

2009 Geochemical Report for the Fin Property

Watson Lake Mining District, Yukon Territory
NTS 105H12
Latitude 61°40' N, Longitude 129°49' W

Prepared for:

EAGLE PLAINS RESOURCES LTD.

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December, 2009

Summary

The Fin Claims lie in the Pelly Mountains, in the southern Yukon, close to the Robert Campbell Highway and near the northwest end of Frances Lake. Access into the property is by helicopter since there are no lakes suitable for float-equipped aircraft near the claims. Helicopters can be chartered from either Ross River or Watson Lake. The property consists of 2,255.6 hectares owned 100% by Eagle Plains Resources Ltd.

Initial exploration work in the Fin area was done by Cominco Ltd. in the 1970's with drilling in the 1980's and 1990's. A total of 14 holes were drilled in the property over 16 years. After the 1996 drill program the property was allowed to lapse. Eagle Plains Resources Ltd. Re-staked the ground in 2007.

The property is underlain by shales of the Devonian-Mississippian Earn Group and Ordovician-Silurian Road River Group. The Iconnu Thrust lies 10 km to the west of the property and the pericratonic Slide Mountain Assemblage and Yukon-Tanana Terran lie on the western side of the thrust. This thrust fault divides a major geologic domain boundary between the ancestral North American basement and allocthonous terranes emplaced from the southwest. The Yukon-Tanana Terrain hosts the Mississippian to Permian Kudz Ze Kayah and Wolverine Zn-Pb-Cu-Ag volcanogenic massive sulfide deposits.

The 2009 field work on the property consisted of infill soil sampling lines of the historic soil grid from 1979 as well as some limited geological mapping in the area of the historic mineral occurrences. The short program was completed from a fly camp located at the historic camp and drill core storage area. The program was able to expand and get more infill detail on the 1979 historic grid. The results also proved that the XRF is an efficient and accurate tool for soil geochemical analysis in a SEDEX deposit model. Bedrock exposure was extremely limited, which hindered the mapping efforts but structural measurements were taken in an attempt to better understand the basin topography.

Total expenditures for the 2009 exploration program were \$34,946.83.

Future work on the Fin property should include more geological mapping and soil geochemical sampling to provide future geophysics and drilling targets. Lithogeochemical analysis of the historic drill core with a Niton XRF field analyser will allow for fast, cost effective identification of anomalous zones within the sub-basin stratigraphy. The same unit should also be used to analyze soil samples in the field to give a quick turn-around time for drill target identification and delineation.

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INTRODUCTION

Location and Access

The Fin Claims are located 10 km NNW of Frances Lake at 61° 40' N latitude and 129° 50' W longitude on NTS map sheet 105H/12 and G/9, 140 km ESE of Ross River and 185 km NNW of Watson Lake, Yukon Territory. Access into the property is by helicopter from either Watson Lake or Ross River. Camp equipment can be mobilized into the property via a staging area on the Robert Campbell Highway 18 km south of the main showing.

Tenure

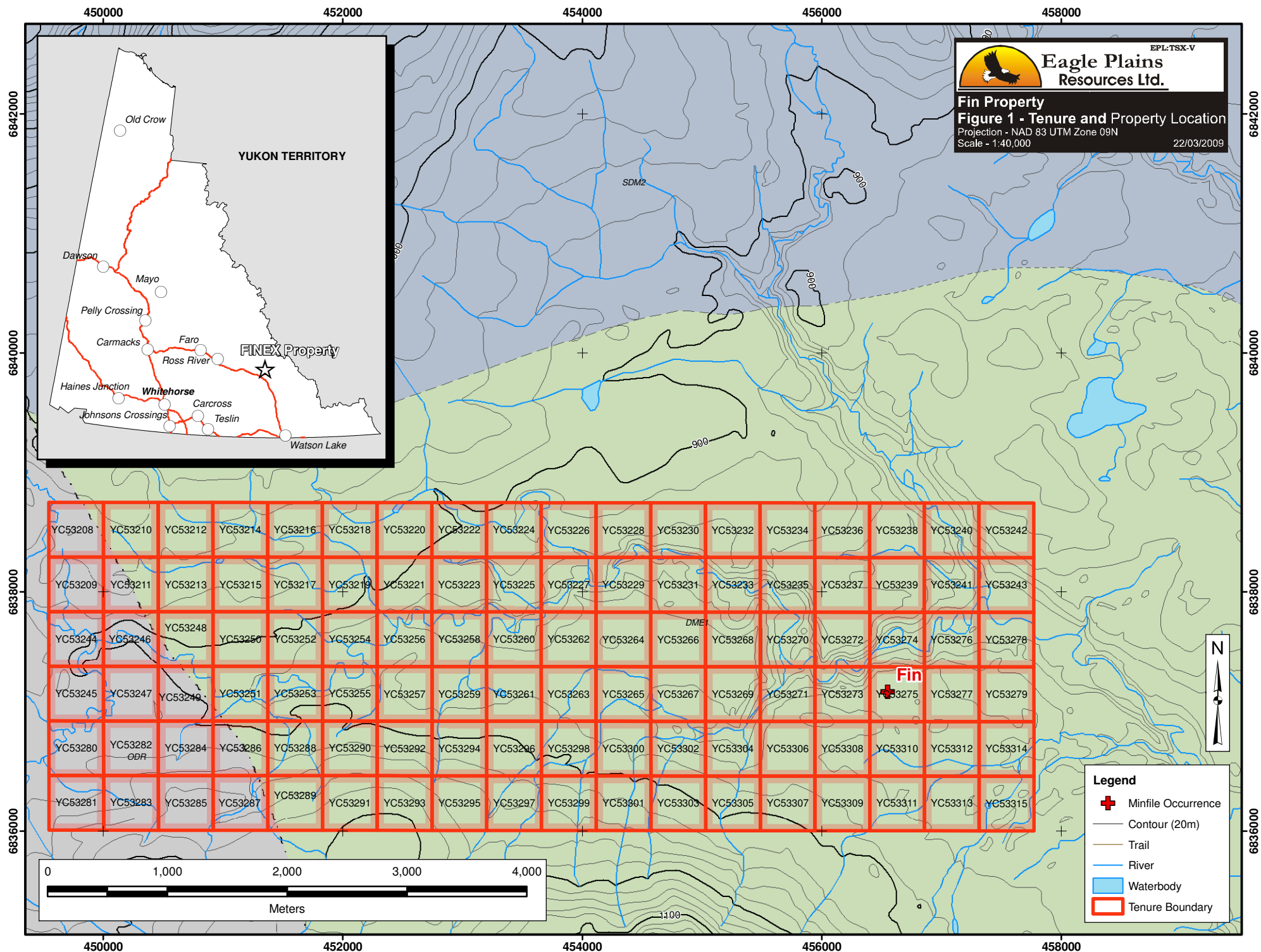
The property consists of 2,255.6 hectares owned 100% by Eagle Plains Resources Ltd. A tenure map is included as Figure 2 and a list of all pertinent tenure details follows:

Table 1 - Fin Tenure

District	Grant #	Name	NTS #	Expiry
Watson Lake	YC53208	FIN	105H12	11/07/2009
Watson Lake	YC53209	FIN	105H12	11/07/2009
Watson Lake	YC53210	FIN	105H12	11/07/2009
Watson Lake	YC53211	FIN	105H12	11/07/2009
Watson Lake	YC53212	FIN	105H12	11/07/2009
Watson Lake	YC53213	FIN	105H12	11/07/2009
Watson Lake	YC53214	FIN	105H12	11/07/2009
Watson Lake	YC53215	FIN	105H12	11/07/2009
Watson Lake	YC53216	FIN	105H12	11/07/2009
Watson Lake	YC53217	FIN	105H12	11/07/2009
Watson Lake	YC53218	FIN	105H12	11/07/2009
Watson Lake	YC53219	FIN	105H12	11/07/2009
Watson Lake	YC53220	FIN	105H12	11/07/2009
Watson Lake	YC53221	FIN	105H12	11/07/2009
Watson Lake	YC53222	FIN	105H12	11/07/2009
Watson Lake	YC53223	FIN	105H12	11/07/2009
Watson Lake	YC53224	FIN	105H12	11/07/2009
Watson Lake	YC53225	FIN	105H12	11/07/2009
Watson Lake	YC53226	FIN	105H12	11/07/2009
Watson Lake	YC53227	FIN	105H12	11/07/2009
Watson Lake	YC53228	FIN	105H12	11/07/2009
Watson Lake	YC53229	FIN	105H12	11/07/2009
Watson Lake	YC53230	FIN	105H12	11/07/2009
Watson Lake	YC53231	FIN	105H12	11/07/2009
Watson Lake	YC53232	FIN	105H12	11/07/2009
Watson Lake	YC53233	FIN	105H12	11/07/2009
Watson Lake	YC53234	FIN	105H12	11/07/2009
Watson Lake	YC53235	FIN	105H12	11/07/2009
Watson Lake	YC53236	FIN	105H12	11/07/2009
Watson Lake	YC53237	FIN	105H12	11/07/2009

District	Grant #	Name	NTS #	Expiry
Watson Lake	YC53238	FIN	105H12	11/07/2009
Watson Lake	YC53239	FIN	105H12	11/07/2009
Watson Lake	YC53240	FIN	105H12	11/07/2009
Watson Lake	YC53241	FIN	105H12	11/07/2009
Watson Lake	YC53242	FIN	105H12	11/07/2009
Watson Lake	YC53243	FIN	105H12	11/07/2009
Watson Lake	YC53244	FIN	105H12	11/07/2009
Watson Lake	YC53245	FIN	105H12	11/07/2009
Watson Lake	YC53246	FIN	105H12	11/07/2009
Watson Lake	YC53247	FIN	105H12	11/07/2009
Watson Lake	YC53248	FIN	105H12	11/07/2009
Watson Lake	YC53249	FIN	105H12	11/07/2009
Watson Lake	YC53250	FIN	105H12	11/07/2009
Watson Lake	YC53251	FIN	105H12	11/07/2009
Watson Lake	YC53252	FIN	105H12	11/07/2009
Watson Lake	YC53253	FIN	105H12	11/07/2009
Watson Lake	YC53254	FIN	105H12	11/07/2009
Watson Lake	YC53255	FIN	105H12	11/07/2009
Watson Lake	YC53256	FIN	105H12	11/07/2009
Watson Lake	YC53257	FIN	105H12	11/07/2009
Watson Lake	YC53258	FIN	105H12	11/07/2009
Watson Lake	YC53259	FIN	105H12	11/07/2009
Watson Lake	YC53260	FIN	105H12	11/07/2009
Watson Lake	YC53261	FIN	105H12	11/07/2009
Watson Lake	YC53262	FIN	105H12	11/07/2009
Watson Lake	YC53263	FIN	105H12	11/07/2009
Watson Lake	YC53264	FIN	105H12	11/07/2009
Watson Lake	YC53265	FIN	105H12	11/07/2009
Watson Lake	YC53266	FIN	105H12	11/07/2009
Watson Lake	YC53267	FIN	105H12	11/07/2009
Watson Lake	YC53268	FIN	105H12	11/07/2009
Watson Lake	YC53269	FIN	105H12	11/07/2009
Watson Lake	YC53270	FIN	105H12	11/07/2009
Watson Lake	YC53271	FIN	105H12	11/07/2009
Watson Lake	YC53272	FIN	105H12	11/07/2009
Watson Lake	YC53273	FIN	105H12	11/07/2009
Watson Lake	YC53274	FIN	105H12	11/07/2009
Watson Lake	YC53275	FIN	105H12	11/07/2009
Watson Lake	YC53276	FIN	105H12	11/07/2009
Watson Lake	YC53277	FIN	105H12	11/07/2009
Watson Lake	YC53278	FIN	105H12	11/07/2009
Watson Lake	YC53279	FIN	105H12	11/07/2009
Watson Lake	YC53280	FIN	105H12	11/07/2009
Watson Lake	YC53281	FIN	105H12	11/07/2009
Watson Lake	YC53282	FIN	105H12	11/07/2009
Watson Lake	YC53283	FIN	105H12	11/07/2009
Watson Lake	YC53284	FIN	105H12	11/07/2009

District	Grant #	Name	NTS #	Expiry
Watson Lake	YC53285	FIN	105H12	11/07/2009
Watson Lake	YC53286	FIN	105H12	11/07/2009
Watson Lake	YC53287	FIN	105H12	11/07/2009
Watson Lake	YC53288	FIN	105H12	11/07/2009
Watson Lake	YC53289	FIN	105H12	11/07/2009
Watson Lake	YC53290	FIN	105H12	11/07/2009
Watson Lake	YC53291	FIN	105H12	11/07/2009
Watson Lake	YC53292	FIN	105H12	11/07/2009
Watson Lake	YC53293	FIN	105H12	11/07/2009
Watson Lake	YC53294	FIN	105H12	11/07/2009
Watson Lake	YC53295	FIN	105H12	11/07/2009
Watson Lake	YC53296	FIN	105H12	11/07/2009
Watson Lake	YC53297	FIN	105H12	11/07/2009
Watson Lake	YC53298	FIN	105H12	11/07/2009
Watson Lake	YC53299	FIN	105H12	11/07/2009
Watson Lake	YC53300	FIN	105H12	11/07/2009
Watson Lake	YC53301	FIN	105H12	11/07/2009
Watson Lake	YC53302	FIN	105H12	11/07/2009
Watson Lake	YC53303	FIN	105H12	11/07/2009
Watson Lake	YC53304	FIN	105H12	11/07/2009
Watson Lake	YC53305	FIN	105H12	11/07/2009
Watson Lake	YC53306	FIN	105H12	11/07/2009
Watson Lake	YC53307	FIN	105H12	11/07/2009
Watson Lake	YC53308	FIN	105H12	11/07/2009
Watson Lake	YC53309	FIN	105H12	11/07/2009
Watson Lake	YC53310	FIN	105H12	11/07/2009
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Watson Lake	YC53314	FIN	105H12	11/07/2009
Watson Lake	YC53315	FIN	105H12	11/07/2009



HISTORY AND PREVIOUS WORK

The original Fin claims were staked in 1978 by Cominco Ltd to cover anomalous silt geochemistry discovered during a regional silt sampling program. Geological mapping, soil/silt geochemistry and trenching in 1978 and 1979 identified several showings of high grade stratiform Pb-Zn mineralization hosted within black carbonaceous and pyritic mudstone and siltstone outcropping along the banks of Fin Creek.

During 1980, additional soil geochemical sampling and six NQ diamond drill holes tested the Fin Zn-Pb mineralization. The area east of the Fin showings was sampled and mapped in 1981. In 1982 a UTEM geophysical survey and a soil geochemical survey was completed over the main showing area leading to a seven hole NQ diamond drilling program carried out in 1984. Recognizing the favorable basinal environment containing geochemically productive sub-basins in the Fin and surrounding area, Cominco Ltd commissioned Aerodat to fly a 1000 line km airborne EM/Mag survey in 1985 and completed a limited program of follow-up geological mapping; VLF surveying plus soil and rock geochemical sampling was undertaken.

