



32D05NW0082 2.8719 ELLIOTT

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A REPORT ON VLF ELECTROMAGNETIC SURVEYING

on

CLAIM L 664057, ELLIOTT TWP.

LARDER LAKE MINING DIVISION, ONTARIO

RECEIVED  
DEC 10 1985  
MINING LANDS SECTION

Markham, Ontario  
December 12, 1985

L.G. Hobbs, P.Eng

*Inst. 24358*

## GENERAL

During the fall of 1985 a VLF Electromagnetic survey was done over claim L 664057 located in the northwest quadrant of Elliott township in the Larder Lake mining division of Ontario. This work is part of a survey covering a group of claims held by Union Mining Corp. and is submitted in part at this time due to assessment work requirements of the Ontario Ministry of Natural Resources.

## LOCATION, TOPOGRAPHY AND ACCESS

Claim L 664057 lies in the northwest part of Elliott Twp. about 1/2 mile west of the north end of Ghost Lake. It is overlain mainly by sand and silt deposits forming a gently rolling topography covered by Jackpine, birch, spruce and relatively minor secondary growth.

Access is by float plane onto Ghost Lake or by truck via a series of secondary sand roads through Garrison and Thackeray townships leading off highway 101 east of the town of Matheson. These roads lead to within 1000 ft. of claim L 664057.

## GRID

A grid was cut to roughly coincide with an older grid cut for Ivan C. Stairs in 1962. The baseline was cut at an azimuth of 70 degrees with lines off it at 400 ft. intervals. A total of 1100 ft. of baseline and 4300 ft. of crosslines were cut.

## INSTRUMENT AND SURVEY

A Geonics EM16 VLF (Very Low Frequency) receiver was used to read the electromagnetic field transmitted from the marine navigational transmitter at Cutler Me. Readings of in-phase and quadrature dip angles were recorded.

The instrument was read at 100 ft. intervals along the grid. A total of 47 stations were read, plotted and profiled.

## RESULTS AND INTERPRETATION


The results are plotted at 1 inch equals 200 ft. and profiled at an amplitude scale of 1 inch equals 20 degrees on the map which accompanies this report. No outcrop is known to exist on the claim.

The following observations may be made.

1. No true in-phase crossovers were detected by the survey.
2. Quadrature readings increase in amplitude to the south suggesting deeper conductive overburden in this direction.

3. Anomalous readings were detected on line 64W at 1+50N and on line 60W at 0+50N with the strongest response occurring on line 60W. Both in-phase and quadrature readings are affected but only the quadrature readings actually cross over. The pattern suggests a ridge of subcrop entering the survey from the east rather than a sulphide conductor. This feature is directly on strike with a magnetic ridge which crosses line 68W at 3N previously interpreted as possibly being caused by iron formation.
4. A reversal of the in-phase patterns at the south edge of the survey is believed to be caused by topography, a relatively steep down hill slope to the south being observable at this location.

Respectfully submitted,

  
\_\_\_\_\_  
L.G. Hobbs, P.Eng.

CERTIFICATE

I, L.G. Hobbs, do hereby certify:

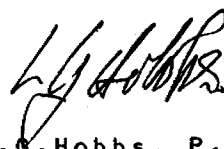
That I graduated from the University of Toronto in 1958 with the degree of B.A.Sc. in engineering geology.

That I have practiced my profession as a geologist since graduation.

That I maintain an office at Suite 4, 101 Amber St., Markham, Ontario.

