42A12SE0232 2.11273 ROBB

GEOPHYSICAL REPORT

ON THE

ROBB TOWNSHIP PROPERTY
Porcupine Mining Division

FOR

FALCONBRIDGE LIMITED
Porcupine Mining Division, Timmins, Ontario

RECEIVED
JUN 2 1988
MINING LANDS SECTION

Prepared by
J.C.GRANT [illegible],F.G.A.C.
Exsics Exploration Ltd.
Timmins, Ontario
May 25, 1988

42A12SE0232 2.11273 ROBB

010C

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APPENDECES

Introduction

Exsics Exploration Limited was contracted to perform geophysical surveys on a group of 22 claims owned by Falconbridge Limited, which are situated in Robb Township, Porcupine Mining Division, Timmins, Ontario. These surveys were completed during the latter half of February to the first week of March, 1988.

The objective of those surveys was to locate and outline favorable geological structure which would be suitable for economical base metal and or gold deposition.

Personnel

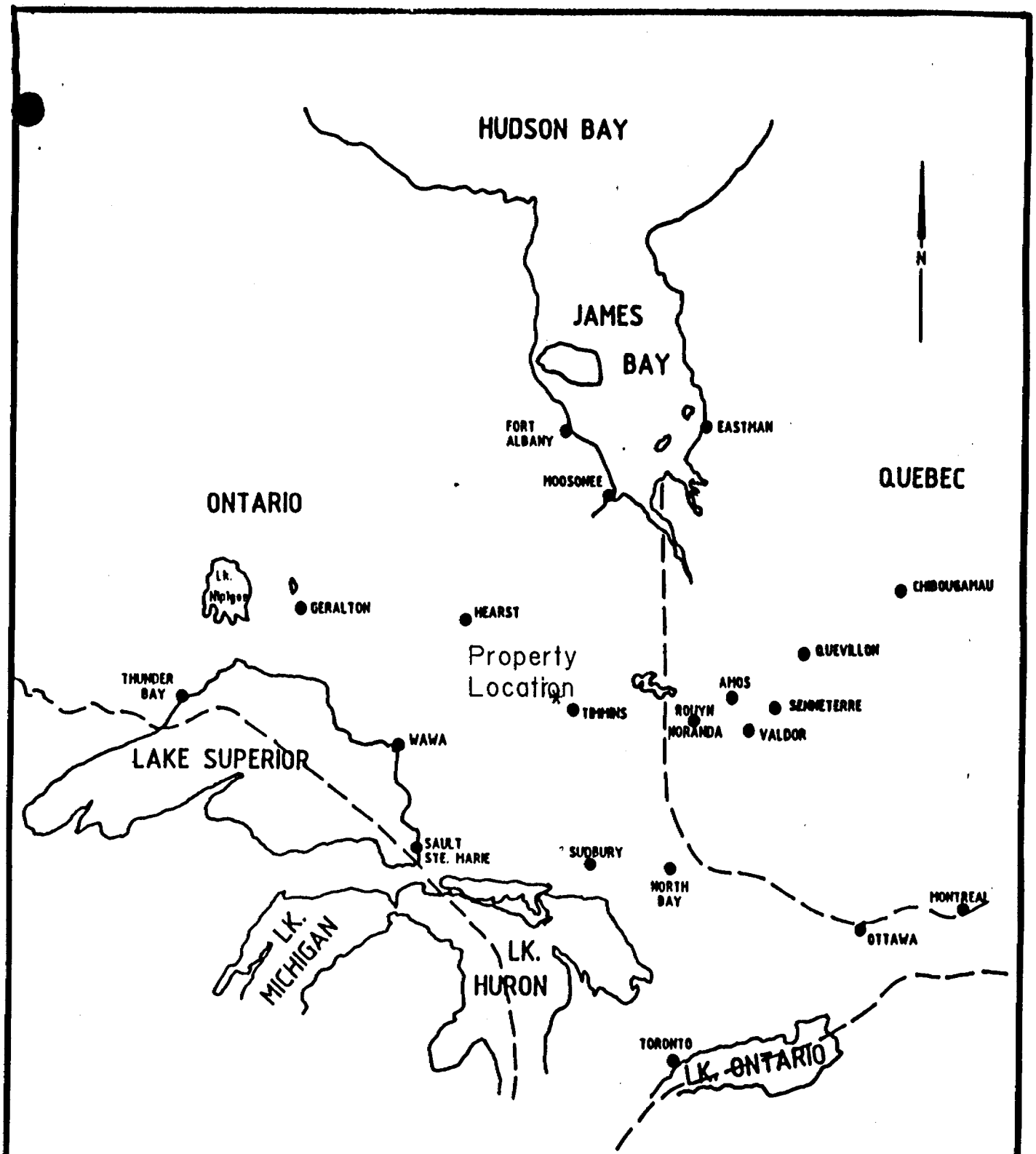
The Exsics staff directly involved with the data collection are as follows:

Lanny Anderson	Timmins, Ontario
Wayne Pearson	" "
Jeff Peterson	" "
Mike Hickey	" "
Rick Lavoy	" "

The work program was supervised by J. C. Grant.

Property Location & Access

The "Robb Property" consists of 22 contiguous, unpatented mining claims all of which are located in the north, central-east section of Robb Township as shown on the Ministry of Northern Development and Mines Plan Map M-309. Half Moon Lake flows into the central-east section of the property. Refer to figures 1 and 2 of this report.



