



42A11NE0599 2.5406 EVELYN

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FEB 28 1983

**MINING LANDS SECTION**

" MAXMIN 11 "

REPORT

ALLERSTON OPTION

MATHESON - EVELYN TWP.

FOR

ST. JOE CANADA INC.

SEPTEMBER 10th, 1982

J.C. Grant

Exsics Expl. Ltd.

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GROUP 2: MAX MIN II, 1777 H<sub>Z</sub>

## INTRODUCTION

This report deals with a maximum 11 survey, carried out by Exsics Exploration Ltd. for St. Joe Canada Inc. The results of the survey are explained, in detail, within this report.

## LOCATION AND ACCESS

The survey area is located approximately 20 miles northeast of Timmins. Access to the grid was by road from Timmins to the Matheson Evelyn Township line. An Argo was used for access to and from the survey grid.

## GRID CHARACTERISTICS

The survey grid was divided into two groups. Group 1 covered Lots 7 to 10, Concessions VI of Matheson Township and Lots 8 to 11, Concession 1 of Evelyn Township. Group 2 covered Lots 4 to 6, Concession VI of Matheson Township.

The actual claims covered are listed below.

Group 1		Group 2
P 632852	P 393105	P 393738
P 632853	P 393104	P 393739
P 452498	P 393103	P 393740
P 452499	P 452461	P 393741
P 452500	P 452462	P 617737
P 617738	P 452463	P 628018
P 624601	P 452464	P 628017
P 624600	P 624629	P 618931
P 393110	P 624630	P 618 932
P 393109	P 617736	
P 393108	P 617735	
P 393107	P 617734	
P 393106	P 617733	

## LINECUTTING

A total of 54 kilometers of grid lines were cut on Group 1. The Baseline azimuth was 090 degrees. Cross lines were chained at 100 meter intervals with station intervals chained at 25 meter intervals.

A total of 23 kilometers of grid lines were cut on Group 2. The Baseline azimuth was 090 degrees. Cross lines were chained at 100 meter intervals with station intervals chained at 25 meter intervals.

## TYPE OF SURVEY

The MaxMin 11 survey was carried out using a Apex Parametrics unit. A 150 meter coil separation was used and frequencies 1777hz and 444hz were read on the following lines.

Group 1: MaxMin 11 lines surveyed were 0+00, 400ME, 800ME, 1200ME, 1600ME, 2000ME, 2400ME, 2800ME, 3200ME, 3600ME, 4000ME.

Group 2: MaxMin 11 lines surveyed were 0+00, 400ME, 800ME, 1200ME, 1600ME, 2000ME.

Detailed explanations of the MaxMin 11 unit and its characteristics are included in the back of this report as Appendix A.

## SURVEY RESULTS

MaxMin ll results for Group # 1 :

The MaxMin ll survey located 2 possible main zones called A and B and two minor zones.

### Zone A

( L 2000ME L 2400ME  
@ 1+25MN to 1+40MN )

#### L 2000ME

1777hz — depth to source of  
-49 meters  
— conductivity value  
of 1.5 MHOS

#### L 2400ME

1777hz — depth to source of  
-60 meters  
— conductivity value  
of 1.5 MHOS  
444hz — depth to source of  
-88 meters  
— conductivity value of  
10MHOS  
— dip of the zone is  
near vertical



Zone B

(L 2000ME to L 2400ME  
475MN to 425MN)

L 2000ME

1777hz — depth to source  
— -12 meters  
— conductivity value  
— of 1 MHOS

444hz — depth to source  
— of -82 meters  
— conductivity value  
— of 6 MHOS

L 2400ME

1777hz — depth to source  
— of -27 meters  
— conductivity value  
— of 1 MHOS

444hz — depth to source  
— of -82 meters  
— conductivity value  
— of 6 MHOS  
— dip of this zone  
— is near vertical

Secondary Zone:

(L 1600ME, 375MN)

444hz — depth to source  
— of -75 meters  
— conductivity value  
— of 5 MHOS

Secondary Zone:

(L 2400ME, 775MN)

1777hz — depth to source  
— of -12 meters  
— conductivity value  
— of 0.5 MHOS  
— dip is near vertical

MaxMin 11 results for Group # 2

The MaxMin 11 survey showed two main zones which may be continuous to both east and west. There was also a short stronger zone to the north-east striking off the grid.

Characteristics:

Zone A

L 800ME (125MS)  
L 1200ME (150MS)

- 1777hz: - depth to source of -87 meters  
- conductivity value of 2.5 MHOS  
- dip of zone near vertical
- 444hz: - depth to source is undetermined due to the weakness of the response

Zone B

L 1200ME (225MN)  
L1600ME (175MN)

- (L 1200ME)  
1777hz: - depth to source of -60 meters  
- conductivity value of 1 MHOS
- 444hz: - depth to source of -87 meters  
- conductivity value of 3.5 MHOS  
- dip of zone is near vertical
- (L 1600ME)  
1777hz: - depth to source of -30 meters  
- conductivity value of 1 MHOS
- 444hz: - depth to source of -94 meters  
- cond. value 6 MHOS  
- dip of zone is near vertical to south

(Group # 2 con't.)

Zone C

L 2000ME (425-475MN)

1777hz: - depth to source  
of -45 meters  
- conductivity value  
of 1 MHOS

444hz: - depth to source  
of -105 meters  
-conductivity value  
of 15-20 MHOS  
- dip of zone is  
near vertical

RECOMMENDATIONS & CONCLUSIONS

Zone A

This may be a continuous zone between lines 2000ME and 2400ME. The zone appears to be of bedrock source.

Zone B

This zone may also be continuous between 2000ME and 2400ME. Because of the consistency in depth and MHO value on the 444 frequency, the probable source is in bedrock.

Secondary Zone: L 1600ME (375MN)

This zone may continue to the east or west and appears to be a legitimate bedrock response.

Secondary Zone: L 2400ME (775MN)

This zone appears to be an overburden response only.

*John Christ*

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AUG 31 1983

MINING LANDS SECTION

APPENDIX A

Max Min II Specifications

# APEX

# MAXMIN II PORTABLE EM

## SPECIFICATIONS:

<b>Frequencies:</b>	222, 444, 888, 1777 and 3555 Hz.	<b>Repeatability:</b>	$\pm 0.5\%$ to $\pm 1\%$ normally, depend on conditions, frequencies and separation used.
<b>Modes of Operation:</b>	<b>MAX:</b> Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable. <b>MIN:</b> Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable. <b>V.L.:</b> Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.	<b>Transmitter Output:</b>	<ul style="list-style-type: none"><li>- 222 Hz : 175 Atm<sup>2</sup></li><li>- 444 Hz : 160 Atm<sup>2</sup></li><li>- 888 Hz : 100 Atm<sup>2</sup></li><li>- 1777 Hz : 80 Atm<sup>2</sup></li><li>- 3555 Hz : 30 Atm<sup>2</sup></li></ul>
<b>Separations:</b>	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.	<b>Receiver Batteries:</b>	9V trans. radio type batteries Life: approx. 35 hrs. continuous (alkaline, 0.5 Ah), less in c weather.
<b>Parameters Read:</b>	<ul style="list-style-type: none"><li>- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.</li><li>- Tilt-angle of the total field in V.L. mode.</li></ul>	<b>Transmitter Batteries:</b>	12V 7.5Ah Gel-Cell recharges batteries (2 x 6V in series).
<b>Readouts:</b>	<ul style="list-style-type: none"><li>- Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.</li><li>- Tilt angle and null in 90mm edgewise meters in V.L. mode.</li></ul>	<b>Reference Cable:</b>	Light weight 2-conductor tef cable for minimum friction. Unshielded. All reference cables optic at extra cost. Please spec
<b>Scale Ranges:</b>	<b>In-Phase:</b> $\pm 20\%$ , $\pm 100\%$ by push-button switch. <b>Quadrature:</b> $\pm 20\%$ , $\pm 100\%$ by push-button switch. <b>Tilt:</b> $\pm 75\%$ slope. <b>Null (V.L.):</b> Sensitivity adjustable by separation switch.	<b>Voice Link:</b>	Built-in intercom system voice communication between receiver and transmitter operate in MAX and MIN modes, via reference cable.
<b>Repeatability:</b>	<b>In-Phase and Quadrature:</b> 0.5 %. <b>Tilt:</b> 1%	<b>Indicator Lights:</b>	Built-in signal and reference warning lights to indicate erroneous readings.
		<b>Temperature Range:</b>	$-40^{\circ}\text{C}$ to $+60^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $+140$
		<b>Receiver Weight:</b>	6kg (13 lbs.)
		<b>Transmitter Weight:</b>	13kg (29 lbs.)
		<b>Shipping Weight:</b>	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) 495-1812

Cables: APEXPARA TORONTO

Telex: 06-966773 NORDVIK TOR

## BRIEF DESCRIPTION OF THE MAXMIN II EM SYSTEM

The MaxMin II is a two-man continuously portable EM system, for which the basic specifications were set down by Mr. Jack Betz following an extensive test programme of eleven continuously portable EM systems in 1972.

