Geological Work and Diamond Drilling

on the

Frank Creek & Kangaroo Projects

Little River Area,
Cariboo Mining Division, British Columbia
52° 45' N; 121°15' W
NTS

Work was done on the following claims: Big Gulp 7 (Old tenure #382064, new MTO # 514343), Jess 1 (Old tenure #347964, new MTO #504425), Jess 2 (Old tenure #347966, new MTO #514373), & Frank (Old tenure #369406, new MTO #514364)

Owned by

BARKER MINERALS

Report prepared by Louis E. Doyle

May 1, 2006

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Exploration Expenditures

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1.0 Introduction

Work on the property to date includes geological mapping and studies, stream-sediment and soil surveys, ground magnetometer and EM studies (VLF-EM, HLEM), airborne magnetometer and EM studies, prospecting, and in some areas of potential economic interest, trenching and diamond drilling.

Paul Anderson of Anderson Geological Consultants Ltd. has been engaged as a geological consultant to Barker Minerals Ltd. since October of 2005. In that capacity he has provided technical guidance on the various company claim groups in the area, in particular on the Frank Creek property. He was thus directly involved in implementing and in supervising the 2005 Frank Creek drilling.

Portions of this report have been taken from previous technical reports filed on the Frank Creek property. In particular, the three most recent reports on the claim group by Perry (2002) and by McKinley (2004) and Anderson (2006) have been used extensively.

The author has relied on the accuracy and completeness of the above-mentioned reports. While it is believed that the information contained herein is reliable under the conditions and subject to the limitations set forth herein, the author cannot guarantee the accuracy thereof.

This report covers exploration work from 2005, which consisted of 4 drillholes, which consisted of 1565 meters of diamond drilling and ongoing interpretation of the lithogeochemistry by Dr. Barrett and McLean.

1.1 Other Projects

The Ace Prospect mineralization and Frank Creek and SCR mineral showings are of the Besshi VMS or SEDEX type. The Ace property and Kangaroo properties have potential for gold and/or gold-copper deposits. The Cariboo Prospect hosts a replacement style Zn-Pb deposit in carbonate rocks of the Cariboo terrane. Scattered stream-sediment anomalies situated within the claims have not been followed up in detail, which provide future target areas to be explored. The Quesnel Platinum Project areas may contain some of the source mafic and ultramafic rocks for PGE minerals occurring in numerous placer platinum occurrences associated with the Quesnel River and its tributaries. These claims also host mafic volcanic rocks that in one area contain anomalous concentrations of copper.

1.2 Property

The mineral exploration property consists of 4,401 mineral claim units, being approximately 271,882 acres The mineral claims comprising the property are owned by and registered in the name of Barker Minerals Ltd. or Louis Doyle in trust for Barker Minerals Ltd. The property contains 19 mineral exploration project areas, some of which are currently under active exploration, including the Ace, Frank Creek, Kangaroo and Sellers Creek Road (SCR) project areas. (**Figure 1 - Location Map**).

1.3 Location and Access

The center of the property is situated 95 km northeast of the city of Williams Lake, B.C., the nearest supply center, and 34 km northeast of Likely, B. C., the nearest settlement.

Exploration work conducted by Barker Minerals Ltd. to the present date has been conducted under the authority of Mineral Exploration and Reclamation Permit MX-10-155. The local BC Inspector of Mines has indicated to Barker his satisfaction with Barker's progressive reclamation of trench and drill sites, and

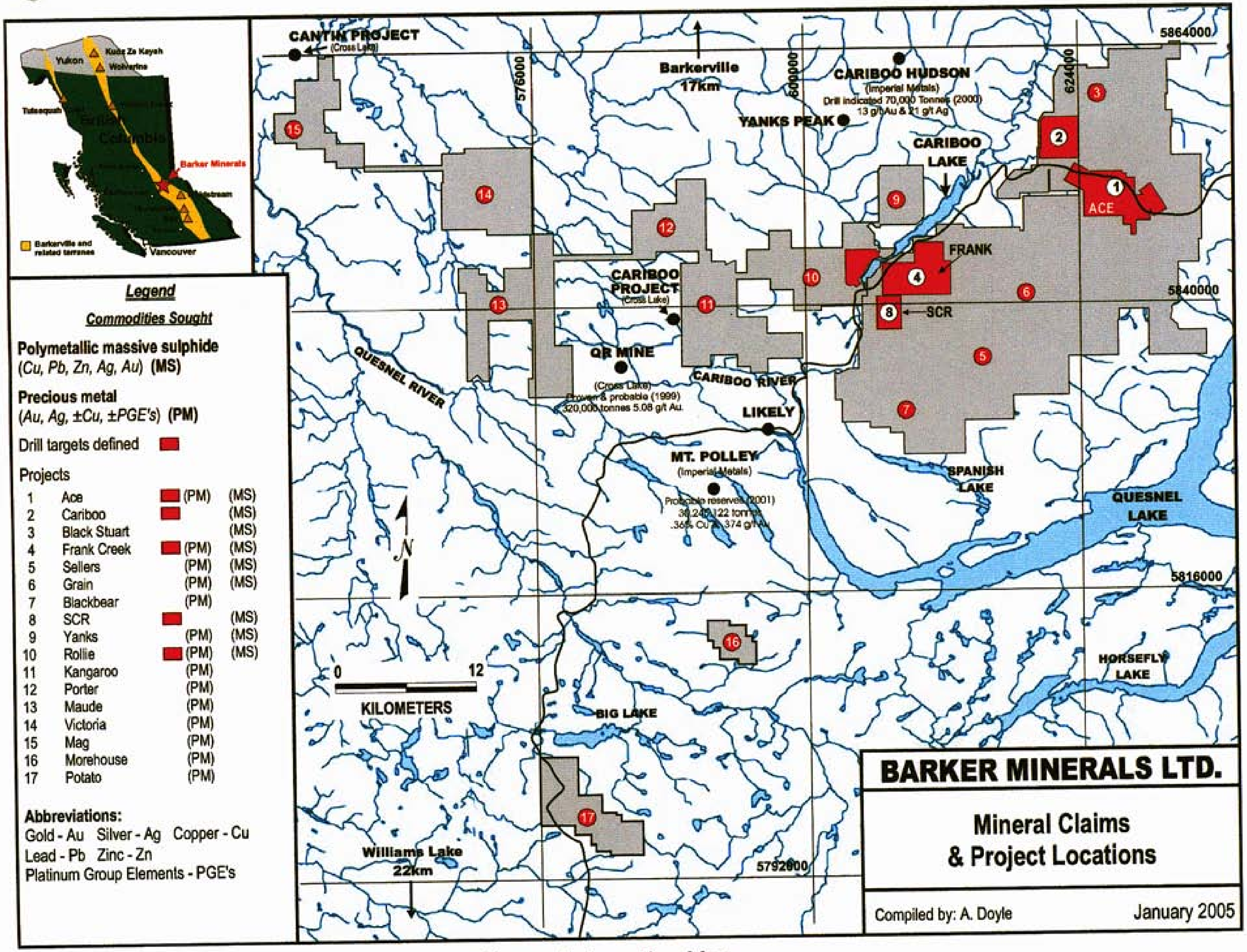

Figure 1 - Location Map

indicated also his satisfaction with the amount of the current reclamation bond Barker has supplied, without need for any further increase in the bond in respect to additional work planned.

2.0 Regional Economic History

Gold was discovered in the Barkerville-Wells area in 1858. Historical production totaled 3.7 million troy ounces, as 1.9 million ounces from placers and 1.8 million ounces from 2.7 million short tons of underground ore. The historic Bullion Pit near Likely produced 175,700 ounces of gold from 200 million tons of gravel and about 1/100th as much platinum.

Much of the lode and placer gold production from the Wells and Barkerville areas occurred in the eastern part of the Barkerville terrane, where most of the important present day lode gold prospects also occur. At the historic mines, the strata trend 315°, dip 45°NE and are cut by north to northeast-trending normal faults dipping 60°E. The zones of economically important quartz veins are contained in graphite-bearing layers near a contact with carbonate-bearing layers. Two sets of quartz veins contain pyrite and gold: transverse veins striking 030° and diagonal veins striking 070°; these contained 15-25% pyrite and 0.3-0.5 oz/t Au. Two other sets of quartz veins do not contain pyrite or gold. Pyrite in altered wall rock contained proportionally less gold. Replacement bodies of auriferous pyrite in carbonate rocks (mainly in the Island Mountain Mine north of Jack of Clubs Lake) accounted for nearly 1/3 of the lode gold mined. Other common sulphides in the mines are arsenopyrite, galena, sphalerite, cosalite (PbBiS), scheelite and bismuthinite (BiS_2). Free gold commonly occurs with nests of cosalite. Gangue minerals are quartz and ankerite/siderite. Wallrock alteration minerals are ankerite and sericite.

2.1 Frank Creek Area History

The first recorded hard rock claims in the immediate vicinity of Frank Creek were staked by Canadian Nickel Company Ltd (Jones, 1981) looking for Barkerville-style gold in 1981. Their claims were south of the Frank Creek showing and just east of the Sellers Creek showing, and are now covered by Barker's ground. E & B Explorations Ltd (Christie et al, 1982) explored ground southwest of Frank Creek for gold that is also now part of Barker's properties.

The Frank Creek property was also staked by Silver Standard Mines Ltd (Beaton, 1983) as the Thunder claims. They note that there was no previous known work on their ground, although they did find several old claim posts. Silver Standard had optioned the ground from two prospectors, who had found pyrite-chalcopyrite mineralization in a ditch while prospecting logging roads. The company did soil geochemical surveys and cat trenching, over what is now the Frank Creek showing and further to the southwest. They noted clots, veinlets and disseminations of pyrite and much less chalcopyrite in small, siliceous, gneissic fingers intruding variegated schists. The grid extended towards the large gneissic body to the southwest, now called the Quesnel Lake Gneiss, in the search for larger mineralized bodies (Beaton, 1983).

One trench along a switchback road immediately downslope from one of the showings uncovered rusty soils, lenses of ferricrete and heavily pyritized float containing minor copper. This trenching has been incorrectly attributed to Rio Algom's later work, in previous reports written for Barker Minerals. A 2 m wide pyrite-silica zone was uncovered on the lower switchback. The company speculated that a number of these lenses, of roughly 1 m by 4 m dimensions, occur in a belt following schistocity (Beaton, 1983).

Esso Minerals Canada (Marr, 1984) held ground adjoining the Thunder claims to the south in 1984, as did Casamiro Resource Corp (Scmidt, 1986). Both conducted soil geochemical surveys and some trenching and were exploring for gold. Their claims are now part of Barker's regional holdings.

In 1988, Golden Eye Minerals Ltd (Assessment Report # 17696; title page with the author is missing) staked the present Frank Creek showing, calling it the Mass property. They noted that at the point where Frank Creek entered the Cariboo Lake valley, hundreds of boulders containing massive sulphides, pyrite-limy schist and pyrite-silica-chlorite schists had been uncovered by placer miners. The boulders occur at the base of the till directly overlying bedrock. When large massive sulphide boulders were found at the base of the placer gravels on the east side of the creek, the Home Run hardrock claim was staked by the placer miners, but no work was ever filed. Golden Eye Minerals Ltd staked the same area and prospected the creek looking for the source of the massive sulphide boulders. The also ran VLF surveys, but failed to locate the source of the boulders.

Formosa Resources Corp (Martin, 1989) optioned the property from Golden Eye and did soil geochemical surveys, and trenched some of the better anomalies. Some trenches revealed windows in the clay-rich till allowing groundwater to surface, with the metals being carried from further upslope. This may help to explain some of the soil geochemical anomalies defined by Barker Minerals, that have no associated geophysical conductor.

In 1991, Rio Algom Exploration Inc (McClintock, 1991) optioned the Mass claims from Formosa, and an adjacent claim group to the northeast from the Annex Group, again trying to locate the source of the boulders. They did prospecting, geological mapping, stream silt sampling and 388 km of helicopter-borne EM and Magnetics. This work identified groups of conductors in 7 separate locations (named the F-1 to F-7 target areas), all within 3 km of the boulders, plus 2 creeks anomalous in Zn-Pb-Ag. No conductors or geochemical anomalies were found on the Annex claims, and this part of the option was terminated.

Follow-up mapping in 1992 on the Mass claims by Rio Algom (Donaldson, 1992) found that most conductors were due to graphitic schist. The four that weren't were subjected to VLF-EM, HLEM and soil geochemical surveys, and then trenched. Once again, all conductors were found to be due to graphitic argillite and schist. The geochemical anomalies were attributed either to high background values in the metasediments, localized quartz veining carrying mineralization or remobilization along faults and shears. No massive sulphides were found, meaning the source is up ice and off of the claims, or too small to be detected. Rio elected to terminate the option.

During 1995, R. Yorston (Assessment Report #24662) staked claims to cover the center of the F-1 target area. In 1996, two, vertical percussion holes (60.9 m total) were drilled along the D-Road switchback. They yielded poor recovery, mainly of very fine particles and minor amounts of rock chips of black and green phyllite. Both holes returned anomalous Cu, Pb, Zn, Ag and Au concentrations in the upper 18.3 m, with the best interval being 3.04 m averaging 1770 ppm Cu, 750 ppm Pb, 2970 ppm Zn, 4.8 ppm Ag and 790 ppb Au.

In late 1993, Barker Minerals Ltd. staked two claims at Ace (see Figure 4 below), northeast of Frank Creek and then added to the claim group in 1994. By 1995, the company's claims totaled 12 placer and 155 hard rock (Lammle, 1995).

During 1996, Barker staked an additional 2590 claim units and conducted regional stream sediment sampling and magnetometer surveys. This led to the discovery of the Big Gulp showing (Lammle, 1997). The Big Gulp showing (BC MinFile 093A 151) is located within the F-4 target area from the Rio Algom airborne survey, and occurs southwest of the Frank Creek showing. It is comprised of sulphide-rich lenses in metamorphosed, altered, now ankeritic, fine-grained tuffaceous sedimentary rocks of original andesitic basalt composition. Chemical analysis of a composite grab sample collected during 1999 yielded results as 4.7% Zn, 600 ppm Cu, 1,520 ppb Hg, 435 ppb Ag, 205 ppm Cd and 29 ppm Pb (Payne, 2000; BC Assessment Report).

2.2 Work Undertaken at Frank Creek by Barker Minerals Prior to 2004

In 1999, Barker staked the immediate Frank Creek area and conducted a program of prospecting and limited mapping. This led to the discovery (or re-discovery) of numerous pyrite-rich float samples in the area of Rio Algom's F-1 series of airborne conductors. A concentration of weathered massive sulphide boulders was also located above a culvert situated 150 metres east of the Silver Standard Minerals Ltd. trench described in the section above, and 2.2 km up the "D" road. This area was trenched, resulting in the discovery of a thin strataform massive sulphide layer. The massive sulphide occurs at a sediment-sediment contact over a strike length of 10 meters and is 1.2 m thick. The zone strikes 167° and dips 32° W, sub-parallel to the regional foliation (McKinley, 2004).

This trench is now known as the Frank Creek showing, and has been described in BC MinFile 093A 152 as a new discovery (see Figures 3 and 4). The Barker Minerals website indicates metal values of 4.2% Cu, 1.3% Pb and 8.2% Zn, presumably from grab samples. It should be noted that these values differ from chip sample results obtained by other mineral exploration companies, which include 0.82% Cu, 0.25% Zn and 0.21% Pb over 5.77 m, 2.1% Cu over 0.77 m, 2.1% Cu, 0.28% Pb and 0.22% Zn over 0.4 m and 1.7% Cu, 0.13% Pb and 0.57% Zn over 0.6 m (McKinley, 2004).

Reconnaissance VLF and magnetometer surveys conducted over the discovery trench indicated the presence of a 40 metre wide conductor under the D road. Additional boulders containing massive sulphide and stringer-style sulphide mineralization were found along strike as far as 150 m away from the showing (Payne and Perry, 2001) although the author doesn't indicate in which direction.

During 2000, prospecting resulted in the discovery of the SCR or Sellers Creek showing (BC MinFile 093A 131) located 4 km west of the Frank Creek showing. SCR consists of pyrite, pyrrhotite, chalcopyrite, sphalerite and galena occuring as semi-massive and stringer mineralization in float and bedrock of altered intermediate to mafic metamorphosed volcanic rocks. The rest of the year was devoted to geological mapping and geophysical surveys undertaken over both Frank Creek and SCR (Payne, 2001).

Also in 2000, new grids were cut on Frank Creek and SCR and ground HLEM and magnetometer surveys were conducted. Grid lines totaled 88 km at Frank Creek and 17.9 km at SCR. Magnetometer readings over both grids were recorded at 25 m intervals on lines spaced 100 m apart. On the Frank Creek grid, 39.5 km of HLEM geophysical surveying were completed and 19.9 km were completed on the SCR grid. The HLEM survey was conducted on the Frank Creek grid by using a dipole separation of 100 m, with local areas of detailed surveying conducted at 50-m spacing on lines spaced 100 m apart. The HLEM survey on the SCR project was conducted using a dipole separation of 200 m (Walcott, 2000).

The magnetic contrast on the Frank Creek grid was found to be low. Despite this, the magnetic patterns mimic the bedrock geology in some areas. Intermediate to volcanic rocks have moderately higher magnetic susceptibilities than the black argillite and siliceous siltstone unit (Walcott, 2000).

The HLEM survey defined several poor to moderate HLEM conductors in the Frank Creek area. Most are shallow and dip steeply. Conductors A and B trend northwesterly east of the massive sulphide outcrop and are located stratigraphically just above the prominent quartzite-limestone marker that is exposed in Frank Creek canyon. Conductor C is broad, trends northwesterly and appears to dip shallowly to the east. Conductor D dips steeply. Conductors E, F, G, J and K are associated with the black argillite-siliceous siltstone unit below the intermediate volcanic rocks, while Conductors A, B, C, D, E, F, G, J and K are associated with intense, coincident Cu-Pb-Zn soil anomalies (Figure 10). Conductors H and I are anomalies that occur near the Big Gulp showing, in the F-4 target area defined by Rio Algom (Walcott, 2000).

Surface geological mapping of an area of about 9 square km encompassing the Frank Creek and SCR project areas was also undertaken in 2000. The centre of the Frank Creek project area had been mapped during 1999, with the 2000 mapping conducted outwards from the initially mapped area. Thirty-five rock samples were collected and analyzed from the Frank Creek and SCR properties. Petrographic examination was performed on 27 rock samples and 7 massive sulphide samples collected from outcrops, most of which were collected within the Frank Creek project area (Payne, 2001).

During 2001 and 2002, Barker Minerals continued to prospect and sample the Frank Creek area, to excavate trenches and to conduct geophysical surveys. EM surveys extended previously located conductor axes. While the Frank Creek discovery outcrop was found to be unresponsive to both EM and IP geophysical techniques, an area of IP chargeability was observed just east of the showing. Preliminary gravity profiling was also done over the showing and the nearby EM conductors, but failed to detect any excess mass. The geophysical contractor expressed concern over the terrain corrections applied to the gravity data (Walcott, 2002), but the survey was never repeated.

A series of excavator trenches tested targets in the F-1 area defined by Rio Algom's airborne survey. Five trenches, totaling 289 m were dug within 70 m of the discovery outcrop. These uncovered several very small lenses of massive sulphides, plus stringer copper mineralization. Along with the results of several previous trenches, the mineralized zone was now defined over a strike length of 375 m northwest and 50 m southeast of the discovery outcrop (Payne, 2002).

Six diamond drill holes (813 m) were drilled at Frank Creek in 2002. Drill holes FC-02-01, FC-02-05 and FC-02-06 were all drilled northwest of the discovery outcrop. They intersected disseminated to semi-massive sulphides, mostly pyrite, near the projected strike extension of the mineralized zone. The best assays were 1.1% Zn over 2.6 m in FC-02-01, 0.14% Cu and 0.13% Zn over 10.7 m in FC-02-05 and 0.15% Cu, 0.1% Pb and 0.23% Zn over 2.7 m (including 2.08% Cu, 0.54% Pb and 0.98% Zn over 0.45 m) in FC-02-06 (Payne, 2002).

Drill hole FC-02-03 was collared under the showing, and it intersected 0.5 m of 0.52% Cu, 0.28% Pb and 0.33% Zn. Holes FC-02-02 and FC-02-04 tested a strong geophysical conductor just to the northeast of the discovery outcrop. Both drill holes hit strongly graphitic sediments, which explained the conductors (Payne, 2002).

Further trenching and sampling was completed in 2003, on geophysical conductors and soil geochemical anomalies close to the D road and to the discovery outcrop. A total of 530 m was excavated in 10 trenches, and 15 rock and 7 till samples were taken. Some trenches did not reach bedrock, and at least one that did, failed to explain the targeted soil geochemical anomaly. An EM conductor immediately southwest of the discovery was trenched and found to be explained by disseminated sulphides which assayed 3.15% Zn and 0.95% Pb (no widths were given, presumably a grab sample was taken). Three additional trenches, one each on the A and B conductors, hit graphitic argillite (McKinley, 2004). Note that conductors A and B had already been tested by drill holes FC-02-02 and FC-02-04, and both had intersected graphite, explaining the conductors.

In addition in 2003, Barker contracted the services of a consultant to conduct a lithogeochemical sampling program on both the Ace and Frank Creek properties, in order to better define the stratigraphy (Barrett and MacLean, 2003). Several drill holes were logged and sampled, as were surficial outcrops, as part of this study. Results pertinent to Frank Creek will be reported on in the drilling section below.

In 2004, Quantec Geoscience Ltd. completed a Titan Distributed Array survey over 15.8 line km, centered on the discovery outcrop. The survey included tensor magnetotelluric resistivity (MT) and DC resistivity and Induced Polarization (DCIP). The system is thought to be able to measure subsurface resistivities to depths in excess of 1 km, and chargeabilities to depths of 500-750 m. Six 2.4 km long east-west lines spaced 200 m apart were surveyed, plus one north-south baseline, covering an area of 1.5 by 2.4 km. The survey identified 90 separate DCIP and MT anomalies, or which 18 were considered significant (Donohue et al, 2004).

2.3 Geography and Physiography

Williams Lake is an intermediate-sized city, which is served by Highway 97, the B.C. Railway, a major hydroelectric power grid and a modern airport. By road, Likely is 65 km northeast of 150 Mile House on Highway 97. Access to the Ace, Frank Creek and SCR exploration areas is *via* gravel logging roads bearing northeast from Likely. The distances from Likely to the main showings are as follows: Ace, 45 km; Frank Creek, 25 km; SCR, 22 km. Driving time to the Ace prospect from Likely is forty-five minutes. Access to the Quesnel Platinum project is mainly *via* gravel logging roads southeast from Quesnel, a distance of 25 km. In Likely, Barker Minerals maintains a property that includes a house, a bunkhouse, a workshop and a few tents. The house serves as a field office.

The property is situated in the central part of the Quesnel Highland between the eastern edge of the Interior Plateau and the western foothills of the Columbia Mountains. This area contains rounded mountains that are transitional between the rolling plateaus to the west and the rugged Cariboo mountains to the east. Pleistocene and Recent ice sheets flowed away from the high mountains to the east over these plateaus and down to the southwest (Cariboo River), west (Little River) and northeast (Quesnel Lake), carving U-shaped valleys. The elevation ranges from 700-1650 m. **(Figure 2 - Topography)**

Precipitation in the region is heavy, as rain in the summer and snow in the winter. Drainage is to the west *via* the Cariboo, Little and Quesnel Rivers to the Fraser River. Quesnel Lake, the main scenic and topographic feature in the region, is a deep, long, forked, glacier-carved lake with an outlet at 725 m elevation. Vegetation is old-growth spruce, fir, pine, hemlock and cedar forest in all but the alpine regions of the higher mountains (mainly above 1400 m elevation). Weldwood has been actively logging fir, spruce and pine in the area principally during winters, and has provided outlines of existing and planned roads and cut-blocks in and near the project areas.

2.4 Previous Regional Work and Summary

The property is located 95 km northeast of Williams Lake in Central British Columbia. The property contains the idle Providence Mine, classified as a 'Past Producer' (BC MinFile 093A 003) of silver, lead, zinc and gold. The property also contains the Cariboo (a.k.a. Maybe) Prospect, which is classified as a 'Developed Prospect' (BC MinFile 093A 110). This is reported to be a lead-zinc (Zn-Pb) replacement-style deposit estimated to contain approximately 400,000 tonnes at an estimated grade of 4% Zn+Pb, using a 1% Zn+Pb cutoff. The property contains the Ace VMS Prospect, which was discovered during 1993 by Louis Doyle, President and CEO of Barker Minerals and is host to what has been described by BC Geological Survey geologists as Besshi-type volcanogenic massive sulphide (VMS) mineralization and auriferous (gold-bearing) quartz veins (BC MinFile 093A 142). The property contains

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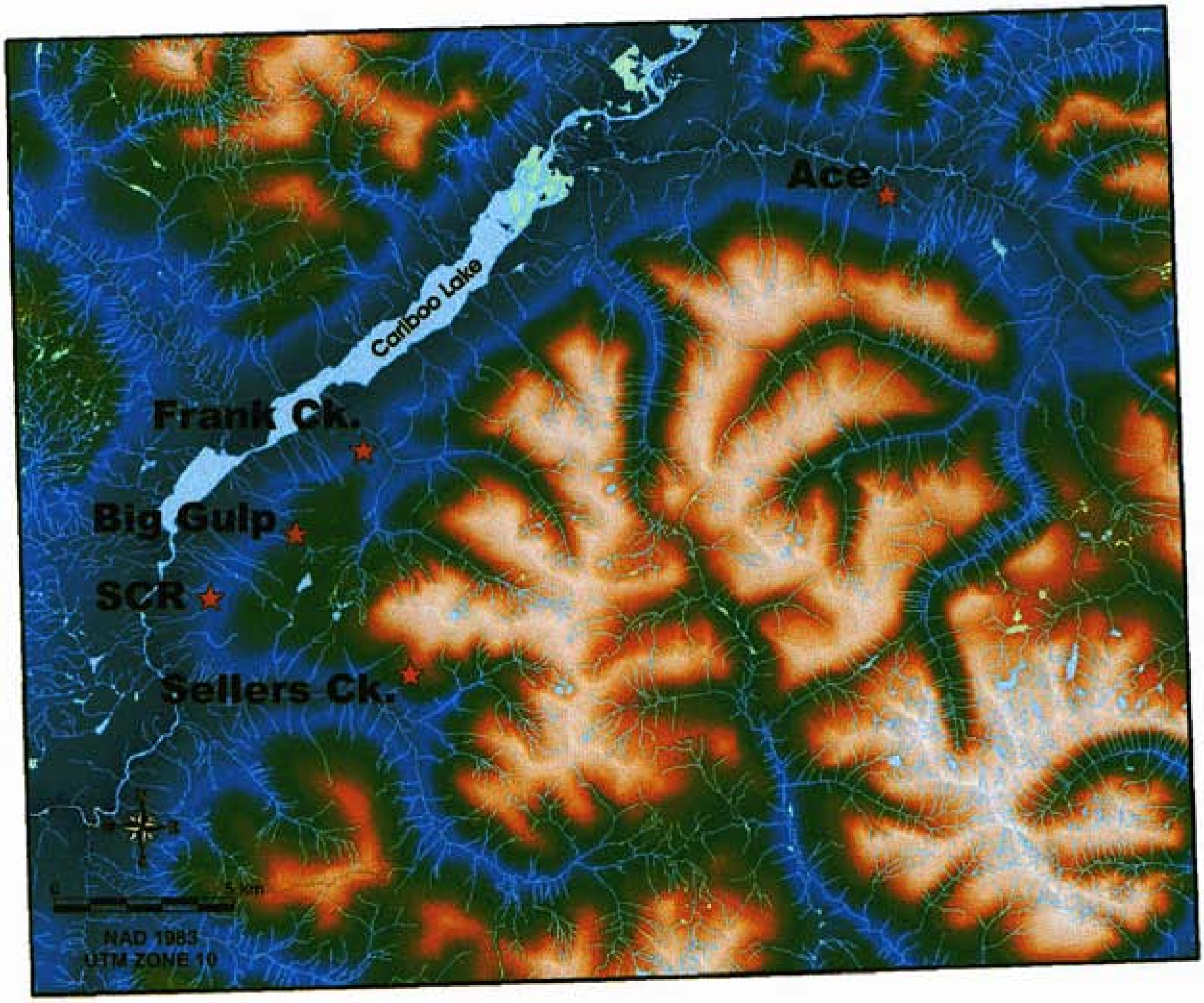


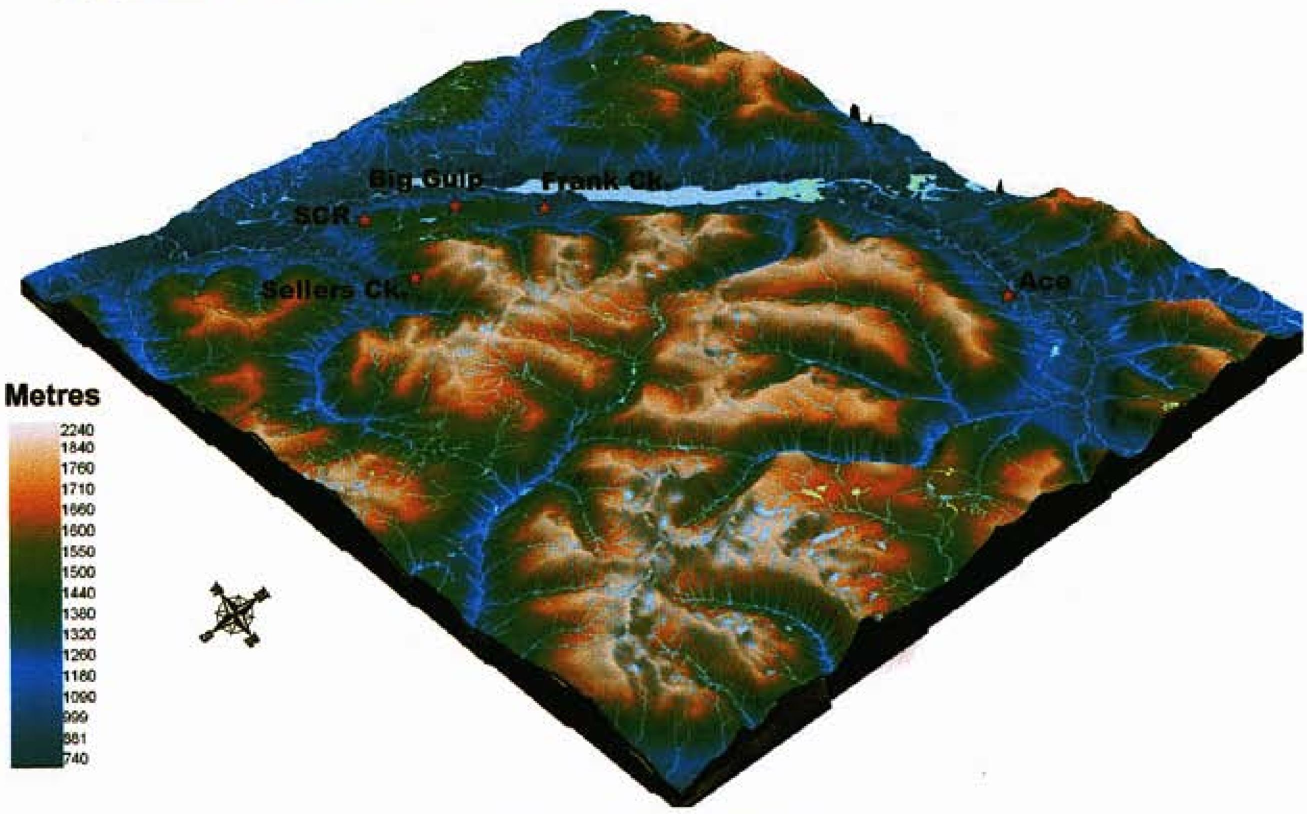


Figure 2 Topography

several known bedrock mineral occurrences, classified as 'showings' by the BC Geological Survey, including the Frank Creek VMS showing (BC MinFile 093A 152), the Sellers VMS showing (BC MinFile 093A 131), the Big silver-lead-gold showing (BC MinFile 093A 151), the Comin Throu Bear lead-zinc-silver showing (BC MinFile 093A 148), the Peacock gold-bearing quartz vein showing (BC MinFile 093A 133), the Maud alkalic porphyry copper-gold showing (BC MinFile 093A 119) and the Trump silver-lead showing (BC MinFile 093A 154). Both the Frank Creek VMS showing and Sellers Creek Road (SCR) VMS showing were discovered by Louis Doyle, President of Barker Minerals Ltd.

The eastern half of the property contains four VMS exploration project areas, the Ace, Frank Creek, Rollie and SCR areas, each of which contain multiple exploration targets as indicated by geochemical, geophysical and geological data and which have been the focuses of Barker Minerals' exploration programs during the period 1993 to the present. The western half of the property contains the mineral claims hosting Barker Minerals' Quesnel Platinum Project.

Within the Frank Creek project area a massive sulphide layer 1.2 m thick outcrops in a zone of overturned volcanic and sedimentary rocks. During 2002 a series of trenches were excavated in order to test several targets in and adjacent to the F-1 Target Area at the Frank Creek VMS project. Five exploratory trenches were excavated over a total distance of 289 metres up to 70 metres southeast of the discovery outcrop. Trench TR-BW-05 exposed the dark quartz eye phyllite host unit within which were found several small massive sulphide lenses within the projected strike extension of the mineralized zone exposed at the discovery outcrop. TR-BW-04 exposed copper stringer mineralization 60 metres southwest of the F-1 occurrence. Along with the mineralized exposure in TR-BW-10 excavated some 375 metres to the NW of the discovery outcrop, this exposure extends the known strike length of the mineralized zone to approximately 425 metres. The zone is open to potential extensions in both directions to the north and south and at depth. According to Wild (2002), former Chief Geologist of Goldstream Mine, near Revelstoke, B. C., the geological setting, mineralization and host rocks are all remarkably similar to the Goldstream Mine mineral deposit, which produced more than 2 million tonnes of ore at a grade in excess of 4.0% copper and 2.2% zinc.

Drill core from the initial exploratory drilling program [6 ddh (813 m)] at the Frank Creek project area contains intervals of Cu-Zn-Pb (+/- Au, Ag) massive sulphide mineralization that are significant examples of ore formation processes having occurred on the property. The mineralizations encountered in the drill core are similar to that exposed at the discovery outcrop where the discovery outcrop massive sulphide layer has been further exposed (3.5m in length and 1.5 metre wide) by trenching, and the local area mapped in detail (Wild, 2002). The concentrations of metals from grab samples of the outcrop massive sulphides ranged up to 4.4% Cu, 8.2% Zn, 1.1% Pb, 14.8oz/t Ag and 854 ppb Au. A chip sample across 5.77 metres exposed width assayed 0.82% Cu, 0.25 % Zn, 0.21% Pb and 44.3 g/t Ag including a .77 metre exposed width which assayed 2.1% Cu, .34% Zn, .11% Pb and 69 ppm Ag.

This Besshi-type VMS polymetallic mineralization also occurs in drill core in significant intervals (up to 0.4 metres) and contains significant concentrations of zinc, copper, silver, lead and gold (up to 3.4% Zn, 2.1% Cu, 2.8 oz/t Ag, 0.53% Pb and 746 ppb Au) within larger weakly mineralized units up to 52 metres wide in drill core intercepts that contain widespread disseminations of these metals. Several significant, combined geophysical and geochemical anomalies are present, one of which is situated within the area in which the massive sulphide outcrop occurs. Further exploratory trenching and drilling are recommended in order to test these specific targets for economic mineralization and in order to further define the extent of the mineralized zone.

The SCR project area contains semi-massive sulphide mineralization in altered volcanic rocks. This project area also contains coincident base-metal soil anomalies and HLEM geophysical anomalies in an area of sparse outcrop. A Maxmin geophysical survey comprised of 4.2 line kilometers was completed during the 2002 field season. In areas of geophysical and geochemical anomalies, prospecting was successful in discovering float boulders which assayed as high as 17.3% Zn and 6.4% Pb. Further surface exploration including trenching and bedrock sampling in this area is recommended, to be followed by initial exploratory drilling.

The Cariboo Zn-Pb deposits reported to be comprised of replacement style Zn-Pb mineralization hosted in carbonate rocks of the lower strata of the Cariboo terrane. Diamond drilling conducted during the1980's outlined a 400,000 tonne deposit grading 4.0% Zn+Pb (BC MinFile 093A 110). Further surface mapping should be conducted in this area in order to help gain an understanding of the deformation history of the deposit and the potential for extensions of the known zone. Compilation of all relevant data and limited diamond drilling is recommended in order to confirm the previous operator's drilling and in order to further define and investigate the size and economic potential of this deposit, which is open in both directions along strike and at depth.

The western part of the property (Quesnel Platinum Project area) was staked for its platinum group element (PGE) potential. It contains zones of anomalous and intense copper concentrations in mafic volcanic rocks and may contain some of the mafic to ultramafic source rocks for some of the platinum group minerals (PGE's) recovered from the predominantly gold-bearing placers associated with the Quesnel River and its tributaries. Further geochemical and geological surveys are recommended in order to explore for bedrock PGE mineralization and in order to explore the zone of mafic volcanic rocks containing anomalous concentrations of copper.

Exploration work conducted by Barker Minerals Ltd. to the present date has been conducted under the authority of Mineral Exploration and Reclamation Permit MX-10-155, which may be modified by amendments in order to facilitate future work such as that recommended within this report.

3.0 Regional Geology

The regional geology was described by L.C. Struik (1988) and has been updated by F. Ferri, (2001-2003). **(Figure 3 Regional Geology)** The Barkerville terrane is considered to be the northwest extension of the Kootenay terrane, which to the southeast overlies the Monashee metamorphic core complex, a large uplifted mass of high-grade paragneiss, quartzite and marble. The properties are on the flank of the northern, unexposed portion of this core complex. Northwest from the North Arm of Quesnel Lake the characteristic metamorphic minerals change from sillimanite through staurolite-kyanite, almandine garnet and biotite to chlorite northwest of the Ace claims. The garnet isograd runs northerly across the east-central part of the Ace group, while that of biotite is 30 km further northwest. Historic mines near Wells and Barkerville are in rocks of the greenschist facies. The age of both deformation and metamorphism is regarded as Mid-Jurassic, which is interpreted as the time of collision of the North American plate to the east with a group of island arcs to the west. In the Little River area, four geological terranes are represented, most of which are dominated by marine sedimentary or metasedimentary rocks.

3.1 Barkerville Terrane

Most of the property area is underlain by marine strata of the Barkerville terrane, whose age is classified broadly as Late Proterozoic to Mid-Paleozoic. It is categorized by the Geological Survey of Canada as a subdivision of the Kootenay terrane. The region was deformed by intense, complex, in part isoclinal folding and overturning that produced an intimate interlensing of impure quartzite, siltstone, ankeritic dolomite, pelite and amphibolite. These rocks are cut by dikes and sills of metamorphosed diorite. Locally, stronger shear deformation produced mylonitic textures.

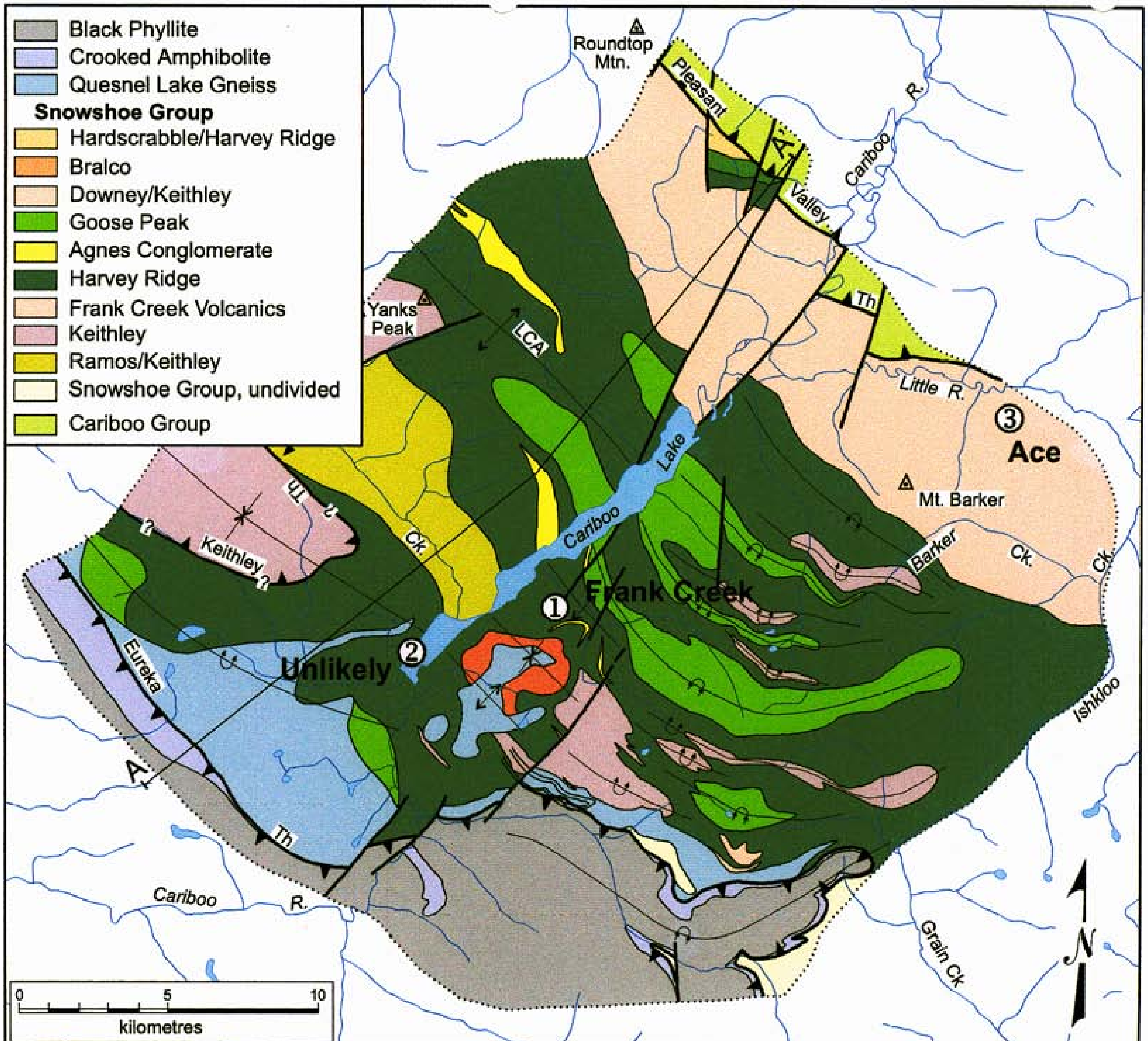


Figure 3 Regional Geology (Ferri 2002)

The northeastern third of this terrane is the main zone of economic interest in the Cariboo district. Struik described it as "gold-enriched", because it contains the historic Wells and Barkerville mines and the Cariboo Hudson deposit, 39 km and 18 km northwest of the Ace project area, respectively. This zone contains olive and grey micaceous quartzite and phyllite, amphibolite, marble, meta-tuff and meta-diorite sheets or sills. These descriptions are compatible with the rock types on the Ace project area, although the latter contains more metamorphosed felsic/intermediate volcanic rocks. Stratigraphic tops are unknown. The Barkerville terrane is cut by the Mid-Devonian Quesnel Lake gneiss (350 Ma), a coarse grained, leucocratic, biotite granitic gneiss with megacrysts of potassium feldspar. The main body of gneiss is 30 km long by 3 km wide and is elongated parallel to the eastern border of the Intermontane belt. Its contacts are in part concordant with, and in part perpendicular to, metamorphic layering. The Barkerville terrane hosts folded, sill-like masses up to 300 m thick of gneissic meta-diorite (400 Ma) and contains post-metamorphic anatectic pegmatite (86 Ma), particularly in a high-grade metamorphic aureole northwest of the North Arm of Quesnel Lake.

3.2 Cariboo Terrane

The northeastern part of the Little River area is underlain by marine peri-cratonic sedimentary strata of the Cariboo terrane. The Cariboo terrane consists mainly of limestone and dolomite with lesser siliceous, clastic, sedimentary rocks and argillite. Some geologists believe that the Cariboo terrane is a shallow, near-shore facies and the Barkerville is a deeper, offshore facies of the same erosion-deposition system. No rifting is suspected between the Cariboo terrane and the North American continent, in contrast to that between the Barkerville terrane and the North American continent.

The Cariboo and Barkerville terranes are separated by the regional Pleasant Valley thrust fault, which dips northeast moderately to steeply. It is reported by Struik (1988) to have moved the Cariboo block from the east over the Barkerville block along a strike length of over 100 km. In the map area, the fault cannot be found, suggesting that much of the movement attributed to it may have occurred by shearing in a broad zone along the "contact" between the two terranes.

Some of the carbonate layers in the lowest part of the Cariboo terrane (or upper part of the Barkerville terrane) are enriched in zinc and lead. Since the 1970's, preliminary exploration on stratiform Zn-Pb targets has been conducted in this area over a strike length of 23 km from the vicinity of the head of the North Arm, *via* Maeford Lake to the Cariboo (Maybe) prospect.

The Cariboo terrane was cut by the Jurassic-Cretaceous Little River stock, a medium-grained granodiorite grading to quartz monzonite. A normal fault along its southwest side (Little River fault) dips east and extends southeasterly to Limestone Point, on the western side of the North Arm of Quesnel Lake. It intersects, and in some literature has been confused with, the Pleasant Valley thrust. It moved chlorite-biotite metamorphic grade strata of the Cariboo terrane eastward to rest against staurolite-kyanite metamorphic grade strata of the Barkerville terrane.

3.3 Quesnel Terrane

A small southwestern portion of the Little River area is underlain by the Late Triassic to Early Jurassic, allochthonous Quesnel terrane. It was accreted to the North American continent, in part by subduction and in part by obduction. The Eureka thrust fault marks the boundary between the Quesnel and Barkerville terranes as well as that between the Intermontane and Omineca physiographic belts. The terrane is partly submarine and partly subaerial, consisting of volcanic and volcaniclastic rocks and co-magmatic intrusions, with minor carbonate lenses and related sedimentary rocks. Regionally, it hosts many important mineral deposits, mainly of Cu and Cu-Au, such as Highland Valley, Craigmont, Copper

Mountain, QR and Mt. Polley. The Bullion Pit, from which 175,700 oz. of placer gold were produced, is near Likely just on the west side of the boundary between the Barkerville and Quesnel terranes.