Property work resumed in 1990 when 112 claims were added to cover favourable areas outlined in the airborne EM survey coincident with geochemical anomalies. During the 1990-91 period, Cominco Ltd cut a geophysical grid of 100 line km and surveyed it using UTEM geophysics and soil geochemical sampling. Geological mapping as well as HLEM and gravity were done on selected lines.

In 1992 seven diamond drill holes tested targets from the 1991 work and 186 new mineral claims were added. Additional geophysical surveying including UTEM, magnetometer and gravity was completed in 1993, extending coverage westward from the 1991 grid.

A follow-up gravity program was undertaken in 1995, producing a 1.5 mgal gravity anomaly. This anomaly was tested in 1996 by a one hole NQ diamond drill program, totaling 298.8 m.

Cominco did no more work on the Fin property after 1996 and eventually let the claims lapse. Core from the 1980-1996 diamond drilling programs is stored in racks and near the edge of the main valley bench above the discovery showing area along Fin Creek.

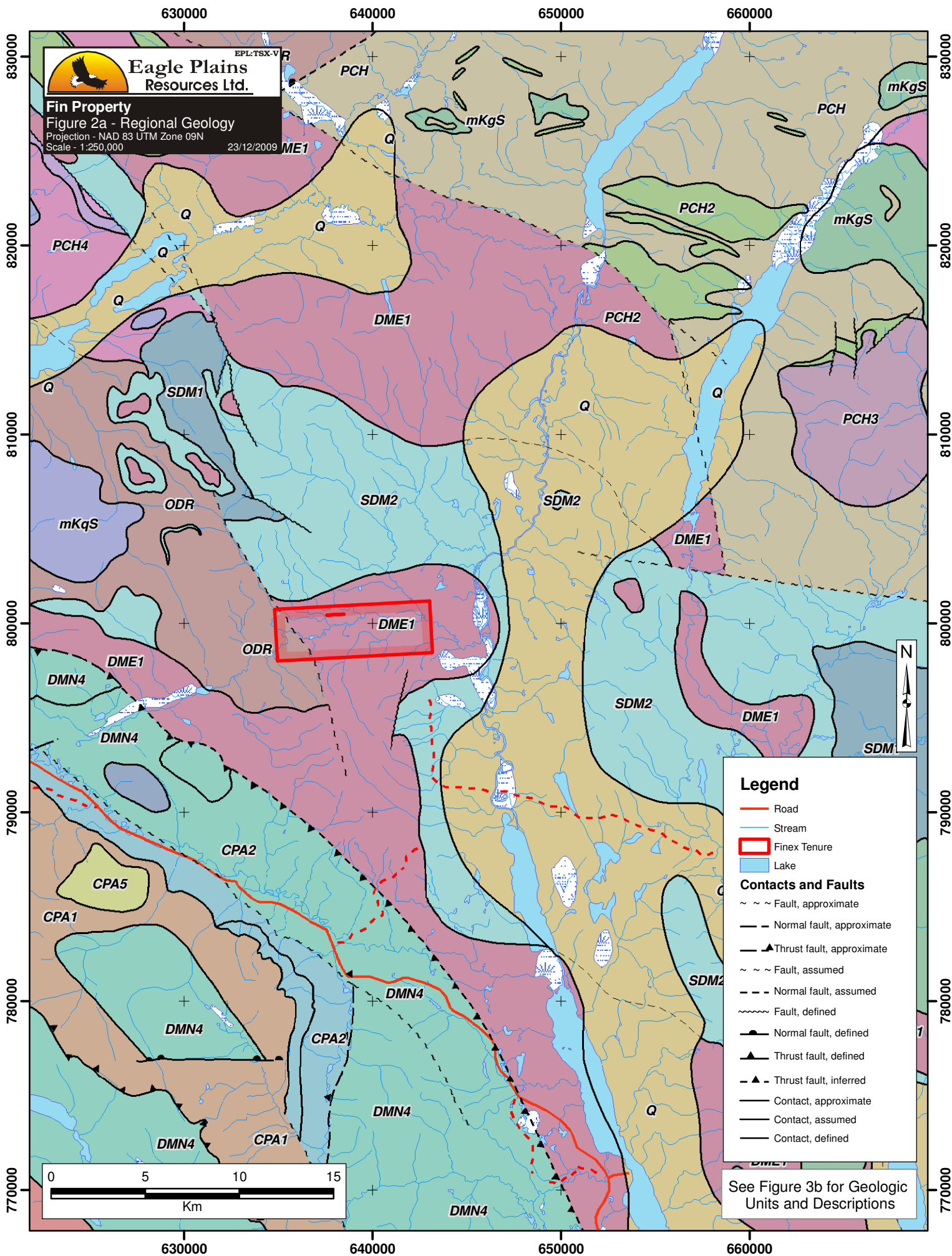
REGIONAL GEOLOGY

In the region of the Fin claims, the Selwyn basin narrows to approximately 40 km wide and forms a medial basin linking the Kechika Trough in the south to the main part of the Selwyn Basin in the north (Fig. 3a). In the vicinity of the Fin Claims the regional geology of the Selwyn basin is dominated by Cambrian to Devonian-Mississippian clastic sedimentary rocks. Older formations consisting of sandy dolomite and/or phyllite lie to the east of the claim group. Younger strata is absent either due to non-deposition or removal by erosion. To the east and north the Paleozoic basinal rocks are intruded by Cretaceous biotite-quartz monzonite, granodiorite and diorite. Several km to the west of the claim group the Inconnu thrust separates the Selwyn Basin rocks from the pericratonic Slide Mountain and Yukon-Tanana Terranes.

Regional mapping on the Frances Lake sheet (NTS 105H) by government geologists dates from 1953 to 1965 and was published by the Geological Survey of Canada in 1966 as the 1 inch to 4 mile GSC Map 6-1966 compiled from the combined fieldwork of: E.F. Roots (1953); L.H. Green and J. A. Roddick (1960); and S.M. Blusson (1962, 1965). The adjoining map sheet to the west, the Finlayson Lake map area (NTS 105G), was published in 1977 as GSC Open File 486 compiled at 1:250,000 scale based on GSC field work carried out from 1959 to 1976 by: J.O. Wheeler, (1958, 1959); L.H. Green and J.A. Roddick, (1959); G. Abbott, (1974, 1976); S.P. Gordey (1975, 1976); D.J. Tempelman-Kluit (1973-76). The regional tectonic setting of the Slide Mountain and Yukon-Tanana Terranes, hosting the Wolverine and Kudzu Ze Kayah Zn-Pb-Cu-Ag volcanogenic massive sulfide deposits, has undergone much study by numerous company, government and university geologists over the last 20 years. The publication by Peter et al (2007) covering the Finlayson Lake area is a good up-to-date reference for this district.

The current re-interpretation of the regional geology can be found on the Yukon Geological Survey website "Map Maker Online" maps.gov.yk.ca showing the historic geological units re-interpreted to conform with the current YGS regional geology map legend.

The Fin claims are underlain by two main sedimentary sequences dominated by grey to black clastic mudstone, siltstone and chert. Polymictic chert pebble conglomerate to grit, occasional felsic volcanic tuff and volcanoclastic rock units are interbedded with the siltstone-mudstone sequences. Most of the eastern and main portion of the Fin claims is underlain by Devonian-Mississippian Earn Group clastic sediments and the western third of the claims is underlain by older clastic sediments belonging to the Ordovician-Silurian Road River Group. Silurian to Devonian basinal to transitional carbonates beds, mainly dolomite and sandy dolomite, form a minor component in the regional sedimentary succession.



Geology Legend

Quaternary

-  Q *unconsolidated glacial, glacioluvial and glaciolacustrine deposits; fluvial silt, sand, and gravel, and local volcanic ash, in part with cover of soil and organic deposits*

Tertiary

-  ITR2 *rhyolite flows, tuffs, ash-flow tuffs and breccias, locally laminated; small stocks and necks of white weathering, flow-banded, quartz-sanidine porphyry to granite porphyry, locally obsidian bearing; local shale, sandstone and conglomerate*

Mesozoic

-  mKqS *equigranular to porphyritic (K-feldspar) biotite hornblende muscovite granite, quartz monzonite and granodiorite; porphyritic biotite hornblende granite with large smoky grey quartz phenocrysts and locally K-feldspar phenocrysts (Selwyn Suite)*
-  mKgS *resistant, blocky, fine to coarse grained equigranular to porphyritic (K-feldspar) biotite quartz monzonite and granodiorite and minor quartz diorite; minor leuco-quartz monzonite and syenite (Selwyn Suite)*
-  TrJ *brown to buff weathering, calcareous fine grained sandstone, argillite and shale; extensive ripple cross-lamination and bioturbation; massive, light grey weathering, fine crystalline, dark grey limestone; minor orange weathering platy limestone (Jones Lake)*

Paleozoic

-  CPA *dominantly oceanic assemblage of mafic volcanics (1), ultramafics (4), chert and pelite (2), limestone (3) and gabbroic rocks (5)*
-  CPA1 *variably altered and foliated, locally augite-phyric basalt (local pillows), diorite and gabbro, chloritic greenstone, amphibolitic greenstone and amphibolite; minor metachert, siliceous argillite or siltstone, greywacke, tuff, and siliceous limestone*
-  CPA2 *varicoloured metachert with partings or interbeds of phyllite and tuffaceous argillite; interbedded jasper red and apple green chert and cherty tuff; chert breccia; shale, minor greenstone, agglomerate, limestone, quartzite(?) and greywacke*
-  CPA5 *dominantly diorite, quartz diorite, and gabbro with lesser pyroxenite or other ultramafic rocks; variably altered and foliated; local dioritic orthogneiss*
-  DME1 *thin bedded, laminated slate with thin to thickly interbedded fine to medium grained chert-quartz arenite and wacke; thick members of chert pebble conglomerate; black siliceous siltstone; nodular and bedded barite; rare limestone (Earn Gp., Portrait Lake and Prevost)*
-  DMqPE *resistant, medium grey weathering, porphyritic (pink K-feldspar) biotite quartz monzonite; generally fresh to weakly saussuritized, locally shattered and recemented*
-  DMgPE *massive, resistant, medium grey weathering, blocky, dark green protomylonite and mylonite derived from hornblende granodiorite to quartz diorite; granitic gneiss*
-  DMN1 *dark grey to black, fine grained graphitic and non-graphitic quartzite, grey micaceous quartzite and quartz muscovite (chlorite; feldspar augen) schist, locally garnetiferous; minor graphitic stretched metaconglomerate and metagrit (Nasina assem.)*
-  DMN2 *marble (Nasina assem.)*
-  DMN3 *quartzite, micaceous quartzite, quartz muscovite (chlorite; feldspar augen) schist, and minor metaconglomerate and metagrit as in (1), but may locally include significant Nisling Assemblage*
-  DMN4 *quartzite, micaceous quartzite, quartz muscovite (chlorite; feldspar augen) schist, and minor metaconglomerate and metagrit as in (1), but may locally include significant Klondike Schist Assemblage*
-  DMPE *variably deformed granitic rocks of predominantly felsic (q) to intermediate composition (g) northeast of Tintina Fault (Simpson Range Suite)*
-  SDA1 *tan, medium grey and locally maroon weathering, light grey, thin bedded to platy dolomitic siltstone, dolomitic fine grained sandstone and minor silty dolomite (Askin Gp.)*
-  SDM1 *buff, brown and grey laminated, platy, calcareous or dolomitic siltstone, grey orthoquartzite, and minor black, argillaceous limestone; silty dolostone, dolostone*
-  SDM2 *medium grey, medium bedded to massive, laminated to sucrose, dolostone and sandy dolostone; dark grey, fetid, platy limestone; silvery white weathering, resistant, medium bedded, medium grained, mature orthoquartzite forms interbeds and thick members*
-  ODR *black shale and chert (1) overlain by orange siltstone (2) or buff platy limestone (3); locally contains beds as old as Middle Cambrian (4); correlations with basinal strata in Richardson Mountains include: ODR1 with CDR2 (upper part) and ODR2 with CDR4 (Road River Gp.)*
-  COR1 *thin bedded, wavy banded, silty limestone and grey lustrous calcareous phyllite; limestone intraclast breccia and conglomerate; massive to laminated, grey quartzose siltstone and chert and rare black slate; local mafic flows, breccia, and tuff (Rabbitkettle)*

Proterozoic

-  PPN3 *calcareous quartz psammite, marble, calcareous chlorite-biotite schist and calc-silicate; calcareous garnet-biotite-muscovite schist, rare amphibolite; biotite-quartz-muscovite schist and lesser quartz-feldspar-muscovite augen schist (assignment uncertain, could belong to DMN (Nasina))*
-  PPa3 *calcareous actinolite-plagioclase-chlorite-biotite schist, plagioclase-actinolite-chlorite schist, and lesser carbonaceous phyllite and quartzite; metamorphosed ultramafic rocks including dunite and pyroxenite, locally serpentinized*
-  PCH *consists upwards of coarse turbiditic clastics (1), limestone (2) and fine clastics typified by maroon and green shale (3); may include younger (4) units; includes scattered mafic volcanic rocks (5) (Hyland Gp.)*
-  PCH2 *grey weathering, dark grey to grey white, thin to thick bedded, very fine crystalline limestone, locally sandy; calc-silicate and marble; may locally include carbonate members within (1) or (4) (Hyland Gp., Algae Lake, limestone member of Yusezyu)*
-  PCH3 *distinctive, recessive, maroon weathering, interbedded maroon and apple-green slate; "Oldhamia" trace fossils; rare grey chert; locally basal member and interbeds of quartz siltstone, sandstone and quartz-pebble conglomerate (Hyland Gp., Narchilla, Senoah, Arrowhead Lake)*
-  PCH4 *quartzose clastic rocks as described in (1); mostly(?) equivalent to (1) but may include younger units (Hyland Gp., mostly?) Yusezyu)*

Property Geology

Outcrop exposure on the Fin claims is very poor and is found mainly in creek banks on some hilltops with little glacial till covering them. A Property Geology Map is provided in Figure 4. The mudstone and siltstones have a well developed penetrative cleavage, commonly cutting across bedding, and weather as small, thin platelets. Mudstone units are dark grey to black, sometimes very carbonaceous, usually pyritic, and almost always recessively weathering. A distinctive marker bed and macrofossils are absent in the basinal strata underlying the claims. This generates significant uncertainty when positioning individual outcrops in their proper stratigraphic context. The stratigraphy underlying the area of the original Fin claims and based mainly on the 1980 to 1984 diamond drilling was reported by Macrobbie (1992) and is considered to be the most accurate at the time of writing. Figure 5 shows the 1992 Macrobbie stratigraphic column.

The primary structural geology features on the property are faults and folds. Abrupt geological changes in bedded rock units, between creek cuts and drill holes, or between two drill holes, show the presence of normal faults having a 10-30 metre displacement. The siltstone-mudstone strata are commonly contorted into small amplitude open folds where exposed in the banks of Fin Creek.

Metamorphic grade is low, usually lower to sub-greenschist. Regional metamorphism has produced phyllites characterized by metamorphic minerals such as sericite. This is likely a thermal product related to the intrusion of the granitic to syenitic Cretaceous plutons in the region.