EXSICS EXPLORATION LTD.
P.O. Box 1000, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-6151

CLIENT: FALCONBRIDGE LIMITED

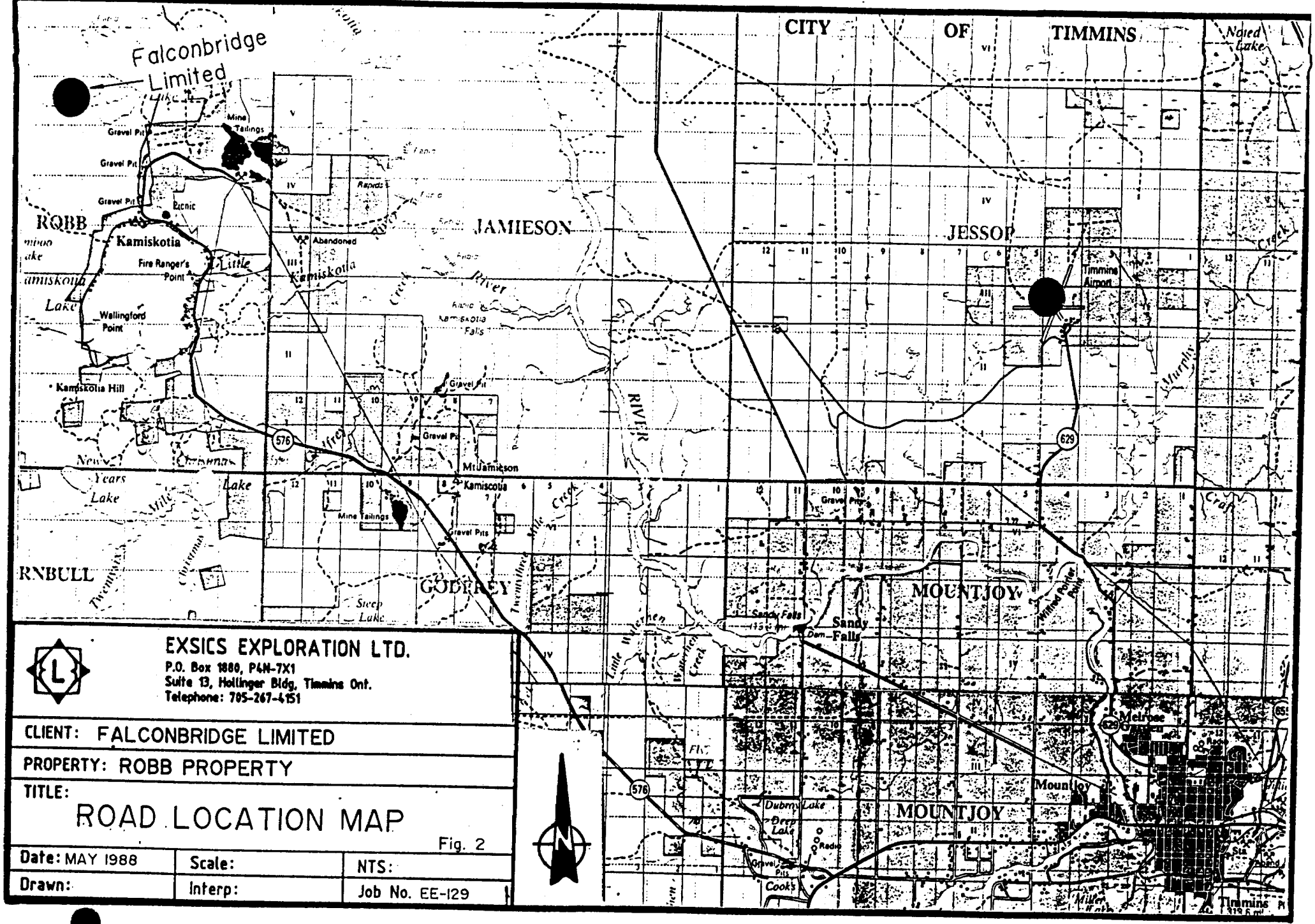
PROPERTY: ROBB PROPERTY

TITLE:

LOCATION MAP

Fig. 1

Date: MAY 1988	Scale: 1"= 125miles	NTS:
Drawn:	Interp:	Job No. EE-129



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

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB PROPERTY

TITLE:

ROAD LOCATION MAP

Fig. 2

Date: MAY 1988	Scale:	NTS:
Drawn:	Interp:	Job No. EE-129

In more general terms, the property is situated approximately 37 km north-northwest of the City of Timmins (figure 2)

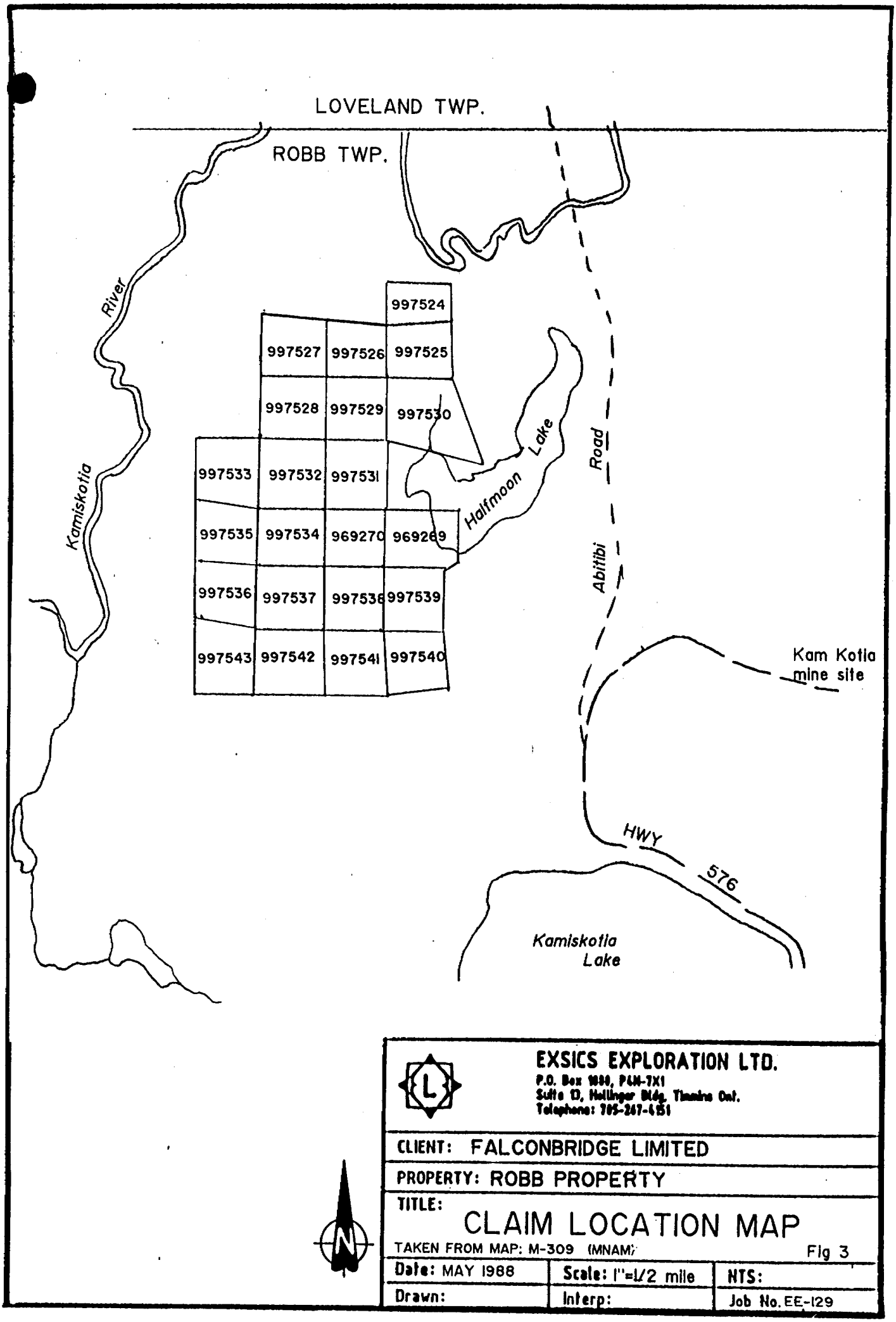
Access to the property is ideal year round. Highway 101 west, head out of the city to the junction of Highways 101 west and 576. Highway 576 is a good paved road running north-northwest up to Kamiskotia Lake. A good secondary gravel road, constructed by Abitibi Lumber runs north off of highway 576 and provides good access to Half Moon Lake. A short boat ride or skidoo ride will bring one to the east end of cut grid.

