

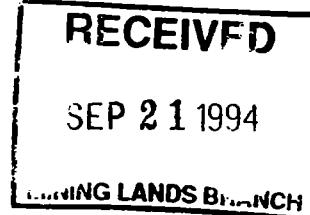
W9460. 00167



010

GEOPHYSICAL REPORT
FOR
FALCONBRIDGE LIMITED
ON THE
CARS CALLEN & WHITESIDES TOWNSHIPS
PORCUPINE MINING DIVISION
TIMMINS, ONTARIO

2.15589



Prepared by: John C. Grant, CET, FGAC
June, 1994

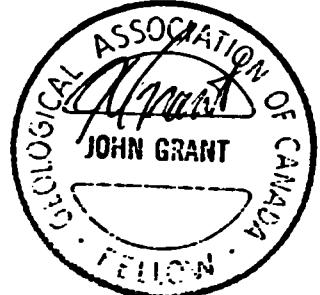


TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
PROPERTY.....	1
PROPERTY LOCATION AND ACCESS.....	1
PERSONNEL.....	2
FIELD PROGRAM.....	2
GEOPHYSICAL.....	2
TOTAL FIELD MAGNETIC SURVEY.....	2
HLEM SURVEY.....	3
SURVEY RESULTS.....	3-6
MAGNETIC SURVEY.....	6
CONCLUSIONS AND RECOMMENDATIONS.....	6
CERTIFICATE	
APPENDIX A: EDA OMNI IV SYSTEM	
B: APEX MAX MIN II SYSTEM	
FIGURES 1: LOCATION MAP	
2: PROPERTY LOCATION MAP	
3: CLAIM SKETCH	
MAPS: MAGNETOMETER SURVEY EAST SHEET AND WEST SHEET	
MAX MIN II 1777 HZ EAST SHEET AND WEST SHEET	
MAX MIN II 444 HZ EAST SHEET AND WEST SHEET	

INTRODUCTION

The services of Exsics Exploration Limited were retained by Falconbridge to cut a detailed metric grid over a group of claims located in Carscallen and Whitesides Townships, Porcupine Mining Division, District of Cochrane, Timmins Ontario.

The purpose of the linecutting was to provide ground control for a detailed geophysical follow-up program.

The linecutting began in mid May of 1994 with the geophysical follow-up program being completed by June 25, 1994.

The purpose of the program was to test the property for base metal potential.

PROPERTY

The claim numbers which make up the project area are as follows:

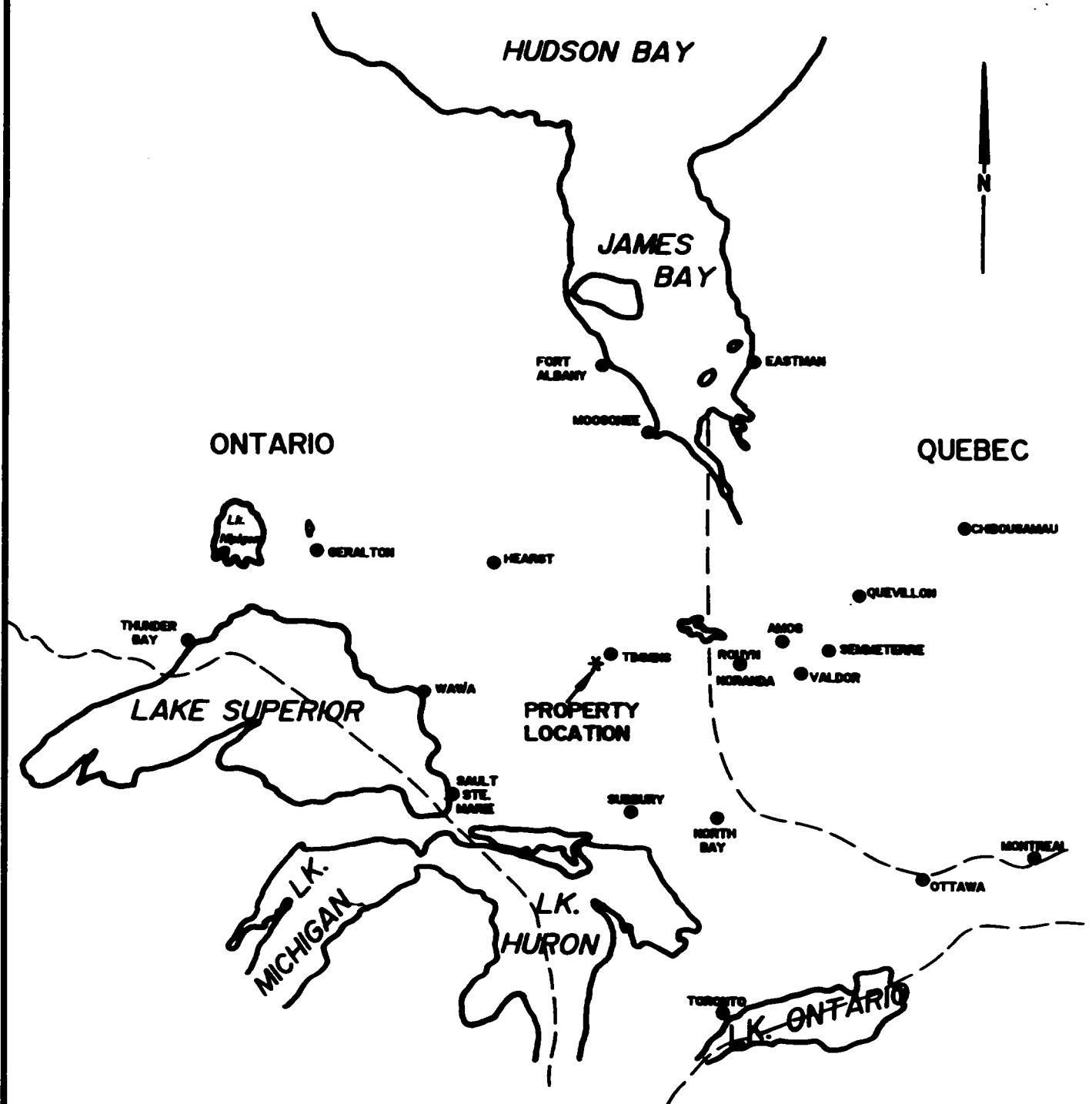
WHITESIDES TOWNSHIP	CARSCALLEN TOWNSHIP
1204429 4 UNITS	1190544 8 UNITS
1204431 1 UNIT	1201245 4 UNITS
1190597 4 UNITS	1201246 8 UNITS
1189753 2 UNITS	1190595 4 UNITS
1201230 2 UNITS	1190596 8 UNITS
1182867	1201305 2 UNITS
1189150	1185702 6 UNITS
1201229	1185766 2 UNITS
1115751 TO 1115754 INCL.	1185703
1115757, 1115758	1185765, 1188809
1115764, 1115765, 1201279,	
1189765	

REFER TO FIGURE 3

PROPERTY LOCATION AND ACCESS

The entire property is located such that the west boundary is situated in Whitesides Township just to the west of Weisman Lake and to the west of Camp Six Lake. The east extension of the property is situated in Carscallen Township, north from Gunther Lake, parallelling Malettes haulage road, for approximately 2 kilometers. Refer to figure 1 and 2.

