



32D05SE0034 2.12649 BEN NEVIS

010

REPORT ON A
GROUND MAGNETIC
TOTAL INTENSITY SURVEY
BEN NEVIS TOWNSHIP

RECEIVED

JUL 21 1989

MINING LANDS SECTION

by D. R. BOUCHER
July 15, 1989



32D05SE0034 2.12649 BEN NEVIS

010C

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1.0 INTRODUCTION

On the 25 of May 1989 the author was contacted by Mr. P. Labbe for assistance in preparing a map and report for a ground geophysical survey he had carried out over his claims. The survey was done to get the necessary assessment work credits for the first period.

The author and Mr. P. Labbe visited the property on 26th of May 1989 to verify that proper survey techniques were used during the survey. A discrepancy was noted in his survey method. Mr Labbe simply surveyed the lines without completing tie-in loops on an hourly basis to correct the data for diurnal drift. No base station was used to monitor diurnal drift. To correct for diurnal drift it is mandatory to complete tie in loops when a base station is not used. Therefore to correct the data for diurnal drift an alternate technique described in Geophysical Field Manual For Technicians No. 1 THE MAGNETIC METHOD was use. It consisted of surveying the base line in both direction and averaging the readings. This in effect establishes base stations at the intersection of all lines with the baseline thus making it possible to correct his survey for diurnal drift. Mr. Labbe completed the survey of the baseline on the 28th of May 1989.

