

2.4464



31F045W9473 2.4464 MONTEAGLE

010

REPORT ON
GEOPHYSICAL SURVEYS
on
GRAPHITE PROPERTY
MONTEAGLE TWP. ONTARIO.

John Rawlinson Lill.
B.Sc. P. Eng.

SUMMARY

Magnetometer and VLF-EM surveys were carried out on a graphite property in Monteagle township Ontario, during December 1981.

There is some conductivity and anomalous magnetic readings in the vicinity of the old workings.

PROPERTY

The property consists of three claims located in Monteagle township Ontario, and lies 11 miles north of the village of Bancroft in Eastern Ontario.

The following are the claim numbers and locations:

EO 572261	N $\frac{1}{2}$ Lot 23 Con. XIII
EO 572262	S $\frac{1}{2}$ Lot 23 Con. XIII
EO 572263	E $\frac{1}{2}$ Lot 24 Con. XIII

Title to the mining rights is held by J. W. Gemmell,
Box 379, Commerce Court, Postal Station, Toronto.

LOCATION & ACCESS

Access is most easily gained by taking the "Graphite Lake" road which runs east from Highway 62N about 2.5 miles south of the hamlet of Maynooth.

LOCATION & ACCESS (Continued)

About 2.5 miles from here, a private road runs north for about $\frac{1}{4}$ mile to the residence of John Freymond who owns the surface rights to the property.

MINERALIZATION

Numerous large pits and trenches are located in the central part of lot 23.

The mineralization consists of flake graphite in limestone and some production was carried out in the early part of the century.

The limestone is enclosed in paragneiss and appears to lie along the axis of a synclinal fault trending northwest-southeast (O.D.M. Map 1954-3).

SURVEY METHOD

A baseline running 309° true azimuth was cut from the southeast corner of the property to the northwest corner.

Lines normal to the baseline were cut at 400' intervals, east and west to the property boundaries.

SURVEY METHOD (Continued)

A magnetic survey employing the McPhar M500A magnetometer and electromagnetic survey using the Ronka EM-16 was carried out, with readings taken at 100' intervals over the section lines.

Approximately 20% of the property consists of fields, and at the conclusion of the survey, as requested by John Freymond, all pickets and flagging were removed from these areas.

RESULTS

The old workings lie in an area of slightly higher magnetic intensity which stretches from 24+00N to 32+00N in the vicinity of the baseline. There is also an area of higher magnetic readings from 4+00N to 16+00N, along strike with the above zone, though this lies mostly in a lower swampy area.

EM conductors were located on lines 28+00N and 32+00N near the old workings.

RESULTS (Continued)

A strong conductor was located on line 16+00N near two old pits, but due to the presence of the hydro line, it could not be determined if this continued south.

No explanation was determined for the conductive zone running from 20+00N to 28+00N lying between 200&300 feet east of the baseline.

CONCLUSIONS & RECOMMENDATIONS

When weather permits, intermediate lines at 200' intervals should be cut between 16+00N and 32+00N.

Geological mapping, sampling of the pits (where possible) and detailed geophysical surveys should be carried out in the area of the old workings and the anomalous zone east of the baseline.

The areas about some of the magnetic anomalous readings should be examined to determine if any old iron is located nearby. This could not be done during the survey as there was 4 to 5 inches of snow on the ground.

The area near the south magnetic anomaly should be geologically mapped to see if this lies in limestone.

CONCLUSIONS & RECOMMENDATIONS (Continued)

If this is the case, it could be the continuation of the north zone. However, ODM Map 1954-3 shows an east-west fault cutting off the limestone to the north of this magnetic high.

Respectfully submitted,

John R. Lill
John Rawlinson Lill, B.Sc.P.Eng.





