



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT:

PROSPECTING, GEOCHEMICAL, GEOLOGICAL, AND PHYSICAL WORK
August 2015 and November 2016:.

TOTAL COST: \$ 33 088.84

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 5611394 dated July 21, 2016: August 29, 2015 to July 20, 2016

EVENT 5625685 dated Nov 11, 2016: July 21, 2016 to November 4, 2016

YEAR OF WORK: **August 2015 to November 2016**

(August 29, 2015 to November 4, 2016).

PROPERTY NAME: **BARRIERE RIDGE**

CLAIM NAME(S) (on which work was done):

6 claims – 2,122.5393 hectares: 744542, 744562, 744582, 744602, 759003, and 1043955.

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' 47.56" N;**

LONGITUDE: **-119 deg 53' 6.08" "** (at centre of work)

UTM Zone: **11** EASTING: **298870.836** NORTHING: **5686755.799**

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)

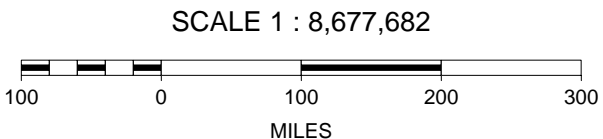
Baldy Batholith; Granite Intrusion; Mid-Cretaceous Intrusion; Iron Carbonate Alteration; Eagle Bay Assemblage, Devonian-Mississippian; Metasediments; Volcanogenic Massive Sulfides; Devonian Orthogneiss; paragneiss; sericite alteration; Intrusive gold; copper in paragneiss; Limestone; Tshinakin Limestone; 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:

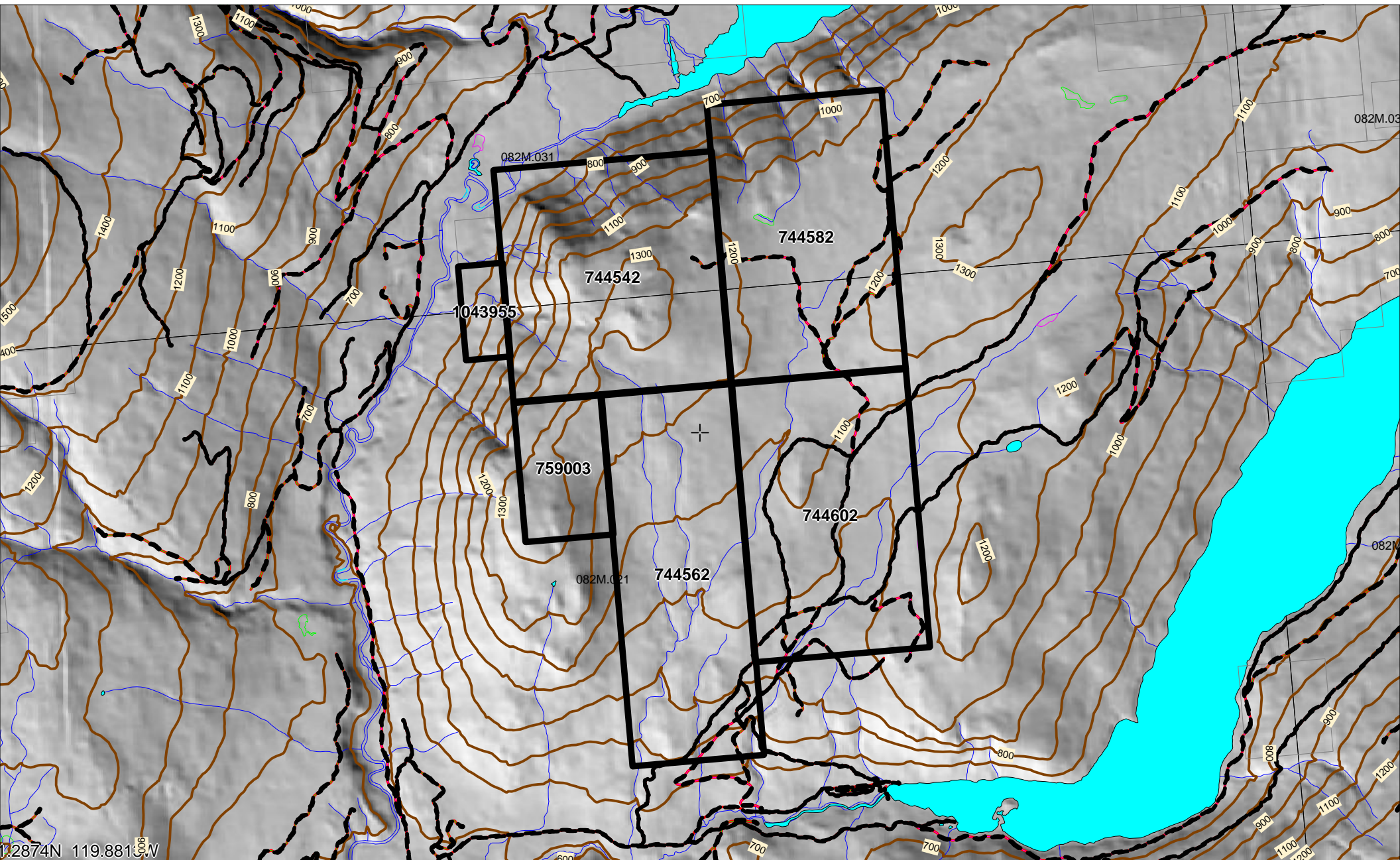
03350, 05363, 08210, 12847A, 12847B, 13168, 13207, 13297, 13793, 14123, 14397, 18489, 19047, 19173, 19851, 22956, 32383, 33190, 33744, 34651, and 35500.

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		744542, 744562	\$ 1,500.00
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil	21 collected; not assayed yet	744542, 744562	NIL
Silt			
Rock	34 collected; 11 assayed	744542, 744562	\$ 652.22
Other (STREAM)			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL		744542, 744562	
Sampling / Assaying	55 samples collected		\$ 16,800.00
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)	2,122.5393 hectares	ALL	\$ 4,000.00
PREPARATORY / PHYSICAL			
Line/grid (km)	Soil Grid 0.325 km GPS'd	744542	\$ 2,500.00
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail	Access Trail Brushing, Danger Trees 1100 metres (chainsaw)	744542	\$ 3,500.00
Trench (number/metres)	TWO 10.1 m total = 5.5m x 0.6m x 0.4m and 4.6m x 2m x 0.2m	744542	\$ 500.00
Underground development (metres)			
Other	Literature General Research, database compilation, First Nations, etc	ALL	\$ 3,636.26
		TOTAL COST	\$ 33,088.48

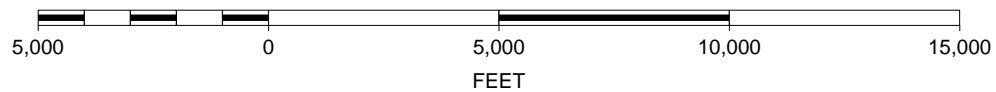
BARRIERE RIDGE Claims



BARRIERE RIDGE CLAIMS



SCALE 1 : 50,000



N





Mineral Titles Online Report

Click on Tenure Numbers for more information.

Click column headings to sort results.

[Download to Excel](#)

Tenure Number	Type	Claim Name	Good Until	Area (ha)
744542	Mineral	BLUFF1	20170703	505.2364
744562	Mineral	BLUFF2	20170703	485.3074
744582	Mineral	BLUFF3	20170703	485.0088
744602	Mineral	BLUFF4	20170703	485.2667
759003	Mineral	SILVER	20170703	121.2995
1043955	Mineral	RIDGE99	20170504	40.4205

Total Area: 2122.5393 ha

[BCGW Metadata](#)

[Mineral Title Online](#)

[BC Geological Survey](#)

[British Columbia Ministry of Energy and Mines](#)

Last updated in April 2007

PROSPECTING, GEOCHEMICAL, GEOLOGICAL, AND PHYSICAL WORK
August 2015 to November 2016:

ASSESSMENT REPORT FOR BARRIERE RIDGE CLAIMS

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

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA, CANADA.

6 Mineral Claims – 2,122.5393 hectares: 744542, 744562, 744582, 744602, 759003, and 1043955

Map Sheets: 082M021; 082M031

66 kilometres northeast of Kamloops, British Columbia, Canada.

Lat 51 deg 17' 47.56" N; and Long -119 deg 53' 6.08" W; or Lat 51.2965445; and Long -119.88502172

UTM NAD 83: Zone 11. 298870.836 Easterly; 5686755.799 Northerly

West of East Barriere Lake; South of North Barriere Lake, East of Barriere River at Russell Creek .

Event No.	Date	Tenure Numbers	Gross Area (hectares)	Total Value of Work(\$)	PAC Account (\$)	Total Applied Work Value(\$)
5611394	July 21, 2016	744542 *, 744562, 744582, 744602, 759003, and 1043955	2,122.5393	\$ 28,921.48	NIL	\$ 28,921.48
5625685	November 4, 2016	744542 *, 744562, 744582, 744602, 759003, and 1043955	2,122.5393	\$4,167.00		\$ 4,167.00
		ASSESSMENT REPORT SUMMARY	2,122.5393 hectares	\$ 33,088.48	NIL	\$ 33,088.48

***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 DeMamie Drive, Sooke, British Columbia, V9Z 1K3

SUMMARY

Exploration work was completed by David J. Piggan from August 29, 2015 to November 4, 2016. The total Applied Work Value of \$33,088.48 was recorded for EVENTS 5611394 and 5625685. BARRIERE RIDGE is located between North Barriere Lake and East Barriere Lake; and 66 km northeast of the Kamloops, British Columbia, Canada. Mineralization was hosted in the Devono-Mississippian Eagle Bay Assemblage (EBGt – early Cambrian Tshinakian 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, 16 diamond drill holes were completed for 1,836.6 metres. Best result were CAD 84-1: Ag 2 g/t; Zn 0.65 %; and CAD 84-2 Ag 15.6 g/t; Zn 12,000 ppm; Pb 392 ppm over 0.1 metres).

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, 35500.

- **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 %; S 2.27 %; 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 %; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm; Zn 5.34 %. **BRECCIA AREA:** 10E41016 SM11R999: Au 29.2 ppb, Ag 50.4 ppm, Cu 1475 ppm, Pb 1275 ppm, Sb 533 ppm, Zn 2990 ppm.
- **SILVER TRAIL Showing:** 10E41081_BR14R73: Ag 117 ppm; Ca 19.2 %; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %. 10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 %; Mg 9.81 %; Pb 5060 ppm.
- **Airborne Geophysics:** Completed by Fugro and reported in ARIS 33744. **Photosat Image:** ARIS 34651.

AUGUST 2015 TO NOVEMBER 2016 EXPLORATION: The following is a brief summary of the works completed and results:

- **Expenditures:** Total Applied Work Value \$ 33,088.48 on 2,122.5393 hectares.
- **Samples:** 55 samples (34 rock and 21 soil) were collected of which 11 rock samples were assayed. The remaining samples (23 rock, 21 soil) will be assayed in 2017 and reported in a future assessment report.
- **SILVER MINNOW GRID2:** 14 samples, 325 lineal metres. The samples have not been assayed. The line was located on UTM Zone 11 Northerly – 5686900N, from 298075E to 298400E.
- **Hand Trenches completed:** 2 for a 10.1 metres in total length (5.5m x 0.6m x 0.4m, and 4.6m x 2m x 0.2m)
- **Assay Results:** None of the 11 rocks assayed contained anomalous Au, Ag, Cu, Mo, Pb, or Zn and therefore, no additional assays were conducted as targeted metals were not anomalous at this location. The rocks sampled were anomalous for Ca (up to 34 %) and Mg (up to 10.55 %). One sample 10E41451_BR16R12E was anomalous for Ba Ca Mg Ce Cr Ga K P as follows:

10E41451_BR16R12E : Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 %; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; K 2.9 %; Mg 2.46 %; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm.

- **Data and Research:** Collated, digitized, mapped samples and results, and researched publications and ARIS reports.
- **Physical Work:** 1100 metres of exploration trail was brushed and small trees removed with chainsaws and axes.
- **FIRST NATIONS Letter 2016:** A First Nations information letter/package was completed and submitted May 19, 2016.
- **Ministry of Forest, Lands, and Natural Resource Operations' (MFLNRO) and BC Timber Sales:** Coordinated brushing and tree cutting with the MFLNRO and BCTS through a Free Use Permit for Mineral Exploration.

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; 35500 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 2017.

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- A. MINERAL TENURE ONLINE – OVERVIEW MAP and REPORT AREA** in black outline (1:67,710).
- B. ARIS: SIX OVERVIEW AND DETAILED MAPS SHOWING TENURES, CONTOURS, WATER COURSES, MINFILE, AND ROADS**
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 - BARRIERE RIDGE ARIS MAP: OVERVIEW ORTHO Roads, Contours, Boundary (1:40,000).
 - BARRIERE RIDGE ARIS MAP: Detail North Half (1:25,000).
 - BARRIERE RIDGE ARIS MAP: Detail South Half (1:25,000).
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- C. BIOGEOCLIMATIC SUB-ZONES** within the BARRIERE RIDGE claims on an Orthographic Map (scale 1:80,000).
- 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 (1:50,000).
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- K. ALS MINERALS CANADA: ASSAY AND ANALYTICAL PROCEDURES.**
- L. ALS MINERALS CANADA: ASSAY CERTIFICATE FOR 2016.** Certificate KL16109074

I - INTRODUCTION:

The purpose of this report is to provide a summary of the exploration work completed by David J. Piggin from August 29, 2015 to November 4, 2016 on the BARRIERE RIDGE claims. Total Applied Work Value \$ 33,088.48. The Mineral Claim Exploration and Development Work/Expiry Date MTOonline documents was recorded for EVENT 5611394 and 5625685.

There are 6 claims - 2,122.5393 hectares. A Mineral Tenures Online (MTOonline) 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, and 1043955.

*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; east of the Barriere River at Russell Creek. The onsite arterial access is via the Barriere Lakes Public Road (PR), Fir PR, Russell Forest Service Road (FSR), Barriere Ridge North FSR, and Barriere Ridge South FSR.

Assessment Report Information System (ARIS): The most recent ARIS reports are 32383, 33190, 33744, 34651, and 35500.

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. All subsequent exploration has been done by David J. Piggin.

The primary objectives of the 2015/2016 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 2016 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).

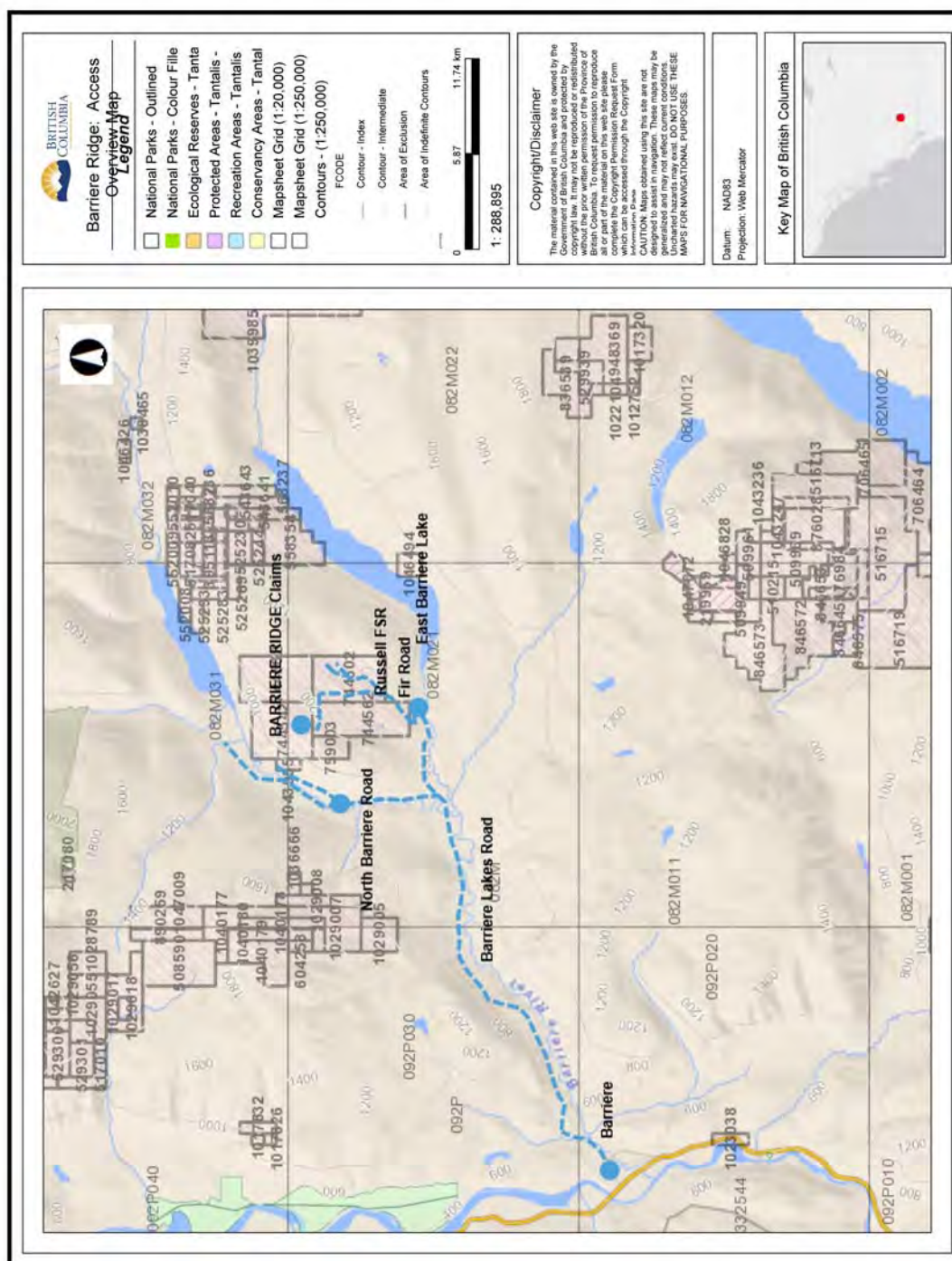
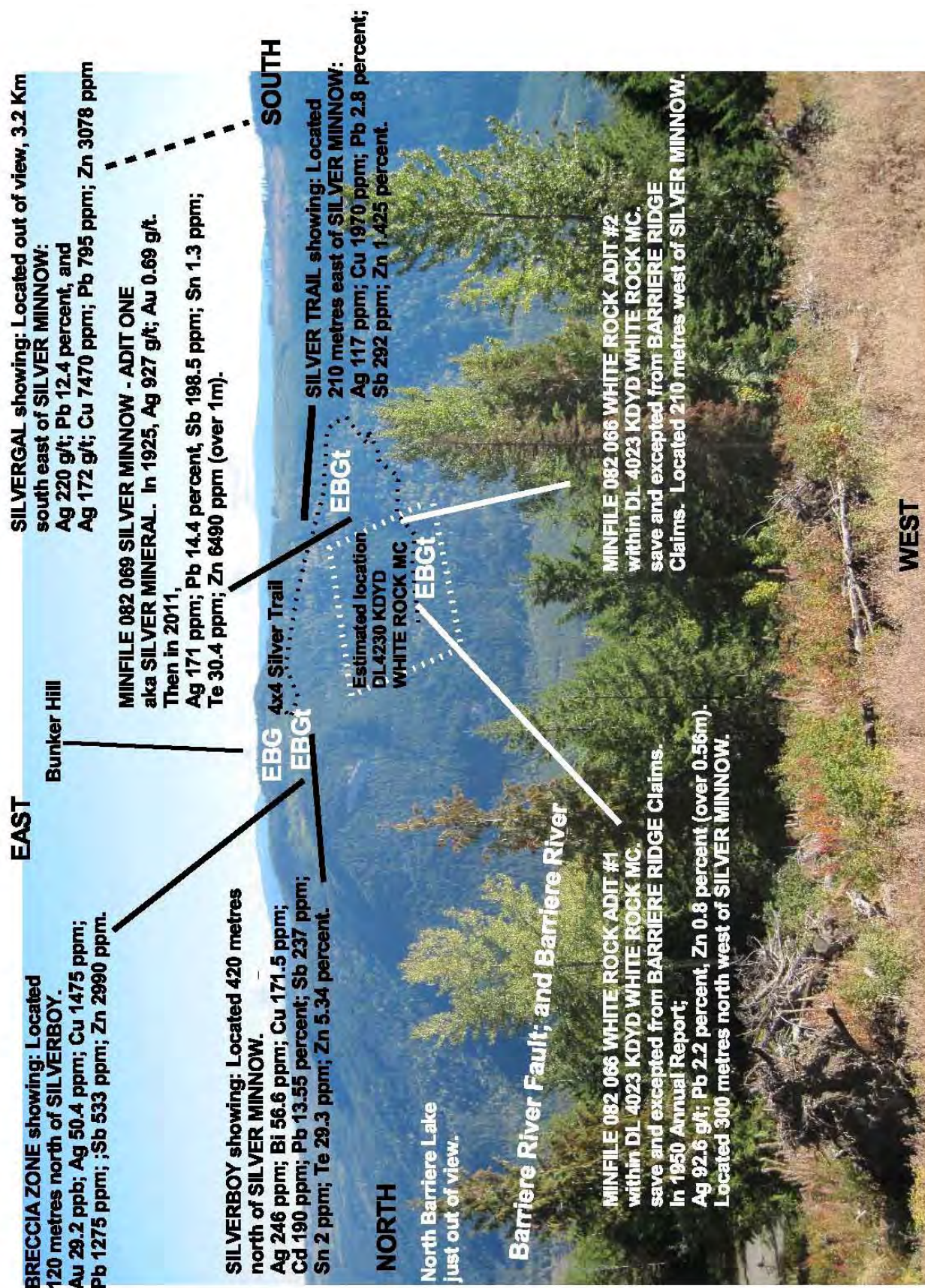


ILLUSTRATION # 2: Overview of BARRIERE RIDGE claims. Showing MINFILE Occurrences. Taken in an easterly direction.



