FALCONBRIDGE LIMITED

WEST GREENLAND TERTIARY BASALT PROVINCE

REPORT ON 1993 EXPLORATION ACTIVITIES

FOR PROSPECTING LICENCE # 156 AND

EXPLORATION LICENCES 02/91, 03/91

KEVIN OLSHEFSKY AND MURRAY JEROME
FALCONBRIDGE LIMITED
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Respectfully Submitted

Kevin Olshefsky
Project Geologist

Murray Jerome
Project Geologist

SUMMARY

In 1993, Falconbridge Greenland A/S and Platinova A/S jointly held two exclusive exploration licences and one non-exclusive prospecting licence. Exploration expenditures amounted to 3,971,579 DKK on licence 02/91, 2,485,970.00 DKK on licence 03/93 and 171,229.00 DKK on prospecting licence #156.

Exploration efforts in 1993 continued to evaluate the West Greenland flood basalt province for a large tonnage Noril'sk-type nickel-copper deposit. The main components of the exploration program were ground geophysics, geological mapping & prospecting and diamond drilling. A total of 8 grids comprising 172.20 line kilometres were established at Igdlukunguaq, Qutdligssat and in the Kûgánguaq Valley on Disko Island, along with locations in the Sarqaq, Auvfarssuaq and Itivdle Valleys on Nuussuaq Peninsula. The grids covered the higher priority 1992 airborne EM anomalies in these areas. In addition to the main grids, two lines on the 1985 Greenex grid located in the Kûgánguaq Valley were refurbished and two reconnaissance lines, 2 km in length, were established over a broad airborne anomaly in the Sarqaq Valley. Geoterrex Ltd. completed ground geophysical surveys on the 1993 grids consisting of; 185.55 km of magnetics, 128.20 km of VLF-EM reading Cutler, Maine, USA, 74.40 km VLF-EM reading Rugby, England and 124.87 Km of horizontal loop electromagnetics recording frequencies 222, 444 and 1777 Hz.

A total of 921.10 m, in 10 diamond drill holes tested geophysical targets at Igdlukunguaq, Qutdligssat and in the Kûgánguaq Valley on Disko Island. Technical problems in drilling the uncemented sandstones at Igdlukunguaq prevented the testing of targets associated with the Ni-sulphide bearing dyke. Subvolcanic intrusions were cored at Qutdligssat and in the Kûgánguaq Valley.

The Disko Island grids and grids located in the Sarqaq and Auvfarssuaq Valleys on Nuussuaq Peninsula were mapped at 1:5,000 scale. Reconnaissance mapping/prospecting at 1:20,000 scale was carried out between the Kûgánguaq Valley and the Vaigat on Disko Island and in the Auvfarssuaq Valley on Nuussuaq Peninsula. Emphasis was placed on locating eruption sites for the Ni-Cu depleted, contaminated, tholeiitic lavas. Detailed

lithogeochemical sampling of contaminated lava members was conducted at five locations on Disko Island. A total of 191 whole rock lithogeochemical samples and 42 rock geochemistry samples were collected during the course of the drilling and geology programs.

The 1993 field crew and contractors consisted of a Greenlandic cook, five Canadian geologists, four Canadian diamond drillers, a two-man Canadian helicopter crew and Greenlandic boat charters. The exploration program was completed from three land based camps positioned at Igdlukunguaq and in the Kûgánguaq Valley on Disko Island and at Marrait Kitdlît on Nuussuaq Peninsula. The program was conducted from June 8th to August 28th, 1993.

CONCLUSIONS, RECOMMENDATIONS AND PLANS

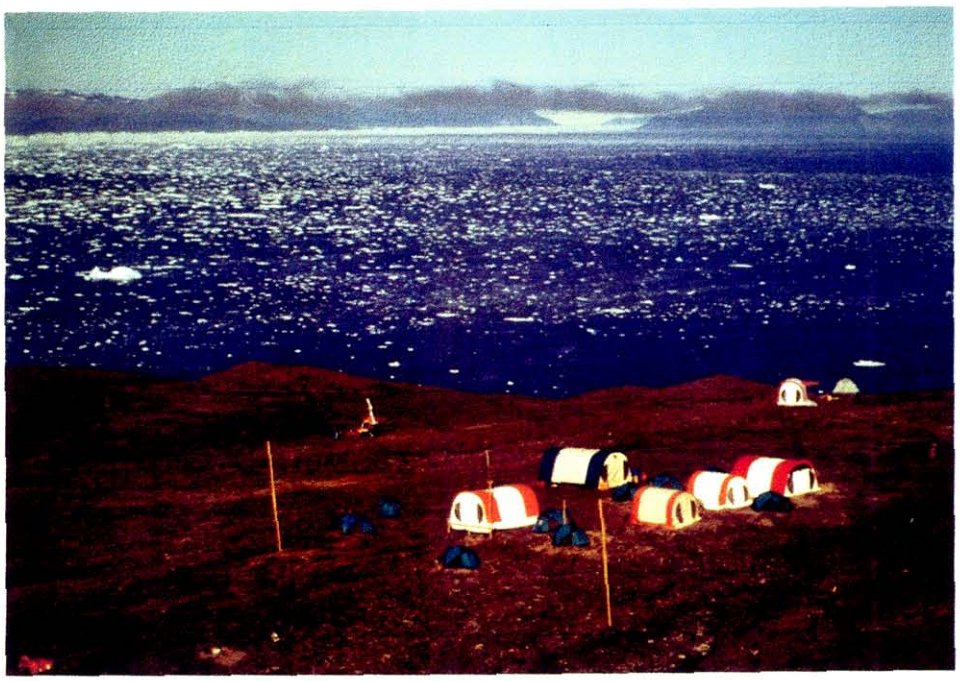
The West Greenland flood basalt province continues to unfold as the best analogy to the geological environment hosting the world class Ni-Cu-PGE deposits at Noril'sk. In 1993, five geophysical targets were investigated by diamond drilling. The drill program at the Ni-Cu bearing Igdlukunguaq dyke was unsuccessful in testing the targets along the geophysically defined, NW-SE orientated structure. Drilling at Qutdligssat encountered a Ni and Cu enriched, contaminated, basaltic intrusion, geochemically similar to the Ni and Cu depleted Asuk Member. The geology program was successful in identifying four Ni and Cu depleted dykes in close proximity to the Kûgánguaq crater site.

The 1993 exploration program has only begun to evaluate the near surface economic potential of the flood basalt province. Future programs will need to incorporate deeper searching geophysical and diamond drilling methods. The 1994 plans are to; 1) complete 5,000 m of diamond drilling on high priority targets along the Itivdle Fault system, at Serfat and in the Sarqaq Valley on Nuussuaq Peninsula, as well as targets on north Disko Island, 2) carry out a gravity survey at Serfat and Igdlukunguaq to detect buried intrusive complexes in preparation for drill testing, 3) carry out pulse-EM and magnetic surveys at Serfat and in areas 9D & 6E, 4) map out eruption centres and subvolcanic intrusions on western Nuussuaq Peninsula and northwestern Disko Island in preparation for drill testing in 1995, and 5) map and prospect for mineralized subvolcanic intrusions within the sediments located along the east coast of Disko Island.

The proposed 1994 expedition is scheduled for the first of June to the end of August and will consist of 5 geologists, 2 geological assistants, 3 Greenlandic casual workers, 1 camp cook/manager, 8 diamond drillers, 2 geophysicists, 3 geophysical technicians, 1 surveyor, 1 helicopter pilot, 1 helicopter mechanic, a 206L/R Bell LongRanger helicopter, 1 ship/base camp and 2 Longyear Fly-38 diamond drills.

At the time of writing of this report, the 1994 work plans had been given approval in principal, but are subject to final corporate approvals.

The Igdlukunguaq base camp on Disko Island (viewing north)



The diamond drill on hole FP93-4-1 (SW of Qutdligssat)

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FALCONBRIDGE LIMITED
WEST GREENLAND TERTIARY BASALT PROVINCE

1993 EXPLORATION REPORT FOR PROSPECTING LICENCE # 156 AND EXPLORATION LICENCES 02/91 and 03/91

LOCATION, ACCESS AND TOPOGRAPHY

The 1993 exploration licences are situated 90 to 270 kilometres northwest of Ilulissat, on the west coast of Greenland between 70°00'N to 72°00'N and 52°00'W to 54°00'W. The 1993 prospecting licence encompassed the 1993 exploration licences and was located from 68°30'N to 72°00'N and 51°00'W to 56°00'W (Figure 1).

The exploration areas are close to or on tidewater with a six to twelve month shipping season. Umanak and Ilulissat serve as the main supply centres for the region. Ilulissat has a Dash 7 service four times a week to Kangerlussuaq (Søndre Strømfjord) and Nuuk. Connections to Iqaluit, Baffin Island are available twice weekly from Nuuk and daily jet service to Copenhagen can be made from Kangerlussuaq. Hotel accommodations and boat service are readily available.

The topography above coastal plains and broad valley bottoms is rugged. Mountain peaks exceeding 1,500 metres are commonly glacier and snow covered year round. Glaciers valleys have deeply incised the flood basalt province, locally exposing the underlying sedimentary rocks. The valley floors are covered by thick accumulations of glacial moraine and fluvial material. High arctic flora and fauna occur throughout the low-lying regions.

PROPERTY STATUS

In 1993, Falconbridge Greenland A/S (51%) and Platinova A/S (49%) jointly held non-exclusive prospecting licence #156 and exclusive exploration licences 02/91 & 03/91. The two exploration licences contained seven subareas covering an area of 2,228 square kilometres (Figure 2). A list of 1993 expenditures is given in Appendix I.

The prospecting licence #156 expired on December 31st, 1993. A new prospecting licence has been issued to Falconbridge Greenland A/S.

SENSITIVITIES

The region is typical of tundra and alpine terrains with localized permafrost. Warm ocean currents flowing northwards along the coast moderate the climate considerably encouraging the development of settlements and infrastructure in this part of Greenland. Exploration programs must be particularly sensitive to any disturbances of the tundra and the potential for tapping natural gas trapped below permafrost caps.

Wildlife preservation areas in the flood basalt province are established north and west of Itsako Peninsula, on Svartenhuk Halvø, in eight areas on Disko Island and one area in central Nuussuaq Peninsula. Exploration activity is not totally prohibited in these areas, however, restrictive regulatory guidelines must be met depending on the nature and magnitude of the activity.

PREVIOUS WORK

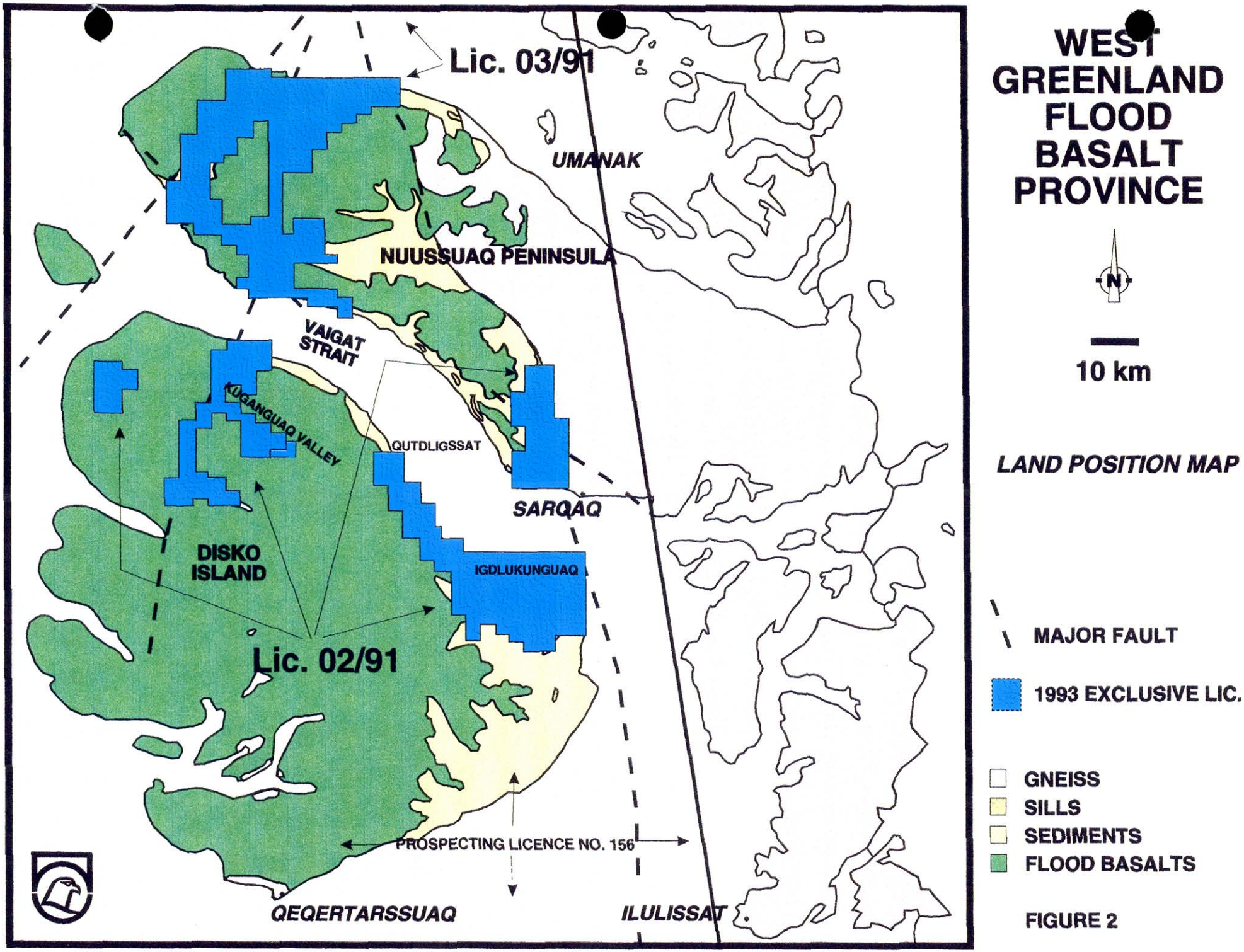
Several native iron occurrences and one nickel sulphide showing in the flood basalts had been studied and documented as early as the 1870's by A.E. Nordenskjöld and K.J.V. Steenstrup. Strong anthropologic evidence indicates that native iron had been used for

centuries by native peoples to make iron blades embedded in bone handles. In 1931, prospectors from Qutdligssat extracted about 28 tons of massive nickel-bearing sulphide from the Igdlukunguaq dyke located on northeast Disko Island. The dyke drew further attention in 1966, when Niels Aegidius Andersen of the New Quebec Mining and Exploration Company, contracted Lockwood Survey Corporation Limited to complete a helicopter airborne magnetometer and electromagnetic survey over the Igdlukunguaq area and a portion of Sarqaq Valley on Nuussuaq Peninsula (Prior, 1968). A 1968 TURAM electromagnetic (EM) survey by Terratest AB outlined a distinct anomaly 500 metres to the east and along strike of the outcropping nickel sulphide mineralization. In 1970, E.A. Hart Limited completed an EM16 geophysical survey in the area followed by a four hole diamond drill program (256 m) focusing the dyke. Only one of the holes intersected the dyke.

Since the 1950's, detailed studies have been published on several of the metal occurrences by Bøggild(1953), Pauly(1958,1969), Bird and Goodrich(1981), Goodrich(1984), Bird and Weathers(1977), Klock, Palme and Tobschall(1986), Pedersen(1975,1977,1979) and Ulff-Møller(1975,1977,1985,1989,1990). The latter two authors are renowned for their extensive work in the flood basalt province and are credited for the discovery of several native iron occurrences.

About 80% of the flood basalt province has been mapped at 1:100,000 scale by government funded geologists. This geology is compiled on six published map sheets.

Aside from a preliminary evaluation of the nickel potential in the iron cumulates by Inco and mapping & prospecting by the Kryloite Company in 1962-63, the only significant nickel exploration work in the area has been by Greenex on behalf of Cominco starting in 1985. The program included an aeromagnetic survey, ground reconnaissance, very low frequency EM (VLF), horizontal loop EM (HEM), time domain EM (UTEM), gravity surveying, prospecting, rock analysis, soil geochemistry and analysis of the light fractions from stream sediment samples. The Greenex program identified 18 airborne electromagnetic (AEM) anomalies, two previously undiscovered native-iron showings and a number of sediment contaminated flows.


Lic. 03/91
UMANAK
NUUSSUAQ PENINSULA
VAIGAT STRAIT
KUGANGUAQ VALLEY
QUTDLIGSSAT
SARQAQ
DISKO ISLAND
IGDLUKUNGUAQ
Lic. 02/91
PROSPECTING LICENCE NO. 156
QEQERTARSSUAQ
ILULISSAT
WEST GREENLAND FLOOD BASALT PROVINCE
N
10 km
LAND POSITION MAP
MAJOR FAULT
1993 EXCLUSIVE LIC.
GNEISS
SILLS
SEDIMENTS
FLOOD BASALTS
FIGURE 2

In 1991, Falconbridge Limited completed reconnaissance geological mapping, prospecting and lithogeochemical sampling of lavas and subvolcanic intrusions (770 whole rock and 33 assay samples). Thirty stratigraphic profile sections were constructed throughout the basalt province (Olshefsky, 1992).

In May of 1992, Geoterrex Ltd. (under contract from Falconbridge Limited) completed an airborne GEOTEM and magnetic survey (1850 km) over eleven areas on Disko Island and Nuussuaq Peninsula. The summer field program continued to evaluate the nickel and platinum group element potential within the West Greenland basalt province through geological mapping, lithogeochemical sampling, stream sediment sampling and prospecting (Olshefsky & Jerome, 1993).

REGIONAL GEOLOGY

Hotspot related rifting and volcanism in the early Tertiary produced the West Greenland flood basalts. These basalts are part of the North Atlantic basalt province which extends from the British Isles, through Iceland and Greenland, to the east coast of Baffin Island. Subsidence within the North American craton, between present day North America and Greenland, began as early as 600 million years ago (Fahrig *et. al.*, 1971). This suggests that the Paleozoic and Mesozoic sediments gradually accumulated until continental rupture in the early Tertiary (Clark and Pedersen, 1976). Unconsolidated Tertiary sediments were deposited proir to the onset of the volcanic lavas.

The eruption time span for the West Greenland basalts is estimated at four to six million years with the picrite phase lasting as long as three million years (Piasecki *et. al.*, 1992). By comparison, the entire East Greenland Tertiary basalt province erupted within three million years.

In West Greenland, the lavas extruded onto a rugged paleosurface composed of fault scarps, basement ridges and deeply eroded channels through the underlying sediments (Clark and

Pedersen, 1976). Large tectonic basins were present at Svartenhuk Peninsula, northern Disko Island and western to central Nuussuaq Peninsula. Early volcanism was dominated by the development of picritic pillow and hyaloclastite breccias as lavas flowed and intruded the basins. Water depths reached 700 metres on Nuussuaq (Piasecki *et. al.*, 1992) and up to 1000 metres on Svartenhuk (Clark and Pedersen, 1976). Cyclic volcanism and basin development occurred continuously throughout the evolution of the flood basalt province. Initial picritic volcanism was eventually followed by tholeiitic volcanism.

Volcanic stratigraphy for the basalt province has been subdivided into three lithostratigraphic units known as the Vaigat, Maligat and Hareøen Formations (Hald and Pedersen, 1975). The Vaigat Formation consists of picrites to olivine basalts and extends over most of the basalt province. Pedersen (1985), subdivided the formation into the Naujánguit, Asuk, Kûgánguaq, Qordlortorssuaq, Ordlingassoq and Manîtdlat members that define two volcanic eruption cycles. The Asuk and Kûgánguaq members consist of sediment contaminated lavas that are prominent on Disko Island and Nuussuaq Peninsula. On Svartenhuk Peninsula, Larsen (1981) has subdivided the stratigraphy into the Lower, Middle and Upper Formations in which he correlates the Lower Formation with the Vaigat Formation.

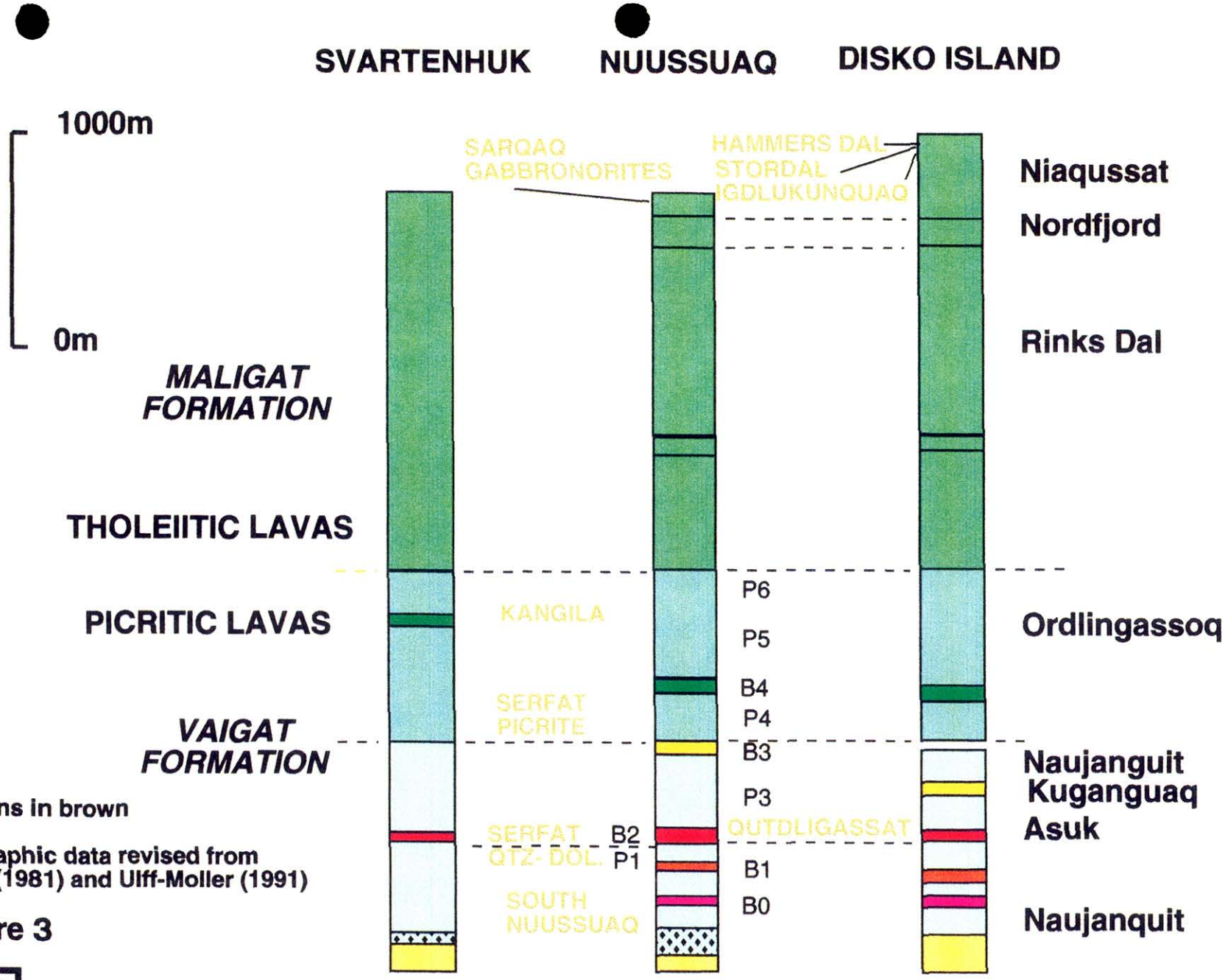
The Maligat Formation overlies the Vaigat Formation and is composed of thicker, massive, feldspar-phyric, tholeiitic basalts. The formation occurs throughout central and western Disko Island and west of the Itivdle Fault on Nuussuaq Peninsula. On Disko Island the formation has been subdivided into the Rinks Dal, Nordfjord and Niaqussat members (Pedersen, 1975). On Nuussuaq Peninsula, Hald (1977), subdivided the Maligat Formation into the Nûluk, Ifsorisok and Kanísut members.

The Hareøen Formation is only present on Hareøen Island and consists of olivine porphyritic transitional basalts. The formation is subdivided into the Aumarûtigssâ and Talerua members (Hald, 1977).

A large quantity of the basaltic magmas in the Vaigat and Maligat Formations were contaminated by reaction with sulphur-rich, carbonaceous sediments that precipitated sulphide liquid and metallic iron. The contaminated basalts are present throughout the province with the largest accumulations occurring on Nuussuaq Peninsula and Disko Island. These basalts commonly host geodes of varying size and are recognizable in the field by their orange-tan colour.

Sills and dykes of different ages and compositions have been identified in the flood basalt province. A number of these intrusions have been correlated with the volcanic stratigraphy (Figure 3).

The Boundary Fault marks the eastern extent of the Cretaceous and Tertiary sediments and locally served as a controlling structure for the flood basalts (Figure 4). This fault cuts through eastern Nuussuaq Peninsula and may join with a major fault which runs through Svartenhuk Peninsula at Itsako. The Itivdle Fault transects western Nuussuaq Peninsula and major down faulting is exhibited along its western side. This fault extends south to eastern Hareøen and may represent the land extension of the Ungava Transform Fault (Larsen and Pedersen, 1992). Several eruption centres occur along a third major fault through the Quvnilik valley on Nuussuaq Peninsula. On Disko Island, a north-south orientated gneiss ridge transects the centre of the island and may represent an upthrown fault block which has acted as a barrier to some of the erupting lavas. Activity parallel faults west of the ridge has led to a repetition of volcanic stratigraphy in this area.



Intrusions in brown

Stratigraphic data revised from Larsen (1981) and Ulff-Moller (1991)

Figure 3

STRATIGRAPHIC CORRELATION OF VOLCANIC LAVAS AND INTRUSIONS

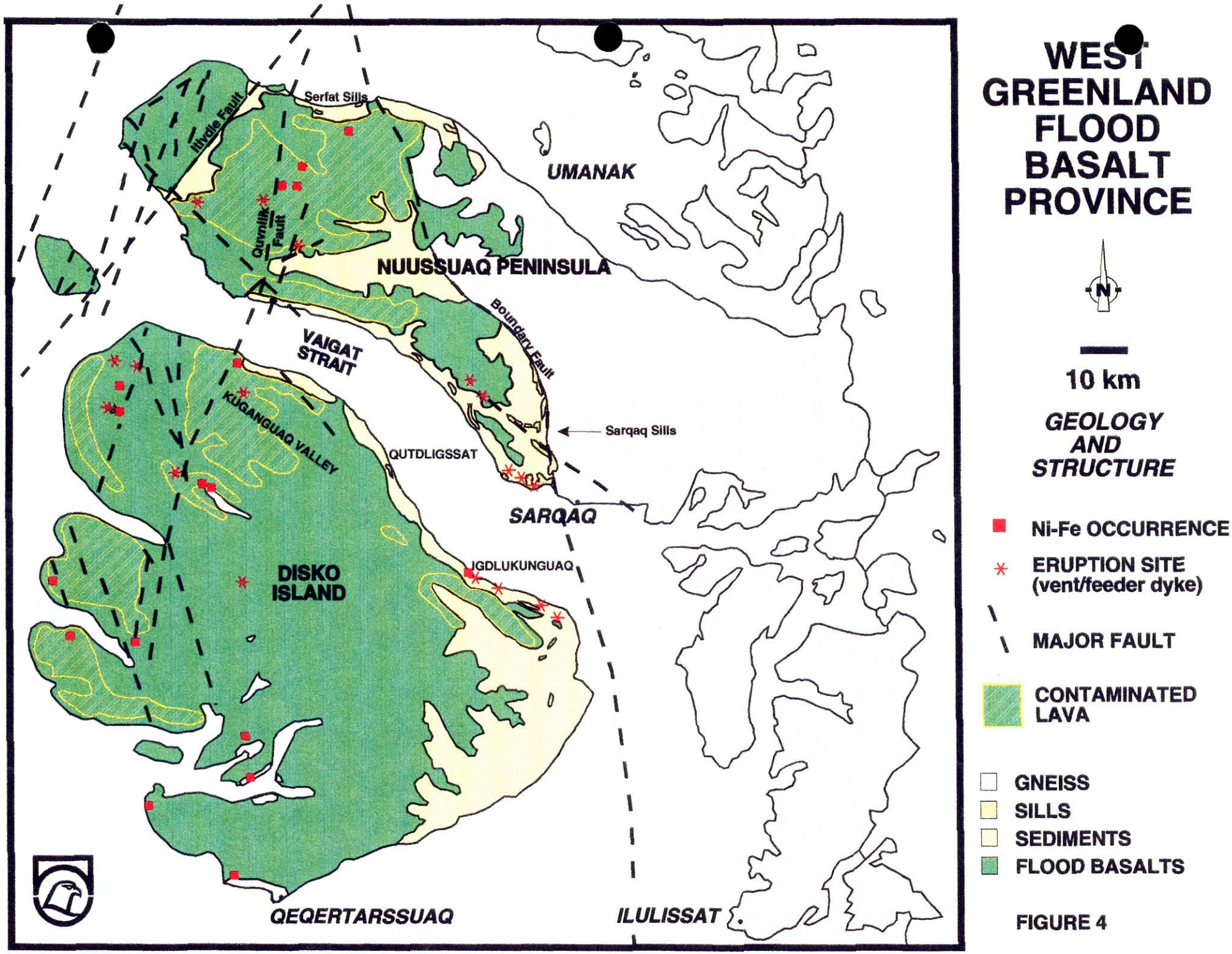

WEST GREENLAND FLOOD BASALT PROVINCE
Serfat Sills
Itivdle Fault
Quvnilik Fault
UMANAK
NUUSSUAQ PENINSULA
Boundary Fault
VAIGAT STRAIT
KUGANGUAQ VALLEY
Sarqaq Sills
QUTDLIGSSAT
SARQAQ
IGDLUKUNGUAQ
DISKO ISLAND
QEQERTARSSUAQ
ILULISSAT
N
10 km
GEOLOGY AND STRUCTURE
Ni-Fe OCCURRENCE
ERUPTION SITE (vent/feeder dyke)
MAJOR FAULT
CONTAMINATED LAVA
GNEISS
SILLS
SEDIMENTS
FLOOD BASALTS

FIGURE 4

1993 EXPLORATION PROGRAM

The exploration program was conducted from June 8th to August 28th, 1993. The field gear was stored and all rock samples where packed and shipped from August 24th to 26th, with the crew departing Greenland on August 28th, 1993. The field crew and company representatives who participated in the summer program are listed as follows:

NAME	POSITION	COMPANY	DATES IN FIELD
Kevin Olshefsky	Project Geologist	Falconbridge	08/06 to 28/08
Murray Jerome	Project Geologist	Falconbridge	08/06 to 23/08
Gary MacDougall	Junior Assistant	Falconbridge	08/06 to 18/08
Patti Tirschmann	Field Geologist	Falconbridge	22/06 to 18/08
Paul Philpott	Contract Geologist	Falconbridge	08/06 to 28/08
Christian Olsen	Camp Cook	Platinova	07/06 to 27/07
Tony Watts	Geophysicist	Falconbridge	22/06 to 07/07
Tony Green	Regional Manager	Falconbridge	17/08 to 23/08
Bob Stewart	District Geologist	Falconbridge	06/07 to 17/07
			17/08 to 23/08
Steve Wardlaw	Geophysicist	Geoterrex	15/06 to 23/06
Phil Veingessner	Geophysicist	Geoterrex	15/06 to 14/07
Howard Northfield	Geophysicist	Geoterrex	15/06 to 14/07
Marc Rougier	Equip. Operator	Geoterrex	15/06 to 14/07
Marc Kehoe	Equip. Operator	Geoterrex	15/06 to 14/07
Mark King	Equip. Operator	Geoterrex	15/06 to 14/07
Gerry Nuttall	Pilot	Universal	11/06 to 04/08
Barry Sheppard	Helic. Engineer	Universal	11/06 to 04/08
Jeff Goodyear	Pilot	Universal	04/08 to 28/08
David Brooking	Helic. Engineer	Universal	04/08 to 28/08
Mel Upwards	Driller	Petro	13/07 to 28/08
Jeff Upward	Driller	Petro	13/07 to 28/08
Dave Mathews	Driller	Petro	13/07 to 28/08
Barry Tizzard	Driller	Petro	13/07 to 28/08
Narhvalen	Ship Contract	KNI	010/06 to 11/06
			26/06 to 27/06
			31/07 to 01/08
Sortside	Ship Contract	KNI	23/08 to 25/08

The 1993 field program consisted of gridding, ground geophysics, diamond drilling, geological mapping, lithogeochemical sampling and prospecting (Figure 5).

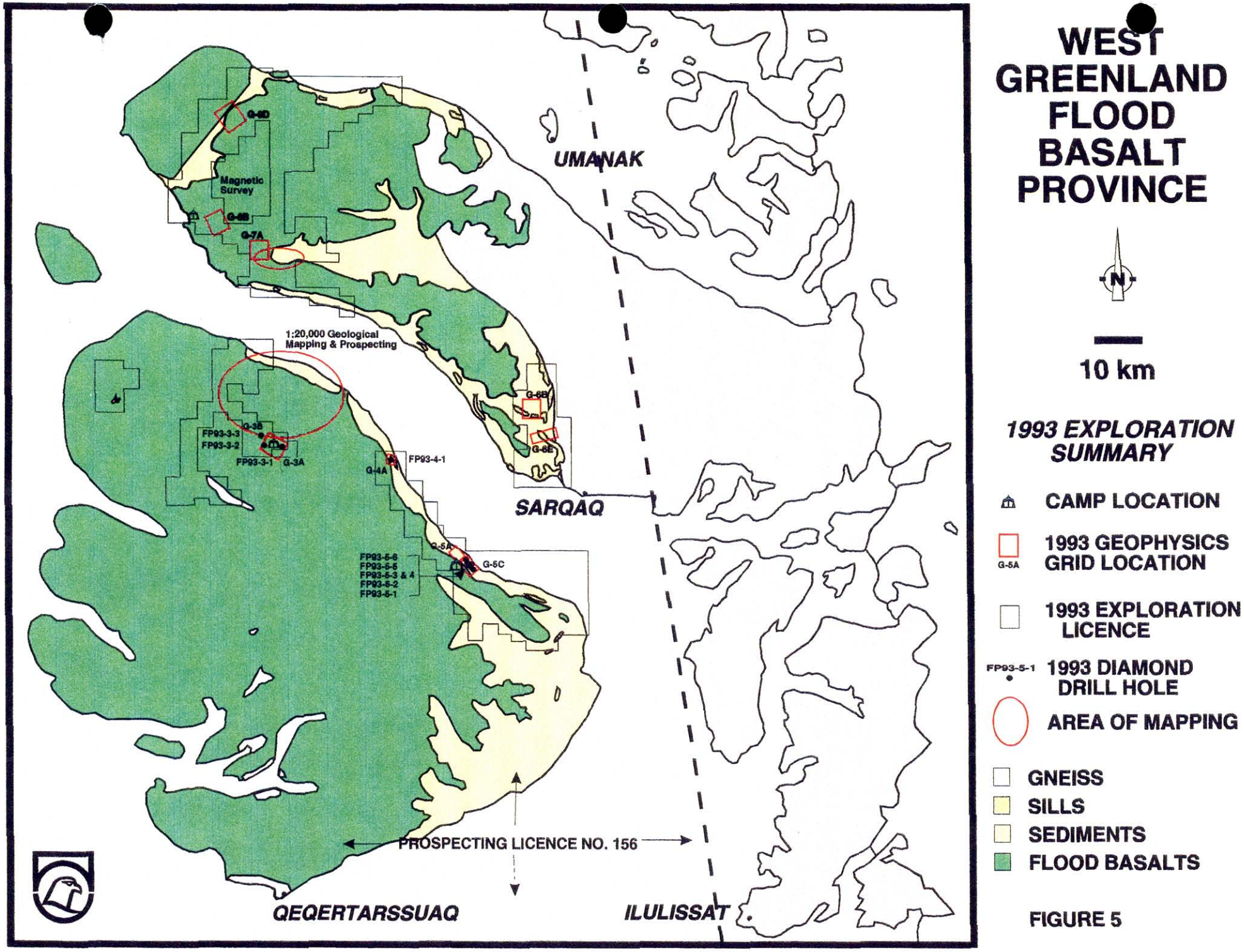
- A total of 8, wire-flag, picket grids were established on Disko Island and Nuussuaq Peninsula. Two lines on the 1985 Greenex grid located in the Kûgánguaq Valley were refurbished and two reconnaissance lines, 2 km in length, where established over AEM-6E in the Sarqaq Valley.

- The ground geophysical surveys consisted of magnetics, VLF-EM and horizontal loop electromagnetics.

- A total of 331.20 m in 6 diamond drill holes, unsuccessfully tested geophysical targets at Igdlukunguaq. Electromagnetic and magnetic targets located at Qutdligssat and in the Kûgánguaq Valley were tested by four drill holes totalling 588.90 m.

- Grids 5C, 5A, 4A, 3B, 6B and 7A were mapped at 1:5,000 scale. Reconnaissance mapping/prospecting was carried out at 1:20,000 scale in selected area on Disko Island and Nuussuaq Peninsula. Detailed lithogeochemical sampling of contaminated lava members was conducted at five locations on Disko Island.

A total of one hundred and ninety-one (191) whole rock samples were collected from subvolcanic intrusions and lavas during the course of the drilling and geology program. Fourty-two (42) geochem samples of mineralization were collected. All samples were shipped from Greenland by air cargo to Lakefield Research located in Lakefield, Ontario, Canada.


WEST GREENLAND FLOOD BASALT PROVINCE
UMANAK
SARQAQ
QEQERTARSSUAQ
ILULISSAT
PROSPECTING LICENCE NO. 156
G-6D
Magnetic Survey
G-6B
G-7A
1:20,000 Geological Mapping & Prospecting
G-3B
FP93-3-3
FP93-3-2
FP93-3-1
G-3A
G-4A
FP93-4-1
G-6B
G-6E
G-5A
G-5C
FP93-5-6
FP93-5-5
FP93-5-3 & 4
FP93-5-2
FP93-5-1
10 km
1993 EXPLORATION SUMMARY
CAMP LOCATION
1993 GEOPHYSICS GRID LOCATION
G-5A
1993 EXPLORATION LICENCE
FP93-5-1
1993 DIAMOND DRILL HOLE
AREA OF MAPPING
GNEISS
SILLS
SEDIMENTS
FLOOD BASALTS
FIGURE 5

ANALYTICAL PROCEDURES AND WHR STANDARD ANALYSIS COMPARISON

Introduction

A review of the whole rock (WHR) standards was undertaken to check the accuracy of the analytical results obtained from 1991 to 1993. In 1991-1992, X-Ray Assay Laboratories (XRAL) in Don Mills, Ontario, Canada completed all the WHR analytical work. In 1991, the major oxides and trace elements were determined by the Xray fluorescence (XRF)/fused disk method, whereas in 1992, the trace elements were determined by a XRF/pressed pellet method. Lakefield Research, located in Lakefield, Ontario, Canada carried out the 1993 WHR and geochemistry analysis. A borate, XRF/fused disk method was used to determine the major oxides, with the trace elements and metals (Ba, Nb, Rb, Sr, Y, Zr, Cu, Zn, Ni, Co and S) analyzed by a powder XRF/pressed pellet method. The geochemical analysis for Cu, Ni, Co, As and S was by the powder XRF/pressed pellet method. Samples exceeding 5,000 ppm Cu, Ni or Co were assayed using a pyrosulphate XRF/fused disk method (Appendices II, III, IV & V).

To verify the quality control of the laboratory analysis, reference controls consisting of analytical standards, sample splits and lab duplicates were consistently and systematically used over the past 3 years. Control WHR standards DSA (peridotite) and GTA (granodiorite) were submitted with the sample shipments. The reference control samples are identified on the analytical documents as samples ending in 08, 28, 48, 68 and 88. The current exercise involved the averaging of 4 to 5 analytical results of standards DSA & GTA from each year. The data was then graphically and statically compared.

Discussion

The lab results statistically are relatively consistent (with only minor deviations) based on comparison plots of the major oxides and metals (figures 6,7 & 8). Standard GTA shows the best correlation, whereas DSA displays some scattering in CaO, Na_2O and P_2O_5. The 1992, Na_2O results for standard DSA are lower than those reported in 1991 by a factor of

ten. A magnitude of this difference suggests a possible laboratory recording error, since there was no change in the analytical method. The 1992 CaO values are consistently 2 to 4 times higher than the 1991 & 1993 analyses.

The trace element plots exhibit the greatest deviation in results with standard DSA displaying the most significant scatter (Figures 9 & 10). The inconsistent results for standard DSA can be attributed to the initial low concentration of these elements in the ultramafic standard and the inability of the analytical equipment to obtain high precision readings at the detection limits of measurement. Care should be taken when making comparisons or conclusions from this trace element data.

A research project using high precision analysis is in progress on a suite of West Greenland rock samples. The principle objectives of the research are to determine: 1) geochemical criteria which might assist in the exploration for magmatic sulphide mineralization and 2) geochemical criteria which contributes to the understanding of the petrogenesis of continental flood basalts and the process by which the West Greenland basalts were erupted at a continental margin. The expected completion time of the research project and the level of academic interpretation involved is beyond the scope of this report, however segments of the research will be incorporated and reported on in future exploration programs.

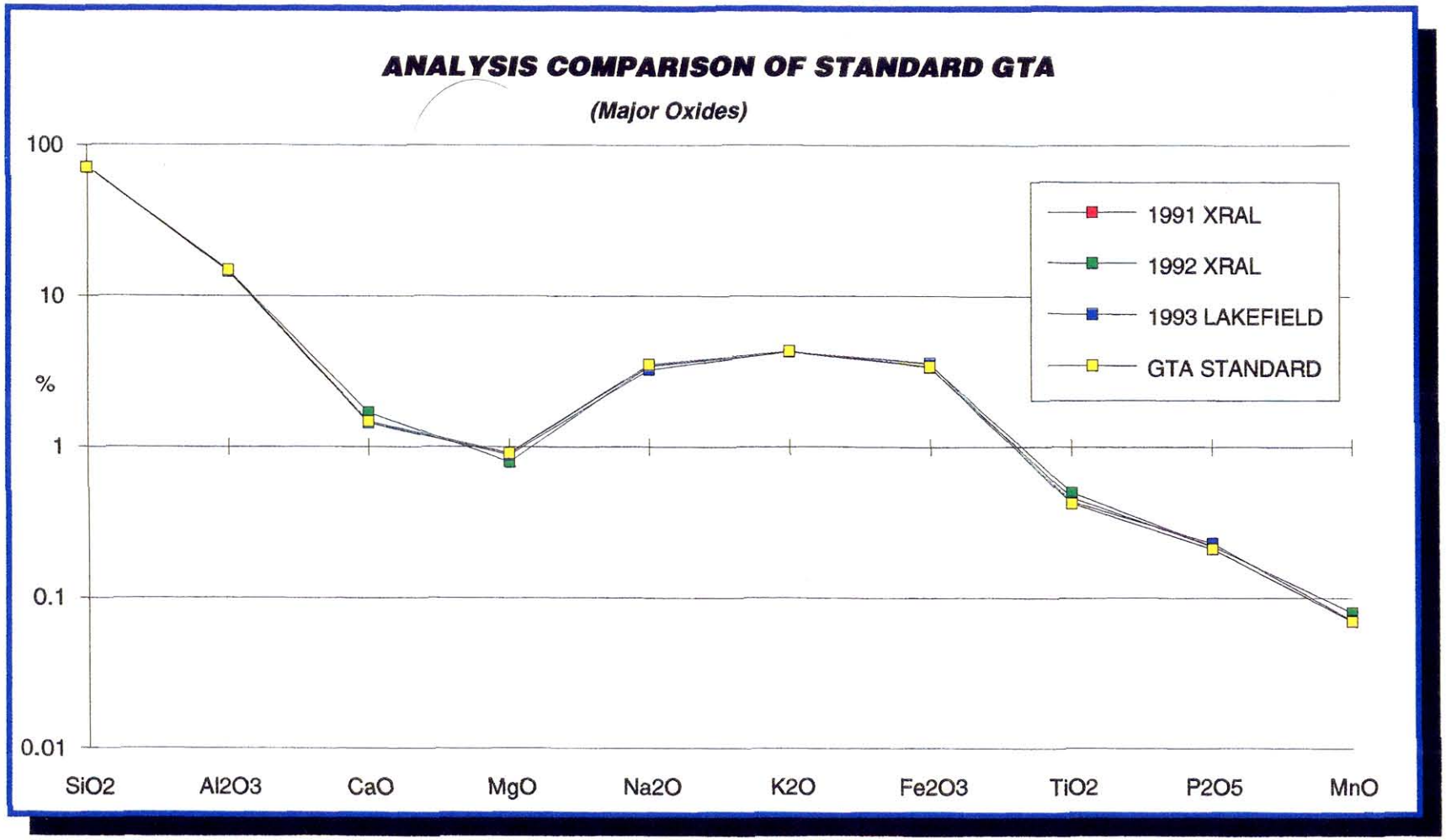

ANALYSIS COMPARISON OF STANDARD GTA
(Major Oxides)
100
10
%
1
0.1
0.01
1991 XRAL
1992 XRAL
1993 LAKEFIELD
GTA STANDARD
SiO2
Al2O3
CaO
MgO
Na2O
K2O
Fe2O3
TiO2
P2O5
MnO

Figure 6

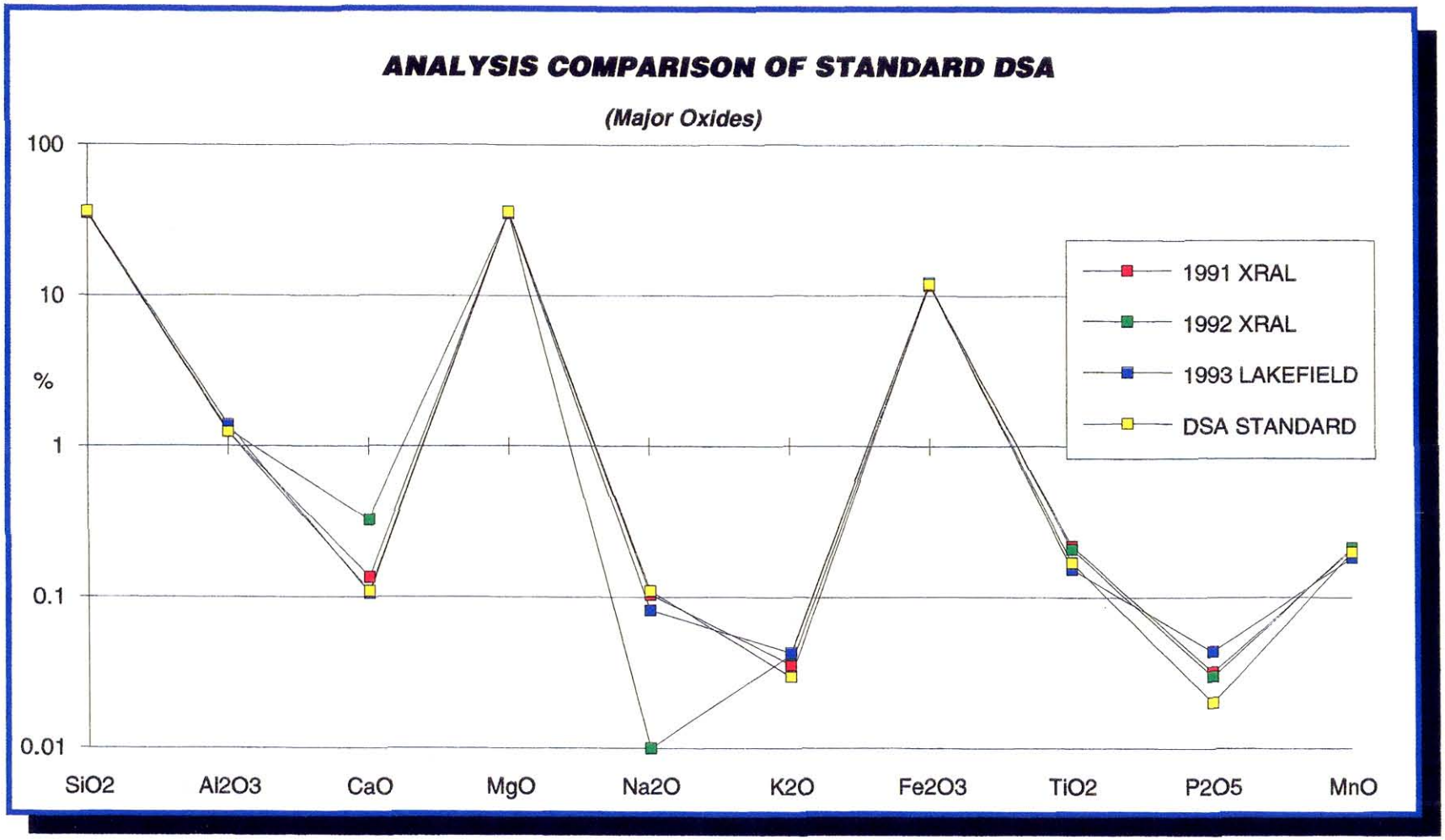

ANALYSIS COMPARISON OF STANDARD DSA
(Major Oxides)
100
10
%
1
0.1
0.01
SiO2
Al2O3
CaO
MgO
Na2O
K2O
Fe2O3
TiO2
P2O5
MnO
1991 XRAL
1992 XRAL
1993 LAKEFIELD
DSA STANDARD

Figure 7

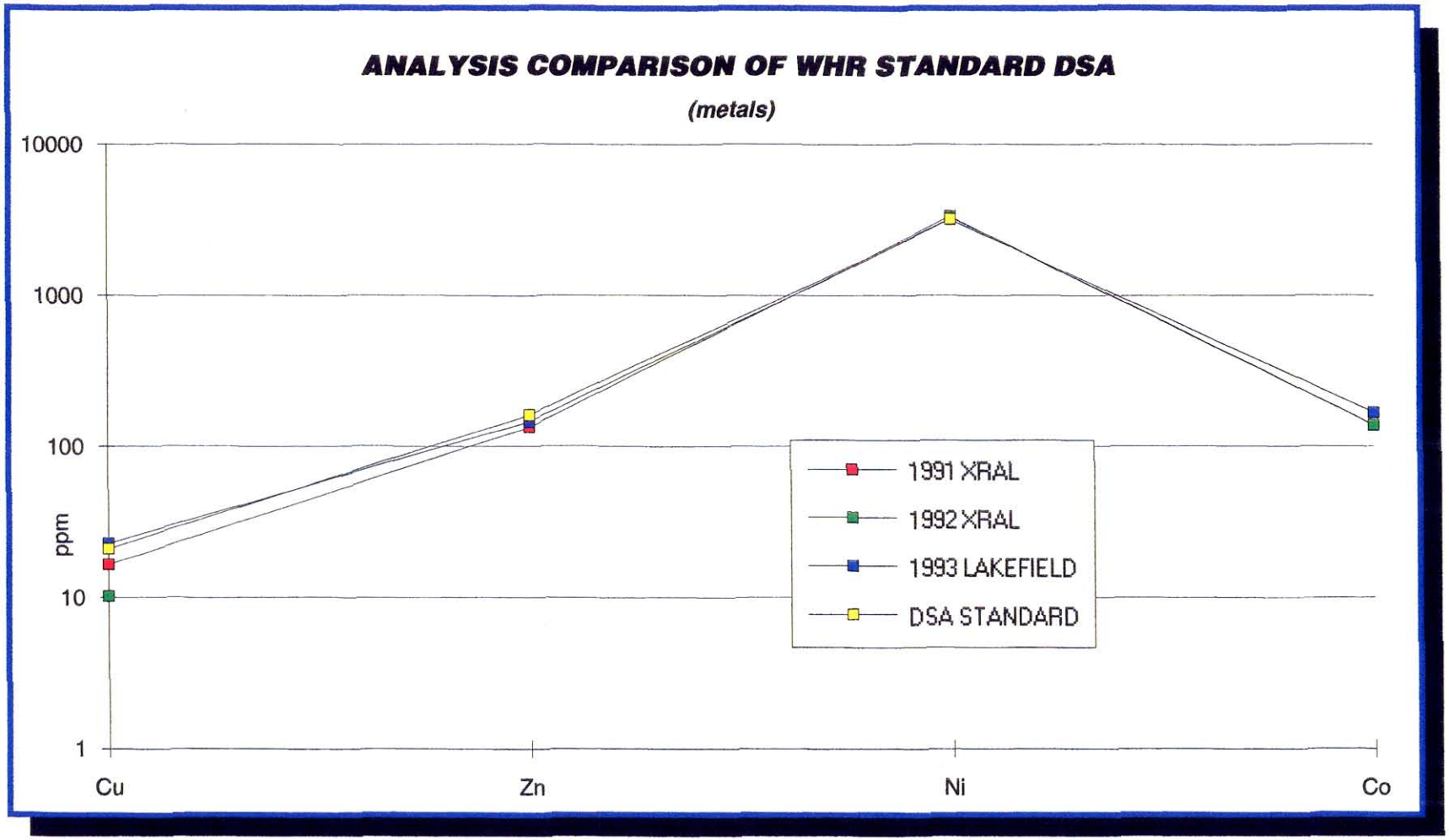

ANALYSIS COMPARISON OF WHR STANDARD DSA
(metals)
10000
1000
100
10
1
ppm
Cu
Zn
Ni
Co
1991 XRAL
1992 XRAL
1993 LAKEFIELD
DSA STANDARD

Figure 8

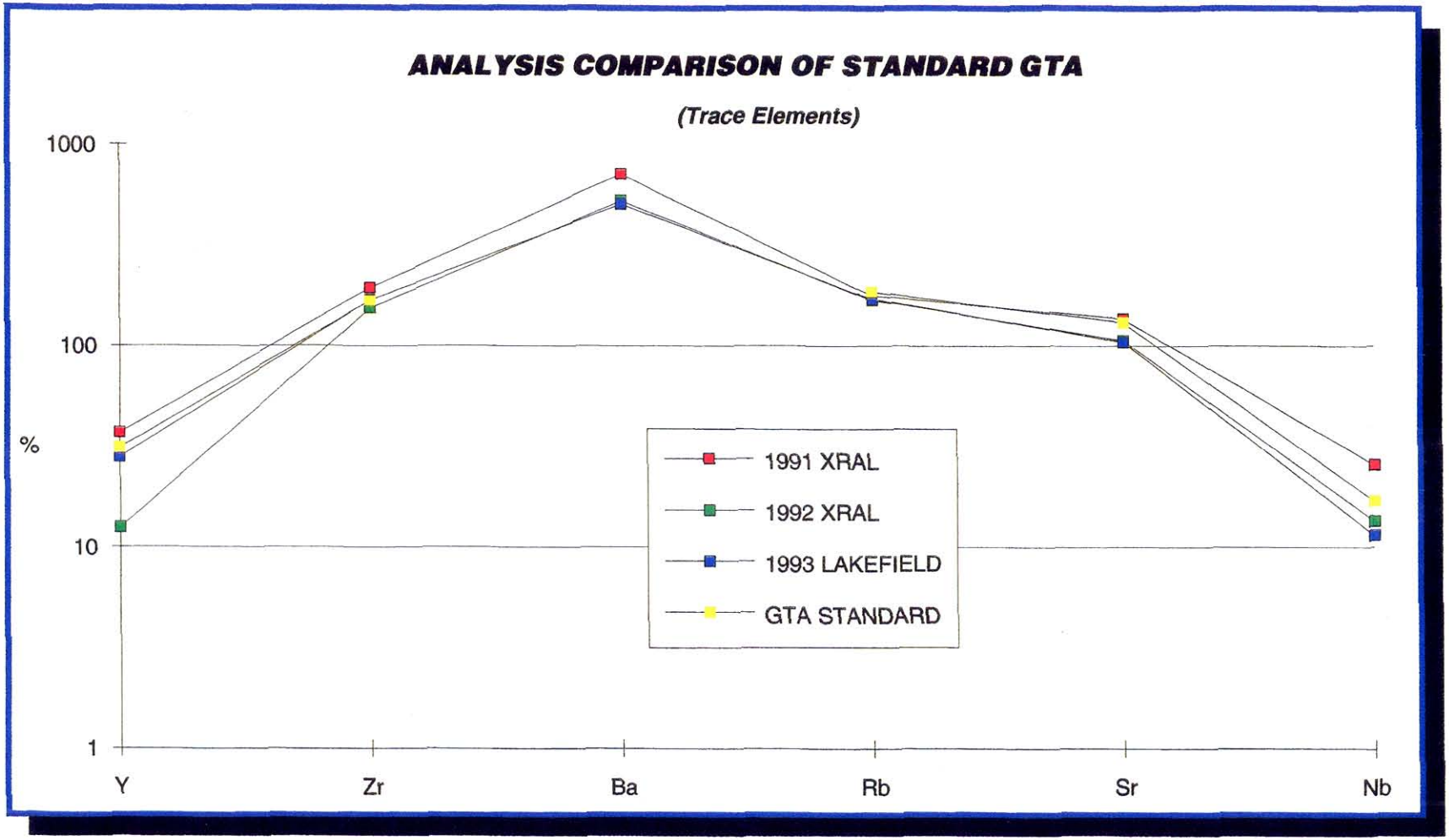

ANALYSIS COMPARISON OF STANDARD GTA
(Trace Elements)
1000
100
10
1
%
Y
Zr
Ba
Rb
Sr
Nb
1991 XRAL
1992 XRAL
1993 LAKEFIELD
GTA STANDARD

Figure 9

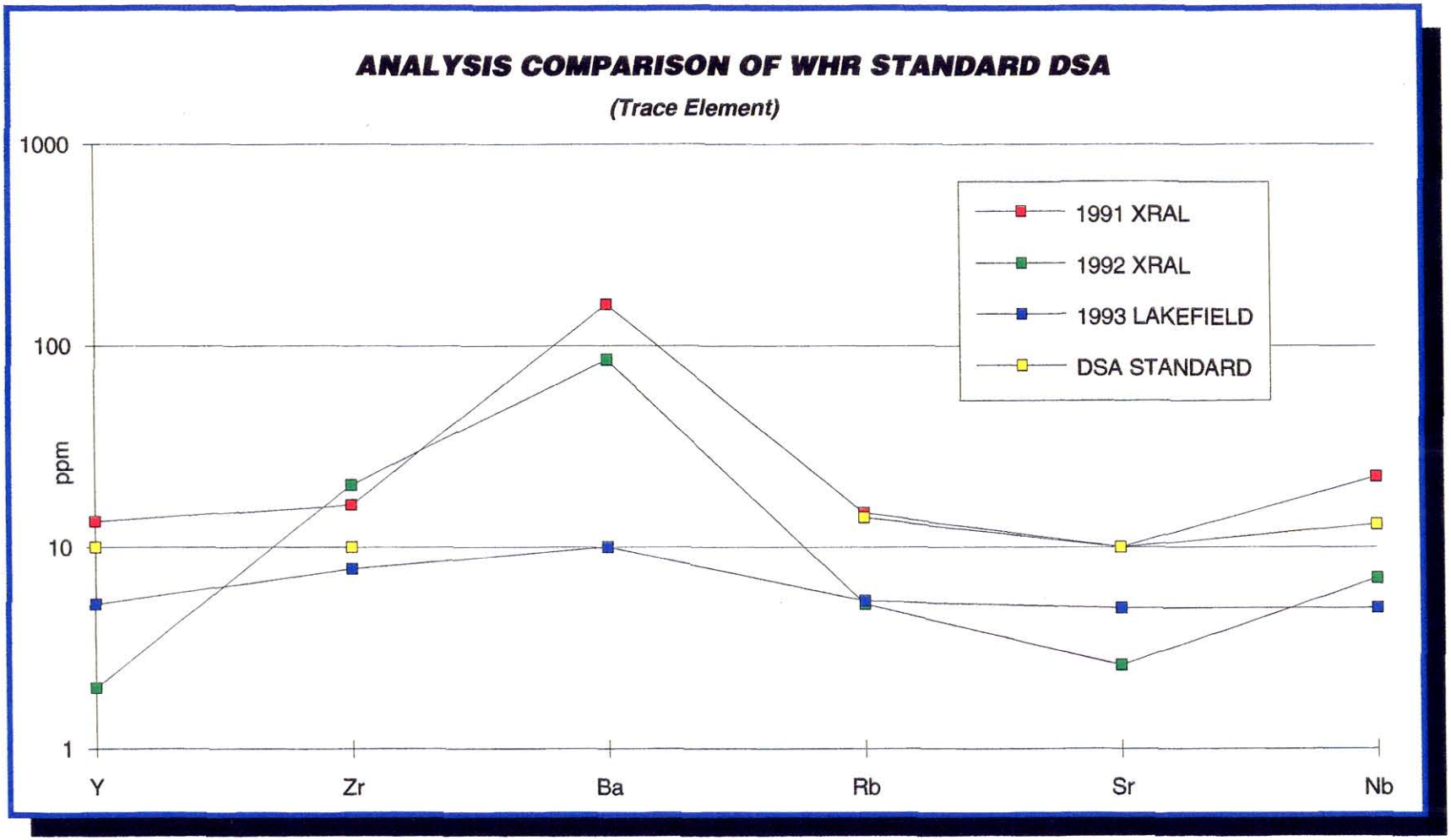

ANALYSIS COMPARISON OF WHR STANDARD DSA
(Trace Element)
1000
100
10
1
ppm
1991 XRAL
1992 XRAL
1993 LAKEFIELD
DSA STANDARD
Y
Zr
Ba
Rb
Sr
Nb

Figure 10

GEOPHYSICAL SURVEY RESULTS

Introduction

Geoterrex Ltd. of Ottawa, Canada under contract from Falconbridge Limited completed the following ground geophysical surveys on Disko Island and Nuussuaq Peninsula;

- 185.55 km of magnetics
- 128.20 km of VLF-EM reading Cutler, Maine, USA.
- 74.40 km VLF-EM reading Rugby, England.
- 124.87 km of horizontal loop electromagnetics recording frequencies 222, 444 and 1777 Hz.

The surveys were carried out by a five man geophysical crew from June 15th to July 14th, 1993. Falconbridge provided the meals, lodging and helicopter transportation for the crew while on the job. A more detailed report of logistics and processing for the survey is provided in Appendix VI.

A total of 8, secant chained, grids (172.2 km), referred to as 5C, 5A, 4A, 3A, 6B, 7A, 8B and 9D, were established as a basis for the geophysical surveys and the 1:5,000 scale geology mapping program (Figure 5). The numeric and alphabetic nomenclature of the grids is based on the 1992 airborne survey blocks and the individual EM anomaly identifier, respectively (Olshefsky & Jerome, 1993). Lines 3+00W and 2+00W on the 1985 Cominco Ltd. grid in the Kûgánguaq Valley were refurbished and labelled grid 3B. Two, 2 km reconnaissance lines where established over airborne anomaly 6E in the Sarqaq Valley on Nuussuaq Peninsula.

The grids were established by Falconbridge personnel from June 11th to July 13th, 1993. A Ushikata - tripod mounted, telescopic compass was used to survey in both the baselines and gridlines. The deviation of grid lines off the survey azimuth was minimal and therefore no tielines were established for control. Wire flag pickets measuring 76 cm high and 0.2 cm

in diameter were used as station markers. Yellow coloured pickets were used to mark the baseline and the 100 m stations along the alternating orange and blue grid lines. Small, rock cairns were constructed along the base line, at the grid corners and at the end of selected grid lines for future reference. The location of the cairns are recorded on the 1:5,000 scale geographical/topographical/geology maps. All of the grids were left intact at the conclusion of the 1993 field season. Detailed information on the 1993 grids is summarized in Table 1.

The purpose of the 1993 ground geophysical program was to investigate the top priority 1992 airborne EM anomalies on Disko Island and Nuussuaq Peninsula, along with the untested 1968 TURAM EM anomaly and the nickel sulphide occurrence at Igdlukunguaq on Disko Island. The investigation of top priority airborne anomalies in the Itivdle Valley and the Serfat area of Nuussuaq Peninsula will be the focus of the 1994 geophysical program.

The surveys were successful in outlining a number of electromagnetic and magnetic responses that warrant testing by diamond drilling. Summarized below by grid number are the 1993 geophysical anomalies with interpretations prepared by Tony Watts (Falconbridge Senior Geophysicist).

Grid 5C - (MAPS 5C-1 to 5C-11)

Grid 5C was laid out to cover, in detail, the Igdlukunguaq Ni-Cu showing, the only massive-sulphide showing discovered to date in the project area. The GEOTEM response over Grid 5C is ambiguous at best, the result of having to fly the area almost parallel to regional strike because of rugged terrain. A previous ground TURAM survey by New Quebec Mining in 1969, did not obtain a response over the showing itself, but did indicate a strong conductor several hundred meters to the SE. The present grid was laid out to provide the maximum detailed ground coverage in the showing area, which is centred on L4+00E at 3+25N, without having to impinge on terrain too rugged to efficiently carry out Max-Min surveying. A number of conductors have been outlined by the Max-Min and VLF surveys and are detailed below.

TABLE 1 - 1993 GRID INFORMATION - WEST GREENLAND PROJECT

Grid	Location	Exploration Licence	*Baseline UTM Azimuth	** Baseline coordinates (UTM)	Length of Baseline (km)	*Gridline UTM Azimuth	Gridline Spacing	Length of Gridlines (m)	Number of Gridlines	Total Km of Gridline	GridlineStation Intervals (m)	Reading Intervals (m)	Number of Flag Pickets
3A	Disko I.	02/91	221°	7777770 N 401186 E	1.60	131°	200m	1000N 1000S	9	17.40	25	25	760
4A	Disko I.	02/91	12°	7775125 N 422567 E	0.90	102°	100m	1000	10	10.00	25	25	436
5A	Disko I.	02/91	325°	7753947 N 436578 E	1.40	55°	100m	1000	15	15.00	25	25	656
5C	Disko I.	02/91	325°	7752745 N 439885 E	1.50	55°	50m	750N 750S	31	44.00	25	12.5	1,820
6B	Nuussuaq	02/91	268°	7783744 N 454941 E	1.50	358°	100m	750N 850S	16	25.60	25	25	1,084
6E	Nuussuaq	02/91	348°	7779190 N 459331 E	0.50	258°	500m	2000	2	4.00	25	25	180
7A	Nuussuaq	03/91	174°	7819854N 393147 E	1.10	84°	100m	1000	12	12.00	25	25	524
8B	Nuussuaq	03/91	350°	7825200 N 385031 E	1.30	260°	100m	1000	14	13.40	25	25	588
9D	Nuussuaq	03/91	337°	7845035 N 389059 E	3.00	67°	500m	1500N 1500S	7	18.00	25	25	840
TOTALS					12.80					159.40			6,888

* Azimuths are based on UTM north (3° west of true north)

* * Baseline Coordinate - UTM position of the eastern most point on each baseline.

Zone A (drilled)

The main conclusion to be reached from the Grid 5C Max-Min results is that no obvious EM response is obtained over the Igdlukunguaq showing. There is, however, a well-defined 1.5 km long Max-Min trend, denoted Zone A, which is directly on strike to the showing, and which is still open at the east end of the survey grid. In fact, the Max-Min EM response appears to be improving over the last 2 to 3 lines of the grid. The corresponding VLF-EM trend outlined by the Rugby VLF-EM station survey is very interesting in that it suggests that the Zone A conductor can be linked directly to the showing. The conductivity of Zone A is estimated to be in the 3 to 5 siemens range between L6+00E and L14+00E, improving to 7 to 10 siemens from L14+50E to L16+00E. The axis of the conductor is remarkably consistent from line-to-line, and is generally much narrower (ie. less than 10 m) than the conductors defined on the previous grids. Depth to the Zone A axis is calculated to be in the 20 to 50 m range, while dips appear to be relatively shallow (50 to 70° south) with the flatter dips apparent further to the east. The linearity of Zone A suggests that whatever the source of conductivity of this feature is, faulting is the controlling mechanism for its emplacement. It is highly unlikely that fault gouge alone could explain the conductivity displayed by Zone A.

The initial 50 m x 50 m line-spacing, 12.5 m reading interval, ground magnetic survey of Grid 5C did not produce a distinctive signature across the Igdlukunguaq dyke. Tony Watts carried out a more detailed survey in the immediate area of the showing at a 25 m x 25 m line-spacing, with readings every 5 m. This survey confirms that the dyke is essentially non-magnetic, with several weak trends terminating immediately grid north and south of the dyke outcrop. It has been suggested that these weak trends (50nT) are probably derived from boulder trains which have their origin in the magnetic Maligat basalts topographically above the showing. However, magnetic susceptibility measurements on some massive-sulphide grab samples from the showing trench do produce moderately magnetic values of 20-40 x 10 emu. This raises the possibility that some of the weak magnetic trends surrounding the showing area could be massive-sulphide derived, especially the trend which terminates in the mineralised portion of the dyke trench at L4+10E/3+10N. Unfortunately, most of the Zone A Max-Min EM conductor is covered by magnetic basalt scree which would definitely obscure any subtle magnetic responses such as those observed in the vicinity of the showing.

Carbonaceous "shale" has been mapped in the vicinity of the Zone A axis. Numerous ohm-meter measurements were made on samples of this rock-unit, all of which indicate that this "shale" is very weak to essentially non-conductive. It is unlikely, therefore, that "shale" is the sole source of the Zone A Max-Min EM response.

A number of attempts were made to drill Zone A during the 1993 drill campaign. The results of the drill program are discussed in the diamond drilling section of this report. The importance accorded to Zone A, as the only conductor in the project area thus far with any possible association with known Ni-Cu bearing massive-sulphide, should not be underestimated. Future drilling on the Greenland Project should ensure that an unequivocal source for Zone A conductivity be found. This might entail drilling a series of short, closely-spaced vertical holes (10 m), across the conductor axis.

Zones B and C

These 2 Max-Min EM trends occur west of the showing area. A single Rugby VLF-EM trend connects these two features, which are generally significantly less conductive (1 to 3 siemens) than Zone A. Once the geology of the Igdlukunguaq showing is better established by drilling, these conductors might be worth further investigation.

Zone D

Zone D lies at the foot of what has been interpreted as a large "raft of Maligat basalt" which has broken off from the mountain above Grid 5C. This zone, while forming a strong Rugby VLF-EM trend, displays poor conductivity (<2 siemens) and as such is probably structurally derived (eg. fault gouge etc.).

This Maligat Formation "basalt raft" produces a distinctive, high amplitude, elliptical magnetic anomaly which is bordered on either side by pronounced flanking lows. This type of magnetic signature is characteristic of a discrete magnetic body of limited depth extent.

Zone D would appear to have minimal massive-sulphide potential and is rated as a low priority target.

Zone E

Zone E locates in the SE corner of the survey grid and coincides with a Rugby VLF trend. Conductivity along this trend is generally rather weak (approx. 5siemens), but on L15+00E and L15+50E at 1+75S in-phase/out-phase ratios locally increase to significantly more than unity. There is a possibility that this apparent increase could be caused by uncompensated topographic irregularities. However, VLF response appears to peak at the same location so this local conductivity enhancement is most likely real.

A SW-trending magnetic anomaly is approximately coincident with the Zone E axis. Unlike the short-wavelength/high amplitude response observed over the magnetic scree at the edges of the grid and, to a lesser extend, the Maligat "basalt raft", the Zone E magnetic anomaly has a broader, more subdued contour pattern. It would appear then that the source of this magnetic anomaly is insitu, and therefore possibly mafic intrusive related.

In summary, Zone E exhibits several encouraging geophysical characteristics and as such warrants a second priority rating, after the first priority Zone A. It is recommended that any future drilling on Grid 5C should include Zone E as a target.

Grid 5A - (MAPS 5A-1 to 5A-9)

The grid is located 2 km NW of grid 5C and was designed to follow-up a 3-line series of weak GEOTEM anomalies which appear to be approximately coincident with a mafic dyke intruded into Cretaceous sediments. The Max-Min EM profiles outline 3 conductive zones, Zones A, B and C.

Zone A and B

These zones are probably part of the same regional conductive trend which spans almost the entire survey grid, a strike length of 1.5 km. These 2 conductors display a poor conductively of 3 siemens or less and are highly unlikely to be caused by a massive-sulphide source. Unlike the conductors on the grids 3A, 3B, and 4A, none of the conductors on this grid appear to have any magnetic association at all.

Carbonaceous shale has been found in the vicinity of the Zone A axis on L8+00E. This rock-type is the likely source of weak conductivity outlined by the Max-Min survey on this grid.

Zone C

Zone C is located in the SW corner of the grid and is only partially covered by the survey. This zone exhibits similar conductivity characteristics to Zones A and B and would be expected to have a similar source.

Grid 4A - (MAPS 4A-1 to 4A-9)

Grid 4A is located 2 km SW of the former coal mining town of Qutdligssat on Disko Island. It is placed over a single-line GEOTEM response which exhibits one of the better conductance values obtained by this 1992 GEOTEM survey. Because of the uncertainty in strike-direction of the airborne response, the surface grid was laid out at a 45 degree angle to topographic contours and the general strike direction of stratigraphy in the area.

