

63,522



31D16SW8548 63.522 CAVENDISH

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REPORT ON MAGNETOMETER SURVEY

OF

CAVENDISH URANIUM & MINING COMPANY LIMITED PROPERTY

CAVENDISH TOWNSHIP, PETERBOROUGH COUNTY, ONTARIO

REPORT ON MAGNETOMETER SURVEY

OF

CAVENDISH URANIUM & MINING COMPANY LIMITED PROPERTY

CAVENDISH TOWNSHIP, PETERBOROUGH COUNTY, ONTARIO

INTRODUCTION

The property surveyed consists of nineteen claims in two groups, all located in Cavendish Township, Peterborough County, Ontario. The northern group comprises claims E07318 - E07321 inclusive. <sup>(4)</sup> The southern group comprises claims E07316, E07317, E07432, E07433, E07489 - E07497 inclusive, E07466, and E07608. <sup>(15)</sup> (19)

The claims may be reached by means of a gravel road which crosses the property.

GENERAL GEOLOGY

The area in the vicinity of the property is underlain by limestones, with minor amounts of amphibolite and paragneiss, which have been intruded by granite gneiss and a pink granite, which is often pegmatitic. This pink granite and pegmatitic rock is generally radioactive, the intensity of the radioactivity reportedly increasing as the amount of magnetite present increases.

Three radioactive zones have been reported on the property with assays on the main zone reported as 0.05% - 0.19% U<sub>3</sub>O<sub>8</sub>.

GEOPHYSICAL SURVEY

Readings of the vertical component of the earth's magnetic field were taken at intervals of 100 feet along lines spaced 400 feet apart. An Askania-type magnetometer with a sensitivity of 29.7 gammas per scale division was used.

RESULTS OF GEOPHYSICAL SURVEY

A number of roughly north-south trending linear magnetic highs are shown on the map accompanying this report. These highs appear to be caused by relatively narrow bodies. In view of the reported association on the property of the radioactive minerals with magnetite, these magnetic highs are considered to be of some importance.

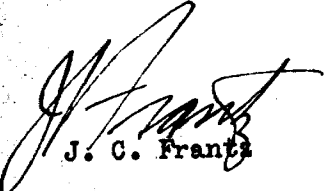
RECOMMENDATIONS

It is recommended that the magnetic highs shown on the coloured contour map accompanying this report be investigated by surface exploration. This work should include detailed geiger or scintillometer work combined with trenching and stripping. Work should be concentrated on those zones which have the largest areal extent, and appear to offer some hope of developing substantial tonnages.

Respectfully submitted,

MINING GEOPHYSICS CORPORATION LIMITED

  
N. B. Keevil

  
J. C. Frantz

Toronto, Ont.,  
July 30, 1954.

APPENDIX TO MINING GEOPHYSICS CORPORATION LIMITED REPORT NO. 372

|  |   |                     |
|--|---|---------------------|
| Surveying, line-cutting, picketing, chaining | June 10/54 - July 10/54                     | 178 man-days        |
| Geophysical readings                         | June 12/54 - July 12/54                     | 48 man-days         |
| Calculating, plotting, drafting, report      | July 12/54 - July 28/54<br>(intermittently) | 19 man-days         |
|  |   | <u>240 man-days</u> |
| 240 x 4                                      |   | - 960 man-days      |

PERSONNEL

*19 claims*

FIELD:

|                     |                                   |                         |
|---------------------|-----------------------------------|-------------------------|
| M. A. Edwards       | - Fredericton, N. B.              | June 10/54 - July 12/54 |
| D. D. Cowan         | - Toronto, Ont.                   | June 10/54 - July 12/54 |
| D. J. Salt          | - Toronto, Ont.                   | June 10/54 - June 12/54 |
| Harvey Green & crew | (line-cutters)<br>Lakefield, Ont. | June 10/54 - July 10/54 |

OFFICE:

|              |                 |  |
|--------------|-----------------|--|
| D. J. Salt   | - Toronto, Ont. | July 10/54 - July 12/54                  |
| J. C. Frantz | - Toronto, Ont. | July 15/54 @ July 28/54 (intermittently) |
| R. B. Evis   | - Toronto, Ont. | " " "                                    |
| N. B. Keevil | - Toronto, Ont. | " " "                                    |
| M. Frantz    | - Toronto, Ont. | July 30/54                               |

