

#### REPORT ON GE

#### OF PART OF

### SASAGINAGA LAKE (Hermiston-Benner Option)

#### INTRODUCTION

An electrical (resistivity) and a magnetic survey were made of the Hermiston-Benner claims on Sasaginaga Lake during April, 1952. The area surveyed comprises three unpatented claims totalling approximately 80 acres.

#### LOCATION & ACCESS

Sasaginaga Lake is located on the west side of the town of Cobalt, in the north part of Coleman Township. The area surveyed includes the central part of the lake. The property may be reached readily by road.

#### GENERAL GEOLOGY

Sasaginaga Lake is underlain by Keewatin-type rocks. These include intermediate to basic flow rocks and banded chert formation. The western contact of the Cobalt sedimentary series lies a short distance east of the lake.

#### GEOPHYSICAL SURVEY

Picket lines were turned off normal to an east-west baseline at intervals of 200 feet for the electrical survey. Sixty cycle alternating current was applied to the ground and measurements of potential difference were taken using a highly sensitive V.T.V.M..

Magnetometer readings were taken along lines spaced 400 feet apart using an Askania vertical magnetometer.

#### DISCUSSION OF GEOPHYSICAL RESULTS

Two zones of high conductivity were indicated by the electrical survey. One of these lies along the south boundary of the claims and is

mainly off the property. A second east-west zone runs east from the long bay in the western part of the lake. The highest conductivities were obtained at the extreme western end of the bay. The results at this point suggest good concentrations of conducting minerals probably sulphides. The good conducting zone lies along the projection of an east-west fault noted east of the lake. Although a silver vein would be a good conductor it is improbable that this is the cause of the anomaly since the electrical results suggest a body many times wider than the widest veins in the camp. This does not however, preclude the possibility of the occurrence of silver associated with base metal sulphides along a fault zone.

A possible cross-fault is suggested in the western part of the claims by discontinuities in the electrical results. There is no geological evidence to support this interpretation.

Magnetic relief is very low in the area covered by the magnetcmeter survey. This part of the work adds very little to the interpretation of the electrical results.

#### RECOMMENDATIONS

It is recommended that the strongly conducting zone in the western part of the property by explored by diamond drilling.

Respectfully submitted,

MINING GEOPHYSICS CORPORATION LIMITED

W.R. Bergey

N. B. Keevil

Toronto, June 9, 1952.

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#### APPENDIX

THE RESIDENCE OF THE PROPERTY OF THE PROPERTY

Property:

Sasaginaga Lake, Hermiston-Benner Option, comprising 3 claims, T-31767 to T-31769 incls.

Dates of Survey:

Surveying - including picketing and chaining, March 3 - 5

4 days

Electrical measurements, March 4 - 9 - 10 days

Magnetic measurements, Mar. 4 - 6 - 4 days

Calculating, plotting, mapping, interpretation, Apr. 1 - 30 inter-

mittently

- 18 days

Baseline & Picket Lines:

31

Baseline - east-west Picket lines - northsouth at 200 foot intervals

Miles of Line:

Picket Lines - 3 3/4 miles Electrical Resistivity - 3 1/4 miles Geomagnetic - 2 miles

Instruments Used:

Surveying - Transit

Electrical Resistivity - M.G.C. Resistivity unit and

V.T.V.M.

Geomagnetic - Askania magnetometer with sensitivity of

28 gammas per scale division.

Personnel:

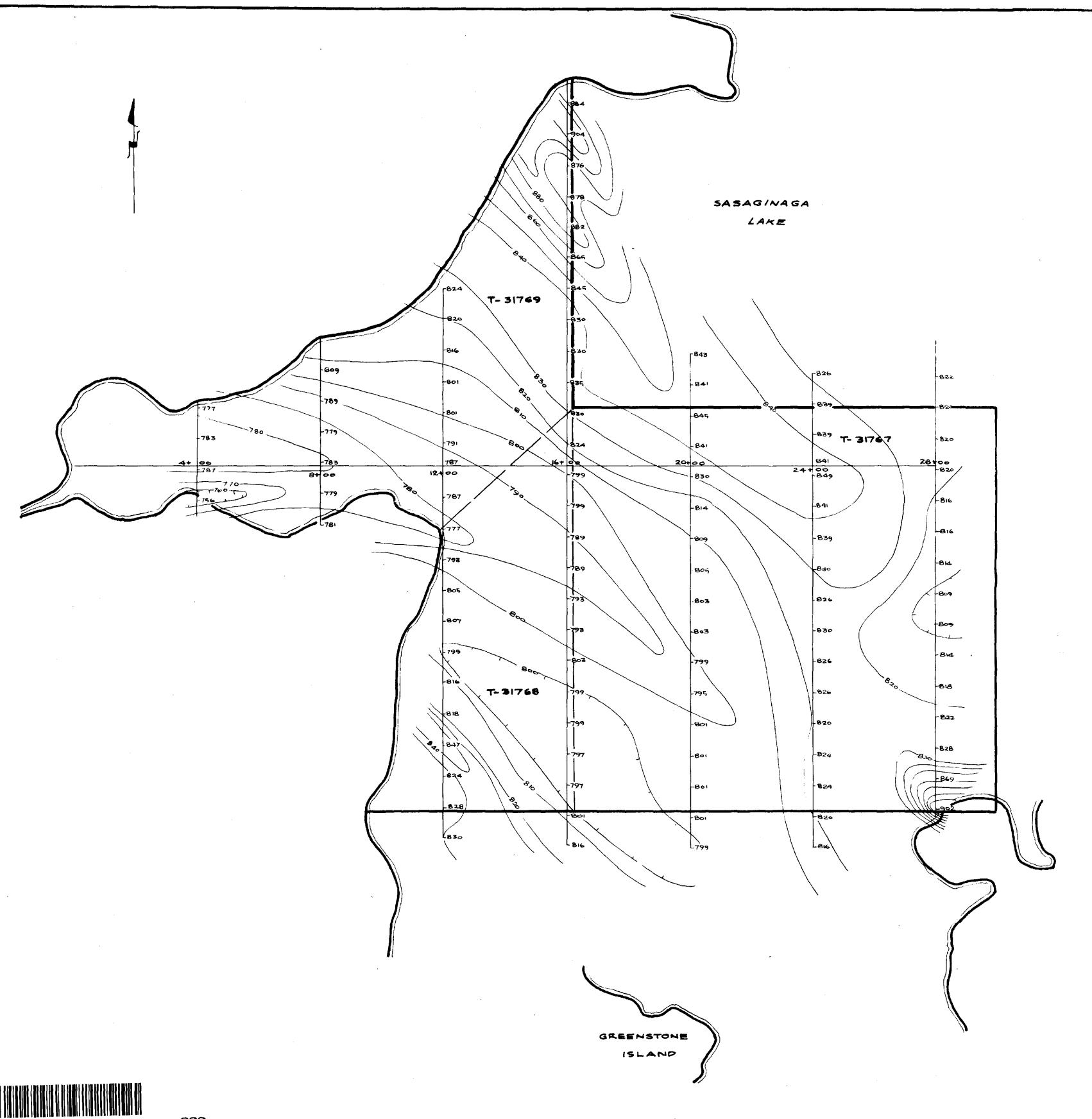
Surveying - J.C.Frantz, T.M.Church Electrical - W.R.Bergey, I.Schafer Magnetic - T.G.Robinson, W. Hanson Office - N.B.Keevil, W.R.Bergey, R.B.Evis, M.G.Hooper.

June 9, 1952.

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N. B. Keevil

 $\frac{31 \times 4}{3} = \frac{124}{3} = 40$ 



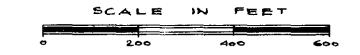


MAGNETIC SURVEY

OF PART OF

## SASAGINAGA LAKE

HERMISTON - BENNER OPTION



CORPORATION - LIMITED 11 JORDAN ST. TOROLDE, OUT.

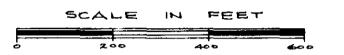
DEALT REE	DAT .: June 9/52
TO ACCOMPANY REPORT: 325	COPY No. 4/2
- Beer	



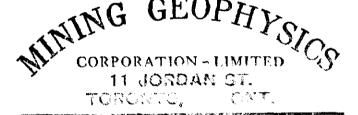
OF PART OF

# SASAGINAGA LAKE

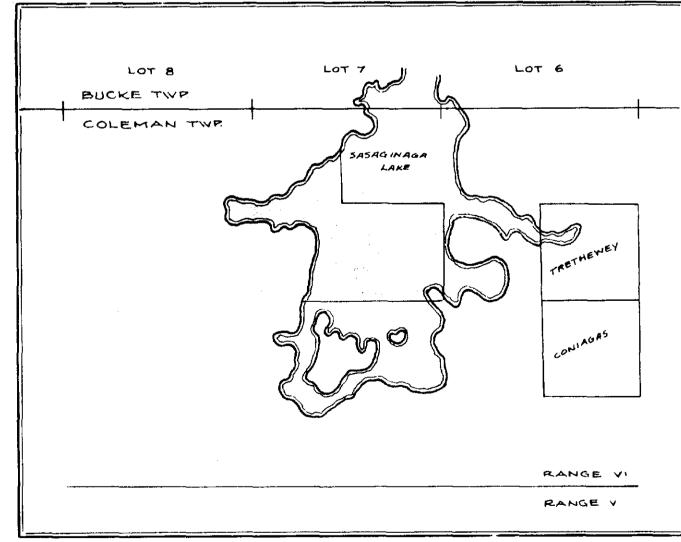
HERMISTON - BENNER OPTION



NOTE:- VALUES ARE 100 log ohm-cm



DRAFT REE	DAVE June 9/50
TO ACCOMPANY REPORT: 325	COPY 13. 2/



LOCATION MAP

SCALE I INCH = 1320 FEET

