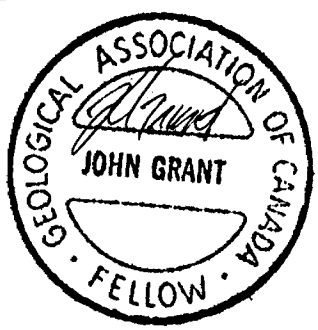
GEOPHYSICAL REPORT
ON THE
FREDERICK HOUSE LAKE PROJECT
FOR
FALCONBRIDGE LIMITED

Prepared By:
J.C. Grant
Exsics Exploration Ltd.
May 1990



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INTRODUCTION

The Frederick House Lake property consists of 83 staked claims located in the west central section of Dundonald Township on the east central portion of Frederick House Lake, approximately 20 miles northeast of the City of Timmins. (Refer to Figure 1 & 2)

Exsics Exploration Limited was contracted to perform a geophysical program over the property to test it's base metal potential. This program was completed during the later part of February and middle March of 1990.

This report will discuss the results of the program along with recommendations and conclusions for the property.

PERSONNEL

The people directly involved with data acquisition for the program were all employees of Exsics and are as follows:

Dan Rifou.....Timmins, Ontario

Ron Leduc.....Timmins, Ontario

Dan Collin.....Timmins, Ontario

Rob Mathieu.....Timmins, Ontario

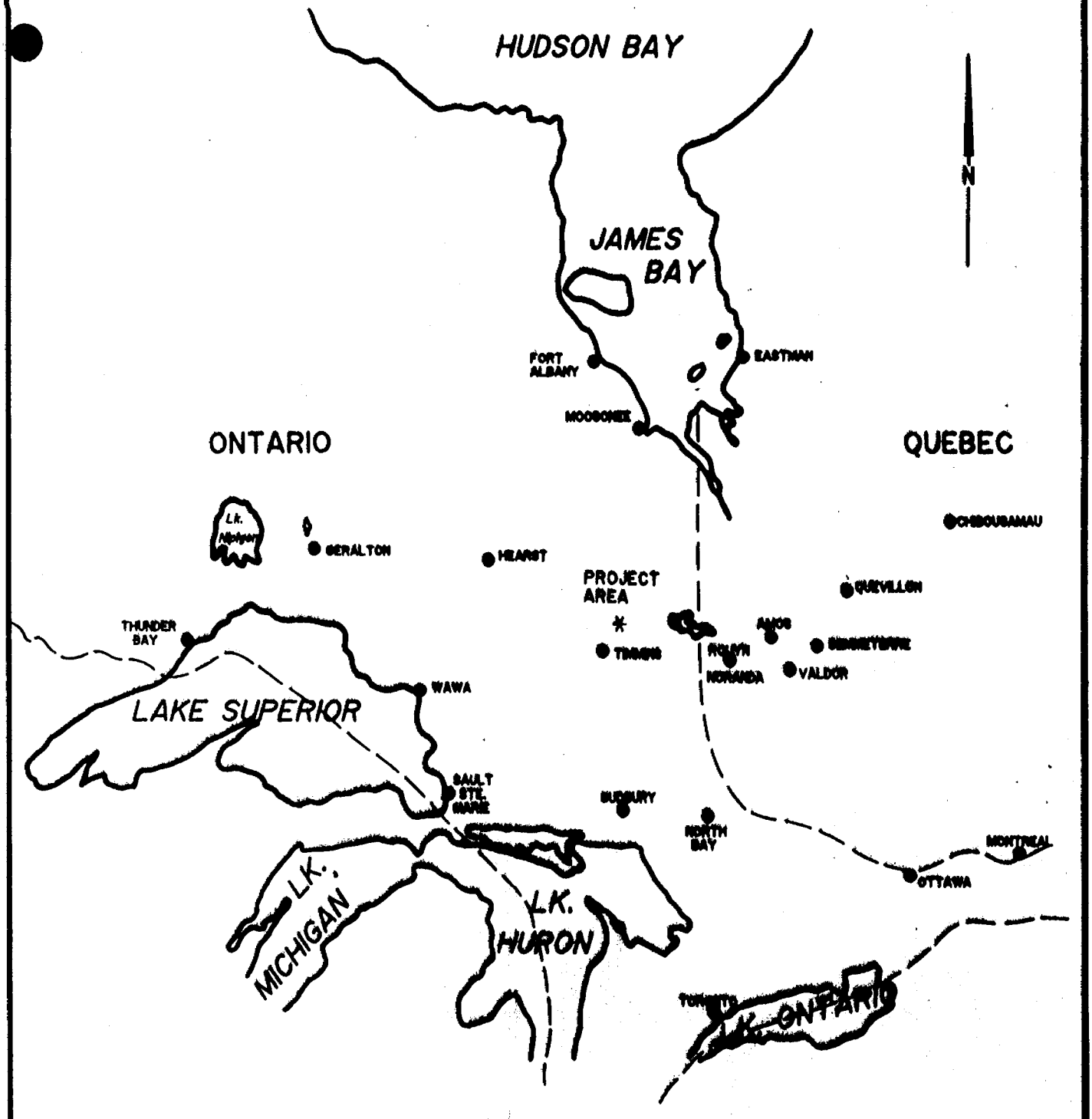
Richard Mathieu.....Timmins, Ontario

The management of the field crews was supervised by Yvon Collin and the data was reviewed and interpreted by John Grant.

LOCATION AND ACCESS

The Frederick House property is located in Concessions II, III, IV and V, Lots 6, 7, 8, 9, 10, 11 & 12 of Dundonald Township, Porcupine Mining Division, Timmins, Ontario. The entire group is located in the west central section of Dundonald Township and in the eastern section of Frederick House Lake. (Refer to Figure 2 & 3)

Access to the property is ideal, year round. One would only have to travel east from the City of Timmins along Highway 101 to the junction of Highway 101 and Highway 67. Highway 67 travels north to the village of MacIntosh Springs and Fielding. A dirt road travelling due west off of Highway 67 at Fielding will provide good access to Frederick House Lake and the property.



EXMIN EXPLORATION LTD.