There is one main access road is the Barriere Lakes Public Road (PR) and it is paved. The onsite access is via the Fir PR, Russell FSR, Barriere Ridge North FSR, and Barriere Ridge South FSR; as well as a number of related spur roads such as Branch 8 of the Russell FSR.

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.

Lower Elevation – West Facing 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.

B. PROPERTY STATUS:

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

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 (ICHmw3) Biogeoclimatic Zone (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 Brunisols 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.

The large body of water in East Barriere Lake and North Barriere Lake may moderate the effects of the general climate conditions; and yet the proximity of the Dunn Peak snow pack to BARRIERE RIDGE may also influence climatic conditions at Russell 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 Barriere River and East Barriere River; as well as the lower to upper elevations of Russell Creek. 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. 744582 and 744602) by the headwaters of Russell Creek at 1200 metres; and on the west side (i.e. 1043955) at 750 metres at Barriere River. The north boundary is bounded (i.e. 744542 and 744582) along the lower slopes of the Barriere River at the outflow of North Barriere Lake; and on the south side (i.e. 744562 and 744602) along the lower slopes of the East Barriere River near the outflow of East Barriere Lake

Slopes are gentle to moderately steep; and are very steep in the vicinity of north half of Tenure 744542 and west half of 1043955. The lower portion of Russell Creek is deeply gullied. There are numerous near vertical rock faces and talus slopes at Tenure 1043955 and 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.
1043955	NW	35	750-1150	1000	ICHmw3.

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 Distribution 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). The BC Timber Sales Program, Kamloops Timber Sales Office (250-371-6500) is the major licensee 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 is one lane wide, and it is not ploughed unless there is active logging on the road system. The Russell FSR is maintained by the BC Timber Sales Program.
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 former, AFTON MINE** (Teck Corp) near Kamloops, a former open pit 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 as an 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. 2015 Production: Au 35,500 oz. Cu 25.1 million lbs. Ag 76,000 oz. Deposit Type: LO3: Alkaline Porphyry Cu Au MINFILE 092INE023 – NEW AFTON (aka AFTON, AFTON MINE, etc) <http://www.newgold.com/operations/new-afton/default.aspx>
Also, the site of the past producing open pit TECK CORP – AFTON MINE.
- **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. 2015 Production: 152,000 tonnes of copper. <http://www.teck.com/operations/canada/operations/highland-valley-copper/>
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.

The Proposed AJAX MINE which is a joint venture between Abacus Mining and Exploration Corp (www.amemining.com), and KGHM AJAX Mining Inc. It is situated 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 three 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) SILVER TRAIL SHOWING;
- (vii) 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. Piggitt 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 chalcopryite; and it is associated with quartz, calcite, azurite and malachite. The MINFILE indicates a *“56 centimetre sample assayed 2.2 % lead, 0.8 % 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 #3 : : 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 Piggitt 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 #4 : 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 #5 : 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 %; 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 ppm	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 #6: 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 #7 : Galena and silver mineralization from a channel sample at **SILVER MINNOW ADIT ONE:10E41181 SMQCH7** - Ag 171 ppm; Pb 14.4 %; S 2.27 %; 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 %, Zn 1.2 % 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 %, Bi 270 ppm, Cr 202 ppm, S 1.69 %, Se 110 ppm
10E41157 BR11Q9C repeat	Ag 220 g/t, Pb 12.4 %, Bi 270 ppm, Cr 208 ppm, S 1.78 %, Se 110 ppm
10E41157 BR11Q9C respit	Ag 220 g/t, Pb 12.4 %, Bi 285 ppm, Cr 226 ppm, S 1.80 %, 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 %, Cu 428 ppm, Mg 8.88 %, P 1080 ppm, Sb 245 ppm, Zn 176 ppm

ILLUSTRATION # 8: SILVERGAL showing close-up galena in sample **10E41160 BR11Q9D** (IMG_3695a.JPG).

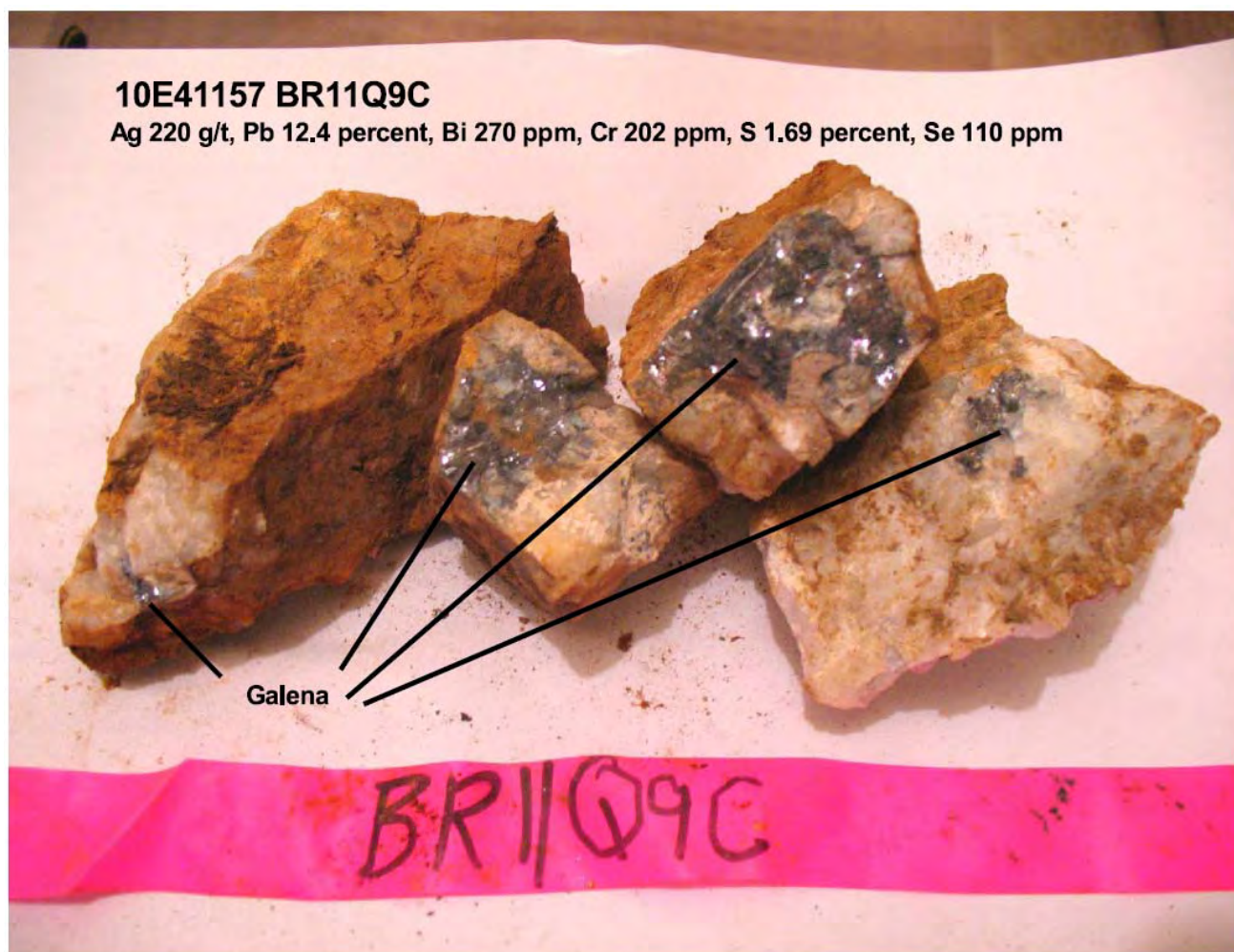
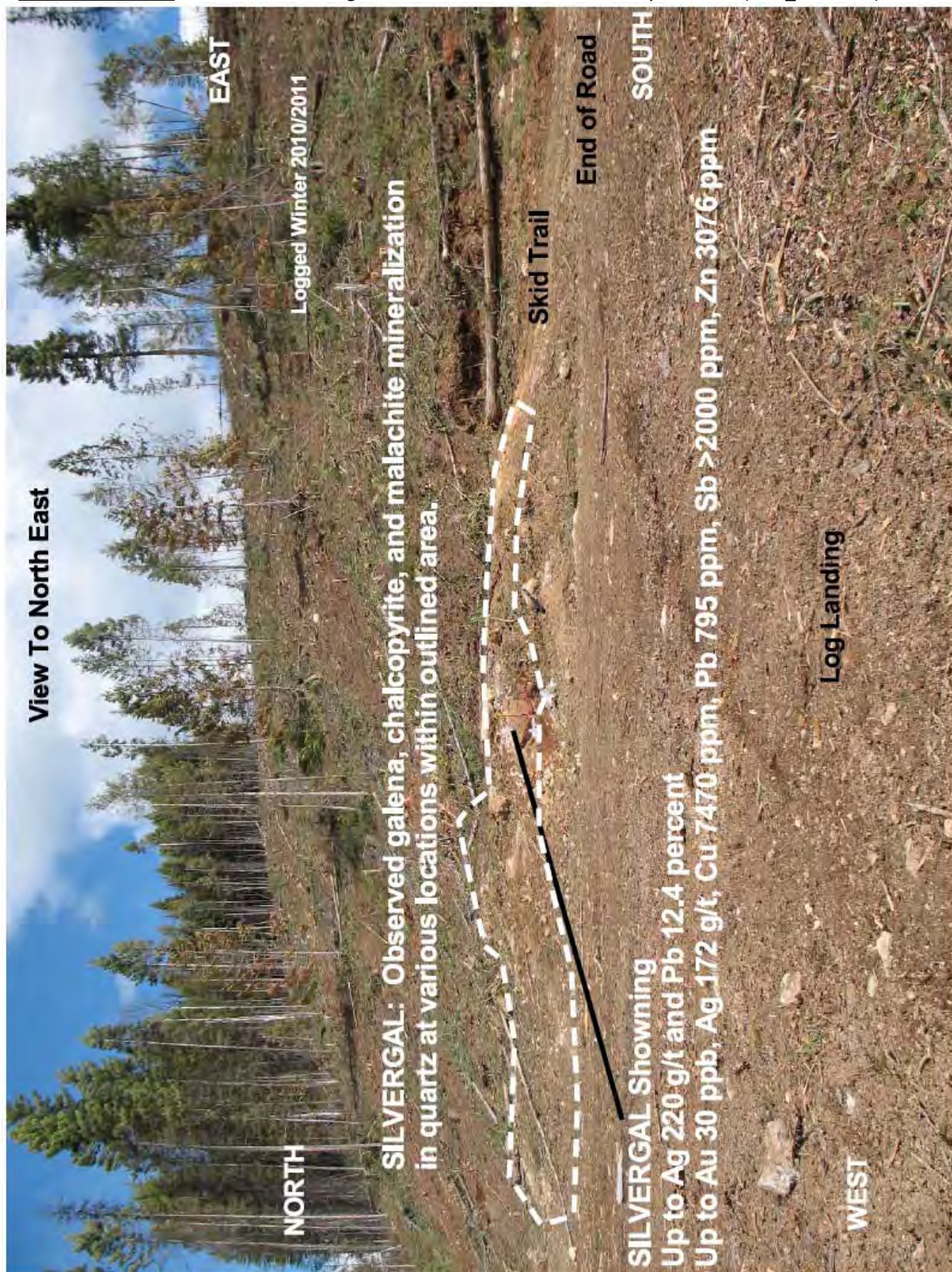


ILLUSTRATION # 9: SILVERGAL showing in overview taken in northwesterly direction (IMG_3676.JPG).



(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 %; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm; Zn 5.34 %
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 %; Cu 479 ppm; Mg 2.44 %; Pb 527 ppm; Sb 139.5 ppm; Sr 509 ppm; Zn 1400 ppm

ILLUSTRATION #10: 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 #11: 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 %), 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) **SILVER TRAIL SHOWING:** 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 %; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %

10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 %; Mg 9.81 %; 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 8: SILVER TRAIL ROCK SAMPLES: See photographs given in the following pages

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 %; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %
10E41085_BR14R77	Silver Trail Showing: trail cut slope outcrop; limestone or dolostone, white quartz veinlets, galena blebs	Ag 19.7 ppm; Ca 18.65 %; Mg 9.81 %; 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 %; Mg 10.5 %; 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 %; Mg 11 %; 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 %; Mg 10.8 %; 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 %; Mg 11.55 %; Pb 448 ppm

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 #12: 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 #13: SILVER TRAIL Showing – sample close-up 10E41081_BR14R73 - Ag 117 ppm; Ca 19.2 %; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %. IMG_1863_10E41081_BR14R73.jpg

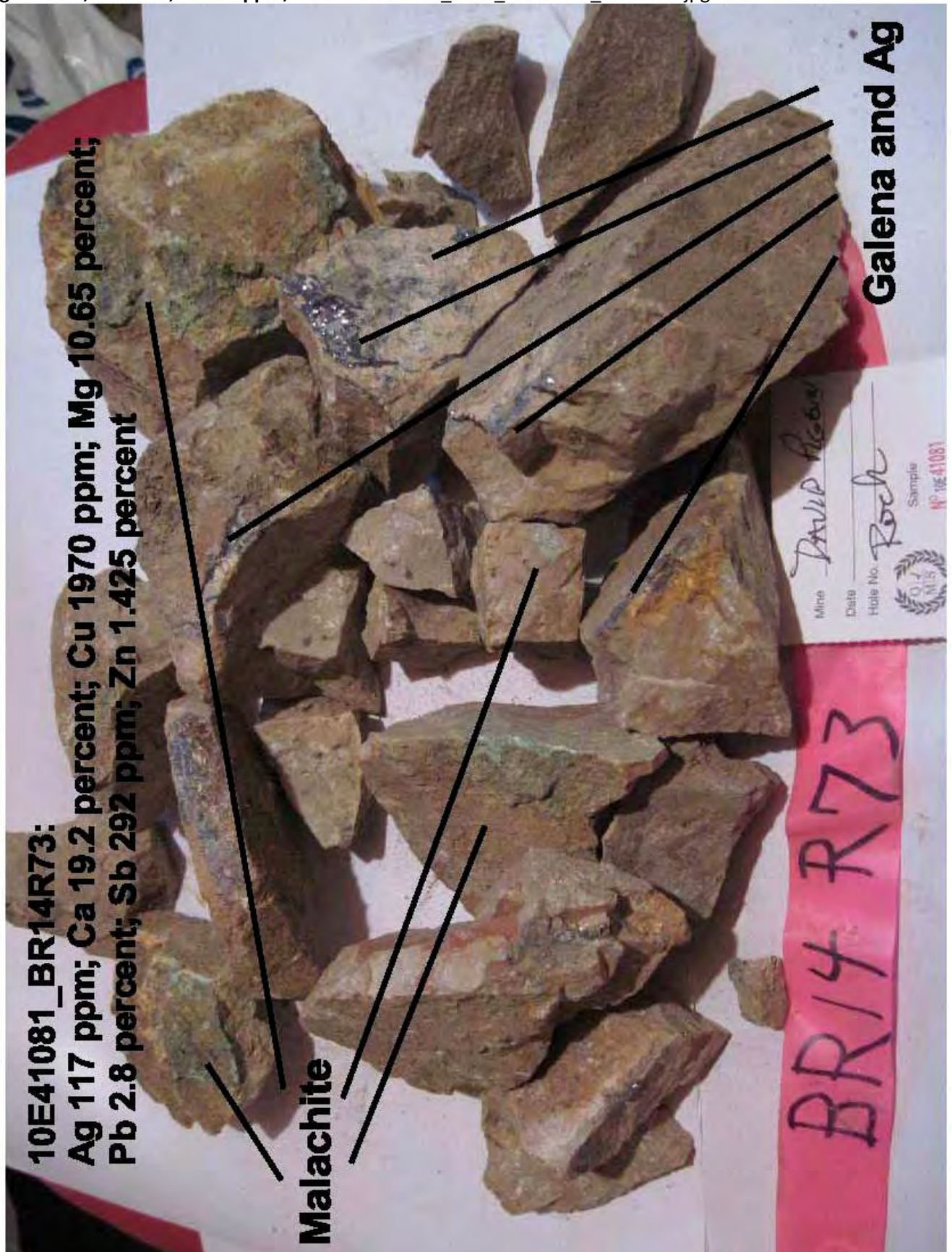
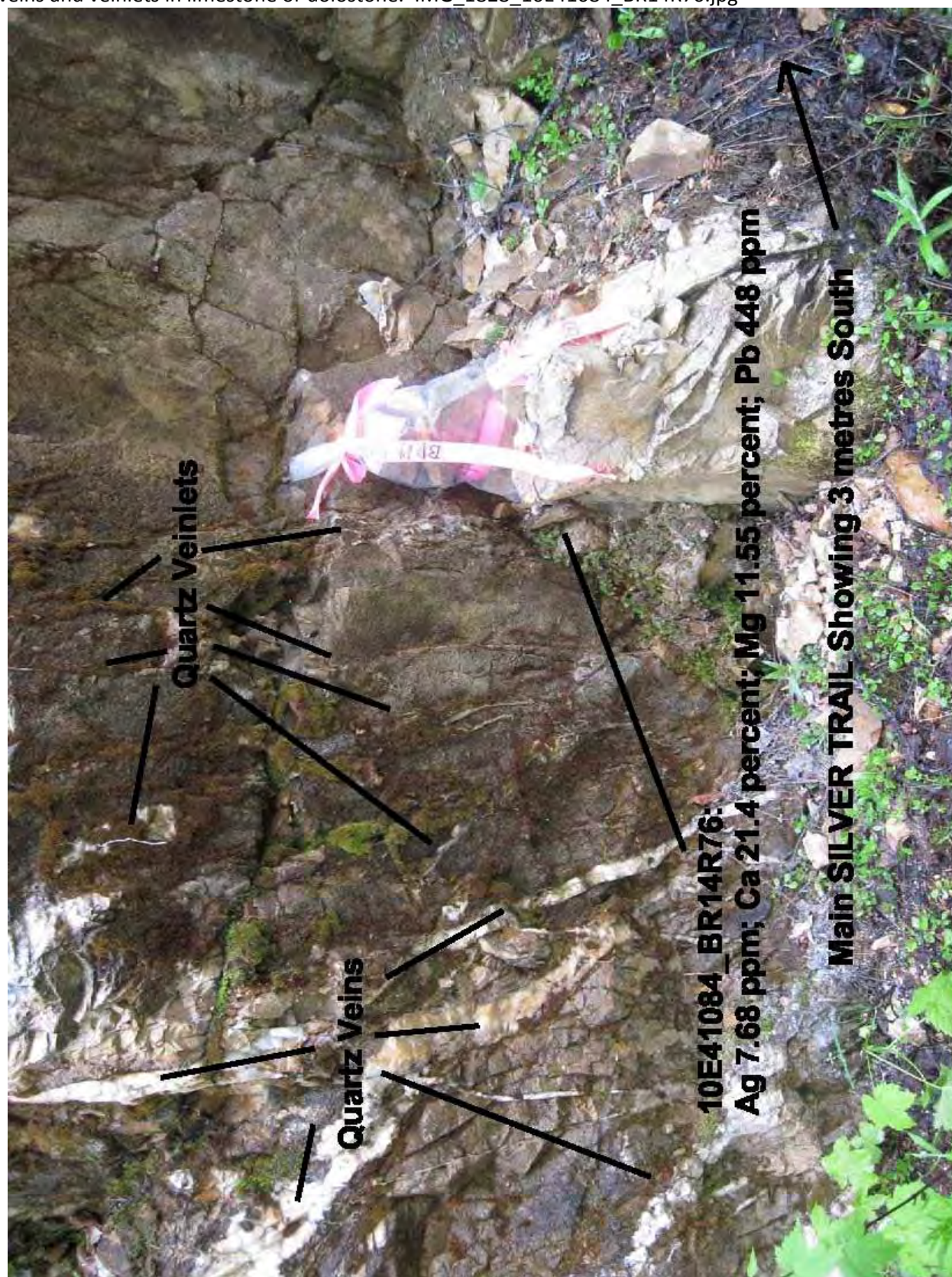


ILLUSTRATION #14: SILVER TRAIL Showing - macro-zoom of sample 10E41081_BR14R73 - Ag 117 ppm; Ca 19.2%; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %. IMG_1864_10E41081_BR14R73.jpg



ILLUSTRATION #14: 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



(vii) 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.
- 35500 David J. Piggin. August 29, 2016. BARRIERE RIDGE \$ 46,111.09.

(c) Historic Drilling: In 2012, a detailed review of the above BARRIERE RIDGE ARIS reports indicated that between 1984 - 1988, 16 diamond drill holes were completed for 1,836.60 metres. For detailed information see attached spreadsheet in APPENDIX).

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 (1989) within Tenures 744542, 744562, 767102: 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 9: 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.

