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1987 FINAL REPORT

on the

FAITH LAKE PROJECT

NTS 92F/11

by

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GEOLOGICAL BRANCH ASSESSMENT REPORT

16,866

This report presents results of the 1987 exploration program conducted on the Rim claims at Faith Lake in southwestern British Columbia.

The project area consists of 12 contiguous two post claims located on central Vancouver Island, about 30km west of Courtnay. The claim block is within the environmentally sensitive Strathcona Recreational Area, part of Strathcona Provincial Park. Only the precious metal rights are owned by Falconbridge Ltd., base metal rights are held by the Provincal Government.

The objective of the program was to explore the Rim claims for structurally controlled, sulphide hosted epithermal gold mineralization within the Karmutsen Formation. Mineralization of this type is known at Mt. Washington, 13km to the east.

Fieldwork was carried out between September 9, and September 29, 1987. It consisted of geological mapping and sampling, prospecting, and soil sampling. A geophysical survey (APPENDIX A) was also completed over the Rim 1, 2, 5, and 6 claims.

The claims are primarily underlain by basaltic flows and acuagene tuffs of the Upper Triassic Karmutsen Formation. During Tertiary time these were intruded by a quartz diorite stock and numerous dykes and sills. Subsequently the rocks were faulted and underwent several generations of quartz veining.

Significant gold mineralization is hosted by the quartz veins. However, though these commonly contain over 30g/ton gold they are generally less than 5cm in width and nowhere occur in sufficient density to be of economic importance. Mineralization of economic interest occurs at the Schev zone, an approximately 20 x 20m area of brecciated and altered volcanic rock. This zone contains on surface .1 to 1 g/ton gold and .3 to 3 g/ton silver. Reported drill intersections for the zone (McDougall, 1964) are as high as 28g/ton over 1.5m.

The soil geochemical survey revealed 1 area of anomalous gold and arsenic values.

- 1) The claims have potential for the discovery of economic gold mineralization.
- 2) The mineralization at Faith Lake consists of Teriary, structurally controlled sulphides of three types: veins, fracture coatings, and a mineralized tectonic breccia.
- 3) Only sulpide assemblages containing arsenopyrite contain significant amounts of gold. These occur in the veins and the mineralized tectonic breccia.
- 4) The gossans at Faith Lake are not a contact metamorphic halo due to the quartz diorite stock. They appear to occur as envelopes about felsite sills and dykes.
- 5) The mineralized tectonic breccia (Schev zone), is the only area known that may have potential for economic mineralization. It consists of mineralized, strongly altered, and tectonically brecciated mafic volcanic rocks.

Further exploration of the property is recommended. This should include the following:

- 1) A legal perimeter survey of the claim group.
- 2) A MAG/VLF geophysical survey over claims, Pim 1, 3, and 5 along north-south oriented lines.
- 3) Fill-in soil sampling around the Schev zone and an extention of the soil sampling program in other areas. Areas that should be soil sampled are:
 - i) the 1400N, 1300N, and 1200N lines between 1100F and 900F
 - ii) the 1100N, 1000N, and 900N lines between 1300E and 900E
 - iii) the 1500N line from 900E to 1100E and from there along the northern boundary of the property to 1400E
- 4) The soil anomaly at 1400N and 1230E should be hand trenched.
- 5) The area between the northern boundary of the propery and the 1300N line and between 1000E and 1400E should be mapped at a scale of 1:500 on a grid basis.
- 6) A series of short (<75m) holes should be drilled on the Schev Zone. This program should consist of not less than 6 holes. A small drill, such as a JKS-300, that requires a minimum of platform construction is recommended. In order to maximize core recovery "NQ" core should be drilled.
- 7) The large IP anomaly (see APPENDIX A) on the northwestern corner of the property should be probed with at least one drill hole.

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INTRODUCTION

Location Access and Terrain

The Rim Group of claims, which encompasses Faith Lake, is located within the Nanaimo Mining District in the Forbidden Plateau area, NTS 92F/ll at about 49 39' and 125 24' Figure 1. The claims lie within the boundary of Strathcona Park, and are designated as a recreational area in which mineral exploration is permitted. Area supply centers are Courtnay and Campbell River, respectively 30 kilometres east and 42 kilometres northeast of the property.

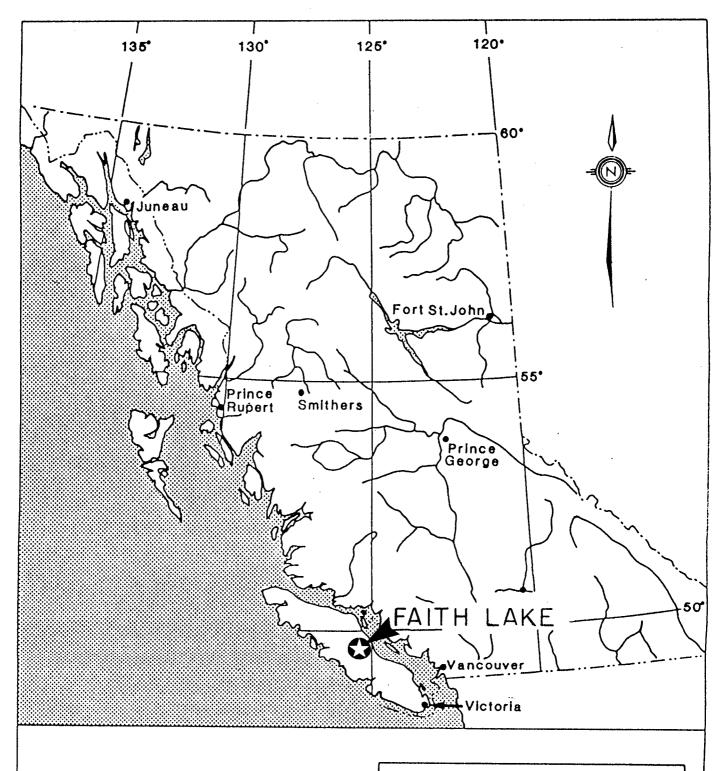
Access is by helicopter and the most practical site for mobilization and demobilization is a logging road just west of the Mount Washington ski resort, 13 km east of the claims.

Most of the property is located in a cirque where the elevation varies from 1200 to 1900 Metres above mean sea level. Camp elevation at Faith Lake is 1235 Metres. The southern side of the cirque consists of cliffs, benches and talus slopes with minor forested areas. The northern side of the cirque is covered by a forest of alders or mature conifers up to tree line at about 1500 Metres. Except for creekbeds and small cliffs, outcrop exposure below the tree line is minimal. Overall the terrain is steep and rugged but most areas are nevertheless accessible by foot.

History

Mineralization (mostly veins) was first found in the Faith Lake area by Falconbridge Nickel in 1961. In order to follow up on this discovery, staking, prospecting, SP geophysical surveying, reconnaissance mapping and drilling were carried out. This work was done in 1962, 63, 64 and 1969. The more significant results of this work are outlined below. For additional information regarding previous work the reader is referred to McDougall 1962, 63 and 69 as well as Salt 1962 and 63.

Prospecting of the Faith Lake area led to the discovery of numerous, widely spaced, narrow (< 20 cm) gold bearing quartz veins, and one poorly exposed sulphide bearing auriferous breccia zone named the Schev showing. The SP surveys that followed located a number of anomalies which often coincided with known mineralization. Drilling done in 1963 aimed at testing these anomalies did not produce many encouraging results. On the other hand, 3 pack sack holes drilled on the Schev showing in 1964, intersected some very interesting gold values. These are shown in TABLE I.



0 100 200 300 400 500

kilometres

Falconbridge Limited

LOCATION MAP

FAITH LAKE PROJECT PROJECT NUMBER 012 NTS: 92 F/II

Figure: I

Hole #	Au	Ag	Interval
1	7.5 g	3.3 g	0.76 M
2	27.4 g	43.5 g	1.52 M
3	7.8 g	18.7 g	1.52 M

TABLE I: Gold and silver values for 1964 drill holes at the Schev showing.

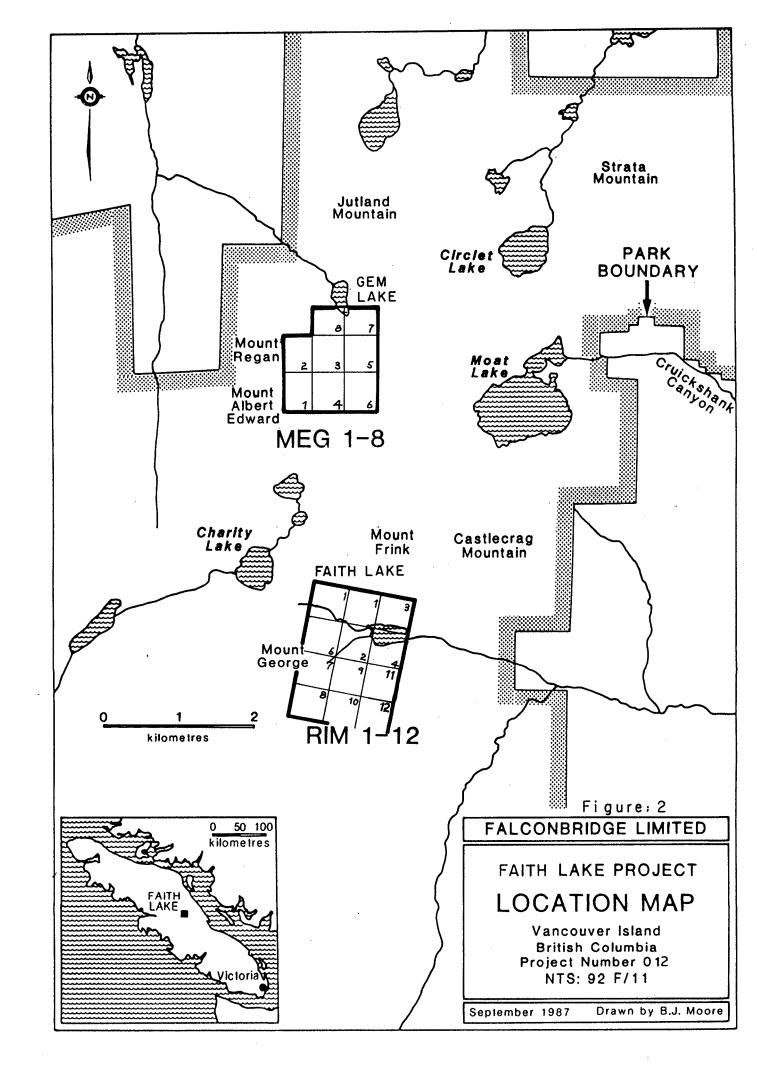
Following these encouraging results, the Faith 1, 2 and 3 claims were staked to the north of the Schev showing which is located 150 M south of the northern edge of the Rim claims (Figure 2). Unfortunately these claims were allowed to lapse in 1972. Further drilling on the Schev was recommended but not carried out. The only field work done on this property since 1964 was an SP geophysical survey of the Faith claims in 1969. The inclusion of the Rim claims within the Strathcona Park boundaries in 1974 eventally prevented further work on the property until 1987.

Summary Of Work In 1987

The objective of the 1987 exploration program was to map the claim group, to examine known showings and locate new mineralization. Over the duration of the program (Sep 9 - Sep 29) the following tasks were performed: the property was mapped and prospected at a scale of 1:2000, 146 geochemical samples were collected from mineralization throughout the claim group, the Schev showing, located on Rim 1, was mapped at a scale of 1:100, 27 channel samples were collected from the Schev showing, on the Rim 1, 2, 5, and 6 claims, 5.6km of grid was cut and chained, and Mag-VLF and IP geophysical surveys were completed over the grid, 47 soil samples were collected on the grid lines surrounding the Schev showing.

Property Status

Figure 2 is a map of the claim group, and TABLE II lists the claims and their annversary dates.



CLAIM STATUS

Claim	Units	Record No.	Loca	ation Date	Record Date	Expiry Date
Rim #1 Rim #2	1 1	15849 15850	June June		June 13, 1962 June 13, 1962	
Rim #3 Rim #4		15851 15852	June June	•	June 13, 1962 June 13, 1962	· ·
Rim #5 Rim #6		15853 15854		7, 1962 7, 1962	June 13, 1962 June 13, 1962	
Rim #7 Rim #8	1	15999 16000	Sep.	24, 1962 24, 1962	Oct. 5, 1962 Oct. 5, 1962	June 13, 1998
Rim #9	1	16001 16002	Sep.	24, 1962 24, 1962	Oct. 5, 1962 Oct. 5, 1962	June 13, 1998
Rim #1 Rim #1	1 1	16002 16003 16004		4, 1962	Oct. 5, 1062 Oct. 5, 1962	June 13, 1998

TABLE II: Claim status and and anniverary dates

Special Procedures Associated With Working In A Park

As of a result of Faith Lake being located within the boundaries of Strathcona park, strict environmental regulations have to be adhered to when working on the property. These regulations are outlined in the work permit attached in APPENDIX I. In addition to following these regulations a special effort was made to fully cooperate with the park authorities. This included clean-up of previous exploration camps and updates on the progress of work and the number of personel in camp. Water samples were taken from the lake and streams adjacent to camp in order to assess background levels of various elements such as lead and arsenic. The samples were analyzed by Bondar Clegg using geochemical methods. The results of these analyses are listed in APPENDIX F.

REGIONAL GEOLOGY

Vancouver Island, except for it's southernmost tip, is part of the allochthonous Insular Belt. It consists of a variable assortment of volcanic, sedimentary, metamorphic and plutonic rocks that form the following sequence; a pre-Devonian volcanic arc terrane, Devonian to Permian carbonate, clastic and minor volcanic rocks, late Triassic oceanic basalts, Jurassic intrusions and lesser volcanic and clastic

rocks, a late Cretaceous clastic basin and several Tertiary units, most notably a series of hypabyssal intrusions (Muller, 1981).

The Faith Lake area is underlain by the Upper Triassic basalts of the Karmutsen Formation and a small hypabyssal intrusion. The basalts are presumed to be directly related to the initial rifting of the Insular Belt away from a continental margin far south of its present latitude (Muller, 1981). The Karmutsen basalts comprise up to 6000m of K-poor "ocean floor" tholeiite. Carlisle (1974) has divided the formation into 3 members; about 2600m of pillow lava overlain by about 800m of pillow breccia and aquagene tuff capped by about 2900m of massive flows with minor interbedded pillow lava, breccia and sedimentary layers. The formation as a whole is thought to represent a predominantly subaqueous emergent volcanic sequence. The age of the Karmutsen Formation is bracketed by the underlying Landinian Buttle Lake Formation and by Karnian fossils in the upper member of the Karmutsen Formation.

After the Triassic rifting the Insular Belt has undergone a series of compressive deformational events. In the Jurassic there is evidence for shortening during the collision of the Insular Belt with North America. The most clearly expressed structural style is due to northeasterly directed underthrusting of the Pacific Rim and Olympic Terranes in Cretaceous to Tertiary time. This resulted in northeast inclined blocks separated by steep northwest trending reverse faults and northeast trending sinistral strike-slip faults (Muller, 1981). More recent writers have increasingly recognized shallow easterly directed structures (thrust faults and tensional detachement zones) to be of regional importance, particularly in the localization of gold bearing mineralization, eq. Mt. Washington (McDougall, 1987).

The Mt. Washington gold prospect operated by Better Resourses Ltd. is situated within the Karmutsen Formation and Cretaceous sediments of the Comox Formation. It consists of a shallow mineralized fault structure in close spatial association with a Tertiary intrusive complex (McDougall, 1987)

PROPERTY GEOLOGY

General

The property is primarily underlain by unmetamorphosed basalt of the Upper Triassic Karmutsen Formation, which consists of flows, pillow lava, pillow breccia, aquagene tuff and some thin sedimentary layers. During Tertiary time this unit was intruded by a hornblende quartz diorite stock, then cut by a felsite sill, faulted and underwent several generations of quartz veining. Most of the gold bearing mineralization consists of aspy, cpy, +/- po in quartz veins. The exception is a sericitised tectonic breccia with a similar sulphide assemblage. Property geology is shown on Figure 6.

Lithology and Stratigraphy

General

Figure 3 shows the rock units that occur on the property, their stratigraphic relationships and a proposed correlation with the regional stratigraphy. Each of these units as well as the stratigraphy is discussed below.

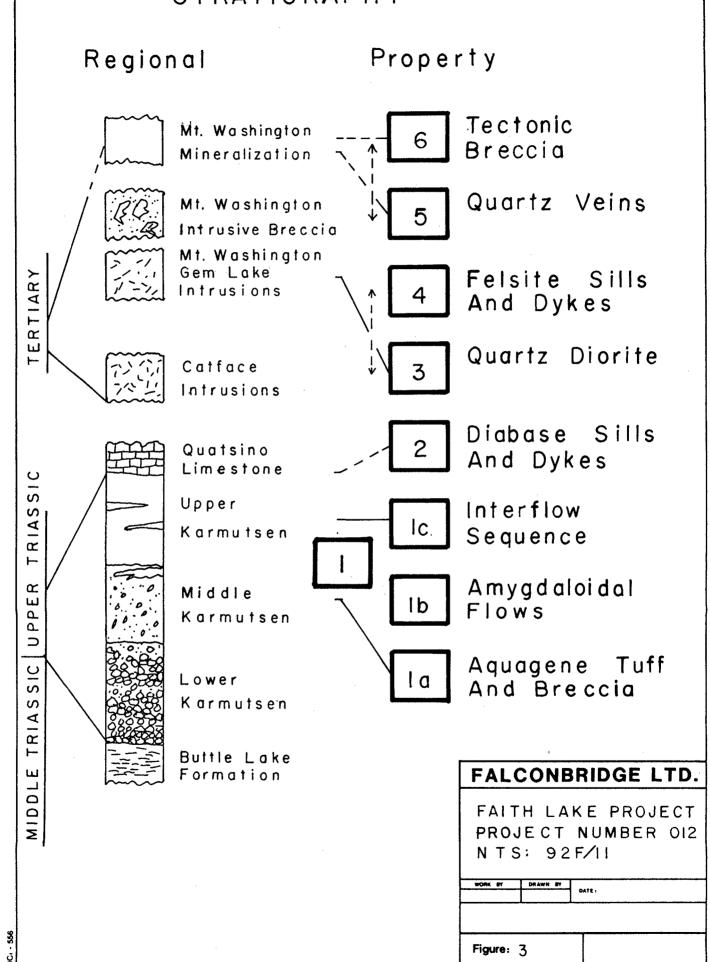
Aquagene Tuff and Breccia (unit la)

This unit is the most widespread on the property. It underlies the cirque bottom and extends a considerable distance up both the northern and southern sides of the circue. It is a homogeneous and massive pile of volcanic fragmental rocks of tholeiitic composition. Several whole rock analyses of this unit are contained in APPENDIX F. Bedding is generally not discernible. This unit typically consists of 20-60% volcanic clasts in a fine tuffaceous matrix. The clasts are always a fine grained basaltic feldspar porphyry. They are usually angular, but rare examples have one rounded side with an aphanitic selvage (possiblly part of a pillow?). The edges of the clasts are often discoloured and altered. Clasts are locally very variable in size but average 5-15cm. The matrix consists of ash to lapilli size angular vitric shards and small feldspar porphyry fragments as well as lesser amounts of crystalline material, predominantly feldspar. Signs of compaction during deposition are occasionally present. Pores initially present in the matrix have been filled by quartz and epidote. This unit is interpreted as being the oldest on the property and is correlated with the middle Karmutsen as defined by Carlisle(1972) Figure 3.

Amygdaloidal Flows (unit 1b)

This unit is best exposed on the slopes south of Faith Lake. It lies conformably upon the Aquagene Tuff and Breccia unit. At one location well preserved load structures can be observed at the contact between the two units. Attempts to trace the unit around the head of the cirque and across to the northern side of the lake were not successful despite excellent exposure and no apparent strucural breaks. The flows appear to pinch out. Flows similar to these were observed north of the lake, but stratigraphic relationships where not determined, and the geology is complicated by diabase sills and dykes of

STRATIGRAPHY



similar lithology.

The unit consists of 1-5m thick amygdaloidal flows that strike south westerly and dip gently to the north. Whole rock analyses indicate a tholeiitic composition (APPENDIX E). The amygdales are composed of epidote, chlorite or quartz, and make up 5-25% of the volume of the flows. Flows with a larger percentage of amygdales contain bigger more elongate amygdales, and are also more likely to show flow features. Feldspar phenocrysts are common and comprise up to 10% of the rock. Flow contacts tend to be sharp without appreciable autobrecciation. This unit is correlated with the lowermost portion of the upper member of the Karmutsen Figure 3.

Interflow Sequence (unit 1c)

This unit is exposed only at higher elevations on the southern side of the cirque. One complete sequence was observed. It consisted of a thin discontinuous layer of limestone in sharp contact with the top of a flow followed by pillow lava, isolated pillow breccia and ultimately by aquagene tuff and breccia indistinguishable from unit la. This sequence was overlain by an interval of flows, which were themselves overlain by a second similar sequence the top of which was not observed. These sequences appear to be discontinuous lensoidal bodies within the flows of unit lb. They are interpreted to be analagous to similar sequences documented within the upper Karmutsen by Carlisie (1974).

Diabase Sills and Dykes (unit 2)

This unit consists of two lithologies; equigranular diabase sills and very fine grained feldspar glomeroporphyritic sills and dykes, lumped together as one map unit.

The feldspar porphyry occurs as a mappable unit only in the cirque bottom west of the lake. It consists of a dark tough very fine grained rock with 5% feldspar as fine laths arranged in rosettes .2-.5cm in size. At this location its relationship to the Karmutsen is not clear, but elsewhere dykes of identical lithology cut unit la. No regional correlative is known for this unit.

The diabase sills occur north of the lake close to the northern boundry of the property. They appear to be true diabases and have an average grain size of lmm. They are thought to have intruded between the flows of unit lb. A dyke of similar lithology cuts flows of unit lb in this area. Such diabase sills are common throughout the Karmutsen (P. Wilton pers. com., 1987).

Quartz Diorite (unit 3)

Beginning at the western end of the lake and extending about 500m to the west is an elongate quartz diorite body. It consists of several mineralogically similar but texturally variable phases. The outcrops just west of the lake expose a quartz diorite hornblende porphyry with a predominantly granitoid textured medium grained groundmass (< 5% interstitial granophyric material). The hornblende is subhedral and 1-5mm in size. The feldspar is oscillatorally zoned plagioclase, An 16-66 (Wanless et al, 1968) several chemical analyses of this unit are contained in APPENDIX E. This lithology is intruded by and grades into various hornblende feldspar porphyries that have a groundmass with 5-30% interstitial granophyric material. The rock is generally fresh, though in areas of high fracture density alteration of hornblende to biotite and ultimately to pyrrhotite is common.

The quartz diorite taken as a unit was observed to intrude units la, lb and 2. The outcops in Faith Creek 150m west of the lake are reported to be 39+/-7MY old (Wanless et al, 1968). This overlaps the reported age for the Mt. Washington stock, 35+/-6MY (Wanless et al, 1967), 14km to the east and is similar to the ages of several Tertiary stocks throughout the Insular Belt, eg. the Catface Intrusions 48+/-12MY (Wanless et al, 1967).

Felsite Dykes and Sills (unit 4)

This lithology outcrops as a mappable unit along the north side of the cirque at about 1450m elevation. It consists of a white, very fine grained felsic planar body 5-10m thick that dips at 15-25 into the hill and appears to be a sill. It contains rare feldspar and quartz phenocrysts up to 1mm in size as well as about 5% equant to acicular chlorite and pyrrhotite blebs that appear to be alteration products of hornblende. APPENDIX E contains a chemical analysis of this unit. The relationship between these dykes and the quartz diorite was not observed. But because of their apparently close temporal association with the arsenopyrite bearing mineralizing event, veins of which cut the quartz diorite in brittle shears, they are interpreted as being younger than the quartz diorite.

