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PROSPECTUS

MINING DISTRICT: Mayo

CONFIDENTIAL X

TYPE OF WORK: Geological and  
Geochemical Surveys

OPEN FILE

REPORT FILED UNDER: Falconbridge Limited

DATE PERFORMED: July 24 - August 8, 1992

DATE FILED: April 23, 1993

LOCATION: LAT.: 63°12'N

ARFA: Niddery Lake

LONG.: 131°16'W

VALUE \$: 41,600.00

CLAIM NAME & NO.: Jet 1 - 86 YB03442 - YB03527, Jet 87 - 104 YB18309 - YB18326.

WORK DONE BY: Mark D. Edwards B.Sc.

WORK DONE FOR: Falconbridge Limited.

DATE TO GOOD STANDING:

REMARKS: # 105 0 - Niddery Lake Area

The company carried out geological mapping, lithochemical sampling and soil sampling in an attempt to find source of high Ni-Zn anomalies. The anomalies are likely related to crosscutting Ni-Zn rich iron red fault zones or Ni-Zn rich Road River transitional silty shales. The source of metal rich fault zone is unknown and no outcropping mineralization was found. The property is similar to the Nick property in some aspects but has different trace element geochemistry. The Ni values range from 549 ppm to 3000 ppm while Zn values range from 5025 ppm to 10,252 ppm. Due to economic outlook, its isolated location and trace element geochemistry it was recommended that no further work be done on the property.



# Falconbridge Limited



Report on  
GEOLOGICAL MAPPING AND GEOCHEMICAL SAMPLING  
at the  
JET PROPERTY, YUKON

Jet 1-86 YB03442-YB03527  
Jet 87-104 YB18309-YB18326

**093095**

NTS 1050/3

Latitude 63°12'N, Longitude 131°16'W

Mark D. Edwards, B.Sc.

February, 1993

Field work performed between July 24 and August 8, 1992

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 41,600.00.

*Robert DeKluek*

for  
Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

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## SUMMARY

The geological mapping, lithochemical sampling, and soil sampling carried out at the Jet property between July 24, 1992 and August 8, 1992 indicated the following:

(a) Geologically, the property consists dominantly of Road River and Lower Earn Group sediments. Stratigraphically, the rock units exposed on the Jet property are time equivalent with sediments hosting the Nick stratiform nickel sulphide deposit. Sulphur-carbon plots of Road River pyritic cherts and carbonaceous shales suggest repetitive transitions varying from non-marine to euxinic depositional conditions. These transitions are not evident in Road River sediments at the Nick property.

(b) Soil anomalies containing up to 1593ppm nickel and 10,367ppm zinc occur throughout the property. The anomalies are likely related to crosscutting Ni-Zn rich iron red fault zones or Ni-Zn rich Road River transitional silty shales. Metal rich fault gouge material contained 549ppm - 3000ppm nickel and 5025ppm - 10,252ppm zinc. Transitional silty shales contained highly anomalous zinc concentrations (> 7000 ppm) with weakly anomalous nickel (289ppm & 388ppm).

(c) The source of the metal rich fault material is unknown. Trace element geochemical patterns are highly variable with no evidence of correlation. One fault zone containing 3000 ppm nickel exhibited trace element enrichment patterns similar to Nick type sulphides, as characterized by high As, Mo, Ni, and Zn. However, the fault zone also contained markedly high Ba, Mn, V, and P relative to Nick type sulphides.

(d) The zinc rich transitional silty shales occur at the contact between Road River and Lower Earn Group sediments. Although the stratigraphic position is favourable for the deposition of Nick type sulphides, the shales contained no visible sulphide minerals and trace element geochemical patterns were unlike those of Nick type sulphides.

(e) Road River pyritic cherts indicate environmental conditions favourable for the formation of stratiform Zn-Pb sulphide deposits. However, geochemical grab samples of sulphide rich pyritic chert (up to 15% disseminated sulphide) contained only background levels of Zn, Pb and Ba.

## RECOMMENDATIONS

Considering that the "Nick" stratiform sulphide horizon is at present sub-economic, and no surface exposures of nickel rich sulphides were located on the Jet property, further work is not recommended at this time. Additional work may include detailed mapping from orthophoto controlled base maps in an attempt to determine the lateral extent of Zn-Ni anomalous transitional silty shales. A detailed lithochemical sampling program could be initiated to further investigate possible Ni-Zn source rocks. Potential exists for the discovery of thin recessive Nick-type sulphide horizons on the Jet property. However, identification of these zones would require diamond drilling.

## INTRODUCTION

This report details the results of the exploration program carried out on the Jet property in the Yukon Territory between July 24 and August 8, 1992. All work on the property in 1992 was conducted by Falconbridge contract and full-time staff. The 1992 exploration program consisted of semi-detailed (1:10,000) geological mapping and lithochemical sampling. Grid soil geochemical samples were collected along compass lines perpendicular to stratigraphy. The project focused on exploration for stratiform "Nick Type" Ni-Zn-PGE sulphide mineralization. A list of personnel involved in the project can be found in Appendix II.

### Location and Access

The Jet property is located at 63° 12'N and 131° 16'W, approximately 140 km northeast of Ross River, Yukon Territory (figure 1) within NTS claim sheet 105 O/3. The property lies approximately 50 km north of the Sheldon Lake airstrip, which is suitable for single engine and small twin engine aircraft. Access to the property was by helicopter from the Sheldon Lake airstrip, accessible via the North Canal Road from Ross River. The closest airport and supply point is the town of Ross River. The 1992 exploration program was serviced by a Bell Jet Ranger II helicopter based in Ross River and operated by Trans North Air of Whitehorse.

### History

The area was previously staked by Atlas Exploration Ltd in 1967, by Itsi Joint Venture in 1976 (Union Oil Ltd., Aquitaine Company of Canada Ltd. and St. Joseph Explorations Ltd.), Hudson Bay Exploration and Development in 1981, and AGIP in 1983. Although highly anomalous zinc and silver anomalies were obtained from silt and water samples, no mineralization was found.

The Jet claims were staked by NDU Resources Ltd. in April 1990 based on soil geochemical and geological similarities with the Nick stratiform nickel-zinc deposit in the north-central Yukon. The property was optioned by Falconbridge Limited from NDU resources in June 1991. The 1991 exploration program was funded by Falconbridge Limited under the option agreement, and was carried out by Archer, Cathro, and Associates (1981) Limited. The work consisted of geological mapping and soil sampling between June 28-July 5 and August 9-13, 1991.

## REGIONAL GEOLOGY

The Jet property is located within the Selwyn Basin tectonic province (figure 2). The Selwyn Basin is an epicratonic marine basin that formed due to subsidence accompanying rifting of the continental margin during the Early Paleozoic. Basinal sediments of calcareous, carbonaceous, and cherty shales were deposited across the basin between the Ordovician to Upper Devonian.

Tectonic compression caused by the Cretaceous Laramide Orogeny produced open to isoclinal folding throughout the basin. Regional metamorphism of the Lower Paleozoic Selwyn Basin sediments

has been estimated as lower greenschist facies based on conodont CAI's (Norford and Orchard, 1982; Goodfellow and Jonasson, 1986) and on graptolite reflectance (Riedeger et al., 1989).

## PROPERTY GEOLOGY

### Introduction

The property geology consists of Road River Group starved basinal sediments, which are conformably overlain by Lower Earn cherty and carbonaceous shales. Coarse grained clastic rocks and shales of the Upper Earn Group overly the Lower Earn Group. Cretaceous intrusions of biotite-hornblende granite and quartz monzonite occur adjacent the southern half of the property. Contact metamorphic aureoles of hornfelsed country rocks are associated with the intrusive bodies. Small granitic dykes occur near the southern edge of the property. Property stratigraphy is outlined in table 1.

The property covers the north face of a southeasterly trending ridge incised by northerly trending drainages. Outcrop exposures are excellent throughout the area. Southern faces of the ridge are covered with overburden and poorly exposed. Large cliffs of Lower Earn cherts and Upper Earn pebble conglomerate are characteristic.

Outcrop mapping was conducted from 1:10,000 scale contoured NTS base maps (figures 8 and 12; map pockets A and C). Outcrop locations were identified using map, compass, and altimeter.

### Stratigraphy

#### *Road River Group (Ordovician-Lower Devonian)*

The Road River Group stratigraphy consists dominantly of pyritic cherts, pyritic siltstones, and carbonaceous black graptolitic clay shales. Silty dark brown to brownish black shales occur at or near the contact with the overlying Lower Earn Group. Black cherty shale units typical of the Lower Earn Group were found interbedded with graptolitic carbonaceous shales, indicating an Ordovician to Lower Devonian age. The shales suggest a gradational Road River - Lower Earn Group contact.

#### Pyritic Chert and Silty Shales

Pyritic shales characterize the majority of Road River sediments exposed on the Jet property. The shales are dark grey to light greyish green, variably homogenous to thinly laminated, and on average contain 1% to 5% disseminated pyrite. The shales are well indurated, cherty, and sometimes exhibit conchoidal fractures on broken surfaces. Thinly laminated units consist of irregular dark grey silty bands which frequently produce tiger stripe textures. Pyrite is very fine (<1mm) to fine grained (1-2mm), and occurs in euhedral to framboidal form. Pyrite increases locally to 45%, forming thin contorted (up to 1cm wide) disseminated bands. Unit thicknesses are greater than 5 metres.

### Carbonaceous Graptolitic Shales

Road River carbonaceous units consist of black, strongly foliated, clay shales. Graptolites occur in abundance along bedding parallel cleavage planes and consist dominantly of straight sicular monograptids (Silurian-Early Devonian). Spirally coiled graptolites of the *Monograptus spiralis* group (Late Early Silurian) were identified at a few outcrop localities. Dagger shaped traces of thin stemmed organic material (1 to 2cm in length including stems) were found in association with graptolites at a few outcrop locations. Unit thickness were greater than 5 metres.

Thick black cherty shales (6 to 10cm wide beds) were interbedded with graptolitic shales at a few localities. Distinctly anomalous carbonaceous shale bed thicknesses (4 to 6cm) distinguished these units from other cherty and carbonaceous shale units.

### Interbedded Cherty and Carbonaceous Shales

Interbedded cherty and carbonaceous shales are characterized by a dominance of cherty shale with only sub-ordinate amounts of carbonaceous shale. Overall, the unit contains 2cm to 16cm thick black cherty shale beds with thin, strongly foliated, 2mm to 2cm thick carbonaceous shale interbeds. The shales are identical to those of the Lower Earn Group. Stratigraphic position provides the only macro-scale method of distinguishing between the two groups.

### Transitional Silty Shales

Transitional silty shales are dark brown to brownish black, variably calcareous, and exhibit a distinct cleavage with 2cm to 4cm wide partings. The unit is weakly fissile, dominantly recessive, and directly overlain by shales of the Lower Earn Group. Lateral continuity of the unit is assumed as the shales have been identified across the property. Anomalous zinc values (up to 9600 ppm) were obtained from samples of these shales, although the unit does not contain visible sulphide minerals. The shales are interpreted to mark the transition between Road River and Lower Earn Group stratigraphy. Unit thicknesses were estimated at 1 to 5 metres.

### Anomalous Units

Anomalous units occurring within the Road River stratigraphy include small dark grey limestone balls, burrowed pyritic shales, and interbedded shales with small oblate chert spheroids. Outcrop exposures of these units were isolated, although significant.

Limestone units (Map Sheet 1, back pocket) consist of dark grey massive outcrops and tectonized limestone ball units. The limestone ball units are characterized by small sub-rounded 20cm to 1 metre wide dark grey fragments in a transitional silty shale host. The fragments are sub-angular to sub-rounded and appear to have developed from tectonic

deformation of nearby limestone beds. The ball units are characteristically distinct from the limestone ball unit associated with "Nick-type" sulphide mineralization.

Burrowed shales (Map Sheet 2, back pocket) occur within pyritic silty shales near the Road River - Lower Earn contact and consist of flat 5mm to 10mm wide by 2mm thick pyrite filled tubes, characteristic of worm burrows. The tubes constitute roughly 5% of the sediment.

Bedded cherty shales with oblate chert spheroids embedded in carbonaceous interbeds occur near the Road River - Lower Earn Group contact (Map Sheet 2, back pocket). The spheroids consist of 5% chert nodules which vary in size from 10mm to 30mm in diameter and occur within carbonaceous shale interbeds separating cherty shales.

#### *Lower Earn Group (Middle-Upper Devonian)*

The Lower Earn Group stratigraphy consists dominantly of variably interbedded black cherty and carbonaceous shales. Small lenses of white laminated limestone occur within the Lower Earn stratigraphy, although their significance is unknown.

##### Interbedded Cherty and Carbonaceous Shale

Interbedded chert and carbonaceous shales characterize the Lower Earn Group stratigraphy and consist of 2cm to 30cm wide black chert shale beds separated by thin 2mm to 2cm wide foliated carbonaceous shales. Carbonaceous shale interbeds are common, but not always present. The shales form a thick sedimentary sequence, with little compositional variation.

##### Limestone

Lower Earn limestone units are bleached white on weathered surfaces, with dark grey laminae. Slump blocks form at the base of some limestone outcrops. Unit thicknesses vary from 5 to 20 metres. Limestones occur sporadically throughout the Lower Earn stratigraphy.

#### *Upper Earn Group (Upper Devonian-Mississippian)*

Upper Earn Group stratigraphy occurs only in the northern half of the property and is characterized by distinct chert pebble conglomerates. Local occurrences of strongly foliated dark grey organic bearing shales underlie the chert pebble conglomerate, although the lateral continuity of the shale is not known. Where present, the shales are interpreted to form the base of the Upper Earn stratigraphy.

### Chert Pebble Conglomerate

The chert pebble conglomerate consists of sub-angular to sub-rounded dark to light grey cherty fragments (3mm to 30mm) forming a closed framework with little matrix material. Fragment size distribution varies locally across the property with zones of dominantly fine grained (10 to 20% fragments > 10mm) to dominantly coarse grained (10 to 20% fragments < 10mm) conglomerates. Outcrops of chert pebble conglomerate are massive and form large vertical peaks. Unit thickness is greater than 10 metres.

### Silty Organic Shale

The dark grey silty shales are strongly foliated and contain unidentified plant remains. The shale contains roughly 5% fine 1mm to 4mm wide stems (blades) which vary from 2cm to 4cm in length. Outcrops were limited to small exposures at the base of large chert pebble conglomerate cliffs. Rock talus covered both upper and lower contacts. Unit thickness was estimated to be greater than 5 metres.

## Structural Geology

The Jet stratigraphy strike southeast-northwest, dip 30 to 60 degrees southeast, and form an upright sedimentary sequence. Outcrop and detailed scale structural features include tight to isoclinal folds and rootless folds with axes near parallel to regional bedding trends. Outcrop scale folding is intense within cherty and carbonaceous shales, due to strong ductility contrasts. Faults on the property trend roughly north-south. A wide spaced north-south trending cleavage can be found locally. Interpreted fault blocks are shown on Map Sheet 1, back pocket. Fault zones often contained iron red powdery gouge material with anomalous metal concentrations (see Lithochemistry below).

## GEOCHEMISTRY

### Soils

#### Introduction

Geochemical soil sampling was undertaken as a follow-up to Ni-Zn anomalous stream sediment and soil samples obtained by Archer-Cathro and Associates during the 1991 field season. The purpose was to delineate anomalous Ni-Zn soil areas that may lead to Nick type sulphide mineralization. Two survey areas were outlined and a total of 694 soil samples were obtained. A total of 17.4 line kilometres of grid were covered during the survey (figures 9,13; map pocket A and C). Sampling consisted of obtaining B horizon soils or talus fines (in the absence of soil) at an average sampling depth of 10cm using hand trowels or soil shovels. The samples were dried, sieved to -80 mesh, and then subjected to

hot multi-acid digestion ICP at International Plasma Laboratories Ltd. of Vancouver. Samples were analyzed for nickel and zinc<sup>1</sup>. Results are plotted on figures 10,11,14, and 15 (map pockets B and D).

One baseline was established at Jet camp 1 as a reference for the soil sampling. Baselines were not established at Jet camp 2. Samples were obtained along non-surveyed lines using compass, topo-chain, dip-inclinometer, and altimeter. Samples were obtained every 25 metres along lines spaced 200 metres apart at Jet camp 1. Samples were obtained along lines spaced between 150 and 300 metres apart at Jet camp 2. A limited amount of contour soil sampling was undertaken at the Jet camp 1 area. A total of 19 reconnaissance stream sediment samples were obtained from the property. The samples were accidentally prepared and analyzed using the lithochemical procedures (see Appendix III).

