

REPORT ON
AIRBORNE GEOPHYSICAL SURVEY
OF THE
ENID TOWNSHIP AREA,
FOR
MESPI MINES



42A126W0277 63.1589 ENID

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I. INTRODUCTION

This report pertains to the combined airborne EM and magnetometer survey flown on behalf of Mespil Mines Ltd., over a block of ground in the north-central part of Enid Township and the south-central part of Fortune Township in the Province of Ontario. The survey was flown March 7, 1965 by the Canadian Aero Mineral Surveys Limited geophysically equipped Otter aircraft (Registration CF-IGM), based at Timmins.

The line direction employed in this block was north-south (astr.) and the line spacing was 1/8 mile. The mean terrain clearance of the aircraft was approximately 150 feet. The geophysical data acquired totalled 48 line miles.

Canadian Aero Mineral Surveys Limited personnel associated with this project were as follows:

- | | | |
|--------------|---|-----------------|
| G. A. Curtis | - | Project Manager |
| J. Gaudry | - | Pilot |
| D. McDonell | - | Navigator |
| D. Graham | - | Operator |
| R. Sarsfield | - | Mechanic |
| D. Sarazin | - | Data Compiler |
| G. Granger | - | Draftsman |
| A. Martin | - | Draftsman |
| P. Tallyhoe | - | Data Chief |

The project was supervised by A. R. Rettew, P.Eng., author of this report.

The EM data and all magnetic anomalies in excess of 100 gammas are plotted on a plan map at the scale of 1 inch equals $\frac{1}{2}$ mile. An airphoto laydown provided the base for this map.

Appendix I is a complete listing of all EM anomalies detected. Appendix II describes the equipment, the records, the survey and map compilation procedures and the data presentation system.

II. GEOLOGY

The Ontario Department of Mines map 40C covers the area at a scale of 1" = 2 miles. There is little outcrop as the rocks are covered by swamp in the north, and sand deposits in the south.

A few outcrops of basic volcanics and acidic intrusives are mapped in the northern part of the block. A mile to the east of the block, two outcrops of basic intrusive material are shown. Granite appears to be widespread to the south.

III. RESULTS

The two EM anomalies plotted on this sheet are both small, questionable in-phase blips with little or no out-of-phase support and no direct magnetic correlation. The only feature of these anomalies which lends any real hope for the existence of a conductor is the proximity of these two blips and the similarity of their

character.

IV. RECOMMENDATIONS

No ground work is recommended in this area unless the geological environment of the two questionable anomalies is considered especially favourable.

Respectfully submitted,



A. R. Rattew, P.Eng.,
Geophysicist.

OTTAWA, Ontario,
May 10, 1965.