Claim Group

The claim numbers which make up the "Robb Property" are listed below:

Claim Number	
P-997524	P-997535
997525	997536
997526	997537
997527	997538
997528	997539
997529	997540
997530	997541
997531	997542
997532	997543
997533	969269
997534	969270

Total Group consisits of 22 Claims.



EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 10, Hollinger Bldg. Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB PROPERTY

TITLE:

CLAIM LOCATION MAP

TAKEN FROM MAP: M-309 (MNAM) Fig 3

Date: MAY 1988	Scale: 1"=1/2 mile	NTS:
Drawn:	Interp:	Job No. EE-129

Geophysical Program

This program consisted of a total field magnetic survey, VLF and Max Min II electromagnetic surveys. All of these surveys were completed over the entire property.

Magnetic Survey Procedure

Magnetic Survey:

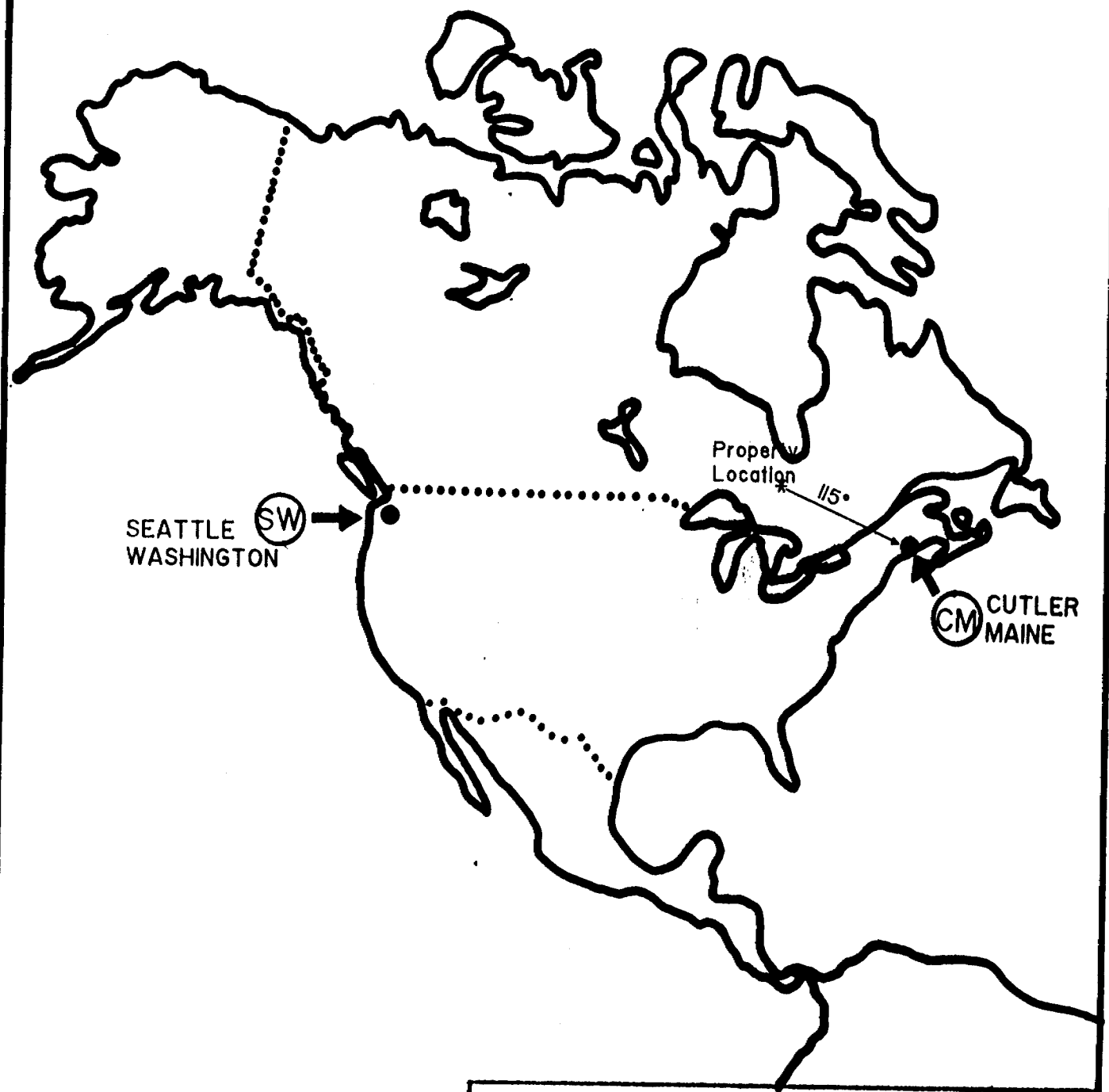
This survey was completed using the EDA Omni IV System and specifications for this unit can be found under Appendix A of this report.

