



TYPE OF REPORT/SURVEY(S) <i>Geochem. Drilling</i>	TOTAL COST <i>216 803.00</i>
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AUTHOR(S) *Ken Hicks* SIGNATURE(S) *Ken Hicks*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED *MARCH 30, 1985* YEAR OF WORK 1984  
PROPERTY NAME(S) *NAKUSP OPTION*

COMMODITIES PRESENT *Au, Ag*

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION *Slocan* NTS *82 K/4 82 F/13*  
LATITUDE *50° 04' N* LONGITUDE *117° 41' W*

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

*SEE ATTACHED SHEET.*

OWNER(S)  
(1) *FALCONBRIDGE LIMITED* (2)

MAILING ADDRESS  
*6415 64th. Street*  
*Delta, B.C. V4K 4E2*

OPERATOR(S) (that is, Company paying for the work)  
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SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):  
*The Nakusp property is underlain by sedimentary and volcanic rocks tentatively correlated with Milford, Slocan and Rossland Groups. A number of small quartz veins with gold and silver values are found in predominantly sediments of Slocan Group. Multi-element soil geochemistry anomalies are coincident with a tuffaceous andesitic volcanic of the Slocan Group.*

REFERENCES TO PREVIOUS WORK *1983 Company report for Nakusp Resources by I. Watson.*

85-170-13797

FALCONBRIDGE LIMITED

NAKUSP PROPERTY

S.E. BRITISH COLUMBIA

Ken Hicks

Volume 1  
Parts 1 and 2

Report No. 147-096-84

PART 1 OF 2: GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

NAKUSP PROJECT, SOUTHEASTERN, B.C.

KEN HICKS

NTS 82K/4, 82F/13

JANUARY, 1985

FALCONBRIDGE LIMITED REPORT NO. 147-096-84

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

13,797 part 1  
of 3

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# 1. INTRODUCTION

This report is a summary of work and results on the 1984 Nakusp project - a property under option to Falconbridge Limited from Nakusp Resources Limited, 1027-470 Granville Street, Vancouver, B.C.

## Location, Access and Physiography

The Nakusp property is situated approximately 20 kilometers south of Nakusp in the Valhalla ranges of the Selkirk Mountains, southeastern British Columbia. The claims lie within NTS map areas 82K/4 and 82F/13 and are centred at approximate coordinates of:

Latitude: 50 04' N  
Longitude: 117 41' W

Access to the western portion of the property is via Route 6, a permanent hard surface highway, to Burton B.C. Inactive logging roads follow up the Caribou Creek drainage and branch north to the Skylark and Promestora adits. The Chieftain and Eureka adits are reached via a southern road branch crossing Caribou creek.

The eastern portion of the property is accessible from Route 6 to Hills Siding, B.C., 29 km southeast of Nakusp. Active logging roads operated by Slocan Forest Products extend along the length of Shannon Creek and onto the property. Inactive logging roads providing quick access between eastern and western sides of the property along Slewiskin Creek were washed out early in the season and remain closed.

Helicopter support for the higher reaches of the property is available from permanent bases in Nelson and Revelstoke.

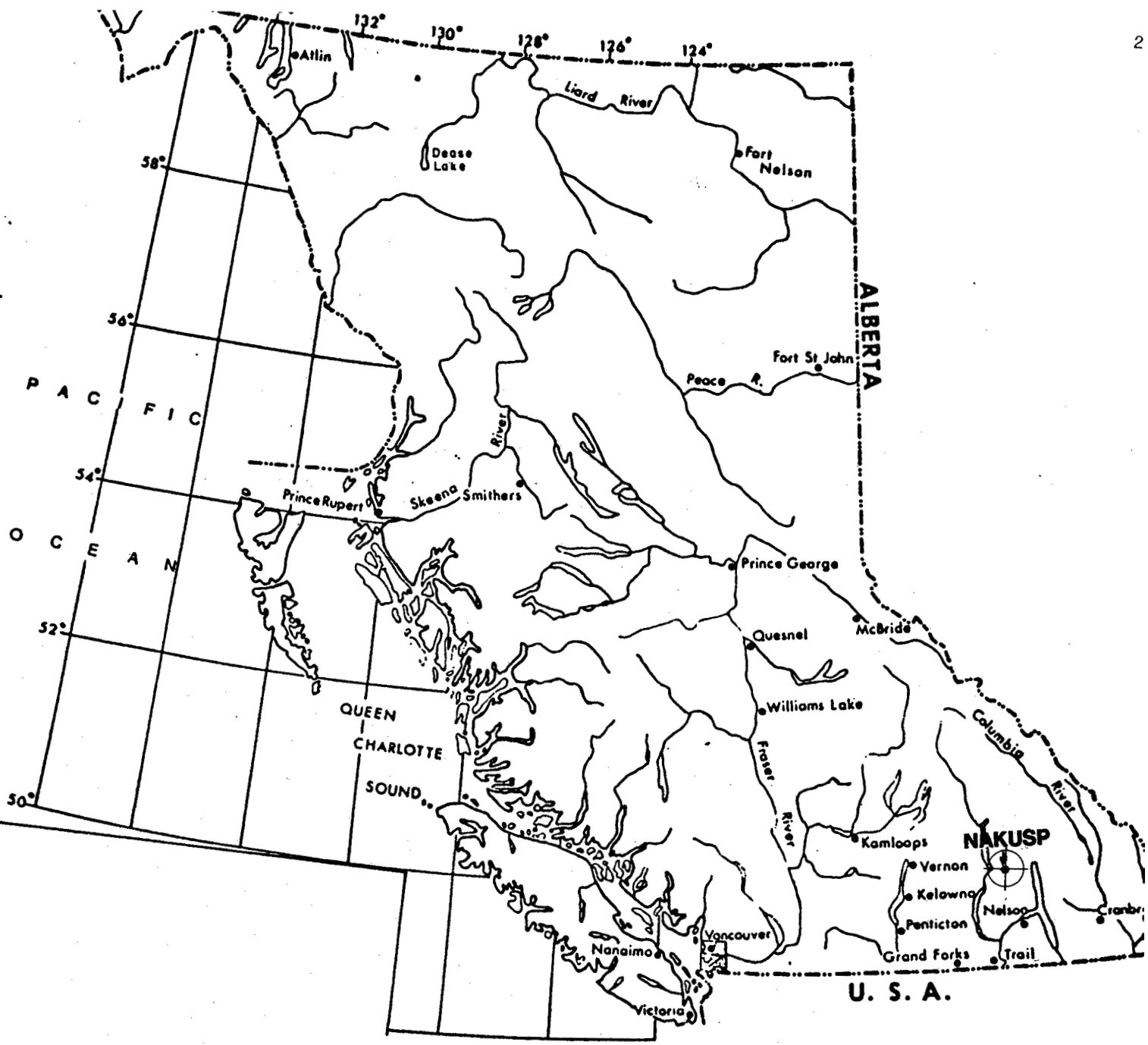
The property covers approximately 8000 Ha of rugged, mountainous terrain with elevations from 1100m to 2400m. Above the treeline at 2200m are open alpine meadows with scattered bedrock exposures. Below this level, slopes are covered with a dense forest cover of fir, cedar, hemlock and spruce. Slide alder and devil's club are ubiquitous near creeks and the valley floor.

Although topography is steep, bedrock exposures are generally limited to creek beds, alpine ridges and road cuts. The valley floor of the Caribou creek drainage is covered by a thick deposit of poorly sorted glacial till and alluvium.

## 1.2 Previous Work

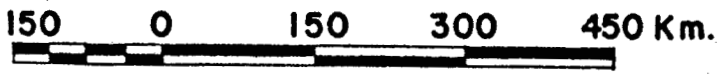
The Nakusp-Burton area has been the site of small placer and hard-rock gold operations since the late 1800's. A number of barren and mineralized adits are located on the claims.

The 1980 discovery of a spectacular gold showing on Tillicum Mountain, south of the Nakusp Resources property, renewed interest in



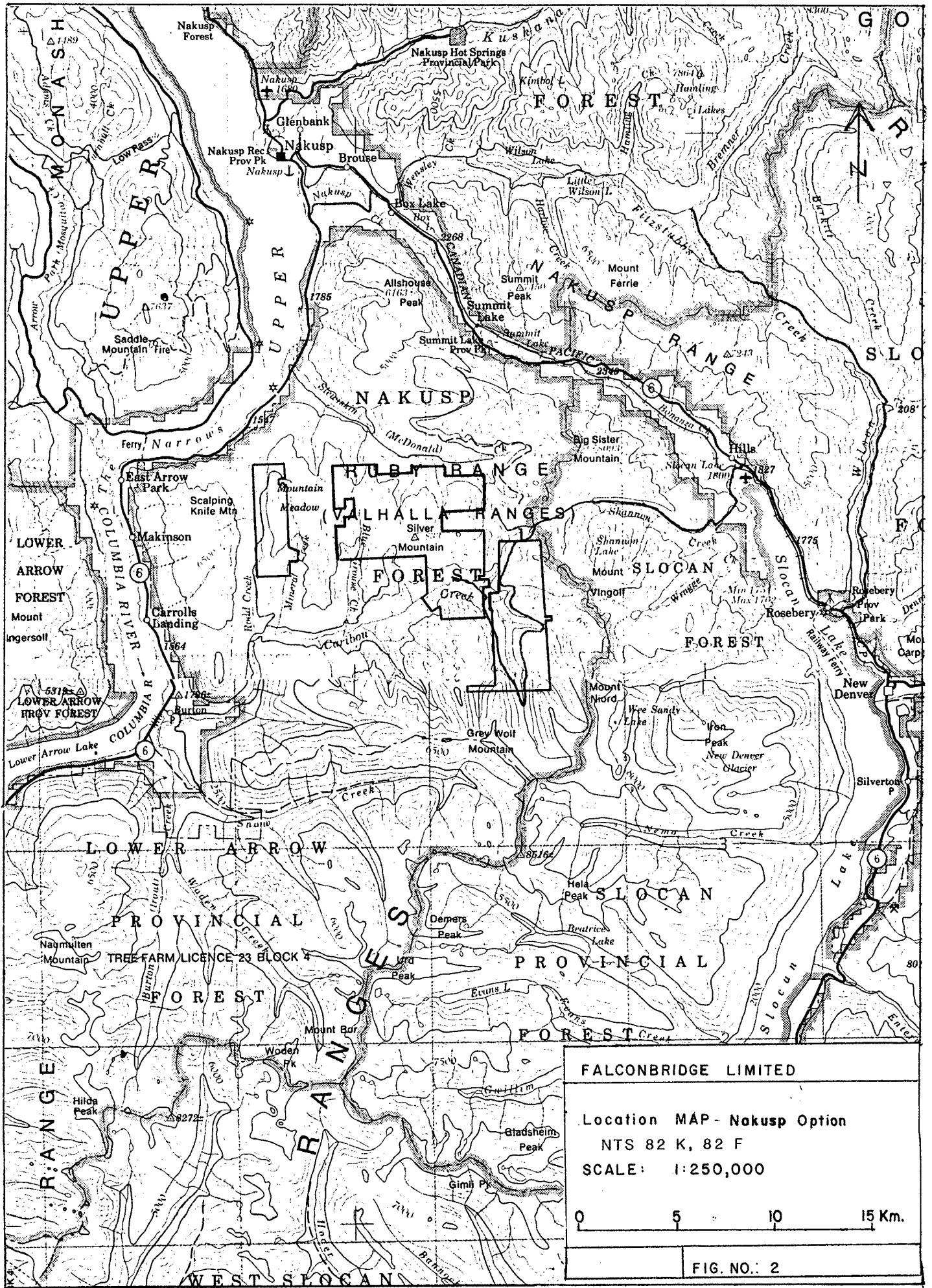
**INDEX MAP**

**BRITISH COLUMBIA**



**SCALE 1: 7 500 000**





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Location MAP - Nakusp Option  
 NTS 82 K, 82 F  
 SCALE: 1:250,000



FIG. NO. 2

the area. Subsequent work on Tillicum Mountain by Esperanza Exploration Limited has delineated several zones anomalous in gold and silver.

A reconnaissance exploration program was conducted on the Nakusp property in 1983 by I.M. Watson and Associates. Work included airborne magnetometer/EM, property mapping as well as contour and grid soil geochemistry sampling (Watson 1983, 1984). Several areas of interest were outlined from this work and these formed the basis for the 1984 exploration program by Falconbridge Limited.

1.3 Claims and Ownership

A total of 320 units of 4 post, 2 post and fractional claims comprise the Nakusp property. All claims are owned by Nakusp Resources Limited through staking, option or purchase and are located within the Slocan Mining Division. Claim locations are shown on Figure 3. A table of current claims information and applied assessment can be found in Appendix 1.

II. GEOLOGY

II.1 Regional Geology

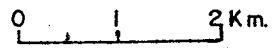
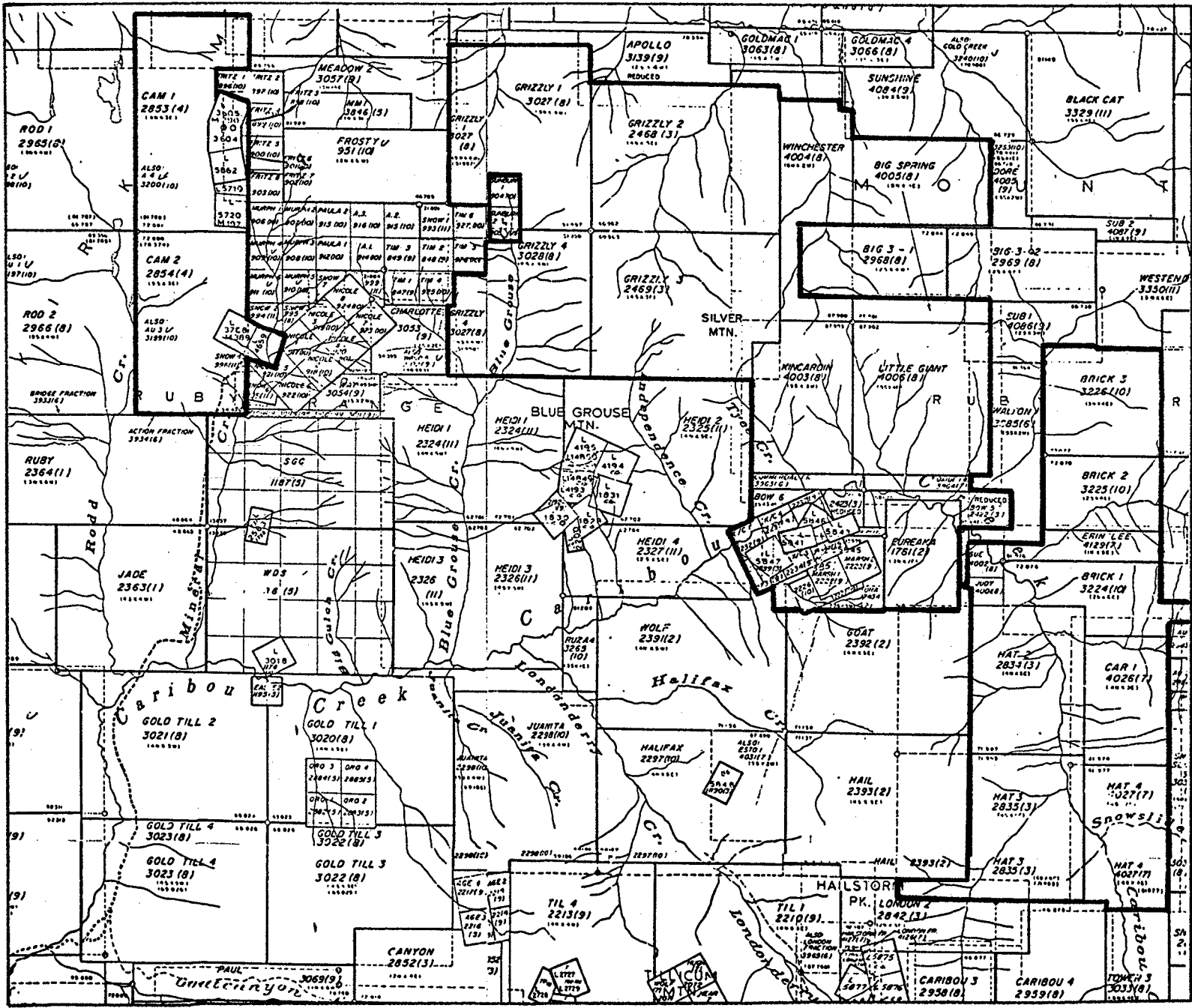
The Nakusp map area consists primarily of low grade metasedimentary and metavolcanic rocks bordered on the northeast by the Kuskanax batholith and an extensive mass of "Nelson Granite" to the south. Three episodes of folding have been described by Hyndman (1968). Small, tight, isoclinal first phase folds are found in high grade metamorphic rocks of Saddle and Scalping Knife Mountains. Phase two folds deform lower grade rocks into a large east-southeast trending recumbent fold open to the southwest. This "Slocan Synclinorium" was described by Hedley (1952). The Slocan fold is truncated on the west by the north-south Rodd Creek fault. Third phase folds (coplanar to both earlier phases) deform earlier lineations. Regional metamorphic grade increases south of the Slocan synclinorium to sillimanite grade in the Valhalla Dome.

II.2 PROPERTY GEOLOGY

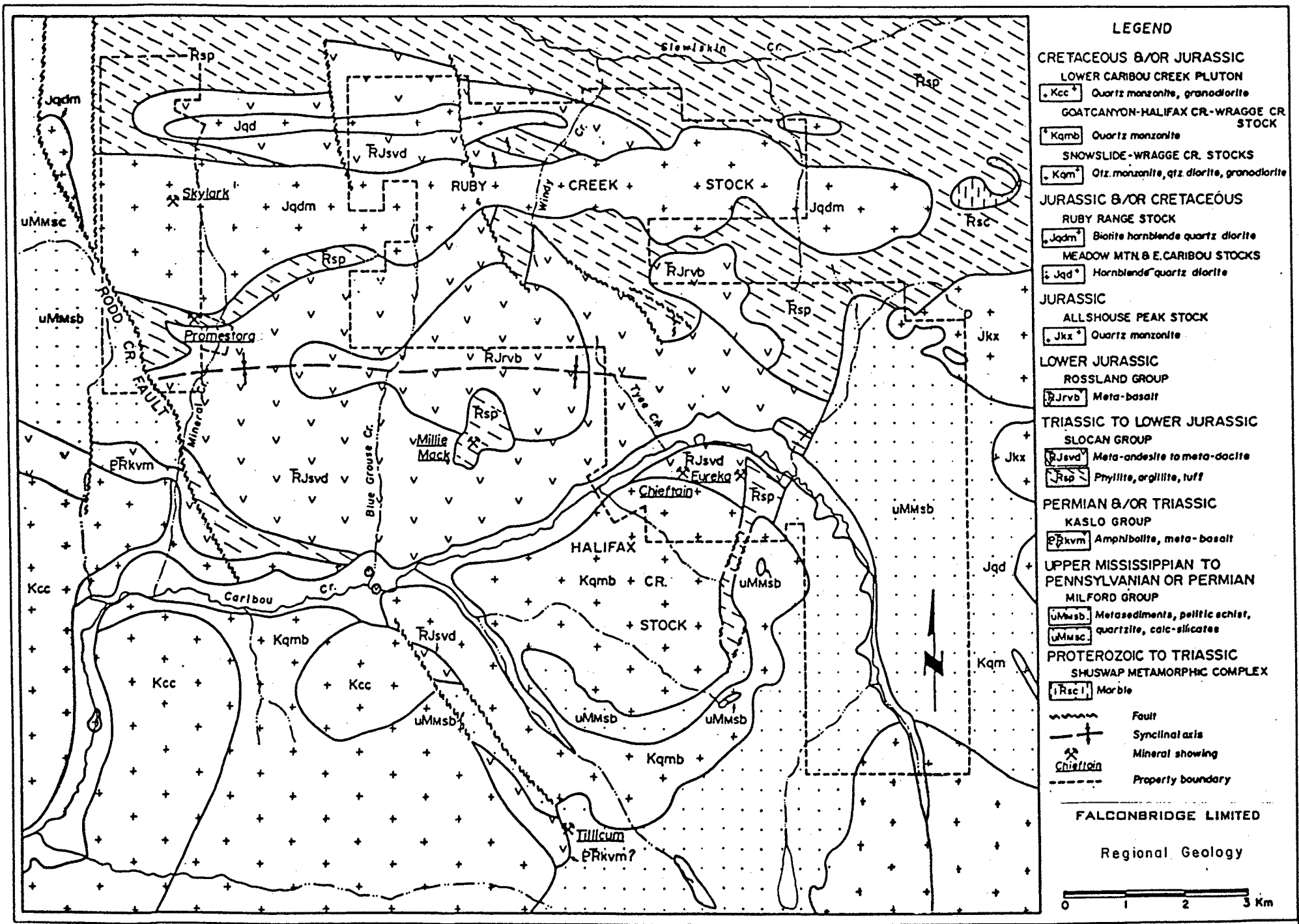
II.2.1 Introduction

The variety and complexity of lithologies in the project area is much greater than the regional overview would suggest. Lithologically distinct marker horizons are locally restricted and some units are thought to undergo rapid facies changes.

Based on the 1983 exploration results, the 1984 program was concentrated between the Chieftain-Eureka adits and the Little Giant area north of Caribou Creek, east of Silver Mountain. This decision was based in part on previous favourable reconnaissance and grid soil sampling the presence of old workings in the general area, and the 1983 reconnaissance mapping of the property. The emphasis of the 1984 program was in following up broadly defined soil geochemical anomalies