## Results

Histogram plots for the nickel and zinc from the soil surveys are shown in figures 3 and 4. The histograms reveal strongly peaked distributions with a marked positive tail for both nickel and zinc. Based on the histograms, anomaly thresholds of 300 ppm nickel and 2500 ppm zinc were selected. Anomalies were classified as follows:

Weakly Anomalous	2500 ppm Zn	300 ppm Ni
Anomalous	5000 ppm Zn	500 ppm Ni
Strongly Anomalous	7500 ppm Zn	700 ppm Ni

Using the threshold values, numerous anomalous areas were outlined (figures 10,11,14, and 15; Map pockets B and D). The anomalies varied from single stations to 100 metre wide areas. A nickel vs. zinc soil plot indicated a broad positive correlation for the two elements (figure 5).

## Lithochemistry

### Introduction

Lithochemical sampling was carried out in an attempt to identify possible source rocks for the anomalous Ni-Zn stream sediments and soils obtained previously. Locations of rock samples are plotted on the geological and geochemical maps (back pocket). Sampling focused on carbon rich shales, anomalous iron red fault gouge material, and pyritic cherts. A total of 40 rock samples were collected and analyzed for 17 elements at International Plasma Laboratories Ltd. of Vancouver. Samples were crushed to -150 mesh and analyzed for Ag, As, Ba, Cd, Co, Cu, Fe, Mn, Mo, Ni, P, Pb, Se, V, and Zn by multi-acid digestion ICP. Sulphur and organic carbon (C<sub>org</sub>) were analyzed by traditional assay methods. Assay results are included in Appendix III.

<sup>1</sup> Note that 251 soil samples were analysed using the lithochemical sample procedures by mistake. These samples were crushed to -150 mesh instead of -80 mesh (see Appendix III).

## Results

High nickel and zinc values were recorded from selected fault gouge samples, which contained 549ppm - 3000ppm Ni and 5025ppm - 10,252ppm Zn (table 2). On average, the metalliferous faults contained between 500 and 800 ppm nickel. However, one highly anomalous 3000ppm nickel fault zone was discovered and contained increased As, Cd, Mo, and V, relative to the other fault zones. The increased As, Mo, Ni, and Zn suggested similarities to Nick type sulphide mineralization, although the faults contained markedly high Ba, Mn, V, and P. Relative to other fault zones sampled, the metal rich fault material was also anomalous in Cu, although all other elements showed extreme variability with no evidence of correlation. The metal rich faults are likely source rocks for Ni-Zn soil anomalies on the property.

Road River transitional silty shales are high in zinc (> 7000 ppm) and contain elevated nickel (289ppm & 388ppm) relative to the other sediments at Jet. The shales occur at the contact between Road River Group and Lower Earn Group stratigraphy, a favourable location for "Nick type" sulphide mineralization. Relative to underlying graptolitic black shales, the transitional shales are anomalous in Zn, Ni, Cd, and Co (table 2). Other elements showed extreme variability with no evidence of correlation. The shales do not contain visible sulphide minerals, but may account for some of the anomalous Ni-Zn soil samples.

Road River carbonaceous shales and pyritic cherts contained background levels of Ni, Cu, and Zn (table 2). Pyritic chert with 15% disseminated sulphide was sampled (VB06925) but contained very low Zn (319ppm), Cu (207ppm), Pb (21ppm), and Ba (351ppm) relative to stratiform Pb-Zn deposits elsewhere in the Selywn Basin. The trace element patterns of the Road River carbonaceous shales were compared with pyritic cherts and pyritic shales. Elements of  $C^{org}$ , As, Ba, Cd, Mo, Ni, V, and Zn were distinctly higher in the carbonaceous shales, whereas Fe (%) and S (%) were lower. High background values of Zn (up to 2600ppm) were recorded in carbonaceous shales. The low Ni, Zn and Cu content of sulphide bearing chert samples was not encouraging.

## Depositional Environment

Sulphur-Carbon plots were constructed in an attempt to examine variations in environmental conditions at the Jet property. Plots of carbonaceous shales and pyritic shales indicated two distinct environmental populations (figure 6). Carbonaceous shales plotted along a non-marine trend, suggesting that the amount of sea-water sulphate converted to sulphur by bacterial action during deposition was quite low. The pyritic shales cluster near the euxinic depositional axis, indicating the appearance of free H<sub>2</sub>S and activation of bacterial sulphate reduction. Given that carbonaceous and pyritic shales occur in repetitive stratigraphic succession on the Jet property, depositional conditions would have undergone rapid fluxuations throughout the Silurian to Lower Devonian.

Sulphur-Carbon plots of the footwall limestone ball member shale matrix and hangingwall shales from the Nick sulphide deposit are shown in figure 6. Limestone ball member shale matrix samples plotted along the non-marine depositional axis. The hangingwall shales plotted near the normal marine depositional axis. One sample of the Road River graptolitic shales was obtained for comparison and plotted on the normal marine depositional axis. A schematic comparison of Nick and Jet property stratigraphy is shown in figure 7.

## DISCUSSION

The Jet property was considered a potential target for the discovery of Nick type sulphides on the basis of strong multi-element (Ni, Zn, Cd, Ag, As, and Mo) soil geochemical responses (see Carne, 1991). Follow-up exploration work, as outlined in this report, indicates that these soil anomalies are possibly related to cross-cutting faults containing metalliferous gouge material and to Zn-Ni rich transitional Road River shales. Lithochemical samples of fault material contained up to 3000ppm nickel and 10,252ppm zinc. Transitional silty shales contained over 7000ppm zinc with 289ppm - 388ppm nickel.

The current model of deposition for stratiform "Nick Type" Ni-Zn-PGE sulphide mineralization involves the discharge and subsequent ponding of hot hydrothermal fluids into sea-floor basins. At the discovery locality on the Nick property, stratiform "Nick type" mineralization occurs near the contact between Road River and Lower Earn sediments. Geological mapping at the Jet property indicated that the sediments are time equivalent with those at the Nick property, although some distinct lithological variations occur. Thin carbonate pods, Road River Group cherty and carbonaceous shales, and pyritic cherts are distinct from sediments at the Nick property. Sulphur-carbon plots of the Nick sediments and Jet sediments indicate that depositional conditions varied markedly within the Road River Group.

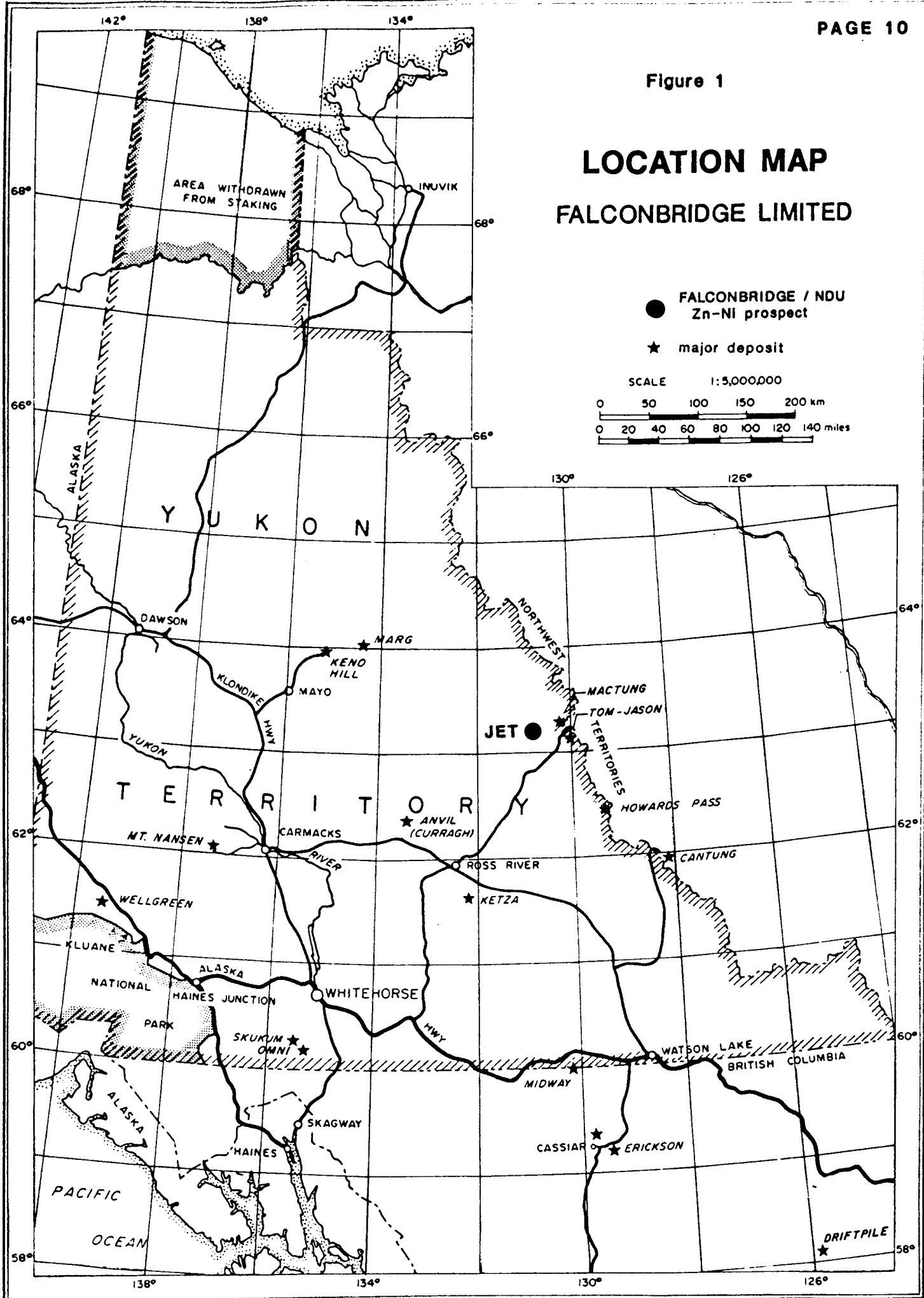
Euxinic depositional conditions, favourable for the formation of sulphide minerals, occur within the Jet property as characterized by Road River pyritic cherts and pyritic silty shales. However, the lithochemical results from sulphide bearing units were not encouraging. Multi-element geochemical enrichment patterns characteristic of Nick type sulphides or sedimentary Pb-Zn sulphides were not present in the Jet rock units.

One fault gouge sample containing 3000ppm nickel exhibited some chemical similarities to Nick type sulphides (high As, Mo, Ni, and Zn), but also contained markedly higher Ba, Mn, V, and P. The source metals for the fault material is unknown. The Ni-Zn enriched transitional silty shales occur at a favourable stratigraphic location for the formation of Nick type sulphides. However, trace element enrichment patterns do not correspond with those of the Nick horizon.

*Respectfully Submitted*  
*Mark Edwards*

Figure 1

# LOCATION MAP FALCONBRIDGE LIMITED



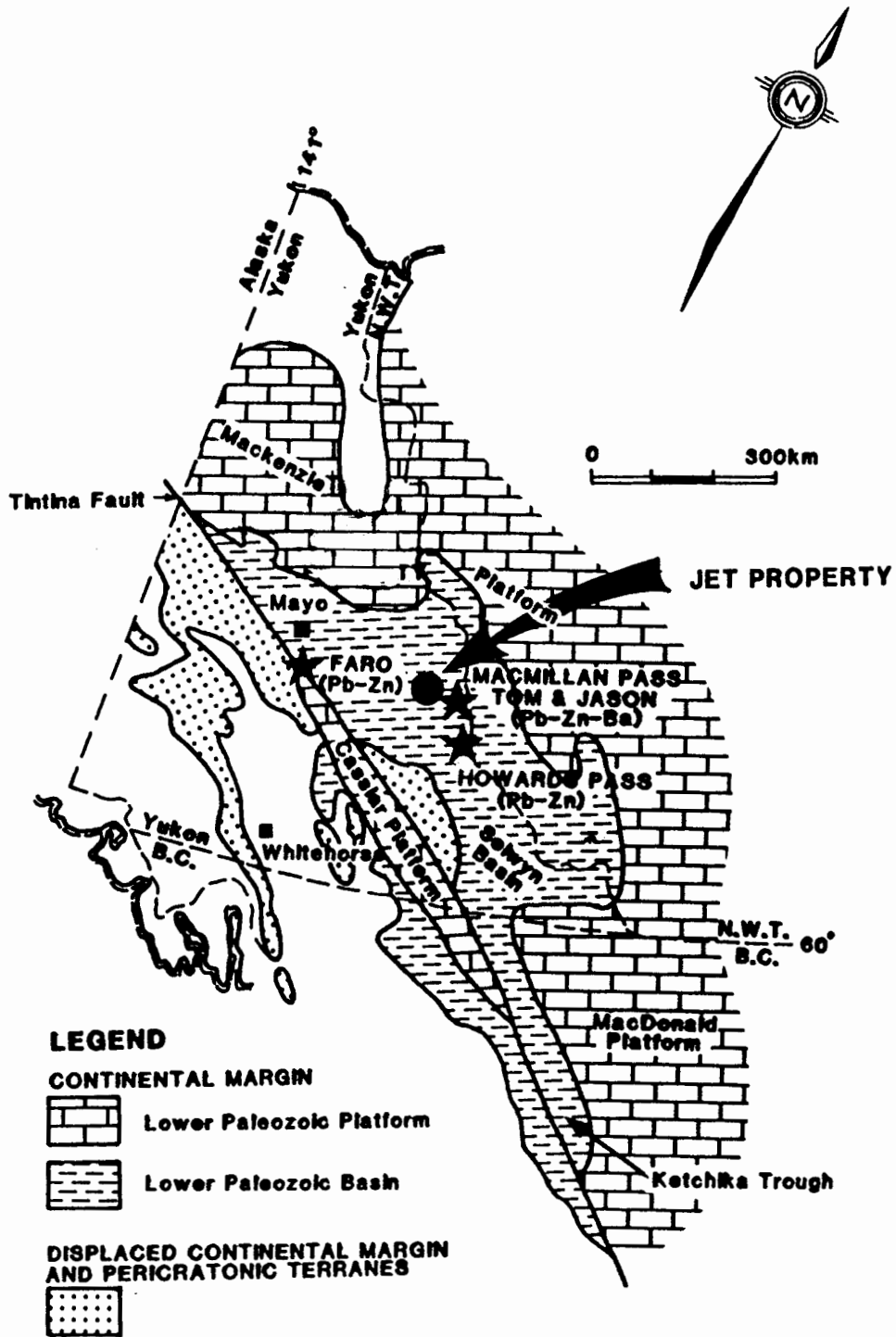


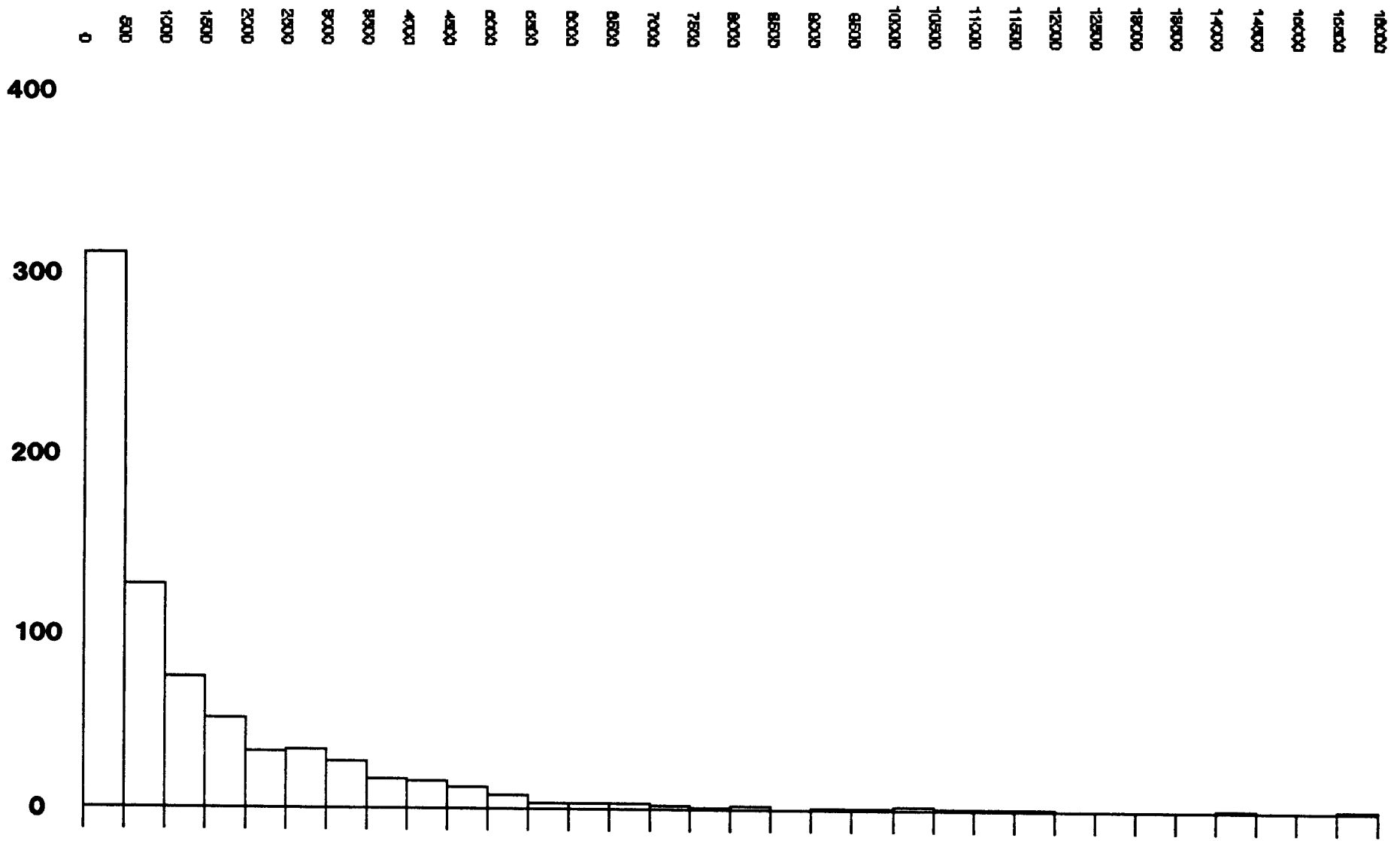
FIGURE 2

FALCONBRIDGE LIMITED	
<b>GEOLOGICAL SETTING JET PROPERTY, YUKON</b>	
SCALE	DRAWN YAZ
DATE NOVEMBER 1992	DATA BY SM

after Hubert et al.(1992)