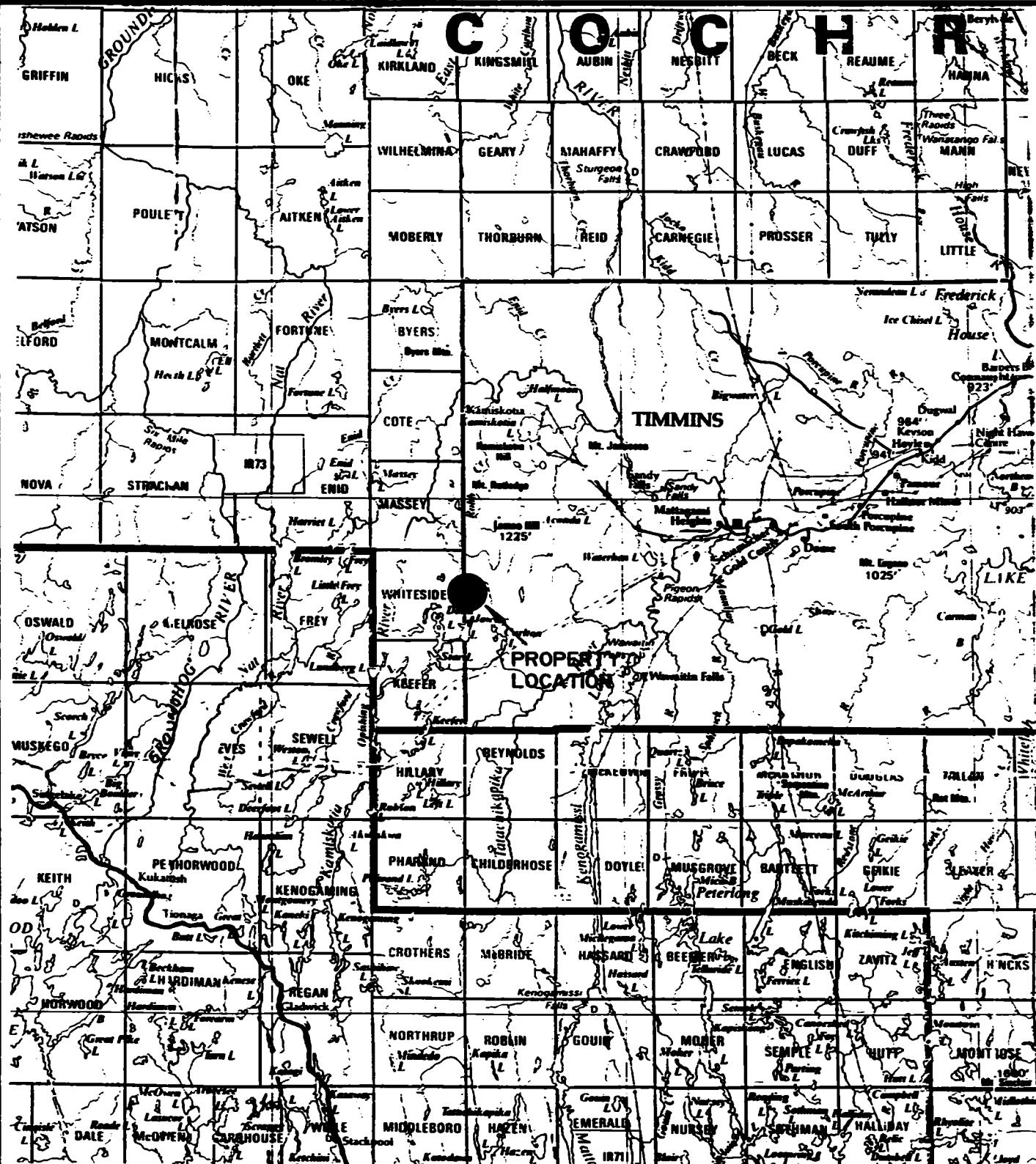
Access to the property during the survey period was ideal. Highway 101 travels west from the City of Timmins and crosses two haulage roads, established by Malettes, which travel north across the west side of the property and the east side of the property. A number of ingress roads with good gravel bottoms provide drivable access to most parts of the cut grid. Travelling time from Timmins to the property is approximately 40 - 60 minutes. Refer to figure 2.



EXSICS EXPLORATION LTD.

P.O. Box 1000, P.M.-7X1
Suite 13, Hollinger Bldg., Timmins Ont.
Telephone: 765-267-451

CLIENT:	FALCONBRIDGE LIMITED	
PROPERTY:	CARSCALLEN/WHITESIDES TWPS.	
TITLE:	LOCATION MAP	
Fig. 1		
Date: June 1994	Scale: 1"=125 miles	NTS:
Drawn: P.G.	Interp: J.C. Grant	Job No. E-53



EXSICS EXPLORATION LTD.

P.O. Box 1000, P.M.-7X1
Suite 13, Hollinger Bldg., Timmins Ont.
Telephone: 705-267-4151

CLIENT: FALCONBRIDGE LIMITED

PROPERTY: CARSCALLEN/WHITESIDES TWPS.

TITLE:

PROPERTY LOCATION

Fig. 2

Date: June 1994

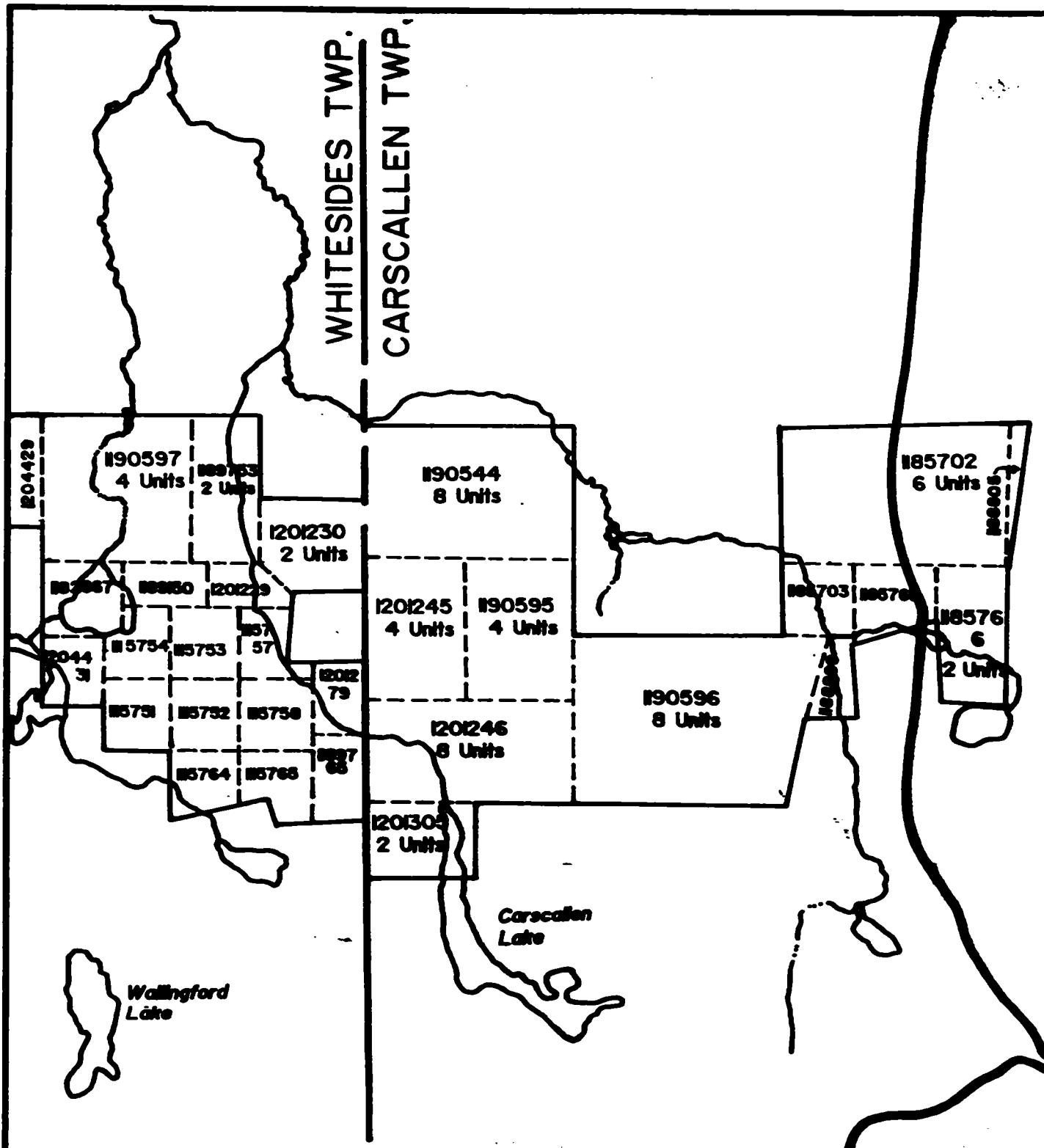
Scale: 1:600,000

NTS:

Drawn:

Interp: J.C. Grant

Job No. E-53



EXSICS EXPLORATION LTD.