**FALCONBRIDGE LIMITED**  
**Nakusp Option**  
**CLAIM MAP**



**LEGEND**

- CRETACEOUS &/OR JURASSIC**
- LOWER CARIBOU CREEK PLUTON
    - [Kcc+] Quartz monzonite, granodiorite
  - GOATCANYON-HALIFAX CR-WRAGGE CR STOCK
    - [Kamb] Quartz monzonite
  - SNOWSLIDE-WRAGGE CR. STOCKS
    - [Kam+] Qtz. monzonite, qtz. diorite, granodiorite
- JURASSIC &/OR CRETACEOUS**
- RUBY RANGE STOCK
    - [Jqdm+] Biotite hornblende quartz diorite
  - MEADOW MTN & E. CARIBOU STOCKS
    - [Jqd+] Hornblende quartz diorite
- JURASSIC**
- ALLSHOUSE PEAK STOCK
    - [Jkx+] Quartz monzonite
- LOWER JURASSIC**
- ROSSLAND GROUP
    - [Rjrvb] Meta-basalt
- TRIASSIC TO LOWER JURASSIC**
- SLOCAN GROUP
    - [Rjsvd] Meta-andesite to meta-dacite
    - [Rsp] Phyllite, argillite, tuff
- PERMIAN &/OR TRIASSIC**
- KASLO GROUP
    - [PRkvm] Amphibolite, meta-basalt
- UPPER MISSISSIPPIAN TO PENNSYLVANIAN OR PERMIAN**
- MILFORD GROUP
    - [uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates
    - [uMmsc]
- PROTEROZOIC TO TRIASSIC**
- SHUSWAP METAMORPHIC COMPLEX
    - [Rsc+] Marble
- ~~~~~ Fault  
 -+ Synclinal axis  
 x Mineral showing  
 - - - - - Property boundary

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Regional Geology



I.M. Watson & Associates Ltd., after Hyndman (1968), Reed & Wheeler (1973), Parrish (1981)

FIG. NO.: 4

together with detailed lithostratigraphic mapping, trenching and possible diamond drilling of defined targets. Previous mapping north of Caribou Creek covered major creeks, road cuts and mountain ridges. Detailed mapping within the areas of interest between creeks was hampered by poor exposure and heavy forest growth.

### 11.2.2 Lithologies

Regional mapping by Hyndman (1968) tentatively correlated sediments and volcanics in the Nakusp project area with Milford (Triassic-Pennsylvanian), Slocan (Lower Jurassic-Triassic) and Rossland (Jurassic) groups, based largely on similarity of lithologic units and succession of geological units in known areas. Granitic rocks of Jurassic to Cretaceous Age are found throughout the project area.

11.2.2.1 Milford Group: Rocks lithologically similar to those within the Milford Group underlie the south-eastern portion of the property near the upper reaches of Caribou Creek. Six units have been defined and are listed on Map 096-84-6. Apparent lithologic changes within the subdivisions make the correlations of specific units difficult; however, exposures of a distinctive grey, limestone within this sequence allows for some extrapolation from outcrop to outcrop. This also gives an indication of the local variations in adjacent pelitic sediments. Outcrops of this limestone are not widely distributed.

Arenaceous and argillaceous occasionally calcareous, sediments trend approximately northwest with moderate southwesterly dips. These rocks extend from the south of the project area north to Walton Creek and then appear to abruptly juxtapose grey-green volcanics of the Slocan Group. This distribution of Milford Group rocks differs with that of previous mapping by Watson (1983).

11.2.2.2 Slocan Group: Sedimentary and volcanic rocks tentatively assigned to the Slocan Group dominate the property north of Caribou Creek. They have been subdivided into six lithologic units for mapping purposes (Map 096-84-6, in pocket). The Slocan Group is distinct in that it contains both a sedimentary and volcanic component. Sediments are typically fine grained dark grey to black argillites, phyllites and siltstones. The phyllitic appearance of some of the sediments may be due to local shearing and therefore a gradation from phyllitic to non-phyllites may exist. Argillites and phyllites are found at the higher levels of Tye Creek and north of Silver Mountain. Less obvious and of a more restricted extent are light brown weathering fine ash to lapilli sized lithic and crystal tuffs. The brownish colour and clastic appearance on weathered surfaces aid in field identification of the finer grained tuffs. In some cases, fine ash tuff grades up to lapilli sized tuffs with an argillaceous component. Some of the finer grained dark grey to black phyllite in this and other areas may in fact be tuffaceous sediments which grade laterally to obvious tuff rocks. This rapid change in appearance restricts the use of coarse grained tuffaceous breccias and

lapilli tuffs as marker horizons. Some of the fine grained lithic and crystal tuff horizons can be traced across a number of minor cross cutting drainages north of Caribou Creek.

A thin grey limestone, Bc, is found with tuffaceous units on the north side of Silver Mountain. Only a few outcrops of this unit were found.

A dark grey calcareous tuff-breccia to lapilli-tuff is also found north of Silver Mountain. Calcareous rock fragments have a pitted appearance on weathered surfaces with a fine grained matrix of similar composition. Outcrops of this unit are also on the ridge east of Silver Mountain.

The volcanic rocks of the Slocan Group, are andesite to dacite in composition, grey to grey-green colour and vary from fine grained to porphyritic. They probably originated as volcanic flows and crystal tuffs with feldspar and lesser hornblende phenocrysts up to 1cm. The largest exposure of volcanics is found on the slope north of Caribou Creek and the top of Silver Mountain.

11.2.2.3 Rossland Group: Overlying the Slocan Group sediments and volcanics is a metavolcanic "greenstone" which Hyndman correlates with the Rossland Group volcanics. One exposure of green metabasalt or metaandesite is located just west of Silver Mountain.

Another occurrence of Rossland volcanics is located approximately 2000m east of Silver Mountain in the Ruby range. It is fine-medium grained, massive to blocky weathering, pale grey-green low level "subvolcanic".

### 11.2.3 Intrusives

The Ruby Range quartz monzonite stock trends approximately east-west along the slopes between Silver Mountain and Slewiskin Creek. Hyndman (1968) suggests intrusion probably took place during the third episode of deformation with the Ruby Range stock coincident with an east-west antiform. Sediments near intrusive contacts have been hornfelsed over a short distance.

To the north lies a smaller east-west trending coarsely porphyritic intrusive known as the Meadow Mountain Pluton. It corresponds with a small east-west synform.

Quartz monzonite-granodiorite of the Halifax Creek stock outcrops on the south side of Caribou Creek. It bounds the Chieftain-Eureka area on the east and west. Minor biotite-feldspar porphyry dykes commonly occur in country rock surrounding the contacts of the major intrusives. In Windy Creek, within the Ruby Range stock, a rusty weathering quartz porphyry dyke runs parallel to a large north trending fault zone. Dark lamprophyre dykes, usually less than 1 metre in width intrude sediments and volcanics.

#### 11.2.4 Structure

Structural data on the property are somewhat limited, however, north of Silver Mountain a repetitive sequence of a thin limestone, phyllitic tuffs and volcanics could correspond to a synform suggested by Hyndman (1968).

The dominant fault orientation is approximately north-northwest, north of Caribou Creek.

#### 11.2.5 Alteration Patterns

The most prominent feature of volcanics on the Nakusp property is their high percentage of secondary carbonate. In thin sections fine grained carbonate is found disseminated throughout the internal fabric of the volcanics. This replacement or alteration obliterates the original textures thereby making the distinction between tuffaceous volcanics and volcanic flows difficult.

Erratic patches of finely disseminated pyrrhotite are also found primarily within volcanic/tuffaceous units. No obvious systematic distribution of pyrrhotite was observed. Minor pyrite is disseminated throughout most rock types but usually not in association with pyrrhotite.

### III. ECONOMIC GEOLOGY

#### III.1 Old Workings

The Nakusp property has four adits known to carry lenses of gold/silver mineralization within small, disrupted quartz veins. The Skylark, Promestora and Upper and Lower Chieftain Adits were sampled in detail in 1984. The results confirm the presence of high-grade pods of Au-Ag mineralization. Three of the four adits are drifted into shear zones within argillites. The Skylark is located within the Ruby Range intrusive.

##### III.1.1 The Chieftain Vein System

The Chieftain vein was first staked in 1890. The vein was developed in two adits and an interval shaft (not connecting). Both adits were sampled in detail across the width of the veins as well as footwall and hanging wall samples in some cases. Gold and silver results are shown in plan view on Figure 5.

##### Upper Chieftain Adit Vein:

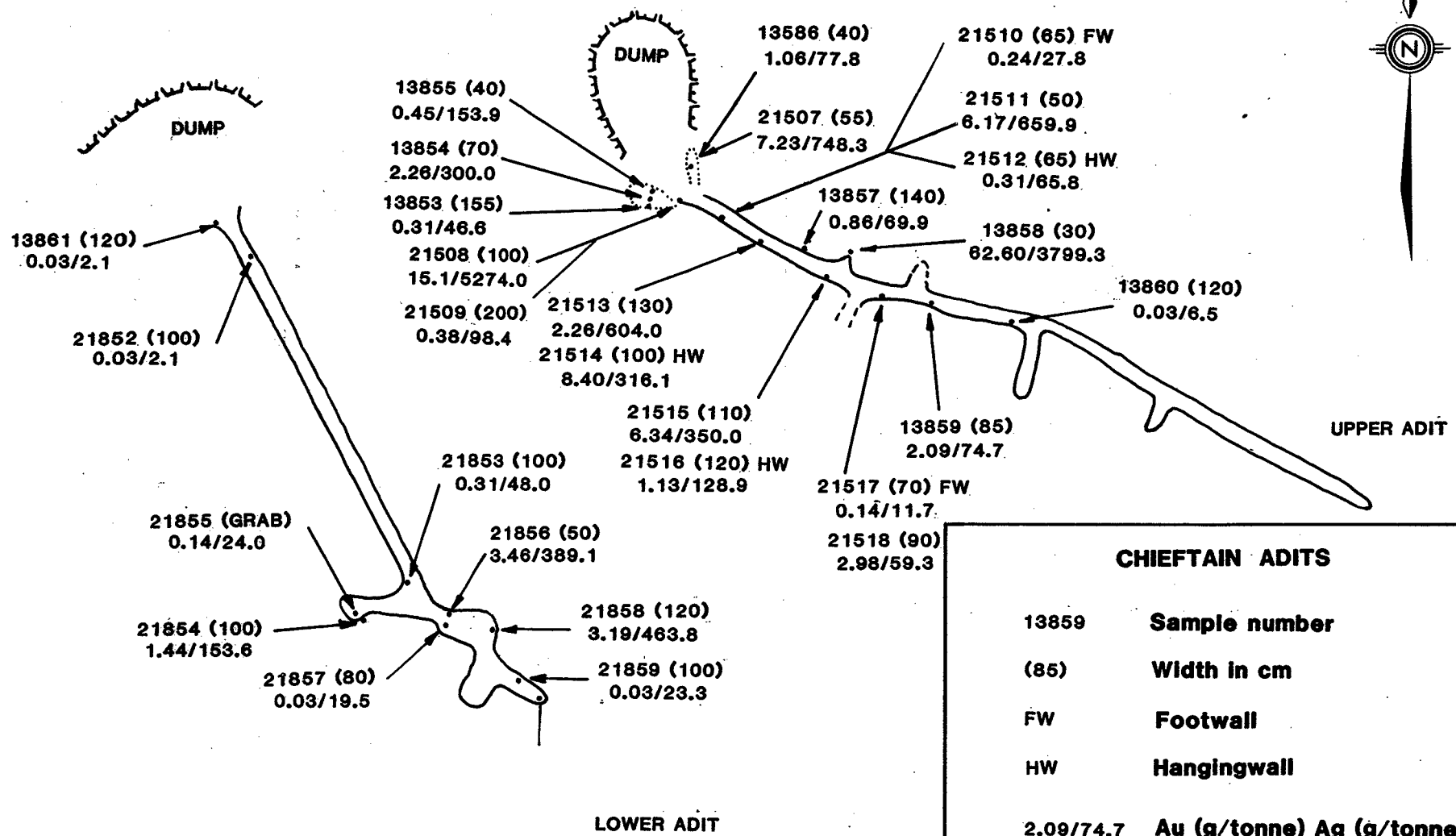
Strike Length: 30m +

Down-dip Extension: 10m +

Mineralogy: Disseminated and patchy pyrite, minor chalcopyrite, trace galena.

Anomalous Elements: Au, Ag, Pb, Sb, Zn, As, Cu

Occurrence: Quartz vein within graphitic shear crosscutting argillite/phyllite and minor andesite country rock. Vein pinching and swelling to 1m maximum with small scale variations in direction and dip.



CHIEFTAIN ADITS	
13859	Sample number
(85)	Width in cm
FW	Footwall
HW	Hangingwall
2.09/74.7	Au (g/tonne) Ag (g/tonne)
Scale 1:500	

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DRAWN BY: K.H. Jan.1985

N.T.S. NO.:82-K-4 FIG.NO.: 5



Wallrock Alteration: None.  
 Elemental Zonation: Not Obvious.  
 Total Assay Samples Taken: 20  
 Analysis: 26 Element ICP + F.A.A. Gold

Best Three Au, Ag Assays:

<u>Sample No.</u>	<u>Au (g/t)</u>	<u>Ag (g/t)</u>	<u>Width (cm)</u>
13858	62.60	3799.3	30
21508	15.10	5274.0	100
21507	7.23	748.3	55

#### Lower Chieftain Adit Vein

Strike Length: Less than 20m, very disrupted  
 Up/Down Dip Extension: None tested  
 Mineralogy: Patchy and disseminated pyrite  
 Anomalous Elements: Au, Ag  
 Occurrence: Erratic quartz vein pinching and swelling within graphitic shear crosscutting argillite/phyllite and andesite country rock. Rapid changes in vein direction and dip.  
 Alteration or Elemental Zonation: Not obvious.  
 Total Assay Samples Taken: 9  
 Analysis: Same

Best three Au, Ag Assays:

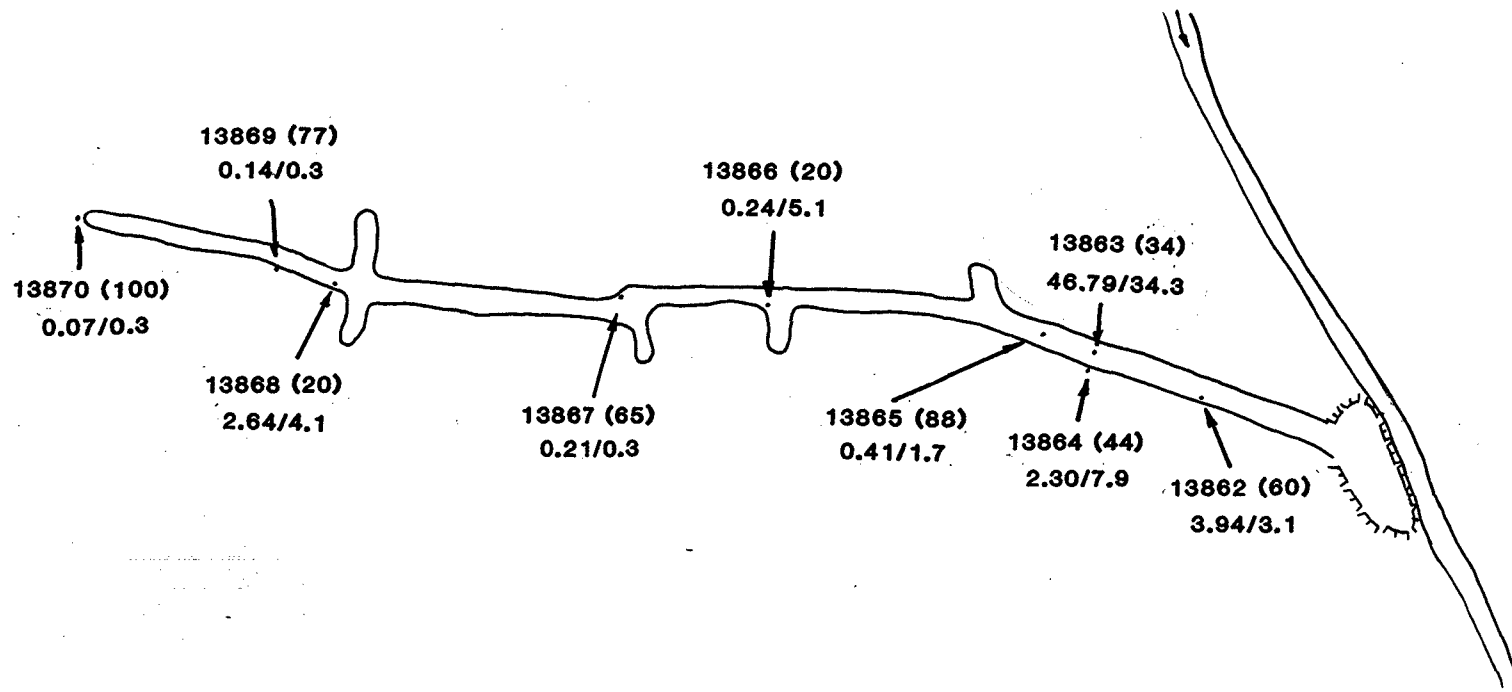
<u>Sample No.</u>	<u>Au (g/t)</u>	<u>Ag (g/t)</u>	<u>Width (cm)</u>
21856	3.46	389.1	50
21858	3.19	463.8	120
21854	1.44	153.6	100

#### III.1.2 Promestora Vein

The Promestora adit is situated on the Cam Claim Group, a separate block of claims west of the main group. Located at the headwaters of Mineral Creek, the Promestora Adit extends 83m into sheared sediments.

#### Promestora Vein Data

Strike Length: 40m +, Discontinuous  
 Dip Extensions: None tested  
 Mineralogy: Massive and disseminated pyrrhotite, minor sphalerite, minor disseminated pyrite.  
 Anomalous Elements: Au  
 Occurrence: Singular or multiple minor quartz veins reaching maximum thickness of 50 cm, usually about 20 cm. Occurring discontinuously along a NW-SE trending shear zone within Slocan Group argillites.  
 Wallrock Alteration or Elemental Zonation: Not obvious  
 Total Assay Samples Taken: 9  
 Analysis: Same



**PROMESTORA ADIT**

13863      **Sample number**  
 (34)      **Width in cm**  
 46.79/34.3      **Au (g/tonne) Ag (g/tonne)**  
**Scale 1:500**

**FALCONBRIDGE LIMITED**

DRAWN BY: K.H. Jan. 1985

N.T.S. NO.: 82-K-4      FIG. NO.: 6

## Best three Au, Ag Assays:

<u>Sample No.</u>	<u>Au (g/t)</u>	<u>Ag (g/t)</u>	<u>Width (cm)</u>
13863	46.79	34.3	34
13862	3.94	3.1	60
13868	2.64	4.1	20

III.1.3 Skylark

The Skylark adit is located approximately 2.5 km north of the Promestora adit. Not all of the underground workings were examined due to the partial collapse of the north extension.

Skylark Vein Data

Strike Length: 100m + on surface but discontinuous  
 Dip Extension: Surface shaft to adit at depth 10m  
 Mineralogy: Minor patches of galena, sphalerite, minor pyrite  
 Anomalous Elements: Au, Ag, Pb, Zn  
 Occurrence: Minor quartz vein within Jurassic Ruby Range Stock quartz diorite, pinching and swelling to maximum 75cm.  
 Wallrock Alteration or Elemental Zonation: Not obvious  
 Total Assay Samples Taken: 4  
 Analysis: Same

## Best three Au, Ag Assays:

<u>Sample No.</u>	<u>Au (g/t)</u>	<u>Ag (g/t)</u>	<u>Width (cm)</u>
13871	2.06	280.1	15
13872	1.54 <sup>52.8</sup>	11.0 <sup>377.0</sup>	75
13873	0.21	5.8	60

Other Areas of InterestIII.1.4 Eureka

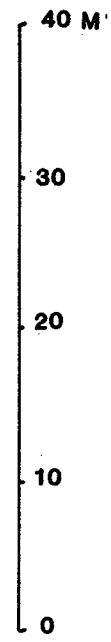
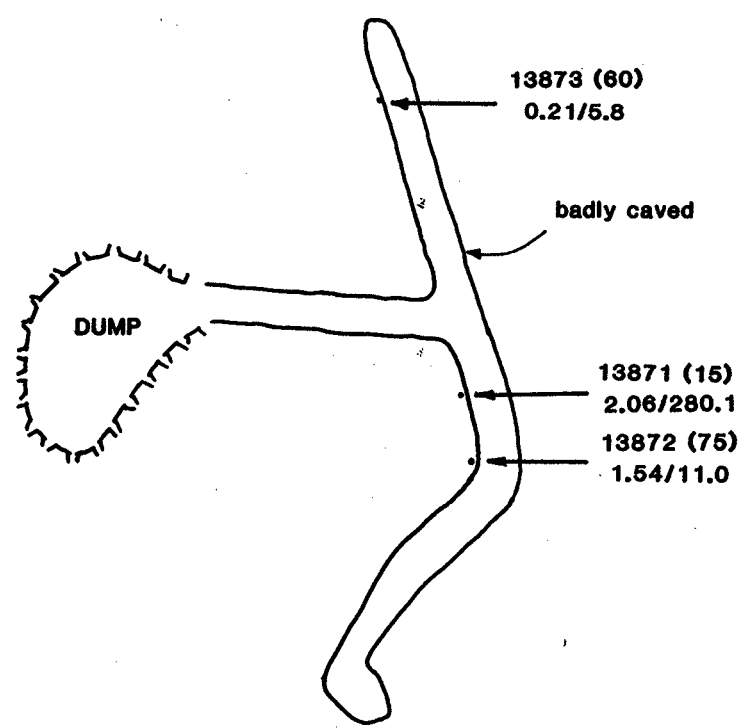
Of the three known Eureka Adits east of the Chieftain, only one was accessible for examination. No evidence of significant mineralization or quartz veining was uncovered. The open middle adit is collared in sheared grey-maroon andesites with minor amounts of bull quartz float at the entrance. The target seems to have been shear controlled veins which apparently pinched out rapidly.

Galena, sphalerite and pyrite rich quartz vein float found above the middle adit was followed upstream for a short distance but was not found in place.

Two additional adits are located in close proximity to the two main Chieftain adits. A small adit below the Lower Chieftain adit is void of obvious mineralization or mineralizing structures and was not sampled. To the east of the upper Chieftain adit a longer adit extends approximately 45m into the hillside but is also barren.



13874 (50)  
0.17/0.3 surface trench



**FALCONBRIDGE LIMITED**

**SKYLARK ADIT**

13871	<b>Sample number</b>
(15)	<b>Width in cm</b>
2.06/280.1	<b>Au(g/tonne) Ag(g/tonne)</b>

**Scale 1:500**

DRAWN BY: K.H. Jan. 1985

N.T.S. NO.:82-K-4 FIG.NO.: 7

### III.1.5 Chieftain Grid

A newly discovered old working was found on the southern edge of the Chieftain grid. A partially caved adit and numerous small hand-pits are located in a sheared exposure of argillite. An attempt was made to clear the adit entrance but continual caving of roof and walls prevented access. No evidence of mineralization or veining was found in the old workings. A soil geochemistry station from the 1983 soil sample which yielded 50ppm is located on the sheared argillite debris of the old dump site.

### III.1.6 Windy Creek Alteration Zone

In Windy Creek, north of Silver Mountain, a large northerly trending shear/fault zone cuts through the Ruby Range stock. Along a short segment of this shear zone the original hornblende quartz diorite has undergone intense kaolinitic alteration. An equally altered rusty weathering quartz porphyry dyke coincides with this alteration zone.

Closely spaced rock sampling carried out in the alteration zone revealed a relative depletion in Al, Na, V and K as well as an enrichment of As, Ca, Cd, Pb and Sb compared with the unaltered intrusive. A total of 15 samples were taken but no economic mineralization was encountered and no obvious lateral elemental zonation or haloes were observed.

### III.1.7 Little Giant Alteration Zone

The zone corresponds to a sheared sub-volcanic/argillite contact on the eastern boundary of the property along the Ruby Range. A closely spaced soil grid covered the area of interest (Geochemistry section, Map 096-84-2a, 2b, 2c).

### III.1.8 Big Spring Skarn Zone

Dark grey calcareous tuffs and tuff-breccias are hornfelsed and weakly skarnified at their contact with the Ruby Range Stock. Patches of pyrrhotite and traces of chalcopyrite comprise approximately 5 percent of total volume.

Sampling of the richest sulphide zones failed to return encouraging results.

## IV. GEOCHEMISTRY

### iv.1 Field Methods

Soil sampling was carried out in an area of interest bounded by the Chieftain-Eureka on the south and the Little Giant Alteration Zone to the North. Sampling proceeded on closely spaced contour traverses (25m sample interval) and on rectangular grids. Control in the field was by compass, hip chain and clinometer on grids and altimeter and hip chain on contour sampling. Samples were collected

from B-horizon whenever possible at a depth of greater than 15 cm using a rock hammer pick and placed in standard labelled kraft paper sample bags.

#### iv.2 Analytical Procedure

##### iv.2.1 24 Element ICP

Ag, Al, As, B, Bi, Ca, Cd, Co, Fe, K, Mg,  
Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, U, V, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95 degrees C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer. One gram of the samples is digested for 6 hours with HNO<sub>3</sub> and HC104 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formatted by routine computer dotline print out.

##### iv.2.2 Fire Gold Geochemical Analysis

Geochemical samples for fire gold were processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95 degrees C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams is fire assay preconcentrated.

