



32D04SE0098 2.3369 RATTRAY

010

PAGE NO.

2,3369

RECEIVED

REPORT ON VLF-EM SURVEYS
SKEAD, RATTRAY AND MCFADDEN TOWNSHIPS
ONTARIO

JUL - 21 1981

MINING LANDS SECTION

Introduction

A VLF-EM survey was carried out in Skead, Hearst and McFadden Townships. The results are shown on the enclosed plan.

Location, Access and Ownership

The claims covered by the survey are located in lots 11 and 12 Concession 6 Skead Township; the northwest corner of Rattray Township and a small adjoining area in McFadden Township. The claims are numbered L476697, L476706, L476707, L476709, L476710, L511640, L511641, L531349, L531358, L531359, L532828, L548637, 548638. They are recorded in the name of Superior Northwest Inc. Box 1110, Sault Ste. Marie, Ontario.

Access can be had by old logging roads leading to Grace Lake from Highway 626 about 7 miles south of Larder Lake, Ontario; and then by following claim lines east to the survey area.

Previous Exploration

There is little to be seen of previous exploration in the area. Old pits are reported near the Skead-Rattray Township line, but little information is now available. Some limited geophysical and prospecting was carried out by Geophysical Engineering and Surveys under an option agreement in 1977. Some sulphides were located in this work.

Geology

The property is underlain by a volcanic sequence of rocks cut by felsic to mafic intrusives. Sedimentary rocks may overlie the volcanics or be interbedded with them.

Survey Procedure

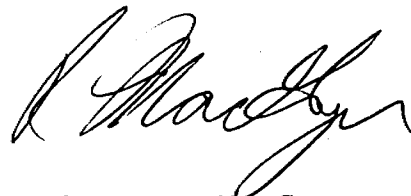
A grid was laid out across the property with a baseline running about 12° west of north. Cross lines were cut perpendicular to the baseline at 400 foot intervals. A VLF-EM survey was carried out using a Crone Radem instrument set to the signal from Annapolis, Maryland (21.4 KHz). Readings were taken at 100 foot intervals using the procedure outlined in Appendix 1.

Results and Conclusions

A number of strong to medium strength anomalies have been located which are shown on the enclosed maps. The anomalies approximately parallel the baseline which is approximately on strike of the underlying volcanic rocks.

Further work is indicated to trace out the anomalies north and south of the area surveyed. Prospecting and geological surveys should be carried out to locate the cause of the anomalies.

Respectfully submitted



Robert A. MacGregor

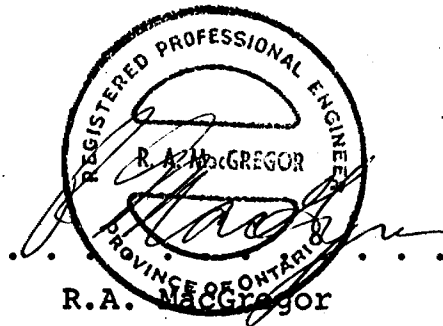
June 24, 1980

CERTIFICATE

I, Robert A. MacGregor, certify:

1. I am a Mining Engineer residing at 134 Palace Drive, Sault Ste. Marie, Ontario. I have worked as a mining engineer and geologist for the past 17 years.
2. I am a member of the Association of Professional Engineers of the Province of Ontario and a member of the Canadian Institute of Mining and Metallurgy.
3. I attended Queen's University for two years in the Mining-Geology course.
4. I personally carried out or supervised the field work on the subject claims.

June 29/80
Date



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 437 Number of Readings 437
Station interval 100 Feet Line spacing 400 Feet
Profile scale 1" = 40'
Contour interval

MAGNETIC

Instrument
Accuracy - Scale constant
Diurnal correction method
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument Crone Radem
Coil configuration N/A
Coil separation N/A
Accuracy +/- 1/2'
Method: Fixed transmitter Shoot back In line Parallel line
Frequency Annapolis, Maryland (21.4KHz)
Parameters measured Dip angle of the resultant field

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