



411155E0070 0033A1 RATHBUN

010  
Ministry of Natural Resources  
RECEIVED /

DEC 7 1983

NORTHEASTERN REGION

MAGNETOMETER SURVEY

OF

MINING CLAIM

538642

IN

RATHBUN TWP.

OF

SUDBURY MINING DISTRICT

RECEIVED

DEC 9 1983

MINING LANDS SECTION

SUDBURY.											
MINING DIV.											
RECEIVED											
DEC 7 1983											
A.M.						P.M.					
7	8	9	10	11	12	1	2	3	4	5	6

REINO, L. VIITALA .

*Reino L. Viitala,*

NOV. 30, 1983.

C- 32251 .

*Just. 2.29/16  
Qual. 2.39/16*



41115SE0070 0033A1 RATHBUN

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010C

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INTRODUCTION

The Magnetometer survey was chosen to determine the relative magnetic characteristics of the two main rock-types within this claim area. Gabbroic outcrops dominate this area, with fine-grained metasediments comprising the south and southeasterly portions. Northeasterly striking Quartz - Carbonate veins intrusively cut both of the rock types.

Correlation with a conductive-axis located earlier by a VLF-survey was confirmed.

This information will be used in conjunction with magnetometer results from Claims 574572 and 574573 to produce a larger map.

METHOD

A flux-gate McPhar M-700 Magnetometer was used in this survey. The unit was standardized by reading Base station 5509 at the Old Crystal mine site. This bench mark was established by the Ministry of Natural Resources as a control station in this area. It is located on gabbroic outcrop. Readings were taken before and after each daily set of readings to ensure control.

Stations were flagged with tape after chaining with Brunton compass and chain. Each line has a shore-line marker which was used as reference for the lake readings. Stations on water were measured by use of a canoe and orientation with the shore-line markers. Lines 1,2,4,6,8, and 9 were surveyed completely with support readings taken on other lines running from north to south.

Care was taken to free the operator of any metallics and readings were taken when meter was stable with the eye bubble level at bulls eye position. The M-700 has a needle deflection style reading in various scales of Gammas. Battery power stayed in the "Green" throughout the survey.

CONCLUSIONS

Generally this claim (538642) can be divided in two regions of different magnetic strength. The north-west region, mainly gabbroic rock type measures around 11500 Gammas, whereas the second region, south-east, consists of metasediments intruded by north-east striking Quartz - Carbonate veins and veinlets, and measured higher at 12000 and 13000 Gammas. These values are not anomolous but show relative values in concentrations.

In an earlier VLF-survey, a conductive-axis running NE under the water portion between the South boundary island and the mainland to the North was detected. This axis resulted in the highest magnetometer readings within this claim boundary.

Metallics are apparently more concentrated by the intrusive vein systems in the metasediments than the Gabbroic host rock. Some of these concentrations could be fault-related along Lake Matagasi in and along secondary fault lines or even in stock works systems.

This magnetometer survey indicates that further investigation of the veining systems within the Metasediments is warranted.

Qualifications on file with:

Mr. E.F. Anderson, Director  
Land Management Branch,  
Whitney Block, Rm 6450,  
Queens park, Toronto  
M7A-1W3



41155E0070 0033A1 RATHBUN

900

Initial Check

Dec 28, 1983 Mary-Elle Andersson.

Assessed

Apr. 17/84 - D.K.

Approved Reports of Work  
sent out

\_\_\_\_\_

Notice of Intent filed

\_\_\_\_\_

Approval after Notice of Intent  
sent out

\_\_\_\_\_

Duplicate sent to Resident  
Geologist

\_\_\_\_\_

Duplicate sent to A.F.R.O.

\_\_\_\_\_



Ontario

Ministry of  
Natural  
Resources

Work Permit (178)

4

Distribution Part 1 - Permittee  
2 - File  
3 - Field Office  
4 - Other

Under The Forest Fires Prevention Act and the regulations, and subject to the limitations thereof and subject also to the terms and conditions herein, this permit is issued to:

Name of Permittee REINO L. VIITALA

Post Office Address RR#17, Site 25, Thunder Bay

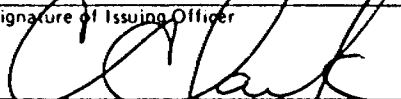
To conduct an operation from the 5th day of November, 1983 to and including the 30th day of November, 1983 on the following work permit area:

RATHBUN Township - Lots 5,6 Con.IV  
Mining Claims 574572,575573,538642

For the purpose of Geophysics (Magnetometer)

Subject to the following conditions

1. The Permittee shall keep this permit or a true copy thereof on the work permit area.
2. The person in charge of the operation conducted under this permit shall produce and show this permit or the true copy kept on the work permit area to any officer whenever requested by the officer.
3. Other conditions:

Place of Issue McFarlane Lake Sudbury District	Date of Issue Oct.25, 1983	Signature of Issuing Officer 
--	-------------------------------	---

Important

Separate authority must be obtained before cutting any timber and before doing any burning.