After pretreatments the samples are digested with Aqua regia solution, and after digestion the samples are taken up with 25% HC1 to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

#### iv.3 Geochemical "Standards" and Variations

Two large "internal" geochemical standards were taken from the property and used to test the variability and reproducibility of gold values within a single sample site. Approximately 30 sub-samples were taken from the Chieftain soil standard and 24 sub-samples of the Walton silt standard. These were distributed at regular intervals within contour and grid soil samples sent for analysis. The results are shown on Table 1.

Approximately 200 soil samples were analyzed for gold using two different analytical methods. Standard aqua regia atomic absorption analysis was carried out and the pulps were subsequently reanalyzed using fire gold geochemistry. A portion of these results are shown on Table 2. Coarse fractions (greater than - 80 mesh) of 101 soil samples were separated out and analyzed. Table 3 is a comparison of Pb, Zn and Au in fine and coarse fractions.

TABLE 1. Analytical Variations of Chieftain Standard (Soil)

<u>Element</u>	<u>Range</u>		<u>Mean</u>	N=30
	<u>Min.</u>	<u>Max.</u>		
Silver	0.0 ppm	2.4 ppm	1.4 ppm	
Arsenic	153	242	190.0	
Lead	1	23	13.4	
Gold	2 ppb	258 ppb	54.7 ppb	

Analytical Variations of Walton Standard (Silt)

<u>Element</u>	<u>Range</u>		<u>Mean</u>	N=24
	<u>Min.</u>	<u>Max.</u>		
Silver	0.1 ppm	1.2 ppm	0.7 ppm	
Arsenic	0	6	1.2	
Lead	0	13	8.1	
Gold	1 ppb	13 ppb	3.0 ppb	

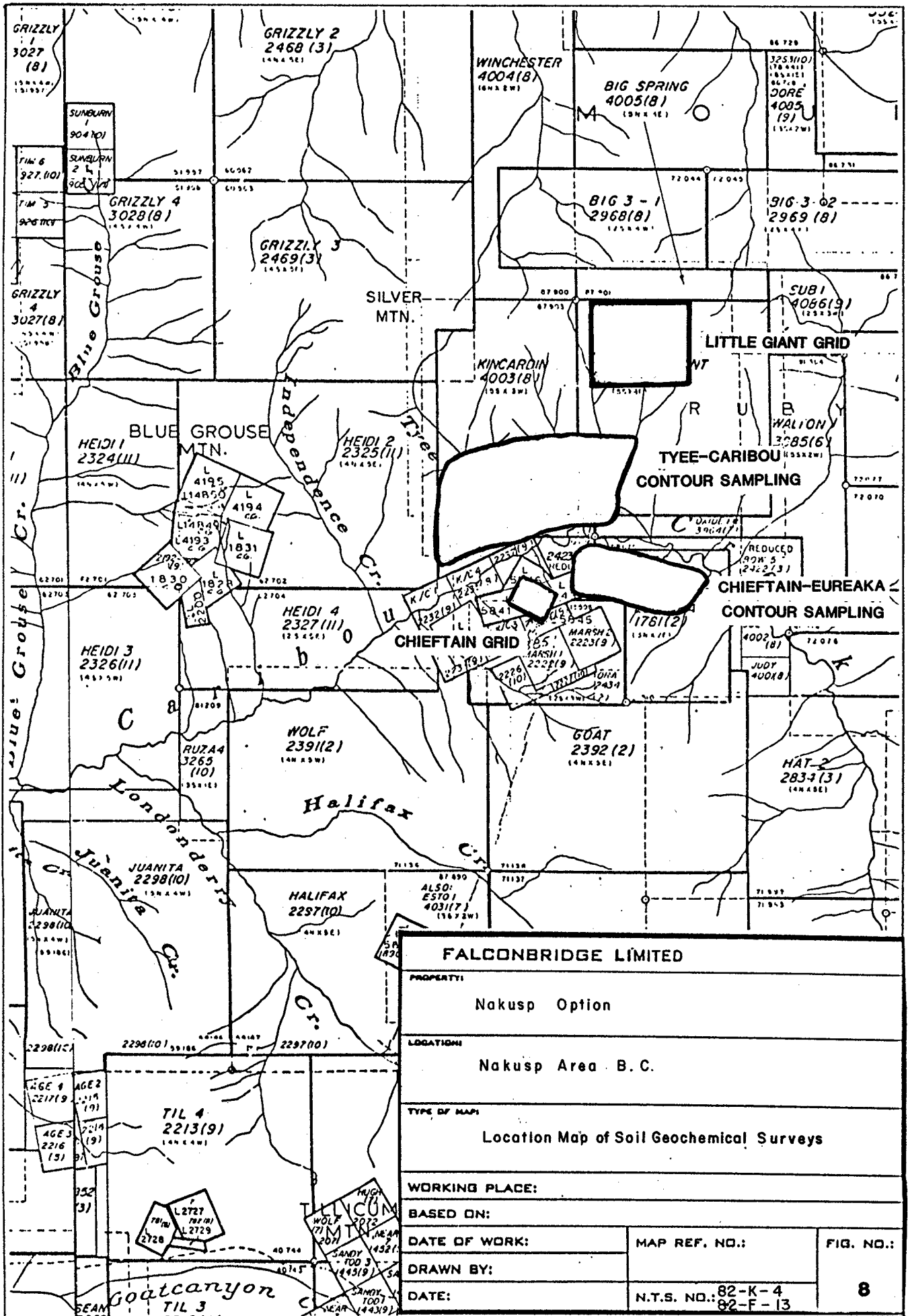


**TABLE 2. Comparison of results of Aqua Regia A.A. versus Au-Fire Analytical Methods for Gold Detection**

Aqua Regia Au			Aqua Regia Au			Aqua Regia Au		
Sample No.	Regia A.A.	Fire	Sample No.	Regia A.A.	Fire	Sample No.	Regia A.A.	Fire
88034	5ppb	10ppb	88078	5ppb	9ppb	88154	5ppb	20ppb
035	5	52	079	20	60	155	5	30
036	5	2	080	10	23	156	5	9
037	5	5	081	5	12	157	10	20
038	5	25	082	5	23	158	5	50
039	5	14	083	5	7	159	5	25
040	5	10	084	5	15	160	10	28
041	5	28	085	35	50	161	30	145
042	5	37	086	5	25	162	25	40
043	35	50	087	10	26	163	5	20
044	10	6	088	15	14	164	5	30
045	280	260	089	5	26	165	5	95
046	200	145	90	5	35	166	5	14
047	400	215	091	10	37	167	10	46
048	10	25	092	5	25	168	5	22
049	25	15	093	5	10	169	5	46
050	30	85	094	5	10	170	10	30
051	15	14	095	10	10	171	5	25
052	15	24	096	10	25	172	15	6
053	5	15	097	5	22	173	25	7
054	<5	10	098	5	7	174	30	42
055	5	10	099	5	20	175	5	15
056	5	6	88100	<5	7	176	10	14
057	5	8	88133	5	13	177	5	20
058	5	10	134	5	5	178	240	85
059	5	13	135	15	30	179	15	48
060	<5	20	136	5	45	180	35	40
061	20	54	137	10	10	181	5	60
062	5	8	138	5	8	182	30	65
063	5	15	139	5	30	183	250	224
064	5	25	140	10	29	184	25	18
065	10	38	141	5	83	185	5	125
066	5	55	142	5	10	186	95	67
067	10	30	143	20	20	187	5	5
068	5	1	144	5	15	188	5	95
069	5	4	145	5	37	189	<5	18
070	5	2	146	5	25	190	5	4
071	10	14	147	<5	26	191	100	55
072	145	74	148	10	3	192	5	9
073	5	15	149	5	15	193	5	2
074	5	140	150	10	30	194	5	33
075	5	10	151	5	10	195	5	10
076	10	12	152	10	37	196	10	58
077	5	1	153	5	13	197	5	13

TABLE 3: Comparison of Pb, Zn and Au in Fine and Coarse Fraction (CF) Separations in Tye-e-Caribou Soil Geochemistry

SAMPLE NUMBER	PB (PPM)	ZN (PPM)	AU (PPB)	SAMPLE NUMBER	PB (PPM)	ZN (PPM)	AU (PPB)
89830	51	389	13	89830CF	27	192	112
89831	40	887	38	89831CF	19	303	34
89832	17	419	52	89832CF	23	213	680
89833	17	235	43	89833CF	15	95	43
89834	3	240	4	89834CF	12	142	3
89835	0	249	37	89835CF	8	144	48
89836	7	257	1	89836CF	14	124	1
89837	2	489	17	89837CF	10	178	6
89838	17	329	3	89838CF	17	147	1
89839	0	505	12	89839CF	7	181	7
89840	6	430	328	89840CF	5	174	2
89841	10	448	6	89841CF	18	210	12
89842	0	262	20	89842CF	1	122	1
89843	0	347	19	89843CF	7	158	3
89844	12	307	2	89844CF	13	199	57
89845	40	1650	25	89845CF	27	521	4
89846	18	653	1550	89846CF	18	283	1
89847	11	697	47	89847CF	19	476	9
89848	29	504	7	89848CF	26	279	7
89849	18	557	4	89849CF	15	332	1
89884	30	312	14	89884CF	33	184	2
89885	42	254	12	89885CF	43	165	1
89886	23	156	2	89886CF	22	81	1
89887	18	258	1	89887CF	15	176	1
89888	16	461	3	89888CF	17	305	8
89889	71	398	4	89889CF	49	235	1
89890	35	241	12	89890CF	22	116	3
89891	59	279	11	89891CF	37	149	2
89892	268	442	116	89892CF	172	293	94
89893	36	221	18	89893CF	15	88	3
89894	46	504	75	89894CF	31	194	15
89895	21	235	19	89895CF	10	7	1
89896	5	257	16	89896CF	7	145	2
89897	29	558	14	89897CF	18	233	1
89898	12	247	35	89898CF	9	146	22
89899	38	657	375	89899CF	19	237	71
89943	91	352	53	89943CF	58	155	13
89944	49	490	32	89944CF	35	177	12
89945	23	259	35	89945CF	14	124	8
89946	2	261	127	89946CF	0	125	24
89947	18	229	40	89947CF	11	106	11
89948	8	194	10	89948CF	4	102	1
89949	0	1310	51	89949CF	2	469	3
87692	28	631	38	87692CF	24	324	1
87693	34	666	14	87693CF	46	433	2
87694	44	940	9	87694CF	43	479	13
87695	41	409	19	87695CF	39	214	2
87696	28	391	28	87696CF	22	172	5
87697	10	416	15	87697CF	12	274	1
87698	22	415	15	87698CF	20	261	4
87699	37	790	18	87699CF	43	415	3
001	43	788	49	001CF	25	287	12
002	19	259	60	002CF	10	124	4
003	26	391	50	003CF	29	217	1
004	26	406	55	004CF	17	232	6
005	16	239	75	005CF	8	133	1
006	3	464	36	006CF	4	215	3
007	25	348	23	007CF	22	200	2
008	24	376	47	008CF	16	161	9
009	20	626	25	009CF	11	269	2
010	9	448	20	010CF	20	292	11
011	27	577	25	011CF	30	296	6
012	23	405	35	012CF	23	178	1
013	2	825	9	013CF	15	327	1
014	41	1060	41	014CF	30	500	1
015	43	709	35	015CF	34	294	4
016	278	1050	705	016CF	162	553	960
017	27	579	35	017CF	35	437	3
018	119	1170	190	018CF	81	596	22
019	129	936	308	019CF	86	344	34
020	86	719	240	020CF	60	345	150
021	100	626	85	021CF	65	249	31
022	35	966	84	022CF	31	443	12
023	93	897	44	023CF	120	535	4
024	59	653	83	024CF	52	399	5
025	39	287	72	025CF	27	154	13
026	17	230	84	026CF	16	116	2
027	20	223	155	027CF	17	109	62
028	11	97	69	028CF	18	54	7
029	17	117	20	029CF	20	66	3
030	11	125	27	030CF	17	66	9
031	21	98	49	031CF	20	67	23
032	27	157	35	032CF	21	74	10
033	29	252	34	033CF	26	136	8
034	32	120	50	034CF	24	82	25
035	38	117	81	035CF	17	71	63
036	10	212	50	036CF	12	160	28
037	12	91	58	037CF	14	62	1
038	6	100	15	038CF	12	64	1
039	4	92	10	039CF	13	63	1
040	16	204	25	040CF	27	104	35
041	14	129	15	041CF	18	69	11
042	1	110	19	042CF	13	81	3
043	1	99	18	043CF	12	58	7
044	4	142	10	044CF	14	69	2
045	26	122	35	045CF	24	80	6
046	17	229	14	046CF	20	113	10
047	27	193	20	047CF	25	91	14
048	31	250	11	048CF	32	209	36
049	54	377	55	049CF	27	150	4
050	32	146	28	050CF	25	107	67



<b>FALCONBRIDGE LIMITED</b>		
PROPERTY:		
Nakusp Option		
LOCATION:		
Nakusp Area B.C.		
TYPE OF MAP:		
Location Map of Soil Geochemical Surveys		
WORKING PLACE:		
BASED ON:		
DATE OF WORK:	MAP REF. NO.:	FIG. NO.:
DRAWN BY:		
DATE:	N.T.S. NO.: 82-K-4 82-F-13	8

#### iv.4 Results

##### iv.4.1 Tye-Caribou Contour Sampling

A total of 754 soil samples were collected from an area bordered along the property boundary near Tye Creek, by Caribou Creek on the south and the 5300 foot contour to the north (fig. 3, Map 096-84-1a.) This area of interest was delineated in 1983 using widely spaced contour soil traverses. The 1984 follow-up concentrated on closely spaced contour geochemical traverses with a sample interval of 25m. An area of approximately 1.5 sq. km. was covered. Hillside slopes averaged 25 - 35 degrees with thin overburden. The sample area has a widespread but seemingly random distribution of weakly anomalous 25 - 35 ppb Au and 0.8 - 2.0 ppm Ag values as well as a high background in zinc. In addition, five zones of strongly anomalous gold values (> 100 ppb) were defined and were the site of trenching and subsequent diamond drilling. (Described in Part 2: Report on 1984 Diamond Drilling on the Nakusp Property). These gold anomalies also have anomalous values in Ag, Pb and As.

Random one and two point gold anomalies were prospected and sample pits were blasted to remove overburden. Results were not encouraging.

##### iv.4.2 Little Giant Grid

A rectangular soil grid 800m x 1000m was used to sample the Little Giant area. North-south lines were spaced 50m apart with 25m sample intervals. A total of 658 soil samples were collected.

Only a few single point precious and base metal anomalies were discovered (Map 096-84 2b, 2c). and their potential is diminished in light of unfavourable results on similar anomalies within the Tye-Caribou area tested by 1984 diamond drilling. These results are described in Part 2: Report on 1984 Diamond Drilling on the Nakusp Property.

##### iv.4.3 Chieftain-Eureka Contour Sampling

This area is located between the Chieftain and Eureka adits. Sampling at 25m intervals along contour lines totaled 183 samples and covered approximately 0.45 sq.km (Map 096-84-3a-3d). Slopes averaged between 35 - 45 degrees with abundant talus slide debris and shallow weathered bedrock.

Results of the sampling revealed only small one or two point gold and silver anomalies. In general, the area has poor soil development with broken, talus debris forming a significant component of overburden

##### iv.4.4 Chieftain Grid

Initial work on the Chieftain Grid in 1984 consisted of re-sampling the previous years' anomalous area. A total of 102 samples

were taken on the 400m by 325m grid. Re-analysis of these sample pulps, (Map 096-84-4b) weakly reproduced the anomalies but of a lower magnitude. Subsequent resampling of the entire grid, (306 samples Map 096-84-5b) confirmed weak but broadly anomalous areas. The disappointing results made the Chieftain area a lower priority for additional work.

#### iv.5 Discussion of Results

The wide range of gold values for the Walton and Chieftain standards as well as the analytical variation between fire gold (F.A.A.) and Aqua Regia A.A. methods pose a difficult problem. The cause of this field variability of gold is thought to be a "particle" effect. Gold may be present in minute particles randomly distributed in overburden as a result of outcrop weathering. Random standard samples taken from the overburden may or may not contain gold particles and therefore multiple sampling would show a range of values.

Variable proportions of rock fragments in samples from steep terrain with talus slide debris could also be responsible for some degree of geochemical variation.

One way to reduce the affect of gold variability would be to rely more on multiple pathfinder element anomalies in conjunction with precious metals. In this case Ag, As and Pb all have a positive correlation with gold.

Table 2 shows only 3 Aqua Regia A.A. anomalous samples which were not reproduced as anomalous using F.A.A. Conversely, F.A.A. analysis shows 45 samples over 25 ppb which were not anomalous using Aqua Regia A.A. Of the four areas of soil sampling, Tye-Caribou was the only one with significant multi-element anomalies and therefore was of higher priority. All four areas showed a high background of zinc relative to other base metals.

#### V. SUMMARY AND CONCLUSIONS

The 1984 exploration program on the Nakusp Resources property consisted primarily of follow-up work of 1983 geochemical anomalies and sampling of old known workings. The main focus of soil sampling was in the Little Giant, Tye-Caribou and Chieftain-Eureka areas. Detailed contour and grid soil surveys were carried out and results indicated the Tye-Caribou to be most promising. Five precious metal/multi-element anomalies were defined and subsequently tested by trenching and diamond drilling.

The widespread areas of elevated base and precious metal concentrations in the Tye-Caribou region appear to coincide with tuffaceous andesitic volcanics. Structurally below this unit is a dark, fine-grained argillite which would be relatively receptive to late fluid movement. With a highly porous and permeable tuff above and a relatively impervious sedimentary unit below, mineralized solutions travelling along the volcanic/sedimentary contact would tend to favour original features such as coarse fragment size or structural

traps such as faults on shears. This fluid percolation was probably responsible for the pervasive carbonatization of the volcanics.

Diamond drill hole 84-2 intersected a zone with visible sphalerite immediately above a sedimentary contact. A zone approximately 6 meters above this contact has highly anomalous values in As, Pb, Zn, Ag and Au (Appendix 3). Values in the adjoining argillites are low.

Prospecting late in the season in the Tye-Caribou region discovered a minor piece of massive arsenopyrite float which assayed 16.60 g/t Au. Its source was never discovered but is assumed to be a minor vein. Traces of arsenopyrite in road samples also returned higher than average gold values.

The most favourable unit appears to be a tuffaceous andesite where anomalous gold values are commonly associated with sphalerite, pyrite and arsenopyrite.

Other areas of interest were examined and evaluated such as the Windy Creek alteration zone and the lesser geochemical anomalies. The results do not indicate potential for economic mineralization.

The potential for large tonnages of economic grade from old workings is remote although smaller tonnages of higher grade may exist in the known veins.

The lack of reproducibility of gold results in soils is attributed to its occurrence as discrete microscopic particles with an erratic distribution.

The difference between Aqua Regia geochemical or Fire Gold analytical methods appears to be a higher degree of sensitivity with fire gold; however, background to peak ratios are similar and both methods appear to be effective in distinguishing true anomalies from background levels.

## VI. RECOMMENDATIONS

Additional work on the Nakusp property should concentrate on detailed underground mapping of the major adits with the possibility of diamond drill testing of vein extensions. The Chieftain and the Promestora adits are considered of prime importance.

Drill testing of the Chieftain adits could be accomplished by three holes with a maximum depth of 100m each. Access to the adits is good and construction of new roads for drill sites would be minimal.

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PART 2 OF 2:

REPORT ON 1984 DIAMOND DRILLING PROGRAM

ON THE NAKUSP PROPERTY,

SOUTHEASTERN BRITISH COLUMBIA

KEN HICKS

NTS 82 K/4, 82 F/13

JANUARY, 1985

FALCONBRIDGE LIMITED REPORT NO. 147-096-84



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LIST OF MAPS (In Pocket)

Map 096-84-8. Sample Location: 1983 Little Giant Contour  
Soil Sampling 1:5000

## 1. INTRODUCTION

This report is a summary of work and results on the 1984 Nakusp project - a property under option to Falconbridge Limited from Nakusp Resources Limited, 1027-470 Granville Street, Vancouver, B.C.

### 1.1 Location, Access and Physiography

The Nakusp property is situated approximately 20 kilometers south of Nakusp in the Valhalla ranges of the Selkirk Mountains, southeastern British Columbia. The claims lie within NTS map areas 82K/4 and 82F/13 and are centred at approximate coordinates of:

Latitude: 50 04' N  
Longitude: 117 41' W

Access to the western portion of the property is via Route 6, a permanent hard surface highway, to Burton B.C. Inactive logging roads follow up the Caribou Creek drainage and branch north to the Skylark and Promestora adits. The Chieftain and Eureka adits are reached via a southern road branch crossing Caribou creek.

The eastern portion of the property is accessible from Route 6 to Hills Siding, B.C., 29 km southeast of Nakusp. Active logging roads operated by Slocan Forest Products extend along the length of Shannon Creek and onto the property. Inactive logging roads providing quick access between eastern and western sides of the property along Slewiskin Creek were washed out early in the season and remain closed.

Helicopter support for the higher reaches of the property is available from permanent bases in Nelson and Revelstoke.

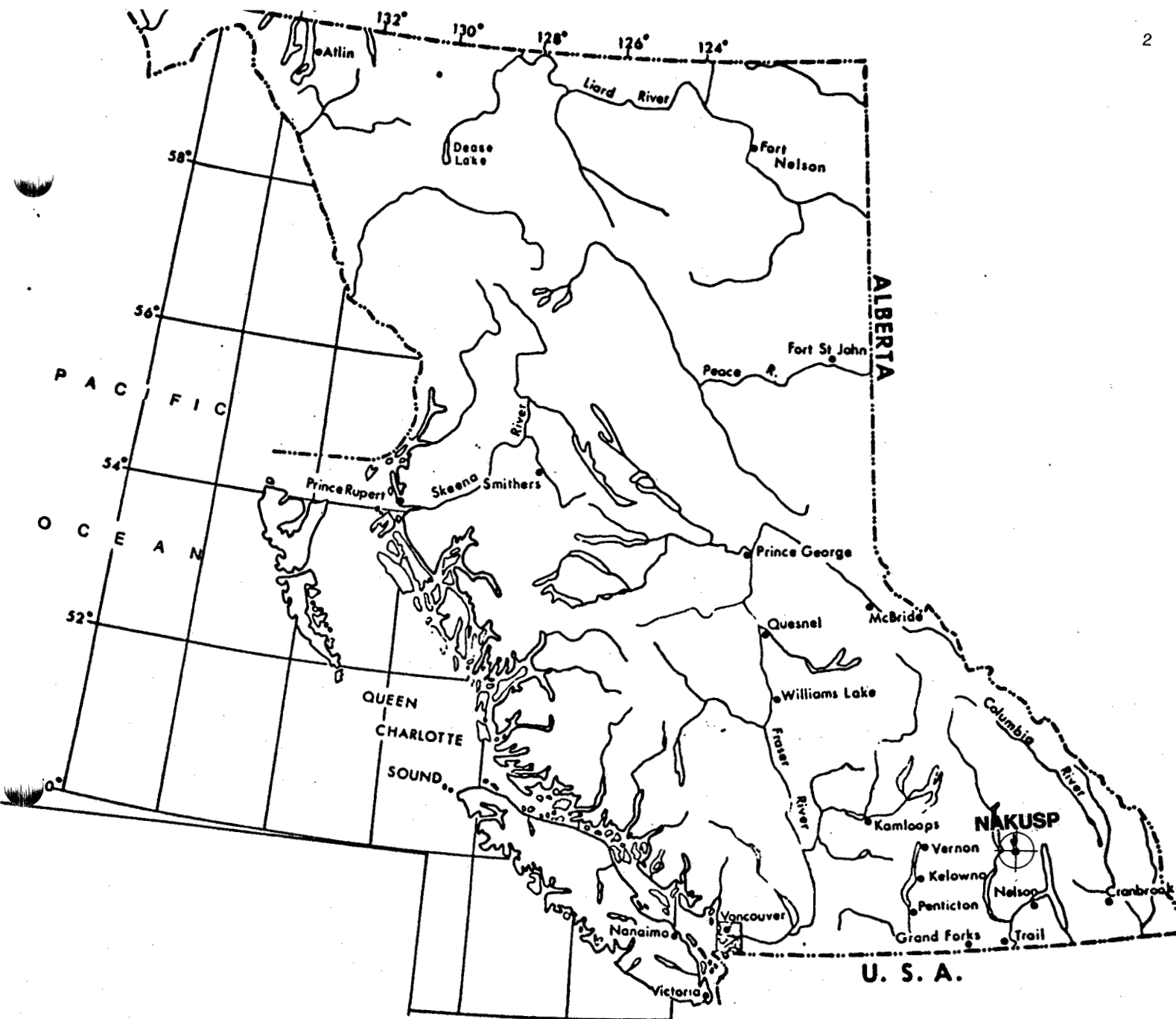
The property covers approximately 8000 Ha of rugged, mountainous terrain with elevations from 1100m to 2400m. Above the treeline at 2200m are open alpine meadows with scattered bedrock exposures. Below this level, slopes are covered with a dense forest cover of fir, cedar, hemlock and spruce. Slide alder and devil's club are ubiquitous near creeks and the valley floor.

Although topography is steep, bedrock exposures are generally limited to creek beds, alpine ridges and road cuts. The valley floor of the Caribou creek drainage is covered by a thick deposit of poorly sorted glacial till and alluvium.

### 1.2 Previous Work

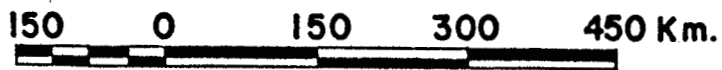
