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KEEVIL MINING GROUP LTD.

CLAIMS P69955 -58, CRAWFORD TWP.

REPORT ON THE  
GEOPHYSICAL SURVEYS

June 4, 1965

*H. D. McLeod P. Eng.*

H. D. McLeod, P. Eng.



## INTRODUCTION

Keevil Mining Group Ltd. Crawford Township property No. 235 consists of four claims as follows located in the north central section of Crawford Township, Porcupine Mining Division, a distance of 25 miles to the north of Timmins, Ontario.

P69955 - N E 1/4 S 1/2 Lot 6, Concession 6  
P69956 - S E 1/4 S 1/2 Lot 6, Concession 6  
P69957 - S W 1/4 S 1/2 Lot 6, Concession 6  
P69958 - N W 1/4 S 1/2 Lot 6, Concession 6

The claims were staked by Keevil Mining Group Ltd., Suite 1000, 11 Adelaide St. W., Toronto, Ontario, the present recorded owner, in May and recorded in June, 1964.

The work outlined in this report was done by Geophysical Engineering and Surveys Limited personnel under the direct supervision of the writer. The surveys were done by A. MacDonnell, 83 Algonquin Blvd. E., Timmins, Ontario during the period December 7, 1964 to March 24, 1965.

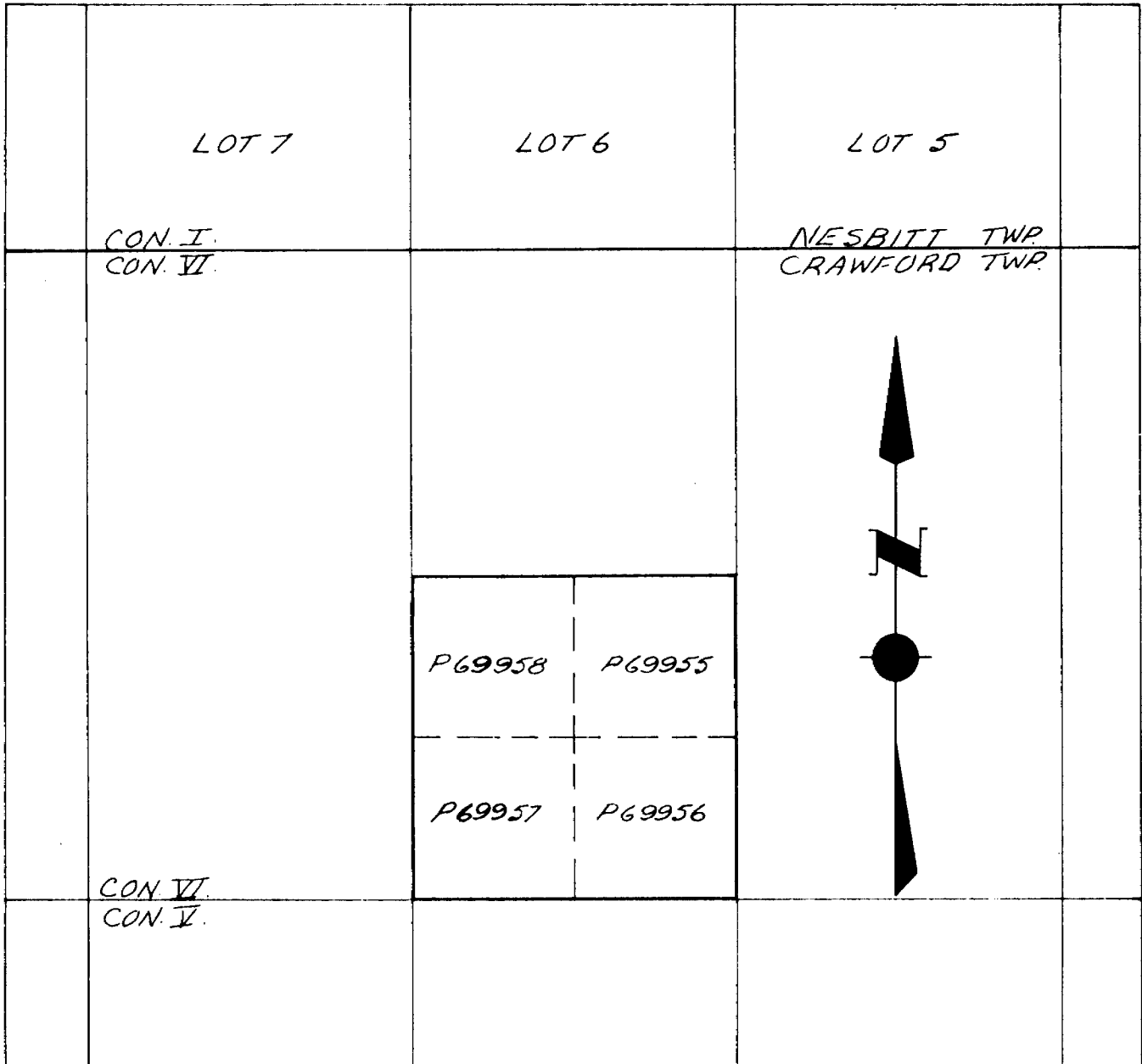
An attempt to complete the electromagnetic survey in February was unsuccessful due to the proximity of the claims to a high tension power line. The survey was done late in March during a shut-down in transmission in the line.

