
CK19-87	Rock	44	8	0.02	80	0.002	<1	0.75	0.007	0.26	<0.1	<0.01	1.1	0.8	0.05	<1	<0.5	<0.2



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

**Client:** **Kootenay Silver Inc.**  
1650 - 1075 W. Georgia St.  
Vancouver British Columbia V6E 3C9 Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: SPIKES  
Report Date: August 13, 2019

Page: 1 of 1

Part: 1 of 2

## QUALITY CONTROL REPORT

VAN19002066.1

Method Analyte Unit MDL	WGHT	AQ201																			
	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
	kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%									
	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
CK19-79	Rock	0.41	0.7	22.2	125.7	66	0.2	12.4	5.8	219	2.43	<0.5	1.0	4.8	12	0.3	0.8	0.3	9	0.14	0.064
REP CK19-79	QC		0.8	22.4	130.2	69	0.2	12.7	5.9	215	2.43	<0.5	2.3	4.6	12	0.3	0.8	0.3	8	0.14	0.062
Reference Materials																					
STD DS11	Standard		15.1	152.5	137.5	328	1.6	78.2	14.0	1028	3.08	41.9	74.7	9.0	61	2.2	8.5	10.9	49	1.05	0.075
STD OREAS262	Standard		0.7	121.3	57.8	144	0.4	64.7	28.1	523	3.14	34.8	65.2	10.4	35	0.6	4.9	1.0	21	2.93	0.041
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	8.74	12.2	50	1.063	0.0701
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	65	9.33	36	0.61	5.06	1.03	22.5	2.98	0.04
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	
Prep Wash																					
ROCK-VAN	Prep Blank		1.0	2.8	1.1	28	<0.1	0.6	3.3	466	1.72	1.0	1.0	2.4	30	<0.1	<0.1	<0.1	20	0.62	0.039
ROCK-VAN	Prep Blank		0.9	3.2	1.3	33	<0.1	0.7	3.5	490	1.84	0.9	<0.5	2.4	22	<0.1	<0.1	<0.1	20	0.62	0.041



**BUREAU  
VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

Client:

**Kootenay Silver Inc.**

1650 - 1075 W. Georgia St.

Vancouver British Columbia V6E 3C9 Canada

Project:

SPIKES

Report Date:

August 13, 2019

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

VAN19002066.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																		
CK19-79	Rock	13	10	0.48	28	0.067	<1	0.82	0.028	0.16	0.2	<0.01	0.8	0.1	0.68	2	0.7	<0.2
REP CK19-79	QC	13	10	0.48	28	0.067	<1	0.80	0.026	0.15	0.2	<0.01	0.7	0.1	0.68	2	0.8	<0.2
Reference Materials																		
STD DS11	Standard	19	62	0.84	331	0.091	7	1.16	0.075	0.41	3.0	0.22	3.2	4.6	0.27	4	2.1	4.4
STD OREAS262	Standard	16	46	1.16	237	0.003	4	1.40	0.066	0.31	0.2	0.17	3.1	0.5	0.24	4	<0.5	0.2
STD DS11 Expected		18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56
STD OREAS262 Expected		15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	3.73	0.4	0.23
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
ROCK-VAN	Prep Blank	7	4	0.40	51	0.073	1	0.83	0.102	0.09	<0.1	<0.01	2.5	<0.1	<0.05	3	<0.5	<0.2
ROCK-VAN	Prep Blank	6	3	0.43	50	0.072	2	0.97	0.136	0.12	<0.1	<0.01	2.8	<0.1	<0.05	3	<0.5	<0.2

Sample No.	UTM E	UTM N	Description	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
MKG19-2	579503	5451956	Fragmental/grey chips/iron fract.SC	67	6	0	0	45750	374	29
MKG19-3	579507	5451932	T needle qtz vein /disseminated/F.	11	0	19	9	18769	138	0
MKG19-4	579580	5451918	1-2 inch qtz veins cutting fragmental OC	50	0	98	9	54555	1766	115
MKG19-6	579547	5451769	1 m Bio rich/fragmental float	30	0	0	0	22824	388	0
MKG19-7	585835	5454249	75 degree fracture/carbonate/lim stain Po rich marker unit .	38	0	40	0	22176	433	61
MKG19-7a	585835	5454249	75 degree fracture/carbonate/lim stain Po rich marker unit .	40	0	23	0	9984	315	49
MKG19-9	584765	5453921	Old rd Iron stained Po rich quartzite F.	21	7	58	14	21183	131	29
MKG19-9a	584765	5453921	Old rd Iron stained Po rich quartzite F.	32	0	61	73	17707	235	48
MKG19-10	584766	5453808	Grey quartzite/siltstone Po 10 m zone old rd.SC	27	12	21	8	11733	200	43
MKG19-82	582047	5453520	Grey quartzites/vug/limonite/hem stain.OC	54	9	0	0	24814	117	0
MKG19-83	582125	5453387	OC Bio/Quartzite/limonite/hem stain.	0	172	33	0	12874	35	0
MKG19-84	582217	5453293	Grey Quartzites fracture Hem/Lim spots.	115	74	28	27	35247	313	0
MKG19-85	582226	5453232	4 inch marker band	58	66	7	0	46096	330	21
MKG19-86	582360	5453008	Angular slab F Iron stain concretions	65	9	5	4	32809	208	0
MKG19-87	582485	5452843	Gabbro OC 2 m fractures.	88	8	113	0	74009	1084	120
MKG19-91	581957	5452609	Weak fragmental beds disrupted.	37	13	0	0	20590	126	0
MKG19-96	582831	5454048	10 by 15 M OC gabbro to creek edge.	85	7	346	0	67792	2028	129
MKG19-107	585309	5449252	Marker ?platy chips SC.	134	13	0	0	30235	420	15
MKG19-108	585117	5449230	Spikes fragmental extension zone 2 M wide	48	23	0	0	24129	232	0
MKG19-109	585031	5449446	T Quartzites White hem/stain spots.	3	43	0	0	8991	0	0
MKG19-111	585247	5449594	Weak 6 inch bed bio.	46	43	0	0	27617	183	0
MKG19-112	585650	5449372	Platy SC marker sulphidic.	95	17	0	0	20526	361	0
MKG19-113	585691	5449372	Same as last.	152	15	0	0	17626	241	0
MKG19-114	586060	5449337	M-T Quartzites.	17	11	0	0	7739	0	0
SB-3A	583594	5452950	Basal meter thick bed of quartzite in above package with pyrite and pyrrhotite flooded top -1 foot portion	27	10	88	0	19336	82	8
SB-3B	583594	5452950	Sulfide flooded leached white mica bearing quartzite bed in middle part of above section	19	10	0	0	6785	0	0
SB-3C	583577	5452952	Sulfide rotted out quartzite bed in upper part of above outcrop with some mauve quartz grains and white mica	17	14	0	0	13293	0	0
SB-3D	583601	5452957	Upper most bed in above outcrop, roughly .75m thick with sulfidic upper portion (pyrite) muscovite -reddish iron staining and some 60 striking vertically dipping joint veinlets	8	11	43	0	8846	0	0
SB-4	583558	5452960	Base of cliff exposure 3-4m thick package of white mica bearing leached quartzite - hangingwall section of thinner bedded siltstone some interbedded quartzite then basal section of SB-3 roughly 10m thick sequence	3	130	5	19	17629	0	14
SB-6	581374	5451053	White spotted beds over a 4m thickness -thin bedded interval siltstone/arg-disrupted slightly	66	16	0	0	22613	159	0
SB-7	580746	5449908	Coarse grained quartzite(sub-crop/outcrop) with mauve quartz eyes -leached out- sericite some limonite spots	5	9	0	0	5479	0	0
SB-10	583828	5452067	Quartzite blocks with dark manganese/goethite sericite spots - coarse grained "Sun" type	0	0	0	0	7744	171	0
SB-10a	583828	5452067	Quartzite blocks with dark manganese/goethite sericite spots - coarse grained "Sun" type	0	0	0	0	36104	925	26

