



41105SE0060 0030A1 BALDWIN

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MAGNETOMETER SURVEY
FUNDY BAY COPPER MINES LIMITED
BALDWIN AND MAIRN TOWNSHIPS
PROVINCE OF ONTARIO

REPORT NO. 5651

September 14, 1956.

Geo-Explorers Ltd., Toronto, Ontario.



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MAGNETOMETER SURVEY
FUNDY BAY COPPER MINES LTD.
BALDWIN AND NAIRN TOWNSHIPS
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SUMMARY

Two possible weak fault zones have been located. Prospecting of these zones is the only follow up work recommended.

INTRODUCTION

The property was acquired due to the current interest in nickel and a magnetometer survey conducted to locate any nickeliferous pyrrhotite bodies that may be present.

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.

In this area the sulphides are usually magnetic due to their pyrrhotite content. The pyrrhotite is nearly always associated with the ore.

LOCATION AND ACCESS

The property is easily accessible by road from the town of Espanola, Ontario as a road runs south from highway 17 through the property. This is illustrated in Figure 1.

METHOD OF SURVEY

Picket lines were cut at 200 foot intervals being turned from a township line in a direction perpendicular to the strike of any ore bodies that are assumed to be present. Magnetometer readings were taken at 100 foot intervals. One high magnetic anomaly was tested by an electromagnetic test to determine if there was anything of good conductivity associated with the anomaly.

GEOPHYSICAL INTERPRETATION

The electromagnetic tests were made on the magnetic anomaly but did not indicate the presence of any conductor. The high values constitute a wrong way crossover and appear to be produced by topography rather than any conductor.

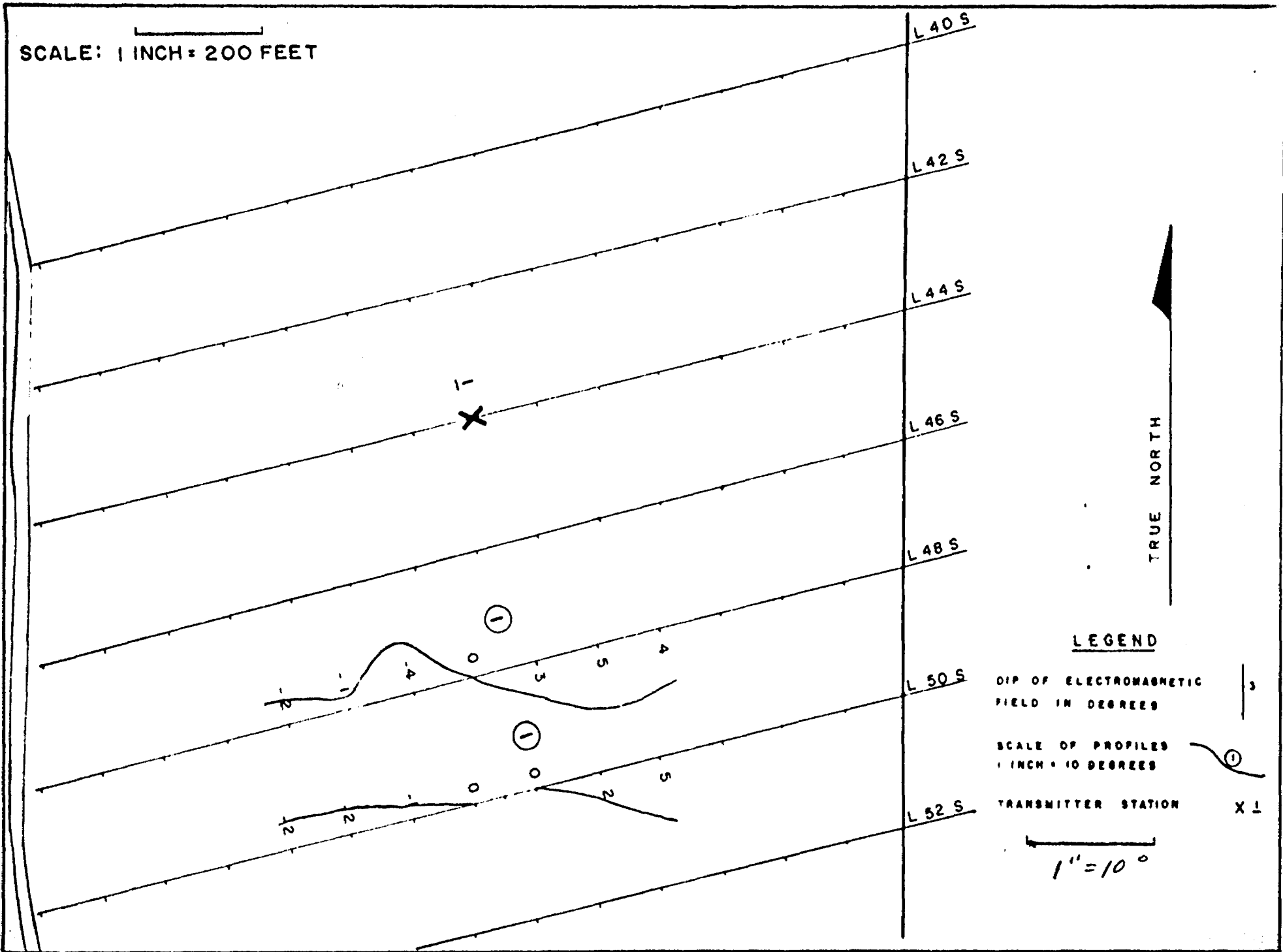
There is a slight alignment to a series of weak highs in two places on the property. This could be a coincidence although not likely.