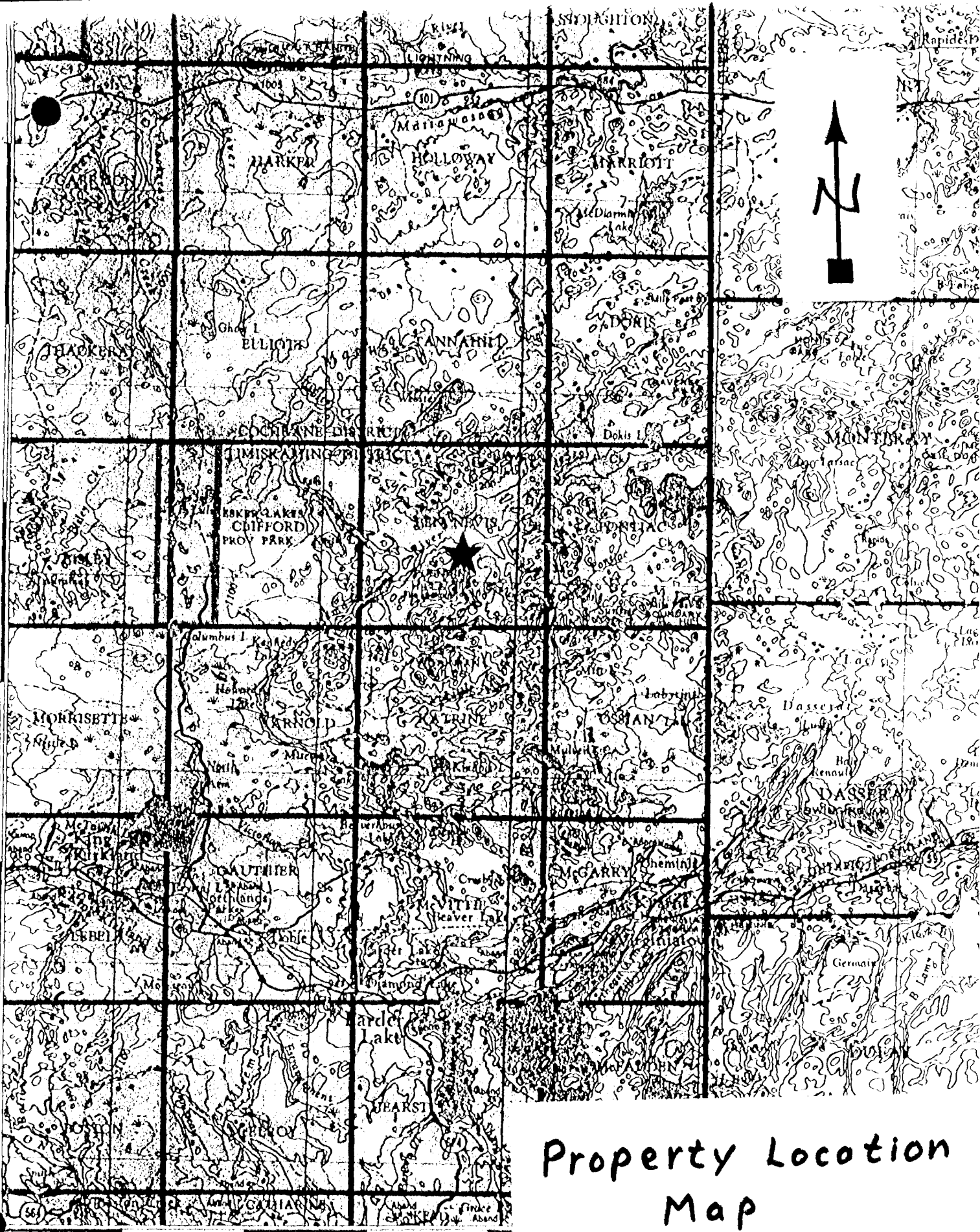
2.0 PROPERTY, LOCATION AND ACCESS

Mr. Labbes property consists of 9 contiguous unpatented mining claims numbered 979925, 979926, 979927, 979928, 979929, 979930, 979931, 980472, and 983359.

The claims are located approximately 23 kilometres North of Larder Lake in the South East quarter of Ben Nevis Township. An all weather forest access road from Larder Lake bisects the western half of the property in a North South direction. See figure 1a and 1b

3.0 SURVEY PROCEDURE

The survey was carried out using a Barringer total field (proton) magnetometer with a digital display. Readings were taken at approximately 1 minute intervals on 100 foot stations along lines 200 feet apart. All total field intensity measurements were recorded in a field note book. Mr. Labbe carried out survey without completing tie in loops. Therefore to correct for diurnal drift the base line was surveyed in both directions and the results averaged to establish base stations at the intersection of all cross lines with the base line see procedure in Roux A. T. 1980



