



010

GEOPHYSICAL REPORT
FOR
FALCONBRIDGE LIMITED
ON THE
KEITH 8200 PROJECT
KEITH TOWNSHIP
PORCUPINE MINING DIVISION
TIMMINS, ONTARIO

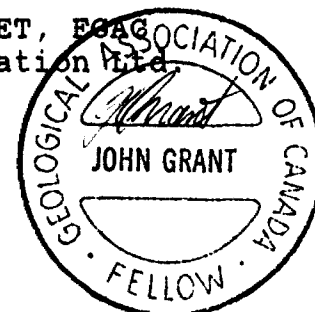
RECEIVED

MAR 27 1991

MINING LANDS SECTION

Prepared By:
J.C. Grant, CET, FCG
Exsics Exploration Ltd
March, 1991

2.14026



INTRODUCTION

This report will deal with the results of a geophysical program carried out over a block of claims located in Keith Township, Porcupine Mining Division, Timmins, Ontario. The property is held 100% by Falconbridge Limited.

During the latter part of January, 1991, Falconbridge retained the services of Exsics Exploration Limited to perform the program. The purpose of the program was to verify the existence of several airborne targets on the block, in the event they signified structural trends favourable for base metal and/or metal deposition.

PERSONNEL

The people directly involved with the collection of all the field data were as follows:

Robin Mathieu.....Operator.....Timmins, Ontario

Dave Clement.....Helper.....Timmins, Ontario

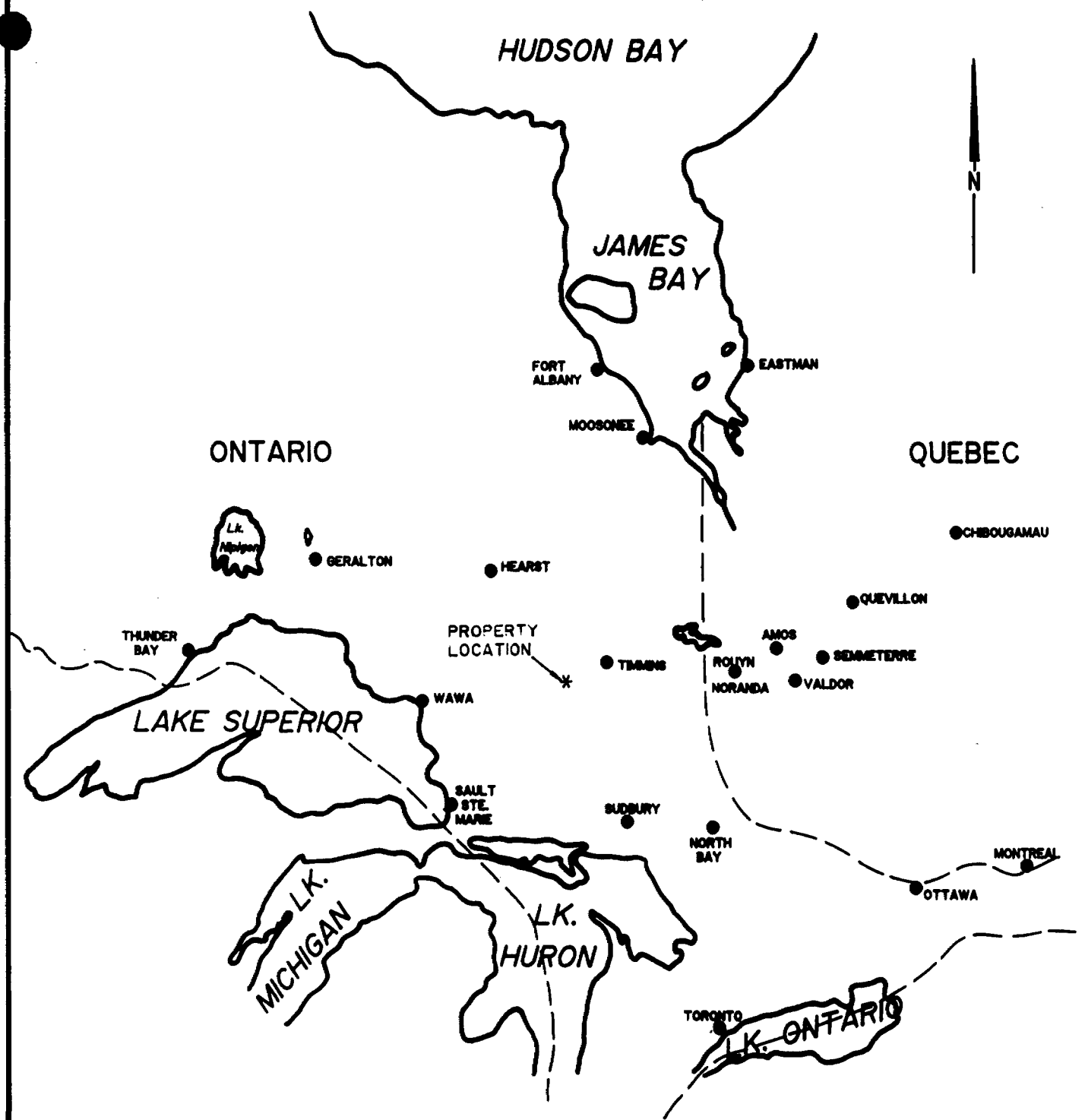
The work was performed under the direct supervision of J. C. Grant.


