BC Geological Survey
Assessment Report
35500

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT:
2014 and SPRING 2015: PROSPECTING, GEOCHEMICAL, GEOLOGICAL, AND PHYSICAL WORK.

TOTAL COST: $ 46,111.09

AUTHOR(S): **David J. Piggin, RPF, Prospector**

SIGNATURE(S): **David J. Piggin, RPF (owner)** -

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

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):
EVENT 5549825 dated April 4, 2015: April 4, 2014 to August 31, 2014
EVENT 5559739 dated June 23, 2015: September 1, 2014 to June 13, 2015
EVENT 5568243 dated August 29, 2015: June 14, 2015 to August 29, 2015

YEAR OF WORK: **2014 and Spring 2045** (April 4, 2014 to August 29, 2015).

PROPERTY NAME: **BARRIERE RIDGE**
CLAIM NAME(S) (on which work was done): 20 Individual Claims – 8,307.9800 hectares

20 claims - 8,307.9800 hectares: 744542, 744562, 744582, 744602, 759003, 767042, 767062, 767102, 767123, 840411, 840413, 840415, 840417, 840418, 844642, 844643, 844644, 844645, 844646, and 844647.
Save and except DL4023 WHITE ROCK MC (18.09 ha) a Crown Granted mineral claim.

COMMODITIES SOUGHT: **Gold, Silver, Copper, Lead, Zinc**

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:
MINFILE 082M 066 WHITE ROCK (with DL4043 KDYD WHITE ROCK MC);
MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL)
MINFILE 082M 222 CAD

MINING DIVISION: **KAMLOOPS**

LATITUDE: **51 deg 17' 53.42" N;**
LONGITUDE: -**119 deg 53' 51.35"** " (at centre of work)
UTM Zone: **11** EASTING: **298001.4** NORTHING: **5686971.5**

MAP SHEETS: **082M021; 082M031**

OPERATOR(S) [who paid for the work]:
David J. Piggin, RPF, Prospector: 5-2363 DeMamiel Drive, Sooke, British Columbia, V9Z 1K3, Cell: (250) 319-3191

OWNER [property optioned from]:
David J. Piggin, RPF, Prospector: 5-2363 DeMamiel Drive, Sooke, British Columbia, V9Z 1K3, Cell: (250) 319-3191

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

Baldy Batholith; Granite Intrusion; Mid-Cretaceous Intrusion; Iron Carbonate Alteration; Eagle Bay Assemblege, Devono-Mississippian; Metasediments; Volcanogenic Massive Sulfides; Devonian Orthogneiss; paragneiss; sericite alteration; Intrusive gold; copper in paragneiss; Limestone; Tshinakin Limstone; chlorite schist, Silver in Limestone; Silver in quartz veins; Silver Lead in limestone; Silver Lead in quartz limestone

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

03350, 05363, 08210, 12847A, 12847B, 13168, 13207, 13297, 13793, 14123, 14397, 18489, 19047, 19173, 19851, 22956, 32383, 33190, 33744, and 34651.

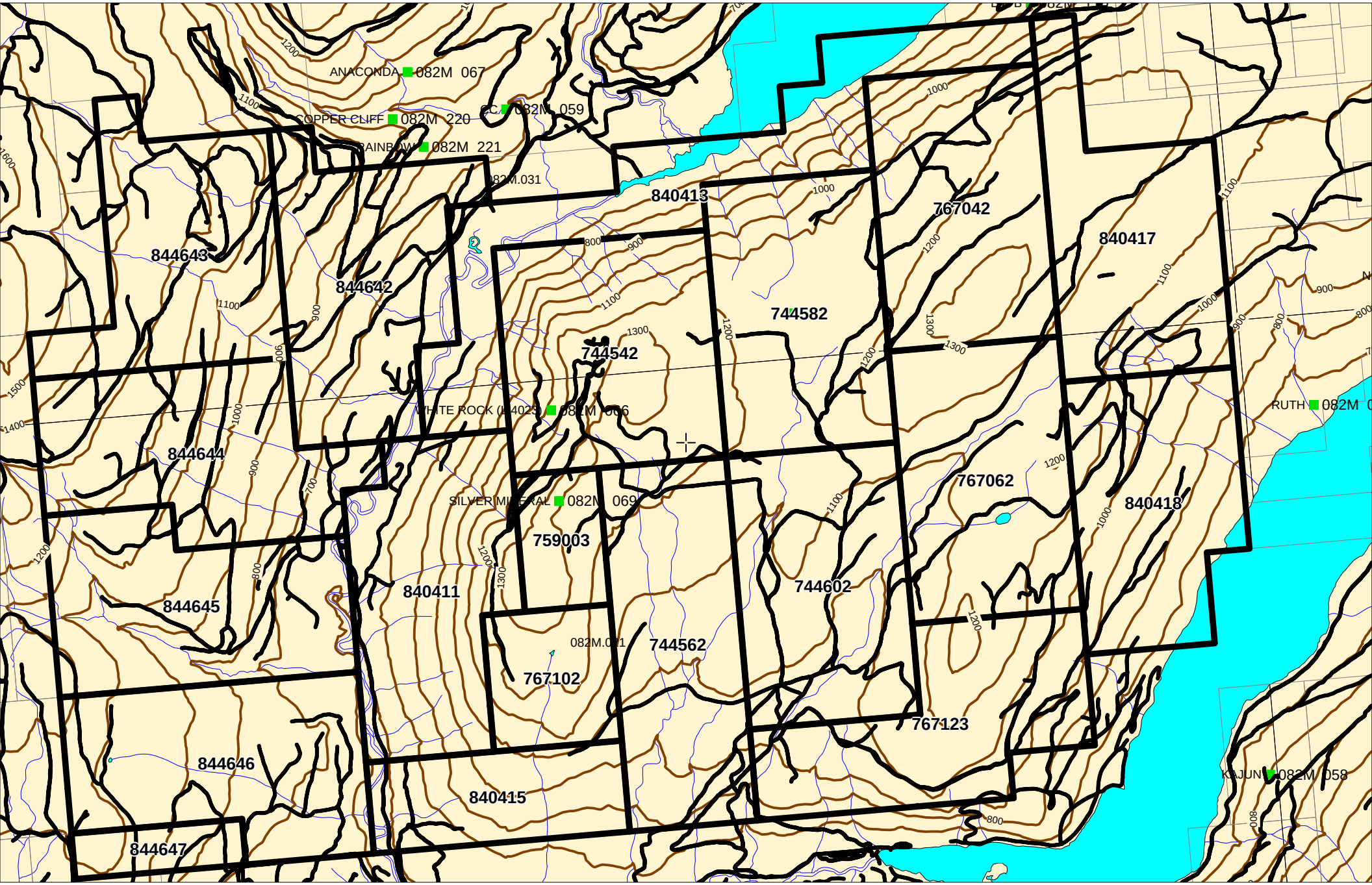
TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			$ 2,500.00
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for …)			
Soil	**26 collected; not assayed yet**		NIL
Silt			
Rock	**19 collected;18 assayed**		$ 1,067.40
Other (STREAM)			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			$ 12,000.00
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)	**8,307.98 hectares**		$ 9,343.69
PREPARATORY / PHYSICAL			
Line/grid (km)	**0.640 km**		$ 5,000.00
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail	**Access Trail Brushing, Danger Trees 1750 metres (chainsaw)**		$ 9,000.00
Trench (number/metres)			
Underground development (metres)			
Other	**Literature General Research, database compilation, First Nations, etc**		$ 7,200.00
		TOTAL COST	$ 46,111.09

BARRIERE RIDGE EVENT SUMMARY

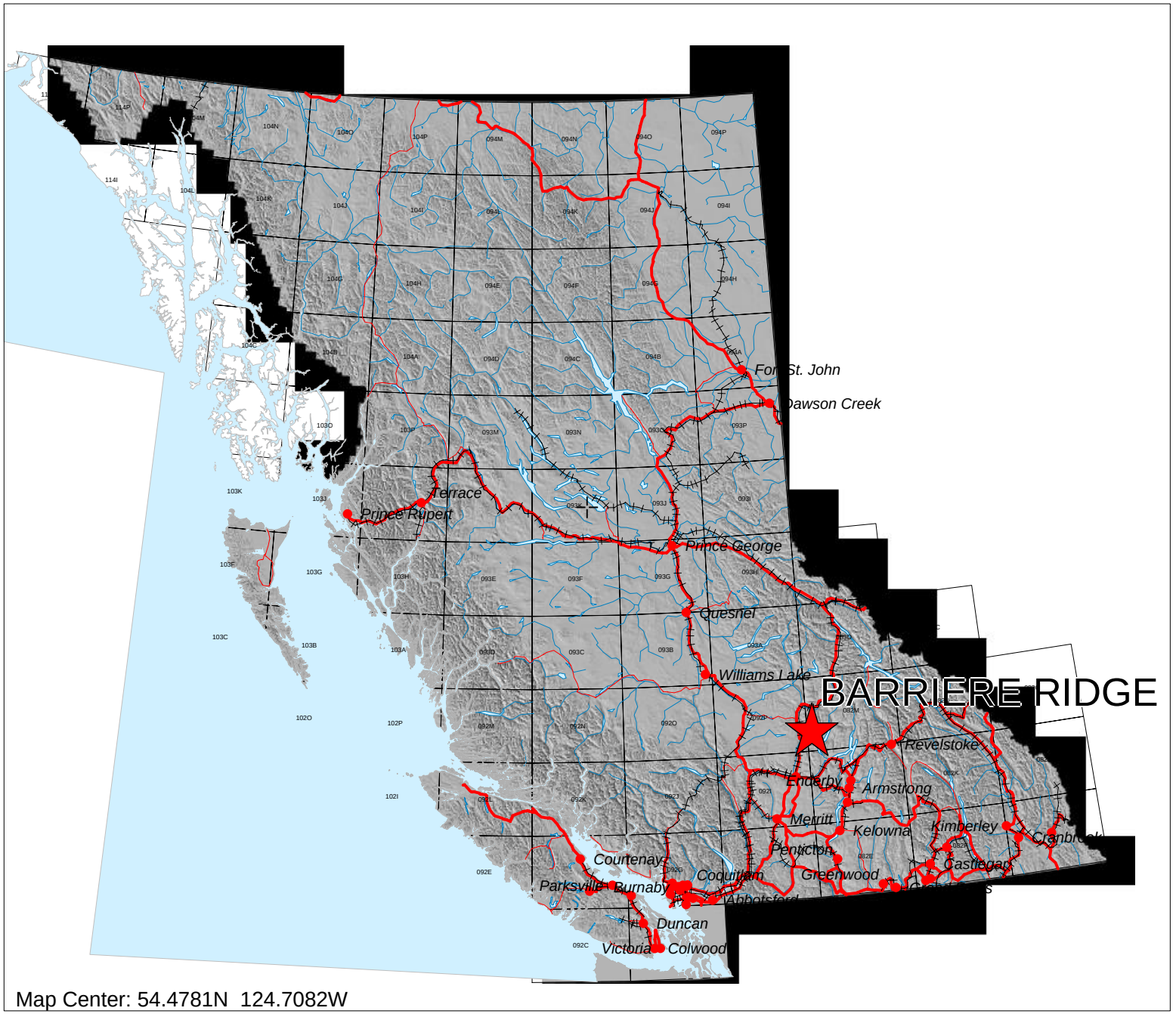
Event No.	Date	Tenure Numbers	Gross Area (hectares)	Total Value of Work($)	PAC Account ($)	Total Applied Work Value($)
5549825	April 4, 2015	744542*, 744562, 744582, 744602, 759003, 767042, 767062, 767102, 767123, 840411, 840413, 840415, 840417, 840418, 844642, 844643, 844644, 844645, 844646, 844647. Note below:	8,307.9800	$ 14,346.32	NIL	$ 14,346.32
5559739	June 23, 2015	Claim boundary reduced on or about May 12, 2015 to include the following claims: 744542*, 744562, 744582, 744602, 759003, 767042, 767062, 767102, 840411 Note below:	3719.4583	$ 30,541.94	NIL	$ 30,541.94
5568243	Aug 29, 2015	744542*, 744562, 744582, 744602, 759003, 767042, 767062, 767102, 840411 Note below:	3719.4583	$ 1, 222.83		$ 1, 222.83
		ASSESSMENT REPORT SUMMARY	**8,307.9800 hectares**	**$ 46,111.09**	**NIL**	**$ 46,111.09**

***NOTE:** An 18.09 hectare Crown Granted mineral claim DL4023 KDYD WHITE ROCK MC (within Tenure 744542) is save and excepted from the BARRIERE RIDGE claims; and is held by George Robert Mitchell. MINFILE 082M066 WHITE ROCK is located within DL4023 KDYD WHITE ROCK MC.

BARRIERE RIDGE: OVERVIEW TENURES, ROADS, CONTOURS



BARRIERE RIDGE



SCALE 1 : 8,677,682

100 0 100 200 300

MILES

N

BARRIERE RIDGE: Tenure List from MTOnline.

Tenure Number	Claim Name	Owner	Tenure Type	Map No	Issue Date	Good To Date	Status	Gross Area (ha)
744542 see note below	BLUFF1	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/apr/10	2015/may/12	GOOD	505.2364
744562	BLUFF2	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/apr/10	2015/may/12	GOOD	485.3074
744582	BLUFF3	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/apr/10	2015/may/12	GOOD	485.0088
744602	BLUFF4	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/apr/10	2015/may/12	GOOD	485.2667
759003	SILVER	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/apr/27	2015/may/12	GOOD	121.2995
767042	RIDGE5	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/may/04	2015/may/12	GOOD	484.9257
767062	RIDGE6	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/may/04	2015/may/12	GOOD	485.1844
767102	RIDGE7	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/may/04	2015/may/12	GOOD	181.9975
767123	RIDGE8	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/may/04	2015/may/12	GOOD	444.9574
840411	RIDGE9	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/dec/08	2015/may/12	GOOD	485.2319
840413	RIDGE10	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/dec/08	2015/may/12	GOOD	505.0888
840415	RIDGE11	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/dec/08	2015/may/12	GOOD	242.7164
840417	RIDGE12	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/dec/08	2015/may/12	GOOD	464.7640
840418	RIDGE13	David J. Piggin 140689 (100%)	Mineral Claim	082M	2010/dec/08	2015/may/12	GOOD	444.7881
844642	BIRK1	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	484.9368
844643	BIRK2	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	464.6854
844644	BIRK3	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	485.0789
844645	BIRK4	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	485.2230
844646	BIRK5	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	485.3746
844647	BIRK6	David J. Piggin 140689 (100%)	Mineral Claim	082M	2011/jan/27	2015/may/12	GOOD	80.9083
							GROSS AREA: hectares	**8,307.9800**
							NET AREA: hectares	**8,289.8900**

NOTE: An 18.09 hectare Crown Granted mineral claim DL4023 KDYD WHITE ROCK MC, within Tenure 744542, is save and excepted from BARRIERE RIDGE; and held by George Robert Mitchell. MINFILE 082M066 WHITE ROCK is located within DL4023 KDYD WHITE ROCK MC.

2014 and SPRING 2015: PROSPECTING, GEOCHEMICAL, GEOLOGICAL, AND PHYSICAL WORK

ASSESSMENT REPORT FOR BARRIERE RIDGE CLAIMS

David J. Piggin, R.P.F., Prospector and Owner

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA, CANADA.

20 claims - 8,307.98 hectares within Map Sheets: 082M021; 082M031
66 kilometres northeast of Kamloops, British Columbia, Canada.

Lat 51 deg 17' 53.42" N; and Long -119 deg 53' 51.35" W; or Lat 51.2982; and Long -119.8976
UTM NAD 83: Zone 11, 298001.4 Easterly; 5686971.5 Northerly

West of East Barriere Lake; South of North Barriere Lake and Birk Creek;
within Russell Creek and Sprague Creek.

Event No.	Date	Tenure Numbers	Gross Area (hectares)	Total Value of Work($)	PAC Account ($)	Total Applied Work Value($)
5549825	April 4, 2015	744542*, 744562, 744582, 744602, 759003, 767042, 767062, 767102, 767123, 840411, 840413, 840415, 840417, 840418, 844642, 844643, 844644, 844645, 844646, 844647. Note below:	8,307.9800	$ 14,346.32	NIL	$ 14,346.32
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		ASSESSMENT REPORT SUMMARY	**8,307.9800 hectares**	**$ 46,111.09**	**NIL**	**$ 46,111.09**

***NOTE:** An 18.09 hectare Crown Granted mineral claim DL4023 KDYD WHITE ROCK MC (within Tenure 744542) is save and excepted from the BARRIERE RIDGE claims; and is held by George Robert Mitchell. MINFILE 082M066 WHITE ROCK is located within DL4023 KDYD WHITE ROCK MC.

PREPARED BY:
David J. Piggin, R.P.F. PROSPECTOR, OWNER, Free Miner 140689,
5-2363 DeMamiel Drive, Sooke, British Columbia, V9Z 1K3

SUMMARY

Exploration work was completed by David J. Piggin from April 4, 2014 to June 13, 2015 on the BARRIERE RIDGE claims Events 5549825, 5559739, 5568243. BARRIERE RIDGE is located between North Barriere Lake and East Barriere Lake 66 km northeast of the Kamloops, British Columbia, Canada. Mineralization was hosted in the Devono-Mississippian Eagle Bay Assemblege (EBGt – early Cambrian Tshinakin Limestone) within quartz veins, veinlets, stockwork and breccia rocks. The claims are within the Kootenay Terrain; and the Slide Mountain Terrains is situated immediately west of the claims.

In the 1980's, parts of BARRIERE RIDGE were optioned by Noranda Inc, Minnova Inc, Cyprus Anvil Mining Corporation, Falconbridge Limited, and others. From 1984 - 1988, 20 diamond drill holes were completed for 2,195.98 metres. Best result was P4 BAR23: (sample 17807) Au 0.91 g/t, Ag 203 g/t, Cu 0.133 %, Pb 5.46 %, Zn 13.2 % (over 0.4 m).

In March 2, 2011 Astral Mining Corporation optioned the BARRIERE RIDGE claims. In February 2013, Astral was taken over by Orex Minerals Inc and on February 28, 2013, due to the industry wide lack of funding, Orex dropped their option on the BARRIERE RIDGE claims. DL4023 KDYD WHITE ROCK MC is save and excepted from the BARRIERE RIDGE claims.

PREVIOUSLY REPORTED – SELECTED ANOMALOUS RESULTS: See ARIS 32383, 33190, 33744, 34651.

- **SILVERGAL Showing:** Ag 220 g/t, Pb 12.4 %; and Ag 172g/t, Cu 7470 ppm, Pb 795 ppm, Zn 3078 ppm;
- **MINFILE 082M 069 SILVER MINNOW:** In 1925: Ag 927 g/t Au 0.69 g/t;
  10E41181 SMQCH7 Ag 171 ppm; Pb 14.4 percent; S 2.27 percent; Sb 198.5 ppm; Te 30.4 ppm; Zn 6490 ppm (1m).
- **SILVERBOY Showing:** 10E41072 SM13R2 Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm; Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm; Zn 5.34 percent. **BRECCIA AREA:** 10E41016 SM11R999: Au 29.2 ppb, Ag 50.4 ppm, Cu 1475 ppm, Pb 1275 ppm, Sb 533 ppm, Zn 2990 ppm.
- **Sprague Creek – Gold in Soils Anomaly:** Gold (multi-element) in soils was discovered 950 metres north of Sprague Creek in Tenure 644845. **10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm**;

2014 AND SPRING 2015 EXPLORATION: The following is a brief summary of the works completed and anomalous results:

- Total Applied Work Value $ 46,111.09 on 8,307.9800 hectares.
- 45 samples (19 rock, 26 soil) were collected; and 18 rock samples were assayed; with 27 to be assayed in 2016.
- The **SILVER TRAIL Showing** –Discovered June 9, 2014 in a limestone or dolostone with galena and malachite mineralization in quartz veinlets and galena veinlets all within a cutslope of an access trail. Rock samples (plus 6 soil samples - 140m surveyed) were collected. The best rock sample results were as follows: **10E41081_BR14R73: Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent**
  10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm
  10E41077_BR14R70: Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm
  10E41083_BR14R75: Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm
  10E41078_BR14R71: Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm
- **Sprague Creek – Gold in Soils:** SPRAGUE1 Soil Grid – Strip Line A was surveyed (500 m), and 20 samples were collected, and will be assayed. Samples were collected over the gold in soils anomaly; and will be expanded in 2016.
- **Prospected** recently logged areas and new roads for rock and soil anomalies; and outcrop exposures.
- **Physical Work:** 1750 metres of trail was brushed and small trees removed with chainsaws and axes for safety, evacuation, and exploration access to the main showings. Trees were cut under Free Use Permit F20815.
- Prospected recently logged areas and new roads for rock and soil anomalies; and outcrop exposures, reviewed the two Fugro Airborne Geophyiscal Reports completed between 2011 and 2013, updated and maintained a database, conducted literature and general research for publications related to the Eagle Bay Asemblege and Ag Pb Zn deposits.
- First Nations information letters/packages were completed and submitted on April 29, 2015 with follow-up.

Recommended Exploration: Based on the high grade Ag Pb Zn SILVER MINNOW/SILVERGAL/SILVERBOY/SILVER TRAIL and Breccia Area showings; the Au Ag Cu Pb Sb Zn anomalies in soils; and the results of ARIS 32383, 33190, 33744, 34651; further exploration work is warranted. The highest priority targets are as follows:

- The Ag Pb Zn SILVER MINNOW/SILVERBOY/SILVER TRAIL/Breccia Area; and SILVERGAL; and related soil grids and anomalies.
- Field check airborne geophysical anomalies from the Fugro airborne geophysical reports; and related assay database.

Exploration should include prospecting and sourcing anomalies; rock and geochemical sampling, geological mapping; ground geophysics; ground truthing airborne geophysical anomalies/structures; trenching and drilling as well as First Nations consultation. A five year program of $1,500,000 is recommended, commencing in the summer of 2015 and 2016.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS:

LIST OF APPENDICIES

MAPS, GEOLOGICAL REPORTS, SPREADSHEETS, AND ASSAY CERTIFICATES

A. MINERAL TENURE ONLINE – OVERVIEW MAP and REPORT AREA in black outline (1:120,253) showing the BARRIERE RIDGE claims.

B. ARIS: SIX OVERVIEW AND DETAILED MAPS SHOWING TENURES, CONTOURS, WATER COURSES, MINFILE, AND ROADS

- BARRIERE RIDGE ARIS MAP: OVERVIEW Roads, Contours, Boundary (1:50,000).
- BARRIERE RIDGE ARIS MAP: OVERVIEW Roads, Contours, Boundary (1:50,000) with Hillshade enhancement.
- BARRIERE RIDGE ARIS MAP: Detail Northeast Corner(1:50,000).
- BARRIERE RIDGE ARIS MAP: Detail Southeast Corner(1:50,000).
- BARRIERE RIDGE ARIS MAP: Detail Northwest Corner (1:50,000).
- BARRIERE RIDGE ARIS MAP: Detail Southwest Corner (1:50,000).

C. BIOGEOCLIMATIC SUB-ZONES within the BARRIERE RIDGE claims on an Orthographic Map (scale 1:85,000).

D. OVERVIEW LOCATION FOR SELECTED HISTORIC MINES AND DEPOSITS in the vicinity of BARRIERE RIDGE claims and Kamloops, B. C. (Mineral Tenures Online - 1:929,947)

E. OVERVIEW GEOLOGY, AND MINFILE OCCURRENCES on an Orthographic Map. Geology is based on GeoFile 2005-4, Preto and Schiarizza 1982; and Open File 2000-7.

- BARRIERE RIDGE GEOLOGY MAP and MINFILE LOCATION - Overview (1:90,000).
- BARRIERE RIDGE GEOLOGY MAP AND MINFILE LOCATION - Overview (1:50,000).

F. OVERVIEW OF EXPLORATION AREA, AND PROSPECTING : Map of the general location of the exploration area where prospecting and preparatory grids were done. (1:50,000).

G. DETAILED LIST OF SAMPLES: Rock, Soil, and Moss Mat Samples including the Waypoint Name, GPS (UTM NAD83) Coordinates, Sample Tag No., etc. All within a spreadsheet.

H. OVERVIEW AND DETAILED MAPS OF SAMPLE LOCATIONS, RESULTS AND ANOMALOUS RESULTS:

- OVERVIEW MAP OF SILVER MINNOW, SILVER BOY, SILVER TRAIL, SILVERGAL, and BRECCIA AREA Showings (1:15,000).
- DETAILED MAP OF SILVER MINNOW SILVER BOY, SILVER TRAIL, and BRECCIA AREA (1:10,000).
- DETAILED MAP OF SILVER TRAIL Showing – ROCK AND SOIL SAMPLES (1:2,500)
- DETAILED MAP OF SPRAGUE CREEK – GOLD IN SOILS, STRIP LINE A, SAMPLE LOCATIONS AND RESULTS (1: 5,000).
- DETAILED MAP OF SPRAGUE CREEK – 300 METRES NORTH OF SPRAGUE CREEK, SAMPLE LOCATIONS AND RESULTS (1:3,000).

I. DETAILED LIST OF HISTORIC DRILLING FROM BARRIERE RIDGE CLAIMS: Spreadsheet showing Drill Site Name, ARIS Report, Company, and where available bearing, dip, length and grade, etc.

J. MAP OF PHYSICAL WORK – BRUSHING AND DANGER TREE REMOVAL – 1750 metres completed (1:8,000).

K. ALS MINERALS CANADA: ASSAY AND ANALYTICAL PROCEDURES.

L. ALS MINERALS CANADA: ASSAY CERTIFICATES FOR 2014 and SPRING 2015. KL14093257

I - INTRODUCTION:

The purpose of this report is to provide a summary of the exploration work completed by David J. Piggin from April 4, 2014 to June 13, 2015 on the BARRIERE RIDGE claims. Total Applied Work Value $ 44, 888.26. The Mineral Claim Exploration and Development Work/Expiry Date MTOnline documents were recorded under EVENTS 5549825, 5559739, and 5568243.

There are 20 claims - 8,307.9800 hectares. A Mineral Tenures Online (MTOnline) map showing the assessment report area is given in APPENDIX A. The specific mineral titles included in this assessment report are as follows: 744542 (see "Note" in next paragraph), 744562, 744582, 744602, 759003, 767042, 767062, 767102, 767123, 840411, 840413, 840415, 840417, 840418, 844642, 844643, 844644, 844645, 844646, and 844647. On or about May 12, 2015, the claim block was reduced to 9 claims – 3719.4583 hectares. The specific mineral titles included in the reduced area are as follows: 744542(see "Note" in next paragraph), 744562, 744582, 744602, 759003, 767042, 767062, 767102, 840411.

*Note: An 18.09 hectare crown granted mineral claim DL4023 KDYD WHITE ROCK MC (situated within Tenure 744542) is save and excepted from BARRIERE RIDGE claims; and is believed to be held by George Robert Mitchell (Free Miner 141118). This crown granted mineral claim was granted on January 1, 1921. MINFILE 082M066 WHITE ROCK is located within DL4023 KDYD WHITE ROCK MC.

The BARRIERE RIDGE claims are located 66 km NE of Kamloops, B.C. The claims are situated along the west shore of East Barriere Lake; along the south shore of North Barriere Lake; south of Birk Creek; and within the mid to lower elevations of Sprague Creek. The onsite arterial access is via the Barriere Lakes Public Road (PR), Fir PR, Russell FSR, the Birk FSR, Sprague FSR, Barriere Ridge North FSR, and Barriere Ridge South FSR.

Assessment Report Information System (ARIS): The most recent ARIS reports are 32383, 33190, 33744, and 34651.

In the 1980's, various parts of BARRIERE RIDGE were optioned by Noranda Inc, Minnova Inc, Cyprus Anvil Mining Corporation, Falconbridge Limited, and others. Between 1984 - 1988, 20 diamond drill holes were completed for 2,195.98 metres. This drilling was summarized in a data table presented in Assessment Report (ARIS) 33744. In March 2, 2011 Astral Mining Corporation optioned the BARRIERE RIDGE claims. In February 2013, Astral was taken over by Orex Minerals Inc (Orex) of Vancouver, B. C. On February 28, 2013, due to the industry wide reduction in funding for junior mining companies, Orex dropped their option on the BARRIERE RIDGE claims.

The primary objectives of the 2014 exploration program were as follows:

(a) Prospect the MINFILE 082 069 SILVER MINNOW area to find new showings.
(b) Prospect the area just east of DL 4023 KDYD WHITE ROCK MC in the Silverboy/Breccia Area.
(c) Due to the termination of the option agreement, review all the ARIS reports, Airborne Geophysical Reports, maps and data to have a working knowledge of the major and minor anomalies.
(d) Confirm the published geological and geophysical mapping, and Regional (BSGS) Geochemical Survey results, in general terms. Where possible create a database.
(e) Complete Preparatory Grid for proposed ground geophysical survey and geochemical survey, on selected areas.
(f) Collect soil samples from proposed ground geophysical survey areas.
(g) Cut and remove windfalls/brush from the exploration/evacuation access road to DL 4023 KDYD WHITE ROCK MC.
(h) Prospect for precious metals, map outcrop locations, sample and assay float rock, as well as outcrops.
(i) Locate the legal boundaries of the DL 4023 KDYD WHITE ROCK MC.
(j) Locate new MINFILE occurrences, historic drilling, and other historic workings.
(k) Report assay results from moss mats, stream sediments, float rock, channel samples and outcrops.
(l) Prospect, collect, and report new data using grassroots and hand exploration techniques.
(m) Propose new explorations works for the 2015 and beyond.
(n) Contact, listen, consult, liaise, and communicate with First Nations representatives; and logging companies.

A. LOCATION, ACCESS, INFRASTRUCTURE, FACILITIES:

The City of Kamloops is located at the junction of the Trans Canada Highway (Hwy), Yellowhead Hwy (No. 5), Coquihalla Hwy, and Highway 97 which is the confluence of the South Thompson and North Thompson Rivers. The Village of Barriere is located 80 km north of Kamloops on the Yellowhead Hwy and is the nearest community to BARRIERE RIDGE claims. (See the ILLUSTRATION below and maps in APPENDIX).

ILLUSTRATION # 1: BARRIERE RIDGE Claims: Main Access Roads (not to scale).

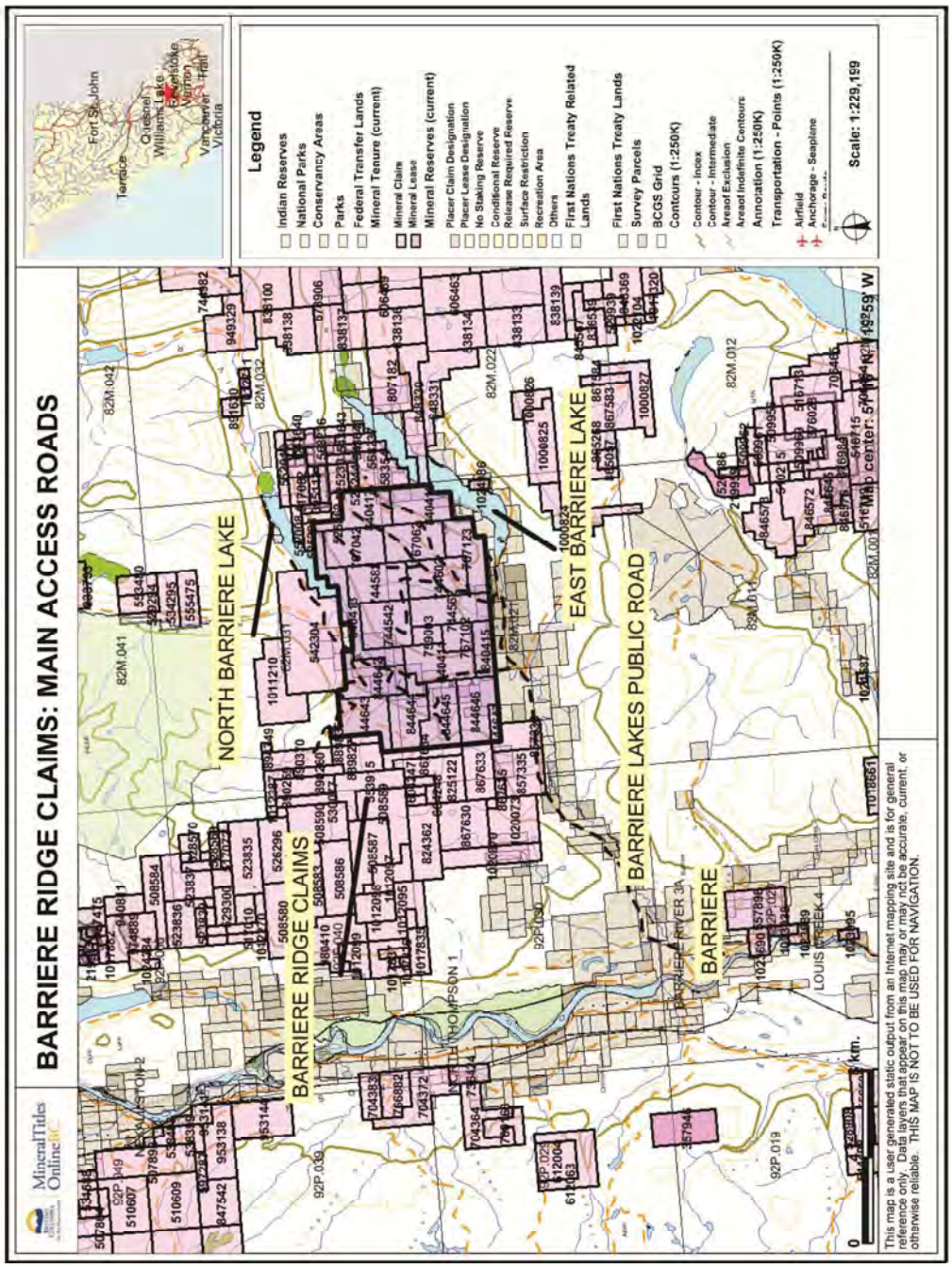


ILLUSTRATION # 2: Overview of BARRIERE RIDGE claims. Showing MINFILE Occurrances and claim boundary. Taken in a northwesterly direction from the SW end of East Barriere Lake.

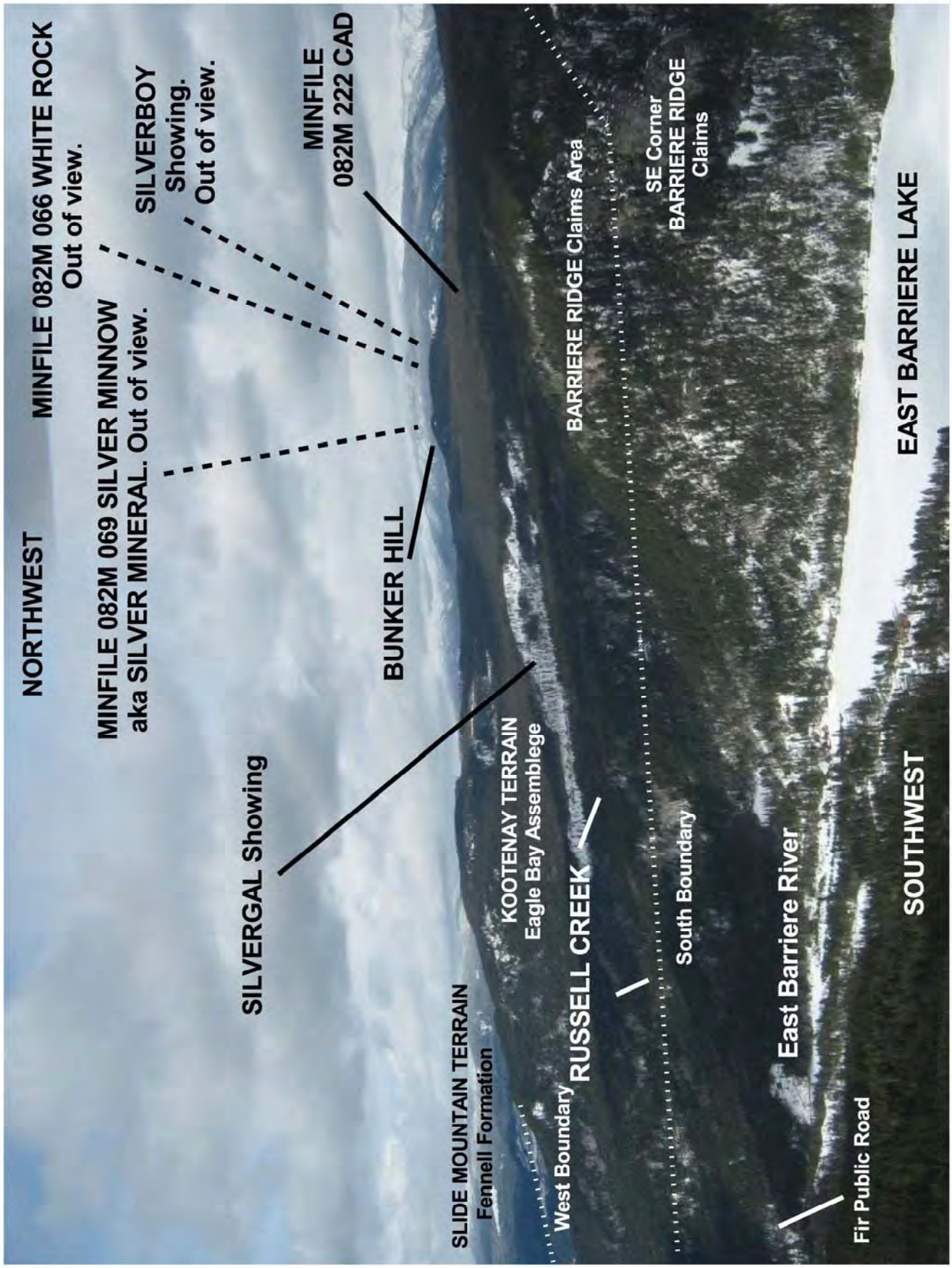
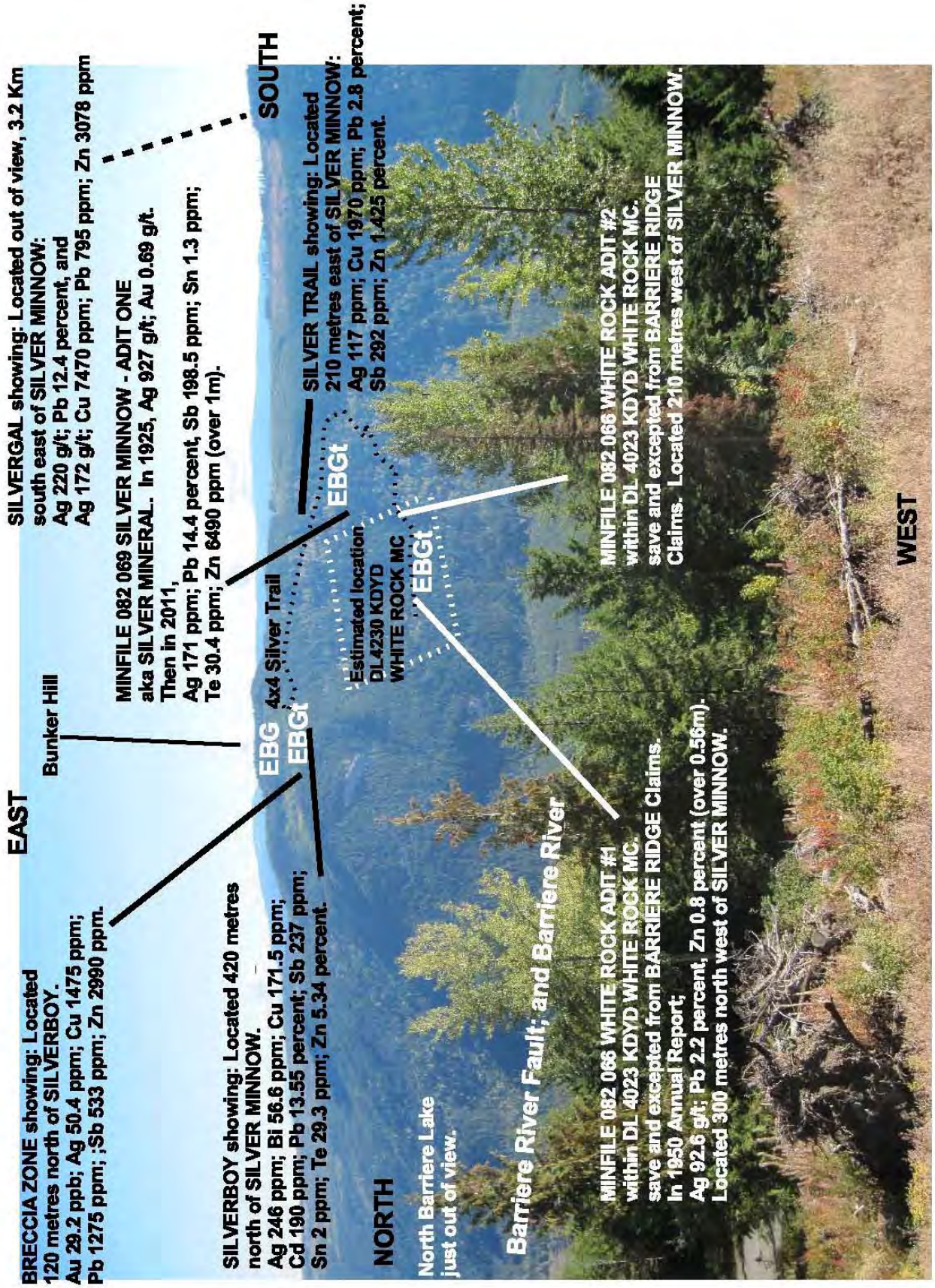


ILLUSTRATION # 3A: Overview of BARRIERE RIDGE claims. Showing MINFILE Occurrances. Taken in an easterly direction.



There is one main access road is the Barriere Lakes Public Road (PR) and it is paved. The onsite access is via the Russell Forest Service Road (FSR), the Birk FSR, Sprague FSR, Barriere Ridge North FSR, and Barriere Ridge South FSR; as well as a number of related spur roads.

East Half of Claims:
Leaving Barriere travel east on the Barriere Lakes PR (paved) for 20 km (Zone 11 and 295678 E; 5681505 N); then continue straight onto the East Barriere Lake PR (gravel) for 3.5 km; and then turn left onto to Fir Road (Zone 11. 299226 E and 5681913 N). Within 100 metres you will encounter the Russell FSR 8534 at 0 km. The road radio frequency is RR22 using the new road frequencies mandated for May 4, 2015.

West Half of Claims
Leaving Barriere travel east on the Barriere Lakes PR (paved) for 20 km (Zone 11 and 295678 E; 5681505 N); then turn left on the North Barriere Lake PR (gravel). Continue straight onto the North Barriere road (gravel) to

- 1 km North Barriere PR and turn right on the Barriere Ridge South FSR, or
- 4.0 km North Barriere PR and turn right on the Barriere Ridge North FSR, or
- 4.8 km North Barriere PR and turn left on the Sprague FSR 3410, or
- Estimate 7.0 km North Barriere PR and turn left on FSR 3400.18, or
- 8.0 km North Barriere PR and turn left on the Birk FSR at 8.0 km

B. PROPERTY STATUS:

The BARRIERE RIDGE claims are in good standing and are currently held by David J. Piggin (100 percent).

