



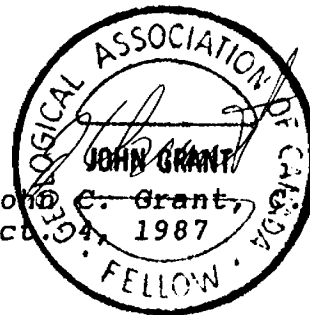
411155E0051 2.10472 RATHBUN

010

GEOPHYSICAL REPORT  
 on the  
 WANAPITEI LAKE PROPERTY  
 RATHBUN TOWNSHIP  
 ONTARIO  
 FOR  
GOLD'OR MINING CORP.

by:

John C. Grant, E.T., F.G.A.C.  
 Oct. 9<sup>th</sup> 1987



*Qual. on  
 2.3943*



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District 1"= 1/2 mile

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## INTRODUCTION

The Wanapitei Lake property consists of 18 staked claims and 4 patented claims all of which are located in Rathbun Township on the northern shore of Lake Wanapitei approximately 25 miles northeast of the city of Sudbury.

The first gold discoveries in this area were made in the early 1890's after the copper nickel discoveries in the Sudbury basin. Gold exploration again became active in the 1920's and 30's and most recently there has been production of gold from the Orofino and Groundstar properties to the south of the subject claims in Scadding and Davis Townships.

Most recently, the area has again become active due to discoveries of gold and platinum to the west of the subject property by Falconbridge and Prophet Resources in Parkin Township (refer to Figure 2 for location of property and areas of interest).

## PROPERTY GEOLOGY

The claim group is underlain by a north-northeast striking and east dipping sequence of greywacke, arkose and conglomerate of the Gowganda Formation of Huronian age intruded by metagabbro sills and dykes. The main areas of

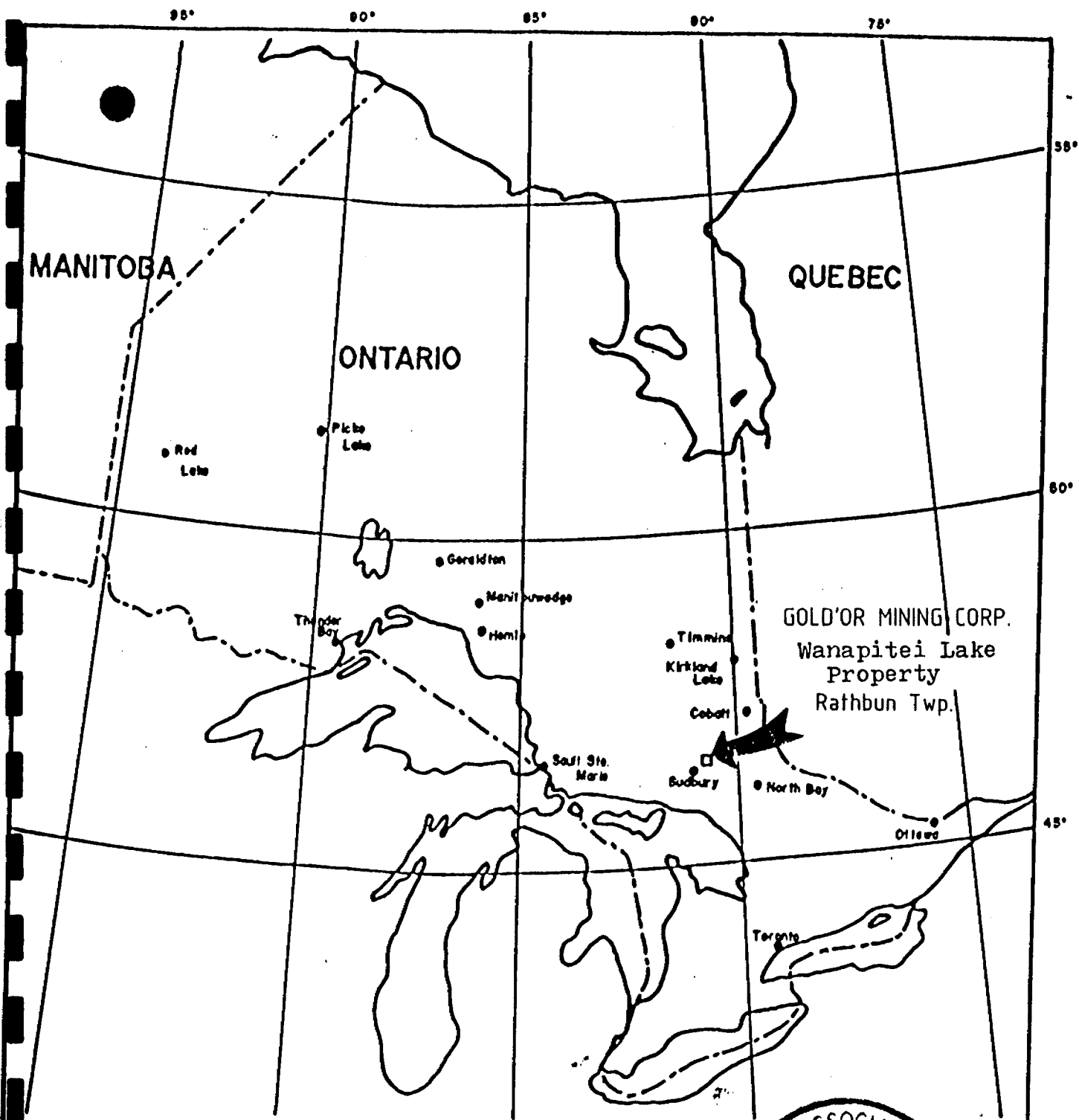
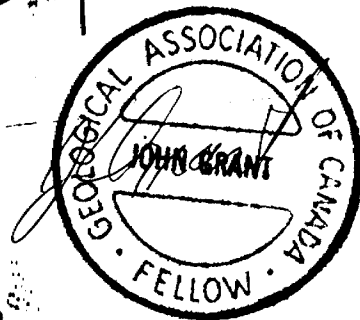


FIGURE 1

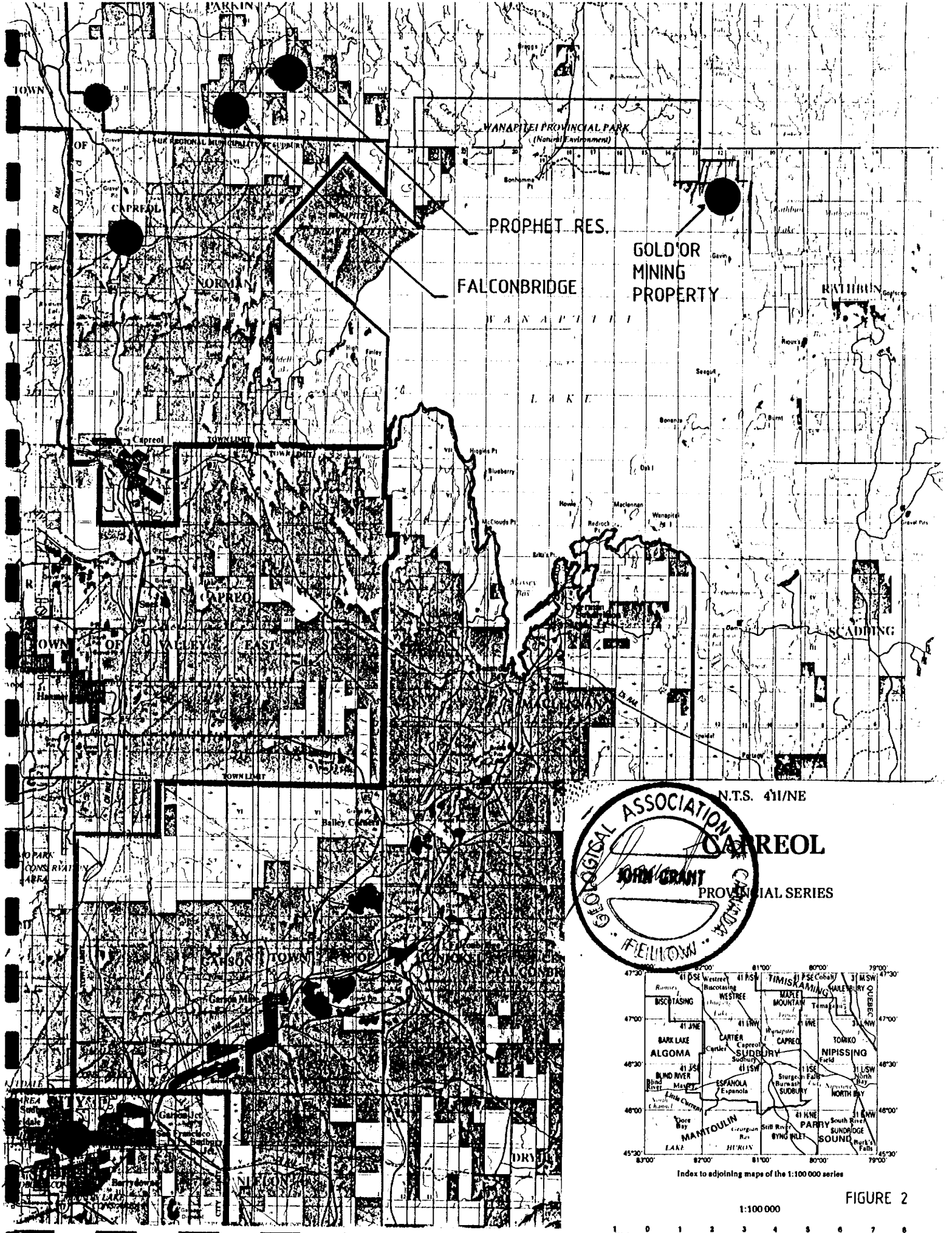
PROPERTY LOCATION MAP

WANAPITEI LAKE PROPERTY

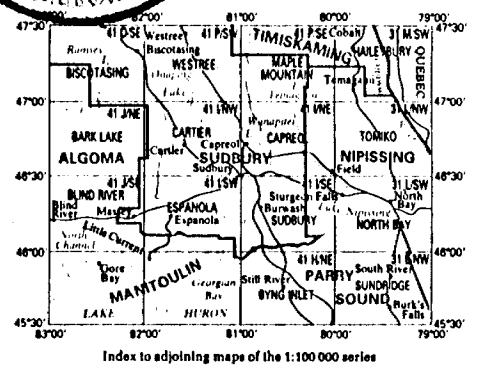
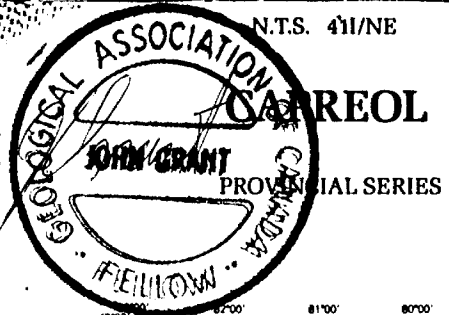
To accompany the report for  
GOLD'OR MINING CORP.