This permit does not authorize the permittee to carry on operations on privately held land, as such authority can be given only by the owner of the land.

**Extracts from The Forest Fires Prevention Act**

Section 15. — (1) Except under the authority of a work permit, no person shall, in or within 1,000 feet of a forest or woodland,

- (a) carry on any logging, mining or industrial operation;
- (b) clear land;
- (c) construct a dam, bridge or camp;
- (d) operate a mill for the purpose of manufacturing timber; or
- (e) carry on any operation liable to cause the accumulation of slash or debris.

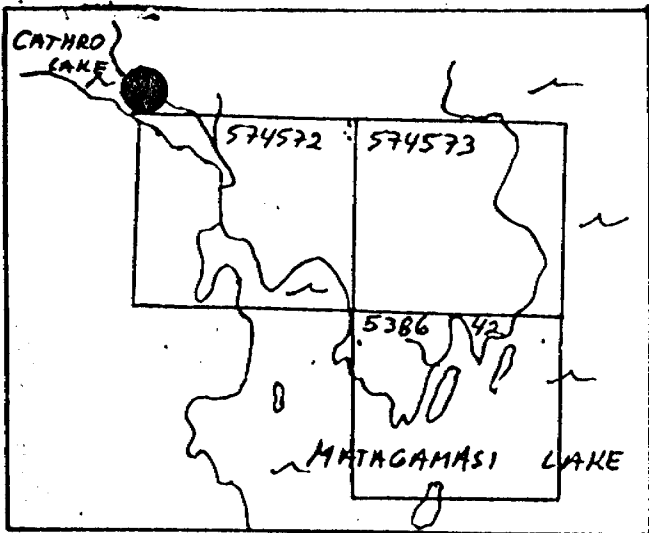
(2) A work permit may be limited as to duration and area, but in any event it expires with the 31st day of March next following the date of issue and may contain such terms and conditions as the issuing officer deems necessary.

(3) An officer may in the interest of forest protection cancel or suspend a work permit at any time.

(4) Where an officer finds an operation mentioned in subsection 1 being conducted without a work permit, he may order that the operation shall cease until a work permit has been obtained and any person carrying on an operation after such order has been made is, in addition to any penalty imposed, subject to a fine of \$100 for each day such operation is continued without a work permit.

