



52J08NW9215 2.611 JUTTEN

010

UNITED MACFIE MINES LTD.  
JUTTEN TOWNSHIP PROPERTY  
STURGEON-SAVANT LAKES AREA  
RONKA EM 16 & MAGNETOMETER SURVEY.

INTRODUCTION

United Macfie Mines Ltd. owns a group of 15 mining claims located in Jutten Township, Patricia Mining Division, Ontario. During the summer of 1971, 12 of the 15 claims were surveyed magnetically and electromagnetically. The 3 unsurveyed claims are entirely covered with water.

The field work and data plotting were done by Roger Mercier and C.J. Miller of Mid-North Engineering Services Ltd. The data was interpreted by the writer.

PROPERTY & LOCATION

The survey area consists of 12 mining claims numbered as follows:

Pa 280973 to Pa 280982 incl., and  
Pa 285917 to Pa 285918 .

The property is accessible from Highway 599 by boat on Savant Lake.

SURVEY METHODS & INSTRUMENT DATA

The surveys were carried out on a network of picket lines striking N35W at 400 ft. intervals. Survey readings were taken at 50 ft. intervals along each picket line. Altogether 6.2 miles of line were surveyed. Electromagnetic readings totalled 1,060, magnetic 630, for a grand total of 1,690 readings.

**DUPLICATE COPY  
POOR QUALITY ORIGINAL  
TO FOLLOW**

RECEIVED  
SEP 23 1971  
PROJECTS  
SECTION

UNITED MACFIE MINES LTD.  
E  
JUTTAN TOWNSHIP PROPERTY  
STURGEON-SAVANT LAKES AREA  
RONKA EM 16 & MAGNETOMETER SURVEY

INTRODUCTION

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PA280973 to PA280982 incl., and  
PA285917 and PA285918.

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ONT. DEPT. OF MINES  
RECEIVED  
APR 26 1972  
Resident Geologist, Kenora, Ont.

The magnetic survey was made using a Sharpe PMF 3 magnetometer. The instrument measures the vertical component of the earth's magnetic field. Readings were plotted as gammas after correction for diurnal variations.

The electromagnetic survey was made using a Ronka EM 16 electromagnetic unit. This instrument utilizes the United States Very Low Frequency transmitting stations for its signal. The VLF stations set up a series of concentric horizontal magnetic fields about their vertical antennae and when their magnetic fields encounter conductive bodies in the ground, secondary magnetic fields are set up which radiate from these bodies. The EM 16 measures the vertical components of these secondary fields by means of two coils.

For this survey signals from the station located at Cutler, Maine, were used. Two readings, the In-Phase and the Quadrature were measured at each station.

### SURVEY RESULTS & INTERPRETATION

#### Magnetic Survey

Over the claim area background magnetic intensities vary from around 1,300 to 1,700 gammas. Readings of over 2,000 gammas are common but very few high readings were observed. The strongest recorded reading is 23,200 gammas; the second strongest, 8,400 gammas; the third, 6,000 gammas. This suggests that rich concentrations of magnetite are scarce. Also there are no strong magnetic "ridges", a further suggestion of the lack or weakness of iron formations.

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POOR QUALITY ORIGINAL  
TO FOLLOW**

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There is a broad area of increased magnetism in the north central part of the property. The irregular shape of this area suggests a basic intrusive and since the highest magnetic reading on the property occurs here (it is an isolated reading) some magnetite is certainly present.

There are numerous small areas of above average magnetic intensity, none of which have any special distinctions.

#### Electromagnetic survey

Several zones of electromagnetic conductivity were detected and the odd fact is that none have any consistent relationship with the zones of above normal magnetism.

Conductive zones are associated with the old trenchings at several places but the conductors tend to flank the trenches suggesting that the trenches never reached the main zone of weakness. Gold values are known to be associated with some of the trenches.

The electromagnetic readings indicate that a major conductor or conductors must strike roughly east-west under Savant Lake. This zone extends onto land at the east end of the property and is associated with an irregular magnetic zone. This particular magnetic-electromagnetic relationship is the most consistent one on the property.

The electromagnetic conductors are far too numerous to drill test and they require appraisal by follow-up techniques such as geochemical prospecting, horizontal loop surveying, and general prospecting.