3.4 Slide Mountain Terrane

Rocks of the allochthonous, Devonian to Late Triassic, Slide Mountain terrane underlie a very small part of the Little River area. Portions of these rocks were obducted, while others were subducted during collision of an oceanic plate with the continent. It is exposed east of Wells and Barkerville as the upper plate overlying the generally low-angle Pundata thrust fault. This fault it is nearly vertical where it crosses the southwestern part of the Little River area. Small slices of mainly mafic volcanic rocks and alpine-type ultramafic rocks of the Slide Mountain terrane occur in and parallel to the Eureka thrust. Minor lithologies include chert, meta-siltstone and argillite.

4.0 Geological and Drilling Work Summary of 2004-2005:

4.1 2005 Exploration on Frank Creek Project

During the period covered by this report and the previous report, the Company conducted geological exploration work, including diamond drilling, assaying and detailed geological studies. **(Figure 4 Titan Grid and Drillhole Locations)**

4.2 Kangaroo Gold Project

The Kangaroo gold project is located in the historic Quesnel River/Likely placer mining districts and is near the historic Bullion Pit and the Quesnel Forks placer mining area on the Quesnel River. **(Figure 5 – Kangaroo Location Map)** The project is in a similar geological terrane as the QR gold mine, which is to the west of the project area. Access in the project area is excellent with past and current logging activity, creating access into the project area.

Stream sediment samples from the Kangaroo project area are highly anomalous in gold, and gold pathfinder minerals; these samples are from streams within the Quesnel River watershed, a significant historical placer gold district. B.C. Geological Survey studies have identified areas of the Kangaroo project as having high potential for gold and precious metals in the highest percentile of their study on the 93A mapsheet (Quesnel Lake survey).

Of interest immediately to the west is the neighbouring Cariboo property of Cross Lake Minerals which was drilled by Corona Gold Corporation in 1989 and hosts a drill intersection of 5.26 g/t gold over an 8.5 metre interval (0.15 oz/t over 27.9 feet. The area of this drill hole is associated with coincident magnetic, IP and soil geochemical anomalies along the contact of a diorite intrusive, similar to the intrusive associated with the QR deposits. **(Figure 6 Kangaroo Gold Project Compilation Map)**

In 2005 34 stream sediment and silt samples were taken within the project area as a follow up to the previous RGS survey. 432 soil samples were also collected from 5 recon sample lines around mineralized and altered outcrops in order to get a geochemical signature to the host rocks nearby as well as to determine if they are goldbearing.

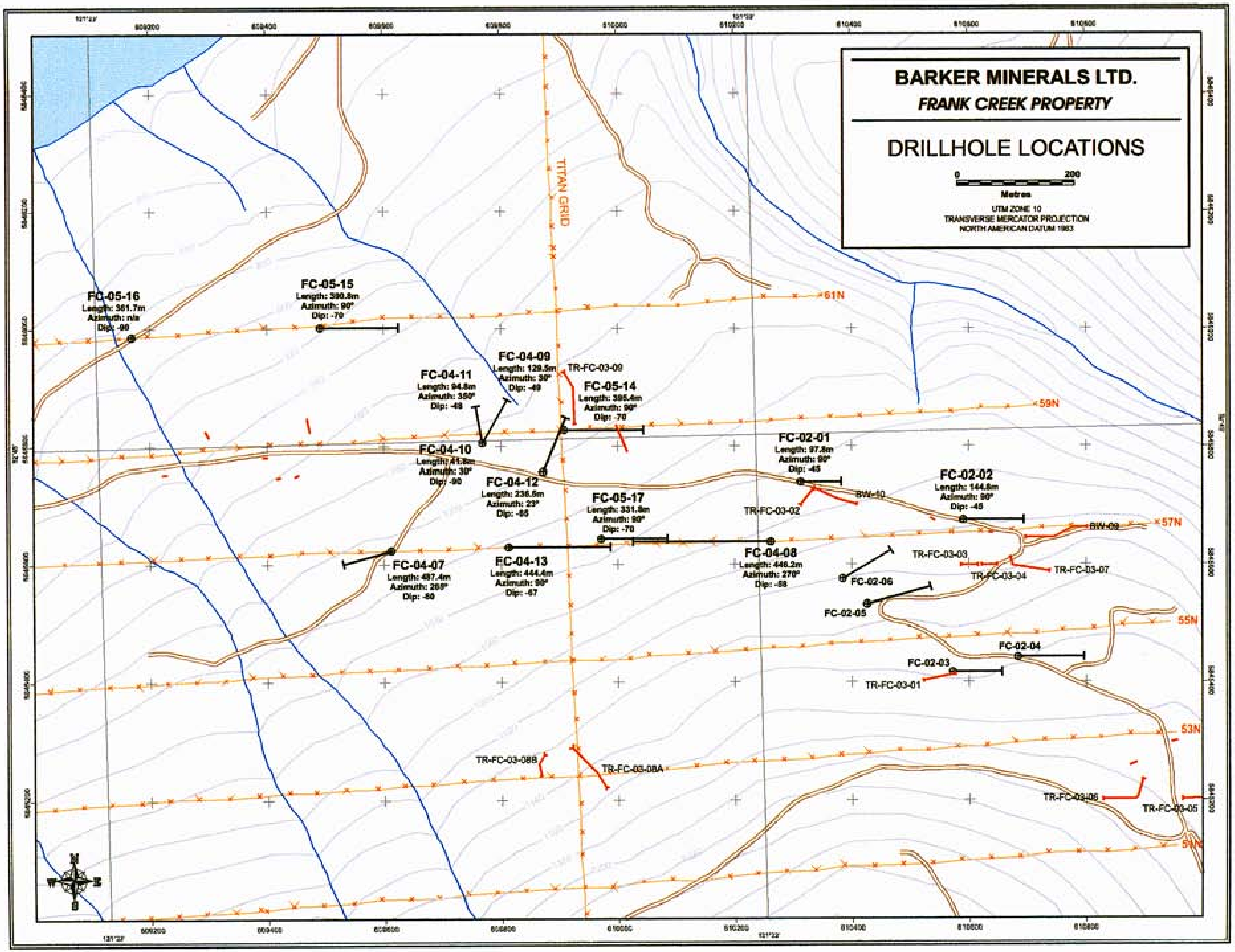


Figure 4 Frank Creek Grid & Drillhole Location Map

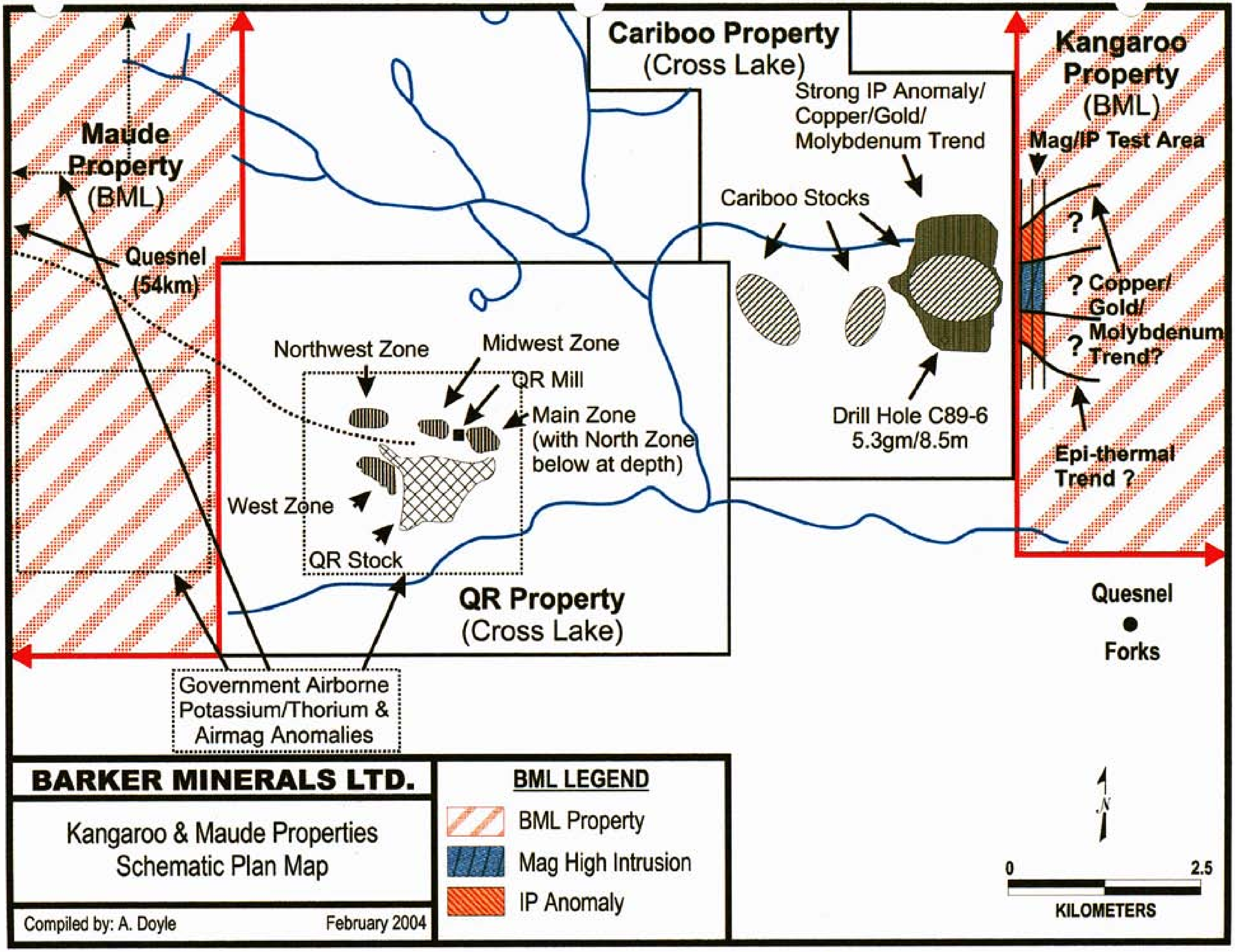


Figure 5 - Kangaroo Gold Project Compilation Map

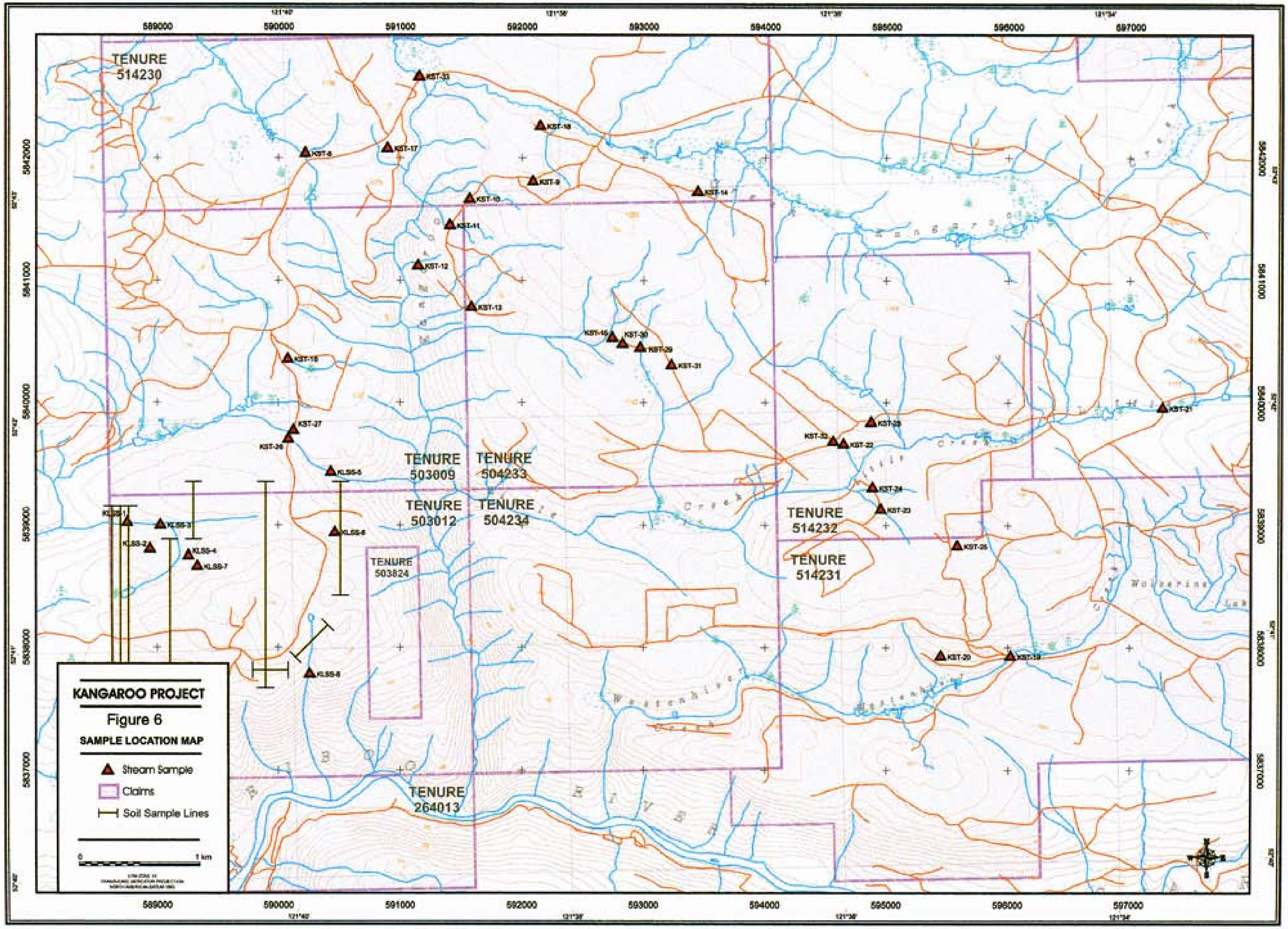


Figure 6 - Kangaroo Sample Location Map

4.3 2004-2005 Geological Studies

During 2004 - 2005 a detailed geological study was undertaken by Dr. Tim Barrett and Dr. Wally McLean of Ore Systems Consulting. A summary of work completed, and abstract summary are provided below with the entire report appended to this report.

"Lithological and Lithogeochemical Features Of Rocks on The Frank Creek and Ace Properties, Cariboo Lake Area, East Central B.C." *by T.J. Barrett and W.H. McLean*

Introduction

The Barrett/McLean report comprises two main sections:

1) A summary of recent mapping and scientific literature pertaining to the properties held by Barker Minerals Ltd. in the Frank Creek to Ace areas on the south side of Cariboo Lake in the Barkerville Terrane of east-central Brisith Columbia. Much of regional and Frank Creek work was carried out by Filippo Ferri and colleagues of the B.C. Ministry of Energy and Mines in the 1997-2001 period (Höy and Ferri, 1998a, 1998b,; Ferri et al., 1999; Ferri, 2001a, 2001b; Ferri and O'Brien, 2002), while the Ace property formed the subject of an assessment report by Payne (1999) and an MSc thesis by Daniel Tutt (2000).

2) Observations and new lithogeochemical and petrographic results based on two one-week field visits to these properties by Tim Barrett in late July and mid-October, 2002. During these visits, Frank Creek drillholes FC02-05, FC02-06, and parts of FC02-01 and FC02-03,; and Ace drillholes ACE98-02, ACE98-03, ACE98-06, ACE98-07, and parts of ACE02-3 and ACE02-04 were sampled for lithogeochemistry. A subset of about 15 petrographic samples was also taken and was examined by Dr. W. H. MacLean of McGill University.

During these visits, Louis Doyle showed the author the main trenches on the Ace and Frank Creek properties where semi-massive to massive sulfides recently have been exposed, as well as various outcrops in these areas. The SCR, Sellers Creek, Peacock (Unlikely) and Cariboo (Maybe) showings were also briefly examined.

The objectives of the new studies of the Ace and Frank Creek properties include:

1) Establish a series of chemically defined stratigraphic units (i.e. chemostratigraphic units), and the position of mineralized zones within the chemostratigraphic sequence.
2) Produce a series of downhole plots showing the chemostratigraphic results.
3) Petrographic examination of various rock types (tied to the lithogeochemical results).
4) Investigate the nature of the so-called "felsite" on the Ace property and "felsic quartz-eye tuffs" on the Frank Creek property.
5) Interpretation of the host stratigraphy on the Ace and Frank Creek properties and discussion of possible seafloor settings for the sulfide mineralization.

In this report, we comment on selected field and chemical features of the rock types, which are present, and also discuss some of the main geological problems in these areas and possible avenues of investigation. Until the rock types in both areas are better defined and can be correlated between drillholes and outcrops, and until the structural complexities are resolved, it will not be possible to reliably reconstruct the stratigraphic sequence which hosts the mineralization or its structural orientation on a large scale. This in turn makes it difficult to project the locations of the mineralized horizons with any confidence, which is necessary in order to effectively carry out exploration drilling programmes in these areas. It also hinders the interpretation of the initial paleoseafloor (paleotectonic) setting of the mineralization, and definition of the stratigraphic and alteration features that should be searched for during further exploration. Diverse paleotectonic settings have been suggested over the last few years for the rocks and mineralization on the Ace and Frank Creek properties, including a felsic volcanic and volcaniclastic association, a mafic volcanic and clastic sediment association (besshi-type), and a clastic ± carbonate sediment association (marine continental shelf).

In the following pages, portions of articles by Ferri and colleagues at the B.C.M.E.M. and Tutt's MSc thesis are reproduced verbatim, with only minor editing, as these papers provide an up-to-date introduction to the geology of the area. The reader is directed to the complete articles for regional maps and stratigraphic columns, field photographs, lithogeochemical data, and assays of mineralizaed samples. In the present report, we follow the mapping units and nomenclature used by Ferri (2001b) on the new B.C.M.E.M. map for the southern side of Cariboo Lake. The map area extends from the Cariboo River, which flows southwards from the southwestern end of Cariboo Lake, to the Little River, which flows eastwards from the northeastern end of Cariboo Lake. As such, it includes the area around the Frank Creek prospect, but stops short of the Ace prospect, which lies a couple of kilometres further to the northeast. The geology of the Ace prospect is discussed in detail by Tutt (2000).The general geology of the larger Ace area is included in the regional map of the Cariboo Lake area given in Ferri and O'Brien (2002), also reproduced below.

Several unpublished company reports and assessment reports have also been completed over the last several years and are available from Barker Minerals Ltd. Geological, geophysical and soil geochemistry data on the Frank Creek and Ace prospects are given by Lammle (1995, 1996, 1997). Petrographic descriptions of the rocks in these areas are presented in Payne (1998a, 1998b, 1999a, 1999b, 2000, 2001). Drill logs for holes drilled in 2002 and maps for trenching in 2002 are given in the company report by Wild (2002). The qualification report for the Barker Minerals Ltd. property by Perry and Payne (2001) provides general descriptions of both prospects, as well as summaries of geophysical and soil geochemistry surveys carried out by Barker Minerals and other companies, and a map covering the SCR to Frank Creek area. Details of recent geophysical surveys are given in Scott (1996), Shore (1997) and Walcott (2001).

Dr. Barrett and Dr. McLean's abstract is provided below:

Abstract

The present study deals with the geology and geochemistry of late Proterozoic to Paleozoic rocks on the Frank Creek and Ace properties in the Cariboo Lake area of east-central British Columbia. It was commissioned by Barker Minerals Ltd. with the following objectives:

1) To determine the primary lithogeochemistry and alteration features of the main rock types, particularly those hosting recently discovered occurrences of massive to semi-massive sulfides of both properties; 2) to resolve
uncertainties regarding the origin of three controversial rock types: a) the "quartz-eye tuff" at Frank Creek; b) the "felsite" at Ace; and c) schists of broadly intermediate composition at Ace; 3) to identify stratigraphic packages and contacts wherever possible, in order to help locate potentially mineralized horizons in future exploration programmes; and 4) to interpret the overall geological setting of the area based on modern and ancient deposits of massive sulfides formed in Besshi-type and clastic sediment-dominated seafloor settings.

Fieldwork on the property was conducted in July 2002, October 2002 and July 2003. Most of the drillholes from Barker Minerals' 1998 Ace program, and their 2002 Frank Creek and Ace programs, were relogged and sampled for lithogeochemical and petrological studies. In addition, numerous outcrop and trench localities were visited and sampled. In total, about 150 samples were taken for lithogeochemistry and 25 for petrology. The present report provides results based on the 2002 fieldwork. Results from the July 2003 fieldwork will be given in an Addendum in the spring of 2004. This last phase of work was done mainly to sample remaining drill holes, and is unlikely to change to overall conclusions presented here. Our studies build upon previous work at Frank Creek and Ace by L. Doyle, J. Payne, C. Wild and B. Perry for Barker Minerals, by D. Tutt (2000) at Ace for the University of Victoria, and by F. Ferri and colleagues for the B.C. Ministry of Energy and Mines. Recent mapping by Ferri (2001) and Ferri and O'Brien (2002) in particular has advanced the understanding of geological relations in the Cariboo Lake area.

The Frank Creek area is less metamorphosed than most of the Ace property, where rocks are in the upper greenshist facies, and therefore the primary lithologies at Frank Creek can be more readily identified, as can the initial setting of the mineralization. The main rocks types at the discovery trench and in the 2002 drillholes are graphitic argillites, siltstones, sandstones and local quartz-pebble sandstones, all belonging to the Harveys Ridge succession of the Snowshoe Group. These lithologies host beds of massive sulfide up to 0.3 m thick (in the trench and nearby DDH FC02-03). Blocks in the float above the discovery trench contain beds of massive sulfide at least 0.5 m thick. Alteration zones in drillholes FC02-05 and FC02-06, located some 150-200 m to the northwest of the trench, contain up to 0.7 m of semi-massive sulfides and m-scale intervals of disseminated sulfides. Grab samples of from trench bedrock contain 0.3–4.3% Cu, 0.1-1.5% Pb, and 0.1-4.5% Zn. Grab samples of boulders and bedrock from various other localities contain 0.1-7.4 % Cu, 0.1-15.4 % Pb, and 0.1-8.2% Zn. Some of these samples contain highly anomalous contents of As, Sb, Bi and Sn. Although Au contents are generally <1ppm, Ag contents range from 10-700 ppm, with the highest Ag values associated with the highest Pb values. Although the initial 2002 drill program at Frank Creek did not intersect the trench massive sulfide horizon due to an unexpected fault, an interval of 0.5 m grading 0.52% Cu, 0.28% Pb, 0.33% Zn and 2.6 opt Ag was hit in nearby FC02-03, while 200 m to the northwest, in the "Cu stringer zone", FC02-06 intersected 0.45 m grading 2.08% Cu, 0.54% Pb, 0.98% Zn and 2.6 opt Ag.

The Frank Creek host rocks in the trench and nearby drill holes are interpreted to represent a sequence of distal continental shelf clastic sediments, with no evidence for felsic volcanic input. The "quartz eye tuffs" do not have felsic compositions, nor do they contain any obvious volcanic clasts. The only definite igneous rocks are occasional metre-scale mafic dykes or sills. Within a few hundred metres of the discovery trench are well-bedded quartz-bearing sandstones and a distinctive orthoquartzite to pebbly sandstone unit known as the Agnes conglomerate. The 2002 drill holes show evidence of graded bedding, indicating that at least some of the clastic beds are turbidites that young downhole to the northeast. Locally lensoidal to brecciated bedding is interpreted as the result of seafloor slumping rather than tectonism. About 1.5 km southwest of the discovery trench, basaltic pillow lavas and mafic volcaniclastic rocks crop out along a ridge. The hillside in between appears to comprise a variety of clastic sediments ranging from pebbly sandstones to argillites. One of the pebbly sandstone beds, as first noted by J. Payne, is clearly overturned. The age of the mafic sequence on the ridge is unknown, but it appears to be conformable within the clastic sediments, based on mapping by F. Ferri and others. The mafic volcaniclastic sequence, which contains interbedded clastic sediments, appears to have extended over a map area of at least 3 x 2 km, prior to intrusion of the later Quesnel Lake Gneiss (357 Ma). The Big Gulp showing near the southern margin of the mafic volcaniclastic unit comprises sulfide-bearing lenses within altered, ankerite-bearing tuffs. Two previous grab samples yielded 4.7 and 8.3 % Zn, with less than 0.1% each of Cu and Pb.

The mafic dykes sampled in the Frank Creek drillholes are high-TiO2 basalts of alkaline affinity. The pillow lavas and mafic volcaniclastics sampled by J. Dunning on the ridge 1.5 km to the southwest of the discovery trench are also high-TiO2 basalts, but lack Nb data. Two samples taken by N. Shriver are of alkaline affinity. "Intermediate" rocks sampled by J. Dunning and F. Ferri in the ridge area could be reworked, impure mafic volcaniclastics or greywacke sediments. Assuming that the extrusive volcanic rocks on the ridge are more or less the same age as the massive sulfide mineralization in the trench, then the geological setting of the Frank Creek area is broadly similar to that of certain Besshi-type deposits hosted by clastic sediments (greywackes to shales) and alkaline mafic rocks. However, the presence of arkosic sandstones, and the fact that some massive sulfides contain up to a few percent Pb, suggests that the setting is more akin to a continental marine shelf. The presence of alkaline mafic rocks suggests that the shelf was undergoing rifting.

The existence of seafloor faults could also account for lateral changes in sedimentary facies on the map scale, although interpretations are complicated by the presence of late tectonic faults and possibility of low-angle thrusting. If the Frank Creek sequence is in fact overturned and intact, then the mafic extrusives would be in the stratigraphic footwall of the sulfide beds that occur in the discovery trench. In any case, the occurrence of mafic magmatism on a faulted continental shelf, as we interpret to have occurred in the Frank Creek area, bodes well for the development of hydrothermal systems and the formation of massive sulfide beds, as does the generally reduced nature of bottom waters (as indicated by the presence of inter-turbidite graphitic argillites). The giant, Sullivan massive sulfide deposit in southeastern B.C. formed in this general type of setting in the mid-Proterozoic, although mafic magmatism at Sullivan takes the form of sills rather than flows, and is of tholeiitic rather than alkaline affinity. Other areas of interest at Frank Creek include Big Gulp, about 2 km southwest of the pillow lava ridge, and the Unlikely prospect, several km northwest of the ridge. Both of these areas contain sulfide-rich beds within altered clastic sediments; a mafic sill is also present at Unlikely. None of these areas has been drilled or systematically tested by geophysics.

On the Ace property, some 10 km east of the northern end of Cariboo Lake, intervals of massive sulfide up to 0.25 m and semi-massive sulfide up to 1.2 m thick are hosted by a series of quartz-feldspar-muscovite-chlorite±biotite±garnet schists and so-called "felsite" intervals, the latter occurring over drillhole thicknesses of 5-70 m. Interbeds of siltstone-argillite up to several metres thick and marble up to 0.5 m thick are also present. The sulfides consist mainly of pyrite and/or pyrrhotite, which form either sulfide-rich layers in chloritized schist, or disseminations (2-10%) in the "felsite". Although the sulfide layers intersected in the 1998 and 2002 drillholes carry only <0.1% each of Cu, Pb and Zn, and <1 ppm Au, grab samples of massive sulfide boulders from the Ace property contain up to 9.9% Zn and 7.7% Pb (with <0.1% Cu and <1 ppm Au). Also present on the Ace property are boulders containing Au-rich quartz-sulfide veins; grab samples contain 2-29 g/t Au. Similar veins have been uncovered in trenches. The age of the Au-sulfide vein systems is unknown, but it is possible they formed during later regional deformation and metamorphism. Due to this metamorphism, the presursors of most of the schistose rocks cannot be identified in the field, apart from the argillite-rich or marble-rich beds, which clearly were sedimentary.

The chemical composition of the schists and also the "felsite" are broadly "intermediate" in terms of their immobile-element ratios, which rules out the presence of felsic volcanic rocks on the Ace property. The precursors of these "intermediate" rocks are instead interpreted to have been mainly clastic sediments such as greywacke or arkose, although it cannot be excluded that some had volcaniclastic precursors of andesitic to locally basaltic andesite composition. The "felsite", which is a coarse-grained plagioclase-quartz-rich rock, is interpreted to have formed as a result of sub-seafloor Na metasomatism of clastic sediments such as greywacke or arkose. The composition of the Ace schists and some of "felsites" is comparable to that of modern, fine-grained clastic turbidites, e.g. those overlying spreading centres in the eastern Pacific Ocean. At Middle Valley, up to 700 m of these sediments overly mafic oceanic crust, and are locally intruded by basaltic sills. Massive sulfide deposits in excess of 90 m thickness occur at surface and in the subsurface, while the host sediments have been hydrothermally altered to a variety of assemblages, including albite-chlorite-pyrite. At Ace, no definite coeval mafic sills or flows have been found, although as noted above, it remains possible that some of the schists could contain a mafic volcaniclastic component.

Until such time as mafic rocks coeval with mineralization at Ace can be identified, we interpret the setting to have been similar to that of Frank Creek, that is, a continental shelf that accumulated clastic sediments with lesser argillites and minor limestones. The composition of the Ace schists is also comparable to some of the unaltered clastic sediments hosting the Sullivan Zn-Pb deposit, while the Ace "felsite" is compositionally and mineralogically comparable to the albite-chlorite-pyrite alteration zone in the Sullivan hangingwall. Similar albite-chlorite-pyrite alteration zones also occur near massive sulfide deposits on modern, sediment-covered spreading ridges, and at many ancient Besshi-type deposits, which consist of elongate lenses of semi-massive to massive, Cu-Zn-bearing pyrite+pyrrhotite, typically hosted by metamorphosed greywackes, argillites and basalts. A Mn-rich lithology known as "coticule" (Mn carbonates, Mn-rich garnets, etc.) also occurs in association with Besshi-type deposits, and can form horizons extending up to a kilometer from the sulfide lenses. Boulders of Mn-rich schist (1-4% MnO) containing garnets and disseminated sulfides have recently been found in trenches in the Ace area. Overall, the lithological sequences at Frank Creek and Ace area show some features of both Besshi-type and Sullivan-type deposits. At Frank Creek, the occurrence of alkaline mafic lavas that are probably of similar age to the massive sulfide prospect is of particular interest, as it supports a paleotectonic setting where deep-seated magmatism was triggered by rifting of a continental shelf. Such a setting would also be favourable for the development of

hydrothermal systems, and the formation of sediment-hosted massive sulfide deposits in sub-basins containing reduced bottom waters (now black shales and Mn-rich sediments). Much more drilling is required to explore the large tracts of untested favourable geology in the Cariboo Lake area that could host massive sulfide deposits, in particular: 1) the along-strike extensions of the discovery trench mineralization at Frank Creek; 2) the mafic lava sequence on the ridge to the south of Frank Creek; 3) drilling through the known zones of albite alteration and Mn horizons at Ace; and 4) drilling of several significant geophysical conductors and soil anomalies in both areas.

4.4 Lithological and Alteration Features in the Frank Creek Area

Dr. Tim Barrett, January 18, 2006

Rock Types

In December 2005, the author reviewed all lithogeochemical data from Barker Mineral's 1998 to 2004 programmes on the Frank Creek and Ace properties, and produced a revised, and hopefully final, classification scheme for more than 600 whole-rock samples. The emphasis in this brief report in on Frank Creek, the focus of exploration over the last 2 years. However, for consistency, the Ace samples have been classified using the same scheme.

Most of the rocks in the Frank Creek area form part of a complex sandstone-siltstone-argillite sequence that locally has been tectonically disrupted by folding and faulting. These rocks host disseminated to vein sulfides, and local beds of massive sulfides. We have not found any good evidence for the occurrence of felsic or even intermediate volcanic rocks on the Frank Creek property, although mafic rocks are present. The mafic rocks occur mainly as dykes or sills that are typically 1-5 m thick and are found throughout the sedimentary sequence. The age of these dykes is unknown. In some cases, they have sharp and possibly chilled contacts with the host rocks, and could be late dykes, but in other cases, the indistinct and altered nature of their margins suggests that the contacts are peperitic and thus the dykes would be synsedimentary. Mafic rocks also occur as pillow lavas at one important locality on top of the Frank Creek hillside. Assuming that the sedimentary rocks associated with the pillow lavas are the same age as the shales and sandstones in the nearby (downslope) Discovery Trench, where sulfide beds are present, then mafic volcanism would have been broadly coeval with the deposition of sulfides. The possibility that some of the mafic dykes are also synsedimentary is supported by the fact that most of these dykes have the same chemistry as the pillow lavas on the hilltop, that is, they are alkaline basalts with relatively high contents of TiO_2, Zr and Nb. It is possible that mafic volcaniclastic rocks are also present here and there on the Frank Creek property, in particular adjacent to the pillow lava outcrop, and probably also in a few of the drillholes. These possible volcaniclastic rocks are typically strongly sheared and altered, so their primary textures are not preserved, but they have the same alkaline basalt chemistry as the massive dykes and pillow lavas. It is worth noting that many of the mafic rocks are highly carbonate-altered and some are sericitized as well. Although this alteration has strongly modified the primary chemistry of these rocks, they can still be identified using immobile-element methods. The mafic alkaline rocks also have high contents of Cr and Ni, which suggests that they represent unfractionated and probably mantle-derived magma.

Classification of the sedimentary rocks has proved to be a difficult task because these rocks are much more variable in primary composition than a typical volcanic sequence. Although shales within a local basin are often relatively uniform in composition (because they represent average fine-grained material slowly settling out of the water column), sandstone-siltstone beds brought into a basin by turbidity currents or grain flows can show a range of compositions due to derivation from more than one source area, and sorting of mineral components during sediment transport. Variations in the proportion of detrital quartz to other components alone can lead to a wide range in initial bulk sediment compositions. This also makes it difficult to assess the effects of hydrothermal alteration (since the precursor composition of any given sedimentary bed may be different from that of the next bed).

Despite these problems, a reasonably consistent and useable classification system has been developed based on immobile-element ratios of elements that are known to be essentially immobile under the alteration conditions that typically prevail during the formation of massive sulfide deposits. Because these ratios do not involve quartz, which is the main component of many of the sandstones, they do not separate rock types on the basis of bulk composition, but rather on the composition of the non-quartz components of the rock. These components typically include feldspars, micas, clays (now converted to other phases), and resistant heavy minerals such as zircon, chromite, ilmenite, rutile apatite, monazite, etc. Quartz-rich sandstones that initially formed by reworking and sorting

of grains in a shallow marine environment commonly contain concentrations of heavy minerals. For example, a sandstone with 80 % quartz can contain enough zircon to produce a whole-rock value of a 200-400 ppm Zr. High Zr contents combined with low Al_2O_3 contents (3-8 %), sets these quartz-rich sandstones apart from reworked quartz-phyric felsic volcanic material, which maintains a fairly normal felsic composition (as the matrix to the quartz grains is dominated by felsic lithic material).

The lithogeochemical data for the Frank Creek sedimentary rocks have been divided into different groupings on an empirical basis, with the objective of defining groups that have as little overlap as possible in the main immobile-element ratios Al_2O_3/TiO_2, Zr/Al_2O_3, Zr/ TiO_2, Zr/Y, Y/Nb and $(La/Yb)_n$. Four main sediment groups, A to D, have been defined, with each of these subdivided into 2-3 subgroups. In general, when classifying a rock, it is probably sufficient to assign only the group name, but if detailed comparisons are being made, the subgroup should also be considered. At Frank Creek, sediments A, B and C are always sandstones and siltstones. Sediment A is the most quartz-rich, while B is arkosic, and C is similar to greywacke. Sediment D is argillite or argillaceous siltstone. Even though this classification system does not take into account the quartz component, it identifies the rocks reasonably well because the ratios incorporate Al_2O_3 (in feldspars and micas), and various components such as TiO_2, Zr and Nb (in the heavy mineral suite). The most immature sediments (greywackes) have the highest content of feldspars and micas, while the most mature (quartzites) have the lowest contents of Al_2O_3, but generally high contents of Zr.

It is also possible to apply the Frank Creek chemical groupings to the rocks on the Ace property. Relative to Frank Creek, the rocks at Ace are more metamorphosed (biotite, amphibole and garnet are present) and are either more schistose, or are recrystallized into hard, pale rocks that previously have been termed "felsites". However, the Ace rocks show the same range of immobile-element ratios are those at Frank Creek, with the main difference being that sediment D-type compositions are much more common at Ace. Unfortunately, the original texture of the Ace rocks is rarely preserved. For this reason, I have classified many of the Ace rocks as "intermediate", to reflect their bulk composition. From the bulk composition alone, they could be either metamorphosed shales and siltstones, or metamorphosed andesites. However, certain compositional details in the less altered samples suggest to me that they are metamorphosed shales and siltstones, and in fact, in those rather uncommon cases where intervals of definite shale and siltstone can still be recognized, their compositions correspond to those of the D1 and D2 sediment subgroups at Frank Creek. I have therefore divided the Ace rocks using the same chemical groupings, but refer to them as Intermediate-1 and Intermediate-2, as a sedimentary protolith often cannot be proven.

Where gritty sandstone beds can be recognized at Ace, they have Sediment B or C compositions. As noted above, where shaly rocks can be recognized, there have Sediment D-1 or D-2 compositions. In combination with the absence of any clearly volcanic features such as lava flows, these observations suggest that most rocks at Ace have been derived from a suite of shale-siltstone-dominated marine sediments. This would place the Ace area in a deeper, more distal part of a marine basin relative to the Frank Creek area, where sandstones with abundant quartz are much more common (there are even beds of pebbly quartz conglomerate at Frank Creek). Fine-grained limestone and calcareous argillite beds are occasionally present at both Frank Creek and Ace, but are more abundant in the former area. Frank Creek also has a higher proportion of definite mafic volcanic rocks and mafic dykes. At Ace, there are only a few samples with compositions equivalent to that of basalt. As noted earlier, there are many "intermediate" compositions at Ace, but these are more likely to be metasediments than metavolcanic rocks. The "felsites" at Ace appear to be the altered equivalent of silts and argillites, to which Na, Si and base-metal sulfides were added. The resulting rocks are now albite-quartz-rich, but retain the immobile-element ratios of typical argillites and argillaceous siltstones. The association of sulfide mineralization with albitic alteration is an interesting one, and should be further explored for, as such alteration is known to occur near certain sediment-hosted massive sulfide deposits, in particular the Sullivan deposit in southern BC.

The sediments at Frank Creek probably formed on the deeper part of a continental platform, where sands accumulated together with ambient shales. The sands, which are occasionally graded, were probably transported by turbidity currents and grain flows from a shallow-shelf setting. Although late tectonic effects have clearly caused some bedding-parallel shearing and disruption of bedding, certain intervals of sediments appear to have been affected by soft-sediment deformation, slumping, and the formation of breccia zones (containing clasts of sand, silt and shale) that may represent debris flows. This suggests that some relief was present on the seafloor. The occurrence of common alkaline basalt dykes at Frank Creek is consistent with a rift-related setting, and if at least some of these dykes are synsedimentary, then there may well be a link between magmatism, rifting and mineralization.

Alteration

Because of the likelihood that individual beds in the Frank Creek sedimentary sequence had different and unpredictable starting compositions – due largely to variations in the proportion of contained quartz – it is difficult to quantitatively asses alteration. To calculate mass changes, for example, one needs to be able to estimate with confidence the original Al_2O_3 or TiO_2 content of a given bed of sediment prior to alteration. However, the initial contents of Al_2O_3 and TiO_2 can vary dramatically depending on the amount of detrital quartz that is present in a bed, and the latter cannot be assessed once the rock is strongly altered. The only alternatives are to use the whole-rock analyses as they are, which is a very rough way of examining alteration, as no corrections are made for the significant effects that mass changes can have on the concentrations of individual elements, or to use a ratio involving mobile elements such as K, Mg, Ca and Na, which suffers from the fact that different beds will have different starting ratios prior to alteration.

Table 1 gives the results for a "normalized" ratio, $(MgO+K_2O)*100 / (MgO+K_2O+CaO+Na_2O)$, also known as the Ishikawa index, and an "unnormalized" ratio, $(Fe_2O_3+MgO+K_2O)/(CaO+Na_2O)$, that I have applied, as a test, to the Frank Creek sedimentary rocks. For the former ratio, the maximum value an altered rock can have is 100 (it should be borne in mind that unaltered rocks can have initial values as high as 50 depending on their starting composition). For the latter ratio, values >15 indicate significant alteration, and values >30 strong alteration. Increased ratios should reflect increased development of chlorite via addition of Mg and Fe to the rocks and increased development of sericite via addition of K; both processes will lead to loss of CaO and Na_2O. The second ratio also includes Fe, which can be added in the form of Fe sulfides, Fe-bearing carbonates or chlorite.

Examination of the Frank Creek data suggests that sedimentary rocks with <1.2 % combined Na_2O+CaO and 8-20 % LOI are strongly altered. The depletion in combined Na_2O+CaO, relative to likely starting values of about 3-5 %, is due mainly to sericitization and chloritization. Such alteration will also increase the LOI, as will the addition of sulfides or carbonates. Figure 1 shows the downhole distribution of alteration for four of the 2002 Frank Creek holes, including Chris Wild's visual estimates of the amount of sulfide, and samples with >4 % MgO (most sediments initially contain 1-3 % MgO). Holes FC-02-05 and FC-02-06 contain significant intervals of altered rock. The altered intervals shown in Figure 1 also contain all of the anomalous enrichments in base metals. In Table 1, anomalous contents of base metals (Cu+Pb+Zn > 500 ppm) are shown in pink, and elevated contents (Cu+Pb+Zn > 3000 ppm) in red. **(Figure 7 Downhole Profile Examples)**

For the purpose of showing spatial alteration effects within the Frank Creek area, it is recommended that the two indices discussed above be plotted and compared, along with (Cu+Pb+Zn) values, and also LOI values. Of the 2002 holes, the most altered intervals occur in the upper half of FC-02-06, the upper two-thirds of FC-02-05, and the mid-portion of FC-02-01. Together with the presence of sulfide beds in the Discovery Trench, this suggests that a zone of alteration and metal addition, with a roughly northwest trend, extends from about 5450N (the trench) to 5800N (FC-02-01). Of the 2004 holes, the most altered intervals are in upper halves of FC-04-08 and FC-04-13. Cu-bearing sulfide mineralization occurs in both of these altered intervals. Of interest in FC-04-13 is the strong alteration shown by 6 out of 7 whole-rock samples taken between 132 and 252 m. **This hole intersected 0.78 % Cu over 11.4 m (257.1-268.5 m).** If the sediment sequence is overturned, as seems to be generally the case in this area, then the zone of strong alteration would lie in the (overturned) stratigraphic footwall of the Cu-mineralized interval.

The mafic rocks at Frank Creek are commonly strongly carbonate-altered, yet their major element compositions have not been changed much, apart from the dilution of all elements as a result of the addition of carbonate. This suggests that the alteration was late and rather weak. CO_2 present in near-

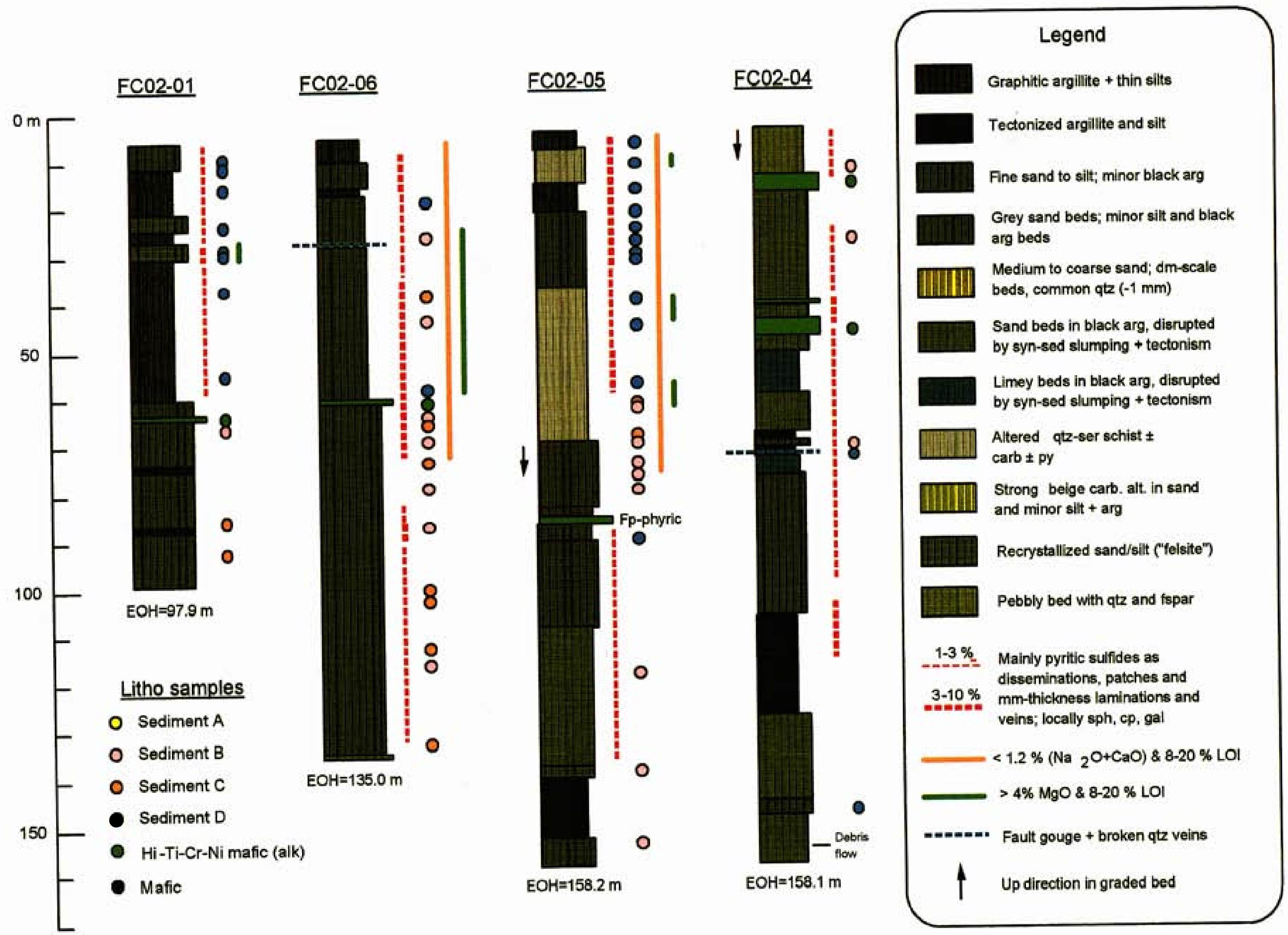


Figure 7 - Downhole Profile Example

neutral fluids can combine with the abundant Fe, Mg and Ca that are present in mafic rocks to produce abundant ankeritic carbonates. In addition, it appears that some Ca also has been added to many of the mafic rocks. The process of carbonate overprinting is not restricted to mafic rocks, but can occur wherever such fluids cross rocks that contain plentiful Fe, Mg and Ca. If Ca is added during alteration, this will lower the alteration indices (the opposite effect to chloritization and sericitization, which deplete Ca). A few mafic rocks, such as the pillow lavas and associated probably volcaniclastics on the hilltop, are notably sericitized as well as carbonatized, and contain up to a few thousand ppm Ba. It is possible that the sericitization and Ba addition developed during seafloor hydrothermal alteration, although this is speculative. Alteration of high-Cr mafic rocks commonly results in the formation of accessory amounts of green Cr-bearing mica. This phase can also occur in altered sandstones, where it probably forms from trace amounts of detrital chromite.