July 10:87



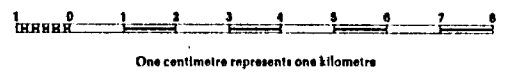
N.T.S. 41/NE



Index to adjoining maps of the 1:100 000 series

1:100 000

FIGURE 2



One centimetre represents one kilometre

outcrop are in the eastern and northern parts of the property. The area in the central part of the property is covered by beach-type sands.

On the 4 patented claims, in the western part of the property, a zone or zones of gold mineralization in pyritic-quartz-carbonate veins has been intersected (assessment files, Sudbury). Five drill holes intersected this mineralization with values from 0.02 oz gold per ton over 5 feet to 0.21 oz gold per ton across 10 feet ((or 0.42 oz gold per ton across 4 feet) (Geological Report, Wanapitei Lake Property, Rathbun Twp., Ontario for Gold'Or Mining Corp, July 10, 1987, L.D.S. Winter)).

#### GEOPHYSICAL PROGRAM

Based on the geological report, Gold'Or Mining Corp. contacted Exsics Exploration Limited to perform linecutting and geophysical surveys over the 22 claim group located in Rathbun Township.

The intentions of this program was to locate and define structural trends which would be favourable areas for gold and/or platinum potential. This report will deal with the results of this program which was carried out during the months of July, August, 1987.

**PROPERTY LOCATION & ACCESS**

The property consists of 18 unpatented contiguous mining claims and 4 patented mining claims as shown in Plan M 1071, Rathbun Township, as issued by the Ministry of Northern Development & Mines, District of Sudbury.

The claims are listed below:

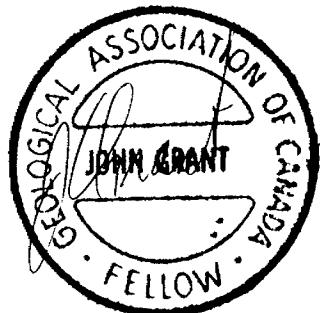
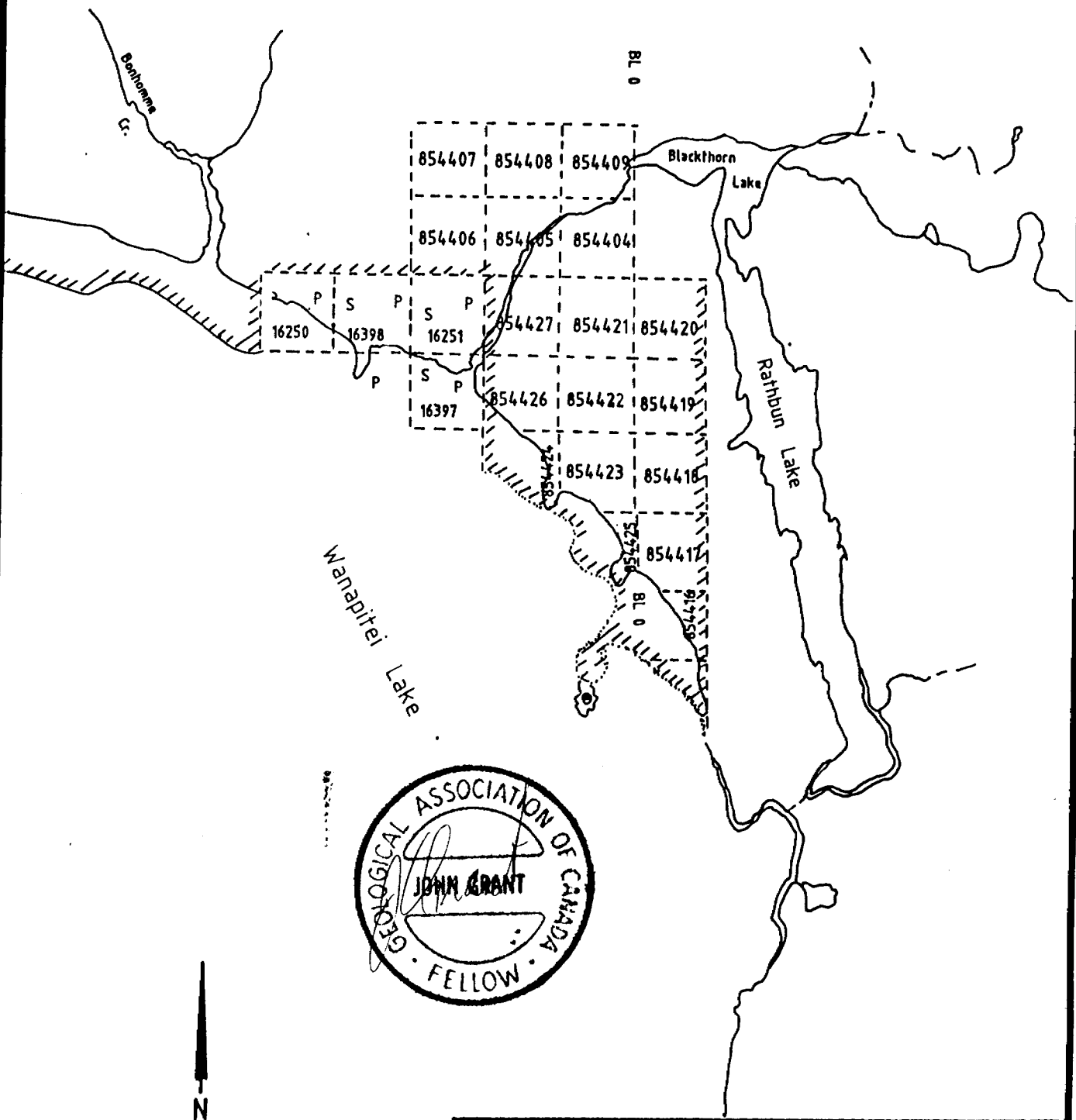
| <u>UNPATENTED CLAIMS</u> | <u>LOCATION</u>                        |
|--------------------------|--|
| S 854404                 | CON. 6, LOT 11, NW 1/4 S 1/2           |
| S 854405                 | CON. 6, LOT 12, NE 1/4 S 1/2           |
| S 854406                 | CON. 6, LOT 12, NW 1/4 S 1/2           |
| S 854407                 | CON. 6, LOT 12, SW 1/4 N 1/2           |
| S 854408                 | CON. 6, LOT 12, SE 1/4 N 1/2           |
| S 854409                 | CON. 6, LOT 11, SW 1/4 N 1/2           |
| S 854416                 | CON. 5, LOT 11, SE 1/4 S 1/2 (PARTIAL) |
| S 854417                 | CON. 5, LOT 11, NE 1/4 N 1/2 (PARTIAL) |
| S 854418                 | CON. 5, LOT 11, SE 1/4 N 1/2           |
| S 854419                 | CON. 5, LOT 11, NE 1/4 N 1/2           |
| S 854420                 | CON. 6, LOT 11, SW 1/4 S 1/2           |
| S 854421                 | CON. 6, LOT 11, SE 1/4 S 1/2           |
| S 854422                 | CON. 5, LOT 11, NW 1/4 N 1/2           |
| S 854423                 | CON. 5, LOT 11, SW 1/4 N 1/2 (PARTIAL) |
| S 854424                 | CON. 5, LOT 12, SE 1/4 N 1/2 (PARTIAL) |
| S 854425                 | CON. 5, LOT 11, SW 1/4 S 1/2 (PARTIAL) |
| S 854426                 | CON. 5, LOT 12, NW 1/4 N 1/2 (PARTIAL) |
| S 854427                 | CON. 6, LOT 12, SE 1/4 S 1/2           |


PATENTED CLAIMS

|         |                              |
|---------|------------------------------|
| S 16250 | CON. 6, LOT 13, SW 1/4 S 1/2 |
| S 16251 | CON. 6, LOT 12, SW 1/4 S 1/2 |
| S 16397 | CON. 5, LOT 12, NW 1/4 N 1/2 |
| S 16398 | CON. 6, LOT 13, SE 1/4 S 1/2 |

LOCATION

The group of claims is located on the northeastern shore of Wanapitei Lake immediately east of Bonhome Creek in the northern part of Rathbun Township, District of Sudbury in



|   |                   |               |
|---|-------------------|---------------|
|  <b>EXSICS EXPLORATION LTD.</b><br>P.O. Box 1000, P4M-7X1<br>Suite 10, Hollinger Bldg, Timmins Ont.<br>Telephone: 795-267-4151 |                   |               |
| CLIENT: GOLD'OR MINING CORPORATION  |                   |               |
| PROPERTY: RATHBUN TOWNSHIP  |                   |               |
| TITLE: CLAIM LOCATION MAP   |                   |               |
| Fig. 3  |                   |               |
| Date: SEPT/1987   | Scale: 1"=1/2mile | NTS:          |
| Drawn: L.R.   | Interp:           | Job No. EE-51 |



northeastern Ontario at 46 degrees - 46'N latitude, 80 degrees - 43'W longitude. The property is approximately 25 miles northeast of Sudbury, Ontario (Figure 1, 2).