Sample No.	UTM E	UTM N	Description	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SB-19	584234	5448887	Bank subcrop/outcrop of coarse grained quartzite with sericite - leached out - mauve quartz eyes	0	13	0	0	2053	0	0
SB-26	583099	5450521	Bank subcrop of medium to thick bedded quartzite with leached out leisgang weathering and sericite -close to "Sun" type	0	12	0	0	7145	0	0
SB-38	583184	5448378	"Marker" mud interval flat laying - thin intervals of varved material	205	135	0	0	48799	2293	27
SB-40	583324	5448076	Ditch line blocky sub-crop of darker quartzite interbed in "Marker" muds	44	7	0	0	19080	1564	0
SB-53	582102	5449233	Sediment -massive darker coloured wacke with carbonate look - micaceous some pink garnet -white lath casts	39	14	15	0	27750	242	0
SB-53a	582102	5449233	Sediment -massive darker coloured wacke with carbonate look - micaceous some pink garnet -white lath casts	32	8	59	0	30233	522	0
SB-53b	582102	5449233	Sediment -massive darker coloured wacke with carbonate look - micaceous some pink garnet -white lath casts	30	7	0	0	21826	199	0
SB-64	581205	5449766	Fragmental zone 4m+ wide clastic dyke sericite altered albitic sulphidic leached wacke and quartzite -roughly N/S trend?	0	28	0	0	4697	0	0
SB-64a	581205	5449766	Fragmental zone 4m+ wide clastic dyke sericite altered albitic sulphidic leached wacke and quartzite -roughly N/S trend?	90	1484	0	0	17345	273	0
SB-64b	581205	5449766	Fragmental zone 4m+ wide clastic dyke sericite altered albitic sulphidic leached wacke and quartzite -roughly N/S trend?	33	825	0	0	2444	0	0
SB-67	581331	5449440	Medium bedded wacke with disrupted thinner bedded intervals - some garnet concretions	11	33	0	0	8555	346	0
SB-70	581449	5449732	Sub-crop of marker material with interbeds of sericitic altered wacke with garnet and rare sphalerite -XRF sample	151	51	15	0	14429	416	0
SB-70a	581449	5449732	Sub-crop of marker material with interbeds of sericitic altered wacke with garnet and rare sphalerite -XRF sample	222	56	22	0	36593	1289	14
SB-72	581226	5449610	Disrupted sediments -more massive wacke with garnet concreational zones -XRF sample	114	44	36	15	49848	654	28
SB-73	581228	5449695	Disrupted wacke bed with chlorite and quartz veinlets with disseminated garnet and pyrrhotite -XRF sample	84	40	280	0	22896	525	0
SB-74	581301	5449806	1m thick disrupted bed and wacke with garnet concretions some veinlets with sericite alteration -XRF sample	4	36	0	0	10929	232	0
SB-74b	581301	5449806	1m thick disrupted bed and wacke with garnet concretions some veinlets with sericite alteration -XRF sample	27	17	0	0	15207	554	0
SB-79	581684	5451447	Sediment outcrop on road first since last gabbro outcrop -footwall- massive wacke disrupted thinner beds in tops	53	38	0	0	16966	269	7
SB-82A	580451	5452595	In basal portion of road outcrop - dark silicification of sediments with some garnet	83	48	0	0	26909	399	0
SB-82b	580460	5452603	1m plus thick quartzite with some coarser grained material -rusty weathering with some garnet and joint veining	78	15	0	0	23821	870	0
SB-82B1	580460	5452603	1m plus thick quartzite with some coarser grained material -rusty weathering with some garnet and joint veining	118	35	0	0	26465	1192	9

Sample No.	UTM E	UTM N	Description	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SB-82c	580515	5452654	pyrite	86	26	0	0	22564	322	0
SB-82d	580515	5452654	joint veining	92	34	4	0	28517	221	13
SB-82e	580515	5452654	2m section of very silicified black sediments	898	47	0	0	12870	143	0
SB-82f	580523	5452655	Upper bed in above interval	284	61	0	0	14114	151	0
SB-82g	580538	5452668	Black silica within thinner bedded interval	135	48	0	0	18769	227	0
SB-82h	580541	5452676	Dark silica altered bed with pyrrhotite	198	23	0	0	14620	191	0
SB-82i	580569	5452694	1m more quartitic bed with weak black silica and garnet with sericite flakes -maybe ZnS?	696	86	0	0	14186	208	0
SB-82j	580588	5452710	Quartzite bed with black silica and some garnet	102	49	0	0	21982	367	0
SB-84	580792	5452830	Start of outcrop some medium grained sericitic quartzite beds	29	12	0	0	18157	2024	0
SB-85	580838	5452851	End of above section of outcrop in road -some pseudo marker and marker muds(no matchable interval)	98	35	34	0	33704	338	17
SB-87	581100	5452952	Some massive wacke interbeds -0.5 to1m thick some sericite and coarse quartz grains	35	40	189	0	10820	88	0
SB-88	580992	5452749	2m thick marker mud package -micaceous in places with some blue spots	110	41	6	0	23675	458	11
SB-93	580793	5452415	Blocky marker mud material in bank subcrop with sericite flakes and pyrrhotite, pyrite and ZnS?	193	45	0	0	27123	607	0
SB-94	580786	5452396	Same as above marker subcrop -for XRF	167	51	12	0	30092	695	0
SB-95a	580663	5452267	Black silicification of sediments in ditch line	43	27	0	0	17162	212	0
SB-95b	580655	5452268	Black silica altered sediments with garnet	87	25	0	0	21603	341	0
SB-95d	580643	5452241	Quartzite with black silica alteration -pink garnet concretions	29	34	0	0	14715	351	0
SB-95e	580633	5452210	2 inch band of dark silicification with pyrrhotite	62	39	0	0	23542	259	0
SB-96	580591	5452128	Sericitic?/bleached altered black silica sediments	88	35	0	0	24718	351	0
SB-99a	580453	5451972	Black silica beds with pink garnet	30	24	0	0	13733	231	0
SB-99B	580446	5451959	Lower bed of similar material to above with pyrite	138	36	16	0	27789	241	8
SB-104	580780	5451975	Float of black silica material with garnet, actinolite/chlorite and ZnS?	79	34	0	0	15541	366	0
SB-107	580924	5451588	Marker mud in road cut -grab of side cast for XRF maybe ZnS	165	51	0	0	26049	537	0
SB-120	580263	5452486	Subcrop of quartzite with weak black silica and pyrrhotite	24	13	0	0	16199	339	0
SB-121	580111	5452469	Outcrop on corner of road with dark silica -garnet, pyrrhotite and maybe actinolite	29	11	0	0	18195	471	0
SB-122	580628	5452951	Blocks of sediments with dark silicification and whitish alteration with some pyrrhotite	40	10	0	0	30166	886	10
SB-125	580798	5453075	Black silica altered sediments with garnet and pyrrhotite -whitish rind -subcrop	38	6	0	0	39368	2888	31
SB-126	580819	5453095	Subcrop of black silica alteration with whitish rind	31	15	0	0	16887	249	0
SB-142	581755	5448698	Marker float with disseminated ZnS -XRF sample	575	463	18	0	39231	750	0
SB-148	581566	5448997	Subcrop/float of marker mud with some disseminated ZnS -XRF sample	189	26	18	0	45161	827	53
sb-155	581200	5449238	CK bed of collage type garnet concretion with pyrrhotite -XRF Sample	36	15	153	0	36651	2150	19