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**Eagle Plains
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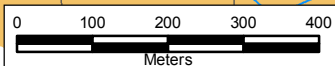
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Fin Property Figure 3 - Property Geology

Projection - NAD 83 UTM Zone 09N

Scale - 1:10,000

21/12/2009



6838000

6838000

6837000

6837000

Legend

X Geologic Stations

+ Minfile Location

+ Historic Showings

— Contour (20m)

— River

□ Tenure Boundary

□ Wetland

□ Waterbody

Contact

— Approximate

— Assumed

— Defined

— Facies

-.-.- Uncertain

Fault

~ ~ ~ Approximate

~ ~ ~ Assumed

~ ~ ~ Uncertain

Geologic Units

- 1 Arkosic Sandstone: (Renamed Felsic Volcanics) Light grey weathered, massive, grey sandstone.
- 2 Chert-Siltstone Member: Green, white, grey, black chert with associated siltstone. Locally contains wispy pyrite laminations, pyrite nodules, barite nodules or lenses and ferromagnesium dolomite nodules and lenses.
- 6 Siltstone-Sandstone Member: grey to rusty weathered, laminated to bedded, grey turbidites.
- 6a Siltstone-Mudstone-Sandstone Member: Similar to above but sandstone content is down and siltstone-mudstone content is up.
- 7 Lower Siltstone-Mudstone Member: Dark grey weathered, laminated to thin bedded, grey to black mudstone to siltstone/ Contains pyrite nodules locally.

- 7A Mudstone Member: Dark grey to black weathered, locally siliceous, carbonaceous, black mudstone. Contains abundant calcareous or mudstone concretions and laminated Pb-Zn Sulphides.
- 7B Upper Siltstone-Mudstone Member: Dark grey to black weathered, laminated to thin bedded, black siltstone to mudstone.
- 8 Cert Pebble Conglomerate Member: Light grey weathered, grey chert pebble conglomerate. White, grey and black subrounded to subangular chert pebbles supported by a silica cemented sandstone matrix. Minor grey sandstone.

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2009 EXPLORATION PROGRAM

Four field days were spent on the property, from the 5th to the 8th of July. The crew staged out of Finlayson Lake and a fly camp was set up at the historic core storage location. During the time on the property, geological and geochemical exploration was completed. Five soil sample lines were completed, for a total of ~5 km. These lines were infill and expansion on the historic soil grid on the property that identified quite a large Zn-Pb coincident anomaly. Geology work included geologic mapping to attempt to narrow down the lithologic contacts with the gps as well focus on the structural component on the property to attempt to identify any mineralization feeders.

Geology

The goal of the geological mapping to focus on understanding the structural geology of the basin and reconstructing the paleo-topography around the Fin showing. The objective of this work is to find a controlling structure that hydrothermal fluids followed and vented through onto the Devonian-Mississippian sea floor.

Unfortunately, geological work was severely limited as the outcrop exposure is very poor, located only on the river bank where they are highly eroded and weathered. Outcrops were mapped out and units described but no important mineralization controlling structures were discovered. The station locations and structure measurements can be found in Figure 3.

Geochemistry

The 2009 geological work demonstrated that anomalous sub-basins with zinc-lead mineralization are present on the Fin claims and that they have significant enrichments in background Zn-Pb values. The infill lines were successful in confirming the historic results as well as obtain infill detail between the historic. Results of the geochemical results can be found in Figure 5a-b. The same criteria for distinguishing anomalous and very anomalous sample was used for both the historic and new data. Anomalous lead values were 50-200 ppm and very anomalous anything over that. Anomalous zinc values were 250-500 and very anomalous anything over that.

Including the new data, the Pb anomaly present encompasses an area in excess of 800 m by 300 m. The historic anomaly was extended further west ~150 m and the infill line FXL005 was able to expand the projected higher anomalous area from 50 m to 100 m wide. The program confirmed the historical Pb results and proved that the XRF is an efficient and accurate tool for Pb analysis in soil on this property.

The total Zinc anomaly is quite a bit more extensive than the Pb one but again the new results confirmed the historical values and proved that the XRF is an efficient and accurate tool for Zn analysis in soil on this property. The anomalous zone was extended 100 to the west and line FXL005 was able to extend the higher anomalous zone to the north 30 m and the anomaly 50 m to the west on the southern side of the creek. Furthermore, line FXL004 was able to confirm anomalous values infilling between two historic anomalous soil lines with ~300 m spacing in between.



EPL:TSX-V

**Eagle Plains
Resources Ltd.**

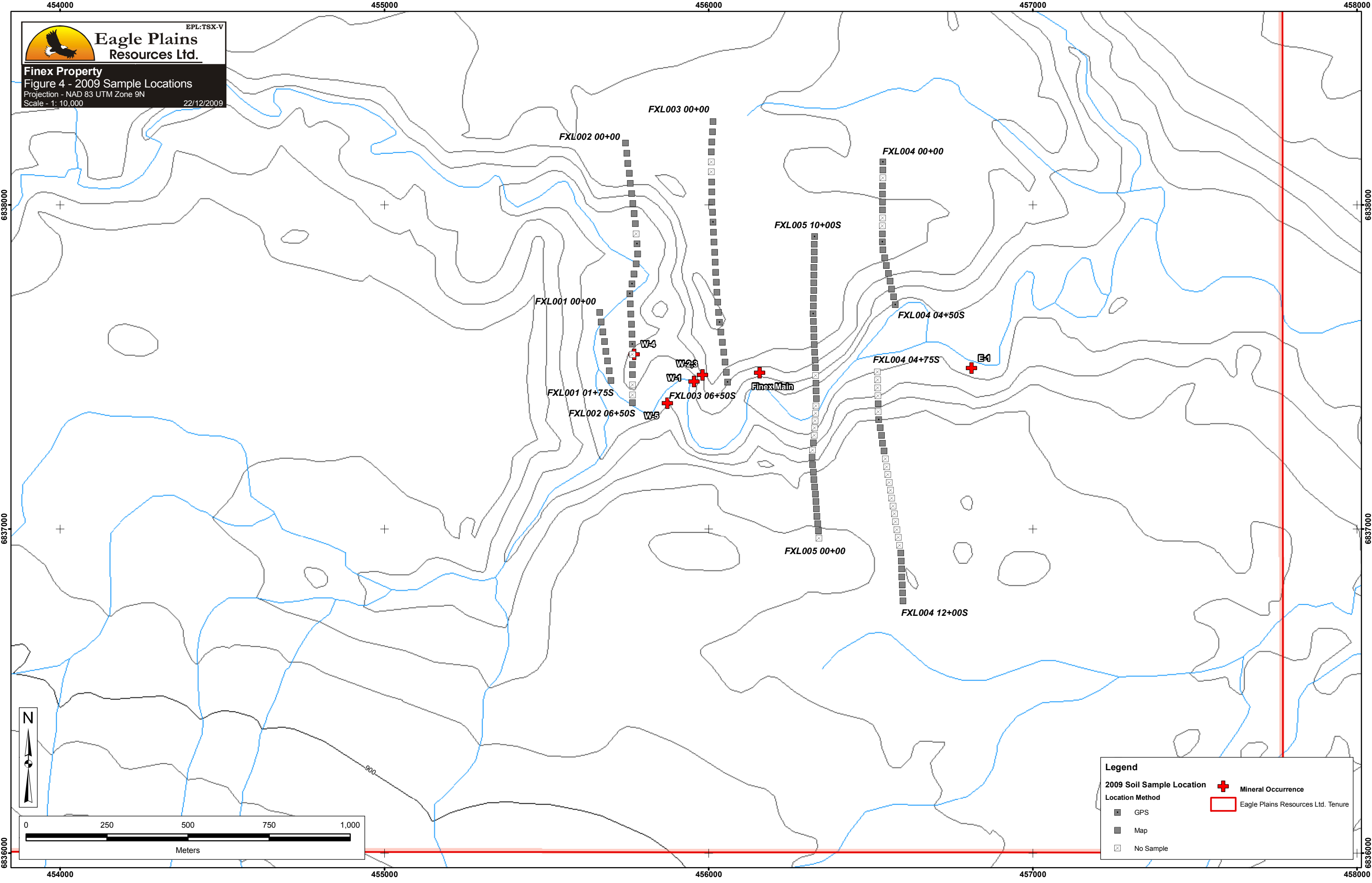
Finex Property

Figure 4 - 2009 Sample Locations

Projection - NAD 83 UTM Zone 9N

Scale - 1: 10,000

22/12/2009



Legend

2009 Soil Sample Location

Location Method

 GPS

 Map

 No Sample

 Mineral Occurrence

 Eagle Plains Resources Ltd. Tenure



EPL:TSX-V

Eagle Plains Resources Ltd.

