



41109NW0200 2.11533 JANES

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FALCONBRIDGE LTD.

REPORT
ON
GEOPHYSICAL WORK
JANES TOWNSHIP

PROJ# 6-122

RECEIVED

AUG 22 1988

MINING LANDS SECTION

JULY 1988

D. LONDRY
TIMMINS GEOPHYSICS LTD.

SUMMARY AND RECOMMENDATIONS

A magnetic survey was carried out for Falconbridge Ltd. in Janes Township during June of 1988.

Three different magnetic responses are present on the property. The regional geology suggests that a broad northeast-southwest striking magnetic low is underlain by sediments. Low frequency high magnetic anomalies to the east and west of the low reflect ultramafics. The high frequency anomalies directly to the east of the sediments may reflect pyrrhotite mineralization.

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- 2. VERTICAL MAGNETIC GRADIENT (BACK POCKET)

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INTRODUCTION

During June 1988, a magnetic survey was carried out for Falconbridge Ltd. on their Janes Township property.

The property is located approximately 53 kilometres northeast of the city of Sudbury in the Sudbury Mining Division (Figure 1). It consists of 9 claims numbered as follows:

919102 - 919107 inclusive
961841 - 961843 inclusive

The claims were accessed by travelling east from Sudbury on Highway 17 and then north from Hagar along lumber roads. The field crew included J. DerWeduwen and D. Londry.

SURVEY DESCRIPTIONS

An east-west baseline was established at 0+00 North. North-south grid lines were cut every 100 meters and picketed every 25 meters.

The magnetic survey was carried out with a Scintrex IGS-2/MP-4. This instrument is a proton precession magnetometer which measures the earth's total magnetic field to an accuracy of .1 gammas. The diurnal drift was monitored every 30 seconds with a Scintrex MP-3 base station