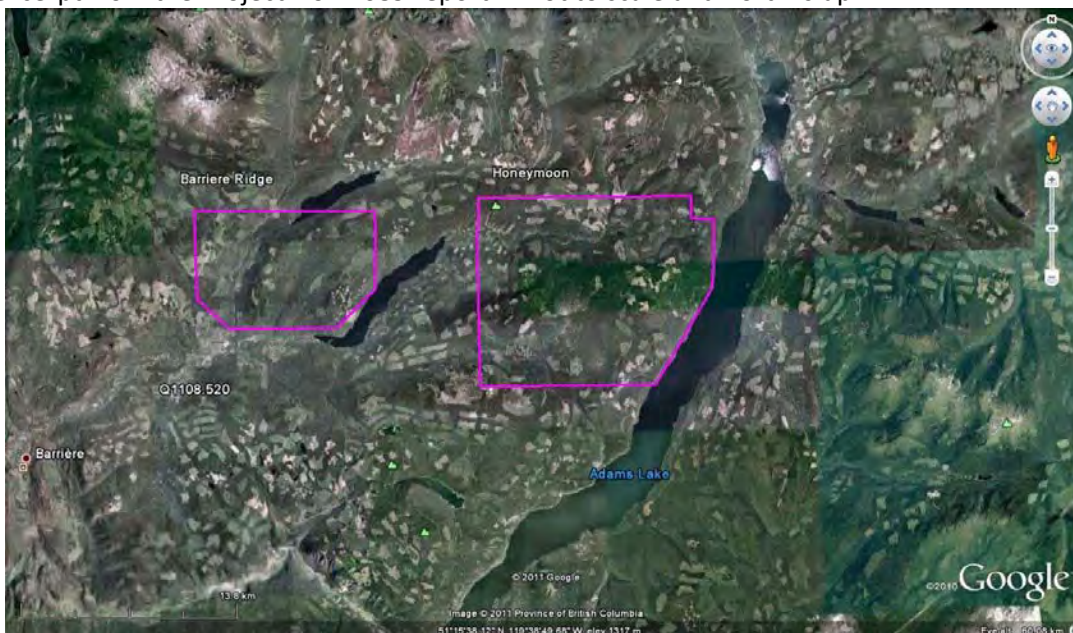
A copy of each report can found on the following website.

<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 # 15: 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**. 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 10** and **TABLE 11** from ARIS 33190, show a few selected gold and silver anomalies for selected elements.

TABLE 10: 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 %ile: 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 11: SILVERGAL1 - Selected Silver Soil Anomalies For Selected Elements: (from ARIS 33190)

SELECTED SOILS only	SILVERGAL1 GRID – SILVER LEADING with Ag 0.5ppm at 90 %ile: 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 (multi-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 12 and TABLE 13**, from ARIS 33190, show a few selected gold and silver anomalies for selected elements.

TABLE 12: 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 %ile: 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 13: 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 %ile: 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 %ile 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 %ile being Pb 24.72 ppm.									
Zinc: 14E41283 returned Zn 195.2 ppm with the 90 %ile 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 14: 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.								
	Au ppb	Ag ppm	As ppm	Cd ppm	Be ppm	Cu ppm	Pb ppm	Sb ppm	Se ppm
Sample Tag 10E41191 SM11FRAT	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.									

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 15: Selected Moss Mat Anomalies: (for selected elements).

Moss Mats only	Anomalous values shown in red (90 %ile)				
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 16: Selected Stream Sediment Anomalies: (for selected elements).

Stream Sediments only	Anomalous values shown in red (90 %ile)				
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

August 2015 to November 2016 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 and TABLE 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 Assemblage (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 Assemblage [**EB**] is a series of low-grade meta-sedimentary and meta-volcanic rocks. The Fennell Formation [**uF** – upper structural division; **IF** – lower structural division] is comprised of oceanic rocks which were tectonically emplaced over Mississippian rocks of the Eagle Bay Assemblage in early Mesozoic time. The **IF** and **EB** successions are cut by mid-Cretaceous granitic rocks, and by Early Tertiary quartz feldspar porphyry, 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 Mississippian

- (a) **EBF**: Devonian and/or Mississippian – light to medium grey, rusty weathering feldspathic 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 volcanoclastic rocks, including pyritic, feldspathic and coarsely fragmental varieties; lesser amounts of dark grey phyllite and siltstone, green chloritic phyllite, sericitic quartzite and pyritic chert (exhalite?).
 - (c) **EBG**: Lower Cambrian (may include younger and or older rocks) Medium to dark green calcareous chlorite schist, fragmental schist and greenstone derived largely from mafic to intermediate volcanic and volcanoclastic rocks; lesser amounts of limestone and dolostone; minor amounts of quartzite grit and light to dark grey phyllite.
 - **EBGp**: dark grey phyllite, calcareous 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 phyllite and slate with interbedded 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, micaceous 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 Permian: Fennell Formation – Lower Structural Division

- (a) **IFu**: Undivided; mainly **IFc**, **IFg** and **IFb**, but may include any or all of the Fennell Formation rock types.
 - **IFc**: grey and green bedded chert, cherty argillite, slate and phyllite.
 - **IFg**: gabbro, diorite, diabase.
 - **IFb**: grey and green pillowed and massive metabasalt; minor amounts of basaltic breccia and tuff.

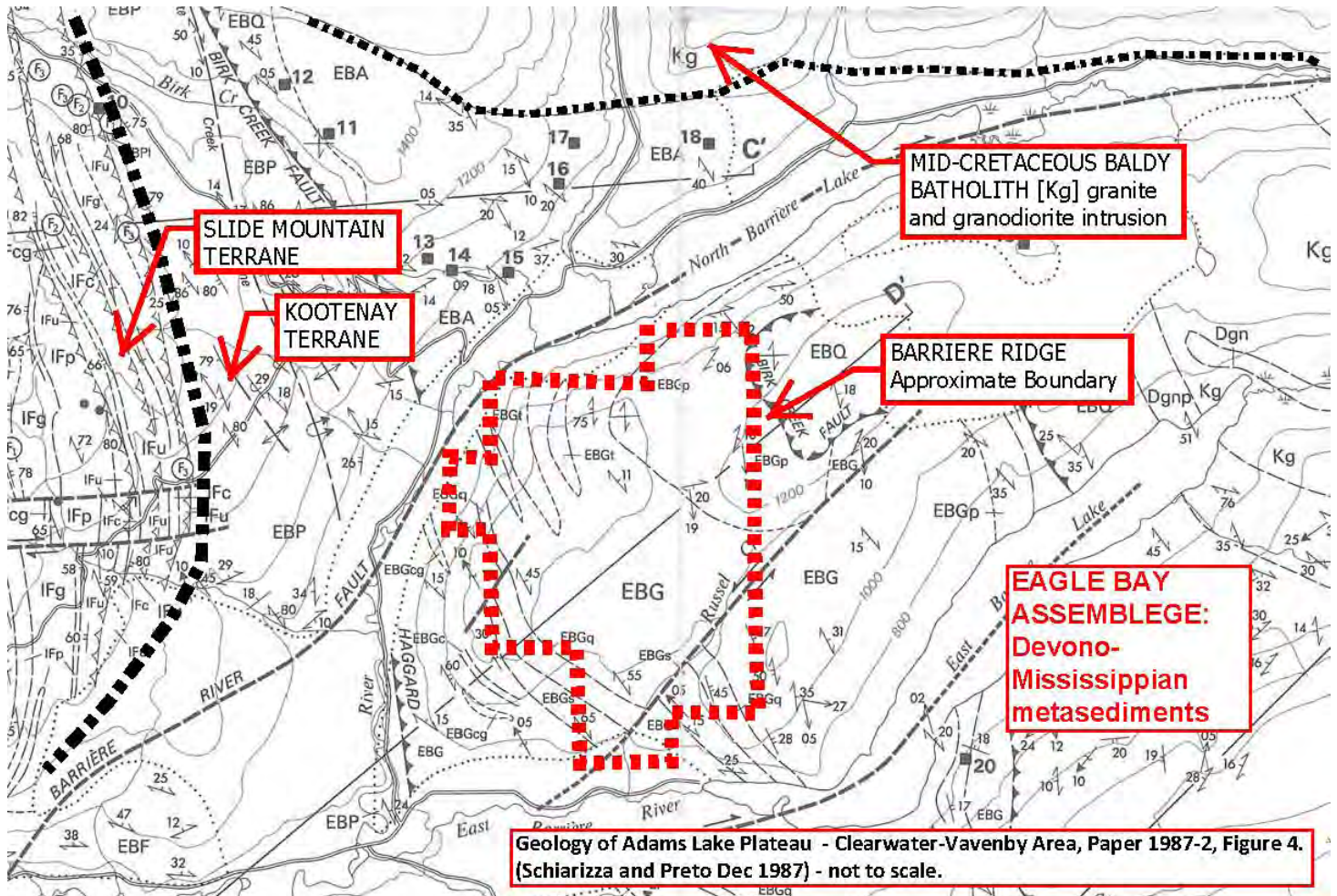
3. Cretaceous

- (a) **Kg**: granite and granodiorite; **Kgp** includes abundant pegmatite; **KBBmg** – medium to coarse 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 # 16: 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, stream/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 # 17: 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.

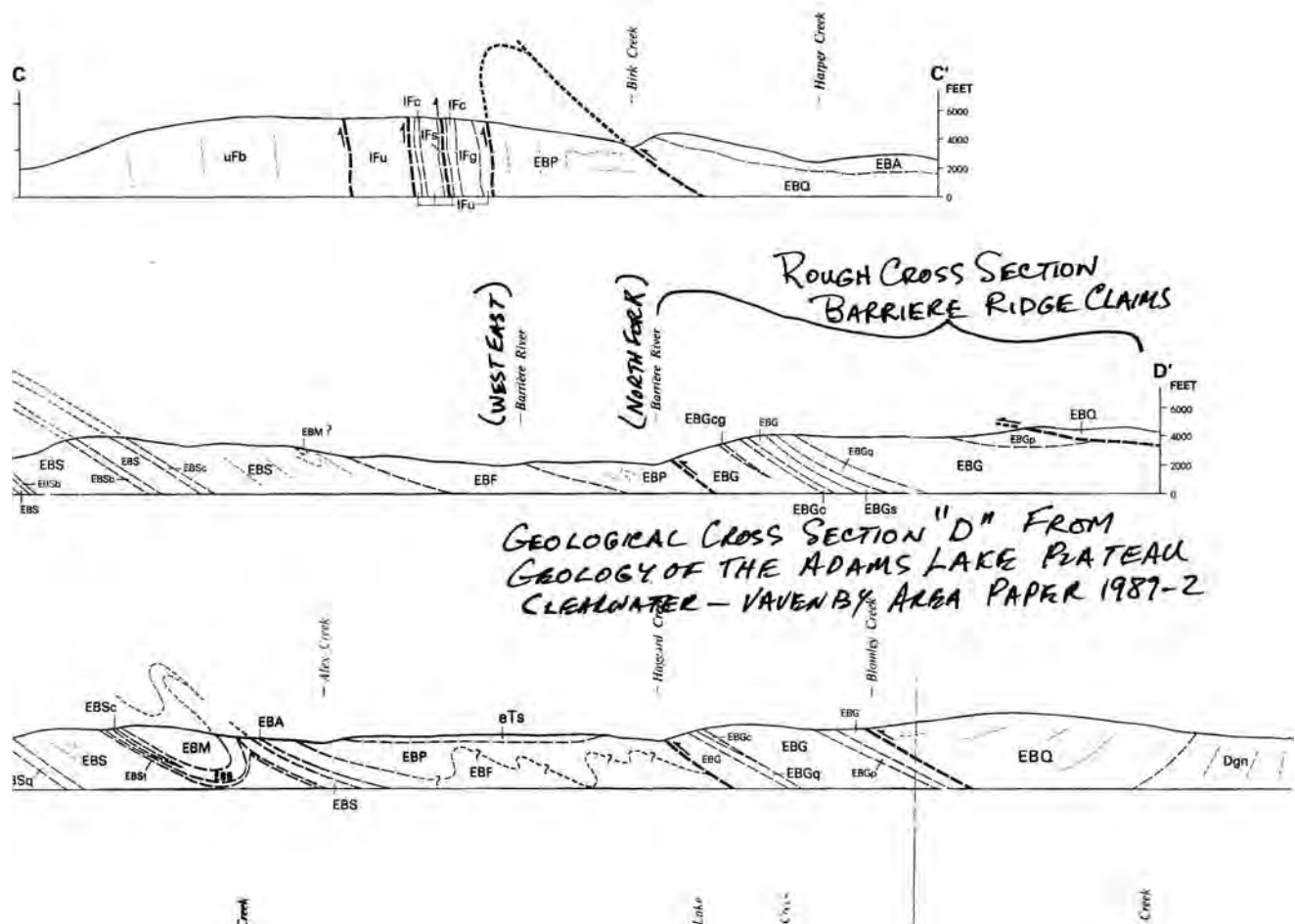


ILLUSTRATION # 18: Map excerpt directly from OPEN FILE 2000-7 Logan and Mann April 2000 showing the geology and faults in the vicinity of North Barriere Lake, East Barriere Lake, Adams Lake (estimated scale <1:100,000). North is up.

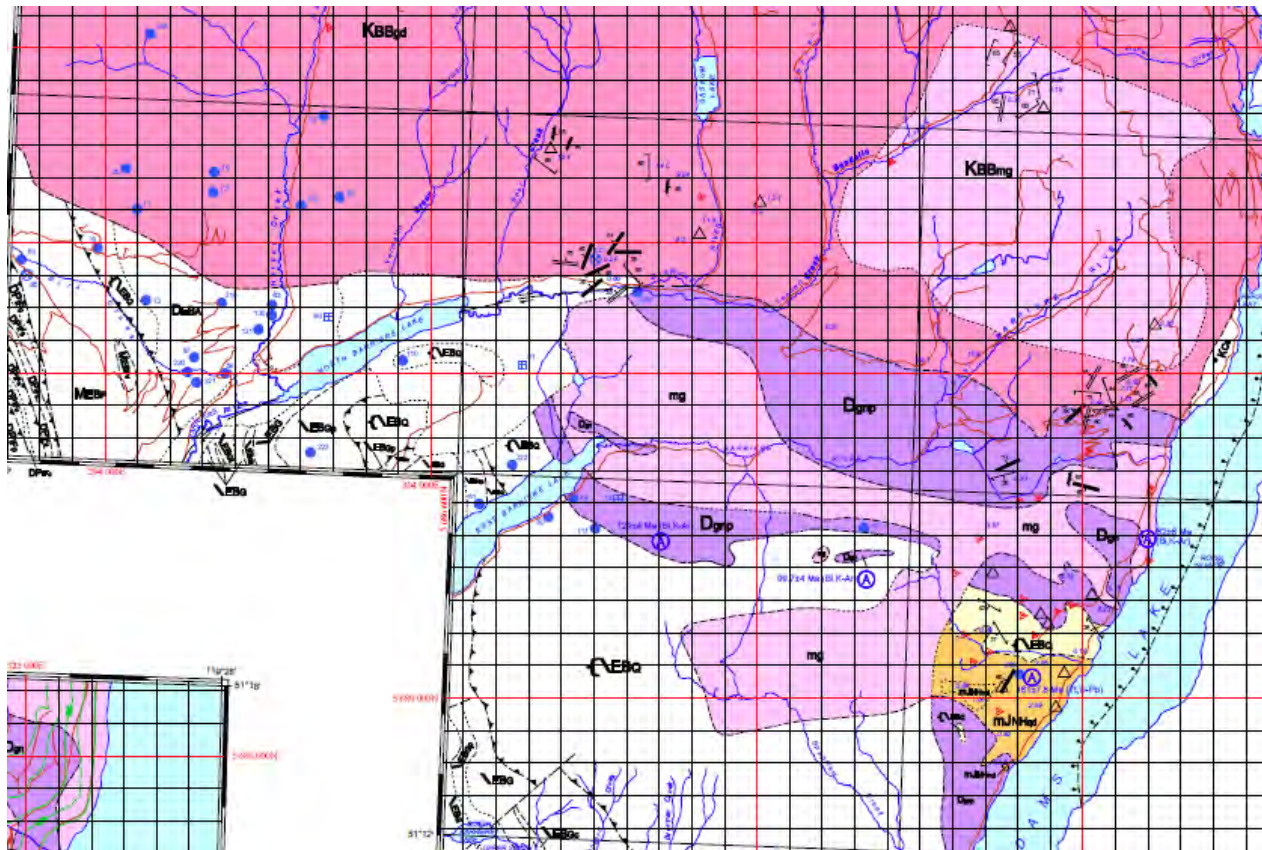


TABLE 17: GEOLOGY OF THE BARRIERE RIDGE CLAIMS: This table gives a detailed summary of each claim based on GeoFile 2005-4 and Open File 2007-7. See also Schiarizza and Preto 1987 and geology maps in the APPENDICES

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.
1043995	EBG; and EBGt in the NE corner.

B. 2015/2016 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 was 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 “BR16__”; and the second 2 digits give the year.
- The SILVER MINNOW area had a prefix “SM__”
- Stream sediment sample waypoints – “_SS_” (i.e. BR16SS__).
- Moss Mat sediment sample waypoints – “_MM_” (i.e. BR16MM__).
- Soil or Till sample waypoints – “_T_” or “_T” (i.e. SGT__ or (i.e. “BR16_T”).
- Float Rock sample waypoints – “_FT_” (i.e. BR16FT__) or (i.e. BR16FL__).
- Rock or Grab Rock sample waypoints – “_R_” (i.e. BR16_R__) and are associated with talus or outcrops.
- Certain Grab sample waypoints – “_GR_” (i.e. BR16_GR__)
- Channel sample waypoints– “_CH_” (i.e. BR16CH__)
- 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 stream 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 %ile) 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 %ile) 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 %ile) 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 x 0.4m) 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.

For this report, samples were submitted to the Kamloops – ALS Canada preparatory lab and shipped to Vancouver for assay.

C. August 2015 to Nov 2016- EXPLORATION AND ANALYTICAL RESULTS:

In February 28, 2016, 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.

From August 2015 to November 2016, 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.
- Prospecting new roads constructed and outcrops exposed by road construction and logging since the previous assessment report.
- 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 prior to 2016.
- 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 BARRIERE RIDGE database to search for errors or omissions.
- 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 Assemblage and Ag Pb Zn deposits.
- Review of historic literature and research concerning the geology and geochemistry of the BARRIERE RIDGE claims.
- Review literature related to the Ag Pb Zn limestone/dolostone deposits.

Exploration work was completed by David J. Piggin with Judy Burr and Leonard Piggin from August 29, 2015 to November 4, 2016. The total applied work was \$ 33,088.48. A detailed cost summary is at the end of this report just before the APPENDICES. The Mineral Claim Exploration and Development Work/Expiry Date MTOonline documents were recorded under EVENTS 5611394 and 5625685 as shown in the following table.

TABLE 18: 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 (\$)
5611394	July 21, 2016	2,122.5393	\$ 28,921.48	NIL	\$ 28,921.48
5625685	November 11, 2016	2,122.5393	\$ 4167.00	NIL	\$ 4167.00
TOTAL EXPENDITURES		2,122.5393 hectares	\$ 33,088.48	NIL	\$ 33,088.48

In general terms, all exploration works (where applicable) are given in the APPENDICES 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.

ILLUSTRATION # 19: David Piggin collecting rock samples (e.g. BR16R13B) from an outcrop exposed by a new road. View to the south (IMG_2077 BR16R13B.jpg).



Summary of August 2015 to November 2016 Exploration and Results:

- **Expenditures:** Total Applied Work Value \$ 33,088.48 on 2,122.5393 hectares.
- **Samples:** A total of 55 samples (34 rock and 21 soil) were collected of which 11 rock samples were assayed. The remaining samples (23 rock, 21 soil) will be assayed in 2015/2016 due to a lack of funds; and reported in a future assessment report.
- **SILVER MINNOW GRID2:** (325 m) was re-established and extended along UTM Zone 11 Northerly line – 5686900N, and 14 soil grid samples were collected in 2016 from 298075E to 298400E (25 metre interval).
- **Prospecting Soil Samples:** 7 prospecting soil samples were collected.

- **Hand Trenches completed:** 2 for a total length of 10.1 metres (5.5m x 0.6m x 0.4m, and 4.6m x 2m x 0.2m).
- **Assay Results:** None of the 11 rocks assayed contained anomalous Au, Ag, Cu, Mo, Pb, or Zn and therefore, no additional assays were conducted as targeted metals were not anomalous at that location. The rocks sampled were anomalous for Ca (up to 34 %) and Mg (up to 10.55 %). One sample 10E41451_BR16R12E was anomalous for Ba Ca Mg Ce Cr Ga K P as follows:

10E41451_BR16R12E : Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 %; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; K 2.9 %; Mg 2.46 %; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm.

- **Data:** Collated, digitized, photographed, and mapped the location of samples and including assayed results.
- **Geological Features:** Recorded and GPS geological features.
- **Sampled and Prospected** recently logged areas and new roads for rock and soil anomalies; and outcrop exposures.
- **Physical Work:** 1100 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 - 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 2016.
- **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 2016.
- **Research:** Conducted literature and general research for publications related to the Eagle Bay Assemblage and Ag Pb Zn deposits (i.e. Geoscience BC, BC Geological Survey, websites).
- **FIRST NATIONS Letter 2016:** A First Nations information letter/package was completed and submitted to each First Nation on May 19, 2016. 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 previous years and also 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 a Free Use Permit for Mineral Exploration.
- **Database management and update:** Continued to update and work on an EXCEL database.