C. PHYSIOGRAPHY AND CLIMATE:

The property is located within the Shuswap Highlands Physiographic Area; and the Northern Wet-Belt Climatic Region and the North Wet-Belt Transition Climatic Region (Lloyd et al 1990). More specifically, they are within the Interior Cedar Hemlock (ICHmk2, ICHmw3) Biogeoclimatic Zone (BGCZ), the Engelmann Spruce Sub-Alpine Fir (ESSFdc2) BGCZ, Interior Douglas-fir (IDFmw2) BGCZ, and the Montane Spruce (MSdm2) BGCZ.

In general terms, the Interior Cedar Hemlock (ICH) climate is continental dominated by easterly moving air masses, resulting in cool, wet winters and warm, moderately dry summers. Snow fall is moderate to high. Frost occurrences during the summer are uncommon. For zonal soils:

a. The dominant soil type is a Humo-Ferric Podzol.
b. In moist subzones, Dystric Burunisols and Brunisolic Gray Luvisols
c. In wetter subzones, Ferro-Humic Podzols.
d. Litter depth 2 to 15 cm.

- For the ICHmw3: The mean annual precipitation is 671 mm and the mean snowfall is 252 cm (211 cm to 287cm). The mean frost free period is 127 days
- For the ICHmk2, there is no specific data in the reference literature (Lloyd et al 1990) therefore, data from the ICHmk1 is included here as an approximation only. For the ICHmk1, the mean annual precipitation 665 mm and the mean snowfall is 432 cm (365 cm to 500 cm). There was no data for the mean frost free period (Lloyd et al 1990) but the frost free period is expected to be shorter than the ICHmw3 (127 days).

The Montane Spruce (MS) climate is cool, continental; and frost may be common during the growing season. Summers are moderately short and warm. Winters are cold with moderate snowfall. For soils:

a. Zonal and drier ecosystems are predominantly Dystric and Eutric Brunisols, and Orthic Gray Luvisols may occur.
b. On coarser-textured soils Humo-Ferric Podzols develop in wetter parts.
c. Litter depth 3 to 12 cm.

- For the MSdm2, the mean annual precipitation is 606 mm; and the mean snowfall is 307 cm (216 cm to 398 cm). The mean frost free period is 85 days

The Engelmann Spruce Sub-Alpine Fir (ESSF) climate is a continental climate characterized by long, cold winters with high snow cover, and short cool summers. The snow pack reaches a maximum depth of 1 to 4 metres and remains until late May. Frosts are common and moisture deficits are uncommon during the growing season. For zonal soils:

a. Mineral soils are commonly strongly leached and acidic.
b. In dry to moist subzones, Humo-Ferric Podzols or Dystric Burunisols.
c. In wetter subzones, Ferro-Humic Podzols or Sombric Brunisols.
d. Litter depth 2 to 20 cm.

- For the ESSFdc2: The mean annual precipitation is 839 mm; and the mean snowfall is estimated to be 650 mm which is slightly greater than the ESSFdc1 at 635 mm.

The Interior Douglas-fir (IDF) climate is continental characterized by warm dry summers, a relatively long growing season, and cool winters with a low to moderate snowfall. Zonal soils:

a. May typically occur on morainal deposits derived from basic volcanic bedrock.
b. Are Orthic or Dark Gray Luvisols, and Eutric or Dystric Brunisols.
c. Have predominantly base-rich bedrock and low rates of leaching due to dry climatic conditions resulting in medium to rich nutrient characteristics.
d. Litter depth 2 to 5 cm.

- For the IDFmw2: The mean annual precipitation is 521 mm and the mean annual snow fall is 171 cm (137 cm to 202 cm). The mean frost free period is 139 days.

The large body of water in East Barriere Lake and North Barriere Lake may moderates the effects of the general climate conditions; and yet proximity of the Dunn Peak snow pack to BARRIERE RIDGE may also influences climatic conditions at Russell Creek and Sprague Creek especially in the spring and fall.

The property is tree covered and is extensively logged with numerous haul roads, spur roads, and skidder trails or dozer trails throughout. Harvesting is active at various locations on the BARRIERE RIDGE Claims. Some of the oldest logging roads are brushing in and/or have immature trees growing on them.

The site characteristics are quite variable. The BARRIERE RIDGE claims are located along the lower slopes [of the mid-portion] of the Barriere River and East Barriere River; as well as the lower to upper elevations of Russell Creek, Sprague Creek; on the northwest side of East Barriere Lake, and on the southwest side of North Barriere Lake. In general terms, the aspect is south. In the main Barriere River valley (towards North Barriere Lake) the aspect is north, southeast, and northwest. The average elevation is about 1100 metres.

The claims are bounded on the east side (i.e. 840418) by East Barriere Lake at 700 metres and on the west side (i.e. 844643) at 1425 metres which is on the Birk Creek plateau. The north boundary is bounded (i.e. 840413) by Birk Creek, Harper Creek, and North Barriere at about 700 metres. The south boundary is bounded by the main Barriere River valley at about 800 metres. The highest point is located in the eastern half of the claims on the northwest corner of the west boundary of Tenure 844643 at 1425 metres.

Slopes are gentle to moderately steep; and are very steep in the vicinity of Tenure 744542, 840411, 840413, 840415, and 844645. Sprague Creek draw and lower portion of Russell Creek are deeply gullied. There are numerous vertical rock faces and talus slopes at Tenure 767123, 840411, 744542. These rock faces are useful for prospecting and identifying rock units; and have been underexplored.

TABLE 1: BARRIERE RIDGE **Physiography and Biogeoclimatic Zones by Tenure Number**. A summary of the aspect and elevation based on ARIS maps, and Biogeoclimatic Zone classification in based on Lloyd et al 1990.

Tenure Number	Aspect	Mean Slope (%)	Elevation Range (metres)	Mean Elevation (metres)	Biogeoclimatic Subzone
744542	NW, SE	45	625-1375	1200	ICHmw3.
744562	S	20	700-1275	1050	ICHmw3.
744582	S, N, Flat	15	725-1250	1150	ICHmw3.
744602	S	15	850-1200	1050	ICHmw3.
759003	E, NW, Flat	20	1150-1375	1300	ICHmw3.
767042	Mainly NW	25	700-1350	1200	ICHmw3.
767062	SW, Flat, SE	15	975-1300	1125	ICHmw3.
767102	SW, S, SE	40	850-1325	1150	ICHmw3.
767123	S, SE	25	750-1250	1025	ICHmw3.
840411	W, NW	50	600-1375	900	ICHmw3.
840413	N, NW	60	625-1100	800	ICHmw3.
840415	S, SW	35	625-1050	850	ICHmw3; IDFmw2 on SW corner.
840417	SE, Flat, N	25	925-1275	1175	ICHmw3.
840418	SE	40	625-1200	900	ICHmw3.
844642	SE	25	600-1175	800	ICHmw3.
844643	SE	40	875-1450	1250	ICHmk2 on west half; ICHmw3 on eastern ¼; ESSFdc2 in the NW corner.
844644	E, SE	40	600-1475	1100	ICHmk2 on west half; ICHmw3 on east half; IDFmw2 in center of south boundary; ESSFdc2 in the NW corner.
844645	SE, S, NE	45	600-1250	900	IDFmw2; ICHmw3 on eastern 1/4; MSdm2 in NW corner and SW corner.
844646	E, SE, Flat	15	575-1125	875	IDFmw2; MSdm2 in NW corner; ICHmw3 in NE corner
844647	E, S	30	700-1025	900	IDFmw2.

D. LOCAL INFRASTRUCTURE:

The following is a brief summary of the local infrastructure:

1. Deep Sea Port: The nearest deep sea port is at Vancouver, B.C. about 350 km southwest of Kamloops.
2. Railroad: The Canadian National Railway (CNR) mainline goes through the community of Barriere (on the Yellowhead Hwy) about 20 km west of BARRIERE RIDGE. The CNR mainline goes through Kamloops.
   The Canadian Pacific Railway (CPR) mainline passes through Kamloops located 64 km south of Barriere.
3. Utility Distibution Lines:
   - A power distribution line runs from Barriere 20 km along the Barriere Lakes PR and within 1 to 2 km of the claim boundary.

- Telephone/Cellphone: There is land line telephone service to homes along the south boundary of the claims. There is cell phone service in Kamloops, and Barriere but there is no cellphone service from the claim areas. There are a few unique/select waypoints on the claims where you can get out on cellphone.

4. Commercial Resort: The private East Barriere Resort (north central on East Barriere Lake) is accessed by the Russell FSR (turn off about 2 km); and there is a public North Barriere Lake resort (RV/cabins) on the north shore of North Barriere Lake.
5. Forest Service Recreation Sites: There is a public recreation site on the west end of East Barriere Lake immediately adjacent to Tenure 767123; and also on the north shore of North Barriere Lake at Vermillion Creek.
6. Community Recreation: BARRIERE RIDGE, there is a community recreation site south of Tenure 844647 on the Barriere Lakes PR.
7. Roads and Logging Companies: The Thompson Rivers Forest District administers forest tenures in the claims area (250-371-6500). Tolko Industries Ltd of Kamloops is a major forest licencee in the Sprague Creek and Birk Creek areas; and the BC Timber Sales Program, Kamloops Timber Sales Office (250-371-6500) is the major licencee harvesting timber from the Russell Creek area.
   The primary roads are the East Barriere and North Barriere FSR roads. These roads are maintained to a high standard, where practicable are almost 2 lanes wide, and are usually ploughed in the winter. The Russell FSR and Sprague FSR are one lane wide, and are not ploughed unless there is active logging on the road system. The Russell FSR is maintained by the BC Timber Sales Program; and the Sprague FSR is maintained by Tolko Industries Ltd
8. Sawmill: Adams Lake Lumber Co. Ltd (International Forest Products Ltd.) has a large scale sawmill at 0 km on the Adams West FSR 45 km. Tolko Industries Ltd has veneer (plywood) operation at Heffley Creek (north of Kamloops) on the Yellowhead Highway.
9. Logging Road Frequencies:
   East Barriere Lake FSR and North Barriere Lake FSR – frequency RR22 (as of May 4, 2015).
10. Emergency Facilities:
    There is a full service hospital with emergency facilities (heliport) in Kamloops including police, and search and rescue. There is an ambulance, clinic, and police station in Barriere. Active logging operations will have industrial first aid attendants on site.
11. Education: There are schools in Kamloops, Barriere and Clearwater. Thompson Rivers University in Kamloops has various degree programs; and has a geology faculty.
12. Residential Garbage Disposal: At Barriere, and there is a Thompson Nicola Regional District (TNRD) Eco Depot also.

E. HISTORY:

The following section is divided into 3 parts as follows:.

1. Past Producers and Producers
2. Advanced Development Projects
3 MINFILE Occurrences and Recent Showings, Assessment Reports, Historic Drilling, Prospector Assistance Program.
4. Airborne Geophysics, Fugro Reports, Including An Interpretations Report.
5. Proposed Ground Geophysics.
6. Soil Geochemical Surveys
7. Stream Geochemical Surveys
8. Photosat Image (0.5m pixel).

1. Past Producers and Producers:

Three historic past producer mines are located in the immediate vicinity of the BARRIERE RIDGE claims and they are as follows:

- Samatosum Mountain (MINFILE 082M-244) located 12 km to the south (Table 2).
- Homestake Mine (MINFILE 082M-025) located 16 km to the south (Table 3).

- Windpass Mine (MINFILE 092P039) located 16 km to the northwest (Table 4).

Table 2: Samatosum Mountain (MINFILE 082M-244) recovery table.

1989 to 1992	**Metric**	**Imperial**
Silver	429,356,776 grams	13,804,121 ounces
Gold	639,118 grams	20,548 ounces
Copper	3,678,016 kilograms	8,108,635 pounds
Lead	5,069,127 kilograms	11,175,509 pounds
Antimony	97,620 kilograms	215,215 pounds
Zinc	9,538,263 kilograms	21,028,264 pounds

Table 3: Homestake Mine (MINFILE 082M-025) recovery table.

1926 to 1941 (intermittent)	**Metric**	**Imperial**
Silver	7,750,829 grams	281,345 ounces
Gold	11,259 grams	362 ounces
Copper	9,138 kilograms	20,146 pounds
Lead	141,295 kilograms	311,502 pounds
Zinc	203,310 kilograms	448,222 pounds

Table 4: Windpass Mine (MINFILE 092P-039) recovery table.

1916 to 1944 (intermittent)	**Metric**	**Imperial**
Silver	93,435 grams	1,886 ounces
Gold	1,071,684 grams	37,798 ounces
Copper	78,906 kilograms	173,956 pounds
Mined	93,435 tonnes	102,965 tons
Milled	73,319 tonnes	80,798 tons

From a regional perspective (within 150 km radius):

- The **AFTON MINE** (Teck Corp) near Kamloops, a former producer, is 80 km to the southwest. This mine was in production for 20 years.
- **New Gold Inc.'s – New Afton Project** (www.newgold.com) 10 km south of Kamloops and started production in July 2012. The mine is being developed for underground block cave at 11,000 tonnes per day. The proposed average annual production will be 120,000 tonnes of concentrate containing 85,000 ounces of Au, and 75 million pounds of Cu. Proven and probable reserves are Au = 1.05 million ounces, Cu = 993 million pounds, Ag 3.1 million ounces. Production in 2013 was Au = 87,000 oz, Cu = 72 million lbs, Ag = 193,000 oz.
- **The HIGHLAND VALLEY COPPER (Teck Resources Ltd - 97.5%)** near Logan Lake, is located 120 km southwest of BARRIERE RIDGE. This mine is the largest mine in Canada and produces Cu and Mo. A total of 44,861,000 tonnes were milled in 2013 for Cu = 113,200 tonnes, and Mo = 6.1 million lbs. The mine is expected to close in 2025.

2. Advanced Development Projects: (within 150 km)

From a regional perspective, within 150 km of the BARRIERE RIDGE there are a number of active advanced development projects as follows:

The Harper Deposit (MINFILE 082M 009) 20 km to the north, is currently being developed by Yellowhead Mining Inc. of Vancouver (www.yellowheadmining.com) and they have identified a 43-101 compliant resource of over 569 million tonnes grading Cu 0.32% and an inferred resource of 62.7 million tonnes grading Cu 0.33%. Preliminary economic

assessments, environmental assessment processes, geotechnical and hydrogeological studies, and First Nations studies are currently underway. Drilling is ongoing.

Abacus Mining and Exploration Corp (www.amemining.com) and KGHM AJAX Mining Inc have a joint venture at the new AJAX deposit which is beneath the former AJAX PIT at the AFTON MINE (Teck Corp) just south of Kamloops. This joint venture is currently in various environmental assessment and permitting processes. A recent Ni-43-101 compliant Preliminary Economic Assessment Report (June 22, 2009) indicated the Ajax copper-gold project proposes a 60,000 tonne per day operation producing an average of 110 million pounds of Cu and 100,000 ounces of Au in concentrate per year. Preliminary economic assessments, environmental assessment processes, geotechnical and hydrogeological studies, First Nations studies, and drilling are currently underway.

3. MINFILE Occurrences and Recent Showings, Assessment Reports, Historic Drilling, Prospector Assistance Program.

The history of the BARRIERE RIDGE claims is given here in the following sections: MINFILE Occurrences and Recent Showings, ARIS Reports, Historic Drilling , and Prospector Assistance Program (Grants). The early history of exploration in the area is not well known although a number of references were found in the Ministry of Mines Annual Report from 1924, 1925, 1926, 1927 and 1928 (Bruce Madu, pers. comm. 2011); and in the Ministry of Energy and Mines MINFILE (www.empr.gov.bc.ca/mining/geoscience/minfile/Pages/default.aspx) information system. See also ARIS 32383, 33190, 33744, and 34651.

(a) MINFILE Occurrences and Recent Showings within BARRIERE RIDGE Claims:

Within the outer boundary of the BARRIERE RIDGE claims there are 3 MINFILE occurrences and two main showing as follows:

(i) MINFILE 082M 066 WHITE ROCK (with DL4043 KDYD WHITE ROCK MC);
(ii) MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL);
(iii) MINFILE 082M 222 CAD;
(iv) SILVERGAL SHOWING;
(v) SILVERBOY SHOWING
(vi) Miscellaneous MINFILE Occurrences (outside BARRIERE RIDGE). There are numerous (12+) MINFILE showings in the immediate vicinity of the BARRIERE RIDGE claims.

DL4043 KDYD WHITE ROCK MC, which contains MINFILE 082M 066 WHITE ROCK, is save and excepted from the BARRIERE RIDGE Claims because it is a crown granted mineral claim and it is owned by a third party George Robert Mitchell. The Crown Grant was made on January 1, 1921.

DL4023 KDYD WHITE ROCK MC is immediately adjacent to SILVER MINNOW, and is geologically relevant to the BARRIERE RIDGE claim group. Therefore it is included here even though it is not within the claim group. The following is a brief description of each of the above 3 MINFILE occurrences as well as some important historic descriptions. Refer to the MINFILE website for more specific references and information; also Assessment Report 32383 and 33190 by David J. Piggin and Astral Mining Corporation.

(i) MINFILE 082M 066 WHITE ROCK (with DL4043 KDYD WHITE ROCK MC)

The WHITE ROCK showing is described as epigenetic hydrothermal polymetallic veins Ag-Pb-Zn+/-Au; and with a vein/stockwork character. The significant minerals are galena tetrahedrite, sphalerite, and chalcopyrite; and it is associated with quartz, calcite, azurite and malachite. The MINFILE indicates a *"56 centimetre sample assayed 2.2 percent lead, 0.8 percent zinc, 92.6 grams per tonne silver and 0.34 grams per tonne gold (Annual Report 1950").* The following Illustrations and results were taken from ARIS 33190.

ILLUSTRATION #4 : : Entrance (apron area) leading into the **WHITE ROCK #1 ADIT** referred to as **MINFILE 082M 066 WHITE ROCK (with DL4043 KDYD WHITE ROCK MC).** David Piggin in picture is 180 cm tall and photo is shot in an easterly direction from the entrance apron. A mine car rail is shown in the foreground. DL 4043 KDYD is save and excepted from the BARRIERE RIDGE claims (MVI_0330.jpg):

ILLUSTRATION #5 : Partially buried entrance to **WHITE ROCK #2 ADIT** within DL4043 KDYD WHITE ROCK MC but on the boundary with BARRIERE RIDGE. Judy Burr is pointing to galena/silver mineralization (162 cm tall). Photo is shot from the road in an easterly direction (IMG_3941.jpg):

ILLUSTRATION #6 : **WHITE ROCK #2 ADIT** within DL4043 KDYD WHITE ROCK Judy Burr is pointing to galena/silver mineralization. Photo is shot from the road in an easterly direction (IMG_3942.jpg):

(ii) MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL): The SILVER MINNOW is described as epigenetic hydrothermal polymetallic veins Ag-Pb-Zn+/-Au; and with a vein character. The significant mineral is galena; and it is associated with quartz and calcite.
In 1925 a sample assayed Ag 925.7 grams per tonne and Au 0.69 grams per tonne. Refer to the MINFILE website for more specific references and information; and also Assessment Report 32383, 33190 and 33744 by David J. Piggin and Astral/Orex. In 2011,
Sample 10E41181 SMQCH7 Ag 171 ppm; Pb 14.4 percent; Zn 6490 ppm (over 1 m).

The SILVER MINNOW is located just south of the southeast corner of DL 4023 KDYD WHITE ROCK MC in an area of large quartz veins. Some up to 5.8 metres wide..

The following Illustrations and results were taken from ARIS 33190.

TABLE 5: Partial List of SILVER MINNOW Rock Anomalies - Selected Rock Anomalies for selected elements:

SELECTED ROCKS only	**Anomalous values shown in bold black**						
Sample Tag	**Au_ppb**	**Ag_ppm**	**Pb %**	**S %**	**Sb ppm**	**Te_ppm**	**Zn ppm**
10E41181 SMQCH7 SILVER MINNOW ADIT ONE	100	**171**	**14.4**	**2.27**	**198.5**	**30.4**	**6490**
Note: Sample 10E41181 SMQCH7 is adjacent to 10E41180 SM11EBCH1 at SILVER MINNOW ADIT ONE. See photos in HISTORY section; also close-up photo below.							
Sample Tag	**Au_ppb**	**Ag_ppm**	**Pb %**	**S %**	**Sb ppm**	**Te_ppm**	**Zn ppm**
10E41199 SM11FRA (see photo below)		**28**	**1.325**	0.92	**382**	2.71	**6970**
10E41021 SM11CHR1		**14.35**	**1.16**		**34.8**	1.64	**1880**

Sample Tag	Au_ppb	Ag_ppm	Cu ppm	Pb pppm	Sb ppm	Te_ppm	Zn ppm
10E41016 SM11R999	29.2	**50.4**	**1475**	**1275**	**533**	0.21	**2990**
10E41017 SM11R999A	55.5	**26.5**	**1465**	**1990**	**590**	0.36	**1600**
10E41182 SMQCH1		**12.8**	**40.8**	**9800**	22.8	1.97	**3280**
10E41198 SM11FRA (see photo below)		**10.55**	**185.5**	**6510**	38.4	1.13	**839**
10E41180 R/S SM11EBCH1 (see Note below)	21.4	**7.12**	**94.1**	**4410**	15.35	1.08	**4360**
10E41180 SM11EBCH1 (See Note below.)	21.2	**5.69**	**104.5**	**4100**	17.5	0.93	**5360**
Note: Sample is adjacent to 10E41180 SM11EBCH1 at SILVER MINNOW ADIT ONE see photos in HISTORY section; also close-up photo below.							
10E41184 SMQCH3		**2.38**	**51.4**	**1230**	39.4	0.23	**871**
10E41023 SM11CHR1-3		**1.89**		**1910**			**2510**
Sample Tag	**Al_%**	**Co_ppm**	**Cr ppm**	**Fe %**	**Mg %**	**Ni_ppm**	**P ppm**
10E41334 BR11FR59	**1.70**	**117**	**1152**	**>10**	**6.49**	**1027**	**670**

ILLUSTRATION #7: **SILVER MINNOW ADIT ONE** referred to as **MINFILE 082M 069 SILVER.** Judy is pointing to semi-massive galena/silver mineralization at the contact between the EBG on the right; and on the left a large near vertical (5.8m wide) quartz veins on the left. The contact is near vertical but dipping down to the south. The adit is believed to be buried in earth fill under Judy's feet (162 cm tall). The photo is shot in a NE direction. (excerpt MVI_0330.jpg):

ILLUSTRATION #8 : : Galena and silver mineralization from a channel sample at **SILVER MINNOW ADIT ONE**:**10E41181 SMQCH7 - Ag 171 ppm; Pb 14.4 percent; S 2.27 percent; Sb 198.5 ppm; Te 30.4 ppm; Zn 6490 ppm over 1m.** Location: MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL). In the background is the contact between the EBG on the right 30% of photo; and on the left the EBGt left 70% of photo. (IMG_0522.jpg):

(iii) MINFILE 082M 222 CAD

The CAD is described as epigenetic polymetallic veins Ag-Pb-Zn+/-Au; and with a vein character. Significant minerals are pyrite, spalerite, and galena; and associated with quartz and calcite. The alteration type is chloritic. Assessment Report 13168 reported Ag 15.6 grams per tonne, Pb 0.04 percent, Zn 1.2 percent over 10 cm vein width.

A number drilling programs occurred at CAD and the drill holes are summarized in a spreadsheet within the APPENDIX.

(iv) SILVERGAL SHOWING: The SILVERGAL was discovered by David J. Piggin for Astral Mining Corporation in 2010 and reported in Assessment Report 32383. The SILVERGAL reported as follows:

TABLE 6: SILVERGAL - Selected Rock Anomalies For Selected Elements):

SILVERGAL Showing: Outcrop on log landing with quartz/limestone with galena, silver, chalcopyrite, malachite	
10E41157 BR11Q9C	Ag 220 g/t, Pb 12.4 percent, Bi 270 ppm, Cr 202 ppm, S 1.69 percent, Se 110 ppm
10E41157 BR11Q9C repeat	Ag 220 g/t, Pb 12.4 percent, Bi 270 ppm, Cr 208 ppm, S 1.78 percent, Se 110 ppm
10E41157 BR11Q9C respit	Ag 220 g/t, Pb 12.4 percent, Bi 285 ppm, Cr 226 ppm, S 1.80 percent, Se 120 ppm
10E41160 BR11Q9D	Au 25 ppb, Ag 172 g/t, As 600 ppm, Cu 7470 ppm, Pb 795 ppm, Sb >2000 ppm, Zn 3076 ppm
10E41160 BR11Q9D repeat	Au 30 ppb, Ag 172 g/t, As 600 ppm, Cu 7470 ppm, Pb 795 ppm, Sb >2000 ppm, Zn 3076 ppm
10E41158 BR11Q9A	Au 20 ppb, Ag 5.8 g/t, Bi 5 ppm, Cr 232 ppm, Pb 2250 ppm
10E41172 BR11-104	Ag 27.2 ppm g/t, Cu 244 ppm
10E41174 BR11-106	Ag 6.8 ppm, Ca > 10 percent, Cu 428 ppm, Mg 8.88 percent, P 1080 ppm, Sb 245 ppm, Zn 176 ppm

ILLUSTRATION # 9: SILVERGAL showing close-up galena in sample **10E41160 BR11Q9D** (IMG_3695a.JPG).

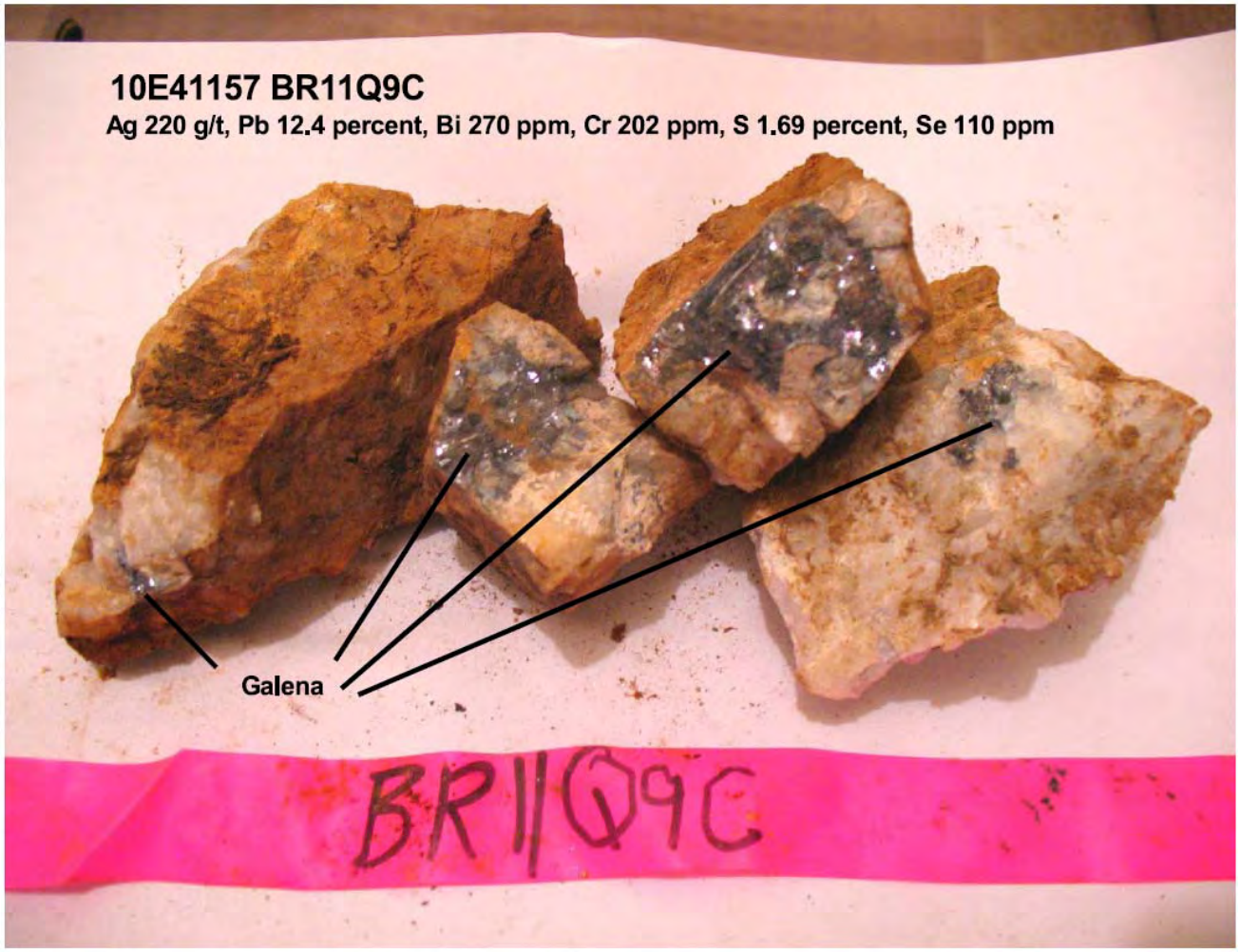


ILLUSTRATION # 10: SILVERGAL showing in overview taken in northwesterly direction (IMG_3676.JPG).

(v) SILVERBOY Showing: As reported in ARIS 34651, a new Ag Pb Zn discovery was made as follows (see TABLE and photographs in the following pages):

TABLE 7 Partial List of Rock Anomalies

Sample Tag	Assay Certificate(s)	Comments	Anomalous Results
SILVERBOY Discovery **10E41072 SM13R2**	KL13184934	On strike 10 metres from 10E41071 SM13R1MALIC. Massive limestone outcrop, galena in Quartz veins veinlets stockwork Zone 11, 297919.055 E. 5687392.442 N.	**Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm; Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm; Zn 5.34 percent**
10E41071 SM13R1MALIC **(10m from SILVERBOY)**	KL13184933	On strike 10 metres from SILVERBOY discovery 10E41072 SM13R2. Near vertical 80 deg quartz vein, strike 190 deg, with malachite stain, galena, in old trench cutslope. Zone 11, 2 297917.094 E. 5687399.071 N.	**Ag 6.88 ppm; Ca 14.7 percent; Cu 479 ppm; Mg 2.44 percent; Pb 527 ppm; Sb 139.5 ppm; Sr 509 ppm; Zn 1400 ppm**

ILLUSTRATION #11: Close up of SILVERBOY showing. Sample **10E41072_SM13R2: Ag 246 ppm; Cu 171.5 ppm; Pb 13.55 %; Sb 237 ppm; Zn 5.34 %.** Limestone with quartz veins, veinlets, and stockwork.(IMG_1549.jpg)

ILLUSTRATION #12: Close up of SILVERBOY sample: Limestone with quartz veins, veinlets, and stockwork. **10E41072_SM13R2: Ag 246 ppm; Cu 171.5 ppm; Pb 13.55 %; Sb 237 ppm; Zn 5.34 %** (IMG_1668.jpg)

The SILVERBOY host rock is similar to the SILVERGAL showing – a massive limestone outcrop with silver-galena-sphalerite-malachite mineralization (Ag Pb Zn Cu) in quartz veins-veinlets-stockwork. At SILVERBOY a subtle malachite staining was observed in a quartz vein exposed in a machine trench (sample 10E41071 SM13R1MALIC) and followed along strike 10 metres to the SILVERBOY discovery at sample 10E41072 SM13R2.

For reference purposes, the SILVERBOY discovery is located about:

- 384 metres northeast of the WHITE ROCK MINFILE Adit No. 1.
- 420 metres north of the SILVER MINNOW adit.
- 3.4 km north of the SILVERGAL discovery.

The SILVERBOY host rock is identical to the SILVERGAL showing therefore, there is a need to prospect for similar mineralized outcrops between the SILVERBOY and SILVER MINNOW zones (420 m to the south); and the SILVERGAL zone about 3.4 km to the south. It appears the SILVERBOY grab sample grades are similar to the SILVERGAL and SILVER MINNOW showings.

In addition to this in 2011, within close proximity to the SILVERBOY, an area of limestone quartz breccia of prospective (subtle) malachite staining was observed and requires additional sampling and trenching. This malachite staining was sampled (10E41016 SM11R999 and 10E41017 SM11R999A) and reported in ARIS 33190. **10E41016 SM11R999: Au 29.2 ppb, Ag 50.4 ppm, Cu 1475 ppm, Pb 1275 ppm, Sb 533 ppm, Zn 2990 ppm.**

High Priority Target: The SILVERBOY and limestone breccia area are a high priority target for a soil geochemical and ground geophysical surveys, trenching and drilling.

A soil grid, called SILVER MINNOW1 GRID, was reported in ARIS 33190 report. It was located almost half way between SILVERBOY/SILVER MINNOW, and the SILVERGAL discovery. This soil grid obtained anomalous results with Au (up to 26 ppb), Ag (up to 0.7 ppm), Ca (up to 1.32 percent), Cu (up to 149.3 ppm), Mo (up to 1.54 ppm), Sb (up to 1.76 ppm), and Zn (up to 195.2 ppm). There is a need to expand this soil grid and determine if there are mineralized zones between the SILVERBOY and SILVER MINNOW zones; and the SILVERGAL zone. The grid could be used for geological mapping.

(vi) Miscellaneous MINFILE Occurrences: The following is a partial list of various MINFILE Occurrences outside the BARRIERE RIDGE Claims. In the interest of brevity they are not discussed here:

East of the BARRIERE RIDGE:	MINFILE 082M 051	MINFILE 082M 061	MINFILE 082M 110
	MINFILE 082M 223	MINFILE 082M 300	
North of BARRIERE RIDGE:	MINFILE 082M 059	MINFILE 082M 060	MINFILE 082M 063
	MINFILE 082M 067	MINFILE 082M 072	MINFILE 082M 130
	MINFILE 082M 131	MINFILE 082M 219	MINFILE 082M 220
	MINFILE 082M 221	et al.	
West of BARRIERE RIDGE:	MINFILE 092P 160		

(b) Assessment Reports:

There are at least 19 Assessment Reports within located within the BARRIERE RIDGE boundary, based on the Assessment Report Information System (ARIS). In the interest of brevity a detailed discussion of the results of the work is not included in this report. The reports can be downloaded from the following website if additional information is required. http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx

The following is a complete list of these 21 ARIS reports:

- 03350 Duncanex Resources., B.J. Price and JR. Woodcock., September 27, 1971, $ 9,989.77
- 05363 Richard A. Rabbitt, D.L. Rabbit, 1974 $ 2,200.40
- 08210 Cyprus Anvil Mining Corporation, B.V. Hall and P.E. Walcott, July 11, 1980, $ 10,190.93
- 12847A Noranda Exploration Company Limited, G. Shevchenko, February 1985 $ 7,059.07
- 12847B Noranda Exploration Company Limited, L. Bradish, December 1984 $ 19,215.00
- 13168 J.D. Graham & Noranda Exploration Company Limited, R.G. Wilson, December 1984, $ 15,974.38
- 13207 Racer Resources Ltd (Ashton & Graham), J.D. Blanchflower, December 4, 2011, $ 24,301.05
- 13297 Mammoth Resources Limited, G.J. Dickie and G.D. Hodgson, November 1984, $12,025.00
- 13793 Racer Resources Ltd (Ashton & Graham), J.D. Blanchflower, July 25, 1985, $ 8,625.65
- 14123 J.D. Graham and Taywin Resources Ltd,), J.D. Blanchflower, September 19, 1985, $ 18, 635.18
- 14397 J.D. Graham & Noranda Exploration Company Limited, G. Shevchenko, February 1986, $ 21,830.05
- 16190 T.H. Thompson & National Resources Exploration Ltd, B.W. Kyba, July 15, 1987, $ 2,549.64
- 16331 J.D. Graham & Merritech Development Corporation, J.D. Blanchflower, February 27, 1987,$ 57, 271.32
- 17739 National Resources Exploration Ltd, D.C. Miller, April 20, 1988, $7,767.55
- 18489 Minnova Inc., D.W. Blackadar, February 12, 1989, a portion of $ 60,035.00
- 19047 National Resources Exploration Ltd & Minnova Inc, C.J. Clayton, September 7, 1989, $1,109.50
- 19173 Falconbridge Limited, S.G. Clemmer, September 1989, $ 2,739.83
- 19851 National Resources Exploration Ltd & Minnova Inc, D.R. Heberlein, March 1990, $32,000.00
- 22956 Rich Coast Resources Ltd, Michael Fox, March 23, 1993, $5,801.80
- 32383 Astral Mining Corporation and David J. Piggin, May 31 2011, $21,824.78
- 33190 Astral Mining Corporation, David J. Piggin, July 18, 2012, $ 344,154.71
  HONEYMOON $216,077.90 and BARRIERE RIDGE $128,076.81
- 33744 Astral Mining Corporation, Orex Minerals Inc, David J. Piggin. March 27, 2013. $ 97,303.43.
  HONEYMOON $ 67,713.37 and BARRIERE RIDGE f$ 29,590.06
- 34651 David J. Piggin. March 18, 2014. BARRIERE RIDGE, $ 39,377.26.

(c) Historic Drilling: In 2012, a detailed review of the above BARRIERE RIDGE ARIS reports indicated that between 1984 - 1988, 20 diamond drill holes were completed for 2,195.98 metres. For detailed information see attached spreadsheet in APPENDIX). The best result were from Minnova Inc which returned:

Up to **P4 BAR23: (sample 17807) Au 0.91 g/t, Ag 203 g/t, Cu 0.133 %, Pb 5.46 %, Zn 13.2 % (over 0.4 m).**

The drill sites have not been located in the field so additional research is required to find and digitize the drill logs. The following is a brief summary of the drilling locations at BARRIERE RIDGE.

- In 1984, drilling within Tenure 744582 and MINFILE 082M 222 CAD**:** ARIS Report 13168 Noranda Inc. reported two NQ diamond drill holes (DDH) CAD 84-1 and CAD 84.-2 for a total of 132.2 metres. CAD 84-2 best samples in three separate veins:
  Ag 15.6 g/t; Zn 12,000 ppm; Pb 392 ppm over 0.1 metres.
  Ag 4.6 g/t; Zn 136 ppm; Pb 1070 ppm over 0.1 metres.
  Ag 3.6 g/t; Zn 500 ppm; Pb 1020 ppm over 0.6 metres.

- In 1985, drilling within Tenure 744582 and MINFILE 082M 222 CAD: ARIS Report 14397 Noranda Inc. reported two NQ diamond drill holes (DDH) CAD 85-1 and CAD 85-2 for a total of 184.7 metres. The drill holes failed to intersect mineralization.

- In 1987, drilling within Tenure 744582 and MINFILE 082M 222 CAD: ARIS Report 16331 Merritech Development Corporation reported three NQ diamond drill holes (DDH) CAD 87-1, CAD 87-2, and CAD 87-3 for a total of 394.11 metres. The drill holes failed to intersect economic mineralization.
  CAD 87-1: Au 30 ppb, Ag 1 ppm, Pb 323 ppm from 545' to 550'.
  CAD 87-2: Cu 122 ppm from 190' to 195'; and CAD 87-3: Pb 122 ppm from 300' to 305'.

- In 1987, drilling within Tenure 744542: Maps provided in ARIS Report 17739 (and 16190) National Resources Exploration Ltd indicated four diamond drill sites DDH 87-1, DDH 87-2, DDH 87-3, and DDH 87-4 on a property map, but no record or drill logs are given showing results.

- In 1989, drilling within Tenure 844646, 844647: ARIS Report 18489 Minnova Inc. reported four NQ drill holes, totalling 601 metres, in the extreme southwest corner of BARRIERE RIDGE. The holes were P1 BAR20 (154.5 m); P2 BAR21 (151.5 m); P3 BAR22 (120.7 m); and P4 BAR23 (174.2 m). Three of four holes were not mineralized.

  P4 BAR23: (sample 17807) Au 0.91 g/t, Ag 203 g/t, Cu 0.133 %, Pb 5.46 %, Zn 13.2 % (over 0.4 m).
  "... The bottom 35 m of the hole encountered medium to coarse grained andesite felspar crystal tuff. Potentially significant Pb-Zn mineralization consisting of minor medium brown sphalerite and galena occurs in the bottom 20 m of the hole. This mineralization generally occurs in trace amounts associated with narrow quartz veins. At the top of this interval is a 4 - 6 cm zone of massive, banded, coarse grained shpalerite and galena. ..." page 9.

- In 1989, drilling (1989) within Tenures 744542, 744562, 767102, 840411: ARIS Report 19851 Minnova Inc. reported 5 NQ drill holes totaling 524.6 metres. The holes were MBD89-1 (102.7 m) and MBD89-2 (96.6 m) both within Tenure 744542; hole MBD89-3 (105.8 m) south end of Tenure 744562; both MBD89-4 (124.1 m) and MBD89-5 (95.4 m) are within Tenure 767102 and 840411. No significant mineralization or alteration was encountered.

Other ARIS Reports: In addition to this, there are a number (15+) ARIS reports located near the boundary of BARRIERE RIDGE on adjacent mineral claims. In the interest of brevity they are not listed here but are available through the Exploration Assistant (Map Place) and ARIS program websites.

(d) Prospectors Assistance Program Grants:

At least 4 Prospector Assistance Grants were issued in the general vicinity of the North Barriere Lakes and East Barriere Lakes area as follows:

- In 1998, the author David J. Piggin - Prospector Assistance Grant #98/99 P94 (1998-43) for $ 10,000.00. Grassroots exploration work was completed over the eastern half of the BARRIERE RIDGE claims and on the HONEYMOON claims**. A number of significant Au, Ag, and base metal anomalies were found in stream sediment and soil samples.** A soil sieve sample was collected south of North Barriere Lake and the sieve sample was a significant gold in soils anomaly as follows:

  Sample 13C (Tag 103282) Certificate AK-0222i.xls: (UTM NAD 83 Zone 11, 300937.7E and 5688537.2N)
  Au 555 ppb, Ag 0.8 ppm, As 25 ppm, Bi 15 ppm, Mo 6 ppm, Pb 70 ppm, Zn 215 ppm.

TABLE 8: Sieve sample, Weev 13C-09 (Tag 103213) Certificate AK98- 0595i.xls returned the following values.

Sample Tag #	Weight (grams)	Mesh Size	Au ppb
103213 Weev 13C-09	91	+32	15
	53	+60	35
	37	+80	20
	62	+140	35
	38	+230	35
	41	-230	65
Repeat		+80	105

- In 1998, Camille Berube - Prospector Assistance Grant #1998/99 P23 (1998-23) for $ 10,000.00. The CAM-GLORIA MINFILE 082M-266 was discovered during this exploration program.

- In 2000, Leonard P. Piggin - Prospector Assistance Grant #2000/01 P73 (2000-22) for $ 7,500.00. The LUCKY BEAR MINFILE 082M-275 (Au Bi, minor W) was discovered during this program. Numerous anomalous stream sediments and moss mats were collected.

- In 2000, Camille Berube - Prospector Assistance Grant #2000/01 P43 (2000-13) for $ 10,000.00. The LUCKY BEAR MINFILE 082M-275 (Au Bi, minor W) was discovered during this program.