This lithology was also observed at Gem Lake (Beekmann and Fournier 1987).

Quartz Veins (unit 5)

These occur over the entire property though their occurrence is broadly centered on the cirque bottom. The largest veins observed were approximately 20cm wide, however 90% of the veins are <5cm wide.

Most veins are are clearly dilational and contain from 3 to >90% sulphides. The sulphides are typically arsenopyrite chalcopyrite and pyrrhotite. Veins were observed to cut units la, lb, 2 and 3. These veins are very similar to mineralized veins at Mt. Washington. Ouartz veins and their mineralogy will be discussed in detail in a later section.

Tectonic Breccia (unit 6)

This unit outcrops over a 20m x 20m area on the northern side of the cirque. It consists of hornfelsed Karmutsen (most likley unit la) that has undergone tectonic brecciation, strong sericitic alteration, weak silicic alteration and has been mineralized with arsenopyrite and chalcopyrite. The upper part of the zone is cross cut by a felsic dyke (unit 4) which has been altered, sheared, and mineralized but apparently not brecciated. This unit is very similar to mineralized breccias on Mt. Washington and will be discussed extensively in a later section.

Structure

The dominant structures at Faith Lake are steeply dipping, north trending shears and faults. Bedding is gently warped and a plot of poles to bedding indicates an average orientation of about 230/15N (APPENDIX G).

The shears and faults are young features at least in part synch-ronous with the quartz veining and mineralization. Structures often contain multiple stages of veining and mineralization. Poorly exposed crosscutting field relationships suggest that faulting and shearing postdate the intrusion of the felsite dykes.

When plotted on an equal area stereo net, the poles to shears and faults form 5 distinct clusters (APPENDIX G). Based on this distribution the faults and shears can be divided into 5 groups. The respective orientation of each group is shown below.

Group	Orientation
1	035/70E
2	175/70W
3	282/18N
4	098 [′] /22S
5	220/18N

TABLE III: dominant shear orientations

Groups 1 and 2 form a parallel set of conjugate shears and faults. They are the most extensive and best developed structures on the property. In most cases stratigraphic control is not sufficient to demonstrate offset of units, and faults are inferred from the occurrance of sheared rock in gullies.

Groups 3 and 4 are interpreted as a second set of conjugate shears. Although their topographic expression is not as large as that of groups 1 and 2 this could be due to their subhorizontal orientation and not because they are less well developed. No offset was documented across any shears of this group.

Shears of group 5 are bedding parallel and occur at flow contacts. Most are zones of intense fracturing and give the impression that little movement has taken place. Such bedding parallel shearing is consistent with the open flexural slip folding observed at several locations.

When the poles to quartz veins are plotted on a stereo net they plot in clusters with the same orientations as the shears (APPENDIX G).

Mineralization

General

Mineralization observed at the Faith Lake property can be grouped into three types:

- 1): Mineralization associated with quartz veins or quartz veins in shear zones (includes the Galena vein and the Discovery vein)
- 2): Pyrrhotite, chalcopyrite mineralization along fracture planes.
- 3): Mineralized breccia (Schev Showing).

A discussion of these three types follows.

Mineralization Associated With Quartz Veins Or Quartz Veins And Shear Zones.

The most widespread form of mineralization observed at Faith Lake is associated with quartz veins. Over the duration of the program, all the mineralized veins found were sampled, regardless of width. Out of a total of 35 assay values greater than 0.1 oz/t obtained during the program 31 were from veins. All these veins are less than 20 cm wide, with the majority being less 5 cm in width. Strike length varies, but exposures of 10 to 30 metres along a cliff face are not uncommon. A stereoplot of the poles to veins assaying \geq 0.1 oz/t Au. clearly shows that most gold bearing veins strike approximately 55 and

dip steeply north or south (APPENDIX G). The sulphides present in these veins are arsenopyrite, chalcopyrite, and lesser pyrrhotite. The relative abundance of the sulphides within a vein is highly variable. The arsenopyrite content of a vein may vary from a trace to 95%, the chalcopyrite content of a vein never exceeds 15% and the pyrrhotite content of most veins is <5%. All well mineralized veins are clearly dilational in origin, and usually display well developed comb textures. Sulphides may occur as selvages or be distributed throughout the veins.

This style of mineralization can be quite spectacular, as at the Galena and Discovery veins. The Discovery vein is a 15cm wide vein emplaced along a brittle shear in the quartz diorite. Greater than 90% of it consists of variable amounts of chalcopyrite, pyrrhotite, and arsenopyrite. This vein is similar to many of the veins on the property both in mineralization and orientation. The Galena vein is a 30cm thick and 20m long pod shaped vein emplaced along a shear between two basalt flows. It may contain up to 50% of sphalerite, chalcopyrite, arsenopyrite, and galena. This vein is the only vein observed that contained galena or sphalerite.

The most significant gold bearing mineralization associated with shear zones occurs when a shear zone hosts a mineralized dilational quartz vein.

Even though the gold content of veins is very encouraging, those that have been located to date are too narrow and too widespread to be of economic interest. Geochemical results are listed in APPENDIX R and are plotted on Figure 6.

Pyrrhotite Chalcopyrite Mineralization Along Fracture Planes

North and south of Faith Lake are two irregular zones where the Karmutsen volcanics have a distinctive rusty weathering pattern. The cause of this conspicuous rusty weathering is a thin coating of pyrrhotite and chalcopyrite on fracture planes.

It was originally believed that the rusty weathering zone represented the contact metamorphic aureole associated with the quartz diorite. However the observation of non gossanous volcanic rocks located directly at the intrusive contact with the quartz diorite suggests that the rusty zones are not due to mineralizing fluids from the quartz diorite intrusion.

The gossan zone north of Faith Lake is centered on an area of higher fracture density associated with the 10m thick felsite sill that outcrops there. Because of this striking association the felsite sill is thought to be the source of the mineralizing fluids responsible for the gossan in this area. The gossan zone south of the lake defies such a simple explanation. Although some talus blocks of the felsite were observed in this area, none was found in outcrop. Nor is the zone close to the quartz diorite intrusion. However like the zone

to the north, this zone is within an area of greater fracture density. Whether the zone is due to fluids from a distant source localized along an unrecognized structure or whether it is due to an intrusive body that does not outcrop, is not known.

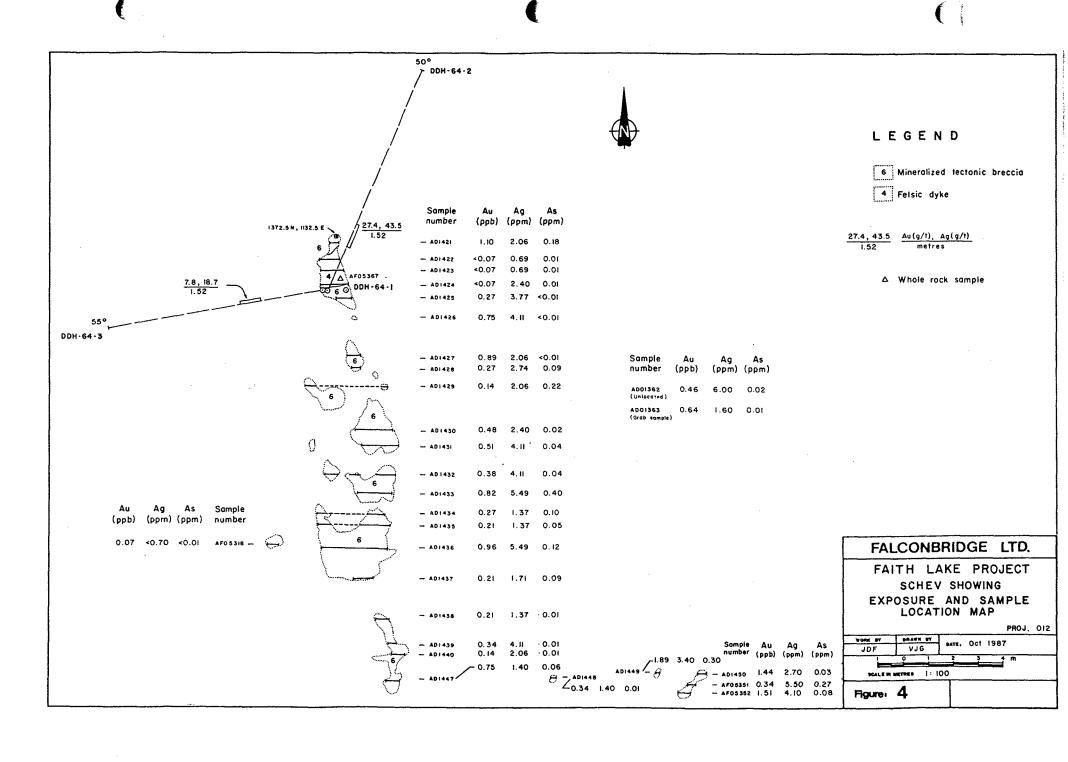
The average gold and silver values obtained from samples of this type of mineralization are 46 PPB and 1.39 PPM respectively, the best values were 280 PPB Au and 8.1 PPM Ag. Geochemical results are listed in APPENDIX B and are plotted on Figure 6.

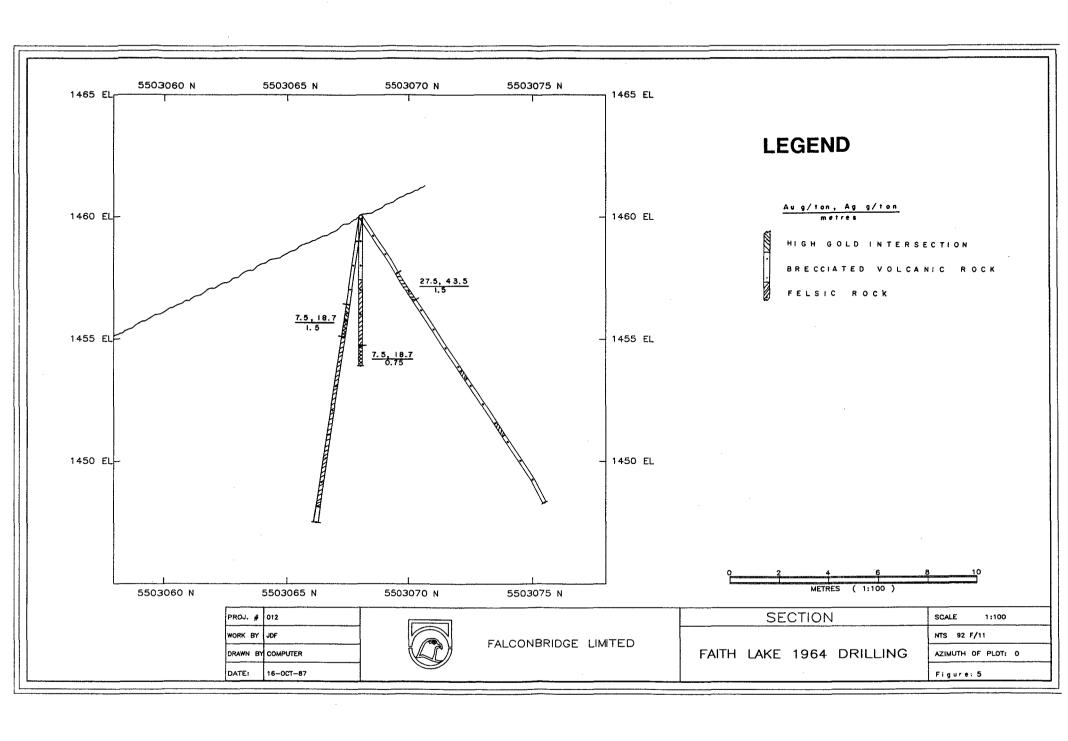
Mineralized Breccia (Schev Showing)

The Schev Showing is the only example of mineralized sericitized breccia in the Faith Lake area. This previously known showing was located and mapped at a scale of 1:100. Outcrop is poor and consists of one discontinuous 20 x lm exposure. Bedrock was reached in several shallow pits up to 10m east of the main showing. The rock and mineralization exposed by these pits is the same as at the main showing. Since no contacts with unmineralized wallrock have been located, the zone is still open in all directions. 27 parallel eastwest oriented channel samples were collected. Where outcrop was contiquous channels were spaced at lm intervals. Channels averaged lm in length. All samples where assayed for gold, silver and arsenic. Figure 4 is a map of the Schev zone. It shows limit of outcrop, sample locations, assay values, and projections of the 1964 drill holes. Figure 5 is a vertical north-south projection of the 1964 drill holes.

The host rock for the mineralization is a highly altered monolithic breccia with clasts of mafic volcanic rock up to 15cm in size. The characteristic sericitic alteration is pervasive but varies in intensity from moderate to strong. Due to poor exposure, the factors controlling this variation were not established. Silicic, and clay alteration are also present but subordinate to the sericitic alteration. The intensity of the mineralization seems to be directly proportional to the intensity of the alteration. Arsenopyrite, chalcopyrite and pyrrhotite are the dominant sulphides. The percentage of chalcopyrite is never greater than 3 percent. Arsenopyrite can form up to 5 percent of the rock but a conservative estimate of the average arsenopyrite content would be 1 to 2 percent. Disseminated in the sericitized groundmass of the breccia is a sulphide that was not identified but is belived to be nonmagnetic form of pyrrhotite.

The top of the showing is crosscut by a small (1 m wide) white felsic dyke (unit 4) striking roughly east-west. About 3 to 4 percent of the dyke consist of small sulphidic grey dots less than 2 mm. They may be the alteration product of earlier hornblende crystals.





GEOCHEMISTRY

Soil Geochemistry

A small (47 sample) soil sampling program was completed over a the portion of the grid that is close to the Schev showing. All samples were analized for gold and arsenic. Geochemical results are shown on Figure 7 and listed in APPENDIX C. Samples were collected at 20m intrevals on the 1400, 1300, and 1200N grid lines between 1100 and 1450E. An attempt was made to collect samples from the "R" soil horizon, but soil development was generally poor. A scatter diagram of arsenic plotted against gold shows a poor relationship between the two (APPENDIX H). Arsenic values appear to vary independently of gold values, however higher gold values are always in conjunction with elevated arsenic values. Such a relationship is consistent with the relative mobilities of arsenic and gold. Because of the small number of samples collected it is difficult to determine background levels and hence which values are anomalous. By inspection one area is clearly anomalous in gold and arsenic and three others contain ele-Soil sample depth ranges from 12-20 cm vated gold values.

Mineralization Geochemistry

Au, Ag, As, Pt, and Pd geochemical results are listed in APPENDIX B. Samples are grouped by mineralization type. In addition all Au, Ag, and As results are plotted on the geology map, Figure 6. APPENDIX D contains the results of the 5, 25 element analysis that were performed on a variety of mineralization types. These analyses were done in order to determine if there were trace element geochemical signatures that characterized the different styles of mineralization. Amonalies of interest are:

- i) the Galena Vein contains 1100PPM antimony, there is no antimony associated with the Discovery Vein"
- ii) the massive pyrrhotite style of mineralization is anomalous in cobalt (400PPM)

Scatter diagrams of gold verses arsenic, silver verses arsenic and gold verses silver show a moderate correlation between both gold and silver and arsenic, and a strong correlation between gold and silver (APPENDIX H).

DISCUSSION

Schev Zone

This zone hosts the most interesting mineralization on the property. Because of overburden cover field work in 1987 did not determine the size or the orientation of this zone. If gold intersections obtained in the 1964 drill holes are assumed to be intersections of a planar feature, this plane strikes approximatly 80 and dips 45 to the south. Such a structure would be paralled to, and may be an extension of a south dipping shear zone observed near the northern edge of the propery in the gully west of the Schev zone (1500N, 1100E). If the Schev zone is part of a major south dipping shear, and this structure is continuous westward, it would form a down slope dipping sheet underlying the northwest corner of the grid. If this structure was everywhere mineralized to the same extent as at the Schev showing, it would perhaps explain the IP anomaly on the northwestern part of the grid (see APPENDIX A).

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STATEMENT OF EXPENDITURES

Labour	
J. Beekmann 24 days @ \$117/day J.D. Fournier 24 days @ \$112/day B. Anderson 27 days @ \$95/day	\$2,808.00 \$2,688.00 \$2,565.00 \$8,061.00
Room and Board	
75 days @ \$30.00/man/day	\$2,250.00
Travel Okanagan Helicopters 13.4 hr @ \$500.00/hr plus fuel Truck and Ferry charges	\$7,700.00 \$ 316.19 \$8,016.19
Linecutting W. Chase & Associates 5.6 lkm @ \$400/lkm	\$2,240.00
Geophysical Surveys Delta Geoscience 5.6 lkm of VLF, IP, MAG @ \$1043.07/lkm	\$5,841.17
Geochemistry Bondar-Clegg, X-Ray Labs 46 soils Au, Ag, As @ \$13.10/s 146 rock Au, Ag, As @ \$17.00/s 11 whole rock+As, Bi, Sb @ \$25.50/s 28 rock assay Au, Ag, As @ \$24.75/s	\$602.60 \$2,482.00 \$ 280.50 \$ 693.00 \$4,058.10
Orthophoto Triathlon Mapping Corp.	\$2,855.25
Total Expenditure	\$33,321.71

STATEMENT OF QUALIFICATIONS

I, Jean-Denis Fournier, an employee of Falconbridge Limited, with offices at 701-1281 West Georgia St. Vancouver B.C., do hereby declare that:

- I am a geologist, graduate of the University of Alberta, Edmonton, Alberta, in 1987 with a B.Sc. degree in Geology
- 2. I have practiced my profession as exploration geologist continuously since graduation, in Canada.
- 3. I am a registered Geologist In Training with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I am a associate member of the G.A.C.
- 5. I carried out the work described in the report.

Dated at Vancouver, B.C., this 20th day of December, 1987.

Jean-Denis Fournier B.Sc.

APPENDIX A

GEOPHYSICAL REPORT IP, MAG/VLF

GEOPHYSICAL SURVEYS

FAITH LAKE PROJECT
RIM 1 TO 12 CLAIMS

NANAIMO MINING DISTRICT BRITISH COLUMBIA

NTS 92F11 LAT 49°39'N, LONG 125°24'W

Owner: FALCONBRIDGE LIMITED

Operator: FALCONBRIDGE LIMITED

DECEMBER 9, 1987.

G.A. HENDRICKSON, P.GEOPH.

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Discussion of the Data	• •	• •	• •	Pages 8 & 9.
Conclusion and Recommenda	tions	• •	• •	Page 10.
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APPENDIX:

Chargeability Contour Plan (Fig. #2).
Resistivity Contour Plan (Fig. #3).
Magnetic Contour Plan (Fig. #4).
Filtered V.L.F. Contour Plan (Fig. #5).
Filtered V.L.F. Profiles (Fig. #6).
Chargeability Profiles (Fig. #7).
Resistivity Profiles (Fig. #8).
Magnetic Profiles (Fig. #9).
Gradiometer Profiles (Fig. #10).
Fraser & Hjelt Filtered V.L.F. Sections.

INTRODUCTION

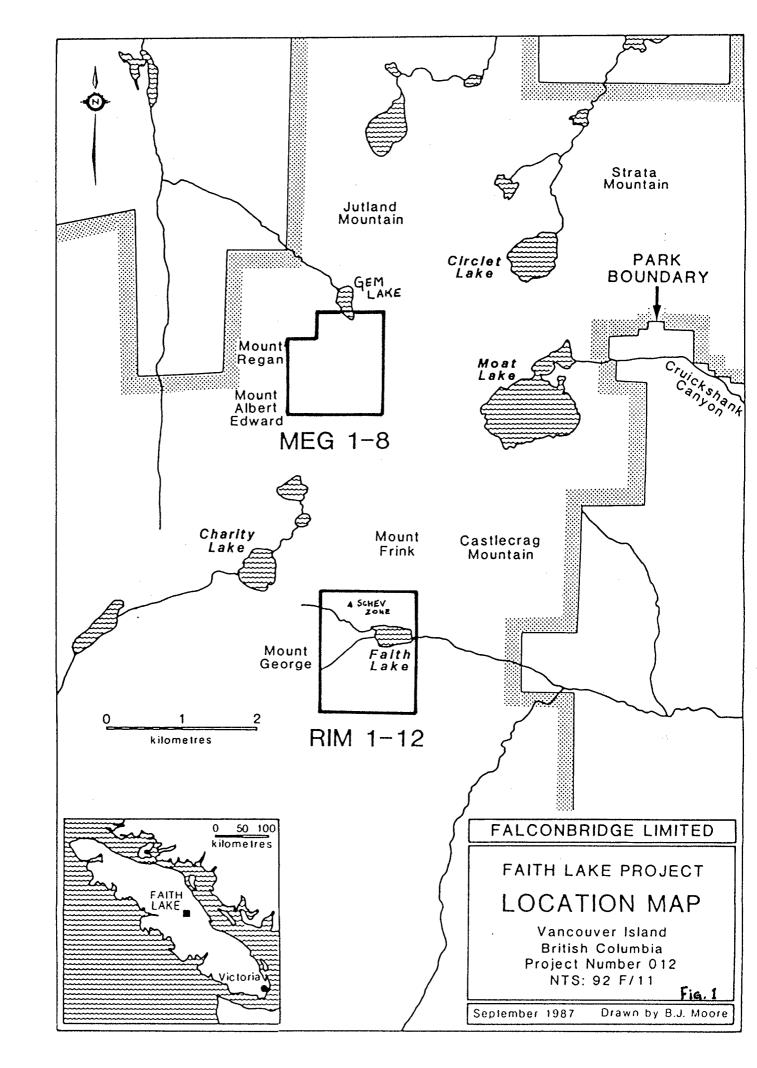
This report reviews the geophysical work carried out by Delta Geoscience Ltd. on the Faith Lake Project during the period September 25 - 29, 1987. Falconbridge Limited owns and operates the mineral claims involved in the Faith Lake project. These claims are the RIM 1 to 12 and are located in the Nanaimo Mining District (Lat. 49 39'N, Long. 125 24'W).

The project was initiated to explore mineral showings within the Karmutsen volcanic rocks of north central Vancouver Island, British Columbia, NTS.92F11. The nearest settlement is the town of Campbell River. In the survey area, the Karmutsen rocks are intruded by quartz diorite rocks of Tertiary age. The exploration target is gold within sulphide rich shear zones and breccia.

Falconbridge Limited contracted the geophysical program to Delta Geoscience Ltd. G. Hendrickson, the author of this report and Senior Geophysicist for Delta Geoscience Ltd., planned the geophysical work in consultation with Nils von Fersen, the Senior Project Geologist for Falconbridge Limited.

Approximately 5.5 kilometres each of VLF/MAG/GRAD/I.P/RESISTIVITY surveys were completed. Surveys have been designed to have good lateral resolution, good signal to noise response and to allow for mobility in the field. Mobility in the field is stressed, since the topography of the survey area is very rugged.

Access to the survey area was by helicopter from Campbell River. Accommodation for the Delta Geoscience Ltd. crew was provided by Falconbridge in their camp at Faith Lake.



PERSONNEL - Delta Geoscience Ltd.

Grant Hendrickson - Senior Geophysicist/Supervisor Scott Cosman - Geophysicist/Field Crew Chief

Robert Wilson-Smith - Junior Geophysicist
Dean Truant - Junior Geophysicist

Two helpers were supplied by Falconbridge Limited.

EQUIPMENT

- 1 Scintrex I.P.R.10 Induced Polarization Receiver
- 1 Scintrex 250 watt Induced Polarization Transmitter
- 3 King Portable V.H.F. Radios
- 1 Scintrex I.G.S.II System, configured as a VLF/MAG/ GRADIOMETER
- 1 Scintrex MP-3 Base Station Magnetometer
- 1 Toshiba T3100 Computer
- 1 Hewlett Packard Quietjet Printer

DATA PRESENTATION

Stacked profile plans of the filtered V.L.F., Magnetics, Gradiometer, Resistivity and Chargeability have been prepared at a scale of 1:5000.