4.5 2004 Frank Creek Geophysical Titan-24 Survey

"Geophysical Interpretation Report Regarding the Quantec TITAN-24 Distributed Array System Tensor-Magnetotelluric and DC Resistivity and IP Surveys over a portion of the Frank Creek Project *by Quantec Geoscience Inc.,"*

INTRODUCTION

Titan Distributed Array surveys were undertaken on the ***Frank Creek Project*** by Quantec Geoscience Inc.The geophysical surveys included tensor magnetotelluric resistitivity (MT), which benefits from high resolution and deep penetration (>1-1.5km) and DC resistivity & Induced polarization (DCIP), which provides superior shallow to mid-depth penetration (<500-750m) and sensitivity to sulphides, from disseminated to massive.

The Titan distributed acquisition system employs a combination of large array size, with a large multiplicity of sensors, as well as precise 24-bit digital sampling, with state of the art signal processing and 2D-3D computer-inversions, to help penetrate deeper than conventional mineral exploration surveys.

The Titan-24 system provides three independent data sets capable of accurately measuring subsurface resistivities to depths in excess of one kilometer, and chargeabilities (mineralization) to depths of 500-750 metres. A total of 15.8 line-km of MT and DCIP were surveyed on six (6), 200m spaced, 2.4km long, east-westerly profiles and one (1) cross-line - roughly covering a 1.5 x 2.4km area.

SURVEY OBJECTIVES

The survey objectives of the TITAN-24 surveys were to identify and define drill targets over areas of potential economic mineralization associated with possible metasedimentary (MET-SED) massive sulphide deposits on the property. The geology, alteration and mineralization to date indicate the *Frank Creek* project to be permissive for the discovery of a sedimentary exhalative massive sulphide (*Sullivan* type) or *Besshi* type massive sulphides (similar to *Goldstream* and *Windy Craggy*). The identification of a very prospective geological host environment is the main reason Barker Minerals have chosen the Titan survey, in order to get the best information possible before embarking on a significant drill program to follow.

Project Results

- In general the data quality is good to excellent, with an average error of <1% for the DC voltage and >1 milliradians for the IP phase, as well as <1/20TH of a decade error associated with the MT apparent resistivities and <3 degrees for the MT phase – due in large part to the remoteness of the survey area, away from man-made culture, to reasonable ground contacts for current injection and high bulk resistivities for the DCIP surveys, as well as relatively high nature source field strengths for the MT surveys.

- The Titan surveys have identified as many as ***90*** separate DCIP and MT anomalies of varying significance, including ***18*** major (>50-75mrad) IP anomalies, whose high chargeability and low resistivity (Type I) characteristics best define the stringer to possibly massive sulphide (for the strongest IP anomalies) target model sought for at ***Frank Creek*** and also lie within 250-500m of the surface.

Conclusions

At present, the exploration objectives have been favourably answered, using the Titan-24 distributed acquisition technology and multi-parameter geophysical interpretation. In response to the survey objectives, the following conclusions can be drawn:

- In general, the Titan targets, which can be divided into shallow (<250m) and deep (>250m) features. Of the ninety ***(90)*** targets, two thirds ***(60/90)*** are shallow and nearly 30% ***(26)*** have favourable high chargeability and low resistivity characteristics that liken them to stringer to massive sulphides. In addition,

- 18 deep MT and DC resistivity low anomalies were identified below 250-500m, which do not have associated IP – in part because they were too deep (>350-500m) or because they are either non-mineralized fault or clay-altered structures or possibly because they are too massive to host IP responses.

- The *Barker* target areas, ***F1, F3, F7*** and ***F8***, all host pronounced chargeability high and resistivity low anomalies, consistent with massive sulphides or graphite, that can be traced from surface to below 500-750m depths. At depth, the areas that appear to host the best potential for massive sulphides are situated: a) in the southern region of L2000W, b) in the southwestern region of L6100N, c) along the western end of L55N, and d) in the northwestern region of L61N.

- The 2D DCIP chargeability results in particular have proven to be the best indicators for anomalous chargeability relating to the presence of sulphides, both massive to disseminate, within the upper 350-500m of the bedrock. In the present evaluation, the IP chargeability has been used as the primary sulphide mapping and targeting tool.

- The 2D DC and MT resistivity results have proven to be effective indicators of geologic structure and sulphide concentration (when associated with the IP) from surface to >750-1.0km depths. The MT inversion results in particular have been able to define moderate to steeply dipping resistivity low and high structures, which correlate well with the DCIP to within 500-750m, but also often extend to greater (1km) depths. The DC resistivity has been used to differentiate between Type I (conductive massive sulphide) to Type III (non conductive disseminate sulphide) chargeability high targets, whereas the MT and DC resistivity has defined several deep (Type IV) resistivity low targets lying at >250-1000m depths, below the depth of investigation limits for IP.

4.6 Year 2004 – 2005 Diamond Drilling Programs

Frank Creek Project Drilling

An initial seven hole diamond drilling program was conducted on the Frank Creek property in 2002, totaling 813 m. A further seven holes were drilled in 2004, totaling 1881.3 m. In 2005, four holes were completed, for a further 1566 m.

The 2004 and 2005 drilling programs are the subject of this section.

Drill logs **(Appendix II)** and cross sections **(Appendix III)** are included in the appendices. Drill hole coordinates may be found in **Table 1** below. It should be noted that as the sampled intervals in the drill core were analyzed for a full suite of major and minor elements, this data has not been added directly to the drill logs, but instead, is included in its entirety in Appendix IV with corresponding sample numbers in Appendix V. Significant assay results, including composite results are compiled in Table 2 & Table 3, included in the body of the report.

All drill core is stored at the Barker field office in Likely, B.C. All drill core of the 2005 drill program was also photographed, both dry and wet, to create a permanent record.

Table 1 - Drill Coordinates

Drill Hole	Northing	Easting	Azimuth	Dip	Length
FC04-07	57+00 N	23+00 W	265°	80°	487.4 m
FC04-08	57+00 N	16+00 W	270°	58°	446.2 m
FC04-09	58+70 N	21+30 W	030°	49°	129.5 m
FC04-10	58+70 N	21+30 W	030°	90°	41.8 m
FC04-11	58+70 N	21+30 W	350°	48°	94.8 m
FC04-12	58+20 N	20+40 W	023°	65°	236.5 m
FC04-13	57+00 N	21+10 W	090°	67°	444.4 m
FC05-14	59+05 N	20+08 W	090°	70°	395 m
FC05-15	61+00 N	24+00 W	090°	70°	414 m
FC05-16	61+00 N	27+25 W	090°	70°	401 m
FC05-17	57+00 N	18+50 W	090°	70°	356 m

4.7 2004 Drilling

During late 2004 and early 2005, the Company conducted an exploratory diamond drilling program (7 ddh, 1880m in total) (Table 1 Drill-hole Parameters) in the vicinity of the 2004 discovered copper rich sulphide discovery outcrop, on grid line 59 north and 21 west, and near geological and geophysical targets. All of the 2004 drill holes were located around the F-7 Target Area and were focused on Titan geophysical targets or bedrock mineralization.

The recent drilling results on the Frank Creek project has confirmed a new discovery with Besshi type mineralization intercepted in 5 of 7 drill holes. Grades of copper within the altered zones had individual mineralized horizons ranging from .25% to 5.7% copper, 7g/t to 39 g/t silver, and .1g/t to 1.4 g/t gold (Table 2 Frank Drill Result Summary). The copper/silver/gold tenor of the mineralization, up to 70 metres thick intervals of altered and variably mineralized zones and favorable geology are consistent with a Besshi type massive sulphide system.

Besshi-type deposits typically form lenses and sheet-like accumulations of massive sulfides that contain up to a few percent each of copper and zinc, with significant gold and silver credits. Examples are the copper-rich Goldstream deposit [3.2 million tons, 4.5% copper (Slack, 1993)] in southern BC and Windy Craggy [297 million tons, 1.4% copper and .22 g/t gold (Slack, 1993)], the world's largest Besshi deposit, in northwestern British Columbia. Stringer mineralization at Windy Craggy ranges up to 1% to 1.5% copper with one drill intercept averaging 1.07% copper over 58 metres.

Multiple mineralized horizons intersected in the wide spaced drill holes FC04-07, FC-08, FC-09, and FC-13, correlating soil and magnetic anomalies, and large Titan geophysical anomalies indicate that a significant mineralizing system may be present on the property. This bodes well for the next phase of drilling which is to define the size and to determine the potential grade of these zones by stepping out laterally, on strike and down-dip from the newly discovered mineralization. A summary of the 2004 drill results are provided in the table below.

Table 2 Frank Creek 2004 Drill Result Summary

Legend:

Bands -	Bands of different styles of sulphides		g/t - Grams per ton
Dis -	Disseminated sulphides	Copper >**.10%**	1 g/t = 1 part per million (ppm)
Str -	Stringer sulphides	Lead >**.10%**	
SM -	Semi-Massive sulphides	Zinc >**.10%**	
MS -	Massive Sulphides	Silver >**7.0 g/t**	

Drillhole	**Sample #**	**Sample Type**	**From metres**	**To metres**	**Interval metres**	**Cu %**	**Pb %**	**Zn %**	**Ag g/t**	**Au g/t**	**Fe %**	**S %**
FC04-07	9153	Str	109.78	110.40	0.62	0.04	**0.16**	**0.49**	**7.1**		**9.1**	**3.1**
FC04-07	9154	Str	110.55	110.99	0.44	0.15	0.06	0.09	6.5		**8.9**	**3.1**
FC04-07	9155	Dis-Str	114.87	115.17	0.30	**0.63**	**0.18**	**0.42**	**24.8**		**16.4**	**8,9**
FC04-07	9152	Str	118.54	119.14	0.60	0.03	0.08	0.15	3.9		**5.7**	**1.9**
FC04-07	9156	Str-SM	122.90	123.70	0.80	0.44	**0.38**	**0.58**	**28.0**		**13.9**	**6.9**
FC04-07	9157	Str	123.70	124.00	0.30	**0.53**	**0.44**	**0.82**	**33.4**		**12.9**	**6.8**
FC04-07	9158	Str-SM	124.81	125.13	0.32	0.14	**0.32**	**0.44**	**9.1**		**16.4**	**10.5**
FC04-07	9159	SM-MS	125.23	125.53	0.30	**0.25**	**0.16**	**0.37**	6.8		**13.2**	**10.5**
FC04-07	9137	Dis-SM-Bands	210.80	211.30	0.50	**0.25**	0.08	0.19	**7.4**		**9.2**	**5.8**
FC04-07	9135	Dis-Str	240.18	240.48	0.30	0.24	0.04	0.04	6.8		**10.8**	**3.1**
FC04-07	9150	MS-Bands	307.59	307.89	0.30	**5.78**	0.05	0.14	**73.2**	**0.44**	**16.8**	**7.3**
FC04-07	9151	Str	308.80	309.60	0.80	0.01	0.02	0.07	0.6		**6.8**	**0.9**
FC04-08	9139	Str	104.20	104.95	0.75	0.04	0.02	**0.29**	1.6		**10.9**	**7.8**
FC04-08	9140	Str-SM	104.95	105.75	0.80	0.11	0.04	0.14	5.0		**12.7**	**9.1**
FC04-08	9141	SM	106.70	107.00	0.30	**0.41**	**0.11**	**0.89**	**9.4**		**10.2**	**3.9**
FC04-08	9142	Str	108.15	108.57	0.42	0.03	0.01	0.09	1.0		**10.3**	**2.1**
FC04-08	9138	Vein	155.25	156.00	0.75	**0.75**	0.03	0.05	**9.9**	**0.12**	**15.1**	**6.1**
FC04-09	212389	MS	22.30	22.80	0.50	**0.58**	**0.15**	**6.57**	**47**		**35**	**>10**
FC04-09	9144	Dis-Str	23.30	23.77	0.43	0.02	0.06	0.04	4.2		**13.8**	**1.5**
FC04-09	9146	Str	25.00	25.30	0.30	0.02	0.02	**0.27**	1.6		**5.7**	**3.1**
FC04-09	9145	Str	27.08	27.56	0.48	0.06	0.01	0.03	1.4		**11.6**	**1.8**

Drillhole	Sample #	Sample Type	From metres	To metres	Interval metres	Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %	S %
FC04-09	9143	Dis-Str	28.80	29.70	0.90	0.03	0.09	**0.42**	6.6		**7.1**	**5.2**
FC04-11	9147	Str	22.95	23.55	0.60	0.02	0.02	0.10	1.4		**5.7**	**1.9**
FC04-11	9148	Str	25.74	26.10	0.36	0.06	0.04	**0.12**	3.0		**7.6**	**4.7**
FC04-11	9149	Dis-Str	26.30	26.82	0.52	0.13	0.03	**0.14**	2.6		**13.3**	**1.8**
FC04-12	9160	Dis-Str	15.75	16.05	0.30	0.03	0.08	0.06	2.8		**9.1**	**1.4**
FC04-12	9161	SM-Bands	18.60	18.90	0.30	**1.24**	0.06	**0.36**	**12.2**		**17.5**	**5.5**
FC04-12	9162	MS-Bands	19.08	19.38	0.30	**3.36**	**0.10**	**0.22**	**29.2**		**13.6**	**6.4**
FC04-12	9163	Dis-Thin SM-Bands	22.08	22.88	0.80	0.09	0.01	0.06	1.2		**7.1**	**5.9**
FC04-13	187812	Dis	123.10	124.36	1.26	0.01	0.01	0.03	0.9		**3.6**	**0.2**
FC04-13	9124	Dis-Str	139.50	139.75	0.25	0.06	0.03	**0.30**	2.5		**18.7**	**7.2**
FC04-13	187808	Dis	184.00	184.7	0.70	**0.17**	0.01	0.03	2.2		**8.9**	**4.9**
FC04-13	187809	Dis	184.70	185.35	0.65	0.02	0.02	0.02	0.9		**9.1**	**3.7**
FC04-13	187810	Dis	186.00	186.5	0.50	**0.22**	0.02	**0.10**	2.2		**11.1**	**8.1**
FC04-13	187811	Dis	187.27	188.37	0.90	0.07	0.02	**0.27**	1.6		**9.2**	**4.9**
FC04-13	9125	SM-Bands	244.15	244.40	0.25	0.09	0.01	**0.21**	1.7		**10.4**	**6.2**
FC04-13	9164	Str-SM	246.29	246.76	0.47	**0.25**	0.01	0.04	1.9		**18.9**	7.1
FC04-13	9165	Dis-Str	257.30	257.60	0.30	**0.81**	0.01	0.05	**11.2**	**0.24**	**12.3**	**2.6**
FC04-13	212458	MS	257.60	257.80	0.20	**2.88**	0.01	**0.40**	**39.0**	**1.70**	**36.6**	**>10**
FC04-13	9166	Dis-SM-Bands	257.80	258.14	0.34	**0.65**	0.01	0.03	**7.7**	**0.04**	**10.4**	**1.8**
FC04-13	9167	Dis-Str	258.14	258.42	0.28	**0.78**	0.01	0.03	**9.0**	**0.20**	**12.3**	**2.6**
FC04-13	9168	Dis-SM-Bands	258.47	258.82	0.35	**1.15**	0.01	0.04	**13.3**	**0.10**	**13.1**	**3.6**
FC04-13	9169	Str-SM-Bands	259.02	259.37	0.35	**1.09**	0.04	**0.12**	**14.9**	**0.56**	**19.5**	**8.9**
FC04-13	9170	SM-MS-Bands	262.10	262.50	0.40	**2.73**	0.02	**0.19**	**30.5**	**0.36**	**17.6**	**9.1**
FC04-13	9171	Dis-SM	264.10	264.42	0.32	**1.16**	0.02	0.07	**16.3**	**0.34**	**13.1**	**5.2**
FC04-13	9172	SM	264.42	264.82	0.40	**0.78**	0.01	0.07	**9.9**	**0.23**	**16.9**	**7.3**
FC04-13	9173	SM	264.82	265.52	0.70	**0.77**	0.01	0.07	**10.2**	**0.30**	**15.2**	**7.1**
FC04-13	9174	SM	265.52	266.00	0.48	**2.77**	0.02	**0.15**	**32.8**	**0.57**	**22.2**	**9.9**
FC04-13	9175	SM-MS-Bands	266.00	266.32	0.32	**1.56**	0.02	**0.11**	**18.7**	**0.07**	**18.7**	**3.7**
FC04-13	9176	Dis-SM	268.01	268.61	0.60	**1.94**	0.01	0.07	**22.6**	**0.19**	**17.6**	**3.1**
FC04-13	9126	Str-SM-Bands	277.60	277.70	0.10	**1.03**	0.01	**0.22**	**13.1**	**0.06**	**13.8**	**1.9**
FC04-13	9128	Str	299.15	299.55	0.40	**1.27**	0.01	0.07	**11.4**	**0.18**	**18.3**	**4.9**
FC04-13	9131	Str	377.70	377.95	0.25	**0.48**	0.01	0.01	2.8		**7.4**	**0.6**
FC04-13	9134	Str-Sm-Bands	431.00	431.15	0.15	0.02	**0.77**	**0.25**	4.8		**5.9**	**3.9**
FC04-13	9133	Str-Sm-Bands	432.70	432.95	0.25	0.08	**0.31**	**1.04**	3.4		**3.9**	**1.1**

FC04-07 was drilled to test a chargeabilty high/resistivity low anomaly at a 125 metre depth, a chargeability high near the 250 metre depth and a deeper conductor at a depth of 450 metres which the Titan results show that it may be related to the same geophysical anomaly tested in FC04-13.

Variably altered and mineralized horizons were intersected at depths of 108 – 132.9 metres, 210.80 – 211.30 metres, and 307.59 – 307.89. The mineralization consists of copper, lead, zinc, and silver, with anomalous gold being associated with the higher grade copper sulphides. The sulphides range from disseminated to stringer, and semi-massive to massive sulphide bands within the altered zones. Disseminated sulphides and fine sphalerite stringers were intersected between 438.0 – 442.0 metres and 457.0 – 487.0 metres with 2 metres of moderate carbonaceous material at the bottom of the hole. No assays were taken below 310 metres. Down hole geophysics will be required to determine if the lowermost anomaly is explained by the drilling, or further drilling is required to explain the anomaly.

Alteration consists of sericite, chlorite, quartz and possibly (cordierite/andalusite/garnet and iron carbonates?)

FC04-08 was drilled to test near surface chargeability highs and resistivity lows and a strong resistivity low and correlating chargeability high at the 200 metre depth. Patchy zones of disseminated to stringer sulphides were intersected in the top 50 metres. Stringer to semi-massive sulphides were intersected between 104 metres to 108 metres as well as an interval of .75% copper from 155.25 to 156 metres. Mineralization intersected in FC04-08 is associated with copper, lead and zinc, with minor silver and gold.

Alteration is comprised of sericite, chlorite, quartz and possibly (cordierite/andalusite/garnet and iron carbonates?)

FC04-09 was a short hole drilled to test the bedrock trench discovery of stringer to massive sulphides on line 59N at 21W which correlates with a thin chargeability high and resistivity low anomaly which extends E/W and to the north towards line 61N. Zinc/copper bearing massive sulphides were intersected at a depth of 22.3 to 22.8 metres. Anomalous zinc was intersected at depths of 25 metres and 28.8 metres. Alteration in this hole consists of sericite, pyrite, quartz, and chlorite. The zones with disseminated sulphides, breccia and vein mineralization may be intensely disrupted and transposed feeder zones. However, some of the zones may also be late mineralization, superimposed by late faulting that is obvious in some of the core.

FC04-10 was a short geology hole drilled down dip from the same drill pad as FC04-09. Brecciated or conglomeratic material was intercepted along with sandstone, siltstone and argillites.

FC04-11 was also a short geology hole drilled grid west off of the FC04-09 set up. An altered stringer zone was intercepted from 17.7 metres to 31.1 metres which was anomalous in copper, lead, zinc with minor silver and gold. Variably altered conglomerate hosts the mineralized and altered interval.

FC04-12 was drilled 90 metres east as a step out hole to FC04-09 which successfully intersected the mineralized and altered horizon similar to FC04-09 at a depth of 12.7 metres to 26.7 metres. Mineralization has higher copper associated with lower lead and zinc values.

Deeper down in the hole drill intercepts were encountered of breccia and/or conglomerate (hydrothermal?), with carbonate alteration or impure limestone, chlorite, sericite and silica alteration. At 140.1 to 145.2 strongly carbonate altered or massive impure limestone is present which is brecciated and is cut by an irregular stockwork of calcite veins.

FC04-12 is also within 100 metres of a significant Titan MT anomaly, it has an associated magnetic high anomaly, and bedrock stringer to massive sulphides were present within 200 metres of the altered zone. Future drilling of the strong MT anomaly will provide information, which will determine whether the carbonate is an impure limestone or intense carbonate alteration similar to other sediment hosted massive sulphide deposits elsewhere in the world. The zones with disseminated sulphides, breccia and vein mineralization may be intensely disrupted and transposed feeder zones. However, some of the zones may also be late mineralization, superimposed by late faulting that is obvious in some of the core.

FC04-13 targeted the western edge of a co-incident strong chargeability high and resistivity low geophysical anomaly. The anomaly is draped by a magnetic high, which in this geological environment may represent alteration to a potential massive sulphide deposit. Alteration with sphalerite stringers and blebs of chalco-pyrite-galena were intercepted at 83.5 to 92 metres. At 184 to 186.5 metres fine stringers and disseminations of sulphides are present with anomalous copper and zinc. From approximately 230 to 300 metres a 70 metre thick altered zone was intersected with horizons and bands of various combinations of copper, silver and gold bearing disseminated, stringer, semi-massive to massive-sulphides within this interval. A thin high grade copper stringer horizon was also intercepted at 377.70 to 377.97 metres and stringer to semi-massive, thin bands were present at 431 to 432.95 metres which were more anomalous in lead and zinc than in copper.

Sulphide mineralization in this hole is more copper rich with silver, gold and minor zinc. The sulphide horizons are also associated with higher nickel, chrome and cobalt values. Other associated minerals are antimony (Sb), arsenic (As), cadmium (Cd), bismuth (Bi), tin (Sn), indium (In), selenium (Se), and tungsten (W). Cadmium, bismuth, tin and Indium were important by-product minerals at the Sullivan deposit and can contribute significantly to the overall potential economics of a deposit. (Appendix IV Frank Creek Drill Logs) (Appendix V Rock and Core Sample Assays)

Table 3 - Frank Creek 2005 Drill Results Summary

Frank Creek 2005 Drill Results Summary

LEGEND:

Bands -	Bands of different styles of sulphides	**Copper**	**>.20%**	**g/t - Grams per ton**
Dis -	Disseminated sulphides	**Lead**	**>.10%**	**1 g/t = 1 ppm**
Str -	Stringer sulphides	**Zinc**	**>.25%**	
SM -	Semi-Massive sulphides	**Silver**	**>7.0 g/t**	
MS -	Massive Sulphides			

Drill Hole	**Sample #**	**From metres**	**To metres**	**Interval metres**	**Copper %**	**Zinc %**	**Lead %**	**Silver g/t**
FC05-14	A39329	148.69	148.89	0.20	**0.26**	**0.106**	0.014	**9.5**
FC05-14	A39330	148.89	149.89	1.00	0.0099	0.023	0.008	1
FC05-14	A39331	149.89	150.08	0.19	0.0054	**0.764**	**0.338**	5.8
FC05-14	Composite	148.69	150.08	1.39	0.092	0.298	0.12	
FC05-14	A39334	167.50	167.70	0.20	0.156	0.012	< 5 ppm	1.9
FC05-14	A39335	167.70	167.90	0.20	**0.339**	0.04	0.001	5.2
FC05-14	A39336	167.90	168.14	0.24	0.169	0.034	< 5 ppm	2.4
FC05-14	A39337	168.14	168.97	0.83	0.022	0.019	< 5 ppm	0.6
FC05-14	A39338	168.97	169.27	0.30	**0.53**	0.064	0.001	7.8
FC05-14	A39339	169.27	169.47	0.20	**1.39**	0.098	0.001	**17.8**
FC05-14	Composite	167.50	169.47	1.97	0.43	0.045		5.95
FC05-14	A39345	202.71	203.35	0.64	**0.296**	0.057	0.0005	1.6
FC05-14	A39352	305.45	305.60	0.15	0.005	0.013	0.213	1.9
FC05-14	A39355	337.78	337.96	0.18	0.03	**0.103**	0.016	1.3
FC05-15	A39356	158.05	158.20	0.15	0.028	**0.878**	0.713	**8.3**

Drill Hole	Sample #	From metres	To metres	Interval metres	Copper %	Zinc %	Lead %	Silver g/t
FC05-15	A39360	196.49	196.64	0.15	0.225	0.065	0.005	1.7
FC05-15	A39361	196.64	196.79	0.15	0.015	**0.139**	0.035	3.3
FC05-15	Composite	196.49	196.79	0.30	0.12	0.102	0.02	2.5
FC05-15	A39365	220.39	220.54	0.15	**0.717**	0.027	0.15	5.6
FC05-15	A39367	237.87	238.02	0.15	0.125	0.016	0.005	1.3
FC05-16	A39371	242.80	242.99	0.19	**1.49**	**6.5**	**2.65**	**0.01**
FC05-16	A39375	250.18	250.33	0.15	0.017	**0.206**	**0.313**	**18.4**
FC05-16	A39376	312.73	312.88	0.15	0.005	**0.286**	0.049	2.8
FC05-16	A39379	314.55	314.70	0.15	0.0008	**0.203**	0.015	0.9
FC05-17	A39393	82.62	83.43	0.81	0.026	**0.137**	0.03	2
FC05-17	A39394	83.43	84.02	0.59	0.086	**0.451**	0.031	3.3
FC05-17	A39395	84.02	84.19	0.17	**0.38**	**0.234**	0.023	5.9
FC05-17	A39396	84.19	84.54	0.35	**0.476**	0.034	0.002	5.6
FC05-17	A39397	84.54	84.82	0.28	**0.314**	0.017	0.005	4.9
FC05-17	Composite	82.62	84.82	2.20	0.26	0.18	0.02	4.34
FC05-17	A39404	90.37	91.37	1.00	0.012	**0.177**	0.0695	2.7
FC05-17	A39405	91.37	92.37	1.00	0.011	**0.137**	0.064	1.7
FC05-17	Composite	90.37	92.37	2.00	0.01	0.16	0.07	2.2
FC05-17	A39409	94.51	94.66	0.15	0.13	0.024	0.01	2.6
FC05-17	A39410	94.66	95.42	0.76	0.039	**0.102**	0.012	1
FC05-17	A39411	95.42	95.57	0.15	**0.276**	**0.243**	0.138	3.9
FC05-17	A39412	95.57	96.17	0.60	0.025	**0.202**	0.112	1.6
FC05-17	Composite	94.51	96.17	0.42	0.12	0.14	0.272	2.28
FC05-17	A39415	147.57	147.87	0.30	0.026	**0.422**	0.225	6.3
FC05-17	A39416	147.87	149.02	1.15	0.008	**0.107**	0.038	2.3
FC05-17	Composite	147.57	149.02	1.45	0.02	0.26	0.13	4.3
FC05-17	A39418	150.02	151.02	1.00	0.032	**0.373**	0.176	3.2
FC05-17	A39419	153.23	154.23	1.00	0.065	**0.594**	0.113	5.6
FC05-17	A39421	155.29	156.12	0.83	**0.311**	**0.265**	0.04	**8.9**
FC05-17	A39422	156.12	157.62	1.50	0.13	**0.111**	0.015	3.2
FC05-17	A39423	157.62	158.20	0.58	**0.208**	0.083	0.05	5.5
FC05-17	A39424	158.20	159.46	1.26	0.11	0.051	0.027	3.1
FC05-17	Composite	155.29	159.46	4.17	0.19	0.13	0.03	5.18
FC05-17	A39425	173.35	173.82	0.47	0.026	**1.14**	**0.416**	**10.5**
FC05-17	A39426	173.82	174.26	0.44	0.007	**0.186**	0.081	2.2
FC05-17	Composite	173.35	174.26	0.91	0.02	0.68	0.25	6.35
FC05-17	A39428	198.47	199.37	0.90	**0.488**	**0.295**	0.025	6.5
FC05-17	A39429	199.37	199.94	0.57	0.148	0.036	0.007	0.6
FC05-17	Composite	198.47	199.94	1.47	0.32	0.17	0.02	3.55
FC05-17	A39430	202.15	202.30	0.15	**0.915**	0.079	0.0239	**11.1**
FC05-17	A39431	202.30	203.30	1.00	0.103	0.03	0.007	< 0.3
FC05-17	Composite	202.15	203.30	1.15	0.51	0.06	0.02	5.55
FC05-17	A39432	205.97	206.17	0.20	**0.793**	0.073	0.004	**10.2**
FC05-17	A39433	207.88	208.12	0.24	**0.748**	**0.955**	0.448	**22.5**
FC05-17	A39434	208.12	209.45	1.33	0.176	0.043	0.012	1.8
FC05-17	Composite	207.88	209.45	1.57	0.46	0.5	0.23	12.15

Drill Hole	Sample #	From metres	To metres	Interval metres	Copper %	Zinc %	Lead %	Silver g/t
FC05-17	A39437	229.07	229.22	0.15	0.0295	**0.827**	0.16	**21.9**
FC05-17	A39438	229.22	229.93	0.71	0.033	**0.172**	0.029	1.7
FC05-17	A39439	229.93	230.14	0.21	0.008	**0.101**	0.025	1.4
FC05-17	Composite	229.07	230.14	1.07	0.02	0.37	0.07	8.33
FC05-17	A39441	231.47	231.62	0.15	**0.219**	0.091	0.031	2.9
FC05-17	A39442	231.62	231.95	0.33	0.177	**0.101**	0.086	7.1
FC05-17	Composite	231.47	231.95	0.48	0.2	0.1	0.06	5
FC05-17	A39449	244.60	244.75	0.15	0.006	**0.155**	**0.84**	**8.2**
FC05-17	A39450	266.26	266.56	0.30	0.123	**0.149**	0.007	< 0.3
FC05-17	A39451	347.35	347.50	0.15	0.008	**0.826**	0.147	0.7
FC05-17	A39452	183.77	184.20	0.43	0.072	**0.169**	0.037	3.5

The results of four drill holes from its continuing exploration program on its Frank Creek massive sulphide project are summarized below. Besides testing the extent of poly-metallic stringer mineralization at the specific hole locations, the Company drilled the four holes to assist in designing further exploration to vector into a potential massive sulphide deposit on the property. All of the four holes intersected multiple horizons of massive sulphide style alteration and anomalous base and precious metal mineralization associated with stringer zones, which is consistent with a massive sulphide environment.

The Company drilled four holes for a total of 1566 metres. All holes were started within the area of the poly-metallic massive and stringer sulphide mineralization discovered in outcrop and in initial drilling in 2004. The drill-holes intersected wide intervals, some in excess of 70 metres thickness in drill core, of disseminated and stringer sulphide mineralization hosted by locally strongly altered host rock comprising phyllites and quartz-rich sandstones. Sulphides present are pyrite, pyrrhotite, chalcopyrite, sphalerite and minor galena. Mineralized intercepts are listed in a Table attached to this news release on the Company's website.

The results will greatly assist the Company as it matches-up its most compelling targets with coincident soil and large Titan geophysical anomalies, which are associated as well with the original massive sulphide discovery trench on Titan grid line 55N 200 metres to the south. The drilling also intercepted a possible new zone of alteration and mineralization, which is interpreted to extend to the north.

The drilling to date along with outcrop geological mapping indicates that the local rock strata being explored is inverted, or overturned. In outcrop, graded beds and the orientation of volcanic pillows also support the overturned model. In one recent drillhole the graded units fine down-hole in every instance, with 40 separate graded sub-units logged in one unit. This means that if the stringer mineralization seen to date is feeding a massive sulphide deposit, the massive sulphide horizon would be at a depth below the stringer mineralization. The casing has been left in most drillholes in order to re-enter the holes for deeper drilling or downhole geophysical surveys at a later date.

Most of the rocks in the Frank Creek area belong to a sequence of sandstones, siltstones and argillites that locally have been tectonically disrupted by folding and faulting. The sedimentary rocks host disseminated to vein sulfides, and local beds of massive sulphides. The sediments range from shales with intermediate compositions to sandstones with >90 % quartz. Alteration minerals include sericite, quartz, chlorite, ankerite, albite and pyrite.

Mafic rocks occur throughout the sedimentary sequence mainly as dykes or sills that are typically 1-5 m thick. In some cases, they have sharp and possibly chilled contacts with the host rocks, and could be late dykes, but in other cases, they have probable peperitic contacts and thus are likely synsedimentary. Mafic rocks also occur as pillow lavas at an important locality on top of the Frank Creek hillside, several hundred metres upslope from the Discovery Trench, where massive sulphide beds are present within dark shales and sandstones.

Drill hole FC-05-14 is located 100 meters grid-east of the 2004 discovery on line 59-north and 2100-west. The main target is a Titan tensor magnetotelluric (MT) resistivity-low anomaly at 200-250 m depth, with a secondary target a shallow coincident conductive IP-high chargeability and DC-low resistivity in the upper 30 m.

The hole started in graphitic argillite, which can explain the shallow geophysical anomaly. At the MT resistivity low target depth of 200 – 300 metres numerous beds of sandstones to siltstones were intercepted with a number of variably altered zones up to 30 metres thick comprised of combinations of sericite, albite, chlorite, silica and ankerite alteration. Anomalous copper, zinc, and lead stringer mineralization occurs sporadically throughout the altered zones. Downhole geophysics are required to determine if any off-hole conductors occur, and if the sulphides in the altered zone were sufficient to cause the Titan low resistivity anomaly or if deeper drilling is required.

Drill hole FC-05-15 is located at line 61-north and 2400-west, which tests a Titan target with chargeability high underlain and overlapped by a resistivity low that was interpreted to represent stringer to thin semi-massive to massive sulphide contact type mineralization in the upper 250 m. It also targeted a large coincident MT resistivity-low anomaly, which extends down to depth.

FC-05-15 intersected 5 separate zones of combinations of sericite, albite, ankerite, silica and chlorite alteration and associated anomalous copper, zinc and lead mineralization. From 166 – 244 metres a number of altered horizons were intersected and a semi-massive to massive pyrite/pyrrhotite layer was intersected at 196 metres depth. This mineralization correlates with the southern edge of the Titan anomaly and also correlates with the southern edge of a magnetic high. Both the magnetic high and Titan anomaly are interpreted to strengthen and plunge to the north. This anomaly can be further tested to the north by drilling anomalies defined along Line 2000W which crosses the centre of the Titan survey in a north/south direction. Further east/west survey lines are recommended to the north to determine the orientation of the geophysical anomalies and mineralization and alteration for follow-up drilling. The drillhole was not drilled deep enough to explain the deeper MT low resistivity target. Downhole geophysics will be completed to determine the location of this strong deeper target.

Drill hole FC-05-16 is located on line 61-north and 2725-west. It tested a Titan resistivity low anomaly from 150 to 350 m depth and also targeted a large MT resistivity-low anomaly at 450 metres and which extends to depth.

A number of altered zones similar to the previous holes were intercepted in FC-0516 with the most significant from 240 metres to 296 metres. This zone of alteration was followed by an intercept of "felsite" from 296 – 307 meters, which in turn was followed by further alteration from 307 metres to 328 metres. The "felsite" is interpreted to be a crystal tuff, or proximal sediments.

The sulphide mineralization in this hole has a little higher concentration of lead associated with the copper and zinc. A narrow 19 cm high grade intercept of copper/zinc/lead was intercepted at a depth of 242.8 metres which assayed 1.49% copper, 6.5%, zinc and 2.6% lead and >100 grams per ton silver.

FC-05-16 was not drilled deep enough to test the deeper MT anomaly. FC-05-16 is on the most northerly line of the Titan grid and is interpreted to be overlying a geophysical anomaly, which begins on line 61 and extends and plunges to the north. Further work is recommended and will consist of further geophysical surveys to the north to test the northerly extension of the Titan anomaly crossing line 61and to identify further drill targets.

Drill hole FC-05-17 is located on line 57-north and 1875-west, which is a follow-up to stringer mineralization in drill holes 2004 FC-04-13 and FC-04-08 on the same line. It targets a shallow IP chargeability-high/ DC resistivity-low anomaly from 150-250 m depth. The anomaly is associated with low MT resistivity at depth.

Five significant zones of alteration were intercepted in FC-05-17 which makes it one of the overall thickest zones of alteration and associated copper, zinc and lead stringer mineralization identified on the property to date. The zone appears to be thickening to the south towards the original bedrock discovery trench and associated large, strong Titan anomalies. The anomalies to the south are also closer to the volcanic pillows on the ridge above the discovery trench and are near two large conductors of Trend A which reach surface coincident with strong copper, zinc and lead soil anomalies and massive sulphide float in the till.

Stringers with copper, zinc and lead start at 81-98 m, with two thin chalcopyrite semi-massive stringers within the altered zone. Mineralization then reoccurs intermittently at 143 to 239 m, the start of which corresponds to the top of the IP bulls-eye chargeability high. The stringer and alteration zone is somewhat more extensive than that seen in FC04-13. Downhole geophysics will be completed on this hole to determine whether a massive sulphide deposit and conductors underly the drilled stringer zone in the overturned rock strata.

The association of sulphide mineralization with albitic alteration is interesting, and will be further explored, as such alteration is known to occur near certain Sediment-Hosted massive sulphide deposits, in particular the Sullivan deposit in southern British Columbia.

The Company is encouraged by the discovery and extension of these anomalously altered and mineralized intervals, which it intends to further explore in the future. The 2005 drill program was successful at validating the Company's exploration model for Sediment Hosted style massive sulphides in this area and in providing valuable geological and stratigraphic information, which will help to focus future exploration at Frank Creek.

Titan Correlation

The Titan plan view at a 250 metre depth shows the large and strong anomaly would have been intercepted near the western edge by FC04-13. The anomaly, at a 250 metre depth trends to the west towards FC04-07 and S/E towards the original F-1 discovery trench area where it broadens and extends to depth

The Titan survey indicates the geophysical anomalies intersected in FC04-07, 09, 11, and 13. are open ended and increase in size and thickness. Line 57N and 59N were the 2 least anomalous Titan lines however numerous targets were still defined on each line and initially appear to correlate well with the drilling which was focused in these areas due to bedrock copper mineralization being exposed by trenching of surface Titan anomalies in earlier programs. Plans will be made to follow up the new discoveries and also to begin drilling of some of the many untested Titan anomalies.

The Titan results are being reconciled with the existing geoscientific database, including the known drill evidence, to confirm that the Titan anomalies are centred over the correct source material. Specifically, comparing geologic sections from the known areas against the Titan 2D cross-sectional results with regards to explaining the three main contrasting anomaly types (*Types I to III*) encountered, in order to confirm the source material and to focus drilling onto other favourable targets of a similar type/physical property mix.

The drill-testing of the Titan anomalies will be conducted in a systematic fashion, by: i) working from known geology to lesser known, ii) from the shallow to deeper targets, iii) from the center of coverage, where the geoelectric structure is best defined in the 2D inversions, to the outside of coverage, where it is more poorly defined.

Recommendations for Titan targets that have been drilled are to be logged using borehole Petrophysics, in order to determine the true geologic source of anomalies, and should also be surveyed with borehole transient EM (BHTEM) to detect off-hole conductors and to identify the nature and extent of in-hole sulphide mineralization.

A 3D Gocad model of the property has been built and will be queried for fully integrated drill targets. Other elements for the query include geochemistry, assays, depth, etc. Following this, consideration will be given to perform additional geologically-constrained inversions, in order to further refine the interpretation as we gain good geological control and a petrophysical database for the property. Once the model advances, unknown and potentially important targets can be more easily discriminated from the known geology, particularly at depth.

5.0 Conclusions and Recommendations

5.1 Quantec Geoscienc Inc. - Recommendations

The Titan-24 approach has had two valuable applications at *Frank Creek:* A) Evaluation and Guiding drill targets, and B) Accountable and Scientific Analysis of geological concepts and ideas, geophysical results during and post-drilling to minimize follow-up holes. We recommend the following follow-up drill holes to test the *18* most geologically unexplained features identified in the Titan results at *Frank Creek.*

In addition, we recommend that:

- The present Titan results should be reconciled with the existing geoscientific database, including the known drill evidence, to confirm that the Titan anomalies are centred over the correct source material. Specifically, compare geologic sections from the known areas against the Titan 2D cross-sectional results with regards to explaining the three main contrasting anomaly types (*Types I to III*) encountered, in order to confirm the source material and to focus drilling onto other favourable targets of a similar type/physical property mix.

- The drill-testing of the Titan anomalies should be conducted in a systematic fashion, by: i) working from known geology to lesser known, ii) from the shallow to deeper targets, iii) from the center of coverage, where the geoelectric structure is best defined in the 2D inversions, to the outside of coverage, where it more poorly defined, due to 2D aperture, and iii) from the multi-parameter anomalies (IP+DC+MT) Titan-defined targets to the more poorly-correlated (or deep MT) single-parameter anomalies.

- Any drilling should focus in on the center of the anomalies that we've described in our anomaly table and cross-sections. The overall dimensions and depths are added to facilitate the drilling effort.

- The Titan coverage should be extended along strike, to the north and south, in order to better define the variations observed at *Frank Creek*.
- Titan targets that are drilled should be logged using borehole Petrophysics, in order to determine the true geologic source of anomalies, and also surveyed with borehole transient EM (BHTEM) to detect off-hole conductors and to identify the nature and extent of in-hole sulphide mineralization.

A 3D Gocad model of the property should be built and queried for fully integrated drill targets. Other elements for the query may include geochemistry, assays, depth, etc. Following this, consideration should be given to perform additional geologically-constrained inversions, in order to further refine the interpretation, if there is sufficiently good geological control and petrophysical database for the property. If so, unknown and potentially important targets can be more easily discriminated from the known geology, particularly at depth.

5.2 Recommendations (McKinley 2004-2005)

The author of this report did not visit all of Barker Minerals' project areas and as such has not been able to independently assess areas including the Cariboo Prospect, the Blackbear Prospect and the Quesnel Platinum Project. However, the author has reviewed the existing information for these projects and agrees with the recommendations as laid out in the most recent technical report of Perry (2002). For completeness, these recommendations are included herein and attributed to Perry, but no exploration budgets have been proposed.

Ace Massive Sulphide and Vein Gold Project

Prospecting should be continued throughout the Ace property in an effort to discover more occurrences of mineralized boulders as well as "coticule" rocks, such as those recently discovered in the Jim Road area. An attempt should be made to assess if the mineralized boulder train extends further "up-ice" to the east. If so, additional claims should be staked over the area if necessary.

Further exploration trenching should continue to test geophysical conductors and geochemical anomalies. Priority should be given to coincident anomalies, particularly the areas in the vicinity of F Road which have east-west resistivity lows and chargeability highs and coincident soil geochemical anomalies. The "E-Scan" resistivity low in the eastern part of the property should be drill-tested.

Geological mapping should continue in order to improve understanding of the regional structure and the local geology of areas of "felsite" rocks that have not yet been examined in detail. This additional mapping should be integrated with that done between the Ace and Frank Creek areas by Ferri and others of the B.C. Geological Survey. The OSC report has clearly demonstrated the value of high quality lithogeochemical sampling and interpretation; this type of work is strongly recommended as a component of future exploration. The body of rock identified on the geological map by Ferri and O'Brien (2003) as Downey succession meta-volcanics/amphibolite in the vicinity of Mount Barker and Barker Creek should be examined. This unit may be prospective for massive sulphide deposits. An initial program of reconnaissance geological mapping and lithogeochemical sampling as well as prospecting is recommended. The lithogeochemical characteristics of these metavolcanic rocks should be compared with those of the Frank Creek volcanics.

Soil geochemical surveys should be carried out in the following locations:

- the central portion of the Ace grid between the two existing survey areas;

- northwest of Colleen Road, in an unsampled area from 8400 Road to the Little River adjacent to areas of anomalous Pb and Zn soil geochemical values;
- to the west of the existing surveys;
- in the area around the eastern end of J Road where there are areas of anomalous copper values.

However, an attempt to address the glacial history of the area and, thus, the validity of soil sampling should be made. An orientation survey to test the applicability of MMI/enzyme leach geochemical techniques is also recommended as these may be more effective techniques to "see through" the glacial cover.

Geophysical surveys, particularly IP and HLEM, have proven most effective at identifying potential bedrock targets. IP surveys should be extended to the east in the areas overlapping 8400, Jim and F Roads. The 2004 Frank Creek geophysical survey by Quantec was successful at identifying numerous potential sulphide targets. A similar such survey is justified and recommended on the Ace property. The area over the "E-Scan" anomaly should be one of the targets of such a survey.

Trenching should be conducted on anomalous zones where the thickness of the glacial overburden allows.

Diamond drilling should test targets identified by the existing geological, geophysical, geochemical and trenching results and by additional work that will be conducted in the first part of the 2004 field season. The linear northwest-southeast trending chargeability high that crosses the F Road and continues south of 8400 Road has coincident Pb and Zn soil anomalies with additional Cu soil anomalies to the south and southwest and should be drill tested, perhaps following a program of trenching. The east-west HLEM which overlies the "E-Scan" resistivity low provides a second high-priority drill target. Additional targets identified by the recommended geochemical and geophysical surveys above should be drill-tested as required.

The second phase of the program will be contingent on obtaining sufficient positive results from the first phase of the proposed program.

Frank Creek Polymetallic Massive Sulphide Project

Geological mapping should continue in order to help determine the stratigraphic and structural setting of the mineralization. This should be integrated with that being done by Ferri of the B.C. Geological Survey between the Ace and Frank Creek areas.

The Quantec Titan geophysical survey was successful at identifying 18 anomalies consistent with massive sulphide mineralization in the vicinity of D Road and the F-1 showing. The results of this survey will be integrated with existing geological information from previous mapping, trenching and diamond drilling. These targets should be systematically drilled-tested with priority given to those close to previously identified bedrock or float mineralization and/or soil geochemical anomalies. Downhole geophysical surveying, particularly EM, is recommended as a part of future drill programs.