Zone A (drilled)

The Max-Min survey defines a 100-125 m wide conductor of moderate conductivity (approx. 10S) with significant In-phase response at 444Hz (especially on L10+00E and L11+00E). The profile characteristics of this conductor change significantly on either side of L10+00E. From L5+00E to L9+00E the response is characterised by an unusual positive-peak type shape, whereas from L10+00E to L13+00E the anomaly shape is the more common negative, trough-shape. Anomaly sign reversals such as this are typical of increasing the depth to a conductor whose width is greater than one-half the Max-Min coil separation. Therefore, to explain the abrupt reversal in sign of anomaly response, a fault is interpreted between L10+00E and L9+00E which would downthrow the near-surface (<50 m) axis on L10+00E to more than 100 m depth on L9+00E. Three cross-lines (4+00N, 6+00N, and 8+00N) were read to ensure that the unusual profile symmetry encountered on this grid was not due to surveying parallel to strike. These cross-lines confirm the presence of a near-surface conductor axis (especially on L6+00N) which coincides precisely with the L10+00E axis.

A strong negative magnetic anomaly flanks the Max-Min conductor to the north (grid) from L10+00E to L14+00E, but appears to be approximately coincident with the conductor west of L10+00E. As this grid is known to lie below the Vaigat basalt/Tertiary-Cretaceous sedimentary contact, this magnetic anomaly is almost certainly caused by a mafic intrusive. The favourable geophysical/geological setting of this target, which would appear to be at least 1 km long (a prerequisite for the Noril'sk-type model), dictated that this target be drilled during the 1993 drill program.

GRID 3A - (MAPS 3A-1 to 3A-9)

The grid is located 27 km in the Kûgánguaq Valley on Disko Island. The grid was designed to target a broad, weak but persistent GEOTEM trend spanning the Kûgánguaq Valley. This AEM feature flanks a distinctive magnetic high that also cross-cuts the valley floor, and which is associated with a curious magnetic low at it's south edge.

Ground geophysical follow-up on this target consisted of 18 km of Max-Min EM, magnetics, and VLF-EM at 200 m line spacing. Lines were laid out parallel to the valley floor.

Three conductive zones (A, B & C) of possible interest were outlined by the Max-Min survey. None of these zones exhibit an in-phase/out-of-phase (IP/OP) ratio of greater than 1 at 1777Hz and therefore fall into the weak-to-moderate conductivity range (ie. 1 to 5 siemens).

Zone A

Zone A is located on Line 0 and traverses outcrop of Vaigat basalt flows. The zone is characterised by multiple conductor axes and is open to the SW. The Vaigat flows are highly magnetic with a contour pattern parallel to the survey line direction. The calculated depths (<20 m) to the Zone A conductor axes suggests a source(s) within the Vaigat formation. This location appears to be geologically unfavourable, therefore Zone A is rated as a third priority target.

Zone B (drilled)

This zone is the weakest of the three detected by the Max-Min EM survey and falls directly on a 600 m long, grid EW trending, magnetic high. As such, it appears to cross-cut the flat-lying stratigraphy in the valley floor and could therefore be related to an intrusive body within the Cretaceous sediments underlying the flood basalts in the area. Depths to both the magnetic and EM targets are calculated to be in excess of 100 m. Even though the poor conductivity of this zone is not suggestive of a massive sulphide target, the possible intrusive association led to the decision to drill Zone B during the course of the 1993 summer drill campaign.

Zone C (drilled)

Of the 3 Max-Min EM targets defined by the ground follow-up, Zone C correlates best with AEM Target 3B. This zone is located in the SE corner of the grid and like the corresponding AEM target, lies on the north flank of an approximately EW-trending magnetic anomaly. Pronounced differences in background Max-Min EM response on either side of the Zone C axis implies that this axis defines the boundary between higher background conductivity to the north and less conductive ground to the south. The Zone C axis also corresponds with the most pronounced VLF anomaly on the grid. The depth to the Zone C anomaly appears to be shallower (60 to 80 m) than for Zone B, while conductivity is marginally higher (4S to 8 siemens). A curious "horse-shoe"-shaped magnetic low 100 m north of the Zone C axis also adds intrigue to this target.

The interesting juxtaposition of regionally cross-cutting magnetic and EM trends led to Zone C being selected as a drill target during the course of the 1993 drill campaign.

Grid 3B (drilled) - (MAPS 3B-1 t 3B-2)

Lines 2+00W & 3+00W on the 1985 Cominco Grid, located 23 km up the Kûgánguaq Valley, were refurbished. Max-Min EM surveying was completed on the lines to relocate the axis of the anomaly defined by Cominco in 1985. The anomaly is best defined on

L2+00S at L3+50W. Previous evaluation of the Cominco/Greenex data had established a moderate conductivity-thickness product of 10S for this conductor giving the most pronounced GEOTEM anomaly in the Kuganguaq Valley for both the Cominco (1985) and the Falconbridge 1992 AEM surveys. The ground magnetic survey by Cominco also indicated that the Max-Min EM response at this location is associated with anomalous magnetic activity, both positive and negative, suggestive of a mafic intrusive source. the depth to the top of the conductor axis on L2+00S is estimated at 110 m. The weak amplitude of the Max-Min EM anomaly precludes any confident prediction of dip, but the relatively narrow and symmetrical shape to the corresponding GEOTEM response suggests a near vertical dip.

Grid 6E - (MAPS 6E-1 to 6E-2)

The grid, consists of two reconnaissance lines, 2 km in length and spaced 500 metres apart, covering a broad airborne EM response located 7 km from the coast in the Sarqaq Valley on Nuussuaq Peninsula. This anomaly was first discovered in 1967 by New Quebec Mining and Exploration Ltd. who had a combined airborne EM and magnetic survey flown over the target. Their explanation for the anomaly favoured a saline solution from a mud volcano permeating through the overburden and being trapped by a sill located at the south edge of the anomaly (Prior, 1968).

The Max-Min EM interpretation is inconclusive due to the lack of coverage over the anomaly. The high amplitude, negative in-phase and out-phase values at 1777 Hz which weaken dramatically and invert in polarity at 444 Hz/222 Hz, are characteristic of a conductive half-space and/or a flat-lying conductive sheet virtually at or very near surface. "Characteristic Phase Diagrams for Conductive Half-Spaced and Thin Horizontal Sheet" were used to assist in the interpretation of the Max-Min EM data. The dramatic change in the in-phase and out-phase response sign and amplitude between L7+00E and L12+00E on line 0 (going from 1777 Hz to 444 Hz) is best explained by the "Characteristic Phase Diagrams for Conductive Half-Spaced model". This suggests the conductive zones mapped by the Max-Min EM survey are most likely broad zones of significant depth extent. The

limited Max-Min EM coverage combined with the wide line separation make the data difficult to interpret. A magnetic survey over the lines and one cross-line at 13+00E were completed by Falconbridge personnel using a Geometrics 816 standard magnetometer. The total field measurements were hand corrected for diurnal variations. The magnetic response over the anomaly is flat.

Grid 6B - (MAPS 6B-1 to 6B-7)

The grid covers airborne anomaly 6B located in the Sarqaq Valley. The gridlines were surveyed using Max-Min EM, VLF-EM and magnetic geophysical methods. A total of 7 conductors were interpreted, most of which are located in the immediate vicinity of a dipolar magnetic anomaly which coincides with a dyke-like subvolcanic intrusion on the grid. The majority of the conductors have a fairly low conductivity with the exception of Zone C.

Zone C

Zone C exhibits a significant in-phase response at both 444Hz and 222Hz and has an in-phase/out-phase ratio at 1777Hz of > 1. There is a possibility that some of the Zone C In-phase response on line 8+00E is caused by topographic distortion. Nevertheless, continuity along strike to the east on lines 9+00E and 10+00E appears to confirm that Zone C is a legitimate, high conductivity target. Zone C also appears to coincide with the weak, positive, magnetic signature at the eastern extent of the E-W trending dyke feature. A grid N-S trending fault appears to offset Zone C from Zone C1 between lines 10+00E and 11+00E.

Zone B & D

These two zones have an in-phase/out-phase ratio of approximately 1 at 1777Hz and correspond with the positive and negative magnetic peaks of the dyke respectively.

GRID 7A - (MAPS 7A-1 to 7A-5)

Grid 7A is located 11 km in the Auvfarssuaq Valley on Nuussuaq Peninsula. The grid covers a 2 line, high conductive, AEM anomaly that coincides with a weak, magnetic high.

Zone A

The 1992 AEM anomaly which should have been detected at L7+36N, 6+02E is not apparent, however, a very poor conductivity response (Zone A) is interpreted on lines 2+00N & 3+00N at approximately 7+00E. This response appears to straddle a magnetic low which parallels the survey lines. There is no evidence of the geologically inferred, north-south fault in the magnetic data as indicated in the 1992 airborne magnetics. These results, coupled with the "borderline" nature of the GEOTEM response being targeted, downgrades this target significantly.

GRID 8B - (MAPS 8B-1 to 8B-7)

The grid covers a two line 1992 AEM response indicating a moderate conductivity source associated with a possible fault structure located 3 km east of the Geologhus on western Nuussuaq Peninsula. Three EM conductors were detected from the ground geophysical surveys.

Zone A

The conductor is located between lines 3+00N and 7+00N at approximately 2+00E. The EM anomaly corresponds with a pronounced magnetic low and exhibits the best conductivity on line 3+00N where the in-phase/out-phase at 444Hz is close to 1. This strength of conductivity is not detected elsewhere on the grid. Zone A has a pronounced kink in it's trace between lines 4+00N and 5+00N where the conductor changes from a NNW to a NNE direction. The negative magnetic correlation with Zone A may be related to negatively magnetized lava flows.

Zone B

The zone is located on the west side of the grid and extends from lines 1+00N to 11+00N. The conductor is quite similar in profile shape and conductivity to Zone A, however, the conductivity does not locally increase as in Zone A. Zone B appears to follow the east flank of a prominent NS trending magnetic high, located along the entire west edge of the survey

grid. The EM response is most likely related to a major NW trending fault structure, interpreted from the 1992 Geoterrex aeromagnetics, which eventually joins with the Itivdle Fault in the vicinity of grid 9D.

Zone C

Zone C is a low conductivity feature which correlated with a NNE trending ground magnetic break. It is suggested that Zone C is almost certainly derived from a structural source such as a fault.

GRID 9D - (MAPS 9D-1 to 9D-3)

The grid covers airborne anomaly 9D located in the Itivdle Valley. The anomaly is a 5 line northwest trending AEM response that indicates a moderate to high conductivity source associated with a magnetic high feature that crosscuts the Itivdle Fault structure. Time only permitted the completion of 1.5 lines of Max-Min EM and 4 lines of magnetics. The Max-Min EM confirmed the presence of a large and strong response that dominates the line. The magnetic survey was completed by Falconbridge personnel using a Geometrics 816 standard magnetometer. Although only half the grid was covered by the magnetic survey, several features are observed. A sharp break in the magnetic signature from line 15S, 15+00W to 10S, 15+00E has been interpreted as the location of the Itvidle Fault. A second NW trending fault cuts through the grid from line 15S, 6+00W to 0S, 4+00E. The high magnetic response east of the fault may be reflecting Maligat basalts whereas the low magnetics to the west could represent Vaigat Formation.

Reconnaissance Magnetic Survey

Falconbridge personnel carried out a 4.1 km long line of reconnaissance magnetics across a regional north trending, magnetic high feature, east of the Itivdle Fault on western Nuussuaq Peninsula. The anomaly appears on the 1985 Cominco airborne survey as a regional magnetic high not conformable with topography. The location of the survey is east

of the Anariartonfik Valley, starting near elevation point 1480 and surveying west. The survey commenced over lava flows and ended in hyaloclastite breccias. The survey confirmed the presence of the magnetic high within the breccias. The response may be reflecting a buried mafic intrusion or a basement high.

Geophysics Summary

- Grid 5C - Five Max-Min EM anomalies were outlined. Zone A correlates with the structure hosting the Ni-sulphide bearing dyke.
- Grid 5A - Carbonaceous shale explains the source of the three Max-Min EM anomalies.
- Grid 4C - A strong, negative, magnetic anomaly flanking a strong EM response is felt to be reflecting an anomaly within a mafic intrusion.
- Grid 3A - Three weak to moderate, Max-Min EM anomalies outlined. Two are associated with magnetic anomalies.
- Grid 3A - The axis of the EM anomaly defined by Cominco (1985) was relocated. The Max-Min EM response is associated with anomalous magnetic activity, suggestive of a mafic intrusion.
- Grid 6E - The strong Max-Min EM responses are most likely broad conductive zones of significant depth extent.
- Grid 6B - Seven EM anomalies outlined. A strong Max-Min EM anomaly (Zone C) is coincident with a large dyke-like subvolcanic intrusion.
- Grids 8B & 7A - Formational and structural related anomalies.
- Grid 9D & Regional Magnetic Anomaly - A strong EM anomaly was comfirmed. Two faults were inferred through the magnetic survey.
- In assessing the effectiveness of the ground geophysical surveys overall, it may be stated that conventional magnetic and electromagnetic methods in this region are hindered by the reversed magnetic polarity of the basalts, the non-magnetic signature of some Ni-Cu depleted intrusions and the presence of conductive sediments. In addition to these geophysical/geological constraints, the EM methods are limited to a 100-200 m depth penetration.

DIAMOND DRILLING PROGRAM AND RESULTS

Introduction

In March of 1993, Petro Drilling Company Limited of Halifax, Nova Scotia was contracted to carry out a diamond drilling program for Falconbridge in the Disko Bay area of West Greenland. A Longyear Fly-in 38, diamond drill rig (Appendix VII) designed for helicopter supported drilling operations was mobilized from the Petro field office in Springdale, Newfoundland. The diamond drill, along with an aluminum mast, water pumps, water line, drill casing, drill rods, fluid additives, core boxes and miscellaneous items, was shipped in two, sealed, twenty foot long containers from Argentia, Newfoundland to Ilulissat, Greenland in May via Iceland and Nuuk, Greenland. Movement of the drill equipment from Ilulissat to Disko Island was accomplished using a chartered boat and barge from the KNI in Illulissat. All drill moves in the field utilized a Bell 206 L/R helicopter chartered from Universal Helicopters Newfoundland Limited. A diamond drill crew, consisting of two operators and two assistants, was employed in Greenland from July 13th-August 28th. The crew participated in the Falconbridge drill program to August 10th, at which time they became involved in a subsequent GGU drill program on Nuussuaq Peninsula. At the conclusion of the GGU drill program the drill was packed down and stored on Nuussuaq Peninsula.

The 1993 Falconbridge diamond drilling program in West Greenland was directed toward the discovery of a large tonnage, Noril'sk-type, nickel-copper deposit by testing ground EM/Mag geophysical anomalies within areas of favourable geology. The principal exploration targets are intrusive bodies containing segregated sulphides enriched in chalcophile elements which occur within reach of present day mining methods. The program was originally designed to incorporate 2000 metres of drilling in approximately 10-16 holes in three areas on Disko Island (Figure 5);

1) Igdlukunguaq (Grid 5C)
2) Qutdligssat (Grid 4A)
3) Kuganguaq Valley (Grids 3A, 3B)

Due primarily to the extremely poor ground conditions encountered at the Igdlukunguaq site, the total metreage obtained in the 1993 drilling campaign was 921.1m in 10 holes. More detailed descriptions of the drilling and the results in each area are outlined below and in Table 2. The diamond drill logs, geochemical results, thin section descriptions and drill sections are presented in Appendices VIII, IX & X.

On completion of the summer field program, the diamond drill core was released to the GGU. The core was removed from the field and delivered to the Teknisk Forvaltning in Ilulissat.

Grid 5C - (MAP 5C-12)

Period of drilling: July 16th-26th, 1993
Number of holes: 6
Metres of drilling: 311.2

The 1993 drilling program in the Grid 5C area attempted to test the Zone A HEM anomaly, however, the planned target depths could not be reached. Typically, each hole began with NW casing and then switched to BW casing which was continued down the hole while drilling BQ core (casing advancer). In each case, the hole reached a depth at which point a complete loss of fluid circulation occurred (within porous, quartzose sandstones and broken, carbonaceous shales). Numerous diamond drill bits and reaming shells were destroyed and/or lost as a result of this lack of water and all holes had to be abandoned prematurely. Various techniques were tried in an attempt to solve the problems (including using drill fluids (EZ Mud), varying pumping rates and drill speeds) but these were unsuccessful. Drill core recoveries through these poorly lithified units are typically 5-10%. Microscopic examination of sandstones similar to those at Igdlukunguaq by F. Nolan of Petro (Appendix X) indicate a high carbonate content in the matrix. Loosening and dissolution of this matrix could have been accomplished through a combination of permafrost and groundwater action with the effects of surface weathering.

TABLE 2: 1993 WEST GREENLAND DRILL SUMMARY

DRILLHOLE NUMBER	GRID	GRID CO-ORDINATE	UTM CO-ORDINATE	ELEVATION	DIP	AZIMUTH	DEPTH	TARGET\RESULT
FP93-5-1	5C	2+75N, 1600E	7752903N, 440110E	133.4	-70	52	50.6	T: 1993 MaxMin EM conductor (Zone A) interpreted to dip 30-50 south. R: Hole abandoned due to bad ground. Interbedded, porous quartzose sandstones and weakly conductive, carbonaceous shales. Broken coal seam from 31.9-35.0m.
FP93-5-2	5C	2+95N, 12+00E	7753241N, 439897E	184.6	-72	52	50.9	T: 1992 Airborne EM anomaly, 1993 MaxMin EM conductor (Zone A), interpreted plunge extension of Igdlukunguaq dyke mineralization. R: Hole abandoned due to bad ground. Interbedded, porous quartzose sandstones and weakly conductive, carbonaceous shales.
FP93-5-3	5C	3+24N, 12+00E	7753258N, 439920E	179.6	-73	52	40.8	T: As FP93-5-2. R: Hole abandoned due to bad ground. Interbedded, porous quartzose sandstones and weakly conductive, carbonaceous shales. Mafic intrusive from 38.3-40.8m.
FP93-5-4	5C	2+50N, 6+50E	7753666N, 439544E	134.5	-61	52	36.3	T: 1992 Airborne EM anomaly, 1993 MaxMin EM conductor (Zone A), interpreted plunge extension of Igdlukunguaq dyke mineralization. R: Hole abandoned due to bad ground. Carbonaceous sandstones throughout.
FP93-5-5	5C	3+25N, 6+52E	7753707N, 439607E	121.6	-89	52	70.4	T: As FP93-5-4. R: Hole abandoned due to bad ground. Interbedded carbonaceous shales and porous quartzose sandstones.
FP93-5-6	5C	2+77N, 4+29E	7753865N, 439440E	91.5	-86	52	62.2	T: Interpreted downdip extension of Igdlukunguaq dyke beneath nickel showing. R: Interbedded carbonaceous shales and porous quartzose sandstones. Minor potential for downdip continuation of dyke. Hole abandoned due to bad ground.
FP93-4-1	4A	7+67N, 11+50E	7774330N, 423182E	296	-90	0	103.6	T: 1992 Airborne EM anomaly, 1993 MaxMin EM conductor, mafic occurrences with trace sulphides and nickel enrichment in the area. R: Mafic sill from 17.3-103.6m having strongly conductive, graphitic fragments and matrix explaining the EM conductor. Minor pyrite locally, elevated levels of Ni & Cu throughout. Hole abandoned due to bad ground.
FP93-3-1	3A	5+10S, 12+25E	7777153N, 401325E	248.2	-61	308	138.7	T: 1992 Airborne Magnetic low, 1993 MaxMin EM conductor (Zone C). R: Interbedded sandstones and weakly conductive, carbonaceous shales from 44.8-97.2m. Probable EM conductor is carbonaceous shale from 64.8-69.2m. Gneissic basement (magnetic) encountered from 100.4-138.7m.
FP93-3-2	3A	6+22N, 4+00E	7777272N, 399929E	303	-51	128	185.6	T: 1993 MaxMin EM conductor (Zone B). R: Mafic volcanic flows from 14.8-31.2m. Interbedded sandstones and weakly conductive carbonaceous shales from 31.2m to EOH. Magnetic, subvertical, mafic dyke (135.0-152.9m) with carbonaceous fragments causing EM response.
FP93-3-3	3B	2+00S, 2+90W	77788779N, 397690E	234	-65	270	182	T: 1985 Greenex MaxMin EM conductor and magnetic low, 1992 Airborne EM anomaly, 1993 MaxMin EM conductor. R: Vaigat Fm. picritic flows from 47.8-142.1m including contaminated unit (119.5-142.1m). High angle mafic intrusive from 142.1-151.7 with strongly conductive graphitic fragments causing EM response.

Carbonaceous shales were intermittently intersected in most of the drill-holes but do not explain the conductivity associated with Zone A. Hole FP93-5-3 (3+24N,L12+00E) intersected a mafic intrusive unit at the end of the hole (38.3-40.8m) which lies immediately over the Zone A axis. The unit has a porphyritic texture and hosts 1%, finely disseminated pyrrhotite (204ppm Ni and 70ppm Cu from whole rock analysis). Geochemically, this intrusive plots within the Igdlukunguaq Dyke field on a MgO-TiO_2 plot (Figure 11) as a lower MgO, marginal phase. This is similar to the exposed dyke on lines 4+00-50 E where porphyritic gabbronorite margins enclose a magnesian-rich, olivine core. The Zone A trend may thus represent a continuation of the mineralized Igdlukunguaq dyke across the 5C grid. Hole FP93-5-6 (2+77N,4+29E) was cored directly beneath the Ni sulphide showing from south to north (opposite, south dipping, New Quebec drill holes 1-70 & 2-70) to determine if the dyke had any depth extent down dip. Unfortunately, this hole ended prematurely (69.18m) and did not encounter any units resembling the dyke. Even though the hole finished short of its planned depth, it has virtually eliminated the possibility of a continuation of the dyke downdip. The dyke still remains open in a southeast direction at an interpreted 15° plunge (R. Stewart, 1992).

Grid 4A - (MAP 4A-10)

Period of drilling: July 28th-29th, 1993
Number of holes: 1
Metres of drilling: 103.6

The drill was positioned to test Zone A, a moderately conductive EM anomaly with a flanking, strong, negative, magnetic anomaly within Cretaceous sediments. Steep topography prevented drilling at the most optimal site on L10+00E. Instead, a vertical hole (FP93-4-1) was collared at 7+67N/L11+50E, directly over the interpolated axis of the conductor. This hole passed almost directly into a moderately magnetic (magnetic susceptibility 15 to >40 x 10 emu) mafic unit at a depth of 17m. This unit contains a high proportion of finely disseminated graphite which causes the rock to be highly conductive. More graphite, in the form of discrete fragments (1-50mm in size) containing specks of pyrite and pyrrhotite, also

occurs within the unit. The thickness of this unit is unknown due to the premature termination of the hole in bad ground.

This mafic unit is interpreted to represent an intrusive sill body because of the uniform nature of the unit throughout the hole and the position of the unit relative to known Cretaceous sediments above and below. This intrusion is visually similar to Asuk volcanic units on Disko and can be correlated geochemically to the latter on an MgO-TiO_2 plot (Figure 11). It contains significantly higher levels of copper (240-700ppm vs <85ppm) and nickel (450-520ppm vs <35ppm) compared to depleted Asuk Member lavas. The unit may thus represent a Ni-Cu rich intrusion related to the Asuk volcanism.

Grid 3A - (MAP 3A-10)

Period of drilling:	August 02nd-07th, 1993
Number of holes:	2
Metres of drilling:	324.3

Two, weak to moderately conductive zones of interest (B & C) were drill tested in 1993;

Zone B - Hole FP93-3-2 (6+22N, L4+00E) intersected a moderately magnetic, 20m thick, mafic intrusive (dyke) at a vertical depth of 110 metres which contained conductive carbonaceous fragments. The intrusive is hosted in a sequence of weakly conductive carbonaceous shales and non-conductive sandstones capped by mafic volcanic flows. Minor pyrite mineralization was noted locally along some fracture surfaces in the intrusive.
In a MgO-TiO_2 plot (Figure 14), samples from the overlying volcanics plot within the Kûgánguaq Member field, part of the Vaigat Formation. The intrusives encountered in FP93-3-2 are of Maligat affinity and plot in a high TiO2 (3.67-4.14%) cluster on the MgO-TiO_2 diagram (Figure 11). Sample NS02811, taken from an intrusive composed of remnant olivine crystals, plots below the other intrusives (1.68% TiO_2) near the Niaqussat member field.

Zone C - Hole FP93-3-1 (5+10N, 12+25E) intersected weakly conductive, carbonaceous shale (64.8-69.2 metres) and magnetic, gneissic basement at 100.4 metres. The combination of these two lithologies adequately explains the geophysical response at this location (Watts, 1993).

Grid 3B - (MAP 3B-3)

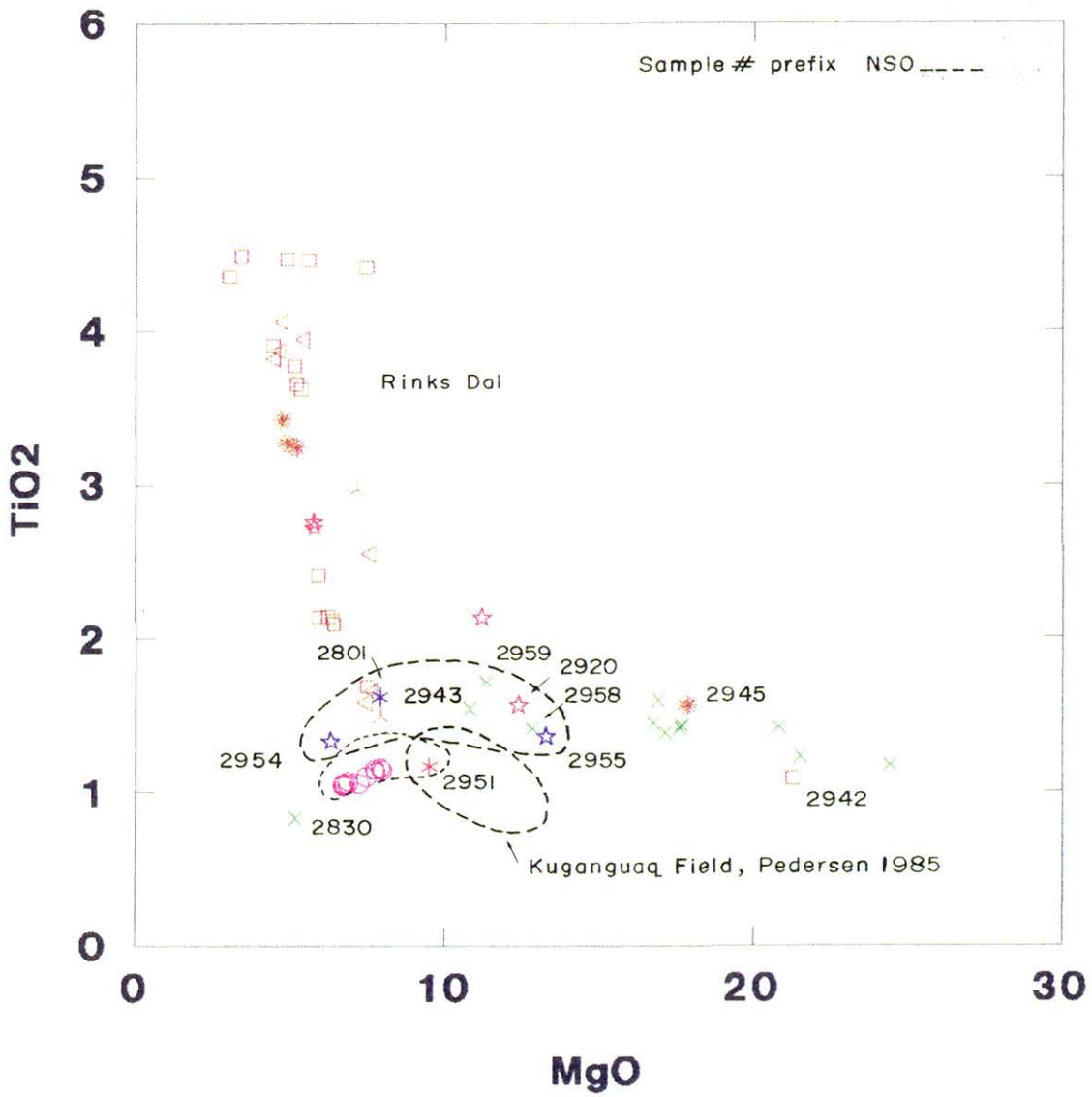
Period of drilling:	August 08th-10th, 1993
Number of holes:	1
Metres of drilling:	182.0

The drilling on Grid 3B was designed to test an airborne/ground EM anomaly defined by Cominco/Greenex in 1985. A hole collared at 2+90W on L2+00S (drilling from east to west) intersected magnetic, Vaigat picritic flows from 47.8-142.1 metres and these plot geochemically as a distinct cluster (Naujanguit member) on an MgO-TiO_2 plot (Figure 14). A contaminated unit lies within this sequence from 119.5-142.1 metres. Samples from this contaminated section (NS02823-02829) plot within the Kûgánguaq Member field (Figure 14). From 142.1-151.7 metres, a non-magnetic, mafic intrusive containing up to 20%, conductive, graphitic fragments and patchy, pyritic mineralization was intersected. This intrusive is the probable source of the Grid 3B Max-Min anomaly and geochemically correlates most closely to the Asuk member field (Figure 11).

Diamond Drilling Summary

- Drilling totalled 921.1 m in 10 holes.
- Grid 5C - Extremely poor ground conditions prevented the testings of the targets. A mafic intrusion at the end of hole FP93-5-3 is correlated to the marginal phase of the exposed Igdlukunguaq dyke.
- Grid 4C - A Ni-Cu enriched, graphitic, mafic intrusions was drilled. Possibly related to the Asuk volcanism.
- Grid 3A - Gneissic basement was encountered in hole FP93-3-1. The remaining drill tested targets on grid 3A & B, are mafic dykes, hosting conductive, carbonaceous, fragments.

'93' DISKO INTRUSIONS

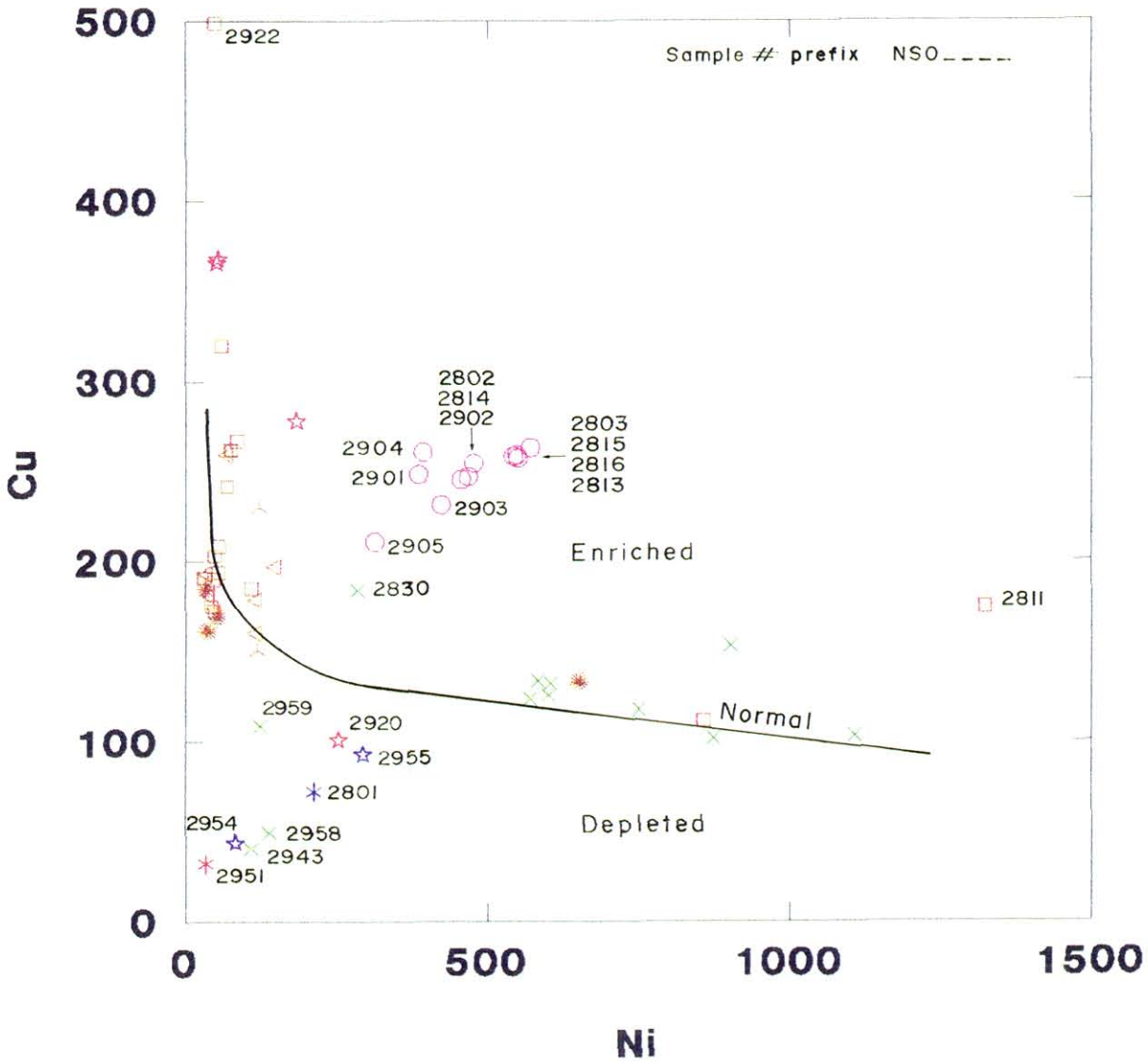


LEGEND

- Kuganguaq Feeder
- Niagussat Feeder
- Maligat Dolerite Dyke
- Maligat Olivine Dyke
- Maligat Aphyric Dyke
- Maligat Fp.Dyke
- Vaigat Olivine Dyke
- Igdlukunguaq Dyke
- Qutdligssat Sill
- Unkown Sill

Figure 11

'93' DISKO INTRUSIONS

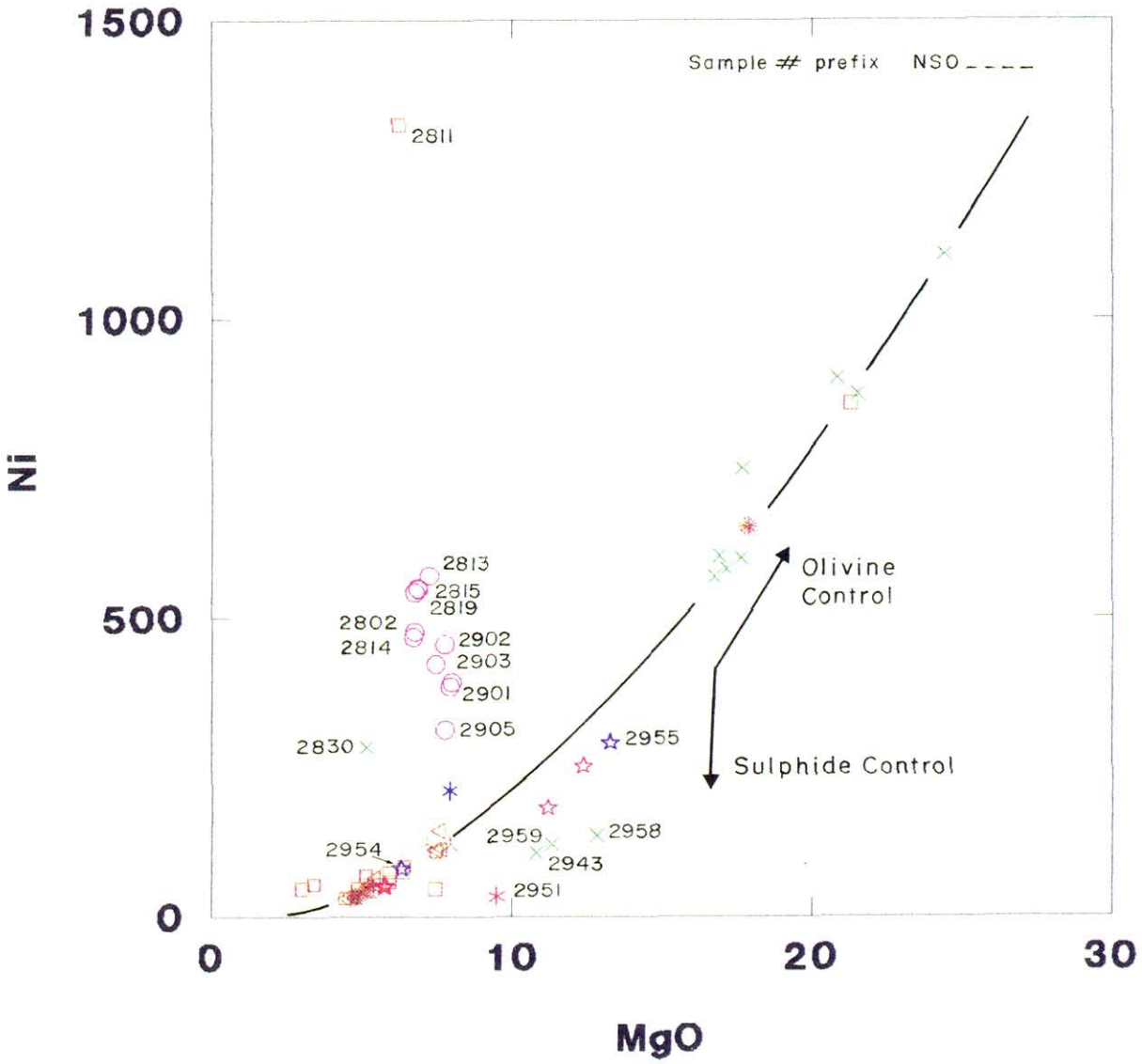


LEGEND

- ✳ Kuganguaq Feeder
- ☆ Niagussat Feeder
- ✳ Maligat Dolerite Dyke
- ⅄ Maligat Olivine Dyke
- ◁ Maligat Aphyric Dyke
- □ Maligat Fp.Dyke
- × Vaigat Olivine Dyke
- ✳ Igdlukunguaq Dyke
- ○ Qutdligssat Sill
- ☆ Unkown Sill

Figure 12

'93' DISKO INTRUSIONS

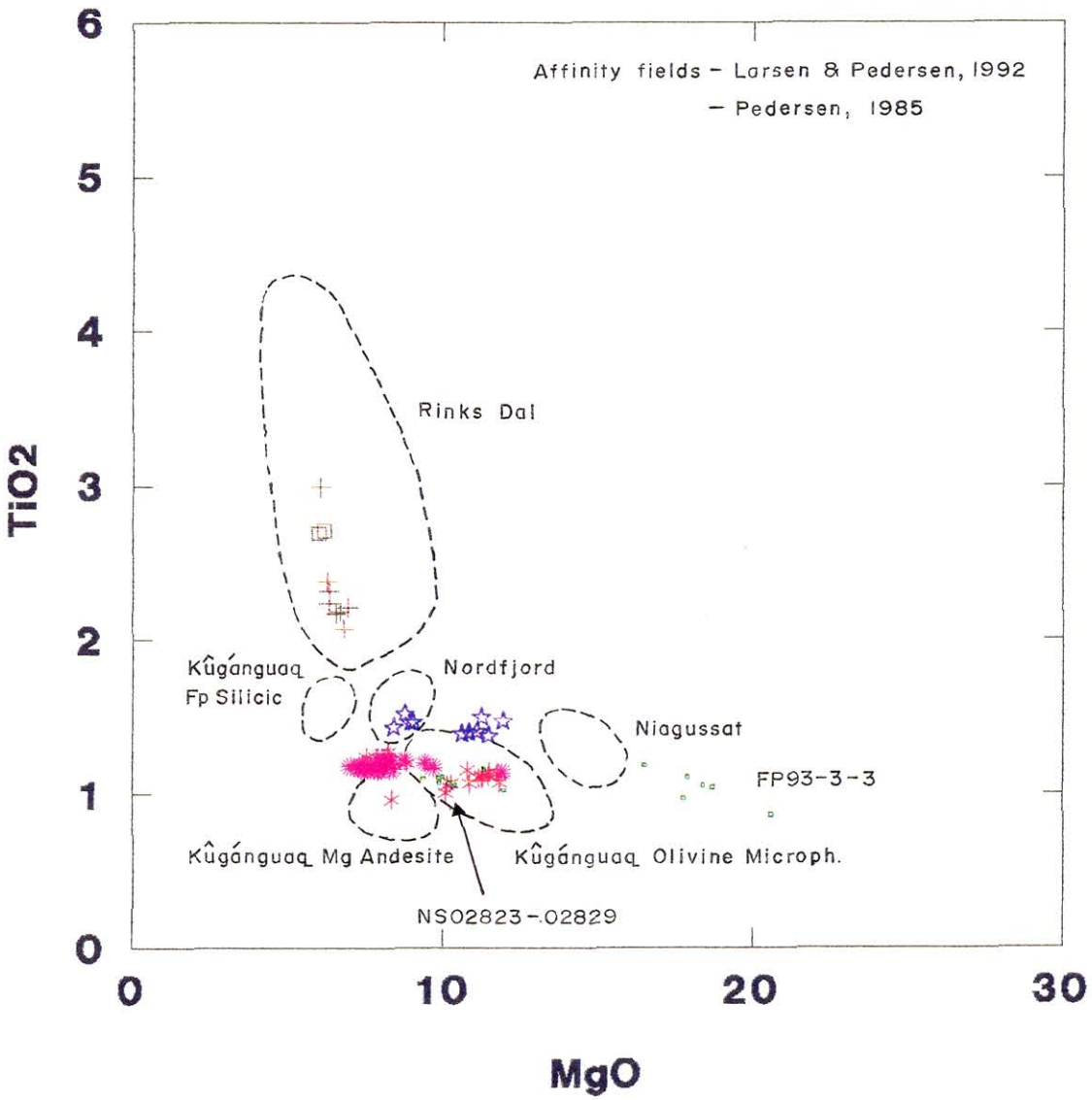


LEGEND

- ✳ Kuganguaq Feeder
- ☆ Niagussat Feeder
- ✳ Maligat Dolerite Dyke
- ⅄ Maligat Olivine Dyke
- ◁ Maligat Aphyric Dyke
- □ Maligat Fp.Dyke
- × Vaigat Olivine Dyke
- ✳ Igdlukunguaq Dyke
- ○ Qutdligssat Sill
- ☆ Unkown Sill

Figure 13

'93' DISKO FLOWS



LEGEND

- ☆ Niagussat Flow
- □ Nordfjord Flow
- + Rinks Dal Flow
- ✳ Ordlingassoq Flow
- △ Qordlortorssuaq Flow
- ✳ Kuganguaq Flow
- ✸ Asuk Flow
- · Naujanguit Flow

Figure 14

GEOLOGY PROGRAM

Introduction

The geological program was carried out on exploration licences 02/91 & 03/91 and prospecting licence #156 between July 1st and August 26th, 1993. A crew of 2 geologists and 2 geological assistants, working out of the main base camps, completed the program with helicopter support. A small, 4 person tent camp was used to carry out the mapping, prospecting and lithogeochemical sampling in the Auvfarssuaq Valley on Nuussuaq Peninsula. The 1993 geology program consisted of three main components:

- Detailed mapping at 1:5,000 scale on grids 5C, 5A, 4A, 3B, 6B and 7A.
- Lithogeochemical sampling of 8 stratigraphic sections through portions of the Niagussat, Rinks Dal, Kûgánguaq and Asuk Lavas on Disko Island.
- Mapping and prospecting at 1:20,000 scale in an area centred between the Kûgánguaq Valley and the Vaigat on Disko Island. A similar program was carried out in the Auvfarssuaq Valley on Nuussuaq Peninsula.

Detailed 1:5,000 Scale Mapping

The detailed 1:5,000 scale mapping program recorded the geology, geographical and topographical features on the 1993 grids. The information assisted in the interpretation of the ground geophysical surveys and in the preparation of the diamond drill program. The outcrops are sparse on the grids due to landslide and glacial debris. The results of the 1:5,000 scale mapping program are summarized below by grid number.

Grid 5C - (Map 5C-13)

Outcrop is mainly restricted to the area encompassing the Ni-sulphide dyke. A detailed description of the dyke has been completed by Pauly (1969) and Olshefsky & Jerome (1993) thus, only the location of the dyke exposures were recorded during the 1993 program. The sedimentary sequence hosting the dyke is best viewed along the coastline and along the

deeply incised stream channels. The sediments consist of uncemented, cross-bedded, quartz sands ("sandstone"), commonly containing small, rounded, quartz pebbles. The sedimentary sequence is representative of a meandering stream deposit in a deltaic environment. Intercalated with the sands are carbonaceous shales, siltstones and minor coal seams. Pieces of non-conductive, coalified, organic material occur in the sandstone as thin discontinuous layers and as minute shreds within the matrix. The remnant matrix has been identified by Nolan (1993) as being calcite with some scattered fragments of coarser grained carbonate grains or possible dolomite. Pods of competent, orange-brown coloured sandstones, up to several metres in length, occur throughout the sedimentary sequence. The matrix of these pods may be a very fine grained siderite (Nolan, 1993).

Lines 1+00E to 2+50E extend over the eastern edge of a glacial moraine composed of blocks of Maligat Formation. A high ridge south of the baseline between 3+50E and 13+00E is formed by a large "raft" of Maligat Formation. North of the baseline and east of lines 7+50E, the area is blanketed by an older, moss covered, glacial moraine with local exposures of uncemented "sandstones" with minor coal. A number of small streams having an intermittent flow in mid summer, drain northward into the Vaigat.

Grid 5A (MAP 5A-10)

Outcrops of uncemented, quartzose, "sandstone" and shale occur mainly in the central portion of the grid between lines 3+00E and 8+00E. Patchy occurrences of carbonaceous shale centred between lines 4+00E and 8+00E, at approximately 6+00N, coincide closely with Max-Min EM anomaly A. The remainder of the grid is covered with volcanic Maligat scree and arctic flora. A large block of Maligat Formation scree forms a steep, NW trending ridge through the SW corner of the grid. Drainage on the grid is by small, NE flowing streams.

Grid 4A - (MAP4A-11)

This grid is located on a generally planar hillside that slopes northeasterly from a 489 metre elevation on the southwest corner to a 133 metre elevation on the northeast corner. Some caution must be taken when making reference to grid north since the gridlines are

orientated at 099° TN with station numbers increasing to the east (which are labelled as north). Approximately 85% of the grid surface is landslide debris, now covered with an arctic vegetation.

A linear mafic body is partly exposed from line 9+00E, 7+00N to 6+00E, 3+20N. The body forms a steep, uniform, NW trending ridge, which can be traced northward for over 1 km. This unit has also been encountered during the diamond drilling (see section on Diamond Drilling Program-Grid 4A). In hand specimen, the rock is dark grey to black, fine grained, equilgranular, hosting minor grains of possible altered hornblende/pyroxene and < 0.5% finely disseminated sulphide. In outcrop, the unit is highly fractured, strongly magnetic and weathers to a reddish-brown colour. The unit appears on the 1:100,000 scale government geology map as a contaminated volcanic rock occurring just below an extensive cover of landslide debris. Some concern exists as to whether this unit may be allochthonous outcrop from lava flows located in the mountain above the grid. Five samples collected from the unit (AF02901-05) plot within the Asuk affinity field on a TiO_2 versus MgO diagram (Figure 11). Contrary to the normal loss of siderophile elements characteristic to the Asuk Formation lavas, this unit is enriched in Ni and Cu as indicated on the Cu versus Ni and Ni versus MgO plots (Figures 12 & 13).

Outcrops of interbedded light brown siltstone/shale and non-conductive carbonaceous shale occur above and below the mafic unit. The shale units dip gently to the east and are highly fissile due to weathering.

Grid 3A - (MAP3A-11)

This grid straddles the floor of the Kûgánguaq Valley with lines 0+00E and 16+00E established on the flanks of the valley walls. The Fe-rich, contaminated, Asuk Member lavas are exposed along line 0+00E. The sequence consists of reddish-brown, highly fractured, Fe-rich, amygdaloidal flows, with well developed flow top and flow bottom breccias. In hand specimen, the matrix is medium to dark grey, fine grained, weakly siliceous, containing 2-3% altered subhedral olivine/pyroxene phenocrysts (up to 1-2 mm

in size) and hosting trace sulphide. Locally, subrounded to subangular, highly conductive, carbon-rich sedimentary xenoliths are visible within the flows.

A large, braided river flows NE through the centre of the grid between lines 6+00E and 12+00E. The valley floor slopes gently upwards from the river to the base of the exposed volcanic sequence. Large alluvial fans and scree slopes, supporting a sparse cover of arctic flora, covers approximately 75% of the grid. Two old, eroded, pingos are located along line 12+50E at 0+40N and 1+80S. A 20 m high, active pingo, located at line 10+20E 8+00N is releasing a sulphureous gas. Water percolating from the pingo was sampled by the GGU in early August.

Grid 6B - (MAP 6B-8)

The topography on Grid 6B is flat with the exception of a non-contaminated, ring-like, Ti-rich, gabbro-norite dyke, protruding 20 m out of the valley floor. The dyke cuts through the southern portion of the grid, trending at 270° TN from lines 15+00E to 3+00E, and than changes to an azimuth of 315° TN. On the grid, the dyke is up to 60 m thick with an apparent steep, north dip and structurally controlled by a secondary NW fault. East of the grid, the dyke swings north and parallels the Boundary Fault.

At line 1+00E, 5+60S, sediments are exposed along the stream bank. The outcrop consists of highly weathered, buff coloured, sandstone hosting a 1.5 m thick black unit. The unit is comprised of bedded to laminated, greyish-brown, mudstone/silty mudstone and black coalified mudstone striking 130°, dipping 10° NE. Patches of sand ("highly weathered sandstone") and boulders occur along the flanks of the dyke. Located in the central portion of the grid are accumulations of gneissic boulders which are commonly coated by a Fe-oxide.

The drainage system on the grid forms a semi-circular pattern that may be reflecting domal uplifting by a buried intrusion. The rivers in the area flow SE into the main river draining the Sarqaq Valley.

Grid 7A - (MAP 7A-6)

The relief on grid 7A is relatively flat with a slight increase in elevation towards the SW corner where a small ridge of picritic, hyloclastite breccia is exposed. The rest of the grid is covered by glacial and fluvial sand and gravel. The vegetation consisting of arctic flora is dominant over the western half of the grid. The streams cutting the grid flow north and east into the main river draining the Auvfarssuaq Valley.

Stratigraphic Lithogeochemistry Sampling on Disko Island

A total of 8 stratigraphic sections through portions of the Niagussat, Rinks Dal, Kûgánguaq and Asuk Lavas on Disko Island were sampled during the regional mapping and prospecting program. The samples were submitted to Lakefield Research for WHR analysis and the pulps later released to the research group. The research project will supply the high precision trace element and REE analysis necessary to make conclusive correlations and to detect subtle geochemical variations both vertically and laterally within the individual lava members.

Documented eruption sites for the Niagussat and Kûgánguaq Member lavas were visited by Kevin Olshefsky and Asger Ken Pedersen on August 6th & 8th, 1994. The purpose of the field trips was to become familiar with the different types of volcanic eruptions and to gain an appreciation for how inconspicuous these eruption sites are to the untrained eye.

The Niagussat member was sampled at two localities; 1) on the mountain top north of Blåbærdalen between elevations 1050 and 1170 m (D-93-06) and 2) at Qingussaq Mountain, SW of Igdlukunguaq, between the elevations of 1345 and 1395 m (D-93-10). The main objective of the detailed lithogeochemical investigation was to confirm the correlation of the Igdlukunguaq feeder dyke to the Niagussat lavas. The final conclusions will be based on the high precision research analysis.

On the TiO_2 versus MgO plot, the Niagussat lavas sampled form two tight clusters at approximately 11.0% MgO and 8.5% MgO (Figure 14). Both groups are elevated in Ti with

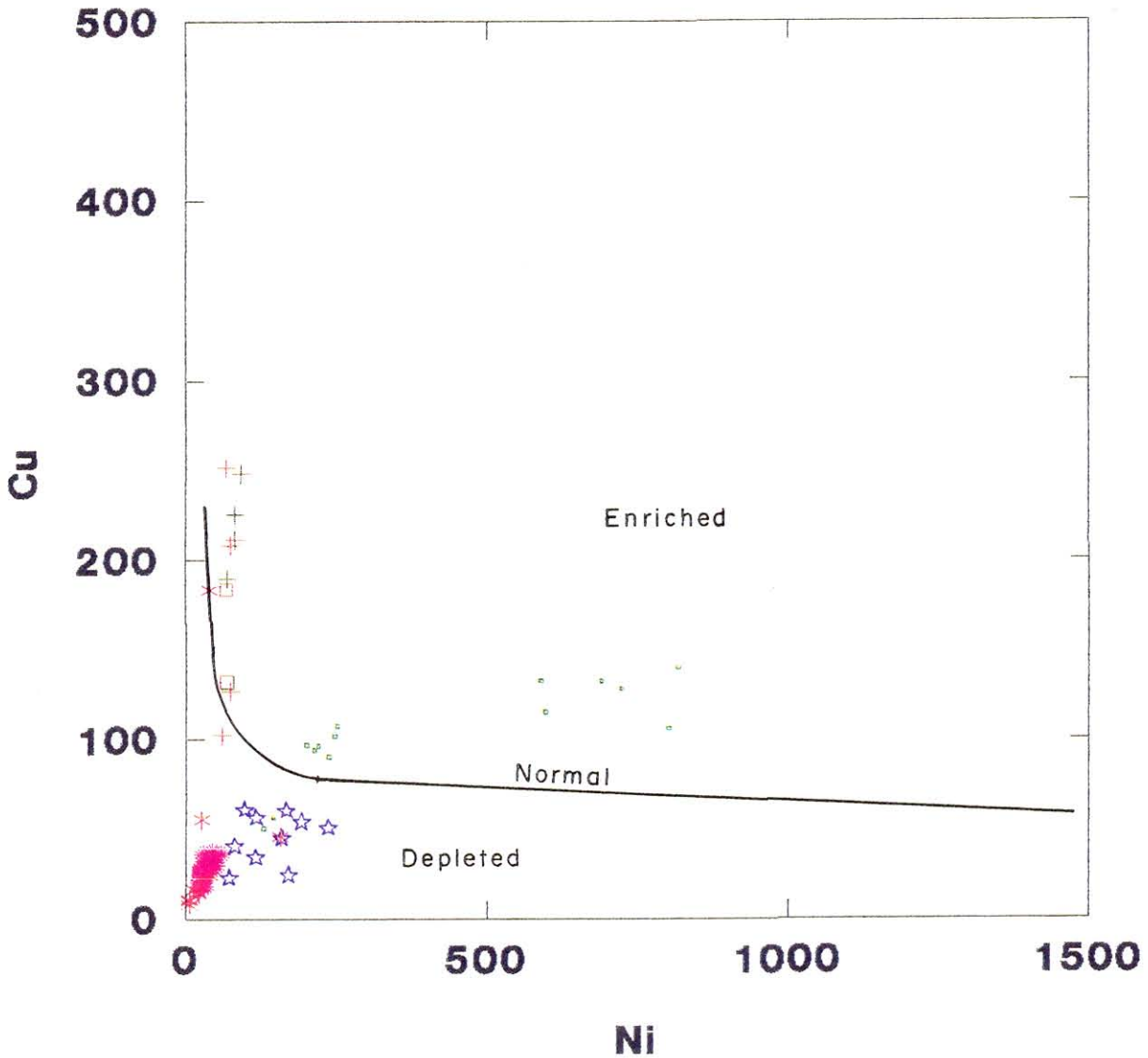
respect to the contaminated tholeiites of the Vaigat Formation, with the exception of the Kûgánguaq feldspar-phyric, silicic basalts. The low MgO Niagussat lavas plot within the Nordfjord Member affinity field, defined by published analyses from Larsen & Pedersen, 1992. On the Blåbærdalen section, the low MgO basalts occur immediately above and below the high MgO Niagussat lavas. To be consistent with the documented Maligat stratigraphic succession, the low MgO basalts have been assigned to the Niagussat Member. The two MgO lava types have the same geochemical affinity as the marginal and core phases of both the Igdlukunguaq dyke and the documented Niagussat feeder dyke, located near Ordlingassoq Mountain on Disko Island. The overlying low MgO basalts are fine-grained, aphyric, flow banded, siliceous and hosting 3-5% amygdules. The underlying low MgO unit is a fine grained, siliceous basalt containing 3-4% thin, lathy, feldspars which are up to 1 mm in length and 1-2% amygdules. Both low MgO units are weakly magnetic, whereas the high MgO Niagussat lavas have a very distinctive low magnetic susceptibility response (0.40 to 0.80 x 10 emu). On the Quingussaq section, the high MgO Niagussat basalts are in direct contact with the feldspar-phyric, Nordfjord tholeiitic basalts.

The Cu versus Ni plot indicates lavas from the Niagussat Member are weakly depleted in both metals (figure 15). On the Cu versus Co plot, the samples fall along the sulphide removal trend, which is supported by the occurrence of the Ni-Cu sulphide in the Igdlukunguaq dyke (figure 16).

In comparison with other Maligat lavas, the Niagussat basalts are slightly silica enriched (Figure 17). Silica enrichment is more evident in the Asuk and Kûgánguaq tholeiites of the Vaigat Formation. The variation of potassium shown on the TiO_2 versus K_2O plot, suggests a low temperature alteration has affected several of the units sampled (Figure 18).

The Rinks Dal lavas were sampled at; 1) Qingussaq Mountain, SW of Igdlukunguaq (D-93-10) and 2) Pingo Mountain on northeast Disko Island (D-93-09). The sampling was undertaken to broaden the lithogeochemistry database for the Maligat Formation. On the TiO_2 versus MgO plot, the Rinks Dal basalts separate out as having greater than 2% TiO_2. (Figure 14). The two sections sampled show no signs of alteration or crustal contamination resulting in the loss of Ni or Cu.

'93' DISKO FLOWS

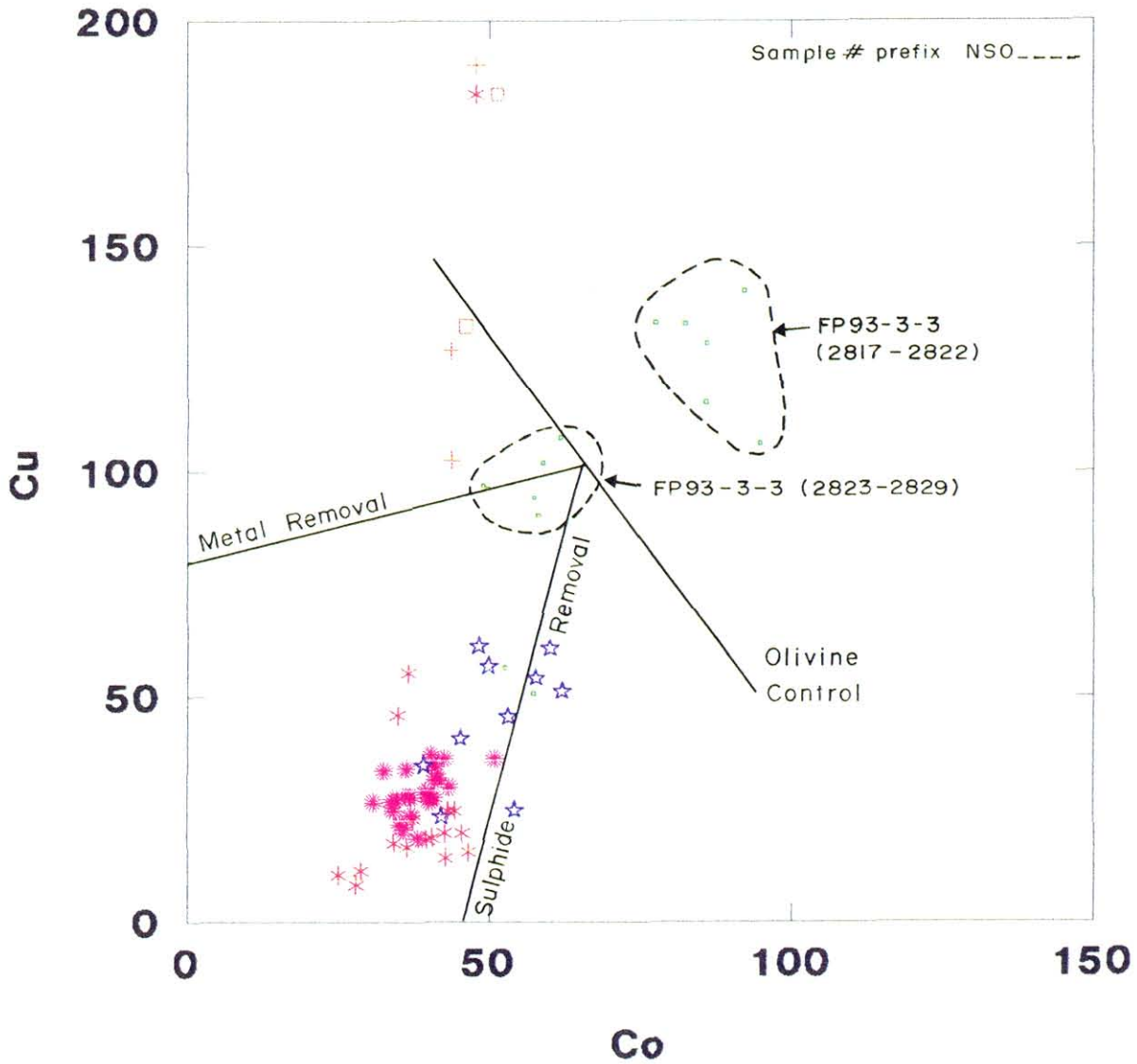


LEGEND

- ☆ Niagusset Flow
- □ Nordfjord Flow
- \+ Rinks Dal Flow
- ✳ Ordlingassoq Flow
- △ Qordlortorssuaq Flow
- ✳ Kuganguaq Flow
- ✺ Asuk Flow
- · Naujanguit Flow

Figure 15

'93' DISKO FLOWS



LEGEND

- ☆ Niagussat Flow
- □ Nordfjord Flow
- + Rinks Dal Flow
- ✳ Ordlingassoq Flow
- △ Qordlortorssuaq Flow
- ✳ Kuganguaq Flow
- ✺ Asuk Flow
- · Naujanguit Flow

Figure 16

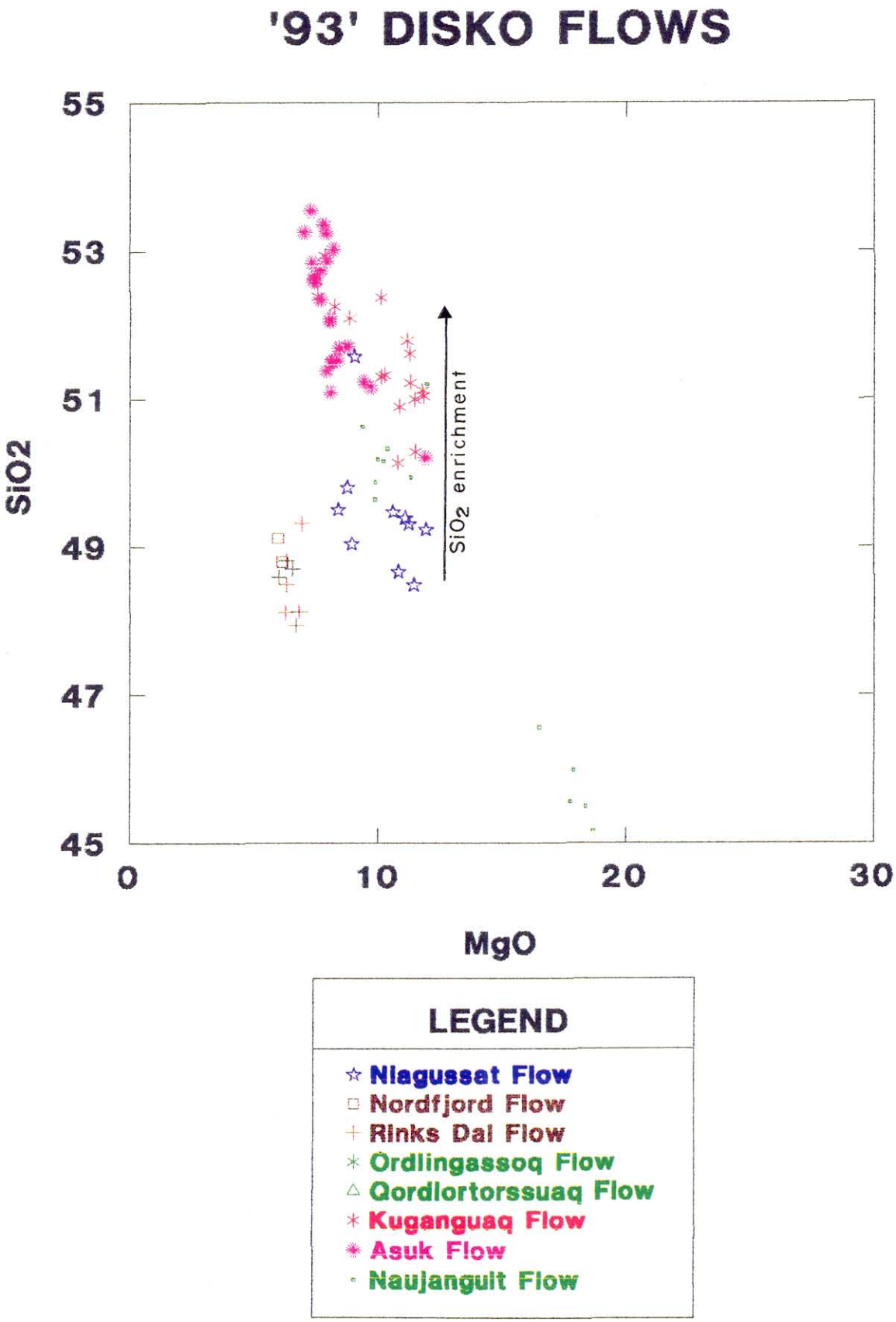
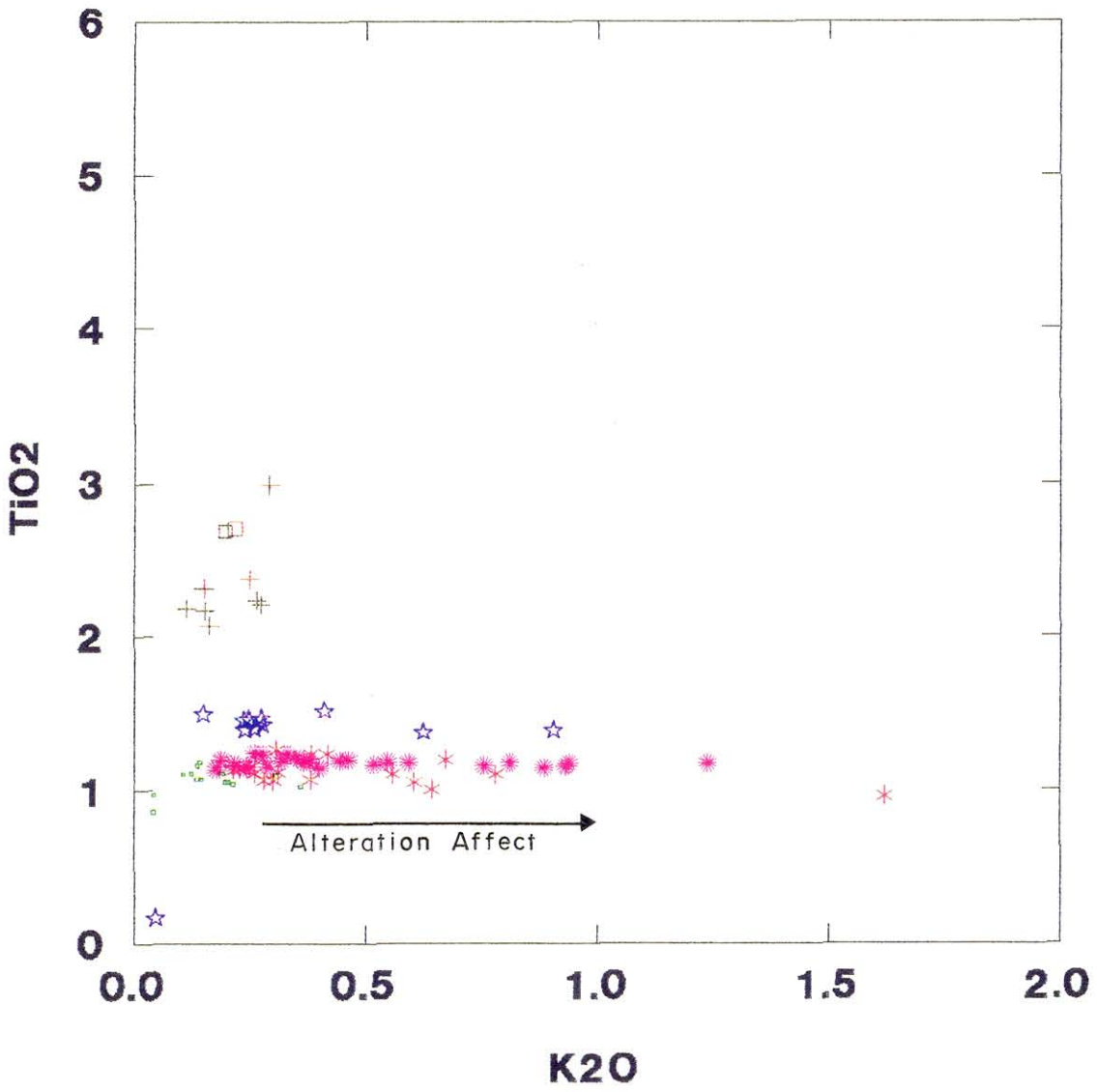

'93' DISKO FLOWS
55
53
51
49
47
45
SiO2
0
10
20
30
MgO
SiO2 enrichment
LEGEND
Niagusset Flow
Nordfjord Flow
Rinks Dal Flow
Ordlingassoq Flow
Qordlortorssuaq Flow
Kuganguaq Flow
Asuk Flow
Naujanguit Flow

Figure 17

'93' DISKO FLOWS



LEGEND

- ☆ Niagusset Flow
- □ Nordfjord Flow
- \+ Rinks Dal Flow
- ✳ Ordlingassoq Flow
- △ Qordlortorssuaq Flow
- ✳ Kuganguaq Flow
- ✳ Asuk Flow
- ▫ Naujanguit Flow

Figure 18

Stratigraphic profiles through the Asuk and Kûgánguaq Members were sampled on the north wall of the Kûgánguaq Valley, at Harold Moltke Dal and 4 km SE of Naujánguit on the north coast of Disko Island (D-93-07, 08, 11, 12 & 13). Where possible, samples were collected at the base, centre and top of the individual flows. The detailed sampling is expected to provide useful information on both the vertical and lateral compositional variation within the flows. The latter exercise may indicate how fast the magma system was evolving and perhaps determine if there is any variation in the degree of contamination along strike in the flows. The main objective of the study is to establish exploration geochemical criteria for mapping out eruption centres. The high precision analyses necessary to complete these objectives will be provided through the research project.

The TiO_2 versus MgO plot separates the Asuk and Kûgánguaq Members based on MgO content (Figure 14). The affects of a low grade alteration may be contributing to the spread in potassium values on the TiO_2 versus K_2O plot (Figure 18).

Mapping and Prospecting Disko Island

Mapping and prospecting for eruption sites and mineralization was completed for an area centred between the Kûgánguaq Valley and the Vaigat, on Disko Island. Dykes easily accessible along the valley walls were visited and classified according to texture and composition. The sampling of dykes was selective and based on representation. The main objective was to identify feeder dykes/eruption centres for the contaminated, tholeiitic lavas of the Vaigat and Maligat Formations.

A total of 44 samples of dykes and 4 sill samples were collected. The program was successful in locating one Kûgánguaq and three "Niagussat-like" feeder dykes. The Kûgánguaq feeder dyke (NS-02951) intrudes Vaigat flows 4 km east of the entrance to the Kûgánguaq Valley and 2-3 km NE of the Kûgánguaq crater site. The dyke is described in field notes as a fine-grained, aphyric, non-magnetic, 7 m wide, Maligat dyke orientated 079°/70° NW. The unit has a blocky, reddish-brown, weathered surface which may have

contributed to the wrong classification. The dyke is strongly depleted in Ni and Cu and plots within the Kûgánguaq affinity field (Figures 11 & 12). The Kûgánguaq crater site has been documented by Pedersen (1985) who indicates that the eruptive event produced about 7.5 km^3 of contaminated, Ni & Cu depleted lavas and tuffs over an area of about 200 km^2. The eruption area is situated just east of a major, N-S, fault zone (Pedersen, 1985). The volume of erupted lavas may be small in comparison to other eruption events, but the magma chamber hosting segregated Ni-sulphides could be of considerable size.