A copy of each report can found on the following website.
http://www.empr.gov.bc.ca/Mining/Geoscience/PropertyFile/Pages/1998pros.aspx

4. Airborne Geophysics by Fugro, Including An Interpretations Report.

In 2011 (ARIS 33190), an airborne geophysical survey was completed on selected areas by Fugro Airborne Surveys – ***Logistics and Processing Report: Helicopter-borne HELITEM Time Domain Electromagnetic and Magnetic Geophysical Survey – Project No. 11089*** dated January 23, 2012 (see ILLUSTRATION # 13 below). The survey was flown from October 21, 2011 to November 9, 2011 and cost $ 239,146.00. Total coverage of the survey blocks

amounted to 1334 km (1121.4 km of it was accepted). Due to bad weather over the blocks survey was stopped by the Astral Mining Corp. before the Fugro's crew was able to re-flight lines L20270-L22420 (Honeymoon block). In the interest of brevity the full report, submitted by Furo Airborne Surveys, was included in ARIS Report 33190 and is not included here.

ILLUSTRATION # 13: Location of the HONEYMOON and BARRIERE RIDGE airborne geophysical survey completed in 2011. This map is an excerpt from the Project No 11089 report. Not to scale and north is up.

Based on their report *"...The purpose of the survey was to determine the existence and locations of bedrock conductors and for better understanding of the subsurface geology within the survey areas. The EM data and the magnetic data were processed to produce images and profiles that are indicative of the magnetic and conductive properties of the survey areas. A GPS electronic navigation system ensured accurate positioning of the geophysical data with respect to the base maps..."* Page 4.

The full report for Project No 11089, submitted by Fugro Airborne Surveys, has been reported in the APPENDIX of ARIS Report 33190 dated July 18, 2013. In the interest of brevity, the Project No. 11089 report is not given here.

The Project No. 11089 report identified numerous significant geological and contract related features as well as geophysical and conductive features which require extensive exploration such as prospecting, geochemical surveys, geological mapping, ground geophysical surveys, trenching and drilling.

In 2012, Fugro was contracted to re-process the Project No. 11089 data for interpretation and targeting purposes. They subsequently submitted their report ***Magnetic and EM Interpretation Airborne Magnetic and HELITEM Survey - BARRIERE RIDGE AND HONEYMOON Blocks, British Columbia - Job No. 12578*** dated February 2013. The report cost $ 29,500.00 and is enclosed in the APPENDIX of ARIS Report 33744 dated March 27, 2013. In the interest of

brevity, the Job No. 12578 report is not given here. In general terms, Job No. 12578 reported significant results and priority targets as follows:

- Significant conductors within the survey area and were outlined on interpretation maps. Conductors were classified as conductive zones, points, and axes. A list of anomalous EM responses, for detailed review and ground follow-up, were provided in the Fugro report.

At BARRIERE RIDGE, the magnetic grid showed a magnetic low, with a gently rippling character in the western portion of the block, and a more complex and highly magnetic area to the centre and northeast. High conductivities exist in both the east and west with a low conductivity area running nearly N-S through the mid-western portion of the block, and along the north in the eastern portion of the block. There is a low conductivity area in the southeast.

Conductivity depth (CDI) sections identified major faults and in many cases these had been identified from the magnetic signatures. Conductivity depth identified some new faults. The dips of the faults can also be identified using CDI sections.

5. Proposed Ground Geophysics (also Proposed Soil Geochemical Survey).

A number of initial (primary) ground geophysical targets were identified by Dale Brittliffe, P. Geo., (Astra/Orex) based on historical/recent data and airborne geophysics. In the fall of 2012, in advance of a large scale ground geophysical survey, a small ground geophysics survey totaling 9,600 lineal metres was recommended as follows:

SILVER MINNOW: (aka SILVER MINNOW2 GRID)

- 3 lines 1400 lineal metres each; Zone 11 central line 5,686,900mN, 297,400mE – 298,800mE.
- Lines 100 metres apart and stations every 25 metres.
- No soil samples collected to date.

SILVERGAL: (aka SILVERGAL1 GRID from ARIS 33190 plus additional stations (east-west) from ARIS 33744.

- 3 lines 1800 lineal metres each; Zone 11 central line 5,684,200mN, 298,600mE – 300,400mE.
- Stations every 25 metres.
- The original SILVERGAL1 GRID was 2 parallel lines at 200 meters spacing; and 82 soil samples were collected and assayed.

The previously established SILVER MINNOW1 GRID had a soil geochemical survey (50 soil samples) but was not proposed for ground geophysics at the time due financial restrictions. It is located about halfway between the SILVERGAL showing and the SILVER MINNOW MINNFILE.

The purpose of the small geophysical survey area was to provide a starting point data for a much larger scale survey. These ground geophysics survey lines were to be used for a preliminary soil geochemical survey as well.

A total of 225 lineal metres was ribboned on the centre line at SILVER MINNOW2 GRID. The line was marked with florescent pink ribbon and kevlar tags at 25 m stations, candy strip orange/ black for the line. Snow/road and budget circumstances brought the preparatory survey to a halt before it could be completed.

The intent was to have First Nations contractors buck out the survey line before the ground geophysical survey started. A First Nations contractor was available but funds were not therefore, the project was re-scheduled for 2013/2015.

6. Soil Geochemical Surveys (see Proposed Ground Geophysics in previous section).

The following section is described in three sections as follows: **SILVERGAL1 GRID**, **SILVER MINNOW1 GRID**, and **Prospecting Soil Samples**, and **Sprague Creek - Gold in Soils**.

In ARIS 33190, the results of the soil grids SILVERGAL1 (82 samples) and SILVER MINNOW1 GRID (50 samples) were reported. The following tables show selected results (gold and silver only) ARIS 33190. The following data is taken from ARIS 33190. For more detailed results including spreadsheets, maps and assays refer to ARIS 33190.

SILVERGAL1 GRID: The following two tables, **TABLE 9 and TABLE 10,** from ARIS 33190, show a few selected gold and silver anomalies for selected elements.

TABLE 9: SILVERGAL1 - Selected Gold Soil Anomalies For Selected Elements: (from ARIS 33190)

SELECTED SOILS only	**SILVERGAL1 GRID – GOLD LEADING with Au 6.8 ppb at 90 percentile: Anomalous values shown (in bold black text) for selected elements.**								
Sample Tag 14E41213	**Au ppb repeat**	**W ppm repeat**	**Au ppb**	**W ppm**	**Sample Tag 14E41233**		**Au ppm**	**Se ppm**	
	80	**0.20**	**69**	**0.20**			**30**	**0.30**	
Sample Tag 14E41239 repeat	**Au_ppb**	**Ag ppm**	**Ca %**	**Cu ppm**	**Fe %**	**Ge ppm**	**Hg ppm**	**K %**	**La ppm**
	11	**0.7**	**0.55**	**55.6**	**4.28**	**34.8**	**35**	**0.23**	**14.5**
	Mg %	**Nb ppm**	**Rb ppm**	**Sc ppm**	**Sr ppm**	**Te ppm**	**T %**	**Tl ppm**	Zn ppm
	0.80	**1.84**	**18.7**	**5.1**	**24**	**0.12**	**0.131**	**0.1**	113.70
Sample Tag 14E41270	**Au_ppb**	Ag ppm	**As ppm**	**Bi ppm**	**Cu ppm**	**La ppm**	**Se ppm**	**Te ppm**	**Y ppm**
	10	0.4	**9.2**	**0.32**	**71.5**	**17**	**0.4**	**0.1**	**10.2**
Sample Tag 14E41232	**Au_ppb**	Ag ppm	**Mo ppm**	**Se ppm**	**Sample Tag 14E41232**		**Au ppm**	**Se ppm**	
	9.0	0.2	**1.18**	**0.8**			**7.0**	**0.3**	
Sample Tags: 14E41235 14E41230 14E41231 14E41240 14E41254 were all anomalous with Au = 7.0 ppb									

TABLE 10: SILVERGAL1 - Selected Silver Soil Anomalies For Selected Elements: (from ARIS 33190)

SELECTED SOILS only	**SILVERGAL1 GRID – SILVER LEADING with Ag 0.5ppm at 90 percentile: Anomalous values shown (in bold black text) for selected elements.**								
Sample Tag 14E41213	Au ppb	**Ag ppm**	**Al %**	**Be ppm**	**Bi ppm**	**Ca %**	**Cd ppm**	**Fe %**	**Ga ppm**
	2.0	**1.1**	**2.74**	**0.80**	**4.0**	**1.29**	**0.5**	**6.04**	**8.0**
	Hg ppm	**Mn ppm**	**Mo ppm**	**Nb ppm**	**Pb ppm**	**S %**	**Sb ppm**	**Sc ppm**	**Se ppm**
	100	**1131**	**2.0**	**2.16**	**1117**	**0.10**	**1.42**	**4.2**	**0.50**
	Sn ppm	**Sr ppm**	**Te ppm**	**U ppm**	**V ppm**	**W ppm**	**Y ppm**	Zn ppm	**Zr ppm**
	0.7	**30.5**	**0.34**	**0.8 ppm**	**60**	**0.30**	**16.4**	129.9	**10.87**
Sample Tags: 14E41212, 14E41222, 14E41227, 14E41236, 14E41265 were all anomalous with Ag = 0.5 ppm									

In addition to the above soil anomalies **14E41266 returned Cu 179.0 ppm; and sample 14E41266 returned Pb 246.9 ppm.** Both of these are at or near the top of the range.

Soil geochemistry results for the SILVERGAL1 (especially **14E41213, 14E41213, 4E41239)** confirmed the presence of multiple Au (mult-element), Ag (multi-element), copper, lead, and zinc soil anomalies which require high priority follow-up work such as prospecting, additional soil geochemistry, geological mapping, ground geophysics, trenching and drilling.

SILVER MINNOW1 GRID: The following two tables, **TABLE 11 and TABLE 12,** from ARIS 33190, show a few selected gold and silver anomalies for selected elements.

TABLE 11: SILVER MINNOW1 GRID - Selected Gold in Soil Anomalies For Selected Elements: (from ARIS 33190)

SELECTED SOILS only	**SILVER MINNOW1 GRID – GOLD LEADING with Au 6.8 ppb at 90 percentile: Anomalous values shown (in bold black text) for selected elements.**								
Sample Tag 14E41285	**Au_ppb**	Ag ppm	**As ppm**	**Ce ppm**	**Co ppm**	**Cr ppm**	**Cu ppm**	**Fe %**	**Ga ppm**
	26	0.3	**18.9**	**33.10**	**27.8**	**67.5**	**149.4**	**5.55**	**7.10**
	K %	**La ppm**	**Mg %**	**Mn ppm**	**Mo ppm**	**Ni ppm**	**Sb ppm**	**Sc ppm**	**Se ppm**
	0.15	**16**	**0.81**	**1019**	**1.31**	**74.3**	**0.92**	**7.0**	**0.40**
	Te ppm	**Th ppm**	**V ppm**	**Y ppm**					
	0.12	**5.2**	**82**	**9.1**					
Sample Tag 14E41306: Au 12 ppb									

TABLE 12: SILVER MINNOW1 GRID - Selected Silver in Soil Anomalies For Selected Elements: (from ARIS 33190)

SELECTED SOILS only	**SILVER MINNOW1 GRID – SILVER LEADING with Ag 0.5ppm at 90 percentile: Anomalous values shown (in bold black text) for selected elements.**								
The following Sample Tags were anomalous for silver: 14E41286 returned Ag 0.7 ppm; 14E41327 returned 0.7 ppm; 14E41329 returned Ag 0.7 ppm; 14E41311 returned Ag 0.5 ppm;									
Sample Tag 14E41305	Au ppb	**Ag ppm**	**Al %**	**Ba ppm**	**Be ppm**	**Bi**	**Cu ppm**	**Ga ppm**	**Hg ppm**
	2.0	**0.5**	**2.77**	**218**	**0.6**	**0.34**	**63**	**9.5**	**45**
	Li ppm	**Mn ppm**	**Nb ppm**	**Rb ppm**	**S %**	**Se ppm**	**Sn ppm**	**Tl ppm**	**U ppm**
	17.9	**2153**	**1.54**	**14.9**	**0.10**	**0.4**	**0.7**	**0.1**	**0.9**
	W ppm	**Zn ppm**							
	0.2	**138.6**							
Sample Tag 14E41322	Au ppb	**Ag ppm**	**Al %**	Be ppm	**Bi ppm**	Cd ppm	Ce ppm	**Hg ppm**	**La ppm**
	2.0	**0.5**	**2.86**	0.6	**0.28**	0.32	30.5	**50**	**29.9**
	Nb ppm	**S %**	**Se ppm**	**Sn ppm**	**Sr ppm**	**Te ppm**	**Ti %**	**U ppm**	**Zn ppm**
	1.68	**0.1**	**0.4**	**0.7**	**26.5**	**0.12**	**0.091**	**1**	**188**
Copper: Sample Tag 14E41308 returned Cu 59.7;14E41309 returned Cu 84.4 ppm; and 14E41325 returned Cu 75.3 ppm									

with the 90 percentile being Cu 52.32 ppm.
Lead: : Sample Tag 14E41297 returned Pb 28; 14E41330 returned Pb 26 ppm; 14E41325 returned Pb 27.3 ppm; and 14E41299 returned Pb 25.5 ppm with the 90 percentile being Pb 24.72 ppm.
Zinc: 14E41283 returned Zn 195.2 ppm with the 90 percentile being Zn 137.62 ppm

Soil geochemistry results for the SILVER MINNOW1 GRID confirm the presence of multiple Au (mult-element), Ag (multi-element), copper, lead and zinc soil anomalies which require high priority follow-up work such as prospecting, additional soil geochemistry, geological mapping, ground geophysics, trenching and drilling.

PROSPECTING SOIL SAMPLES:

At BARRIERE RIDGE, soil samples were collected when float rocks in till were observed (or suspected) to have mineralization. The each soil sample was collected from the same soil horizon as the float rock. Prospecting soil samples were not included in the soil grid sampling data because they were biased by the anomalous float rock. For example, ARIS 33190 soil sample **Tag 10E41191 SM11FRAT returned Au 18.1 ppb, Ag 9.74 ppm, Pb 1835 ppm, Zn 2730 ppm** which far exceeds any Zn Pb Zn soil values in any of the soil grids in this report.

TABLE 13: PROSPECTING (only) SOIL SAMPLES vicinity of SILVER MINNOW1 GRID – Selected Soil Anomalies For Selected Elements:

SELECTED SOILS only	**PROSPECTING (only) SOIL SAMPLES Anomalous values shown (in bold black text) for selected elements.**								
Sample Tag 10E41191 SM11FRAT	**Au ppb**	**Ag ppm**	**As ppm**	**Cd ppm**	**Be ppm**	**Cu ppm**	**Pb ppm**	**Sb ppm**	**Se ppm**
	18.1	**9.74**	**8.5**	**4.5**	**0.6**	**53.4**	**1835**	**51.6**	**0.6**
	Te ppm	**W ppm**	**Zn ppm**						
	0.24	**0.76**	**2730**						
Sample Tag 10E41193 SM11FR10T	Au ppb	Ag ppm	**As ppm**	**Cd ppm**	**Bi ppm**	Cd ppm	Co ppm	**Cu ppm**	**Nb ppm**
	6.1	0.3	**18**	**1.53**	**0.28**	0.32	33.9	**174**	**1.48**
	Pb ppm	**Se ppm**	**Sr ppm**	**Ta ppm**	**Tl ppm**	**Zn ppm**			
	30.2	**0.4**	**28.9**	**0.04**	**0.08**	**427**			
Copper: Sample Tag 14E41194 SM11T8 returned Cu 124 ppm, Fe 5.99 %, Pb 30.3 ppm. **Lead: Sample Tag 14E41190 SM11FR5T returned** Cu 37.1 ppm**, Pb 139 ppm.**									

SPRAGUE CREEK – GOLD IN SOILS: Near the center of Tenure 844645, North of Sprague Creek, 3 soil samples were collected that were anomalous for gold. See Illustration below.

10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm.
10E41061_SR13QT3: Au 9.8 ppb; As 24 ppm; Ni 71.1 ppm
10E41060_SR13QT2: Au 7.3 ppb; As 30.3 ppm; Ba 220 ppm; Cu 61.5 ppm; Fe 4.45 %; Ni 91.3 ppm; Zn 107 ppm;

These 3 samples were collected 25 metres apart in a soil with numerous chunks and pieces of rusty quartz. The underlying bedrock was a dark bluey-grey colored (rusty on bedding surfaces) meta-sediment. Sprague Creek is anomalous for gold based on the Regional Stream Sediment Sample:
82M765098: Au 16 ppb; As 22 ppm; Ba 1400 ppm; Cu 41 ppm; Cr 200 ppm; Ni 65 ppm; Zn 89 ppm.

Therefore, we have 2 independent gold anomalies pointing to a gold source in the Sprague Creek drainage. A preparatory soil survey at the Sprague Creek Gold-In-Soils anomaly was proposed and sample stations were determined using UTM coordinates. The GPS coordinates for 205 stations (5 strips @ 1 km long; at 100 metre intervals) were determined. No field work has been done. Work may commence in April/May 2014 subject to snow conditions and funding.

ILLUSTRATION: #14. Sample Location for Soil Sample **10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm.** Sample taken at center of picture above exposed bed rock (pink flagging). Numerous pieces of rusty quartz were observed in the glacial till. (IMG_1506.jpg)

Soil geochemistry results from prospecting soil samples confirm the presence of multiple Au (mult-element), Ag (multi-element), copper, lead and zinc soil anomalies which require high priority follow-up work such as prospecting, additional soil geochemistry, geological mapping, ground geophysics, trenching and drilling.

Clearly, based on the soil geochemical data to date, there is a need for an expanded soil geochemical survey related to existing Ag Pb Zn anomalies such as the SILVER MINNOW MINFILE, SILVERGAL, SILVERBOY, and Sprague Creek – Gold In Soils area.

7. Stream Geochemical Surveys.

A total of 2 stream sediment and 2 moss mat samples were previously collected in ARIS 33190. The target area was south (down ice) from the SILVER MINNOW adit and DL 4023 WHITE ROCK MC. All 4 samples had anomalous values therefore all four are shown in the following tables, **TABLE 14 Moss Mats** and **Table 15 Stream Sediments**, as follows:

TABLE 14: Selected Moss Mat Anomalies: (for selected elements).

Moss Mats only	Anomalous values shown in red (90 percentile)				
Sample Tag	Ag_ppm	Ca_%	Cu_ppm	Pb_ppm	Sb_ppm
10E41186 SM11MM1	**0.35**	**16.8**	14	6	0.18
10E41187 SM11MM2	0.21	**18.45**	**29**	**16.8**	**0.54**

TABLE 15: Selected Stream Sediment Anomalies: (for selected elements).

Stream Sediments only	Anomalous values shown in red (90 percentile)				
Sample Tag	Ag_ppm	Ca_%	Cu_ppm	Pb_ppm	Sb_ppm
10E41188 SM11SS1	**0.75**	**22.5**	**26.1**	5.8	0.17
10E41189 SM11SS2	0.12	**20.2**	21.8	**24.8**	**0.53**

Based on these results, the area 400 metres south of SILVER MINNOW is prospective for Ag and Cu and is associated with limestone. These stream anomalies require followed up to determine the source.

8. Photosat Image (0.5m pixel).

A total of 23,530 hectares of 2012 PhotoSat 0.5metre Pixel imagery were acquired and reported in ARIS 33744. This will be used extensively for mineral exploration and development programs; and reporting.

II – TECHNICAL DATA AND INTERPRETATION

2014 and Spring 2015 EXPLORATION PROGRAM

The property geology described here is based largely on Schiarizza and Preto Dec 1987, Dixon and Warren et al 1997; and Logan and Mann April 2000. For detailed information, consult the above references and additional references given in LITERATURE CITED.

A. PROPERTY GEOLOGY:

The property geology and rock type descriptions are based entirely on Schiarizza and Preto Dec 1987; Dixon and Warren et al 1997; Logan and Mann April 2000; and GeoFile 2005-4 downloaded from the Ministry of Energy Mines website. For detailed information, consult the above references and additional references given in LITERATURE CITED. See ILLUSTRATION # 15, # 16, #17 and TABLE 16 below, and the geology map provided in the APPENDIX.

Regionally, BARRIERE RIDGE is located in the Kootenay Terrane at or, near the main contact between the mid-CRETACEOUS Baldy Batholith Unit **[Kg, also KBBgd, KBBmg]** the DEVONO-MISSISSIPPIAN Eagle Bay Assemblage Unit **[EB**], and the late DEVONIAN Paragneiss Unit **[Dgnp]**. On the west side of the BARRIERE RIDGE claims along the western boundary of Tenures 844644/844645, the claims are at the contact between the Fennell Formation **[IF]** (Slide Mountain Terrane) and the Eagle Bay Assemblege (Kootenay Terrane).

The Baldy Batholith is generally considered MID-CRETACEOUS at 80 to 100Ma. The **Kg** is a massive granite and granodiorite intrusive. The Eagle Bay Assemblege **[EB]** is a series of low-grade meta-sedimentary and meta-volcanic rocks. The Fennell Formation [**uF** – upper structural division; **lF** – lower structural division is comprised of oceanic rocks which were tectonically emplaced over Mississippian rocks of the Eagle Bay Assemblege in early Mesozoic time. The **lF** and **EB** successions are cut by mid-Cretaceous granitic rocks, and by Early Tertiary quartz feldspar porhhyry, basalt and lamprophyre dykes. The Late Devonian Paragneiss Unit **[Dgnp],** is absent from the BARRIERE RIDGE claims.

The following is a brief description of the various rock types:

1. Kootenay Terrane: Lower Cambrian (and older?) to Mississipian

(a) EBF: *Devonian and/or Mississipian – light to medium grey, rusty weathering felspathic phyllite, schist and fragmental schist derived from intermediate tuff and volcanic breccia; minor amounts of dark grey phyllite and siltstone.*

(b) EBA: *Devonian – light silvery grey to medium greenish grey sericite-quartz phyllite and sericite-chlorite-quartz phyllite derived from felsic to intermediate volcanic and volcaniclastic rocks, including pyritic, felspathic and coarsely fragmental varieties; lesser amounts of dark grey phyllite and siltstone, green chloiritc phyllite, sericiteic quartzite and pyritic chert (exhlite?).*

(c) EBG: *Lower Cambrian (may include younger and or older rocks) Medium to dark green calcareious chlorite schist, fragmental schist and greenstone derived largely from mafic to intermediate volcanic and volcaniclastic rocks; lesser amounts of limeston and dolostone; minor amouns of quartzite grit and light to dark grey phyllite.*

- EBGp: *dark grey phyllite, calcareious phyllite and limestone; minor amounts of rusty weathering carbonate-sericite-quartz phyllite (metatuff?).*
- EBGq: *light to medium grey quartzite.*
- EBGt: *Tshinakin limestone member – massive light grey finely crystalline limestone dolostone.*

(d) EBP: *Mississippian – dark grey phylilite and slate with interbeedded siltstone, sandstone and grit; lesser amounts of conglomerate, limestone, dolostone, chlorite-sericite quartz schist, quartzite and metatuff.*

- EBPv: *metavolcanic breccia and tuff.*

(e) EBQ: *Lower Cambrian ? and Hadrynian ? – light to dark grey quartzite, micaceious quartzite, grit chlorite-muscovite-quartz schist and phyllite; lesser amounts of calcareous phyllite, calc-silicate schist, carbonate and green chlorite schist; eastern exposures include staurolite-garnet-mica schist and amphibolite.*
Note: Described by Logan and Mann (April 2000) as **"HCEBQ";** and **"HCEBQgn"** *includes orthogneiss of unit* **Dgn***, as well as sericite-quartz phyllite derived from quartz porphyry dikes and sills*.

2. Slide Mountain Terrane: Devonian to Permain: Fennell Formation – Lower Structural Division

(a) lFu: *Undivided; mainly lFc, lFg and lFb, but may include any or all of the Fennell Formation rock types.*

- lFc: *grey and green bedded chert, certy argillite, slate and phyllite.*
- lFg: *gabbro, diorite, diabase.*
- lFb: *grey and green pillowed and massive metabasalt; minor amounts of basaltic breccia and tuff.*

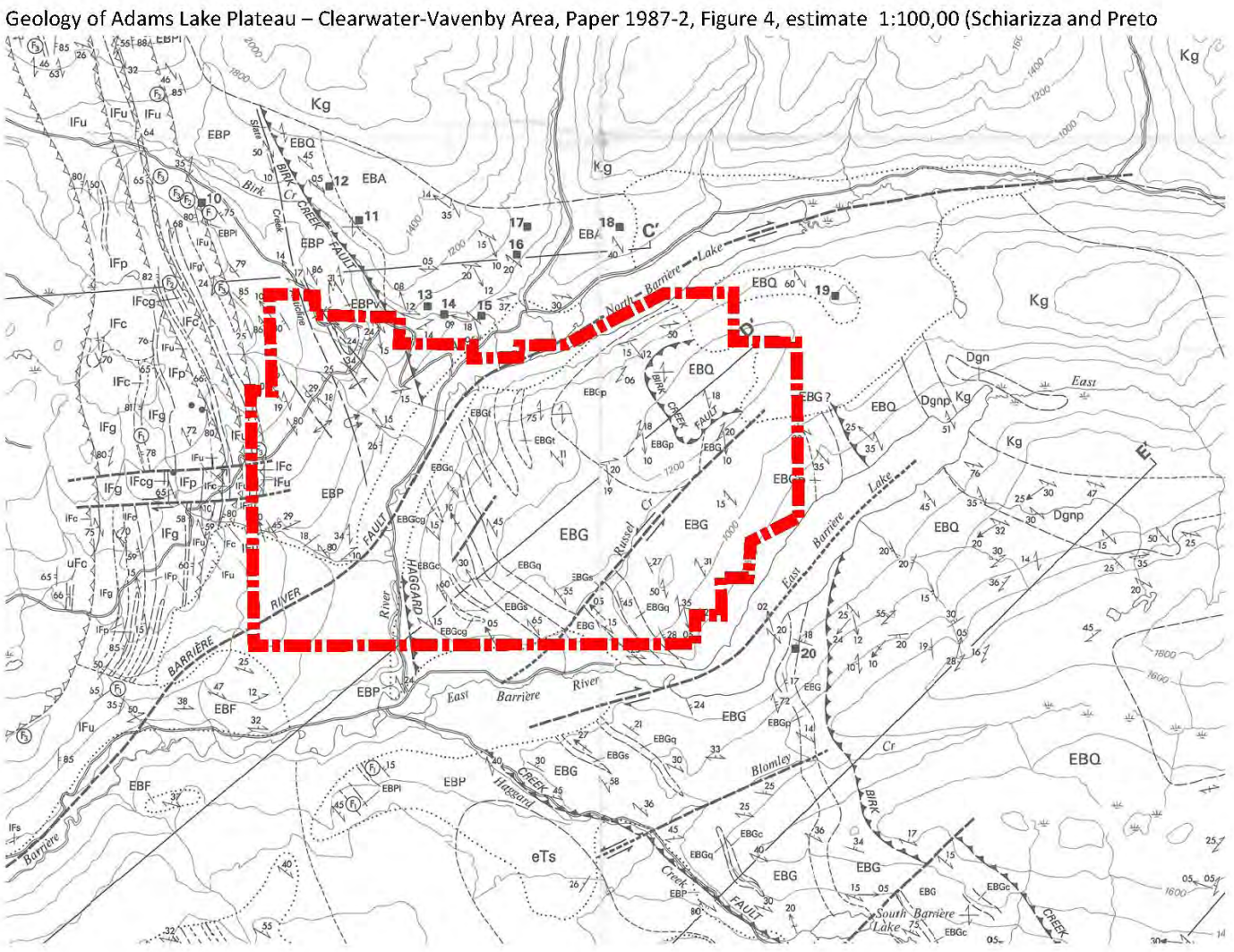
3. Cretaceous

(a) **Kg:** *granite and granodiorite***; Kgp** *includes abundant pegmatite;* **KBBmg** – *medium to course grained, pink potassium feldspar megacrystic biotite monzogranite, hornblende-biotite monzodiorite and coarse pegmatite segregations*; **KBBgd** – *coarse potassium feldspar megacrystic hornblende-biotite granite to granodiorite, coarse equigranular biotite monzogranite (KBBg) and medium-grained aplite dikes.*

4. Geologic Faults: A number of important geologic faults occur within the BARRIERE RIDGE claims (Schiarizza and Preto Dec 1987 Figure 4 map). They are as follows:

- The Barriere River Fault which follows the Barriere River and North Barriere Lake in a southwest to northeast direction.
- The Birk Creek Fault which follows Birk Creek in a northwest to south east direction. This fault forms a junction with the Barriere River Fault at the confluence of Birk Creek. The fault forms a NE facing "U-shape" on the height of land between North Barriere Lake and East Barriere Lake; and continues in a southerly direction south of East Barriere Lake.
- The Haggard Creek Fault which follows Haggard Creek in a southeast to northwest direction; and follows the Barriere River upstream from the confluence with the East Barriere River.
- The Russell Creek Fault runs in a southwest to northeasterly direction up Russell Creek.
- The East Barriere Lake Fault runs up the center of East Barriere Lake in a roughly southwest to northeasterly direction.

ILLUSTRATION # 15: Map excerpt from Figure 4 of Schiarizza and Preto Dec 1987 showing the geology and faults in the vicinity of North Barriere Lake, East Barriere Lake, Adams Lake (not to scale). The North on this map is up. See cross section in the next Illustration.



BRITISH COLUMBIA GEOLOGICAL SURVEY DATA (BCGS):

The BCGS has completed a number of regional geochemistry surveys including till, stream water, steam/moss sediment, and geological mapping works as follows:

(a) *Till Geochemistry of the Adams Lake Plateau - North Barriere Lake Area (82M/4 & 5) – Open File 1997-9.* (Bobrowsky et. al. 1997).

(b) *Regional Stream Water Geochemistry of the Adams Lake – North Barriere Lake Area, British Columbia (NTS 82M/4 and 82M/5) – Open File 1998-9* (Lett, Sibbick, Runnells January 1999)

(c) *Stream Geochemical Exploration for Pluton-Related Quartz Vein Gold Deposits in Southern British Columbia - Open File 2000-23.* (Lett, Jackaman, Englund April 2000).

(d) *Geology & Mineralization around Baldy Batholith, Southcentral BC. Map Scale 1:50 000. NTS 82M/3, 4, 5 &6.* Open File 2000-7. (Logan and Mann April 2000).

(e) *Geology of the Adams Plateau-Clearwater-Vavenby Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1987-2.* Schiarizza, P. and Preto, V. (1987).

(f) *British Columbia Regional Geochemical Survey, Seymour Arm - NTS82M - RGS 33* (P.F. Maytysek et al 1991)

Anomalies and geological mapping summarized in these 6 OPEN FILE/PAPER references, when considered together, formed part of the basis for this 2010/2011 exploration program. On a number of occasions, the author spoke to various authors named above to obtain (free) advise concerning various aspects of their work (i.e. Jim Logan, Ray Letts, and Paul Schiarizza).

ILLUSTRATION # 16: Geological Cross Section D, an excerpt from Figure 4): An excerpt from *Geology of the Adams Plateau-Clearwater-Vavenby Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1987-2.* Schiarizza, P. and Preto, V. (1987). View is to the north and west is at the bottom of the page.

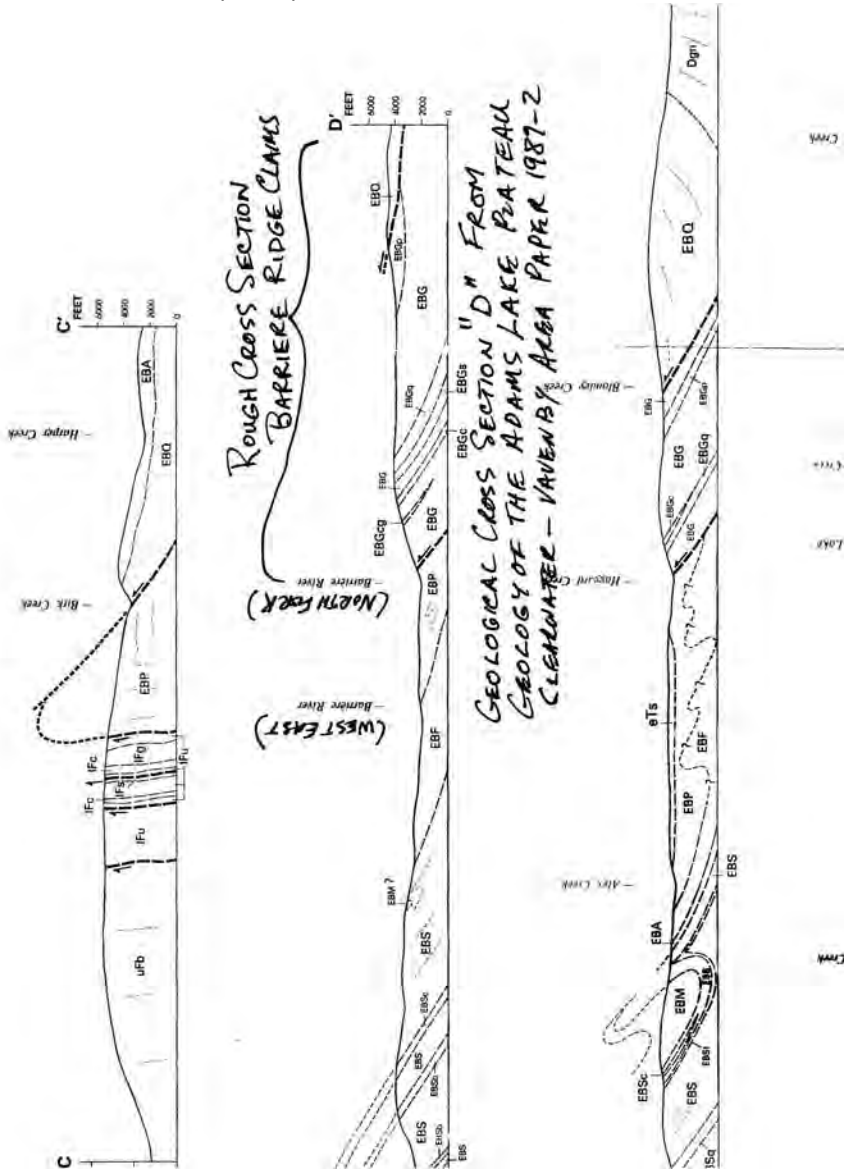


ILLUSTRATION # 17: Map excerpt directly from OPEN FILE 2000-7 Logan and Mann April 2000 showing the geology and faults in the vicinity of North Barriere Lake, East Barriere Lake, Adams Lake (estimated scale <1:100,000). North is up.

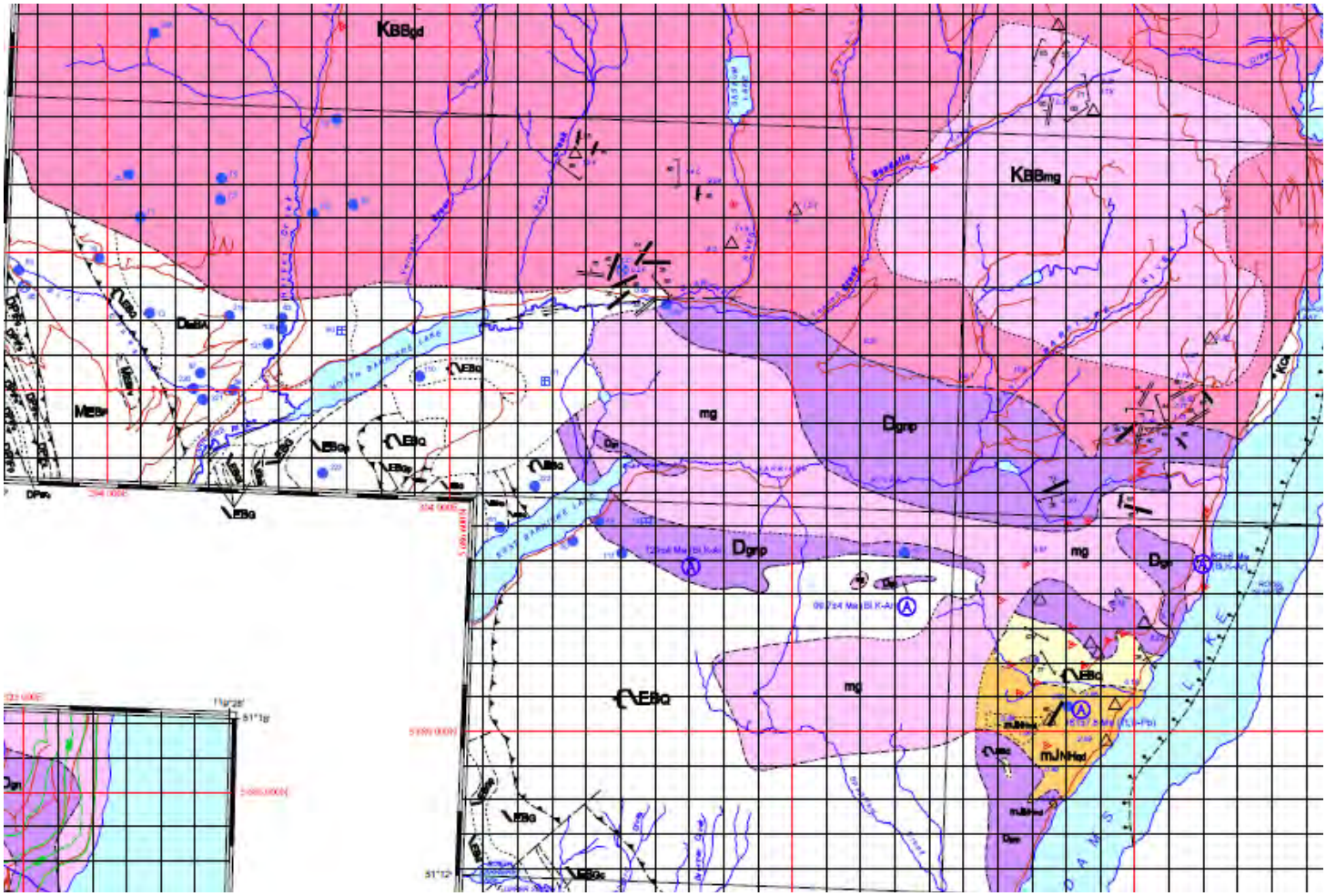


TABLE 16: GEOLOGY OF THE BARRIERE RIDGE CLAIMS: This table gives a detailed summary of each claim based on GeoFile 2005-4 and Open File 2007-7. See also Schiarizza and Preto 1987 and geology maps in the APPENDICIES

Tenure	Geology
744542	EBG; EBGt with fingers forming in northwest to southeast direction. Hosts WHITE ROCK MINFILE.
744562	EBG; with EBGq in the south 1/2.
744582	EBGp; EBG in SW corner; sliver of EBG in NW.
744602	EBG; EBGp in north 1/3. Hosts new discovery SILVERGAL showing.
759003	EBG; and EBGq in a finger on SW corner. Hosts SILVER MINNOW MINFILE.
767042	EBQ in center and east half; EBGp in SW corner and NW corner.
767062	EBG; EBGp in NW corner.
767102	EBG; EBGq in NE corner.
767123	EBG; EBGq in a NW to SE sliver in middle of claims.
840411	EBG; EBP? in a sliver on SW corner (see note below).
840413	Complex geology; EBG predominately with sliver of EBGt, EBA, EBP, EBQ.
840415	EBG; EBP? in sliver on west boundary (see note below).
840417	EBQ; with EBG on south 1/4; EBGp in sliver on east boundary.

840418	EBG.
844642	EBP on SW half; EBA on NE half.
844643	EBP; EBPv finger on north boundary.
844644	EBP; lFu of Fennell Formation on extreme west boundary.
844645	EBP? (see note below); lFu of Fennell Formation on extreme NW boundary.
844646	EBP? (see note below); EBF sliver on SW corner.
844647	EBP? on East half (see note below); EBF on west half.
NOTE:	*Tenures 840411, 840415, 844645, 844646, and 844647 have a portion classified as EBP? as the map Figure 4 (Schiarizza and Preto Dec 1987) specifically classify the geologic unit. In Figure 5 of (Schiarizza and Preto Dec 1987) Cross Section D describes the area as EBP therefore EBP is used in this table.*

B. 2014/2015 EXPLORATION METHODS, WORKS AND OBJECTIVES:

Sampling methods, works and objectives are discussed in the following 6 sections:

1. **Sampling Methods and Analysis Procedures**
2. **Stream Sediment Surveys**
3. **Moss Mat Surveys,**
4. **Soil Sampling**
5. **Rock Samples**
6. **Assay and Analytical Procedures.**

1. Sampling Methods and Analysis Procedures:

Sample locations were marked with winter weight survey ribbon, and/or an aluminum tag or white Tyvek tag. In most circumstances the interval between sample locations was marked with "candy stripe orange & black" survey ribbon, and each sample site was marked with florescent orange or florescent pink ribbon.

A Garmin 60CSx was used to collect Global Position System (GPS) waypoints. GPS data was collected using the Universal Transverse Mercator Grid (UTM) in NAD 83 (or WGS84) and usually 4 or more satellites were used for waypoints unless narrow gullies, ravines, and heavy timber made waypoint collection problematic. Where the sample location is problematic, in terms of satellite reception (i.e. deep gully, forest cover), and only 2 satellites were obtained the UTM coordinates were interpolated from 3 adjacent waypoints by an iterative process, or by hip chain and compass bearing. Adjusted waypoints were confirmed by referencing the sample location on an orthographic map, at a scale of 1:5000, and/or re-confirming the location with prospecting field notes.

Sample waypoints were named according to the following naming convention:

- The Barriere Ridge claims had a prefix of "BR13__"; and the second 2 digits give the year.
- The Sprague Creek area had a prefix of "SG__".
- The SILVER MINNOW area had a prefix "SM__"
- Stream sediment sample waypoints – "_SS_" (i.e. BR13SS__).
- Moss Mat sediment sample waypoints – "_MM_" (i.e. BR13MM__).
- Soil or Till sample waypoints – "_T_" or "__T" (i.e. SGT__ or (i.e. "BR13__T".
- Float Rock sample waypoints – "_FT_ " (i.e. BR13FT__) or (i.e. BR13FL__).
- Rock sample waypoints – "_R_" (i.e. BR13_R__) and are associated with talus or outcrops.
- Grab sample waypoints – "_GR_" (i.e. BR13_GR__")
- Channel sample waypoints– "_CH_ " (i.e. BR13CH__)
- Quartz Veins waypoints – "_Q_" or "_QZ_" or "_QTZ_" (i.e. BR_QZ__) or (i.e. SG_QZ__")
- Limestone waypoints "_LIM_" or "_QLIM_" for quartz limestone.

Important samples sites were photographed with a digital camera for future reference. Rocks, outcrops and sample sites were photographed in the field, and then at home a close up of each sample rock (macro zoom) was taken before being assayed. Before sealing the sample bag for assay, a voucher specimen piece was taken from the sample bag, and marked and securely stored for future reference.

2. Stream Sediment Surveys:

Usually a stream sediment sample is collected in tandem with a moss mat sample because the moss mats tended to give more reliable data for gold anomalies.

Stream sediment surveys were collected using a clean plastic hand trowel, black/green plastic gold pan (40cm diameter), black plastic door screen (0.1 inch square), and kraft sample bags. Stream sediments were collected from the centre of the main stream channel. The trowel or D-handled spade was used to dig the gravels and sand from the creek bed and the material was dumped into a clean plastic gold pan which had been covered by the black plastic screen. Approximately 4.5 litres of gravel, sand, and silt were collected; sieved with a plastic screen, and lightly panned. Gravels were removed and discarded on the steam bank. The whole remaining sample was troweled or poured into a kraft sample bag. In some cases, the kraft bags were double bagged because they were too wet and would break. The location was GPS'd, and samples were air dried in Kamloops prior to assay at ALS Minerals in Kamloops.