Geochemical soil surveys should be conducted over the strike extensions of known mineralized trends and also over specific target areas in order to identify base and/or precious metal soil anomalies, which may be indicative of economic massive sulphide mineralization targets in the local bedrock. Lithogeochemical studies should be continued in future exploration programs and integrated with the results of the recent OSC report.

The second phase of the program will be contingent on obtaining sufficient positive results from the first phase of the proposed program.

SCR Project

Geological mapping should continue in order to help determine the stratigraphic and structural setting of the mineralization. This should be integrated with that being done by Ferri of the B.C. Geological Survey between the Ace and Frank Creek areas.

Lithogeochemistry studies should be continued in order to determine the stratigraphic and alteration relations of the rock sequences hosting the known mineralization, using advanced lithogeochemical methods, combined with new core and outcrop sampling and petrography.

Given the success of the Titan geophysical survey on the Frank Creek property, such a survey is considered to be just as applicable on the SCR property. Linecutting and a DCIP-MT survey is recommended.

Soil geochemistry should be conducted over the grid and should be extended to the east to cover the possible extensions of the anomalous zone as defined by geology and coincident magnetic and HLEM anomalies. As on the Ace Property, an attempt to address the glacial history of the area and, thus, the validity of soil sampling should be made. An orientation survey to test the applicability of MMI/enzyme leach geochemical techniques is also recommended at SCR where glacial cover is locally quite thick. If such techniques appear to be applicable, then the survey should be expanded with priority being given to areas of 'conventional' soil anomalies and areas containing mineralized boulders.

Diamond drilling should test the most prospective anomalies as defined by the geology, geophysics, geochemistry and trenching. Coincident geophysical and geochemical anomalies should be given higher priority.

The second phase of the program will be contingent on obtaining sufficient positive results from the first phase of the proposed program.

Kangaroo Project

IP geophysical surveys have proven useful in this area. The 2003 geophysical survey should be extended northward and eastward across Barker claims PG 9 and PG 7 along the established northwest-southeast anomalous trend. Peter Walcott, P.Eng., geophysical consultant to Barker Minerals, recommended that the survey be extended an additional 500 metres to the north and 1 km to the east (summary report to Barker Minerals). A broader soil geochemical survey is recommended in the same area. Detailed geological mapping accompanied by lithogeochemical sampling should be carried out to better define the geological setting and to detect and quantify alteration effects. Trenching should be used to expose bedrock over the best geochemical and geophysical targets. If the results of this work prove promising then a first phase of diamond drilling should test the best targets.

A second phase of exploration is contingent on the success of this first phase.

Unlikely Prospect/Rollie Creek area

The area along Keithley Creek Road on the western side of Cariboo Lake (roughly from UTM 5844530N to 5844650N) contains anomalous Cu±Pb-Zn mineralization hosted by sedimentary rocks of the Harveys

Ridge Formation. The geological setting here appears to be similar to that around the F-1 showing in the Frank Creek area to the east. This area warrants further exploration work. Poor outcrop exposure and steep terrain above the road outcrops likely precludes extensive useful geological mapping although the area should still be examined. IP and EM geophysical surveys will likely be more useful tools for outlining potentially mineralized targets here, although care should be taken with such work to take into account possible 'cultural' effects such as the presence of telephone lines along the road. The steepness of the terrain and the position of the mineralization above the main Unlikely showing may render drilling difficult, but not impossible. The southern mineralized exposure would likely be an easier target for drilling. These exposures should be assessed for the possibility of doing some limited blasting to better expose the mineralization. This would have to be done with great care, however, given the proximity of the road and the telephone lines. If geophysical survey(s) return promising results then a small diamond drill program is recommended to follow up these targets.

Prospecting up the Rollie Creek drainage is recommended in an attempt to determine the source of the mineralized sandstone boulder near the Rollie Creek bridge.

Blackbear Project Area (from Perry, 2002)

Since it appears that interest in gold is increasing as its price has risen substantially during the previous year, the Company should begin to investigate this project area, which hosts the former Providence Mine, from which a previous operator's shipment of selected ore from the No. 2 zone assayed 3343 grams of silver per tonne, 45.7% lead, 0.11% zinc and 4.9 grams of gold per tonne (all the above from BC MinFile 093A 003). One grab sample (# 11-07-98-59; Barker Minerals) of outcropping mineralization contained 52% Pb, 0.03% Zn, 142 oz/ton Ag and 0.081oz/ton Au. (Payne, 1999; BC Assessment Report). All previous exploration results available should be compiled, interpreted and, if then warranted, be followed up with an initial program designed to identify and develop drill targets having economic massive sulphide and/or gold/silver potential.

Cariboo Prospect and Other Areas (from Perry, 2002)

Detailed geological mapping should be continued in the Cariboo prospect area in order to help determine the extent of deformation and in order to explore for targets of Zn+Pb replacement deposits along strike of the known zones. Compilation of all relevant data and limited diamond drilling is recommended in order to confirm the previous operator's drilling and in order to further define and investigate the size and economic potential of this deposit, which is open in both directions along strike and at depth. Despite low gold concentrations found there to date, further prospecting in the near vicinity and exploratory investigation of the Foster zone for its gold potential is recommended in light of its position within the Pleasant Valley Thrust and the intensity of sulphides in the zone and their localization at a junction of two large scale structures.

Elsewhere in the eastern half of the property, detailed mapping and follow-up geochemical sampling and geophysical surveys should be performed in areas of significant, multi-element stream-sediment anomalies. Areas of particular interest are the upper reaches of the Sellers Creek and Grain Creek drainage basins.

The second phase of the program will be contingent on obtaining sufficient positive results from the first phase of the proposed program.

Quesnel Platinum Project (from Perry, 2002)

Stream and soil sampling programs should be conducted in drainages associated with known placer occurrences of PGE minerals, especially in areas of mafic and ultramafic rocks that may be sources of such minerals. Studies should be done in order to characterize the assemblages of PGE's, which could help determine the environment of their origin. Geological mapping should be conducted in areas of mafic and ultramafic rocks in order to better understand the nature of these rocks and their possible association with PGE minerals. Prospecting should continue in drainages that contain known placer Pt deposits or anomalous concentrations of PGE's.

The zone of large copper concentrations in the Mag claims should be studied in more detail geologically, geochemically and geophysically. Other zones of coincident geochemical and geophysical anomalies should be examined once data from previous reports are compiled and interpreted. Some of these areas will require new grids for geophysical and geochemical surveys.

The second phase of the program will be contingent on obtaining sufficient positive results from the first phase of the proposed program.

Regional Generative Exploration

Large portions of the Barker Minerals' properties remain largely unexplored. For example, the areas between the Ace and Frank Creek prospects east of Cariboo Lake and in the vicinity of Grain and Ishkloo Creeks in the central and eastern parts of the claim block have received only limited exploration by Barker staff. Since these areas appear to contain similar geology to the Ace and Frank areas, they warrant exploration.

A reconnaissance-scale exploration program is recommended for these relatively unknown areas. A first phase of work should comprise general prospecting and geological mapping and sampling to identify new prospective areas and to establish the geological setting. This work can be accompanied by stream sediment geochemical sampling and possibly geophysical surveys. If this first phase is successful at identifying some areas of interest then a second phase of geological mapping and geochemical and geophysical surveys is recommended. Diamond drilling would not likely be warranted at this early stage unless the results of the first phase were particularly good. Some areas have already been identified by Barker Minerals that are considered to be of interest based on preliminary prospecting, but that have not been given "project area" status as yet (L. Doyle, Barker president, pers. comm.). These areas warrant further work including line-cutting, sampling and possibly trenching.

6.0 Certificate or Qualifications

Report was prepared by Louis E. Doyle, Prospector and President of Barker Minerals Ltd. Mr. Doyle has been responsible for the oversight of all exploration on Barkers properties for the last 12 years. Data within this report was compiled from the following independent company technical reports or their authors;

"Geophysical Interpretation Report Regarding the Quantec TITAN-24 Distributed Array System Tensor-Magnetotelluric and DC Resistivity and IP Surveys over a portion of the Frank Creek Project by *Quantec Geoscience Inc.,"*

"Technical Report on The Cariboo Properties Of Barker Minerals Ltd. *by S.D. McKinley*, M.Sc., P. Geo."

"Lithological and Lithogeochemical Features Of Rocks on The Frank Creek and Ace Properties, Cariboo Lake Area, East Central B.C. *by Dr. T.J. Barrett and Dr. W.H. McLean*"

Report on Two Separate Diamond Drilling Programs Conducted On the Frank Creek Property, Paul G. Anderson, M.Sc., P. Geo. Anderson Geological Consultants Ltd. Mission, B.C."

Appendix I

Mineral Claim Exploration and Development Work/Expiry Date Change Confirmation

Recorder: FRANCES JEAN MACPHERSON (116548)
Submitter: FRANCES JEAN MACPHERSON (116548)

Recorded: 2006/JAN/31
Effective: 2006/JAN/31

D/E Date: 2006/JAN/31

Event Number: 4067778

Work Start Date: 2005/OCT/21
Work Stop Date: 2005/DEC/15
Total Value of Work: $ 133696.58
Mine Permit No: MX-10-155

Work Type: Technical Work
Technical Items: Drilling, PAC Withdrawal (up to 30% of technical work performed)

Summary of the work value:

Tenure #	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days For-ward	Area in Ha	Work Value Due	Sub-mission Fee
503009		2005/JAN/13	2006/FEB/01	2006/OCT/31	272	685.63	$ 2043.73	$ 204.37
503012		2005/JAN/13	2006/FEB/01	2006/OCT/31	272	627.16	$ 1869.46	$ 186.95
503824	PG9-2	2005/JAN/15	2006/FEB/01	2006/OCT/31	272	58.79	$ 175.24	$ 17.52
504233		2005/JAN/18	2006/FEB/01	2006/OCT/31	272	587.63	$ 1751.61	$ 175.16
504234		2005/JAN/18	2006/FEB/01	2006/OCT/31	272	587.89	$ 1752.38	$ 175.24
504409		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	469.65	$ 1399.95	$ 140.00
504410		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	410.75	$ 1224.37	$ 122.44
504412		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	78.24	$ 233.21	$ 23.32
504413		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	626.05	$ 1866.15	$ 186.61
504416		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	508.36	$ 1515.33	$ 151.53
504418		2005/JAN/20	2006/FEB/01	2006/OCT/31	272	469.26	$ 1398.78	$ 139.88
504419		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	824.23	$ 2456.89	$ 245.69
504421		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	706.45	$ 2105.79	$ 210.58
504422		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	490.62	$ 1462.44	$ 146.24
504424		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	822.06	$ 2450.40	$ 245.04
504425		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	665.62	$ 1984.08	$ 198.41
504426		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	39.15	$ 116.70	$ 11.67
504427		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	508.73	$ 1516.45	$ 151.64
504428		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	704.56	$ 2100.17	$ 210.02
504429		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	684.35	$ 2039.93	$ 203.99
504430		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	684.68	$ 2040.89	$ 204.09

504431		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	685.86	$ 2044.44	$ 204.44
504432		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	705.03	$ 2101.55	$ 210.16
504433		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	587.21	$ 1750.35	$ 175.04
504434		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	801.71	$ 2389.74	$ 238.97
504435		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	625.33	$ 1864.01	$ 186.40
504436		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	585.95	$ 1746.60	$ 174.66
504437		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	683.74	$ 2038.10	$ 203.81
504438		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	683.56	$ 2037.56	$ 203.76
504439		2005/JAN/21	2006/FEB/01	2006/OCT/31	272	702.38	$ 2093.67	$ 209.37
505771		2005/FEB/03	2006/FEB/01	2006/OCT/31	272	586.28	$ 1734.73	$ 174.76
509589	grav01	2005/MAR/24	2006/MAR/24	2006/OCT/31	221	488.02	$ 1181.95	$ 118.19
509590		2005/MAR/24	2006/FEB/01	2006/OCT/31	272	429.40	$ 1039.97	$ 128.00
509591		2005/MAR/24	2006/FEB/01	2006/OCT/31	272	566.23	$ 1371.36	$ 168.78
509592		2005/MAR/24	2006/FEB/01	2006/OCT/31	272	214.83	$ 520.31	$ 64.04
509593	grav02	2005/MAR/24	2006/MAR/24	2006/OCT/31	221	273.27	$ 661.85	$ 66.18
513452	AUBAR NEW	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	371.54	$ 639.26	$ 63.93
513453	CATH	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	488.06	$ 839.72	$ 83.97
513455	CATH 2	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	214.77	$ 369.53	$ 36.95
513456	AUBAR NEW 2	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	19.55	$ 33.64	$ 3.36
513458	MADAM 6	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	313.28	$ 539.01	$ 53.90
513459	STEVEN 1	2005/MAY/27	2006/MAY/27	2006/OCT/31	157	235.28	$ 404.80	$ 40.48
514097		2005/JUN/07	2006/FEB/01	2006/OCT/31	272	370.51	$ 592.81	$ 110.44
514099		2005/JUN/07	2006/FEB/01	2006/OCT/31	272	390.19	$ 624.30	$ 116.31
514100		2005/JUN/07	2006/FEB/01	2006/OCT/31	272	683.22	$ 1093.15	$ 203.65
514127		2005/JUN/08	2006/FEB/01	2006/OCT/31	272	1270.78	$ 2019.32	$ 378.80
514129		2005/JUN/08	2006/FEB/01	2006/OCT/31	272	1562.89	$ 2483.50	$ 465.87
514130		2005/JUN/08	2006/FEB/01	2006/OCT/31	272	938.38	$ 1491.13	$ 279.71
514134		2005/JUN/08	2006/FEB/01	2006/OCT/31	272	19.56	$ 31.08	$ 5.83
514195		2005/JUN/09	2006/FEB/01	2006/OCT/31	272	429.78	$ 678.22	$ 128.11
514197		2005/JUN/09	2006/JUN/09	2006/OCT/31	144	468.70	$ 739.64	$ 73.96
514200		2005/JUN/09	2006/JUN/09	2006/OCT/31	144	117.15	$ 184.87	$ 18.49
514202		2005/JUN/09	2006/JUN/09	2006/OCT/31	144	488.45	$ 770.81	$ 77.08
514203		2005/JUN/09	2006/JUN/09	2006/OCT/31	144	410.36	$ 647.58	$ 64.76
514207		2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1370.30	$ 2162.44	$ 408.46
514223		2005/JUN/09	2006/FEB/01	2006/OCT/31	272	684.03	$ 1079.46	$ 203.90
514224		2005/JUN/09	2006/FEB/01	2006/OCT/31	272	489.08	$ 771.80	$ 145.78
514225		2005/JUN/09	2006/FEB/01	2006/OCT/31	272	332.64	$ 524.93	$ 99.15

514227	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1760.17	$ 2777.70	$ 524.68
514228	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	234.81	$ 370.55	$ 69.99
514229	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1311.47	$ 2069.60	$ 390.93
514230	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	763.67	$ 1205.14	$ 227.64
514231	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1391.53	$ 2195.94	$ 414.79
514232	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	470.15	$ 741.93	$ 140.14
514233	2005/JUN/09	2006/OCT/31	2006/OCT/31	0	274.47	$ 0.00	$ 0.00
514234	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1369.71	$ 2161.51	$ 408.28
514235	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1135.44	$ 1791.82	$ 338.46
514236	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1429.63	$ 2256.08	$ 426.15
514237	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	391.68	$ 618.10	$ 116.75
514238	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1270.41	$ 2004.81	$ 378.69
514239	2005/JUN/09	2006/FEB/01	2006/OCT/31	272	1290.68	$ 2036.79	$ 384.73
514252	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1411.10	$ 2211.36	$ 420.62
514253	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1351.33	$ 2117.69	$ 402.81
514254	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1372.60	$ 2151.03	$ 409.15
514265	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1521.20	$ 2383.90	$ 453.44
514266	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1580.45	$ 2476.76	$ 471.10
514268	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1287.85	$ 2018.22	$ 383.89
514272	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1767.18	$ 2769.40	$ 526.77
514279	2005/JUN/10	2006/JUN/10	2006/OCT/31	143	19.55	$ 30.64	$ 3.06
514281	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	371.41	$ 582.05	$ 110.71
514282	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1056.39	$ 1655.49	$ 314.89
514284	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1624.87	$ 2546.37	$ 484.34
514285	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1038.42	$ 1627.33	$ 309.53
514289	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	1391.87	$ 2181.23	$ 414.89
514293	2005/JUN/10	2006/FEB/01	2006/OCT/31	272	860.00	$ 1347.73	$ 256.35
514304	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1530.56	$ 2381.81	$ 456.23
514305	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1412.17	$ 2197.57	$ 420.94
514319	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1622.87	$ 2525.46	$ 483.75
514320	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	156.44	$ 243.45	$ 46.63
514322	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	901.54	$ 1402.95	$ 268.73
514324	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1607.58	$ 2501.66	$ 479.19
514325	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1114.31	$ 1734.04	$ 332.15
514326	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	783.78	$ 1219.68	$ 233.63
514327	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1054.94	$ 1641.67	$ 314.46
514328	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1233.90	$ 1920.16	$ 367.80
514329	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	842.05	$ 1310.37	$ 251.00

514330	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	821.52	$ 1278.42	$ 244.88
514332	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1235.95	$ 1923.34	$ 368.41
514333	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	859.23	$ 1337.10	$ 256.12
514334	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1334.21	$ 2076.24	$ 397.70
514335	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1039.23	$ 1617.22	$ 309.78
514336	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	995.97	$ 1549.89	$ 296.88
514337	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	568.41	$ 884.53	$ 169.43
514338	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	627.16	$ 975.96	$ 186.95
514339	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	975.98	$ 1518.78	$ 290.92
514340	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1430.24	$ 2225.69	$ 426.33
514341	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	959.91	$ 1493.78	$ 286.13
514342	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1191.43	$ 1854.06	$ 355.14
514343	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1488.23	$ 2315.93	$ 443.61
514344	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1273.91	$ 1982.41	$ 379.73
514345	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1293.96	$ 2013.62	$ 385.71
514346	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1155.68	$ 1798.43	$ 344.49
514347	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	548.60	$ 853.72	$ 163.53
514348	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	980.85	$ 1526.36	$ 292.37
514356	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	608.02	$ 946.18	$ 181.24
514358	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1448.10	$ 2253.48	$ 431.65
514361	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	606.74	$ 944.19	$ 180.86
514364	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1565.32	$ 2435.89	$ 466.59
514366	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1096.52	$ 1706.37	$ 326.85
514367	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1018.58	$ 1585.08	$ 303.62
514368	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	586.65	$ 912.92	$ 174.87
514371	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	547.91	$ 852.63	$ 163.32
514372	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1389.44	$ 2162.19	$ 414.17
514373	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	137.03	$ 213.25	$ 40.85
514374	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	1115.59	$ 1736.04	$ 332.54
514375	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	607.07	$ 944.70	$ 180.96
514376	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	176.21	$ 274.21	$ 52.52
514377	2005/JUN/11	2006/FEB/01	2006/OCT/31	272	137.04	$ 213.26	$ 40.85
514397	2005/JUN/12	2006/MAY/26	2006/OCT/31	158	273.92	$ 423.26	$ 47.43
514415	2005/JUN/13	2006/FEB/01	2006/OCT/31	272	117.36	$ 180.06	$ 34.98
514525	2005/JUN/15	2006/FEB/01	2006/OCT/31	272	470.75	$ 711.92	$ 140.32
514531	2005/JUN/15	2006/FEB/01	2006/OCT/31	272	704.12	$ 1064.87	$ 209.89

Total required work value:	$	190995.11
PAC name:		Barker Minerals Ltd.
Debited PAC amount:	$	57298.53
Credited PAC amount:	$	0.00
Total Submission Fees:	$	30698.79
Total Paid:	$	30698.79

The event was successfully saved.

Appendix II

Grid Name: Frank Creek
Location: 80 m North of D road
Collar Grid Co-ordinates: 59+05N / 20+08W
Collar UTM Co-ordinates: 609908 / 5845828
Logged By: J. Laberge

Collar Azimuth: 090°
Collar Dip: -70°
Start Date: 11-21-2005
Finish Date: 11-25-2005
Drill Contractor: Hardrock Diamond Drilling Ltd.

Drill Hole Summary:
Targets a MT resistivity-low anomaly at 200-250 m depth from the Quantec Survey. Also test a shallow conductive IP-high in upper 30 m and shallow DC-low. Follows Quantec's (2004) proposed drill hole DDH 59N-03. Target selected by L. Doyle and P. Anderson. Drill hole spotted by J. Laberge.

From (m)	To (m)	Interval		From (m)	To (m)	Interval	
3.66	56.15	52.5	Carbonaceous Argillite	177.53	187.99	10.5	Sandstone
56.15	75.38	19.2	Interbedded Siltstone and Argillite	187.99	190.00	2.0	Altered Sandstone
75.38	94.55	19.2	Sandstone	190.00	191.94	1.9	Sandstone
94.55	100.63	6.1	Laminated Siltstone	191.94	194.04	2.1	Altered Sandstone
100.63	107.48	6.9	Mixed Siltstone and Sandstone	194.04	195.23	1.2	Sandstone
107.48	115.43	8.0	Sandstone	195.23	200.39	5.2	Laminated Siltstone
115.43	117.85	2.4	Carbonaceous Argillite	200.39	217.88	17.5	Sandstone
117.85	124.84	7.0	Silicified Sandstone	217.88	225.32	7.4	Coarse Sandstone
124.84	125.02	0.2	Carbonaceous Argillite	225.32	227.23	1.9	Altered Sandstone
125.02	127.26	2.2	Brittle Fault Zone	227.23	273.33	46.1	Coarse Sandstone
127.26	133.16	5.9	Sandstone to Siltstone	273.33	310.50	37.2	Siltstone to Sandstone
133.16	136.65	3.5	Muscovite Schist	310.50	354.35	43.9	Sandstone to Siltstone
136.65	137.77	1.1	Siltstone	354.35	376.95	22.6	Coarse Sandstone
137.77	141.53	3.8	Siltstone to Argillite	376.95	380.46	3.5	Fault Zone
141.53	142.02	0.5	Siltstone	380.46	392.60	12.1	Sandstone to Siltstone
142.02	148.06	6.0	Siltstone and Sandstone	392.60	395.07	2.5	Altered Sandstone
148.06	177.53	29.5	Alteration Zone in Sandstone	395.07	395.43	0.4	Sandstone

Down Hole Tests: none

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
0	3.66	CASING											
3.66	56.15	**Carbonaceous Argillite**	none										
		Black to dk grey, FG graphitic argillite. Massive to laminated with 2-5% white Qtz-rich laminae ≤1mm and 1-100 mm thick dark argillite beds. Laminae and bedding are locally crenulated. 5-10% lt grey siltstone beds 2-10 mm thick with recrystallized Qtz and 10-15% FG graphitic material. Py occurs as disseminated CG cubes up to 10 mm, generally rimmed by Qtz. Rare beds 1-2 cm thick enriched with Py concretions 1-2 mm in size (up to 30% Py in these beds). Py also occurs in a few bedding-parallel Qtz veins 1-5 mm thick, as irregular aggregates and cubes.			2-3					0	5.00	S1	58
											13.10	S1	52
											20.10	S1	42
											20.10	S2	02
											49.82	S1	53
											49.82	S2	03
		S1 is a bedding parallel mineral foliation best defined in the coarser horizons of siltstone. In the argillite, some graphitic planes are along S1, but dominant graphite orientation is at strong angle to S1, along S2, which is axial planar to crenulation of S1. Micro-shears and fractures are also developed along S2.											
		< 9.28 - 13.66 > dominantly grey siltstone to dirty sandstone (greywacke) in 75-100 cm beds and 25% black argillite in 20-200 cm beds.											
		< 23.70 - 29.65 > fault zone defined by black graphitic gouge and minor lt grey blocky siltstone fragments.											
		< 32.62 - 32.93 > competent argillite breccia with 40% argillite fragments 2-5 mm in size, in a white Qtz matrix. Lower 5 cm is foliated alonf S1, with 5% Py cubes up to 8 mm.											
		< 34.02 - 37.40 > fault zone with 15% black graphitic gouge and 85% blocky fragments of massive graphitic argillite.											
		< 50.57 - 50.86 > lt green, Qtz-rich sandstone with 15% chlorite.											
		< 55.20 – 56.15 > laminated argillite and siltstone. 60% black argillite beds 2-10 mm interbedded with 40% lt grey siltstone beds 1-20 mm thick.											
56.15	75.38	**Interbedded Siltstone and Argillite**	none										
		50% Black carbonaceous argillite (as above) generally in metric beds. 40% Grey siltstone in metric beds containing minor graphitic material. Local beds up to 50 cm thick of laminated argillite and siltstone with interbedded 1-5 mm laminae. 10% CG massive to weakly foliated sandstone beds 3-40 cm thick. The 40 cm bed appears to be fining downhole.			1-2					0	62.90	S1	83

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		Py occurs as disseminated cubes 3-10 mm (up to 20 mm) in the argillite and rarely in coarser beds. S1 surfaces are micaceous (muscovite).											
		< 69.48 – 75.38 > Shear zone defined by seven 10-15 cm thick gouge zones in black argillite. Gouge zone contain up to 15% pervasive Qtz veining and some preserved graphitic shear planes.									72.26	shear plane	37
75.38	94.55	**Sandstone**											
		Lt grey to grey sandstone (85%) to siltstone (10%) with minor CG quartzite (5%) (recrystallized sds). Some beds appear to be fining downhole. Sandstone is weakly foliated with muscovite along S1 and minor late Bt (post-S1). ~40% of unit is brecciated (syn-sedimentary? tectonic?) as lens-shaped fragments of sandstone 0.5-4 cm long often flattened along S1. Silty matrix between fragments contains muscovite which wraps around the fragments (S1 is post-brecciation). Smooth edges and relationship with foliation suggest syn-sedimentary deformation and later flattening.	Sericite	3	≤1								
		< 73.38 – 79.71 > Section with seven gouge zones 1-16 cm thick in siltstone with no notable Qtz-veining nor consistent shear orientation. Between gouge zones are competent lt grey to grey sandstone and siltstone.											
94.55	100.63	**Laminated Siltstone**											
		Lt grey to grey laminated Qtz-rich siltstone with 70% grey beds 1-20 mm thick interbedded with 30% white to lt grey laminae 1-3 mm thick. Although very siliceous, core can be scratched easily with a knife due to sericite alteration. Lots of small shear zones within the unit, as a dozen greenish (Chl-rich) 2-10 cm thick gouge zones and unconsolidated breccia. S2 locally observed as microveins displacing S0-S1.	Sericite	10	0-1					0	97.30 97.30	S1 S2	88 26
100.63	107.48	**Mixed Siltstone and Sandstone**											
		70% grey siltstone as massive beds up to 30 cm thick. 30% massive white sandstone as irregular fragments and lenses 2-20 mm thick, suggesting soft-sediment deformation in most of the unit. Undisturbed thin beds very locally. Silty portions contain Ms.	Sericite	5									
107.48	115.43	**Sandstone**											
		White to lt grey sandstone, some siltstone and rare CG sandstone. Some horizons of brecciated sds in grey silty matrix. Sds fragments are sub-rounded, lens-shaped. A few Bt porphyroblasts ≤1mm, in sds. Ms along S1. First appearance of Po, disseminated in sds. Po, occurring locally, forms	Ms	5	1-2	1				0-2	111.65	S1	64

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		small aggregates elongated along S1. Py occurs as cubes up to 8 mm in size, not spatially associated with Po. Alteration: ~5% Ms along S1; silicification as 5-50 mm thick of fine (massive?) Qtz that doesn't appear to be detrital. These zones are spatially associated with occurrences of Po. Crenulation lineation on Ms-defined S1 planes, but no S2 visible.											
115.43	117.85	**Carbonaceous Argillite**											
		Massive bed with 5-10% irregularly folded Qtz-veins ≤2mm thick. Most veins along S1 but a few are cross-cutting. Most are folded with S1?. Py occurs as MG-CG in Qtz-veins or as disseminated aggregates (lenses) folded with S1. Lower 30 cm of unit contains 30% sandy material complexly mixed and reworked within the argillite (soft-sediment deformation?).	none		2-3					0			
117.85	124.84	**Silicified Sandstone**											
		Lt grey to grey Qtz-rich FG clastics, with a smooth massive appearance? Much of the Qtz appears to be secondary rather than detrital, with a pale yellowish hue due to muscovite alteration. The unit locally displays an overprinted brecciated appearance. Py occurs as disseminated large cubes 2-10 mm in size, which is uncommon in clean sandstone so far, supporting the secondary (hydrothermal) nature of the Qtz. The unit is less siliceous downward as lower 1 m contains 30% black argillaceous material in thin bands defining S1.	Ms	5	2					0			
		< 118.20 – 118.43 > traces of disseminated Grt (Sph?) within irregular Py aggregates.	Qtz								118.23	shear plane	46
124.84	125.02	**Carbonaceous Argillite**											
		Black graphitic argillite. Py in Qtz-rich lenses along S1.			2					0	124.82	S1	65
125.02	127.26	**Brittle Fault Zone**											
		90% unconsolidated breccias (matrix dominated) with 35% fragments ≥0.5 cm. 10% broken up blocky fragments of lt grey, highly siliceous sandstone/siltstone. Upper 40 cm is crushed argillite, the rest is crushed sandstone/siltstone. Breccia locally greenish from minor chlorite.	Chl	2						0	126.00	shear plane	50
127.26	133.16	**Sandstone to Siltstone**											
		Grey to lt grey sandstone to siltstone, complexly inter-layered (inter-bedded?) with ~20% FG black graphitic argillite. Some flattening of			2	<1						S1	55-90

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		sandstone fragments as lenses along S1 in silty matrix. The siltstone is locally brittly brecciated with Qtz filling between fragments (competent breccia). S1 is wavy and quite variable. Po is observed in one location, disseminated within a 35 cm horizon with ~1% Po as irregular grain aggregates up to 2 mm along S1. Py occurs in thin veins parallel to S1.											
133.16	136.65	**Muscovite Schist**											
		70% siliceous Ms-schist likely derived from a greywacke. 20% laminated siltstone with minor black argillaceous material. 10% Qtz-veins 10-18 cm thick. Strong parting along wavy S1, defined by the alignment of Ms. Py occurs as disseminated cubes up to 5 mm and thin aggregates along S1. Po occurs as disseminated irregular grains 1-3 mm, in schist and locally in Qtz-veins, close to the contact with the schist.	Ms	20	1	0.5				1	135.50	S1	60
136.65	137.77	**Siltstone**											
		Massive grey siltstone, brecciated in centimetre-size sub-angular fragments within an irregular network of Qtz-veins (10%) and Py.	none		1					0			
137.77	141.53	**Siltstone to Argillite**											
		Massive grey Qtz-rich siltstone grading downward to a laminated dk grey argillite. 2 such graded beds, repeated at 140.62. Py occurs as disseminated cubes upp to 5 mm and aggregates along S1.			1-2					0		S1	50-90
141.53	142.02	**Siltstone**											
		Massive grey siltstone with an irregular network of Qtz-veins (10%) up to 3 cm thick. One red garnet crystal 4 mm across in Qtz-vein.	Qtz		tr.					0			
142.02	148.06	**Siltstone and Sandstone**											
		Lt grey, thinly-bedded Qtz-rich siltstone to sandstone, locally with up to 15% muscovite. Brecciated texture locally as sub-rounded sandstone fragments up to 3 cm in size in a dk grey FG silty matrix. Trace occurrences of garnet grains <1mm. 5% Qtz-veins up to 6 cm thick. Lower 1.5 m is brecciated by an irregular network of Qtz-veins. Py as disseminated cubes up to 6 mm. Some Po disseminated locally within discrete horizons a few centimeters thick.	Ms	5	<1	0-1							
148.06	177.53	**Alteration Zone in Sandstone**											
		White to lt grey sandstone with strong Ms-Qtz alteration. ~20% unaltered	Ms	10-35	1						161.80	S1	42

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		sandstone beds up to 5 cm thick are preserved. Muscovite is present throughout along S1 and locally concentrated in thin bands parallel to S1. 6 bands 2-10 cm thick occurring as unconsolidated pasty gouge with ~90% muscovite and 10% Qtz. Silicification is pervasive as intergranular replacement/filling within sandstone, occurring as white FG or smooth massive-looking Qtz with centimetre-size rounded patches of original grey sandstone, with gradual contacts. 1% actual cross-cutting Qtz-veins 1-15 cm thick, locally displaying void-filling texture (euhedral Qtz in voids).	Qtz	20							175.90	S1	24
		< 148.69 – 148.89 > Semi-massive pyrite-stringer. 30-35% MG Py in an interconnected network within clean Qtz-sandstone and recrystallized Qtz. No other sulfides observed.			30-35								
		< 148.89 – 149.98 > Highly-silicified sandstone, with 15% Ms and local Sph stringers (<<1%), and spatially-unassociated traces of disseminated Cpy.					tr.	<1					
		< 149.98 - 150.08 > as above but with rare Sph-Gal-Py veins (stringers) 1-2 mm thick, along S1.			2			1	0.5				
		< 167.50 – 167.90 > disseminated Cpy and Py in silicified sandstone, with no Ms.			1		1						
		< 167.90 – 168.97 > Massive sandstone with albitic alteration, as 1-3 mm white porphyroblastic crystals. No distinctive Ms or Qtz alteration. Traces of disseminated Cpy and Py.	Ab	5	tr.		tr.						
		< 168.97 – 169.47 > Silicified and brecciated sandstone. Small and local interconnected network of Py-Cpy.			4		1						
		< 170.10 – 170.14 > Small Cpy stringer within Ms-rich MG sandstone.					3						
		< 172.49 – 173.53 > thin, jagged Po stringers cross-cutting S1, within strongly Ms+Qtz-altered sandstone.				1				1			
177.53	187.99	**Sandstone**											
		Lt grey, clean sandstone with no more Ms-alteration. 15% Qtz-veins up to 5 cm thick ften as irregular network within brecciated sandstone. Py is disseminated as FG to MG.			1					0			
187.99	190.00	**Altered Sandstone**											
		Creamy-white Ms-Qtz alteration with a few remnant patches of grey	Ms	10	1								

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		sandstone. Alteration is pervasive with silicification concentrated almost entirely in top 40 cm and lower 20 cm (containing ~75% Qtz). Py as disseminated cubes up to 6 mm.											
190.00	191.94	**Sandstone**											
		Lt grey massive bed. Py in rare thin stringers.			tr.								
191.94	194.04	**Altered Sandstone**											
		Creamy-white alteration zone as above. Rare remnants of grey sandstone in white silicified rock with Ms-rich bands 1-20 cm thick. Disseminated Py is spatially associated with Ms-rich bands.	Ms Qtz	15	1					0			
194.04	195.23	**Sandstone**											
		Mostly clean grey sandstone.								0			
		< 194.04 – 194.67 > 10% Qtz-veining											
		< 194.67 – 194.90 > Ms-altered sds with 1% disseminated Po.	Ms	10		1				1			
		< 194.90 – 195.23 > Massive sandstone with disseminated Py as cubes up to 6 mm, and traces of Po.			2								
195.23	200.39	**Laminated Siltstone**											
		Grey to dk grey siltstone with 10-15% black carbonaceous argillic material in thin wavy bands defining S1. Strange texture locally, within rare coarse fragmental bands, where small rounded nodules occur, with a grey silty core <1mm rimmed by 1-2mm of Qtz. Traces of FG Po within rounded Qtz-nodules. Py as disseminated cubes 1-15 mm across.			1						197.00	S1	83
200.39	217.88	**Sandstone**											
		Massive MG beds 20-40 cm thick interbedded with 20% FG laminated beds 10-30 cm thick. Laminated beds contain lenses of sandstone flattened parallel to S1 in a foliated dk grey carbonaceous matrix. Py occurs as sisseminated cubes up to 6 mm in size. Traces of Po, disseminated locally within sandstone beds and in one 8 mm thick, cross-cutting Qtz-vein.			1					0.5	201.80	S1	75
		< 200.37 – 201.19 > 50% Qtz-veins, some Ms (5%) 0 and Py.	Ms	5									
		< 202.53 – 202.71 > Traces of Cpy in discontinuous stringers. Py as			2		0.5						

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		disseminated cubes and within thin cross-cutting veins.											
217.88	225.32	**Coarse Sandstone**											
		MG to very CG Qtz sandstone with grains up to 3 mm in size. 15% thin grey silty beds 2-10 mm thick. ~50% of unit is Ms-altered with up to 8% FG Ms to sericite. Uneven albitic alteration, strongest in the lower half of the section, where up to 10% post-S1 Ab "porphyroblasts" 1-3 mm in size give a dotted appearance to the rock. Some whitish horizons could reflect more pervasive intergranular albitization. Minor ankerite alteration in pale-orangish horizons. 3% Qtz-veins 1-10 cm thick throughout the unit. S1 is wavy and irregular.	Ms Ab Ank	0-5 0-10 0-5	<1								
225.32	227.23	**Altered Sandstone**											
		Bed of MG massive sandstone with pervasive Ab-Ank-Cr-alteration. No large Ab grains but light dull colour and smooth texture suggests intergranular albitization (sericite?). Orangish hue due to FG ankerite. Chromium-alteration occurs as Cr-green grains (Cr-mica?) <2mm.	Ab Ank Cr	10 5 1	0								
227.23	273.33	**Coarse Sandstone**											
		Thick sequence of coarse siliciclastics, unaltered, grey to lt grey. Thick massive metric beds with grains 1-2 mm in general, but up to 5 mm. Coarsest bed observed at the top of unit (uphole – stratigraphic base). Rare (1%) thin black argillite beds 5-20 mm thick. 2% Qtz-veins 1-10 cm thick in different orientation. 6-7 thin gouge bands 2-6 mm thick in upper 5.5 m.		tr.									
		< 250.16 – 273.33 > Minor Ab-alteration as 1-2 mm white "dots" in Qtz-sandstone.	Ab	2-5									
		< @ 248.59 > Cpy stringer 1-2 mm thick at ~85°.					tr.						
		< @ 249.34 > Po-Py(-Cpy)-stringer veins with 60% massive Qtz, 1-4 cm thick.			tr.	tr.	tr.						
		< @ 250.21 > Cpy-Py-Po discontinuous stringer 1-3 mm thick.			tr.	tr.	tr.						
		< @ 268.18 > small Gal grain ~ 1mm in size, in 10 cm Qtz-vein.							tr.				
		< 264.26 – 264.96 > Strong Ab-Ank-Cr alteration. Minor Cr-rich mica locally along S1.	Ab Ank Cr	25 5 2									

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
273.33	310.50	**Siltstone to Sandstone**											
		~75% siltstone, 20% sandstone, 5% Qtz-veins. Grey siltstone is laminated to thinly-bedded with 5-30% lt grey silty to sandy lenses flattened along S1. Lenses are 1-15 mm thick with a 3:1 to 10:1 aspect ratio. Siltstone contains ~5% black graphitic material. Sandstone occurs in lt grey massive beds 10-110 cm thick. Qtz-veins are 1-20 cm thick, locally displaying void-filling texture. In FG rock, the foliation wraps around bends in the veins suggesting that at least some are pre-S1. Generally unaltered. Minor Ab-alteration locally, down to 288.25 m. Py occurs as 2-22 mm cubes in siltstone and as disseminated FG in sandstone (with traces of Po).			1						285.00 305.75	S1 S0	85 86
		< 298.18 – 292.75 > Sheared, broken-up section with a few gouge zones ~5 cm thick within carbonaceous siltstone.										shear plane	25-45
		< 292.75 – 300.38 > sandstone-dominated section displaying a brecciated texture with 10-15% pervasive Qtz-veining, locally as network of veins.											
		< 300.38 – 302.33 > pervasive carbonate-alteration in sandstone, as FG lt orange intergranular ankerite.	Ank	5									
		< @ 307.01 > first appearance of Po in this unit; at the base of a 25 cm Qtz-vain containing minor Py.											
		< 307.53 – 307.55 > Qtz-vein with 8 mm by 1-2 mm aggregate of MG galena next to a larger aggregate of Py, + few disseminated grains 1-2 mm.											
310.50	354.35	**Sandstone to Siltstone**											
		Similar to above unit, but dominant sandstone. 65-70% Sandstone, 25-30% siltstone, 5% Qtz-veins. Massive sandstone beds up to 1.4 m thick. Massive to laminated siltstone (locally carbonaceous argillite) in beds up to 60 cm thick. S1 is wavy (openly folded).				<1							
		< 334.03 – 335.10 > Fault zone. 40% carbonaceous gouge and 60% consolidated breccia with pervasive silicification.											
		<337.50 – 337.96 > 5% ankerite alteration as fine intergranular grains in thin S1-parallel bands. @337.75: Small discontinuous Po-stringer with traces of Cpy within the stringer and as disseminated FG within 1 cm on each side of Po.	Ank	5		<1	tr.						
		<338.46 – 338.57 > Disseminated Po in Ank-Ser-altered zone with traces of Cr-mica.	Ms-Ank	10	<1	1							

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< 335.10 – 344.45 > consolidated breccia with lens-shaped sandstone in dk grey silt.											
354.35	376.95	**Coarse Sandstone**											
		Lt grey CG sandstone beds start occurring in this unit, with Qtz-grains and rare black siltstone clasts up to 6 mm in size, locally. Up to 5% white feldspar clasts in some beds. ≤5% dk grey to black siltstone/argillite beds <5 cm thick. ~2% Qtz-veins 2-40 cm thick locally containing minor Py. Overall very little Py as FG disseminated cubes.			0-1					0			
		< 357.68 – 357.96 > Lt coloured altered bed with Ms-Ank-Cr alteration. Cr-mica 1-3 mm in size. Po+Py disseminated as FG.	Ms-Ank-Cr	3									
		< 365.85 – 367.03 > Shear zone with minor gouge and blocky core fragments.											
		< 367.64 – 368.22 > Lt coloured sericitic alteration in sandstone, no sulfides.	Ms-Ank	10									
376.95	380.46	**Fault Zone**											
		Unconsolidated carbonaceous gouge and breccia with 10% massive Qtz-veins in sub-angular fragments within the breccia. 10% blocky core fragments of graphitic siltstone/argillite. Py as large cubes in gouge.			1					0			
380.46	392.60	**Sandstone to Siltstone**											
		~75% grey sandstone in 2-50 cm beds inter-bedded with 23% siltstone and minor argillite, often containing up to 25% lens-shaped clasts (?) of sandstone. 2% Qtz-veins 2-4 cm thick. Py as disseminated cubes up to 10 mm.			<1								
392.60	395.07	**Altered Sandstone**											
		Discontinuous alteration with 3% Ms, 2% Ank, up to 1% Cr-mica (up to 3% over 30 cm), 2% Ab?, 5% Qtz-veins up to 10 cm.	Ms Ank Cr	3 2 1	<1								
395.07	395.43	**Sandstone**											
		Massive Qtz-sandstone.											

Grid Name: Frank Creek
Location: 200 m North of D road, 150 m SE of road 8400
Collar Grid Co-ordinates: 61+00N / 24+00W
Collar UTM Co-ordinates: 609491 / 5846002
Logged By: J. Laberge

Collar Azimuth: 090°
Collar Dip: -70°
Start Date: 11-26-2005
Finish Date: 11-30-2005
Drill Contractor: Hardrock Diamond Drilling Ltd.

Drill Hole Summary:

This hole tests a IP chargeability-high anomaly in upper 250 m, underlain (with overlap) by a DC resistivity-low flat anomaly at 200-250 m depth. It also targets a large MT resistivity-low anomaly starting at around 50 m, down to great depth. Target selected by L. Doyle and P. Anderson. Drill hole spotted by J. Laberge.