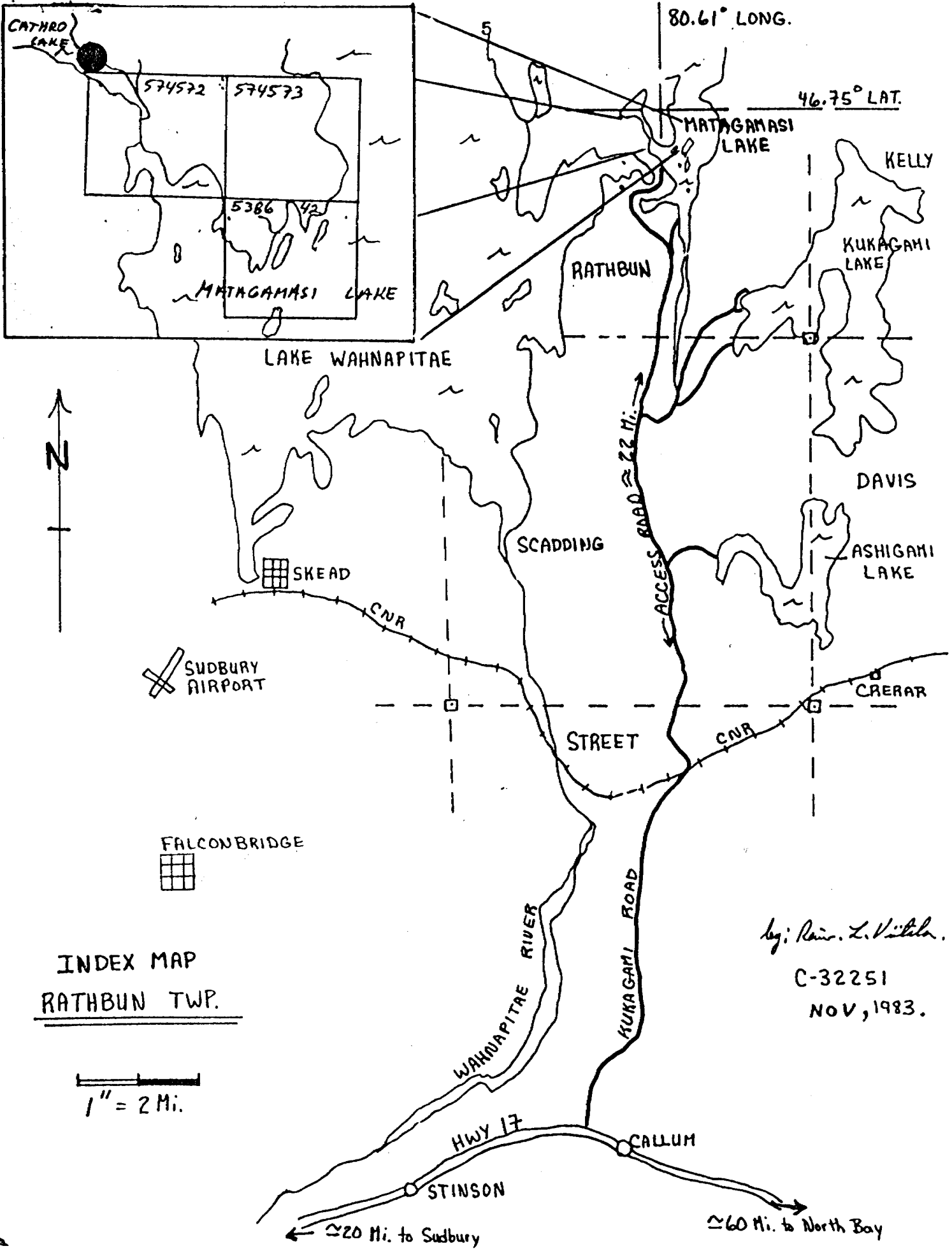
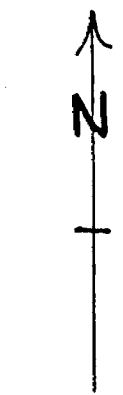
(5) Where a person carries on an operation mentioned in subsection 1 through a servant, contractor, subcontractor or someone on his behalf, he shall obtain any permit required under this Act and he shall be deemed to have committed