Property Location Map

580000m. E. Eaglehart 9 45' 0

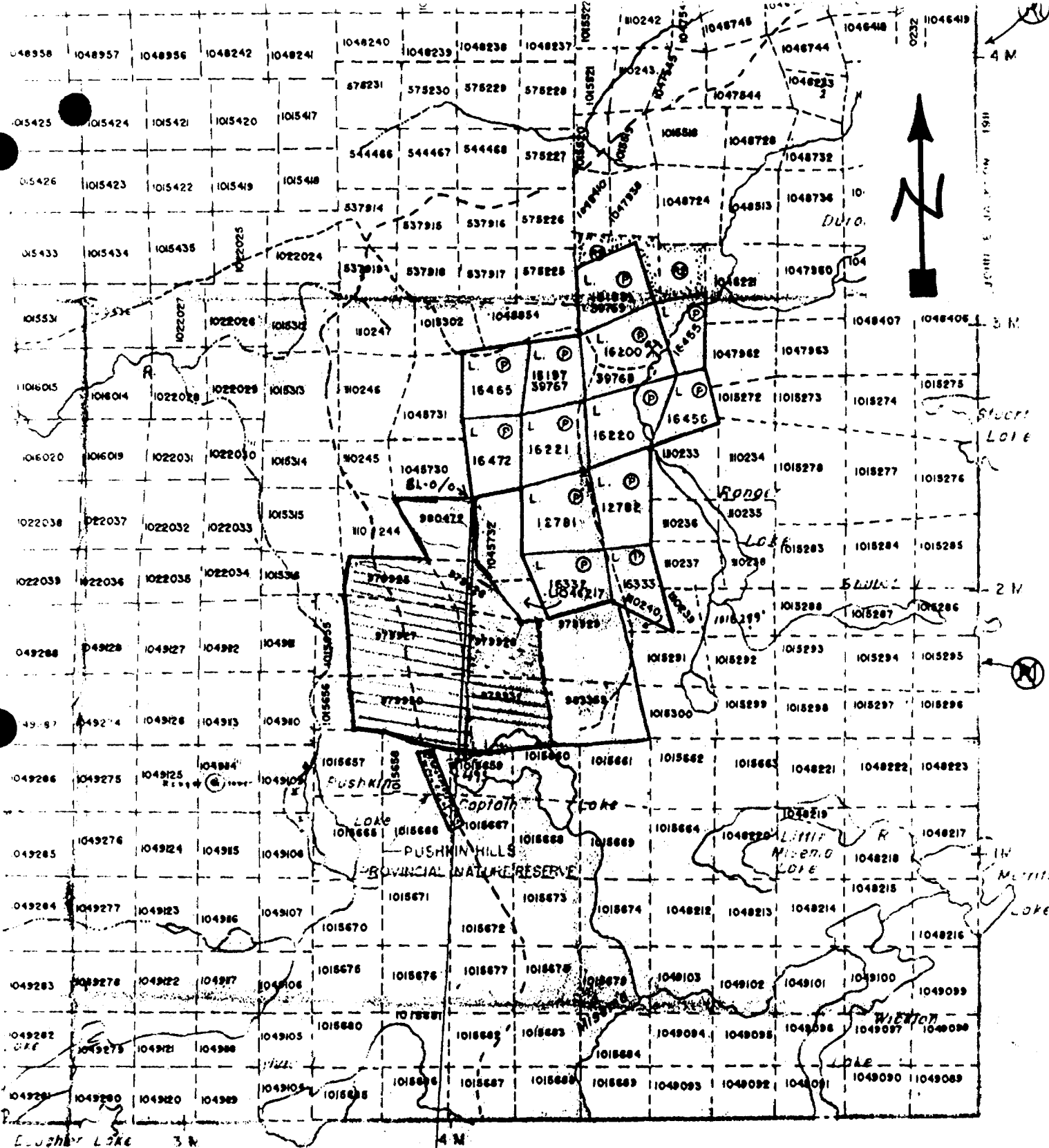
ALTITUDE



DA
DE
PW

Scale 1:250,000

Fig 1a



Katrine Two (M.357)

Claim Location Map

Scale 1" = 1/2 mile Fig 1b

4.0 RESULTS

Only minor variations in intensity of the magnetic field were detected over the grid area. This generally confirms the results of the KLIP airborne magnetic survey.

Two weak linear line anomalies on the east side of the grid may be due to some remanent diurnal drift which may not have been removed by the corrections applied to the data.

The survey did not detect any changes in the magnetite content of the various rock formations underlying the property. In order to detect the very low variations in magnetite concentrations in the rock formations requires the monitoring of diurnal drift with a digital base station. Then a field magnetometer synchronized with the base station would produce corrected data that would possibly outline the various lithologic units. Before carrying out a high precision ground magnetic survey an Electromagnetic survey would be much more usefull in outlining areas of potential economic interest.

5.0 CONCLUSIONS AND RECOMENDATIONS

Clearly the ground magnetometer survey did not detect any significant magnetic anomalies. This was expected since the airborne magnetic survey OGS 1979 indicates only background variations also.

The airborne EM survey did not detect any input anomalies on the property. The reason for not detecting any anomalies may be due to the survey flight lines being oriented parallel to the strike of the rock formations. Therefore a ground Electromagnetic survey over the East West lines on the property is strongly recomended since therock formations strike approximately North South.

Further lithogeochemical studies carried out by the OGS in Ben Nevis Township indicate that the rock formations in the area may host massive sulfide type mineralization. Hence a ground EM survey would pick up such conductive targets.