The unit is capable of recording and storing magnetic values acccurate 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 survey grid at a fixed point and this unit was tuned to a reference field of 58500 gammas. The field unit was also tuned at the same fixed point and set to the same reference field.

The base station unit was set to record and store readings at 30 second intervals so as to monitor any spiking or change in the earth's diurnal throughout the day.

At the end of each survey day, the field unit and base station unit are coupled together and the raw field data is dumped to the base station mag where it is merged. The internal microprocessor then computes the diurnal variation in the earth's magnetic field for each survey grid coordinate by comparing the times at which readings were taked and computing any mid-interval values.



EXSICS EXPLORATION LTD.
P.O. Box 1000, P4N-7X1
Suite 10, Hollinger Bldg. Timmins Ont.
Telephone: 705-267-6151

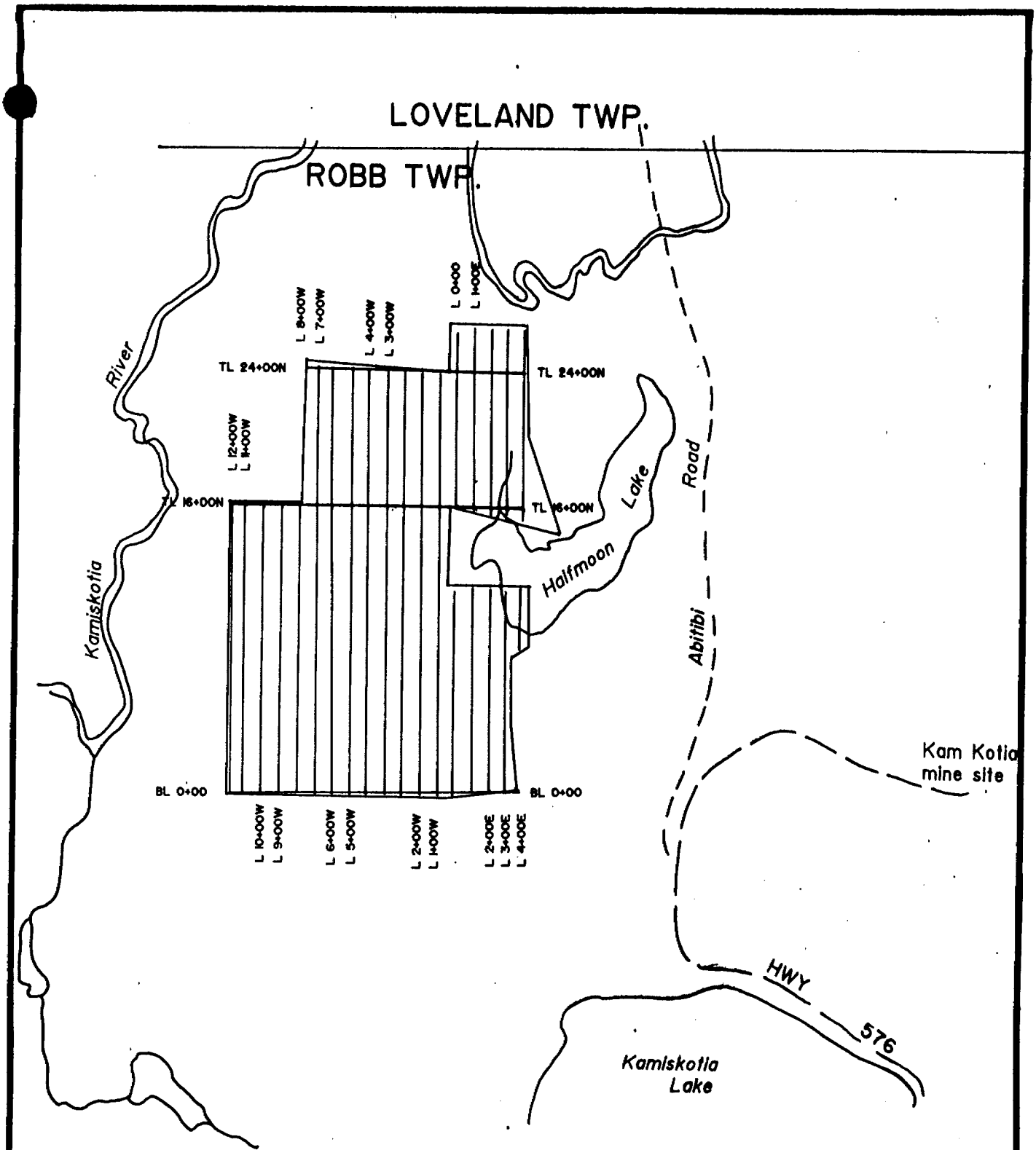
CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB PROPERTY

TITLE: VLF TRANSMITTER STATIONS LOCATION MAP

Fig. 6

Date: MAY 1988	Scale:	NTS:
Drawn:	Interp:	Job No EE-129



EXSICS EXPLORATION LTD.
P.O. Box 1880, P6N-7X1
Suite 13, Hollinger Bldg. Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