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TO FOLLOW**

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### CONCLUSIONS & RECOMMENDATIONS

1. Magnetic and electromagnetic surveys at 400 ft. line intervals and 50 ft. station intervals have been completed on the property and have resulted in locating numerous areas of above normal magnetism and electromagnetic conductivity.
2. A proposal to test certain of the survey results by 5 diamond drill holes of which the first 3 listed were given the top priority, has been submitted separately with their locations, bearings, dips and length. The total footage recommended was 1,250 feet.
3. Electromagnetic conductors located on the property are too numerous to drill-test. Therefore the better looking conductors should be classified with respect to each other by means of geochemical prospecting and horizontal loop surveying. This work should be done after the preliminary drilling when all conductors can be re-revaluated vis-a-vis the drill results.
4. There is every indication of a major zone of electromagnetic conductivity lying under Savant Lake on Claims Pa 280981 and Pa 280977, etc. This area should be surveyed from the ice.

My report is respectfully submitted.

Willowdale, Ontario  
August 31, 1971

H. Grant Harper, F.G.A.C., P.Eng.  
Economic Geologist.

**DUPLICATE COPY  
POOR QUALITY ORIGINAL  
TO FOLLOW**

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Willowdale, Ontario  
August 31, 1971

H. Grant Harper, F.G.A.C., P.Eng.  
Economic Geologist





52J08NW9215 2.611 JUTTEN

900

(United Machie M.L.)

ASSESSMENT WORK DETAILS

Type of Survey Magnetometer  
A separate form is required for each type of survey

Township or Area Jutten Twp.

Chief Line Cutter C. D. Huston & Sons  
Name  
 or Contractor 5 "A" Street, Wawa, Ont.  
Address

Party Chief Roger Mercier  
Name  
Cardiff, Ontario  
Address

Consultant H. Grant Harper, P. Eng.  
Name  
314 Hendon Ave, Killoolek  
Address

Geological field mapping by \_\_\_\_\_  
Name  
 \_\_\_\_\_  
Address

COVERING DATES

Line Cutting Feb 13 - Mar 10 1971

Field Jun 13 - 19 1971  
Instrument work, geological mapping, sampling etc.

Office Jul 22 - 27 Aug 26 - 29 1971

INSTRUMENT DATA

Make, Model and Type Sharpe PMF 3

Scale Constant or Sensitivity \_\_\_\_\_  
Or provide copy of instrument data from Manufacturer's brochure.

Radiometric Background Count \_\_\_\_\_

Number of Stations Within Claim Group 630

Number of Readings Within Claim Group 630

Number of Miles of Line cut Within Claim Group 6.2

Number of Samples Collected Within Claim Group \_\_\_\_\_

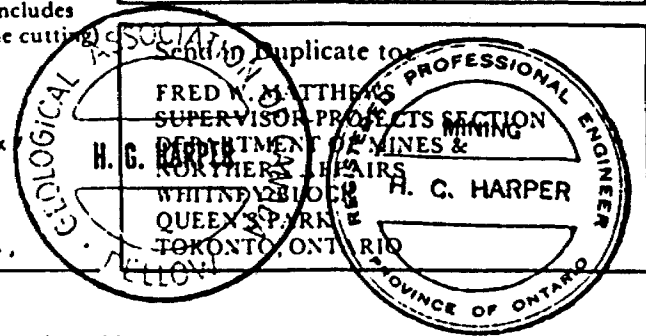
SPECIAL PROVISION CREDITS for PERFORMANCE & COVERAGE	
MINING CLAIMS TRAVERSED List numerically	
PA 280973	x
280974	x
280975	1/2
280976	✓
280977	1/2
280978	1/2
280979	✓
280980	✓
280981	1/2
280982	✓
PA 285917	✓
285918	✓
RECEIVED SEP 23 1971 PROJECTS SECTION.	
Areas not covered = 1 3/4 claims no credit for circled claims	
400 ÷ 11.75 = 34 days per cl.	
TOTAL CLAIMS <u>12</u>	

If space insufficient, attach list

CREDITS REQUESTED

	20 DAYS per claim	40 DAYS per claim	----- Includes (Line cutting)
Geological Survey	<input type="checkbox"/>	<input type="checkbox"/>	
Geophysical Survey	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Show Check
Geochemical Survey	<input type="checkbox"/>	<input type="checkbox"/>	

DATE Aug 31/71 SIGNED H. G. Harper.



Performance and coverage credits do not apply to airborne surveys

TO  
E. 2611



(United Machie)  
**JUTTEN TWP**  
M-1767

A separate form is required for each type of work to be recorded.