CLIENT: FALCONBRIDGE LIMITED

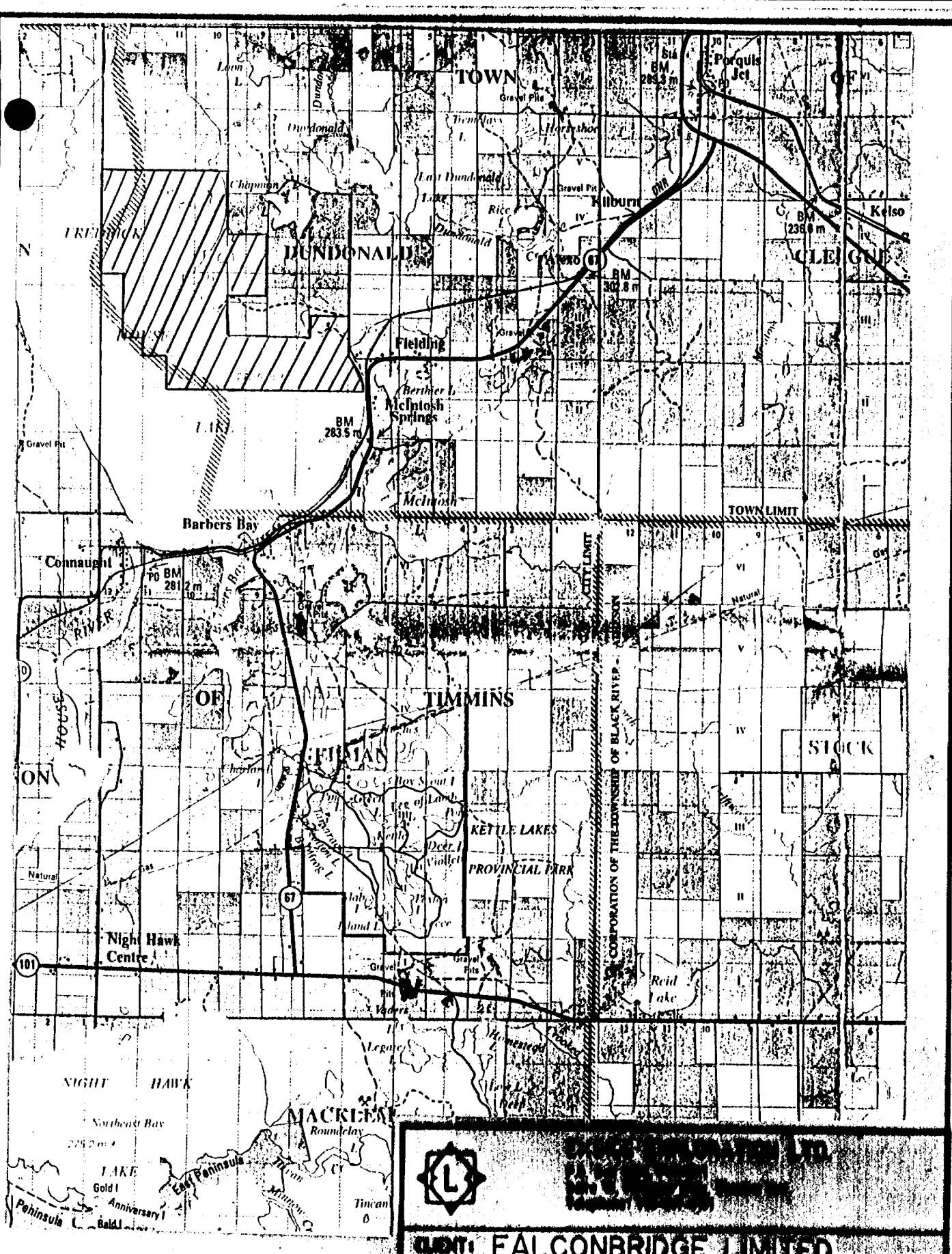
PROPERTY: FREDERICK HOUSE LAKE

TITLE:

LOCATION MAP

Fig. 1

Date: May, 1990	Scale: 1"=125miles	NTS:
Drawn: JCG	Interp: jcg	Job No. E-841



CLIENT: FALCONBRIDGE LIMITED

PROPERTY: FREDERICK HOUSE LAKE

GRID LOCATION MAP

FIG:2

Date: May/86	Scale: 1:00,000	NTS: 42A / NE
Drawn: JCB	Interp: JCB	Job No. E-341

PROPERTY CLAIM BLOCK

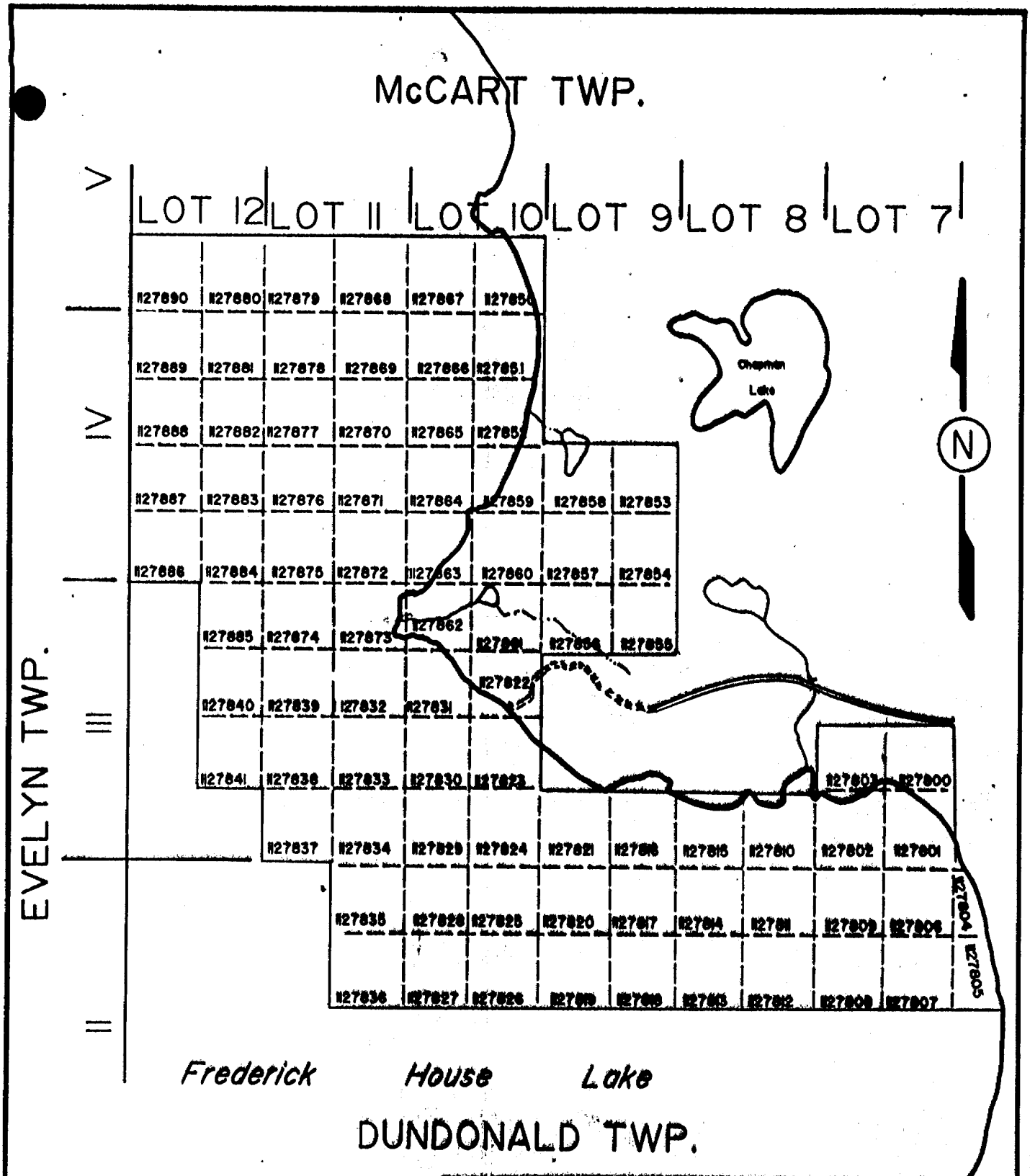
The block of claims covered by the geophysical program are listed below. Approximately 90 percent of the claims are covered by Frederick House Lake. The numbers are as follows:

P1127850 to P1127890 inclusive.....41 claims

P1127800 to P1127841 inclusive.....42 claims

Total Claims in Group....83 claims

Refer to Figure 3 of this report for block layout.



EXSICS EXPLORATION LTD.
P.O. Box [illegible], Pembroke
Suite [illegible], Timmins Ont.
Telephone: [illegible]

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: FREDERICK HOUSE LAKE

TITLE:

CLAIM BLOCK

Fig. 3

Date: May, 1990	Scale: 1"=1/2m.	NTS: 42a / NE
Drawn: TAA	Interp: JCG	Job No. E-341

GEOPHYSICAL PROGRAM

This program consisted of a total field magnetic survey and a MaxMin II, horizontal loop, electromagnetic survey. Both of these surveys were completed over the entire property.

Magnetic Survey & Procedure:

The survey was completed using the EDA Omni IV proton magnetometer system. Specifications for this system can be found under Appendix A of this report.

The survey was run using the following procedures and parameters.

The Omni IV system is capable of recording and storing magnetic values accurate to the decimal point, thus greatly improving the accuracy as well as the quality of the collected data.

A base station was established on the grid at a fixed location and the unit was tuned to a reference field of 58,600 gammas. The field unit was also initialized at the same fixed point and set to the same reference field as the base station unit. The base station unit was set-up to record and store recordings at 30 second intervals throughout the survey day.

At the end of each day, the base station unit and field unit are coupled together and the raw field data is dumped into the base station mag where it is merged.

The internal microprocessor then computes the diurnal variation in the earth's magnetic field for each of the survey's grid point by comparing the time at which readings were taken and computing any mid-interval values.

This can be most useful in these northern regions where more detailed monitoring of the diurnal variations is required. This correction is done during the data dump sequence of the unit. The retrieved data is the corrected data ready for plotting.

For ease in plotting purposes, a background of 58,000 gammas has been removed from each magnetic value.

The final contoured magnetic maps can be found in the back pocket of this report.

Horizontal Loop Survey:

This survey was completed using the MaxMin II system manufactured by Apex Parametrics of Toronto. Specifications for this unit can be found as Appendix B of this report.

This system is a two man portable EM system which is designed to measure both the vertical and horizontal in-phase (IP) and quadrature (QP) components of the anomalous field from electrically conductive zone.

For this survey, a coil separation between the receiver and transmitter operator was set at 150 meters. This would result in a theoretical search depth ranging from 75 - 80 meters.

