

**GEOPHYSICAL REPORT****ON****GOMAK GROUP A & B****CHESTER TOWNSHIP
SUDBURY MINING DIVISION
DISTRICT OF SUDBURY
PROVINCE OF ONTARIO****Introduction**

From September 22 to October 19, 1965, Sulmac Exploration Services Limited carried out a ground magnetometer survey over two groups of claims held by M. E. Manderson, F. Hedley, E. B. Ruscoe, and G. W. McCurdy, and located in Chester Township, Sudbury Mining Division, Ontario.

The survey was run over north-south grids, the picket lines being turned off every 400 feet from east-west baselines, and chained at 100 foot intervals. Readings were taken every 50 feet using a Sharpe Fluxgate magnetometer.

The results of the survey over the two groups and their respective interpretations are shown on the accompanying maps, the results of the magnetometer survey being presented in contoured form. The maps of the first group, Gomak A, are at 1" to 200', while those of Gomak B are at 1" to 100'.

Purpose

The purpose of the survey was to examine the magnetic rock units to see if there is any structure that could be favourably associated with mineralization.

Property & Location

The property is located in Chester Township, Sudbury Mining Division, Ontario.

The survey was carried out over the following mineral claims.

<u>Gomak A</u>		<u>Gomak B</u>	
S 118900-06 inclusive	7	S 118910-12 inclusive	3
S 118914-17	" 4	S 121594	1
S 119071-73	" 3		

The claims are situated on the eastern side of Three Duck Lake in Chester Township. Access is by road and bush road from the town of Gogama which is about 12 miles to the northeast.

The property is swampy and covered with spruce, fir, birch and large alder growths. Outcrop occurrence is limited.

Survey Specifications

The survey was done using a Sharpe Fluxgate magnetometer. This measures variations in the vertical component of the earth's magnetic field to an accuracy of ± 10 gammas. Corrections for diurnal variations were made by tying-in to previously established base stations at intervals not exceeding two hours. Readings with this instrument were taken every 50 feet along the picket lines for a total of 1,654 stations or 170 miles.

General Geology

The general area of the property is underlain by a large granitic batholith of the Algonian period. This was itself intruded by acid and basic dykes at the end of the Algonian, and by diabase dykes of the Matachewan period.

Gold is known to occur in narrow quartz veins accompanying well defined fractures or "breaks" in the intrusive rock, or in quartz veins along the contact between the acid intrusive and a basic dyke commonly lamprophyre.

Discussion of Results

Gomak Group A

The results of the magnetometer survey show this property to exhibit overall moderate magnetic relief with a significant series of slightly offset continuous highs generally trending west-northwest across it.

These continuous magnetic highs have been interpreted as basic dykes offset by minor faulting as shown on the interpretation map of the property, whereas the isolated highs are assumed attributable to small basic intrusions. However, it should be borne in mind that all the magnetic highs could be caused by basic phases in the batholithic intrusive that is assumed to underlie the property. This ambiguity is mostly caused by the wide line spacing and could probably be resolved by reading intermediate lines 200 feet apart at 50 foot station intervals and by a geological investigation of the known outcrops.

The faulting appears to follow a general east-northeastern pattern but is dependent on a dyke interpretation of the magnetic features. Again, as quartz veins bearing gold are known to accompany well defined fractures further work should be done to ascertain the plausibility of faulting.

Gomak Group B

The results of the magnetometer survey were very similar to those of Group A. However, the magnetic highs were grouped around the edge of the lake on the property, so that no real interpretation can be carried out until the lake freezes over and can be surveyed.

Further surveying should be carried out using a 200 foot line spacing in the lake area and accompanied by a geological examination of outcrops.

Summary and Recommendations

A ground magnetometer survey was carried out over two groups of claims held by Messrs. Manderson, Hedley, Ruscoe, and McCurdy, and located in Chester Township, Sudbury Mining Division, Ontario.

The survey showed the properties to be of moderate magnetic relief with several continuous and isolated magnetic highs. The continuous highs suggested a series of basic dykes trending west-northwest through the property and offset by faulting. However, mostly due to the wide line spacings some ambiguity exists as to whether these highs could not also be attributable to more basic phases in the underlying intrusive.

It is, therefore, recommended that additional magnetic work be done at 50 foot station intervals on a 200 foot line spacing and on the baseline in the anomalous areas in an endeavour to resolve the ambiguity. A geological examination of the outcrops should be done at the same time to determine whether the interpreted basic dykes, if there, be Algonian or Matachewan, the former having more control on the occurrence of gold in the area.

