



31M045W0039 2.2725 STRATHCONA

010

WAGKICH LAKE PROPERTY

REPORT ON GEOPHYSICAL SURVEYS

SUMMER 1977

Project #133.1

## INTRODUCTION

A magnetometer and horizontal loop E.M. surveys were performed from September 27 - 29, 1977 and June 13 - 23, 1977 respectively. These were done upon the Wagkich Lake grid which consists of 21.3 kilometers of grid line and 1.5 kilometers baseline. Line spacing is 100 meters oriented North-South. Pertinent data regarding the surveys are presented on maps accompanying this report. Data regarding the instruments used may be found in the Appendixes to this report.

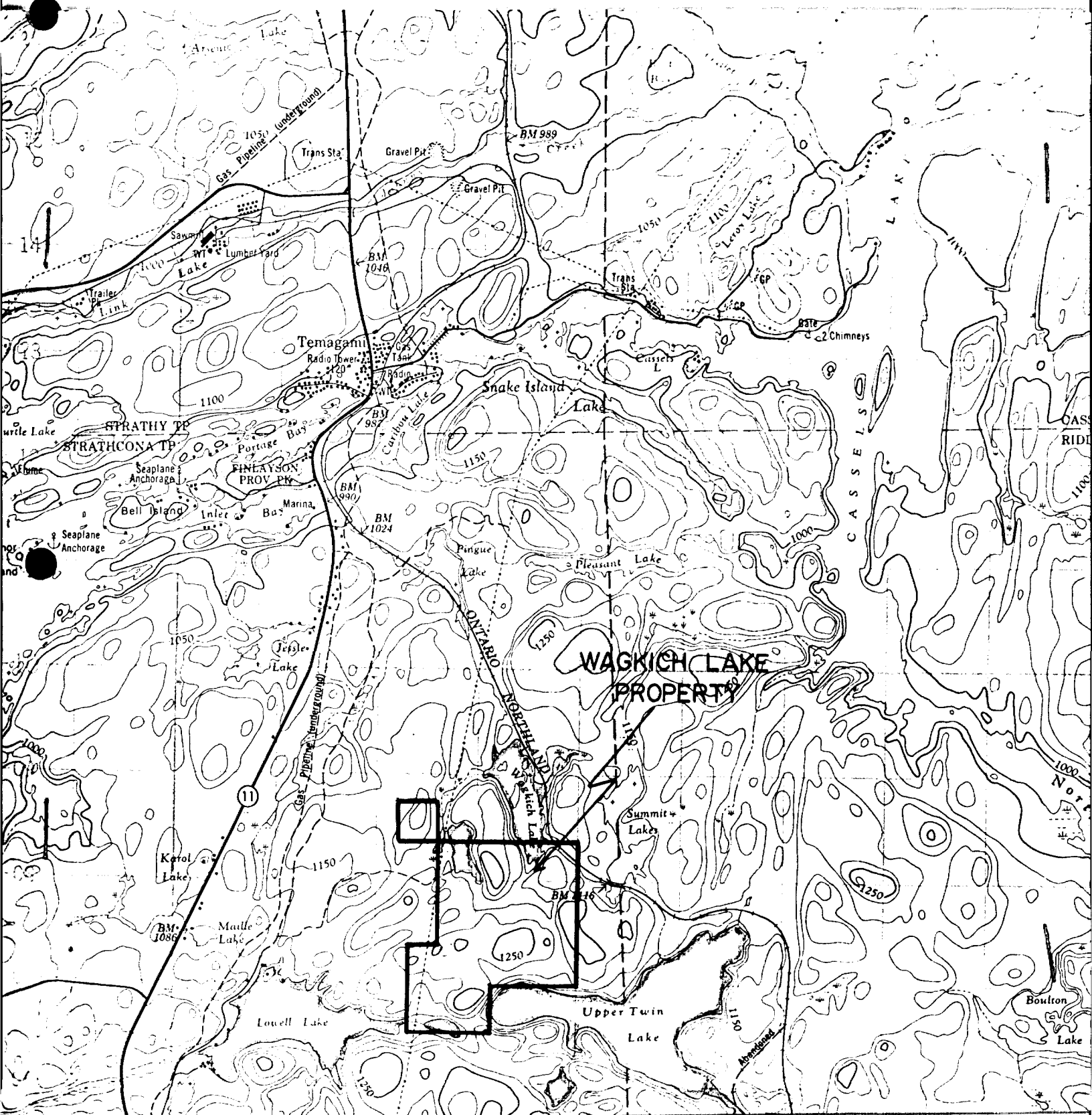
## LOCATION and ACCESS

The Wagkich Lake property is located approximately 5.5 kilometers south-southeast of the town of Temagami, Ontario, in Strathy Township. It is bounded to the north by Wagkich Lake, to the south-southeast by Upper Twin Lake and to the Southwest by Lowell Lake. The property is shown on map 31M/4 at grid reference 927074 or approximately Latitude 47°01'05"N and Longitude 79°46'28"W. The accompanying map summarizes the above location information.

Access to the property is possible by the Lowell Lake all weather gravel road which exits easterly from Ontario Highway 11 approximately 8.0 kilometers south of the town of Temagami. About 5.0 kilometers by road after leaving highway 11 is a juncture with a large Ontario Hydro power line. This point lies in the northwest part of the property.

## PROPERTY and CLAIM STATUS

The Wagkich Lake property consists of 13 contiguous claims numbering 478705 to 478717 inclusive. The property is held by St. Joseph Explorations Ltd., 90 Eglinton Ave. West, 5th Floor, Toronto, Ontario, M4R 2E4. This work is being submitted by and for the aforementioned company.



PREVIOUS WORK

The area has evidently been staked previously, but to the writer's knowledge no previous work has been done upon the property.

RESULTS and INTERPRETATIONHorizontal Loop E.M. Survey

A Max-Min II E.M. unit employing a frequency of 888 Hz was used for the survey. Lines 4+00E - 15+00E were run with a 200 meter cable and lines 0 - 3+00E and the small grid off baseline 1100N to the north with a 100 meter cable.