APPENDIX I

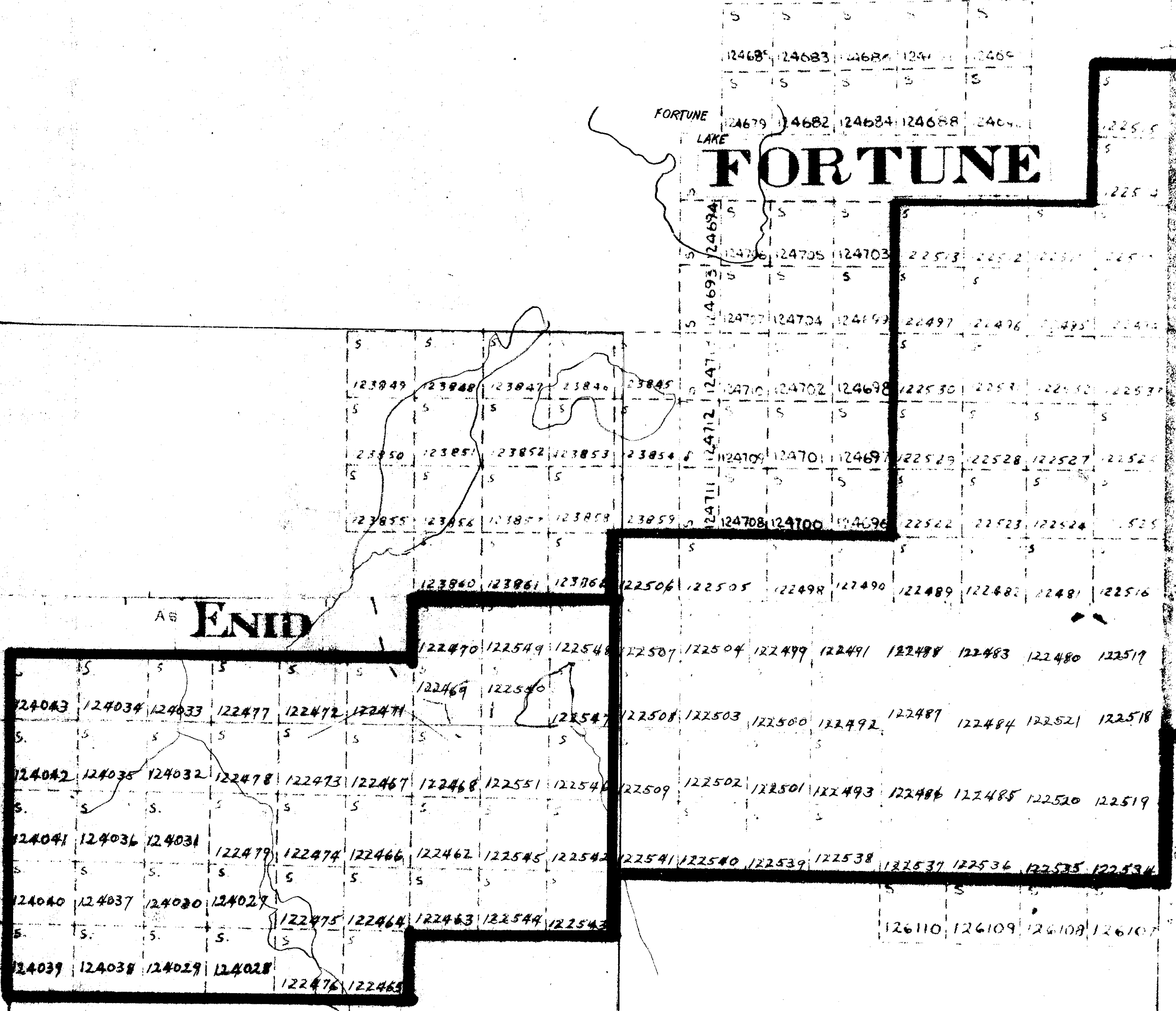
PROJECT NO. 5044 - ENID TOWNSHIP AREA

<u>Anomaly</u>	<u>Fiducials</u>	<u>In-Phase Quad</u>	<u>Altitude</u>	<u>Magnetics</u>	<u>Rate</u>	<u>Comments</u>
17 A	5394/7	40/20 ?	150	nil	x	Between two mag highs.
18 A	5253/6	30/0	145	S.Flank 500g	x	Weak