Miles of Line - 25.5

No. of Stations - 2160

Instrument: Watt vertical magnetometer, Scale constant 29.6 gammas per scale division

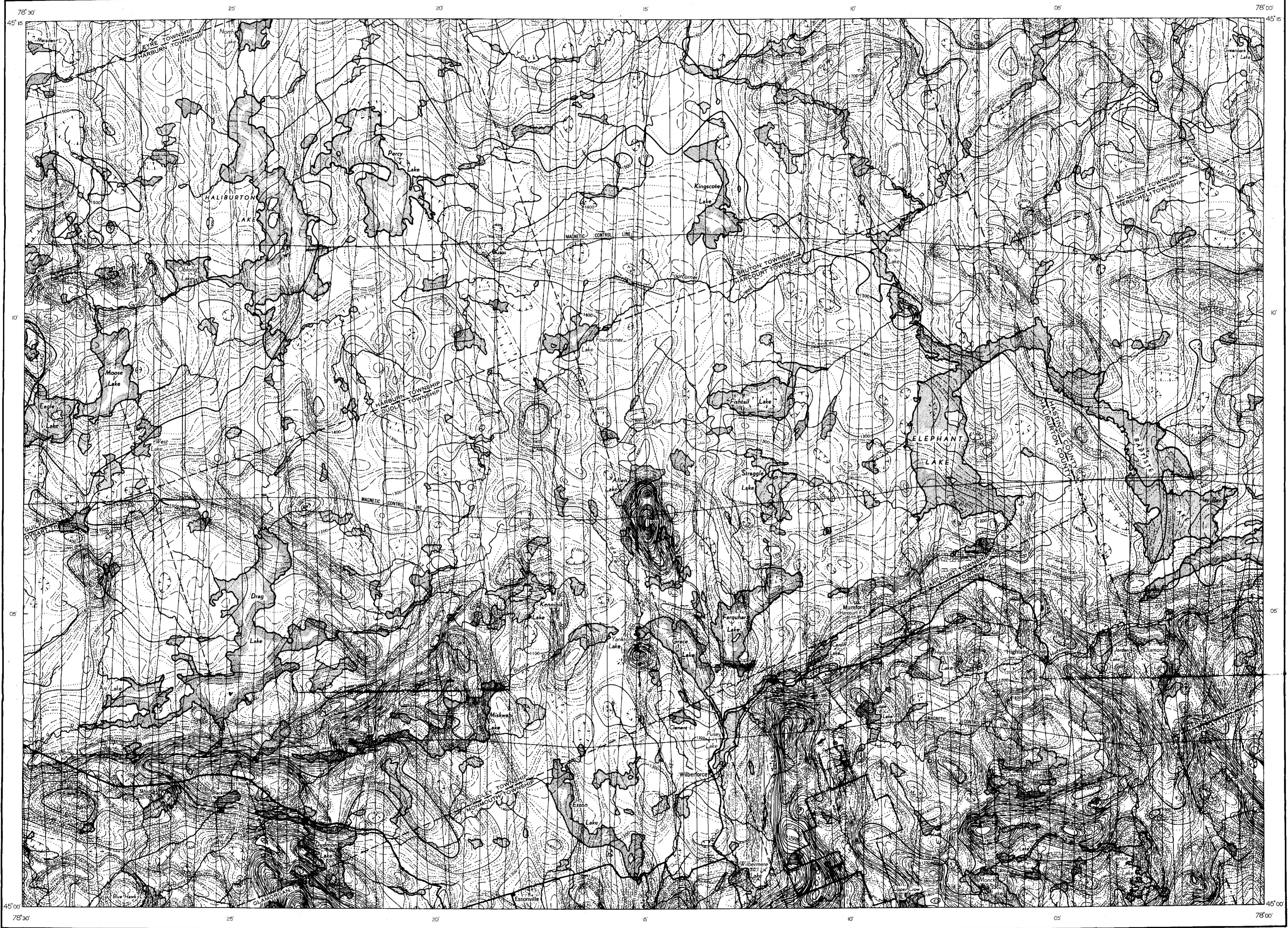
*Handwritten calculations:*

67144  
67144  
-----  
1344

11/336  
387  
-----  
152

(25)