The Chargeability, Resistivity, Magnetics and V.L.F. data is also presented in a contoured plan format, at a scale of 1:5000.

Profiles aid in interpretation, whereas contoured plans give a good spatial view of the data. Profile data is always presented increasing to the right from a base level (value at the line position).

Fig. #1 - Location Map.

Fig. #2 - Chargeability Contour Plan.

Fig. #3 - Resistivity Contour Plan.

Fig. #4 - Magnetic Contour Plan.

Fig. #5 - Filtered V.L.F. Contour Plan.

Fig. #6 - Filtered V.L.F. Profiles.

Fig. #7 - Chargeability Profiles.

Fig. #8 - Resistivity Profiles.

Fig. #9 - Magnetic Profiles.

Fig. #10- Gradiometer Profiles.

Separate profile sections of the V.L.F. data are also given with the Fraser and Hjelt filtered values posted below the profiles. The scale of these sections is 1:2500. This data is appended to the back of this report.

SURVEY PROCEDURE

Falconbridge Limited ensured that the line cutting contractor had cut and accurately chained all the grid lines prior to the arrival of the Delta Geoscience Ltd. crew. Station interval was set at 20 metres horizontal, thus the chaining crews had to correct for the slope. Lines were spaced 100 metres apart.

Surveys as mentioned earlier were designed to have good lateral resolution, good signal to noise response and good mobility in the field, to help solve four main problems:

- a) spatial position and strength of sulphide zones.
- b) spatial position of structures.
- c) to give a good indication of the lithology present under the overburden.
- d) cost effective surveying in rough terrain.

It was expected that the Induced Polarization would respond primarily to sulphide zones and only weakly to lithology. The Resistivity survey was expected to respond primarily to the lithology and only moderately to sulphide zones. The V.L.F. survey was expected to respond equally well to both sulphides and/or structures. The Magnetics were expected to respond primarily to the lithology and any near surface pyrrhotite/magnetite mineralization.

Induced Polarization and Resistivity:

The Schlumberger electrode configuration was chosen for this survey. Current electrode separation, AB, was set at 220 metres. Potential electrode separation, MN, was set at 20 metres. This array gives excellent horizontal resolution, with the prime depth of investigation at the 30 to 50 metre depth range. The array gives better signal to noise response, when compared to other arrays for the same depth of investigation - an important consideration when using a battery-powered 250 watt portable transmitter. Some general information on dip is also obtained by using the Schlumberger array.

V.L.F:

The magnetic and V.L.F. surveys were performed simultaneously. V.L.F. measurements were taken every 20 metres along grid lines. The Seattle V.L.F. station, NLK, transmitting at 24.8 khz was chosen as the transmitter. This station is approximately 25° off strike with the expected strike of the geology, thus still provided good electromagnetic coupling and excellent primary field strength for any conformable conductors.

The Hawaii V.L.F. station, 23.4 khz, was used on Tie Line 10+00E, to test for structures trending more east/west. The orientation of the Hawaii station with the general strike of the geology was expected to be poor. Note that for optimum electromagnetic coupling, the conductor should strike toward the transmitter.

Three components of the V.L.F. electromagnetic field were measured: the horizontal field strength, vertical inphase and vertical quadrature. All of the vertical inphase V.L.F. data was subsequently filtered using the Fraser and Hjelt filters. This filtering helps to understand the spatial position of conductors, both along strike and downdip. These filtering techniques are referenced at the back of this report.

An important parameter of V.L.F. surveying should be noted - the skin depth. Skin depth is a useful parameter for describing the depth of penetration of V.L.F. signals. A good conductor buried at one skin depth will produce a signal at the surface with an amplitude equal to approximately 10% of the incident field. Detection of this weak signal would be difficult in the presence of any noise. Skin depth decreases with an increase in frequency and decrease of the resistivity of the bedrock and/or overburden. For the average apparent resistivity encountered in these surveys (approximately 3000 ohm-m), the skin depth is approximately 300 metres.

Magnetics:

As mentioned earlier, measurements of the total magnetic field strength were taken every 10 metres along grid lines, simultaneously with the V.L.F. survey. Accuracy of the portable magnetometer readings is \$\pm\$1 nanotesla. An aluminium staff was used to keep the sensors approximately 2.5 and 3.0 metres above the ground.

Magnetic field measurements were corrected for any diurnal variations, through the use of the MP-3 base station magnetometer located in the Falconbridge Camp at Faith Lake. A base station standard of 56,100 nanotesla was assumed for this project.

Gradiometer Survey:

The magnetic gradiometer survey is a useful adjunct to magnetic surveying. The gradiometer acts like a filter, in that it enhances local near surface anomalies at the expense of long wavelength regional anomalies. The rate of fall-off of the magnetic field with height is much higher for local sources than for regional sources and therefore a higher gradient (rate of change) can be recorded over local sources using sensors 0.5 metres vertically apart.

Erratic concentrations of near surface magnetite (both within the bedrock and overburden) has created noise for the gradiometer and thus lessens its effectiveness.

A useful feature of the gradiometer data is that it allows a simple calculation to be made for the depth of an anomaly (assuming a dipole field):

d = -3 (total field anomaly)(in nanotesla)
Gradient Anomaly (in nanotesla/metre)

The gradiometer can also help to accurately distinguish the contact area between rocks of different magnetic susceptibility.

DISCUSSION OF THE DATA

This report has been written with only a cursory knowledge of the grid geology. A perusal of the geophysical data does suggest some possibilities about the geology. This discussion is quite general, in order to give an overall view of the data. Individual anomalies in areas of interest could be interpreted further, if necessary.

Resistivity data indicates overburden thickness is minimal (less than 5 metres). Large areas of blocky talus cover prevented the whole grid from being surveyed with Induced Polarization and Resistivity. Topography problems also limited the size of the grid.

A general magnetic low (indicating rocks of low magnetic susceptibility) correlates with the strong chargeability high and moderate resistivities in the northwest corner of the This correlation suggests the source of the chargeability response is pyrite mineralization within tuffs of the Karmutsen volcanics. A perusal of the contoured chargeability, resistivity and magnetics clearly indicate a NE-SW strike to the rocks underlaying the northwest corner of the grid. Numerous small disturbances in the magnetic profiles are likely due to near surface magnetite mineralization. Strong gradiometer responses were noticed at 7+90E on lines 15+00N and 14+00N and at 11+50E on lines 10+00N and 11+00N. The narrow, yet intense gradiometer anomaly at approximately 8+00E on line 14+00N correlates well with the strongest chargeability responses. This correlation indicates that Pyrrhotite is present, however the bulk of the I.P. response is likely due to pyrite.

Resistivity lows at the ends of lines 12+00N and 13+00N and at 11+00E on L14+00N are probably due to concentrations of sulphide mineralization. These resistivity lows indicate sulphide mineralization is continuous with good electrical conduction between individual sulphide grains.

High resistivities to the east and central part of the grid correlate with low chargeability and high, although erratic, magnetic background. The very high resistivities (20,000 ohm-m) indicate fresh (not fractured) intrusive rock, thus the correlation suggests the area is underlain by the Tertiary Quartz Diorite intrusions.

The strong chargeability anomalies (>100ms) in the northwest corner of the grid is the most important feature of the data. The correlation of high chargeability with V.L.F. anomalies and resistivity lows is an encouraging guide for sulphide rich shear or breccia zones.

The V.L.F. data from the Tie Line 10+00E is important. The strong V.L.F. response at 13+00N likely represents the contact area between the Karmutsen and the younger intrusives. The strong V.L.F. response at 10+40N is perhaps a major fault zone within the intrusive, perhaps also related to the contact. The disruption of the V.L.F. conductors (Seattle station) along a line trending northeast supports the interpretation of a contact. Clearly, additional tie lines are required. The difficulty in correlating V.L.F. anomalies line to line is partly due to crossing structures influencing the distribution of anomalies.

Dips appear steep but quite variable in direction. There seems to be a trend however, toward east dips on the north side of the grid and west dips on the south side.

A study of the Hjelt filtered sections at the back of this report will provide further insight into the dip of the V.L.F. conductors.

CONCLUSION AND RECOMMENDATIONS

The limited amount of grid surveying has revealed some interesting apparent sulphide trends that are only partially outlined. An expansion of the grid to the northwest is warranted, provided topography permits and the land is available.

The direct correlation of V.L.F. anomalies, resistivity lows and chargeability highs is an important exploration guide for sulphide rich shear and/or breccia zones.

The ground geophysical surveys have also provided additional information related to the geological setting of the grid. This data should be used to improve and extend the geological mapping into talus or overburden covered areas by comparison with the responses over outcropping areas.

Grant A. Hendrickson, P.Geoph.

I Handricks

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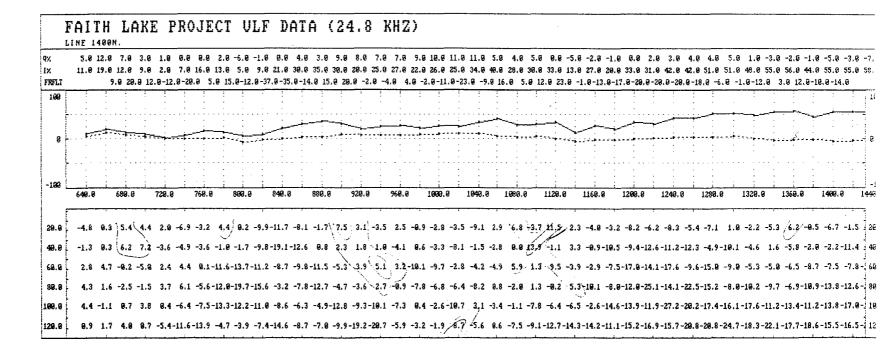
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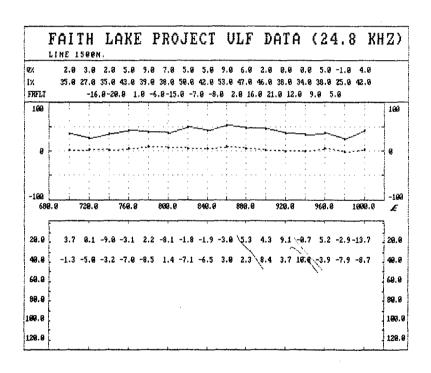
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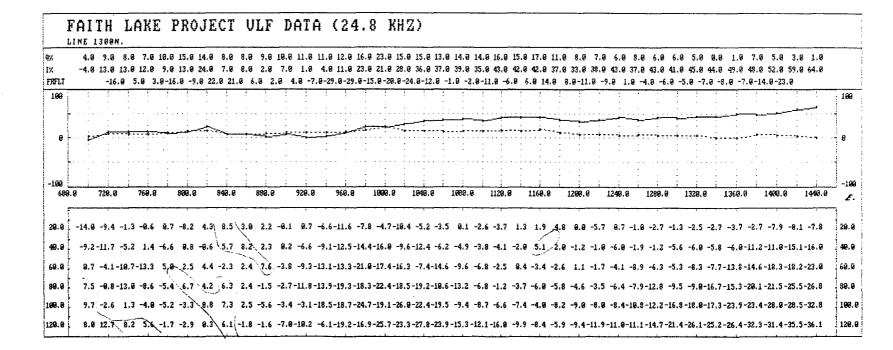
Grant A. Hendrickson

- B.Science, U.B.C. 1971, Geophysics option.
- For the past 17 years, I have been actively involved in mineral exploration projects throughout Canada and the United States.
- I am a registered Professional Geophysicist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I am an active member of the S.E.G., E.A.E.G., and B.C.G.S.

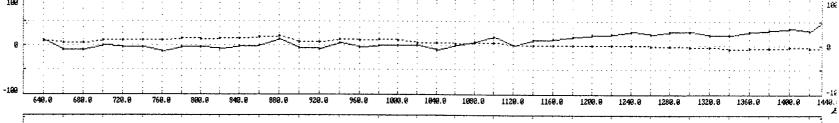
Grant A. Hendrickson, P.Geoph.







LINE 1200N.



 FAITH LAKE PROJECT ULF DATA (24.8 KHZ)

LINE 1100N.

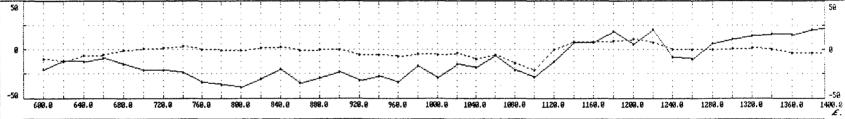
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1120.0 1160.0 1200.0 1240.0 1200.0 1320.0 1320.0 1400.0 1440.0 £

20.0 8-20.5-10.5-10.6 1.5 0.3 5.7 17.7 -9.3-10.1 -5.3 -5.3 -1.9 -3.4 -5.8 -5.1 -3.4 -2.1 20.0 1-16.5-25.3-11.2 -8.0 5.9 12.0 -2.9 3.5-13.5-15.5 -5.5 -3.8 -0.4-10.1 -9.3 -7.3 -5.9 49.0 69.0 7-16.7-19.1-28.9 -5.7 8.0 -1.1 2.6 -9.3 -2.7-16.9-18.2-12.5 -9.1 -8.8 -8.3-13.2-12.0 60.0 80.0 2-15.1-17.3-10.5-13.9-14.4 -5.5 -7.5 9.0 -8.8 -3.1-22.7-27.6-16.2-13.6-11.4-10.2-14.3 80.0 100.0 5-22.8 -0.0 -1.5-19.2-24.6-19.0 -9.0 -9.8 -3.5-14.4 -7.9-25.1-26.2-20.7-19.0-17.7-14.2 100.0 3-15.8 -7.4-17.8-13.2-22.2-29.7-19.0-11.4-14.5-19.3-18.9 -8.7-27.8-29.8-22.4-29.3-20.5 120.0

LINE 1180N.



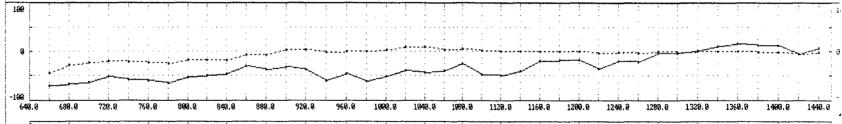
28.8 -7.8 -4.1 -1.2 1.2 7.5 4.6 3.4 8.3 6.6 2.9 -1.6 -18.9 1.5 4.7 -7.2 3.4 8.3 8.9 -6.2 -3.8 -2.4 -6.7 -3.5 -8.8 /18.5 -6.8 -28.5 -18.5 -18.6 1.5 8.3 /5.7 17.7 -9.3 -18.1 -5.3 -5.3 -1.9 -3.4 -5.8 28.8 48.8 -2.7 -7.3 -8.6 7.8 6.2 7.5 8.5 9.5 11.5 4.8 -6.8 -8.5 -4.3 -4.1 6.7 -5.3 -8.4 -4.7 -8.9 -6.3 -9.5 -9.3 -7.2 4.8 -5.1 -9.1 -16.5 -25.3 -11.2 -8.8 5.9 12.8 -2.9 3.5 -13.5 -15.5 -5.5 -3.8 -8.4 -18.1 44.6 68.8 8.3 8.9 8.8 1.2 9.8 /13.3 15.9 13.3 4.3 -8.1 /5.2 -8.9 -7.4 -3.2 -3.8 8.5 -7.9 -8.7 -8.9 -12.2 -15.8 -7.5 3.0 -9.8 -11.4 -15.7 -16.7 -19.1 -28.9 -5.7 8.8 -1.1 2.6 -9.3 -2.7 -16.9 -18.2 -12.5 -9.1 -8.8 60.8 89.9 4.8 6.6 3.1 1.8 19.8 16.8 17.8 13.8 4.9 6.3 3.8 -2.9 -1.3 -3.8 -3.2 -7.9 3.5 -14.3 -7.2 -11.8 -7.1 1.8 -14.4 -15.1 -22.2 -23.2 -15.1 -17.3 -10.5 -13.9 -14.4 -5.5 -7.5 8.8 -3.1 -22.7 -27.6 -16.2 -13.6 -38.8 11.6 18.2 9.2 11.2 6.7 14.4 12.2 6.3 14.2 18.3 2.8 6.1 -8.9 -2.6 -15.5 -8.6 -11.0 8.3 -13.2 -3.4 2.1 -11.8 -22.4 -25.9 -23.8 -23.5 -22.8 -8.0 -1.5 -19.2 -24.6 -19.8 -9.8 -3.5 -14.4 -7.9 -25.1 -26.2 -28.7 - 182.1 128.9 17.7 13.6 17.4 15.2 13.8 5.8 3.8 17.4 /11.4 8.5 9.8 2.9 6.0 -7.6 -2.5 -11.4 -13.1 -14.7 -1.4 -3.5 -18.8 -18.3 -23.2 -28.4 -24.3 -23.3 -15.8 -7.4 -17.8 -13.2 -22.2 -27.7 -19.8 -11.4 -14.5 -10.3 -18.0 -8.7 -27.8 -29.8 -12.5 -12.5 -10.5 -13.5 -13.5 -13.2 -22.2 -27.7 -19.8 -11.4 -14.5 -10.3 -18.0 -8.7 -27.8 -29.8 -12.5 -10.5 -10.5 -13.5 -13.5 -13.2 -22.2 -27.7 -19.8 -11.4 -14.5 -10.3 -18.0 -8.7 -27.8 -29.8 -12.5 -10.

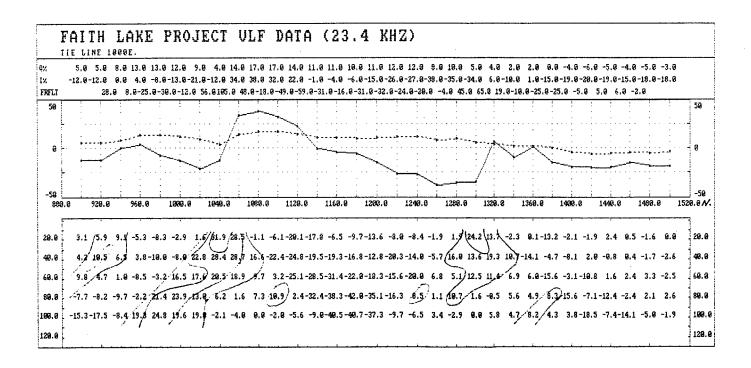
LINE 1888H.

28.8 8.3 -8.9 1.5 2.7 1.7 -8.5 -2.6 -2.6 -5.8 -7.3 2.4 6.9 19.8 -13.1 -7.6 -2.6 -9.3 -5.8 -2.1 -6.8 8.3 13.5 6.7 -2.1 1.4 -7.8 -8.2 5.1 3.6 -6.6 -1.3 4.6 -2.7 -4.9 -9.3 -6.7 1.2 -5.4 -8.8 -2.5 -2.6 49.8 -1.1 1.8 1.5 1.8 8.9 8.4 -1.5 -9.5 -11.8 -3.3 -8.8 -7.9 -7.8 -17.3 -17.5 -13.3 -3.2 -18.6 -14.6 -2.9 4.8 5.6 11.4 6.9 -18.8 -8.7 2.7 4.8 -2.8 8.6 -3.8 -2.6 8.3 -9.7 -12.3 -9.9 -9.5 -8.6 -8.8 -12.8 49.8 69.8 81 81 81 8.8 1.7 8.1 -1.6 -8.9 -11.8 -6.1 -2.8 -14.8 -14.7 -12.6 -6.1 -22.9 -19.4 -17.8 -14.3 -9.9 1.3 3.2 8.3 5.8 3.2 5.6 -4.3 8.5 -9.4 2.8 5.3 2.3 -9.5 -13.3 -7.8 -9.9 -15.2 -18.4 -13.6 -11.1 -12.7 -68.8 69.8 1.7 1.5 -8.5 -1.6 -3.1 -8.1 -8.7 -4.5 -4.9 -14.9 -15.8 -16.8 -13.2 -17.8 -12.9 -25.2 -27.3 -15.9 -1.6 -3.6 -1.9 2.8 -4.4 1.1 6.7 5.8 -12.2 -8.9 -4.8 -1.5 -1.4 -9.8 -12.9 -11.5 -12.5 -11.5 -19.8 -28.1 -19.8 -16.6 -88.8 10.8 10.9 -1.4 -3.8 -2.9 -8.8 -11.8 -3.5 1.2 -12.4 -12.8 -16.5 -25.7 -18.7 -28.1 -19.7 -24.3 -13.8 -9.2 -4.2 -6.6 -10.6 8.9 -8.6 6.2 8.8 2.5 -19.3 -4.1 -11.8 -13.1 -9.9 -8.5 -18.9 -12.2 -12.4 -28.8 -26.6 -26.2 -25.6 -10.8 10.8 -12.2 -12.4 -28.8 -26.6 -26.2 -25.6 -10.8 -22.2 -22.2 -3.8 -7.8 -8.6 -1.4 -8.7 -18.8 -13.5 -17.1 -17.1 -26.2 -22.1 -26.4 -26.1 -28.2 -6.7 -19.7 -17.8 -18.5 -11.4 -6.8 -5.2 3.3 -7.4 1.5 3.8 8.6 -14.2 -16.6 -19.3 -13.2 -14.6 -12.1 -21.9 -23.1 -19.5 -26.6 -29.9 -31.5 -12.8 -22.2 -22.2 -3.8 -7.8 -8.6 -1.4 -8.7 -18.8 -13.5 -17.1 -17.1 -26.2 -22.1 -26.4 -26.1 -28.2 -6.7 -19.7 -17.8 -18.5 -11.4 -6.8 -5.2 3.3 -7.4 1.5 3.8 8.6 -14.2 -16.6 -19.3 -13.2 -14.6 -12.1 -21.9 -23.1 -19.5 -26.6 -29.9 -31.5 -12.8

1996.0 1940.0

LINE 980H.