Details of August 2015 to November 2016 Exploration and Results:

Discussion of the August 29, 2015 to November 4, 2016 exploration work is provided here.

A total of 55 samples were collected, 34 rock samples and 21 soil samples, of which 11 rock samples were assayed. The remaining samples (23 rock samples and 21 soil samples) will be assayed in 2017 and included in a future ARIS report. A complete list of the sample tag numbers, GPS coordinates, rock descriptions, detailed location maps (1:10,000 and 1:2000), anomalous results, and assay certificates are given in the APPENDICES. A list of selected anomalous results for certain selected elements, including photographs, is given in the sections below as follows:

1. **South of the SILVER MINNOW MINFILE/SILVER TRAIL SHOWING.**
2. **East of SILVER MINNOW MINFILE/SILVER TRAIL SHOWING (new road construction and logging)**
Rock Samples, Soil Samples, Hand Trenches.
3. **Stream Sediment Samples**
4. **Fugro Airborne Geophysics/Intpretation Report (Anomalous Rock, Soil, and Stream Samples).**
5. **First Nations.**
6. **Physical Work – Trail Brushing for safety access and exploration.**

were: rock - BR16R30FL, BR16R30B; and soil – BR16T30A, BR16T30B, and BR16T30C. These samples have not been assayed yet.

TABLE 19: Summary of Rock and Soil Samples collected south of the SILVER MINNOW and SILVER TRAIL Showings. Detailed information related to GPS coordinates and etc. is given in the APPRENDICIES.

Sample Tag; and Waypoint Name	Assay Certificate	Comments	Anomalous Results; and Other Results
ROCK SAMPLES			
Br16R30B	not assayed	possible malachite Ag, see also BR16T30A, BR16T30C	Not applicable. See also soil samples BR16T30A, BR16T30B, and BR16T30C
Br16R30FL	not assayed	float rock, quartz float, possible mineralization (galena Ag ??)	Not applicable. See also soil samples BR16T30A, BR16T30B, and BR16T30C
SOIL SAMPLES			
Br16T30B	not assayed	see also BR16T30A, BR16T30C	Bm horizon, brown, poorly sorted, CL. Road cut slope.
Br16T30A	not assayed	slight grit, see also BR16T30B, BR16T30B	Bm horizon, brown, poorly sorted, CL. Road cut slope.
Br16T30C	not assayed	end of switch back above landing, see also BR16T30A, BR16T30B	Bm, horizon, brown, poorly sorted, CL. End of switch back above landing

Since rock samples BR16R30FL and BR16R30B appeared to be mineralized 3 soil samples were collected along the road cut to assess the potential for a geochemical anomaly. Soil sample BR16T30B was collected at the same location as BR16R30B. Additional sampling, outcrop prospecting, assaying, and a soil grid are planned for 2017.

ILLUSTRATION #21: Sample location for Rock Sample BR16R30B and Soil Sample BR16T30B near switch back on SILVER TRIAL access trail. These samples have not been assayed yet (IMG_2177.jpg).



2. East of SILVER MINNOW MINFILE/SILVER TRAIL SHOWING:(new road construction and logging)

In 2015 and 2016, new road construction and logging east and south of the SILVER MINNOW MINFILE and SILVER TRAIL Showing exposed rock outcrops that were previously covered by heavy timber (see BCTS logging map above). Therefore, the majority of the exploration and sampling work was focused in this new area. The new area explored was up to 800 metres east of SILVER TRAIL Showing.

ILLUSTRATION # 22: Judy Burr collecting and packing rock samples (e.g. BR16R13DQZ BR16R13E BR16R13A) from an outcrop exposed by a new road. View to the south (IMG_2139 Judy BR16R13DQZ BR16R13E BR16R13A.JPG).



In this area, a total of 32 rock and 18 soil samples were collected of which 11 rock samples were assayed. The remaining samples (23 rock, 18 soil) will be assayed in 2017 and reported in a future ARIS report. Detailed sample information, detailed maps, GPS, and assay results etc. are given in the APPENDICES. This area is discussed in the following 3 sections:

- (a) Rock Samples
- (b) Soil Samples
- (c) Hand Trenches.

(a) ROCK SAMPLES:

Exploration in the recently logged area was focused on the potential for Au, Ag, Cu, Mo, Pb, or Zn anomalies.

Assay Results: None of the 11 rocks assayed contained anomalous Au, Ag, Cu, Mo, Pb, or Zn and therefore, no additional assays were submitted as targeted metals were not anomalous at this location. Brief results are presented here. Detailed maps and data are given in the APPENDICES.

ILLUSTRATION #23: Photograph of samples submitted for assay (IMG_1879 all submitted.JPG).



In certain cases, the rocks assayed were anomalous for Ca (up to 36.5 %) and Mg (up to 10.55 %). For example:

ILLUSTRATION #24: Sample 10E41458_BR16R13C: Au <.001 ppm; Ag 0.01 ppm; Ca 36.5 %; Cu 4.1 ppm; Mg 0.21 %; Mo 0.23 ppm; Pb 1.4 ppm; Zn 3 ppm (IMG_1830 10E41458_BR16R13C.JPG)



ILLUSTRATION #25: Sample 10E41454_BR16R14BFL: Au <.001 ppm; Ag 0.05 ppm; Ca 35.8 %; Cu 6.3 ppm; Mg 0.92 %; Mo 0.24 ppm; Pb 80.1 ppm; Zn 25 ppm.(IMG_1792 10E41454_BR16R14BFL.JPG)



ILLUSTRATION #26: Sample 10E41457_BR16R12D: Au <.001 ppm; Ag 0.01 ppm; Ca 18 %; Cu 3.7 ppm; Mg 10.55 %; Mo 0.79 ppm; Pb 1.7 ppm; Zn 18 ppm (IMG_1822 10E41457_BR16R12D.JPG)



ILLUSTRATION #27: One sample 10E41451_BR16R12E was anomalous for Ba Ca Mg Ce Cr Ga K P as follows:

Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 %; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; Mg 2.46 %; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm (IMG_1759 10E41451_BR16R12E.JPG)



ILLUSTRATION #28: Another sample: 10E41453_BR16R13CC was anomalous for Ba with Ba 8770 ppm as follows:

Au <.001 ppm; Ag 0.02 ppm; Ba 8770 ppm; Ca 10.2 %; Cu 86 ppm; Mg 0.88 %; Mo 1.52 ppm; Pb 8.6 ppm; Zn 23 ppm. (IMG_1782 10E41453_BR16R13CC.JPG)



The Ca and Mg anomalies can be explained by the presence of limestone (EBGt) and dolostone formations. The Ba Ca Mg Ce Cr Ga K P anomalies have not been explained at this point. It is unclear if they are related or unrelated to the genesis of the Au, Ag, Cu, Mo, Pb, or Zn anomalies at SILVER MINNOW, SILVER TRAIL, and SILVER BOY Showings.

TABLE 20: Summary of Rock Samples collected East of the SILVER MINNOW MINFILE and SILVER TRAIL Showing. Detailed information related to GPS coordinates and etc. is given in the APPENDICIES.

Sample Tag; and Waypoint Name	Assay Certificate	Comments	Anomalous Results; and Other Results
ROCK SAMPLES			
10E41451_BR16R12E	KL16109074	limestone, felsic with slight greenish tinge, clay alteration; road cut slope	Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 %; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; Mg 2.46 %; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm
10E41453_BR16R13CC	KL16109074	limestone, felsic with slight greenish tinge, clay and brown alteration; road cut slope, same location as BR16R13DD	Au <.001 ppm; Ag 0.02 ppm; Ba 8770 ppm; Ca 10.2 %; Cu 86 ppm; Mg 0.88 %; Mo 1.52 ppm; Pb 8.6 ppm; Zn 23 ppm
10E41462_BR16R12A	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope	Au <.001 ppm; Ag <0.01 ppm; Ca 19.45 %; Cu 2 ppm; Mg 9.46 %; Mo 0.5 ppm; Pb 1.9 ppm; Zn 21 ppm
10E41460_BR16R12C	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location BR16R12D	Au <.001 ppm; Ag <0.01 ppm; Ca 18.5 %; Cu 2.2 ppm; Mg 10.05 %; Mo 0.92 ppm; Pb 1.6 ppm; Zn 19 ppm
10E41457_BR16R12D	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location BR16R12C	Au <.001 ppm; Ag 0.01 ppm; Ca 18 %; Cu 3.7 ppm; Mg 10.55 %; Mo 0.79 ppm; Pb 1.7 ppm; Zn 18 ppm
10E41459_BR16R12F	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 19.7 %; Cu 28.9 ppm; Mg 8.96 %; Mo 0.7 ppm; Pb 1.6 ppm; Zn 17 ppm
10E41461_BR16R12G	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 16.5 %; Cu 2.7 ppm; Mg 7.18 %; Mo 1.13 ppm; Pb 1.5 ppm; Zn 23 ppm
10E41458_BR16R13C	KL16109074	possible malachite, pinkish outcrop, limestone, felsic, greyish, siliceous, black blebs; same location as BR16R13A BR16R13B	Au <.001 ppm; Ag 0.07 ppm; Ca 34 %; Cu 4.4 ppm; Mg 3.33 %; Mo 0.15 ppm; Pb 8.6 ppm; Zn 22 ppm
10E41452_BR16R13DD	KL16109074	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location as BR16R13CC	Au <.001 ppm; Ag 0.03 ppm; Ca 6.51 %; Cu 55.6 ppm; Mg 2.4 %; Mo 1.53 ppm; Pb 0.8 ppm; Zn 13 ppm

10E41455_BR16R13DQZ	KL16109074	quartz with black mineral specs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 36.5 %; Cu 4.1 ppm; Mg 0.21 %; Mo 0.23 ppm; Pb 1.4 ppm; Zn 3 ppm
10E41454_BR16R14BFL	KL16109074	salicious, black blebs in lines, pink to redish colour with red soil stain; downslope from hand trench; road cut slope, redish alteration, float rock	Au <.001 ppm; Ag 0.05 ppm; Ca 35.8 %; Cu 6.3 ppm; Mg 0.92 %; Mo 0.24 ppm; Pb 80.1 ppm; Zn 25 ppm
Br16R10	not assayed	Salicious white outcrop with pink tinge, end of road, landing	Not applicable
Br16R11	not assayed	rusty red rock, road cut slope, schist	Not applicable
Br16R12B	not assayed	road cut slope, redish quartz black sploches	Not applicable
Br16R13A	not assayed	Limestone, redish alteration, pinkish outcrop, same location as BR16R13B, BR16R13C	Not applicable
Br16R13B	not assayed	Limestone, white, pinkish outcrop, same location as BR16R13A, BR16R13C	Not applicable
Br16R13E	not assayed	Limestone white; road cut slope	Not applicable
Br16R14AFL	not assayed	Pink limestone, road cut slope, float rock	Not applicable
Br16R14FL	not assayed	Pink limestone, road cut slope, float rock	Not applicable
Br16R17FL	not assayed	Red oxidized limestone, float rock, road cut. See also BR16T17	Not applicable
Br16R1F	not assayed	sugary salicious with sugar quartz viens, black blebs, same location as BR16T1F	Not applicable
Br16R20A	not assayed	quartz with black streaks	Not applicable
BR16R20LIM	not assayed	limestone with black blebs	Not applicable
Br16R21QZ	not assayed	quartz	Not applicable
BR16R22A	not assayed	White limestone, black specs, red tinge in streaks, strike 245 deg vertical dip; road cut,	Not applicable

BR16R22B	not assayed	White limestone, black specs, red tinge in streaks, strike 245 deg vertical dip; road cut,	Not applicable
Br16R2A	not assayed	limestone with quartz veins, veinlets in roadcut north side of road	Not applicable
Br16R2BB	not assayed	(black matrix) veinlets, yellowish.	Not applicable
Br16R2C	not assayed	limestone with veinlets and black layer, vacuoles in veinlets	Not applicable
Br16R3	not assayed	sulfide blebs, same location BR16R4, BR16R5Q	Not applicable
Br16R4	not assayed	sulfide blebs, felsic, same location BR16R3, BR16R5Q	Not applicable
Br16R5Q	not assayed	quartz grab across 4m, same location BR16R3, BR16R4	Not applicable

(a) SOIL SAMPLES:

A total of 18 soil samples were collected of which 14 samples were collected from the SILVER MINNOW GRID 2 (SML2). The remaining 4 samples were collected as prospecting samples. None of the soil samples have been assayed yet.

The SML2 preparatory survey was started in October 25, 2012 (225 m) and was previously reported in ARIS 33744. The SML2 Line was re-established; and extended in 2016 because the survey line was logged in 2015/2016. Samples were collected in 2016 at the time of survey and various outcrops exposed by logging were sampled. The SML2 Soil Grid Samples were collected in an easterly direction for 325 metres along UTM Zone 11 UTM Zone 11 Northerly line – 5686900N from 298075E to 298400E at 25 metre intervals. See a summary in the following Table.

ILLUSTRATION #29: Soil Samples from the SILVER MINNOW GRID SML2 and prospecting samples. (20160626_120938.jpg).



ILLUSTRATION #30: Map of SILVER MINNOW SOIL GRID SML2. See also map in APPENDICIES. .

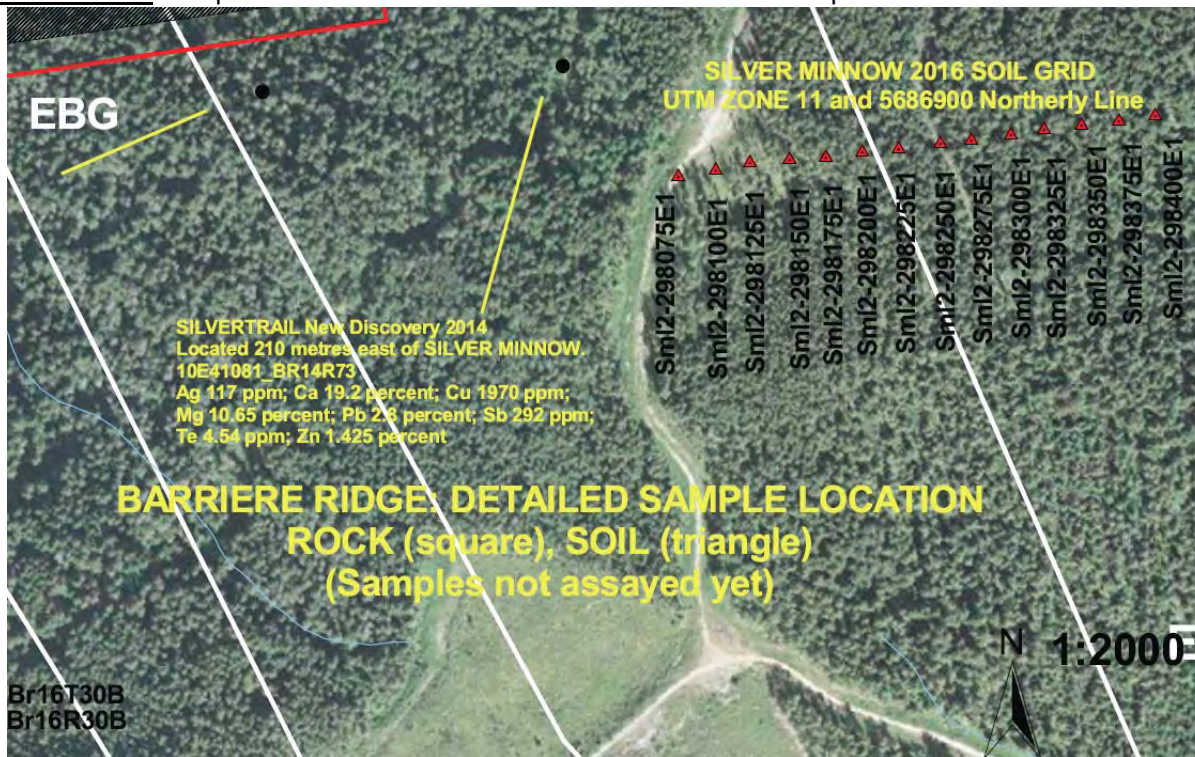


TABLE 21: Summary of Soil Samples collected East of the SILVER MINNOW MINFILE and SILVER TRAIL Showing. Detailed information related to GPS coordinates and etc. is given in the APPENDICIES

Sample Tag; and SML2 appointment name	Assay		Anomalous Results; and Other
GRID (aka SML2)			
SML2-298075E1	not assayed	Bm, brown, well sorted, CL; Line 1, UTM Coordinate is estimate	Line 1, UTM Coordinate is estimate, grid location: Zone 11.298075E. 5686900N
SML2-298100E1	not assayed	Bm, brown, moderately sorted, CL; Line 1	grid location: Zone 11.298100E. 5686900N
SML2-298125E1	not assayed	Bf, yellow brown, poorly sorted, L; Line 1	grid location: Zone 11.298125E. 5686900N
SML2-298150E1	not assayed	Bg, brownish grey, poorly sorted, CL; Line 1	grid location: Zone 11.298150E. 5686900N
SML2-298175E1	not assayed	Bg, grey with brownish tinge, poorly sorted, CL; Line 1	grid location: Zone 11.298175E. 5686900N
SML2-298200E1	not assayed	Bm, brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298200E. 5686900N
SML2-298225E1	not assayed	Bm, brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298225E. 5686900N

SML2-298250E1	not assayed	Bf, red brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298250E. 5686900N
SML2-298275E1	not assayed	Bf, red brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298275E. 5686900N
SML2-298300E1	not assayed	Bf, redish brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298300E. 5686900N
SML2-298325E1	not assayed	Bf, grey brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298325E. 5686900N
SML2-298350E1	not assayed	Bf, brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298350E. 5686900N
SML2-298375E1	not assayed	Bf, redish brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298375E. 5686900N
SML2-298400E1	not assayed	Bf, redish brown, poorly sorted, CL; Line 1, recent logging	grid location: Zone 11.298400E. 5686900N
PROSPECTING SOIL SAMPLES			
Br16T1F	not assayed	Bf	same location as BR16R1F
Br16T2A	not assayed	Bf, redish brown, poorly sorted, L	see also BR16T2B, BR16T30C
Br16T2B	not assayed	Bf, brown, poorly sorted, CL	see also BR16T2A, BR16T30C
Br16T2C	not assayed	Bg, brownish grey, poorly sorted, CL	see also BR16T2A, BR16T30B

(b) HAND TRENCHES:

A total of 2 hand trenches were completed as follows:

Trench Name	Zone	Easterly	Northerly	Elevation (m)	Trench Size	COMMENT
16HANDTR1	11	298871.665	5686757.082	1306.31	5.5m x 0.6m x 0.4m	To be channel sampled, and outcropped mapped.
16-1	11	298445.833	5686745.334	1289.96	4.6m x 2m x 0.2m	Sample trench, same location as BR16T1F, BR16R1F

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, 35500.
- 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 Pigin 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 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: 250-679-8816
- 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

FIRST NATIONS letter 2016: A First Nations information letter/package was completed and submitted to each First Nation between May 17, 2016 and May 19, 2016. The letter included an information on proposed work plus an overview tenure map. Follow-up telephone calls were also completed.

FIRST NATIONS letter 2015: A First Nations information letter/package was completed and submitted to each First Nation on April 29, 2015.

FIRST NATIONS letter 2014: A First Nations information letter/package was completed and submitted to each First Nation on February 26, 2014. In 2014, meetings were held with Simpcw First Nations, Little Shuswap First Nation, and the Adams Lake Band.

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. Pigin 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 First Nation reserve.

6. PHYSICAL WORK:

The proposed physical work was communicated in writing to First Nations through an annual communications letter dated May 2016 and during follow-up telephones.

On June 17, 2016, David J. Piggin obtained a Free Use Permit (FUP) F20815 - Mineral Exploration. The FUP 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 and Judy Burr June/July 2016. Two personal chainsaws were used plus chainsaw protective chaps, hard hats, and ear/eye protection. An estimated 1100 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 (3 to 4 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 August 29, 2015 to November 4, 2016. Total Applied Work Value \$ 33,088.48. The Mineral Claim Exploration and Development Work/Expiry Date documents were recorded for EVENT 5611394 and 5625685.

Results, conclusions and recommendations from three previous ARIS reports 32383, 33190, 33744, 34651, 35500 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 2016; the discovery of the high grade Ag Pb Zn – SILVERBOY Showing; SILVERGAL Showing; SILVER TRAIL Showing; the Breccia Area showings; various MINFILE occurrences; the results of this report and previous (ARIS 32383, 33190, 33744, 34651, 35500) 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.

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 2017.

SUMMARY: EXPLORATION WORK COMPLETED AUGUST 2015 TO NOV 2016:

The following is a brief summary of the works completed:

- **Expenditures:** Total Applied Work Value \$ 33,088.48 on 2,122.5393 hectares.
- **Samples:** A total of 55 samples (34 rock and 21 soil) were collected of which 11 rock samples were assayed. The remaining samples (23 rock, 21 soil) will be assayed in 2015/2016 due to a lack of funds; and reported in a future assessment report.
- **SILVER MINNOW GRID2** was started along a UTM Zone 11 Northerly line – 5686900N, and 14 soil grid samples were collected in 2016 from 298075E to 298400E (25 metre interval).
- **Prospecting Soil Samples:** 7 prospecting soil samples were collected.
- **Hand Trenches completed:** 2 for a 10.1 metres in total length (5.5m x 0.6m x 0.4m, and 4.6m x 2m x 0.2m)
- **Assay Results:** None of the 11 rocks assayed contained anomalous Au, Ag, Cu, Mo, Pb, or Zn therefore, no additional assays were conducted as targeted metals were not anomalous at this location. The rocks sampled were anomalous for Ca (up to 34 %) and Mg (up to 10.55 %). One sample 10E41451_BR16R12E was anomalous for Ba Ca Mg Ce Cr Ga K P as follows:

10E41451_BR16R12E : Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 %; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; K 2.9 %; Mg 2.46 %; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm.