Donald R. Burch

REFERENCES

BREINERS S. 1973

Applications Manual for Portable Magnetometers; Geometrics,
Palo Alto California USA

JENSEN L. S. 1975

Geology of Clifford and Ben Nevis Townships, District of
Cochrane; Ontario Div. of Mines, GR132, 55p. Accompanied by
Map 2283, scale 1 inch to 1/2 mile.

OGS 1979

Airborne Electromagnetic and Total Intensity Magnetic survey,
Kirkland Lake Area, Ben Nevis Township, District of Cochrane;
By Questor Surveys Limited for the Ontario Geological survey,
Prelim. Map P.2254 Geophys. Ser., Scale 1:20,000. Survey and
Compilation February and March 1979.

ROUX A. T. 1980

Geophysical Field Manual for Technicians No. 1 The Magnetic
Method; South African Geophysical Union

WOLFE, W. J. 1977

Geochemical Exploration of Early Precambrian Sulfide
Mineralization in Ben Nevis Township, District of Cochrane;
Ontario Geological Survey Study 19, 39p.



Ministry of
Northern Affairs
and Mines

Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

CIVIL
W890E



32055E0034 2.12649 BEN NEVIS

900

M 8908.179 2.1

Type of Survey(s) Magnetometer		Township or Area BEN NEVIS	
Claim Holder(s) PASCAL J. LABBE'		Prospector's Licence No. K 21877	
Address LARDER LAKE, Ontario			
Survey Company		Date of Survey (from & to) Day Mo. Yr. Day Mo. Yr. 14 05 89 28 05 89	Total Miles of line Cut 15.9
Name and Address of Author (of Geo-Technical report) DONALD R. BOUCHER Box 814, 14 ATKINS AVE KIRKLAND LAKE, ONT.			

Credits Requested per Each Claim in Columns at right

Special Provisions	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	

Man Days	Geophysical	Days per Claim
<div style="border: 2px solid black; padding: 5px; transform: rotate(-5deg); display: inline-block;"> RECEIVED MAY 30 1989 1200000 57 </div>	- Electromagnetic	40
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
L					
	979925	40			
	979926	40			
	979927	40			
	979928	40			
	979929	40			
	979930	40			
	979931	40			
	980472	40			
	983359	40			

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.

Total number of mining claims covered by this report of work. **9**

For Office Use Only

Total Days Cr. Recorded 360	Date Recorded May 30/89	Mining Recorder <i>W. G. Weerman</i>
Date Approved as Recorded May 11/89	Branch Recorder <i>W. G. Weerman</i>	

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.

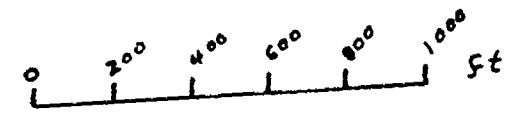
Name and Postal Address of Person Certifying
DONALD R. BOUCHER Box 814 14 Atkins Ave

