

41P11SW0244 2.5367 ASQUITH

010



NAREX Ore Search Consultants Inc.

4900 Sheppard Avenue East, Suite 208, Scarborough
Ontario, Canada M1S 4A7 Tel. (416) 293-2990

NRX: 83/ 01

TIMMINS GOLD RESOURCES LIMITED

MAGNETOMETER SURVEY

GIBSON-MOORECAMP LAKE PROPERTY

ASQUITH TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF SUDBURY

ONTARIO

JANUARY 1983

RECEIVED

JAN 26 1983

MINING LANDS SECTION



41P11SW0244 2.5367 ASQUITH

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Accompanying Maps

Drawing # 1 - Magnetometer Survey - Scale: 1 inch to 200 feet.



A. INTRODUCTION

The Gibson-Moorecamp Lake property consists of five (5) contiguous claims in Asquith Township, Larder Lake Mining Division, District of Sudbury, Ontario. These claims which are held by Timmins Gold Resources Ltd. are L446557, L494562, L507641, L573086, and L573098.

During March 1982, a grid was cut over the property and a subsequent magnetometer survey was conducted by NAREX Ore Search Consultants Inc.

B. LOCATION AND ACCESS

The claim group is located in central Asquith Twp. immediately east of Highway 560 and the village of Shiningtree, Ontario. Moorecamp and Mc Donald Lakes are major bodies of water which are located at least partly within the boundaries of the claim block.

C. SURVEY AND INSTRUMENT DATA

The surveys were conducted over previously cut north-south lines which are spaced at 400 foot intervals across the property. A total of 6.5 miles of grid and base lines were cut and picketed every 100 feet. The main baseline which is oriented east-west has a length of 4000 feet across the middle of the property.

.../.



MAGNETOMETER SURVEY

The magnetometer survey was carried out with a Geometrics "Unimag II" (model 836) portable proton magnetometer. This type of magnetometer utilizes the precession of spinning protons or nuclei of the hydrogen atom in a sample of hydrocarbon fluid to measure the total magnetic intensity.

These spinning protons behave as small spinning dipoles which are temporarily aligned or polarized by the application of a uniform magnetic field generated by a current in a coil of wire. When the current is removed, the spin of the proton causes them to precess about the direction of the ambient or earth's magnetic field. The precessing proton then generates a small signal in the same coil used to polarize it, a signal whose frequency is precisely proportional to the total magnetic field intensity and independent of the orientation of the coil (sensor of the magnetometer). Operation of the instrument is simple: one simply presses a button and reads the number for the total magnetic field strength in gammas (γ), with a sensitivity of $\pm 10 \gamma$ (gammas). Readings were taken every fifty (50) feet along grid lines for a total of 609 stations. Readings along the baseline serves as a standard to make the necessary corrections to compensate for the diurnal variations of the local magnetic field.

.../.



D. INTERPRETATION OF RESULTS

Magnetometer Survey

Results from the magnetometer survey outline several north-south trending magnetic features. The highest anomalies are located on L-16E north of the baseline and on L28E at 21+00N (claim L 507641) and on L-24E south of the baseline (claim L 573098). In addition there are several other weak magnetic anomalies south of the baseline in claims L 446557 and L 494562.

Subsequent geological mapping indicates that the areas with high magnetic anomalies are underlain by diabase dykes in which the percentage of magnetite must be somewhat higher the predominant host rocks of basaltic-andesite metavolcanics. Also the magnetic pattern suggests that the main north-south striking dyke which is found on L-16E north of the baseline and on L+20E, L+24E and L+28E south of the baseline probably was a through-going feature which has been off-set by several east-west trending faults-shear zones. This is reflected by the somewhat segmented north-south trending dyke or dyke swarm within the metavolcanics.

The other high magnetic anomaly on L+28 at 21+00N (claim L507641) also corresponds to a narrow north-striking diabase dyke. Although there is little or no bedrock exposures in the area underlying some weak magnetic anomalies south of the baseline in claims L 446557,



L 494562, it is believed to be caused by similar diabasic rocks.

E. SUMMARY

Results from the magnetometer survey show several major anomalies on the Timmins Gold Resources - Gibson - Moorecamp Lake property.

Several north-south striking diabase dykes have been outlined by the survey and confirmed by latter geological mapping. It is suggested by the magnetic pattern that this main dyke (claims 573098 and 507641) has been off-set by several east-west trending fault-shear zones. The probable higher percentage of magnetite in the diabase rocks, explains the magnetic anomalies.