The two frequencies chosen for the survey were the 1777 Hz and 444 Hz frequencies. In the past these two frequencies have proven to be quite successful in the surrounding area.

The data was collected at the mid point between the two operators over the entire grid. One in-phase and one quadrature value was recorded at each station.

The data was then plotted onto the base maps. One base map for each frequency.

Due to the size of the property surveyed. The grid was divided into two sections and plotted on separate map sheets with overlap for alignment purpose.

Also, on the 444 Hz frequency the approximate position of the government airborne anomalies have been put on to help in the interpretation of the ground geophysics.

SURVEY RESULTS

The results of the geophysical program will be discussed in detail in two sections; under Map Sheet 1 and Map Sheet 2, with general correlation on all anomalies should they continue from one sheet to the next.

Map Sheet 1:

Generally the EM Survey was successful in outlining several areas of interest with the primary target area situated on the southeast section.

One zone of interest is the weak EM target striking across Lines 800ME/2040MN to L500ME/2005MN. This feature is probably coincidental with a known JEM-HEM target located in the past, but was never drilled. The zone may represent a contact zone between the sediments and ultramafics. There does not appear to be any distinct magnetic association with the zone.

A second zone of interest strikes across Lines 800ME/1600MN to Line 200ME/1780MN. This zone may also relate to a drilled zone located in the past which returned a mixture of ultramafics, sediments, mafic to felsic materials.

The magnetics for the same area is somewhat spotty along the strike of the zone with a short mag high feature on strike to the west which may be an ultramafic pod or sulphide lense.

The zone striking across Line 100ME/1920MN to 400MW/1860MN is probably the western extension of the above zone. This EM zone may extend as far as Line 600MW out into the lake. Again there is no distinct magnetic correlation with this target.

The short EM zone striking across Lines 300MW and 400MW at 3300MN most probably coincides with a known JEM target which is untested. Again there is no magnetic correlation.

The EM response striking across Lines 1700MW and 1800MW at 3300MN coincide with a good airborne target, which also may relate to a drilled zone which returned a mixture of sediments mafic to ultramafic materials containing arsenopyrite.

The zone lies on the extreme north flank of a strong magnetic feature. Another EM target striking across Lines 2100MW to 2400MW at 2140MN to 2220MN continues off the grid to the northwest. This feature coincides with a known turam conductor but has not been tested. Depth to source is approximately 15 to 20 m with a conductivity of 6 mhos. The zone has a weak magnetic signature of approximately 200 to 250 gammas above the background.

Another weak EM target striking across Lines 2300 and 2400MW at 2580MN is coincidental with an airborne target. The zone appears to be legitimate but possibly deep. There is no definite magnetic correlation.

The two airborne targets located on Lines 2200 & 2100MW at 180MN & 1700MN respectfully were not located at this time. On Line 2100MW there is a response just noted at the end of the line which may represent the feature. Further work is necessary for a better definition.

The most predominant magnetic feature of the survey grid is the strong northwest-southeast striking feature running from Line 1000MN to 2400MW and continues off of the grid to the northwest. This is most probably representative of a band of ultramafics which have been mapped on the northwest and southeast shore of the lake. Refer to Map 2205, Timmins-Kirkland Lake, Geological Compilation Series Scale 1 inch to 4 miles.

For interpretation of Map Sheet 1, refer to Ontario Geological Survey Preliminary Map P2029 Dundonald Township, Scale 1:15840, NTS Reference 42A/10W, which is included in the back pocket of this report.

Map Sheet 2:

The EM survey read over this section of the grid was successful in outlining several zones of interest.

Certainly the major target area is the EM zone paralleling the shore line and striking from Line 700MW/1120MN to 1200ME/140MN. In fact, this zone may strike as far as 1700ME. The feature does appear to have been drilled in the vicinity of Lines 700 to 500MN and Lines 200MW to 0+00. Refer to Preliminary Map P2029 Dundonald Township. The zone has flanking north and south mag as well as direct association in some places. This feature does represent a sulphide horizon at a depth range of 25 to 15 meters west to east with a conductivity range of 8 to 2 mhos west to east.

Another area of interest is the EM zone striking across Lines 2100ME/40MN to 2400ME/BL and continuing off of the grid to the east. This feature may also have been tested in the past and returned sulphides containing unknown amounts of nickel rich sulphides. The feature lies on the south flank of a mag high structure striking northwest to southeast.

Another EM target striking across Lines 1800ME to 2300ME at 150 to 300MS may in fact be an extension of the predominant zone mentioned above. The east extension of this zone lies on strike with an east trending mag high.

Another EM target strikes across Lines 1600ME to 2100ME at 580MN. This feature appears to be a legitimate zone although quite weak and possibly deep. There is some spotty mag highs and lows along the conductor's strike with the main area of interest over Lines 2000 & 2100ME. Prospecting in the area may explain this feature.

The final area of interest lies between Lines 1700MW to 900MW at 1000MN. This feature has been somewhat distorted possibly by subtle cross structure. The zone does appear to be legitimate but either weak or deeper than the survey's search depth. The eastern extension of this zone lies along a broad mag high feature. Further testing geophysically is required for a better definition.

There were one or two other conductors of short strike length noted by the HEM survey, but have not been discussed in this text. They require further work to prove their validity at this point.

However, should one of the more predominant features return interesting results, the questionable zones will need to be re-evaluated.

RECOMMENDATIONS AND CONCLUSIONS

Generally the HEM and magnetic surveys were successful in outlining the areas of interest. In some instances, these new targets coincide with previously drilled JEM and HEM targets. However, this should not deter further testing along strike because past drilling has proved the existence of sulphide horizons, some bearing nickel, copper and sphalerite.

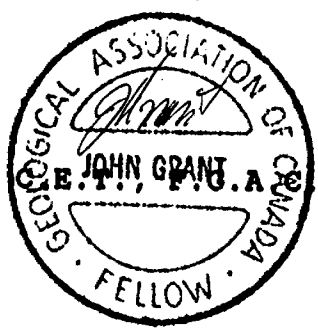
Should future geophysics be planned for the area, I would suggest the following parameters.

One should consider a Deep EM program in the event the known sulphide zones are representatives of a deeper rooted source or feeder. This Deep EM program could entail a larger Max-Min cable separation, but one should lean towards a Pulse Deep EM system for it's multi-channel response.

Also, if new drilling is done, some of the holes should have their casing left in so a borehole survey can be done. This would be to test the better conductors for strike and depth extensions should they exist.

As always, should any of the discussed zones return favourable results, all conductors, regardless of their strike lengths or priorities, should be re-examined and followed up to the fullest extent.

Respectfully Submitted,



J. C. Grant, B.E.T., F.G.A.C.

CERTIFICATE OF QUALIFICATIONS

I, John Charles Grant do hereby certify:

1. that I am a geophysicist and reside at Lot 2 Martineau Avenue, Kamiskotia Lake, Timmins, Ontario.

2. that I am a Fellow of the Geological Association of Canada.

3. that I am a member of the Certified Engineering Technologist Association.

4. that I graduated from Cambrian College of Applied Arts and Technology, Sudbury Campus in 1975 with an Honour's diploma in Geology Technology.

5. that I have practised my profession continuously for 13 years.

6. that my report on the FREDERICK HOUSE LAKE PROPERTY, for FALCONBRIDGE LIMITED is based on work carried out under my supervision.

4. I hold no specific or special interest in the described property. I have been retained as a Consulting Geophysicist for "the property".

Dated this 23rd day of May, 1990 at Timmins, Ontario

John C. Grant, C.E.T., F.G.A.C.