#### *ACCESS*

The property is most easily accessed by boat from either the West Bay road on the west side of the lake from Capreol or Highway 541 at Bolands Bay on the south shore of the lake. Float equipped aircraft or helicopter could also provide access to the claims.

#### *LINECUTTING PROGRAM*

The first stage of the 1987 program was to establish a detailed metric grid over the entire claim group. This was done by first cutting a north-south baseline 1/4 of a mile west of the east boundary of the claim group. This baseline was turned off at the number 2 post of claim # 854425 and was cut and chained due north to the north boundary of the claim block. Cross lines were then turned off of this baseline at 100 meter intervals with L300MS being the most southerly line of the grid and L2000MN being the most northerly line of the grid.

All of these crosslines were cut and chained at 25 meter intervals to the east and west boundary of the block. In all, a total of 42 km of grid lines and baselines were established.

### *GEOPHYSICAL PROGRAM*

This program consisted of performing a VLF-EM dip angle survey and total field magnetic survey over the entire cut grid, with the intent of locating anomalous zones and geological structures which would be favourable to gold and/or platinum deposition.

### *ELECTROMAGNETIC SURVEY*

This survey was completed over the entire cut grid using the Crone VLF-EM Receiver. A transmitting station using a frequency of 21.4 K Hz, Annapolis, Maryland, was used as it would offer the best angle needed to locate the expected structure.

Readings were recorded at 25 meter intervals along the survey lines. These recorded values were then plotted on base maps using a scale of 1:2500.

The values were then profiled at a scale of 1cm to 10 degrees. When reading the base map, a true crossover or suspected area of interest has been defined as west readings to east readings when traversing east to west.

Specifications for the Crone VLF - EM receiver can be found as Appendix A of this report.

The base map can be found in the back pocket of this report.

#### *MAGNETIC SURVEY*

This survey was completed using the Scintrex MP-2 portable Proton Magnetometer. The survey was completed over the entire grid with values being recorded at 25 meter intervals. The baseline was first read from south to north and tied in.

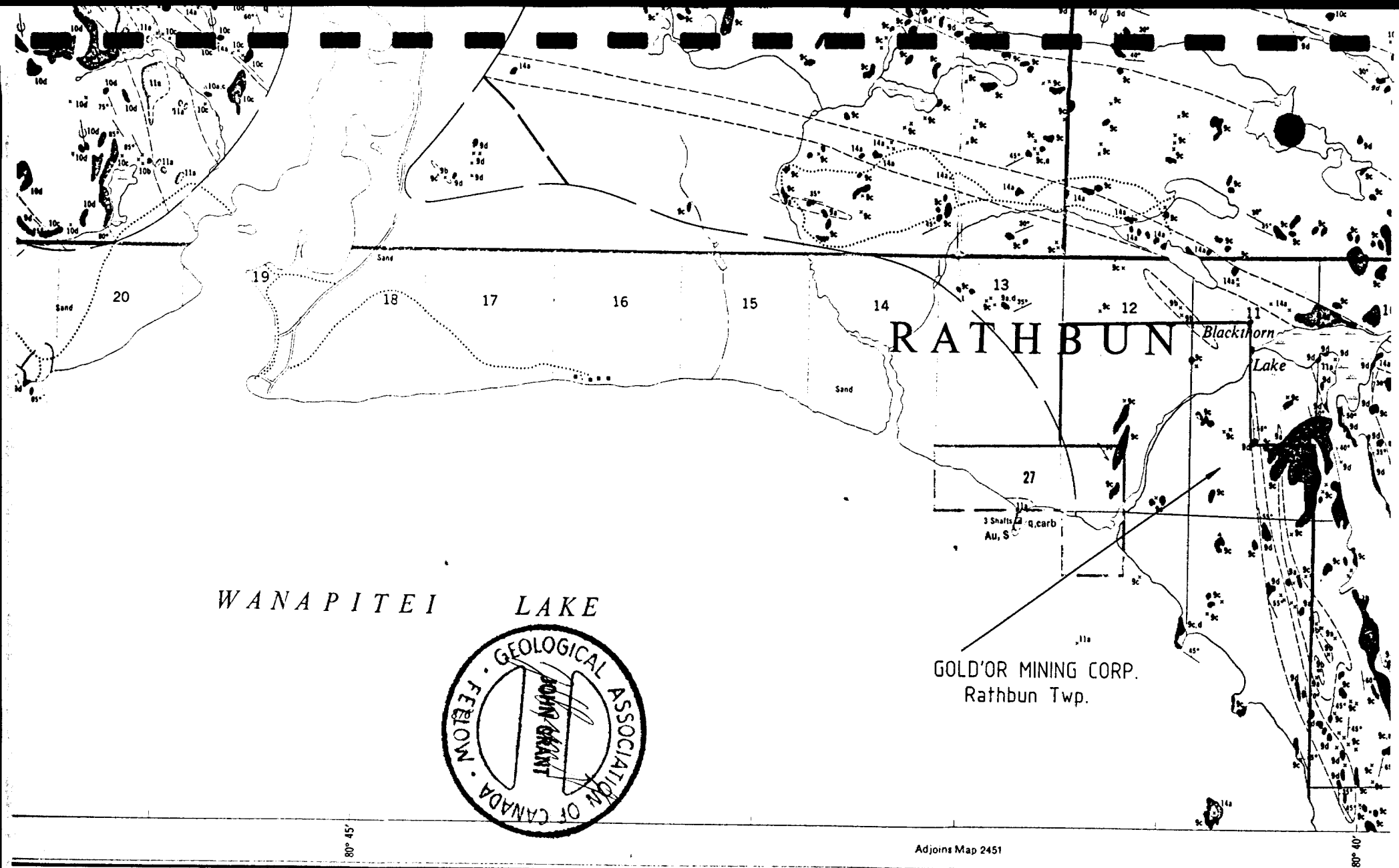
This line would then act as a control line for all of the cross lines. This is necessary to correct the magnetic data for any change of the earth's durinal.

This collected data was then plotted on a base map at a scale of 1:2500 and then contoured at 50 and 100 gamma intervals.

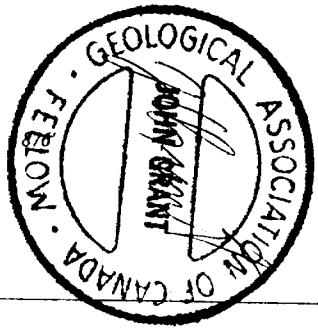
Specifications for the Scintrex MP-2 Mag can be found under Appendix B of this report.

#### *SURVEY RESULTS*

The EM Survey was successful in outlining a number of parallel north-south structure, mostly over the central and western section of the grid.



WANAPITEI LAKE

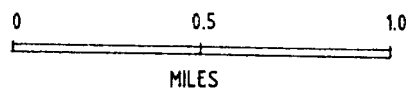


GOLD'OR MINING CORP.  
Rathbun Twp.

Adjoins Map 2451

**LEGEND**

- 14 Late Precambrian - Olivine Diabase
- Middle Precambrian
- 11 Nipissing Diabase
- Huronian Supergroup
- 10 Cobalt Group - Lorrain Fm.
- 9 Cobalt Group - Gowganda Fm.



50° Strike and dip of bedding

Geological contact

Ontario Geological Survey  
Map 2450  
**OTTER LAKE**  
SUDBURY DISTRICT

Scale 1:31,680 or 1 Inch to 1/2 Mile

FIGURE 4

Each of the more significant zones will be discussed separately, and in detail below.

#### CONDUCTIVE ZONES

First and foremost is the VLF zone striking north-south across lines 100 MN to 900 MN at 1530 MW and continuing south into the lake. This EM feature is located in the area of the 3 shafts, (O.G.S. Report 213, Geology of the Wanapitei Lake Area, District of Sudbury, B.O. Dressler, 1982, pg.111, G.E. McVittie).

There is little to no magnetics directly associated with the EM response but there is a good magnetic high feature flanking the zone to the southeast.

This northwest striking magnetic feature may relate to a strongly mineralized sulphide-bearing vein structure.

A second EM response was noted striking roughly north-south across lines 1100 MN to 800 MN at 1400 MW to 1350 MW. This structure parallels the zone mentioned above. It also has a weak magnetic high signature with an associated low.

Another zone of major interest is the EM response striking across lines 1100 MN to 800 MN at 1150 MW to 1050 MW.

This zone has good magnetic association just flanking the northern extension with a good low east flanking correlation on its south extension.

This would indicate a possible shear or fracture zone. the magnetic low may relate to a fault zone or alteration zone possibly carbonate in origin.

The major structure on the grid is the EM response begining on L0+00 at 50 MW and continuing as far as 1000 MN at 375 MW. This zone also shows an associated shear or fracture zone striking off of the main zone at L700 MW at 375 MW.

This eastern EM structure strikes into a magnetic high low structure which could be of significance should geological mapping prove the existence of sulphide bearing gabbro.

This magnetic feature, striking across lines 1700 MN at 375 MW to line 500 MN at 125 ME, may represent a structural contact possibly composed of magnetic sulphide pods and veinlets.

Another EM response of interest is that feature striking across lines 2000 MN at 625 MW to 1200 MN at 600 MW.

This zone has good magnetic correlation with its central section. The distrotion in the zones strike length in the

area of the 1800 MN, 700 MW may be due to shearing and/or faulting. Further investigation is required before a better definition of the zone can be given.

However, structural interference can be detected if one observes the bend in the river which correlates with the south extension of this zone in the area of lines 1500 and 1400 MN.

A somewhat spotty EM response was noted striking southeast to south from line 2000 MN at 1100 MW to line 700 MW at 900 MW.

This feature may be indicative of a zone with pod or bleb type sulphides in isolated concentrations along its strike length. The magnetic correlation, although weak, does follow the entire strike of the zone.

#### **RECOMMENDATIONS AND CONCLUSIONS**

The surveys were successful in outlining a number of areas of interest over the survey grid. As stated earlier, the area covered by claim # S-16398, already has a history of gold discoveries, situated in carbonate zones. Also, diamond drilling has proven the existence of a gold bearing structure on the property.