Results of the survey indicate that displacements on the east-west trending shear zones are probably in the order of about 200-400 feet. This makes it possible to better interpret some of the structure related to the main shear zones which contain Au-bearing qtz-carbonate veins immediately south of Moorecamp Lake.

PB/cb

Peter Born



January 21, 1983.





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(file LA-6557) The 1

Type of Survey(s) **Magnetometer** Township or Area **Asquith Twp.**

Claim Holder(s) **Timmins Gold Resources Ltd.** Prospector's Licence No. **T 1166**

Survey Company **Narex Ore Search Consultants Inc.** Survey Dates (linecutting to office) **20-1-83** Total Miles of line cut **6.5**

Name and Address of Author (of Geo-Technical report) **Peter Born - Ste. 208, 4900 Sheppard Ave. E., Scarborough, Ontario, M1S 4A7**

Special Provisions Credits Requested

Instructions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
L	44655Z				
	49456Z				
	507641				
	573086				
	573098				

Man Days

Instructions	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

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.

Report Completed

Date of Report **Jan. 25, 1983**

Recorded Holder or Agent (Signature) *S.J. McCarroll*

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

Total number of mining claims covered by this report of work. **5**

For Office Use Only

Total Days Cr. Recorded **200** Date Recorded **FEB 15 1983** Mining Recorder *[Signature]*

Date Approved as Recorded **FEB 08 1983** Regional/Branch Director *[Signature]*

RECEIVED
14 1983
SECTION

LARGE TAKE
RECORDED
FEB 10 1983
AM
7 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6
PM

August 5, 1983

#60
2.5367

Peter Born
Suite 208
4900 Sheppard Avenue East
Scarborough, Ontario
M1S 4A7

Dear Sir:

RE: Geophysical (Magnetometer) Survey submitted on
Mining Claims L 446557 et al in the Township of
Asquith

Enclosed are the plans, in duplicate, for the above-mentioned survey. Please sign each map and return them to this office.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

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

D. Kinvig:mc

Encl.

cc: Mining Recorder
Kirkland Lake, Ontario



May 24/83

Mining Lands Comments

- Map not signed.

To: Geophysics

Mr. Barlow.

Comments

Please sign map

Approved

Wish to see again with corrections

Date

July 26/83

Signature

Douglas H. Patten

To: Geology - Expenditures

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)

1983 02 10

2.5367

Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geophysical Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims L 446557 et al in the Township of Asquith.

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

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

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

D. Wice:sc

cc: Peter Born
208 - 4900 Sheppard Avenue E.
Scarborough, Ontario
M1S 4A7



GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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) Geophysical - Magnetometer

Township or Area Asquith Twp.

Claim Holder(s) Timmins Gold Resources Ltd.

Survey Company NAREX Ore Search Consultants Inc.

Author of Report Peter Born

Address of Author 208-4900 Sheppard Ave. E, Scarb. Ontario.

Covering Dates of Survey Mar. 1982 - Jan. 1983
(linecutting to office)

Total Miles of Line Cut 6.5

<u>SPECIAL PROVISIONS CREDITS REQUESTED</u>	<u>DAYS per claim</u>
ENTER 40 days (includes line cutting) for first survey.	Geophysical -- Electromagnetic _____ -- Magnetometer <u>40</u> -- Radiometric _____
ENTER 20 days for each additional survey using same grid.	-- Other _____ Geological _____ Geochemical _____

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Jan. 20, 1983 SIGNATURE: Peter Born
Author of Report or Agent

Res. Geol. _____ Qualifications 2.3604

<u>Previous Surveys</u>			
<u>File No.</u>	<u>Type</u>	<u>Date</u>	<u>Claim Holder</u>

MINING CLAIMS TRAVERSED
List numerically

L 446557
(prefix) (number)

L 494562

L 507641

L 573086

L 573098

RECEIVED

JAN 26 1983

MINING LANDS SECTION

If space insufficient, attach list

TOTAL CLAIMS 5

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 609 Number of Readings 609
Station interval 50 ft. Line spacing 400 ft.
Profile scale _____
Contour interval 500 γ

MAGNETIC

Instrument Geometrics "Unimag II" model 836 proton magnetometer
Accuracy - Scale constant + 10 γ
Diurnal correction method Correction of baseline - crossline readings
Base Station check-in interval (hours) _____
Base Station location and value _____