From (m)	To (m)	Interval		From (m)	To (m)	Interval	
13.78	38.75	25.0	Sandstone	257.14	263.14	6.0	Sandstone
38.75	45.78	7.0	Siltstone (deformed conglomerate?)	263.14	264.02	0.9	Fault Zone Breccia
45.78	97.42	51.6	Graded Siliciclastics	264.02	273.05	9.0	Mixed Clastics
97.42	119.20	21.8	Interbedded Conglomerate and Argillite	273.05	295.41	22.4	Conglomerate and Coarse Sandstone
119.20	133.00	13.8	Carbonaceous Argillite	295.41	308.44	13.0	Greywacke to Polymictic Conglomerate
133.00	157.13	24.1	Coarse Sandstone	308.44	315.23	6.8	Sandstone and Sandstone Conglomerate
157.13	158.68	1.6	Altered Sandstone	315.23	316.05	0.8	Greywacke Conglomerate
158.68	163.27	4.6	Siltstone	316.05	329.15	13.1	Sandstone Conglomerate and Sandstone
163.27	166.79	3.5	Argillite	329.15	344.18	15.0	Sandstone and Sandstone Conglomerate
166.79	244.77	78.0	Sandstone with altered horizons	344.18	346.33	2.1	Conglomerate
244.77	253.08	8.3	Quartz-Conglomerate	346.33	413.72	67.4	Interbedded Sandstone, Mudstone and Conglomerate
253.08	257.14	4.1	Altered Coarse Sandstone				

Down Hole Tests:

depth	*azimuth*	*dip*
106 m	093	-76
200 m	091	-76
316 m	090	-78
414 m	091	-79

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
0.00	13.78	CASING											
13.78	38.75	**Sandstone**											
		MG to CG lt grey sandstone in beds 10 cm to more than 2 m thick. A few beds display fining-downhole grading. 2-3% muscovite, defining weak S1 fabric. Ms appears black on S1 planes (but scrathes to white flakes). Some sericite (1%) from minor feldspar alteration. ~1% dk grey to black FG material in a few 2-10 mm thick beds. ~2% Qtz-veins 0.5-5 cm thick, some along S1 and deformed with it, some cross-cutting S1. Traces of FG disseminated Py.	Ser	1	<1					0	15.25	S1	72
										30.20	S1	63	
38.75	45.78	**Siltstone (deformed conglomerate?)**											
		Grey to dk grey, laminated to thinly bedded siltstone, with ~15% sandstone in massive 2-15 cm thick beds. Good S1 foliation defined by muscovite, parallel to bedding. S2 is expressed by a set of microfractures, slightly displacing S1. 1% Qtz-veins. The laminated structure could be compositional layering due to intense ductile deformation/flattening along S1. This interpretation comes from observation from the downhole unit, were conglomerate beds contain lt coloured sandstone in dk grey FG matrix, which, if deformed, could have the appearance of this laminanated unit. Supporting this is the observed flattening of detrital quartz grains in sandy beds. Up to 2% Po in some laminated horizons, as FG disseminated masses, slightly elongated along S1. Some FG Py remobilized along small S2 microfractures.	Ms	5	<1	1-2				0-2	40.25	S1	62
											40.25	S2	1-4
45.78	97.42	**Graded Siliciclastics**											
		Sandstone-dominated sequence of thick-bedded graded clastics. Graded beds are generally 1.5 to 3 m thick, although thickest bed observed is 3.8 m thick, and locally some beds a few cm-thick occur. All beds are fining downhole (upside-down), grading from lt grey conglomerate at the base (top in hole) to lt grey sandstone, grey siltstone and a thin argillaceous top. The thickest beds have a lot of conglomerate at their base, while thinnest beds have a silty base. In thick beds, monogenic conglomerate to very coarse (>2 mm) qtz-sandstone represent 65% of the beds, with 20% sandstone (<2 mm grains), 10% siltstone and 5% argillite. Counted ~40 graded beds in the unit. ≤1% Qtz-veins 0.5-3 cm thick, generally cross-cutting.			<1					0	93.36	S1	74

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
97.42	119.20	**Interbedded Conglomerate and Argillite**											
		No clear graded structure as above. Inter-bedded metric conglomerate and black carboneous argillite beds (conglomerate beds are generally slightly thicker). The change from conglomerate to argillite is generally abrupt, with interfingering within a few cm. Gradual increase of the proportion of argillite beds downhole. Along with its decreasing proportion downhole, the thickness of conglomerate beds also decreases downhole. Gravel conglomerate (minor pebble-size clasts locally) contain sub-rounded black argillaceous clasts and white MG Qtz+Fsp fragments. No large Qtz grains as in unit above. The matrix is generally quite dark and carbonaceous.			<1					0	117.83	S0	53
		Py as large disseminated cubes ≤12 mm, mostly in argillaceous beds.											
119.20	133.00	**Carbonaceous Argillite**											
		Massive to locally laminated with white <1mm thick Qtz-veins as (pseudo-beds) along and folded with S1. S1 has variable orientation due to folding. Some small Qtz-veins <3mm cross-cutting S1.			1						127.50	S1	80
		Py as MG disseminated cubes generally ~1 mm in size, in lens-shaped aggregates.											
		< 129.86 - 133.00 > 40% gouge and 60% blocky core fragments of black graphitic argillite.											
133.00	157.13	**Coarse Sandstone**											
		Lt grey CG sandstone (1-2 mm Qtz grains) with minor Qtz conglomerate (Qtz grains and quartzite clasts ≤8 mm) in metric beds. A few graded beds fining downhole to FG sandstone- dk grey siltstone. Some muscovite along S1 in sandy portion. Rare cm-size bands where Ms-concentration is higher, with up to 15% Ms locally. ~4% Qtz-veins ≤10 cm thick, along S1, which wraps around them.		3	<1						153.30	S0	67
		Py as irregular-shaped disseminated aggregates.											
157.13	158.68	**Altered Sandstone**											
		CG sandstone with quartz grains up to 2 mm, displaying strong Ms-alteration, locally up to 30%, and minor Cr-mica alteration. Stronger alteration in lower half.	Ms-Cr										

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< @ 158.14 > Sph-Gal-Po-stringer within relatively unaltered sandstone, from less than 1 mm to 1 cm thick. Py occurs as cubes up to 2 mm disseminated (not connected) within the stringer vein.			10			3	2				
		< 158.20 – 158.47 > Sandstone with Ms and Cr-mica alteration. Cr-mica along S1 with Ms.	Ms Cr-mica	5 2									
		< 158.47 – 158.68 > Strong Ms-alteration. Rare discontinuous Py-veins up to 3 mm thick, cross-cutting S1.	Ms	2 5									
158.68	163.27	**Siltstone**											
		Siltstone inter-bedded with ~15% lt grey sandstone beds 5-10 cm thick. Siltstone is Ms-rich, thin-bedded, with 1-5 mm white Qtz-rich laminae between darker beds up to 3 cm thick.	Ms	20							160.50	S1	88
163.27	166.79	**Argillite**									160.50	S2	31
		70% black carbonaceous argillite with inter-bedded sandstone (20%) and siltstone (10%) in 3-30 cm beds, locally discontinuous and lenticular. Many siltstone to sandstone beds contain Ms.	Ms	1	<1								
166.79	244.77	**Sandstone with altered horizons**											
		This unit is composed of 50% lt grey sandstone in massive to graded beds ≤1 m thick, with little alteration. It is interlayered with decimetric to metric altered horizons. These are generally layered, with 1-10 mm thick lt coloured Qtz-rich bands alternating with 1-50 mm thick grey Ms-rich bands in which Ms is aligned along S2, at a strong angle to S1. ~2% Qtz-veins ≤3 cm thick, most along S1, some cross-cutting.	Ms		1	<1					188.25	S1	86
		< 167.30 – 172.87 > 20% Qtz-veins in a network within strongly altered sandstone.	Ms±Ank	10	1	tr.					188.25	S2	23
		< 193.75 – 196.20 > Ms-Qtz-Ab alteration, 5% creamy-white lenticular fragments of albitized sandstone (pseudo-porphyritic appearance). Lower 20 cm is completely replaced by Qtz.	Ms	15		1					204.50	S1	78
		< 196.20 – 196.40 > White "quartzite", secondary massive Qtz replacement?	Qtz								234.40	S1	67
		< 196.40 – 196.50 > Ms-Qtz alteration, Chl at contact with upper Qtz-band. Small Po-stringer with disseminated Py cubes.	Ms	15	5	10					240.60	S1	73

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< 196.50 – 196.64 > Semi-massive sulphides: Po-Py-stringer as network between sand grains. Upper 1 cm is all Po the rest is Py-dominated with minor Cpy. Locally Cpy is rimmed by Po, rimmed again by Py.			30	20	1				240.60	S2	15
		< 196.64 – 196.76 > Sandstone with Ms-rich bands 2-5 mm thick. Thin stringer of Py-Sph-Gal (traces of Po-Cpy) in Qtz-vein up to 3 cm thick.	Ms		1	tr.	tr.	1	tr.				
		< 196.76 – 197.48 > Ms-Qtz-Ab alterater conglomerate with 20% with albitized sandstone clasts as lenses flattened along S1, in a Ms-rich matrix.	Ms-Ab										
		< @ 207.24 > Small aggregate of Cpy (1% over 1 cm).					1						
		< 213.29 – 214.50 > Strongly altered horizon with Cr-mica and traces of disseminated Po.	Ms-Cr	5		tr.							
		< 220.41 – 220.53 > Altered horizon with a small Cpy-stringer (with minor Po), and a few disseminated Cpy grains elongated along S1.	Ms	5		tr.	1						
		< 229.38 – 229.60 > Ms+Cr-mica alteration with traces of FG disseminated Py-Po-Cpy.	Ms-Cr	5	<1	tr.	tr.						
		< @ 233.65 > Traces of Cpy in contact with Po which forms a 3 by 1 mm aggregate within a 1 cm Qtz –nodule.	Ms										
		< @ 237.92 > Small Cpy aggregate 4 by 1 mm, within Ms-rich sandstone with minor Ank-alteration. Traces of FG disseminated Cpy within 10 cm around the aggregate.	Ms-Ank										
244.77	253.08	**Quartz-Conglomerate**											
		85% conglomerate in metric beds, composed of 2-5 mm Qtz-grains in recrystallized Qtz matrix. Minor Ms and Bt in matrix. 12% dk grey siliceous siltstone in 2-30 cm thick beds. 3% Qtz-veins 1-6 cm thick, locally rimmed by Chl.	Ms	1		tr.							
253.08	257.14	**Altered Coarse Sandstone**											
		Lt grey Ms-altered sandstone with Qtz grains ≤2 mm. One 18 cm thick conglomerate bed with lt grey lens-shaped sandstone clasts up to 5 cm in dark silty matrix. 2% Qtz-veins 1-3 cm thick. Ma-alteration is intergranular, defining weak S1, and increases downhole to ~10%.	Ms	8		tr.					256.35	S1	67

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< 256.62 – 256.88 > Po is a 1-4 mm thick stringer and disseminated as thin FG aggregates up to 1 cm long along S1. Traces of FG Cpy in contact with Po in some aggregates. ~10 cm thick sulphide-free band in the middle of this interval.				1	tr.						
		< 256.88 – 257.14 > CG quartzite with minor Ms.											
257.14	263.14	**Sandstone** Lt grey massive MG sandstone? Very homogeneous bed with a few thin Ms-rich bands 1-2mm thick, locally containing minor Py. Late brittle deformation expressed locally as 2-10 cm unconsolidated and consolidated breccias with angular fragments ≤2 cm in grey matrix. Very Qtz-rich overall, some of the Qtz might be secondary.	Qtz		<1								
263.14	264.02	**Fault Zone Breccia** Tectonic breccia generally unconsolidated, locally consolidated, with sub-angular fragments of CG sandstone and QTz-veins 2-40 mm long, in a black graphitic matrix.											
264.02	273.05	**Mixed Clastics** Heterogeneous unit with 50% grey siltstone in cm-size beds, 20% sandstone in 1-30 cm beds, and 30% black carbonaceous argillite in 1-10 cm beds. The proportion and thickness of argillite beds increases downhole. Siltstone is well foliated with black micaceous planes (Ms+graphite?). 4% Qtz-veins up to 12 cm thick, folded with S1.	Ms?		<1						267.30	S1	60
273.05	295.41	**Conglomerate and Coarse Sandstone** Heterogeneius unit with: 30% conglomerate in 20-80 cm beds, 40% sandstone in 10-100 cm beds, 20% siltstone in 10-100 cm laminated beds, 10% black argillite in thin ≤2 cm beds often within siltstone. Matrix-supported conglomerate is composed of 50-80% lens-shaped sandstone clasts up to 10 cm, flattened along S1, in a dark grey to black foliated matrix. Lt grey sandstone is MG to CG (≤2 mm grains), Qtz-rich and locally quite Ms-rich (10% Ms); Cr-mica very locally within a 10 cm horizon. Siltstone is FG, dk grey, micaceous, laminated with thin black carbonaceous argillite.			<< 1						274.80 294.25 294.25	S1 S1 S2	62 67 9
295.41	308.44	**Greywacke to Polymictic Conglomerate**											

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		Grey wacke with Qtz-grains ≤1.5 mm, white feldspar grains ≤1 mm, white Qtz-rich sandstone clasts up to 1 cm long, black argillite clasts a few mm long, in a foliated graphitic matrix. 10% dk grey siltstone in mm- to cm-thick beds (up to 6 cm), often dismembered as lenses. Different than above due to variety of clasts, mixed FG material with CG material (unsorted).Grey wacke with Qtz-grains ≤1.5 mm, white feldspar grains ≤1 mm, white Qtz-rich sandstone clasts up to 1 cm long, black argillite clasts a few mm long, in a foliated graphitic matrix. The proportion of FG matrix material increases downhole. 10% dk grey siltstone in mm- to cm-thick beds (up to 6 cm), often dismembered as lenses. Different than above due to variety of clasts, mixed FG material with CG material (unsorted). Py occurs as disseminated cubes up to 1 cm. Grey wacke with Qtz-grains ≤1.5 mm, white feldspar grains ≤1 mm, white Qtz-rich sandstone clasts up to 1 cm long, black argillite clasts a few mm long, in a foliated graphitic matrix. The proportion of FG matrix material increases downhole. 10% dk grey siltstone in mm- to cm-thick beds (up to 6 cm), often dismembered as lenses. Different than above due to variety of clasts, mixed FG material with CG material (unsorted). Py occurs as disseminated cubes up to 1 cm.			<1						300.32	S1	74
308.44	315.23	**Sandstone and Sandstone Conglomerate** Inter-bedded lt grey sandstone (75%) in 10-60 cm beds, and sandstone conglomerate (25%) in 3-15 cm beds. Clasts in conglomerate are of lt grey sandstone in a dk silty matrix (30-40% clasts ≤1 by 6 cm). Clasts are more or less deformed depending on bed (up to 9:1 aspect ratio).											
315.23	316.05	**Greywacke Conglomerate** Greywacke as 2nd unit above but with 30% cm-size black argillite clasts, often flattened along S1.									315.23	S1	68
316.05	329.15	**Sandstone Conglomerate and Sandstone** Similar to 2nd unit above but 62% conglomerate, 35% sandstone and 3% Qtz-veins up to 14 cm thick.			<1						322.30	S1	71
329.15	344.18	**Sandstone and Sandstone Conglomerate**											

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		Unit similar to that above by strongly ductilely deformed and altered. 35% conglomerate with lt grey sandstone clasts in dark graphitic matrix, with inter-bedded lt grey sandstone beds. Gradually more sandstone downhole. Strong deformation is expressed as intense flattening of clasts, having an aspect ratio of more than 20:1 locally, as the conglomerate takes a pseudo-laminated structure. 30% od sandstone beds are altered with 5% Ser with minor Cr-mica + Ank (1-2%), very locally. 2% Qtz-veins up to 10 cm thick, folded with S1.	Ser-Cr-Ank								332.15	S1	69
344.18	346.33	**Conglomerate** Matrix-supported conglomerate with 35% lt grey sandstone-quartzite clasts up to 3 cm thick, generally flattened along S1, with a 4:1 to 12:1 aspect ratio. FG black matrix containing FG dark muscovite (+graphite). Py in cubes up to 8 mm.			<1								
346.33	413.72	**Interbedded Sandstone, Mudstone and Conglomerate** 50% sandstone, 40% conglomerate, 5% mudstone, 5 % Qtz-veins. Sandstone in massive 5-30 cm bds often altered with 5% pervasive sericite, and thin Ms-wisps along S1. Conglomerate, in beds up to 50 cm, contains 30-40% cm-size lt grey sandstone clasts generally flattened along S1. Dark grey FG matrix rich in dark Ms+graphite. Mudstone is that forming the conglomerate's matrix, with the absence of clasts. Some micaceous-graphitic surfaces along S1 and some defining a weak S2. 5% Qtz-veins 1-20 cm thick. Some veins contains up to 5% CG white Ab crystal. Albite-alteration (leucoxene?) throughout, occurring as late lt coloured to almost colourless porphyroblasts, locally sericitized in part. Clearly a late feature as the crystals are undeformed and grew on top of S1 surfaces. Ab? Grains are typically 1-2 mm in size and range in concentration from 1-8%. Traces of Po disseminated locally in sandstone.	Ser	2	<1	tr					347.00	S1	78
			Ab	5							347.00	S2	20
											360.00	S1	77
											367.85	S1	77
											380.10	S1	77
											395.40	S1	75
											410.50	S1	77

Grid Name: Frank Creek
Location: Road 8400, 460 m NE of D-road turnout
Collar Grid Co-ordinates: 61+00N / 27+25W
Collar UTM Co-ordinates: 608956 / 5846044
Logged By: J. Laberge

Collar Azimuth: N/A
Collar Dip: -90°
Start Date: 12-01-2005
Finish Date: 12-07-2005
Drill Contractor: Hardrock Diamond Drilling Ltd.

Drill Hole Summary:

This hole tests a shallow IP chargeability-high anomaly from 50-175 m depth, underlain (with overlap) by a DC resistivity-low anomaly from 150 to 350 m depth. It also targets a large MT resistivity-low anomaly starting at around 50 m, increasing to great depth. Target selected by L. Doyle and P. Anderson. Drill hole spotted by J. Laberge.
Drilling issues: overall very slow drilling, bit was changed a few times (3 or 4), significant reaming had to be done each time after pulling the rods because of caving within the hole.

From (m)	To (m)	Interval		From (m)	To (m)	Interval	
17.38	53.35	36.0	Siltstone and Fine-grained Sandstone	178.40	188.80	10.4	Sandstone
53.35	60.22	6.9	Quartz-veins in Siltstone	188.80	202.85	14.1	Mixed Clastics
60.22	83.93	23.7	Siltstone and Sandstone	202.85	219.30	16.5	Graded Siliciclastics
83.93	106.26	22.3	Interbedded Sandstone, Siltstone and Argillite	219.30	228.31	9.0	Altered Siltstone
106.26	108.26	2.0	Fault Zone?	228.31	237.84	9.5	Siltstone to Argillite
108.26	114.00	5.7	Greywacke	237.84	242.99	5.2	Coarse Quartz-Sandstone
114.00	117.60	3.6	Carbonaceous Argillite	242.99	245.00	2.0	Altered Siltstone and Sandstone
117.60	120.50	2.9	Greywacke	245.00	247.45	2.4	Sandstone to Siltstone
120.50	137.80	17.3	Carbonaceous Argillite	247.45	296.94	49.5	Alteration Zone in Sandstone/Siltstone
137.80	139.61	1.8	Greywacke	296.94	307.35	10.4	Felsite?
139.61	144.65	5.0	Carbonaceous Argillite	307.35	328.35	21.0	Alteration Zone in Sandstone/Siltstone
144.65	147.75	3.1	Greywacke	328.35	372.51	44.2	Mixed Clastics
147.75	153.89	6.1	Carbonaceous Argillite	372.51	393.20	20.7	Weakly Carbonaceous Mixed Clastics
153.89	176.85	23.0	Fine-grained Sandstone	393.20	401.52	8.3	Sandstone
176.85	178.40	1.6	Laminated Siltstone				

Down Hole Tests:

depth	*azimuth*	*dip*
390 m	090	-85

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
0.00	17.38	CASING											
17.38	53.35	**Siltstone and Fine-grained Sandstone**											
		Lt grey to dk grey Ms-rich siltstone in decimetre- to metre-thick beds, interbedded with 25% FG to MG sandstone in beds up to 35 cm thick. Siltstone occurs in massive sericite-rich FG lt grey beds and 50% is thinly-bedded with alternating dark- and light-grey beds ≤1 cm thick, often folded and slightly displaced by micro-fractures (micro-faults) along S2. Some weak mineral (Ms) foliation also along S2. S2 micro-fractures are locally filled with Qtz. Lt grey thin silty beds are locally dismembered as fragments within dk grey siltstone. Sandstone occurs in massive beds with Qtz-grains ≤1 mm, with minor Ms. 5% Qtz-veins. Rare Py as disseminated cubes up to 1 cm.			tr.						24.25 45.25 49.30	S0 S2 S0	40 0-3 50
53.35	60.22	**Quartz-veins in Siltstone**											
		55% Pervasive Qtz-veining with qrey to white massive Qtz in veins up to 10 cm thick, within Ms-rich dk grey siltstone and lt grey sandstone, as above. Minor Chl locally at the contact between Qtz-veins and siltstone.			<1	tr.					59.20	S1	54
60.22	83.93	**Siltstone and Sandstone**											
		Similar to 2nd unit above. Lt grey to dk grey Ms-rich siltstone (up to 15% Ms), and 35% lt grey sandstone in 20-40 cm thick massive beds. 5% qrey to white Qtz-veins up to 10 cm thick.									62.60	S0	53
		< 76.79 – 77.80 > Altered sandstone. 30% Ms in bands along S1. 10% Qtz-veins along and deformed with S1, often as dismembered fragments. Minor ankerite-alteration (1-2%).	Ms-Ank	30							78.80	S1	54
		< 81.50 – 83.93 > Altered horizon with 50% massive Qtz in veins up to 6 cm thick, along and cross-cutting S1; hosted by Ms-rich siltstone with minor Chl at contact with Qtz-veins. 1% Py as aggregates in or bordering Qtz-veins. Traces of Po within a Qtz-vein @ 82.96.	Ms-Chl	30	1	tr.							
83.93	106.26	**Interbedded Sandstone, Siltstone and Argillite**											
		65% Lt grey to grey sandstone in beds 10 cm to 2 m thick. 10% lt grey to dk grey siltstone in 2-15 cm beds. 25% black carbonaceous argillite in beds 2 cm to 1 m thick. Beds thicken downhole as argillite proportion increases. Black argillite beds are generally laminated with 10% grey silty laminae 1-20 mm thick. Py occurs as cubes up to 10 mm in argillite and as small			1						85.90 102.50	S0 S0	67 67

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		disseminated aggregates in sandstone. ~2% Qtz-veins up to 3 cm thick, main set parallel to S1 but some cross-cutting it. First appearance of graphite in this hole.											
106.26	108.26	**Fault Zone?** 75% dk grey gouge and 25% blocky core fragments of Qtz-veins and black argillite with significant Qtz-veining.											
108.26	114.00	**Greywacke** Unsorted, rather coarse Qtz-rich sediment, with stretched small polygenetic clasts in a FG Qtz+Feldspar graphitic matrix. 3% black argillite clasts strongly flattened along S1 (6:1 to 10:1 aspect ratio) up to a few cm long. 5% white sandstone/quartzite clasts 2-10 mm in length. A few rare black argillite beds 2-5 cm thick are present within the unit. Py occurs as disseminated grains generally ≤1mm and locally as aggregates with Qtz along S1.			3-4								
114.00	117.60	**Carbonaceous Argillite** Very graphitic FG black argillite. Core is quite broken up, locally gougy. Blocky fragments remaining contain 5% Qtz-veins.			1								
117.60	120.50	**Greywacke** Dominated by white to lt grey MG Qtz and feldspars with 10-20% wavy graphitic flakes, defining the foliation. 1% 1-4 mm thick Qtz ± Cal-veins cross-cutting S1. 30 cm broken-up gougy horizon. 2% Py as mm-size FG aggregates, along S1.			2						119.45	S1	45
120.50	137.80	**Carbonaceous Argillite** Black FG graphitic argillite. Core is broken-up in blocky fragments and a few gouge zones up to 80 cm thick. Poor recovery overall. Preserved fragments display a poorly laminated structure with 15% lighter coloured beds containing small white Qtz-crystals (concretions?) within 1-5 mm laminae. Some cross-cutting Qtz-veins locally. Minor Py cubes with Qtz-pressure shadows, along S1.			<1								
137.80	139.61	**Greywacke**											

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		Lt grey, Ms-rich, unsorted sediment. No graphite, unlike other greywacke above, instead Ms forms the micaceous matrix along with FG Qtz. Polygenetic clasts of black argillite and white sandstone, strongly stretched, generally <2mm thick and up to 1 cm in length. 3% black argillite clasts; 15% white sandstone (?) clasts, otherwise MG to FG Qtz, feldspars and Ms. Py is disseminated as FG aggregates.			2						139.50	S1	72
139.61	144.65	**Carbonaceous Argillite** Massive black graphitic argillite. 5% thin Qtz veins generally <1mm thick, as pseudo-beds along S0-S1, but some up to 5 mm thick cross-cutting S1. Most Py occurs as MG concretions rimmed by Qtz (diagenetic Py). One 50 cm thick gouge zone.			1								
144.65	147.75	**Greywacke** Grey unsorted sediment, locally with gravel-size clasts. 20% white sandstone clasts ≤1 cm long. A few argillite clasts up to a few cm n length are present locally, most in upper 60 cm. Clasts are strongly stretched along a lineation which also corresponds to the crenulation lineation on S1 Ms-planes. On the plane perpendicular to the stretching lineation, clasts appear almost undeformed. Matrix is composed of recrystallized Qtz, feldpars and Ms. Minor graphite flakes are present in the matrix in the upper part, but disappears lower in the unit. Py occurs as disseminated cubes up to 5 mm and as MG aggregates along S1.			2						147.00 147.00	S1 L2	79 87
147.75	153.89	**Carbonaceous Argillite** Massive to thinly-bedded black graphitic argillite, similar as above. 8% mm-size white laminae or Qtz-rich pseudo-beds. Some up to 7 mm thick enriched containing Py. Most Py is dessiminated as cubes <1mm and MG aggregates up to a few mm, rimmed by quartz. S0-S1 is locally crenulated. A few Qtz-veins up to 10 cm thick, cross-cutting S1.									150.00	S0	74
153.89	176.85	**Fine-grained Sandstone** Lt grey, massive, FG Qtz-sandstone to siliceous siltstone. Weak foliation defined by up to 5% dark Ms. 5% Qtz-veins 1-20 mm thick, generally cross-cutting S1. Secondary yellowish Ms in bands a few mm- to dm-thick, locally. Py occurs as aggregates in Qtz-veins and locally as disseminated cubes up to 3 mm in silty horizons.			1						157.00 164.30	S0 S1	67 45

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< 163.27 – 164.85 > Ms-altered siltstone with 10% unaltered grey siltstone remaining as 3-10 mm thick lenses.	Ms	15							172.23	S1	58
		< 167.88 – 168.74 > Ms-altered siltstone as above.	Ms	20									
176.85	178.40	**Laminated Siltstone**											
		Dark grey siliceous siltstone with 20% FG carbonaceous material. 5% thin lt grey sandstone beds <1cm thick. Py as cubes up to 10 mm.			1								
178.40	188.80	**Sandstone**											
		Thick massive bed of homogeneous medium-grained lt grey Qtz-sandstone with Qtz-grains ≤1 mm. 2% Qtz-veins up to 5 cm thick.											
		< 184.67 – 185.98 > Altered horizon with muscovite, ankerite and Cr-mica, giving the sds a creamy colour and smooth texture. 5% Ms, 2% Ank, 1% Cr-mica.											
188.80	202.85	**Mixed Clastics**											
		Interbedded lt grey sandstone, lt grey coarse-grained Qtz-sandstone, lt grey siltstone and black carbonaceous argillite. Alternating beds are up to 70 cm thick with sharp contacts. 40% MG sandstone, 30% CG sandstone, 5% siltstone, 25% argillite. CG sandstone contains gravel-size Qtz-grains 2-4 mm. Massive beds except for argillite which is thinly-bedded with 2-20% lt-coloured silty laminae and the odd coarser lt grey bed ≤3 cm of sandstone.									194.15 196.35 200.40	S0 S0 S0	80 77 74
202.85	219.30	**Graded Siliciclastics**											
		0.45-1.60 m thick beds, most somewhat graded, fining downhole. MG lt grey sandstone is the dominant lithology. 15% very coarse Qtz-sandstone, 65% MG Qtz-sandstone, 10% siltstone, 5% argillite, 5% Qtz-veins. Beds have VCG to MG sandstone at their base (upper part), grading into FG sandstone to siltstone, and in some beds, to a few cm of dk grey to black argillite. Rare argillite clasts up to few cm lon locally occur within sandstone. Qtz-veins are 0.5-10 cm thick. 5% Ms in most litho. Minor FG disseminated Py.	Ms	5							210.85 212.40 218.85	S1 S0 S0	56 71 60
219.30	228.31	**Altered Siltstone**											
		Creamy-beige siltstone to FG sandstone with strong Ms (sericite?) alteration Laminated structure as 1-10 mm bands, grey to white with more or less Ms. 15% of the bands are of unaltered grey Qtz-sandstone, alternating with Ms-rich bands. Some thin mm-bands are almost entirely composed of Ms, with	Ms Ab	25 1	<1	<1					225.45	S1	76

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		minor recrystallized Qtz. Minor Py as irregular aggregates and vens a few mm in size, and minor locally disseminated Po.											
228.31	237.84	**Siltstone to Argillite**											
		Grey siltstone grading downhole to a dk to black carbonaceous argillite. Thinly-bedded to laminated. 10% Qtz-veins 1 mm – 12 cm thick, often networked, cross-cutting S0-S1. Py occurs as FG (<0.5mm) cubes disseminated in dk grey siltstone/argillite and as Py-rich beds 2-5 mm thick (with up to 60% Py) in the black argillite.			1						232.25	S0	79
237.84	242.99	**Coarse Quartz-Sandstone**											
		White coarse-grained QQtz-sandstone with 1-2 mm Qtz-grains (in contact), with intergranular recrystallized Qtz ±feldspars. Rare Sph-Cpy-Gal-stringer vein, locally. Core quite brittle, and is broken-up in mineralized area.									238.90	S0	73
		< @ 240.88 > small discontinuous stringer 1.5 cm long by 2 mm, with Sph-Cpy-Gal. After sampling, no stringer will be left in witness half.					tr.	tr.	tr.				
		< 242.80 – 242.99 > Cpy-Sph-Gal stringer. Crumbly core. Interconnected Cpy up to 5 mm thick, bordered by a mix of Sph + Gal. Stringer-vein up to 2 cm thick, locally.			1		3	3	1				
242.99	245.00	**Altered Siltstone and Sandstone**											
		Ms-altered massive sandstone and laminated siltstone with Ms-rich bands. 5% Qtz-veins up to a few cm thick. Rare small Cpy-Sph-Gal discontinuous stringer @ 243.08 and 243.26 (1 mm by 1 cm).	Ms	10			tr.	tr.	tr.				
		< 243.85 – 244.00 > Qtz-vein with disseminated Cpy ± Gal.					<1		tr.				
245.00	247.45	**Sandstone to Siltstone**											
		Lt grey sandstone locally grading into dk grey siltstone and minor black carbonaceous argillite (10%). Py occurs as cubes up to 8 mm.			1								
247.45	296.94	**Alteration Zone in Sandstone/Siltstone**											
		Very heterogeneous unit with variable intensity of Ms and/or Qtz-alteration, within horizons up to a few metres in thickness.											
		< 247.45 – 249.08 > White to yellowish altered sandstone, possibly albitized (FG Ab), with 15% yellowish Ms-veins to Ms-rich bands up to a few mm thick. Very rare traces of Cr-mica.											

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		< 249.08 – 253.36 > Grey MG to FG poorly sorted sandstone (a few grains >1mm), and 20% siltstone. Minor FG Ms in sandstone, and up to 15% Ms in silty horizons. 5% Qtz-veins, often dismembered, up to 3 cm thick, locally rimmed by Chl. Py is disseminated as FG in sandstone. @ 250.20: Sph-Gal-Cpy discontinuous aggregates near large Py-cubes up to 6 mm. Sph occurs in 3 aggregates up to 2 cm by 3 mm; Gal in one 6 by 4 mm aggregates not in contact with Sph. Minor Cpy within the Sph masses.	Ms	2	<1		tr.	tr.	tr.		249.70	S0	70
		< 253.36 – 255.75 > Lt grey sandstone with 10% Ms-rich yellowish bands 1-20 mm thick. Dissemintaed FG-MG Py and traces of Po.				tr.							
		< 255.75 – 257.42 > White albitized? and silicified? Sandstone with a few yellowish Ms-bands up to 3 mm thick.	Ab-Qtz Ms	 5	tr.	tr.							
		< 257.47 – 267.60 > Strong Ms-alteration with a few remaining grey lenses of unaltered sandstone up to a few cm thick. Sub-unit locally appears laminated to fragmental (lenses) which could be a secondary structure reflecting pathways for alteration fluid.	Ms	20		tr.							
		< 267.60 – 296.94 > Alternating horizons with more or less alteration. 70% Ms-rich sandstone to siltstone with disseminated Po in FG aggregates and veins. 15% lt grey apparently unaltered sandstone in beds generally 10 cm to 1 m thick. 10% white albitized? sandstone with minor thin Ms-bands, in 10-30 cm horizons. 5% Qtz-veins: grey Qtz-veins up to 10 cm thick, often dismembered; minor white Qtz-veins up to 2 cm thick, cross-cutting S1.	Ms	20	<1	1				1	269.10 281.75 293.15	S1 S1 S1	71 63 75
296.94	307.35	**Felsite?**											
		Previously unseen. Massive and homogeneous beigy-grey unit. Quite feldspar-rich compared to most clastics, but still very Qtz-rich (50% Qtz?). Generally MG quartz and white feldpars. Quartz does not look detrital (primary crystals? recrystallized?) and feldspars are often sericitized. Locally contains up to 5% poly-crystalline Qtz clasts up to 1 cm in length, displaying little deformation (if any), and a few rounded (embayed?) Qtz-crystals a few mm across. Some twinned plagioclase laths up to 5 mm long are locally observed. Unit is rather magnetic due to disseminated Po. A few 3-10 cm bands enriched with 2-5% Py. This unit could be a felsic crystal tuff or a very proximal sediment.	Ser		<1	1				2			
307.35	328.35	**Alteration Zone in Sandstone/Siltstone**											
		Heterogeneous altered horizons up to a few metres thick, within sandstone. 55% yellowish-grey Ms-altered sandstone with 10-30% Ms and 1% Po, making the sub-unit notably magnetic. Po occurs as disseminated FG	Ms Ms	20 5	<1	1				2			

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		aggregates and veins ≤1 mm thick. Note that even very thin Ms-rich bands often contains minor Po suggesting a strong correlation between occurrences of Ms and Po. Ms is irregularly distributed, often resulting in a banded appearance with varying Ms-content between bands. Very rare occurrences of Cr-mica, locally observed in Ms-rich horizons and associated with minor Ank-alteration. 25% lt grey unaltered Qtz-sandstone in thin to thick bands and beds up to 3 m thick, containing at least 5% yellowish Ms-rich veins 1-5 mm thick. 15% white albitized? sandstone in bands 2 cm – 1 m thick, with a few yellowish Ms-rich veins. 5% white Qtz-veins, up to 20 cm thick, some barren, but most containing a bit of Py as CG cubes or veins and a few chloritized silty fragments. Very little Py, associated with Qtz-veins or as rare disseminated cubes in least the altered horizons. Traces of Sph and Cpy very locally in stringers.	Ab Qtz										
		< @ 312.77 > small discontinuous stringer of red Sph 1-2 mm thick. Traces of associated Po and Cpy within the stringer, present within a 3 cm band of dk grey siltstone with minor graphite.				tr.	tr.	1					
		< 314.62 – 314.67 > set of very thin (≤1 mm) discontinuous red Sph-stringers over a 4 cm interval, within mixed grey sandstone and Qtz-veins. Some FG Ms is locally associated with the stringer. Traces of Gal but not in direct contact with Sph, but as a discrete mm-size aggregate.						1	tr.				
		< @ 321.53 > small Po-Cpy discontinuous stringer ~1 mm thick. Po-dominated with Cpy over 1 cm along stringer. Po and Cpy are intergrown.				1	tr.						
		< 322.52 – 322.75 > unconsolidated breccia with 10% angular fragments ≤2 cm in Ms-rich gouge.											
328.35	372.51	**Mixed Clastics**											
		Heterogeneous unit with alternating dm- to m-size beds of sandstone, siltstone, argillite and minor conglomerate.			1						328.00 326.60	S0 S1	70 63
		65% lt grey sandstone, massive beds 10-200 cm thick, with Qtz-grains generally ≤1 mm. 5% of the sandstone is Ms-altered with 2-5% Ms and minor Cr-mica. Traces of Po, locally. 10% grey siltstone, generally laminated, in 5-50 cm beds.									357.50	S0	80
		15% black carbonaceous argillite in massive to laminated beds 2-100 cm thick.									361.00	S0	88
		5% Very coarse-grained Qtz-sandstone to conglomerate in rare 40-70 cm beds. 5% Qtz-veins 0.1-40 cm thick, often containing Py aggregates.									362.10	S1	73

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	1-5	Depth	Type	Angle
		Py occurs as disseminated FG to MG in sandstone and as large cubes up to 5 mm in argillite.									370.00	S0	77
		< 333.68 – 334.21 > Qtz-vein with 2% Py as FG aggregates, and associated traces of Gal. One very small Cpy grain was also observed with Py.			2		tr.		<1				
		< 349.80 – 352.07 > 70% white Qtz-veining, with individual veins up to 35 cm thick, hosted in micaceous siltstone, VCG sandstone and minor argillite. Cr-mica occurs within a 3 cm black argillite band (5% Cr-mica over 3 cm) with minor Ank.	Ms-Cr										
		< 370.70 – 371.00 > Yellowish Ms-altered sandstone with traces of Cr-mica locally.	Ms		2								
372.51	393.20	**Weakly Carbonaceous Mixed Clastics**											
		Heterogeneous unit of interbedded conglomerate, sandstone, siltstone and argillite.			<1						383.00	S1	86
		45% conglomerate with light grey sandstone lens-shaped clasts up to a few cm in length. Clasts are more or less deformed locally, with an aspect ratio ranging from 2:1 to 12:1. Matrix-supported to clasts-supported with 20-90% clasts in a black graphitic matrix. 10% greywacke, as Qtz-rich sand with minor graphitic matrix, in beds up to 1.4 m thick. 10% lt grey sandstone in 2-20 cm beds. 10% black carbonaceous argillite in massive beds 1-25 cm thick. 08% grey siltsone, locally laminated. 5% very coarse-grained Qtz-sandstone with grains up to 5 mm, in 10-30 cm beds. 2% Qtz-veins often lens-shaped, dismembered, up to 8 cm thick.									387.80	S1	75
		< 372.69 – 373.51 > Consolidated to poorly consolidated brecciawith angular fragments of sandstone, argillite and Qtz-veins, in dark carbonaceous matrix.											
		< 386.27 – 386.46 > Cr-mica + Ank alteration in a Qtz+feldspar-veined fragmental Qtz-rich horizon. Alteration occurs along a network of Cr-green micaceous veins up to 3 mm thick.	Cr-Ank										
393.20	401.52	**Sandstone**											
		Lt grey MG sandstone with minor very coarse-grained sandstone (Grains up to 4 mm) and 20% siltstone. Minor Ms-alteration locally, in dm-size bands. 3% Qtz-veins 2-20 mm thick.			<1								

Grid Name: Frank Creek
Location: 250 m west of FC-04-08; 260 m east of FC-04-13
Collar Grid Co-ordinates: 57+00N / 18+50W
Collar UTM Co-ordinates: 609971 / 5845643
Logged By: J. Laberge

Collar Azimuth: 090°
Collar Dip: -70°
Start Date: 12-07-2005
Finish Date: 12-06-2005
Drill Contractor: Hardrock Diamond Drilling Ltd.

Drill Hole Summary:

This hole is a follow-up to FC-04-13 and FC-04-08. It targets a shallow IP chargeability-high/ DC resistivity-low anomaly from 150-250 m depth. The anomaly is associated with low MT resistivity. Target selected by L. Doyle and P. Anderson. Drill hole spotted by J. Laberge.
Fault zone at 140 m depth which caused problems with the drilling: fault is associated with artesian water flow, which causes significant caving when rods are pulled out, and in turn makes the hole very tight (16 rods were damaged because of it).

From (m)	To (m)	Interval		From (m)	To (m)	Interval	
6.10	11.75	5.7	Altered Sandstone	168.74	182.38	13.6	Siltstone
11.75	72.00	60.3	Interbedded Coarse-grained Sandstone and Argillite	182.38	183.59	1.2	Carbonaceous Argillite
72.00	81.12	9.1	Carbonaceous Conglomerate	183.59	184.73	1.1	Silicified Pyritic Sandstone
81.12	98.05	16.9	Alteration and Stringer Zone in Siltstone	184.73	213.50	28.8	Stringer Zone in Siltstone
98.05	143.12	45.1	Carbonaceous Argillite	213.50	226.60	13.1	Sandstone
143.12	154.23	11.1	Alteration Zone with Few Stringers in Siltstone	226.60	239.00	12.4	Alteration Zone with Few Stringers in Siltstone
154.23	159.46	5.2	Silicified Pyritic Sandstone	239.00	311.80	72.8	Mixed Clastics, Ab-alteration
159.46	168.74	9.3	Carbonaceous Argillite	311.80	355.80	44.0	Interbedded Sandstone and Argillite

Down Hole Tests:

depth	*azimuth*	*dip*
100 m	086°	68.5°
355 m	073°	-67.5°

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
0.00	6.09	CASING											
6.10	11.75	**Altered Sandstone**											
		Lt yellowish-grey MG-CG sandstone with pervasive muscovite-ankerite-alteration, with minor Cr-mica, locally. 5-15% Ms in S1-parallel veins or bands with unaltered grey sandstone lenses preserved in between, locally resulting in a pseudo-fragmental appearance. 3-5% Ank as disseminated pale orange crystals <<1 mm.	Ms	10	<1	tr.	tr.				11.28	S1	60
			Ank	4									
		Py occurs as aggregates or cubes generally 1-5 mm. Minor Po locally as FG aggregates 1-3 mm and rare discontinuous veins ≤1 mm thick. Very rare traces of FG Cpy occur in association within Po. The only small Cpy grains observed are @ 7.21, 11.42 and 11.46 m.											
11.75	72.00	**Interbedded Coarse-grained Sandstone and Argillite**											
		60% medium- to coarse-grained sandstone (grains 1-2 mm) as massive beds up to 3 m thick.			<1						14.30	S1	30
		15% very coarse-grained sandstone to conglomerate with polycrystalline quartzite clasts up to 5 mm in size, in a matrix of recrystallized quartz and minor graphite, occurring in 5-50 cm beds.									17.50	S1	48
											24.00	S1	50
											33.00	S1	72
		25% carbonaceous argillite in 5-200 cm thick beds; massive to laminated, generally containing 5-40% lt grey FG-MG sandstone as beds, laminae and fragments 0.2-30 cm thick. Some thinly bedded sandstone fragments in argillite suggest slump features (soft-sediment deformation?). Some thin argillite beds up to a few cm in thickness are complexly mixed within the VCG sandstone/conglomerate.									45.10	S1	65
											57.10	S1	60
		2% white Qtz-veins, up to 30 cm thick.											
		Only minor Py, occurring as disseminated mm-size aggregates in argillite and sandstone.											
		S0-S1 ranges from 25-75° from core axis, and is locally crenulated within laminated argillite, with S2 at a small angle to core axis (0-5°).											
		< 34.77 – 35.18 > Creamy-yellowish-grey Ms-altered sandstone, with minor Ank and Cr-mica.	Ms	10	tr.								
			Ank	1									
		< 42.58 – 42.83 > Ms-altered sandstone similar as above but without Ank.	Ms	7									
			Cr	1									
72.00	81.12	**Carbonaceous Conglomerate**											
		Heterogeneous unit dominated by conglomerate.			2						67.00	S1	60
		83% conglomerate with 50-75% sub-angular to sub-rounded clasts, generally 0.5-10 cm in size. Clasts are often flattened (lens-shaped), locally									72.00	S1	52
											73.77	S1	79

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		undeformed to 15:1 aspect ratio. They all appears to be of sedimentary origins, but of different colour and grain-size; FG to MG, grey to lt grey sandstone and siltstone. Matrix varies from FG carbonaceous argillite to MG grey sandstone/greywacke with minor graphite and Ms. 15% lt grey MG sandstone in rare beds up to 40 cm thick. Sandstone is not pure Qtz, almost a greywacke with minor graphite, massive to foliated. 2% grey Qtz-veins up to 8 cm thick. Py occurs as cubes 2-6 mm in size, disseminated, but concentrated locally within veins or beds, along some clasts' boundaries. Py is unaffected by deformation. S1 is irregular, open folded, ranging from 45°-90° to core-axis. < 73.55 – 73.77 > strange bed? Massive, siliceous, dark, FG, containing a few strange tabular to acicular white feldspar crystals 1-2 mm across by up to 4 cm in length. Contacts are somewhat gradual over a few mm with surrounding sediments, suggesting it is in fact sedimentary? < 80.07 – 80.31 > Strongly deformed greywacke ? (tectonite?). Band in which deformation is much more intense than surrounding rocks. Strongly foliated to tectonically laminated with Qtz grains and clasts completely flattened along S1.									80.20	S1	55
81.12	98.05	**Alteration and Stringer Zone in Siltstone**											
		Heterogeneous unit of Ms-altered sandstone and siltstone with localized Py-Po-Sph-Cpy-Gal-stringers, generally thin, but locally forming dm-size semi-massive bands.	Ms	15							88.00	S1	59
		< 81.12 – 83.43 > 20% strongly altered Ms-rich fragments within grey massive Qtz-veins. Remaining fragments are 1-2 cm thick, creamy yellowish-green, locally with speckles of black Chl. A few small discontinuous red Sph-stringers 1 mm thick, following S1 along Ms. Traces of Cpy, hosted by Qtz-veins. Some Py as large cubes up to 8 mm and thin stringers, not associated with other sulphides. Minor Po occurring as irregular mm-blebs, disseminated mostly close to Sph.	Ms	20	2	1	tr.	1			90.00	S1	40
		< 83.43 – 84.02 > Very Qtz-rich, strongly deformed sandstone (flattened Qtz-grains), with numerous Po, Po-Sph, Sph, Po-Py, Cpy-Py and Py-Sph-Po-Cpy stringers. Sph is red when discrete and dark brown when associated with Po-Py. Most common stringers are thin Po or Py stringers <1mm thick. Local multi-sulphides stringers up to 5 mm thick. Two Py-rich semi-massive lenses 1-1.5 cm by 3-5 cm (one contains 15% Sph).			1	2	<1	1			94.50	S1	60

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		< 84.02 – 84.19 > Semi-massive sulphides (25%) stringer in recrystallized Qtz? Po-Py-Cpy as grain-network. Mostly intergrown Py-Po. Cpy is concentrated in lower 4 cm as stringer locally intergrown with Po. Traces of dk Sph as discrete grains.			12	10	3	tr.					
		< 84.19 – 84.54 > A few thin Po-Cpy stringers in Qtz-sandstone, with minor Ms and black Chl, concentrated in thin bands <3mm. Stringers are only continuous over a few cm, and up to 5 mm thick.				2	2						
		< 84.54 – 84.82 > Semi-massive sulphides (20%) in recrystallized Qtz. Po-Py-Cpy, similar to 2 above. Intergrown Py-Po. Cpy concentrated locally as discrete branching grains or associated with Po or Py.			12	7	2						
		< 84.82 – 92.37 > Laminated altered sandstone with 1-5 mm bands with more or less Ms + Ab. Lots of stringers along S1, of Py, Po, Py-Po, Py-Po-Cpy, Py-Sph and very rare Py-Sph-Gal. Most stringers have a variable thickness from 1 to 5 mm, and continuous over a few mm to cm. Py-Po present throughout. Cpy only in trace amount in top 3 m. Sph more common in lower 4 m.	Ms	5	3	2	tr.	1	tr.				
		< 92.37 – 94.54 > Strong Ms-alteration in FG sandstone, with a few white albitized laminae. No apparent mineralization.	Ms	10									
		< 94.54 – 94.66 > A few Po-Py-Cpy stringers in altered sandstone.			1	1	1						
		< 94.66 – 95.47 > Stronly Ms-altered laminated siltstone with rare very thin (<1mm) stringers of FG Py, Po, Sph and one 2 mm thick Sph-Gal stringer.	Ms	20	<1	<1	<1	tr.	tr.				
		< 95.47 – 95.52 > Grey Qtz-vein containing significant amount of Cpy in irregular blebs up to 1 cm long. Sph± Cpy-stringers 1-4 mm thick on each side of the vein, within 2 cm of the contact, within Ms-altered sts.					5	tr.					
		< 95.52 – 96.17 > Ms-altered siltstone with a few 1-5 mm thick stringers of Sph-Py, Sph-Gal-Py, Gal-Sph and Sph-Po.	Ms	10	<1	<1		1	<1				
		< 96.17 – 98.05 > Ms-altered siltstone. No apparent mineralization. A few Py cubes up to 5 mm.	Ms	20									
98.05	143.12	**Carbonaceous Argillite**											
		Massive to laminated black siliceous and carbonaceous argillite with minor lt grey MG sandstone and conglomerate. 90% argillite, generally massive, with 1% disseminated Py cubes ≤1 mm. 1-3% thin white Qtz-veins along S1 (≤1mm thick). 5-10% of the argillite is laminated (10-50 cm beds) with alternating (50/50) black mud and grey silt in 0.5-4 mm laminae.			1						62.00 109.40 114.80 123.80 134.20	S1 S1 S1 S1 S1	63 75 58 76 46