The MaxMin II system is designed to measure both the vertical and horizontal in-phase (IP) and quadrature phase (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 Tx is kept parallel to the mean slope between the Tx and Rx at all times. This means that the MaxMin II is in effect a horizontal loop (HL) system, when the receiver measure anomalous components perpendicular to the mean slope between the coils. It is a minimum-coupled (Min C) system, when the receiver measure anomalous components parallel to the mean slope between the coils.

Generally the MaxMin II is run in the HL mode with the Min C mode being used in the few instances, where it can improve on the data of the HL mode.

The MaxMin II has the following principal features designed into it:

- 1) four system frequencies - 222, 444, 888, and 1777 Hz - to deal effectively with a wide range of overburden and bedrock conductor conductivities,
- 2) six Tx-Rx separations - 25, 50, 100, 150, 200, 250 meters to cope with a wide range of problems from the search for large deep conductive zones to the resolution of shallow, parallel conductive zones,
- 4) A built-in, easy-to-operate intercom system to insure good co-ordination of the transmitter and receiver operators at all times.
- 5) Very advanced electronic (active and digital) filtering in the receiver to reduce the interference effects of power line and atmospheric noise,
- 6) Warning lights to indicate invalid readings,
- 7) Large scale IP and QP meters giving a fine scale reading precision of 1/2% of the primary field strength at the receiver,
- 8) Reference cables with teflon insulation and jacket to insure easy pulling at all times.



- 9) The capability of changing the Rx from the H1 to the Min C mode with no loss of time,
- 10) Balanced reference voltage and compensator circuitry to eliminate stray coupling effects, and
- 11) Two-man portability to reduce operating costs.

M A P S

GRID 1: Topography, Claims; MaxMin 11 Survey

GRID 2: Topography, Claims; MaxMin 11 Survey



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

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_  
Station interval 25 meters Line spacing 400 meters  
Profile scale 1 cm = 25 m = ± 10%  
Contour interval \_\_\_\_\_

MAGNETIC

Instrument \_\_\_\_\_  
Accuracy - Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base Station check-in interval (hours) \_\_\_\_\_  
Base Station location and value \_\_\_\_\_

ELECTROMAGNETIC

Instrument MaxMin 11 (Apex Parametrics)  
Coil configuration Horizontal Loop  
Coil separation 150 meters  
Accuracy ± 1/2 % to ± 1 %  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 1777 hz and 444 hz  
(specify V.L.F. station)  
Parameters measured inphase and quadrature component of the secondary field.

GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

INDUCED POLARIZATION  
RESISTIVITY

Instrument \_\_\_\_\_  
Method  Time Domain  Frequency Domain  
Parameters - On time \_\_\_\_\_ Frequency \_\_\_\_\_  
- Off time \_\_\_\_\_ Range \_\_\_\_\_  
- Delay time \_\_\_\_\_  
- Integration time \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

Group 1

P 632852	P 393105
P 632853	P 393104
P 452498	P 393103
P 452499	P 452461
P 452500	P 452462
P 617738	P 452463
P 624601	P 452464
P 624600	P 393123
P 393110	P 393124
P 393109	P 617736
P 393108	P 617735
P 393107	P 617734
P 393106	P 617733


Group 2

P 393738
P 393739
P 393740
P 393741
P 617737
P 628018
P 628017
P 618931
P 618 932

CERTIFICATE

I, John Grant, hereby certify that:

- 1) I am a 1975 graduate of the three year program in Geological Technology at the Cambrian College of Applied Arts and Technology and I have worked subsequently as Chief Geophysicist for Teck Exploration (5 years) and Exsics Exploration Ltd.
- 2) The field work described in the attached report was carried out under my supervision and the interpretation and conclusions contained therein are based on my training and professional experience.

  
\_\_\_\_\_  
John Grant,  
Exsics Exploration Ltd.



Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

#4



42A11NE0599 2.5406 EVELYN

900

The Mining Act

Do not use shaded areas below.

Type of Survey(s) <b>Geophysical-MaxMin II</b>		Township or Area <b>Matheson, Evelyn</b>
Claim Holder(s) <b>St. Joe Canada Inc.</b>		Prospector's Licence No. <b>T1109</b>
Address <b>Suite 418, 111 Richmond St. W., Toronto, Ontario M5H 2J4</b>		
Survey Company <b>Exsics Exploration</b>	Date of Survey (from & to) <b>01 05 82 01 06 82</b> Day Mo. Yr. Day Mo. Yr.	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) <b>John Grant, P.O. Box 1880, Timmins, Ontario</b>		

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	632852		P	617735	
	632853			617734	
	452498			617733	
	452499			393738	
	452500			393739	
	617738			393740	
	624601			393741	
	624600			617737	
	393110			628018	
	393109			628017	
	393108			618931	
	393107			618932	
	393106				
	393105				
	393104				
	393103				
	452461				
	452462				
	452463				
	452464				
	624629				
	624630				
	617736				

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MINING LANDS SECTION

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Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures + 15 = Total Days Credits

\$ [ ] + 15 = [ ]

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work. **35**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
700	Mar 2 / 83	[Signature]
	Date Approved as Recorded	Branch Director
		Regional Mining Recorder

Date: Feb. 28/83

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 the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying  
**Kevin Leonard, 886 Tanager Ave.**

Burlington, Ontario L7T 212

Date Certified: February 28 / 83

Certified by (Signature): Kevin Leonard

1. Type of Survey Max-Min II
2. Township or Area Matheson and Evelyn Townships
3. Numbers of Mining Claims Traversed by Survey Group 1: P. 632852, 632853, 452498, P. 452499, 452500, 617738, 624601, 624600, 393110, 393109, 393108, 393107, P. 393106, 393105, 393104, 393103, 452461, 452462, 452463, 452464, 393123, P. 393124, 617736, 617735, 617734, 617733; Group 2: P. 393738, 393739, 393740, 393741, 617737, 628018, 628017, 618931, 618932.
4. Number of Miles of Line Cut 48 Flown \_\_\_\_\_
- \*5. Number of Stations Established 539 (readings)
- \*6. Make and type of Instrument Used Apex Parametrics Max-Min II Portable E.M.
- \*7. Scale Constant or Sensitivity \_\_\_\_\_
- \*8. Frequency Used and Power Output 1777 Hz.: 60 Atm<sup>2</sup>; 444 Hz.: 160 Atm<sup>2</sup>
9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) 61

Total 8 hour Line-Cutting Days 0

Calculation

$$\frac{61}{\text{Technical}} \times 7 = \frac{427}{\text{Line-cutting}} + \frac{0}{\text{Line-cutting}} = \frac{427}{\text{Line-cutting}} \div \frac{35}{\text{Number of claims}} = \frac{12}{\text{Assessment credits per claim}}$$

The dates listed on this form represent working time spent entirely within the limits of the above listed claims  Check  
If otherwise, please explain \_\_\_\_\_

Dated: Sept. 19<sup>th</sup> / 83

Signed: Kevin Leonard

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- Note: (A) \* Complete only if applicable.  
(B) Complete list of names, addresses and dates on reverse, side 1923  
(C) Submit separate breakdown for each type of survey.  
(D) Submit in duplicate.