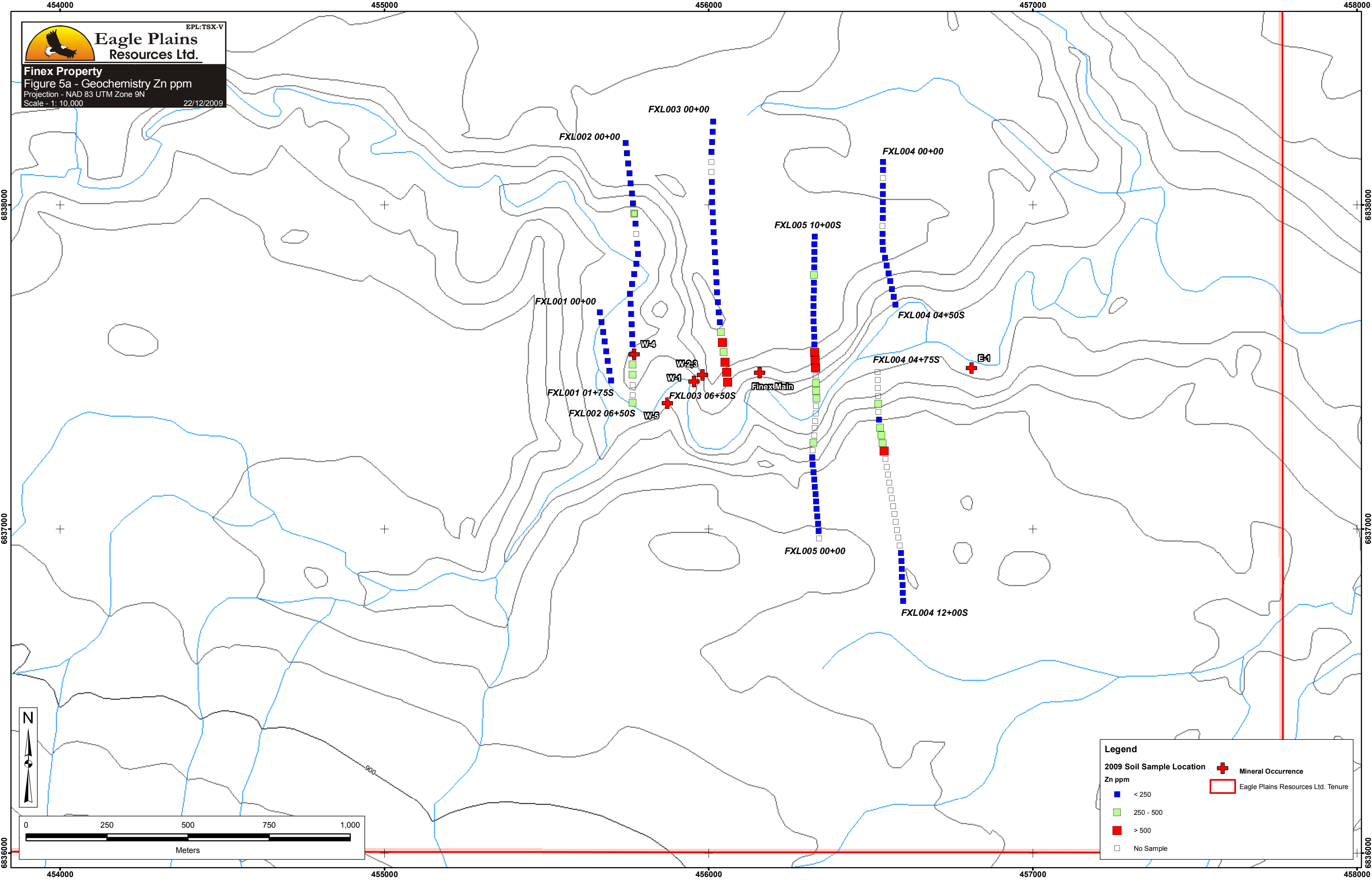
Finex Property

Figure 5a - Geochemistry Zn ppm

Projection - NAD 83 UTM Zone 9N

Scale - 1: 10,000

22/12/2009



Legend

2009 Soil Sample Location

Zn ppm

< 250

250 - 500

> 500

No Sample

Mineral Occurrence

Eagle Plains Resources Ltd. Tenure



**Eagle Plains
Resources Ltd.**

EPL:TSX-V

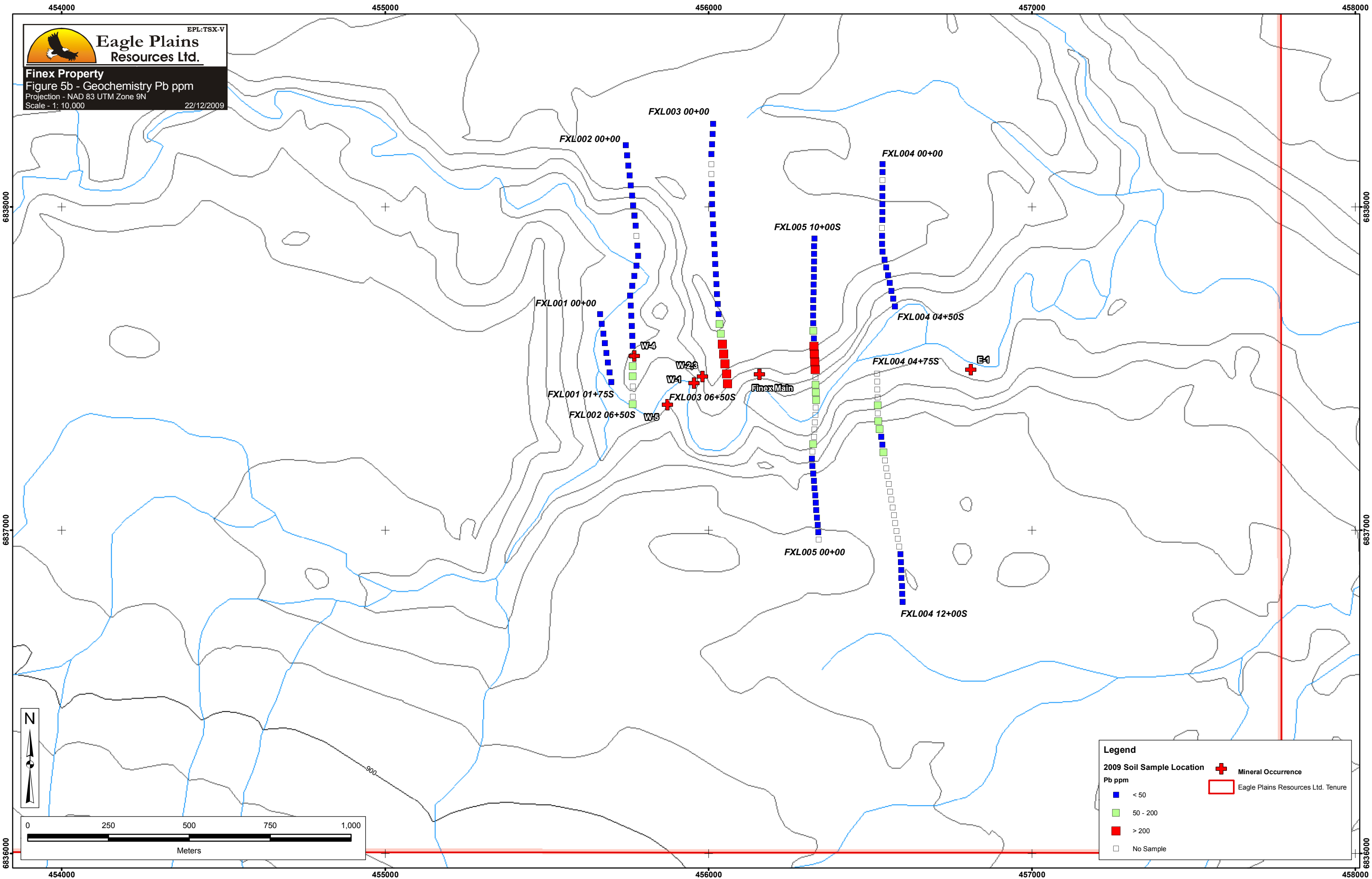
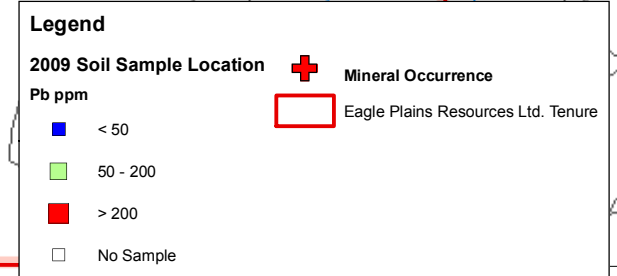
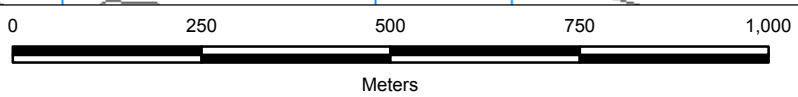
Finex Property

Figure 5b - Geochemistry Pb ppm

Projection - NAD 83 UTM Zone 9N

Scale - 1: 10,000

22/12/2009



CONCLUSIONS

The 2009 field work on the property consisted of infill soil sampling lines of the historic soil grid from 1979 as well as some limited geological mapping in the are of the historic mineral occurrences. The short program was completed from a fly camp located at the historic camp and drill core storage area. The program was able to expand and get more infill detail on the 1979 historic grid. The results also proved that the XRF is an efficient and accurate tool for soil geochemical analysis in a SEDEX deposit model. Bedrock exposure was extremely limited, which hindered the mapping efforts but structural measurements were taken in an attempt to better understand the basin topography.

The future exploration model must take into account the possibility of the syngenetic zinc-lead mineralization arising from two different genetic environments. The first model supports the production of sedimentary-exhalative fluids depositing Zn-Pb mineralization in carbonaceous sub-basins; this model is the one traditionally used in past exploration programs. The second model suggests volcanogenic-exhalative zinc-lead mineralization associated with felsic volcanism in arc settings. Vocanic-exhalative mineralization will have more irregular shapes giving different geophysical responses compared with those associated with more sheet-like SEDEX mineralization.

RECOMMENDATIONS

Office:

1. Compile all historical geological, geophysical and diamond drilling information into a GIS format.
2. Identify second and third order sub-basins based on historic outcrop mapping and drill intersections.
3. Identify felsic volcanic/volcaniclastic units and define their trend looking for the volcanic vent area.
4. Identify coarse clastic (grit and pebble conglomerate units) to indicate location of paleo-highs and fault scarps adjacent to sub-basins.
5. Re-interpret the structural geology of the area to confirm the existing stratigraphic sequence and trend of mineralized sub-basins.

Field

1. Re-interpret the geology of the property to account for the presence of proximal felsic volcanic crystal tuffs, exhalative chert-barite beds and Zn-Pb mineralized limy exhalite layers in the sub-basins.
2. Re-interpret the structural geology of the area to confirm the existing stratigraphic sequence and trend of mineralized sub-basins.
3. Carry out a program of compilation of existing data followed by the field collection of new structural geology measurments in order to re-interpret the folding and faulting history of the Fin sub-basin.

4. Use lithogeochemistry to identify anomalous intervals in carbonaceous sub-basin stratigraphy and in volcanic-exhalative cherty stratigraphy by using a Niton portable XRF field analyzer on the existing diamond drill core.
6. Continue the work of collecting new primary and infill soil geochemical sampling using lead, manganese and phosphorous anomalies to target future geophysical surveys and diamond drill holes.
7. Carry out ground geophysics to identify drill targets in anomalous geochemical areas and in areas containing untested airborne EM conductors defined in the 1985 Cominco regional survey.
8. Complete a differential GPS survey of all old diamond drill collars and key geological contacts to improve the accuracy of the orthorectified historical geology / geochemistry / geophysics / drilling map.
9. Diamond drill targets with attractive geological/structural features, known mineralization, anomalous lead geochemistry and geophysical responses.

REFERENCES

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- Schultze, H.C., 1996, Yukon Assessment Report Number 093527, Diamond drilling, Fin Property, Watson Lake mining District. December, 1996. Cominco Ltd., Western Canada Exploration, 17p.
- Sharp, R.J., 1984, Yukon Assessment Report Number 091595, Diamond drilling, Fin Property, Watson Lake mining District. December, 1984. Cominco Ltd., Western District Exploration, 124p.
- Sharp, R.J., 2007, Geological and Geochemical Report on the Fin Property, Watson Lake mining District.

Appendix I – Statement of Qualifications

AARON A. HIGGS, B. Sc.

I, Aaron Ashwell Higgs, B.Sc. do hereby certify that:

I am currently employed as a Senior Geologist by Bootleg Exploration Inc., with business location of Suite 200, 16-11th Ave S., Cranbrook, BC, V1C 2P1 (Telephone: 250-426-0749, email: aah@eagleplains.com)

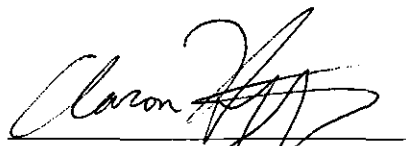
I graduated with a B.Sc. degree in Geology from the University of British Columbia in 2005.

I have worked as a Geologist in Western Canada for 4 years since my graduation from university.

I am responsible for the preparation of this report entitled "Geological and Geochemical Report for the Fin Property, December 23, 2009".

Dated at Cranbrook, British Columbia, Canada this 23rd day of December, 2009.

Respectfully submitted



Aaron A. Higgs, B.Sc. (Geol)

Appendix II – Statement of Expenditures

The following expenses were incurred on Fin claims for the purposes of mineral exploration between the dates of July 3 - July 9, 2009

geological personnel: Bootleg Exploration Inc.	no. of days	rate	
Aaron Higgs, Project Geologist	6.5	\$525.00	\$3,412.50
Bronwyn Wallace, Senior Geologist	6.5	\$475.00	\$3,087.50
Glen Hendrickson, GIS Technician	6.5	\$475.00	\$3,087.50
Nathan Taylor, Geological Technician	6.5	\$400.00	\$2,600.00
Lewis Jones, Geological Technician	6.5	\$375.00	\$2,437.50
			<u>\$14,625.00</u>

pre-field: includes cartography, digital data acquisition, field map generation, project planning \$2,262.50
Total Bootleg Personnel: \$16,887.50

aircraft charter:

helicopter: Kluane Airways crew and camp set out and pick up; includes fuel \$4,101.93

equipment rental and repair:	Time	Rate per item/per day	Total
Truck	\$6.50	\$100.00	\$650.00
Field Gear (packs, GPS, palm, vest, hammer, etc...)	32.50	\$35.00	\$1,137.50
Trailers	6.50	\$100.00	\$650.00
XRF - Niton	6.50	\$300.00	\$1,950.00
Satellite Internet	6.50	\$45.00	\$292.50
Sat Phone	13.00	\$15.00	\$195.00
Hand Held Radios	32.50	\$10.00	\$325.00
Chainsaw	6.50	\$10.00	\$65.00
Computer	13.00	\$10.00	\$130.00
Printer	6.50	\$10.00	\$65.00
Survival Kit	6.50	\$5.00	\$32.50
Small Generator	6.50	\$45.00	\$292.50
Large Generator	6.50	\$60.00	\$390.00
Field Fly Camp	6.5	\$150.00	\$975.00
			<u>\$6,500.00</u>

consultants/subcontractors: no. of days rate
Legacy GIS Solutions: XRF prep and anlysis 2.5 \$475.00 \$1,187.50

travel expenses : \$1,735.75

accommodation : \$342.00

fuel : trucks \$640.75

meals/groceries: \$202.35

field supply: includes sampling consumables (bags, flagging, tags...) \$135.56

miscellaneous: \$24.72

Bootleg Exploration Handling and Admin Fees on Disbursements \$1,188.77

report writing : (estimate including maps/reproduction, database work) \$2,000.00

TOTAL: \$34,946.83

STATEMENT OF EXPENDITURES

Geological Mapping and Geochemical sampling

Costs:

Wages:	\$ 10,012.50
Rental Equipment, camp expenses, travel, etc.	7,333.69
Helicopter Expenses	3,798.92
Estimated Report Writing Costs	<u>2,000.00</u>
	\$ 23,145.11

Detailed costs to follow in report being submitted.



Appendix III – Soil Sample Locations and Descriptions

Sample #	Date	Type	Purpose	Location Method	UTM East	UTM North	UTM Zone	GPS Accuracy (m)	Colour 1	Colour 2	Slope	Depth (cm)	Soil Horizon	Quality	Note 1	Note 2
FXL001 00+00	06/07/2009	SOIL	ANALYSIS	MAP	455664	6837668	09N	22	grey	dark	0 - 20	35	A	2	LINE_START	
FXL001 00+25S	06/07/2009	SOIL	ANALYSIS	MAP	455669	6837638	09N		grey	dark	0 - 20	25	A	2	ORGANIC	
FXL001 00+50S	06/07/2009	SOIL	ANALYSIS	MAP	455674	6837608	09N		grey	dark	0 - 20	45	A	2		
FXL001 00+75S	06/07/2009	SOIL	ANALYSIS	MAP	455679	6837578	09N									
FXL001 01+00S	06/07/2009	SOIL	ANALYSIS	MAP	455684	6837548	09N		grey	dark	0 - 20	45	A	2		
FXL001 01+25S	06/07/2009	SOIL	ANALYSIS	MAP	455689	6837518	09N		grey	dark	0 - 20	45	A	2		
FXL001 01+50S	06/07/2009	SOIL	ANALYSIS	MAP	455694	6837488	09N		grey	dark	0 - 20	45	A	2		
FXL001 01+75S	06/07/2009	SOIL	ANALYSIS	MAP	455699	6837458	09N	16	grey	dark	0 - 20	45	A	2		
FXL002 00+00	06/07/2009	SOIL	ANALYSIS	MAP	455744	6838190	09N	8	brown	light	0 - 20	25	B	4	LINE_START	
FXL002 00+25S	06/07/2009	SOIL	ANALYSIS	MAP	455747.8	6838159	09N		brown	light	0 - 20	25	B	3	ROCKY	
FXL002 00+50S	06/07/2009	SOIL	ANALYSIS	MAP	455751.6	6838127.9	09N		brown	light	0 - 20	25	B	3	ROCKY	
FXL002 00+75S	06/07/2009	SOIL	ANALYSIS	MAP	455755.5	6838096.9	09N		brown	light	0 - 20	25	B	4	ORGANIC	
FXL002 01+00S	06/07/2009	SOIL	ANALYSIS	MAP	455759.3	6838065.8	09N		brown	light	0 - 20	25	B	4	ORGANIC	ROCKY
FXL002 01+25S	06/07/2009	SOIL	ANALYSIS	MAP	455763.1	6838034.8	09N		brown	light	0 - 20	35	B	2	ORGANIC	
FXL002 01+50S	06/07/2009	SOIL	ANALYSIS	MAP	455766.9	6838003.7	09N		brown	light	0 - 20	35	B	3	ROCKY	
FXL002 01+75S	06/07/2009	SOIL	ANALYSIS	MAP	455770.7	6837972.7	09N		rusty	light	0 - 20	35	B	3	ROCKY	
FXL002 02+00S	06/07/2009	SOIL	ANALYSIS	MAP	455774.3	6837941.6	09N		brown	light	0 - 20	35	B	3	ROCKY	
FXL002 02+25S	06/07/2009	SOIL	ANALYSIS	NO SAMPLE	455776.8	6837910.4	09N		brown	light	0 - 20	35	B	3	PERMAFR OST	
FXL002 02+50S	06/07/2009	SOIL	ANALYSIS	GPS	455779.2	6837879.3	09N	32	dark	grey	0 - 20	35	B	2	PERMAFR OST	ASH
FXL002 02+75S	06/07/2009	SOIL	ANALYSIS	MAP	455781.7	6837848.1	09N		dark	grey	0 - 20	35	B	3	PERMAFR OST	ASH
FXL002 03+00S	06/07/2009	SOIL	ANALYSIS	MAP	455776.5	6837817.4	09N		dark	grey	0 - 20	35	B	3	PERMAFR OST	ASH
FXL002 03+25S	06/07/2009	SOIL	ANALYSIS	MAP	455770.1	6837786.8	09N		dark	grey	0 - 20	35	B	3	PERMAFR OST	ASH
FXL002 03+50S	06/07/2009	SOIL	ANALYSIS	GPS	455763.7	6837756.1	09N	8	dark	grey	0 - 20	5	A	1	ORGANIC	ASH
FXL002 03+75S	06/07/2009	SOIL	ANALYSIS	GPS	455757.3	6837725.5	09N	10	dark	grey	0 - 20	5	A	2	ORGANIC	ROCKY
FXL002 04+00S	06/07/2009	SOIL	ANALYSIS	MAP	455758.7	6837694.3	09N		dark	grey	0 - 20	25	B	3	ORGANIC	ASH
FXL002 04+25S	06/07/2009	SOIL	ANALYSIS	MAP	455760.5	6837663.1	09N		dark	grey	0 - 20	25	B	3	ORGANIC	ASH
FXL002 04+50S	06/07/2009	SOIL	ANALYSIS	MAP	455762.2	6837631.9	09N		dark	grey	0 - 20	25	B	3	ORGANIC	ASH
FXL002 04+75S	06/07/2009	SOIL	ANALYSIS	MAP	455764	6837600.6	09N		dark	grey	0 - 20	25	A	3	ORGANIC	ASH
FXL002 05+00S	06/07/2009	SOIL	ANALYSIS	GPS	455765.1	6837569.4	09N	13	dark	grey	0 - 20	25	A	3	ORGANIC	ASH
FXL002 05+25S	06/07/2009	SOIL	ANALYSIS	NO SAMPLE	455765.3	6837538.1	09N		dark	grey	0 - 20	25	A	3	TALUS	
FXL002 05+50S	06/07/2009	SOIL	ANALYSIS	MAP	455765.4	6837506.8	09N		light	grey	0 - 20	25	A	1	TALUS	
FXL002 05+75S	06/07/2009	SOIL	ANALYSIS	MAP	455765.6	6837475.6	09N		light	brown	0 - 20	5	A	1	TALUS	ORGANIC