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		5% lt grey MG sandstone in 5-35 cm beds and lenses; sharp contacts with argillite. 5% conglomerate set in black carbonaceous matrix, containing 30-50% grey to lt grey lens-shaped fragments of siltstone and sandstone, 0.5-3 cm long. Occurs in rare 12-35 cm thick beds with gradual transition into argillite. Very rare greywacke beds 1-3 cm thick. 1% grey Qtz-veins 1-8 cm thick locally containing minor CG white feldspars. A few gouge zones 4-15 cm thick within carbonaceous argillite. < 135.7-140.0? > Approximate location of a fault zone, which cannot be described properly because the core box was dropped at the drill site.											
143.12	154.23	**Alteration Zone with Few Stringers in Siltstone** Lt creamy yellowish, Ms-rich siltstone containing a few sulphide-stringers. Up to 50% Ms locally, crumbly and talcy core. Stringers 1-6 mm (some up to 20 mm) thick are spread throughout the unit. They are of: Py, Py-Sph and rare Py-Sph-Gal. MG Py with branching FG Sph in Qtz-rich bands.	Ms	30	1			<1	tr.		144.30	S1	61
154.23	159.46	**Silicified Pyritic Sandstone** Lt grey very siliceous sandstone?, with lots of recrystallized Qtz. No Ms. Very pyritic, concentrated in broad bands, locally up to 30% Py over 30 cm. Rare red Sph-stringers with or without Py. Traces of disseminated Cpy close to, but not in contact with, some Sph-stringers. Possible traces of Gal associated with Sph. Py occurs as CG cubes 1-4 mm without forming a connected network. Grey Qtz-veins in lower 80 cm, locally containing large Cpy grains and Py.	Qtz		8		<1	<1	tr.		159.40	S1	60
159.46	168.74	**Carbonaceous Argillite** Black argillite, massive to laminated, with 15% lt grey sandstone in massive 15-30 cm beds. Py occurs as disseminated cubes up to 8 mm. One 5 mm Py-stringer in a sandy bed, with traces of Sph and Cpy.			1								
168.74	182.38	**Siltstone**											

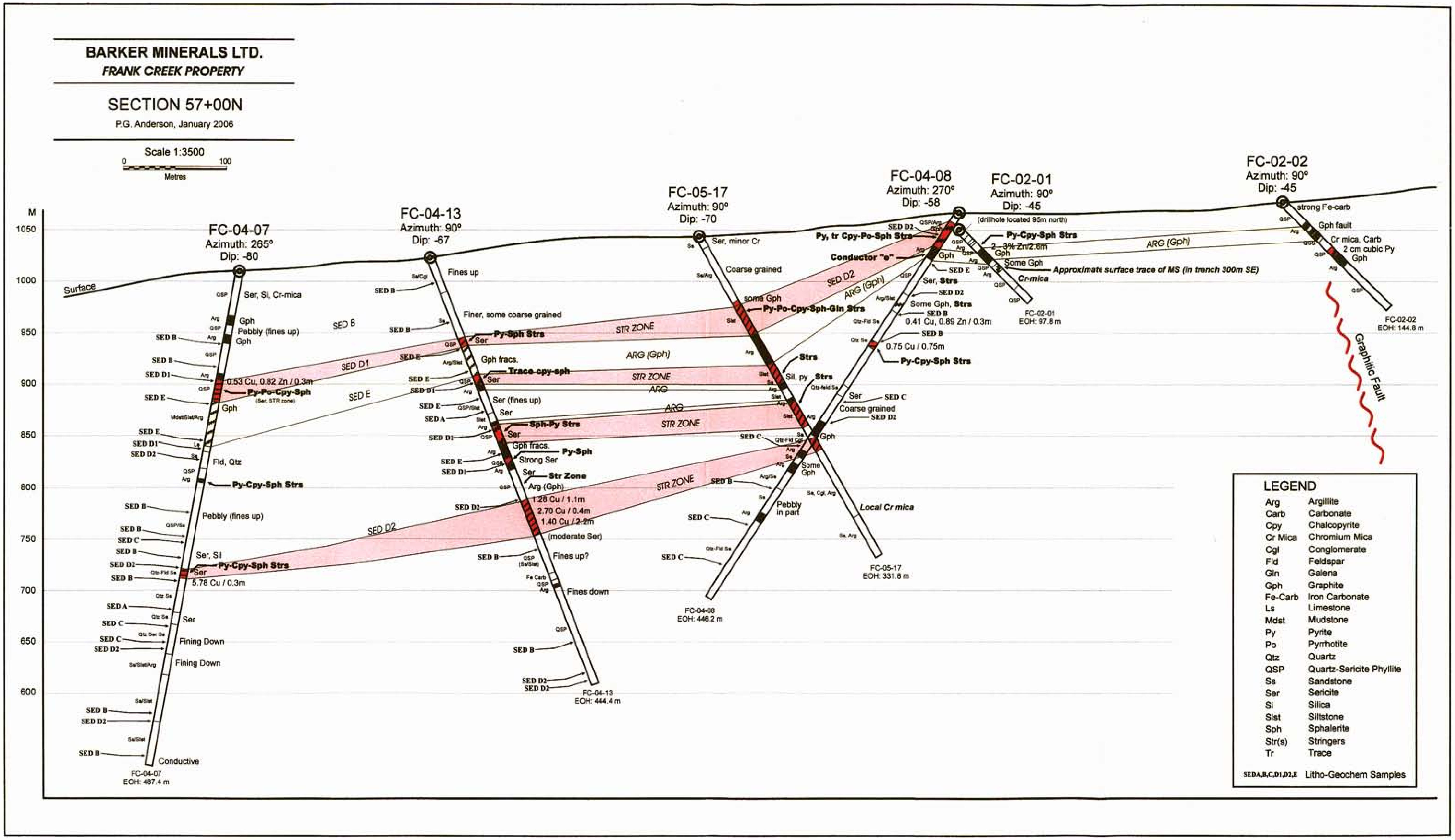
From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		Massive lt grey to grey siltstone. Minor massive lt grey sandstone beds 10-35 cm thick. Some Ms-alteration locally, most in the upper 4.5 m, where siltstone is lt creamy coloured, with 5-10% Ms. Py is relatively common, forming 1-8 mm cubes, often concentrated in cm-bands (discrete grains, not networked). Rare Sph± Cpy stringers 1-5 mm thick, occurring sporadically through the unit. Red Sph in stringer occurs as branching fine grains, usually associated with minor Py. Cpy observed once (1 grain) with Sph. Minor Po, very locally, generally not associated with other sulphides other than a single occurrence of one small Cpy-grain with Po.			2	tr.	tr.	tr.			175.80		55
		< 174.5 – 175.4 > unconsolidated Ms-rich band (40% Ms!), crumbly, with a few grey Qtz-veins 5-10 mm thick.											
182.38	183.59	**Carbonaceous Argillite**											
		Massive bed with gradual contacts with bounding grey siltstone. Py occurs as disseminated cubes 2-4 mm, often partly rimmed by Qtz (pressure shadows).			2								
183.59	184.73	**Silicified Pyritic Sandstone**											
		Lt grey sandstone with minor Ms and lots (20%?) of grey Qtz that looks secondary, massive. Py-rich, concentrated in dm-bands (locally 30% Py over 6 cm, 15% over 30 cm), as irregular mm-equant masses (up to 4 mm) rather than actual cubes. 5% grey Qtz-veins up to 4 cm thick within a 20 cm horizon. One vein contains a few Cpy grains, with some Py.	Ms Qtz	3	6		tr.				183.70	S1	65
184.73	213.50	**Stringer Zone in Siltstone**											
		70% Lt grey to grey siltstone, massive to laminated, in m-size beds. Variable alteration, from unaltered to strong Ms-alteration within metric bands. ~30% of the siltstone is Ms-altered.	Ms		2	tr.	tr.	tr.	tr.		188.60	S1	65
		30% lt grey MG sandstone, unaltered, in massive beds 10-80 cm thick.									193.10	S1	64
		Local horizons with a few Py, Cpy and/or Sph stringers.									196.70	S1	59
		< 193.06 – 195.37 > Ms-altered laminated siltstone with alternating white and grey laminae 1-4 mm thick. White laminae could be albitized? S0 is convoluted, open folded.	Ms	10							205.97	S1	63
		< 195.37 – 197.00 > Unaltered MG sandstone (grains ≤1mm) with traces of Sph within rare stringer veins a few mm across, occurring as red branching Sph grains between Qtz-grains, associated with Py.									212.10	S1	63

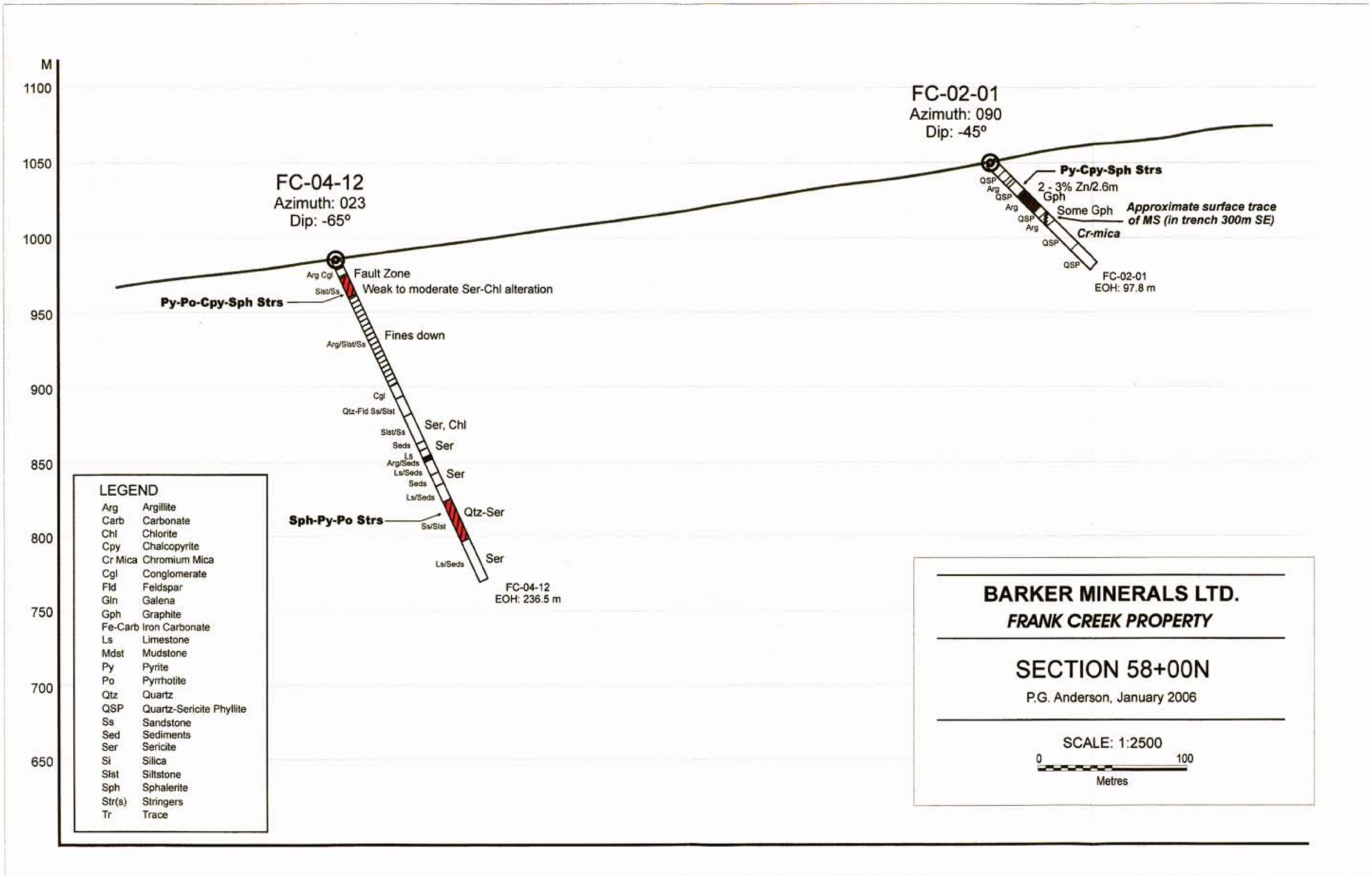
From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		< 198.50 – 199.94 > Unaltered, lt grey, MG sandstone containing a dozen Py-rich stringers 3-30 mm thick. Some stringers contain Sph and/or Cpy, which are intergrown with Py. Sph represents up to 15% of sulphides within individual stringers. Two discontinuous, 3-4 mm wide Cpy-stringers (no Py).			3		<1	<1					
		< @ 202.26 > 1-1.5 cm thick Cpy-stringer (75% Cpy – 25% Qtz).					x						
		< @ 203.06 > 2-3 mm thick, discontinuous Cpy-Py-stringer.			x		x						
		< @ 203.20 > 1 mm thick by 3 cm Cpy vein (lens).											
		< 205.97 – 206.17 > Zone with lots of secondary Qtz and Qtz-veining, with a few Py-stringer and traces of disseminated Cpy.			4		<1						
		< @ 207.91 > Py-Gal-Sph-stringer (with traces of Cpy), over 2-3 cm dominated by Qtz. The stringer consists of disseminated Py cubes 2-4 mm across and Gal cubes <1 mm in size, between Qtz-grains, bordered by a 5-6 mm band rich in red Sph.			x		x	x	x				
		< @ 208.05 > Py-rich, Py-Sph-stringer, up to 4 cm thick, next to (but not in contact with) a discontinuous 3 mm thick Cpy-stringer.			x		x	x					
		< @ 209.40 > Last observed Cpy in the unit, as discrete grain near a thin Py-stringer.											
213.50	226.60	**Sandstone**											
		Lt grey MG sandstone (grains ≤1mm), minor CG sandstone (grains 1-2 mm) and FG sandstone (<0.5 mm grains). In massive to graded beds 10-50 cm thick, fining downhole. Minor local Ms-rich bands 2-10 mm thick and Ms-altered sandstone over a few dm. Some intergranular, pervasive Ms-Ab-alteration, as FG Ms and Ab in matrix. 2% grey Qtz-veins up to 5 cm thick, generally rimmed by Ms-rich bands (and locally, traces of Cr-mica and Cpy - @222.70).	Ms Ab	3 3							221.00 226.70	S1 S1	59 65
226.60	239.00	**Alteration Zone with Few Stringers in Siltstone**											
		Intense Ms-Qtz-Ab-alteration (replacement) in siltstone, resulting in a creamy-grey colour. Mostly very altered with 15% weakly altered sandstone. Lots of secondary massive Qtz. Ab-alteration as FG to MG disseminated Ab, intergranular in sandstone and as disseminated FG and within thin wisps in siltstone. Selective replacement in bands results in an irregular banded structure with 1-20 mm bands with subdued (gradual) contacts. 3% grey	Ms Ab Qtz	10	1	2	tr.	tr.			235.60	S1	60

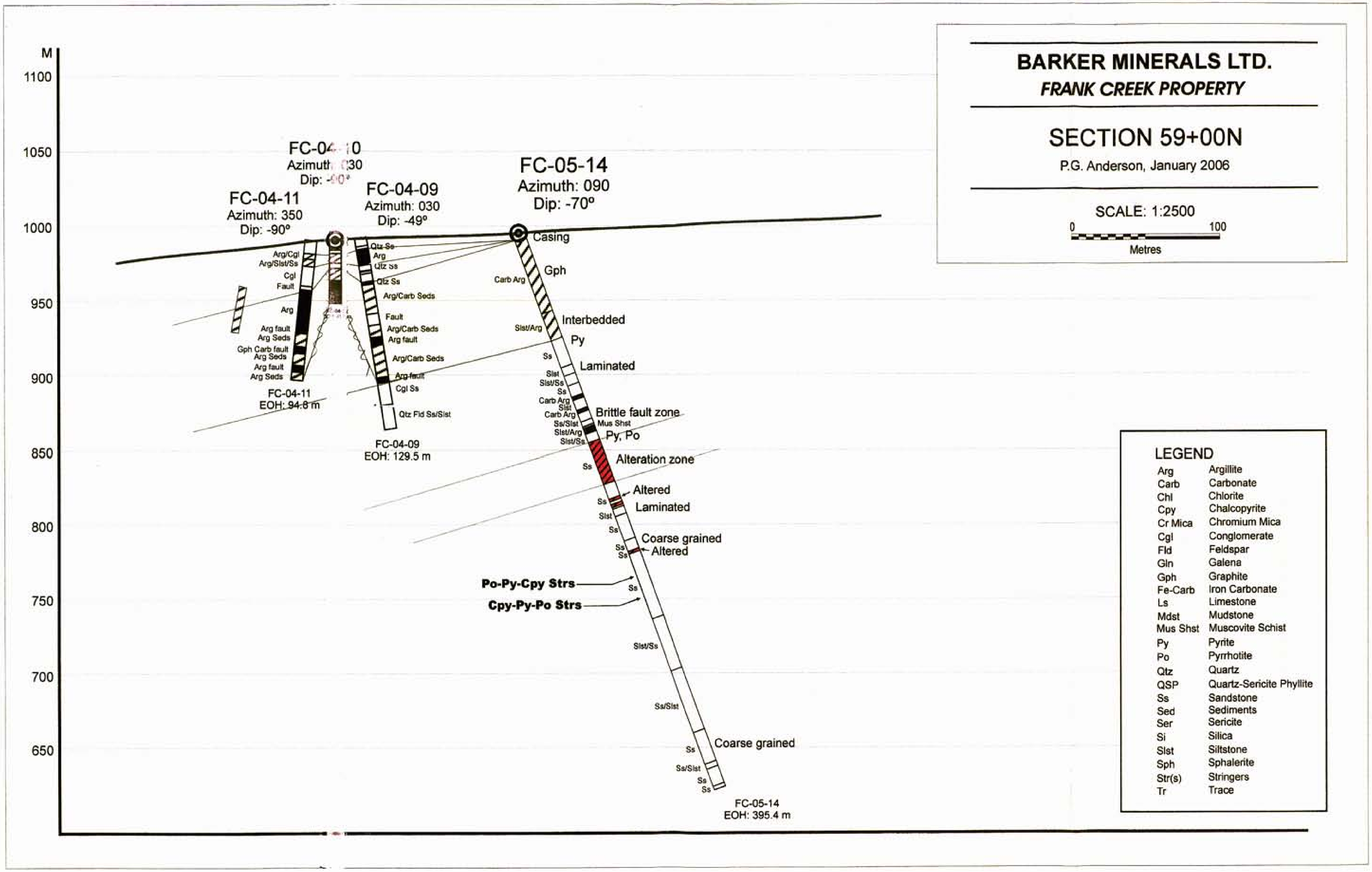
From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		Qtz-veins, mmost in lower 7 m, up to 6 cm thick, generally with strong Ms-Ab-alteration in their vicinity, and locally rimmed by FG to CG Ab-crystals. Quite a bit of Po in thin discontinuous veins (stringers) along S1. Other stringers include Po-Cpy (3), Sph-Py (3), Cpy-Py (1) and Cp-Sph-Gal-Po (1). Stringers are generally 2-3 mm thick, discontinuous. The odd disseminated grain of Cpy or Sph is rarely observed in Qtz-rich horizons.											
239.00	311.80	**Mixed Clastics, Ab-alteration**											
		Sandstone-dominated unit with interbedded Qtz-pebble-conglomerate and minor siltstone and argillite. 65% lt grey MG to CG sandstone in 10-200 cm massive beds. 25% grey VCG sandstone to Qtz-pebble-conglomerate in 10-60 cm beds, mainly composed of monocrystalline Qtz pebbles up to 6 mm, but also minor polycrystalline Qtz clasts and rare dark FG clasts. 4% massive to laminated grey siltstone containing minor graphite. 4% black carbonaceous argillite in sparse 1-5 cm massive beds. One 2.5 m thick argillite bed, thinly-bedded, containing thin grey siltstone beds. No distinct grading. A few white Qtz-veins 1-15 cm thick. S2 foliation developed locally in FG beds, defined by dark Ms+graphite. Ab-alteration occurs as intergranular pervasive FG-MG Ab, and as disseminated Ab-porphyroblasts 1-3 mm in size, of late growth: syn-S2 as S2 wraps weakly around around porphyroblasts. Ab-alteration decreases downhole. Rare, very local occurrences of Cr-mica. Rare, sparse, thin, discontinuous stringers of Po-Cpy (@242.75, 262.46), Sph (@244.05) and Py-Sph-Gal-Cpy (@244.75, 267.30).	Ab Ms	8 1	<1	<1					246.50 246.50 255.10 256.60 267.20 287.00 302.40 311.80	S1 S2 S1 S1 S1 S0 S1 S0	73 35 70 60 68 73 62 68
		< 277.19 – 277.69 > Ms-Ab-altered sandstone. FG pervasive Ms and Ab and disseminated Ab-porphyroblasts. Traces of Cr-mica.	Ms Ab	5 15									
		< 278.39 – 281.38 > Carbonaceous argillite, laminated with 5% mm-thick grey siliceous bands. 5% Ab-porphyroblasts 2-4 mm.	Ab										
311.80	355.80	**Interbedded Sandstone and Argillite**											
		Sandstone-dominated with some interbedded carbonaceous argillite. 80% massive lt-grey MG sandstone in beds 2-100 cm thick. 18% black, massive, carbonaceous argillite, generally in thin beds 1-10 cm thick, but locally much thicker, up to 3.6 m. In thicker beds, argillite contains a few discontinuous, convoluted, grey, siliceous laminae. 2% Qtz-veins. Py disseminated as large cubes up to 1.5 cm. Weak but pervasive Ab-alteration, as porphyroblasts 1-4 mm, finer-grained in sandstone, and coarser in argillite. Traces of Po in a few discontinuous veins in sandstone.	Ab	2	1-2	tr.		tr.			319.00 327.00 334.50 341.20 347.70 355.10	S0 S1 S1 S1 S0 S1	68 60 73 80 80 64
		< 321.91 – 327.28 > Intense Qtz-veining in sandstone. 40% grey Qtz-veins 0.5-5 cm thick. Often lens-shaped.	Qtz										

From	To	Description	Alteration		Mineralization (%)					Mag	Structure		
(m)	(m)		Type	%	Py	Po	Cpy	Sph	Gal	Mag	Depth	Type	Angle
		< 327.28 – 330.90 > Thick carbonaceous argillite bed.											
		< 343.23 – 344.44 > Ms-Qtz-Ab-alteration band with numerous grey Qtz-veins 1-5 mm thick. A few discontinuous Sph-stringers, ≤1mm thick, in lower 32 cm. Minor disseminated Po.	Ms-Ab					1					
		< 347.35 – 347.40 > a few thin Sph-Py(-Gal)-stringers within unaltered sandstone.		3				5	<1				

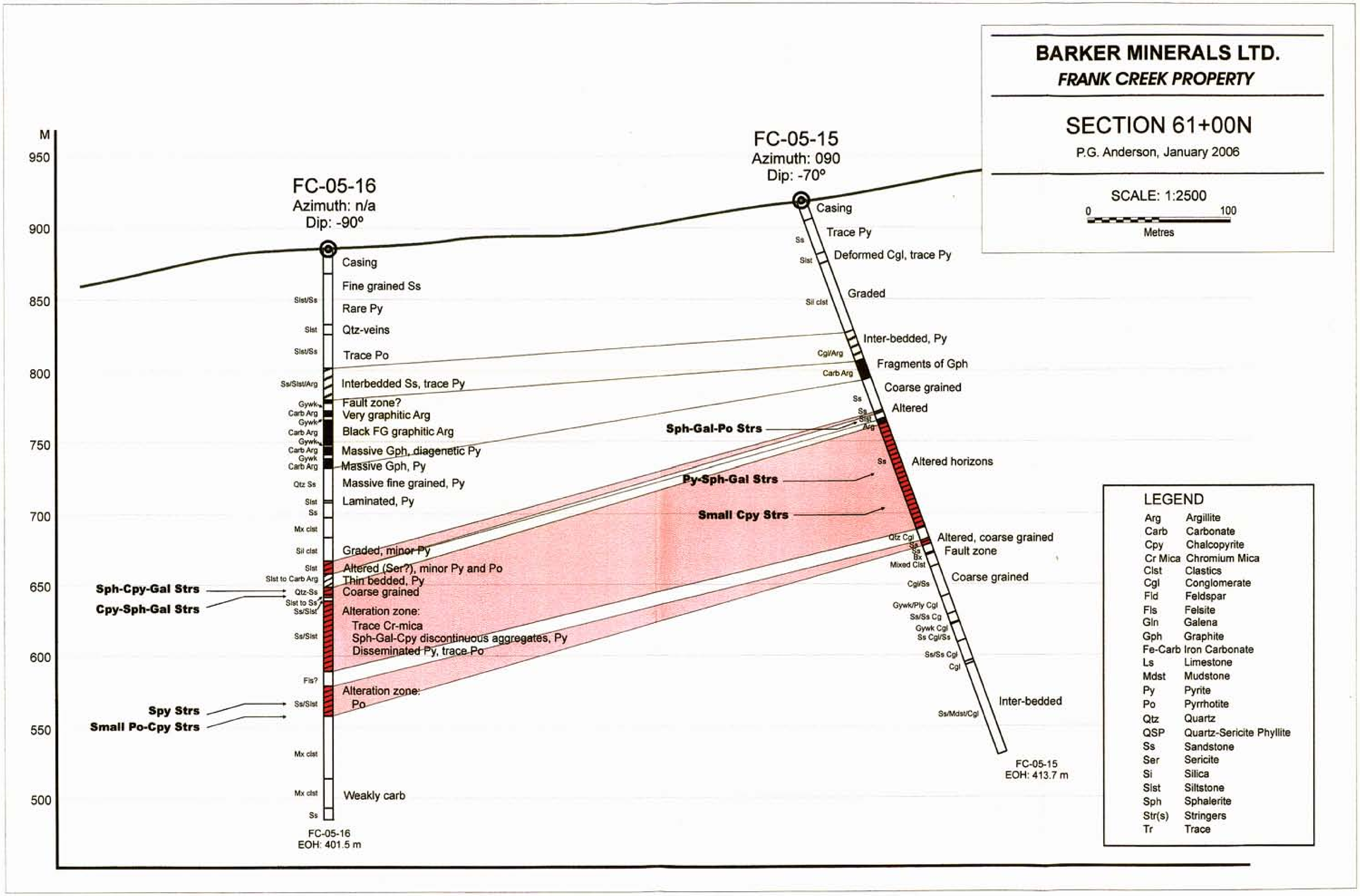
Appendix III


BARKER MINERALS LTD.
FRANK CREEK PROPERTY
SECTION 57+00N
P.G. Anderson, January 2006
Scale 1:3500
0
100
Metres
M
1050
1000
950
900
850
800
750
700
650
600
Surface
FC-04-07
Azimuth: 265°
Dip: -80
FC-04-13
Azimuth: 90°
Dip: -67
FC-05-17
Azimuth: 90°
Dip: -70
FC-04-08
Azimuth: 270°
Dip: -58
FC-02-01
Azimuth: 90°
Dip: -45
FC-02-02
Azimuth: 90°
Dip: -45
Ser, Si, Cr-mica
Gph
Pebbly (fines up)
Gph
0.53 Cu, 0.82 Zn / 0.3m
Py-Po-Cpy-Sph
Gph
Fld, Qtz
Py-Cpy-Sph Strs
Pebbly (fines up)
Ser, Sil
Py-Cpy-Sph Strs
Ser
5.78 Cu / 0.3m
Ser
Fining Down
Fining Down
Conductive
FC-04-07
EOH: 487.4 m
SED B
SED D1
SED E
SED D2
SED E
SED B
SED C
SED A
Fines up
Finer, some coarse grained
Py-Sph Strs
Ser
Gph fracs.
Trace cpy-sph
Ser
Ser (fines up)
Ser
Sph-Py Strs
Ser
Gph fracs.
Py-Sph
Strong Ser
Ser
Str Zone
Arg (Gph)
1.28 Cu / 1.1m
2.70 Cu / 0.4m
1.40 Cu / 2.2m
(moderate Ser)
Fines up?
Fines down
FC-04-13
EOH: 444.4 m
STR ZONE
ARG (Gph)
STR ZONE
ARG
ARG
STR ZONE
STR ZONE
SED D2
Ser, minor Cr
Coarse grained
some Gph
Py-Po-Cpy-Sph-Gln Strs
Strs
Sil, py
Strs
Gph
Some Gph
Pebbly in part
Local Cr mica
FC-05-17
EOH: 331.8 m
FC-04-08
EOH: 446.2 m
Py, tr Cpy-Po-Sph Strs
Conductor "e"
Gph
Ser, Strs
Some Gph, Strs
0.41 Cu, 0.89 Zn / 0.3m
0.75 Cu / 0.75m
Py-Cpy-Sph Strs
Ser
Coarse grained
ARG (Gph)
(drillhole located 95m north)
Py-Cpy-Sph Strs
2 - 3% Zn/2.8m
Gph
Some Gph
Cr-mica
Approximate surface trace of MS (in trench 300m SE)
FC-02-01
EOH: 97.8 m
strong Fe-carb
Gph fault
Cr mica, Carb
2 cm cubic Py
Gph
FC-02-02
EOH: 144.8 m
Graphitic Fault
LEGEND
Arg Argillite
Carb Carbonate
Cpy Chalcopyrite
Cr Mica Chromium Mica
Cgl Conglomerate
Fld Feldspar
Gln Galena
Gph Graphite
Fe-Carb Iron Carbonate
Ls Limestone
Mdst Mudstone
Py Pyrite
Po Pyrrhotite
Qtz Quartz
QSP Quartz-Sericite Phyllite
Ss Sandstone
Ser Sericite
Si Silica
Slst Siltstone
Sph Sphalerite
Str(s) Stringers
Tr Trace
SEDA,B,C,D1,D2,E Litho-Geochem Samples


M
1100
1050
1000
950
900
850
800
750
700
650
FC-02-01
Azimuth: 090
Dip: -45°
Py-Cpy-Sph Strs
2 - 3% Zn/2.6m
Gph
Some Gph
Approximate surface trace of MS (in trench 300m SE)
Cr-mica
QSP
Arg
FC-02-01
EOH: 97.8 m
FC-04-12
Azimuth: 023
Dip: -65°
Arg Cgl
Slst/Ss
Fault Zone
Weak to moderate Ser-Chl alteration
Py-Po-Cpy-Sph Strs
Fines down
Arg/Slst/Ss
Cgl
Qtz-Fld Ss/Slst
Ser, Chl
Slst/Ss
Seds
Ser
Ls
Arg/Seds
Ls/Seds
Ser
Seds
Ls/Seds
Qtz-Ser
Sph-Py-Po Strs
Ss/Slst
Ser
Ls/Seds
FC-04-12
EOH: 236.5 m
LEGEND
Arg Argillite
Carb Carbonate
Chl Chlorite
Cpy Chalcopyrite
Cr Mica Chromium Mica
Cgl Conglomerate
Fld Feldspar
Gln Galena
Gph Graphite
Fe-Carb Iron Carbonate
Ls Limestone
Mdst Mudstone
Py Pyrite
Po Pyrrhotite
Qtz Quartz
QSP Quartz-Sericite Phyllite
Ss Sandstone
Sed Sediments
Ser Sericite
Si Silica
Slst Siltstone
Sph Sphalerite
Str(s) Stringers
Tr Trace
BARKER MINERALS LTD.
FRANK CREEK PROPERTY
SECTION 58+00N
P.G. Anderson, January 2006
SCALE: 1:2500
0
100
Metres



BARKER MINERALS LTD.
FRANK CREEK PROPERTY
SECTION 59+00N
P.G. Anderson, January 2006
SCALE: 1:2500
0
100
Metres
M
1100
1050
1000
950
900
850
800
750
700
650
FC-04-11
Azimuth: 350
Dip: -90°
FC-04-09
Azimuth: 030
Dip: -49°
FC-05-14
Azimuth: 090
Dip: -70°
Casing
Gph
Carb Arg
Interbedded
Py
Slst/Arg
Laminated
Brittle fault zone
Mus Shst
Py, Po
Alteration zone
Altered
Laminated
Coarse grained
Altered
Po-Py-Cpy Strs
Cpy-Py-Po Strs
Slst/Ss
Ss/Slst
Coarse grained
FC-05-14
EOH: 395.4 m
FC-04-11
EOH: 94.8 m
FC-04-09
EOH: 129.5 m
Arg/Cgl
Arg/Slst/Ss
Cgl
Fault
Arg
Arg fault
Arg Seds
Gph Carb fault
Arg Seds
Arg fault
Arg Seds
Qtz Ss
Arg
Qtz Ss
Arg/Carb Seds
Fault
Arg/Carb Seds
Arg fault
Arg/Carb Seds
Arg fault
Cgl Ss
Qtz Fld Ss/Slst
LEGEND
Arg Argillite
Carb Carbonate
Chl Chlorite
Cpy Chalcopyrite
Cr Mica Chromium Mica
Cgl Conglomerate
Fld Feldspar
Gln Galena
Gph Graphite
Fe-Carb Iron Carbonate
Ls Limestone
Mdst Mudstone
Mus Shst Muscovite Schist
Py Pyrite
Po Pyrrhotite
Qtz Quartz
QSP Quartz-Sericite Phyllite
Ss Sandstone
Sed Sediments
Ser Sericite
Si Silica
Slst Siltstone
Sph Sphalerite
Str(s) Stringers
Tr Trace


BARKER MINERALS LTD.
FRANK CREEK PROPERTY
SECTION 61+00N
P.G. Anderson, January 2006
SCALE: 1:2500
0 100
Metres
M
950
900
850
800
750
700
650
600
550
500
FC-05-16
Azimuth: n/a
Dip: -90°
FC-05-15
Azimuth: 090
Dip: -70°
Casing
Fine grained Ss
Rare Py
Qtz-veins
Trace Po
Interbedded Ss, trace Py
Fault zone?
Very graphitic Arg
Black FG graphitic Arg
Massive Gph, diagenetic Py
Massive Gph, Py
Massive fine grained, Py
Laminated, Py
Graded, minor Py
Altered (Ser?), minor Py and Po
Thin bedded, Py
Coarse grained
Alteration zone:
Trace Cr-mica
Sph-Gal-Cpy discontinuous aggregates, Py
Disseminated Py, trace Po
Alteration zone:
Po
Weakly carb
Sph-Cpy-Gal Strs
Cpy-Sph-Gal Strs
Spy Strs
Small Po-Cpy Strs
FC-05-16
EOH: 401.5 m
Casing
Trace Py
Deformed Cgl, trace Py
Graded
Inter-bedded, Py
Fragments of Gph
Coarse grained
Altered
Sph-Gal-Po Strs
Altered horizons
Py-Sph-Gal Strs
Small Cpy Strs
Altered, coarse grained
Fault zone
Coarse grained
Inter-bedded
FC-05-15
EOH: 413.7 m
LEGEND
Arg Argillite
Carb Carbonate
Cpy Chalcopyrite
Cr Mica Chromium Mica
Clst Clastics
Cgl Conglomerate
Fld Feldspar
Fls Felsite
Gln Galena
Gph Graphite
Fe-Carb Iron Carbonate
Ls Limestone
Mdst Mudstone
Py Pyrite
Po Pyrrhotite
Qtz Quartz
QSP Quartz-Sericite Phyllite
Ss Sandstone
Ser Sericite
Si Silica
Slst Siltstone
Sph Sphalerite
Str(s) Stringers
Tr Trace

Appendix IV

Final Report
Activation Laboratories

Element:	Ag	Cu	Zn	Pb	Au
Units:	%	%	%	%	ppb
Detection Limit:	0.001	0.001	0.001	0.003	5
Reference Method:	ICP-OES	ICP-OES	ICP-OES	ICP-OES	FA-AA
Client I.D.					
A39326	--	--	--	--	< 5
A39327	--	--	--	--	< 5
A39328	--	--	--	--	< 5
A39329	--	--	--	--	137
A39330	--	--	--	--	< 5
A39331	--	--	--	--	9
A39332	--	--	--	--	< 5
A39333	--	--	--	--	< 5
A39334	--	--	--	--	< 5
A39335	--	--	--	--	24
A39336	--	--	--	--	6
A39337	--	--	--	--	< 5
A39338	--	--	--	--	31
A39339	--	1.39	--	--	52
A39340	--	--	--	--	< 5
A39341	--	--	--	--	< 5
A39342	--	--	--	--	< 5
A39343	--	--	--	--	< 5
A39344	--	--	--	--	13
A39345	--	--	--	--	< 5
A39346	--	--	--	--	13
A39347	--	--	--	--	< 5
A39348	--	--	--	--	12
A39349	--	--	--	--	< 5
A39350	--	--	--	--	9
A39351	--	--	--	--	< 5
A39352	--	--	--	--	< 5
A39353	--	--	--	--	< 5
A39354	--	--	--	--	< 5
A39355	--	--	--	--	< 5
A39356	--	--	--	0.713	< 5
A39357	--	--	--	--	< 5
A39358	--	--	--	--	< 5
A39359	--	--	--	--	< 5
A39360	--	--	--	--	10
A39361	--	--	--	--	< 5
A39362	--	--	--	--	< 5
A39363	--	--	--	--	< 5
A39364	--	--	--	--	< 5
A39365	--	--	--	--	23
A39366	--	--	--	--	8
A39367	--	--	--	--	< 5
A39368	--	--	--	--	< 5
A39369	--	--	--	--	< 5
A39370	--	--	--	--	< 5
A39371	0.01	1.49	6.5	2.61	41
A39372	--	--	--	--	< 5
A39373	--	--	--	--	< 5
A39374	--	--	--	--	< 5

Element:	Ag	Cu	Zn	Pb	Au
Units:	%	%	%	%	ppb
Detection Limit:	0.001	0.001	0.001	0.003	5
Reference Method:	ICP-OES	ICP-OES	ICP-OES	ICP-OES	FA-AA
Client I.D.					
A39375	--	--	--	--	< 5
A39376	--	--	--	--	< 5
A39377	--	--	--	--	< 5
A39378	--	--	--	--	< 5
A39379	--	--	--	--	< 5
A39380	--	--	--	--	< 5
A39381	--	--	--	--	< 5
A39382	--	--	--	--	< 5
A39383	--	--	--	--	< 5
A39384	--	--	--	--	< 5
A39385	--	--	--	--	< 5
A39386	--	--	--	--	< 5
A39387	--	--	--	--	< 5
A39388	--	--	--	--	7
A39389	--	--	--	--	6
A39390	--	--	--	--	< 5
A39391	--	--	--	--	< 5
A39392	--	--	--	--	< 5
A39393	--	--	--	--	< 5
A39394	--	--	--	--	5
A39395	--	--	--	--	13
A39396	--	--	--	--	23
A39397	--	--	--	--	54
A39398	--	--	--	--	< 5
A39399	--	--	--	--	< 5
A39400	--	--	--	--	5
A39401	--	--	--	--	< 5
A39402	--	--	--	--	< 5
A39403	--	--	--	--	< 5
A39404	--	--	--	--	< 5
A39405	--	--	--	--	< 5
A39406	--	--	--	--	< 5
A39407	--	--	--	--	< 5
A39408	--	--	--	--	< 5
A39409	--	--	--	--	10
A39410	--	--	--	--	< 5
A39411	--	--	--	--	14
A39412	--	--	--	--	11
A39413	--	--	--	--	< 5
A39414	--	--	--	--	< 5
A39415	--	--	--	--	28
A39416	--	--	--	--	< 5
A39417	--	--	--	--	< 5
A39418	--	--	--	--	< 5
A39419	--	--	--	--	< 5
A39420	--	--	--	--	< 5
A39421	--	--	--	--	22
A39422	--	--	--	--	9
A39423	--	--	--	--	16

Final Report
Activation Laboratories

Element:	Ag	Cu	Zn	Pb	Au
Units:	%	%	%	%	ppb
Detection Limit:	0.001	0.001	0.001	0.003	5
Reference Method:	ICP-OES	ICP-OES	ICP-OES	ICP-OES	FA-AA
Client I.D.					
A39424	--	--	--	--	13
A39425	--	--	1.14	--	13
A39426	--	--	--	--	< 5
A39427	--	--	--	--	< 5
A39428	--	--	--	--	20
A39429	--	--	--	--	9
A39430	--	--	--	--	93
A39431	--	--	--	--	< 5
A39432	--	--	--	--	172
A39433	--	--	--	--	489
A39434	--	--	--	--	30
A39435	--	--	--	--	< 5
A39436	--	--	--	--	< 5
A39437	--	--	--	--	27
A39438	--	--	--	--	< 5
A39439	--	--	--	--	5
A39440	--	--	--	--	< 5
A39441	--	--	--	--	8
A39442	--	--	--	--	36
A39443	--	--	--	--	< 5
A39444	--	--	--	--	< 5
A39445	--	--	--	--	< 5
A39446	--	--	--	--	< 5
A39447	--	--	--	--	< 5
A39448	--	--	--	--	6
A39449	--	--	--	0.84	6
A39450	--	--	--	--	17
A39451	--	--	--	--	< 5
A20901	--	--	--	--	< 5
A20902	--	--	--	--	< 5
A20903	--	--	--	--	< 5
A20904	--	--	--	--	< 5
A20905	--	--	--	--	12
A20906	--	--	--	--	< 5
A20907	--	--	--	--	< 5
A20908	--	--	--	--	< 5
A20909	--	--	--	--	< 5
A20910	--	--	--	--	< 5
A20911	--	--	--	--	< 5
A20912	--	--	--	--	< 5
A20913	--	--	--	--	< 5
A20914	--	--	--	--	< 5
A20915	--	--	--	--	< 5
A20916	--	--	--	--	< 5
A20917	--	--	--	--	43
A20918	--	--	--	--	39
A20919	--	--	--	--	7
A20920	--	--	--	--	< 5
A20921	--	--	--	--	< 5

Final Report
Activation Laboratories

Element:	Ag	Cu	Zn	Pb	Au
Units:	%	%	%	%	ppb
Detection Limit:	0.001	0.001	0.001	0.003	5
Reference Method:	ICP-OES	ICP-OES	ICP-OES	ICP-OES	FA-AA
Client I.D.					
A39452	--	--	--	--	28
A39453	--	--	--	--	5