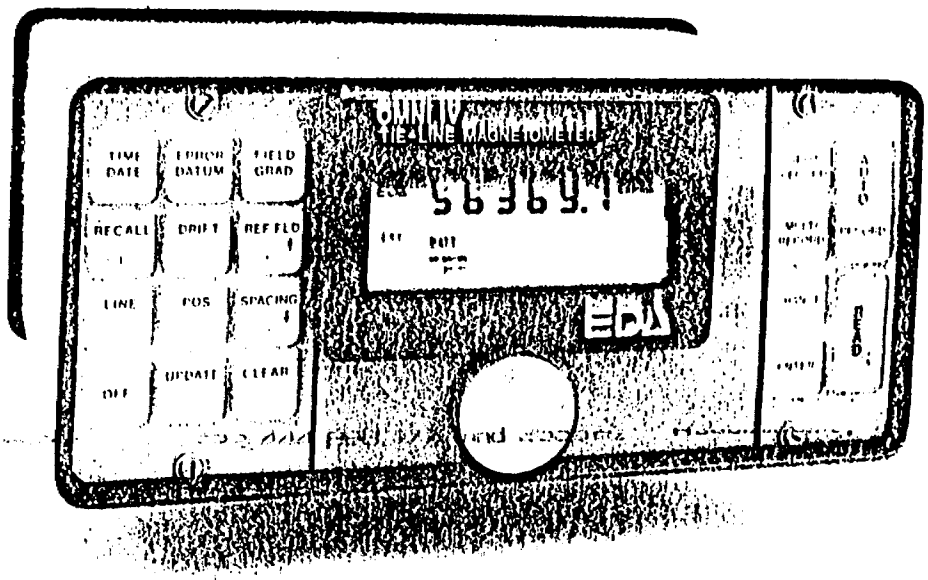
GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW

A P P E N D I C E S

APPENDIX A

OMNI IV "Tie-Line" Magnetometer

EDA



OMNI IV's Major Benefits

- Four Magnetometers In One
- Self Correcting for Diurnal Variations
- Reduced Instrumentation Requirements
- 25% Weight Reduction
- User Friendly Keypad Operation
- Universal Computer Interface
- Comprehensive Software Packages

Specifications

Dipoles	Two simultaneous input dipoles.
Input Voltage (Vp) Range	40 microvolts to 4 volts, with automatic ranging and overvoltage protection.
Vp Resolution	10 microvolts.
Vp Accuracy	0.3% typical; maximum 1% over temperature range.
Chargeability Resolution	1 %.
Chargeability Accuracy	0.3% typical; maximum 1% over temperature range for Vp > 10 mV.
Automatic SP Compensation	± 1 V with linear drift correction up to 1 mV/s.
Input Impedance	1 Megohm.
Sample Rate	10 milliseconds.
Automatic Stacking	3 to 99 cycles.
Synchronization	Minimum primary voltage level of 40 microvolts.
Rejection Filters	50 and 60 Hz power line rejection greater than 100 dB.
Grounding Resistance Check	100 ohm to 128 kilo-ohm.
Compatible Transmitters	Any time domain waveform transmitter with a pulse duration of 1 or 2 seconds and a crystal timing stability of 100 ppm.
Programmable Parameters	Geometric parameters, time parameter, intensity of current, type of array and station number.
Display	Two line, 32-character alphanumeric liquid crystal display protected by an internal heater for low temperature conditions.
Memory Capacity	600 sets of readings.
RS-232C Serial I/O Interface	1200 baud, 8 data bits, 1 stop bit, no parity.
Console Power Supply	Six- 1.5V "D" cell disposable batteries with a maximum supply current of 70 mA and auto power save.
Operating Environmental Range	−25°C to +55°C; 0–100% relative humidity; weatherproof.
Storage Temperature Range	−40°C to +60°C.
Weight and Dimensions	5.5 kg, 310x230x210 mm.
Standard System Complement	Instrument console with carrying strap, batteries and operations manual.
Available Options	Stainless steel transmitting electrodes, copper sulphate receiving electrodes, alligator clips, bridge leads, wire spools, interface cables, rechargeable batteries, charger and software programs.

E D A Instruments Inc.
4 Thorncliffe Park Drive,
Toronto, Ontario
Canada M4H 1H1
Telex: 06 23222 EDA TOR
Cable: Instruments Toronto
(416) 425 7800

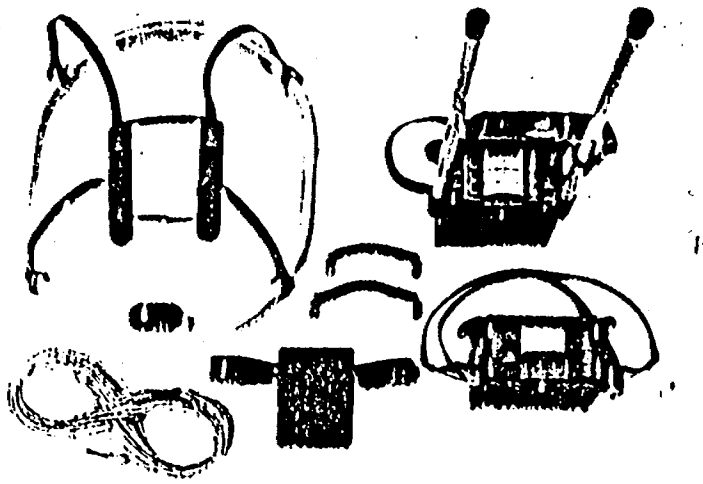
In U S A.
E D A Instruments Inc.
5151 Ward Road,
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422 9112

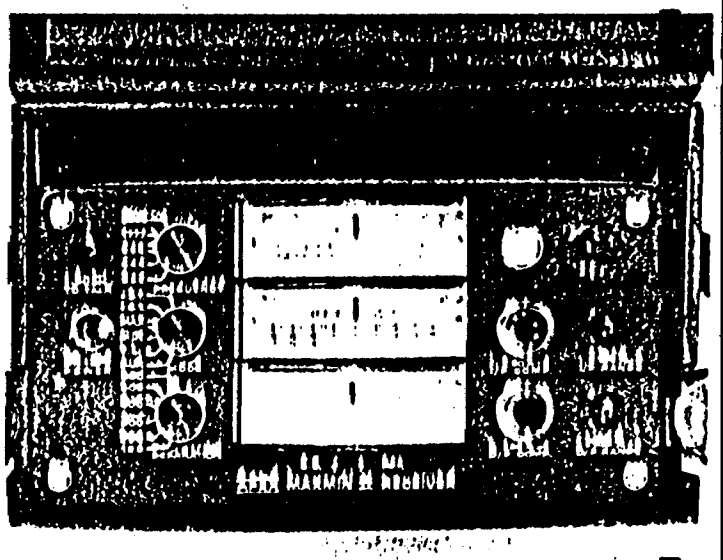
Printed in Canada

APPENIX B

APEX MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180 m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555Hz.

Modes of Operation:
- MAX: Transmitter coilplane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.
- MIN: Transmitter coilplane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.
- V.L. : Transmitter coilplane vertical and receiver coilplane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

Coil Separations: 25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIIF).
Coil separations in V.L. mode not restricted to fixed values.

Parameters Read:
- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in V.L. mode.

Readouts:
- Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90mm edgewise meters in V.L. mode.

Scale Ranges:
- In-Phase: ±20%, ±100% by push-button switch.
- Quadrature: ±20%, ±100% by push-button switch.
- Tilt: ±75% slope.
- Null (V.L): Sensitivity adjustable by separation switch.

Readability: In-Phase and Quadrature: 0.25 % to 0.5 % ; Tilt: 1% .

Repeatability: ±0.25% to ±1% normally, depending on conditions, frequencies and coil separation used.

Transmitter Output:
- 222Hz : 220 Atm^2
- 444Hz : 200 Atm^2
- 888Hz : 120 Atm^2
- 1777Hz : 60 Atm^2
- 3555Hz : 30 Atm^2

Receiver Batteries: 9V trans. radio type batteries (4). Life: approx. 35hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

Transmitter Batteries: 12V 8Ah Gel-type rechargeable battery. (Charger supplied).

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operator in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warning lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F).

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weight: Typically 80kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO Telex: 06-966773 NORDVIK TOR

APPENDIX C

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) MaxMin & Magnetics

Township or Area Dundonald Township

Claim Holder(s) Falconbridge Limited
Timmins, Ontario

Survey Company Exsics Exploration Limited

Author of Report J.C. Grant

Address of Author P.O. Box 1880, Timmins, Ontario

Covering Dates of Survey Feb 15/90 to May 10.90
(linecutting to office)

Total Miles of Line Cut _____

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	20
--Magnetometer	40
--Radiometric	
--Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: May 22/90 SIGNATURE: J.C. Grant
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

P-1127850 to P-1127890
(prefix) (number)
Inclusive for 41 claims

P-1127800 to P-1127841
Inclusive for 42 claims

If space insufficient, attach list

TOTAL CLAIMS 83

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 8800 Number of Readings 44,000

Station interval 20 meters Line spacing 100 meters

Profile scale 1 cm to 20%

Contour interval 50 gammas where possible

MAGNETIC

Instrument EDA Omni IV System

Accuracy – Scale constant ± .5 gammas

Diurnal correction method Base Station Controlled

Base Station check-in interval (hours) 30 second recording & storing

Base Station location and value on grid, 58,600 gammas

ELECTROMAGNETIC

Instrument Apex MaxMin II System

Coil configuration Coplaner

Coil separation 150 meters

Accuracy ± 1%

Method: ☐ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line

Frequency 1777 Hz, 444 Hz
(specify V.L.F. station)

Parameters measured One In-phase, one quadrature

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

Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W 9006·60

W9006.60340

2.1333

42A10NW0556 2.13339 DUNDONALD   900

Report of Work
(Geophysical, Geological and Geochemical

Mining Act

Type of Survey(s)	Mining Division	Township or Area
MaxMin & Magnetics	Porcupine	Dundonald

Recorded Holder(s): Falconbridge Limited
Prospector's Licence No.: A21647

Address: 571 Moneta Ave., Box 1140, Timmins, Ontario P4N 7H9
Telephone No.: (705) 267-1188

Survey Company: Exsics Exploration Limited

Name and Address of Author (of Geo-Technical Report): J. C. Grant, P.O. Box 1880, Timmins, Ont.

