



42A13SE0071 63.1670 MAHAFFY

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KEEVIL MINING GROUP LTD.

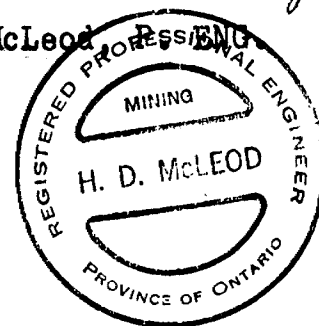
CLAIMS P59411 to 16, P70342 to 51, MAHAFFY TOWNSHIP

REPORT ON THE
GEOPHYSICAL SURVEYS

June 9, 1965

H. D. McLeod P. Eng.

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INTRODUCTION

Keevil Mining Group Limited Mahaffy Township claims group No. 254 consists of sixteen contiguous claims, numbered P59411 to P59416 inclusive and P70342 to P70351 inclusive, located in the south central part of Mahaffy Township, Porcupine Mining Division, a distance of 24 miles to the north of Timmins, Ontario.

The claims were staked for Keevil Mining Group Limited, the present recorded owner, in May 1964 and recorded in June.

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. McClemens, 83 Algonquin Blvd. E., Timmins, Ontario. The field work was completed during the period October 7 to November 29, 1964.

Access to the claims is by boat down the Mattagami River from Timmins to the Sturgeon Falls power dam, thence by trail two miles west or, more easily, by helicopter from Timmins.

SURVEY METHODS

Line Cutting - A base line was established N 65°W and lines cut at 400-foot intervals 3,000 feet to the north and south to the Mahaffy-Reid Township line. A total of approximately 11 miles of line was cut.

Magnetometer Survey - The magnetometer survey was done with a Sharpe 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.

Approximately 490 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 400 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 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 1,054 readings were taken.

RESULTS OF SURVEYS

Magnetometer - The magnetometer survey has outlined three anomalies, two being linear north-south to $N 30^{\circ} W$ trending highs and the third a lensy east-west to $N 60^{\circ} W$ trend.

The north-south trends have relief to 750 gammas above background and are believed to represent diabase dikes. The east-west anomaly is an oval-shaped high with magnetic relief of 950 gammas above background. This is probably caused by a small basic intrusive.

Electromagnetic - The electromagnetic survey has located indications of a large number of conductors, some of which have been outlined in detail. These strike uniformly east-west and have lengths from 400-feet to a minimum of 4,000 feet. Conductivity, in general, is poor

although some sections of excellent conductivity were located.

GEOLOGY

No outcrops are located on or adjacent to the claims. The area is believed to be underlain by basic volcanics and sediments, probably mostly sediments if the results of the electromagnetic survey are considered to be correct.

Strike of formations, as indicated by the geophysics, is east-west.

SUMMARY & CONCLUSIONS

Magnetometer and vertical loop electromagnetic surveys have outlined three magnetic highs and a number of conductors, none however coinciding.

It is recommended that the electromagnetic survey be repeated in an attempt to clarify the results and any conductors then be drilled.

	P59416	P70343	P70342		
	P59415	P70344	P70349	P70350	P70351
P59411	P59414	P70345	P70348		
		P70346	P70347		
P59412	P59413				



MAHAFFY TWP.
REID TWP. 4M.

3M.

TIMMINS AREA
PROPERTY 254- MAHAFFY
TOWNSHIP

SCALE: 1" = 1/4 MILES. JULY, 1965.