Type of Survey(s): **GEO PHYSICAL (MAGNETOMETER ELECTROMAGNETIC) MONTEAGLE**

Claim Holder(s): **JAMES W. GEMMELL** Prospector's Licence No.: **A36500**

Address: **P.O. BOX 379 COMMERCE COURT, POSTAL STATION TORONTO, ONTARIO M5L 1K2**

Survey Company: **JOHN R. LILL** Date of Survey (from & to):
 Day | Mo. | Yr. | Day | Mo. | Yr. | Total Miles of Line Cut: **3.8**

Name and Address of Author (of Geo-Technical report): **JOHN R. LILL 40 FIRTH CRES. SCARBORO ONT M1G 2J5**

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	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
E0	572261				
	572262				
	572263				

MINING RECORDS OFFICE - TORONTO
RECEIVED
JAN - 4 1982
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FIRST
MINING RECORDS OFFICE - TORONTO
RECEIVED
DEC 23 1981
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

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. **3**

Date: **DEC 23 1981** Recorded Holder or Agent (Signature): **[Signature]**

For Office Use Only

Total Days Cr. Recorded: **180** Date Recorded: **January 4, 1982** Mining Recorder: **[Signature]**

Date Approved by Recorder: **[Signature]**

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: **JOHN R. LILL 40 FIRTH CRES. SCARBORO ONT M1G 2J5**

Date Certified: **DEC 22/81** Certified by (Signature): **[Signature]**



Mining Lands Comments

To: Geophysics *Mr Barber*

Comments

Approved

Wish to see again with corrections

Date *Oct 29/82*

Signature *Ryan Plw*

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)



Ministry of
Natural
Resources
Ontario

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

- 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.

The Mining Act

Type of Survey(s) GEOPHYSICAL (MAGNETOMETER + ELECTROMAGNETIC)	Township or Area MONTFAGLE
Claim Holder(s) JAMES W. GEMMELL	Prospector's Licence No. A36500
Address P.O. BOX 379 COMMERCE COURT POSTAL STATION TORONTO ONT	
Survey Company JOHN R LILL	Total Miles of line Cut 3.8
Name and Address of Author (of Geo-Technical report) JOHN R LILL 40 FIRTH CRES. SCARBORO ONT M1G 2J5	

Special Provisions	Geophysical	Days per Claim	Mining Claim			Mining Claim		
			Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40				E0	572261	
	- Magnetometer	20					572262	
	- Radiometric						572263	
For each additional survey: using the same grid: Enter 20 days (for each)	- Other							
	Geological							
	Geochemical							
Man Days 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.	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.

Total number of mining claims covered by this report of work. **3**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

Date **DEC 23/81** Recorded Holder or Agent (Signature) **John R Lill**

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
JOHN R. LILL 40 FIRTH CRES. SCARBORO ONT M1G 2J5

Date Certified **DEC 23/81** Certified by (Signature) **John R Lill**



Ministry of Natural Resources

File _____

GEO PHYSICAL - 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) GEO PHYSICAL
Township or Area MONTEAGLE
Claim Holder(s) JAMES W. GEMMELL
COMMERCE COURT POSTAL STATION TORONTO
PO BOX 379
Survey Company JOHN R. LILL
Author of Report JOHN R. LILL
Address of Author 40 FIRTH CRES SCARBORO ONT
Covering Dates of Survey 16 12 81 - 19 12 81
(linecutting to office)
Total Miles of Line Cut 3.8

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

E O 572261
572262
572263

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 40
-Magnetometer 20
-Radiometric _____
-Other _____
Geological _____
Geochemical _____

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

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

DATE: JAN 4/82 SIGNATURE: John R. Lill
Author of Report or Agent

Res. Geol. _____ Qualifications 63A.426

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 3

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 180 Number of Readings 360
Station interval 100' Line spacing 400'
Profile scale VLF 1" = 30'
Contour interval MAG 500 GAMMAS

MAGNETIC

Instrument M^CPHAR M500A
Accuracy - Scale constant 5 GAMMA MAXIMUM
Diurnal correction method CHECK ON BASE & CONTROL STATIONS
Base Station check-in interval (hours) 1 HOUR
Base Station location and value 12+00N BASE LINE 500 GAMMAS