Date of Survey (from & to): 15 02 90 | 10 05 90 (Day Mo. Yr.)

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	20
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Other	
	Geological	
	Geochemical	
Man Days		**Days per Claim**
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Airborne Credits		**Days per Claim**
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date	Recorded Holder or Agent (Signature)
May28, 1990	[signature]

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Number	Mining Claim Prefix	Number	Mining Claim Prefix	Number
	See Schedule A Attached				

Total number of mining claims covered by this report of work: 83

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES JUN 20 1990 RECEIVED

RECORDED MAY 31 1990

RECEIVED JUN 14 1990 MINING LANDS SECTION

Certification Verifying Report of Work

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

Name and Address of Person Certifying: Al Coutts, Box 1140, Timmins, Ontario P4N 7H9

Telephone No.	Date	Certified By (Signature)
(705) 267-1188	May 28, 1990	[signature]

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
4980	MAY31/90	[signature] Mining Recorder
	Date Approved as Recorded: 19 June 90	Provincial Manager, Mining Lands: [signature]

Received Stamp: PORCUPINE MINING DIVISION RECEIVED MAY 31 1990

W9006.60340

Schedule A

Dundonald Township Claims

P-1127800	P-1127850
1127801	1127851
1127802	1127852
1127803	1127853
1127804	1127854
1127805	1127855
1127806	1127856
1127807	1127857
1127808	1127858
1127809	1127859
1127810	1127860
1127811	1127861
1127812	1127862
1127813	1127863
1127814	1127864
1127815	1127865
1127816	1127866
1127817	1127867
1127818	1127868
1127819	1127869
1127820	1127870
1127821	1127871
1127822	1127872
1127823	1127873
1127824	1127874
1127825	1127875
1127826	1127876
1127827	1127877
1127828	1127878
1127829	1127879
1127830	1127880
1127831	1127881
1127832	1127882
1127833	1127883
1127834	1127884
1127835	1127885
1127836	1127886
1127837	1127887
1127838	1127888
1127839	1127889
1127840	1127890
1127841	

P. Courtois

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

	Description	Order No.	Date	Disposition	File
(X)	SEC. 42/60			S.R.O.	32269
(R2)	SEC. 43/70	W. 66/75	1/12/75	M.+S.	1593
(R3)	NRO 31/85		22/7/85	MR+SR	

SAND AND GRAVEL

(G1) M.T.C. PIT 1284
(G2) M.T.C. PIT 1274

NOTES

PART OF THIS TOWNSHIP SOUTH AND EAST OF FREDERIC HOUSE LAKE LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS.

WITNESS POSTS FOR CLAIMS STAKED OUT COVERING LAND UNDER THE WATERS OF FREDERICK HOUSE LAKE IN DUNDONALD TWP. SHOULD NOT BE ERECTED OR PLANTED IN EVELYN TWP.

FLOODING RIGHTS ON FREDERICK HOUSE LAKE RESERVED TO ONTARIO HYDRO TO CONTOUR ELEV. 903', L.O. 7128, FILE 64518, VOL. 2

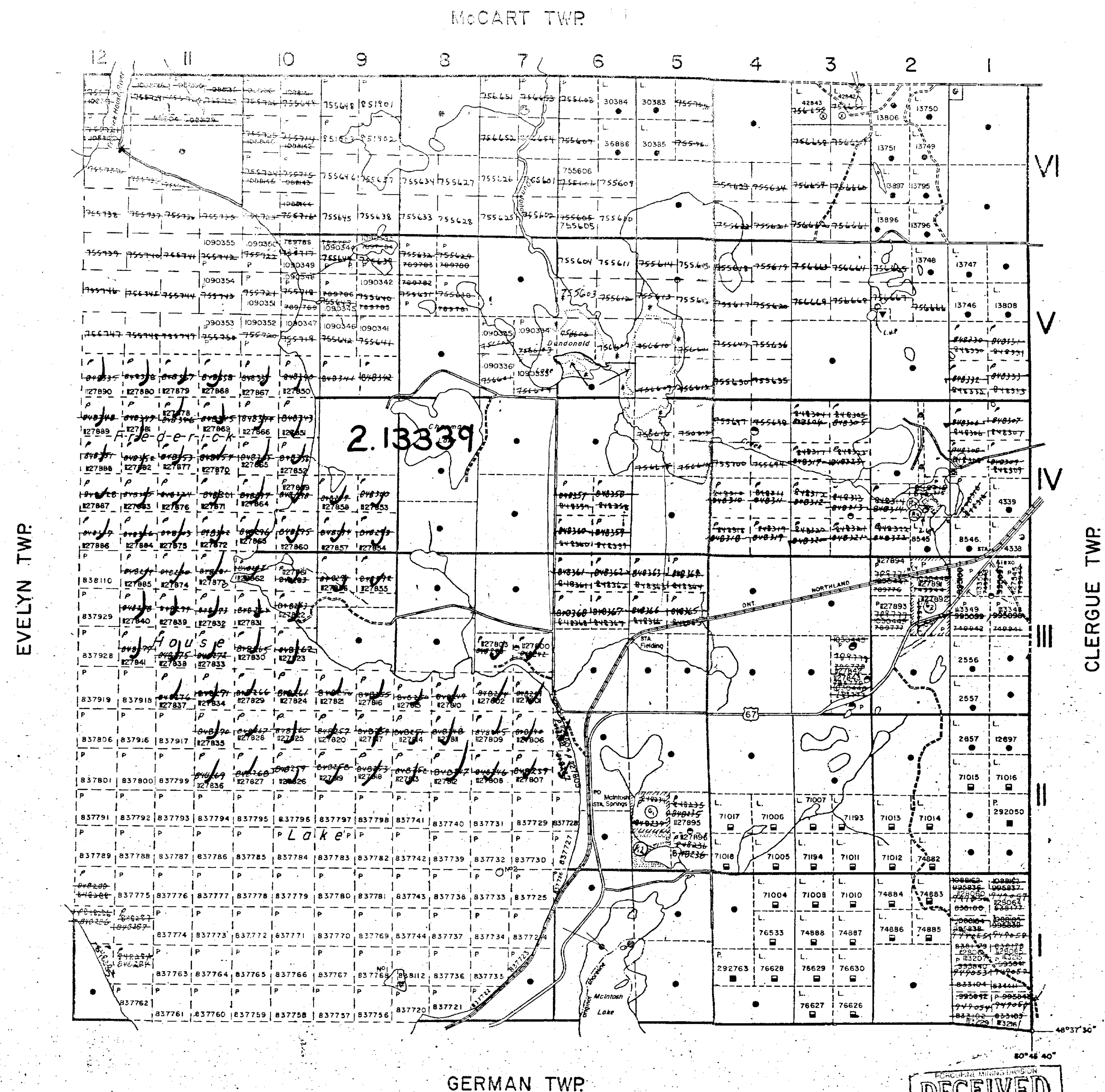
400' surface rights reservation along the shores of all lakes and rivers.

⊙ LUP (LAND USE PERMIT)

42A10NW0556 2.13339 DUNDONALD

200

Received May 3, 1985.



