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MAGNETOMETER SURVEY
MAYBRUN MINES LIMITED
ATIKWA LAKE PROPERTY
SIOUX NARROWS, ONTARIO
REPORT NO. 5618

63.707

March 12, 1956.

Geo-Explorers Ltd. Toronto, Ontario.

MAGNETOMETER SURVEY
KAYBRUN MINES LIMITED
ATIKWA LAKE PROPERTY
BIQUE HARBORS, ONTARIO
REPORT NO. 5618

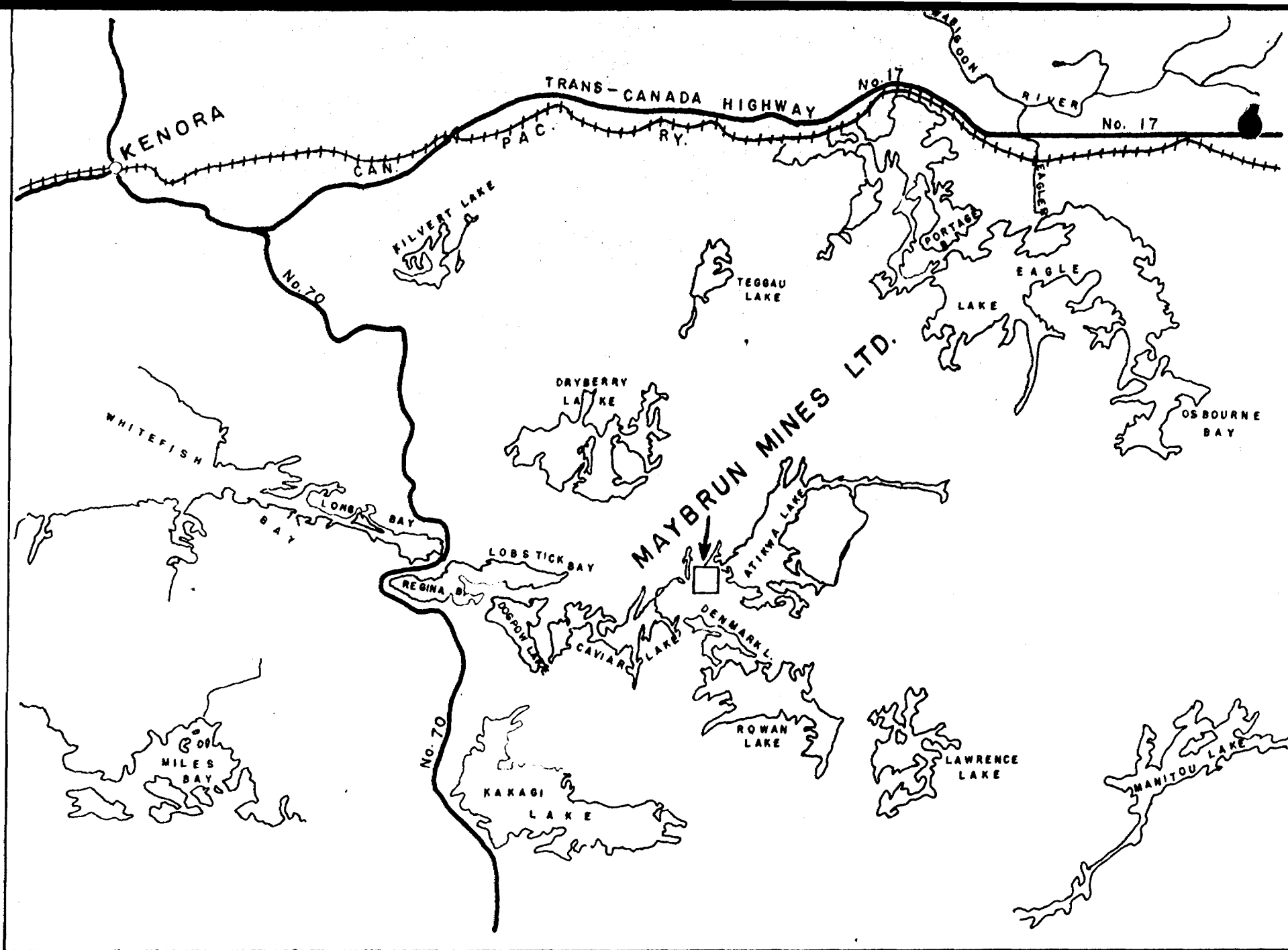
SUMMARY

The magnetometer technique was not successful at delineating ore bodies or structure on this property. Self-potential work which could not be conducted at this time of year would be more suitable.