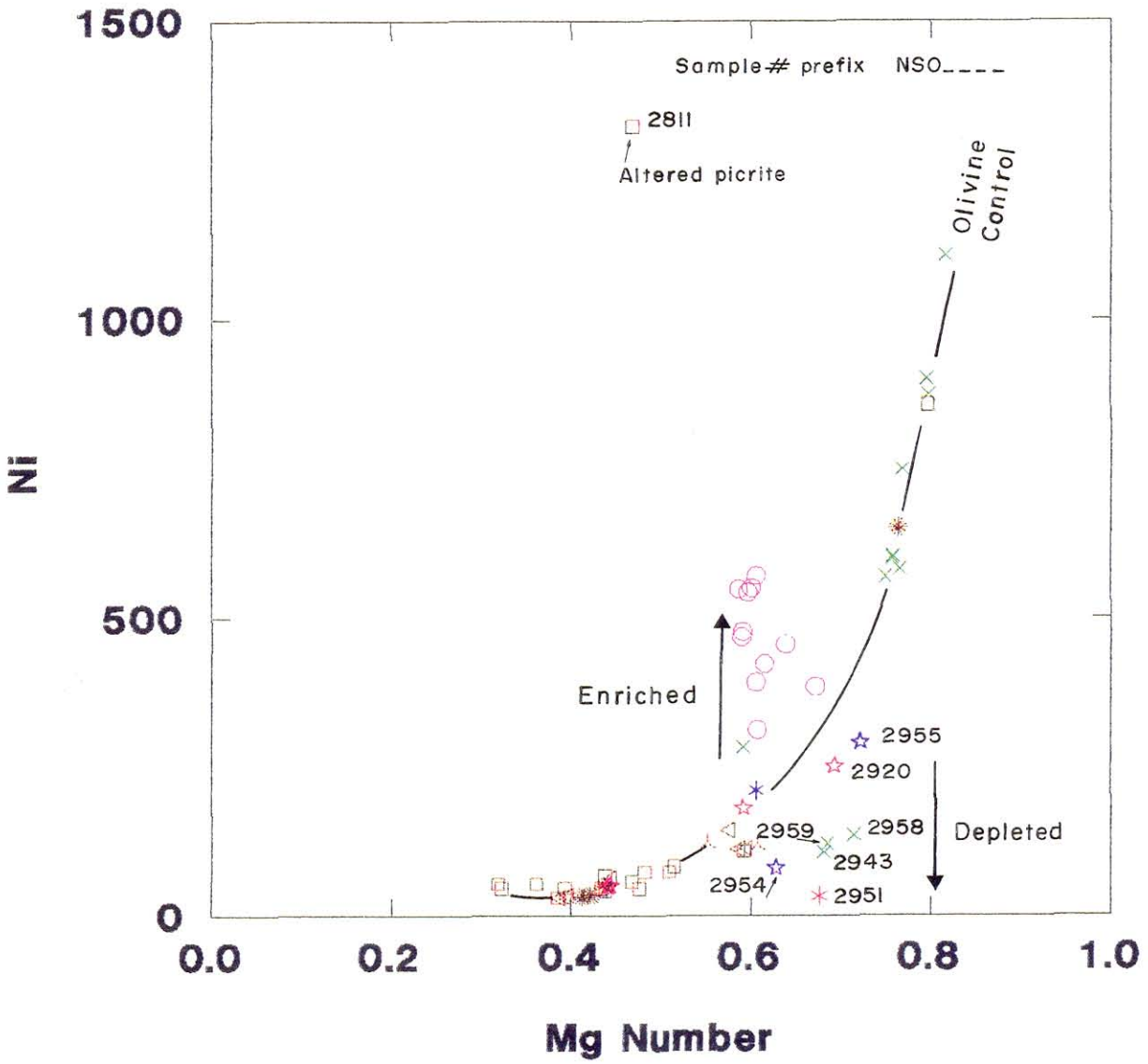
The three "Niagussat-like" dykes (NS-02943, 02958 & 02959) are located on the north side of Harold Moltke Dal and within a 2 km radius of the Kûgánguaq crater site. The dykes are 1- 3 m thick, fine-grained, olivine-pyroxene porphyritic, weakly to moderately magnetic and weather an olive to tan-brown colour. The dykes twist and roll up through the volcanic pile resulting in very irregular contacts. Spots of Fe-staining are common along the contact of dyke NS-02959. The mineral assemblage and the magnetic susceptibility responses, of the dykes favour a Vaigat classification. Minor amygdules along the dyke contacts, suggests a close proximity to the eroded eruption site. Despite the physical correlation of the dykes to Vaigat volcanism, geochemically they are comparable to the MgO-rich core phase of the Niagussat feeder dyke (figure 11). On the Ni versus Mg Number plot, the samples show similar Ni loss as the marginal phase of the Niagussat dyke (Figure 19, sample NS-02954). All three dykes are depleted in Cu, most likely by sulphide removal (Figure 22).

A small, 1 m thick, olivine-pyroxene sill intrudes hyaloclastite breccia on the north wall of the Kûgánguaq Valley above grid 3A. The sill occurs within a fault zone at an elevation of 618 m and extends approximately 15 m to the east before terminating. The sill (NS-02920) is correlated geochemically with the three "Niagussat-like" dykes described above (figure 11).

Mapping and Prospecting Nuussuaq Peninsula

Mapping and prospecting in the Auvfarssuaq Valley on Nuussuaq Peninsula was carried out from a four person tent camp located on the south side of the valley, directly across from the entrance to the Quvnilik Valley. The purpose of program was to identify feeder

'93' DISKO INTRUSIONS



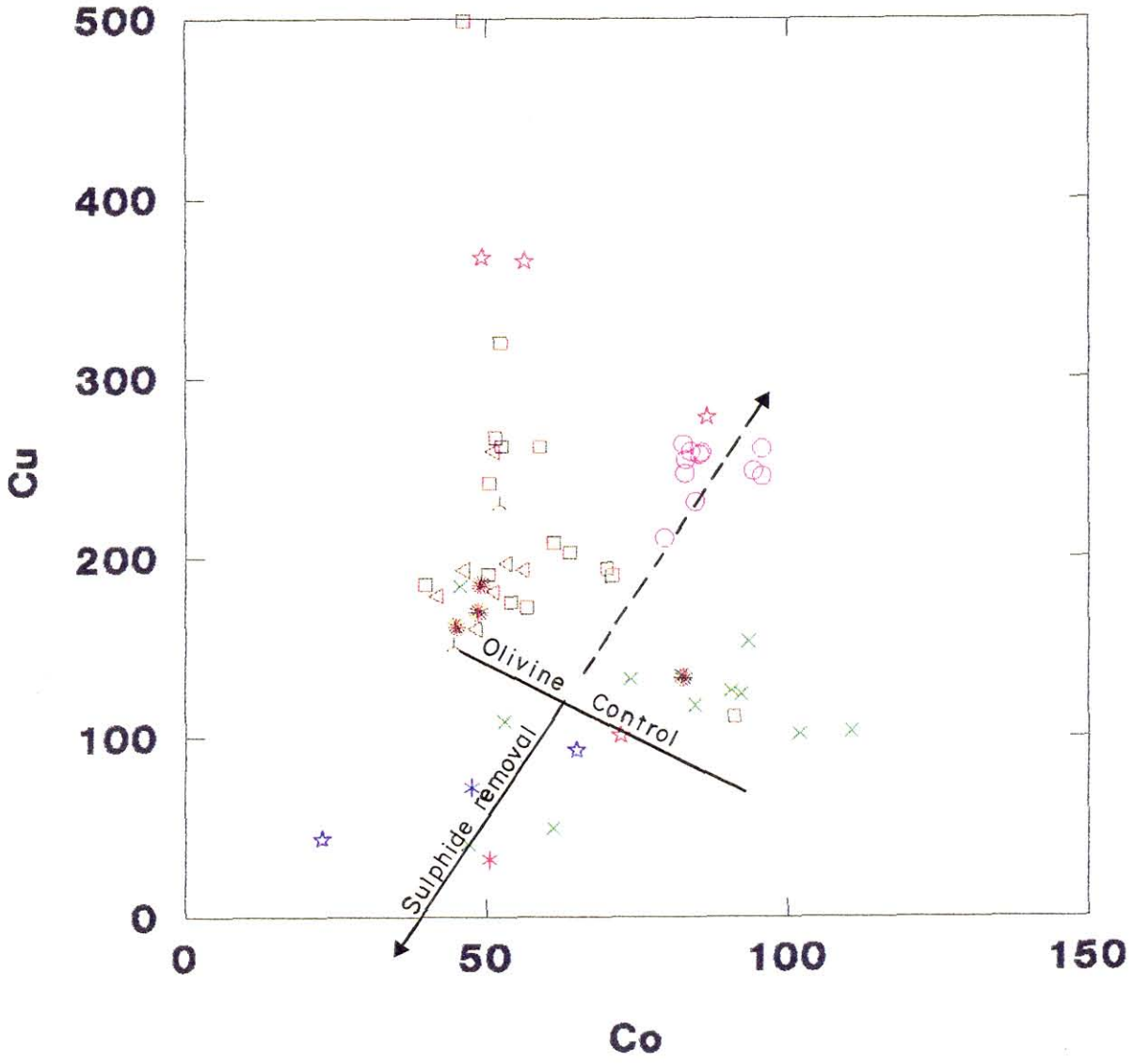
$$\text{Mg Number} = \frac{(MgO / 40{\cdot}32)}{(MgO/40{\cdot}32) + \frac{0{\cdot}85(0{\cdot}8998 \times Fe_2O_3)}{71{\cdot}85}}$$

LEGEND

- Kuganguaq Feeder
- Niagussat Feeder
- Maligat Dolerite Dyke
- Maligat Olivine Dyke
- Maligat Aphyric Dyke
- Maligat Fp.Dyke
- Vaigat Olivine Dyke
- Igdlukunguaq Dyke
- Qutdligssat Sill
- Unkown Sill

Figure 19

'93' DISKO INTRUSIONS



LEGEND

- Kuganguaq Feeder
- Niagussat Feeder
- Maligat Dolerite Dyke
- Maligat Olivine Dyke
- Maligat Aphyric Dyke
- Maligat Fp.Dyke
- Vaigat Olivine Dyke
- Igdlukunguaq Dyke
- Qutdligssat Sill
- Unkown Sill

Figure 20

dykes/eruption centres for the contaminated, tholeiitic lavas. The field investigation concentrated on an area ranging up to 5 km on either side of the Quvnilik fault along the south wall of the Auvfarssuaq Valley. The geology in the area is dominated by picritic hyaloclastite pillow breccias underlain by Cretaceous, non-marine, quartz-pebble, sandstone and coalified, carbonaceous siltstone. East of the fault, tuffaceous units are found intercalated with the breccia. A 5m thick, graphitic, block-lapilli-tuff is believed to be related to the Ilugigsoq vent-eruption centre discovered by Lotte Melchior Larsen and Asger Ken Pedersen in 1992. At site A on the 1:20,000 scale map 3E3, large blocks of hyaloclastite breccia are hosted in a highly disturbed section of altered pillow breccia. The site may be indicating an eruption site or the proximity to a centre.

A total of 11 dyke were sampled along the 10 km section of the valley wall. The dykes plot as Vaigat feeders and one is related to Maligat volcanism (Figure 21). No Ni or Cu depletion was detected in the dykes (figure 22). No mineralization or sills were discovered.

A site visit to the Serfat Sill was completed in mid August. The stratigraphic top of the sill is exposed at an elevation of 114 m. At this elevation, the sill is fine-grained, siliceous, aphyric, hosting 5%, irregular to subrounded amygdules and 10-20 cm sized, irregular to semi-globby shaped, dark-grey shale xenoliths. Minor specks of sulphide occur along the contact of the shale fragments. Magnetic susceptibility readings through the dolerite sill are very low (0.44 x 10 emu) whereas the intruding picrite sill has levels up to 20 x 10 emu.

The Serfat dolerite sill complex has become an attractive exploration target. This strongly Ni-Cu depleted intrusion is located 3 km west of the Boundary Fault and 4 km NE of the Saviargat Fe-Ni showing. Preliminary high precision geochemical data indicates that the sill has similar rare earth element abundances and trace element signatures as the nickel sulphide-bearing Igdlukunguaq and Hammersdal dykes on Disko Island (Figure 23). The spread in the light REEs may be indicating levels of contamination.

Mapping and Prospecting Disko Island & Nuussuaq Peninsula Summary

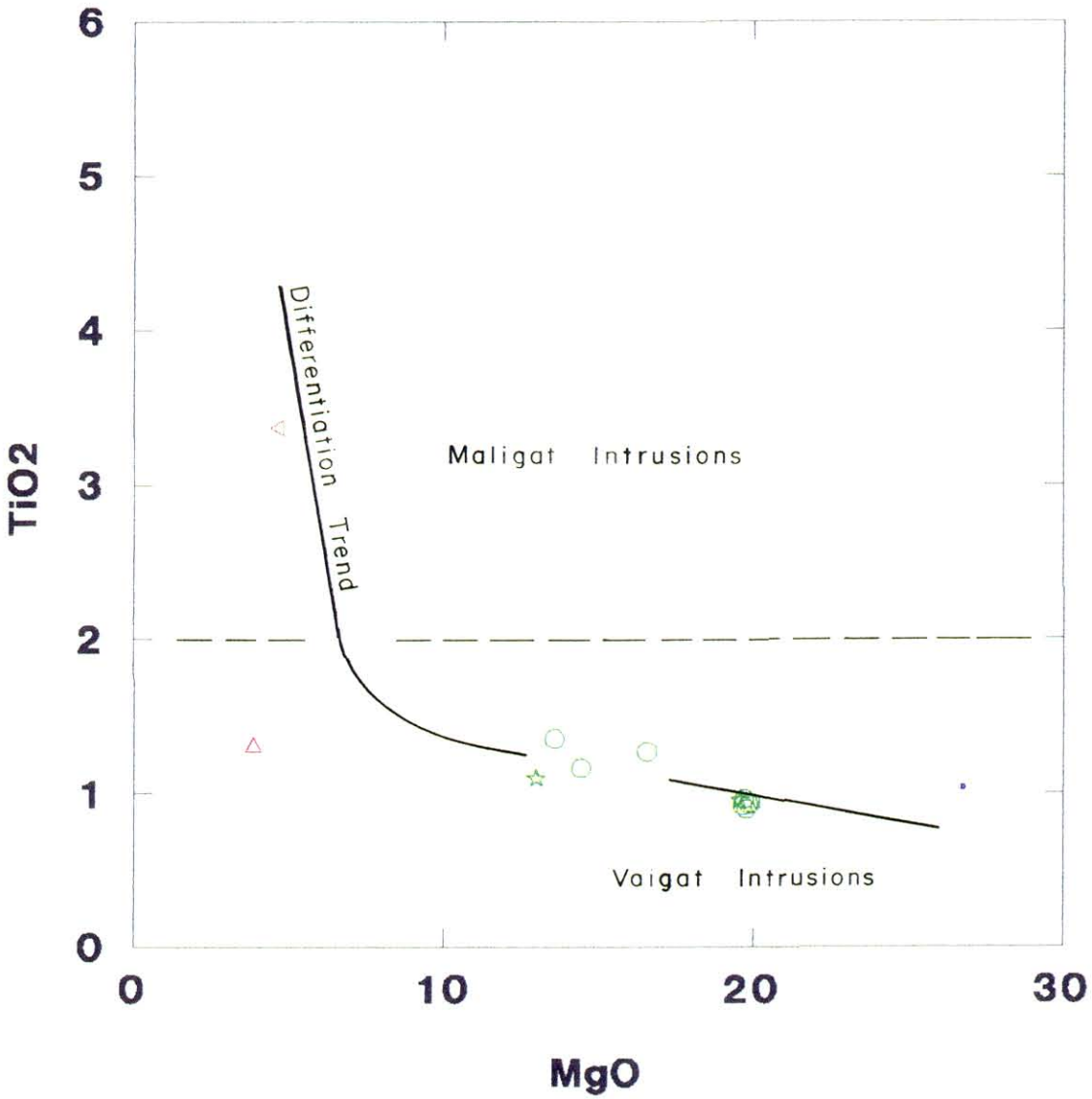
Disko Island

- No new mineral occurrences were discovered during the course of the program.
- Four Ni and Cu depleted dykes were located in close proximity to the Kûgánguaq crater site. One dyke correlates to the Kûgánguaq eruption event while the remaining dykes may represent feeders to the Niagussat Member lavas or possibly to an now eroded event, associated with the Kûgánguaq crater site.

Nuussuaq Peninsula

- No new mineral occurrences were discovered during the course of the program.
- A site for an uncontaminated, Vaigat eruption was located.
- The Serfat dolerite sill has similar rare earth element abundances and trace element signatures as the nickel sulphide-bearing Igdlukunguaq and Hammersdal dykes on Disko Island.

'93' NUUSSUAQ INTRUSIONS

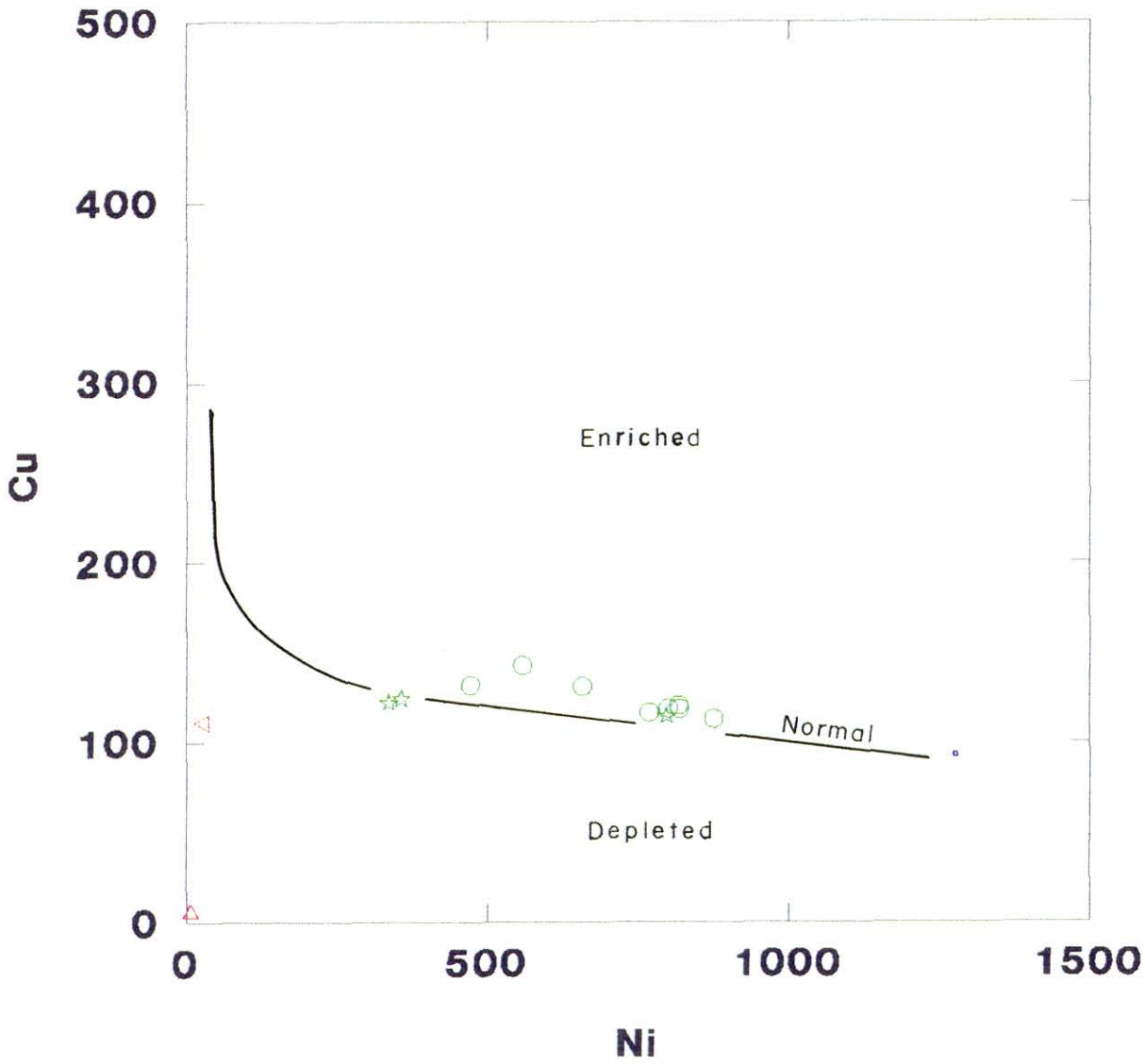


LEGEND

- Maligat Fp. Dyke
- Maligat Aphyric Dyke
- Sarqaq Ti-rich Dyke
- Vaigat Aphyric Magnetic Dyke
- Vaigat Ol/Pyx Dyke
- Vaigat Fp/Ol/Pyx Dyke
- Vaigat Aphyric Non-Mag. Dyke
- Serfat Dolerite Sill

Figure 21

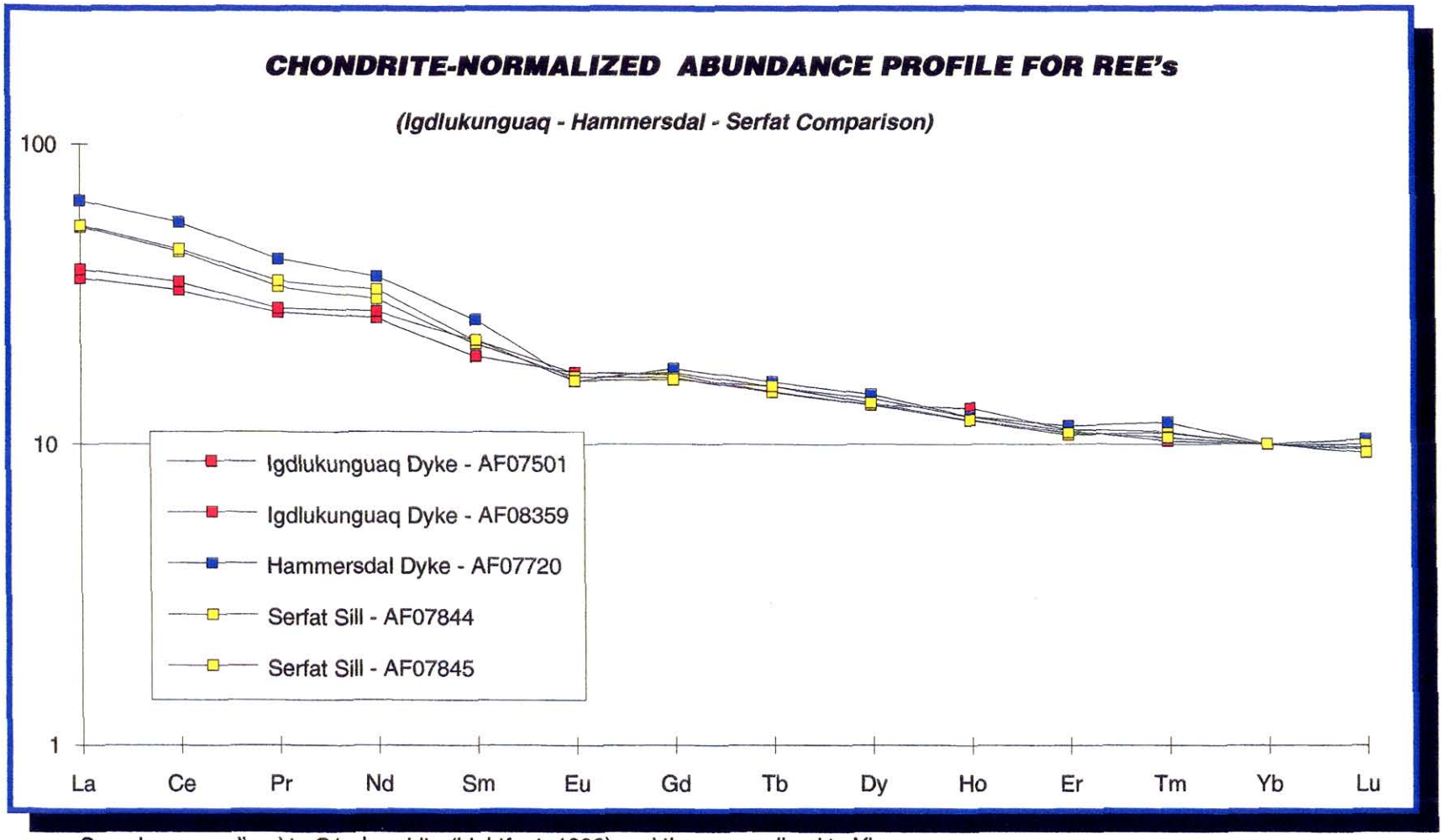
'93' NUUSSUAQ INTRUSIONS



LEGEND

- □ Maligat Fp. Dyke
- < Maligat Aphyric Dyke
- + Sarqaq Ti-rich Dyke
- × Vaigat Aphyric Magnetic Dyke
- ☆ Vaigat Ol/Pyx Dyke
- ○ Vaigat Fp/Ol/Pyx Dyke
- ✳ Vaigat Aphyric Non-Mag. Dyke
- △ Serfat Dolerite Sill

Figure 22



Samples normalized to C1-chondrite (Lightfoot, 1993) and then normalized to Yb

ACKNOWLEDGEMENTS

We appreciate the dedicated assistance and support from professional and technical staff at the GGU, Falconbridge, Platinova and our supporting contractors.

We especially thank Flemming Christiansen, Gregers Dam and Mogens Lind for their assistance in the summer logistics. Special thanks are given to Asger Ken Pedersen for offering his geological guidance and knowledge of the flood basalt province.

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APPENDIX I

List of 1993 Expenditures

1993 EXPENDITURES IN DANISH KRONER

	LIC. 02/91	LIC. 03/91	PROSP. LIC. 156	TOTAL
FIELD COSTS				
SALARIES	564,124	450,272	29,529	1,043,925
CAMP	202,491	147,266	18,408	368,166
COMMUNICATION	47,285	34,389	4,299	85,973
TRAVEL/AIRFARE	115,044	83,669	10,458	209,173
FIELD SUPPLIES	61,816	44,957	5,620	112,393
HELICOPTER FUEL	49,405	35,931	4,491	89,828
SHIPPING COST	37,680	27,403	3,425	68,509
AIRPORT FEES/CHARGES	8,015	5,829	729	14,573
DRILL SUPPLIES	45,867			45,867
MAJOR CONTRACTED FIELD SERVICES				
GEOPHYSICS	213,631	91,556	0	305,187
HELICOPTER	706,676	495,913	37,193	1,239,782
DIAMOND DRILLING	451,247	110,475	0	561,721
BOAT	52,991	52,991	0	105,981
LAKEFIELD RESEARCH	19,713	4,928	0	24,642
OPEN UNIVERSITY	25,677	25,677	0	51,354
PGW	22,846	22,847	0	45,692
PHOTOSUR GEOMAT	11,555	11,555	0	23,186
PETROGRAPHIC PREP.	4,062	4,062	0	8,124
ADI NOLAN, DAVIS	4,062	4,062	0	15,186
TOTALS	2,647,719	1,657,314	114,153	4,419,186
GENERAL ALLOWANCE 50%	3,971,579	2,485,970	171,229	6,628,778

Confirmation of salaries, contract expenses and expenditures exceeding 10000 DKK are appended. Canadian Dollars were converted to Danish Kroner using the exchange rate of DDK 5.1354 per CDN $. This rate was provide by Karen Christensen in the appended letter dated February 17th, 1994. Costs have generally been apportioned on a pro rata basis between exclusive exploration licenses.

MINISTRY OF ENERGY
MINERAL RESOURCES ADMINISTRATION FOR GREENLAND
1, Slotsholmsgade 4th floor, DK-1216 Copenhagen K
Phone +45 33 92 75 00 – Telex 15505 enrgy dk – Telefax +45 33 13 30 17

Date 17 FEB. 1994
Letter No. 000162
Ref. No. 9234-03-03

FEB 24 1994

KC/vj/Z/977/94

Falconbridge Limited
Att.: Kevin Olshevsky
124 Water St.
Windsor, N.S.
Canada BON 2TO

Dear Mr Olshefsky,

At a meeting on February 16, 1994 Robert D. Stewart asked MRA to provide you with the exchange rate for CAD/DKK on the first bank day of July 1993 as published by the Danish Central Bank.

Please note that according to section 610 in the Standard Terms exploration expenses will be calculated as the amounts entered in the licensee's book-keeping which in your case, I presume, is in CAD. The total sum of expenses shall then be converted to DKK by using either the exchange rate on the first bank day of July in the calendar year in question as published by the Danish Central Bank or an alternative conversion procedure which is approved by MRA.

MRA can inform you that the exchange rate was 513,54 for CAD/DKK on the first bank day of July 1993.

Yours sincerely,

K. Chr.

Karen Christensen

General Ledger Listing as of December 31, 1993

P	Dept.	Pd	Srce	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
	601604	15905			FIELD EXPENSES GEOLOGY NFT (continued)						
		2	GL-	9 Feb 01 93	JANUARY A					1,117.00	
		2	GL-	9 Feb 01 93	JANUARY A				1,276.41		
		2	GL-	9 Feb 25 93	PGI				2,778.00		
		2	GL-	9 Feb 25 93	PGI				1,117.00		
		2	GL-	9 Feb 25 93	KNI					1,276.41	1,892.41
											2,649.53
		3	AP-IN	Feb 11 93	APIN # 6				14.61		
		3	AP-IN	Feb 12 93	APIN # 6				12.95		
		3	AP-IN	Feb 18 93	APIN # 6				23.80		
		3	AP-IN	Feb 19 93	APIN # 7				62.15		
		3	AP-IN	Feb 27 93	APIN # 6				15.89		
		3	AP-IN	Feb 27 93	APIN # 7				211.60		
		3	AP-IN	Mar 01 93	APIN # 7				129.24		
		3	AP-IN	Mar 02 93	APIN # 6				38.42		
		3	AP-IN	Mar 03 93	APIN # 6				720.41		
		3	AP-IN	Mar 04 93	APIN # 6				32.50		
		3	AP-IN	Mar 04 93	APIN # 7				324.30		
		3	AP-IN	Mar 05 93	APIN # 7				80.37		
		3	AP-IN	Mar 05 93	APIN # 7				76.95		
		3	AP-IN	Mar 08 93	APIN # 7				111.00		
		3	AP-IN	Mar 11 93	APIN # 7					11.07	
		3	AP-IN	Mar 11 93	APIN # 7					26.90	
		3	AP-IN	Mar 11 93	APIN # 7				36.31		
		3	AP-IN	Mar 15 93	APIN # 7				138.37		
		3	AP-IN	Mar 17 93	APIN # 7				1,076.69		
		3	AP-IN	Mar 24 93	APIN # 7				239.99		
		3	AP-IN	Mar 26 93	APIN # 7				58.61		
		3	AP-IN	Mar 26 93	APIN # 8				572.36		
		3	GL-	5 Mar 29 93	KNI - KALAALL					1,217.77	
		3	GL-	9 Mar 04 93	FEBRUARY ACCRI			8-2		2,778.00	
		3	GL-	9 Mar 04 93	FEBRUARY ACCRI	PGI	5-2	8-2		1,117.00	
		3	GL-	9 Mar 04 93	FEBRUARY ACCRUAL REVERSAL	KNI	5-2	8-2	1,276.41		
		3	GL-	9 Mar 30 93	PLATINOVA REFUND	MAR ACCRUAL	5-4	8-4		1,200.00	
		3	GL-	9 Mar 30 93	PGI (92)	MAR ACCRUAL	5-4	8-4	2,778.00		
		3	GL-	9 Mar 30 93	PGI (92)	MAR ACCRUAL	5-4	8-4	1,117.00		2,797.19
											5,446.72
		4	AP-IN	Mar 18 93	APIN # 9 MARITIME TEL &	18/93	7-7	12-3	5.51		
		4	AP-IN	Mar 23 93	APIN # 9 HALIFAX OFFICE	16522	7-7	12-3	362.27		
		4	AP-IN	Apr 01 93	APIN # 10 MARITIME TEL &	01/93	7-7	12-3	156.47		
		4	AP-IN	Apr 06 93	APIN # 10 IRVING OIL LTD	06/93	7-7	12-3	124.21		
		4	AP-IN	Apr 08 93	APIN # 10 TONY GREEN	08/93	7-7	12-3	74.38		
		4	AP-IN	Apr 08 93	APIN # 10 NORMAN WADE CO	-59545	7-7	12-3	225.83		
		4	AP-IN	Apr 12 93	APIN # 9 ROBERT STEWART	12/93	7-7	12-3	6.55		
		4	AP-IN	Apr 12 93	APIN # 10 NORMAN WADE CO	-59640	7-7	12-3	77.87		
		4	AP-IN	Apr 12 93	APIN # 10 CROWNTEK BUSIN	008821	7-7	12-3	97.97		
		4	AP-IN	Apr 13 93	APIN # 9 CANADIAN IMPER	MC	7-7	12-3	405.53		
		4	AP-IN	Apr 14 93	APIN # 10 HALIFAX OFFICE	18368	7-7	12-3	70.85		
		4	AP-IN	Apr 16 93	APIN # 10 KEVIN OLSHEFSK	MC-544	7-7	12-3	118.84		
		4	AP-IN	Apr 16 93	APIN # 10 KEVIN OLSHEFSK	MC-544	7-7	12-3	1,435.05		
		4	AP-IN	Apr 20 93	APIN # 10 MICROTEK SYSTE	4347	7-7	12-3	226.73		
		4	GL-	9 Apr 14 93	MARCH ACCRUAL REVERSAL	PLATINOVA RE	7-1	11-1	1,200.00		
		4	GL-	9 Apr 14 93	MARCH ACCRUAL REVERSAL	PGI (92)	7-1	11-1		2,778.00	
		4	GL-	9 Apr 14 93	MARCH ACCRUAL REVERSAL	PGI (92)	7-1	11-1		1,117.00	
		4	GL-	9 Apr 28 93	PLATINOVA REFUND (92)	APR ACCRUAL	7-4	11-4		1,200.00	
		4	GL-	9 Apr 28 93	PGI (92)	APR ACCRUAL	7-4	11-4	2,778.00		
		4	GL-	9 Apr 28 93	PGI (92)	APR ACCRUAL	7-4	11-4	1,117.00		
		4	GL-	9 Apr 28 93	SUPPLIES KO	APR ACCRUAL	7-4	11-4	5,000.00		
		4	GL-	9 Apr 28 93	TENTS	APR ACCRUAL	7-4	11-4	7,000.00		15,388.06
											20,834.78
		5	AP-IN	Apr 18 93	APIN # 11 MARITIME TEL &	18/93	9-7	15-3	22.19		
		5	AP-IN	Apr 22 93	APIN # 11 KONSULT INTERN	347	9-7	15-3	21.00		
		5	AP-IN	Apr 23 93	APIN # 11 DON OSBURN	111248	9-7	15-3	412.00 L		
		5	AP-IN	Apr 30 93	APIN # 11 CROWNTEK BUSIN	008989	9-7	15-3	343.72		
		5	AP-IN	May 01 93	APIN # 12 IRVING OIL LTD	01/93	9-7	15-3	121.50		
		5	AP-IN	May 01 93	APIN # 12 MARITIME TEL &	01/93	9-7	15-3	174.19		
		5	AP-IN	May 07 93	APIN # 12 WEATHERHAVEN R	1048	9-7	15-3	6,688.85 C		
		5	AP-IN	May 13 93	APIN # 12 GATEWAY TRAVEL	/93-GM	9-7	15-3	1,515.50 A		
		5	AP-IN	May 14 93	APIN # 12 PUROLATOR COUR	4471-2	9-7	15-3	46.95		
		5	AP-IN	May 18 93	APIN # 12 NORMAN WADE CO	-61765	9-7	15-3	690.37		

CODES

A - Airfare

L - Lab Work

C - Camp

FS - Field Supplies

EXC - External Consultant

COM - Communication

S - Shipping

P - Platinova Invoice

D - Drilling

H - Helicopter

EXP - Personal Expense Account

General Ledger Listing as of December 31, 1993

A[illegible] Dept.

Pd	Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601604 15905 FIELD EXPENSES GEOLOGY NFT (continued)									
7	AP-IN	Jul 07 93	APIN # 16 ROBERT STEWART	07/93	15-3	22-3	2,540.00		
7	AP-IN	Jul 09 93	APIN # 18 AIR CANADA CAR	094049	20-6	29-3	337.48		
7	GL- 3	Jul 27 93	INSUR. PREMIUMS RE NON-OWNED	7-1 TORONTO	20-2	28-2	1,876.00		
7	GL- 5	Jul 15 93	INVOICE REVERSAL 7/15	HELLY HANSON	17-1	25-1		10,154.20	
7	GL- 5	Jul 27 93	HELLY HANSON	REVERSE 7/15	20-1	28-1	10,154.20		
7	GL- 5	Jul 27 93	PLATINOVA CABLE INV #93027-28	CIBC	20-3	28-3	22,426.75		
7	GL- 5	Jul 29 93	HELLY HANSEN CHEQ # 5533	CORRECT ERRO	22-1	31-1	0.10		
7	GL- 5	Aug 31 93	HELLY HANSON	TRANSFER-909	25-1	34-1		10,154.20	
7	GL- 5	Aug 31 93	TORONTO ADVISE - INSURANCE PRE	TRANSFER-909	25-1	34-1		1,876.00	
7	GL- 5	Aug 31 93	PLATINOVA	TRANSFER-909	25-1	34-1		22,426.75	
7	GL- 5	Aug 31 93	PICTURE-IT BOUTIQUE	TRANSFER-909	25-1	34-1		97.19	
7	GL- 5	Aug 31 93	KONSULT	TRANSFER-909	25-1	34-1		6.00	
7	GL- 5	Aug 31 93	TELEFIX	TRANSFER-909	25-1	34-1		695.00	
7	GL- 5	Aug 31 93	MARITIME TEL	TRANSFER-909	25-1	34-1		110.86	
7	GL- 5	Aug 31 93	NEW SCOTLAND	TRANSFER-909	25-1	34-1		624.35	
7	GL- 5	Aug 31 93	IRVING OIL	TRANSFER-909	25-1	34-1		28.94	
7	GL- 5	Aug 31 93	AIR CANADA	TRANSFER-909	25-1	34-1		337.48	
7	GL- 5	Aug 31 93	ACCRUAL - PLATINOVA (CAMP)	TRANSFER-909	25-1	34-1		4,051.00	
7	GL- 5	Aug 31 93	ACCRUAL - PLATINOVA (FOOD)	TRANSFER-909	25-1	34-1		6,558.00	
7	GL- 5	Aug 31 93	ACCRUAL - AIR CANADA	TRANSFER-909	25-1	34-1		3,797.00	
7	GL- 5	Aug 31 93	HELLY HANSON	TRANSFER-909	25-1	34-1		0.10	
7	GL- 9	Jul 14 93	JUNE ACCURAL REVERSAL	PLATINOVA	15-4	23-1		2,000.00	
7	GL- 9	Jul 14 93	JUNE ACCURAL REVERSAL	AIR CANADA	15-4	23-1		3,797.00	
7	GL- 9	Jul 29 93	PLATINOVA (CAMP RENTAL)	JULY ACCRUAL	21-3	30-3	4,051.00		
7	GL- 9	Jul 29 93	PLATINOVA (FOOD)	JULY ACCRUAL	21-3	30-3	6,558.00		
7	GL- 9	Jul 29 93	AIR CANADA	JULY ACCRUAL	21-3	30-3	3,797.00		4,025.31-
									62,868.41
8	GL- 5	Aug 25 93	HELLY HANSON	TRANSFER-909	23-1	32-1		10,154.20	
8	GL- 5	Aug 25 93	TORONTO ADVISE - INSURANCE PRE	TRANSFER-909	23-1	32-1		1,876.00	
8	GL- 5	Aug 25 93	PLATINOVA	TRANSFER-909	23-1	32-1		22,426.75	
8	GL- 5	Aug 25 93	PICTURE-IT BOUTIQUE	TRANSFER-909	23-1	32-1		97.19	
8	GL- 5	Aug 25 93	KONSULT	TRANSFER-909	23-1	32-1		6.00	
8	GL- 5	Aug 25 93	TELEFIX	TRANSFER-909	23-1	32-1		695.00	
8	GL- 5	Aug 25 93	MARITIME TEL	TRANSFER-909	23-1	32-1		110.86	
8	GL- 5	Aug 25 93	NEW SCOTLAND	TRANSFER-909	23-1	32-1		624.35	
8	GL- 5	Aug 25 93	IRVING OIL	TRANSFER-909	23-1	32-1		28.94	
8	GL- 5	Aug 25 93	AIR CANADA	TRANSFER-909	23-1	32-1		337.48	
8	GL- 5	Aug 25 93	ACCRUAL - PLATINOVA (CAMP)	TRANSFER-909	23-1	32-1		4,051.00	
8	GL- 5	Aug 25 93	ACCRUAL - PLATINOVA (FOOD)	TRANSFER-909	23-1	32-1		6,558.00	
8	GL- 5	Aug 25 93	ACCRUAL - AIR CANADA	TRANSFER-909	23-1	32-1		3,797.00	
8	GL- 5	Aug 25 93	HELLY HANSON	TRANSFER-909	23-1	32-1		0.10	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	50,762.87		0.00
				Ending balance					62,868.41
									0.00
601608 15905 ASSAYS GEOLOGY NFT									
1	AP-IN	Jan 07 93	APIN # 2 X-RAY ASSAY LA	22990	1-5	2-3	3,346.70		
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	XRAL ASSAY	1-1	1-1		6,500.00	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	OPEN UNIV.	1-1	1-1		10,000.00	
1	GL- 9	Jan 28 93	XRAL	JAN ACCRUALS	1-2	1-2	3,154.00		
1	GL- 9	Jan 28 93	OPEN UNIVERSITY-UK	JAN ACCRUALS	1-2	1-2	10,000.00		0.70
									0.70
2	GL- 9	Feb 01 93	JANUARY ACCRUAL REVERSAL	XRAL	2-1	4-1		3,154.00	
2	GL- 9	Feb 01 93	JANUARY ACCRUAL REVERSAL	OPEN UNIVERS	2-1	4-1		10,000.00	
2	GL- 9	Feb 25 93	XRAL	FEB ACCRUAL	2-4	4-4	3,154.00		
2	GL- 9	Feb 25 93	OPEN UNIVERSITY	FEB ACCRUAL	2-4	4-4	10,000.00		0.00
									0.70
3	GL- 9	Mar 04 93	FEBRUARY ACCRUAL REVERSAL	XRAL	5-2	8-2		3,154.00	
3	GL- 9	Mar 04 93	FEBRUARY ACCRUAL REVERSAL	OPEN UNIV.	5-2	8-2		10,000.00	
3	GL- 9	Mar 30 93	XRAL (92)	MAR ACCRUAL	5-4	8-4	3,154.00		
3	GL- 9	Mar 30 93	OPEN UNIVERSITY (92)	MAR ACCRUAL	5-4	8-4	10,000.00		0.00
									0.70
4	GL- 9	Apr 14 93	MARCH ACCRUAL REVERSAL	XRAL (92)	7-1	11-1		3,154.00	
4	GL- 9	Apr 14 93	MARCH ACCRUAL REVERSAL	OPEN UNIVERS	7-1	11-1		10,000.00	
4	GL- 9	Apr 28 93	XRAL (92)	APR ACCRUAL	7-4	11-4	3,154.00		
4	GL- 9	Apr 28 93	OPEN UNIVERSITY (92)	APR ACCRUAL	7-4	11-4	10,000.00		0.00
									0.70
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	XRAL (92)	9-1	14-1		3,154.00	
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	OPEN UNIVERS	9-1	14-1		10,000.00	
5	GL- 9	May 31 93	XRAL (92)	MAY ACCRUALS	9-4	14-4	3,154.00		

General Ledger Listing as of December 31, 1993

Pd	A· . Dept. ..ce	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601604	15905 FIELD EXPENSES		GEOLOGY NFT (continued)						
5	AP-IN	May 18 93	APIN # 12 P & H DRAFTING	3-0020	9-7	15-3	2,385.00 FS		
5	AP-IN	May 19 93	APIN # 12 KEVIN OLSHEFSK	19/93	9-7	15-3	5,087.59		
5	AP-IN	May 19 93	APIN # 12 LE BARON	70215	9-7	15-3	341.40 FS		
5	AP-IN	May 25 93	APIN # 12 GATEWAY TRAVEL	25-PP	9-7	15-3	1,116.00 A		
5	AP-IN	May 25 93	APIN # 12 GATEWAY TRAVEL	/93-GM	9-7	15-3	1,116.00 A		
5	AP-IN	May 25 93	APIN # 12 GATEWAY TRAVEL	/93-PT	9-7	15-3	1,116.00 A		
5	AP-IN	May 26 93	APIN # 12 SURVIVAL SYSTE	26/93	9-7	15-3	850.00		
5	AP-IN	May 27 93	APIN # 12 GATEWAY TRAVEL	/93-IN	9-7	15-3	179.20		
5	AP-IN	May 27 93	APIN # 12 PHOTOSUR GEOMA	002259	9-7	15-3	4,500.00 EXC		
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	PLATINOVA RE	9-1	14-1	1,200.00		
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	PGI (92)	9-1	14-1		2,778.00	
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	PGI (92)	9-1	14-1		1,117.00	
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	SUPPLIES KO	9-1	14-1		5,000.00	
5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	TENTS	9-1	14-1		7,000.00	
5	GL- 9	May 31 93	NEVILLE CROSBY	MAY ACCRUALS	9-4	14-4	3,650.00		
5	GL- 9	May 31 93	AIR CANADA CARGO	MAY ACCRUALS	9-4	14-4	3,797.00		19,479.46
									40,314.24
6	AP-IN	May 12 93	APIN # 13 NEVILLE CROSBY	22774	11-7	18-3	4,290.09 FS		
6	AP-IN	May 12 93	APIN # 13 NEVILLE CROSBY	22776	11-7	18-3	450.00 FS		
6	AP-IN	May 12 93	APIN # 15 FIRST AID PROD	75099	11-7	18-3	93.00 FS		
6	AP-IN	May 18 93	APIN # 13 MARITIME TEL &	18/93	11-7	18-3	62.10		
6	AP-IN	May 20 93	APIN # 13 WINDSOR HOME H	6555	11-7	18-3	9.72 FS		
6	AP-IN	May 26 93	APIN # 14 NORMAN WADE CO	-62177	11-7	18-3	231.36		
6	AP-IN	May 26 93	APIN # 15 NORMAN WADE CO	-62176	11-7	18-3	353.70		
6	AP-IN	May 27 93	APIN # 14 TELEFIX CANADA	17451	11-7	18-3	713.95 FS		
6	AP-IN	May 28 93	APIN # 14 PUROLATOR COUR	4748-5	11-7	18-3	70.85		
6	AP-IN	May 28 93	APIN # 15 LOOMIS COURIER	30-319	11-7	18-3	15.99		
6	AP-IN	May 31 93	APIN # 14 CANADIAN TIRE	31/93	11-7	18-3	393.63		
6	AP-IN	May 31 93	APIN # 13 VAUGHANS STATI	31/93	11-7	18-3	32.42		
6	AP-IN	May 31 93	APIN # 13 NEW SCOTLAND C	67268	11-7	18-3	1,689.85 com		
6	-IN	May 31 93	APIN # 15 GEOSOFT INC.	G2988	11-7	18-3	539.95		
	IN	May 31 93	APIN # 15 NEVILLE CROSBY	23067	11-7	18-3	350.72 FS		
6	-IN	Jun 01 93	APIN # 13 MURRAY JEROME	01/93	11-7	18-3	610.04		
6	AP-IN	Jun 01 93	APIN # 14 MARITIME TEL &	01/93	11-7	18-3	253.41		
6	AP-IN	Jun 02 93	APIN # 14 HALIFAX OFFICE	22323	11-7	18-3	218.36		
6	AP-IN	Jun 02 93	APIN # 14 HALIFAX OFFICE	2323-1	11-7	18-3	72.00		
6	AP-IN	Jun 02 93	APIN # 15 BABCOCK'S	-70391	11-7	18-3	27.67		
6	AP-IN	Jun 04 93	APIN # 14 PUROLATOR COUR	4629-8	11-7	18-3	44.70		
6	AP-IN	Jun 04 93	APIN # 13 HELLY HANSEN C	N 03/3	11-7	18-3	10,154.20 FS		
6	AP-IN	Jun 04 93	APIN # 15 WEATHERHAVEN R	1078	11-7	18-3	147.32 C		
6	AP-IN	Jun 05 93	APIN # 14 VALLEY STATION	96179	11-7	18-3	54.73		
6	AP-IN	Jun 07 93	APIN # 14 EDGECOMBE SPOR	964	11-7	18-3	111.75 FS		
6	AP-IN	Jun 11 93	APIN # 15 PUROLATOR COUR	5484-8	11-7	18-3	10.67		
6	AP-IN	Jun 15 93	APIN # 15 NORMAN WADE CO	-63752	11-7	18-3	40.96		
6	AP-IN	Jun 18 93	APIN # 15 SCOTT MCLEAN	M\C	11-7	18-3	38.68		
6	AP-IN	Jun 22 93	APIN # 15 PETTY CASH	22/93	11-7	18-3	13.90		
6	AP-IN	Jun 25 93	APIN # 15 CANADIAN IMPER	25/93	11-7	18-3	7,135.26		
6	GL- 5	Jun 28 93	HELLY HANSEN CHEQ # 5560	VOID CHEQUE	11-4	17-4		1.00	
6	GL- 9	Jun 16 93	MAY ACCRUAL REVERSAL	NEVILLE CROS	11-1	17-1		3,650.00	
6	GL- 9	Jun 16 93	MAY ACCRUAL REVERSAL	AIR CANADA	11-1	17-1		3,797.00	
6	GL- 9	Jun 29 93	PLATINOVA (BOAT CHARTER)	JUNE ACCURAL	12-1	19-1	2,000.00		
6	GL- 9	Jun 29 93	AIR CANADA CARGO	JUNE ACCURAL	12-1	19-1	3,797.00		26,579.98
									66,894.22
7	AP-IN	Jun 01 93	APIN # 16 HALIFAX OFFICE	2323-2	15-3	22-3	74.44		
7	AP-IN	Jun 04 93	APIN # 17 CANADIAN IMPER	MC	15-3	22-3	8,542.13		
7	AP-IN	Jun 07 93	APIN # 18 PICTURE-IT BOU	11631	20-6	29-3	97.19 FS		
7	AP-IN	Jun 11 93	APIN # 16 NORMAN WADE CO	-63592	15-3	22-3	172.29		
7	AP-IN	Jun 15 93	APIN # 16 THE FRAME MAKE	3172	15-3	22-3	117.61		
7	AP-IN	Jun 18 93	APIN # 16 MARITIME TEL &	18/93	15-3	22-3	59.39		
7	AP-IN	Jun 22 93	APIN # 16 NORMAN WADE CO	-64153	15-3	22-3	45.38		
7	AP-IN	Jun 22 93	APIN # 16 BABCOCK'S	-70855	15-3	22-3	29.21		
7	AP-IN	Jun 28 93	APIN # 18 KONSULT INTERN	425	20-6	29-3	6.00		
7	AP-IN	Jun 28 93	APIN # 16 WINDSOR HOME H	28/93	15-3	22-3	11.03		
7	AP-IN	Jun 30 93	APIN # 18 TELEFIX CANADA	17924	20-6	29-3	695.00 FS		
7	-IN	Jun 30 93	APIN # 16 NORMAN WADE CO	-64694	15-3	22-3	52.42		
	IN	Jul 01 93	APIN # 18 MARITIME TEL &	01/93	20-6	29-3	110.86		
7	-IN	Jul 01 93	APIN # 18 NEW SCOTLAND C	67290	20-6	29-3	624.35 com		
7	AP-IN	Jul 05 93	APIN # 16 ROBERT STEWART	M\C	15-3	22-3	281.49		
7	AP-IN	Jul 06 93	APIN # 18 IRVING OIL LTD	06/93	20-6	29-3	28.94		

General Ledger Listing as of December 31, 1993

A Pd	Dept. ...ce	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601608	15905	ASSAYS	GEOLOGY NFT (continued)						
5	GL- 9	May 31 93	OPEN UNIVERSITY (92)	MAY ACCRUALS	9-4	14-4	10,000.00		0.00
									0.00
6	AP-IN	Jun 02 93	APIN # 14 THE OPEN UNIVE	5548	11-7	18-3	10,000.00		
6	GL- 9	Jun 16 93	MAY ACCRUAL REVERSAL	XRAL (92)	11-1	17-1		3,154.00	
6	GL- 9	Jun 16 93	MAY ACCRUAL REVERSAL	OPEN UNIVERS	11-1	17-1		10,000.00	3,154.00-
									3,153.30-
7	AP-IN	Jul 20 93	APIN # 18 MARITIME ONTAR	4143-1	20-6	29-3	55.00		
7	GL- 5	Aug 31 93	MARITIME ONTARIO	TRANSFER-909	25-1	34-1		55.00	0.00
									3,153.30-
8	GL- 5	Aug 25 93	MARITIME ONTARIO	TRANSFER-909	23-1	32-1		55.00	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	55.00		0.00
				Ending balance					3,153.30-
602001	15905	SALARIES	GEOPHYSYSCS NFT						0.00
1	GL- 3	Jan 28 93	T. WATTS	1-2	1-6	3-1	740.00		740.00
									740.00
2	GL- 3	Feb 25 93	TONY WATTS - GREENLAND	2-2	2-2	4-2	1,480.00		1,480.00
									2,220.00
4	GL- 2	Apr 28 93	PAYROLL	4-1 TORONTO	7-3	11-3	475.96		
4	GL- 3	Apr 28 93	TONY WATTS CHARGES - APRIL	4-1 TORONTO	7-3	11-3	740.00		1,215.96
									3,435.96
5	GL- 2	May 27 93	PAYROLL	5-1	9-2	14-2	605.86		605.86
									4,041.82
6	GL- 3	Jun 28 93	TONY WATTS JUNE CHARGES	6-1 TORONTO	11-3	17-3	2,960.00		2,960.00
									7,001.82
7	GL- 3	Jul 29 93	TONY WATTS - JULY CHARGES	7-2 TORONTO	21-1	30-1	1,850.00		
7	GL- 5	Aug 31 93	SALARIES TW	TRANSFER-909	25-1	34-1		1,850.00	0.00
									7,001.82
8	GL- 5	Aug 25 93	SALARIES T.W.	TRANSFER-909	23-1	32-1		1,850.00	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	1,850.00		0.00
				Ending balance					7,001.82
602...0	15905	TRAVELLING	GEOPHYSYSCS NFT						0.00
5	AP-IN	May 15 93	APIN # 12 GATEWAY TRAVEL	15/93	9-7	15-3	1,583.00		1,583.00
				Ending balance					1,583.00
602600	15905	CONTRACT PAY'T	GEOPHYSYSCS NFT						0.00
1	AP-IN	Nov 30 92	APIN # 1 PATERSON, GRAN	2695JM	1-5	2-3	2,440.64		2,440.64
									2,440.64
2	AP-IN	Dec 31 92	APIN # 4 PATERSON, GRAN	2711SR	2-8	5-3	1,450.00		1,450.00
									3,890.64
3	GL- 9	Mar 30 93	PATERSON, GRANT & WATSON	MAR ACCRUAL	5-4	8-4	3,270.00		3,270.00
									7,160.64
4	AP-IN	Apr 01 93	APIN # 9 PATERSON, GRAN	2829SR	7-7	12-3	3,270.00 EXC		
4	GL- 9	Apr 14 93	MARCH ACCRUAL REVERSAL	PATERSON,GRA	7-1	11-1		3,270.00	0.00
									7,160.64
6	GL- 9	Jun 29 93	GEOTERREX	JUNE ACCURAL	12-1	19-1	50,000.00		50,000.00
									57,160.64
7	GL- 5	Jul 15 93	ACCURAL REVERSAL	GEOTERREX	17-1	25-1		50,000.00	
7	GL- 5	Aug 31 93	ACCRUAL - UNIVERSAL	TRANSFER-909	25-1	34-1		38,000.00	
7	GL- 5	Aug 31 93	ACCRUAL - GEOTERREX	TRANSFER-909	25-1	34-1		50,000.00	
7	GL- 9	Jul 14 93	GEOTERREX	JULY ACCURAL	16-1	24-1	50,000.00		
7	GL- 9	Jul 14 93	JUNE ACCURAL REVERSAL	GEOTERREX	15-4	23-1		50,000.00	
7	GL- 9	Jul 29 93	UNIVERSAL HELICOPTERS	JULY ACCRUAL	21-3	30-3	38,000.00		
7	GL- 9	Jul 29 93	GEOTERREX	JULY ACCRUAL	21-3	30-3	50,000.00		50,000.00-
									7,160.64
8	GL- 5	Aug 25 93	ACCRUAL - UNIVERSAL	TRANSFER-909	23-1	32-1		38,000.00	
8	GL- 5	Aug 25 93	ACCRUAL - GEOTERREX	TRANSFER-909	23-1	32-1		50,000.00	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	88,000.00		0.00
				Ending balance					7,160.64
602604	15905	FIELD EXPENSES	GEOPHYSYSCS NFT						0.00
1	AP-IN	Jan 11 93	APIN # 2 THE FRAME MAKE	1961	1-5	2-3	346.78		346.78
									346.78
3	AP-IN	Feb 22 93	APIN # 7 THE FRAME MAKE	2369	5-7	9-3	767.88		767.88
									1,114.66
4	AP-IN	Apr 08 93	APIN # 10 NORMAN WADE CO	-59568	7-7	12-3	1,584.34		1,584.34
									2,699.00
5	AP-IN	Apr 30 93	APIN # 12 PATERSON, GRAN	2849JM	9-7	15-3	1,155.00 EXC		

General Ledger Listing as of December 31, 1993

A/	Dept.								
Pd	Src	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
602604	15905	FIELD EXPENSES GEOPHYSYSCS NFT (continued)							
5	AP-IN	May 14 93	APIN # 12 FEDERAL EXPRES	-16425	9-7	15-3	224.75		
5	AP-IN	May 19 93	APIN # 12 KEVIN OLSHEFSK	19/93	9-7	15-3	3.43		
5	AP-IN	May 25 93	APIN # 12 GATEWAY TRAVEL	/93-TW	9-7	15-3	1,116.00		
5	GL- 3	May 27 93	TONY WATTS EXPENSE	5-1	9-2	14-2	213.07 T		2,712.25
									5,411.25
7	GL- 3	Jul 29 93	TONY WATTS GREENLAND EXPENSES	7-2 TORONTO	21-1	30-1	678.94 T		
7	GL- 5	Aug 31 93	EXPENSES TW	TRANSFER-909	25-1	34-1		678.94	0.00
									5,411.25
8	GL- 5	Aug 25 93	EXPENSES T.W.	TRANSFER-909	23-1	32-1		678.94	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	678.94		0.00
				Ending balance					5,411.25
603001	15905	SALARIES	GEOCHEM NFT						0.00
1	GL- 2	Jan 27 93	TORONTO ADVISE - PAYROLL	1-1	1-6	3-1	1,235.07		1,235.07
									1,235.07
2	GL- 3	Feb 25 93	PAYROLL - TORONTO ADVISE	2-2	2-2	4-2	2,445.46		2,445.46
				Ending balance					3,680.53
603120	15905	TRAVELLING	GEOCHEM NFT	Ending balance					0.00
603600	15905	CONTRACT PAYMENTS	GEOCHEM NFT						0.00
2	AP-IN	Jan 27 93	APIN # 4 JAMES E. TILSL	3-1313	2-8	5-3	778.71		778.71
				Ending balance					778.71
603604	15905	FIELD EXPENSES	GEOCHEM NFT	Ending balance					0.00
603608	15905	ASSAYS	GEOCHEM NFT						0.00
5	AP-IN	Apr 30 93	APIN # 11 LAKEFIELD RESE	-07670	9-7	15-3	51.00		51.00
				Ending balance					51.00
603701	15905	SALARIES	DIAMOND DRIL NFT						0.00
	2	Apr 28 93	PAYROLL	4-1 TORONTO	7-3	11-3	2,625.62		2,625.62
									2,625.62
5	GL- 2	May 27 93	PAYROLL	5-1	9-2	14-2	2,804.32		2,804.32
									5,429.94
7	GL- 2	Jul 29 93	PAYROLL	7-2 TORONTO	21-1	30-1	2,477.65		
7	GL- 5	Aug 31 93	SALARIES	TRANSFER-909	25-1	34-1		2,477.65	0.00
									5,429.94
8	GL- 5	Aug 25 93	SALARIES	TRANSFER-909	23-1	32-1		2,477.65	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	2,477.65		0.00
				Ending balance					5,429.94
605120	15905	TRAVELLING	DIAMOND DRIL NFT	Ending balance					0.00
605600	15905	CONTRACT PAY	DIAMOND DRIL NFT						0.00
6	AP-IN	May 26 93	APIN # 13 PETRO DRILLING	3-2308	11-7	18-3	38,865.20 S		38,865.20
									38,865.20
7	GL- 5	Jul 15 93	INVOICE REVERSAL 7/15	PETRO	17-1	25-1		38,865.20	
7	GL- 5	Jul 27 93	PETRO	REVERSE 7/15	20-1	28-1	38,865.20		
7	GL- 5	Aug 31 93	PETRO DRILLING	TRANSFER-909	25-1	34-1		38,865.20	
7	GL- 5	Aug 31 93	ACCRUAL - UNIVERSAL	TRANSFER-909	25-1	34-1		53,865.00	
7	GL- 9	Jul 29 93	UNIVERSAL HELICOPTERS	JULY ACCRUAL	21-3	30-3	53,865.00		38,865.20-
									0.00
8	AP-IN	Jul 26 93	APIN # 20 PETRO DRILLING	3-2343	26-6	36-3	19,543.17		
8	GL- 5	Aug 25 93	PETRO DRILLING	TRANSFER-909	23-1	32-1		38,865.20	
8	GL- 5	Aug 25 93	ACCRUAL - UNIVERSAL	TRANSFER-909	23-1	32-1		53,865.00	
8	GL- 5	Aug 31 93	TRANSFER TO NEW PROJECT #909	PETRO DRILL	28-1	38-1		19,543.17	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	92,730.20		0.00
				Ending balance					0.00
605604	15905	FIELD EXPENSE	DIAMOND DRIL NFT						0.00
4	AP-IN	Apr 15 93	APIN # 10 SUPERIOR SAFET	84871	7-7	12-3	1,864.10		1,864.10
				Ending balance					1,864.10
605608	15905	ASSAYS	DIAMOND DRIL NFT	Ending balance					0.00
606001	15905	SALARIES	REV CIRC DRILL NFT	Ending balance					0.00
606120	15905	TRAVELLING	REV CIRC DRILL NFT	Ending balance					0.00

General Ledger Listing as of December 31, 1993

A Pd	Dept. Srce	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
606600		15905	CONTRAC PAY REV CIRC DRILL NFT	Ending balance					0.00
606604		15905	FIELD EXPEN REV CIRC DRILL NFT	Ending balance					0.00
606608		15905	ASSAYS REV CIRC DRILL NFT	Ending balance					0.00
607001		15905	SALARIES ENVIRONMENT NFT	Ending balance					0.00
607120		15905	TRAVELLING ENVIRONMENT NFT	Ending balance					0.00
607600		15905	CONTRACT PAY ENVIRONMENT NFT	Ending balance					0.00
607604		15905	FIELD EXPENSE ENVIRONMENT NFT	Ending balance					0.00
615001		15905	SALARIES PROPERTY AQU NFT	Ending balance					0.00
615120		15905	TRAVELLING PROPERTY AQU NFT	Ending balance					0.00
615600		15905	CONTRACT PAYT PROPERTY AQU NFT	Ending balance					0.00
615604		15905	FIELD EXPENSE PROPERTY AQU NFT	Ending balance					0.00
630000		15905	OPTION PAYMENTS NFT	Ending balance					0.00
635000		15905	PARTICIPATIONS NFT	Ending balance					0.00
640000		15905	PROPERTY MAINTENANCE NFT						0.00
1	GL-	9 Jan 21 93	DECEMBER ACCRUAL REVERSAL	GGU	1-1	1-1		5,000.00	
1	GL-	9 Jan 28 93	GGU	JAN ACCRUALS	1-2	1-2	5,000.00		0.00
									0.00
2	GL-	9 Feb 01 93	JANUARY ACCRUAL REVERSAL	GGU	2-1	4-1		5,000.00	
2	GL-	9 Feb 25 93	GGU	FEB ACCRUAL	2-4	4-4	5,000.00		0.00
									0.00
3	GL-	9 Mar 04 93	FEBRUARY ACCRUAL REVERSAL	GGU	5-2	8-2		5,000.00	
3	GL-	9 Mar 30 93	GGU (92)	MAR ACCRUAL	5-4	8-4	5,000.00		0.00
									0.00
4	GL-	9 Apr 14 93	MARCH ACCRUAL REVERSAL	GGU (92)	7-1	11-1		5,000.00	
4	GL-	9 Apr 28 93	GGU (92)	APR ACCRUAL	7-4	11-4	5,000.00		0.00
									0.00
5	GL-	9 Apr 29 93	APRIL ACCRUAL REVERSAL	GGU (92)	9-1	14-1		5,000.00	
5	GL-	9 May 31 93	GGU (92)	MAY ACCRUALS	9-4	14-4	5,000.00		0.00
									0.00
6	GL-	9 Jun 16 93	MAY ACCRUAL REVERSAL	GGU (92)	11-1	17-1		5,000.00	5,000.00-
									5,000.00-
7	AP-IN	Jun 04 93	APIN # 17 CANADIAN IMPER	MC	15-3	22-3	5,458.41		5,458.41
				Ending balance					458.41
655000		15905	MEALS & ENT. - 20% NFT						0.00
1	AP-IN	Dec 17 92	APIN # 1 TONY GREEN	17/92	1-5	2-3	7.96		
1	GL-	9 Jan 21 93	DECEMBER ACCRUAL REVERSAL	T.GREEN EXP	1-1	1-1		8.00	0.04-
									0.04-
2	AP-IN	Feb 25 93	APIN # 5 ROBERT STEWART	25/93	2-8	5-3	7.34		7.34
									7.30
3	AP-IN	Mar 02 93	APIN # 6 TONY GREEN	MC-536	5-7	9-3	9.60		
3	AP-IN	Mar 24 93	APIN # 7 MURRAY JEROME	24/93	5-7	9-3	54.68		64.28
									71.58
4	AP-IN	Apr 16 93	APIN # 10 KEVIN OLSHEFSK	MC-544	7-7	12-3	16.35		16.35
				Ending balance					87.93
670000		15905	OTHER EXPENSES NFT	Ending balance					0.00
690000		15905	PARTICIPANTS SHARE NFT	Ending balance					0.00
695000		15905	REGIONAL OFFICE RECOVERIES NFT	Ending balance					0.00
							1,333,580.60	1,143,814.55	

386 transactions printed.
39 accounts printed.

General Ledger Listing as of December 31, 1993

G/ isting for account [ ] to [695000],
fo partment [15905] to [15905],
for fiscal period [1] to [12],
sorted by [Account].