#345  
(b)

THE MINING ACT REPORT OF WORK

To the Recorder of Patricia Mining Division  
1, Mid-North Engineering Service Ltd. A 22041  
name of Recorded Holder Miner's Licence  
416 - 25 Adelaide St. W., Toronto.

do hereby report the performance of 240 days of Electromagnetic Survey  
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
<u>see attached schedule</u>					
<u>(24 days)</u>					

All the work was performed on Mining Claim (s) all  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

- For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.
- For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
- For Compressed Air or Other Power Driven or Mechanical Equipment
- Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
- For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
- With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
- For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
- For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

See attached schedule  
Duplicate Reports & Pink Forms sent to F.W. Matthews  
as per special provisions

Date Aug 31/71  
Signature of Recorded Holder or Agent H. G. Harper.

The Mining Act  
Certificate Verifying Report of Work

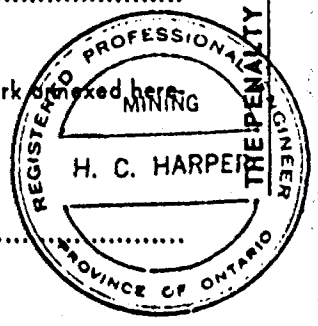
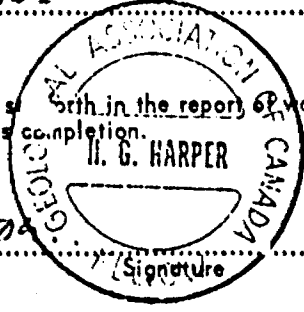
1, H. G. Harper.  
314 Hendon Ave., Willowdale.  
(Post Office Address)

hereby certify:

- That I have a personal and intimate knowledge of the facts set forth in the report of work annexed here to, having performed the work or witnessed same during and/or after its completion.
- That the annexed report is true.

Dated Aug 31/71 19

PATRICIA  
MINING DIVISION  
REGISTRY  
SEP 24 1971  
AM 9:00 PM 4:58



Pa. 280973

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

(United Metric)

ASSESSMENT WORK DETAILS

Type of Survey Electromagnetic  
A separate form is required for each type of survey

Township or Area Totten Twp

Chief Line Cutter C. D. Huston & Sons Ltd  
Name  
 or Contractor 5 "A" Street, Wawa, Ont.  
Address

Party Chief Roger Mercier  
Name  
Corduff, Ontario  
Address

Consultant H. Grant Harper,  
Name  
314 Hendon Ave, Welland, Ont.  
Address

Geological field mapping by \_\_\_\_\_  
Name  
 \_\_\_\_\_  
Address

COVERING DATES

Line Cutting Feb 13 to Mar 10 1971

Field Jun 13 - 19 1971  
Instrument work, geological mapping, sampling etc.

Office July 22 - 24 Aug 26 - 29 1971

INSTRUMENT DATA

Make, Model and Type Ronko FM 16

Scale Constant or Sensitivity \_\_\_\_\_  
Or provide copy of instrument data from Manufacturer's brochure.

Radiometric Background Count \_\_\_\_\_

Number of Stations Within Claim Group 530

Number of Readings Within Claim Group 1060

Number of Miles of Line cut Within Claim Group 6.2

Number of Samples Collected Within Claim Group \_\_\_\_\_

CREDITS REQUESTED

	20 DAYS per claim	40 DAYS per claim	----- Includes (Line cutting)
Geological Survey	<input type="checkbox"/>	<input type="checkbox"/>	
Geophysical Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Show Check ✓
Geochemical Survey	<input type="checkbox"/>	<input type="checkbox"/>	

DATE Aug 31/71 SIGNED H. G. Harper.

SPECIAL PROVISION CREDITS  
for  
PERFORMANCE & COVERAGE

MINING CLAIMS TRAVERSED  
List numerically

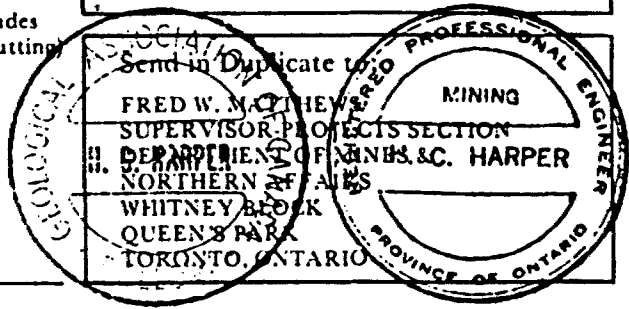
PA 280 973  
 280 974  
 280 975  
 280 976  
 280 977  
 280 978  
 280 979  
 280 980  
 280 981  
 280 982

PA 285 917  
 285 918

RECEIVED  
 SEP 23 1971  
 PROJECTS  
 SECTION

same coverage as map  
 allows 17 days per 1' checked  
 mineral claims

TOTAL CLAIMS 12



If space insufficient, attach list

JUTTEN TWP. (United Mastic)



M-1767

A separate form is required for each type of work to be recorded.