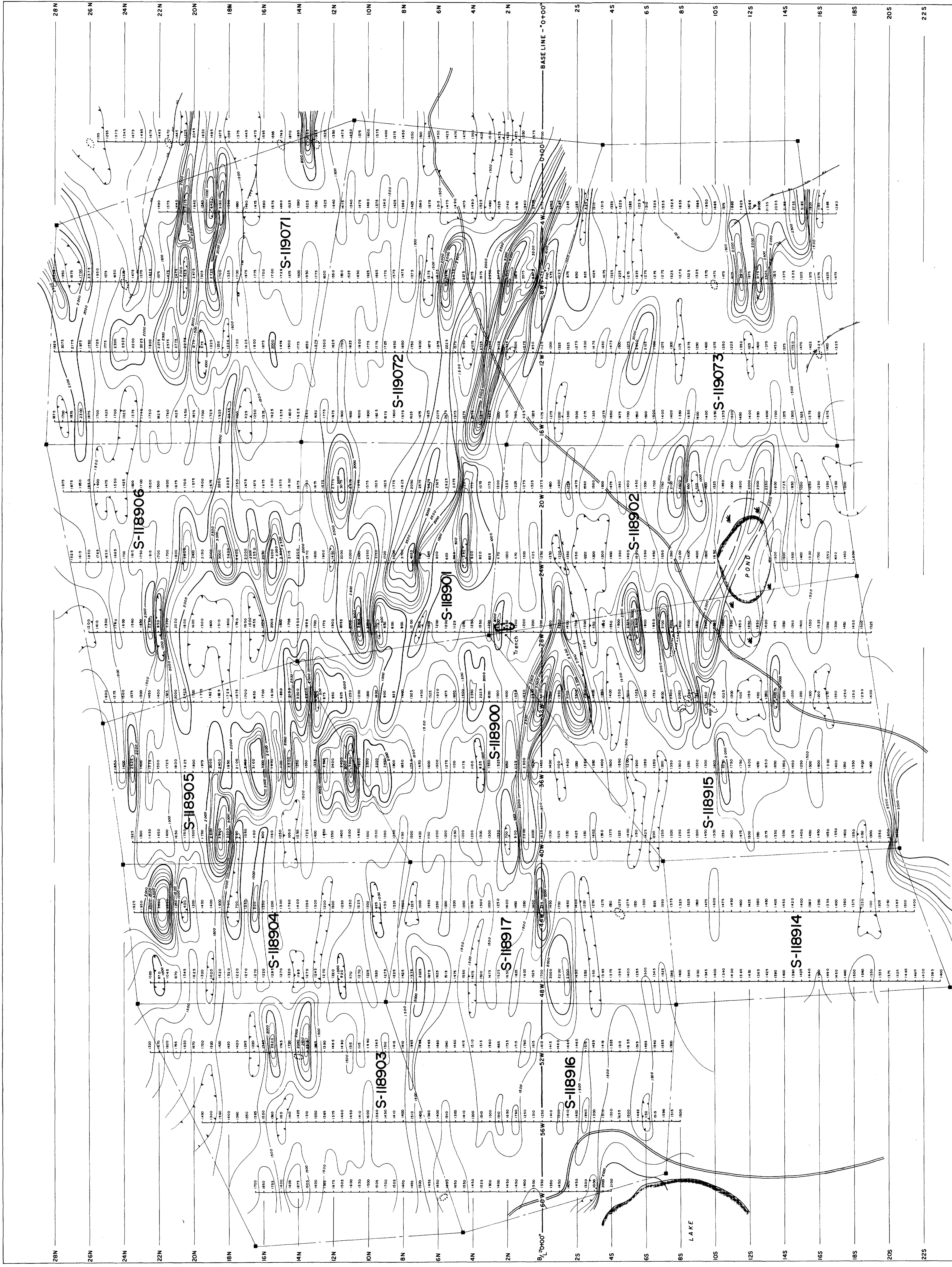
Respectfully submitted,

SULMAC EXPLORATION SERVICES LIMITED



**Peter E. Walcott, B.A.Sc., P.Eng.,
Geophysicist.**

November 1, 1965

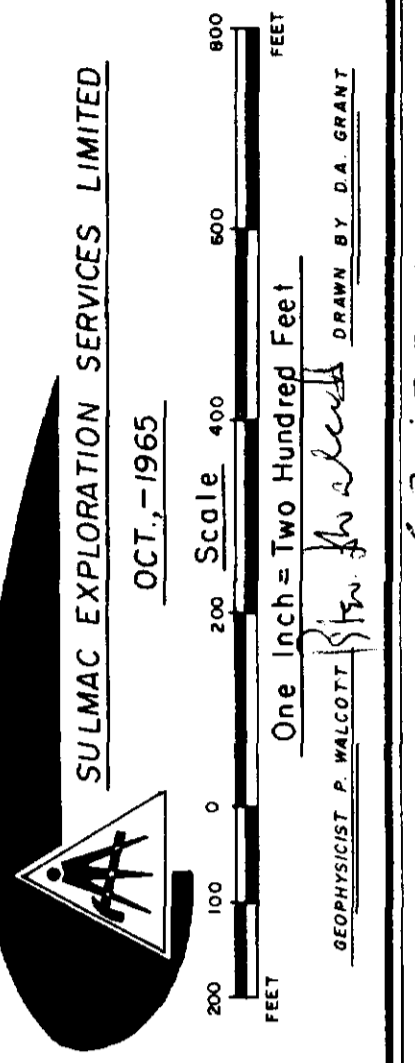
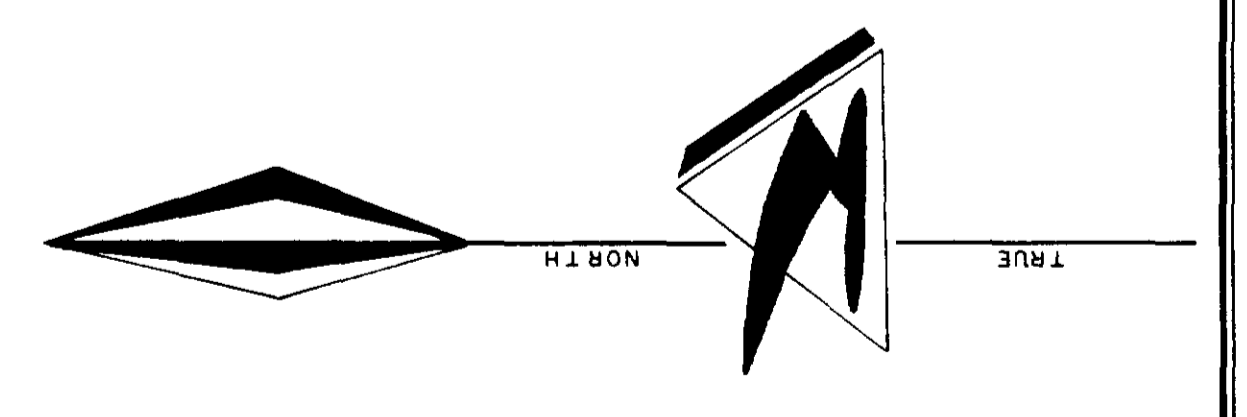
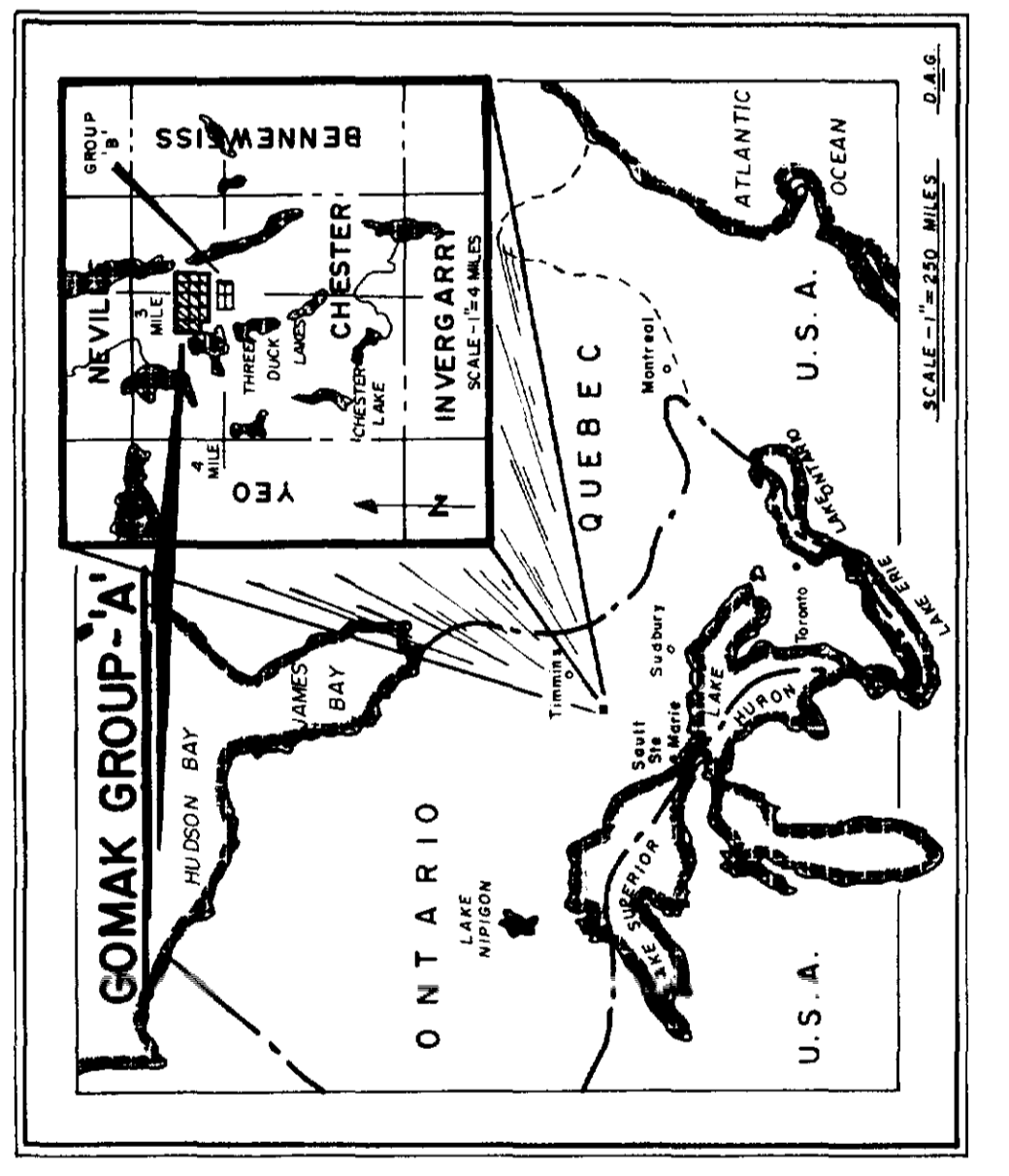


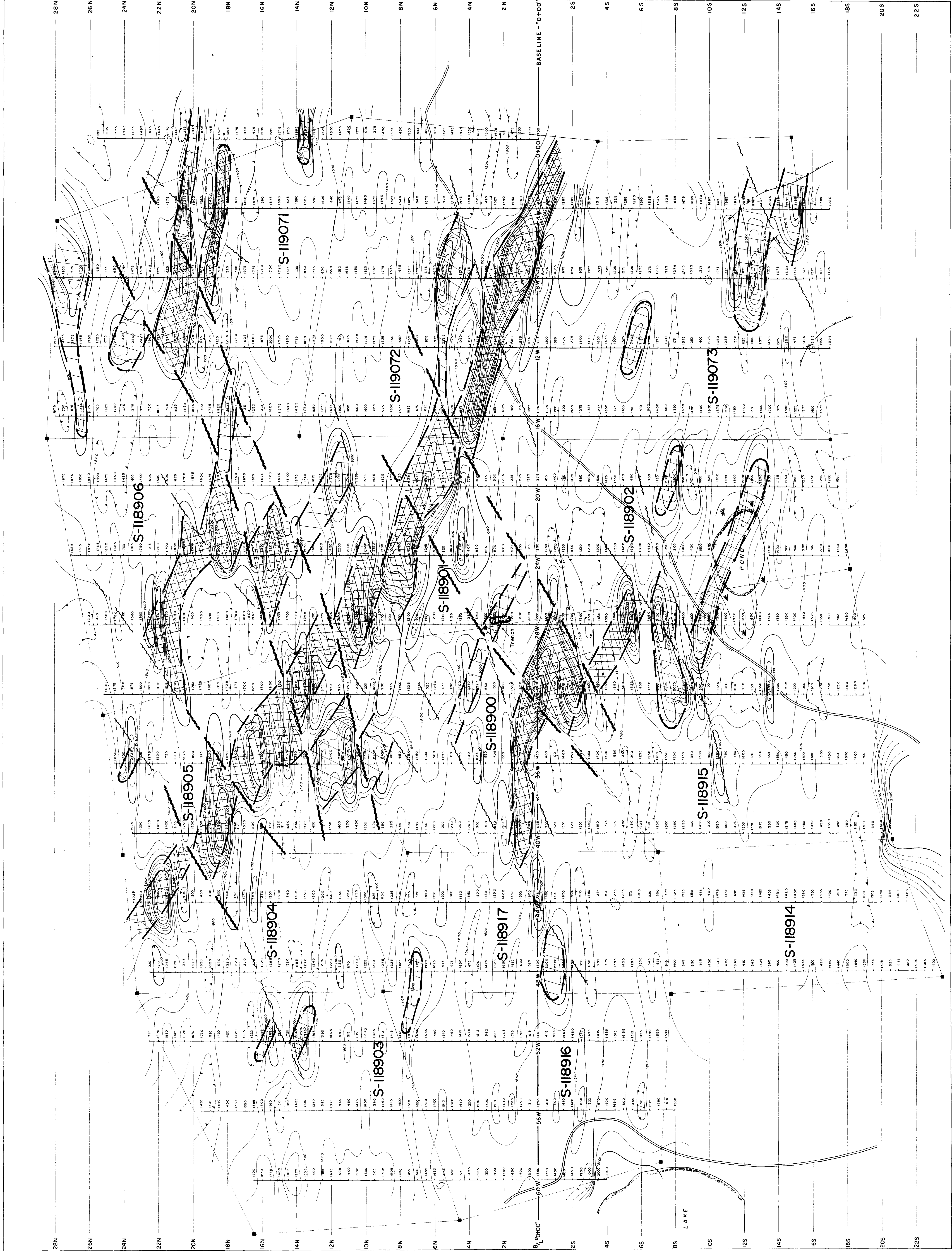
GOMAK GROUP - "A"
 CHESTER TOWNSHIP, DISTRICT OF SUDBURY, ONTARIO
 SUDBURY MINING DIVISION

MAGNETOMETER SURVEY

LEGEND

- MAGNETOMETER SURVEY**
 Contour Interval 250 Gamma
 1000 Gamma Contour
 250,500 Gamma Contour
 Magnetic Depression
- MAP SYMBOLS**
 Claim Point and Claim Boundary
 Pond or Lake Outline
 Geological Outcrops
 Road
 Flooded Swampy Area
 Ridge
 Transmission Line

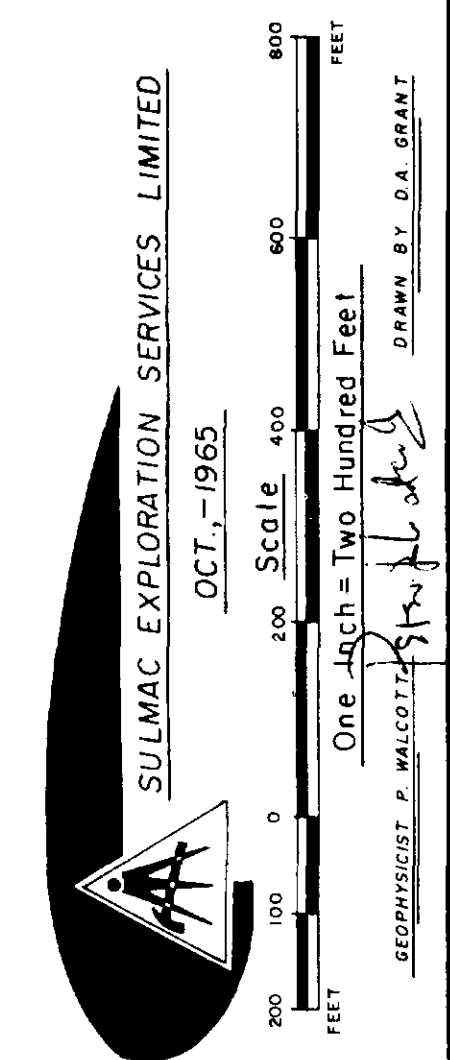
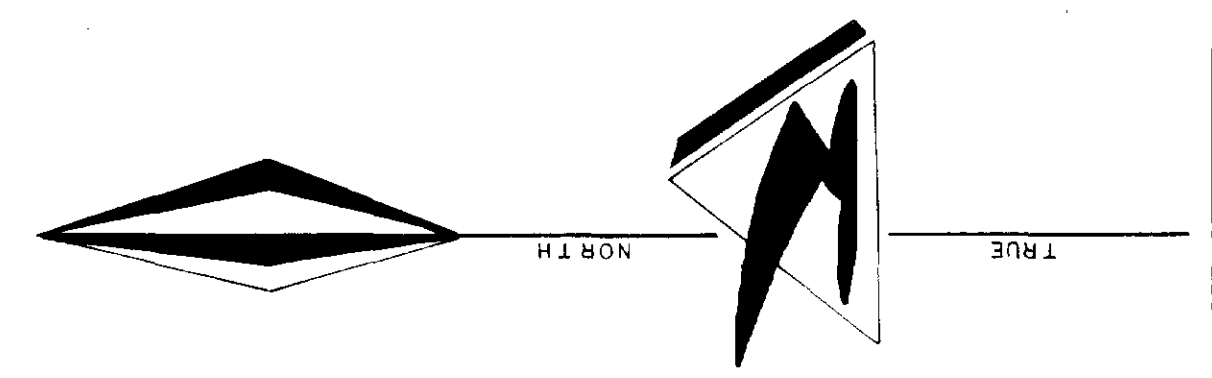
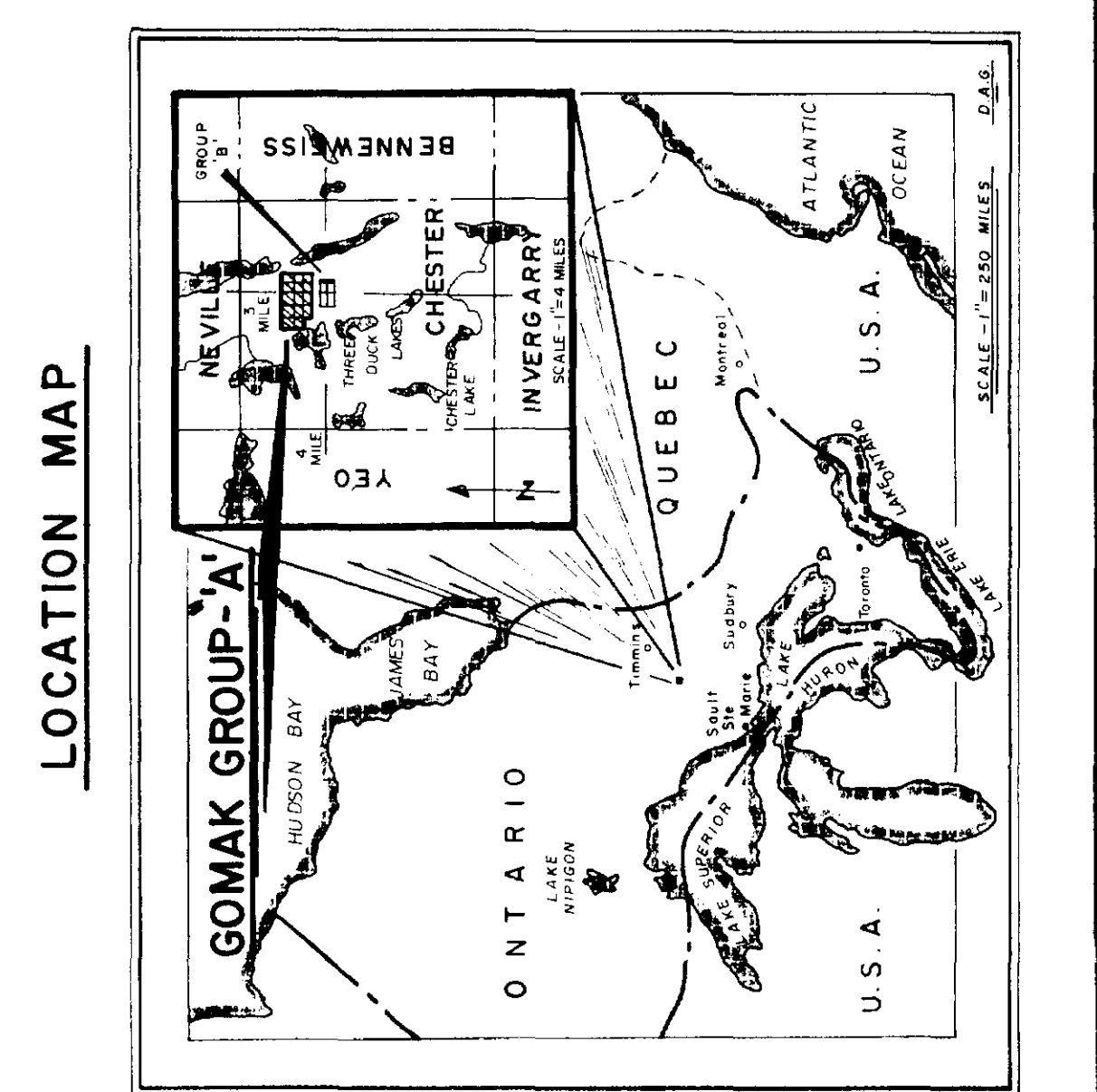


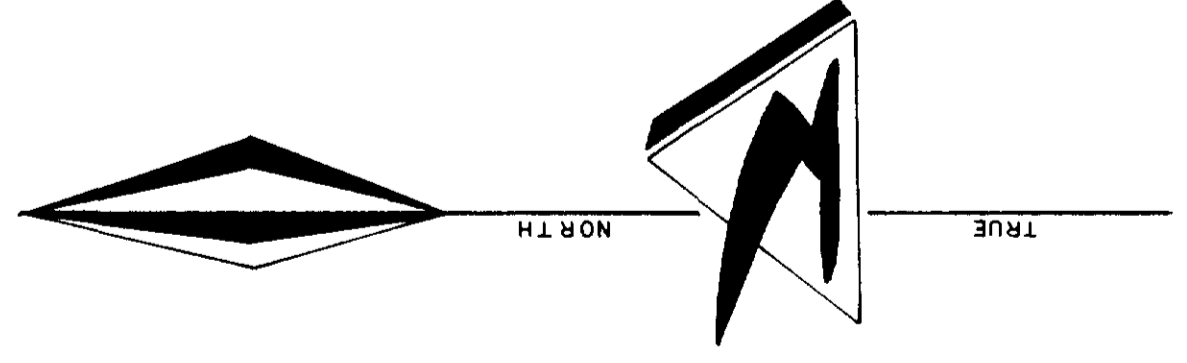
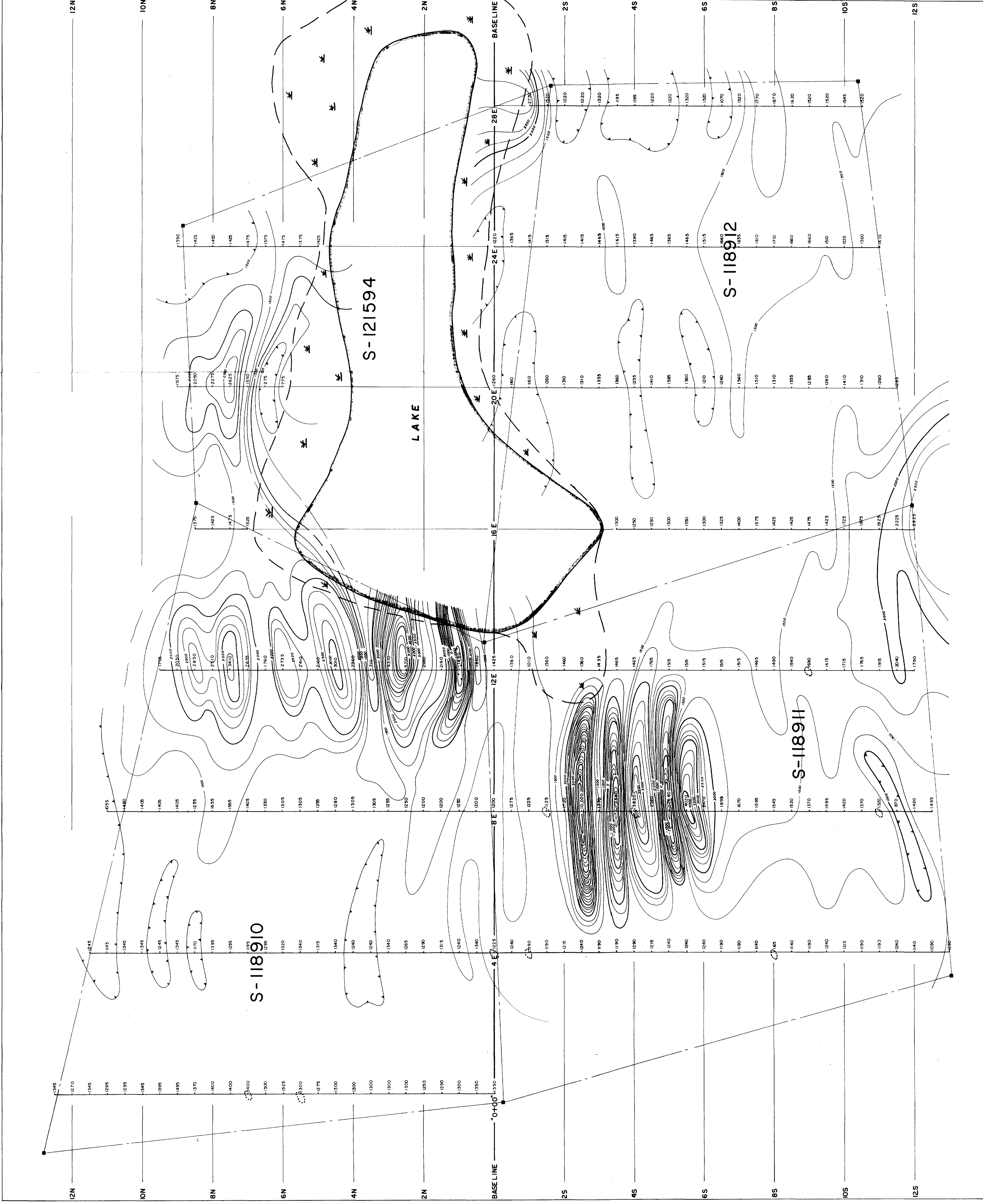


GOMAK GROUP - "A"
 CHESTER TOWNSHIP, DISTRICT OF SUDBURY, ONTARIO
 SUDBURY MINING DIVISION

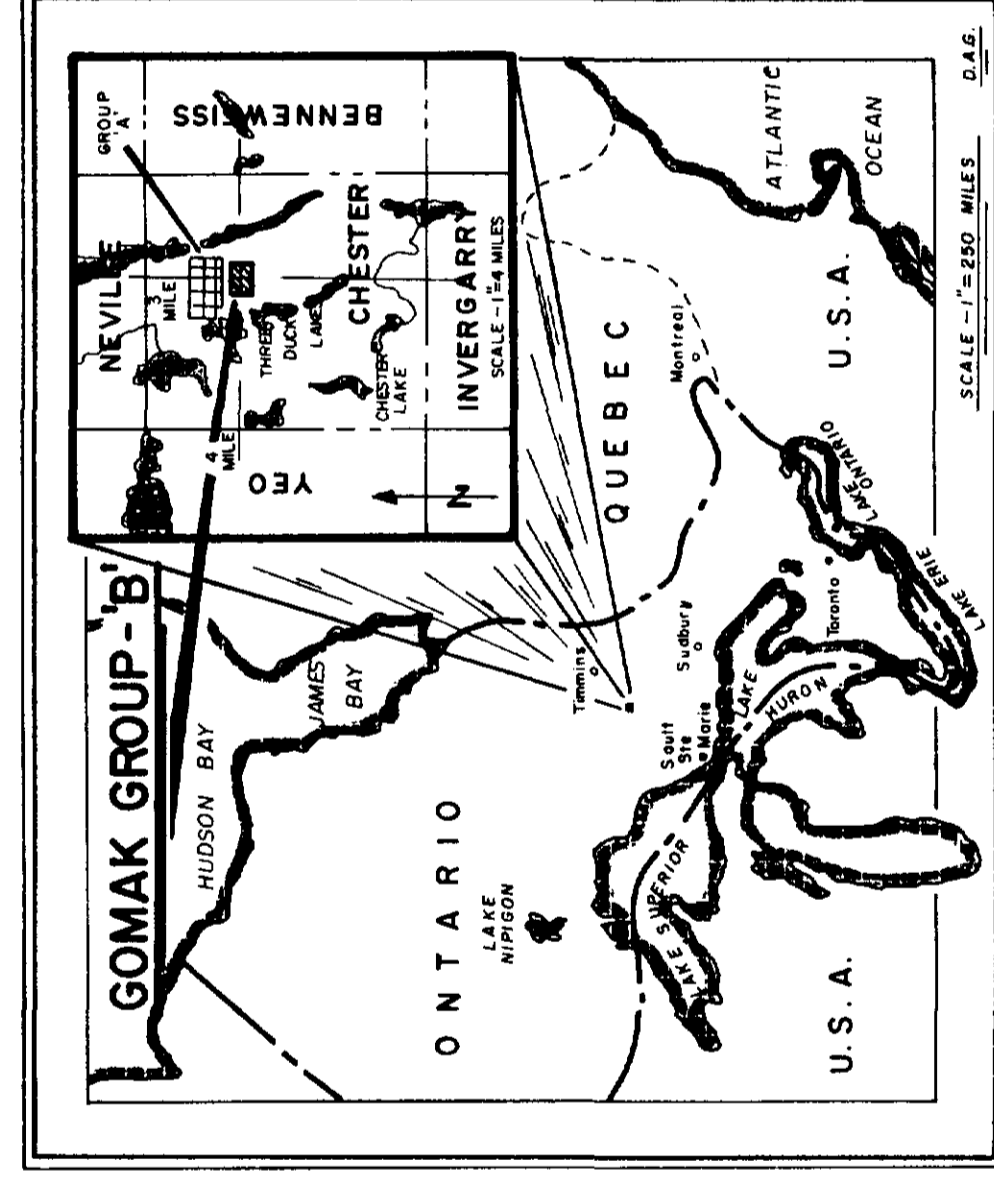
MAGNETOMETER SURVEY

- LEGEND**
- MAGNETOMETER SURVEY**
 Contour Interval 250 Gammas
 000 Gamma Contour
 250-500 Gamma Contour
 Magnetic Depression
 Interpreted Fault
 Possible Interpreted Fault
 Interpreted Basic Dikes
 Interpreted Basic Intrusives (some are probably not basic dikes)
- MAP SYMBOLS**
 Claim Post and Claim Boundary (approx)
 Pond or Lake Outline
 Geological Outcrops
 Road
 Flooded Swampy Area
 Ridge
 Transmission Line





LOCATION MAP



LEGEND

MAGNETOMETER SURVEY

- Contour Interval 250 Gamma
- 1000 Gamma Contour
- 250, 500 Gamma Contour
- Magnetic Depression

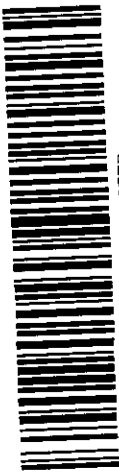
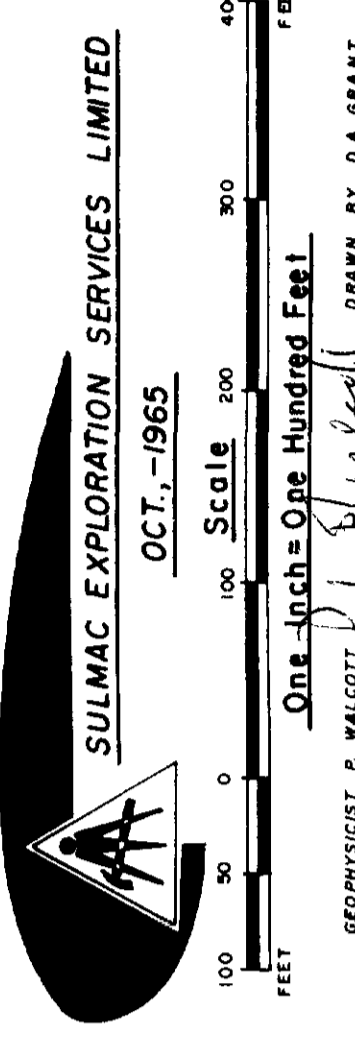
MAP SYMBOLS

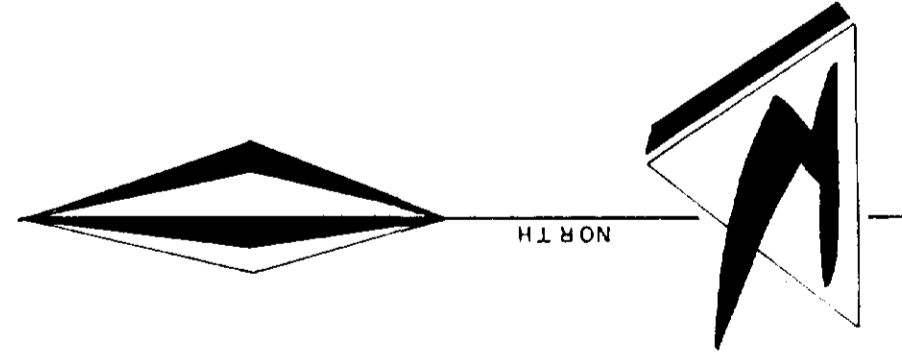
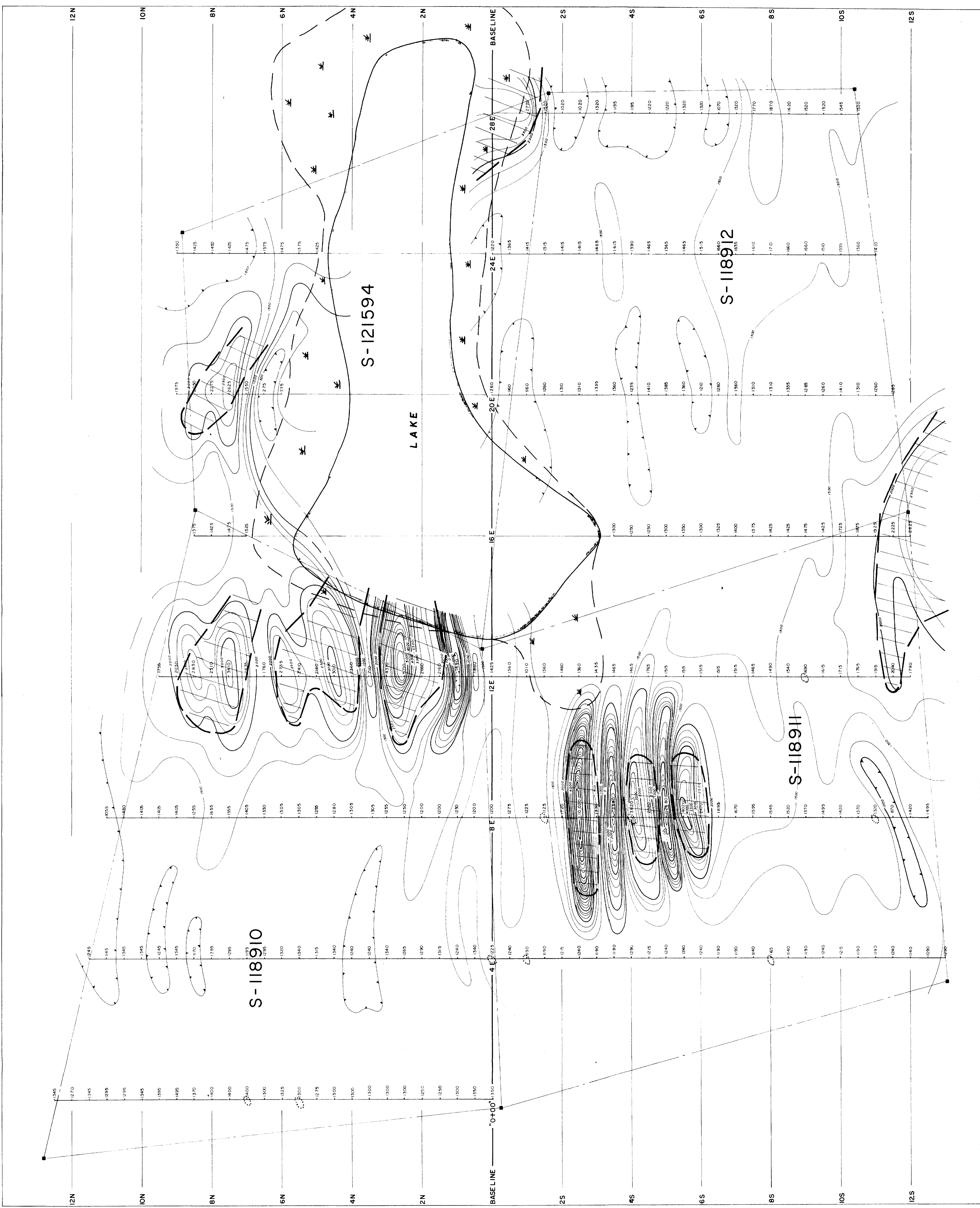
- Claim Boundary and Claim Post
- Pond or Lake Outline
- Flooded Swampy Area
- Geological Outcrops

GOMAK GROUP - "B"

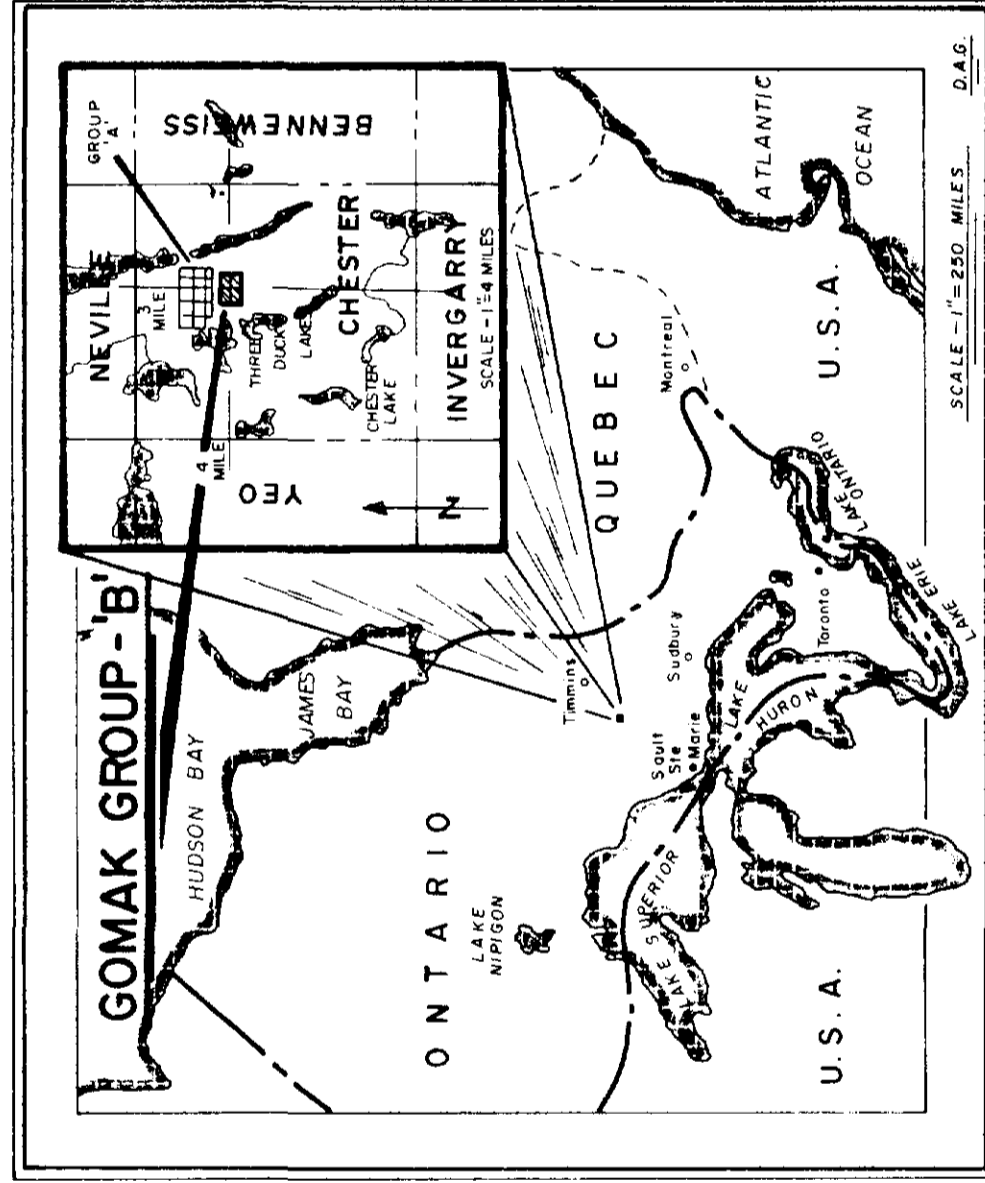
CHESTER TOWNSHIP, DISTRICT OF SUDBURY, ONTARIO
SUDBURY MINING DIVISION

MAGNETOMETER SURVEY





LOCATION MAP

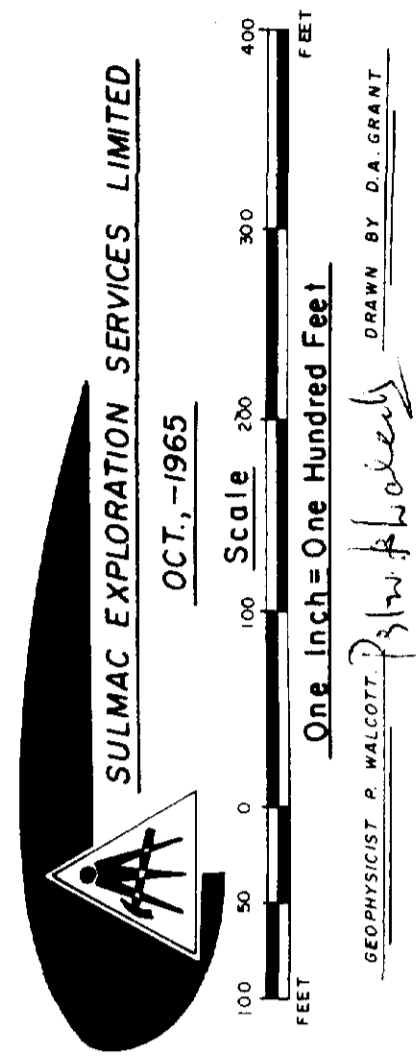


LEGEND

- MAGNETOMETER SURVEY
 - Contour Interval 250 Gamma
 - 1000 Gamma Contour
 - 250, 500 Gamma Contour
 - Magnetic Depression
 - Interpreted Basic Rock
- MAP SYMBOLS
 - Claim Boundary and Claim Post
 - Pond or Lake Outline
 - Flooded Swampy Area
 - Geological Outcrops

GOMAK GROUP-"B"
 CHESTER TOWNSHIP, DISTRICT OF SUDBURY, ONTARIO
 SUDBURY MINING DIVISION

MAGNETOMETER SURVEY



SULMAC EXPLORATION SERVICES LIMITED
 OCT. - 1965
 SCALE 1" = 1000'
 One Inch = One Hundred Feet
 CHECKED BY S.E. HARRAT

63.1784