42A13SE0071 63.1670 MAHAFFY

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THE MINING ACT

Assessment Work Credits

Name: ~~CANADIAN JOHNS-MANVILLE CO. LTD.~~

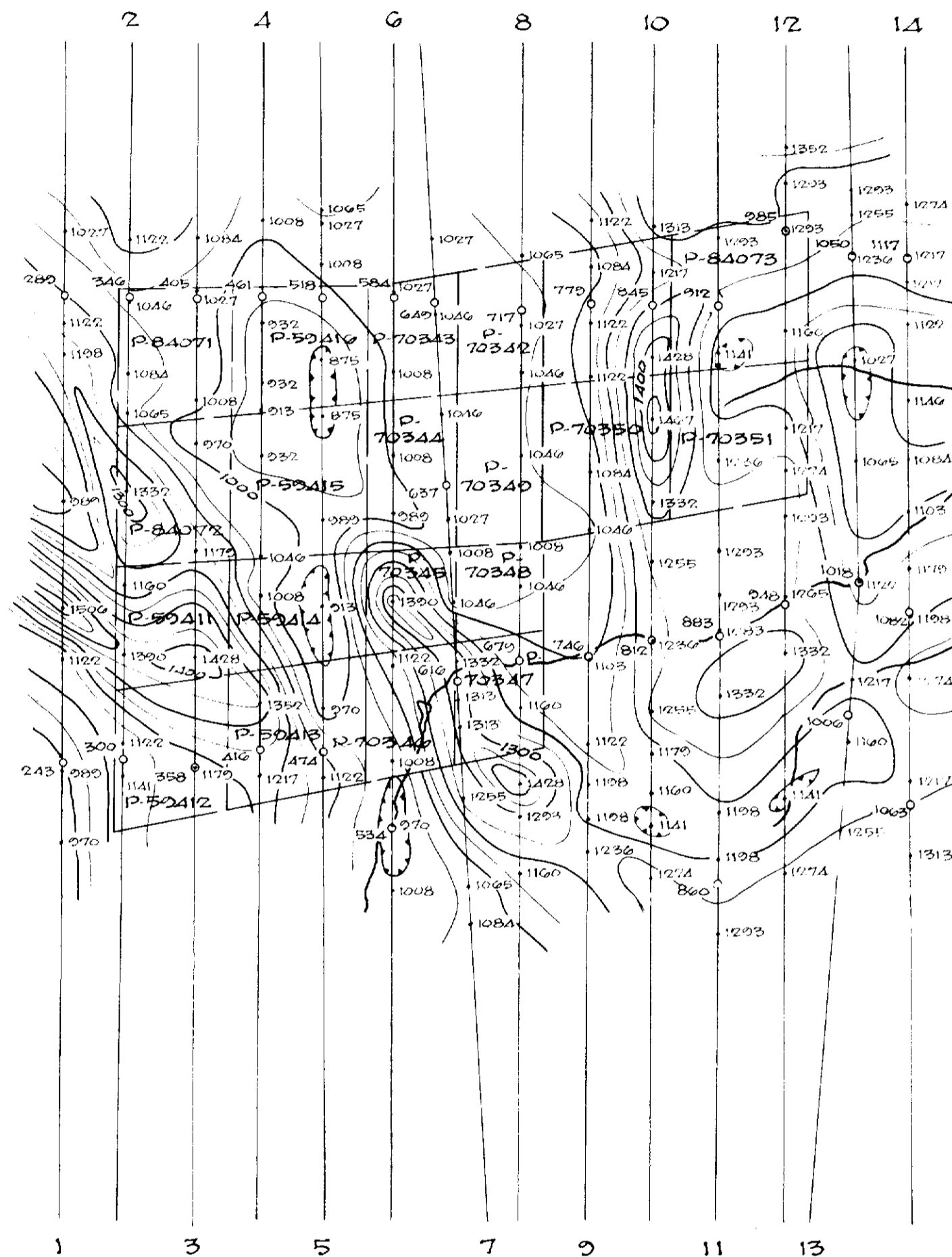
Township or Area: ~~PENHORWOOD TOWNSHIP~~