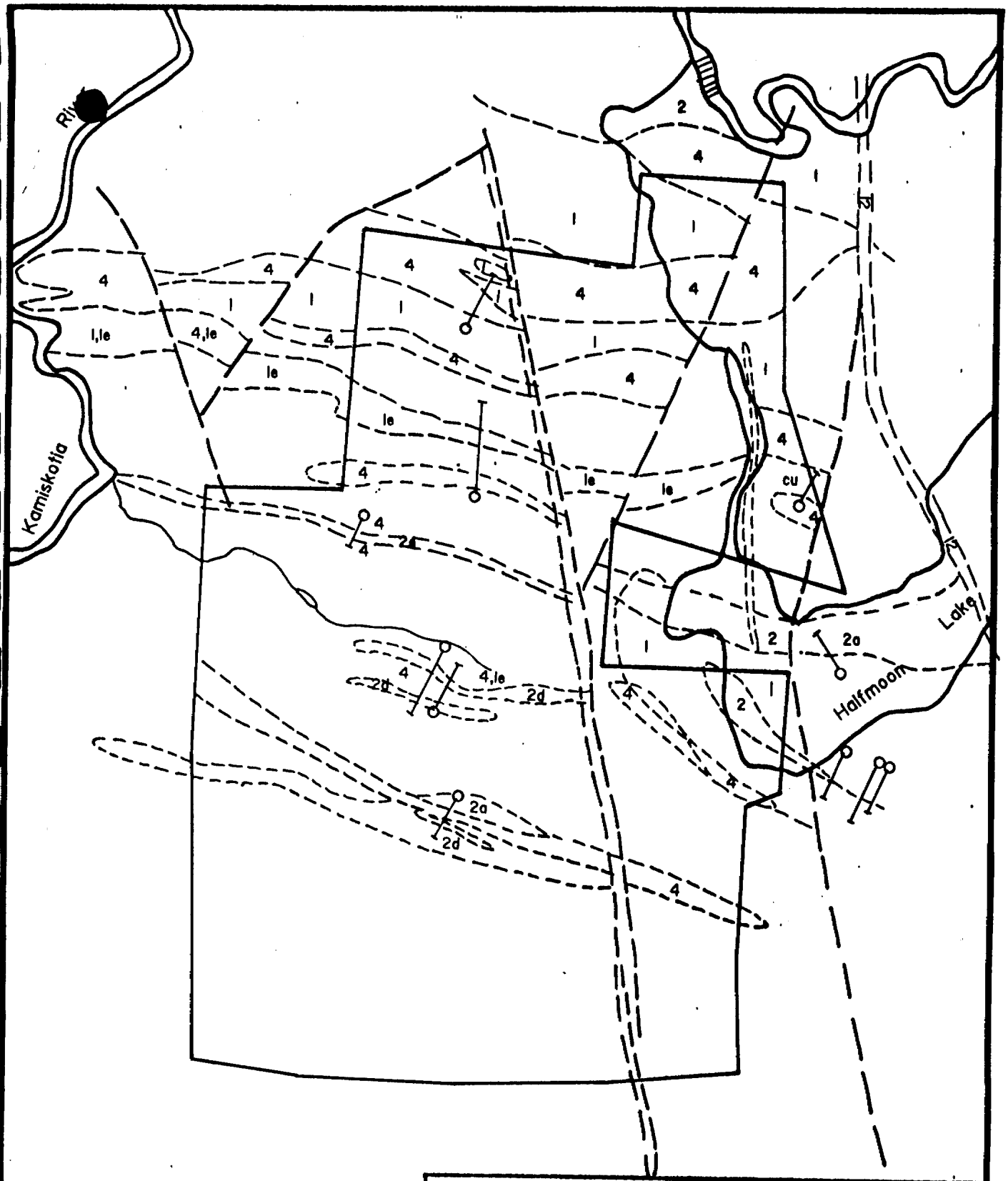
PROPERTY: ROBB PROPERTY

TITLE:

GRID SKETCH MAP

Fig. 4

Date: MAY 1988	Scale: 1"=1/2 mile	NTS:
Drawn:	Interp:	Job No. EE-129



DRILL HOLE

FAULT ZONE

cu COPPER

12 DIABASE

4 MAFIC&ULTRA MAFIC INTRUSIVE ROCKS

2 FELSIC METAVOLCANICS
2a MASSIVE & FOLIATED LAVA
2d PORPHYRITIC TUFF & WELDED TUFF, CHERT

1 MAFIC TO INTERMEDIATE METAVOLCANICS

1e MAFIC DIKES & SILLS

N

EXSICS EXPLORATION LTD.
P.O. Box 1888, P4N-7X1
Suite 13, Hollinger Bldg. Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB PROPERTY

TITLE:

LOCAL GEOLOGY MAP

Taken from: ODM Map P.694

Fig. 5

Date: MAY 1988	Scale: 1"=1/4 mile	NTS:
Drawn:	Interp:	Job No. EE-129

This is most useful in these northern latitudes where more detailed monitoring of the diurnal variations is required.

This correction is done during the data dump of the unit. The retrieved data is the correct data ready for plotting. This plotted data has had a background of 58000 gammas removed for ease in plotting.

Electromagnetic Procedure

VLF Survey

This survey was completed using the EDA Omni Plus System.

Specifications for this unit can be found as Appendix B of this report.

The survey was completed on the entire grid using a transmitter station, Cutler Maine, at a frequency of 24.0 kHz.

A dip angle measurement was recorded at each station on the grid. This data was then plotted direct onto the base maps and profiled. When interpreting this data, a true conductor axis is noted as positive readings to negative readings when traversing south to north.

One should keep in mind, when interpreting this survey, that the VLF unit is an ideal geological tool as it will react favourably to contact zones, faults, and shears as well as outcrop to swamp contacts, creeks, lake shores, and of course anomalous zones.

Horizontal Loop Survey

This survey was completed using the Max Min II System manufactured by Apex Parametrics of Toronto.

Specifications for this system can be found as Appendix C of this report.

This survey is a two-man continuously portable EM System which is designed to measure both the vertical and horizontal in-phase (IP) and quadrature phase (QP) components of the anomalous field from electically conductive zones.

For this survey, a coil separation between the receiver and transmitter operator was set at 150 meter, which would give a theoretical search depth range of 65-75 meters.

The two frequencies chosen were the 1777 and 444 Hz channels which, in the past, has proven to be quite sufficient in this area.

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

This data was then directly plotted onto the base maps.

BASE MAPS

The base maps were set-up at a scale of 1:5000 and all of the collected data was put on. For the magnetic data, 58000 gammas has been subtracted from each reading for ease in plotting. The data was then contoured at 100 gamma intervals wherever possible.

The VLF map was profiled at 1 cm to 10% and all conductor axis have been noted.

The Max Min maps were also profiled at 1 cm to 10% and one map was used for each frequency. The plot point is the mid-point between the operators which accounts for the 75 meter blanks at the north and south end of each line.

All of these maps can be found in the back pocket of this report.

Survey Results

The Max Min survey was successful in locating several areas of interest of which two appear to relate to legitimate bedrock conductors.

These two zones show up well on the 444 frequency which is less affected by conductive overburden layering.

The first zones strikes at 080 degrees from lines 700mw to 200mw at 1100 to 1200 mn. This feature lies at a depth of 60 meters with a conductivity value of about 15 mhos. The zone appears to be dipping slightly south to near vertical.