any offence against this Act or the regulations committed by his servant, contractor, subcontractor or person acting on his behalf in carrying out the operation.





80.61° LONG.

46.75° LAT.



SUDBURY AIRPORT

FALCONBRIDGE

by: Rain. L. Vittel.

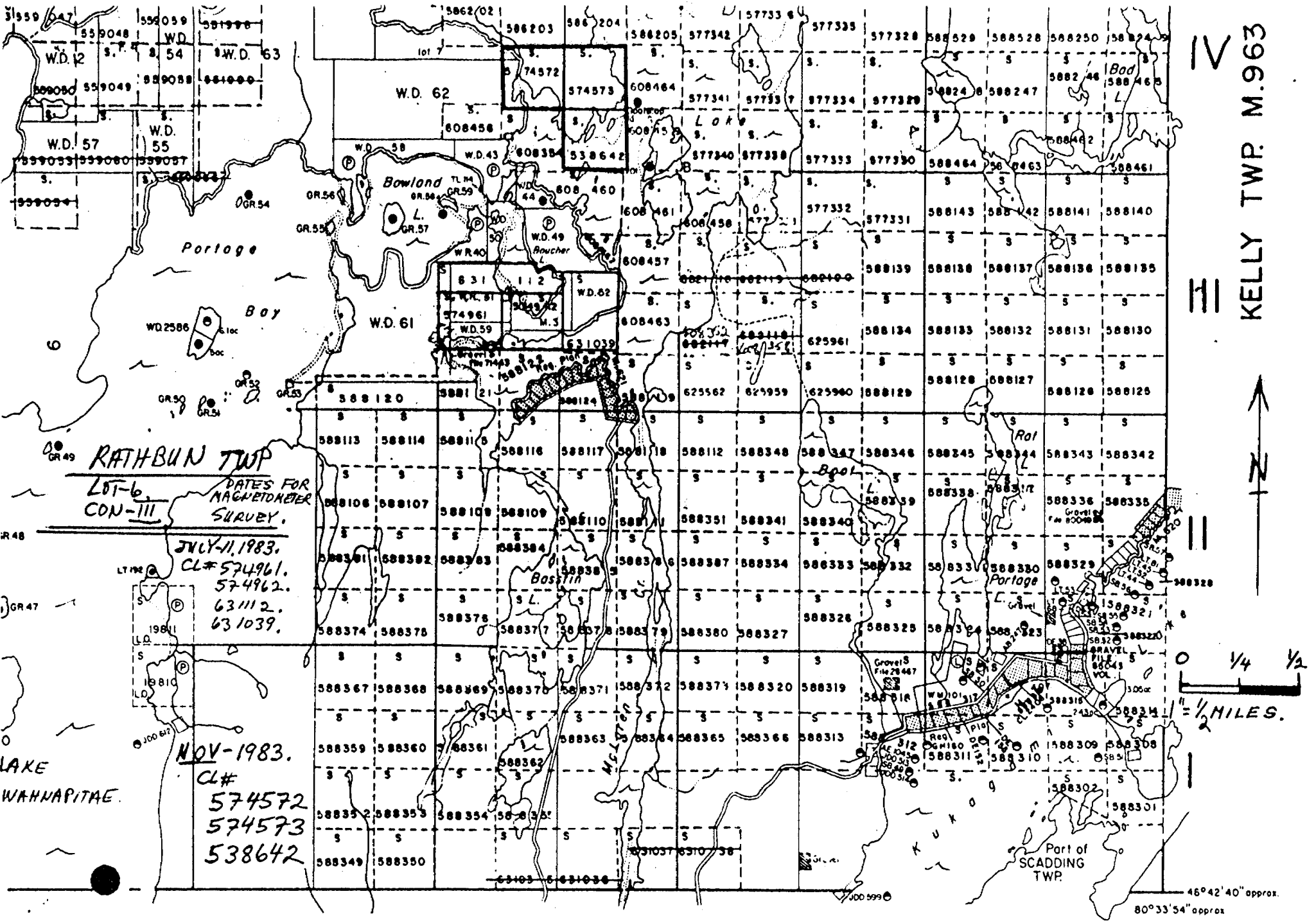
C-32251  
NOV, 1983.

