



41P11SW0037 2.4498 CONNAUGHT

010

MAGNETOMETER SURVEY  
REPORT FOR  
GOLDHURST RESOURCES INC.  
LITTLE ESTHER PROPERTY  
CONNAUGHT TOWNSHIP, ONTARIO.

**RECEIVED**

JAN 21 1982

MINING LANDS SECTION

by

F.T. Archibald, B.Sc. Geologist  
January 15, 1982.

*qual on file: 2.2715*

GOLDHURST RESOURCES INC.  
LITTLE ESTHER PROPERTY  
CONNAUGHT TOWNSHIP, ONTARIO.

SUMMARY

The property consists of twelve contiguous non-patented mining claims in Connaught Township which is situated in the Larder Lake Mining District of Ontario. The claims are numbered L553672 to L553683 inclusive.

The purpose of the survey was to delineate any zone of mineralization and to attempt to delineate geological structure underlying the property.

Over 80% of the property is covered by overburden. Outcroppings are scarce with exception of that area which is in close proximity of the shore of Little Esther Lake. A zone of chalcopryrite mineralization has been traced by stripping along the southwest shore of Little Esther Lake. A strong electromagnetic V.L.F. anomaly has been delineated in close proximity and paralling this zone of mineralization.

Some 9.0 miles of line was traversed during the survey. Readings were taken on lines spaced at 400 feet apart and at intervals of 50 to 100 feet along the lines.

There is a weak to moderately weak magnetic signature overlying the property. Two anomalous trends are found to exist on the property. Both of these follow close to the contacts between a diorite intrusive and acid to basic metavolcanic units. One trend corresponds close to a mineralized breccia shear or fault zone which lies along the intrusive-metavolcanic contact.

PROPERTY AND LOCATION

The property consists of twelve unpatented mining claims in the Township of Connaught; District of Larder Lake, Ontario. The claims are numbered: L553672 to L553683 inclusive.

The property is located approximately 75 miles northwest of the town of Sudbury, Ontario, or approximately 5 miles north of the town of Shiningtree, Ontario.

Access is by highway #560 to Shiningtree and then by snowmobile in the winter or by float plane to Little Esther Lake. This highway can be reached by Highway # 144 from Sudbury or by Highway #11 at the New Liskeard or Kirkland Lake turnoffs.

TOPOGRAPHY

The area encompassed by the claims is generally slightly undulating. There are small knolls or hills rising to fifty feet above the lake level in the north and east section, and low lying swamp sections in the south and west sections of the property. The knolls are elongated in a northwest to southeast direction.

Up to 35% of the property is covered by swamp or low lying areas.

The timber consists primarily of mature poplar with areas of birch, spruce and tag alder.

## GEOLOGY

The property is underlain by basic flows of Keewatin age and smaller areas of younger Cobalt sediments. Acid volcanic flows (rhyolites) can be seen on the west side of Little Esther Lake. Quartz diorite intrusives are also evident on both the west and south east sides of Little Esther Lake.

Fault breccia striking north  $60^{\circ}$  west and dipping  $62^{\circ}$  to the north can be found along the west arm of Little Esther Lake and dipping underneath the lake.

## ECONOMIC GEOLOGY

An east-west trending zone of fault breccia with concentrations of pyrite and chalcopyrite can be followed along the west arm of Little Esther Lake. Samples from this zone have returned assays with up to 2.34% copper mineralization.

Work on this zone has been limited because of the swamp overburden to the west and the lake overlying it to the east.

SPECIFICS OF SURVEY

The survey was completed with the use of the Exploranium-Geometrics 'Unimag' proton magnetometer. This digital readout instrument has a sensitivity of  $\pm 10$  gammas.

Station readings were taken at intervals of 100 feet on lines at 400 feet apart. When abnormally high or low readings were encountered, or in areas of high magnetic fluctuation, readings were taken at 50 foot interval stations. Some 9.0 miles of line was traversed during the survey.

The accuracy of the readings was increased by averaging two or three readings, especially in areas of high magnetic fluctuation. In areas where fluctuations could not be nulled, stations were moved a few feet until a constant reading was obtained. The range selector was changed in areas of high fluctuation until the readings decreased to a constant level.

The 'world gamma range' setting on the instrument was brought down to a scale relative to the airborne magnetics of the area when plotting the final resultant readings. Results, after plotting corrections for diurnal drift, are plotted at 500 gamma intervals. Base plans are plotted at a scale of 1 inch to 320 feet.

Actual field work was done from January 6 to January 15, 1982.

RESULTS OF SURVEY

There is a very weak magnetic signature overlying the claim group. Two weak magnetic trends were encountered during the survey. These magnetic trends parallel the regional geological strike, in a northwest-southeast direction.

The strongest magnetic response found was 2740 gammas above a normalized background. These moderately weak responses are narrow and very discontinuous.

Anomalous trend A is a moderately weak magnetic signature which runs the length of the northern section of the property, in an east-west direction. The highest magnetic response lies between lines 32 West and 40 West.

Anomalous trend B is a weak to moderately weak magnetic signature which runs between lines 0+0 and 36 West. This discontinuous anomaly trends in a northwest to southeast direction across the southern-middle portion of the property.

CONCLUSIONS

Two east-west to northwest-southeast trends, Anomalies A and B, have weak to moderately weak responses and show up as discontinuous conductive zones.

Anomaly A parallels the contact between the acid metavolcanic group (rhyolites) to the north and a diorite intrusive unit to the south.

This magnetic trend parallels a strong electromagnetic anomaly and parallels a brecciated shear zone or fault zone which travels through the west arm of Little Esther Lake.

Anomaly B parallels the contact of the weakly magnetic diorite intrusive unit. This trend probably follows the southern contact of the intrusive unit.

A flat magnetic signature in the southwest section of the property is underlain by a basic metavolcanic unit.

*F.T. Archibald*

January 15, 1982.

F.T. Archibald, B.Sc. Geologist



Ministry of  
Natural  
Resources  
Ontario

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



41P11SW0037 2.4498 CONNAUGHT

#29

traversed  
attach a list.  
ed in the  
be entered  
columns.

900

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

Claim Holder(s) **Goldhurst Resources Inc.** Prospector's Licence No. **T-970**

Survey Company **F.T. Archibald Consulting Ltd.** Survey Dates (linecutting to office) **07 Day | 01 Mo | 82 Yr | 15 Day | 01 Mo | 82 Yr** Total Miles of line Cut **9.0**

Name and Address of Author (of Geo-Technical report)  
**F.T. Archibald 702-100 Adelaide St. W. Toronto, Ontario**

**Special Provisions Credits Requested**

Instructions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	<b>XX20</b>
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

**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. 15, 1982** Recorded Holder or Agent (Signature) *F.T. Archibald*

**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  
**F.T. Archibald**

702-100 Adelaide St. W. Toronto, Ont Date Certified **Jan. 15, 1982** Certified by (Signature) *F.T. Archibald*

**Mining Claims Traversed (List in numerical sequence)**

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
L	553672	20			
	553673	20			
	553674	20			
	553675	20			
	553676	20			
	553677	20			
	553678	20			
	553679	20			
	553680	20			
	553681	20			
	553682	20			
	553683	20			

ORDER L  
MINING DIV.  
**RECEIVED**  
FEB 2 1982  
MINING LANDS SECTION

AM  
7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6

Total number of mining claims covered by this report of work. **12**

**For Office Use Only**

Total Days Cr. Recorded **240** Date Recorded **JAN 20 1982** Mining Recorder

Date Approved Recorded **82.12.14** Regional Chief Director *[Signature]*



2.4498

February 9, 1982

2.4498

Office of the 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 (Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims L.553672 et al in the Township of Connaught.

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: 416/965-1380

J. Skura/bk

cc: F.T. Archibald  
Toronto, Ontario



Mining Lands Comments


To: Geophysics *Mr Barlow.*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Oct 29/82</i>	Signature <i>Ryan P. [unclear]</i>
--	---	--------------------------	---------------------------------------

To: Geology - Expenditures

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
-----------------------------------	---	------	-----------

To: Geochemistry

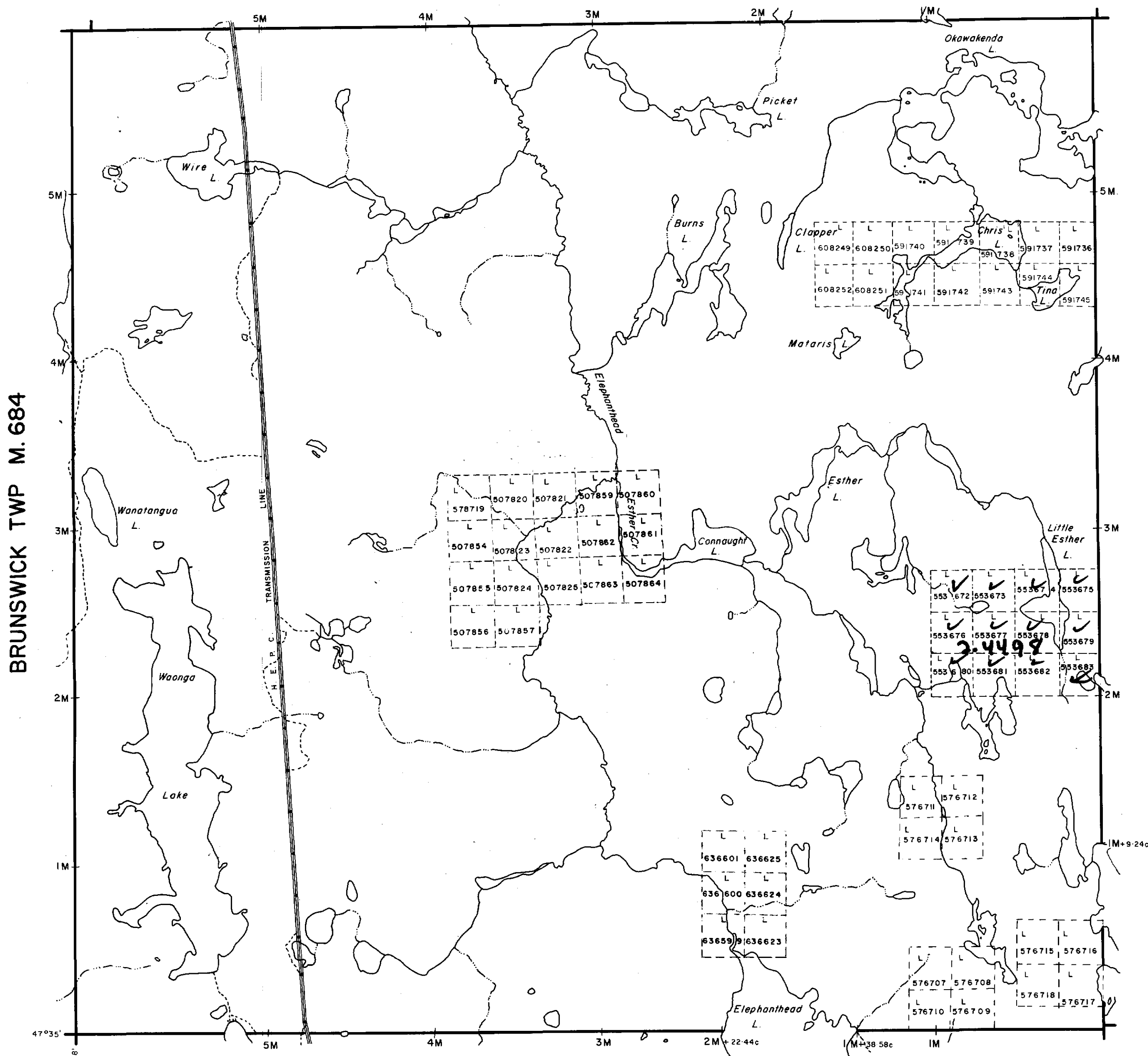
Comments

*FF LD*

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
-----------------------------------	---	------	-----------

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

CABOT TWP M. 695



NOTES

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

DATE OF ISSUE  
 DEC - 6 1982  
 Ministry of Natural Resources  
 TORONTO

LEGEND

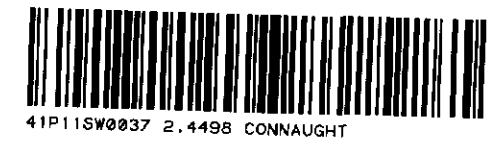
- PATENTED LAND (P) or ●\*
  - PATENTED FOR SURFACE RIGHTS ONLY (P) or ●\*
  - LEASE (L)
  - LICENSE OF OCCUPATION (L.O.)
  - CROWN LAND SALES (C.S.)
  - LOCATED LAND (Loc.)
  - CANCELLED (C)
  - MINING RIGHTS ONLY (M.R.O.)
  - SURFACE RIGHTS ONLY (S.R.O.)
  - HIGHWAY & ROUTE NO. (17)
  - ROADS (—)
  - TRAILS (---)
  - RAILWAYS (—+—)
  - POWER LINES (—+—)
  - MARSH OR MUSKEG (—+—)
  - MINES (X)
- \*used only with summer resort locations or when space is limited

TOWNSHIP OF  
**CONNAUGHT**  
 DISTRICT OF  
**SUBBURY**  
**LARDER LAKE**  
 MINING DIVISION  
 SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

DR. *JBK*  
 DATE 20-Jan-77  
 PLAN NO. **M. 730**

ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

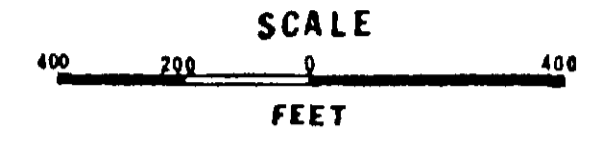
MIRAMICHI TWP M. 865



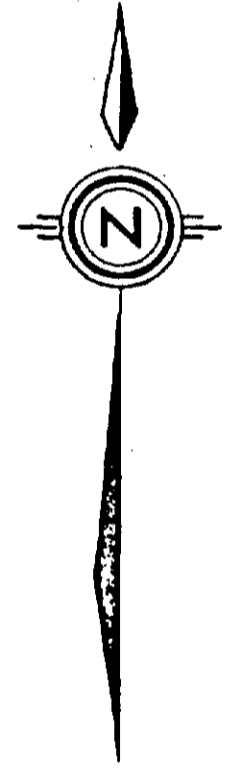
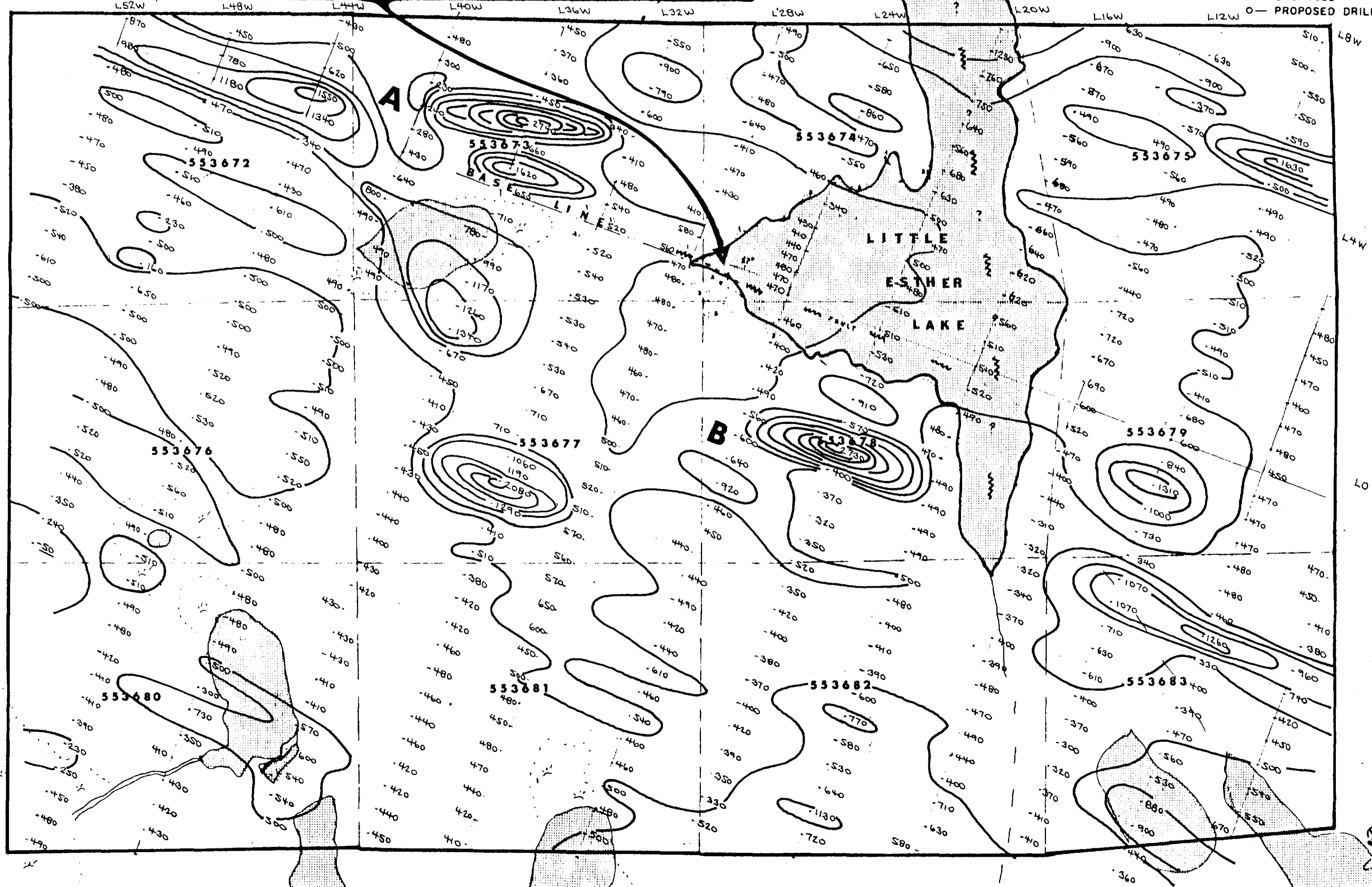
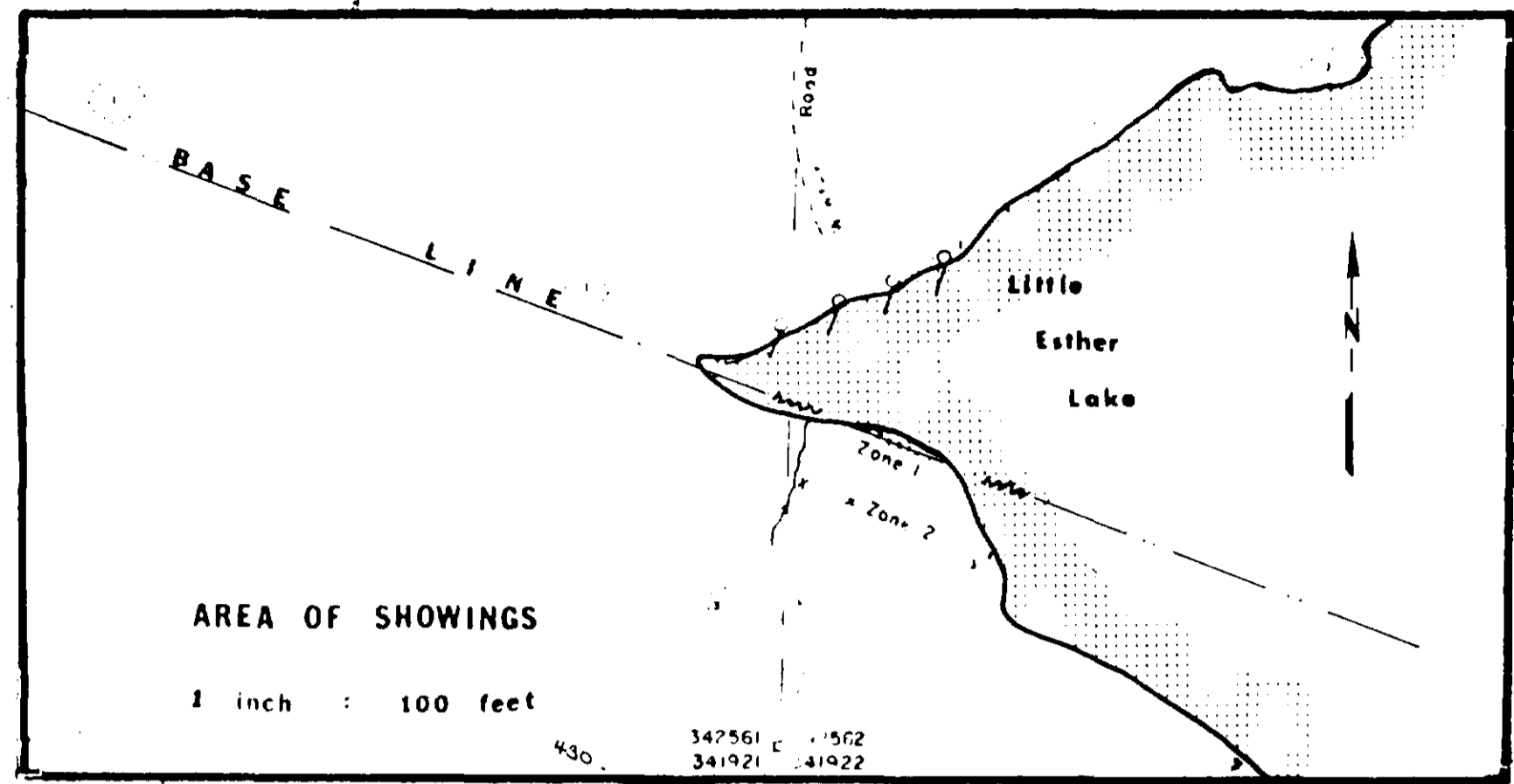
# PROPERTY PLAN GOLDHURST RESOURCES INC.

CONNAUGHT TOWNSHIP, ONTARIO  
**PROTON MAGNETOMETER**

CONTOUR INTERVAL - 250 GAMMAS  
anomaly / trend



- LEGEND**
- RHYOLITE
  - ANDESITE
  - QUARTZ DIORITE
  - SEDIMENTS
  - OUTCROP
  - SHOWINGS
  - PROPOSED DRILL HOLE



P.D. Archibald