**MINING LANDS SECTION**



Details of Assessment Work Breakdown

FIELD WORK

<u>Type of Work</u>	<u>Name &amp; Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
E.M. surveying	J.C. Grant P.O. Box 1880 Timmins Ont.	May 2 - June 4/82	27
E.M. surveying	Yvon Collin 85 Mountjoy St. Timmins	"	27

CONSULTANTS

<u>Name &amp; Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>
John C. Grant	June 7-10/82	4

DRAUGHTSMAN, TYPING, OTHERS (specify)

<u>Name &amp; Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
Y. Collin	drafting	June 8-10	3

TOTAL 8 HOUR TECHNICAL DAYS 61

LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR LINE-CUTTING DAYS \_\_\_\_\_

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2.5406

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining Claims  
P 393103 et al in the Townships of Matheson & Evelyn

---

The Geophysical (Electromagnetic) Survey assessment work credits as listed with my Notice of Intent dated October 19, 1983 have been approved as of the above date.

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

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1880

R. Pichette:sc

cc: St. Joe Canada Incorporated  
Suite 418  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

cc: Resident Geologist  
Timmins, Ontario



Ministry of  
Natural  
Resources

7059/83

Your file:

1983 10 19

Our file: 2.5406

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1316

R. Pichette:mc

Encls:

cc: St. Joe Canada Incorporated  
Suite 418  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

cc: Mr. G.H. Ferguson  
Mining & Lands Commissioner  
845 Toronto, Ontario



Ministry of  
Natural  
Resources

Ontario

Notice of Intent  
for Technical Reports

1983 10 19

2.5406

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



Ontario

Ministry of Natural Resources

# Technical Assessment Work Credits

File

2.5406

Date

1983 10 19

Mining Recorder's Report of Work No.

43

Recorded Holder

ST. JOE CANADA INC

Township or Area

MATHESON & EVELYN TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ <u>15</u> days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input checked="" type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" 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.	P 632852-53 452498 to 500 inclusive 617738 624600 392103 to 10 inclusive 452463-64 624629-30 617733 to 34 393738 393740-41 617737 628017-18 618931-32

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

\_\_\_\_\_

No credits have been allowed for the following mining claims

- not sufficiently covered by the survey       Insufficient technical data filed

P 624601  
 452461-62  
 393739  
 617735-36

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)—60:

September 8, 1983

2.5406

St. Joe Canada Incorporated  
Suite 418  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining Claims  
P 393103 et al in the Townships of Matheson & Evelyn

---

We regret having to write to you again, but due to the fact that the line spacing on this survey exceeds 400 feet (125 meters), this survey may not be assessed under the "Special Provisions" method.

Please complete and return the enclosed man-days breakdown form, in duplicate. The survey will then be assessed under the provisions of subsection (9) of Section 77 of the Mining Act, R.S.O. 1980.

For further information, please contact Mr. F.W. Matthews at (416)965-1380.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)965-1380

S. Hurst:mc

Encl.



Ministry of  
Natural  
Resources

Geotechnical  
Report  
Approval

Aug 18/83

File  
2.5406

Mining Lands Comments

*You wanted to see this report again  
M.V.K.*

To: Geophysics *Ma Basler*

Comments

Approved     Wish to see again with corrections

Date *Aug 31/83*    Signature *[Signature]*

To: Geology - Expenditures

Comments

Approved     Wish to see again with corrections

Date    Signature

To: Geochemistry

Comments

*[Handwritten mark]*

Approved     Wish to see again with corrections

Date    Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

August 9, 1983

2.5406

St. Joe Canada Incorporated  
Suite 418  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

Attention: Dave Malloy

Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining Claims  
P 393103 et al in the Townships of Matheson and Evelyn

---

With reference to our letter of August 8, 1983, enclosed is the last page of the report (in duplicate) which was omitted from our first letter. Please have the author of the report sign each copy.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

S. Hurst:mc

Encl.



August 8, 1983

2.5406

St. Joe Canada Incorporated  
Suite 418  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining  
Claims P 393103 et al in the Townships of  
Matheson & Evelyn.

---

Returned herein are four electromagnetic plans (in  
duplicate) for the above mentioned survey. On each plan,  
please show the claim lines and claim numbers.

Also enclosed is the last page of the report (in duplicate).  
Please have the author of the report sign each copy.

When returning this material, please quote File #2.5406.

For further information please contact Mr. F.W. Matthews at  
416/965-1380.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

S. Hurst:sc

Encls:

cc: Mr. John Grant  
Timmins, Ontario

cc: Mining Recorder  
Timmins, Ontario

May 24/83

File 2.5406

Mining Lands Comments

- Report not signed.  
- Some maps need claim posts, lines.

To: Geophysics

Mr. Barlow.

Comments

Report not signed

Approved

Wish to see again with corrections

Date

July 26/83

Signature

Douglas H. Pitcher

To: Geology - Expenditures

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Geochemistry

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)

1983 03 24

2.5406

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 393103 et al in the Township of Matheson and Evelyn.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

A. Barr:sc

cc: St. Joe Canada Inc  
Suite 418  
111 Richmond St.W  
Toronto, Ontario  
M5H 2J4

cc: Mr. John Grant  
P.O. Box 1880  
Timmins, Ontario  
P4N 7X1



Instructions: - Please type or print.  
- If number of mining claims traversed exceeds space on this form, attach a list.  
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
- Do not use shaded areas below.

The Mining Act

Type of Survey(s) <b>Geophysical-MaxMin II</b>	Township or Area <b>Matheson, Evelyn</b>
Claim Holder(s) <b>St. Joe Canada Inc.</b>	Prospector's Licence No. <b>T1109</b>
Address <b>Suite 418, 111 Richmond St. W., Toronto, Ontario M5H 2J4</b>	
Survey Company <b>Exsics Exploration</b>	Date of Survey (from & to) Day   Mo.   Yr.   Day   Mo.   Yr. <b>01   05   82   01   06   82</b>
Name and Address of Author (of Geo-Technical report) <b>John Grant, P.O. Box 1880, Timmins, Ontario</b>	

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	632852		P	617735	
	632853			617734	
	452498			617733	
	452499			393738	
	452500			393739	
	617738			393740	
	624601			393741	
	624600			617737	
	393110			628018	
	393109			628017	
	393108			618931	
	393107			618932	
	393106				
	393105				
	393104				
	393103				
	452461				
	452462				
	452463				
	452464				
	624629				
	624630				
	617736				

**RECEIVED**

FEB 28 1983

MINING LANDS SECTION

Total number of mining claims covered by this report of work.