RECEIVED
MAR 22 1990
PORCUPINE MINING DIVISION

LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	⊖
" , MINING RIGHTS ONLY	⊖
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	⊟
" , MINING RIGHTS ONLY	⊟
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(S)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

DUNDONALD

M.N.R. ADMINISTRATIVE DISTRICT
COCHRANE
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario — Ministry of Natural Resources — Land Management Branch

Date	Number
MARCH, 1985	G-3240

✓ By D. Vallilee — Placed in file
✓✓ By L.h. — may 9/85

N

road

Dundonald Lake

road

Chapman Lake

road

Alexo

road

Railroad

FREDERICK HOUSE LAKE

Fielding

HWY 67

Mc Intosh Springs

road

Mc Intosh Lake

HWY 67

HWY 610

Barbers Bay

0 210

JEM
HEM
TUR
VEM
osp
py
Ni
cp,sp
Cu,po
Cr,Ni,cp,sp
Ni,asb,mag

SYMBOLS

Drill Hole

Airborne Electromagnetic Anomaly

GROUND ELECTROMAGNETIC ANOMALY

VEM	Vertical Loop
HEM	Horizontal Loop
JEM	Junior Crone Unit
TUR	Turam
VLF	Very Low Frequency

2.13339

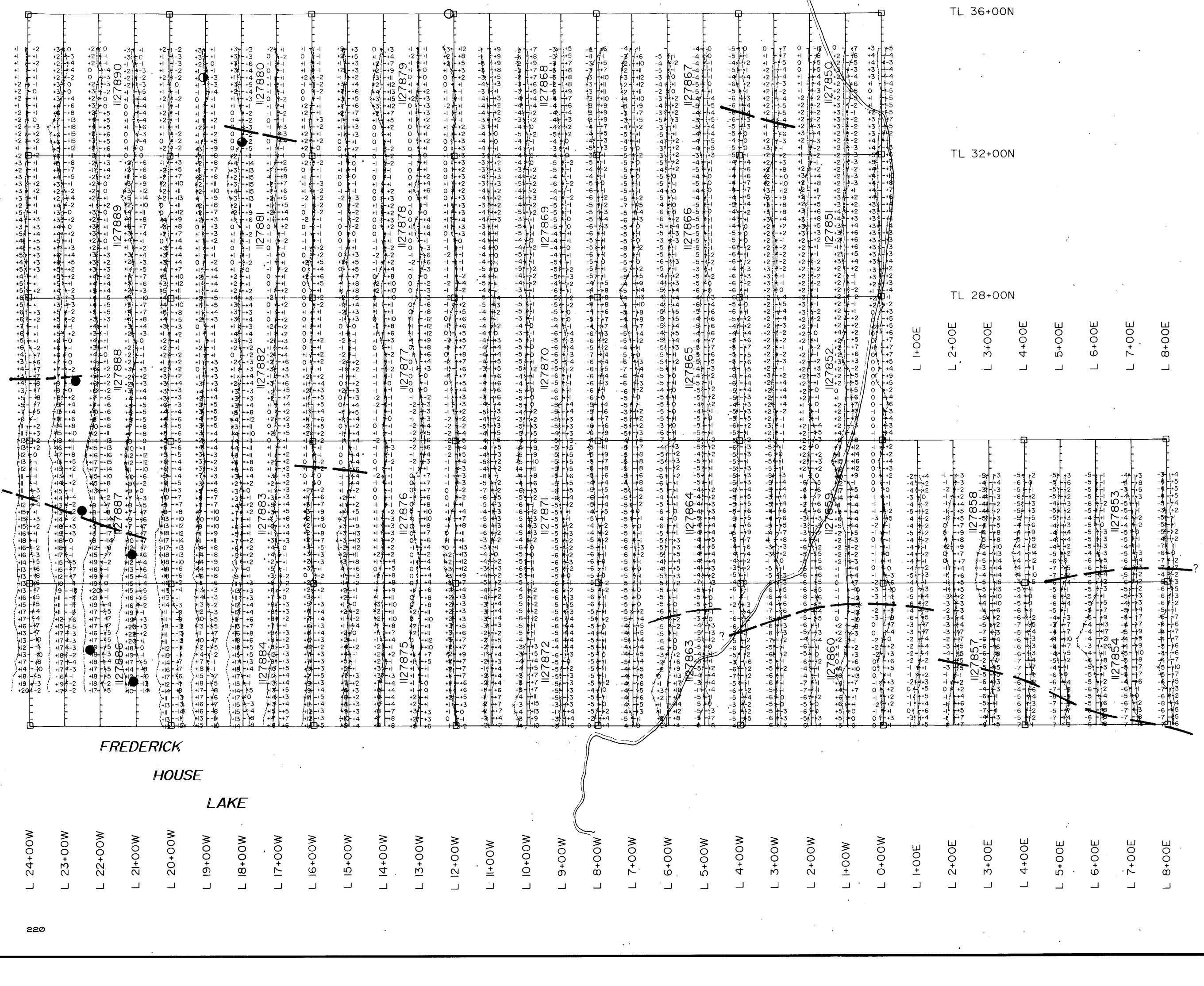
EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: FREDERICK HOUSE LAKE PROP.

TITLE: DUNDONALD TOWNSHIP
ONTARIO GEOLOGICAL SURVEY
PRELIMINARY MAP P.2029 TIMMINS DATA SERIES

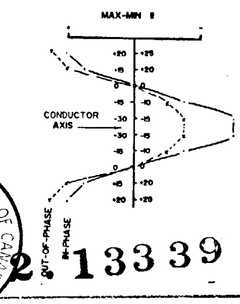
Date: May 1990	Scale: 1"=1/4mile	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-341



AIRBORNE ANOMALY

DECAY INTERVAL CLASSIFICATION

- 1-2 Channel (350, 450 microseconds)
- 3-4 Channel (550, 670 microseconds)
- 5-6 Channel (790, 910 microseconds)
- 7-8 Channel (1050, 1190 microseconds)
- 9-10 Channel (1350, 1510 microseconds)
- 11-12 Channel (1680, 1870 microseconds)



GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT

2.13339

LEGEND

INSTRUMENT: Apex Parametrics Max-Min II
MODE: Maximum Coupled, Horizontal Loop Survey
PARAMETRES MEASURED: Inphase (%)
Out of phase (%)
FREQUENCY: 444 Hz
COIL SEPARATION: 200m
OPERATOR: EXSICS EXPLORATION
PROFILE SCALE: 1cm=20%

EXSICS EXPLORATION LTD.
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Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED.