Access to the claims is by the Abitibi Power and Paper Company Limited forest access road from Smooth Rock Falls, Ontario or by helicopter from Timmins.

## SURVEY METHODS

Line Cutting - An east-west base line was established along the south boundary of the claims and lines cut north to the north boundary at 400-foot intervals.

Approximately 4 1/2 miles of line was cut.



KEEVIL MINING GROUP LTD

TIMMINS AREA

PROPERTY 235.

SCALE: 1" = 1/4 MILES.

JUNE, 1965.

Magnetometer Survey - The magnetometer survey was done with a Sh. Fluxgate Model M. F. 1 magnetometer having a constant of 20 gammas per scale division. Readings were taken at 100-foot intervals along all the picket lines with fill-in readings at 50-foot intervals in areas of high magnetic relief. Diurnal readings were taken at 1 to 1 1/2 hour intervals on permanent base stations. The results were corrected, plotted and contoured as shown on the accompanying map. 7

Approximately 235 readings were taken.

Electromagnetic Survey - The electromagnetic survey was done with a Sharpe S. E. 200 V. E. M. unit fitted with a special amplifier and batteries in order to increase the range to 600 feet. A reconnaissance survey of the lines was done using the parallel line method. In this method readings are taken at 100-foot intervals on every line with the transmitter and receiver located at the same station on adjacent lines. The transmitter-receiver interval thus is the line spacing or, in this case, 400 feet.

All possible cross-overs indicated by the reconnaissance survey were checked by the fixed transmitter method. In this method the transmitter is set up on an indicated cross-over and readings taken at 50-foot intervals on the adjacent line or lines. In this way conductors are traced from line to line and accurately located within 25 feet on every line.

Approximately 310 readings were taken.

## RESULTS OF SURVEYS

Magnetometer - The magnetometer survey has outlined a number of small lensy highs ranging to 450 gammas above background. Most form an east-west to N 80° W striking zone crossing the south part of the group. One forms a small isolated anomaly in the northwest section of the claims.

Electromagnetic - The electromagnetic survey has located and traced two short parallel conductors in the south part of the claims. One is approximately 600 feet long, the other 1400 feet. Both have sections of excellent conductivity. The south conductor correlates exactly with one of the magnetic anomalies while the north conductor lies along the edge of another magnetic anomaly.