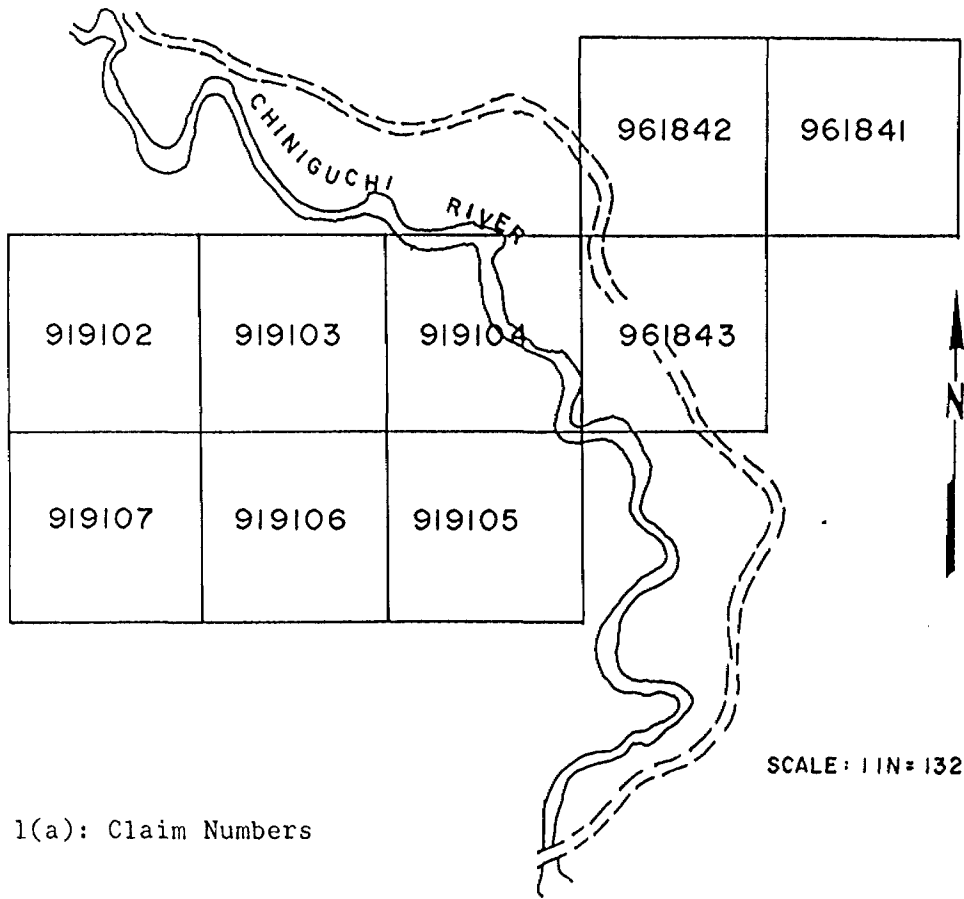


FIGURE 1(a): Claim Numbers

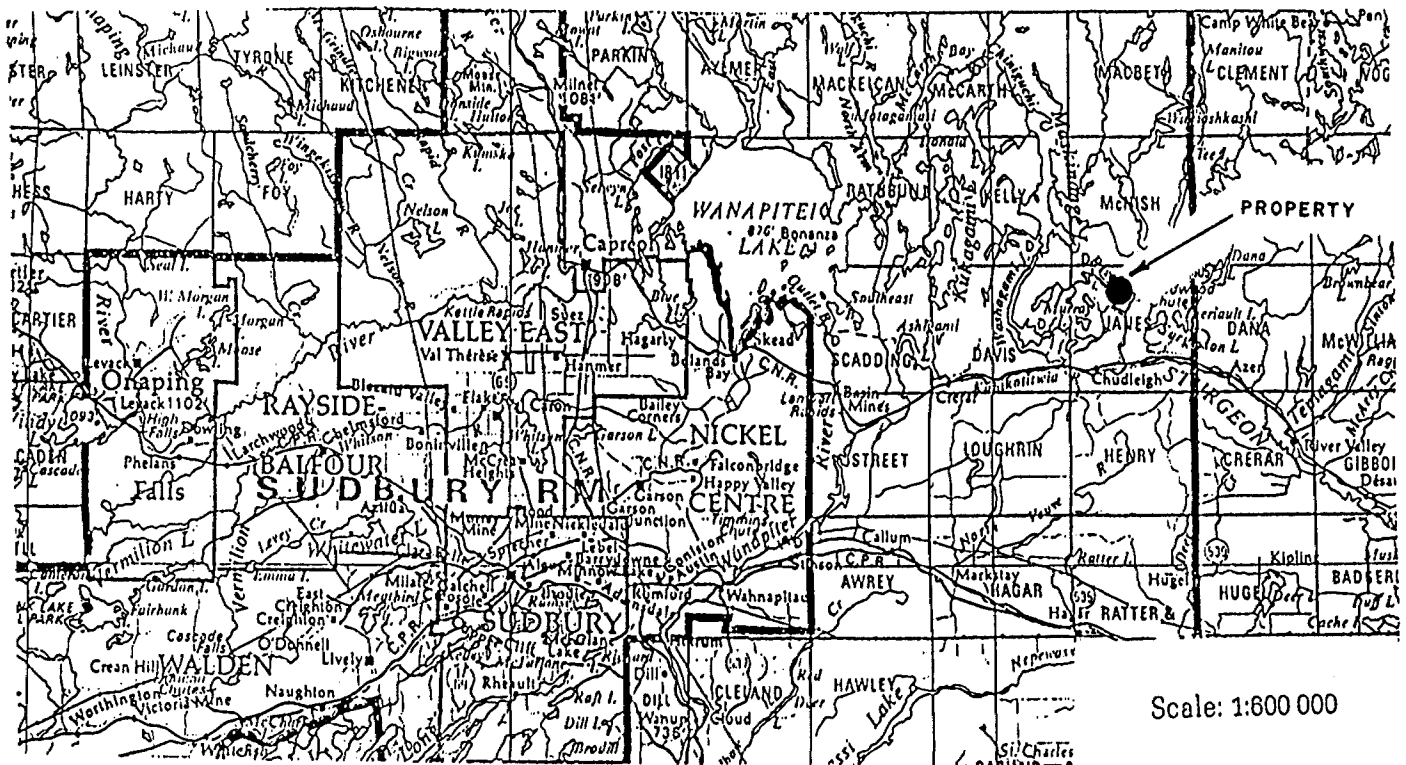


FIGURE 1(b): Location Map

magnetometer. Parameters measured in the survey included the total magnetic field and the vertical magnetic gradient. The vertical gradient was measured with a sensor separation of 1 metre.

MAGNETIC RESULTS

The total magnetic field data are contoured on map 1 with a contour interval of 100 gammas. The vertical magnetic gradient data are profiled on map 2 with a profile scale of 1 cm = 50 gammas/metre.


The total field map can be divided into three areas with different magnetic responses.