35

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  ÷ 15 = Total Days Credits

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only			
Total Days Cr. Recorded	Date Recorded	Mining Recorder	
	Date Approved as Recorded	Branch Director	

Date **Feb. 28/83** Recorded Holder or Agent (Signature) *David E. Morley*

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying  
**Kevin Leonard, 886 Tanager Ave.**

Burlington, Ontario L7T 212

Date Certified **February 28/83** Certified by (Signature) *Kevin Leonard*

*Received copy of report with maps*

*[Signature]*

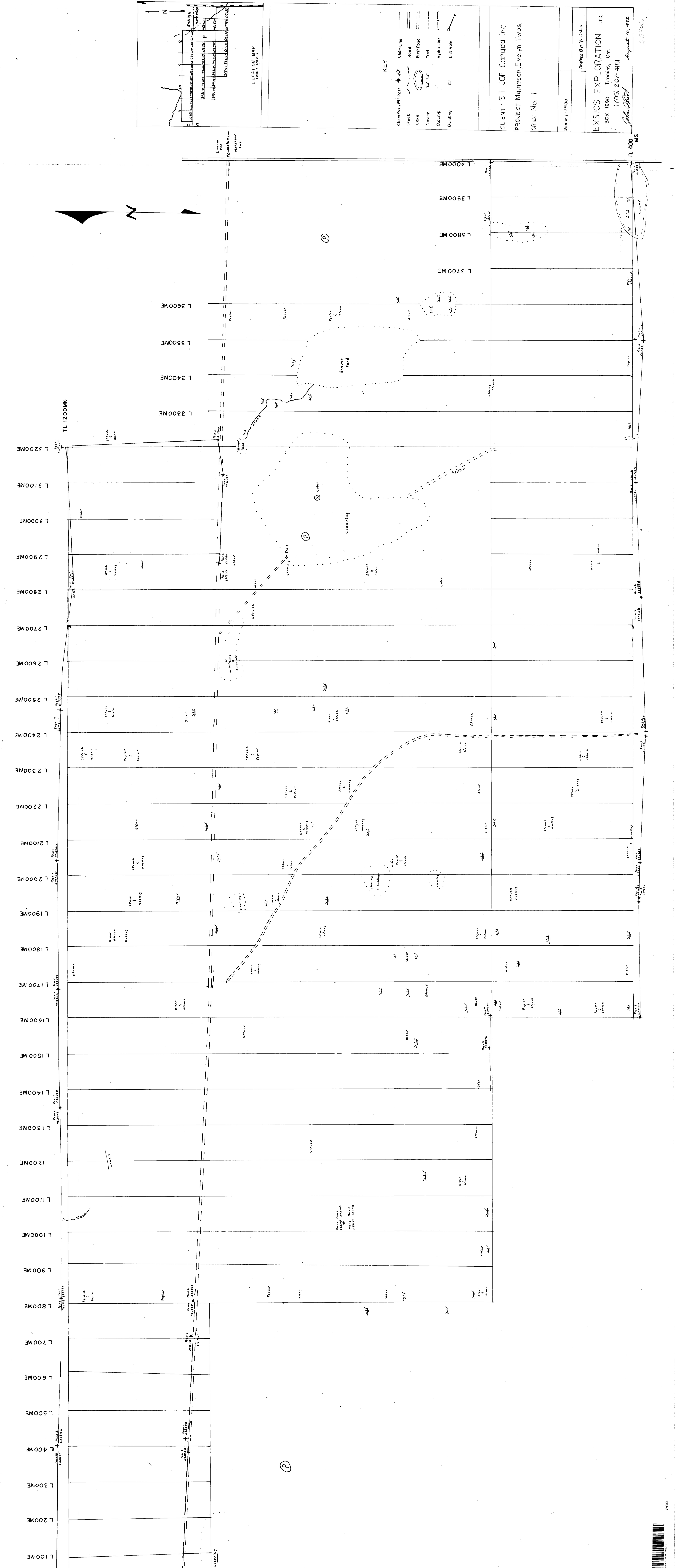
	EM		EM
P632852	✓		✓
853	✓		✓
452498	✓		✓
499	✓		
500	✓		
617738	✓		
624601	○		
600	✓		
393110	✓		
393109	✓		
393108	✓		
107	✓		
106	✓		
105	✓		
104	✓		
103	✓		
452461	○		
462	○		
463	✓		
464	✓		
624629	✓		
630	✓		
617736	○		
735	○		
734	✓		
733	✓		
393738	✓		
739	○		
393740	✓		
741	✓		
617737	✓		
628018	✓		

29

Manday  
427 ÷ 29

15

~~Items not covered~~



CLIENT: ST JOE Canada Inc.  
 PROJECT: Matheson, Evelyln Twps.  
 GRID: No. 1

Scale: 1:2500  
 Drafted By: Y. Collin

EXSICS EXPLORATION LTD.  
 BOX 1880 Timmins, Ont.  
 (705) 267-4151

August 10, 1992

KEY

- Claim Line
- Road
- Bush Road
- Lake
- Swamp
- Outcrop
- Building
- Hydro Line
- Drill Hole