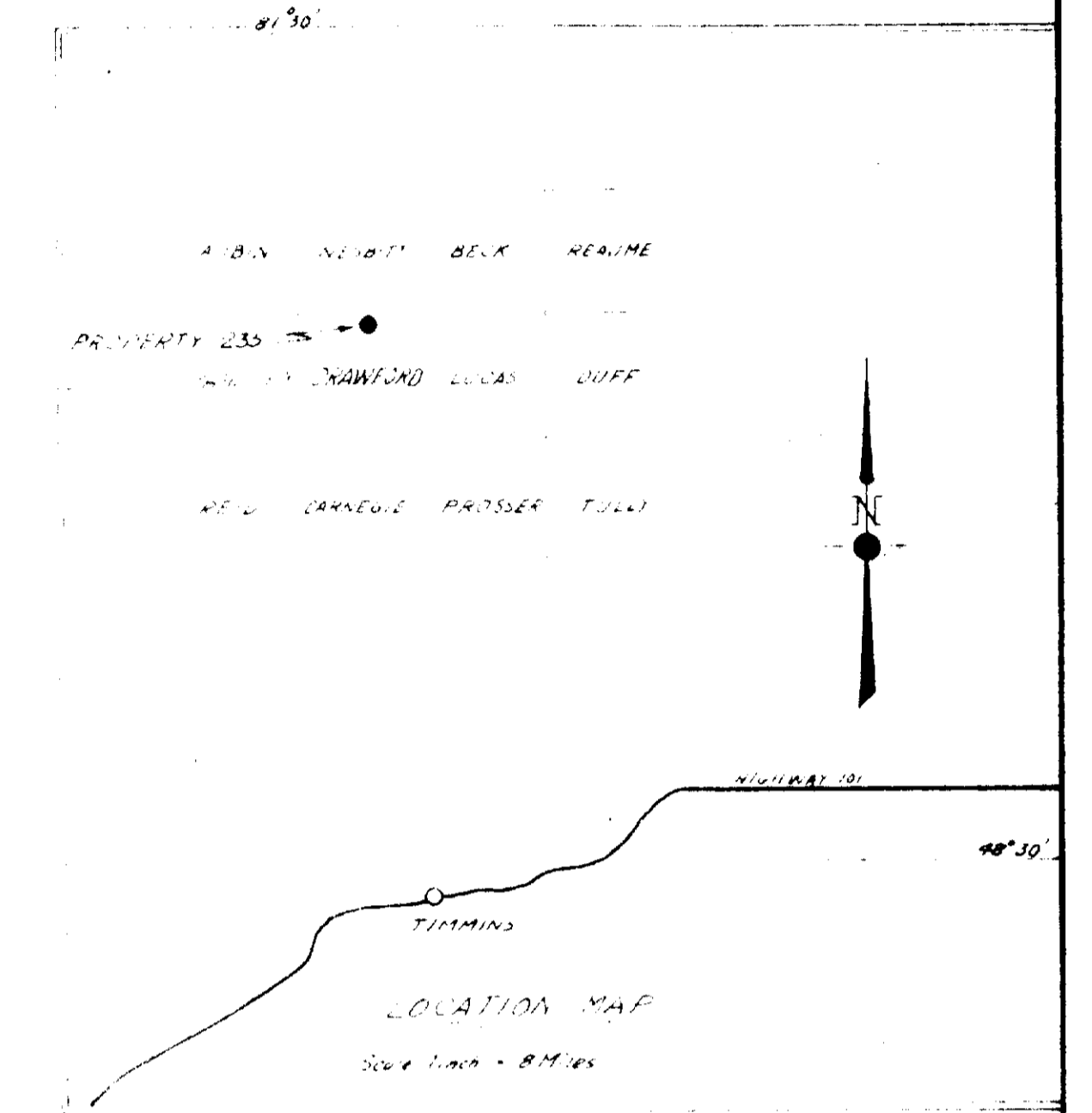
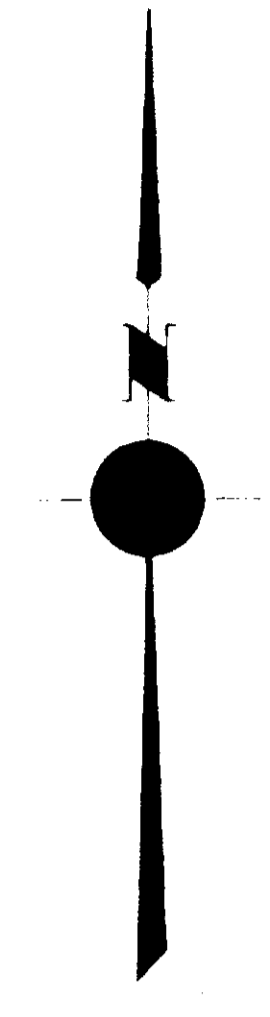