KIRKLAND LAKE, Ont P2N 3N5

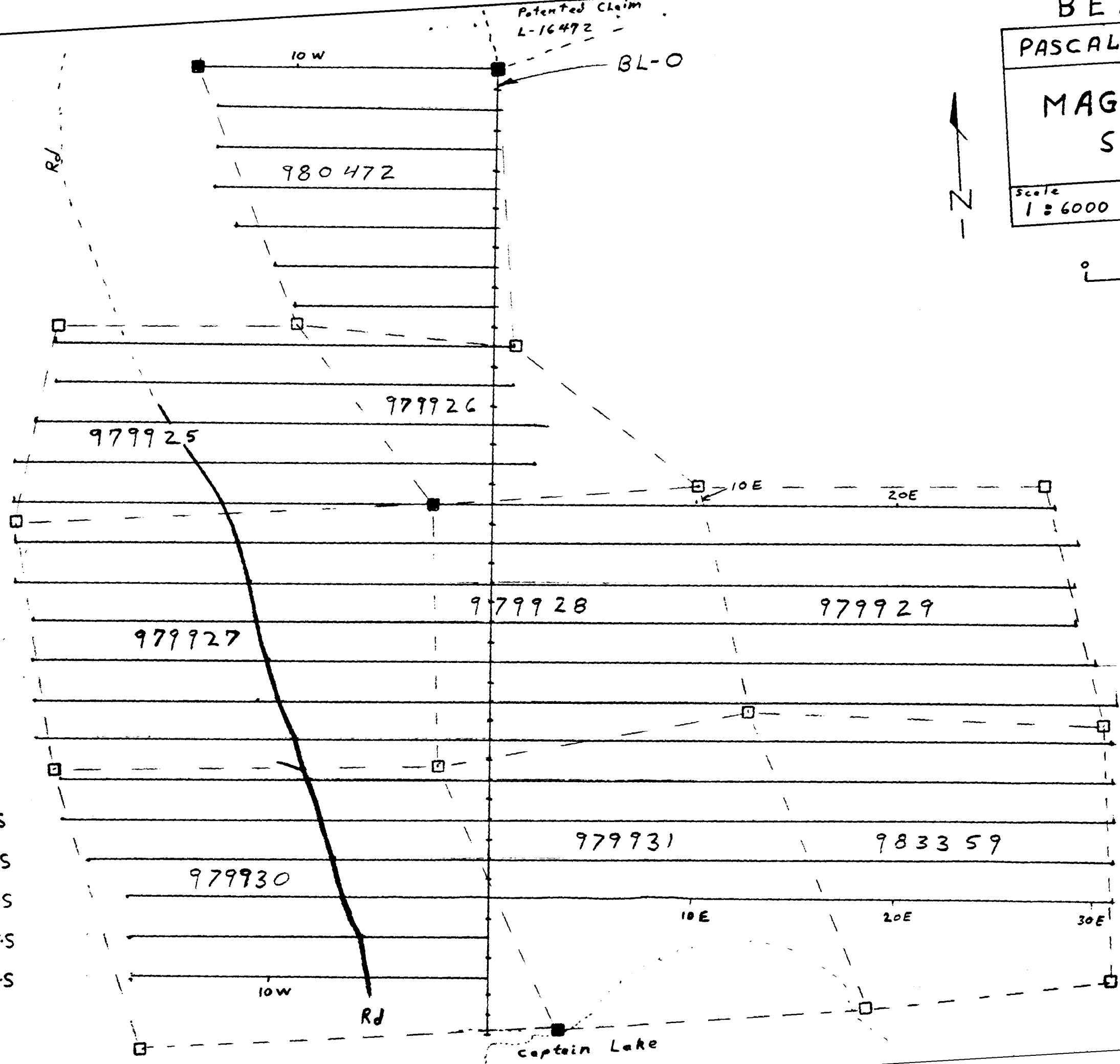
Date Certified **30/05/89**

Certified by (Signature) *Donald R. Boucher*

PASCAL J. LABBÉ		
MAGNETOMETER SURVEY		
Scale 1 : 6000	Drawn by DRB	Figure



- L-0
- L-2.5
- L-4.5
- L-6.5
- L-8.5
- L-10.5
- L-12.5
- L-14.5
- L-16.5
- L-18.5
- L-20.5
- L-22.5
- L-24.5
- L-26.5
- L-28.5
- L-30.5
- L-32.5
- L-34.5
- L-36.5
- L-38.5
- L-40.5
- L-42.5
- L-44.5
- L-46.5





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) Magnetic Total Field
Township or Area BEN NEVIS TP.
Claim Holder(s) PASCAL LABBE
Survey Company PASCAL LABBE
Author of Report D. R. BOUCHER
Address of Author Box 814 14 Atkins Ave, Kirkland Lake
Covering Dates of Survey 15/09/88 15/17/89
(linecutting to office)
Total Miles of Line Cut 15.9

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

979925

979926

979927

979928

979929

979930

979931

980472

983359

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim.