P.O. Box 1000, P.O. Box 2X1
Suite 10, Wallingford Bldg., Timmins Ont.
Telephone: 763-307-451

CLIENT:	FALCONBRIDGE LIMITED	
PROPERTY:	CARSCALLEN/WHITESIDES TWPS.	
TITLE:		
CLAIM SKETCH		
Date: June 1994	Scale: 1"-1/2 mile	NTS:
Drawn: P.G.	Interp: J.C. Grant	Job No. E-53

Fig. 3

PERSONNEL

The geophysical crew consisted of the following members:

John Grant- Magnetic Operator	Timmins, Ontario
Yvon Collin- Magnetic Operator	Timmins, Ontario
Richard Mathieu-HLEM Operator	Timmins, Ontario
Robin Mathieu-HLEM Assistant	Timmins, Ontario

The work was completed under the supervision of J. C. Grant, and the linecutting crew was managed by Mario Pilon.

FIELD PROGRAM

The linecutting grid was established from a location flagged by a Falconbridge representative. Baseline 2500MN was first established and cut from the west to east side of the property at an Azimuth of 110 degrees.

Cross lines were then turned off of this baseline at 100 meter intervals and cut to the north and south limits of the claim group. Tielines were also established across the property, parallel north and south of the 2500MN baseline. All of the crosslines, baseline and tielines were chained with 20 meter pickets. In all, a total of 110 Km were cut and chained.

GEOPHYSICAL PROGRAM

This program consisted of a Total Field Magnetic Survey and a Horizontal Loop Electromagnetic, (HLEM), Survey. The magnetic survey was completed on all of the cut lines, however, the HLEM survey was completed on the cross lines only.

TOTAL FIELD MAGNETIC SURVEY

This survey was completed using the EDA OMNI IV field and base station system. Specifications can be found as Appendix A of this report.

The following parameters were kept consistent throughout the survey period.

Line Spacing	-100 meter
Station Spacing	-20 meter
Reference Field	-58000 gammas
Datum Subtract	-57500 gammas
Base Station Record interval	-20 seconds
Accuracy	- +/- 1 gamma
Contour interval	-25 gamma

The corrected Magnetic data has had 57500 gammas removed for ease in plotting only. The data was then plotted onto a base map at a scale of 1:5000 and contoured at 25 gammas where ever possible.

This basemap is included in the back pocket of this report.

HLEM SURVEY

This survey was completed using the Apex Max Min II System. Specifications for this system can be found as Appendix B of this report.

The following parameters were kept consistent throughout the survey period.

Line spacing	-100 meter
Station Spacing	-20 meter
Coil separation	-150 meter
Theoretical search depth	-75-80 meter
Frequencies Read	-1777 Hz, 444 Hz
Configuration	-Horizontal loop mode
Components read	-Inphase & Quadrature of the Secondary Field
Accuracy	- +/- 1%
Profile scale(plotting)	- 1 cm = +/- 20%

The collected HLEM data was then plotted onto base maps at a scale of 1:5000, one map for each frequency. The data was then profiled at 1 cm = +/- 20%.

These base maps are also included in the back pocket of this report.

SURVEY RESULTS

The HLEM survey was successful in locating and outlining a number of good targets across the property. Each of these zones have been lettered and will be discussed separately and in detail below:

WEST SHEET:

Zone A: (L1700ME/1680MN to L3100ME/1440MN)

This structure represents a good strong legitimate target. It lies at a depth ranging from 20 meters to 60 meters with a conductivity range of 3 to 8 MHOS. The zone also appears to be dipping vertical to slightly south.

There is good magnetic correlation with the entire strike length of the target generally 500 to 700 gamma above background. The feature may relate to an iron formation.

There appears to be a short somewhat weaker EM target paralleling Zone A across lines 2700ME and 2800ME. This probably represents a narrow splay off of the main zone. The magnetics for the same area show weak slumping within the main structural trend which may be indicative of minor cross structure.

Zone B: (L3400ME/1860MN to L3500ME/1840MN)

This feature also represents a short narrow zone situated at a depth of 60-65 meters with moderate conductivity of 5-7 MHOS. Again the zone appears to be dipping near vertical. The entire strike zone lies along the south flank of a moderate magnetic low feature however, there is direct magnetic high values with the feature.

Zones C, D, E, F (L3000ME/2300MN-2350MN to L3800ME/2300-2400ME)

This grouping of conductive zones most probably relate to a system of banded iron formation. Individually the zones could not be interpreted due to their closeness to one another. Rough interpretation would suggest the zone is very shallow and extremely strong at over 100 MHOS.

The structure has extreme magnetic correlation and in some cases, the magnetic unit itself could not tune fast enough to take a proper reading. During the field work, the structure was noted on surface and appears to be an iron formation of unknown composition.

Zone G: (L2900ME/2820MN to L3100ME/2800MN)

At this writing, this target appears to be a narrow questionable zone situated in an area of sandy ridges. The entire strike length is situated on the southern flank of a magnetic high feature.

Zone H: (L1100ME/2200MN to L1200ME/2140MN)

This feature represents a good strong target situated at a depth range of 50 to 65 meters with a conductivity value of 5 to 26 MHOS. This feature also appears to dip vertical to slightly south. The zone may continue to the east and into Camp Six Lake.

The magnetics show good correlation of 800 to 1400 gammas above background suggesting it may relate to possible iron formation.

Zone H may have a short parallel zone associated with it to the south on Line 1200ME. Again this feature may extend to the east under Camp Six Lake.

EAST SHEET:

Zone J: (L4000ME/2540MN to L5400ME/2320MN)

This structure represents a good strong bedrock conductor situated at a depth range of 15 to 45 meters and with a conductivity range of 2 to 11 MHOS. This zone appears to be dipping vertical to slightly south.

The entire strike of the zone has good direct magnetic association of 400 to 1100 gammas above general background. In fact, the zone may be a continuance of the same magnetic unit which hosts Zones C, D, E and F. The magnetic signature of Zone J would suggest the presence of iron formation.

Zone K: (L4300ME/2180MN to L4700ME/2100MN)

This structure represents a good, strong bedrock conductor situated at a depth range of 20 to 60 meters with a conductivity range of 8 to 20 MHOS. This zone appears to be dipping near vertical.

There is direct magnetic association with the zone ranging from 300 to 800 gammas above general background. The zone may relate to an iron formation.

Zone L: (L5400ME/3620MN to 6100ME/3480MN)

This structure represents a good, strong bedrock conductor situated at a depth of 30 to 60 meters with a conductivity range of 5 to 25 MHOS. Again the zone appears to dip near vertical to slightly south. The zone continues off of the grid to the east and runs under a small pond.

The entire strike of the zone lies along the north flank of a good strong magnetic structure ranging 700 to 1500 gammas above the general background.

Again the magnetic signature would suggest an iron formation. The zone also appears to have been stripped and exposed on its eastern extension.

Zone M (L5100ME/3680 MN to L5200ME/3740MN)

This zone represents a somewhat weak zone situated at a depth of 15 to 50 meters with a conductivity range of 2 to 5 MHOS.

The structure appears to relate to the western edge of the same magnetic unit which hosts Zone L.

Zone N: (L5300ME/3880MN to L5400Me/3840MN)

This zone appears to relate to a weak questionable target roughly parallelling Zone L but near perpendicular to Zone M. There does not appear to be any definite magnetic correlation associated with the structure.

Zone P: (L4700ME/Northend to L4800ME/4340N)

This zone appears to represent a legitimate bedrock zone which was just noted by the survey. The structure continues off of the grid to the west.

The magnetic survey shows direct magnetic correlation building up with the zone on the western extension.

SEE TABLE 1 AND 2

MAGNETIC SURVEY

Generally the magnetic survey correlated to most of the EM target zones. The signatures of the correlations would suggest that Zones A, B, C, D, E, F, H, J, K, L & M may relate to iron formation structures of unknown composition.