PROPERTY: FREDERICK HOUSE LAKE

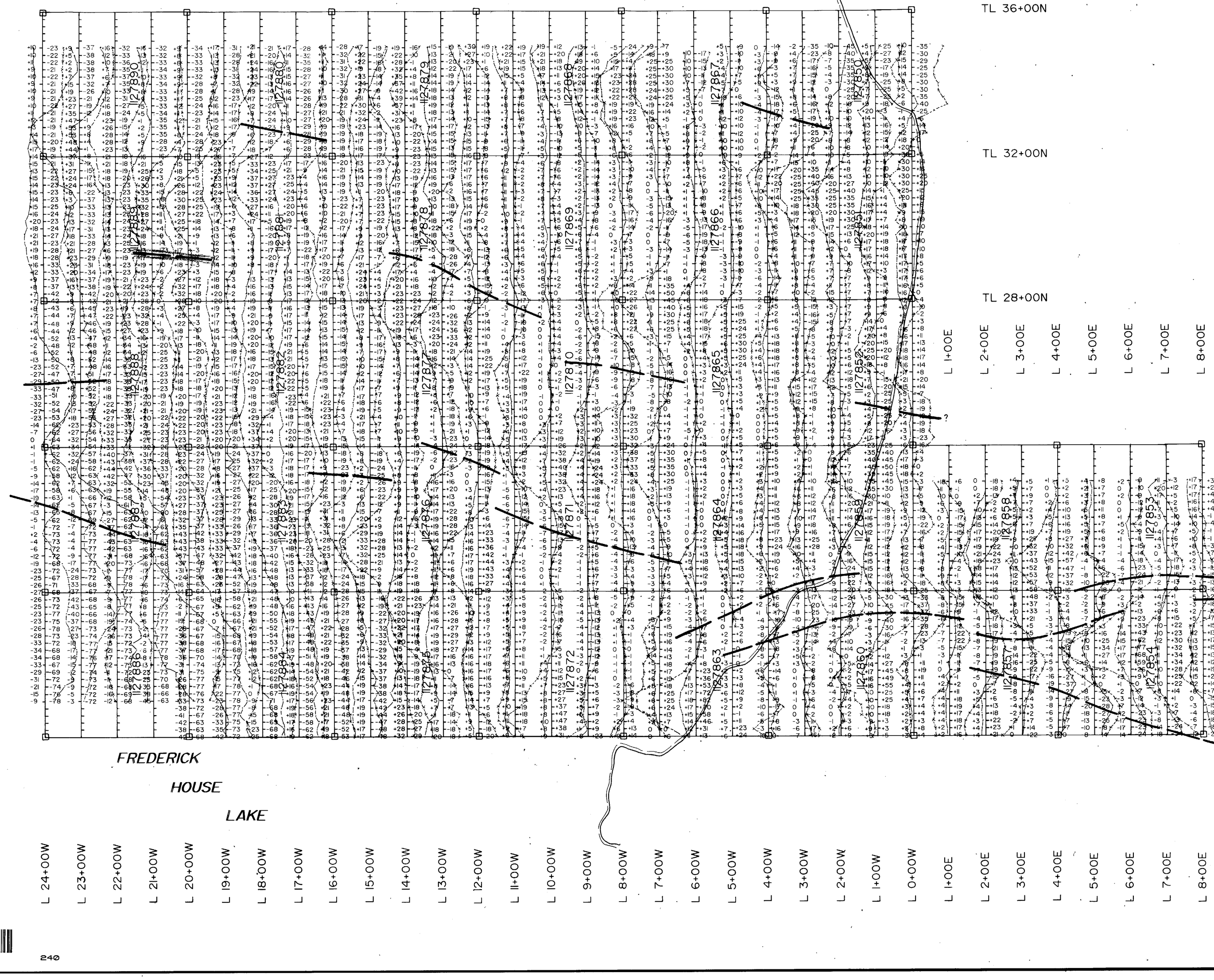
TITLE: MAX-MIN II

MAP 1

444 Hz

Date: MARCH/90	Scale: 1:5000	NTS:
Drawn: V.G.	Interp:	Job No. EE-341


N
TL 16+00N
TL 12+00N
TL 8+00N
TL 4+00N
BL 0+00
TL 4+00S
TL 8+00S
FREDERICK
HOUSE
LAKE
AIRBORNE ANOMALY
DECAY INTERVAL CLASSIFICATION
1-2 Channel (350, 450 microseconds)
3-4 Channel (550, 670 microseconds)
5-6 Channel (790, 910 microseconds)
7-8 Channel (1050, 1190 microseconds)
9-10 Channel (1350, 1510 microseconds)
11-12 Channel (1680, 1870 microseconds)
230
MAX-MIN II
CONDUCTOR AXIS
OUT-OF-PHASE
IN-PHASE
2.13339
GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW
LEGEND
INSTRUMENT: Apex Parametrics Max-Min 11
MODE: Maximum Coupled, Horizontal Loop Survey
PARAMETRES MEASURED: Inphase (%)
Out of phase (%)
FREQUENCY: 444 Hz
COIL SEPARATION: 200m
OPERATOR: EXSICS EXPLORATION
PROFILE SCALE: 1cm=20%
EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151
CLIENT: FALCONBRIDGE LIMITED
PROPERTY: FREDERICK HOUSE LAKE
TITLE: MAX-MIN II 444 Hz
MAP 2
Date: MARCH/90
Scale: 1:5000
NTS:
Drawn: P.G.
Interp:
Job No. EE-341



GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW

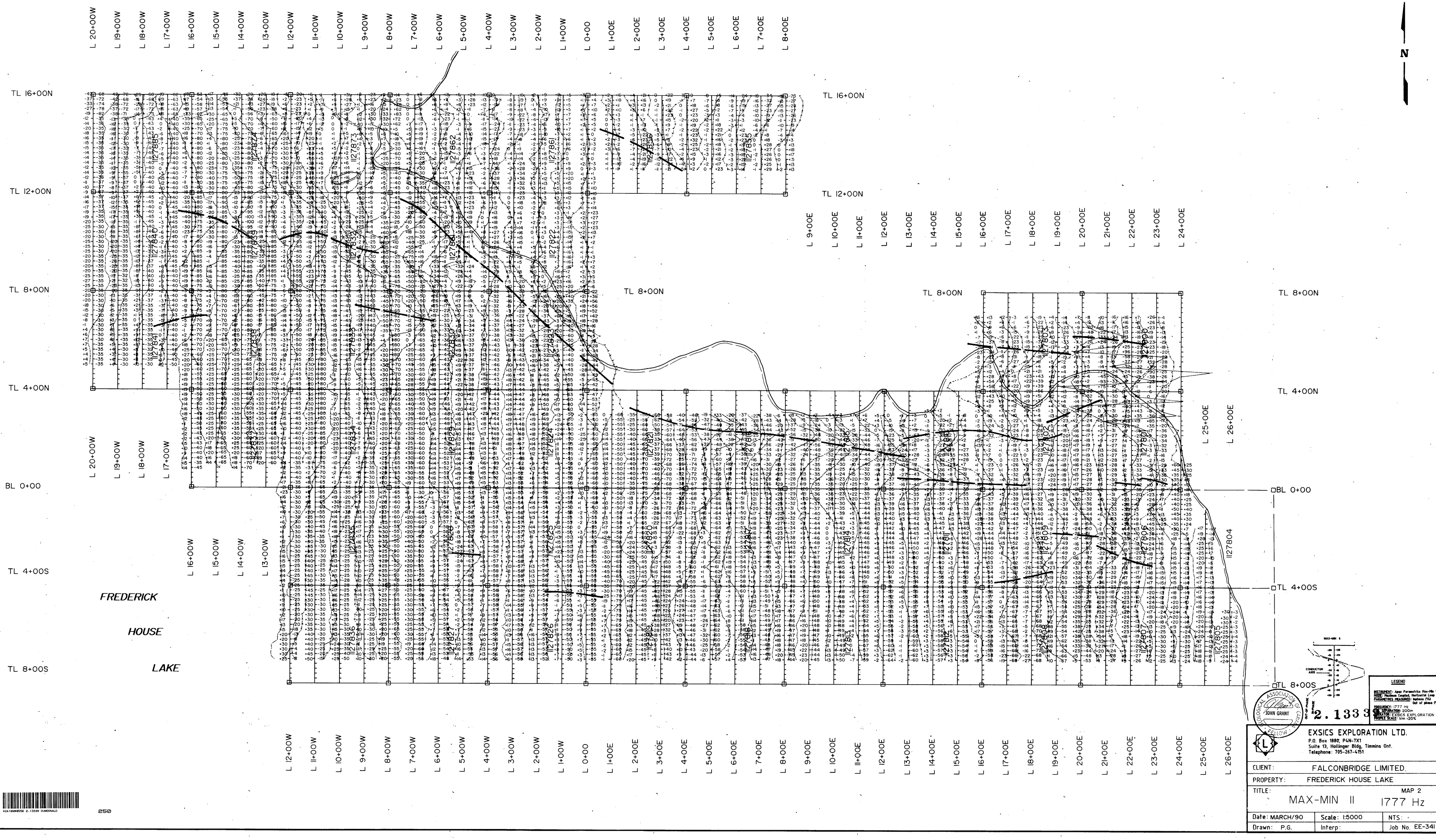
2.13339

LEGEND

INSTRUMENT: Apex Parametrics Max-Min II
MODE: Maximum Coupled, Horizontal Loop Survey
PARAMETRES MEASURED: Inphase (%)
Out of phase (%)
FREQUENCY: 1777 Hz
COIL SEPARATION: 200m
OPERATOR: EXSICS EXPLORATION
PROFILE SCALE: 1cm=20%

EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT:	FALCONBRIDGE LIMITED.	
PROPERTY:	FREDERICK HOUSE LAKE	
TITLE:	MAX-MIN II 1777 Hz	MAP 1
Date: MARCH/90	Scale: 1:5000	NTS:
Drawn: V.G.	Interp:	Job No. EE-341