LOCATION AND ACCESS

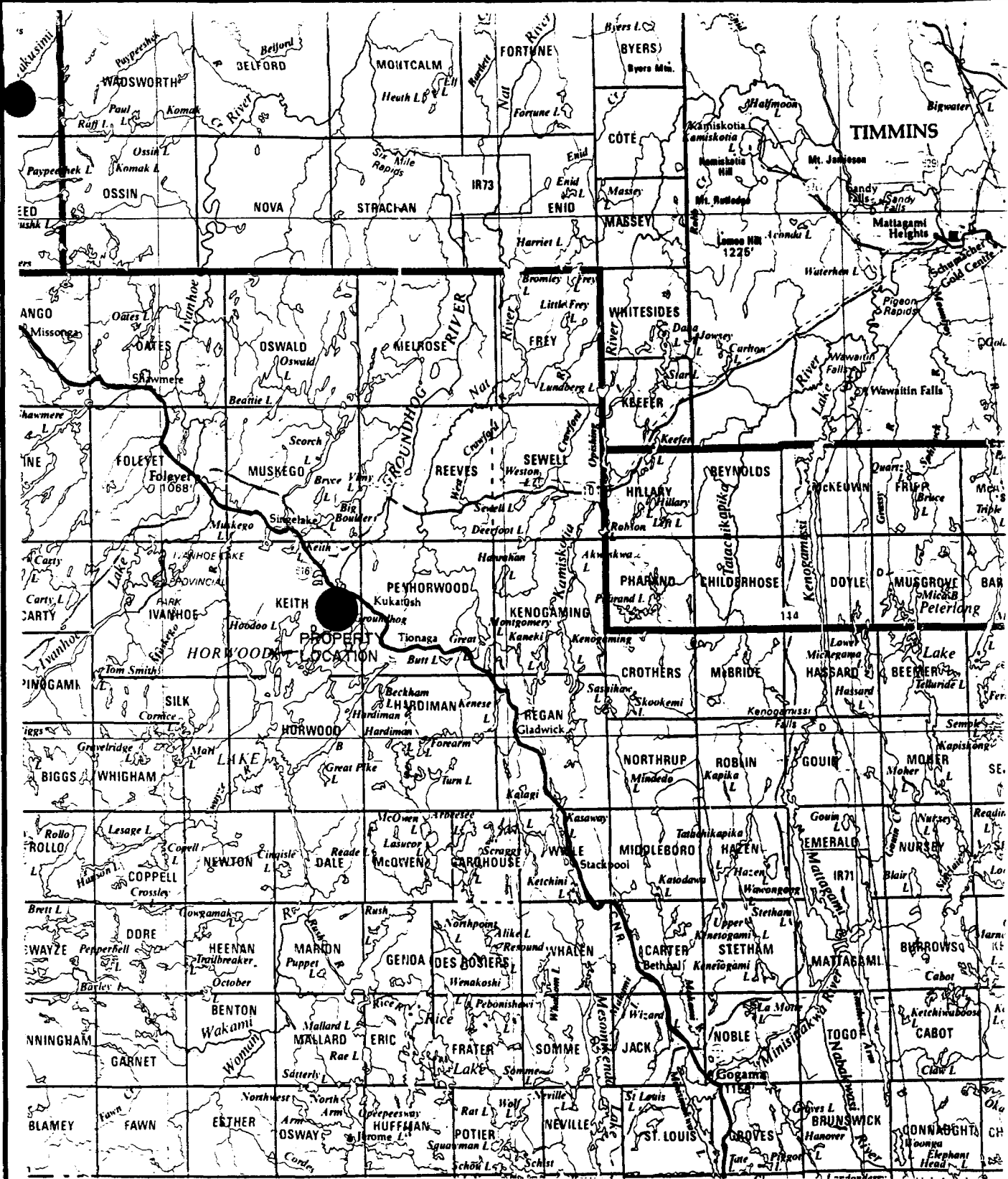
The property consists of 10 contiguous unpatented mining claims all of which are located in the south central section of Keith Township, Porcupine Mining Division, District of Cochrane, Timmins, Ontario. More specifically, the block is situated on the northwest arm of Horwood Lake directly north of West Marsh Island. (Refer to Figure 1 and 2). Horwood Lake is situated approximately 21 air kilometres southeast of the Village of Foleyet, Northeastern Ontario.

Access to the property is ideal year round. The lumber companies in the area have developed an extensive network of good gravel, all weather roads into the area with the main haulage road running right to the west of the property.

The Village of Foleyet is situated approximately 100 km west of the City of Timmins, on Highway 101 West. It takes approximately 1.5 hours to drive from Timmins to the claim group.



	EXSICS EXPLORATION LTD. P.O. Box 1888, P4N-7X1 Suite 13, Hollinger Bldg. Timmins Ont. Telephone: 705-267-451	
	CLIENT: FALCONBRIDGE LIMITED	
PROPERTY: KEITH TOWNSHIP		
TITLE: <div style="text-align: center; font-size: 1.2em;">LOCATION MAP</div>		
Fig. 1		
Date: March '99'	Scale: 1"=125miles	NTS:
Drawn:	Interp: J. Grant	Job No. EE-446



EXSICS EXPLORATION LTD.

P.O. Box 1889, P4N-7X1
 Suite 13, Hollinger Bldg. Timmins Ont.
 Telephone: 705-267-451