Number of Assessment work days per claim

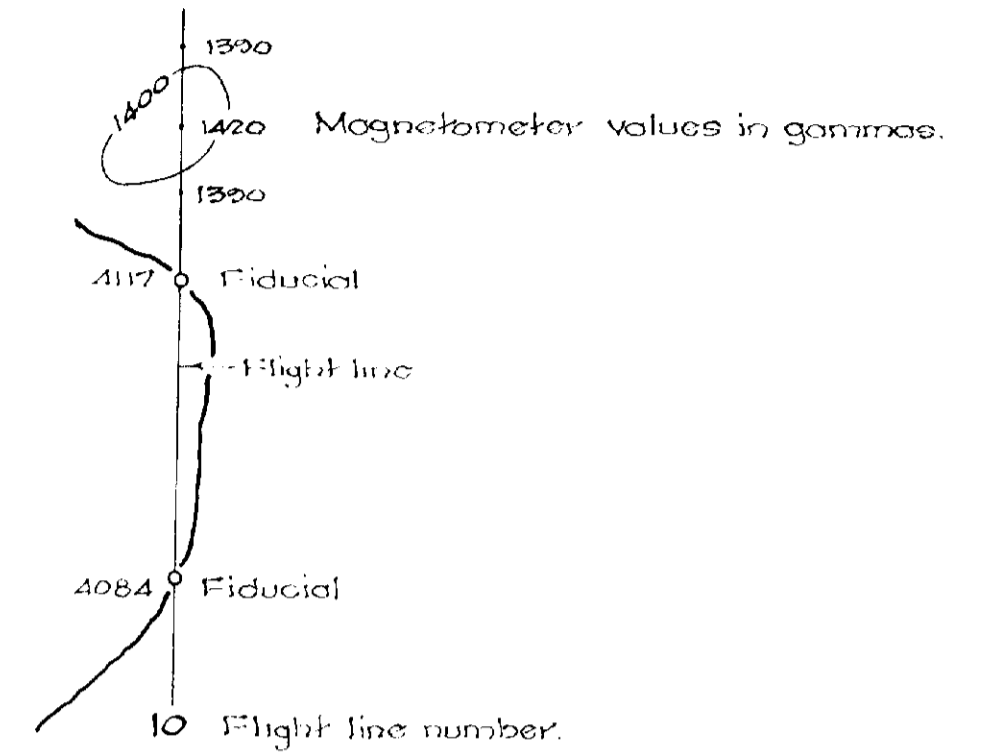
Geophysical ~~40~~

Geological ~~nil~~

Mining Claims: S 124799 to 124812 inclusive



• LEGEND •

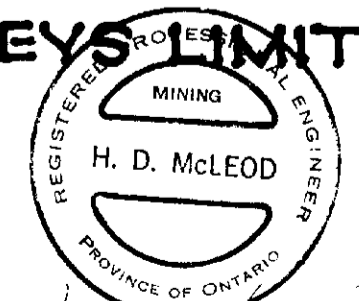
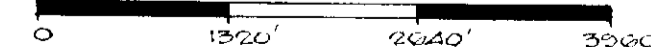


Note:
Magnetic values contoured at 50 gamma interval are above a datum of 58,717 gammas the sum equalling the total earth's magnetic field.

• AIRBORNE •
MAGNETOMETER SURVEY
of
PROPERTY 254
TOWNSHIP OF MAHAFFY
PROVINCE OF ONTARIO

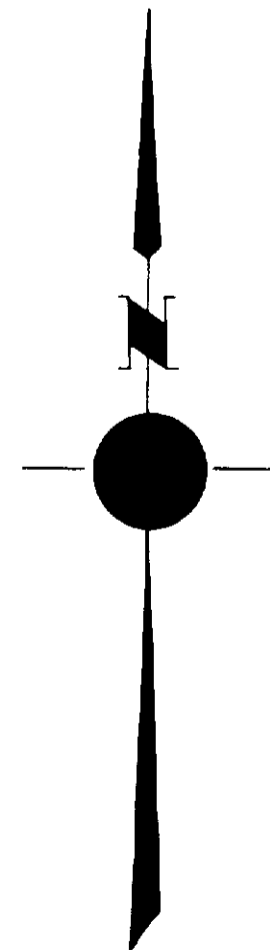
for
KEEVIL MINING GROUP LIMITED
by
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED

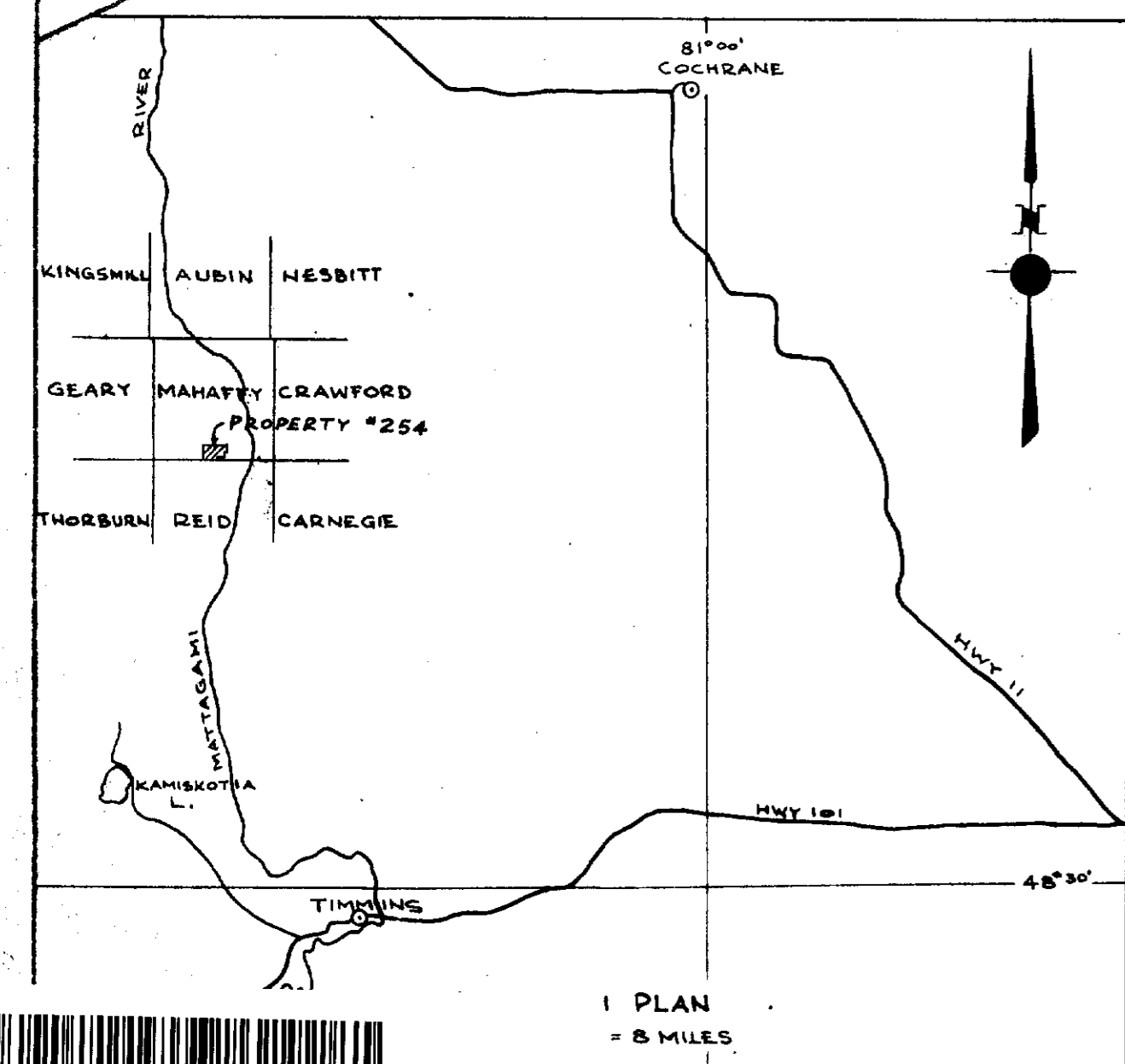
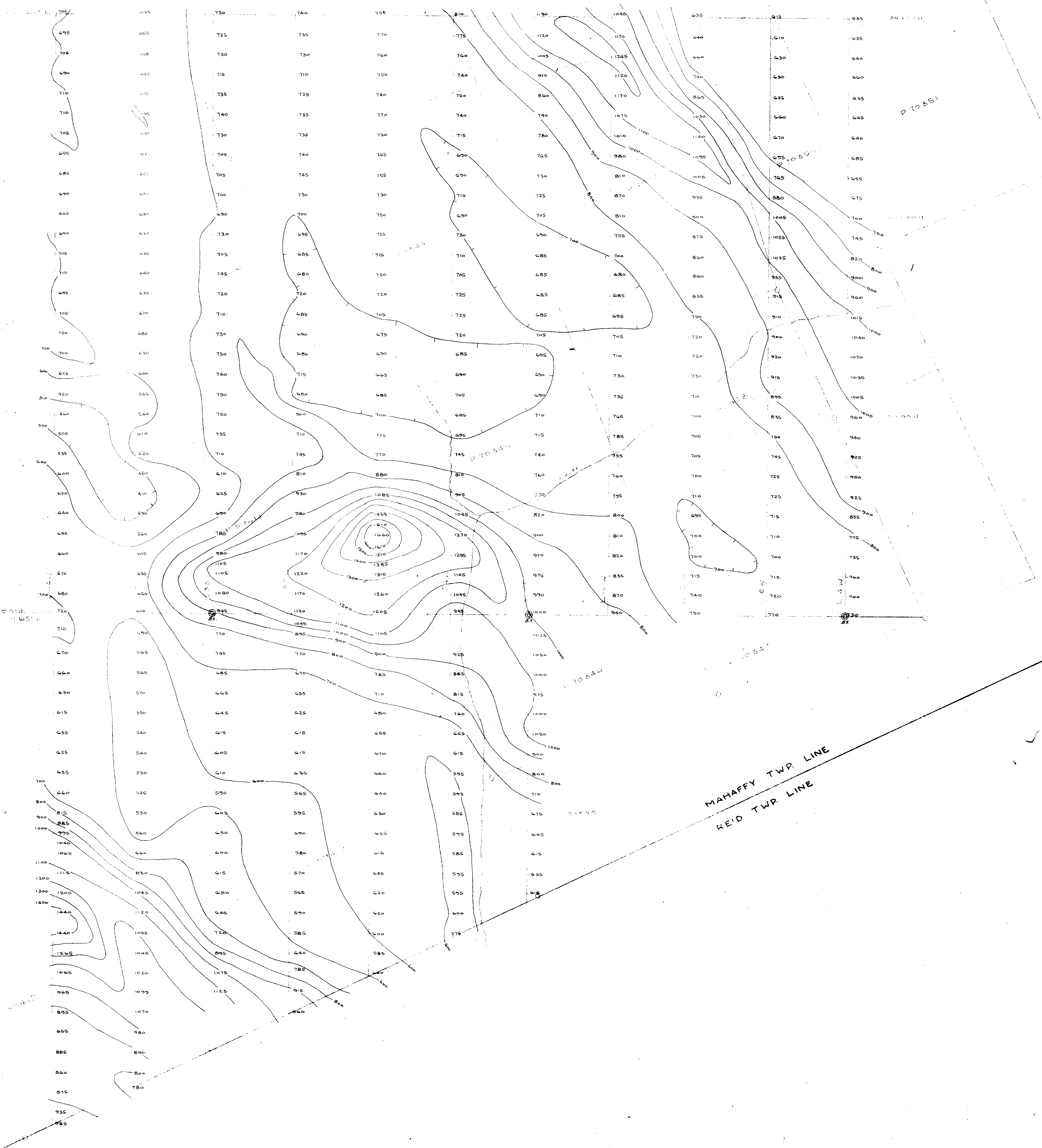