**JET PROPERTY SOILS  
Zinc Histogram**

Zinc (ppm)



**FIGURE 3**

# JET PROPERTY SOILS

## Nickel Histogram

Nickel (ppm)

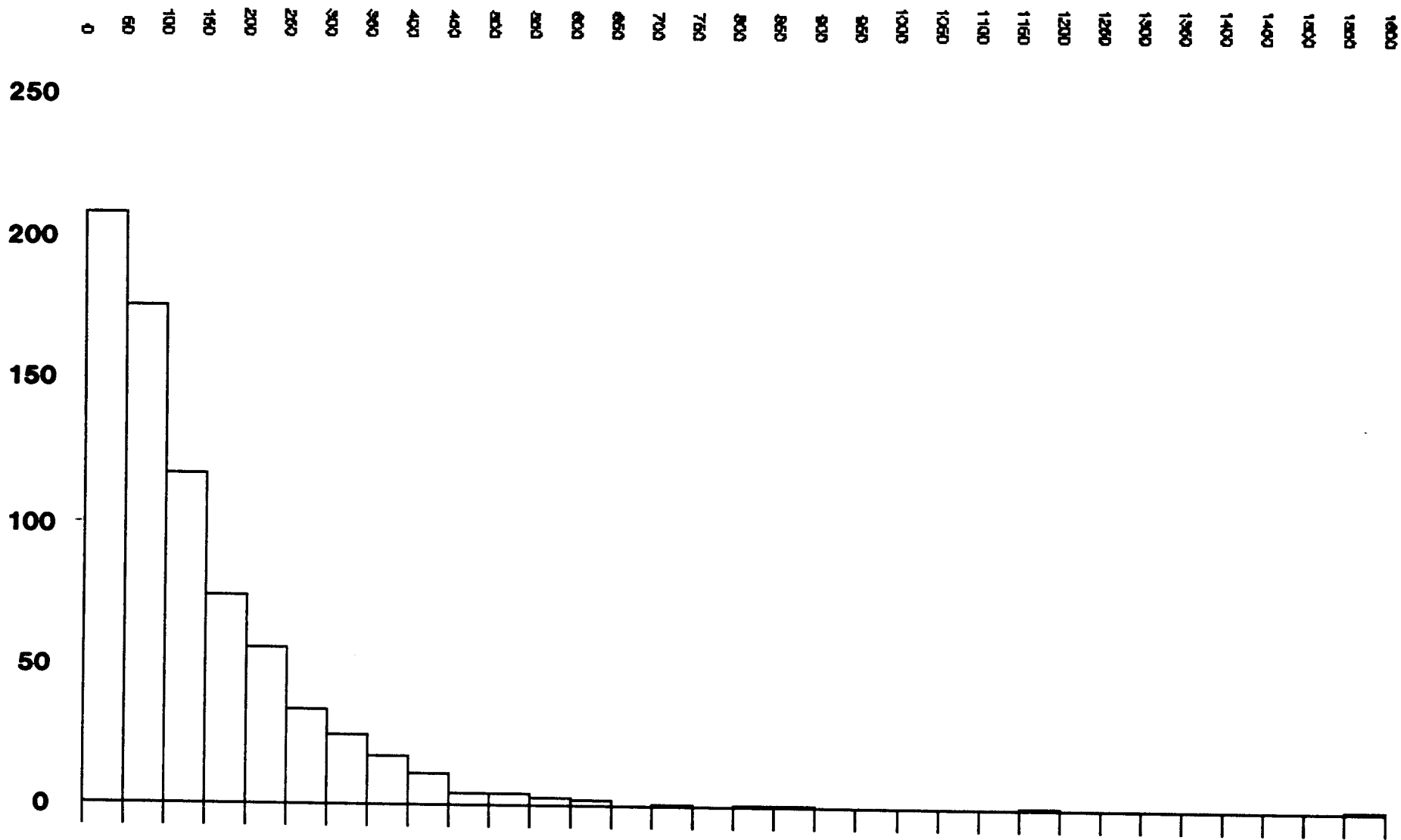


FIGURE 4

### SOILS : Zinc vs. Nickel

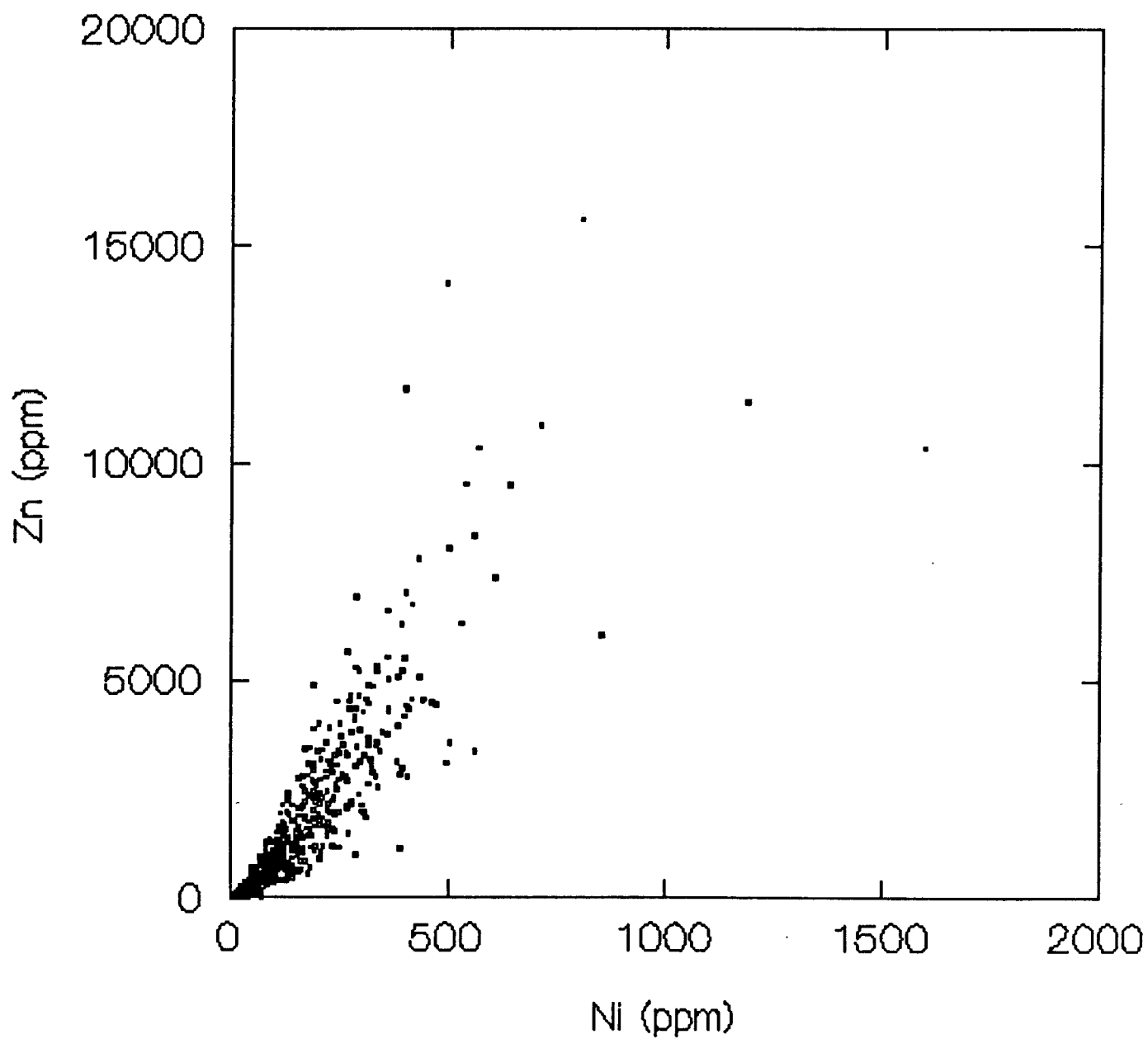
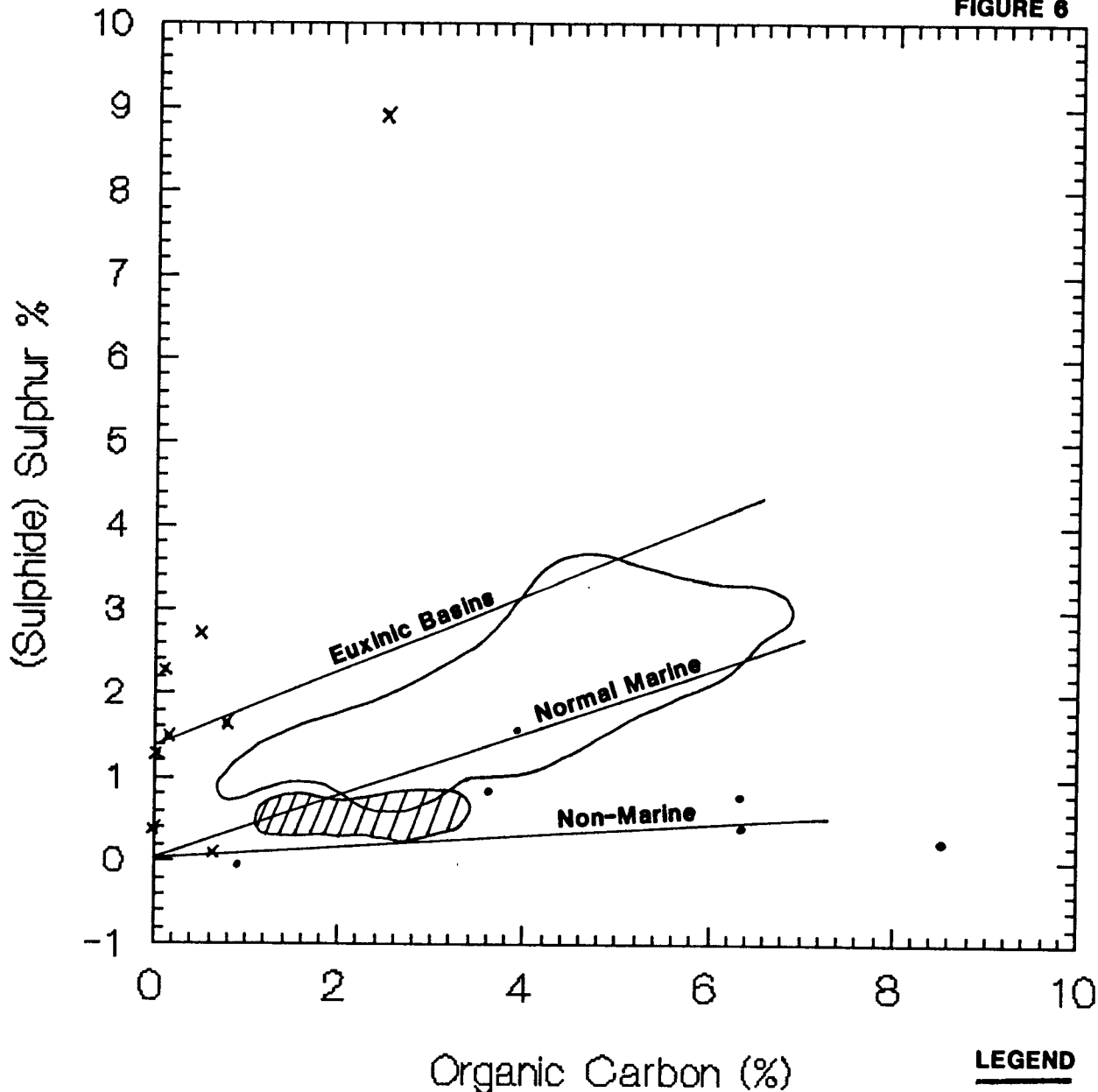


FIGURE 5

# JET and NICK PROPERTY SHALES

## Sulphur vs. Carbon



FIGURE 6



(After Holser et al., 1988)

(Nick Property Data from Falconbridge In-House Report)

**LEGEND**

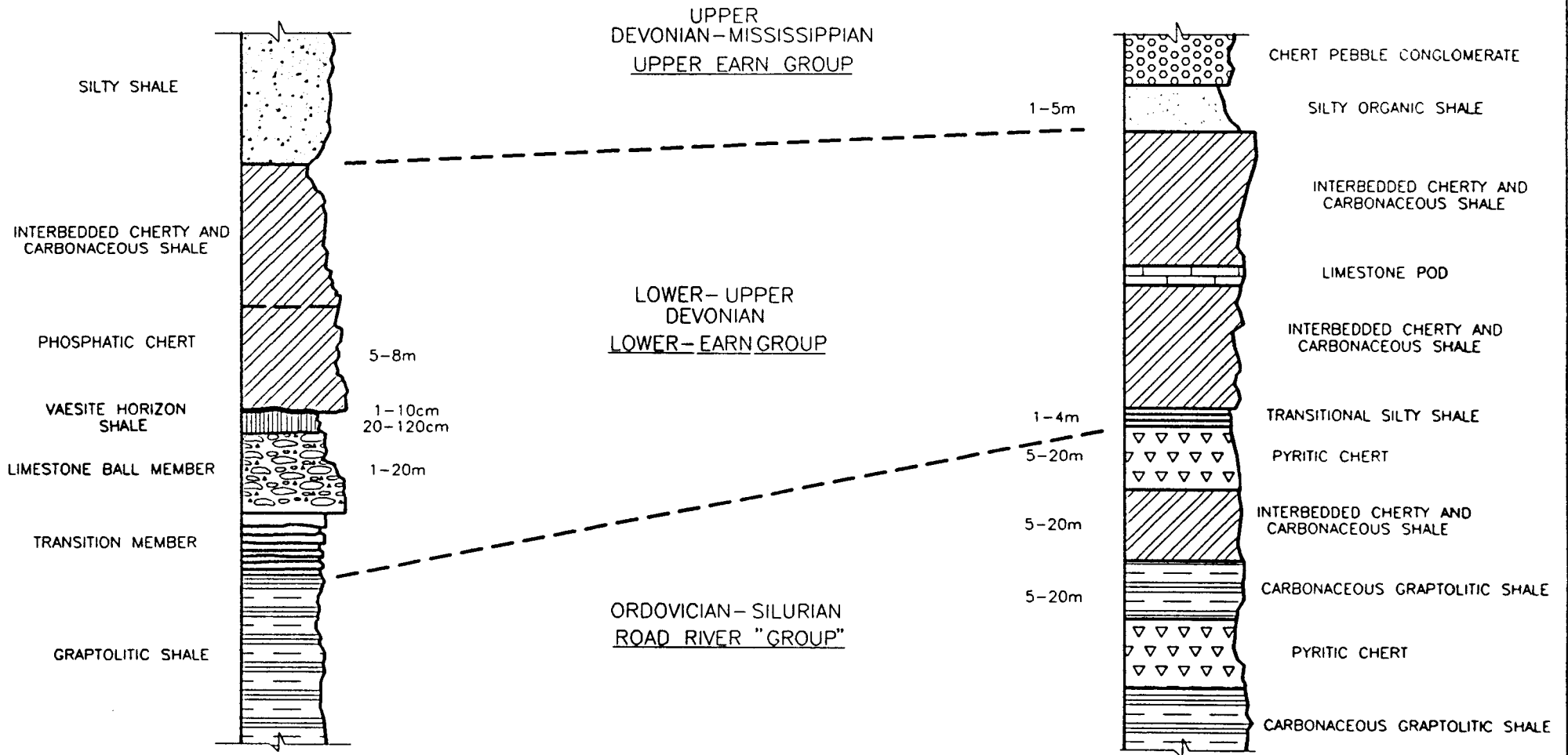
- x ROAD RIVER PYRITIC CHERTS and PYRITIC SHALES
- ROAD RIVER CARBONACEOUS SHALES
-  NICK PROPERTY HANGINGWALL SHALES
-  NICK PROPERTY FOOTWALL LIMESTONE BALL SHALE MATRIX

# STRATIGRAPHY

Figure 7

## Nick Property

## Jet Property



•• Not to Scale

TABLE 1

UPPER EARN GROUP  
(Upper Devonian to Mississippian)

- 9 UNDIVIDED
- 9Bfr SILTY ORGANIC SHALE:  
Medium grey, strongly fissile, with 5% unidentified plant remains.
- 9L CONGLOMERATE:  
Dark grey subrounded to subangular, light to medium grey chert fragments (3mm to 30mm). Closed framework with little or no matrix material.