The west section of the zone has no definite magnetic association. The east extension strikes into but not across a strong magnetic high feature. This magnetic feature may relate to an ultramafic intrusive flowing into the metavolcanic host rock.

On examination of ODM preliminary map P.694, Geological series, Robb Township scale 1 to 1/4 mile, two drill holes appear to have tested this zone however, a more positive location of the holes are needed before eliminating the feature.

The second EM target closely parallels the first zone and is located across lines 600 mw to 300 mw at 700 to 800 mn. This zone lies at a depth of 30 meters with a conductivity of 2-3 mhos.

The magnetics show some weak low association which is somewhat spotty and irregular.

This feature may also have ben tested by a drill hole, see map P.694 for location.

The magnetic structure showing up across lines 800 mw to 200 mw at 2200 to 2400 mn may in fact relate to ultramafics and intermediate metavolcanic flows.

Another area of interest may be the magnetic activity across lines 400 mw to 400 me at 450 mn to 0. This area again may relate to ultramafic to felsic intrusives.

The VLF survey most probably is indicative of a complicated buried structure of flow and intrusive type material.

The interpreted fault structure, Map P-694, may run through lines 700 mn to 0+00 in a north-northwest direction.

Conclusions

The surveys did prove to be successful in outling two moderate to good EM zones on the grid. These zones may have been tested but closer inspection of the zones and hole locations would be necessary before drawing any definite conclusions.

Recommendations

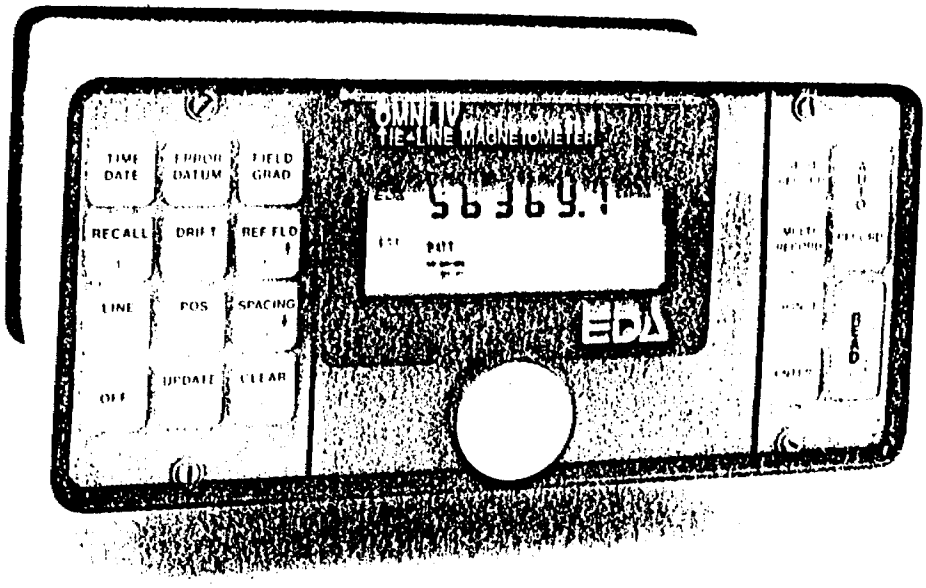
A geological survey may add a more definite interpretation of the zones. Also, this mapping may locate the actual position of the old drilling.

The only additional recommendatiion would be further drilling to define the targets.

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

EDA

Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS-232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to +55°C; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

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

APPENDIX B

OMNI PLUS VLF/Magnetometer System

EDA

Major Benefits of the OMNI PLUS

- Combined VLF/Magnetometer/Gradiometer System
- No Orientation Required
- Three VLF Magnetic Parameters Recorded
- Automatic Calculation of Fraser Filter
- Calculation of Ellipticity
- Automatic Correction of Primary Field Variations
- Measurement of VLF Electric Field

Specifications*

Frequency Tuning Range	15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured	Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from −40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	−40°C to +55°C; 0 – 100% relative humidity; Weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only.

Weights and Dimensions	
Instrument Console	2.8 kg, 128 x 150 x 250 mm
Sensor Head	2.1 kg, 130 dia. x 130 mm
VLF Electronics Module	1.1 kg, 40 x 150 x 250 mm
Lead Acid Battery Cartridge	1.8 kg, 235 x 105 x 90 mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40 mm
Disposable Battery Belt	1.2 kg, 540 x 100 x 40 mm

*Preliminary

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

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

Printed in Canada

APPENDIX C

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.

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 for 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 12 years.

6. that my report on FALCONBRIDGE LIMITED. on the Robb Township property, Procupine Mining Division, 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 25th day of May 1988
at Timmins, Ontario.

GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW

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

Ministry of Northern Development and Mines

Ontario

G
Te

42A12SE0232 2.11273 ROBB

900

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, VLF-EM.

Township or Area ROBB TOWNSHIP

Claim Holder(s) FALCONBRIDGE LTD.
571 MONETA, TIMMINS, ONT.

Survey Company EXSICS EXP. LTD.

Author of Report JOHN C. GRANT

Address of Author BOX 1880, TIMMINS, ONT.

Covering Dates of Survey 16/02/88 to 18/5/88.
(linecutting to office)

Total Miles of Line Cut 48.8 KM.

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	40
--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 18/88 SIGNATURE: J.C. Grant
Author of Report or Agent

Res. Geol. _____ Qualifications 2.5341

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	997524
	997525
	997526
	997527
	997528
	997529
	997530
	997531
	997532
	997533
	997534
	997535
	997536
	997537
	997538
	997539
	997540
	541
	542
	543
	969270
	969269

TOTAL CLAIMS 22

If space insufficient, attach list

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 2410 Number of Readings 9760

Station interval 20 METERS Line spacing 100 METERS

Profile scale 1CM to 10%.

Contour interval 100 GAMMA.

MAGNETIC

Instrument EDA OMNI IV

Accuracy – Scale constant ± .5 GAMMA.

Diurnal correction method BASE STATION RECORDER

Base Station check-in interval (hours) 30 SEC READINGS DURING DAY.

Base Station location and value

ELECTROMAGNETIC

Instrument APEX MAX MIN II SYSTEM

Coil configuration COPLANER COILS.

Coil separation 150 METER

Accuracy ± 1 %.