____700 E 700 E____ ____800 E 800 E____ ___900 E 900 E____ ___1000 E 1000 E..... ___1100 E 1100 E____ ___1200 E 1200 E____ 40> ___1300 E 1300 E____ ___1400 E 1400 E____ ___1500 E 1500 E____

Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

FAITH LAKE PROJECT, VANCOUVER ISLAND CHARGEABILITY CONTOUR PLAN

contour interval 5 ms

SCALE 1:5000

DELTA GEOSCIENCE LTD

Fig. No. 2

30 (1)

___700 E

____800 E

___900 E

___1000 E

___1100 E

___1200 E

___1300 E

___1400 E

___1500 E

Fig No. 3

Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

FAITH LAKE PROJECT, VANCOUVER ISLAND RESISTIVITY CONTOUR PLAN

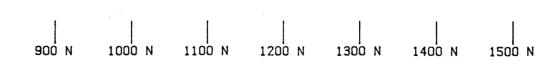
contour interval 500 ohm-m

SCALE 1:5000

DELTA GEOSCIENCE LTD

700 E____ 800 E ____ 900 E____ 1000 E___ 1100 E____ 1200 E____ 1300 E____ 1400 E____

1500 E____



Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

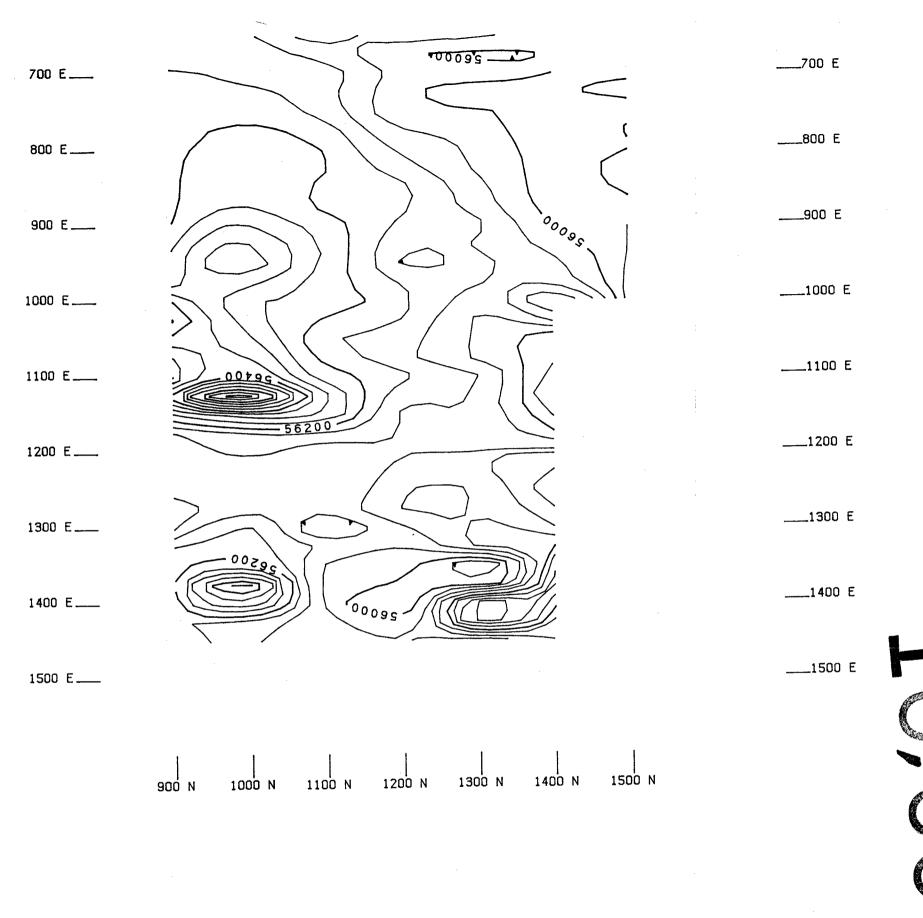
FAITH LAKE PROJECT, VANCOUVER ISLAND

MAGNETIC TOTAL FIELD CONTOUR PLAN

contour interval 50 nt

SCALE 1:5000

DELTA GEOSCIENCE LTD



ASSESSMENT REPORT

FiG. No. 4

ASSESSMENT REP

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____700 E

____800 E

____900 E

___1000 E

___1100 E

___1200 E

___1300 E

___1400 E

____1500 E

1400 E____

1500 E ____

FALCONBRIDGE LTD

FAITH LAKE PROJECT, VANCOUVER ISLAND

FILTERED VLF CONTOUR PLAN (fraser)

contour interval 5%

SCALE 1:5000

DELTA GEOSCIENCE LTD

00 N 1000 N 1100 N 1200 N 1300 N 1400 N 1500

Inclination: 72 Deg Declination: 23 Deg 1

FALCONBRIDGE LTD

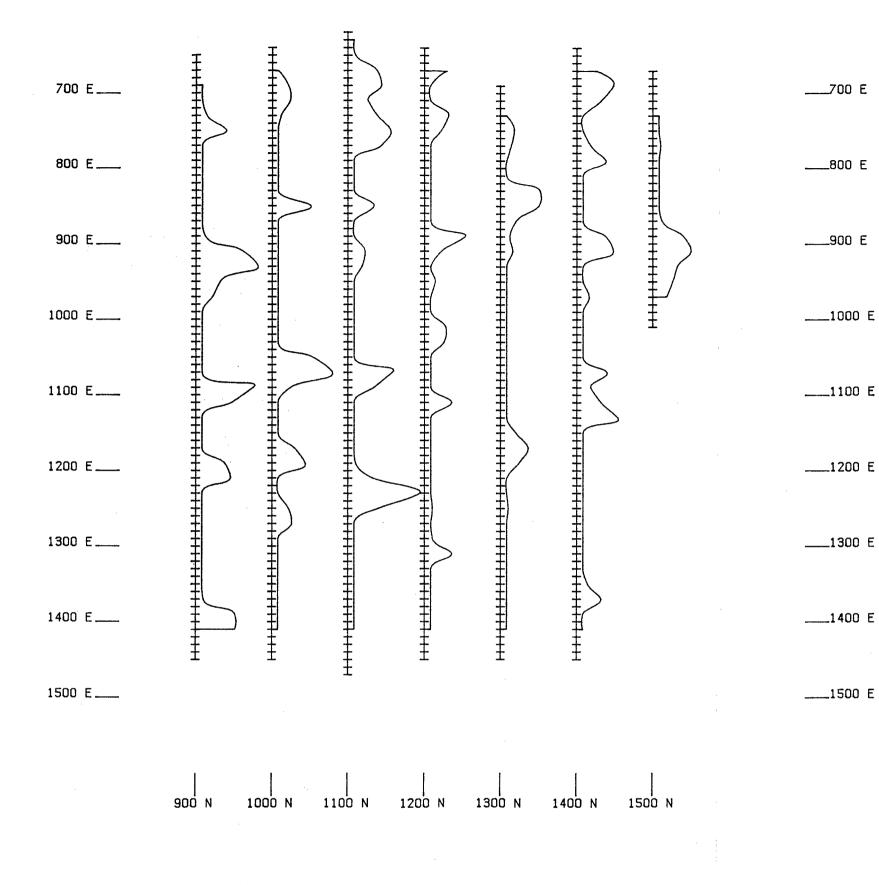
FAITH LAKE PROJECT, VANCOUVER ISLAND

FILTERED VLF PROFILES, (fraser)

1 cm = 25%, base -4%

SCALE 1:5000

DELTA GEOSCIENCE LTD



ASSESSMENT REPORT

Fig. No. 6

ASSESSMENT REPORT

Fig. No. 7

Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

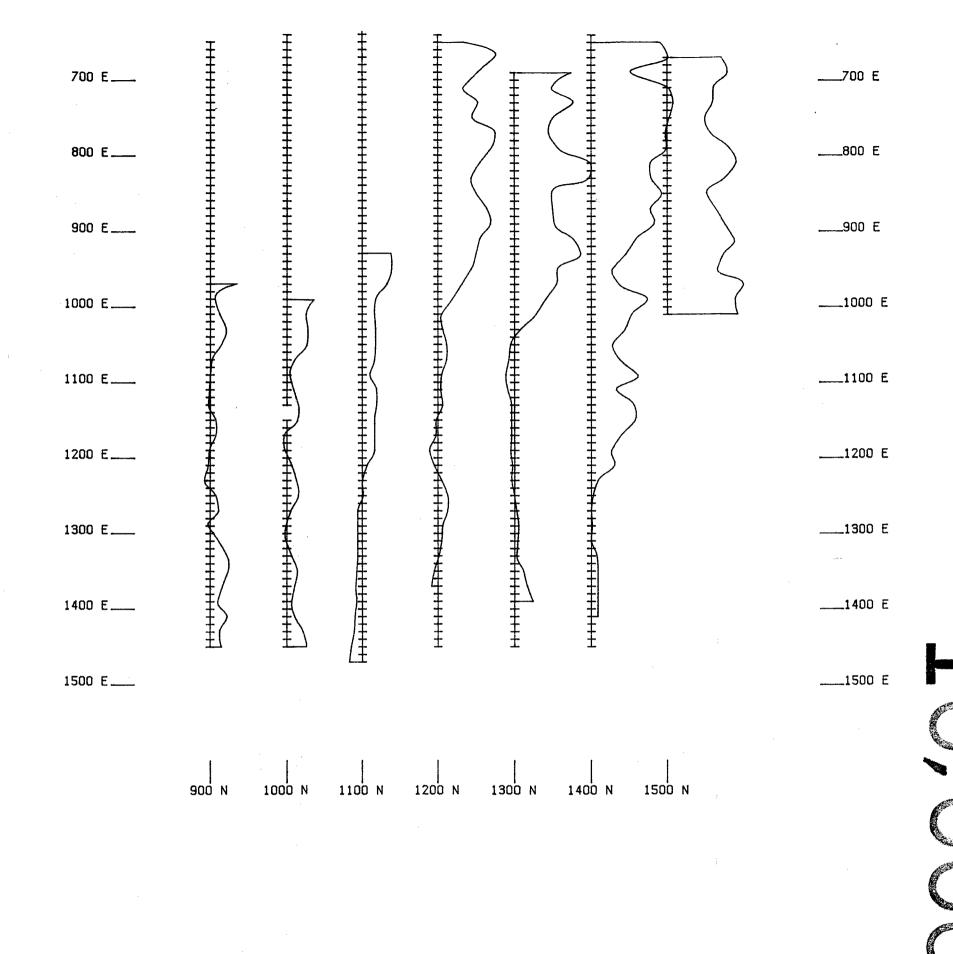
FAITH LAKE PROJECT, VANCOUVER ISLAND

CHARGEABILITY PROFILES

1 cm = 40 ms, base 30 ms

SCALE 1:5000

DELTA GEOSCIENCE LTD



Inclination: 72 Deg Declination: 23 Deg f

FALCONBRIDGE LTD

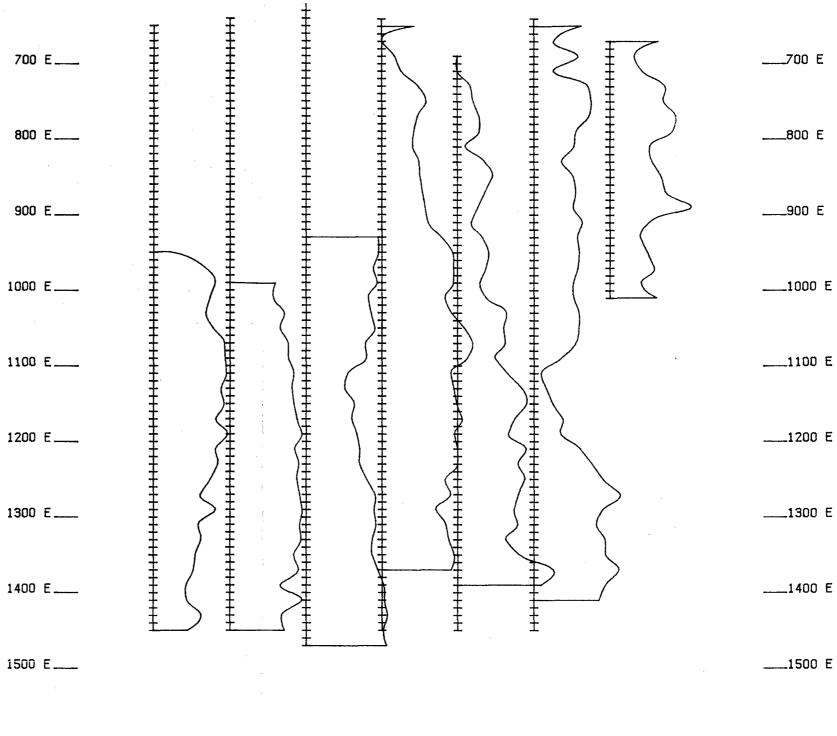
FAITH LAKE PROJECT, VANCOUVER ISLAND

RESISTIVITY PROFILES

1 cm = 1 decade log scale, base 100 ohm-m

SCALE 1:5000

DELTA GEOSCIENCE LTD



1400 N

1300 N

A SSESSMENT REPORT

Fig. No. 8

___1100 E

___1000 E

____700 E

____800 E

___900 E

___1200 E

___1300 E

___1400 E

___1500 E

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Fig. No. 9

Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

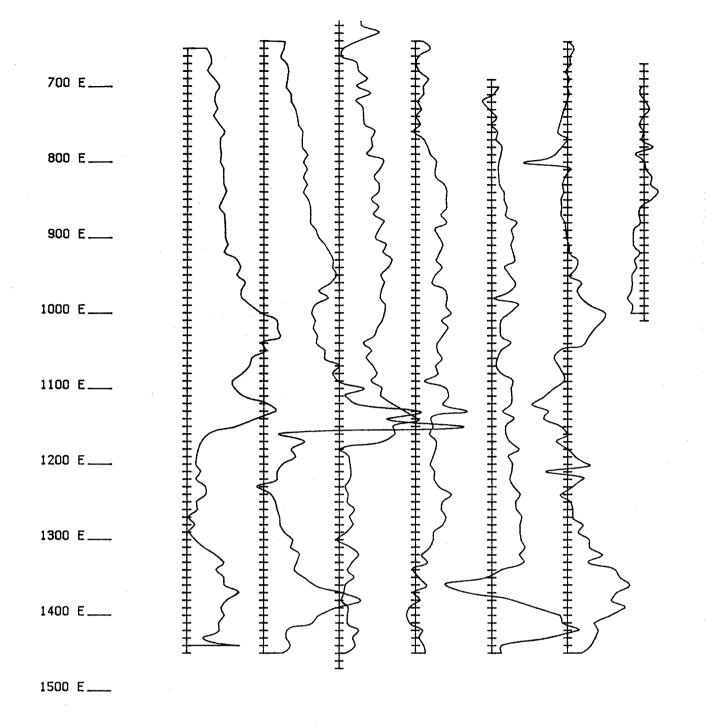
FAITH LAKE PROJECT, VANCOUVER ISLAND

MAGNETIC TOTAL FIELD PROFILES

1 cm = 200 nt, base 56000 nt

SCALE 1:5000

DELTA GEOSCIENCE LTD



____800 E

___900 E

___1000 E

___1100 E

___1200 E

___1300 E

___1400 E

___1500 E

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0 0 0

Inclination: 72 Deg Declination: 23 Deg E

FALCONBRIDGE LTD

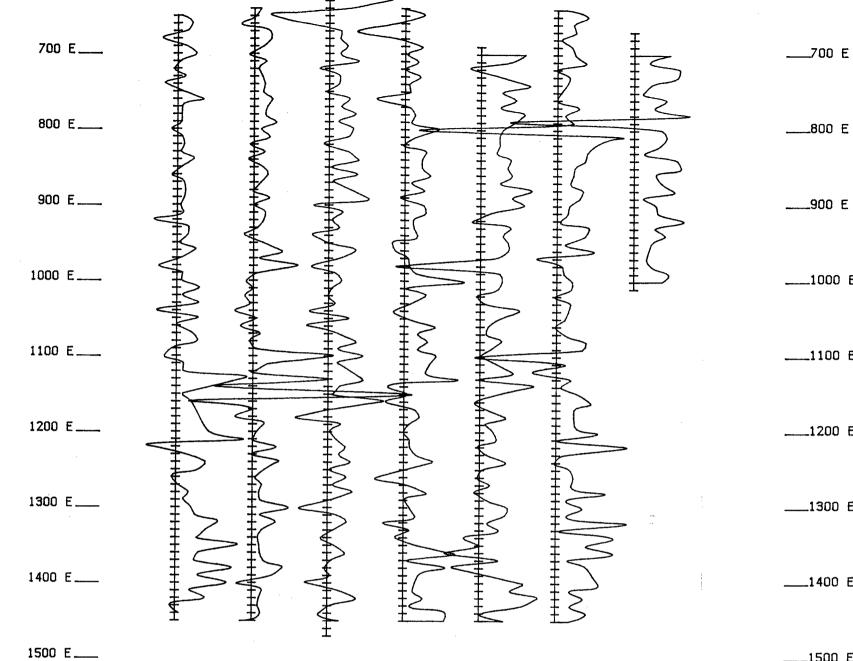
FAITH LAKE PROJECT, VANCOUVER ISLAND

MAGNETIC GRADIOMETER PROFILES

1 cm = 50 nt/m, base 0

SCALE 1:5000

DELTA GEOSCIENCE LTD



1100 N

AU, AG, AS, PT, PD GEOCHEMICAL RESULTS FROM OUTCROP SAMPLES

AD01352	eAssa; AU OPT	OF ANALYSIS FA / AA ENT AU S PPB	J AG	FireAssay AG OPT	FireAssay AS PCT
AD01352					
AD01353	1.100	351	.00	8.01	12.56
AD01354 15 1.3	2.218	352	218	4.54	21.32
AD01354 15 1.3					21.18
AD01355 20 0.7					<0.01
AD01357 1450 7.3 0.84 20 AD01358 1.435 0.345 0.11 20 AD01360 0.575 2.59 26 AD01361 110 3.0 0. AD01362 460 6.0 0 AD01363 640 1.6 0 AD01364 0.534 1.18 26 AD01365 440 4.8 0. AD01366 280 3.4 0.8 AD01367 0.102 0.08 12 AD01368 520 39.0 0 AD01369 4600 7.6 1.41 0. AD01370 >10000 1.599 >50.0 1.41 0. AD01371 0.250 0.27 11 AD01372 >10000 2.325 21.0 0.27 11 AD01373 2.282 3.23 21 AD01374 520 0.9 0.9 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.534 0.81 25 AD01380 0.534 0.81 25 AD01380 0.534 0.81 25 AD01381 0.002 0.002 0.002 0.002 AD01382 6200 18.0 0.002 0.002 0.000 AD01388 0.104 0.47 6 AD01388 0.104 AD01388 0.104 AD01388 0.001 0.005 0.002 AD01388 0.104 AD01388 0.005 0.002 0.002 0.002			0.7		<0.01
ADD1357 ADD1358 ADD1359 ADD1359 ADD1360 ADD1360 ADD1361 ADD1362 ADD1363 ADD1363 ADD1363 ADD1363 ADD1364 ADD1365 ADD1366 ADD1366 ADD1366 ADD1366 ADD1366 ADD1366 ADD1367 ADD1368 ADD1368 ADD1370 ADD1371 ADD1372 ADD1372 ADD1373 ADD1373 ADD1374 ADD1375 ADD1376 ADD1376 ADD1376 ADD1377 ADD1377 ADD1377 ADD1378 ADD1378 ADD1378 ADD1379 ADD1379 ADD1379 ADD1379 ADD1370 ADD1370 ADD1371 ADD1371 ADD1372 ADD1373 ADD1374 ADD1375 ADD1376 ADD1377 ADD1377 ADD1377 ADD1378 ADD1378 ADD1378 ADD1378 ADD1378 ADD1378 ADD1378 ADD1380 ADD1380 ADD1380 ADD1380 ADD1380 ADD1381 ADD1381 ADD1381 ADD1381 ADD1382 ADD1384 ADD1385 ADD1385 ADD1386 ADD1386 ADD1387 ADD1388 ADD1388 ADD1388 ADD1388 ADD1388 ADD1389 ADD1388 ADD1389		356 25	0.1		<0.01
AD01359 AD01360 AD01361 AD01362 AD01362 AD01363 AD01363 AD01363 AD01364 AD01365 AD01366 AD01366 AD01366 AD01366 AD01366 AD01367 AD01367 AD01368 AD01368 AD01370 AD01371 AD01372 AD01373 AD01373 AD01374 AD01375 AD01375 AD01375 AD01376 AD01377 AD01378 AD01377 AD01378 AD01378 AD01378 AD01379 AD01379 AD01380 AD01380 AD01380 AD01380 AD01384 AD01386 AD01386 AD01386 AD01388 AD01387 AD01388 AD01387 AD01388 AD01388 AD01389					0.50
AD01359 AD01360 AD01361 AD01361 AD01362 AD01363 AD01363 AD01363 AD01364 AD01365 AD01366 AD01366 AD01366 AD01366 AD01366 AD01367 AD01367 AD01367 AD01368 AD01370 AD01371 AD01372 AD01373 AD01373 AD01374 AD01375 AD01376 AD01376 AD01377 AD01377 AD01378 AD01378 AD01378 AD01378 AD01379 AD01378 AD01379 AD01380 AD01380 AD01380 AD01384 AD01386 AD01386 AD01386 AD01386 AD01387 AD01387 AD01388 AD01388 AD01388 AD01389	L.435	358	1 35	0.84	20.08
AD01361 110 3.0 0.0 AD01362 460 6.0 0.0 AD01363 640 1.6 0.0 AD01364 0.534 1.18 26 AD01365 440 4.8 0.0 AD01366 280 3.4 0.0 AD01367 0.102 0.08 12 AD01368 520 39.0 0 AD01370 >10000 1.599 >50.0 1.41 0. AD01371 0.250 0.27 11 AD01372 >10000 2.325 21.0 0.27 11 AD01373 2.282 3.23 21 AD01374 520 0.616 0.32 0 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.556 0.15 22 AD01378 180 0.534 0.81 25 AD01380 0.534 0.81 25 AD01381 0.002 0.02 0.02 AD01383 0.024 4.4 0.81 25 AD01384 2700 4.4 4.4 AD01385 0.102 1.91 0. AD01386 0.338 0.74 9 AD01387 95 0.338 0.74 9 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01389 0.010 0.05 0 AD01389 0.010 0.05 0 AD01389 0.010 0.05 0	345	359	345		20.08
AD01362 460 6.0 0 AD01363 640 1.6 0 AD01364 0.534 1.18 26 AD01365 440 4.8 0 AD01366 280 3.4 0 AD01367 0.102 0.08 12 AD01368 520 39.0 0 AD01370 >10000 1.599 >50.0 1.41 0 AD01371 0.250 0.27 11 AD01372 >10000 2.325 21.0 0 AD01373 2.282 3.23 21 AD01374 520 0.9 0 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.55 0 AD01379 0.347 0.26 18 AD01380 0.534 0.81 25 AD01381 0.002 0.02 0 AD01383 0.024 0.81 25 AD01384 2700 4.4 4 AD01385 0.102 1.91 0 AD01386 0.338 0.74 9 AD01387 95 0.338 0.74 9 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0	575	360	575		26.85
AD01363 640 0.534 1.18 26 AD01365 440 4.8 0 AD01366 280 3.4 0 AD01367 0.102 0.08 12 AD01368 520 39.0 0 AD01370 >10000 1.599 >50.0 1.41 0 AD01371 0.250 0.27 11 AD01372 >10000 2.325 21.0 0 AD01373 2.282 3.23 21 AD01374 520 0.9 0 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.554 0.81 25 AD01380 0.534 0.81 25 AD01381 0.002 0.02 0.02 AD01382 6200 18.0 0 AD01383 0.024 0.16 0 AD01385 0.102 1.91 0 AD01387 95 0.338 0.74 9 AD01387 95 0.338 0.74 9 AD01388 0.338 0.74 9 AD01389 0.010 0.05 0		361 110	3.0		0.01
AD01364		362 460	6.0		0.02
AD01365		363 640	1.6		0.01
AD01366 280 3.4 0.4021367 0.102 0.08 12 AD01368 520 39.0 0.4001369 4600 7.6 1.41 0.4001370 1.41 0.4001371 0.250 0.27 11 AD01371 0.250 0.27 11 AD01372 10000 2.325 21.0 0.27 11 AD01373 2.282 3.23 21 AD01374 520 0.616 0.32 0 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.55 0.15 22 AD01380 0.534 0.81 25 AD01381 0.002 0.002 0.002 0 AD01382 6200 18.0 0 AD01383 0.0138 0.024 0.16 0.AD01383 0.0138 0.024 0.16 0.AD01385 0.002 0.002 0.002 0.002 0.00388 0.00388 0.0038 0.004 0.16 0.00388 0.00388 0.004 0.006 0.005 0.001388 0.001388 0.0010 0.005 0.0000 0.0000 0.005 0.0000 0.005 0.0000 0.0000 0.005 0.0000 0.0000 0.005 0.0000 0.0000 0.005 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.00000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000	0.534	364	34	1.18	26.51
AD01367		365 440	4.8		0.07
ADD1368 520 39.0 0 ADD1369 4600 7.6 1 ADD1370 >10000 1.599 >50.0 1.41 0 ADD1371 0.250 0.27 11 ADD1372 >10000 2.325 21.0 0 ADD1373 2.282 3.23 21 ADD1374 520 0.9 0 ADD1375 0.616 0.32 0 ADD1376 4.884 2.11 33 ADD1377 0.256 0.15 22 ADD1378 180 0.5 0 ADD1379 0.347 0.26 18 ADD1379 0.347 0.26 18 ADD1380 0.534 0.81 25 ADD1381 0.002 0.02 0.02 ADD1383 0.002 18.0 0 ADD1384 2700 4.4 0.16 0 ADD1385 0.102 1.91 0 ADD1386 0.338 0.74 9 ADD1387 95 0.3038 0.74 9 ADD1388 0.0104 0.47 6 ADD1389 0.010 0.05 0 ADD1389 0.010 0.05 0 ADD1389 0.010 0.05 0 ADD1389 0.010 0.05 0		366 280	3.4		0.03
ADD1369 4600 7.6 1 ADD1370 >10000 1.599 >50.0 1.41 0 ADD1371 0.250 0.27 11 ADD1372 >10000 2.325 21.0 0 ADD1373 2.282 3.23 21 ADD1374 520 0.9 0 ADD1375 0.616 0.32 0 ADD1376 4.884 2.11 33 ADD1377 0.256 0.15 22 ADD1378 180 0.5 0 ADD1379 0.347 0.26 18 ADD1380 0.534 0.81 25 ADD1381 0.002 0.02 0.02 ADD1382 6200 18.0 0.002 ADD1383 0.002 18.0 0.16 0 ADD1384 2700 4.4 0 ADD1385 0.338 0.74 9 ADD1387 95 0.338 0.74 9 ADD1388 0.104 0.47 6 ADD1389 0.010 0.05 0 ADD1389 0.010 0.05 0 ADD1389 0.010 0.05 0	0.102	367	.02	0.08	12.46
ADD1370 >10000 1.599 >50.0 1.41 0 ADD1371 0.250 0.27 11 ADD1372 >10000 2.325 21.0 0 ADD1373 2.282 3.23 21 ADD1374 520 0.9 0 ADD1375 0.616 0.32 0 ADD1376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.5 0 AD01380 0.534 0.81 25 AD01381 <0.002		368 520	39.0		0.12
AD01371		369 4600	7.6		1.45
ADO1372	1.599	370 >10000	599 >50.0	1.41	0.85
ADO1372	250	371	250	0.27	11.07
AD01374 520 0.9 0 AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.5 0 AD01379 0.347 0.26 18 AD01380 0.534 0.81 25 AD01381 0.002 0.02 0 AD01382 6200 18.0 0 AD01383 0.024 0.16 0 AD01384 2700 4.4 0 AD01385 0.338 0.74 9 AD01386 0.338 0.74 9 AD01387 95 0.3 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 0.002 0.002	2.325		325 21.0		0.02
AD01375 0.616 0.32 0 AD01376 4.884 2.11 33 AD01377 0.256 0.15 22 AD01378 180 0.5 0 AD01379 0.347 0.26 18 AD01380 0.534 0.81 25 AD01381 <0.002 0.02 0 AD01382 6200 18.0 0.16 0 AD01383 0.024 0.16 0 AD01384 2700 4.4 0.16 0 AD01385 0.102 1.91 0 AD01386 0.338 0.74 9 AD01387 95 0.3 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.002	2.282	373	282	3.23	21.65
AD01376 AD01377 AD01378 AD01378 AD01379 AD01380 AD01381 AD01382 AD01383 AD01383 AD01384 AD01385 AD01385 AD01386 AD01387 AD01387 AD01388 AD01388 AD01388 AD01389 AD01389 AD01390 4.884 A.884 A.8		374 520	0.9		0.01
AD01377 AD01378 180 0.256 0.5 AD01379 0.347 0.26 18. AD01380 0.534 0.81 25. AD01381 0.002 0.002 0.02 0.02 AD01383 0.024 0.16 0.40 0.40 0.385 0.102 0.386 0.338 0.74 0.40 0.47 0.40 0.40 0.47 0.40 0.40	0.616	375	516	0.32	0.45
AD01378 180 0.5 0 AD01379 0.347 0.26 18 AD01380 0.534 0.81 25 AD01381 0.002 0.02 0 AD01382 6200 18.0 0 AD01383 0.024 0.16 0 AD01384 2700 4.4 0 AD01385 0.102 1.91 0 AD01386 0.338 0.74 9 AD01387 95 0.3 0 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 0.002 0.002 0	1.884	376	384	2.11	33.81
ADO1379 ADO1380 ADO1381 ADO1381 ADO1382 ADO1383 ADO1383 ADO1384 ADO1384 ADO1385 ADO1386 ADO1386 ADO1387 ADO1388 ADO1388 ADO1388 ADO1389 ADO1390 ADO139	256	377	256	0.15	22.73
AD01380 0.534 0.81 25 AD01381		378 180	0.5		0.02
AD01381				0.26	18.39
AD01382 6200 18.0 0.16 0.16 AD01383 0.024 0.16 0.16 AD01384 2700 4.4 0.102 1.91 0.38 0.74 9.4001387 95 0.3 0.47 6.4001388 0.104 0.47 6.4001389 0.010 0.05 0.4001390 <0.002 0.002 0.002					25.93
AD01383 0.024 0.16 0.001384 2700 4.4 0.16 0.001385 0.102 1.91 0.001386 0.338 0.74 9.001387 95 0.3 0.47 6.001388 0.104 0.47 6.001389 0.010 0.05 0.05 0.001390 <0.002 0.002 0.002).002)02	<0.02	0.01
AD01384 2700 4.4 0 AD01385 0.102 1.91 0 AD01386 0.338 0.74 9 AD01387 95 0.3 0 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0					0.03
AD01385 0.102 1.91 0 AD01386 0.338 0.74 9 AD01387 95 0.3 0 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0	0.024			0.16	0.43
AD01386 0.338 0.74 9 AD01387 95 0.3 0 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0		384 2700	4.4		0.51
AD01387 95 0.3 0 AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0	0.102	385	.02	1.91	0.24
AD01388 0.104 0.47 6 AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0).338			0.74	9.21
AD01389 0.010 0.05 0 AD01390 <0.002 0.02 0					0.03
AD01390 <0.002 0.02 0				0.47	6.84
					0.27
ADOI 201 65 0 5	0.002)02	0.02	0.08
			0.5		0.03
					0.01
					0.01
AD01395 0.004 0.23 0).004	395)04	0.23	0.02
AD01396 840 19.0 <0.		396 840	19.0		<0.01
ADO1397 2.016 7.86 24	2.016	397)16	7.86	24.95
).382		382	1.23	24.36
					0.01
					0.02
					0.02
AD01402 340 >50.0 1.55		402 340	>50.0	1.55	