Last posting sequence number: 42

Acct.	Dept.	Pd	Srce	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601001	15905				SALARIES GEOLOGY NFT						0.00
		1	GL- 2	Jan 27 93	TORONTO ADVISE - PAYROLL	1-1	1-6	3-1	14,192.84		14,192.84
											14,192.84
		2	GL- 3	Feb 25 93	PAYROLL - TORONTO ADVISE	2-2	2-2	4-2	14,351.83		14,351.83
											28,544.67
		3	GL- 2	Mar 29 93	PAYROLL - TORONTO ADVISE	3-2	5-3	8-3	12,724.72		12,724.72
											41,269.39
		4	GL- 2	Apr 28 93	PAYROLL	4-1 TORONTO	7-3	11-3	8,932.30		8,932.30
											50,201.69
		5	GL- 2	May 27 93	PAYROLL	5-1	9-2	14-2	8,271.77		8,271.77
											58,473.46
		6	GL- 2	Jun 28 93	PAYROLL	6-1 TORONTO	11-3	17-3	16,837.45		16,837.45
											75,310.91
		7	GL- 2	Jul 29 93	PAYROLL	7-2 TORONTO	21-1	30-1	21,373.61		
		7	GL- 2	Jul 29 93	PAYROLL	7-2 TORONTO	21-1	30-1	4,815.40		
		7	GL- 5	Aug 31 93	SALARIES	TRANSFER-909	25-1	34-1		21,373.61	
		7	GL- 5	Aug 31 93	SALARIES	TRANSFER-909	25-1	34-1		4,815.40	0.00
											75,310.91
		8	GL- 5	Aug 25 93	SALARIES	TRANSFER-909	23-1	32-1		21,373.61	
		8	GL- 5	Aug 25 93	SALARIES	TRANSFER-909	23-1	32-1		4,815.40	
		8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	26,189.01		0.00
						Ending balance					75,310.91
601120	15905				TRAVELLING GEOLOGY NFT						0.00
		1	- 9	Jan 28 93	GATEWAY TRAVEL KO,MJ	JAN ACCRUALS	1-2	1-2	1,993.00		1,993.00
											1,993.00
		2	AP-IN	Feb 12 93	APIN # 4 GATEWAY TRAVEL	14/93	2-8	5-3	752.88		
		2	GL- 9	Feb 01 93	JANUARY ACCRUAL REVERSAL	GATEWAY TRAV	2-1	4-1		1,993.00	1,240.12-
											752.88
		3	AP-IN	Mar 04 93	APIN # 6 MURRAY JEROME	04/93	5-7	9-3	534.25		534.25
											1,287.13
		4	GL- 9	Apr 28 93	GATEWAY TRAVEL	APR ACCRUAL	7-4	11-4		752.88	752.88-
											534.25
		5	AP-IN	May 04 93	APIN # 12 GATEWAY TRAVEL	/93-TG	9-7	15-3		752.88	
		5	AP-IN	May 12 93	APIN # 12 GATEWAY TRAVEL	/93-PP	9-7	15-3	1,774.50 A		
		5	AP-IN	May 17 93	APIN # 12 GATEWAY TRAVEL	/93-PT	9-7	15-3	1,604.50 A		
		5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	GATEWAY TRAV	9-1	14-1	752.88		3,379.00
											3,913.25
		6	AP-IN	May 28 93	APIN # 13 GATEWAY TRAVEL	10-TG	11-7	18-3	1,424.00 A		
		6	AP-IN	May 28 93	APIN # 13 GATEWAY TRAVEL	28-TG	11-7	18-3	1,116.00 A		
		6	AP-IN	May 28 93	APIN # 15 GATEWAY TRAVEL	10/93	11-7	18-3	1,424.00 A		
		6	AP-IN	May 28 93	APIN # 15 GATEWAY TRAVEL	12/93	11-7	18-3	1,116.00 A		
		6	GL- 5	Jun 28 93	GATEWAY TRAVEL CHEQ # 005556	VOID CHEQUE	11-4	17-4		1,424.00	
		6	GL- 5	Jun 28 93	GATEWAY TRAVEL CHEQ # 005556	VOID CHEQUE	11-4	17-4		1,116.00	2,540.00
						Ending balance					6,453.25
601600	15905				CONTRACT PAYMENTS GEOLOGY NFT						0.00
		4	GL- 9	Apr 28 93	PLATINOVA	APR ACCRUAL	7-4	11-4	25,000.00		25,000.00
											25,000.00
		5	GL- 9	Apr 29 93	APRIL ACCRUAL REVERSAL	PLATINOVA	9-1	14-1		25,000.00	
		5	GL- 9	May 31 93	PLATINOVA	MAY ACCRUALS	9-4	14-4	25,000.00		0.00
											25,000.00
		6	AP-IN	Jun 25 93	APIN # 15 CANADIAN IMPER	25/93	11-7	18-3	12,283.32		
		6	GL- 9	Jun 16 93	MAY ACCRUAL REVERSAL	PLATINOVA	11-1	17-1		25,000.00	
		6	GL- 9	Jun 29 93	UNIVERSAL	JUNE ACCURAL	12-1	19-1	32,300.00		
		6	GL- 9	Jun 29 93	PLATINOVA	JUNE ACCURAL	12-1	19-1	12,500.00		32,083.32
											57,083.32
		7	AP-IN	Jun 30 93	APIN # 18 UNIVERSAL HELI	12999	20-6	29-3	26,630.81 H		
		7	-IN	Jun 30 93	APIN # 16 UNIVERSAL HELI	13000	15-3	22-3	8,847.36 H		
		7	5	Jul 15 93	ACCURAL REVERSAL	UNIVERSAL	17-1	25-1		31,204.37	
		7	GL- 5	Jul 15 93	RE-ACCURAL	UNIVERSAL	17-1	25-1	1,091.77		
		7	GL- 5	Jul 27 93	C.I.B.C.	REVERSE 7/15	20-1	28-1	12,283.32		
		7	GL- 5	Jul 27 93	ACCURAL REVERSAL UNIVERSAL	REVERSE 7/15	20-1	28-1		932.09	

General Ledger Listing as of December 31, 1993

Ar Pd	Dept. Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601600	15905	CONTRACT PAYMENTS GEOLOGY NFT (continued)							
7	GL- 5	Jul 27 93	ACCURAL REVERSAL UNIVERSAL	REVERSE 7/15	20-1	28-1		5,000.00	
7	GL- 5	Jul 27 93	PLATINOVA CABLE INV #93027-28	CIBC	20-3	28-3	4,051.48		
7	GL- 5	Aug 31 93	C.I.B.C.	TRANSFER-909	25-1	34-1		12,283.32	
7	GL- 5	Aug 31 93	UNIVERSAL	TRANSFER-909	25-1	34-1	932.09		
7	GL- 5	Aug 31 93	UNIVERSAL	TRANSFER-909	25-1	34-1	5,000.00		
7	GL- 5	Aug 31 93	PLATINOVA	TRANSFER-909	25-1	34-1		4,051.48	
7	GL- 5	Aug 31 93	UNIVERSAL	TRANSFER-909	25-1	34-1		26,630.81	
7	GL- 5	Aug 31 93	ACCRUAL - UNIVERSAL	TRANSFER-909	25-1	34-1		19,000.00	
7	GL- 9	Jul 14 93	UNIVERSAL	JULY ACCURAL	16-1	24-1	31,204.37		
7	GL- 9	Jul 14 93	JUNE ACCURAL REVERSAL	UNIVERSAL	15-4	23-1		32,300.00	
7	GL- 9	Jul 14 93	JUNE ACCURAL REVERSAL	PLATINOVA	15-4	23-1		12,500.00	
7	GL- 9	Jul 15 93	UNIVERSAL	RE-ACCURAL	19-1	27-1	5,000.00		
7	GL- 9	Jul 15 93	INVOICE REVERSAL REF 25/93	CIBC	18-1	26-1		12,283.32	
7	GL- 9	Jul 15 93	ACCURAL REVERSAL 7/15/93 17-1	UNIVERSAL	18-1	26-1		1,091.77	
7	GL- 9	Jul 15 93	RE-ACCURAL 7/15/93 17-1	UNIVERSAL	18-1	26-1	932.09		
7	GL- 9	Jul 29 93	UNIVERSAL HELICOPTERS	JULY ACCRUAL	21-3	30-3	19,000.00		42,303.87-
									14,779.45
8	GL- 5	Aug 25 93	C.I.B.C.	TRANSFER-909	23-1	32-1		12,283.32	
8	GL- 5	Aug 25 93	UNIVERSAL	TRANSFER-909	23-1	32-1	932.09		
8	GL- 5	Aug 25 93	UNIVERSAL	TRANSFER-909	23-1	32-1	5,000.00		
8	GL- 5	Aug 25 93	PLATINOVA	TRANSFER-909	23-1	32-1		4,051.48	
8	GL- 5	Aug 25 93	UNIVERSAL	TRANSFER-909	23-1	32-1		26,630.81	
8	GL- 5	Aug 25 93	ACCRUAL - UNIVERSAL	TRANSFER-909	23-1	32-1		19,000.00	
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1	56,033.52		0.00
				Ending balance					14,779.45
									0.00
601604	15905	FIELD EXPENSES GEOLOGY NFT							
1	AP-IN	Dec 17 92	APIN # 1 TONY GREEN	17/92	1-5	2-3	61.55		
1	AP-IN	Dec 18 92	APIN # 1 PETTY CASH	18/92	1-5	2-3	15.48		
1	AP-IN	Dec 24 92	APIN # 1 PUROLATOR COUR	7943-7	1-5	2-3	83.25		
1	AP-IN	Jan 01 93	APIN # 1 MARITIME TEL &	01/93	1-5	2-3	95.47		
1	IN	Jan 04 93	APIN # 2 KONSULT INTERN	232	1-5	2-3	24.43		
1	AP-IN	Jan 06 93	APIN # 1 BRIAN FISHER	06/93	1-5	2-3	198.90		
1	AP-IN	Jan 07 93	APIN # 1 MURRAY JEROME	07/93	1-5	2-3	130.00		
1	AP-IN	Jan 15 93	APIN # 2 PUROLATOR COUR	0805-2	1-5	2-3	38.85		
1	AP-IN	Jan 26 93	APIN # 2 CANADIAN IMPER	52373	1-5	2-3	1,851.43		
1	AP-IN	Jan 26 93	APIN # 2 CANADIAN IMPER	25/93	1-5	2-3	4,800.31		
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	T.GREEN EXP	1-1	1-1		62.00	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PUROLATOR	1-1	1-1		41.85	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PGI	1-1	1-1		2,778.00	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PGI	1-1	1-1		1,117.00	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	GGU	1-1	1-1		1,800.00	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PLATINOVA	1-1	1-1	1,464.00		
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PLATINOVA	1-1	1-1		6,087.22	
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	KNI	1-1	1-1	1,276.41		
1	GL- 9	Jan 21 93	DECEMBER ACCRUAL REVERSAL	PETTY CASH	1-1	1-1		15.48	
1	GL- 9	Jan 28 93	PGI	JAN ACCRUALS	1-2	1-2	2,778.00		
1	GL- 9	Jan 28 93	PGI	JAN ACCRUALS	1-2	1-2	1,117.00		
1	GL- 9	Jan 28 93	KNI	JAN ACCRUALS	1-2	1-2		1,276.41	757.12
									757.12
2	AP-IN	Jan 18 93	APIN # 4 MARITIME TEL &	18/93	2-8	5-3	4.49		
2	AP-IN	Jan 20 93	APIN # 4 NORMAN WADE CO	-54742	2-8	5-3	134.31		
2	AP-IN	Jan 22 93	APIN # 4 PUROLATOR COUR	1018-2	2-8	5-3	25.05		
2	AP-IN	Jan 22 93	APIN # 4 NORMAN WADE CO	-54896	2-8	5-3	86.48		
2	AP-IN	Jan 26 93	APIN # 5 LOOMIS & TOLES	600889	2-8	5-3	25.59		
2	AP-IN	Jan 27 93	APIN # 4 NORMAN WADE CO	-55137	2-8	5-3	84.22		
2	AP-IN	Jan 29 93	APIN # 4 DON OSBURN	111245	2-8	5-3	84.00 L		
2	AP-IN	Jan 31 93	APIN # 5 CROWNTEK BUSIN	008033	2-8	5-3	76.94		
2	AP-IN	Feb 01 93	APIN # 4 MARITIME TEL &	01/93	2-8	5-3	35.42		
2	AP-IN	Feb 03 93	APIN # 4 NORMAN WADE CO	-55730	2-8	5-3	88.25		
2	AP-IN	Feb 04 93	APIN # 4 NORMAN WADE CO	-55779	2-8	5-3	225.83		
2	AP-IN	Feb 04 93	APIN # 4 DAY-TIMERS OF	0242-4	2-8	5-3	33.54		
2	AP-IN	Feb 04 93	APIN # 4 DAY-TIMERS OF	0243-2	2-8	5-3	86.94		
2	AP-IN	Feb 05 93	APIN # 5 IRVING OIL LTD	05/93	2-8	5-3	74.77		
2	AP-IN	Feb 08 93	APIN # 4 TATTINGSTONE I	08/93	2-8	5-3	122.48		
2	IN	Feb 09 93	APIN # 4 PICTURE-IT BOU	11346	2-8	5-3	68.74		
2	AP-IN	Feb 25 93	APIN # 5 ROBERT STEWART	25/93	2-8	5-3	77.12		
2	GL- 3	Feb 24 93	TOGA TECHNICAL TORONTO ADVISE	2-1	2-2	4-2	558.24		
2	GL- 9	Feb 01 93	JANUARY ACCRUAL REVERSAL	PGI	2-1	4-1		2,778.00	

General Ledger Listing as of December 31, 1993

G isting for account [ ] to [695000],
fc partment [15909] to [15909],
for riscal period [1] to [12],
sorted by [Account].

Last posting sequence number: 42

Acct. Dept. Pd Srce Date Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601001 15909 SALARIES GEOLOGY NFT						0.00
7 GL- 5 Aug 31 93 SALARIES	TRF FROM 905	25-1	34-1	21,373.61		
7 GL- 5 Aug 31 93 SALARIES	TRF FROM 905	25-1	34-1	4,815.40		26,189.01
						26,189.01
8 GL- 2 Aug 31 93 PAYROLL	TORONTO 8-1	26-1	35-1	17,136.39		
8 GL- 2 Aug 31 93 PAYROLL	TORONTO 8-1	26-1	35-1	4,719.70		
8 GL- 5 Aug 25 93 SALARIES	TRF FROM 905	23-1	32-1	21,373.61		
8 GL- 5 Aug 25 93 SALARIES	TRF FROM 905	23-1	32-1	4,815.40		
8 GL- 5 Aug 31 93 REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		26,189.01	21,856.09
						48,045.10
9 GL- 2 Sep 29 93 PAYROLL	TORONTO 9-1	30-2	41-2	10,000.01		
9 GL- 2 Sep 29 93 PAYROLL	TORONTO 9-1	30-2	41-2	1,291.71		
9 GL- 2 Sep 29 93 PAYROLL	TORONTO 9-1	30-2	41-2	1,300.92		12,592.64
						60,637.74
10 GL- 2 Oct 28 93 PAYROLL	TORONTO 10-1	34-3	45-3	10,599.08		10,599.08
						71,236.82
11 GL- 2 Nov 26 93 PAYROLL	TORONTO 11-1	37-3	50-3	9,057.50		9,057.50
						80,294.32
12 GL- 3 Dec 31 93 PAYROLL: DECEMBER	12-1 TORONTO	41-1	56-1	11,099.78		11,099.78
	Ending balance					91,394.10
601120 15909 TRAVELLING GEOLOGY NFT						0.00
9 AP-IN Aug 02 93 APIN # 23 ROBERT STEWART	28/93	29-4	40-3	413.19		
9 AP-IN Sep 15 93 APIN # 24 MURRAY JEROME	15/93	29-4	40-3	1,467.46 EXP		
-IN Sep 20 93 APIN # 24 MURRAY JEROME	20/93	29-4	40-3	1,083.08 EXP		2,963.73
	Ending balance					2,963.73
601600 15909 CONTRACT PAYMENTS GEOLOGY NFT						0.00
7 GL- 5 Aug 31 93 C.I.B.C.	TRF FROM 905	25-1	34-1	12,283.32		
7 GL- 5 Aug 31 93 UNIVERSAL	TRF FROM 905	25-1	34-1		932.09	
7 GL- 5 Aug 31 93 UNIVERSAL	TRF FROM 905	25-1	34-1		5,000.00	
7 GL- 5 Aug 31 93 PLATINOVA	TRF FROM 905	25-1	34-1	4,051.48		
7 GL- 5 Aug 31 93 UNIVERSAL	TRF FROM 905	25-1	34-1	26,630.81 H		
7 GL- 5 Aug 31 93 ACCRUAL - UNIVERSAL	TRF FROM 905	25-1	34-1	19,000.00		56,033.52
						56,033.52
8 AP-IN Jul 20 93 APIN # 19 UNIVERSAL HELI	13065	26-6	36-3	15,865.00 H		
8 AP-IN Jul 22 93 APIN # 19 UNIVERSAL HELI	13085	26-6	36-3	31,730.00 H		
8 AP-IN Jul 31 93 APIN # 19 UNIVERSAL HELI	13148	26-6	36-3	35,625.00 H		
8 AP-IN Jul 31 93 APIN # 21 UNIVERSAL HELI	13185	26-6	36-3	43,985.00 H		
8 AP-IN Aug 16 93 APIN # 21 UNIVERSAL HELI	13198	26-6	36-3	11,875.00 H		
8 AP-IN Aug 16 93 APIN # 21 UNIVERSAL HELI	13206	26-6	36-3	19,285.00 H		
8 GL- 3 Aug 31 93 OTHER CHARGES-PLATINOVA	TORONTO 8-1	26-1	35-1	30,386.72 P		
8 GL- 5 Aug 25 93 C.I.B.C.	TRF FROM 905	23-1	32-1	12,283.32		
8 GL- 5 Aug 25 93 UNIVERSAL	TRF FROM 905	23-1	32-1		932.09	
8 GL- 5 Aug 25 93 UNIVERSAL	TRF FROM 905	23-1	32-1		5,000.00	
8 GL- 5 Aug 25 93 PLATINOVA	TRF FROM 905	23-1	32-1	4,051.48		
8 GL- 5 Aug 25 93 UNIVERSAL	TRF FROM 905	23-1	32-1	26,630.81		
8 GL- 5 Aug 25 93 ACCRUAL - UNIVERSAL	TRF FROM 905	23-1	32-1	19,000.00		
8 GL- 5 Aug 31 93 REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		56,033.52	
8 GL- 9 Aug 31 93 JULY ACCRUAL REVERSAL	UNIVERSAL	26-3	35-3		19,000.00	169,751.72
						225,785.24
9 AP-IN Aug 31 93 APIN # 23 UNIVERSAL HELI	13352	29-4	40-3	81,631.08 H		
9 AP-IN Sep 16 93 APIN # 24 UNIVERSAL HELI	13421	29-4	40-3	9,577.51 H		91,208.59
						316,993.83
11 AP-IN Nov 17 93 APIN # 30 ADI NOLAN DAVI	10065	37-7	51-3	563.32 EXC		
11 GL- 9 Nov 29 93 ADI NOLAN DAVIS (J.S.YANG)	NOV. ACCRUAL	37-4	50-4	1,440.00 EXC		2,003.32
						318,997.15
12 GL- 3 Dec 17 93 GGU REFUND	TORONTO ADV.	39-5	54-2		44,294.70	
12 GL- 5 Dec 17 93 TRF. TOTAL CHARGES	UNIVERSAL	39-5	54-2		175,190.71	
12 GL- 9 Dec 17 93 ADI NOLAN DAVIS (J.S. YANG)	NOV. ACCRUAL	39-4	54-1		1,440.00	
12 GL- 9 Dec 17 93 ADI NOLAN DAVIS (J.S. YANG)	DEC. ACCRUAL	39-6	54-3	2,664.00 EXC		
12 GL- 9 Dec 17 93 SYNMAP	DEC. ACCRUAL	39-6	54-3	1,100.00		217,161.41-
	Ending balance					101,835.74

General Ledger Listing as of December 31, 1993

Pd	Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
									0.00
601604	15909	FIELD EXPENSES	GEOLOGY NFT						
7	GL- 5	Aug 31 93	HELLY HANSON	TRF FROM 905	25-1	34-1	10,154.20		
7	GL- 5	Aug 31 93	TORONTO ADVISE - INSURANCE PRE	TRF FROM 905	25-1	34-1	1,876.00		
7	GL- 5	Aug 31 93	PLATINOVA	TRF FROM 905	25-1	34-1	22,426.75		
7	GL- 5	Aug 31 93	PICTURE-IT BOUTIQUE	TRF FROM 905	25-1	34-1	97.19		
7	GL- 5	Aug 31 93	KONSULT	TRF FROM 905	25-1	34-1	6.00		
7	GL- 5	Aug 31 93	TELEFIX	TRF FROM 905	25-1	34-1	695.00		
7	GL- 5	Aug 31 93	MARITIME TEL	TRF FROM 905	25-1	34-1	110.86		
7	GL- 5	Aug 31 93	NEW SCOTLAND	TRF FROM 905	25-1	34-1	624.35		
7	GL- 5	Aug 31 93	IRVING OIL	TRF FROM 905	25-1	34-1	28.94		
7	GL- 5	Aug 31 93	AIR CANADA	TRF FROM 905	25-1	34-1	337.48		
7	GL- 5	Aug 31 93	ACCRUAL - PLATINOVA (CAMP)	TRF FROM 905	25-1	34-1	4,051.00		
7	GL- 5	Aug 31 93	ACCRUAL - PLATINOVA (FOOD)	TRF FROM 905	25-1	34-1	6,558.00		
7	GL- 5	Aug 31 93	ACCRUAL - AIR CANADA	TRF FROM 905	25-1	34-1	3,797.00		
7	GL- 5	Aug 31 93	HELLY HANSON	TRF FROM 905	25-1	34-1	0.10		50,762.87
									50,762.87
8	AP-IN	Jun 10 93	APIN # 21 CANADIAN MARCO	F7004	26-6	36-3	398.52		
8	AP-IN	Jul 16 93	APIN # 20 PUROLATOR COUR	0000-5	26-6	36-3	13.95		
8	AP-IN	Jul 18 93	APIN # 20 MARITIME TEL &	18/93	26-6	36-3	29.79		
8	AP-IN	Jul 23 93	APIN # 19 UNIVERSAL HELI	13093	26-6	36-3	21.27		
8	AP-IN	Jul 27 93	APIN # 20 TELEFIX CANADA	17966	26-6	36-3	695.00		
8	AP-IN	Jul 28 93	APIN # 20 SEA LINK	2406	26-6	36-3	279.28		
8	AP-IN	Aug 01 93	APIN # 19 NEW SCOTLAND C	79702	26-6	36-3	624.35		
8	AP-IN	Aug 01 93	APIN # 21 MARITIME TEL &	01/93	26-6	36-3	146.29		
8	AP-IN	Aug 16 93	APIN # 20 CANADIAN MARCO	H1058	26-6	36-3	398.52		
8	AP-IN	Aug 17 93	APIN # 21 CANADIAN MARCO	I1056	26-6	36-3	398.52		
8	AP-IN	Aug 18 93	APIN # 21 MARITIME TEL &	18/93	26-6	36-3	29.29		
8	AP-IN	Aug 18 93	APIN # 21 CROWNTEK BUSIN	009886	26-6	36-3	163.29		
8	GL- 3	Aug 31 93	OTHER CHARGES-MITEC RES-93E06	TORONTO 8-1	26-1	35-1	1,104.54		
8	GL- 5	Aug 25 93	HELLY HANSON	TRF FROM 905	23-1	32-1	10,154.20		
8	GL- 5	Aug 25 93	TORONTO ADVISE - INSURANCE PRE	TRF FROM 905	23-1	32-1	1,876.00		
8	GL- 5	Aug 25 93	PLATINOVA	TRF FROM 905	23-1	32-1	22,426.75		
8	GL- 5	Aug 25 93	PICTURE-IT BOUTIQUE	TRF FROM 905	23-1	32-1	97.19		
8	GL- 5	Aug 25 93	KONSULT	TRF FROM 905	23-1	32-1	6.00		
8	GL- 5	Aug 25 93	TELEFIX	TRF FROM 905	23-1	32-1	695.00		
8	GL- 5	Aug 25 93	MARITIME TEL	TRF FROM 905	23-1	32-1	110.86		
8	GL- 5	Aug 25 93	NEW SCOTLAND	TRF FROM 905	23-1	32-1	624.35		
8	GL- 5	Aug 25 93	IRVING OIL	TRF FROM 905	23-1	32-1	28.94		
8	GL- 5	Aug 25 93	AIR CANADA	TRF FROM 905	23-1	32-1	337.48		
8	GL- 5	Aug 25 93	ACCRUAL - PLATINOVA (CAMP)	TRF FROM 905	23-1	32-1	4,051.00		
8	GL- 5	Aug 25 93	ACCRUAL - PLATINOVA (FOOD)	TRF FROM 905	23-1	32-1	6,558.00		
8	GL- 5	Aug 25 93	ACCRUAL - AIR CANADA	TRF FROM 905	23-1	32-1	3,797.00		
8	GL- 5	Aug 25 93	HELLY HANSON	TRF FROM 905	23-1	32-1	0.10		
8	GL- 5	Aug 31 93	TRANSFER TO CORRECT PROJECT	VENDOR #2367	26-2	35-2	398.52		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		50,762.87	
8	GL- 8	Aug 31 93	AIR CANADA	AUG. ACCRUAL	27-3	37-3	3,797.00		
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	PLATINOVA	26-3	35-3		4,051.00	
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	PLATINOVA	26-3	35-3		6,558.00	
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	AIR CANADA	26-3	35-3		3,797.00	5,907.87-
									44,855.00
9	AP-IN	Aug 02 93	APIN # 23 ROBERT STEWART	28/93	29-4	40-3	155.31		
9	AP-IN	Aug 11 93	APIN # 22 MARR'S PARCEL	17488	29-4	40-3	3.00		
9	AP-IN	Aug 12 93	APIN # 22 NEVILLE CROSBY	24531	29-4	40-3	150.00		
9	AP-IN	Aug 27 93	APIN # 22 AIR CANADA CAR	994049	29-4	40-3	20.00		
9	AP-IN	Sep 01 93	APIN # 22 KEVIN OLSHEFSK	MC	29-4	40-3	2,733.89		
9	AP-IN	Sep 01 93	APIN # 23 MARITIME TEL &	01/93	29-4	40-3	200.40		
9	AP-IN	Sep 02 93	APIN # 22 KEVIN OLSHEFSK	02/93	29-4	40-3	850.18		
9	AP-IN	Sep 03 93	APIN # 22 PICTURE-IT BOU	11842	29-4	40-3	74.30		
9	AP-IN	Sep 17 93	APIN # 24 PUROLATOR COUR	4833-5	29-4	40-3	43.55		
9	AP-IN	Sep 19 93	APIN # 24 ROBERT STEWART	19/93	29-4	40-3	86.04		
9	AP-IN	Sep 20 93	APIN # 24 MURRAY JEROME	20/93	29-4	40-3	112.47		
9	AP-IN	Sep 21 93	APIN # 24 PICTURE-IT BOU	11893	29-4	40-3	39.04		
9	GL- 3	Sep 28 93	P. TIRSCHMANN EXPENSE REPORT	WINNIPEG 9-	30-2	41-2	308.32		
9	GL- 3	Sep 29 93	OTHER CHARGES - MITEC	TORONTO 9-1	30-2	41-2		936.54	
9	GL- 9	Sep 02 93	AUGUST ACCRUAL REVERSAL	AIR CANADA	29-1	39-1		3,797.00	
9	GL- 9	Sep 30 93	PETRO DRILLING	SEP ACCRUALS	31-2	42-2		150.00	
9	GL- 9	Sep 30 93	GEOTERREX	SEP ACCRUALS	31-2	42-2		2,700.00	
9	GL- 9	Sep 30 93	UNIVERSAL	SEP ACCRUALS	31-2	42-2		250.00	
9	GL- 9	Sep 30 93	PLATINOVA	SEP ACCRUALS	31-2	42-2	16,600.00		
9	GL- 9	Sep 30 93	PLATINOVA	SEP ACCRUALS	31-2	42-2	30,500.00		44,042.96

General Ledger Listing as of December 31, 1993

Pd	Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
601604	15909	FIELD EXPENSES	GEOLOGY NFT (continued)						88,897.96
10	AP-IN	May 28 93	APIN # 27 AIR CANADA CAR	894049	34-8	46-3	3,797.76 S		
10	AP-IN	Sep 13 93	APIN # 26 TONY GREEN	19/93	34-8	46-3	63.88 EXP		
10	AP-IN	Sep 15 93	APIN # 26 CANADIAN AIRLI	371896	34-8	46-3	49.50 T		
10	AP-IN	Sep 27 93	APIN # 25 PICTURE-IT BOU	10693	34-8	46-3	14.58 FS		
10	AP-IN	Sep 30 93	APIN # 26 ROBERT STEWART	MC	34-8	46-3	18.06 EXP		
10	AP-IN	Oct 01 93	APIN # 27 MARITIME TEL &	01/93	34-8	46-3	68.28		
10	AP-IN	Oct 07 93	APIN # 25 KEVIN OLSHEFSK	07/93	34-8	46-3	373.05		
10	AP-IN	Oct 07 93	APIN # 25 KEVIN OLSHEFSK	/93-GM	34-8	46-3	242.26		
10	AP-IN	Oct 07 93	APIN # 26 TONY GREEN	23/93	34-8	46-3	225.92		
10	AP-IN	Oct 08 93	APIN # 26 DON OSBURN	78003	34-8	46-3	380.00 Lab		
10	AP-IN	Oct 08 93	APIN # 27 AIR CANADA CAR	194049	34-8	46-3	20.00 S		
10	AP-IN	Oct 15 93	APIN # 27 PUROLATOR COUR	098144	34-8	46-3	24.05		
10	AP-IN	Oct 15 93	APIN # 27 IRVING OIL LTD	05/93	34-8	46-3	27.29		
10	AP-IN	Oct 21 93	APIN # 27 DON OSBURN	78004	34-8	46-3	636.00 Lab		
10	AP-IN	Oct 26 93	APIN # 27 CANADIAN IMPER	M/C	34-8	46-3	16,766.81		
10	GL- 2	Oct 28 93	OTHER CHARGES-PLATINOVA	TORONTO 10-1	34-3	45-3	42,808.17		
10	GL- 5	Oct 27 93	HELLY-HANSON - DAMAGE DEPOSIT	BANK DEPOSIT	34-2	45-2		3,312.04	
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	PETRO DRILL	34-1	45-1	150.00		
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	GEOTERREX	34-1	45-1	2,700.00		
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	UNIVERSAL	34-1	45-1	250.00		
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	PLATINOVA	34-1	45-1		16,600.00	
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	PLATINOVA	34-1	45-1		30,500.00	
10	GL- 9	Oct 28 93	PETRO DRILLING	OCT. ACCRUAL	34-4	45-4		150.00	
10	GL- 9	Oct 28 93	GEOTERREX	OCT. ACCRUAL	34-4	45-4		2,700.00	
10	GL- 9	Oct 28 93	UNIVERSAL	OCT. ACCRUAL	34-4	45-4		250.00	15,103.57
									104,001.53
11	AP-IN	Sep 29 93	APIN # 29 LAKEFIELD RESE	-08338	37-7	51-3	186.18 Lab		
11	AP-IN	Oct 18 93	APIN # 29 MARITIME TEL &	18/93	37-7	51-3	3.30		
11	AP-IN	Oct 22 93	APIN # 29 PUROLATOR COUR	7562-2	37-7	51-3	26.44		
1	-IN	Oct 29 93	APIN # 29 PUROLATOR COUR	3325-7	37-7	51-3	197.95		
1	-IN	Nov 01 93	APIN # 29 CANADIAN IMPER	M/C	37-7	51-3	100.16		
11	AP-IN	Nov 01 93	APIN # 29 MARITIME TEL &	01/93	37-7	51-3	73.75		
11	AP-IN	Nov 03 93	APIN # 29 THE N.S. MINIS	MC	37-7	51-3	397.80		
11	AP-IN	Nov 05 93	APIN # 30 PUROLATOR COUR	0372-3	37-7	51-3	36.65		
11	AP-IN	Nov 12 93	APIN # 30 PUROLATOR COUR	2971-3	37-7	51-3	41.85		
11	AP-IN	Nov 13 93	APIN # 30 DHL WORLDWIDE	559749	37-7	51-3	40.00		
11	AP-IN	Nov 18 93	APIN # 30 MARITIME TEL &	18/93	37-7	51-3	9.54		
11	AP-IN	Nov 19 93	APIN # 30 KLEAN ALL CLEA	23958	37-7	51-3	125.00		
11	GL- 5	Nov 17 93	PETRO DRILLING	BANK DEPOSIT	37-2	50-2		157.01	
11	GL- 5	Nov 17 93	NEW SCOTLAND COMMUNICATIONS	BANK DEPOSIT	37-2	50-2		506.59	
11	GL- 5	Nov 17 93	UNIVERSAL HELICOPTERS	BANK DEPOSIT	37-2	50-2		2,115.53	
11	GL- 5	Nov 17 93	GEOTERREX	BANK DEPOSIT	37-2	50-2		2,699.44	
11	GL- 5	Nov 29 93	OTHER CHARGES PLATINOVA (EXCH)	TORONTO 11-1	37-3	50-3		458.28	
11	GL- 9	Nov 02 93	OCTOBER ACCRUAL REVERSAL	GEOTERREX	37-1	50-1	2,700.00		
11	GL- 9	Nov 02 93	OCTOBER ACCRUAL REVERSAL	UNIVERSAL	37-1	50-1	250.00		
11	GL- 9	Nov 30 93	OCTOBER ACCRUAL REVERSAL	PETRO DRILL	38-2	52-2	150.00		1,598.23-
									102,403.30
12	AP-IN	Dec 10 93	APIN # 31 PUROLATOR COUR	3486-6	39-3	53-3	73.65		
12	AP-IN	Dec 17 93	APIN # 32 CANADIAN IMPER	MC-594	39-3	53-3	3,312.85		
12	GL- 3	Dec 17 93	GGU REFUND	TORONTO ADV.	39-5	54-2		28,936.14	25,549.64-
				Ending balance					76,853.66
601608	15909	ASSAYS	GEOLOGY NFT						0.00
7	GL- 5	Aug 31 93	MARITIME ONTARIO	TRF FROM 905	25-1	34-1	55.00		55.00
									55.00
8	GL- 5	Aug 25 93	MARITIME ONTARIO	TRF FROM 905	23-1	32-1	55.00		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		55.00	0.00
									55.00
10	AP-IN	Sep 14 93	APIN # 27 LAKEFIELD RESE	C08310	34-8	46-3	156.00 Lab		
10	AP-IN	Sep 27 93	APIN # 26 LAKEFIELD RESE	C08294	34-8	46-3	2,438.00 Lab		
10	AP-IN	Oct 25 93	APIN # 27 DON OSBURN	78005	34-8	46-3	70.00 Lab		2,664.00
									2,719.00
12	AP-IN	Nov 25 93	APIN # 31 LAKEFIELD RESE	-08609	39-3	53-3	37.00 Lab		
1	-IN	Nov 25 93	APIN # 31 LAKEFIELD RESE	-08611	39-3	53-3	586.00 Lab		623.00
				Ending balance					3,342.00
602001	15909	SALARIES	GEOPHYSYSCS NFT						0.00
7	GL- 5	Aug 31 93	SALARIES TW	TRF FROM 905	25-1	34-1	1,850.00		1,850.00

General Ledger Listing as of December 31, 1993

Pd	Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
602001	15909	SALARIES	GEOPHYSYSCS NFT (continued)						1,850.00
8	GL- 2	Aug 31 93	PAYROLL	TORONTO 8-1	26-1	35-1	350.85		
8	GL- 3	Aug 31 93	OTHER CHARGES - T. WATTS AUG.	TORONTO 8-1	26-1	35-1	925.00		
8	GL- 5	Aug 25 93	SALARIES - T.W.	TRF FROM 905	23-1	32-1	1,850.00		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		1,850.00	1,275.85
									3,125.85
11	GL- 2	Nov 26 93	PAYROLL	TORONTO 11-1	37-3	50-3	169.91		
11	GL- 5	Nov 29 93	OTHER CHARGES: TONY WATTS	TORONTO 11-1	37-3	50-3	925.00		1,094.91
									4,220.76
12	GL- 3	Dec 31 93	PAYROLL: DECEMBER	12-1 TORONTO	41-1	56-1	2,710.84		
12	GL- 3	Dec 31 93	OTHER CHARGES: TONY WATTS	12-1 TORONTO	41-1	56-1	370.00		3,080.84
				Ending balance					7,301.60
602120	15909	TRAVELLING	GEOPHYSYSCS NFT	Ending balance					0.00
602600	15909	CONTRACT PAY'T	GEOPHYSYSCS NFT						0.00
7	GL- 5	Aug 31 93	ACCRUAL - UNIVERSAL	TRF FROM 905	25-1	34-1	38,000.00		
7	GL- 5	Aug 31 93	ACCRUAL - GEOTERREX	TRF FROM 905	25-1	34-1	50,000.00		88,000.00
									88,000.00
8	AP-IN	Aug 10 93	APIN # 21 GEOTERREX LIMI	5899	26-6	36-3	44,232.20		
8	GL- 5	Aug 25 93	ACCRUAL - UNIVERSAL	TRF FROM 905	23-1	32-1	38,000.00		
8	GL- 5	Aug 25 93	ACCRUAL - GEOTERREX	TRF FROM 905	23-1	32-1	50,000.00		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		88,000.00	
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	UNIVERSAL	26-3	35-3		38,000.00	
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	GEOTERREX	26-3	35-3		50,000.00	43,767.80-
									44,232.20
9	GL- 9	Sep 30 93	GEOTERREX	SEP ACCRUALS	31-2	42-2	10,000.00		10,000.00
									54,232.20
10	GL- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	GEOTERREX	34-1	45-1		10,000.00	
10	GL- 9	Oct 28 93	GEOTERREX	OCT. ACCRUAL	34-4	45-4	11,308.05		1,308.05
									55,540.25
1	AP-IN	Oct 07 93	APIN # 29 GEOTERREX LIMI	1040	37-7	51-3	11,308.05		
11	GL- 9	Nov 02 93	OCTOBER ACCRUAL REVERSAL	GEOTERREX	37-1	50-1		11,308.05	0.00
									55,540.25
12	GL- 5	Dec 17 93	TRF. TOTAL CHARGES	UNIVERSAL	39-5	54-2	74,839.82		74,839.82
				Ending balance					130,380.07
602604	15909	FIELD EXPENSES	GEOPHYSYSCS NFT						0.00
7	GL- 5	Aug 31 93	EXPENSES TW	TRF FROM 905	25-1	34-1	678.94		678.94
									678.94
8	AP-IN	Jul 23 93	APIN # 20 PUROLATOR COUR	5099-5	26-6	36-3	53.25		
8	GL- 5	Aug 25 93	EXPENSES - T.W.	TRF FROM 905	23-1	32-1	678.94		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		678.94	53.25
									732.19
11	AP-IN	Nov 05 93	APIN # 30 AIR CANADA CAR	994049	37-7	51-3	85.00		85.00
				Ending balance					817.19
603001	15909	SALARIES	GEOCHEM NFT						0.00
11	GL- 2	Nov 26 93	PAYROLL	TORONTO 11-1	37-3	50-3	169.91		169.91
									169.91
12	GL- 3	Dec 31 93	PAYROLL: DECEMBER	12-1 TORONTO	41-1	56-1	146.69		146.69
				Ending balance					316.60
603120	15909	TRAVELLING	GEOCHEM NFT	Ending balance					0.00
603600	15909	CONTRACT PAYMENTS	GEOCHEM NFT	Ending balance					0.00
603604	15909	FIELD EXPENSES	GEOCHEM NFT	Ending balance					0.00
603608	15909	ASSAYS	GEOCHEM NFT	Ending balance					0.00
605001	15909	SALARIES	DIAMOND DRIL NFT						0.00
7	GL- 5	Aug 31 93	SALARIES	TRF FROM 905	25-1	34-1	2,477.65		2,477.65
									2,477.65
8	GL- 2	Aug 31 93	PAYROLL	TORONTO 8-1	26-1	35-1	5,008.02		
8	GL- 5	Aug 25 93	SALARIES	TRF FROM 905	23-1	32-1	2,477.65		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		2,477.65	5,008.02
									7,485.67
9	GL- 2	Sep 29 93	PAYROLL	TORONTO 9-1	30-2	41-2	2,425.50		2,425.50

General Ledger Listing as of December 31, 1993

Pd	Dept. Source	Date	Description	Reference	Posting Entry	Batch Entry	Debits	Credits	Net Change/ Balance
605001	15909	SALARIES	DIAMOND DRIL NFT (continued)						9,911.17
10	GL- 2	Oct 28 93	PAYROLL	TORONTO 10-1	34-3	45-3	2,748.34		2,748.34
									12,659.51
11	GL- 2	Nov 26 93	PAYROLL	TORONTO 11-1	37-3	50-3	2,344.24		2,344.24
									15,003.75
12	GL- 3	Dec 31 93	PAYROLL: DECEMBER	12-1 TORONTO	41-1	56-1	2,181.34		2,181.34
				Ending balance					17,185.09
605120	15909	TRAVELLING	DIAMOND DRIL NFT						0.00
9	AP-IN	Sep 15 93	APIN # 24 MURRAY JEROME	15/93	29-4	40-3	1,252.83 EXP		
9	AP-IN	Sep 20 93	APIN # 24 MURRAY JEROME	20/93	29-4	40-3	19.64 EXP		1,272.47
				Ending balance					1,272.47
605600	15909	CONTRACT PAY	DIAMOND DRIL NFT						0.00
7	GL- 5	Aug 31 93	PETRO DRILLING	TRF FROM 905	25-1	34-1	38,865.20 B		
7	GL- 5	Aug 31 93	ACCRUAL - UNIVERSAL	TRF FROM 905	25-1	34-1	53,865.00		92,730.20
									92,730.20
8	AP-IN	Aug 09 93	APIN # 20 PETRO DRILLING	3-2348	26-6	36-3	25,564.76 P		
8	GL- 5	Aug 25 93	PETRO DRILLING	TRF FROM 905	23-1	32-1	38,865.20		
8	GL- 5	Aug 25 93	ACCRUAL - UNIVERSAL	TRF FROM 905	23-1	32-1	53,865.00		
8	GL- 5	Aug 31 93	TRANSFER TO NEW PROJECT #909	PETRO DRILL	28-1	38-1	19,543.17 D		
8	GL- 5	Aug 31 93	REVERSE ENTRY, RE-ENTER 7/31	BATCH 32	24-1	33-1		92,730.20	
8	GL- 9	Aug 31 93	JULY ACCRUAL REVERSAL	UNIVERSAL	26-3	35-3		53,865.00	8,757.07-
									83,973.13
9	AP-IN	Jul 26 93	APIN # 22 PETRO DRILLING	2343-A	29-4	40-3	3,704.83 D		
9	AP-IN	Aug 09 93	APIN # 22 PETRO DRILLING	2348-A	29-4	40-3	12,847.25 D		
9	AP-IN	Aug 31 93	APIN # 23 UNIVERSAL HELI	13352	29-4	40-3	1,045.00 H		
9	GL- 9	Sep 30 93	GGU	SEP ACCRUALS	31-2	42-2		73,000.00	55,402.92-
									28,570.21
10	AP-IN	Sep 28 93	APIN # 25 PETRO DRILLING	3-2373	34-8	46-3	1,000.00 D		
	- 9	Oct 13 93	SEPTEMBER ACCRUAL REVERSAL	GGU	34-1	45-1	73,000.00		
1.	· 9	Oct 28 93	GGU	OCT. ACCRUAL	34-4	45-4		73,000.00	1,000.00
									29,570.21
11	AP-IN	Nov 02 93	APIN # 29 PETRO DRILLING	3-2392	37-7	51-3	1,000.00 D		
11	GL- 9	Nov 02 93	OCTOBER ACCRUAL REVERSAL	GGU	37-1	50-1	73,000.00		
11	GL- 9	Nov 29 93	PATRO DRILLING	NOV. ACCRUAL	37-4	50-4	1,000.00 D		
11	GL- 9	Nov 29 93	GGU	NOV. ACCRUAL	37-4	50-4		73,000.00	2,000.00
									31,570.21
12	AP-IN	Nov 29 93	APIN # 31 PETRO DRILLING	3-2407	39-3	53-3	1,070.00 D		
12	GL- 5	Dec 17 93	TRF. TOTAL CHARGES	UNIVERSAL	39-5	54-2	100,350.89 H		
12	GL- 9	Dec 17 93	PETRO DRILLING	NOV. ACCRUAL	39-4	54-1		1,000.00	
12	GL- 9	Dec 17 93	GGU	NOV. ACCRUAL	39-4	54-1	73,000.00		173,420.89
				Ending balance					204,991.10
605604	15909	FIELD EXPENSE	DIAMOND DRIL NFT						0.00
9	AP-IN	Sep 14 93	APIN # 23 PICTURE-IT BOU	11866	29-4	40-3	70.16 FS		
9	AP-IN	Sep 15 93	APIN # 24 MURRAY JEROME	15/93	29-4	40-3	19.93 EXP		
9	AP-IN	Sep 19 93	APIN # 24 ROBERT STEWART	19/93	29-4	40-3	16.66 EXP		
9	AP-IN	Sep 20 93	APIN # 24 MURRAY JEROME	20/93	29-4	40-3	33.36 EXP		140.11
									140.11
12	AP-IN	Nov 10 93	APIN # 31 CANADIAN IMPER	MC-591	39-3	53-3	4,022.08		4,022.08
				Ending balance					4,162.19
605608	15909	ASSAYS	DIAMOND DRIL NFT						0.00
12	AP-IN	Nov 25 93	APIN # 31 LAKEFIELD RESE	-08610	39-3	53-3	805.00 LAB		805.00

(5)

PASSENGER TICKET AND BAGGAGE CHECK SUBJECT TO CONDITIONS OF CONTRACT / BILLET DE PASSAGE ET BULLETIN DE BAGAGES SOUMIS AUX CONDITIONS DE TRANSPORT

CANADIAN AIRLINES INTL
TICKET NON REFUNDABLE
AUTH0349 YHZSDBH 456YHZ AMJ
OLSHEFSKY/KEVIN MR

BSP CANADA YHZ/YHZ SITI
13MAY93 OK77KB /1CL
IAT

INTRA GATEWAY TRAVEL
PASSENGER COUPON / PASSAGER
WINDSOR 92
6678080 /SH

	Carrier	Flight	Cl	Date	Time	Status	Fare Basis	Not valid before	Not valid after	Allow
HALIFAX	CP	1401	V	8JUN	810A	OK	VL10LNR	8JUN	8JUN	2PC
X MONTREAL/DORVL	CP	404	V	8JUN	915A	OK	L10LNR	8JUN	8JUN	2PC
O IQALUIT	7F	950	Y	8JUN		OK				2PC
O NUUK	7F		Y		300A	OK				2PC
O IQALUIT										

NOT GOOD FOR PASSAGE
NON VALABLE POUR TRANSPORT

CAD 1475.50 8JUN YHZ CP X/YUL CP YFB 404.50 7F GOH 320.00 7F YFB 323.00 OP X/YUL CP YHZ 428.00 CAD1475.50 END
CAD 40.00CA XTA
CADEXEMPTXG
FORM OF PAYMENT / MODE DE PAIEMENT [redacted]
APP. CODE 00449
CAD 1515.50
75607 546
13300303376
018 33522 1

(6)

PASSENGER TICKET AND BAGGAGE CHECK SUBJECT TO CONDITIONS OF CONTRACT / BILLET DE PASSAGE ET BULLETIN DE BAGAGES SOUMIS AUX CONDITIONS DE TRANSPORT

SAS SCANDINAVIAN AIR
JAV IAT
OLSHEFSKY/KEVIN MR

BSP CANADA GOH/GOH /1CL

Agency Name/Location/Numeric Code: GLA/GOH/Ari
Booking ref.
NOT GOOD FOR PASSAGE
264 M 10JUN 0815 OK

INTRA GATEWAY TRAVEL
PASSENGER COUPON / PASSAGER
WINDSOR 92
6678080 /DE

	Carrier	Flight	Cl	Date	Time	Status
NUUK	GL					
O JAKOBSHAVN	GL	265	M	27AUG	225P	OK
NUUK				VOID		
VOID						
VOID						

NOT GOOD FOR PASSAGE
NON VALABLE POUR TRANSPORT

DKK 5440 9JUN GOH GL JAV 2720 GL GOH 2720 DKK5440 END
CAD 1116.00 XTA
FORM OF PAYMENT / MODE DE PAIEMENT [redacted]
APP. CODE 007007
CAD 1116.00
75607 704
14600523851
117 3352245786 1

Travel #2631.5 x 10 tickets = 26,315.00

Helly-Hansen CANADA LIMITED

Landmark Place, 51 Raddall Ave., Dartmouth, Nova Scotia, B3B 1L4
FAX: (902) 468-2367 TELEPHONE: 902-468-6382 TOLL FREE 1-800-565-7749

HellyHansen

VENDU À / SOLD TO

FALCONBRIDGE
124 WATER STREET
P.O. BOX 398
WINDSOR, NS
BON 2TO

EXPÉDIER À / SHIP TO

FALCONBRIDGE
124 WATER STREET
WINDSOR, NS
BON 2TO

DATE DE LA COMMANDE ORDER DATE	DATE D'EXPÉDITION DATE SHIPPED	DATE DE LA FACTURE INVOICE DATE	DATE DUE DE FACTURE INVOICE DUE DATE	NOTRE Nº DE COMMANDE OUR ORDER NO.	Nº COMMANDE DU CLIENT CUSTOMER'S ORDER NO.	Nº DE TAXE PROVINCIALE PROVINCIAL SALES TAX NO.	Nº DE TAXE FÉDÉRALE FEDERAL SALES TAX NO.
06/04/93	06/04/93	06/04/93	CHEQUE				131322489

Nº DU CLIENT CUSTOMER NO.	VENDEUR REPR.	TYPE COM ORD. KIND	Nº MAGASIN STORE NO.	DEPT.	CONDITIONS - TERMS	P.P.A. P.P.'D.	À PERC. COLL.	EXPÉDIÉ VIA SHIPPED VIA	EXPÉDIÉ DE SHIPPED FROM	Nº DE CONNAISSEM. B/L NO.	Nº DE FACTURE INVOICE NO.
					CHEQUE IN HOUSE	XX		PICK UP	DART.		A28270

QTÉ COMM. QTY ORDERED	À VENIR B/O	STYLE	DESCRIPTION	PFX	QTÉ EXP. QTY SHIP'D	U/M	PRIX PRICE	ESCOMPTE DISCOUNT	PRIX NET NET PRICE	MONTANT AMOUNT
3		E352	Transport Suit		3		300.00		300.00	900.00
			3 MONTH LEASE							900.00
										900.00
			TOTAL 3 MONTH LEASE							2700.00
			G.S.T.							189.00
			P.S.T.							288.90
										3,177,90
			DAMAGE DEPOSIT							3,312.04 (with ...
										6,489.94
			[illegible]							
			DAMAGE DEPOSIT WILL BE RETURNED AT THE END OF THE THREE MONTH LEASE AS LONG AS SUITS ARE IN GOOD CONDITION							

Paid by Chq #

M. Jerome
06/06/93
15-905-601-604

H-9003 REV. 05-87

FACTURE - INVOICE

ORIGINALE - ORIGINAL

TOTAL 6,489.94

Helly Hansen CANADA LIMITED

Landmark Place, 31 Raddall Ave., Dartmouth, Nova Scotia, B3B 1L4
FAX: (902) 468-2367 TELEPHONE: 902-468-6382 TOLL FREE 1-800-565-7749

VENDU À / SOLD TO

FALCONBRIDGE
124 WATER STREET, P.O. BOX 398
WINDSOR, NS
BON 2TO

EXPÉDIER À / SHIP TO

SAME AS SOLD TO

DATE DE LA COMMANDE ORDER DATE	DATE D'EXPÉDITION DATE SHIPPED	DATE DE LA FACTURE INVOICE DATE	DATE DUE DE FACTURE INVOICE DUE DATE	NOTRE N° DE COMMANDE OUR ORDER NO.	N° COMMANDE DU CLIENT CUSTOMER'S ORDER NO.
06/04/93	06/04/93	06/04/93	CHEQUE		

N° DE TAXE PROVINCIALE PROVINCIAL SALES TAX NO.	N° DE TAXE FÉDÉRALE FEDERAL SALES TAX NO.
	? 131322489

N° DU CLIENT CUSTOMER NO.	VENDEUR REPR.	TYPE COM ORD. KIND	N° MAGASIN STORE NO.	DEPT.	CONDITIONS - TERMS	P.P.A. P.P.'D.	À PERC. COLL.	EXPÉDIÉ VIA SHIPPED VIA	EXPÉDIÉ DE SHIPPED FROM	N° DE CONNAISSEM. B/L NO.	N° DE FACTURE INVOICE NO.
					CHEQUE IN HOUSE	XXX		PICK UP			A28269

QTÉ COMM. QTY ORDERED	À VENIR B/O	STYLE	DESCRIPTION	PFX	QTÉ EXP. QTY SHIP'D	U/M	PRIX PRICE	ESCOMPTE DISCOUNT	PRIX NET NET PRICE	MONTANT AMOUNT
2		E352	Transport Suit 1/Medium 1/Large		2		1,740.00		1,740.00	3,480.00
		RENTAL	SUITS WILL BE REPLACED WITH NEW SUITS WHEN THEY ARRIVE							
			G.S.T.							243.60
			P.S.T.							372.36

Paid by Cheque.

M. Jeune
06/06/93
15-905-601-604

TOTAL 4,095.96

ORIGINALE - ORIGINAL

H-9003 REV. 05-87

PGI
PHOTOSUR GÉOMAT

Photosur Géomat (1991) Inc.
5160 Décarie Boulevard
Suite 300
Montréal, Québec
Canada H3X 2H9

Telephone: (514) 369-5000
Fax: (514) 369-5059
Telex: 055-61250
SNC LAVALIN INC

MAY 28 1993

MUL001

INVOICE *(Please return a copy of the invoice with your payment.)*

TO FALCONBRIDGE
P.O. Box 398
124 Water St.
Windsor, N.S.
B0N 2T0

15-905-601-604

6 **	TYPE	PN	%

DATE: May 28/93 INITIALS: M.J.

Date: May 27 1993

Subject

Your File No.: 015-601-604-905

ATT.: Murray Jerome

Our Project No.: 60726-C1-6000

PAYABLE UPON RECEIPT

Page 1 of 1 INVOICE No. IM-002259

PROFESSIONAL SERVICES

HRV-SPOT Multispectral scene 630-203 (92-07-14):
CCT optimal digital enhancement scene (EXABYTE 8 mm)
Negative of the digital enhancement

Photo-reproduction at the scale of 1:100 000

Expenses and salaries 6 701,39 $

FALCONBRIDGE LIMITED

IM-002259 5398

	AMOUNT	CR X
32005	315.00	
601604 015905	4 500.00	

4815.00

APPROVED | CW | CW | CHECKED

...cial price : 4 500,00 $

...is invoice : 4 500,00 $

G.S.T. : 315,00 $

...IS INVOICE : 4 815,00 $

G.S.T. No : R131100364

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTN: A. H. GREEN OR R. STEWART

INVOICE NUMBER: 13093
INVOICE DATE: 23/ 7/93
PAGE: 1

OUR REFERENCE NO: 100606
CUSTOMER P.O. NO.:

AIRCRAFT
C-GQNS

TO CHARGE FOR THE FOLLOWING EXPENSE:

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	EXPENSE CLAIM NO. 9202 TAXI EXPENSES JUNE 12 & 23		21.27
	GST		0.00
	TOTAL		21.27

FALCONBRIDGE LIMITED

VOUCHER NUMBER	13093	VENDOR NUMBER	2029
ACCOUNT	COST CENTRE		CR
601604	01.5905		2487
		FREIGHT	
		CURRENCY	21.27
ENTERED	CODED	EXT & ADD	CHECKED
	CW	CW	CW MD

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

nputer ... -Custc

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611 FAX (709) 576-0083

AUG 09 1993

GST REG. # R105457139

TO
FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTENTION: A. H. Green OR R. Stewart

INVOICE NUMBER
13148

INVOICE DATE
31/ 7/93

PAGE
1

OUR REFERENCE NO
100606

CUSTOMER P.O. NO.

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24852-24863

QUANTITY	DESCRIPTION	PRICE	AMOUNT
37.50	FLYING HOURS	950.00	35,625.00
	GST		0.00
	TOTAL		35,625.00

FALCONBRIDGE LIMITED

13148 VENDOR NUMBER 2029

COST CENTRE	AMOUNT	CR X
601.600	01.590.51	35625.00

CURRENCY 35,625.00

CODED			CHECKED
CW	CW	CW	RJS

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 21208, ST. JOHN'S, NEWFOUNDLAND A1A 5B2
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

AUG 20 1993

TO
FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTN: A.H. GREEN OR R. STEWART

INVOICE NUMBER
13206

INVOICE DATE
16/ 8/93

CUR REFERENCE NO
100606

CUSTOMER P.O. NO.

PAGE
1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24873-24875, 24801-24802

QUANTITY	DESCRIPTION	PRICE	AMOUNT
20.30	FLYING HOURS	950.00	19,285.00
	GST		0.00
	TOTAL		19,285.00

Drilling 7790.00
Geo & Gen 11495.00

NEW MAILING ADDRESS ABOVE

601	605
2.7	2.2
1.5	0.3
1.1	4.0
0.7	3.8
1.2	2.8
RDS(?) 601 = 7.2 hrs	13.1 hrs.
$6840	$12,445

FALCONBRIDGE LIMITED

VOUCHER NUMBER	13206	VENDOR NUMBER	2029
ACCOUNT	COST CENTRE	AMOUNT	
601600	015909	11,495.00	
605600	015905	7,790.00	
DUE DATE		CURRENCY	19,285.00
APPROVED	CODED	EXT & ADDS	A/PAY	CHEC. ED
	CW	CW	CW	235

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

AUG 23 1993

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 21208, ST. JOHN'S, NEWFOUNDLAND A1A 5B2
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO
FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTN: A.H. GREEN OR R. STEWART

INVOICE NUMBER
13198

INVOICE DATE
16/ 8/93

OUR REFERENCE NO	CUSTOMER P.O. NO.	PAGE
100606		1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24870-24872

QUANTITY	DESCRIPTION	PRICE	AMOUNT
12.50	FLYING HOURS	950.00	11,875.00
	GST		0.00
	TOTAL		11,875.00

Drilling 11590
Geo & Gen 285

***NEW MAILING ADDRESS ABOVE**

FALCONBRIDGE LIMITED

VOUCHER NUMBER 13198 2027

ACCOUNT	COST	CR X
6.05.600 01.5909	11,590.00	
6.01.600 01.5909	285	

DUE DATE | GST No. 11,875.00

APPROVED	CODED	EXT & ADDS	A/P ENTRY	CHECKED
	CW	CW	CW	

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

17 1993

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 21208, ST. JOHN'S, NEWFOUNDLAND A1A 5B2
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO
FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0

ATTN: A.H. GREEN OR R. STEWART

INVOICE NUMBER
13185

INVOICE DATE
31/ 7/93

OUR REFERENCE NO
100606

CUSTOMER P.O. NO.

PAGE
1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24864-24869

QUANTITY	DESCRIPTION	PRICE	AMOUNT
46.30	FLYING HOURS	950.00	43,985.00
	GST		0.00
	TOTAL		43,985.00

Drilling 2669
Geo & Gen 17290

FALCONBRIDGE LIMITED

VOUCHER NUMBER 13185			2029	
ACCOUNT				CR X
~~1-3-2005~~				
601 600	0.15900		17,290.00	
605600	0.15900		26,695.00	
DUE DATE			CURRENCY 43,985.00	
APPROVED	CODED CW	EXT & ADDS CW	A/PAY CW	CHECKED

****PLEASE NOTE OUR ADDRESS CHANGE ABOVE****

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

FALCONBRIDGE

Falconbridge Limited
P.O. Box 398
124 Water St.
Windsor, Nova Scotia
CANADA B0N 2T0
Telephone 902/798-2218
Rapidfax 902/798-2395

October 22, 1993

INVOICE - 102293

Flemming Christiansen
Grønlands Geologiske Undersøgelse
Øster Voldgarde 10
DK-1350
Copenhagen K
Denmark

Description				Amount
Helicopter Hours	45.9 hr	X	950.00/hr	43,605.00
Helicopter Fuel	5508 l	X	2.85 ddk/l	3,109.34
Crew Change Airfare & Exp.	33%	X	9,579.05 cdn$	3,161.09
Crew Change Helicopter Hours	33%	X	2.20 hr	689.70
Crew Change Helicopter Fuel	87.12 l	X	2.85 ddk/l	49.18
Services by Falconbridge	31 man-days	X	240.00/day	0.00
Cook	14 days	X	206.5/day	2,891.00
Cooks Mob & Demob	20%	X	3,800.00 cdn$	760.00
1993 Drill Mobilization	33%	X	29,000.00 cdn$	9,570.00
1994 Drill Demobilization	33%	X	27,500.00 cdn$	9,075.00
1993-94 Drill storage	0 %	X	9,000.00 cdn$	0.00
Crew Mob & Demob	33%	X	7,500.00 cdn$	2,475.00
Ticket Change	100%	X	200.00 cdn$	200.00
Drill Invoice	67%	X	-4,232.00 ddk	-2,835.44
Diesel Fuel	1200 l	X	2.05 ddk/l	487.26
Telephone & Fax Charges (Windsor)			151.03 cdn$	151.03
Freight Charge			532.40 ddk	105.45
Food	98 man/days	X	87.56 ddk	1,699.66
Camp Rental	2 weeks	X	5,096.25	2,018.88
Boat Charter	67%	X	-30,000.000 ddk	-3.981.30
INVOICE TOTAL				$73,230.84

Conversion rate of CDN$ .198075 = 1 DKK

Invoice is to be paid in Canadian dollars.

Att. Frank Nolan

7020 ~~720~~ Mumford Rd, Hfx, NS.

petro DRILLING COMPANY LIMITED
PO Box ~~488, Springdale, Newfoundland~~
~~A0J 1T0, (709) 673-3801~~
B3L 4B9 453-1200

INVOICE DATE	INVOICE NO.
May 26,1993	93-2308
CUST. NO.	
JOB Greenland	

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Limited,
P. O. Box 398,
Windsor, N.S. BON 2TO

Date	Description		Price	Cost	Total
	Mobilization of drill outfit and associated equipment, drill shack, supplies and drill crews from Canada to Ilulissat	L.S.	29,000.00	29,000.00	$29,000.00
	BQ Core trays	340	12.78	4,345.20	4,345.20
	E-Z Mud -20L pails	46	120.00	5,520.00	5,520.00
	Sub-total				$38,865.20
	GST				2,720.56

015-905-605-600

G/L	TYPE	PN	%

DATE 02/06/93 INITIALS TM

GST #R104168331

FALCONBRIDGE LIMITED

VOUCHER NUMBER 93-2308 FUND 5193

132005
605600 015905

2,720.56
38,865.20

DUE DATE CURRENCY 41,585.76

APPROVED	ACCOUNT	TAX & ADDS	A/PAY	CHECKED
	CW		CW	RDS

TOTAL AMOUNT $41,585.76

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

JAN 17 1994

DRILLING COMPANY LIMITED
PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
Dec. 31, 1993	93-2427

CUST. NO.

JOB: Greenland

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S. BON 2TO

Date	Description	Price	Cost	Total
	Rental charge to retain diamond drill at Greenland			
	Period: Nov. 26 to Dec. 25/93			$ 1,000.00
	GST			70.00

6 ** | TYPE | | |
605 | 600 | 989 |
DATE 01/19/94 INITIALS TMJ

FALCONBRIDGE LIMITED

VOUCHER NUMBER 93-2427 | ERROR NUMBER 5193

ACCOUNT	AMOUNT	DR X
132005	70.00	
605600 015909	1000.00	
	1070.00	

RDS CW CW CW RDS

TOTAL AMOUNT $1,070.00

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

DEC - 6 1993

DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
November 29, 1993	93-2407
CUST. NO.	
JOB: Greenland	

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S.
B0N 2T0

Date	Description	Price	Cost	Total
	Rental charges to retain diamond drill at Greenland.			
	Period: Oct. 26 to Nov. 25/93	1,000.00	1,000.00	$1,000.00
	GST			70.00

G/L	TYPE	PN	%
605	600	909	100

DATE: Dec 9/93 INITIALS: KD

FALCONBRIDGE LIMITED

VOUCHER NUMBER: 93-2407 VOUCHER: 5193

	ACCOUNT	AMOUNT	CR X
1	605600 015909	1070.00	

TOTAL: 1070.00

APPROVED: RDS | CW | CW | CW | RDS

TOTAL AMOUNT $1,070.00

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

DRILLING COMPANY LIMITED

PO Box 488, Sydney, Nova Scotia
ADJ TO [illegible]

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S.
BON 2TO

[illegible]
Greenland

Date	Description	Price	Cost	Total
	Rental charges to retain diamond drill rig at Greenland Period: Sept. 26 to Oct. 25/93	1,000.00	1,000.00	$1,000.00
	GST			70.00

6 **	TYPE	PN	%
605	600	909	

Nov 8/93 INITIALS MJ

FALCONBRI[illegible]D

VOUCHER NUMBER 93-2392 5193

AMOUNT | DR X

132005
605600 0.15 909 | 70.00 | 1,000.00

DUE 1070.00

APPROVED		AUDITED	PAID	CHECKED
RDS	CW	CW	CW	RDS

TOTAL AMOUNT $1,070.00

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

171 Little Bay Rd

...etro
...ILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
Sept. 28,1993	93-2373
CUST. NO.	
JOB Greenland	

INVOICE TO:

Falconbridge Greenland A/S
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S.
B0N 2T0

Date	Description	Price	Cost	Total
	Rental charges to retain diamond drill at Greenland for period of August 26 to Sept. 25,1993			$1,000.00
	GST			70.00
	GST #R104168331			

909-605-600

	TYPE	PN	%

10/04/93 INITIALS MJ

FALCONBRIDGE LIMITED

VOUCHER NUMBER 93-2373 5193

ACCOUNT	AMOUNT
132005	70.00
605600 015909	1000.00

APPROVED 1070.00

CW CW CW RDS

TOTAL AMOUNT	$1,070.00

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

...G COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
August 9,1993	93-2348
CUST. NO.	
JOB	
Greenland	

...CE TO: Falconbridge Greenland A/S
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S. BON 2TO

AUG 12 1993

Date	Description			Price	Cost	Total
	Hole #FP93-5-6					
	Overburden	0-10.0m	10.0	42.95	429.50	$
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-23.3m	3.3	47.25	155.93	
	BQ Coring	23.3-62.2m	38.9	42.95	1,670.76	2,728.69
	Hole #FP93-4-1					
	Overburden	0- 10.0m	10.0	42.95	429.50	
	"	10.0- 11.3m	1.3	47.25	61.43	
	BQ Coring	11.3-103.6m	92.3	42.95	3,964.29	4,455.22
	Hole #FP93-3-1 (B8)					
	Overburden	0- 10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0- 44.8m	24.8	47.25	1,171.80	
	BQ Coring	44.8-138.7m	93.9	42.95	4,033.01	6,106.81
	Hole #FP93-3-2					
	Overburden	0- 10.0m	10.0	42.95	429.50	
	"	10.0- 14.8m	4.8	47.25	226.80	
	BQ Coring	14.8-185.6m	170.8	42.95	7,335.86	7,992.16
	Hole #FP93-3-3 (B10)					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-46.9m	26.9	47.25	1,271.03	
	BQ Coring	46.9-96.0m	49.1	42.95	2,108.85	4,281.88
	Sub-total					$ 25,564.76
	GST					1,789.53
	GST #R104168331					
					TOTAL AMOUNT	$27,354.29

FALCONBRIDGE LIMITED

VOUCHER NUMBER 93-2348 VENDOR NUMBER 5193

132005 178953
605600 015 905 25564.76

DUE DATE
CURRENCY 27,354.29

APPROVED CW CODED CW CW 8/25

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

DRILLING COMPANY LIMITED
PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
July 26, 1993	93-2343

CUST. NO.

JOB: Greenland

INVOICE TO: Falconbridge Greenland A/S
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water Street,
Windsor, N.S. BON 2TO

'AUG 09 1993

Date	Description			Price	Cost	Total
	Hole #FP93-5-1 (B4)					
	Overburden	0-10m	10.0	42.95	429.50	$
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-50.6m	30.6	47.25	1,445.85	2,347.85
	Hole #FP93-5-2 (B3)					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-50.9m	30.9	47.25	1,460.03	2,362.03
	Hole #FP93-5-3					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-40.8m	20.8	47.25	982.80	1,884.80
	Hole #FP93-5-4 (B2)					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-36.3m	16.3	47.25	770.18	1,672.18
	Hole #FP-93-5-5					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-70.4m	50.4	47.25	2,381.40	3,283.40
	Hole #FP93-5-6					
	Overburden	0-10.0m	10.0	42.95	429.50	
	"	10.0-20.0m	10.0	47.25	472.50	
	"	20.0-62.2m	42.2	47.25	1,993.95	2,895.95
	Materials lost in hole #FP93-5-1					
	BQ inner tube 10'		1	52.86	52.86	
	BQ core bit		1	457.70	457.70	
	BQ Reaming shell		1	249.00	249.00	
	BW casing shoe		1	160.00	160.00	919.56

TOTAL AMOUNT Cont'd.

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

Petro DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE TO:

Falconbridge Greenland A/S

-Page 2

INVOICE DATE	INVOICE NO.
July 26,1993	93-2343
CUST. NO.	
JOB: Greenland	

Date	Description		Price	Cost	Total
	Materials lost in hole #FP93-5-2				
	BW casing	13.41m	55.00	737.55	$
	BQ reaming shell	1	249.00	249.00	
	BW casing shoe	1	160.00	160.00	1,146.55
	Materials lost in hole #FP93-5-3				
	BQ core bit	1	457.70	457.70	
	BQ reaming shell	1	249.00	249.00	
	BW casing	.61m	55.00	33.55	
	BW casing shoe	1	160.00	160.00	900.25
	Materials lost in hole #FP93-5-4				
	BW casing	1.22m	55.00	67.10	
	BW casing shoe	1	160.00	160.00	227.10
	Materials lost in hole #FP93-5-6				
	BW casing	31.7m	55.00	1,743.50	
	BW casing shoe	1	160.00	160.00	1,903.50
	Sub-total				$ 19,543.17
	GST				1,368.02
	GST #R!04168331				

*This invoice is based on reports faxed to us from you representative and may require an adjusting invoice upon receipt of our field reports.

FALCONBRIDGE LIMITED

VOUCHER NUMBER	93-2343	VENDOR NUMBER	5193
ACCOUNT		AMOUNT	CR X
1 3 2005		1,368.02	
6 0 5600 0 1 5905		19,543.17	
DUE DATE		CURRENCY	20,911.19
APPROVED	CW	CW	CW	CHECKED

1903•50 +
1368•02 +
20911•19 T

TOTAL AMOUNT $ 20,911.19

CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

SEP 07 1993

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
July 26, 1993	93-2343A

CUST. NO.

JOB: Greenland

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S. B0N 2T0

Date	Description			Price	Cost	Total
	Invoice #93-2343 amended					
	Hole #FP93-5-1					
	Overburden	0-10.00m	10.00	42.95	✓429.50	
	"	10.00-20.00m	10.00	47.25	✓472.50	
	"	20.00-50.60m	30.60	47.25	✓1,445.85	✓2,347.85
July 17	Labour man/hrs		12	23.00	✓276.00	
	Drill hrs		8	13.50	✓108.00	✓384.00
	Materials consumed (#FP93-5-1)					
	BQ Core bit		2	457.70	✓915.40	
	BQ Reaming shell -lite set		1	249.00	✓249.00	
	BQ Inner tube		1	52.86	✓ 52.86	
	NW Casing shoe		1	190.00	✓190.00	
	Plus 15%			1,407.26	✓211.09	✓1,618.35
	Hole #FP93-5-2					
	Overburden	0-10.00m	10.00	42.95	✓429.50	
	"	10.00-20.00m	10.00	47.25	✓472.50	
	"	20.00-50.90m	30.90	47.25	✓1,460.03	✓2,362.03
" 19	Labour man/hrs		8	23.00	✓184.00	
	Drill hrs		4	13.50	✓ 54.00	✓238.00
	Materials consumed (#FP93-5-2)					
	BQ Core bit		2.2	457.70	✓1,006.94	
	BW Casing -m		13.41	55.00	✓737.55	
	BW Casing shoe		1	160.00	✓160.00	
	Plus 15%			1,904.49	✓285.67	✓2,190.16
	Hole #FP93-5-3					
	Overburden	0-10.00m	10.00	42.95	✓429.50	
	"	10.00-20.00m	10.00	47.25	✓472.50	
	"	20.00-40.84m	20.84	47.25	✓984.69	✓1,886.69
" 21	Labour man/hrs		12	23.00	✓276.00	
	Drill hrs		3	13.50	✓ 40.50	✓316.50

TOTAL AMOUNT Cont'd.

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
July 26, 1993	93-2343A
CUST. NO.	
JOB: Greenland	

INVOICE TO: Falconbridge Greenland A/S

-Page 2

Date	Description		Price	Cost	Total
	Materials consumed (#FP93-5-3)				
	BQ Core bit	2	457.70	915.40	$
	BQ Reaming shell -lite set	1	249.00	249.00	
	BW Casing -m	.61	55.00	33.55	
	BW Casing shoe	1	160.00	160.00	
	Plus 15%		1,357.95	203.69	1,561.64
	Hole #FP93-5-4				
	Overburden 0-10.00m	10.00	42.95	429.50	
	" 10.00-20.00m	10.00	47.25	472.50	
	" 20.00-36.27m	16.27	47.25	768.76	1,670.76
July 22	Labour man/hrs	6	23.00	138.00	
	Drill hrs	3	13.50	40.50	178.50
	Materials consumed (#FP93-5-4)				
	BQ Core bit	1	457.70	457.70	
	BW Casing -m	1.22	55.00	67.10	
	BW Casing shoe	1	160.00	160.00	
	Plus 15%		684.80	102.72	787.52
	Hole #FP93-5-5				
	Overburden 0-10.00m	10.00	42.95	429.50	
	" 10.00-20.00m	10.00	47.25	472.50	
	" 20.00-70.41m	50.41	47.25	2,381.87	3,283.87
" 24	Labour man/hrs	6	23.00	138.00	
	Drill hrs	3	13.50	40.50	178.50
	Materials consumed (#FP93-5-5)				
	BQ Core bit	.5	457.70	228.85	
	Plus 15%		228.85	34.33	263.18
	Hole #FP93-5-6)				
	Overburden 0-10.00m	10.00	42.95	429.50	
	" 10.00-20.00m	10.00	47.25	472.50	
	" 20.00-38.71m	18.71	47.25	884.05	
	BQ Coring 38.71-62.18m	23.47	42.95	1,008.04	2,794.09
" 25	Labour man/hrs	4	23.00	92.00	
	Drill hrs	2	13.50	27.00	119.00

TOTAL AMOUNT

Cont'd.

Jetro DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
July 26, 1993	93-2343A

CUST. NO.

JOB
Greenland

INVOICE TO: Falconbridge Greenland A/S

-Page 3

Date	Description		Price	Cost	Total
July 26	Labour man/hrs	12	23.00	✓276.00	
	Drill hrs	6	13.50	✓81.00	✓357.00
	Materials consumed (#FP93-5-6)				
	BQ Core bit	1	457.70	✓457.70	
	BW Casing shoe	1	160.00	✓160.00	
	Plus 15%		617.70	✓92.66	✓710.36
	Sub-total				$ ✓23,248.00
	Less: sub-total re invoice #93-2343				CW ✓(19,543.17)
	Adjusted sub-total balance				$ ✓3,704.83
	GST				259.34

GST #R104168331

909
15-905-605-600

6**	TYPE	PV	
DATE 09/10/93		INITIALS	

FALCONBRIDGE LIMITED

VOUCHER NUMBER 93-2343A	VENDOR NUMBER 5193	
ACCOUNT	COST CENTRE	AMOUNT
1.32005		259.34
605600	01.59.09	3,704.83
DUE DATE	CURRENCY	3964.17
APPROVED	CODED CW	ENTERED CW

TOTAL AMOUNT $3,964.17

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
August 9, 1993	93-2348A
CUST. NO.	
JOB Greenland	

INVOICE TO: Falconbridge Greenland A/S,
c/o Falconbridge Ltd.,
P. O. Box 398, 124 Water St.,
Windsor, N.S. B0N 2T0

Date	Description			Price	Cost	Total
	Invoice #93-2348 amended					
	Hole #FP93-5-7					
	Overburden	0- 10.00m	10.00	42.95	429.50	
	"	10.00- 15.24m	5.24	47.25	247.59	
	BQ Coring	15.24-103.63m	88.39	42.95	3,796.35	4,473.44
July 29	Labour man/hrs		4	23.00	92.00	
	Drill hrs		2	13.50	27.00	119.00
	Materials consumed (#FP-93-5-7)					
	BQ Core bit		1	457.70	457.70	
	Plus 15%			457.70	68.66	526.36
" 30	Standby hrs		36	20.00	720.00	720.00
Aug. 1	Standby hrs		16	20.00	320.00	320.00
	Hole #FP93-3-1					
	Overburden	0- 10.00m	10.00	42.95	429.50	
	"	10.00- 20.00m	10.00	47.25	472.50	
	"	20.00- 66.14m	46.14	47.25	2,180.12	
	BQ Coring	66.14-138.68m	72.54	42.95	3,115.59	6,197.71
" 2	Labour man/hrs		16	23.00	368.00	
	Drill hrs		8	13.50	108.00	476.00
" 4	Labour man/hrs		10	23.00	230.00	
	Drill hrs		5	13.50	67.50	297.50
	Materials consumed (#FP93-3-1)					
	BQ Core bit		.50	457.70	228.85	
	BW Casing shoe		1	160.00	160.00	
	Plus 15%			388.85	58.33	447.18
	Hole #FP93-3-2					
	Overburden	0- 10.00m	10.00	42.95	429.50	
	"	10.00- 15.24m	5.24	47.25	247.59	
	BQ Coring	15.24-150.00m	134.76	42.95	5,787.94	
	BQ "	150.00-185.62m	35.62	44.60	1,588.65	8,053.68
" 6	Labour man/hrs		4	23.00	92.00	
	Drill hrs		2	13.50	27.00	119.00

TOTAL AMOUNT

Cont'd.

