

**Ministry of Forests, Mines and Lands**  
BC Geological Survey

**Assessment Report**  
**Title Page and Summary**

TYPE OF REPORT [type of survey(s)]: Geochemical

TOTAL COST: \$3994.86

AUTHOR(S): M. McCuaig SIGNATURE(S): M. McCuaig 11/03/2016

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

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5582273, 5594556

PROPERTY NAME: Hall Lake

CLAIM NAME(S) (on which the work was done): R (839123)

COMMODITIES SOUGHT: Ag, Au, Cu, Pb, Zn

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

MINING DIVISION: Ft. Steele NTS/BCGS: 82F009

LATITUDE: 49 ° 40 ' 117 " LONGITUDE: 116 ° 27 ' 663 " (at centre of work)

OWNER(S):

1) Eagle Plains Resources Ltd. 2) \_\_\_\_\_

MAILING ADDRESS:

Suite 200 44-12th Avenue South

Cranbrook, BC, V1C 2R7

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

1) Bethpage Capital Corporation 2) \_\_\_\_\_

MAILING ADDRESS:

Suite 717, 1030 West Georgia Street

Vancouver, BC, V6E 2Y3

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

Belt-Purcell, Proterozoic, Cretaceous, Aldridge Formation, Creston Formation, Moyie Sills

albite, chlorite, tourmaline, sericite, silica, polymetallic shear zone, graphite, fragmental, breccia, Sullivan

gold, silver, lead, zinc, sphalerite, galena, chalcopyrite, pyrite, pyrrhotite, corundum

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 34463, 32614, 28448, 27694

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
<b>Ground, mapping</b>	_____	_____	_____
<b>Photo interpretation</b>	_____	_____	_____
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
<b>Magnetic</b>	_____	_____	_____
<b>Electromagnetic</b>	_____	_____	_____
<b>Induced Polarization</b>	_____	_____	_____
<b>Radiometric</b>	_____	_____	_____
<b>Seismic</b>	_____	_____	_____
<b>Other</b>	_____	_____	_____
<b>Airborne</b>			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
<b>Soil</b>	_____	_____	_____
<b>Silt</b>	_____	_____	_____
<b>Rock</b>	_____	_____	_____
<b>Other</b> bulk stream sediment samples		839123	2676.61
<b>DRILLING (total metres; number of holes, size)</b>			
<b>Core</b>	_____	_____	_____
<b>Non-core</b>	_____	_____	_____
<b>RELATED TECHNICAL</b>			
<b>Sampling/assaying</b>	_____	_____	_____
<b>Petrographic</b>	_____	_____	_____
<b>Mineralographic</b>	_____	_____	_____
<b>Metallurgic</b>	_____	_____	_____
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
<b>Line/grid (kilometres)</b>	_____	_____	_____
<b>Topographic/Photogrammetric (scale, area)</b>	_____	_____	_____
<b>Legal surveys (scale, area)</b>	_____	_____	_____
<b>Road, local access (kilometres)/trail</b>	_____	_____	_____
<b>Trench (metres)</b>	_____	_____	_____
<b>Underground dev. (metres)</b>	_____	_____	_____
<b>Other</b> Management and Reporting		839123	1318.25\$
		<b>TOTAL COST:</b>	3994.86\$

GEOCHEMICAL REPORT  
for the  
HALL LAKE PROPERTY

Ft. Steele Mining Division  
Center of Work  
Latitude 49° 40.117' N, Longitude 116°27.663' W  
NTS 82F09

Prepared for:

EAGLE PLAINS RESOURCES LTD.  
Suite 200, 44-12<sup>th</sup> Avenue South  
Cranbrook, British Columbia V1C 2R7

and

BETHPAGE CAPITAL CORPORATION  
Suite 717, 1030 West Georgia Street  
Vancouver, British Columbia, V6E 2Y3

Prepared by:

Mike McCuaig P. Geo  
TerraLogic Exploration Inc.  
Suite 200, 44-12<sup>th</sup> Avenue South  
Cranbrook, British Columbia V1C 2R7

March 10<sup>th</sup>, 2016

## SUMMARY

The Hall Lake Property is located approximately 33.5 kilometres west of Kimberley, British Columbia and consists of 1 MTO claim covering approximately 439 hectares in the Fort Steele Mining District. The claim is owned 100% by Eagle Plains Resources Ltd, and is currently under option by Bethpage Capital Corporation.

As a result of the regional BCGS work, the Hall Lake property was identified by Eagle Plains Resources as an excellent grass roots exploration target for gold mineralization and thus staked the property in 2003. The mineral claim covers sedimentary rocks of the Aldridge and Creston Formations.

The Hall Lake property has seen very little historical work, with the only recent work on the property before the current 2015 program completed by Eagle Plains in 2004, 2005, 2011 and 2013.

2004 fieldwork by Eagle Plains consisted of a rock geochemical survey and prospecting aimed to assess the geochemical character of the Hall Lake Stock as well as that of the host sediments. The most significant results from the 2004 geochemical survey and prospecting were the anomalous gold values collected from a large dyke in the sediments of the Creston Formation approximately 300 meters from the contact with the intrusive, which included 2.4 g/t Au and 1.8 g/t Au from grab samples. One sample also returned anomalous values for silver hosted in a limestone unit near the Hall Lake Fault, returning 1.64% Pb and 42 g/t Ag. The total cost of the 2004 geochemical survey of the Creston Property was \$ 11,435.61.

2011 exploration on the Hall Lake property consisted of a 479.1 line-km VTEM airborne geophysical survey. The airborne geophysical survey identified five anomalous features. Total cost of the 2011 Airborne Geophysical survey was \$104,916.05.

The 2013 exploration program consisted of a total of nine days of field work spread out between June 21<sup>st</sup> and September 21<sup>st</sup>, 2013. The goals of the program were as follows:

- Evaluate the Hall Lake Fault for similar signatures to the Iron Range Fault system;
- Gather silt geochemistry samples covering the property;
- Assess the Storm King mineral occurrence and surrounding area;
- Follow up 2011 geophysical anomalies.

The 2013 work program demonstrated that the Hall Lake fault shares many similarities to the Iron Range Fault Zone (IRFZ). Float samples of albite/chlorite altered iron-oxide breccia were encountered in abundance in proximity to the fault. Elevated values in soil samples crossing the fault were returned for Sc, V, Cr, Fe and Au, all elements associated with the IRFZ. A 2.5 metre chip sample was taken crossing the fault returned anomalous values for Fe, Cr and V. This discovery leads to a large strike length of exploration potential surrounding the greater Iron Range-Hall Lake fault system. More work is warranted following up this structure and any sub-parallel splays in search of significant mineralization as seen on the Iron Range property.

Total exploration expenditures for 2013 were \$60,297.65.

The 2015 work program consisted of one day of field work on November 12<sup>th</sup>, 2015 completed by two personnel from TerraLogic Exploration Inc. The field program resulted in the collection of two bulk stream sediment samples. The objectives of the 2015 program were as follows:

- To determine if visible gold grains could be recovered from two sample sites on the mineral tenure which could suggest proximity to source;
- To determine if Metamorphic Massive Sulphide Indicator Minerals (MMSIM<sup>®</sup>) could be

recovered from two sample sites on the mineral tenure which could suggest proximity to a massive sulphide deposit.

Samples MMHLH001 and BRHLH001 each returned 1 visible gold grain, which is not considered to be anomalous. The reshaped and modified gold grain morphology suggests that the gold grains have traveled a significant distance from their original source and likely represent background concentrations for the local area.

Sample MMHLH001 returned the following MMSIM<sup>®</sup>: Trace arsenopyrite, chalcopyrite, scheelite, ghanite, Zn-hercynite and sapphire corundum. These minerals are indicative of a zone of contact metamorphism between a felsic intrusive and metasedimentary rocks. The most plausible explanation for the occurrence of the MMSIM<sup>®</sup> mineral assemblage identified in the bulk stream sediment sample is a greisen type mineral deposit related to the Hall Lake pluton.

Total exploration expenditures for the 2015 exploration program were \$3,994.86.

Based on the results to date, further work is recommended on the Hall Lake Property.

Future exploration efforts should focus on determining the bedrock source of the sapphire corundum, and the maximum potential size of the sapphire crystals. Both of these determinations could easily be made with a systematic bulk stream sediment and subsequent bulk till sample survey. An initial recce program could be completed for approximately \$3000.00 which would include processing bulk stream sediment samples at several classifications (size fractions) from the same sample location as MMHLH001 to determine the maximum crystal size of the sapphire corundum. If crystals measuring > 6.5 mm in size (large enough to produce 1 carat gemstones) can be recovered from recce stream sediment samples they should be taken to a certified gemologist for appraisal. The closest example of a viable sapphire market is located in Philipsburg Montana, USA.