LOWER EARN GROUP  
(Middle to Upper Devonian)

- 7 UNDIVIDED
- 7Ach CHERTY and CARBONACEOUS SHALE:  
Black variably interbedded cherty and carbonaceous shales. Cherty beds exhibit conchoidal fracture and vary in thickness from 2cm to 30cm. Carbonaceous interbeds are generally well foliated, black, and 2mm to 2cm thick.
- 7Dla LIMESTONE:  
Bleached white weathered surfaces, micritic, some thinly laminated.

ROAD RIVER GROUP  
(Ordovician to Lower Devonian)

- 5 UNDIVIDED
- 5Afr(ch) CARBONACEOUS GRAPTOLITIC SHALE:  
Black, strongly foliated clay shale, graptolites in abundance along bedding parallel cleavage. Graptolites include straight sicula monograptids and spiral coiled Monograptus Spiralis. Some interbedded with chert.
- 5Ach INTERBEDDED CHERTY and CARBONACEOUS SHALE:  
Black variably interbedded cherty and carbonaceous shales. Cherty beds exhibit conchoidal fracture and vary in thickness from 2cm to 16cm. Carbonaceous interbeds are generally well foliated, black, and 2mm to 2cm thick.
- 5B(ca) TRANSITIONAL SILTY SHALE:  
Dark brown to brownish black, variably calcareous, with a distinct 2cm to 4cm wide cleavage parting. Weakly fissile.
- 5D(bl,la) LIMESTONE:  
Dark grey, massive limestone. In strongly folded areas, occurring as small, sub-rounded limestone balls, 20cm to 1 meter wide.
- 5E PYRITIC CHERT and PYRITIC SILTY SHALE:  
Dark grey to light grey, variably homogeneous to thinly laminated, 1% to 5% disseminated pyrite. Pyrite is fine grained and occurs in euhedral to framboidal form.

**TABLE 2**  
**Wholerock Lithochemistry**  
**Jet Property, Yukon**

Unit	Ag		As		Ba		Cd		Co		Corg (%)	
	(Min - Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.
Transitional Silty Shales	0.0 - 1.8	0.9	19.9 - 82.4	51.1	1917 - 1983	1950	89.3 - 94.7	92.0	22 - 23	22	0.27 - 5.28	2.77
Carbonaceous Shales	0.0 - 3.2	1.5	12.0 - 268.4	78.6	618 - 3355	1805	8.7 - 47.9	20.1	6 - 15	10	0.90 - 8.57	4.96
Pyritic Cherty Shales	0.0 - 1.6	0.5	3.1 - 30.9	13.3	143 - 2236	856	0.0 - 10.7	1.9	2 - 27	14	0.00 - 2.47	0.58
Fault Zones	0.0 - 3.6	1.3	65.2 - 347.2	182.1	330 - 8785	2230	1.6 - 12.1	5.4	3 - 33	11	1.28 - 7.04	3.64
Metal Rich Fault Zones	1.5 - 2.9	2.4	85.3 - 217.2	122.5	422 - 3074	1458	0.1 - 2.5	1.0	25 - 41	33	1.26 - 2.69	1.86
Nickeliferous Fault Zone		1.6		756.0		2563		61.3		14		1.82
<b>Summary</b>												
Ag	0.0 - 3.2	1.3	19.9 - 268.4	78.6	618 - 3355	1805	8.7 - 47.9	20.1	6 - 15	10	0.90 - 8.57	4.96
As	0.0 - 1.6	0.5	3.1 - 30.9	13.3	143 - 2236	856	0.0 - 10.7	1.9	2 - 27	14	0.00 - 2.47	0.58
Ba				756.0		2563		61.3		14		1.82
Cd								61.3				
Co												
Corg (%)												
<b>Summary</b>												
Unit	Cu		Fe (%)		Mn		Mo		Ni		P	
	(Min - Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.
Transitional Silty Shales	80 - 106	83	1.68 - 2.44	2.06	264 - 652	459	26 - 88	57	289 - 388	338	0.02 - 0.03	0.025
Carbonaceous Shales	83 - 409	165	0.93 - 4.15	2.41	36 - 804	206	8 - 119	72	100 - 211	169	0.04 - 0.79	0.34
Pyritic Cherty Shales	8 - 207	51	0.63 - 11.3	3.96	68 - 623	351	3 - 8	4	17 - 69	44	0.02 - 0.21	0.06
Fault Zones	154 - 290	205	1.28 - 10.64	4.51	12 - 702	143	5 - 191	85	32 - 430	169	0.35 - 0.95	0.54
Metal Rich Fault Zones	531 - 1174	871	2.78 - 12.2	6.36	202 - 2702	1426	10 - 99	51	549 - 622	595	0.12 - 0.89	0.62
Nickeliferous Fault Zone		677		5.59		61		312		3000		0.95
<b>Summary</b>												
	Pb	S (%)	Se	V	Zn	No. of						
	(Min-Max)	Ave.	(Min-Max)	Ave.	(Min-Max)	Ave.	Samples					
Transitional Silty Shales	10 - 11	10.5	0.28 - 1.99	1.12	63 - 16.6	11.4	107 - 1000	553	7084 - 9651	8367	2	
Carbonaceous Shales	0 - 23	14	0.01 - 1.60	0.67	21 - 42.3	17.7	159 - 2000	1322	897 - 2659	1767	6	
Pyritic Cherty Shales	0 - 21	9	0.10 - 8.92	2.35	0.3 - 12.5	2.6	43 - 137	81	36 - 652	230	8	
Fault Zones	11 - 72	30	0.21 - 22.98	4.40	6 - 64.8	25.3	343 - 4000	1454	83 - 1619	778	7	
Metal Rich Fault Zones	6 - 32	17	0.10 - 4.20	1.66	15.0 - 292.5	112.1	971 - 2000	1323	5524 - 16237	10671	3	
Nickeliferous Fault Zone		36		0.24		36.1		8000		5025	1	

↳ Nick horizon geochemical data obtained from Miller (1992)  
 \*\*Elements in ppm unless otherwise noted

STATEMENT OF COSTS  
JET CLAIMS (PN 001-208)

<b>Geology</b>	
Salaries	\$ 18,873.76
Travel & Expenses	2,376.33
Contract Payments	5,465.84
Field Expenses	10,663.35
Assays	1,036.00
<b>Total Geology</b>	<u>\$ 38,415.28</u>
<b>Geochemistry</b>	
Salaries	\$ 9,814.44
Travel & Expenses	836.50
Contract Payments	15,468.32
Field Expenses	4,454.75
Assays	6,806.35
<b>Total Geochemistry</b>	<u>\$ 37,380.36</u>
<b>Sub-total</b>	75,795.64
<b>Administration 10%</b>	<u>7,579.56</u>
<b>TOTAL EXPENDITURES</b>	<u><u>\$ 83,375.20</u></u>

CERTIFIED CORRECT



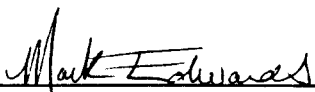
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R. B. BAND

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

I, Mark D. Edwards, of 195 Bartlet Avenue, Winnipeg, Manitoba, hereby certify that:

1. I graduated from the University of Regina in 1990 with a B.Sc. (Hons.) in geology.
2. From 1990 to present I have been actively engaged as a geologist in mineral exploration in the Ontario, Manitoba, and the Yukon Territory.
3. I have no financial interest in the claims covered by this report nor do I expect to receive any interest.

---

**Mark D. Edwards, B.Sc.**

**APPENDIX II****LIST OF PERSONNEL**

<u>Name</u>	<u>Position</u>	<u>Period</u>
Mark Edwards	Geologist	July 24-August 8
Peter Manojlovic	Project Geologist	July 24-July 29
Krystian von Fersen	Field Assistant	July 24-August 8
Scott Parker	Field Assistant	July 24-August 8
Ryan Kelly	Field Assistant	July 24-August 8

**APPENDIX III**  
**GEOCHEMICAL CERTIFICATES**

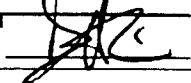
iPL Report: 92005271 Falconbridge Ltd.  
 Project: 601 208 Jet

In: Jul 22, 1992  
 Out: Jul 28, 1992

15 Rock

Page 1 of 1

Section 1 of 1  
 Certified BC Assayer



David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm	Rock Type
VB 06918	R 2.4	166	27	1295	0.21	94	76.5	191	11.5	33	180	1536	0.1%	702	10.64	0.66	21	1.28	17.9	Fault Gouge
VB 06919	R 4.0	711	50	2335	0.12	553	456.0	256	15.0	27	250	1976	0.1%	555	11.37	0.84	31	1.31	26.8	Ferricrete
VB 06920	R 16.2	278	20	3199	0.22	105	100.0	27	13.7	11	316	425	0.1%	72	5.73	0.27	12	5.88	7.1	Shear Zone
VB 06921	R <	26	6	78	2.27	22	19.9	4	<	16	52	1112	84	209	4.07	0.02	<	0.11	2.2	Pyritic Chert
VB 06922	R 0.1	24	5	209	0.10	29	30.9	5	1.1	2	32	204	73	549	0.63	0.04	5	0.63	1.1	Pyritic Chert
VB 06923	R <	8	7	319	1.30	<	4.1	5	1.0	9	43	758	46	623	2.84	0.05	<	0.03	0.5	Pyritic Chert
VB 06924	R 0.6	107	12	11%	0.12	56	63.8	1	0.8m	8	0.7%	364	189	151	0.29	0.16	5	0.21	1.7	Tuff Deposit
VB 06925	R 1.6	207	21	362	8.92	15	12.1	8	1.9	27	69	351	43	98	11.30	0.03	21	2.47	12.5	Pyritic Chert
VB 06926	R 0.8	45	12	113	1.64	14	5.2	3	<	19	37	1837	137	333	3.75	0.21	<	0.78	2.0	Pyritic Chert
VB 06927	R <	11	10	74	1.47	<	26.8	5	0.4	9	17	143	51	586	2.95	0.06	<	0.14	0.5	Pyritic Chert
VB 06928	R 1.6	677	36	5025	0.24	770	756.0	312	61.3	14	0.3%	2563	0.8%	61	5.59	0.95	23	1.82	36.1	Fault Gouge
VB 06929	R 1.5	1174	13	5524	0.68	78	85.0	44	2.5	34	622	3074	971	876	12.21	0.89	217	1.63	292.5	Fault Gouge
VB 06930	R <	83	4	431	0.07	31	25.8	25	12.4	9	75	561	773	159	0.62	0.31	9	0.80	7.2	Bituminous Rock (Purus)
VB 06931	R 1.2	106	13	697	0.88	24	31.3	33	10.8	7	115	2403	776	80	0.93	0.62	21	3.63	18.8	Road River Carbonaceous Shale
VB 06932	R 3.0	154	23	1028	0.29	49	39.4	78	8.7	6	184	618	0.2%	68	1.67	0.79	35	8.57	42.3	Carbonaceous Shale



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 Project: 601 208 Jet

In: Aug 05, 1992  
 Out: Aug 12, 1992

12 Rock

Page 1 of 1

Section 1 of 1  
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David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm	Rock Type
VB 06934	R 0.4	83	<	1570	0.01	<	12.0	8	23.6	15	100	1603	159	804	4.38	0.40	6	0.90	2.1	Carbonaceous Shale
VB 06935	R <	28	<	652	0.38	<	3.1	4	10.7	11	57	2236	85	274	2.80	0.02	<	<	0.3	Road River Pyritic Chert
VB 06936	R 0.3	28	2	2838	0.04	<	9.2	19	12.0	18	167	2064	92	489	6.97	0.04	10	<	8.5	Ferric chert
VB 06937	R 1.0	423	10	2854	0.06	116	148.8	86	10.1	15	320	1839	340	63	4.81	0.31	135	0.72	136.0	Lower Egan Chert, Qts. Veined
VB 06938	R 1.1	312	11	701	0.52	<	7.4	42	0.7	49	182	1089	641	850	3.86	0.39	7	4.08	6.0	Carbonaceous Shale
VB 06939	R 1.0	63	12	36	2.72	<	4.4	3	<	18	45	213	131	136	3.36	0.04	<	0.50	2.1	Pyritic Chert
VB 06940	R 0.9	68	3	1136	0.10	12	17.9	17	21.3	5	107	573	398	130	0.83	0.11	6	2.53	5.8	Road River Silty Shale
VB 06941	R 1.8	60	10	9651	0.26	6	19.9	26	94.7	22	289	1983	107	652	2.44	0.03	5	0.27	6.3	Transitional Silty Shale
VB 06942	R 2.7	908	6	16237	0.10	77	65.3	10	0.1m	41	616	879	0.1%	702	4.10	0.85	25	2.69	28.0	Fault Gouge
VB 06943	R 3.6	197	68	1064	0.10	54	54.6	63	9.8	5	99	602	0.4%	62	1.54	0.14	25	3.23	30.4	Quartz Veined Shale
VB 06944	R 4.8	54	26	2500	0.06	21	20.3	7	11.1	9	114	631	248	79	5.97	0.08	9	0.52	9.1	Quartz Veined Chert
VB 06945	R 1.3	132	13	2659	0.46	31	39.1	81	47.9	12	204	3355	0.1%	165	1.66	0.05	12	6.37	15.2	Carbonaceous Shale

Min Limit 0.1 1 2 1 0.01 5 0.1 1 0.1 1 1 2 2 1 0.01 0.01 5 0.01 0.1  
 Max Reported\* 99.9 20000 20000 20000 100.00 9999 1000.0 9999 99.9 999 999 9999 999 9999 99.99 5.00 10000 100.00 1000.0  
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 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879-7878 Fax:604/879-7898