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: KEITH TOWNSHIP

TITLE: PROPERTY LOCATION

Fig. 2

Date: March '99	Scale: 1:600,000	NTS:
Drawn:	Interp: J. Grant	Job No. EE-48

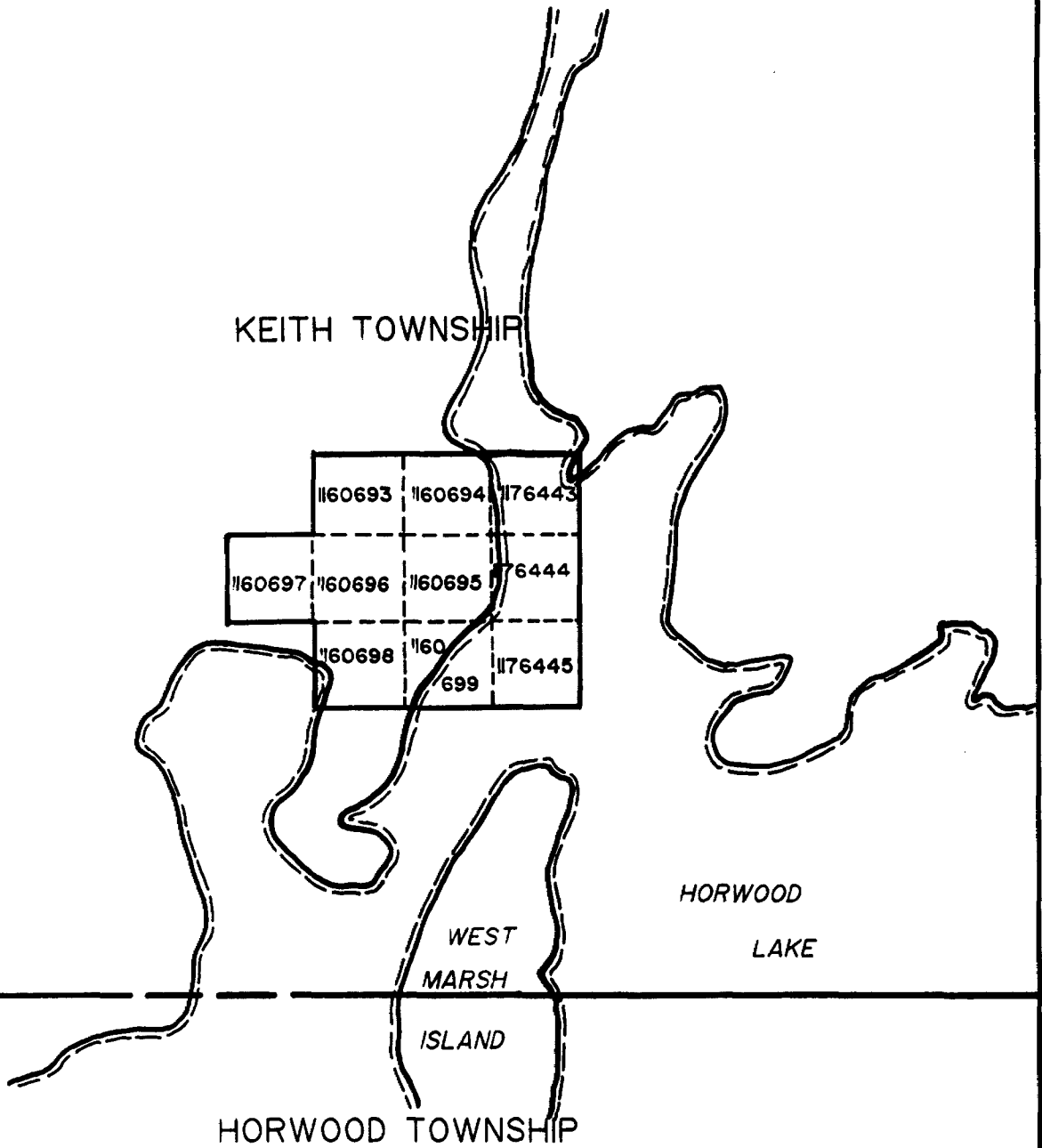
CLAIM GROUP

The property consists of 10 claims all of which are located in Southern Keith Township and on the northwest shore of Horwood Lake. The numbers of the claims are as follows:

P-1160693	P-1160694	P-1160695	P-1160696
P-1160697	P-1160698	P-1160699	P-1176443
P-1176444	P-1176445		

TOTAL: 10 Claims

Refer to Figure 3 of this report, copies from MNM Plan Map G-3238, Keith Township.



KEITH TOWNSHIP

1160693 1160694 1176443

1160697 1160696 1160695 1176444

1160698 1160699 1176445

HORWOOD
LAKE

WEST
MARSH

ISLAND

HORWOOD TOWNSHIP



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

CLIENT: **FALCONBRIDGE LIMITED**

PROPERTY: **KEITH TOWNSHIP**

TITLE:
CLAIM SKETCH

Fig. 3

Date: March '99

Scale: 1"=1/2mile

NTS:

Drawn: P. J.

Interp: G. Grant

Job No. EE 11-46

REGIONAL AND PROPERTY GEOLOGY

The property is generally underlain by mafic to intermediate metavolcanics comprised of basalts to andesitic flows. Regionally the township has a number of sulphide iron formations, graphitic-horizons as well as several gold occurrences. The northern section of the township has a bank of east-west metasediments interlaced with rhyolitic and dacite flows. There are also several areas of ultramafic intrusives which appear to have been faulted and folded by dikes and similar cross-structures. There are also several areas of granite intrusives.

LINECUTTING PROGRAM

A detailed metric grid was first cut over the property using a line spacing of 100 meters and a station interval of 20 meters. This grid would provide the control for the follow-up geophysical program and later for spotting drill targets.

GEOPHYSICAL PROGRAM

This program consisted of a total field magnetic survey run in conjunction with a horizontal loop, electromagnetic survey.

Magnetic Survey:

This survey was completed using the EDA Omni IV System. Specifications for this system can be found as Appendix B of this report.

This unit is rugged compact portable instrument designed specifically for field operation. The unit is extremely accurate and flexible. It contains a microprocessor and associated circuitry for monitoring, storing and processing data.

For this project, two Omni IV units were used in the following manner. One unit was set up at a fixed location in the base station mode where it measures and stores in it's memory the diurnal variations in the earth's magnetic field. Readings were taken automatically at intervals of 30 seconds. The memory has a capacity of 5000 data blocks.

A field unit was also used and it was tuned to the same reference field as the base unit and at the same location. When the two units are connected together, the base unit can correct

and dump the total field measurements. These corrections made are for diurnal variations and reference field values.

For this particular survey, a reference field of 58500 gammas was used throughout the period.

Also, a background of 58000 gammas has been removed from each reading for ease in plotting purposes only. The data was then contoured at 25 gamma intervals wherever possible.

This magnetic contour map is included in the back pocket of this report.

Electromagnetic Survey:

This survey was completed using the Apex MaxMin II System. Specifications for this unit can be found as Appendix A of this report.

The MaxMin II is a two-man continuously portable EM system. It is designed to measure both the vertical and horizontal in-phase (IP) and quadrature (QP), components of the anomalous field from electrically conductive zones. More accurately, the directions of the measured components are perpendicular and parallel to the mean slope between the transmitting coil (Tx) and the receiving coil (Rx). The plane of the transmitter is kept

parallel to the mean slope between the transmitter and receiver at all times. This means that the MaxMin is in effect a horizontal loop (HL) system, when the receiver measures anomalous components perpendicular to the mean slope between the coils.

This system has the following principal features designed into it:

- 1) Five system frequencies of 222, 444, 888, 1777 and 3555 Hz to deal effectively with a wide range of overburden and bedrock conductivities.
- 2) Several transmitter, receiver operations - 50, 100, 150, 200 and 250 meters to cope with a wide range of problems from search for large deep conductive zones to the resolution of shallow, parallel conductive zones.
- 3) Good intercom system for operator co-ordination.
- 4) Warning lights to indicate invalid readings.
- 5) Lightweight portability to reduce operating costs.

For this survey, a coil separation of 150 meters was used between the two operators. This separation would result in a theoretical search depth range of 75 to 80 meters with a side-seeking ability of 75 meters on both sides of the line of survey.

The collected data is taken at the mid-point between the two operators which would account for the 75 meter gaps at the ends of each line.