A linear low magnetic anomaly strikes northeast-southwest through the east half of the property; the regional geology from ODM map 2361 suggests that this area is underlain by sediments. An offset in this anomaly at 0 North indicates the presence of a west-northwest striking fault with a right hand movement.

A large ultramafic body under the west half of the property is reflected by a low frequency magnetic high anomaly. The source or significance of isolated positive and negative gradient anomalies within this area is unknown.

Strong high frequency anomalies to the east of the magnetic low reflect small near surface intrusives or pyrrhotite mineralization close to the contact between the

sediments and ultramafics. The source of these anomalies are also reflected by high gradient anomalies. Similar high frequency anomalies in the southwest corner of the property may reflect a west-northwest striking diabase dike.


DOUGLAS LONDREY
TIMMINS GEOPHYSICS LTD.

APPENDIX A

DOCUMENT NO.
WB807-170

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

2.11533

Mining Act

Type of Survey(s) GEOPHYSICAL		Township or Area JANES TOWNSHIP	
Claim Holder(s) FALCONBRIDGE LIMITED		Prospector's Licence No. A-21647	
Address P. O. BOX 40, COMMERCE COURT WEST, TORONTO, ONT. M5L 1B4			
Survey Company TIMMINS GEOPHYSICS LTD.		Date of Survey (from & to) Day Mo. Yr. 24 06 88 to Day Mo. Yr. 25 06 88	Total Miles of line Cut 18 km.
Name and Address of Author (of Geo-Technical report) D. LONDY, P.O. BOX 1783, SOUTH PORCUPINE, ONTARIO PON 1H0			

Credits Requested per Each Claim in Columns at right			Mining Claims Traversed (List in numerical sequence)					
Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
			Prefix	Number		Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	- Electromagnetic	20	S	919102				
	- Magnetometer			919103				
	- Radiometric			919104				
	- Other			919105				
	Geological			919106				
Man Days Complete reverse side and enter total(s) here	Geophysical			919107				
	- Electromagnetic			961841				
	- Magnetometer			961842				
	- Radiometric			961843				
	- Other							
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Geological							
	Geochemical							
	Electromagnetic							
	Magnetometer							
	Radiometric							

**ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 2 1988
RECEIVED**

**SUBURRY MINING DIV.
RECEIVED
AUG 18 1988
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.
3:12 PM**

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \div 15 = Total Days Credits

\$ \div 15 =

Total number of mining claims covered by this report of work. **9**

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded 180	Date Recorded Aug. 19/88	Mining Recorder <i>V. C. Wells</i>
Date Approved as Recorded 26 Aug 88	Branch Director <i>[Signature]</i>	

Date **August 18, 1988**

Recorded Holder or Agent (Signature) *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
TED BARNETT - FALCONBRIDGE LIMITED (EXPLORATION) 693-2761

P. O. Box 40, FALCONBRIDGE, ONTARIO POM 1S0

Date Certified **August 18, 1988**

Certified by (Signature) *[Signature]*



Mining Act

Type of Survey(s) GEOPHYSICAL	Township or Area JANES TOWNSHIP
Claim Holder(s) FALCONBRIDGE LIMITED	Prospector's Licence No. A-21647
Address P. O. BOX 40, COMMERCE COURT WEST, TORONTO, ONT. M5L 1B4	
Survey Company TIMMINS GEOPHYSICS LTD.	Date of Survey (from & to) 24 Mo. 88. 25 Mo. 88.
Name and Address of Author (of Geo-Technical report) D. LONDY, P.O. BOX 1783, SOUTH PORCUPINE, ONTARIO PON 1H0	
Total Miles of line Cut 18 km.	

Credits Requested per Each Claim in Columns at right			Mining Claims Traversed (List in numerical sequence)		
Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend. Days Cr.
			Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20	S	919102	
	- Magnetometer			919103	
	- Radiometric			919104	
	- Other			919105	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological			919106	
	Geochemical			919107	
				961841	
				961842	
Man Days Complete reverse side and enter total(s) here	- Electromagnetic			961843	
	- Magnetometer				
	- Radiometric				
	- Other				
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Geological				
	Geochemical				
	Electromagnetic				
	Magnetometer				
	Radiometric				

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AUG 22 1988
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date **August 18, 1988** Recorded Holder or Agent (Signature) *[Signature]*

Total number of mining claims covered by this report of work.