Sample No.	UTM E	UTM N	Description	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
sb-155	581200	5449238	CK bed of collage type garnet concretion with pyrrhotite -XRF Sample	62	14	110	6	37064	1203	76
SB-161	579361	5448193	Massive beds at point with some disseminated pyrrhotite some disrupted beds	48	38	56	0	5186	206	55
SB-172	578823	5449584	Marker outcrop in road -mainly black mud with thin white bands - disseminated Po maybe ZnS XRF sample	147	23	0	0	12278	327	60
SB-174	578787	5450584	Marker -mainly mud with thin white varves -widely spaced	33	0	28	0	12409	227	59
SB-176	579006	5450857	Medium bedded wacke	12	0	0	5	7351	294	0
SB-182	579004	5451229	Sediments -more sulfidic sericitic leached -sulfide flooded look	30	13	67	0	10185	877	28
SB-182b	579016	5451230	Sulfide rich quartzite -XRF sample	104	29	0	0	15150	413	44
SB-184	578915	5451551	Sulfide flooded sediments quartz wacke -XRF sample	73	202	102	0	10663	365	60
SB-185	579441	5451784	Similar sediments to above with biotite and garnet	61	0	22	0	18889	465	34
SB-187	583348	5453570	Sericitic whitish limonitic leached quartzite -1m thick bed	13	0	0	0	7387	175	0
SB-197	583382	5453228	Black silicified sediments 1m thick band at top of mudstone unit -	31	0	30	0	14490	330	48
SB-197a	583373	5453246	Silicified mudstone -pinkish hue disseminated pyrite and pyrrhotite	116	27	35	0	26097	482	66
SB-198	583318	5453333	Black mudstone with disseminated pyrite	52	0	25	0	17785	377	44
SB-202	583283	5453354	Fragmental in place 2mx2m outcrop in a bit of a swale -clastic dyke like with coarse quartzite matrix lots of fragments and disseminated pyrite	58	11	21	0	11664	308	57
SB-205	583371	5454146	Similar outcrops to above -at point 1m thick bed of finergrained quartz wacke with albitic bleached look	11	0	0	0	4182	171	32
SB-215	581834	5448893	Quartz sericite wacke with some pink garnet and sulfide spots	28	23	0	0	4435	624	44
SB-216	581715	5448400	Bank subcrop of marker	87	95	34	0	18283	397	63
SB-216a	581715	5448400	Bank subcrop of marker	216	98	34	0	19044	408	41
SB-218	581488	5449188	Angular blocks of marker	169	81	19	0	18425	744	68
SB-220	580611	5447435	Marker material in road bank	375	160	20	0	14101	594	51
SB-220	580611	5447435	Marker material in road bank	454	124	20	0	18369	733	64
SB-220a	580623	5447491	Marker -10 inch thick interval with white spotting and chlorite/actinolite	57	65	36	0	24261	2062	61
SB-232	583731	5452648	Silicified quartzite with sericite fractures some mauve quartz eyes - upper part of Ginty mud package?	15	0	20	0	5069	167	40
SB-233	583335	5453161	1m thick white quartzite with some mauve eyes -weathered out and limonitic - extension of Jackson showing?	15	16	0	0	8800	111	0
SB-233a	583335	5453161	1m thick white quartzite with some mauve eyes -weathered out and limonitic - extension of Jackson showing?	0	0	0	0	2880	982	0
SB-234	582486	5453927	Sundown marker horizon -XRF sample	90	35	32	0	16857	674	110
SB-251	583218	5452742	Marker mud package	102	24	47	0	24960	799	73
SB-254	583291	5452673	Marker mud package	189	62	33	0	26171	1133	72
TM-1	581590	5451388	Below sill-Sundown?	111	0	52	0	20040	463	67
TM-2B	580652	5449684	Above on strike	228	115	0	0	66636	3629	64
TM-3	584182	5448951	Bank Subcrop	94	49	0	0	20100	254	0

Sample No.	UTM E	UTM N	Description	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
TM-5B	582939	5448005	Marker ditchline material	114	17	7	0	28775	601	0
TM-6	581410	5449660	Marker subcrop	66	43	0	0	24243	355	0
TM-6B	581395	5449515	Marker subcrop	207	24	29	0	28059	341	15
TM-11	579533	5447946	Marker on road from the point back up spur road	108	33	59	0	23784	391	71

APPENDIX 2  
SOIL  
Sample Location  
With XRF results

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-01	583310	5454262	145	26	19	0.0	27243	576	9
SOSP-02	583208	5454168	139	20	0	0.0	19856	339	0
SOSP-03	583686	5453710	146	24	9	0.0	25893	607	9
SOSP-04	583814	5453784	160	23	0	0.0	19725	1393	0
SOSP-05	583761	5453783	120	23	0	0.0	20579	274	0
SOSP-06	583796	5453565	172	35	14	0.0	25062	332	24
SOSP-07	583804	5453393	162	26	0	0.0	24162	292	0
SOSP-08	583734	5453535	220	25	0	0.0	21191	693	8
SOSP-09	583728	5453557	120	22	0	0.0	17684	331	0
SOSP-10	583002	5454305	177	20	0	0.0	24795	346	0
SOSP-11	582972	5454284	340	17	0	0.0	19578	813	0
SOSP-12	582944	5454265	191	27	6	0.0	25430	647	12
SOSP-13	582921	5454270	301	15	0	3.9	23569	524	0
SOSP-14	582889	5454206	189	17	0	0.0	17516	839	0
SOSP-15	582858	5454155	266	27	0	0.0	21741	762	0
SOSP-16	584110	5452895	211	28	5	0.0	28201	780	9
SOSP-17	584190	5453606	236	34	0	0.0	24637	655	26
SOSP-18	584189	5453689	199	37	9	0.0	27768	1144	32
SOSP-19	584175	5453778	137	24	0	0.0	21562	747	0
SOSP-20	584222	5453871	194	41	29	3.5	28224	555	36
SOSP-21	584293	5453881	159	30	0	0.0	27458	498	0
SOSP-22	584355	5453811	203	33	6	0.0	26279	469	10
SOSP-23	583693	5453903	229	18	0	2.6	20367	435	15
SOSP-24	584701	5453518	152	54	69	5.1	175858	213	35
SOSP-25	585546	5453047	180	21	7	0.0	25685	487	21
SOSP-26	585558	5452857	195	27	0	0.0	26636	1755	0
SOSP-27	585236	5452545	176	25	0	0.0	22645	863	13
SOSP-28	584693	5452781	197	31	0	0.0	23358	480	14
SOSP-29	581252	5449855	168	27	16	7	30759	324	33
SOSP-30	581223	5449907	158	30	0	0	32565	241	0
SOSP-31	581193	5449895	178	20	7	3	30113	274	0
SOSP-32	581187	5449863	173	24	20	0	28007	347	0
SOSP-33	581176	5449852	150	27	0	0	24983	250	0
SOSP-34	581169	5449842	179	20	0	3	28518	421	0
SOSP-35	581147	5449799	211	22	0	0	28673	590	0
SOSP-36	581132	5449803	158	18	0	0	27305	377	0
SOSP-37	581122	5449784	137	22	10	4	32799	248	0
SOSP-38	581108	5449765	157	27	5	0	33033	205	15
SOSP-39	581095	5449751	163	31	10	0	39459	216	14
SOSP-40	581088	5449730	191	39	15	0	33388	328	24
SOSP-41	581077	5449711	198	48	25	0	29379	441	23
SOSP-42	581069	5449689	221	31	15	0	29688	438	17
SOSP-43	581067	5449656	136	34	5	0	30477	493	0
SOSP-44	581408	5449761	262	42	32	0	28335	896	0
SOSP-45	581405	5449744	294	72	17	0	34839	298	0
SOSP-46	581403	5449719	532	54	138	7	56302	250	89
SOSP-47	581424	5449691	180	37	6	0	27866	309	0
SOSP-48	581410	5449659	277	38	6	0	31784	414	0
SOSP-49	581394	5449628	203	21	0	0	26354	324	0
SOSP-50	581381	5449590	217	28	6	0	28254	213	0
SOSP-51	580584	5449755	277	29	55	7	35130	859	68
SOSP-52	580561	5449738	342	22	45	9	32378	1410	56
SOSP-53	580543	5449707	195	13	0	5	25644	541	0
SOSP-54	580539	5449686	214	27	29	9	29392	761	0
SOSP-55	580526	5449662	227	20	52	10	38068	289	46
SOSP-56	580503	5449637	258	23	21	12	32040	769	30
SOSP-57	580490	5449610	136	23	22	11	28077	367	0

