



31C14NE001 2.8665 CLARENDON

010

NOV 26 '85	
PREPARE REPLY	<input type="checkbox"/>
COMMENTS PLEASE BY	<input type="checkbox"/>
S. E. YUNDT	
J. R. MORTON	
J. C. SMITH	/
W. P. BROOK	
M. J. HOBAN	
D. W. SCOTT	
S. KEEN	
Return To: R.6649	

Report on a  
Magnetometer Survey  
Clarendon Township  
Eastern Ontario Mining Division  
Ontario  
for  
St. Joe Canada Inc.

by: David Molloy  
October 1985

*David Molloy*  
23124

SUMMARY:

St. Joe Canada Inc. owns two contiguous claims located in Clarendon Township, Ontario. The claims were acquired from Mr. G. Pearce who had outlined significant soil geochemical anomalies on the property.

Linecutting and ground magnetic surveys were carried out over the claims in March, 1985. The magnetic survey produced ENE trending anomalies.

INTRODUCTION:

Linecutting and a magnetometer survey were carried out on the Clarendon Township property of St. Joe Canada Inc. during March, 1985. The linecutting was conducted under contract to Bruce Fagan of R. R. #4, Coldwater, Ontario. The magnetometer and VLF surveys were completed by Bruce Fagan assisted by Tia Tennent of 1427 Dundas Crescent, Mississauga, Ontario. A total of 4.9km was surveyed.

PROPERTY, LOCATION AND ACCESS:

The Clarendon Township property is owned by St. Joe Canada Inc. and consists of two contiguous mining claims located in the western part of the township. The claim numbers are E0673566 and E0673567.

The property is located in N.T.S. 31C/14 with an approximate geographic centre positioned at lat. 44°54'N and long. 77°01'W.

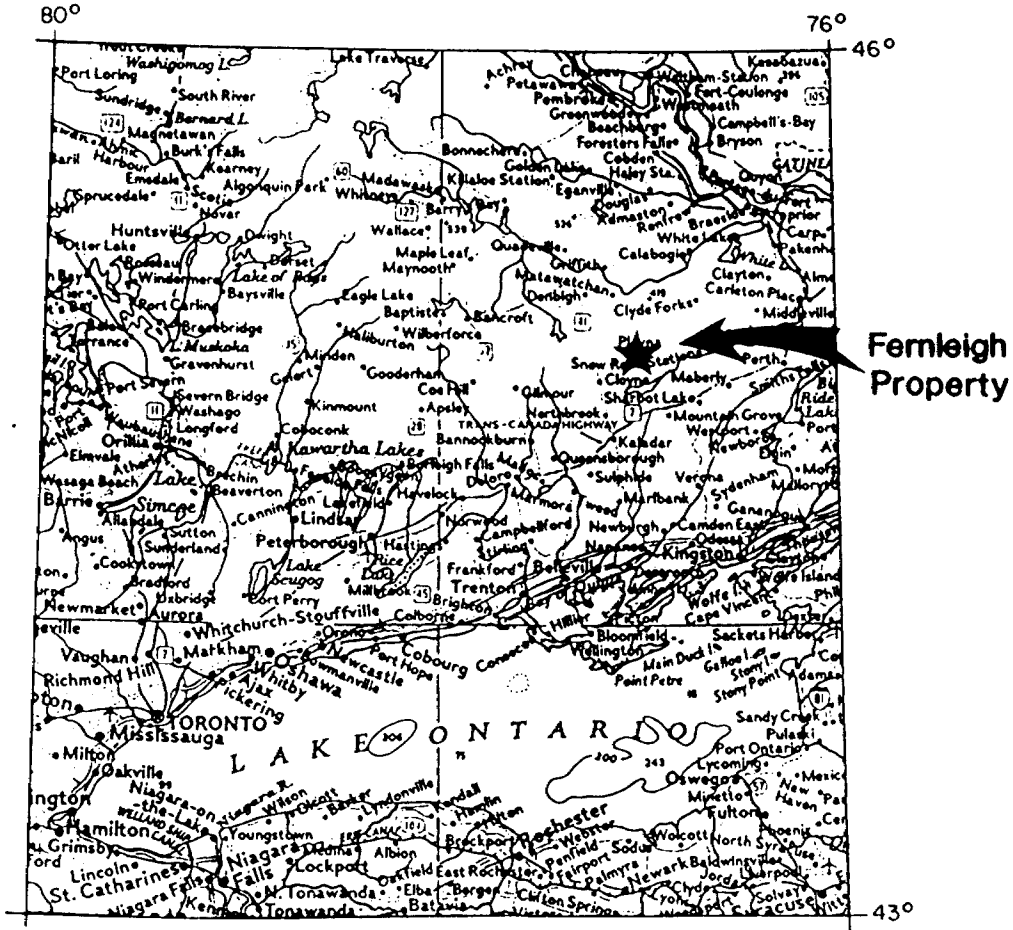
Access to the property is by foot directly north of Hwy. 506, 1 mile west of the town of Fernleigh, Ontario.

HISTORY:

The property was originally staked by Gary Pearce (R.R. #3, Novan, Ontario) for its muscovite potential in 1981. In August, 1982 additional geologic, geochemical and VLF (EM-16) surveys were conducted by Mr. Pearce to assess the base metal potential of the property. As a result of zinc geochemical soil anomalies St. Joe Canada Inc. optioned the property from Mr. Pearce in January, 1985.

GEOLOGY:

The property lies within the Hastings Basin of the Central Metasedimentary Belt of the Grenville Province. The property is underlain by intercalated metasediments and metavolcanics intruded by later felsic to mafic plutonic rocks.



St. Joe Canada Inc.  
 LOCATION MAP

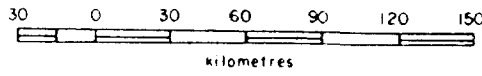


FIGURE 1

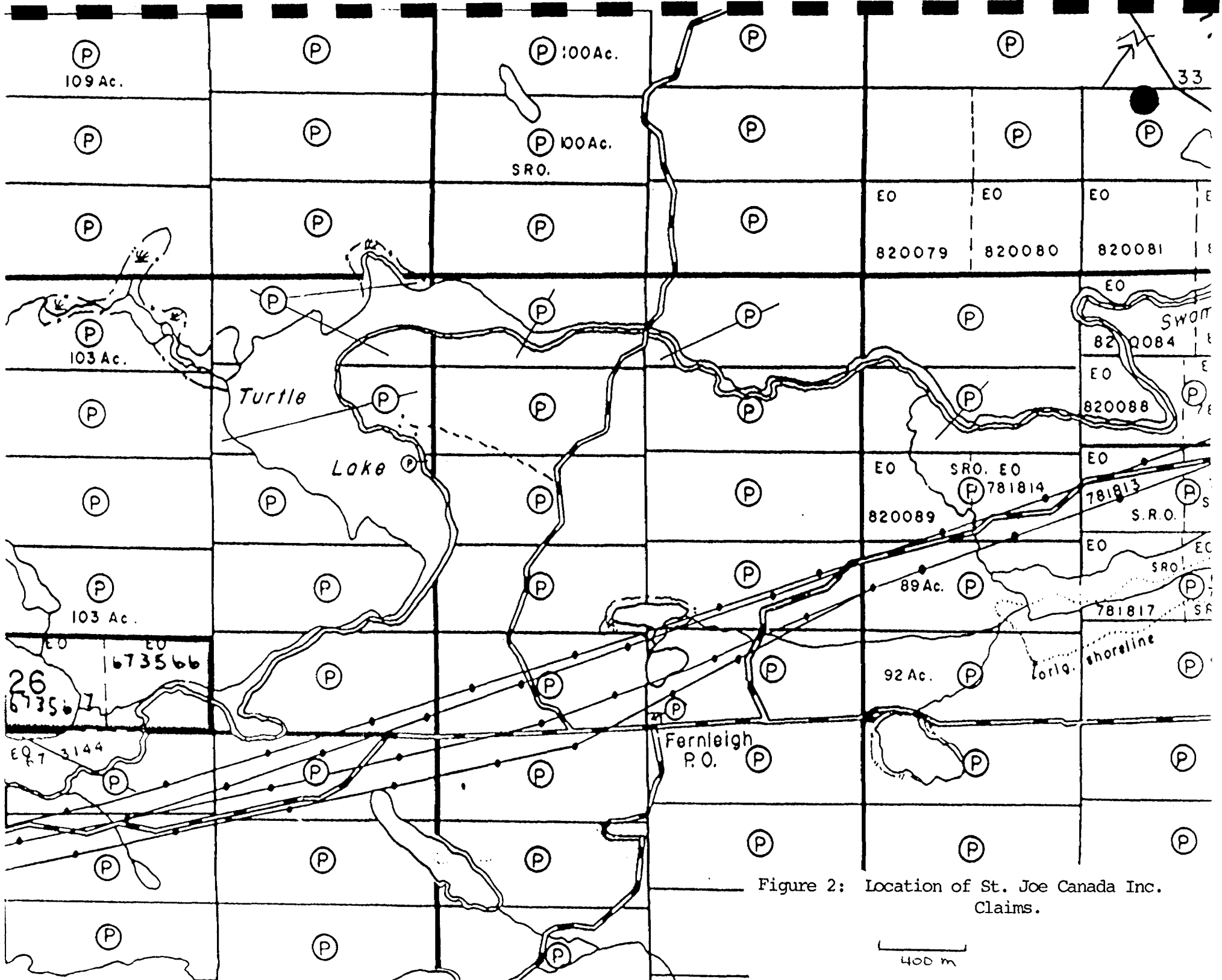


Figure 2: Location of St. Joe Canada Inc. Claims.

MAGNETIC SURVEY RESULTS:

A magnetic survey using an EDA Model PPM-350 field magnetometer and a Model PPM-400 base station magnetometer was carried out along lines oriented north-south and spaced at 100m intervals. Readings were recorded at 12.5m intervals along each line. A detailed survey with 50m line spacing was carried out over a prominent zinc soil anomaly associated with dolomitic marble. The survey results indicate a prominent positive magnetic anomaly with a relief of up to approximately 2500 gammas trending east-northeast across the southeastern portion of the claims. The anomaly is associated with quartz-muscovite-staurolite schists and quartz-biotite-garnet-feldspar schists. The presence of magnetite as well as pyrite and pyrrhotite mineralization in these units accounts for this anomaly. Flanking the anomaly to the southeast is a narrow zone of low magnetic response which correlates well with a band of dolomitic marble. In the southeast corner of the claim group several small isolated magnetically positive anomalies with a relief ranging from about 600 to 2000 gammas occur in a pelitic schist unit which locally contains disseminated iron sulphides.

The quiet magnetic response occurring over the northern portion of the claim group relates to a thick section of quartz biotite gneiss.

CONCLUSIONS:

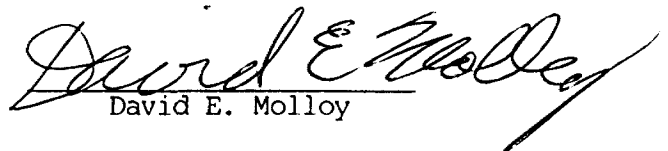
Each of the rock units on the property has a distinct magnetic signature and the magnetic survey was useful as a mapping tool in extending geological contacts under areas of overburden cover.

CERTIFICATE

I, David Earl Molloy, of the town of Unionville, Province of Ontario, do hereby certify that:

1. I reside at 49 Normandale Road, Unionville, Ontario.
2. I have worked as a geologist for the last 13 years.
3. I am a graduate of McMaster University with a B.A. Degree (1967) in Philosophy and of the University of Waterloo with a BSc Degree (1972) in Earth Sciences.
4. I am a member of the Prospectors and Developers Association, of the Canadian Institute of Mining and Metallurgy, and of the Geological Association of Canada.
5. The Magnetometer and VLF Surveys were done under my supervision and I was present when it was being carried out. I have supervised the preparation of the maps and have written the report.

Respectfully Submitted,  
St. Joe Canada Inc.

  
David E. Molloy

Dated at Toronto this 18th day of October, 1985.



31C14NE0001 2.8665 CLARENDON

900

Mining Lands Section

File No 28665

Control Sheet

TYPE OF SURVEY  GEOPHYSICAL

GEOLOGICAL

GEOCHEMICAL

EXPENDITURE

MINING LANDS COMMENTS:

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*Handwritten initials: H.D.*

*J. Hurst*  
Signature of Assessor

*Nov 27/85*  
Date

**REGISTERED**

November 20, 1985

Report Of Work #57

St. Joe Canada Inc  
Suite 1116  
111 Richmond Street West  
Toronto, Ontario  
M5H 2J4

Dear Sirs:

RE: Mining Claims E0 673566 & 67,  
in Clarendon Township

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I have not received the reports and maps (in duplicate) for the Geophysical (Magnetometer) Survey on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on September 30, 1985 the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on November 29, 1985.

If the material is not submitted to this office by November 29, 1985 I will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)965-4888

AB/mc

cc: Mining Recorder  
Toronto, Ontario  
Encl.



# ST. JOE CANADA INC.

111 RICHMOND STREET WEST, SUITE 1116  
TORONTO, CANADA M5H 2J4  
(416) 367-1031

<b>RECEIVED</b> LAND MANAGEMENT BRANCH	
NOV 26 '85	
PREPARE REPLY	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
S. E. YUNDT	
J. R. MORTON	
J. C. SMITH	/
W. P. BROOK	
M. J. HOGAN	
D. W. SCOTT	
S. KEEN	
Return To: R.6643	

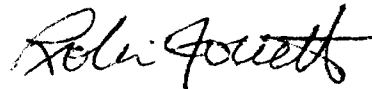
November 25, 1985

Mrs. S.E. Yundt,  
Land Management Branch,  
Ministry of Natural Resources,  
Whitney Block, Room 6643,  
Queen's Park,  
Toronto, Ontario.  
M7A 1W3

Dear Mrs. Yundt:

Please find enclosed 2 copies of a "Report on a Magnetometer Survey" conducted on 2 claims in Clarendon Twp. A photocopy of the Report of Work is included for your reference.

Sincerely,



Robin Jowett  
Geologist

RJ:kg  
Encl.

## RECEIVED

NOV 26 1985

### MINING LANDS SECTION

L.M.B. Nov. 1984



Report of Work # 85-57  
(Geophysical, Geological,  
Geochemical and Expenditures)

28665

FILE # EO 673566

- 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.

W8509-57

Mining Act

Type of Survey(s) <b>Magnetometer</b>	Township or Area <b>Clarendon</b>
Claim Holder(s) <b>St. Joe Canada Inc.</b>	Prospector's Licence No. <b>T1109</b>
Address <b>111 Richmond Street, West - Suite 1116 Toronto, Ontario M5H 2J4</b>	
Survey Company <b>same as above</b>	Date of Survey (from & to) <b>23 06 85 26 06 85</b> <small>Day Mo. Yr. Day Mo. Yr.</small>
Name and Address of Author (of Geo-Technical report) <b>same as above</b>	
Total Miles of line Cut <b>2.94</b>	

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)  For each additional survey: using the same grid: Enter 20 days (for each)	- Electromagnetic	40
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
Geological		
Airborne Credits  Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)					
Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
EO	673566				
	673567				

MINING RECORDS OFFICE - TORONTO  
**RECEIVED**  
SEP 30 1985  
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)

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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. 2

Date: **Sept. 25, 1985**

Recorded Holder or Agent (Signature): *[Signature]*

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
80	Sept 30 1985	<i>[Signature]</i>
	Date approved as Recorded	Branch Director
	85.12.3	<i>[Signature]</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.

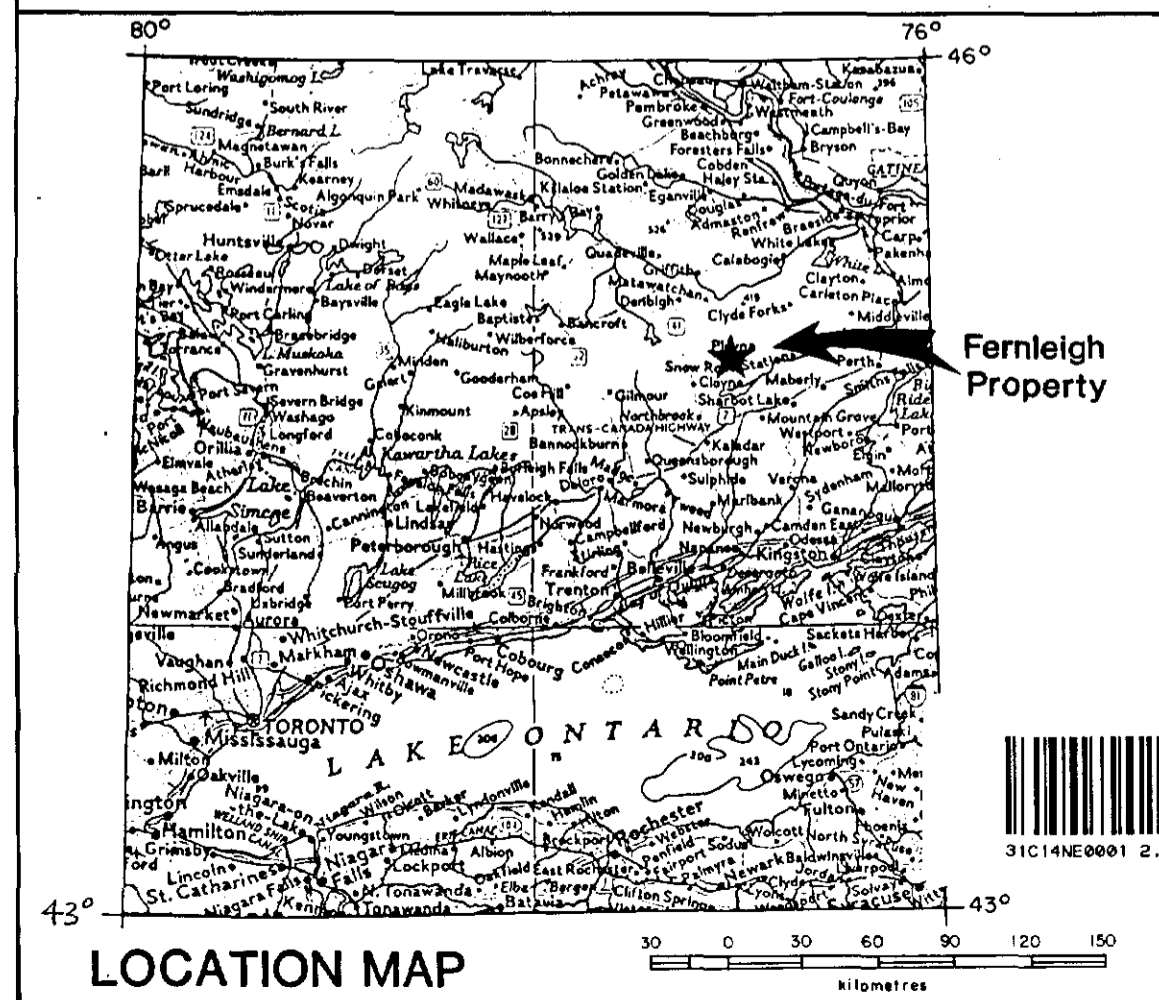
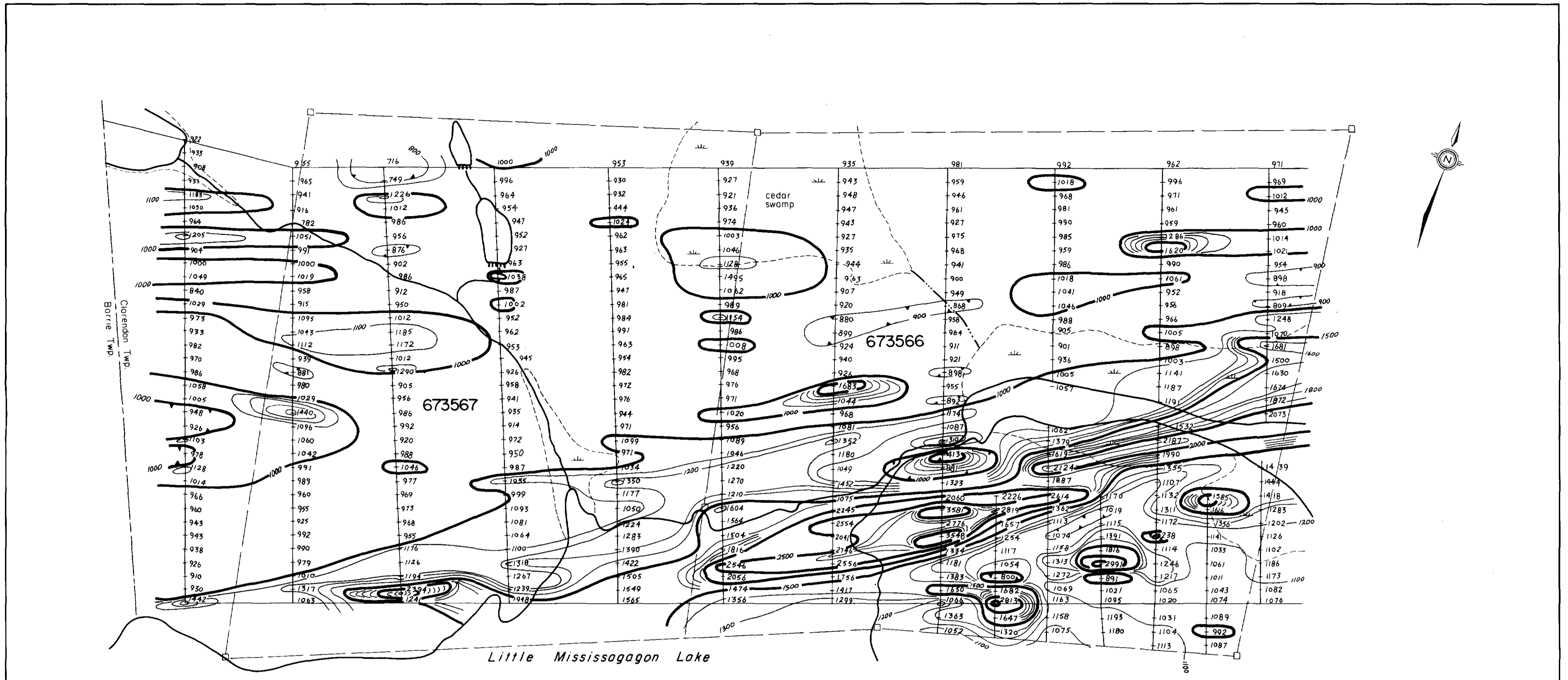
Name and Postal Address of Person Certifying  
**Robin Jowett**

**883 Sunningdale Bend, Mississauga, Ont. L5J 1G1**

Date Certified: **Sept. 25, 1985**

Certified by (Signature): *[Signature]*

1362 (81/9) Resident Geologist Tweed.



**LEGEND**  
 □ Claim post  
 — Claim line

**INSTRUMENT**  
 Field Magnetometer - EDA PPM 350  
 Base Station Magnetometer - EDA PPM 400  
 Plotted Values = Reading - 57,000 γ  
 Operators - B. Fagan, T. Tennent  
 — 100 gamma contour  
 — 500 gamma contour  
 - Depression contour

St. Joe Canada Inc.

**Fernleigh Option**  
 Ontario N.T.S. 31C/14

**MAGNETIC SURVEY**  
**TOTAL FIELD**

2.8665

SCALE 1:2500  
 50 0 100 150 200 metres

Jeff Meek & Associates Ltd.  
 Drafting & Cartographic Services

Survey Date:  
 March, 1985



200