To determine if stream sediment assay results were anomalous they were compared to statistical (90 percentile) references given in Lett, Jackaman, Englund April 2000.

3. Moss Mat Surveys:

Usually a moss mat sample is collected in tandem with a stream sediment sample because the stream sediment samples tended to give more reliable data for elements other than gold.

Moss mat samples were collected using methods recommended Open File 2000-23 (Lett, Jackaman, Englund April 2000), and based on numerous personal communications with Dr. Ray Letts a co-author. Moss mats were collected by hand from the main stream channel and from (overhanging or partially submerged) moss on the edge of the main water flow. The moss was attached to rocks, logs, and stream banks. Moss Mat samples were compacted tightly into white "cloth" linen-like bags. Approximately 4.0 – 5.0 litres of moss, organics, sands, and silts were collected. Large gravels and sticks were removed unless they were encrusted with sediments. In order to ensure moss mat samples were not cross contaminated while packing them out of the bush the moss mat bags were put into plastic bags. These plastic bags were removed at the vehicle so the samples would not become moldy prior to drying. The location was GPS'd, and samples were air dried in Kamloops prior to assay at ALS Minerals in Kamloops.

Based on recommendations in Open File 2000-23, moss mat sampling is a preferred sampling method for heavy sediments like gold. For the purposes of prospecting at each sample site both a stream sediment sample and a moss mat samples were collected. In the odd case, a moss mat was not collected due to the lack of suitable stream moss for collection purposes. There was no intent to conduct efficacy studies on the two sampling methods as part of this assessment report.

To determine if moss mat assay results were anomalous they were compared to statistical (90 percentile) references given in Lett, Jackaman, Englund April 2000.

4. Soil Sampling:

Surface soils (exposed in road cuts or skidder trails) containing color anomalies were observed in some locations. On a prospective basis, random soil samples were collected from the apparently altered soil. A shallow pit or hand trench (i.e. 0.5m x 0.5m x 0.4m) was dug with a grub hoe, geotul, or shovel. The soil sample was collected with a clean plastic hand trowel and put in a kraft soil bag. If samples were very wet they were double bagged to ensure

the samples was secure. The location was GPS'd and photographed; and samples were then air dried in Kamloops prior to assay at ALS Minerals in Kamloops. To determine if soil sample assay results were anomalous they were compared to statistical (90 percentile) references given in Open File 1997-9 (Bobrowsky, et al. 1999).

A hand held compass, hip chain, and a GPS unit were used to survey soil grids. Sample stations were marked with survey ribbon and/or Tyvek tags. Where possible, soil samples were taken with a hand powered soil auger except on rocky sites where a geotul or rock hammer was used to dig a small sampling pit.

In previously reported soil grids at BARRIERE RIDGE (i.e. SILVERGAL SOIL GRID and SILVER MINNOW SOIL GRID) stations were established using a "preset" UTM grid using a Garmin 60scx hand held GPS (25 metre interval). The strip lines were following a UTM easterly strip line. Periodically, a hip chain was used to measure the distance between samples to make sure the GPS working properly. This method was used to collect samples for the SPRAGUE SOIL GRID in the spring of 2015.

Where possible, soil samples were collected from the top of the B horizon (usually Bf, Bm, Bmf, or Bh) based on the reference *The Canadian System of Soil Classification* (1987) as well as the *Taxonomic Classification of Humus Forms in Ecosystems of British Columbia* (Klinka et al 1981).

5. Rock Samples:

Rock samples were collected using a geotul, rock hammer, sledge hammer or grub hoe. In certain cases small prospecting hand trenches (i.e. 0.5m x 0.5m x0.4m) were made to collect the sample. All samples were broken to a suitable size and collected in plastic samples bags secured with survey ribbon. The plastic bags were permanently marked for identification purposes and survey ribbon (sample no.) was placed inside the bag just in case the markings on the bag were rubbed off.

The location was GPS'd. The collection site and rocks were photographed with a digital camera, and again (macro zoom) prior to being sent to the assay lab for processing. Where necessary, field notes described the location of the samples and rough sketch maps were made of rock faces showing the detailed sample location. Care was taken to note if samples were a random sample, selective sample, channel sample, grab sample, glacial float sample, stream float sample, or from outcrop. Some rocks were collected, observed and not assayed. These rocks were discarded in a sensitive manner.

6. Assay and Analytical Procedures:

Assay and analytical work are done by ALS Minerals Canada following international certification practices. In the interest of brevity, refer to their website (http://www.alsglobal.com/en/Our-Services/Minerals) for more specific assay criterion; and also the information provided in the APPENDIX.

C. 2014 and Spring 2015- EXPLORATION AND ANALYTICAL RESULTS:

In February 28, 2013, the BARRIERE RIDGE option to Astral/Orex was terminated therefore, a fresh start was required to review and assemble all the related exploration work, exploration reports, literature, and proposed works.

In 2014 and early 2015, in general terms, exploration works involved as follows:

- Prospecting, sampling (rock, soil, stream), outcrop sampling, and geochemical assays.
- Analyzing geochemical assay results to test for first and second order anomalies.
- Physical work brushing the access and safe evacuation trail under a Free Use Permit – Mineral Exploration.
- The review of the Fugro airborne geophysical work and interpretations report including data and maps.

- The review and upload spatial files of the digital aerial photography by Photosat in to UDIG software.
- Field checking, and planning preparatory surveys, and geochemical survey work for 2014 and early 2015.
- Working with a company geologist (Dale Brittliffe, P.Geo.) related to interpreting geophysical results and maps.
- Determine the main owners (traditional First Nations) of the lands within the BARRIERE RIDGE claims.
- Communication, information share, and meet with First Nations.
- Communication with BC Timber Sales (ownership) concerning harvesting and road access for mineral exploration.
- Database management and update. Review and debug the BARRIRERE RIDGE database to search for errors or ommissions.
- Initiating a new GIS spatial software package called UDIG and importing BARRIERE RIDGE data into this new software.
- Literature searches and research (BCGS, GSC, Internet searches) concerning historic assessment work from government data sets and published literature related to the Eagle Bay Assemblege and Ag Pb Zn deposits.
- Review of historic literature and research concerning the geology and geochemistry of the BARRIERE RIDE claims. A number of new publications were added to the bibliography and government websites were used for example: "Property File, etc".
- Review literature related to the Ag Pb Zn limestone/dolostone deposits.

Exploration work was completed by David J. Piggin from April 4, 2014 to June 13, 2015. A detailed cost summary is at the end of this report just before the APPENDICIES. The Mineral Claim Exploration and Development Work/Expiry Date MTOnline documents were recorded under EVENTS 5549825 and 5559739 as shown in the following table.

TABLE 17: Cost Summary by EVENT Number: A cost summary is presented at the end of this report before the APPENDIX.

Event No.	Date	Area (hectares)	Total Value of Work($)	PAC Account ($)	Total Applied Work Value ($)
5549825	April 4, 2015	8,307.9800	$ 14,346.32	NIL	$ 14,346.32
5559739	June 23, 2015	3719.4583	$ 30,541.94	NIL	$ 30,541.94
5568243	Aug 29, 2015	3719.4583	$ 1, 222.83		$ 1, 222.83
TOTAL EXPENDITURES		**8,307.9800 hectares**	**$ 46,111.09**	**NIL**	**$ 46,111.09**

In general terms, all exploration works (where applicable) are given in the APPENDICIES for example: overview maps, the general location of prospecting work, detailed maps showing sampling locations and anomalous results, as well as assay results. The following is a brief summary of the works completed:

Summary of 2014 and Spring 2015 Exploration and Results:

- Total Applied Work Value $ 46,111.09 on 8,307.9800 hectares.
- A total of 45 samples (19 rock, 26 soil) were collected of which 18 rock samples were assayed. The remaining samples (1 rock, 26 soil) will be assayed in 2015/2016 due to a lack of funds; and reported in a future assessment report.
- Collated and mapped anomalous results.
- The **SILVER TRAIL Showing** – Ag Pb Zn (within Tenure 744542) was discovered June 9, 2014 in a limestone or dolostone with galena and malachite mineralization situated in quartz veinlets and galena veinlets. The best results were as follows:
  10E41081_BR14R73:
  Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent
  10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm
  10E41077_BR14R70: Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm

10E41083_BR14R75: Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm
10E41078_BR14R71: Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm
The showing was located in the cutslope of a mineral exploration trail. A total of 6 soil samples were collected (northerly-southerly line, 140 metres) and will be assayed in 2015/2016.

- **Sprague Creek – Gold in Soils:** Strip Line A of the SPRAGUE1 Soil Grid was surveyed (500 metres) and sampled within Tenure 644845. 20 Samples were collected, and have not been assayed yet. The samples were collected to assess a previously reported (ARIS 34651) Gold In Soils anomaly discovered about 950 metres north of Sprague Creek. **10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm** . Also, the RGS stream sediment on Sprague Creek indicates the creek is anomalous for gold **82M765098: Au 16 ppb; As 22 ppm; Ba 1400 ppm; Cu 41 ppm; Cr 200 ppm; Ni 65 ppm; Zn 89 ppm**. This grid will be expanded in 2016.
- **Prospected** recently logged areas and new roads for rock and soil anomalies; and outcrop exposures.
- **Physical Work:** 1750 metres of exploration trail was brushed and small trees removed with chainsaws and axes for safety, evacuation, and mineral exploration access to the SILVER MINNOW, SILVERBOY, SILVER TRAIL, BRECCIA ZONE, and other showings on the BARRIERE RIDGE Claims. The trees were cut under Free Use Permit F20815 - Mineral Exploration.
- **Fugro**: Reviewed the report: *"Magnetic and EM Interpretation Airborne Magnetic and HeliTEM Survey BARRIERE RIDGE and HONEYMOON Blocks British Columbia - Job No. 12578"* dated February 2013.
- **Fugro:** Reviewed the reprocessing and targeting study "*Magnetic and EM Interpretation Airborne Magnetic and HELITEM Survey - BARRIERE RIDGE AND HONEYMOON Blocks, British Columbia - Job No. 12578"* dated February 2013.
- **Research:** Conducted literature and general research for publications related to the Eagle Bay Asemblege and Ag Pb Zn deposits (i.e. Geoscience BC, BC Geological Survey, websites).
- **FIRST NATIONS Letter 2015.** First Nations information letter/package was completed and submitted to each First Nation on April 29, 2015. The letter had 4 pages plus a 6 page BARRIERE RIDGE summary. The package included an overview summary with maps, tenure information, proposed works, and other information. This letter was sent as follow-up to First Nation letters sent in 2013 and 2014, various First Nations meetings, and telephone conversations.
- **Ministry of Forest, Lands, and Natural Resource Operations' (MFLNRO) and BC Timber Sales:** Coordinated brushing and tree cutting with the MFLNRO and BCTS through email and office visit(s).
- **Database management and update:** Continued to update and work on an EXCEL database.

Details of 2014 and Spring 2015 Exploration and Results:

Discussion of the 2014 and spring 2015 exploration work is provided here in the following six sections:

1. ROCK SAMPLES: (a) SILVER TRAIL Discovery. (b) 300 Metres North of Sprague Creek.
2. SOIL SAMPLES: (a) SILVER TRAIL Discovery. (b) Sprague Creek – Gold In Soils.
3. Stream Sediment Samples.
4. Fugro Airborne Geophysics/Intrepretation Report (Anomalous Rock, Soil, and Stream Samples).
5. First Nations.
6. Physical Work.

1. ROCK SAMPLES:

A total of 19 rock samples were collected; and 18 were assayed. The samples were collected in two separate areas: the **SILVER TRAIL Showing**, and **300 Metres North of Sprague Creek**. A complete list of the sample tag numbers, GPS coordinates, rock descriptions, detailed location maps (1:10,000), anomalous results, and assay certificates are given in the APPENDICIES. A list of selected anomalous results for certain selected elements, including photographs, is given in the sections below as follows: **SILVER TRAIL Discovery**, and **300 Metres North of Spague Creek** (Tenure 844645).

(a) <u>SILVER TRAIL Discovery</u>: A new Ag Pb Zn discovery [Zone 11. 298003.448 E. 5686986.491 N.] called the SILVER TRAIL Showing was made on June 9, 2014. The Ag Pb Zn mineralization was in a limestone or dolostone, quartz veinlets, malachite, galena blebs and veinlets, and possible Ag. The following two samples were the best results.
10E41081_BR14R73:
Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent
10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm

The showing was located in the cutslope of an exploration access trail used to access the SILVER MINNOW MINFILE showing. The following is a brief summary of rock samples collected, results and anomalous results.

TABLE 18: SILVER TRAIL ROCK SAMPLES: See photographs given in the following pages; and also the detailed list of all the rock and soil samples collected including GPS locations, assay certificate(s), results, and descriptions which is given in the APPENDICIES.

Sample Tag; and Waypoint Name	Comments	Anomalous Results (in Bold); and Other Results
10E41081_BR14R73	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, malachite sheet, galena blebs and veinlets, possible Ag	**Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent**
10E41085_BR14R77	Silver Trail Showing: trail cut slope outcrop; limestone or dolostone, white quartz veinlets, galena blebs	**Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm**
10E41077_BR14R70	Silver Trail Showing: trail cutslope; tan to light brown limestone or dolostone, quartz veinlets, malchite, galena blebs and veinlets	**Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm**
10E41083_BR14R75	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, malachite, galena veins and blebs, possible Ag	**Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm**
10E41078_BR14R71	Silver Trail Showing: trail cutslope; tan to light brown limestone or dolostone, quartz, veinlets, malchite, galena	**Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm**
10E41084_BR14R76	Silver Trail Showing: trail cut slope outcrop; limestone or dolostone, quartz veinlets, malachite possible galena and silver	**Ag 7.68 ppm; Ca 21.4 percent; Mg 11.55 percent; Pb 448 ppm**
10E41082_BR14R74	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, no visible malachite galena	Ca 20.4 percent; Mg 11.1 percent; Zn 856 ppm
10E41079_BR14R72	Silver Trail Showing: trail cutslope colluvium boulder 80x67x50cm, limestone quartz veinlets, malachite	Ca 24.4 percent
10E41080_BR14R72A	Silver Trail Showing: trail cutslope colluvium boulder 80x67x50cm, limestone quartz veinlets, malachite	Ca 17.15 percent
Br14R80	Silver Trail Showing: trail cutslope outcrop; tan to light brown limestone or dolostone, galena veinlets and blebs, malachite, possible Ag, hand trench 0.5m x 1m x 0.12m	**not assayed yet; visible galena and malchite, possible silver. To be assayed.**

Also, a total of 6 soil samples were collected immediately adjacent to the SILVER TRAIL showing and these samples are discussed in a following section titled **2. SOIL SAMPLES**. The following are a number of overview and/or detailed photographs of selected samples from the SILVER TRAIL Showing **TABLE 18** given above

ILLUSTRATION #18: Overview of the SILVER TRAIL Showing giving sample locations and anomalous results. The showing is situated on the cut slope of an exploration trail. Limestone with quartz veins, veinlets, and stockwork. IMG_1822_10E41081_BR14R73_10E41082_BR14R74_10E41083_BR14R75.jpg

ILLUSTRATION #19: SILVER TRAIL Showing – sample close-up **10E41081_BR14R73 - Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent.** IMG_1863_10E41081_BR14R73.jpg

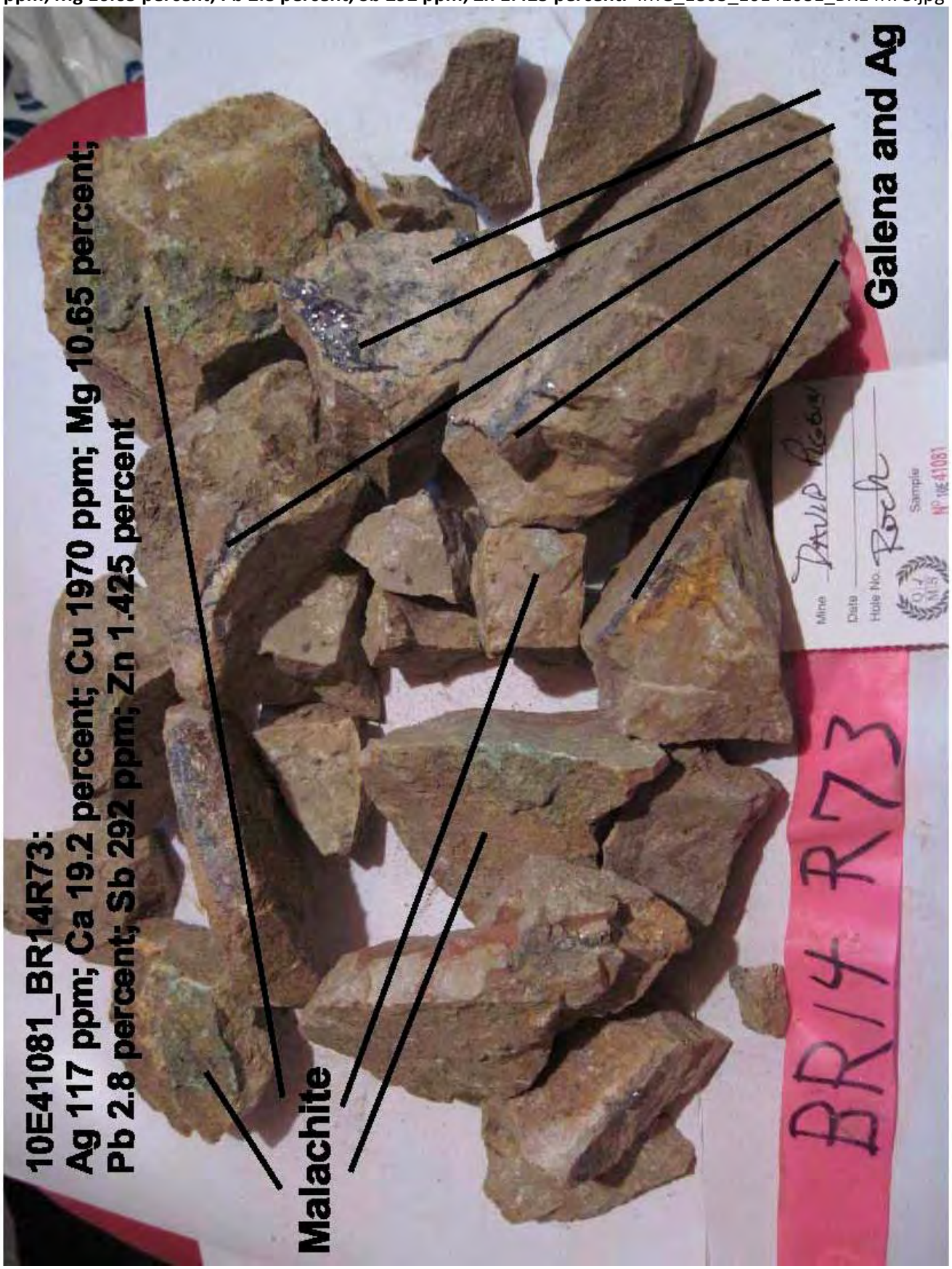


ILLUSTRATION #20: SILVER TRAIL Showing - macro-zoom of sample **10E41081_BR14R73 - Ag 117 ppm; Ca 19.2percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent.**
IMG_1864_10E41081_BR14R73.jpg

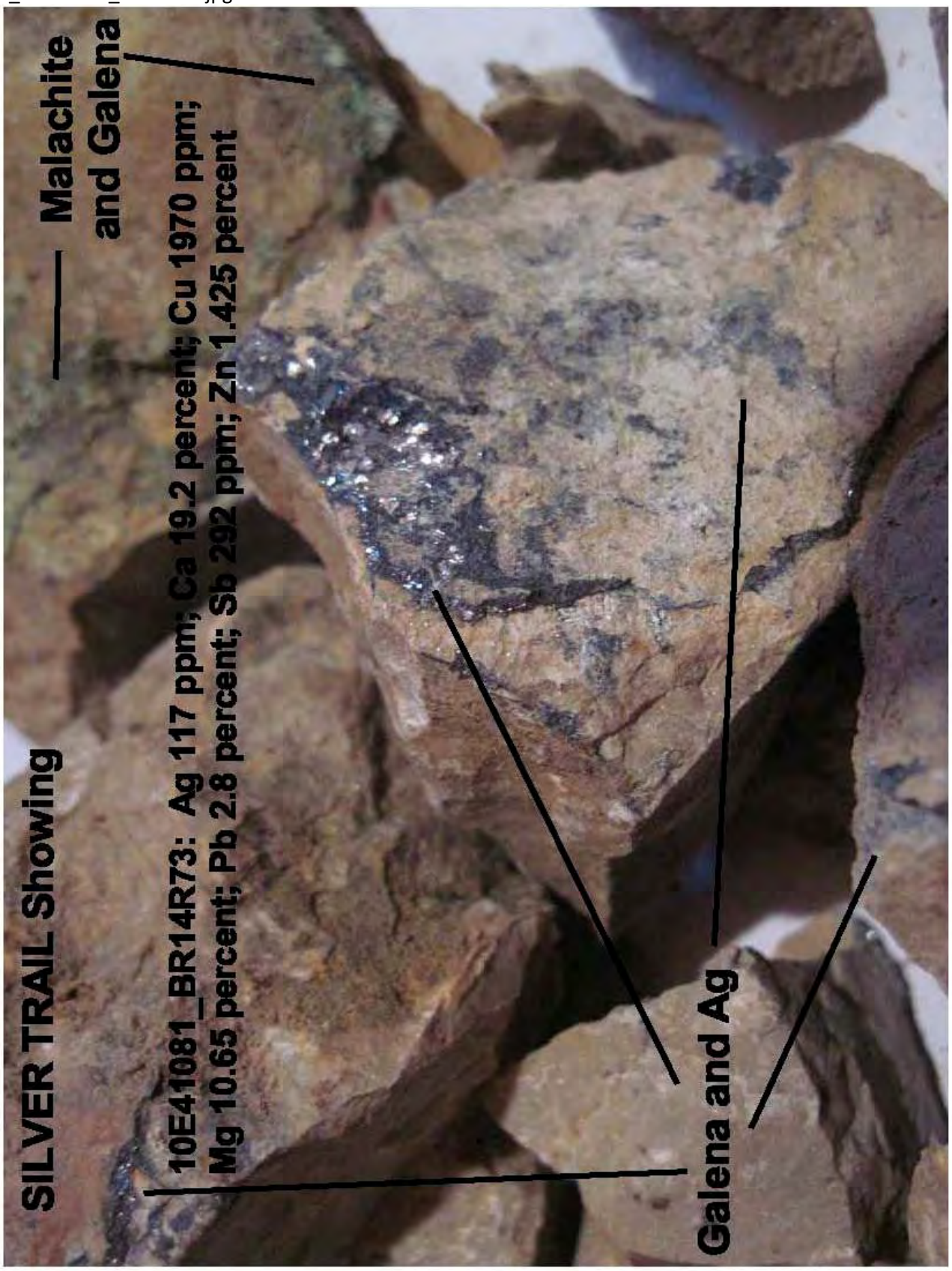


ILLUSTRATION #21: SILVER TRAIL Showing - sample **10E41085_BR14R77- Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm.** IMG_1907_10E41085_BR14R77.jpg

ILLUSTRATION #22: SILVER TRAIL Showing - sample **10E41077_BR14R70- Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm**. IMG_1833_10E41077_BR14R70.jpg

ILLUSTRATION #23: SILVER TRAIL Showing - sample **10E41083_BR14R75- Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm.** IMG_1881_10E41083_BR14R75.jpg

ILLUSTRATION #24: SILVER TRAIL Showing - sample 10E41083_BR14R75- Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm. IMG_1882_10E41083_BR14R75.jpg

ILLUSTRATION #25: 18 metres south of SILVER TRAIL Showing - sample **10E41078_BR14R71 - Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm.** IMG_1835_10E41078_BR14R71.jpg

ILLUSTRATION #26: Close-up of SILVER TRAIL Showing giving sample location for 10E41084_BR14R76 showing quartz veins and veinlets in limestone or dolostone. IMG_1828_10E41084_BR14R76.jpg

ILLUSTRATION #27: SILVER TRAIL Showing - sample **10E41084_BR14R76 - Ag 7.68 ppm; Ca 21.4 percent; Mg 11.55 percent; Pb 448 ppm**. IMG_1894_10E41084_BR14R76.jpg

(b) **<u>300 Metres North of Sprague Creek</u>:** (within Tenure 844645)**:** Sprague Creek has a Regional Stream Sediment Sample (82M765098) with anomalous gold and silver values:
82M765098: Au 16 ppb; As 22 ppm; Ba 1400 ppm; Cu 41 ppm; Cr 200 ppm; Ni 65 ppm; Zn 89 ppm.

During routine prospecting for the source of the gold/silver an area of scattered very-rusty quartz float was found on or adjacent to a log landing. A total of 9 rock samples were collected and assayed including rusty quartz as

well as host rock. None of these samples returned anomalous results therefore, no further exploration is scheduled for this location at this time.

ILLUSTRATION #28: Overview of a few select quartz float rock samples 300 Metres North of Sprague Creek (Tenure 844645). None of the samples collected were anomalous for gold or silver. See also **TABLE 19** below.

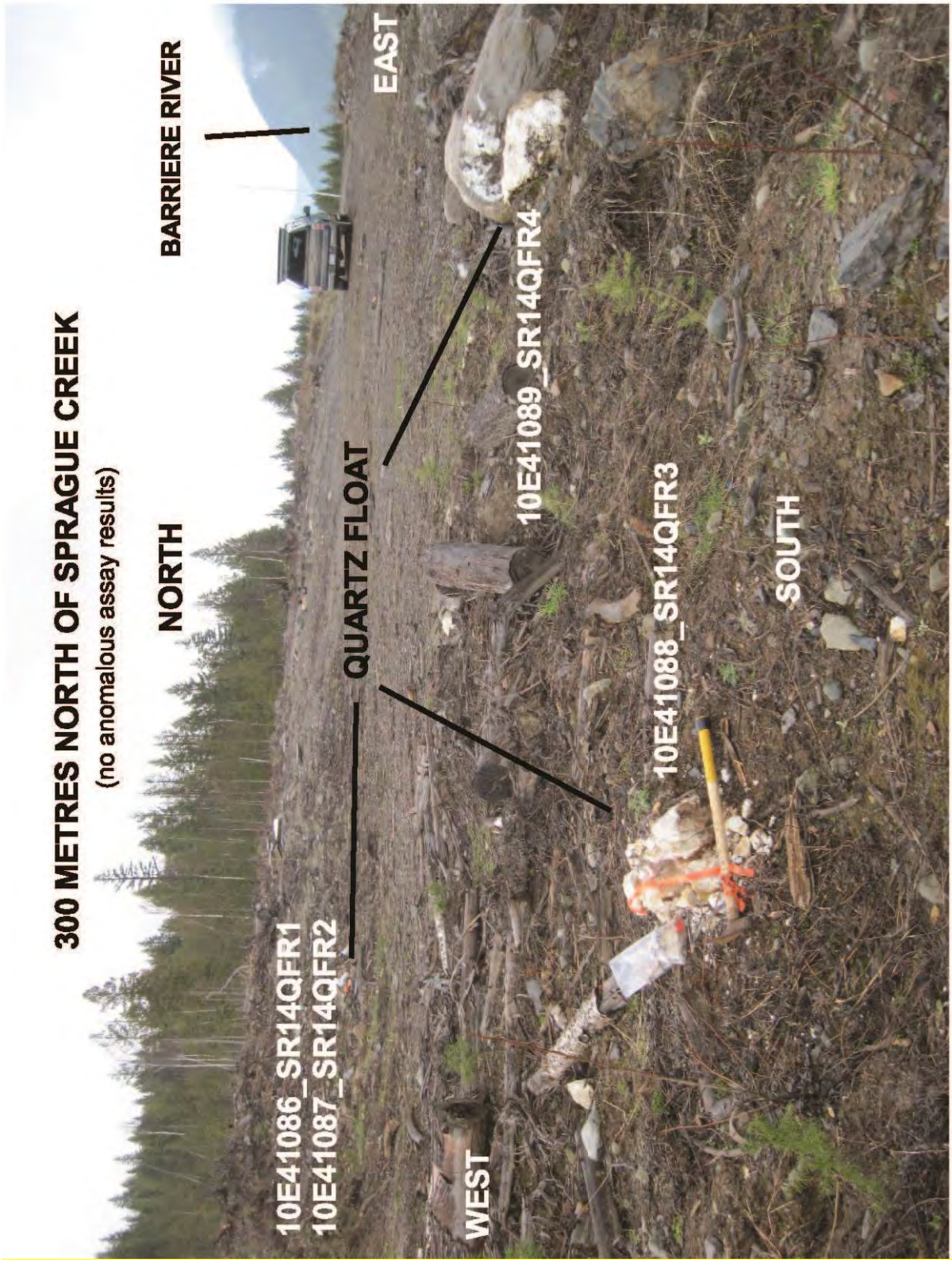


TABLE 19: 300 METRES NORTH OF SPRAGUE CREEK - ROCK SAMPLES: See photographs given in the following pages; and also the detailed list of all the rock and soil samples collected including GPS locations, assay certificate(s), results, and descriptions which is given in the APPENDICIES.

Sample Tag; and Waypoint Name	Comments	Anomalous Results (in Bold); and Other Results
10E41094_SR14HFR9	surface float; greyish brown, fine grained, salicious with rusty flecks, 1-5% pyrite cubes, hosting 1cm smokey quartz veins	No anomalous results; Au 2 ppb; Ag 0.1 ppm; Al 4.29 percent; As 35.5 ppm; Cu 15.2 ppm; Fe 2.24 percent; Zn 45 ppm
10E41091_SR14HR6	surface float; greyish brown, fine grained, salicious with rusty flecks, pyrite cubes, hosting 1cm smoke+white quartz veins	No anomalous results; Au 1 ppb; Ag 0.08 ppm; Al 3.34 percent; As 14.6 ppm; Cu 12.4 ppm; Fe 2.09 percent; Zn 82 ppm
10E41093_SR14HR8	surface float; grey, fine grained, salicious with rusty flecks, pyrite cubes, hosting 1cm smokey quartz veins	No anomalous results; Au 2 ppb; Ag 0.13 ppm; Al 4.36 percent; As 23.2 ppm; Cu 27.3 ppm; Fe 2.52 percent; Zn 79 ppm
10E41086_SR14QFR1	surface float; white quartz vein with pyrite, rusty vugs	No anomalous results; Au 10 ppb; Ag 0.21 ppm; Al 0.29 percent; As 34.7 ppm; Cu 18.8 ppm; Fe 2.69 percent; Zn 54 ppm
10E41087_SR14QFR2	surface float; white quartz vein with pyrite, rusty vugs	No anomalous results; Au 6 ppb; Ag 0.08 ppm; Al 0.6 percent; As 9.1 ppm; Cu 21.9 ppm; Fe 2.06 percent; Zn 41 ppm
10E41088_SR14QFR3	surface float; white quartz vein with pyrite, rusty vugs	No anomalous results; Au 2 ppb; Ag 0.06 ppm; Al 0.64 percent; As 6.5 ppm; Cu 18.5 ppm; Fe 1.2 percent; Zn 60 ppm
10E41089_SR14QFR4	surface float; white quartz vein with pyrite, rusty vugs	No anomalous results; Au 5 ppb; Ag 0.04 ppm; Al 0.36 percent; As 19.5 ppm; Cu 10.7 ppm; Fe 1.52 percent; Zn 50 ppm
10E41090_SR14QFR5	surface float; white quartz vein with pyrite, rusty vugs	No anomalous results; Au 4 ppb; Ag 0.04 ppm; Al 0.24 percent; As 11.6 ppm; Cu 7.3 ppm; Fe 0.85 percent; Zn 11 ppm
10E41092_SR14QFR7	surface float; greyish brown, fine grained, salicious with rusty flecks, 5-10% pyrite cubes, hosting 1cm smokey quartz veins	No anomalous results; Au 4 ppb; Ag 0.07 ppm; Al 4.54 percent; As 89.2 ppm; Cu 7.3 ppm; Fe 2.67 percent; Zn 35 ppm

2. SOIL SAMPLES:

A total of 26 soil samples were collected; and they have not been assayed yet. The samples were collected in two separate areas: the **SILVER TRAIL Showing** (6 samples), and **Sprague Creek – Gold In Soils** (20 samples) about 950 metres north of Sprague Creek (within Tenure 844645). A complete list of the sample tag numbers, GPS coordinates, rock descriptions, detailed location maps (1:10,000), anomalous results, and assay certificates are given in the APPENDICIES. A list of selected anomalous results for certain selected elements, including photographs, is given in the sections below in two parts as follows: **SILVER TRAIL Discovery**, and **Sprague Creek – Gold In Soils**.

(a) SILVER TRAIL Discovery: A total of 6 soil samples were collected at the SILVER TRAIL Discovery to test the presence or absence of Ag Pb Zn or other pathfinder elements in local soils for future soil grids. These samples have not been assayed yet. Additional soil samples will be collected in late 2015 and 2016.

Since the SILVER TRAIL Discovery is located in the cutslope of a mineral exploration access trail, the 6 soil samples were collected along the road in a northerly-southerly direction. The sample line bisects the SILVER TRAIL and

the stations are about 50 metres apart by “road distance” therefore, the horizontal distance between samples varied. Total distance surveyed was 140 metres. The following is a picture of the samples collected.

ILLUSTRATION #29: Soil Samples bags (6) collected in a northerly-southerly direction at SILVER TRAIL Discovery; and along the access trail. These samples not assayed yet. Sample locations and descriptions are given in the APPENDICIES. (20150816_132322.jpg)

(b) <u>SPRAGUE CREEK – GOLD IN SOILS</u>: (950 metres north of Sprague Creek - Tenure 844645)

As previously reported in ARIS Report 34651, near the north boundary of Tenure 844645 about 950 metres north of Sprague Creek, 3 soil samples were collected that were anomalous for gold. This is in an area of major faulting since the contact between the Slide Mountain Terrane and the Kootenay Terrane is about 1.3 km to the west; and also the Barriere River Fault and Haggard Creek Fault are about 1.8 km to the east.

10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm.
10E41061_SR13QT3: Au 9.8 ppb; As 24 ppm; Ni 71.1 ppm
10E41060_SR13QT2: Au 7.3 ppb; As 30.3 ppm; Ba 220 ppm; Cu 61.5 ppm; Fe 4.45 %; Ni 91.3 ppm; Zn 107 ppm;

These 3 samples were collected 25 metres apart in a soil with numerous chunks and pieces of rusty quartz. The underlying bedrock was a dark bluey-grey colored (rusty on bedding surfaces) meta-sediment [EBP].

Sprague Creek is anomalous for gold based on the Regional Stream Sediment Sample:
82M765098: Au 16 ppb; As 22 ppm; Ba 1400 ppm; Cu 41 ppm; Cr 200 ppm; Ni 65 ppm; Zn 89 ppm.
Therefore, we have 2 independent gold anomalies pointing to a gold source in the Sprague Creek drainage. A geochemical soil grid was recommended for 2015 and 2016.

In 2014 and 2015, a soil grid spreadsheet was calculated using UTM coordinates (100 metres between strips, 25 metres between samples). The grid strip lines were set in a westerly-easterly direction because the estimated ice direction was north to south. The strip lines were planned to bisecting (west-east) across sample **10E41059_SR13QT1** and the Strip Lines were numbered based on the "Northerly" UTM Coordinate. This primary Strip Line was set in Zone 11 and on the line for 5685800 northerly (Strip Line A).

In the spring of 2015, one strip line of 20 soil samples was completed and called Strip Line A (500 metres long). The samples names were prefixed by the letter **"A"**, and the station number was based on the "Easterly" UTM coordinate (e.g. A293600). The samples were collected with a soil auger and were numbered A293600 to A294100. These samples have not been assayed. Station A293850 landed on the fill slope of the road and therefore, no sample was collected.

A complete list of the sample numbers, GPS coordinates, elevations, descriptions, and detailed location maps (1:10,000) are given in the APPENDICIES. The samples will be assayed in 2015/2016 as funding is available.

ILLUSTRATION #30: Strip Line A - 20 samples bags were collected in a westerly-easterly direction at Sprague Creek – Gold In Soils. Strip Line A was located on 5685800 northerly; and the stations were on 25 metre centres from 293600 easterly to 294100 easterly. Samples not assayed yet. Sample locations and descriptions are given in the APPENDICIES. (20150816_141604.jpg)

3. STREAM SEDIMENT SAMPLES:

No stream sediment or moss samples were collected for this report.

4. Fugro Airborne Geophysics/Intrepretation Report (Anomalous Rock, Soil, and Stream Samples).

There is a need to compare, contrast, interpret, and field check the results of the Fugro Airborne Geophysics Report and follow-up Interpretations Report, using a spatial GIS database, with the following data included:

- Anomalous rock, soil, and stream sediment assay results from ARIS 32383, 33190, 33744, 34651.
- Anomalous rock and soil assay results from this report.
- Historical data and geological mapping from old ARIS reports where appropriate.
- Historical data collected by David Piggin for a Prospector Assistance Grant #98/99 P94 (1998-43).
- Existing geological mapping.
- Existing fault and structural information.
- Additional geological mapping that may done in 2015/2016.

Outputs from this spatial information would be used to prioritize exploration areas for further targeting, prospecting, geochemical and ground geophysical surveys, trenching and drilling; and to provide a framework to field test various geophysical and structural anomalies identified by the Fugro Airborne Survey and Interpretation Report.

5. FIRST NATIONS:

A number of written, telephone, and face-to-face meetings were held with First Nations to assess areas of ownership, traditional use, concerns, and proposed mineral exploration works.

Based on current government information, the following First Nations may have aboriginal interests in the BARRIERE RIDGE mineral tenure(s) area. This is a preliminary First Nations contact list and should not be considered conclusive.

- North Thompson – Simpcw First Nation, Chief and Council, PO Box 220, Barriere, British Columbia, V0E 1E0
  Phone: 250-672-9995, Fax 250-672-5858
- Adams Lake Indian Band, Chief and Council, Hillcrest Road, PO Box 588, Chase, British Columbia, V0E 1M0
  Phone: 250-679-8841, Fax: 250-679-8813
- Neskonlith First Nation, Chief and Council, PO Box 608, Chase, British Columbia, V0E 1M0
  Phone: 250-679-3295, Fax 250-679-5306
- Little Shuswap First Nation, Chief and Council, PO Box 1100, Chase, British Columbia, V0E 1M0
  Phone: 250-679-3203, Fax 250-679-3220

In 2011 and 2012, a number of informal meetings, telephone conversations, and informational letters were shared with First Nations. A two day First Nations sponsored workshop was attended by David J. Piggin and Dale Brittliffe, P.Geo (OREX/Astral) which was held at the Quaaout Lodge and Spa, 1663 Little Shuswap Road in Chase, B. C. [250-679-3090] which is located on the Little Shuswap Firs Nation reserve.

FIRST NATIONS letter 2013: A First Nations information letter/package was completed and submitted to each First Nation between May 17, 2013 and May 19, 2013. The letter was 3 pages plus an overview tenure map. The package included a detailed summary with maps and photographs of the BARRIERE RIDGE claims including geology and exploration works (25 pages).

FIRST NATIONS letter 2014: A First Nations information letter/package was completed and submitted to each First Nation on February 26, 2014. The letter had 3 pages plus an overview tenure map. The package included a detailed summary with maps and photographs of the BARRIERE RIDGE claims including geology and exploration works (25 pages). In 2014, meetings were held with Simpcw First Nations, Little Shuswap First Nation, and the Adams Lake Band.

FIRST NATIONS letter 2015: A First Nations information letter/package was completed and submitted to each First Nation on April 29, 2015. The letter had 4 pages plus a 6 page BARRIERE RIDGE summary. The package included an overview summary with maps, tenure information, proposed works, and other information.

6. PHYSICAL WORK:

The proposed physical work was communicated in writing to First Nations through an annual communications letter dated February 26, 2014 and during follow-up telephone and personal visits.

On April 25, 2014, David J. Piggin obtained Free Use Permit (FUP) F20815 - Mineral Exploration for the following purpose (see map in APPENDICIES):

"To clear existing road surface of ingrowth, and to fell danger trees in the vicinity of the road, and to fell trees to make seven (7) turnouts or turn-arounds suitable for a pick-up truck"

FUP F20815 was entirely within Tenure 744542; and covered the 4x4 access road into DL4023 KDYD WHITE ROCK MC. This old exploration trail (1980s) required brushing to provide safety, evacuation, and mineral exploration access to the SILVER MINNOW, SILVERBOY, SILVER TRAIL, BRECCIA ZONE, and other showings on the BARRIERE RIDGE Claims.

Most of the work was completed by David J. Piggin, Judy Burr, and Leonard P. Piggin in June 2014 with some follow-up work completed in summer 2014 and in spring 2015. Two personal chainsaws were used plus chainsaw protective chaps, hard hats, and ear/eye protection. Chainsaws were also rented from Jasco Rentals ($70.78 per day) in Kamloops. An estimated 1750 metres of access trail was successfully and safely brushed-out including turn-arounds.

At the Ministry of Forest, Lands, and Natural Resource Operations' (MFLNRO) direction some firewood sized pieces were removed from the site (5 pickup truck loads); and were given (free) to a local Kamloops resident that had ran out of firewood the previous winter, and had limited ability or finances to obtain their own firewood.

III – CONCLUSIONS AND RECOMMENDATIONS:

The following conclusions and recommendations were made based on the exploration work completed by David J. Piggin, from April 4, 2014 to June 13, 2015 on the BARRIERE RIDGE claims. Total Applied Work Value $ 46,111.09 and PAC Account moneys were not used. The Mineral Claim Exploration and Development Work/Expiry Date MTOnline documents were recorded under EVENTS 5549825, 5559739, and 5568243.

Results, conclusions and recommendations from three previous ARIS reports 32383, 33190, 33744, 34651 should be considered along with the conclusions and recommendations of this report.

SUMMARY:

Based on 2011/2012 Fugro Airborne Geophysics Survey; the Fugro Interpretations Report from 2013; the discovery of the high grade Ag Pb Zn – SILVERBOY Showing; SILVERGAL Showing; SILVER TRAIL Showing; the breccia area showings;

the discovery of the Sprague Creek – Gold in Soils anomaly; various MINFILE occurrences; the results of this report and previous (ARIS 32383, 33190, 33744, 34651) exploration works to date; further exploration work is warranted. The highest priority targets are as follows:

- The Ag Pb Zn SILVER MINNOW, SILVERBOY, and Breccia Area.
- The Ag Pb Zn SILVERGAL Showing area.
- The Ag Pb Zn SILVER TRAIL Showing.
- The under explored area between the SILVER MINNOW, SILVERBOY, SILVER TRAIL, and SILVERGAL.
- Follow-up anomalies in soil grids SILVERGAL1, SILVER MINNOW1, other prospecting anomalies.
- Completion of the proposed SILVERMINNOW2 grid.
- Sprague Creek-Gold in Soils area. **10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm**.

Exploration should include as follows: prospecting, prospecting and sourcing known soil anomalies; geological mapping; spatial database management; soil, stream, and outcrop sampling; ground geophysics surveys; ground truth Airborne Geophysical Survey results and interpretations; trenching; and drilling as well as First Nations consultation. A five year program of $1,500,000 is recommended commencing in the summer and fall of 2015, and 2016.