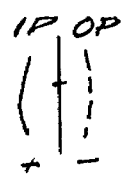
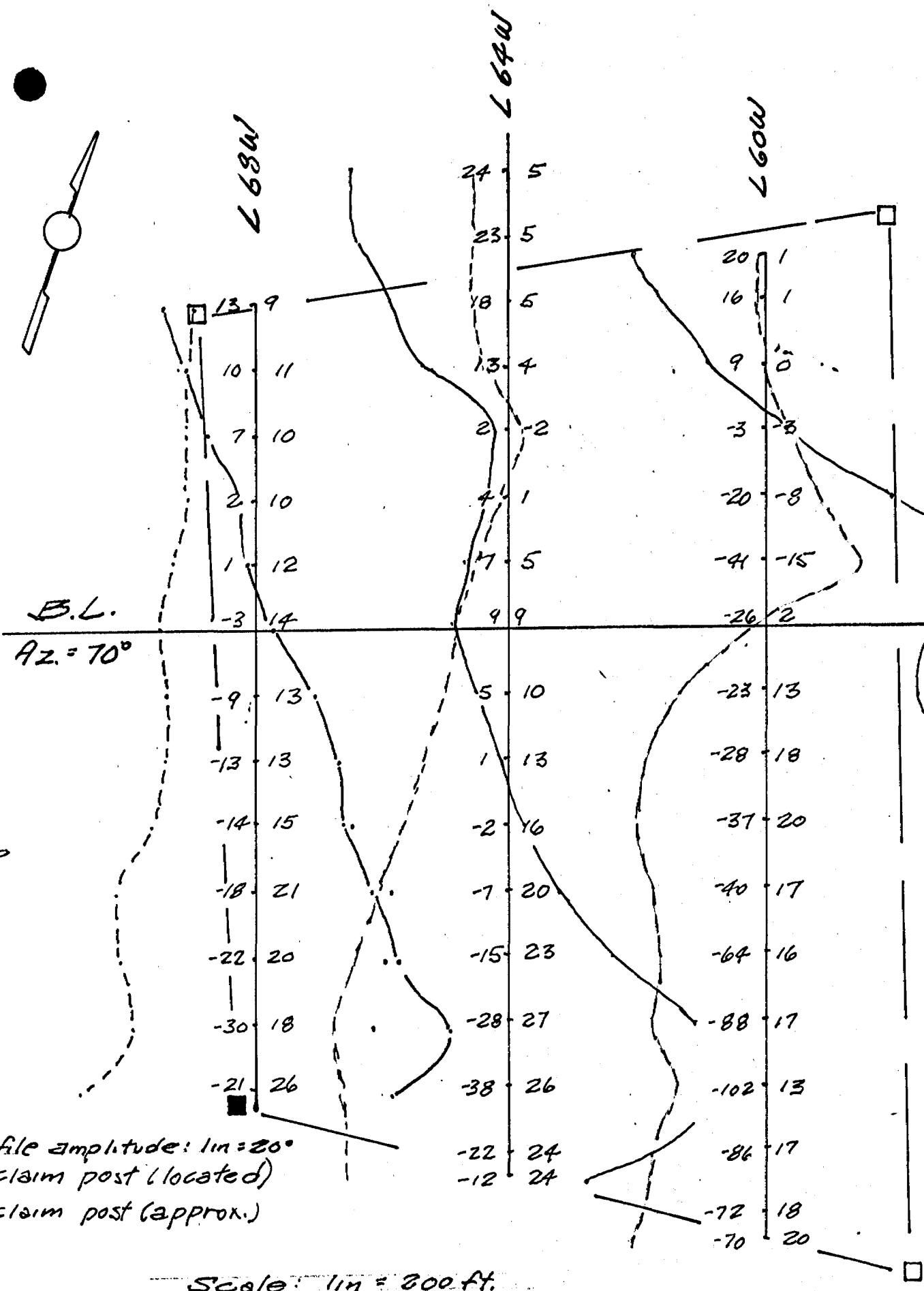
That I am a member of the Association of Professional Engineers of Ontario and the Prospectors and Developers Association.

That the foregoing report is based on the author's personal supervision of the survey described.



L.G. Hobbs, P.Eng.