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

ENTER 20 days for each
additional survey using
same grid.

- Geophysical
 - Electromagnetic _____
 - Magnetometer _____
 - Radiometric _____
 - Other _____
- Geological _____
- Geochemical _____

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

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

DATE: 27/7/89 SIGNATURE: Donald R. Boucher
Author of Report or Agent

Res. Geol. _____ Qualifications 2.5921

Previous Surveys

File No.	Type	Date	Claim Holder

LARDER LAKE
MINING DIV.
RECEIVED
JUL 28 1989
12:30 PM
7 18 19 110 111 112 113 114 115

TOTAL CLAIMS 9

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 818 Number of Readings 818
Station interval 100' Line spacing 200'
Profile scale
Contour interval 100 nT

MAGNETIC

Instrument BARRINGER
Accuracy - Scale constant 1 nT
Diurnal correction method Loop Tie-in
Base Station check-in interval (hours) Approx. 1 hr.
Base Station location and value BL-0 / L-0 58310 nT

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)

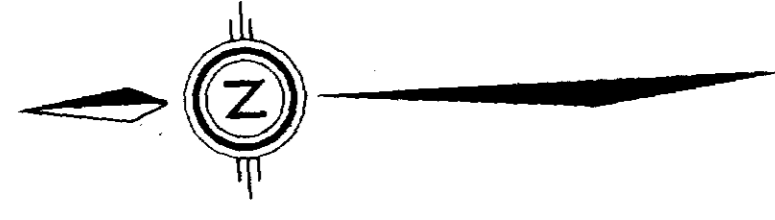
Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