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-58	580488	5449577	150	21	29	0	24257	341	0
SOSP-59	580467	5449555	191	23	41	8	32884	294	42
SOSP-60	580401	5449326	188	22	27	0	27080	1026	0
SOSP-61	580411	5449289	193	17	35	0	25490	853	45
SOSP-62	580406	5449264	174	15	20	0	22682	491	29
SOSP-63	580405	5449228	170	23	17	0	24147	1034	0
SOSP-64	581458	5449744	221	201	0	0	45601	540	0
SOSP-65	581391	5449511	156	17	31	0	30083	371	0
SOSP-66	581381	5449486	143	14	17	7	28211	310	0
SOSP-67	581388	5449450	153	14	23	0	29895	393	0
SOSP-68	581382	5449439	122	11	30	6	29414	360	0
SOSP-69	581396	5449391	177	10	38	11	31885	252	0
SOSP-70	581400	5449368	170	14	24	0	31740	384	0
SOSP-71	581401	5449323	266	15	71	0	33196	529	46
SOSP-72	581404	5449280	137	11	21	0	35293	454	0
SOSP-73	581350	5449300	96	16	23	7	29903	295	0
SOSP-74	581346	5449272	127	13	40	7	34732	337	40
SOSP-75	581333	5449229	108	13	41	7	34073	420	44
SOSP-76	581325	5449192	86	15	33	0	31619	334	0
SOSP-77	581323	5449165	119	11	26	0	33708	602	0
SOSP-78	581263	5449142	95	11	30	9	31130	320	0
SOSP-79	581256	5449098	148	13	33	0	27305	446	0
SOSP-80	581264	5449060	127	26	26	9	26520	408	0
SOSP-81	581282	5449024	119	13	39	8	27344	476	0
SOSP-82	581300	5449315	109	16	34	0	29894	569	0
SOSP-83	581313	5449342	100	13	34	6	29350	404	36
SOSP-84	581366	5449771	114	15	38	8	30503	316	0
SOSP-85	581383	5449817	79	15	24	8	26267	408	0
SOSP-86	581410	5449857	224	21	34	9	28848	352	0
SOSP-87	581606	5451650	175	22	24	7	22865	483	0
SOSP-88	581592	5451640	132	25	0	7	28427	416	0
SOSP-89	581573	5451627	129	15	36	5	27211	647	0
SOSP-90	581551	5451610	137	0	0	7	20892	968	0
SOSP-91	581534	5451578	135	19	0	0	28501	496	30
SOSP-92	581511	5451560	166	15	33	5	24963	1623	0
SOSP-93	581548	5451497	200	19	27	6	28875	1164	47
SOSP-94	581557	5451530	205	0	22	6	23433	639	0
SOSP-95	581553	5451555	146	33	26	9	25859	1484	27
SOSP-96	581562	5451575	114	16	0	6	21973	267	0
SOSP-97	581580	5451590	130	27	30	7	31905	394	31
SOSP-98	581607	5451895	257	21	27	7	29419	960	0
SOSP-99	581586	5451560	155	38	22	0	30877	709	0
SOSP-100	581566	5451423	238	13	33	0	28690	1558	32
SOSP-101	581573	5451390	236	18	43	0	30795	1718	29
SOSP-102	584079	5451897	178	17	38	0	31932	1698	0
SOSP-103	584062	5451922	154	15	47	0	40606	580	53
SOSP-104	584158	5451943	217	11	21	8	20140	1090	0
SOSP-105	584124	5451963	166	0	30	5	18550	475	29
SOSP-106	584106	5452000	215	10	15	0	18089	825	0
SOSP-107	584090	5452025	223	6	27	0	17607	773	0
SOSP-108	584079	5452050	292	8	23	0	19461	994	0
SOSP-109	584058	5452113	149	8	39	0	33434	533	49
SOSP-110	584054	5452156	216	6	19	0	15396	1095	0
SOSP-111	584029	5452113	117	7	24	6	21586	288	30
SOSP-112	584034	5452096	138	10	23	0	19476	390	42
SOSP-113	584027	5452031	246	0	21	5	19089	472	0
SOSP-114	584016	5452001	169	6	40	6	25558	457	0

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-115	583998	5451970	185	0	66	6	38056	563	82
SOSP-116	583970	5451950	204	0	35	5	23795	506	33
SOSP-117	584390	5452096	114	7	25	0	20527	489	32
SOSP-118	584417	5452125	154	7	20	0	20160	573	0
SOSP-119	584390	5452149	124	9	17	0	16002	327	0
SOSP-120	584374	5452172	118	12	20	0	20532	309	26
SOSP-121	584354	5452180	151	8	30	5	21458	623	0
SOSP-122	584334	5452204	101	8	28	0	18103	386	0
SOSP-123	584305	5452227	74	0	21	0	18042	486	36
SOSP-124	584289	5452242	78	9	19	0	16788	397	0
SOSP-125	584268	5452242	89	11	0	0	18938	507	0
SOSP-126	584249	5452262	119	14	22	0	21212	956	32
SOSP-127	584222	5452279	98	14	33	0	25665	635	50
SOSP-128	584194	5452295	104	13	28	0	19286	931	0
SOSP-129	584181	5452286	95	9	23	0	24831	399	43
SOSP-130	584178	5452312	148	14	24	0	24205	1162	0
SOSP-131	584156	5452346	124	16	27	6	26942	474	57
SOSP-132	584444	5452174	111	12	25	0	16389	698	0
SOSP-133	584442	5452149	106	12	30	0	21231	510	0
SOSP-134	584434	5452191	98	7	23	0	15599	308	33
SOSP-135	584410	5452210	132	6	20	5	20207	591	0
SOSP-136	583325	5453728	115	15	61	5	25160	859	38
SOSP-137	583331	5453837	118	0	27	7	21583	450	0
SOSP-138	583343	5453880	126	10	59	0	26860	666	33
SOSP-139	583343	5453915	190	21	29	0	27808	643	0
SOSP-140	583400	5453992	141	8	25	0	19734	376	28
SOSP-141	583214	5453843	111	8	30	0	25531	532	46
SOSP-142	583214	5453862	190	8	22	0	23508	613	27
SOSP-143	583215	5453882	181	11	21	0	20506	630	28
SOSP-144	583194	5453908	189	0	22	5	23619	582	0
SOSP-145	583197	5453925	125	12	44	0	20087	364	38
SOSP-146	583210	5453943	192	6	37	8	24038	1047	0
SOSP-147	583226	5453966	151	6	30	6	21969	393	29
SOSP-148	583247	5453988	132	8	15	5	19223	469	0
SOSP-149	583263	5453963	166	9	25	7	24992	525	0
SOSP-150	583268	5453943	125	0	24	5	18555	761	0
SOSP-151	583275	5453911	122	11	20	0	23049	459	0
SOSP-152	583282	5453897	86	7	34	6	21333	259	30
SOSP-153	583282	5453867	182	0	0	0	20429	679	0
SOSP-154	583281	5453841	108	0	0	0	18491	552	0
SOSP-155	583277	5453814	114	0	0	0	15053	915	0
SOSP-156	583277	5453780	132	12	26	0	22777	691	28
SOSP-157	583275	5453741	118	8	0	0	20301	653	0
SOSP-158	583275	5453482	131	9	29	0	24344	402	0
SOSP-159	583273	5453473	166	8	23	5	23178	725	0
SOSP-160	583275	5453450	161	12	36	0	25221	1686	0
SOSP-161	583276	5453422	155	9	33	0	25579	800	0
SOSP-162	583277	5453393	161	12	32	0	35629	798	30
SOSP-163	583293	5453380	184	0	70	8	49756	621	42
SOSP-164	583309	5453353	159	12	35	0	29335	1219	42
SOSP-165	583310	5453316	160	8	51	0	40419	1339	0
SOSP-166	583315	5453293	245	0	28	0	26624	597	0
SOSP-167	583326	5453264	196	0	18	0	19069	586	0
SOSP-168	583308	5453237	181	11	20	7	19484	660	0
SOSP-169	584057	5454896	181	15	17	5	24130	2776	0
SOSP-170	584069	5454930	161	16	0	0	26715	2130	0
SOSP-171	584104	5454940	146	17	18	5	24856	1125	0