ELECTROMAGNETIC

Instrument RONK EM 16
Coil configuration FIXED HORIZONTAL & VERTICAL
Coil separation
Accuracy +/- 1%
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency NAA CUTLER MAINE 17.8 KHZ (specify V.L.F. station)
Parameters measured VERTICAL IN PHASE & OUT OF PHASE COMPONENTS

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

2.4464

January 27, 1982

2.4464

R.M. Charnesky
Mining Recorder
Ministry of Natural Resources
Whitney Block, Room 1522
99 Wellesley Street West
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Madam:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims EO.572261 et al, in the Township of Monteaagle.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/96501380

de Skura/bk

cc: John R. Lill
Scarboro, Ontario

cc: James W. Gemmell
Toronto, Ontario

Wicklow Twp.(M.158)

THE TOWNSHIP OF
MONTEAGLE
 COUNTY OF HASTINGS
 EASTERN ONTARIO
 MINING DIVISION
 SCALE: 1-INCH=40CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KINGS HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED
- TRAILS
- CHURCH PROPERTIES

NOTES
 This Map Is Not To Be Used
 FOR SURVEY PURPOSES

Lot And Concession Lines Shown Hereon Are Projected From The Best Information Available, But Their True Position Is Not Guaranteed. For Official Survey Purposes Consult The Original Survey Plans And Field Notes Of Records In The Dept. Of Lands & Forests;

400' Surface Rights Reservation Around All Lakes And Rivers.

The Acreages Shown Are The Amount That Were Patented And Do Not Necessarily Represent The True Surveyed Area Of The Parcel.

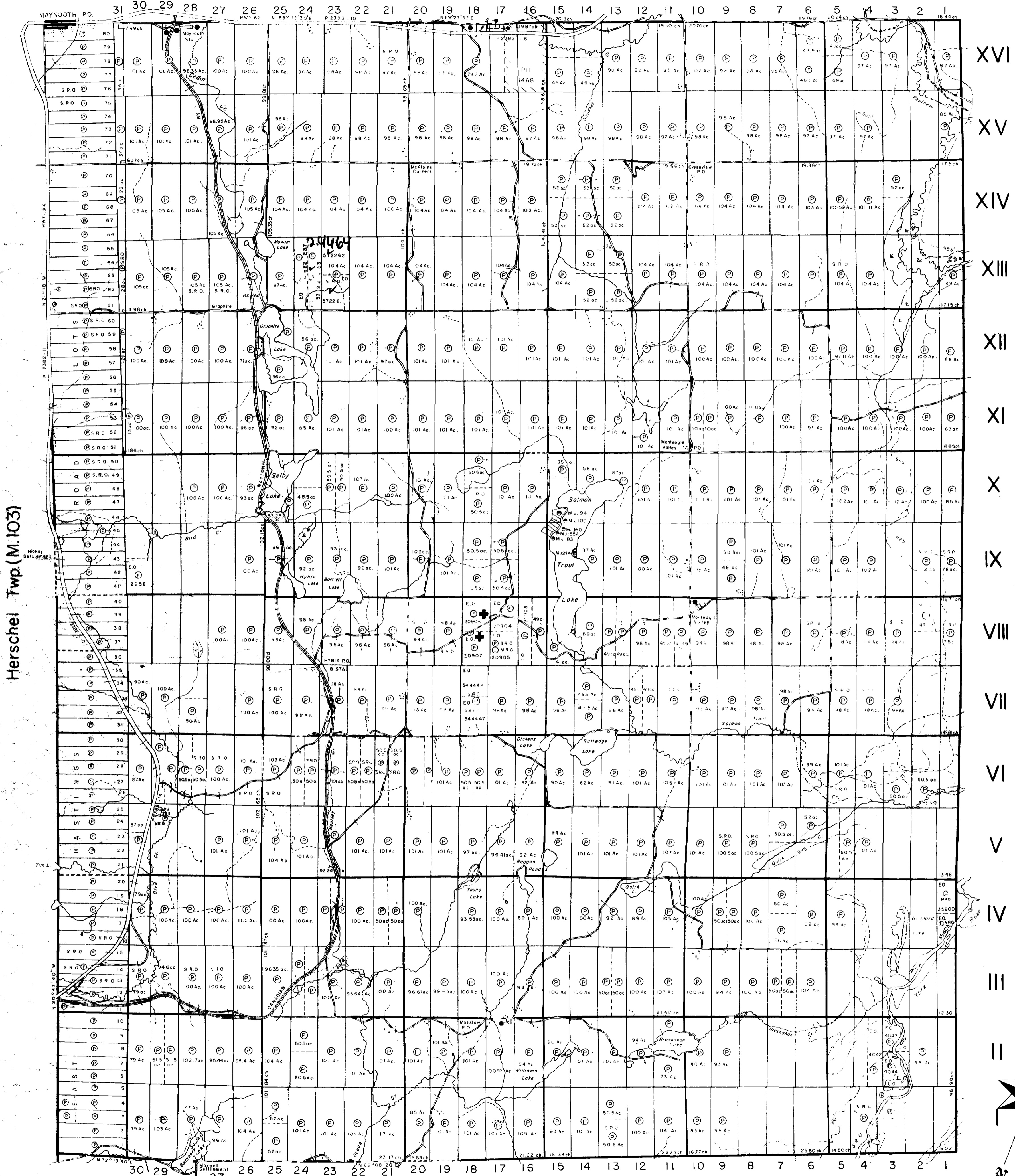
Parcels Indicated Thus:
 ● Patented Mining & Surface Rights
 ○ Surface Rights Only.