Zones G, N and P at this writing do not have the same magnetic signature and should be prospected further to determine their source.

The magnetic survey was also successful in locating several cross structures across the grid.

There appears to be 2 parallel dikes cross cutting lines 800ME and 900ME as well as lines 1200ME to 1700ME north of Camp Six Lake.

There also appears to be 2 parallel dikes cross cutting lines 5400ME to 5900ME north of TL3500MN. Again they are represented by a series of bullseye magnetic zones.

Another cross structure is evident parallelling lines 5200ME and 5300ME which run across the grid. This structure may be indicative of a fault zone which could explain the orientation and short strike lengths of Zones M and N.

CONCLUSIONS AND RECOMMENDATIONS

The field program was successful in locating and outlining a number of conductive zones which probably relate to banded iron formations.

There appears to be abundant outcrop in most of the areas of EM targets which would lend itself well to a detailed geological survey.

Zone G, N and P should be prospected further as they do not have the distinct signature of an iron formation.

Zone P should be detailed further to better define the target. There is outcrop in the area which may explain the target.

A drilling program would be based on the results of the geological survey.

Respectfully Submitted,

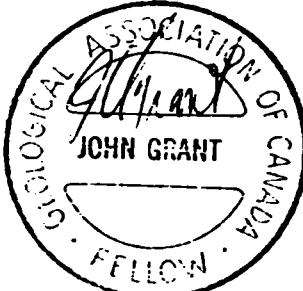


TABLE I
CONDUCTIVE CHARACTERISTICS OF WEST SHEET

<u>ZONE</u>	<u>LINE</u> / <u>STATION</u>	<u>DEPTH</u>	<u>CONDUCTIVITY</u>	<u>DIP</u>	<u>MAG CORR.</u>	<u>EXPLANATION</u>
A	19E/1640N 20E/1630N	-57M -45-61M	3 MHOS 6 to 35 MHOS	Vert to south	Direct Direct	Fe Fe
	21E/1620N	-18-22M	20 to 80 MHOS	South	Direct	Fe
	22E/1580N	-27-40M	7 to 22 MHOS	Vert	Direct	Fe
	23E/1550N	-42-48M	15 to 52 MHOS	South	Direct	Fe
	24E/15N	-15M	28-85 MHOS	Vert	Direct	Fe
	25E/1480N	-15M	20 to 65 MHOS	Vert	Direct	Fe
	28E/1460N	-57- 72 M	9 to 13 MHOS	Vert	Direct	Fe
B	34E/1840N 35E/1820N 36E/1800N	-48M -60-65 M -	4 MHOS 5-7 MHOS -	Vert Vert Vert	Direct Direct Direct	Fe Fe Fe
C,D, E,F	2900MW to 3800MW/2300MN to 2400MN	-	+100MHOS	to South	Direct	Fe
G	29E to L31E/29N to 2860N	-	Weak	Vert	N. Flanking	Fe?
H	11E/2220N 12E/2180N	50-65M -30M	5-26MHOS 10 MHOS	Vert Vert	Direct Direct	Fe Fe

TABLE II
CONDUCTOR CHARACTERISTICS EAST SHEET

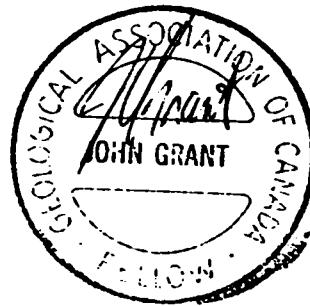
J	41E/2560N to 54E/2320N	15-45 M	2-11 MHOS	Vert to south	Direct	Fe
K	43E/2180N 44E/2160N 45E/2160N	49-65 M 20-30 M 27-35M	8-22 MHOS 6-15 MHOS 8-15MHOS	Vert	Direct	Fe
L	46E/2150N 54E/3620N to 61E/3480N	34-40M 32-60M	10-20 MHOS 5-28 MHOS	Vert	Direct	Fe
M	51E3680N to 52E/3740N	15-52 M	2-5 MHOS	Vert	E. Flanking	Fe
N	53E/3880N to 54E/3840N	-	Weak	-	None	?
P	47E/Northend to 48E/4320N	30-35 M	20 MHOS	-	Direct	?

CERTIFICATE

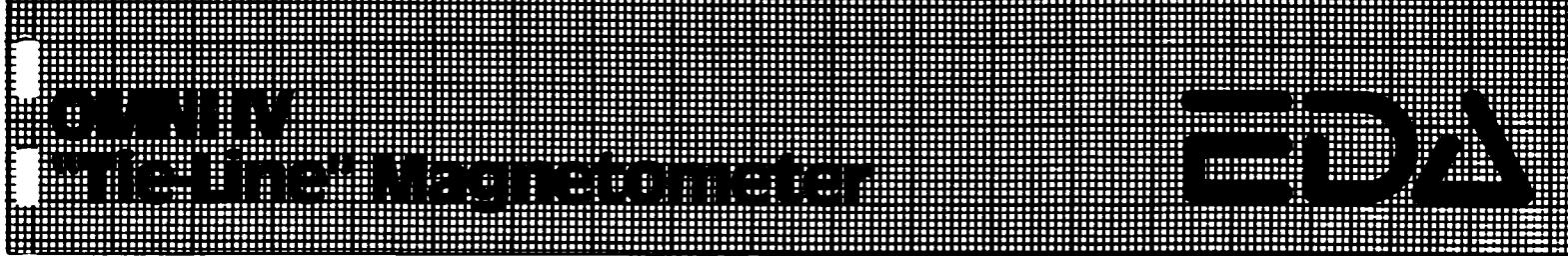
I, John C. Grant, hereby certify that:

- 1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury, Campus. I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited (5 years), North Bay office, and as Exploration Manager and Geophysicist for Exsics Exploration Limited from 1980 to present.
- 2) I am a Member of the Certified Engineering Technologist Association since 1984.
- 3) I am a member of the Geological Association of Canada.
- 4) I have been actively engaged in my profession for the last seventeen (17) years, including all aspects of exploration studies, surveys and interpretations.
- 5) I have no specific or special interest in the described property. I have been retained as a Consulting Geophysicist. for property appraisal.

John Charles Grant, CET, FGAC



APPENDIX A



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

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	1,200 data blocks or sets of readings
Total Field or Gradient	100 data blocks or sets of readings
Tie-Line Points	5,000 data blocks or sets of readings
Base Station	
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 (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m 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

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

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

Printed in Canada

APPENDIX B

APEX MAXMIN II PORTABLE GPR

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.

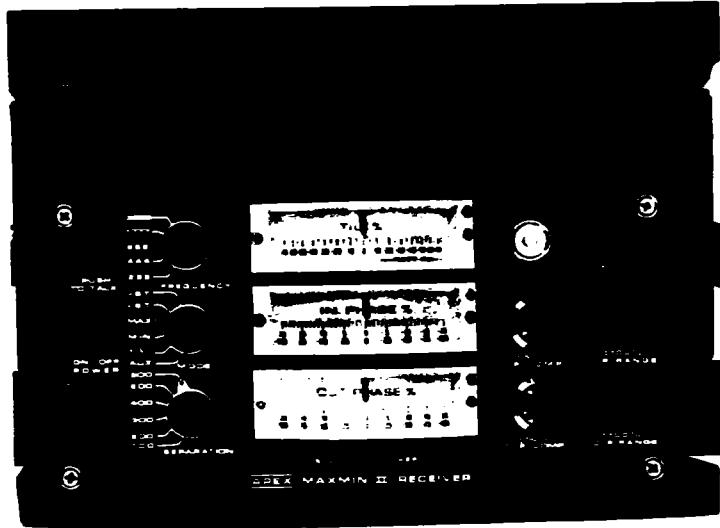
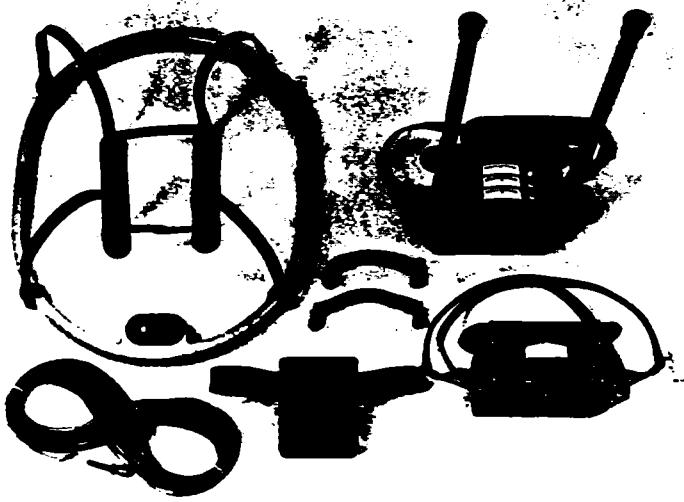
Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.