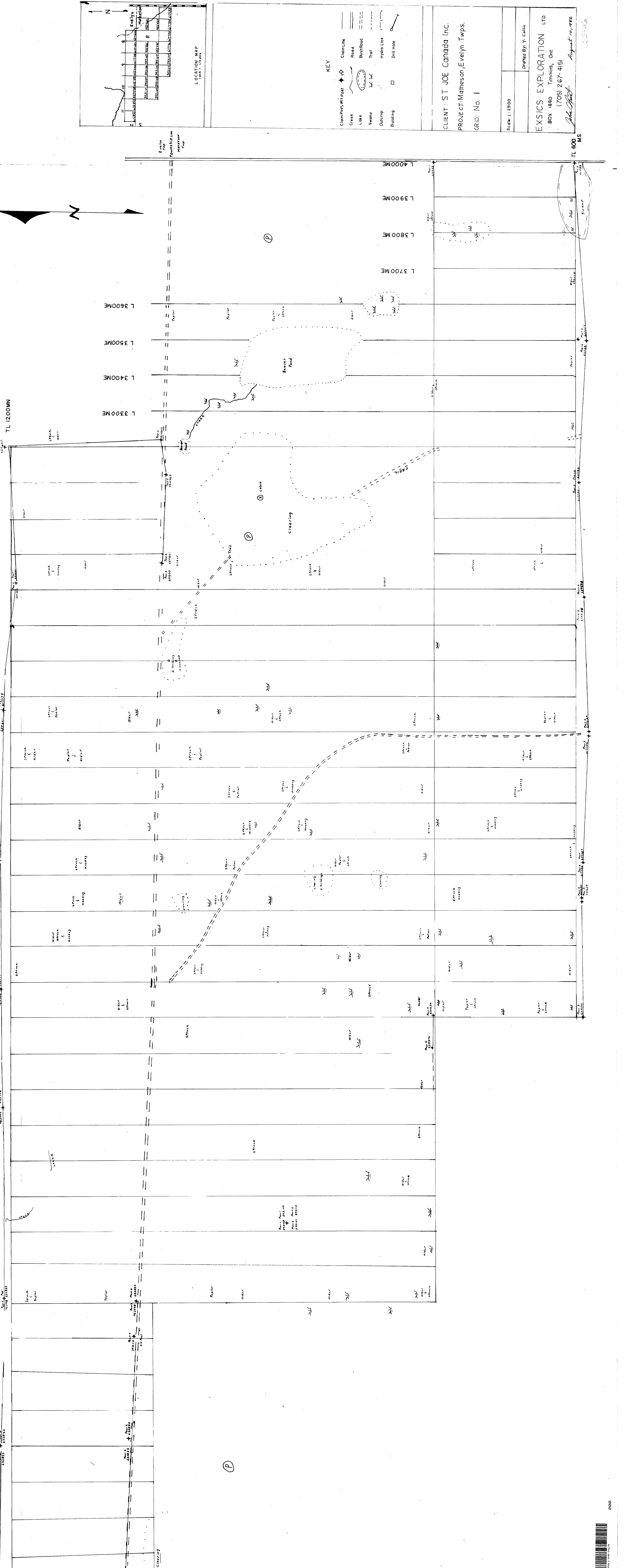
LOCATION MAP  
 1/4 mile

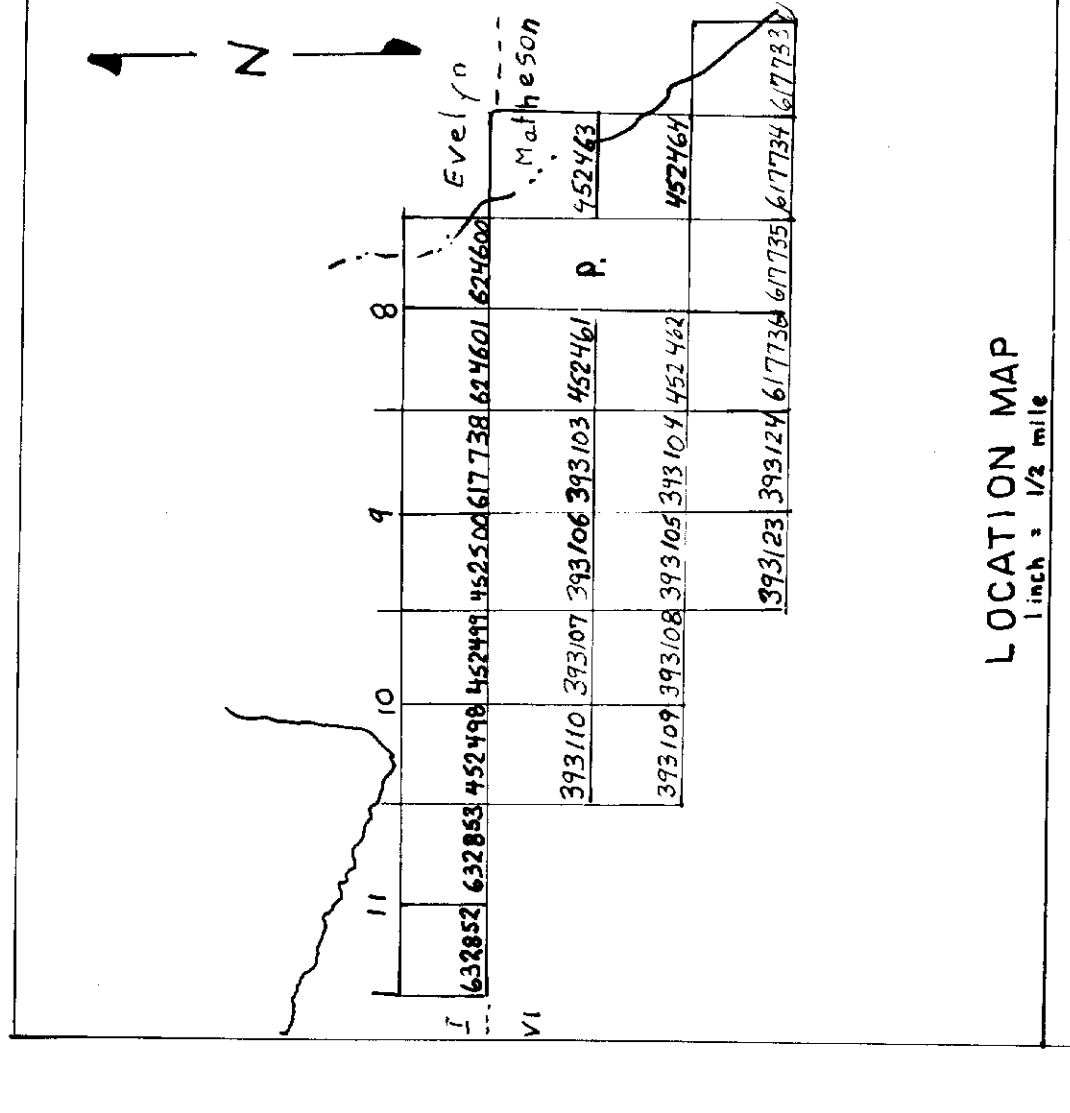
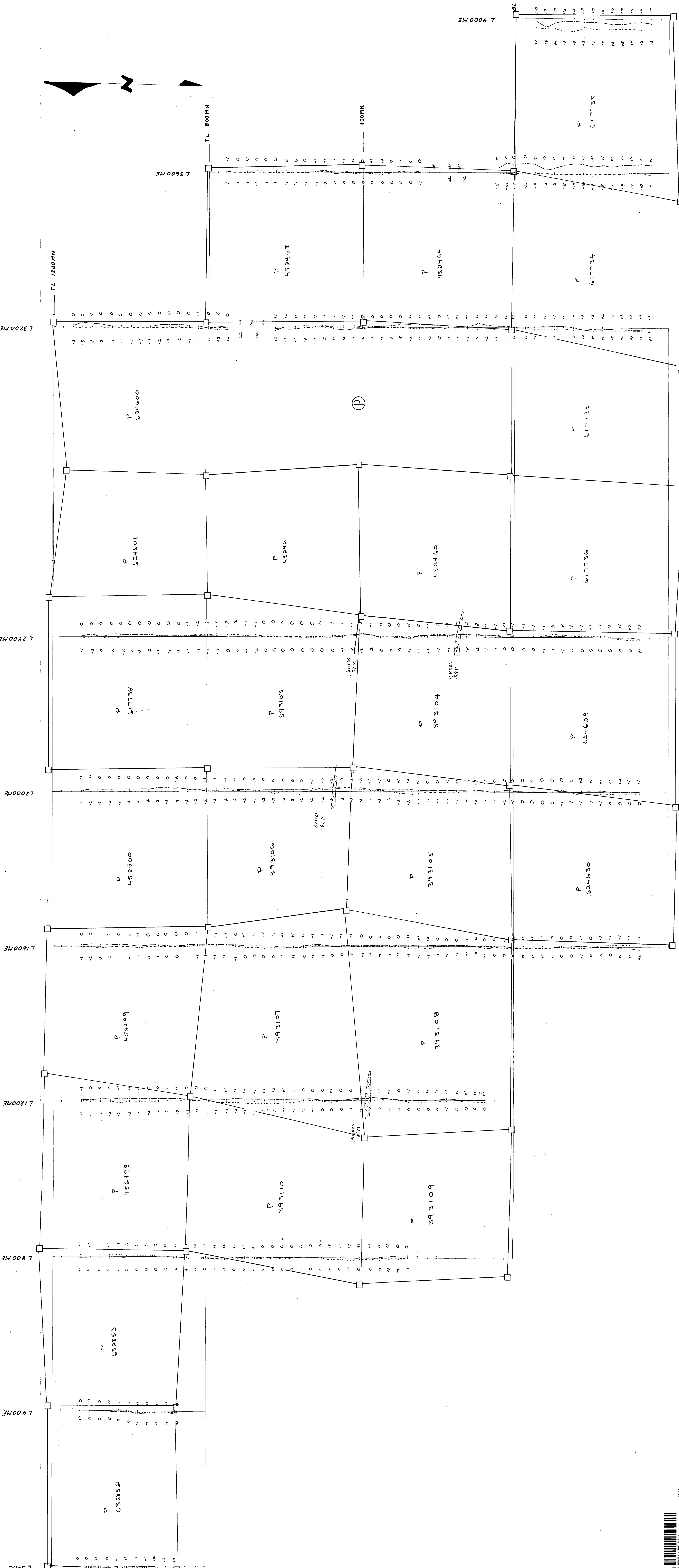
Evelyln Township

TL 1200MN

TL 400MS

L 000ME  
 L 100ME  
 L 200ME  
 L 300ME  
 L 400ME





**LEGEND**

Conductor Axis:

In Phase Profile:

Quadrature Profile:

Scale: 1cm = 10%

CONDUCTIVITY  
Depth:

**KEY**

Claim Post, Wire Pass:

Creek:

Line:

Swamp:

Outcrop:

Building:

Drain Line:

Road:

Back Road:

Trail:

Hydro Line:

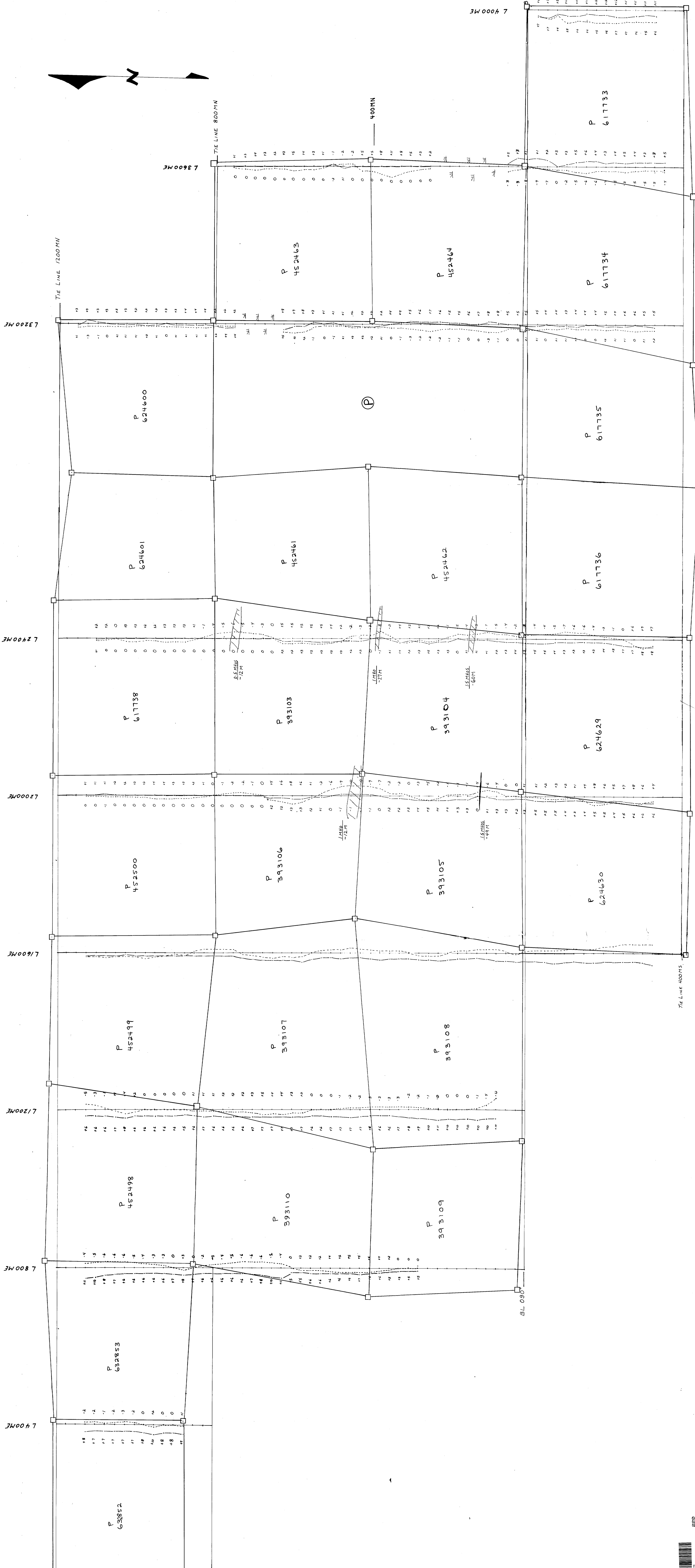
Drill Hole:

CLIENT: ST. JOE CANADA  
 PROJECT: Matheson, Evelyn Twp.  
 GRID: Group I  
 SURVEY: MAXMIN II  
 444 BK  
 Scale: 1:2500 Survey Date: June/82  
 Interpretation: C. S. Grant Drafted By: Y. Collin  
**EXSICS EXPLORATION Inc.**  
 Box 1880 Timmins, Ont.  
 (705) 267-4151





10007



**CLIENT:** ST. JOE CANADA  
**PROJECT:** Matheson, Evelyn Twp.  
**GRID:** Group 1  
**SURVEY:** MAXMIN II

Scale: 1:2500  
 Survey Date: June / 1982  
 Interpretation: J.C. Grant  
 Drafted By: Y. Collin

**EXSICS EXPLORATION LTD**  
 Box 1880 Timmins, Ont  
 (705) 267-4151

*Y. Collin*  
 12/1/82

**LEGEND**

Conductor Axis:

In Phase Profile:

Quadrature Profile:

Scale: 1cm = 10 m

Conductivity:

Depth:

UNIT: APEX: MAXMIN II

**KEY**

Claim Line:

Road:

Bush Road:

Trail:

Hide Line:

Drill Hole:

Building:

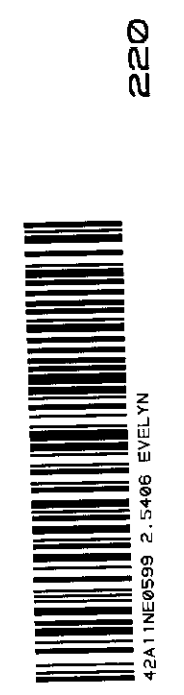
Creek:

Lake:

Swamp:

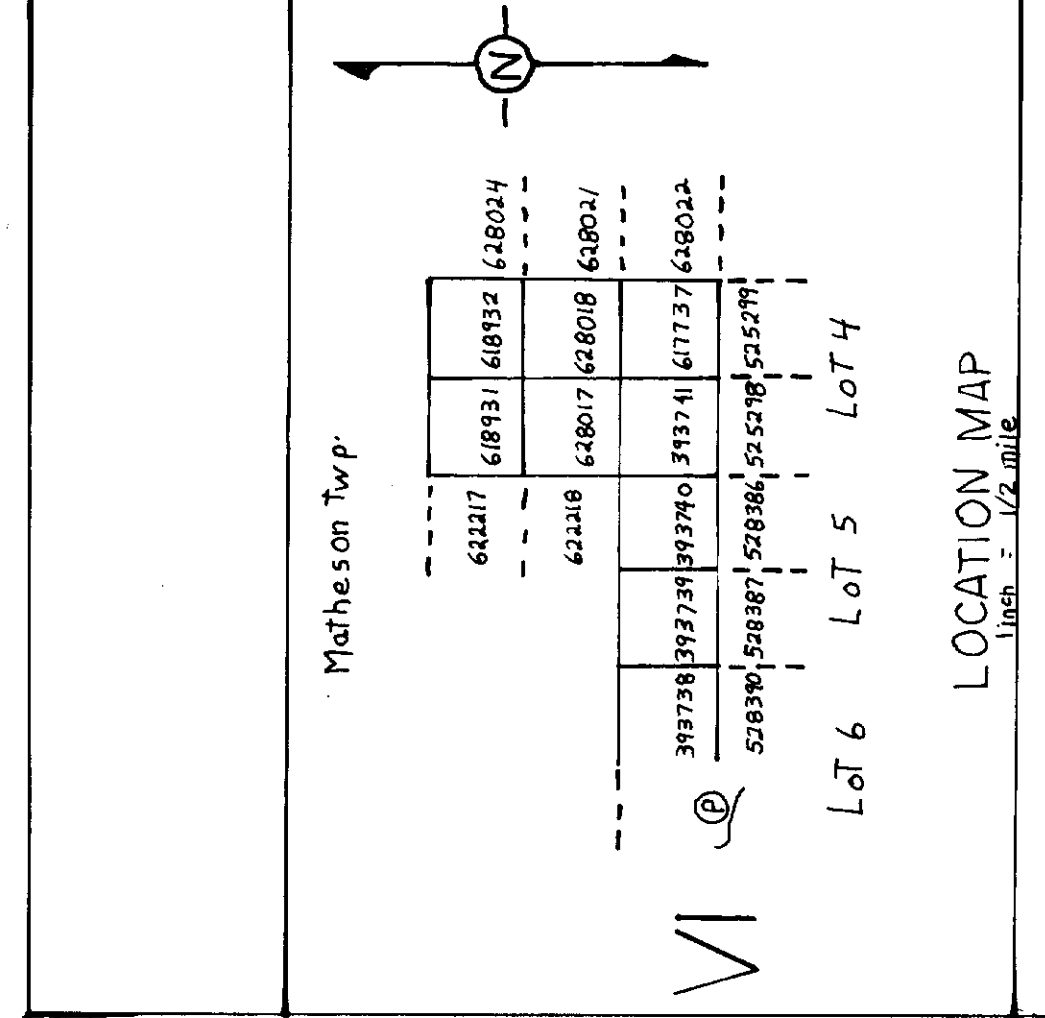
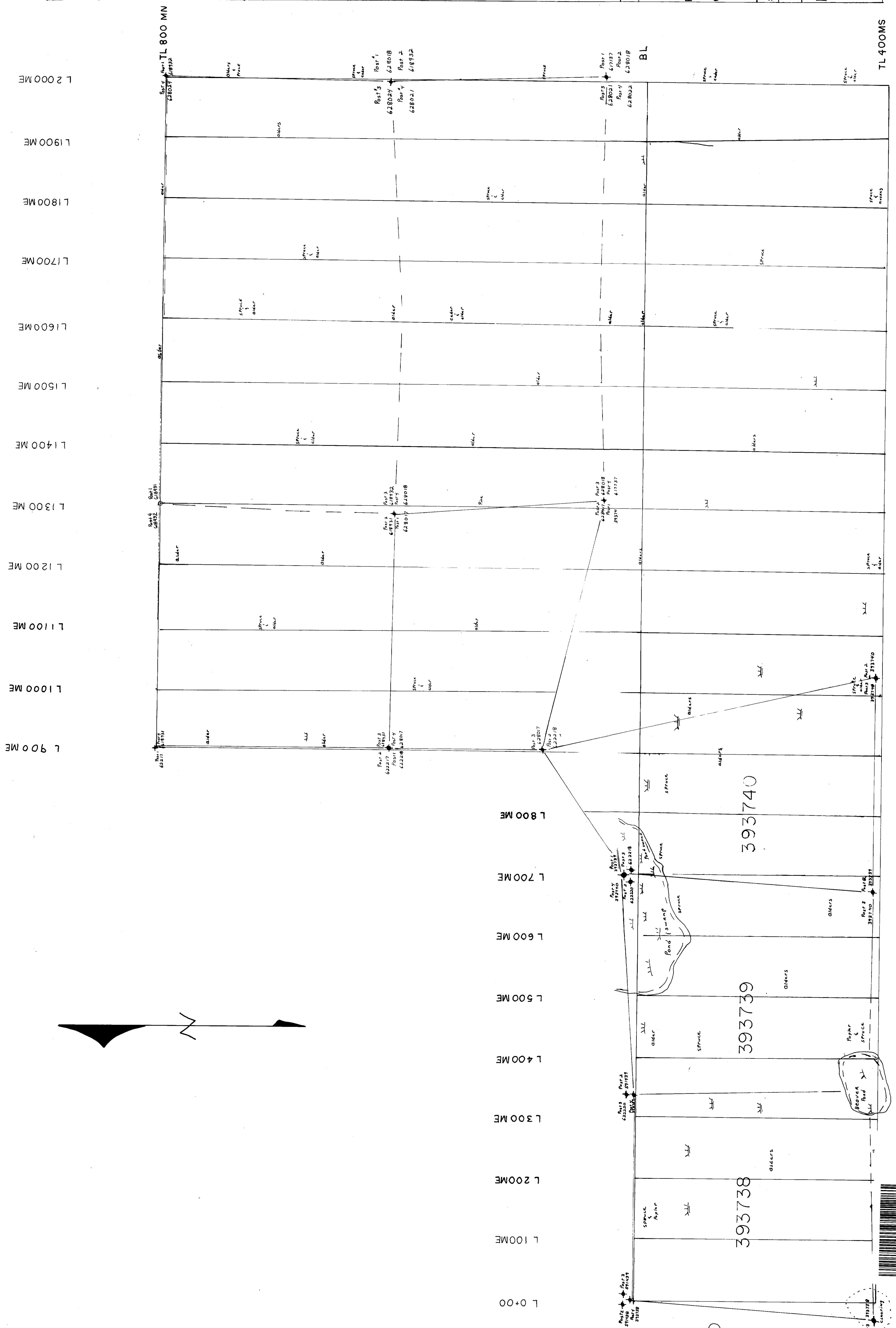
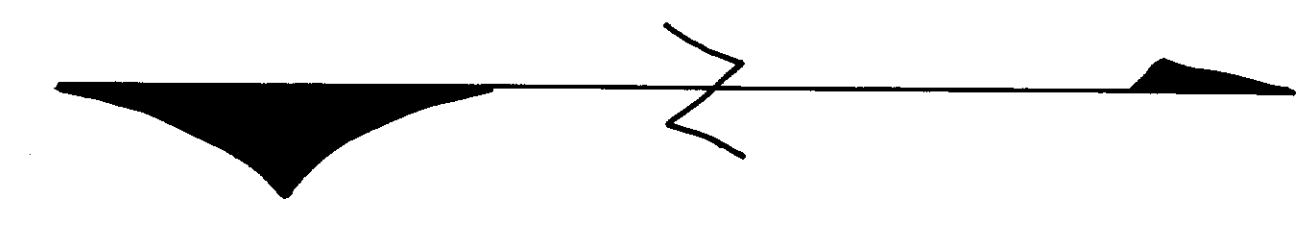
Outcrop:

Building:



2250





LOCATION MAP  
1:2500

KEY

- Claim Post, W.P. Post
- Creek
- Lake
- Swamp
- Outcrop
- Building
- Claim Line
- Road
- Bush Road
- Trail
- Hydro Line
- Drill Hole