ELECTROMAGNETIC

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)
Parameters measured _____

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 _____

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 _____

File no. 2.5369

	Mag.						
L446557	✓						
494562	✓						
507641	✓						
573086	✓						
573098	✓						

Churchill Twp. - M.719

THE TOWNSHIP
OF

ASQUITH

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	● or ⊕
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	—
CANCELLED	o c c
PATENTED FOR S. R. O.	o c c

NOTES

400' Surface Rights Reservation along
the shores of all lakes and rivers

SAND and GRAVEL

- Ⓢ MTC Pit 489
- Ⓢ MTC Gravel Pit No 3C-14
- Ⓢ M.T.C. P.T 3C-16
- Ⓢ Gravel Pit File 124425
- Ⓢ M.T.C. GRAVEL PIT. 3C-15

RESERVES

- Ⓢ MNR SRO Reserve File 163003
- Ⓢ M.N.R. S.R.O. RESERVE FILE 163005
- Ⓢ Waste Disposal Site Buffer Zone 2/9/81

As withdrawn from staking under Section
of the Mining Act (R.S.O. 1990) File Date Disposition

W. 91/81 18 517 S.R.O.

DATE OF ISSUE
28/8/81
AUG - 3 1983
Ministry of Natural Resources
TORONTO

PLAN NO.- M.637

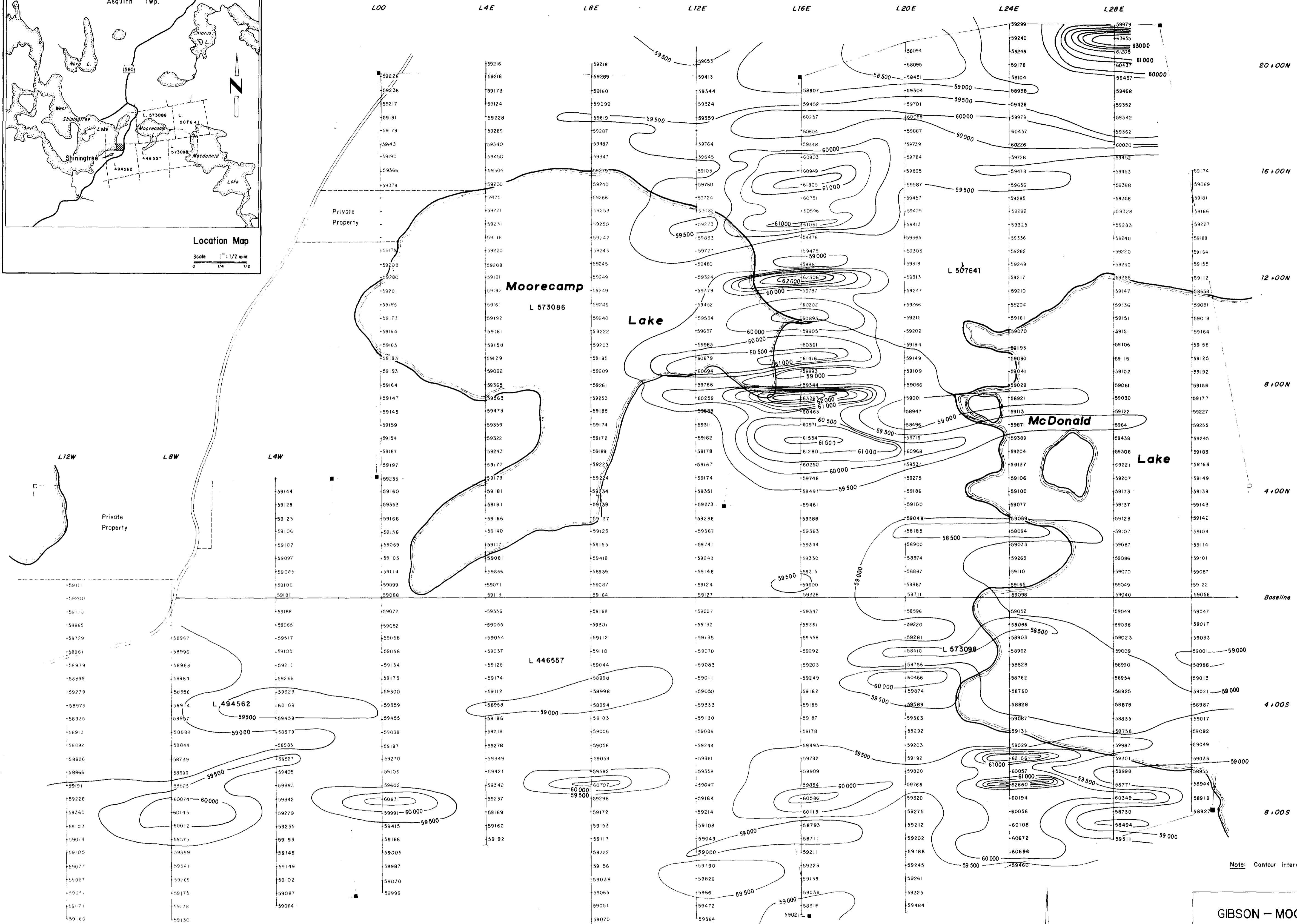
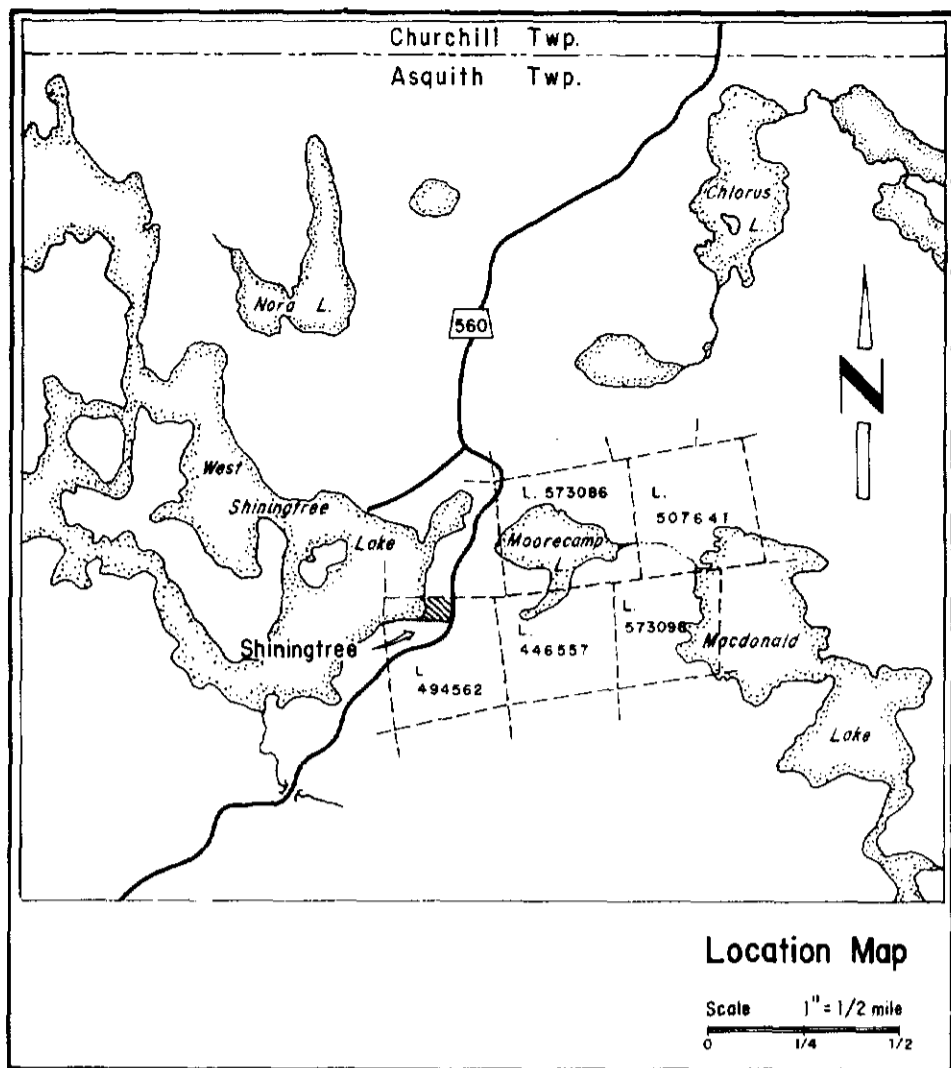
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Miramichi Twp. - M.865

Fawcett Twp. - M.803

Sheard Twp. - M.1107





GIBSON - MOORECAMP LAKE PROPERTY

MAGNETOMETER SURVEY

OPERATOR: PETER BORN
DATE: March 11, 1982
SCALE: 1" = 200'

INSTRUMENT: UNIMAG II Model 836