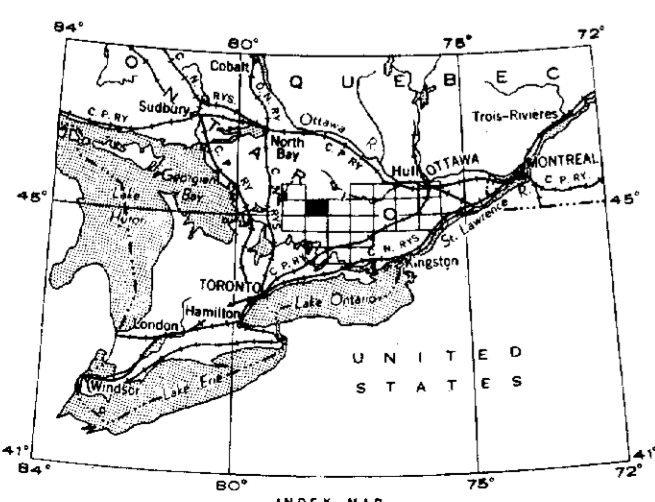
PUBLISHED, 1953

MAP 110 G  
**WILBERFORCE**  
 HALIBURTON AND HASTINGS COUNTIES  
 ONTARIO

Scale: One Inch to One Mile =  $\frac{1}{63,360}$   
 Miles



- Isomagnetic lines (total field)
  - 500 gammas
  - 100 gammas
  - 20 gammas
  - 10 gammas
- Magnetic depression contour
- Flight line
- Flight altitude: 1,000 feet above ground level



Magnetic Survey, 1949, by Geophysics Section,  
 Geological Survey of Canada, Department of Mines  
 and Technical Surveys.

No correction has been made for regional variation;  
 this increases at the rate of 3.5 gammas per mile from  
 east to west and 3.0 gammas per mile from south  
 to north.

The magnetic data on this map were compiled from information recorded  
 along the flight lines shown. The anomalies expressed by the magnetic contours  
 are dependent on the variable magnetic intensities of the underlying rocks, and  
 may be due to conditions near, or at unknown depths below, the surface. High  
 magnetic anomalies normally indicate the presence of basic rocks, such as diabase,  
 gabbro, or serpentine, which have a relatively high iron content; but in special  
 instances may be due, or partly due, to concentrations of magnetic ore minerals.  
 By means of the magnetic anomalies, various rock bodies or structural features,  
 such as faults or folds, may be traced by the geologist into, or across, areas  
 of few or no outcrops. In many instances, however, no present interpretation  
 of particular anomalies may be possible.