INTRODUCTION

The company which is currently exploring a copper nickel deposit in the Atikwa Lake area of Ontario wanted to have further information regarding the disposition of the sulphide bodies.

A discussion with a representative of the company led to the conclusion that a magnetometer survey would be the most useful. An electromagnetic survey had already been conducted by another company sometime previously but without much success. The type of mineralization present is normally conducive to successful magnetometer work.



LOCATION MAP

FIG. 1

THEORY OF SURVEY

Varying amounts of magnetite in different rocks near the earth's surface produce measureable differences in the earth's magnetic field. By measuring these differences the underlying rock structure can often be inferred even though covered with overburden.

Occasionally the structure containing the sulphides can be determined from the magnetometer survey. The results can also be used as a guide to the presence of pyrrhotite and varying rock types.

METHOD OF SURVEY

Short lines were cut at 100 foot intervals across the sulphide bearing zone and a magnetometer survey conducted.

Lines were run east west at 200 foot intervals over the north part of the property and at 400 foot intervals over the south part.

GEOPHYSICAL INTERPRETATION

There is an interpretation possible which does not add much to the study of the ore bodies.

The high erratic type of anomalies coincide rather well with the margins of the andesite and altered andesite as presently known. This is quite common for andesite which usually has some bands more magnetic than others and it shows up in this manner.

There are contacts shown on the map. These however probably outline the area of andesite approximately. The intrusive complex interpreted outside the andesites will probably contain some inclusions of andesite which will probably be small.

The shape of the body of andesites suggests they were folded and one band was thought to be traceable magnetically but unfortunately the known geology does not agree. This magnetic pattern is outlined on the map in case it does prove to be of interest in the future but for the present no reason for its existence can be given.

There were noted on the map several conductors located from an electromagnetic survey. The magnetic values do not give any information as to how important these conductors are, and without the actual values no further comment can be made on them. The only feature to note is that they appear to strike different directions than the ore bodies, and lie outside the belt of andesites where the present ore occurs.

CONCLUSIONS AND RECOMMENDATIONS

The magnetometer survey outlined approximately the andesite bands where the ore will likely be located. It appears that the best sulphide section lies in the nose of a fold if this interpretation has any merit.

In view of the inconclusive results regarding the disposition of the sulphides it is recommended that a self-potential survey be conducted to outline the sulphides and prospect for others on the property. This method cannot be applied until the frost is out of the ground in the spring.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "D. J. Salt".