#345 (a)

THE MINING ACT REPORT OF WORK

To the Recorder of Patricia Mining Division  
1. Mid-North Engineering Services Ltd A 22041  
name of Recorded Holder Miner's Licence

416-25 Adelaide St. West Toronto  
Post Office Address

do hereby report the performance of 480 days of Magnetometer Survey type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
.....	.....	.....	.....	.....	.....
see attached schedule					
(40 days)					
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

All the work was performed on Mining Claim (s) 211  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

- For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.
- For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
- For Compressed Air or Other Power Driven or Mechanical Equipment  
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
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see attached schedule.

Duplicate Reports & Pink forms sent to F.W. Matthews.  
re per special provisions

Date Aug 31/71 per H. G. Harper  
Signature of Recorded Holder or Agent

The Mining Act Certificate Verifying Report of Work

1. H. G. Harper  
314 Hendon Ave. Willowdale  
(Post Office Address)

hereby certify:

- That I have a personal and intimate knowledge of the facts set forth in the report of work annexed here-to, having performed the work or witnessed same during and/or after its completion.
- That the annexed report is true.

Dated Aug 31 1971

PATRICIA MINING DIV. RECEIVED SEP 24 1971 AM 10:28:58 PM

H. G. HARPER Signature

REGISTERED PROFESSIONAL ENGINEER MINING H. C. HARPER PROVINCE OF ONTARIO

Pa. 280973

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH



ONTARIO

Ministry  
of Natural  
Resources

Room W 1617, Parliament Buildings  
Queen's Park, Toronto 182

April 21, 1972

Dear Sir:

Re: Mining Claim Pa. 280975 et al,  
Jutten Township, File 2.611

The Geophysical (Magnetometer and Electromagnetic) assessment work credits as listed with my Notice of Intent dated March 30, 1972 have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Matthews  
Supervisor  
Projects Section

OJ/mw

cc: Mid-North Engineering Services Ltd.

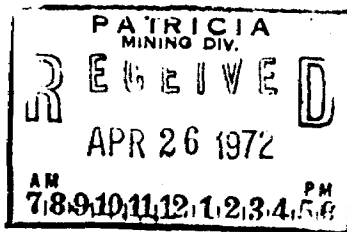
cc: H. G. Harper, P. Eng.

cc: United Macfie Mines Ltd.

cc: Resident Geologist  
Kenora, Ontario

Telephone 416:965-6918 When replying kindly quote this file number 2.611

Mr. W. A. Buchan  
Mining Recorder  
P.O. Box 669  
Sioux Lookout, Ontario



Pa. 280973



TECHNICAL ASSESSMENT WORK CREDITS

Recorder Holder ..... Mid-North Engineering Services Limited .....

Township or Area ..... Jutten Township .....

Type of Survey and number of Assessment Days Credits per claim

**GEOPHYSICAL**

Magnetometer ..... 34 ..... days

Electromagnetic ..... 17 ..... days

Radiometric ..... ..... days

..... days  
**GEOLOGICAL**..... days

**GEOCHEMICAL**..... days

Man days

Ground

Special Provision

Airborne

NOTICE OF INTENT TO BE ISSUED

Credits have been reduced because of partial coverage of claims.

Credits have been reduced because of corrections to work dates and figures of applicant.

NO CREDITS have been allowed for the following mining claims as they were not sufficiently covered by the survey:

Pa. 280973

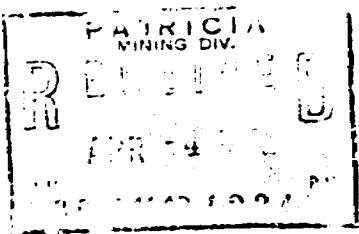
280974

\_\_\_\_\_

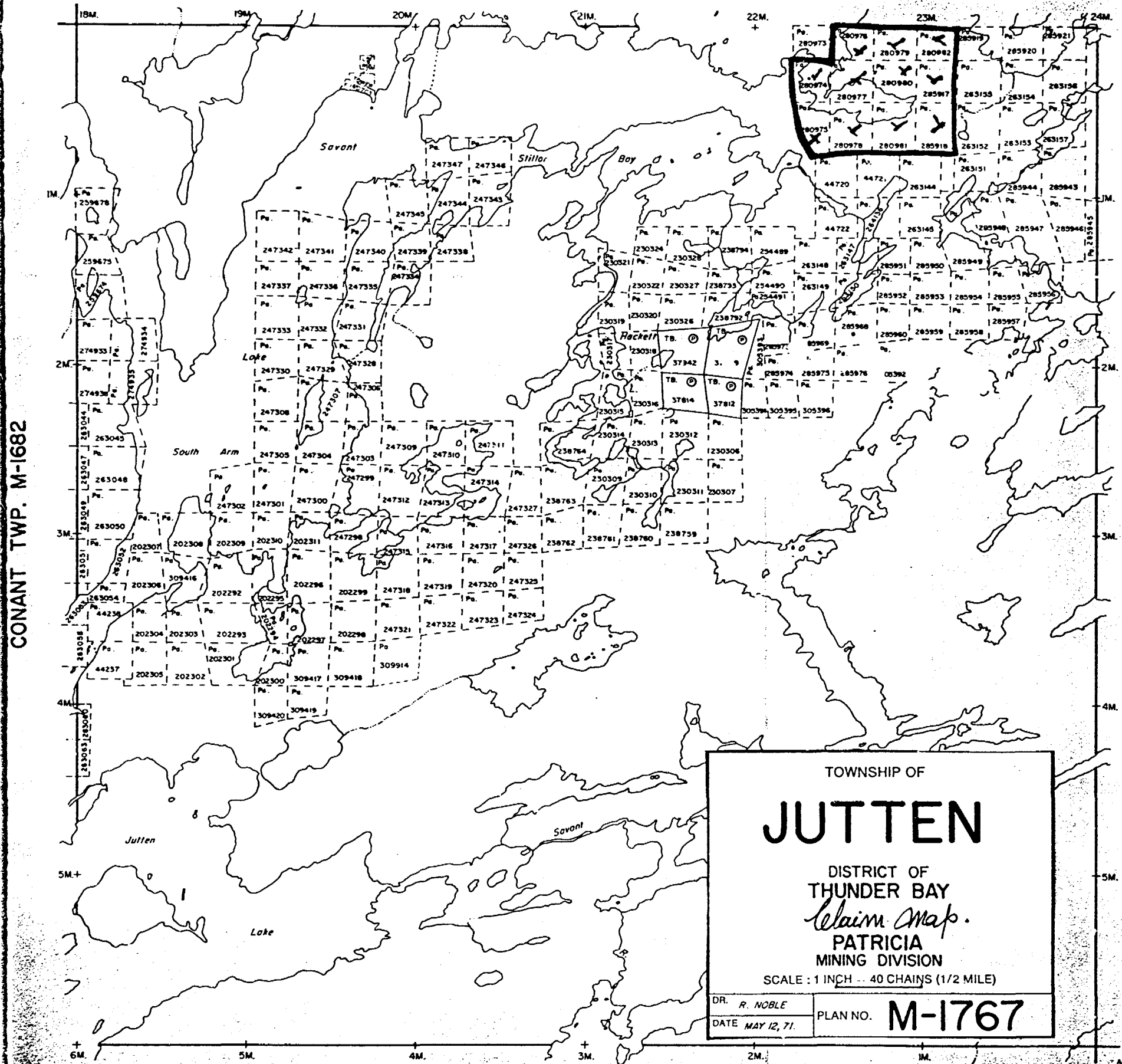
\_\_\_\_\_

\_\_\_\_\_

Mining Claims
Pa. 280975 to 82 inclusive 285917 - 18



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;



CONANT TWP. M-1682

SMYE TWP. M-1893

TOWNSHIP OF  
**JUTTEN**

DISTRICT OF  
THUNDER BAY

*Claim Map.*

PATRICIA  
MINING DIVISION

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

DR. R. NOBLE

DATE MAY 12, 71.