These linears may represent two weak fault zones.

CONCLUSIONS AND RECOMMENDATIONS

There are two lines of weak highs which could be caused by faulting. The indications are not strong enough

SCALE: 1 INCH = 200 FEET



ELECTROMAGNETIC DETAIL AREA

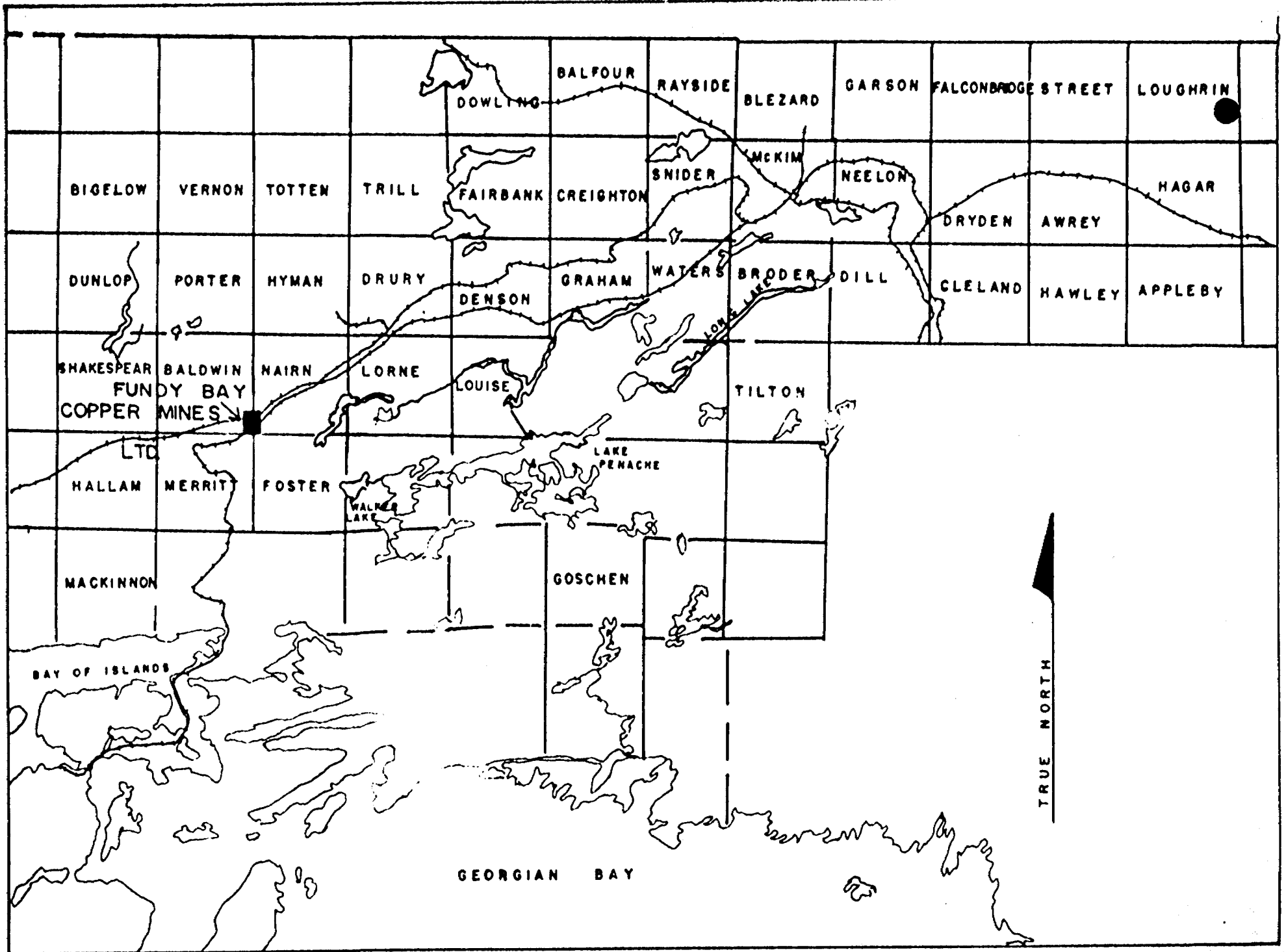
to warrant any further work than surface examination of these zones where feasible.