INDEX MAP  
RATHBUN TWP.

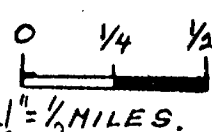
1" = 2 Mi.

← ≈20 Mi. to Sudbury

≈60 Mi. to North Bay →



IV  
III  
KELLY TWP. M.963



46°42'40" approx.  
80°33'54" approx

RATHBUN TWP  
LOT-6  
CON-III  
DATES FOR  
MAGNETOMETER  
SURVEY.

JULY-11, 1983.  
CL# 574961.  
574962.  
631112.  
631039.

NOV-1983.  
CL#  
574572  
574573  
538642

CLAIMS MAP, RATHBUN TWP.

SCADDING TWP. M.1092

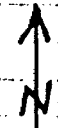
by Rev. L. Vitale.

# MAGNETOMER READINGS

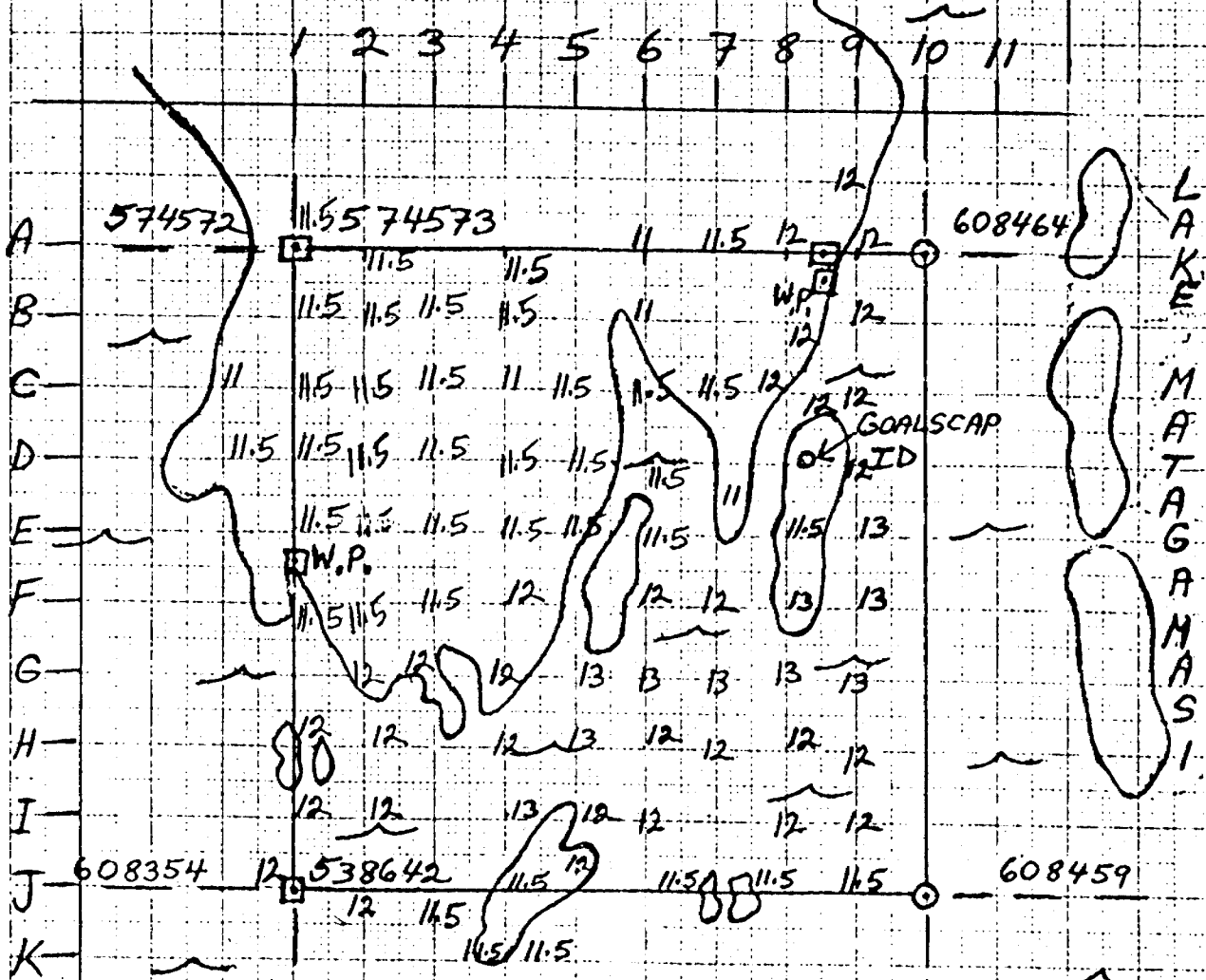
## BASE MAP OF CLAIM

### # 538642.

SCALE 1" = 400 FT.



READINGS = GAMMAS ( $\times 10^3$ ).



# 538642 (SW 1/4 of S 1/2 LOT-5. CON-IV.)

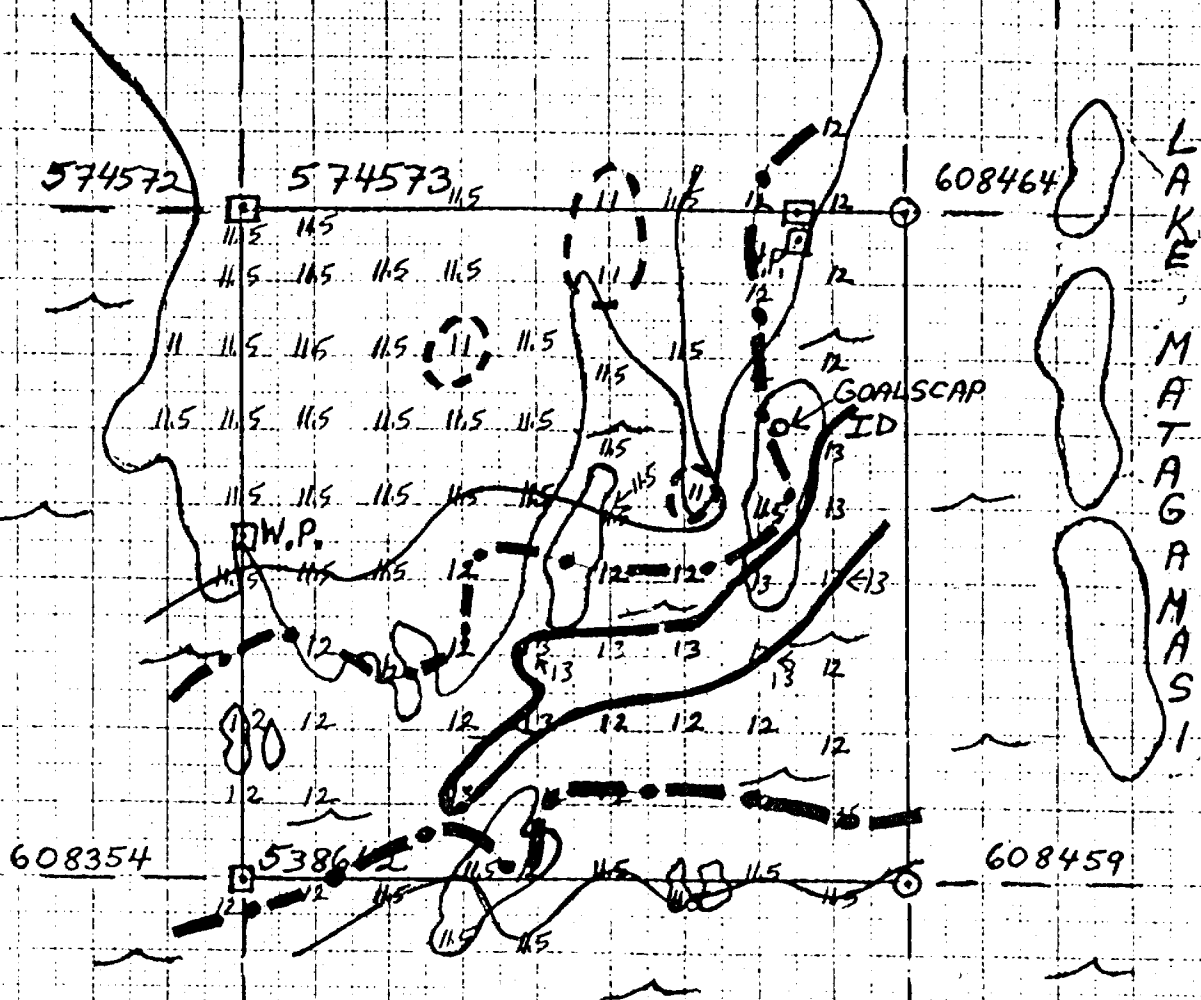
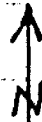
TOWNSHIP OF  
RATHBUN. NOV-1983.