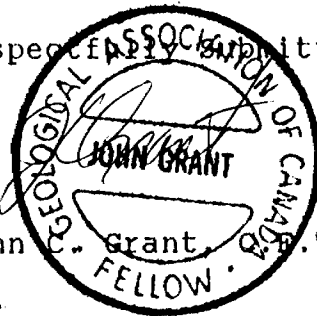
It should also be stated here that the 18 claim group has never been surveyed as it was part of a provincial park.

There does appear to be several parallel structures on the 18 claim group which parallel the structures on the patented ground. This knowledge alone upgrades the claim group as there are proven gold results on the patented ground.

Therefore, I would recommend a geological survey certainly in the area of the shafts and if possible to locate any signs of the drill holes. Also, detail geology should be done over the five areas discussed above.

Follow-up geophysics should include a Horizontal Loop Survey as well as an IP Survey. This should be followed up with drilling during the winter which would be the best and easiest time to access the property.

Respectfully submitted,



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



*REFERENCES*

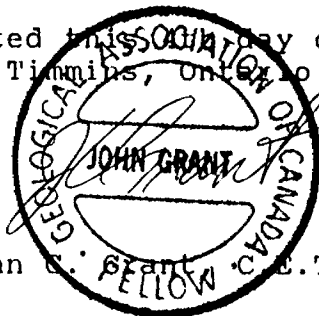
1. Assessment Files: Ministry of Natural Resources,  
Sudbury, Ontario
2. Dressler; B.O.  
1982                      Geology of the Wanapitei Lake Area,  
District of Sudbury, Ontario, Geology  
Survey, Geology Report 231, pg. 111
3. Winter, L.D.S.  
B.A.Sc., M.S.C., F.G.A.C.  
July 10, 1987              Geological Report on the Wanapitei  
Lake Property, Rathbun Twp., Ontario  
for Gold'Or Mining Corporation

CERTIFICATE OF QUALIFICATIONS

I, John Charles Grant do hereby certify:

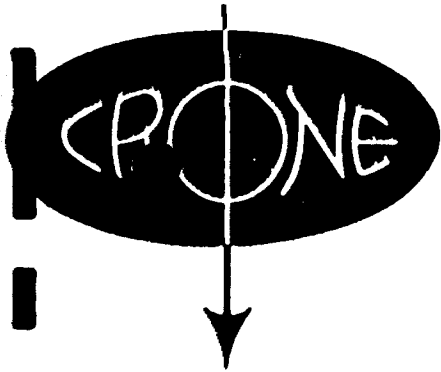
1. that I am a geophysicist and reside at Lot 2 Martineau Avenue, Kamiskotia Lake, Timmins, Ontario.
2. that I am a Fellow of the Geological Association of Canada.
3. that I am a member of the Certified Engineering Technologist Association.
4. that I graduated for Cambrian College of Applied Arts and Technology, Sudbury Campus in 1975 with an Honour's diploma in Geology Technology.
5. that I have practised my profession continuously for 12 years.
6. that my report on the Gold'Or Mining Corporation property, Rathbun Township, is based on work carried out under my supervision.

Dated this 15th day of October, 1987  
at Timmins, Ontario

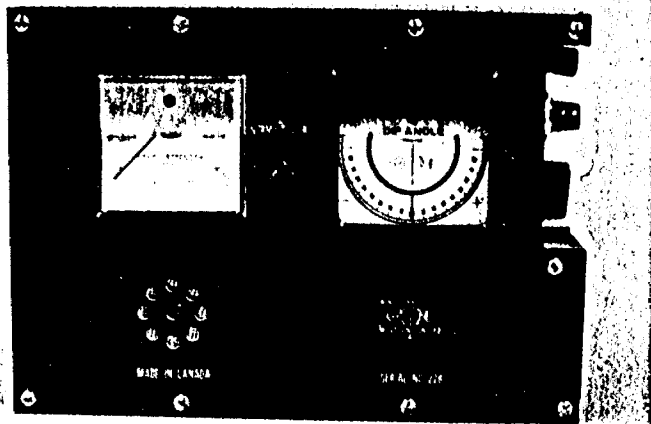


John C. Grant E.T., F.G.A.C.

APPENDIX A



## CRONE GEOPHYSICS LIMITED RADEM VLF EM RECEIVER



An EM receiver measuring the FIELD STRENGTH, DIP ANGLE and QUADRATURE components of the VLF communications stations.

This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and RECONNAISSANCE SURVEYS of MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting poorly conductive sulphide deposits and fault zones. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH POWERLINE NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and attitude of the conductor.

- Instrument Sales, Rental and Repair Services
- Contract Survey Services
- Consulting Services
- Computer Plotting and Processing Services

HEAD OFFICE: 3607 Wolfedale Rd.  
MISSISSAUGA, Ontario  
CANADA L5C 1V8  
PHONE: (416) 270-0096  
TELEX: 06-961260

## SPECIFICATIONS\*

**SOURCE OF PRIMARY FIELD:** VLF Communications Stations 1 to 25 KHz  
**NUMBER OF STATIONS:** 7 Switch Selectable  
**STATIONS AVAILABLE:** The Seven Stations May Be Selected From:

|          | CODE | STATION & LOCATION      | CALL SIGN   | FREQUENCY |
|----------|------|-------------------------|-------------|-----------|
| Standard | CM   | Cutler, Maine           | NAA. ....   | 24.0 KHz  |
| "        | SW   | Seattle, Washington     | NLK. ....   | 24.8 KHz  |
| "        | AM   | Annapolis, Maryland     | NSS. ....   | 21.4 KHz  |
| "        | H    | Laulualei, Hawaii       | NPM. ....   | 23.4 KHz  |
| "        | BOF  | Bordeaux, France        | NWU. ....   | 15.1 KHz  |
| "        | E    | Rugby, England          | GBR. ....   | 16.0 KHz  |
| Optional | MS   | Moscow, Russia          | UMS. ....   | 17.1 KHz  |
| "        | OD   | Odessa (Black Sea)      | EWB. ....   | 15.6 KHz  |
| "        | NC   | Exmouth, Australia      | NWC. ....   | 22.3 KHz  |
| "        | HN   | Helgelend, Norway       | JXZ. ....   | 17.6 KHz  |
| "        | YJ   | Yosamai, Japan          | NDT. ....   | 17.4 KHz  |
| "        | TJ   | Tokyo, Japan            | JG2AR. .... | 20.0 KHz  |
| "        | BA   | Buenos Aires, Argentina | .....       | 23.6 KHz  |

**CHECK THAT STATION IS TRANSMITTING:** Audible signal from speaker.

**PARAMETERS MEASURED:**

- (1) **DIP ANGLE** in degrees of the magnetic field component, from the horizontal, of the major axis of the polarization ellipse. Detected by a minimum on the field strength meter and read from an inclinometer with a range of  $\pm 1/2^\circ$ .
- (2) **FIELD STRENGTH** (total or horizontal) of the magnetic component of the VLF field, (amplitude of the major axis of the polarization ellipse). Measured as a percent of normal field strength established at a base station. Accuracy  $\pm 2\%$  dependent on signal. Meter has two ranges: 0 - 300% and 0 - 600%.
- (3) **QUADRATURE** component of the magnetic field, perpendicular in direction to the resultant field, as a percent of the normal field strength, (amplitude of the minor axis of the polarization ellipse). This is the minimum reading of the Field Strength meter obtained when measuring the dip angle. Accuracy  $\pm 2\%$ .

**OPERATING TEMPERATURE RANGE:**  $-40^\circ\text{C}$  to  $50^\circ\text{C}$  ( $-40^\circ\text{F}$  to  $120^\circ\text{F}$ )

**DIMENSIONS:** 9 cm x 19 cm x 27 cm ( $3\frac{1}{2}''$  x  $7\frac{1}{2}''$  x  $10\frac{1}{2}''$ )

**SHIPPING DIMENSIONS:** 30 cm x 14 cm x 36 cm ( $11\frac{1}{8}''$  x  $5\frac{1}{2}''$  x 14")

**WEIGHT:** 2.7 kg (6 lbs)

**SHIPPING WEIGHT:** 6.0 kg (13 lbs)

**BATTERIES:** 2 of 9 volt  
 Average Life Expectancy  
 20 Hours for Continuous Operation

\*Specifications subject to change without notice\*

APPENDIX B



# SCINTREX

earth science division

## Proton Precession Magnetometer for Portable or Base Station Use

### MP-2

#### features ▶

- ▶ *1 gamma sensitivity and accuracy over range of 20,000 to 100,000 gammas.*
- ▶ *Operates in very high gradients, to 5000 gammas per metre.*
- ▶ *Ultra small size and weight.*
- ▶ *Up to 25,000 readings from only 8 D cells.*
- ▶ *Battery pack isolated from electronics for corrosion protection.*
- ▶ *Battery pack easily extended for winter use.*
- ▶ *Light-emitting diode digital display, with complete test feature.*
- ▶ *Unique no-glare polarized reflector permits easy reading in bright sunlight.*
- ▶ *Indicator light warning of excessive gradient, ambient noise or electronic failure.*
- ▶ *Digital readout of battery voltage.*
- ▶ *Rugged all metal housing for rough field use at all temperatures.*
- ▶ *Automatic recycling or external trigger features permit ready conversion to base station use.*
- ▶ *Short reading time.*
- ▶ *Broad operating temperature range.*

The MP-2 is a portable one gamma proton precession magnetometer for field survey or base station use. The optimized design of sensor and circuitry using the latest CMOS components has resulted in a very light weight, low power consumption, rugged and reliable magnetometer.

Light emitting diodes coupled with an ingenious optically polarized reflector combine solid state reliability with easy reading even in bright sunlight.

A standard automatic recycling feature allows ready use of the MP-2, with suitable (optional) interfacing, as a base station recorder in analogue or digital form. Alternatively, a remote trigger can be used.

The noise-cancelling dual-coil sensor and electronics have been so designed as to effectively eliminate reading problems due to virtually all magnetic gradients which may be encountered in field survey conditions.