The collected data was then plotted onto base maps, one for each frequency, and then profiled at 1 cm to $\pm 20\%$. These base maps are included in the back pocket of this report.

SURVEY RESULTS

The electromagnetic survey was successful in outlining one major feature and several minor zones over the survey grid. These zones will be discussed separately and in detail below:

Zone A:

This represents the most predominant feature on the grid. It strikes east to northeast across lines 10000ME to 11100ME and continues off of the survey grid to the northeast. The zone represents a good legitimate bedrock conductor situated at a depth range of 15 to 37 meters and appears to be deepening to 65 meters to the northeast. The conductivity ranges from 3 to 12 mhos and it is dipping slightly to the north. The strongest portion of the zone lies between lines 10300ME and 10500ME.

The zone has a somewhat spotty magnetic correlation with the western and central sections grading to a moderate broad signature to the east.

The spotty highs could represent sulphide concentrations along the zones strike length. However, caution is advised when drilling the zone especially in the vicinity of line 10300ME and 10400ME as there appears to be a definite cross-structure present. This cross-structure could be dike related possibly fault controlled.

A second questionable response was weakly noted striking northeast across lines 10400ME to 10600ME. This feature may relate to an airborne target on strike to the southwest. However, further work is required to better define the target.

The magnetics for the same area show a moderate spot low associated directly with the airborne target. A second cross-structure may also be evident running northwest across lines 11000ME/9500MN to L10400ME/10300MN. This cross-structure, in turn, appears to have been cut by a north-south structure in the vicinity of line 10800ME.

The weak EM response, paralleling the main feature, to the north, may in fact be indicative of the down dip extension of the main zone. However, it may also represent a weak, separate

parallel zone unrelated to the main zone. Magnetically it is situated between the predominant cross-structure to the west and a bullseye type high to the east.

The fourth and final EM response is a weak zone situated across lines 11000ME to 11100ME and 9760MN. It is entirely situated out in Horwood Lake and may, in fact, relate to lake bottom sediments. This zone should not be ruled out if drilling returns favourable geology or sulphides. Magnetically the zone is quiet.

RECOMMENDATIONS AND CONCLUSIONS

Certainly the program was successful in locating and outlining the airborne targets. The main feature represents a good bedrock target well within the search depth capabilities of the survey.

The increase in depth and mho value of the response on line 11100ME may suggest the target strikes as far as another airborne target situated out in the lake. At this point, and until the main zone is drilled, the zone need not be traced further.

The isolated parallel EM zones are questionable at this writing since they require further follow-up to enhance them.

If drilling of the main zone returns interesting geological structure or ore material, then certainly they would be elevated in priorities.

Should follow up surveys be entertained, I would suggest a wider coil separation of 200 meters or a large loop Deep EM survey.

Respectfully Submitted

John C. Grant, O.E.S.



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 16 years.
6. that my report on the KEITH 8200 PROJECT, KEITH TOWNSHIP, 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 14th day of March, 1991 at Timmins, Ontario

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



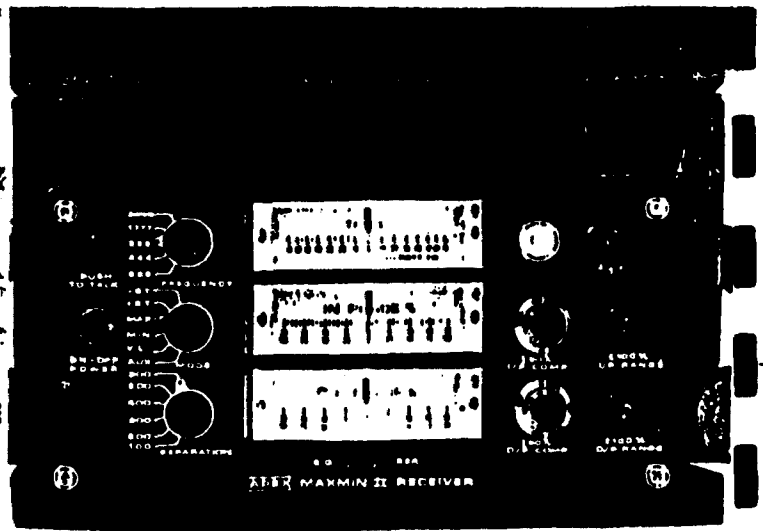
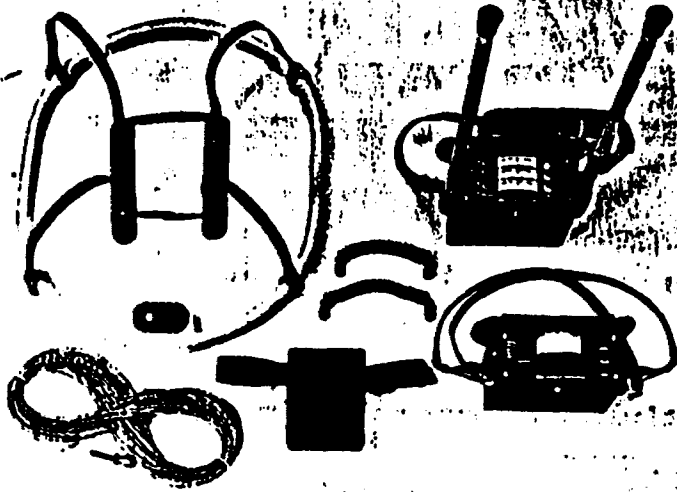
A P P E N D I X A

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, 500 and 600 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





SPECIFICATIONS :

- Frequencies:** 222, 444, 888, 1777 and 3555 Hz.
- Modes of Operation:** **MAX:** Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.
MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.
V.L.: Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.
- Coil Separations:** 25, 50, 100, 150, 200 & 250m (MMI) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). 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: $\pm 20\%$, $\pm 100\%$ by push-button switch.
 Quadrature: $\pm 20\%$, $\pm 100\%$ by push-button switch.
 Tilt: $\pm 75\%$ slope.
 Null (V.L.): Sensitivity adjustable by separation switch.
- Readability:** In-Phase and Quadrature: 0.25% to 0.5% ; Tilt: 1%.
- Repeatability:** $\pm 0.25\%$ to $\pm 1\%$ normally, depending on conditions, frequencies and coil separation used.
- Transmitter Output:** - 222Hz : 220 Atm²
 - 444Hz : 200 Atm²
 - 888Hz : 120 Atm²
 - 1777Hz : 80 Atm²
 - 3555Hz : 30 Atm²
- Receiver Batteries:** 9V trans. radio type batteries (4). Life: approx. 35hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.
- Transmitter Batteries:** 12V 6Ah 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 operators 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:** 8kg (13 lbs.)
- Transmitter Weight:** 13kg (29 lbs.)
- Shipping Weight:** Typically 60kg (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

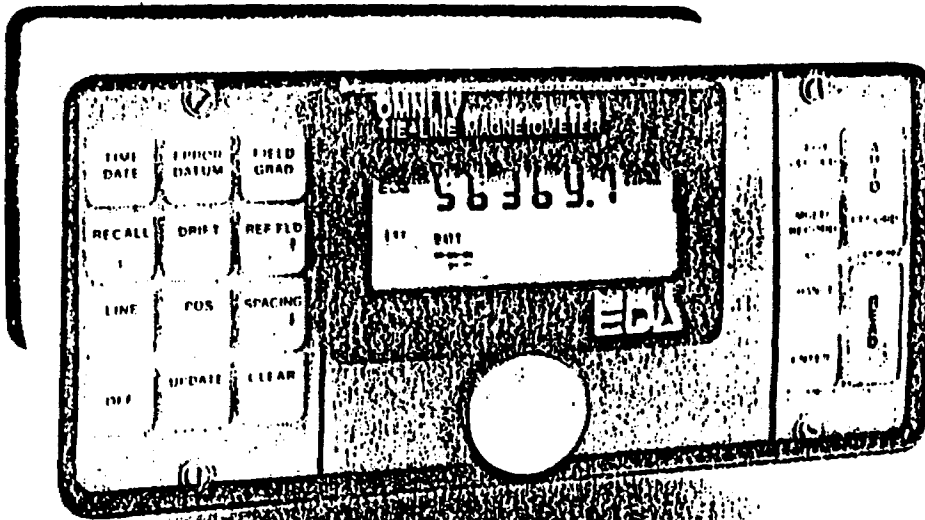
Cables: APEXPARA TORONTO

Telex: 06-966773 NOROVK TOR

A P P E N D I X B

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.

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

In USA:
 EDA Instruments Inc.
 5151 Ward Road,
 Wheat Ridge, Colorado
 USA 80033
 (303) 422 9112

A P P E N D I X C



Ontario



42B015E0302 2.14026 KEITH

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

Your File: W. 9160. 00114, 115
Our File: 2. 14026

June 13, 1991

Mining Recorder
Ministry of Northern Development
and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir/Madam:

RE: Notice of Intent dated May 13, 1991 for Geophysical
(Electromagnetic and Magnetometer) Surveys on mining
claims P. 1160693 et al. in the Township of Keith.

The assessment work credits, as listed with the above-mentioned
Notice of Intent have been approved as of the above date.

Please inform the recorded holder of these mining claims and so
indicate on your records.

Yours sincerely,

Ron. C. Gashinski,
Provincial Manager, Mining Lands
Mines & Minerals Division

CD
CDS/jl

Enclosures:

cc: Falconbridge Limited
Timmins, Ontario
✓ Assessment Files Office
Toronto, Ontario

Exsics Exploration Ltd.
Timmins, Ontario
Resident Geologist
Timmins, Ontario



Recorded Holder
Falconbridge Limited

Township or Area
Keith Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic <u>20.0</u> days	P.1160693-696 incl.
Magnetometer <u>40.0</u> days	1160698-699
	1176443-445 incl.
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/>	Airborne <input type="checkbox"/>
Special provision <input checked="" type="checkbox"/>	Ground <input checked="" type="checkbox"/>
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

P.1160697: 40 days Magnetometer
15 days Electromagnetic

Note: Credits have been reduced because of partial coverage.

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 80.

ML



DOCUMENT No. W 9160.00114
4 .00115

- Instructions
- Please type or print.
 - Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
 - If number of mining claims traversed exceeds space on this form, attach a list.
 - Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:

Report of Work
(Geophysical, Geological and Geochemical Surveys)

Mining Act

Type of Survey(s) Magnetic, Electromagnetic	Mining Division Porcupine	Township or Area Keith Township
Recorded Holder(s) Falconbridge Limited	2.14026	Prospector's Licence No. A21647
Address 571 Moneta Ave., Box 1140, Timmins, Ont. P4N 7H9		Telephone No. (705) 267-1188
Survey Company Exsics Exploration Ltd.		
Name and Address of Author (of Geo-Technical Report) John C. Grant, Box 1880, Timmins, Ont. P4N 7X1		Date of Survey (from & to) 07 02 91 15 02 91

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Other	
	Geological	
	Geochemical	

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

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1160693				
P	1160694				
P	1160695				
P	1160696				
P	1160697				
P	1160698				
P	1160699				
P	1176443				
P	1176444				
P	1176445				

SURVEY DATES:
01/23/91 13/03/91

DOCUMENT No. W 9160.00115

RECEIVED

APR 22 1991

Total mining claims covered by this report of work: **10**

Total miles flown over claim(s):

Date: **Mar 26/91** 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 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:
Doug Cruji, 571 Moneta Ave., Box 1140, Timmins, Ont. P4N 7H9

Telephone No.: **(705) 267-1188** Date: **Mar 26/91** Certified By (Signature): *[Signature]*

Received Stamp: *[Signature]*

For Office Use Only

"ACTG"

Total Days Cr. Recorded 600	Date Recorded MAR. 26/91	Mining Recorder <i>[Signature]</i>
Date Approved as Recorded		Provincial Manager, Mining Lands

'SEE REVISED WORK STATEMENT'

RECEIVED

RECORDED

MAR 26 1991

MAR 26 1991

12:30 (C)



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) MAGNETIC, ELECTROMAGNETIC
Township or Area KEITH TOWNSHIP
Claim Holder(s) FALCONBRIDGE LIMITED
Timmins, Ont.
Survey Company EXSICS EXP. LTD.
Author of Report JOHN C. GRANT.
Address of Author Box 1880, Timmins, Ont.
Covering Dates of Survey JAN 5/91 - MAR 13/91
(linecutting to office)
Total Miles of Line Cut 22.0 Km.

MINING CLAIMS TRAVERSED
List numerically

P- 1160693
1160694
1160695
1160696
1160697
1160698
1160699
1176443
1176444
1176445

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.
ENTER 20 days for each additional survey using same grid.

Table with columns: Geophysical, Geological, Geochemical, DAYS per claim. Rows include Electromagnetic (20), Magnetometer (40), Radiometric, Other.

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: MAR 13/91 SIGNATURE: JOHN GRANT
Author of Report or Agent's

Res. Geol. Qualifications 2.5347

Previous Surveys

Table with columns: File No., Type, Date, Claim Holder. Multiple empty rows for previous surveys.

TOTAL CLAIMS 10

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 1100 Number of Readings 5500

Station interval 20M Line spacing 100M

Profile scale 1CM = 20%

Contour interval 25 GAMMAS

MAGNETIC

Instrument EDA OMNI IV SYSTEM

Accuracy - Scale constant ± .5 GAMMAS

Diurnal correction method BASE STATION CONTROL

Base Station check-in interval (hours) 30 SEC RECORDING TIME

Base Station location and value ON THE GRID, REF. FIELD 58,500 GAMMAS

ELECTROMAGNETIC

Instrument APEX MAX MIN II SYSTEM

Coil configuration CO-PLANER

Coil separation 150M

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 QUADRATURE PHASE

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

Instrument _____

Method Time Domain Frequency Domain

Parameters - On time _____ Frequency _____

- Off time _____ Range _____

- Delay time _____

- Integration time _____

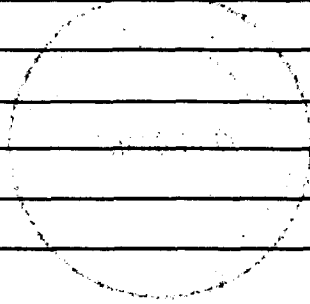
Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

RESISTIVITY



MUSKEGO TWP.

LEGEND

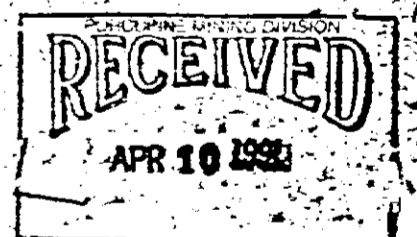
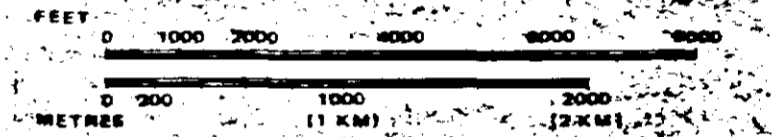
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION 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	◊
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	⊚
REMOTE TOURIST CAMPS	⊛

NOTE: MINING RIGHTS AND PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 280, SEC. 63, SUBSEC. 4.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP
KEITH
M.N.R. ADMINISTRATIVE DISTRICT
CHAPLEAU
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
SUDBURY

Ministry of Land
Natural Resources
Ontario

DATE: APRIL 1985
G-3238

IVANHOE TWP.

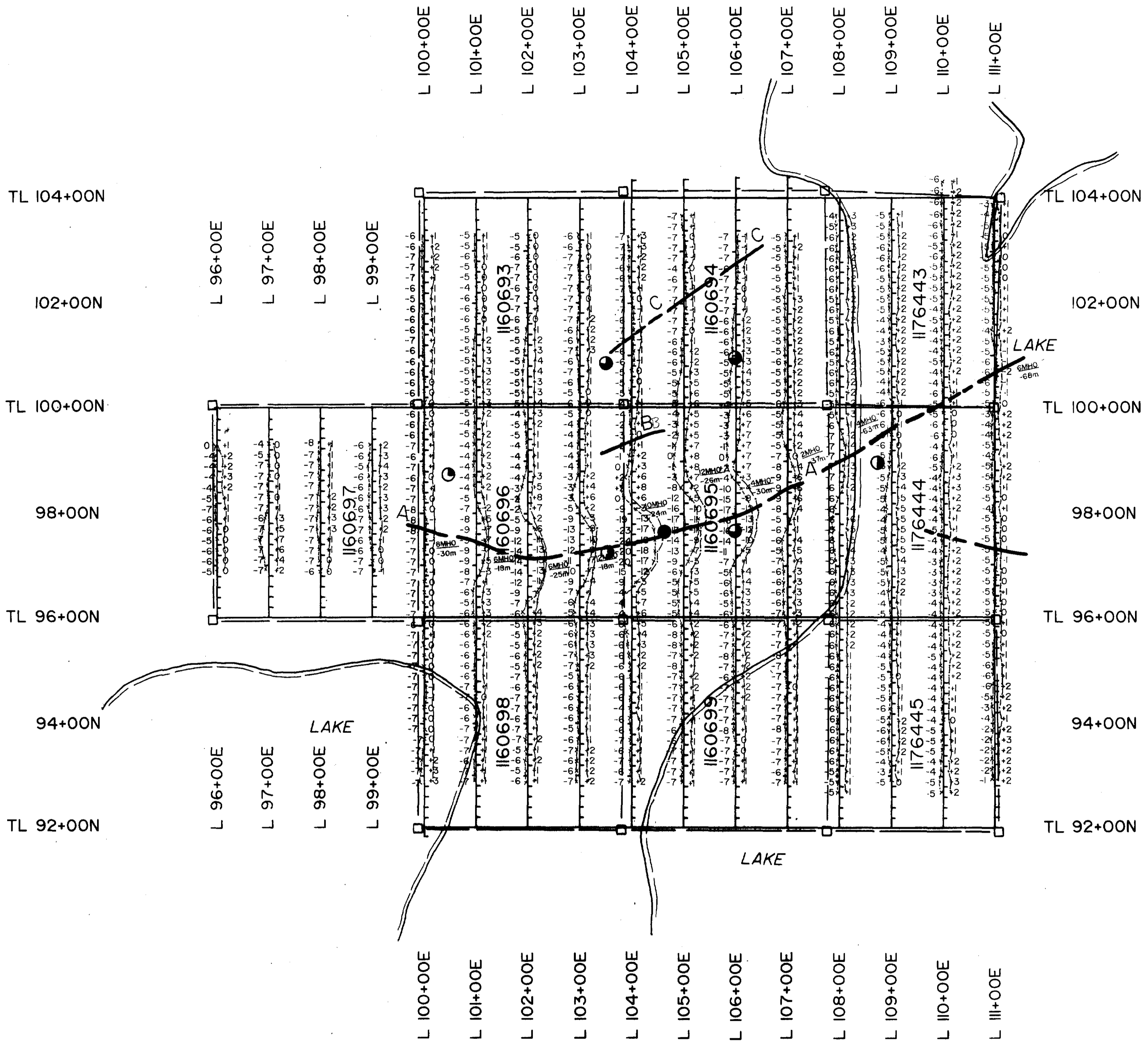
PENHORWOOD TWP.

HORWOOD TWP.

2.4026

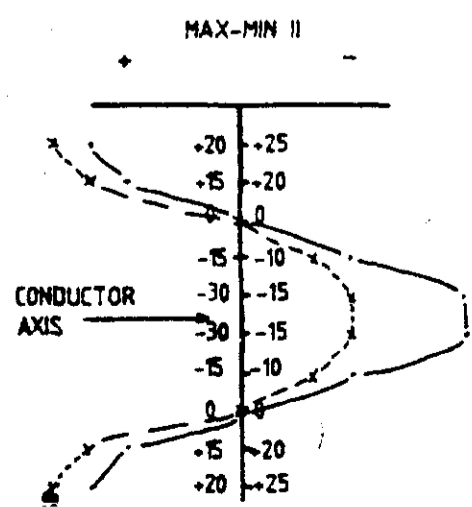


N



2.14026


LEGEND
 INSTRUMENT: Apex Parametrics Max-Min II
 MODE: Maximum Coupled, Horizontal Loop Survey
 PARAMETERS MEASURED: Inphase (%)
 Out of phase (%)
 FREQUENCY: 444 Hz
 COIL SEPARATION: 150m
 OPERATOR: R. Mathieu
 PROFILE SCALE: 1cm=20%

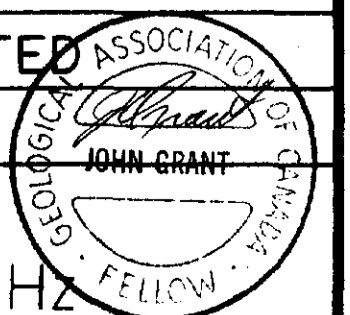


- AIRBORNE ANOMALY**
- * 1-2 Channel (350, 450 microseconds)
 - ⊙ 3-4 Channel (550, 670 microseconds)
 - ⊕ 5-6 Channel (790, 910 microseconds)
 - ⊖ 7-8 Channel (1050, 1190 microseconds)
 - ⊗ 9-10 Channel (1350, 1510 microseconds)
 - ⊙ 11-12 Channel (1680, 1870 microseconds)

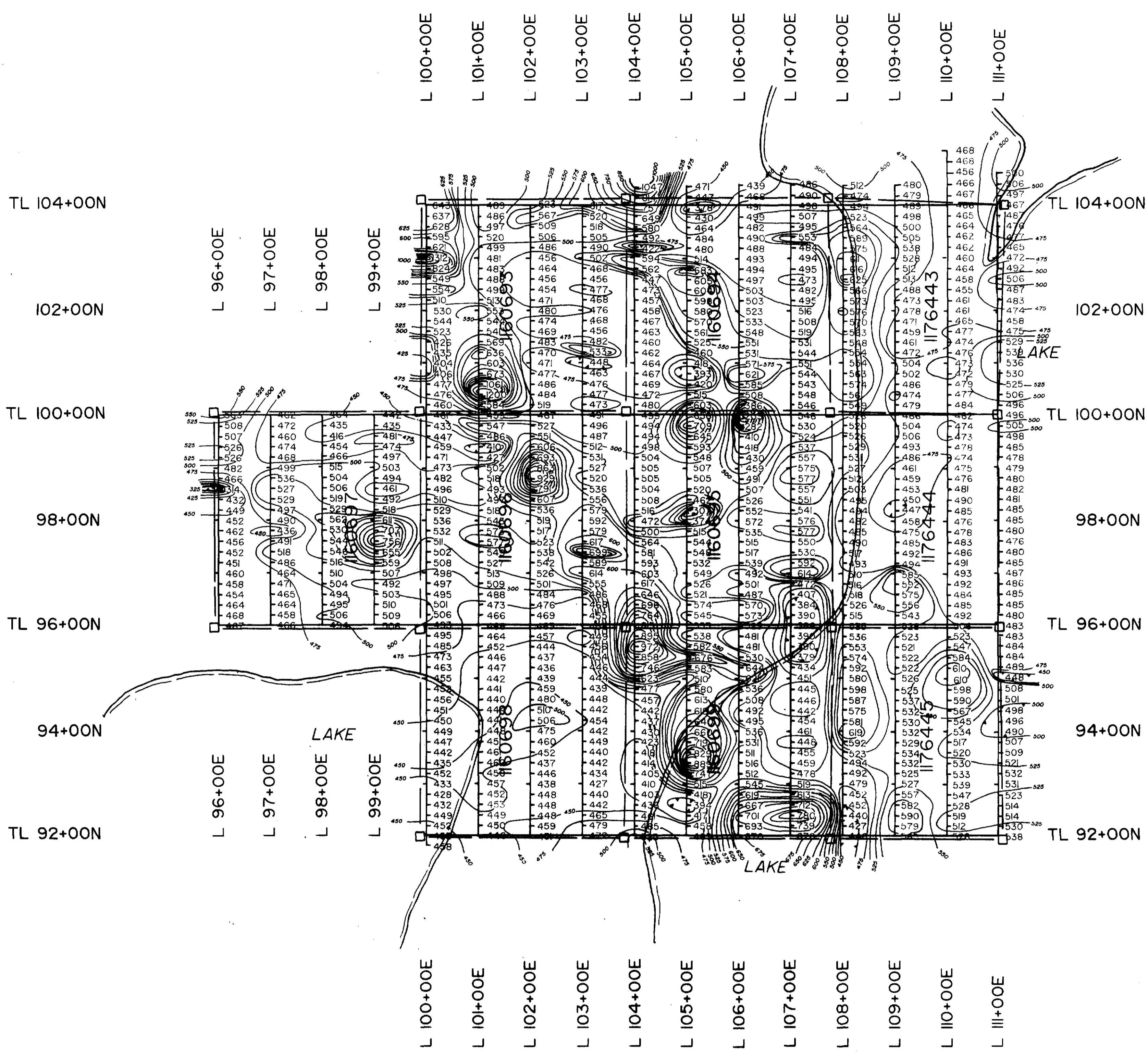


210

 EXSICS EXPLORATION LTD. P.O. Box 1800, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151		
CLIENT:	FALCONBRIDGE LIMITED	
PROPERTY:	KEITH TOWNSHIP	
TITLE:	PROJECT # 8200	
	MAX-MIN II	444 HZ
Date: Feb. 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-448



N




2.14026

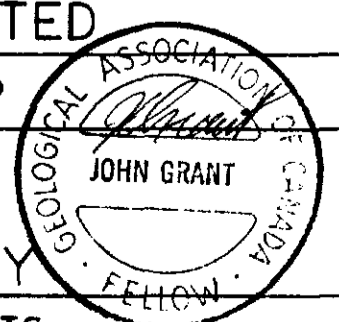
LEGEND

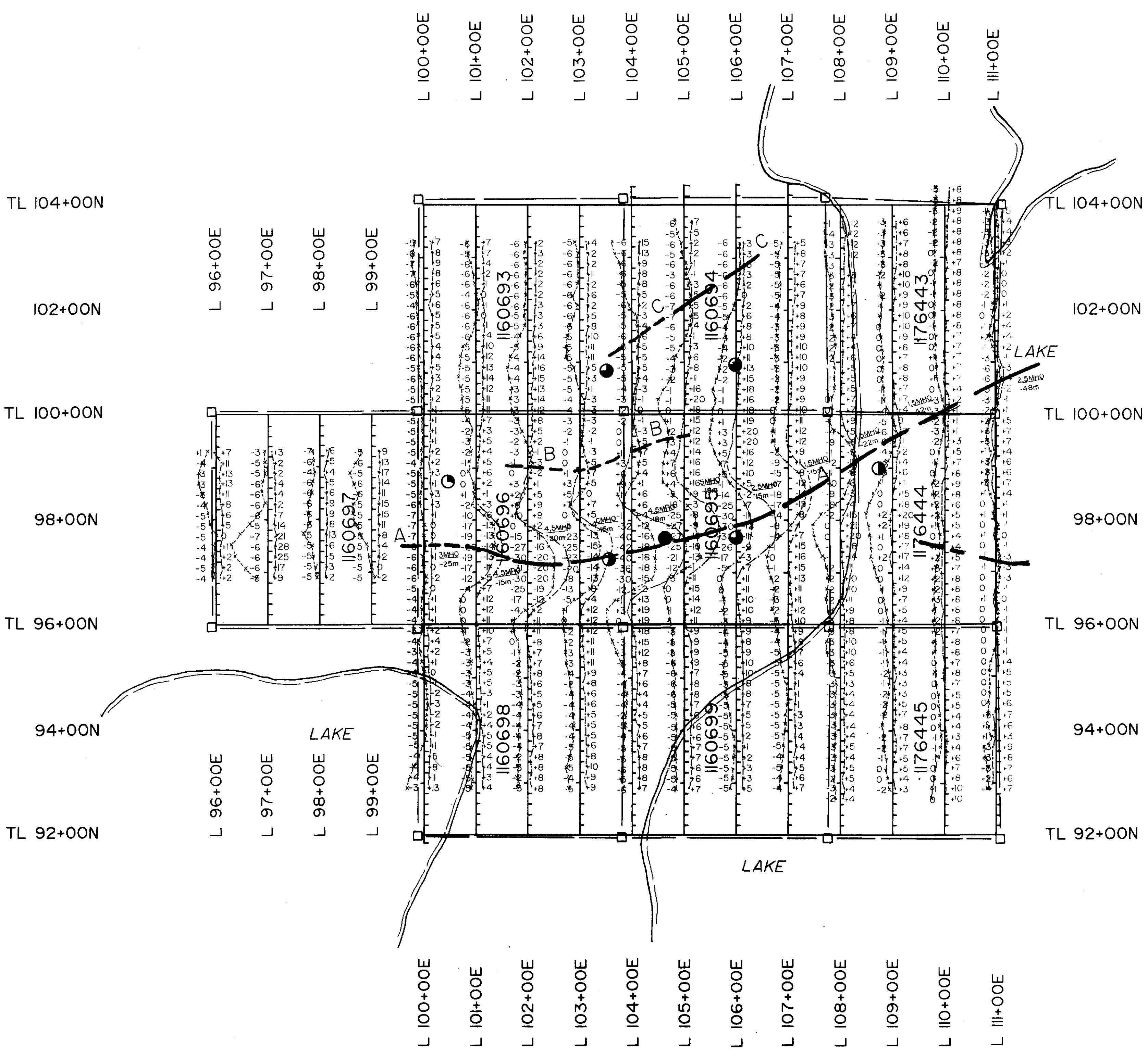
Instrument: EDA OMNI-IV
 Parameters Measured: Earth's total magnetic field
 Accuracy: +/- 1 nano-Teslas
 Diurnals: Corrected by base station recorder
 Contour Interval: 0,25,50,75,100,125
 Reference Field: 58,500
 Datum Subtracted: 58,000



220

 EXSICS EXPLORATION LTD. P.O. Box 1000, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151		
PROPERTY: KEITH TOWNSHIP		
TITLE: PROJECT # 8200 CONTOURED MAGNETOMETER SURVEY		
Date: Feb. 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No.: EE-448



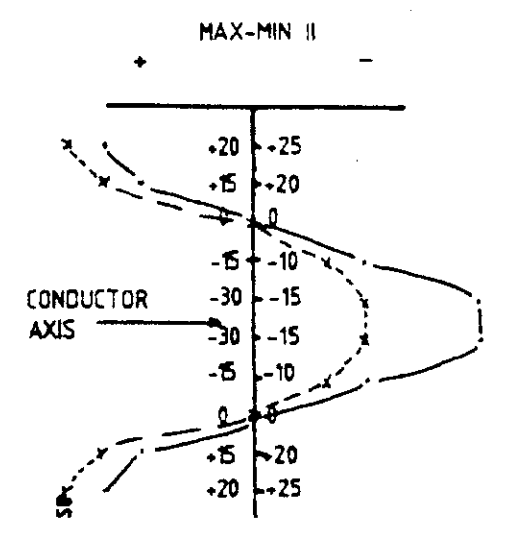



2.14026

LEGEND

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

FREQUENCY: 1777 Hz
 COIL SEPARATION: 150m
 OPERATOR: R. Mathieu
 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:	KEITH TOWNSHIP	
TITLE:	PROJECT # 8200	
	MAX-MIN II 1777 HZ	
Date: Feb. 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-448