Markham, Ont.  
Dec. 12, 1985



Profile amplitude: 1in = 20°

■ claim post (located)

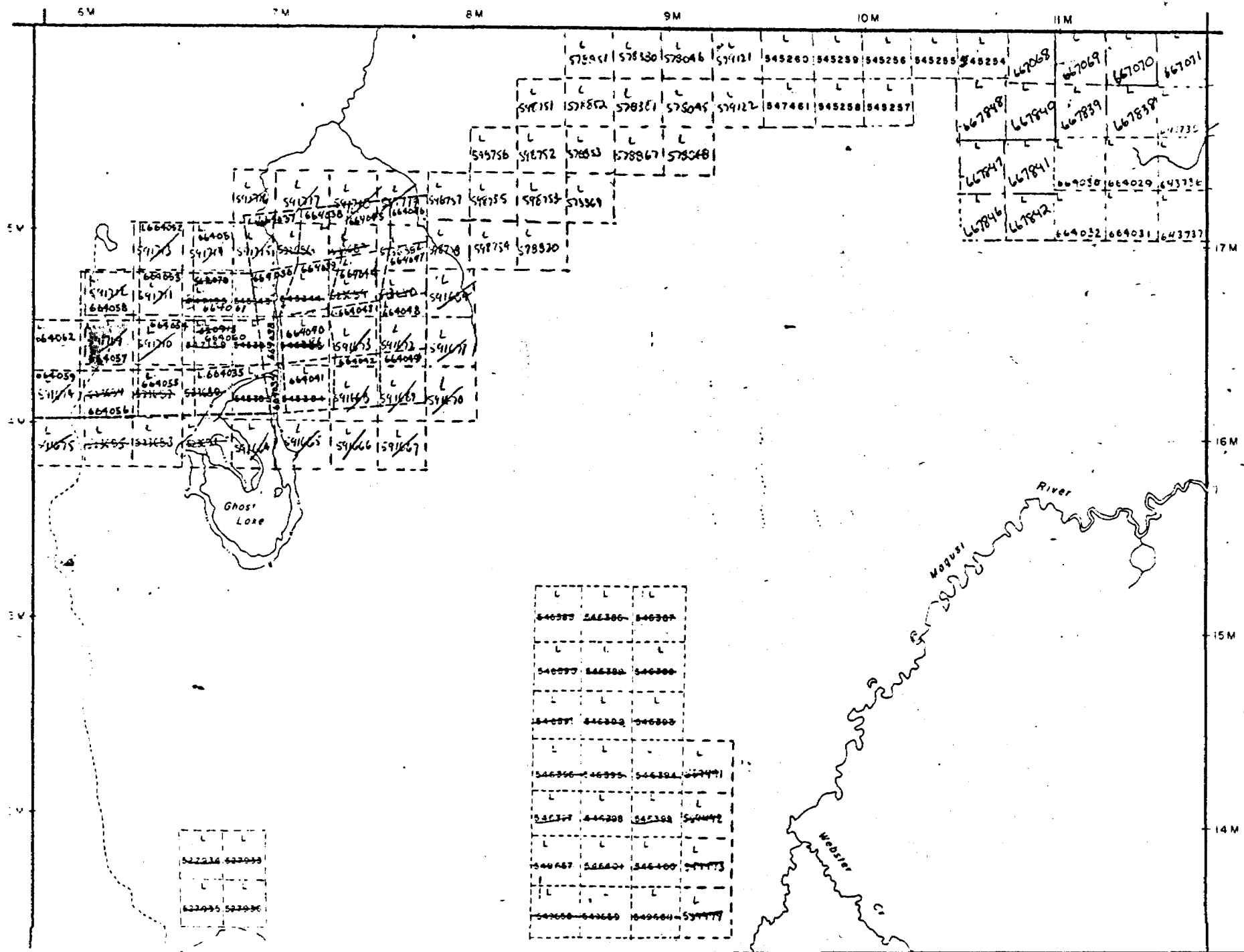
□ claim post (approx.)