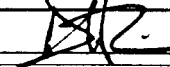


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 Project: 603 208 Jet

In: Aug 10, 1992  
 Out: Aug 17, 1992  
 13 Rock

Page 1 of 1 Section 1 of 1  
 Certified BC Assayer  David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm	Rock Type
VB 06501	R <	202	23	365	22.98	113	153.2	150	4.0	3 430	330	866	16	1.28	0.44	21	3.17	22.9	Fault Gouge	
VB 06951	R <	106	11	7084	1.99	46	82.4	88	89.3	23 388	1917	0.1%	266	1.68	0.02	12	5.28	16.6	Transitional S Hr Shale	
VB 06953	R 1.4	97	7	409	2.39	21	58.8	17	6.2	4 153	654	973	478	1.03	0.34	11	5.49	14.8	Lower Earn Shale	
VB 06954	R 2.3	341	15	1140	3.99	198	243.6	140	10.2	9 297	1151	0.2%	165	3.25	0.43	10	4.40	19.7	Lower Earn Cherty Shale	
VB 06955	R 3.2	409	20	2473	1.60	217	268.4	119	11.7	9 197	1345	0.2%	36	4.51	0.14	10	3.92	11.2	Carbonaceous Shale	
VB 06956	R <	195	13	1619	0.79	215	257.2	29	12.1	10 123	2096	460	121	8.57	0.95	16	3.11	13.8	Fault Gouge	
VB 06957	R <	240	21	780	1.00	174	220.0	70	2.8	13 121	8785	513	29	4.01	0.42	62	3.08	64.8	Fault Gouge	
VB 06958	R <	290	11	1021	3.00	27	65.2	5	1.8	12 179	1279	343	109	3.13	0.35	<	3.43	8.1	Fault Gouge	
VB 06959	R 3.6	154	72	83	1.59	117	156.0	79	3.8	3 32	684	0.3%	14	1.84	0.37	14	4.37	19.2	Fault Gouge	
VB 06960	R 3.1	188	45	283	1.20	309	347.2	69	1.6	4 121	900	0.4%	12	2.09	0.58	27	7.04	30.2	Fault Gouge	
VB 06961	R 3.1	243	5	152	1.39	42	120.4	17	3.7	2 12	330	0.1%	26	0.54	0.04	9	0.66	10.8	Quartz Veined Cherty Shale	
VB 06962	R <	104	17	2176	0.79	44	81.6	118	18.0	9 211	1511	0.2%	84	1.32	0.04	11	6.38	16.7	Carbonaceous Shale	
VB 06963	R 2.9	531	32	10252	4.20	145	217.2	99	0.6m	25 549	422	0.2%	2702	2.76	0.12	12	1.26	15.8	Fault Gouge	

Min Limit 0.1 1 2 1 0.01 5 0.1 1 0.1 1 1 2 2 1 0.01 0.01 5 0.01 0.1  
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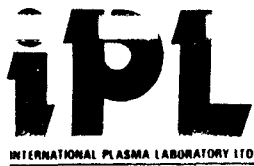
In: Jul 22, 1992  
 Out: Jul 28, 1992 246 Soil

Page 2 of 2 Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm
SA 23750	S	231 49	SA 23789	S	2950 231									
SA 23751	S	353 58	SA 23790	S	1246 140									
SA 23752	S	2248 130	SA 23791	S	2811 265									
SA 23753	S	3890 191	SA 23792	S	2360 202									
SA 23754	S	4183 284	SA 23793	S	1810 169									
SA 23755	S	4514 273	SA 23794	S	1262 108									
SA 23756	S	4013 250	SA 23795	S	173 25									
SA 23757	S	5234 336	SA 23796	S	1046 103									
SA 23758	S	3102 193	SA 23797	S	2757 157									
SA 23759	S	3067 243	SA 23798	S	1359 108									
SA 23760	S	5027 363	SA 23799	S	795 88									
SA 23761	S	5087 386	SA 23800	S	843 95									
SA 23762	S	4885 318												
SA 23763	S	3823 348												
SA 23764	S	15616 805												
SA 23765	S	1373 161												
SA 23766	S	2137 140												
SA 23767	S	4870 327												
SA 23768	S	5219 394												
SA 23769	S	774 87												
SA 23770	S	188 31												
SA 23771	S	527 66												
SA 23772	S	420 50												
SA 23773	S	499 60												
SA 23774	S	257 34												
SA 23775	S	347 83												
SA 23776	S	372 80												
SA 23777	S	665 108												
SA 23778	S	536 102												
SA 23779	S	580 49												
SA 23780	S	717 57												
SA 23781	S	1258 93												
SA 23782	S	288 38												
SA 23783	S	282 41												
SA 23784	S	112 16												
SA 23785	S	348 51												
SA 23786	S	1268 125												
SA 23787	S	2719 247												
SA 23788	S	2443 221												

Min Limit 1 1 1 1 1 1 1 1  
 Max Reported\* 20000 999 20000 999 20000 999 20000 999 20000 999  
 Method ICP ICP ICP ICP ICP ICP ICP ICP  
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 Z=Estimate % Max=No Estimate



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In: Aug 10, 1992  
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235 Soil

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Section 1 of 1  
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David Chiu

Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm
SA 23016	76	17	SA 23055	399	122	SA 26118	440	77	SA 26157	477	81	SA 26353	272	38
SA 23017	81	16	SA 23056	1488	120	SA 26119	1184	145	SA 26158	207	30	SA 26354	1060	101
SA 23018	293	40	SA 23057	1889	158	SA 26120	302	49	SA 26159	1116	164	SA 26355	695	82
SA 23019	338	48	SA 23058	53	12	SA 26121	240	51	SA 26160	500	66	SA 26356	385	54
SA 23020	331	51	SA 23059	711	80	SA 26122	252	45	SA 26161	510	95	SA 26357	1521	238
SA 23021	554	61	SA 23060	151	26	SA 26123	417	73	SA 26162	516	91	SA 26358	902	124
SA 23022	629	87	SA 23061	62	12	SA 26124	198	36	SA 26163	2294	192	SA 26359	418	69
SA 23023	908	108	SA 23062	82	14	SA 26125	319	50	SA 26164	882	113	SA 26360	535	87
SA 23024	830	105	SA 23063	103	24	SA 26126	319	50	SA 26165	138	57	SA 26361	261	63
SA 23025	463	74	SA 23064	69	13	SA 26127	498	81	SA 26166	267	45	SA 26362	332	77
SA 23026	467	74	SA 23065	63	11	SA 26128	218	43	SA 26167	143	25	SA 26363	996	83
SA 23027	496	67	SA 23066	165	34	SA 26129	104	19	SA 26168	944	114	SA 26364	3535	318
SA 23028	452	68	SA 23067	85	16	SA 26130	215	43	SA 26169	184	32	SA 26365	1266	126
SA 23029	868	111	SA 23068	98	19	SA 26131	517	52	SA 26170	1281	153	SA 26366	387	49
SA 23030	844	102	SA 23069	581	84	SA 26132	212	38	SA 26171	2925	216	SA 26367	886	105
SA 23031	1120	112	SA 23070	102	29	SA 26133	240	37	SA 26172	712	110	SA 26368	742	92
SA 23032	791	81	SA 23071	83	59	SA 26134	196	33	SA 26173	353	78	SA 26369	345	66
SA 23033	550	67	SA 23072	357	60	SA 26135	296	40	SA 26174	432	81	SA 26370	152	28
SA 23034	731	72	SA 23073	218	47	SA 26136	276	25	SA 26175	991	288	SA 26371	183	33
SA 23035	170	26	SA 23074	576	85	SA 26137	221	38	SA 26176	1147	391	SA 26372	1482	164
SA 23036	417	75	SA 23075	2134	119	SA 26138	137	22	SA 26177	385	85	SA 26373	946	89
SA 23037	73	19	SA 23076	2419	131	SA 26139	566	92	SA 26178	131	27	SA 26374	400	108
SA 23038	175	42	SA 23077	442	43	SA 26140	656	149	SA 26179	147	29	SA 26375	37	15
SA 23039	1181	113	SA 23078	74	14	SA 26141	476	65	SA 26180	125	25	SA 26376	71	16
SA 23040	404	67	SA 23079	123	21	SA 26142	893	204	SA 26181	123	22	SA 26377	116	32
SA 23041	817	101	SA 23080	57	13	SA 26143	944	125	SA 26182	92	19	SA 26378	232	50
SA 23042	1019	104	SA 23081	48	12	SA 26144	1625	154	SA 26183	244	48	SA 26379	1031	166
SA 23043	1555	148	SA 23082	48	12	SA 26145	1316	109	SA 26184	390	62	SA 26380	308	41
SA 23044	1380	151	SA 23083	34	7	SA 26146	8327	561	SA 26185	446	77	SA 26381	175	42
SA 23045	987	109	SA 23084	266	44	SA 26147	3040	323	SA 26186	140	27	SA 26382	61	16
SA 23046	1155	112	SA 23085	129	28	SA 26148	152	68	SA 26187	191	51	SA 26383	74	25
SA 23047	742	96	SA 23086	43	13	SA 26149	10363	569	SA 26188	419	129	SA 26384	942	113
SA 23048	777	129	SA 23087	34	13	SA 26150	632	126	SA 26189	546	130	SA 26385	60	29
SA 23049	789	116	SA 23088	50	15	SA 26151	395	81	SA 26190	360	72	SA 26386	75	41
SA 23050	374	76	SA 23089	34	8	SA 26152	2146	269	SA 26191	530	98	SA 26387	363	64
SA 23051	329	70	SA 23090	26	12	SA 26153	6329	532	SA 26192	753	144	SA 26388	261	45
SA 23052	1723	223	SA 26115	104	24	SA 26154	856	161	SA 26193	736	134	SA 26389	112	38
SA 23053	574	83	SA 26116	150	21	SA 26155	1969	249	SA 26194	354	72	SA 26390	172	39
SA 23054	397	60	SA 26117	123	24	SA 26156	459	82	SA 26352	657	85	SA 26391	222	43

Min Limit 1 1 1 1 1 1 1 1  
 Max Reported\* 20000 999 20000 999 20000 999 20000 999 20000 999  
 Method ICP ICP ICP ICP ICP ICP ICP ICP  
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 Z=Estimate X Max=No Estimate



INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street  
 Vancouver, B.C.  
 Canada V5Y 3E1  
 Phone (604) 879-7878  
 Fax (604) 879-7898

iPL Report: 9200615 M Falconbridge Ltd.  
 Project: 603 208 Jet

In: Aug 10, 1992  
 Out: Aug 13, 1992

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Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm
SA 26392	S	147 41	SA 27831	S	169 38									
SA 26393	S	108 32												
SA 26394	S	585 87												
SA 26395	S	658 59												
SA 26396	S	622 56												
SA 26397	S	802 73												
SA 26398	S	316 57												
SA 26399	S	5678 267												
SA 26400	S	291 33												
SA 27801	S	310 33												
SA 27802	S	3321 266												
SA 27803	S	187 52												
SA 27804	S	1166 247												
SA 27805	S	391 76												
SA 27806	S	305 47												
SA 27807	S	1777 147												
SA 27808	S	1504 117												
SA 27809	S	3180 207												
SA 27810	S	1955 129												
SA 27811	S	2135 301												
SA 27812	S	10859 713												
SA 27813	S	124 28												
SA 27814	S	53 12												
SA 27815	S	19 6												
SA 27816	S	571 178												
SA 27817	S	183 57												
SA 27818	S	398 102												
SA 27819	S	2845 391												
SA 27820	S	1031 153												
SA 27821	S	1626 157												
SA 27822	S	1479 152												
SA 27823	S	1690 121												
SA 27824	S	2306 210												
SA 27825	S	1283 113												
SA 27826	S	1244 108												
SA 27827	S	1466 122												
SA 27828	S	792 103												
SA 27829	S	608 90												
SA 27830	S	247 48												

Min Limit 1 1 1 1 1 1 1 1  
 Max Reported\* 20000 999 20000 999 20000 999 20000 999 20000 999  
 Method ICP ICP ICP ICP ICP ICP ICP ICP

--No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate



2036 Columbia Street  
 Vancouver, B.C.  
 Canada V5Y 3E1  
 Phone (604) 879-7878  
 Fax (604) 879-7898

iPL Report: 9200612 M Falconbridge Ltd.  
 Project: 603 208 Jet

In: Aug 10, 1992  
 Out: Aug 13, 1992

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Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm	Sample Name	Zn ppm	Ni ppm
SA 23091	\$	1555 152	SA 23130	\$	218 22						
SA 23092	\$	941 70	SA 23131	\$	457 46						
SA 23093	\$	592 84	SA 23132	\$	1933 134						
SA 23094	\$	1693 121	SA 23133	\$	1088 101						
SA 23095	\$	764 76	SA 23134	\$	739 71						
SA 23096	\$	1893 237	SA 23135	\$	2208 169						
SA 23097	\$	1985 299	SA 26195	\$	1786 203						
SA 23098	\$	580 89	SA 26196	\$	1984 225						
SA 23099 Low Volume	\$	2182 320	SA 26197	\$	1394 166						
SA 23100	\$	517 79	SA 26198 Lost in Transit	\$	-- --						
SA 23101	\$	804 124	SA 26199	\$	1595 173						
SA 23102	\$	1687 205	SA 26200 Low Volume	\$	5484 363						
SA 23103	\$	359 96	SA 27601	\$	4348 273						
SA 23104	\$	117 47	SA 27602	\$	3709 254						
SA 23105 Lost in Transit	\$	-- --	SA 27603	\$	2361 181						
SA 23106 Low Volume	\$	120 34	SA 27604	\$	3282 269						
SA 23107	\$	151 32	SA 27605	\$	4380 362						
SA 23108	\$	130 25	SA 27606	\$	728 68						
SA 23109	\$	210 42	SA 27607	\$	2574 167						
SA 23110	\$	124 23	SA 27608	\$	7030 401						
SA 23111	\$	145 31	SA 27609	\$	4521 245						
SA 23112	\$	11410 0.1%	SA 27610	\$	3366 199						
SA 23113	\$	6045 852	SA 27611	\$	2417 206						
SA 23114	\$	2240 234	SA 27612	\$	1891 155						
SA 23115	\$	1580 155	SA 27613	\$	5535 399						
SA 23116	\$	2691 188	SA 27614	\$	1573 128						
SA 23117	\$	6607 361	SA 27615	\$	1025 106						
SA 23118	\$	7821 431	SA 27616	\$	670 80						
SA 23119	\$	1279 92	SA 27832	\$	10367 0.2%						
SA 23120	\$	958 65									
SA 23121	\$	810 67									
SA 23122	\$	941 77									
SA 23123	\$	711 48									
SA 23124	\$	855 69									
SA 23125	\$	691 50									
SA 23126	\$	710 51									
SA 23127	\$	641 69									
SA 23128	\$	330 35									
SA 23129	\$	358 35									

Min Limit 1 1 1 1 1 1  
 Max Reported\* 20000 999 20000 999 20000 999 20000 999  
 Method ICP ICP ICP ICP ICP ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=PuIp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879 7878 Fax:604/879 7898