Reliable data from depths of up to 180m (600 ft).

Built-in voice communication circuitry with cable.

Tilt meters to control coil orientation.





222, 444, 888, 1777 and 3555 Hz.

MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. 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 (MMID) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). Coil separations in V.L. mode not restricted to fixed values.

Phase-error Reduction: - 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.

Cable Ranges: In-Phase: $\pm 20\%$, $\pm 100\%$ by push-button switch.
Quadrature: $\pm 20\%$, $\pm 100\%$ by push-button switch.
Tilt:
Null (V.L.): Sensitivity adjustable by separation switch.

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

$\pm 0.25\%$ to $\pm 1\%$ normally, depending on conditions, frequencies and coil separation used.

- 222Hz : 220 Atm²
- 444Hz : 200 Atm²
- 888Hz : 120 Atm²
- 1777Hz : 60 Atm²
- 3555Hz : 30 Atm²

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

12V 6 Ah Gel-type rechargeable battery. (Charger supplied).

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

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

Indication Lights:

Temperature Range: -40°C to $+60^{\circ}\text{C}$ (-40°F to $+140^{\circ}\text{F}$).

Transmitter weight: 6kg (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.

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



Northern Development
and Mines

Ontario

**REPORT OF WORK CONDUCTED
AFTER RECORDING CLAIM**

Mining Act

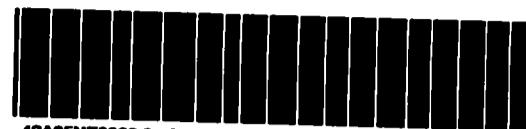
Transaction Number

W9460.00161

Information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2. 15589

- Instructions:**
- Please type or print and submit in duplicate
 - Refer to the Mining Act and Regulation Recorder
 - A separate copy of this form must be submitted
 - Technical reports and maps must accompany this application
 - A sketch, showing the claims the work was performed on



42A05NE0068 2.15589 CARSCALLEN

900

Recorded Holder(s)

FALCONBRIDGE LIMITED		P4N 7H9	Client No. 130672
Address	PO BOX 1140 571 MONETA AVE	TIMMINS ONTARIO	Telephone No. 267 1188
Mining Division	PORCUPINE	Township/Area CARSCALLEN - W. SIDE	M or G Plan No.
Dates Work Performed	From: MAY 15 / 1994	To: JUNE 25 / 1994	

Work Performed (Check One Work Group Only)

Work Group	Type
✓ Geotechnical Survey	LINECUTTING, HLEM - MAG SURVEYS
Physical Work, Including Drilling	
Rehabilitation	REPAIRS
Other Authorized Work	
Assays	
Assignment from Reserve	SEARCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ 56,834

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
EXSIS EXPLORATION LTD (JOHN GRANT)	P.O. BOX 1660 TIMMINS ON P4N 7X1
YUAN COLLINS	TIMMINS
RICHARD MATHIEU	TIMMINS
ROBINA MATHIEU	TIMMINS

(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	Recorded Holder or Agent (Signature)
--	------	--------------------------------------

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

MARJORIE Y. VONNE
13-456-12-12-12 P4N 7J7

For Office Use Only

Total Value of Recordings Date Recorded

Aug. 8/94

Entered Account Date

Nov 6/94

RECEIVED

RECORDED AND INDEXED

Work Report Number for Applicant	Claim Number (see Note 2)	Number of Claim Units
2.1558	1185702	6
	1185707	1
	1195765	1
	1185166	2
	1138805	1
	1188809	1
	1190544	8
	1190596	8
	1201245	4
	1201246	3
	1201304	2
	1201305	2
?	1201306	1
	1201279	1
	1115751	1
	1115752	1
	17	

Assessment on the Claim	Value of Work Done	Applied to this Claim
4,736.	2450	
710.	400	
789	100	
1,571.	800	
789	400	
6,715.	3200	
6,315.	3200	
3,157	1600	
3,157	1600	
C	800	
1,571	800	
0	400	
789	400	
789	400	
78,679	20,350	

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date	2336.
389	389	389
779	779	779
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389
389	389	389

Credits you are claiming on this report may be subject to property to minimize the adverse effects of such actions. Please indicate which credits you want to prioritize the deletion of credits. Please mark one of the following:

1. Credits are to be cut back starting with the claim listed last, working backwards.
 2. Credits are to be cut back equally over all claims contained in this report of work.
 3. Credits are to be cut back as proposed at the start of the statement above.

RECORDED

100 - 2 100

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

10 Examples of general transfers are unrestricted transfers, option agreements, Memorandum of agreements, etc., whereas

Note 2: If work has been performed in addition to those listed, please indicate the following:

Work Report Number for Applying Revised	Claim Number (see Note 2)	Number of Claim Units
8	1115753	1
88	1115754	1
5	1115755	1
55	1115756	1
1	1115757	1
11	1115758	1
2	1115764	1
22	1115765	1
3	11182867	1
33	1139150	1
4	1189753	2
44	1189765	1
5	1190597	1
55	1201229	1
6	1201230	2
66	1204431	1
7	1204429	4
77		15 Units

Assessment Work Done on this Claim	Value of Appended to this Claim
7.7	100
789	400
101	400
789	400
789	400
7	400
787	400
1.5	800
797	200
3.158	1600
789	400
1.574	200
789	0
3.157	0
18.155	7200

Credits you are claiming on your report may be cut back in order to minimize the adverse effects of such debts on your credit profile.

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

RECORDED

Note 7 Examples of beneficial interest are unrecorded transfers, option agreements, memberships in joint ventures, etc., to the management.

Note 2: If work has been performed on patented or leased land, please indicate the location.



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

W9460-00167

2. 15589

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 forme 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^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Total Total global
Wages Salaires	Labour Main-d'œuvre		
Contractor's and Consultant's Fees	Field Supervision Supervision sur le terrain		
Croits de l'entrepreneur et de l'expert- conseil	Type GEOPHYKAL S.T.R.C.S		
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			

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	Total Total global
Transportation Transport	Type		
RECORDED			
AUG - 8 1994			
Receipt			
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilitation			
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)			
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			

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
	x 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
	x 0.50 =

Certification Verifying Statement of Costs

I, the undersigned, 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.

I, the undersigned, am authorized
to act as my Agent, Foster - Company.

I, the undersigned,
make this _____ day of _____, 19____.

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 forme de rapport de travail ci-joint.

Et du à titre de _____ je suis autorisé
à faire enregistrer mon représentant, monsieur Foster - Company
à faire cette attestation.

Signature



**Ministry of
Northern Development
and Mines**

**Ministère du
Développement du Nord
et des Mines**

**Geoscience Approvals Section
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5**

September 30, 1994

**Our File: 2.15589
Transaction #: W9460.00167**

**Telephone: (705) 670-5853
Fax: (705) 670-5863**

**Mining Recorder
Ministry of Northern Development
and Mines
60 Wilson Avenue
1st Floor
Timmins, Ontario
P4N 1A2**

Dear Sir/Madam:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
P.1185702 ET AL IN CARSCALLE & WHITESIDES TOWNSHIPS**

Assessment work credits have been approved as outlined on the original report of work form for the submission. The credits have been approved under Section 14, Geophysics (Mag & EM), Mining Act Regulations.

The approval date is September 29, 1994.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5855.

ORIGINAL SIGNED BY:

A handwritten signature in black ink that appears to read "Ron C. Gashinski".

**Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division**

**LJ/jl
Enclosures:**

**cc: Resident Geologist
Timmins, Ontario**

**Assessment Files Library
Sudbury, Ontario**

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY

S.R.O. - SURFACE RIGHTS ONLY

M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
DANA AND JOWSEY LAKE PARK REG.	S.R.O.			171606
SEC. 36/70		W.36/70	M.R.O.	
SEC. 48/70	FEB. 3/96	M. & S.R.		171606
SEC. 48/70	SEP. 1/71	M. & S.R.		171606

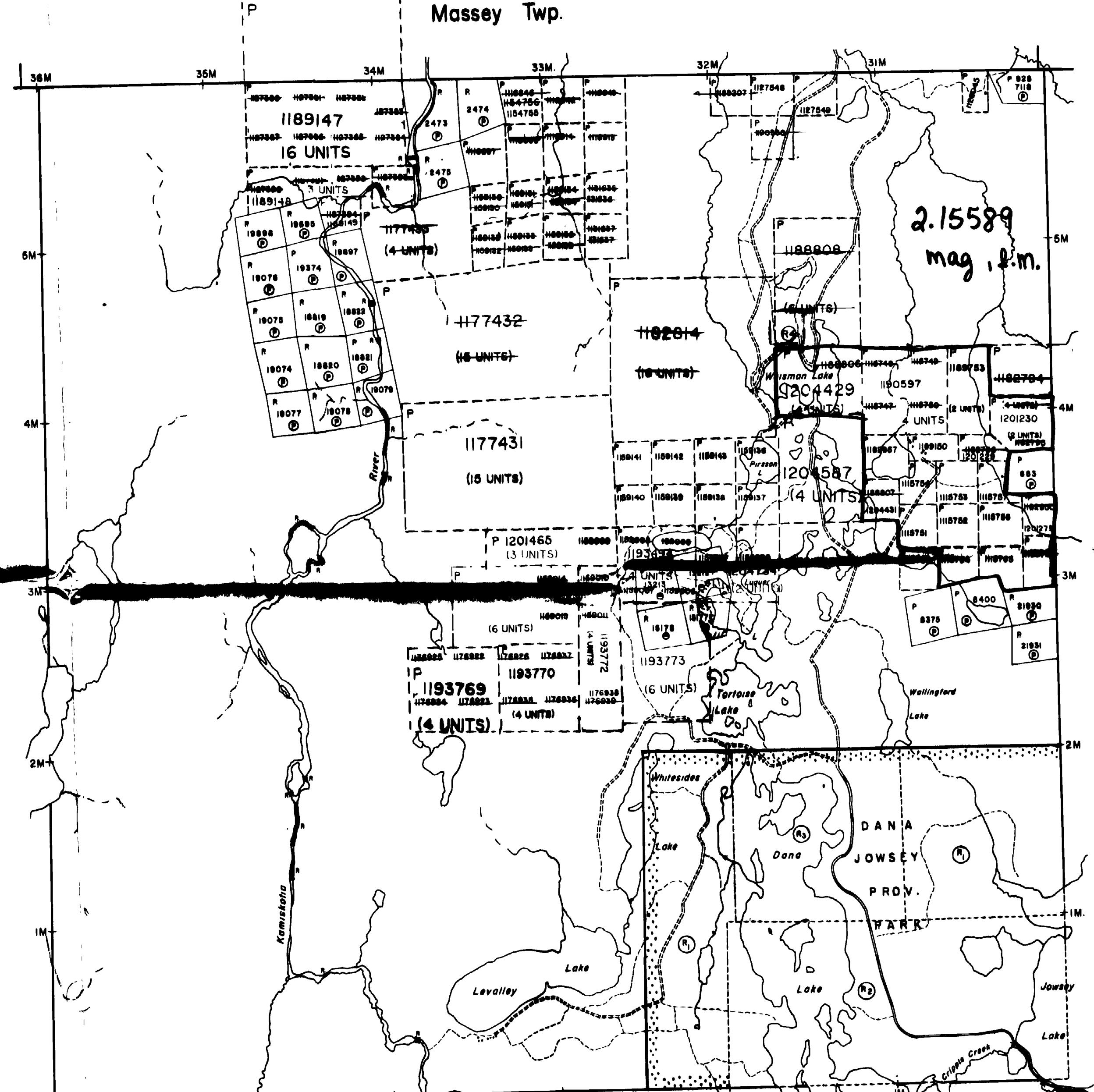
MINING AND SURFACE RIGHTS WITHDRAWN FROM
PROSPECTING, STAKING OUT, SALE OR LEASE
UNDER SECTION 36 OF THE MINING ACT R.S.O. 1990
ORDER NO. W-P 49/94 IER DATED 94-MAY-02

THE INFORMATION THAT
APPEARS ON THIS MAP
HAS BEEN COMPILED
FROM VARIOUS SOURCES,
AND ACCURACY IS NOT
GUARANTEED. THOSE
WISHING TO STAKE MIN-
ING CLAIMS SHOULD CON-
SULT WITH THE MINING
RECORDER, MINISTRY OF
NORTHERN DEVELOP-
MENT



200

Frey Twp.



Keefer Twp.

Carscallen 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

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

SCALE 1 INCH = 40 CHAINS

FEET	0	1100	2200	4000	6000	8000
METRE	0	200	400	1000	2000	
			(1 KM)			(2 KM)

ISSUED

SEP 13 1994

TOWNSHIP

PORCUPINE MINING DIVISION

WHITESIDES 213589

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

RECEIVED

SEP 21 1994

JOB BRANCH

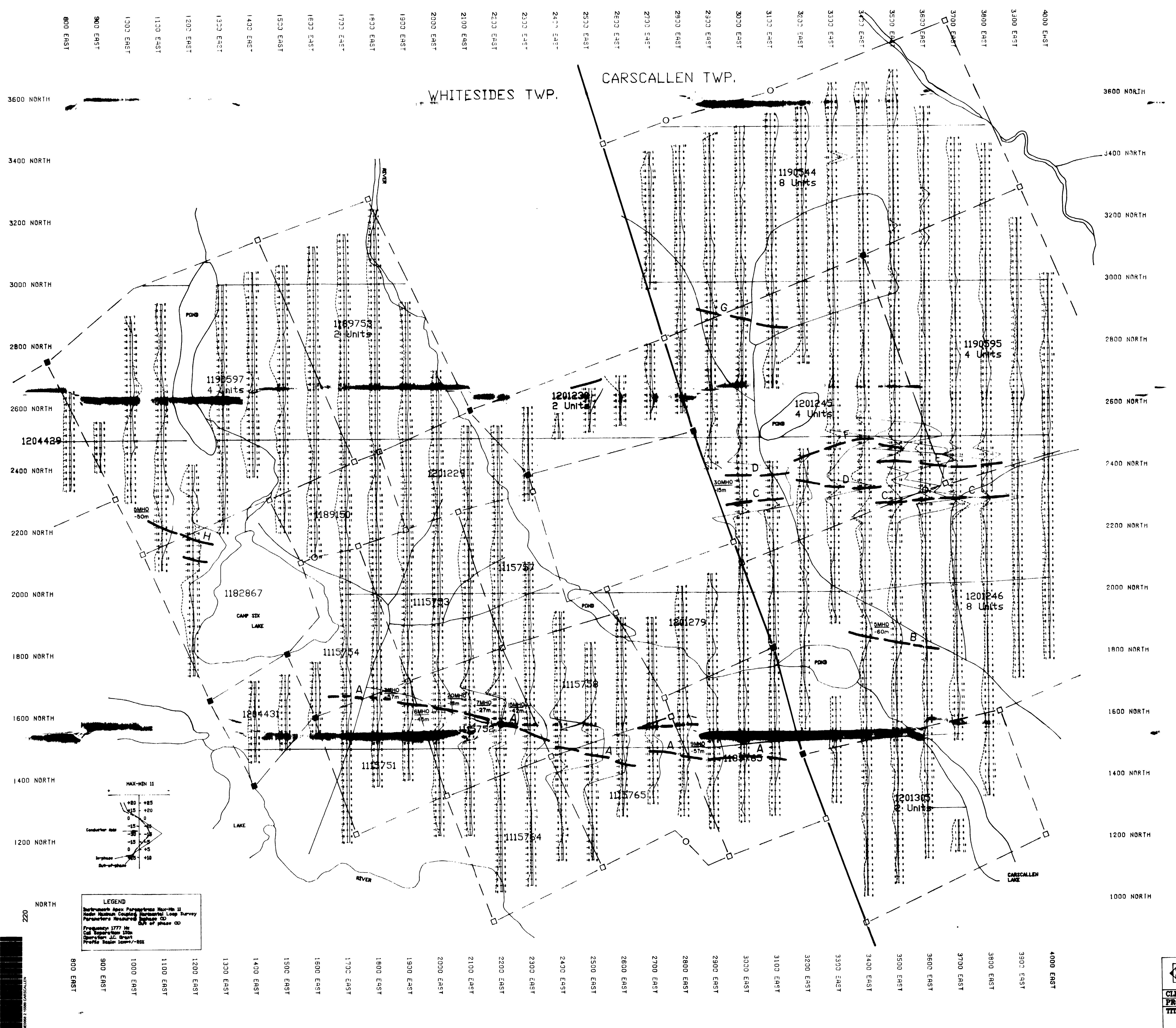
Ministry of Natural Resources	Land Management Branch
-------------------------------------	------------------------------