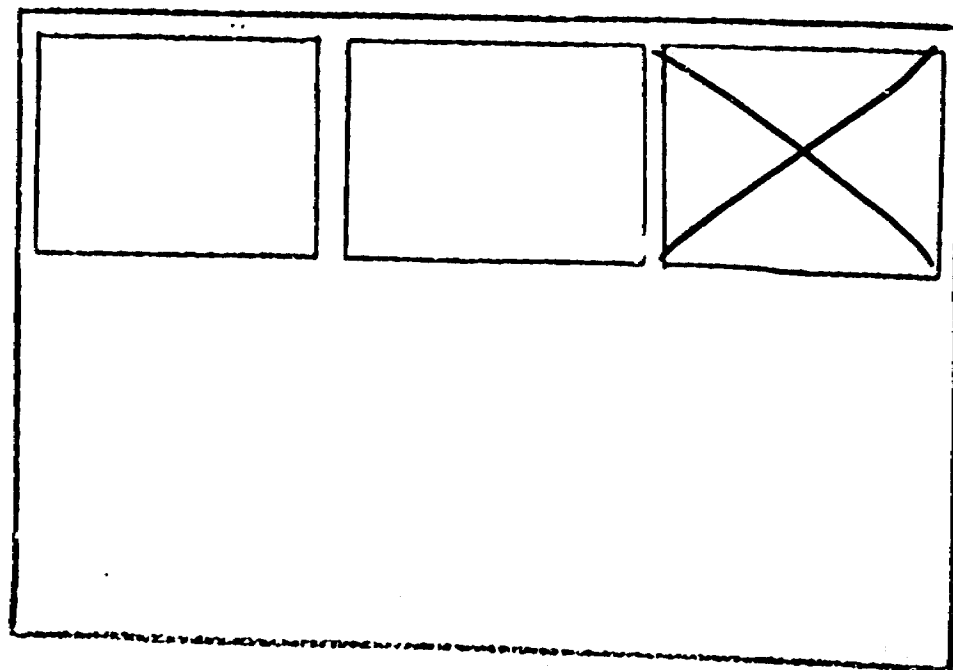
PLAN NO. **M-1767**

50° 19' 30"  
APPROX  
90° 25' 15"

SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

52 J/08 NW-0017-C1 #1

LOCATED IN THE MAP  
CHANNEL IN THE FOLLOWING  
SEQUENCE (X)