2036 Columbia Street  
 Vancouver, B.C.  
 Canada V5Y 3E1  
 Phone (604) 879-7878  
 Fax (604) 879-7898

iPL Report: 9200590 T Falconbridge Ltd.  
 Project: 603 208 Jet

In: Aug 05, 1992  
 Out: Aug 13, 1992

Soil  
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Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm
DA 06204	R 1.2	68	10	1300	0.24	25	24.3	23	16.3	7	81	5218	781	135	1.60	0.51	7	1.94	9.2
DA 06205	R 1.2	76	3	337	0.86	94	72.2	188	1.9	14	50	2143	0.1%	341	12.73	1.04	19	1.38	20.5
DA 06206	R 1.1	68	9	215	0.35	39	32.9	58	3.1	10	34	4864	938	159	4.37	0.53	13	1.45	10.5
DA 06207	R 0.6	52	11	197	0.16	19	14.6	16	4.4	8	29	4178	553	212	1.09	0.20	<	0.92	5.3
DA 06208	R 0.8	36	<	53	0.72	156	148.0	40	<	6	16	1462	695	49	12.03	1.61	20	0.81	18.3
DA 06209	R 1.0	34	12	21	0.35	26	17.0	16	<	7	16	4420	522	22	3.20	0.20	8	2.17	8.0
DA 06210	R 1.1	71	11	284	0.04	44	39.4	32	3.9	9	45	2746	0.1%	138	4.16	0.64	11	1.29	16.1
DA 06211	R <	<	<	29	1.71	116	136.0	19	<	8	16	165	0.1%	8	27.85	2.16	5	1.22	1.7
DA 06212	R 1.4	19	<	30	0.94	136	152.0	14	<	7	13	1705	0.1%	22	18.26	1.99	<	2.89	4.0
DA 06401	R 0.4	33	<	78	0.99	150	167.6	33	<	9	22	2137	0.1%	152	14.13	0.65	11	1.39	7.5
DA 06402	R 2.2	109	19	1260	0.16	42	53.1	33	19.4	11	97	2267	0.1%	153	1.84	0.37	13	0.74	16.7
DA 06403	R 2.4	150	30	1948	0.29	62	60.5	62	32.8	10	115	4036	0.2%	149	2.50	0.82	32	0.78	35.0
DA 06404	R 1.9	115	16	1589	0.20	52	56.8	36	19.8	14	125	2711	0.1%	215	2.64	0.37	15	0.80	16.2
DA 06405	R 2.6	182	31	2065	0.24	59	67.6	51	26.2	9	157	2851	0.2%	128	2.11	0.60	24	1.25	27.1
DA 06406	R 2.1	118	20	4348	0.16	45	58.2	36	44.1	26	287	4598	904	739	2.58	0.38	14	0.97	14.3
DA 06407	R 2.2	109	26	2721	0.16	38	47.6	32	31.9	20	202	4501	895	424	2.37	0.40	11	1.07	14.5
DA 06408	R 1.7	88	20	538	0.64	27	28.2	27	8.2	19	72	4415	706	454	2.15	0.41	6	1.33	9.8
DA 06409	R 2.6	334	31	4578	0.23	36	52.9	30	59.6	25	416	4955	801	616	2.85	0.37	11	7.88	14.2
DA 06410	R 1.1	63	25	1639	0.08	53	51.9	21	19.9	17	116	2550	933	477	2.22	0.39	6	0.65	8.6
SA 26049	R 0.5	73	2	687	0.61	<	6.7	4	1.5	21	111	3495	155	161	2.63	0.08	<	1.13	3.2
SA 26050	R 0.9	134	9	5345	0.08	81	93.9	84	52.7	16	336	1060	0.1%	285	2.18	0.10	11	6.09	15.9
SA 26051	R 1.2	104	17	4896	0.10	61	68.3	43	59.3	10	189	2420	0.2%	274	1.31	0.26	16	2.28	21.3
SA 26052	R 2.0	623	29	14122	0.18	403	413.6	160	0.2m	30	494	1757	0.7%	741	3.04	0.19	36	1.69	45.6
SA 26053	R 1.6	168	23	3088	0.08	123	115.6	69	35.7	10	181	1125	0.2%	217	1.71	0.29	11	0.77	18.1
SA 26054	R 1.7	148	21	2797	0.10	97	100.4	42	33.4	15	165	1396	0.1%	531	2.15	0.17	8	1.10	12.8
SA 26055	R 1.5	179	27	3427	0.10	88	96.8	42	57.2	11	169	1167	0.2%	260	1.74	0.18	14	1.62	20.9
SA 26056	R 0.9	50	12	1038	0.18	19	13.3	10	5.8	16	95	2085	200	262	2.75	0.07	5	0.39	4.4
SA 26057	R 0.7	53	13	539	0.31	15	9.6	7	1.5	17	86	2635	154	216	3.31	0.07	5	0.21	2.6
SA 26058	R 0.5	41	14	898	0.23	11	13.4	7	4.2	14	97	1779	172	264	2.40	0.06	<	0.50	4.4
SA 26059	R 4.2	279	62	1233	0.18	133	134.8	77	15.0	8	108	879	0.2%	66	2.47	0.40	15	1.18	20.7
SA 26060	R 3.5	366	57	3164	0.20	101	103.8	64	65.4	17	222	998	0.2%	376	3.50	0.78	34	0.74	37.8
SA 26061	R 3.5	200	62	532	0.24	93	95.4	56	6.6	9	72	1052	0.2%	101	3.25	0.99	62	0.47	70.9
SA 26062	R 1.5	83	41	164	0.19	86	82.2	98	1.0	5	28	720	0.2%	58	1.82	0.21	31	0.68	41.6
SA 26063	R 2.1	99	87	144	0.51	138	144.4	152	2.2	7	29	1115	0.3%	59	3.71	0.53	70	0.99	94.8
SA 26064	R 2.3	78	62	86	0.47	109	116.0	105	0.9	6	16	926	0.2%	51	3.06	0.67	74	0.91	106.8
SA 26065	R 4.4	139	81	152	0.31	124	129.2	98	3.3	8	32	1071	0.2%	96	2.94	0.75	32	0.86	37.5
SA 26066	R 2.0	173	9	1193	0.31	55	51.8	29	14.6	10	234	2706	704	277	2.27	1.09	12	2.57	17.2
SA 26067	R 1.2	24	13	21	0.20	19	17.8	58	1.7	3	42	853	948	16	0.63	0.20	6	2.92	9.5
SA 26068	R 0.8	71	11	25	0.20	18	16.1	26	0.9	4	35	1941	0.1%	14	0.54	0.19	26	3.76	32.0

Min Limit 0.1 1 2 1 0.01 5 0.1 1 0.1 1 1 2 2 1 0.01 0.01 5 0.01 0.1  
 Max Reported\* 99.9 20000 20000 20000 100.00 9999 1000.0 9999 99.9 999 999 9999 999 9999 99.99 5.00 10000 100.00 1000.0  
 Method ICP ICP ICP ICP Assay ICP VGA ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP Assay VGA  
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate  
 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3L1 Ph:604/879 7878 Fax:604/879 7898





iPL Report: 9200590 T Falconbridge Ltd.  
 Project: 603 208 Jet

In: Aug 05, 1992  
 Out: Aug 13, 1992

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Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm
SA 26299	R 3.2	162	13	1112	0.12	26	44.6	22	11.7	10	193	2431	975	182	1.43	0.52	8	0.96	10.3
SA 26300	R 1.9	119	16	1960	0.14	36	56.1	53	16.5	11	230	1640	0.1%	213	1.62	0.45	11	1.19	12.1
SA 26301	R 1.8	121	19	1847	0.08	37	55.2	48	16.1	11	211	1667	0.1%	207	1.51	0.46	12	1.12	12.1
SA 26302	R 4.3	144	33	636	0.16	78	86.9	34	27.0	5	91	865	0.2%	49	1.73	1.25	10	1.34	15.5
SA 26303	R 4.6	176	62	1509	0.08	84	84.5	61	23.7	8	108	784	0.3%	252	1.58	0.32	15	1.07	20.4
SA 26304	R 1.9	154	17	3454	0.08	29	55.0	37	56.3	9	179	911	0.1%	450	1.38	0.35	9	0.58	11.2
SA 26305	R 0.8	74	23	1196	0.08	48	55.9	48	10.1	19	211	1443	0.2%	465	2.38	0.52	10	1.12	13.2
SA 26306	R 2.1	136	15	2224	0.04	45	55.2	37	26.4	18	276	985	0.1%	453	2.06	0.75	9	1.83	10.9
SA 26307	R 1.8	127	16	2700	0.10	35	47.5	34	26.9	16	267	1069	0.1%	478	1.90	0.87	10	2.07	9.9
SA 26308	R 1.8	124	14	2341	0.10	31	42.2	28	23.8	13	236	1083	0.1%	407	1.65	0.67	10	3.33	9.0
SA 26309	R 0.6	20	20	189	0.04	20	14.9	22	1.0	5	31	596	0.1%	131	0.82	0.09	<	1.10	8.0
SA 26310	R 1.3	19	22	159	0.08	19	15.7	27	1.2	4	24	510	0.2%	24	0.77	0.08	5	0.88	6.7
SA 26311	R 4.3	184	49	628	0.14	77	75.9	54	12.1	6	76	606	0.3%	100	1.39	0.24	18	1.32	20.7
SA 26312	R 6.4	249	86	4024	0.25	121	141.6	94	65.7	9	202	923	0.5%	159	1.98	0.69	36	3.32	43.9
SA 26313	R 7.2	169	71	485	0.27	104	125.0	84	15.7	6	69	562	0.4%	72	1.99	0.48	22	1.76	30.6
SA 26314	R 5.2	145	70	255	0.29	89	92.5	97	7.8	7	66	1432	0.3%	50	2.42	0.76	29	2.48	40.9
SA 26315	R 3.5	75	22	229	0.20	41	45.9	26	12.4	4	40	1589	0.1%	22	1.12	0.56	10	1.57	16.5
SA 26316	R 4.9	82	33	253	0.20	72	69.9	36	7.9	5	55	969	0.2%	27	1.75	0.59	15	1.36	18.2
SA 26317	R 8.5	154	42	481	0.25	100	43.8	39	27.4	6	72	899	0.2%	102	2.39	0.95	16	1.29	21.6
SA 26318	R 3.1	217	12	1188	0.18	79	79.8	65	13.1	6	196	1764	0.4%	60	1.62	0.30	21	2.29	27.0
SA 26319	R 2.5	71	24	1431	0.23	25	36.6	21	11.6	10	123	2759	639	217	1.69	0.16	6	0.83	8.1
SA 26320	R 2.9	291	26	5301	0.27	99	117.8	79	57.5	13	287	2842	0.3%	146	2.49	0.52	42	5.03	45.4
SA 26321	R 2.9	125	6	685	0.29	34	39.8	42	10.9	6	128	2507	0.2%	55	1.10	0.45	15	3.44	19.3
SA 26322	R 2.8	99	30	2324	0.08	33	51.4	38	25.6	10	180	1437	879	287	1.73	0.73	9	0.94	11.5
SA 26323	R 1.8	385	13	1092	0.14	122	138.8	121	47.7	12	138	931	0.5%	113	1.71	0.16	24	2.99	31.1
SA 26324	R 1.2	105	4	126	0.31	28	25.3	35	4.1	6	59	3833	0.1%	19	0.85	0.42	30	4.59	31.4
SA 26325	R 1.2	107	8	79	0.31	32	30.7	39	2.9	5	57	3363	0.1%	19	0.87	0.49	27	4.96	33.0
SA 26326	R 1.1	108	16	100	0.31	32	31.2	39	3.0	5	59	3061	0.1%	22	0.91	0.42	25	4.95	31.7
SA 26327	R 2.8	205	26	2169	0.16	81	80.2	71	51.5	9	203	961	0.3%	300	1.63	0.74	18	1.56	22.6
SA 26328	R 2.1	103	27	913	0.12	35	38.0	32	12.3	7	140	1155	0.1%	210	1.41	0.71	6	1.08	8.6
SA 26329	R 1.5	67	33	530	0.12	40	40.5	51	13.0	6	63	791	0.1%	195	1.50	0.25	8	0.81	11.9
SA 26330	R 4.7	96	47	842	0.22	112	122.6	46	14.9	6	77	1123	0.3%	78	2.52	0.61	14	1.36	18.6
SA 26331	R 3.7	162	46	736	0.22	108	105.2	78	7.7	5	102	755	0.4%	61	2.49	0.18	32	3.23	37.1
SA 26332	R 4.4	150	15	680	0.16	94	80.6	64	6.3	5	81	866	0.3%	56	2.18	0.55	19	0.95	24.4
SA 26333	R 3.2	262	8	11694	0.20	44	69.7	33	0.1m	13	399	1740	0.1%	135	1.14	0.66	17	3.37	23.2
SA 26334	R 1.8	193	22	904	0.20	67	67.5	62	18.1	8	98	1214	0.3%	107	1.94	0.52	17	1.99	24.4
SA 26335	R 2.3	142	19	1152	0.16	56	56.2	44	20.4	7	122	1509	0.2%	98	1.92	0.73	12	1.99	16.4
SA 26336	R 2.2	72	31	143	0.24	51	44.6	50	4.3	4	37	1182	0.2%	19	1.46	0.42	21	2.19	27.2
SA 26337	R 1.0	88	9	176	0.55	43	37.3	52	7.0	7	56	3906	0.2%	39	1.76	0.22	52	1.88	61.7

Min Limit 0.1 1 2 1 0.01 5 0.1 1 0.1 1 1 2 2 1 0.01 0.01 5 0.01 0.1  
 Max Reported\* 99.9 20000 20000 20000 100.00 9999 1000.0 9999 99.9 999 999 9999 999 9999 99.99 5.00 10000 100.00 1000.0  
 Method ICP ICP ICP ICP Assay ICP VGA ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP Assay VGA  
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate  
 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3F1 Ph:604/879-7878 Fax:604/879-7898



2036 Columbia Street  
 Vancouver, B.C.  
 Canada V5Y 3E1  
 Phone (604) 879-7878  
 Fax (604) 879-7898

iPL Report: 9200590 T Falconbridge Ltd.  
 Project: 603 208 Jet

In: Aug 05, 1992  
 Out: Aug 13, 1992

S.S.I  
 170

Page 5 of 5

Section 1 of 1  
 Certified BC Assayer

David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	S %	As ppm	As ppm	Mo ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	V ppm	Mn ppm	Fe %	P %	Se ppm	C Org %	Se ppm
SA 26338	R 1.0	91	5	123	0.53	85	67.8	92	5.7	6	56	2718	0.2%	19	2.07	0.49	68	4.26	77.7
SA 26339	R 2.4	118	21	438	0.43	31	29.3	54	8.8	9	87	6237	0.1%	91	1.69	0.36	14	2.63	18.7
SA 26340	R 2.2	87	9	340	0.35	35	35.0	26	5.1	10	60	7833	701	80	1.94	0.74	23	2.79	25.7
SA 26341	R 0.8	51	7	34	0.20	15	11.6	21	1.2	6	36	5834	0.1%	13	0.48	0.16	6	3.24	4.6
SA 26342	R 1.6	67	3	22	0.21	28	30.0	31	2.4	10	23	9578	788	10	0.85	0.75	12	3.07	14.1
SA 26343	R 1.3	46	6	85	0.35	28	28.0	86	1.0	5	38	2568	0.1%	12	1.27	0.22	13	5.38	15.8
SA 26344	R 2.1	97	8	94	0.31	41	37.4	37	3.6	5	41	3084	0.2%	16	1.24	0.48	28	3.68	30.3
SA 26345	R 1.4	94	15	53	0.25	27	26.2	38	3.4	4	41	1892	0.1%	18	0.90	0.39	32	3.96	32.7
SA 26346	R 2.2	78	26	120	0.25	24	22.2	26	5.2	5	59	2238	0.1%	33	0.88	0.42	10	3.81	12.7
SA 26347	R 1.2	159	9	56	0.33	56	51.7	71	2.6	5	53	2222	0.2%	14	1.21	0.53	65	5.11	76.6
SA 26348	R 1.3	114	7	119	0.25	20	21.2	18	5.0	6	42	3334	0.1%	24	0.97	0.65	23	3.21	23.7
SA 26349	R 1.6	64	8	40	0.29	17	17.0	18	2.4	6	35	4419	912	15	0.70	0.32	34	2.68	31.0
SA 26350	R 0.6	92	9	54	0.27	18	19.8	33	2.4	4	43	1610	0.1%	20	0.64	0.23	24	4.73	24.8
SA 26351	R 0.6	90	8	68	0.24	19	21.9	32	3.5	4	42	1311	0.1%	27	0.66	0.75	24	4.61	26.4

Min Limit 0.1 1 2 1 0.01 5 0.1 1 0.1 1 1 2 2 1 0.01 0.01 5 0.01 0.1  
 Max Reported\* 99.9 20000 20000 20000 100.00 9999 1000.0 9999 99.9 999 999 9999 999 9999 99.99 5.00 10000 100.00 1000.0  
 Method ICP ICP ICP ICP Assay ICP VGA ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP Assay VGA  
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 Z=Estimate % Max=No Estimate  
 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879-7878 Fax:604/879-7898

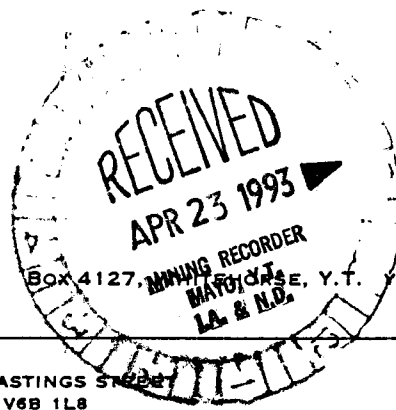
**APPENDIX IV****REFERENCES**

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- HOLSER, W.T., SCHIDLOWSKI, M., MACKENZIE, F.T., and MAYNARD, J.B., 1988. Biogeochemical cycles of carbon and sulfur. *In Gregor, C.B., Garrels, R.M., Mackenzie, F.T., and Maynard, J.B., Chemical cycles in the evolution of the earth: John Wiley and Sons, New York pp. 133-174.*
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**ARCHER, CATHRO**  
& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

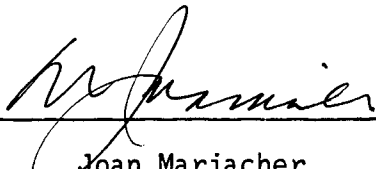


1016 - 510 WEST HASTINGS STREET  
VANCOUVER, B.C. V6B 1L8

AFFIDAVIT

I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Jet 1-104 mineral claims on Claim Sheet 1050/3 is accurate.