Date: FEBRUARY 1985

ACTIVATED: JUNE 30, 1992

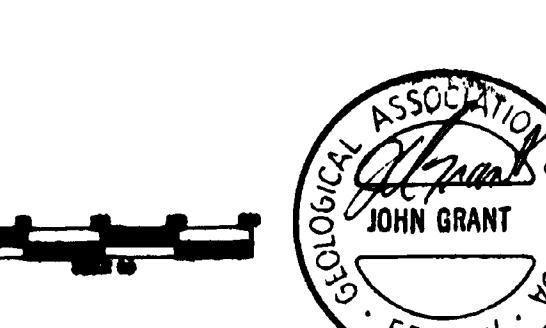
BY: D.C.

Number:	G-3230
---------	--------

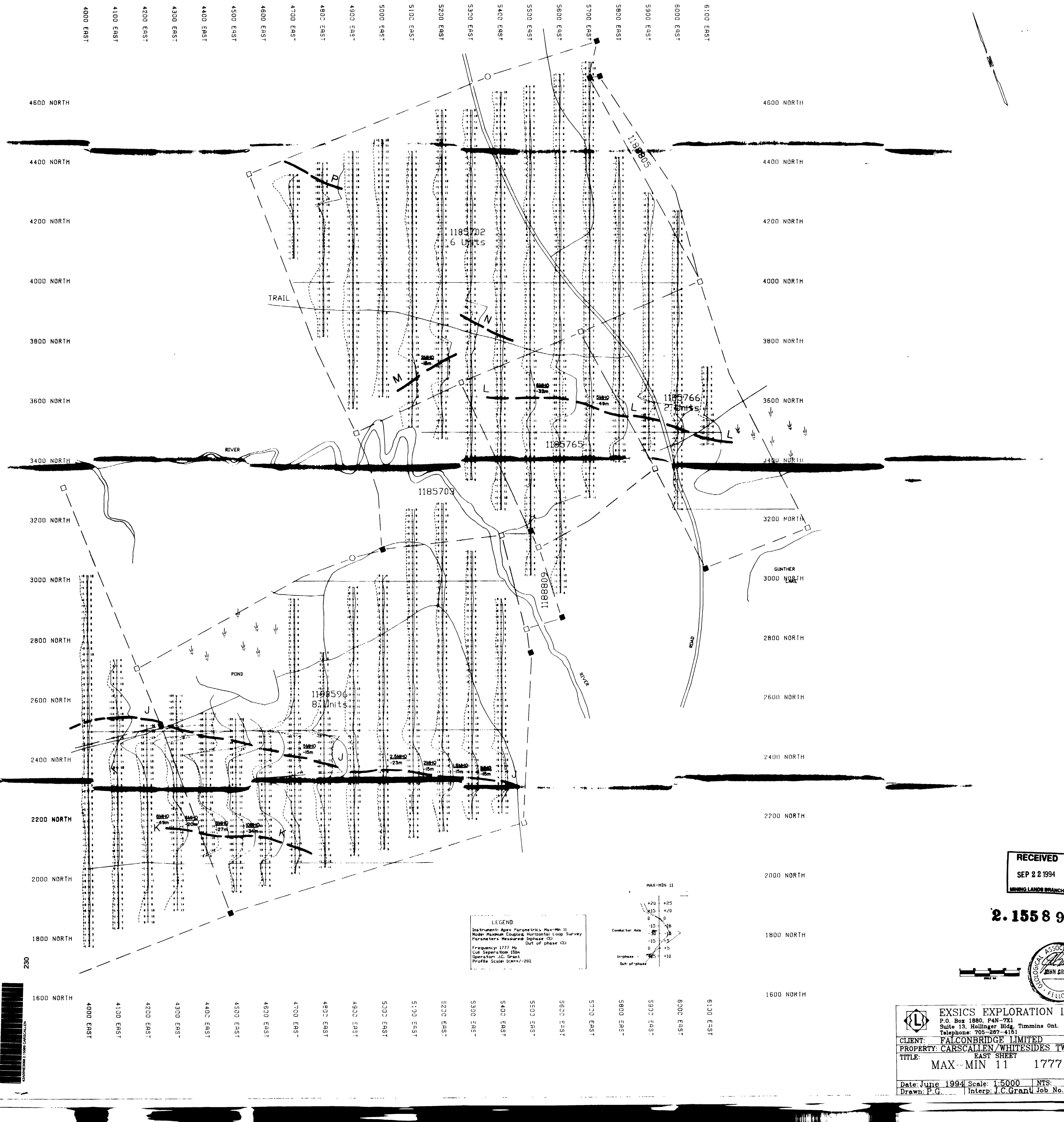


RECEIVED

SEP 22 1994

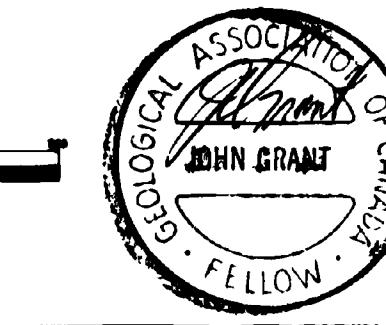


	EXSICS EXPLORATION LTD.	
P.O. Box 1880, P.O.H.-7K1 Suite 13, Hollinger Bldg., Timmins Ont. Telephone: 705-667-4151		
CLIENT:	FALCONBRIDGE LIMITED	
PROPERTY:	CARSCALLEN / WHITESIDES TWPS.	
TITLE:	WEST SHEET	
	MAX-MIN 11 1777 H2	
Date: June 1994	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J.C.Grant	Job No.: E-1