The Nakusp-Burton area has been the site of small placer and hard-rock gold operations since the late 1800's. A number of barren and mineralized adits are located on the claims.

The 1980 discovery of a spectacular gold showing on Tillicum Mountain, south of the Nakusp Resources property, renewed interest in the area. Subsequent work on Tillicum Mountain by Esperanza



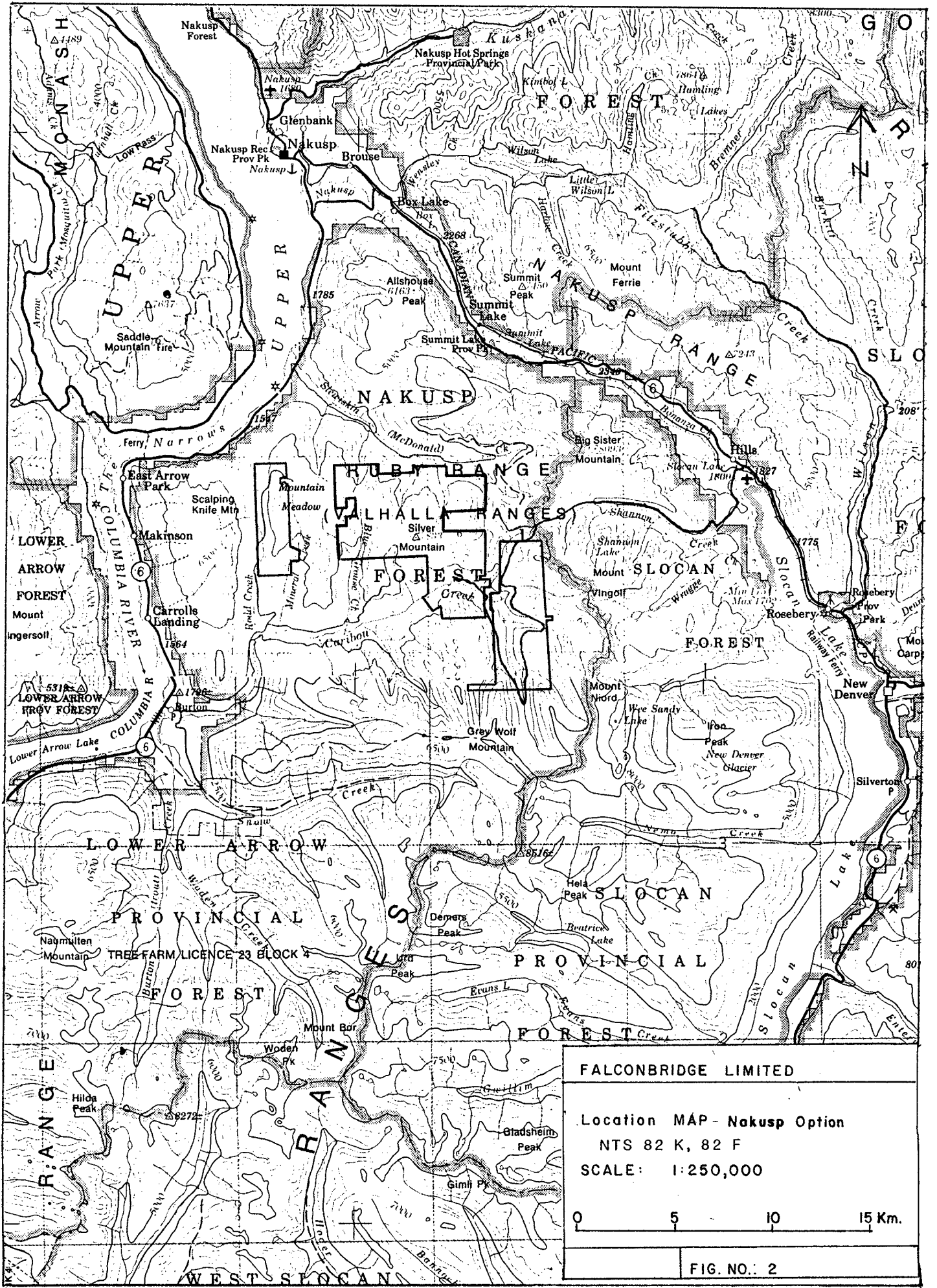
**INDEX MAP**

**BRITISH COLUMBIA**



**SCALE 1: 7 500 000**

FIG. NO.: 1



<b>FALCONBRIDGE LIMITED</b>	
Location MAP - Nakusp Option	
NTS 82 K, 82 F	
SCALE: 1:250,000	
FIG. NO.: 2	

Exploration Limited has delineated several zones anomalous in gold and silver.

A reconnaissance exploration program was conducted on the Nakusp property in 1983 by I.M. Watson and Associates. Work included airborne magnetometer/EM, property mapping as well as contour and grid soil geochemistry sampling (Watson 1983, 1984). Several areas of interest were outlined from this work and these formed the basis for the 1984 exploration program by Falconbridge Limited.

### 1.3 Claims and Ownership

A total of 320 units of 4 post, 2 post and fractional claims comprise the Nakusp property. All claims are owned by Nakusp Resources Limited through staking, option or purchase and are located within the Slocan Mining Division. Claim locations are shown on Figure 3. A table of current claims information and applied assessment can be found in Appendix 1.

## II. GEOLOGY

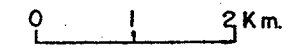
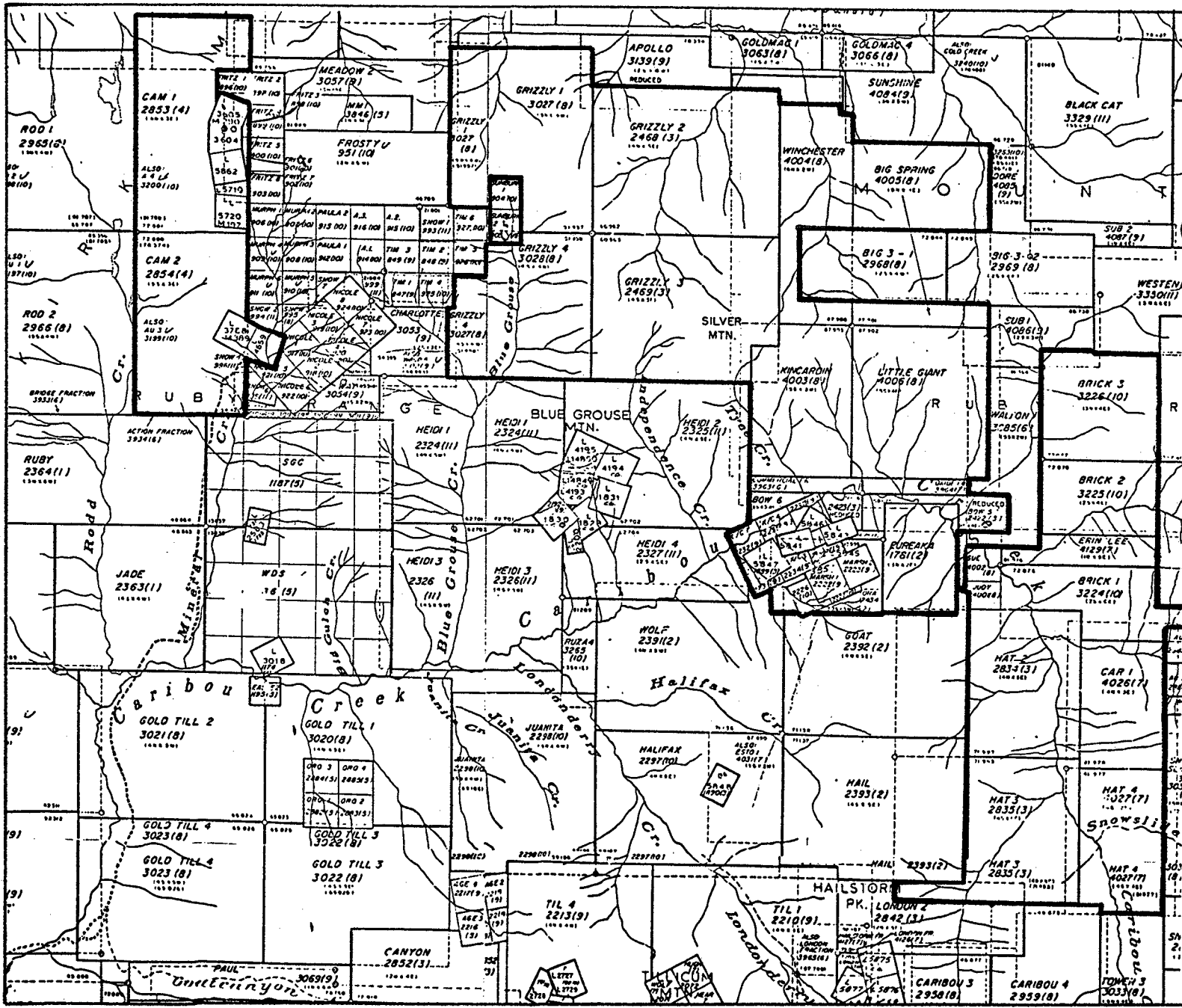
### II.1 Regional Geology

The Nakusp map area consists primarily of low grade metasedimentary and metavolcanic rocks bordered on the northeast by the Kuskanax batholith and an extensive mass of "Nelson Granite" to the south. Three episodes of folding have been described by Hyndman (1968). Small, tight, isoclinal first phase folds are found in high grade metamorphic rocks of Saddle and Scalping Knife Mountains. Phase two folds deform lower grade rocks into a large east-southeast trending recumbent fold open to the southwest. This "Slocan Synclinorium" was described by Hedley (1952). The Slocan fold is truncated on the west by the north-south Rodd Creek fault. Third phase folds (coplanar to both earlier phases) deform earlier lineations. Regional metamorphic grade increases south of the Slocan synclinorium to sillimanite grade in the Valhalla Dome.

### II.2 DETAILED GEOLOGY

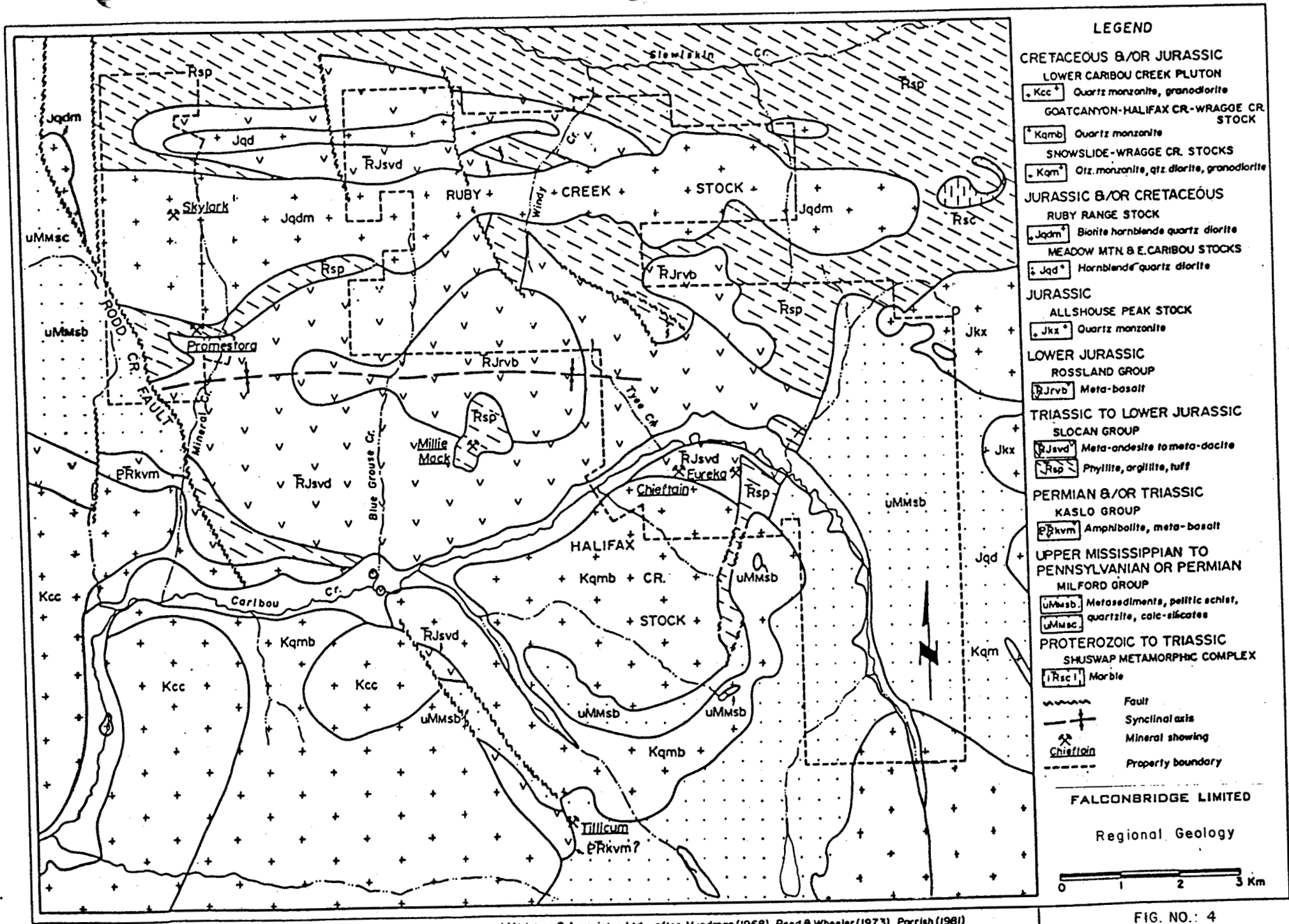
#### II.2.1 Lithologies and Textures

Intermediate volcanics, sediments and mafic dykes were encountered in drilling. The dominant lithology is a grey-green, fine grained andesite which grades rapidly from homogeneously fine grained to coarsely porphyritic with hornblende and feldspar crystals. This unit is thought to be composed of multiple crystal and lithic tuffaceous layers with a rapid gradation between them. Volcanic flows could also be a part of this unit, since finer grained tuffs are difficult to distinguish from flows because of shearing and greenschist level metamorphism. The coarse hornblende crystals might represent the hydrous center of a volcanic flow; however, no flow contacts were seen.



**FALCONBRIDGE LIMITED**  
**Nakusp Option**  
**CLAIM MAP**

FIG.NO.: 3



I.M. Watson & Associates Ltd., after Hyndman (1968), Reed & Wheeler (1973), Parrish (1981)

FIG. NO.: 4



The only sediments intersected in drill core were in DDH #2 and which were heavily sheared friable grey-black argillites. A small quartz vein occurred at the volcanic/sediment contact.

A small number of narrow mafic amygdaloidal dykes crosscut sediment and volcanics.

### 11.2.2 Alteration

Pervasive chloritization and carbonatization are evident within volcanics. Minor, random areas of bleaching leave the volcanics a very light grey color. Minor chlorite and clay alteration are found surrounding rare 3-7cm grey lithic fragments. Small quartz-carbonate veins (<1cm) are randomly oriented.

Disseminated pyrrhotite and pyrite are found throughout the volcanics but usually in amounts less than 1%. Pyrrhotite occurs as a partial replacement or alteration of hornblende crystals. Disseminations and minor veins of sphalerite were most prevalent within the volcanics close to the sediment contact in Drill Hole #2, but far below economic concentrations. Trace amounts of arsenopyrite usually occur as disseminations and fracture surface coatings.

## III. PROPERTY WORK

### III.1 Introduction

Trenching and diamond drilling were carried out on a number of precious metal/multi-element soil anomalies outlined by closely spaced contour sampling. Approximately 2.5 kilometers of new road was built on the rocky slope north of Caribou Creek and east of Tye Creek (Fig. 9).

### III.2 Road Building

A D-G Cat bulldozer, a compressor driven percussion drill and blasting materials were used in road construction. Good progress was made on the lower elevations because of loose, thick overburden but decreased higher with increasing rock outcrops. The new road starts at an elevation of 4000' and reaches a maximum of 5150' with an average grade of approximately 10 degrees. Merchantable timber felled was skidded and decked on the main logging road. After drilling had been completed and all equipment removed, water bars were constructed at selective sites along the road.

### III.3 Trenching and Sampling

New road work for drill access also provided fresh outcrop in anomalous areas. Rock sampling of 2m by 2m panels along selected road cuts collected a total of 330 samples. These were analyzed at Min-En labs for 26 element ICP plus fire gold.

The purpose of panel sampling was to obtain a more representative sampling and reduce the affect of erratic gold distribution. Lithology changes and shear zones were distinguished during sampling.

Analytical Procedure - 24 Element ICP

Ag, Al, As, B, Bi, Ca, Cd, Co, Fe, K, Mg,  
Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, U, V, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th Street, North Vancouver Laboratory employing the following procedures.

After drying the samples at 95 degrees C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO<sub>3</sub> and HC104 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrell Ash 9000ICP Inductively coupled Plasma Analyser. Reports are formatted by routing computer dotline print out.

- Fire Gold Geochemical Analysis

Geochemical samples for fire gold were processed by Min-En Laboratories Limited, at 705 W. 15th Street, North Vancouver Laboratory employing the following procedures.

After drying the samples at 95 degrees C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams is fire assay preconcentrated.

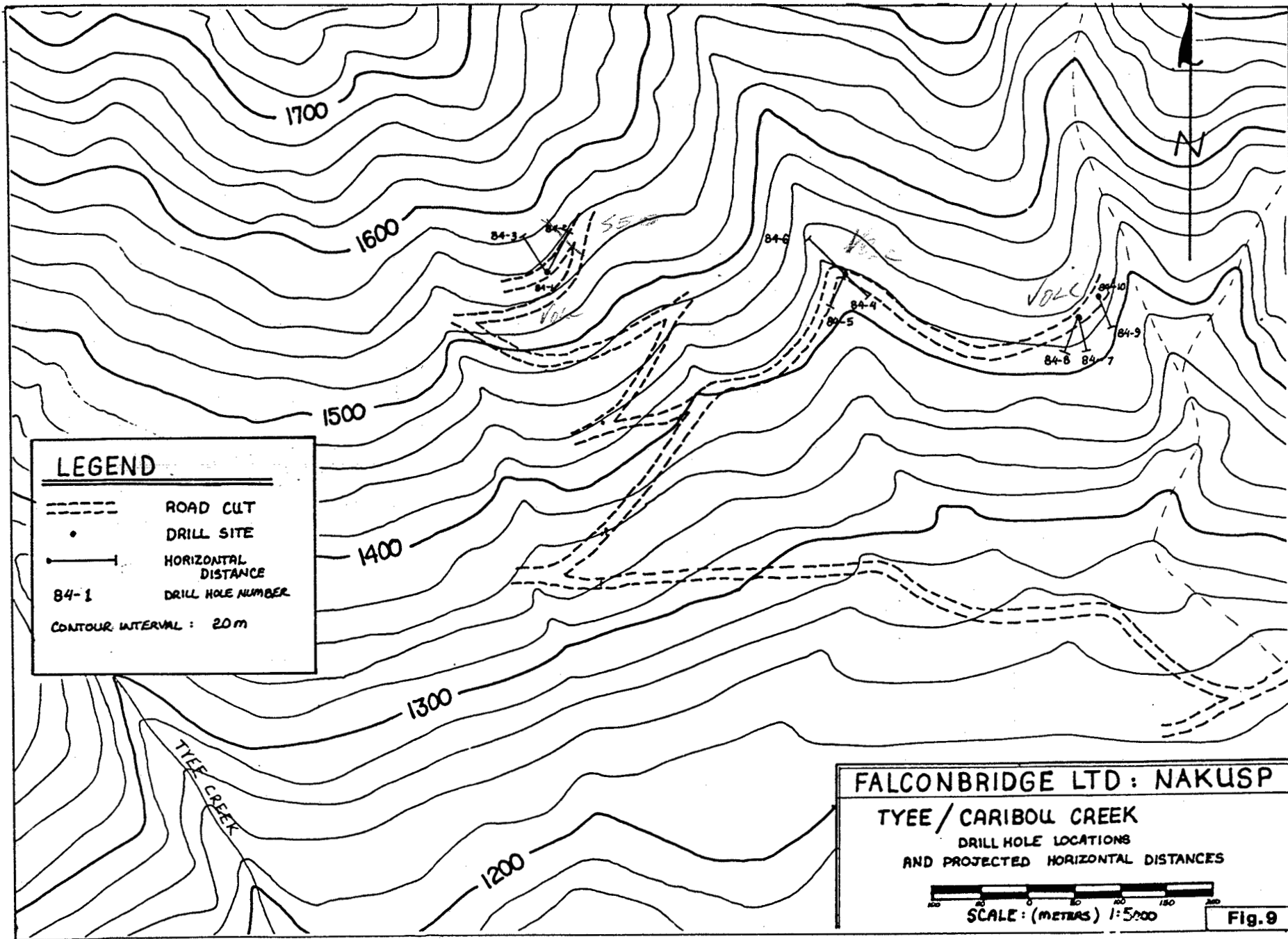
After pretreatments, the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HC1 to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyliso-Butyl Ketone.

With a set of suitable standard solution, gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

III.4 Diamond Drilling and Results

Four drill sites were constructed in the three anomalous zones



**LEGEND**

----- ROAD CUT  
 • DRILL SITE  
 ———> HORIZONTAL DISTANCE  
 84-1 DRILL HOLE NUMBER  
 CONTOUR INTERVAL : 20 m

**FALCONBRIDGE LTD : NAKUSP**  
**TYEE / CARIBOU CREEK**  
 DRILL HOLE LOCATIONS  
 AND PROJECTED HORIZONTAL DISTANCES

SCALE : (METERS) 1:5000

Fig. 9

east of Tye Creek. Sites were constructed to accommodate a Longyear Super 38 diamond drill mounted on 3 meter wide skids. A D-6 Cat was required to move the drill between sites with a smaller John Deere 454 Cat used for site modification and drill platform orientation. A total of 10 short holes were drilled for a total of 649 meters. The distribution of holes is shown on Figure 9, and drill hole information is listed in Table 4. Drill casing was used for only the top 3 to 4 meters of each hole and no mud was required for drilling. Two 10 hour shifts averaged 31 to 38 meter per shift. NQ core was used and all core was split on site with half sent for analysis. Maximum sample length was 2 meters. A total of 380 samples was taken.

Water was obtained from a small free flowing creek close to Drill Site #2. To reach the highest drill site, a single pump with high pressure 5-8 cm polyethylene hose pumped water up 200 vertical meters over a distance of 461 meters. All other sites were at roughly the same elevation as the water supply. Hydrofluoric acid etch dip tests were performed at the bottom of each hole.

The best gold assay results obtained were 1.12 g/tonne Au over 2.0 meters in DDH 3 and 0.95 g/tonne Au over 1.7 meters also in DDH 3. These values correlate with zones of disseminated pyrite, sphalerite and arsenopyrite as disseminations and in minor quartz-carbonate-sulphide veins.

Diamond drill hole 84-2 intersected a zone with visible sphalerite immediately above a sedimentary contact. A zone approximately 6 meters above this contact has highly anomalous values in As, Pb, Zn, Ag and Au (Appendix 3). Values in the adjoining argillites are low.

Overall drilling results confirmed the presence of anomalous gold levels detected through soil sampling. However, drilling did not encounter significantly higher gold values.

#### IV. SUMMARY AND CONCLUSIONS

The 1984 diamond drilling program was centred on multi-element/precious metal soil anomalies within an altered intermediate volcanic unit on the north side of Caribou Creek. Trenching/road sampling and diamond drilling revealed minor gold anomalies but of too low a grade and too small in size to be economic.

TABLE 4.

NAKUSP DIAMOND DRILLING SPECIFICATIONS

<u>Drill Hole</u>	<u>Depth</u>	<u>Corrected Angle</u>	<u>Bearing</u>
DDH 84-1	62.78	88.5	Vertical
DDH 84-2	74.07	43.5	008
DDH 84-3	62.78	45.0	310
DDH 84-4	64.48	32.5	315
DDH 84-5	64.31	59.0	135
DDH 84-6	68.58	58.0	200
DDH 84-7	64.48	59.0	165
DDH 84-8	63.09	74.5	195
DDH 84-9	63.09	74.5	185
DDH 84-10	63.09	72.5	005
-----			
Total	648.75m		

## V. BIBLIOGRAPHY

- Hedley, M.S., 1952: Geology and Ore Deposits of the Sandon area, Slocan Mining Camp, British Columbia, B.C.D.M. Bulletin 29.
- Hyndman, D.W., 1968: Petrology and Structure of Nakusp Map Area, British Columbia. Geol. Surv. Can., Memoir 308.
- Parrish, R., 1981: Geology of the Nemo Lakes Belt, Northern Valhalla Range, Southeast British Columbia, C.J.E.S. 181 P944 - P958.
- Watson, I.M., 1983: Geological Report of the Properties of Nakusp Resources.
- Watson, I.M., 1984: Geological Report of the Silver Mountain-Hat-Chieftain Project of Nakusp Resources Ltd.

**APPENDIX 1: CLAIM INFORMATION**

**APPENDIX 2: STATEMENT OF COSTS**



STATEMENT OF COSTS - NAKUSP

I. Personnel Wages

<u>Position Held</u>	<u>Name</u>	<u>Period</u>	<u>Days Total</u>	<u>Rate</u>	
-----	-----	-----	-----	-----	
Manager	J. Gammon	Aug. 3 - Aug. 6/84	4	\$300/day	\$1200
Senior Geologist	J. Hardy	June 28 - July 2 July 6 - July 12 Aug. 3 - Aug. 6 Sept. 15 - Sept. 16 Sept. 22 - Sept. 23	5  7 4  2 2		
			<u>20</u>	\$180	\$3600
Project Geologist	K. Hicks	June 26 - Aug. 23 Aug. 26 - Sept. 9 Sept. 14 - Oct. 28	59  15 45		
			<u>119</u>	\$ 85	\$10,115
Geologist	V. Koyanagi	Sept. 14 - Oct. 28	45	\$ 85	\$3825
Geol. Asst.	K. Richter	July 1 - Aug. 23 Aug. 26 - Aug. 31	54  6		
			<u>60</u>	\$ 50	\$3000
Geol. Asst.	B. Coates	July 26 - Aug. 1 Sept. 1 - Sept. 8	6  8		
			<u>14</u>	\$ 65	\$ 910
Pros/Sampler	H. Swanson	Sept. 14 - Oct. 28	45	\$ 50	\$2250
Pros/Blaster	D. Murphy	Sept. 29 - Oct. 28	30	\$100	\$3000

Surveyor	G. Thommason	Sept. 20 - Sept. 26	7	\$150	\$1050
					<u>\$28,950.00</u>

## II. Food and Accommodation

344 Man Days @ \$35/Day for Food & Lodging at Selkirk Inn, Nakusp	\$ 12,040.00
Trailer Rental 2 Months @ \$325/Month	\$ 650.00
<u>\$ 12,690.00</u>	

## III. Transportation

Truck Rental	
(1) GMC 4x4 4 Months @ \$1100/Month Fuel, Repairs, Maintenance	\$ 4,400.00 \$ 2,975.00
(1) Chev 4x4 1 Month @ \$1100/Month Fuel, Repairs, Maintenance	\$ 1,100.00 \$ 744.00
Air Fare	\$ 1,247.40
Helicopter 25 Hrs. @ \$415/Hr Inclusive	\$ 10,373.45
<u>\$20,839.85</u>	

## IV. Field Equipment

Tents, Backpacks, Sample Bags, etc.	\$ 3,600.00
<u>\$ 3,600.00</u>	

## V. Geochemical Analyses

1. Soils: Analyzed for 26 Element ICP + F.A.A. Gold 2656 Samples @ \$14.85	\$ 39,441.60
2. Rock & Drill Core: 26 Element + F.A.A. Gold 753 @ \$17.00	\$ 12,801.00
3. Rock: Assayed For Cu, Pb, Zn, Au, Ag 24 @ \$34.00	\$ 816.00
Shipping Costs	\$ 1,000.00
<u>\$54,058.60</u>	

VI. Contracts

Geochemistry (34 Man Days)	\$ 4,870.66
Road Building 2.5 km	\$ 34,781.00
Diamond Drilling (678 Meters) @ \$57.72 / m.	\$ 39,134.25

\$ 78,785.

---

VII. Maps, Reproductions & Airphotos

New Metric Base Maps 1:5000, 1:10,000	\$ 14,469.00
Reproductions	\$ 1,635.21
AirPhotos	\$ 500.00

\$ 16,604.

---

VIII. Report Preparation, Drafting

15 Days @ \$85.00	\$ 1,275.00
-------------------	-------------

\$ 1,275.

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-----  
**TOTAL EXPENDITURES**

**\$216,803**  
-----

## COST BREAKDOWN

Specific activities and expenses such as soil and rock sampling, road building and diamond drilling are allocated to a specific claim group, while other expenses such as transportation, wages and field expenses are divided proportionately between the groups.

### CAM Group - 33 Units

#### Wages

33 X \$ 28,950 =	\$ 3,092
309	

#### Food and Accommodation

33 X \$ 12,690 =	\$ 1,355
309	

#### Transportation

33 X \$ 20,839.85 =	\$ 2,226
309	

#### Field Equipment

33 X \$ 3,600 =	\$ 384
309	

#### Samples

13 Rock Geochem @ \$17 =	\$ 221
--------------------------	--------

#### Maps, Reproductions and Airphotos

33 X \$ 16,604.21 =	\$ 1,773
309	

\$ 9,051

### Grizzly Group - 98 Units

#### Wages

98 X \$ 28,950 =	\$ 9,181
309	

#### Food and Accommodation

98 X \$ 12,690.00 =	\$ 4,025
309	

#### Transportation

98 X \$ 20,839.85 =	\$ 6,609
309	

#### Field Equipment

98 X \$ 3,600 =	\$ 1,142
309	

Brick Group - 83 Units

Wages

83 X \$ 28,950 = \$ 7,776  
309

Food and Accommodation

83 X \$ 12,690 = \$ 3,409  
309

Transportation

83 X \$ 20,839.85 = \$ 5,598  
309

Field Equipment

83 X \$ 3,600 = \$ 967  
309

Samples

6 Soil @ \$14.85 = \$ 89.10

Maps, Reproductions and Airphotos

83 X \$ 16,604.21 = \$ 4,460  
309

\$22,299.10

Samples		
650 Soils @ \$14.85 =		\$ 9,652
735 Rock Geochem @ \$17.00 =		\$12,495
Shipping Costs =		\$ 400
Contracts		
Geochemistry 1 X \$ 4,870.66 =		\$ 1,624
3		
Road Building =		\$34,781.00
Diamond Drilling =		\$39,134.25
Maps, Reproductions and Airphotos		
98 X \$ 16,604.21 =		\$ 5,266
309		

\$124,309

Little Giant Group - 95 Units

Wages		
95 X \$ 28,950 =		\$ 8,900
309		
Food and Accommodation		
95 X \$ 12,690.00 =		\$ 3,901
309		
Transportation		
95 X \$ 20,839.85 =		\$ 6,407
309		
Field Equipment		
95 X \$ 3,600 =		\$ 1,107
309		

Samples		
2000 Soil Samples @ \$14.85 =		\$29,700
5 Rock Geochem @ \$17.00 =		\$ 85
24 Rock Assays @ \$34.00 =		\$ 816

Shipping Costs =		\$ 600
------------------	--	--------

Contracts		
Geochemistry 2 X \$ 4,870.66 =		\$ 3,247
3		

Maps, Reproductions and Airphotos		
95 X \$ 16,604.21 =		\$ 5,105
309		

\$59,868

**APPENDIX 3**

**DIAMOND DRILL HOLE SECTIONS**

**& DIAMOND DRILL LOGS**

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSP	Length	206.0 FEET	HOLE No.	DDH 84-1	Page#	1
Collar	90-0	Location		Hor. Comp	0	Sheet	1	of	6
BDH 2010	88.5	Elevation	1566.10 M@ COLLAR	Bearing	VERTICAL	Logged by	K. HICKS		
		Coordinates	5544 311.21 N 450,791.48 E	Began	OCT 12, 1984 / Completed OCT 13/84	Sampled by	H. SWANSON		
				Core size	N/D	% Recovery	Driller STAN BEAUPRE		

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	P6%	Zn	Ag	Au	
		6 FEET OF CASING											
6.0'	12.5'	LT. GREY, M.G., PORPHYRIC HB+PX+ FELDSPAR INTERM VOLC. MED GRAY MATRIX. GRAIN SIZES < 1MM IN MATRIX TO > 7MM PHENOCRYSTS. SLIGHT CARBONATE ALTERATION OF FELDSPAR PHENOCRYSTS (WEAKLY FIZZY). OVERALL WEAKLY MAGNETIC. HB+PX ~ 19% FELDSPAR ~ 75% CLINITE ~ 4% CALCITE ~ 1% SULPHIDES ~ 1%				23001	2.0'	37	16	73	0.9	0.01	
		WEAK ALTERATION OF MAEL PHENOCRYSTS TO CLINITE. PERVASIVE CARBONATE (CALCITE) ALTERATION THROUGHOUT WITH OCCASIONAL PATCHES (< 1%) . MODERATE HAIRLINE FRACTURING WITH OCCASIONAL SLIDING CONTACTS. INDIVIDUAL GRAIN BOUNDARIES IN MATRIX DISSE AND DIFFICULT TO IDENTIFY SULPHIDES: PA - < 1% ALONG FRACTURES AND AS BLEBS WITHIN ALTERED MAEL PHENOCRYSTS. ALSO AS MINOR DISSE PY - < 1% AS DISSEMINATIONS ASPY - TRACE NAME. PHANOCRYSTALS											
		LT. BLUE-GREEN-GREY, PORPHYRIC HB+PX+ FELDSPAR VESICULAR. MAEL PHENOCRYSTS COMPLETELY ALTERED TO CLINITE WITH ONLY FAINT CRYSTAL BOUNDARIES REMAINING. MATRIX CONSISTING MAINLY OF V.E.G. FELDSPARS, TAN COLORED WITH W/4-MOD ALTERATION TO SEMI-LITE FELDSPAR - 85% CLINITE - 10%				23002	4.5'	110	19	89	0.8	0.02	