**TECHNICAL  
DESCRIPTION OF  
MP-2  
MAGNETOMETER**



**SCINTREX**

|                                     |  |
|-------------------------------------|--|
| <b>RESOLUTION</b>                   | 1 Gamma.   |
| <b>TOTAL FIELD ACCURACY</b>         | $\pm 1$ Gamma over full operating range.   |
| <b>RANGE</b>                        | 20,000 to 100,000 gammas in 25 overlapping steps.  |
| <b>INTERNAL MEASURING PROGRAMME</b> | Single reading — 3.7 seconds. Recyc. feature permits automatic repetitive readings 3.7 seconds intervals.  |
| <b>EXTERNAL TRIGGER</b>             | External trigger input permits use of sampling intervals longer than 3.7 seconds.  |
| <b>DISPLAY</b>                      | 5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.  |
| <b>RECORDER OUTPUT (Optional)</b>   | Multiplied precession frequency and gate time outputs for interfacing with incremental tape recorders (eg. Increlogger) for digital recording. As an additional option a digital to analogue convertor is available for use with analogue recorders. |
| <b>GRADIENT TOLERANCE</b>           | Up to 5000 gammas/metre.   |
| <b>POWER SOURCE</b>                 | 8 alkaline "D" cells provide up to 25,000 readings at 25° C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.   |
| <b>SENSOR</b>                       | Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.  |
| <b>HARNESS</b>                      | Complete for operation with staff or back pack sensor.   |
| <b>OPERATING TEMPERATURE RANGE</b>  | -35°C to +60°C.  |
| <b>SIZE</b>                         | Console, with batteries: 80 x 160 x 250mm.<br>Sensor: 80 x 150mm.<br>Staff: 30 x 1550mm. (extended)<br>30 x 600 mm. (collapsed)  |
| <b>WEIGHTS</b>                      | Console, with batteries: 1.8kg.<br>Sensor: 1.3kg.<br>Staff: 0.6kg.   |

**SCINTREX LIMITED**  
222 Snidercroft Road,  
Concord, Ontario, Canada L4K 1B5  
TELEPHONE (416) 669-7200, TELEX 06-964570



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_  
Station interval 25 METER Line spacing 100 METER.  
Profile scale 1 CM = 10 FT.  
Contour interval 50, 100 GAMMAS.

MAGNETIC

Instrument SCINTREX MP-2 PROTON MAG.  
Accuracy - Scale constant ± 1 GAMMA.  
Diurnal correction method BASE STATION LOOPING.  
Base Station check-in interval (hours) 1- 1/2 HOURS.  
Base Station location and value BASE LINE WAS REAR, TIED IN TO CONTROL GRID.

ELECTROMAGNETIC

Instrument CROWE VLF-EM RECEIVER.  
Coil configuration \_\_\_\_\_  
Coil separation 10 FEET WIDE.  
Accuracy ± 1/2 °  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency ANNAPOLIS, MARYLAND 21.4 KHZ.  
(specify V.L.F. station)  
Parameters measured 1 DIP ANGLE MEASUREMENT.

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 \_\_\_\_\_



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) ULF-EM & MAGNETIC SURVEYS.  
Township or Area RATHBURN TOWNSHIP  
Claim Holder(s) GOLD OR MINING CORP.  
Survey Company EXSICS EXP. LTD.  
Author of Report JOHN C. GRANT.  
Address of Author BOX 1880, TIMMINO, ONT.  
Covering Dates of Survey July 15/87 to Oct 15/87  
(linecutting to office)  
Total Miles of Line Cut 24.0 KM.

**MINING CLAIMS TRAVERSED**  
List numerically

- 5. 854404 (prefix) (number)
- 854405
- 854406
- 854407
- 854408
- 854409
- 854416
- 854417
- 854418
- 854419
- 854420
- 854421
- 854422
- 854423
- 854424
- 854425
- 854426
- 854427

If space insufficient, attach list

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

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

ENTER 20 days for each additional survey using same grid.

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

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

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

DATE: Oct 19/87 SIGNATURE: J. Grant  
Author of Report or Agent

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

**Previous Surveys**

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

TOTAL CLAIMS 18

OFFICE USE ONLY

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_  
Survey Method \_\_\_\_\_  
\_\_\_\_\_  
Corrections made \_\_\_\_\_  
\_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_  
Values measured \_\_\_\_\_  
Energy windows (levels) \_\_\_\_\_  
Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_  
Size of detector \_\_\_\_\_  
Overburden \_\_\_\_\_  
(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_  
Instrument \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Parameters measured \_\_\_\_\_  
\_\_\_\_\_  
Additional information (for understanding results) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_  
Instrument(s) \_\_\_\_\_  
(specify for each type of survey)  
Accuracy \_\_\_\_\_  
(specify for each type of survey)  
Aircraft used \_\_\_\_\_  
Sensor altitude \_\_\_\_\_  
Navigation and flight path recovery method \_\_\_\_\_  
\_\_\_\_\_  
Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_  
Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_  
\_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_  
\_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

General \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ANALYTICAL METHODS

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (\_\_\_\_\_ tests)

Name of Laboratory \_\_\_\_\_

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Ministry of Northern Affairs and Mines

# 37-61 (Subbury)

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Rat



41155E0051 2.10472 RATHBUN

900

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he  
ed  
15.

|   |  |  |  |
|---|--|--|--|
| Type of Survey(s)<br><b>ELECTROMAGNETIC (VLF) &amp; MAGNETIC</b>  |  | Township or Area<br><b>RATHBUN TWP.</b>  |  |
| Claim Holder(s)<br><b>WILLIAM GORDON GRANT</b>  |  | Prospector's Licence No.<br><b>C-35972</b>   |  |
| Address<br><b>353 SANDRA BLVD. SCARBURY, ONTARIO. P3C-3K8.</b>  |  |  |  |
| Survey Company<br><b>EXSICS EXP. LTD.</b>   |  | Date of Survey (from & to)<br>Day   Mo.   Yr. <b>27 08 87</b> to Day   Mo.   Yr. <b>25 08 87</b> | Total Miles of line Cut<br><b>24 Miles</b> |
| Name and Address of Author (of Geo-Technical report)<br><b>JOHN C GRANT, Box 1880, TIMMINES, 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:<br>Enter 40 days. (This includes line cutting)                                  | - Electromagnetic | 20             |
|   | - Magnetometer    | 40             |
|   | - Radiometric     |                |
|   | - Other           |                |
| For each additional survey:<br>using the same grid:<br>Enter 20 days (for each)                   | Geological        |                |
|   | Geochemical       |                |
|   |                   |                |
| Man Days  | Geophysical       | Days per Claim |
| Complete reverse side and enter total(s) here   | - Electromagnetic |                |
|   | - Magnetometer    |                |
|   | - Radiometric     |                |
| Airborne Credits  | Geological        |                |
|   | Geochemical       |                |
|   |                   |                |
| Note: <b>MINING LANDS</b> SECTION<br>Special provisions credits do not apply to Airborne Surveys. | Electromagnetic   |                |
|   | Magnetometer      |                |
|   | Radiometric       |                |
|   |                   |                |

| Mining Claim |        | Expend. Days Cr. | Mining Claim |        | Expend. Days Cr. |
|--------------|--------|------------------|--------------|--------|------------------|
| Prefix       | Number |                  | Prefix       | Number |                  |
| 5.           | 854404 |                  |              |        |                  |
|              | 854405 |                  |              |        |                  |
|              | 854406 |                  |              |        |                  |
|              | 854407 |                  |              |        |                  |
|              | 854408 |                  |              |        |                  |
|              | 854409 |                  |              |        |                  |
|              | 854416 |                  |              |        |                  |
|              | 854417 |                  |              |        |                  |
|              | 854418 |                  |              |        |                  |
|              | 854419 |                  |              |        |                  |
|              | 854420 |                  |              |        |                  |
|              | 854421 |                  |              |        |                  |
|              | 854422 |                  |              |        |                  |
|              | 854423 |                  |              |        |                  |
|              | 854424 |                  |              |        |                  |
|              | 854425 |                  |              |        |                  |
|              | 854426 |                  |              |        |                  |
|              | 854427 |                  |              |        |                  |

RECEIVED

SEP - 2 1987

SUBBURY MINING DIV. RECEIVED AUG 27 1987

A.M. 7 8 9 10 11 12 1 2 3 4 5 P.M. Total number of mining days covered by this report of work. **18**

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   |
| 1080                    | 1987 08 31                  | <i>W. J. Hill</i> |
|                         | Date Approved as Recorded   | Branch Director   |
|                         | <i>See record statement</i> | <i>W. J. Hill</i> |

Date *Aug 26/87* Recorded Holder or Agent (Signature) *J. Grant*

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  
*John C Grant, Box 1880, Timmines Ont. P4N-7X1*

Date Certified *Aug 26/87* Certified by (Signature) *J. Grant*

|                  |                      |
|------------------|----------------------|
| Recorded Holder  | William Gordon Grant |
| Township or Area | Rathun               |

| Type of survey and number of Assessment days credit per claim   | Mining Claims Assessed  |
|---|---|
| <b>Geophysical</b><br>Electromagnetic _____ 20 _____ days<br>Magnetometer _____ 40 _____ days<br>Radiometric _____ days<br>Induced polarization _____ days<br>Other _____ days<br>Section 77 (19) See "Mining Claims Assessed" column<br>Geological _____ days<br>Geochemical _____ days<br>Man days <input type="checkbox"/> Airborne <input type="checkbox"/><br>Special provision <input type="checkbox"/> Ground <input type="checkbox"/><br><input type="checkbox"/> Credits have been reduced because of partial coverage of claims.<br><input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant. | S 854404 to 09 inclusive<br>854416 to 23 inclusive<br>854426-27 |

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

|  |
|--|
| 15 Days Electromagnetic and 30 Days Magnetometer<br>S 854424 |
| 10 Days Electromagnetic and 20 Days Magnetometer<br>S 854425 |

**No credits have been allowed for the following mining claims**

|   |  |
|---|--|
| <input type="checkbox"/> not sufficiently covered by the survey | <input type="checkbox"/> insufficient technical data filed |
|---|--|

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

November 19, 1987

Your File:  
Our File:

61  
2.10472

Mining Recorder  
Ministry of Northern Development and Mines  
199 Larch Street  
Sudbury, Ontario  
P3E 5P9

Dear Sir:

RE: Notice of Intent dated November 4, 1987 -  
Geophysical (Electromagnetic & Magnetometer)  
Survey on Mining Claims S 854404 et al in  
Rathbun Township.