LEGEND

— 100 nT contour line

○ Magnetic low

— Survey Line + Peg

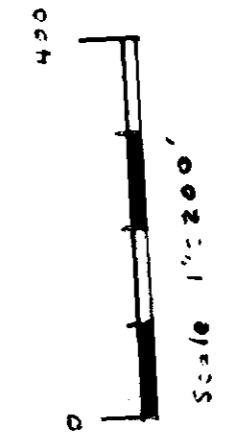
420 300 Readings

Base Value 58,000 nT

Claim Post

■ located

□ assumed



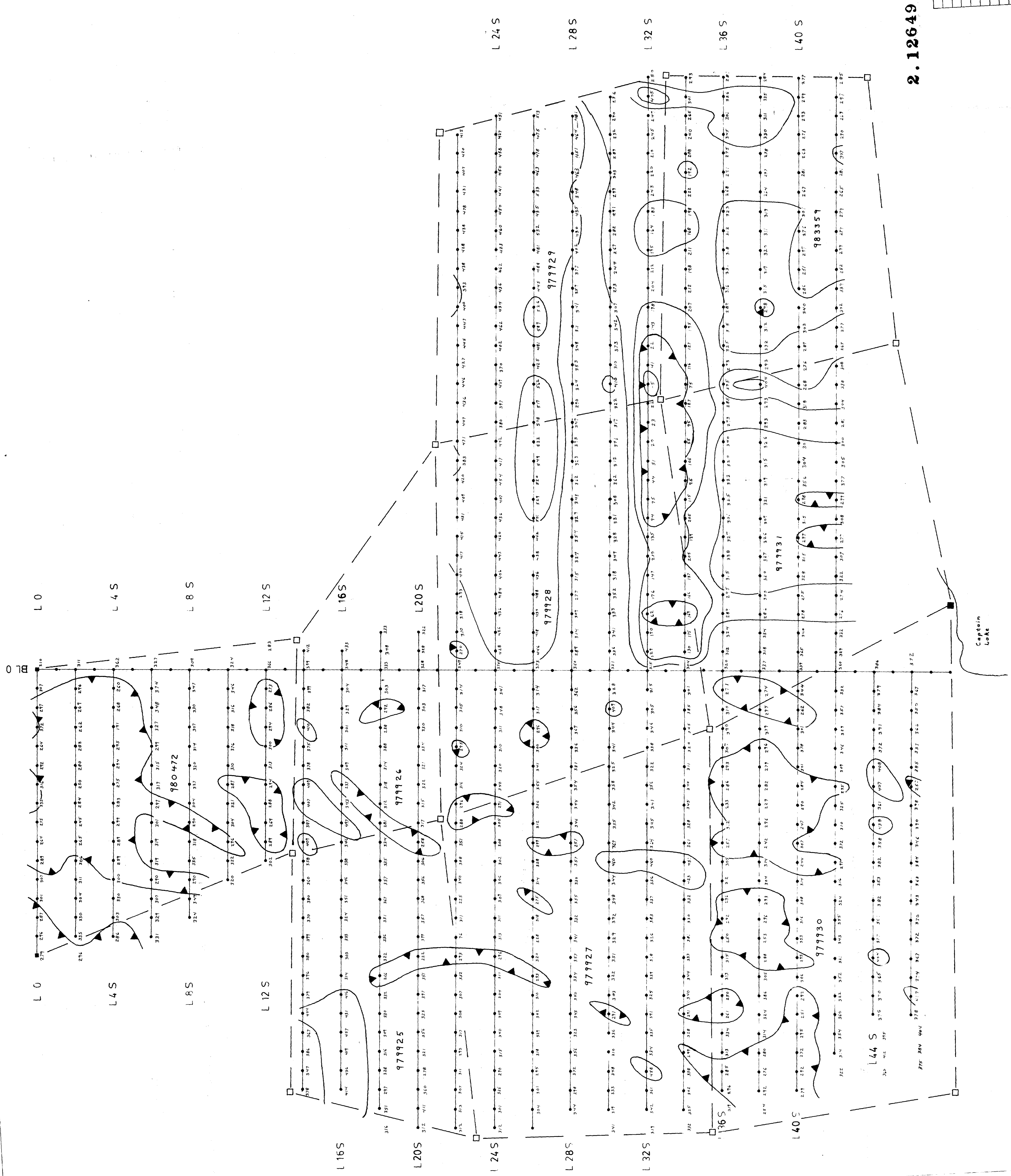
Donald R. Bondy

2.12649

PASCAL-LABBÉ
BEN NEVIS TOWNSHIP

MAGNETIC SURVEY
total field

SCALE	1:200	DRAWN BY	D.R.B.	FIG.	2
SHEET NO.		DATE			



Captain
Loke



210

Tannahill Twp. (M.390)

THE TOWNSHIP
OF

BEN NEVIS

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1 INCH = 40 CHAINS

LEGEND

- PATENTED LAND (P)
- TOWN LAND (TL)
- LEASIS (L)
- LOCATED LAND (Lc)
- 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
- RIVERS
- CANCELLED
- TRAILS

NOTES

- 400' Surface rights reservation along the shores of all lakes and rivers
- (H) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SECT 36 ORDER W 01/88L 545pm Sept 28, 1988
- (M) MUSHKIN HILLS NATURE RESERVE SURFACE AND MINING RIGHTS NOT OPEN TO STAKING
- (R) PENDING PROCEEDINGS SURFACE AND MINING RIGHTS NOT OPEN TO STAKING