Final Report
Activation Laboratories

Element:	Hg	Cd	Cu	Ni	Zn	S	Ag	Pb	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Units:	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%	%	%	%	%	%
Detection Limit:	5	0.5	1	1	1	0.001	0.3	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Reference Method:	Hg-FIMS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Client I.D.																		
A39326	5	< 0.5	57	52	56	1.56	0.4	15	64.79	13.52	5.24	0.088	1.34	2.94	0.29	3.73	0.606	0.17
A39327	6	< 0.5	55	51	64	1.54	0.5	13	64.33	13.75	5.16	0.086	1.28	2.75	0.28	3.89	0.62	0.13
A39328	6	< 0.5	17	5	22	0.31	0.5	13	14.89	3.53	3.25	0.14	1.75	40.33	0.19	0.79	0.129	0.07
A39329	193	2.1	2600	24	1060	18.5	9.5	139	5.62	2.48	33.17	0.145	4.66	14.15	0.05	0.61	0.099	0.05
A39330	38	0.6	99	12	229	0.703	1	80	24.81	6.92	5.47	0.193	5.44	25.77	0.24	1.68	0.248	0.08
A39331	1220	21.6	54	24	7640	1.84	5.8	3380	20.78	2.33	5.53	0.211	4.44	36.35	< 0.01	0.44	0.082	0.09
A39332	22	< 0.5	45	30	155	0.749	0.5	29	48.38	17.98	5.46	0.13	2.72	6.71	0.57	4.62	0.644	0.06
A39333	10	< 0.5	35	40	87	0.119	0.4	< 5	57.37	17.69	5.57	0.094	1.86	2.83	0.48	4.17	0.58	0.08
A39334	17	0.8	1560	25	117	0.907	1.9	< 5	30.3	9.68	9.58	0.314	6.96	14.52	0.4	2	0.784	0.15
A39335	37	1.6	3390	59	397	5.06	5.2	10	23.72	12.91	22.17	0.293	6.08	8.17	0.16	1.08	2.486	0.38
A39336	31	1.1	1690	49	335	2.92	2.4	< 5	27.06	14.16	22.41	0.292	6.3	6.69	0.24	1	3.377	0.47
A39337	13	0.5	220	28	193	0.939	0.6	< 5	33.32	17.26	17.07	0.2	5.14	5.59	0.67	1.37	3.737	0.53
A39338	137	3.4	5390	120	637	7.95	7.8	9	21.31	9.56	16.24	0.299	5.85	13.6	0.53	1.87	0.98	0.15
A39339	184	5	> 10000	27	982	3.27	17.8	9	15.54	5.49	16.03	0.302	8.53	20.92	0.41	0.87	0.275	0.02
A39340	19	< 0.5	115	< 1	5	0.019	< 0.3	< 5	17.56	5	4.82	0.223	6.3	30.42	1.14	0.51	0.19	0.07
A39341	< 5	0.6	874	7	117	0.147	1.7	18	23.34	6.74	4.2	0.229	6.26	26.21	0.85	1.24	0.298	0.1
A39342	10	< 0.5	10	13	32	0.031	0.4	8	57.3	16.86	5.91	0.095	1.84	3.86	0.42	4.54	0.567	0.05
A39343	14	< 0.5	54	31	35	1.02	< 0.3	< 5	47.91	17.64	6.76	0.137	2.64	6	0.39	4.9	1.872	0.3
A39344	32	< 0.5	97	113	27	1.11	0.4	< 5	36	15.3	24.85	0.542	7.32	0.17	0.13	1.73	0.764	0.07
A39345	9	1.3	2960	74	571	2.36	1.6	5	53.16	18.12	12.96	0.201	4.31	0.16	0.26	3.6	0.77	0.11
A39346	24	0.6	271	44	217	0.959	0.4	< 5	52.49	20.29	11.26	0.172	2.98	0.37	0.47	5.08	1.248	0.27
A39347	21	0.7	806	80	230	0.32	0.9	6	52.97	19.63	10.59	0.161	2.83	0.52	0.49	4.83	1.204	0.38
A39348	10	0.5	815	80	215	0.308	1.2	6	72.45	9.61	8.93	0.107	1.67	0.08	0.36	2.34	0.568	0.03
A39349	27	< 0.5	169	59	108	2.12	1.8	183	47.8	19.6	16.21	0.232	3.79	0.24	0.51	4.14	0.889	0.17
A39350	13	< 0.5	231	41	179	0.62	0.8	46	70.9	10.16	10.33	0.111	2.34	0.15	0.82	1.54	0.487	0.06
A39351	< 5	< 0.5	9	15	67	0.028	0.4	57	81.94	5.84	2.86	0.065	1.34	2.06	0.36	1.55	0.226	0.05
A39352	< 5	< 0.5	51	46	132	0.792	1.9	2130	64.6	15.31	6.43	0.084	2.52	0.61	0.2	3.97	0.543	0.12
A39353	< 5	< 0.5	72	79	85	2.53	0.6	22	50.02	24.78	8.52	0.028	2.74	0.12	0.33	6.58	0.872	0.08
A39354	6	0.6	93	577	233	0.426	0.8	53	43.18	7.35	9.68	0.37	10.52	9.53	0.04	0.41	0.871	0.12
A39355	52	4.5	304	461	1030	1.01	1.3	160	49.5	8.95	12.65	0.294	10	5.28	0.03	0.07	1.226	0.15
A39356	1420	15.2	281	70	8780	1.58	8.3	> 5000	68.08	11.98	5.1	0.057	1.86	1.37	0.31	3.21	0.57	0.08
A39357	29	< 0.5	56	264	186	0.398	0.7	179	50.28	12.33	5.83	0.217	4.35	7.76	0.14	3.65	0.734	0.1
A39358	42	0.7	61	12	223	0.304	0.7	24	20.62	8.49	6.46	0.257	7.28	24.45	0.5	2.29	0.39	0.08
A39359	17	< 0.5	162	9	90	1.05	0.7	18	20.85	5.98	5.5	0.155	1.96	32.78	2.36	0.52	0.233	0.07
A39360	102	3.3	2250	46	653	18	1.7	47	17.23	1.89	52.98	0.198	0.82	1.28	0.56	0.11	0.093	0.04
A39361	200	4.6	152	32	1390	1.26	3.3	346	42.53	11.53	7.53	0.206	4.11	12.52	0.19	3.41	0.513	0.11
A39362	7	< 0.5	38	70	106	0.355	0.5	< 5	56.38	15.48	6.64	0.15	3.46	4.69	0.31	3.94	0.77	0.14
A39363	< 5	< 0.5	386	574	106	0.062	< 0.3	14	40.87	6.49	9.89	0.36	11.31	10.62	< 0.01	< 0.01	1.095	0.13
A39364	< 5	< 0.5	136	410	106	0.039	0.8	25	43.93	8.93	11.81	0.423	9.03	8.44	0.04	0.78	1.269	0.16
A39365	31	3.2	7170	437	274	1.14	5.6	145	44.13	10.61	17.61	0.43	8.05	5.23	0.04	0.44	1.499	0.18
A39366	< 5	0.6	1250	610	164	0.18	1.3	50	46.33	10.95	15.51	0.27	9.52	4.46	< 0.01	0.15	1.652	0.2
A39367	< 5	0.6	598	600	162	0.103	1.3	71	48.37	10.79	15.84	0.254	9.3	4.12	< 0.01	0.08	1.666	0.21
A39368	< 5	< 0.5	35	79	50	0.259	< 0.3	6	56.12	16.57	8.09	0.172	2.44	1.77	0.77	3.81	0.874	0.13
A39369	9	< 0.5	84	41	36	0.676	0.5	< 5	68.58	12.02	6.22	0.067	1.56	0.61	0.53	2.89	0.601	0.09
A39370	54	1.2	71	8	340	0.054	2	267	83.06	6.32	3.51	0.066	0.92	0.83	0.16	1.69	0.316	0.03
A39371	11000	210	> 10000	92	64200	5.91	> 100	> 5000	50.92	4.15	13.43	0.227	2.37	0.6	0.08	1.06	0.171	0.02
A39372	26	0.8	41	40	205	0.03	1.5	87	57.99	17.53	8.36	0.145	2.17	0.48	0.41	4.41	0.79	0.09
A39373	21	0.8	962	30	175	0.321	2.1	73	61.76	12.4	10.51	0.207	2.42	0.55	0.31	2.98	0.464	0.06
A39374	16	< 0.5	54	171	184	0.027	0.9	11	50.54	12.48	9.42	0.247	4.7	5.61	0.31	2.22	1.625	0.21

Final Report
Activation Laboratories

Element:	Hg	Cd	Cu	Ni	Zn	S	Ag	Pb	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Units:	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%	%	%	%	%	%
Detection Limit:	5	0.5	1	1	1	0.001	0.3	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Reference Method:	Hg-FIMS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Client I.D.																		
A39375	323	16	166	37	2060	0.422	18.4	3130	66.4	11.23	10.06	0.233	2.8	0.33	1.42	1.69	0.48	0.12
A39376	331	5.2	52	7	2860	0.397	2.8	488	25.88	5.53	3.35	0.174	2.6	31.5	1.14	1.09	0.254	0.08
A39377	< 5	< 0.5	24	44	83	0.337	1.1	< 5	28.92	11.16	7.59	0.216	3.84	21.59	0.61	2.5	1.621	0.52
A39378	< 5	< 0.5	35	45	80	0.196	0.9	< 5	27.46	10.11	8.08	0.448	3.8	23.59	1.05	1.55	1.591	0.52
A39379	194	4.3	8	10	2030	0.153	0.9	145	31.1	5.49	3.59	0.268	2.12	28.8	1.28	0.87	0.405	0.14
A39380	6	< 0.5	26	22	80	0.191	1	5	38.74	7.88	4.6	0.136	2.11	22.98	0.75	1.47	0.831	0.23
A39381	< 5	< 0.5	253	86	109	0.869	0.7	20	61.21	16.02	7.74	0.044	3.12	1.8	0.56	3.83	0.725	0.11
A39382	< 5	< 0.5	30	11	10	0.589	0.8	325	91.33	0.89	2.14	0.07	0.77	1.74	0.02	0.25	0.043	0.02
A39383	< 5	< 0.5	108	154	92	0.598	< 0.3	< 5	40.28	14.04	12	0.177	7.76	6.9	1.82	1.57	2.212	0.28
A39384	< 5	< 0.5	281	176	78	0.487	< 0.3	< 5	43.63	13.82	11.33	0.15	6.75	6.05	3.81	0.59	2.304	0.32
A39385	< 5	< 0.5	123	127	73	0.185	< 0.3	< 5	42.25	12.99	9.98	0.147	7.84	7	2.76	0.77	2.042	0.22
A39386	< 5	< 0.5	104	178	78	0.06	0.3	< 5	39.65	12.82	10.92	0.17	9.26	7.66	2.86	0.22	2.039	0.23
A39387	< 5	< 0.5	100	155	75	0.066	< 0.3	< 5	41.59	12.85	10.68	0.157	8.7	7.51	2.93	0.35	2.082	0.25
A39388	< 5	< 0.5	76	226	65	0.066	0.5	< 5	39.86	11.56	10.09	0.169	9.06	9.3	1.91	0.92	1.776	0.21
A39389	< 5	< 0.5	102	272	75	0.144	< 0.3	< 5	39.61	11.7	9.71	0.185	8.94	8.57	1.36	1.2	1.741	0.18
A39390	< 5	< 0.5	243	169	85	0.541	0.3	< 5	43.12	13.14	10.71	0.187	6.52	7.11	1.93	1.77	2.028	0.28
A39391	< 5	< 0.5	156	137	87	0.401	< 0.3	< 5	43.82	12.76	10.66	0.202	6.2	6.98	1.16	2.2	2.048	0.27
A39392	36	0.5	94	38	189	0.508	0.6	57	69.35	11.62	6.5	0.103	2.4	1.14	0.38	2.56	0.636	0.13
A39393	312	4.8	260	29	1370	1.9	2	304	66.41	11.52	8.31	0.128	2.26	1.1	0.21	2.69	0.558	0.18
A39394	1260	17.9	864	27	4510	4.1	3.3	305	61.59	7.01	16.65	0.345	2.93	0.21	0.25	1.29	0.365	0.1
A39395	712	9.7	3800	55	2340	9.95	5.9	229	54.61	2.35	27.17	0.322	1.57	0.29	0.19	0.34	0.097	0.17
A39396	150	1.8	4760	24	339	2.43	5.6	22	58.95	2.49	25.8	0.336	1.67	0.3	0.28	0.35	0.106	0.1
A39397	89	1.5	3140	33	173	8.86	4.9	51	51.68	4.47	26.89	0.307	1.78	0.3	1.24	0.23	0.225	0.16
A39398	22	0.5	74	30	163	0.47	0.4	< 5	65.04	9.84	13.56	0.215	3.09	0.16	0.67	0.99	0.476	0.1
A39399	66	1	327	31	295	1.11	1.1	63	62.42	8.75	15.3	0.334	3.55	0.22	0.4	0.88	0.435	0.14
A39400	79	1.7	502	34	439	1.14	2.3	92	60.91	10.24	15.97	0.27	4.75	0.22	0.11	0.83	0.504	0.12
A39401	67	1.3	138	39	381	1.24	2.6	155	61.68	12.51	12.51	0.264	3.53	0.25	0.25	2.2	0.56	0.17
A39402	32	< 0.5	24	39	201	0.547	0.5	58	66.02	12.27	10.66	0.225	2.74	0.17	0.18	2.44	0.586	0.12
A39403	48	1	18	43	296	1.27	1.3	194	66.69	12.84	8.65	0.174	1.89	0.18	0.31	3.02	0.663	0.13
A39404	344	5.5	116	41	1770	2.08	2.7	695	58.86	13.06	13.01	0.252	2.69	0.26	1.61	2.2	0.661	0.15
A39405	257	4.4	105	40	1370	1.14	1.7	635	66.25	11.97	9.72	0.191	2.23	0.25	0.44	2.66	0.571	0.12
A39406	54	1	46	48	338	0.204	1	238	53.67	16.91	12.41	0.277	3.35	0.64	0.27	3.93	0.891	0.18
A39407	54	0.8	48	50	325	0.267	0.8	232	54.79	16.27	12.17	0.246	3.23	0.57	0.25	3.78	0.893	0.18
A39408	82	1.9	59	46	492	0.119	0.9	90	56.58	16.19	11.62	0.228	3.07	0.31	0.26	3.77	0.913	0.19
A39409	30	1.1	1300	55	239	1.24	2.6	103	50.42	10.02	20.38	0.362	3.99	0.33	0.15	2.09	0.665	0.16
A39410	207	3.7	386	42	1020	0.588	1	123	54.41	16.18	12.84	0.229	3.37	0.29	0.25	3.74	0.854	0.17
A39411	480	8.5	2760	27	2430	1.67	3.9	1380	66.82	7.93	11.01	0.209	2.8	0.44	0.1	1.61	0.329	0.14
A39412	375	6.7	253	41	2020	0.822	1.6	1120	54.57	16.5	12.25	0.189	4.18	0.41	0.21	3.43	0.835	0.15
A39413	42	0.9	89	40	291	0.245	0.4	85	56.33	15.15	6.5	0.252	3.86	3.31	0.25	3.91	0.777	0.29
A39414	35	0.6	38	40	261	0.464	0.9	121	43.13	14.08	6.24	0.282	6.19	8.42	0.24	3.56	1.055	0.26
A39415	489	15.5	264	30	4220	2.58	6.3	2250	62.43	9.17	12.56	0.217	3.23	0.27	0.09	1.36	0.443	0.09
A39416	135	3.3	83	32	1070	0.949	2.3	377	60.77	10.61	11.98	0.207	3.57	0.43	0.13	1.55	0.576	0.13
A39417	179	3.2	163	36	959	0.512	2.6	603	58.03	12.46	12.47	0.227	4.14	0.41	0.18	2.24	0.822	0.17
A39418	489	13.1	321	45	3730	1.25	3.2	1760	51	14.96	15.06	0.31	4.29	0.26	0.24	2.49	0.835	0.13
A39419	753	22.8	647	39	5940	1.37	5.6	1130	54.8	11.89	14.57	0.307	3.64	0.44	0.27	1.63	0.732	0.12
A39420	102	2.2	290	51	827	0.915	3.1	550	55.29	13.19	12.52	0.22	3.74	0.35	0.33	2.01	0.914	0.22
A39421	308	8.7	3110	37	2650	9.05	8.9	402	55.16	8.02	16.36	0.149	1.79	0.41	0.43	1	0.454	0.27
A39422	136	3.5	1300	30	1110	4.17	3.2	150	62.19	10.61	11.05	0.18	2.01	0.54	0.61	1.57	0.577	0.2
A39423	97	3	2080	31	833	3.03	5.5	502	69.29	8.68	8.8	0.129	1.69	0.28	0.32	1.55	0.467	0.13

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Final Report
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Element:	Hg	Cd	Cu	Ni	Zn	S	Ag	Pb	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Units:	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%	%	%	%	%	%
Detection Limit:	5	0.5	1	1	1	0.001	0.3	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Reference Method:	Hg-FIMS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Client I.D.																		
A39424	81	2.3	1100	40	512	9.3	3.1	270	38.32	6.31	27.58	0.713	4.26	1.55	0.41	0.57	0.378	0.23
A39425	687	40.4	261	38	11800	5.27	10.5	4160	48.48	11.17	19.91	0.187	4.69	0.18	0.38	1.5	0.439	0.07
A39426	115	6.5	72	33	1860	1.61	2.2	806	58.99	13.5	11.61	0.124	3.69	0.13	0.31	2.48	0.573	0.05
A39427	178	10.4	125	36	2670	2.14	0.5	1180	55.2	13.21	14.52	0.171	4.37	0.11	0.32	2.2	0.522	0.05
A39428	99	11.5	4880	134	2950	2.4	6.5	247	40.29	11.02	23.51	0.24	7.55	0.77	0.51	0.25	2.043	0.29
A39429	11	1.3	1480	378	367	0.685	0.6	72	50.97	9.66	17.94	0.186	8.25	0.73	0.03	< 0.01	1.911	0.26
A39430	29	6.8	9150	144	794	3.39	11.1	239	33.25	11.61	27.37	0.308	8.52	0.49	0.39	0.24	2.28	0.33
A39431	5	0.9	1030	134	303	0.884	< 0.3	71	43.97	10.94	21.59	0.246	7.84	0.56	0.3	0.09	2.188	0.3
A39432	37	4.9	7930	74	729	5	10.2	35	38.99	12.67	23.42	0.226	5.89	0.26	0.79	1.7	0.994	0.16
A39433	240	33.9	7480	106	9550	5.89	22.5	4480	36.57	9.02	26.23	0.298	6.14	0.28	0.97	0.96	0.992	0.14
A39434	14	1.5	1760	252	428	2.21	1.8	115	44.9	10.67	18.76	0.215	8.05	0.51	0.43	0.31	1.614	0.24
A39435	< 5	< 0.5	111	47	65	0.313	< 0.3	37	62.64	11.05	9.58	0.167	3.42	0.21	0.68	2.36	0.688	0.12
A39436	14	0.7	61	38	197	0.316	< 0.3	12	57.45	13.66	12.66	0.203	3.76	0.1	0.54	2.68	0.64	0.05
A39437	227	32.3	295	55	8270	1.53	21.9	1600	48.91	11.04	17.92	0.279	4.8	0.41	0.55	1.59	0.838	0.27
A39438	55	8.1	333	51	1720	0.774	1.7	291	57.12	15.48	11.4	0.141	3.29	0.3	0.39	3.37	0.761	0.21
A39439	33	3.9	82	38	1010	0.565	1.4	250	52.1	14.61	16.8	0.192	5.06	0.11	0.22	2.21	0.61	0.06
A39440	9	0.5	47	46	187	0.334	< 0.3	59	61.4	14.89	10.04	0.128	3.05	0.1	0.32	3.36	0.573	0.06
A39441	24	3.4	2190	43	913	1.67	2.9	313	63.43	9.2	13.45	0.099	3.86	0.75	0.08	1.12	0.354	0.56
A39442	29	3.9	1770	41	1010	1.45	7.1	863	57.03	10.6	17	0.218	4.83	0.2	0.12	1.39	0.397	0.13
A39443	10	1.4	213	39	435	0.464	< 0.3	61	59.91	13.74	11.25	0.164	3.55	0.33	0.26	3.11	0.543	0.23
A39444	8	0.8	221	79	302	0.667	< 0.3	236	57.3	12.9	12.98	0.221	5.57	0.27	0.19	2.04	1.158	0.17
A39445	< 5	< 0.5	152	35	133	0.44	< 0.3	35	61.98	15.04	8.76	0.135	3.44	0.11	0.27	3.53	0.629	0.08
A39446	< 5	< 0.5	43	21	127	0.128	< 0.3	13	78.71	8.76	4.24	0.061	1.63	0.18	0.88	1.67	0.423	0.05
A39447	< 5	< 0.5	199	20	141	0.136	< 0.3	7	79.14	8.88	4.68	0.066	1.77	0.16	0.86	1.67	0.414	0.05
A39448	15	1.6	184	47	450	1.03	< 0.3	322	58.91	17.63	8.86	0.066	3.02	0.16	0.41	4.07	0.874	0.07
A39449	47	6.8	60	18	1550	0.385	8.2	> 5000	75.85	8.49	4.16	0.106	1.7	1.3	0.23	2.19	0.233	0.05
A39450	56	7.5	1230	33	1490	1.51	< 0.3	68	74.84	5.55	9.49	0.114	2	0.26	0.68	0.88	0.29	0.03
A39451	181	22.9	82	47	8260	2.83	0.7	1470	62.33	14.1	7.24	0.093	1.81	1.08	0.26	4.03	0.485	0.1
A20901	24	1	53	96	148	0.054	< 0.3	12	74.44	8.47	2.24	0.015	0.92	0.42	0.07	2.24	0.392	0.12
A20902	< 5	< 0.5	9	22	10	0.349	< 0.3	35	36.52	2.28	2.09	0.25	1.38	30.42	0.05	0.65	0.119	0.1
A20903	< 5	< 0.5	42	43	21	0.036	< 0.3	< 5	55.64	23.16	2.97	0.053	1.47	2.56	0.58	6.09	0.73	0.1
A20904	< 5	< 0.5	11	73	106	0.024	0.5	< 5	44.33	13.22	13.93	0.297	6.52	4.81	1.22	1.16	2.404	0.3
A20905	< 5	< 0.5	10	239	102	0.024	0.3	< 5	34.51	9.48	9.94	0.181	10.27	12.28	0.21	1.29	1.458	0.16
A20906	6	< 0.5	13	27	66	0.065	< 0.3	6	74.54	11.57	4.38	0.051	1.69	0.57	1.71	2.11	0.497	0.07
A20907	6	< 0.5	30	82	94	0.119	0.5	< 5	49.14	14.38	7.35	0.232	4.5	7.05	0.23	3.78	0.765	0.12
A20908	< 5	< 0.5	96	479	98	0.019	0.6	< 5	38.77	8.51	11.13	0.307	11.04	10.2	0.08	0.58	1.264	0.17
A20909	< 5	< 0.5	27	57	56	0.227	0.6	< 5	56.22	19.28	8.08	0.048	1.98	0.32	0.68	4.67	1.038	0.13
A20910	72	0.7	19	20	80	1.03	0.9	25	71.17	13.1	2.33	0.025	1.32	1.42	2.66	2.38	0.401	0.16
A20911	14	< 0.5	4	7	< 1	0.328	0.8	< 5	3.9	1.08	1.15	0.036	0.6	52.74	0.13	0.2	0.071	0.12
A20912	< 5	< 0.5	60	41	20	1.31	< 0.3	< 5	63.44	17.98	3.72	0.034	1.08	1.94	0.35	4.99	0.739	0.16
A20913	< 5	< 0.5	28	39	98	0.154	0.5	< 5	59.59	18.49	8.53	0.021	3.08	1.14	0.61	3.82	0.627	0.07
A20914	< 5	< 0.5	33	54	101	0.409	0.5	< 5	45.54	16.21	13.25	0.138	4.02	5.23	4.54	0.14	3.3	0.47
A20915	< 5	< 0.5	45	230	41	0.03	0.6	< 5	33.66	7.43	8.13	0.226	11.23	14.28	0.09	1.13	1.12	0.13
A20916	< 5	< 0.5	85	146	64	0.015	< 0.3	< 5	41.21	12.1	10.04	0.176	8.75	8.29	2.63	0.49	1.916	0.23
A20917	110	< 0.5	853	32	193	0.711	0.7	< 5	66.13	8.86	13.46	0.181	3.76	0.15	0.12	0.55	0.45	0.09
A20918	24	0.6	83	43	258	0.99	0.4	< 5	53.94	13.66	14.93	0.204	4.17	0.25	0.13	2.02	0.564	0.15
A20919	< 5	0.9	1280	505	177	0.371	2.1	35	48.19	9.54	17.49	0.218	9.74	1.14	< 0.01	< 0.01	2.055	0.31
A20920	< 5	0.5	68	47	154	0.116	< 0.3	10	57.47	14.23	10.64	0.166	3.38	0.22	0.48	3.21	0.633	0.15
A20921	< 5	< 0.5	86	51	134	0.563	0.4	< 5	61.35	16.24	8.72	0.111	3.37	0.14	0.72	3.32	0.812	0.09

Final Report
Activation Laboratories

Element:	Hg	Cd	Cu	Ni	Zn	S	Ag	Pb	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Units:	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%	%	%	%	%	%
Detection Limit:	5	0.5	1	1	1	0.001	0.3	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Reference Method:	Hg-FIMS	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
Client I.D.																		
A39452	99	6	723	27	1690	7.23	3.5	370	36.46	5.47	29.76	0.434	5.08	0.29	0.42	1.09	0.316	0.02
A39453	11	1	351	46	247	2.53	2.2	229	55.9	10.89	13.45	0.231	3.42	0.3	0.86	1.85	0.555	0.13

Final Report
Activation Laboratories

Element:	LOI	Total	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Units:	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.01	0.01	1	1	5	3	2	2	4	20	1	20	10	30	1	1	5	2
Reference Method:	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39326	4.71	97.43	12	2	83	1219	105	21	106	< 20	18	30	40	< 30	18	1	< 5	141
A39327	4.86	97.14	12	2	80	1257	101	19	105	< 20	17	30	40	60	19	2	< 5	152
A39328	32.12	97.17	4	< 1	16	444	981	10	41	< 20	< 1	< 20	20	< 30	5	< 1	20	30
A39329	16.39	77.42	3	< 1	13	388	234	4	34	< 20	519	40	4540	890	7	< 1	> 2000	38
A39330	27.22	98.08	6	1	27	1333	530	11	60	< 20	9	< 20	60	190	9	< 1	89	89
A39331	30.35	100.6	2	< 1	10	335	654	11	22	< 20	11	20	50	7330	3	< 1	15	14
A39332	11.86	99.13	14	2	69	2118	208	27	145	30	14	20	20	70	25	1	39	189
A39333	8.48	99.11	15	3	64	2517	172	25	118	< 20	16	30	20	70	22	2	12	185
A39334	22.06	96.76	11	2	85	1523	421	16	118	< 20	18	< 20	990	110	14	< 1	< 5	79
A39335	15.21	92.65	21	1	247	861	261	25	177	< 20	50	< 20	1790	340	20	< 1	36	41
A39336	13.45	95.44	26	2	336	916	248	29	214	< 20	39	40	970	450	24	2	24	39
A39337	12.25	97.14	29	2	374	1462	234	29	247	< 20	22	30	150	190	26	1	< 5	57
A39338	16	86.38	11	2	91	2303	445	18	128	< 20	103	70	2630	540	17	< 1	36	72
A39339	23.77	92.16	7	1	30	971	519	15	68	20	86	< 20	7180	1040	8	< 1	13	31
A39340	32.32	98.54	5	< 1	24	538	805	16	48	< 20	7	< 20	670	80	7	< 1	11	19
A39341	29.18	98.64	7	1	26	1117	725	16	71	< 20	4	< 20	< 10	< 30	8	< 1	< 5	38
A39342	7.98	99.41	16	3	71	2494	187	21	109	20	19	< 20	30	< 30	22	1	< 5	188
A39343	9.87	98.43	25	3	171	2278	190	29	189	210	30	40	60	< 30	25	1	< 5	199
A39344	12.32	99.2	12	1	90	466	24	17	151	30	40	< 20	1200	520	24	2	< 5	74
A39345	6.74	100.4	14	2	97	981	45	28	204	40	21	< 20	120	180	26	2	< 5	148
A39346	5.67	100.3	20	3	148	1447	48	25	225	120	32	40	480	200	31	2	13	192
A39347	5.56	99.17	19	3	146	1399	58	30	234	110	31	40	450	160	29	1	13	184
A39348	4.73	100.9	8	1	60	739	19	15	234	< 20	37	< 20	120	100	14	< 1	< 5	88
A39349	6.55	100.1	19	2	120	1495	38	31	158	70	22	30	110	160	28	2	< 5	152
A39350	3.54	100.4	9	1	60	519	26	17	197	< 20	21	< 20	130	130	14	2	< 5	57
A39351	3.7	99.97	6	1	33	371	91	10	89	< 20	6	< 20	< 10	50	8	1	< 5	61
A39352	4.9	99.29	14	3	107	1001	50	23	89	30	11	20	30	120	21	2	< 5	162
A39353	6.25	100.3	23	4	169	1735	50	38	131	80	21	30	20	60	33	2	< 5	250
A39354	16.54	98.6	23	1	128	178	237	12	65	1010	56	360	70	180	10	1	79	16
A39355	9.85	98.01	26	< 1	167	45	137	16	86	860	40	250	190	600	12	1	< 5	4
A39356	5.35	97.96	11	2	70	858	84	19	182	90	12	30	160	5530	16	1	13	126
A39357	13.63	99.02	17	2	98	943	224	16	142	470	35	190	40	110	18	1	116	151
A39358	28.82	99.65	7	2	46	834	615	15	91	< 20	8	20	60	210	12	< 1	< 5	88
A39359	26.49	96.9	5	< 1	29	189	986	11	75	< 20	6	< 20	120	80	9	< 1	< 5	32
A39360	25.69	100.9	3	< 1	15	38	40	5	17	60	212	70	3930	120	5	2	< 5	10
A39361	15.35	97.99	11	2	57	1057	322	19	121	40	13	< 20	110	1090	15	< 1	< 5	129
A39362	8.84	100.8	15	3	94	1252	147	26	185	150	29	80	30	90	21	1	< 5	157
A39363	18.5	99.25	21	< 1	140	9	456	11	68	920	57	420	290	70	9	2	137	< 2
A39364	15.18	100	24	1	183	251	399	18	101	840	58	310	120	100	13	2	59	33
A39365	9.52	97.74	24	1	205	144	234	17	103	1010	90	190	2540	260	16	2	36	17
A39366	10.27	99.32	33	1	240	59	286	18	105	1280	64	400	790	120	15	2	171	7
A39367	9.37	99.99	32	< 1	228	39	268	18	114	1260	74	430	400	160	15	2	182	4
A39368	8.94	99.7	16	2	98	1859	112	30	203	150	33	50	30	50	24	2	32	153
A39369	6.06	99.23	10	2	64	1349	59	20	303	50	14	< 20	50	< 30	16	1	< 5	110
A39370	3.57	100.5	4	< 1	23	634	52	11	263	40	3	< 20	60	300	7	1	< 5	82
A39371	12.05	85.06	3	< 1	18	370	27	11	120	< 20	61	< 20	6630	> 10000	7	< 1	< 5	39
A39372	7.28	99.65	15	2	89	1510	80	29	298	40	14	< 20	30	160	24	2	6	152
A39373	8.76	100.4	9	2	59	996	83	22	234	40	18	< 20	570	170	18	2	< 5	102
A39374	12.1	99.48	22	2	196	705	160	25	177	260	33	110	40	140	17	1	46	81

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Element:	LOI	Total	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Units:	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.01	0.01	1	1	5	3	2	2	4	20	1	20	10	30	1	1	5	2
Reference Method:	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39375	5.72	100.5	7	1	53	440	48	27	252	70	12	< 20	130	1380	16	1	25	68
A39376	27.11	98.7	4	< 1	23	467	805	11	105	50	9	40	40	1550	8	< 1	< 5	41
A39377	20.59	99.15	10	2	96	1526	582	19	254	50	20	20	20	80	15	1	8	97
A39378	21.26	99.46	9	1	86	1084	588	22	228	50	19	20	30	70	13	1	10	61
A39379	25.03	99.09	5	< 1	29	634	842	17	115	< 20	6	< 20	20	1510	6	< 1	5	32
A39380	20.15	99.87	6	1	49	903	693	18	156	50	12	< 20	30	60	12	1	8	57
A39381	4.89	100.1	15	3	102	1718	77	25	171	90	25	50	160	110	22	2	< 5	162
A39382	2.79	100.1	< 1	< 1	7	62	58	3	13	80	5	< 20	20	< 30	1	< 1	< 5	10
A39383	12.37	99.41	32	2	274	1108	357	21	148	450	38	100	70	90	19	1	12	67
A39384	10.23	98.98	29	2	257	430	339	22	155	350	46	120	180	80	17	1	< 5	24
A39385	12.41	98.41	29	2	249	568	314	19	126	360	35	110	100	70	16	1	< 5	34
A39386	13.48	99.31	32	1	260	199	324	19	127	490	40	160	100	90	16	1	12	12
A39387	13.15	100.3	32	1	260	238	313	20	132	470	38	140	100	90	17	2	9	18
A39388	15.42	100.3	30	1	231	366	363	16	114	760	50	210	80	80	17	1	84	38
A39389	14.78	97.97	32	2	219	861	361	17	104	840	39	220	80	60	15	1	67	51
A39390	11.75	98.54	28	2	247	1171	329	21	156	410	40	110	210	100	18	1	15	77
A39391	12.07	98.38	29	2	252	1257	282	22	148	410	42	100	120	130	17	1	39	91
A39392	4.67	99.48	11	2	74	957	70	18	201	110	14	< 20	80	220	17	1	19	101
A39393	5.57	98.94	9	1	68	902	66	22	179	130	10	< 20	170	1500	18	1	34	111
A39394	9.6	100.3	8	< 1	46	392	22	19	72	50	20	< 20	630	4330	12	< 1	37	56
A39395	14.01	> 101.0	4	< 1	14	109	17	9	23	70	16	40	3530	2650	5	1	37	16
A39396	8.68	99.06	3	< 1	26	113	17	10	24	70	10	30	220	2710	4	< 1	67	15
A39397	13.52	100.8	6	< 1	28	70	46	11	57	60	118	30	2840	170	7	< 1	11	9
A39398	5.27	99.41	9	< 1	72	306	31	17	88	60	14	< 20	50	170	16	1	146	44
A39399	6.94	99.38	7	< 1	55	283	27	19	84	60	16	< 20	220	300	14	2	1010	42
A39400	6.4	100.3	9	< 1	56	269	20	20	95	50	23	< 20	330	510	16	2	497	40
A39401	6.24	100.1	12	1	66	637	36	26	103	70	19	< 20	110	300	18	1	266	103
A39402	5.31	100.7	11	1	77	695	31	22	127	60	15	< 20	20	210	18	2	260	114
A39403	5.5	100	10	1	66	821	40	24	179	70	16	< 20	< 10	290	19	1	130	140
A39404	7.12	99.87	11	1	68	614	67	22	133	60	13	< 20	60	2130	20	2	516	99
A39405	5.5	99.9	11	1	65	642	39	22	127	80	18	< 20	80	1470	18	2	160	119
A39406	7.58	100.1	14	1	96	1033	55	29	181	80	20	30	40	360	24	2	458	160
A39407	7.29	99.65	13	1	93	974	53	28	189	120	21	30	40	370	23	2	362	154
A39408	7.31	100.4	13	1	92	988	47	29	205	90	18	20	50	570	23	2	227	160
A39409	12.05	100.6	9	1	62	518	28	29	195	60	42	< 20	570	290	15	2	473	89
A39410	7.79	100.1	12	1	85	889	46	28	198	90	19	< 20	220	1060	22	2	703	146
A39411	6.46	97.85	6	< 1	44	350	34	10	92	40	19	< 20	1070	2380	12	2	> 2000	64
A39412	7.18	99.9	13	2	91	797	45	26	199	100	19	< 20	170	1790	24	2	> 2000	142
A39413	8.66	99.27	13	2	84	942	134	34	192	70	18	20	80	290	21	2	798	161
A39414	15.19	98.66	12	2	83	891	272	25	191	90	17	< 20	30	300	20	1	81	144
A39415	9.02	98.87	9	< 1	65	323	25	16	85	40	12	< 20	120	4370	14	1	> 2000	56
A39416	8.96	98.89	10	1	66	518	49	24	116	70	16	< 20	60	670	15	< 1	48	65
A39417	8.75	99.89	11	1	83	965	65	26	173	90	19	< 20	140	1040	17	1	592	83
A39418	9.91	99.49	12	2	93	1000	84	22	167	80	20	< 20	180	3610	21	1	222	100
A39419	11.37	99.78	10	< 1	75	508	70	22	147	70	16	< 20	320	6850	17	1	210	68
A39420	10.79	99.56	12	1	94	579	71	27	177	70	13	< 20	170	470	19	1	168	85
A39421	11.8	95.85	8	< 1	54	287	86	16	91	80	44	< 20	1100	2220	13	< 1	26	42
A39422	9.2	98.75	11	1	84	460	111	35	123	90	19	< 20	660	920	18	1	77	64
A39423	7.51	98.85	9	< 1	79	511	64	16	87	30	11	< 20	830	610	15	1	114	62

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Element:	LOI	Total	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Units:	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.01	0.01	1	1	5	3	2	2	4	20	1	20	10	30	1	1	5	2
Reference Method:	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39424	18.55	98.87	8	< 1	61	178	66	14	70	80	60	40	930	500	10	2	101	23
A39425	11.71	98.74	12	1	65	334	58	30	139	40	45	30	260	> 10000	17	3	66	61
A39426	7.15	98.62	12	2	87	620	49	35	146	30	16	< 20	50	1160	20	2	48	105
A39427	8.42	99.08	13	1	80	530	45	33	132	80	21	< 20	80	2450	20	2	53	93
A39428	13.09	99.57	19	< 1	217	64	54	19	143	140	35	< 20	1690	2620	22	2	132	10
A39429	9.07	99.02	27	< 1	235	6	25	19	137	490	61	280	1020	240	22	2	97	< 2
A39430	14.42	99.19	25	1	262	50	44	23	154	140	72	200	8170	910	25	3	44	7
A39431	11.24	99.27	22	< 1	241	33	40	19	153	130	28	40	500	260	23	2	75	5
A39432	15.09	100.2	16	1	124	522	99	25	139	100	87	60	7250	570	22	2	91	62
A39433	19.01	100.6	14	1	119	252	124	19	159	70	104	90	6640	7680	17	1	120	35
A39434	13.81	99.52	21	< 1	195	70	62	17	130	290	55	60	810	330	18	2	158	16
A39435	9.3	100.2	10	1	77	511	88	18	185	60	11	< 20	70	50	15	1	31	93
A39436	8.82	100.6	12	2	73	514	68	18	180	90	20	30	70	150	21	1	< 5	110
A39437	12.04	98.66	8	1	67	299	77	19	255	30	38	< 20	220	5650	17	2	105	63
A39438	7.33	99.8	13	2	85	702	59	21	156	50	22	< 20	200	1090	22	2	45	134
A39439	8.28	100.3	11	1	81	476	31	18	144	40	22	20	60	740	22	2	535	86
A39440	6.42	100.3	13	2	103	786	41	32	110	70	21	40	50	70	21	2	55	143
A39441	6.29	99.2	8	< 1	68	248	39	29	54	< 20	24	< 20	870	730	13	2	739	46
A39442	8.23	100.2	11	< 1	69	309	22	20	65	50	42	40	1920	1150	16	2	207	59
A39443	7.21	100.3	13	2	88	695	47	23	105	40	14	20	130	260	18	2	83	124
A39444	8.05	100.9	15	1	132	413	38	20	198	110	28	70	220	300	20	2	9	88
A39445	6.23	100.2	11	< 1	79	715	44	21	213	60	15	20	100	100	21	2	20	141
A39446	3.14	99.75	6	1	44	385	34	14	245	< 20	6	< 20	30	90	12	1	7	69
A39447	3.25	100.9	6	1	47	371	34	14	239	40	8	< 20	180	120	12	1	< 5	69
A39448	6.48	100.6	16	3	105	995	60	23	345	70	17	20	150	270	24	1	35	153
A39449	4.77	99.07	5	1	32	517	74	11	86	< 20	4	< 20	60	1160	11	1	10	82
A39450	6.54	100.7	4	< 1	30	229	32	14	222	< 20	19	< 20	780	1010	8	< 1	< 5	33
A39451	6.76	98.29	10	2	61	906	55	22	143	30	13	< 20	40	4680	18	1	5	150
A20901	6.36	95.69	8	3	444	1586	68	19	73	50	5	80	50	< 30	12	1	< 5	94
A20902	25.41	99.25	1	< 1	13	199	724	9	51	50	5	40	10	< 30	3	< 1	9	24
A20903	7.14	100.5	19	3	82	3146	223	32	141	90	18	20	40	< 30	29	2	7	239
A20904	11.05	99.25	27	2	286	304	180	25	161	100	32	< 20	< 10	90	19	2	12	43
A20905	20.29	100.1	28	1	212	282	412	16	89	870	42	210	10	80	13	1	99	49
A20906	3.1	100.3	9	2	59	606	62	16	217	70	10	< 20	10	50	16	1	< 5	81
A20907	12.29	99.84	14	3	95	1145	191	26	171	160	18	70	20	60	19	1	9	144
A20908	17.75	100.4	25	2	177	227	418	16	87	1160	46	330	60	100	11	1	41	22
A20909	7.06	99.49	18	3	112	1042	127	32	191	100	18	< 20	20	< 30	25	3	< 5	179
A20910	4.62	99.59	5	2	76	2210	157	19	139	20	5	< 20	10	40	16	< 1	< 5	97
A20911	40.35	100.4	1	< 1	11	123	890	5	22	< 20	< 1	30	20	< 30	2	< 1	< 5	8
A20912	5.44	99.87	14	3	80	1974	116	21	129	70	24	40	40	< 30	24	2	< 5	179
A20913	4.27	100.2	16	3	77	1509	97	27	128	90	13	< 20	20	80	24	3	< 5	147
A20914	5.88	98.71	26	2	342	100	404	26	208	70	41	< 20	20	90	24	1	< 5	6
A20915	22.82	100.2	32	2	185	369	483	13	70	950	45	230	50	40	11	1	44	47
A20916	14.43	100.3	32	2	247	253	331	18	122	540	39	110	80	60	16	1	10	20
A20917	5.18	98.94	8	< 1	68	156	15	18	84	40	14	30	780	170	13	2	23	24
A20918	10.22	100.2	11	1	71	561	31	17	101	60	20	50	80	180	20	1	25	85
A20919	10.3	98.99	28	< 1	233	6	35	20	169	580	80	340	680	230	16	2	333	< 2
A20920	8.24	98.82	11	2	77	659	71	18	194	30	17	30	50	130	20	2	28	132
A20921	5.72	100.6	15	2	89	745	47	24	239	60	22	30	60	110	21	2	34	138

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Element:	LOI	Total	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Units:	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.01	0.01	1	1	5	3	2	2	4	20	1	20	10	30	1	1	5	2
Reference Method:	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39452	21.11	100.4	6	< 1	46	320	52	13	68	< 20	13	20	50	2250	8	< 1	26	43
A39453	11.12	98.7	10	< 1	79	471	100	23	112	50	23	30	240	230	16	2	62	78

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Element:	Nb	Mo	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39326	14	< 2	< 0.5	< 0.2	< 1	2	3	52.6	107	11.1	40.5	7.1	1.33	5.9	0.8	4.4	0.8	2.3
A39327	16	< 2	< 0.5	< 0.2	< 1	2.3	3.2	55.2	111	11.5	41.1	6.8	1.35	5.6	0.7	3.9	0.7	2.1
A39328	4	< 2	< 0.5	0.2	13	0.7	0.6	14.3	26	3.04	11.5	2.1	0.67	2	0.3	1.6	0.3	0.9
A39329	4	< 2	1.3	6.7	45	9.9	0.8	7.3	13.8	1.47	5.7	1	0.47	1	0.1	0.7	0.1	0.4
A39330	8	< 2	< 0.5	0.3	13	3.1	1.4	23.7	43.8	4.86	18	3.1	0.86	2.8	0.4	2.1	0.4	1.2
A39331	2	< 2	2.1	< 0.2	4	1.2	< 0.5	9.7	18.5	2.02	7.8	1.6	0.76	1.8	0.3	1.6	0.3	0.8
A39332	24	< 2	< 0.5	< 0.2	< 1	3.1	3.8	56.2	109	12	43.9	7.5	1.47	6.8	0.9	5	1	2.7
A39333	18	< 2	< 0.5	< 0.2	3	5.6	3.9	59.3	114	12.2	44.9	7.4	1.41	6.6	0.9	4.8	0.9	2.6
A39334	16	< 2	< 0.5	2.6	29	2	1.9	33.9	63	7.19	27.3	5.2	1.36	4.7	0.6	3.3	0.6	1.7
A39335	34	3	< 0.5	6.8	37	1.7	1	45.2	89.3	10.4	41.3	8.2	1.89	7.6	1.1	5.3	1	2.7
A39336	44	< 2	< 0.5	3.2	109	2.5	1.1	30.7	65.3	7.86	32.4	6.9	1.66	7.4	1.1	6	1.1	2.9
A39337	51	< 2	< 0.5	0.8	98	2.9	1.6	42.1	87.9	10.3	41.3	8.6	1.92	8.5	1.3	6.4	1.2	3.1
A39338	20	< 2	< 0.5	12.5	41	1.3	1.7	41.8	78.5	9.09	35.1	6.2	1.6	5.2	0.7	3.6	0.7	1.8
A39339	8	< 2	1.8	16.9	97	0.7	0.7	31.6	58.5	6.44	24.2	4.2	1.25	3.9	0.5	2.8	0.5	1.4
A39340	6	< 2	< 0.5	2.2	12	4.3	3.3	24.6	46.6	5.16	19.7	3.5	1.07	3.5	0.5	2.8	0.5	1.5
A39341	8	< 2	< 0.5	< 0.2	< 1	1.1	0.7	27.9	52.5	5.96	22.1	4	1.18	3.6	0.5	2.9	0.6	1.6
A39342	17	< 2	< 0.5	< 0.2	< 1	2.7	4	53.8	104	11.2	40.1	6.6	1.21	5	0.8	4.2	0.8	2.3
A39343	37	< 2	< 0.5	< 0.2	< 1	3.8	3.6	54.8	105	11.8	44.5	8.1	1.9	7	1	5.6	1	2.9
A39344	16	< 2	< 0.5	3.4	30	2.7	1.5	33.3	70.8	7.43	28.3	5.1	0.81	4.3	0.6	3.5	0.6	1.9
A39345	16	< 2	< 0.5	0.5	40	3.3	2.9	56.5	115	12.1	44.8	7.8	1.32	6.6	1	5.4	1	2.8
A39346	20	< 2	< 0.5	1.3	26	3.3	3.9	47.9	104	10.5	40.6	7.6	1.92	6.8	1	5	0.9	2.5
A39347	19	< 2	< 0.5	1.1	23	3.2	3.8	46.7	100	10.3	40.3	7.8	2.04	7.6	1.1	6.1	1.1	2.9
A39348	9	< 2	< 0.5	0.4	< 1	1.4	1.8	28.4	56.5	5.88	21.2	3.7	0.86	3.1	0.5	2.7	0.5	1.5
A39349	16	< 2	< 0.5	0.4	25	2.6	2.9	78	153	16.7	61.7	10.7	2.73	8.9	1.3	6.4	1.1	3.1
A39350	8	< 2	< 0.5	0.2	9	3.2	1.2	34.9	71.7	7.42	27.6	4.7	1.21	3.9	0.6	3.2	0.6	1.7
A39351	4	< 2	< 0.5	< 0.2	< 1	4	1.2	18.2	37.2	3.87	14.4	2.5	0.54	2.3	0.4	2.1	0.4	1.1
A39352	10	< 2	0.7	< 0.2	< 1	3.8	3.6	42.5	81.8	8.87	32.8	6.1	1.31	5.6	0.8	4.5	0.8	2.4
A39353	15	< 2	< 0.5	< 0.2	< 1	1.9	5.2	80.5	154	16.8	61.9	10.9	2.19	9.5	1.4	7.1	1.3	3.8
A39354	10	< 2	< 0.5	< 0.2	2	4.6	< 0.5	11.9	24.5	2.77	11.4	2.4	0.79	2.7	0.4	2.5	0.5	1.3
A39355	15	< 2	< 0.5	0.5	7	3	< 0.5	21.3	43.4	5.24	20.6	4.2	0.93	3.8	0.6	3.3	0.6	1.6
A39356	12	< 2	2.6	< 0.2	6	6.9	3.1	34.6	69.7	7.2	26.7	4.7	0.99	4	0.6	3.4	0.7	2
A39357	12	< 2	< 0.5	< 0.2	1	4.9	3.7	37.2	76.8	7.86	29.3	5	1.28	4.2	0.6	3.3	0.6	1.7
A39358	12	< 2	< 0.5	< 0.2	8	3.7	2.1	32.9	63.4	6.69	24.4	4.2	1.1	3.8	0.5	2.9	0.5	1.5
A39359	8	< 2	< 0.5	0.3	9	1.9	1.4	24.3	48.8	5.24	19.2	3.5	0.72	2.8	0.4	2	0.4	1
A39360	3	< 2	< 0.5	0.8	29	4.2	0.6	6.9	14.1	1.49	5.9	1.1	0.32	1.1	0.2	0.9	0.2	0.5
A39361	13	< 2	1.1	< 0.2	6	2.1	3	37.8	72.3	8.01	29.1	5.2	1.12	4.5	0.6	3.4	0.6	1.8
A39362	13	< 2	< 0.5	< 0.2	2	2.7	3.9	44.6	87.6	9.78	36.1	6.6	1.38	5.7	0.8	4.6	0.9	2.5
A39363	11	< 2	< 0.5	0.2	8	4.9	< 0.5	10.3	21.9	2.62	11.4	2.5	1.05	2.8	0.4	2.4	0.4	1.1
A39364	12	< 2	< 0.5	< 0.2	10	4.5	0.9	13.5	29.1	3.48	14.8	3.3	0.94	3.5	0.6	3.4	0.6	1.8
A39365	15	< 2	< 0.5	4.8	24	3.2	0.5	17.4	37.2	4.45	18	3.8	0.91	3.8	0.6	3.5	0.7	1.8
A39366	17	< 2	< 0.5	0.9	21	5.9	< 0.5	14.9	32.9	3.87	16.7	3.7	1.12	4	0.6	3.4	0.6	1.7
A39367	17	< 2	< 0.5	0.5	26	5.6	< 0.5	16.4	35.4	4.19	17.6	3.8	1.16	4.1	0.6	3.5	0.6	1.7
A39368	15	< 2	< 0.5	< 0.2	11	5.2	4.1	45.8	93.8	10.2	38.6	6.9	1.55	6.4	1	5.4	1	2.9
A39369	11	< 2	< 0.5	< 0.2	2	3.4	2.8	36.3	76.9	8.02	30.4	5.5	1.15	4.7	0.7	3.7	0.7	2.1
A39370	5	< 2	0.8	< 0.2	21	2.7	1.4	28.4	60.4	6.24	22.3	3.9	0.65	3	0.4	2	0.4	1
A39371	3	< 2	1.1	9.3	43	3	0.9	16	32	3.38	12.5	2.3	0.45	2.2	0.4	2	0.4	1
A39372	15	< 2	< 0.5	0.2	25	7	9.4	56.8	114	12.2	45	7.8	1.53	6.7	1	5.3	1	3
A39373	9	< 2	0.8	1	17	5	2.8	44.6	89.1	9.41	34.1	5.7	1.23	4.8	0.7	3.8	0.7	2.1
A39374	22	< 2	< 0.5	< 0.2	11	0.7	2.1	28.9	60.7	6.79	27.8	5.5	1.54	5.3	0.9	4.8	0.9	2.4