## Table of Contents

Introduction.....	1
Location and Access.....	1
Tenure.....	1
History and Previous Work.....	1
Geology.....	6
Regional Geology .....	6
Property Geology .....	8
2015 Exploration Program.....	11
Work Summary.....	11
Program Results.....	11
Conclusions.....	12
Recommendations.....	12
References.....	13

## List of Figures

Figure 1 – Property Location.....	4
Figure 2 – Tenure Map .....	5
Figure 3 – Regional Geology Map.....	7
Figure 4a – Property Geology and Sample Location Map.....	9
Figure 4b – Property Geology Legend .....	10

## List of Tables

Table 1 – Hall Lake Tenure.....	1
Table 2 – Hall Lake Work History Summary.....	3

## List of Appendices

Appendix 1 – Statement of Qualifications	
Appendix 2 – Statement of Expenditures	
Appendix 3 – Geochemical Protocol	
Appendix 4 – Sample Description and Location Data	
Appendix 5 – Analytic Certificate	

## INTRODUCTION

### Location and Access

The Hall Lake Property is located 33.5 kilometres west of Kimberley, British Columbia and can be accessed by the St. Mary's and Redding Creek Forest Service Roads (Figure 1). The claims cover mountain valley to subalpine terrain within the southern Purcell Mountains. Elevations range from approximately 1,200 metres to 2,000 metres, with moderate to steep topography. Outcrop exposure is generally good at high elevations while Quaternary cover is extensive in valley bottoms. Summer field season lasts from May to late-October. A well-developed transportation corridor and power corridor lies approximately 33.5 kilometres east of the property. A high pressure gas pipeline and a high voltage hydro-electric line follow the CPR line and Highway 3 52.5 kilometres southeast of the property. The rail line provides efficient access to the Teck smelter in Trail, British Columbia.

### Tenure

The property consists of 1 MTO claim covering approximately 439 hectares in the Fort Steele Mining District (Figure 2). The claim is owned 100% by Eagle Plains Resources Ltd., and is currently under option by Bethpage Capital Corporation.

Table 1 – Hall Lake Tenure

Tenure Number	Claim Name	Ownership	Expiry Date* (DD/MM/YYYY)	Mining Division	Area (ha)
839123	R	100% Eagle Plains Resources Ltd.	05/02/17	Fort Steele	439.03
				<b>TOTAL:</b>	<b>439.03</b>

\*As of submission of event number 5582273

### History and Previous Work

after Downie (2005, 2006) and Higgs (2013)

The Hall Lake property has seen little historical work, with recent work on or adjacent to the property before the current 2015 program completed by Eagle Plains Resources and affiliated companies in 2004, 2005, 2011, and 2013.

As a result of regional work completed by the BCGS, the Hall Lake property was identified by Eagle Plains' personnel as an excellent grass roots exploration target and the initial claims were acquired in 2003.

2004 fieldwork by Eagle Plains consisted of a rock geochemical survey and prospecting aimed to assess the geochemical character of the Hall Lake Stock as well as that of the host sediments. The most significant results from the 2004 geochemical survey and prospecting were the anomalous gold values collected from a large dyke swarm in the sediments of the Creston Formation approximately 300

meters from the western contact with the intrusive. Sample H-16 returned 2.39 g/t Au and greater than 10,000 ppm As from a grab of felsic dyke material with arsenopyrite and tetrahedrite with quartz veins. H-18, a sample of rusty felsic dyke with tourmalinite needles and arsenopyrite returned 1.77 g/t Au and greater than 10,000 ppm As. Sample H-02 returned 42 g/t Ag and 1.64% Pb from a quartz vein with galena and pyrrhotite hosted within a limestone unit.

The total cost of the 2004 geochemical survey of the Hall Lake Property was \$ 11,435.61.

Based on results from the 2004 program, Eagle Plains carried out a field program on the Hall Lake property in late 2005. Work consisted of contour soil sampling and rock geochemical sampling. Due to heavy snowfall on the property, the only practical exploration work that could be accomplished was to run contour soil lines above Hall Lake. Chuck Downie, P. Geo., spent one day attempting to map and sample at the higher elevations of the property in the area of the mineralized dyke identified by 2004 work, but the snow cover and extreme terrain at the higher elevations led to extremely hazardous working conditions and a decision was made to focus on the soil sampling program. A total of 488 soil samples were collected by Bootleg Exploration personnel along six N-S oriented contour soil lines. Line spacing was approximately 100 metres vertical, with 25 meter sample spacing. A total of 13 rock samples were collected.

The results from the 2005 field program were disappointing, with only a single soil sample, HLL03 11+75N, returning an anomalous gold value, 75 ppb Au. None of the rock samples returned anomalous gold values. All of soil samples were collected from within the mapped contacts of the intrusive body. The rock samples were all collected from outcrops and boulder fields where they were exposed from the snow cover. Mapping and establishing any continuity of samples was impossible due to the snow.

The total cost of the 2005 program was \$38,675.40.

2011 exploration on the Hall Lake property consisted of a 479.1 line kilometre VTEM airborne geophysical survey.

The airborne geophysical survey identified five anomalous features or targets. No.1 and No.2 very low conductive zones are mapping a trend of low magnetic intensity that extends in NE to NS direction. They may be associated with an extension of the felsic dyke that carries the gold mineralization found around Hall Lake in 2004, or possibly a magnetite destructive halo associated with hydrothermal alteration along the intrusive / sedimentary contact.

Total cost of the 2011 Airborne Geophysical survey was \$104,916.05.

The 2013 exploration program consisted of a total of nine days of field work spread out between June 21<sup>st</sup> and September 21<sup>st</sup>, 2013. The goals of the program were as follows:

- Evaluate the Hall Lake Fault for similar signatures to the Iron Range Fault system;
- Gather silt geochemistry samples covering the property;
- Assess the Storm King mineral occurrence and surrounding area;

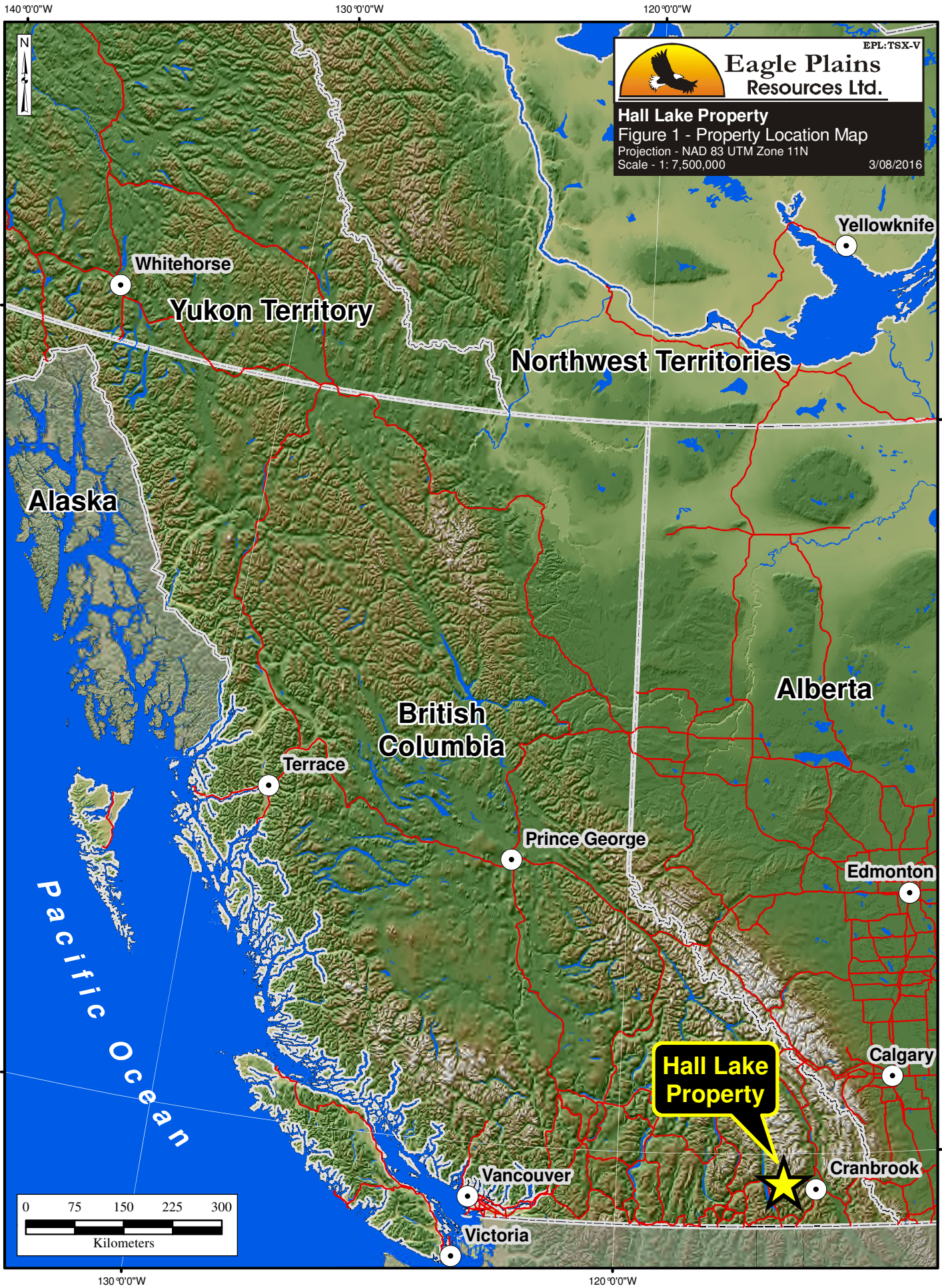
- Follow up 2011 geophysical anomalies.