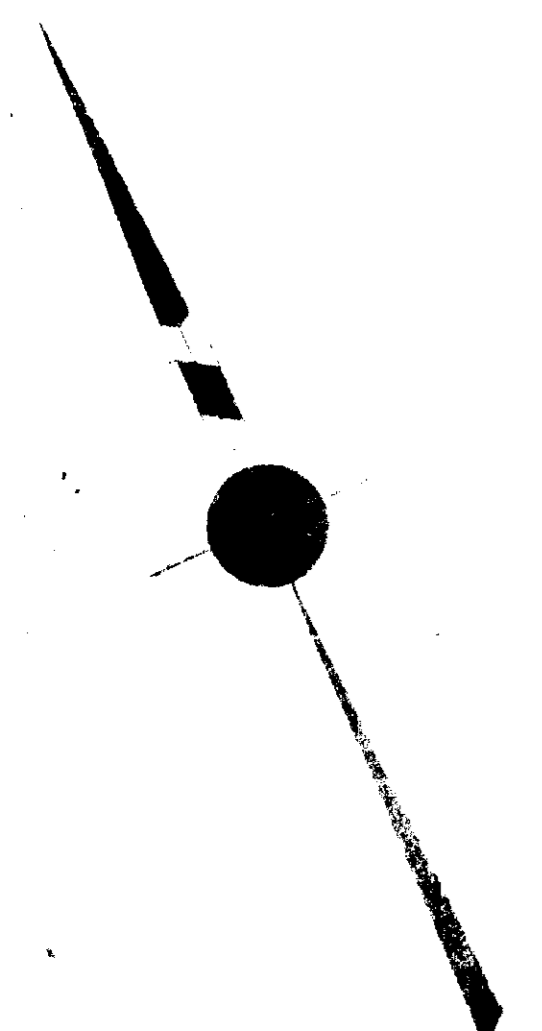
SCALE: 1 INCH = 1320 FEET