- **Data:** Collated, digitized, and mapped the location of samples and including assayed results.
- **Geological Features:** Recorded and GPS geological features.
- **Sampled and Prospected** recently logged areas and new roads for rock and soil anomalies; and outcrop exposures.
- **Physical Work:** 1100 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 2016.
- **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 2016.
- **Research:** Conducted literature and general research for publications related to the Eagle Bay Assemblage and Ag Pb Zn deposits (i.e. Geoscience BC, BC Geological Survey, websites).
- **FIRST NATIONS Letter 2016:** A First Nations information letter/package was completed and submitted to each First Nation on May 19, 2016. 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 previous years and also 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 a Free Use Permit for Mineral Exploration.
- **Database management and update:** Continued to update and work on an EXCEL database.

PROPOSED EXPLORATION WORK: THE DETAILS

A five year program of \$1,500,000 is recommended commencing in the summer and fall of 2017.

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 %, Bi 270 ppm, Cr 202 ppm, S 1.69 %, 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 %; Zn 6490 ppm (over 1 m)
- **SILVERBOY Showing:** In 2016 sample,
10E41072 SM16R2:
Ag 246 ppm; Bi 56.6 ppm; Cu 171.5 ppm; Cd 190 ppm; Pb 16.55 %; Sb 237 ppm; Se 35 ppm; Sn 2 ppm; Te 29.3 ppm;
Zn 5.34 %.
- **SILVER TRAIL Showing –** In 2014 samples,
10E41081_BR14R73:
Ag 117 ppm; Ca 19.2 %; Cu 1970 ppm; Mg 10.65 %; Pb 2.8 %; Sb 292 ppm; Zn 1.425 %
10E41085_BR14R77: Ag 19.7 ppm; Ca 18.65 %; Mg 9.81 %; Pb 5060 ppm
10E41077_BR14R70: Ag 18.65; Ca 21.5 %; Mg 10.5 %; Pb 1410 ppm
10E41083_BR14R75: Ag 16.8 ppm; Ca 20.5 %; Mg 11 %; Pb 8780 ppm; Zn 2680 ppm
10E41078_BR14R71: Ag 12.95; Ca 22.1 %; Mg 10.8 %; 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 existing 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.

SILVER TRAIL Showing: Conduct further outcrop sampling and completed an east west soil grid in conjunction with the SILVER MINNOW – SML2 Grid.

Access Trail Switchback: 400 – 500 metres South of SILVER MINNOW and SILVER TRAIL: Conduct further outcrop sampling and completed an east west soil grid in conjunction with the SILVER MINNOW – SML1 Grid previously reported in ARIS 33190.

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.

14E41216: 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 116.7 ppm

14E41270: Au 10 ppb, Mo 1.18 ppm

14E41232, 14E41235, 14E41230, 14E41231, 14E41240, and 14E41254 all carried Au 7 ppb

14E41216: 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.

14E41606: Au 12 ppb

14E41605: Ag 0.5 ppm, Cu 63 ppm, Zn 188 ppm

14E41608: Cu 59.7 (90 %ile being Cu 52.32 ppm). 14E41609: Cu 84.4 ppm 14E41625: Cu 75.3 ppm.

14E41297: Pb 28 (90 %ile being Pb 24.72 ppm).

14E41630: Pb 26 ppm 14E41625: Pb 27.3 ppm 14E41299: Pb 25.5 ppm.

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 169 ppm.

Miscellaneous Soil Samples for consideration:

10E41053 BR16T3:

Au 6.7 ppb; Ag 0.54 ppm; Bi 0.52 ppm; Co 34.9 ppm; Fe 4.88 %; Ni 72.2 ppm; Pb 39.9 ppm; Zn 153 ppm

10E41051 BR16T1:

Au 6.5 ppb; Bi 0.44 ppm; Co 44 ppm; Cr 92 ppm; Cu 102.5 ppm; Fe 7.43 percent; Mg 1.34 %; Mo 1.54 ppm; Ni 146.5 ppm; Pb 36.6 ppm; Zn 108 ppm

10E41062 SM16T1: Al 2.64 %; Ca 6.26 %; Pb 57.7 ppm; Sb 2.46 ppm; Zn 146 ppm.

10E41054 BR16T4: Bi 0.57 ppm; Fe 4.43 %; 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 2016, 10E41063 BR16MM1:

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.**
- 10E41634 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 2016, 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, 35500.
- 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-Cretaceous 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.

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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, Samatsum, 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, 2016. \$ 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, 2016; \$ 17,706.83.
 - 34651: David J. Piggin. March 18, 2014. BARRIERE RIDGE; \$ 39,377.26.
 - 35500 David J. Piggin. August 29, 2016. BARRIERE RIDGE \$ 46,111.09.
- 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. Google Earth.
9. Adobe Acrobat 9 Pro and Adobe Acrobat Distiller.
10. Trackmaker version 16.1 (freeware) for GPS download.
11. DNR Garmin GPS download.
12. Garmin 12XL – Global Positioning Unit.
13. Garmin GPSmap 60CSx – Global Positioning Unit.
14. Canon A630 and A1100 digital camera.
15. ICOM road radio and hand held radio for safety.
16. Stone Blaze, belt chain, surveying tool.
17. Hand held Ranger Silva Compass, Azimuth.
18. Clinometer, Sunnto, (degrees, %).
19. Iwamoto Hand lens.
20. Survey ribbon (various colours), metal tags, and tyvek tags with wire.
21. Rock hammer, geotul, and various sledge hammers, shovels, soil auger, and trowels.
22. Gold pan, black, for collecting sediment samples prior to bagging.
23. Black plastic door screen (0.1 inch square mesh) for screening stream sediment samples.
24. Samples were collected with plastic bags (rock), stream sediments/soil (kraft bags), moss mats (linen bags).
25. 2 Trapper Nelson pack boards with sacks.
26. Ford, F150 4x4 pickup, with canopy/boat racks.
27. Shindawa powersaw and Husqvarna 55 Chainsaw.
28. 1 hand tank pumps (fire), fire extinguishers, shovels, pulaskis for fire prevention.
29. First aid kit for safety.

COST SUMMARY

Event	Dates	Total Value of Work	Total Applied Work Value	PAC	
Event 5611394	August 29, 2015 to July 20, 2016	28,921.48	28,921.48		
EVent 5625685	July 21, 2016 to November 4, 2016	4,167.00	4,167.00		
		\$ 33,088.48	\$ 33,088.48	\$ -	TOTAL
Exploration Work type	Comment	Days			Totals
Personnel (Name)* / Positic Field Days (list actua		Days	Rate	Subtotal*	
David Piggin, RPF, Prospector	October 7, 2015	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	October 11, 2015	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	October 12, 2015	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	May 19, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	June 15, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	June 19, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	June 21, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	June 22, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	June 22, 2016	1	\$300.00	\$300.00	
David Piggin, RPF. Prospector	June 23, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	June 23, 2016	1	\$300.00	\$300.00	
David Piggin, RPF. Prospector	June 24, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	June 24, 2016	1	\$300.00	\$300.00	
David Piggin, RPF. Prospector	June 25, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	June 25, 2016	1	\$300.00	\$300.00	
David Piggin, RPF. Prospector	June 26, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	June 29, 2016	1	\$400.00	\$400.00	
David Piggin, RPF. Prospector	July 3, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 4, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	July 4, 2016	1	\$300.00	\$300.00	
David Piggin, RPF, Prospector	July 5, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	July 5, 2016	1	\$300.00	\$300.00	
David Piggin, RPF, Prospector	July 6, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	July 6, 2016	1	\$300.00	\$300.00	
David Piggin, RPF, Prospector	July 6, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 7, 2016	1	\$400.00	\$400.00	

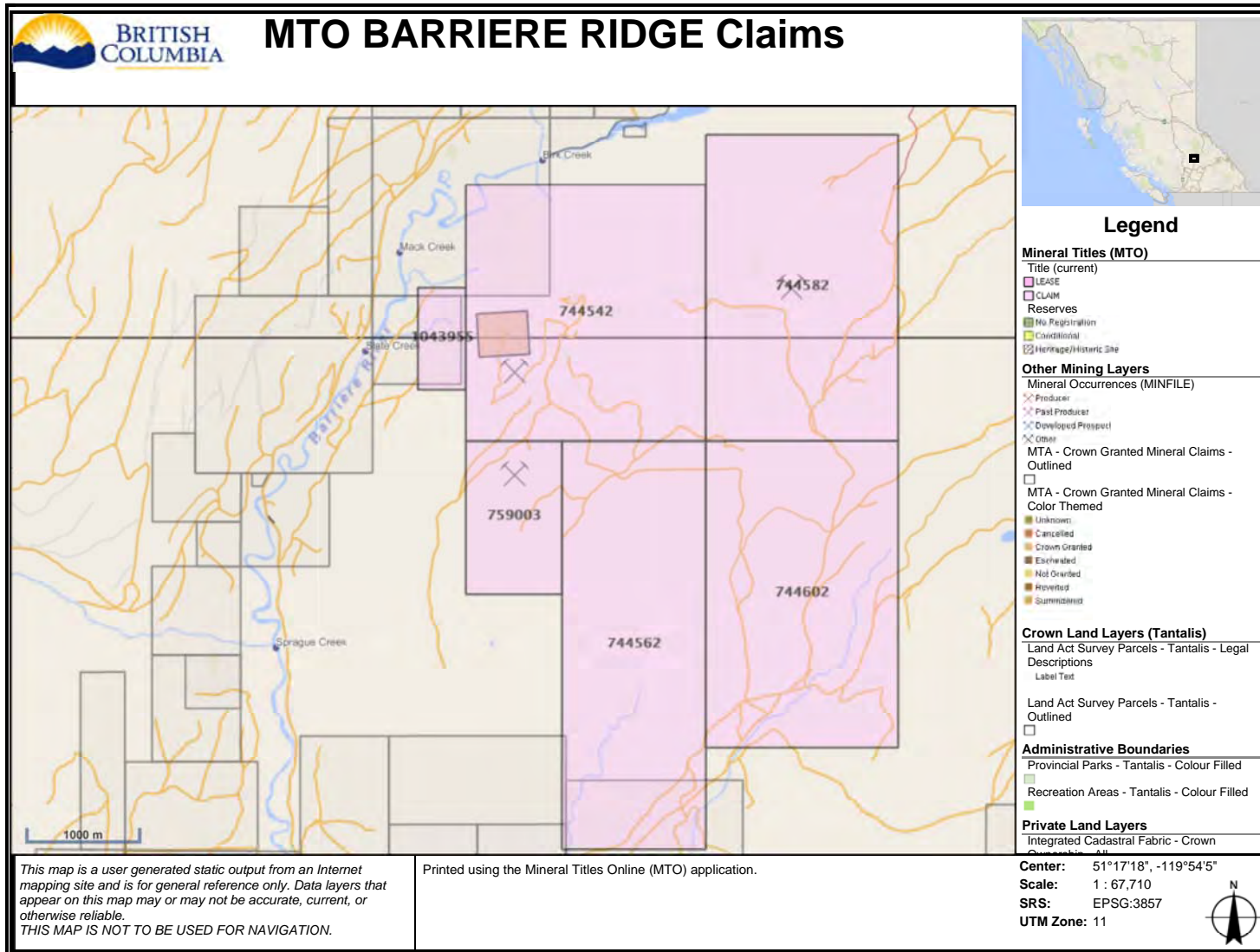
David Piggin, RPF, Prospector	July 10, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 11, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 12, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	July 12, 2016	1	\$300.00	\$300.00	
David Piggin, RPF, Prospector	July 13, 2016	1	\$400.00	\$400.00	
Judy Burr, Prospector	July 13, 2016	1	\$300.00	\$300.00	
David Piggin, RPF, Prospector	July 14, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 23, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	July 24, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	October 10, 2016	1	\$400.00	\$400.00	
David Piggin, RPF, Prospector	October 11, 2016	1	\$400.00	\$400.00	
				\$0.00	
				\$13,900.00	\$13,900.00
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	
Computer modelling			\$0.00	\$0.00	
Reprocessing of data			\$0.00	\$0.00	
General research	David Piggin, RPF. Prospector	2.0	\$400.00	\$800.00	
General research					
Report preparation	David Piggin, RPF. Prospector	6.0	\$400.00	\$2,400.00	
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.	David Piggin, RPF. Prospector	1.0	\$400.00	\$400.00	
Other (specify) First Nations and claim area ownership and notification, information sharing.	David Piggin, RPF. Prospector	1.0	\$400.00	\$400.00	
Other (specify) Photograph, inspect, describe, document 55 samples at Sooke		1.0	\$400.00	\$400.00	

					\$6,800.00	\$6,800.00
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		<i>note: expenditures here</i>		\$0.00		
Reconnaissance		<i>should be captured in Personnel</i>		\$0.00		
Prospect		<i>field expenditures above</i>		\$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	<i>note: expenditures for your crew in the field</i>			\$0.00		
SP/AP/EP	<i>should be captured above in Personnel</i>			\$0.00		
IP	<i>field expenditures above</i>			\$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		

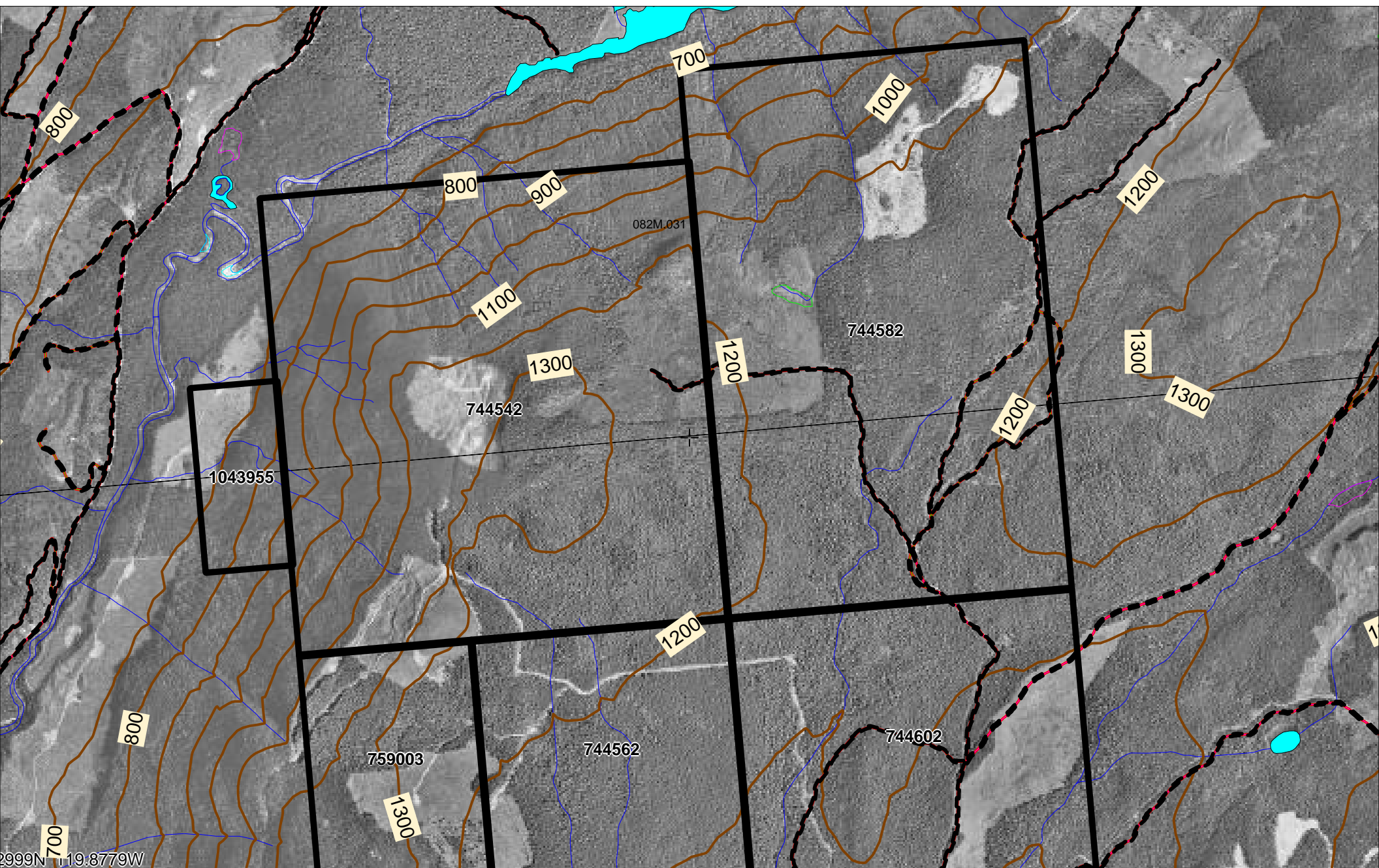
Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment			\$0.00	\$0.00	
Stream sediment - Moss Mat			\$0.00	\$0.00	
Stream sediment - Moss Mat			\$0.00	\$0.00	
Soil	not assayed	21.0	\$0.00	\$0.00	
Soil			\$0.00	\$0.00	
Soil			\$0.00	\$0.00	
Rock	6-Jul-16	11.0	\$59.29	\$652.22	
Rock	not assayed	23.0	\$0.00	\$0.00	
Rock			\$0.00	\$0.00	
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	
				\$652.22	\$652.22
Drilling	No. of Holes, Size of Core & 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	18.00	\$75.00	\$1,350.00	
kilometers	Barriere Ridge	6,063.00	\$0.55	\$3,334.65	
ATV			\$0.00	\$0.00	
fuel			\$0.00	\$0.00	
Helicopter (hours)			\$0.00	\$0.00	
Fuel (litres/hour)			\$0.00	\$0.00	
Ferry		6.00	\$429.00	\$2,574.00	
Other					
				\$7,258.65	\$7,258.65
Accommodation & Food Rates per day					
Hotel			\$0.00	\$0.00	
Hotel, D. Piggin at Fathers Place		14.00	\$50.00	\$700.00	
Camp			\$0.00	\$0.00	
Meals	day rate	24.50	\$45.00	\$1,102.50	
Meals	day rate or actual costs-specify			\$0.00	
				\$1,802.50	\$1,802.50
Miscellaneous					
Telephone		1.00	\$200.00	\$200.00	
Other (Specify)	Field Supplies		\$367.68	\$367.68	
Other (Specify)				\$0.00	
				\$567.68	\$567.68
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		\$70.78	\$0.00	
Other (Specify)	Chainsaw Husky 55	9.00	\$60.00	\$540.00	
Other (Specify)	Chainsaw Shindaiwa	0.00	\$25.00	\$0.00	
				\$2,086.80	\$2,086.80
Freight, rock samples					
Deliver to ALS Kamloops	11 rock samples	1.0	\$20.99	\$20.99	
			\$0.00	\$0.00	
				\$20.99	\$20.99
TOTAL Expenditures					\$33,088.84