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

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P. O. Box 40, FALCONBRIDGE, ONTARIO POM 1S0

Date Certified **August 18, 1988** Certified by (Signature) *[Signature]*

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations 741 Number of Readings 1545
Station interval 12.5 meters Line spacing 100 meters
Profile scale VERTICAL MAGNETIC GRADIENT 1cm.=50 gammas/meter
Contour interval TOTAL FIELD: 100 gammas

MAGNETIC

Instrument SCINTREX IGS-2/MP-4
Accuracy - Scale constant ± .1 gammas
Diurnal correction method SCINTREX MP-3 BASE STATION MAGNETOMETER
Base Station check-in interval (hours) 30 seconds
Base Station location and value LINE 0, 450 SOUTH
57000 gammas

ELECTROMAGNETIC

Instrument
Coil configuration
Coil separation
Accuracy
Method: [] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency (specify V.L.F. station)
Parameters measured

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument _____ Range _____
Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____
Values measured _____
Energy windows (levels) _____
Height of instrument _____ Background Count _____
Size of detector _____
Overburden _____
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____
Instrument _____
Accuracy _____
Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____
Instrument(s) _____
(specify for each type of survey)
Accuracy _____
(specify for each type of survey)
Aircraft used _____
Sensor altitude _____
Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____
Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY - PROCEDURE RECORD



Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

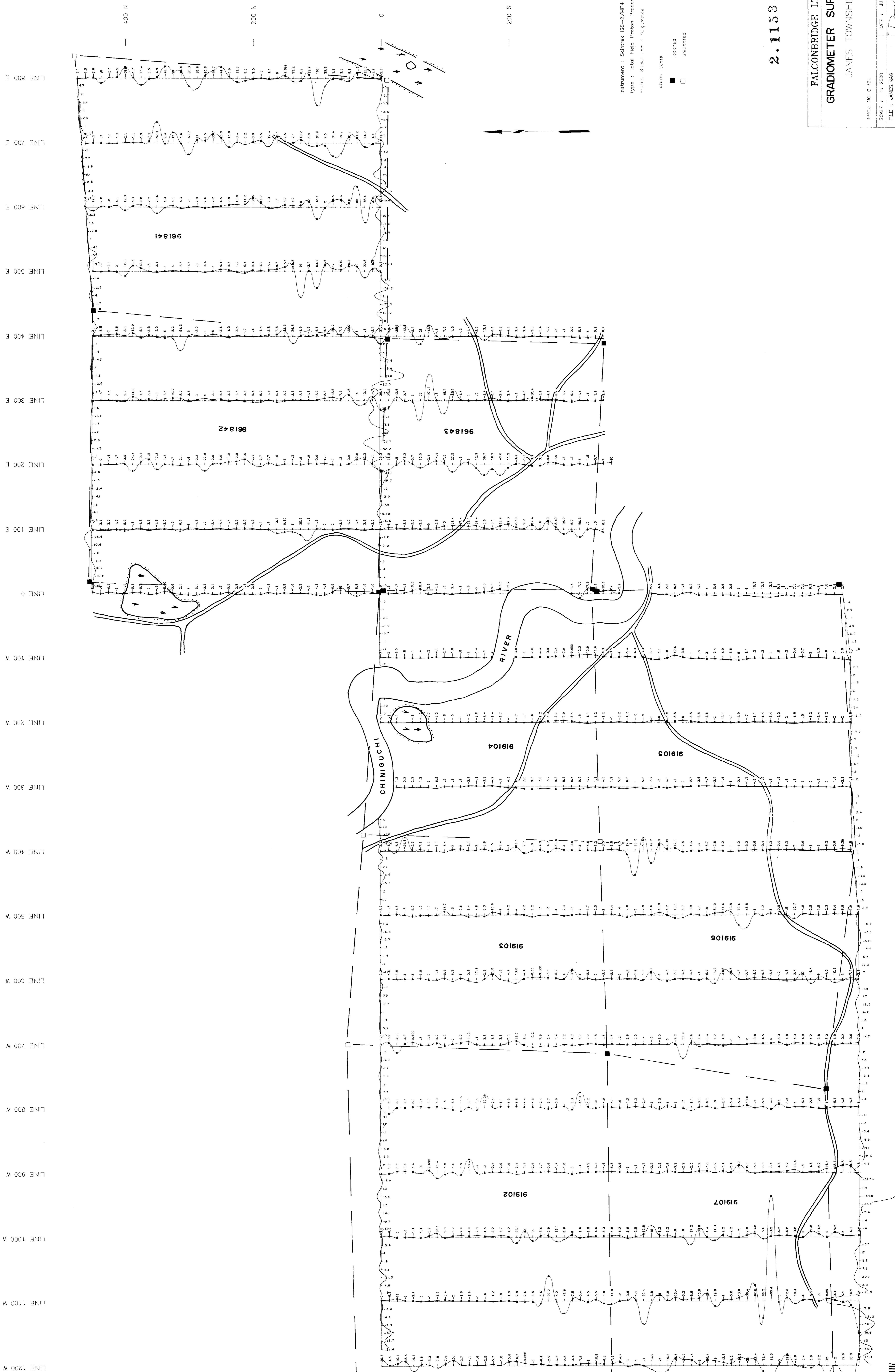
Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