  
Joan Mariacher

Sworn before me at Vancouver, B.C.

this 20th day of

April, 1993

  
\_\_\_\_\_

Notary, Yukon Territory

093095

STATEMENT OF COSTS  
JET CLAIMS (PN 001-208)

Geology

Salaries \$ 18,873.76  
Travel & Expenses 2,376.33  
Contract Payments 5,465.84  
Field Expenses 10,663.35  
Assays 1,036.00

Total Geology \$ 38,415.28

Geochemistry

Salaries \$ 9,814.44  
Travel & Expenses 836.50  
Contract Payments 15,468.32  
Field Expenses 4,454.75  
Assays 6,806.35

Total Geochemistry \$ 37,380.36

Sub-total 75,795.64

Administration 10% 7,579.56

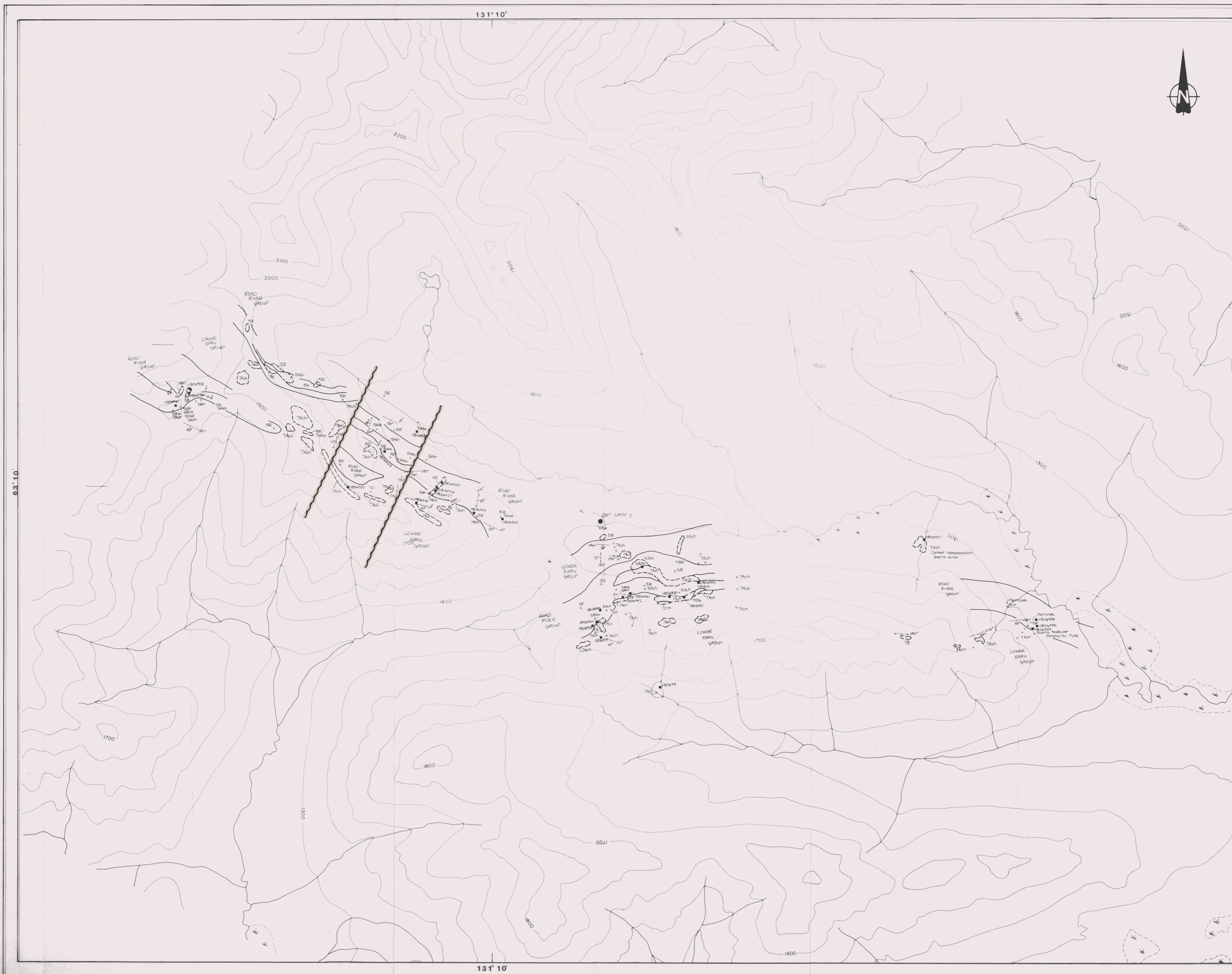
**TOTAL EXPENDITURES** \$ 83,375.20

CERTIFIED CORRECT



R. B. BAND

093095



LEGEND

NUMBER	UPPERCASE LETTER
9	A Clay Shale
7	B Silty Shale
5	C Sandstone
	D Limestone
	E Chert
	L Conglomerate

QUALIFIERS	QUALIFIERS
di Diamicritic	br Br Brecciated
li Limestone Bed	fr Fossiliferous
tr Textured	gr Graptolitic
bu Banded	ft Fatig
br Burrowed	mt Metamorphic
nu Nodular	no Nodular
co Carbonaceous	ph Phosphatic
cb Carbonaceous	py Pyritic
ch Cherty	gr Graptolitic

**SYMBOLS**

- Geological Contact (Observed, inferred, assumed)
- Normal Fault
- Thrust Fault
- Bedding Attitude (upright, overturned)
- Cleavage Attitude
- Fold Axis
- Mapped Outcrop Area
- Mapped Outcrop
- Rock Sample Location

TABLE OF FORMATIONS

TABLE 1

UPPER EARN GROUP (Upper Devonian to Mississippian)
9 UNDIVIDED
9B(S) SILTY ORGANIC SHALE Medium grey, strongly fissile, with 5% undifferentiated plant remains.
9L CONGLOMERATE Dark grey sandstones to subangular, light to medium grey chert fragments (3mm to 30mm). Coated framework with little or no matrix material.
LOWER EARN GROUP (Middle to Upper Devonian)
7 UNDIVIDED
7ACh CHERT and CARBONACEOUS SHALE Black variably interbedded cherty and carbonaceous shales. Cherty beds reach centimetric thickness and vary in thickness from 2cm to 30cm. Carbonaceous intervals are generally well foliated, black, and 2mm to 2cm thick.
7Di Limestone Bleached white weathered surfaces, micritic, some thinly laminated.
ROAD RIVER GROUP (Ordovician to Lower Devonian)
5 UNDIVIDED
5A(C) CARBONACEOUS GRAPTOLITE SHALE Black, strongly foliated clay shale, graptolites in abundance along bedding plane. Cleavage and spiral called Monograptus Spiralis. Some interbedded with chert.
5ACh INTERBEDDED CHERT and CARBONACEOUS SHALE Black variably interbedded cherty and carbonaceous shales. Cherty beds exhibit conical fracture and vary in thickness from 2cm to 16cm. Carbonaceous intervals are generally well foliated, black, and 2mm to 2cm thick.
5B(C) TRANSITIONAL SILTY SHALE Dark brown to brownish black, variably carbonaceous, with a distinct 2cm to 4cm wide cleavage parting. Weasily fissile.
5D(L) LIMESTONE Dark grey, massive limestone, in strongly folded areas, occurring as small, sub-rounded limestone beds, 25cm to 11 meter wide.
5E PYRITIC CHERT and PYRITIC SILTY SHALE Dark grey to light grey, variably homogeneous to thinly laminated, 1% to 5% disseminated pyrite. Pyrite is fine grained and occurs in euhedral to fibrous form.

*W. J. Edwards*

DWG 147

SCALE 1:10,000

Figure 8

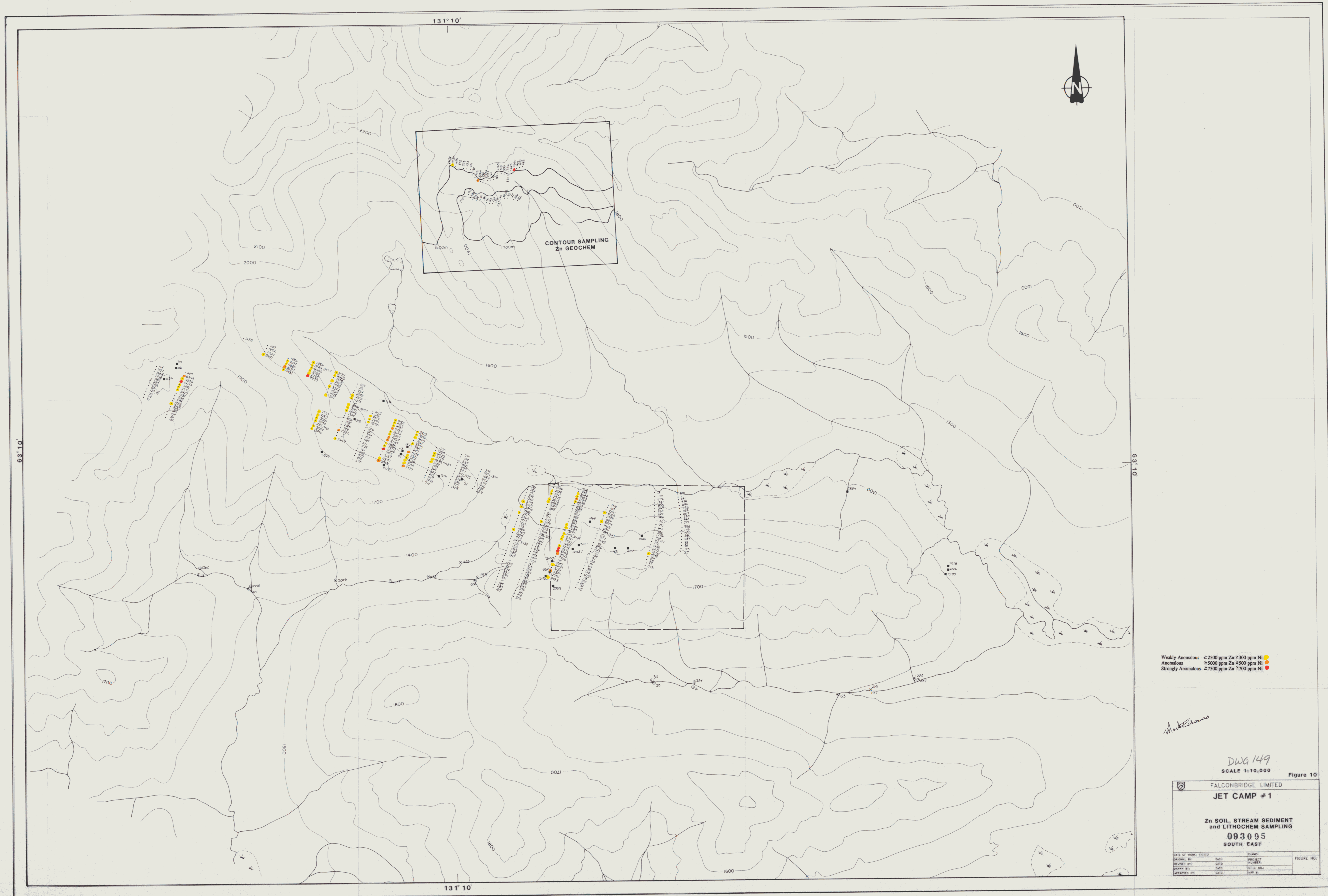
FALCONBRIDGE LIMITED			
JET CAMP #1			
093095			
GEOLOGY and SURFACE GEOCHEMISTRY			
SOUTH EAST			
DATE OF WORK	DATE	PROJECT	FIGURE NO.
DRAWN BY	DATE	NUMBER	
APPROVED BY	DATE	MAP #	

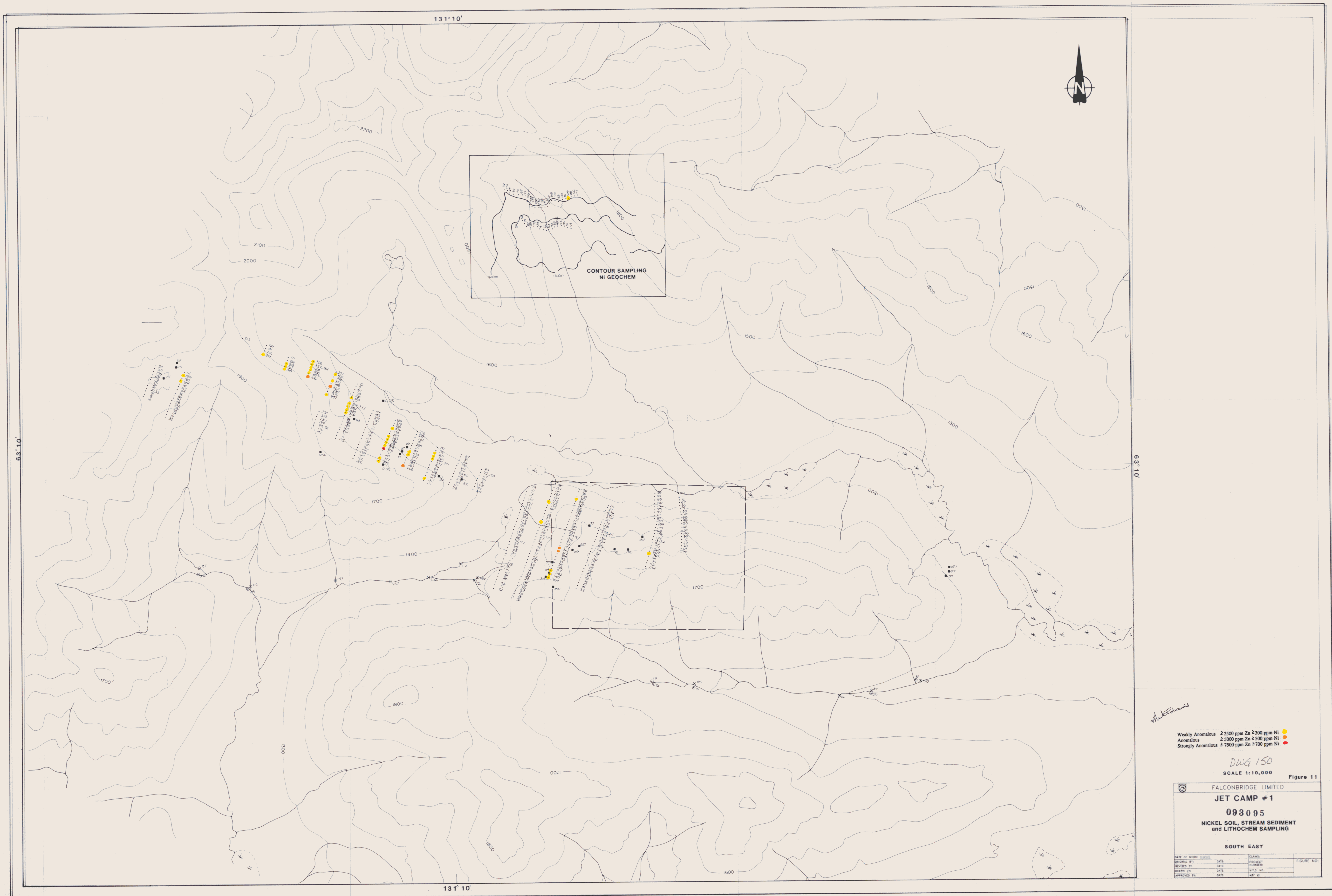


*W. Edwards*

DWG 148  
SCALE 1:10,000 Figure 9

FALCONBRIDGE LIMITED			
JET CAMP #1			
093095			
SOIL SAMPLES			
SOUTH EAST			
DATE OF WORK	DATE	PROJECT	FIGURE NO.
DRAWN BY	DATE	NUMBER	
CHECK BY	DATE	N.I.S. NO.	
APPROVED BY	DATE	MAP #	