RECEIVED

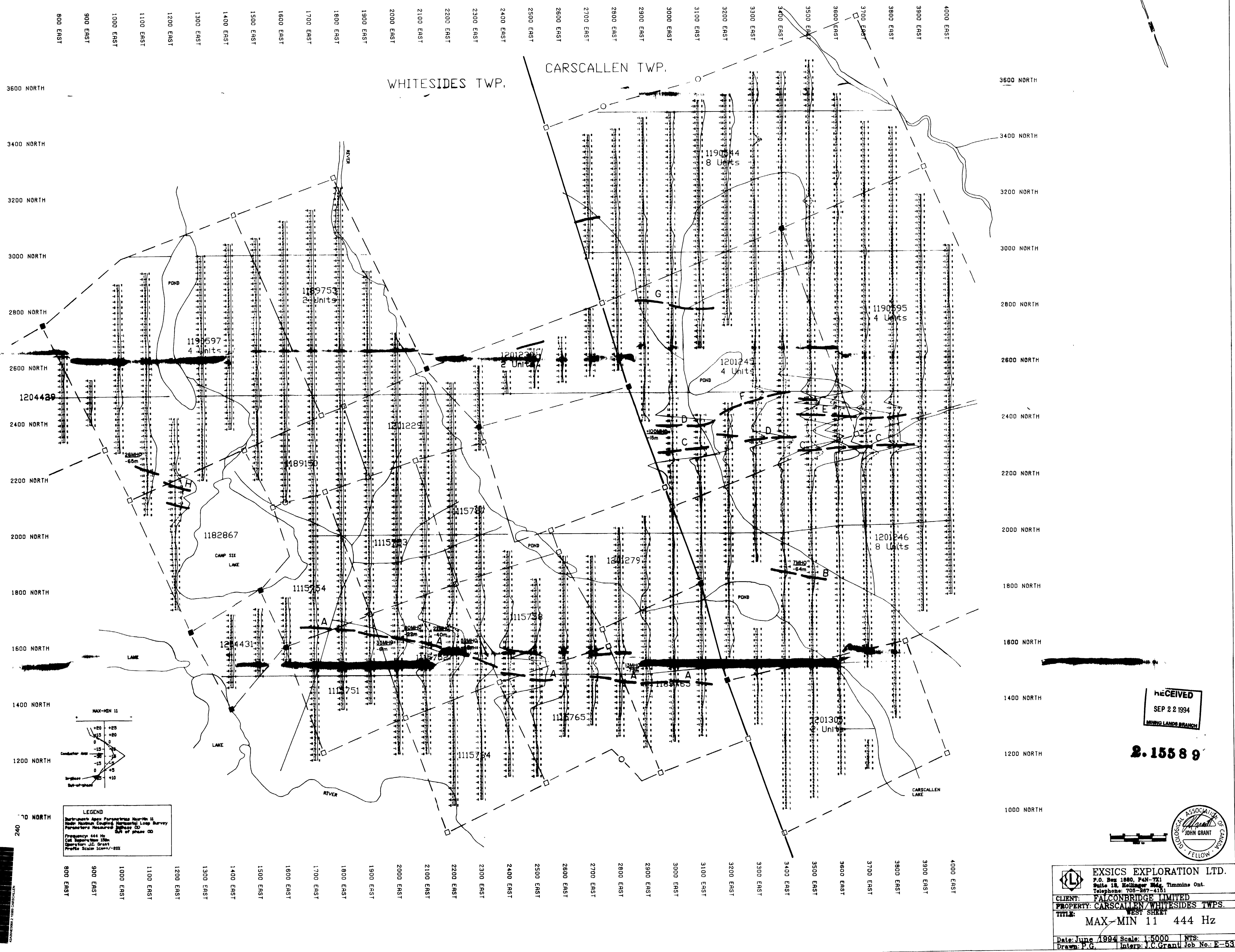
2.15589

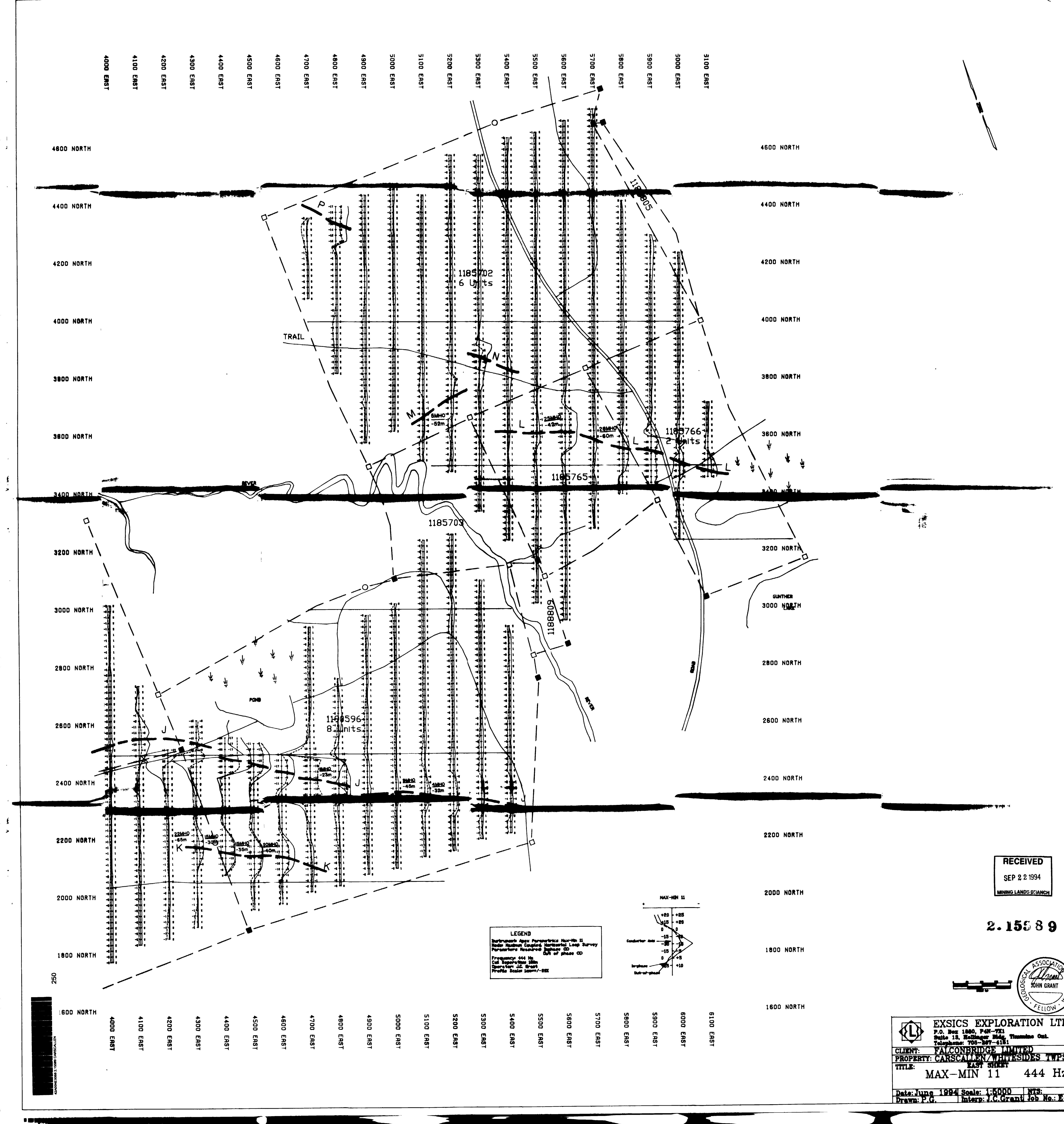


EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

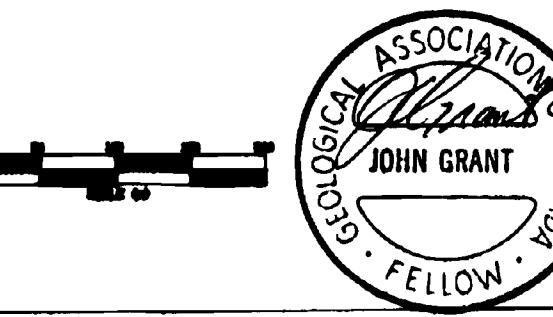
CLIENT: FALCONBRIDGE LIMITED
PROPERTY: CARSCALLEN/WHITESIDES TWPS.
TITLE: EAST SHEET
MAX--MIN 11 1777 Hz

Date: June 1994	Scale: 1:5000	NTS:
Drawn: P.G.	Interp: J.C.Grant	Job No.: E-53





2.15589

RECEIVED
SEP 22 1994
MINING LANDS BRANCH

EXSICS EXPLORATION LTD.
 P.O. Box 1880, P.A.N.-T1
 Suite 18, Hollinger Ridge, Timmins Ont.
 Telephone: 705-687-4181
CLIENT: FALCONBRIDGE LIMITED
PROPERTY: CARSCALEEN WHITESIDES TWP.
TITLE: WEST SHEET
MAGNETOMETER SURVEY

Date: June 1994 Scale: 1:5000 NTS
 Drawn: P.G. Interp: J.C. Grant Job No.: E-63