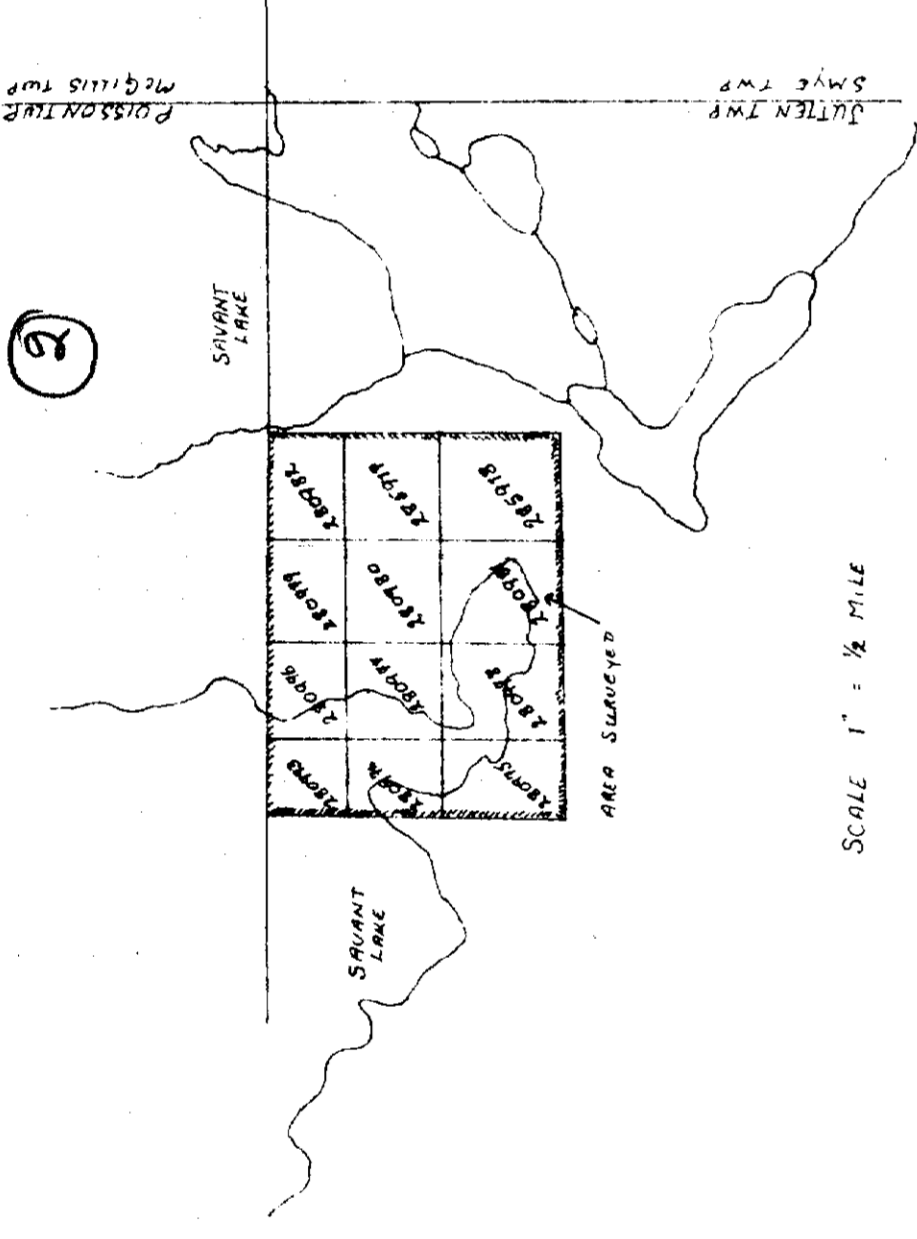


**ELECTROMAGNETIC SURVEY**  
RONKA 16 EM

①  
 110 - 1230  
 124 - 1247  
 1248 - 1447  
 1448 - 1520  
 1521 - 1570  
 1571 - 1650  
 1651 - 1720  
 1721 - 1790  
 1791 - 1860  
 1861 - 1930  
 1931 - 2000

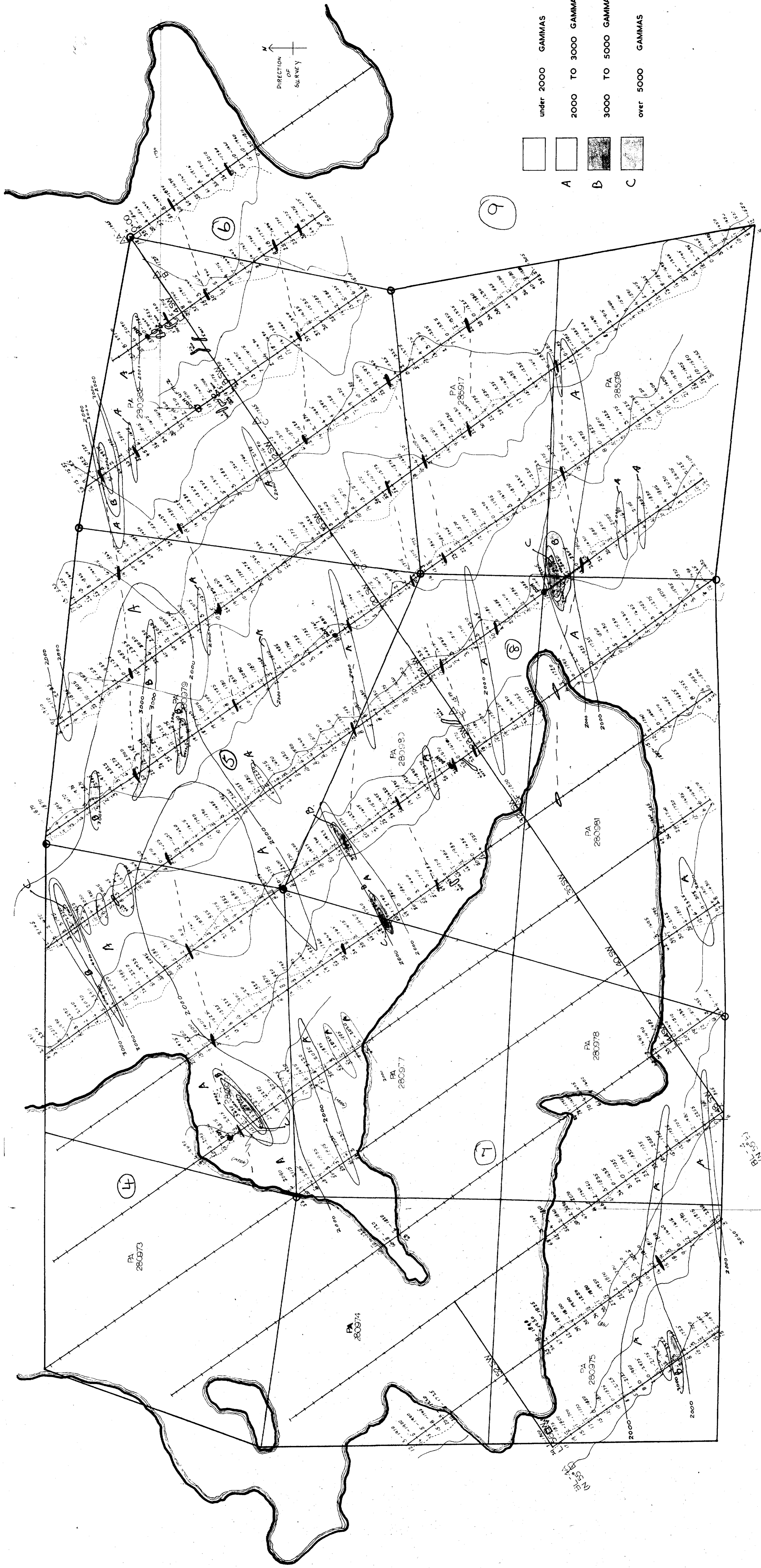
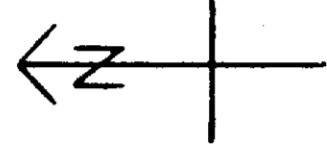
IN FEET: DIAMETER - MAGNETOMETER  
 STATION: CUPPER MINE  
 NO. OF SPACINGS: 530  
 NO. OF READINGS: 1060  
 I = 30  
 — Electromagnetic Conductor