The 2013 work program demonstrated that the Hall Lake fault shares many similarities to the Iron Range Fault Zone (IRFZ). Float samples of albite/chlorite altered iron-oxide breccia were encountered in abundance in proximity to the fault. Elevated values in soil samples crossing the fault were returned for Sc, V, Cr, Fe and Au, all elements associated with the IRFZ. A 2.5 metre chip sample was taken crossing the fault returned anomalous values for Fe, Cr and V. This discovery leads to a large strike length of exploration potential surrounding the greater Iron Range-Hall Lake fault system. More work is warranted following up this structure and any sub-parallel splays in search of significant mineralization as seen on the Iron Range property.

Total exploration expenditures for 2013 were \$60,297.65.

**Table 2 – Hall Lake Work History Summary**

Report Number	Report Year	Work Year	Owner	Operator	Work Completed
27694	2005	2004	Eagle Plains Resources Ltd.	Eagle Plains Resources Ltd.	Rock geochemical survey and prospecting
28448	2006	2005	Eagle Plains Resources Ltd.	Solomon Resources Ltd.	Contour soil and rock geochemical sampling
32614	2011	2011	Eagle Plains Resources Ltd.	Bethpage Capital Corporation	Airborne Magnetism and VTEM survey
34463	2013	2013	Eagle Plains Resources Ltd.	Eagle Plains Resources Ltd.	Geochemical surveys



**Eagle Plains Resources Ltd.**

EPL:TSX-V

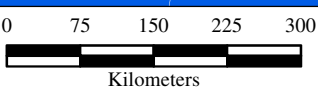
**Hall Lake Property**

Figure 1 - Property Location Map

Projection - NAD 83 UTM Zone 11N  
Scale - 1: 7,500,000

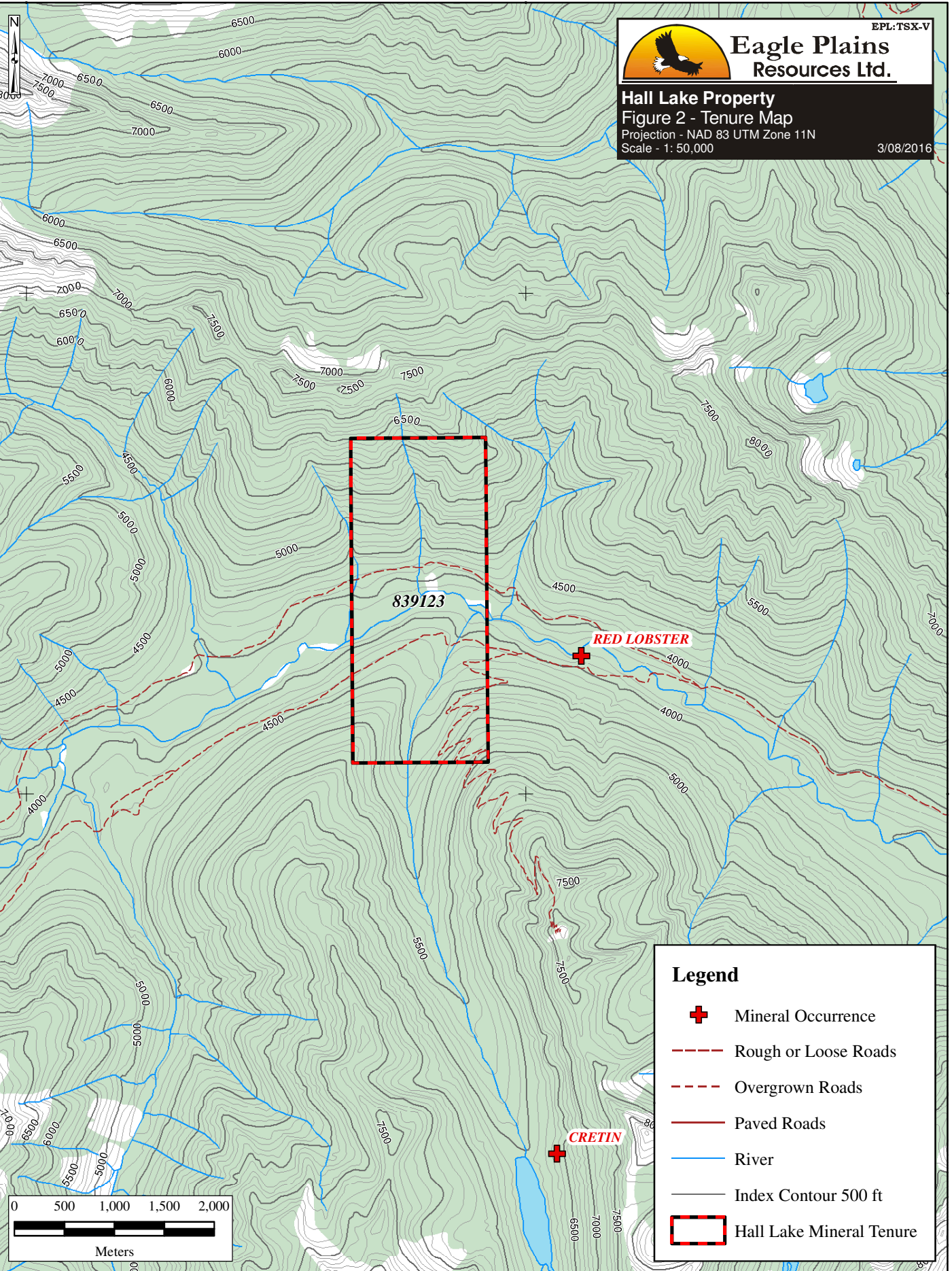
3/08/2016

**Hall Lake Property**



535000

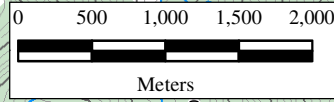
540000



**Eagle Plains Resources Ltd.**  
 Hall Lake Property  
 Figure 2 - Tenure Map  
 Projection - NAD 83 UTM Zone 11N  
 Scale - 1: 50,000  
 3/08/2016

**Legend**

- Mineral Occurrence
- Rough or Loose Roads
- Overgrown Roads
- Paved Roads
- River
- Index Contour 500 ft
- Hall Lake Mineral Tenure



535000

540000

## **GEOLOGY**

### **Regional Geology**

after Hoy and Jackman, (2004)

Regionally the Hall Lake area is underlain by rocks of the Purcell Supergroup on the western flank of the Purcell Anticlinorium, a broad, north-plunging arch-like structure in Helikian and Hadrynian aged rocks. The anticlinorium is allocthonous, carried eastward and onto the underlying cratonic basement by generally north trending thrusts throughout the Laramide orogeny during late Mesozoic and early Tertiary time.

The oldest rocks exposed in the Hall Lake area are greenish, rusty weathering thin bedded siltites and quartzites of the greater than 4,000 metres thick Lower Aldridge Formation, along with the facies-related, dominantly fluvial Fort Steele Formation (the base of which is unexposed). The Sullivan deposit is located some 20-30 metres below the upper contact of the Lower Aldridge Formation. Overlying the Lower Aldridge is a continuous section of Middle Aldridge quartz wackes, subwackes and argillites some 3,000 metres thick. Within the Middle Aldridge formation, fourteen varied marker horizons can be correlated over hundreds of kilometres. These represent the only accurate stratigraphic control. A number of aerially extensive, locally thick gabbroic sills are present within the Lower and Middle Aldridge Formations. These sills and dykes; the "Moyie Sills", locally were intruded into wet, unconsolidated sediments, and have been dated to 1445 Ma, providing a minimum age for Aldridge sedimentation and formation of the Sullivan deposit. The Middle Aldridge is overlain conformably by the Upper Aldridge, 300-400 metres of thin, fissile, rusty weathering siltite/argillite.

Conformably overlying the Aldridge Formation is the Creston Formation, comprising approximately 1,800 metres of grey, green and maroon, cross-bedded and ripple marked platformal quartzites and mudstones. The Kitchener-Siyeh Formation, which includes 1200-1600 metres of grey-green and buff coloured dolomitic mudstone are shallow water sediments overlying the Creston Formation.

The upper portion of the Purcell Supergroup consists of the Dutch Creek and Mount Nelson Formations. The Dutch Creek formation consists of approximately 1,200 metres of dark grey, calcareous dolomitic mudstones. Overlying the Dutch Creek formation is the Mount Nelson formation, 1,000 metres of grey-green and maroon mudstone and calcareous mudstones. This unit marks the top of the Purcell Supergroup.

The Purcell Supergroup in the Sullivan area was deposited along an active tectonic basin margin. Dramatic thickness and facies variations record Purcell-age growth faults and contrast with gradual changes characteristic of most Purcell rocks elsewhere. These faults reflect deep crustal structures that modified incipient Purcell rifting, and led to the development of an intercratonic basin in middle Proterozoic time.