Readings were taken every 25 meters. The quantities measured were the In-phase and Out-of-phase components (in percentages) of the secondary electromagnetic field. Details regarding the instrumentation can be found in the appendixes.

The results of the survey are presented on the enclosed Horizontal Loop E.M. Survey map. Profiles of the In-phase and Out-of-phase components are shown. Study of the profiles shows no recognizable anomalies other than suspect reading due to short cables. No near surface highly conductive zones seem to be present in the area surveyed.

Magnetometer Survey

The magnetometer survey was done with a Barringer GM-122 Proton Magnetometer and diurnal monitoring with a Scintrex MBS-2 base station. Details regarding the instrumentation can be found in the appendixes. The previous described grid was run with readings every 25 m. Proton magnetometers measure the earth's total magnetic field at any given point. This is a scalar measurement.

Results of the survey are presented on the enclosed Magnetometer Survey map. The readings have been plotted and contoured with a 100 gamma interval.

Study of the magnetic data reveals a relatively flat area in the north central grid area. An area of higher magnetic relief runs across the southern portion of the grid and up the east side as well. It is felt this southwest-northeast band could be associated with Diabase dikes and sills intruding the Huronian Tillites which cover the area. The frequency of the anomalies suggest fairly shallow depths. In the extreme southwest corner of the grid near line 1+00E, 3+00S to 6+00S is a confined area of fairly large high amplitude forced readings. These probably represent power-line interference. This is also reflected in the horizontal loop data.

#### CONCLUSIONS

The magnetometer and horizontal loop E.M. surveys show no targets which might be considered associated with possible economic mineralization.

Respectfully submitted,

*James L. Wright*

JLW\*MS  
June, 1978

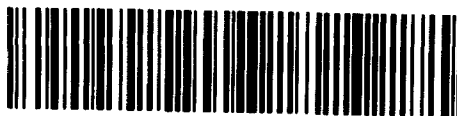
J.L.Wright  
Geophysicist



Ontario

Ministry of Natural Resources

GEOPHYSICAL - GEOLC  
TECHNICAL DATA



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File \_\_\_\_\_

900

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Magnetometer, Horizontal Loop E.M.