Sample #	Date	Type	Purpose	Location Method	UTM East	UTM North	UTM Zone	GPS Accuracy (m)	Colour 1	Colour 2	Slope	Depth (cm)	Soil Horizon	Quality	Note 1	Note 2
FXL002 06+00S	06/07/2009	SOIL	ANALYSIS	NO SAMPLE	455765.8	6837444.3	09N		light	brown	0 - 20	5	A	1	TALUS	
FXL002 06+25S	06/07/2009	SOIL	ANALYSIS	MAP	455766	6837413	09N	10	light	grey	0 - 20	45	A	3	ORGANIC	LINE_END
FXL002 06+50S	06/07/2009	SOIL	ANALYSIS	MAP	455766	6837389	09N									
FXL003 00+00	06/07/2009	SOIL	ANALYSIS	MAP	456014	6838256	09N	6	dark	black	0 - 20	45	A	1	ORGANIC	LINE_START
FXL003 00+25S	06/07/2009	SOIL	ANALYSIS	MAP	456012.2	6838225.1	09N		brown	light	0 - 20	25	B	3	ROCKY	
FXL003 00+50S	06/07/2009	SOIL	ANALYSIS	MAP	456010.5	6838194.1	09N		brown	light	0 - 20	25	B	3	ROCKY	
FXL003 00+75S	06/07/2009	SOIL	ANALYSIS	MAP	456008.7	6838163.2	09N		brown	light	0 - 20	25	B	3	ORGANIC	
FXL003 01+00S	06/07/2009	SOIL	ANALYSIS	NO SAMPLE	456008.3	6838132.2	09N	8	grey	dark	0 - 20	45	A	2	PERMAFR OST	
FXL003 01+25S	06/07/2009	SOIL	ANALYSIS	NO SAMPLE	456008.9	6838101.2	09N		grey	dark	0 - 20	45	A	2	ASH	PERMAFR OST
FXL003 01+50S	06/07/2009	SOIL	ANALYSIS	MAP	456009.5	6838070.3	09N		light	brown	0 - 20	15	B	2	ROCKY	
FXL003 01+75S	06/07/2009	SOIL	ANALYSIS	MAP	456010.1	6838039.3	09N		light	brown	0 - 20	15	B	2	ROCKY	
FXL003 02+00S	06/07/2009	SOIL	ANALYSIS	MAP	456010.7	6838008.3	09N		light	brown	0 - 20	15	B	3	ROCKY	
FXL003 02+25S	06/07/2009	SOIL	ANALYSIS	MAP	456011.8	6837977.3	09N		light	grey	0 - 20	35	B	3	ROCKY	
FXL003 02+50S	06/07/2009	SOIL	ANALYSIS	GPS	456013.6	6837946.4	09N	11	light	brown	0 - 20	25	B	4	ROCKY	
FXL003 02+75S	06/07/2009	SOIL	ANALYSIS	MAP	456015.3	6837915.4	09N		light	brown	0 - 20	25	B	4	ROCKY	
FXL003 03+00S	06/07/2009	SOIL	ANALYSIS	MAP	456017.1	6837884.5	09N		light	brown	0 - 20	25	B	4	ROCKY	
FXL003 03+25S	06/07/2009	SOIL	ANALYSIS	MAP	456018.9	6837853.6	09N		grey	brown	0 - 20	25	B	3	ROCKY	
FXL003 03+50S	06/07/2009	SOIL	ANALYSIS	MAP	456020.7	6837822.6	09N		grey	NA	0 - 20	15	A	2	ROCKY	
FXL003 03+75S	06/07/2009	SOIL	ANALYSIS	MAP	456022.5	6837791.7	09N		grey	light	0 - 20	25	B	3		
FXL003 04+00S	06/07/2009	SOIL	ANALYSIS	MAP	456024.2	6837760.8	09N		brown	light	0 - 20	15	B	4	ROCKY	
FXL003 04+25S	06/07/2009	SOIL	ANALYSIS	MAP	456026	6837729.8	09N		brown	light	0 - 20	15	B	4	ROCKY	
FXL003 04+50S	06/07/2009	SOIL	ANALYSIS	MAP	456027.8	6837698.9	09N		brown	light	0 - 20	15	B	4	ROCKY	
FXL003 04+75S	06/07/2009	SOIL	ANALYSIS	MAP	456030.3	6837668	09N		brown	light	0 - 20	15	B	4	ROCKY	
FXL003 05+00S	06/07/2009	SOIL	ANALYSIS	GPS	456034.4	6837637.3	09N	7	brown	light	0 - 20	15	B	4	ROCKY	
FXL003 05+25S	06/07/2009	SOIL	ANALYSIS	MAP	456038.5	6837606.6	09N		brown	light	0 - 20	15	B	4	N/A	
FXL003 05+50S	06/07/2009	SOIL	ANALYSIS	MAP	456042.6	6837575.9	09N		brown	red	0 - 20	25	B	4	N/A	
FXL003 05+75S	06/07/2009	SOIL	ANALYSIS	MAP	456046.7	6837545.2	09N		brown	light	0 - 20	15	B	4	N/A	
FXL003 06+00S	06/07/2009	SOIL	ANALYSIS	MAP	456050.8	6837514.4	09N		brown	orange	0 - 20	25	B	4	N/A	
FXL003 06+25S	06/07/2009	SOIL	ANALYSIS	MAP	456054.9	6837483.7	09N		brown	orange	0 - 20	25	B	4	N/A	
FXL003 06+50S	06/07/2009	SOIL	ANALYSIS	GPS	456059	6837453	09N	20	red	orange	0 - 20	5	B	3	TALUS	LINE_END
FXL004 00+00	07/07/2009	SOIL	ANALYSIS	GPS	456538	6838132	09N	8	golden	brown	0 - 20	25	B	3	LINE_START	
FXL004 00+25S	07/07/2009	SOIL	ANALYSIS	MAP	456537.8	6838107.3	09N		golden	brown	0 - 20	25	B	3	LINE_START	

Sample #	Date	Type	Purpose	Location Method	UTM East	UTM North	UTM Zone	GPS Accuracy (m)	Colour 1	Colour 2	Slope	Depth (cm)	Soil Horizon	Quality	Note 1	Note 2
FXL004 00+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456537.6	6838082.6	09N		golden	brown	0 - 20	25	B	3		
FXL004 00+75S	07/07/2009	SOIL	ANALYSIS	MAP	456537.4	6838057.9	09N		golden	brown	0 - 20	25	B	3	ROCKY	
FXL004 01+00S	07/07/2009	SOIL	ANALYSIS	MAP	456537.2	6838033.2	09N		golden	brown	0 - 20	25	B	3	ROCKY	
FXL004 01+25S	07/07/2009	SOIL	ANALYSIS	MAP	456537.1	6838008.6	09N		light grey		0 - 20	15	A	3	ROCKY	
FXL004 01+50S	07/07/2009	SOIL	ANALYSIS	MAP	456536.9	6837983.9	09N		golden	brown	0 - 20	25	B	3	ORGANIC	
FXL004 01+75S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456536.7	6837959.2	09N		golden	brown	0 - 20	25	B	3	PERMAFR OST	
FXL004 02+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456536.5	6837934.5	09N		golden	brown	0 - 20	25	B	3	PERMAFR OST	
FXL004 02+25S	07/07/2009	SOIL	ANALYSIS	MAP	456536.3	6837909.8	09N		light grey		0 - 20	25	A	2	5M PAST	
FXL004 02+50S	07/07/2009	SOIL	ANALYSIS	GPS	456536.1	6837885.1	09N	7	light grey		0 - 20	25	A	2		
FXL004 02+75S	07/07/2009	SOIL	ANALYSIS	MAP	456538.3	6837860.7	09N		golden	brown	0 - 20	25	B	3		
FXL004 03+00S	07/07/2009	SOIL	ANALYSIS	MAP	456543.7	6837836.6	09N		golden	brown	0 - 20	25	B	3	ORGANIC	
FXL004 03+25S	07/07/2009	SOIL	ANALYSIS	MAP	456549.1	6837812.5	09N		golden	brown	0 - 20	25	B	2	ORGANIC	
FXL004 03+50S	07/07/2009	SOIL	ANALYSIS	MAP	456554.5	6837788.4	09N		grey	brown	0 - 20	25	B	3	ORGANIC	
FXL004 03+75S	07/07/2009	SOIL	ANALYSIS	MAP	456559.8	6837764.3	09N		yellow	brown	0 - 20	25	B	3	ORGANIC	
FXL004 04+00S	07/07/2009	SOIL	ANALYSIS	MAP	456565.2	6837740.2	09N		golden	brown	0 - 20	25	B	3	ORGANIC	ROCKY
FXL004 04+25S	07/07/2009	SOIL	ANALYSIS	MAP	456570.6	6837716.1	09N		light grey		0 - 20	45	A	3	ORGANIC	ASH
FXL004 04+50S	07/07/2009	SOIL	ANALYSIS	GPS	456576	6837692	09N	16	light grey		0 - 20	45	A	2	ORGANIC	ASH
FXL004 04+75S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456521	6837484	09N	5	light grey		0 - 20	45	A	2	CROSSED CREEK	
FXL004 05+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456521.5	6837459.5	09N		light grey		0 - 20	45	A	2	CROSSED CREEK	PERMAFR OST
FXL004 05+25S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456522.1	6837434.9	09N		light grey		0 - 20	45	A	2	TALUS	PERMAFR OST
FXL004 05+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456522.6	6837410.4	09N		light grey		0 - 20	45	A	2	TALUS	PERMAFR OST
FXL004 05+75S	07/07/2009	SOIL	ANALYSIS	MAP	456523.1	6837385.8	09N		light brown		0 - 20	15	A	2	ROCKY	TALUS
FXL004 06+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456523.7	6837361.3	09N		light brown		0 - 20	15	A	2	ROCKY	TALUS
FXL004 06+25S	07/07/2009	SOIL	ANALYSIS	GPS	456525.5	6837336.9	09N	12	light brown		0 - 20	15	B	3	ASH	ROCKY
FXL004 06+50S	07/07/2009	SOIL	ANALYSIS	MAP	456529.5	6837312.7	09N		grey	brown	0 - 20	15	A	2	ASH	ROCKY
FXL004 06+75S	07/07/2009	SOIL	ANALYSIS	MAP	456533.5	6837288.4	09N		light brown		0 - 20	45	B	3		ROCKY
FXL004 07+00S	07/07/2009	SOIL	ANALYSIS	MAP	456537.4	6837264.2	09N		golden	brown	0 - 20	25	B	4		ROCKY
FXL004 07+25S	07/07/2009	SOIL	ANALYSIS	MAP	456541.4	6837240	09N		grey	brown	0 - 20	25	A	2	ORGANIC	ROCKY
FXL004 07+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456545.4	6837215.8	09N		grey	brown	0 - 20	25	A	2	ORGANIC	ROCKY
FXL004 07+75S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456549.4	6837191.6	09N		grey	brown	0 - 20	25	A	2	PERMAFR OST	
FXL004 08+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456553.4	6837167.3	09N		grey	brown	0 - 20	25	A	2	PERMAFR OST	

Sample #	Date	Type	Purpose	Location Method	UTM East	UTM North	UTM Zone	GPS Accuracy (m)	Colour 1	Colour 2	Slope	Depth (cm)	Soil Horizon	Quality	Note 1	Note 2
FXL004 08+25S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456557.3	6837143.1	09N									
FXL004 08+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456561.3	6837118.9	09N									
FXL004 08+75S	07/07/2009	SOIL	ANALYSIS	MAP	456565.3	6837094.7	09N		black	brown	0 - 20	25	O	1	ORGANIC	
FXL004 09+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456569.3	6837070.4	09N		black	brown	0 - 20	25	O	1	ORGANIC	
FXL004 09+25S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456573.2	6837046.2	09N									
FXL004 09+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456577.2	6837022	09N									
FXL004 09+75S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456581.2	6836997.8	09N									
FXL004 10+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456585.2	6836973.6	09N									
FXL004 10+25S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456589.2	6836949.3	09N									
FXL004 10+50S	07/07/2009	SOIL	ANALYSIS	MAP	456593	6836925.1	09N	11	golden	brown	0 - 20	25	B	4	ROCKY	
FXL004 10+75S	07/07/2009	SOIL	ANALYSIS	MAP	456594.2	6836900.6	09N		golden	brown	0 - 20	25	B	5		
FXL004 11+00S	07/07/2009	SOIL	ANALYSIS	MAP	456595.4	6836876.1	09N		golden	brown	0 - 20	35	B	4	ROCKY	
FXL004 11+25S	07/07/2009	SOIL	ANALYSIS	MAP	456596.5	6836851.6	09N		grey	brown	0 - 20	25	B	3	ROCKY	
FXL004 11+50S	07/07/2009	SOIL	ANALYSIS	MAP	456597.7	6836827	09N		golden	brown	0 - 20	45	B	4		
FXL004 11+75S	07/07/2009	SOIL	ANALYSIS	MAP	456598.8	6836802.5	09N		golden	brown	0 - 20	45	B	4		
FXL004 12+00S	07/07/2009	SOIL	ANALYSIS	MAP	456600	6836778	09N	11	grey	brown	0 - 20	45	B	4	LINE_END	
FXL005 00+00	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456341	6836971	09N	11	red	orange	0 - 20	5	B	3	PERMAFR OST	LINE_STA RT
FXL005 00+25S	07/07/2009	SOIL	ANALYSIS	MAP	456339	6836993.7	09N		grey	dark	0 - 20	35	A	2	ORGANIC	
FXL005 00+50S	07/07/2009	SOIL	ANALYSIS	MAP	456337.1	6837016.4	09N		brown	golden	0 - 20	35	B	4		
FXL005 00+75S	07/07/2009	SOIL	ANALYSIS	MAP	456335.1	6837039	09N		brown	grey	0 - 20	35	B	2		
FXL005 01+00S	07/07/2009	SOIL	ANALYSIS	MAP	456333.1	6837061.7	09N		brown	golden	0 - 20	35	B	3	ROCKY	
FXL005 01+25S	07/07/2009	SOIL	ANALYSIS	MAP	456331.2	6837084.4	09N		brown	golden	0 - 20	35	B	4		
FXL005 01+50S	07/07/2009	SOIL	ANALYSIS	MAP	456329.2	6837107.1	09N		brown	grey	0 - 20	35	B	3	ROCKY	
FXL005 01+75S	07/07/2009	SOIL	ANALYSIS	MAP	456327.2	6837129.8	09N		brown	golden	0 - 20	35	B	4		
FXL005 02+00S	07/07/2009	SOIL	ANALYSIS	MAP	456325.3	6837152.4	09N		brown	golden	0 - 20	35	B	4		
FXL005 02+25S	07/07/2009	SOIL	ANALYSIS	MAP	456323.3	6837175.1	09N		brown	NA	0 - 20	35	B	5		
FXL005 02+50S	07/07/2009	SOIL	ANALYSIS	MAP	456321.4	6837197.8	09N	11	brown	NA	0 - 20	35	A	2	ROCKY	TALUS