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

Petro DRILLING COMPANY LIMITED

PO Box 488, Springdale, Newfoundland
A0J 1T0, (709) 673-3801

INVOICE DATE	INVOICE NO.
August 9, 1993	93-2348A
CUST. NO.	
JOB: Greenland	

INVOICE TO: Falconbridge Greenland A/S

-Page 2

Date	Description			Price	Cost	Total
	Acid test at 185.62m		1	60.00	60.00	$ 60.00
Aug. 7	Labour man/hrs		6	23.00	138.00	
	Drill hrs		2	13.50	27.00	165.00
	Hole #FP93-3-3					
	Overburden	0- 10.00m	10.00	42.95	429.50	
	"	10.00- 20.00m	10.00	47.25	472.50	
	"	20.00- 46.94m	26.94	47.25	1,272.92	
	BQ Coring	46.94-150.00m	103.06	42.95	4,426.43	
	BQ "	150.00-181.97m	31.97	44.60	1,425.86	8,027.21
" 10	Labour man/hrs		6	23.00	138.00	
	Drill hrs		3	13.50	40.50	178.50
	Acid test at 181.97m		1	60.00	60.00	60.00
	Materials consumed (#FP93-3-3)					
	BQ grout plug		1	22.50	22.50	
	Fondu cement -bag		7	47.50	332.50	
	BQ Core bit		.50	457.70	228.85	
	Plus 15%			583.85	87.58	671.43
	Demobilization of drill crew			7,500.00	7,500.00	7,500.00
	Sub-total					$ 38,412.01
	Less: sub-total re invoice #93-2348					(25,564.76)
	Adjusted sub-total balance					$ 12,847.25
	GST					899.31

909
15-905-605-600

C**	TYPE	PAY	%

FALCONBRIDGE LIMITED
09/10/93 INITIALS: MM

VOUCHER NUMBER #R10416331 93-2348A
VENDOR NUMBER 5193
GST
CR X
899.31
132005
605.600 015909
2,847.25

DUE DATE

CURRENCY 13,746.56

TOTAL AMOUNT $13,746.56

APPROVED CW | CODED CW | & ADDS CW | PAY CW | CHECKED

INTEREST WILL BE CHARGED AT 2% ON ALL OVERDUE ACCOUNTS

JAN 10 1994 Kathryn

ADI NOLAN, DAVIS (NS) LIMITED
ENGINEERS AND SCIENTISTS

7020 Mumford Road
Halifax, Nova Scotia
Canada B3L 4S9

Telephone (902) 453-5555
Fax (902) 453-6325
INET NOLAN-HFX

TO: Falconbridge Limited
P.O Box 398
124 Water Street
Windsor, Nova Scotia
BON 2TO

INVOICE DATE: January 5,1994
INVOICE NO: 211117(FINAL)
PROJECT NO: 93-727
BILLING PERIOD: THRU DECEMBER /93
GST REGISTRATION # R103896205

ATTENTION: Mr. Robert Stewart

INVOICE

BILLING RE: Employment of Jing-Sui Yang

To invoice in accordance with the agreement of employment for Jing-Sui Yang from November 1 thru December 10,1993 ~~31~~ 30.8 days @$144.00/day ~~$4,464.00~~ $ 4,435.20

SUB-TOTAL	~~4,464.00~~	4,435.2
GST	~~312.48~~	310.4[illegible]
PST	~~491.04~~	487.87
TOTAL INVOICE	~~5,267.52~~	5233.53

FALCONBRIDGE LIMITED

VOUCHER NUMBER	211117		5416	
ACCOUNT				CR X
132005			310.46	
601600	015909		2957.04 *	
	906		159.84	
	202		79.92	
	224		1726.27	
		CURRENCY	5233.53	

APPROVED	CODED	EXT. & ADDS	/PAY	CHECKED
RDS	CW	CW	CW	RDS

Amount charged to West Greenland project

COPY

KAL·AAT·UT NIUERFIAT · Grønlands Handel

FAKTURA

Handelssted			
Aasiaat			
Init.	Dato	Bilagsnr.	913786
jcj	01.07.93		

Køber/modtager

PLATINOVA A/S
P.O.Box 1601
3900 Nuuk

23 AUG. 1993

Yderligere oplysninger

☐ Hovedlager-regnskab salgsvarer	☐ Butiks-regnskab	☐ Driftsvare-regnskab	☐ Eget forbrug (KNI)
☐ Hovedlager-regnskab kul & olier	☐ Bageri-regnskab	☐ Produktions-regnskab	☐

Deres reference	Vor reference	Leveringstid	Betaling	Sendt pr.

Varenummer	Varebetegnelse	Kvantum bestilt	Kvantum leveret	Enhed	Enhedspris	Beløb
	Charter af M/S Narhvalen					
	2 døgn 26. og 27. juni					= 20.000 00

Ekspederet af	Efterregnet af	Attest	Kvittering for modtagelsen af ovennævnte varer	Modtagers kontrol	Modt.s efterregn.

c. Udfyldes i København

By	Art	Afd.	Spec.	Tekstkode	Beløb/debet	Beløb/kredit
002	41300	5552				20000 00

COPY

KALAALLIT NIUERFIAT - Grønlands Handel

FAKTURA

Handelssted			
Aasiaat			
Init.	Dato	Bilagsnr.	891029
jcj	18.08.93		

ɔber/modtager

PLATINOVA A/S
P.O. Box 1601
3900 Nuuk

23 AUG. 1993

Yderligere oplysninger

Chartring af M/S Narhvalen
31/7 og 1/8 1993

☐ Hovedlager-regnskab salgsvarer	☐ Butiks-regnskab	☐ Driftsvare-regnskab	☐ Eget forbrug (KNI)
☐ Hovedlager-regnskab kul & olier	☐ Bageri-regnskab	☐ Produktions-regnskab	☐

ɾes reference	Vor reference	Leveringstid	Betaling	Sendt pr.

ɾenummer	Varebetegnelse	Kvantum bestilt	Kvantum leveret	Enhed	Enhedspris	Beløb
	Charter ms narhvalen					
	2 døgn					20.000 00
						==========
	Beløbet bedes fremsendt pr. check.					
	til:					
	KNI Service A/S					
	Postboks 211					
	3950 Aasiaat					

ɔderet af	Efterregnet af	Attest	Kvittering for modtagelsen af ovennævnte varer	Modtagers kontrol	Modt.s efterregn.

ɪdfyldes i
ɛbenhavn

By	Art	Afd.	Spec.	Tekstkode	Beløb/debet	Beløb/kredit

COPY

KALAALLIT NIUERFIAT / Grønlands Handel

FAKTURA

Handelssted			
Aasiaat			
Init.	Dato	Bilagsnr.	860590
jcj	14/6-93		

Varemodtager

Platinova A/s
Postboks 1601
3900 Nuuk

16 JUNI 1993

Yderligere oplysninger

☐ Hovedlager-regnskab salgsvarer	☐ Butiks-regnskab	☐ Driftsvare-regnskab	☐ Eget forbrug (KNI)
☐ Hovedlager-regnskab kul & olier	☐ Bageri-regnskab	☐ Produktions-regnskab	☐

Jres reference	Vor reference	Leveringstid	Betaling	Sendt pr.

Varenummer	Varebetegnelse	Kvantum bestilt	Kvantum leveret	Enhed	Enhedspris	Beløb
	Chartring af M/S Narhvalen					
	10/6-93 fra Ilulissat til					
	Igdlukunguaq.					
	1 døgn fast pris i.h.t aftale					10.000 00
						==========

Ekspederet af	Efterregnet af	Attest	Kvittering for modtagelsen af ovennævnte varer	Modtagers kontrol	Modt.s efterregn.

Udfyldes i København

By	Art	Afd.	Spec.	Tekstkode	Beløb/debet	Beløb/kredit
002	41/300	5552				10000 00

INVOICE

DEC - 8 1993

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341 Telex No. 06 962842
Fax No. (705) 652-6365

No.: C 08610

DATE November 25, 1993

TO: Falconbridge Limited (Windsor) (92)
P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

Attn : Brian Fisher

Ref. : ---

G.S.T. NUMBER R 101733426

Project : LR9343977
LR. Ref : OCT9093.C93

qty	Description	unit $	total $
35	Crushed and pulverized	3.00	105.00
35	WRA + traces	20.00	700.00
		SUB TOTAL $	805.00

	TYPE	FIN	%
605	608	909	100

INITIALS:
Dec 9/93 KO

Analysis	805.00	805.00
	TOTAL $	805.00

RE: M. Jerome

FALCONBRIDGE LIMITED

VOUCHER NUMBER C-08610 5160

ACCOUNT	LR #	
6056080159 09		805.00
DUE DATE		805.00

APPROVED	ISSUED	CHECKED		CHECKED
RDS	CW	CW	CW	RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

INVOICE

DEC - 8 1993

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341 Telex No. 06 962842
Fax No. (705) 652-6365

No.: C 08609

DATE November 25, 1993

TO: Falconbridge Limited (Windsor) (92)
P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

Attn : Brian Fisher

Ref. : ---

G.S.T. NUMBER R 101733426

Project : LR9343979
LR. Ref : OCT9095.C93

qty	Description	unit $	total $
2	Crushed and pulverized	3.00	6.00
2	Geochem Packages	10.00	20.00
1	Ni Assay	11.00	11.00
		SUB TOTAL $	37.00

	TYPE		
601	608	909	100
DATE Dec 9		INITIALS:	

	Analysis	37.00	37.00
		TOTAL $	37.00

RE: Kevin Olshefsky

FALCONBRIDGE LIMITED

VOUCHER NUMBER C-08609 5160

ACCOUNT	CR X
601 608 015909	37.00
	37.00

RDS CW CW CW RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

INVOICE

DEC - 8 1993

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341 Telex No. 06 962842
Fax No. (705) 652-6365

No.: C 08611

DATE November 25, 1993

TO: Falconbridge Limited (Windsor) (92)
P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

Attn : Brian Fisher

Ref. : ---

G.S.T. NUMBER R 101733426

Project : LR9343978
LR. Ref : OCT9094.C93

qty	Description	unit $	total $
25	Crushed and pulverized	3.00	75.00
25	WRA + Traces	20.00	500.00
1	Ni Assay per D. Butler	11.00	11.00
		SUB TOTAL $	586.00

ACCT	TYPE	PN	%
601	608	909	100
DATE Dec 10/93		INITIALS: KO	

	Analysis	586.00	586.00
		TOTAL $	586.00

RE: Kevin Olshefsky
Ni Assay - D. Butler

FALCONBRIDGE LIMITED

VOUCHER NUMBER C-08611 VOUCHER 5160

ACCOUNT					CR X
601	608	01	5909	586.00	

5860

RDS CW CW CW RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

INVOICE

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341
Telex No. 06 962842
Fax No. (705) 652-6365

No.: C08338

DATE September 29, 1993 19

Falconbridge Limited (Windsor) (92)
TO: P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

G.S.T. NUMBER R101733426

Attn : Brian Fisher/Bob Stewart

Project : ---
LR. Ref : SEP9995.C93

Ref. : Freight Charges

qty	Description	unit $	total $	
	SUB TOTAL $		0.00	
qty	Additional Costs	unit $	total $	
1	FedEX 400-1557-0774 - disk	16.32	16.32	224
1	Purolator 164-466-1215 - disk	20.95	20.95	906, 909, 224
1	Purolator 164-466-0290 - disk	22.42	22.42	224
1	Meyers T530703- Tor to Lakefield	51.50	51.50	909
1	Meyers Q742631- Tor to Lakefield	55.11	55.11	224
1	Meyers S692264- Tor to Lakefield	51.50	51.50	224
1	Meyers Q740826- Tor to Lakefield	55.11	55.11	224
1	Meyers T527099- Tor to Lakefield	112.00	112.00	003 (credit inv. to follow)
1	Meyers Q741656- Tor to Lakefield	74.37	74.37	224
1	Cdn Air Int'l 018-1931-3243	79.70	79.70	224
1	Peacebridge-Sulfidamalm	109.70	109.70	906
1	Peacebridge - Platinova, Grnland	116.70	116.70	909
1	Air Canada Cargo-Platinova, Grnln	11.00	11.00	909
	SUB TOTAL $		776.38	
	Analysis	0.00	0.00	
	Extras	776.38	776.38	
	TOTAL $		776.38	

VOUCHER NO. C-08338

51160

All Invoices attached

601604 015 003 112.50
224 361.52
906 116.68
909 186.18
776.38

DUE DATE

APPROVED	CODED	CHK & ADDS	PAY	CHECKED
RDS	CW	CW	GW	RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

INVOICE

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341 Telex No. 06 962842
Fax No. (705) 652-6365

No.: C08310 OCT 19 1993

DATE September 14, 1993 19

TO: Falconbridge Limited (Windsor) (92)
P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

Attn : Brian Fisher/Bob Stewart

Ref. : ---

G.S.T. NUMBER R101733426

Project : 9343448
LR. Ref : AUG9111.C93

qty	Description	unit $	total $
12	Geochem Packages	10.00	120.00
12	Crushed and pulverized	3.00	36.00
		SUB TOTAL $	156.00

6**	TYPE	P.N	
601	608	909	160
DATE Oct 19/93	INITIALS: KO		

	Analysis	156.00	156.00
		TOTAL $	156.00

NS03151-58
NS03251-54

FALCONBRIDGE LIMITED

5160

VOUCHER NUMBER C09310		VENDOR NUMBER 5036	
ACCOUNT	COST CENTRE	AMOUNT	CR X
601608015909		156.00	
DUE DATE		TOTAL 156.00	
APPROVED	ENCODED CW	EXT. & ADDS CW	AUDIT CW
			CHECKED RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

MJ OCT 05 1993

INVOICE

LAKEFIELD RESEARCH
A DIVISION OF FALCONBRIDGE LIMITED
Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0
Phone: (705) 652-3341
Telex No. 06 962842
Fax No. (705) 652-6365

No.: C 08294

DATE September 27, 1993

G.S.T. NUMBER R 101733426

TO: Falconbridge Limited (Windsor) (92)
P.O. Box 398, 124 Water Street
Windsor, NS B0N 2T0

Attn : Brian Fisher/Bob Stewart

Ref. : ---

Project : 9343449
LR. Ref : AUG9112.C93

qty	Description	unit $	total $
106	Crushed and pulverized	3.00	318.00
106	Whole Rock + Traces	20.00	2120.00
		SUB TOTAL $	2438.00
	Analysis	2438.00	2438.00
		TOTAL $	2438.00

6 **	TYPE	PN	%
661	608	909	100
DATE: Oct 6/93		INITIALS: KO	

Sample NS02977 - not received

FALCONBRIDGE LIMITED

VOUCHER NUMBER C08294		VENDOR NUMBER 5160	
ACCOUNT	COST CENTRE	AMOUNT	CR X
~~13.2005~~			
601 608 0 15909		2438.00	
DUE DATE		TOTAL 2438.00	

APPROVED	CODED		PAY	CHECKED
	CW	CW	CW	RDS

PLEASE PAY BY INVOICE — Terms: Net 30 days. 2% service charge per month on overdue accounts.

The Open University

Invoice No 00005548

Account No 10002382

JUN 15 1993

VAT Registration No 396 8766 70

Telephone No (0908) 653310

Invoice To

Falcon Bridge
PO Box 390
124 water Street
Windsor N.S
CANADA 130N 2TO

Date (Tax Point) 2 June 1993

Payment Terms 30 DAYS

P.O./Reference No
Tony Green

	Line No	Description	Amount (£) C$
	1 2	High quality isotape analysis Rb-Sr, Sm-Nd, Pb-Pb	10000.00
			C$ 10000.00

Please return the attached remittance advice with your cheque made payable to 'The Open University'.

Lerson, Grant
Watson Limited

Consulting
Geophysicists

PGW

November 30, 1992

JAN 08 1993

6 **	TYPE	PN	%
602	600	905	100
DATE Jan 13/93		INITIALS: KO	

Falconbridge Limited
P.O. Box 398
124 Water St.
Windsor, Nova Scotia
B0N 2T0

Attn: Mr. Kevin Olshefsky

Invoice No. P2695 JM
Reissued

Re: Magnetic Processing, Greenland

a) Professional Fees:

Mr. S. R. Reford 10 hrs @ $95/hr	$950.00

b) Expenses:

Data Purchases

- Geoterrex	$50.00
- Geoterrex	500.00
- GeoGreenland	488.42
- GeoGreenland	316.71
Admin. 10%	135.53
	$1,490.66
	$2,440.66
GST # R104090824	$170.85
	$2,611.49

FALCONBRIDGE LIMITED

VOUCHER NUMBER P2695 JM VENDOR # 5379

ACCOUNT	UNIT	CR X
1.32005	1085	
602600 015905	244064	
DUE	261149	
APPROVED CW	EXTENSIONS CW	CHECKED CW

Telephone: (416) 971-7700 Telex: 06-22633 Fax: (416) 971-7520

Paterson, Grant & Watson Limited

Consulting Geophysicists

FEB 0 2 1993

December 31, 1992

6 **	TYPE	PN	%
602	600	905	000
IF Feb 2nd/93		INITIALS	KO

Falconbridge Limited
P.O. Box 398
124 Water St.
Windsor, Nova Scotia
B0N 2T0

Attn: Mr. Kevin Olshefsky

Invoice No. P2711 SR

Re: Magnetic Processing, Greenland

a) Professional Fees:

Mr. S. Reford 5 hrs @ $95/hr	$475.00
Mr. K. Kwan 15 hrs @ $65/hr	$975.00
	$1,450.00
GST # R104090824	$101.50
Total Amount Due	**$1,551.50**

Payment due upon receipt of invoice.

9293

FALCONBRIDGE LIMITED

VOUCHER NUMBER	P2711 SR	5379
		101.50
1 1	1 3 2 0 0 5	
1 1	6 0 2 6 0 0 0 1 5 9 0 5	1450.00
DUE		1551.50
APPROVED	CW	CW RDS

Fifth Floor 204 Richmond Street West Toronto, Canada, M5V 1V6 Telephone: (416) 971-7700 Telex: 06-22633 Fax: (416) 971-7520

Paterson, Grant
& Watson Limited

Consulting
Geophysicists

6 **	TYPE	PN	%
602	604	905	100
DATE May 19/93		INITIALS:	KC

April 30, 1993

MAY 18 1993

Falconbridge Limited
P.O. Box 398
124 Water St.
Windsor, N.S.
B0N 2T0

Attn: Mr. Brian Fisher

Invoice No. P2849 JM

Re: Magnetic Processing,
Greenland

a)	Preparation of topographic data Mr. L. Racic	$1,155.00
	GST #R104090824	85 $80.~~25~~
	Total Amount Payable	**$1,235.85**

Payment due upon receipt of invoice.

9314

FALC[illegible] LIMITED

VOUCHER NUMBER	P2849 JM		5379
ACCT	DEPT	AMOUNT	CR X
1 1 1.3.2005		80.85	
1 1 6.0.2.604.0.15.905		1.155.00	
DUE DATE			1235.85
APPROVED	BUS	PAY	CHECKED
	CW	CW	

Fifth Floor 204 Richmond Street West Toronto, Canada, M5V 1V6 Telephone: (416) 971-7700 Telex: 06-22633 Fax: (416) 971-7520

Paterson, Grant
& Watson Limited

Consulting
Geophysicists

APR 07 1993

April 1, 1993

6 **	TYPE	PN	%
602	600	905	100
DATE April 8/93		INITIALS: KO	

Falconbridge Limited
P.O. Box 398
124 Water St.
Windsor, N.S.
B0N 2T0

Attn: Mr. Kevin Olshefsky

Invoice No. P2829 SR

Re: Magnetic Processing,
Greenland

a)	Preparation of draped grids	$1,900.00
b)	Preparation of colour/contour maps, 3 sheets	$1,100.00
c)	Second copy of maps, 3 sheets	...$270.00
		$3,270.00
GST #R104090824		$228.90
	Total Amount Payable	**$3,498.90**

Payment due upon receipt of invoice.

9314

VOUCHER NUMBER P2829 SR	5379
	CR X
132005	228.90
602600. 015905	3270.00
DUE DATE	CURRENCY 3498.90

SUR

APPROVED	CODED	EXT. & ADDS	A/PAY	CHECKED
[signature]	CW		CW	RJS

180,000 NET
1,723,922 net

Don Osburn
Petrographic
Preparations

INVOICE

078003

DATE Oct 8 1993

ORDER NUMBER

REPRESENTATIVE

TERMS

F.O.B.

SOLD TO Falconbridge Ltd
Windsor NS

SHIP TO c/o Murray Jerome

ADDRESS

VIA

QUANTITY	DESCRIPTION	PRICE	AMOUNT
20	Polished Rock Samples (Hand Specimens)	10 00	200 00
10	Std. Thin Sections, coverslipped	12 00	120 00
3	Polished Thin Sections	20 00	60 00
		TOTAL	380 00

G/L	TYPE	PN	%
605	608	909	100

DATE Oct 8/93 INITIALS: KA

REDIFORM® 7M31

FALCONBRIDGE LIMITED

VOUCHER NUMBER 78003 2269

ACCOUNT				
605	608	01	5909	380 00

DUE DATE

380.00

APPROVED	COLED		CHECKED
	CW	CW CW	RDS

DON OSBURN
PETROGRAPHIC PREP.

INVOICE 078005

6""	TYPE	DATE PN	%
601	608	ORDER NUMBER	

DATE: Oct/05/93 INITIALS REPRESENTATIVE: KD

TERMS

F.O.B.

SOLD TO FALCONBRIDGE LTD
WINDSOR NS.

SHIP TO KEVIN OLSHEFSKY

ADDRESS

VIA

QUANTITY	DESCRIPTION	PRICE	AMOUNT
—	PREPARE 18 ROCK SAMPLES FOR GEO-		60 00
	CHEMICAL TESTING		
—	POLISH ROCK SPECIMEN	10 00	10 00
		TOTAL	70 00
	PLEASE REMIT TO:		
	DON OSBURN		
	C/O GEOLOGY DEPT		
	ACADIA UNIVERSITY		
	WOLFVILLE NS B0P1X0		
	THANKS.		

REDIFORM® 7M31

FALCONBRIDGE LIMITED

VENDOR NUMBER 2269

VOUCHER NUMBER 78005

ACCOUNT	AMOUNT	CR X
601 608 0 15909	70.00	
	70.00	
DUE		
APPROVED	CW CW CW RDS	

SOLD TO FALCONBRIDGE LTD 015-905-605-604

WINDSOR NS

SHIP TO MURRAY JEROME

ADDRESS

ACCT. NO.	TYPE	PN	%

DATE: 10/25/93 INITIALS: MK

VIA

REPRESENTATIVE

TERMS

F.O.B.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
28	STD THINSECTIONS, COVER-SLIPPED	12 00	336 00
30	POLISHED ROCK SAMPLES (DRILL CORE)	10 00	300 00
	TOTAL		636 00

PLEASE REMIT TO:

DON OSBURN

C/O GEOLOGY DEPT

ACADIA UNIVERSITY

WOLFVILLE NS B0P1X0

THANKS!

REDIFORM® 7M31

FALCONBRIDGE LIMITED

VOUCHER NUMBER	78004	VENDOR NUMBER	2269
ACCOUNT	COST CENTRE	AMOUNT	CR X
6.01.604	0.15.909	636.00	
		CURRENCY	636.00
APPROVED	CODED	AUDITED	PAID	CHECKED
	CW	CW	CW	RDS

ADI NOLAN DAVIS (NS) LIMITED
ENGINEERS AND SCIENTISTS

7020 Mumford Road
Halifax, Nova Scotia
Canada B3L 4S9

Telephone (902) 453-5555
Fax: (902) 453-6325
INET NOLAN-HFX

TO: Falconbridge Limited
P.O Box 398
124 Water Street
Windsor, Nova Scotia
BON 2TO

INVOICE DATE: November 17,1993
INVOICE NO: 10065
PROJECT NO: 93-727
BILLING PERIOD: OCTOBER 1993
GST REGISTRATION # R103896205

ATTENTION: Mr. Robert Stewart

INVOICE

BILLING RE: Employment of Jing-Sui Yang

To invoice in accordance with the agreement of employment for Jing-Sui Yang
from October 16 thru October 29,1993 17.5 days @$144.00/day $2,520.00

FALCONBRIDGE LIMITED

VOUCHER NUMBER 10065 5416

CR X

13.2005 176.40
601 600 015 224 1,854.93
906 156.93
907 241.42
909 563.32

2993.00

RDS | CW | CW | CW RDS

SUB-TOTAL	2,520.00
GST	176.40
PST	296.60
TOTAL INVOICE	2,993.00

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: Murray Jerome DATE: 15-Sep-93 Page 1

For Trip to: Nova Scotia - Greenland Dates: From 05\28\93 to 08\28\93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5
Subtotal from page 2	$0.00	$21.13	$2,871.50	$0.00	$2,892.63
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00
TOTAL	$0.00	$21.13	$2,871.50	$0.00	$2,892.63
GST at .056604 of the "TOTAL" in column above	$0.00	$1.20	~~$162.54~~ 152.41	$0.00	~~$163.73~~ 152.41 A
Non recoverable 20% of GST on meals & entertainment	$0.00 B				
GST Recoverable (Box A - Box B)	~~$163.73~~ 152.41				

EXPENSE DISTRIBUTION Sept. 15/93

Account #	Project #	Amount	Credit
605-604	15-908	19.93	
605-120	"	1252.83	
601-120	"	1467.46	
	SUBTOTAL	2740.22 ~~$2,728.00~~	
660360	- - -	152.41 ~~$163.73~~	
132005	- - -	$0.00	
	TOTAL	$2,892.63	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date:	ORIGINAL	Amount:	$0.00
Date:		Amount:	$0.00
Add: Advances received			$0.00
Less: Expenses above			$2,892.63
Balance:			($2,892.63)
Remaining funds on hand:			($2,892.63)
Funds returned to Company			$0.00
Funds due to employee:			$2,892.63

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Murray Jerome

Approval: Robert Stewart

FILE:J\COMMON\EXPBLANK

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

[redacted]OYEE: Murray Jerome

For Trip to: Nova Scotia - Greenland

DATE: 20-Sep-93

Dates: From 06\09\93 to 08\28\93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:

	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5
Subtotal from page 2	$0.00	$0.00	$0.00	$0.00	$0.00
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00
TOTAL	$0.00	$0.00	$0.00	$0.00	$1,389.80
GST at .056604 of the "TOTAL" in column above	$0.00	$0.00	$0.00	$0.00	$0.00 A
Non recoverable 20% of GST on meals & entertainment	$0.00 B				
GST Recoverable (Box A - Box B)	$0.00				

EXPENSE DISTRIBUTION Sep.20\93

Account #	Project #	Amount	Credit
601-604	15-908	112.47	
601-120	"	1083.08	
605-604	"	33.36	
605-120	"	19.64	
601-120	15-907	11.78	
601-604	"	129.46	
	SUBTOTAL	$1,389.80	
660360	---	$0.00	
132005	---	$0.00	
	TOTAL	$1,389.80	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date:	ORIGINAL	Amount: $0.00
Date:		Amount: $0.00
Add: Advances received		$0.00
Less: Expenses above		$1,389.80
Balance:		($1,389.80)
Remaining funds on hand:		($1,389.80)
Funds returned to Company		$0.00
Funds due to employee:		$1,389.80

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Murray Jerome

Approval: Robert Stewart

FILE:J\COMMON\EXPBLANK

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: Tony Green DATE: 23-Sep-93

For Trip to: Dates: From to

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:

	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5
Subtotal from page 2	$26.61	$199.31	$0.00	$0.00	$225.92
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00
TOTAL	$26.61	$199.31	$0.00	$0.00	$225.92
GST at .056604 of the "TOTAL" in column above	$0.00	$0.00	$0.00	$0.00	$0.00 A

Non recoverable 20% of GST on meals & entertainment $0.00 B

GST Recoverable (Box A - Box B) $0.00

Dep 23/93

EXPENSE DISTRIBUTION

Account #	Project #	Amount	Credit
601604	15909	$225.92	
	SUBTOTAL	$225.92	
660360	- - -	$0.00	
132005	- - -	$0.00	
	TOTAL	$225.92	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date: ORIGINAL	Amount:	$2,000.00
Date:	Amount:	$0.00
Add: Advances received		$0.00
Less: Expenses above		$225.92
Balance:		$1,774.08
Remaining funds on hand:		$1,774.08
Funds returned to Company		$0.00
Funds due to employee:		$225.92

Funds returned to company: Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: A Green

Approval:

FILE:J\COMMON\EXPBLANK

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: Tony Green DATE: 23-Sep-93

For Trip to: Dates: From Aug. 16/93 Sep. 19/93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5	
Subtotal from page 2	$67.85	$488.52	$482.24	$0.00	$1,038.61	
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00	
TOTAL	$67.85	$488.52	$482.24	$0.00	$1,038.61	
GST at .056604 of the "TOTAL" in column above	$3.84	$27.65	$27.30	$0.00	$58.79	A
Non recoverable 20% of GST on meals & entertainment	$0.77					B
GST Recoverable (Box A - Box B)	$58.02					

Sep. 19/93 1013

EXPENSE DISTRIBUTION

Account #	Project #	Amount	Credit
660120	15-001	$821.70	
601604	15-909	$63.88	
601604	15-908	$9.33	
601604	15-902	$84.91	
	SUBTOTAL	$979.82	
660360	- - -	$58.02	
132005	- - -	$0.77	
	TOTAL	$1,038.61	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date:	ORIGINAL	Amount:	$2,000.00
Date:		Amount:	$0.00
Add: Advances received			$0.00
Less: Expenses above			$1,038.61
Balance:			$961.39
Remaining funds on hand:			$961.39
Funds returned to Company			$0.00
Funds due to employee:			$1,038.61

Funds returned to company: Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: C Green

Approval:

FILE:J\COMMON\EXPBLANK

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: ROBERT STEWART DATE: 13-Sep-93

For Trip to: GREENLAND Dates: From 6-Jul-93 to ~~7 Jul 93~~ August 28/93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5	
Subtotal from page 2	2177.00	818.25	0.00	0.00	2995.25	dkk $568.50 CDN.
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00	
TOTAL	2177.00	818.25	0.00	0.00	2995.25	dkk 568.50 CDN at the August rate of 5.2687=
Actual GST of the "TOTAL" In column above		0.00	0.00	0.00	0.00	A 568.50 $ Can

Non recoverable 20% of GST on meals & entertainment 0.00 B

GST Recoverable (Box A - Box B) 0.00

August 28/93 10XLS

EXPENSE DISTRIBUTION

Account #	Project #	Amount	Credit
601120	015909	413.19	
601604	015909	155.31	
		568.50	
	SUBTOTAL	$0.00	
132005	---	$0.00	
660360	---	$0.00	
	TOTAL	568.50 $0.00	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date:	ORIGINAL	Amount:	2000.00
Date:		Amount:	0.00
Add: Advances received			0.00
Less: Expenses above			568.50
Balance:			1431.50
Remaining funds on hand:			1431.50
Funds returned to Company			0.00
Funds due to employee:			568.50

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Robert Stewart

Approval: [signature]

.XLS

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: ROBERT STEWART

DATE: 19-Sep-93

For Trip to: GREENLAND

Dates: From 6-Jul-93 to 7-Jul-93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:

	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5	
Subtotal from page 2	56.60	608.82	3251.52	0.00	3916.94	
Subtotal from page 3	24.95	179.74	0.00	119.86	324.55	
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00	
TOTAL	81.55	788.56	3251.52	119.86	4241.49	
Actual GST of the "TOTAL" in column above	4.62	44.64	184.05	6.78	240.09	A
Non recoverable 20% of GST on meals & entertainment	0.92	B				
GST Recoverable (Box A - Box B)	239.16					

EXPENSE DISTRIBUTION Sep. 7/93

Account #	Project #	Amount	Credit
601604	15909	$86.04	
601604	15902	$136.35	
601604	15003	$160.46	
601604	15224	$211.45	
601604	15907	$66.02	
601120	15224	$784.02	
601120	15907	$2,324.53	
601120	15003	$35.84	
605604	15909	$16.66	
660266	15001	$98.92	
660270	15001	$14.15	
660360	15001	$66.04	
	SUBTOTAL	$4,000.48	
132005	- - -	$240.09	
660360	- - -	$0.92	
	TOTAL	$4,241.49	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date: ORIGINAL	Amount:	2000.00
Date:	Amount:	0.00
Add: Advances received		0.00
Less: Expenses above		4241.49
Balance:		-2241.49
Remaining funds on hand:		-2241.49
Funds returned to Company		0.00
Funds due to employee:		4241.49

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Robt Stewart

Approval: _____

FILE:C:\BOB\EXPENSES\XA930408.XLS

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: Kevin Olshefsky

DATE: 1-Sep-93

For Trip to: General Expenses

Dates: From Jun-93 to June 7/93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:

	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5
Subtotal from page 2	$15.31	$62.08	$2,631.50	$25.00	$2,733.89
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00
TOTAL	$15.31	$62.08	$2,631.50	$25.00	$2,733.89
GST at .056604 of the "TOTAL" in column above	$0.87	$3.51	$148.95	$1.42	$154.75 A
Non recoverable 20% of GST on meals & entertainment	$0.17 B				
GST Recoverable (Box A - Box B)	$154.58				

- returning advance of $500.00.
- 1000.00 remaining

Sep 01/93

EXPENSE DISTRIBUTION

Account #	Project #	Amount	Credit
601604	15909	~~$2,579.14~~ 2,133.14	
310010		500.00	X
		2,079.14	
	SUBTOTAL	~~$2,579.14~~	
005	- - -	$154.58	
	- - -	$0.17	
	TOTAL	~~$2,733.89~~	

2233.57

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date:	ORIGINAL	Amount:	$500.00
Date:		Amount:	$1,000.00
Add: Advances received			$0.00
Less: Expenses above			$2,733.89
Balance:			($2,233.89)
Remaining funds on hand:			($1,233.89)
Funds returned to Company			$500.00
Funds due to employee:			$2,233.89

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Kevin Olshefsky

Approval: [signature]

FALCONBRIDGE LIMITED EXPENSE STATEMENT

WINDSOR , NOVA SCOTIA EXPLORATION OFFICE

EMPLOYEE: Kevin Olshefsky

For Trip to: Field work in Greenland

DATE: 2-Sep-93

Dates: From March 3/93 to August 25/93

CANADIAN FUNDS ONLY

EXPENDITURES CARRIED FORWARD FROM FOLLOWING PAGES:

	Meals & entertainment 1	Field Supplies 2	Transport. Accomodation 3	Other 4	TOTAL 5	
Subtotal from page 2	$237.60	$130.00	$3,713.00	$80.00	$4,160.60	
Subtotal from page 3	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 4	0.00	0.00	0.00	0.00	0.00	
Subtotal from page 5	0.00	0.00	0.00	0.00	0.00	
TOTAL	$237.60	$130.00	$3,713.00	$80.00	$4,160.60	DDK
						A

Average Exchange Rate 0.204341334

GST at .056604 of the "TOTAL" in column above

Non recoverable 20% of GST on meals & entertainment #VALUE! B

GST Recoverable (Box A - Box B) #VALUE!

Sep. 02/93

EXPENSE DISTRIBUTION

Account #	Project #	Amount	Credit
601604	15909	850.18	
	SUBTOTAL	850.18	
0360	---		

	TOTAL	850.18	

EMPLOYEE ACCOUNT SUMMARY

ADVANCES

Date: ORIGINAL	Amount:	$0.00
Date:	Amount:	$0.00
Add: Advances received		$0.00
Less: Expenses above		$850.18 Cdn.
Balance:		($850.18)
Remaining funds on hand:		($850.18)
Funds returned to Company		$0.00
Funds due to employee:		$850.18 Cdn.

Funds returned to company: _____ Received by - Signature

ATTACH RECEIPTS FOR ALL EXPENDITURES

Employee's signature: Kevin Olshefsky

Approval: J Lyon

FURUNO DANMARK AS

Kontoudtog over åbne p

Statement of account ope

Kunde nr./Customer No.
1036380

Afslutningsdato/Statement date
31.05.93

Side nr./Page No.
1

Indbetalinger modtaget efter afslutningsdagen, er ikke medregnet.
Payment received after Statement Date is not in

	Forfaldsdato/Due date	Debet/Debit	Kredit/Credit
SE GREENLAND	12.06.93	22995,00	
SF GREENLAND	12.06.93	8625,00	
SE GREENLAND	12.06.93	8222,50	

paid
today

Forfalden senere
Due later 39842,50

Saldo ialt
Total amount DKR 39842,5

allocated.
dag.

Rentesats/måned
Interest rate/month 1,6 %

★★ Efter forfaldsdato tilskrives rente ★★
★★ Interest will be charged for overdue account ★

Bank: Den Danske Bank
Hovedvejen 108
2600 Glostrup
Konto 4440-3333-015609
PBS nr.: 0017-9779

BETALINGSOPLYSNING / REMITTANCE ADVICE
Venligst oplys faktura- og kundenr. ved indbetaling
Please indicate Invoice and Custom No. on remita

00 Glostrup
nto 4440-3333-015609

DK-6700 Esbjerg
Tlf. +45 75 13 22 66

Tlf. +45 98 44 16 54

---

602 9756

00233 WINDSOR

WINDSOR, NS

JUN04/93

NAME OF REMITTER / DONNEUR D'ORDRE — TRANSIT NO. / N° D'IDENTIFICATION — BRANCH / SUCCURSALE — DATE

FALCONBRIDGE

IN FAVOUR OF / EN FAVEUR DE FURUNO DANMARK AS********** — DKK ********39,842.50**

CURRENCY / DEVISE — AMOUNT IN FIGURES / MONTANT EN CHIFFRES

FOR / DE THIRTY NINE THOUSAND EIGHT HUNDRED FORTY TWO 50/100****DANISH KRONER

AMOUNT AND CURRENCY IN WORDS / MONTANT ET DEVISE EN LETTRES

DRAWN ON / TIRAGE SUR
· DEN DANSKE BANK AKTIESELSKAB
· 12 HOLMENS KANAL
· COPENHAGEN DK-1092 K
· DENMARK

NOT NEGOTIABLE / NON NÉGOCIABLE

CUSTOMER'S COPY

RETAIN THIS COPY FOR YOUR RECORD

SEE "NOTICE TO PURCHASER" OVERLEAF

COPIE DU CLIENT

CONSERVER CETTE COPIE POUR VOS DOSSIERS

VOIR "AVIS À L'ACHETEUR" AU VERSO

CHARGE TO CUSTOMER / À IMPUTER AU CLIENT 0.2142343

RATE / COURS

EQUIV. CAN. $ CONTRE-VALEUR EN $ CAN. 8,335.63

HANDLING CHARGES / COMMISSION DE MANIPULATION 6.50

TOTAL COST / COÛT TOTAL 8,342.13 F

paid by chq # 2004
See CIBC file

150

DK-2650 Hvidovre
Tlf. +45 36 77 45 00

Reg.nr. 63.381

DATE July 1, 1993

.D T[illegible]alconbridge Greenland A/S
P.O. Box 398
Windsor, Nova Scotia, B0N 2T0

SHIPPED TO
SAME

OUR ORDER	OUR ORDER NO.	SALESPERSON	TAX REG. NO.
	34669	R.B.	R 103869905

TE SHIPPED	SHIPPED VIA	F.O.B.	TERMS
8 May 1993	In Possession	Sackville	Net 10 Days

IAN. ORD.	QUAN. SHIP.	STOCK NUMBER - DESCRIPTION	PRICE	PER	AMOUNT
		*** CORRECTION OF INVOICE 067283***			
2X1mo	2X1mo	Rental of M.F. Portables SBX-11A	235.00	ea/mo	470.00
2X1mo	2X1mo	Rental of STA-210, Antennas	47.00	ea/mo	94.00
		Sub Total			564.00
		G.S.T.			39.48
		P.S.T.			60.35
		Total Please Pay			$663.83

UELINE* D 4401 (50 Pkg.) D 5401 (250 Pkg.)

TRIP.

FALCONBRIDGE LIMITED

VOUCHER NUMBER	67290	VENDOR NUMBER	5395	CR X
ACCOUNT	COST		AMOUNT	
132005			39.48	
601604	015905		624.35	
		CURRENCY	663.83	

D	EXT & ADDS	PAY	CHECKED
CW	CW	CW	RDS

079702

AUG 09 1993

DATE 1 August 1993

[Fal]conbridge Greenland A/S
P.O. Box 398
Windsor, Nova Scotia, B0N 2T0

SHIPPED TO
SAME

YOUR ORDER	OUR ORDER NO.	SALESPERSON	TAX REG. NO.
	34685	R.B.	R 103869905

DATE SHIPPED	SHIPPED VIA	F.O.B.	TERMS
28 May 1993	P/U	Sackville	Net 10 Days

QUAN. ORD.	QUAN. SHIP.	STOCK NUMBER - DESCRIPTION	PRICE	PER	AMOUNT
2X1mo	2X1mo	Rental of M.F. Portables SBX-11A	235.00	ea/mo	470.00
2X1mo	2X1mo	Rental of Antennas STA-210	47.00	ea/mo	94.00
		Sub Total			564.00
		G.S.T.			39.48
		P.S.T.			60.35
		Total Please Pay			$663.83

BLUELINE D 4401 (50 Pkg.) D 5401 (250 Pkg.)

TRIP.

FALCONBRIDGE LIMITED

VOUCHER NUMBER	79702	VENDOR NUMBER	5395
ACCOUNT	COST CENTRE	AMOUNT	CR
132005		39.48	
601 604	015905	624.35	
DUE		CURRENCY	66383
APPROVED	EXP. & ADDS	A/PAY	
CW	CW	CW	RDS

..lconbridge Greenland A/S
.O. [illegible]ox 398
indsor, Nova Scotia, B0N 2T0

SHIPPED TO
SAME

Kevin Olchefsky

	OUR ORDER NO. 34654	SALESPERSON R.B.	TAX REG. NO. R 103869905
.993	SHIPPED VIA P/U	F.O.B. Sackville	TERMS Net Cash

QUAN. SHIP.	STOCK NUMBER - DESCRIPTION	PRICE	PER	AMOUNT
2	Sbx-11A monthly rental S/N 91312, 91313	235.00	ea	470.00
2	SBX-11A refundable deposit	425.00	ea	* 850.00
6	Channel frequency 3350, 2090, 2182	57.26	ea	343.56
6	Expedite cahrges for channels above	28.63	ea	171.78
2	STA-210 antenna rental	47.00	ea	94.00
	Sub Total			1586.13
	G.S.T.			75.55
	P.S.T.			115.49
	Total Please Pay			$1777.17

Paid $1,765.40 Shaw
RJC Burns
(C67261)
(previous invoice overpaid by 11.77, the 11.77 was subtracted off this invoice.) CW.

(50 Pkg.) D 5401 (250 Pkg.)

.. amount was not entered
..ding; the amount of 506.79
.. See the
..d letter
..om BSP Burns

FALCONBRIDGE LIMITED

VOUCHER NUMBER 67268		VENDOR NUMBER 5395	
ACCOUNT	COST CENTRE	AMOUNT	CR X
132005		75.55	
601604	015905	1.689.85	
DATE		CURRENCY 1765.40	

APPROVED	CODED	EXT. & ADDS	A/PAY	CHECKED
[initials]	CW		CW	RDS

INVOICE

1655 WEST 3RD AVE
VANCOUVER, B.C.
V6J 1K1

Mail Order Phone (604) 732-1537
1-800-663-2667 Within Canada
Mail Order Fax (604) 731-6483

INVOICE NO. 105911 1-0
INVOICE DATE 93/04/24

MEMBER NO. 422199

G.S.T. NO. R103778312

PAGE 1

SHIP TO (902)-798-2218
KEVIN OLSHEFSKY

PO BOX 398
124 WATER ST
WINDSOR
NS CAN
B0N 2T0

(902)-542-4450
KY,KEVIN

② 601 604

ON	ORDER DATE	LOCATION	SALES CODE	NO. BOXES	WAYBILL NO.	SHIP METHOD
0	93/04/23	9	MS	6		PARCEL POST
-0						

DUCT CODE	QTY. ORD'D	QTY. SHIP'D	BACK ORDER	DESCRIPTION		UNIT PRICE	EXTENSION	PST	GST
102-467	5	5		BRASS CANDLE LANTERN		20.60	103.00	N	Y
102-491	100	100		CANDLES FOR UCO LANTERN		.49	49.00	N	Y
807-107	7	7		CAMP REST	Consol Consolidt	81.00	567.00	N	Y
899-088	4	4		SHEET LINER Long		39.00	156.00	N	Y
1602-135	2	2		OPEN COUNTRY 10pc DELUXE		35.50	71.00	N	Y
1602-143	2	2		10" SILVERSTONE FRYPAN		18.25	36.50	N	Y
1602-382	2	2		EVERNEW 2.81 POT		18.75	37.50	N	Y
4000-265	5	5		Mec Nunatak		475.00	2375.00	N	Y
4000-559	4	4		SWAN SUPER GTX MUMMY Long	Left Cob	375.00	1500.00	N	Y

SALES	NON DIVIDENDABLE SALES	P.S.T.	FREIGHT	INSURANCE	G.S.T.	TOTAL THIS INVOICE
5.00			4.00		342.93	5241.93

MOD 1	BANK CARD NO./CHEQUE NO.	EXPIRY DATE	AMOUNT	TOTAL PAYMENTS RECEIVED
	4500610239217	11/94	5241.93	5241.93

MOD 2	BANK CARD NO./CHEQUE NO.	EXPIRY DATE	AMOUNT	BALANCE
				.00

WAS SOME ADDITIONAL FREIGHT

PLATINOVA A/S
P.O.Box 1601
DK-3900 Nuuk
Greenland
Telephone +299 2 00 66
Telefax +299 2 00 67

PLATINOVA A/S

Your gateway to Greenland for exploration services and investment in resource related industrial development

INVOICE

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

NUMBER.....: 93050
DATE.....: 30.11.93
ACCOUNT....: 110

PAGE.....: 1

DESCRIPTION	NET	FEE%	AMOUNT
Tele, radio communications	16.013,85		16.013,85
Grønlandsfly, AWB 245-00374312	1.291,50		1.291,50

RE: Project Nuussuaq, Greenland

FALCONBRIDGE LTD

VOUCHER NUMBER 93050

601 604 015 909	3,312.85
601 608 015 907	265.40
	3578.25

APPROVED RDS | CHECKED RDS

NET..AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
17.305,35		17.305,35

Terms of payment Net 30 Days PAYMENT BEFORE 30.12.93

Kujataata Naqitervia NB-CCI-891-93

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.PBS NO. 0201 864

PLATINOVA A/S
Ordrekort

93039

Dato: 27.08.93 Side: 1

Ordrenr.....: 9300004
Project.....: Nuussuaq, Greenland

Ordre Grp: 0

PLATINOVA A/S
Eqalugalinnguit 48-A
P.O.Box 1601
G-100 Nuuk, Greenland

TELEPHONE +299 20066
TELEFAX +299 20067

INVOICE

NUMBER.....: 93018
DATE.....: 09.06.93
ACCOUNT....: 110
PAGE.....: 1

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. B0N 2T0
CANADA

Description	Quantity	Price	Net amount	Fee%	Fee	Amount
Service fee, CAD 25.000,00, covering the 1993 season, as per agreement dated May 18th, 1993.						
First 50% (12500cad @ 4,8663)	1,00	60.828,75	60.828,75		60.828,75	60.828,75

Payment in DKK or CAD 12.500,00

S-SYSTEM©

NET	FEE	INVOICE TOTAL DKK
60.828,75	60.828,75	60.828,75

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

PAYMENT.: Net 30 Days

PAYMENT BEFORE: 09.07.93

93039

LATINOVA A/S
rdrekort

Dato: 27.08.93 Side: 1

---

rdrenr.....: 9300004 Ordre Grp: 0
roject.....: Nuussuaq, Greenland

PLATINOVA A/S
BOX 1601
DK-3900 NUUK
GREENLAND

TELEPHONE +299 20066
TELEFAX +299 20067
PBS-NO. 0201 864

INVOICE

NUMBER.....: 93040
DATE.......: 31.08.93
ACCOUNT....: 110
PAGE.......: 1

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2TO
CANADA

PAYMENT BEFORE 30.09.93

DESCRIPTION	NET	FEE%	AMOUNT
Rental Camp-equipment, August	20.385,00		20.385,00

SEP 1993

6 **	TYPE	PN	%
601	604	909	100
DATE: Sep 27/93	INITIALS: KO		

NET AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
20.385,00		20.385,00

TERMS OF PAYMENT: Net 30 Days

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

PLATINOVA A/S
Ordrekort

93039 Dato: 27.08.93 Side: 1

Ordrenr.....: 9300004
Project.....: Nuussuaq, Greenland

Ordre Grp: 0

PLATINOVA A/S
BOX 1601
DK-3900 NUUK
GREENLAND

TELEPHONE +299 20066
TELEFAX +299 20067
PBS-NO. 0201 864

INVOICE

NUMBER.....: 93039
DATE.....: 27.08.93
ACCOUNT....: 110
PAGE.....: 3

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

PAYMENT BEFORE 26.09.93

DESCRIPTION	NET	FEE%	AMOUNT
TRANSFERRED:			119.390,86
Hotel Hvide Falk, dbl.room etc	1.541,00		1.541,00
Grønlandsfly, awb 63101161882	2.569,28		2.569,28
Grønlandsfly, awb 63101161893	2.435,79		2.435,79
Hotel Hans Egede, Tony Green	2.169,00		2.169,00

6 **	TYPE	PN	%
601	604	909	100
DATE: Sept 27/93	INITIALS: KB		

NET..AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
128.105,93	[redacted]	128.105,93

TERMS OF PAYMENT: Net 30 Days

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

PLATINOVA A/S
Ordrekort

Dato: 30.06.93 Side: 1

Ordrenr.....: 9300002
Project.....: Nuussuaq, Greenland

Ordre Grp: 0

Falconbridge Limited

PLATINOVA A/S
Eqalugalinnguit 48-A
P.O.Box 1601
G-100 Nuuk, Greenland

JUL 09 1993

TELEPHONE +299 20066
TELEFAX +299 20067

INVOICE

NUMBER.....: 93027
DATE.......: 30.06.93
ACCOUNT....: 110
PAGE.......: 1

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

VOUCHER NUMBER: 93027
VENDOR NUMBER:

ACCOUNT	COST CENTRE	AMOUNT	CR X
601604	015905	112,729.31	DK

DUE DATE:
CURRENCY: 112,729.31 DKK

APPROVED		EX. & ODDS	A/PAY	CHECKED
AG		CW	CW	

6**	TYPE	PN	%
601	604	905	100

DATE: July 20/93 INITIALS: RDS

Subject to review by KO – Sept 93

DESCRIPTION

Project Nuussuaq

AMOUNT

112.729,31

NET AMOUNT 112.729,31

FEE/GEBYR

INVOICE TOTAL DKK 112.729,31

PAYMENT.: Net 30 Days

PAYMENT BEFORE: 30.07.93

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DKK.

...0067

...VOICE

NUMBER.....: 93028
DATE.......: 30.06.93
ACCOUNT....: 110
PAGE.......: 1

...imited
.. 598, 124 Water St.
Windsor, N.S. B0N 2T0
CANADA

VOUCHER NUMBER	93028	VENDOR NUMBER		
ACCOUNT	COST CENTRE	AMOUNT	CR X	
601 600	015905	20385.00	DDK	

DUE DATE	CURRENCY 20,385.00 DDK

APPROVED	CODED	EXT & ADDS	A/PAY	CHECKED
[signature]	CW	CW	CW	

6**	TYPE	PN	%
601	600	905	100

DATE: July 20/93 INITIALS: RDS

Subject to Review by KO – Sept/93

DESCRIPTION	AMOUNT
Rental camp-equipm...	20.385,00

NET AMOUNT 20.385,00

INVOICE TOTAL DKK 20.385,00

PAYMENT.: Net 30 Days PAYMENT BEFORE: 30.07.93

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

)VA A/C

PLATINOVA A/S

ORIGINAL

Falconbridge Limited
P.O. Box 398
124 Water St.

.TINOVA A/S
601
/00 NUUK
NLAND

TELEPHONE +299 20066
TELEFAX +299 20067
PBS-NO. 0201 864

INVOICE

NUMBER.....: 93035
DATE.....: 31.07.93
ACCOUNT....: 110
PAGE.....: 1

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. B0N 2T0
CANADA

PAYMENT BEFORE 30.08.93

DESCRIPTION	NET	FEE%	AMOUNT
Rental camp-equipment, July	20.385,00		20.385,00

NET. AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
20.385,00		20.385,00

TERMS OF PAYMENT: Net 30 Days

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

PLATINOVA A/S
Ordrekort

Dato: 28.05.93 Side: 1

Ordrenr.....: 9300000
Project.....: Nuussuaq, West Greenland

Ordre Grp: 0

Falconbridge Limited

PLATINOVA A/S
Eqalugalinnguit 48-A
P.O.Box 1601
G-100 Nuuk, Greenland

JUN 15 1993

TELEPHONE +299 20066

INVOICE

NUMBER.....: 93009
DATE.....: 31.05.93
ACCOUNT....: 110
PAGE.....: 1

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

DESCRIPTION	NET	FEE %	AMOUNT
Tele, temporary permit	500,00		500,00
KNQ, misc. timber	1.345,50		1.345,50
Texaco, litres Jet A-1	2,85		27.360,00
Superbyg, nails 55/160	98,26		196,52
Superbyg, regulators/propane	160,00		320,00
Vejle Rejser, GHB/JAV/GHB	5.440,00		5.440,00
Superbyg, screws for tentdoor	1,25		125,00
Superbyg, locking rings	0,25		25,00

G/L	TYPE	PN	%
601	604	905	100
DATE June 15/93		INITIALS RDS	

CURRENCY.: DKK

TOTAL-AMOUNT
35.312,02

PAYMENT.: Net 30 Days
PAYMENT BEFORE: 30.06.93
The Bank Of Greenland,Reg.no.6471, Account no.855275-1
P.O.Box 1033, DK-3900 Nuuk

Ordre Grp: 0

_drenr.....: 9300006
Project.....: Nuussuaq, Greenland

Falconbridge Limited

PLATINOVA A/S

Your gateway to Greenland for exploration services and investment in resource related industrial development

6	TYPE	PN	%
605	604	909	100

DATE: Nov 10/93 INITIALS: KO

PLATINOVA A/S
P.O.Box 1601
DK-3900 Nuuk
Greenland
Telephone +299 2 00 66
Telefax +299 2 00 67

INVOICE

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

NUMBER.....: 93047
DATE.....: 31.10.93
ACCOUNT....: 110

PAGE.....: 1

DESCRIPTION	NET	FEE%	AMOUNT
KNI, foodsupplies	7.059,83		7.059,83
KNI, foodsupplies	285,00		285,00
KNI, foodsupplies	12.446,83		12.446,83
KNI, foodsupplies	151,65		151,65
KNI, glue and gloves	88,00		88,00
KNI, nails	29,25		29,25

NET..AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
20.060,56		20.060,56

Terms of payment Net 30 Days PAYMENT BEFORE 30.11.93

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.PBS NO. 0201 864

PLATINOVA A/S

ORIGINAL

Falconbridge Limited
P.O. Box 398
124 Water St.
[illegible]

ATINOVA A/S
601
00 NUUK
LAND

TELEPHONE +299 20066
TELEFAX +299 20067
0

INVOICE

NUMBER.....: 93034
DATE.....: 31.07.93
ACCOUNT....: 110
PAGE.....: 3

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

PAYMENT BEFORE 30.08.93

CRIPTION	NET	FEE%	AMOUNT
NSFERRED:			136.698,85
, foodsupplies	4.105,10		4.105,10
, foodsupplies	339,00		339,00

NET..AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
~~88.371,95~~	~~374.531,18~~	141.142,95

TERMS OF PAYMENT: Net 30 Days

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751, or payment in cheque in DDK.

PLATINOVA A/S
Ordrekort

Ordrenr.....: 9300005 Ordre Grp: 0
Project.....: Nuussuaq, Greenland

Falconbridge Limited

Your gateway to Greenland for exploration services and investment in resource related industrial development

6 **	TYPE	PN	%
601	604	909	100

DATE: Oct 15/93 INITIALS: KC

PLATINOVA A/S
P.O.Box 1601
DK-3900 Nuuk
Greenland
Telephone +299 2 00 66
Telefax +299 2 00 67

INVOICE

Falconbridge Limited
P.O.Box 398, 124 Water St.
Windsor, N.S. BON 2T0
CANADA

NUMBER.....: 93044
DATE.....: 04.10.93
ACCOUNT....: 110

PAGE.....: 1

DESCRIPTION	NET	FEE%	AMOUNT
Grønlandsfly, awb 631-01161952	710,40		710,40
Grønlandsfly, awb 631-01161963	11.290,19		11.290,19
Hotel Hans Egede, Bob Stewart	5.755,00		5.755,00
Hotel Hans Egede, Olshe.+Phil.	1.295,00		1.295,00
Iluli.Transport, 3 hrs.truck	1.800,00		1.800,00
Iluli.Airport, takeoff fee	150,00		150,00
Iluli.Airport, handling fee	2.400,00		2.400,00
Iluli.Airport, administration	100,00		100,00
Iluli.Airport, 1121 L. jet A-1	2.802,50		2.802,50
KNI, foodsupplies	5.472,42		5.472,42
KNI, foodsupplies	1.999,16		1.999,16
Paul J. Philpott	14.942,02		14.942,02
Nuuk Airport, Jet A-1 fuel	2.047,50		2.047,50
Hotel Hvide Falk, rooms etc.	35.020,50		35.020,50
KNI, return of 54x11kg.propane	-13.446,00		-13.446,00
KNI, 54 bottles for propane	11.406,42		11.406,42

NET..AMOUNT	ADMINISTRATION	INVOICE TOTAL DKK
83.745,11		83.745,11

Terms of payment Net 30 Days PAYMENT BEFORE 03.11.93

Kujataata Naqitenvia NB-CCI-891-93

Bank of Greenland, Box 1033, DK-3900 Nuuk, Greenland, swift-code GRENGLX, account 8552751 or payment in cheque

Weatherhaven

All Season Shelter Systems • Complete Turnkey Installations

I N V O I C E: 1048 **DATE:** 5/7/93

FALCONBRIDGE LIMITED

SOLD TO: FALCONBRIDGE
PO Box 398
124 Water Street
Windsor, NS
B0N 2T0
Attention: Murray Jerome
Tel: 902-798-2218
Fax: 902-798-2395

SHIP TO: FALCONBRIDGE
124 Water Street
Windsor, Nova Scotia
B0N 2T0
Attention: Murray Jerome

VOUCHER NUMBER 1048 X 5394

13 2005 468.22
601 604 015905 6688.85

DUE DATE 7157.07

	CW		CW	

	DESCRIPTION	UNIT PRICE		
1	8 X 12 Weatherhaven 4A	$2,010.18	CND	$2,010.18
1	12 X 16 Insulated Weatherhaven 4A	$4,243.43	CND	$4,243.43

Shipped Via: Canadian Freightways
Shipping Date: May 7, 1993
WIL#720
Our Job#:93-WR072-J
Your PO#Verbal

Salesman: Nigel Carvalho

015-905-601-604

6 **	TYPE	P.V.	

DATE May 18/93 INITIALS MJ

MADE IN CANADA

EXTENSION:	CND	$6,253.61
FREIGHT:	CND	$435.24
GST # R105606867:	CND	$468.22
TOTAL DUE UPON RECEIPT:	CND	$7,157.07

ALKLEY RD.,
AWA, ONTARIO K1G 3P5
code (613) 731-9571

GEOTERREX
INTERNATIONAL RESOURCES and ENGINEERING

AUG [illegible] 1993

INVOICE:

TO: Falconbridge Limited
P.O. Box 398
124 Water Street
Windsor, N.S.
B0N 2T0
ATTN: BOB STEWART

5899

JOB NO. 808 August 10, 1993

FOLD

602600

909

RE: GENERAL LAND GEOPHYSICAL SURVEYS, GREENLAND

In accordance with the terms of the agreement dated May 5, 1993, due upon completion of field work.

Mobilization		$19,000.00
Data acquisition	$24,420.25	
Standby charges	4,620.00	
Supplementary charges		
June 17-19 (4 man crew doing grid preparation)		
2.5 days @$1,000.	2,500.00	
	$31,540.25 @80%	25,232.20
		$44,232.20
GST #135511210		3,096.25
		$47,328.45 cw

FOLD

FALCONBRIDGE LIMITED

VOUCHER NUMBER 5899	VENDOR NUMBER 5331	
ACCOUNT	AMOUNT	CR X
1 1 1 32005	3096.25	
1 1 1 60 2 600 0 15909	44,232.20	
DUE DATE	CURRENCY 47328.45	
APPROVED	CODED	EXT & ADDS	A/PAY	CHECKED
	cw	cw	cw	

0 WALKLEY RD.,
OTTAWA, ONTARIO K1G 3P5
area code (613) 731-9571
Fax # (613) 731-0453

GEOTERREX

A DIVISION OF CGG CANADA LTD.

INVOICE:

TO: Falconbridge Limited
P.O. Box 398
124 Water Street
Windsor, N.S.
B0N 2T0

ATTN: BOB STEWART

GST 135511210

№ 1040

JOB NO. 808

October 7, 1993

FOLD

RE: GENERAL LAND GEOPHYSICAL SURVEYS, GREENLAND

In accordance with the terms of the agreement dated May 5, 1993, due upon delivery of data

31,540.25 @ 20%	$ 6,308.05
Report preparation	5,000.00
	$11,308.05
GST	791.56
	$12,099.61

6**	TYPE	PIN
602	600	909

DATE Oct 27/93 INITIALS KC

FOLD

FALCONBRIDGE

5331

VOUCHER NUMBER 1040

CR X

ACCOUNT	COST CENTRE	
132005		791.56
60,26,00	0159.09	1,308.05

CURRENCY 12,099.61

DATE	APPROVED	CODED	EX. & ADDS	A/PAY	CHECKED
	RDS	CW	CW	CW	RDS

1993 WESTGREENLAND EXPLORATION EXPENDITURES

ITEM	INVOICE	DEBITS	CREDITS	TOTAL
Helicopter	13000	8,847.36		8,847.36
	12999	26,630.81		26,630.81
	13421	9,579.05		9,579.05
	13352	82,270.00		82,270.00
	13064	15,865.00		15,865.00
	13085	31,730.00		31,730.00
	13093	21.27		21.27
	13148	35,625.00		35,625.00
	13206	19,285.00		19,285.00
	13198	11,875.00		11,875.00
	13185	43,985.00		43,985.00
	102293		44,294.70	-44,294.70
		285,713.49	44,294.70	241,418.79

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611 FAX (709) 576-0083

JUL 19 1993

GST REG. # R105457139

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0

INVOICE NUMBER
13000

INVOICE DATE
30/ 6/93

PAGE
1

OUR REFERENCE NO
100606

CUSTOMER P.O. NO.

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24668-24672

QUANTITY	DESCRIPTION	PRICE	AMOUNT
8.70	FLYING HOURS	950.00	8,265.00
	FUEL:		
257.00	LITRES	0.61	156.77
94.00	LITRES	0.70	65.80
			359.79
	EXPENSE CLAIM NO. 8460		
	GST		0.00
	TOTAL		8,847.36

Faxed to Christine
07/09/93
PB

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

omput   5-Cu

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED

P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611   FAX (709) 576-0083

JUL 19 1993

GST REG. # R105457139

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
Attn: A. H. Green or R. Stewart

INVOICE NUMBER 12999

INVOICE DATE 30/ 6/93

OUR REFERENCE NO 100606

CUSTOMER P.O. NO.

PAGE 1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24673-24686

QUANTITY	DESCRIPTION	PRICE	AMOUNT
28.00	FLYING HOURS	950.00	26,600.00
	EXPENSE CLAIM NO. 8463		30.81
	GST		0.00
	TOTAL		26,630.81

FALCONBRIDGE LIMITED

VOUCHER NUMBER 12999		2029
ACCOUNT	COST CENTRE	AMOUNT
601600	915905	26,630.81
DUE DATE		CURRENCY 26,630.81

APPROVED	PAID	EXT. & ADDS	A/PAY	CHECKED
[signature]	CW	CW	CW	RDS

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

SEP 2 1 1993

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 21208, ST. JOHN'S, NEWFOUNDLAND A1A 5B2
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0

6 **	TYPE	PN	%
601	600	909	100

DATE: Sept 22/93 INITIALS: KO

INVOICE NUMBER: 13421

INVOICE DATE: 16/ 9/93

OUR REFERENCE NO	CUSTOMER P.O. NO.	PAGE
100606		1

AIRCRAFT
C-GQNS

TO CHARGE FOR EXPENSES FOR CREW CHANGE
AS PER THE ATTACHED DOCUMENTS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	TRAVEL / ENROUTE STATEMENT		7,511.20
	GST		40.18
	CLAIM NO. 7956 / BROOKING		283.02
	GST		5.67
	CLAIM NO. 7986 / GOODYEAR		415.47
	GST		6.83
	CLAIM NO. 9205 / SHEPPARD		1,016.65
	CLAIM NO. 9207 / SHEPPARD		123.70
	GST		8.07
	CLAIM NO. 9277 / NUTTALL		166.72
	GST		1.54
			9,579.05

FALCONBRIDGE LIMITED

VOUCHER NUMBER	TOTAL 13421		2029
ACCOUNT			CR X
13 2005		1.54	
1 1 6 0 1 6 0 0 0 1 5 9 0 9		9577.51	
DUE		CURRENCY	9579.05
APPROVED	CODED	A/PAY	CHECKED
		CW	

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH) WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 21208, ST. JOHN'S, NEWFOUNDLAND A1A 5B2
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO
FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
BON 2TO

SEP 15 1993

INVOICE NUMBER
13352

INVOICE DATE
31/ 8/93

OUR REFERENCE NO
100606

CUSTOMER P.O. NO.

PAGE
1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24803-24822

6	TYPE	PN	%

DATE 09/15/93 INITIALS: [illegible]

QUANTITY	DESCRIPTION	PRICE	AMOUNT
86.60	FLYING HOURS	950.00	82,270.00
	GREENLANDAIR INC. # 20098 AIRCRAFT SERVICES FEES		406.08
	GST		0.00
	TOTAL		82,676.08

15-909-605-600 1045
15-909-601-600 81631.08

FALCONBRIDGE LIMITED

VOUCHER NUMBER 13352		VENDOR NUMBER 2029
ACCOUNT	COST CENTRE	AMOUNT
605600	015909	1,045.00
601600	015909	81,631.08

DUE DATE

CURRENCY 82,676.08

APPROVED	CODED	EXT & ADDS	[illegible]	CHECKED
[signature]	CW	CW	CW	RDS

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (
WILL BE CHARGED ON ALL PAST

O

(5 - Cur)

JUL 23 1993

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED

P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTN: A.H. GREEN OR R. STEWART

INVOICE NUMBER
13064

INVOICE DATE
20/ 7/93

CUR REFERENCE NO
100606

CUSTOMER P.O. NO.

PAGE
1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24787-24790, 24792-24793

QUANTITY	DESCRIPTION	PRICE	AMOUNT
16.70	FLYING HOURS	950.00	15,865.00
	GST		0.00
	TOTAL		15,865.00

FALCONBRIDGE LIMITED

VOUCHER NUMBER	13065	VENDOR NUMBER	2029
ACCOUNT	COST CENTRE	AMOUNT	CR X
601609	01.5905	15,865.00	
DUE DATE		CURRENCY	15,865.00
APPROVED	CODED CW	EXT & ADDS CW	A/PAY CW
			CHECKED RDS

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

UNIVERSAL HELICOPTERS NEWFOUNDLAND LIMITED
P.O. BOX 9025, STN. B., ST. JOHN'S, NEWFOUNDLAND A1A 2X3
TELEPHONE (709) 576-4611 FAX (709) 576-0083

GST REG. # R105457139

JUL 26 1993

TO FALCONBRIDGE GREENLAND A/S
124 WATER STREET
P.O. BOX 398
WINDSOR, NOVA SCOTIA
B0N 2T0
ATTN: A. H. Green or R. Stewart

INVOICE NUMBER: 13085

INVOICE DATE: 22/ 7/93

OUR REFERENCE NO	CUSTOMER P.O. NO.	PAGE
100606		1

AIRCRAFT
C-GQNS

FLYING AS PER ATTACHED FLIGHT REPORT(S)
24794-24799, 24800, 24851

QUANTITY	DESCRIPTION	PRICE	AMOUNT
33.40	FLYING HOURS	950.00	31,730.00
	GST		0.00
	TOTAL		31,730.00

FALCONBRIDGE LIMITED

13085 2029

~~13,2005~~
60116000 015905 31,730.00

DUE DATE 31,730.00

APPROVED	CO.			CHECKED
	CW	CW	CW	RDS

PAYMENT TERMS:
DUE ON RECEIPT OF INVOICE

INTEREST AT 18% PER ANNUM (1 1/2% PER MONTH)
WILL BE CHARGED ON ALL PAST DUE INVOICES

ORIGINAL INVOICE

APPENDIX II

Geology Whole Rock Lithogeochemical Results

LAKEFIELD RESEARCH
ANALYTICAL DEPARTMENT

185 CONCESSION STREET
POSTAL BAG 4300
LAKEFIELD, ON
K0L 2H0

FACSIMILE NO. - 705-652-6365 (MAIN OFFICE)
FACSIMILE NO - 705-652-6441 (ANALYTICAL OFFICE)

PHONE NO. - 705-652-2000 (MAIN OFFICE)
PHONE NO. - 705-652-2038 (ANALYTICAL OFFICE)

TO: Brian Fisher COMPANY: Falconbridge

FROM: Rock Marion FAX No: 902 798 2395

DATE: June 29/93 REFERENCE: Detection Limits

THIS TRANSMISSION CONSISTS OF 1 PAGES INCLUDING THIS ONE.