EXSICS EXPLORATION LTD.
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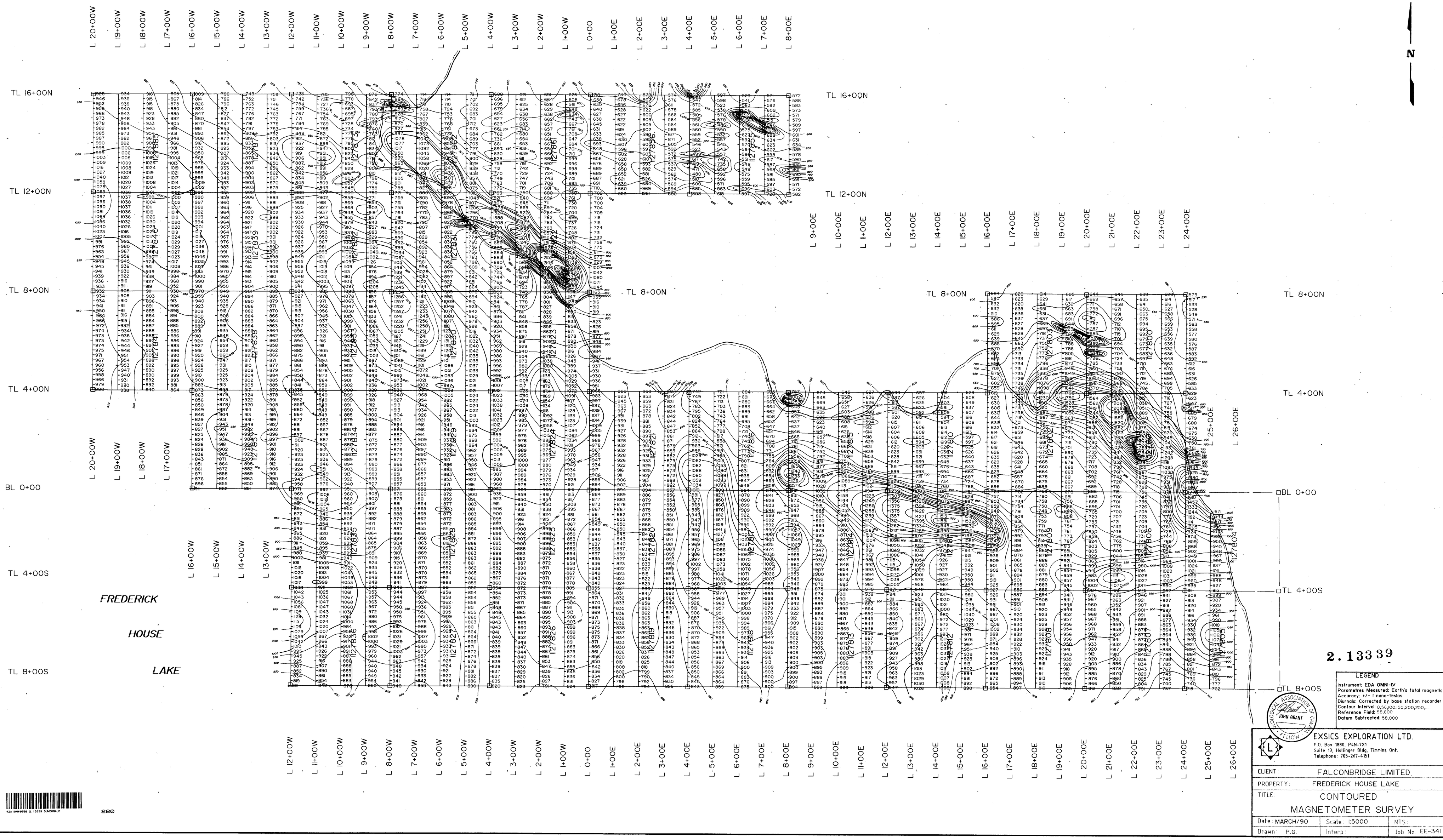
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT:	FALCONBRIDGE LIMITED.	
PROPERTY:	FREDERICK HOUSE LAKE	
TITLE:	MAX-MIN II	MAP 2 1777 Hz
Date: MARCH/90	Scale: 1:5000	NTS:
Drawn: P.G.	Interp:	Job No. EE-341



2.13339

LEGEND

Instrument: EDA OMNI-IV
Parameters Measured: Earth's total magnetic field
Accuracy: +/- 1 nano-Teslas
Diurnals: Corrected by base station recorder
Contour Interval: 0.5,1,5,10,50,100,200,250,...
Reference Field: 58,600
Datum Subtracted: 58,000

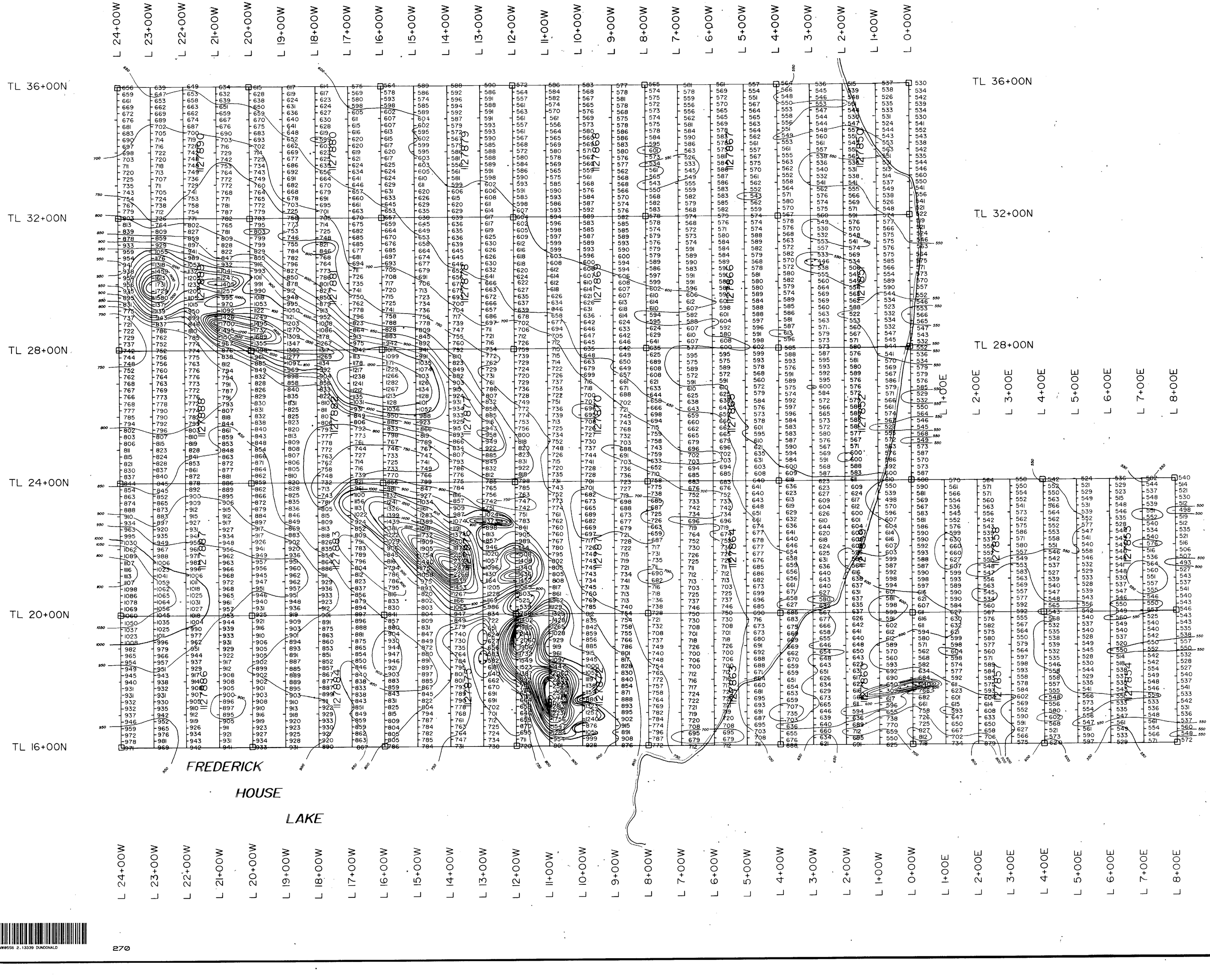
JOHN GRANT
FELLOW

EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT:	FALCONBRIDGE LIMITED
PROPERTY:	FREDERICK HOUSE LAKE
TITLE:	CONTOURED MAGNETOMETER SURVEY

Date: MARCH/90	Scale: 1:5000	NTS
Drawn: P.G.	Interp:	Job No: EE-341

260



2.13339

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Instrument: EDA OMNI-IV
Parametres Measured: Earth's total magnetic field
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Reference Field: 58,600
Datum Subtracted: 58,000

GEOLOGICAL ASSOCIATION OF CANADA — JOHN GRANT — FELLOW

EXSICS EXPLORATION LTD
P.O. Box 1880, P6N 7Z1
Suite 18, Hollinger Bldg., Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: FREDERICK HOUSE LAKE

TITLE: CONTOURED MAGNETOMETER SURVEY

Date: MARCH/90	Scale: 1:5000	NTS
Drawn: V.G.	Interp:	Fig. EE-341