BY REINO, L. VIITALA.  
GEOLOGICAL TECHNOLOGIST.  
iby R.

BASE MAP OF CLAIM  
# 538642.

SCALE 1" = 400 FT.

# MAGNETOMETER CONTOURS.



- = 11,000 GAMMAS.
- = 11,500
- = 12,000
- = 13,000

# 538642 (SW 1/4 of S 1/2 LOT-5. CON-IV.)

TOWNSHIP OF  
RATHBUN. NOV-1983.

BY REINO, L. VIITALA.  
GEOLOGICAL TECHNOLOGIST.  
L.S. P.

# MAGNETOMETER PROFILES

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G-15 SQUARE 5 X 5 TO THE CM  
SPECIFY TRACING OR DRAWING PAPER

G  
A  
M  
M  
A  
S

13000  
12000  
11000

LINE-1

13000  
12000  
11000

LINE-2

13000  
12000  
11000

LINE-4

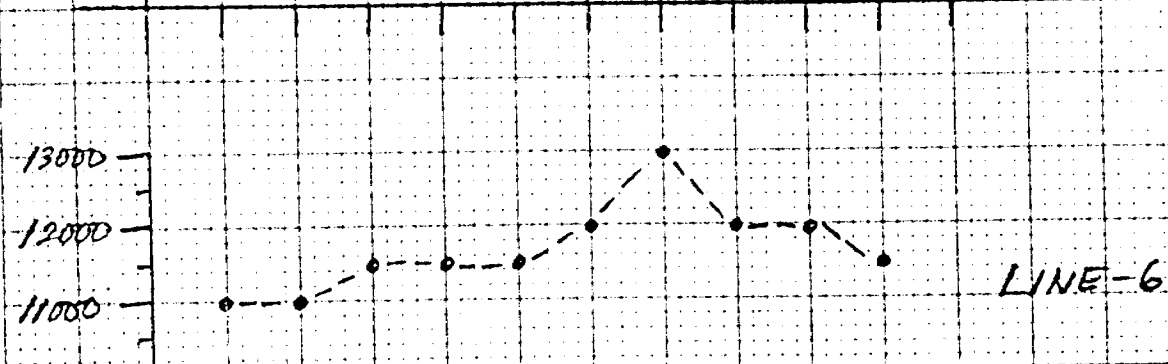
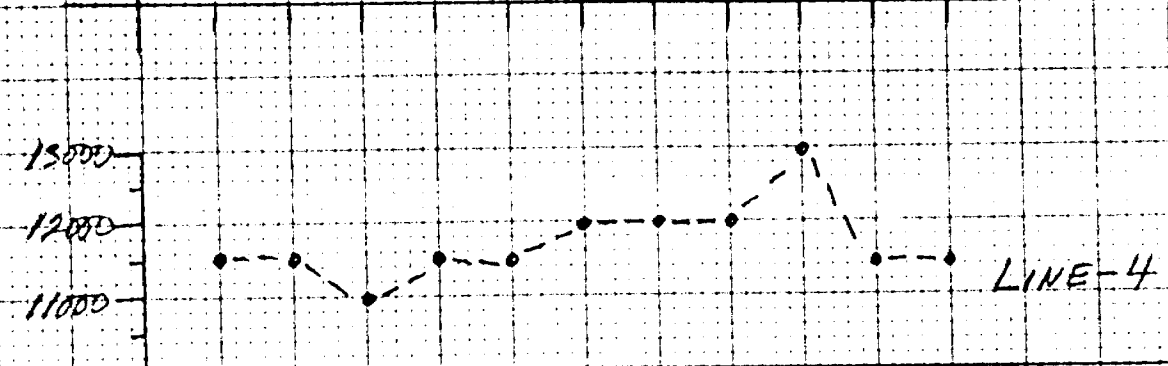
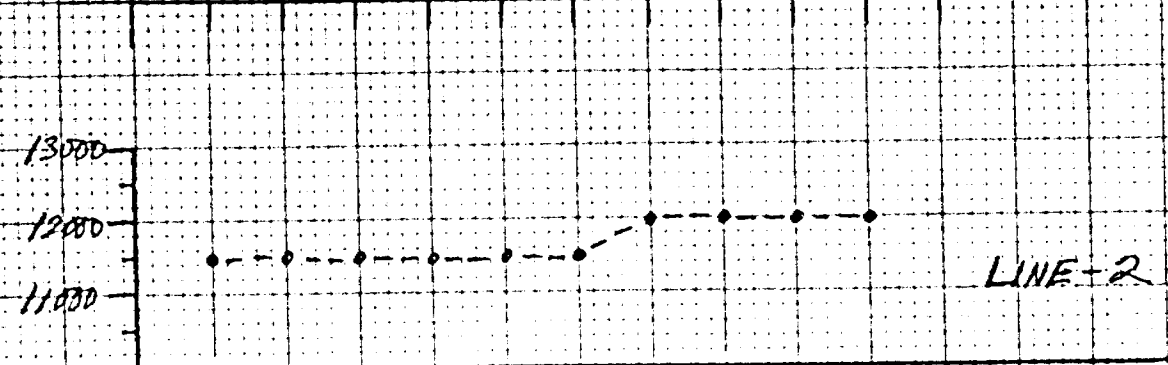
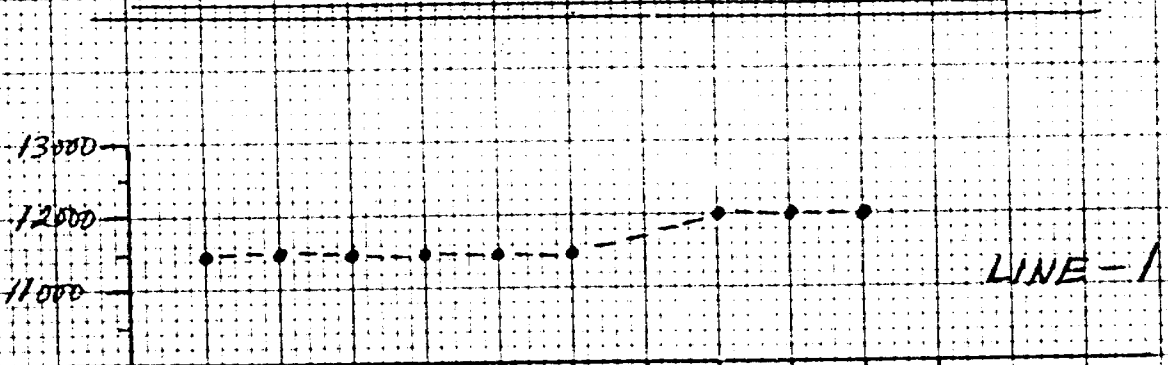
13000  
12000  
11000

