MAGNETOMETER SURVEY

R. E. ALLERSTON PROPERTY

WHITNEY TOWNSHIP

PORCUPINE MINING DIVISION

ONTARIO

Timmins, Ontario
March 5, 1976.

Peter T. George, P. Eng.,
Consulting Geologist.

INTRODUCTION

A magnetometer survey was carried out on a block of 5 claims in Whitney Township, Porcupine Mining Division, Ontario for R. E. Allerston, 322 Elm Street North, Timmins, Ontario by J. J. Johnson during October 1975.

A total of 494 magnetometer readings were taken on the property.

A total of 4.6 miles of line were cut on the property.

PROPERTY, LOCATION AND ACCESS (See Figure 1)

The property occupies the west half of lot 8, concession 2 and the northeast ¼ of the south half of lot 9, concession 2, Whitney Township.

Access to the property is via a road along the lot 8 - lot 9 boundary.

PROPERTY, DESCRIPTION

The property consists of 5 contiguous, unpatented mining claims recorded in the name of R. E. Allerston, Miners Licence M13613. The claims are numbered as follows: P380506, P413433, P413434, P443578, and P443579.

PROPERTY, TOPOGRAPHY

The property has generally low relief and is covered by mixed evergreen and poplar bush. Outcrop is sparse on the northern 2 claims of the property but underlies approximately 30% of the south 3 claims.

PREVIOUS WORK

The only previous work completed on the property was plugger work and trenching by the recorded holder.

The only government mapping in the area was by Hurst(1938).

PROPERTY, GEOLOGY

The only geological map available for the southwest part of Whitney Township is by Hurst(1938). This map presents a generallized interpretation of the geooogy in the area of the property. The north part of the property is underlain by felsic flows and pyroclastics. The single claim located in lot 9 is underlain by ultramafic(peridotite?) rocks. The south half of the property in lot 8 is underlain by granitic rocks. Some serpentinite has been mapped by Mr. Allerston. On the basis of the regional geology bedding in the area has an easterly to southeasterly strike direction and 30° to 90° dips to the north. Tops are to the north and northeast.

RESULTS OF THE MAGNETOMETER SURVEY

The magnetometer survey was carried out utilizing a McPhar M700 fluxgate magnetometer capable of measuring a relative value of the vertical component of the earth's magnetic field. Base stations were established along the base lines at 100 foot intervals and correction of the survey data for diurnal variation was accomplished by periodic check readings at the base stations. The Main Base Station was located at station 0+00 on Base Line 00 and had a value of 630 gammas.

Readings were taken at 50 foot intervals along the grid lines.

The results of the magnetometer survey are presented on Map 1 (in pocket).

Magnetic relief on the property is quite variable. Maximum relief is 7050 gammas in areas underlain by ultramafic rocks. The bulk of the property displays moderate magnetic relief in the order of 200 to 400 gammas.

A northwesterly trending break in the magnetic pattern suggests the presence of a fault zone. West of the inferred fault zone two magnetically anomalous areas are underlain by ultramafic rocks. No ultramafic rocks are outlined by the magnetci survey to the west of the fault zone.

CONCLUSIONS

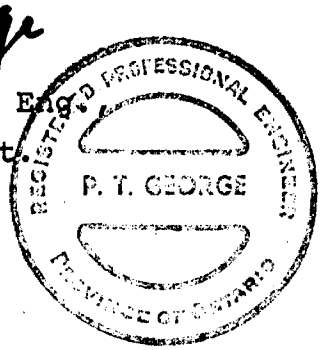
The magnetometer survey has assisted in outlining some major lithologic and structural features on the property. Ultramafic rocks on the property display very anomalous magnetic values with sharp contact zones outlined by the magnetic anomaly. A northwesterly trending fault zone offsets the ultramafic rocks. On the basis of Hurst's (1938) geological map it would appear that the fault has right hand strike slip displacement.

RECOMMENDATIONS

The property should be surveyed with an electromagnetic unit to test for conductive zones within the volcanic and ultramafic rocks on the property. The area has potential for base metal and nickel-bearing sulphide deposits.

Respectfully submitted,

Peter T. George. P. Eng.
Consulting Geologist.



REFERENCES

Hurst, M. E.,
1938 The Porcupine Area; Ontario Department of Mines, Map 47a, scale 1 inch to 2000 feet.

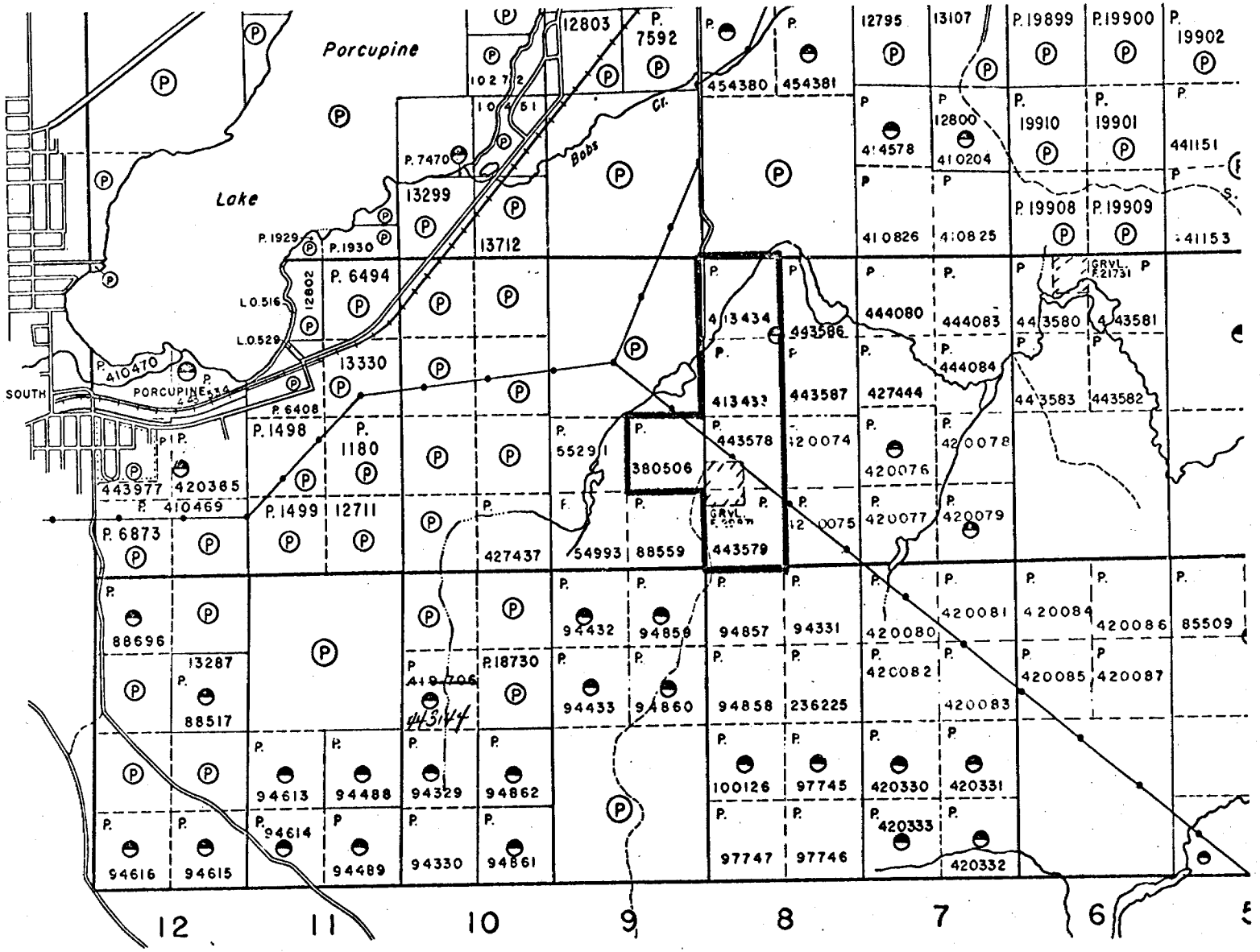


FIGURE 1

LOCATION MAP SCALE - 1" to 2640'

Ontario

42A06NE0060 2.2058 WHITNEY

G. 900

File 2.2058

RECEIVED
MAR 10 1976
PROJECTS UNIT

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) MAGNETOMETER

Township or Area WHITNEY TP

Claim Holder(s) _____

_____

Survey Company JOHN J. JOHNSON

Author of Report PETER T. GEORGE, P.ENG.

Address of Author GEOEX LTD., P.O. BOX 70, TIMMINS, ONT.

Covering Dates of Survey OCT. 1975 - MARCH 1976
(linecutting to office)

Total Miles of Line Cut 4.6 miles

SPECIAL PROVISIONS CREDITS REQUESTED		DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	–Electromagnetic	
	–Magnetometer	40 K.
	–Radiometric	
ENTER 20 days for each additional survey using same grid.	–Other	
	Geological	
	Geochemical	

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

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

DATE: March 6, 1976 SIGNATURE: Peter T. George
Author of Report or Agent

L.D.

Res. Geol. _____ Qualifications 63.2350

Previous Surveys

File No.	Type	Date	Claim Holder
63.2469	EM Mag	1968	Noranda (diff instr.)

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	413434
P	413433
P	380506
P	443578
P	443579

If space insufficient, attach list

TOTAL CLAIMS 5

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations ~~494~~ 247 Number of Readings 494

Station interval ~~200'~~ 100' Line spacing 400'

Profile scale

Contour interval 100 gammas

MAGNETIC

Instrument McPhar M700 Fluxgate Magnetometer

Accuracy – Scale constant ± 20 gammas

Diurnal correction method Base Stations established on Base and Tie lines

Base Station check-in interval (hours) 3/4 hr to 1hr.

Base Station location and value Line 0, 0+00, 630 gammas.

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

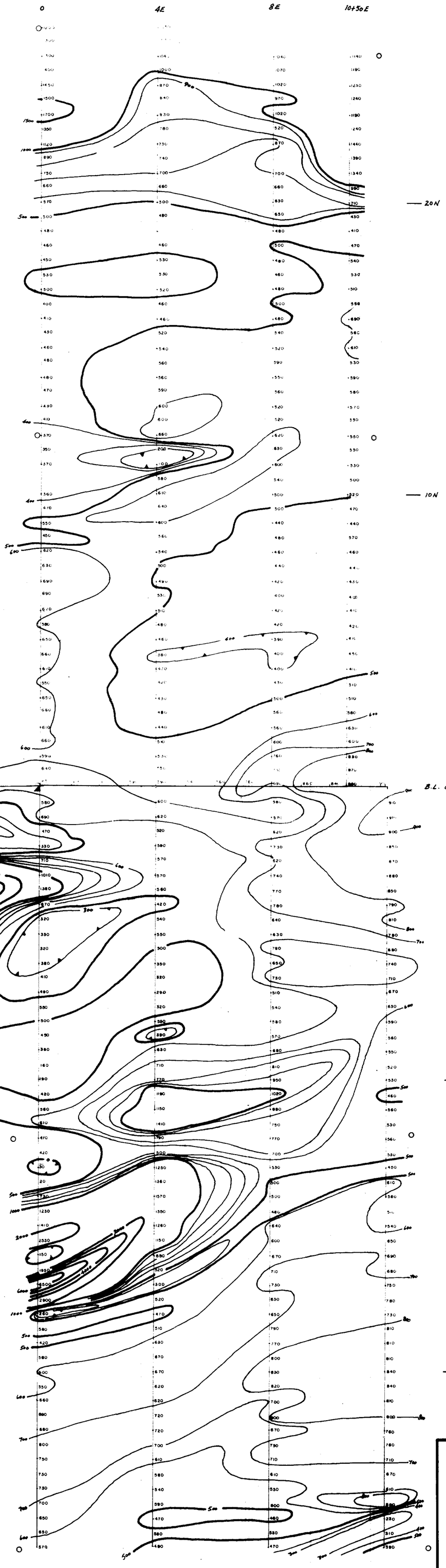
– Integration time

Power

Electrode array

Electrode spacing

Type of electrode



LEGEND

Measurement station along picket line

590 Relative value, vertical component of earth's magnetic field in gammas.

Main Base Station

Magnetic depression

Magnetic contour

CONTOUR INTERVAL 100 gammas below 1000 gammas
1000 gammas above 1000 gammas

20S INSTRUMENT Mc Phar M700 Fluxgate Magnetometer

MAGNETOMETER SURVEY
R. E. ALLERSTON PROPERTY
WHITNEY TOWNSHIP

SCALE 1 INCH TO 200 FEET

GEOEX LIMITED
EXPLORATION MANAGEMENT AND SERVICES
P.O. BOX 70,
TIMMINS, ONTARIO
(705) 267-6580