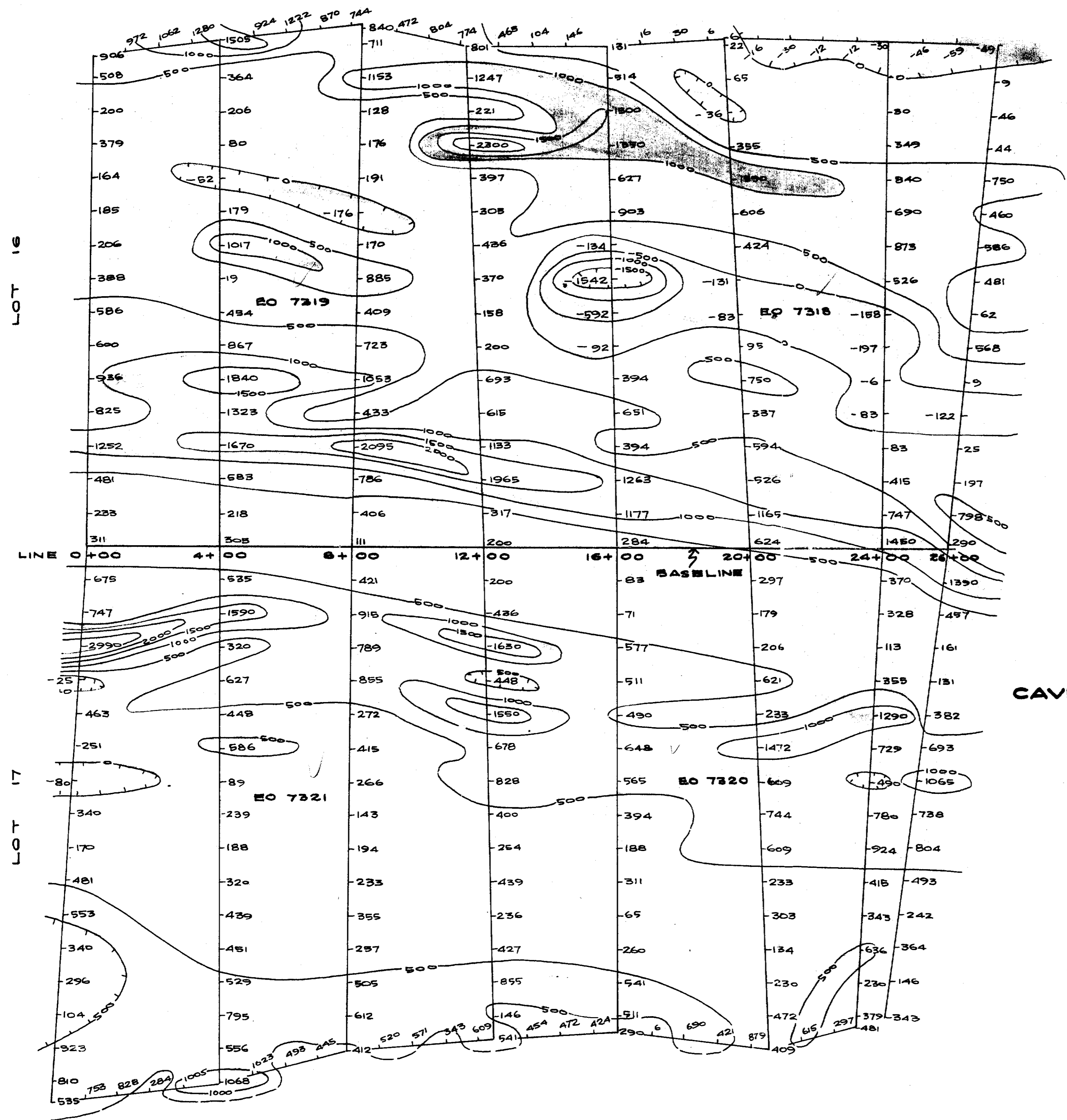


CON. X

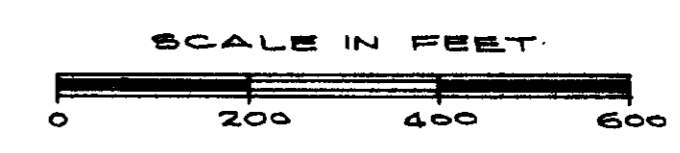
# MINING GEOPHYSICS

CORPORATION - LIMITED  
11 JORDAN ST.  
TORONTO, ONT.

|                             |                  |
|-----------------------------|------------------|
| DRAFTED BY:<br>B.S.         | DATE:<br>July 28 |
| TO ACCOMPANY<br>REPORT: 377 | COPY No.<br>3    |
| N. B. Keenid per. H.B.      |                  |



MAGNETOMETER SURVEY  
OF  
CAVENDISH URANIUM & MINING CO. LTD.  
NORTH GROUP  
CAVENDISH TWP., ONTARIO  
BY  
MINING GEOPHYSICS CORP. LTD.



**LEGEND**

|                   |             |
|-------------------|-------------|
| [Dark Grey Box]   | > 3000      |
| [Medium Grey Box] | 2000 - 3000 |
| [Light Grey Box]  | 1000 - 2000 |
| [White Box]       | 0 - 1000    |
| [White Box]       | -1000 - 0   |
| [Dark Grey Box]   | < -1000     |