---

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

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

Yours sincerely,

W.R. Cowan, Manager  
Mining Lands Section  
Mines & Minerals Division

Whitney Block, Room 6610  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Telephone: (416) 965-4880

AB:sc

cc: Mr. William Gordon Grant  
353 Sandra Blvd  
Sudbury, Ontario  
P3C 3K8

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

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

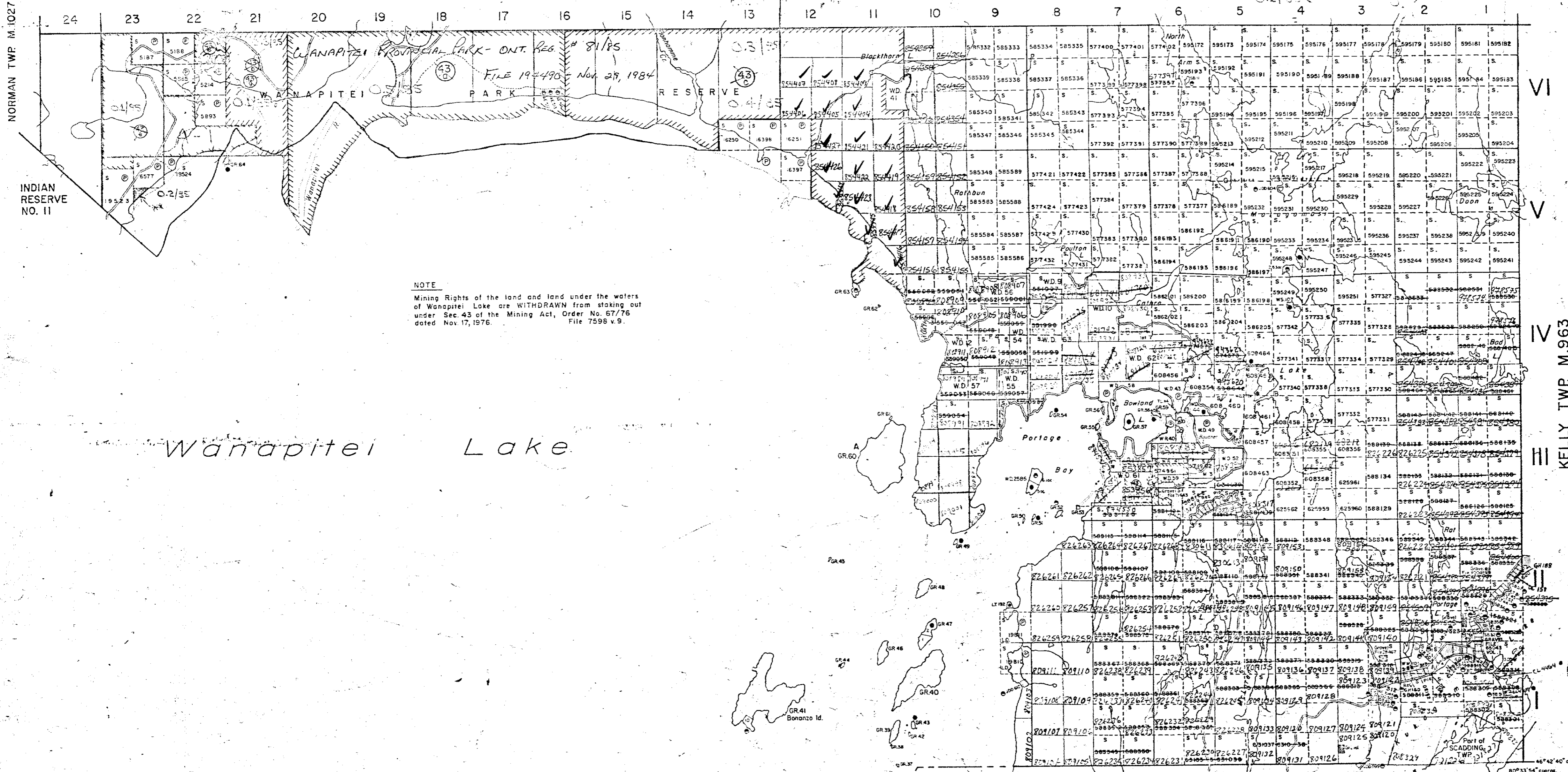
cc: Resident Geologist  
Sudbury, Ontario

NORMAN TWP. M.1027

AYLMER TWP. M.641

MACKELCAN TWP. M.840

0.4/35 (Northwestern Region) S.R. & M.R.  
0.5/35 (Northwestern Region) S.R. & M.R.  
0.1/35 (Northwestern Region) S.R. & M.R.



**NOTE**  
Mining Rights of the land and land under the waters of Wanapitei Lake are WITHDRAWN from staking out under Sec.43 of the Mining Act, Order No. 67/76 dated Nov. 17, 1976. File 7598 v.9.

Wanapitei Lake

**NOTES**

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

ISLANDS in Wanapitei Lake WITHDRAWN FROM STAKING under Sec.38 (c) of Mining Act R.S.O.1970. Nov.23,1976

FLOODING RIGHTS along the shores of Wanapitei Lake and islands contained therein to elev.100.5' (crest of dam) reserved to H.E.R.C.  
L.O. 6186 File 43815

Withdrawn from staking under Section of the Mining Act, R.S.O. 1970 (Sec. 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100)

| File   | Date              | Disposition |
|--------|-------------------|-------------|
| 171524 | May 5/65          | S.R. & M.R. |
| 171524 | June 9/69         | S.R.O.      |
| 114727 | W-51/76 Aug 26/76 | S.R.O.      |
| 41954  | W-8/78 Jan. 27/78 | S.R. & M.R. |

\* W-4/84 (Northwestern Region) Sudbury S.R. & M.R. 1984

\* 0.2/35 (Northwestern Region) S.R. & M.R.  
0.3/35 (Northwestern Region) S.R.O.

**LEGEND**

- PATENTED LAND
- PATENTED FOR SURFACE RIGHTS ONLY
- LEASE
- LICENS: OF OCCUPATION
- CROWN LAND SALES
- LOCATED LAND
- CANCELLED
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- HIGHWAY B ROUTE-HG
- ROADS
- TRAILS
- RAILWAYS
- POWER LINES
- MARSH OR MUDFLAT
- MINEE
- ORIGINAL SHORELINE

used only with summer resort locations or other...

**TOWNSHIP OF RATHBUN**

DISTRICT OF SUDBURY

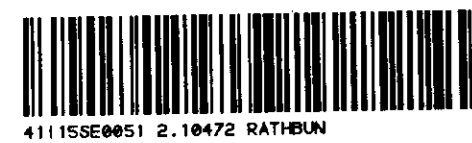
SUDBURY MINING DIVISION

SCALE: 1 INCH = 40 CHAINS (1/2 MILE)