EXPLORATION WORK COMPLETED 2014 and Spring 2015:

The following is a brief summary of the works completed:

- Total Applied Work Value $ 46,111.09 on 8,307.9800 hectares.
- A total of 45 samples (19 rock, 26 soil) were collected of which 18 rock samples were assayed. The remaining samples (1 rock, 26 soil) will be assayed in 2015/2016 due to a lack of funds; and reported in a future assessment report.
- Collated and mapped anomalous results.
- The **SILVER TRAIL Showing** – Ag Pb Zn (within Tenure 744542) was discovered June 9, 2014 in a limestone or dolostone with galena and malachite mineralization situated in quartz veinlets and galena veinlets. The best results were as follows:
  10E41081_BR14R73:
  Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent
  10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm
  10E41077_BR14R70: Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm
  10E41083_BR14R75: Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm
  10E41078_BR14R71: Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm
  The showing was located in the cutslope of a mineral exploration trail. A total of 6 soil samples were collected (northerly-southerly line, 140 metres) and will be assayed in 2015/2016.
- **Sprague Creek – Gold in Soils:** Strip Line A of the SPRAGUE1 Soil Grid was surveyed (500 metres) and sampled within Tenure 644845. 20 Samples were collected, and have not been assayed yet. The samples were collected to assess a previously reported (ARIS 34651) Gold In Soils anomaly discovered about 950 metres north of Sprague Creek. **10E41059_SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm** . Also, the RGS stream sediment on Sprague Creek indicates the creek is anomalous for gold **82M765098: Au 16 ppb; As 22 ppm; Ba 1400 ppm; Cu 41 ppm; Cr 200 ppm; Ni 65 ppm; Zn 89 ppm**. This grid will be expanded in 2016.
- **Prospected** recently logged areas and new roads for rock and soil anomalies; and outcrop exposures.
- **Physical Work:** 1750 metres of exploration trail was brushed and small trees removed with chainsaws and axes for safety, evacuation, and mineral exploration access to the SILVER MINNOW, SILVERBOY, SILVER TRAIL, BRECCIA ZONE, and other showings on the BARRIERE RIDGE Claims. The trees were cut under Free Use Permit F20815 - Mineral Exploration.
- **Fugro**: Reviewed the report: *"Magnetic and EM Interpretation Airborne Magnetic and HeliTEM Survey BARRIERE RIDGE and HONEYMOON Blocks British Columbia - Job No. 12578"* dated February 2013.
- **Fugro:** Reviewed the reprocessing and targeting study "*Magnetic and EM Interpretation Airborne Magnetic and HELITEM Survey - BARRIERE RIDGE AND HONEYMOON Blocks, British Columbia - Job No. 12578"* dated February 2013.

- **Research:** Conducted literature and general research for publications related to the Eagle Bay Asemblege and Ag Pb Zn deposits (i.e. Geoscience BC, BC Geological Survey, websites).
- **FIRST NATIONS Letter 2015.** First Nations information letter/package was completed and submitted to each First Nation on April 29, 2015. The letter had 4 pages plus a 6 page BARRIERE RIDGE summary. The package included an overview summary with maps, tenure information, proposed works, and other information. This letter was sent as follow-up to First Nation letters sent in 2013 and 2014, various First Nations meetings, and telephone conversations.
- **Ministry of Forest, Lands, and Natural Resource Operations' (MFLNRO) and BC Timber Sales:** Coordinated brushing and tree cutting with the MFLNRO and BCTS through email and office visit(s).
- **Database management and update:** Continued to update and work on an EXCEL database.

THE DETAILS, PROPOSED EXPLORATION WORK:

A five year program of $1,500,000 is recommended commencing in the summer and fall of 2015, and 2016.

1. HIGH PRIORITY TRENCHING AND DRILLING AREAS.

It is recommended the following high priority - main showings be trenched and drilled:

- **SILVERGAL Showing:** In 2011,
  Sample 10E41157 BR11Q9C: Ag 220 g/t, Pb 12.4 percent, Bi 270 ppm, Cr 202 ppm, S 1.69 percent, Se 110 ppm
  Sample 10E41160 BR11Q9D: Ag 172 g/t, As 600 ppm, Cu 7470 ppm, Pb 795 ppm, Sb >2000 ppm, Zn 3076 ppm

- **MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL):** In 1925**, Ag 927 g/t Au 0.69 g/t.** In 2011,
  Sample 10E41181 SMQCH7: Ag 171 ppm; Pb 14.4 percent; Zn 6490 ppm (over 1 m)

- **SILVERBOY Showing:** In 2013 sample,
  10E41072 SM13R2:
  Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm; Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm; Zn 5.34 percent.

- **SILVER TRAIL Showing** – In 2014 samples,
  10E41081_BR14R73:
  Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent
  10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm
  10E41077_BR14R70: Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm
  10E41083_BR14R75: Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm
  10E41078_BR14R71: Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm

SILVERGAL is located on a flat log landing. The access road to the landing will require an ATV, and is not suitable for a 4x4 pickup. The SILVERBOY is about 10 metres passed the end of an exisiting machine trench in a large outcrop. Access is through a regenerated logged block (trees 2 to 5 metres tall). The SILVER MINNOW is on steep ground and will require field study to determine the "best practice" route into the showing for trenching and/or drilling. The SILVER TRAIL is located in the cutslope of an existing exploration trail and access is by 4x4.

4. HIGH PRIORITY GROUND GEOPHYSICS AND GEOCHEMICAL SURVEYS:

To target trench and drill site selection, additional ground geophysical surveys, soil geochemical surveys, and prospecting are required as follows:

SILVERGAL: Prospecting; ground geophysics; and expand the (existing 2 lines) SILVERGAL1 soil geochemical grid.

SILVERMINNOW: Prospecting; ground geophysics; and soil geochemical surveys.
Complete the proposed SILVERMINNOW2 GRID soil geochemical grid along the south boundary of DL 4023 KDYD WHITE ROCK MC. Also, expand this grid to surround DL 4023 KDYD WHITE ROCK MC. This should include outcrop sample 10E41016 SM11R999 and 10E41017 SM11R999 which is a new malachite quartz limestone breccia outcrop east of the NW corner DL 4023 KDYD WHITE ROCK MC and also, the new SILVERBOY discovery. Also, this soil grid should be extended to the south to include previously completed SILVERMINNOW1 GRID (existing 2 lines).

SILVERBOY and Breccia Area: Prospecting, ground geophysics and expand proposed SILVER MINNOW2 GRID soil geochemical grid to include the SILVERBOY.

The prospecting, ground geophysics, and soil surveys will identify additional areas for trenching and drilling; and may test the strike, dip, structure, mineralization as well as determine if the showings are part of one or more structures.

5. ANOMALOUS ROCK, SOIL, AND STREAM SEDIEMENTS FOR FOLLOW-UP:

Based on Open File 1997-9, ARIS 33190, 34651 and this report, the following anomalous samples require follow-up:

OPEN FILE 1997-9 – Regional Till Survey: Numerous first order Au, Ag, Cu, Pb, Zn till anomalies were identified in Open File 1997-9 for example **969540: Au 84 ppb, Ag 0.8 ppm, As 83 ppm, Cu 101 ppm, Pb 61 ppm, Zn 229** which is located about 800 metres north east of the SILVERGAL Showing.

SILVERGAL1 SOIL GRID: It is proposed that this soil grid be expanded.
14E41213: Au 80 ppb, W 0.2 ppm.
14E41233: Au 30 ppm, Se 0.3 ppm.
14E41239 repeat: Au 11 ppb, Ag 0.7 ppm, Cu 55.6 ppm, Fe 4.28 %, Ge 34.8 ppm, Zn 113.7 ppm
14E41270: Au 10 ppb, Mo 1.18 ppm
14E41232, 14E41235, 14E41230, 14E41231, 14E41240, and 14E41254 all carried Au 7 ppb
14E41213: Ag 1.1 ppm, Bi 4 ppm, Fe 6.04 %, Mo 2 ppm, Pb 1117 ppm
14E41212, 14E41222, 14E41227, 14E41236, and 14E41265 were all anomalous with Ag 0.5 ppm
14E41266 returned Cu 179.0 ppm; and sample 14E41266 returned Pb 246.9 ppm.

SILVER MINNOW1 SOIL GRID: It is proposed that this soil grid be expanded.
14E41285: Au 26 ppb, Ag 0.3 ppm, Cu 149.4 ppm, Fe 5.55 %, Mo 1.31 ppm.
14E41306: Au 12 ppb
14E41305: Ag 0.5 ppm, Cu 63 ppm, Zn 188 ppm
14E41308: Cu 59.7 (90 percentile being Cu 52.32 ppm). 14E41309: Cu 84.4 ppm 14E41325: Cu 75.3 ppm.
14E41297: Pb 28 (90 percentile being Pb 24.72 ppm).
14E41330: Pb 26 ppm 14E41325: Pb 27.3 ppm 14E41299: Pb 25.5 ppm.

SPRAGUE CREEK – GOLD IN SOILS: SPRAGUE1 SOIL GRID:

In 2013, the **Gold In Soils** anomaly was discovered in Prospecting Type Soil samples.:
10E41059 SR13QT1: Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm.
10E41061 SR13QT3: Au 9.8 ppb; As 24 ppm; Ni 71.1 ppm.
10E41060 SR13QT2: Au 7.3 ppb; As 30.3 ppm; Ba 220 ppm; Cu 61.5 ppm; Fe 4.45 percent; Ni 91.3 ppm; Zn 107 ppm.

SPRAGUE1 Soil Grid was commenced and 20 samples were collected along STRIP LINE A (500 metres surveyed). These samples have not been assayed. The GPS coordinates for an estimated 200 stations (5 strips @ 1 km long; at 100 metre between strips) were determined.

PROSPECTING SOIL SAMPLES: It proposed that Sample 10E41191 SM11FRAT be included in the proposed SILVERMINNOW2 SOIL GRID which was started at the end of the 2011 field season.

In 2011:

10E41191 SM11FRAT: Au 18.1 ppb, Ag 9.74 ppm, Cu 53.4 ppm, Pb 1835 ppm, Zn 2730 ppm.
(south boundary DL 4023 KDYD WHITE ROCK MC just west and down hill from SILVER MINNOW.)
10E41193 SM11FR10T: Au 6.1 ppb, Cu 174 ppm, Pb 30.2 ppm, Zn 427 ppm
14E41194 SM11T8: Cu 124 ppm, Fe 5.99 %, Pb 30.3 ppm.
14E41190 SM11FR5T: Cu 37.1 ppm, Pb 139 ppm.

Miscellaneous Soil Samples for consideration:
10E41053 BR13T3:
Au 6.7 ppb; Ag 0.54 ppm; Bi 0.52 ppm; Co 34.9 ppm; Fe 4.88 percent; Ni 72.2 ppm; Pb 39.9 ppm; Zn 153 ppm
10E41051 BR13T1:
Au 6.5 ppb; Bi 0.44 ppm; Co 44 ppm; Cr 92 ppm; Cu 102.5 ppm; Fe 7.43 precent; Mg 1.34 percent; Mo 1.54 ppm; Ni 146.5 ppm; Pb 36.6 ppm; Zn 108 ppm
10E41062 SM13T1: Al 2.64 percent; Ca 6.26 percent; Pb 57.7 ppm; Sb 2.46 ppm; Zn 146 ppm.
10E41054 BR13T4: Bi 0.57 ppm; Fe 4.43 percent; Pb 31.9 ppm; W 12.25 ppm.

STREAM SEDIMENT AND MOSS MAT SAMPLES:

In 2011, Moss Mat and paired Stream Sediment Samples:
10E41186 SM11MM1: Ag 0.35 ppm; **10E41188 SM11SS1: Ag 0.75 ppm**, Cu 26.1 ppm.
10E41187 SM11MM2: Cu 29 ppm, Pb 16.8 ppm; 10E41189 SM11SS2: Cu 21.8 ppm, Pb 24.8 ppm.

In 2013,
10E41063 BR13MM1: Ag 0.32 ppm; As 15.6 ppm; Hg 0.22 ppm; Mn 14,700 ppm; Mo 2.53 ppm; Ni 26.4 ppm; Sb 0.33 ppm.

MISCELLANEOUS ROCK SAMPLES:

- **10E41016 SM11R999: Au 29.2 ppb, Ag 50.4 ppm, Cu 1475 ppm, Pb 1275 ppm, Sb 533 ppm, Zn 2990 ppm.** Limestone quartz breccia with malachite in outcrop; possibly a new mineralized zone.
- Limestone quartz stockwork/veins.
  10E41021 SM11CHR1: Ag 12.8 ppm, Pb 1.16 %, Zn 1880 ppm (channel).
  10E41023 SM11CHR1-3: Ag 1.89 ppm, Pb 1910 ppm, Zn 2510 ppm (channel).
- **10E41198 SM11FRA (float rock): Ag 10.55 ppm, Cu 185.5 ppm, Pb 6510 ppm, Zn 839 ppm.**
- 10E41334 BR11FR59 (float rock): Al 1.7 %, Co 117 ppm, Cr 1152 ppm, Fe >10 %, Mg 6.49 %, Ni 1027 ppm.

4. GEOPHYSICS AND GEOCHEMICAL SURVEYS (ARIS 33190, 33744):

An airborne geological survey was completed by Fugro Airborne Surveys Corp titled ***Logistics and Processing Report: Helicopter-borne HELITEM Time Domain Electromagnetic and Magnetic Geophysical Survey – Project No. 11089*** dated January 23, 2012. The purpose of the survey was to determine the existence and locations of bedrock conductors and for better understanding of subsurface geology within the survey areas. The EM data and the magnetic data were processed to produce images and profiles that are indicative of the magnetic and conductive properties of the survey area. A GPS navigation system ensured accurate positioning of geophysical data.

In February 2013, a follow-up interpretations report was completed. In general terms, ***"Magnetic and EM Interpretation Airborne Magnetic and HeliTEM Survey BARRIERE RIDGE and HONEYMOON Blocks British Columbia - Job No. 12578"*** reported priority targets and significant results as follows:

- Significant conductors were identified within the survey area and they were outlined on interpretation maps. Conductors were classified as conductive zones, points, and axes. A list of anomalous EM responses, for detailed review and ground follow-up were provided Fugro.
- The magnetic grid showed a magnetic low, with a gently rippling character in the western portion of the block, and a more complex and highly magnetic area to the centre and northeast. High conductivities exist in both the east and west with a low conductivity area running nearly N-S through the mid-western portion of the block, and along the north in the eastern portion of the block. There is a low conductivity area in the southeast.
- Conductivity depth (CDI) sections identified major faults and in many cases these had been identified from the magnetic signatures. Conductivity depth identified some new faults. The dips of the faults can also be identified using CDI sections.

Geophysical Anomaly List: A list of geophysical anomalies was provided by Fugro including GPS coordinates and a key map. These geophysical anomalies require further interpretation through field checks and ground geophysics.

Based on the above geophysical surveys and various geochemical anomalies, there is a need to compare, contrast, field check, and interpret the results of the Fugro airborne geophysics surveys using a spatial GIS database with the following data included:

- Anomalous rock, soil, and stream sediment assay results from ARIS 32383, 33190, 33744.
- Historical data from old ARIS reports
- Historical data collected by David Piggin for a Prospector Assistance Grant #98/99 P94 (1998-43).
- Existing geological mapping.
- Existing fault and structural information.

Outputs from this spatial information would be used to prioritize exploration areas for further targeting, prospecting, geochemical and ground geophysical surveys, trenching and drilling; and to provide a framework to field test various geophysical and structural anomalies identified by the Fugro airborne geophysical surveys

5. MISCELLANEOUS:

A. Advanced Exploration Projects in the Vicinity of BARRIERE RIDGE.

The BARRIERE RIDGE claims are prospective for Ag Pb Zn (Au Cu) due the many anomalies that have been discovered; the proximity to the contact between the SLIDE TERRANE, and KOOTENAY TERRANE; the presence of the massive Baldy Batholith Intrusion, and because of the many exploration and development projects in the near vicinity, for example the:

- HARPER CREEK deposit of Yellowhead Mining Inc (25 km to the north),
- CHU CHUA Deposit of Newport Exploration Ltd. (14 Km to the northwest),
- Initial work of First American Gold Corp immediately to the east of BARRIERE RIDGE
- RUDDOCK CREEK deposit of Imperial Metals (80 Km to the northeast)
- Past production at the Samatosum Mountain, Rea, and Homestake Mines (16 km to the south).
- Many MINFILE occurrences immediately adjacent to the BARRIERE RIDGE claims and south of the Mid-Cretacious Bald Batholith intrusive.

B. British Columbia Geological Survey (BCGS) and Regional Geologist: Open File reports (e.g. Open File 1997-9; Regional Stream Sediment Surveys) are extremely useful for prospecting the Birk Creek, North Barriere River, East

Barriere River, Russell Creek areas. There is a wealth of geological, mapping, geochemical, sampling, and exploration information in the till, stream chemistry, moss mat, stream sediment, and mapping data. The GeoFile 2005-4 download data set proved to be invaluable for spatial mapping purposes. It was noted that GeoFile 2005-4 needs to be updated with respect to new mapping available in Open File 2000-7. Personal communication with Jim Britton, Regional Geologist has proven invaluable for exploration.

C. **Spatial Data:** A digital database is being developed and continued for BARRIERE RIDGE. There is a need to bring all this data together into a spatial data base (i.e. ARCGIS, UDIG) to define possible exploration targets. Work was commenced by David Piggin and Dale Brittliffe on a spatial data base and will continue until all data sources are coalesced.

D. **MINFILE 082M 069 SILVER MINNOW (aka SILVER MINERAL): Tenure 744542.** The GPS coordinates in the MINFILE database are incorrect. The correct GPS coordinates for 082M 069 are as follows: NAD 83 Zone 11: 297803.482E and 5686989.765N.

List of Literature Cited

Agriculture Canada Expert Committee on Soil Survey, 1987: The Canadian System of Soil Classsification. Second Edition, Agriculture Canada Publication 1646.

Bobrowsky, P., Leboe, E., Sixon-Warren, A., Ledwon, A., MacDougall, D., and Sibbick, S. 1997: Till Geochemistry of the Adams Plateau-North Barriere Lake area (82M/4 and 5). B.C. Ministry of Employment and Investment. Open File 1997-9.

Bobrowsky, P., Leboe, E., A. Dixon-Warren, and Ledwon, A., 1996. Eagle Bay Project: Till Geochemistry of the Adams Plateau (82M/4) and North Barriere Lake (82M/5) Map Areas. Geological Fieldwork 1996. Paper 1997-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Bailey, S., S. Paradis, S. Johnston, T. Hoy, 2000: Geologic Setting of the Devonian Mississippian, Rea and Samatosum VMS Deposits of the Eagle Bay Asssemblage, Adams Lake Area, South Central British Columbia. Paper 2000-1. British Columbia Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Cathro, M., and Lefebure, D. 1999: Several New Plutonic-related Gold, Bismuth Tungsten Occurrences in southern British Columbia. Geological Fieldwork 1999, p. 207-211. B.C. Ministry of Energy and Mines. Paper 2000-1.

Dixon-Warren, A., Bobrowsky, P., Leboe, E., and Ledwon, A., 1996. Eagle Bay Project: Surficial Geology of the Adams Platearu (82m/4) and North Barriere Lake (82M5) Map Areas. Geological Fieldwork 1996. Paper 1997-1.

Dixon-Warren, A., Bobrowsky, P., Leboe, E., and Ledwon, A. 1997b: Terrain geology map of the Adams Plateau area, NTS 82 M/4, scale 1:50 000; B.C. Ministry of Employment and Investment, Open File 1997-7. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Evans, G., Dec 1999. Teck Corp: 1999 Geological & Geophysical & Geochemical & Diamond Drilling - Report on the Cam Gloria Property, Kamloops Mining Division, British Columbia. Geological Survey Branch, BC Assessment Report 26,216.

Fugro Airborne Surveys, Jan 2012: Logistics and Processing Report: Helicopter-borne HELITEM Time Domain Electromagnetic and Magnetic Geophysical Survey - Project No. 11089 - for the HONEYMOON and BARRIERE RIDGE claims dated January 23, 2012. Prepared for Astral Mining Corporation, Vancouver, British Columbia and reported in ARIS 33190 Report dated July 18, 2012

Fugro Airborne Surveys, Feb 2013: Magnetic and EM Interpretation Airborne Magnetic and HeliTEM Survey BARRIERE RIDGE and HONEYMOON Blocks - Job No. 11089 - dated February 2013. Prepared for Astral Mining Corporation, Vancouver, British Columbia.

Hoy, T., 1998. Massive Sulphide Deposits of the Eagle Bay Assemblage, Adams Plateau, South Central British Columbia (82m3,4). Geological Fieldwork 1998. Paper 1999-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Hoy, T., 1996. Harper Creek: A Volcanogenic Sulphide Deposit within the Eagle Bay Assemlage, Kootenay Terrane, Southern British Columbia. Geological Fieldwork 1996. Paper 1997-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Hoy, T., F. Goutier. 1985. Rea Gold (Hilton) and Homestake Volcanogenic Sulphide-Barite Deposits Southeastern British Columbia (82M/4W). Geological Fieldwork 1985. Paper 1986-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Klinka, K., R.N. Green, R.L. Trowbridge and L.E. Lowe August 1981: Taxonomic Classification of Humus Forms in Ecosystems of British Columbia, First Approximation, Land Management Report 8. BC Ministry of Forests.

Leboe, E., Bobrowsky, P., Dixon-Warren, A. and Ledwon, A. 1997: Terrain geology map of the North Barriere Lake area NTS 82 M/5, scale 1:50 000; B.C. Ministry of Employment and Investment, Open File 1997-6.

Lett, R., P. Bobrowsky, M. Cathro, A. Yeow, 1997. Geochemical Pathfinders for Massive Sulphide Deposits In The Southern Kootenay Terrane. Geological Fieldwork 1997. Paper 1998-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Lett, R., Jackaman, W., Englund, L. April 2000: Stream Geochemical Exploration for Pluton-Related Quartz-Vein Gold Deposits in Southern British Columbia, NTS 82M/4, 5, 6; 92P/8; 82F7. B.C. Ministry of Energy and Mines, Open File 2000-23.

Lett, R., Sibbick, S., Runnels, J. January 1999: Regional stream water geochemistry of the Adams Lake-North Barriere Lake area, British Columbia (NTS 82M/4 and 82M/5). B.C. Ministry of Energy and Mines, Open File 1998-9.

Lloyd, D., Angove, G., Hope, G., and Thompson, C., 1990. A guide to site identification and interpretation for the Kamloops Forest Region. Land Management Handbook No. 23. B.C. Ministry of Forests, Research Branch, Victoria, B.C.

Logan, J., 2000: Prospective Areas for Intrusion-Related Gold-Quartz Veins in Southern British Columbia. Geological Fieldwork 2000. Paper 2000-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Logan, J., 1999. Plutonic-related Gold-quartz Veins in Southern British Columbia. Geological Fieldwork 1999. Paper 2000-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Logan, J., Mann, R. April 2000: Geology & Mineralization around Baldy Batholith, Southcentral BC. Map Scale 1:50 000. NTS 82M/3, 4, 5 &6. B.C. Ministry of Energy and Mines. Open File 2000-7.

Marshall, L., J. Mortensen, J. Gabites, 1999. Lead Isotope Data From Epigenetic Sulphide Occurrences in the Purcell Supergroup, Southeastern British Columbia, and Implications for Exploration for Sediment-hosted Base Metal Deposits. Geological Fieldwork 1999. Paper 2000-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Massey, N., MacIntyre, D., et al. 2005: Geology Map of British Columbia: Tile NM11 Southeast B.C., B.C. Ministry of Energy and Mines, GeoFile 2005-4, 82E, F, G, J, K, L, M, N, O (Southeast B.C.). Download Shape File Albers Projection (33MB).

Schiarizza, P. 1985. Geology of the Eagle Bay Formation between the Raft and Baldy Batholiths (82M/5, 11, 12). Geological Fieldwork 1985. Paper 1996-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

Schiarizza, P. and Preto, V. (1987): Geology of the Adams Plateau-Clearwater-Vavenby Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1987-2.

Sibbick, S., J. Runnells, R. Lett. 1996. Eagle Bay Project: Regional Hydrogeochemical Survey and Geochemical Orientation Studies (82J/4) and 5). Geological Fieldwork 1996. Paper 1997-1. BC Geological Survey, Ministry of Energy and Mines, Victoria, British Columbia.

AUTHORS QUALIFICATIONS

The author has been a prospector since 1997 and has the following qualifications:

- Registered Professional Forester (2412). Retired in 2009 from the Ministry of Forests and Range, Southern Interior Forest Region with 35 years of meritorious service.
- Past Director, Past Vice President, and Member of the Kamloops Exploration Group (KEG).
- Plan, organized or participated in KEG Conventions in Kamloops since 1997 - 2015.
- Attend the Cordilleran Roundup (Vancouver) and maintained a prospector's booth for most years.
- Attend the KEG (Kamloops) and maintained a prospector's booth for most years.
- KEG Prospectors Course (University College of the Cariboo) in 1997.
- Attended numerous KEG and Geoscience BC short courses or field trips for prospecting, geochemistry, (basic) geophysics, mineralization, ore bodies, and formations such as the Nicola Volcanics.
- Attended numerous KEG and Geoscience BC field trips to Afton (Abacus), New Gold Inc (underground), Gibraltar, Mount Polley, Highland Valley Copper, Samatosum, Copper Mountain, and etc.
- Conducted field tours of properties with company geologists, and government geologists.
- Conducted one rotary wing geological inspection with geologist.
- Completed Prospectors Assistance Grant #98/99 P94.
- Completed contract staking; and completed contracts on 80+ line kilometers of soil surveys for companies.
- Collected 2500+ of soil samples for assay by exploration companies.
- Collected 500+ prospecting soil samples; 400+ moss mats/stream sediments samples; and 400+ rock samples.
- Completed advanced courses in Mathematics and Physics in the 1970s; and Forest Sciences such as Forest Hydrology, Forest Soils, Forest Ecology, Statistics, and Forest Mensuration in the 1980s.
- Project Management Courses, Continuous Improvement, Conflict Resolution, Coaching & Facilitating (meetings and teams), and business processes.
- Member of Provincial Working Groups related to government initiatives.
- Budgeted and implemented up to $ 1.1 million per year of forestry related contracts.
- Contracted and supervised professionals working to a scientific standard.
- Certified Incident Commander for forest fires in 2009.
- Completed Assessment Reports (ARIS) as follows:
  29378: SPAPILEM CREEK (aka HONEYMOON) - July 4, 2007; $ 6,375.11.
  29407: HONEYMOON CREEK (aka HONEYMOON)- November 18, 2007; $ 11,040.10.
  29709: CAMGLORIA (aka HONEYMOON) - December 20, 2007; $ 7,037.87.
  29960: HONEYMOON - March 1, 2008; $ 25,177.09.
  30869: HONEYMOON - June 2, 2009; $ 29,959.06.
  32076: HONEYMOON - for Astral Mining Corporation, June 7, 2011, $ 78,250.27;
  32383: BARRIERE RIDGE for Astral Mining Corporation, August 21, 2011; $ 21,824.78.
  33190: HONEYMOON and BARRIERE RIDGE for Astral Mining Corporation, July 18, 2012, $ 344,154.71.
  33744: HONEYMOON and BARRIERE RIDGE for Astral Mining Corporation; March 27, 2013. $ 97,303.43.
  33202: SASKUM BEAR for David J. Piggin, August 11, 2012; $ 9,411.98.
  33216: BENDGOLD for David J. Piggin, August 28, 2012; $ 37,007.66.
  34324: BENDGOLD for David J. Piggin, December 12, 2013; $ 17,706.83.
  34651: David J. Piggin. March 18, 2014. BARRIERE RIDGE; $ 39,377.26.
- Optioned/sold the MAGNUM CLAIMS (near Ajax Pit at Afton) to New Gold Inc, near Kamloops, British Columbia.
- Optioned the HONEYMOON CLAIMS to Acrex Ventures Ltd., Vancouver, British Columbia.
- Optioned the HONEYMOON CLAIMS to Astral Mining Corporation, Vancouver, British Columbia.
- Optioned the BARRIERE RIDGE CLAIMS to Astral Mining Corporation, Vancouver, British Columbia.
- Optioned/sold the HONEYMOON CLAIMS to SolidusGold Inc (formerly Mantra Capital Inc) Vancouver, British Columbia.

Software Programs Used In Support of this Report

The following computer software and equipment used in support of the exploration and development work, and in the preparation of this report.

1. Microsoft Office 2010: EXCEL, WORD, OUTLOOK, ACCESS.
2. Internet Explorer (version 7).
3. Mineral Tenures Online mapping software.
4. ARIS MapBuilder.
5. MINFILE, Ministry of Mines – Open Files and related data.
6. UDIG spatial software.
7. Arcview 3.2a.
8. Adobe Acrobat 9 Pro.
9. Trackmaker version 13.1 (freeware) for GPS download.
10. DNR Garmin GPS download.
11. Garmin 12XL – Global Positioning Unit.
12. Garmin GPSmap 60CSx – Global Positioning Unit.
13. Canon A630 and A1100 digital camera.
14. ICOM road radio and hand held radio for safety.
15. Stone Blaze, belt chain, surveying tool.
16. Hand held Ranger Silva Compass, Azimuth.
17. Clinometer, Sunnto, (degrees, percent).
18. Iwamoto Hand lens.
19. Survey ribbon (various colours), metal tags, and tyvek tags with wire.
20. Rock hammer, geotul, and various sledge hammers, shovels, soil auger, and trowels.
21. Gold pan, black, for collecting sediment samples prior to bagging.
22. Black plastic door screen (0.1 inch square mesh) for screening stream sediment samples.
23. Samples were collected with plastic bags (rock), stream sediments/soil (kraft bags), moss mats (linen bags).
24. 2 Trapper Nelson pack boards with sacks.
25. Ford, F150 4x4 pickup, with canopy/boat racks.
26. Shindawa powersaw and Husqvarna Chainsaw.
27. 1 hand tank pumps (fire) and fire extinguishers for fire prevention.
28. First aid kit for safety.

COST SUMMARY

BARRIERE RIDGE COST SUMMARY: 2014 and SPRING 2015

5549825	April 4, 2015	14,346.32	14,346.32		April 4, 2014 to August 31, 2014
5559739	June 23, 2015	30,541.94	30,541.94		September 1, 2015 to June 13, 2015
5568243	August 29, 2015	$1,222.83	$1,222.83		June 24, 2015 to August 29, 2015
		$ 46,111.09	$ 46,111.09	$ -	TOTAL
			$46,111.09		

Exploration Work type	**Comment**	**Days**			**Totals**
Personnel (Name)* / Positic	**Field Days (list actua**	**Days**	**Rate**	**Subtotal***	
April 8, 2014	David Piggin, RPF. Prospector	0.5	$400.00	$200.00	
				$0.00	
				$0.00	
				$0.00	
				$0.00	
April 24, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
April 25, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
April 26, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
April 26, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
April 30, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
				$0.00	
				$0.00	
June 4, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 5, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	

June 7, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 9, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 9, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 10, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 10, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 11, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 11, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 12, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 12, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 13, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 13, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 14, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 14, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 15, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 14, 2014	Judy Burr, Prospector	1	$400.00	$400.00	
June 16, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
June 19, 2014	Leonard Piggin, Prospector	1	$400.00	$400.00	
August 29, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
August 29, 2014	Heidi Romeike	1	$300.00	$300.00	
September 1, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
September 1, 2014	Heidi Romeike	1	$300.00	$300.00	
September 3, 2014	David Piggin, RPF, Prospector	1	$400.00	$400.00	
September 3, 2014	Heidi Romeike	1	$300.00	$300.00	
March 11, 2015	Heidi Romeike	0.5	$300.00	$150.00	

April 12, 2015	David Piggin, RPF, Prospector	1	$400.00	$400.00	
April 13, 2015	David Piggin, RPF, Prospector	0.5	$ 400.00	$200.00	
April 16, 2015	David Piggin, RPF, Prospector	0.5	$ 400.00	$200.00	
April 17, 2015	David Piggin, RPF, Prospector	1	$ 400.00	$400.00	
April 17, 2015	Judy Burr, Prospector	1	$ 400.00	$400.00	
April 18, 2015	David Piggin, RPF, Prospector	1	$ 400.00	$400.00	
April 18, 2015	Len Piggin, Prospector	1	$ 400.00	$400.00	
April 21, 2015	David Piggin, RPF, Prospector	1	$ 400.00	$400.00	
April 21, 2015	Len Piggin, Prospector	1	$ 400.00	$400.00	
April 23, 2015	David Piggin, RPF, Prospector	1	$ 400.00	$400.00	
April 24, 2015	David Piggin, RPF, Prospector	0.5	$ 400.00	$200.00	
April 25, 2015	David Piggin, RPF, Prospector	0.75	$ 400.00	$300.00	
April 27, 2015	David Piggin, RPF, Prospector	0.25	$ 400.00	$100.00	
May 26, 2015	David Piggin, RPF, Prospector	1	$ 400.00	$400.00	
May 26, 2015	Len Piggin, Prospector	1	$ 400.00	$400.00	
May 26, 2015	Judy Burr, Prospector	1	$400.00	$400.00	
June 13, 2015	Len Piggin, Prospector	1	$400.00	$400.00	
				$0.00	
				$0.00	
				$0.00	
				$0.00	
				$17,850.00	**$17,850.00**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Literature search	David Piggin, RPF. Prospector	2.0	$400.00	$800.00	

Database compilation	David Piggin, RPF. Prospector	4.0	$400.00	$1,600.00	
Database compilation, for database from recent company ARIS Reports	David Piggin, RPF. Prospector	6.0	$400.00	$2,400.00	
Computer modelling			$0.00	$0.00	
Reprocessing of data			$0.00	$0.00	
General research	David Piggin, RPF. Prospector	4.0	$400.00	$1,600.00	
General research					
Report preparation	David Piggin, RPF. Prospector	8.0	$400.00	$3,200.00	
Other (specify)		0.0	$0.00	$0.00	
Other (specify)		0.0	$0.00	$0.00	
Other (specify): Free Use Permit for exploration access, land ownership, Kamloops District Tenures, prepare exhibit maps and District Office for meeting.	David Piggin, RPF. Prospector	2.5	$400.00	$1,000.00	
Other (specify) First Nations ownership and notification, information sharing.	David Piggin, RPF. Prospector	4.0	$400.00	$1,600.00	
Other (specify)			$0.00	$0.00	
				$12,200.00	**$12,200.00**
Airborne Exploration Survey **Line Kilometres / Enter total invoiced amount**					
Aeromagnetics			$0.00	$0.00	
Radiometrics			$0.00	$0.00	
Electromagnetics			$0.00	$0.00	
Gravity			$0.00	$0.00	
Digital terrain modelling			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$0.00	**$0.00**
Remote Sensing **Area in Hectares / Enter total invoiced amount or list personnel**					
Aerial photography			$0.00	$0.00	
LANDSAT			$0.00	$0.00	
Other (specify)				$0.00	
				$0.00	**$0.00**
Ground Exploration Surveys **Area in Hectares/List Personnel**					

Geological mapping				$0.00	
Regional		*note: expenditures here*		$0.00	
Reconnaissance		*should be captured in Personnel*		$0.00	
Prospect		*field expenditures above*		$0.00	
Underground	Define by length and width			$0.00	
Trenches	Define by length and width			$0.00	
				$0.00	**$0.00**
Ground geophysics	**Line Kilometres / Enter total amount invoiced list personnel**				
Radiometrics				$0.00	
Magnetics				$0.00	
Gravity				$0.00	
Digital terrain modelling				$0.00	
Electromagnetics	*note: expenditures for your crew in the field*			$0.00	
SP/AP/EP	*should be captured above in Personnel*			$0.00	
IP	*field expenditures above*			$0.00	
AMT/CSAMT				$0.00	
Resistivity				$0.00	
Complex resistivity				$0.00	
Seismic reflection				$0.00	
Seismic refraction				$0.00	
Well logging	Define by total length			$0.00	
Geophysical interpretation				$0.00	
Petrophysics				$0.00	
Other (specify)				$0.00	
				$0.00	**$0.00**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Drill (cuttings, core, etc.)			$0.00	$0.00	
Stream sediment			$0.00	$0.00	
Stream sediment - Moss Mat			$0.00	$0.00	
Stream sediment - Moss Mat			$0.00	$0.00	
Soil			$0.00	$0.00	

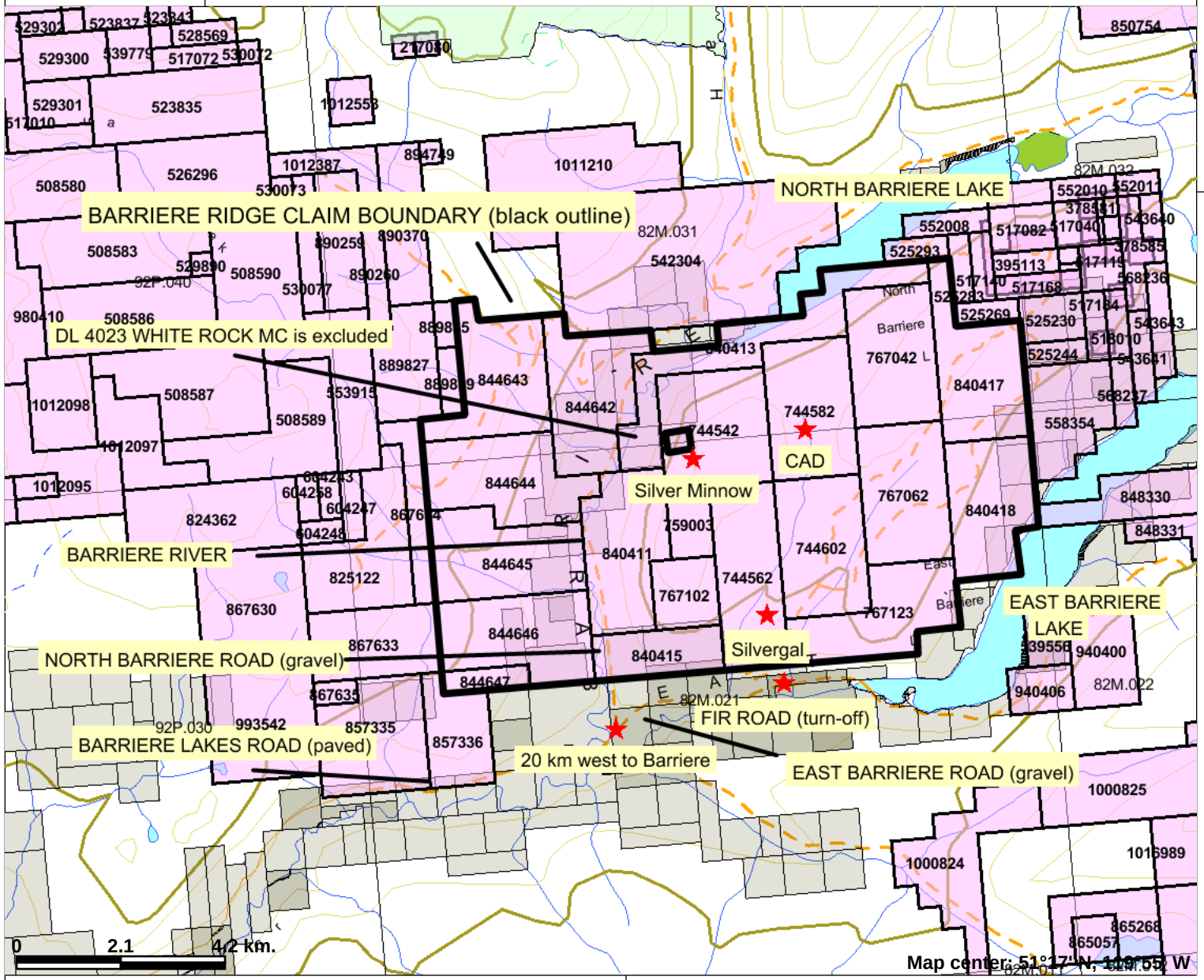
Soil	Sprague Creek Soil Line A: Samples collected not assayed UTM Zone 11. 5685800 northerly; and 294500E to 293600E. Easterly line at 25 metre spacing. Waypoints: A294500 - A293600 (no sample at A293850)	20.0	$0.00	$0.00	
Soil	BR14T80A to BR14T80F for 6 samples, not assayed yet.	6.0	$0.00	$0.00	
Rock	BR14R80 silver galena veinlets, not assayed yet.	1.0	$0.00	$0.00	
Rock (sprague)	SR14QFR1_10E41086; SR14QFR2_10E41087; SR14QFR3_10E41088; SR14QFR4_10E41089; SR14QFR5_10E41090; SR14HR6_10E41091; SR14QFR7_10E41092; SR14HR8_10E41093;	9.0	$59.30	$533.70	
Rock (Silver Minnow)	BR14R70_10E41077; BR14R71_10E41078; BR14R72_10E41079; BR14R72A_10E41080; BR14R73_10E41081; BR14R74_10E41082; BR14R75_10E41083; BR14R76_10E41084; BR14R77_10E41085	9.0	$59.30	$533.70	
Water			$0.00	$0.00	
Biogeochemistry			$0.00	$0.00	
Whole rock			$0.00	$0.00	
Petrology			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$1,067.40	**$1,067.40**

Drilling	No. of Holes, Size of Core a	No.	Rate	Subtotal	
Diamond			$0.00	$0.00	
Reverse circulation (RC)			$0.00	$0.00	
Rotary air blast (RAB)			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$0.00	**$0.00**
Other Operations	**Clarify**	**No.**	**Rate**	**Subtotal**	
Trenching			$0.00	$0.00	
Bulk sampling			$0.00	$0.00	
Underground development			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$0.00	**$0.00**
Reclamation	**Clarify**	**No.**	**Rate**	**Subtotal**	
After drilling			$0.00	$0.00	
Monitoring			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$0.00	**$0.00**
Transportation		**No.**	**Rate**	**Subtotal**	
Airfare			$0.00	$0.00	
Taxi			$0.00	$0.00	
truck rental	Barriere Ridge	33.00	$75.00	$2,475.00	
kilometers	Barriere Ridge	7,421.00	$0.55	$4,081.55	
ATV			$0.00	$0.00	
fuel			$0.00	$0.00	
Helicopter (hours)			$0.00	$0.00	
Fuel (litres/hour)			$0.00	$0.00	
Ferry		10.00	$74.60	$746.00	
Other					
				$7,302.55	**$7,302.55**
Accommodation & Food	**Rates per day**				
Hotel			$0.00	$0.00	
Hotel, D. Piggin at Fathers Place		30.00	$50.00	$1,500.00	
Camp			$0.00	$0.00	
Meals	day rate	44.00	$45.00	$1,980.00	
Meals	day rate or actual costs-specify			$0.00	
				$3,480.00	**$3,480.00**
Miscellaneous					
Telephone		1.00	$200.00	$200.00	
Other (Specify)	Field Supplies		$1,588.78	$1,588.78	

Other (Specify)				$0.00	
				$1,788.78	**$1,788.78**
Equipment Rentals					
Field Gear (Specify)				$0.00	
Budget Storage Locker for samples, field supplies, and field tools (months)		12.00	$128.90	$1,546.80	
Other (Specify)	Jasco Rental, Chainsaw Husky	2.00	$70.78	$141.56	
Other (Specify)	Chainsaw Husky 55	7.00	$60.00	$420.00	
Other (Specify)	Chainsaw Shindaiwa	11.00	$25.00	$275.00	
				$2,383.36	**$2,383.36**
Freight, rock samples					
Freight and postage			$39.00	$39.00	
			$0.00	$0.00	
				$39.00	**$39.00**
			TOTAL Expenditures		**$46,111.09**