Flooding Rights Reserved To Contour Elevation 985' To H.E.P.C. Of Ontario. File: 22311

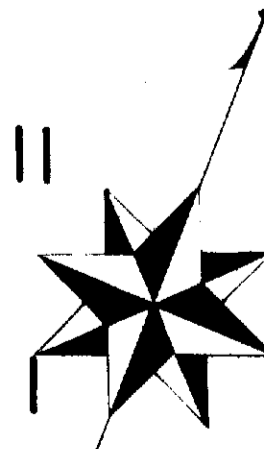
DATE OF ISSUE
 DEC - 2, 1982
 Ministry of Natural Resources
 TORONTO

PLAN NO.-M.128

ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEY AND MAPPING BRANCH



XVI
 XV
 XIV
 XIII
 XII
 XI
 X
 IX
 VIII
 VII
 VI
 V
 IV
 III
 II

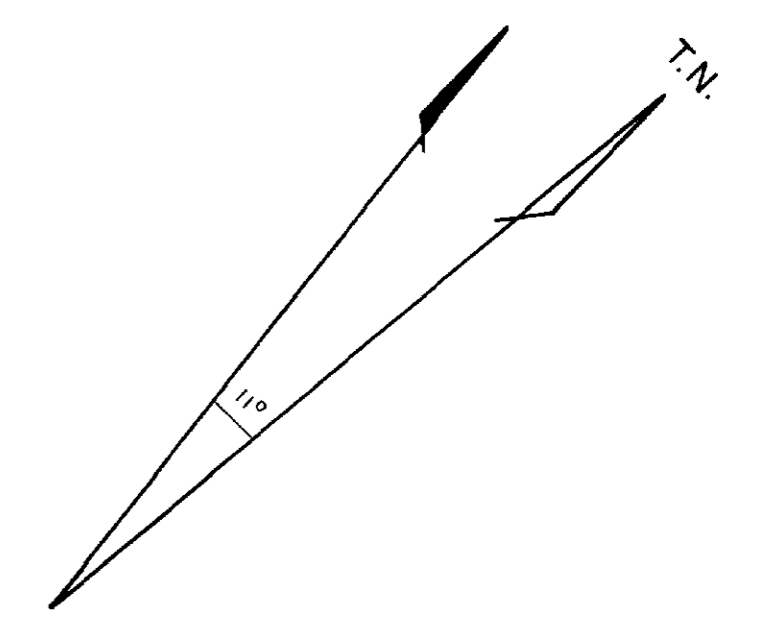
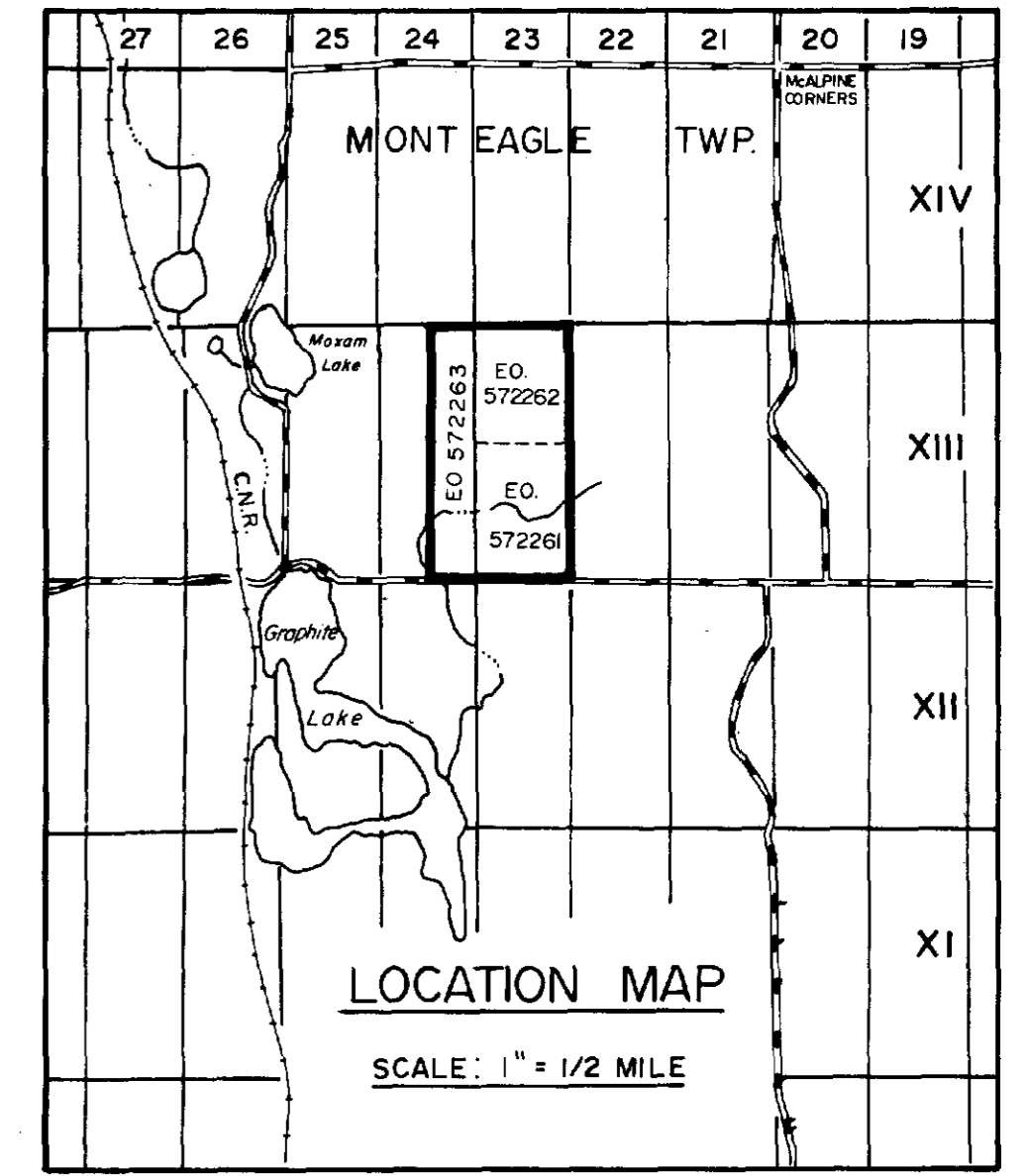
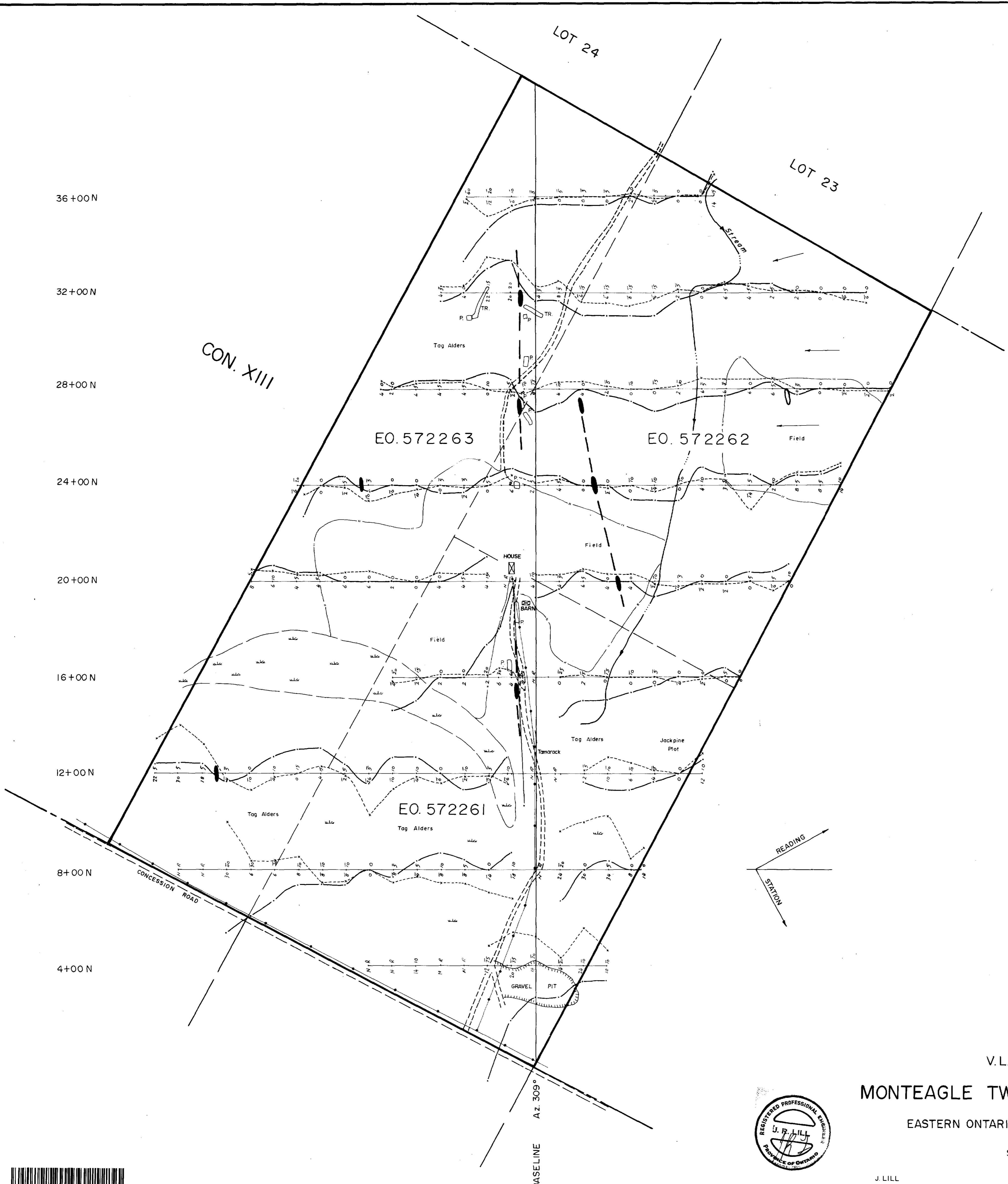


