GENEVA LAKE PROJECT

REPORT ON GROUND MAGNETOMETER SURVEY

Toronto, Ontario
August 16, 1974

Wallace Ng-See-Quan
INTRODUCTION

Line cutting and a ground magnetometer survey were completed on the Geneva Lake Property during the period of May 21, 1974 to July 20, 1974.

The Geneva Lake Property, consisting of 19 claims (S 378055 to S 378068 inclusive and S 378433 to S 378437 inclusive) is held by St. Joseph Explorations Limited, 90 Eglinton Avenue West, 5th Floor, Toronto, Ontario, Canada M4R 2E4.

LOCATION AND ACCESS

The Geneva Lake Property is located on the east side of Geneva Lake in Hess Township (latitude 46° 46' 00" N, longitude 81° 31' 00" W) about 40 miles north of Sudbury.

Access to the property is via the Geneva Lake road, which branches east off Hwy. 144 about one mile north of Cartier, and leads to a trailer park on Geneva Lake. A boat may then be used to make the short trip across the Lake to the property.

Figure 1 shows location of property and figure 2 shows the claim group that makes up the Geneva Lake Property.

PREVIOUS WORK

The Geneva Lake Property was staked by St. Joseph Explorations Limited on January 3rd, 1974. No previous work was ever done on this property to the knowledge of the author.
AREA SURVEYED

18.6 line miles were cut on the property and the survey was conducted over the entire property except the northern part of claim S 378435. Line spacing was at 300' intervals.

MAGNETOMETER SURVEY

A Scintrex MF-2 fluxgate magnetometer, measuring the variations of the vertical component of the earth's magnetic field, was used in this survey. The prime base station was established on a firmly fixed picket on base line, L24E and was assigned a value of 500 gammas.

Additional base stations were established at 300' foot intervals on the base line to correct for diurnal variations. The prime base station was not tied to any regional base station.

Readings were taken every 100 feet on cross lines, which were 300 feet apart, except in cases of sharp magnetic gradient where readings were taken at 50 foot intervals.

RESULTS AND INTERPRETATION

The results of the magnetometer survey are presented on Map 1 (in pocket). Magnetic background in the area surveyed is approximately 500 gammas with moderately high magnetic relief.
This survey outlined two major relatively narrow, linear magnetic features. Both strike at about N 70° E. These two features are noted at:
I: L 3E, 21S to L 12E, 17S
II: L 45E, 24S to L 51E, 23S
The two major features may be reflecting shear zones.

Several relatively high magnetic features are also noted. However these features are of limited extent and are generally restricted just to the line surveyed.

The northeastern part of the property reflects a higher magnetic relief than the rest of the property. This may be indicative of a more basic lithologic unit that may be present in that part of the property.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the magnetometer survey no definite conclusions can be drawn with regard to the economic mineral potential of the property although several interesting magnetic expressions have been noted.

Further magnetic surveying should be done to determine the extent of the single line anomalous responses. Geological mapping will aid the interpretation of the magnetometer survey and should be done. Other geophysical surveys might complement the magnetometer survey as a means of determining probable drill targets.

Respectfully submitted,

Wallace Ng-See-Quan
CERTIFICATE

This is to certify that I, Wallace Ng-See-Quan

1) graduated in 1973 from The University of Toronto, Toronto Ontario with a B.A. Sc. in Geological Engineering;

2) have been practicing my profession as an exploration geologist for one year.

Toronto, Ontario
August 16, 1974

Wallace Ng-See-Quan
**Natural Resources**

**Geophysical - 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)** Line cutting, Ground magnetometer

**Township or Area** Hess Township

**Claim Holder(s)** St. Joseph Explorations Ltd.

**Survey Company** St. Joseph Explorations Ltd.

**Author of Report** Wallace Ng-See-Ouan

**Address of Author** 90 Eglinton Ave. W., 5th floor, Toronto

**Covering Dates of Survey** May 21/74 - July 20/74

**Total Miles of Line Cut** 18.6

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**Special Provisions**

**Credits Requested**

Geophysical
- Electromagnetic
- Magnetometer
- Radiometric
- Other

**Geological

**Geochemical

**Airborne Credits** (Special provision credits do not apply to airborne surveys)

Magnetometer
Electromagnetic
Radiometric

**Date:** August 16/75

**Signature:** [Signature]

**Qualifications:** [Qualifications]

**Previous Surveys**

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<th>File No.</th>
<th>Type</th>
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**Total Claims** 19
GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 786  Number of Readings 923
Station interval 100' with 50' where required  Line spacing 300'
Profile scale
Contour interval 500 gammas 0 to 1000 gammas, 1000 gammas 1000 gammas

Instrument Scintrex MF-2 Fluxgate magnetometer
Accuracy — Scale constant 10 gammas
Diurnal correction method Tie in to base stations at 300' intervals on baseline
Base Station check-in interval (hours)
Base Station location and value Not tied to regional base station
See accompanying map(s) identified as HESS-0019-A1 #1

Located in the map channel in the following sequence (x)