**LOCATION MAP**



**MAGNETOMETER SURVEY**  
SHARPE PMF-3

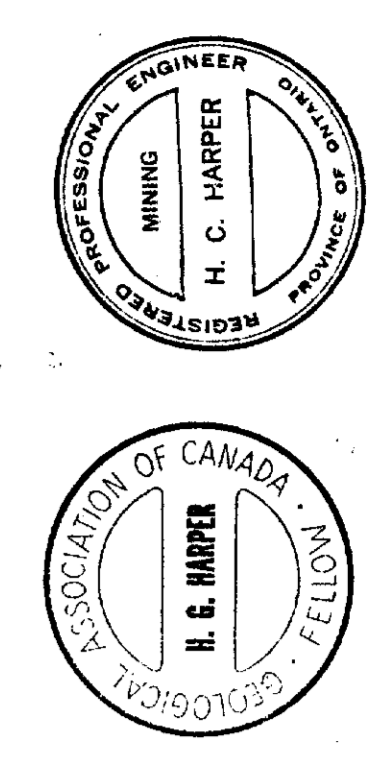
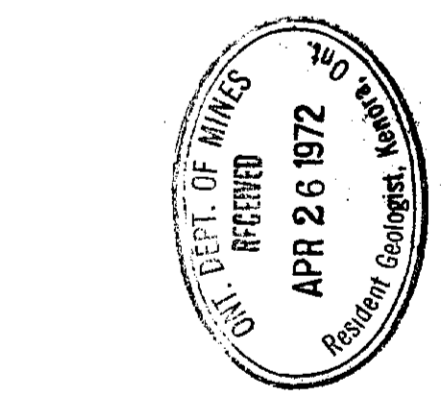
③  
 Δ - BASE STATION  
 THIS PROPERTY TIED IN WITH SURVEY ON ADJOINING LANDS  
 SURVEY DONE IN SPRING, 1972  
 NO. OF READINGS: 630  
 Line Parting (on bond only): 6.2 miles



under 2000 GAMMAS  
 2000 TO 3000 GAMMAS  
 3000 TO 5000 GAMMAS  
 over 5000 GAMMAS

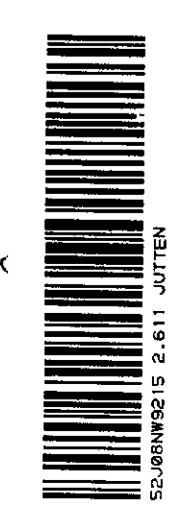
A B C

**UNITED MACFIE MINES LTD**  
 JUTTEN TOWNSHIP  
 DISTRICT OF THUNDER BAY  
 PATRICIA MINING DIVISION  
 STUREON - SAVANT LAKES AREA  
 SCALE - 1" = 200'



Aug 31 71

⑩  
 H. G. Harper  
 52 J/O 8 NW-0017-C1 #1



2000