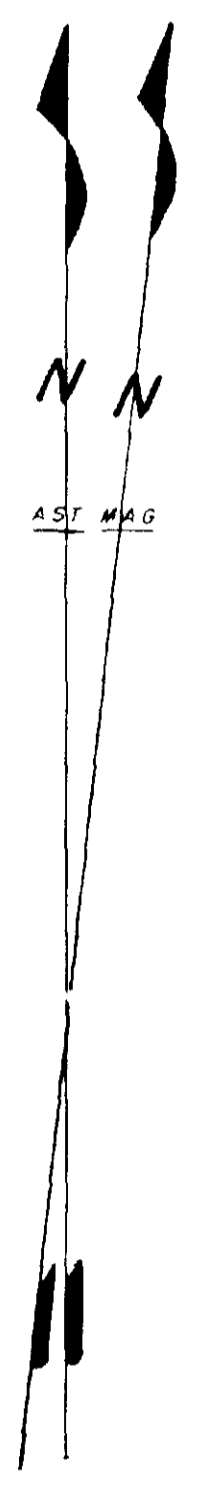
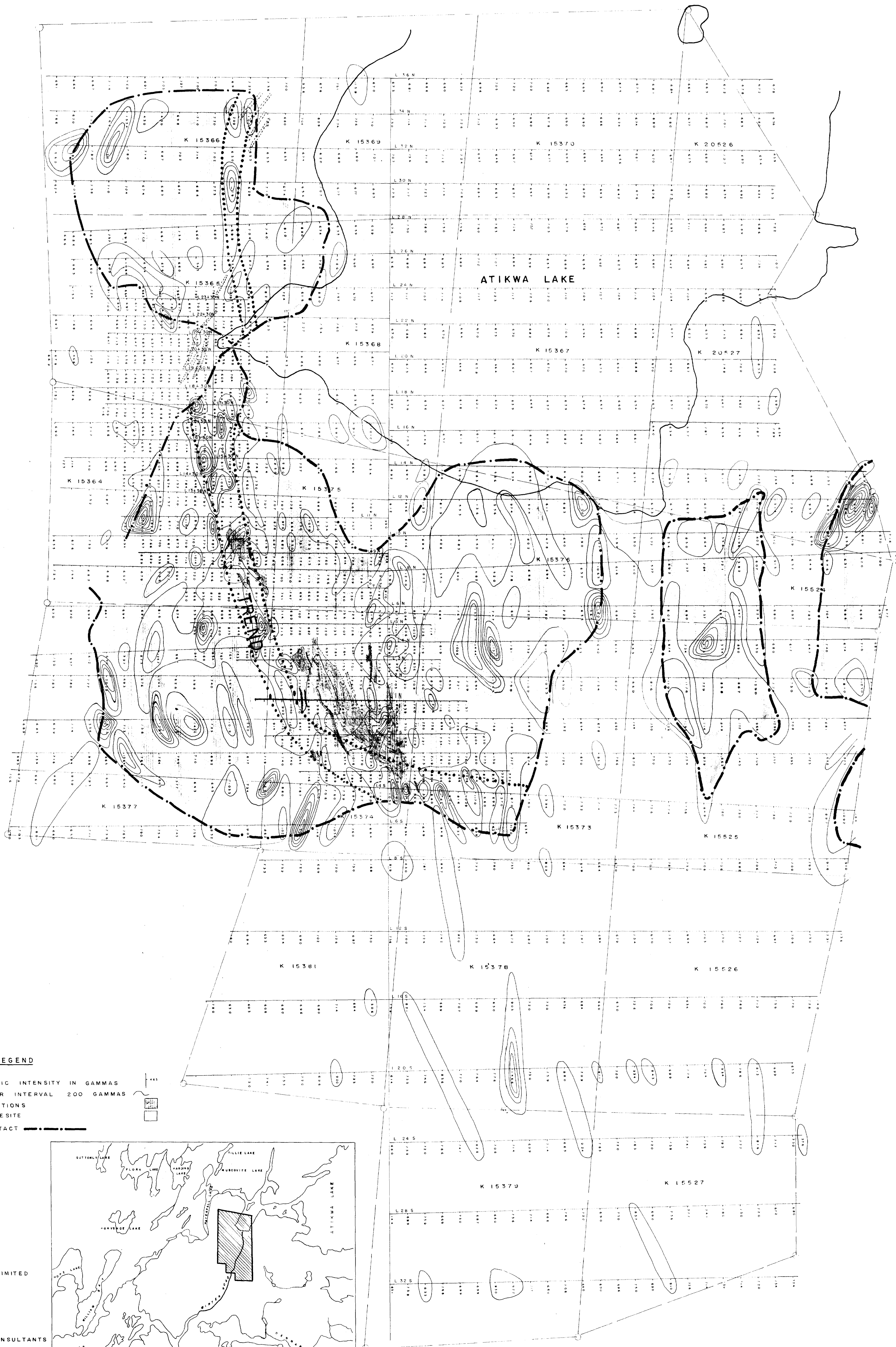
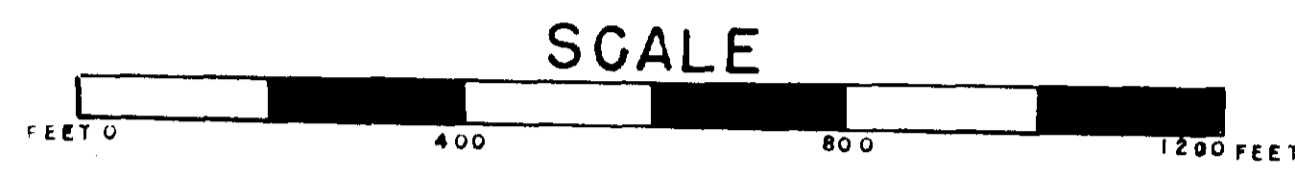
D. J. Salt,
Geophysical Consultant.