		QUARTZ + CARBONATE IN SMALL VEINS WITH MINOR CLINITE & SULPHIDES											
		16.5' SMALL 1CM Ø-5 VEIN // TO AXIS OF CORE WITH MINOR BRASSIATION ON EDGES. E.G. DISSEMINATED ASPY ~ 1-2% IN VEIN AND ASSOCIATED WALLROCK											
						23003	6.5'	3390	43	100	1.7	0.18	



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSP	Length	206.0	HOLE No.	DDH 84-1	Page#	2
Callar		Location		Hgr. Comp.	/Vert Comp.	Sheet	2 of 6		
		Elevation	1566.10	Bearing	VERTICAL	Logged by	K. HICKS		
		Coordinates	5541, 311.21 N 450, 791.48 E	Begin	/Completed	Sampled by	M SWANSON		
				Core size	/Recovery	%	Driller	REQUIRE	

DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.				
					No.	Depth	To	W	As	Pb	Zn	Ag	Au		
		SULPHIDES: PY <1% } AS DISSEMINATIONS Pb <1% }													
		As Py - Tr ASSOCIATED WITH Q-C VEIN													
		GRAPTOLITE CONTACT BETWEEN THIS AND PREVIOUS HOLE TYPE - ONE POSSIBLY MORE ALTERED VERSION OF OTHER													
		18.5' - 24.5' BLEACHED WHITE-TAN COLOR WITH RUSTY LIND ALONG FRACTURES. ALTERED SHOWING TAN COLORATION OF FELDSPAR PHENOCRYSTS 4-5 MM. MOST ROCK AS ABOVE					19.0								
		24.5' - 43.5' F.G. MED BLUE-GRAY PORPHYRITIC FELDSPAR VOLC. CHLONITE BLENDS (AFTR MAFICS?). TRACE DISSEM Pb. QZ-CARB VEIN @ 31.3' 2% Pb, 2% SP, <1% PY					23004	4.5	4.0	28	174	0.5	0.07		
		43.5' - 46.0' AS ABOVE BUT WITH HB+PX PHENOCRYSTS UP TO 8MM. MAFICS PARTIALLY ALTERED TO CHLONITE. CALCITE IN MINOR VEINS UP TO 5MM. PORPHYRITIC FELDSPAR STILL EVIDENT TRACE Pb, <1% DISS PY					23005	5.5	7.7	35	242	0.6	0.03		
		46.0' - 46.8' MED-LT GRAY, BLEACHED VOLCANIC, FELDSPAR PHENOCRYSTS BUT NO VISIBLE HB+PX (COMPLETELY ALTERED?) 1 CM Q-C VEINS @ 45° TO AXIS WITH 2-4% DISS PY <1% Pb. MINOR GORGE ON FRAC SURFACES					23006	2.0	7.3	1250	5680	14.8	0.23		
		46.8' - 50.5' PX-HR-FELDSPAR PORPHYRY WITH F.G. MATRIX. COARSENS BETWEEN 49.0' - 52.5'. MAFICS PARALLEL BETWEEN 50.8' AND 51.4', OTHERWISE MODERATE TO COMPLETELY ALTERED TO CHLONITE. WK BUT PERVASIVE CARBONATE ALTERATION <1% DISS PY, INCREASE IN Pb TO ~1% AS DISSEM AND WITH MAFICS MINOR QZ VEINS <0.5 CM @ 45° TO AXIS.					23007	7.0	0	30	248	1.4	0.20		
		50.5' - 50.8' AS ABOVE WITH VARIATION FROM WK TO NEGLIGIBLE CHLONITE ALTERATION OF HR+PX. DISS Pb ~1%					23008	5.5	55.4	32	133	0.7	0.09		
		50.8' - 51.5' AS ABOVE BUT HB+PX COMPLETELY CHLONITIZED, GIVING MATRIX MORE GREEN APPEARANCE. DISS Pb ~1%					23009	2.5	16.7	22	90	0.2	0.02		
		51.5' - 51.8' WK TO NEGLIGIBLE ALTERATION OF MAFICS. DISS Pb ~1%					23010	1.8	9	4.7	134	1.0	0.01		
							23011	4.6	31	25	82	1.1	0.34		



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSP	Length	206.0	MOLE No.	DDH 84-1	Page	4
Callor		Location		Hor. Comp.	/ Vert Comp.	Sheet	4 of 6		
		Elevation	1566.10 M	Bearing	VERTICAL	Logged by	K. HICKS		
		Coordinates	5544, 311.21 N	Began	/ Completed	Sampled by	H. SWANSON		
			450, 791.48 E	Core size	/ Recovery	Driller	REARWERE		

DEPTH (metres)		RECOV'Y	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS				g/mt.	
From	To	RQDCore				No.	To	W	As	Pb	Zn	Ag	Au
			102.5 LARGE 5 CM CARB + SULPHIDE VEIN @ 20°. CALCITE 95% SP+PX 5% 5% TRACE REMNANT OF V.F.G. SHINY METALLIC MINERAL WITH SP (GALENA?) TRACE CRP. SULPHIDES PRIMARILY AT VEIN SELVAGE AS PATCHES										
			102.5-104.5 LT GRAY BLEACHED INTERM VOLC. HB+PX QUARTZ COMPLETELY REPLACED BY CHL. SERICITIC FELDSPAR. FG: PY ~1%				103.0						
			104.5-113.8 MED BLUE-GRAY PONDYLLITE FELDSPAR, HB+PX INTERM VOLC. MARGES → CHL 10% FELDSPAR INDISTINCT. MINOR DISS. PY & PY PRIMARY P.P. IN SMALL QTZ VEINS @ 50° TO AXIS				23021	1.6'	62	612	3230	7.4	0.05
			113.8-125.6 PONDYLLITE FELDSPAR - CHL (AFTER HB+PX) INTERM VOLC. FELDSPAR PHENOCRYSTS TO 0.3 CM, MARGES TO 0.7, MINOR V.F.G. GRAY-BLUE BRDT MICADENAL. DISSEM. PY ~1%				23022	104.6 ↓ 6.6'	4	25	116	0.8	0.02
			125.6 MINOR QTZ VEINS TO 4 CM. 2% SP, 2% PY, P.P. ~1%				23023	111.2 ↓ 6.6'	86	118	414	2.9	0.17
			128.0-133.0 INTERM VOLC. DECREASE IN CHL, INCREASE IN BLEACHING. DISS. PY ~1%, LESSER DISS. PY. INCREASED SIZE OF FELDSPAR PHENOCRYSTS				23024	117.8 ↓ 6.8'	117	76	146	2.4	0.42
			133.0-133.5 BLEACHED VOLC. DISS. PY ~1%, V.F.G. SULPHIDES, BLACK W. 2% CARB FRAG @ 30°. TR. CHL, TRAC. ON PYROPHYLLITE				23025	124.6 ↓ 1.4'	1600	375	1500	5.7	0.34
			133.5-134.0 QTZ-CARB-BRECCIATED VEIN, PY 1-2% AS PATCHES OR DISSEM.				23026	126.0 ↓ 2.6'	1930	68	166	1.4	0.24
			134.0-139.0 BLEACHED VOLC. WITH OXIDIZED V.F.G. PY, MINOR TRAC. ON PYROPHYLLITE SPECKLES. FELDSPAR PHENOC. TO 10 MM				23027	128.5 ↓ 3.8'	685	84	127	1.8	0.18
			139.0 QTZ-CARB VEIN @ 25° PY ~5%				23028	132.4 ↓ 1.0'	44	23	77	1.0	0.03
			140.0-142.5 DARK GRAY BLEACHED VOLC. CALCRITIZED MARGES. DISS. PY ~1% QTZ-CARB FILLED FRAC. MINOR TRAC. (PYROPHYLLITE)				23029	133.4 ↓ 5.6'	20	30	63	0.6	0.10
			142.5 CARB-CHL VEIN. TR. DISS. PY				23030	139.0 ↓ 1.0'	2	25	83	0.3	0.12
			143.0-148.5 REFRAG. PANCH. FELDSPAR, CHL (AFTER HB+PX) INTERM VOLC. DISS. PY ~1%. MINOR TRAC. SPECKLES				23031	140.0 ↓ 4.0'	13	34	98	0.7	0.19
			148.5-150.0 REFRAG. CHLONITE, STILL FELDSPAR PHENOCRYSTS. MINOR QTZ-CARB VEINS & FRAC. DISS. PY ~1%				23032	144.0 ↓ 5.3'	61	36	163	1.8	0.37
							23033	149.3 ↓ 1.0'	137	158	189	2.8	0.26
								150.3					

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSP	Length	206.0	HOLE No.	DDH.84-1	Page#	
Location		Location		Hgr. Comp.	/Vert Comp.	Sheet	5 of 6		
Elevation	1566.10	Coordinates	5544, 311.21 N 450, 791.48 E	Bearing	VERTICAL	Logged by	K. HICKS		
				Begin	/Completed	Sampled by	H. SWANSON		
				Core size	/Recovery	% Driller	BEAUFAGE		

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS		g/mt.			
					No.	To W	A.S.	P.B.	Zn	Ag.	Au.	
151.0-170.5		LT GREEN-GREY INTERM PORPHYRITIC FELDSPAR, CHL VOLC FELDSPARS 2-3MM ALTERING TO SERICITE, CHL-TALC? GHOSTS OF MAFICS. DISS PY + PY ~ 2% RARE SMALL BLACK CRYSTALS (SUBHEDRAL TO ANHEDRAL) CHROMITE?				151.7						
152.5		2 CM WIDE Q-C + SULPHIDE VEIN @ 35°. QUARTZ 70% <sup>2</sup> , CALCITE 25% PY 5%					1.5'	72	72	118	2.0	0.35
153.2		SMALL 1 CM CARB VEIN @ 65°				153.2						
155.5		LARGE 7 CM Q-C + SULPHIDE VEIN @ 25°. 2-3% PY, ~ 1% PY, ~ 1% CPY AT SELVAGES, CALCITE 85% QUARTZ 10%				154.9	1.4'	89	125	336	2.6	0.30
162.5		SMALL 1 CM Q-C + SULPHIDE VEIN, FERRIC ORIENTATION PY 10% CARB 90%. NUMEROUS SMALL VEINS AND PATCHES OF Q-C TO 165.0' WITH DISS PY + PY ~ 3-4% RARE GREEN, V. SOFT PATCHES OF TALL OR PHAENOCRYSTIC COMMONLY ASSOCIATED WITH SMALL SUBHEDRAL DK BROWN-BLACK GRAINS (CHROMITE?)				156.1	1.2'	71	526	619	10.0	0.41
170.5-177.5		LT GREY-GREEN PORPHYRITIC FELDSPAR, HB+PY VOLCANIC MAFICS COMPLETELY ALTERED TO CHLORITE. INDISTINCT CRYSTAL SHAPES AND BOUNDARIES. MAFIC GHOSTS TO 10 MM, DISS PY ~ 1%				162.8	5.7'	77	96	177	1.7	0.37
177.5-178.0		AS ABOVE WITH LARGER WHITE FELDSPAR PHENOCRYSTS. GRADING FROM COMPLETELY CHLORITIZED MAFICS TO ONLY PARTIALLY ALTERED WITH LIGHTEN MATRIX				162.8	2.6'	224	300	464	5.1	0.88
178.0-182.0		AS ABOVE WITH MOD TO COMPLETE CHLORITIZATION OF MAFICS. 178.5 SMALL 1 CM Q-C + SULPHIDE VEIN @ 30°. QUARTZ 30%, CARB 30%, SP 30% CHL 10%				165.4	6.6'	52	57	201	0.7	0.56
182.0-184.5		* GREENISH-BLACK FELDSPAR CRYSTAL TUFF OR PORPHYRITIC VOLCANIC. FELDSPARS PARTIALLY RELEASED BY PY. PLANNED ALIGNMENT OF FERRUGINOUS PHENOCRYSTS @ 40-45° TO CORE AXIS. DISTINCT BUT GRADATION CONTACTS				172.0	6.2'	49	57	95	0.4	0.41
184.5-189.5		AS BEFORE, LT GREY-GREEN PORPHYRITIC FELDSPAR, HB+PY VOLC. MAFICS → CHL 50-100% DISS PY ~ 2% MAFICS TO 5MM. FELDSPARS < 2MM				178.2	1.1'	2	34	78	0.4	0.05
189.5-190.0		AS ABOVE, MINOR TUFF OR PHAENOCRYSTIC ASSOCIATED WITH HB ON PX. MINOR Q-C IN FERRIC VEINS				179.3	3.0'	12	32	89	0.6	0.24
						182.3	2.1'	56	68	84	1.4	0.15
						184.4	6.2'	37	40	99	0.6	0.14

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Collar	Inclination	Bearing	PROPERTY	NAKUSP	Length	206.0'	HOLE No.	DDH 04-1	Page#
			Location		Hor. Comp	/ Vert Comp	Sheet	6 of 6	
			Elevation	1566.10 M	Bearing	VERTICAL	Logged by	K. HICKS	
			Coordinates	5544, 311.21 N	Begin	/Completed	Sampled by	H. SWANSON	48 SAMPLES
				450, 791.48 E	Core size	/Recovery	% Driller	BENJAMIN	

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
170.0 - 192		AS ABOVE, DELACHERED, MINOR CARB + CHLORITE VEINS. FA DISS PY			23046	190.6	1.8'	25	40	69	0.4	0.10
172.0 - 196		AS ABOVE, CHLORITE ~ 3MM, FELDSPAR ~ 1MM			23047	192.4	6.6'	2	33	61	0.9	0.01
196.1 - 206.0		PHYLLITIC FELDSPAR, HB+PY VENE, MAFICS ONLY W/ALY ALTERED TO CHLORITE. AP IN VENS UP TO 9MM. ABBT CARB FILLED FRACTURES			23048	199.6	4.0'	1	77	87	1.4	0.01
202.0		Q-C + CHL VEIN (1.5CM) BRACCIATED @ 55° DISS PY ~ 170 THROUGHOUT			23049	203.0	3.0'	6	22	65	0.4	0.03
						206.0						

EDH

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	HOLE No.	Page#
55.0	008°	NAKUSP	243'	DDH 84-2	
Callar	Location	Hor. Comp	Ver. Comp	Sheet	of
55.0				1	5
Core 203.0'	Elevation	Bearing	DIP	Logged by	
	1566.10 METERS	008°	-45°	K. HICKS	
	Coordinates	Began	Completed	Sampled by	
	5544 311.21 N	OCT 14, 1984	OCT 15	H. SWANSON	
	450, 791.49 E	Core size	Recovery	% Driller	
		NO		BEAUPRÉ	

DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
		10 FEET OF CASING											
10.0-12.0		LT BLuish-GREY PORPHYRITIC HB+PX 'DAGTIC VOLC?'. HB+PX ALTERED TO CHL IN VARIOUS DEGREES FROM 50-100%. GROUNDMASS IS LT GREY WITH NO DRILLING GRAINS. FIRST 10-12' OF CORE IS FRACTURED WITH RUSTY WEATHERING RIND. MINOR DISS Pp & Py. POSSIBLE TR CPY			23050	10.0	2.0	310	22	92	0.4	0.02	
12.0-19.5		LT BLUE-GREY-GREEN INTERM VOLC AS ABOVE. MAGIC PHENOCRYSTS LARGEN (TO 10 MM), STILL MOD ALTERED TO CHLORITE BUT LESS THAN ABOVE. SMALL (< 1 MM) Euhedral FELDSPAR PHENOCRYSTS VISIBLE. LARGE ~ 10 MM WHITE ANHEDRAL PATCHES WITH SMALL Euhedral CRYSTALS WITHIN. SCATTERED DISTRIBUTION. OVERALL MATRIX LIGHTER. PROBABLY DUE TO LESSEN ALTERATION OF HB+PX TO CHL. ANHEDRAL PATCHES HAVE SERICITIC ALTERATION RIM AT EDGES. DISSEM ASPY DOMINANT BUT STILL ≈ 1% TR PY			23051	12.0	6.6	650	19	74	0.4	0.02	
19.5-28.5		MED GREY PORPHYRITIC FELDSPAR HB+PY INTERM VOLC. FELDSPARS FAINT BUT Euhedral. MAGICS MODERATELY ALTERED TO CHL. GHOSTS UP TO 15 MM			23052	18.6	6.6	530	19	69	0.4	0.01	
28.5-33.0		AS ABOVE BUT INCREASE IN DISSEM Pp 1-2%. DISS PY < 1%			23053	25.2	6.6	117	27	50	0.7	0.05	
33.0-35.0		RELATIVELY UNALTERED PORPHYRITIC HB+PX INTERM VOLC. MAGIC PHENOCRYSTS TO 10 MM. GREENISH-GREY MATRIX. PY < 1%. Pp < 1%. ASPY - TR			23054	31.8	4.4	528	23	130	0.6	0.01	
35.0-40.0		AS ABOVE BUT MAGICS → CHL 80-100%. FAINT FELDSPAR PHENOCRYSTS 3-9 MM. LT GREY MATRIX			23055	36.2	1.7	605	36	256	0.3	0.12	
40.0-45.0		AS ABOVE BUT COARSELY PORPHYRITIC. MAGICS → CHL 50%. FELDSPARS ANHEDRAL TO Euhedral, UP TO 10 MM. MAGIC GHOSTS UP TO 15 MM			23056	37.9	6.6	137	28	121	0.9	0.01	
45.0-47.5		F.G. MED GREY SLT PURPLISH TINTED IN VOLC. FAINT FELDSPAR PHENOCRYSTS. MINOR PY. POSSIBLE CONTACT BETWEEN THIS & PREVIOUS ROCK TYPE. SHARP PENNILL LINE CONTACT @ 50 (FLOW CONTACT?)				44.5							

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	MARKSP	Length	243'	HOLE No.	DDH 84-2	Page#	
Callar		Location		Mgr. Comp.	/Vert Comp.	Sheet	2 of 5		
		Elevation	1566.10 M	Bearing	008° - 45°	Logged by	KEN HICKS		
		Coordinates	5594, 311.21	Begin	OCT 14 / Completed OCT 15	Sampled by	M. SWANSON		
			450, 791.48	E	Core size	NQ / Recovery	%	Driller	BEAUPRÉ

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As%	Pb	Zn	Ag	Au
47.5-49.5		LT GREEN-GREY POLYPHYLLITE FELDSPAR HB+PX INTERM VULC. MAFIC COMPLETELY CHLORITIZED AND FAINT, FELDSPAR? SUBHEDRAL TO ANHEDRAL. MINOR PY & Pp TR ASPY			23057	6.6'	439	45	163	1.3	0.02	
49.5-53.0		F.G. MED GREY - SLTLY PURPLISH VULC AS ABOVE. MAFIC PHENOCRYST → CHL 100% , FAINT OUTLINES. FAINT SUBHEDRAL FELDSPAR PHENO- CRYSTS. MATRIX VARIABLE BDM WHITE - GREEN - MED GREY - PURPLISH WITH LIGHTER GOLDEN MATRIX ASSOCIATED WITH BEST ALTERED MAFICS. PENCIL SHARP COLOR CHANGE BETWEEN LT GREEN & PURPLISH TINGE @ 65-70° TO AXIS. POSSIBLE FLOW CONTACT? MINOR PY, Pp. TR ASPY			51.1'							
53.0-57.0		LT GREY, BLEACHED POLYPHYLLITE HB+PX INTERM VULC. NO DISTINCT FELDSPAR PHENOCRYSTS. MAFICS W/ MOD CHLORITIZED. MINOR PY			57.7'							
57.0-71.0		MED GREY-GREEN WITH FAINT FELDSPAR PHENOCRYSTS & CHLORITIZED HB+PX PHENOCRYSTS. MINOR PY. MINOR AREAS OF LT GREEN, SOFT ALTERATION (TALE OR SYNORPHALITE) NEAR FRACTURES. SPALLS, DISCON- TINUOUS Q-C FRACTURES & VEINS			64.3'							
71.0-72.0		AS ABOVE BUT MAFICS ALTERED ONLY 50%. LARGER 2-8 MM ANHEDRAL FELDSPARS. LT GREY MATRIX			23060	6.6'	145	37	122	1.2	0.10	
72.0-73.0		MED GREY INTERM VULC AS ABOVE			70.9'							
73.0-75.0		COARSE HB+PX PHENOCRYSTS <sup>50%</sup> → CHL			77.5'							
75.0-84.0		MED GREY INTERM VULC AS ABOVE, CHLORITIZED MAFICS, FAINT FELDSPARS. "SALT & PEBBLE APPEARANCES". MAFICS → CHL 90% DISS Pp & PY 1-2%			23061	6.6'	8	24	129	1.3	0.01	
84.0-88.5		AS ABOVE BUT NO OBVIOUS FELDSPARS PHENOCRYSTS VISIBLE (ALTERED COMPLETELY?)			84.1'							
88.5-90.0		V. LT GREY, BLEACHED INTERM VULC WITH SOME TRANSLUCENT ANHEDRAL FELDSPAR PHENOCRYSTS			23062	6.6'	11	25	170	1.1	0.03	
90.0-95.0		MED GREEN-GREY, CHLORITIZED MAFICS, LT GREY FELDSPAR MATRIX. DISS PY ~ 1%. DISS Pp SLT			89.1'							
					23063	6.6'	15	27	99	0.8	0.24	
					90.7'							

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY NAKUSP	Length 243'	HOLE No. DDH 84-2	Page#
Callar		Location	Mgr. Comp. / Vert Comp.	Sheet 3 of 5	
		Elevation 1566.10	Bearing 008° -45°	Logged by K. HIGGS	
		Coordinates 5544,311.21 N 430,791.48 E	Begin /Completed	Sampled by	
			Core size /Recovery	% Driller	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS			g/mt.	
					No.	To	W	As	Pb%	Zn %	Ag
95.0-114.5		MED GRAY-GREEN PORPHYRITIC INTERM VOLC. MAFICS COMPLETELY CILONITIZED, FELDSPAR PHENOCRYSTS FINE, RARELY EMBEDDED AND LESS THAN 3MM. MINOR SECTION BLEACHED TO LT GRAY. DTS P <sub>8</sub> & PY 1-2% MAX. MINOR 0.5 CM CALCITE VEIN WITH MINOR PY PATCHES			23064	6.6'	12	19	251	0.8	0.01
						97.3					
					23065	6.6'	25	27	270	1.0	0.07
						103.9					
					23066	6.6'	6	36	351	1.0	0.01
						110.5					
114.5-133.5		AS ABOVE WITH MINOR SECTION OF DARK MEDIUM CILONITIZATION OF MAFICS AND ASSOCIATED LIGHTER COLORED MATRIX @ 128.5'			23067	6.6'	3	28	116	0.8	0.13
						117.1					
133.5-153.5		AS ABOVE WITH MOD CNL AND GRADATION IN COLOR FROM LT GRAY-GRAY TO LIGHT GRAY			23068	6.6'	21	18	95	0.9	0.02
						123.7					
					23069	6.6'	13	23	113	1.0	0.04
						130.3					
153.5-159.0		LT GRAY-WHITE BLEACHED VOLCANIC, NO VISIBLE MAFICS OR CILONITE, SCALITIZED FELDSPARS, MINOR SPECKS OF PY ≤ 1%.			23070	6.6'	21	29	88	1.3	0.32
						136.9					
					23071	6.6'	28	42	166	1.5	0.64
						143.5					
159.0-167.7		LT GRAY-LT GREEN INTERM VOLC, MAFICS COMPLETELY CILONITIZED AND DISPERSE. FELDSPARS PARTIALLY SCALITIZED, MINOR DTS P <sub>8</sub> & PY			23072	6.6'	118	65	489	1.6	0.48
						150.1					
159.0-160.0		2 CM FLAT LYING QTE VEIN WITH MINOR CNL & SULPH. PATCHES OF P <sub>8</sub> WITH MINOR CPY. P <sub>8</sub> ~ 1-2%, CPY - TR. CALCITE 5-10% ON SQUARE. MINOR CNL IN WALL ROCK AROUND SQUARE			23073	4.9'	4	27	27	1.9	0.01
						155.0					
					23074	3.7'	27	18	58	1.0	0.14
						158.7					
167.7-180.0		MED-DK GRAY PORPHYRITIC FELDSPAR, H&PX SILICIFIED INTERM VOLC MAFICS → CNL 2.5% - SMALL (1-3MM) FINE FELDSPAR PHENOCRYSTS. POSSIBLE FLOW CONTACT WITH PREVIOUS SECTION. CONTACT MARKED BY 1 CM QTE + SULPHIDE VEIN @ 40° TO AXIS (V.E.G. PY: 5%, P <sub>8</sub> 5%, CPY: 1%). SILICIFIED VOLC CONSIDERABLY HARDER THAN PREV. LT GRAY-GRAY VOLC. GRAY MATRIX OF V.E.G. QUARTZ + FELDSPAR			23075	8.8'	35	25	105	1.1	0.05
						167.5					
163.0		SMALL 1CM QTE VEIN WITH MINOR CNL SQUARE @ 45° TO AXIS				174.1					
170.0		1 CM QTE + CNL VEIN WITH MINOR P <sub>8</sub> & PY, LESSER CPY @ 45°									
170.5		1 CM QTE + CNL VEIN @ 50°									
172.5		1 CM QTE + CNL + P <sub>8</sub> VEIN @ 40°			23076	6.6'	9	21	134	1.1	0.02
		MINOR AREAS OF BLEACHING AND VARIABLE MAFIC CILONITIZATION									
180.0-183.0		GRADATION FROM SILICIFIED UNREACTED TO LT GRAY-GRAY CILONITIZED INTERM VOLC. NO REACTED VISIBLE FELDSPARS									
						180.7					
* 183.0-185.5		V. LIGHT GRAY-GRAY, BLEACHED AND OBVIOUSLY PLASTICALLY DEFORMED (SHEARED) VOLC ON TIE. LARGE 1-3 CM FELDSPAR LEUCOSIDAL SHAPED WITH ROUNDED QTE FRAGS FROM DISRUPTED			23077	6.6'	2	32	76	1.1	0.08
						183.0					
					23078	2.3'	50	28	38	1.0	0.05



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Institution	Boring	PROPERTY	ADKUSP	Length	243'	HOLE No.	DDH 84-2	Page #
Callar		Location		Hor. Comp.	1/Vert Comp.	Sheet	4 of 5	
		Elevation	1566.10	Bearing	008° -45°	Logged by	K. HICKS	
		Coordinates	5544, 311.21	N	Begin /Completed	Sampled by		
			450, 791.48	E	Core size	ADP /Recovery	%	Driller

DEPTH (metres) From To	RECOV RQCORE	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	From To	W	As	Pb%	Zn%	Ag.	Au.	