TYPE OF ANALYSIS ELEMENT UNITS	FA / AA AU PPB	FireAssay AU OPT	A A AG PPM	FireAssay AG OPT	FireAssay AS PCT
AD01403	10		1.1		0.01
AD01404	10		0.8		0.01
AD01405	< 5		0.2		0.02
AD01406	< 5		0.2		0.01
AD01407	< 5		<0.1		0.01
AD01408	< 5		0.4		0.01
AD01409	580		3.1		0.04
AD01410	40		2.5		0.01
AD01411	< 5		0.1		0.01
AD01413		0.006		0.24	0.12
AD01414	360		7.1		0.11
AD01415		0.350		0.10	25.72
AD01416	15		16.2		0.03
AD01417	5000		12.3		0.01
AD01418	15		2.1		<0.01
AD01419	480		2.9		0.01
AD01420	1000	0.000	9.0		<0.01
AD01421		0.039		0.06	0.18
AD01422		<0.002		0.02	0.01
AD01423		<0.002		0.02	0.01
AD01424		<0.002		0.07	0.01
AD01425 AD01426		0.008		0.11	<0.01
AD01420 AD01427		0.024 0.030		0.11	<0.01
AD01427 AD01428		0.008		0.06 0.08	<0.01 <0.01
AD01420 AD01429		0.003		0.06	0.22
AD01429		0.014		0.08	0.22
AD01431		0.012		0.12	0.04
AD01432		0.014		0.11	0.04
AD01433		0.022		0.18	0.40
AD01434		0.006		0.04	0.10
AD01435		0.007		0.04	0.05
AD01436		0.034		0.16	0.12
AD01437		0.007		0.04	0.09
AD01438		0.006		0.03	<0.01
AD01439		0.010		0.12	<0.01
AD01440		0.002		0.06	<0.01
AD01441	160		2.8		<0.01
AD01442	5		0.2		0.01
AD01443	70		0.6		<0.01
AD01444	120		2.1		<0.01
AD01445	50	0.110	22.6		0.04
AD01446		0.112		4.06	1.38
AD01447		0.024		0.04	0.06
AD01448		0.013		0.05	0.01
AD01449 AD01450		0.055		0.09	0.30
	300	0.043	2 -	0.06	0.03
AD01452	300	0.642	2.5	0.10	0.05
AD01453		0.642		0.19	26.31
AD01454 AD01455	20	0.296	7 0	0.55	0.17
AD01455 AD01456	20	0.376	1.0	י פר ד	0.01
LINOTANO		0.376		1.23	2.02

TYPE OF ANALYSIS ELEMENT UNITS	FA / AA AU PPB	FireAssay AU OPT	A A AG PPM	FireAssay AG OPT	FireAssay AS PCT
AD01457		0.654		5.82	5.70
AD01458		0.244		1.23	1.61
AD01459	>10000	0.397	>50.0	5.15	0.37
AD01460	200	0.05.	4.2	0.4.0	<0.01
AD01461	130		1.7		0.04
AD01462	30		1.0		<0.01
AD01463	•	0.048	2.00	0.88	0.25
AD01464	100	0.010	0.6	000	0.02
AD01465	110		0.3		0.03
AD01466	25		1.2		0.02
AD01467		0.789		0.77	1.67
AD01468	440		19.0		0.09
AD01469	150		1.2		0.05
AD01470	1050		>50.0	1.46	0.04
AD01471	600		21.0		0.01
AD01472		0.050		1.31	0.02
AD01473	95		8.1		0.01
AD01474	30		1.1		0.01
AD01475	880		16.0		0.32
AD01476	15		2.7		0.01
AD01477		0.297		1.30	10.41
AD01478	60		0.6		<0.01
AD01479	< 5		0.7		0.30
AD01480	5		0.6		0.01
AD01481	< 5		0.2		0.01
AD01482	< 5		0.2		0.01
AD01483	45		1.1		0.01
AD01484	10		0.2		0.01
AD01485	< 5		0.7		<0.01
AD01486	< 5		0.2		0.01
AD01487	50	0.020	2.0	0.15	0.04
AD01488	50		3.2		<0.01
AD01489	>10000	0.441	2.7		0.41
AD01490	40		1.3		<0.01
AD01491	40		0.5		0.01
AD01492	20		0.5		<0.01
AD01493	5	0.647	0.9		0.02
AD01494 AD01495	>10000 40	0.647	9.3		0.11
AD01495 AD01496	120		0.9 1.1		<0.01
AD01490 AD01497	35		1.5		<0.01
AD01497 AD01498	15		0.5		0.01
AD01498 AD01499	220		4.7		0.01 <0.01
AD01499 AD01500	>10000	0.691	16.0		13.95
AF05304	4300	0.001	14.0		0.09
AF05305	7300	0.825	T-4• O	4.39	0.09
AF05305 AF05306		0.342		4.39 0.36	0.08
AF05307	6500	U• 3 4 2	26.0	0.30	2.34
AF05307 AF05308	200		4.0		2.34 0.04
AF05308 AF05312	15		0.2		0.01
AF05312 AF05313	280		5.6		0.01
AF05314	 00	0.030	J•0	0.51	<0.01
					

TYPE OF ANALYSIS ELEMENT UNITS	FA / AA AU PPB	FireAssay AU OPT	A A AG PPM	FireAssay AG OPT	FireAssay AS PCT
AF05315	10		0.6		<0.01
AF05316		0.027	•	0.06	0.09
AF05318		0.002		<0.02	0.01
AF05351		0.010		0.16	0.27
AF05352		0.044		0.14	0.08
AF05353	< 5		<0.1		<0.01
AF05354		0.044		0.16	0.18
AF05355	1950		2.0		0.01
AF05356	25		0.1		0.96
AF05357		0.258		0.43	10.78
AF05358	20		1.4		0.30
AF05359		0.340		0.62	20.67
AF05360	15		2.2		0.01
AF05361	>10000	0.335	>50.0	1.42	0.05

FAITH GEOCHEMISTRY

SAMPLE#	AU(PPB)	AG(PPM)	AS(PPM)	PD(PPB)	PT(PPB)	OVER(M)

VEIN STYLE MINERALIZATION (ALL WIDTHS OVER <0.2M)

AD01351	37713.50	274.62	125600.00	4.00	25.00
AD01352	76044.12	155.65	213200.00		
AD01353	9942.65	16.11	211800.00		
AD01357	1450.00	7.30	5000.00		
AD01358	49198.97	28.80	200800.00		
AD01359	11828.33	3.77	200800.00		
AD01360	19713.88	88.80	268500.00		
AD01364	18308.19	40.46	265100.00		
AD01365	440.00	4.80	700.00		
AD01368	520.00	39.00	1200.00		
AD01369	4600.00	7.60	14500.00		
AD01370	54822.00	48.30	8500.00		
AD01371	8571.25	9.26	110700.00		
AD01372	79713.00	21.00	200.00		
AD01373	78238.37	110.74	216500.00		
AD01374	520.00	0.90	100.00		
AD01375	21119.56	10.97	4500.00		
AD01376	167447.94	72.34	338100.00		
AD01377	8776.96	5.14	227300.00		
AD01379	11896.90	8.91	183900.00		
AD01380	18308.19	27.77	259300.00		
AD01381	<68.57	<0.69	100.00		
AD01382	6200.00	18.00	300.00		
AD01383	822.84	5.49	4300.00		
AD01384	2700.00	4.40	5100.00		
AD01385	3497.07	65.48	2400.00		
AD01387	95.00	0.30	. 300.00		
AD01388	3565.64	16.11	68400.00		
AD01390	<68.57	0.69	800.00		
AD01395	137.14	7.89	200.00		
AD01397	69118.56	269.48	256100.00		
AD01398	13096.87	42.17	246100.00		
AD01399	20.00	1.40	100.00		
AD01400	1650.00	3.20	200.00		
AD01401	30.00	4.30	200.00		
AD01402	340.00	53.14			
AD01409	580.00	3.10	400.00		
AD01414	360.00	7.10	1100.00		
AD01416	15.00	16.20	300.00		

SAMPLE#	AU(PPB)	AG(PPM)	AS(PPM)	PD(PPB)	PT(PPB)	OVER(M)
AD01418	15.00	2.10	<100.00			
AD01420	1000.00	9.00	<100.00			
AD01446	3839.92	139.20	13800.00	4.00	<15.00	
AD01453	22010.97	6.51	263100.00			
AD01454	10148.36	18.86	1700.00			
AD01456	12891.16	42.17	20200.00			
AD01457	22422.39	199.54	57000.00			
AD01458	8365.54	42.17	16100.00			
AD01459	13611.00	176.60	3700.00			
AD01463	1645.68	30.17	2500.00			
AD01467	27050.86	26.40	16700.00	÷		
AD01470	1050.00	50.10	400.00			
AD01471	600.00	21.00	100.00			
AD01472	1714.25	44.91	200.00			
AD01477	10182.64	44.57	104300.00			
AD01487	685.70	5.14	400.00			
AD01493	5.00	0.90	200.00			
AD01494	22182.00	9.30	1100.00			
AD01499	220.00	4.70	<100.00			
AF05304	4300.00	14.00	900.00			
AF05305	28285.10	150.50	800.00			
AF05306	11725.50	12.30	200.00			
AF05307	6500.00	26.00	23400.00			
AF05354	1508.50	5.50	1800.00			
	1950.00	2.00	100.00			
	8845.50	14.70	107800.00			
AF05359	11656.90	21.30	206700.00			
AF05361	11485.00	48.70	500.00			
	erupii	енонтые м	INERALIZATIO	A.I		
	acnev	SUOMING U	IKEKHLIZHIIO	I X		
AD01362	460.00	6.00	200.00			
AD01363	640.00	1.60	100.00			
AD01421	1097.12	2.06	1800.00			0.4
AD01422	<68.57	0.69	100.00			0.9
AD01423	<68.57	0.69	100.00			1.0
AD01424	<68.57	2.40	100.00			1.2
AD01425	274.28	3.77	<100.00			0.7
AD01426	754.27	4.11	<100.00			0.1
AD01427	891.41	2.06	<100.00			0.6
AD01428	274.28	2.74	90.00	10.00	<15.00	0.4
AD01429	137.14	2.06	2200.00			0.8

SAMPLE#	AU(PPB)	AG(PPM)	AS(PPM)	PD(PPB)	PI(PPB)	OVER(M)
			2 to 00 to 00 to 10 to 00 to 00 to 00 to	: II	: = = = = = = = = =	
AD01430	479.99	2.40	200.00			1.5
AD01431	514.27	4.11	400.00	15.00	<15.00	1.6
AD01432	377.14	4.11	400.00			2.0
AD01433	822.84	5.49	4000.00			1.4
AD01434	274.28	1.37	1000.00			1.2
AD01435	205.71	1.37	500.00			1.8
AD01436	959.98	5.49	1200.00			2.7
AD01437	205.71	1.71	900.00			0.8
AD01438	205.71	1.37	<100.00			0.6
AD01439	342.85	4.11	<100.00			0.4
AD01440	137.14	2.06	<100.00			0.6
AD01447	754.30	1.40	600.00			0.6
AD01448	342.90	1.40	100.00			0.2
AD01449	1885.70	3.40	3000.00			0.2
ADO1450	1440.00	2.70	300.00			0.3
AF05316	994.30	2.40	900.00			0.3
AF05318	68.60	<0.70	<100.00			0.5
AF 05 351	342.90	5.50	2700.00			0.3
AF05352	1508.50	4.10	800.00			0.5
		DISSEMINA	ATED STYLE A	1 INERAL IZ	ATION	
			SAMPLES OVI			
AD01354	15.00	1.30	<100.00			
AD01355	20.00	0.70	<100.00			
AD01356	25.00	0.10	<100.00			
AD01361	110.00	3.00	100.00			
AD01366	280.00	3.40	300.00			
AD01367	3497.07	2.74	124600.00			
AD01378	180.00	0.50	200.00			
AD01386	11588.33	25.37	92100.00			
AD01389	342.85	1.71	2700.00	25.00	<15.00	
AD01391	65.00	0.50	300.00			
AD01392	35.00	1.30	100.00			
AD01394	75.00	1.30	100.00			
AD01396	840.00	19.00	<100.00			
AD01403	10.00	1.10	100.00			
AD01404	10.00	0.80	100.00			
AD01405	<5.00	0.20	200.00			
AD01406	<5.00	0.20	100.00			
AD01407	<5.00	<0.10	100.00			
AD01408	<5.00	0.40	100.00			

APPENDIX B

SAMPLE#	AU(PPB)	AG(PPM)	AS(PPM)	PD(PPB)	PT(PPB)	OVER(M)
w m w m 2 2 2 2 2			000 000 000 000 000 000 000 000 000 00			
AD01410	40.00	2.50	100.00			
AD01411	<5.00	0.10	100.00			
AD01413	205.71	8.23	1200.00			
AD01415	11999.75	3.43	250900.00			
AD01417	5000.00	12.30	100.00			
AD01419	480.00	2.90	100.00			
AD01441	160.00	2.80	<100.00		•	
AD01442	5.00	0.20	100.00			
AD01443	70.00	0.60	<100.00			
AD01444	120.00	2.10	<100.00			
AD01445	50.00	22.60	400.00			
AD01452	300.00	2.50	500.00			
AD01455	20.00	1.00	100.00			
AD01460	200.00	4.20	<100.00			
AD01461	130.00	1.70	400.00			
AD01462	30.00	1.00	<100.00			
AD01464	100.00	0.60	200.00			
AD01465	110.00	0.30	300.00			
AD01466	25.00	1.20	200.00			
AD01468	440.00	19.00	900.00			
AD01469	150.00	1.20	500.00			
AD01473	95.00	8.10	100.00			
AD01474	30.00	1.10	100.00			
AD01475	880.00	16.00	3200.00			
AD01476	15.00	2.70	100.00			
AD01478	60.00	0.60	<100.00			
AD01479	<5.00	0.70	3000.00			
AD01480	5.00	0.60	100.00			
AD01481	<5.00	0.20	100.00			
AD01482	<5.00	0.20	100.00			
AD01483	45.00	1.10	100.00			
AD01484	10.00	0.20	100.00			
AD01485	<5.00	0.70	<100.00			
AD01486	<5.00	0.20	100.00			
AD01488	50.00	3.20	<100.00			
AD01489	15120.00	2.70	4100.00			
AD01490	40.00	1.30	<100.00			*
AD01491	40.00	0.50	100.00			
AD01492	20.00	0.50	<100.00			
AD01495	40.00	0.90	<100.00			
AD01496	120.00	1.10	<100.00			
AD01497	35.00	1.50	100.00			
AD01498	15.00	0.50	100.00			

SAMPLE#	AU(PPB)	AG(PPM)	AS(PPM)	PD(PPB)	PT(PPB)	OVER(M)
======:		=======================================			=======	
AD01500	23691.00	16.00	139500.00			
AF05308	200.00	4.00	400.00			
AF05312	15.00	0.20	100.00			
AF05313	280.00	5.60	100.00			
AF05315	10.00	0.60	<100.00			
AF05353	<5.00	<0.10	<100.00		•	
AF05356	25.00	0.10	9600.00			
AF05358	20.00	1.40	3000.00			
AF05360	15.00	2.20	100.00			

APPENDIX C

AU, AS GEOCHEMICAL RESULTS FROM SOIL SAMPLES

APPENDIX C
FAITH LAKE SOIL GEOCHEMICAL RESULTS

SAMPLE	AU: PPB	AS: PPM	SAMPLE	AU: PPB	AS: PPM
SA21425	15.00	50.00	SA21467	40.00	218.00
SA21426	10.00	160.00	SA21468	780.00	160.00
SA21427	25.00	120.00	SA21469	960.00	180.00
SA21428	15.00	120.00	SA21470	10.00	60.00
SA21429	5.00	100.00	SA21471	10.00	280.00
SA21430	46.00	240.00			
SA21431	5400.00	750.00			
SA21432	190.00	360.00			
SA21433	150.00	240.00			
SA21434	10.00	90.00			
SA21435	75.00	170.00			
SA21436	15.00	192.00			
SA21437	110.00	272.00		•	
SA21438	5.00	140.00			
SA21439	<5.00	360.00			
SA21440	55.00	140.00			
SA21441	<5.00	175.00			
SA21442	15.00	250.00			
SA21443	15.00	120.00			
SA21444	10.00	120.00			
SA21445	<5.00	80.00			
SA21446	30.00	160.00			
SA21447	25.00	100.00			
SA21448	5.00	108.00			
SA21449	10.00	70.00			
SA21450	<5.00	86.00			
SA21451	20.00	245.00			
SA21452	40.00	60.00			
SA21453	25.00	106.00			
SA21454	15.00	100.00			
SA21455	50.00	200.00			
SA21456	<5.00	70.00			
SA21457	15.00	140.00			
SA21458	220.00	104.00			
SA21459	110.00	80.00			
SA21460	65.00	30.00			
SA21461	10.00	56.00			
SA21462	<5.00	<2.00		*	
SA21463	10.00	18.00			
SA21464	65.00	100.00			
SA21465	<5.00	44.00			
SA21466	10.00	360.00			

APPENDIX D

MULTIELEMENT GEOCHEMICAL RESULTS FROM OUTCROP SAMPLES

APPENDIX D

SAMPLE	DESCRIPTIONS, FAITH LAKE MULTIELEMENT ANALYSES
Sample No.	Rock and Mineralization Description
AD01389	VOLCANIC, MAFIC, FINE. MASSIVE POD OF, 50-100%, PYRRHOTITE PLUS CHALCOPYRITE.
AD01351	DISCOVERY VEIN VEIN, QUARTZ, COARSE. MASSIVE SEVAGES OF, 20-50% ASPY, CPY, & PO
AD01428 AD01431	SCHEV ZONE VOLCANIC, MAFIC, FINE. TECTONIZED. FRACTURE CONTROLLED MINERALIZATION AND ALTERATION 3-5% ASPY, CPY & PO
AD01446	GALENA VEIN 20CM QUARTZ VEIN IN 1M SHEAR ZONE 10-50% SPH, ASPY, CPY, PO, & GL