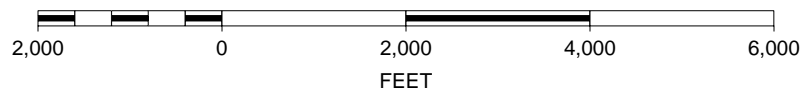
APPENDICIES



BARRIERE RIDGE CLAIMS



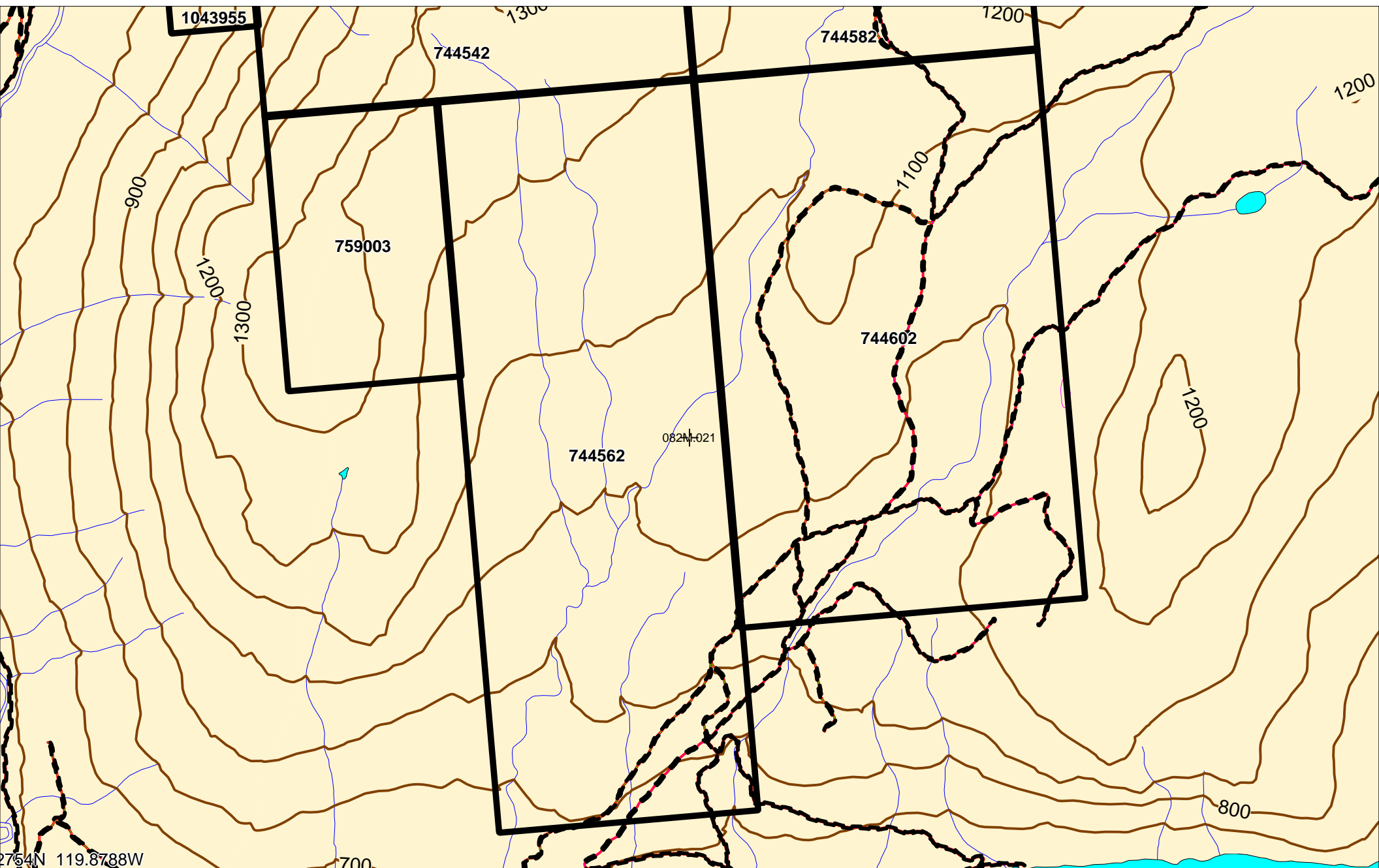
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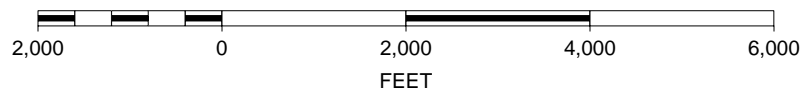
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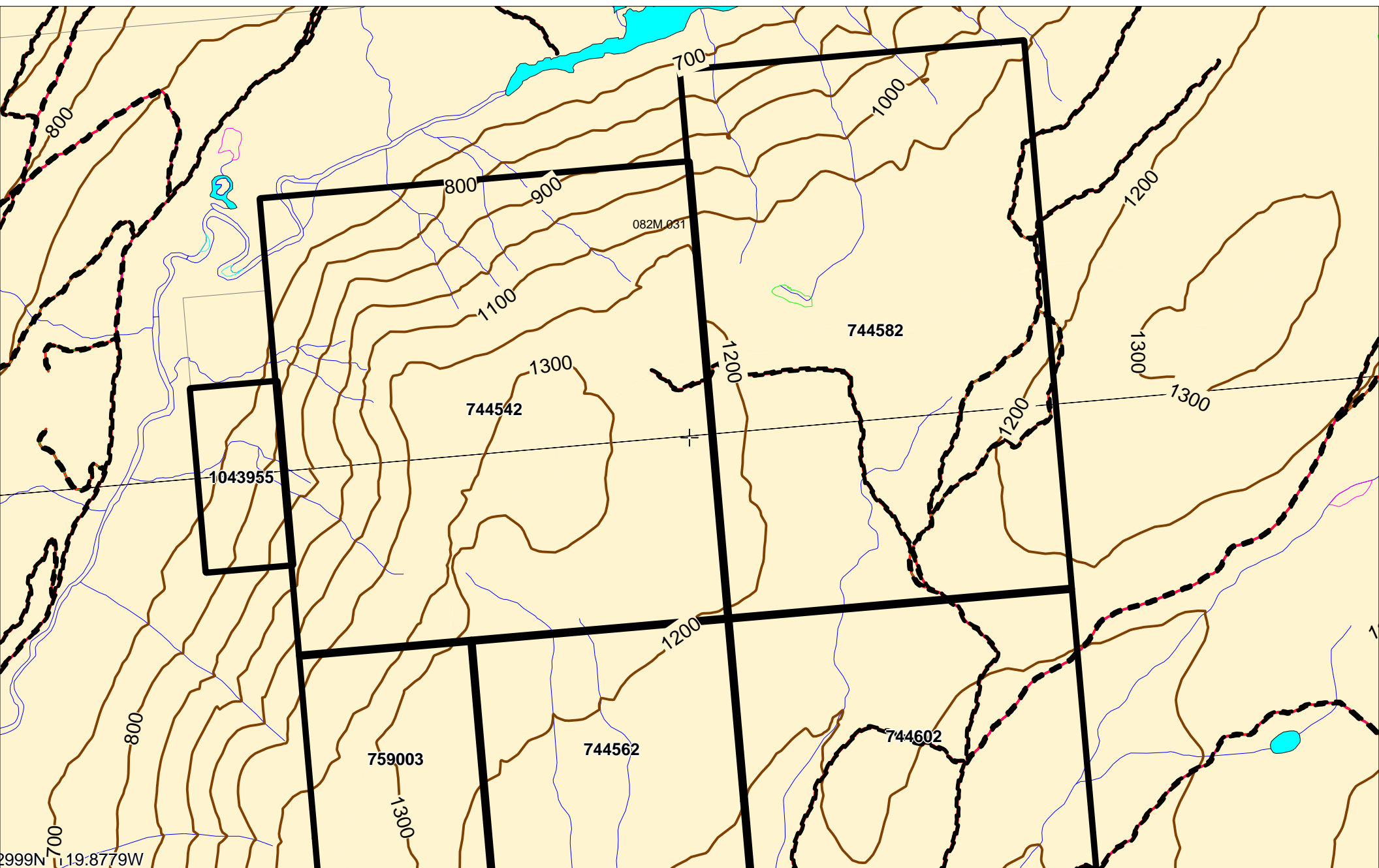
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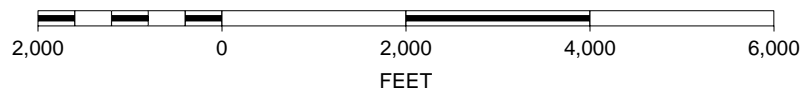
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BARRIERE RIDGE CLAIMS



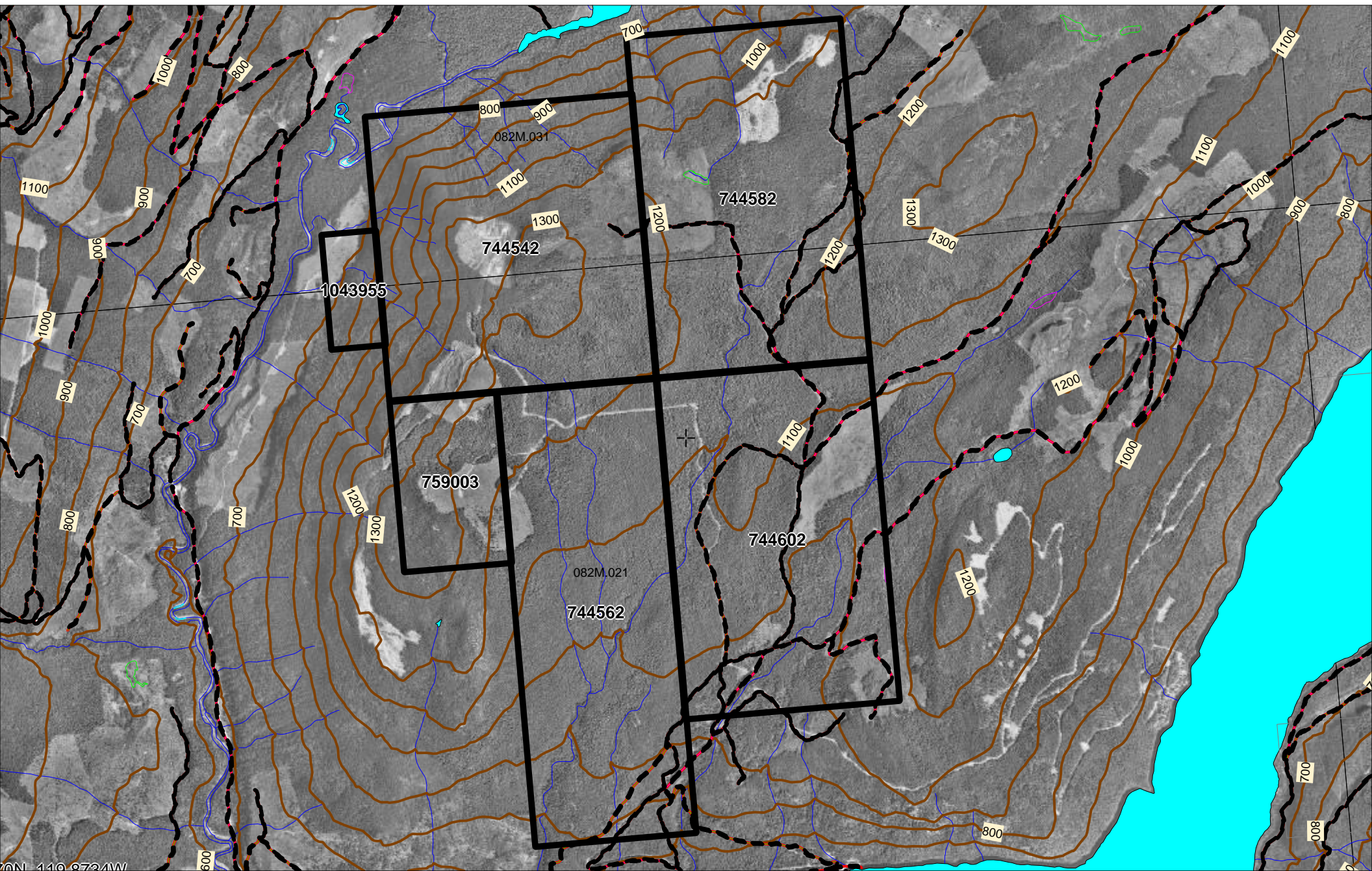
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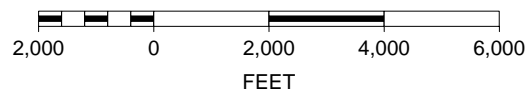


BARRIERE RIDGE CLAIMS



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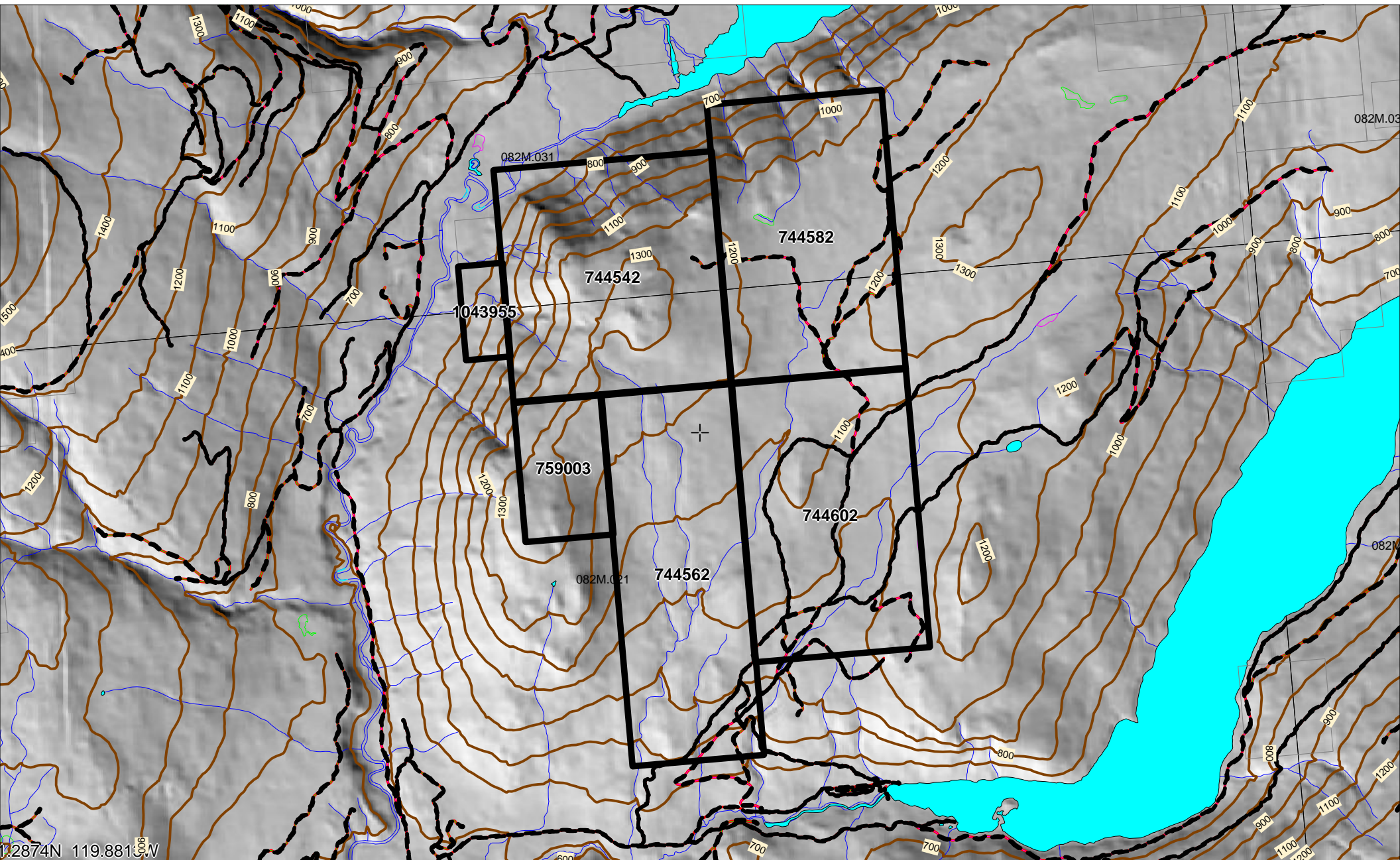
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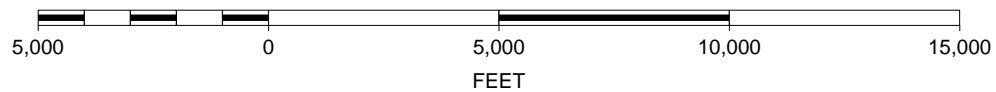
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BARRIERE RIDGE CLAIMS



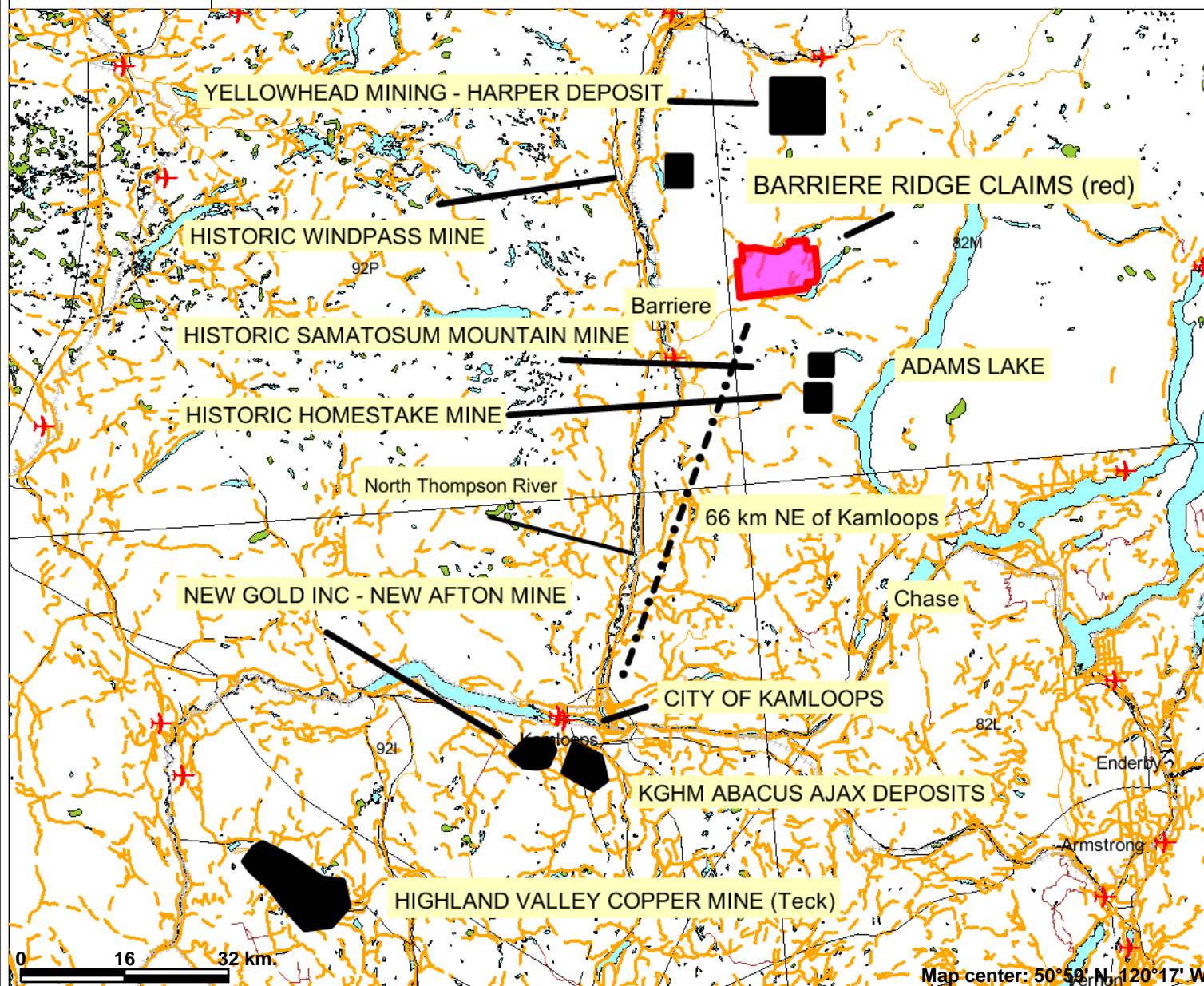
SCALE 1 : 50,000



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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



Scale: 1:929,947

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.