Sample #	Date	Type	Purpose	Location Method	UTM East	UTM North	UTM Zone	GPS Accuracy (m)	Colour 1	Colour 2	Slope	Depth (cm)	Soil Horizon	Quality	Note 1	Note 2
FXL005 02+75S	07/07/2009	SOIL	ANALYSIS	MAP	456319.4	6837220.5	09N		grey	NA	0 - 20	35	B	2	ROCKY	TALUS
FXL005 03+00S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456321	6837243.1	09N		grey	NA	0 - 20	35	B	2	PERMAFR OST	
FXL005 03+25S	07/07/2009	SOIL	ANALYSIS	MAP	456323.4	6837265.8	09N		golden	brown	0 - 20	35	B	3	ROCKY	
FXL005 03+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456325.8	6837288.4	09N		golden	brown	0 - 20	35	B	3	ROCKY	TALUS
FXL005 03+75S	07/07/2009	SOIL	ANALYSIS	MAP	456327.3	6837311.1	09N									
FXL005 04+00S	07/07/2009	SOIL	ANALYSIS	MAP	456328.7	6837333.8	09N									
FXL005 04+25S	07/07/2009	SOIL	ANALYSIS	MAP	456330.2	6837356.6	09N									
FXL005 04+50S	07/07/2009	SOIL	ANALYSIS	MAP	456331.6	6837379.3	09N									
FXL005 04+75S	07/07/2009	SOIL	ANALYSIS	MAP	456333	6837402	09N	11	grey	NA	0 - 20	5	A	2	ROCKY	
FXL005 05+00S	07/07/2009	SOIL	ANALYSIS	MAP	456332.1	6837425.8	09N		grey	NA	0 - 20	5	A	2	ROCKY	
FXL005 05+25S	07/07/2009	SOIL	ANALYSIS	MAP	456331.1	6837449.6	09N		grey	NA	0 - 20	5	A	2	ROCKY	CROSSED _CREEK
FXL005 05+50S	07/07/2009	SOIL	ANALYSIS	NO SAMPLE	456330.2	6837473.4	09N		grey	NA	0 - 20	5	A	2	ROCKY	TALUS
FXL005 05+75S	07/07/2009	SOIL	ANALYSIS	MAP	456329.3	6837497.2	09N		rusty	brown	0 - 20	25	A	2	ROCKY	ORGANIC
FXL005 06+00S	07/07/2009	SOIL	ANALYSIS	MAP	456328.4	6837521	09N		rusty	brown	0 - 20	25	A	2	ROCKY	ORGANIC
FXL005 06+25S	07/07/2009	SOIL	ANALYSIS	MAP	456327.4	6837544.8	09N		dark	brown	0 - 20	25	B	3	ORGANIC	
FXL005 06+50S	07/07/2009	SOIL	ANALYSIS	MAP	456326.5	6837568.6	09N		dark	black	0 - 20	25	A	2	ORGANIC	
FXL005 06+75S	07/07/2009	SOIL	ANALYSIS	MAP	456325.6	6837592.4	09N		dark	black	0 - 20	25	A	2	ORGANIC	
FXL005 07+00S	07/07/2009	SOIL	ANALYSIS	MAP	456324.7	6837616.2	09N		golden	brown	0 - 20	25	B	3	ROCKY	
FXL005 07+25S	07/07/2009	SOIL	ANALYSIS	MAP	456323.7	6837640	09N		light	brown	0 - 20	35	B	3	ROCKY	
FXL005 07+50S	07/07/2009	SOIL	ANALYSIS	GPS	456323.1	6837663.8	09N	10	light	brown	0 - 20	35	B	3	ROCKY	
FXL005 07+75S	07/07/2009	SOIL	ANALYSIS	MAP	456323.5	6837687.6	09N		light	brown	0 - 20	35	B	4		
FXL005 08+00S	07/07/2009	SOIL	ANALYSIS	MAP	456323.9	6837711.5	09N		dark	grey	0 - 20	35	B	3	ORGANIC	
FXL005 08+25S	07/07/2009	SOIL	ANALYSIS	MAP	456324.3	6837735.3	09N		dark	grey	0 - 20	35	B	3	ORGANIC	
FXL005 08+50S	07/07/2009	SOIL	ANALYSIS	MAP	456324.6	6837759.1	09N		dark	grey	0 - 20	35	B	1	ORGANIC	ROCKY
FXL005 08+75S	07/07/2009	SOIL	ANALYSIS	MAP	456325	6837782.9	09N		golden	brown	0 - 20	35	B	5		
FXL005 09+00S	07/07/2009	SOIL	ANALYSIS	MAP	456325.4	6837806.7	09N		light	brown	0 - 20	35	B	4		
FXL005 09+25S	07/07/2009	SOIL	ANALYSIS	MAP	456325.8	6837830.5	09N		grey	brown	0 - 20	45	A	2	ORGANIC	
FXL005 09+50S	07/07/2009	SOIL	ANALYSIS	MAP	456326.2	6837854.4	09N		grey	brown	0 - 20	15	B	4		
FXL005 09+75S	07/07/2009	SOIL	ANALYSIS	MAP	456326.6	6837878.2	09N		golden	brown	0 - 20	15	B	4		
FXL005 10+00S	07/07/2009	SOIL	ANALYSIS	GPS	456327	6837902	09N	7	rusty	brown	0 - 20	25	B	4	LINE_END	

Appendix IV – Geochemical Protocol and XRF Procedure and Results

4.1 Field Sampling Techniques

4.2 XRF Techniques

4.3 XRF Geochemical Results

4.1 Geochemical Sampling Techniques

All surface geochemical samples were collected by company geologists or sampling technician employees trained by Bootleg staff geologists and under the supervision of Aaron Higgs.

Soil samples were collected from the B-horizon wherever possible and placed and sealed into brown paper kraft bags. Samples were dried in the field daily, weather permitting. Relevant details pertaining to the soil samples such as location parameters, depth, horizon, quality, were recorded in the palm and notebook by the sampler in the field.

Sample sites were marked in the field with orange or pink arctic-grade flagging and an aluminum tag, both having been marked with the appropriate sample number. Sample locations were determined by hand-held GPS set to report locations in UTM coordinates using the North American datum established in 1983 (NAD 83).

4.2 – XRF Techniques

Sample Preparation

The soil samples collected at the Finex property were first completely dried while in the original soil bags. The samples were then sieved to a less than 250µm size; a minimum of 1 teaspoon of this fine fraction was placed in a labeled thin plastic bag (e.g. Ziplock bag).

XRF Analysis

Samples were analyzed using an Niton handheld x-ray fluorescence (XRF) analyzer. The ziplock bags were shaken to compact the sample in a bottom corner of the bag and this was then positioned under the XRF analyzer window. Samples were analyzed for a total of 90 seconds using 2 filters for 45 seconds each. Results were downloaded to the Bootleg database at the end of each day and quality assurance and quality control procedures were conducted.

Quality Control Quality Assurance

The integrity of the XRF analyzer was tested daily by verifying calibration of the analyzer, analyses of blank samples and standards. As an internal QAQC function, the analyser will not function if the calibration of the fails. Blanks and standards are compared to assure they are within the accepted range of values provided by the standard supplier. Duplicate samples were analyzed approximately every 25 samples and results were compared with originals.

Sample #	Analysis Duration (s)	Mo_p pm	Mo_ER ROR	Cu_pp m	Cu_ER ROR	Pb_pp m	Pb_ER ROR	Zn_pp m	Zn_ERR OR	Co_pp m	Co_ERR OR	Mn_p pm	Mn_ER ROR	Fe_Per c	Fe_ER ROR	As_pp m	As_ER ROR	Th_pp m	Th_ER ROR	Sr_pp m	Sr_ER ROR	V_ppm	V_ERR OR	Ca_Pe rc	Ca_ER ROR	Cr_pp m	Cr_ER ROR	Ti_Per c	Ti_ERR OR	K_Per c	K_ERR OR
FXL001 00+00	90	0	8.43	42.71	25.25	17.01	9.51	158	24.63	0	190.19	265	92.76	2.0366	0.0454	12.43	8.06	21.17	8.15	66	6.2	193	76.1	0.876	0.0367	0	38.66	0.314	0.0227	1.751	0.07049
FXL001 00+25S	90	0	8.05	0	31.95	20.13	9.8	133	22.58	0	186.47	351	98.82	2.0385	0.0448	13.19	8.25	0	10.4	68	6.18	148	71.9	1.031	0.0392	43.1	25.88	0.311	0.0218	1.665	0.06898
FXL001 00+50S	90	0	7.87	0	33.72	15.08	8.98	117	21.47	0	172.64	264	88.58	1.6735	0.0405	14.14	7.84	0	9.96	60	5.83	166	69.38	0.948	0.0371	0	36.07	0.259	0.0206	1.59	0.06631
FXL001 00+75S	90	0	7.83	53.13	26.12	19.15	9.63	132	22.81	0	186.91	372	101.94	1.9314	0.0444	0	11.93	12.83	7.3	71	6.4	120	69.3	1.261	0.0423	45.72	25.42	0.272	0.021	1.622	0.06774
FXL001 01+00S	90	0	7.93	0	36.59	27.11	10.32	145	23.66	0	183.12	353	98.34	1.9628	0.0442	0	12.58	0	10.61	69	6.25	190	71	0.98	0.038	0	37.21	0.293	0.0211	1.514	0.06562
FXL001 01+25S	90	0	7.88	0	28.92	30.17	10.5	174	25.21	0	186.59	248	89.39	1.9455	0.0438	0	12.67	0	10.27	58	5.76	206	71.45	0.369	0.0262	0	37.82	0.308	0.0212	1.567	0.06629
FXL001 01+50S	90	0	7.83	37.58	24.02	31.81	10.53	216	27.51	0	174.7	345	95.58	1.7602	0.0413	0	13.12	11.78	7.1	60	5.8	225	72.04	0.912	0.0366	0	38.32	0.264	0.0209	1.512	0.06505
FXL001 01+75S	90	0	8.15	44.01	25.76	18.98	9.58	123	22.73	0	195.81	368	102.5	1.9551	0.045	0	11.64	11.16	7.29	68	6.33	143	72.28	0.796	0.0352	0	36.05	0.309	0.0219	1.94	0.07323
FXL002 00+00	90	0	7.92	0	35.4	18.77	9.48	66	17.91	0	165.77	175	78.96	1.4625	0.038	0	11.42	11.22	7.01	213	10.39	108	60.5	0.418	0.0265	0	34.9	0.244	0.0184	1.495	0.06343
FXL002 00+25S	90	0	7.7	0	32.59	17.64	8.86	61	16.42	0	149.04	0	100.59	1.2319	0.0338	0	9.44	0	8.95	65	5.84	0	93.97	0.209	0.021	0	34.58	0.279	0.0197	1.309	0.05923
FXL002 00+50S	90	0	8.04	0	34.7	15.2	8.97	112	21.32	0	186.49	0	114.59	1.9589	0.0443	0	11.26	0	10.21	116	7.9	153	65.7	0.278	0.0234	0	35.66	0.264	0.0196	1.335	0.06118
FXL002 00+75S	90	0	7.64	0	32.3	29.79	10.14	160	23.71	0	165.27	147	76.19	1.5995	0.0388	0	11.98	10.38	6.84	67	6.01	139	68.82	0.178	0.0206	0	36.51	0.301	0.0209	1.384	0.06172
FXL002 01+00S	90	0	7.81	0	35.73	21.41	10.03	210	27.84	0	193.88	0	116.91	2.0287	0.0454	14.74	8.57	15.47	7.65	91	7.11	128	70.21	0.249	0.0232	52.3	25.72	0.327	0.0216	1.562	0.06612
FXL002 01+25S	90	0	7.79	39.87	24.38	27.71	10.39	196	26.72	183.2	113.44	217	84.21	1.5054	0.0386	0	12.2	0	9.44	372	13.6	0	88.3	1.007	0.0378	0	34.7	0.225	0.0183	1.639	0.06674
FXL002 01+50S	90	0	7.73	0	33.31	15.79	8.97	178	25.27	0	174.33	130	75.9	1.7553	0.0409	0	10.62	14.94	7.27	74	6.31	127	69.24	0.252	0.023	43.09	25.44	0.291	0.021	1.441	0.06347
FXL002 01+75S	90	0	7.72	0	34.18	20.66	9.55	168	24.34	0	175.74	129	77.31	1.821	0.0419	0	10.85	0	9.48	76	6.39	128	68.73	0.239	0.0226	48.75	25.54	0.303	0.021	1.403	0.06273
FXL002 01+75S	90	0	7.72	39.09	25.28	35.71	11.36	369	36.01	0	183.64	391	102.51	1.7948	0.043	0	13.95	0	10.81	157	9.19	137	66.71	0.543	0.0293	41.9	24.42	0.25	0.0199	1.422	0.06261
FXL002 02+00S	90	0	7.97	0	35.22	34.47	11.01	206	27.97	0	211.51	0	119.86	2.3493	0.049	0	13.06	13.53	7.63	52	5.62	118	71.44	0.108	0.0193	40.03	26.19	0.308	0.0218	1.465	0.06515
FXL002 02+50S	90	0	7.95	0	35.18	14	8.98	121	21.77	0	176.14	186	82.82	1.8624	0.043	14.36	7.86	13.11	7.2	61	5.93	167	71.7	0.517	0.0292	43.67	25.34	0.301	0.0215	1.548	0.06554
FXL002 02+75S	90	0	7.94	0	36.36	24.87	10.11	176	25.56	0	177.64	176	83.3	1.8721	0.0431	0	12.77	13.33	7.31	68	6.19	154	72.71	0.542	0.0299	43.74	25.62	0.278	0.0217	1.597	0.06665
FXL002 03+00S	90	0	7.72	46.03	24.56	25.68	9.99	152	23.97	0	181.71	263	89.47	1.8597	0.0425	0	11.84	12.61	7.21	51	5.44	183	71.87	0.373	0.0268	0	37.03	0.301	0.0214	1.796	0.07076
FXL002 03+25S	90	0	8.15	47.37	25.36	23.58	9.82	145	23.88	0	196.8	359	99.8	2.1139	0.046	26.23	9.34	0	8.96	58	5.78	180	75.4	0.279	0.0241	56.94	27.01	0.317	0.0225	1.472	0.06496
FXL002 03+50S	90	9.28	5.4	0	33.28	20.24	9.63	154	23.96	0	196.49	370	100.03	2.1367	0.0459	15.57	8.37	21.5	8.09	58	5.76	131	72.33	0.793	0.0351	51.6	26.39	0.298	0.0219	1.603	0.06779
FXL002 03+75S	90	0	8.11	41.56	25.28	20	9.94	166	25.21	0	200.98	341	100.77	2.1641	0.0469	0	12.12	15.77	7.69	69	6.33	125	74.51	0.994	0.0389	50.57	26.52	0.332	0.0228	1.825	0.07226
FXL002 04+00S	90	0	7.6	0	31.59	22.39	9.6	110	21	0	176.68	264	89.44	1.7846	0.0418	0	11.71	10.76	6.99	59	5.78	154	68.39	0.93	0.0371	0	36.48	0.276	0.0205	1.679	0.06848
FXL002 04+25S	90	0	8.04	39.44	24.62	24.99	10.07	133	22.91	203.92	129.21	205	88.4	1.9555	0.0443	0	12.78	14.29	7.51	59	5.87	242	73.66	0.817	0.0355	0	38.65	0.328	0.0217	1.738	0.07004
FXL002 04+50S	90	0	7.82	0	36.07	25.38	10.23	131	22.71	0	191.26	333	98.07	2.0857	0.0456	0	12.63	15.7	7.64	53	5.61	138	73.98	0.45	0.0288	0	38.46	0.33	0.0226	1.813	0.07164
FXL002 04+75S	90	0	7.89	46.47	24.51	19.32	9.22	194	25.97	0	164.78	257	85.92	1.5739	0.0387	0	11.03	0	9.39	71	6.19	230	70.69	0.955	0.0371	49.6	25.48	0.284	0.0207	1.559	0.06565
FXL002 05+00S	90	8.72	5.26	0	33.49	30.85	10.5	169	24.58	0	174.46	503	105.72	1.7815	0.0413	0	12.67	0	10.17	68	6.05	171	70.67	0.851	0.0356	0	37.8	0.294	0.0211	1.496	0.06488
FXL002 05+50S	90	0	7.99	68.1	27.12	60.57	13.4	308	32.82	0	199.02	0	117.63	2.1738	0.0469	0	16.12	0	11.63	32	4.61	287	88.17	0.098	0.0208	0	41.36	0.364	0.0257	2.299	0.0801
FXL002 05+75S	90	0	8.28	45.63	27.35	77.93	15.6	368	37.47	0	254.53	220	100.13	3.2125	0.0596	24.52	13.09	20.87	9.21	132	8.83	235	82.21	0.265	0.0252	0	41.99	0.327	0.0241	1.807	0.0735
FXL002 06+50S	90	9.66	5.63	82.12	30.02	90.09	16.3	353	36.27	0	252.99	330	107.03	3.2758	0.0599	23.37	13.54	0	12.56	142	9.08	212	80.06	0.276	0.0253	51.69	28.38	0.308	0.0235	1.743	0.07236
FXL003 00+00	90	24.45	6.48	80.81	35.1	0	15.1	134	27.44	0	166.35	957	158.18	1.1989	0.0405	0	12.29	0	10.36	356	15.58	0	72.8	4.923	0.0771	0	32.73	0.068	0.0144	0.785	0.04968
FXL003 00+25S	90	0	7.7	0	31.72	19.02	9.29	108	20.73	0	176.26	121	75.03	1.9027	0.0427	0	10.7	0	9.24	71	6.19	100	62.15	0.25	0.0223	0	35.99	0.247	0.0189	1.181	0.05776
FXL003 00+50S	90	0	7.5	0	30.38	0	11.99	61	16.58	0	141.23	0	98.28	1.1987	0.0332	0	9.37	0	9.09	98	6.98	0	87.36	0.214	0.0205	0	32.66	0.22	0.0177	1.1	0.05435
FXL003 00+75S	90	0	7.32	38.39	22.58	0	11.44	71	16.97	0	157.09	0	103.23	1.4886	0.0367	0	9.75	11.48	6.45	86	6.52	0	95.31	0.337	0.0241	0	35.62	0.236	0.0194	1.027	0.05358
FXL003 01+50S	90	0	7.72	52.95	24.87	0	12.9	102	20.04	0	164.3	0	104.81	1.5882	0.039	0	10.23	0	10.13	86	6.75	0	100.6	0.189	0.0214	0	35.33	0.31	0.0209	1.619	0.06627
FXL003 01+75S	90	0	7.87	0	34.25	30.98	10.66	140	23.34	0	194.65	132	79.41	2.124	0.0463	0	12.18	0	10.32	59	5.88	0	100.52	0.133	0.0197	0	37.53	0.296	0.0207	1.445	0.06384
FXL003 02+00S	90	0	7.7	0	34.21	19.41	9.47	119	21.63	0	175.67	0	108.01	1.629	0.0401	0	11.67	11.42	7.14	79	6.61	114	68.49	0.183	0.0209	0	35.14	0.312	0.0211	1.484	0.06362
FXL003 02+25S	90	0	7.42	0	33.1	0	12.25	67	16.7	0	145.3	0	97.12	1.2767	0.0343	0	9.25	13.53	6.93	34	4.51	110	68.14	0.093	0.018	0	35.09	0.32			