DR. D.T.  
DATE APR/72

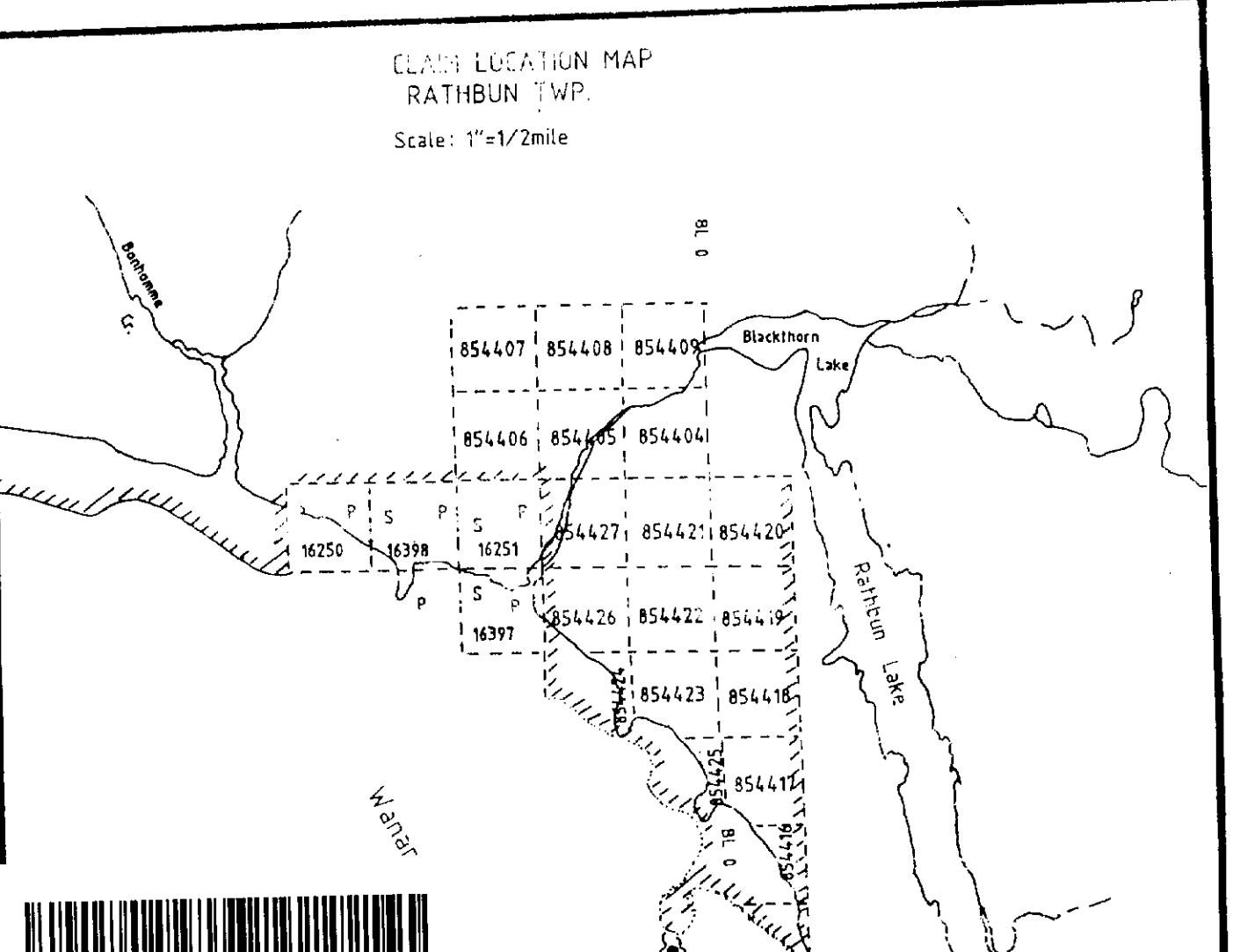
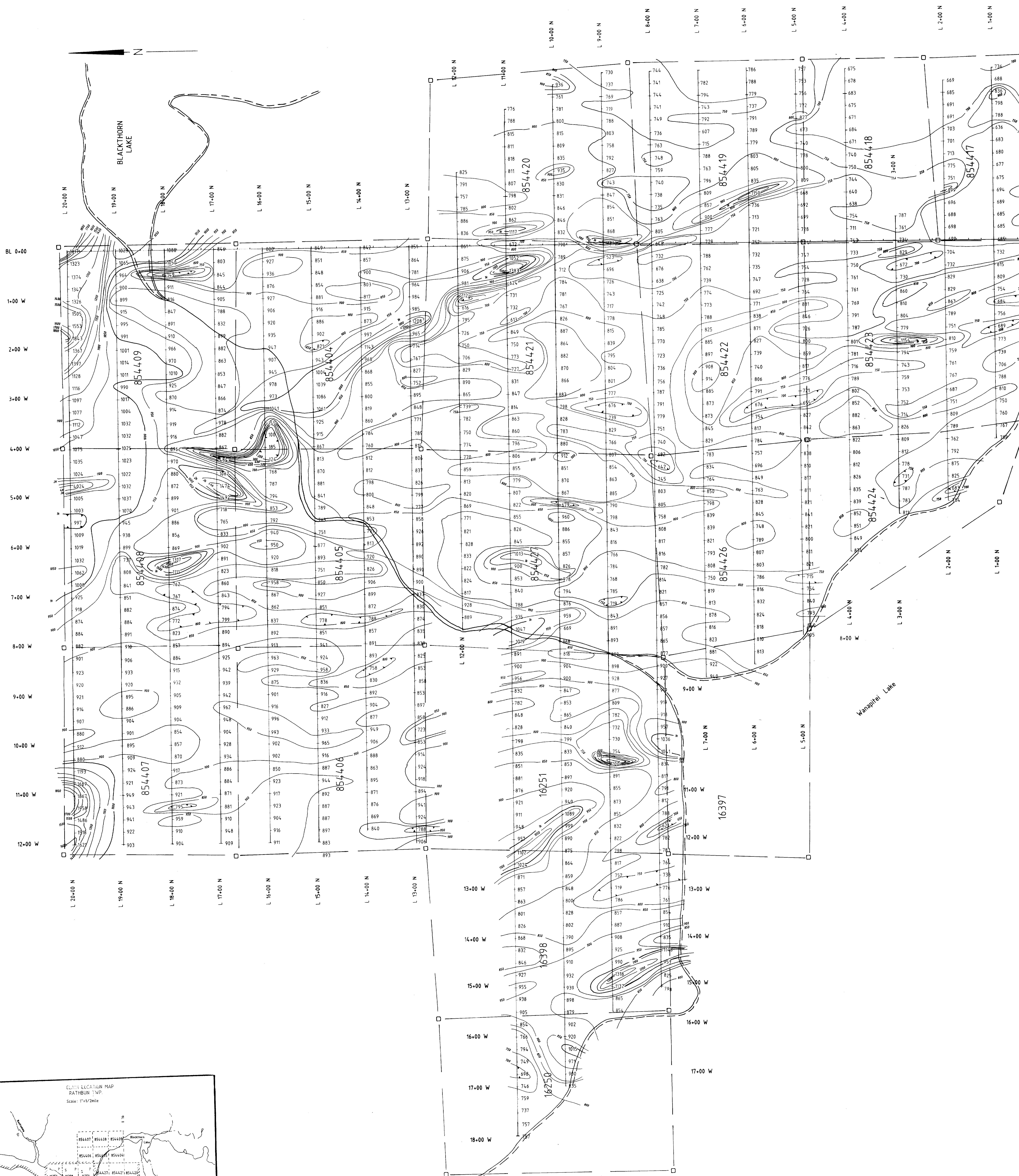
PLAN NO. **M.1071**

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



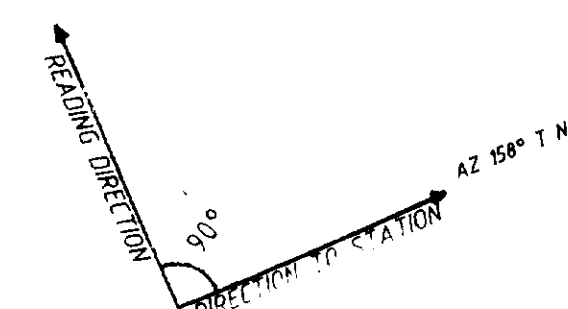
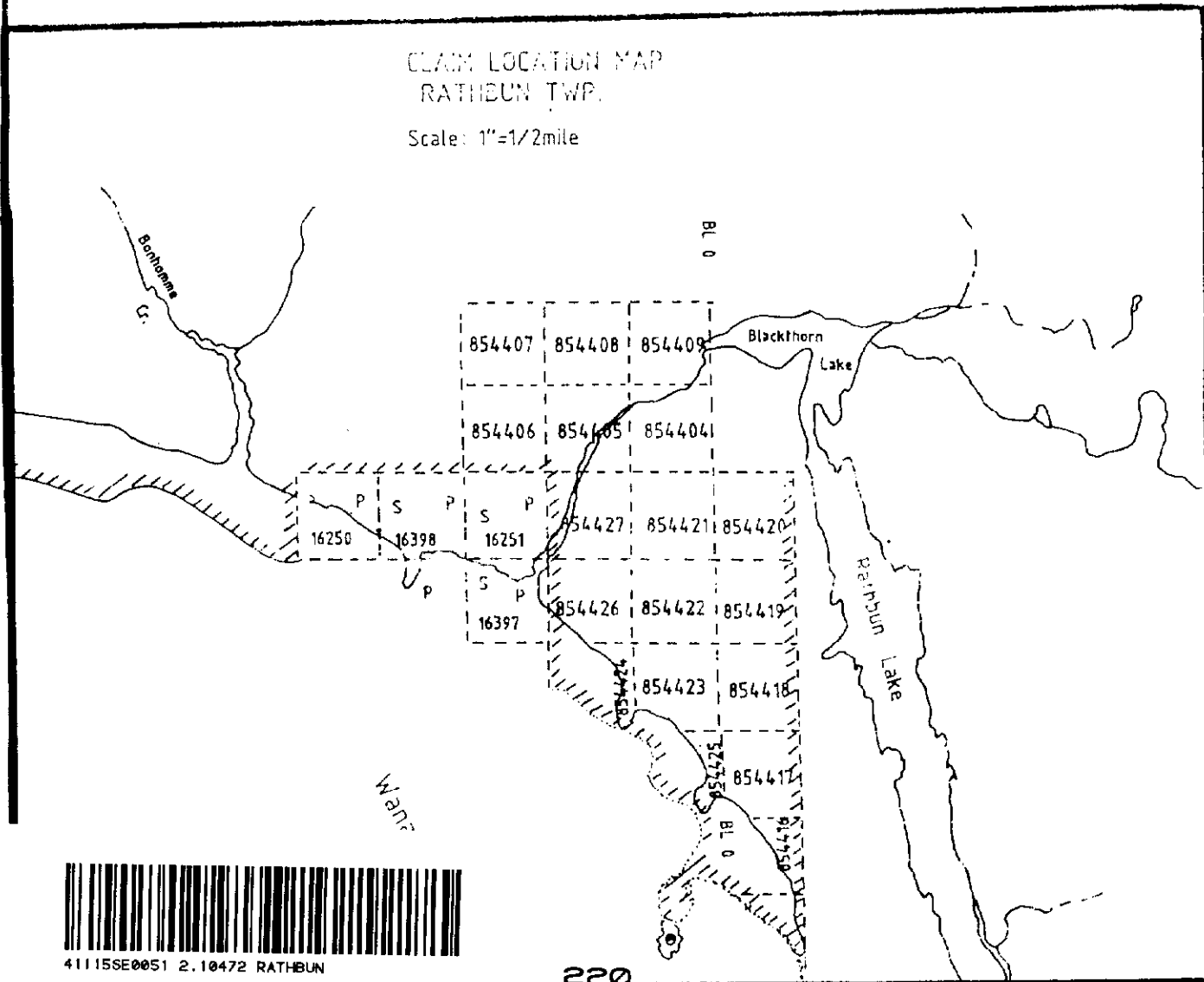
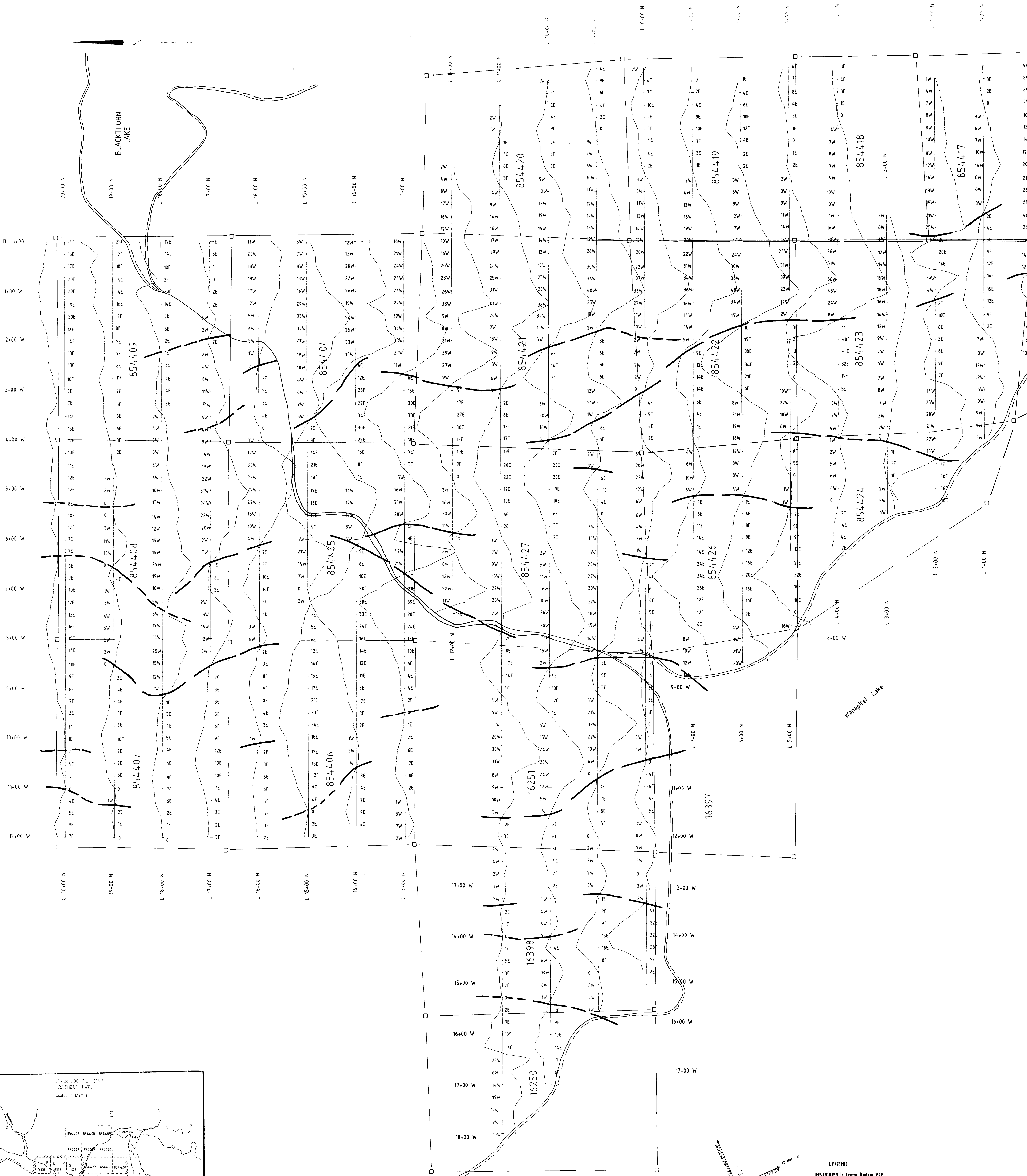
SCADDING TWP. M.1092