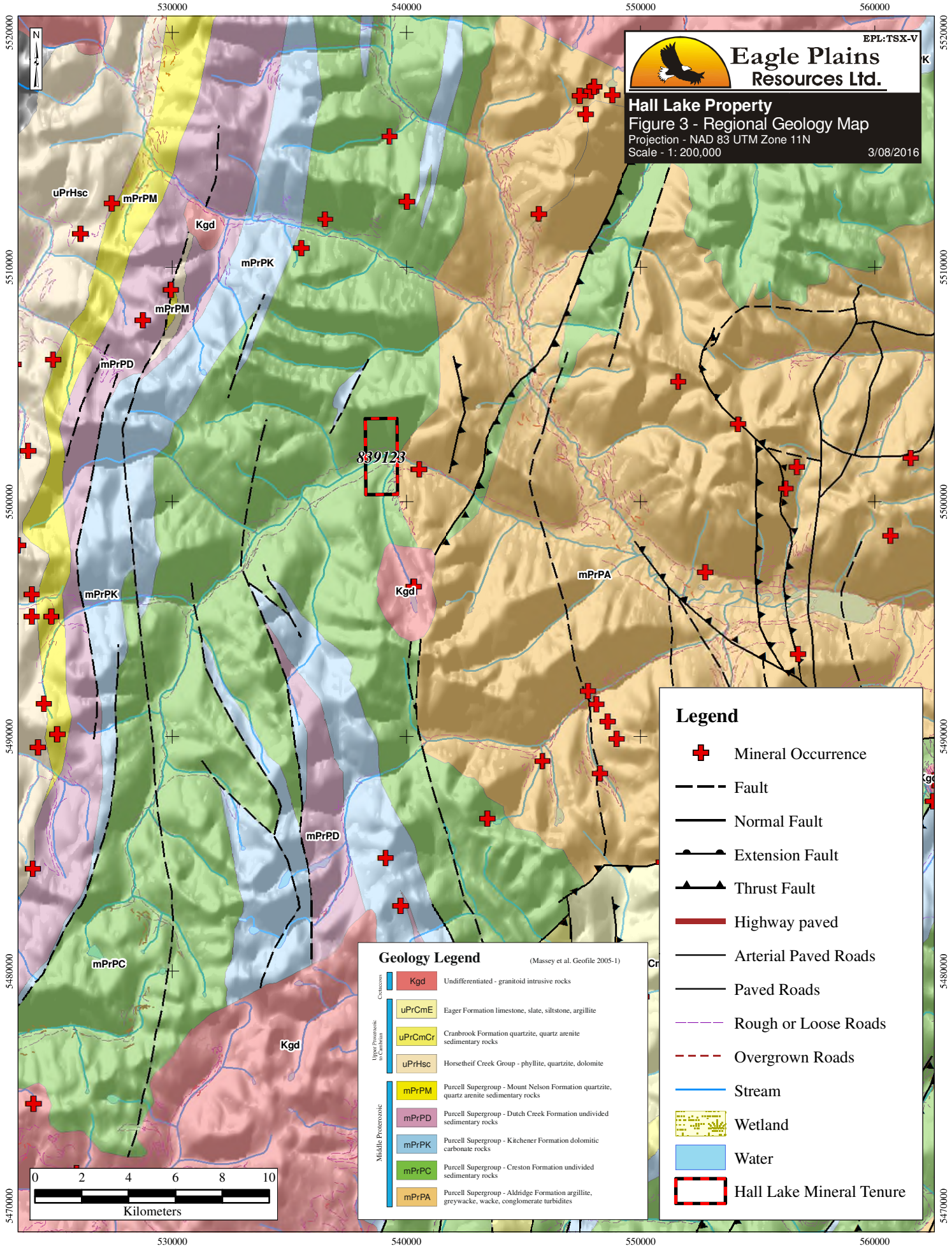
**Eagle Plains Resources Ltd.**

EPL:TSX-V

**Hall Lake Property**  
**Figure 3 - Regional Geology Map**

Projection - NAD 83 UTM Zone 11N  
Scale - 1: 200,000

3/08/2016

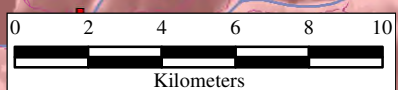


**Legend**

- Mineral Occurrence
- Fault
- Normal Fault
- Extension Fault
- Thrust Fault
- Highway paved
- Arterial Paved Roads
- Paved Roads
- Rough or Loose Roads
- Overgrown Roads
- Stream
- Wetland
- Water
- Hall Lake Mineral Tenure

**Geology Legend** (Massey et al. Geofile 2005-1)

Cretaceous		<b>Kgd</b>	Undifferentiated - granitoid intrusive rocks
		<b>uPrCmE</b>	Eager Formation limestone, slate, siltstone, argillite
		<b>uPrCmCr</b>	Cranbrook Formation quartzite, quartz arenite sedimentary rocks
		<b>uPrHsc</b>	Horseheif Creek Group - phyllite, quartzite, dolomite
Upper Proterozoic to Cambrian		<b>mPrPM</b>	Purcell Supergroup - Mount Nelson Formation quartzite, quartz arenite sedimentary rocks
		<b>mPrPD</b>	Purcell Supergroup - Dutch Creek Formation undivided sedimentary rocks
		<b>mPrPK</b>	Purcell Supergroup - Kitchener Formation dolomitic carbonate rocks
		<b>mPrPC</b>	Purcell Supergroup - Creston Formation undivided sedimentary rocks
		<b>mPrPA</b>	Purcell Supergroup - Aldridge Formation argillite, greywacke, wacke, conglomerate turbidites
Middle Proterozoic		<b>Kgd</b>	



### **Property Geology**

Downie (2005, 2006) and Higgs (2013), after Hoy and Jackman, (2004)

Geologic mapping at the Hall Lake property is limited to regional scale mapping by Hoy and Jackman(2004). The property itself is centred on the conformable contact between moderately-dipping Middle and Upper Aldridge rocks to the east and overlying Creston Formation rocks to the west (Figure 4); see regional geology for a detailed description of the host rocks. The contact zones in areas investigated to date do not appear to have any associated significant contact metamorphism or alteration.

Geologic mapping on the property has so far been centred around a ~10.0 metre wide NW-striking, sub-vertical felsic dyke which cross-cuts the host sediments and can be traced for over 1.5 kilometres.

The light-grey to rusty-orange weathering quartz-feldspar dyke is massive and very-fine-grained to aphanitic with rare 0.5 millimetre quartz eyes. Sulphide mineralization is rare but consists of mm-scale euhedral pyrite cubes; minor disseminated, medium-grained arsenopyrite prisms and needles; and medium-grained euhedral arsenopyrite needles to fine-grained, massive, arsenopyrite common along fracture surfaces. Arsenopyrite bearing, light- to dark-grey, sugary quartz veins which average 0.5 cm in width, cross-cut the dyke.

Larger 3.0-10.0 centimetre medium to coarse-grained, rusty, quartz veins intrude the host metasedimentary rocks; veins can contain muscovite and form minor stockworks. Sulphide mineralization includes coarse-grained euhedral galena, coarse-grained euhedral pyrite and associated pseudomorphs (limonite?), as well as fine-grained disseminated arsenopyrite.

538000

540000

542000

MEADOWBROOK  
EPL:TSX-V



**Eagle Plains  
Resources Ltd.**

**Hall Lake Property**

Figure 4a - Property Geology & Sample Locations  
Projection - NAD 83 UTM Zone 11N  
Scale - 1: 30,000  
3/08/2016