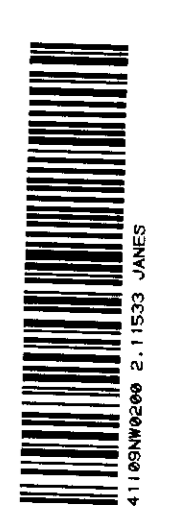
Instrument : Scintrex ISS-2/MP4
 Type : Total Field Proton Precession
 Units : Stat. for 10 Gamma

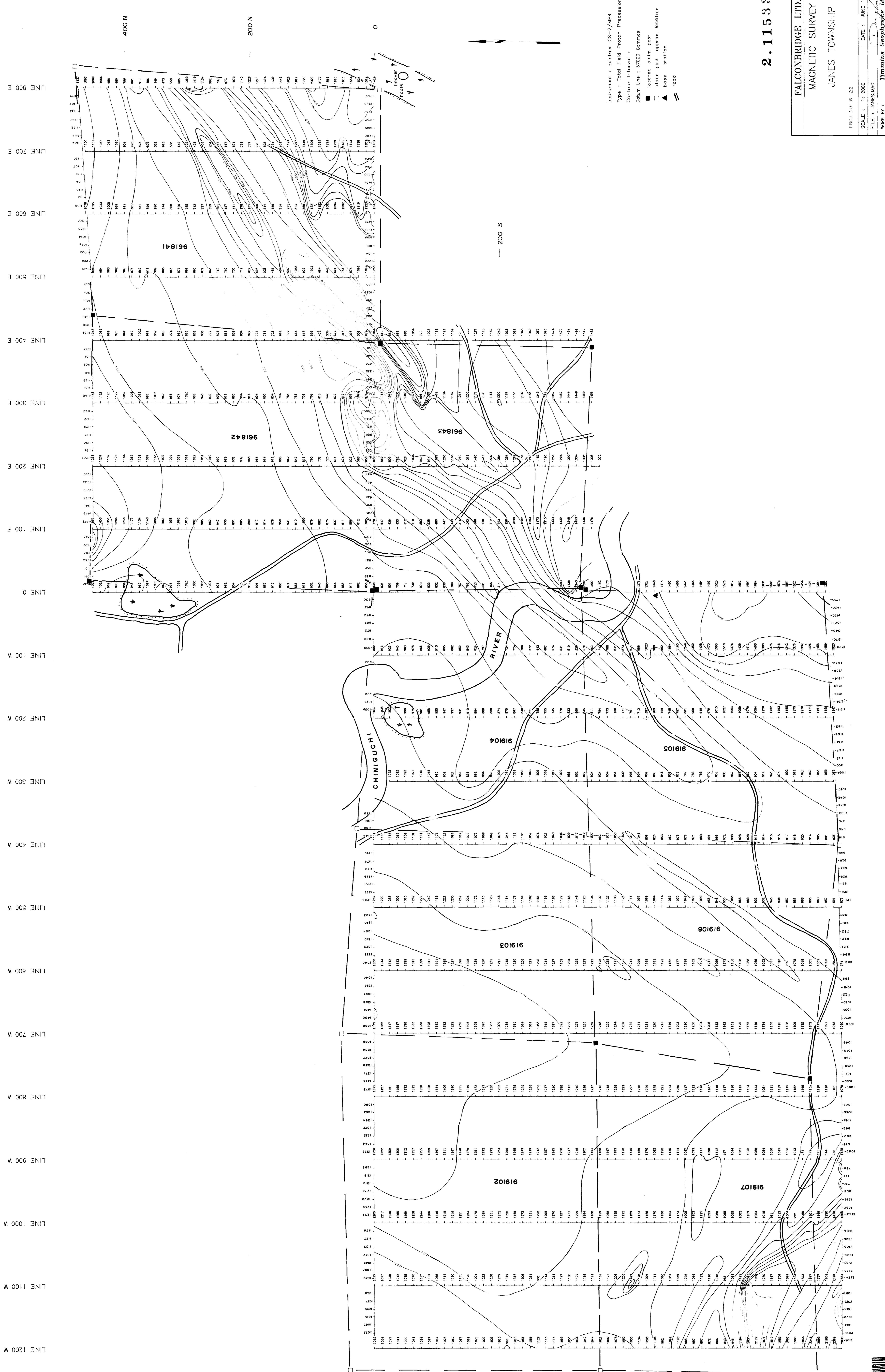
column ACTS
 ■ located
 □ unlocated

2.11533

FALCONBRIDGE LTD.
 GRADIOMETER SURVEY
 JANES TOWNSHIP

FILE : JANES1843
 DATE : JUNE 1988
 WORK BY : *Thomson Geophysics Ltd.*



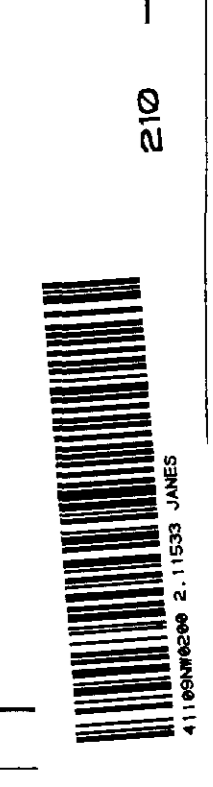


Instrument : Scintrex GS-2/MP4
 Type : Total Field Proton Precession
 Contour Interval :
 Datum Line : 57000 Gammmas
 ■ located claim post
 ▲ claim post approx location
 ≡ road

2.11533

FALCONBRIDGE LTD.
MAGNETIC SURVEY
 JAMES TOWNSHIP

FRUJ NO: 6-4122
 SCALE : 1:2000
 FILE : JAMES.MAG
 DATE : JUNE 1988
 WORK BY : *D. J. ...*
 Tutorials Geophysics Ltd.





Min

Type of Survey(s) GEOPHYSICAL		Township or Area JANES TOWNSHIP	
Claim Holder(s) FALCONBRIDGE LIMITED		Prospector's Licence No. A-21647	
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Name and Address of Author (of Geo-Technical report) D. LONDRY, P.O. BOX 1783, SOUTH PORCUPINE, ONTARIO PON 1H0			

Credits Requested per Each Claim in Columns at right

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	- Magnetometer	
	- Radiometric	
	- Other	
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	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
S	919102				
	919103				
	919104				
	919105				
	919106				
	919107				
	961841				
	961842				
	961843				

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MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures ÷ = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work.

Date **August 18, 1988** Recorded Holder or Agent (Signature) *[Signature]*

For Office Use Only