North Barriere Lake

BARRIERE RIDGE OVERVIEW GEOLOGY, MINFILE, SHOWINGS

SILVERBOY - 2013 New Discovery

In 2013, Ag 246 g/t; Pb 13.55 %; Sb 237 ppm; Zn 5.34 %

MINFILE 082M 066 WHITE ROCK

DL4043 KDYD WHITE ROCK MC

Au 0.34 g/t; Ag 92.6 g/t; Pb 2.2 %; Zn 0.8 %

KOOTENAY TERRANE

EBGp

EBQ

EBG

MINFILE 082M 222 CAD

Ag 15.6 g/t; Pb 0.04 %; Zn 0.8 % (0.1m)

EBP

EBG

EBG

EBGp

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)

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

SLIDE
MOUNTAIN
TERRANE

EBG

EBGq

EBGq

EBQ

EBF

KOOTENAY TERRANE

082M.021

East Barriere Lake

EBGp

EBG

EBGp

1:50,000

BARRIERE RIDGE: LIST OF SAMPLES: ROCK AND SOIL								
Rock Samples = 34 collected, 11 assayed, 23 not assayed yet.								
Soil Samples = 21 collected and not assayed yet. Total of 14 soils samples in SILVERMINNOW GRID2 (SML2), and 7 prospecting soils samples								
Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
ROCK SAMPLE ONLY								
10E41451_BR16R12E	KL16109074	rock, grab	11	298887.407	5686774.094	1311.59	limestone, felsic with slight greenish tinge, clay alteration; road cut slope	Au <.001 ppm; Ag 0.02 ppm; Ba 1070 ppm; Ca 10.9 percent; Ce 34.8 ppm; Cu 25.4 ppm; Cr 308 ppm; Ga 20.4 ppm; Mg 2.46 percent; Mo 0.52 ppm; P>10,000 ppm; Pb 2.2 ppm; Zn 20 ppm
10E41453_BR16R13CC	KL16109074	rock, grab	11	298878.162	5686760.700	1310.87	limestone, felsic with slight greenish tinge, clay and brown alteration; road cut slope, same location as BR16R13DD	Au <.001 ppm; Ag 0.02 ppm; Ba 8770 ppm; Ca 10.2 percent; Cu 86 ppm; Mg 0.88 percent; Mo 1.52 ppm; Pb 8.6 ppm; Zn 23 ppm
10E41462_BR16R12A	KL16109074	rock, grab	11	298884.639	5686783.312	1310.39	Limestone, felsic, greyish, siliceous, black blebs; road cut slope.	Au <.001 ppm; Ag <0.01 ppm; Ca 19.45 percent; Cu 2 ppm; Mg 9.46 percent; Mo 0.5 ppm; Pb 1.9 ppm; Zn 21 ppm
10E41460_BR16R12C	KL16109074	rock, grab	11	298881.632	5686759.957	1312.80	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location BR16R12D	Au <.001 ppm; Ag <0.01 ppm; Ca 18.5 percent; Cu 2.2 ppm; Mg 10.05 percent; Mo 0.92 ppm; Pb 1.6 ppm; Zn 19 ppm
10E41457_BR16R12D	KL16109074	rock, grab	11	298881.632	5686759.957	1312.80	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location BR16R12C	Au <.001 ppm; Ag 0.01 ppm; Ca 18 percent; Cu 3.7 ppm; Mg 10.55 percent; Mo 0.79 ppm; Pb 1.7 ppm; Zn 18 ppm
10E41459_BR16R12F	KL16109074	rock, grab	11	298881.664	5686778.921	1314.24	Limestone, felsic, greyish, siliceous, black blebs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 19.7 percent; Cu 28.9 ppm; Mg 8.96 percent; Mo 0.7 ppm; Pb 1.6 ppm; Zn 17 ppm

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
10E41461_BR16R12G	KL16109074	rock, grab	11	298881.374	5686781.527	1312.80	Limestone, felsic, greyish, siliceous, black blebs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 16.5 percent; Cu 2.7 ppm; Mg 7.18 percent; Mo 1.13 ppm; Pb 1.5 ppm; Zn 23 ppm
10E41458_BR16R13C	KL16109074	rock, grab	11	298857.805	5686728.862	1308.71	possible malachite, pinkish outcrop, limestone, felsic, greyish, siliceous, black blebs; same location as BR16R13A BR16R13B	Au <.001 ppm; Ag 0.07 ppm; Ca 34 percent; Cu 4.4 ppm; Mg 3.33 percent; Mo 0.15 ppm; Pb 8.6 ppm; Zn 22 ppm
10E41452_BR16R13DD	KL16109074	rock, grab	11	298878.162	5686760.700	1310.87	Limestone, felsic, greyish, siliceous, black blebs; road cut slope, same location as BR16R13CC	Au <.001 ppm; Ag 0.03 ppm; Ca 6.51 percent; Cu 55.6 ppm; Mg 2.4 percent; Mo 1.53 ppm; Pb 0.8 ppm; Zn 13 ppm
10E41455_BR16R13DQZ	KL16109074	rock, grab	11	298860.497	5686737.063	1307.03	quartz with black mineral specs; road cut slope	Au <.001 ppm; Ag 0.01 ppm; Ca 36.5 percent; Cu 4.1 ppm; Mg 0.21 percent; Mo 0.23 ppm; Pb 1.4 ppm; Zn 3 ppm
10E41454_BR16R14BFL	KL16109074	rock, grab	11	298870.836	5686755.799	1307.75	salicious, black blebs in lines, pink to redish colour with red soil stain; downslope for hand trench; road cut slope, redish alteration, float rock	Au <.001 ppm; Ag 0.05 ppm; Ca 35.8 percent; Cu 6.3 ppm; Mg 0.92 percent; Mo 0.24 ppm; Pb 80.1 ppm; Zn 25 ppm
Br16R10	not assayed	rock, grab	11	298526.709	5687177.744	1352.69	salicious white outcrop with pink tinge, end of road, landing	
Br16R11	not assayed	rock, grab	11	298614.559	5687109.342	1349.09	rusty red rock, road cut slope, schist	

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
Br16R12B	not assayed	rock, grab	11	298879.658	5686759.605	1308.23	road cut slope, redish quartz black sploches	
Br16R13A	not assayed	rock, grab	11	298863.017	5686736.572	1312.08	Limestone, redish alteration, pinkish outcrop, same location as BR16R13B, BR16R13C	
Br16R13B	not assayed	rock, grab	11	298858.864	5686727.971	1306.79	Limestone, white, pinkish outcrop, same location as BR16R13A, BR16R13C	
Br16R13E	not assayed	rock, grab	11	298863.109	5686734.151	1307.51	Limestone white; road cut slope	
Br16R14AFL	not assayed	rock, grab	11	298747.430	5686631.350	1291.17	Pink limestone, road cut slope, float rock	
Br16R14FL	not assayed	rock, grab	11	298692.496	5686600.574	1284.92	Pink limestone, road cut slope, float rock	
Br16R17FL	not assayed	rock, grab	11	298650.401	5686952.997	1336.59	Red oxidized limestone, float rock, road cut. See also BR16T17	
Br16R1F	not assayed	rock, grab	11	298445.833	5686745.334	1289.96	sugary salicious with sugar quartz viens, black blebs, same location as BR16T1F	
Br16R20A	not assayed	rock, grab	11	298494.270	5686622.185	1283.48	quartz with black streaks	
BR16R20LIM	not assayed	rock, grab	11	298486.363	5686591.407	1276.99	limestone with black blebs	
Br16R21QZ	not assayed	rock, grab	11	298586.053	5686714.171	1338.27	quartz	

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
BR16R22A	not assayed	rock, grab	11	298744.850	5686865.690	1332.50	White limestone, black specs, red tinge in streaks, strike 245 deg vertical dip; road cut,	
BR16R22B	not assayed	rock, grab	11	298744.850	5686865.690	1332.50	White limestone, black specs, red tinge in streaks, strike 245 deg vertical dip; road cut,	
Br16R2A	not assayed	rock, grab	11	298653.244	5685885.833	1216.67	limestone with quartz veins, veinlets in roadcut north side of road	
Br16R2BB	not assayed	rock, grab	11	298655.327	5685887.441	1215.70	(black matrix) veinlets, yellowish.	
Br16R2C	not assayed	rock, grab	11	298653.199	5685885.714	1222.19	limestone with veinlets and black layer, vacules in veinlets	
Br16R30B	not assayed	rock, grab	11	297572.388	5686613.146	1149.37	possible malachite Ag, see also BR16T30A, BR16T30C	
Br16R30FL	not assayed	rock, grab	11	297558.368	5686626.777	1157.06	float rock, quartz float, possible mineralization (galena Ag ??)	
Br16R3	not assayed	rock, grab	11	298664.742	5685879.986	1224.84	sulfide blebs, same location BR16R4, BR16R5Q	
Br16R4	not assayed	rock, grab	11	298664.742	5685879.986	1224.84	sulfide blebs, felsic, same location BR16R3, BR16R5Q	
Br16R5Q	not assayed	rock, grab	11	298664.742	5685879.986	1224.84	quartz grab across 4m, same location BR16R3, BR16R4	

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
SOIL SAMPLES ONLY								
PROSPECTING SAMPLES								
Br16T30B	not assayed	soil, trowel	11	297572.388	5686613.146	1149.37	see also BR16T30A, BR16T30C	
Br16T1F	not assayed	soil, trowel	11	298445.981	5686743.601	1286.60	same location as BR16T1F	
Br16T2A	not assayed	soil, trowel	11	298668.846	5685886.862	1232.53	see also BR16T2B, BR16T30C	
Br16T2B	not assayed	soil, trowel	11	298665.371	5685885.702	1223.63	see also BR16T2A, BR16T30C	
Br16T2C	not assayed	soil, trowel	11	298660.580	5685889.913	1221.95	see also BR16T2A, BR16T30B	
Br16T30A	not assayed	soil, trowel	11	297558.368	5686626.777	1157.06	slight grit, see also BR16T30B, BR16T30B	
Br16T30C	not assayed	soil, trowel	11	297536.928	5686610.070	1145.77	end of switch back above landing, see also BR16T30A, BR16T30B	
SILVERMINNOW GRID (aka SML2)	UTM ZONE 11: Line located on 5686900 Northerly							
Sml2-298075E1	not assayed	soil, hand auger	11	298075.000	5686900.000	1295.00	Line 1, UTM Coordinate is estimate	planned grid location: Zone 11.298075E. 5686900N
Sml2-298100E1	not assayed	soil, hand auger	11	298100.445	5686901.311	1295.49	Line 1	planned grid location: Zone 11.298100E. 5686900N
Sml2-298125E1	not assayed	soil, hand auger	11	298123.897	5686903.232	1296.93	Line 1	planned grid location: Zone 11.298125E. 5686900N
Sml2-298150E1	not assayed	soil, hand auger	11	298150.906	5686902.315	1293.09	Line 1	planned grid location: Zone 11.298150E. 5686900N

Sample Tag; and Waypoint Name	Assay Certificate	Sample Type, Method	Zone	Easterly	Northerly	Elevation (m)	Comments	Anomalous Results; and Other Results
Sml2-298175E1	not assayed	soil, hand auger	11	298175.514	5686900.765	1287.80	Line 1	planned grid location: Zone 11.298175E. 5686900N
Sml2-298200E1	not assayed	soil, hand auger	11	298200.234	5686901.012	1296.21	Line 1, recent logging	planned grid location: Zone 11.298200E. 5686900N
Sml2-298225E1	not assayed	soil, hand auger	11	298224.975	5686900.334	1297.42	Line 1, recent logging	planned grid location: Zone 11.298225E. 5686900N
Sml2-298250E1	not assayed	soil, hand auger	11	298253.798	5686900.000	1297.42	Line 1, recent logging	planned grid location: Zone 11.298250E. 5686900N
Sml2-298275E1	not assayed	soil, hand auger	11	298275.003	5686899.723	1303.42	Line 1, recent logging	planned grid location: Zone 11.298275E. 5686900N
Sml2-298300E1	not assayed	soil, hand auger	11	298302.051	5686900.094	1308.95	Line 1, recent logging	planned grid location: Zone 11.298300E. 5686900N
Sml2-298325E1	not assayed	soil, hand auger	11	298324.917	5686900.508	1310.15	Line 1, recent logging	planned grid location: Zone 11.298325E. 5686900N
Sml2-298350E1	not assayed	soil, hand auger	11	298350.338	5686900.290	1313.76	Line 1, recent logging	planned grid location: Zone 11.298350E. 5686900N
Sml2-298375E1	not assayed	soil, hand auger	11	298375.537	5686899.921	1314.96	Line 1, recent logging	planned grid location: Zone 11.298375E. 5686900N
Sml2-298400E1	not assayed	soil, hand auger	11	298400.388	5686900.538	1319.53	Line 1, recent logging	planned grid location: Zone 11.298400E. 5686900N

MINFILE 082M 066
WHITE ROCK ADIT #2

EBGt EBG

MINFILE 082M 069 SILVER MINNOW ADIT ONE
1925, Ag 927 g/t; Au 0.69 g/t
2011 Ag 171 ppm; Pb 14.4 %; Zn 6490 ppm

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

Sml2-298075E1

Sml2-298100E1

Sml2-298125E1

Sml2-298150E1

Sml2-298175E1

Sml2-298200E1

Sml2-298225E1

Sml2-298250E1

Sml2-298275E1

Sml2-298300E1

Sml2-298325E1

BARRIERE RIDGE: DETAILED SAMPLE LOCATION
ROCK (square), SOIL (triangle)
(Samples Assayed, Results, and Not Assayed)

Br16T30A
Br16R30FL
Br16T30C
Br16T30B
Br16R30B

1:2000



EBGt

BARRIER RIDGE: DETAILED SAMPLE LOCATION
ROCK (square), SOIL (triangle)
(Samples Assayed, Results, and Not Assayed)

Sml2-298075E1
Sml2-298100E1
Sml2-298125E1
Sml2-298150E1
Sml2-298175E1
Sml2-298200E1
Sml2-298225E1
Sml2-298250E1
Sml2-298275E1
Sml2-298300E1
Sml2-298325E1
Sml2-298350E1
Sml2-298375E1
Sml2-298400E1

Br16R17FL

BR16R22A
BR16R22B

Br16R1F
Br16T1F

Br16R21QZ

Br16R20A
BR16R20LIM

Br16R14A
Br16R14FL



1:2000

EBG

EBGt

BARRIER RIDGE: DETAILED SAMPLE LOCATION

ROCK (square), SOIL (triangle)
(Samples Assayed, Results, and Not Assayed)

Sml2-298325E1
Sml2-298350E1
Sml2-298375E1
Sml2-298400E1

Br16R1F
Br16T1F

Br16R21QZ

Br16R20A

BR16R20LIM

BR16R22A
BR16R22B

Br16R14FL

Br16R14AFL

Br16R13B

Br16R13A
Br16R13E

Br16R12B

10E41462_BR16R12A
Au <.001 ppm; Ag <0.01 ppm; Ca 19.45 percent; Cu

10E41461_BR16R12G
Au <.001 ppm; Ag 0.01 ppm; Ca 16.5 percent;

10E41459_BR16R12F
Au <.001 ppm; Ag 0.01 ppm; Ca 19.7 percent;

10E41451_BR16R12E
Au <.001 ppm; Ag 0.01 ppm; Ca 10.9 percent;

10E41460_BR16R12C
Au <.001 ppm; Ag <0.01 ppm; Ca 18.5 percent;

10E41457_BR16R12D
Au <.001 ppm; Ag 0.01 ppm; Ca 18 percent;

10E41458_BR16R13C
Au <.001 ppm; Ag 0.07 ppm; Ca 34 percent;

10E41453_BR16R13CC
Au <.001 ppm; Ag 0.02 ppm; Ca 10.2 percent;

10E41452_BR16R13DD
Au <.001 ppm; Ag 0.03 ppm; Ca 6.5 percent;

10E41455_BR16R13DQZ
Au <.001 ppm; Ag 0.01 ppm; Ca 36.5 percent;

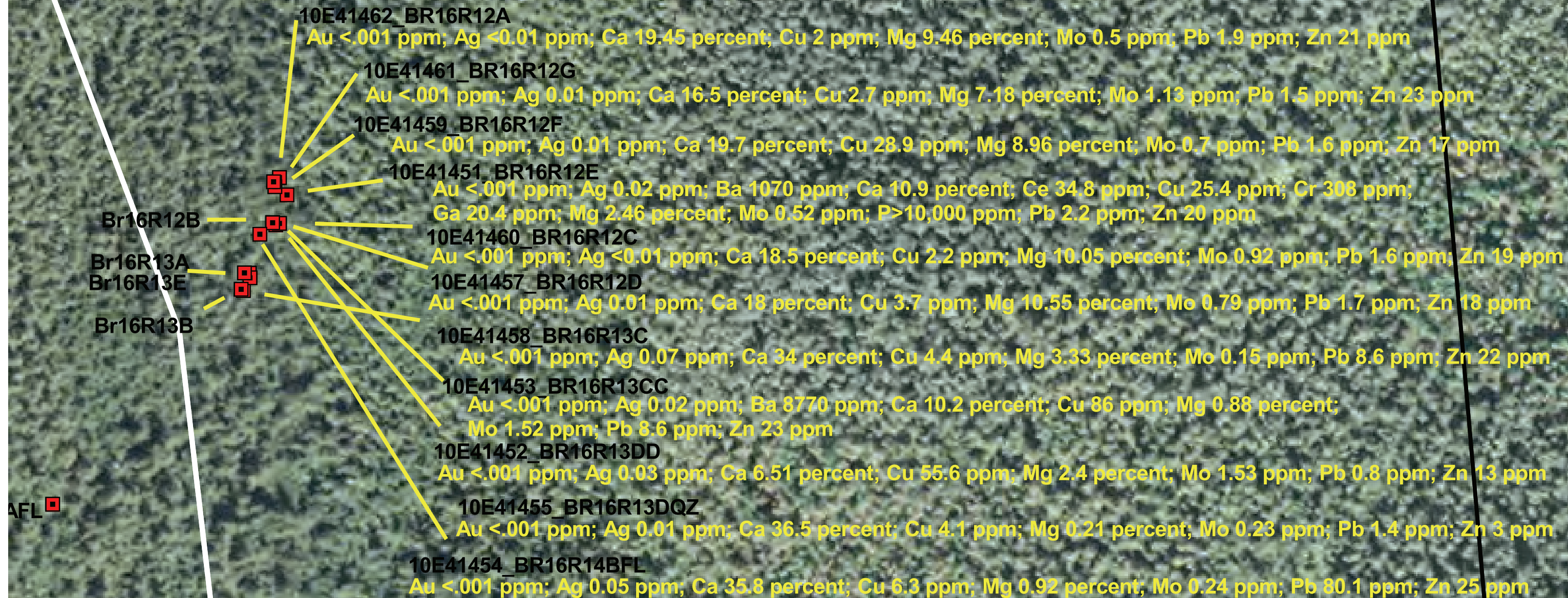
10E41454_BR16R14BFL
Au <.001 ppm; Ag 0.05 ppm; Ca 35.8 percent;



1:2000

EBG

BARRIER RIDGE: DETAILED SAMPLE LOCATION
ROCK (square), SOIL (triangle)
(Samples Assayed, Results, Anomalous Results, and Not Assayed)



1:2000



EBG

SILVER MINNOW 2016 SOIL GRID
UTM ZONE 11 and 5686900 Northerly Line

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

Sml2-298075E1
Sml2-298100E1
Sml2-298125E1
Sml2-298150E1
Sml2-298175E1
Sml2-298200E1
Sml2-298225E1
Sml2-298250E1
Sml2-298275E1
Sml2-298300E1
Sml2-298325E1
Sml2-298350E1
Sml2-298375E1
Sml2-298400E1

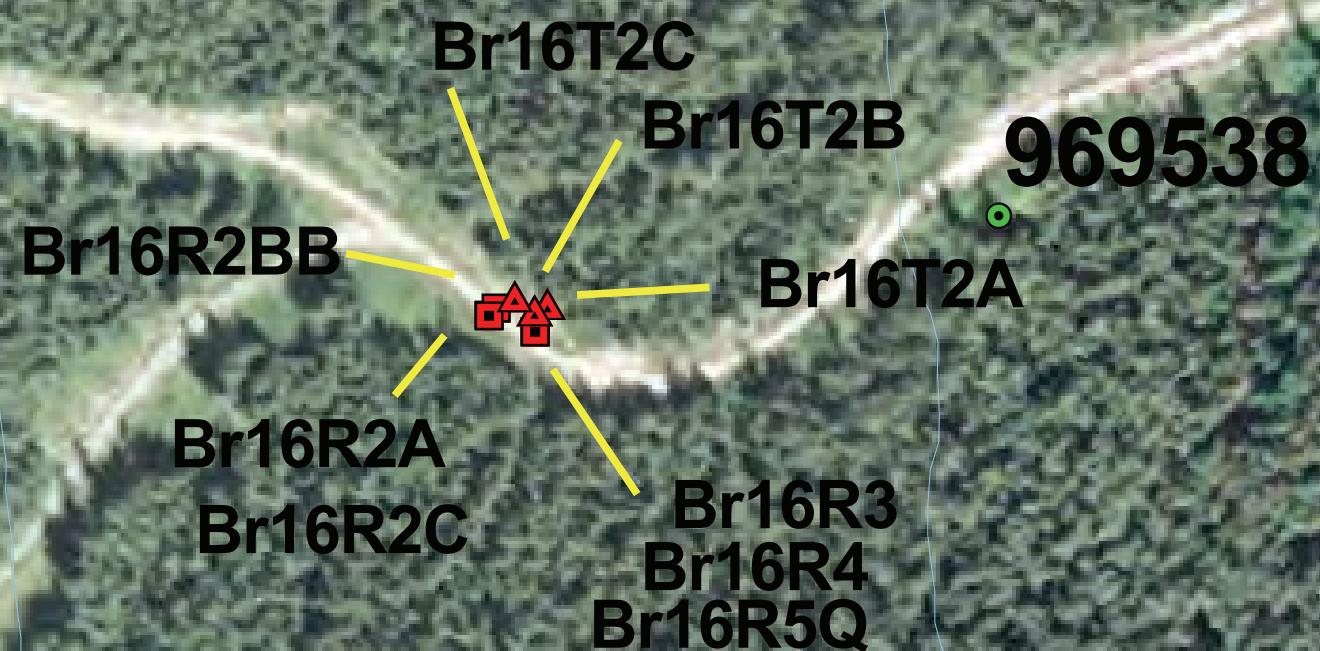
BARRIERE RIDGE: DETAILED SAMPLE LOCATION
ROCK (square), SOIL (triangle)
(Samples not assayed yet)

Br16T30B
Br16R30B

N 1:2000 EBC

BARRIER RIDGE: DETAILED SAMPLE LOCATION

ROCK (square), SOIL (triangle)
(Samples not assayed yet)



MINFILE 082M 066
WHITE ROCK ADIT #2

EBG

EBGt

EBG

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

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

BARRIER RIDGE: DETAILED SAMPLE LOCATION
ROCK (square), SOIL (triangle)
(Samples not assayed yet)

Br16T30A
Br16R30FL
Br16T30C
Br16T30B
Br16R30B

Sml2-298075E1

Sml2-298100E1

Sml2-298125E1

Sml2-298150E1

Sml2-298175E1

N

1:2000

EBGt

BRECCIA ZONE showing: Located
120 metres north of SILVERBOY.

Au 20.2 ppb; Ag 50.4 ppm; Cu 1475 ppm;
Pb 1235 ppm; Sb 533 ppm; Zn 2990 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

043955

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 %

MINFILE 082M 066
WHITE ROCK ADIT #2

EBG

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

EBGt

EBG

Sml2-298075E1
Sml2-298100E1
Sml2-298150E1
Sml2-298200E1
Sml2-298250E1
Sml2-298300E1
Sml2-298350E1
Sml2-298400E1

EBGt

Br16R10
Br16R11
Br16R17FL
Br16R22A
Br16R22B
Br16T1F
Br16R13C
Br16R13B
Br16R14AFL
Br16R14FL
Br16R20A
Br16R20LIM

Br16R12A
Br16R12B
Br16R12C
Br16R12D
Br16R12E
Br16R12F
Br16R12G
Br16R13A
Br16R13CC
Br16R13DD
Br16R13DQZ
Br16R13E
Br16R14BFL

Br16R30FL
Br16R30B
Br16T30A
Br16T30B
Br16T30C

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

744542

969536

Br16R2BB
Br16R2C
Br16R3
Br16R4
Br16R5Q
Br16R2A

N

1:10,000

969538

BARRIERE RIDGE: SAMPLE LOCATIONS
ROCK (square), SOIL (triangle)

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

ESTIMATED TOTAL LENGTH OF DRILLING (metres)												
					1,836.60							
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 110+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 112+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
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

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	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 m west 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 m west of baseline.
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
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

EBG 969537

10E41062_SM13T1
Al 2.64 percent; Ga 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 %

MINFILE 082M 066 WHITE ROCK ADIT #2

1069 SILVER MINNOW ADIT ONE

Ag 927 g/t; Au 0.69 g/t
Ag 171 ppm; Pb 14.4 %; Zn 6490 ppm

Switchback

Mineral Exploration Access
Trail, 2016 Physical Work
Completed 1100 metres
brushed with chainsaw
and axe.