Township or Area Strathy

Claim Holder(s) St. Joseph Explorations Limited

Survey Company St. Joseph Explorations Limited

Author of Report J. L. Wright

Address of Author 90 Eglinton Ave. W., Ste. 505, Toronto

Covering Dates of Survey June 1 - Sept. 29/77 M4R 2E4  
(linecutting to office)

Total Miles of Line Cut 22.8 kilometers

**MINING CLAIMS TRAVERSED**  
List numerically

|          |                   |          |                                |
|----------|-------------------|----------|--------------------------------|
| S        | <sup>EM</sup> 1/2 | 478705   | <sup>MAG</sup> 1/3 not covered |
| (prefix) |                   | (number) |                                |
| S        |                   | 478706   | ✓                              |
| S        |                   | 478707   | ✓                              |
| S        | 2/3 not covered   | 478708   | 1/2                            |
| S        | 1/3               | 478709   | 1/4                            |
| S        | 1/3               | 478710   | 1/4                            |
| S        |                   | 478711   | ✓                              |
| S        |                   | 478712   | ✓                              |
| S        |                   | 478713   | ✓                              |
| S        | 1/2               | 478714   | 1/3                            |
| S        | 1/4               | 478715   | ✓                              |
| S        | 3/3               | 478716   | 1/2                            |
| S        | 1/4               | 478717   | ✓                              |

if space insufficient, attach list

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

DAYS  
per claim

|                  |    |
|------------------|----|
| Geophysical      |    |
| -Electromagnetic | 40 |
| -Magnetometer    | 20 |
| -Radiometric     |    |
| -Other           |    |
| Geological       |    |
| Geochemical      |    |

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

ENTER 20 days for each additional survey using same grid.

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

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

DATE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_  
Author of Report or Agent

Res. Geol. L.D. Qualifications 2, 2330 ✓  
on this file

**Previous Surveys**

| File No. | Type | Date | Claim Holder |
|----------|------|------|--------------|
|          |      |      |              |
|          |      |      |              |
|          |      |      |              |
|          |      |      |              |
|          |      |      |              |
|          |      |      |              |
|          |      |      |              |

EM

Area not covered =  $3\frac{1}{2}$   
 $13 \times 40 = 520 \div (13+3)$   
 $= 32.5 \text{ days per claim}$

Mag

Area not covered =  $2\frac{1}{4}$   
 $13 \times 20 = 260 \div (13+2)$   
 $= 17.3 \text{ days per claim}$

TOTAL CLAIMS 13

# GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 862 Magnetic & 733 Electromagnetic Number of Readings 862 Magnetic & 733 Electromagnetic  
Station interval 25 meters Line spacing 100 meters  
Profile scale Horizontal Loop .1 cm = 20%  
Contour interval 100 gammas

### MAGNETIC

Instrument Barringer GM-122  
Accuracy - Scale constant + 1 gamma  
Diurnal correction method Magnetic base station MBS 2 (Scintrex)  
Base Station check-in interval (hours) Readings every minute by base station recorder  
Base Station location and value Papa John's Camp Temagami  
Arbitrary value 58889 gammas

### ELECTROMAGNETIC

Instrument Max-Min II E.M. Unit  
Coil configuration Horizontal Loop  
Coil separation 100 meters and 200 meters  
Accuracy + 1%  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 888 Hz  
(specify V.L.F. station)  
Parameters measured In-phase, Out-of-phase

### GRAVITY

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

### INDUCED POLARIZATION RESISTIVITY

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

**NOTES**

400' surface rights reservation along the shores of all lakes and rivers.

**SAND and GRAVEL**

- Gravel File 132830
- Gravel File 146693

Sand and gravel in this township reserved until further notice.

**AREAS WITHDRAWN FROM STAKING**

| S.R. - SURFACE RIGHTS |           | M.R.-MINING RIGHTS |                  |
|-----------------------|-----------|--------------------|------------------|
| Section               | Order No. | Date               | Disposition File |
| 43 (R.S.O.1970)       | W.70/76   | 13/12/76           | S.R. 146693      |

Island 25 (Bell Id.) - all Crown land reserved. File 68120  
 " 27 " " " " " " 18119  
 " 49 (O'Connor) - " " " " " " 181200