Herschel Twp.(M.103)

Carlow Twp.(M.70)

Dungannon Twp.(M.85)





L E G E N D

- IN PHASE
Solid line
% off vertical
- QUADRATURE
Dashed line
% off horizontal
- Profile Scale: 1" = 30%
- Instrument: Ronka E.M. 16
- Transmitter Station: Cutler, Maine
- All readings facing north
- Strong conductor
 - Weak conductor
- Survey dates: Dec. 17 & 18, 1981
- P TR Pit, trench
 - ⊠ Building
 - Road
 - Field
 - Swamp
 - ↘ Down slope
 - Power line
 - Claim line
 - Property boundary

V.L.F. - E.M. SURVEY

MONTEAGLE TWP. GRAPHITE PROPERTY

EASTERN ONTARIO MINING DIVISION, ONTARIO

SCALE: 1" = 200'



J. LILL

DECEMBER 1981



36+00 N
 32+00 N
 28+00 N
 24+00 N
 20+00 N
 16+00 N
 12+00 N
 8+00 N
 4+00 N

CON. XIII

LOT 24

LOT 23

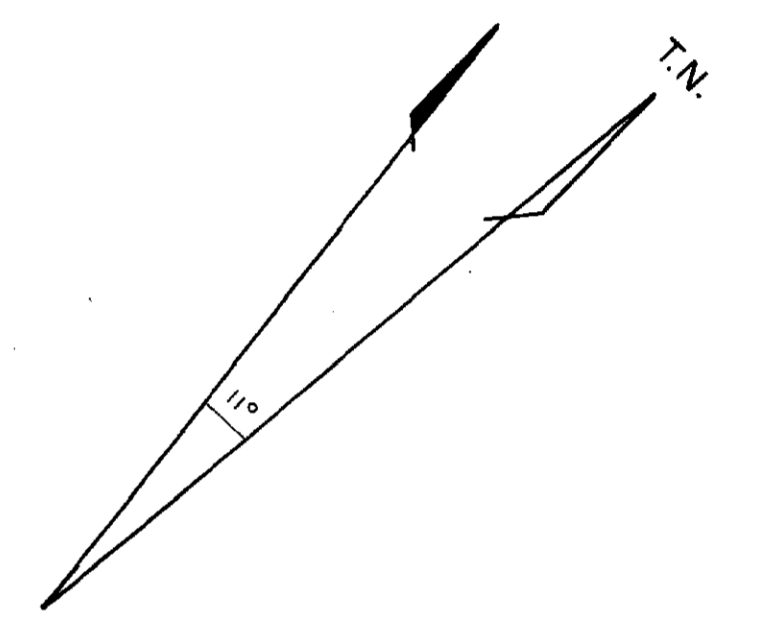
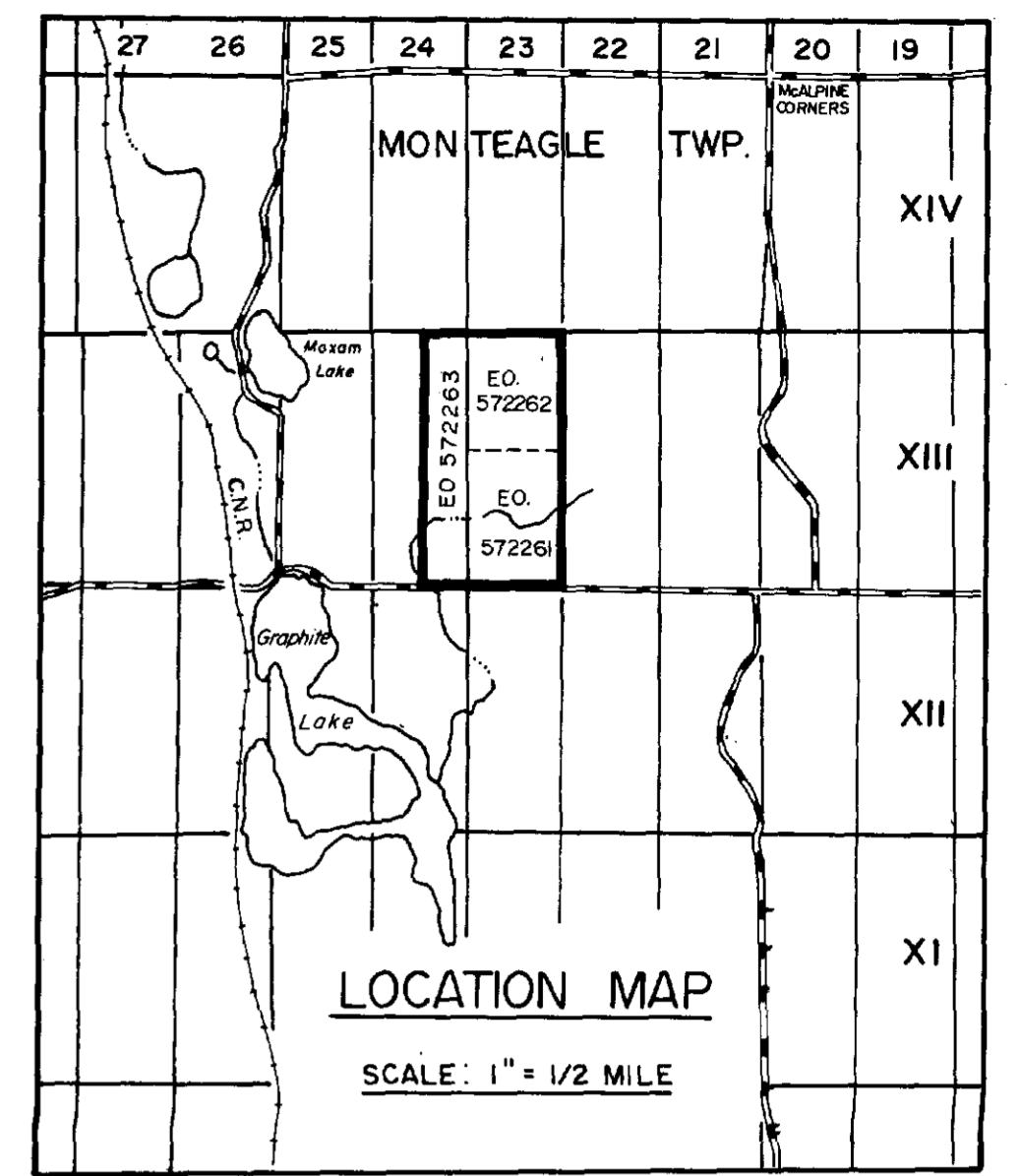
EO. 572263

EO. 572262

EO. 572261

CONCESSION ROAD

BASELINE Az. 309°



LEGEND

- ↑ 200 Station, reading in gammas
- ▲ Base station
- △ Control station
- Contour interval: 500 gammas
- Instrument: MCPHAR M500A
- Survey dates: Dec. 17 & 18, 1981
- TR Pit, trench
- ▣ Building
- Road
- Field
- Swamp
- ↓ Down slope
- Power line
- Claim line
- Property boundary

MAGNETOMETER SURVEY
 MONTEAGLE TWP. GRAPHITE PROPERTY

EASTERN ONTARIO MINING DIVISION, ONTARIO

SCALE: 1" = 200'



J. LILL

DECEMBER 1981