APPENDIX D

FALCONBRIDGE LTD - WHOLE ROCK DATABASE FAITH LAKE MULTIELEMENT ANALYSES

SAMP NO>	AD01389	AD01351	AD01428	AD01431	AD01446
AU (PPB)	342.85 1.40 2240.00	37713.50	274.28	514.27	3839.92
SB	1.40	53.30	3.30	2.30	1160.00
AS	2240.00	125600.00	90.00	667.00	10600.00
BA	140.00	< 410.00	430.00	380.00	< 270.00
BR	10.00	< 320.00	< 5.00	< 5.00	75.00
CD	< 10.00	< 75.00	< 10.00	< 10.00	89.00
CE	< 27.00	< 81.00	< 10.00	< 23.00	< 44.00
CS	< 1.00	< 3.00	< 1.00	< 1.00	< 1.00
CR	160.00	< 230.00	260.00	350.00	190.00
CO	500.00 < 2.00	300.00	26.00	62.00	74.00
EU	500.00 < 2.00 < 2.00 < 100.00 31.00 < 5.00 < 0.50 < 5.00	< 2.00	< 2.00	< 2.00	< 5.00
HE	< 2.00	< 9.00	< 2.00	< 2.00	< 6.00
IR (PPB)	< 100.00	< 280.00	< 100.00	< 100.00	< 100.00
FE (PCT)	31.00	26.00	10.00	15.00	21.00
LA	< 5.00	< 5.00	< 5.00	< 5.00	7.00
LU	< 0.50	< 4.20	< 0.50	< 0.50	2.80
					27.00
NI	67.00	< 75.00	69.00	90.00	56.00
PD (PPB)	25.00	4.00	10.00	15.00	4.00
PT (PPB)	<15.00	25.00	<15.00	<15.00	<15.00
RB	< 21.00	< 47.00	14.00	< 10.00	< 30.00
SM	< 0.50	< 0.50	2.40	2.60	2.00
SC	0.80	< 1.30	27.00	30.00	1.40
SE	29.00	< 36.00	< 10.00	< 10.00	< 21.00
AG	1.71	274.62	2.74	4.11	139.20
NA (PCI)	0.08	< 1.10	0.12	0.16	3.20
TA	<pre></pre>	< 1.00	< 1.00	< 1.00	< 1.00
TE	< 20.00	< 190.00	< 20.00	< 20.00	< 120.00
1.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TH	< 1.10	< 91.00	< 0.50	< 0.50	< 5.70
SN	< 200.00				
W	< 4.00		10.00		
U		< 3.9			
AB	< 5.0 < 2002300	< 27.0	< 5.0	< 5.0	29.0
ZN	< 2002300	0.0 < 200	.0 < 200	.0 26100	.0
ZR	< 5002000	0.0 < 500	.0 < 500	.0 < 1200	.0

NOTE: VALUES FOR ALL ELEMENTS ARE IN PPM EXCEPT FOR; AU, IR, PD, AND PT WHICH ARE IN PPB AND FE AND NA WHICH ARE IN PCT

APPENDIX E

WHOLE ROCK GEOCHEMICAL RESULTS FROM OUTCROP SAMPLES

FALCONBRIDGE === EXPLORATION DIVISION ===

REPORT #2000

WHOLE ROCK GEOCHEMICAL ANALYSIS SAMPLE ID # ADO1412

> FIELD NUMBER: 87012JD041 PROJECT # 1012

LAB REPORT # 29628 TOWNSHIP : LOT: O CONCESSION:

NTS : 092F11

PROVINCE: BRITISH COLUMBIA PROJECT: FAITH LAKE UTM ZONE : 10 GRID COORDINATES : E : 326312.0 N: 5503096.0 EL: 0.0

SAMPLE TYPE : GRAB SAMPLE

FIELD NAME : VOLCANIC, MAFIC , FINE.

FINAL NAME : ALTERATION :

MINERALIZATION : DISSEMINATED AND BLEBS, <1%, PYRRHOTITE PLUS CHALCOPYRITE.

FORMATION :

SAMPLED BY : JD FOURNIER

ANALYZED BY : XRAL DATE: 22-0CT-87

DATE : 20-SEP-87 ALLITTICAL TECHNIQUE : X-RAY FLUORESCENCE PAGE 1

17:34:21

PRINTED 27-OCT-87

	WT Z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION		NORMS	CLASSIFICATIONS	AND INDICE	S	
S102	50.50	52.18	48.87	Q	3.27	NA20+K20 3.13	8102	52.18	SUBALKAL INE
AL203	14.50	14.98	16.54	C	0.00				
FE203	11.50	3.04	2.14	OR	1.11	OL* 24.93 NE*	35.69 Q*	39.38	SUBALKAL INE
FEO	0.00	7.96	6.23	AB	26.73				
CAO	10.50	10.85	10.89	AN	27.43	CPX 58.31 OL	0.00 OPX	41.69	ALKAL INE
MGO	5.87	6.07	8.47	LC	0.00				
NA20	2,85	2.94	5.35	NE	0.00	A 15.74 F	53.76 M	30.50	THOLEITIC
K20	0.18	0.19	0.22	KР	0.00				
T102	1.44	1.49	1.05	AC	0.00	AL203 14.98	NORM PLAG	50.64	THOLEITIC
P205	0.13	0.13	0.11	DI	13.94				
ONM	0.15	0.15	0.12	HE	6.96	AN 49.62 AB*	48.37 OR	2.01	K-POOR SERIES
S	0.00	0.00	0.00	EN	9.96				
NIO	0.00	0.00	0.00	FS	4.98	CI 41.15	NORM PLAG	50.64	BASALT
CR203	0.02	0.02	0.02	FO	0.00				
CO2	0.00	0.00	0.00	FA	0.00				
H20+	0.00	0.00	0.00	WO	0.00		ON THOLEIT	IC BASALT	
H20-	0.00	0.00	0.00	LN	0.00	AL 47.87 FE	27.63 MG	24.50	
roi	1.16	0.00	0.00	МT	3.21				
				ΙL	2.10				
TOTAL	96.78	100.00	100.00	CR	0.02	COLOR INDEX :	41.15		
				HM	0.00	HASHIMOTO INDEX	: 31.19		
				AP	0.28				
				PO	0.00				
				NS	0.00				
				KS	0.00				
				RU	0.00				
				AG	0.00				
				OL	0.00				
				OPX	14.94	•			
				CPX	20.90				
				AB*	26.73				
TRACE E	LEMENTS	(P.P.M.) AU,RE,	,PT,PD,IR,OS,RH,RU	8.HG (P.P.	B.)				
AS	4.80:RB	-10.00:SR	131.00:Y -	10.00:ZR	63.00:NB	10.00:SB	0.20:BA	37.	00:BI -0.10:

COMMENTS :

==== FALCONBRIDGE LID ==== === EXPLORATION DIVISION ===

REPORT #2000

WHOLE ROCK GEOCHENICAL ANALYSIS

PRINTED 27-0CT-87 17:33:39

LAB REPORT # 29628 FIELD NUMBER : 87012JD023 PROJECT # 1012

LAB REPORT # 29628 FIELD NUMBER : 870123D023 PRUJECT # 1012

TOWNSHIP: LOT: O CONCESSION: PROVINCE: BRITISH COLUMBIA
NTS: 092F11 PROJECT: FAITH LAKE

UTM ZONE: 10 GRID COORDINATES: E: 326660.0 N: 5502385.0 EL: 0.0 SAMPLE TYPE: GRAB SAMPLE

FIELD NAME : VOLCANIC.MAFIC .MEDIUM.HYALOCLASTITIC.

FINAL NAME : ALTERATION :

MINERALIZATION : NIL.

SAMPLE ID # ADO1393

FORMATION :

SAMPLED BY: JD FOURNIER DATE: 18-SEP-87 ANALYTICAL
ANALYZED BY: XRAL DATE: 22-OCT-87 TECHNIQUE: ATOMIC ABSORPTION

NORMALIZED NORMALIZED WT X ANHYDROUS WT % ANHYDROUS CATION % CLASSIFICATIONS AND INDICES NORMS _______ ____ S 102 50.40 51.99 48.66 3.11 NA20+K20 51.99 SUBALKALINE 2.86 SIO2 AL203 14.60 15.06 16.61 C 0.00 FE203 11.10 2.84 2.00 SUBALKAL INE OR 1.11 OL* 26.50 NE* 34.39 ÜΥ 39.11 FEO 0.00 7.75 6.07 AB 24.24 CAO 11.20 11.55 11.59 AN 28.86 CPX 60.26 0.00 OPX 39.74 **ALKALINE** MGO 6.16 6.35 8.86 LC 0.00 NA20 2.59 2.67 4.85 NE 0.00 52.80 32.56 THOLEITIC 14.64 E K20 0.18 0.19 0.22 KP 0.00 T102 1.25 1.29 0.91 AC 0.00 AL203 15.06 NORM PLAG 54.35 THOLEITIC P205 15.29 0.11 0.11 0.09 DI ONM 0.15 0.15 0.12 HE 7.37 53.24 AB* 44.71 OR 2.05 K-POOR SERIES 0.00 0.00 EN 10.08 S 0.00 NIO 0.00 0.00 0.00 FS 4.86 42.41 NORM PLAG 54.35 BASALT CR203 0.03 0.03 0.02 FO 0.00 002 0.00 0.00 0.00 FΑ 0.00 H20+ 0.00 0.00 0.00 wo 0.00 HIGH IRON THOLEIITIC BASALT H20-0.00 0.00 0.00 0.00 48.06 FE 26.31 MG 25.64 LN LOI 1.00 0.00 0.00 3.00 1.82 IL TOTAL 96.93 100.00 100.00 63 0.03 COLOR INDEX : 42.41 0.00 HASHIMOTO INDEX: 31.50 ΗM AP 0.24 PO 0.00 NS 0.00 KS 0.00 RU 0.00 AG 0.00 OL 0.00 OPX 14.94 CPX 22.65

TRACE ELEMENTS (P.P.M.) AU.RE.PT.PD.IR.OS.RH.RU.HG (P.P.B.)

AS 1.00:RB -10.00:SR 255.00:Y 10.00:ZR 47.00:NB 14.00:SB -0.10:BA 43.00:BI -0.10:

COMMENTS :

- 1

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REPORT #2000

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 27-0CT-87 17:35:01

LAB REPORT # 29628 FIELD NUMBER: 87012JB012A PROJECT # 1012

TOWNSHIP: LOT: 0 CONCESSION:

PROVINCE : BRITISH COLUMBIA

NTS: 092F11 PROJECT: FAITH LAKE

DATE : 15-SEP-87

DATE : 22-0CT-87

UTM ZONE: 10 GRID COORDINATES: E: 325610.0 N: 5502208.0 EL: 0.0 SAMPLE TYPE: GRAB SAMPLE

FIELD NAME : VOLCANIC, MAFIC , FINE, FELDSPAR PORPHYRITIC.

FINAL NAME :

SAMPLE ID # ADO1451

ALTERATION : NOT VISIBLE. MINERALIZATION : NIL.

FORMATION :

SAMPLED BY : J BEEKMAN

ANALYZED BY : XRAL

ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

	WT Z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION %		NORMS	CLASSIFICATIONS AND INDICES
S102	47.60	49.24	46.10	Q	0.00	NA20+K20 3.15 SIO2 49.24 SUBALKALINE
AL203	15.60	16.14	17.81	C	0.00	
FE203	12.10	3.07	2.16	OR	6.93	OLA 41.05 NEA 28.18 QA 30.77 SUBALKALINE
FEO	0.00	8.50	6.65	AB	18.12	
CAO	10.40	10.76	10.79	AN	31.99	CPX 45.02 OL 5.30 OPX 49.68 SUBALKALINE
MGO	7.01	7.25	10.12	LC	0.00	
NA20	1.93	2.00	3.62	NE	0.00	A 14.56 F 51.98 M 33.46 THOLEITIC
K20	1.12	1.16	1.39	KР	0.00	
T102	1.47	1.52	1.07	AC	0.00	AL203 16.14 NORM PLAG 63.85 THOLEITIC
P205	0.15	0.16	0.12	DГ	11.49	
ONM	0.17	0.18	0.14	HE	5.25	AN 56.09 AB* 31.76 OR 12.14 AVERAGE SERIES
S	0.00	0.00	0.00	EN	12.68	
NIO	0.00	0.00	0.00	FS	5.80	CI 42.59 NORM PLAG 63.85 BASALT
CR203	0.04	0.04	0.03	FO	1.35	· ·
C02	0.00	0.00	0.00	FΑ	0.62	•
H20+	0.00	0.00	0.00	WO	0.00	JENSEN HIGH MAGNESIUM THOLEITTIC BASALT
H20-	0.00	0.00	0.00	LN	0.00	AL 46.92 FE 26.42 MG 26.66
ro i	0.93	0.00	0.00	MI	3.25	
				IL	2.14	
TOTAL	96.68	100.00	100.00	CR	0.05	COLOR INDEX: 42.59
				HM	0.00	HASHIMOTO INDEX: 39.74
				AP	0.33	
				PO	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
				AG	0.00	
				OL	1.97	
			•	OPX	18.48	
				CPX	16.75	
				AB*	18.12	
TRACE E	LEMENTS	(P.P.M.) AU,RE	PT,PD,IR,OS,RH,RU,HG			
AS	2.10:RB	26.00:SR	203.00:Y 29.	00:ZR	59.00:NR	18.00:SB -0.10:BA 144.00:BT -0.10

COMMENTS: FELDSPAR CRYSTALS COMPRISE ABOUT 10% OF ROCK AND ARE 3-10 MM IN SIZE

FALCONBRIDGE LTD === EXPLORATION DIVISION ===

REPORT #2000

SAMPLE ID # AF05301

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 27-0CT-87 17:35:42

0.0

FIELD NUMBER : 87012JB0015G PROJECT # 1012

LAB REPORT # 29628 TOWNSHIP :

LOT: 0 CONCESSION:

PROVINCE : BRITISH COLUMBIA

NTS : 92F11 PROJECT : FAITH LAKE UTM ZONE : 10 GRID COORDINATES : 325451.0 N: 5502458.0 EL:

SAMPLE TYPE : GRAB SAMPLE FIELD NAME: VOLCANIC.MAFIC .FINE.FELDSPAR PORPHYRITIC.AMYGDALOIDAL OR VESICULAR.

FINAL NAME : ALTERATION :

MINERALIZATION : FORMATION :

SAMPLED BY : J BEEKMANN ANALYZED BY : XRAL

DATE : 16-SEP-87 DATE: 22-0CT-87 ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

	WT Z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION Z		NORMS	CLASSIFICATIONS AND INDICES
S102	47.70	49.27	45.75	Q	0.00	NA20+K20 2.97 SIO2 49.27 SUBALKALINE
AL203	14.30	14.77	16.17	C	0.00	
FE203	11.80	2.83	1.98	OR	4.78	OL# 44.49 NE# 28.19 Q# 27.32 SUBALKALINE
FEO	0.00	8.42	6.54	AB	19.52	
CAO	10.60	10.95	10.89	AN	28.26	CPX 47.97 OL 18.55 OPX 33.48 SUBALKALINE
MGO	8.84	9.13	12.64	LC	0.00	
NA20	2.10	2.17	3.90	NE	0.00	A 12.89 F 47.53 M 39.57 THOLEITIC
K20	0.78	0.81	0.96	KP	0.00	
T 102	1.24	1.28	0.89	AC	0.00	AL203 14.77 NORM PLAG 59.15 THOLEITIC
P205	0.12	0.12	0.10	DI	14.75	
ONM	0.17	0.18	0.14	HE	5.56	AN 53.77 AB# 37.14 OR 9.09 AVERAGE SERIES
S	0.00	0.00	0.00	EN	10.29	
NIO	0.00	0.00	0.00	FS	3.88	CI 47.10 NORM PLAG 59.15 BASALT
CR203	0.07	0.07	0.05	FO	5.70	
002	0.00	0.00	0.00	FA	2.15	
H20+	0.00	0.00	0.00	WO	0.00	JENSEN HIGH MAGNESIUM THOLEIITIC BASALT
H20-	0.00	0.00	0.00	LN	0.00	AL 42.15 FE 24.90 MG 32.95
LOI	1.23	0.00	0.00	MT	2.97	
				I L	1.79	
TOTAL	96.81	100.00	100.00	CR	0.08	COLOR INDEX: 47.10
				HM	0.00	HASHIMOTO INDEX: 43.10
				ΑP	0.26	
				PG	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
				AG	0.00	
				OL	7.85	
				OPX	14.18	
				CPX	20.31	
				AB★	19.52	
TRACE EL	LEMENTS	(P.P.M.) AU.RE	,PT,PD,IR.OS,RH.RU.H	G (P.P.	B.)	
		,				
as .	2.40:RB	-10.00:SR	256.00:Y -10	.00:ZR	33.00:NB	22.00:SB -0.10:BA 136.00:BI -0.1

COMMENTS :

FALCONBRIDGE LTB === EXPLORATION DIVISION ===

REPORT #2000

SAMPLE ID # AF05302 WHOLE ROCK GEOCHEMICAL ANALYSIS PRINTED 27-OCT-87 17:36:22

PAGE 1

LAB REPORT # 29628 FIELD NUMBER: 87012JB018C PROJECT # 1012

TOWNSHIP :

LOT : O CONCESSION :

PROVINCE : BRITISH COLUMBIA

NTS : 92F11 PROJECT : FAITH LAKE UTM ZONE : 10

GRID COORDINATES : 325353.0 N: 5502187.0 EL: 0.0

FIELD NAME: VOLCANIC, MAFIC, FINE, AMYGDALOIDAL OR VESICULAR, FELDSPAR PORPHYRITIC.

FINAL NAME : ALTERATION : MINERALIZATION :

FORMATION :

SAMPLED BY : J BEEKMANN ANALYZED BY : XRAL

SAMPLE TYPE : GRAB SAMPLE

DATE : 16-SEP-87 DATE: 22-00T-87 ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

			21122	22 001 0	•	I DOWN TROUBLE TO A NOT LEGON TO DEFENDE
	wr z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION	% 	NORMS	CLASSIFICATIONS AND INDICES
S102	48.50	50.28	46.90	Q	0.00	NA20+K20 3.38 SI02 50.28 SUBALKALINE
AL203	15.60	.16.17	17.78	С	0.00	
FE203	11.30	2.92	2.05	OR	1.61	OL# 25.27 NE# 41.11 Q# 33.61 SUBALKALINE
FEO	0.00	7.91	6.17	AB	28.12	
CAO	11.30	11.71	11.71	AN	29.59	CPX 63.48 OL 7.74 OPX 28.78 ALKALINE
MGO	5.70	5.91	8.21	LC	0.00	
NA20	3.00	3.11	5.62	NE	0.00	A 17.04 F 53.16 M 29.80 THOLEITIC
K20	0.26	0.27	0.32	KP	0.00	
T102	1.32	1.37	0.96	AC	0.00	AL203 16.17 NORM PLAG 51.27 CALC-ALKALINE
P205	0.13	0.13	0.11	ÐΙ	14.72	
MNO	0.17	0.18	0.14	HE	7.73	AN 49.88 AB+ 47.41 OR 2.71 K-POOR SERIES
S	0.00	0.00	0.00	EN	6.68	
NIO	0.00	0.00	0.00	FS	3.50	CI 40.37 NORM PLAG 51.27 BASALT
CR203	0.03	0.03	0.02	FO	1.79	
CO2	0.00	0.00	0.00	FA	0.94	•
H20+	0.00	0.00	0.00	₩O	0.00	JENSEN CALC-ALKALINE BASALT
H20-	0.00	0.00	0.00	LN	0.00	AL 50.35 FE 26.40 MG 23.26
101	1.39	0.00	0.00	MT	3.08	
				IL.	1.92	
TOTAL	96.46	100.00	100.00	CR	0.03	COLOR INDEX: 40.37
				HM	0.00	HASHIMOTO INDEX: 29.42
				ΑP	0.28	
				PO	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
				AG	0.00	
				OL	2.74	
				OPX	10.18	
				CPX	22.45	
				AB★	28.12	
TRACE EL	LEMENTS	(P.P.M.) AU, RE	,PT,PD,IR,OS,RH,RU,			•
AS	2.80:RB	14.00:SR	75.00:Y	13.00:ZR	65.00:NB	26.00:SB -0.10:BA 55.00:BI -0.

COMMENTS :

FALCONBRIDGE LTD === EXPLORATION DIVISION ===

REPORT #2000

PAGE 1 PRINTED 27-OCT-87 17:37:03

WHOLE ROCK GEOCHEMICAL ANALYSIS SAMPLE ID # AF05303

LAB REPORT # 29628 FIELD NUMBER: 87012JB044 LOT: 0 CONCESSION: TOWNSHIP :

PROVINCE : BRITISH COLUMBIA

NTS : 92F11

UTM ZONE : 10

GRID COORDINATES : 326510.0 N: 5502992.0 EL:

PROJECT : FAITH LAKE

FIELD NAME: VOLCANIC, MAFIC, FINE, FELDSPAR PORPHYRITIC, AMYGDALOIDAL OR VESICULAR.

FINAL NAME : ALTERATION : MINERALIZATION : FORMATION :

SAMPLED BY : J BEEKMANN ANALYZED BY : XRAL

SAMPLE TYPE : GRAB SAMPLE

DATE : 20-SEP-87 DATE : 22-00T-87 ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

	WI Z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION %		NORMS	CLASSIFICATIONS AND INDICES
S102	48.00	49.97	46.61	Q	0.00	NA20+K20 3.22 SIO2 49.97 SUBALKALINE
AL203	14.90	15.51	17.05	ε	0.00	
FE203	12.40	2.90	2.04	OR	4.03	OL* 38.39 NE* 30.80 Q* 30.81 SUBALKALINE
FEO	0.00	9.00	7.02	AB	22.97	
CAU	9.80	10.20	10.20	AN	29.14	CPX 43.67 OL 8.76 OPX 47.57 SUBALKALINE
MGO	7.24	7.54	10.48	LC	0.00	
NA20	2,44	2.54	4.59	NE	0.00	A 14.38 F 51.93 M 33.69 THOLEITIC
K20	0.65	0.68	0.81	ΚP	0.00	
T102	1.29	1.34	0.94	AC	0.00	AL203 15.51 NORM PLAG 55.92 THOLEITIC
P205	0.11	0.11	0.09	DI	11.29	
ONM	0.17	0.18	0.14	HE	5.59	AN 51.90 AB# 40.92 OR 7.18 AVERAGE SERIES
S	0.00	0.00	0.00	EN	12.30	
NIO	0.00	0.00	0.00	ES	6.09	CI 43.59 NORM PLAG 55.92 BASALT
CR203	0.03	0.03	0.02	EO	2.26	
.C02	0.00	0.00	0.00	ΕA	1.12	
H20+	0.00	0.00	0.00	WO	0.00	JENSEN HIGH MAGNESIUM THOLEIITIC BASALT
H20-	0.00	0.00	0.00	LN	0.00	AL 45.27 FE 26.92 MG 27.81
LOI	1.77	0.00	0.00	MI	3.06	
				IL	1.88	
TOTAL	96.07	100.00	100.00	CR	0.03	COLOR INDEX: 43.59
				HM	0.00	HASHIMOTO INDEX: 39.20
				AP	0.24	
				PO	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
		•		AG	0.00	
				OL	3.38	
				XTO	18.38	
				CPX	16.87	
				AB★	22.97	
TRACE EL	EMENTS	(P.P.M.) AU.RE	PT.PD.IR.OS.RH.RU.HO			

46.00:NB

23.00:SB

0.20:BA

59.00:BI

-0.10:

12.00:ZR

COMMENTS :

8.60:RB

25.00:SR

204.00:Y

FALCONBRIDGE LID === EXPLORATION DIVISION ===

REPORT #2000

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 27-OCT-87 17:39:50

PROJECT # 1012 FIELD NUMBER: 87012JD054

LAB REPORT # 29628 TOWNSHIP :

NTS : 92F11

LOT : O CONCESSION :

PROVINCE : BRITISH COLUMBIA

PROJECT : FAITH LAKE 325990.0 N: 5502825.0 EL:

SAMPLE TYPE : GRAB SAMPLE

FIELD NAME: PLUTONIC, INTERMEDIATE OR MESOCRATIC, MEDIUM, HORNBLENDE BEARING, FELDSPAR PORPHYRITIC.