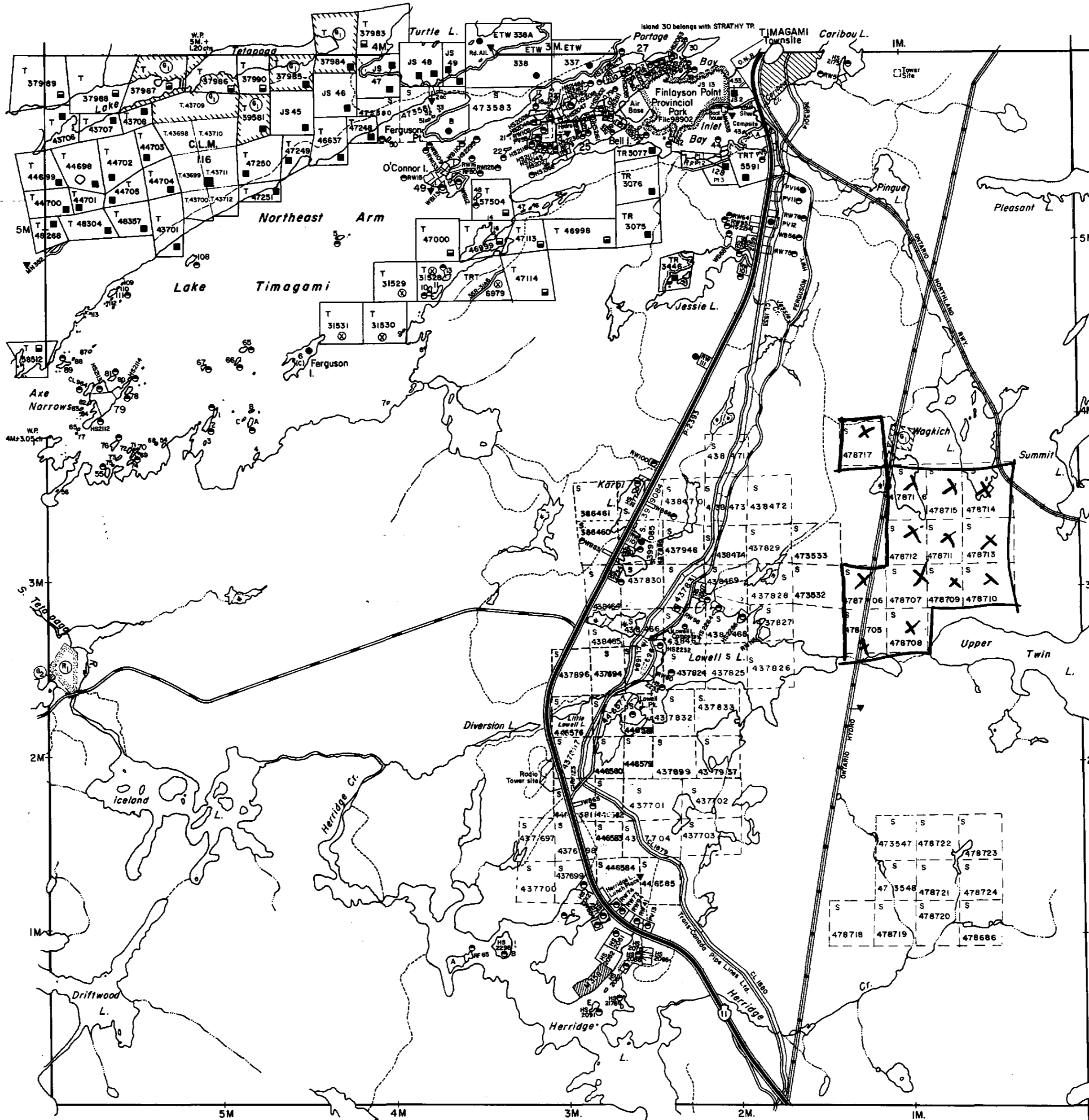
Islands in Lake Timagami NOT OPENED FOR STAKING.

This Township lies within THE CORPORATION OF THE IMPROVEMENT DISTRICT OF TEMAGAMI. File 176049.

Township closed to staking effective May 8 '78, Sec 387 of Mining Act.

DATE OF ISSUE  
**OCT 24 1978**  
 SURVEYS AND MAPPING  
 BRANCH

**STRATHY TP. M.596**



**LAW TP. M.529**

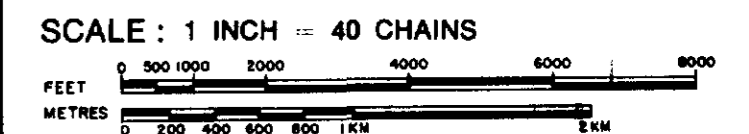
SE CORNER co-ordinates  
 LAT. 46°58'20" APPROX.  
 DEP. 79°45'20" APPROX.