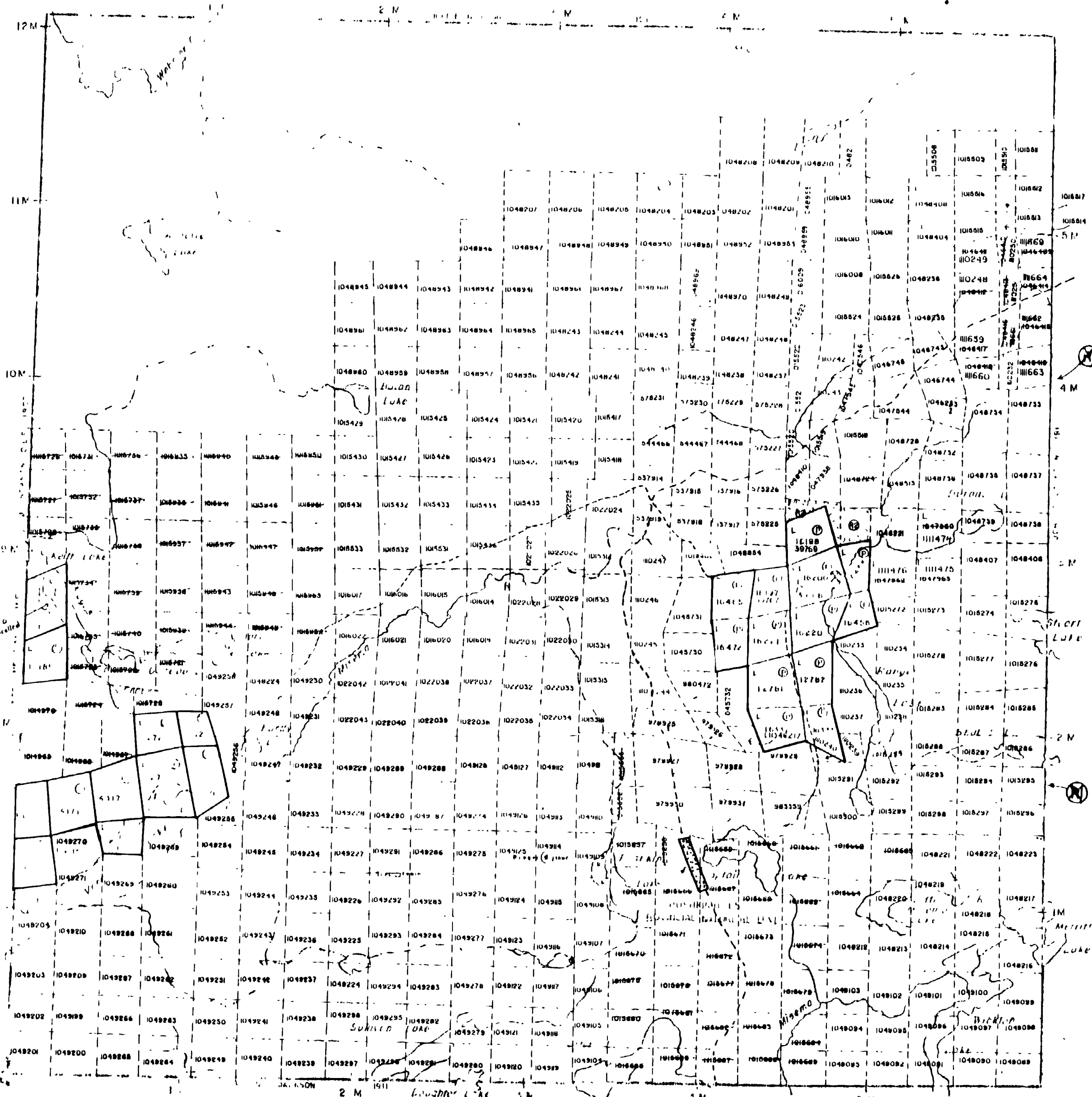
DATE OF ISSUE
JUL 17 1986
LARDER LAKE
MINING RECORDER'S OFFICE

circulated march 17, 1989

PLAN NO. **V. 325** M.W.
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYING & MAPPING BRANCH

Clifford Twp. (M.338)

Pontiac Twp. (M.382)



Katrine Twp. (M.357)

NOTICE OF FORESTRY ACTIVITY
THIS TOWNSHIP / AREA FALLS WITHIN THE
TIMISKAMING MANAGEMENT UNIT
AND MAY BE SUBJECT TO FORESTRY OPERATIONS
THE MNR UNIT FORESTER FOR THIS AREA CAN BE
CONTACTED AT: P.O. BOX 129
SWASTIKA, ONT.

