



42A08NW0225 2.1218 PLAYFAIR

010

K. AND F. PROPERTY
GEOPHYSICAL REPORT
PLAYFAIR TOWNSHIP, ONTARIO

INTRODUCTION

This report covers the results of a magnetic and electromagnetic survey on four claims in Playfair Township owned by J. Kakish and J. Ferguson of Toronto.

The line cutting and survey field work was done by J. Kakish and Monte Hall of Toronto. The preparation of geophysical maps, their interpretation, and the report were prepared by the writer.

PROPERTY & LOCATION

The four claims surveyed and numbered L346406 to L346409 inclusive, and are located in the north-west quarter of Playfair Township, Larder Lake Mining Division, Ontario.

The property lies two miles west on Highway 11, about two miles north on the Highway 11 by-pass around the town of Raymore. An improved east-west road leads from Highway 11 and lies along the north boundary of the property.

GENERAL GEOLOGY

There are no outcrops on the property. The regional geology suggests that the property is underlain by intermediate volcanic rocks which may be intruded by syenite stocks and diabasic dikes.

Mineralization in the area is chiefly gold as evidence by the nearby Ross Mine operated by Hollinger, the New Kelore ore body and by the gold deposit owned by Consolidated Golden Arrow Mines Ltd.

SURVEY RESULTS AND INTERPRETATION

Magnetic Survey

The general area seems to have a high level of magnetism, although the area surveyed is too small to determine a realistic background level. The south quarter of the property and the north-east section have a low magnetic level, which may reflect underlying acid intrusives. For the remainder of the property,

- continued -

the magnetic intensity is relatively strong reaching a peak of 7300 gammas.

The magnetic survey shows a general east-west trend to the underlying formation with a very prominent north-south trending "bay" of lower magnetism. It is possible that the enbayment is indicative of a north-south fault.

Judging by the magnetic level, one would expect the underlying rocks to be acid syenite in the areas of low magnetism; sediments or iron rich volcanics in the areas of intermediate magnetism; and magnetite bearing rocks in those areas if extremely high magnetism.

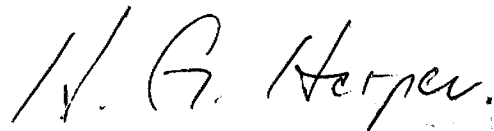
Electromagnetic Survey

The results of this survey are inconclusive. Although several strong In-phase responses are present, they lack (a) definite continuity from line to line; (b) favourable Quadrature features; and (c) magnetic correlation. However, due to the limited extent of the electromagnetic data, the results can not be dismissed because of the varied magnetic behaviour in the same general area.

CONCLUSIONS AND RECOMMENDATIONS

1. The survey results indicate some interesting geophysical features but the data is too widely dispersed to allow definitive interpretation. Therefore, more detailed survey work is required. The area from Line 4W to 20W and from the base line to 1500 south, should be surveyed on lines 100 feet apart and all VLF responses should be checked by vertical or horizontal loop methods. Surveying required: 3.5 miles.
2. Since the mineral sought is gold, a limited amount of wild cat diamond drilling is likely to be necessary, but no decision can be reached on this at the present time.

My report is respectfully submitted,



Willowdale, Ontario
April 26th, 1973

E. Grant Harper, F.G.A.C. P.Eng.
Economic Geologist



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GEOPHYSICAL - GEOLOGICAL
TECHNICAL DATA STATEMENT

900

MAY 8 - 1973

PROJECTS
SECTION

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey Magnetic & Electromagnetic
Township or Area Playfair Twp.
Claim holder(s) A39166 John Ferguson
905 - 500 Dawes Rd, Scarborough Ont.
H. GRANT HARPER, P. Eng.
Author of Report 314 HENDON AVENUE
Address WILLOWDALE - ONTARIO
Covering Dates of Survey April 30/73
(linecutting to office)
Total Miles of Line cut 3.5

MINING CLAIMS TRAVERSED
List numerically

\$ L. 346 406
(prefix) (number)
\$ L. 346 407
\$ L. 346 408
\$ L. 346 409

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

DAYS
per claim
Geophysical
- Electromagnetic 40
- Magnetometer 20
- Radiometric _____
- Other _____
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: April 30/73 SIGNATURE: H. G. Harper.
Author of Report

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.1058

Previous Surveys L.D.