APPENDICIES

BARRIERE RIDGE CLAIMS



Legend

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- Federal Transfer Lands

Mineral Tenure (current)

- Mineral Claim
- Mineral Lease

Mineral Reserves (current)

- Placer Claim Designation
- Placer Lease Designation
- No Staking Reserve
- Conditional Reserve
- Release Required Reserve
- Surface Restriction
- Recreation Area
- Others
- First Nations Treaty Related Lands
- First Nations Treaty Lands
- Survey Parcels
- BCGS Grid

Contours (1:250K)

- Contour - Index
- Contour - Intermediate
- Areaof Exclusion
- Areaof Indefinite Contours

Annotation (1:250K)

Transportation - Points (1:250K)

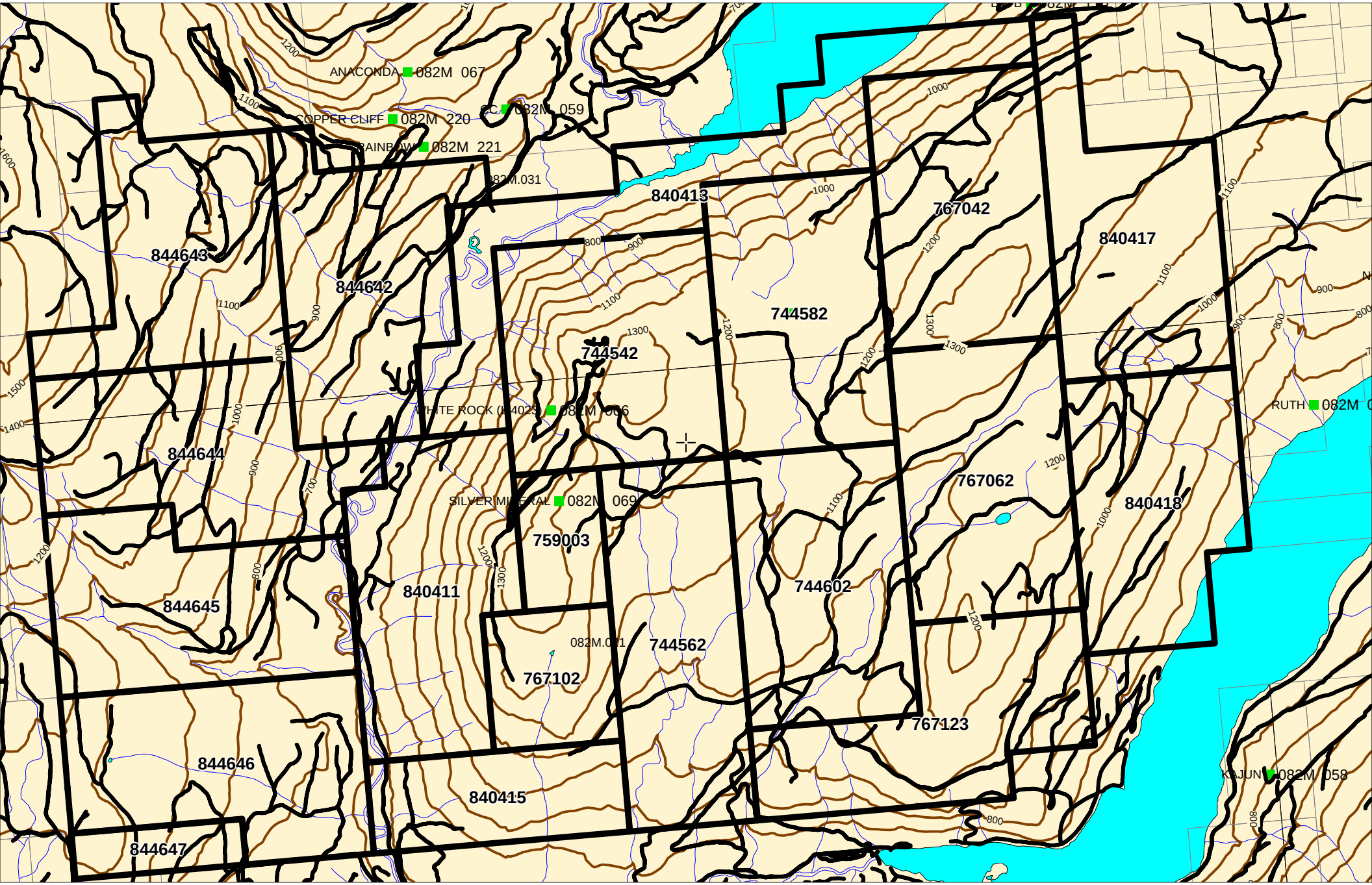
- Airfield
- Anchorage - Seaplane

Scale: 1:120,253

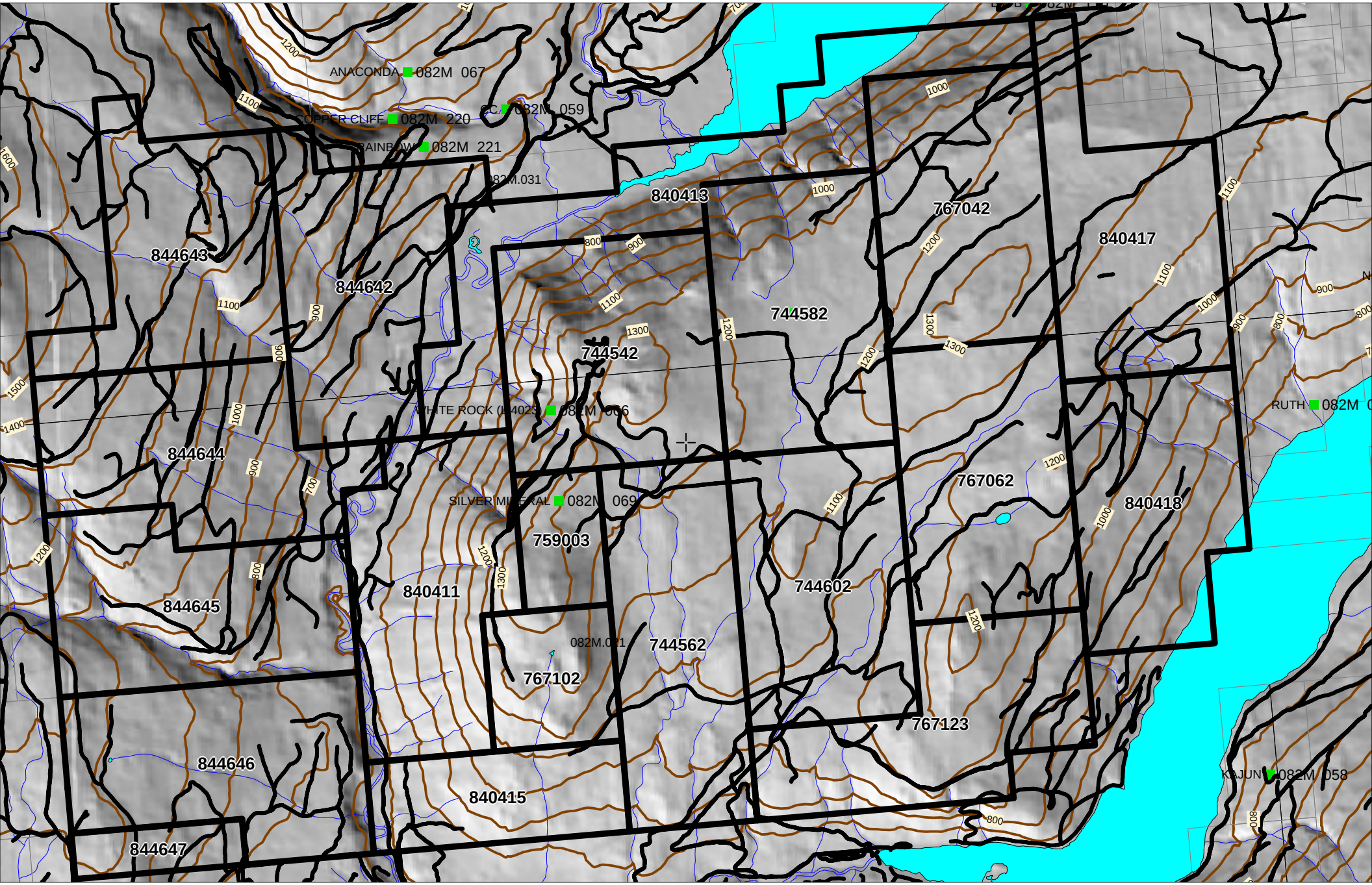
This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Notes: BARRIERE RIDE CLAIMS, SAVE AND EXCEPTING DL 4023 KDYD WHITE ROCK MC WHICH CONTAINS MINFILE 082M-066 WHITE ROCK

BARRIERE RIDGE: OVERVIEW TENURES, ROADS, CONTOURS



BARRIERE RIDGE: OVERVIEW TENURES, ROADS, CONTOURS



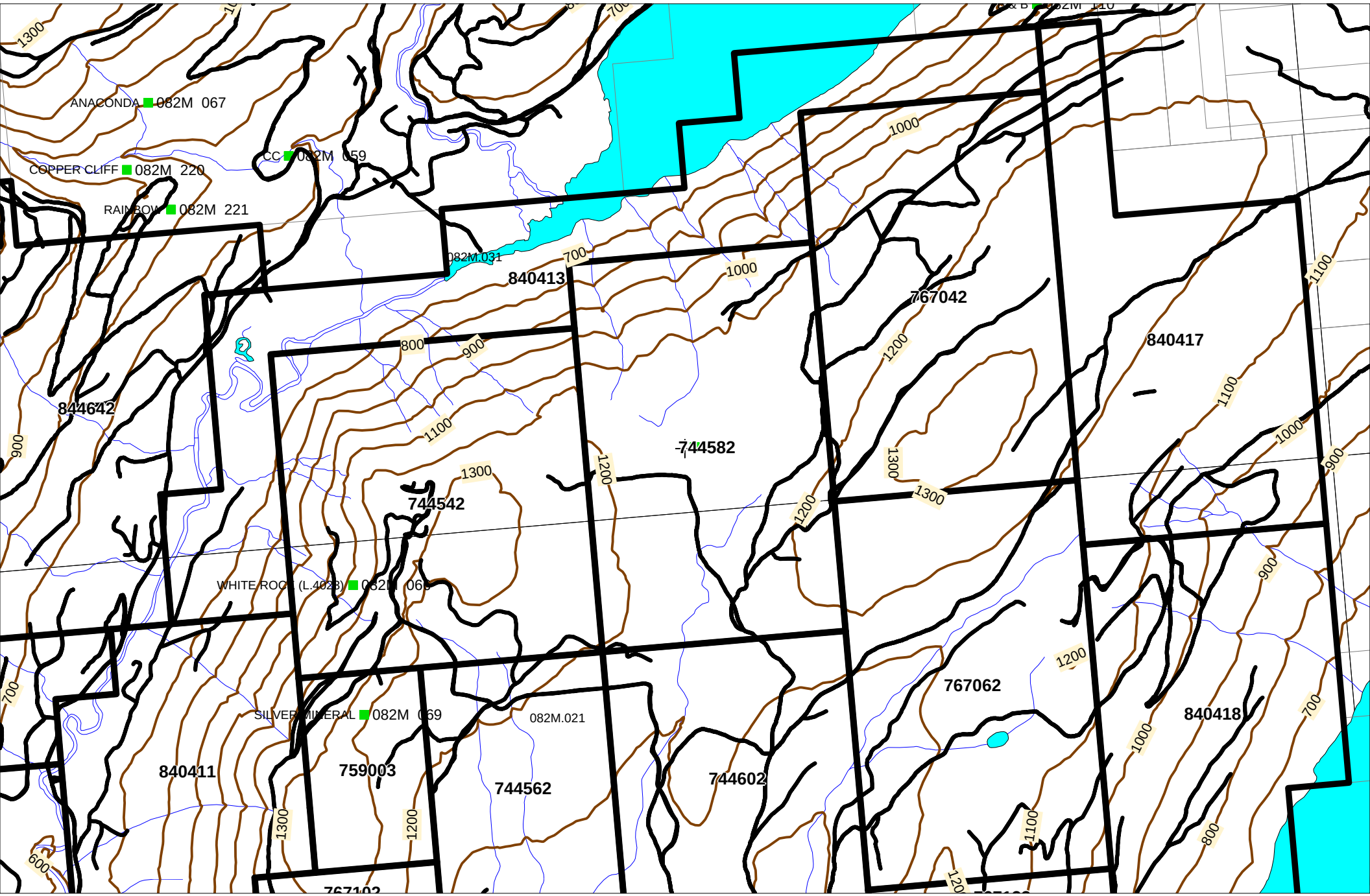
SCALE 1 : 50,000

1 0 1 2 3

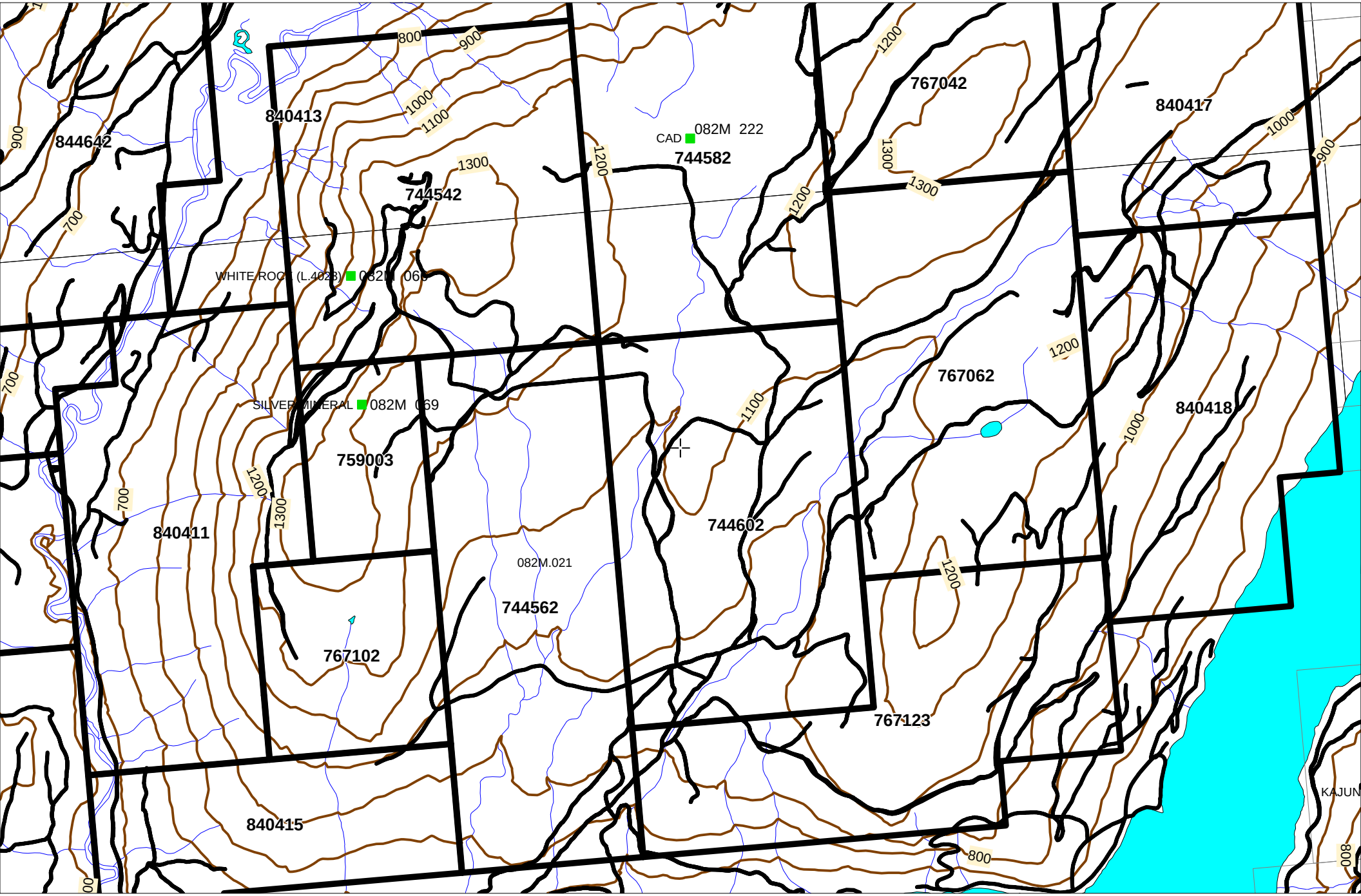
KILOMETERS

N

Barriere Ridge NE Corner: 744542, 744582, 759003, 767042, 767062, 840413, 840417



Barriere Ridge SE Corner: 744542, 744562, 744602, 759003, 767062, 767102, 767123, 840411, 840418



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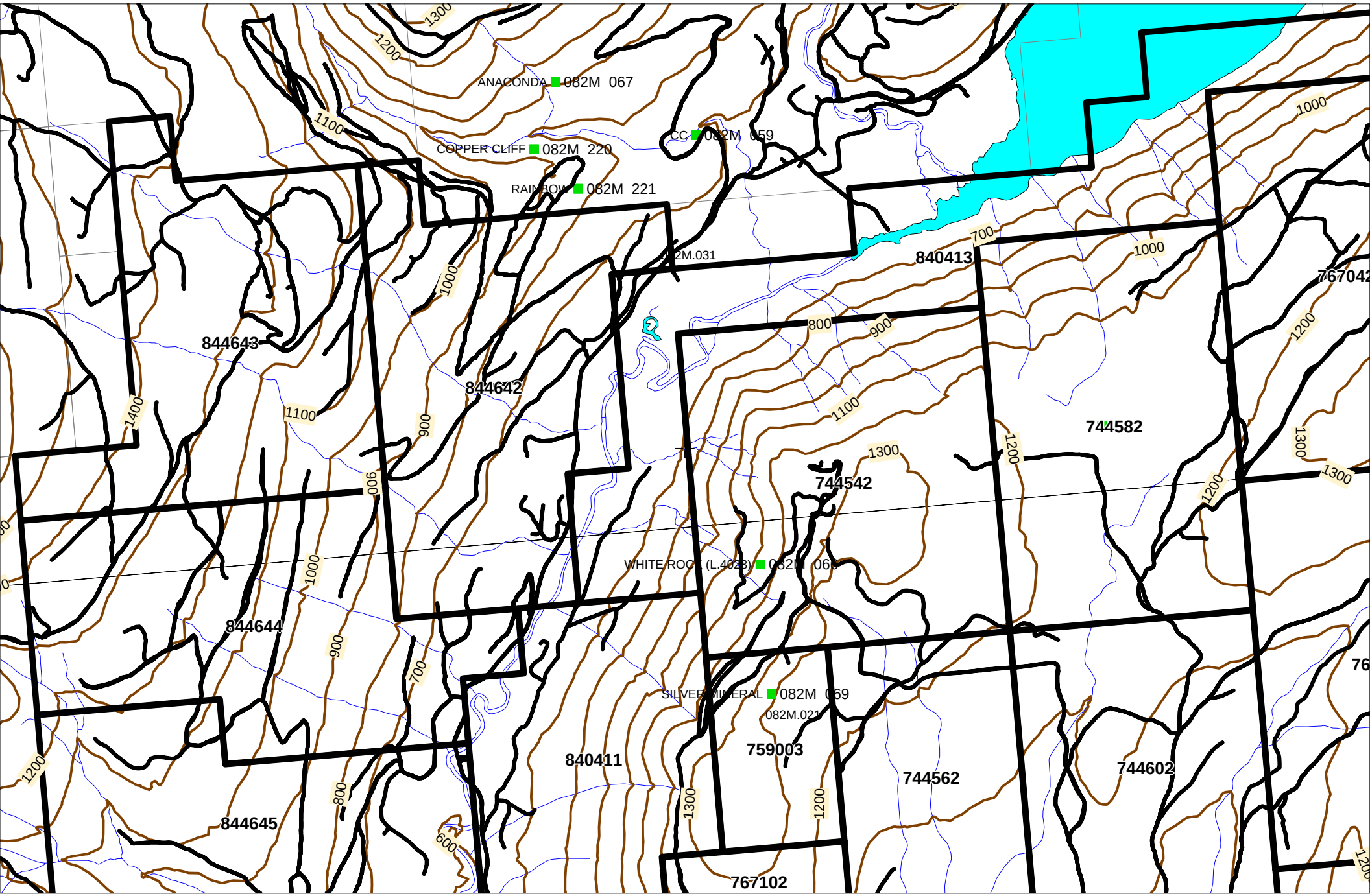
KILOMETERS

N

Barriere Ridge NW Corner: Tenures 744542, 744582, 759003, 844642, 844643, 844644



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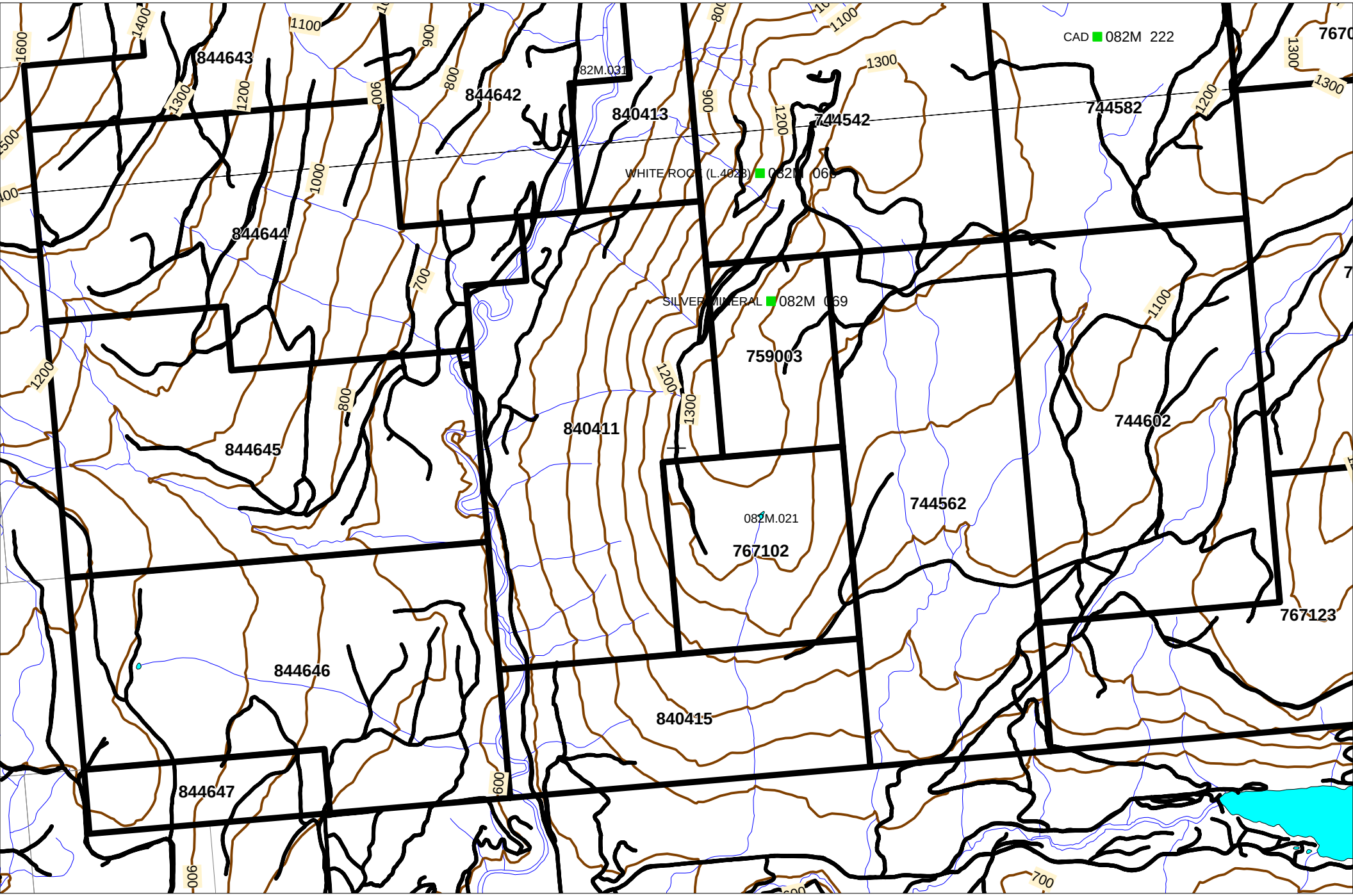
KILOMETERS

N

Barriere Ridge SW Corner: 744562, 744602, 759003, 767102, 840411, 840415, 844644, 844645, 844646, 844647



SCALE 1 : 35,000

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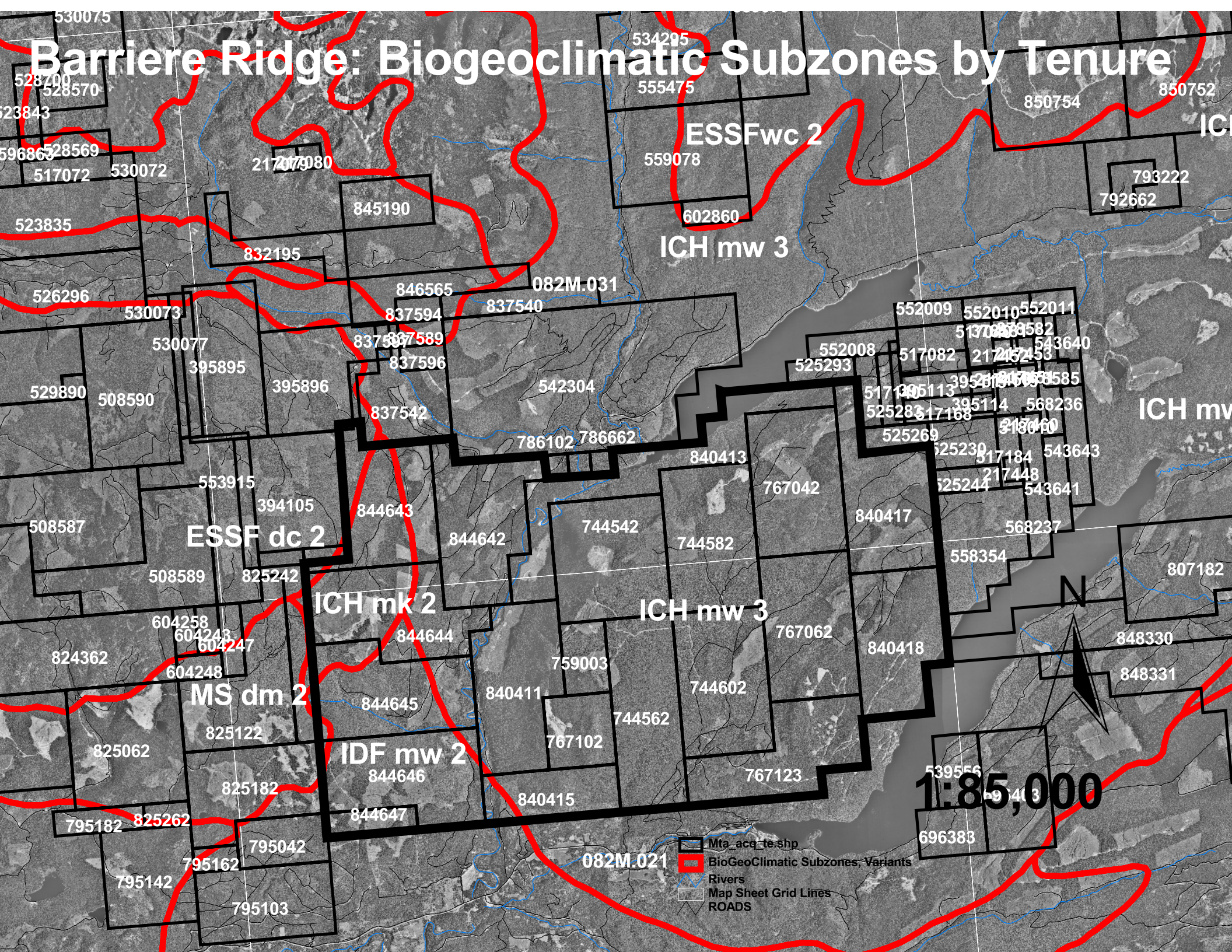
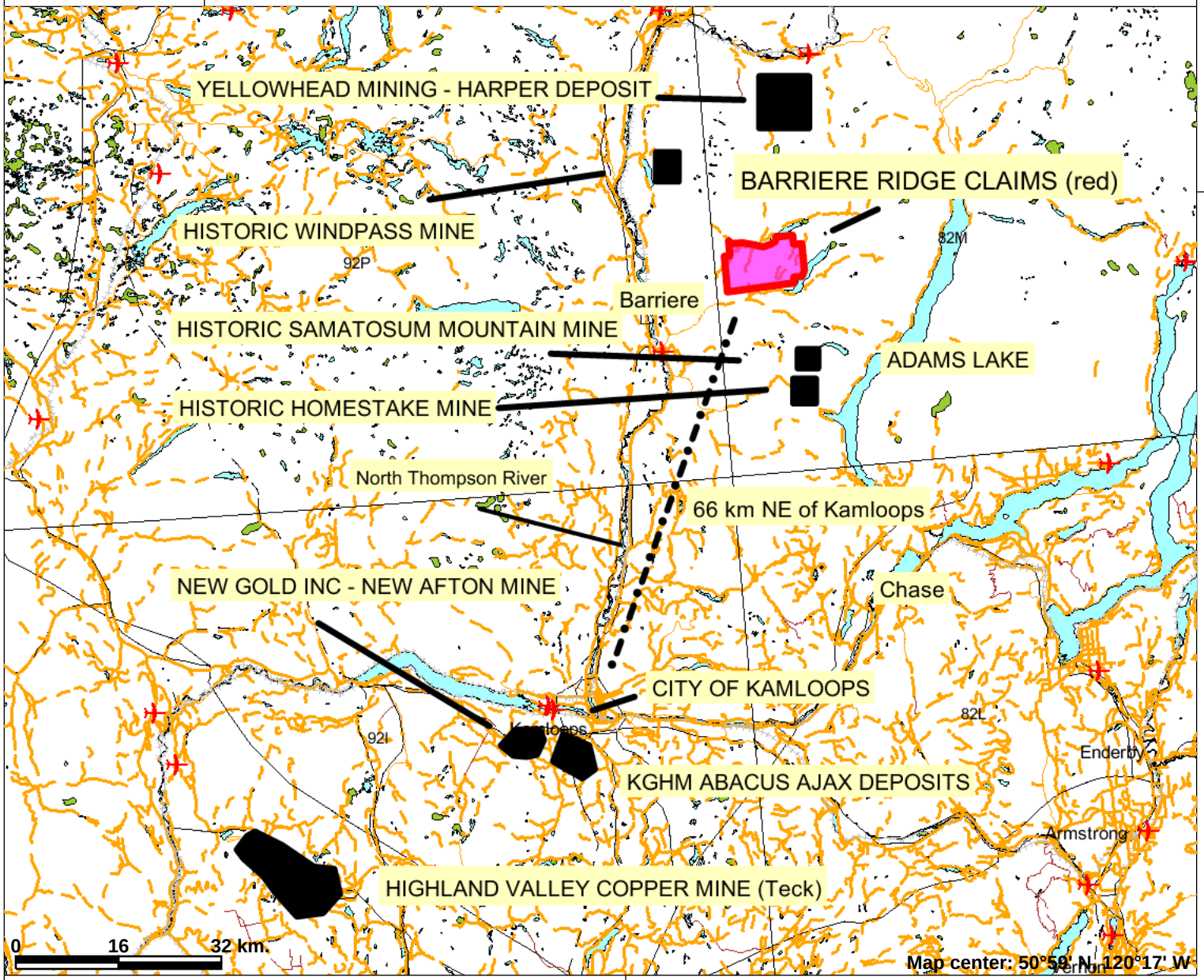
KILOMETERS

N


Barriere Ridge: Biogeoclimatic Subzones by Tenure
ESSFwc 2
ICH mw 3
ESSF dc 2
ICH mk 2
ICH mw 3
MS dm 2
IDF mw 2
082M.031
082M.021
N
1:85,000
Mta_acq_te.shp
BioGeoClimatic Subzones, Variants
Rivers
Map Sheet Grid Lines
ROADS

BARRIERE RIDGE: Overview of Mines & Deposits

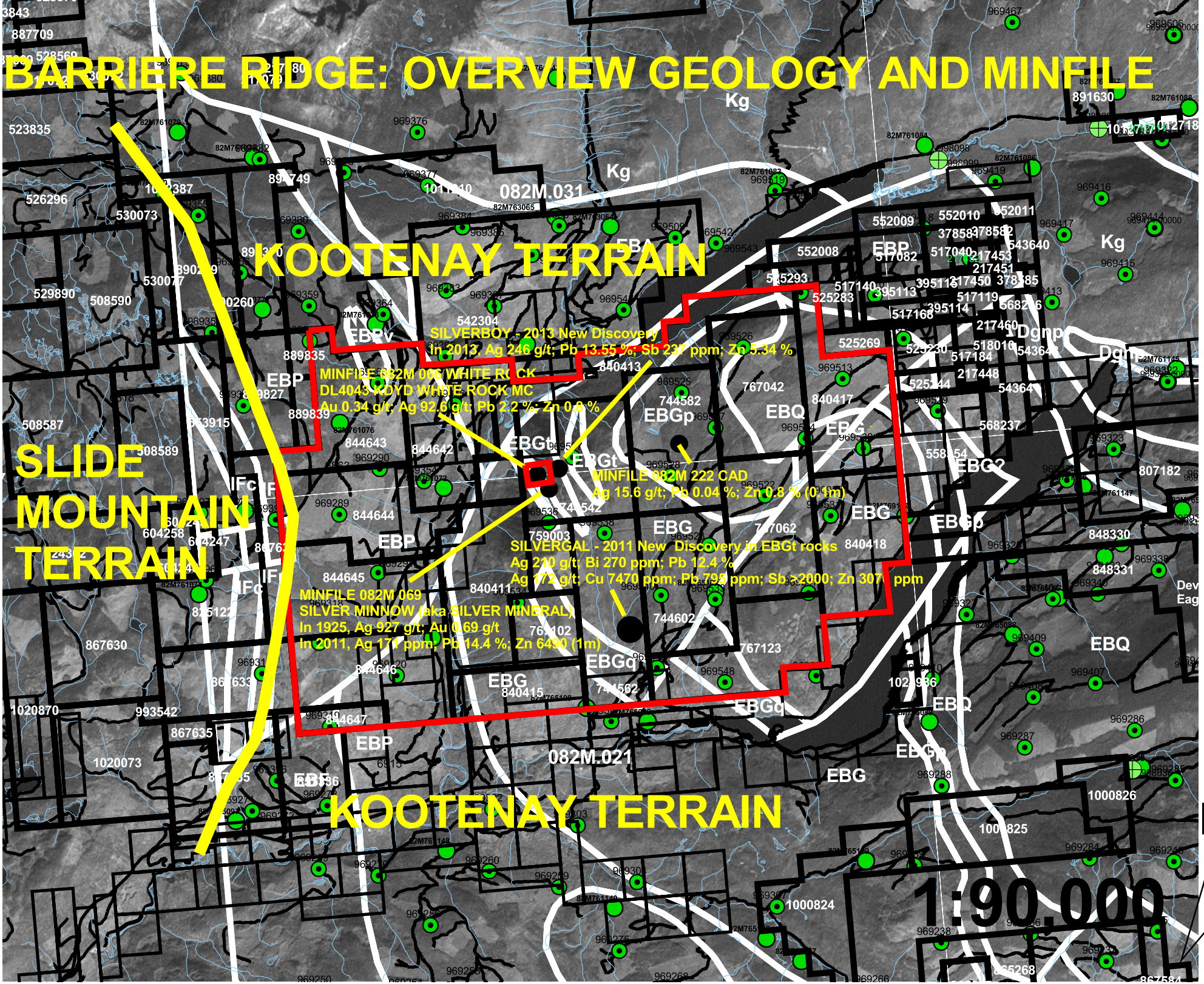


Legend

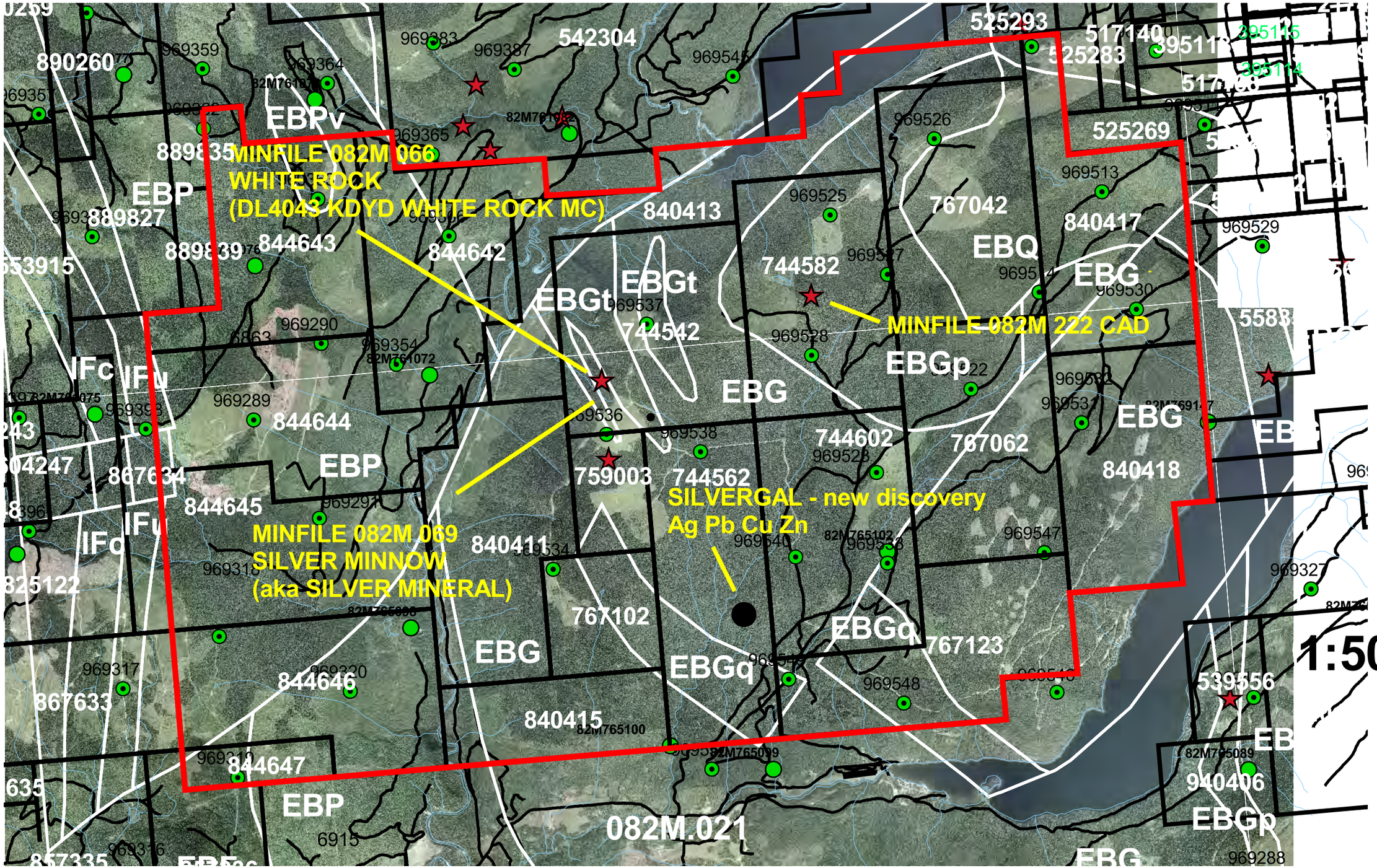
- NTS Grid
- Annotation (1:250K)
- Transportation - Points (1:250K)
  - Airfield
  - Anchorage - Seaplane
  - Ferry Route
  - Heliport
  - Seaplane Base
  - Air Field
  - Airport
  - Air Feature - Condition Unknown
  - Airport.Abandoned
- Transportation - Lines (1:250K)
  - Ferry Route
  - Aerial Cableway
  - Road (Gravel Undivided) - 1 Lane
  - Road (Gravel Undivided) - 3 Lanes
  - Road - Paved.lanes.2or More.Divided
  - Road (Paved Undivided) - Not Elevated - 1 Lane
  - Road (Paved Undivided) - Not Elevated - 2 Lanes
  - Road - Paved.lanes.3or More.Undivided
  - Road (Unimproved)
  - Road - Loose.access Dry Weather
  - Road (Winter Road)
  - Road - Paved.lanes.2.Undivided
  - Road - Paved.lanes.2.Undivided.U/C
  - Road - Paved.Divided.access.Non Standard
  - Track - Cart/Tractor
  - Causeway (Railway)
  - Cut (Roadway)
  - Trail
  - Tunnel
  - Bridge
  - Rail Line - Narrow Gauge - Single Track

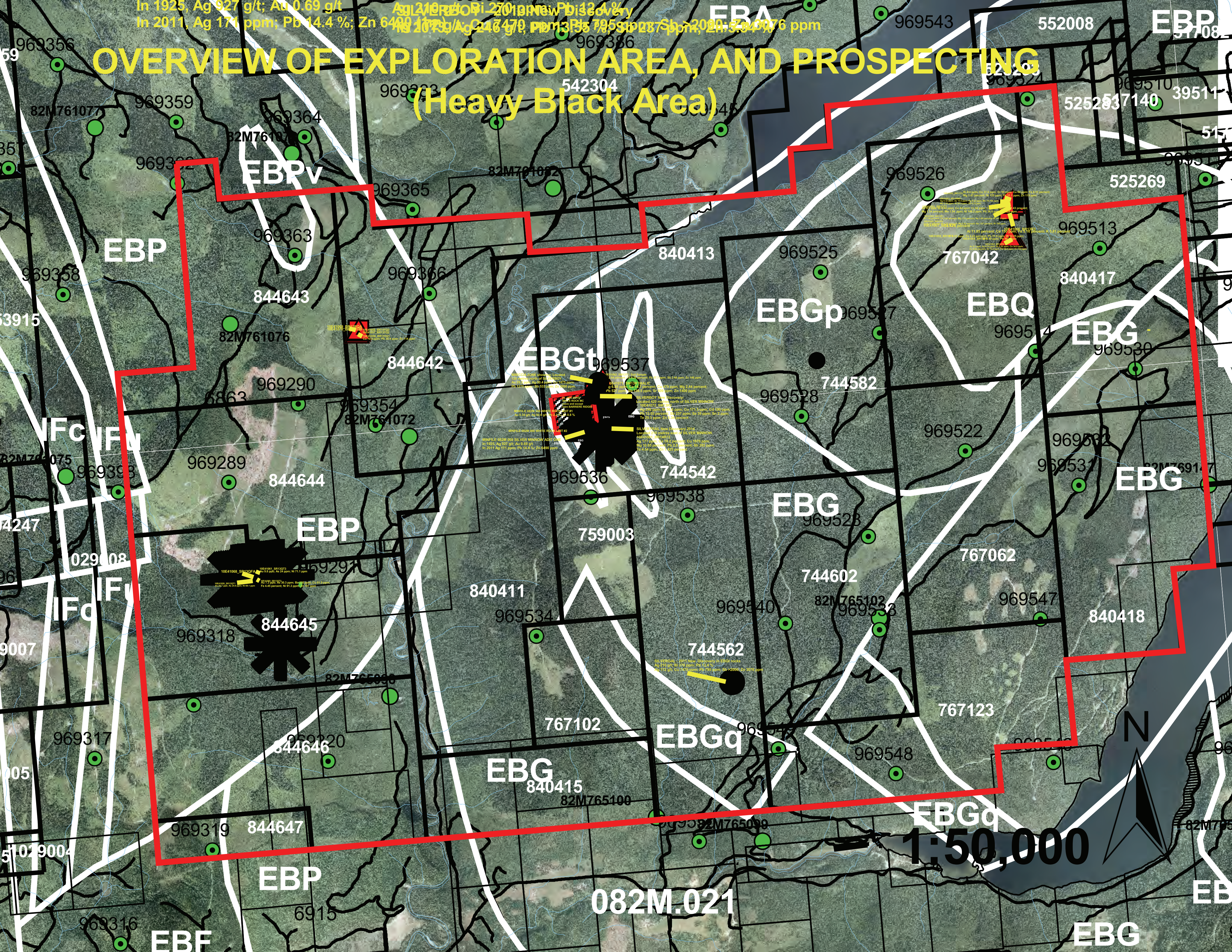
N

Scale: 1:929,947


BARRIERE RIDGE: OVERVIEW GEOLOGY AND MINFILE
KOOTENAY TERRAIN
SLIDE MOUNTAIN TERRAIN
KOOTENAY TERRAIN
082M.031
082M.021
SILVERBOY - 2013 New Discovery
In 2013, Ag 246 g/t; Pb 13.55 %; Sb 237 ppm; Zn 5.34 %
MINFILE 082M 068 WHITE ROCK
DL4043 ROYD WHITE ROCK MC
Au 0.34 g/t; Ag 92.6 g/t; Pb 2.2 %; Zn 0.8 %
MINFILE 082M 222 CAD
Ag 15.6 g/t; Pb 0.04 %; Zn 0.8 % (0.1m)
SILVERGAL - 2011 New Discovery in EBGt rocks
Ag 210 g/t; Bi 270 ppm; Pb 12.4 %
Ag 172 g/t; Cu 7470 ppm; Pb 795 ppm; Sb >2000; Zn 307 ppm
MINFILE 082M 069
SILVER MINNOW (aka SILVER MINERAL)
In 1925, Ag 927 g/t; Au 0.69 g/t
In 2011, Ag 171 ppm; Pb 14.4 %; Zn 6490 (1m)
1:90,000
N

BARRIERE RIDGE: OVERVIEW GEOLOGY, MINFILE, SILVERGAL SHOWING




OVERVIEW OF EXPLORATION AREA, AND PROSPECTING
(Heavy Black Area)
1:50,000
N
082M.021
EBPv
EBP
EBGt
EBGp
EBQ
EBG
EBGq
EBA
EBF
IFc
IFu
969543
552008
542304
840413
969525
744582
969528
969522
969526
767042
840417
525269
969513
969537
744542
969536
969538
759003
969523
744602
969540
744562
767062
969547
840418
767123
969548
840411
969534
767102
840415
82M765100
844643
844642
844644
844645
844646
844647
82M761076
82M761072
969290
969289
969354
969363
969365
969366
969359
969364
969358
969318
969317
969319
969316
969356
82M761077
029008
EBP
525283
517140

BARRIERE RIDGE: LIST OF ROCK, SOIL, MOSS MAT, and STREAM SEDIMENT SAMPLES.