RESPECTFULLY SUBMITTED,

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

D. J. Salt,
Geophysical Consultant.

*MR. D. J. SALT
Box 452
NORANDA, QUE*



SCALE: 1 INCH = 7.89 MILES

$\frac{7.89 \text{ miles}}{1'' = 7.89}$

LOCATION MAP

FIG. 1

APPENDIX

Distribution of Work Done on Survey.

Period August 15 to September 3, 1956.

Instrument man

Mr. S. Morrell, RR# 3, St. Stephen, New Brunswick 10 days

Assistant

Mr. L. Kearney, Clericy, Quebec 10 days

Line Cutters

Mr. S. Morrell, RR# 3, St. Stephen, New Brunswick 4½ days

Mr. L. Kearney, Clericy, Quebec 4½ days

Geophysicist

Mr. D. J. Salt, 307 Ellerslie Ave., Willowdale, Ont. 2 days

Draftsman

Mrs. P. Tays, 36, 15th Street, Noranda, Quebec. 2 days

Typist

Miss M. Bibeau, 271-B Main Street, Rouyn, Quebec. 1 day

34 man days

Total time applicable for assessment work $34 \times \text{factor } 4 = 136$ man days

This figure does not cover all of the line cutting but only a part of it carried out by our staff.

APPENDIX

Miles of geophysical work 10.4

No. of readings taken 670

Instrument used: Watt vertical force variometer with a
scale constant of 22.6 gammas per division.

Base Stations: were at 00N and 5200S on the base line.