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-172	584141	5454938	188	24	0	0	21016	852	28
SOSP-173	584176	5454948	223	20	22	8	23007	1647	42
SOSP-174	584208	5454957	256	28	38	18	25279	1156	87
SOSP-175	584227	5454969	141	24	25	7	20121	471	45
SOSP-176	584264	5454990	149	22	23	10	24663	745	32
SOSP-177	584293	5455029	157	11	0	9	23824	958	0
SOSP-178	584329	5455031	158	22	0	6	20545	1232	0
SOSP-179	584312	5454959	133	15	16	7	25314	564	0
SOSP-180	584308	5454932	216	24	0	0	23189	1334	28
SOSP-181	584261	5454905	234	15	0	6	21572	2013	32
SOSP-182	584226	5454892	275	37	35	9	27701	574	83
SOSP-183	584210	5454877	188	49	0	8	20314	424	0
SOSP-184	584174	5454854	277	86	20	13	22670	1062	28
SOSP-185	584152	5454818	288	31	26	0	25662	4116	0
SOSP-186	584116	5454814	243	23	22	8	22427	1838	0
SOSP-187	584087	5454772	221	11	0	6	20128	820	27
SOSP-188	584050	5454768	210	38	19	7	20376	1080	0
SOSP-189	584016	5454765	153	20	42	0	30059	628	51
SOSP-190	583978	5454754	283	17	32	0	24001	466	100
SOSP-191	583940	5454712	169	31	0	0	20833	713	0
SOSP-192	584205	5451342	181	0	23	0	21946	516	27
SOSP-193	584190	5451360	186	7	55	0	28553	771	35
SOSP-194	584186	5451402	165	6	24	0	24815	513	0
SOSP-195	584184	5451439	169	0	37	7	21662	785	0
SOSP-196	584180	5451466	140	14	30	0	24848	413	0
SOSP-197	584171	5451510	160	13	19	0	23414	418	0
SOSP-198	584174	5451566	167	10	24	0	27735	786	0
SOSP-199	584182	5451596	144	9	40	5	24870	401	27
SOSP-200	584182	5451634	143	9	22	6	22282	427	0
SOSP-201	584160	5451683	138	9	23	6	20410	403	39
SOSP-202	584108	5451651	198	21	103	0	21997	1780	50
SOSP-203	584020	5454956	206	0	26	5	25872	461	28
SOSP-204	584043	54545031	216	15	24	7	24564	923	42
SOSP-205	583965	5455017	137	0	15	0	15370	460	0
SOSP-206	583954	5454985	161	0	39	8	17787	439	0
SOSP-207	583943	5454962	135	10	24	0	19614	451	37
SOSP-208	583930	5454931	166	13	0	0	19079	557	0
SOSP-209	583916	5454892	117	16	30	6	19798	434	34
SOSP-210	583891	5454839	165	10	0	6	20243	815	0
SOSP-211	583944	5452855	138	10	29	0	20402	374	0
SOSP-212	583957	5452818							
SOSP-213	583961	5452770	87	14	22	0	22742	313	40
SOSP-214	584116	5452660	131	6	20	5	18465	535	29
SOSP-215	584129	5452686	112	9	21	6	23236	389	0
SOSP-216	584108	542720	110	8	17	0	15876	736	0
SOSP-217	584083	5452737	120	0	0	0	17130	374	0
SOSP-218	584068	5452771	115	15	26	0	22769	1394	32
SOSP-219	584053	5452791	155	13	20	5	22953	977	0
SOSP-220	584043	5452828	179	22	28	0	28554	1237	50
SOSP-221	584036	5452870	126	29	37	0	28018	559	0
SOSP-222	584026	5452903	120	17	16	0	21379	551	0
SOSP-223	584022	5452946	169	23	42	0	21517	850	34
SOSP-224	584003	5452979	174	8	0	6	18839	599	34
SOSP-225	583980	5453027	120	9	15	5	17115	331	38
SOSP-226	584058	5452324	135	0	0	5	18552	848	0
SOSP-227	583845	5452422	129	0	213	16	181954	1966	114
SOSP-228	583847	5452388	137	13	124	13	66728	3316	110

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-229	583848	5452379	124	0	87	11	134071	1348	119
SOSP-230	583849	5452377	109	36	40	0	37584	804	50
SOSP-231	583851	5452372	91	50	60	7	41593	788	51
SOSP-232	585915	5454808	146	19	20	0	18292	1061	0
SOSP-233	585923	5454798	128	16	0	0	19314	637	0
SOSP-234	585942	5454795	119	25	20	0	21189	574	0
SOSP-235	585939	5454789	120	19	20	0	20990	379	35
SOSP-236	585946	5454780	121	17	17	0	20771	426	34
SOSP-237	585957	5454787	103	19	0	0	18490	494	0
SOSP-238	585983	5454773	91	17	0	0	18605	558	41
SOSP-239	586013	5454770	157	57	68	0	31369	1627	62
SOSP-240	586012	5454760	144	49	49	8	24327	1786	0
SOSP-241	580119	5452196	149	18	0	0	19973	1055	0
SOSP-242	580130	5452213	158	7	18	5	18896	783	0
SOSP-243	580161	5452249	120	6	0	5	20953	304	0
SOSP-244	580167	5452290	144	0	0	6	19791	329	44
SOSP-245	580174	5452321	139	0	24	5	19308	344	44
SOSP-246	580176	5452354	260	0	0	8	17666	1175	0
SOSP-247	580183	5452379	224	6	20	5	19389	650	0
SOSP-248	580186	5452411	240	0	16	5	16153	1392	0
SOSP-249	580201	5452458	209	7	16	5	20297	687	0
SOSP-250	580232	5452473	275	0	16	6	18817	750	29
SOSP-251	580253	5452491	267	11	0	6	18044	1162	0
SOSP-252	580288	5452502	352	0	23	8	19658	1514	0
SOSP-253	580312	5452514	316	11	33	0	21612	595	37
SOSP-254	580343	5452520	402	8	17	8	20300	683	0
SOSP-255	580360	5452534	366	7	28	7	20947	436	30
SOSP-256	580394	5452538	495	9	21	6	20682	550	0
SOSP-257	580414	5452553	273	7	22	7	17019	424	0
SOSP-258	580440	5452580	486	8	18	9	22442	482	0
SOSP-259	580461	5452582	181	10	20	0	18988	519	31
SOSP-260	580485	5452602	304	11	19	7	18731	378	0
SOSP-261	580505	5452623	268	17	0	5	19243	380	0
SOSP-262	580526	5452653	302	13	0	0	19489	371	0
SOSP-263	580555	5452677	322	28	0	0	20294	447	0
SOSP-264	580578	5452694	576	14	21	7	20498	436	0
SOSP-265	580615	5452726	199	0	0	0	16650	829	0
SOSP-266	580653	5452739	168	0	23	6	21203	529	32
SOSP-267	580702	5452741	185	0	18	0	17495	231	0
SOSP-268	580727	5452767	171	9	0	0	18195	482	0
SOSP-269	580748	5452800	214	0	0	0	18535	610	0
SOSP-270	582970	5453945	105	8	29	0	24615	415	48
SOSP-271	582969	5453974	130	12	43	7	27237	404	50
SOSP-272	582951	5453994	136	6	15	6	18441	588	0
SOSP-273	582930	5454007	75	10	26	0	20111	333	41
SOSP-274	582896	5454029	72	0	27	5	16951	358	0
SOSP-275	582919	5454060	115	0	18	6	22990	710	0
SOSP-276	582923	5454097	97	0	17	5	22280	1072	0
SOSP-277	582916	5454134	215	14	19	6	21165	900	0
SOSP-278	578385	5451307	248	11	0	0	22014	506	0
SOSP-279	578406	5451327	204	7	0	7	20291	783	0
SOSP-280	578442	5451342	150	10	0	6	18748	506	0
SOSP-281	578474	5451358	139	9	0	0	18974	627	0
SOSP-282	578513	5451367	183	9	16	5	18921	915	0
SOSP-283	578555	5451375	173	6	0	5	17948	599	0
SOSP-284	578582	5451396	130	7	0	5	16644	672	0
SOSP-285	578618	5451407	126	6	0	9	19889	433	26