Sample #	Analysis Duration (s)	Mo_p pm	Mo_ER ROR	Cu_pp m	Cu_ER ROR	Pb_pp m	Pb_ER ROR	Zn_pp m	Zn_ERR OR	Co_pp m	Co_ERR OR	Mn_p pm	Mn_ER ROR	Fe_Per c	Fe_ER ROR	As_pp m	As_ER ROR	Th_pp m	Th_ER ROR	Sr_pp m	Sr_ER ROR	V_ppm	V_ERR OR	Ca_Pe rc	Ca_ER ROR	Cr_pp m	Cr_ER ROR	Ti_Per c	Ti_ERR OR	K_Per c	K_ERR OR
FXL004 02+25S	90	0	7.63	0	30.79	0	11.99	41	14.75	0	106.8	0	88.73	0.6959	0.0253	0	9.24	18.04	7.33	54	5.36	129	65.34	0.122	0.0182	56.55	23.35	0.337	0.0203	1.452	0.06059
FXL004 02+50S	90	0	7.5	0	30	0	11.06	55	15.51	0	109.57	0	89.49	0.7475	0.0256	0	9.12	15.84	6.95	55	5.29	103	65.73	0.106	0.0182	40.32	23.2	0.349	0.0207	1.555	0.06296
FXL004 02+75S	90	0	7.8	0	31.18	22.95	9.46	106	20.17	0	140.13	0	91.56	1.114	0.0324	0	10.87	0	8.86	85	6.62	132	65.7	0.166	0.0194	0	34.15	0.333	0.0203	1.254	0.05757
FXL004 03+00S	90	0	7.42	0	32.01	17.48	8.96	90	18.55	0	137.59	0	97.27	1.1778	0.0328	0	10.24	10.89	6.67	91	6.74	153	65.71	0.21	0.0209	0	35.28	0.3	0.0199	1.306	0.05893
FXL004 03+25S	90	0	7.73	0	30.92	33.05	10.44	126	22	0	144.81	131	73.24	1.1373	0.033	0	11.84	0	8.64	184	9.55	0	89.22	0.573	0.0292	35.5	22.59	0.261	0.0186	1.383	0.0604
FXL004 03+50S	90	0	7.8	0	34.98	0	12.88	128	22.11	0	157.95	185	80.29	1.4695	0.0379	0	10.39	0	9.62	127	8.1	127	63.22	0.488	0.028	0	35.64	0.24	0.019	1.419	0.06201
FXL004 03+75S	90	0	7.63	0	34.19	17.07	9.12	90	19.49	0	161.25	187	81.35	1.584	0.0392	0	10.7	14.22	7.11	58	5.72	141	66.47	0.212	0.0209	40.31	24.31	0.315	0.0203	1.149	0.05642
FXL004 04+00S	90	0	7.75	0	31.38	21.41	9.33	154	23.63	0	167.54	0	106.96	1.6232	0.0393	0	10.95	0	9.39	51	5.34	112	66.99	0.247	0.0219	0	35.14	0.285	0.0205	1.065	0.05464
FXL004 04+25S	90	0	7.69	48.62	25.08	0	12.6	188	25.99	0	191.38	220	88.14	2.0467	0.0449	11.8	7.3	0	10.1	93	7.09	133	72.77	1.388	0.0443	0	38.43	0.271	0.0219	1.548	0.06669
FXL004 04+50S	90	0	7.71	43.49	24.13	15	8.97	126	21.87	0	178.27	201	82.41	1.8325	0.0419	0	10.89	12.12	6.95	83	6.63	145	72.65	0.989	0.0381	0	38.06	0.287	0.0219	1.537	0.06612
FXL004 05+75S	90	8.35	5.44	0	34.95	96.62	16.02	294	32.88	0	210.07	145	84.23	2.3586	0.0496	0	19.59	0	11.65	129	8.46	245	74.12	0.256	0.0238	0	39.47	0.296	0.0215	1.592	0.06754
FXL004 06+25S	90	0	7.9	0	32.48	63.35	13.49	231	28.86	0	170.33	121	76.09	1.5613	0.0397	0	15.7	13.06	7.95	108	7.67	132	71.01	0.236	0.0226	53.87	24.97	0.302	0.0215	1.695	0.06731
FXL004 06+50S	90	0	7.37	0	33.23	148.11	17.98	311	31.37	0	138.71	0	96.04	1.1517	0.0327	0	20.46	0	10.48	89	6.7	120	67.47	0.242	0.0216	39.17	23.8	0.31	0.0207	1.237	0.05752
FXL004 06+75S	90	0	7.47	0	32.1	47.04	11.54	358	33.63	0	146.95	0	103.99	1.2106	0.0337	0	13.56	0	9.93	56	5.52	139	65.57	0.178	0.0196	53.99	24.43	0.262	0.0197	1.152	0.05559
FXL004 07+00S	90	0	7.7	0	28.83	47.59	11.87	290	31.15	0	164.98	0	110.02	1.5675	0.0389	0	13.58	0	10.25	121	7.9	127	63.3	0.305	0.0232	50.89	24.4	0.238	0.0189	1.084	0.05473
FXL004 07+25S	90	0	7.5	0	31.38	74.23	13.8	567	41.98	0	158.45	0	100.83	1.5048	0.0379	0	16.67	0	10.13	66	6	0	98.48	0.341	0.0244	0	36.23	0.237	0.0198	1.184	0.05718
FXL004 10+50S	90	0	7.6	0	30.26	0	11.32	42	14.68	0	122.48	135	68.14	0.8606	0.028	0	9.26	0	9.33	91	6.73	118	58.72	0.235	0.0207	0	31.94	0.26	0.018	1.052	0.05258
FXL004 10+75S	90	0	7.79	0	32.63	30.08	10.28	127	21.92	0	167.07	0	103.51	1.5778	0.0388	0	12.4	0	9.34	40	4.85	142	64.77	0.128	0.018	0	35.16	0.238	0.0192	0.955	0.05183
FXL004 11+00S	90	0	7.3	0	30.65	13.29	8.15	64	16.43	0	142.9	0	96.91	1.1812	0.0325	0	9.98	0	8.78	53	5.26	135	61.78	0.16	0.019	0	34.67	0.278	0.0188	1	0.05232
FXL004 11+25S	90	0	7.39	0	32.14	19.41	8.92	94	18.9	0	129.55	0	92.17	1.0613	0.031	0	10.01	11.7	6.61	43	4.88	131	61.86	0.085	0.0162	42.39	23.43	0.258	0.0187	1.014	0.0521
FXL004 11+50S	90	0	7.88	39.04	23.99	31.24	10.66	67	17.58	0	166.6	0	108.81	1.6143	0.0396	0	12.88	19.98	7.95	46	5.18	0	93.83	0.115	0.0187	0	34.57	0.266	0.0194	1.447	0.06284
FXL004 11+75S	90	0	7.59	0	29.64	15.15	8.68	65	16.58	0	122.87	128	69.35	0.9192	0.0289	0	10.19	15.61	7.04	102	7.07	0	89.99	0.274	0.0226	34.48	22.47	0.29	0.0191	1.418	0.06069
FXL004 12+00S	90	0	7.67	0	33.17	23.22	9.41	110	20.41	0	142.2	200	78.48	1.258	0.034	0	10.79	0	9.52	61	5.69	134	68.8	0.193	0.0204	40.87	24.45	0.281	0.0208	1.213	0.05726
FXL005 00+25S	90	0	7.02	0	29.96	17.49	8.44	63	16.07	0	117.87	402	90.44	0.8818	0.0278	0	9.95	0	8.33	92	6.6	0	93.32	0.694	0.0309	0	33.37	0.184	0.0186	0.985	0.05153
FXL005 00+50S	90	0	7.76	0	29.03	17.42	8.92	161	23.62	0	154.06	0	102.32	1.4523	0.0368	13.81	7.76	0	9.44	81	6.46	102	61.35	0.265	0.0222	0	35.25	0.22	0.0184	1.088	0.05481
FXL005 00+75S	90	0	7.25	0	31.45	15.39	8.43	92	18.92	0	115.62	180	73.54	0.8191	0.0274	0	10.62	0	9.12	108	7.28	119	59.1	0.35	0.0238	0	32.75	0.247	0.0179	1.292	0.05753
FXL005 01+00S	90	0	7.66	0	28.27	16.05	8.63	78	18.06	0	130.44	163	74.17	1.0624	0.0313	0	9.98	0	9.18	76	6.23	132	62.28	0.227	0.0208	45.78	23.51	0.291	0.0191	1.076	0.05356
FXL005 01+25S	90	0	7.58	0	32.1	20.14	9.08	84	18.42	0	121.35	0	95.56	0.858	0.0283	0	10.61	0	8.2	80	6.39	0	87.93	0.208	0.0197	0	32.49	0.287	0.0186	0.977	0.0506
FXL005 01+50S	90	8.12	5.28	0	31.15	22.38	9.44	93	19.33	0	162.03	190	81.03	1.5667	0.0384	14.29	8.16	14.78	7.12	60	5.7	159	68.07	0.312	0.0239	0	36.47	0.231	0.02	1.181	0.05748
FXL005 01+75S	90	0	7.78	0	30.29	18.12	8.92	137	22.25	0	142.55	126	70.79	1.202	0.0335	0	11.23	11.32	6.76	97	7.01	157	64.07	0.242	0.0215	0	34.75	0.288	0.0193	1.181	0.05638
FXL005 02+00S	90	0	7.51	0	31.99	30.89	10.18	111	20.23	0	161.79	0	105.5	1.5548	0.038	0	11.99	0	8.53	83	6.52	118	66.02	0.259	0.0225	56.8	25.41	0.268	0.02	1.216	0.05822
FXL005 02+25S	90	0	7.54	0	34.95	23.16	9.72	187	25.7	0	150.81	112	73.18	1.4166	0.0369	12.64	8.22	0	10.32	78	6.47	300	73.74	0.272	0.023	55.3	25.26	0.293	0.0211	1.522	0.06374
FXL005 02+50S	90	0	8.18	0	38.97	36.16	11.84	190	27.77	0	263.18	216	99.62	3.4822	0.0618	0	14.66	0	11.41	48	5.66	0	121.01	0.091	0.0205	0	42.13	0.347	0.0247	1.844	0.07503
FXL005 02+75S	90	0	7.69	0	34.85	34.73	10.92	117	21.79	0	171.69	199	83.47	1.693	0.041	0	12.7	0	9.99	222	10.63	158	64.97	0.599	0.0307	0	34.46	0.248	0.0193	1.648	0.06681
FXL005 03+25S	90	0	8.08	0	36.75	65.32	13.75	318	34	0	230.44	150	86.69	2.8223	0.0541	0	16	0	11.18	54	5.79	137	75.32	0.103	0.0198	42	27.29	0.289	0.0226	1.62	0.06908
FXL005 04+75S	90	0	7.95	39.3	25.25	91.86	15.64	431	38.5	0	198.88	417	106.31	2.1651	0.0471	0	18.73	17.19	8.49	79	6.72	182	74.12	0.863	0.037	52.08	26.51	0.328	0.0223	2.098	0.077
FXL005 05+00S	90	0	7.89	0	34.89	69.04	13.86	362	35.14	0	194.81	503	111.21	2.0662	0.0457	19.49	11.63	0	10.52	71	6.36	134	72.35	0.945	0.038	44.29	25.82	0.289	0.0219	1.9	0.0733
FXL005 05+25S	90	0	7.98	0	36.64	102.17	16.28	463	39.97	0	155.03	283	90.57	1.2481	0.036	0	18.86	0	10.18	561	17.01	0	73.92	1.102	0.0386	0	31.43	0.163	0.0157	1.733	0.06736
FXL005 05+75S	90	0	8.71	0	42.4	366.5	30.7	1016	62.25	0	221.77	437	117.2	2.3946	0.0533	0	36.57	0	16.15	389	15.27	0	86.16	0.705	0.0324	0	34.24	0.197	0.0175	1.312	0.06081
FXL005 06+00S	90	0	8.36	0	37.85	555.32	36.39	1008	60.12	0	242.08	667	131.35	2.9028	0.0571	0	42.81	0	17.3	325	13.62	0	102.8	0.811	0.036	43.22	26.5	0.225	0.0205	1.568	0.06826
FXL005 06+25S	90	0	7.92	0	35	268.88	24.71	772	50.53																						