		VEINS? MINOR TALCOSE OR PYROPHYLLITE (MED-BRIGHT GREEN) ALTERATION IN SMALL FRACTURES. DIPS PY IN PLACEMENTS AND BOUNDARIES 1-2% CONTACT OF THIS UNIT ARE RELATIVELY SHARP, DEFINED BY COLOR CHANGE AND V. THIN QTZ FILLED FRAC. @ 60-65°											
		185.5-206.0 MED GRAY-GARY INTERM VOLC WITH FRONT FELDSPAR PHENOCRYSTS 1.4 MM HAPHS → CHL 10% AND DISSESE. CONTAINS BARKEN QTZ FRACS AND SMALL QTZ MINOR SULPHIDE VEINS PINCHING & SWELLING @ 75-80° MINOR LOCALIZED SERICITIZATION OF FELDSPARS. DIPS PY 2-4%											
		187.2-190.0 SLTLY MORE BLEACHED APPEARANCE THAN ABOVE											
		190-194.5 AS ABOVE, WHITE FELDSPAR PHENOCRYSTS BECOMING MORE VISIBLE AND DISTINCT, 1-3 MM. GRADATIONAL CHANGE @ 191.5 TO MED GR. POKRY EVIDENT FELDSPARS											
		194.5-206.0 SMALL AMOUNT (1-2% TOTAL) OF REDDISH BROWN SPINELITE IN SMALL VEINS AND FRACTURES											
		196.0 MORE VISIBLE FELDSPAR PHENOCRYSTS											
		197.5-198.8 AS ABOVE											
		202.0-202.5 BLEACHED, V. LT GRAY, FG.											
		202.5-206.0 V. LT GRAY, V.F.G. SILICIFIED AND BLEACHED VOLC? HADASS 26. 203.0 SP FILING FRACTURES (3-5% TOTAL) 203.5 WIDE 5 CM Q-C VEIN WITH ~1% SP											
		* 206.0-224.0 VOLC/SED CONTACT @ 206.0 MARKED BY 2 CM QTZ VEIN @ 90°. CONTACT SLIPPED, BARKEN. SEDIMENTS GENERALLY DK GRAY-BLACK WITH MINOR GRANITE Q-C VEINS. COLOR BRANDING (LAYERING?) OF DK VS LT GRAY BANDS ~75-80° BUT IS DISCONTINUOUS, WITH ALMOST LONGBUILD (CLASSED) SHADES OF ONE IN ANOTHER. SMALL WHITE CRYSTAL GRANITE UBIQUITOUS (MINUTE FELDSPARS?). SEDS GENERALLY MORE FISSILE & BARKEN. MINOR DIPS PY < 1% MINOR SMALL GRANITE CALSITE VEINS < 1 CM											
						23079	2.5	61	57	85	1.2	0.02	
						185.5							
						23080	1.8	23	37	79	1.0	0.19	
						187.3							
						23081	2.7	87	92	126	1.5	0.03	
						190.0							
						23082	5.5	38	45	98	1.3	0.01	
						195.5							
						23083	3.3	24	34.6	25.70	3.0	0.53	
						198.8							
						23084	4.2	289	657	4630	7.6	0.19	
						203.0							
						23085	3.0	732	374	1630	6.6	0.26	
						206.0							
						23086	6.6	87	33	101	1.1	0.01	
						212.0							
						23087	6.6	62	48	168	2.0	0.01	
						219.2							
						23088	4.8	8	51	90	1.8	0.01	
						224.0							



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	HOLE No.	Page #
45.0	370	NAKUSP	206.0 FEET	DPH 84-3	1
EDH 206	45.0	Location	Hor. Comp	Sheet	
		Elevation 1566.1 METERS	1 Vert Comp.	1 of 6	
		Coordinates 5549, 311.21 N	Bearing 310	Logged by V. KOYANAGI	
		450, 791.49 E	Began OCT. 16/84/Completed OCT. 17/84	Sampled by E.H. SWANSON	
			Core size NR /Recovery %	Driller STAN BEAUPRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS			g/mt.			
					No.	To	W	As	Pb	Zn	Ag	Au	
		12 FEET OF CASING											
0 - 23.1		MED. TO COARSE GRAINED, MED. DARK GREY (MAGICS), GREENISH GREY (FELSICS). HB AND PX 10-15%; ALTERED TO CHL VARIED FROM SLIGHTLY 25% (W) TO 100%, TRACE DISSEM. PY AND PH ~ <1%, RUSTY ALONG FRACTURES FELDSPARS ~ 80%, QTZ ~ 1-2% TO PSS. LARGE WASHED OUT AREAS OF 'FELDSPARS' VISIBLE UP TO 1CM X 1CM, GRAINS WITH VERY FINE INDIVIDUAL CRYSTALS NOT VISIBLE. SOME EUBEDRAL FELDSPARS VISIBLE SIZE UP TO 1CM X 0.4 CM. (MAX) MAGIC VS. FELSIC CONTENT VARIABLE. CALCAREOUS MICRO FRACTURES 6/METER											
23.1 - 28.5		COLOR CHANGE (DARKER) POSS INCREASE IN MAGICS - FELDSPARS, HB, PX, PORPHYRYTIC HB, PX ~ 35%, FELDSPARS ~ 55%, QTZ POSS 1-2%. COMPOSITION VARIABLE, HB, PX ALTERED TO CHLORITE 100% COLOR MEDIUM BLuish GREY 5B5/1 28.0 SMALL 2.0 CM ARGILLITE BAND, DIPPING 10° TO AXIS. 3.0 CM. QTZ/CARB. WITH COUNTRY ROCK (BRECCIA) OVER ARGILLITE BAND, VEIN PY, PH, POSS MAG. ASPY; OVER ALL SULPHIDES UP TO 3%; MINOR ARG. ALTERATION. DISSEM PY ~ 1% IN ARGILLITE (BLOBS) FOR 3.0 CM BELOW ARGILLITE COUNTRY ROCK SILICEOUS ALTERATION, CALCITE ALONG CONTACT WITH ARGILLITE (AND IN ARGILLITE) VISIBLE FELDSPAR ? CRYSTAL OUTLINES IN ALTERED COUNTRY ROCK. GRADES INTO BLUR/GREY FELDSPAR, HB, PX PORPHYRY DISSEM PY <1%, POSS DISSEM ASPY ALONG ARG./COUNTRY ROCK CONTACT? ± 10%											
28.5 - 43.0		MED BLuish/GREY 5B5/1 FELDSPAR HB, PX PORPHYRYTIC DISSEM PY <1%, HB, PX ALTERED TO CHLORITE											
						23093	0	3.0	239	18	91	0.5	0.01
							12						
						23094		6.5	411	11	61	0.2	0.01
							18.5						
						23095		6.5	414	10	47	0.6	0.01
							25.0						
						23096		25	1390	18	62	0.2	0.01
							27.5						
						23097		10	3030	12	15	0.0	0.60
							28.5						
						23098			814	15	66	0.2	0.02
							32.0						





# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

inclination	Bearing	PROPERTY NAKUSP	Length 206.0 FEET	HOLE No. 004-84-3	Page#
Location	Elevation 1566.1 M	Mag. Comp	1 Vert Comp	Sheet 4 of 6	
Coordinates 5544311.21	470, 791.48	Bearing 310	Begin OCT. 14/84	Completed OCT. 17/84	Logged by V. KUYANAGI
			Core size NQ	Recovery %	Sampled by F. H. SWANSON
					Driller STAN GEHUPPE

DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
		AREAS OF WELL-DEFINED FELDSPARS APPEAR INTERMITTENTLY - ~5cm WIDE BANDS ALL OTHER CHARACTERISTICS HELD CONSTANT BANDS 40° TO AXIS WELL DEFINED FELDSPARS ASSOCIATED WITH WHITE MICROFRACTURES - ALTERED FELDSPARS WITHIN MICROFRACTURE HALO. TRACE DISSEM PY < 1%.										
		118.0-126.0 GREENISH/GREY 5GY 4/1 - LIGHT GRAY N7 SLIGHTLY BLEACHED/ALTERED HB → CHLORITE ~100% FELDSPARS - GREYISH/ORANGE/PINK 5YR 7/2 UP TO 1.0cm DISSEM PY + ASP4 < 1% 118.5 1.0cm QTZ/CARB URIN 10-15% SPHAL, DISSEM PY < 1%.				23113	7.0	21	16	103	0.9	0.01
		121.0 SEVERAL QTZ/CARBONATE FRACTURES UP TO 2.0cm WIDE CONTAINING MASSIVE PY + PY SLICKENSIDES 122.0 DISSEM BLACK SULPHIDES 0.1 X 0.1 CM MAX POSS F.G. PY 1% 123.0 FELDSPARS ALIGNED IN PLANAR FASHION DUE TO SHEAR? QTZ MICROFRACTURES CONTAINING PY AND CHLORITE ABUNDANT 4/METER; CARBONATE FILLED FRACTURES ALSO ABUNDANT 5/METER 124.0 QTZ/CARB FRACTURE 0.2cm CONTAINING MASSIVE ~10% SPHALERITE, DISSEM PY ~1%				23114	6.5	167	30	188	0.9	0.02
		126.0-129.5 COLOUR DARKENS TO GREENISH BLACK 5GY 2/1 NON BLEACHED, FELDSPAR, HB, PX PORPHYRATIC. - COURSE TO MED GRAINED. HB, PX WELL DEFINED ALTERED TO CHLORITE 0-100% - FELDSPARS WELL DEFINED NEAR FRACTURES - MAFICS CHLORITIZED NEAR FRACTURES DISSEM PY < 1% HB + PX 0.3cm AVE; MAX 1.0cm FELDSPARS 0.3cm AVE.				23115	3.0	13	26	77	0.9	0.06
		129.5-140.0 FINE GRAINED DARK GRN/GRY/BLK 5G 3/1 FELDSPAR, HB, PX PORPHYRATIC				23116	4.0	7	50	118	1.4	0.41

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY <b>NAKUSP</b>	Length <b>206.0 FEET</b>	MOLE No. <b>DDH-84-3</b>	Page#
Location	Elevation <b>1566.1 M</b>	Mor. Comp	1 Vert Comp	Sheet <b>5</b> of <b>6</b>	
Coordinates <b>5549311.21</b>	<b>450, 791.48</b>	Bearing <b>310°</b>	Begin <b>Oct. 16/84</b>	Completed <b>Oct. 17/84</b>	Logged by <b>V. KOYANAGI</b>
			Core size <b>NQ</b>	Recovery %	Sampled by <b>E.H. SWANSON</b>
					Driller <b>STAN BEAUPRE</b>

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS				g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au		
		PHENOCRYSTS - HB UP TO 1.0 CM MAX AVE 0.2 CM FELDSPARS 0.1 - 0.3 AVE HB, PX 100% ALTERED TO CHLORITE CARBONATE FRACTURES - IRREGULAR - MASSIVE PX ~ 15-20% DISSSEM PX < 1% THROUGHOUT			23117		4.5	0	165	456	2.6	0.05		
							131.0							
140.0-155.5		QTZ - 58% HB, PX - 20% FELDSPAR - 20% PX - < 1% FELDSPARS EUPHERAL AVE 0.2 CM MAX 0.5 CM HB, PX EUPHERAL AVE 0.3 CM MAX 0.8 CM FELDSPARS BLuish WHITE 58% - AROUND FRACTURES YELLOWISH/OLIVE/GREY 59 7/1 (ALTERED) MAFICS ALTERED 10-90% TO AVE 20% TO CHLORITE			23118		65	1	26	142	2.7	0.17		
							142.5							
					23119		65	7	20	67	2.8	0.08		
							149.0							
					23120		65	6	18	51	1.5	0.03		
							155.5							
155.5-163.5		FELDSPAR HB, PX PORPHYRYTIC NO VISIBLE QTZ, MATRIX FINE GRAINED HB, PX ALTERED TO CHLORITE ~ 100% SIZE 0.2 CM AVE, 0.8 CM 157.0 QTZ/PARA 3.5 CM MASSIVE DISSSEM PX 5-10%			23121		65	130	22	58	0.8	0.05		
							162.0							
163.5-171.1		COURSE TO MEDIUM GRAINED HB, PX 15-20% QTZ 60% FELDSPAR 20% FELDSPARS WASHED OUT AND DIFFUSE, SOMEWHAT BETTER DEFINED ABOUT MICRO FRACTURES SIZE 0.1 CM AVE TO 0.8 CM MAX HB, PX ALTERED TO CHLORITE 10-100% AVE 75% SIZE AVE 0.2 CM MAX 0.9 CM ALTERATION HALO ABOUT MICRO FRACTURES (POSS SILICEOUS / ARGILLIC ALTERATION) 168.5 SILICEOUS DYKE 3.0 CM			23122		65	3	20	53	1.3	0.08		
							168.5							
					23123		25	5	18	55	1.0	0.03		
							171.0							
171.1-176.0		ALTERED / BLEACHED LIGHT BLuish/GREY S&L FELDSPARS 59 7/3 BLUSH YELLOW/GREY PORPHYRYTIC BLACK DISSSEM SULPHIDES - EG PX ± 2% QTZ AND CARBONATE MICROFRACTURES ± 8/METER			23124		55	23	27	53	1.2	0.95		





# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	MOLE No.	Page#
41.5	315	NAKUSP	205.0	DDM 84-4	
Location	Mgr. Comp	Ver. Comp.	Sheet	of 4	
Elevation 1426.4 m	Bearing 315°	-41.5	Logged by	K. HICKS	
Coordinates 5544340.27 N	Began OCT 17	Completed OCT 18	Sampled by		
451, 112.48 E	Core size AXQ	% Recovery	Driller	BEAUPRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS				g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
		12 FEET CASING			23130	4.0	4.0	2	24	52	0.5	0.02	
					23131	4.0	4.0	23	26	90	0.2	0.03	
0-12.0'		DK GREEN, ANDESITIC VOLCANIC, HARDNESS ~ 5. SMALL TAN COLONN SERICITIZED FELDSPAR & QUARTZ IN MINOR VEINS, CORE BACKEN AND FRASURED. V. LT GRAY BLEACHED SECTION FROM 4.0' - 8.0'. MINOR PATCHES OF PY AND <1% TSS PY			23132	4.0	12.0	16	24	84	0.3	0.01	
12.0-15.0'		AS ABOVE BUT BECOMING MORE MED-GRAY IN COLUMN WITH SMALL PATCHES OF CHLONITE IN FRACTURES AND IN WALL ROCK. TR DISSEM PQ			23133	6.5	18.5	29	23	104	0.3	0.04	
15.0-27.0'		LT GRAY-GREEN SILICIFIED INTGM VOLC. HARDNESS ~ 6. MINOR Q-C & CHLONITE IN MINOR VEINS. MINOR SPORADIC PATCHES OF TRAPS- LUCENT, SOFT MINERAL IN VUG (ZEOLITES?). ABBT FG. FELDSPARS IN GROUNDMASS. SERICITIC ALTERATION NEAR FRACTURES. TUFFACEOUS TEXTURES AT 20.0' MINOR Q-C VEIN @ 40° 23.5' " " " @ 20° MINOR PQ 25.2' " " " @ 25°			23134	6.5	25.0	32	31	89	0.4	0.02	
27.0-37.0'		V. LT GRAY, F.G. (1-2MM), GRANULAR/TUFFACEOUS TEXTURED FELDSPAR MUCH PLIOCLASTIC. SOFT WGA. SERICITIC ALTERATION TO 50%. RARE LARGE FRAGMENTS. MULTIPLE, SMALL LIGN Q-C & CHL VEINS & FRACTURES OF DIFFERENT AGES. 35.5' EARLY Q-C + CHL VEIN @ 10° TO AXIS. ONE SET OF OFFSETTING FRACS @ 15° TO AXIS / 25° FROM VEIN. ANOTHER SET @ 40° TO AXIS / 50° FROM VEIN			23135	6.5	31.5	29	33	63	0.4	0.03	
37.0-41.5'		SLTY DARKER GRAY COLONN INTGM TUFFACEOUS? VOLC. EARLY LT GRAY VS MED GRAY PATCHES, STILL EARLY SOFT, EASILY SCRATCHED			23136	6.5	38.0	28	35	76	0.1	0.03	
41.5-45.5'		MED GRAY, V.F.G., FELDSPAR PKII TUFFACEOUS VOLCANIC WITH MED GRAY STAGONS BETWEEN LIGHTER GRAY PATCHES SMALL ERATIC VEINS OF WEASY WHITE CLAY (KARLONITE)? 42.5' 1 CM PY VEIN @ 15° 43-45 BACKEN CORE			23137	6.5	41.0	59	46	76	0.1	0.01	
45.5-78.0'		V. LT GRAY, F.G. TUFFACEOUS VOLCANIC AS BEFORE. MOD SERICITIZED FELDSPARS. VERY SOFT WGA. RARE SMALL QTR & CARB VEINS WITH MINOR PY 55.5' 1 CM QTR VEIN @ 15° 65.5' - GRAY GUAZE MATERIAL ~ 2 CM WIRE			23138	6.5	43.5	25	135	21	49	0.3	0.04
					23139	6.5	50.0	52	29	70	0.3	0.03	
					23140	6.5	56.5	64	30	58	0.5	0.01	
					23141	7.0	63.5	12	29	52	0.4	0.01	

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUP	Length	205.0	MOLE No.	DDH 84-4	Page #
Location	Hor. Comp	1/Vert Comp		Sheer	2	of	4	
Elevation	1426.4 M	Bearing	315° - 41.5°	Logged by	K. HICKS			
Coordinates	5549340.27 N	Began	OCT 17	Completed	OCT 18			
	451, 112.48 E	Core size	AWP	% Recovery	Sampled by H. SWANSON			
					Driller BEAUPRÉ			

DEPTH (metres) From To	RECOVERY RQCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
65.5-67.0		BROKEN, RUSTY CONG WITH MINOR V.F.G. PY 1-2% MINOR BRIGHT GREEN, V. SOFT. GASEY ALTERATION MINERAL (PYROPHYLLITE OR TALC) IN RARE PATCHES ASSOCIATED WITH LARGER PY PATCHES			23142	3.5	90	20	50	0.4	0.01	
						67.0						
67.0-72.0		MODERATELY BROKEN & FRAG CONG, ~1% DISS FS PY			23143	5.5	40	22	44	0.3	0.01	
		72.0 1 CM SOFT GASY GONGE				72.5						
75.0-78.0		SMALL THIN PY FILLED FRACTURES			23144	6.5	13	26	40	0.5	0.01	
78.0-79.5		TEXTURAL CHANGE FROM ABOVE. LARGE V. LT. GASY PATCHES WITH INTERVENING MED GASY MATRIX - ROUNDED PATCHES (AUTO-BRECCIATION TEXTURE?)				79.0						
79.5-82.5		AS BEFORE, V. LT. GASY, F.G. FELSIC TUFF. DISS PY 1-2% AND OCCASIONAL PATCHES OF BRIGHT GREEN ALTERATION MINERAL. STILL V. SOFT.			23145	6.0	27	27	30	0.6	0.10	
						85.0						
82.5-93.5		V. LT GASY F.G. TUFF AS BEFORE BUT SILICIFIED. HARDNESS = 6. STILL OCCASIONAL TALC ON PYROPHYLLITE PATCHES. MINOR DISS PY AND Pq IN MINOR FRAG			23146	6.5	4	27	35	0.4	0.10	
						91.5						
93.5-106.5		AS ABOVE BUT HARDNESS = 5, CONTAINS LARGE FRAGMENTS OF MED GASY FELSIC COMPOSITION WITH TALC OR PYROPHYLLITE ALTERA- TION			23147	4.5	35	19	35	0.6	0.01	
						96.0						
106.5-110.5		AS ABOVE WITH GRADATIONAL COLOR CHANGE TO LT GASY-GREEN HARDNESS = 6 110.0 SMALL QZ VEIN 1 CM @ 15° CUT OFF BY DYKE			23148	2.0	15	35	47	0.4	0.01	
						98.0						
110.5-116.0		DK GREEN, AMYGDALOIDAL MAFIC DYKE. LT BROWN-GREY "MUDDY" LOOKING CONTACTS. CAVITIES AWAY FROM CONTACT FILLED WITH SOFT, WHITE MINERAL, POSSIBLY ZEOLITES? SMALL REDDISH SPECKS (HEMATITE) THROUGHOUT ALONG WITH ANHYDRAL TO SUBANGULAR DK GREEN MAFICS			23149	6.5	19	22	41	0.5	0.01	
						104.5						
					23150	6.0	8	23	36	0.5	0.01	
						110.5						
116.0-132.5		V. LT. GASY, F.G. TUFF AS BEFORE, SLTGY GREEN NEAR DYKE CONTACT. W/ K TO MOD SILICIFICATION (HARDNESS = 6). STILL CONTAINS RANDOM TALCSE PATCHES WITH V.F.G. PY. PATCHES USUALLY CONTAIN MINOR AMOUNT OF SMALL, RESISTANT SUBANGULAR CHROMITE? GRAINS. SMALL QZ VEINS WITH MINOR PY			23151	6.0	0	24	61	1.1	0.01	
						116.5						
					23152	6.5	5	21	43	0.4	0.01	
						128.5						
					23153	6.5	153	29	85	0.5	0.01	
						129.0						

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSD	Length	205.0'	HOLE No.	DDH 84-4	Page #
Collar		Location		Hqr. Comp	/ Vert Comp	Sheet	3 of 4	
		Elevation	1426.4 M	Bearing	315° - 415°	Logged by	K. HIGGS	
		Coordinates	954439.27 N 451,112.48 E	Began	OCT 17 / Completed OCT 18	Sampled by	H. SWANSON	
				Core size	Ng / Recovery	% Driller	BEAUPRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
132.5 - 134.5		AS ABOVE BUT SOMEWHAT SOFTER (HARDNESS 4-5). MINOR GREEN ALTERATION MINERAL AS ABOVE WITH V.F.G. GREY SULPHIDE (TETRAHEDRITE?)			23154	65'	0	24	61	1.1	0.01	
134.5 - 151.0		V. LT GREY TUFF AS BEFORE, WK TO MOD SILICIFICATION, GREEN ALTERATION MINERAL PATCHES (≤ 1% TOTAL) DISS V.F.G. BY 1-2% 135.5 SMALL Q-C VEINS @ 25° & 35° 148.5 4 CM CARB + WHITE CLAY (KARLENITE) VEIN @ 30°. PATCH V.F.G. OXIDIZED BY 2-3%			23155	65'	24	24	32	0.4	0.01	
151.0 - 170.0		AS ABOVE, WK-MOD SERICITIC ALTERATION. SCATTERED PATCHES OF LT GREEN TALCOSE MATERIAL WITH MINOR SUBHEDRAL RADIIANT BLACK LAMIN. OVERALL HARDNESS 5-6. MINOR Q-C VEINS. DISTINCTION BETWEEN PATCHES OF V. LT GREY AND MINOR MED GREY MATERIAL BETWEEN. DISS SULPHIDES 1% MAX			23156	65'	12	21	36	0.2	0.01	
170.0 - 172.0		AS ABOVE WITH PATCHES OF PY ALONG FRACTURED AND ASSOCIATED V. LT GREY FRAGS. 172.0 1 CM QTZ VEIN @ 25°			23157	65'	49	23	31	0.2	0.01	
172.0 - 205.0		OVERALL SAME V. LT GREY, F.G. BLEACHED TUFF. 176.0 12 CM QTZ VEIN @ 15° WITH MINOR PATCHY ASPY 2-3% AND TR PY. ONLY RARE TALCOSE PATCHES. 176.0 - 177.0 DISS PY + ASPY 2-3%			23158	65'	58	25	34	0.3	0.01	
184.5 - 185.5		HEAVILY FRACTURED AREA SURROUNDING 1.5 CM QTZ VEIN WITH SOLITARY PY CLOT AND MINOR ASPY 5.1%. MINOR TALCOSE STREAKS.			23159	65'	8	30	40	0.2	0.01	
189.5'		1 CM QTZ VEIN @ 10° WITH MINOR ASPY & PY IN VEIN ≤ 1% AND IN WALLROCK WITHIN 5-10 CM. RANDOM TALCOSE PATCHES IN WALLROCK AS BEFORE.			23160	15'	4	31	40	0.5	0.01	
198.0		BROKEN CORE, MUSTY FRACTURES, SMALL QTZ VEINS			23161	2.0'	19	34	46	0.5	0.01	
					23162	4.0'	13	29	58	0.2	0.01	
					23163	1.5'	2300	41	76	1.1	0.03	
					23164	4.0'	92	24	56	0.7	0.01	
					23165	35'	45	29	64	0.6	0.01	
					23166	15'	178	24	46	0.5	0.01	
					23167	65'	400	31	68	0.4	0.22	
					23168	65'	44	58	195	0.5	0.03	



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	HOLE No.	Page#
60.0	135	NAKUSP	211.0 FEET	DDH 84-5	
Callar		Location	Hgr. Comp	Sheet	1 of 4
EDH 211	39.0	Elevation 1426.4 m	Bearing 135	Logged by	V. HOYANAGI
		Coordinates 5744 340.27 N 451, 112.48 E	Begin OCT. 18/84 Completed OCT. 19/84	Sampled by	F. H. SWANSON
			Core size NR / Recovery	% Driller	STAN BEAUPRE

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
		10.0 FEET OF CASING				0.0'							
		10.0'-38.5' INTERMEDIATE/MAFIC VOLCANICS - ANDESITE/DACITE - FINE GRAINED, DARK GREY N3 - FELDSPAR/QTZ MATRIX, HORNBLENDE, PX PHENOCRYSTS - GROUNDMASS APHANITIC, MED LIGHT GREY NG - CARBONATE MICROFRACTURES WITH CHLORITE - RUSTY ON OPEN FRACTURE SURFACES - MAFICS SLIGHTLY ALTERED TO CHLORITE - POSS BIOTITE WITH HB - DISSEM PY < 1% 20.5' QTZ/CARBONATE 1.5 CM - VEIN PYROXITE 3% + CHLORITE - BLACK ACICULAR MASSIVE 40% → POSS. TOURMALINE COMBINED WITH CARBONATE 32.0 CARBONATE VEIN - MASSIVE CHLORITE MASSIVE PY ± 2-3%											