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-286	578651	5451432	147	7	0	6	21381	593	0
SOSP-287	578681	5451442	270	6	15	10	19718	1846	0
SOSP-288	578724	5451460	165	22	0	13	23336	456	33
SOSP-289	578765	5451477	231	15	0	5	21091	540	40
SOSP-290	578801	5451488	81	12	19	7	16797	431	26
SOSP-291	578838	5451515	120	7	0	6	21499	712	0
SOSP-292	578869	5451526	189	0	17	5	18873	576	0
SOSP-293	578905	5451539	105	0	27	6	18557	426	0
SOSP-294	578700	5451311	146	14	0	5	21254	578	0
SOSP-295	578669	5451300	153	0	17	5	19327	555	0
SOSP-296	578634	5451295	202	0	0	7	21242	1114	0
SOSP-297	578587	5451262	236	0	22	8	21166	1205	0
SOSP-298	578556	5451239	147	9	19	0	21314	1104	0
SOSP-299	578504	5451222	219	0	20	11	21932	1049	0
SOSP-300	578459	5451215	196	7	0	8	20751	725	0
SOSP-301	578426	5451184	174	11	0	8	19700	416	0
SOSP-302	578384	5451176	95	10	0	8	18401	287	0
SOSP-303	578393	5451232	126	0	15	5	21035	570	0
SOSP-304	578347	5451240	75	14	23	9	19931	317	0
SOSP-305	578500	5451310	105	0	23	11	21679	467	0
SOSP-306	584944	5456814	88	23	16	0	18948	244	29
SOSP-307	584915	5456828	205	32	17	0	21295	333	0
SOSP-308	584901	5455850	158	30	16	9	20720	450	34
SOSP-309	584873	5456845	151	25	17	0	19244	317	44
SOSP-310	584846	5456849	154	20	0	10	19706	415	0
SOSP-311	584832	5456870	207	11	0	8	15339	643	0
SOSP-312	584847	5459606	198	14	0	8	19214	819	0
SOSP-313	580579	5452209	180	0	22	11	20494	855	0
SOSP-314	580598	5452229	245	10	46	8	24690	532	0
SOSP-315	580579	5452209	216	0	20	5	18584	896	0
SOSP-316	580645	5452306	230	6	29	8	21819	524	0
SOSP-317	580659	5452341	152	6	0	0	19339	553	0
SOSP-318	580683	5452387	188	6	20	7	22161	266	29
SOSP-319	580694	5452454	150	8	18	5	20678	219	0
SOSP-320	580708	5452499	160	8	31	0	16157	298	0
SOSP-321	580723	5452530	271	6	0	0	19168	549	0
SOSP-322	580736	5452570	231	6	17	5	20867	575	0
SOSP-323	580763	5452608	151	0	0	6	18785	667	0
SOSP-324	580784	5452636	157	10	28	0	22476	466	46
SOSP-325	580837	5452657	91	6	16	5	22528	481	46
SOSP-326	580887	5452679	185	0	19	8	23882	781	35
SOSP-327	580946	5452703	119	8	0	0	22914	813	0
SOSP-328	580962	5452730	186	0	31	5	23259	1115	0
SOSP-329	580972	5452731	220	6	27	6	21914	492	0
SOSP-330	580534	5452158	223	7	25	7	25273	344	0
SOSP-331	580515	5452120	86	10	35	0	15741	207	0
SOSP-332	580484	5452076	146	7	0	0	18356	1203	0
SOSP-333	580469	5452033	197	8	34	5	24766	479	0
SOSP-334	580423	5451995	429	14	44	0	22974	963	50
SOSP-335	580396	5451962	91	0	0	6	20189	427	0
SOSP-336	580373	5451935	119	0	16	5	21001	368	0
SOSP-337	580130	5450506	185	18	23	0	22863	403	0
SOSP-338	580163	5450527	224	18	47	7	30064	1003	41
SOSP-339	580163	5450571	313	18	0	6	25003	1179	0
SOSP-340	580164	5450610	207	15	27	6	28857	346	0
SOSP-341	580166	5450640	440	11	17	7	19923	486	0
SOSP-342	580177	5450695	242	8	30	6	20959	314	34

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-343	580188	5450752	118	7	29	0	19887	291	27
SOSP-344	580184	5450809	330	16	32	0	22339	448	35
SOSP-345	580198	5450862	161	0	16	8	18131	317	0
SOSP-346	580214	5450917	123	0	0	0	18846	378	0
SOSP-347	580255	5450932	69	6	0	5	16831	252	29
SOSP-348	580276	5450937	59	9	20	0	16385	287	30
SOSP-349	580297	5450964	54	11	21	0	13860	330	0
SOSP-350	580302	5451000	47	9	16	0	15709	253	37
SOSP-351	580289	5451040	56	6	0	0	15551	341	0
SOSP-352	580296	5451083	76	0	25	6	18227	216	0
SOSP-353	580336	5451170	62	7	28	6	16488	187	0
SOSP-354	580352	5451211	185	0	18	6	18663	597	28
SOSP-355	580363	5451219	132	0	16	7	18256	283	0
SOSP-356	580361	5451238	144	8	30	0	18160	211	0
SOSP-357	580367	5451245	273	8	37	5	23926	357	32
SOSP-358	580368	5451261	175	0	20	0	20254	396	0
SOSP-359	580376	5451265	221	7	16	0	20505	566	0
SOSP-360	580440	5452750	197	0	0	6	18403	303	0
SOSP-361	580468	5452777	230	0	18	5	17836	606	0
SOSP-362	580494	5452799	399	0	20	8	19529	495	26
SOSP-363	580537	5452819	469	7	46	6	22416	399	0
SOSP-364	580539	5452868	480	0	21	6	20386	912	0
SOSP-365	580580	5452885	200	0	30	0	19957	857	0
SOSP-366	580615	5452906	246	0	0	0	17511	606	0
SOSP-367	580633	5452938	331	0	0	5	16672	567	0
SOSP-368	580642	5452897	240	0	21	7	20511	603	0
SOSP-369	580684	5453032	190	0	0	6	16838	699	0
SOSP-370	580719	5453067	239	0	0	5	21881	630	0
SOSP-371	580760	5453087	140	8	19	5	20844	335	0
SOSP-372	580791	5453130	134	0	31	6	21562	1341	0
SOSP-373	588492	5451890	384	0	15	7	21375	671	0
SOSP-374	588444	5451872	293	0	24	5	19557	250	0
SOSP-375	588404	5451860	288	0	0	4	21309	535	0
SOSP-376	588346	5451843	153	0	17	6	18970	349	0
SOSP-377	588307	5451825	362	6	27	0	23284	433	0
SOSP-378	588266	5451826	333	9	30	9	32191	631	0
SOSP-379	588223	5451820	319	8	23	5	24020	451	0
SOSP-380	588155	5451818	78	17	26	0	19345	331	0
SOSP-381	588058	5451812	102	15	16	0	21838	231	42
SOSP-382	588010	5451784	84	13	19	6	21354	391	0
SOSP-383	581756	5448737	133	48	7	0	40044	364	0
SOSP-384	581746	5448691	151	34	0	0	38074	322	0
SOSP-385	581711	5448648	331	48	57	0	36822	440	24
SOSP-386	581675	5448615	226	39	52	0	34833	341	11
SOSP-387	581650	5448570	148	29	7	0	35024	290	0
SOSP-388	581635	5448519	63	24	7	0	30677	201	0
SOSP-389	581621	5448474	66	24	5	0	28753	252	0
SOSP-390	581587	5448414	77	25	8	4	30623	316	0
SOSP-391	581616	5448374	116	29	21	0	35578	418	0
SOSP-392	581647	5448319	102	26	22	0	31820	412	0
SOSP-393	581723	5448319	121	31	11	0	27970	356	0
SOSP-394	581734	5448372	158	45	0	0	38537	792	0
SOSP-395	581737	5448418	99	39	11	0	35381	320	0
SOSP-396	581750	5448453	71	40	0	0	30238	213	0
SOSP-397	581766	5448492	91	56	9	0	37868	320	0
SOSP-398	581779	5448531	58	49	10	0	29251	187	0
SOSP-399	581828	5448552	101	83	12	0	27596	399	0