LINE-6

A B C D E F G H I J K

STATION

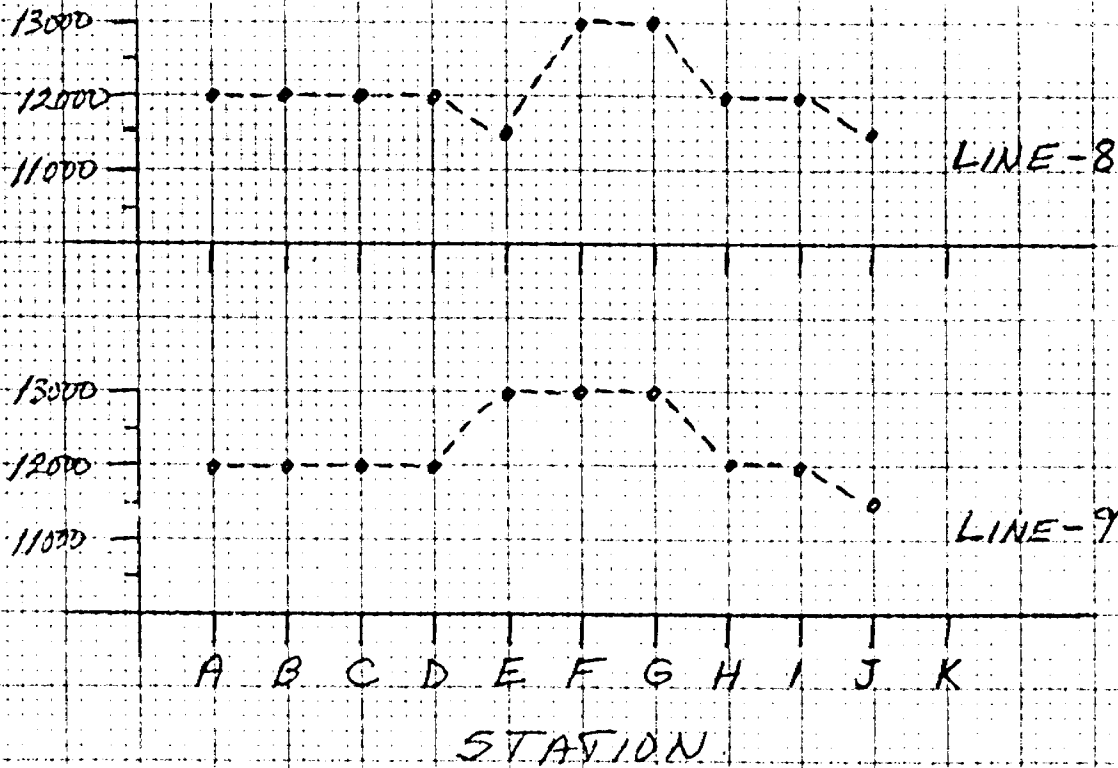
by R.



# MAGNETOMETER PROFILES

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G  
A  
M  
M  
A  
S



MAGNETOMETER BASE STATION AT OLD CRYSTAL MINE SITE SITUATED ON GABROIC OUTCROP. (MINISTRY OF NATURAL RESOURCES BENCH-MARK # 5509.)

NOV-11-1983. CHECKED AT 10:30 AM = 10,800 GAMMAS.  
- AT 6:00 PM = 10,800 GAMMAS.

INSTRUMENT USED = McPHAR M-700.

by R.

G-15 SQUARE 5 X 5 10" X 14" CM  
SPECIFY TRACING OR DRAWING PAPER



2.6138  
2.6138

1. Type of Survey ... MAGNETOMETER - GEOPHYSICAL
2. Township or Area ... RATHBUN TWP. LOT-5.2 CN-1V.
3. Numbers of Mining Claims Traversed by Survey ...  
1-538642
4. Number of Miles of Line Cut ALREADY ESTABLISHED GRID Flown
- \*5. Number of Stations Established ... 84
- \*6. Make and type of Instrument Used FLUX-GATE MCPHAR M-700 MAGNETOMETER
- \*7. Scale Constant or Sensitivity ... GAMMAS ( $\times 10^3$ )
- \*8. Frequency Used and Power Output
9. Summary of Assessment Credits (details on reverse side)  
Total 8 hour Technical Days (Include Consultants, Draughting etc.) ... 4  
Total 8 hour Line-Cutting Days ...

Calculation

$$\frac{4}{\text{Technical}} \times 7 = \frac{28}{\text{Line-cutting}} + \frac{0}{\text{Line-cutting}} = \frac{28}{\text{Line-cutting}} \div \frac{1}{\text{Number of claims}} = \frac{28}{\text{Assessment credits per claim}}$$

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: Apr 7/84

Signed: Reino L. Virta

*Note - To reassess survey to # of mandays worked from previous expenditures assessment, File 2.6138.*

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

RECEIVED

APR 16 1984

MINING LANDS SECTION

2.6138  
2.6138

### 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>
1) - FLAGGING & CHAINING STATIONS ALONG OLD GRID-LINES.	REINO VITALA	NOV-11, 1983	1
	SHIRLEY RAINEN	NOV-11, 1983	1
2) - MAGNETOMETER READINGS	REINO VITALA	NOV-12, 1983	1

#### CONSULTANTS

<u>Name &amp; Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

#### 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>
REINO L. VITALA	COMPILATIONS & TYPING - MAPS.	Dec 4, 1983	1

TOTAL 8 HOUR TECHNICAL DAYS 4

#### 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 \_\_\_\_\_





Ministry of  
Natural  
Resources

Geotechnical  
Report  
Approval

No. 2.6138

Mining Lands Comments

- require cancelled cheques and receipts  
 - requires breakdown of man days and # of credits requested

To: Geophysics Mr. R. Barlow

Comments

Approved

Wish to see again with corrections

Date

Jan 13/89

Signature

R Barlow

To: Geology - Expenditures Mr. C. Krusta

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Geochemistry

Comments

LD

Approved

Wish to see again with corrections

Date

Signature

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

(Tel: 5-1380)