H. D. McLeod

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Note:
 Values shown thus 730 are in gammas.
 Contours shown thus: 1200 at 100gamma interval.

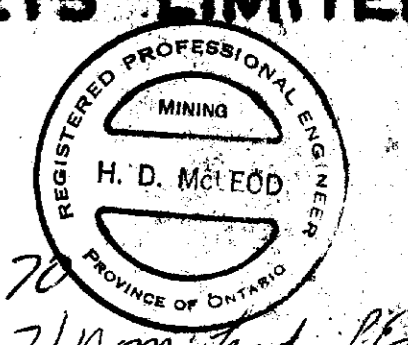
Base Station
 Instrument: Sharp Model MF-1 Fluxgate Magnetometer
 Operator: A. Mc Clements

MAHAFFY TWP. LINE
 REID TWP. LINE

MAGNETOMETER SURVEY
 OF
PROPERTY 254
 TOWNSHIP OF MAHAFFY
 PROVINCE OF ONTARIO
 FOR

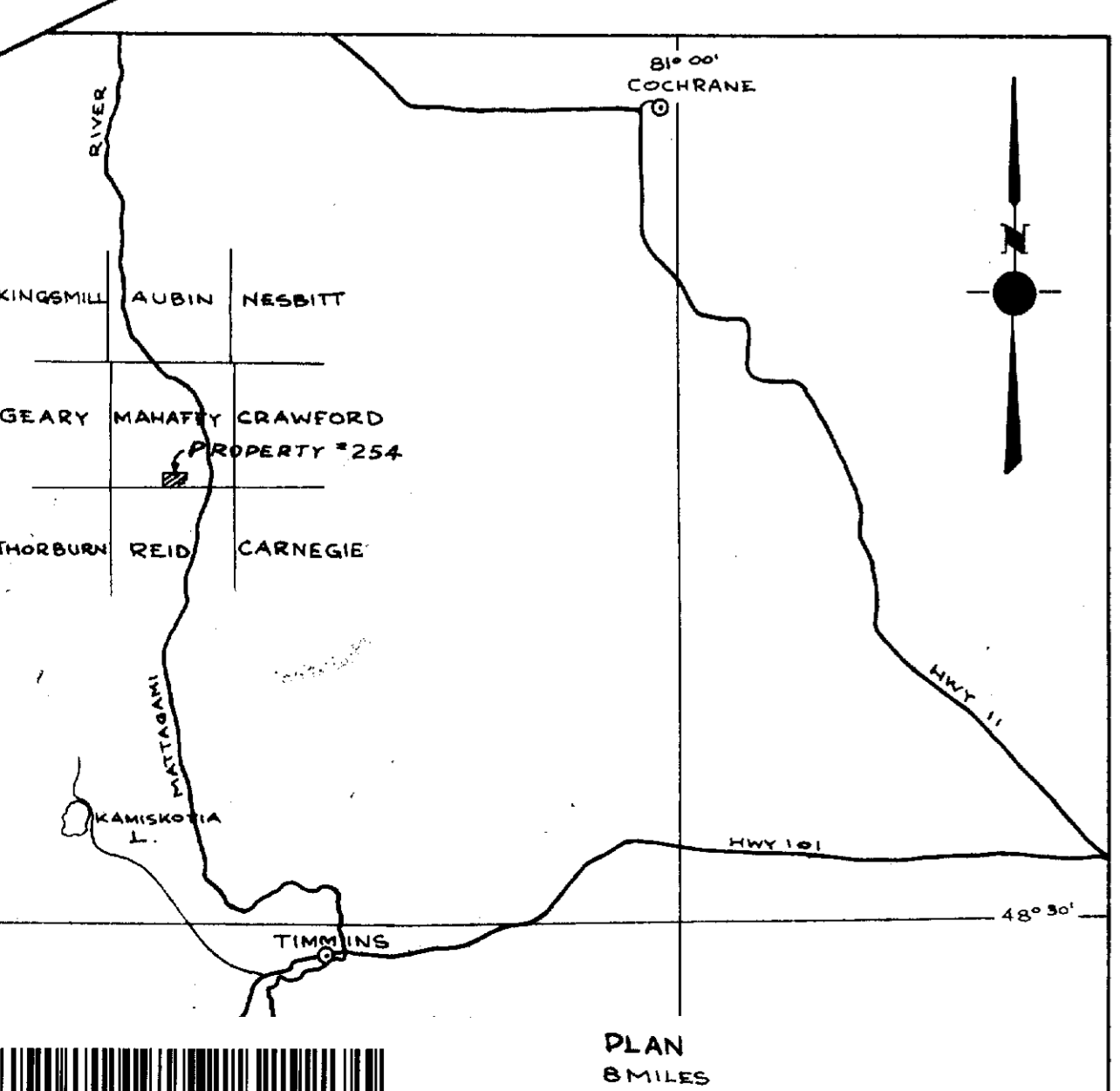
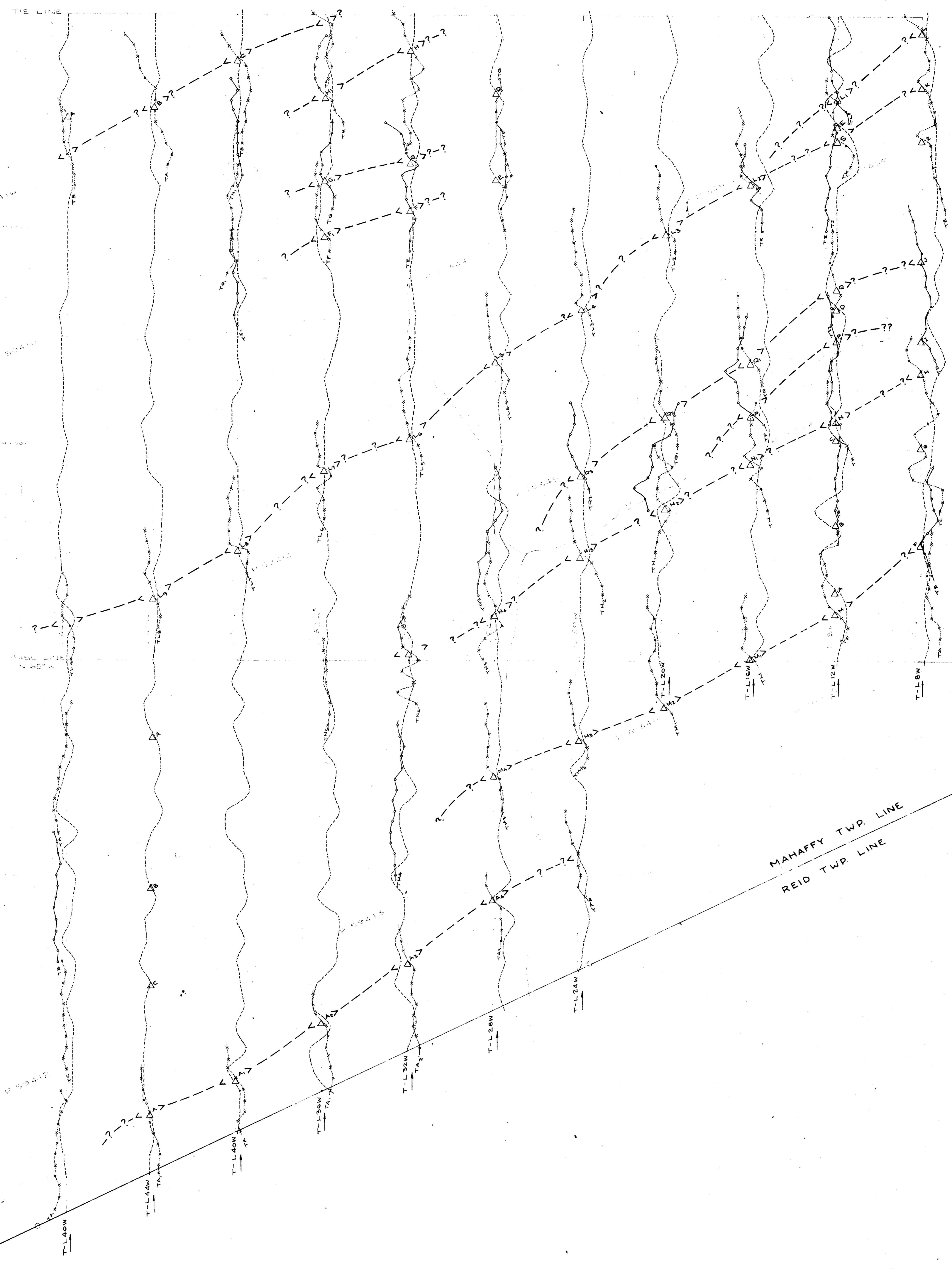
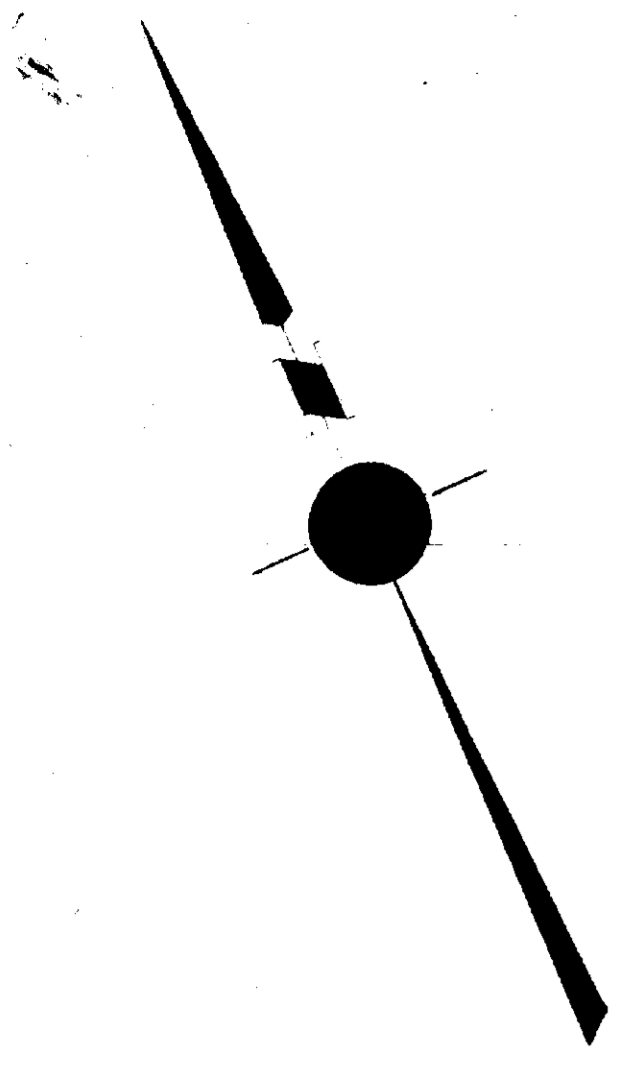
KEEVIL MINING GROUP LTD.
 BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED

SCALE 1 INCH = 200 FEET
 0 200 400 600

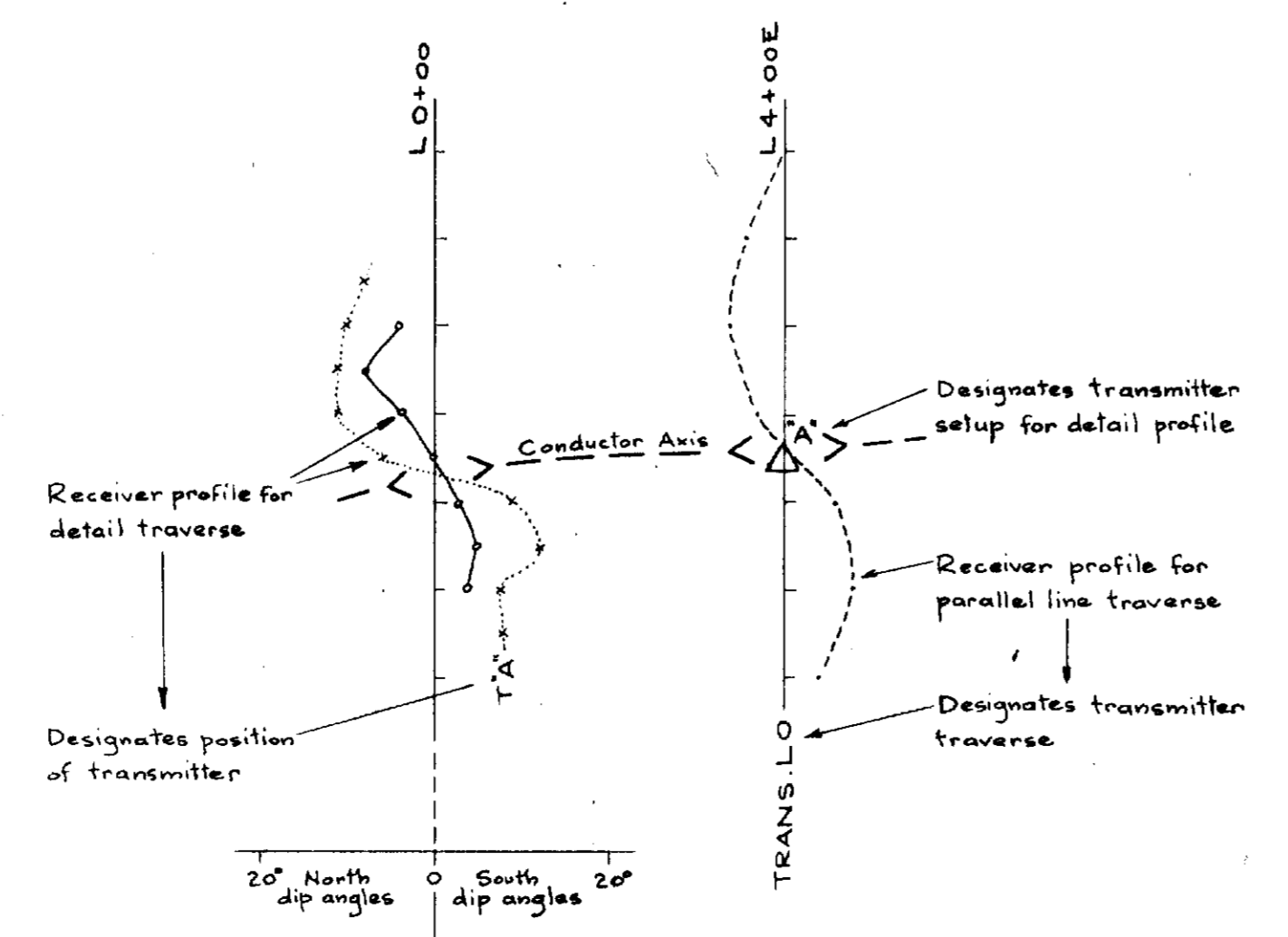


631670
 2/10/54
 H. D. McLeod





LEGEND



Instrument: *Sharp S-200 V.E.M.*
 Operator: *A. McDiarmid*

VERTICAL LOOP E.M. SURVEY
 OF
PROPERTY 254
 TOWNSHIP OF MAHAFFY
 PROVINCE OF ONTARIO

FOR
KEEVIL MINING GROUP LTD.
 BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED

SCALE: 1 INCH = 200 FEET