5504000

5502000

5500000

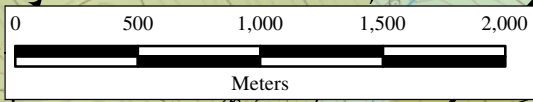
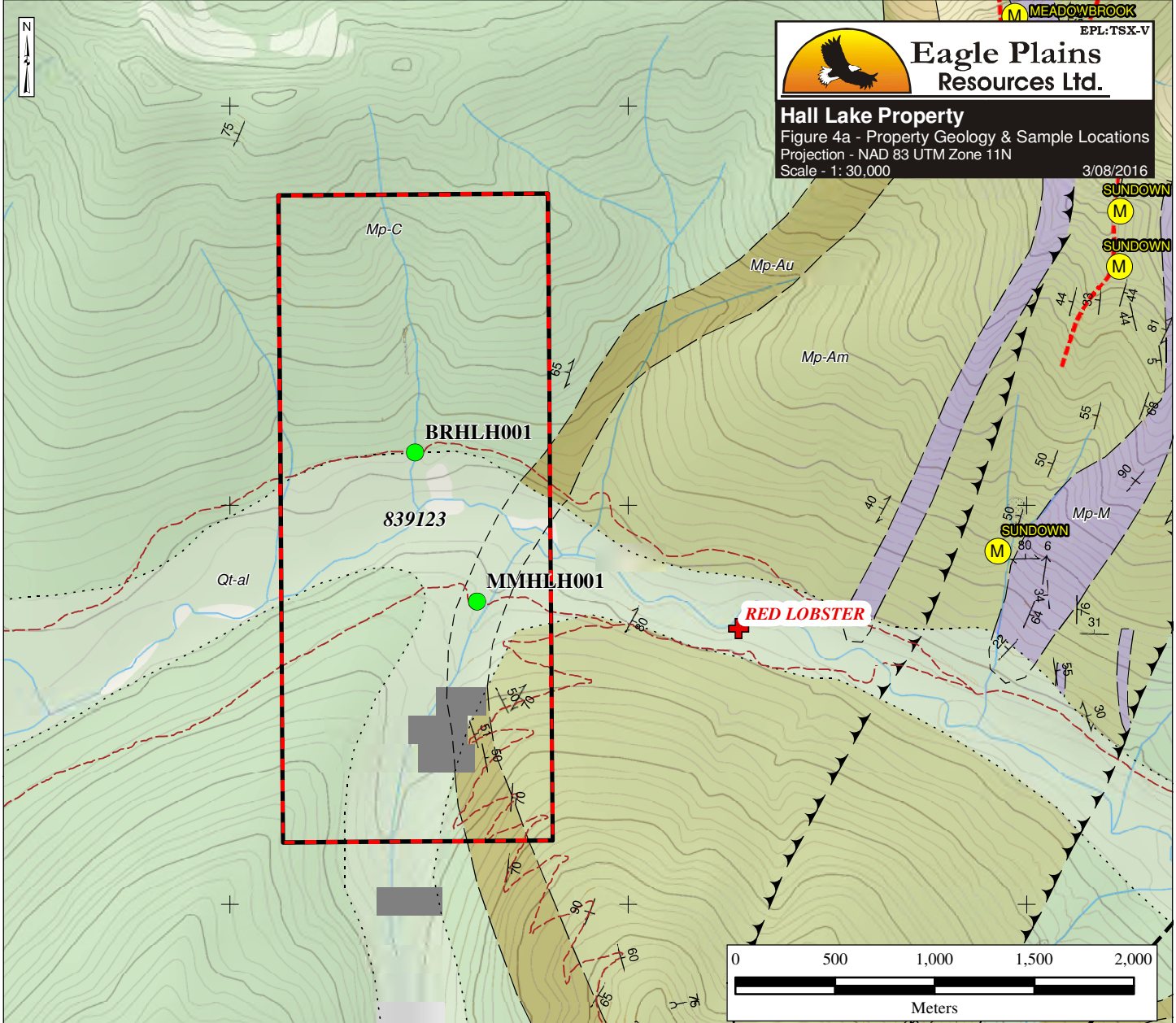
5498000

5504000

5502000

5500000

5498000



**Legend**

	2015 bulk stream sediment sample		axial plane		fold axis
	Mineral Occurrence		axial plane (vertical)		fold axis (m)
	Albite Alterations		bedding		fold axis (s)
	Fragmentals		bedding (horizontal)		fold axis (z)
	Hematite Alteration		bedding (overturned)		fracture (vertical)
	Marker		bedding (upright)		glacial striae
	Tourmalinite		bedding (vertical)		lineation
	Rough or Loose Roads		cleavage		mylonitic fabric
	Overgrown Roads		cleavage (vertical)		stretching lineation
	Hall Lake Mineral Tenure				

Refer to Figure 4b for Geology Legend

538000

540000

542000

Quaternary

Qt-al

Unconsolidated sediments: alluvium; colluvium; diamictite

Tertiary

Ct-dia

Diatreme: Lamprophyre sills and dykes in the Middle Aldridge Formation; brown weathering, carbonatized, large megacrysts and xenocrysts of phlogopite, amphibole, and pyroxene in a fine-grained, dark chloritic matrix; 10-80 percent by volume xenocrysts; sedimentary, lower crustal, and mantle xenocrysts; possibly Cretaceous in age

Lower Cretaceous

Lct-Rgn

RYKERT BATHOLITH: Medium-grained, light-grey, biotite granite, monzogranite, and granodiorite; includes Shorty Peak pluton and gneissic rocks; zircon U-Pb date of  $99 \pm 3$  Ma (Brown et al., 1995). Note: previously referred to as Kanisku batholith (Archibald et al., 1984) and Selkirk Crest complex (Reesor, 1993)

Lct-BMS

MOUNT SKELLY PLUTON: hornblende-biotite granite; pale grey to white, massive, medium-grained, and potassium-feldspar megacrystic; local magmatic layering occurs.

Early Cretaceous

Ect-WC

WEST CRESTON GNEISS: Similar to Corn Creek gneiss; zircon U-Pb date of ~136 Ma (Brown et al., 1995)

Ec-bx

Chloritic microbreccia; cataclasite; mylonitic granitic rocks; pale green, chloritesericite-clay altered leucocratic granitoids

Cretaceous

Ct-mu

CORN CREEK AND WEST CRESTON GNEISS: "Mixed unit" (lit-par-lit gneiss): Meta-wacke and semi-pelite (Middle Aldridge Formation) intruded by mylonitic granite and pegmatite sills

Cambrian

Cm-E

EAGER FORMATION: Grey argillite, silty argillite, siltstone; buff weathering, silty limestone; rare bioclastic beds.

Cm-C

CRANBROOK FORMATION: Quartzite, limestone, calcite marble, dolomite marble, calc-silicate.

Middle Proterozoic

Mp-MN

MOUNT NELSON FORMATION: Undivided sedimentary rocks

Mp-MNa

MOUNT NELSON FORMATION: Thin-bedded to laminated argillite, phyllitic argillite, and siltstone; brown phyllite with quartz pebbles and granules; mauve to purple wacke and phyllitic siltstone; pale green sericitic phyllite; intercalated quartz gritstone of unit m MNq

Mp-MNc

MOUNT NELSON FORMATION: Calc-silicate

Mp-MNdl

MOUNT NELSON FORMATION: Lower dolomite: buff dolomite and minor grey limestone; thin-bedded to laminated

# Hall Lake Geology Legend

Mp-MNdu

MOUNT NELSON FORMATION: Upper dolomite: buff to grey dolomite, dolomite with quartz lenses and pods; minor blue-white, coarse to medium-grained quartzite and quartz gritstone layers up to 2 m thick

Mp-MNp

MOUNT NELSON FORMATION: Phyllitic argillite and siltstone with flattened siliceous quartz veins (or clasts?)

Mp-MNq

MOUNT NELSON FORMATION: Medium to thin-bedded dolomite, quartzite, white, grey, and green, blue quartz granules, rare white potassium-feldspar fragments; argillite; argillaceous siltstone; medium-bedded, wavy, lenticular bedding (possible equivalent to the Buffalo Hump Formation, Deer Trail Group, Washington; cf. Miller and Whipple, 1989) DUTCH CREEK FORMATION: Sedimentary rocks; green siltstone, argillite, stromatolitic dolomite, quartz wacke.

Mp-DC

DUTCH CREEK FORMATION: Calcareous phyllite; laminated to microlaminated argillite; phyllitic siltstone; sericite schist; lenticular sandstone beds.

Mp-DCa

DUTCH CREEK FORMATION: Dolomite; dolomitic phyllite; clean dolomite with stromatolites; minor quartzite; mauve phyllite, argillite, and siltstone; dolomite breccia layers at the Leg Property

Mp-DCd

DUTCH CREEK FORMATION: Pale green chlorite-sericite phyllite with distinctive but minor mauve quartz arenite beds up to 2 m thick.

Mp-DCs

Unnamed Volcanic Unit: Basalt to andesite flows (and sills?); dull to olive-green volcanic wacke siltstone; thin to medium-bedded

Mp-V

KITCHENER FORMATION: Undivided meta-sedimentary rocks: thin-bedded, brown-weathering dolomitic siltstone and green argillite.

Mp-K

KITCHENER FORMATION: Graphitic phyllite; pyritic and rusty brown weathering

Mp-Ka

KITCHENER FORMATION: Dolomitic siltstone; dolomitic argillite; dolomite, commonly buff-weathering; argillite; siltstone; quartzite; green-tinged dolomitic siltstone near the base

Mp-Kd

KITCHENER FORMATION: LOWER: green and beige siltstone, dark grey argillite; dolomitic siltstone.

Mp-KI

KITCHENER FORMATION: LOWER: green and beige siltstone, dark grey argillite; dolomitic siltstone. Grey carbonate member.

Mp-Kla

Mp-Cu

CRESTON FORMATION: UPPER: green siltstone; black or purple argillite and siltstone.

Mp-Cm

CRESTON FORMATION: MIDDLE: light grey, mauve, or purple, thin to medium-bedded quartz arenite; quartz wacke; lesser grey siltstone and argillite; white quartzite interbeds; lenticular bedding, ripples, cross-bedding, and mudcracks occur locally.

Mp-CI

CRESTON FORMATION: LOWER: waxy-green to olive, tan-weathering, thin to thick-bedded to laminated argillite and siltstone; lesser fine-grained quartz wacke; wavy bedding and abundant mudcracks common.

Mp-C

CRESTON FORMATION: Undivided meta-sedimentary rocks: light grey, mauve, or green siltstone and argillite; thin to medium-bedded quartz arenite, quartz wacke; lenticular bedding, ripples, cross-bedding, and mudcracks

Mp-Au

ALDRIDGE FORMATION: UPPER: rusty brown weathering, grey to dark grey, fissile to platy, laminated silty argillite and siltite.