**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
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

**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           | ▼      |
| CROWN LAND SALE                 | C.S.   |
| ORDER-IN-COUNCIL                | OC     |
| RESERVATION                     | ⊙      |
| CANCELLED                       | ⊘      |
| SAND & GRAVEL                   | ⊖      |



| ACRES | HECTARES |
|-------|----------|
| 40    | 16       |

TOWNSHIP **2.2725**  
**STRATHCONA**

DISTRICT **NIPISSING**

MINING DIVISION **SUDBURY**

Ministry of Natural Resources

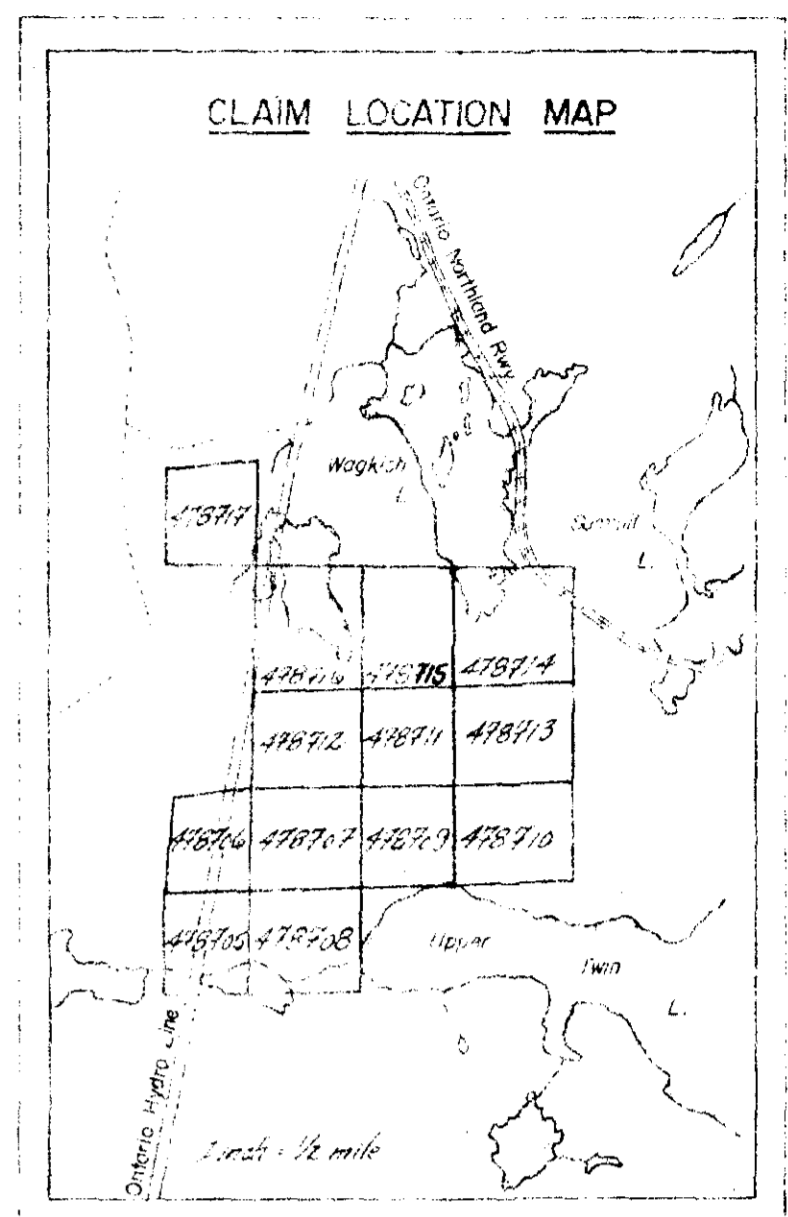
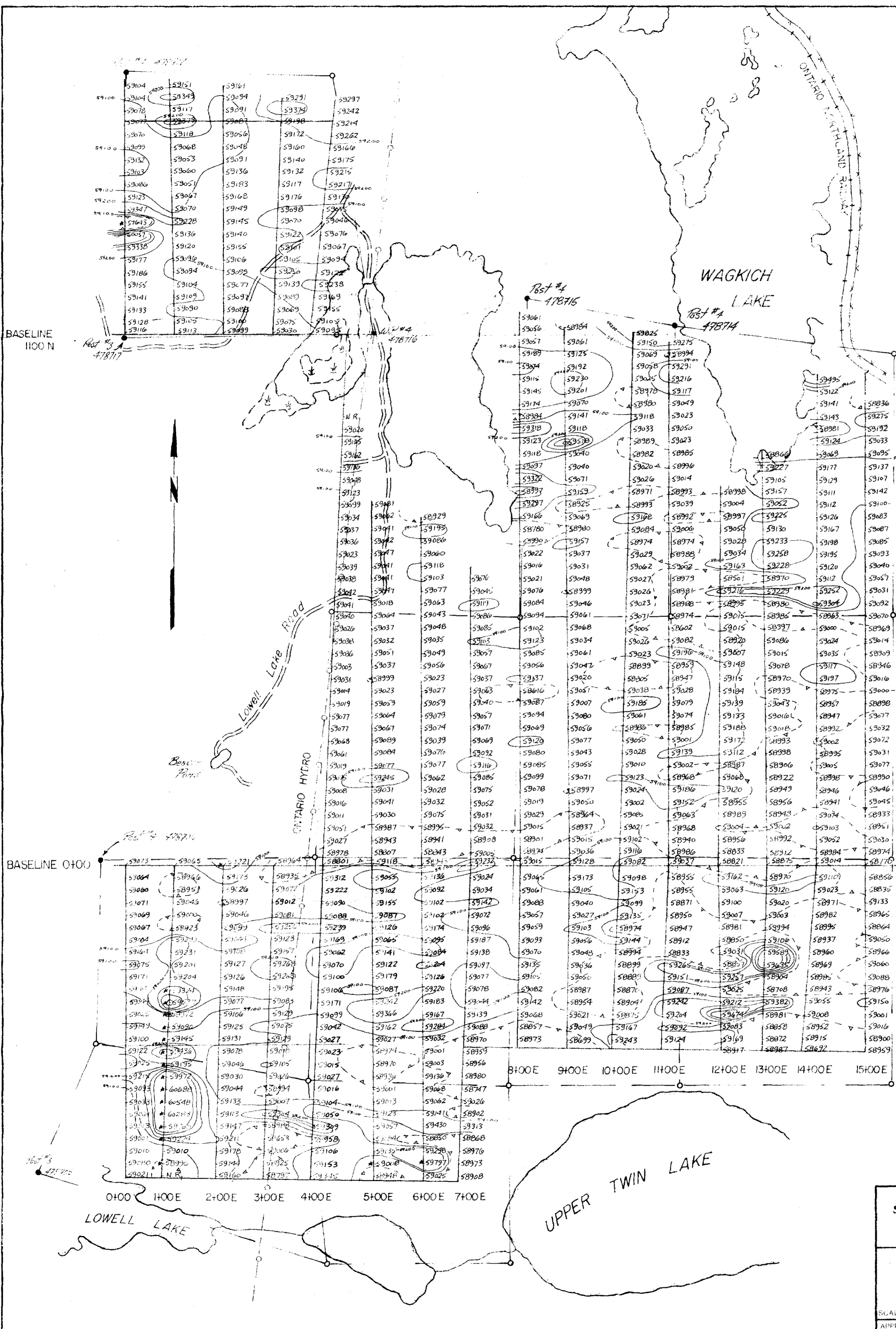
Ontario Surveys and Mapping Branch