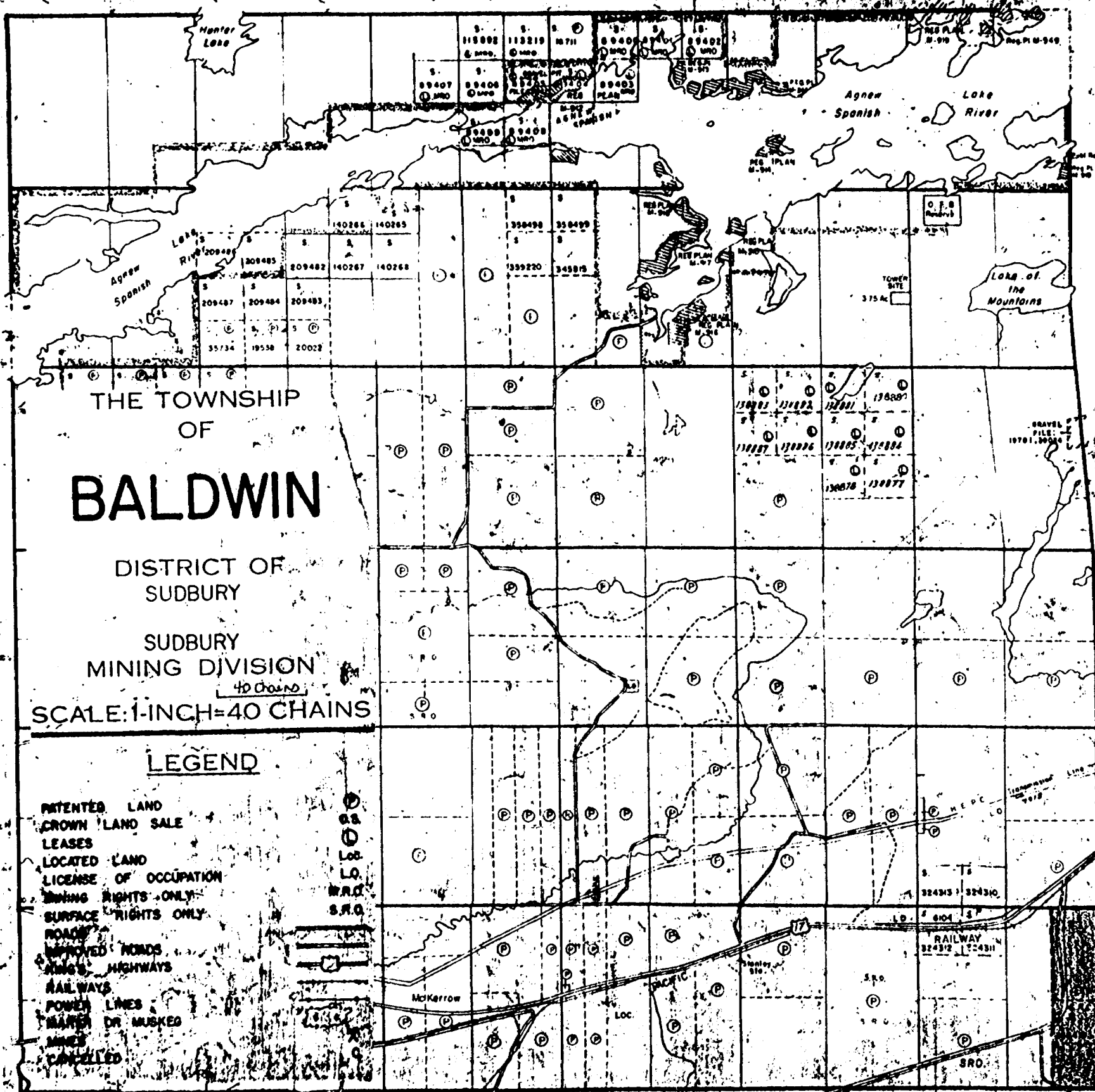
To obtain approximate value of earth's vertical field
add 59,600 gammas.



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900

Porter Twp. (M-106)



VI

V

IV

III

II

furdy Bay
Copper
Mines

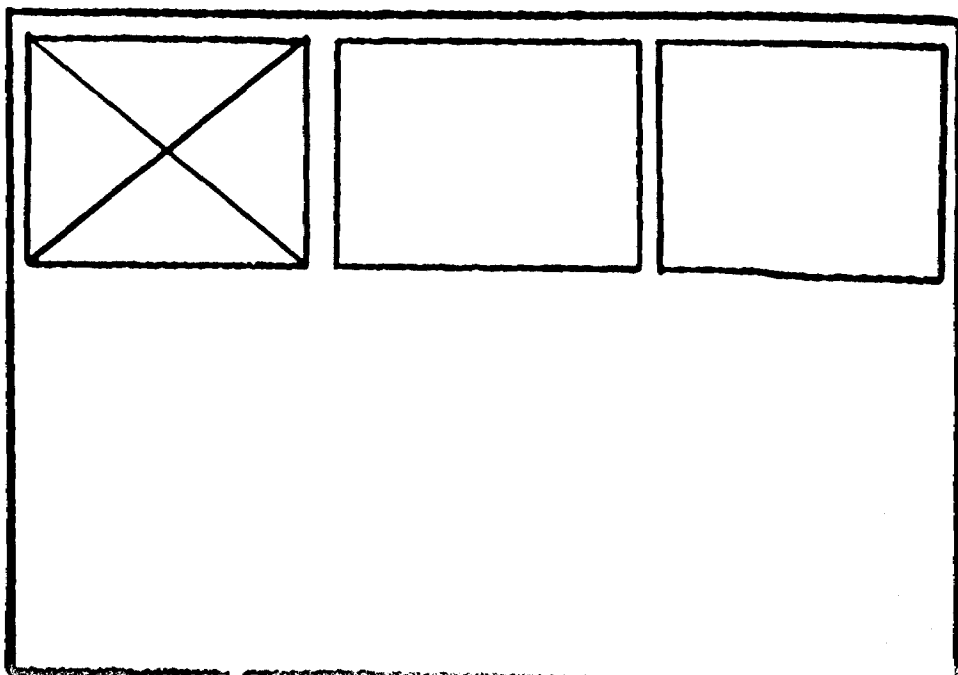
Shakespeare Twp. (M-104)