Mp-Am

ALDRIDGE FORMATION: MIDDLE grey to rusty weathering, thick- to thin-bedded, quartzofeldspathic wacke, intercalated argillite and siltite,

Mp-Alr

ALDRIDGE FORMATION: "Ramparts Facies" member: light grey weathering, medium to thick-bedded, medium to fine-grained quartzite, quartz arenite and quartz wacke; local lenticular bedding and cross-bedding; rare rusty-brown quartz wacke layers towards base of the exposed section.

Mp-Afr

ALDRIDGE FORMATION: Fragmental rocks interpreted as sedimentary debris flows, breccias formed in dewatering pathways, mud volcano debris, and hydrothermal breccias: stratiform and discordant matrix- and framework-supported fragmental rocks consisting of angular to rounded quartzite clasts having a size range of <2mm to >2m.

Mp-M

MOYIE INTRUSIONS: "Moyie sills": dark-green to black, medium to fine-grained gabbro and hornblende quartz diorite sills and dikes; several to hundreds of metres thick.

Mp-AI

ALDRIDGE FORMATION: LOWER: rusty brown weathering, thin- to medium-bedded, quartz wacke, quartz arenite.

**Geologic Contacts**

- Amphibolite
- Contact Approx
- Granitic
- Contact Assumed;
- Contact Compiler
- Contact Defined
- Contact Quaternary
- Contact Subdivided
- Fault Approximate
- Fault Assumed
- Fault Defined
- Fault Normal Approximate
- Fault Normal Assumed
- Fault Normal Defined
- Fault\_Reverse App; Fault Thrust\_Approximate
- Fault\_Reverse Assumed; Fault Thrust Ass
- Fault Thrust Defined

**Folds**

- Anticline Approximate
- Anticline\_Approximate
- Anticline defined
- Anticline defined; Syncline defined
- Anticline overturned
- Anticline overturned
- Syncline approx
- Syncline approx
- Syncline defined
- Syncline overturned
- Syncline overturned

Figure 4b - Geology after Massey et al., (2005), Brown et al., (2011), Brown and MacLeod (2011), and Glombick et al., (2011 a/b)

## **2015 EXPLORATION PROGRAM**

### **Work Summary**

The 2015 work program consisted of one day of field work on November 12<sup>th</sup>, 2015 completed by two personnel from TerraLogic Exploration Inc. The field program resulted in the collection of two bulk stream sediment samples. The samples were shipped to Overburden Drilling Management of Ottawa, Ontario for Heavy Mineral Concentrate (HMC) processing to identify gold grains and Metamorphic Massive Sulphide Indicator Minerals (MMSIM<sup>®</sup>).

Goals of the program were as follows:

- To determine if visible gold grains could be recovered from two sample sites on the mineral tenure which could suggest proximity to source;
- To determine if MMSIM<sup>®</sup> could be recovered from two sample sites on the mineral tenure which could suggest proximity to a massive sulphide deposit.

Total exploration expenditures for the 2015 program were \$3,994.86.

### **Program Results**

Samples MMHLH001 and BRHLH001 (refer to Figure 4a for sample locations) each returned 1 visible gold grain, which is not considered to be anomalous. The reshaped and modified gold grain morphology suggests that the gold grains have traveled a significant distance from their original source.

Sample MMHLH001 returned the following MMSIM<sup>®</sup>: Trace arsenopyrite, chalcopyrite, scheelite, ghanite, Zn-hercynite and sapphire corundum. These minerals are indicative of a zone of contact metamorphism between a felsic intrusive and metasedimentary rocks. Sample BRHLH001 did not return any MMSIM<sup>®</sup> of interest.

## **CONCLUSIONS**

Samples MMHLH001 and BRHLH001 each returned 1 visible gold grain, which is not considered to be anomalous. The reshaped and modified gold grain morphology suggests that the gold grains have traveled a significant distance from their original source and likely represent background concentrations for the local area.

Sample MMHLH001 returned the following MMSIM<sup>®</sup>: Trace arsenopyrite, chalcopyrite, scheelite, ghanite, Zn-hercynite and sapphire corundum. The most plausible explanation for the occurrence of the MMSIM<sup>®</sup> mineral assemblage identified in the bulk stream sediment sample is a greisen type mineral deposit related to the Hall Lake pluton.

## **RECOMMENDATIONS**

Further exploration is recommended on the Hall Lake Property.

Future exploration efforts should focus on determining the bedrock source of the sapphire corundum, and the maximum potential size of the sapphire crystals. Both of these determinations could easily be made with a systematic bulk stream sediment and subsequent bulk till sample survey. An initial recce program could be completed for approximately \$3000.00 which would include processing bulk stream sediment samples at several classifications (size fractions) from the same sample location as MMHLH001 to determine the maximum crystal size of the sapphire corundum. If crystals measuring > 6.5 mm in size (large enough to produce 1 carat gemstones) can be recovered from the recce stream sediment samples they should be taken to a certified gemologist for appraisal. The closest example of a viable sapphire market is located in Philipsburg Montana, USA.

## REFERENCES

- Brown, D.A., MacLeod, R.F., Wagner, C.L., and Chow, W. (compilers) (2011): Geology, Grassy Mountain, British Columbia; Geological Survey of Canada, Open File 6309, scale 1:50 000.
- Brown, D.A. and MacLeod, R.F. (compilers) (2011): Geology, Boswell, British Columbia. Geological Survey of Canada, Open File 6310, scale 1:50 000.
- Downie, C.C. and Hendrickson, G.W., (2005): Assessment Report for the 2004 Cretin Field Program; BCEMPR Assessment Report 27694.
- Downie, C.C., (2006): Geological Report for the Hall Lake (Cretin) Property. BCMEMPR Assessment Report 28448.
- Gallagher, C., (2011): Geophysical Report for the Hall Lake (Cretin) Property; BCEMPR Assessment Report 32614.
- Glombick, P., Brown, D.A., and MacLeod, R.F. (compilers) (2011a): Geology, Yahk, British Columbia; Geological Survey of Canada, Open File 6153, (revised), scale 1:50 000.
- Glombick, P., Brown, D.A. and MacLeod, R.F. (compilers) (2011b): Geology, Creston, British Columbia; Geological Survey of Canada, Open File 6152, (revised), scale 1:50 000.
- Higgs, A., (2013): Geological and Geochemical Report for the Hall Lake Property. BCMEMPR Assessment Report 34463.
- Höy, T. and Jackaman, W., (2004): Geology of the St. Mary map sheet (NTS 82F/09); B.C. Ministry of Energy and Mines, Geoscience Map 2004-1.
- Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T., (2005): Digital Geology Map of British Columbia, B.C. Ministry of Energy and Mines, Open File 2005-2, DVD.
- McCurdy, M.W., Prior, G.J., Day, S.J.A., Weiss, J.A., Friske, P.W.B., Pawlowicz, J.G., McNeil, R.J., Hathway, B., Wilson, R.S. And Goulet, D.E. (2008): Geochemical, Mineralogical, and Kimberlite Indicator Mineral Electron Microprobe Data from Silts, Heavy Mineral Concentrates and Waters from National Geochemical Reconnaissance Stream Sediment and Water Surveys in the Northeastern and Southern Clear Hills, Alberta (NTS 84E/01 and 84E/02 and Parts of 84D/10 and 84D/11). *In*: GSC **Open File 5807**, ERCB/AGS Special Report 97, 1 CD-ROM.

## Appendix 1

### Statement of Qualifications

## STATEMENT OF QUALIFICATIONS

I, Michael A. McCuaig, Do hereby certify that:

I am currently employed as a Geologist, with TerraLogic Exploration Inc., with business address: Suite 200, 44-12<sup>th</sup> Avenue South, Cranbrook, British Columbia, V1C 2R7.

I graduated with a Bachelor of Science Degree from St. Francis Xavier University in 2003.

I have worked as a geologist for 9 years since my graduation from university.

I am currently a member in good standing with APEGBC, Registration Number 39402.

I supervised field work and have authored the 2015 assessment report titled “Geochemical Report for the Hall Lake Property” dated March 10<sup>th</sup>, 2016.

Dated this 10<sup>th</sup> day of March 2016, in Cranbrook, British Columbia.