Final Report
Activation Laboratories

Element:	Nb	Mo	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39375	11	< 2	6.1	0.4	9	0.9	1.7	36.1	76	8.04	30.4	5.4	1.09	4.4	0.8	4.8	0.9	2.7
A39376	7	< 2	< 0.5	0.2	< 1	< 0.5	1.1	18	37	3.95	15.3	2.7	0.64	2.2	0.4	1.9	0.4	1.1
A39377	71	2	< 0.5	< 0.2	1	0.6	2.9	56.8	104	10.8	41.1	6.8	1.7	4.9	0.8	4	0.7	1.8
A39378	69	2	< 0.5	< 0.2	2	0.8	1.6	59.1	106	11.1	41.5	7.1	2.19	5.3	0.9	4.5	0.8	2
A39379	16	< 2	< 0.5	< 0.2	< 1	0.7	0.9	26.9	50.7	5.28	20	3.6	1.27	2.9	0.5	2.9	0.5	1.4
A39380	38	< 2	< 0.5	< 0.2	1	1.2	2	43.6	82.3	8.69	33.1	5.7	1.44	4.3	0.7	4	0.7	2
A39381	16	< 2	< 0.5	< 0.2	5	0.9	5.7	51.3	99.4	11	41.2	7.2	1.53	5.4	0.9	4.8	0.9	2.5
A39382	< 1	< 2	< 0.5	< 0.2	< 1	0.6	< 0.5	2.3	4.8	0.53	2.1	0.5	0.15	0.6	0.1	0.7	0.1	0.4
A39383	26	< 2	< 0.5	< 0.2	< 1	0.9	1.2	23.5	49.8	5.86	25.5	5.5	1.85	5.3	0.9	4.6	0.8	2.2
A39384	27	< 2	< 0.5	< 0.2	< 1	1	< 0.5	24.3	52.4	6.19	27.1	5.6	1.92	5.4	0.9	4.8	0.8	2.2
A39385	23	< 2	< 0.5	< 0.2	< 1	1.8	0.7	20.6	44.2	5.36	22.5	5	1.67	4.9	0.8	4.1	0.7	2
A39386	22	< 2	< 0.5	< 0.2	< 1	2.6	< 0.5	19.6	41.6	5	21.6	4.6	1.57	4.6	0.7	3.9	0.7	1.9
A39387	24	< 2	< 0.5	< 0.2	< 1	1.2	< 0.5	20.1	43	5.1	21.9	4.7	1.64	4.8	0.8	4.2	0.7	2
A39388	21	< 2	< 0.5	< 0.2	< 1	0.8	0.6	17.3	37.3	4.38	19	4.2	1.5	4.5	0.7	3.6	0.7	1.8
A39389	19	< 2	< 0.5	< 0.2	< 1	0.8	0.9	16.3	34.5	4.13	17.6	4	1.35	4	0.6	3.4	0.6	1.6
A39390	28	< 2	< 0.5	< 0.2	< 1	0.8	1.3	21	45	5.25	22.8	5	1.65	5.2	0.8	4.3	0.8	2.1
A39391	26	< 2	< 0.5	< 0.2	1	1.6	1.7	23	48	5.75	24.1	5.4	1.66	5.5	0.9	4.3	0.8	2.1
A39392	12	< 2	< 0.5	< 0.2	6	0.6	1.8	35.5	73.2	7.39	28	5	1.07	4	0.7	3.6	0.7	2
A39393	12	< 2	< 0.5	0.3	19	0.7	2	39.8	80.8	8.41	31.3	5.8	1.08	4.7	0.8	4.1	0.8	2.3
A39394	10	< 2	1.6	2.1	48	0.6	1.3	32	67.5	6.79	25.1	4.6	0.43	3.9	0.7	3.5	0.7	1.9
A39395	3	< 2	4.2	4.8	52	0.8	< 0.5	6.7	15	1.65	6.5	1.6	0.19	1.7	0.3	1.5	0.3	0.8
A39396	4	< 2	< 0.5	3.2	7	< 0.5	< 0.5	6.8	15.6	1.63	6.8	1.5	0.21	1.8	0.3	1.6	0.3	0.9
A39397	6	< 2	2.5	1.7	30	0.6	< 0.5	19.5	45.5	4.72	18.5	3.7	0.35	3.1	0.5	2.3	0.4	1.1
A39398	12	< 2	< 0.5	0.2	21	< 0.5	1.2	41.1	85.5	8.61	31.9	5.4	0.5	4.1	0.6	3.2	0.6	1.7
A39399	14	< 2	< 0.5	0.6	18	0.6	1	33.8	68.2	6.73	24.9	4.4	0.46	3.6	0.6	3.4	0.7	1.9
A39400	16	< 2	< 0.5	0.7	25	0.7	0.9	44.5	89.9	9.06	33.3	5.6	0.56	4.1	0.7	3.9	0.7	2
A39401	17	< 2	1.2	0.3	24	0.5	2.3	53.6	105	11.2	41.7	7.3	0.81	5.9	0.9	5	0.9	2.5
A39402	18	< 2	< 0.5	< 0.2	28	0.8	2.4	45.7	93.2	9.39	35.1	6	0.73	4.5	0.8	4.2	0.8	2.3
A39403	39	< 2	< 0.5	< 0.2	21	< 0.5	3.2	54.9	110	11.1	39.7	6.6	0.9	5	0.8	4.6	0.9	2.6
A39404	25	< 2	< 0.5	0.3	34	0.9	2.3	55.3	105	11	40.6	6.7	1.13	4.8	0.8	4.3	0.8	2.3
A39405	19	< 2	< 0.5	0.3	35	1.1	2.9	48.4	99.6	10.1	38.3	6.8	1.1	5.1	0.8	4.3	0.8	2.3
A39406	31	< 2	< 0.5	0.4	64	0.8	3.1	66.3	124	13.8	50.9	8.7	1.65	7.1	1.1	5.6	1	2.9
A39407	32	< 2	< 0.5	0.4	74	1.2	3.2	64.3	121	13.3	49.4	8.3	1.61	6.8	1	5.4	1	2.9
A39408	34	< 2	< 0.5	0.6	65	1	3.1	64.8	121	13.1	48.7	8.2	1.53	6.6	1.1	5.6	1	3
A39409	22	< 2	< 0.5	1.9	46	0.6	1.8	44.2	86.5	9.43	36.6	6.8	1.29	6.4	1.1	5.5	1	2.7
A39410	28	< 2	< 0.5	0.8	36	0.6	2.8	63.7	117	13.1	47.5	8.2	1.05	6.6	1	5.3	1	2.9
A39411	10	< 2	< 0.5	3.4	42	2.5	1.4	31.7	59.7	6.83	24.4	4.2	0.5	3.3	0.4	2.2	0.4	1.1
A39412	28	< 2	< 0.5	0.8	58	1	2.7	65	120	13.2	48.3	7.9	0.99	6.2	0.9	4.8	0.9	2.7
A39413	26	< 2	< 0.5	< 0.2	20	0.9	3	62.2	118	13.3	51.2	9.3	1.67	8.3	1.3	6.5	1.2	3.4
A39414	40	< 2	< 0.5	< 0.2	4	0.5	2.7	61.8	115	12.4	46.2	7.9	1.82	5.9	1	5	0.9	2.6
A39415	13	< 2	1.5	0.5	26	1.8	1.7	32.8	66.6	6.76	25.1	4.4	0.73	3.4	0.6	3	0.6	1.6
A39416	19	< 2	< 0.5	0.2	21	0.6	2.8	46	92.2	9.58	35.9	6.4	1.18	5.3	0.9	4.7	0.9	2.4
A39417	24	< 2	0.7	0.3	27	0.8	2.8	48.4	92.6	9.93	37.8	6.8	1.3	5.7	0.9	4.8	0.9	2.6
A39418	27	< 2	1.1	0.7	45	0.8	2.9	57.3	108	11.5	42.2	6.9	1.22	5	0.8	4.3	0.8	2.3
A39419	24	< 2	1.9	1.5	40	0.7	2.1	50.2	95.7	10.4	38.5	6.4	0.93	4.9	0.8	4.2	0.8	2.3
A39420	27	< 2	< 0.5	0.4	21	0.6	2.3	57.7	113	12.2	46.1	7.8	1.28	6.2	1	5.3	0.9	2.8
A39421	13	< 2	0.8	2.5	13	0.6	1.2	32.3	65.8	7.11	27.3	5.5	0.78	4.5	0.7	3.5	0.6	1.6
A39422	16	< 2	< 0.5	1.3	20	1.1	1.9	38.4	83.5	8.61	33.2	6.5	0.97	6.4	1.2	7.1	1.3	3.7
A39423	12	< 2	0.5	1.1	25	0.7	1.6	32.4	73	6.91	25.9	4.6	0.78	3.5	0.6	3.2	0.6	1.8

Final Report
Activation Laboratories

Element:	Nb	Mo	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39424	11	< 2	2.8	1.4	85	1.3	0.8	31.2	67.2	7.14	27.3	5.1	1.09	4	0.6	2.9	0.5	1.4
A39425	18	< 2	13.1	1	25	1.7	1.4	54.5	111	12.2	46.3	8.4	1	6.5	1.1	5.6	1	3.1
A39426	20	< 2	< 0.5	0.4	21	0.5	2.4	57.7	119	12.9	48.6	8.7	1.05	7	1.2	6.8	1.3	3.9
A39427	16	< 2	< 0.5	0.7	20	0.8	2.2	58.8	124	13.4	51.1	9.4	1.11	7.6	1.2	6.7	1.2	3.7
A39428	30	< 2	< 0.5	3.6	123	0.6	< 0.5	24	53.1	6.15	25.5	5.2	1.01	5.2	0.9	4.5	0.8	2.2
A39429	28	< 2	< 0.5	1.7	104	1.1	< 0.5	19.8	44.3	5.22	22.2	4.7	1.07	4.8	0.8	4	0.7	1.9
A39430	30	< 2	9.7	8	329	1.7	< 0.5	18.8	44.7	5.42	23.3	5	0.96	5.2	0.9	4.6	0.8	2.3
A39431	31	< 2	< 0.5	1	88	0.6	< 0.5	20.6	46.2	5.47	23.6	5	0.96	4.9	0.8	4	0.7	2
A39432	18	3	10.9	8.8	126	1.9	1.5	39.1	77.1	8.55	32.3	6	1.03	4.9	0.8	4.3	0.8	2.3
A39433	14	< 2	13.7	10	217	1.7	0.9	20.1	42.3	4.72	19.1	3.8	0.72	3.6	0.6	3.2	0.6	1.6
A39434	22	< 2	< 0.5	1.4	51	0.6	< 0.5	24.3	50.8	5.77	23.6	4.9	1.03	4.7	0.7	3.7	0.6	1.7
A39435	12	< 2	< 0.5	0.2	28	< 0.5	1.8	32.8	70	7.24	27.5	4.8	0.7	3.9	0.7	3.5	0.6	1.9
A39436	14	< 2	0.6	< 0.2	26	< 0.5	2.1	34.8	71.6	7.42	27.4	4.7	0.63	3.3	0.6	3.2	0.6	1.8
A39437	47	2	15.4	2.7	13	0.7	1.2	33.6	67.7	6.89	26.1	4.7	0.8	3.7	0.7	3.6	0.7	2
A39438	25	< 2	0.8	0.6	22	0.6	2.4	52.1	101	10.6	40	7	1	5.3	0.9	4.2	0.8	2.2
A39439	13	< 2	1.1	0.3	18	0.6	1.7	36.4	75.3	7.76	29.2	5.1	0.69	4.2	0.7	3.5	0.6	2
A39440	12	< 2	< 0.5	0.2	25	0.9	2.7	65.2	124	13.5	50	8.5	1.09	6.9	1.1	5.9	1.1	3.2
A39441	7	< 2	0.8	1.7	12	0.8	1	26.7	57.6	6.09	24	5.2	0.84	6.1	1	5.2	0.9	2.7
A39442	8	< 2	6	2.3	27	1.3	2	28.7	60.2	6.28	23.9	4.5	0.64	4.4	0.7	3.8	0.7	2
A39443	11	< 2	< 0.5	0.4	26	0.6	2.6	40.6	80.9	8.74	32.8	6	0.81	5.2	0.8	4.3	0.8	2.4
A39444	19	< 2	0.7	0.5	83	< 0.5	1.9	34.5	70	7.58	29.3	5.3	0.78	4.7	0.7	3.9	0.7	2.1
A39445	13	< 2	< 0.5	0.3	30	0.6	3	40.2	81.4	8.64	32.3	5.6	0.89	4.8	0.7	3.8	0.7	2.1
A39446	6	< 2	< 0.5	< 0.2	10	0.8	1.5	26.2	53.6	5.43	19.7	3.3	0.64	2.6	0.5	2.4	0.4	1.4
A39447	6	< 2	0.5	< 0.2	9	0.9	1.4	28.2	58.6	6.06	21.8	3.7	0.68	3	0.5	2.4	0.5	1.5
A39448	16	< 2	< 0.5	< 0.2	9	0.6	2.9	45.9	95.8	9.95	37.2	6.1	1.27	4.6	0.8	4.1	0.8	2.5
A39449	4	< 2	8.7	0.6	6	0.9	1.6	21.6	41.5	4.45	16.4	2.9	0.63	2.5	0.4	2.1	0.4	1.1
A39450	5	< 2	< 0.5	1.4	4	< 0.5	0.7	22.8	47.8	5	19.1	3.7	0.57	3.2	0.5	2.5	0.5	1.3
A39451	11	< 2	0.8	< 0.2	4	0.5	3.7	42.8	82.9	8.93	33.4	5.7	1.16	4.8	0.8	3.9	0.7	2.1
A20901	7	21	< 0.5	< 0.2	1	0.8	3.7	25.8	46.8	5.47	20.7	3.8	0.81	3.5	0.5	2.9	0.6	1.7
A20902	4	2	< 0.5	< 0.2	< 1	0.7	< 0.5	10.9	24.4	2.22	8.7	1.8	0.95	1.5	0.3	1.5	0.3	0.8
A20903	22	< 2	< 0.5	< 0.2	6	0.8	5.4	71.8	140	14.9	55.1	9.3	1.45	5.3	1	6.2	1.2	3.3
A20904	29	< 2	< 0.5	< 0.2	28	0.6	1.1	24.5	53.4	6.22	26.8	5.9	1.67	5	0.9	5.2	1	2.5
A20905	16	< 2	< 0.5	< 0.2	2	0.9	1.1	15	32	3.7	16.1	3.5	1.27	3.1	0.6	3.3	0.6	1.6
A20906	10	< 2	< 0.5	< 0.2	1	0.8	2.2	32.6	70.7	7.14	27.1	4.8	0.89	2.8	0.5	3.2	0.6	1.7
A20907	13	< 2	< 0.5	< 0.2	3	0.8	3.3	45.4	90.6	9.69	36.7	6.7	1.39	4.5	0.8	5	0.9	2.6
A20908	12	< 2	< 0.5	< 0.2	4	1.3	0.6	12.7	27.6	3.32	14	3.3	1.07	3.3	0.6	3.1	0.6	1.5
A20909	25	< 2	< 0.5	< 0.2	2	0.9	4	57.5	115	12.2	45.9	8.3	1.65	5.3	1	6.1	1.1	3.2
A20910	12	< 2	< 0.5	< 0.2	< 1	< 0.5	3.7	39	78.8	8.24	30.7	5.7	1.05	3.6	0.7	3.7	0.7	1.7
A20911	3	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	7.7	15.2	1.55	6	1.1	0.42	0.7	0.1	0.8	0.1	0.4
A20912	23	< 2	< 0.5	< 0.2	1	0.7	4.2	75.4	147	15.7	56.7	9.2	1.6	6.1	0.9	4.5	0.8	2.3
A20913	21	< 2	< 0.5	< 0.2	2	0.9	4.4	57.2	113	11.9	44.7	7.8	1.52	4.9	0.9	5.4	1	2.8
A20914	43	< 2	< 0.5	< 0.2	1	0.6	< 0.5	33	70.1	7.92	34	7.2	2.38	5.7	1	5.5	1	2.5
A20915	13	< 2	< 0.5	< 0.2	1	0.8	1.4	8.7	18.9	2.29	10.4	2.6	0.97	2.8	0.5	2.9	0.5	1.4
A20916	22	< 2	< 0.5	< 0.2	< 1	0.7	< 0.5	17.7	38.4	4.47	19.6	4.4	1.49	3.9	0.7	3.8	0.7	1.8
A20917	14	< 2	< 0.5	< 0.2	22	1.4	0.5	41.4	80	7.74	27.2	4.6	0.52	4.2	0.7	3.9	0.8	2.1
A20918	25	< 2	< 0.5	< 0.2	32	0.6	2.3	59	115	11.7	41.6	6.7	1.08	5.3	0.7	3.7	0.7	1.9
A20919	32	< 2	< 0.5	1.4	70	2.5	< 0.5	29.2	60.7	6.81	28	5.4	1.45	5.1	0.8	4	0.8	2.1
A20920	13	< 2	< 0.5	< 0.2	21	2	2.4	46.9	93.8	9.64	36	6.3	0.89	5.6	0.8	3.8	0.7	2
A20921	15	< 2	< 0.5	< 0.2	4	2	2.6	43.8	90	9.01	33	5.6	1.24	4.9	0.7	3.8	0.7	2.2

Final Report
Activation Laboratories

Element:	Nb	Mo	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.																		
A39452	8	< 2	< 0.5	1.5	3	< 0.5	1	25.6	53.4	5.24	20.1	3.5	0.43	3	0.4	2.3	0.4	1.2
A39453	16	< 2	0.8	0.5	21	1.5	2.2	45.8	96.2	9.76	36.4	6.6	1.01	5.7	0.9	4.6	0.9	2.4

Final Report
Activation Laboratories

Element:	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th	U
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.											
A39326	0.33	2.1	0.31	2.8	1.1	5	0.6	13	< 0.4	14.5	2.3
A39327	0.32	2	0.29	2.9	1.1	2	0.8	16	0.5	14.7	2.1
A39328	0.12	0.8	0.11	1	0.3	1	0.1	12	< 0.4	6.2	2.1
A39329	< 0.05	0.3	0.04	1.6	0.4	5	< 0.1	< 5	1.2	3.9	2
A39330	0.17	1.1	0.16	1.6	0.7	2	0.3	89	0.7	6.4	1.7
A39331	0.12	0.8	0.1	0.6	0.2	1	< 0.1	2350	12.4	2.4	1.4
A39332	0.4	2.7	0.39	3.8	1.6	3	0.6	13	< 0.4	16.8	2.8
A39333	0.38	2.4	0.33	3.1	1.3	2	1.1	5	< 0.4	17.2	2.2
A39334	0.25	1.7	0.24	3.2	1.1	6	0.3	< 5	0.6	11.2	2.3
A39335	0.37	2.4	0.33	4.5	2.3	24	0.2	< 5	1.2	6.9	1.9
A39336	0.41	2.4	0.34	5.5	2.9	25	0.2	9	1.4	4.6	1.8
A39337	0.41	2.5	0.34	6.3	3.5	21	0.3	< 5	0.7	5	1.9
A39338	0.26	1.7	0.24	3.4	1.4	11	0.2	7	1.3	10.8	2.2
A39339	0.2	1.3	0.18	1.8	0.6	3	0.1	10	4	7.4	1.5
A39340	0.22	1.4	0.19	1.4	0.4	1	< 0.1	16	< 0.4	5.5	1.2
A39341	0.23	1.5	0.21	2	0.6	1	< 0.1	< 5	0.7	7.6	1.9
A39342	0.35	2.3	0.31	3.1	1.3	3	0.7	< 5	< 0.4	12.9	1.9
A39343	0.42	2.6	0.37	4.7	2.5	4	0.8	< 5	< 0.4	11.4	3
A39344	0.28	1.8	0.27	4.4	1.2	8	0.3	< 5	0.5	11.3	1.9
A39345	0.43	2.7	0.38	5.7	1.3	8	0.7	< 5	< 0.4	15.3	3.6
A39346	0.36	2.4	0.34	5.8	1.6	6	1.9	8	< 0.4	11.7	3.7
A39347	0.42	2.7	0.38	6.1	1.6	6	1.6	6	< 0.4	11.2	3.7
A39348	0.23	1.5	0.22	5.7	0.7	4	0.8	54	2.8	9.3	2.1
A39349	0.44	3	0.41	4.3	1.2	7	1.1	< 5	< 0.4	15.5	3.7
A39350	0.25	1.6	0.23	5	0.7	2	0.6	34	2.9	10.1	2.4
A39351	0.17	1.1	0.15	2.3	0.4	< 1	0.5	60	< 0.4	4.9	1.4
A39352	0.35	2.3	0.32	2.5	0.8	2	1.1	1280	0.6	9.6	2.9
A39353	0.56	3.6	0.5	3.8	1.3	5	0.7	7	< 0.4	17.4	4.5
A39354	0.17	1.1	0.15	1.7	0.7	6	< 0.1	29	< 0.4	2.9	0.9
A39355	0.23	1.4	0.18	2.3	1	12	< 0.1	69	0.5	3.1	0.9
A39356	0.3	2	0.28	4.7	0.9	1	0.6	2110	< 0.4	10.8	2.6
A39357	0.25	1.7	0.23	3.9	0.9	3	0.8	134	< 0.4	9.8	2.2
A39358	0.21	1.4	0.19	2.5	0.8	3	0.5	22	< 0.4	7.5	2.5
A39359	0.15	1	0.14	2	0.6	2	0.2	16	1.3	6.1	1.9
A39360	0.07	0.4	0.06	1.2	0.4	3	< 0.1	< 5	0.6	3.3	1.5
A39361	0.27	1.8	0.25	3.3	1	4	0.6	151	7.6	11.5	3.2
A39362	0.38	2.4	0.34	4.8	1.1	3	0.9	< 5	0.8	14	3.4
A39363	0.15	0.9	0.12	1.8	0.8	5	< 0.1	12	< 0.4	1.1	0.4
A39364	0.27	1.7	0.23	2.8	0.9	11	0.2	28	1.4	2.7	1
A39365	0.26	1.6	0.23	2.9	1.1	11	0.2	125	8.8	3	1.1
A39366	0.23	1.4	0.21	2.8	1.1	14	< 0.1	42	1.6	2	0.8
A39367	0.25	1.5	0.21	2.9	1.2	16	< 0.1	82	3.1	2.5	0.9
A39368	0.43	2.8	0.39	5.4	1.2	4	1.5	11	0.7	13.7	4
A39369	0.32	2.1	0.31	7.8	1	3	0.9	6	< 0.4	15.5	3.5
A39370	0.16	1.1	0.16	7	0.5	3	0.4	281	11.1	14	2
A39371	0.15	0.9	0.13	3.5	0.3	4	0.6	> 10000	382	6.1	1.3
A39372	0.45	3	0.43	7.6	1.2	6	1	80	3.8	17.8	3.6
A39373	0.32	2.1	0.29	6	0.8	4	0.7	66	10.2	13.7	2.9
A39374	0.34	2.1	0.28	4.5	1.6	6	0.4	20	0.4	5.4	2.5

Element:	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th	U
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.											
A39375	0.4	2.5	0.34	6.6	0.9	5	0.3	1550	56.4	13.4	3.5
A39376	0.16	1	0.13	2.6	0.5	1	< 0.1	219	0.6	4.9	1.5
A39377	0.26	1.6	0.23	5.6	4.7	5	0.4	9	< 0.4	8.6	2.4
A39378	0.28	1.8	0.24	5.1	4.7	6	0.3	10	< 0.4	7.8	2.4
A39379	0.19	1.2	0.15	2.9	1.1	2	0.1	150	0.5	5.1	1.4
A39380	0.31	1.9	0.25	4.1	2.6	3	0.2	14	< 0.4	7.9	2.1
A39381	0.4	2.5	0.35	4.4	1.3	3	0.9	23	0.4	13.7	3.7
A39382	0.06	0.4	0.05	0.3	< 0.1	< 1	< 0.1	264	0.9	0.8	0.2
A39383	0.3	1.9	0.24	3.9	1.8	2	0.4	< 5	< 0.4	2.4	0.8
A39384	0.31	1.9	0.25	4.1	1.9	1	0.2	5	< 0.4	2.4	0.8
A39385	0.27	1.7	0.22	3.4	1.7	< 1	0.2	< 5	< 0.4	2.1	0.6
A39386	0.26	1.6	0.21	3.3	1.5	< 1	< 0.1	< 5	< 0.4	1.9	0.8
A39387	0.27	1.7	0.22	3.5	1.6	1	0.1	6	< 0.4	2	0.8
A39388	0.24	1.4	0.2	3.1	1.3	1	0.3	12	< 0.4	2.1	0.9
A39389	0.22	1.3	0.18	2.8	1.3	1	0.3	9	< 0.4	2.1	0.7
A39390	0.29	1.7	0.24	4	1.8	2	0.7	6	< 0.4	2.7	0.9
A39391	0.29	1.7	0.24	3.7	1.8	2	0.8	9	< 0.4	2.5	0.9
A39392	0.3	1.9	0.27	5.2	0.9	2	1.8	67	0.9	11.5	2.8
A39393	0.33	2	0.29	4.7	0.9	6	1.5	257	4.5	12.4	3.3
A39394	0.28	1.7	0.23	2	0.7	13	0.7	154	3.8	7.9	2.3
A39395	0.12	0.7	0.1	0.6	0.2	6	0.2	324	13.1	2.3	1.8
A39396	0.12	0.7	0.1	0.6	0.2	6	< 0.1	99	1.1	2	1.7
A39397	0.16	1	0.13	1.5	0.4	9	< 0.1	45	12.1	4.7	2
A39398	0.26	1.6	0.24	2.4	0.9	8	0.6	17	< 0.4	9.8	1.9
A39399	0.28	1.7	0.24	2.3	0.9	10	0.6	59	2.3	8.9	2.3
A39400	0.31	1.9	0.26	2.5	1.1	10	0.5	96	5.7	10.4	2
A39401	0.38	2.3	0.31	2.8	1.2	9	0.9	105	9.7	12.5	2.6
A39402	0.36	2.2	0.32	3.5	1.3	9	1.5	71	1	13	2.1
A39403	0.4	2.5	0.35	4.6	2.5	9	1.1	124	0.9	12.9	2.3
A39404	0.34	2.1	0.3	3.5	1.7	11	1.2	779	3.9	14.4	2.6
A39405	0.34	2.1	0.3	3.5	1.4	8	1.1	577	1.4	12.2	1.9
A39406	0.44	2.7	0.37	4.9	2	7	1.7	328	1.3	18.2	3.6
A39407	0.43	2.6	0.36	5.2	2.1	7	2	416	1.9	17.1	3.3
A39408	0.45	2.8	0.39	5.4	2.1	8	2	175	4.2	17.3	3.7
A39409	0.4	2.4	0.33	5.1	1.4	5	1.1	109	11.7	11.6	2.7
A39410	0.43	2.6	0.38	5.2	2	7	1.6	145	2.7	17.4	3.7
A39411	0.16	1	0.15	2.4	0.8	4	0.6	1130	1.6	8.2	1.6
A39412	0.41	2.6	0.36	5.4	1.9	8	1.4	1150	1.8	18.7	5
A39413	0.5	3.1	0.43	4.9	1.7	4	1.8	143	1.4	17.6	3.6
A39414	0.37	2.4	0.34	5	2.6	3	1.5	148	< 0.4	14.5	3.6
A39415	0.25	1.5	0.21	2.2	0.9	9	0.6	1270	10.7	9.2	1.6
A39416	0.36	2.2	0.29	3.1	1.3	9	0.4	58	1.6	10.7	4.1
A39417	0.37	2.3	0.32	4.4	1.6	9	0.8	756	7	13.4	3
A39418	0.35	2.2	0.32	4.5	1.8	11	0.9	1060	5.4	16.3	2.6
A39419	0.35	2.2	0.3	4	1.6	7	0.7	1240	14.5	13.5	2.2
A39420	0.41	2.5	0.35	4.5	1.9	9	0.3	342	3.8	13.5	2.9
A39421	0.24	1.4	0.19	2.4	0.7	16	0.2	256	3.3	8.3	2.9
A39422	0.51	2.9	0.38	3.4	1	16	0.4	135	5.4	10.3	3.2
A39423	0.27	1.7	0.25	2.2	0.8	9	0.4	265	7.8	8.7	2.7

Final Report
Activation Laboratories

Element:	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th	U
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.											
A39424	0.19	1.2	0.17	2	0.7	13	< 0.1	555	37.9	7.2	2.8
A39425	0.47	2.8	0.41	4.5	2	5	0.3	8420	105	13.7	2
A39426	0.57	3.5	0.49	4.7	1.8	6	0.4	526	2.5	15.9	3.5
A39427	0.56	3.4	0.48	5.1	2.2	6	0.5	776	2.7	15.2	3.6
A39428	0.31	1.8	0.23	3.7	2	31	< 0.1	161	1.3	3.4	0.9
A39429	0.27	1.6	0.22	3.7	1.9	26	< 0.1	53	0.5	3.1	0.7
A39430	0.32	1.8	0.25	4.1	2.1	57	< 0.1	507	1.7	3	0.8
A39431	0.29	1.7	0.24	4	2.1	47	< 0.1	76	< 0.4	3.5	1
A39432	0.36	2.2	0.3	4	1.3	21	0.3	101	4.3	10.2	2.2
A39433	0.24	1.4	0.19	4.1	1	16	0.2	2690	7.9	5.1	1.1
A39434	0.25	1.5	0.21	3.5	1.5	19	0.1	85	2	4.3	1.3
A39435	0.29	1.7	0.24	4.9	0.9	7	0.5	35	0.8	11	2.3
A39436	0.29	1.8	0.26	5	1.1	6	0.7	10	< 0.4	11.3	2.2
A39437	0.31	2	0.28	6.3	3.3	8	0.4	997	59.8	11.4	2.9
A39438	0.33	2.1	0.3	4.2	1.8	7	0.6	271	7.8	14.5	3.2
A39439	0.31	1.9	0.26	3.8	1	7	0.4	200	8.5	13	2.6
A39440	0.48	2.8	0.4	3.4	1.5	5	0.9	28	1.8	15.1	2.6
A39441	0.39	2.3	0.32	1.5	0.6	4	0.3	262	4	10.2	2.7
A39442	0.3	1.9	0.27	1.8	0.7	4	0.4	910	14	10.3	2
A39443	0.36	2.2	0.33	2.7	0.8	6	0.7	59	1.1	13.4	2.3
A39444	0.31	1.9	0.28	4.9	1.4	25	0.5	228	1.1	10.6	2.3
A39445	0.33	2.1	0.29	5.2	1	5	0.9	41	2	13.4	2.6
A39446	0.23	1.5	0.22	6.6	0.6	3	0.5	18	< 0.4	12.6	2.5
A39447	0.23	1.5	0.22	6.1	0.7	3	0.4	15	< 0.4	12.8	2.4
A39448	0.43	2.7	0.4	8.9	1.3	5	0.8	225	2.4	20	4.7
A39449	0.17	1.1	0.16	2.4	0.4	1	0.6	3650	19.7	7.7	1.8
A39450	0.21	1.3	0.18	5.7	0.5	2	0.2	27	2	10.6	1.8
A39451	0.32	2	0.29	3.8	0.8	2	0.7	846	3.4	15.4	3.7
A20901	0.26	1.7	0.24	1.9	0.7	1	0.6	< 5	< 0.4	7.5	6.9
A20902	0.12	0.7	0.1	1.4	0.2	< 1	0.2	33	< 0.4	2.5	1.6
A20903	0.5	3.1	0.45	4	1.6	3	1.6	6	< 0.4	19.6	3.2
A20904	0.35	2.1	0.29	4.3	1.9	11	0.3	7	1.1	2.9	0.8
A20905	0.22	1.3	0.18	2.4	1	10	0.3	6	< 0.4	1.9	0.7
A20906	0.27	1.7	0.25	5.8	0.9	1	0.8	12	< 0.4	13.3	2.5
A20907	0.41	2.5	0.36	4.7	1	3	0.8	6	< 0.4	13.3	3.2
A20908	0.21	1.3	0.18	2.3	0.9	3	0.1	< 5	< 0.4	2.2	0.8
A20909	0.5	3.1	0.45	5.3	1.8	4	0.8	7	< 0.4	16	3.1
A20910	0.25	1.6	0.21	3.8	1	< 1	1	< 5	< 0.4	14.8	2.4
A20911	< 0.05	0.3	< 0.04	0.5	0.2	< 1	< 0.1	< 5	< 0.4	1.4	1
A20912	0.34	2.3	0.33	3.5	1.8	2	0.9	7	0.4	20.1	2.6
A20913	0.45	2.9	0.4	3.5	1.5	1	1	< 5	< 0.4	16	2.3
A20914	0.35	2.2	0.3	5.4	2.9	1	< 0.1	< 5	< 0.4	4.5	1.1
A20915	0.2	1.2	0.16	2	0.8	2	0.3	7	< 0.4	1.3	0.4
A20916	0.25	1.6	0.21	3.2	1.4	< 1	0.2	6	< 0.4	2.2	0.9
A20917	0.31	1.9	0.26	2.3	1	9	0.2	< 5	< 0.4	10.1	2.9
A20918	0.29	1.9	0.28	2.8	2	6	0.6	19	< 0.4	14.4	2.5
A20919	0.28	1.7	0.24	4.3	2.1	14	< 0.1	38	< 0.4	3.9	1.2
A20920	0.31	2	0.29	5.2	1	6	0.7	10	0.4	14.7	2.3
A20921	0.34	2.3	0.34	6.6	1.3	5	0.9	6	< 0.4	16.1	4

Final Report
Activation Laboratories

Element:	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th	U
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit:	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Reference Method:	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Client I.D.											
A39452	0.18	1.1	0.16	1.8	0.6	15	< 0.1	159	< 0.4	6.3	2.3
A39453	0.37	2.2	0.32	3.1	1.1	13	0.4	173	6	12.1	2.4

Appendix V

DH	Sample #	Depth (m)
FC-05-14	A20901	51.4
FC-05-14	A20902	110.8
FC-05-14	A20903	166.0
FC-05-14	A20904	223.6
FC-05-14	A20905	226.4
FC-05-15	A20906	137.0
FC-05-15	A20907	197.1
FC-05-15	A20908	213.3
FC-05-15	A20909	356.1
FC-05-16	A20910	145.4
FC-05-16	A20911	160.3
FC-05-16	A20912	226.5
FC-05-16	A20913	292.3
FC-05-16	A20914	305.7
FC-05-16	A20915	322.9
FC-05-17	A20916	9.3
FC-05-17	A20917	86.5
FC-05-17	A20918	143.9
FC-05-17	A20919	203.4
FC-05-17	A20920	227.9
FC-05-17	A20921	242.3

Lab: Actlabs

DH	Sample #	From (m)	To (m)	Interval	Note
FC-05-14	A39326	111.23	111.54	0.31	
FC-05-14	A39327	111.23	111.54	0.31	field duplicate
FC-05-14	A39328	148.06	148.69	0.63	
FC-05-14	A39329	148.69	148.89	0.20	
FC-05-14	A39330	148.89	149.89	1.00	
FC-05-14	A39331	149.89	150.08	0.19	
FC-05-14	A39332	150.08	151.08	1.00	
FC-05-14	A39333	166.50	167.50	1.00	
FC-05-14	A39334	167.50	167.70	0.20	
FC-05-14	A39335	167.70	167.90	0.20	
FC-05-14	A39336	167.90	168.14	0.24	
FC-05-14	A39337	168.14	168.97	0.83	
FC-05-14	A39338	168.97	169.27	0.30	
FC-05-14	A39339	169.27	169.47	0.20	
FC-05-14	A39340	169.47	170.47	1.00	lab duplicate
FC-05-14	A39341	170.47	171.49	1.02	
FC-05-14	A39342	172.49	172.87	0.38	
FC-05-14	A39343	194.67	194.90	0.23	
FC-05-14	A39344	202.53	202.71	0.18	
FC-05-14	A39345	202.71	203.35	0.64	
FC-05-14	A39346	248.51	248.66	0.15	
FC-05-14	A39347	248.51	248.66	0.15	field duplicate
FC-05-14	A39348	249.27	249.42	0.15	
FC-05-14	A39349	249.97	250.16	0.19	
FC-05-14	A39350	250.16	250.31	0.15	
FC-05-14	A39351	268.10	268.25	0.15	
FC-05-14	A39352	305.45	305.60	0.15	
FC-05-14	A39353	305.60	305.82	0.22	
FC-05-14	A39354	337.50	337.78	0.28	
FC-05-14	A39355	337.78	337.96	0.18	
FC-05-15	A39356	158.05	158.20	0.15	
FC-05-15	A39357	158.20	158.47	0.27	
FC-05-15	A39358	195.86	196.20	0.34	
FC-05-15	A39359	196.20	196.49	0.29	lab duplicate
FC-05-15	A39360	196.49	196.64	0.15	
FC-05-15	A39361	196.64	196.79	0.15	
FC-05-15	A39362	196.79	197.48	0.69	
FC-05-15	A39363	207.15	207.30	0.15	
FC-05-15	A39364	220.03	220.39	0.36	
FC-05-15	A39365	220.39	220.54	0.15	
FC-05-15	A39366	237.87	238.02	0.15	
FC-05-15	A39367	237.87	238.02	0.15	field duplicate
FC-05-15	A39368	256.41	256.62	0.21	
FC-05-15	A39369	256.62	256.88	0.26	
FC-05-16	A39370	240.80	240.95	0.15	
FC-05-16	A39371	242.80	242.99	0.19	
FC-05-16	A39372	242.99	243.85	0.86	
FC-05-16	A39373	243.85	244.00	0.15	

FC-05-16	A39374	244.00	245.00	1.00	
FC-05-16	A39375	250.18	250.33	0.15	
FC-05-16	A39376	312.73	312.88	0.15	
FC-05-16	A39377	312.88	313.72	0.84	
FC-05-16	A39378	313.72	314.55	0.83	
FC-05-16	A39379	314.55	314.70	0.15	
FC-05-16	A39380	314.70	315.20	0.50	lab duplicate
FC-05-16	A39381	321.45	321.60	0.15	
FC-05-16	A39382	333.76	334.16	0.40	
FC-05-17	A39383	6.53	7.07	0.54	
FC-05-17	A39384	7.07	7.22	0.15	
FC-05-17	A39385	7.22	8.22	1.00	
FC-05-17	A39386	8.22	9.30	1.08	
FC-05-17	A39387	8.22	9.30	1.08	field duplicate
FC-05-17	A39388	9.30	10.40	1.10	
FC-05-17	A39389	10.40	11.40	1.00	
FC-05-17	A39390	11.40	11.55	0.15	
FC-05-17	A39391	11.55	11.75	0.20	
FC-05-17	A39392	81.12	82.62	1.50	
FC-05-17	A39393	82.62	83.43	0.81	
FC-05-17	A39394	83.43	84.02	0.59	
FC-05-17	A39395	84.02	84.19	0.17	
FC-05-17	A39396	84.19	84.54	0.35	
FC-05-17	A39397	84.54	84.82	0.28	
FC-05-17	A39398	84.82	85.37	0.55	
FC-05-17	A39399	85.37	86.37	1.00	
FC-05-17	A39400	86.37	87.37	1.00	lab duplicate
FC-05-17	A39401	87.37	88.37	1.00	
FC-05-17	A39402	88.37	89.37	1.00	
FC-05-17	A39403	89.37	90.37	1.00	
FC-05-17	A39404	90.37	91.37	1.00	
FC-05-17	A39405	91.37	92.37	1.00	
FC-05-17	A39406	92.37	93.44	1.07	
FC-05-17	A39407	92.37	93.44	1.07	field duplicate
FC-05-17	A39408	93.44	94.51	1.07	
FC-05-17	A39409	94.51	94.66	0.15	
FC-05-17	A39410	94.66	95.42	0.76	
FC-05-17	A39411	95.42	95.57	0.15	
FC-05-17	A39412	95.57	96.17	0.60	
FC-05-17	A39413	96.17	97.05	0.88	
FC-05-17	A39414	97.05	98.05	1.00	
FC-05-17	A39415	147.57	147.87	0.30	
FC-05-17	A39416	147.87	149.02	1.15	
FC-05-17	A39417	149.02	150.02	1.00	
FC-05-17	A39418	150.02	151.02	1.00	
FC-05-17	A39419	153.23	154.23	1.00	
FC-05-17	A39420	154.23	155.29	1.06	lab duplicate
FC-05-17	A39421	155.29	156.12	0.83	
FC-05-17	A39422	156.12	157.62	1.50	
FC-05-17	A39423	157.62	158.20	0.58	
FC-05-17	A39424	158.20	159.46	1.26	

FC-05-17	A39425	173.35	173.82	0.47	
FC-05-17	A39426	173.82	174.26	0.44	
FC-05-17	A39427	173.82	174.26	0.44	field duplicate
FC-05-17	A39428	198.47	199.37	0.90	
FC-05-17	A39429	199.37	199.94	0.57	
FC-05-17	A39430	202.15	202.30	0.15	
FC-05-17	A39431	202.30	203.30	1.00	
FC-05-17	A39432	205.97	206.17	0.20	
FC-05-17	A39433	207.88	208.12	0.24	
FC-05-17	A39434	208.12	209.45	1.33	
FC-05-17	A39435	222.65	222.82	0.17	
FC-05-17	A39436	228.71	229.07	0.36	
FC-05-17	A39437	229.07	229.22	0.15	
FC-05-17	A39438	229.22	229.93	0.71	
FC-05-17	A39439	229.93	230.14	0.21	
FC-05-17	A39440	230.14	231.47	1.33	lab duplicate
FC-05-17	A39441	231.47	231.62	0.15	
FC-05-17	A39442	231.62	231.95	0.33	
FC-05-17	A39443	231.95	233.15	1.20	
FC-05-17	A39444	233.15	234.35	1.20	
FC-05-17	A39445	234.35	235.55	1.20	
FC-05-17	A39446	242.70	242.85	0.15	
FC-05-17	A39447	242.70	242.85	0.15	field duplicate
FC-05-17	A39448	243.95	244.10	0.15	
FC-05-17	A39449	244.60	244.75	0.15	
FC-05-17	A39450	266.26	266.56	0.30	
FC-05-17	A39451	347.35	347.50	0.15	
FC-05-17	A39452	183.77	184.20	0.43	
FC-05-17	A39453	184.20	184.66	0.46	

Geological - Drilling

Work was completed on the following claims:

- **Big Gulp** (Old tenure 382064, new MTO # 514343)
- **Jess 1** (Old tenure 347964, new MTO # 504425)
- **Jess 2** (Old tenure 382065, new MTO # 514373)
- **Frank** (Old tenure 369406, new MTO # 514364)

Expenditures for October 1, 2005 - December 15, 2005

Louis Doyle - Planning, supervising and report preparation		
4.5 days @ $350.00/day wages	$	1,575.00
3 days @ $100.00/day room & board	$	300.00
3 days @ $125.00/day vehicle & gas	$	375.00
Aaron Doyle - Camp manager, core teching, sampling, drill swamper & expiditor etc....		
28 days @ $250.00/day wages	$	7,000.00
28 days @ $100.00/day room & board	$	2,800.00
28 days @ $125.00/day vehicle & gas	$	3,500.00
Chris Stevens - Camp manager, core teching, sampling, drill swamper & expiditor etc....		
28 days @ $300.00/day wages	$	8,400.00
28 days @ $100.00/day room & board	$	2,800.00
28 days @ $125.00/day vehicle & gas	$	3,500.00
Jason Kolcun - Core teching, sampling, drill swamper & expiditor etc....		
16 days @ $150.00/day wages	$	2,400.00
16 days @ $100.00/day room & board	$	1,600.00
2 days @ $125.00/day vehicle & gas	$	250.00
Justin Laberge - Core logging		
28 days @ $300.00/day wages	$	8,400.00
28 days @ $100.00/day room & board	$	2,800.00
Anderson Geological - Geologist		
Invoiced 2005-11	$	8,400.00
6 days @ $100.00/day room & board	$	600.00
2 days @ $125.00/day vehicle & gas	$	250.00
Wayne Jackaman - Map drafting		
Invoiced 2005-121	$	160.00
Invoiced 2005-118	$	315.00
Pothier Enterprises Ltd.		
Invoiced 22884	$	2,086.50

Geological - Drilling con't

Hardrock Diamond Drilling		
Invoiced	Adv	$ 5,350.00
Invoiced	29	$ 66,027.17
Invoiced	30	$ 32,827.00
Invoiced	31	$ 35,124.89
112 days @ $100.00/day room & board		$ 11,200.00
Rudy Geddert		
Invoiced	854907	$ 3,720.00
Quesnel Hyab		
Invoiced		$ 720.80
S & F Construction		
Invoiced		$ 1,386.55
John Reichert		
Invoiced		$ 6,500.00
Accurate Mining Services		
Invoiced		$ 1,534.40
Quad rental		
28 days @ $100.00/day		$ 2,800.00
Satelite phone		
28 days @ $25.00/day		$ 700.00
General Expenses		
Repairs & maintenance		$ 232.92
Supplies		$ 4,283.23
Gas & diesel		$ 20,259.03
Total Geological Expenditures		**$ 250,177.49**