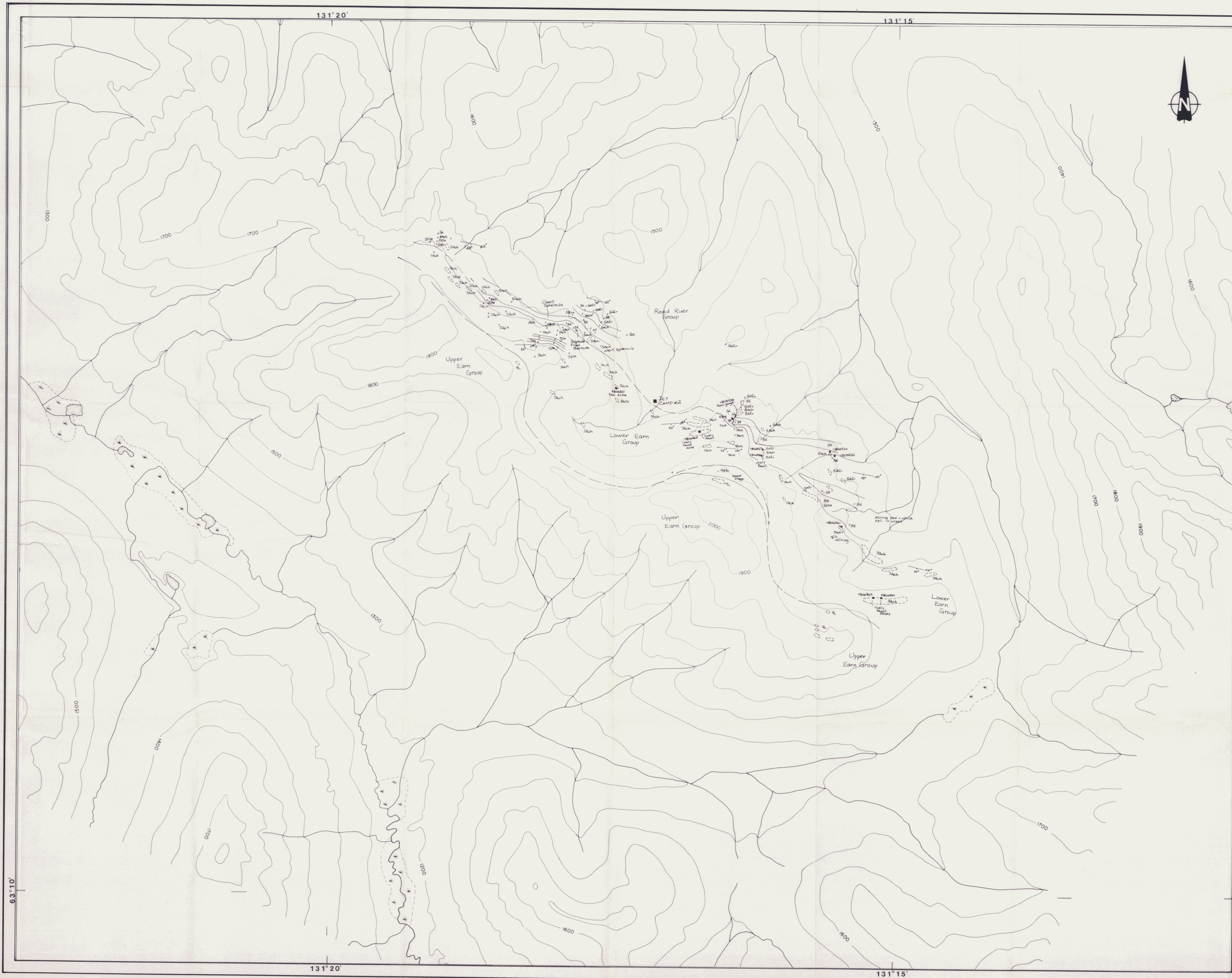


Weakly Anomalous 2-2500 ppm Zn 2-300 ppm Ni  
 Anomalous 2-5000 ppm Zn 2-500 ppm Ni  
 Strongly Anomalous 2-7500 ppm Zn 2-700 ppm Ni

DWG 150

SCALE 1:10,000 Figure 11

FALCONBRIDGE LIMITED			
<b>JET CAMP #1</b>			
<b>093095</b>			
NICKEL SOIL, STREAM SEDIMENT and LITOCHEM SAMPLING			
SOUTH EAST			
DATE OF WORK 1992	SCALE	PROJECT	FIGURE NO.
DRAWN BY	DATE	FORWEN	
DESIGN BY	DATE	N.T.S. NO.	
APPROVED BY	DATE	MAP #	



LEGEND

NUMBER	UPPERCASE LETTER
5	A
7	B
5	C
	D
	E
	L

QUALIFIERS	QUALIFIERS
bu	bu Buryitic
li	li Limestone Bed
br	br Brecciated
bl	bl Blocky
br	br Brecciated
bu	bu Buryitic
ca	ca Carbonaceous
ch	ch Cherty
fr	fr Fossiliferous (incl. graptolites)
ft	ft Felsic (metachert)
no	no Nodular
ph	ph Phosphatic
py	py Pyritic (dis. to banded)
gr	gr Graptolitic

**SYMBOLS**

	Geological Contact (observed, inferred assumed)
	Normal Fault
	Thrust Fault
	Bedding Altitude (upright, overturned)
	Cleavage Altitude
	Fold Axis
	Mapped Outcrop Area
	Mapped Outcrop
	Rock Sample Location

TABLE OF FORMATIONS

TABLE 1

<b>UPPER EANN GROUP</b> (Upper Devonian to Mississippian)	
UNDIVIDED	
987b	SILTY ORGANIC SHALE Medium grey, stringy fissile, with 5% unconsolidated plant remains.
91	CONGLOMERATE Dark grey subrounded to subangular, light to medium grey chert fragments (less to 30mm). Closed framework with little or no matrix material.
<b>LOWER EANN GROUP</b> (Middle to Upper Devonian)	
UNDIVIDED	
7ah	CHERT and CARBONACEOUS SHALE Black, variably interbedded cherty and carbonaceous shales. Cherty beds exhibit conchoidal fracture and vary in thickness from 2cm to 30cm. Carbonaceous interbeds are generally well foliated, black, and 2mm to 2cm thick.
73a	LIMESTONE Bleached white weathered surfaces, micritic, some thinly laminated.
<b>ROAD RIVER GROUP</b> (Ordovician to Lower Devonian)	
UNDIVIDED	
5a/cx	CARBONACEOUS GRAPTOLITIC SHALE Black, stringy bedded clay shale, graptolites in abundance, some bedding parallel cleavage. Graptolites include strongly pinnate Monograptus and spiral coiled Monograptus Spiralis. Some interbedded with chert.
5ah	INTERBEDDED CHERT and CARBONACEOUS SHALE Black, variably interbedded cherty and carbonaceous shales. Cherty beds exhibit conchoidal fracture and vary in thickness from 2cm to 16cm. Carbonaceous interbeds are generally well foliated, black, and 2cm to 2cm thick.
5i(cc)	TRANSITIONAL SILTY SHALE Dark grey to brownish black, variably calcareous, with a distinct 2cm to 4cm wide cleavage parting. Weakly fissile.
5e(d)h	LIMESTONE Dark grey, massive limestone, in strongly folded areas, occurring as small, sub-rounded limestone boulders, 20cm to 1 meter wide.
5e	PIRITIC CHERT and PIRITIC SILTY SHALE Dark grey to light grey, variably homogeneous to thinly laminated, 1% to 5% disseminated pyrite. Pyrite in fine grained and occurs in subhedral to fibrous form.

*M. Edwards*

DWG 151  
1:10,000

Figure 12

FALCONBRIDGE LIMITED			
JET CAMP #2			
093095			
GEOLOGY and SURFACE GEOCHEMISTRY			
NORTH WEST			
DATE OF WORK: 1992	DRAWN:	PROJECT:	FIGURE NO:
DESIGNED BY:	DATE:	NUMBER:	
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CHECKED BY:	DATE:	REV. #:	

Jet Camp #2 - Soil Samples Worksheet

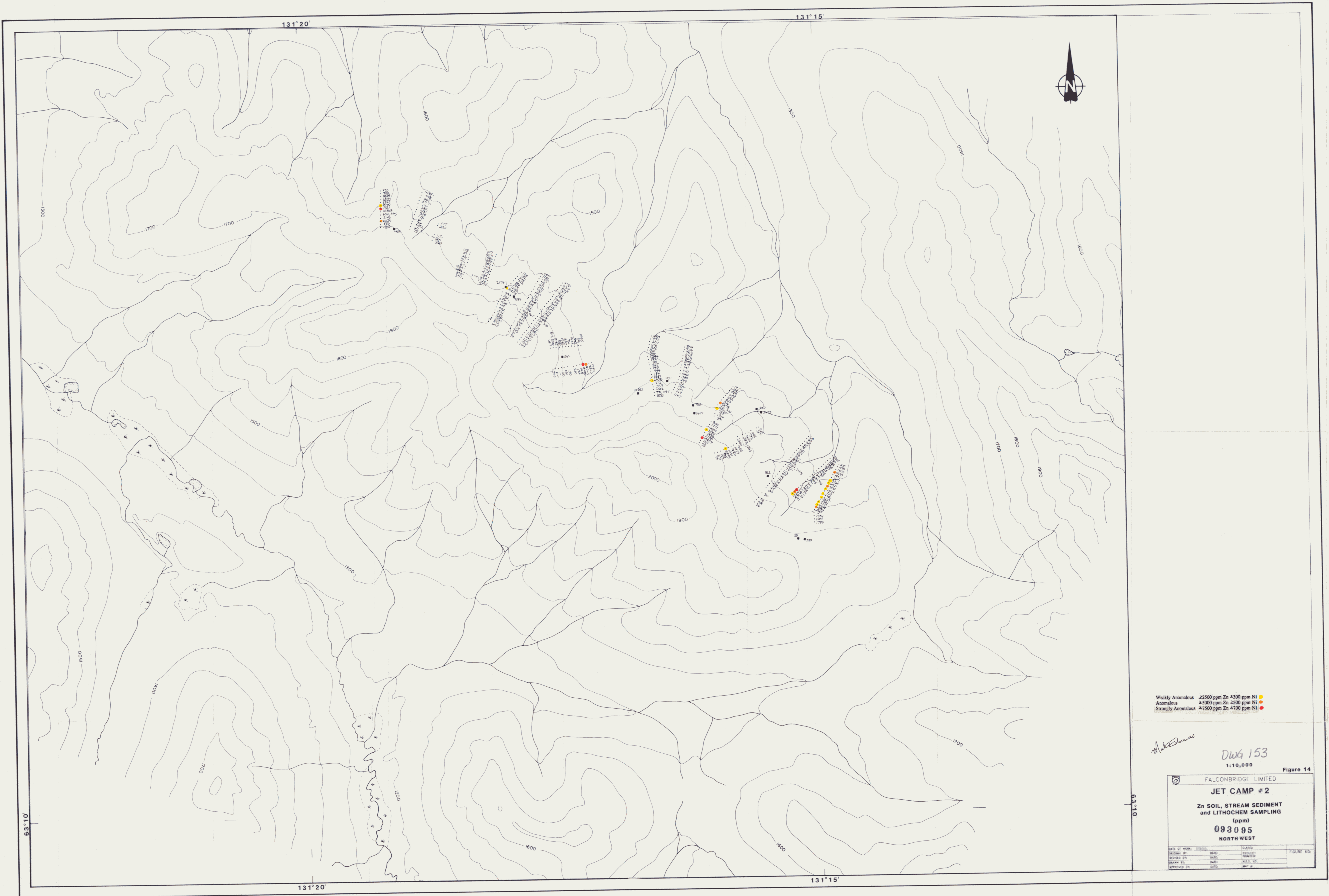


*M. Edwards*

DWG 152  
1:10,000

Figure 13  
FALCONBRIDGE LIMITED  
**JET CAMP #2**  
SOIL SAMPLES  
**093095**  
NORTH WEST

DATE OF WORK	DATE	ISSUED	FIGURE NO.
DESIGNED BY		PROJECT	
DRAWN BY		NUMBER	
CHECKED BY		DATE	
APPROVED BY		SCALE	



Weakly Anomalous 2250 ppm Zn > 300 ppm Ni  
 Anomalous ≥ 5000 ppm Zn > 500 ppm Ni  
 Strongly Anomalous ≥ 7500 ppm Zn > 700 ppm Ni

*M. Edwards*  
 DWG 153  
 1:10,000 Figure 14

FALCONBRIDGE LIMITED	
<b>JET CAMP #2</b>	
Zn SOIL, STREAM SEDIMENT and LITHOCHEM SAMPLING (ppm)	
<b>093095</b>	
NORTH WEST	
DATE OF WORK: 1992	FIGURE NO:
DRAWN BY: [ ]	PROJECT:
REVISED BY: [ ]	NUMBER:
CHECK BY: [ ]	DATE:
APPROVED BY: [ ]	DATE:

63-10

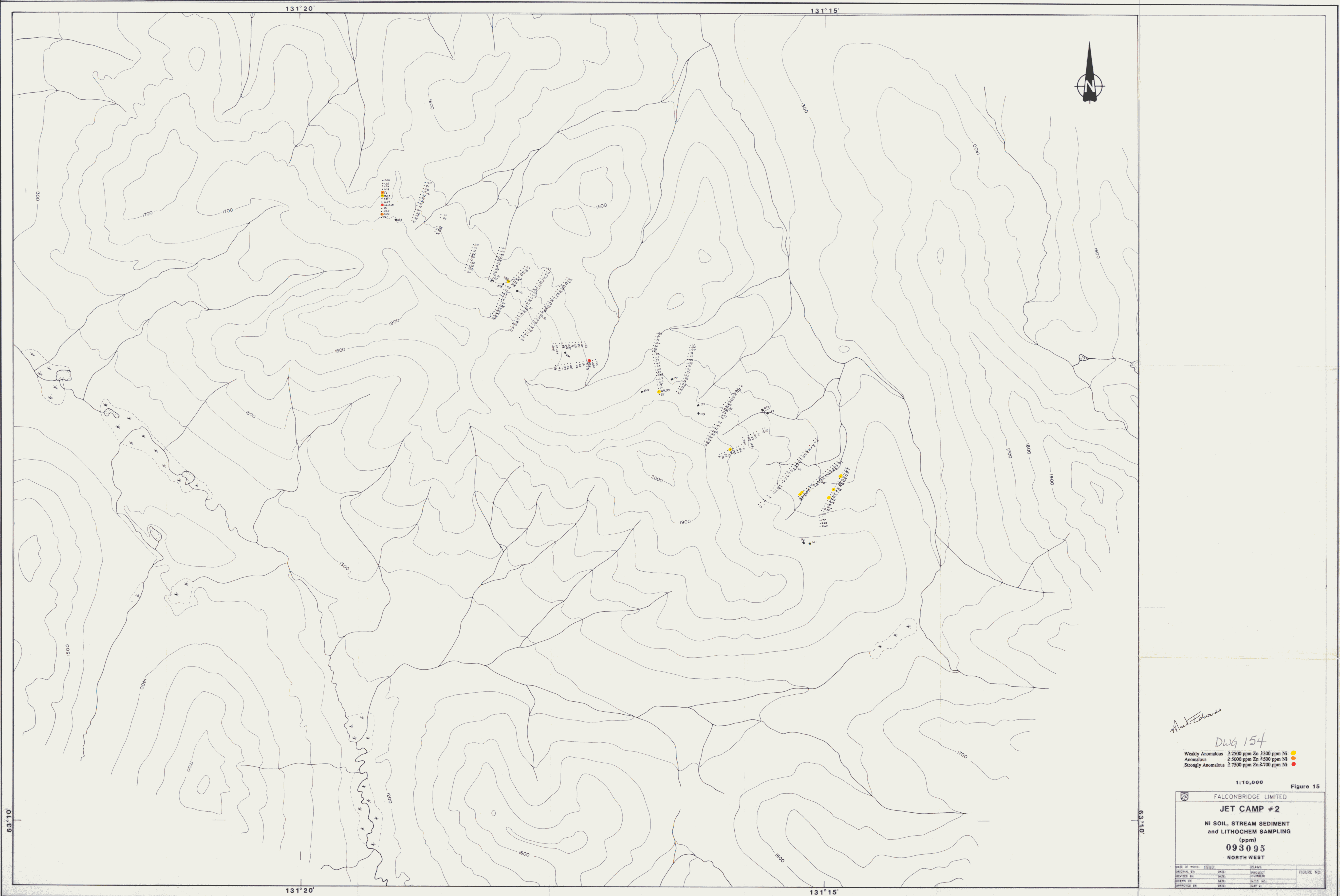
63-10

131° 20'

131° 15'

131° 20'

131° 15'



*Mark Edwards*

DWG 154

Weakly Anomalous ≥ 2500 ppm Zn ≥ 300 ppm Ni ●  
 Anomalous ≥ 5000 ppm Zn ≥ 500 ppm Ni ●  
 Strongly Anomalous ≥ 7500 ppm Zn ≥ 700 ppm Ni ●

1:10,000 Figure 15

FALCONBRIDGE LIMITED			
<b>JET CAMP #2</b>			
NI SOIL, STREAM SEDIMENT and LITHOCHEM SAMPLING (ppm)			
<b>093095</b>			
NORTH WEST			
DATE OF WORK: 1999	SCALE:	PROJECT:	FIGURE NO:
DRAWN BY: [ ]	DATE: [ ]	PROJECT:	FIGURE NO:
REVIEWED BY: [ ]	DATE: [ ]	PROJECT:	FIGURE NO:
APPROVED BY: [ ]	DATE: [ ]	PROJECT:	FIGURE NO: