

42A11SW0355 2.14285 GODFREY

010

GEOPHYSICAL REPORT  
FOR  
FALCONBRIDGE LIMITED  
ON THE  
GODFREY PROJECT #8211  
GODFREY TOWNSHIP  
PORCUPINE MINING DIVISION  
TIMMINS, ONTARIO

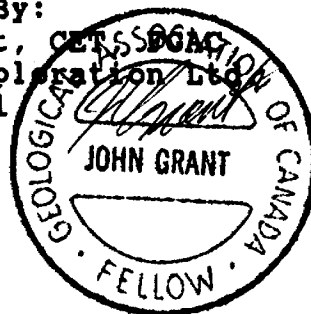
2-1-1991

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MINING LANDS SECTION

Prepared By:  
J.C. Grant, C.E.T., S.S.G.C.  
Exsics Exploration Ltd  
June, 1991





42A11SW0355 2.14285 GODFREY

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## INTRODUCTION

The Godfrey #8211 Project consists of 20 mining claims which are held by Falconbridge Limited. The property is located in Godfrey Township, in the Porcupine Mining Division, District of Cochrane, Timmins, Ontario. Refer to Figures 1 and 2 of this report.

Exsics Exploration Limited was contracted to cut a detailed grid over the property and to perform geophysical surveys over the entire cut grid. The purpose of the project was to test the property's potential for base metal and/or gold deposition. This program was done during the months of May and early June, 1991.

## PERSONNEL

The people directly involved with the field work and collection of all the data are as follows:

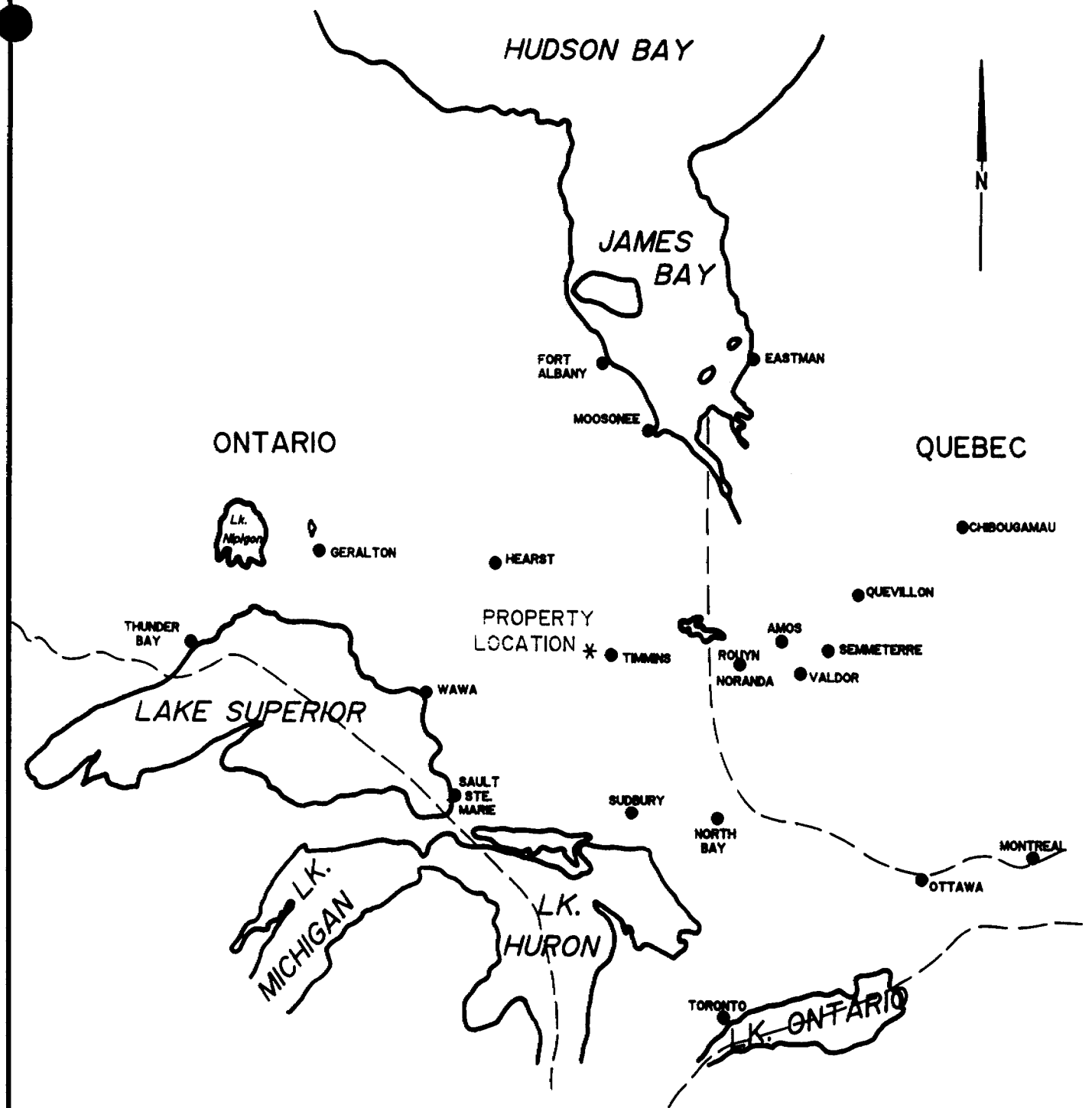
John C. Grant....Geophysicist.....Timmins, Ontario  
Pat Atkinson....Helper.....Timmins, Ontario


All of the work and interpretation was handled by John C. Grant.

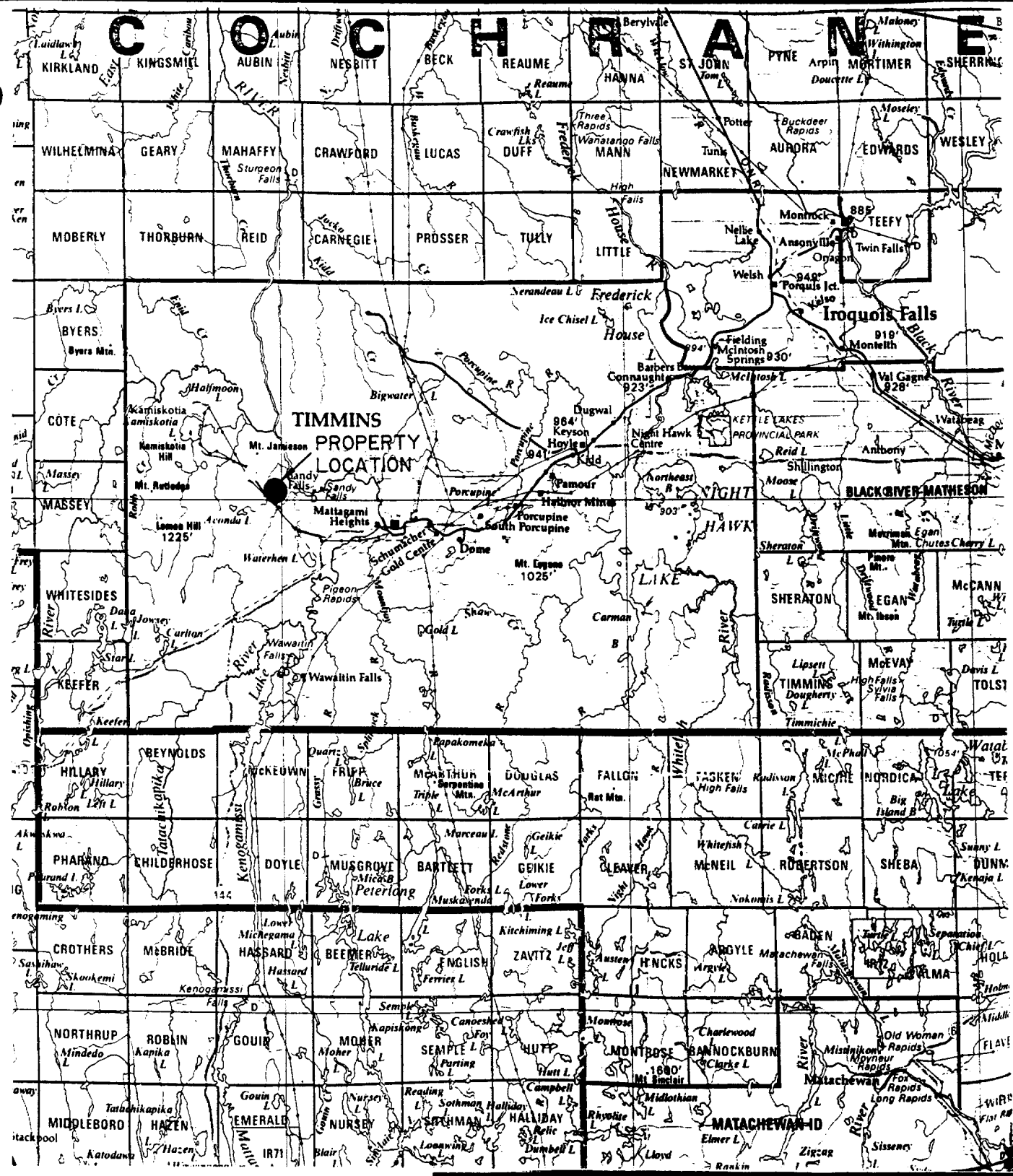
### LOCATION AND ACCESS

The Godfrey #8211 Project is located in the northeast section of Godfrey Township. More specifically it is located in Concession V, Lots 5, 4 and the west half of Lot 3 of the Township. Refer to Figure 3 of this report.

Godfrey Township is located approximately 15 km west-northwest of the City of Timmins. Access to the property is ideal year round. The junction of Highway 101 west and Highway 576 is located approximately 8 km west of the City core. Highway 576 runs northwest from the junction and passes within 75 meters of the southwest corner of the property. Travel time from Timmins to the site is about 25 minutes.



	<b>EXSICS EXPLORATION LTD.</b> P.O. Box 1888, P4M-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151	
	<b>CLIENT: FALCONBRIDGE LIMITED</b>	
<b>PROPERTY: GODFREY TWP. PROJECT # 8NEW</b>		
<b>TITLE: MONETA PORCUPINE CLAIMS</b> <b>LOCATION MAP</b>		Fig. 1
<b>Date:</b> May 1991	<b>Scale:</b> 1"=125miles	<b>NTS:</b>
<b>Drawn:</b> P.C.	<b>Interp:</b> J. Dyer	<b>Job No.:</b> EE-400



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

**CLIENT: FALCONBRIDGE LIMITED**  
**PROPERTY: GODFREY TWP. PROJECT # 8NEW**  
**TITLE: MONETA PORCUPINE CLAIMS**  
**PROPERTY LOCATION**

Fig. 2

<b>Date:</b> May 1991	<b>Scale:</b> 1:60,000	<b>NTS:</b>
<b>Drawn:</b>	<b>Interp:</b> J. Grant	<b>Job No.:</b> 23-465

CLAIM GROUP

The claim group consists of 20 mining claims of which 8 are unpatented and 12 are leased claims. The numbers of each are as follows:

Unpatented Claims

P-1155626

P-1155627

P-1155628

P-1154301

P-1154302

P-1154303

P-1154304

P-1154305

Leased Claims

P-99260

P-99259

P-99258

P-96005

P-96006

P-96007

P-96008

P-95057

P-99218

P-99219

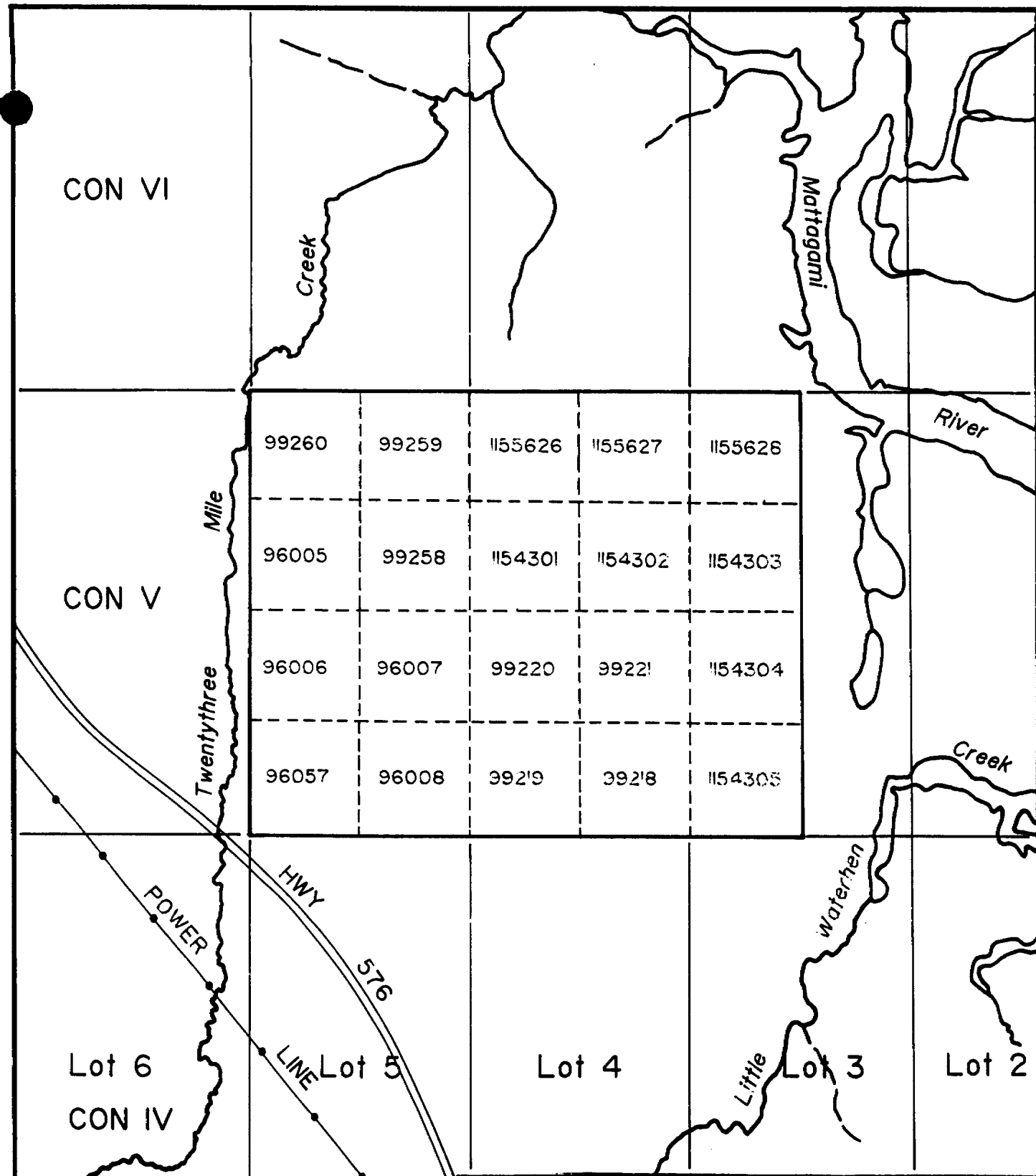
P-99220

P-99221

TOTAL: 8

TOTAL: 12

Refer to Figure 3 of this report copied from MNDM Map G-3391.



**EXSICS EXPLORATION LTD.**

P.O. Box 1880, P4N-7X1  
 Suite 13, Hollinger Bldg, Timmins Ont.  
 Telephone: 705-267-4451

CLIENT: FALCONBRIDGE LIMITED		
PROPERTY: GODFREY TWP. PROJECT # 8NEW		
TITLE: MONETA PORCUPINE CLAIMS CLAIM SKETCH		
MND: G-3991		Fig. 3
Date: May '89	Scale: 1:20,000	NTS:
Drawn: [unclear]	Interp: [unclear]	Job No. [unclear]



### PROPERTY GEOLOGY

Generally the property is underlain by intermediate to mafic metavolcanics which has been cross cut by several northwest-southeast trending diabase dikes. The Mattagami River Fault parallels 50 meters to the east of the property's east boundary. An area of outcrop was noted in the southeast corner of the grid and appears to be felsic volcanics with some minor quartz stringers.

The outcrops show evidence of past trenching and sampling. The remainder of the property is covered by overburden and occasional swamp patches. On reviewing Preliminary Map P-967, Geological Series, there is evidence of at least 3 drill holes on the property. The areas were not visibly apparent on the grid.

### LINECUTTING PROGRAM

The linecutting consisted of a baseline being cut along the western edge of the property from corner to corner. Cross lines were then turned off of this base line at 100 meter intervals from L800MN (south boundary), to L2400MN (north boundary).

Tie lines paralleling the baseline were cut at 400 meter intervals from the baseline (4000ME) to TL 6000 ME, the eastern boundary. All of the grid lines were chained at 20 meter station intervals.

In all, a total of 45.5 km of lines were established.

### GEOPHYSICAL PROGRAM

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

The magnetics were completed over the entire grid and the EM survey was read over all of the cross lines.

#### Magnetic Survey:

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

This unit is a 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 its 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.

A base station was set up on the grid at L800MN/4000E and tuned to a reference field of 58500 gammas.

The data was then plotted on base maps at a scale of 1:5000 and then contoured at 25 gamma intervals wherever possible. This contoured base map is included in the back pocket of this report.

#### Horizontal Loop Survey:

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

A coil separation of 150 meters was used which would result in a theoretical search depth range of 75 meters.

The collected data was then plotted directly onto base maps at 1:5000 and profiled at 1 cm to  $\pm 20\%$ . Copies of these maps are included in the back pocket of this report.

### SURVEY RESULTS

The geophysical program was successful in outlining one strong EM conductor as well as several weak questionable zones. Each feature will be discussed separately below:

#### Zone A:

This zone represents the most predominant feature on the grid. It strikes north-south across lines 1600MN to 110MN. The zone lies at a depth to source of 20 - 48 meters with good conductivity ranging from 4 to 13 mhos. The feature also appears to be dipping slightly east to near vertical.

The feature appears to strike south into a diabase dike but has good, although spotty, mag high association with the northern and central sections.

Zone B:

This feature represents a weak questionable zone at this time. The higher EM frequency reacted better to it which suggests it may relate to conductive overburden, possibly a clay filled trough. There is no apparent magnetic correlation.

Zone C:

This feature also represents a weak, questionable zone. It lies just east of the outcrop areas and may represent a contact zone between the outcrop and swamp. It lies within the western edge of a diabase dike.

The short weak EM zone (F) which lies along the eastern edge of the same dike may in fact represent a weak or Deep EM zone. Interpretation puts the feature between 47 and 68 meters with a conductivity value of 4 to 10 mhos.

Past drilling may have intersected the zone at depth.

Zone D:

This feature was only noted on the higher feature and is associated with an overburden ridge to ravine area.

The target is considered as low priority at this writing.

Zone E:

This feature represents a weak or deep target which strikes north-south across lines 1100 MN to 1400 MN.

The magnetics show a parallel structure following the target. The feature may have been tested by two drill holes which have been spotted on O.G.S. Map P-967.

RECOMMENDATIONS AND CONCLUSIONS

The surveys were successful in outlining several targets on the grid.

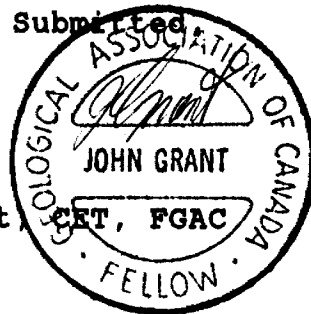
Certainly Zone A represents a good legitimate bedrock response which was also noted by the government airborne survey. Zone E and F also appear to represent legitimate targets which may have been too deep for the present survey. However, both of these zones may have been tested in past drilling.

In recommendations follow up work, certainly Zone A should be tested with drilling. One should keep in mind that the MaxMin Unit will sideseek as much as it penetrates. This feature has a tendency to extend the strike lengths of short strong zones. Therefore, the target is probably strongest in the vicinity of Lines 12 and 1300 MN.

The other two deeper zones, E & F, may be considered for Deep EM follow up. Although a quick check would be to re-read the area with a 200 to 250 meter cable with the MaxMin.

Respectfully Submitted,

John C. Grant,





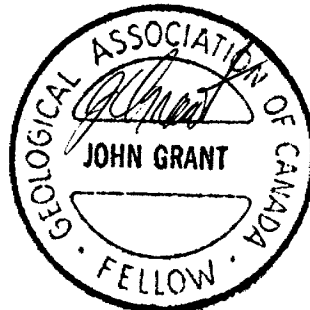
CERTIFICATE OF QUALIFICATIONS

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 GODFREY PROJECT # 8211, GODFREY 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".

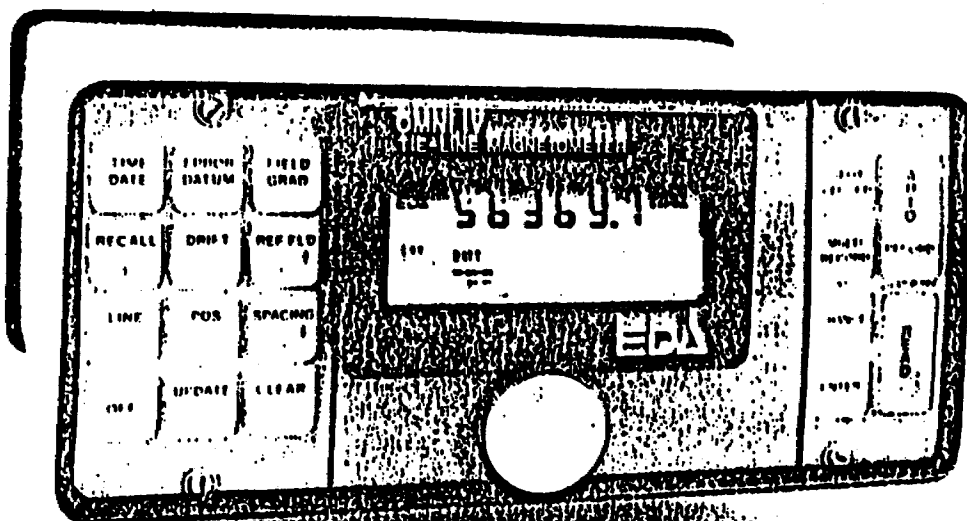
Dated this 21st day of June, 1991 at Timmins, Ontario

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



A P P E N D I X   A

# OMNI IV "Tie-Line" Magnetometer



## 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 80035  
 (303) 422 9112

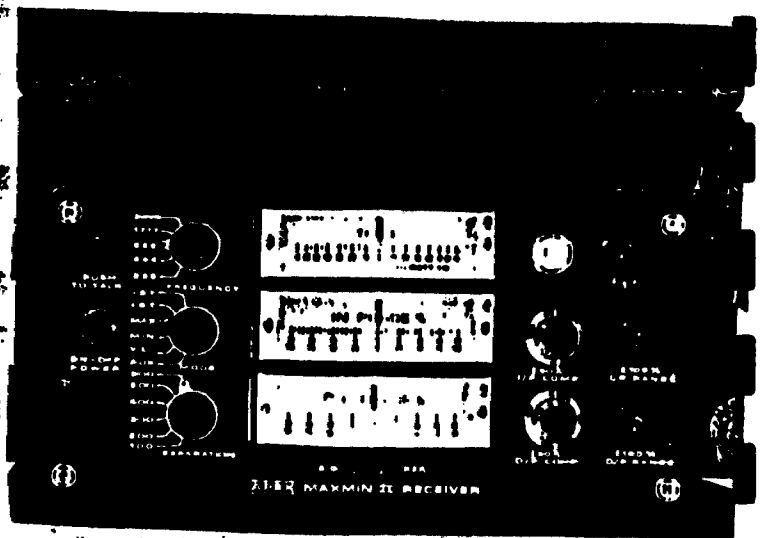
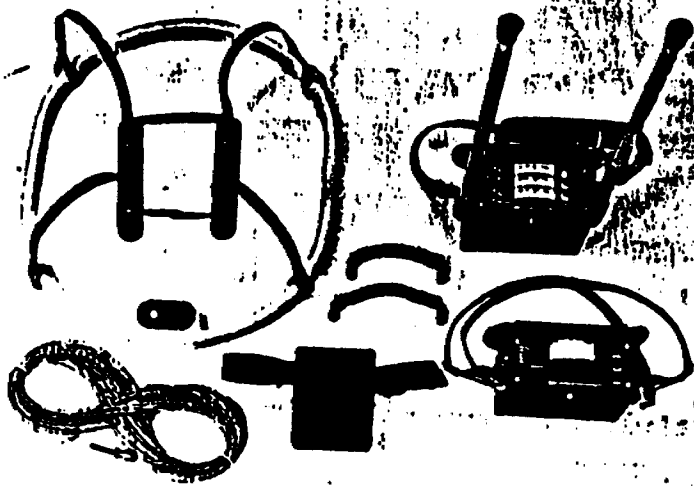
A P P E N D I X   B

# APEX

# MAXMIN-II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3553 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 refen 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:** ±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<sup>2</sup>
- 444Hz : 200 Atm<sup>2</sup>
- 888Hz : 120 Atm<sup>2</sup>
- 1777Hz : 60 Atm<sup>2</sup>
- 3555Hz : 30 Atm<sup>2</sup>

**Receiver Batteries:** 8V trans. radio type batteries (4).  
Life: approx. 35hrs. continuous duty (alkaline, 0.8 Ah), less in cold weather.

**Transmitter Batteries:** 12V 8Ah Gal-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: 06-988773 NORDVIK TOR

A P P E N D I X 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 & HORIZONTAL LOOP.  
Township or Area GOOSEBAY TOWNSHIP  
Claim Holder(s) FALCONBRIDGE LIMITED.  
TIMMINS, ONTARIO  
Survey Company ESSICS EXP. LTD.  
Author of Report JOHN C. GRANT.  
Address of Author BOX 1880, TIMMINS, ONT.  
Covering Dates of Survey MAY 3/91 To June 31/91  
(linecutting to office)  
Total Miles of Line Cut 45.5 Km.

SPECIAL PROVISIONS  
CREDITS REQUESTED

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

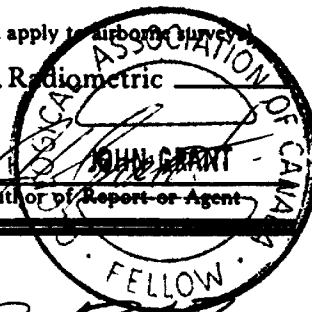
ENTER 20 days for each  
additional survey using  
same grid.

	DAYS per claim
Geophysical	
- Electromagnetic	<u>20</u>
- Magnetometer	<u>40</u>
- Radiometric	_____
- Other	_____
Geological	_____
Geochemical	_____

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: June 21/91 SIGNATURE: JOHN GRANT  
Author of Report or Agent



Res. Geol. \_\_\_\_\_ Qualifications 2.5571

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED	
List numerically	
P-1155626	
(prefix) (number)	
1155627	
1155628	
1154301	
1154302	
1154303	
1154304	
1154305	
99260	
99259	
99258	
96005	
96006	
96007	
96008	
96057	
99218	
99219	
99220	
99221	
TOTAL CLAIMS	<u>20</u>

If space insufficient, attach list

**GEOPHYSICAL TECHNICAL DATA**

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

Number of Stations 2275 Number of Readings 11,375  
Station interval 20M. Line spacing 100M.  
Profile scale 1CM = ± 20%  
Contour interval 25 GAMMAS.

MAGNETIC

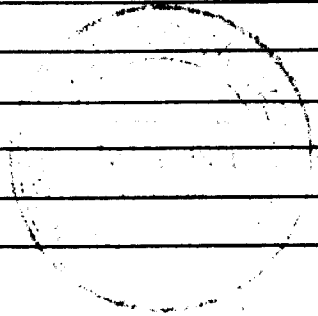
Instrument EVA OMNI IV SYSTEM  
Accuracy - Scale constant ± .5 GAMMAS.  
Diurnal correction method BASE STATION CONTROL  
Base Station check-in interval (hours) 30 SEC. RECORDING TIME  
Base Station location and value L800MN/4000ME, 58500 GAMMAS.

ELECTROMAGNETIC

Instrument ALEX MAX MIN II SYSTEM  
Coil configuration COPLANAR, HORIZONTAL COILS  
Coil separation 150 M.  
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 \_\_\_\_\_



INDUCED GRAVITY

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 \_\_\_\_\_



Ont. Mining Act

Personal information collected on this form is obtained under the authority of the this collection should be directed to the Provincial Manager, Mining Lands, 1 Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.



900

- Instructions:
- Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
  - A separate copy of this form must be completed for each Work Group.
  - Technical reports and maps must accompany this form in duplicate.
  - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <b>FALCONBRIDGE LIMITED</b>		Client No. <b>130079</b>
Address <b>571 MONETA AVE BOX 1140</b>		Telephone No. <b>(705) 267-1188</b>
Mining Division <b>PORCUPINE</b>	Township/Area <b>GODFREY</b>	M or G Plan No.
Dates Work Performed From: <b>MAY 13, 1991</b>		To: <b>JUNE 7, 1991</b>

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	<i>Line cutting, Magnetometer, MaxMin II</i>
<input type="checkbox"/> Physical Work, Including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

**RECEIVED**  
AUG - 9 1991  
MINING LANDS SECTION

**RECORDED**  
JUL 30 1991  
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs \$ 9,314

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
<i>John Grant (Author of Report)</i>	<i>Excels Exploration Ltd Box 1880, Timmins Ont.</i>
<i>Pat Atkinson</i>	<i>Excels Exploration Ltd Box 1880, Timmins Ont.</i>

(attach a schedule if necessary)

Certification of Beneficial Interest \* See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date <b>July 30, 1991</b>	Recorded Holder or Agent (Signature) <i>[Signature]</i> (John Pattison)
--	------------------------------	---

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying <b>John Pattison, Falconbridge Limited, Box 1140 Timmins Ont. P4N 7H1</b>		
Telephone No. <b>(705) 267-1188</b>	Date <b>July 30, 1991</b>	Certified By (Signature) <i>[Signature]</i>

For Office Use Only

9,314	Total Value Cr. Recorded	Date Recorded <b>JULY 30/91</b>	Mining Recorder <i>[Signature]</i>	<b>RECEIVED</b> JUL 30 1991
		Deemed Approval Date <b>OCT. 28/91</b>	Date Approved	
		Date Notice for Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	P 1154301	1
	P 1154302	1
	P 1154303	1
	P 1154304	1
	P 1154305	1
	P 1155626	1
	P 1155627	1
	P 1155628	1
	8	

Total Number of Claims

Value of Assessment Work Done on this Claim	Value Applied to this Claim
1164	H69 800
1164	H64 800
1164	H64 800
1164	H64 800
1165	H65 800
1164	H69 800
1164	H64 800
1165	H65 800
\$ 9,314	\$ 9,314,400

Total Value Work Done

Total Value Work Applied

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	364
	364
	364
	364
	365
	364
	364
	365
	\$ 2,914

Total Assigned From

Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

	Date
Signature	



Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des mines

Statement of Costs  
for Assessment Credit

État des coûts aux fins  
du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

W9160. 00223

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>e</sup> étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Line cutting	4868	
	Magnets	1660	
	Mu Min	2,786	9,314
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
<b>Total Direct Costs Total des coûts directs</b>			<b>9,314</b>

2. Indirect Costs/Coûts indirects

\*\* Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.  
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
<b>Sub Total of Indirect Costs Total partiel des coûts indirects</b>			
<b>Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)</b>			
<b>Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)</b>		<b>Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)</b>	

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	× 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100% de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50% de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	× 0,50 =

Certification Verifying Statement of Costs

I hereby certify:  
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Project Geologist I am authorized  
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :  
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de \_\_\_\_\_ je suis autorisé  
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature 	Date July 20, 1991
---------------	-----------------------



Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

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

Toll Free: 1-800-465-3880  
Telephone: (705) 670-7264  
Fax: (705) 670-7262

October 23, 1991

Our File: 2.14285  
Your File: W.9160.00223

Mining Recorder  
Ministry of Northern Development  
and Mines  
60 Wilson Avenue  
TIMMINS, ONTARIO  
P4N 2S7

Dear Sir/Madam:

**SUBJECT: APPROVAL OF ASSESSMENT WORK SUBMITTED ON MINING CLAIMS  
P. 1154301 ET AL. IN THE TOWNSHIP OF GODFREY.**

---

The assessment work credits for the Geophysical Survey, under Section 14 of the Mining Act Regulations, submitted on the above work report have been approved as of October 23, 1991.

Please indicate this approval on your records.

Yours sincerely,

Ron C. Gashinski  
Senior Manager, Mining Lands Branch  
Mines and Minerals Division

TA/jl  
Enclosures:

cc: Resident Geologist  
Timmins, Ontario

✓ Assessment Files Office  
Toronto, Ontario



MAP SYMBOLOLOGY

Aerial Cableway	Pipeline
Boundary	Railroad
International	Single Track
Interprovincial	Double Track
District, Township	Abandoned
Indian Reserve	Turbidity
Approximate	Road
Lot, Concession	Highway, County
Approximate	Township
Paris Boundary	Access (road of doubtful
Bridge	maintenance or significant rapids)
Road, Railroad	Trail, Bark Road
Building	(Service Drive)
Chimney	Rapids
Cliff, Pit, Pile	Double line river
Contours	with multiple rapids
Interpreted	Double line river
Approximate	with multiple rapids
Depressive	Reservoir
Control Points	River, Stream, Canal
horizontal	Approximate
vertical	direction of flow
Culvert	Rock
Falls	Natural
Double line river	Pool
Fence, Hedge, Wall	Spot Elevation
Feature Outline	(with elevation)
(Construction Features, etc.)	Tower
Flooded Land	Transmission Line
Lock	Police
Marsh or Swamp	Pylon
Most	Utility Poles
Mine Head Frame	Wharf, Dock, Pier
Outcrop	Wooded Area

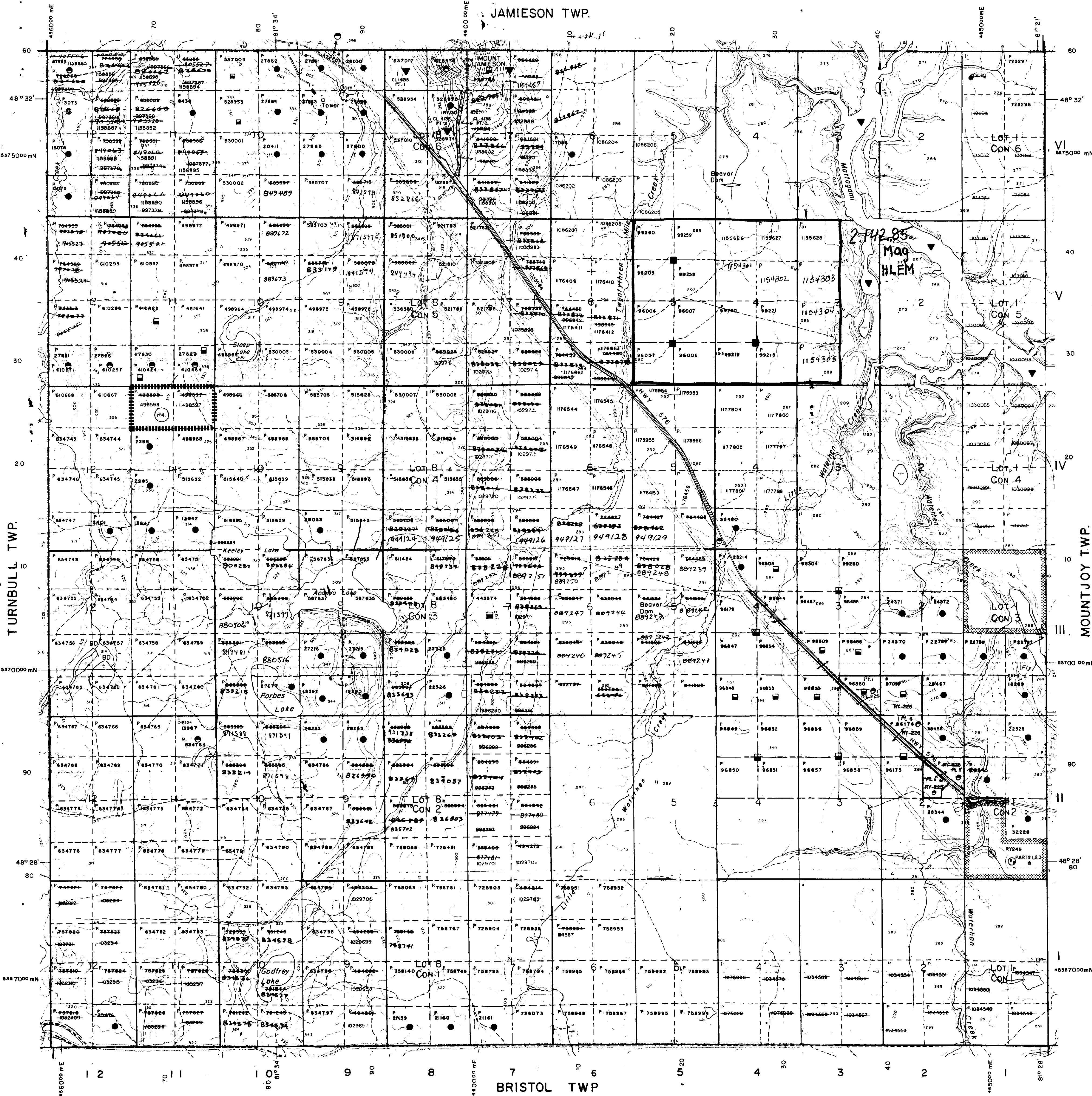
AREAS WITHDRAWN FROM DISPOSITION

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

Description	Order No.	Date	Disposition	File
(A) - S.R.O. UNDER APPLICATION FOR AGRICULTURAL PURPOSES				
(B) - CERTIFIED AGRICULTURAL LAND - 26/8/82 SUBJECT TO SEC. 41(1) OF THE MINING ACT				
(C) - BONA FIDE APPLICATION				
(D) - Pending S.R. Disposition under P.L.A.				
(E) - Pending proceedings, land not open				
(F) - FILED ONLY NOV 15/85 - B35628				

MINING AND SURFACE RIGHTS WITHDRAWN PROSPECTING, STAKING, SALE OR LEASE, SECTION 36 THE MINING ACT RSO 1980

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF TECHNICAL SERVICES.



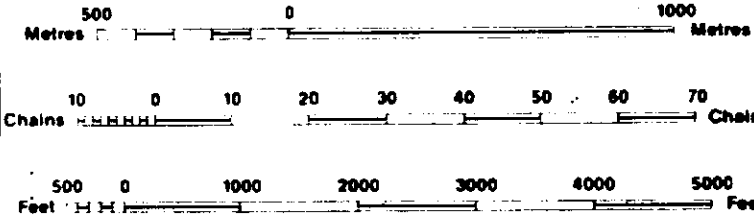
LEGEND

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	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC. 1.



SCALE 1:20 000  
 GRID ZONE 17

NOTES

FLOODING RIGHTS ON EITHER SIDE OF THE MATTAGAMI RIVER TO H.E.P.C.  
 LICENCE OF OCCUPATION LOCATED WITHIN LOTS 7 & 9 IN CONCESSION 6, BEING PARTS 1, 2, AND 3 ON A PLAN OF LOCATION CL 4135, ISSUED JUNE 11, 1985 FOR SURFACE RIGHTS ONLY TO KAMISKOTIA SKI RESORTS LIMITED.  
 LICENCE DOCUMENT AND PLAN OF SURVEY AVAILABLE ON LAND ROLL FILE.

2.14285

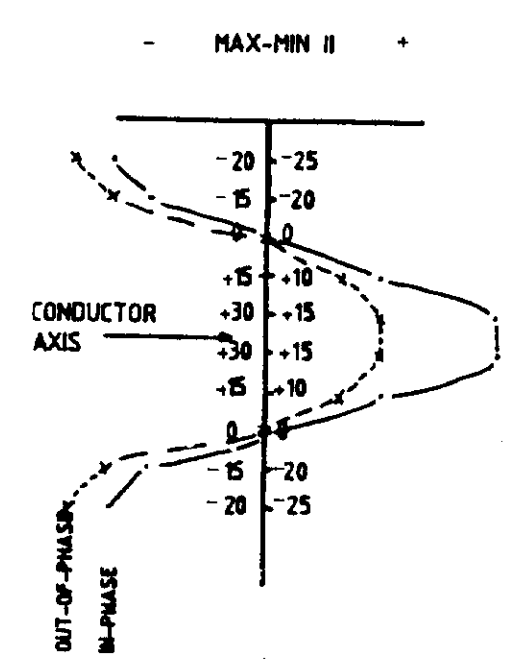
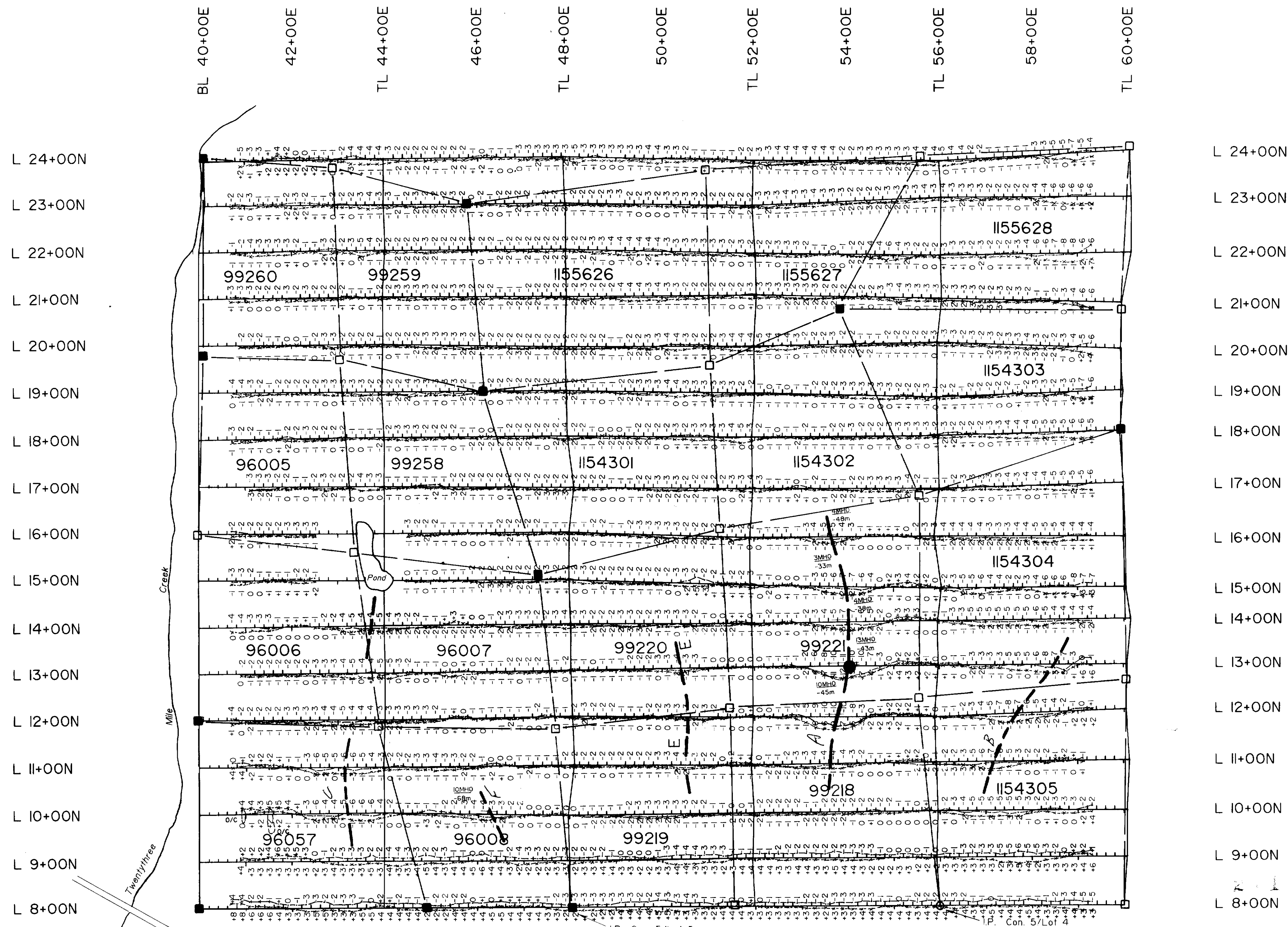
TOWNSHIP  
**GODFREY**  
 M.N.R. ADMINISTRATIVE DISTRICT  
**TIMMINS**  
 MINING DIVISION  
**PORCUPINE**  
 LAND TITLES / REGISTRY DIVISION  
**COCHRANE**

Ministry of Land  
 Natural Resources Management  
 Ontario Branch

ORIGINAL JULY 1984  
 REVISIONS  
 G-3991



N



**LEGEND**

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

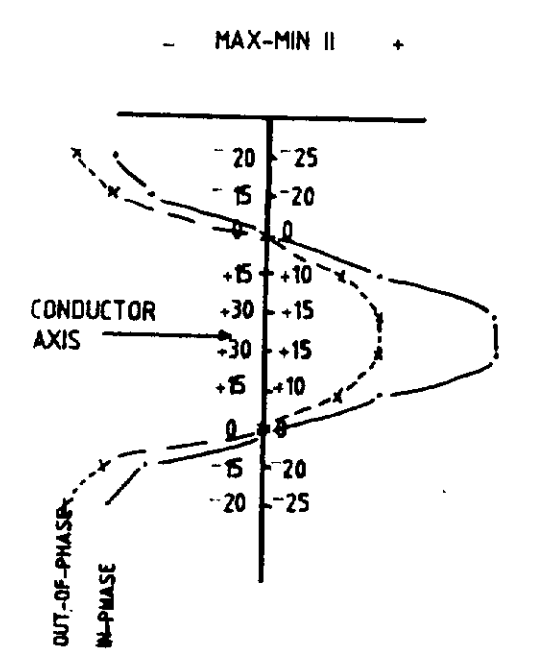
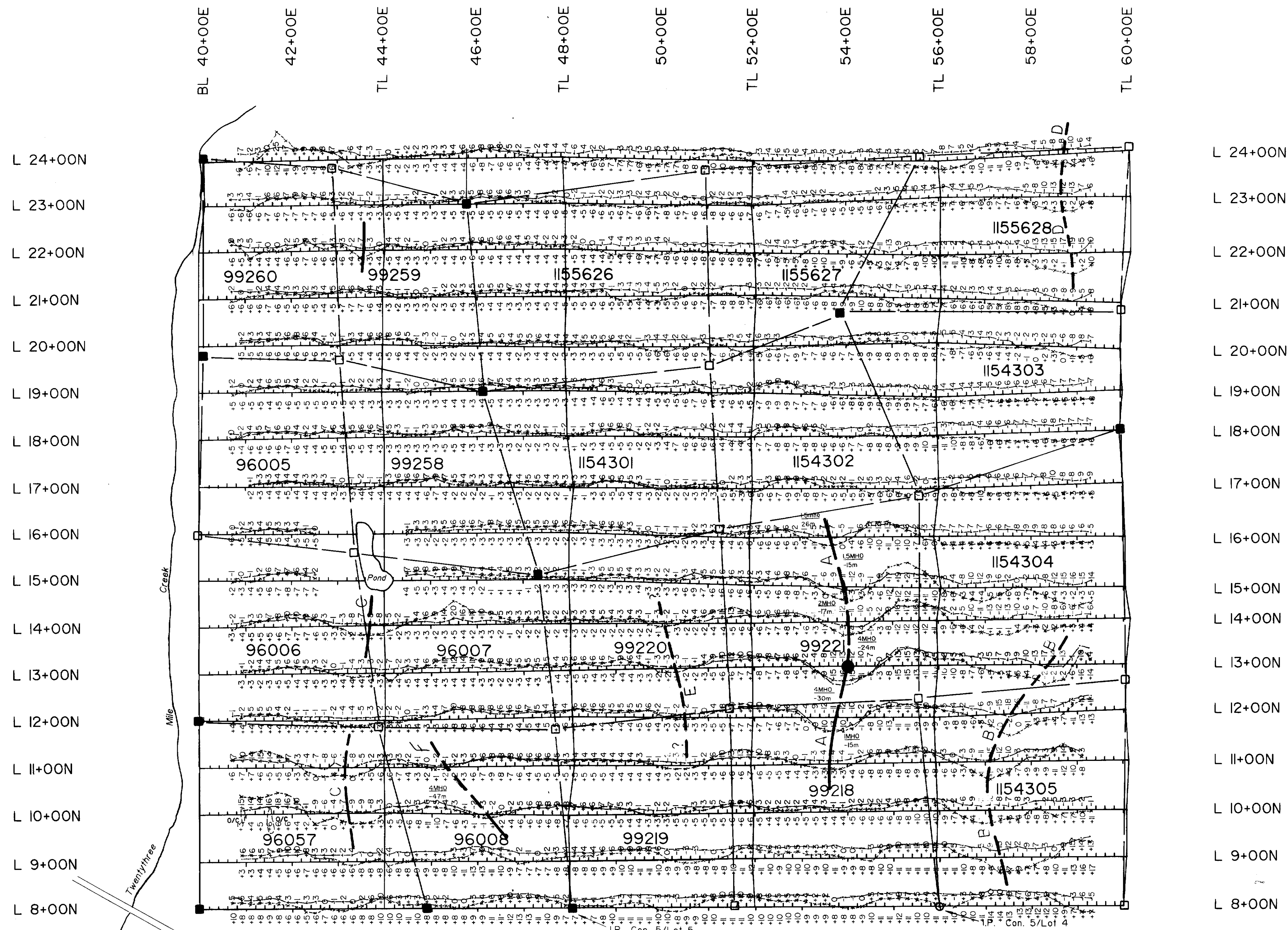
FREQUENCY: 444 Hz  
 COIL SEPARATION: 150m  
 OPERATOR: J. Grant, P. Atkinson  
 PROFILE SCALE: 1cm=20%

- 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)



<p><b>EXSICS EXPLORATION LTD.</b>          P.O. Box 1880, P4N-7X1          Suite 13, Holinger Bldg, Timmins Ont.          Telephone: 705-267-4151</p>		
TITLE: MONETA PORCUPINE CLAIMS PROJECT # 821		
MAX-MIN II 444 Hz		
Date: May 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-463





**LEGEND**

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

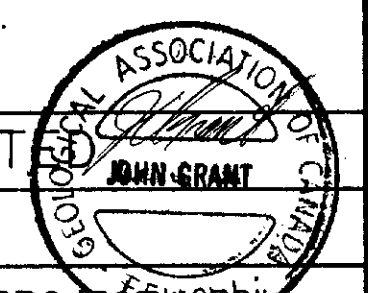
FREQUENCY: 1777 Hz  
 COIL SEPARATION: 150m  
 OPERATOR: J. Grant, P. Atkinson  
 PROFILE SCALE: 1cm=20%

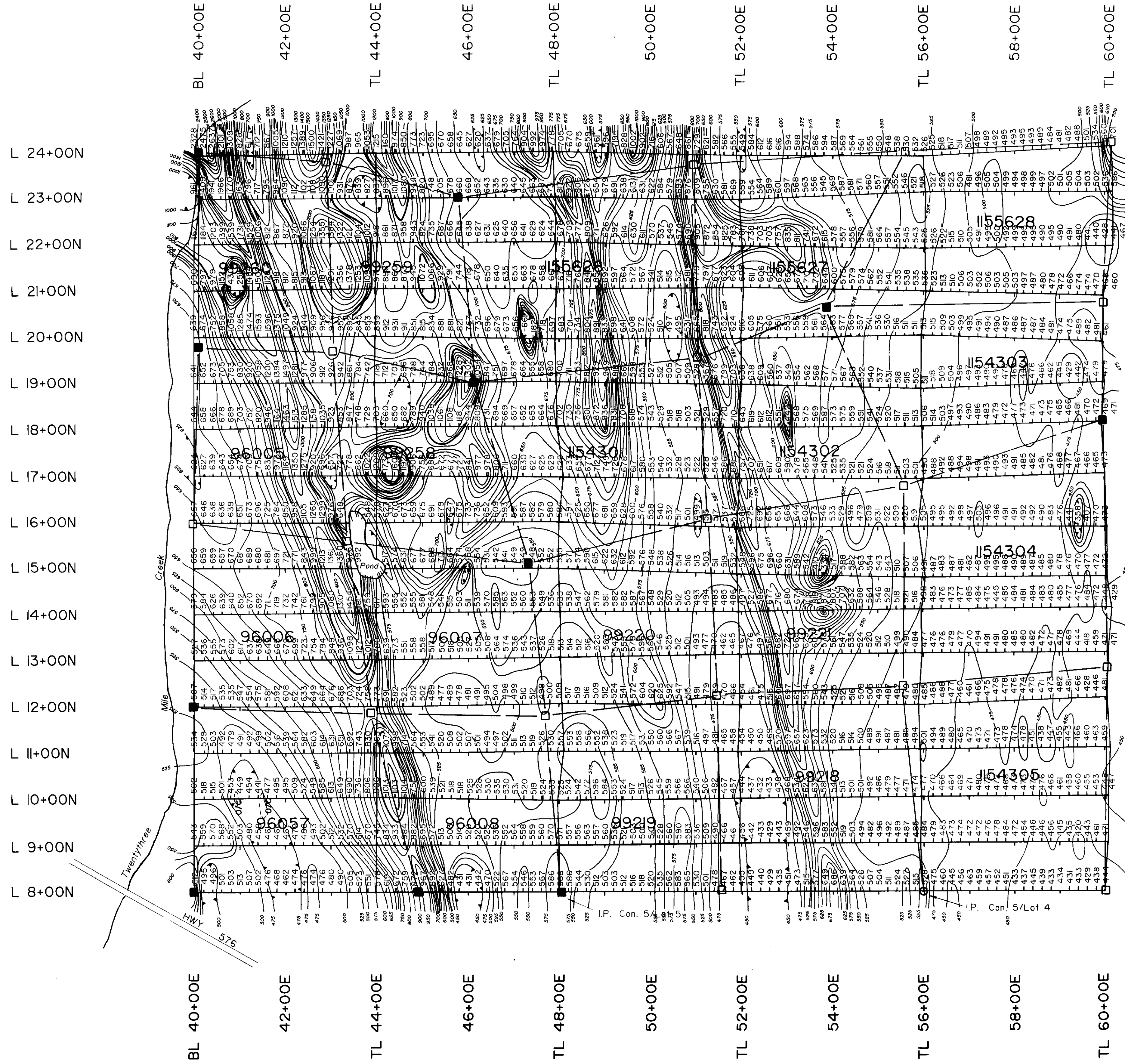
- AIRBORNE ANOMALY**
- DECAY INTERVAL CLASSIFICATION**
- 1-2 Channel (350, 450 microseconds)
  - 3-4 Channel (550, 670 microseconds)
  - 5-6 Channel (790, 910 microseconds)
  - 7-8 Channel (1050, 1190 microseconds)
  - 9-10 Channel (1350, 1510 microseconds)
  - 11-12 Channel (1680, 1870 microseconds)

BL 40+00E      42+00E      TL 44+00E      46+00E      TL 48+00E      50+00E      TL 52+00E      54+00E      TL 56+00E      58+00E      TL 60+00E

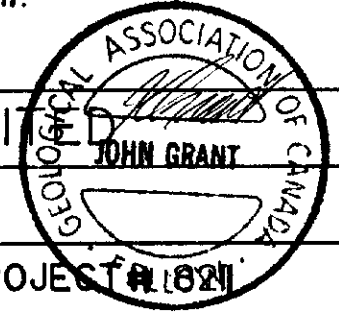


<p><b>EXSICS EXPLORATION LTD.</b>          P.O. Box 1880, P4N-7X1          Suite 13, Hollinger Bldg, Timmins Ont.          Telephone: 705-267-4151</p>		
<p>PROPERTY: GODFREY TWP.</p>		
<p>TITLE: MONETA PORCUPINE CLAIMS PROJECT  <b>MAX-MIN II 1777 Hz</b></p>		
Date: May 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-463





**LEGEND**  
 Instrument: EDA OMNI-IV  
 Parameters Measured: Earth's total magnetic field  
 Accuracy: +/- 1 nano-teslas  
 Diurnal: Corrected by base station recorder  
 Contour Interval: 0,25,50,75,100,125,150,200,250,300,350,400,450,500,550,600,650,700,750,800,850,900,950,1000  
 Reference Field: 58,500  
 Datum Subtracted: 58,000

		
<b>EXSICS EXPLORATION LTD.</b> P.O. Box 1880, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151		
CLIENT:	FALCONBRIDGE LIMITED	
PROPERTY:	GODFREY TWP.	
TITLE:	MONETA PORCUPINE CLAIMS PROJECT # 1821 CONTOURED	
MAGNETOMETER SURVEY		
Date: May 1991	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J. Grant	Job No. EE-463