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

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

Parameters measured 1 IN PHASE & 1 OUT OF PHASE

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 VLF - EM

Instrument EDA OMNI PLUS.

Accuracy ± 1.5 %.

Parameters measured DIP ANGLE OF RESULTANT FIELD.

Additional information (for understanding results) FREQUENCY WAS 24.0 KHz CUTLER MAINE, FIXED TX LOCATION.

_____

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 _____

_____

_____

_____

_____

_____

_____

_____

_____

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

DOCUMENT NO. W8806.118

June 4

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.

2.11273

Type of Survey(s): MAGMIN, MAGNETIC, VLF SURVEYS.	Township or Area: ROBB TWP.
Claim Holder(s): FALCONBRIDGE LIMITED.	Prospector's Licence No.: A-21647
Address: 571 MONETA, TIMMINS, ONT.	
Survey Company: EXSICS EXP. LTD.	Date of Survey (from & to): 16 Day / 2 Mo. / F8 Yr. – 3 Day / 3 Mo. / 88 Yr.
Name and Address of Author (of Geo-Technical report): JOHN C GRANT, BOX 1880, TIMMINS, ONT.	Total Miles of line Cut: 48.8 Km

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	40
	Geophysical - Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

RECEIVED
MAY 24 1988
MINING LANDS SECTION

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	

PORCUPINE MINING DIVISION
RECEIVED
APR 15 1988

Expenditures (excludes power stripping)

Type of Work Performed	
Performed on Claim(s)	

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = 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	Recorded Holder or Agent (Signature)
April 15/88	JOHN GRANT

GEOLOGICAL ASSOCIATION OF CANADA
FELLOW

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P.	997524	
	997525	
	997526	
	997527	
	997528	
	997529	
	997530	
	997531	
	997532	
	997533	
	997534	
	997535	
	997536	
	997537	
	997538	
	997539	
	997540	
	997541	
	997542	
	997543	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P.	969270	
	969269	

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
JUN 8 1988
RECEIVED

RECORDED
APR 15 1988

Total number of mining claims covered by this report of work: 22

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1760	April 15/88	
	Date Approved as Recorded: June 8/88 AB	Branch Director

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	Date Certified	Certified by (Signature)
c/o JOHN C GRANT, BOX 1880, TIMMINS, ONT. P4N-7X1	April 5/88	

1362 (85/12)

LOVELAND TP. M.293

COTE TP. M.271

JAMIESON TP. M.288

TURNBULL TP. M. 316

THE TOWNSHIP
OF

ROBB

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

REGISTERED PLAN OF SUBDIVISION	
PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
PATENTED for S.R.O.	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

Areas withdrawn from staking under Section 42 of the Mining Act R.S.O. 1970 See 6(1)(b)

File | Date | Disposition

MAY 3 1988

This township lies within the Municipality of CITY of TIMMINS.

RESERVATIONS:

(1) ~~Reserved for recreational purposes under Sec. 3 of the Public Lands Act~~

R1 - S.R.O. REOPENED FOR STAKING

PLANNED REFORESTATION APR. 14/82

(R2) ORDER OF THE MINISTER WITHDRAWS MINING AND SURFACE RIGHTS UNDER SECTION 35, The Mining Act, RSO 1980 ORDER NO. W. 27/87 NR March 12/87