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-400	580540	5447352	174	44	6	0	27502	275	0
SOSP-401	580545	5447383	136	73	8	6	29966	1005	0
SOSP-402	580547	5447419	159	58	31	0	30387	529	0
SOSP-403	580560	5447461	209	64	0	0	32052	158	0
SOSP-404	580564	5447508	314	82	17	0	33940	374	0
SOSP-405	580573	5447535	382	65	18	0	30833	426	34
SOSP-406	580580	5447566	184	55	15	0	26220	313	0
SOSP-407	580623	5447600	279	101	7	0	28598	905	14
SOSP-408	580747	5447575	78	24	6	0	24154	236	0
SOSP-409	580698	5447551	159	47	7	0	26705	921	0
SOSP-410	580654	5447486	156	64	34	5	32998	337	0
SOSP-411	580650	5447440	182	47	0	0	25496	259	0
SOSP-412	580616	5447413	152	57	10	0	27151	603	0
SOSP-413	580770	5450095	120	19	36	0	24738	303	0
SOSP-414	580713	5450091	183	27	55	0	34440	1556	30
SOSP-415	580680	5450053	192	28	30	6	29469	382	38
SOSP-416	580673	5450023	167	18	47	9	31401	345	40
SOSP-417	580654	5449990	127	13	36	0	23208	327	46
SOSP-418	580636	5449944	150	26	35	0	34237	425	32
SOSP-419	580611	5449906	105	15	27	6	23642	337	0
SOSP-420	580608	5449839	138	23	35	7	23589	837	0
SOSP-421	580555	5449827	112	13	28	9	21734	827	0
SOSP-422	580484	5449857	71	13	28	0	22826	407	31
SOSP-423	580460	5449817	96	18	35	9	35518	534	0
SOSP-424	580434	5449788	58	10	28	5	16156	260	0
SOSP-425	580392	5449726	86	6	20	5	22801	716	0
SOSP-426	580407	5449131	63	10	28	0	19165	289	0
SOSP-427	580419	5449072	47	25	17	0	16298	319	57
SOSP-428	580399	5449043	82	23	28	0	20140	645	42
SOSP-429	580408	5448982	56	18	23	7	19790	412	0
SOSP-430	580395	5448939	88	0	0	8	21786	432	0
SOSP-431	580406	5448896	88	33	55	9	31971	500	0
SOSP-432	580384	5448863	76	10	25	0	22739	564	0
SOSP-433	580337	5448832	113	14	27	8	26235	536	0
SOSP-434	580272	5448818	82	18	32	7	22085	438	0
SOSP-435	580254	5448776	70	14	34	6	21250	271	0
SOSP-436	580231	5448733	82	10	18	5	21130	578	0
SOSP-437	580262	5448647	103	9	17	9	23473	488	0
SOSP-438	580262	5448597	75	11	0	10	22942	304	0
SOSP-439	580338	5448637	92	0	16	7	20330	372	0
SOSP-440	580409	5448606	67	14	26	5	21129	230	0
SOSP-441	580556	5448630	87	21	30	0	23466	1049	0
SOSP-442	583804	5453811	83	7	0	0	24248	343	0
SOSP-443	583793	5453884	132	0	26	0	16114	333	27
SOSP-444	583788	5453941	310	16	30	6	25114	509	41
SOSP-445	583783	5453983	127	10	0	0	21709	375	0
SOSP-446	583785	5454047	175	12	0	0	21783	756	0
SOSP-447	583811	5454095	134	13	23	0	25312	873	27
SOSP-448	583842	5454095	112	19	44	0	22343	344	47
SOSP-449	583842	5454100	118	18	33	0	21288	360	0
SOSP-450	583911	5454064	113	14	29	0	18131	696	26
SOSP-451	583938	5454109	97	15	17	0	19378	462	28
SOSP-452	583937	5454158	124	14	20	0	18203	402	27
SOSP-453	583929	5454217	84	14	22	5	19409	426	0
SOSP-454	583923	5454270	156	16	36	0	24148	1828	52
SOSP-455	583947	5454304	133	14	17	0	20709	576	40
SOSP-456	583992	5454321	120	12	0	5	16540	416	32

Sample No.	UTM E	UTM N	Zn(PPM)	Pb(PPM)	Cu(PPM)	As(PPM)	Fe(PPM)	Mn(PPM)	Ni(PPM)
SOSP-457	584030	5454355	195	18	34	6	23066	1061	57
SOSP-458	584061	5454413	150	18	37	0	22415	898	39
SOSP-459	584122	5454387	120	14	38	0	22940	470	38
SOSP-460	584147	5454341	108	17	24	0	23571	1016	0
SOSP-461	584175	5454292	97	12	31	8	25502	425	0
SOSP-462	582941	5454133	136	7	26	6	23706	544	0
SOSP-463	582977	5454135	359	71	0	0	20592	730	43
SOSP-464	583012	5454162	268	14	19	5	19047	1181	0
SOSP-465	581233	5446706	88	11	21	7	30734	456	38
SOSP-466	581244	5446791	88	10	25	6	30226	548	0
SOSP-467	581257	5446829	75	8	39	7	33813	459	34
SOSP-468	581218	5446824	85	14	28	0	34916	450	38
SOSP-469	581185	5446872	90	14	0	6	29469	483	45
SOSP-470	581183	5446900	76	11	25	6	34564	455	29
SOSP-471	581176	5446935	68	9	23	8	35651	335	0
SOSP-472	581152	5446967	90	7	25	7	28045	782	0
SOSP-473	581120	5446967	107	12	37	0	29702	366	0
SOSP-474	581089	5446942	98	6	24	8	32506	667	0
SOSP-475	581094	5446909	111	11	34	7	31082	397	0
SOSP-476	581092	5446867	152	19	33	0	33696	1137	40
SOSP-477	581116	5446836	80	10	0	8	23212	1719	0
SOSP-478	581144	5446810	150	12	45	0	33733	1182	0
SOSP-479	581155	5446767	77	0	31	7	25437	285	0
SOSP-480	581153	5446719	48	0	18	5	22398	200	0
SOSP-481	581119	5446674	99	7	20	0	28618	403	0
SOSP-482	581091	5446627	87	0	19	7	27263	271	0
SOSP-483	581093	5446580	97	7	20	0	25970	312	0
SOSP-484	581096	5446989	153	19	34	0	32217	776	0
SOSP-485	581101	5446993	101	14	18	7	31766	333	0
SOSP-486	581124	5447017	102	7	33	6	28179	430	0
SOSP-487	581132	5447060	66	15	38	0	22972	506	0