INSTRUMENT: Scintrex MP-2 Proton Precession Magnetometer  
 PARAMETERS MEASURED: Earth's Total Magnetic Intensity  
 ACCURACY: +/- 10 nano-Teslas  
 JOURNALS: Corrected by Base Line Looping  
 CONTOUR INTERVAL: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000






**LEGEND**  
 INSTRUMENT: Crone Redem VLF  
 TRANSMITTER STATION: ANNAPOLIS MD (NSSI)  
 FREQUENCY: 214 KHZ  
 PARAMETERS MEASURED: Inphase Dip Angle  
 OPERATOR: L.A.  
 VERTICAL SCALE: 1cm=10%

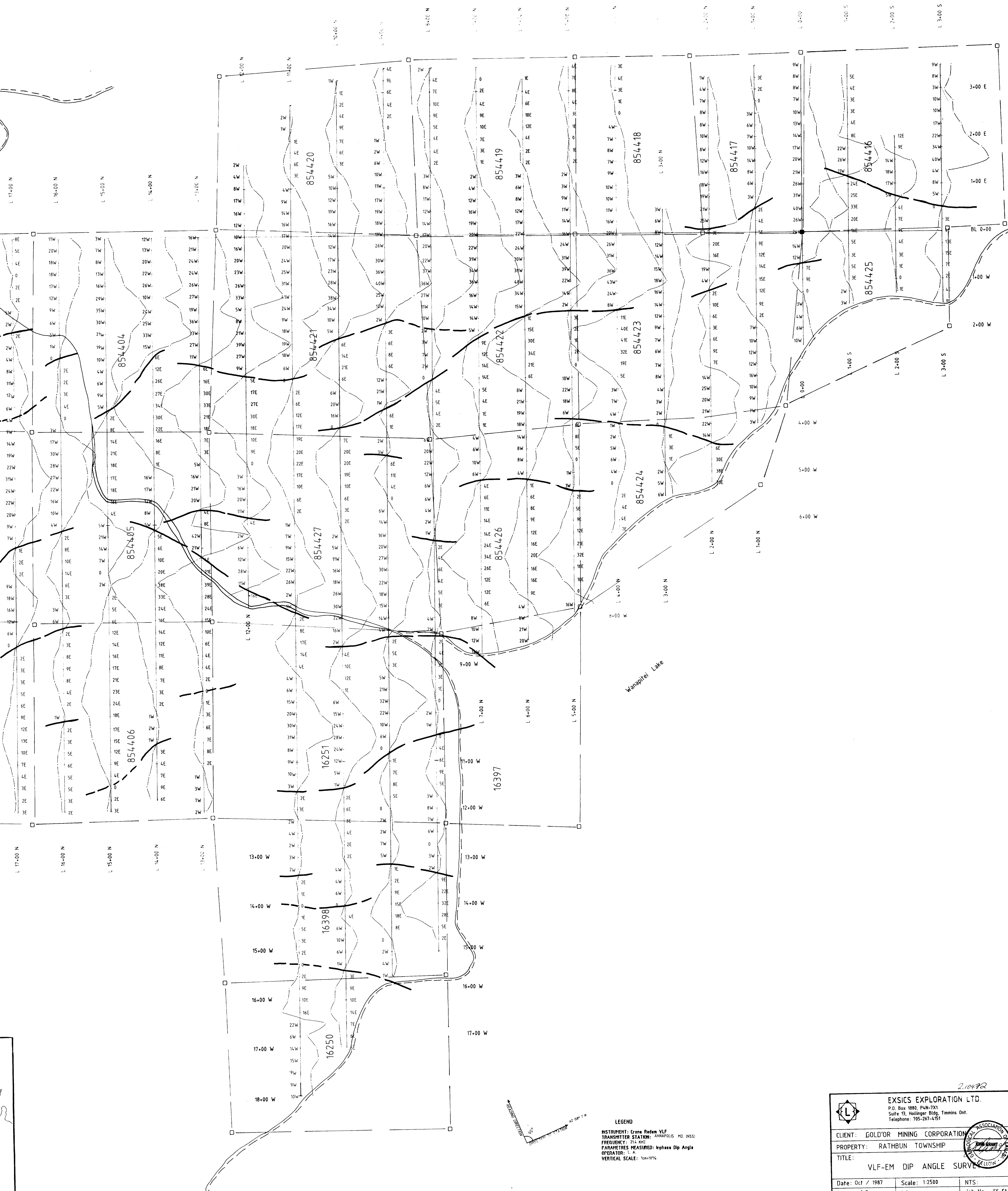




INSTRUMENT: Scintrex MP-2 Proton Precession Magnetometer  
 PARAMETRES MEASURED: Earth's Total Magnetic Field  
 ACCURACY: +/- 10 nano-Teslas  
 DIURNALS: Corrected by Base Line Looping  
 CONTOUR INTERVAL: 100,200,300,400,500,600,700,750,800,850

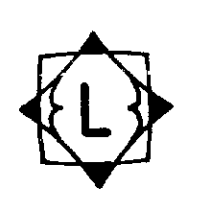
2,109.78

|   |               |               |
|---|---------------|---------------|
|  <b>EXSICS EXPLORATION LTD.</b><br>P.O. Box 1880, P4N-7X1<br>Suite 13, Hattinger Bldg, Timmins Ont.<br>Telephone: 705-267-4151 |               |               |
| CLIENT: GOLD'OR MINING CORPORATION  |               |               |
| PROPERTY: RATHBUN TOWNSHIP  |               |               |
| TITLE: CONTOURED MAGNETOMETER SURVEY  |               |               |
| Date: Oct / 1987  | Scale: 1:2500 | NTS:          |
| Drawn: L.R.   | Interp:       | Job No. EE-51 |



**LEGEND**  
 INSTRUMENT: Erno Rodem VLF  
 TRANSMITTER STATION: ANNAPOLIS MD (NSS)  
 FREQUENCY: 215 KHZ  
 PARAMETERS MEASURED: Inphase Dip Angle  
 OPERATOR: L.A.  
 VERTICAL SCALE: 1cm=10%

2,10478

|  |               |               |
|--|---------------|---------------|
|  <b>EXSICS EXPLORATION LTD.</b><br>P.O. Box 1880, P.N.-7X1<br>Suite 13, Hollinger Bldg, Timmins Ont.<br>Telephone: 705-267-4151 |               |               |
| CLIENT: GOLDOR MINING CORPORATION  |               |               |
| PROPERTY: RATHBUN TOWNSHIP   |               |               |
| TITLE: VLF-EM DIP ANGLE SURVEY   |               |               |
| Date: Oct / 1987   | Scale: 1:2500 | NTS:          |
| Drawn: L.R.  | Interp:       | Job No. EE-51 |