NOTE: FOR LOCATION MAP, SEE MAP OF SOUTH GROUP



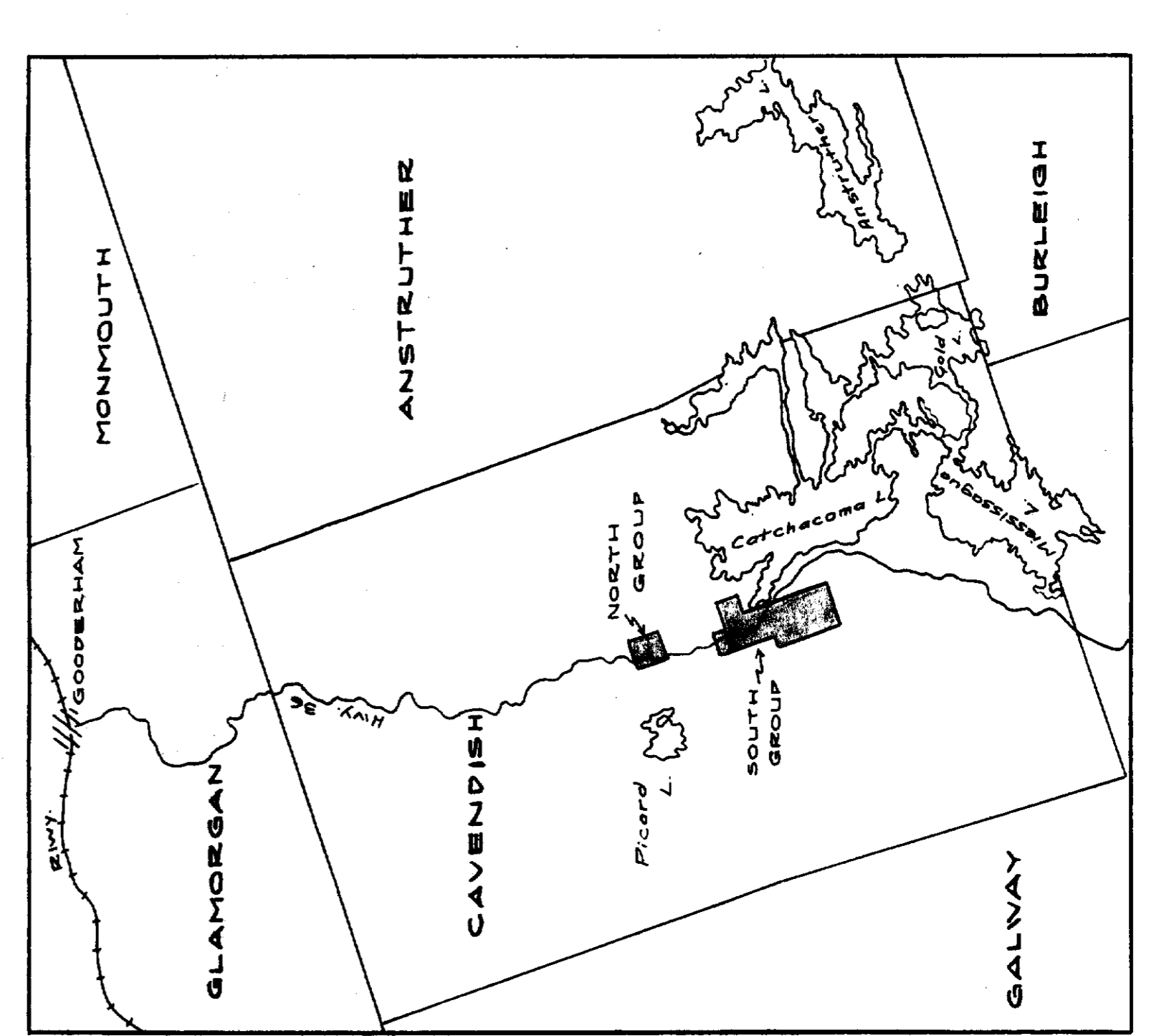
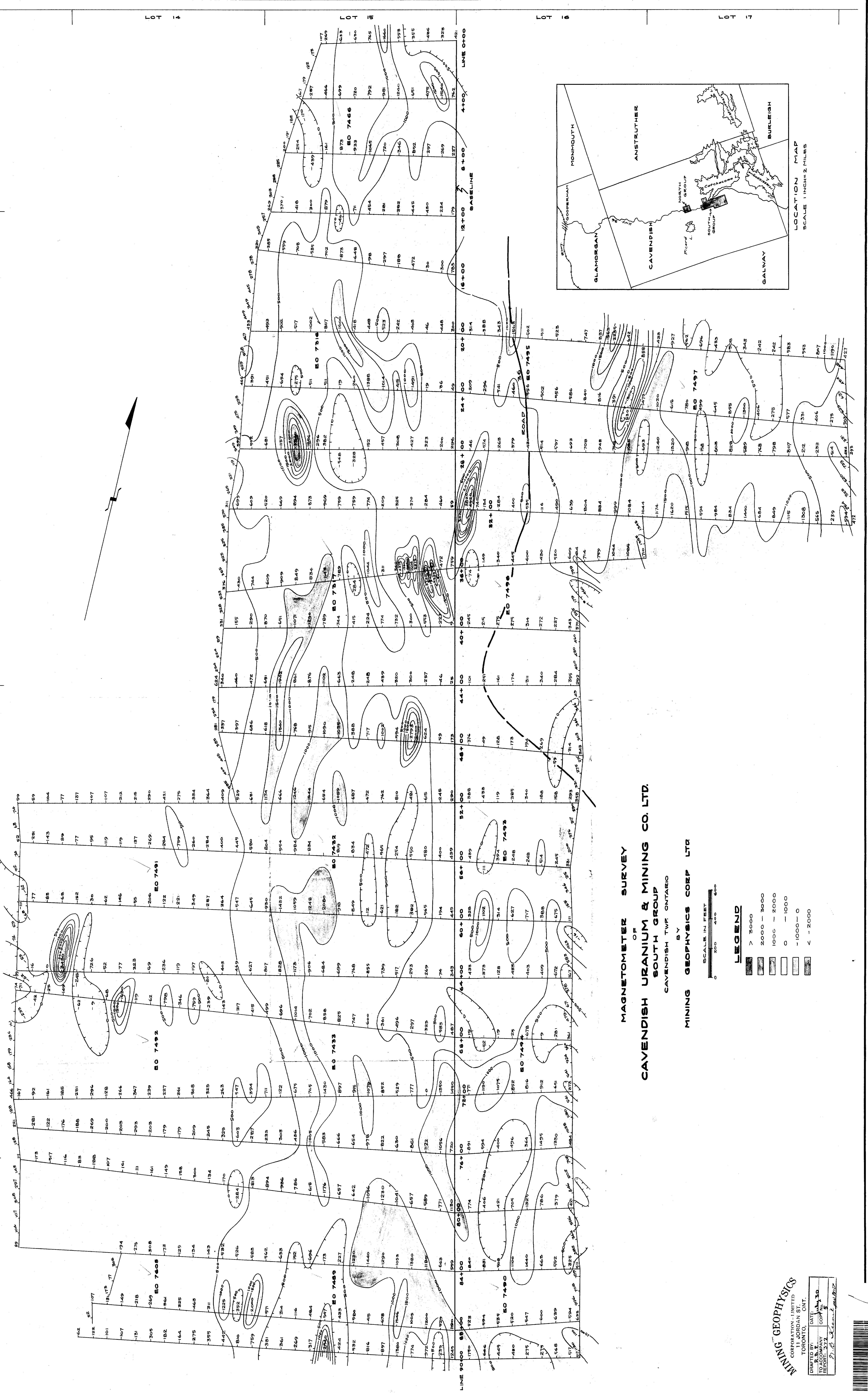
630522