Whole Rock Package	Detection Limit
SiO_2	0.01 %
Al_2O_3	0.01
Fe_2O_3	0.01
MgO	0.05
Na_2O	0.05
K_2O	0.01
TiO_2	0.01
P_2O_5	0.01
MnO	0.01
Cr_2O_3	0.01
CaO	0.01
Ba	

Traces	Detection Limit
Cu	5 g/t (pp
Ni	5 g/t (pp
Co	5 g/t (pp
As	10 g/t (pp
S	0.1 % (p
Au	0.02 g/t
Ba	10 ppm
Nb	5 ppm
Rb	5 ppm
Sr	5 ppm
Y	5 ppm
Zr	5 ppm
Zn	5 ppm

X-MJ
X- KC
X- RS
Chris
original BP

94

LAKEFIELD RESEARCH
A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher
Fax : 902-798-2395

Lakefield, November 12, 1993

Date Rec. : October 28, 1993
LR. Ref. : OCT9094.C93
Reference : ---
Project : LR9343978

CERTIFICATE OF ANALYSIS

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	LOI %	SUM %
1	NSO 2995	49.2	15.0	9.69	9.72	8.29	1.95	0.58	1.01	0.14	0.17	0.20	2.68	98.6
2	NSO 2996	49.6	15.0	9.87	9.92	8.63	1.82	0.27	1.03	0.14	0.16	0.19	2.54	99.2
3	NSO 2997	50.3	15.2	9.59	8.53	8.94	1.71	0.65	1.16	0.15	0.17	0.15	2.94	99.5
4	NSO 2998	49.5	14.0	10.2	10.9	8.57	1.56	0.30	1.08	0.14	0.17	0.20	2.05	98.7
5	NSO 2999	50.9	14.1	10.5	11.1	8.36	1.57	0.55	1.09	0.14	0.16	0.20	1.15	99.8
6	NSO 3000	51.1	14.1	10.3	11.0	8.21	1.58	0.77	1.09	0.14	0.16	0.21	0.70	99.4
7	NSO 3001	49.4	14.0	10.5	11.1	8.54	1.54	0.25	1.08	0.13	0.18	0.19	2.21	99.1
8	NSO 3002	50.9	15.4	9.40	7.54	9.16	1.75	0.40	1.19	0.15	0.16	0.12	2.44	98.6
9	NSO 3003	51.1	15.6	9.66	8.05	9.62	1.75	0.30	1.24	0.14	0.17	0.13	2.00	99.8
10	NSO 3004	50.8	15.9	9.49	7.31	9.70	1.73	0.37	1.20	0.16	0.16	0.12	2.02	99.0
11	NSO 3005	56.3	13.4	8.37	8.19	6.75	2.00	1.59	0.94	0.19	0.13	0.14	1.92	99.9
12	NSO 3006	49.6	13.8	10.2	11.5	8.74	1.50	0.37	1.04	0.12	0.15	0.20	2.81	100.0
13	NSO 3007	49.0	14.2	10.4	11.2	9.22	1.55	0.22	1.11	0.13	0.19	0.20	2.45	99.9
14	NSO 3008	36.0	1.44	12.2	35.9	0.11	0.09	0.05	0.16	0.02	0.19	1.61	11.8	99.6
15	NSO 3009	48.2	13.4	10.0	11.1	8.44	1.47	0.20	1.07	0.13	0.16	0.19	6.29	100.6

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO

Phone : 705-652-2000 - FAX : 705-652-6365

OCT9094.C93

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	LOI %	SUM %
16	NSO 3010	48.3	14.4	10.5	10.4	9.25	1.59	0.24	1.11	0.14	0.19	0.20	3.46	99.8
17	NSO 3011	49.2	15.1	9.67	10.5	8.87	1.53	0.29	1.03	0.12	0.17	0.18	3.92	100.6
18	NSO 3012	50.5	14.8	9.33	9.73	8.20	1.83	0.62	0.97	0.13	0.16	0.19	3.67	100.1
19	NSO 23026	47.2	13.9	14.0	6.59	11.7	2.41	0.11	2.15	0.21	0.19	0.03	1.75	100.2
20	NSO 23027	48.4	13.7	14.3	6.31	11.5	2.63	0.15	2.31	0.24	0.22	0.04	0.70	100.5
21	NSO 23028	36.1	1.44	12.2	35.9	0.11	0.09	0.04	0.16	0.02	0.18	1.61	11.9	99.8
22	NSO 23029	48.3	13.4	14.3	6.25	11.2	2.51	0.26	2.21	0.24	0.21	0.03	1.26	100.2
23	NSO 23030	48.4	14.0	14.6	6.30	11.6	2.50	0.25	2.39	0.26	0.22	0.05	0.00	100.6
24	NSO 23031	48.6	13.5	14.2	6.01	11.2	2.66	0.29	2.99	0.30	0.21	0.07	1.28	101.3
25	NSO 23032	47.5	13.7	14.6	5.82	11.7	2.59	0.22	2.11	0.20	0.22	0.05	1.47	100.2
-- duplicates --														
26	NSO 3004	51.6	16.0	9.49	7.43	9.84	1.78	0.38	1.23	0.16	0.17	0.12	2.06	100.3
27	NSO 23027	47.7	13.5	14.3	6.23	11.4	2.54	0.15	2.30	0.24	0.22	0.03	0.64	99.3

Russ Calow

A MEMBER OF IAETL CANADA

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO

Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, BON 2TO - Canada

Attn : Brian Fisher
Fax : 902-798-2395

Lakefield, November 12, 1993

Date Rec. : October 28, 1993
LR. Ref. : OCT9094.C93
Reference : ---
Project : LR9343978

CERTIFICATE OF ANALYSIS

No.	Sample ID	Rb ppm	Sr ppm	Y ppm	Nb ppm	Ba ppm	S %	Cu ppm	Ni ppm	Zn ppm	Co ppm	Zr ppm
1	NSO 2995	12	145	24	8	139	0.05	53	24	146	35	121
2	NSO 2996	7	145	23	8	90	0.03	22	22	88	36	120
3	NSO 2997	13	165	22	7	182	0.03	16	12	93	35	126
4	NSO 2998	7	161	22	7	163	0.01	19	21	83	44	120
5	NSO 2999	17	162	21	7	168	0.02	14	21	90	42	119
6	NSO 3000	25	155	21	7	171	< 0.01	18	23	79	39	119
7	NSO 3001	8	164	22	7	149	0.01	15	19	88	45	117
8	NSO 3002	9	179	24	8	196	< 0.01	10	< 5	75	24	134
9	NSO 3003	7	183	22	7	193	< 0.01	11	< 5	78	28	137
10	NSO 3004	7	183	24	8	209	< 0.01	8	< 5	88	27	137
11	NSO 3005	60	189	20	11	384	0.04	45	152	120	34	143
12	NSO 3006	8	154	21	7	171	0.01	24	38	88	43	112
13	NSO 3007	5	158	24	9	137	0.01	24	36	98	42	115
14	NSO 3008	6	< 5	6	< 5	< 10	0.04	25	3170	152	169	8
15	NSO 3009	6	145	21	7	116	0.04	173	36	96	45	112

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO

Phone : 705-652-2000 - FAX : 705-652-6365

OCT9094.C93

No.	Sample ID	Rb ppm	Sr ppm	Y ppm	Nb ppm	Ba ppm	S %	Cu ppm	Ni ppm	Zn ppm	Co ppm	Zr ppm
16	NSO 3010	7	162	21	8	139	0.02	19	20	80	41	121
17	NSO 3011	9	147	23	9	91	0.02	17	22	77	33	121
18	NSO 3012	16	137	22	8	172	0.02	18	27	80	39	115
19	NSO 23026	< 5	191	33	6	34	< 0.01	187	66	97	47	126
20	NSO 23027	< 5	185	40	8	60	< 0.01	211	80	99	47	142
21	NSO 23028	< 5	< 5	< 5	5	< 10	0.04	25	3155	156	169	9
22	NSO 23029	10	175	38	6	56	< 0.01	223	80	97	42	137
23	NSO 23030	7	189	38	7	57	< 0.01	253	66	104	48	149
24	NSO 23031	6	257	41	10	142	< 0.01	248	91	109	45	192
25	NSO 23032	6	206	36	9	118	0.03	258	73	93	58	128
-- duplicates --												
26	NSO 3004	7	184	23	8	177	< 0.01	9	< 5	76	28	136
27	NSO 23027	< 5	188	37	6	43	< 0.01	213	79	94	48	144

Russ Calow

A MEMBER OF IAETL CANADA

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0

Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher/Bob Stewart
Fax : 902-798-2395

Lakefield, October 12, 1993

Date Rec. : August 31, 1993
LR. Ref. : **AUG9096.C93**
Reference : ---
Sample : (94) 4 Pulps,90 Rock Samples
Project : 9343426

CERTIFICATE OF ANALYSIS

No.	Sample ID	NI %
84	LB03390	1.23

J. R. Johnston

J. R. Johnston

A MEMBER OF IAETL CANADA

LAKEFIELD RESEARCH

A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher
Fax : 902-798-2395

Lakefield, November 11, 1993.

Date Rec. : October 27, 1993
LR. Ref. : OCT9095.C93
Reference : ---
Project : LR9343979

CERTIFICATE OF ANALYSIS

No.	Sample ID	Co ppm	Zn ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm	S %	Ni ppm	Cu ppm	Ni %
1	NS 03255	34	3414	38	46	22	74	8	97	21.4	674	891	--
2	NS 03255	630	< 5	18	94	8	39	< 5	140	5.31	> 5000	1880	5.39

J.R. Johnston

A MEMBER OF IAETL CANADA

K-0-3A 95

LAKEFIELD RESEARCH
A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0
Phone : 705-652-2000 - FAX : 705-652-6365

P.2/3

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher
Fax : 902-798-2395

Lakefield, November 11, 1993
Date Rec. : October 27, 1993
LR. Ref. : OCT9095.C93
Reference :
Project : LR9343979

CERTIFICATE OF ANALYSIS

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	Sum %
1	NS 03255	25.0	5.85	46.9	2.32	2.66	0.32	1.66	0.63	0.10	0.12	0.07	13.8	99.4
2	NS 03255	39.5	6.85	14.7	13.7	4.48	1.12	0.46	0.21	0.11	0.05	0.13	9.46	90.8

J.R. Johnston

A MEMBER OF IAETL CANADA

X-KO-
X-TCr
X-RSC
originals-BF-
90

LAKEFIELD RESEARCH
A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, BON 2TO - Canada

Attn : Brian Fisher/Bob Stewart
Fax : 902-798-2395

Lakefield, September 17, 1993

Date Rec. : August 31, 1993
LR. Ref. : **AUG9112.C93**
Reference : ---
Sample : (107) Routine Pulp
Project : 9343449

CERTIFICATE OF ANALYSIS

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	SUM %
1	NS02901	51.2	14.7	8.52	7.47	8.96	1.83	0.26	1.09	0.12	0.15	0.12	5.48	99.87
2	NS02902	50.8	14.4	9.71	7.35	9.08	1.87	0.41	1.09	0.14	0.13	0.085	3.87	98.96
3	NS02903	51.0	14.4	10.4	7.11	8.65	1.99	0.76	1.05	0.14	0.08	0.081	3.82	99.49
4	NS02904	50.2	14.3	11.8	7.76	9.53	1.57	0.60	1.11	0.15	0.11	0.090	3.09	100.31
5	NS02905	51.4	14.6	11.5	7.62	9.33	1.65	0.67	1.11	0.15	0.11	0.087	1.96	100.19
6	NS02906	44.4	11.0	12.1	16.0	9.87	1.56	0.067	1.23	0.17	0.12	0.17	2.30	99.03
7	NS02907	42.4	9.81	11.8	18.6	9.14	1.23	0.050	0.91	0.18	0.08	0.26	2.98	97.41
8	NS02908	35.7	1.36	12.1	35.4	0.09	0.09	0.041	0.15	0.18	< 0.05	1.6	12.0	98.71
9	NS02909	46.8	12.4	11.4	12.6	10.4	1.86	0.18	1.07	0.17	0.10	0.13	1.0	98.15
10	NS02910	44.5	10.3	11.7	19.1	9.16	1.36	0.076	0.94	0.18	0.08	0.23	1.25	98.92
11	NS02911	47.5	12.5	11.4	12.7	10.2	1.98	0.18	1.08	0.17	0.10	0.13	1.26	99.22
12	NS02912	45.8	12.1	11.6	14.1	10.8	1.66	0.085	1.14	0.17	0.10	0.17	1.67	99.44
13	NS02913	44.2	10.2	11.9	19.5	9.39	1.28	0.033	0.92	0.17	0.08	0.25	0.9	98.84
14	NS02914	43.7	10.3	11.6	19.2	9.26	1.28	0.037	0.90	0.17	0.07	0.25	2.09	98.88

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No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	SUM %
15	NS02915	44.8	12.2	11.2	13.0	11.2	1.67	0.11	1.30	0.17	0.12	0.14	3.13	99.07
16	NS02916	40.8	9.51	10.8	17.8	8.69	1.19	0.044	0.81	0.16	0.07	0.23	9.07	99.18
17	NS02917	44.6	10.6	11.7	19.4	9.61	1.35	0.033	0.91	0.17	0.08	0.25	1.02	99.77
18	NS02918	47.1	12.1	16.6	4.59	9.50	2.72	1.1	3.99	0.24	0.53	< 0.001	1.30	99.75
19	NS02919	47.2	13.4	15.6	5.88	11.8	2.48	0.25	2.40	0.24	0.26	0.020	0.7	100.25
20	NS02920	43.2	11.6	12.4	12.0	13.7	1.11	0.64	1.52	0.20	0.49	0.11	2.67	99.63
21	NS02921	43.3	8.10	12.7	24.1	7.58	1.15	0.083	1.16	0.18	0.12	0.25	0.4	99.07
22	NS02922	47.0	11.7	17.5	4.85	10.3	2.47	0.46	4.45	0.26	0.64	0.018	0.7	100.38
23	NS02923	46.6	12.5	15.7	5.24	10.3	2.60	0.93	3.55	0.23	0.45	0.013	1.21	99.32
24	NS02924	44.6	10.8	12.1	16.9	10.4	1.56	0.37	1.37	0.18	0.25	0.17	1.18	99.82
25	NS02925	43.9	9.42	12.3	20.5	8.72	1.45	0.20	1.40	0.18	0.15	0.22	0.7	99.19
26	NS02926	45.8	13.6	12.8	7.38	12.2	2.49	0.68	2.50	0.19	0.33	0.045	1.0	99.03
27	NS02927	47.9	14.2	11.8	7.82	13.1	2.05	0.10	1.47	0.18	0.14	0.052	1.43	100.29
28	NS02928	35.8	1.40	12.3	35.4	0.11	0.08	0.042	0.16	0.18	< 0.05	1.6	12.1	99.17
29	NS02929	47.6	14.1	12.0	7.24	12.8	2.15	0.13	1.55	0.18	0.15	0.049	1.19	99.14
30	NS02930	47.1	13.5	13.7	6.23	12.0	2.36	0.068	2.04	0.21	0.20	0.022	2.48	99.91
31	NS02931	47.4	13.0	15.3	4.78	10.0	2.64	0.88	3.20	0.22	0.41	< 0.001	2.13	99.96
32	NS02932	47.3	12.9	15.5	4.66	9.98	2.63	0.91	3.35	0.23	0.43	0.011	2.36	100.26
33	NS02933	46.6	12.9	15.0	5.00	9.88	2.51	0.89	3.13	0.21	0.40	0.014	3.42	99.95
34	NS02934	47.7	14.1	11.8	7.34	12.8	2.34	0.20	1.66	0.19	0.16	0.049	1.14	99.48
35	NS02935	48.3	13.4	14.2	6.31	11.9	2.36	0.24	2.10	0.21	0.20	0.021	1.30	100.54
36	NS02936	47.2	13.6	13.5	7.12	11.1	2.81	0.79	2.96	0.19	0.38	0.036	1.0	100.69
37	NS02937	46.1	9.16	17.9	11.1	10.4	1.76	0.25	2.12	0.27	0.21	0.045	0.05	99.37

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No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	SUM %
38	NS02938	47.9	12.3	16.9	5.76	11.0	2.40	0.34	2.72	0.26	0.30	0.016	0.5	100.40
39	NS02939	47.6	12.3	17.0	5.73	11.0	2.39	0.34	2.75	0.25	0.29	0.021	0.6	100.27
40	NS02940	48.3	14.1	12.0	7.49	12.6	2.31	0.16	1.64	0.19	0.16	0.055	0.8	99.81
41	NS02941	47.9	13.5	13.7	6.71	12.0	2.35	0.21	1.97	0.21	0.19	0.028	1.06	99.83
42	NS02942	44.1	9.59	12.5	21.0	8.64	1.26	0.072	1.07	0.18	0.10	0.21	1.54	100.26
43	NS02943	48.7	13.3	11.6	10.6	9.84	1.88	0.32	1.52	0.17	0.17	0.12	1.0	99.22
44	NS02944	46.3	12.8	15.5	5.28	10.4	2.52	0.99	3.88	0.23	0.53	0.018	1.67	100.12
45	NS02945	44.8	10.5	12.8	17.7	9.68	1.46	0.15	1.55	0.19	0.14	0.17	1.31	100.45
46	NS02946	44.4	9.20	12.6	21.3	8.39	1.35	0.12	1.22	0.18	0.11	0.22	1.0	100.09
47	NS02947	47.5	12.2	16.1	4.51	9.41	2.84	1.1	3.80	0.23	0.54	0.011	2.42	100.66
48	NS02948	69.9	14.3	3.57	0.87	1.43	3.14	4.3	0.42	0.072	0.23	< 0.001	0.7	98.93
49	NS02949	45.3	10.7	12.5	16.7	9.76	1.60	0.20	1.58	0.19	0.15	0.16	0.6	99.44
50	NS02950	48.3	12.4	16.5	4.42	9.34	2.87	1.1	3.89	0.25	0.56	< 0.001	1.17	100.80
51	NS02951	51.1	13.5	10.3	9.23	9.14	1.99	0.35	1.13	0.15	0.13	0.14	1.71	98.87
52	NS02952	44.3	10.1	12.1	17.1	9.73	1.51	0.17	1.39	0.17	0.13	0.18	2.97	99.85
53	NS02953	47.7	12.2	16.1	4.33	9.22	2.77	1.1	3.74	0.24	0.56	< 0.001	1.72	99.68
54	NS02954	55.9	15.2	8.49	6.14	7.01	2.36	0.67	1.30	0.12	0.20	0.058	2.36	99.81
55	NS02955	47.0	12.7	11.8	13.1	10.6	1.65	0.10	1.35	0.18	0.13	0.14	1.09	99.84
56	NS02956	45.1	10.5	13.1	17.5	9.55	1.53	0.15	1.41	0.19	0.13	0.19	0.4	99.75
57	NS02957	45.1	10.8	12.9	16.5	9.73	1.58	0.11	1.43	0.18	0.13	0.18	1.30	99.94
58	NS02958	46.6	12.4	11.6	12.4	10.00	1.70	0.28	1.37	0.17	0.14	0.15	2.96	99.77
59	NS02959	43.7	12.7	11.5	10.7	10.5	2.13	0.96	1.63	0.20	0.52	0.055	5.37	99.97
60	NS02960	46.2	12.9	15.0	4.99	10.4	2.44	0.95	3.67	0.22	0.55	0.018	2.62	99.96

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No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	SUM %
61	NS02961	50.3	15.0	10.3	8.14	10.0	2.05	0.31	1.17	0.17	0.14	0.067	2.62	100.27
62	NS02962	51.3	15.2	9.86	7.49	9.90	2.17	0.58	1.16	0.15	0.14	0.066	1.87	99.89
63	NS02963	50.4	15.3	10.3	7.95	10.1	1.92	0.27	1.21	0.20	0.14	0.075	2.13	100.00
64	NS02964	49.8	15.3	10.3	7.65	10.0	1.98	0.32	1.20	0.18	0.13	0.078	2.90	99.84
65	NS02965	49.4	14.3	10.5	9.09	9.52	1.91	0.18	1.16	0.15	0.13	0.10	4.00	100.44
66	NS02966	49.8	14.4	10.4	9.42	9.73	1.80	0.21	1.14	0.24	0.13	0.098	2.90	100.27
67	NS02967	48.5	13.1	10.7	11.5	9.51	1.54	0.17	1.10	0.20	0.12	0.17	3.75	100.36
68	NS02968	35.2	1.37	12.1	35.2	0.12	0.09	0.040	0.15	0.18	< 0.05	1.6	12.0	98.05
69	NS02969	49.3	14.5	10.5	8.00	9.55	1.89	0.23	1.10	0.15	0.13	0.060	3.43	98.84
70	NS02970	51.8	15.2	9.94	7.29	10.1	2.20	0.36	1.17	0.15	0.15	0.062	2.01	100.43
71	NS02971	51.5	15.2	9.96	7.49	9.73	2.02	0.28	1.13	0.17	0.13	0.061	2.22	99.89
72	NS02972	51.7	15.4	9.89	7.33	9.74	1.90	0.87	1.13	0.15	0.13	0.061	1.33	99.63
73	NS02973	49.7	15.5	10.4	7.83	9.90	1.95	0.45	1.17	0.18	0.13	0.065	2.86	100.14
74	NS02974	50.2	15.3	10.2	7.90	10.1	1.87	0.37	1.16	0.19	0.14	0.064	2.58	100.07
75	NS02975	50.5	14.9	10.2	7.80	9.66	1.99	0.43	1.16	0.18	0.13	0.078	3.29	100.32
76	NS02976	51.9	14.6	9.84	7.68	9.62	1.99	0.39	1.12	0.15	0.14	0.073	1.49	98.99
77	NS02977	--	--	--	--	--	--	--	--	--	--	--	--	--
78	NS02978	51.3	14.6	9.67	7.92	9.64	1.81	0.25	1.20	0.13	0.13	0.10	3.38	100.13
79	NS02979	51.7	14.7	9.73	7.02	9.53	1.91	0.50	1.13	0.16	0.13	0.065	3.60	100.17
80	NS02980	51.9	15.3	9.49	6.83	9.29	2.39	0.79	1.15	0.14	0.13	0.063	2.65	100.12
81	NS02981	51.0	15.0	9.79	7.18	9.57	2.41	0.53	1.15	0.17	0.14	0.063	3.27	100.27
82	NS02982	51.2	14.9	9.63	7.10	9.26	2.13	1.2	1.14	0.15	0.14	0.062	3.62	100.53
83	NS02983	50.3	14.9	9.89	7.76	9.21	2.30	0.73	1.12	0.18	0.13	0.063	2.50	99.08

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No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	LOI %	SUM %
84	NS02984	51.2	14.7	9.87	7.68	9.14	1.86	0.91	1.14	0.15	0.13	0.074	2.76	99.61
85	NS02985	52.2	14.7	9.84	7.60	9.16	1.93	0.91	1.13	0.16	0.13	0.075	2.19	100.02
86	NS02986	50.1	14.4	10.4	8.48	9.76	1.86	0.34	1.18	0.16	0.14	0.085	2.33	99.24
87	NS02987	48.7	14.0	11.3	8.55	11.1	1.83	0.40	1.49	0.17	0.15	0.091	2.44	100.22
88	NS02988	35.6	1.38	12.2	35.4	0.10	0.06	0.044	0.15	0.19	< 0.05	1.6	12.0	98.72
89	NS02989	47.2	13.7	11.5	10.5	10.4	1.66	0.23	1.36	0.18	0.13	0.12	2.88	99.86
90	NS02990	47.7	13.3	11.4	10.7	9.82	1.63	0.25	1.36	0.18	0.12	0.11	3.95	100.52
91	NS02991	47.6	13.3	11.2	10.2	9.86	1.43	0.87	1.34	0.16	0.14	0.11	2.86	99.07
92	NS02992	46.6	13.2	11.4	11.0	10.2	1.34	0.60	1.33	0.18	0.13	0.12	4.23	100.33
93	NS02993	47.9	14.9	10.9	8.73	11.4	1.78	0.23	1.43	0.17	0.13	0.095	2.19	99.86
94	NS02994	48.3	15.0	10.6	8.18	11.5	1.92	0.27	1.40	0.17	0.13	0.088	1.87	99.43
95	NS03013	49.4	14.4	9.15	3.48	9.48	2.47	0.73	1.18	0.100	0.15	0.098	8.06	98.70
96	NS03015	50.3	14.8	10.4	8.81	9.29	1.85	0.24	1.43	0.16	0.17	0.089	2.23	99.77
97	NS03016	47.1	13.0	11.3	11.4	9.26	1.51	0.26	1.41	0.17	0.13	0.12	4.83	100.49
98	NS03017	47.0	13.0	11.3	10.7	9.80	1.51	0.14	1.43	0.17	0.14	0.12	4.81	100.12
99	NS03018	48.0	13.7	13.7	5.84	10.9	2.28	0.19	2.63	0.20	0.26	0.030	2.55	100.28
100	NS03019	47.6	13.6	13.8	5.99	10.9	2.30	0.21	2.64	0.21	0.26	0.032	2.80	100.34
101	NS03020	48.0	14.8	12.7	6.47	11.6	2.26	0.15	2.14	0.18	0.21	0.039	1.45	100.00
102	NS03021	48.7	14.0	12.8	6.83	11.3	2.24	0.27	2.18	0.18	0.21	0.052	1.35	100.11
103	NS03022	47.6	14.2	13.5	6.71	11.9	2.34	0.16	2.05	0.21	0.20	0.031	1.18	100.08
104	NS03023	46.3	13.1	11.4	11.8	9.83	1.48	0.19	1.29	0.17	0.12	0.13	3.96	99.77
105	NS03024	44.3	13.4	10.7	9.20	7.38	1.55	0.59	1.17	0.14	0.10	0.067	11.2	99.80
106	NS03025	48.5	13.1	15.5	4.56	9.26	2.98	1.0	3.33	0.23	0.47	< 0.001	1.16	100.09

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107	NS03008	35.6	1.39	12.2	35.3	0.09	0.06	0.042	0.15	0.18	< 0.05	1.6	12.0	98.61
-- duplicates --														
108	NS02910	44.6	10.3	11.8	19.3	9.12	1.33	0.075	0.93	0.17	0.09	0.24	1.26	99.22
109	NS02920	42.8	11.6	12.3	11.8	13.7	1.13	0.64	1.53	0.21	0.50	0.11	2.51	98.83
110	NS02930	47.1	13.4	13.8	6.39	12.1	2.36	0.068	2.06	0.21	0.19	0.023	2.44	100.14
111	NS02940	48.7	14.2	12.0	7.55	12.7	2.29	0.16	1.66	0.18	0.16	0.055	0.7	100.36
112	NS02950	48.0	12.3	16.4	4.41	9.31	2.84	1.1	3.86	0.24	0.54	< 0.001	1.10	100.10
113	NS02960	46.1	12.9	15.0	4.97	10.5	2.47	0.94	3.68	0.22	0.56	0.019	2.61	99.97
114	NS02970	51.9	15.3	9.97	7.27	10.1	2.21	0.36	1.17	0.15	0.14	0.064	1.75	100.38
115	NS02980	51.6	15.2	9.40	6.80	9.30	2.37	0.79	1.14	0.14	0.13	0.063	2.78	99.71
116	NS02990	47.6	13.2	11.4	10.6	9.72	1.61	0.25	1.34	0.18	0.12	0.12	3.96	100.10
117	NS03019	47.6	13.5	13.7	5.93	10.9	2.31	0.21	2.65	0.20	0.26	0.033	3.01	100.30
118	NS03025	48.9	13.1	15.6	4.58	9.30	2.99	1.0	3.35	0.23	0.47	< 0.001	1.22	100.74

J.R. Johnston

A MEMBER OF IAETL CANADA

LAKEFIELD RESEARCH

A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, BON 2TO - Canada

Attn : Brian Fisher/Bob Stewart
Fax : 902-798-2395

Lakefield, September 8, 1993

Date Rec. : August 31, 1993
LR. Ref. : **AUG9112.C93**
Reference : ---
Sample : (107) Routine Pulp
Project : 9343449

CERTIFICATE OF ANALYSIS

No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
1	NS02901	9	188	22	125	6	187	1.28	363	234	89	< 5
2	NS02902	18	184	23	121	7	179	1.28	433	233	91	10
3	NS02903	26	184	20	124	9	211	1.38	404	221	81	9
4	NS02904	19	177	23	115	7	153	1.41	381	253	93	14
5	NS02905	21	181	22	120	8	203	1.21	307	207	78	9
6	NS02906	< 5	142	19	72	7	< 10	0.02	635	127	80	72
7	NS02907	< 5	93	16	50	5	32	0.02	773	112	86	58
8	NS02908	6	< 5	< 5	7	< 5	< 10	0.04	3175	23	164	144
9	NS02909	8	143	22	76	6	91	0.02	325	119	70	70
10	NS02910	5	102	18	54	5	29	< 0.01	778	112	83	58
11	NS02911	< 5	142	21	73	6	111	0.02	348	122	64	74
12	NS02912	< 5	123	21	65	< 5	30	< 0.01	460	129	66	66
13	NS02913	< 5	94	18	51	< 5	< 10	< 0.01	800	118	90	67
14	NS02914	< 5	87	18	47	< 5	12	< 0.01	774	115	92	66

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No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
15	NS02915	< 5	150	21	85	7	23	0.10	534	137	69	64
16	NS02916	< 5	81	18	45	< 5	< 10	< 0.01	789	102	83	61
17	NS02917	< 5	94	18	48	< 5	< 10	< 0.01	759	115	87	65
18	NS02918	29	332	48	314	36	355	0.07	31	190	55	131
19	NS02919	< 5	213	41	165	13	78	0.01	58	318	52	99
20	NS02920	18	1069	23	150	82	2147	0.04	245	98	70	77
21	NS02921	< 5	161	16	73	7	24	< 0.01	1093	102	109	73
22	NS02922	9	213	72	406	28	228	0.02	47	497	46	141
23	NS02923	26	356	43	277	34	283	0.18	41	172	53	118
24	NS02924	13	244	23	100	16	97	0.01	574	132	81	77
25	NS02925	5	196	18	99	8	46	0.04	887	151	92	70
26	NS02926	16	356	29	207	17	182	0.04	141	193	52	74
27	NS02927	< 5	184	26	81	< 5	47	0.04	117	149	44	65
28	NS02928	< 5	< 5	< 5	8	< 5	< 10	0.03	3205	22	173	149
29	NS02929	6	186	25	87	7	54	0.04	110	157	47	79
30	NS02930	< 5	188	37	124	7	35	0.04	81	260	50	90
31	NS02931	23	356	39	246	29	265	0.06	34	158	44	104
32	NS02932	25	363	45	262	30	294	0.04	32	181	48	111
33	NS02933	25	327	39	239	29	258	0.03	49	164	47	127
34	NS02934	< 5	173	29	96	7	66	0.02	107	182	39	77
35	NS02935	7	186	37	129	6	62	0.03	73	260	52	89
36	NS02936	18	353	36	235	21	180	< 0.01	121	229	52	88
37	NS02937	8	135	38	135	11	55	< 0.01	180	276	86	112

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

P.O. Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO

Phone : 705-652-2000 - FAX : 705-652-6365

AUG9112.C93

No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
38	NS02938	10	188	46	179	11	81	< 0.01	52	367	49	110
39	NS02939	10	179	46	179	12	89	< 0.01	50	364	56	115
40	NS02940	< 5	176	31	98	7	54	0.02	112	177	41	68
41	NS02941	5	194	34	124	7	32	0.02	81	240	44	82
42	NS02942	6	106	19	64	6	13	< 0.01	846	110	90	69
43	NS02943	11	181	25	118	6	108	0.16	105	40	46	76
44	NS02944	29	339	44	316	40	340	0.04	63	255	50	115
45	NS02945	8	200	21	96	7	58	0.02	645	132	82	68
46	NS02946	5	140	17	71	7	19	< 0.01	865	101	101	70
47	NS02947	28	333	50	328	39	334	0.10	34	178	50	134
48	NS02948	172	105	27	165	11	481	< 0.01	9	8	< 5	75
49	NS02949	7	217	23	100	7	47	0.02	596	131	73	75
50	NS02950	29	340	49	340	39	334	0.10	30	190	50	140
51	NS02951	13	183	23	112	6	156	0.08	32	31	49	71
52	NS02952	8	243	19	89	6	45	0.01	726	114	82	68
53	NS02953	33	345	50	349	40	350	0.10	30	189	45	141
54	NS02954	34	207	26	197	9	302	0.21	79	43	22	71
55	NS02955	7	161	22	92	6	27	0.09	289	92	64	78
56	NS02956	< 5	190	20	90	6	57	0.01	596	125	90	74
57	NS02957	< 5	192	19	89	6	34	< 0.01	561	122	91	74
58	NS02958	11	167	24	96	6	82	0.17	132	48	59	78
59	NS02959	17	267	28	165	76	366	0.18	115	103	50	73
60	NS02960	29	331	47	312	38	293	0.06	66	235	49	110

LAKEFIELD RESEARCH

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P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0

Phone : 705-652-2000 - FAX : 705-652-6365

AUG9112.C93

No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
61	NS02961	7	183	22	129	7	96	< 0.01	27	27	39	78
62	NS02962	8	203	22	131	6	113	< 0.01	31	27	40	76
63	NS02963	8	198	22	133	8	93	0.01	45	31	40	67
64	NS02964	10	217	22	131	8	80	< 0.01	47	29	42	74
65	NS02965	< 5	167	24	111	6	80	0.02	27	35	41	77
66	NS02966	6	172	23	111	7	114	< 0.01	23	27	36	74
67	NS02967	6	154	20	99	6	77	0.02	55	35	49	70
68	NS02968	5	< 5	< 5	8	< 5	< 10	0.03	3202	21	171	142
69	NS02969	7	188	24	129	6	125	0.03	35	33	39	73
70	NS02970	8	204	23	132	7	88	< 0.01	42	33	32	72
71	NS02971	9	199	23	135	8	118	< 0.01	27	26	30	76
72	NS02972	20	204	22	135	8	91	< 0.01	26	27	34	76
73	NS02973	14	190	22	132	7	86	< 0.01	30	23	36	78
74	NS02974	11	192	24	134	6	93	< 0.01	24	26	39	72
75	NS02975	10	188	22	128	8	120	< 0.01	29	18	37	72
76	NS02976	18	190	25	126	8	185	0.02	24	26	33	73
77	NS02977	--	--	--	--	--	--	--	--	--	--	--
78	NS02978	7	179	21	116	8	127	< 0.01	27	27	35	72
79	NS02979	10	179	23	129	7	93	0.08	28	31	40	73
80	NS02980	23	195	23	131	6	190	0.02	40	27	39	72
81	NS02981	17	176	23	130	6	164	0.05	43	33	35	69
82	NS02982	29	163	22	126	7	131	0.05	42	36	39	71
83	NS02983	25	179	22	127	7	183	< 0.01	25	28	38	74

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AUG9112.C93

No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
84	NS02984	22	178	24	127	7	90	< 0.01	22	24	33	73
85	NS02985	26	180	22	126	7	116	0.01	21	20	35	72
86	NS02986	9	183	21	118	8	83	< 0.01	22	21	34	75
87	NS02987	15	169	24	108	8	74	< 0.01	94	60	47	74
88	NS02988	5	< 5	5	8	< 5	10	0.03	3190	23	161	146
89	NS02989	9	146	24	92	5	88	< 0.01	160	59	58	80
90	NS02990	6	140	24	94	5	71	< 0.01	111	55	48	77
91	NS02991	38	128	23	101	6	91	< 0.01	151	44	51	78
92	NS02992	33	143	21	91	< 5	92	< 0.01	162	24	52	73
93	NS02993	6	164	26	93	5	62	< 0.01	69	23	41	72
94	NS02994	9	165	25	96	7	43	< 0.01	78	40	44	69
95	NS03013	21	172	21	128	7	212	0.47	< 5	5	16	63
96	NS03015	10	208	26	145	8	144	< 0.01	112	34	38	87
97	NS03016	5	141	24	106	6	101	< 0.01	182	52	55	78
98	NS03017	< 5	145	21	101	7	59	< 0.01	224	49	59	79
99	NS03018	7	215	38	175	8	84	< 0.01	65	129	45	101
100	NS03019	< 5	213	38	181	9	95	< 0.01	64	179	50	114
101	NS03020	5	211	33	142	9	39	< 0.01	72	125	43	84
102	NS03021	6	192	34	153	8	81	< 0.01	58	101	43	95
103	NS03022	< 5	184	33	121	< 5	47	< 0.01	71	206	44	87
104	NS03023	< 5	131	23	81	5	44	< 0.01	237	51	53	74
105	NS03024	14	205	24	70	< 5	431	< 0.01	146	116	48	62
106	NS03025	26	347	42	283	36	350	0.08	24	110	55	125

LAKEFIELD RESEARCH

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AUG9112.C93

No.	Sample ID	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM	S% %	NI PPM	CU PPM	CO PPM	ZN PPM
107	NS03008	< 5	< 5	5	8	< 5	< 10	0.03	3173	24	166	148
-- duplicates --												
108	NS02910	< 5	103	18	58	< 5	44	< 0.01	770	107	89	68
109	NS02920	20	1063	21	150	81	2096	0.04	242	96	63	76
110	NS02930	< 5	189	34	125	9	15	0.04	78	256	50	93
111	NS02940	< 5	179	29	96	7	39	0.03	114	178	43	75
112	NS02950	27	340	50	343	42	339	0.09	31	188	56	144
113	NS02960	28	338	45	314	37	307	0.05	66	234	46	115
114	NS02970	5	202	23	134	7	88	< 0.01	38	34	33	70
115	NS02980	25	191	22	130	8	181	0.02	38	28	38	67
116	NS02990	6	139	23	92	6	83	< 0.01	109	57	49	70
117	NS03019	6	210	40	182	9	94	< 0.01	65	173	46	107

J.R. Johnston

J.R. Johnston

A MEMBER OF IAETL CANADA

APPENDIX III

Drilling Whole Rock Lithogeochemical Results Results

LAKEFIELD RESEARCH
ANALYTICAL DEPARTMENT

185 CONCESSION STREET
POSTAL BAG 4300
LAKEFIELD, ON
K0L 2H0

FACSIMILE NO. - 705-652-6365 (MAIN OFFICE)
FACSIMILE NO - 705-652-6441 (ANALYTICAL OFFICE)

PHONE NO. - 705-652-2000 (MAIN OFFICE)
PHONE NO. - 705-652-2038 (ANALYTICAL OFFICE)

TO: Brian Fisher COMPANY: Falconbridge

FROM: Roch Marion FAX No: 902 798 2395

DATE: June 29/93 REFERENCE: Detection Limits

THIS TRANSMISSION CONSISTS OF 1 PAGES INCLUDING THIS ONE.

Whole Rock Package	Detection Limit
SiO_2	0.01 %
Al_2O_3	0.01
Fe_2O_3	0.01
MgO	0.05
Na_2O	0.05
K_2O	0.01
TiO_2	0.01
P_2O_5	0.01
MnO	0.01
Cr_2O_3	0.01
CaO	0.01
Ba	

Traces	Detection Limit
Cu	5g/t (ppm)
Ni	5g/t (ppm)
Co	5g/t (ppm)
As	10g/t (ppm)
S	0.01% (ppm)
Au	0.02g/t
Ba	10 ppm
Nb	5 ppm
Rb	5 ppm
Sr	5 ppm
Y	5 ppm
Zr	5 ppm
Zn	5 ppm

MJ - BF 93

LAKEFIELD RESEARCH

A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher
Fax : 902-798-2395

Lakefield, November 11, 1993

Date Rec. : October 27, 1993
LR. Ref. : OCT9093.C93
Reference : ---
Project : LR9343977

CERTIFICATE OF ANALYSIS

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	Sum %
1	NS 02801	49.6	13.9	11.6	7.64	9.38	2.14	0.60	1.57	0.16	0.19	0.10	100.58
2	NS 02802	53.0	14.7	10.5	6.48	7.82	1.68	0.89	1.00	0.13	0.14	0.08	100.45
3	NS 02803	52.7	14.7	10.2	6.46	7.83	1.83	0.72	1.01	0.13	0.12	0.08	100.52
4	NS 02804	48.4	12.6	10.2	11.3	8.85	1.47	0.34	0.97	0.12	0.09	0.19	100.00
5	NS 02805	38.9	14.5	15.5	3.11	11.1	2.69	1.06	4.11	0.20	0.55	0.01	100.53
6	NS 02806	41.9	14.0	13.6	2.78	11.6	2.86	1.06	4.03	0.22	0.54	0.01	99.32
7	NS 02807	41.1	14.4	17.8	6.93	4.48	2.50	1.08	4.11	0.15	0.55	0.05	99.79
8	NS 02808	70.6	14.6	3.59	0.89	1.44	3.35	4.29	0.44	0.07	0.23	< 0.01	100.10
9	NS 02809	47.7	13.1	15.9	5.21	10.4	2.77	0.99	3.67	0.24	0.48	0.02	101.32
10	NS 02810	37.0	14.4	21.4	5.18	6.90	2.21	0.98	4.14	0.13	0.55	0.01	100.77
11	NS 02811	26.9	11.7	12.9	4.87	19.1	0.58	0.07	1.68	0.35	0.16	0.28	100.89
12	NS 02812	47.7	12.9	11.3	10.8	9.51	1.60	0.13	1.11	0.18	0.11	0.18	100.60
13	NS 02813	52.1	14.6	10.8	6.56	7.75	1.79	0.57	1.02	0.13	0.11	0.08	100.42
14	NS 02814	53.0	14.7	10.5	6.45	7.90	1.71	0.89	1.01	0.13	0.14	0.09	100.30
15	NS 02815	49.2	14.4	10.1	6.65	7.86	1.84	0.74	0.97	0.11	0.16	0.07	100.89
16	NS 02816	52.1	14.5	10.1	6.51	7.83	1.95	0.69	1.00	0.13	0.15	0.08	100.33
17	NS 02817	46.3	11.7	11.8	16.4	9.94	1.50	0.14	1.18	0.18	0.12	0.19	101.11
18	NS 02818	41.4	10.2	11.4	16.1	8.52	0.87	0.11	1.00	0.16	0.08	0.20	100.14
19	NS 02819	45.3	11.0	12.1	18.3	9.69	1.44	0.20	1.05	0.18	0.10	0.22	101.04

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OCT9093.C93

No.	Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Cr2O3 %	Sum %
20	NS 02820	44.7	11.0	12.0	18.5	9.73	1.30	0.21	1.03	0.18	0.09	0.23	100.97
21	NS 02821	42.8	9.94	12.2	19.8	8.88	1.09	0.04	0.83	0.18	0.07	0.27	100.85
22	NS 02822	43.1	11.2	11.8	16.8	9.22	1.06	0.04	0.92	0.17	0.08	0.22	100.13
23	NS 02823	49.7	14.0	10.5	9.19	10.9	2.10	0.30	1.08	0.19	0.12	0.10	101.17
24	NS 02824	48.7	13.7	10.7	9.89	10.6	1.93	0.14	1.04	0.18	0.12	0.10	100.83
25	NS 02825	48.6	13.6	10.4	10.0	10.5	1.88	0.19	1.02	0.16	0.11	0.10	100.70
26	NS 02826	47.4	13.6	10.2	9.42	10.3	1.94	0.18	1.05	0.14	0.12	0.10	100.22
27	NS 02827	48.2	13.5	10.4	9.54	11.5	1.94	0.13	1.04	0.18	0.12	0.10	100.94
28	NS 02828	36.6	2.24	12.5	33.7	0.83	0.23	0.06	0.21	0.19	0.02	1.61	99.59
29	NS 02829	47.6	14.0	10.6	9.46	10.8	1.81	0.10	1.06	0.24	0.12	0.10	100.64
30	NS 02830	55.3	14.5	7.68	4.76	6.90	1.84	0.28	0.77	0.10	0.15	0.05	99.85
31	NS 02831	41.9	12.4	9.37	9.69	7.01	1.42	0.80	0.90	0.10	0.06	0.09	99.34
32	NS 02832	42.8	13.3	11.1	10.0	8.28	1.06	0.48	1.11	0.17	0.11	0.14	100.25
33	NS 02833	43.1	13.1	11.0	9.41	8.86	1.39	0.32	1.12	0.16	0.11	0.13	99.40
34	NS 02834	50.5	5.84	10.1	27.7	3.88	1.03	0.36	0.20	0.16	0.04	0.66	100.67
35	NS 02835	47.2	2.52	9.20	25.5	13.1	0.51	0.17	0.16	0.16	0.06	0.30	99.43
-- duplicates --													
36	NS 02810	36.9	14.3	21.3	5.21	6.90	2.13	0.97	4.14	0.13	0.55	< 0.01	100.43
37	NS 02820	44.1	10.7	11.8	18.4	9.56	1.31	0.21	1.02	0.18	0.10	0.22	99.82
38	NS 02830	55.7	14.7	7.78	4.92	7.00	1.93	0.28	0.78	0.10	0.15	0.05	99.88

Russ Calow

LAKEFIELD RESEARCH

A Division of Falconbridge Limited

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Lakefield, November 11, 1993

Date Rec. : October 27, 1993
LR. Ref. : OCT9093.C93
Reference : ---
Project : LR9343977

CERTIFICATE OF ANALYSIS

No.	Sample ID	Sr ppm	Rb ppm	Y ppm	Zn ppm	Zr ppm	Nb ppm	Ba ppm	S %	Ni ppm	Ni %	Cu ppm	Co ppm
1	NS 02801	188	19	27	99	139	8	154	0.22	204	--	70	46
2	NS 02802	191	29	21	44	136	7	264	1.23	459	--	245	80
3	NS 02803	191	26	20	37	134	7	247	1.32	519	--	247	82
4	NS 02804	149	7	21	84	84	5	125	0.03	121	--	48	54
5	NS 02805	398	30	45	205	309	41	304	0.11	49	--	191	56
6	NS 02806	429	30	47	162	315	41	310	0.15	43	--	188	59
7	NS 02807	337	30	41	165	314	42	352	0.11	43	--	177	66
8	NS 02808	103	170	29	83	170	12	531	0.01	9	--	11	7
9	NS 02809	377	26	41	128	278	35	301	0.15	46	--	173	57
10	NS 02810	282	23	42	166	308	41	302	0.06	50	--	180	65
11	NS 02811	189	8	20	123	98	7	54	0.10	1040	--	137	118
12	NS 02812	156	< 5	19	76	98	6	70	0.03	137	--	54	50
13	NS 02813	187	21	21	23	133	8	229	1.28	523	--	247	80
14	NS 02814	190	27	21	32	136	7	256	1.23	451	--	238	80
15	NS 02815	186	23	19	31	135	7	260	0.99	525	--	242	76
16	NS 02816	185	24	22	45	133	8	243	1.46	522	--	244	81
17	NS 02817	106	< 5	23	68	72	< 5	33	0.02	585	--	132	77
18	NS 02818	64	< 5	18	69	68	< 5	29	0.04	735	--	126	83
19	NS 02819	98	6	20	71	60	< 5	36	0.01	686	--	132	82

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Phone : 705-652-2000 - FAX : 705-652-6365

OCT9093.C93

No.	Sample ID	Sr ppm	Rb ppm	Y ppm	Zn ppm	Zr ppm	Nb ppm	Ba ppm	S %	Mn ppm	Ni %	Cu ppm	Co ppm
20	NS 02820	124	8	20	73	56	< 5	102	0.01	715	--	127	85
21	NS 02821	88	< 5	16	71	43	< 5	18	0.04	770	--	102	91
22	NS 02822	68	< 5	19	67	47	< 5	12	0.05	564	--	109	81
23	NS 02823	184	6	21	72	86	6	150	0.03	196	--	95	48
24	NS 02824	177	< 5	21	74	86	5	109	0.02	239	--	99	57
25	NS 02825	175	< 5	23	73	82	< 5	114	0.02	228	--	87	56
26	NS 02826	171	< 5	23	74	87	7	102	0.04	200	--	89	54
27	NS 02827	178	< 5	20	69	86	5	112	0.03	211	--	93	48
28	NS 02828	14	< 5	8	142	13	< 5	< 10	0.12	2716	--	29	153
29	NS 02829	174	< 5	20	84	89	6	77	0.07	240	--	103	59
30	NS 02830	231	6	17	114	159	7	161	0.65	262	--	170	42
31	NS 02831	91	27	17	77	82	< 5	825	0.06	201	--	92	48
32	NS 02832	165	13	21	82	89	7	127	0.16	156	--	114	60
33	NS 02833	201	12	21	87	85	6	146	0.20	145	--	98	48
34	NS 02834	93	11	8	77	33	< 5	142	0.30	1455	--	163	106
35	NS 02835	122	8	9	62	22	< 5	107	0.08	1099	--	27	99
--	duplicates --												
36	NS 02810	286	23	44	154	311	40	292	0.06	47	--	181	69
37	NS 02820	125	9	20	84	57	< 5	96	0.02	721	--	125	81
38	NS 02830	233	7	18	116	158	9	164	0.65	268	--	175	47

Ross Calow

APPENDIX IV

Geology Geochemical and Assay Results

89 X-KJ-
X-MJ-
X-RS-
original B:

LAKEFIELD RESEARCH
A Division of Falconbridge Limited
Box 4300, 185 Concession St., Lakefield, Ontario, KOL 2HO
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, BON 2TO - Canada

Attn : Brian Fisher/Bob Stewart
Fax : 902-798-2395

Lakefield, September 7, 1993

Date Rec. : August 31, 1993
LR. Ref. : **AUG9111.C93**
Reference : ---
Sample : (12) Routine Pulp
Project : 9343448

CERTIFICATE OF ANALYSIS

No.	Sample ID	S% %	NI PPM	CU PPM	CO PPM	AS PPM
1	NS03151	1.26	482	711	79	12
2	NS03152	1.34	504	271	82	12
3	NS03153	1.33	516	397	87	< 10
4	NS03154	1.22	508	254	73	< 10
5	NS03155	0.80	247	173	42	< 10
6	NS03156	0.58	214	219	38	< 10
7	NS03157	0.46	215	219	41	< 10
8	NS03158	0.69	285	297	49	12
9	NS03251	0.22	52	109	22	< 10
10	NS03252	0.31	34	200	50	14
11	NS03253	0.15	74	62	23	< 10
12	NS03254	0.01	39	36	35	< 10
-- duplicates --						
13	NS03252	0.31	32	221	58	< 10

J.R. Johnston

J.R. Johnston

A MEMBER OF IAETL CANADA

APPENDIX V

Drilling Geochemical and Assay Results

X-TG -
X-RS -
Original BF -

LAKEFIELD RESEARCH
A Division of Falconbridge Limited
P.O. Box 4300, 185 Concession St., Lakefield, Ontario, K0L 2H0
Phone : 705-652-2000 - FAX : 705-652-6365

Falconbridge Limited (Windsor)
P.O. Box 398, 124 Water Street
Windsor, NS, B0N 2T0 - Canada

Attn : Brian Fisher/Bob Stewart
Fax : 902-798-2395

Lakefield, September 7, 1993

Date Rec. : August 31, 1993
LR. Ref. : AUG9111.C93
Reference : —
Sample : (12) Routine Pulp
Project : 9343448

CERTIFICATE OF ANALYSIS

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2	NS03152	1.34	504	271	82	12
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6	NS03156	0.58	214	219	38	< 10
7	NS03157	0.46	215	219	41	< 10
8	NS03158	0.69	285	297	49	12
9	NS03251	0.22	52	109	22	< 10
10	NS03252	0.31	34	200	50	14
11	NS03253	0.15	74	62	23	< 10
12	NS03254	0.01	39	36	35	< 10
--	duplicates --					
13	NS03252	0.31	32	221	58	< 10

FP93-4-1
FP93-3-3

J.R. Johnston

A MEMBER OF IAETL CANADA

APPENDIX VI

Logistic and report on a Geophysical Survey Program
on the West Greenland Project

(Geoterrex Ltd, 1993)

LOGISTICS REPORT

on a
GEOPHYSICAL SURVEY PROGRAM

on the
WEST GREENLAND PROJECT

on behalf of
FALCONBRIDGE LTD.

Job 808
July 1993

Submitted by
P. Beingessner

geoterrex

TABLE OF CONTENTS

INTRODUCTION

During the period from June 15th to July 14th, 1993, Geoterrex, a division of CGG Canada Limited, of 2060 Walkley Road, Ottawa, Ontario performed geophysical surveys on the West Greenland project on behalf of Falconbridge Limited.

The geophysical methods performed were magnetics, VLF-EM and horizontal loop electromagnetics.

LOCATION AND ACCESS

The West Greenland project area is located in West Greenland on Disko Island and Nuussuaq Peninsula between 69° to 70°N and 52° to 55°W. A location map is included as Figure 1.

A base camp was set up on grid 5C and all other grids were accessed by helicopter.

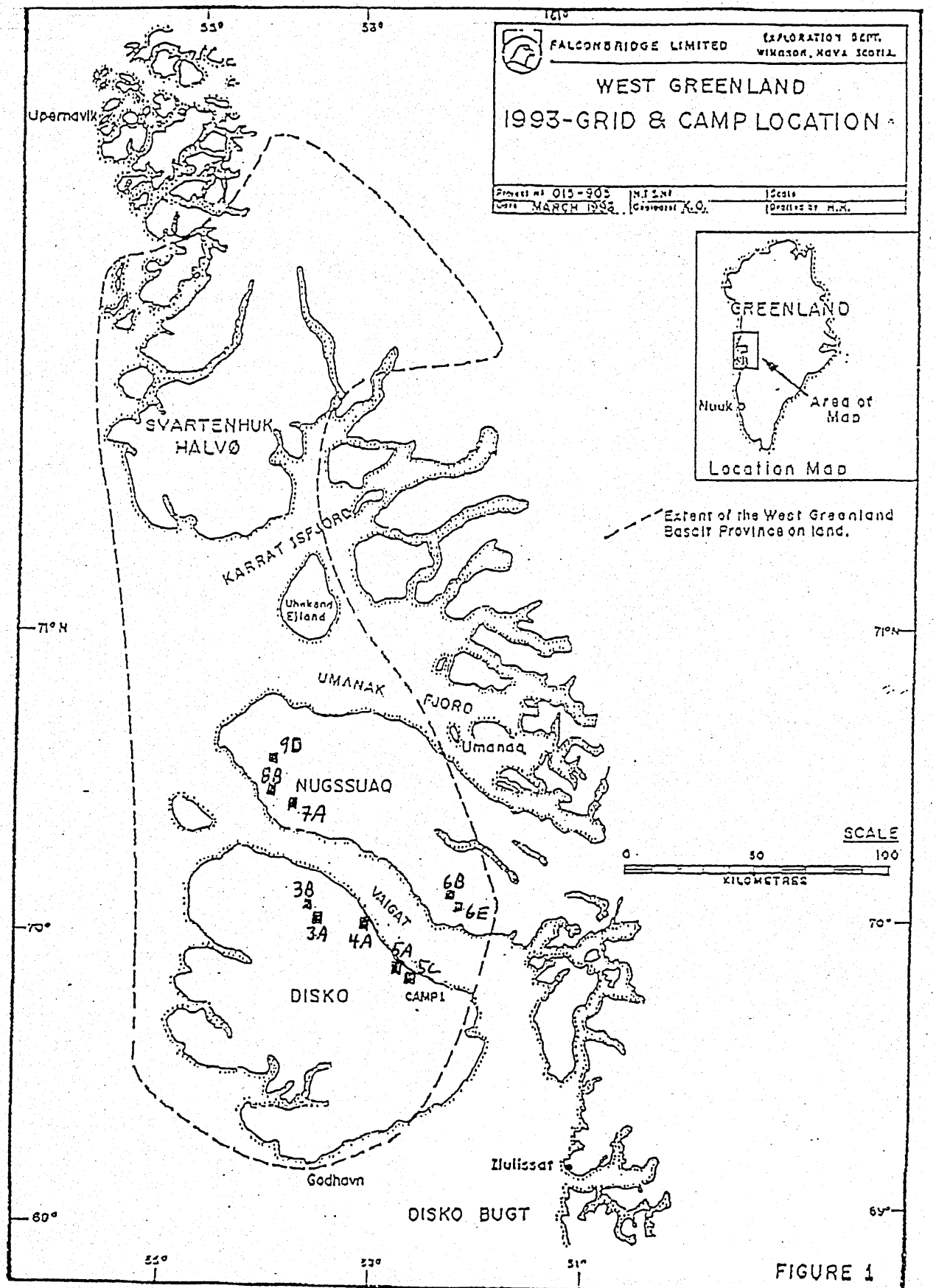

FALCONBRIDGE LIMITED
EXPLORATION DEPT.
WINDSOR, NOVA SCOTIA
WEST GREENLAND
1993-GRID & CAMP LOCATION
Project no 015-903
N.T.S. No
Scale
Date MARCH 1993
Geologist K.O.
Drafted by M.K.
GREENLAND
Nuuk
Area of Map
Location Map
Extent of the West Greenland Basalt Province on land.
Upernavik
SVARTENHUK HALVØ
KARRAT ISFJORD
Uhnkand Eiland
UMANAK FJORD
Umanaq
NUGSSUAQ
9D
8B
7A
6B
6E
5C
5A
4A
3B
3A
VAIGAT
DISKO
CAMP 1
Ilulissat
Godhavn
DISKO BUGT
71° N
70°
60°
53°
52°
51°
SCALE
0
50
100
KILOMETRES

FIGURE 1

PERSONNEL

Geoterrex provided a five man crew to perform the survey work and one extra man for the first week to help in data processing. The following Geoterrex personnel were actively involved on this project.

Steve Wardlaw	Project Supervisor
Phil Beingessner	Geophysicist/Party Chief--Data Acquisition and Processing
Howard Northfield	Geophysicist--Data Acquisition and Processing
Mark Rougier	Geophysical Technician--Data Acquisition and Processing
Mark Kehoe	Geophysical Assistant
Mark King	Geophysical Assistant

EQUIPMENT

The equipment provided by Geoterrex for this survey program consisted of the following items:

- 2 - EDA OMNI-PLUS mag/VLF units
- 1 - OMNI IV mag
- 3 - APEX MAX-MIN II electromagnetic systems
- 2 - 286 Compaq computers plus peripherals
- 1 - FUJITSU DL3400 printer
- All accessories and supplies as required.

Falconbridge provided the camp, food and helicopter transportation to the grids.

SURVEY METHODS

MAGNETICS

A total of approximately 185.55 km of magnetic data was acquired. Total field measurements were taken every 12.5 metres on grid 5C and every 25 metres on the other grids. On grid 5C and 4A data was collected on lines running both parallel and perpendicular to the grid orientation. The data was collected using two EDA OMNI-PLUS magnetometers, one at a base station. The base station was set up close to camp on grid 5C away from any cultural interference. The base station recorded readings every 15 seconds for the first week and was changed to every 10 seconds because of the rapid diurnal variations of the ambient magnetic field. The total field measurements were automatically corrected for diurnal variations using internal software built into the magnetometer instruments.

A Geoterrex program was used to reduce the data from grid 7B because of a software problem in the magnetometer. All total fields were reduced using a reference field of 50,000 nanotesla for the base station.

VLF-EM

The VLF-EM data was also collected using the EDA OMNI series equipment. Both the in-phase VLF component and quadrature phase VLF component were recorded from two VLF transmitter stations. The two stations used were Cutler, Maine (24.0 KHz) and Rugby, England (16.0 KHz). Unfortunately the Rugby transmitter station turned off for maintenance on Tuesday July 6th and did not transmit again for the rest of the survey time. Therefore only grids 5C, 5A and 3A have Rugby data. No VLF data was recorded for grid 7B because of a broken

cable and time did not permit going back to collect data on it.

The VLF survey stations were the same as the magnetics except no VLF data was collected on the cross lines on grids 5C or 4A. A total of approximately 128.2 km of Cutler, Maine VLF data was collect and approximately 74.4 km of Rugby, England data was collected.

FREQUENCY-DOMAIN ELECTROMAGNETICS (MAX-MIN)

A total of approximately 125 km of Max-Min data was collected during the survey. This was done with two crews using the Apex Max-Min II systems in the horizontal loop mode. The survey parameters are identified below:

- Coil Separation: 200 metres
- Operating Frequencies: 222 Hz, 444 Hz, 1777 Hz
- Station Spacing: 25 metres

The grid lines had been secant chained so that the horizontal separation between stations was constant. Slope measurements were recorded and used during the Max-Min data acquisition to ensure that the receiver and transmitter coils were co-planar. This information was also used in processing the data to remove topographical effects.

Only 3.5 km of Max-Min data was collected on grid 9D due to time constraints imposed by Falconbridge.

PRODUCTION CHART

GRID	MAXMIN	MAG	VLF--CUTLER	VLF--RUGBY
5C	37.6	86.05	44	44
5A	11.675	15.0	15	15
4A	10.7	18.3	15	0
3A	13.8	15.4	15.4	15.4
3B	1.425	0	0	0
6B	22.625	25.6	25.6	0
6E	3.6	0	0	0
7A	9.6	12.0	12.0	0
8B	10.4	13.2	13.2	0
9D	3.45	0	0	0
TOTAL KM	124.875	185.55	128.2	74.4

DATA PROCESSING

IN-FIELD DATA PROCESSING

All survey data were plotted as profile and contour maps in the field as a check on data quality using GEOPAK software and a printer.

FINAL DATA PROCESSING

Final data processing at Geoterrex's office in Ottawa consisted of plotting all of the data from the various grids at a scale of 1:5,000 using GEOPAK software and a Calcomp plotter. The final Max-Min data was base corrected by subtracting the 222 Hz data from the 444 Hz and 1777 Hz frequencies and then plotted.

The magnetic data on grids 3A, 5A and 5C were filtered by Tony Watts of Falconbridge and then used for final plotting.

Maps for each grid included with this report consist of:

Max-Min:

1:5,000 profile maps of base frequency corrected 444 Hz and 1777 Hz frequencies.

Magnetics:

1:5,000 black-line mylar contour map,
1:5,000 colour contour map,
1:5,000 profile map,
1:5,000 posted values.

VLF-EM:

1:5,000 contour map for 2 frequencies fraser-filtered in-phase response of grids 3A, 5A,

1:5,000 profile maps as above.

GENERAL QUALITATIVE DISCUSSION OF RESULTS

MAXMIN-EM

Due to rugged topography, slope correction was performed on the Max-Min data using the secant chained station separation data. This corrects the responses for station separation variation due to topography. In field examination of raw and reduced data showed significant removal of topographic effects.

MAGNETICS

Good repeatability was observed in the field during data acquisition. Throughout the project, the overall magnetic amplitude from grid to grid was consistent. The magnetic data defined a number of stratigraphic and structural features.

VLF-EM

Two VLF transmitter stations were used for the VLF survey; Cutler, Maine and Rugby, England. The Cutler signal was found to give far better data quality than that of the Rugby station. The received primary field of Cutler was observed in the field to be 4 to 5 times greater than that of Rugby.

The VLF-EM data generally supported the results of the Max-Min survey.

GRID 3B

Coverage on grid 3B was performed on a previously surveyed location to compare Max-Min results.

GRID 3A

Lines of grid 3A ran parallel with a valley, bounding a braided stream network. Anomalous Max-Min responses were only seen on the valley walls. The lines lower in the valley were geophysically flat. This is attributed to a deep alluvium at the valley floor. VLF results were similar to the Max-Min. EM responses were coincident with elevated magnetics.

GRID 4A

Preliminary grid coverage delineated an interline feature which was further surveyed on cross lines. Magnetics and Max-Min were performed on cross lines and gave a better developed response.

GRID 5A

A strong signal and good repeatability was observed during the Max-Min survey at all frequencies on grid 5A. A strong, possibly stratigraphic, response was detected across the western end of the grid.

GRID 5C

The most intensive coverage was performed on grid 5C. Numerous anomalous responses were observed in all survey methods performed.

GRID 6B

An exposed dyke gave a strong magnetic low in the southern end of the survey coverage. The Max-Min coverage resulted in only subtle anomalous responses.

GRID 6E

Two test lines were run over a strong airborne response near grid 6B with Max-Min. Extremely strong responses were observed and confirmed the airborne results.

GRID 7A

Extremely weak Max-Min signal was observed in the field. The only feature of interest is a weakly anomalous response in the quadrature of 1777 Hz that was detected in the south eastern portion of the grid.

GRID 8B

A number of strong Max-Min responses were detected on grid 8B. The south western portion of the Max-Min response is accompanied by a strong VLF feature.

GRID 9D

Only one and a half lines of Max-Min was performed on grid 9D. The line of full coverage is dominated by a very large and strong response. The partial coverage of the adjacent line supports the existence of the anomaly.

CONCLUSION

The survey went smoothly, interrupted only by fog related weather problems causing the helicopter to be grounded.

The data collected was checked by Falconbridge personnel in the field to maintain good quality and should prove to be useful in delineating anomalies previously observed by airborne techniques and new anomalies discovered by ground techniques.

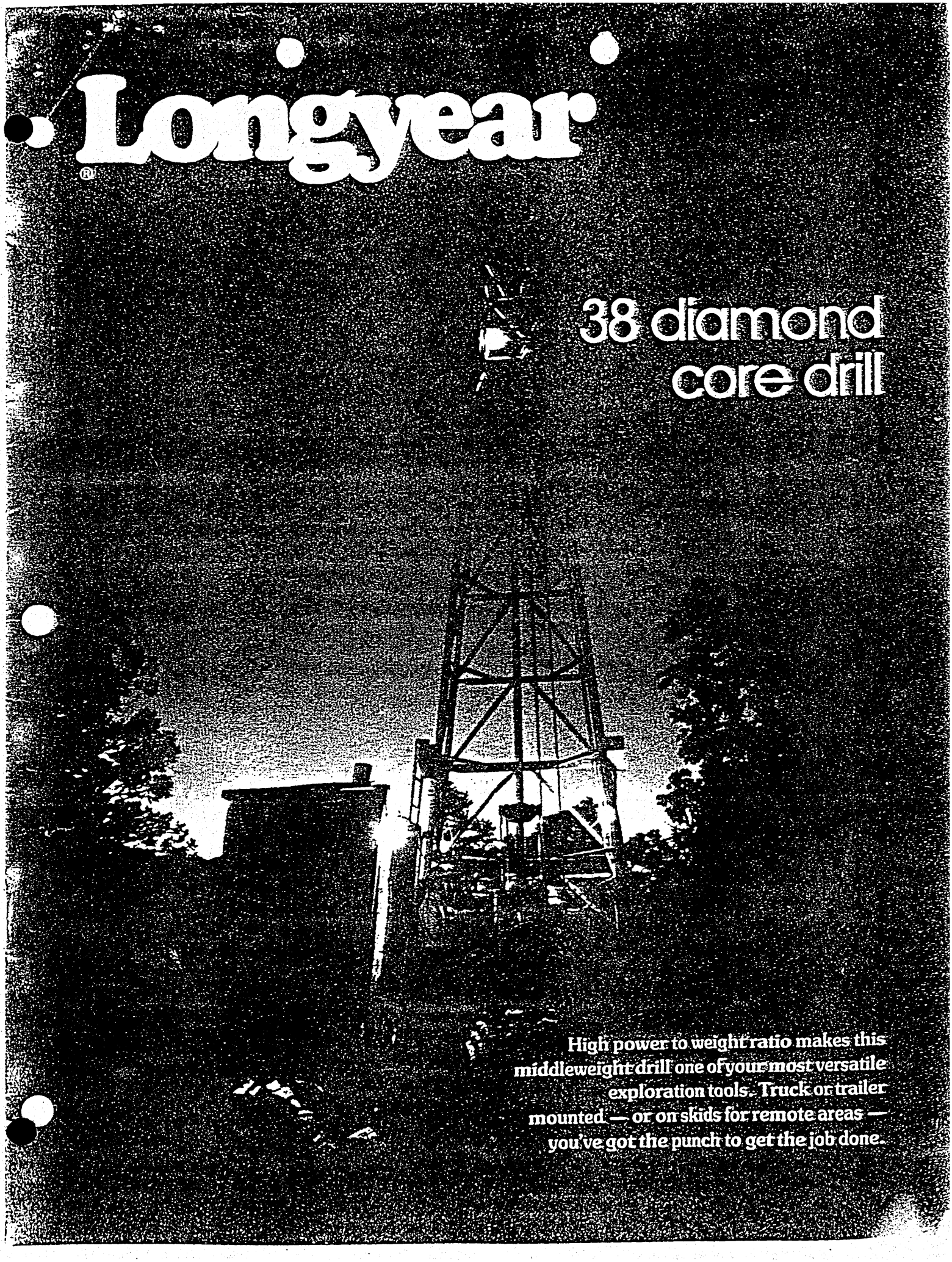
Respectfully submitted,

P. Beingessner

Phil Beingessner
Party Chief

APPENDIX VII

Longyear Fly-in 38, Diamond Drill Rig Information


Longyear®
38 diamond core drill
High power to weight ratio makes this middleweight drill one of your most versatile exploration tools. Truck or trailer mounted — or on skids for remote areas — you've got the punch to get the job done.

Examine the features of the Longyear 38 drill

Hoist clutch — extra-wide, uniformly-concentric clutch and brake bands apply more holding power for a given amount of effort on the part of the operator. They also have the additional surface needed to prevent overheating under heavy load.

Power — modular design provides a choice of dependable diesel or gasoline engines. Air or electric power are available on special order. Stub-shaft units are also available for customer installation of power unit. (Illustrated: Deutz diesel)

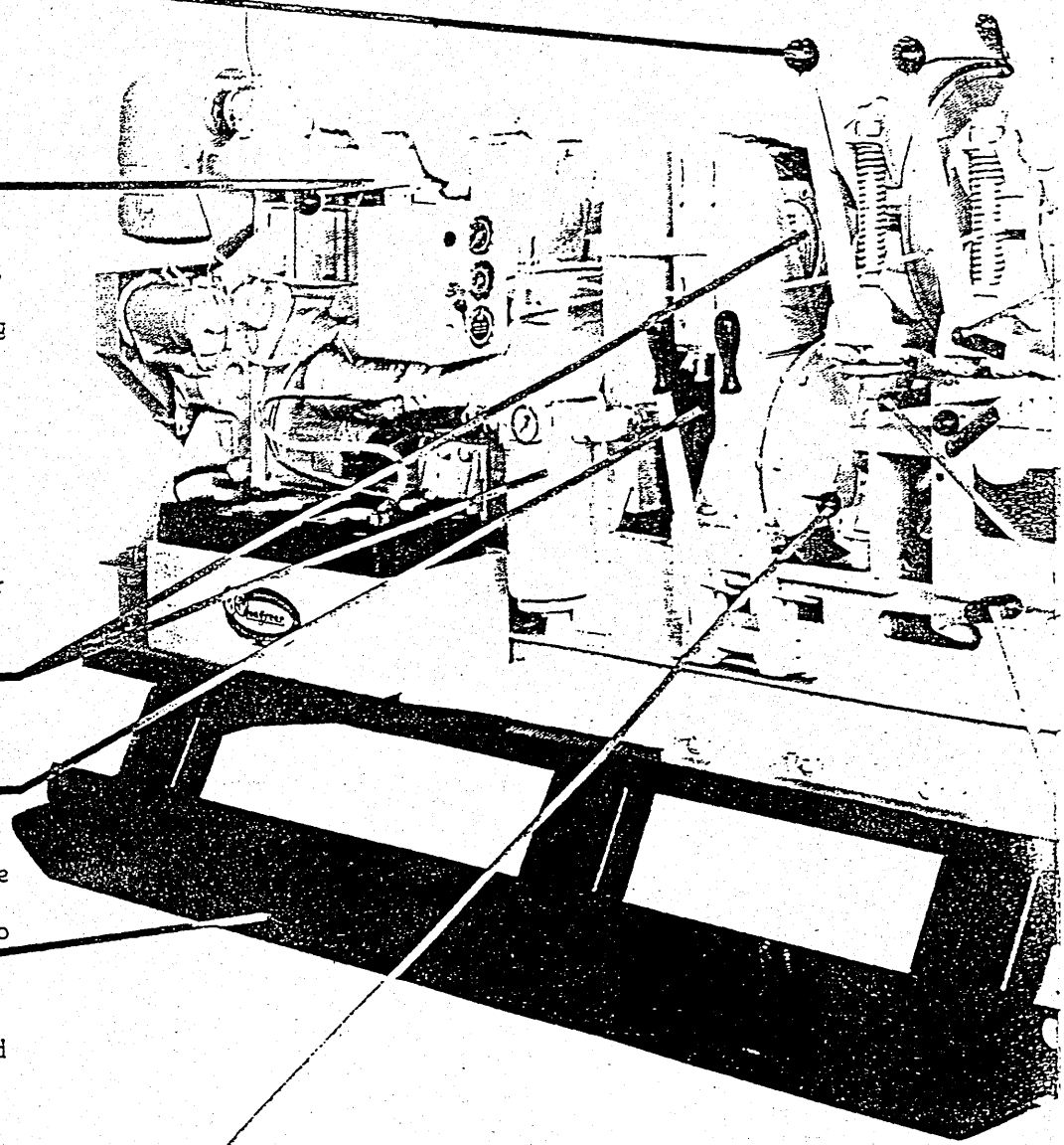
Self-propelling attachment — this option provides the necessary fairleads, sheaves and rollers to allow the drill to be moved under its own power by using the hoisting cable.

High-capacity hydraulic system — live hydraulic system provides for operation of hydraulic components when drill clutch is disengaged. Variable volume, vane-type pump delivers exactly the amount of oil required, thus overheating, foaming of oil and horsepower requirements are minimized. An efficient oil filter is provided to protect the hydraulic system.

Flexible coupling — compensates for minor misalignment and cushions shocks imposed by drilling.

Skid — welded structural steel construction provides long life under severe operating conditions. Modular design permits easy transfer of drill from skid to truck-mount and vice versa.

Transmission — synchro-mesh. Four forward speeds. Combination of Speed Range Selector and 4-speed transmission provides the correct bit speed for any drilling situation without the need for changing bevel gears. There are 8 usable bit speeds for each throttle setting. By simply shifting a selector lever, the operator can select higher drilling speeds when using diamond bits and lower speeds for roller or drag bits . . . assuring the most efficient engine and drilling performance on any job.

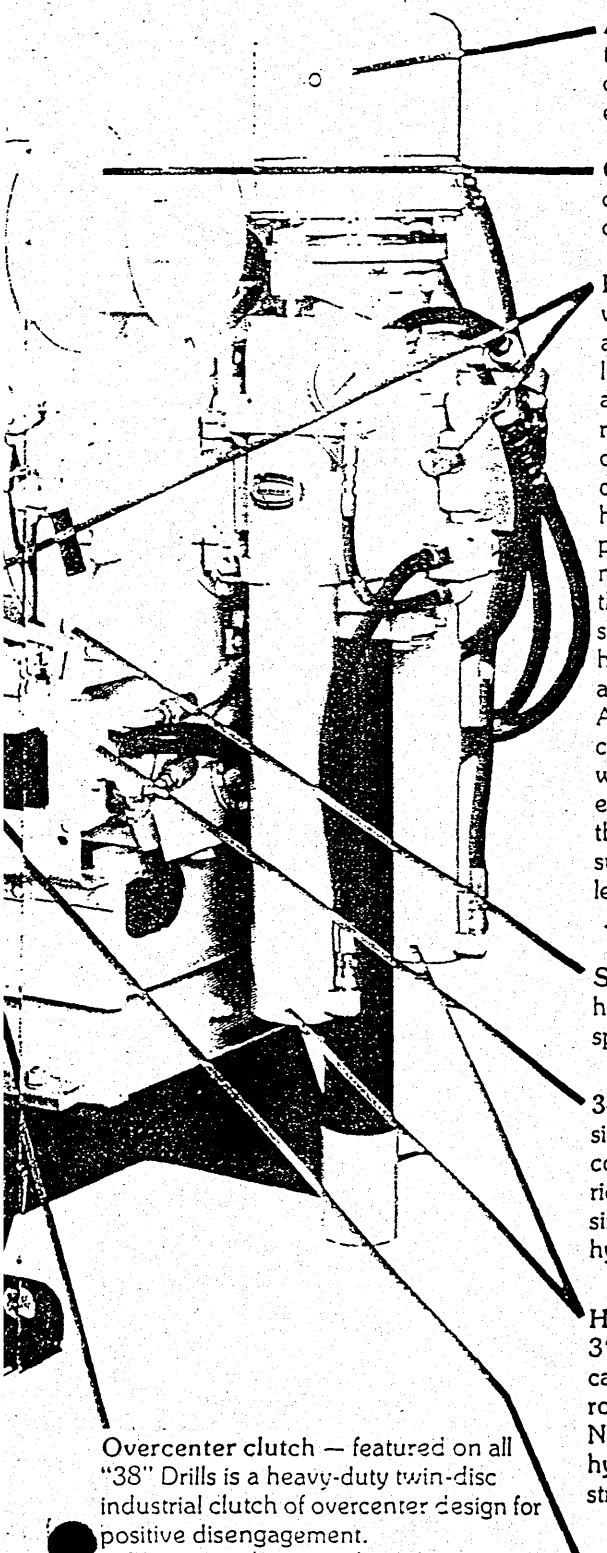


Drill capacities

Drill rod size	Feet	Meters
AQ Wireline	3100	950
BQ Wireline	2400	725
NQ Wireline	1900	575
HQ Wireline	1200	375

Drill rod size	Feet	Meters
AW*	2800	850
BW*	2300	700
NW*	1800	550
HW*	1100	325

*DCDMA upset wall tubing



Automatic chuck — An optional feature which eliminates the manual chucking operation to increase drilling efficiency and operator safety.