Appendix V – Bedrock Geologic Mapping

5.1 Station Locations

5.2 Lithology

5.3 Structure

5.1 Station Locations

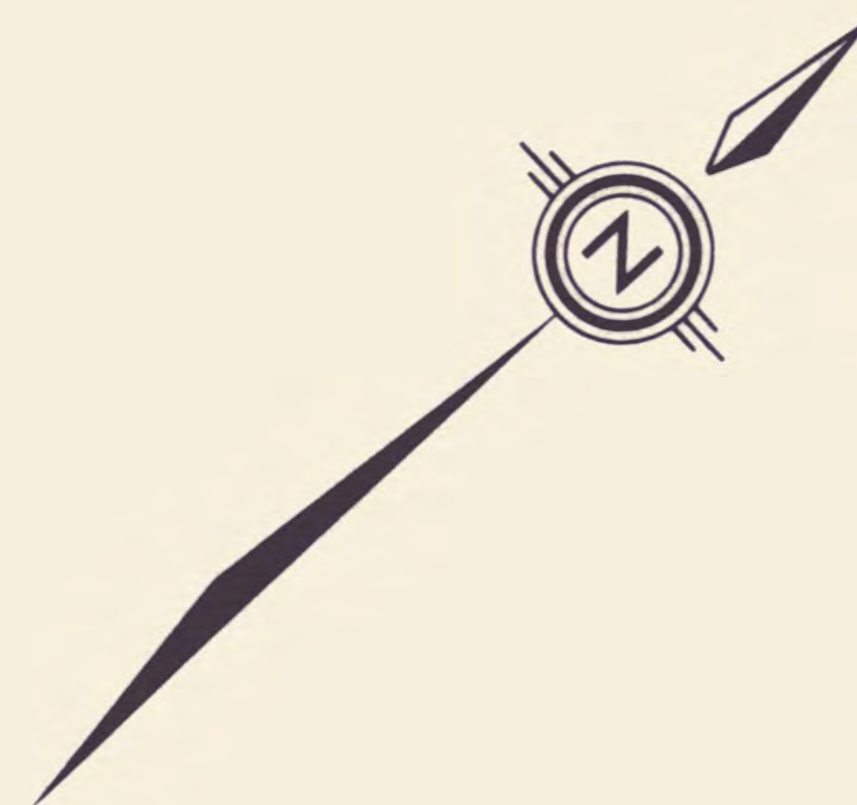
Station #	Date	Type	Location Method	UTM Datum	UTM Zone	Elevation (m)	UTM East	UTM North	GPS Accuracy (m)	Comments
AHFXG001	06/07/2009	outcrop	GPS	NAD83	9N	827	456110.9	6837543	5	
AHFXG002	06/07/2009	outcrop	GPS	NAD83	9N	789	455951.9	6837396	1	
AHFXG003	06/07/2009	outcrop	GPS	NAD83	9N	827	455884.5	6837824	4	unit claimed to be 7b but fairly difficult to distinguish from 7a on surface, less Fe staining perhaps
AHFXG004	07/07/2009	outcrop	GPS	NAD83	9N	781	456359.6	6837474	4	
AHFXG005	07/07/2009	outcrop	GPS	NAD83	9N	807	455996.6	6837235	2	unit 6, interlayers of sandstone/siltstone. Sandstone layers average 20 cm while siltstone/mudstone highly fissile, avg 5-10 cm wide
AHFXG006	07/07/2009	outcrop	GPS	NAD83	9N	824	455907.8	6837265	2	
BWFXG001	06/07/2009	outcrop	GPS	NAD83	9N		456209	6837494	12	some smithsonite, wavy bedding
BWFXG002	06/07/2009	outcrop	GPS	NAD83	9N		455769	6837440	10	
BWFXG003	06/07/2009	outcrop	GPS	NAD83	9N		455935	6837868	12	
BWFXG004	07/07/2009	outcrop	GPS	NAD83	9N		456261	6837293	12	

5.2 - Lithology

Station #	Map Unit	Rock Type Major	Rock Type Minor	Colour Fresh	Colour Weathered	Grainsize	Texture
AHFXG001	7a	Mudstone		black	brown	very fine	laminated
AHFXG002	7a	Mudstone					
AHFXG003		Mudstone					
AHFXG004	7a	Mudstone		black	grey	very fine	laminated
AHFXG005	6	Sandstone	Siltstone	grey	brownish	fine-medium	bedded
AHFXG006	7	Mudstone	Siltstone	black	grey	fine	bedded
BWFXG001		Shale		black	grey	very fine	laminated
BWFXG002	7a	Shale		black	rusty	very fine	laminated
BWFXG003	7b	Shale		black	grey	very fine	laminated
BWFXG004		Mudstone		black	dark	very fine	laminated

5.3 Structure

Station #	Structure Name	Azimuth	Dip/Plunge	Quality
AHFXG001	bedding	104	45	GOOD
AHFXG002	bedding	85	57	GOOD
AHFXG003	bedding	127	35	GOOD
AHFXG004	bedding	175	34	GOOD
AHFXG006	bedding	45	25	MODERATE
BWFXG001	bedding	52	28	GOOD
BWFXG002	bedding	78	50	GOOD
BWFXG003	fold axis	60	26	MODERATE
BWFXG004	bedding	91	21	GOOD

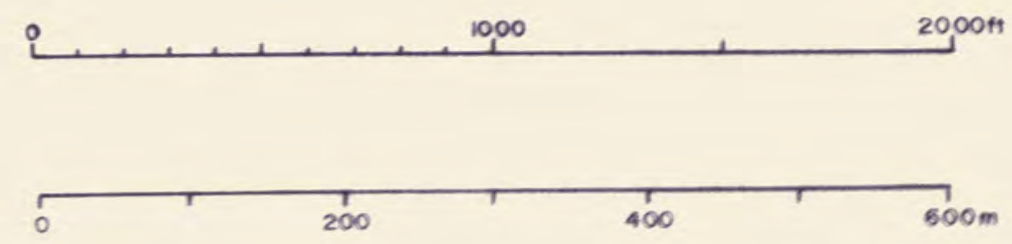


LEGEND

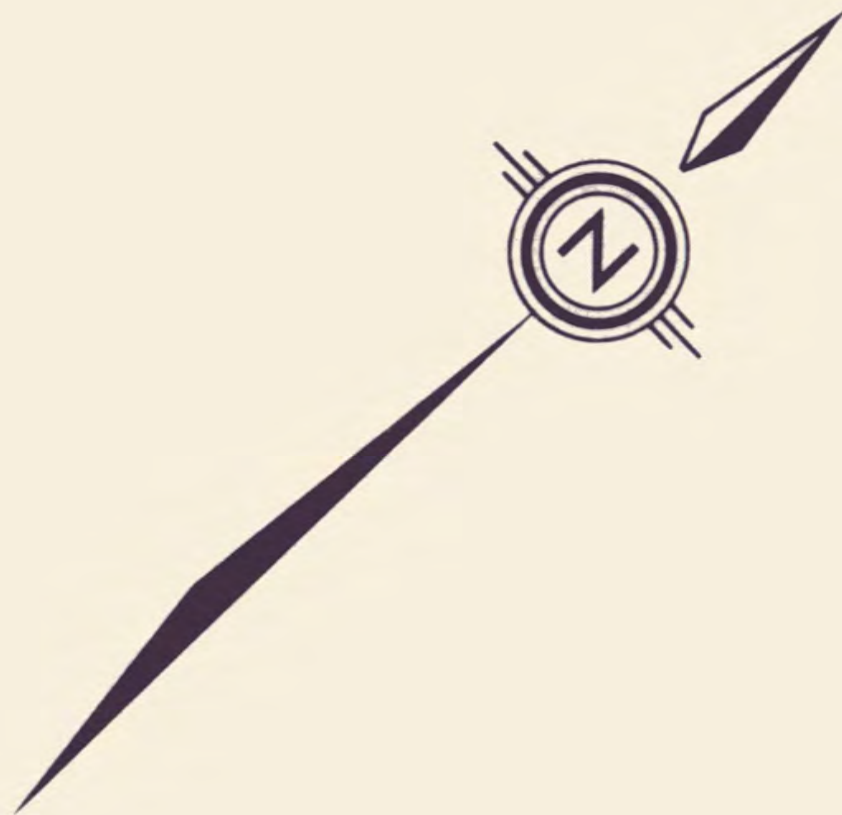
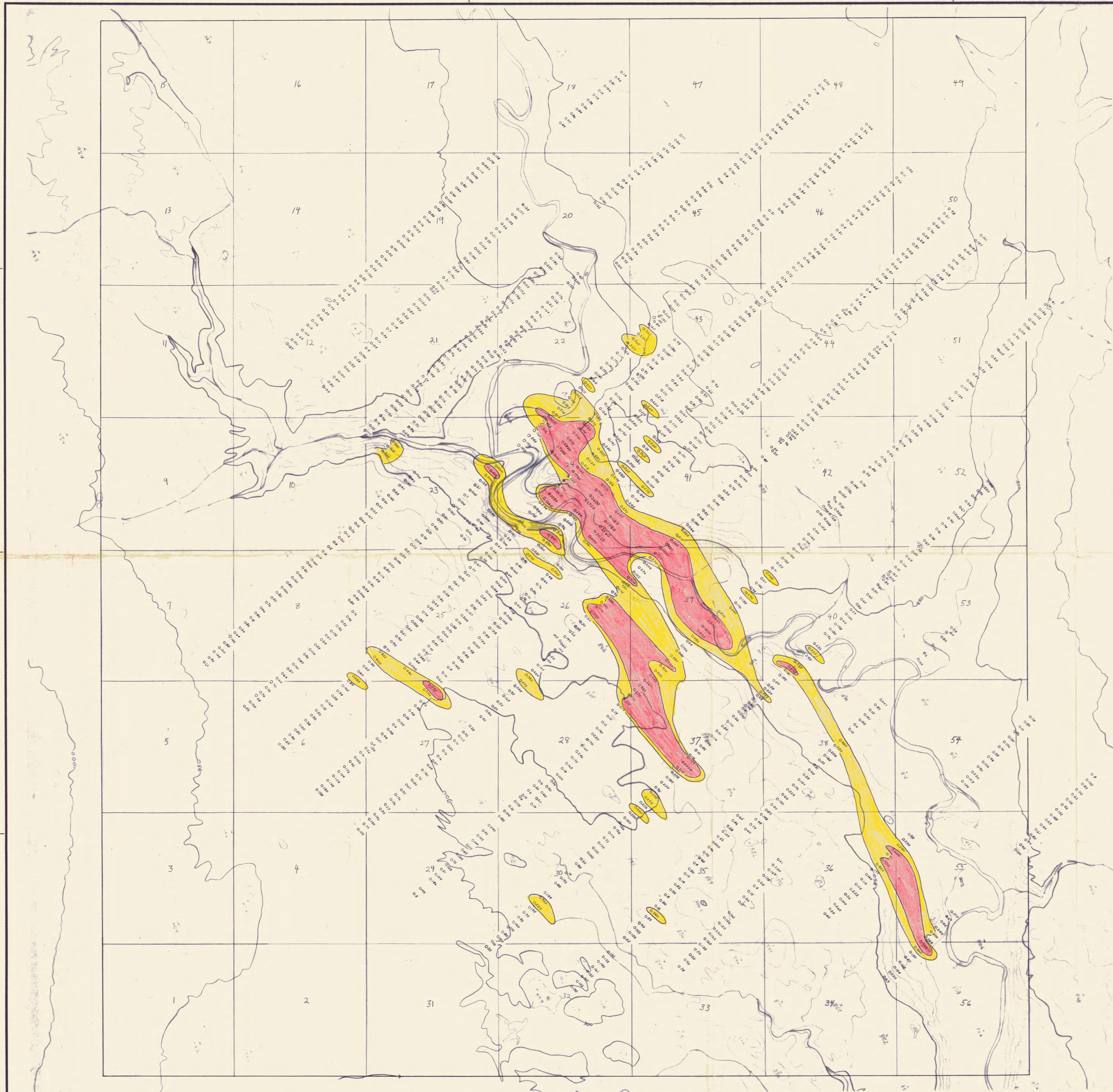
- 0 - 49 ppm Pb
- 50 - 200
- 200 - 7000

* Sample contains rock talus

Anomalous threshold: 200 ppm Pb



FIN PROPERTY		NTS 105H12	
Drawn by: SL	Traced by: SL		
Revised by: []	Revised by: []		
		SOIL GEOCHEMISTRY - LEAD	
Scale: 1:5000		Date: AUG. 1979	Plate: 77-3



LEGEND

- 0 - 249 ppm Zn
- 250-499
- 500-7000
- Sample contains rock talus
- Anomalous threshold: 500 ppm Zn

0 1000 2000 ft

0 200 400 600m

FIN PROPERTY

NTS
105H12

Drawn by:	Traced by:
SL	SL
Revised by:	Revised by:

SOIL GEOCHEMISTRY - ZINC

Scale: 1:5000 Date: AUG. 1979 Plate: 79-4