1:8,000

N

969538
Tenure 744542

BARRIERE RIDGE CLAIMS:
OVERVIEW OF EXPLORATION ACCESS ROAD

SAMPLE PREPARATION PACKAGE

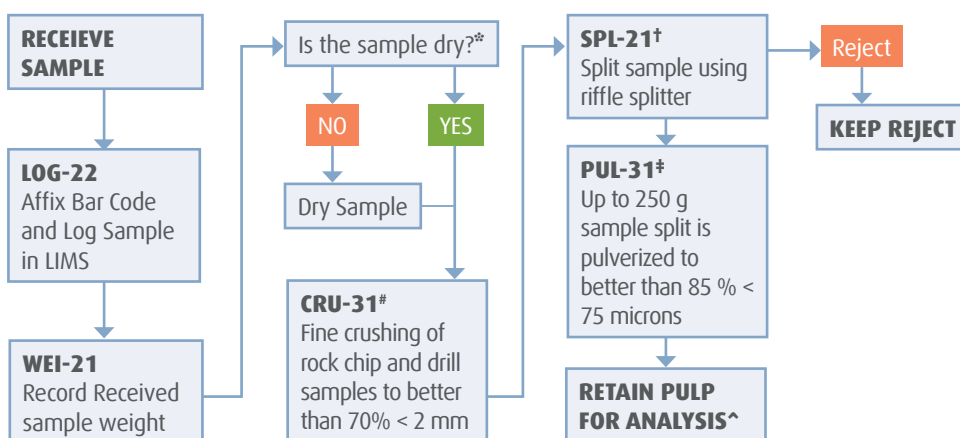
PREP- 31

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.

SAMPLE PREPARATION PACKAGE

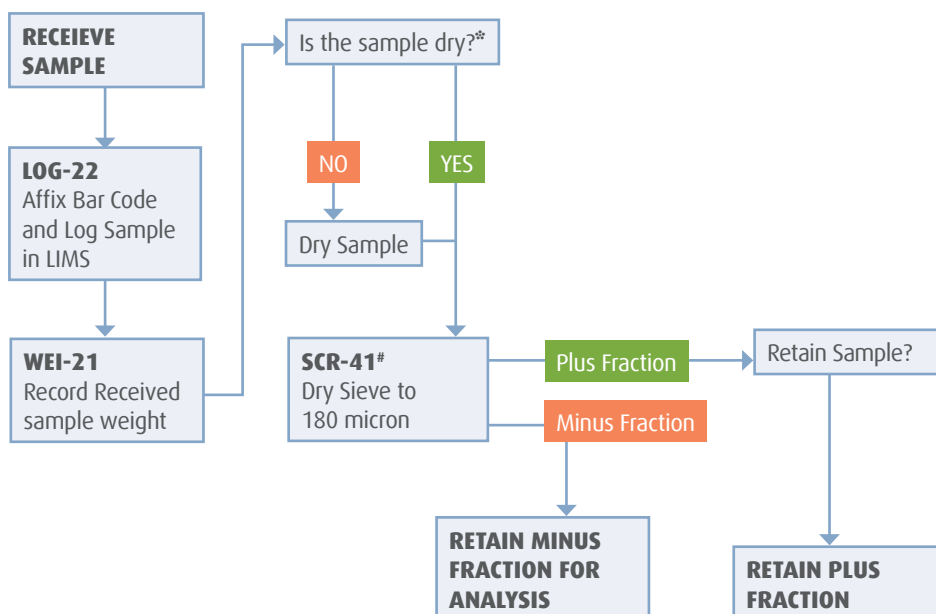
PREP- 41

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.

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

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

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

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

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

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, AuTe₂.

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

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

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.

GEOCHEMICAL PROCEDURE

ME-ICP61

TRACE LEVEL METHODS USING CONVENTIONAL ICP- AES ANALYSIS

SAMPLE DECOMPOSITION

HNO₃ -HClO₄ -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	10,000	

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	

GEOCHEMICAL PROCEDURE

ME- MS61

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

SAMPLE DECOMPOSITION

HF-HNO₃ -HClO₄ 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

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

ASSAY PROCEDURE

ME- OG62

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

SAMPLE DECOMPOSITION

HNO₃ -HClO₄ -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



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.

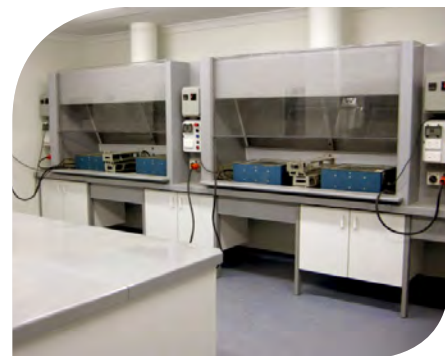
ALS Minerals recommends carrying out an orientation survey to optimise sampling parameters such as soil horizon, size fraction, preparation, digestion and analysis.



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



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

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CERTIFICATE KL16109074

Project: Barriere ridge

This report is for 11 Rock samples submitted to our lab in Kamloops, BC, Canada on 7- JUL- 2016.

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
Au- ICP21	Au 30g FA ICP- AES Finish ICP- AES

To: DAVID PIGGIN
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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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CERTIFICATE OF ANALYSIS KL16109074

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
10E41451_BR16R12E		2.46	<0.001	0.02	5.73	10.6	1070	1.20	0.16	10.90	0.03	34.8	9.2	308	2.63	25.4
10E41452_BR16R13DD		2.38	<0.001	0.03	0.43	7.3	70	0.13	0.02	6.51	0.03	2.41	8.4	37	0.30	55.6
10E41453_BR16R13CC		1.68	<0.001	0.02	2.73	33.8	440	0.60	0.03	10.20	0.04	13.10	37.1	141	2.01	86.0
10E41454_BR16R14BFL		2.52	<0.001	0.05	0.23	2.0	80	0.17	0.03	35.8	0.40	3.78	2.8	10	0.13	6.3
10E41455_BR16R13DQZ		2.06	<0.001	0.01	0.29	0.2	20	0.06	0.02	36.5	0.03	3.65	1.2	8	0.16	4.1
10E41457_BR16R12D		2.51	<0.001	0.01	0.04	0.8	10	0.15	<0.01	18.00	0.10	0.41	2.8	9	<0.05	3.7
10E41458_BR16R13C		2.16	<0.001	0.07	0.03	3.6	20	0.14	<0.01	34.0	0.10	1.36	0.9	1	<0.05	4.4
10E41459_BR16R12F		2.25	<0.001	0.01	0.75	1.5	90	0.27	0.01	19.70	0.04	5.96	3.3	42	0.44	28.9
10E41460_BR16R12C		2.63	<0.001	<0.01	0.26	2.0	50	0.16	<0.01	18.50	0.05	2.07	3.8	20	0.15	2.2
10E41461_BR16R12G		1.89	<0.001	0.01	0.84	4.4	80	0.32	<0.01	16.50	0.05	6.53	4.4	52	0.51	2.7
10E41462_BR16R12A		1.90	<0.001	<0.01	0.50	3.5	50	0.25	0.01	19.45	0.06	3.75	3.8	25	0.32	2.0



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Project: Barriere ridge

CERTIFICATE OF ANALYSIS KL16109074

Sample Description	Method Analyte Units LOR	ME- MS61 Fe %	ME- MS61 Ga ppm	ME- MS61 Ge ppm	ME- MS61 Hf ppm	ME- MS61 In ppm	ME- MS61 K %	ME- MS61 La ppm	ME- MS61 Li ppm	ME- MS61 Mg %	ME- MS61 Mn ppm	ME- MS61 Mo ppm	ME- MS61 Na %	ME- MS61 Nb ppm	ME- MS61 Ni ppm	ME- MS61 P ppm
10E41451_BR16R12E		1.39	20.4	0.18	1.3	0.053	2.90	26.5	11.3	2.46	189	0.52	0.10	1.2	22.8	>10000
10E41452_BR16R13DD		1.19	1.48	0.07	0.2	0.008	0.20	1.8	1.3	2.40	1520	1.53	0.01	0.7	12.4	1850
10E41453_BR16R13CC		1.92	8.84	0.10	0.4	0.031	1.31	8.6	5.3	0.88	1380	1.52	0.05	0.6	46.8	8770
10E41454_BR16R14BFL		0.56	0.76	0.07	0.1	<0.005	0.08	2.0	2.5	0.92	467	0.24	<0.01	0.8	5.5	350
10E41455_BR16R13DQZ		0.35	0.68	0.08	0.1	0.005	0.12	1.6	0.6	0.21	104	0.23	0.01	1.2	5.8	30
10E41457_BR16R12D		0.51	0.15	0.16	<0.1	<0.005	0.01	<0.5	1.5	10.55	356	0.79	<0.01	<0.1	7.4	220
10E41458_BR16R13C		0.67	0.14	0.12	<0.1	<0.005	0.01	0.8	0.5	3.33	428	0.15	<0.01	0.1	3.6	20
10E41459_BR16R12F		1.56	2.66	0.18	0.3	0.011	0.38	4.3	3.4	8.96	172	0.70	0.01	1.9	9.8	1340
10E41460_BR16R12C		1.11	0.89	0.14	0.1	<0.005	0.12	1.8	1.6	10.05	250	0.92	0.01	0.6	13.4	1080
10E41461_BR16R12G		2.14	2.47	0.13	0.4	0.009	0.42	4.3	3.4	7.18	469	1.13	0.01	1.8	16.5	1590
10E41462_BR16R12A		1.67	1.49	0.13	0.2	0.005	0.25	2.5	2.7	9.46	510	0.50	0.01	1.0	13.0	740



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CERTIFICATE OF ANALYSIS KL16109074

Sample Description	Method Analyte Units LOR	ME- MS61 Pb ppm 0.5	ME- MS61 Rb ppm 0.1	ME- MS61 Re ppm 0.002	ME- MS61 S % 0.01	ME- MS61 Sb ppm 0.05	ME- MS61 Sc ppm 0.1	ME- MS61 Se ppm 1	ME- MS61 Sn ppm 0.2	ME- MS61 Sr ppm 0.2	ME- MS61 Ta ppm 0.05	ME- MS61 Te ppm 0.05	ME- MS61 Th ppm 0.01	ME- MS61 Ti % 0.005	ME- MS61 Tl ppm 0.02	ME- MS61 U ppm 0.1
10E41451_BR16R12E		2.2	76.3	<0.002	<0.01	0.30	24.4	1	<0.2	176.0	0.08	0.24	1.19	0.168	0.37	12.3
10E41452_BR16R13DD		0.8	5.9	<0.002	<0.01	0.29	2.5	<1	<0.2	50.0	<0.05	<0.05	0.07	0.045	0.07	0.8
10E41453_BR16R13CC		1.5	36.0	<0.002	<0.01	0.19	12.0	1	<0.2	65.7	<0.05	<0.05	0.50	0.107	0.26	5.0
10E41454_BR16R14BFL		80.1	3.1	<0.002	<0.01	3.35	1.4	<1	<0.2	96.8	<0.05	0.05	0.20	0.020	0.08	0.8
10E41455_BR16R13DQZ		1.4	3.7	<0.002	0.01	0.18	2.0	<1	<0.2	182.5	0.07	<0.05	0.14	0.037	0.03	0.3
10E41457_BR16R12D		1.7	0.4	<0.002	<0.01	0.24	0.2	<1	<0.2	120.5	<0.05	<0.05	0.01	<0.005	<0.02	0.2
10E41458_BR16R13C		8.6	0.4	<0.002	<0.01	2.06	0.3	<1	<0.2	217	<0.05	<0.05	0.04	<0.005	<0.02	0.6
10E41459_BR16R12F		1.6	9.7	<0.002	<0.01	0.46	4.7	<1	0.2	89.0	0.10	<0.05	0.28	0.106	0.07	1.5
10E41460_BR16R12C		1.6	3.3	<0.002	<0.01	0.43	1.9	<1	<0.2	107.0	<0.05	<0.05	0.06	0.035	0.03	0.7
10E41461_BR16R12G		1.5	10.6	<0.002	<0.01	1.27	3.7	1	0.2	114.0	0.10	<0.05	0.19	0.114	0.10	1.6
10E41462_BR16R12A		1.9	6.3	<0.002	<0.01	0.51	2.3	<1	<0.2	108.0	0.05	<0.05	0.13	0.060	0.06	1.0



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Sample Description	Method Analyte Units LOR	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
		V	W	Y	Zn	Zr
		ppm 1	ppm 0.1	ppm 0.1	ppm 2	ppm 0.5
10E41451_BR16R12E		99	0.3	54.0	20	68.5
10E41452_BR16R13DD		23	0.2	4.1	13	6.8
10E41453_BR16R13CC		72	0.3	20.3	23	24.0
10E41454_BR16R14BFL		9	1.0	5.2	25	4.7
10E41455_BR16R13DQZ		4	0.1	2.7	3	4.2
10E41457_BR16R12D		14	<0.1	0.9	18	1.8
10E41458_BR16R13C		4	0.3	1.6	22	0.8
10E41459_BR16R12F		42	0.4	8.3	17	14.9
10E41460_BR16R12C		11	0.1	4.2	19	4.8
10E41461_BR16R12G		27	0.5	8.0	23	15.3
10E41462_BR16R12A		19	0.5	5.0	21	8.3



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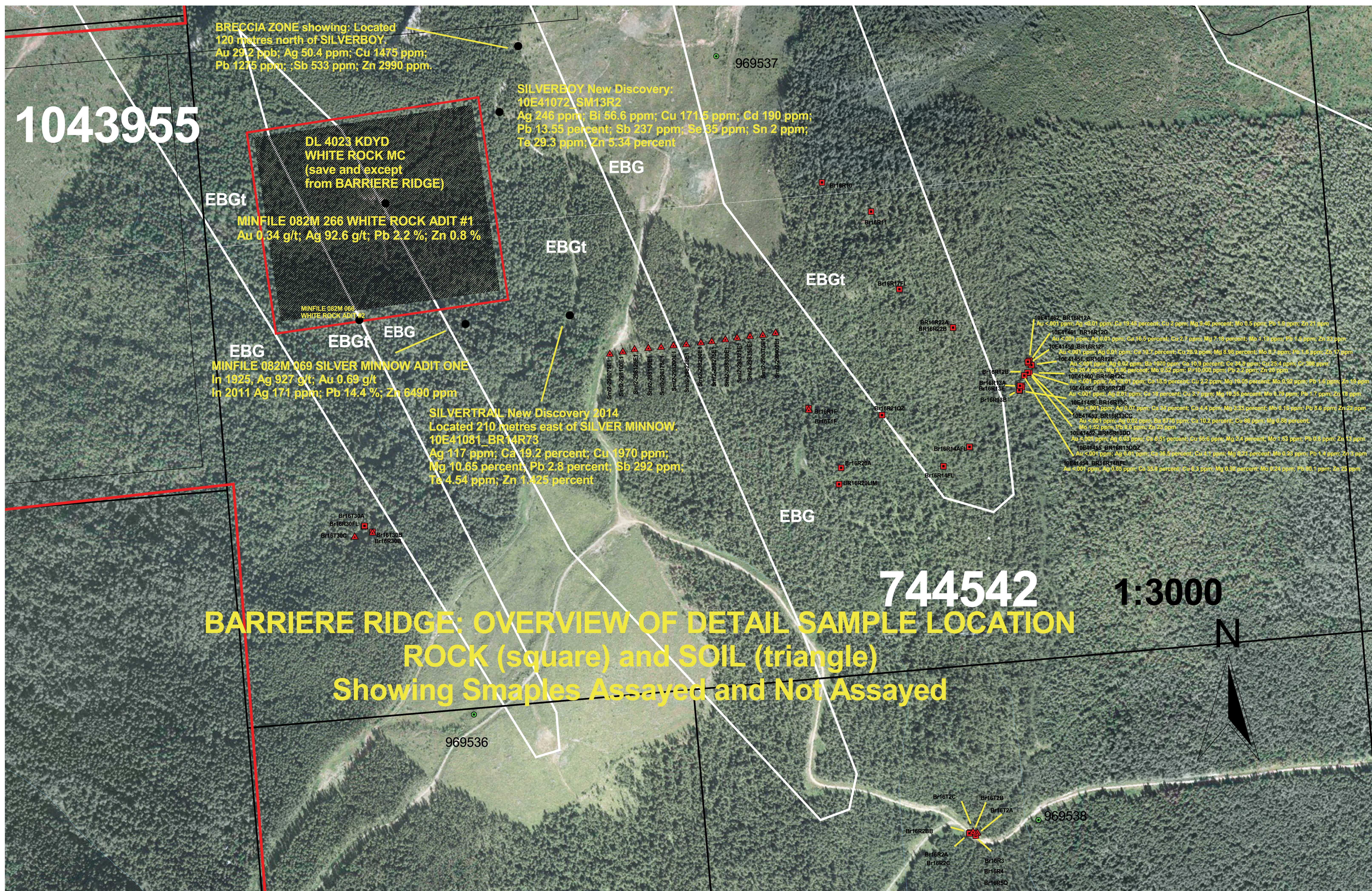
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CERTIFICATE OF ANALYSIS KL16109074

	CERTIFICATE COMMENTS
	<p>ANALYTICAL COMMENTS</p> <p>Applies to Method: REE's may not be totally soluble in this method. ME- MS61</p> <p>LABORATORY ADDRESSES</p> <p>Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.</p> <p>Applies to Method: CRU- 31 CRU- QC LOG- 22 PUL- 31 PUL- QC SPL- 21 WEI- 21</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <p>Applies to Method: Au- ICP21 ME- MS61</p>



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.

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 %

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

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 1.825 percent

10E41462_BR16R12A
Au <0.01 ppm; Ag <0.01 ppm; Ca 19.45 percent; Cu 2 ppm; Mg 9.46 percent; Mo 0.5 ppm; Pb 1.8 ppm; Zn 21 ppm
10E41461_BR16R12B
Au <0.01 ppm; Ag <0.01 ppm; Ca 16.5 percent; Cu 2.7 ppm; Mg 7.76 percent; Mo 3.18 ppm; Pb 1.6 ppm; Zn 22 ppm
10E41459_BR16R12F
Au <0.01 ppm; Ag 0.01 ppm; Ca 10.7 percent; Cu 28.9 ppm; Mg 8.86 percent; Mo 6.7 ppm; Pb 1.6 ppm; Zn 17 ppm
10E41457_BR16R12G
Au <0.01 ppm; Ag 0.02 ppm; Ca 10.2 ppm; Cu 10.9 percent; Cu 4.9 ppm; Cu 29.4 ppm; Cu 3.8 ppm
Cu 30.4 ppm; Cu 1.96 percent; Mo 0.62 ppm; Pb 10.000 ppm; Pb 2.4 ppm; Zn 20 ppm
10E41460_BR16R12C
Au <0.01 ppm; Ag <0.01 ppm; Ca 18.5 percent; Cu 2.2 ppm; Mg 10.06 percent; Mo 0.54 ppm; Pb 1.6 ppm; Zn 18 ppm
10E41467_BR16R12D
Au <0.01 ppm; Ag <0.01 ppm; Ca 16 percent; Cu 3.7 ppm; Mg 10.36 percent; Mo 0.58 ppm; Pb 1.7 ppm; Zn 19 ppm
10E41458_BR16R13C
Au <0.01 ppm; Ag 0.07 ppm; Cu 42 percent; Cu 4.4 ppm; Mg 1.33 percent; Mo 0.15 ppm; Pb 8.6 ppm; Zn 22 ppm
10E41456_BR16R13CC
Au <0.01 ppm; Ag <0.02 ppm; Cu 17.26 ppm; Cu 10.2 percent; Cu 6.6 ppm; Mg 9.86 percent
Mo 1.82 ppm; Pb 3.8 ppm; Zn 23 ppm
10E41452_BR16R13DD
Au <0.01 ppm; Ag <0.01 ppm; Cu 4.51 percent; Cu 55.6 ppm; Mg 2.4 percent; Mo 1.83 ppm; Pb 9.8 ppm; Zn 13 ppm
10E41455_BR16R13DD2
Au <0.01 ppm; Ag 0.01 ppm; Cu 36.5 percent; Cu 3.7 ppm; Mg 10.21 percent; Mo 0.26 ppm; Pb 1.9 ppm; Zn 14 ppm
10E41454_BR16R14BFL
Au <0.01 ppm; Ag 0.06 ppm; Ca 35.8 percent; Cu 4.3 ppm; Mg 0.38 percent; Mo 0.24 ppm; Pb 0.1 ppm; Zn 25 ppm

BARRIERE RIDGE: OVERVIEW OF DETAIL SAMPLE LOCATION
ROCK (square) and SOIL (triangle)
Showing Samples Assayed and Not Assayed

1:3000