CON. VI

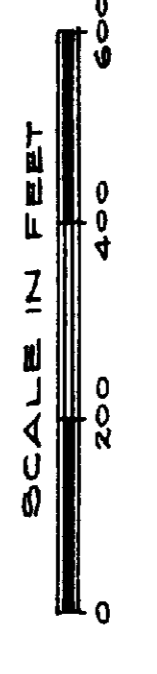
CON. VII

CON. VIII

CON. IX



**MAGNETOMETER SURVEY  
OF  
CAVENTISH URANIUM & MINING CO. LTD.  
SOUTH GROUP  
CAVENTISH TWP. ONTARIO  
BY  
MINING GEOPHYSICS CORP. LTD.**



**LEGEND**

|                   |             |
|-------------------|-------------|
| [Dark Grey Box]   | > 3000      |
| [Medium Grey Box] | 2000 - 3000 |
| [Light Grey Box]  | 1000 - 2000 |
| [White Box]       | 0 - 1000    |
| [Light Blue Box]  | -1000 - 0   |
| [Dark Blue Box]   | < -2000     |

**MINING GEOPHYSICS**  
CORPORATION LIMITED  
TORONTO, ONT.

DRAWN BY: DATE: 10/1/50  
REPORT NO. 377  
COMP. NO. 5