FINAL NAME :

UTM ZONE : 10

ALTERATION : UNKNOWN. MINERALIZATION : NIL.

SAMPLE ID # AF05317

FORMATION :

SAMPLED BY : JD FOURNIER

ANALYZED BY : XRAL

DATE : 24-SEP-87 DATE : 22-0CT-87

GRID COORDINATES :

ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

	WT %	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION		NORMS	CLASSIFICATION	ONS AND IND	ICES	
S102	65.10	65.99	61.05	Q	19.88	NA20+K20 5.	46 SIO2	65.99	SUBALKALINE
AL203	17.30	17.54	19.12	C	0.04				
FE203	3.79	1.88	1.31	OR	4.49	OLA 7.44 N	E* 36.74 Q	k 55.83	SUBALKAL INE
FEO	0.00	1.77	1.37	AB	42.18				
CAO	5.01	5.08	5.03	AN	24.37	CPX 0.00 0	L 0.00 0	PX 100.00	SUBALKAL INE
MGO	1.71	1.73	2.39	LC	0.00				
NA20	4.64	4.70	8.44	NE	0.00	A 51.28 F	32.45 M	16.27	THOLEITIC
K20	0.75	0.76	0.90	KР	0.00				
T 102	0.35	0.35	0.25	AC	0.00	AL203 17.	54 NORM PL	4G 36.62	CALC-ALKAL INE
P205	0.12	0.12	0.10	DI	0.00				
ONM	0.07	0.07	0.06	HE	0.00	AN 34.31 A	B* 59.37 0	R 6.32	AVERAGE SERIES
S	0.00	0.00	0.00	EN	4.78				
OIN	0.00	0.00	0.00	FS	2.05	CI 9.:	28 NORM PL	AG 36.62	ANDESITE
CR203	0.00	0.50	0.50	FO	0.00				
002	0.00	0.00	0.00	FA	0.00				
120+	0.00	0.00	0.00	WO	0.00	JENSEN CALC	-ALKALINE D	ACITE	
H20-	0.00	0.00	0.00	LN	0.00	AL 78.08 F			
LOI	1.00	0.00	0.00	MI	1.96				
				IL	0.49				
COTAL	98.64	99.00	99.00	CR	0.75	COLOR INDEX :	9.28		
				HM	0.00	HASHIMOTO IND	EX: 20.	31	
				AP	0.25				
				PO	0.00				
				NS	0.00				
				KS	0.00				
				RU	0.00				
				AG	0.00				
				OL	0.00				
				ÖPX	6.83				
				CPX	0.00				
				AB*	42.18				
RACE E	LEMENTS	(P.P.M.) AU,RE	,PT,PD,IR,OS,RH,RU,						
 15	2.30:RB	22.00:SR	624.00:Y	3.00:ZR	57.00:NB	32.00:SB	-0.10		7.00:BI -0.1

COMMENTS :

==== FALCONBRIDGE LID ===== === EXPLORATION DIVISION ===

REPORT #2000

PRINTED 27-0CT-87 17:39:10

SAMPLE ID # AF05311 WHOLE ROCK GEOCHEMICAL ANALYSIS

LAB REPORT # 29628 FIELD NUMBER: 87012JB073B PROJECT # 1012
TOWNSHIP: LOT: 0 CONCESSION: PROVINCE: BRITISH COLUMBIA

NTS: 92F11 PROJECT: FAITH LAKE
UTM ZONE: 10 GRID COORDINATES: E: 326380.0 N: 5502950.0 EL:

UTM ZONE : 10 GRID COORDINATES : E : 326380.0 N : 5502950.0 EL : 0.0 SAMPLE TYPE : GRAB SAMPLE

FIELD NAME : PLUTONIC.FELSIC OR LEUCOCRATIC .FINE.HORNBLENDE BEARING.

FINAL NAME : ALTERATION :

MINERALIZATION : NIL .NIL.

1.08

FORMATION :

LOI

SAMPLED BY: J BEEKMANN DATE: 25-SEP-87 ANALYTICAL
ANALYZED BY: XRAL DATE: 22-OCT-87 TECHNIQUE: X-RAY FLUORESCENCE

NORMALIZED NORMALIZED CLASSIFICATIONS AND INDICES WT % ANHYDROUS WT % ANHYDROUS CATION % NORMS ______ SI02 SUBALKALINE 73.60 74.82 69.49 Q 33.40 NA20+K20 74.82 5.46 SIO2 AL203 14.20 14.44 15.80 f: 0.00 SUBALKAL INE FE203 1.14 1.16 0.81 OR 0.90 0.17 NEX 35.23 QX 64.60 FEO 0.00 0.00 0.00 AB 47.77 0.00 OPX 11.03 ALKALINE CAD 3.49 3.55 3.53 AN 15.17 CPX 88.97 OL MGO 0.33 LC 0.32 0.45 0.00 NA20 5.22 5.31 9.55 NE 0.00 15.27 M 4.76 CALC-ALKALINE 79.96 K20 0.15 0.15 0.18 ΚP 0.00 14.44 NORM PLAG 24.10 CALC-ALKALINE T102 0.14 0.14 0.10 AC 0.00 AL203 P205 0.10 0.10 0.08 DТ 1.44 K-POOR SERIES MNO 0.01 0.01 0.01 HE 0.01 23.76 AB* 74.83 OR 1.42 S 0.00 0.00 0.00 EN 0.18 NIO 0.00 0.00 0.00 FS 0.00 3.05 NORM PLAG 24.10 DACITE C: T **CR203** 0.00 0.50 0.50 FO 0.00 002 0.00 0.00 0.00 £Α 0.00 H20+ 0.00 0.00 0.00 WO 0.00 CALC-ALKALINE RHYOLITE H20-0.00 0.00 92.03 FE 5.34 MG 0.00 LN 0.00 2.62

TOTAL 98.36 99.00 99.00 CR 0.75 COLOR INDEX: 3.05 HM 0.00 HASHIMOTO INDEX: 5.12

MI

0.00

AP 0.21 PO 0.00 NS 0.00 KS 0.00 ŘΨ 0.00 AG 0.00 ÜL 0.00 OPX 0.18 CPX 1.45 47.77 AB*

TRACE ELEMENTS (P.P.M.) AU, RE, PT, PD, IR, OS, RH, RU, HG (P.P.B.)

AS 1.00:RB 12.00:SR 509.00:Y 20.00:ZR 65.00:NB -10.00:SB 0.20:BA 290.00:BI -0.10:

1.21

COMMENTS : HNBL ARE ALTERED TO BIO AND PO

0.00

FALCONBRIDGE LID === EXPLORATION DIVISION ===

REPORT #2000

SAMPLE ID # AF05310

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 27-OCT-87 17:38:28

LAB REPORT # 29628 FIELD NUMBER: 87012JB062B PROJECT # 1012

TOWNSHIP : LOT: 0 CONCESSION: PROVINCE : BRITISH COLUMBIA NTS : 92F11 PROJECT : FAITH LAKE

UTM ZONE : 10 GRID COORDINATES : E : 325710.0 N: 5502617.0 EL: 0.0 SAMPLE TYPE : GRAB SAMPLE

FIELD NAME: PLUTONIC, INTERMEDIATE OR MESOCRATIC, MEDIUM, HORNBLENDE BEARING, FELDSPAR PORPHYRITIC.

FINAL NAME : ALTERATION :

MINERALIZATION : NIL , NIL.

FORMATION :

SAMPLED BY : J BEEKMANN DATE : 24-SEP-87 ANALYTICAL ANALYZED BY : XRAL DATE: 22-0CT-87 TECHNIQUE : X-RAY FLUORESCENCE

	D DI . AI	(HL	DATE . Z.	2 001	07	Individue : A KAI I HOUVESCHOOL
	WT %	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION %		NORMS	CLASSIFICATIONS AND INDICES
S102	67.70	67.97	63.03	Q	24.28	NA20+K20 4.91 SIO2 67.97 SUBALKALINE
AL203	16.50	16.57	18.11	C	0.00	
EE203	3.08	1.84	1.28	OR	1.78	OLA 5.08 NEA 35.27 QA 59.65 SUBALKALINE
FEO	0.00	1.13	0.88	AB	41.43	•
CAO	5.38	5.40	5.37	AN	23.67	CPX 29.09 OL 0.00 OPX 70.91 SUBALKALINE
MGD	1.67	1.68	2.32	LC	0.00	
NA20	4.59	4.61	8.29	NE	0.00	A 52.40 F 29.70 M 17.90 CALC-ALKALINE
K20	0.30	0.30	0.36	КP	0.00	
T102	0.33	0.33	0.23	AC	0.00	AL203 16.57 NORM PLAG 36.36 CALC-ALKALINE
P205	0.11	0.11	0.09	DІ	1.58	
MNO	0.07	0.07	0.06	HE	0.38	AN 35.39 AB+ 61.95 OR 2.67 K-POOR SERIES
S	0.00	0.00	0.00	EN	3.85	
WIO	0.00	0.00	0.00	FS	0.93	CI 9.12 NORM PLAG 36.36 HIGH ALUMINA ANDESITE
CR203	0.00	0.50	0.50	FO	0.00	
C02	0.00	0.00	0.00	FA	0.00	
H20+	0.00	0.00	0.00	WO	0.00	JENSEN CALC-ALKALINE DACITE
H20-	0.00	0.00	0.00	LN	0.00	AL 79.18 FE 10.69 MG 10.13
roi	0.39	0.00	0.00	MI	1.92	
				IL	0.46	
TOTAL	99.59	99.00	99.00	CR	0.75	COLOR INDEX: 9.12
				HM	0.00	HASHIMOTO INDEX: 16.50
				AP	0.23	
				PO	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
			•	AG	0.00	
		•		OL	0.00	
				OPX	4.77	
				CPX	1.96	
				ABA	41,43	
TDACE E	PMENTS	AND WAY ANDE	ים וומ עם סח פד חם דם			

TRACE ELEMENTS (P.P.M.) AU, RE, PT, PD, IR, OS, RH, RU, HG (P.P.B.)

0.70:RB 20.00:SR 709.00:Y -10.00:ZR 47.00:NB 23.00:SB -0.10:BA 352,00:BI -0.10:

COMMENTS :

REPORT #2000

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 27-OCT-87

LAB REPORT # 29628 FIELD NUMBER: 87012JB062A PROJECT # 1012

TOWNSHIP : LOT: 0 CONCESSION: PROVINCE : BRITISH COLUMBIA

NTS : 92F11 PROJECT : FAITH LAKE

UTM ZONE : 10 GRID COORDINATES : E : 325710.0 N: 5502617.0 EL: SAMPLE TYPE : GRAB SAMPLE

FIELD NAME: PLUTONIC, FELSIC OR LEUCOCRATIC, FINE, EQUIGRANULAR, LOOK AT COMMENTS FILE.

FINAL NAME : ALTERATION :

SAMPLE ID # AF05309

MINERALIZATION : NIL .NIL.

FORMATION :

SAMPLED BY : J BEEKMANN DATE : 24-SEP-87 ANALYTICAL

ANALYZED BY : XRAL DATE: 22-0CT-87 TECHNIQUE : X-RAY FLUORESCENCE

	WT Z	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION %		NORMS	CLASSIFICATIONS AND INDICES
S102	97.50	98.32	98.28	Q	99.97	NA20+K20 0.02 SIO2 98.32 SUBALKALINE
AL203	0.25	0.25	0.30	C	0.38	
FE203	0.53	0.53	0.40	OR	0.13	OL* 0.51 NE* 0.00 Q* 99.49 SUBALKALINE
FEO	0.00	0.00	0.00	AB	2.50	
CAB	0.49	0.49	0.53	AN	2.22	CPX 0.00 OL 0.00 OPX 100.00 SUBALKALINE
MGO	0.23	0.23	0.35	LC	0.00	
NA20	0.00	0.50	0.50	NE	0.00	A 2.75 F 65.61 M 31.64 THOLEITIC
K20	0.02	0.02	0.03	ΚP	0.00	
T102	0.05	0.05	0.04	AC	0.00	AL203 0.25 NORM PLAG 100.00 THOLEITIC
P205	0.06	0.06	0.05	DІ	0.00	
ОИМ	0.02	0.02	0.02	HE	0.00	AN 94.52 AB+ 0.00 OR 5.48 K-RICH SERIES
S	0.00	0.00	0.00	ΕN	0.69	
NIO	0.00	0.00	0.00	FS	0.00	CI 1.11 NORM PLAG 100.00 BASALT
CR203	0.02	0.02	0.02	FO	0.00	
C02	0.00	0.00	0.00	FA	0.00	
H20+	0.00	0.00	0.00	WO	0.00	JENSEN BASALTIC KOMATIITE
H20-	0.00	0.00	0.00	LN	0.00	AL 27.01 FE 41.56 MG 31.42
LOI	0.62	0.00	0.00	ΜÏ	0.00	
				IL	0.02	
TOTAL	99.16	99.00	99.00	CR	0.02	COLOR INDEX: 1.11
				HM	0.40	HASHIMOTO INDEX: 33.78
				AP	0.14	
				PO	0.00	
			~	NS	0.00	
				KS	0.00	
				RU	0.03	
				AG	0.00	
			-	OL	0.00	·
				OPX	0.69	
				CPX	0.00	
				AB#	2.50	
TRACE EL	EMENIS	(P.P.M.) AU,RE,	PT,PD,IR,OS,RH,RU,HG	(P.P	.B.)	

6.00:RB -10.00:SR 43.00:Y -10.00:ZR -10.00:NB -0.10:BA 88.00:BI -0.10:

COMMENTS : APLITE DYKE

FALCONBRIDGE LID === EXPLORATION DIVISION ===

REPORT #2000

SAMPLE ID # AF05367

WHOLE ROCK GEOCHEMICAL ANALYSIS

PAGE 1 PRINTED 28-OCT-87 10:09:27

1.20:

LAB REPORT # 29628 FIELD NUMBER: 87012JD002B PROJECT # 1012 TOWNSHIP : LOT: 0 CONCESSION: PROVINCE : BRITISH COLUMBIA NTS : 092F11 PROJECT : FAITH LAKE UTM ZONE : 10 GRID COORDINATES : 325820.0 N: 5503000.0 EL: 0.0 SAMPLE TYPE : GRAB SAMPLE

FIELD NAME : PLUTONIC, FELSIC OR LEUCOCRATIC , FINE, LOOK AT COMMENTS FILE.

FINAL NAME :

ALTERATION :

MINERALIZATION : DISSEMINATED AND BLEBS, <1% , ARSENOPYRITE.

FURMATION :

SAMPLED BY : JD FOURNIER

ANALYZED BY : XRAL

DATE : 27-SEP-87 DATE : 22-0CT-87 ANALYTICAL

TECHNIQUE : X-RAY FLUORESCENCE

0.20:BA

1230.00:BI

	WT %	NORMALIZED ANHYDROUS WT %	NORMALIZED ANHYDROUS CATION %		NORMS	CLASSIFICATIONS AND INDICES
S 102	73.00	77.18	75.25	Q	57.43	NA20+K20 3.47 SIO2 77.18 SUBALKALINE
AL203	11.80	12.48	14.34	С	8.99	
FE203	5.49	1.80	1.32	OR	20.41	OL* 8.11 NE* 1.63 Q* 90.27 SUBALKALINE
FEG	0.00	3.61	2.94	AB	1.80	
CAO	0.49	0.52	0.54	AN	2.27	CPX 0.00 OL 0.00 OPX 100.00 SUBALKALINE
MGO	0.61	0.64	0.94	LC	0.00	
NA20	0.18	0.19	0.36	NE	0.00	A 37.15 F 55.95 M 6.91 THOLEITIC
K20	3.10	3.28	4.08	КP	0.00	
T102	0.20	0.21	0.16	AC	0.00	AL203 12.48 NORM PLAG 55.78 THOLEITIC
P205	0.06	0.06	0.05	DI	0.00	
ONM	0.03	0.03	0.03	HE	0.00	AN 9.27 AB* 7.35 OR 83.38 K-RICH SERIES
S	0.00	0.00	0.00	EN	1.87	
NIO	0.00	0.00	0.00	FS	5.30	CI 9.47 NORM PLAG 55.78 ANDESITE
CR203	0.00	0.50	0.50	FO	0.00	
C02	0.00	0.00	0.00	FA	0.00	
H20+	0.00	0.00	0.00	WO	0.00	JENSEN THOLEIITIC RHYOLITE
H20-	0.00	0.00	0.00	LN	0.00	AL 72.73 FE 22.52 MG 4.75
LOI	4.00	0.00	0.00	MI	1.98	
				IL	0.31	
TOTAL	94.57	99.00	99.00	CR	0.75	COLOR INDEX: 9.47
				нм	0.00	HASHIMOTO INDEX: 84.70
			•	AP	0.14	
				PO	0.00	
				NS	0.00	
				KS	0.00	
				RU	0.00	
				AG	0.00	
				OL.	0.00	
				OPX	7.18	
				CPX	0.00	
				ABA	1.80	
TRACE EL	PMPNTO	(P.P.M.) AU.RE.	.PT.PD.IR.OS.RH.RU.H			

26.00:NB

-10.00:SB

-10.00:ZR

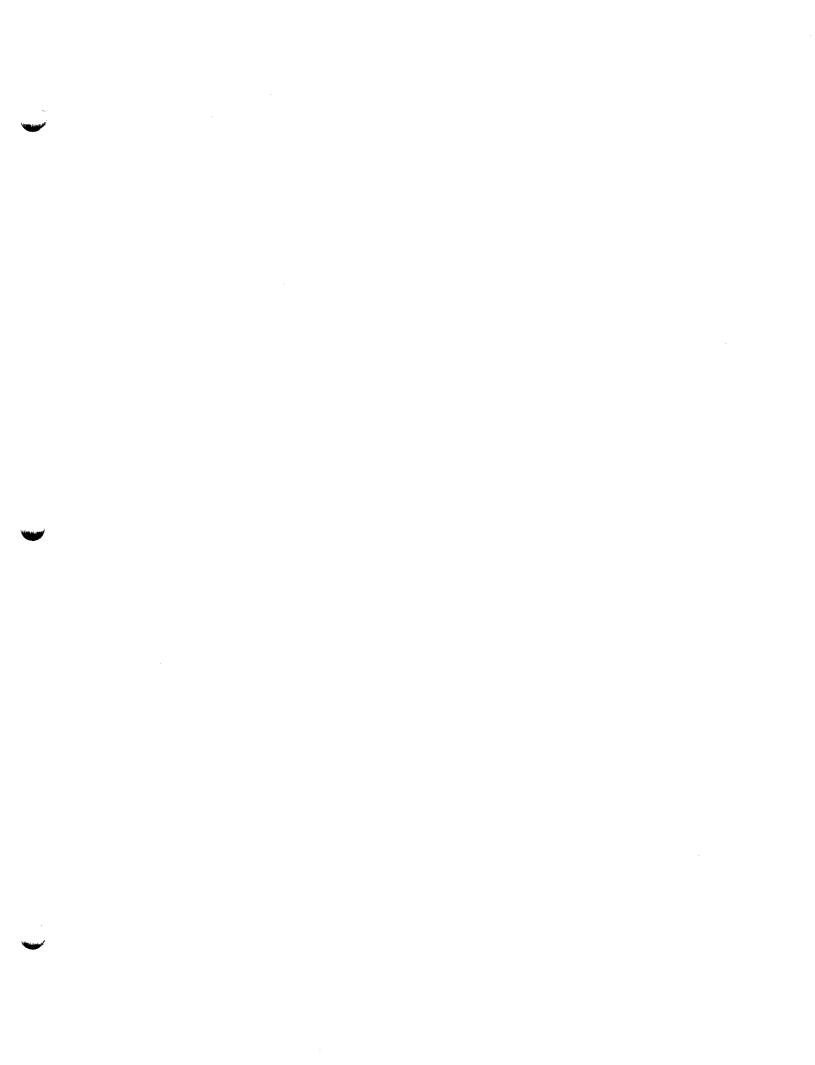
COMMENTS : WHITE FELSIC DYKE @ TOP OF SCHEV

46.00:SR

5.20:RB

APPENDIX F

MULTIELEMENT GEOCHEMICAL RESULTS FROM ENVIRONMENTAL SAMPLES



APPENDIX F

ENVIRONMENTAL MULTIELEMENT ANALYSES

SAMPLE ->	ENV-1	ENV-2	ENV-3	ENV-4	env-5
	(WATER)	(WATER)	(WATER)	(WATER)	(SILT)
THE THE PER STATE AND ASSESSMENT AND THE STATE STATE STATE	PPB	PPB	PPB	PPB	PPM
**************************************	\$100 and hid dom one out the time for the two				
PB	10.00	13.00	12.00	21.00	4.00
MN	3.00	7.00	2.00	2.00	,
סא	1.00	< 1.00	< 1.00	< 1.00	****
NI	2.00	1.00	3.00	2.00	si be
ZN	2.00	3.00	13.00	8.00	95.00
AS	< 5.00	< 5.00	< 5.00	6.00	200.00
HG	0.12	0.10	0.10	0.18	0.03
CD	< 1.00	2.00	4.00	2.00	
CO	< 1.00	< 1.00	< 1.00	3.00	
CU	6.00	5.00	1.00	6.00	405.00
FE	29.00	33.00	27.00	28.00	1000