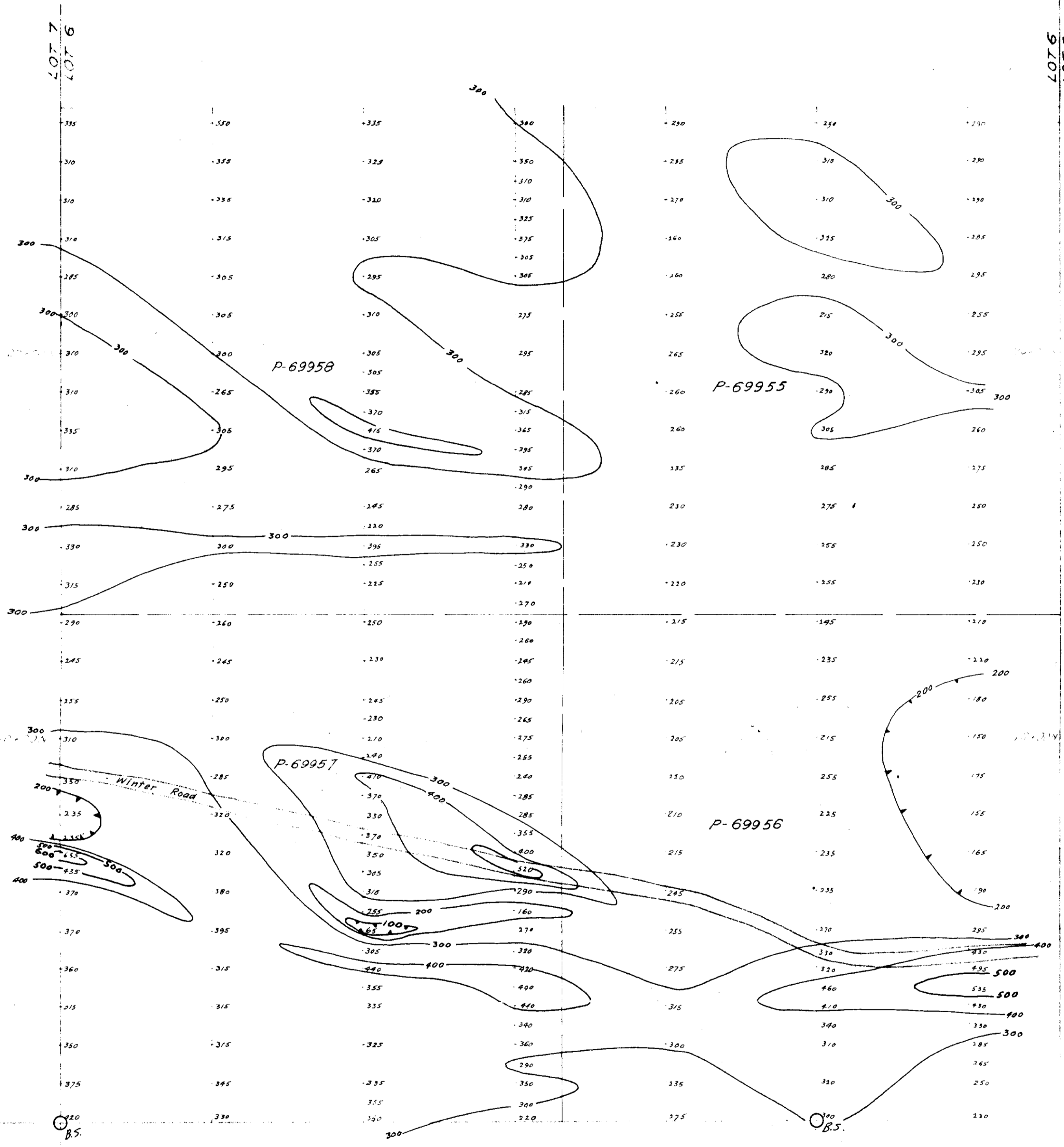
#### GEOLOGY