Scale: 1in = 200 ft.

# VLF SURVEY - CLAIM L664057

# HARKER TWP M. 353

400  
1A1



TANNAHILL TWP. M. 390

PAT  
PAT  
LEA  
LICE  
CRU  
LOC  
CAL  
M.A.  
SER  
HIC  
RUE  
TRA  
PA  
FC  
MA  
MIN  
TUB



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900

Mining Lands Section

File No 2.8719

Control Sheet

TYPE OF SURVEY

- GEOPHYSICAL
- GEOLOGICAL
- GEOCHEMICAL
- EXPENDITURE

MINING LANDS COMMENTS:

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*60  
28*

*J. Hurst*

Signature of Assessor

*Jan 1/86*

Date

## Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

### The Mining Act

Instructions: — Please type or print.  
 — If number of mining claims traversed exceeds space on this form, attach a list.  
 Note: — Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
 — Do not use shaded areas below.

Dec. #412

2.8719

Type of Survey(s): VLF ELECTROMAGNETIC Township or Area: ELLIOTT TWP.  
 Claim Holder(s): UNION MINING CORP. Prospector's Licence No.: T1356  
 Survey Company: L.G. HOBBS EXPLORATION SERVICES Survey Dates (linecutting to office): 12.09.85 to 12.20.85 Total Miles of line Cut: ≈ 1 mile.  
 Name and Address of Author (of Geo-Technical report): L.G. Hobbs P.Eng., Suite 4, 101 Amber St., Markham, Ont. L3R 3B2

Special Provisions Credits Requested

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

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
<u>L</u>	<u>664057</u>	<u>/</u>			

LARDER LAKE MINING DIV.  
**RECEIVED**  
 OCT 21 1985  
 AM 7 8 9 10 11 12 1 2 3 4 5 6

**RECEIVED**  
 NOV - 8 1985  
 MINING LANDS SECTION

Man Days

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

Airborne Credits

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

Expenditures (excludes power stripping)

Type of Work Performed: \_\_\_\_\_

Performed on Claim(s): \_\_\_\_\_

Calculation of Expenditure Days Credits

Total Expenditures	+	<u>15</u>	=	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: 12/20/85 Recorder/Holder of Agent (Signature): L.G. Hobbs

For Office Use Only

Total Days Cr. Recorded: <u>20</u>	Date Recorded: <u>OCT 21 1985</u>	Mining Recorder: _____
Date Approved as Recorded: <u>86.1.9</u>	Regional Director: _____	

Total number of mining claims covered by this report of work: 1

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: L.G. Hobbs, Suite 4, 101 Amber St., Markham, Ont. L3R 3B2