Samples listed by Sample Tag, GPS Coordinate UTM NAD 83, Showing Assay Certificates, Anomalous Results and Other Results.

Total Samples = 45 collected, 18 assayed, 27 not assayed yet.

Rock Samples = 19 collected, 18 assayed, 1 not assayed yet.

Soil Samples = 26 collected and not assayed yet.

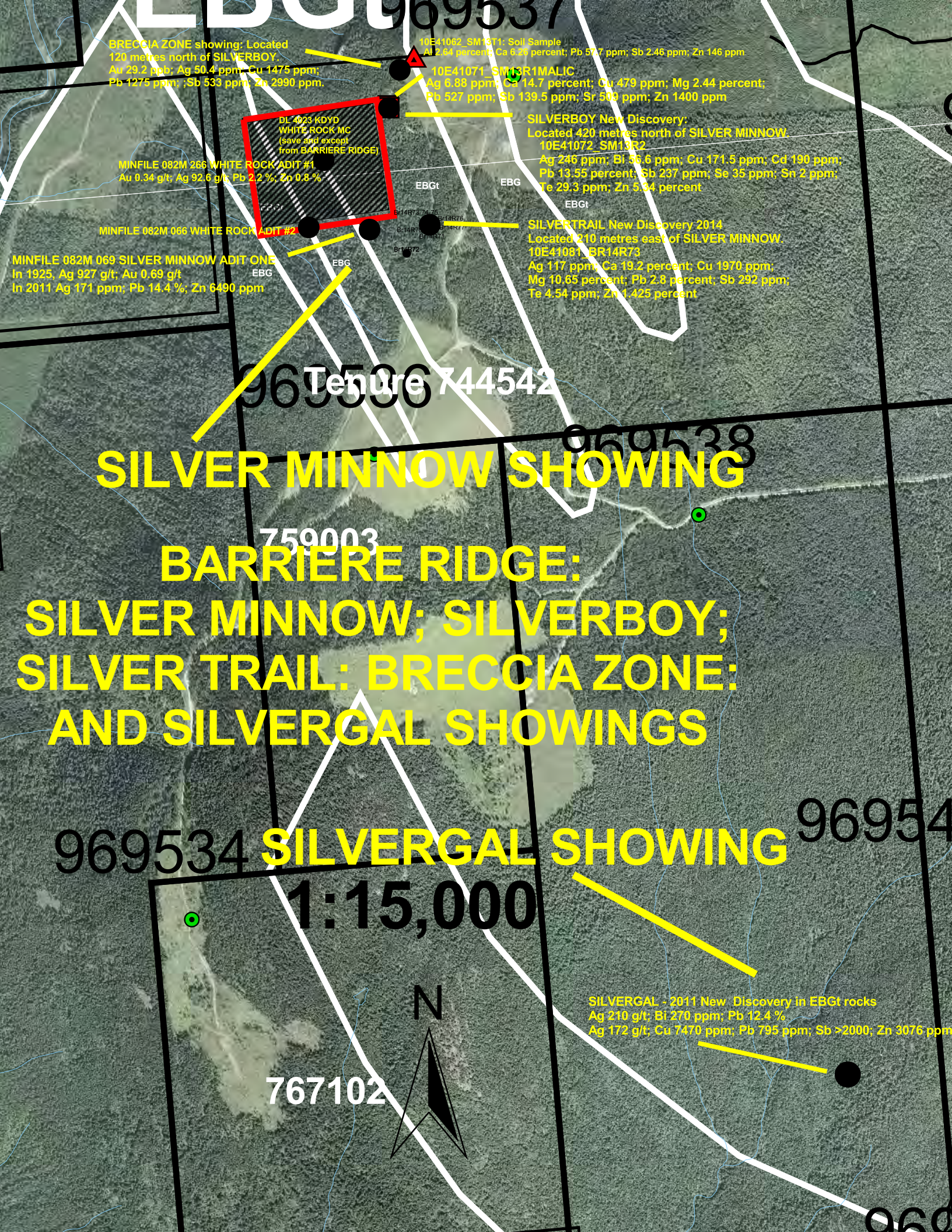
Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
SILVER TRAIL Showing, Tenure 744542								
10E41081_BR14R73	KL14093257	rock, grab	11	298003.448	5686986.491	1266.17	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, malachite sheet, galena blebs and veinlets, possible Ag	**Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent**
10E41085_BR14R77	KL14093257	rock, grab	11	298018.174	5686984.986	1248.39	Silver Trail Showing: trail cut slope outcrop; limestone or dolostone, white quartz veinlets, galena blebs	**Ag 19.7 ppm; Ca 18.65 percent; Mg 9.81 percent; Pb 5060 ppm**
10E41077_BR14R70	KL14093257	rock, grab	11	297997.411	5686972.310	1257.28	Silver Trail Showing: trail cutslope; tan to light brown limestone or dolostone, quartz veinlets, malchite, galena blebs and veinlets	**Ag 18.65; Ca 21.5 percent; Mg 10.5 percent; Pb 1410 ppm**
10E41083_BR14R75	KL14093257	rock, grab	11	298003.448	5686986.491	1266.17	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, malachite, galena veins and blebs, possible Ag	**Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent; Pb 8780 ppm; Zn 2680 ppm**
10E41078_BR14R71	KL14093257	rock, grab	11	298001.771	5686970.112	1247.67	Silver Trail Showing: trail cutslope; tan to light brown limestone or dolostone, quartz, veinlets, malchite, galena	**Ag 12.95; Ca 22.1 percent; Mg 10.8 percent; Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm**
10E41084_BR14R76	KL14093257	rock, grab	11	298018.507	5686987.623	1246.23	Silver Trail Showing: trail cut slope outcrop; limestone or dolostone, quartz veinlets, malachite possible galena and silver	**Ag 7.68 ppm; Ca 21.4 percent; Mg 11.55 percent; Pb 448 ppm**

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
10E41082_BR14R74	KL14093257	rock, grab	11	298003.448	5686986.491	1266.17	Silver Trail Showing: trail cutslope outcrop; limestone or dolostone, quartz veinlets, no visible malachite galena	**Ca 20.4 percent; Mg 11.1 percent; Zn 856 ppm**
10E41079_BR14R72	KL14093257	rock, grab	11	297917.351	5686897.604	1221.23	Silver Trail Showing: trail cutslope colluvium boulder 80x67x50cm, limestone quartz veinlets, malachite	**Ca 24.4 percent**
10E41080_BR14R72A	KL14093257	rock, grab	11	297917.351	5686897.604	1221.23	Silver Trail Showing: trail cutslope colluvium boulder 80x67x50cm, limestone quartz veinlets, malachite	**Ca 17.15 percent**
Br14R80	not assayed	rock, grab	11	297997.956	5686966.548	1259.44	Silver Trail Showing: trail cutslope outcrop; tan to light brown limestone or dolostone, galena veinlets and blebs, malachite, possible Ag, hand trench 0.5m x 1m x 0.12m	**not assayed yet; visible galena and malchite, possible silver. To be assayed.**
Sprague Creek Area: 300 Metres North Of Sprague Creek, south central portion of Tenure 844645.								
10E41091_SR14HR6	KL14093257	rock, grab	11	294004.291	5685034.930	869.87	surface float; greyish brown, fine grained, salicious with rusty flecks, pyrite cubes, hosting 1cm smoke+white quartz veins	no anomalous results; Au 1 ppb; Ag 0.08 ppm; Al 3.34 percent; As 14.6 ppm; Cu 12.4 ppm; Fe 2.09 percent; Zn 82 ppm
10E41093_SR14HR8	KL14093257	rock, grab	11	294014.305	5685003.613	866.99	surface float; grey, fine grained, salicious with rusty flecks, pyrite cubes, hosting 1cm smokey quartz veins	no anomalous results; Au 2 ppb; Ag 0.13 ppm; Al 4.36 percent; As 23.2 ppm; Cu 27.3 ppm; Fe 2.52 percent; Zn 79 ppm
10E41086_SR14QFR1	KL14093257	rock, grab	11	294004.291	5685034.930	869.87	surface float; white quartz vein with pyrite, rusty vugs	no anomalous results; Au 10 ppb; Ag 0.21 ppm; Al 0.29 percent; As 34.7 ppm; Cu 18.8 ppm; Fe 2.69 percent; Zn 54 ppm
10E41087_SR14QFR2	KL14093257	rock, grab	11	294002.150	5685030.611	868.19	surface float; white quartz vein with pyrite, rusty vugs	no anomalous results; Au 6 ppb; Ag 0.08 ppm; Al 0.6 percent; As 9.1 ppm; Cu 21.9 ppm; Fe 2.06 percent; Zn 41 ppm

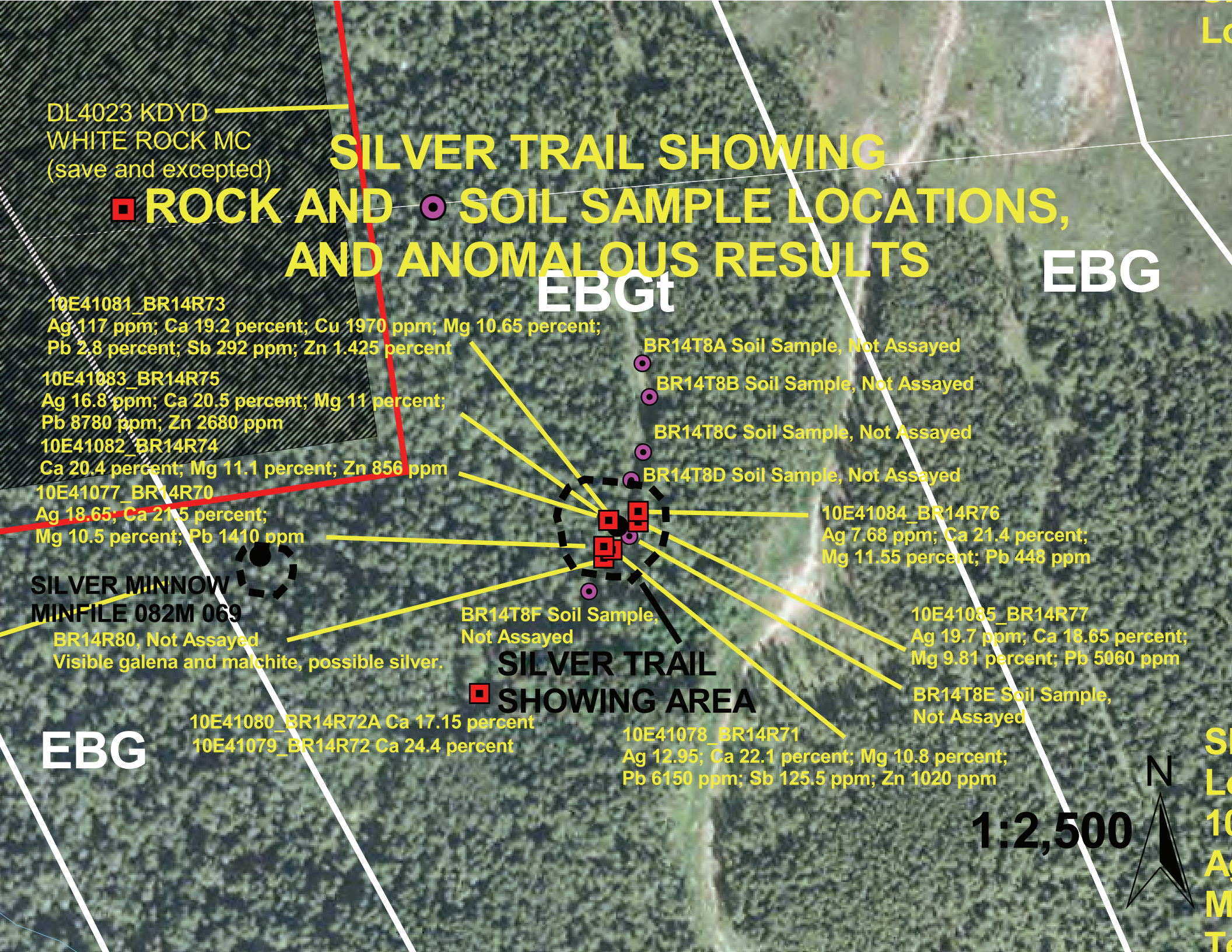
Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
10E41088_SR14QFR3	KL14093257	rock, grab	11	294024.415	5685035.912	874.68	surface float; white quartz vein with pyrite, rusty vugs	no anomalous results; Au 2 ppb; Ag 0.06 ppm; Al 0.64 percent; As 6.5 ppm; Cu 18.5 ppm; Fe 1.2 percent; Zn 60 ppm
10E41089_SR14QFR4	KL14093257	rock, grab	11	294004.038	5685015.265	866.99	surface float; white quartz vein with pyrite, rusty vugs	no anomalous results; Au 5 ppb; Ag 0.04 ppm; Al 0.36 percent; As 19.5 ppm; Cu 10.7 ppm; Fe 1.52 percent; Zn 50 ppm
10E41090_SR14QFR5	KL14093257	rock, grab	11	294024.348	5685002.537	864.34	surface float; white quartz vein with pyrite, rusty vugs	no anomalous results; Au 4 ppb; Ag 0.04 ppm; Al 0.24 percent; As 11.6 ppm; Cu 7.3 ppm; Fe 0.85 percent; Zn 11 ppm
10E41092_SR14QFR7	KL14093257	rock, grab	11	294014.007	5684998.828	864.83	surface float; greyish brown, fine grained, salicious with rusty flecks, 5-10% pyrite cubes, hosting 1cm smokey quartz veins	no anomalous results; Au 4 ppb; Ag 0.07 ppm; Al 4.54 percent; As 89.2 ppm; Cu 7.3 ppm; Fe 2.67 percent; Zn 35 ppm
SILVER TRAIL Showing, Tenure 744542 (see also rock samples above)								
Br14T8A	not assayed	soil, trowel	11	298032.442	5687072.893	1251.99	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, yellowish light brown, poorly graded, CL	not assayed yet
Br14T8B	not assayed	soil, trowel	11	298034.057	5687053.500	1251.03	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, yellowish tedish brown, poorly graded, CL	not assayed yet
Br14T8C	not assayed	soil, trowel	11	298026.548	5687022.782	1245.50	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, yellowish medium brown, poorly graded, CL	not assayed yet
Br14T8D	not assayed	soil, trowel	11	298017.826	5687007.866	1280.59	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, greyish light brown, poorly graded, CL	not assayed yet
Br14T8E	not assayed	soil, trowel	11	298012.758	5686976.445	1240.94	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, greyish light brown, poorly graded, CL	not assayed yet

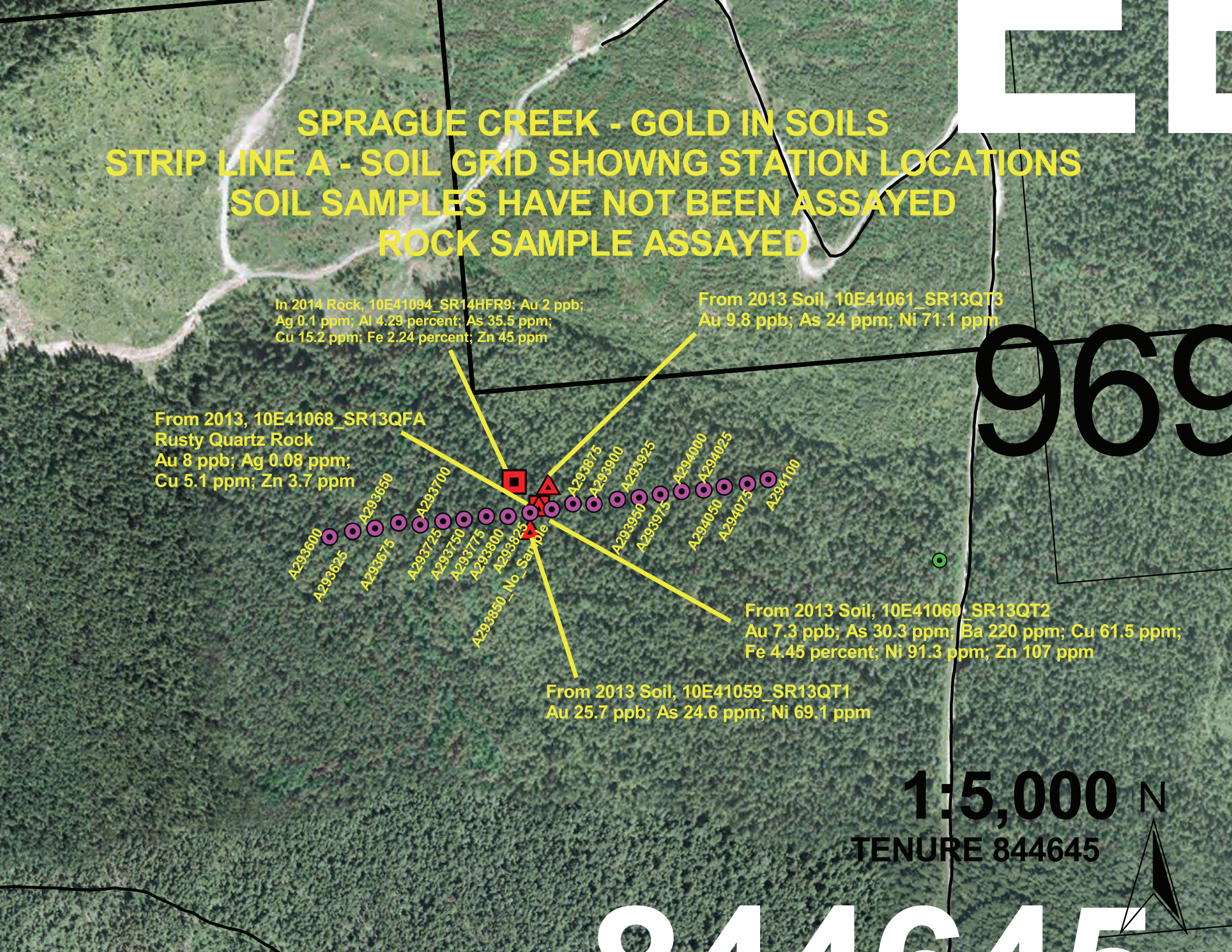
Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
Br14T8F	not assayed	soil, trowel	11	297986.166	5686948.039	1255.36	Silver Trail Showing: SILVERTRAIL1 Soil Grid, trail cutslope, Bm horizon, yellowish light brown, poorly graded, SCL	not assayed yet
Sprague Creek - Gold In Soils: 950 Metres North of Sprague Creek (north boundary Tenure 844645)								
10E41094_SR14HFR9	KL14093257	rock, grab	11	293811.525	5685831.893	1017.19	surface float; greyish brown, fine grained, salicious with rusty flecks, 1-5% pyrite cubes, hosting 1cm smokey quartz veins	no anomalous results; Au 2 ppb; Ag 0.1 ppm; Al 4.29 percent; As 35.5 ppm; Cu 15.2 ppm; Fe 2.24 percent; Zn 45 ppm
A293600	not assayed	soil, auger	11	293597.003	5685799.502	1043.63	SPRAGUE1 Soil Grid: 5% slope, not logged, Bf horizon, yellowish brown, SCL	not assayed yet
A293625	not assayed	soil, auger	11	293623.810	5685802.546	1049.40	SPRAGUE1 Soil Grid: flat, not logged, Bf horizon, yellowish brown, SCL	not assayed yet
A293650	not assayed	soil, auger	11	293649.574	5685802.664	1048.44	SPRAGUE1 Soil Grid: flat, not logged, Bf horizon, yellowish brown, SCL	not assayed yet
A293675	not assayed	soil, auger	11	293676.646	5685805.595	1039.30	SPRAGUE1 Soil Grid: flat, logged, Bf horizon, yellow brown, SCL	not assayed yet
A293700	not assayed	soil, auger	11	293700.716	5685800.574	1032.57	SPRAGUE1 Soil Grid: flat, logged, Bf horizon, red brown, CL	not assayed yet
A293725	not assayed	soil, auger	11	293726.631	5685801.237	1023.92	SPRAGUE1 Soil Grid: 10% slope, logged, sulphides in float, Bm horizon, yellowish brown, CL	not assayed yet
A293750	not assayed	soil, auger	11	293750.618	5685800.391	1021.52	SPRAGUE1 Soil Grid: 25% slope, logged, quartz fragments, Bg horizon, grey brown, CL	not assayed yet
A293775	not assayed	soil, auger	11	293776.077	5685800.634	1016.95	SPRAGUE1 Soil Grid: 25% slope, logged, Bf horizon, yellowish greyish brown, CL	not assayed yet

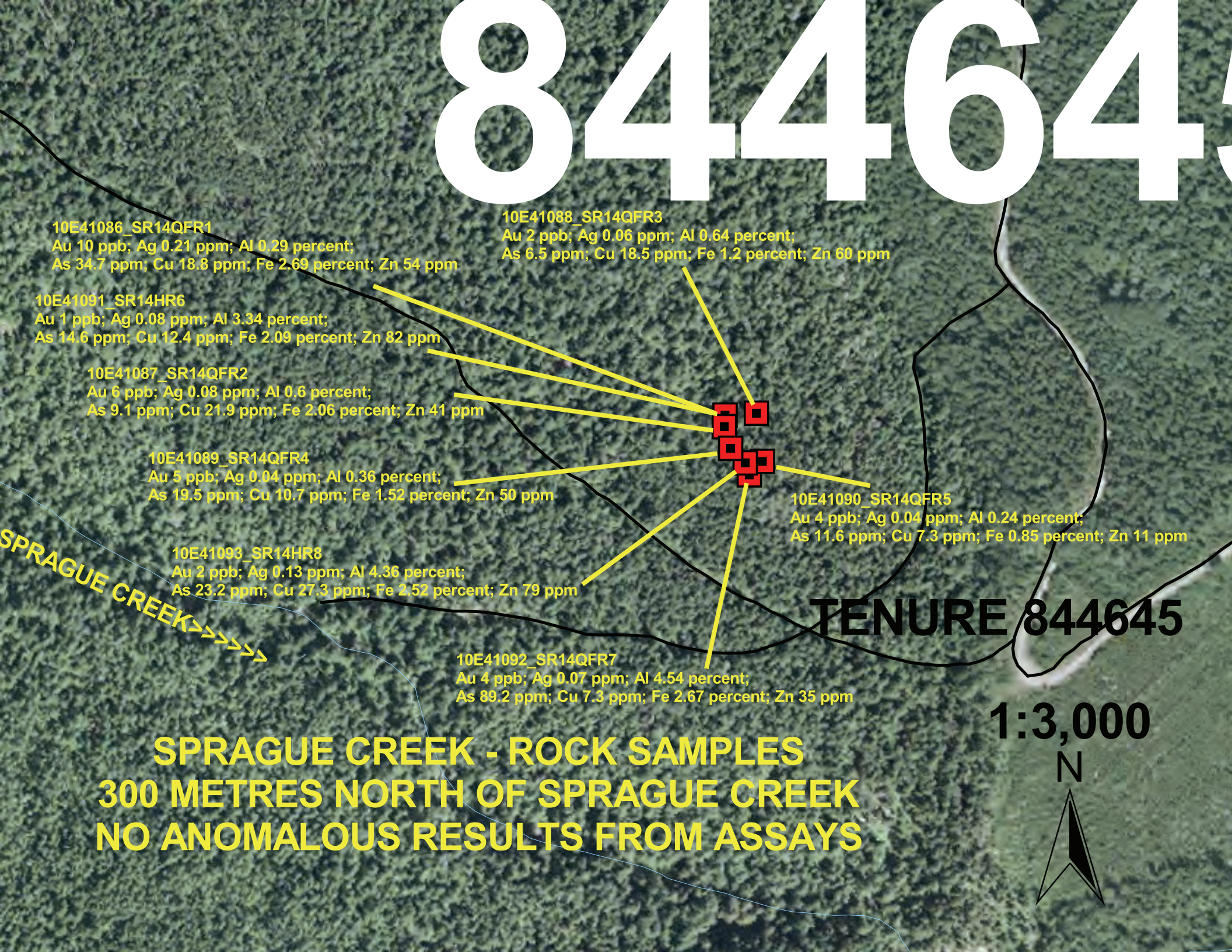
Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
A293800	not assayed	soil, auger	11	293800.381	5685797.489	1012.15	SPRAGUE1 Soil Grid: 30% slope, logged, Bf horizon, yellow brown, CL	not assayed yet
A293825	not assayed	soil, auger	11	293825.655	5685798.356	1003.25	SPRAGUE1 Soil Grid: 32% slope, logged, Bf horizon, yellowish brown, CL	not assayed yet
A293850 NO SAMPLE	not sampled		11	293850.500	5685799.333	997.49	SPRAGUE1 Soil Grid: no sample taken, located on fill slope of road therefore not representative	not sampled
A293875	not assayed	soil, auger	11	293875.088	5685802.375	990.28	SPRAGUE1 Soil Grid: 20% slope, Bm horizon, redish medium brown, CL, soil saturated wet	not assayed yet
A293900	not assayed	soil, auger	11	293898.639	5685799.121	987.87	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, greyish brown, CL	not assayed yet
A293925	not assayed	soil, auger	11	293925.642	5685800.786	982.35	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, grey brown, CL	not assayed yet
A293950	not assayed	soil, auger	11	293950.220	5685799.946	977.54	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, redish grey brown, CL	not assayed yet
A293975	not assayed	soil, auger	11	293974.666	5685800.473	978.50	SPRAGUE1 Soil Grid: 20% slope, Bm horizon, redish medium brown, CL, soil saturated wet	not assayed yet
A294000	not assayed	soil, auger	11	293999.234	5685800.678	969.61	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, yellowish brown, CL	not assayed yet
A294025	not assayed	soil, auger	11	294024.179	5685799.347	961.20	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, yellowish medium brown, CL	not assayed yet
A294050	not assayed	soil, auger	11	294047.397	5685799.915	953.51	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, yellow brown, CL	not assayed yet
A294075	not assayed	soil, auger	11	294074.110	5685800.035	951.34	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, yellow brown, CL	not assayed yet
A294100	not assayed	soil, auger	11	294098.125	5685801.784	946.06	SPRAGUE1 Soil Grid: 20% slope, Bf horizon, yellowish grey brown, C	not assayed yet


BRECCIA ZONE showing: Located
120 metres north of SILVERBOY.
Au 29.2 ppb; Ag 50.4 ppm; Cu 1475 ppm;
Pb 1275 ppm; ;Sb 533 ppm; Zn 2990 ppm.
10E41062_SM13T1: Soil Sample
Al 2.64 percent; Ca 6.25 percent; Pb 577 ppm; Sb 2.46 ppm; Zn 146 ppm
10E41071_SM13R1MALIC
Ag 6.88 ppm; Ca 14.7 percent; Cu 479 ppm; Mg 2.44 percent;
Pb 527 ppm; Sb 139.5 ppm; Sr 509 ppm; Zn 1400 ppm
DL 4923 KDYD
WHITE ROCK MC
(save and except
from BARRIERE RIDGE)
SILVERBOY New Discovery:
Located 420 metres north of SILVER MINNOW.
10E41072_SM13R2
Ag 246 ppm; Bi 55.6 ppm; Cu 171.5 ppm; Cd 190 ppm;
Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm;
Te 29.3 ppm; Zn 5.34 percent
MINFILE 082M 266 WHITE ROCK ADIT #1
Au 0.34 g/t; Ag 92.6 g/t; Pb 2.2 %; Zn 0.8 %
EBGt
EBG
EBGt
MINFILE 082M 066 WHITE ROCK ADIT #2
SILVERTRAIL New Discovery 2014
Located 210 metres east of SILVER MINNOW.
10E41081_BR14R73
Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm;
Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm;
Te 4.54 ppm; Zn 1.425 percent
MINFILE 082M 069 SILVER MINNOW ADIT ONE
In 1925, Ag 927 g/t; Au 0.69 g/t
In 2011 Ag 171 ppm; Pb 14.4 %; Zn 6490 ppm
EBG
EBG
Tenure 744542
SILVER MINNOW SHOWING
BARRIERE RIDGE:
SILVER MINNOW; SILVERBOY;
SILVER TRAIL: BRECCIA ZONE:
AND SILVERGAL SHOWINGS
SILVERGAL SHOWING
1:15,000
N
SILVERGAL - 2011 New Discovery in EBGt rocks
Ag 210 g/t; Bi 270 ppm; Pb 12.4 %
Ag 172 g/t; Cu 7470 ppm; Pb 795 ppm; Sb >2000; Zn 3076 ppm


BARRIERE RIDGE: SILVER MINNOW; SILVERBOY; SILVER TRAIL;
BRECCIA ZONE SHOWINGS AND RESULTS
(save and except DL4023 KDYD WHITE ROCK MC)
EBGt
969537
BRECCIA ZONE showing: Located
120 metres north of SILVERBOY.
Au 29.2 ppb; Ag 50.4 ppm; Cu 1475 ppm;
Pb 1275 ppm; ;Sb 533 ppm; Zn 2990 ppm.
10E41062_SM13T1: Soil Sample
Al 2.64 percent; Ca 6.26 percent; Pb 57.7 ppm; Sb 2.46 ppm; Zn 146 ppm
10E41071_SM13R1MALIC
Ag 6.88 ppm; Ca 14.7 percent; Cu 479 ppm; Mg 2.44 percent;
Pb 527 ppm; Sb 139.5 ppm; Sr 509 ppm; Zn 1400 ppm
DL 4023 KDYD
WHITE ROCK MC
(save and except
from BARRIERE RIDGE)
SILVERBOY New Discovery:
Located 420 metres north of SILVER MINNOW.
10E41072_SM13R2
Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm
Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm
Te 29.3 ppm; Zn 5.34 percent
MINFILE 082M 266 WHITE ROCK ADIT #1
Au 0.34 g/t; Ag 92.6 g/t; Pb 2.2 %; Zn 0.8 %
EBGt
EBG
EBGt
Br14R73-74-75
Br14R76
Br14R77
Br14R70
Br14R71
Br14R72
MINFILE 082M 066 WHITE ROCK ADIT #2
SILVERTRAIL New Discovery 2014
Located 210 metres east of SILVER MINNOW.
10E41081_BR14R73
Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm;
Mg 10.65 percent; Pb 2.8 percent; Sb 292 ppm;
Te 4.54 ppm; Zn 1.425 percent
MINFILE 082M 069 SILVER MINNOW ADIT ONE
In 1925, Ag 927 g/t; Au 0.69 g/t
In 2011 Ag 171 ppm; Pb 14.4 %; Zn 6490 ppm
EBG
EBG
N
1:10,000
969536
Tenure 744542
969538


DL4023 KDYD
WHITE ROCK MC
(save and excepted)
SILVER TRAIL SHOWING
ROCK AND SOIL SAMPLE LOCATIONS,
AND ANOMALOUS RESULTS
EBG
EBGt
10E41081_BR14R73
Ag 117 ppm; Ca 19.2 percent; Cu 1970 ppm; Mg 10.65 percent;
Pb 2.8 percent; Sb 292 ppm; Zn 1.425 percent
10E41083_BR14R75
Ag 16.8 ppm; Ca 20.5 percent; Mg 11 percent;
Pb 8780 ppm; Zn 2680 ppm
10E41082_BR14R74
Ca 20.4 percent; Mg 11.1 percent; Zn 856 ppm
10E41077_BR14R70
Ag 18.65; Ca 21.5 percent;
Mg 10.5 percent; Pb 1410 ppm
BR14T8A Soil Sample, Not Assayed
BR14T8B Soil Sample, Not Assayed
BR14T8C Soil Sample, Not Assayed
BR14T8D Soil Sample, Not Assayed
10E41084_BR14R76
Ag 7.68 ppm; Ca 21.4 percent;
Mg 11.55 percent; Pb 448 ppm
SILVER MINNOW
MINFILE 082M 069
BR14R80, Not Assayed
Visible galena and malchite, possible silver.
BR14T8F Soil Sample,
Not Assayed
SILVER TRAIL
SHOWING AREA
10E41085_BR14R77
Ag 19.7 ppm; Ca 18.65 percent;
Mg 9.81 percent; Pb 5060 ppm
BR14T8E Soil Sample,
Not Assayed
EBG
10E41080_BR14R72A Ca 17.15 percent
10E41079_BR14R72 Ca 24.4 percent
10E41078_BR14R71
Ag 12.95; Ca 22.1 percent; Mg 10.8 percent;
Pb 6150 ppm; Sb 125.5 ppm; Zn 1020 ppm
N
1:2,500


SPRAGUE CREEK - GOLD IN SOILS
STRIP LINE A - SOIL GRID SHOWNG STATION LOCATIONS
SOIL SAMPLES HAVE NOT BEEN ASSAYED
ROCK SAMPLE ASSAYED
In 2014 Rock, 10E41094_SR14HFR9: Au 2 ppb; Ag 0.1 ppm; Al 4.29 percent; As 35.5 ppm; Cu 15.2 ppm; Fe 2.24 percent; Zn 45 ppm
From 2013 Soil, 10E41061_SR13QT3 Au 9.8 ppb; As 24 ppm; Ni 71.1 ppm
From 2013, 10E41068_SR13QFA Rusty Quartz Rock Au 8 ppb; Ag 0.08 ppm; Cu 5.1 ppm; Zn 3.7 ppm
A293600
A293625
A293650
A293675
A293700
A293725
A293750
A293775
A293800
A293825
A293850_No_Sample
A293875
A293900
A293925
A293950
A293975
A294000
A294025
A294050
A294075
A294100
From 2013 Soil, 10E41060_SR13QT2 Au 7.3 ppb; As 30.3 ppm; Ba 220 ppm; Cu 61.5 ppm; Fe 4.45 percent; Ni 91.3 ppm; Zn 107 ppm
From 2013 Soil, 10E41059_SR13QT1 Au 25.7 ppb; As 24.6 ppm; Ni 69.1 ppm
969
1:5,000
N
TENURE 844645
844645


844645
10E41086_SR14QFR1
Au 10 ppb; Ag 0.21 ppm; Al 0.29 percent;
As 34.7 ppm; Cu 18.8 ppm; Fe 2.69 percent; Zn 54 ppm
10E41088_SR14QFR3
Au 2 ppb; Ag 0.06 ppm; Al 0.64 percent;
As 6.5 ppm; Cu 18.5 ppm; Fe 1.2 percent; Zn 60 ppm
10E41091_SR14HR6
Au 1 ppb; Ag 0.08 ppm; Al 3.34 percent;
As 14.6 ppm; Cu 12.4 ppm; Fe 2.09 percent; Zn 82 ppm
10E41087_SR14QFR2
Au 6 ppb; Ag 0.08 ppm; Al 0.6 percent;
As 9.1 ppm; Cu 21.9 ppm; Fe 2.06 percent; Zn 41 ppm
10E41089_SR14QFR4
Au 5 ppb; Ag 0.04 ppm; Al 0.36 percent;
As 19.5 ppm; Cu 10.7 ppm; Fe 1.52 percent; Zn 50 ppm
10E41090_SR14QFR5
Au 4 ppb; Ag 0.04 ppm; Al 0.24 percent;
As 11.6 ppm; Cu 7.3 ppm; Fe 0.85 percent; Zn 11 ppm
SPRAGUE CREEK>>>>>>
10E41093_SR14HR8
Au 2 ppb; Ag 0.13 ppm; Al 4.36 percent;
As 23.2 ppm; Cu 27.3 ppm; Fe 2.52 percent; Zn 79 ppm
TENURE 844645
10E41092_SR14QFR7
Au 4 ppb; Ag 0.07 ppm; Al 4.54 percent;
As 89.2 ppm; Cu 7.3 ppm; Fe 2.67 percent; Zn 35 ppm
SPRAGUE CREEK - ROCK SAMPLES
300 METRES NORTH OF SPRAGUE CREEK
NO ANOMALOUS RESULTS FROM ASSAYS
1:3,000
N

BARRIERE RIDGE CLAIMS: GENERAL LIST OF HISTORIC DIAMOND DRILLING BASED ON ARIS REPORTS.

Data based on review of ARIS Reports completed March 2013 by David J. Piggin.

Field work to locate and GPS drill collars scheduled for 2013/2014.