		38.5-43.0 BLEACHED/ALTERED LIGHT GREY N7 FELDSPAR PHENOCRYSTS - YELLOW GREY 54 7/2 - ABUNDANT CARBONATE/GRAPHITIC SHEARS - ALTERED FELDSPAR MICROFRACTURES - SHEARS IRREGULAR, MAX WIDTH OVER 2.0 CM											
		43.0-54.5 INTERMEDIATE/MAFIC VOLCANICS - MED BLUE GREY 5B5/1 - FINE GRAINED, NON PORPHYRYTIC, APHANITIC - DISSEM PA, PY < 1% - CHLORITE ALONG FAINT FOLIATION POSS RESULT OF ALTERED BIOTITE OR HB - GROUNDMASS APPEARS TO BE QTZ, FELDSPARS AND HB, CHLORITE, BIOTITE - IN AN INTERMEDIATE COMPOSITION. - ABUNDANT CARBONATE MICRO FRACTS. - GRADES INTO BLEACHED/ALTERED											
		54.5-61.0 COLOUR N7 LIGHT GREY TO YELLOW GREY 54 8/1 BLEACHED/ALTERED(?) POSS SHEAR, SILICIFIED. V. FINE GRAINED ALTERED ABOUT VEINS/FRACTURES											
						23170	3.0	2	20	80	0.5	0.02	
						23171	6.5	6	15	80	0.7	0.01	
						23172	6.5	0	20	90	0.5	0.03	
						23173	6.5	19	22	118	0.5	0.20	
						23174	6.5	44	21	101	0.6	0.02	
						23175	7.0	84	22	116	0.4	0.03	
						23176	6.5	19	25	104	0.4	0.01	
						23177	6.5	51	28	309	0.5	0.02	

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY NAKUSP	Length 211.0 FEET	HOLE No. DDH 84-5	Page#
Location	Elevation 1426.4	Mar. Comp	1 Vert Comp.	Sheet 2 of 4	
Coordinates 5544340.27 N 431,112.48 E	Bearing 135°	Began OCT. 18/84	Completed OCT. 19/84	Logged by U. KODAWAGI	
		Core size NQ	% Recovery	Sampled by F.H. SWANSON	
				Driller STAN BEUKRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
		57.5 QTZ VEIN ± 5.0 cm WIDE DISSEM PY < 1% EG. MASSIVE WACK(?) E To CALCITE/CHLORITE IN FRACTS AND CONTACT.											
		61.0-67.0 COLOUR MED/LBLUE/GREY SB 5/1 GRADUALLY BECOMES DARKER TOWARDS AN ANDESITE/DACITE - INTERMEDIATE VOLCANIC. QTZ/CARB VEINS AVE 1.0 cm - 6 BTWN 64.5 AND 67.0. TRACE DISSEM PY < 1% BECOMES SILICEOUS FROM 65.0 GRADUALLY TOWARDS 67.0					62.5						
		67.0-77.5 ALTERED/BLEACHED/SILICEOUS LIGHT/BLUE/GREY SB 7/1 - GRN/GREY SG 6/1 DISSEM PY ~ 1% (V.FG. BLACK) SMALL SHEAR AT 75.0, ALTERED ABOUT SHEAR -> CLAY; CALCAREOUS ABOUT FRACTURE ALTERATION HALO. SMALL 1.0 X 0.5 cm TALC + POSS CHROMITE + POSS CHALCOHITE 76.5 FELSIC/INTERMEDIATE VOLCANICS (HARD)					69.5						
		77.5-87.0 GRADED INTO FROM BLEACHED/ALTERED/SILICEOUS COLOUR MED GREEN/GREY SG 5/1, FINE GR. - CALCAREOUS ALONG FRACTURES - QTZ/CARBONATE IN FRACT/SHEAR ZONES ALSO CONTAINED IN FRACT/SHEARS CHLORITE, POSS ALTERED FELDSPAR, NO VISIBLE SULPHIDES - DISSEM PY THROUGHOUT < 1% - APHANITIC, NON PORPHYRYTIC EXCEPT FOR THE ODD CLUMP OF CHLORITE 82.0 COLOUR SB 6/1 MED LIGHT BLUE/GREY DISSEM PY ~ 1% 0.1 X 0.2 cm CHLORITE/TALC < 1% 86.0 TALC WITH POSS CHROMITE, POSS ZAPPER							189°				
		87.0-93.0 MINERAL (CHALCOHITE?) 0.2 X 0.2 cm 89.0 COLOUR LIGHT GREY N7 QTZ/CARB MICRO FRACTURES DISSEM/MASSIVE PY ~ 1-2% ALSO FOUND ASSOC WITH TALC/CHLORITE											

No.	To	W	As	Pb	Zn	Ag	Au
23179		6.5	411	29	87	2.3	0.16
23180						0.5	0.08
23181		6.5	89	26	46	0.2	0.01
23182			9	23	37	0.4	0.01







# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

inclin.ation	Bearing	PROPERTY	Length	HOLE No.	Page#
40.0	288	NAKUSP	325.0	DDH-94-6	
Callor		Location	Hor. Comp	Sheet	1 of 5
58.0		Elevation 1426.4 m	Bearing 200°	Logged by	K. HICKS
		Coordinates 954340.27 N	Began OCT. 10/94 / Completed OCT. 19/94	Sampled by	F.H. SWANSON
		451,112.48 E	Core size NR / Recovery %	Driller	STAN BRUPPE

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn.	Ag.	Au.
		13 FEET OF CASING			23252	2.0	6.5	49	33	75	0.9	0.01
		0.0-13.0 MED. GREEN-GREY F.G. ANDESITIC VOLC. MINOR CARBONATE ALTERATION (WK BUT PERVASIVE). TRACE SULPHIDES. FAIRLY SOFT (~4) ON FRESH SURFACE.			23253	6.5	13.0	19	25	68	0.6	0.02
		13.0-19.5 AS ABOVE BUT LOSING GREENISH TINGE BECOMING MORE GREY (BLEACHING?) STILL EASILY SCRATCHED NO VISIBLE GRAINS OR CRYSTALS, JUST GROUND MASS			23254	6.5		48	21	76	0.6	0.02
		19.5-23.0 V. LIGHT GREY, BLEACHED VOLC. WHICH HAS BEEN SHEARED ON A FELSIC SHEARED TUFF WITH FLATTENED ELONGATE FRAGMENTS. ORIENT OF PLANAR FABRIC ~ 20° TO AXIS. NO FIZZ/RUSTY FRACTURES AT EITHER CONTACT BUT NO VISUAL SULPHIDES WITHIN SECTION.			23255	19.5	35	57	22	67	0.5	0.01
		23.0-28.5 MED. GREEN GREY F.G. ANDESITIC VOLC? HARDNESS 4-5, MINOR Q-C VEINS < 1cm.			23256	23.0	5.5	67	28	68	0.7	0.01
		28.5-35.5 OVERALL SAME ROCK TYPE AS ABOVE BUT WITH RUSTY RIND IN AND AROUND FRACTURES AND QTZ VEINS. PY < 1% 28.5 SMALL QTZ VEIN < 1cm AT 60° 30.0 2cm QTZ VEIN AT 60°, RUSTY			23257	28.5		54	23	70	0.6	0.01
		35.5-37.0 LT. GREY, WKKLY GRANULAR ON F.G. TUFFACEOUS TEXTURE. HARDNESS ~ 5. EUBEDRAL PYRITE CHANGES DISSEM 1 ~ 2% TEXTURAL DIFFERENCES MAY BE ONLY BLEACHING FROM PREVIOUS GREEN GREY ROCK 36.0 1cm QTZ AND SULPHIDE VEIN AT 60° PYRITE 3-5% 36.5 2cm QTZ/CARB AND SULPHIDE VEIN AT 20°. FRAGMENTS OF WALLROCK AND 3-5% PY, VEG, DK. GREY, SOFT, MUSH (SMOURED PY?)			23258	35.5	2.5	40	28	63	0.6	0.01

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Callar	Inclination	Depth	PROPERTY NAKUSP	Length 225.0 FT	HOLE No. DDH-84-6	Page#
			Location	Hor. Comp	Sheet 2 of 5	
			Elevation 1426.4	Bearing 200°	Logged by KEN HICKS	
			Coordinates 5544340.27 N	BEAUPRE 19/84 / Completed OCT. 9/84	Sampled by HARRY SWANSON	
			451, 112.48 E	Core size N/A / Recovery %	Driller STAN BEAUPRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS			g/mt.		
					No.	To W	As	Pb	Zn.	Ag.	Au.	
		37.0-47.5 COLOR CHANGE GRADATIONAL TO MED GREEN-GREY. HARDNESS ~5				38.0						
		(38.0-39.5) LARGE 4 cm CALCITE AND BRECCIA VEIN WITH MINOR CHL AND DISS PY. ORIENT AT // TO CORE.				23259	2.0	40	27	45	0.5	0.03
						40.0						
		47.5-55.8 BLEACHED V. LIGHT GREY, GRANULAR, ON F.G. TUFFACEOUS TEXTURED VOLC. MINOR 1-2 cm QUARTZ ON CARBONATE & CHLORITE VEINS WITH PATCHY AND MINOR PY. TRACE ASPY NEAR VEINS. OVERALL Euhedral DISS PY 2-3%				23260	7.5	41	28	62	0.8	0.01
						47.5						
		55.8-63.5 MED GREEN-GREY FG. ANDESITIC VOLC AS BEFORE, FAIRLY SOFT, 4-5, RUSTY FRAC DISS PY < 1% MINIM < 1/cm CARB.				23261	4.5	1380	34	73	0.9	0.01
						52.0						
		63.5-64.5 V. LIGHT GREY, BLEACHED WITH LT. GREEN TALL PATCHES WITH ASSOCIATED ASPY AND PY WITH THEM OVERALL DISS PY 1-2% RUSTY FRAC				23262	3.5	1070	33	61	0.6	0.17
						55.5						
		64.5-67.0 BROKEN AND FRACTURED CORE, THICK RUST RING FROM FRAC. MOST STILL LT. GREEN - LT. GREY FAIRLY SOFT VOLC OR FG. TUFF				23263	6.5	246	22	57	0.7	0.03
						62.0						
		67.0-73.5 LT-MED GREY BLEACHED, WK-MOD SILIFICATION, PERVASIVE WK CARB ALTERATION DISS Euhedral PY ON FRACTURES. < 1% OVERALL.				23264	2.5	316	30	73	0.7	0.12
						64.5						
		73.5-82.5 COMPLETELY PERVASIVE RUST. NO OBVIOUS SULPHIDES. MULTIPLE FRACTURES. ORIGINAL MOST PROBABLY VOLC. AS ABOVE				23265	6.5	196	28	61	0.9	0.09
						71.0						
						23266	2.5	178	23	56	0.5	0.02
						73.5						
						23267	3.0	134	18	80	0.3	0.01
						76.5						
						23268	3.0	82	24	81	0.5	0.01
						79.5						

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Logging	PROPERTY <b>NARUSP</b>	Length <b>225.0 FT</b>	HOLE No. <b>DDH-84-6</b>	Page#
Location	Hor. Comp	Ver. Comp	Sheet <b>3</b> of <b>5</b>	Logged by <b>K. HICKS</b>	
Elevation <b>1426.4M</b>	Bearing <b>200°</b>	Coordinates <b>5544340.27 N</b> <b>451,112.48 E</b>	Begin <b>02/19/84</b> / Completed <b>02/19/84</b>	Sampled by <b>H. SWANSON</b>	
Core size <b>N 2</b> / Recovery <b>%</b>			Driller <b>S. BEAUPRE</b>		

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn.	Ag.	Au.
		82.5-101.0 V. LIGHT GREY, WK-MOD SILICIFIED AND BLEACHED FR TUFF ON ERGIC VOLCS RARE LT. GREEN (TALS SUGGESTED BUT LOOKS LIKE MALACHITE) PATCHES WITH DK GRAY MINERAL AND MINIM ASPH AND PY. DISS PY ON FRFS. FG. GRANULAR TEXTURE SMALL IRON BLACK MIN. IN PATCHES			23269	82.5	3.0	128	27	96	0.9	0.01
		88.5-91.0 DISS PY ASSOCIATED WITH PATCHES. LARGE PATCH AT 86'			23270	88.5	6.5	153	33	64	1.0	0.02
		94.0-101.0 MED. GRAY WITH LT. GREEN RIM. ABUNDANT SMALL SUBHEDRAL BLACK CRUSTALS HARDNESS > 6			23271	94.0	5.0	480	34	72	0.7	0.01
		94.0-101.0 MULTIPLE ON WAVING LOW ANGLE CALCITE-CHLORITE-RTZ + SULPHIDE VEIN ORIENT AT 0-15° GRAY PATCHES WITHIN VEIN (EG. PY? OR OTHER). OCCASIONAL BRIGHT GREEN PATCHES.			23272	94.0	3.0	1050	61	59	0.6	0.03
		101.0-106.0 SOME V. LIGHT GREY HOST AS ABOVE. SMALL NETWORK OF CROSSCUTTING CARB-CHLORITE-RTZ + SULPHIDE VEINS (SMALL) VEG. DK. GRAY DIFFUSE MINERAL USUALLY IN SMALL FRAC AND VEIN SALVAGES. OVERALL DISS PY + PATCHY ~3% AREAS WITHOUT VEINING AND EASILY SCRATCHED			23273	97.0	3.0	643	91	190	0.9	0.02
		106.0-112.0 V. LIGHT GREEN-GREY, EASILY SCRATCHED. VEG. ALTERED DACITE/ANDESITE VOLC. DISS PY < 10%. DISS PY < 10%.			23274	100.0	3.0	1110	55	138	0.6	0.01
		112.0-114.5 AS BEFORE BUT COLOR BECOMING SLTLY MORE GREENISH. FAINT CHLORITE SPECKS (AFTER MAELCS) VISIBLE. SLTLY HARDER (WK-MOD SILICIFIED) DISS PY + PY < 10%			23275	103.0	3.0	1100	50	67	0.6	0.04
		114.5-116.5 SMALL DK. GREEN-BLACK, MAELC DYKE WITH EG. BROWNISH MUDRY CONTACTS AT 45° MINOR VESICLES FILLED WITH CALCITE AND RARE QUARTZ EYES.			23276	106.0	4.0	223	22	60	0.3	0.01
					23277	110.0	4.0	27	26	77	0.8	0.01
					23278	114.0	2.5	45	46	79	1.6	0.01

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Callar	Inclination	Bearing	PROPERTY NAKUSP	Length 225.0 FT.	HOLE No. DDH 84-6	Page#
			Location	Hor. Comp / Vert. Comp.	Sheet 4 of 5	
			Elevation 1426.4 M	Bearing 200°	Logged by K. HICKS	
			Coordinates 5544340.27 451, 112.48 E	Began Oct 1984 / Completed Oct 1984	Sampled by H. SWANSON	
				Core size N2 / Recovery %	Driller S. BRAUPPE	

DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS				g/mt.			
					No.	To	W	As	Pb	Zn.	Ag.	Au.			
116.5-155.0		MED GREEN GREY FF. VOLC? HARDNESS ~5. MINOR DISS P <sub>d</sub> < 1%. FAINT CHLORITIC GHOSTS OF MAFICS. TR. OF DISS M <sub>d</sub> ? DISS P <sub>d</sub> < 1% 134.0 BECOMING MORE GREENISH AND LIGHTER IN HUE BUT AS BEFORE OTHERWISE, MINOR GROWTH OF SMALL LATHE-LIKE BLACK CRUSTALS < 1mm (ACTINOLITE?) 145-155.0 LT GREY-GREEN DISS P <sub>d</sub> ~1% DISS P <sub>d</sub> < 1%													
						23279	116.5	6.5	14	29	61	0.7	0.01		
						23280	123.0	6.5	10	28	60	0.7	0.01		
						23281	129.5	6.5	10	20	41	0.5	0.01		
						23282	136.0	6.5	1	25	35	0.4	0.01		
						23283	142.5	7.0	5	21	32	0.5	0.02		
						23284	149.5	5.5	12	21	32	0.6	0.03		
							155.0								
155.0-157.0		LT. YELLOWISH-GREY DYKE AT 30° TO AXIS OVERALL F.G. GROUND MASS WITH WHITE (CALCITE) AMYGDALES AND CLEAR IRREGULAR SHAPED QUARTZ BLENDS ALSO BRIGHT GREEN (AS BEFORE) PATCHES OR SPOTS WITH DIFFUSE BOUNDARIES, POSSIBLY PHOSPHILLITE				23285		2.0	6	44	82	0.7	0.01		
157.0-180.0		157.0-162.0 LT. GREY BLEACHED VOLC. WITH DISS P <sub>d</sub> + P <sub>d</sub> ~ 1%. HARDNESS 4-5. MINOR P <sub>d</sub> FRACTURE AT 15° 162.0-167.0 AS ABOVE BUT WITH GREENISH TINGE. 167.0-175.0 TR. P <sub>d</sub> ONLY, LT. GREY VOLC. AS ABOVE, SMALL P <sub>d</sub> FILLED VEIN < 0.5 mm AT 15° AT 169.5. P <sub>d</sub> AND BRECCIA VEIN ~ 3 cm WIDE AT 15° AND 20°. MINOR P <sub>d</sub> FILLED BRAC AT 25° AND 35° 177.5 6-8 cm WIDE PURITE-BRECCIA AT 40°				23286		6.5	13	22	39	0.7	0.12		
						23287		163.5	6.0	11	19	40	0.6	0.01	
						23288		169.5	11.5	18	22	33	0.8	0.01	
						23289		171.0	6.0	10	22	33	0.7	0.01	
						23290		177.0	1.0	31	20	40	0.6	0.02	
180-191.5		LT. GREEN-GREY FF. VOLC AS BEFORE MINOR DISS P <sub>d</sub> AND P <sub>d</sub> 1-2% TR. ASP <sub>d</sub>				23291		178.0	6.5	2	17	45	0.4	0.01	
								184.5							





# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

PROPERTY	NAKUSP	Length	205.0 FT.	HOLE No.	DDH 34-7	Page	#
Location		Mag. Comp.	1 Vert. Comp.	Sheet	2 of 5		
Elevation	1431.2 M	Bearing	165°	Logged by	V. KOYANAGI		
Coordinates		N	Began OCT. 20/84	Completed OCT. 21/84	Sampled by	F.H. SWANSON	
		E	Core size	% Recovery	Driller	STAN BEAMER	

DEPTH (metres)		RECOVERY	DESCRIPTION	INTERSECTION	GRAPHIC	SAMPLES			ASSAYS			g/mt.	
From	To	RQDCore				No.	To	W	As	Pb	Zn	Ag	Au
	48.0-49.5		FRACTURED/SHEARED										
	49.5-51.5		MED/LAV/GRY INTERMED VOLCANICS - SLIGHTLY ALTERED, FROSPAR PHENOS VISIBLE - LOCALLY SIZE < 0.1 X 0.1 CM - RIND ABOUT FRACTURED AREAS - RUSTY			23208	65	17	60	329	0.7	0.01	
	51.5-52.5		RUSTY/FRACTURED/SHEAR										
	52.5-55.0		LIGHT/MED ALUISH GRAY VOLCANICS SBW1, DISSEM PH - PYRROPHITE/CHLORITE/TALC BLEBS - SIZE ± 0.8 CM X 0.3 CM. PH: CHL = AVE 80/20 - DISSEM PH ~ 10% THROUGHOUT - TRACE CHALCOPYRITE WITH PH < 1%				53.0						
	55.0-56.0		SHEARED/FRACT/RUSTY			23209	65	9	40	198	0.5	0.01	
	56.0-82.5		MED/LIGHT BLUE GRAY - PH/CHLORITE BLEBS PERSIST - SMALL RUSTY FRACTURES ABUNDANT ± 10/M - CARBONATE MICROFRACTS ABUNDANT ± 10/M - DISSEM PH/ACTINOLITE ON NON RUSTY FRACT SURFACES CONT: BLEBS PH, CARBONATE(?) CHALCOPY, PY, CHL, ASPY. ASPY < 10%, PH 65%, CARB 25%, CPY 2%, PY 1%, CHL 5% - PH ~ 10% TO < 1% DISSEM THROUGHOUT - LESS FRACTURED ± 4/METER (RUSTY ON FRACT SURFACES) - CALC ON FRACTS BLEBS < 1% TOTAL CORE				59.5						
						23210	65	17	45	211	0.6	0.01	
							61.0						
						23211	65	27	28	263	0.5	0.01	
							72.5						
						23212	65	43	44	162	0.6	0.02	
							79.0						
	82.5-84.0		(BOX 5) SHEAR OVER 1.5 FT. - RUSTY PYROPHOSITE ON FRACTURE SURFACES - TALC < 1%, CALCITE IN FRACTS - RUSTY, NO VISIBLE SULPHIDES			23213	65	15	36	85	0.6	0.06	









# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	HOLE No.	Page#
75.0	195	NAKUSP	207.0 FT.	DDH-34-8	
Wall	Location	Mpr. Comp	Verl Comp	Sheet	1 of 5
74.5					
Core No	Elevation	Bearing	Logged by	VICTOR KOYANAGI	
207	1431.2 M	195			
	Coordinates	Began	Completed	Sampled by	F. HARRY SWANSON
	554426500 N	OCT. 21/84	OCT. 22/84	Driller	STAN BEAUPRE
	451 385'00 E	Core size	% Recovery		

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS				g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au	
0.0 - 27.5		(Box 1) 12.0 FT. OF CASING INTERMEDIATE VOLCANICS - MED/LIGHT BLUSH GREY - GROUNDMASS V. FINE GRAINED (APHANITIC) - VISIBLE FELDSPAR PHENOCRYSTS, SIZE < 0.1 mm - RUSTY RIND ABOUT FRACTURES. - DISSEM PY UP TO 1%, PY ~ 1% - CHLORITE BLEBS WITH QTZ/CARA AND DISSEM/MASSIVE Pz 25% OF BLEB. CPY < 1%, ASPY 2% - PY AND ASPY IN MICROFRACTURES - QTZ/CARA MICROFRACTS - WITH DISSEM PY ~ 1% - RUSTY SHEAR/FRACTS 16.0, 7.0 cm - " " " 18.0, 6.0 cm - " " " 22.0, 5.0 cm - RUSTY/FRACTURE 27.5, 12.0 cm			23233	0.0	4.0	17	36	85	0.7	0.14	
						12.0							
					23234		6.5	24	53	109	1.1	0.10	
						18.5							
					23235		6.5	35	92	183	1.0	0.09	
						25.0							
					23236		6.5	30	97	256	1.3	0.14	
						31.5							
27.5 - 42.0		(Box 2) SAME INTERMEDIATE VOLCANICS - Pz, PY ON FRACT SURFACES - Pz, PY DISSEM THROUGHOUT ~ 1% - CHLORITE, Pz, PY IN BLEBS 29.5 - FRACTURE AND RUSTY TO 31.5 32.5 - " " " " 34.5			23237		6.5	21	485	443	4.0	0.02	
						38.0							
42.0 - 57.5		(Box 3) SAME VOLCANICS (PY IN VEINS (MICRO)) DISSEM - 44.0 SLIGHTLY BLEACHED/SILICIFIED, FRACTURED TO 45.0 RUSTY WITH DISSEM PY ~ 1% - 45.5 - 46.0 FRACTURED/RUSTY, DISSEM PY < 1% - 52.5 - 53.0 FRACT/RUSTY - 53.5 CHLORITE BLEB MAX SIZE 1.5 X 1.0 cm WITH Pz ~ 5%, SIZE 0.8 X 0.4 cm WITH PY ~ 75% ABUNDANT RUSTY FRACTURES THROUGHOUT.			23238		6.5	25	62	176	0.9	0.01	
						44.5							
					23239		6.5	26	51	119	0.9	0.03	
						51.0							
					23240		6.5	19	60	230	0.8	0.01	
						57.5							
57.5 - 73.5		(Box 4) 57.5 - 59.0 FRACTURED/RUSTY/ALTERED OVERALL SMALL FRACTURES MAJORITY NOW RUSTY, SOME CLAY ALTERATION ON FRACTURE SURFACES (CHLORITE/TALC).			23241		6.5	19	33	149	0.8	0.01	
						64.0							

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	Length	HOLE No.	Page #
Callar		NAKUSP.	207.0 FT	DDH-84-8	
		Location	Hor. Comp	Shear	2 of 5
		Elevation	1431.2M	Bearing	195°
		Coordinates	Begin	Completed	Logged by
			Oct. 21/84	Oct. 23/84	V. KOYANAGI
			Core size	Recovery	Sampled by
				%	F.H. SWANSON
					Driller
					STAN BEAUPRE

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
		- DISSEM PY UP TO 1% - P <sub>8</sub> IN CHLORITE BLEBS UP TO 90% P <sub>8</sub> - ABUNDANT CARB MICRO FRACTURES - DISSEM ASP <sub>4</sub> LOCALLY < 1% 72.5 ACTINOLITE IN AND NEAR FRACTURE.				23242		65	16	35	73	1.0	0.01
								70.5					
73.5-89.0 (BOX 5)		SAME INTERMEDIATE VOLCANICS - RUSTY FRACTURE; ABUNDANT (RIND) - ACTINOLITE ALONG AND ABOUT FRACTURES - PYROXENITE IN RIND AND ON FRACTURES - DISSEM PY THROUGHOUT - P <sub>8</sub> IN CHLORITE BLEBS (PY ALSO) 76.5-77.5 FRACTURED/ALTERED/RUSTY 78.5 CALCITE VEIN, RUSTY BELOW, VEIN - 3.0cm RUST 25.0 cm ABUND MANGANESE, QTZ FRAGS/CRYSTALS IN CALCITE VEIN. 81.0-85.0 FRACT/RUSTY. 88.0 SLIGHTLY BLEACHED ALTERED AROUND CHLORITE IN GROUND MASS				23243		65	12	26	143	0.9	0.01
								77.0					
						23244		65	31	23	65	0.9	0.01
								83.5					
						23245		65	20	30	77	1.1	0.01
								89.0					
89.0-104.5 (BOX 6)		- DISSEM PY/P <sub>8</sub> - < 1% (UP TO 1% LOCALLY) - P <sub>8</sub> IN CHLORITE BLEBS ~ 85% SIZE UP TO 0.8 X 0.8 cm - PYROXENITE IN RUSTY ZONES - CARB/QTZ BLEBS WITH PY DISSEM ~ 5% SIZE 0.4 cm X 0.8 cm MAX 92.0-95.0 SLIGHTLY BLEACHED 89.0-90.0 FRACTURED/RUSTY/CLAY ALT ON FRACT 91.0-92.0 FRACT/RUSTY/PYROXENITE 93.0-95.0 FRACT/RUSTY/SMALL SHEAR 101.0-103.0 FRACT/RUSTY.				23246			22	19	91	0.7	0.01