**APPENDIX 3**  
**Table of Historic**  
**Assessment Reports SBA Area**

Aris Num#	Area	Year	Author	Company	Property	Target	Work	Primary Fm	Notes				
19957	Stone Cr./Tochty	1990	Pirie,I.D./Baxter,P.	Minnova	Stone	Pb-Zn-Ag	Drilling, Geological, Geochemical	Middle Aldridge	2 holes(519.4m) 31 samples(rock)				
18152	Stone Cr./Tochty	1988	Pirie,I.D.	Minnova	Stone	Pb-Zn-Ag	Geophysical	Middle Aldridge	Gravity				
17633	Stone Cr./Tochty	1988	Pirie,I.D.	Minnova	Stone	Pb-Zn-Ag	Geochemical, Geological, Geophysical	Middle Aldridge	Rock(226 samples), Ground geophysics(CSMT)				
36269	Stone Cr./Tochty	2016	Kennedy,C.	Self	Lady Slipper	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Rock Geochem				
34914	S.Moyie Lake to Sundown	2014	Kennedy,S.J.	Kootenay Silver	Spikes Big Adventure	Pb-Zn-Ag	Rock and Soil Geochemistry	Middle Aldridge	34Rock and 54 Soils -multi-element				
34828	S.Moyie Lake to Sundown	2014	Kennedy,S.J.	Kootenay Silver	Sunrise	Pb-Zn-Ag	Prospecting	Middle Aldridge	11 rock samples				
34178	S.Moyie Lake to Sundown	2013	Kennedy,S.J.	Kootenay Silver	Spikes Big Adventure	Pb-Zn-Ag	Geochemistry/Geology	Middle Aldridge	Rock(12), Soil(101) -multielement				
30232	S.Moyie Lake to Sundown	2008	Pighin,D./Anderson,D.	Klondike Gold	Cruz	Pb-Zn-Ag	Drilling	Middle Aldridge	1 hole(843.9m) -28 samples				
30087	Stone Cr./Tochty	2008	Anderson,D.	Klondike Gold	JCD	Pb-Zn-Ag	Geological	Middle Aldridge	Geology Map -Orchid vent area				
26318	Stone Cr./Tochty	2000	Pighin,D.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Drilling, Geochemical	Middle Aldridge	1 hole(941.5m) -56 samples				
26202	S.Moyie Lake to Sundown	1999	Anderson,D.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Drilling	Middle Aldridge	2 holes(740.0m) Midway Vent area				
26065	Stone Cr./Tochty	1999	Anderson,D.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Soil survey(164 samples) -multielement				
22492	S.Moyie Lake to Sundown	1993	Rodgers,G.M.	Cominco	Sun	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Contour Soil (190 samples)				
22429	S.Moyie Lake to Sundown	1992	Rodgers,G.M.	Self	Sun	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground Mag and VLF				
24932	S.Moyie Lake to Sundown	1997	Rodgers,G.M.	Sedex Mining	Rise	Pb-Zn-Ag	Drilling	Middle Aldridge	1 hole 295.7m				
26502	S.Moyie Lake to Sundown	2000	Klewchuk,P.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Soil grid(252 samples) -multielement -copper anomaly				
25858	S.Moyie Lake to Sundown	1999	Anderson,D.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Geology	Middle Aldridge					
25823	S.Moyie Lake to Sundown	1999	Pighin,D./Anderson,D.	Chapleau	Cruz	Pb-Zn-Ag	Geology/Geochemistry	Middle Aldridge	Copper soil anomaly -Sundown creek				
25822	S.Moyie Lake to Sundown	1998	Kennedy, R.D.C.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Prospecting	Middle Aldridge	Midway vent, tourmaline, gossan				
25378	S.Moyie Lake to Sundown	1997	Walker,R.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Soil survey(1920 samples) -multi-element				
25138	S.Moyie Lake to Sundown	1997	Walker,R.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Geochemical	Middle Aldridge	Soil survey(359 samples)				
24772	S.Moyie Lake to Sundown	1996	Pighin,D.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Drilling	Middle Aldridge	1 hole 229.9m				
24478	S.Moyie Lake to Sundown	1996	Rodgers,G.M.	Sedex Mining	Sun/Gas	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground Mag and VLF				
24401	S.Moyie Lake to Sundown	1996	Walker,R.	Chapleau Res. Ltd.	Cruz	Pb-Zn-Ag	Drilling	Middle Aldridge	4 holes -2018.5m -14 rock samples -Cruz vent complex				
22434	S.Moyie Lake to Sundown	1992	Rodgers,G.M.	Kokanees Res.	Leo	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Soil Survey(489 samples)				
8431	S.Moyie Lake to Sundown	1980	Shear,H.H.	Sea Gold Oil	Midway	Au-Ag	Drilling	Middle Aldridge	6 holes percussion -98 rock samples Au,Ag assays				
5049	S.Moyie Lake to Sundown	1974	Winslow/McBean	Dorvan Mines	Midway	Au-Ag	Geochemistry/Geophysics	Middle Aldridge	Soil grid(49 samples) -ground mag, EM				
813	Stone Cr./Tochty	1966	Northcote,K.	Kennco	Stoney	Pb-Zn-Ag	Geochemical	Middle Aldridge	Soil survey(171 samples) -Cu,Pb,Zn,Mo				
29810	St.Eugene area	2008	Klewchuk,P.	St.Eugene Mining	Glencairn	Pb-Zn-Ag	Drilling, Geochemical	Middle Aldridge	3 holes(1007.6m) -35 samples -North structure area				
29809	St.Eugene area	2008	Klewchuk,P.	St.Eugene Mining	Moyie	Pb-Zn-Ag	Drilling, Geochemical	Middle Aldridge	1 hole(242.6) -35 samples				
27805	St.Eugene area	2005	Klewchuk,P.	St.Eugene Mining	505101	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground VLF				
22503	St.Eugene area	1992	Ransom,P.W.	Cominco	Cherry	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Soil(187 samples) -multielement				
20751	St.Eugene area West	1990	Stephenson,L.G.	Kokanee Res.	Aur	Pb-Zn	Geochemical	Creston	525 samples -multielement soils				
20705	St.Eugene area	1990	Jackish,I.	Cominco	Ald	Pb-Zn-Ag	Geophysical	Middle Aldridge	UTEM				
18128	St.Eugene area	1988	Schultze,H.C.	Cominco	ML	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Drill hole cuttings -Duncan Energy hole -810samples				
16681	St.Eugene area	1987	Anderson,D.W.	Cominco	ML	Pb-Zn-Ag	Geochemistry	Middle Aldridge	Drill hole cuttings -Duncan Energy hole				
57	St.Eugene area	1951	Smith,A.	St.Eugene Mining	ML	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground magnetics				
56	St.Eugene area	1951	Smith,A.	St.Eugene Mining	ML	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground Magnetics				
41	St.Eugene area	1948	Smith,A.	St.Eugene Mining	Etna	Pb-Zn-Ag	Geophysical	Middle Aldridge	Ground magnetics				
11	St.Eugene area	1947	Smith,A.	St.Eugene Mining	ML	Pb-Zn-Ag	Geological	Middle Aldridge	Mapping				
1	St.Eugene area	1947	Smith,A.	St.Eugene Mining	Etna	Ag-Au	Geological	Middle Aldridge	Mapping				