APPENDIX G

STEREOGRAPHIC PROJECTIONS OF STRUCTURAL DATA

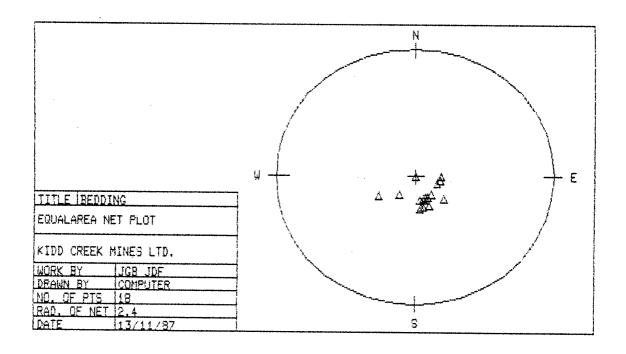


FIGURE 1: Equal area plot of poles to bedding

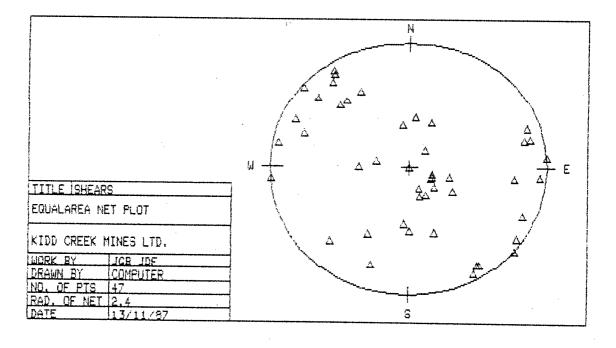


FIGURE 2: Equal area plot of poles to shears

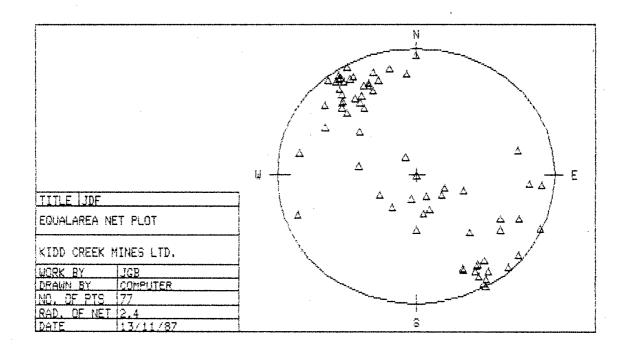


FIGURE 3: Equal area plot of poles to veins

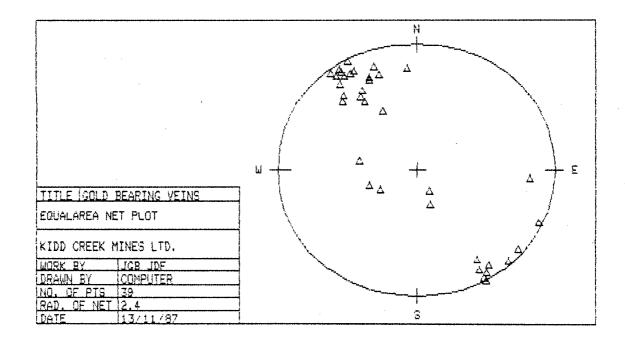


FIGURE 4: Equal area plot of poles to gold bearing veins

APPENDIX H

SCATTER DIAGRAMS

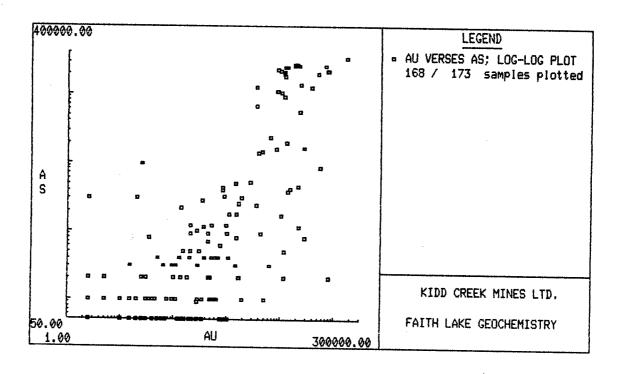


FIGURE 1: Log-log scatter plot of Au verses As

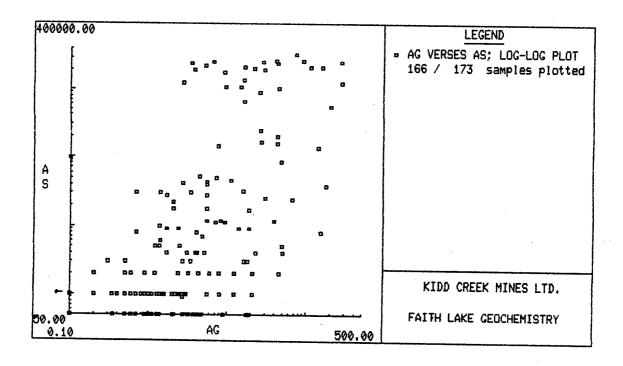


FIGURE 2: Log-log scatter plot of Ag verses As

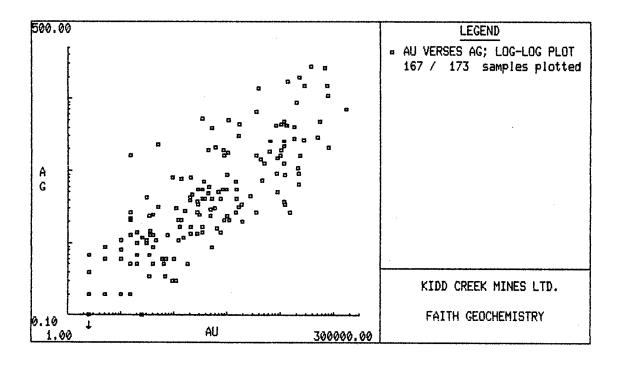


FIGURE 1: Log-log scatter plot of Au verses Ag

APPENDIX I

WORK PERMIT



Ministry of Environment and Parks PARKS AND OUTDOOR PEOPLETION DIVISION

Resource Use Permit

	RECREATION DIVISION	
		PERMIT NO1875
This Pa	ark Use Permit (hereinafter called the "Permit") dated for reference	
the		Strathcona
MADE IN	PURSUANCE OF THE PARK ACT	Recreation Area
BETWEEN	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, represented by the Minister of Environment and Parks (the "Province")	SH WITNESSES THAT WHEREAS the Province has agreed to grant to the Permittee a permit over the land and improvements (hereinafter referred to as the "Permit Area") described in the schedule below entitled Permit Description Schedule;
AND	Falconbridge Ltd.	
		NOW. THEREFORE, in consideration of the money to be

(the "Permittee")

ARTICLE VI—COVENANTS OF THE PERMITTEE

ARTICLE I—GRANT OF PERMIT

1.01 The Province, on the terms, conditions and provisions set forth herein, hereby

grants to the Permittee permission to enter -

Strathcona Recreation Area (the "Park") and to enter and use the Permit Area for the purposes described in the schedule below entitled Management Plan Schedule (the "Management Plan").

ARTICLE II—DURATION

ing on October 31, 1987, unless cancelled, terminated or renewed in accordance with the terms and provisions hereof.

ARTICLE III-FINANCIAL

- 3.01 The Permittee shall pay to the Province:
 - (a) the "Permit Fee"; and,
 - (b) the "Rent"
 - as defined and prescribed in the schedule below entitled Financial Schedule.
- 3.02 Notwithstanding the Financial Schedule the Province may, by notice to the Permittee 30 days prior to each anniversary of the Commencement Date, increase the Permit Fee and the Rent by an amount solely determined by the Province at its discretion, and the Permittee shall pay the increased amount.
- 3.03 The Permittee shall pay interest to the Province on the money payable by the Permittee and owing to the Province hereunder, at the rate of interest prescribed by the Financial Administration Act in respect of money owing to the Province, said interest to be calculated from the date that the money becomes payable to the Province.

ARTICLE IV-INDEMNITY AND INSURANCE

- 4.01 The Permittee shall indemnify and save harmless the Province from and against any and all losses, claims, damages, actions, causes of action, costs, fees and expenses that the Province may sustain, incur, suffer or be put to by reason of any act or omission of the Permittee or of any servant, employee, officer, director, shareholder or client of the Permittee.
- 4.02 The Permittee shall, during the duration of this Permit, provide, maintain and pay for insurance in such form and amounts and with such deductibles as prescribed in the schedule below entitled Insurance Schedule.
- 4.03 Notwithstanding the Insurance Schedule the Province may, by notice to the Permittee, require the Permittee to change the form, amount, deductible or other term of an insurance policy required hereunder, and the Permittee shall change the insurance policy accordingly.
- 4.04 The Permittee shall deliver to the Province, upon demand, copies of insurance policies required to be maintained by the Permittee and evidence of payment of the premiums for the aforesaid insurance policies.

ARTICLE V-TRANSFER

5.01 The Permittee shall not assign, transfer, sublet, mortgage or grant any of the rights or privileges granted by this Permit without the prior written consent of, and on the terms and conditions determined by, the Province.

- 6.01 The Permittee covenants with the Province:
 - (a) to pay the Permit Fee and other money payable under this Permit when due at the address of the Province noted below or at such place as the Province may specify from time to time;

paid by the Permittee, and the the terms, conditions and provisions of this Permit, the parties agree as follows:

- (b) to pay and discharge when due all taxes, levies, charges and assessments now or hereafter assessed, levied or charged which relate to operations of the Permittee and the Permit Area;
- (c) to observe, abide by and comply with all laws, bylaws, orders, directions, ordinances and regulations of any competent governmental authority in any way affecting the Permit Area, the Park or the use and occupation thereof:
- (d) to advise its clients, servants, employees and agents of the laws and regulations respecting provincial parks and recreation areas and the conditions of this Permit respecting conduct in the Permit Area.
- (e) to keep the Permit Area in a safe, clean and sanitary condition to the satisfaction of the Province and to make safe, clean and sanitary any portion of the Permit Area that the Province may direct by notice in writing to the Permittee;
- (f) to report to the Province, as soon as practicable, in writing and in detail any accidents requiring medical attention which occur in the Permit Area;
- (g) to comply with all orders and directions made verbally or in writing by a park officer, as defined in the Park Act, relating to the Park, the Permit or the Permit Area.
- (h) not to construct, erect, place, repair, maintain or alter any building, fixture, equipment, structure or improvement of any kind whatsoever on the Permit Area without the prior written consent of the Province;
- to take all reasonable precautions to prevent and suppress fires in the Permit Area;
- (j) not to misrepresent in any way by advertisement, sign, circular, pamphlet, letterhead or other advertising medium, the status of its rights under this Permit and not to post or distribute advertising matter in any way connected with this Permit without the consent of the Province;
- (k) not to interfere with free public access through, across and upon the Permit Area, unless otherwise specified in the Management Plan;
- (b) not to interfere or disrupt the activities and operations of other permittees or users in the Park;
- (m) to use and occupy the Permit Area only in accordance with the provisions of this Permit;
- (n) not to commit or allow any wilful or voluntary waste, damage or destruction in or upon the Permit Area;
- to pay for or repair, as determined by the Province, any damage caused to the property of the Province by the Permittee, its servants, agents, licensees, or clients;
- (p) upon the expiration, cancellation or termination of this Permit:
 - (i) to peaceably quit and deliver up possession of the Permit Area and the improvements thereon to the Province, in a safe, clean and sanitary condition and in a state of good repair, and
 - (ii) to deliver possession of all equipment, turnishings, fixtures and chattels owned by the Province in a state of good repair and working order.

and to the extent necessary, this covenant shall survive the expiration, cancellation or termination of this Permit;

- (q) to comply with all of the provisions of the Management Plan; and
- (r) to establish, maintain and, upon request, provide to the Province books of account, balance sheets and income statements as prescribed in the Financial Schedule.

ARTICLE VII-RIGHTS OF THE PROVINCE

- 7.01 The Province retains all rights in respect of the Park and Permit Area which are not expressly granted to the Permittee hereby, including, without limitation:
 - (a) the right at all times for its authorized representatives, servants and agents to have unimpeded access over and along all portions of the Permit Area;
 - (b) the right at all times to construct, repair, alter and maintain buildings, equipment, structures and improvements upon the Permit Area; and
 - (c) the right to grant further rights in respect of the Park and Permit Area, provided that such rights shall not unreasonably impede, obstruct or compete with the rights of the Permittee granted herein.

ARTICLE VIII—NOTICE

- 8.01 Where service of a notice or a document is required under this Permit the notice or document shall be in writing and shall be deemed to have been served if delivered, or it sent by prepaid registered mail addressed, as follows:
 - (a) to the Province:

Strathcona District Manager Rathtrevor Beach Park Box 1479 PARKSVILLE, B.C. VOR 2SO (604) 248-3931

the duly authorized representative having responsibility for management of all matters concerning the Park, or

Regional Director South Coast Region 1610 Indian River Drive NORTH VANCOUVER, B.C. V7G 1L3 (604) 929-1291

the duly authorized representative having responsibility for the execution, adjudication and administration of this Permit; and

(b) to the Permittee:

Falconbridge Ltd. #701 - 1281 West Georgia Street VANCOUVER, B.C. V6E 3J7

and if the notice or document is mailed it shall be deemed to be served on the eighth day after its deposit with Canada Post.

- 8.02 Either party may, by notice in writing to the other, specify another address for service of notices and documents under this Permit and where another address is specified under this section, notices and documents shall be mailed to that address in accordance with this Article.
- 8.03 Notwithstanding section 8.01, any written notice or document to be served or given by the Province to the Permittee under this Permit shall be effectively given or served by posting the same in a conspicuous place on the Permit Area.

ARTICLE IX-RENEWAL

- 9.01 The Province may, at its discretion, offer a further permit to the Permittee by notice in writing on the terms and conditions, and for a period, specified in the notice where:
 - (a) the term of this Permit is for one year or more; and
 - (a) the Permittee is not in default hereunder.
- 9.02 The Permittee shall have a period of thirty (30) days from the date of receipt of the notice referred to in Section 9.01 to accept a further permit by endorsing his acceptance on the notice and delivering it to the Province.

ARTICLE X-PERFORMANCE GUARANTEE

- 10.01 Upon the request of the Province, the Permittee shall deliver to the Province a performance guarantee as security for the performance by the Permittee of all the terms and conditions of this Permit (herein called the "Performance Guarantee").
- 10.02 The terms, conditions and provisions of the Performance Guarantee shall be as prescribed in the schedule below entitled Performance Guarantee Schedule.

ARTICLE XI-MISCELLANEOUS

- 11.01 This Permit may be inspected by the public at such times and at such places as the Province may determine.
- 11.02 Notations of change will be recorded on the schedule below entitled Endorsements Schedule.
- 11.03 Time is of the essence in this agreement.
- 11.04 No term, condition, covenant or other provision herein shall be considered to have been waived by the Province unless such waiver is expressed in writing by the Province.
- 41.05 During the term of this Permit, the Permittee shall be an independent contractor and not the servant, agent, employee or partner of the Province.
- 11.06 All employees hired by the Permittee shall remain at all times the employees of the Permittee and not of the Province and the Permittee shall be solely responsible for the arrangement of reliefs and substitutions, pay, supervision, discipline, unemployment insurance, worker's compensation, leave and all other matters arising out of the relationship of employer and employee.
- 11.07 The Province shall not be liable for any loss, damage, cost or expense resulting from the disruption of the Permittee's property or the operation contemplated by this Permit which result from strikes, flooding or other acts of God, vandalism, or any other interference to the Permittee's operation or property.

ARTICLE XII-CANCELLATION

12.01 In the event that

- (a) the Permittee defaults in the payment of the Permit Fee or other money payable under this Permit, and the default continues for 7 days after the giving of written notice of the default by the Province to the Permittee;
- (b) the Permittee fails to perform or observe any of the terms or conditions of this Permit, other than the payment of money hereunder, and the failure is not remedied within a period specified by the Province;
- (c) the Permit Area is damaged or destroyed by any cause whatsoever;
- (d) the Park is closed by the Province;
- (e) the Permittee files a petition in bankruptcy, is adjudged bankrupt, is petitioned into bankruptcy, makes an assignment for the benefit of his creditors, becomes insolvent or takes the benefit or protection of any statute for bankrupt or insolvent debtors;
- (f) any of the Permittee's assets are seized in execution from the Permit Area;
- (g) the Permittee performs any act which, in the opinion of the Province, affects the good standing or reputation of the Park, or adversely affects any other permit holder within the Park

the Province may cancel this Permit immediately by written notice to the Permittee. \Box

- 12.02 In the event that the Permittee and the Province mutually agree in writing to terminate this Permit, it shall be deemed to be terminated and, except as otherwise provided in this Permit, the parties shall be released and discharged from and of their obligations hereunder.
- 12.03 The obligation of the Permittee
 - (a) to pay the Permit Fee and other money payable under this Permit; and
 - (b) to comply with sections 4.01, 6.01(e), 6.01(j), 6.01(o), 6.01(p) and 6.01(r) shall survive the expiration, cancellation or termination of this Permit.
- 12.04 The Permittee shall not be entitled to any compensation from the Province, whether for damages or otherwise, in respect of a cancellation or termination of this Permit.

ARTICLE XIII—INTERPRETATION

- 13.01 In this Permit, unless the context otherwise requires, the singular includes the plural and the masculine includes the feminine, a corporation and body politic.
- 13.02 The captions and headings contained in this Permit are for convenience only and are not to be construed as defining or in any way limiting the scope or intent of the provisions hereof.
- 13.03 Where in this Permit there is a reference to an enactment of the Province of British Columbia or of Canada, that reference shall include a reference to any subsequent enactment of like effect, and unless the context otherwise requires, all statutes referred to herein are enactments of the Province of British Columbia.
- 13.04 If any section of this Permit or any part of a section is found to be illegal or unenforceable, that part or section, as the case may be, shall be considered separate and severable and the remaining parts or sections, as the case may be, shall not be affected thereby and shall be enforceable to the fullest extent permitted by law.

IN WITNESS WHEREOF, the parties hereto have executed this Permit as of the day and year first above written.

SIGNED, SEALED AND DELIV-ERED by the Minister of Environment and Parks or his duly authorized representative on behalf of Her Majesty the Queen in Right of the Province of British Columbia in the presence of: Witness Signature Representative SIGNED, SEALED AND DELIV-ERED by the Permittee in the Signature of Permittee Signature of Permittee the Common Seal of... was hereunto affixed in the presence of: Authorized Signatory C/S **Authorized Signatory**

PERMIT DESCRIPTION SCHEDULE
See Attached Sketch

MANAGEMENT PLAN SCHEDULE

As Attached

FINANCIAL SCHEDULE

Permit Fee: \$60.00 payable in advance

INSURANCE SCHEDULE

As Attached

PERFORMANCE GUARANTEE SCHEDULE

As Attached

Letter of Credit No. 2D/116/998

ENDORSEMENTS SCHEDULE

As Attached

Gem Lake Property: Notice of Work dated

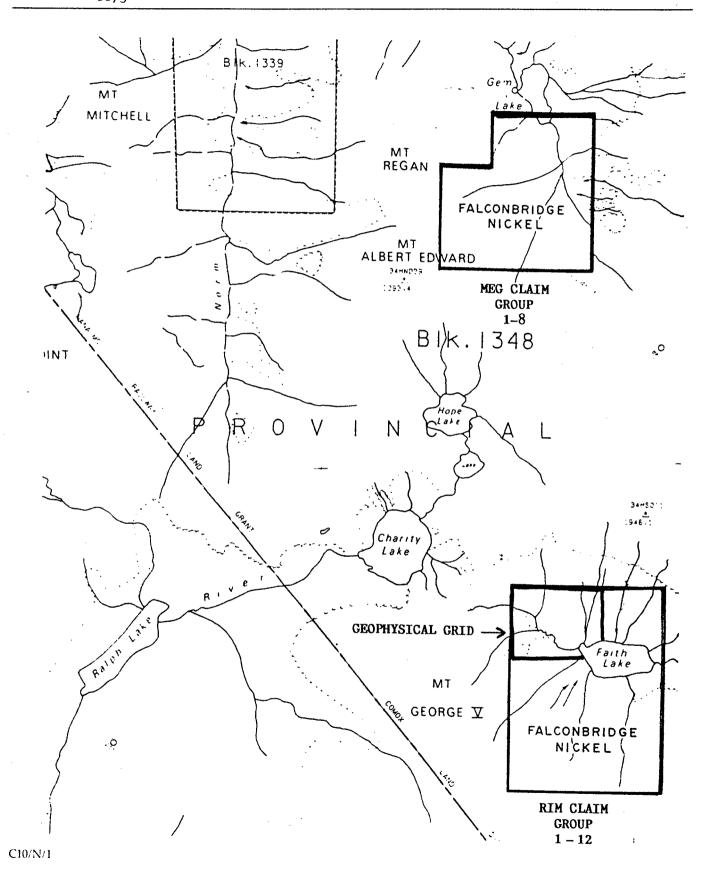
May 8, 1987

Faith Lake Property: Notice of Work dated

May 7 1087

PERMIT No.

1875



PERMIT No. 1875

PURPOSE:

To allow mineral exploration on Mineral Titles Meg and Rim. The work shall be limited to:

- 1. Geophysical survey
- 2. Geochemical survey
- 3. Fly camp
- 4. Clean out existing pits

SPECIAL CONDITIONS:

- 1. Prior to initiating the assessment program, the Permittee shall meet on site with the District Manager and discuss the details of the program, including but not limiting start dates, helicopter flights, campsites, flagging, clearing, etc., the cost of this meeting as well as subsequent meetings to discuss amendments to the work plan shall be the responsibility of the Permittee.
- 2. The Permittee shall designate a representative to be responsible for liaison with the District Manager.
- 3. The Permittee is responsible for all aspects of public safety in his Permit Area.
- 4. The District Manager may designate helicopter access routes, pick up points and landing sites.
 - a) There shall be no clearing of landing pads except as authorized by the District Manager.
 - b) The District Manager may designate restricted access areas.
- 5. The Permittee shall not use, nor permit to be brought into the Park, any explosives.
- 6. All garbage and debris resulting from the granting of this Permit shall be removed from the Park by the Permittee.

7. Grid System

- a) There shall be no brushing or clearing except as approved by the District Manager.
- b) All temporary marking shall be done with blue biodegradable flagging tape (Frederick Goertz Ltd., Vancouver). No blazing of trees is allowed except under conditions approved by the District Manager. No tape or blazes are to be used within ten metres of a trail.
- c) All slash and debris shall be disposed of in a manner satisfactory to the District Manager and may include requirement to cut and leave "flat lying" and/or cut and scattered.

- d) There shall be no brushing within the ten metres of existing hiking trails.
- 8. Upon expiry and non-renewal, the Permittee will have ninety (90) days to remove or dispose of improvements from the Permit Area and restore the area as specified by the District Manager.

9. Camp

No camp except as approved by the District Manager shall be established in the Permit Area.

- 10. The Permittee shall provide a report detailing his activities within sixty (60) days upon completion of the program.
- 11. If, during periods of extremely dry weather, the Province considers the operation to constitute an unacceptable fire hazard to the Park, the Province may, after consultation with the Permittee, order the operation suspended.
- 12. No new construction is permitted except as approved by the District Manager.
- 13. The standards of all work allowed under this Permit must be to the standards found in "Guidelines for Mineral Exploration (1982)" unless otherwise set in this Permit or approved by the District Manager.
- 14. The District Manager will indicate clean-up requirements on work previously completed, including removal of any unnecessary equipment or debris. The Permittee shall clean up the area to the satisfaction of the District Manager.



Province of British Columbia

Ministry of Environment and Parks PARKS AND OUTDOOR RECREATION DIVISION

Insurance Schedule

PERMIT No. 1875

Insurance to be provided, maintained and paid for by the Permittee shall include:

- Comprehensive General Liability Insurance protecting the Province, the Permittee and their respective servants, agents and employees (without any rights of cross-claim or subrogation against the Province) against claims for personal injury, death, property damage, products liability or third party or public liability, arising from the use of the Permit Area by the Permittee or his servants, agents, clients or employees, up to an amount not less than One Million DOLLARS (\$ 1,000,000.00) inclusive of any one occurrence.
- The Permittee shall ensure that also named insured is "Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Environment and Parks".
- The Permittee shall ensure that the policy carries a cross-liability clause.
- The Permittee shall ensure that the policy gives 30 days notice of cancellation to the Province.



Province of British Columbia

Ministry of Environment and Parks PARKS AND OUTDOOR RECREATION DIVISION

Performance Guarantee Schedule

PERMIT No.

1875

- (2) The Performance Guarantee may be claimed and drawn down by the Province,
 - (a) to pay the Permit Fee, Rent and any other money payable by the Permittee and owing to the Province hereunder;
 - (b) to pay any costs incurred by the Province as a result of the failure of the Permittee to observe or perform a term, covenant, or condition of this Permit.
- (4) On the expiration, termination or cancellation of this Permit, the Province shall return the remainder of the Performance Guarantee to the Permittee, less all amounts claimed by the Province under Section 2 of this schedule.

APPENDIX J

GEOCHEMICAL METHODS

APPENDIX J

GEOCHEMICAL METHODS

All analyses for Au, Ag, and As were performed by Bondar-Clegg in Vancouver. Rock samples were crushed and pulverized to -150 mesh. Soil samples were screened to -80 mesh. The Au, Ag and As values of soil samples and the Au and Ag content of rock samples with <5% sulphides were obtained by "geochemical" methods. Silver was extracted with hot HCl-HNO3, gold was preconcentrated by fire assay. Both gold and silver analyses were completed by atomic absorption. Rock samples were assayed for As, in addition rock samples with >5% sulphide content, or samples where geochemistry had indicated >10,000PPB Au or >50PPM Ag were assayed for Au and Ag.

Multi element geochemistry was performed by Bondar-Clegg using a direct iradiation, instrumental neutron activation analysis of a pulverized and encapsuled sample.

Whole rock geochemistry was performed by X-Ray Laboratories of Don Mills, Ontario. A x-ray florescence technique was used.