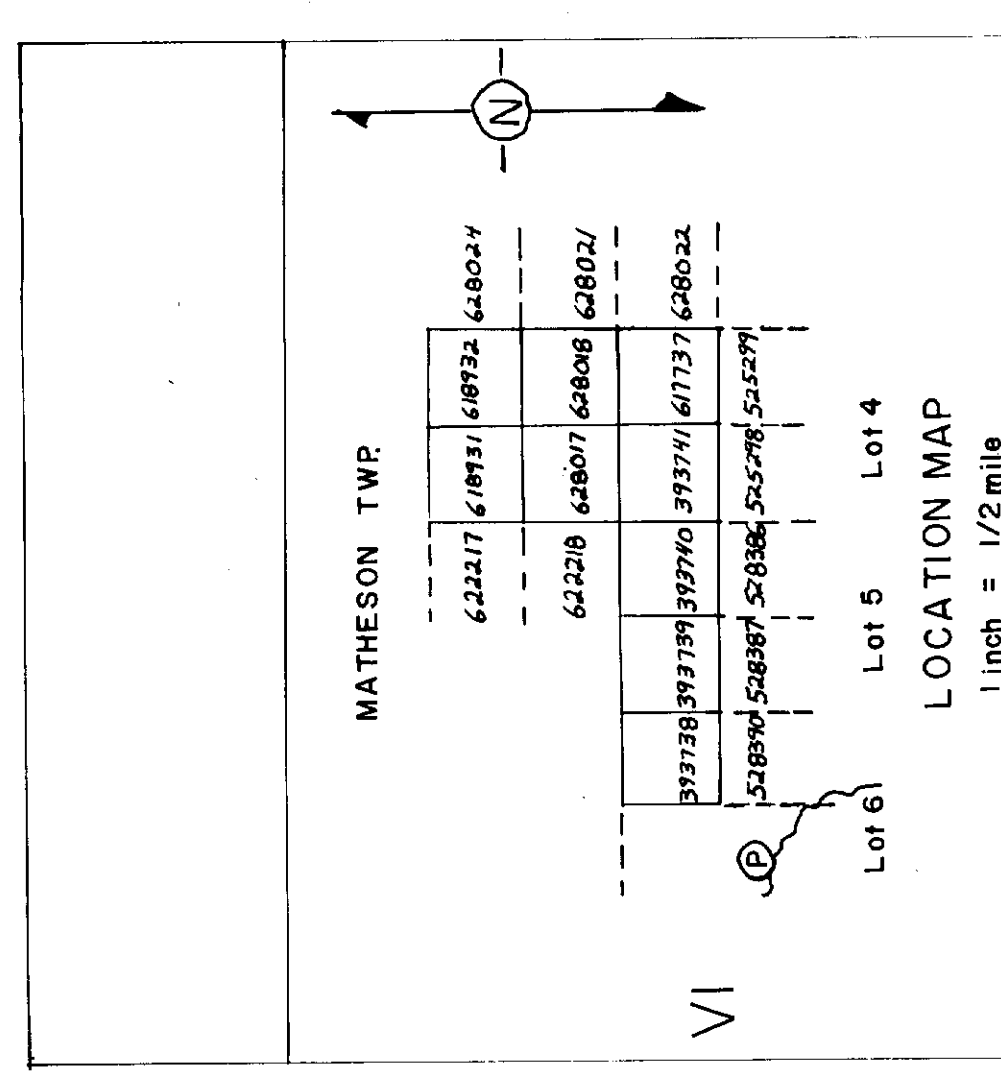
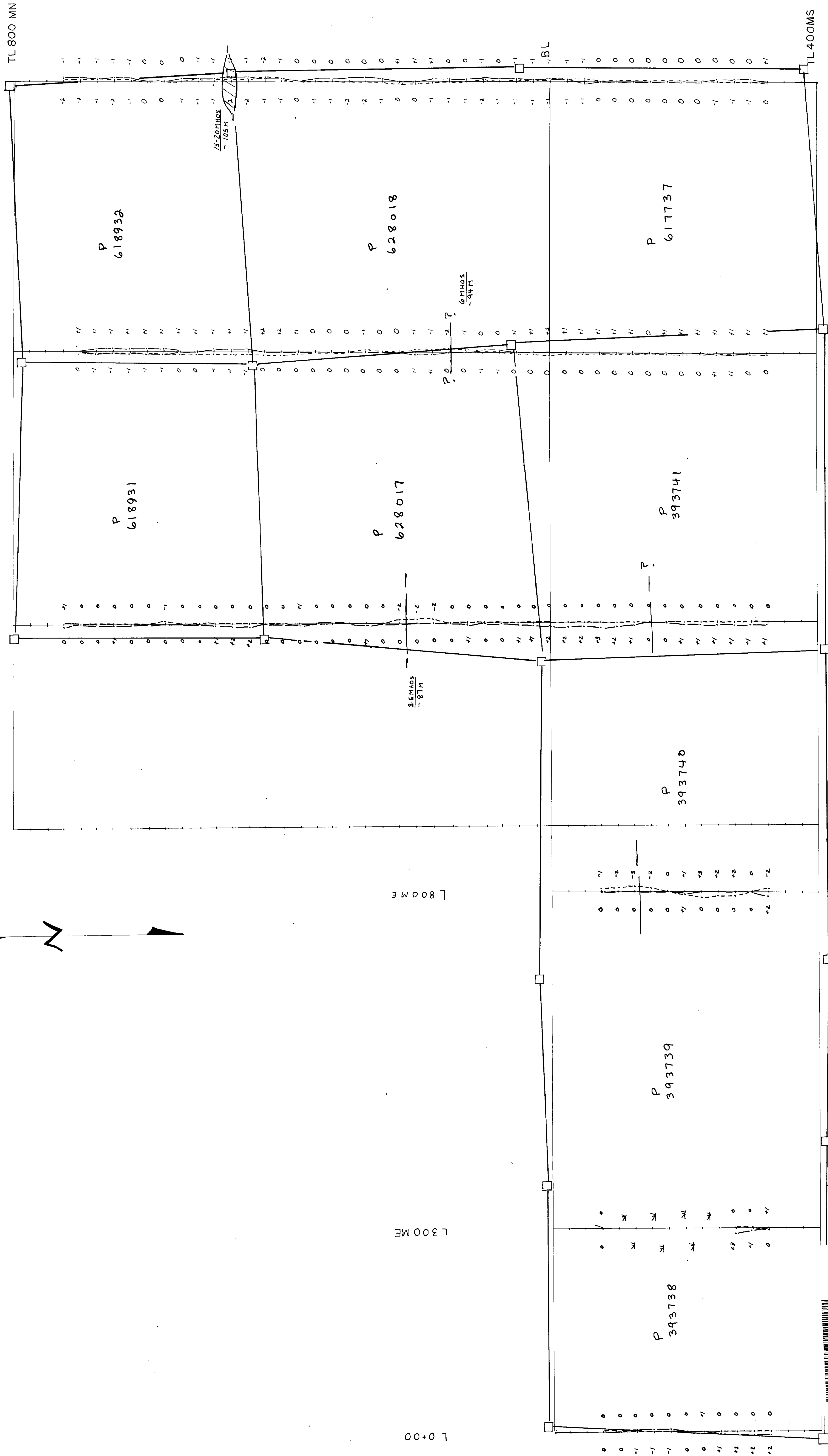
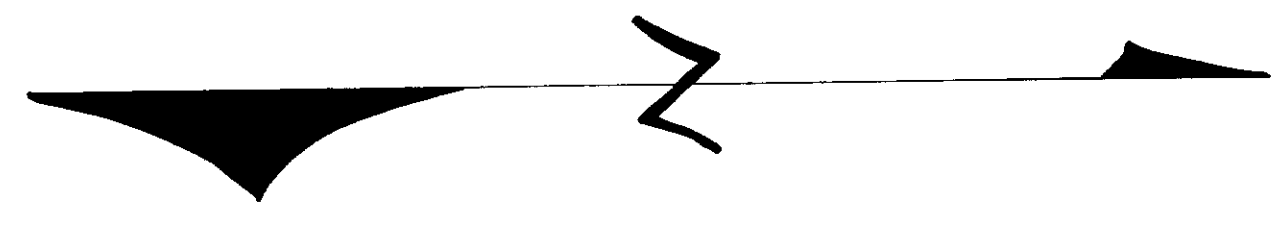
CLIENT: ST JOE Canada Inc.  
 PROJECT: Matheson, Evelyn Twp.  
 GRID: No. 2

Scale: 1:2500  
 Drafted By: Y. Cellin

EXSICS EXPLORATION LTD  
 BOX 1880 Timmins, Ont.  
 (705) 267-4151

TL 400MS

L 2000 ME  
L 1600 ME  
L 1200 ME  
L 900 ME



LEGEND

- Conductor Axis:
- In Phase Profile:
- Quadrature Profile:
- Scale: 1cm = 10 %
- Conductivity Depth: 10mhos - 25 m
- Unit: Apex: MaxMin II
- KEY
- Claim Post, MH Post:
  - Creek:
  - Lake:
  - Swamp:
  - Outcrop:
  - Building:
  - Claim Line:
  - Road:
  - Bush Road:
  - Trail:
  - Hydro Line:
  - Drill Hole:

CLIENT: ST. JOE Canada Inc.  
PROJECT: Matheson, Evelyn Twp.  
GRID: No. 2  
SURVEY: MaxMin II 444 Hz  
Scale: 1 : 2500 Survey Date: June /1982  
Interpretation: J.C. Grant Drafted By: Y. Collin  
EXSICS EXPLORATION LTD  
BOX 1880 Timmins Ont.  
(705) 267-4151  
*Y. Collin*  
June 20, 1982



L 200ME  
L 1600ME  
L 1200ME  
L 900ME

Matheson Twp.

VI

LOCATION MAP  
1 inch = 1/2 mile

Lot 6 Lot 5 Lot 4

6222/7 61893/ 61893/2 61802/7  
6222/8 62807/ 62808/ 62802/

61778/ 61779/ 61780/ 61781/ 61782/ 61783/ 61802/4

61890/ 61891/ 61892/ 61893/ 61894/ 61895/

Conductor Axis:  
In Phase Profile:  
Quadrature Profile:  
Scale: 1cm = 10 %  
Conductivity Depth: 10 mhos -25m  
Unit: Apex: MaxMin II

KEY

Claim Post, W/P Post, Claim Line  
Creek  
Lake  
Swamp  
Outcrop  
Building  
Road  
Bush Road  
Trail  
Hydro Line  
Drill Hole

CLIENT: ST JOE Canada Inc.  
PROJECT: MATHESON, EVELYN TWP  
GRID: NO. 2  
SURVEY: MaxMin II 1717 Hz.

Scale: 1:2500  
Survey Date: June / 1962  
Interpretation: J.C. Grant  
Drafted By: Y. Collin

EXSICS EXPLORATION Limited  
BOX 1880 Timmins, Ont.  
(705) 267-4151