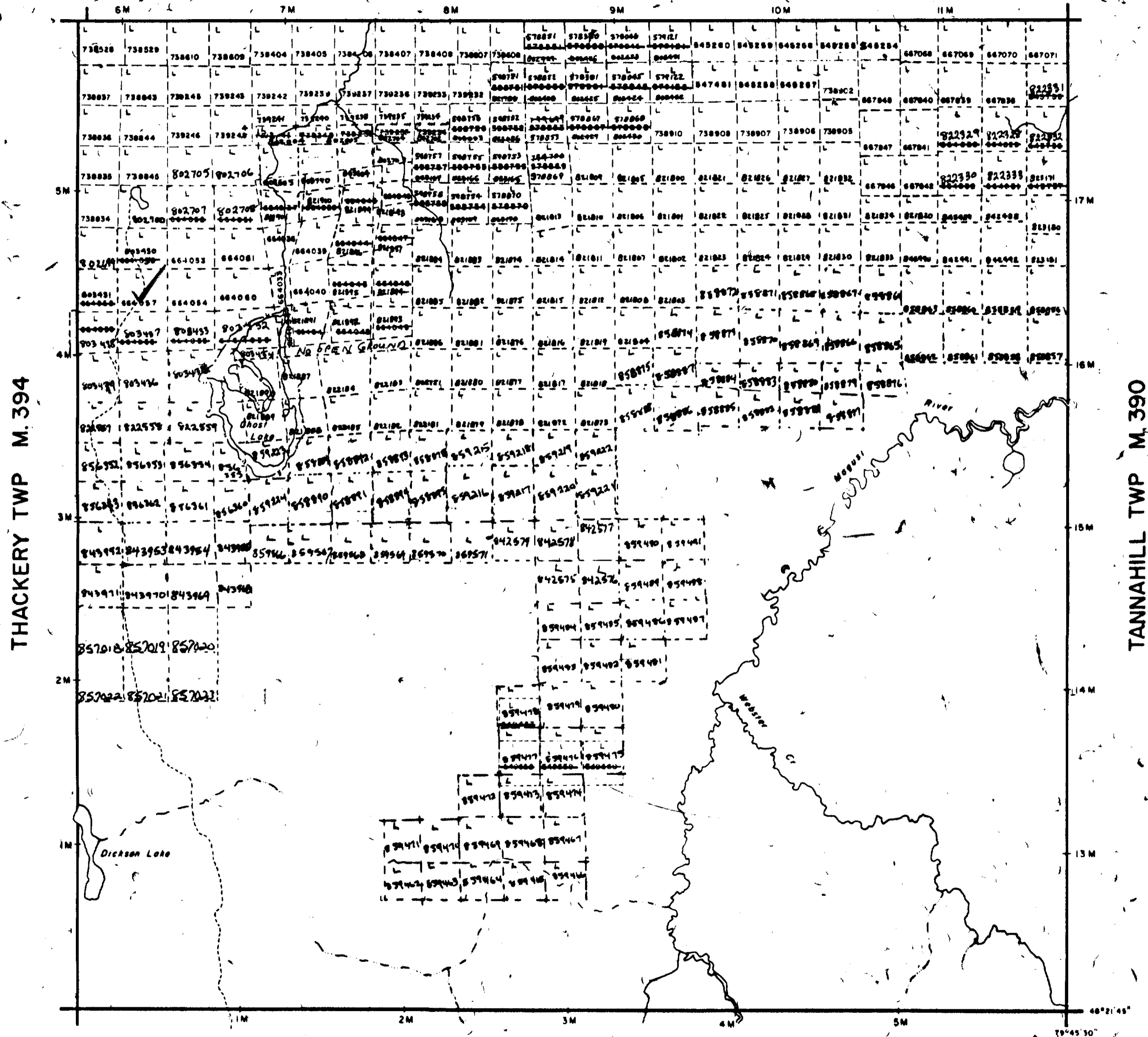
Date Certified: <u>Oct 12/85</u>	Certified by (Signature): <u>L.G. Hobbs</u>
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HARKER TWP M. 353

NOTES

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



THACKERY TWP M. 394

TANNAHILL TWP M. 390

LEGEND

- PATENTED LAND
  - PATENTED FOR SURFACE RIGHTS ONLY
  - LEASE
  - LICENSE OF OCCUPATION
  - CROWN LAND SALES
  - LOCATED LAND
  - CANCELLED
  - MINING RIGHTS ONLY
  - SURFACE RIGHTS ONLY
  - HIGHWAY & ROUTE NO.
  - ROADS
  - TRAILS
  - RAILWAYS
  - POWER LINES
  - MARSH OR MUSKEG
  - MINES
- \*used only with summer resort locations or when space is limited

TOWNSHIP OF  
Jan. 8/86

ELLIOTT

DISTRICT OF  
COCHRANE  
LARDER LAKE  
MINING DIVISION

SCALE: 1/4 INCH = 40 CHAINS (1/2 MILE)

DR. JBN  
DATE 20 Aug 71

PLAN NO. M. 347

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



CLIFFORD TWP M. 338