Cathead — an optional feature for drive hammer operation, general handling and lifting tasks.

Feed control — positive control of weight on the bit and rate of advance is accomplished by bleeding oil from the lower end of the feed cylinders through a needle type control valve. A quick-return circuit is provided for raising the drive rod to re-chuck. The directional control valve used to control the hydraulic head incorporates four independent valve positions: up, down, neutral and float. At shallow depths, the directional control valve should be set in a down position, where full hydraulic pump pressure can be applied above the pistons to provide bit weight. At greater depths, set the directional control valve in float position, and the weight of the drill string can be employed to provide bit weight, without the necessity of applying hydraulic pressure above the pistons. Advantages: less horsepower required . . . cooler oil . . . less wear.

Speed range selector — for selecting high or low range swivelhead rotating speeds.

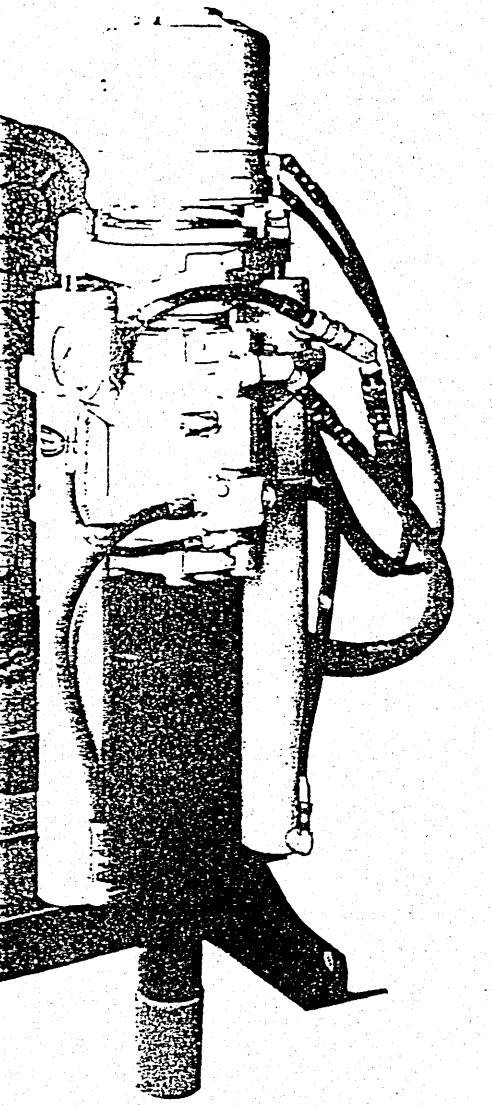
3-spool, 4-way hydraulic valve — simplifies installation and minimizes the cost of adding extra hydraulic accessories. When needed, accessories are simply connected to receive full hydraulic power.

Hydraulic swivelhead — available in 3″ size for rods through NQ size or casing through BW size, or 3-7/8″ for rods through HQ size or casing through NW size. Incorporates twin (3-1/2″) hydraulic cylinders with a full 24″ stroke.

Hydraulic retraction — This option features a full 13″ travel giving 10″ minimum hole clearance.

Overcenter clutch — featured on all "38" Drills is a heavy-duty twin-disc industrial clutch of overcenter design for positive disengagement.

This smooth-acting clutch has 55 square inches of friction area for efficient operation and longer life.



Swivelhead

Longyear hydraulic swivelheads have accurate control of bit pressure and rate of advance. Variable-volume pump delivers correct volume of oil to the head for efficient advance of bit in constantly changing rock formations.

Large cylinders provide powerful bit pressure and rod pull plus fast chuck return. Wide spacing of cylinders and guide rods give excellent rigidity and smooth operation.

"38" drills can be supplied with either the NQ (3-inch) or HQ (3-7/8-inch) hydraulic swivelheads. The NQ will pass NQ wireline, NW rods or BW casing. The HQ will pass HQ wireline, HW rods or NW casing.

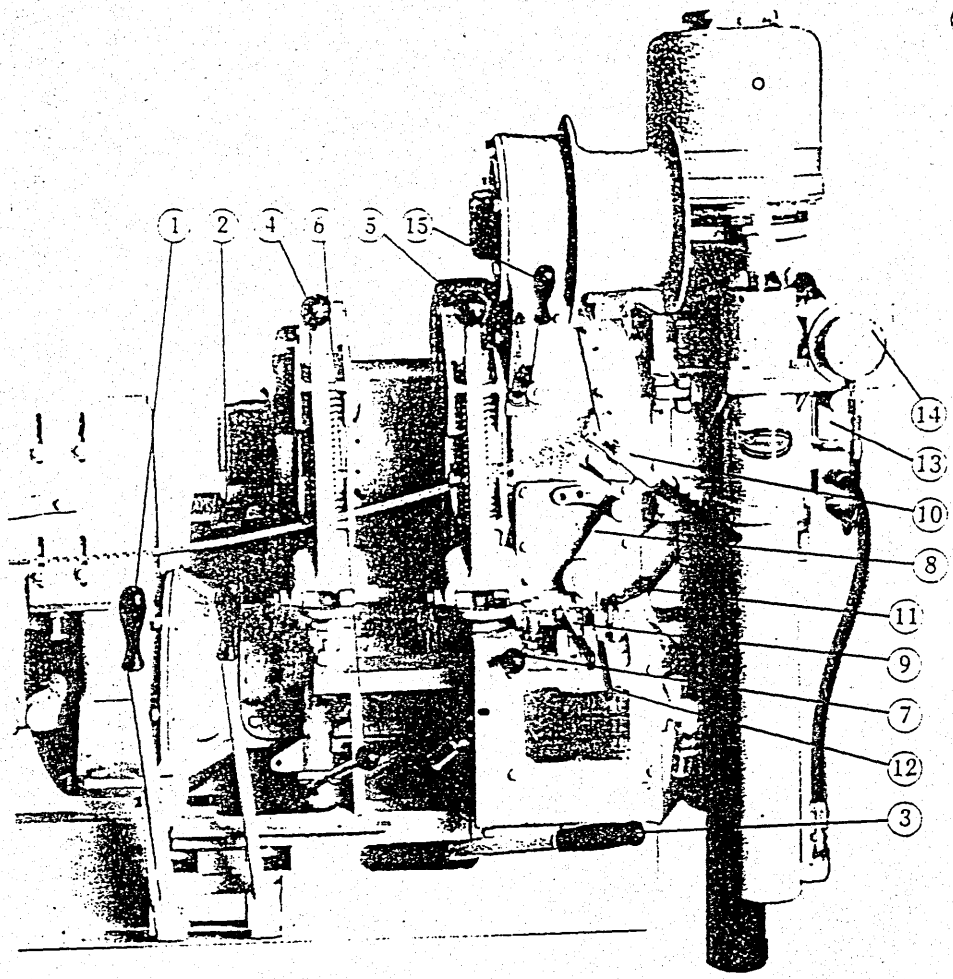
The HQ head (shown above) features a brass measuring rod scaled in inches.

Special features, optional equipment

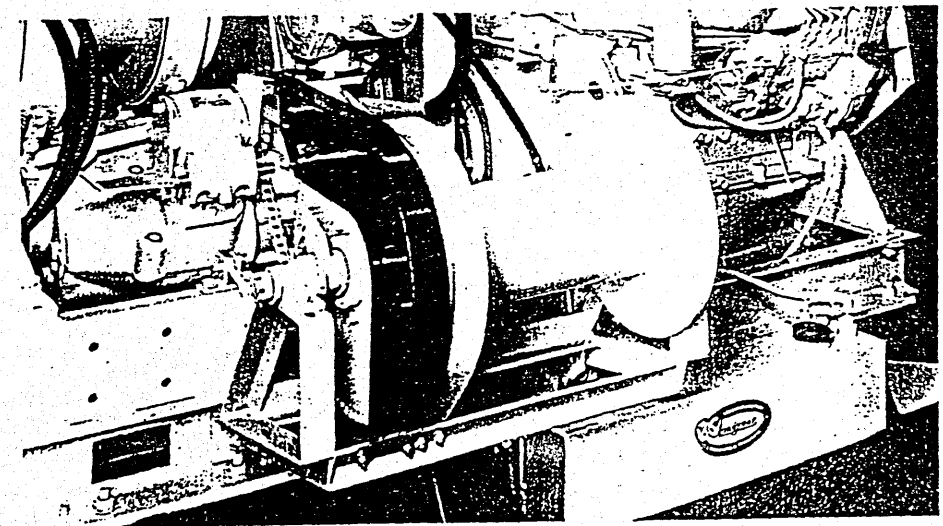
38 drill controls

1 Wireline hoist brake lever
2 Wireline hoist clutch lever
3 Main clutch lever
4 Hoist clutch lever
5 Hoist brake lever
6 Transmission shift lever
7 Wireline hoist engaging lever
8 Speed range selector lever
9 Retraction lever
10 Engine throttle control
11 Swivelhead control lever
12 Control lever for optional, automatic chuck
13 Hydraulic swivelhead feed control valve
14 Hydraulic feed pressure gauge
15 Cathead engaging lever

Central grouping of all controls saves waste motion and allows the operator more hours of profitable drilling.

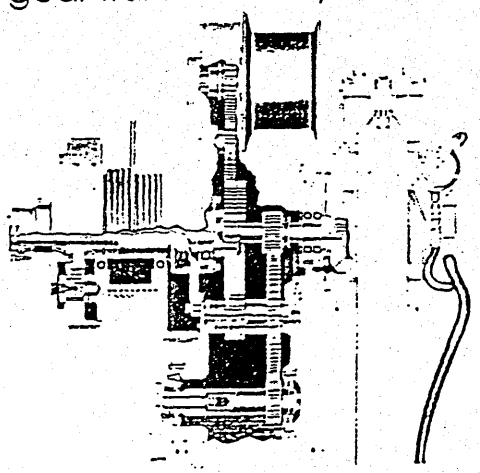


Wireline hoist



A build-in wireline hoist can be supplied as accessory equipment. The drum assembly mounts securely on the skid frame and features maintenance free sealed ball bearings. It is driven from the transmission power take-off by roller chain. The power take-off can be disengaged when drilling. The "built-in" feature eliminates the nuisance of a separate hoist unit while giving the operator "finger-tip" control from the central control station.

Transmission and hoist gear train assembly



Smooth-running planetary gear hoist with ball bearings facilitates the hoisting and lowering of drill rods as hoist brake and clutch can be used independently.

BV-3820 mast

For drilling vertical or angle-holes Combination vertical-and-angle-hole mast features advanced design for efficient drilling operations. Adequate capacity to handle rods in either vertical or angle-hole position at the rated capacity of the drill.

Designed so that forces developed when hoisting drill string are confined within the drill mast assembly. There is no tendency for the drill to lift off the ground.

ROLLER BEARING SHEAVES in heavy-duty crown block.

ACCOMMODATES PULL OF 20-FOOT ROD LENGTHS.

2-PART MAIN POLE is flanged and bolted together. Easily dismantled for transporting.

ROD RACK. Adequate capacity to store rods to the rated capacity of the drill.

WORKING PLATFORM. Swivels to remain horizontal as mast is angled. Platform has access from built-in ladder provided with the mast.

QUICK-DETACH PINS are used throughout at adjustment points.

MAST — Raised and Lowered by hoist cable or by optional hydraulic cylinder. For optimum safety and ease of operation, the hydraulic cylinder is recommended.

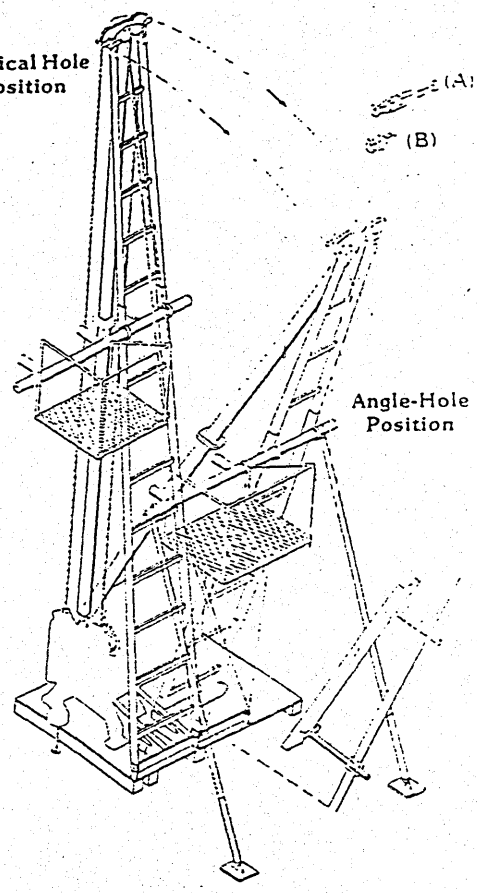
RETRACTION. Mast allows drill retraction of up to 13 inches. Crown sheave remains in perfect alignment with hole even when drill is retracted and when mast is in any operating position.

BACKSTAY LEGS telescope and adjust with quick-detach pins when mast is angled or lowered. Purchased as accessory equipment with rod slide.

ROD SLIDE for ease in feeding rods through the swivelhead when angle-hole drilling. Rod slide and backstay legs are accessory items and are specified as angle-hole attachments. Neither is necessary for vertical hole drilling.

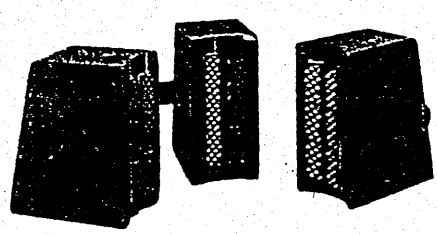
ACCESSORY WIRELINE SHEAVE ATTACHMENT is purchased separately for use with the wireline hoist. (A)

ACCESSORY CATHEAD SHEAVE ATTACHMENT is purchased separately for use with cathead. (B)



Automatic chuck

Optional, automatic chuck is spring loaded and hydraulically released. Advantages are increased footage, smoother rotation, safer operation and operator ease. Chuck has three hardened steel chuck jaws with Longyear designed, tungsten carbide inserts to grip rods firmly.



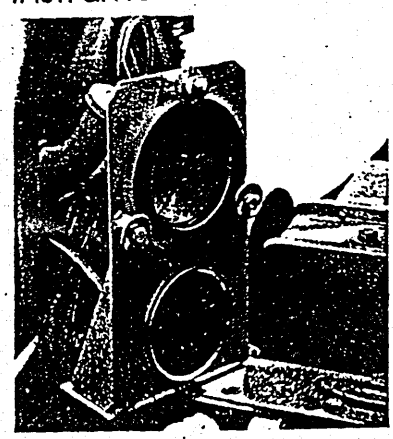
Instrumentation kit

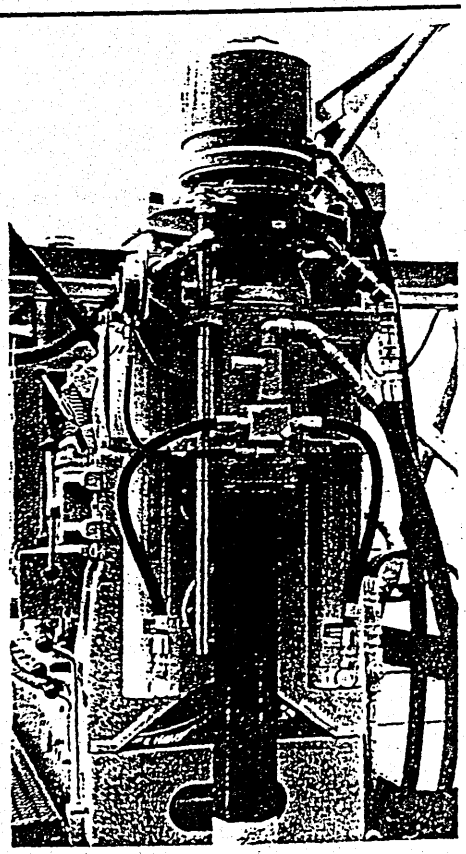
The instrumentation kit gives a visual reading of the drill string RPM and bit weight. The kit contains a 12V DC electric tachometer and a hydraulic pressure gauge.

A dial ring on the pressure gauge is "zeroed" with the bit just off bottom. When drilling commences, the load transferred to the bit can be read directly in pounds or kilograms on the dial.

The hydraulic gauge is equipped with an oscillation damper for easier, more accurate reading.

The accurate readings obtained with the kit enable the driller to maximize penetration rates and extend bit life.





Adaptability is standard equipment on every Longyear 38 drilling rig

The modular selection process

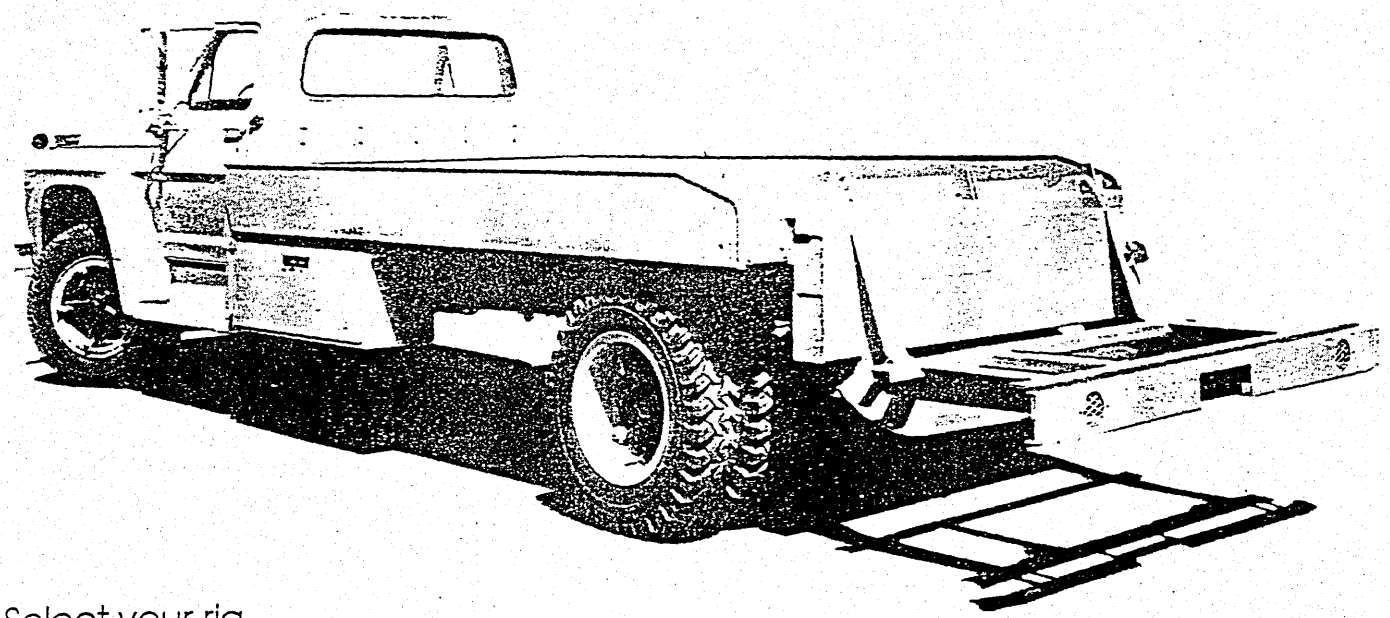
Standardization of basic drilling rig components allows flexibility in selecting the components to meet your drilling requirements, together with the economy and careful engineering of a factory-built system.

Modular Design gives you unmatched *adaptability* . . . an important benefit for as long as you own your Longyear drill.

Module and mounting interfaces are standardized, so it is a simple matter to alter the configuration of your drill rig as your drilling requirements change.

Many modular features can even be added or substituted in the field. Frames and mounting surfaces are pre-drilled to eliminate the fuss of complicated custom fitting.

The result is fast flexibility to meet changing needs, decreased drill downtime, and lower operating costs.



Select your rig

1 / Construct a model number by selecting one of the basic drill assemblies. All subsequent selections must be made from the same vertical column.
Example: A 38 Skid-mounted drill with 3-7/8" head. 38SH

2 / Select the power option from Table II.
Example: A Ford Diesel DF19

3 / Select the desired Chuck from Table III.
Example: 3-7/8" Mechanical Chuck HM

4 / Select the Drive Rod Bushing and Chuck Jaw size by placing that size in the model number from the table.
Example: Drive Rod Bushing and Chuck Jaw size desired is HQ HQ

For information to order additional or different size sets, see table.

5 / You may select one of the five Truck Options offered by Longyear under Table IV, or you may furnish your own truck. Customer-furnished trucks must meet the following minimum specifications: single rear axle with 187" wheelbase and 120" cab to rear axle length OR tandem rear axle with 169" wheelbase and 102" cab to centerline of tandem axle length: 17,000# minimum rear axle capacity: 8:00 x 20 minimum tires: reinforced frame: 108" maximum height to top of cab; 60" maximum height from frame to top of cab. For skid and trailer mounted units no selection should be made.
Example: No Selection 0

6 / Select Accessory Equipment as desired from Table V for best operation. (Longyear recommends the 535 RQ Pumping Unit available with either gas or diesel power, see Price Book for complete specifications). All trucks and trailers are furnished pre-drilled for mounting the pump and are equipped with a standpipe and discharge hose. Other ancillary equipment such as the suction hose and water swivel hose should be selected from the Longyear Catalog.
Example: Cathead, Hydraulic Retraction, Wireline Hoist (Drill Mount) and Self-Propelling. C,R,W,SP

For example the Unit Model Number is: 38SH-DF19-HM-HQ-O-C, R, W, SP which describes the entire drill.

	Skid mounted		Vehicle mounted Angle Mast, 20 foot		Vehicle mounted Vertical Mast, 20 foot or 30 foot	
I	Model	Description	Model	Description	Model	Description
	38SN	Drill Unit with 3" Hydraulic Head	3STA2N	Truck Mtd. Drill, 3" Head, 20' Mast	38TV2N	Truck Mtd. Drill, 3" Head, 20' Mast
	38SH	Drill Unit with 3-7/8" Hydraulic Head	3STA2H	Truck Mtd. Drill, 3-7/8" Head, 20' Mast	38TV2H	Truck Mtd. Drill, 3-7/8" Head, 20' Mast
		Units include	3SUA2N	Trailer Mtd. Drill, 3" Head, 20' Mast	38TV3N	Truck Mtd. Drill, 3" Head, 30' Mast
		Transmission, Drum Hoist,	3SUA2H	Trailer Mtd. Drill, 3-7/8" Head, 20' Mast	38TV3H	Truck Mtd. Drill, 3-7/8" Head, 30' Mast
		Speed Range Selector, 90' Single Part		Units include:	38UV2N	Trailer Mtd. Drill, 3" Head, 20' Mast
		Hoisting Cable.		Mast Raising Cylinder, Truck or Trailer Bed,	38UV2H	Trailer Mtd. Drill, 3-7/8" Head, 20' Mast
				Transmission, Drum Hoist, 90' Single Part		Units include
				Hoisting Cable, Retraction. Price does not		Mast Raising Cylinder, Truck or Trailer Bed,
				include truck or trailer.		Transmission, Drum Hoist, 90' Single Part
						Hoisting Cable, Retraction
						Price does not include truck or trailer
II	0	No Power Unit (Stub-shaft)	0	No Power Unit (Stub-shaft)	0	No Power Unit (Stub-shaft)
	DD4	Air-cooled Deutz Diesel Engine	DD4T	Air-cooled Deutz Diesel Engine	DD4T	Air-cooled Deutz Diesel Engine
III	NM	3" Mechanical Chuck	NM	3" Mechanical Chuck	NM	3" Mechanical Chuck
	HM	3-7/8" Mechanical Chuck	HM	3-7/8" Mechanical Chuck	HM	3-7/8" Mechanical Chuck
	NA	3" Automatic Chuck	NA	3" Automatic Chuck	NA	3" Automatic Chuck
	HA	3-7/8" Automatic Chuck	HA	3-7/8" Automatic Chuck	HA	3-7/8" Automatic Chuck
IV	0	No Vehicle Selection	0	No Vehicle Selection	0	No Vehicle Selection
			FS700	Ford - F700 Single Axle	FS700	Ford - F700 Single Axle
			FS750	Ford - F750 Single Axle	FS750	Ford - F750 Single Axle
			IS1800	International 1800 Single Axle	IS1800	International 1800 Single Axle
			IS1890	International 1890 Single Axle	IS1890	International 1890 Single Axle
			IT1800	International 1800 Tandem Axle	IT1800	International 1800 Tandem Axle
			UA	Trailer	UV	Trailer
V	C	Cathead	C	Cathead	C	Cathead
	R	Hydraulic Retraction **3	WT	Wireline Hoist	WLO	Wireline Hoist (oil powered)
	W	Wireline Hoist Built-in	A	Angle-Hole Attachment, BV-3820 Mast **2	3S	Triple Line Sheave Assembly
	SP	Self-Propelling Unit	24	Cathead Attachment, BV-3820 Mast (Sheave)	12	Traveling Block w/ shackle **1
	M	BV-3820 Mast	22	Wireline Attachment, BV-3820 Mast (Sheave)	HJ	Hydraulic Leveling Jacks **1
	A	Angle-Hole Attachment BV-3820 **2	26	Mast Lighting Harness	11	Drilling Fluid Pump Remote Control
	22	Wireline Attachment, BV-3820 Mast (Sheave)	HJ	Hydraulic Leveling Jacks **1	26	Mast Lighting Harness
	24	Cathead Attachment, BV-3820 Mast (Sheave)	11	Drilling Fluid Pump Remote Control		Hoisting Cable other than standard:
	26	Mast Lighting Harness	F	Blank Bore Flex Coupling	105	105' 2 Part for 20' Mast
	F	Blank Bore Flex Coupling	K	Instrument Kit 3"	130	130' 2 Part for 30' Mast
	K	Instrument Kit 3"	KH	Instrument Kit 3-7/8"		or 3 Part for 20' Mast
	KH	Instrument Kit 3-7/8"			170	170' 3 Part for 30' Mast
					F	Blank Bore Flex Coupling
					K	Instrument Kit 3"
					KH	Instrument Kit 3-7/8"

FOOTNOTES: **1 Price on request. **2 Must be added for angle-hole operation with BV-3820 mast. **3 Must be added if option M is selected.

Chuck jaw sets & bushing for mechanical chuck

	DRILL ROD SIZE	E	EW	A	AW, AQ	B	BW, BQ	N	NW	NQ	HQ
Mechanical	Drive Rod Bushing	18980	18976	18979	18975	18978	18974	18977	18973	18972	N/A
Chuck 3"	Chuck Jaw Set	15862		15863		15864		15865		15870	N/A
Mechanical	Drive Rod Bushing	25181	25182	25183	25184	25185	25186	25187	25188	25189	25147
Chuck 3-7/8"	Chuck Jaw Set	25820		25823		25826		25829		25832	25169

Chuck jaw sets & bushings for automatic chuck

	Size	EW	AW	AQ	BW	BQ	NW	NQ	HW, HQ, HWY
Chuck Jaw Set	Rod	38456	38458	38458	38460	38462	38463	38465	38464
(3 Jaws)	Casing	38457	38459	—	38461	—	38464	—	—

Hood	Rod		29012		29013		29014		29015
Bushing	Casing	29012	29013	—	29014	—	29015	—	29015
3" Drive Rod	Rod	29173	28364		28362		28359	28358	—
Bushing	Casing	29171	29170	—	28357	—	—	—	—
3-7/8" Drive Rod	Rod	29179	28341		28338		28336	28335	28333
Bushing	Casing	29177	29178	—	28334	—	28333	—	—

Specifications

POWER	
Deutz Deisel	4-cylinder **54 HP @ 2200 RPM
**Rated 15% below engine manufacturers' maximum hp rating	
TRANSMISSION, type	Heavy-duty synchro-mesh
Speeds	4 forward
HOIST, type	Planetary
Drum Dimensions	9½" (241 mm) diameter, 5½" (140 mm) long
Drum Capacity (9/16" cable)	130' (40 m) 90' (27.4 m) cable furnished with drill
Bare Drum Line Speeds**	72, 150, 278, 468' (22, 46, 85, 143 m) per minute
RANGE SELECTOR, type	Sliding gear
Ranges	Low, high, neutral
Number of Bit Speeds	8 forward
HYDRAULIC PUMP, type	Variable volume
Volume	0-12 gallons (0-45 liters) per minute
Maximum Pressure	1000 psi (70 Kg per square cm)
HQ 3-7/8" HYD. HEAD	Twin-cylinder type
Spindle I.D.	3-7/8" (98.4 mm)
Hydraulic Cylinder I.D.	3½" (88.9 mm)
Feed Length	24" (610 mm)
Angle Range	360°
NQ 3" HYD. HEAD	Twin-cylinder type
Spindle I.D.	3" (76 mm)
Hydraulic Cylinder I.D.	3½" (88.9 mm)
Feed Length	24" (610 mm)
Angle Range	360°

	Stub-shaft Power Take-Off	Water-cooled Gasoline Engine	Water-cooled Diesel Engine	Air-cooled Diesel (Duetz)
OVERALL DIMENSIONS				
Width	42" (107 cm)	42" (107 cm)	42" (107 cm)	42" (107 cm)
Length	96½" (244 cm)	103" (261 cm)	103" (261 cm)	96½" (244 cm)
Height	57" (145 cm)	57" (145 cm)	57" (145 cm)	57" (145 cm)
APPROX. WEIGHT Net				
HQ 3-7/8" Hyd. Head	2510 lbs (1140 Kg)	3165 lbs (1440 Kg)	3305 lbs (1500 Kg)	3230 lbs (1460 Kg)
NQ 3" Hyd. Head	2390 lbs (1086 Kg)	3045 lbs (1380 Kg)	3185 lbs (1450 Kg)	3110 lbs (1410 Kg)
For Domestic Shipment				
HQ 3-7/8" Hyd. Head	2920 pounds	3575 pounds	3715 pounds	3640 pounds
NQ 3" Hyd. Head	2500 pounds	3460 pounds	3600 pounds	3525 pounds
For Export				
HQ 3-7/8" Hyd. Head	3210 lbs (1459 Kg)	3865 lbs (1755 Kg)	4005 lbs (1820 Kg)	3930 lbs (1783 Kg)
NQ 3" Hyd. Head	3100 lbs (1409 Kg)	3750 lbs (1700 Kg)	3890 lbs (1765 Kg)	3815 lbs (1730 Kg)
CUBIC DISPLACEMENT				
Crated for Export	160 cu.ft(4.5 cu.m)	175 cu.ft(5 cu.m)	175 cu.ft(5 cu.m)	170 cu.ft(4.8 cu.m)

Accessory equipment

CATHEAD, type	Topside
Spool Diameter, length	8" (203 mm) diameter, 6½" (165 mm) long
Bare Spool Speeds**	176, 357, 660, 1108' (54, 109, 201, 338 m) per minute
Approximate Weight	115 lbs (52 Kg)
WIRELINE HOIST, type	Built-in
Drum Diameter, length	7" (178 mm) diameter, 17" (432 mm) long
Drum Capacity	4200' (1280 m) of 3/16" (4.76 mm) wire rope
Bare Drum Speed**	416' (127 m) per minute
Approximate Weight	250 lbs (113 Kg)
RETRACTION KIT	Hydraulic
Travel Length	13" (330 mm)
Approximate Weight	60 lbs (27 Kg)
BV-3820 MAST, type	Vertical or angle
Rod Length Capacity	20' (6.1 m)
Approximate Weight	1900 lbs (862 Kg)
AUTOMATIC CHUCK, type	Spring-loaded, hydraulically released
Capacity	EW rods through HQ rods / NW Casing
Jaws	Tungsten Carbide insert type

**Based at engine speeds of 2200 rpm. For stub-shaft model, speeds will vary according to power unit used.

Forward Bit speeds

	Engine RPM	Low Range RPM	High Range RPM
HQ	2200	51, 105, 192, 323	211, 438, 803, 1350
3-7/8" HYD.	1800	41, 85, 156, 265	172, 357, 653, 1105
HEAD	1100	25, 52, 96, 161	105, 219, 401, 675
NQ	2200	70, 144, 264, 444	290, 600, 1100, 1850
3" HYD.	1800	56, 118, 217, 364	236, 490, 900, 1510
HEAD	1100	35, 72, 132, 222	145, 300, 550, 925

Bulletin 1700 bp 2.5m 11/83

UNITED STATES
925 Delaware St.
Minneapolis, Minn. 55414

Phoenix, Arizona
Keewatin, Minnesota
Reno, Nevada
York, Pennsylvania
Salt Lake City, Utah
Max Meadows, Virginia
Spokane, Washington
New Philadelphia, Ohio

AUSTRALIA
919-929 Marion Rd.
Mitchell Park, S.A. 5043

Kalgoorlie, W.A.
Brisbane, Queensland
Perth, W.A.
Wynyard, Tasmania
Sydney, N.S.W.

CANADA
P.O. Box 330
North Bay, Ontario P1B 8H6

Moncton, N.B.
St. Leonard, Que.
Concord, Ont.
New Westminster, B.C.
Saskatoon, Saskatchewan
Springdale, Newfoundland

CHILE
Las Dalias 2900
Macul, Santiago

COSTA RICA
Apartado 5235
San Jose

FRANCE
Boite Postale 1
78191 Trappes CEDEX

FEDERAL REPUBLIC
OF GERMANY
Postfach 460, Grafftring 1
3100 Celle

MEXICO
Aptdo. 325
Tlalnepantla
Edo. de Mexico

THE NETHERLANDS
P.O. Box 56
Nijverheidsweg 47
Etten Leur

NEW ZEALAND
Box 43030
Mangere
Auckland

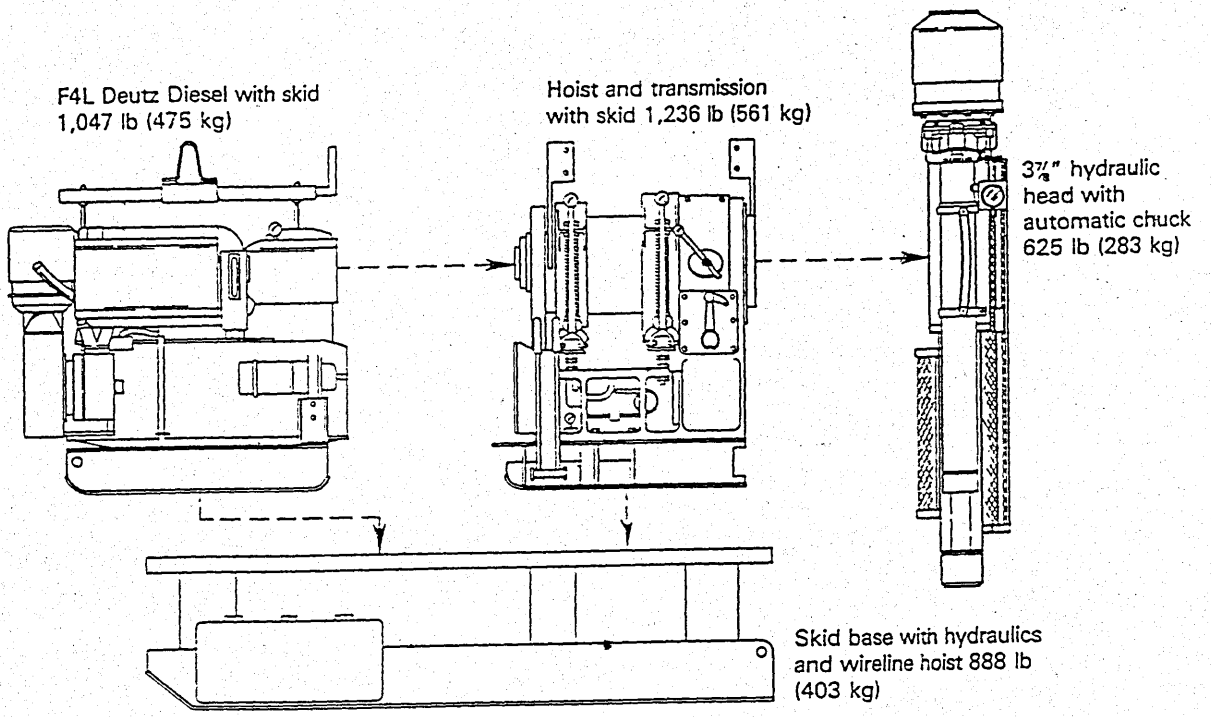
PHILIPPINES
P.O. Box 308
7232 Malugay St.
Makati, Rizal D708

SOUTH AFRICA
P.O. Box 14189
Farrarmere, Benoni
Transvaal

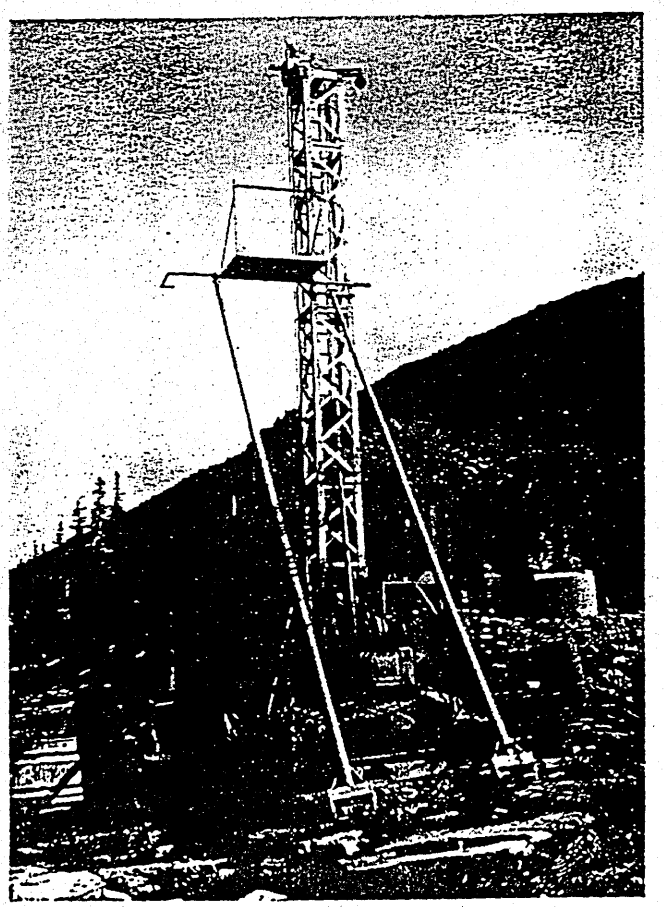
SPAIN
Avda. de los Metales S/No.
Leganes (Madrid)

UNITED KINGDOM
Holbrook Green
Holbrook
Sheffield S19 5FE

Longyear



The Fly-in 38 drill can be disassembled for transportation to remote drilling locations.



For maximum strength with minimum weight, Longyear recommends the use of an aluminum mast for the Fly-in 38.

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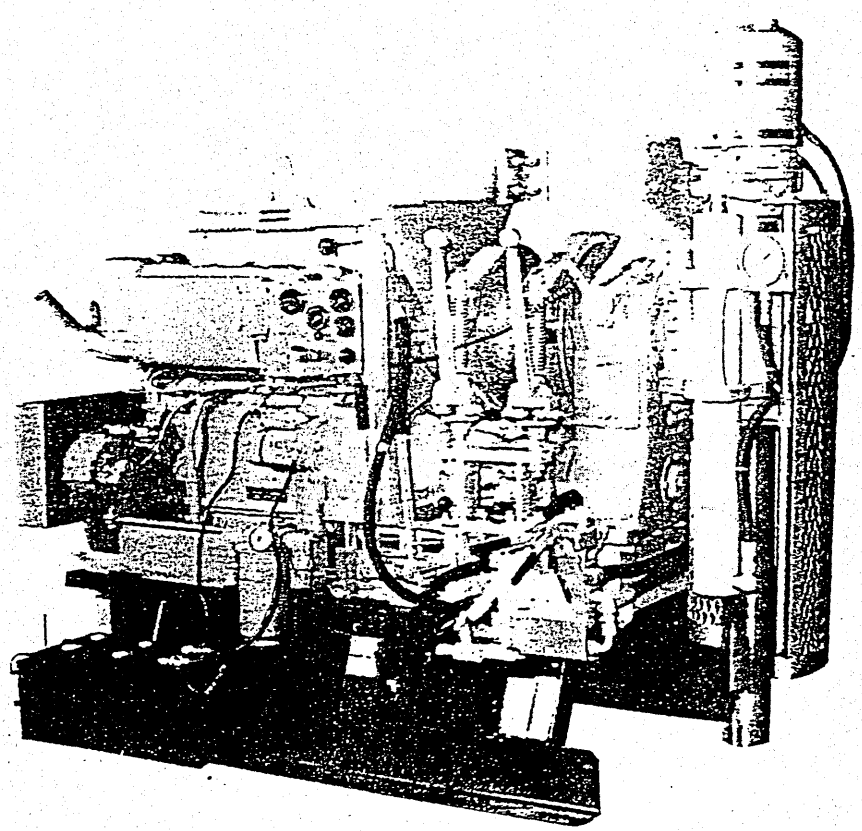
Fly-in 38

The Longyear Fly-in 38 Diamond Core Drill is an excellent drill for remote drilling situations that require a drill with enough power to handle larger size down-hole tools and has a low range for efficient penetration of overburden.

Important modifications which have been made to the Fly-in 38 are:

- The length of the drill has been reduced by utilizing a close-coupled design and a disc type clutch.
- All hydraulics are mounted on the lower portion of the surface frame. This eliminates the need to disconnect hoses, valves and the hydraulic pump. The wireline hoist is operated hydraulically and is located on the lower frame.
- The engine, main hoist and the hydraulic head can be disassembled quickly for transportation.

The modifications made on the Fly-in 38 result in a small weight reduction. There is a choice of Deutz or John Deere power units. The mast recommended for the Fly-in 38 is aluminum for maximum strength with minimum weight.



Description	lb	kg	ft³	m³
Fly-in 38 with 3" head, less chuck. Unit includes safety headguards, and an air-cooled Deutz diesel F4L-912 power unit.	3799	1727	230	6.5
Fly-in 38 with 3-7/8" head, less chuck. Unit includes safety headguards, and an air-cooled Deutz diesel F4L-912 power unit.	3829	1740	260	7.2
Fly-in 38 with 3" head, less chuck. Unit includes safety headguards, and a water-cooled John Deere diesel 4239 power unit.	4499	2045	230	6.5
Fly-in 38 with 3-7/8" head, less chuck. Unit includes safety headguards, and a water-cooled John Deere diesel 4239 power unit.	4529	2059	260	7.2
NA 3" Automatic Chuck	—	—		
HA 3-7/8" Automatic Chuck	—	—		
Wireline Hoist, oil powered	—	—		
20' Aluminum mast	1565	711		

APPENDIX VIII

Diamond Drill Logs

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-1 Zone # : Contractor : PETRO Date started : 07/16/1993
Township: Date completed: 07/17/1993
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I.,GRN

Collar coordinate : Line : 2+75 N Latitude: 7752903.00 N Azimuth: 52° 0' 0"
Station: 16+ 0 E Departure: 440110.00 E Dip : -70° 0' 0"
Reference frame : Elevation: 133.37 Length : 50.60

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED BECAUSE OF JAMMED CASING DUE TO LOSS OF WATER (CASING PULLED)

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/18/1993 Hole # : FP93-5-1

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	30.85	BROKEN CARBONACEOUS DEBRIS/GOUGE - Dark grey, soft, broken/ground, fine grained, carbonaceous debris/gouge. Very poor RQD with extreme core loss. Locally, 2-5mm, light brown, sandstone fragments contained in unit (this entire unit may be part of the overburden cover).									
30.85	31.90	QUARTZOSE SANDSTONE - Light greenish-grey, speckled, medium grained, quartz rich sandstone. Unit composed of 50-60%, light green, coarse sand sized (1-2mm), subangular/subrounded, quartz grains in finer grained matrix (poorly lithified). Gradational inner contact and sharp outer contact (@ 70° to CA), both weakly iron stained. 30.85- 31.00 Light grey-brown, very fine grained section (grades into sandstone @ 31.13m).									
31.90	35.00	BROKEN COAL SEAM (CARBONACEOUS SHALE) - Dark grey/black, fine grained, broken/ground, non-conductive coal seam. Well cleaved with common, shiny surfaces. Locally the unit more closely resembles carbonaceous shale. The outer contact is uncertain due to poor ground conditions. 31.90- 31.90 Sharp contact @ 70° to CA.									
35.00	37.66	CARBONACEOUS SHALE - Very fine grained, dark grey (black), weakly conductive, bedded carbonaceous shale (55-70° to CA). Unit more competent than previous, however local breakage/grinding of core does occur. Increasing sandy content towards lower portion of unit. Gradational outer contact. 35.15- 35.15 Bedding @ 55° to CA. 36.74- 36.74 Bedding @ 70° to CA.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
37.66	38.96	MIXED CARBONACEOUS SHALE/SANDSTONE - Interbedded dark grey carbonaceous sediments with light grey, fine grained sandstone. Gradational inner contact, sharp outer contact at 55° to CA. 38.28- 38.28 Bedding @ 50° to CA. 38.47- 38.47 Bedding @ 70° to CA.									
38.96	43.40	QUARTZOSE SANDSTONE - White/light grey, granular, soft/unconsolidated sandstone with 50-60%, <1-2mm, opaque to medium grey, subangular/subrounded, quartz grains (locally up to 5mm pebbles). Unit crumbles easily to free sand. Broken outer contact (uncertain measure). 38.96- 39.13 Minor carbonaceous content. 38.96- 38.96 Sharp contact @ 55° to CA.									
43.40	50.60	CARBONACEOUS SHALE - Dark grey/black, fine grained, broken (extreme core loss), weakly conductive, carbonaceous sediments. Bedding direction unclear. 43.40- 43.40 14cm of soft gouge.									
50.60	50.60	END OF HOLE CORE RECOVERIES - 26.51-29.56 0.87 of 3.05m 29.56-31.69 2.13 of 2.13m 31.69-35.66 2.05 of 3.97m 35.66-38.70 2.96 of 3.04m 38.70-41.75 2.80 of 3.05m 41.75-43.28 0.80 of 1.53m 43.28-47.85 0.40 of 4.57m 47.85-50.60 0.14 of 2.75m									

HOLE NUMBER: FP93-5-1

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
27.43	29.34	1.91	0.00	0.0	0	0.00	0	0.00	0	
29.34	32.00	2.66	0.88	33.1	0	0.00	0	0.00	0	
32.00	35.80	3.80	0.00	0.0	0	0.00	0	0.00	0	
35.80	39.00	3.20	0.96	30.0	0	0.00	0	0.00	0	
39.00	41.60	2.60	1.56	60.0	0	0.00	0	0.00	0	
41.60	50.60	9.00	0.00	0.0	0	0.00	0	0.00	0	

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-2 Zone # : Contractor : PETRO Date started : 07/18/1993
Date completed: 07/19/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I.,GRN

Collar coordinate : Line : 2+95 N Latitude: 7753241.00 N Azimuth: 52° 0' 0"
Station: 12+ 0 E Departure: 439897.00 E Dip : -72° 0' 0"
Reference frame : Elevation: 184.60 Length : 50.90

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED BECAUSE OF JAMMED CASING DUE TO LOSS OF WATER (CASING PULLED (13.41M BW LOST))

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/20/1993 Hole # : FP93-5-2

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	18.90	OVERBURDEN - Unit composed primarily of medium to dark grey, weakly magnetic, amygdaloidal (chlorite-filled), fine grained blocks of basalt scree. Uncertain outer contact because of blockiness.									
18.90	20.42	CARBONACEOUS SHALE - Medium to dark grey, fine grained, soft/broken, weakly conductive, carbonaceous shale. Indistinct bedding (approximately 50° to CA). Uncertain contact locations due to blockiness.									
20.42	41.76	QUARTZOSE SANDSTONE - White/buff to light grey, granular, soft, unconsolidated sandstone with 50-60%, <1-2mm (locally up to 3-4mm), white to opaque, quartz grains throughout. Local carbonaceous and gouge sections. Broken, uncertain contacts. 32.61- 32.71 Carbonaceous section with interbedded sandy material (@ 80° to CA), weakly conductive. 32.81- 33.27 Soft, fine grained, muddy gouge.									
41.76	42.86	CARBONACEOUS GOUGE/SHALE - Medium to dark grey, fine grained, weakly conductive, carbonaceous unit. Various portions as soft gouge and rock (gouge>rock). Broken outer contact.									
42.86	50.90	QUARTZOSE SANDSTONE - Light grey, unconsolidated unit similar to that from 20.42-41.76m.									
50.90	50.90	END OF HOLE CORE RECOVERIES - 17.37-20.42 0.67 of 3.05m 20.42-23.47 0.79 of 3.05m 23.47-26.52 1.24 of 3.05m									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		26.52-29.57 0.67 of 3.05m 29.57-32.61 0.74 of 3.05m 32.61-38.71 0.82 of 6.10m 38.71-41.76 0.28 of 3.05m 41.76-50.90 1.36 of 9.14m									

HOLE NUMBER: FP93-5-2

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
18.90	23.47	4.57	0.00	0.0	0	0.00	0	0.00	0	
23.47	26.52	3.05	0.41	13.4	0	0.00	0	0.00	0	
26.52	41.76	15.24	0.00	0.0	0	0.00	0	0.00	0	
41.76	50.90	9.14	0.52	5.7	0	0.00	0	0.00	0	

hOLE NUMBER: FP93-5-2

MESURE RQD

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-3 Zone # : Contractor : PETRO Date started : 07/20/1993
Date completed: 07/21/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I.,GRN

Collar coordinate : Line : 3+24 N Latitude: 7753258.00 N Azimuth: 52° 0' 0"
Station: 12+ 0 E Departure: 439920.00 E Dip : -72°30' 0"
Elevation: 179.60 Length : 40.84

Reference frame :

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED BECAUSE OF JAMMED CASING DUE TO LOSS OF WATER (CASING PULLED (0.61M BW LOST))

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/22/1993 Hole # : FP93-5-3

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	14.32	OVERBURDEN - Section composed predominently of medium to dark grey, fine grained, magnetic (mag.suscept: 6.96), feldspar porphyritic (+chlorite amygdaloidal) basaltic scree. Uncertain outer contact. 14.26- 14.32 White, quartzose sandstone.									
14.32	17.20	BROKEN CARBONACEOUS SHALE - Medium/dark grey, fine grained, unconsolidated (0% RQD), weakly conductive, carbonaceous sediments. Unit darkening downhole. Uncertain outer contact.									
17.20	18.80	MIXED CARBONACEOUS SEDIMENTS/SANDSTONE - Mix of dark grey, fine grained, carbonaceous shales with medium grey, fine grained, gritty sandstone. Local, muddy gouge present. Gradational contacts. 17.95- 17.95 Bedded carbonaceous shale @ 75° to CA (weakly conductive).									
18.80	35.66	QUARTZOSE SANDSTONE - Light buff-white to light grey, granular, soft/unconsolidated sandstone with variable amounts and sizes of quartz grains throughout. 18.80- 29.56 Light buff-white/grey sandstone with 15-30%, generally <1mm, quartz grains throughout. Local, 1-10mm wide, carbonaceous seams. 23.50- 23.50 Bedded carbonaceous seam @ 75° to CA. 29.56- 35.66 Light buff-white, quartzose sandstone with 50-60%, <1mm to 1cm, subangular to subrounded quartz grains. Unconsolidated.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
35.66	36.57	CARBONACEOUS SEDIMENTS - Dark grey, fine grained, moderately conductive, carbonaceous sediments with sandy content. Brown, iron staining along some bedding planes. Sharp, broken contacts. 36.42- 36.42 Bedding @ 65 to CA.									
36.57	38.32	QUARTZOSE SANDSTONE - (As 29.56-35.66m), entire unit ground/broken (unconsolidated) with sharp, broken contacts.									
38.32	40.84	AMYGDALOIDAL PORPHYRITIC BASALT(?) - (Probably a mafic intrusive) Medium greenish-grey speckled, hard unit (mag. suscept: 0.36), composed of 30-35%, 1-2mm, round to tabular, light buff crystals set in a fine grained, grey-green matrix. Also 1%, 1mm sized, white, feldspar patches and <1cm, rounded, dark grey carbonaceous blotches present. Gouge common locally along inner contact.									
40.84	40.84	END OF HOLE CORE RECOVERIES - 14.32-17.37 1.43 of 3.05m 17.37-20.42 1.70 of 3.05m 20.42-23.46 2.19 of 3.05m 23.46-26.51 2.28 of 3.05m 26.51-29.56 0.30 of 3.05m 29.56-32.61 1.15 of 3.05m 32.61-35.66 1.67 of 3.05m 35.66-36.57 0.40 of 0.91m 36.57-38.70 0.68 of 2.13m 38.70-39.31 0.08 of 0.61m 39.31-40.84 0.80 of 1.53m									

HOLE NUMBER: FP93-5-3

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
14.32	17.37	3.05	0.00	0.0	0	0.00	0	0.00	0	
17.37	20.42	3.05	0.18	5.9	0	0.00	0	0.00	0	
20.42	23.46	3.04	0.88	28.9	0	0.00	0	0.00	0	
23.46	26.51	3.05	0.91	29.8	0	0.00	0	0.00	0	
26.51	39.31	12.80	0.00	0.0	0	0.00	0	0.00	0	
39.31	40.84	1.53	0.18	11.8	0	0.00	0	0.00	0	

Sample	From (M)	To (M)	Len. (M)	NA2O %	MGO %	AL2O3 %	SIO2 %	P2O5 %	S PPM	K2O %	CAO %	TIO2 %	CR PPM	CR2O3 %	MNO %	FE2O3 %	CO PPM	NI PPM	CU PPM	ZN PPM	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM
NS02801	39.55	39.83	0.28	2.14	7.64	13.9	49.6	0.19	0.22	0.60	9.38	1.57	NS	0.10	0.16	11.6	46	204	70	99	19	188	27	139	8	154

Sample	From (M)	To (M)	Len. (M)	MG# %	LOI %	SUM %	AU G/T	PT G/T	PD G/T	S% %	NI% %	CU% %	CO% %	AS PPM	AS% %
NS02801	39.55	39.83	0.28		3.70	100.58	NS	NS	NS	NS	NS	NS	NS	NS	NS

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-4 Zone # : Contractor : PETRO Date started : 07/22/1993
Township: Date completed: 07/22/1993
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I.,GRN

Collar coordinate : Line : 2+50 N Latitude: 7753666.00 N Azimuth: 52° 0' 0"
Station: 6+50 E Departure: 439544.00 E Dip : -60°30' 0"
Reference frame : Elevation: 134.49 Length : 36.27

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED BECAUSE OF JAMMED CASING DUE TO LOSS OF WATER (CASING PULLED (1.22M OF BW LOST))

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/24/1993 Hole # : FP93-5-4

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	13.70	GOUGE/OVERBURDEN - Soft, dark grey gouge. Uncertain outer contact.									
13.70	36.27	CARBONACEOUS SEDIMENTS - (carbonaceous sandstone) Medium grey, fine grained, broken/ground carbonaceous sandstone (fine grained, light grey gritty/sandy component). Very blocky ground (0% RQD). Bedding at 40° to CA. Minor, black, fine grained carbon wisps/fragments.									
36.27	36.27	END OF HOLE CORE RECOVERIES - 0.0 -14.32 0.66m 14.32-35.66 1.80 of 21.34m 35.66-36.27 0.66 of 0.66m									

HOLE NUMBER: FP93-5-4

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	36.27	36.27	0.00	0.0	0	0.00	0	0.00	0	

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-5 Zone # : Contractor : PETRO Date started : 07/23/1993
Township: Date completed: 07/24/1993
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I.,GRN

Collar coordinate : Line : 3+25 N Latitude: 7753707.00 N Azimuth: 52° 0' 0"
Station: 6+52 E Departure: 439607.00 E Dip : -89° 0' 0"
Reference frame : Elevation: 121.60 Length : 70.41

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : LOWER 30.5M OF HOLE CAVED, HOLE ABANDONED (CASING PULLED)

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/24/1993 Hole # : FP93-5-5

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	0.32	CARBONACEOUS GOUGE (O/B?) - Dark grey, fine grained, weakly conductive, ground, soft unit with broken outer contact (unit possibly weathered O/B debris).									
0.32	46.38	QUARTZOSE SANDSTONE - Light buff-white (locally light grey), granular, broken/ground (0% RQD), unconsolidated, quartzose sandstone with 25-30%, <1mm, rounded, light grey to opaque quartz grains. No apparent bedding planes. Gradational outer contact.									
46.38	47.55	MIXED CARBONACEOUS SHALE/SANDSTONE - Mixed dark grey, fine grained, soft, bedded carbonaceous sediments (weakly conductive) and light grey to buff-brown, fine grained, quartzose sandstone. Gradational contacts. 47.30- 47.30 Bedding @ 60° to CA.									
47.55	70.41	QUARTZOSE SANDSTONE - Light greyish/buff-white, granular, soft (unconsolidated) sandstone with 50-60%, <1-7mm, subangular to subrounded, light grey to opaque, quartz grains throughout. The quantity and size of the quartz grains appears to increase outward. Local, minor, carbonaceous seams. 66.14- 66.17 Carbonaceous gouge.									
70.41	70.41	END OF HOLE CORE RECOVERIES - 0.00-29.56 0.73m 29.56-35.66 0.50 of 6.10m 35.66-41.76 0.12 of 6.10m 41.76-44.81 1.92 of 3.05m 44.81-46.94 1.40 of 2.13m 46.94-49.99 1.24 of 3.05m 49.99-53.95 0.32 of 3.96m 53.95-57.00 0.23 of 3.05m									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		57.00-60.05 2.70 of 3.05m 60.05-63.09 2.55 of 3.05m 63.09-66.14 3.05 of 3.05m 66.14-69.19 2.40 of 3.05m 69.19-70.41 0.28 of 1.22m									

HOLE NUMBER: FP93-5-5

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	44.81	44.81	0.00	0.0	0	0.00	0	0.00	0	
44.81	46.94	2.13	0.53	24.9	0	0.00	0	0.00	0	
46.94	49.99	3.05	0.15	4.9	0	0.00	0	0.00	0	
49.99	57.00	7.01	0.00	0.0	0	0.00	0	0.00	0	
57.00	63.09	6.09	0.91	14.9	0	0.00	0	0.00	0	
63.09	70.41	7.32	0.86	11.7	0					

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-5-6 Zone # : Contractor : PETRO Date started : 07/25/1993
Township: Date completed: 07/26/1993
Lot : Concession: Claim # :

Level : Section: Location : GRID 5C-DISKO I, GRN

Collar coordinate : Line : 2+77 N Latitude: 7753865.00 N Azimuth: 52° 0' 0"
Station: 4+29 E Departure: 439440.00 E Dip : -86° 0' 0"
Reference frame : Elevation: 91.50 Length : 62.18

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED DUE TO LOSS OF WATER
(CASING PULLED)

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/27/1993 Hole # : FP93-5-6

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	23.28	OVERBURDEN - 6cm of mottled, medium grey, mafic scree in box. Uncertain outer contact measurement.									
23.28	32.60	QUARTZOSE SANDSTONE - Light grey-white (buff), unconsolidated/soft, sandstone with 20-25%, <1mm sized, subrounded, light grey to opaque quartz grains. Broken/lost outer contact (estimated).									
32.60	41.76	GOUGE - Soft, unconsolidated, medium grey, muddy gouge. Very little rock content. Broken contacts.									
41.76	42.45	CARBONACEOUS SHALE - Dark grey/black, fine grained, bedded, weakly conductive, carbonaceous shale unit. Broken contacts. Local gouge. 42.24- 42.24 Bedding @ 60° to CA.									
42.45	47.30	CARBONACEOUS SANDSTONE - Light grey, fine grained, gritty, unconsolidated sandstone. Variable widths/quantities of carbonaceous material. Broken unit. Uncertain contacts. 44.81- 44.81 4cm of coal material. 46.00- 53.78 Broken core.									
47.30	48.11	CARBONACEOUS SILTSTONE/SHALE - Fine grained, medium grey, weakly to moderately conductive, bedded unit similar to shale from 41.76-42.45m. Broken contacts. 47.63- 47.63 Bedding @ 60° to CA.									
48.11	62.18	SANDSTONE - Light buff-grey to grey, fine grained, gritty/									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		granular, unconsolidated sandstone with variable amounts of carbonaceous material. Unit has a low RQD. Similar to unit from 42.45-47.3m. 48.45- 48.45 Bedding @ 70° to CA. 56.20- 56.20 Bedding @ 72° to CA. 56.85- 60.50 Section with greatest amount of carbonaceous material.									
62.18	62.18	END OF HOLE CORE RECOVERIES - 0.00-23.46 0.25m 23.46-26.51 0.68 of 3.05m 26.51-38.70 0.23 of 12.19m 38.70-39.93 0.78 of 1.23m 39.93-41.76 0.19 of 1.83m 41.76-44.81 1.48 of 3.05m 44.81-47.85 0.93 of 3.05m 47.85-50.90 1.35 of 3.05m 50.90-53.95 1.52 of 3.05m 53.95-57.00 2.13 of 3.05m 57.00-60.05 1.31 of 3.05m 60.05-62.18 1.56 of 2.13m									

HOLE NUMBER: FP93-5-6

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	41.76	41.76	0.00	0.0	0	0.00	0	0.00	0	
41.76	44.81	3.05	0.37	12.1	0	0.00	0	0.00	0	
44.81	53.95	9.14	0.00	0.0	0	0.00	0	0.00	0	
53.95	57.00	3.05	0.61	20.0	0	0.00	0	0.00	0	
57.00	62.18	5.18	0.00	0.0	0	0.00	0	0.00	0	

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-4-1 Zone # : Contractor : PETRO Date started : 07/28/1993
Date completed: 07/29/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 4A-DISKO I, GRN

Collar coordinate : Line : 7+67 N Latitude: 7774330.00 N Azimuth: 0° 0' 0"
Station: 11+50 E Departure: 423182.00 E Dip : -90° 0' 0"
Reference frame : Elevation: 296.00 Length : 103.63

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : HOLE ABANDONED DUE TO LOSS OF WATER IN BAD GROUND
(CASING PULLED)

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 07/30/1993 Hole # : FP93-4-1

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	11.27	OVERBURDEN - Uncertain contact.									
11.27	14.50	MAFIC VOLCANIC - Light greenish-grey, fine grained, hard, slightly blocky unit with 1-2%, <1mm, dark grey/black, carbonaceous/chloritic specks. 1-5%, 2-20mm, irregular, white, carbonate amygdules over the initial 50cm of unit. Broken outer contact. This unit may represent mafic volcanic scree.									
14.50	17.34	GOUGE - Soft, muddy, broken/blocky gouge material (rock fragments incorporated locally).									
17.34	103.63	MAFIC INTRUSIVE - Medium greenish-grey, fine grained, hard, competent intrusive unit (possibly volcaniclastic) composed of 5-7%, 1-50mm sized fragments set in a fine grained, strongly conductive (variably throughout) matrix incorporating fine, disseminated graphite. The fragments consist of; 1) 1-5mm, non-conductive, angular/sharp, elongate, white/green pyroxene + olivine crystals (50%), 2) 1-50mm, strongly conductive, subrounded to angular, medium to dark grey, shiny graphitic fragments (30%) and 3) 1-30mm, non-conductive, subangular, pale white lithic (sandstone) fragments commonly with chilled margins (20%). Generally, there is an overall decrease in the quantity of graphitic and lithic fragments downhole. Minor pyrite specks/patches are noted within the graphitic fragments locally and as fracture fillings. Minor pyrrhotite specks scattered locally within the matrix (possibly graphitic flakes) and in some fragments. 1-2mm wide quartz-sericite wisps throughout (1%). Iron staining locally along fractures and joint planes.									
		17.34- 25.00 Minor pyrrhotite (?) as disseminated flakes within the matrix and inclusions in fragments.	NS03151 MS01 MS02 NS03152	18.50 19.00 20.00 20.00	20.00 19.01 20.01 21.50	1.50 0.01 0.01 1.50	1.26 1.34	482 504	711 271	79 82	 28 40.7

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS03	21.00	21.01	0.01					35.5
			NS03153	21.50	23.00	1.50	1.33	516	397	87	
			MS04	22.00	22.01	0.01					24.5
			MS05	23.00	23.01	0.01					26.6
			NS03154	23.00	24.50	1.50	1.22	508	254	73	
			MS06	24.00	24.01	0.01					30.2
			MS07	25.00	25.01	0.01					29.5
			MS08	26.00	26.01	0.01					30.2
			MS09	27.00	27.01	0.01					10.6
			MS10	28.00	28.01	0.01					22.6
			MS11	29.00	29.01	0.01					13.7
			MS12	30.00	30.01	0.01					23.1
			MS13	31.00	31.01	0.01					16.7
			MS14	32.00	32.01	0.01					34.9
			MS15	33.00	33.01	0.01					36.4
			MS16	34.00	34.01	0.01					14.3
			MS17	35.00	35.01	0.01					12.4
			MS18	36.00	36.01	0.01					15.8
			MS19	37.00	37.01	0.01					14.3
			MS20	38.00	38.01	0.01					11.1
			MS21	39.00	39.01	0.01					7.9
			MS22	40.00	40.01	0.01					13.3
			MS23	41.00	41.01	0.01					9.1
			MS24	42.00	42.01	0.01					11.8
			MS25	43.00	43.01	0.01					13.5
			MS26	44.00	44.01	0.01					13.3
			MS27	45.00	45.01	0.01					13.5
			MS28	46.00	46.01	0.01					13.8
			MS29	47.00	47.01	0.01					12.8
			MS30	48.00	48.01	0.01					14.0
			MS31	49.00	49.01	0.01					13.7
			MS32	50.00	50.01	0.01					16.5
			MS33	51.00	51.01	0.01					17.4
			MS34	52.00	52.01	0.01					14.4
			MS35	53.00	53.01	0.01					15.3
			MS36	54.00	54.01	0.01					15.9
			MS37	55.00	55.01	0.01					13.5
		55.54- 55.54 Minor pyrite specks in 3x5cm graphitic fragment.									
			MS38	56.00	56.01	0.01					14.1
			MS39	57.00	57.01	0.01					18.3
			MS40	58.00	58.01	0.01					17.6

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS41	59.00	59.01	0.01					14.2
			MS42	60.00	60.01	0.01					18.8
			MS43	61.00	61.01	0.01					15.4
			MS44	62.00	62.01	0.01					15.3
			MS45	63.00	63.01	0.01					13.6
			MS46	64.00	64.01	0.01					12.0
			MS47	65.00	65.01	0.01					32.1
			MS48	66.00	66.01	0.01					47.3
		66.70- 66.70 Increase in thin, wispy quartz-sericite stringers.									
			MS49	67.00	67.01	0.01					21.4
		67.55- 67.55 Patchy, globby pyrite in 2-3mm wide fracture.									
			MS50	68.00	68.01	0.01					9.9
			MS51	69.00	69.01	0.01					15.5
			MS52	70.00	70.01	0.01					40.1
			MS53	71.00	71.01	0.01					35.7
			MS54	72.00	72.01	0.01					32.0
			MS55	73.00	73.01	0.01					11.0
			MS56	74.00	74.01	0.01					32.6
			MS57	75.00	75.01	0.01					35.3
			MS58	76.00	76.01	0.01					35.6
			MS59	77.00	77.01	0.01					44.2
			MS60	78.00	78.01	0.01					35.1
			MS61	79.00	79.01	0.01					26.1
			MS62	80.00	80.01	0.01					18.8
			MS63	81.00	81.01	0.01					32.1
			MS64	82.00	82.01	0.01					4.5
			MS65	83.00	83.01	0.01					15.2
			MS66	84.00	84.01	0.01					13.9
			MS67	85.00	85.01	0.01					28.4
			MS68	86.00	86.01	0.01					9.8
		86.60- 86.60 Iron stained joint @ 10° to CA.									
			MS69	87.00	87.01	0.01					30.9
			MS70	88.00	88.01	0.01					40.0
			MS71	89.00	89.01	0.01					32.5
			MS72	90.00	90.01	0.01					26.8
			MS73	91.00	91.01	0.01					37.5

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		91.84- 97.54 Section with blocky/broken core due to low angle, iron stained jointing (5-10° to CA).	MS74 MS75 MS76	92.10 93.30 95.30	92.11 93.31 95.31	0.01 0.01 0.01					3.2 10.6 21.6
		95.40- 95.40 10cm of gouge.									
		97.54- 103.63 Section with lighter (white), more feldspathic/siliceous matrix highlighting fragments and graphitic disseminations.	MS77 MS78 MS79 MS80 MS81	99.00 100.00 101.00 102.00 103.10	99.01 100.01 101.01 102.01 103.11	0.01 0.01 0.01 0.01 0.01					0.7 27.6 12.6 20.1 3.2
103.63	103.63	END OF HOLE									
		CORE RECOVERIES - 0.00-14.32 1.88m 14.32-17.37 1.22 of 3.05m 17.37-18.59 0.13 of 1.22m 18.59-21.33 2.74 of 2.74m 21.33-90.53 69.20 of 69.20m 90.53-92.05 1.41 of 1.52m 92.05-93.27 1.10 of 1.22m 93.27-95.40 1.70 of 2.13m 95.40-96.93 1.24 of 1.53m 96.93-97.54 0.61 of 0.61m 97.54-103.63 5.82 of 6.09m									

HOLE NUMBER: FP93-4-1

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	14.23	14.23	0.85	6.0	0	0.00	0	0.00	0	
14.23	18.59	4.36	0.07	1.6	0	0.00	0	0.00	0	
18.59	91.80	73.21	69.55	95.0	0	0.00	0	0.00	0	
91.80	93.27	1.47	0.22	15.0	0	0.00	0	0.00	0	
93.27	94.34	1.07	1.07	100.0	0	0.00	0	0.00	0	
94.34	97.54	3.20	0.06	1.9	0	0.00	0	0.00	0	
97.54	103.63	6.09	5.24	86.0	0					

hOLE NUMBER: FP93-4-1

MESURE RQD

Sample	From (M)	To (M)	Len. (M)	NA2O %	MGO %	AL2O3 %	SIO2 %	P2O5 %	S PPM	K2O %	CAO %	TIO2 %	CR PPM	CR2O3 %	MNO %	FE2O3 %	CO PPM	NI PPM	CU PPM	ZN PPM	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM
NS02813	29.92	30.10	0.18	1.79	6.56	14.6	52.1	0.11	1.28	0.57	7.75	1.02	NS	0.08	0.13	10.8	80	523	247	23	21	187	21	133	8	229
NS02802	44.09	44.30	0.21	1.68	6.48	14.7	53.0	0.14	1.23	0.89	7.82	1.00	NS	0.08	0.13	10.5	80	459	245	44	29	191	21	136	7	264
NS02814	58.92	59.05	0.13	1.71	6.45	14.7	53.0	0.14	1.23	0.89	7.90	1.01	NS	0.09	0.13	10.5	80	451	238	32	27	190	21	136	7	256
NS02815	72.93	73.12	0.19	1.84	6.65	14.4	49.2	0.16	0.99	0.74	7.86	0.97	NS	0.07	0.11	10.1	76	525	242	31	23	186	19	135	7	260
NS02803	85.65	85.87	0.22	1.83	6.46	14.7	52.7	0.12	1.32	0.72	7.83	1.01	NS	0.08	0.13	10.2	82	519	247	37	26	191	20	134	7	247
NS02816	100.97	101.17	0.20	1.95	6.51	14.5	52.1	0.15	1.46	0.69	7.83	1.00	NS	0.08	0.13	10.1	81	522	244	45	24	185	22	133	8	243