Nairn Twp. (M-883)

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

BALDWIN-0030-A1, #1

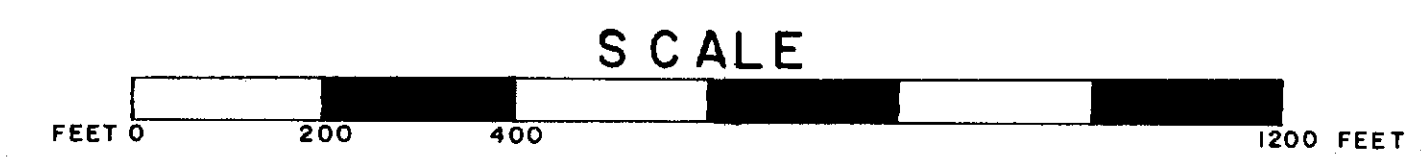
LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)



MAGNETOMETER SURVEY FUNDY BAY COPPER MINES LTD.

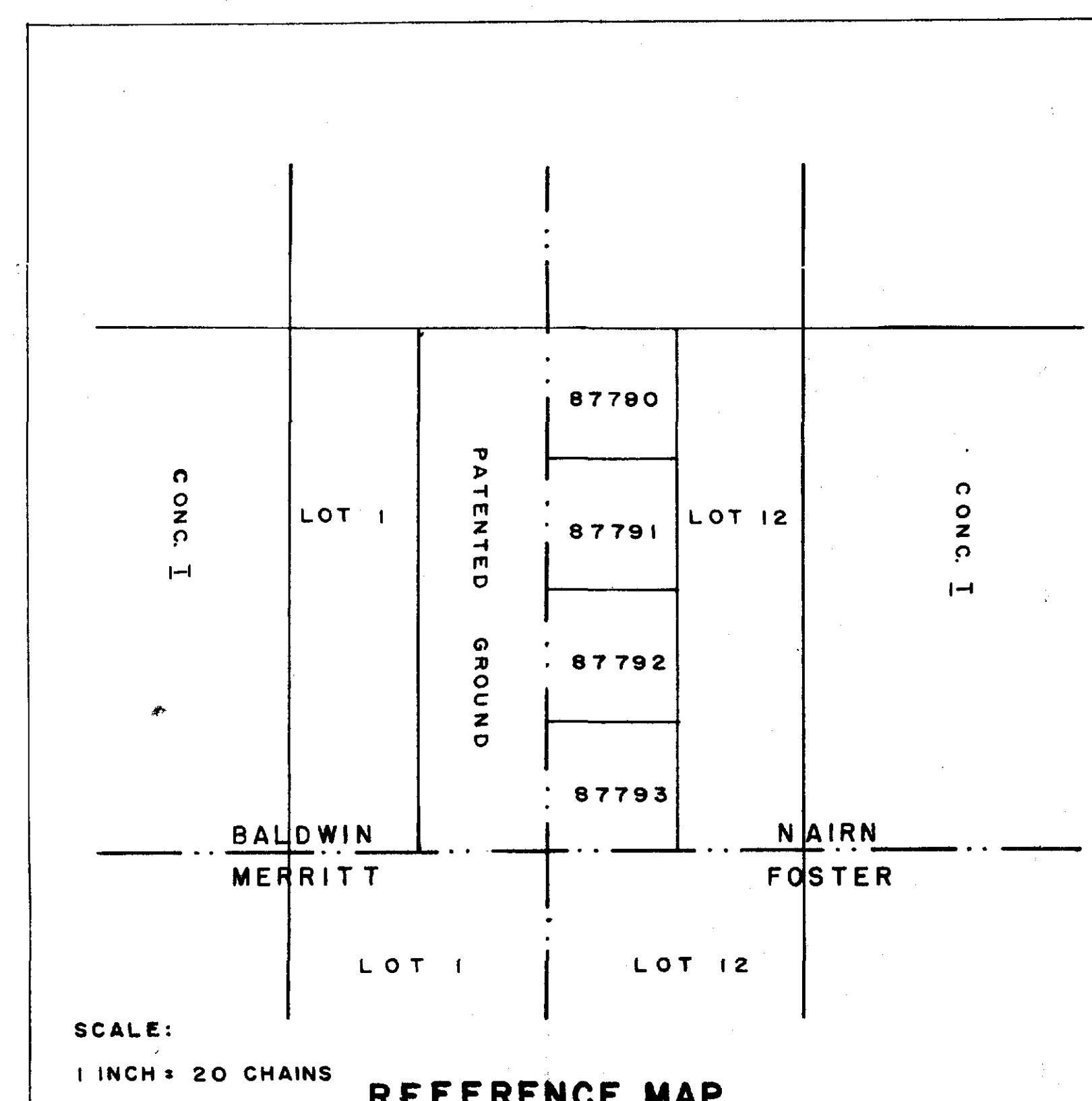
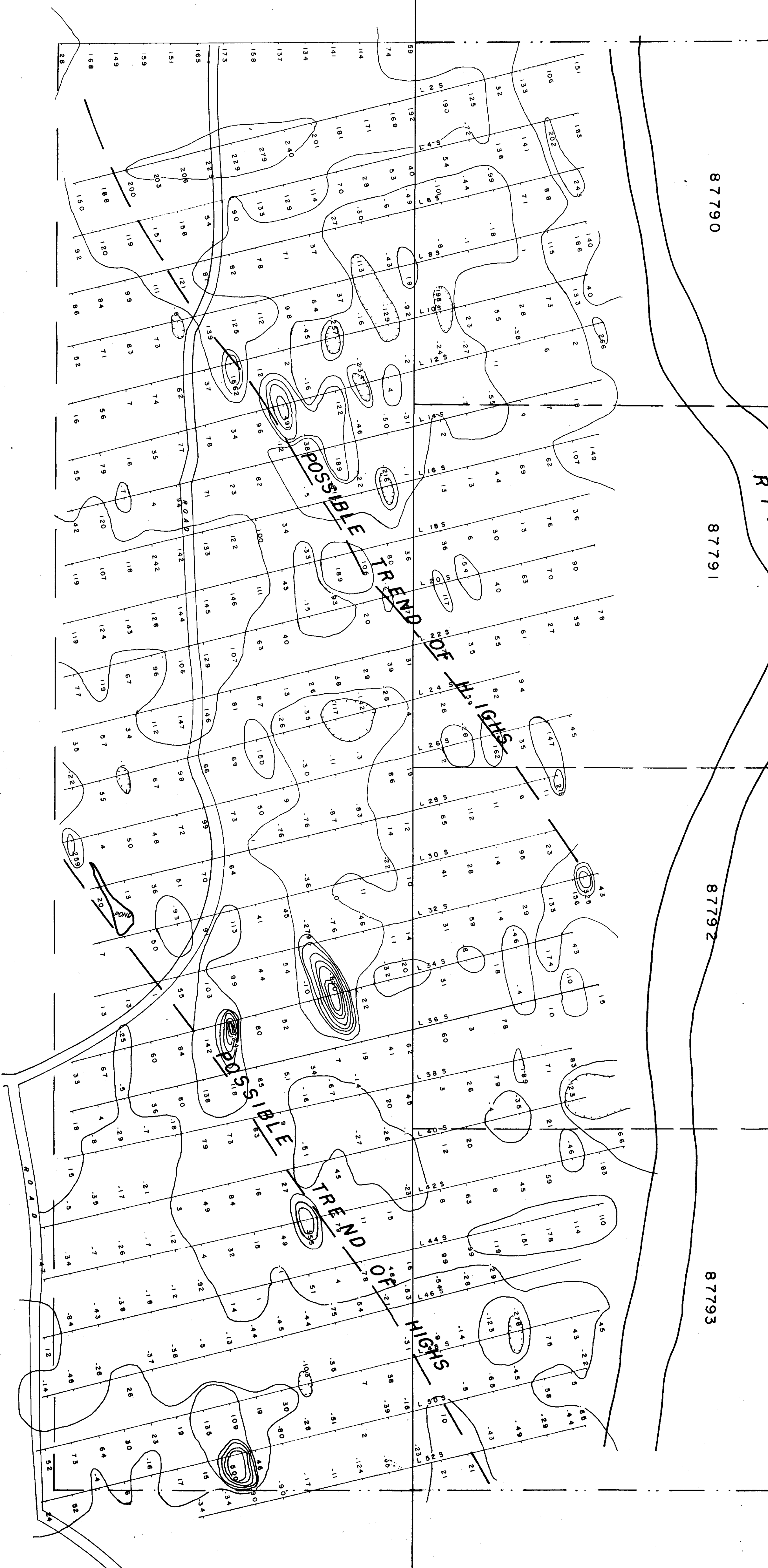
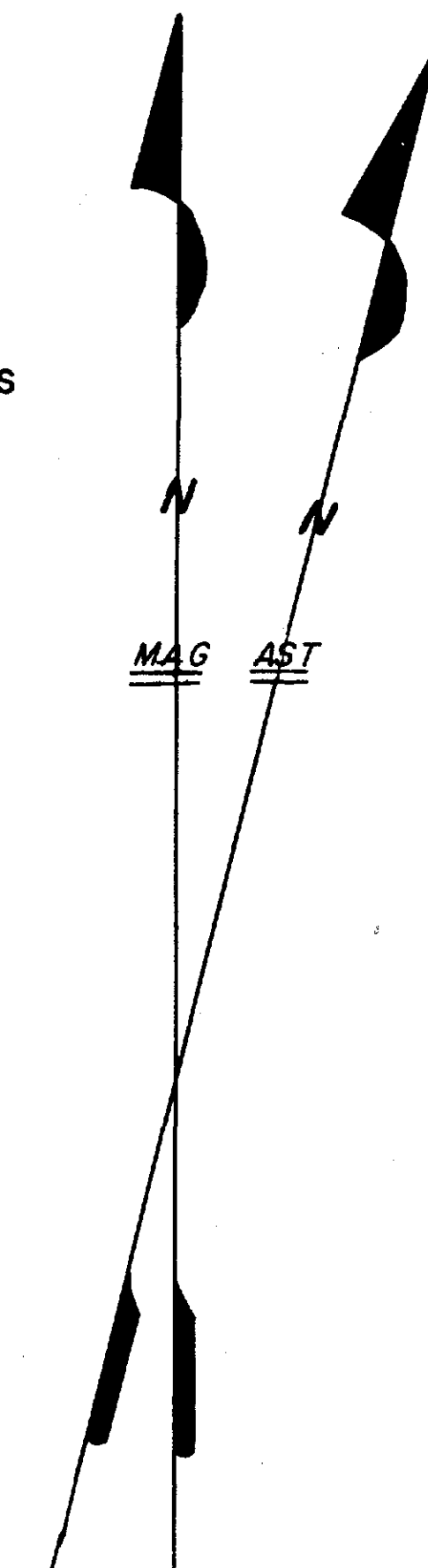
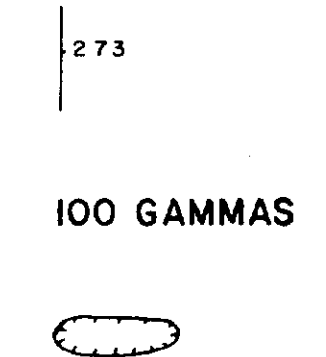
BALDWIN AND NAIRN TOWNSHIPS
PROVINCE OF ONTARIO

AUGUST 15, 1956



LEGEND

VERTICAL MAGNETIC INTENSITY IN GAMMAS
CONTOUR INTERVAL
MAGNETIC DEPRESSION



PRESENTED BY:
GEO-EXPLORERS LIMITED
D. J. Salt
D.J. SALT

GEOPHYSICAL CONSULTANT

BALDWIN-0030 A1, #1