No outcrops are present on or adjacent to the claims. The area is believed to be underlain by volcanics, probably mostly basic in composition.

#### SUMMARY & RECOMMENDATIONS

Magnetometer and vertical loop electromagnetic surveys have outlined two short but good conductors, one with exact and the other with close magnetic correlation.

One drill hole approximately 700 feet in length is recommended to cross and explain both conductors.



Note:  
 Values shown thus  $\begin{matrix} 335 \\ | \\ 325 \end{matrix}$  are in gammas  
 Contours shown thus  $\text{---}300\text{---}$  at 100 gamma intervals  
 Instrument: Sharpe Fluxgate Magnetometer Model MF-1  
 Operator: A. MacDannell  
 OBS - Base Station.

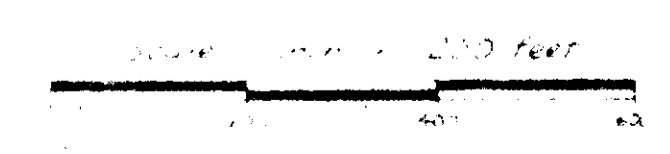
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## MAGNETOMETER SURVEY

OF  
 PROPERTY 235  
 TOWNSHIP OF CRAWFORD  
 PROVINCE OF ONTARIO

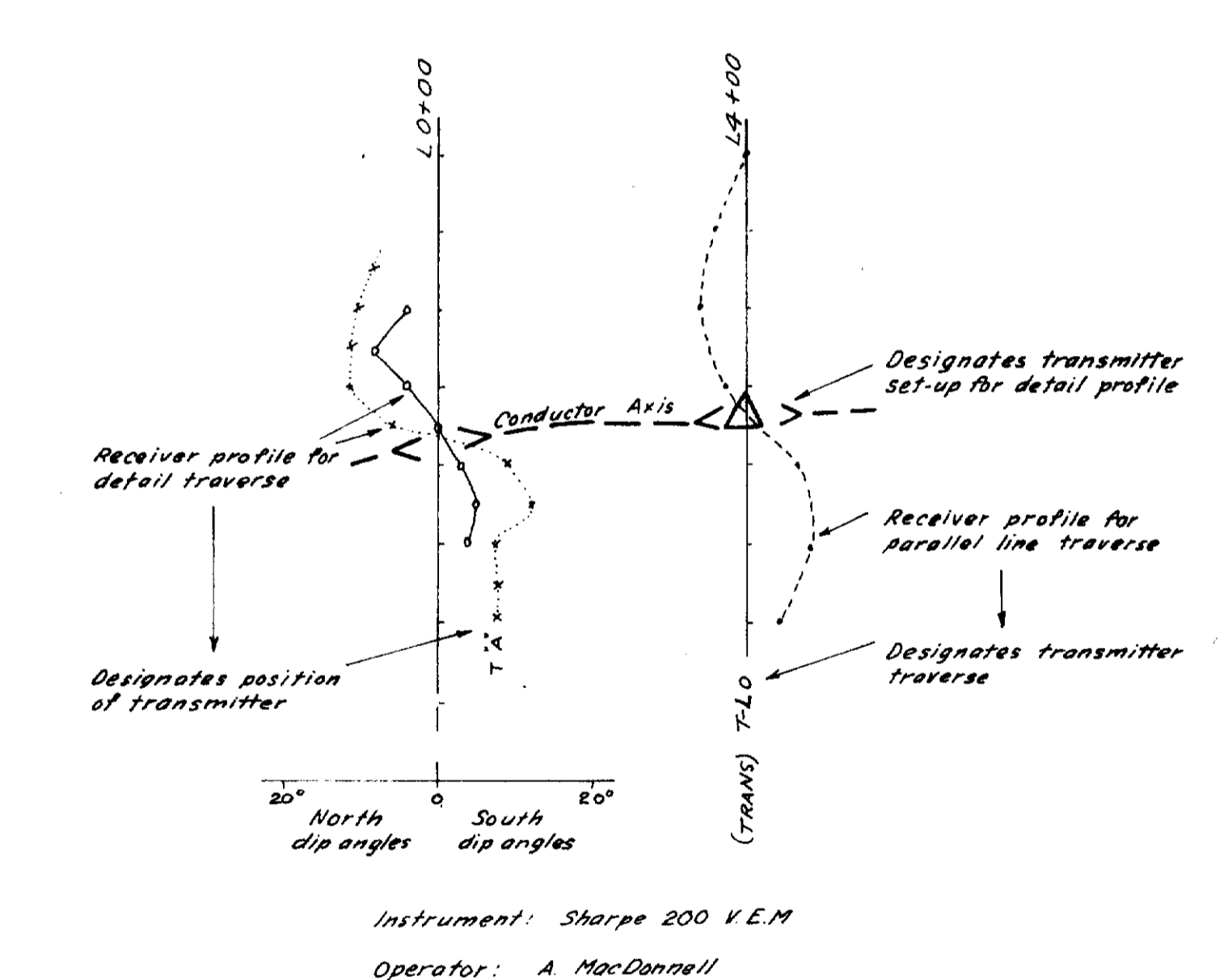
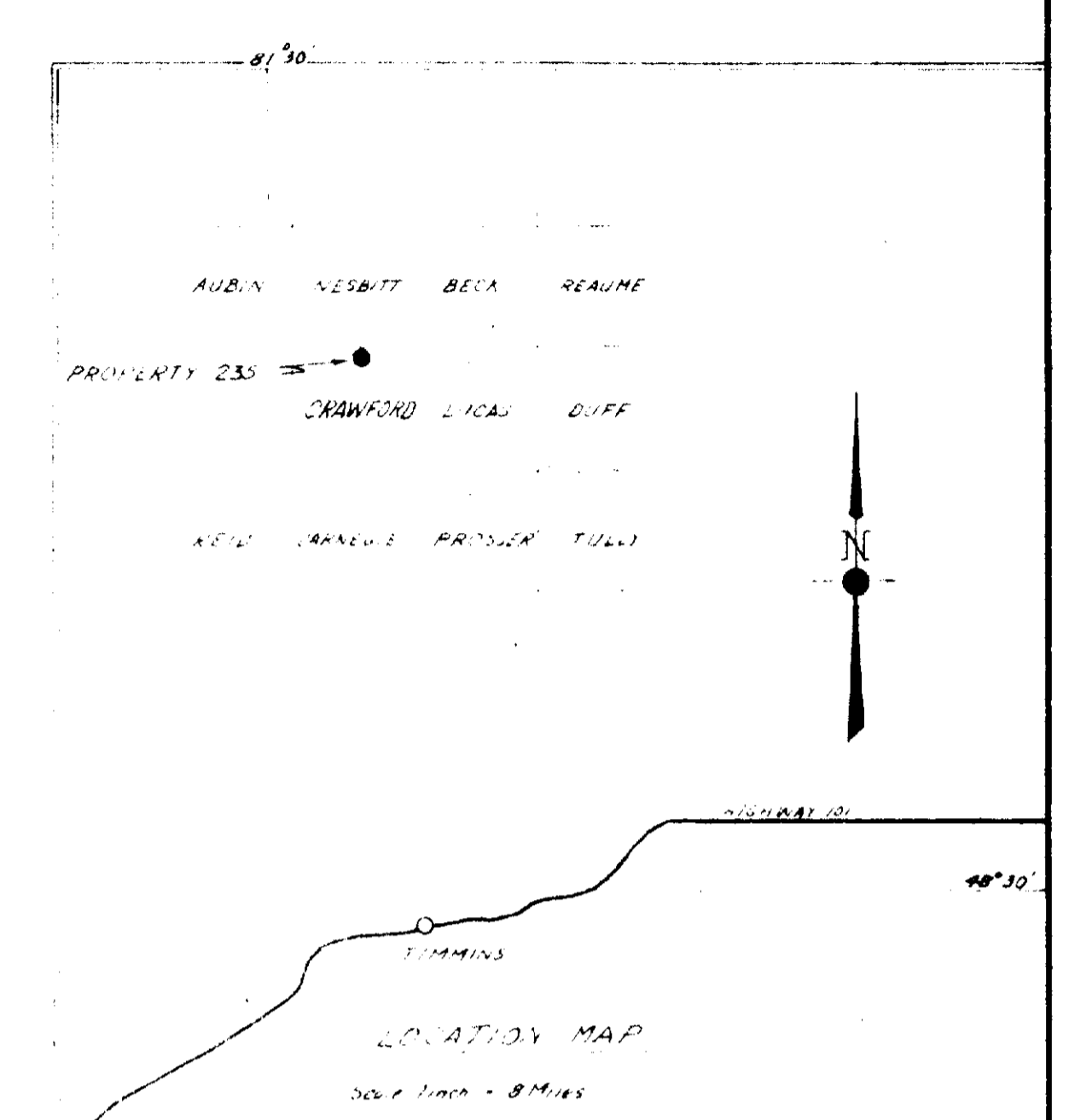
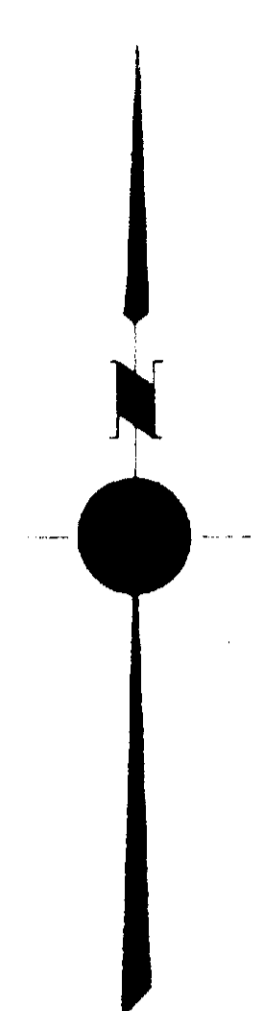
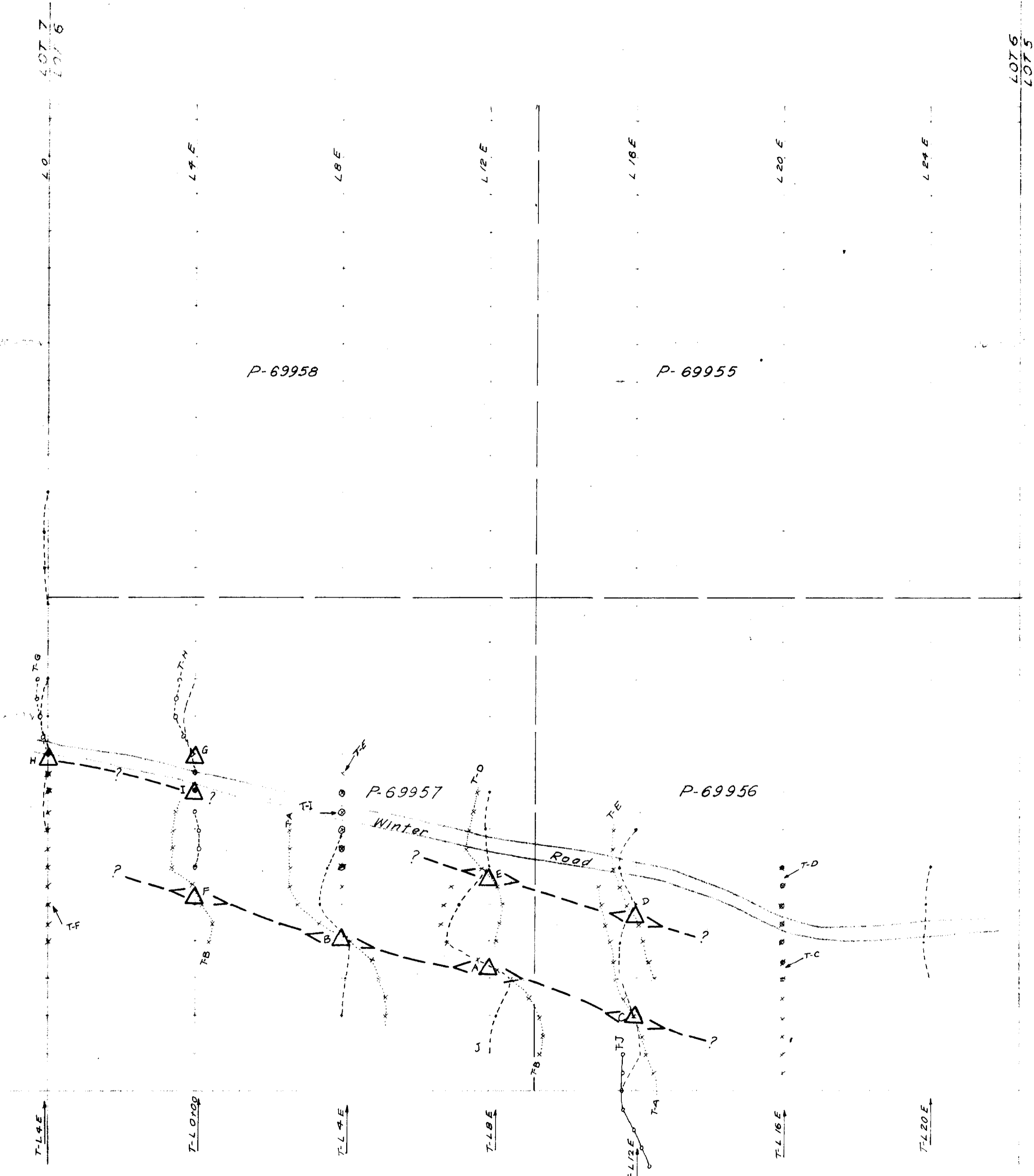
**KEEVIL MINING GROUP LTD.**

GEOPHYSICAL ENGINEERING AND SURVEYS



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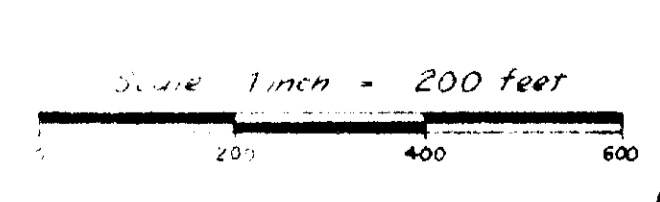




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**VERTICAL LOOP EM SURVEY**  
OF  
**PROPERTY 235**  
TOWNSHIP OF CRAWFORD,  
PROVINCE OF ONTARIO

FOR  
**KEEVIL MINING GROUP LTD.**  
GEOPHYSICAL ENGINEERING AND SURVEYS



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