FORTUNE LAKE

FORTUNE

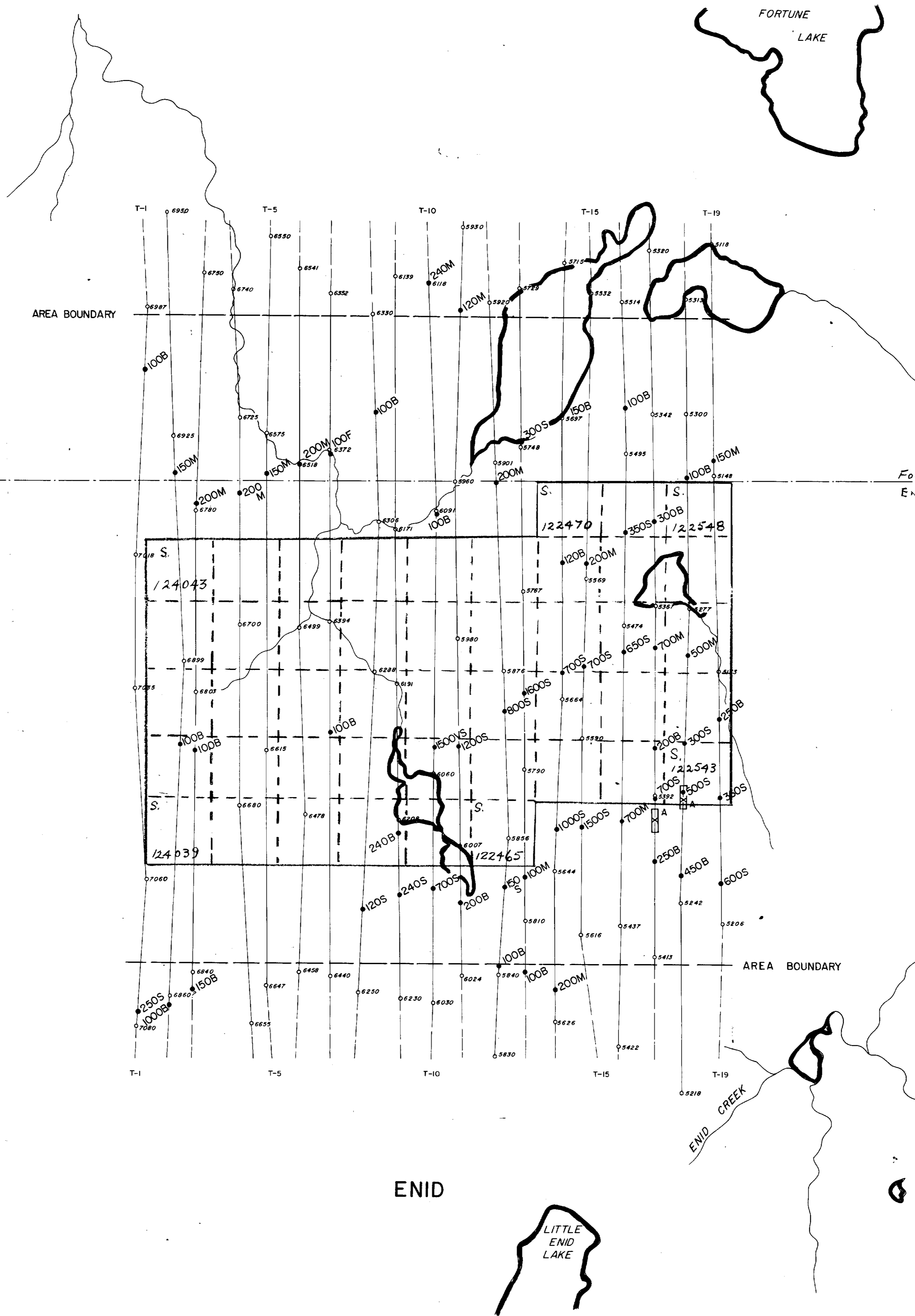
ENID



← AREA OF SURVEY



FORTUNE



MAGNETIC LEGEND

- S - SHARP
- VS - VERY SHARP
- B - BROAD
- VB - VERY BROAD
- F - FLAT
- M - MULTIPLE
- 200 - SYMBOL



42A125W0277 63.1589 ENID

210

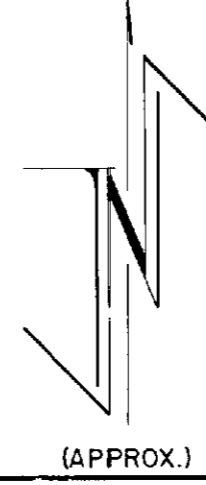
63.1589

LEGEND

1 A ANOMALY	▬
1 B ANOMALY	▬▬▬
2 A ANOMALY	▬▬▬▬
2 B ANOMALY	▬▬▬▬▬
3 ANOMALY	▬▬▬▬▬▬
X type ANOMALY	▬▬▬▬▬▬▬

MEAN TERRAIN CLEARANCE...150 FEET
 FLIGHT LINE SPACING...1/8 MILE
 RIVERS AND LAKES...
 HORIZONTAL CONTROL...BASED ON
 PHOTO LAYDOWN

AIRBORNE ELECTROMAGNETIC SURVEY
ENID TOWNSHIP AREA
 ONTARIO
MESPI MINES LIMITED
 SCALE: 1 INCH = 1/4 MILE (approx.)



(APPROX.)

CANADIAN AERO
Mineral Surveys LTD.
 OTTAWA & TORONTO, ONTARIO