Act 11/29. Received

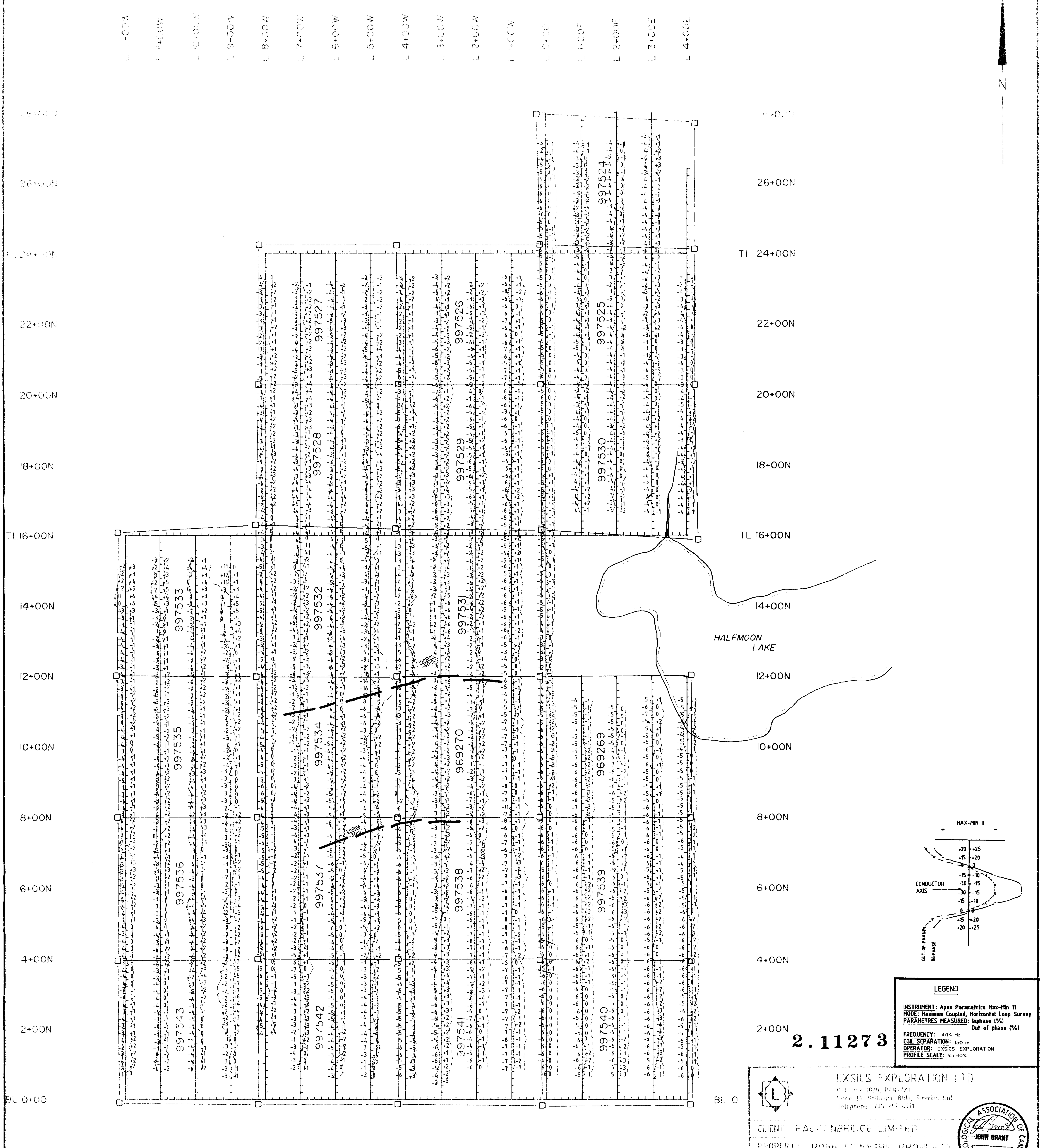
PLAN NO. M.309

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

42A12SE0232 2.11273 ROBB

200



2.11273

LEGEND

INSTRUMENT: Apex Parametrics Max-Min 11
MODE: Maximum Coupled, Horizontal Loop Survey
PARAMETRES MEASURED: Inphase (%)
Out of phase (%)

FREQUENCY: 444 Hz
COIL SEPARATION: 150 m
OPERATOR: EXSICS EXPLORATION
PROFILE SCALE: 1cm=10%

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

GEOLOGICAL ASSOCIATION OF CANADA · FELLOW · JOHN GRANT

CLIENT FALCONBRIDGE LIMITED
PROPERTY ROBB TOWNSHIP PROPERTY
TITLE
MAX-MIN II 444 Hz

Date: March 1984

42A12SE0232 2.11273 ROBB

210

L 12+00W | L 11+00W | L 10+00W | L 9+00W | L 8+00W | L 7+00W | L 6+00W | L 5+00W | L 4+00W | L 3+00W | L 2+00W | L 1+00W | L 0+00 | L 1+00E | L 2+00E | L 3+00E | L 4+00E

28+00N
26+00N
TL 24+00N
22+00N
20+00N
18+00N
TL 16+00N
14+00N
12+00N
10+00N
8+00N
6+00N
4+00N
2+00N
BL 0+00

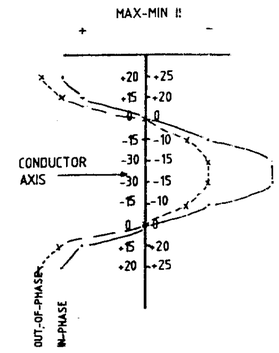
997527 | 997526 | 997525 | 997524
997528 | 997529 | 997530
997533 | 997532 | 997531
997535 | 997534 | 969270 | 969269
997536 | 997537 | 997538 | 997539
997543 | 997542 | 997541 | 997540

1mhos 15m

HALFMOON LAKE

N

MAX-MIN II



LEGEND

INSTRUMENT: Apex Parametrics Max-Min 11
MODE: Maximum Coupled, Horizontal Loop Survey
PARAMETRES MEASURED: Inphase (%)
Out of phase (%)
FREQUENCY: 1777 Hz
COIL SEPARATION: 150 m
OPERATOR: EXSICS EXPLORATION
PROFILE SCALE: 1cm=10%

2.11273

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

GEOLOGICAL ASSOCIATION OF CANADA · JOHN GRANT · FELLOW ·

CLIENT: FALCONBRIDGE LIMITED
PROPERTY: ROBB TOWNSHIP PROPERTY
TITLE: MAX-MIN II 1777 Hz

Date: March 1988	Scale: 1:5000	NTS:
Drawn: P.G.	Interp:	Job No EE-129

42A12SE0232 2.11273 ROBB

L 12+00W | L 11+00W | L 10+00W | L 9+00W | L 8+00W | L 7+00W | L 6+00W | L 5+00W | L 4+00W | L 3+00W | L 2+00W | L 1+00W | L 0+00 | L 1+00E | L 2+00E | L 3+00E | L 4+00E

N

28+00N
26+00N
TL 24+00N
22+00N
20+00N
18+00N
TL 16+00N
14+00N
12+00N
10+00N
8+00N
6+00N
4+00N
2+00N
BL 0+00

HALFMOON LAKE

2.11273

LEGEND

Instrument: EDA OMNI-IV
Parametres Measured: Earth's total magnetic field
Accuracy: +/- 1 nano-teslas
Diurnals: Corrected by base station recorder
Contour Interval:
Reference Field:
Datum Subtracted:

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

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB TOWNSHIP PROPERTY

TITLE: CONTOURED MAGNETOMETER SURVEY

GEOLOGICAL ASSOCIATION OF CANADA · JOHN GRANT · FELLOW ·

Date: March 1988	Scale: 1:5000	NTS:
Drawn: P.G.	Interp:	Job No. EE-129

42A12SE0232 2.11273 ROBB

230

L 12+00W | L 11+00W | L 10+00W | L 9+00W | L 8+00W | L 7+00W | L 6+00W | L 5+00W | L 4+00W | L 3+00W | L 2+00W | L 1+00W | L 0+00 | L 1+00E | L 2+00E | L 3+00E | L 4+00E

N

28+00N
26+00N
TL 24+00N
22+00N
20+00N
18+00N
TL 16+00N
14+00N
12+00N
10+00N
8+00N
6+00N
4+00N
2+00N
BL 0+00

997524 997525 997526 997527 997528 997529 997530 997531 997532 997533 997534 997535 997536 997537 997538 997539 997540 997541 997542 997543 969270 969269

HALFMOON LAKE

CROSS-OVER
VERTICAL INPHASE (percent)
+20% +10% 0% -10% -20%
90°

2.11273

LEGEND

INSTRUMENT: OMNI PLUS
TRANSMITTER STATION: CUTLER MAINE
FREQUENCY: 24.0
PARAMETRES MEASURED: Inphase Dip Angle
OPERATOR: EXSICS EXPLORATION
VERTICAL SCALE: 1cm=10%

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GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: ROBB TOWNSHIP PROPERTY

TITLE:

VLF DIP ANGLE

Date: March 1988	Scale: 1:5000	NTS:
Drawn: P.G.	Interp:	Job No. EE-129

42A12SE0232 2.11273 ROBB