								95.5					
						23247			198	13	509	0.9	0.13
								102.0					
104.5-122.5 (BOX 7)		INTERMEDIATE VOLCANICS - CHLORITE BLEBS INCREASE IN NUMBER				23248			446	13	59	1.0	0.10
								108.5					
						23249			269	13	63	0.9	0.23
								115.0					

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination		Bearing	PROPERTY NAKUSP	Length 207.0 FT.	HOLE No. DDH-84-3	Page#
Collar			Location	Hor. Comp / Vert. Comp	Sheet 3 of 5	
			Elevation 1431.2 M	Bearing 195°	Logged by VICTOR KHAMASI	
			Coordinates	N E	Sampled by F. HARRY SWANSON	
				Core size / Recovery %	Driller STAN ARUPPE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn.	Ag.	Au.	
		BUT LESS CONTAIN SULPHIDES - SOME P <sub>4</sub> IN CHLORITE UP TO 50% P <sub>4</sub> - ABUND MICROFRACT INFILLED WITH CALCITE - FRACT 3/METER RIND RUSTY CHLORITE SLICKS - DISSEM P <sub>4</sub> /P <sub>4</sub> < 1%				23250		6.5	2	41	162	1.4	0.01
		122.5-138.5 (BOX 8) SAME AS BOX 7, INT VORES - INCREASE IN CHLORITE CONTENT BUT LESS DISSEM SULPHIDES 126.0 SMALL 1.5cm QTZ VEIN 131.0 SLIGHTLY REACHED/FRACTURED NO RUST/RIND, CHLORITE ON FRACT SURFACES. 135.0 SLIGHTLY REACHED COLOUR LIGHT GRN/GREY 5G7/1											
		OVERALL STILL DISSEM P <sub>4</sub> , P <sub>4</sub> < 1% AND P <sub>4</sub> /P <sub>4</sub> IN CHLORITE AREAS RUSTY FRACT/RIND ≈ 10/METER				21801		6.5	14	30	104	0.9	0.01
		138.5-155.5 (BOX 9) COLOUR GREENISH/GREY 5G 6/1 SAME INTERMEDIATE VOLCANICS - DECREASE IN CHLORITE CONTENT - SOME VERY TRACE DISSEM P <sub>4</sub> < 1% - SOME P <sub>4</sub> IN HAIRLINE FRACTS - CHLORITE AREAS WITH P <sub>4</sub> , P <sub>4</sub> BUT SPARSE, SIZE MAX 0.4 X 0.5 cm - SOME CARB/QTZ FRACTS UP TO 0.3 cm 60° TO AXIS. 139.5-140.0 RUSTY RIND SMALL FRACTS 141.0-141.5 " " " " 142.5-143.5 " " " "											
		155.5-173.5 (BOX 10) 155.0 MED/LIGHT BLUE GREY INTERMEDIATE VOLCANICS - ABUND CARB MICROFRACTURES ~ < 0.1 cm - DISSEM ASP <sub>4</sub> , P <sub>4</sub> < 1% LOCALLY. - RUSTY FRACTURES WITH RIND ≈ 5/METER				21802		6.5	10	25	179	1.1	0.01
						21803		6.5	16	21	211	0.8	0.01
						21804		6.5	23	14	141	1.0	0.02
						21805		6.5	10	15	349	1.1	0.02
						21806		6.5	132	14	53	1.0	0.01

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

PROPERTY	NAKUSP	Length	207.0 FT	HOLE No.	DDH-84-8	Page	1 of 5
Location		Hor. Comp		Sheet	4	of	5
Elevation	1431.2 M	Bearing	195°	Logged by	V. KOYANAGI		
Coordinates		Begin	OCT. 21/84	Completed	OCT. 22/84	Sampled by	F. H. SWANSON
		Core size		Recovery	%	Driller	STAN BEAUPRE

DEPTH (metres) From To	RECOV'Y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES		ASSAYS				g/mt.			
					No.	To	W	As	Pb	Zn.	Ag.	Au.		
		1650-177.0 COLOUR CHANGE DARK GREY N7 TO DARK BLUE GREY SB 4/1 - PORPHYRITIC HB OR ACTINOLITE PHENOCRISTS AVERAGE 0.1 cm - DISSEM P <sub>0</sub> ~ 10%, DISSEM ASPY < 10% - CHLORITE BLEBS WITH ASPY - 50% BLEB 1.0 X 1.5 cm - CHLORITE ON FRACTS - CARB MICRO FRACTS STILL AROUND. - HB (MAFICS) CHLORITIZED UP TO 100% AVE 75%												
		173.5-191.0 (BOX 11) DARK GREY 'HA PORPH' ENDS 177.0 GRADES BACK INTO LIGHT/MED BLUE GREY SB 6/1 INTERMEDIATE VOLCANICS - STILL SOME MAFIC PHENOCRISTS VISIBLE BUT SMALL ~ 2.1 cm MAX - CHLORITE P <sub>0</sub> BLEBS WITH ASPY ~ 25% AVE - DISSEM P <sub>0</sub> THROUGHOUT ~ 10% MAX - DISSEM ASPY THROUGHOUT < 10% 184.0 QTZ/CARB/CHLORITE VEIN DISSEM ASPY, PY, P <sub>0</sub> ~ 2% TOTAL 185.0 SPHAL IN MICROFRACTS < 0.1 cm 189.0 CHLORITE BLEB 2.0 cm X 1.0 cm NO SULPHIDES CPY, P <sub>0</sub> , ASPY, PY DISSEM WITH CHLORITE ON FRACT SURFACES												
		191.0-207.0 (BOX 12) INTERMEDIATE VOLCANICS - DARK GREY 'N3' TO DARK BLUE GREY SB 4/1 - SOME HB PHENOS UP TO 0.3 cm MAX CHLORITIZED UP TO 100% AVE < 50% - DISSEM ASPY < 10%, DISSEM P <sub>0</sub> < 1% THROUGHOUT - CHLORITE BLEBS WITH DISSEM P <sub>0</sub> CHL : P <sub>0</sub> = 75:25 - DISSEM PY ON FRACTS.												
						21807	65'	185	14	61	1.0	0.01		
						167.0								
						21808	65'	548	15	50	1.6	0.01		
						173.5								
						21809	65'	247	19	72	1.7	0.01		
						180.0								
						21810	65'	282	18	78	1.1	0.01		
						186.5								
						21811	65'	154	372	84	1.1	0.07		
						193.0								
						21812	65'	190	18	76	1.2	0.02		



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSP	Length	207.0	HOLE No.	DDH 84-9	Page	#
Wallar 75.0	185.0	Location		Mqr. Comp	/ Vert Comp.	Sheet	1 of 2		
ROH 207 74.5		Elevation	1431.0 m	Bearing	185° -75°	Logged by	K. HICKS		
		Coordinates	5544300.00 N 451,410.00 E	Began	OCT 22	Completed	OCT 22	Sampled by	F. H. SWANSON, ESQUIRE
				Core size	NQ / Recovery	%	Driller	BEAUPRE	

DEPTH (metres) From To	RECOVERY RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:300	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn.	Ag.	Au.	
		11 FEET CASING				0.0							
						23299	5.5'	12	16	71	0.8	0.26	
						23300	5.5'	9	16	25	0.9	0.01	
0-24.0		MED GREEN-GREY F.G., INTERM VOLCANIC. NO VISIBLE GLAUCOPHANE OR PNEUMOLITE, TRANSLUCENT APPEARANCE ON FRESH SURFACE. HARDNESS N5. DISS PY ~ 1%, DISS PY ~ 1%. TA GPY ASSOCIATED WITH PY				21715	6.5'	6	17	49	0.7	0.06	
						21716	6.5'	3	14	74	0.7	0.01	
24.0-42.5		AS ABOVE WITH MINOR DISS SUBHEDRAL PY, 1-2%, DISS PY ~ 1% TA GPY				21717	6.5'	15	25	248	0.8	0.05	
						21718	6.0'	12	24	401	0.7	0.01	
36.5-40.0		PY AS ENACTIC DISS SECTIONS AND PATCHES MINOR SP FILLED FRACTURES 1-2MM WIDE TOTAL SP < 1%				21719	4.0'	32	121	1030	2.3	0.01	
						21720	6.5'	39	32	242	1.1	0.02	
40.0		LARGE SOLITARY FRAGMENT OF MED-GREY SILICEOUS COMPOSITION. SMALL DARK SUBHEDRAL MINERAL WITHIN FRAG. MINOR PY ASSOCIATED WITH FRAG. MINOR REMNANT OUTLINES OF CHLORITIZED MAFICS BECOMING VISIBLE				21721	4.0'	329	15	185	0.8	0.07	
42.5-59.5		AS ABOVE WITH RARE LARGE CHLORITIC PATCHES WITH ASSOCIATED PY, SOMETIMES ANGULAR PY. 55.5' MINOR Q-C VEIN @ 90° 56.5-58.0 OBLIQUELY FRACTURED HOST WITH RUSTY SURFACE. TA DISS GPY				21722	4.0'	29	23	170	0.9	0.01	
						21723	1.0'	14	18	96	0.7	0.01	
59.5-79.0		MED GRAY-BLUE-GREEN V.F.G. INTERM VOLCANIC. HARDNESS N4, EASILY SCRATCHED. RANDOM DK GREEN CHLORITIC PATCHES WITH ASSOCIATED PY. OVERALL DISS SUBHEDRAL PY ~ 1%. TA PY. 79.0 MINOR QTC VEIN @ 60° WITH 3-5% ANGULAR. RADIATING BLACK TOMMALINE HOST ROCK BECOMING MORE CHLORITIC THAN BEFORE				21724	6.5'	348	20	120	0.8	0.02	
						21725	6.5'	5	27	89	1.1	0.01	
						21726	6.5'	6	25	82	1.4	0.01	
79.0-97.0		MED GREEN-GREY F.G. INTERM (ANDESITIC?) VOLCANIC HARDNESS 4-5. DELAGIATED ROUND CHLORITIC PATCHES WITH MINOR PY WITHIN. MINOR CHLORITE AROUND FRACTURES. V. SMALL CHLORITIC BLEBS WITHIN GROUNDMASS (AFTER MAFICS?) OVERALL DISS PY 1-3%				21727	6.5'	3	31	81	1.2	0.01	
						21728	6.5'	3	15	77	0.9	0.01	
						21729	6.5'	18	17	86	0.9	0.08	
97.0-115.0		AS ABOVE, DISS PY 1-2%, MINOR CALCITE IN FRACTURES. MINOR CARB-QTC + CHL. VEINS < 1CM. FAINT, SMALL CHLORITIC BLEBS FORMING GROUNDMASS. BLANK WITH V.F.G.				21730	6.5'	5	24	241	1.1	0.01	



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY NAKUSP	Length 207.0'	MOLE No. DDH 84-9	Page #
Location	Mag. Comp	Location	1/Vert Comp	Sheet 2 of 2	
Elevation 1431.0 M	Bearing 185° - 75°	Elevation 1431.0 M		Logged by K. HICKS	
Coordinates	N	Coordinates	Begin OCT 22 / Completed OCT 22	Sampled by H. SWANSON	37 SAMPLES
	E	Coordinates	Core size NQ / Recovery %	Driller BEAUPRE	

DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
		WHITE SPECKS (FELDSPARS)			21731	101.5	6.5	188	21	52	1.7	0.01
						108.0						
115.0 - 133.0		AS ABOVE WITH MINOR BLEACHED SECTIONS. 119.0 SOLITARY LARGE GASY SILEXIOUS PATCH WITH GREEN CHLONITE ALTERATION RIM WITH SMALL ANHEDRAL GAPINS WITHIN (HORNITE?). DK GREEN CHLONITE PATCHES 131.5 MULTIPLE SMALL SP FILLED FRACTURE @ 75° WITH MINOR CPY AND TA GA.			21732	114.5	6.5	677	43	134	2.3	0.03
					21733	121.0	6.5	9	42	141	1.1	0.01
					21734	127.5	6.5	10	22	74	0.6	0.01
					21735	132.0	4.5	18	65	120	1.6	0.02
133.0 - 152.0		MED GREY-GREEN, F.G. ANDESITIC VOLCANIC. NO ORIGINAL MAFICS VISIBLE. BUT F.G. CHLORITIZED ANDSTS. RARE CHLONITE PATCHES WITH PY MINOR QTS - CHL - PY & TERNITINE VEINS. DISS PY ≤ 1%. 139.5			21736	139.5	6.5	16	32	156	1.5	0.01
					21737	145.0	6.5	4	18	80	0.8	0.01
					21738	146.0	1.0	10	23	81	1.2	0.03
152.0 - 170.0		MED BLUE-GASY-GREEN, F.G TO SLTLY PLAGIOPHATIC ALTERED ANDESITE. SUBHEDRAL TO ANHEDRAL FELDSPARS PHENOCRYSTS 1-3MM. RADY CHLONITE BLEBS 1-5MM POSSIBLY ALTERED FROM ORIGINAL HR OR PX PHENOCRYSTS. OCCASIONAL LARGE 1-3CM CHLONITE & P# PATCHES (OR ENABRYANTS) WHICH ARE OBVIOUSLY NOT ALTERATIONS OF ORIGINAL PHENOCRYSTS. MOST LARGE CHLONITE PATCHES HAVE MED GASY CORE OVERALL SULPHIDES, DISS PY: < 1%, P# TO 160.0 3 CM LT GASY ROUNDED FRAGMENT WITHIN LT GREEN-GASY HOST ROCK			21739	152.5	6.5	11	21	72	1.1	0.02
					21740	159.0	6.5	16	26	99	0.2	0.01
					21741	165.5	6.5	16	28	113	0.6	0.01
					21742	172.0	6.5	15	32	134	0.8	0.02
					21743	178.5	6.5	17	30	106	0.6	0.01
					21744	185.0	6.5	17	35	214	0.8	0.02
170.0 - 189.0		AS ABOVE, HARDNESS 4-5			21745	191.5	6.5	17	29	106	0.5	0.01
					21746	198.0	6.5	15	28	112	0.8	0.02
189.0 - 207.0		AS ABOVE, HARDNESS 4-5			21747	204.0	6.0	15	29	115	0.7	0.01
		196.0 1 CM Q-C VEIN @ 25° 205.0 1 CM Q-C + SP VEIN @ 30°. SP ~ 20%			21748	205.5	1.5	17	28	101	0.7	0.01
					21749	207.0	1.5	16	29	94	0.6	0.01

EOH



# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY NAKUSP	Length 207.0	HOLE No. DDH 84-10	Page #
Location	Hor. Comp	Elevation 1431.0 M	Ver. Comp	Sheet 2 of 3	
Coordinates	Bearing 005° -75°		Completed OCT 23	Logged by K. HICKS	
	Core size 100 / Recovery %		Driller	Sampled by H. SWANSON	
				BENHARÉ	

DEPTH (metres) From To	RECOVERY RQOCORE	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.		
					No.	To	W	As	Pb	Zn	Ag	Au	
68.5		LARGE 2 CM SOLID CHLONITE VEIN @ 30° CONTIGUOUS FRAG. CONTAINS ABBT ASPY ON SURFACE @ 30° TO AXIS, 60° TO VEIN											
74.5		V. LARGE 8 CM WHITE-GREY FELSIC FRAGMENT WITH A CHLONITE RIM DIFFUSING INTO WALL ROCK. CORE OF FRAGMENT IS CASUALLY SCATTERED AND APPEARS TO BE ESSENTIALLY ALTERED FELDSPATHS. IT CONTAINS SMALL ANHEDRAL DARK GRAINS AS IN OTHER PREVIOUS FRAGMENTS THOUGHT TO BE CHLONITE.			21825	6.5	16	18	166	1.2	0.01		
76.0 - 93.5		STILL AS ABOVE BUT WITH MAELLS ALTERING TO CHLONITE ~ 50% AND GRADUALLY COMPLETELY CHLONITIZED											
88.0		3 CM Q-C-CHL VEIN WITH 3-5% PY, 2-5% PP AND MINOR AMOUNTS OF QV & PAV			21826	6.5	48	22	111	1.1	0.01		
91.0		LARGE 4 CM FELSIC FRAG AS ABOVE. WHITE-GREY CORE WITH CHLONITE RIM			21827	2.0	181	22	116	0.9	0.02		
93.5 - 113.0		MED BLUE GRAY F.G. CHLONITE INTERM VOLC. DISS PY ~ TR NO VEINS			21828	1.5	138	25	178	0.9	0.01		
113.0 - 132.0		LT GRAY-BLUE-GRAN F.G. INTERM VOLC WITH A FEW MINOR SECTIONS BLEACHED TO V. LT GRAY. OVERALL INDISTINCT GRAINS, JUST F.G. GARDINHOSS, MINOR DISS PY & PP			21829	6.5	30	35	139	1.0	0.01		
119.0		SMALL 2.5 CM SECTION BLEACHED TO V. LIGHT GRAY WITH MINOR SP GLASS ~ 1%			21830	6.5	5	18	97	1.0	0.02		
121.0		SIMILAR BLEACHED SECTION AS ABOVE, SP AS GLASS & IN FRACTURES			21831	6.5	36	17	115	1.5	0.01		
128.3		LARGE CHLONITE NAMED MED GRAY FRAGMENT WITH SMALL DARK F.G. MINOR INSIDE ~ 1-2%			21832	6.5	78	19	133	1.0	0.01		
132.0 - 150.5		MED GRAY-BLUE INTERM VOLC. SLIGHTLY COARSE TEXTURE IN SOME SECTIONS			21833	4.0	13	17	338	2.1	0.07		
147.0 - 150.0		COARSEST TEXTURE OF FELSIC AND MAELG ANHEDRAL GRAINS (PHENACRYST?) TO 3-5 MM TR. DISS PY			21834	3.0	13	25	2040	2.1	0.04		
150.5 - 160.0		F.G. - M.G. MED GRAY-BLUE INTERM VOLC AS ABOVE.			21835	6.5	46	17	301	1.3	0.02		
159.0		1 CM Q-C VEIN @ 25°			21836	6.5	22	16	130	0.8	0.03		
158.5		RECRYSTALLIZED SLIGHTLY LIGHTER IN COLOR AND MORE FRAGILE. POSSIBLE AEM SILICIFICATION. MINOR PY & PP			21837	6.5	0	30	97	0.9	0.01		
		OVERALL HONOLIES OF LT GRAY-BLUE ~ 6 COMPACT WITH ~ 5% WITH MED GRAY-BLUE			21838	6.5	2	38	139	0.9	0.01		
					21839	6.5	7	42	154	1.0	0.02		
					21840	6.5	5	44	136	1.0	0.01		
					21841	6.5	9	22	100	1.1	0.04		

# DRILL HOLE RECORD

FALCONBRIDGE LIMITED

Inclination	Bearing	PROPERTY	NAKUSD	Length	207.0'	HOLE No.	DDH 84-10	Page#	
Location	Elevation	1431.0 M	Hor. Comp	Verl Comp	Bearing	005°	-75°	Sheet	3 of 3
Coordinates	N	Begin	Oct 23	Completed	Oct 23	Logged by	K. HICKS	Sampled by	H. SWANSON
E	Core size	NQ	Recovery	%	Driller	BEAUPRE			34



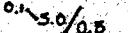



DEPTH (metres) From To	RECOV'y RQDCore	DESCRIPTION	INTERSECTION ANGLE	GRAPHIC 1:500	SAMPLES			ASSAYS			g/mt.	
					No.	To	W	As	Pb	Zn	Ag	Au
					21842	1735	6.5'	23	25	81	0.9	0.08
		168.0-207.0 LT GRAY-BLUE INTERM VEG. - LIABLY REACHED AND SILICIFIED. TA BY I PB. HARDNESS 5% - VERY LITTLE FRACTURING OR VEINING.			21843	180.0	6.5'	25	20	78	0.9	0.04
					21844	1865	6.5'	58	77	141	0.9	0.03
					21845	193.0	6.5'	29	27	68	0.8	0.02
					21846	1995	6.5'	38	22	56	0.6	0.05
					21847	2070	7.5'	54	35	59	0.6	0.04

*EOH*

ELEVATION (METERS)

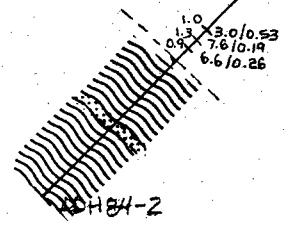
570  
560  
550  
540  
530  
520  
510  
500  
490  
480  
470  
460  
450  
440

**LEGEND**

-  drill hole
-  geologic contact
-  width - Ag/Au (g/mt)
-  volcanic
-  intrusive
-  sedimentary

Assay cut off values  
 Ag - 5.0 g/mt  
 Au - 0.5 g/mt

LOOKING TOWARD 098°



2.0 15/0.64

volcanic

0.60 14.8/0.23

0.49 7.4/0.05

0.43 5.7/0.34

0.37 10.0/0.41

0.79 5.1/0.88

2.00 0.7/0.56

DDH84-1



FALCONBRIDGE LIMITED		
PROPERTY: NAKUSP 096		
LOCATION: TYEE / CARIBOU CREEK		
TYPE OF WORK: DDH84-1 / DDH84-2		
WORKING PLACES:		
BASED ON:		
DATE OF WORK:	MAP REF. NO.:	FIG. NO.:
DRAWN BY:		
DATE:	N.T.S. NO.:	

10 20 30 40 50 60 70 80 90

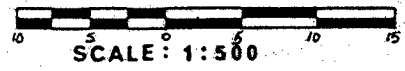
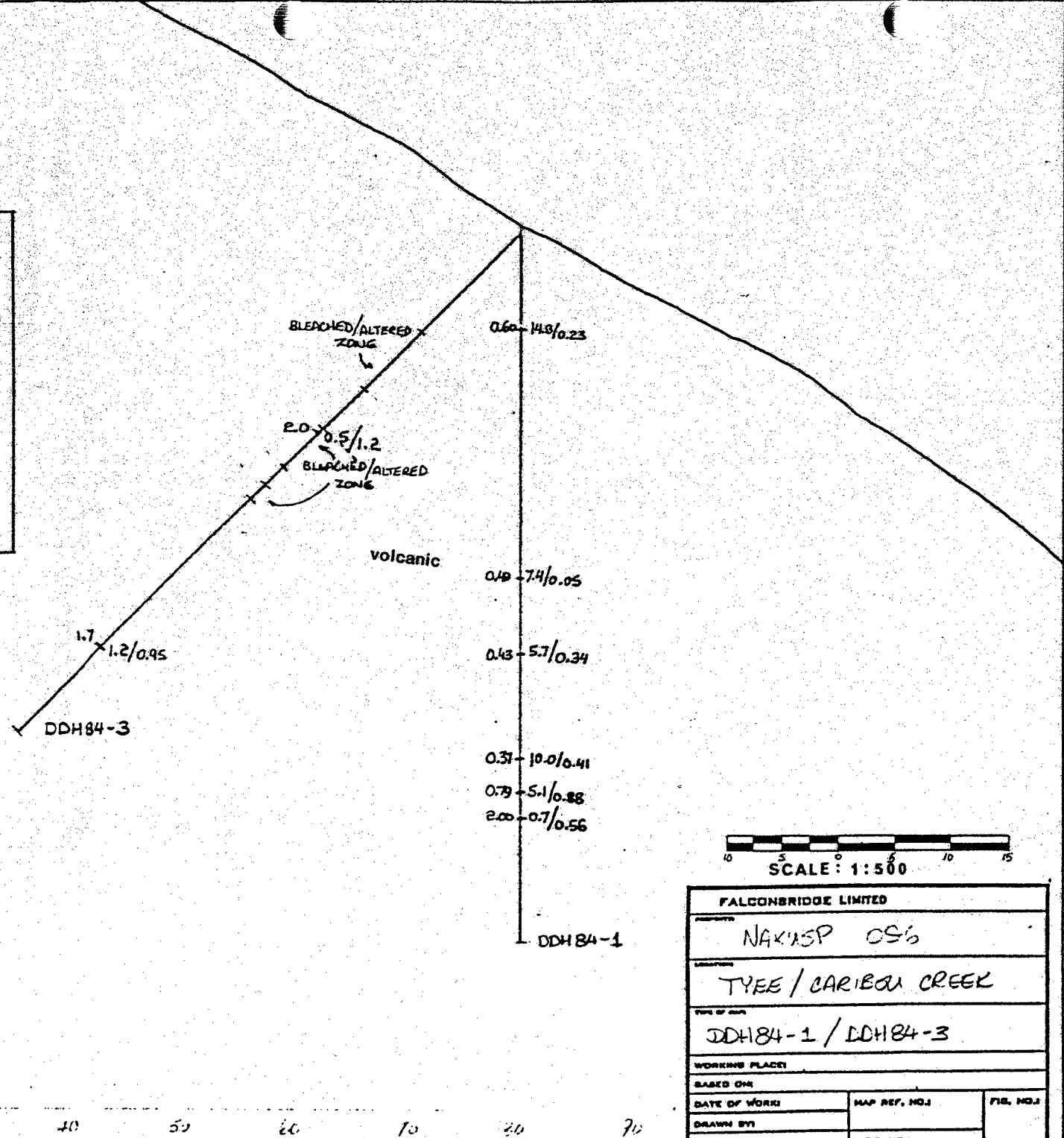
ELEVATION (METERS)  
1550  
1530  
1530  
1510  
1500  
1490  
1480  
1470

**LEGEND**

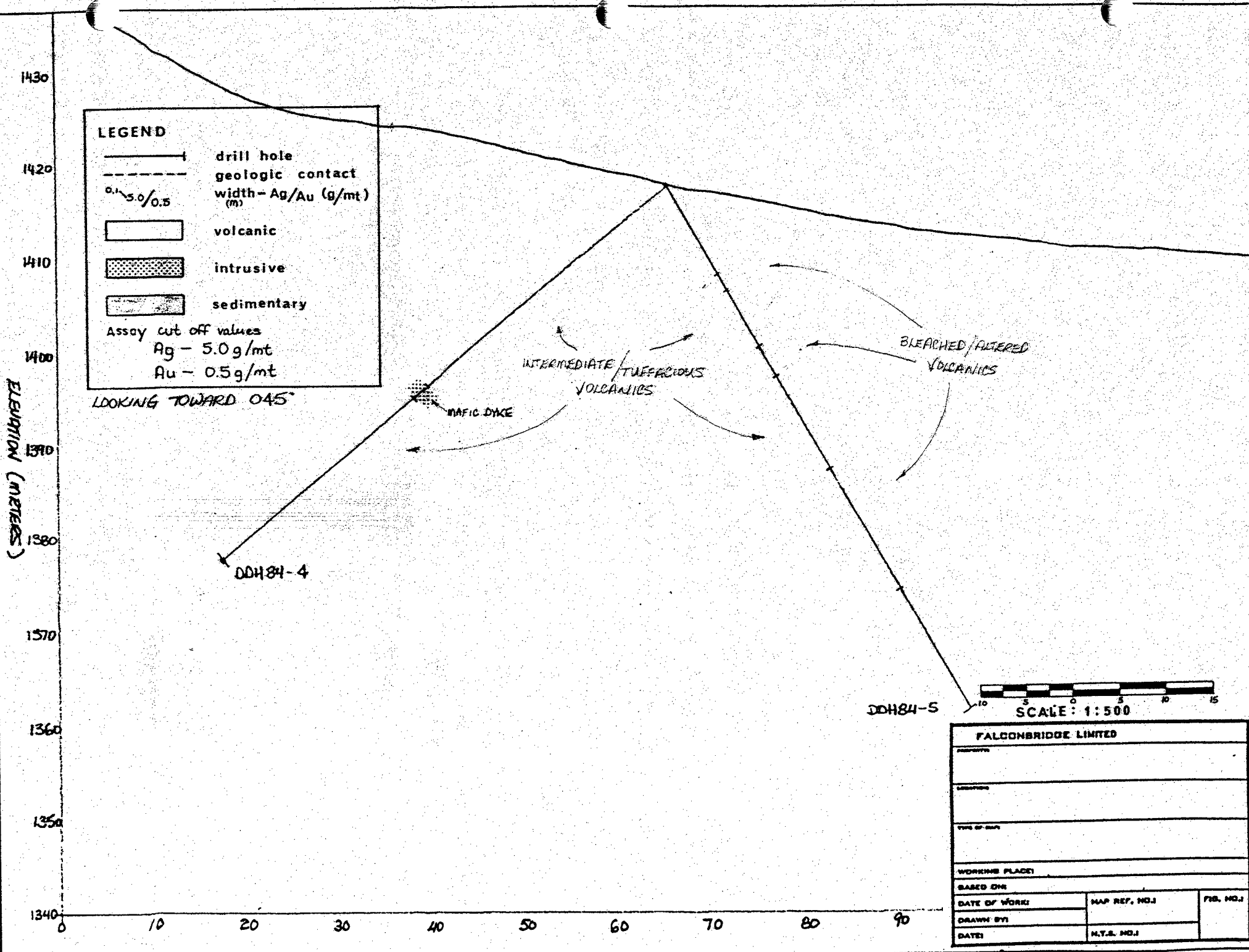
- |— drill hole
- - - geologic contact
- 0.1 5.0/0.5 width - Ag/Au (g/mt) (m)
- ☐ volcanic
- ☐ intrusive
- ☐ sedimentary

Assay cut off values  
Ag - 5.0g/mt  
Au - 0.5g/mt

LOOKING TOWARD 040°



FALCONBRIDGE LIMITED		
PROPERTY NAK'ASP OS's		
LOCALITY TYEE / CARIBOU CREEK		
Title of map DDH84-1 / DDH84-3		
WORKING PLACE		
BASED ON		
DATE OF WORK	MAP REF. NO. J	FIS. NO. J
DRAWN BY		
DATE	N.T.S. NO. J	



**LEGEND**

- drill hole
- geologic contact
- $0.1 \frac{5.0}{0.5}$  width - Ag/Au (g/mt)
- volcanic
- intrusive
- sedimentary

Assay cut off values  
 Ag - 5.0 g/mt  
 Au - 0.5 g/mt

LOOKING TOWARD 045°

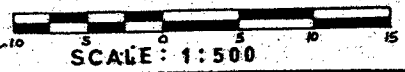
INTERMEDIATE/TUFFACEOUS VOLCANICS

BLEACHED/ALTERED VOLCANICS

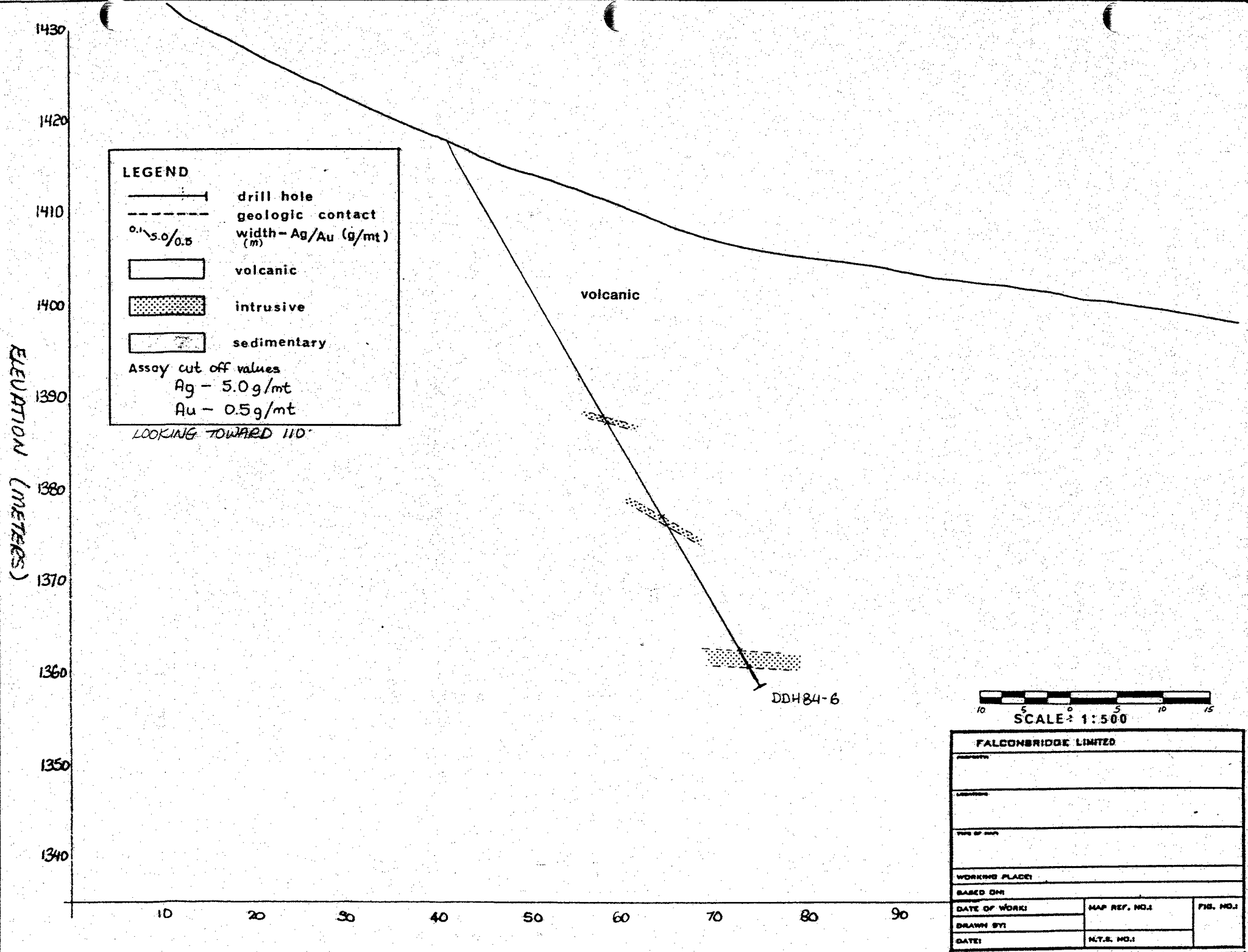
MAFIC DYKE

DDH84-4

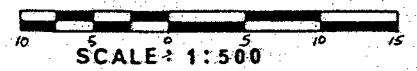
DDH84-5



FALCONBRIDGE LIMITED		
WORKING PLACE		
BASED ON		
DATE OF WORK:	MAP REF. NO.:	FIG. NO.:
DRAWN BY:	N.T.S. NO.:	
DATE:		



ELEVATION (METERS)



<b>FALCONBRIDGE LIMITED</b>		
PROPERTY		
LOCATION		
TYPE OF MAP		
WORKING PLACES		
BASED ON		
DATE OF WORK	MAP REF. NO.	FIG. NO.
DRAWN BY		
DATE	N.T.S. NO.	



ELEVATION (METERS)

1430  
1420  
1410  
1400  
1390  
1380  
1370  
1360  
1350

0 10 20 30 40 50 60 70 80 90

**LEGEND**

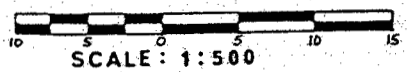
- drill hole
- - - geologic contact
- 5.0/0.5 width - Ag/Au (g/mt) (m)
- volcanic
- intrusive
- sedimentary

Assay cut off values  
Ag - 5.0 g/mt  
Au - 0.5 g/mt

LOOKING TOWARD DTS

volcanic

DDH 84-7



FALCONBRIDGE LIMITED		
PROPERTY		
SUBSTRATE		
TYPE OF WORK		
WORKING PLACE		
BASED ON:		
DATE OF WORK:	MAP REF. NO. 1	FIG. NO. 1
DRAWN BY:		
DATE:	N.T.S. NO. 1	

ELEVATION (METERS)

1440  
1430  
1420  
1410  
1400  
1390  
1380  
1370  
1360  
1350

0 10 20 30 40 50 60 70 80 90

**LEGEND**

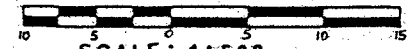
- | drill hole
- - - geologic contact
- 0.1 5.0/0.5 width - Ag/Au (g/mt)  
(m)
- volcanic
- intrusive
- sedimentary

Assay cut off values  
Ag - 5.0 g/mt  
Au - 0.5 g/mt

LOOKING TOWARD 105°

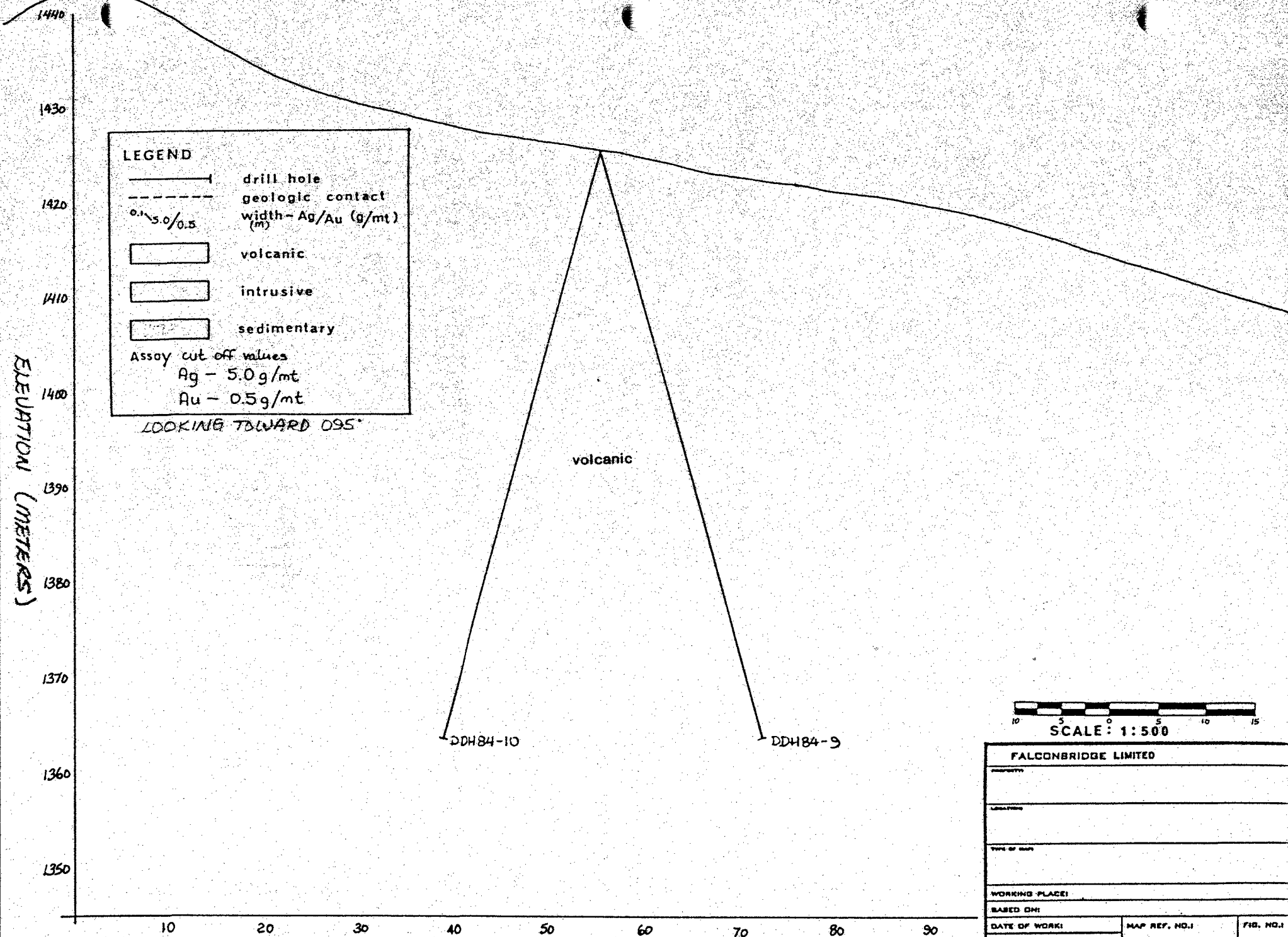
volcanic

DDH 84-8

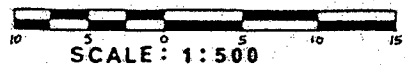


SCALE: 1:500

<b>FALCONBRIDGE LIMITED</b>		
PROPERTY		
LOCATION		
TYPE OF MAP		
WORKING PLACE:		
BASED ON:		
DATE OF WORK:	MAP REF. NO.:	FIG. NO.:
DRAWN BY:		
DATE:	N.T.S. NO.:	



ELEVATION (METERS)



FALCONBRIDGE LIMITED		
WORKING PLACE:		
BASED ON:		
DATE OF WORK:	MAP REF. NO.:	FIG. NO.:
DRAWN BY:		
DATE:	N.T.S. NO.:	

STATEMENT OF QUALIFICATIONS

I, Kenneth Hicks, do hereby certify that:

1. I am a geologist with residence at 7700 115th Street, Delta, British Columbia, V4C 5M8.
2. I am a graduate of the University of British Columbia with a Bachelor of Science degree in Geology (1982).
3. I have practiced in the field of mineral exploration since 1978.
4. I was employed by Falconbridge Limited to manage the field program outlined in the accompanying report.
5. I have no financial or legal interest in the mineral properties herein described.

Respectfully Submitted,

*Ken Hicks*

Ken Hicks  
Geologist