Sample	From (M)	To (M)	Len. (M)	MG# %	LOI %	SUM %	AU G/T	PT G/T	PD G/T	S% %	NI% %	CU% %	CO% %	AS PPM	AS% %
NS02813	29.92	30.10	0.18	4.91	100.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02802	44.09	44.30	0.21	4.03	100.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02814	58.92	59.05	0.13	3.78	100.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02815	72.93	73.12	0.19	8.79	100.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02803	85.65	85.87	0.22	4.74	100.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02816	100.97	101.17	0.20	5.29	100.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-3-1 Zone # : Contractor : PETRO Date started : 08/02/1993
Date completed: 08/04/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 3A-DISKO I.,GRN

Collar coordinate : Line : 5+10 S Latitude: 7777153.00 N Azimuth: 308° 0' 0"
Station: 12+25 E Departure: 401325.00 E Dip : -60°30' 0"
Reference frame : Elevation: 248.20 Length : 138.68

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
M	° ' "	° ' "

Remarks : CASING PULLED

Water flow : NO
Cemented : NO

Logged by : M. JEROME Date logged: 08/05/1993 Hole # : FP93-3-1

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	44.80	OVERBURDEN - Cover sequence comprised of 1mm-25cm, light to medium grey, pyroxene porphyritic (chlorite amygdaloidal), hard, weakly to moderately magnetic (12.3, 9.61, 14.2, 5.3, 18.7 (magnetic susceptibility)), subangular, mafic fragments set in a nonlithified, muddy matrix (glacial till). Increase in fragment size size outward. Local gneiss fragment.									
44.80	45.78	CARBONACEOUS SHALE - Dark grey, fine grained, bedded (40-45° to CA), very weakly conductive (stronger conductivity in gouge zones), carbonaceous shale. Minor interbedded sandy component locally. Blocky unit with broken contacts. 44.80- 44.90 Interbedded sandy content. 44.80- 44.90 Bedding @45° to CA. 45.48- 45.78 Softer, gouge section.									
45.78	64.80	QUARTZOSE SANDSTONE - White/grey-white, gritty, granular, fine to medium grained, bedded (@35-40° to CA)), consolidated (more competent than similar unit on Grid 5C) sandstone with 20-25%, <1mm-5mm, subrounded to subangular, white-grey (opaque) to pink, quartz grains throughout set in a white matrix. <1mm wide, dark grey, carbonaceous seams interbedded locally throughout. Local broken/ground sections. Outer contact @30° to CA. 54.52- 54.52 Bedding @40° to CA. 62.86- 62.86 Bedding @32° to CA.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
64.80	69.19	CARBONACEOUS SHALE/GOUGE - Dark grey to black, fine grained, bedded to broken/tectonized, blocky carbonaceous unit. Very weakly conductive. Broken outer contact.									
69.19	85.53	MIXED CARBONACEOUS SHALE AND SANDSTONE - Interbedded, fine grained, dark grey, carbonaceous shales (very weakly conductive) with light to medium grey, fine grained, gritty (carbonaceous) sandstone. Bedding @30-50° to CA. Blocky, broken unit. 70.30- 70.30 Bedding @50° to CA. 73.90- 73.90 Bedding @30° to CA. 75.24- 77.72 Section of apparent gouge material (competent). 84.90- 84.90 Bedding @32° to CA.									
85.53	97.23	SANDSTONE - Light greyish-white, granular, gritty, fine grained sandstone bedded @35-40° to CA. Local carbonaceous shale subunits. Gradational contacts. Portions of unit are quartzose (as 45.78-64.8m). 85.87- 85.87 Bedding @35° to CA. 88.60- 88.60 Broken carbonaceous seam (non-conductive) 92.72- 93.37 Weakly conductive, carbonaceous shale @45° to CA. 95.82- 95.95 Weakly conductive carbonaceous shale.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		96.21- 96.33 Weakly conductive carbonaceous shale.									
97.23	100.43	CARBONACEOUS GOUGE - Dark grey to black, fine grained, weakly conductive, tectonized unit locally containing sandstone and gneissic shards. Broken inner contact, gradational sheared outer contact.									
100.43	138.68	GNEISS - Medium to coarse grained, mottled white/pink/ greenish-black, strongly to moderately foliated (@40-60° to CA)(local zones of weak to nil foliation) gneissic basement composed of <1mm-1cm K-feldspar and plagioclase (20-25%), opaque/grey quartz (50-55%), green chlorite (20-25%) and black, (weakly to highly magnetic) magnetite (+biotite (5-7%). Minor accessory red garnets (?)	MS01	101.00	101.01	0.01					5.23
			MS02	102.00	102.01	0.01					7.72
			MS03	103.00	103.01	0.01					5.59
			MS04	104.00	104.01	0.01					3.53
			MS05	105.00	105.01	0.01					2.36
			MS06	106.00	106.01	0.01					5.34
			MS07	107.00	107.01	0.01					6.92
			MS08	108.00	108.01	0.01					8.62
			MS09	109.00	109.01	0.01					5.12

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS10	110.00	110.01	0.01					10.4
			MS11	111.00	111.01	0.01					9.63
			MS12	112.00	112.01	0.01					33.7
			MS13	113.00	113.01	0.01					7.38
			MS14	114.00	114.01	0.01					8.16
			MS15	115.00	115.01	0.01					5.12
			MS16	116.00	116.01	0.01					30.3
			MS17	117.00	117.01	0.01					9.08
			MS18	118.00	118.01	0.01					9.61
			MS19	119.00	119.01	0.01					3.76
			MS20	120.00	120.01	0.01					7.96
			MS21	121.00	121.01	0.01					10.5
			MS22	122.00	122.01	0.01					6.68
			MS23	123.00	123.01	0.01					6.05
			MS24	124.00	124.01	0.01					7.3
			MS25	125.00	125.01	0.01					0.53
			MS26	126.00	126.01	0.01					11.7
			MS27	127.00	127.01	0.01					0.62
			MS28	128.00	128.01	0.01					2.32
			MS29	129.00	129.01	0.01					5.99
			MS30	130.00	130.01	0.01					6.46
			MS31	131.00	131.01	0.01					6.19
			MS32	132.00	132.01	0.01					1.12
			MS33	133.00	133.01	0.01					14.7
			MS34	134.00	134.01	0.01					1.5
			MS35	135.00	135.01	0.01					4.74
			MS36	136.00	136.01	0.01					1.66
			MS37	137.00	137.01	0.01					0.64
			MS38	138.00	138.01	0.01					2.07
138.68	138.68	END OF HOLE									
		CORE RECOVERIES -									
		44.80-50.90 0.90 of 6.10m									
		50.90-53.94 1.95 of 3.04m									
		53.94-60.04 2.36 of 6.10m									
		60.04-62.48 2.33 of 2.44m									
		62.48-64.92 1.72 of 2.44m									
		64.92-66.14 0.62 of 1.22m									
		66.14-67.97 1.10 of 1.83m									
		67.97-69.19 0.92 of 1.22m									
		69.19-70.10 0.50 of 0.91m									
		70.10-71.32 1.09 of 1.22m									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		71.32-72.24 0.55 of 0.92m 72.24-73.76 0.75 of 1.52m 73.76-74.68 0.44 of 0.92m 74.68-77.72 1.84 of 3.04m 77.72-80.16 0.64 of 2.44m 80.16-81.38 0.92 of 1.22m 81.38-82.60 0.28 of 1.22m 82.60-84.43 1.13 of 1.83m 84.43-85.65 0.76 of 1.22m 85.65-87.78 1.80 of 2.13m 87.78-89.31 1.53 of 1.53m 89.31-89.92 0.35 of 0.61m 89.92-92.66 2.64 of 2.74m 92.66-93.57 0.80 of 0.91m 93.57-94.49 0.80 of 0.92m 94.49-95.10 0.40 of 0.61m 95.10-95.71 0.15 of 0.61m 95.71-97.23 0.90 of 1.52m 97.23-99.67 1.95 of 2.44m 99.67-102.1 1.92 of 2.43m 102.1-138.68 36.58 of 36.58m									

HOLE NUMBER: FP93-3-1

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
24.79	44.80	20.01	0.08	0.4	0					
44.80	50.90	6.10	0.00	0.0	0					
50.90	53.94	3.04	0.98	32.2	0					
53.94	60.04	6.10	0.64	10.5	0					
60.04	62.48	2.44	1.75	71.7	0					
62.48	64.92	2.44	1.03	42.2	0					
64.92	70.10	5.18	0.00	0.0	0					
70.10	71.32	1.22	0.36	29.5	0					
71.32	85.65	14.33	1.83	12.8	0					
85.65	92.66	7.01	5.06	72.2	0					
92.66	97.32	4.66	0.00	0.0	0					
97.32	98.94	1.62	0.97	59.9	0					
98.94	99.67	0.73	0.00	0.0	0					
99.67	102.10	2.43	0.29	11.9	0					
102.10	138.68	36.58	29.26	80.0	0					

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-3-2 Zone # : Contractor : PETRO Date started : 08/05/1993
Date completed: 08/07/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 3A-DISKO I.,GRN

Collar coordinate : Line : 6+22 N Latitude: 7777272.00 N Azimuth: 128° 0' 0"
Station: 4+ 0 E Departure: 399929.00 E Dip : -51° 0' 0"
Reference frame : Elevation: 303.00 Length : 185.63

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
185.63 M	-56° 0' 0"	° ' "

Remarks : CASING PULLED, WATER FLOW STOPPED

Water flow : YES
Cemented : YES

Logged by : M. JEROME Date logged: 08/08/1993 Hole # : FP93-3-2

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	14.75	OVERBURDEN									
14.75	31.22	MAFIC VOLCANIC - Light to medium greenish-grey, hard, weakly magnetic, mafic volcanic unit (Vaigat Fm). The unit is composed of 1-5%, <1-5mm, white, irregular, quartz-carbonate filled vesicles locally. Bleaching is common peripheral to fractures. The unit is locally blocky/broken (eg 18.0-18.28, 18.46-18.89, 19.0-19.81, 21.38-21.95, 29.25-29.45m). Gradational outer contact.	MS01	15.00	15.01	0.01					0.92
			MS02	16.00	16.01	0.01					0.63
			MS03	17.00	17.01	0.01					0.84
			MS04	18.00	18.01	0.01					0.35
			MS05	19.00	19.01	0.01					0.40
			MS06	20.00	20.01	0.01					0.71
			MS07	21.00	21.01	0.01					0.37
			MS08	22.00	22.01	0.01					0.84
			MS09	23.00	23.01	0.01					0.49
			MS10	24.00	24.01	0.01					0.34
			MS11	25.00	25.01	0.01					0.36
			MS12	26.00	26.01	0.01					1.76
			MS13	27.00	27.01	0.01					0.54
			MS14	28.00	28.01	0.01					1.00
			MS15	29.00	29.01	0.01					0.54
			MS16	30.00	30.01	0.01					2.84
			MS17	31.00	31.01	0.01					6.70
31.22	37.88	MIXED CONGLOMERATE AND SANDSTONE - This unit is composed of polymictic conglomerate (80%) and interbedded sandstone (20%)(quantity of sandstone increasing outward). Reddish-maroon (weathered) to grey conglomerate has 35-40%, <1mm to 17cm sized, rounded, matrix supported, lithic and crystal clasts (variable colours: maroon, white, grey, pink and green). Interbedded sandstone sections (25-30° to CA) are beige-grey, fine to medium grained, granular/gritty and up to 65cm wide. The unit has a gradational outer contact. 34.49- 34.49 Bedded sandstone @30° to CA. 35.09- 35.27 Fine grained, light brownish-green, siltstone boulder. 36.22- 36.22 Bedded sandstone @30° to CA.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
37.88	38.70	MIXED CARBONACEOUS SHALE AND SANDSTONE - Interbedded dark grey, fine grained, non-conductive, carbonaceous shale and light grey, fine grained, gritty sandstones (85:15) @40° to CA. Gradational contacts. 38.13- 38.13 Bedding @40° to CA.									
38.70	48.82	SANDSTONE - Light buff/white-grey, gritty/granular, sandstone with <1mm wide, non-conductive, carbonaceous (+micaceous) seams/bedding planes @35-40° to CA. Gradational contacts. 38.83- 38.83 Jointing @35° to CA. 40.00- 40.00 Bedding @30° to CA. 40.46- 40.72 Carbonaceous shale section with interbedded sandstone. 41.04- 41.04 Bedding @45° to CA. 47.30- 47.30 Bedding @42° to CA.									
48.82	57.94	MIXED SANDSTONE AND CARBONACEOUS SHALE - Interbedded, light buff/white-grey, granular, fine grained sandstone and dark grey, fine grained, carbonaceous shale (60:40)(similar to unit from 37.88-38.7m). The carbonaceous shale has a very weak to nil conductivity. Bedding @45° to CA. Gradational contacts. 49.85- 49.85 Bedding @45° to CA. 52.94- 53.87 Dominantly carbonaceous shale.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		52.94- 52.99 Gouge zone @42° to CA. 53.95- 53.95 Bedding @45° to CA. 55.28- 55.93 Dominantly carbonaceous shale.									
57.94	59.78	CARBONACEOUS SHALE/SILTSTONE - Medium to dark grey, fine grained, blocky, non-conductive unit of shale/siltstone. Unit darkening in tone outward. Indistinct bedding. Sharp inner contact @50° to CA. Gradational outer contact.									
59.78	65.15	MIXED CARBONACEOUS SHALE AND SANDSTONE - (similar to unit from 48.82-57.94m) Shale:sandstone is 70:30. Bedding @35-50° to CA. 60.28- 60.28 Bedding @50° to CA. 63.02- 63.85 Dominantly carbonaceous shale. 64.15- 64.15 Bedding @37° to CA. 64.54- 65.15 Blocky, broken carbonaceous section.									
65.15	102.74	SANDSTONE - Light buff/white-greyish green, granular/gritty, fine to coarse grained sandstone. Numerous gradational sequences throughout (grading outward) from fine sand (<1mm) to quartzose sandstone (<1-3mm) to polymictic conglomeratic sections (<1cm-50cm wide consisting of <1cm sized quartz and feldspar pebbles). Minor carbonaceous sections/seams locally. Bedding @35-45° to CA. 65.15- 83.50 Darkest section (with green tint).									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		66.51- 66.82 Carbonaceous section @50° to CA (very weakly conductive). 68.05- 68.05 Bedding @35° to CA. 82.23- 82.23 Bedding @42° to CA. 83.50- 84.40 Conglomeratic section. 101.90- 102.74 Increasing fragment content grading into conglomerate.									
102.74	105.84	POLYMICTIC CONGLOMERATE - Light buff-white/grey, medium to coarse grained, fragment supported, granular unit consisting of 40-50%, 1-12mm sized, rounded to subrounded, pink-grey-opaque-buff white, quartzose/feldspathic/lithic fragments set in a fine grained, light, sandy matrix. Minor carbonaceous content. Blocky unit. Gradational inner contact, sharp outer contact @40°.									
105.84	109.60	CARBONACEOUS SHALE - Predominantly fine grained, dark grey, bedded (@40° to CA) carbonaceous shale with 10-15%, light grey, sandstone content. Very weak to nil conductivity. Locally blocky. Sharp outer contact @45° to CA. 105.96- 106.30 Dominantly sandstone content. 107.40- 107.40 Bedding @40° to CA.									
109.60	112.32	SANDSTONE - Light buff-white/grey, fine grained, granular, sandstone unit (similar to that from 38.7-48.82m) Thin, carbonaceous planes throughout (5%).									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		Bedding @40° to CA.									
112.32	116.78	CARBONACEOUS SHALE - As 105.84-109.6m with 5-10% sandstone content. Very weak to nil conductivity. Bedding @40° to CA Locally blocky/broken sections.									
116.78	122.65	MIXED SANDSTONE AND CARBONACEOUS SHALE - Interbedded light buff-white/grey, fine grained, granular sandstone (as 109.6-112.32m) and dark grey, fine grained, carbonaceous shales (as 1-5mm planes). Carbonaceous content increasing outward. Bedding @35-40° to CA.									
122.65	123.91	CARBONACEOUS SHALE - Medium to dark grey, fine grained, carbonaceous unit with a fine, light grey, gritty\sandy component throughout. Very weak to nil conductivity. Bedding @40° to CA. Inner contact @42° to CA.									
123.91	125.54	MAFIC INTRUSIVE - Medium to dark greyish-green, hard, weakly to moderately magnetic, non-conductive, fine grained mafic intrusive with 2-5%, <1-3mm, angular to subangular (and elongate), pale white (bleached) to dark grey, pyroxene phenocrysts throughout. Inner contact @35° to CA, outer contact @25° to CA.	MS18 MS19 MS20 MS21	124.00 124.50 125.00 125.50	124.01 124.51 125.01 125.51	0.01 0.01 0.01 0.01					1.95 5.09 2.37 0.34
125.54	131.10	MIXED CARBONACEOUS SHALE AND SANDSTONE - Interbedded, fine grained, dark grey, carbonaceous shale and light grey, fine grained, gritty sandstone (90:10). Carbonaceous shale has a weak to nil conductivity (as previous units). Sandstone content increasing outward. Blocky\broken unit. Gradational outer contact. 125.54- 126.26 Strongest carbonaceous section. 128.53- 128.53 Bedding @40° to CA.									

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		129.07- 131.10 Section composed of carbonaceous shale shards with sandstone.									
131.10	135.00	QUARTZOSE SANDSTONE - Light grey to buff-white\grey (tone lightening outward), fine to medium\coarse grained, granular sandstone with 30-40%, <1-10mm sized, quartz and lithic fragments (locally conglomeratic). Unit coarsening outward. Local carbonaceous shale sections. 131.61- 132.07 Carbonaceous shale section.									
135.00	152.89	MAFIC INTRUSIVE - Medium to dark greyish-green, fine grained, hard, strongly magnetic, mafic intrusive (similar to that from 123.91-125.54m) with 2-5%, <1-3mm, angular\subangular and elongate, pyroxene crystals throughout. Apparent dark grey, <2mm sized, subrounded, carbonaceous shale fragments locally. Minor pyrite smears locally along fracture surfaces. Unit locally broken\blocky. Sharp contacts (inner- 30° to CA, outer- 10° to CA). 135.00- 137.00 Dark, weakly magnetic outer margin of unit. 137.00- 137.50 Low to high magnetic transition zone. 137.50- 152.00 Highly magnetic section of unit.	MS22 MS23 MS24 MS25 MS26 MS27 MS28	135.00 135.50 136.00 136.50 137.00 137.50 138.00	135.01 135.51 136.01 136.51 137.01 137.51 138.01	0.01 0.01 0.01 0.01 0.01 0.01 0.01					1.04 0.42 0.43 0.38 0.55 12.4 18.5

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS29	138.50	138.51	0.01					
			MS30	139.00	139.01	0.01					15.4
			MS31	139.50	139.51	0.01					13.2
			MS32	140.00	140.01	0.01					12.6
			MS33	140.50	140.51	0.01					13.3
			MS34	141.00	141.01	0.01					14.4
			MS35	141.50	141.51	0.01					15.0
			MS36	142.00	142.01	0.01					15.6
			MS37	142.50	142.51	0.01					15.7
			MS38	143.00	143.01	0.01					11.9
			MS39	143.50	143.51	0.01					11.2
			MS40	144.00	144.01	0.01					15.8
			MS41	144.50	144.51	0.01					16.4
			MS42	145.00	145.01	0.01					16.2
			MS43	145.50	145.51	0.01					15.5
			MS44	146.00	146.01	0.01					13.1
			MS45	146.50	146.51	0.01					10.0
			MS46	147.00	147.01	0.01					18.3
			MS47	147.50	147.51	0.01					17.0
			MS48	148.00	148.01	0.01					10.7
			MS49	148.50	148.51	0.01					15.4
			MS50	149.00	149.01	0.01					17.1
			MS51	149.50	149.51	0.01					15.4
			MS52	150.00	150.01	0.01					16.5
			MS53	150.50	150.51	0.01					17.1
			MS54	151.00	151.01	0.01					20.5
			MS55	151.50	151.51	0.01					10.6
		152.00- 152.89 Darker grey, weakly magnetic outer margin of unit.	MS56	152.00	152.01	0.01					0.25
152.89	173.47	QUARTZOSE SANDSTONE - (as 131.1-135.0m) Finer grained sandstone sections throughout. Local, minor carbonaceous seams. Outer contact @12° to CA. 154.84- 154.84 Bedding @42° to CA. 163.35- 163.35 Bedding @22° to CA.	MS57	152.90	152.91	0.01					0.52

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
173.47	176.62	MIXED SANDSTONE AND CARBONACEOUS SHALE - Similar to previous mixed units (sandstone to shale is 60:40). Bedding @10-20° to CA. Shale units are non-conductive. Blocky unit.									
176.62	179.13	CARBONACEOUS SHALE - Medium to dark grey, non-conductive, fine grained bedded unit (@30-40° to CA), locally blocky. Inner contact @10° to CA, outer contact @35° to CA. 177.21- 177.21 Bedding @35° to CA. 177.52- 178.17 Moderately to strongly magnetic (MS 9.31-11.9), fine grained, dark grey mafic intrusive with 15-60%, <1-4mm sized, subangular to elongate, bleached pyroxene crystals (greatest concentration in central portion of intrusive). Upper and lower contacts @15° to CA.									
179.13	185.63	SANDSTONE - (As previous sandstone units) Fine grained to quartzose with minor interbedded carbonaceous seams. Locally ground\broken.									
185.63	185.63	END OF HOLE CORE RECOVERIES - 14.75-15.85 1.10 of 1.10m 15.85-17.37 1.52 of 1.52m Core recoveries very good throughout hole (>90%).									

HOLE NUMBER: FP93-3-2

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
14.75	29.57	14.82	5.93	40.0	0	0.00	0	0.00	0	
29.57	42.67	13.10	7.21	55.0	0	0.00	0	0.00	0	
42.67	58.10	15.43	12.34	80.0	0	0.00	0	0.00	0	
58.10	59.48	1.38	0.28	20.3	0	0.00	0	0.00	0	
59.48	64.40	4.92	2.46	50.0	0	0.00	0	0.00	0	
64.40	65.22	0.82	0.00	0.0	0	0.00	0	0.00	0	
65.22	102.41	37.19	29.75	80.0	0	0.00	0	0.00	0	
102.41	105.84	3.43	0.17	5.0	0	0.00	0	0.00	0	
105.84	112.66	6.82	5.12	75.1	0	0.00	0	0.00	0	
112.66	115.30	2.64	0.40	15.2	0	0.00	0	0.00	0	
115.30	120.70	5.40	2.16	40.0	0	0.00	0	0.00	0	
120.70	123.90	3.20	0.32	10.0	0	0.00	0	0.00	0	
123.90	125.54	1.64	0.66	40.2	0	0.00	0	0.00	0	
125.54	129.94	4.40	0.00	0.0	0	0.00	0	0.00	0	
129.94	135.00	5.06	3.04	60.1	0	0.00	0	0.00	0	
135.00	152.90	17.90	7.16	40.0	0	0.00	0	0.00	0	
152.90	173.50	20.60	16.48	80.0	0	0.00	0	0.00	0	
173.50	176.62	3.12	1.25	40.1	0	0.00	0	0.00	0	
176.62	177.54	0.92	0.00	0.0	0					
177.54	179.13	1.59	0.80	50.3	0					
179.13	185.63	6.50	4.55	70.0	0					

Sample	From (M)	To (M)	Len. (M)	NA2O %	MGO %	AL2O3 %	SIO2 %	P2O5 %	S PPM	K2O %	CAO %	TIO2 %	CR PPM	CR2O3 %	MNO %	FE2O3 %	CO PPM	NI PPM	CU PPM	ZN PPM	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM
NS02804	22.30	22.56	0.26	1.47	11.3	12.6	48.4	0.09	0.03	0.34	8.85	0.97	NS	0.19	0.12	10.2	54	121	48	84	7	149	21	84	5	125
NS02812	30.31	30.48	0.17	1.60	10.8	12.9	47.7	0.11	0.03	0.13	9.51	1.11	NS	0.18	0.18	11.3	50	137	54	76	<5	156	19	98	6	70
NS02805	123.91	124.05	0.14	2.69	3.11	14.5	38.9	0.55	0.11	1.06	11.1	4.11	NS	0.01	0.20	15.5	56	49	191	205	30	398	45	309	41	304
NS02806	124.51	124.66	0.15	2.86	2.78	14.0	41.9	0.54	0.15	1.06	11.6	4.03	NS	0.01	0.22	13.6	59	43	188	162	30	429	47	315	41	310
NS02807	135.07	135.26	0.19	2.50	6.93	14.4	41.1	0.55	0.11	1.08	4.48	4.11	NS	0.05	0.15	17.8	66	43	177	165	30	337	41	314	42	352
NS02809	147.25	147.45	0.20	2.77	5.21	13.1	47.7	0.48	0.15	0.99	10.4	3.67	NS	0.02	0.24	15.9	57	46	173	128	26	377	41	278	35	301
NS02810	152.62	152.84	0.22	2.21	5.18	14.4	37.0	0.55	0.06	0.98	6.90	4.14	NS	0.01	0.13	21.4	65	50	180	166	23	282	42	308	41	302
NS02811	177.74	177.94	0.20	0.58	4.87	11.7	26.9	0.16	0.10	0.07	19.1	1.68	NS	0.28	0.35	12.9	118	1040	137	123	8	189	20	98	7	54

Sample	From (M)	To (M)	Len. (M)	MG# %	LOI %	SUM %	AU G/T	PT G/T	PD G/T	S% %	NI% %	CU% %	CO% %	AS PPM	AS% %
NS02804	22.30	22.56	0.26		5.47	100.00	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02812	30.31	30.48	0.17		5.08	100.60	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02805	123.91	124.05	0.14		8.80	100.53	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02806	124.51	124.66	0.15		6.72	99.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02807	135.07	135.26	0.19		6.64	99.79	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02809	147.25	147.45	0.20		0.84	101.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02810	152.62	152.84	0.22		7.87	100.77	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02811	177.74	177.94	0.20		22.3	100.89	NS	NS	NS	NS	NS	NS	NS	NS	NS

Falconbridge

DIAMOND DRILL LOG

Property : 015905605

Hole # : FP93-3-3 Zone # : Contractor : PETRO Date started : 08/08/1993
Date completed: 08/10/1993
Township:
Lot : Concession: Claim # :

Level : Section: Location : GRID 3B-DISKO I.,GRN

Collar coordinate : Line : 2+ 0 S Latitude: 7778779.00 N Azimuth: 270° 0' 0"
Station: 2+90 W Departure: 397690.00 E Dip : -64°30' 0"
Reference frame : Elevation: 234.00 Length : 181.97

Surveyed by:

Deviation tests :

Depth	Dip	Azimuth
181.97 M	-70°30' 0"	° ' "

Remarks : CASING PULLED (WATER FLOW STOPPED)

Water flow : YES
Cemented : NO

Logged by : M. JEROME Date logged: 08/16/1993 Hole # : FP93-3-3

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
0.00	47.82	OVERBURDEN -									
47.82	142.10	MAFIC VOLCANICS - Light to dark greyish-gree (locally red-brown), fine grained, weakly to strongly magnetic, locally vesicular\amygdaloidal section comprised of several eruptive picrite flows. Vesicles are <1-20mm in size, rounded to subrounded, elongate, white to green\white and composed of quartz-carbonate (+talc).									
		47.82- 71.96 Dark grey-green to red\maroon-brown subunit with vesicular\amygdaloidal and massive sections (numerous flows). Predominant vesicular sections from 47.82-51.32m, 57.5-60.6m and 63.71-67.7m.	MS001	51.00	51.01	0.01					6.94
			MS002	52.00	52.01	0.01					2.53
			MS003	53.00	53.01	0.01					9.2
			MS004	54.00	54.01	0.01					2.6
			MS005	55.00	55.01	0.01					1.58
			MS006	56.00	56.01	0.01					1.52
			MS007	57.00	57.01	0.01					3.48
			MS008	58.00	58.01	0.01					3.45
			MS009	59.00	59.01	0.01					9.01
			MS010	60.00	60.01	0.01					9.39
			MS011	61.00	61.01	0.01					5.21
			MS012	62.00	62.01	0.01					3.0
			MS013	63.00	63.01	0.01					4.22
			MS014	64.00	64.01	0.01					15.5
			MS015	65.00	65.01	0.01					6.32
			MS016	66.00	66.01	0.01					8.09
			MS017	67.00	67.01	0.01					9.65
			MS018	68.00	68.01	0.01					8.07
			MS019	69.00	69.01	0.01					7.01
			MS020	70.00	70.01	0.01					11.1
			MS021	71.00	71.01	0.01					7.4
		71.96- 88.88 Light to medium greenish-grey, fine grained, weakly magnetic, massive mafic section. Local, minor, 1-2mm, round, quartz-carbonate filled vesicles. 2-5%, <1mm sized, olivine phenocrysts throughout (resinous, shiny appearance resembling sulphides).	MS022	72.00	72.01	0.01					7.91
			MS023	73.00	73.01	0.01					3.28
			MS024	74.00	74.01	0.01					4.06
			MS025	75.00	75.01	0.01					2.06
			MS026	76.00	76.01	0.01					7.46
			MS027	77.00	77.01	0.01					7.31
			MS028	78.00	78.01	0.01					5.78
			MS029	79.00	79.01	0.01					1.36

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS030	80.00	80.01	0.01					3.74
			MS031	81.00	81.01	0.01					2.9
			MS032	82.00	82.01	0.01					2.89
			MS033	83.00	83.01	0.01					4.58
			MS034	84.00	84.01	0.01					5.02
			MS035	85.00	85.01	0.01					3.67
			MS036	86.00	86.01	0.01					4.79
			MS037	87.00	87.01	0.01					4.1
			MS038	88.00	88.01	0.01					4.59
		88.88- 119.49	MS039	89.00	89.01	0.01					5.5
		Dark greyish-green, fine grained, weakly	MS040	90.00	90.01	0.01					4.32
		magnetic, vesicular and massive mafic	MS041	91.00	91.01	0.01					4.92
		subunit similar in appearance to that	MS042	92.00	92.01	0.01					6.48
		from 47.82-71.96m. Olivine crystals	MS043	93.00	93.01	0.01					3.21
		apparent. Predominant vesicular sections	MS044	94.00	94.01	0.01					4.7
		from 88.88-95.72m, 101.5-104.55m, 111.42-	MS045	95.00	95.01	0.01					8.65
		113.8m and 115.0-119.49m.	MS046	96.00	96.01	0.01					5.59
			MS047	97.00	97.01	0.01					5.1
			MS048	98.00	98.01	0.01					4.51
			MS049	99.00	99.01	0.01					10.8
			MS050	100.00	100.01	0.01					1.84
			MS051	101.00	101.01	0.01					1.81
			MS052	102.00	102.01	0.01					3.5
			NS053	103.00	103.01	0.01					5.2
			MS054	104.00	104.01	0.01					6.64
			NS055	105.00	105.01	0.01					9.15
			MS056	106.00	106.01	0.01					11.7
			MS057	107.00	107.01	0.01					5.16
			MS058	108.00	108.01	0.01					6.66
			MS059	109.00	109.01	0.01					4.34
			MS060	110.00	110.01	0.01					4.89
			MS061	111.00	111.01	0.01					5.97
			MS062	112.00	112.01	0.01					2.03
			MS063	113.00	113.01	0.01					1.68
			MS064	114.00	114.01	0.01					3.8
			MS065	115.00	115.01	0.01					1.52
			MS066	116.00	116.01	0.01					4.01
			MS067	117.00	117.01	0.01					2.77
			MS068	118.00	118.01	0.01					7.83
			MS069	119.00	119.01	0.01					9.44
		119.49- 142.10	MS070	120.00	120.01	0.01					8.15
		Light greenish-grey (locally brownish),	MS071	121.00	121.01	0.01					3.28

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
		contaminated mafic flow with irregular, sharp, grey, shale fragments throughout. Non-conductive. Few vesicles.	MS072	122.00	122.01	0.01					8.68
			MS073	123.00	123.01	0.01					7.99
			MS074	124.00	124.01	0.01					7.72
			MS075	125.00	125.01	0.01					6.58
			MS076	126.00	126.01	0.01					3.28
			MS077	127.00	127.01	0.01					3.1
			MS078	128.00	128.01	0.01					5.31
			MS079	129.00	129.01	0.01					5.31
			MS080	130.00	130.01	0.01					5.91
			MS081	131.00	131.01	0.01					3.2
			MS082	132.00	132.01	0.01					1.43
			MS083	133.00	133.01	0.01					5.13
			MS084	134.00	134.01	0.01					4.44
			MS085	135.00	135.01	0.01					5.0
			MS086	136.00	136.01	0.01					13.5
			MS087	137.00	137.01	0.01					9.72
			MS088	138.00	138.01	0.01					17.5
			MS089	139.00	139.01	0.01					4.07
			MS090	140.00	140.01	0.01					7.9
			MS091	141.00	141.01	0.01					0.19
			MS092	142.00	142.01	0.01					0.19
142.10	151.67	MAFIC INTRUSIVE - Light\medium to dark grey, fine grained, mafic intrusive (volcaniclastic?) consisting of 5-20%, <1-20mm, irregular to subrounded fragments set in a fine grained matrix. Fragments dominantly medium to dark grey, strongly conductive, graphitic (sedimentary) material. Also 1-2mm, light greenish-white, angular pyroxene crystals throughout. Local patchy, pyritic sulphides along cleavage planes and fracture facings. Sharp inner contact @55° to CA, broken sharp outer contact. 142.10- 143.20 Strong fabric @30° to CA. 142.34- 142.65 1-2% pyrite along foliation planes.	MS093	143.00	143.01	0.01					0.61
			MS094	144.00	144.01	0.01					0.69
			MS095	145.00	145.01	0.01					0.63
			MS096	146.00	146.01	0.01					0.68
			NS03155	146.10	147.60	1.50	0.80	247	173	42	

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS097	147.00	147.01	0.01					0.58
			NS03156	147.60	149.00	1.40	0.58	214	219	38	
			MS098	148.00	148.01	0.01					0.53
		147.67- 150.46	MS099	149.00	149.01	0.01					0.54
		Dark grey section with 1-2% pyrite	NS03157	149.00	150.50	1.50	0.46	215	219	41	
		patches throughout.	MS100	150.00	150.01	0.01					0.53
			NS03158	150.50	151.70	1.20	0.69	285	297	49	
			MS101	151.00	151.01	0.01					0.43
151.67	181.97	MAFIC HYALOCLA$TITE BRECCIA - Light to medium greyish-green, sharp\angular, chlorite amygdaloidal, mafic volcanic fragments (weakly magnetic) commonly with bleached margins set in a fine grained, dark green, glassy matrix. Unit locally blocky\broken. Breccia fragments range in size from 1-2mm to 50-60cm.	MS102	152.00	152.01	0.01					5.03
		152.80- 152.87									
		Gouge	MS103	153.00	153.01	0.01					3.48
			MS104	154.00	154.01	0.01					0.61
			MS105	155.00	155.01	0.01					6.65
			MS106	156.00	156.01	0.01					0.42
			MS107	157.00	157.01	0.01					7.12
			MS108	158.00	158.01	0.01					1.85
			MS109	159.00	159.01	0.01					1.18
			MS110	160.00	160.01	0.01					4.37
			MS111	161.00	161.01	0.01					3.36
			MS112	162.00	162.01	0.01					0.26
			MS113	163.00	163.01	0.01					0.38
			MS114	164.00	164.01	0.01					3.93
			MS115	165.00	165.01	0.01					0.34
			MS116	166.00	166.01	0.01					0.89
			MS117	167.00	167.01	0.01					0.28
			MS118	168.00	168.01	0.01					0.37
			MS119	169.00	169.01	0.01					3.79
			MS120	170.00	170.01	0.01					0.29
			MS121	171.00	171.01	0.01					0.52
			MS122	172.00	172.01	0.01					0.98
			MS123	173.00	173.01	0.01					0.7
			MS124	174.00	174.01	0.01					0.97
			MS125	175.00	175.01	0.01					0.67
			MS126	176.00	176.01	0.01					0.23

FROM (M)	TO (M	DESCRIPTION	Sampl.	FROM (M)	TO M	L (M)	S% %	NI PPM	CU PPM	CO PPM	MS
			MS127	177.00	177.01	0.01					0.45
			MS128	178.00	178.01	0.01					0.31
			MS129	179.00	179.01	0.01					0.28
			MS130	180.00	180.01	0.01					0.47
			MS131	181.00	181.01	0.01					2.97
181.97	181.97	END OF HOLE									
		CORE RECOVERIES - 111.25-112.77 0.82 of 1.52m 124.05-130.15 5.0 of 6.1m									

HOLE NUMBER: FP93-3-3

RQD ASSAY

From (M)	To (M)	Length (M)	Sum Of Length S>= 8.38 cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
47.82	51.43	3.61	1.26	34.9	0	0.00	0	0.00	0	
51.43	70.63	19.20	12.48	65.0	0	0.00	0	0.00	0	
70.63	102.00	31.37	26.67	85.0	0	0.00	0	0.00	0	
102.00	104.46	2.46	0.37	15.0	0	0.00	0	0.00	0	
104.46	111.40	6.94	5.21	75.1	0	0.00	0	0.00	0	
111.40	113.08	1.68	0.00	0.0	0	0.00	0	0.00	0	
113.08	117.30	4.22	3.17	75.1	0	0.00	0	0.00	0	
117.30	117.96	0.66	0.00	0.0	0	0.00	0	0.00	0	
117.96	136.83	18.87	16.04	85.0	0	0.00	0	0.00	0	
136.83	151.26	14.43	8.66	60.0	0	0.00	0	0.00	0	
151.26	158.80	7.54	1.89	25.1	0	0.00	0	0.00	0	
158.80	181.96	23.16	17.27	74.6	0	0.00	0	0.00	0	

HOLE NUMBER: FP93-3-3 RESULTATS DE GEOCHIMIE DATE: /01/21/1994

Sample	From (M)	To (M)	Len. (M)	NA2O %	MGO %	AL2O3 %	SIO2 %	P2O5 %	S PPM	K2O %	CAO %	TIO2 %	CR PPM	CR2O3 %	MNO %	FE2O3 %	CO PPM	NI PPM	CU PPM	ZN PPM	RB PPM	SR PPM	Y PPM	ZR PPM	NB PPM	BA PPM
NS02817	54.94	55.11	0.17	1.50	16.4	11.7	46.3	0.12	0.02	0.14	9.94	1.18	NS	0.19	0.18	11.8	77	585	132	68	<5	106	23	72	<5	33
NS02818	66.87	67.02	0.15	0.87	16.1	10.2	41.4	0.08	0.04	0.11	8.52	1.00	NS	0.20	0.16	11.4	83	735	126	69	<5	64	18	68	<5	29
NS02819	82.99	83.17	0.18	1.44	18.3	11.0	45.3	0.10	0.01	0.20	9.69	1.05	NS	0.22	0.18	12.1	82	686	132	71	6	98	20	60	<5	36
NS02820	88.24	88.39	0.15	1.30	18.5	11.0	44.7	0.09	0.01	0.21	9.73	1.03	NS	0.23	0.18	12.0	85	715	127	73	8	124	20	56	<5	102
NS02821	99.94	100.10	0.16	1.09	19.8	9.94	42.8	0.07	0.04	0.04	8.88	0.83	NS	0.27	0.18	12.2	91	770	102	71	<5	88	16	43	<5	18
NS02822	109.86	110.03	0.17	1.06	16.8	11.2	43.1	0.08	0.05	0.04	9.22	0.92	NS	0.22	0.17	11.8	81	564	109	67	<5	68	19	47	<5	12
NS02823	123.89	124.05	0.16	2.10	9.19	14.0	49.7	0.12	0.03	0.30	10.9	1.08	NS	0.10	0.19	10.5	48	196	95	72	6	184	21	86	6	150
NS02824	126.91	127.08	0.17	1.93	9.89	13.7	48.7	0.12	0.02	0.14	10.6	1.04	NS	0.10	0.18	10.7	57	239	99	74	<5	177	21	86	5	109
NS02825	129.36	129.50	0.14	1.88	10.0	13.6	48.6	0.11	0.02	0.19	10.5	1.02	NS	0.10	0.16	10.4	56	228	87	73	<5	175	23	82	<5	114
NS02826	130.39	130.50	0.11	1.94	9.42	13.6	47.4	0.12	0.04	0.18	10.3	1.05	NS	0.10	0.14	10.2	54	200	89	74	<5	171	23	87	7	102
NS02827	134.90	135.04	0.14	1.94	9.54	13.5	48.2	0.12	0.03	0.13	11.5	1.04	NS	0.10	0.18	10.4	48	211	93	69	<5	178	20	86	5	112
NS02829	139.90	140.06	0.16	1.81	9.46	14.0	47.6	0.12	0.07	0.10	10.8	1.06	NS	0.10	0.24	10.6	59	240	103	84	<5	174	20	89	6	77
NS02830	145.08	145.23	0.15	1.84	4.76	14.5	55.3	0.15	0.65	0.28	6.90	0.77	NS	0.05	0.10	7.68	42	262	170	114	6	231	17	159	7	161
NS02831	158.04	158.20	0.16	1.42	9.69	12.4	41.9	0.06	0.06	0.80	7.01	0.90	NS	0.09	0.10	9.37	48	201	92	77	27	91	17	82	<5	825
NS02832	170.50	170.67	0.17	1.06	10.0	13.3	42.8	0.11	0.16	0.48	8.28	1.11	NS	0.14	0.17	11.1	60	156	114	82	13	165	21	89	7	127
NS02833	180.51	180.67	0.16	1.39	9.41	13.1	43.1	0.11	0.20	0.32	8.86	1.12	NS	0.13	0.16	11.0	48	145	98	87	12	201	21	85	6	146

Sample	From (M)	To (M)	Len. (M)	MG# %	LOI %	SUM %	AU G/T	PT G/T	PD G/T	S% %	NI% %	CU% %	CO% %	AS PPM	AS% %
NS02817	54.94	55.11	0.17		1.66	101.11	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02818	66.87	67.02	0.15		10.1	100.14	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02819	82.99	83.17	0.18		1.46	101.04	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02820	88.24	88.39	0.15		2.00	100.97	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02821	99.94	100.10	0.16		4.75	100.85	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02822	109.86	110.03	0.17		5.52	100.13	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02823	123.89	124.05	0.16		2.99	101.17	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02824	126.91	127.08	0.17		3.73	100.83	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02825	129.36	129.50	0.14		4.14	100.70	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02826	130.39	130.50	0.11		5.77	100.22	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02827	134.90	135.04	0.14		4.29	100.94	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02829	139.90	140.06	0.16		4.75	100.64	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02830	145.08	145.23	0.15		7.52	99.85	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02831	158.04	158.20	0.16		15.6	99.34	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02832	170.50	170.67	0.17		11.7	100.25	NS	NS	NS	NS	NS	NS	NS	NS	NS
NS02833	180.51	180.67	0.16		10.7	99.40	NS	NS	NS	NS	NS	NS	NS	NS	NS

DB. 1356. 25/3-94

FINAL REPORT ON 1993 EXPLORATION ACTIVITIES IN THE WEST GREENLAND TERTIARY BASALT PROVINCE

PREPARED FOR FALCONBRIDGE GREENLAND A\S

PROSPECTING LICENCE # 156 AND EXPLORATION LICENCES 02/91, 03/91

K. OLSHEFSKY, M. JEROME

MARCH, 1994

Heri Appendix I-X

GRØNLANDS GEOLOGISKE UNDERSØGELSE
The Geological Survey of Greenland
ØSTER VOLDGADE 10, DK-1350 KØBENHAVN K, DANMARK

÷ appendix IX

som er i særskilt mappe

25/3 -94

FINAL REPORT ON 1993 EXPLORATION ACTIVITIES IN THE WEST GREENLAND TERTIARY BASALT PROVINCE

PREPARED FOR FALCONBRIDGE GREENLAND A\S

PROSPECTING LICENCE # 156 AND
EXPLORATION LICENCES 02/91, 03/91

APPENDIX IX

440000.0 E

450000.0 E

460000.0 E

e Location Legend	
Whole Rock Analysis	
Geochem / Assays	
Stream Light Fractions	
Stream Heavy Fractions	

FALCONBRIDGE

FALCONBRIDGE LIMITED

EXPLORATION DIVISION
WINDSOR, NOVA SCOTIA

WEST GREENLAND

NUUSSUAQ AREA

1993 SAMPLE LOCATIONS

0 1 2 4 6 8 10 Km

SCALE 1: 100,000

Date of Work:		Claims:	
Original by:	Date:	015–909	FIGURE NO:
Revised by:	Date:	Project No.	
Drawn by: B Fisher	Date: Mar 16 1994	N.T.S. No.	
Approved by:	Date:	Map Number: 3	

Sample Location Legend

Symbol	Description
▲ AF09456	Whole Rock Analysis
☐ NB03035	Geochem / Assays
× LF04967	Stream Light Fractions
967 ◇	Stream Heavy Fractions

FALCONBRIDGE

FALCONBRIDGE LIMITED

EXPLORATION DIVISION
WINDSOR, NOVA SCOTIA

WEST GREENLAND

DISKO AREA

1993 SAMPLE LOCATIONS

0 1 2 4 6 8 10 Km

SCALE 1: 100,000

Date of Work:		Claims:	
Original by:	Date:	015–909	FIGURE NO:
Revised by:	Date:	Project No.	
Drawn by: B Fisher	Date: Mar 16 1994	N.T.S. No.	
Approved by:	Date:	Map Number: 4	

440000.0 E

450000.0 E

460000.0 E

Store Kartbilag

FALCONBRIDGE

FALCONBRIDGE LIMITED

EXPLORATION DIVISION
WINDSOR, NOVA SCOTIA

WEST GREENLAND

SOUTH DISKO AREA

1993 SAMPLE LOCATIONS

0 1 2 4 6 8 10 Km

SCALE 1: 100,000

Date of Work:		Claims:	
Original by:	Date:	015-909	FIGURE NO:
Revised by:	Date:	Project No.	
Drawn by: B Fisher	Date: Mar 17 1994	N.T.S. No.	
Approved by:	Date:	Map Number: 5	

le Location Legend

- Whole Rock Analysis
- Geochem / Assays
- Stream Light Fractions
- Stream Heavy Fractions

Store Karthelg

1000m

NB PPM	BA PPM	MG#	LOI %	SUM %	AU G/T	PT G/T	PD G/T	S% %	NI% %	CU% %	CO% %	AS PPM	AS% %
8	74	0.64	2.44	100.22	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	88	0.68	2.88	99.86	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	71	0.69	3.95	100.52	NS	NS	NS	NS	NS	NS	NS	NS	NS
6	91	0.68	2.86	99.07	NS	NS	NS	NS	NS	NS	NS	NS	NS
<5	92	0.69	4.23	100.33	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	62	0.65	2.19	99.86	NS	NS	NS	NS	NS	NS	NS	NS	NS
7	43	0.64	1.87	99.43	NS	NS	NS	NS	NS	NS	NS	NS	NS

FALCONBRIDGE LTD.
Atlantic Canada and Europe
Exploration Office

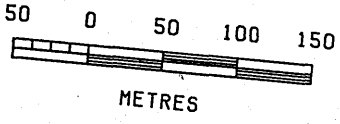
West Greenland

Stratigraphic Profile Section - D-93-06

Disko Island

Traced by	: B Fisher Mar 2 1994	Approved by	:
Drawn by	: K Olshefsky Mar 2 1994	Plan no.	:
Supervised by	:	Scale	: 1 : 1000 (metres) 0 10 20 30 40
Revised by	:		

D-93-06
07
08
09
10
11
12
13



IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 5%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

Stare Portion

17 9D-1
17 9D-2

MAP 9D-1

SURVEYED & COMPILED BY	FOR
GEOTERREX LIMITED	FALCONBRIDGE LIMITED
GEOPHYSICAL SURVEY PROGRAM	
ENLAND PROJECT GRID 9D	MAX-MIN II FREQUENCY 444HZ
APEX MAX-MIN II	SURVEYED BY: P.B. / CHECKED BY S.W. DATE : JULY 1993 / GEOTERREX JOB #808

M8B-1
M8B-2
M8B-3
M8B-4
M8B-5
M8B-6
M8B-7

50 0 50 100 150

METRES

IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 5%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

MAP 8B-1

SURVEYED & COMPILED BY

GEOTERREX
LIMITED

FOR

FALCONBRIDGE
LIMITED

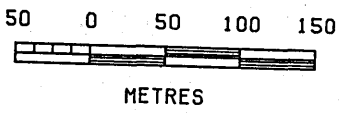
GEOPHYSICAL SURVEY PROGRAM

EST GREENLAND PROJECT
GRID 8B

MAX-MIN II
FREQUENCY 444HZ

ET 1 OF 1	APEX MAX-MIN II	SURVEYED BY: P.B.	CHECKED BY S.W.
E 1 : 5000		DATE : JULY 1993	GEOTERREX JOB #808

22 – 28



IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 5%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

Store Partridge

M 7A-1
M 7A-2
M 7A-3
M 7A-4
M 7A-5
M 7A-6

MAP 7A-1

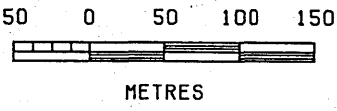
	SURVEYED & COMPILED BY	FOR
	GEOTERREX LIMITED	FALCONBRIDGE LIMITED

GEOPHYSICAL SURVEY PROGRAM

ST GREENLAND PROJECT GRID 7A	MAX-MIN II FREQUENCY 444HZ

1 OF 1 : 5000	APEX MAX-MIN II	SURVEYED BY: P.B. DATE : JULY 1993	CHECKED BY S.W. GEOTERREX JOB #808

29 - 34



IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 10%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

Stan Kerfoot

M6E-1
M6E-2

MAP 6E-1

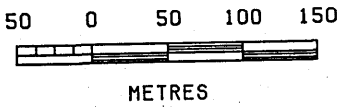
	SURVEYED & COMPILED BY	FOR
	GEOTERREX LIMITED	FALCONBRIDGE LIMITED

GEOPHYSICAL SURVEY PROGRAM

WEST GREENLAND PROJECT GRID 6E	MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1	APEX MAX-MIN II	SURVEYED BY: P.B.	CHECKED BY S.W.
SCALE 1 : 5000		DATE : JULY 1993	GEOTERREX JOB #808

35-36



IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 5%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

line location

M-6B-1
M 6B-2
M-6B-3
M 6B-4
M6B-5
M6B-6

M6B-7 m.s
M6B-9

MAP 6B-1

	SURVEYED & COMPILED BY	FOR
	GEOTERREX LIMITED	FALCONBRIDGE LIMITED

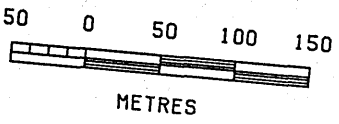
GEOPHYSICAL SURVEY PROGRAM

WEST GREENLAND PROJECT GRID 6B	MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1 SCALE 1 : 5000	APEX MAX-MIN II	SURVEYED BY: P.B. DATE : JULY 1993	CHECKED BY S.W. GEOTERREX JOB #808

25/3/94

37-44



IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 5%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

Store Karthaup

M-3B-1
M 3B-2
M 3B-3

MAP 3B-1

SURVEYED & COMPILED BY GEOTERREX LIMITED	FOR FALCONBRIDGE LIMITED

GEOPHYSICAL SURVEY PROGRAM

GREENLAND PROJECT GRID 3B	MAX-MIN II FREQUENCY 444HZ

F 1 5000	APEX MAX-MIN II	SURVEYED BY: P.B. DATE : JULY 1993	CHECKED BY S.W. GEOTERREX JOB #808

45-47

25/3-94

M-3A-1
M-3A-2
M 3A-3
M 3A-4
M 3A-5
M 3A-6
M 3A-7
M 3A-8
M 3A-9
M 3A-10
M 3A-11

Store Portfolio

map 3A-1

	SURVEYED & COMPILED BY	FOR
	GEOTERREX LIMITED	FALCONBRIDGE LIMITED

GEOPHYSICAL SURVEY PROGRAM

WEST GREENLAND PROJECT GRID 3A	MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1	APEX MAX-MIN II	SURVEYED BY: P.B.	CHECKED BY S.W.
SCALE 1 : 5000		DATE : JULY 1993	GEOTERREX JOB #808

DGE

TICS

28/3-94

SCALE 1 : 5000

DATE : JULY 1993

KED BY S.W.

GEOTERREX JOB #808

VERTICAL SCALE 1 CM : 20%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

M 4A-1
M 4A-1a
M 4A-2
M 4A-2a
M 4A-3
M 4A-4
M 4A-5
M 4A-6
M 4A-7
M 4A-8
M 4A-9
M 4A-10
M 4A-11

MAP 4A-1

	SURVEYED & COMPILED BY GEOTERREX LIMITED	FOR FALCONBRIDGE LIMITED
GEOPHYSICAL SURVEY PROGRAM		
WEST GREENLAND PROJECT GRID 4A		MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1	APEX MAX-MIN II	SURVEYED BY: P.B.	CHECKED BY S.W.
SCALE 1 : 5000		DATE : JULY 1993	GEOTERREX JOB #808

28/3.94

59 - 71

Store Kortbilag

M5A-1
M5A-2
M5A-3
M5A-4
M5A-5
M5A-6
M5A-7
M5A-8
M5A-9
M5A-10

50 0 50 100 150
METRES

IN PHASE : SOLID LINE
OUT OF PHASE : DASHED LINE

COIL SEPARATION : 200M
VERTICAL SCALE 1 CM : 10%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

74-81

MAP 5A-1

SURVEYED & COMPILED BY GEOTERREX LIMITED	FOR FALCONBRIDGE LIMITED

GEOPHYSICAL SURVEY PROGRAM

WEST GREENLAND PROJECT GRID 5A.	MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1 SCALE 1 : 5000	APEX MAX-MIN II	SURVEYED BY: P.B. DATE : JULY 1993	CHECKED BY S.W. GEOTERREX JOB #808

MAP 5C-1
5C-2
5C-3
5C-4
5C-5
5C-6
5C-7
5C-8
5C-9
5C-10
5C-11
5C-12
5C-13

VERTICAL SCALE 1 CM : 10%
BASE FREQUENCY NORMALIZED
TERRAIN CORRECTED

MAP 5C-1

map 1

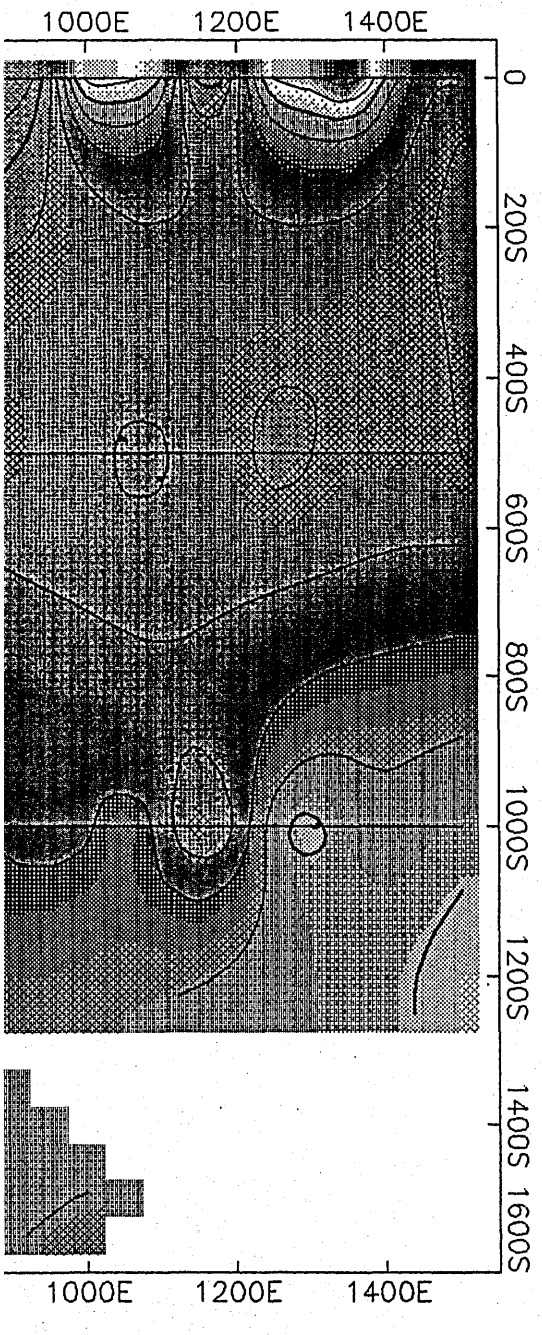
	SURVEYED & COMPILED BY GEOTERREX LIMITED	FOR FALCONBRIDGE LIMITED

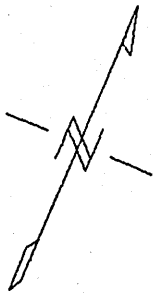
GEOPHYSICAL SURVEY PROGRAM

WEST GREENLAND PROJECT GRID 5C	MAX-MIN II FREQUENCY 444HZ

SHEET 1 OF 1 SCALE 1 : 5000	APEX MAX-MIN II	SURVEYED BY: P.B. DATE : JULY 1993	CHECKED BY S.W. GEOTERREX JOB #808

82 - 94





Scale 1:10000

200 0 200 400 600

(meters)

Falconbrige Greenland

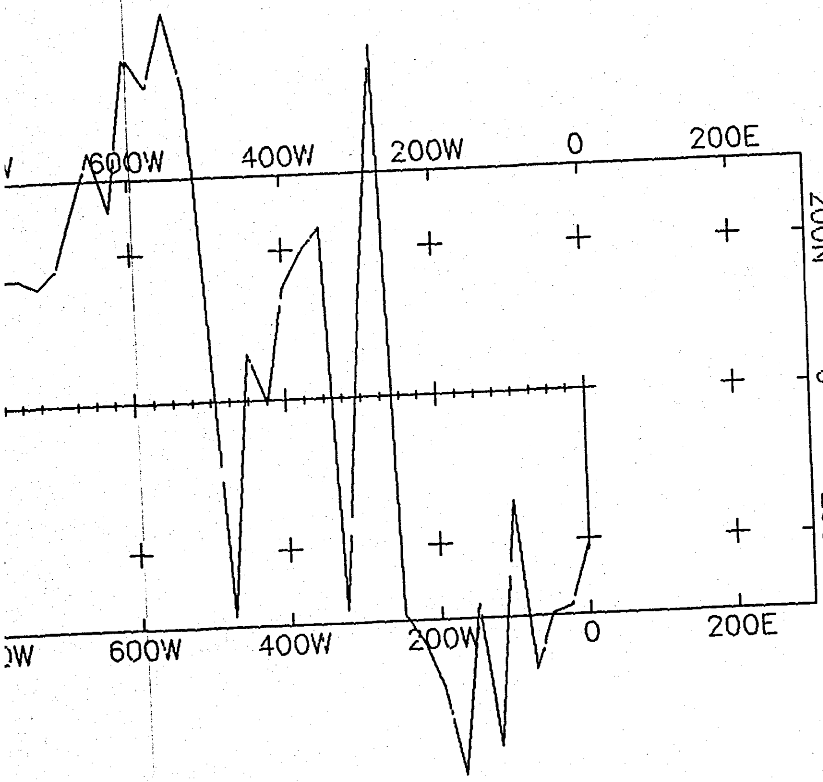
Total Field Magnetics
Contoured

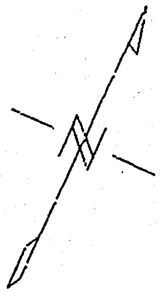
West Greenland Project
Grid 9D

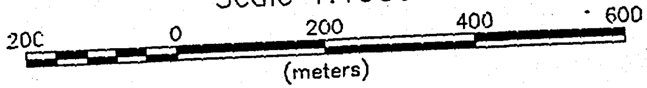
Brian Fisher – Mar 18 1994

Rodd 25/3 94

little bank
(glamor)







Falconbridge Greenlanc

Reconnaissance Magnetic Profile
West Nuussuaq Peninsula

Base 56000
verticle sca e: 1 cm = 500

Brian Fisher – Mar 21 1994

25/3 -94

FINAL REPORT ON 1993 EXPLORATION ACTIVITIES IN THE WEST GREENLAND TERTIARY BASALT PROVINCE

PREPARED FOR FALCONBRIDGE GREENLAND A\S

PROSPECTING LICENCE # 156 AND
EXPLORATION LICENCES 02/91, 03/91

K. OLSHEFSKY, M. JEROME
MARCH, 1994

Ideri Appendix I-X

GRØNLANDS GEOLOGISKE UNDERSØGELSE
The Geological Survey of Greenland
ØSTER VOLDGADE 10, DK-1350 KØBENHAVN K, DANMARK

I, appendix IX.

Kan er i særskilt mappe

Appendix IX

i særskilt mappe

Blå som ~~dette~~ EKS

AA

APPENDIX X

Petrographic and Microscopic Descriptions

1993 THIN SECTION PETROGRAPHY

(Jing-Sui Yang, Dalhousie University)

SAMPLE #	*ROCK NAME*	*HOLE*	*SAMPLE WIDTH*
NS 02801	BASALT/DYKE	FP93-5-3	39.55- 39.83
NS 02804	BASALT	FP93-3-2	22.30- 22.56
NS 02806	ANDESITE/BASALT	FP93-3-2	124.51-124.66
NS 02809	OLIVINE BASALT/DYKE	FP93-3-2	147.25-147.45
NS 02810	BASALT	FP93-3-2	152.62-152.84
NS 02811	PICRITE	FP93-3-2	177.74-177.94
NS 02813	MINERALIZED BASALT	FP93-4-1	29.92- 30.10
NS 02814	MINERALIZED BASALT	FP93-4-1	58.92- 59.05
NS 02817	OLIVINE BASALT	FP93-3-3	54.94- 55.11
NS 02818	BASALT	FP93-3-3	66.87- 67.02
NS 02819	OLIVINE BASALT	FP93-3-3	82.99- 83.17
NS 02822	BASALTIC DYKE	FP93-3-3	109.86-110.03
NS 02823	BASALT	FP93-3-3	123.89-124.05
NS 02826	BASALT	FP93-3-3	130.39-139.50
NS 02830	MINERALIZED BASALT	FP93-3-3	145.08-145.23
NS 02831	OLIVINE BASALT	FP93-3-3	158.04-158.20

THIN SECTION:	NS 02801
ROCK NAME:	BASALT/DYKE
MAJOR MINERALS:	- plagioclase (An 45-55), clinopyroxene (Pl>Cpx) - plagioclase lathes up to 1:10 (width to length), approximately 5mm in size, clear, multiple twinning developed, highly altered. Small, granular clinopyroxenes, larger crystals contain plag lathes. - 5-10%, 1-2mm sized, phenocrysts throughout (formerly pyroxenes which have been replaced by calcite/chalcedony).
ACCESSORY MINERALS:	- 2-3%, <1mm sized, 1:10 (width:length), euhedral opaque minerals. - Few sphenes, few vesicles filled with calcite. - Single, fine chalcedony vein. Very fine chalcedony observed in former pyroxene crystals.
DESCRIPTION:	- Fresh, coarse grained, porphyritic texture with a diabasic/poikilitic textured groundmass. No glass is observed however very fine crystals with weak to nil optic features are possibly devitrified glass. - Weak alteration mostly as carbonatization in groundmass and replacing phenocrysts. - Two fragments (probably previous intrusion) observed in the section. Calcite-filled vesicles and opaque minerals (similar to those in the host rock) are noted in these fragments. An unidentified, purple mineral has also been seen.

THIN SECTION:	NS 02804
ROCK NAME:	BASALT
MAJOR MINERALS:	- Equal quantities of plagioclase (An 55) and pyroxenes (no olivine observed). Some plagioclase lathes form a variolitic texture.
ACCESSORY MINERALS:	- Minor opaque minerals. - About 5-10%, 1-2mm sized, rounded to subangular, unorientated, glass fragments(?) or glass-filled vesicles. Some of these are devitrified.
DESCRIPTION:	- Fresh, fine grained, diabasic to tholeiitic texture with no phenocrysts. A fine grained, rock fragment is included in the section.

THIN SECTION:	NS 02806
ROCK NAME:	ANDESITE-BASALT
MAJOR MINERALS:	- About 5% by volume plagioclase (An 30) and clinopyroxene phenocrysts. The plagioclase crystals measure 1:3-5 (width:length), and show a zoned texture with common twinning. The pyroxene phenocrysts are mostly replaced by calcite.
ACCESSORY MINERALS:	- The groundmass is composed of very fine, micro-crystals (probably devitrified glass).
DESCRIPTION:	- Fresh, dark, fine grained, porphyritic rock. No vesicles.

THIN SECTION: NS 02809

ROCK NAME: OLIVINE BASALT/DYKE

MAJOR MINERALS: - <5%, 1-2mm sized, phenocrysts composed of clinopyroxene, orthopyroxene (cpx> >opx), plagioclase and iddingsite. Some of the pyroxenes display a zoned texture and measure about 5-10:1. The plagioclase crystals exhibit simple and multiple twinning. Iddingsite is produced from olivine after autometamorphism.

ACCESSORY MINERALS: - 10-15%, needle and granular shaped, evenly distributed, opaque minerals which are the same size as other minerals in the groundmass.

DESCRIPTION: - Fresh, coarse grained, porphyritic texture. No vesicles.
- The groundmass has a diabasic texture with the amount of plagioclase equal to that of pyroxene (40% individually).

THIN SECTION: NS 02810

ROCK NAME: BASALT

MAJOR MINERALS: - About 10%, altered plagioclase and pyroxene phenocrysts (difficult to identify).

ACCESSORY MINERALS:

DESCRIPTION: - Highly altered, fine grained, porphyritic rock. The groundmass is composed of a large quantity of skeletal crystals indicating a quick cooling history. The unit has undergone pervasive uralite and calcite alteration.

THIN SECTION: NS 02811

ROCK NAME: PICRITE(?)

MAJOR MINERALS: - 20%, 1-3mm sized, euhedral phenocrysts. These were originally olivines but are now composed entirely of calcite.

ACCESSORY MINERALS:

DESCRIPTION: - Strongly altered, porphyritic texture with no vesicles.
- Original minerals in the groundmass are difficult to determine (except for plagioclase) due to the intense alteration.

THIN SECTION: NS 02813

ROCK NAME: MINERALIZED BASALT

MAJOR MINERALS: - 25-30%, opaque (graphitic) fragments occurring as anhedral, narrow lathes forming a myrmekitic-type structure (these opaques may be formed by a secondary process).
- 1-2%, 1-2mm sized, platy, plagioclase (low An) phenocrysts.

ACCESSORY MINERALS: - Local calcite vein with chalcedony deposited within the central portion.

DESCRIPTION: - Porphyritic unit with very fine groundmass composed of micro-granular plagioclase and pyroxene.

THIN SECTION: NS 02814

ROCK NAME: MINERALIZED BASALT (similar to NS 02813)

THIN SECTION: NS 02816

ROCK NAME: MINERALIZED BASALT

MAJOR MINERALS: - Low An plagioclase and clinopyroxene phenocrysts (fine grained plagioclase lathes locally within larger pyroxene phenocrysts).

ACCESSORY MINERALS:

DESCRIPTION: - Porphyritic unit. The groundmass consists of micro-crystals which are relatively coarser than those in samples NS 02813-14. The opaque minerals form a myrmekitic structure.
- This unit contains two fragment types; 1) a lithology similar to that in samples NS 02813-14 and 2) an opaque mineral (with minor plag lathes within). The former exhibits an indistinct boundary with the host rock suggesting a compositional similarity between the two and perhaps a coeval formation.

THIN SECTION: NS 02817

ROCK NAME: OLIVINE BASALT

MAJOR MINERALS: - 10%, 1-3mm sized, euhedral, olivine phenocrysts (minor plagioclase).
- 5-10%, needle shaped to granular, opaque minerals.

ACCESSORY MINERALS:

DESCRIPTION: - Fresh, porphyritic unit with a medium grained groundmass composed of plagioclase (40%, An 55), olivine (20%) and pyroxene (20%).

THIN SECTION: NS 02818

ROCK NAME: BASALT

MAJOR MINERALS:

ACCESSORY MINERALS:

DESCRIPTION:

- Purple to dark brown unit which appears oxidized. The unit is porphyritic with most phenocrysts being altered and containing opaque minerals which display a graphic texture. The phenocrysts and the minerals comprising the groundmass are difficult to identify. Vesicles are round and filled with low temperature, clay minerals.

THIN SECTION: NS 02819

ROCK NAME: OLIVINE BASALT (similar to NS 02819 but with sphene)

THIN SECTION: NS 02822

ROCK NAME: BASALTIC DYKE

MAJOR MINERALS:

- 15-20%, 1-2mm sized, olivine and clinopyroxene phenocrysts (equal volume of each).

ACCESSORY MINERALS:

- 1% opaque minerals

DESCRIPTION:

- Porphyritic, poikilitic textured rock with a coarse grained groundmass, few vesicles. The groundmass is composed of plagioclase (30%), olivine (20%) and clinopyroxene (20%).
- Some low temperature clay minerals occurring as acicular crystals in the groundmass and within vesicles.

THIN SECTION:	NS 02823
ROCK NAME:	BASALT
MAJOR MINERALS:	- <5%, 1-2mm sized, plagioclase phenocrysts.
ACCESSORY MINERALS:	- <1% opaque minerals.
DESCRIPTION:	- Porphyritic unit with a medium grained groundmass, few vesicles filled with very fine minerals. The groundmass has a tholeiitic texture and is composed of plagioclase (55%) and clinopyroxene (40%).

THIN SECTION:	NS 02826
ROCK NAME:	BASALT
MAJOR MINERALS:	- <5%, 1mm sized, plagioclase phenocrysts.
ACCESSORY MINERALS:	- Very few opaque minerals.
DESCRIPTION:	- Porphyritic unit with well developed, rounded, variable sized, weakly orientated vesicles. The groundmass is medium grained with a tholeiitic texture and is composed of plagioclase (An 60, 55%) and clinopyroxene (40%). Brown, interstitial regions of finer crystals within the groundmass probably represent devitrified glass, low temperature clay minerals are also present.

THIN SECTION: NS 02830

ROCK NAME: MINERALIZED BASALT

MAJOR MINERALS:

ACCESSORY MINERALS:

DESCRIPTION: - Unit composed of 10-20%, opaque fragments and occasional quartz phenocrysts within a very fine grained groundmass. The groundmass is composed of fine, needle-like plagioclase and other, fine, unidentified minerals. Vesicles are 1-2mm in size and filled with chalcedony.

THIN SECTION: NS 02831

ROCK NAME: OLIVINE BASALT

MAJOR MINERALS: - 5-10%, <1mm sized, olivine phenocrysts (minor orthopyroxene and plagioclase).

ACCESSORY MINERALS:

DESCRIPTION: - Porphyritic unit with some vesicles in a very fine grained groundmass. The vesicles are rounded and filled with very fine crystals (devitrified glass).

Dec. 9, 1993 (Frank Nolan, Petro Drilling)

Falconbridge Samples from Disko Island

Descriptions from binocular microscope examination.
Core and Rock samples from Disko Island, Greenland.
Cretaceous (possibly Triassic) sandstones.

Core Sample FP93-3-2 interval: 185.47m - 185.62m

Light grey, fine to very fine grained sandstone.
Qtz. grains make up approx..... 90%
Calcite crystals & matrix powder.. 7%
Coal shreds ..... < 3%
Fine grained matrix, white $CaCO_3$ ≈ 10%
Some matrix is $CaCO_3$ flour, reacts strongly with 10% HCl.
Weakly cemented with vugs along surface of core, probably due to dislodging of grains near surface of core.
Some scattered fragments of coarser grained carbonate grains or rock fragments, possibly dolomite as they are not strongly reactive in HCl, yet softer than quartz or feldspar. These fragments seem to be banded or have parallel micro fracs.
Nearly 10% of the rock is made of carbonate material in grains and flour size particles.
Contains shreds of coal < 3%

Rock Sample from rock outcrop

Light grey thru light brown, fine to v-fine grained sandstone.
Quartz grains ≈ 90%, angular to rounded.
Some grains are clear calcite with rhom. shapes (cleavage?).
Matrix is v-fine grained, clear to orange (siderite?).
Rock has fairly low porosity, generally fairly competent, although cement (matrix) in not strongly bonded to the larger grains (grains can readily flicked out ŵ a needle in the weathered zone).
Specimen will strongly effervesce in 10% HCl.

Conclusion

The matrix of both these samples apprear to have a fairly high carbonate content. Any increase in acidity to groundwater and runoff in the area, eg. acid rain, would promote disollution of the matrix, rendering the rock both porous and weak, features which are quite evident in certain areas and which can contribute directly to lost circulation problems.

NOTE:

Subsequent to the above examination to the two samples lab testing was performed on them. Pieces of each of the two samples were ground to sand size and smaller and they were placed in baths of HCl (10%). The outcrop sample lost slightly more than 4% of its weight. The core sample lost approximately 2 percent. A second test was done on the outcrop sample in which fresh acid was heated to determine the dolomite content. The conclusion from this test was that little or no dolomite or dolomitic material is present.

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