Date **MAY 1974** Plan No. **M.595**  
 Whitney Block  
 Queen's Park, Toronto



31M645W6839 2.2725 STRATHCONA





Instrument: Barringer GM-122 Proton Magnetometer

Scintrex Base Station MBS 2

Operators: J. L. Wright  
C. B. Novak

\* FORCED READINGS

Contour Intervals: --- 59000 gammas (γ)  
- - - 59100 γ  
- - - 59200 γ  
- - - 59300 γ  
- - - 59400 γ  
- - - 59500 γ

Dates of Survey: September 27, 28, & 29, 1977

- Claim post, located
- " " , unlocated
- Witness post

**ST. JOSEPH EXPLORATIONS LIMITED**  
(INCORPORATED IN CANADA)

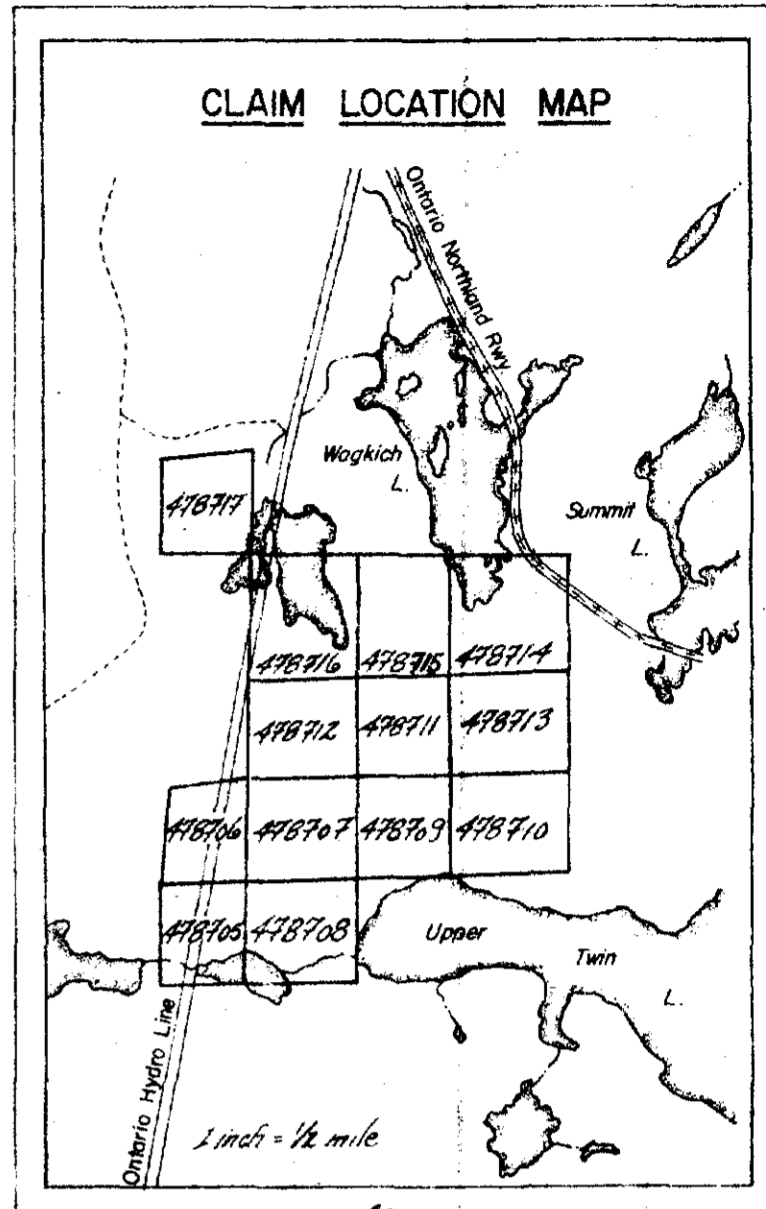
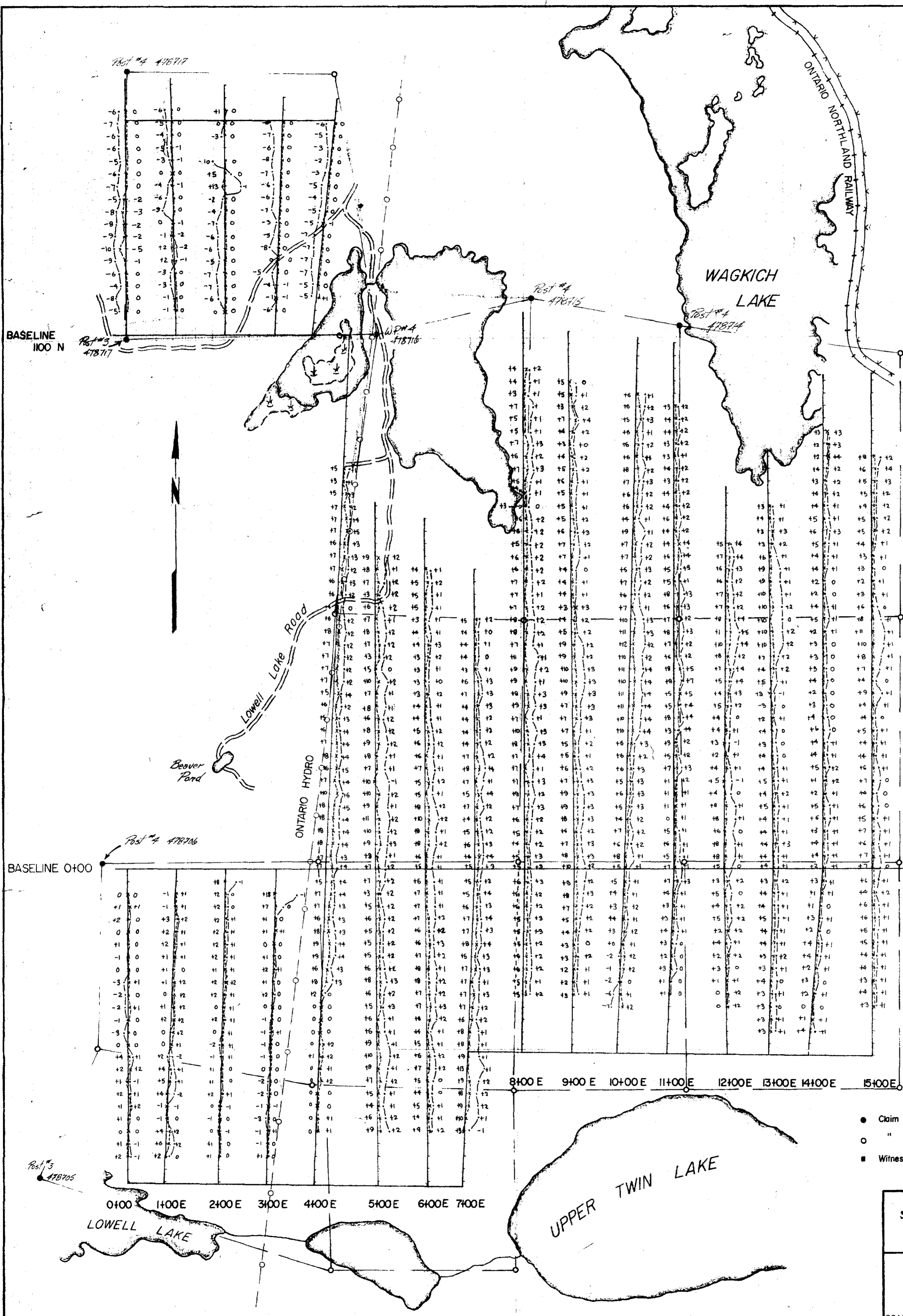
*James L. Wright*