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	Date Approved as Recorded	Branch Director

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P. O. Box 40, FALCONBRIDGE, ONTARIO POM 1S0

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Contour interval TOTAL FIELD: 100 gammas

MAGNETIC
Instrument SCINTREX IGS-2/MP-4
Accuracy - Scale constant ± 1 gammas
Diurnal correction method SCINTREX MP-3 BASE STATION MAGNETOMETER
Base Station check-in interval (hours) 30 seconds
Base Station location and value LINE 0, 450 SOUTH
57000 gammas

ELECTROMAGNETIC
Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)

GRAVITY
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

INDUCED POLARIZATION
Elevation accuracy _____
Instrument _____
Method Time Domain Frequency Domain
Parameters - On time _____ Frequency _____
- Off time _____ Range _____
- Delay time _____
- Integration time _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

SELF POTENTIAL
Instrument _____ Range _____
Survey Method _____

Corrections made _____

RADIOMETRIC
Instrument _____
Values measured _____
Energy windows (levels) _____
Height of instrument _____ Background Count _____
Size of detector _____
Overburden _____
(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)
Type of survey _____
Instrument _____
Accuracy _____
Parameters measured _____
Additional information (for understanding results) _____

AIRBORNE SURVEYS
Type of survey(s) _____
Instrument(s) _____ (specify for each type of survey)
Accuracy _____ (specify for each type of survey)
Aircraft used _____
Sensor altitude _____
Navigation and flight path recovery method _____
Aircraft altitude _____ Line Spacing _____
Miles flown over total area _____ Over claims only _____