Michael  
McCuaig

Digitally signed by Michael McCuaig  
DN: cn=Michael McCuaig, o=TerraLogic  
Exploration Inc, ou=  
email=mmam@terralogicexploration.com, c=CA  
Date: 2016.03.10 10:27:24 -0700

---

Michael A. McCuaig

Appendix 2

Statement of Expenditures

<b>Hall Lake 2015</b>					
<b>Geochemical Surveys</b>					<b>Totals</b>
<b>Personnel / Position</b>	<b>Field Days</b>	<b>Days</b>	<b>Rate</b>	<b>Subtotal</b>	
Mike McCuaig / P.Geo.	November 12 <sup>th</sup> , 2015	1.00	\$625.00	\$625.00	
Brad Robison / Technician	November 12 <sup>th</sup> , 2015	1.00	\$525.00	\$525.00	
				\$1,150.00	<b>\$1,150.00</b>
<b>Office Work</b>	<b>List Personnel</b>	<b>Days</b>	<b>Rate</b>	<b>Subtotal</b>	
Report preparation and data management	Mike McCuaig / P.Geo.	2.00	\$625.00	\$1,250.00	
Equipment preparation	Brad Robison / Technician	0.13	\$525.00	\$68.25	
				\$1,318.25	<b>\$1,318.25</b>
<b>Geochemical Surveying</b>	<b>Description</b>	<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
Bulk Stream Sediment	Gold Grain Count and MMSIM Identification	2.0	\$467.35	\$934.70	
				\$934.70	<b>\$934.70</b>
<b>Transportation</b>		<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
truck rental	F -150 (1 days @ \$100.00/day)	1.00	\$100.00	\$100.00	
kilometers		140.00	\$0.30	\$42.00	
fuel				\$91.71	
				\$233.71	<b>\$233.71</b>
<b>Equipment</b>		<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
Field Gear (Specify)	Pack with gear, GPS, cruizer vest, sample supplies	2.00	\$10.00	\$20.00	
Satellite Phone		1.00	\$15.00	\$15.00	
Sampling Consumables	Plastic pails for samples			\$36.87	
				\$71.87	<b>\$71.87</b>
<b>Freight</b>				<b>Subtotal</b>	
Greyhound	Samples Cranbrook-Ottawa-Cranbrook			\$110.30	
				\$110.30	<b>\$110.30</b>
<b>TerraLogic Exploration Handling and Administration Fees</b>				<b>Subtotal</b>	
				\$176.03	<b>\$176.03</b>
<b>TOTAL Expenditures</b>					<b>\$3,994.86</b>

Appendix 3  
Geochemical Protocol

### **3.1 Handling and Sampling Protocol**

All of the 2015 samples were collected by TerraLogic Exploration Inc employees. The sampling process is standardized and continually monitored for quality assurance and quality control. All samples are described in a field notebook in the field at the time of collection and also have a GPS location recorded at the site. Upon returning to the field office all of the sample metadata was input into a digital database. All of the 2015 samples from the Hall Lake program were delivered to Overburden Drilling Management, Unit 107 15 Capella Court, Ottawa, Ontario, Canada, K2E 7X1. The samples were shipped via Greyhound from Cranbrook, British Columbia.

#### Stream Sediment Samples

Geologists/Geotechnicians collected stream sediment samples using the following technique. Stream sediment material was collected using a small D-handled shovel and placed into a 10 mm screen size sieve, under which a 2.3 mm sieve was fitted to a 20 litre plastic pail lined with a plastic sample bag. The sediment was washed with water, and the sieve was vigorously vibrated by the sample technician until all of the fine sediment was washed through the two sieves. The process was repeated until approximately 10-15 kg of – 2.3 mm material was collected into the sample bag. The sample was then thoroughly washed with water to remove organic materials, and all excess water was drained from the sample. Once the sampling was complete the plastic poly bag was sealed with flagging tape, labelled and a plastic lid was placed on top of the plastic pail to prevent sample contamination and tampering. Attribute data collected for each silt sample included: sample location, sample size, quality, depth, water velocity and tributary order. Sample technique and attribute data was collected in accordance with the sampling techniques outlined in GSC Open File 5807 (2008). Sample sites were clearly labelled in the field using metal tags and orange flagging tape. Photos were collected for each sample location for internal reference.

#### Sample Handling and Shipping Procedure

All samples were brought back to the field base camp (Eagle Plains Resources field house); here stream sediment samples were arranged in order and laid to dry. Samples with damaged bags or unclear labels were re-bagged and placed back into order. At the end of the program, a shipment was prepared. This required one person going through each sample ensuring that all samples were in order. The other person would record each sample number to be shipped. Once recorded, the samples were placed in plastic pails with sealed lids. As an extra security measure each lid was sealed with packing tape. Each pail was clearly labeled with the following: Shipping address, receiver address, pail # of # and PO/TerraLogic shipping reference number (HL15-xxx). Each shipping container weighed approximately 15 kg. The list of samples was compared to the database and any discrepancies investigated and rectified. Once the list of samples to be shipped matched the database's records, the bags were sealed with a zip tie security seal. The pails were then delivered to Overland West Freight Lines Limited in Cranbrook, British Columbia and were subsequently delivered to Overburden Drilling Management in Ottawa, Ontario.

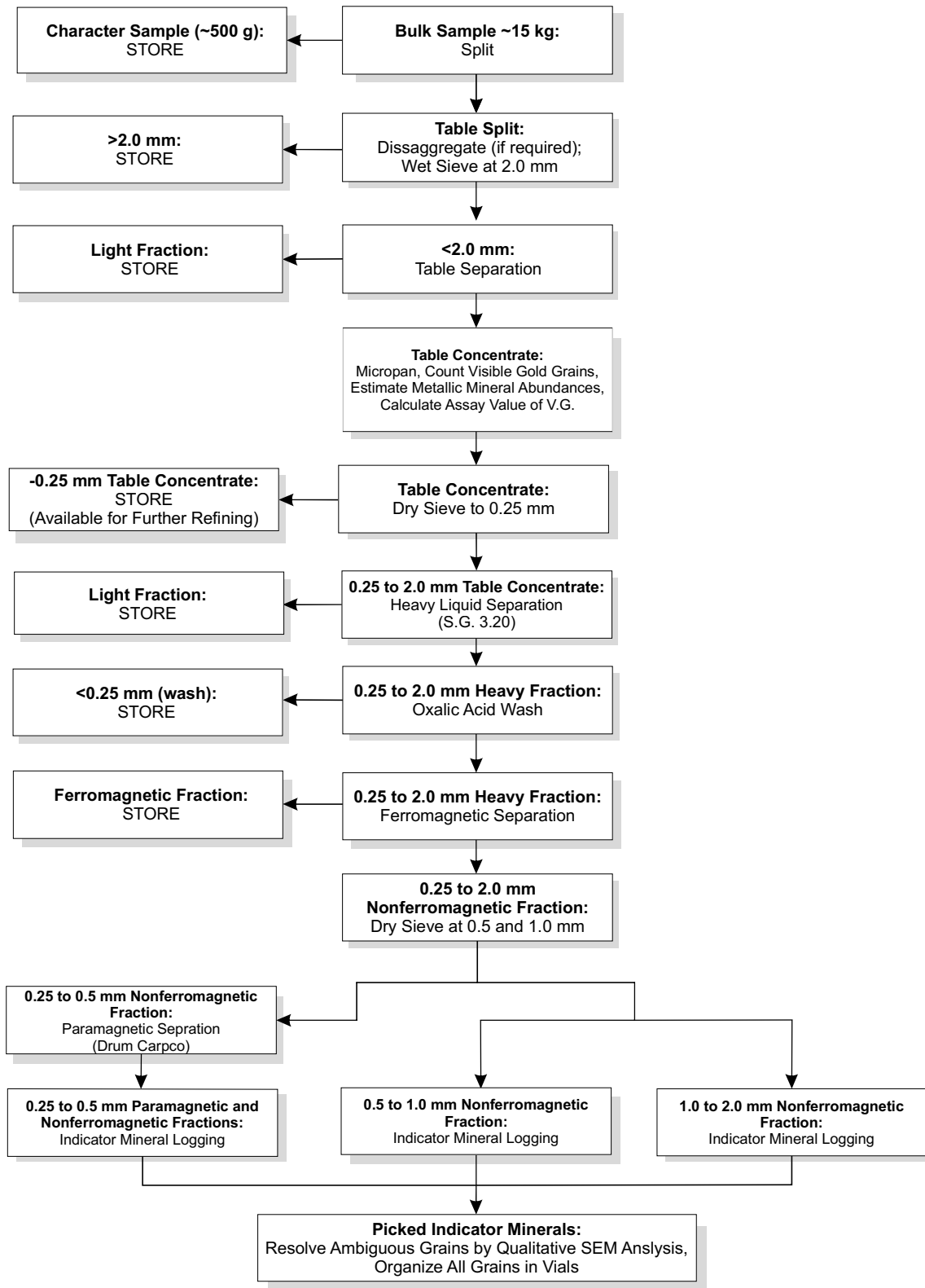
### 3.2 Analytic Procedures

All samples were submitted to Overburden Drilling Management for analysis. The following sample preparation and analytic techniques were used for all stream sediment samples:

1. Submitted by client: ~15 to 20 kg alluvial sand/gravel and till samples.
2. Single  $\pm 500$  g archival splits taken.
3. All samples panned for gold and metallic indicator minerals.
4. Heavy liquid separation specific gravity: 3.20.
5. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.

The following flow chart illustrates how the sample is classified into various fractions for mineral processing and subsequent identification through grain picking and SEM analysis.

# Overburden Drilling Management Limited



Processing flow sheet for gold grains + indicator minerals.