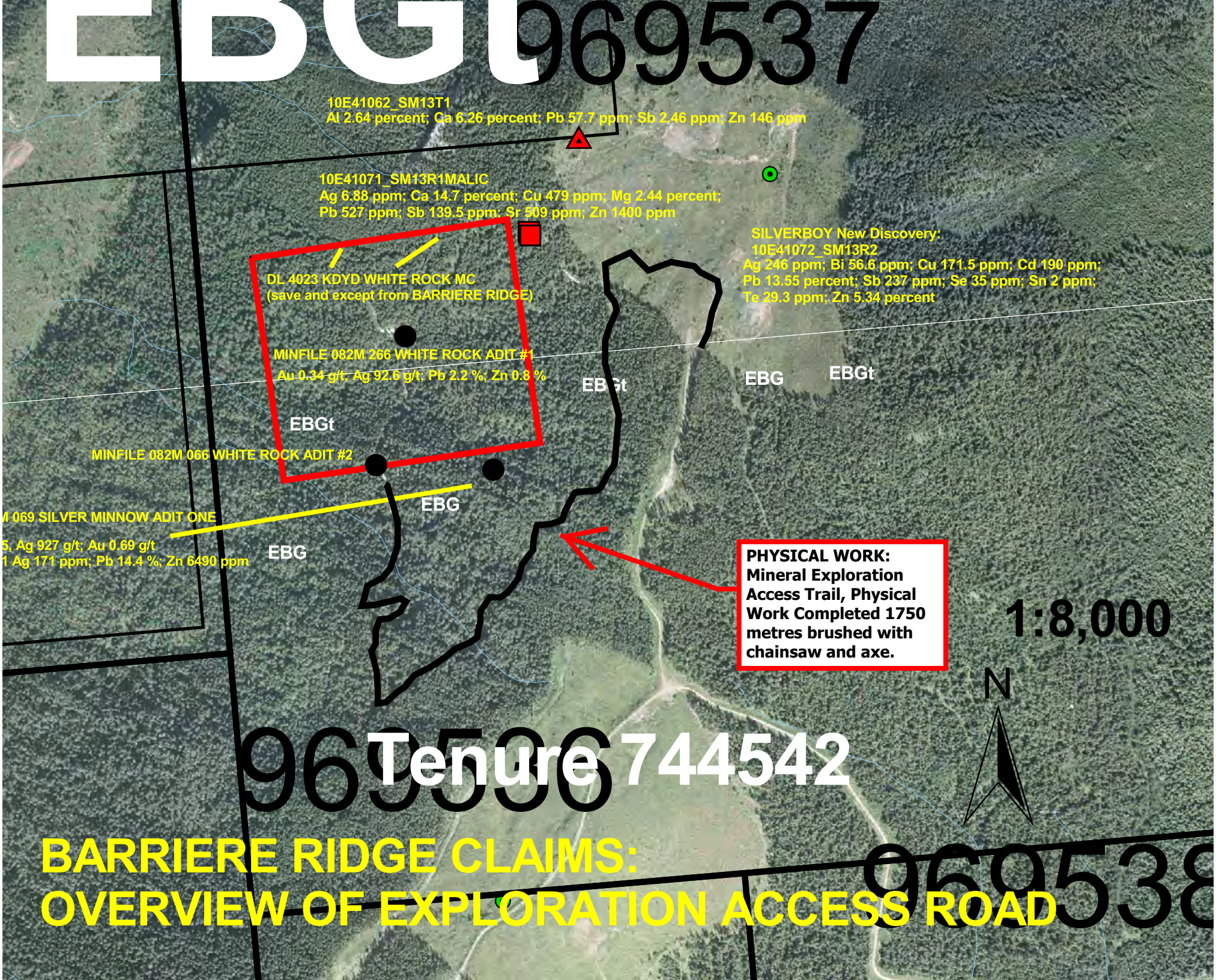
	ESTIMATED TOTAL LENGTH OF DRILLING (metres)	2,195.98	20 Historic Drill Holes based on ARIS Reports

Year	ARIS Report	Operator	Drill Hole	Core Size	S.D. Length (m)	H.D. Length (m)	Azimuth (deg)	Angle (deg)	Depth to Collar (m)	Results and Comments	Interval	Coordinates
					1,836.60	**359.38**						
1984	13168	Noranda Inc	CAD 84-1	NQ	66.1		250	-45	12.5	Ag 2 g/t; Zn 0.65 % Drill logs in ARIS report.	2 m	Line 145+15E and ll0+00N.
1984	13168	Noranda Inc	CAD 84-2	NQ	66.1		250	-45	3	Ag 15.6 g/t; Zn 12,000 ppm; Pb 392 ppm over 0.1 metres; and Ag 4.6 g/t; Zn 136 ppm; Pb 1070 ppm over 0.1 metres; and Ag 3.6 g/t; Zn 500 ppm; Pb 1020 ppm over 0.6 metres. Drill logs in ARIS report.	In 3 separate quartz veins	Line 134+58E and ll2+00N,
1985	14397	Noranda Inc	CAD 85-1	NQ	137.2		270	-45	17.08	Drilling failed to intersect mineralization that would explain Soil and IP anomaly. Drill logs in ARIS report.		East 146+95 and North 110+90
1985	14397	Noranda Inc	CAD 85-2	NQ	47.5		270	-65	13.1	Drilling failed to intersect mineralization that would explain Soil and IP anomaly. Drill logs in ARIS report.		East 146+47 and North 110+95
1987	16331	Merritech Development Corporation	CAD 87-1	NQ	175		250	-45	13.4	Drilling failed to intersect mineralization that would explain soil anomaly. Drill logs in ARIS report.		143+00 East and 110+00 North

Year	ARIS Report	Operator	Drill Hole	Core Size	S.D. Length (m)	H.D. Length (m)	Azimuth (deg)	Angle (deg)	Depth to Collar (m)	Results and Comments	Interval	Coordinates
1987	16331	Merritech Development Corporation	CAD 87-2	NQ	98.8		250	-60	9.1	Drilling failed to intersect mineralization that would explain soil anomaly. Drill logs in ARIS report.		146+42 East and 111+50 North
1987	16331	Merritech Development Corporation	CAD 87-3	NQ	120.4		250	-45	3	Drilling failed to intersect mineralization that would explain soil anomaly. Drill logs in ARIS report.		145+60.5 East and 106+94 North
1987	17739	National Resources Exploration Ltd	DDH 87-1	NQ	na	125	SW	na	na	Unknown, Drill site shown on map 125 m horizontal distance. Drill logs not found.		115 North line about 134.4 m west of baseline.
1987	17739	National Resources Exploration Ltd	DDH 87-2	NQ	na	134.375	SW	na	na	Unknown, Drill site shown on map 134 m horizontal distance. Drill logs not found.		114 North line about 93.8 m west of baseline.
1987	17739	National Resources Exploration Ltd	DDH 87-3	NQ	na	50	SW	na	na	Unknown, Drill site shown on map 50 m horizontal distance. Drill logs not found.		113 North line about 156.3 mwest of baseline.
1987	17739	National Resources Exploration Ltd	DDH 87-4	NQ	na	50	SW	na	na	Unknown, Drill site shown on map 50 m horizontal distance. Drill logs not found.		113 North line about 156.3 mwest of baseline.
1988	18489	Minnova Inc.	P1 BAR20	NQ	154.5		235	-45	4.1	Intersected a uniform sequence of dacite tuffs with a relatively narrow rhyolite interval. Conductor is associated with graphitic argillites.		L52+50E and 53+50N

Year	ARIS Report	Operator	Drill Hole	Core Size	S.D. Length (m)	H.D. Length (m)	Azimuth (deg)	Angle (deg)	Depth to Collar (m)	Results and Comments	Interval	Coordinates
1988	18489	Minnova Inc.	P2 BAR21	NQ	151.5		235	-45	3.05	Drill through a QFP rhyolite-dacite dome in a na area of overlapping Na2O depletion and Ag enrichment. Intersected QFP rhyolite flow and dacite tuff. Drill logs in ARIS report.		L54+25E and 52+35N
1988	18489	Minnova Inc.	P3 BAR22	NQ	120.7		235	-45	15.7	Tested a Max/Min conductor with a weak coincident Cu soil anomaly. Trace pyrite and pyrrhotite. Drill logs in ARIS report.		L48+35E and 53+08N
1988	18489	Minnova Inc.	P4 BAR23	NQ	174.2		235	-45	4.8	Tested a strong coincident Cu and Zn soil anomaly. Intersected a narrow intervalof epigenetic (?) massive sulphide mineralization. Conductor is associated with graphitic argillites. **Au 0.91 g/t, Ag 203 g/t, Cu 0.133 %, Pb 5.46 %, Zn 13.2 % Drill logs in ARIS report.**	0.4 m	L48+00E and 56+73N
1989	19851	Minnova Inc.	MBD89-1		102.7		270	-50	3.05	No significant mineralization or alteration was encountered. Drill logs in ARIS report.		Grid 1-C: 109+50mE and 137+00mN

Year	ARIS Report	Operator	Drill Hole	Core Size	S.D. Length (m)	H.D. Length (m)	Azimuth (deg)	Angle (deg)	Depth to Collar (m)	Results and Comments	Interval	Coordinates
1989	19851	Minnova Inc.	MBD89-2		96.6		245	-50	13.3	No significant mineralization or alteration was encountered. Drill logs in ARIS report.		Grid 1-C: 110+75mE and 133+00mN
1989	19851	Minnova Inc.	MBD89-3		105.8		270	-48	18.3	No significant mineralization or alteration was encountered. Drill logs in ARIS report.		Grid 1-B: 100+60mE and 105+20mN
1989	19851	Minnova Inc.	MBD89-4		124.1		235	-50	12.2	No significant mineralization or alteration was encountered. Drill logs in ARIS report.		Grid 6: 89+00mE and 120+00mN
1989	19851	Minnova Inc.	MBD89-5		95.4		235	-50	30.5	No significant mineralization or alteration was encountered. Drill logs in ARIS report.		Grid 6: 89+35mE and 116+00mN


EBGt
969537
10E41062_SM13T1
Al 2.64 percent; Ca 6.26 percent; Pb 57.7 ppm; Sb 2.46 ppm; Zn 146 ppm
10E41071_SM13R1MALIC
Ag 6.88 ppm; Ca 14.7 percent; Cu 479 ppm; Mg 2.44 percent;
Pb 527 ppm; Sb 139.5 ppm; Sr 509 ppm; Zn 1400 ppm
SILVERBOY New Discovery:
10E41072_SM13R2
Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm;
Pb 13.55 percent; Sb 237 ppm; Se 35 ppm; Sn 2 ppm;
Te 29.3 ppm; Zn 5.34 percent
DL 4023 KDYD WHITE ROCK MC
(save and except from BARRIERE RIDGE)
MINFILE 082M 266 WHITE ROCK ADIT #1
Au 0.34 g/t; Ag 92.6 g/t; Pb 2.2 %; Zn 0.8 %
EBGt
EBGt
EBG
EBGt
MINFILE 082M 066 WHITE ROCK ADIT #2
EBG
M 069 SILVER MINNOW ADIT ONE
5, Ag 927 g/t; Au 0.69 g/t
1 Ag 171 ppm; Pb 14.4 %; Zn 6490 ppm
EBG
PHYSICAL WORK:
Mineral Exploration
Access Trail, Physical
Work Completed 1750
metres brushed with
chainsaw and axe.
1:8,000
N
969506
Tenure 744542
BARRIERE RIDGE CLAIMS:
OVERVIEW OF EXPLORATION ACCESS ROAD
969538

ALS Minerals

SAMPLE PREPARATION PACKAGE

PREP- 31

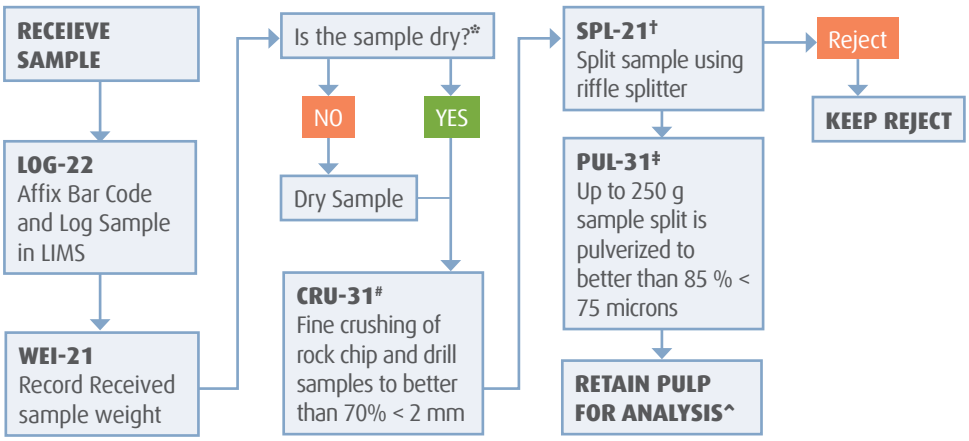
STANDARD SAMPLE PREPARATION: DRY, CRUSH, SPLIT AND PULVERIZE

Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

The sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. This method is appropriate for rock chip or drill samples.

METHOD CODE	DESCRIPTION
LOG-22	Sample is logged in tracking system and a bar code label is attached.
DRY-21	Drying of excessively wet samples in drying ovens. This is the default drying procedure for most rock chip and drill samples.
CRU-31	Fine crushing of rock chip and drill samples to better than 70% of the sample passing 2 mm.
SPL-21	Split sample using riffle splitter.
PUL-31	A sample split of up to 250 g is pulverized to better than 85% of the sample passing 75 microns.

FLOW CHART - SAMPLE PREPARATION PACKAGE – PREP-31 STANDARD SAMPLE PREPARATION: DRY, CRUSH, SPLIT AND PULVERIZE



*If samples air-dry overnight, no charge to client. If samples are excessively wet, the sample should be dried to a maximum of 120°C. (**DRY-21**)

#QC testing of crushing efficiency is conducted on random samples (**CRU-QC**).

†The sample reject is saved or dumped pending client instructions. Prolonged storage (> 45 days) of rejects will be charged to the client.

‡QC testing of pulverizing efficiency is conducted on random samples (**PUL-QC**).

^Lab splits are required when analyses must be performed at a location different than where samples received.

ALS Minerals

SAMPLE PREPARATION PACKAGE

PREP- 41

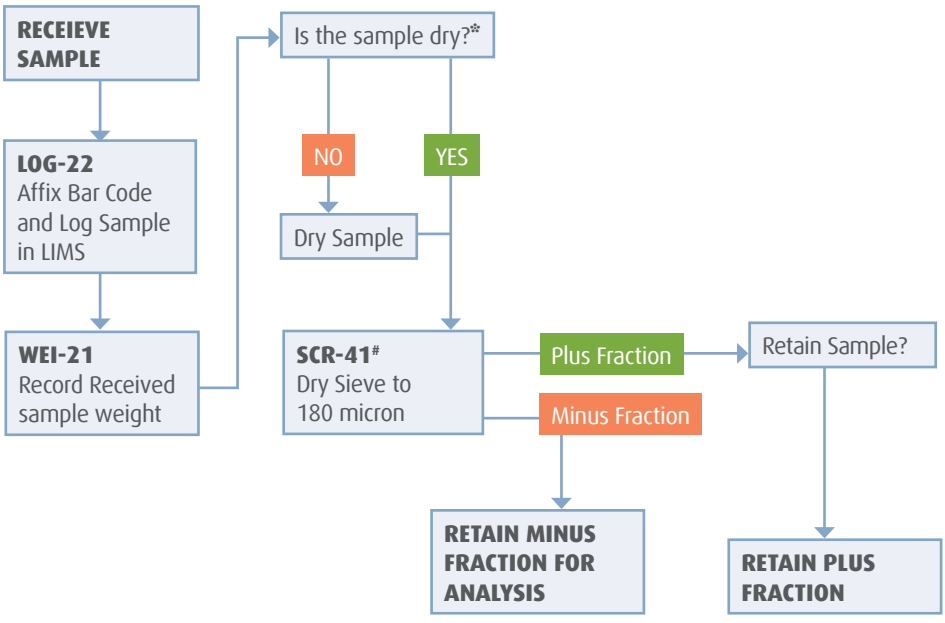
STANDARD PREPARATION: DRY SAMPLE AND DRY- SIEVE TO –180 MICRON

Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

An entire sample is dried and then dry-sieved using a 180 micron (Tyler 80 mesh) screen. The plus fraction is retained unless disposal is requested. This method is appropriate for soil or sediment samples up to 1 kg in weight.

METHOD CODE	DESCRIPTION
LOG-22	Sample is logged in tracking system and a bar code label is attached.
DRY-22	Low temperature drying of excessively wet samples where the oven temperature is not to exceed 60°C. This method is suitable for more soil and sediment samples that are analyzed for volatile elements.
SCR-41	Sample is dry-sieved to – 180 micron and both the plus and minus fractions are retained.

SAMPLE PREPARATION FLOWCHART PACKAGE –PREP- 41



*If samples air-dry overnight, no charge to client. If samples are excessively wet, the sample should be dried to a maximum of 120°C. (**DRY-21**)

#The plus fraction is the material remaining on the screen. The minus fraction is the material passing through the screen.

†The plus fraction is retained unless disposal is requested.

ALS Minerals

FIRE ASSAY PROCEDURE

Au-ICP21 and Au-ICP22

FIRE ASSAY FUSION ICP-AES FINISH

SAMPLE DECOMPOSITION

Fire Assay Fusion (FA-FUSPG1 & FA-FUSPG2)

ANALYTICAL METHOD

Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

METHOD CODE	ELEMENT	SYMBOL	UNITS	SAMPLE WEIGHT (G)	LOWER LIMIT	UPPER LIMIT	DEFAULT OVERLIMIT METHOD
Au-ICP21	Gold	Au	ppm	30	0.001	10	Au-AA25
Au-ICP22	Gold	Au	ppm	50	0.001	10	Au-AA26

ALS Minerals

FIRE ASSAY PROCEDURE

Au- SCR21

PRECIOUS METALS ANALYSIS – SCREEN METALLICS GOLD, DOUBLE MINUS

SAMPLE DECOMPOSITION

Fire Assay Fusion

ANALYTICAL METHOD

Gravimetric

1000 g of the final prepared pulp is passed through a 100 micron (Tyler 150 mesh) stainless steel screen to separate the oversize fractions. Any +100 micron material remaining on the screen is retained and analyzed in its entirety by fire assay with gravimetric finish and reported as the Au(+)fraction result. The –100 micron fraction is homogenized and two sub-samples are analyzed by fire assay with AAS finish (Au-AA25 and Au-AA25D). The average of the two AAS results is taken and reported as the Au (-) fraction result. All three values are used in calculating the combined gold content of the plus and minus fractions.

In the fire assay procedure, the sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required in order to produce a lead button. The lead button, containing the precious metals, is cupelled to remove the lead and the resulting precious metal bead is parted in dilute nitric acid, annealed and weighed to determine gold content.

The gold values for both the +100 and -100 micron fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample.

Calculations

$$\text{Au – avg} = \frac{\text{Au – (1)} + \text{Au –(2)}}{2}$$

$$\text{AuTotal (g / t)} = \frac{(\text{Au – avg (g/t)} \times \text{Wt.Minus(g)} \times 10^{-6}\ \text{t /g}) + (\text{Weight Au in Plus(mg)} \times 10^{-3}\ \text{g/mg})}{(\text{Wt.Minus(g)} + \text{Wt.Plus(g)}) \times 10\ \text{–6 t / g}}$$

Au- SCR21

FIRE ASSAY

Density = Specific gravity x Density of water (at temperature (t°C))

Factors for converting specific gravity to density are tabulated below:

DETERMINATION	DESCRIPTION	DETECTION LIMIT	UPPER LIMIT	UNITS
Au Total (+)(-) Combined	Total gold content of sample as determined by metallics calculation above.	0.05	0.05	ppm
Au (+) Fraction	Gold content of plus fraction determined by Au-GRA21.	0.05	0.05	ppm
Au (-) Fraction	Gold content of minus fraction. Reported as average of two subsamples.	0.05	0.05	ppm
Au-AA25	Gold content of first minus fraction subsample.	0.05	0.05	ppm
Au-AA25D	Gold content of second minus fraction subsample.	0.05	0.05	ppm
Au (+) mg	Weight of gold in plus fraction.	0.001	0.001	mg
WT. (+) Fraction Entire	Weight of plus fraction.	0.01	0.01	g
WT. (-) Fraction Entire	Weight of minus fraction.	0.1	0.1	g

ALS Minerals

GEOCHEMICAL PROCEDURE

Au-TL43, Au-TL44

DETERMINATION OF TRACE LEVEL GOLD BY SOLVENT EXTRACTION – GRAPHITE FURNACE AAS OR ICPMS FINISH

SAMPLE DECOMPOSITION

Aqua regia gold digestion (GEO-AuAR01/02)

ANALYTICAL METHOD

Inductively coupled mass spectrometry (ICPMS) or Atomic absorption spectrometry (AAS)

A finely pulverised sample (25 – 50 g) is digested in a mixture of 3 parts hydrochloric acid and 1 part nitric acid (aqua regia). This acid mixture generates nascent chlorine and nitrosyl chloride, which will dissolve free gold and gold compounds such as calaverite, $AuTe_2$.

The dissolved gold is complexed and extracted with Kerosene/DBS and determined by graphite furnace AAS. Alternatively gold is determined by ICPMS directly from the digestion liquor. This method allows for the simple and economical addition of extra elements by running the digestion liquor through the ICPAES or ICPMS.

NOTE: Samples high in sulphide or carbon content may lead to low gold recoveries unless they are roasted prior to digestion.

METHOD CODE	ELEMENT	SYMBOL	UNITS	SAMPLE MASS (G)	LOWER LIMIT	UPPER LIMIT	DEFAULT OVERLIMIT METHOD
Au-TL43	Gold	Au	ppm	25	0.001	1	Au-OG43
Au-TL44	Gold	Au	ppm	50	0.001	1	Au-OG44

ALS Minerals

GEOCHEMICAL PROCEDURE

ME- MS41

ULTRA- TRACE LEVEL METHODS USING ICP- MS AND ICP- AES

SAMPLE DECOMPOSITION

Aqua Regia Digestion (GEO-AR01)

ANALYTICAL METHOD

Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES)
Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, ment spectral interferences.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	25
Arsenic	As	ppm	0.1	10 000
Gold	Au	ppm	0.2	25
Boron	B	ppm	10	10 000
Barium	Ba	ppm	10	10 000
Beryllium	Be	ppm	0.05	1 000
Bismuth	Bi	ppm	0.01	10 000
Calcium	Ca	%	0.01	25
Cadmium	Cd	ppm	0.01	1 000
Cerium	Ce	ppm	0.02	500
Cobalt	Co	ppm	0.1	10 000
Chromium	Cr	ppm	1	10 000
Cesium	Cs	ppm	0.05	500
Copper	Cu	ppm	0.2	10 000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10 000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.02	500

ALS Minerals

ME- MS41

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Mercury	Hg	ppm	0.01	10 000
Indium	In	ppm	0.005	500
Potassium	K	%	0.01	10
Lanthanum	La	ppm	0.2	10 000
Lithium	Li	ppm	0.1	10 000
Magnesium	Mg	%	0.01	25
Manganese	Mn	ppm	5	50 000
Molybdenum	Mo	ppm	0.05	10 000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.05	500
Nickel	Ni	ppm	0.2	10 000
Phosphorus	P	ppm	10	10 000
Lead	Pb	ppm	0.2	10 000
Rubidium	Rb	ppm	0.1	10 000
Rhenium	Re	ppm	0.001	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10 000
Scandium	Sc	ppm	0.1	10 000
Selenium	Se	ppm	0.2	1 000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10 000
Tantalum	Ta	ppm	0.01	500
Tellurium	Te	ppm	0.01	500
Thorium	Th	ppm	0.2	10000
Titanium	Ti	%	0.005	10
Thallium	Tl	ppm	0.02	10 000
Uranium	U	ppm	0.05	10 000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.05	10 000
Yttrium	Y	ppm	0.05	500
Zinc	Zn	ppm	2	10 000
Zirconium	Zr	ppm	0.5	500

NOTE: In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte.

ALS Minerals

GEOCHEMICAL PROCEDURE

ME-ICP61

TRACE LEVEL METHODS USING CONVENTIONAL ICP- AES ANALYSIS

SAMPLE DECOMPOSITION

HNO_3 -$HClO_4$ -HF-HCl digestion, HCl Leach (GEO-4ACID)

ANALYTICAL METHOD

Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry. Results are corrected for spectral interelement interferences.

NOTE: Four acid digestions are able to dissolve most minerals; however, although the term "*near- total*" is used, depending on the sample matrix, not all elements are quantitatively extracted.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT	DEFAULT OVER-LIMIT METHOD
Silver	Ag	ppm	0.5	100	Ag-OG62
Aluminum	Al	%	0.01	50	
Arsenic	As	ppm	5	10,000	
Barium	Ba	ppm	10	10,000	
Beryllium	Be	ppm	0.5	1,000	
Bismuth	Bi	ppm	2	10,000	
Calcium	Ca	%	0.01	50	
Cadmium	Cd	ppm	0.5	500	
Cobalt	Co	ppm	1	10,000	Co-OG62
Chromium	Cr	ppm	1	10,000	
Copper	Cu	ppm	1	10,000	Cu-OG62
Iron	Fe	%	0.01	50	
Gallium	Ga	ppm	10	10,000	
Potassium	K	%	0.01	10	
Lanthanum	La	ppm	10	10,000	
Magnesium	Mg	%	0.01	50	
Manganese	Mn	ppm	5	10,0000	

ME-ICP61

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT	DEFAULT OVER-LIMIT METHOD
Molybdenum	Mo	ppm	1	10,000	Mo-OG62
Sodium	Na	%	0.01	10	
Nickel	Ni	ppm	1	10,000	Ni-OG62
Phosphorus	P	ppm	10	10,000	
Lead	Pb	ppm	2	10,000	Pb-OG62
Sulphur	S	%	0.01	10	
Antimony	Sb	ppm	5	10,000	
Scandium	Sc	ppm	1	10,000	
Strontium	Sr	ppm	1	10,000	
Thorium	Th	ppm	20	10,000	
Titanium	Ti	%	0.01	10	
Thallium	Tl	ppm	10	10,000	
Uranium	U	ppm	10	10,000	
Vanadium	V	ppm	1	10,000	
Tungsten	W	ppm	10	10,000	
Zinc	Zn	ppm	2	10,000	Zn-OG62

ELEMENTS LISTED BELOW ARE AVAILABLE UPON REQUEST

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT	DEFAULT OVER-LIMIT METHOD
Lithium	Li	ppm	10	10,000	
Niobium	Nb	ppm	5	2,000	
Rubidium	Rb	ppm	10	10,000	
Selenium	Se	ppm	10	1,000	
Tin	Sn	ppm	10	10,000	
Tantalum	Ta	ppm	10	10,000	
Tellurium	Te	ppm	10	10,000	
Yttrium	Y	ppm	10	10,000	
Zirconium	Zr	ppm	5	500	

ALS Minerals

GEOCHEMICAL PROCEDURE

ME- MS61

ULTRA- TRACE LEVEL METHOD USING ICP- MS AND ICP- AES

SAMPLE DECOMPOSITION

HF-HNO_3 -$HClO_4$ acid digestion, HCl leach (GEO-4A01)

ANALYTICAL METHOD

Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES)
Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and analyzed by inductively coupled plasma- atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples meeting this criterion are then analyzed by inductively coupled plasma-mass spectrometry. Results are corrected for spectral interelement interferences.

NOTE: Four acid digestions are able to dissolve most minerals; however, although the term "*near- total*" is used, depending on the sample matrix, not all elements are quantitatively extracted.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	50
Arsenic	As	ppm	0.2	10,000
Barium	Ba	ppm	10	10,000
Beryllium	Be	ppm	0.05	1,000
Bismuth	Bi	ppm	0.01	10,000
Calcium	Ca	%	0.01	50
Cadmium	Cd	ppm	0.02	1,000
Cerium	Ce	ppm	0.01	500
Cobalt	Co	ppm	0.1	10,000
Chromium	Cr	ppm	1	10,000
Cesium	Cs	ppm	0.05	500
Copper	Cu	ppm	0.2	10,000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10,000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.1	500

ALS Minerals

ME- MS61

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Indium	In	ppm	0.005	500
Potassium	K	%	0.01	10
Lanthanum	La	ppm	0.5	10,000
Lithium	Li	ppm	0.2	10,000
Magnesium	Mg	%	0.01	50
Manganese	Mn	ppm	5	100,000
Molybdenum	Mo	ppm	0.05	10,000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.1	500
Nickel	Ni	ppm	0.2	10,000
Phosphorous	P	ppm	10	10,000
Lead	Pb	ppm	0.5	10,000
Rubidium	Rb	ppm	0.1	10,000
Rhenium	Re	ppm	0.002	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10,000
Scandium	Sc	ppm	0.1	10,000
Selenium	Se	ppm	1	1,000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10,000
Tantalum	Ta	ppm	0.05	100
Tellurium	Te	ppm	0.05	500
Thorium	Th	ppm	0.2	10,000
Titanium	Ti	%	0.005	10
Thallium	Tl	ppm	0.02	10,000
Uranium	U	ppm	0.1	10,000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.1	10,000
Yttrium	Y	ppm	0.1	500
Zinc	Zn	ppm	2	10,000
Zirconium	Zr	ppm	0.5	500

ALS Minerals

ASSAY PROCEDURE

ME- OG62

ORE GRADE ELEMENTS BY FOUR ACID DIGESTION USING CONVENTIONAL ICP- AES ANALYSIS

SAMPLE DECOMPOSITION

HNO_3 -$HClO_4$ -HF-HCl Digestion (ASY-4A01)

ANALYTICAL METHOD

Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)*

Assays for the evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations. Ultra high concentration samples (> 15 -20%) may require the use of methods such as titrimetric and gravimetric analysis, in order to achieve maximum accuracy.

A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water is added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.

***NOTE:** ICP-AES is the default finish technique for ME-OG62. However, under some conditions and at the discretion of the laboratory an AA finish may be substituted. The certificate will clearly reflect which instrument finish was used.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Silver	Ag	ppm	1	1,500
Arsenic	As	%	0.01	30
Bismuth	Bi	%	0.01	30
Cadmium	Cd	%	0.0001	10
Cobalt	Co	%	0.001	20
Chromium	Cr	%	0.002	30
Copper	Cu	%	0.001	40
Iron	Fe	%	0.01	100
Manganese	Mn	%	0.01	50
Molybdenum	Mo	%	0.001	10
Nickel	Ni	%	0.001	30
Lead	Pb	%	0.001	20
Zinc	Zn	%	0.001	30

ALS Minerals

Technical Note

LOW LEVEL SAMPLE PREPARATION PROCEDURES

New facilities and procedures with Super Trace detection limits

Recent upgrades at the Townsville and Orange laboratories as well as new sample preparation facilities in Darwin and Perth now provide dedicated low-level soil and stream sediment preparation areas and equipment to ensure a contamination free environment for sieving and pulverisation of geochemical, soil, sediment and lag samples.

ALS Minerals recommends carrying out an orientation survey to optimise sampling parameters such as soil horizon, size fraction, preparation, digestion and analysis.

Unless otherwise specified by its clients, ALS Minerals will adopt the following procedures when preparing soil, sediment and lag samples:

- Any samples submitted to the laboratory identified as soil, stream sediment or lag will be logged under a separate workorder if submitted with other sample types
- Samples will be dried either in the paper packets they are received in or transferred to dedicated stainless steel or aluminium trays
- ALS Minerals recommends sieving of samples instead of pulverising to reduce the possibility of steel contamination inherent with pulverising bowls. Samples can be sieved in the field, or ALS Minerals can provide this service in our dedicated low level sample preparation areas. A range of sieve sizes is available depending on individual client requirements. Where sample sieving is required to a minus 80 mesh or finer fraction, samples will not be pulverised and the oversize fraction will automatically be retained and stored
- Where pulverising is required for bulk soils or fractions coarser than 80 mesh, a maximum 250g split will be finely pulverised with the remaining unpulverised portion being retained and stored. All bulk residues will be stored in sealed plastic bags and in a designated soil/sediment storage area
- Samples with significant clay content can be problematic when pulverising; and bowl cleaning between each sample may not be effective with vacuum and compressed air. In such cases a barren wash containing high silica content will be used between each sample
- Dedicated 400cc capacity low chromium steel bowls will be used for sample pulverisation. Pulverising any sample in a steel bowl has the potential to contribute trace levels of certain metals to the sample due to the composition of the steel bowls and their inherent wear rates.

Recommended analysis procedures include aqua regia digestion with analysis of gold by method Au-ST43 and base metals by method ME-MS41L. Both methods can be provided in package ST43L-PKG:

ANALYTICAL METHODS

Detection limits in (ppm) unless otherwise stated

Analytes			Method Description	Method Code
Au (0.0001)			Up to a 25g, aqua regia extraction, with ICPMS finish	ST43L-PKG
Ag (0.002)	**Hf** (0.02)	**Sb** (0.005)	Aqua regia digestion, ICPAES and ICPMS finish, providing Super Trace detection limits	
Al (0.01%)	**Hg** (0.005)	**Sc** (0.1)		
As (0.02)	**In** (0.005)	**Se** (0.1)		
B (10)	**K** (0.01%)	**Sn** (0.2)		
Ba (0.5)	**La** (0.2)	**Sr** (0.2)		
Be (0.05)	**Li** (0.1)	**Ta** (0.01)		
Bi (0.01)	**Mg** (0.01%)	**Te** (0.01)		
Ca (0.01%)	**Mn** (1)	**Th** (0.1)		
Cd (0.01)	**Mo** (0.01)	**Ti** (0.001%)		
Ce (0.02)	**Na** (0.01%)	**Tl** (0.02)		
Co (0.1)	**Nb** (0.05)	**U** (0.05)		
Cr (0.5)	**Ni** (0.1)	**V** (1)		
Cs (0.05)	**P** (10)	**W** (0.01)		
Cu (0.01)	**Pb** (0.01)	**Y** (0.05)		
Fe (0.01%)	**Rb** (0.1)	**Zn** (0.1)		
Ga (0.05)	**Re** (0.001)	**Zr** (0.5)		
Ge (0.05)	**S** (0.01%)			

A range of other methods is also available. To discuss your soil sampling program and analytical requirements, please contact your nearest ALS Minerals laboratory or email alsminerals.brisbane@alsglobal.com or alsminerals.perth@alsglobal.com

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

To: DAVID PIGGIN
5- 2363 DEMAMIEL DRIVE
SOOKE BC V9Z 1K3

Finalized Date: 29- JUN- 2014
This copy reported on
30- JUN- 2014
Account: DAVIPI

CERTIFICATE KL14093257

Project: Barriere Ridge

This report is for 18 Rock samples submitted to our lab in Kamloops, BC, Canada on 19- JUN- 2014.

The following have access to data associated with this certificate:

DAVID PIGGIN

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Ag- OG62	Ore Grade Ag - Four Acid	VARIABLE
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
Pb- OG62	Ore Grade Pb - Four Acid	VARIABLE
Zn- OG62	Ore Grade Zn - Four Acid	VARIABLE
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES

To: DAVID PIGGIN
ATTN: DAVID PIGGIN
5- 2363 DEMAMIEL DRIVE
SOOKE BC V9Z 1K3

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 29- JUN- 2014
Account: DAVIPI

Project: Barriere Ridge

CERTIFICATE OF ANALYSIS KL14093257

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
10E41085- BR14R77		2.18	0.012	19.70	0.21	5.6	120	0.19	0.26	18.65	1.37	1.66	2.3	12	0.13	94.1
10E41094- SR14HFR9		1.88	0.002	0.10	4.29	35.5	310	0.81	0.03	0.49	0.15	53.5	7.9	89	0.95	15.2
10E41077- BR14R70		2.07	0.015	18.65	0.22	6.0	160	0.24	0.01	21.5	1.33	1.94	3.1	10	0.11	309
10E41078- BR14R71		2.37	0.016	12.95	0.27	12.5	190	0.29	0.05	22.1	5.92	3.69	4.4	14	0.12	160.5
10E41079- BR14R72		2.21	0.005	0.19	0.40	3.4	200	0.17	<0.01	24.4	0.38	6.00	11.1	45	0.17	8.6
10E41080- BR14R72A		2.37	0.007	0.07	0.66	5.9	330	0.26	0.01	17.15	0.28	6.55	21.1	71	0.29	9.0
10E41081- BR14R73		2.58	0.086	>100	0.26	9.9	80	0.23	0.25	19.20	80.9	1.81	6.8	11	0.17	1970
10E41082- BR14R74		2.28	0.004	2.20	0.23	2.4	90	0.21	<0.01	20.4	6.29	1.95	3.4	8	0.16	52.7
10E41083- BR14R75		2.31	0.042	16.80	0.08	3.7	30	0.16	0.13	20.5	20.8	1.59	3.6	3	0.07	50.9
10E41084- BR14R76		2.51	0.011	7.68	0.20	5.2	70	0.25	0.01	21.4	1.62	1.53	2.8	7	0.10	241
10E41086- SR14QFR1		2.28	0.010	0.21	0.29	34.7	30	0.09	0.05	0.52	0.24	4.05	2.6	35	<0.05	18.8
10E41087- SR14QFR2		2.51	0.006	0.08	0.60	9.1	60	0.17	0.02	0.09	0.16	5.62	2.8	58	0.14	21.9
10E41088- SR14QFR3		2.83	0.002	0.06	0.64	6.5	10	0.08	0.03	0.20	0.27	4.31	2.1	43	<0.05	18.5
10E41089- SR14QFR4		1.78	0.005	0.04	0.36	19.5	20	0.07	0.03	0.28	0.20	4.51	2.6	46	<0.05	10.7
10E41090- SR14QFR5		2.01	0.004	0.04	0.24	11.6	20	<0.05	0.01	0.02	0.06	3.90	1.3	42	<0.05	7.3
10E41091- SR14HR6		2.51	0.001	0.08	3.34	14.6	270	0.76	0.07	0.76	0.35	38.7	6.4	72	0.92	12.4
10E41092- SR14QFR7		2.64	0.004	0.07	4.54	89.2	50	0.37	0.08	0.44	0.15	51.2	7.6	61	0.09	14.3
10E41093- SR14HR8		2.43	0.002	0.13	4.36	23.2	410	1.14	0.12	0.10	0.33	49.8	8.5	62	1.62	27.3

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

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To: DAVID PIGGIN
5- 2363 DEMAMIEL DRIVE
SOOKE BC V9Z 1K3

Finalized Date: 29- JUN- 2014
Account: DAVIPI

Project: Barriere Ridge

CERTIFICATE OF ANALYSIS KL14093257

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
10E41085- BR14R77		1.25	0.71	<0.05	0.1	0.005	0.09	0.9	2.5	9.81	331	0.48	0.01	0.5	13.2	20
10E41094- SR14HFR9		2.24	10.10	0.09	1.7	0.028	0.78	25.6	1.9	0.24	350	1.28	2.40	5.7	32.2	270
10E41077- BR14R70		1.54	0.70	<0.05	0.1	0.005	0.09	0.9	2.7	10.50	411	0.53	0.02	0.5	17.1	30
10E41078- BR14R71		1.30	0.78	0.05	0.1	0.020	0.10	1.5	2.5	10.80	357	0.51	0.01	0.6	19.8	40
10E41079- BR14R72		2.29	1.15	<0.05	0.1	0.008	0.20	2.3	5.2	3.67	721	1.23	0.01	0.8	19.7	60
10E41080- BR14R72A		3.32	1.95	<0.05	0.2	0.009	0.35	2.6	9.5	4.96	764	1.89	0.01	1.3	33.3	90
10E41081- BR14R73		1.31	1.00	0.05	0.1	0.196	0.10	1.0	5.5	10.65	349	0.38	0.01	0.5	16.8	20
10E41082- BR14R74		1.34	0.78	<0.05	0.1	0.009	0.09	1.0	2.6	11.10	360	0.12	0.01	0.7	15.9	10
10E41083- BR14R75		1.25	0.33	<0.05	<0.1	0.047	0.03	0.8	2.3	11.00	344	0.17	0.01	0.1	14.0	50
10E41084- BR14R76		1.41	0.68	<0.05	<0.1	0.005	0.07	0.8	6.0	11.55	327	0.31	0.01	0.3	14.4	30
10E41086- SR14QFR1		2.69	0.65	<0.05	0.1	0.011	0.03	1.8	0.3	0.17	1300	1.58	0.19	0.3	12.1	220
10E41087- SR14QFR2		2.06	1.34	<0.05	0.2	0.016	0.09	2.4	0.9	0.04	1080	2.64	0.34	0.6	11.8	210
10E41088- SR14QFR3		1.20	1.47	<0.05	0.1	0.017	0.01	1.8	0.2	0.03	557	2.21	0.54	0.4	9.8	490
10E41089- SR14QFR4		1.52	0.71	<0.05	0.1	0.010	0.02	2.0	0.4	0.09	530	2.61	0.27	0.4	8.9	130
10E41090- SR14QFR5		0.85	0.50	<0.05	0.1	<0.005	0.02	1.8	0.3	0.01	240	1.96	0.16	0.4	4.0	80
10E41091- SR14HR6		2.09	6.88	0.08	1.2	0.021	0.76	18.1	2.3	0.28	362	2.35	1.62	4.4	21.9	400
10E41092- SR14QFR7		2.67	8.45	0.09	1.7	0.008	0.06	24.4	0.4	0.10	589	1.42	3.83	5.9	35.9	500
10E41093- SR14HR8		2.52	10.05	0.09	1.5	0.026	1.22	23.3	3.5	0.17	215	1.44	1.84	6.2	32.9	350

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

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5- 2363 DEMAMIEL DRIVE
SOOKE BC V9Z 1K3

Finalized Date: 29- JUN- 2014
Account: DAVIPI

Project: Barriere Ridge

CERTIFICATE OF ANALYSIS KL14093257

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1
10E41085- BR14R77		5060	2.9	<0.002	0.03	51.5	0.7	1	0.2	268	<0.05	0.78	<0.2	0.023	0.03	0.9
10E41094- SR14HFR9		19.6	36.0	<0.002	0.23	0.73	7.1	<1	0.9	101.0	0.40	<0.05	11.9	0.200	0.20	1.6
10E41077- BR14R70		1410	2.9	<0.002	0.02	57.0	0.9	<1	<0.2	237	<0.05	0.35	<0.2	0.023	0.03	1.1
10E41078- BR14R71		6150	3.1	<0.002	0.07	125.5	2.0	1	<0.2	269	<0.05	1.05	<0.2	0.031	0.03	0.9
10E41079- BR14R72		23.7	5.0	<0.002	0.16	3.63	2.3	1	<0.2	185.5	<0.05	0.06	<0.2	0.068	0.04	0.3
10E41080- BR14R72A		9.2	9.0	<0.002	0.38	3.41	3.4	<1	<0.2	148.5	0.07	0.11	<0.2	0.112	0.05	0.4
10E41081- BR14R73		>10000	3.9	<0.002	0.32	292	0.6	4	0.6	326	<0.05	4.54	<0.2	0.024	0.07	1.0
10E41082- BR14R74		347	3.6	<0.002	<0.01	47.4	0.7	<1	0.2	321	<0.05	0.13	<0.2	0.033	0.04	1.0
10E41083- BR14R75		8780	1.2	<0.002	0.08	31.3	0.6	1	0.2	322	<0.05	1.30	<0.2	0.007	0.02	1.2
10E41084- BR14R76		448	3.0	<0.002	<0.01	81.1	0.6	<1	<0.2	362	<0.05	0.13	<0.2	0.016	0.04	1.3
10E41086- SR14QFR1		31.9	1.2	<0.002	0.45	1.00	2.5	1	<0.2	73.7	<0.05	<0.05	0.5	0.011	<0.02	0.2
10E41087- SR14QFR2		7.3	4.0	<0.002	0.33	0.58	3.4	<1	<0.2	23.6	<0.05	<0.05	0.9	0.021	0.03	0.2
10E41088- SR14QFR3		6.9	0.4	<0.002	0.21	0.25	2.0	<1	<0.2	53.3	<0.05	<0.05	0.6	0.013	<0.02	0.1
10E41089- SR14QFR4		7.6	0.9	<0.002	0.13	0.27	1.5	1	<0.2	50.2	<0.05	<0.05	0.7	0.015	<0.02	0.2
10E41090- SR14QFR5		2.4	0.7	<0.002	0.15	0.22	0.7	<1	<0.2	8.5	<0.05	<0.05	0.6	0.012	<0.02	0.1
10E41091- SR14HR6		7.6	34.6	<0.002	0.23	0.30	5.2	<1	0.7	151.0	0.30	<0.05	7.4	0.138	0.20	1.5
10E41092- SR14QFR7		5.9	2.2	<0.002	1.46	0.40	3.2	1	0.3	165.0	0.35	<0.05	9.5	0.193	<0.02	1.6
10E41093- SR14HR8		10.2	55.6	<0.002	0.29	0.41	6.7	1	0.9	72.2	0.43	<0.05	10.3	0.189	0.32	1.6

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SOOKE BC V9Z 1K3

Finalized Date: 29- JUN- 2014
Account: DAVIPI

Project: Barriere Ridge

CERTIFICATE OF ANALYSIS KL14093257

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Ag- OG62 Ag ppm 1	Pb- OG62 Pb % 0.001	Zn- OG62 Zn % 0.001
10E41085- BR14R77		17	0.5	0.8	271	2.9			
10E41094- SR14HFR9		60	1.4	4.9	45	62.2			
10E41077- BR14R70		13	0.5	1.5	88	2.3			
10E41078- BR14R71		15	0.6	2.2	1020	3.5			
10E41079- BR14R72		30	1.1	6.8	54	5.2			
10E41080- BR14R72A		47	1.7	7.1	59	9.2			
10E41081- BR14R73		13	0.8	0.8	>10000	2.2	117	2.80	1.425
10E41082- BR14R74		14	0.9	0.8	856	2.9			
10E41083- BR14R75		14	0.3	0.8	2680	1.3			
10E41084- BR14R76		13	0.4	0.6	245	1.6			
10E41086- SR14QFR1		7	0.1	6.5	54	2.5			
10E41087- SR14QFR2		11	0.2	3.5	41	5.7			
10E41088- SR14QFR3		4	0.2	3.8	60	2.9			
10E41089- SR14QFR4		4	0.3	2.1	50	3.8			
10E41090- SR14QFR5		3	0.2	1.2	11	3.2			
10E41091- SR14HR6		39	1.0	5.4	82	40.4			
10E41092- SR14QFR7		18	2.8	6.5	35	62.7			
10E41093- SR14HR8		60	1.3	4.9	79	53.2			

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CERTIFICATE OF ANALYSIS KL14093257

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.
CRU- 31 CRU- QC LOG- 22 PUL- 31
PUL- QC SPL- 21 WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Ag- OG62 Au- ICP21 ME- MS61 ME- OG62
Pb- OG62 Zn- OG62