**WAGKICH LAKE PROPERTY**  
 Strathcona Township, N. Ontario

**MAGNETOMETER SURVEY**  
**(TOTAL FIELD)**

SCALE: 1cm=50m

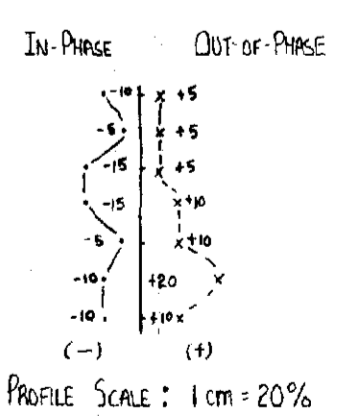
|   |                   |                    |
|---|-------------------|--------------------|
| APPROX. LAT. & LONG. OF LOWER R.T. COR. OF DWG. | PROJECT NO. 133.1 | SHEET NO. 13 OF 14 |
| 79° 46' 00" LATITUDE                            | REPORT NO.        | NTS 31 M/4         |
| 47° 01' 00" LONGITUDE                           |                   |                    |



Lines 4+00 to 15+00 (SOUTH BASE LINE) -  
200 metre SEPARATION

Lines 0+00 to 3+00 and 4+00 (NORTH BASE LINE) -  
100 metre SEPARATION

FREQUENCY: 888 HZ  
INSTRUMENT: MAX MIN II EM UNIT  
OPERATORS: STEVE GIBSON BRAD WARD



- Claim post, located
- " " , unlocated
- Witness post

**ST. JOSEPH EXPLORATIONS LIMITED**  
TORONTO, CANADA

*James J. Wright*  
**WAGKICH LAKE PROPERTY**  
Strathcona Township, 'N. Ontario

**HORIZONTAL LOOP E.M. SURVEY**

SCALE: 1 cm = 50 m

|  |                  |               |
|--|------------------|---------------|
| APPROX LAT. & LONG. OF LOWER RT. COR. OF DWG.<br>79° 46' 00" LATITUDE<br>47° 01' 00" LONGITUDE | PROJECT NO. 1331 | SHEET NO. OF  |
| REPORT NO.   |                  | N.T.S. 31 M/4 |