### **3.3 Software**

The following is a list of software used in the field and writing of this report:

- Arc GIS 10.3
- Microsoft Office 2010
- Apache Open Office
- Adobe Acrobat 10

## Appendix 4

### Sample Location and Description Data

Appendix 4 - Sample Location and Description Data

Sample Number	Sampler	Date	Easting	Northing	UTM Zone	Accuracy	Screen Mesh	Mass(Kg)	Quality	Physiography	SurfExpression	DrainagePattern	SiteDrainage	StreamSource	StreamClass	StreamType	StreamFlow	WaterClarity	VegType	BankType	SampSite	SiteQual	Notes	Sample Shipment
BRHLH001	BRR	12-Nov-15	538929	5502265	11N	9	8	20	3	Mountainous	Inclined	Rectilinear	Well	SpringMelt	Tertiary	Intermittent	n/a	n/a	mixed	Colluvium, Organic, Talus/Scree, Till	Longitudinal Bar	3	Avalanche chute/creek	HL15-001
MMHLH001	MAM	12-Nov-15	539240	5501518	11N	13	8	10	5	Mountainous	Inclined	Trellis	Well	Ground	Primary	Permanent	Moderate	transparent	mixed	Alluvium, Outwash, Till	Boulder Trap, Pool	4	Hall Creek	HL15-001

Appendix 5  
Analytic Certificates

OVERBURDEN DRILLING MANAGEMENT LIMITED  
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1  
TELEPHONE: (613) 226-1771  
FAX NO.: (613) 226-8753  
EMAIL: odm@storm.ca

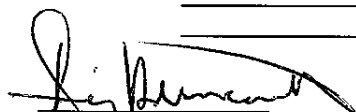
DATA TRANSMITTAL REPORT

DATE: 16-Dec-2015  
ATTENTION: Mr. Michael McCuaig  
CLIENT: TerraLogic Exploration Inc.  
Suite 200-44-12th Avenue South  
Cranbrook, BC  
V1C 2R7  
E-mail mam@terralogicexploration.com / jtc@terralogicexploration.com  
NO. OF PAGES: 7  
PROJECT: HL15-001  
FILE NAME: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015  
SAMPLE NUMBERS: MMHLH001 and BRHLH001  
BATCH NUMBER: 7061  
NO. OF SAMPLES: 2  
THESE SAMPLES WERE PROCESSED FOR: MMSIMs  
GOLD

SPECIFICATIONS:

1. Submitted by client: 12.3 and 24.0 kg sand/gravel and till samples.
2. Sand/gravel samples screened to 2.3 mm and till samples to 10.0 mm in the field.
3. Single  $\pm 500$  g archival split taken.
4. All samples panned for gold and fine grained metallic indicator minerals.
5. Heavy liquid separation specific gravity: 3.20.
6. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals and lamped for scheelite.
7. Scheelite counts confirmed by UV lamping 1.0-2.0 mm, 0.5-1.0 mm and nonparamagnetic ( $>1.0$  amp) 0.25-0.5 mm fractions.

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Remy Huneault, P.Geo.  
President

**OVERBURDEN DRILLING MANAGEMENT LIMITED  
LABORATORY SAMPLE LOG**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015  
 Total Number of Samples in this Report = 2  
 Batch Number: 7061

Sample Number	Weight (kg wet)					Sample Description											CLASS	
						Clasts (+2.0 mm)*					Matrix (-2.0 mm)							Colour
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts*	Table Feed	S i z e	Percentage				Distribution				O R G	SD		CY
							W/S	GR	LS	OT	S/U	SD	ST	CY				
MMHLH001	12.3	0.5	11.8	1.0	10.8	G	60	40	0	0	S	MC	N	N	N	LOC	NA	SAND + GRAVEL TILL
BRHLH001	24.0	0.5	23.5	8.8	14.7	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	

\*Sand/gravel sample screened to 2.3 mm and till sample to 10.0 mm in the field.

**OVERBURDEN DRILLING MANAGEMENT LIMITED****GOLD GRAIN SUMMARY SHEET**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015

Total Number of Samples in this Report = 2

Batch Number: 7061

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
MMHLH001	1	1	0	0	43.2	1	1	0	0
BRHLH001	1	0	1	0	58.8	1	0	1	0

\* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

**OVERBURDEN DRILLING MANAGEMENT LIMITED  
DETAILED GOLD GRAIN SHEET**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015

Total Number of Samples in this Report = 2

Batch Number: 7061

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
MMHLH001	Yes	5 C	25	25	1				1	1	~20 grains pyrite (25-250µm).
									1	43.2	1
BRHLH001	Yes	8 C	25	50		1			1	1	~20 grains pyrite (25-100µm).
									1	58.8	1

\* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

**OVERBURDEN DRILLING MANAGEMENT LIMITED  
LABORATORY SAMPLE LOG**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015

Total Number of Samples in this Report = 2

Batch Number: 7061

Sample Number	Weight (g)															
	-2.0 mm Table Concentrate															
	0.25 to 2.0 mm Heavy Liquid Separation S.G 3.2															
	Total	-0.25 mm	Total	Lights SG <3.2	Total HMC	-0.25 mm (wash)	Mag HMC	Nonferromagnetic HMC								
								Total	Processed Split							
									%	Weight	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm			
MMHLH001	1,209.9	302.7	907.2	879.5	27.7	2.3	2.0	23.4	100	23.4	15.2	6.3	1.9			
BRHLH001	1,078.1	396.4	681.7	666.1	15.6	5.0	5.4	5.2	100	5.2	3.7	1.2	0.3			

**OVERBURDEN DRILLING MANAGEMENT LIMITED  
PARAMAGNETIC/NONPARAMAGNETIC FRACTION WEIGHTS**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015

Total Number of Samples in this Report = 2

Batch Number: 7061

Sample Number	Weight 0.25-0.5 mm Nonferromagnetic Heavy Mineral Fractions (g)					
	Total	Paramagnetic			Nonparamagnetic (>1.0 amp)	
		Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp	>1.0 amp Lights*
MMHLH001	15.2	1.67	4.30	3.97	5.19	0.07
BRHLH001	3.7	1.25	0.53	0.85	1.07	0.01

\*SG <3.20 heavy liquid separation cleanup of >1.0 amp fraction.

**OVERBURDEN DRILLING MANAGEMENT LIMITED  
MMS INDICATOR MINERAL DATA**

File Name: 20157061 - TerraLogic - McCuaig - (HL15-001) - December 2015  
Total Number of Samples in this Report = 2  
Batch Number: 7061

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm										Phosphates		Remarks	Picked Grains	
	>1 amp		<1.0 amp		>1.0 amp					<0.8 amp					>1.0 amp				
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap			% Mz
MMHLH001	Tr (19 gr)	Tr scheelite (~30 gr) Tr arsenopyrite (1 gr)	0.1 (~50 gr)	40	3 blue-green gahnite; 1 blue-green Zn-hercynite	Tr sapphire corundum (~100 gr)	Tr (24 gr)	0	0	0	0	Tr (~150 gr)	0	0	0	Tr	Tr	Ilmenite-goethite/epidote assemblage. SEM checks from 1.0-2.0 mm fraction: 4 sapphire corundum candidates = 4 sapphire corundum ± muscovite. SEM checks from 0.5-1.0 mm fraction: 2 tourmaline candidates = 2 allanite. SEM checks from 0.25-0.5 mm fraction: 1 scheelite candidate = 1 scheelite; 1 arsenopyrite versus loellingite candidate = 1 arsenopyrite; 4 blue-green gahnite versus spinel candidates = 3 gahnite and 1 Zn-hercynite; 5 sapphire corundum candidates = 5 sapphire corundum ± muscovite; 5 altered sapphire corundum candidates = 1 sapphire corundum ± muscovite and 4 epidote ± leucoxene ± muscovite ± quartz ± chloritoid; 10 spessartine candidates = 10 spessartine; and 10 epidote (major nonparamagnetic assemblage mineral) candidates = 10 epidote. 0.5-1.0 mm fraction contains trace (~50 grains) sapphire corundum.	1.0-2.0 mm fraction: 4 sapphire corundum ± muscovite 0.5-1.0 mm fraction: 2 chalcopyrite 30 representative sapphire corundum ± muscovite 2 allanite resembling tourmaline 5 spessartine 0.25-0.5 mm fraction: 19 chalcopyrite 21 representative scheelite 1 arsenopyrite 3 gahnite 1 Zn-hercynite 26 representative sapphire corundum ± muscovite 4 epidote ± leucoxene ± muscovite ± quartz ± chloritoid resembling sapphire corundum 30 representative spessartine 10 representative epidote
BRHLH001	Tr (1 gr)	0	0.1 (~50 gr)	20	0	0	Tr (9 gr)	0	0	0	Tr	0	0	0	0	Tr	0	Ilmenite-goethite/leucoxene assemblage. SEM checks from 0.25-0.5 mm fraction: 4 dark red cassiterite versus rutile candidates = 4 rutile; 5 ochre barite candidates = 4 rutile and 1 grossular; and 5 hematite versus ilmenite (major paramagnetic assemblage mineral) candidates = 5 ilmenite.	0.25-0.5 mm fraction: 1 chalcopyrite 4 rutile resembling cassiterite 4 rutile resembling barite 1 grossular resembling barite 9 red rutile 5 representative ilmenite