MAGNETOMETER SURVEY MAYBRUN MINES LIMITED

ATIKWA LAKE PROPERTY

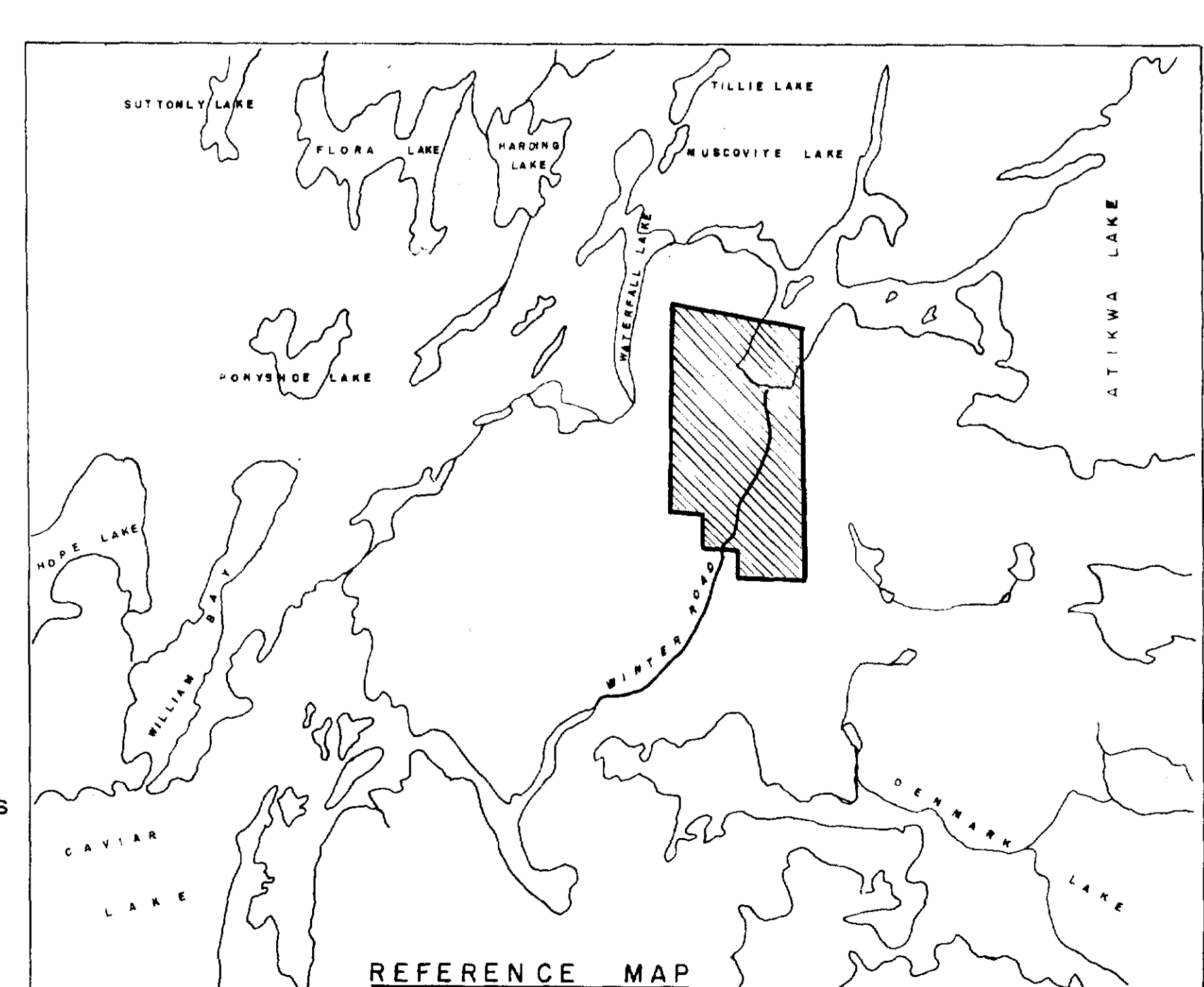
SIOUX NARROWS, ONTARIO

MARCH 6, 1956



LEGEND

- VERTICAL MAGNETIC INTENSITY IN GAMMAS
- MAGNETIC CONTOUR INTERVAL 200 GAMMAS
- MINERALIZED SECTIONS
- INTERPRETED ANDESITE
- INTERPRETED CONTACT



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