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 4

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 189 Number of Readings 378
Station interval 100 feet
Line spacing 400 feet
Profile scale or Contour intervals Run ka 1" = 30% Mog - variable
(specify for each type of survey)

MAGNETIC

Instrument McPhar M 500 A
Accuracy - Scale constant 5 % max
Diurnal correction method 1/2 to 1 hr checks at Base & Control Stations
Base station location L 8+00 W 0+00

ELECTROMAGNETIC

Instrument Run ka EM 16
Coil configuration Fixed hor & vert.
Coil separation h/2
Accuracy ± 1%
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 17.80 kHz - Cutler Me.
(specify V.L.F. station)
Parameters measured Vert in phase & out of phase components

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION - RESISTIVITY

Instrument _____
Time domain _____ Frequency domain _____
Frequency _____ Range _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

183 M

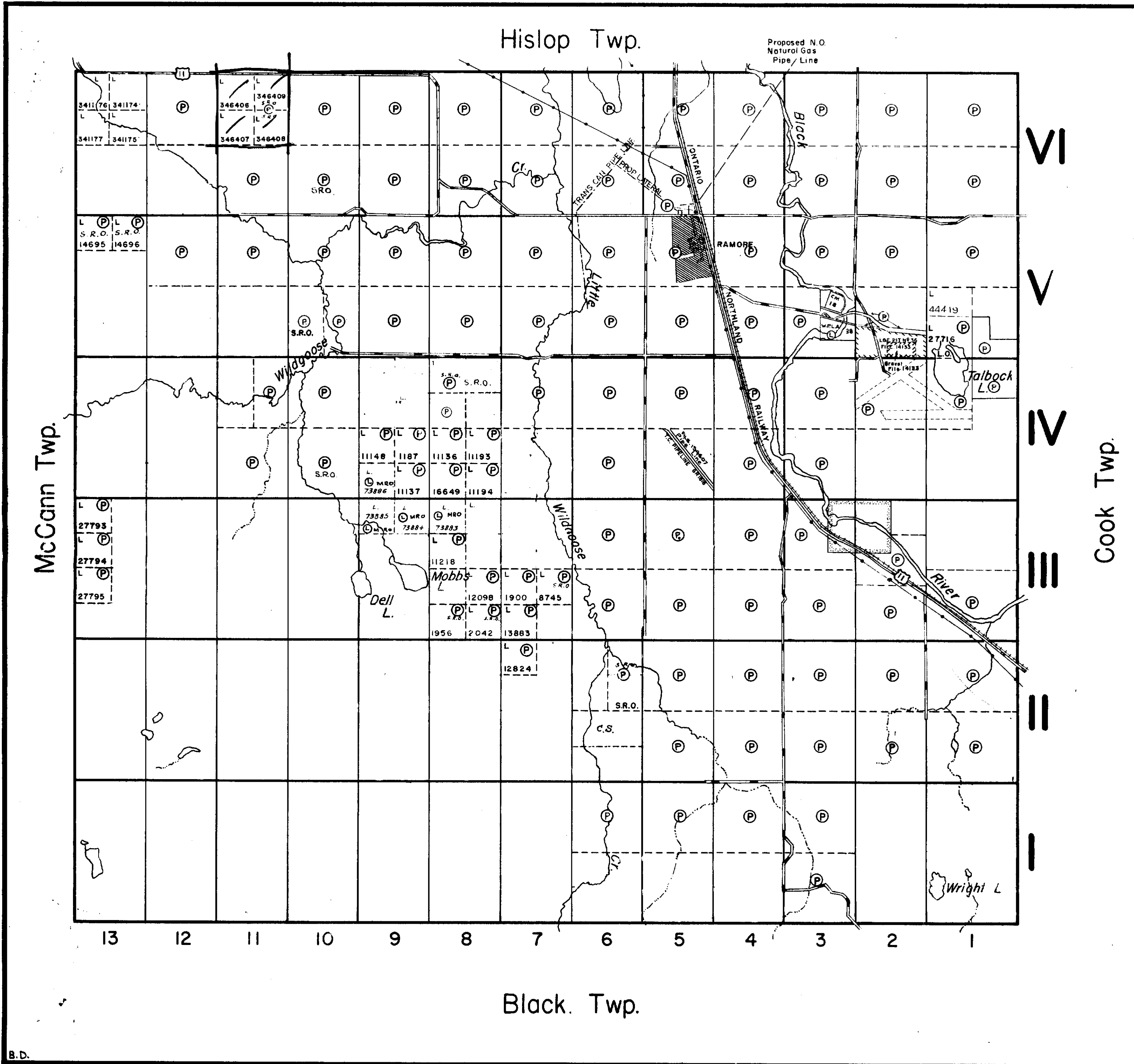
W.T. 183 M

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183 M

PLAYFAIR TWP

183 M



THE TOWNSHIP
OF
PLAYFAIR
DISTRICT OF
COCHRANE
LARDER LAKE
MINING DIVISION
SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	Ⓟ or Ⓢ	Ⓢ
CROWN LAND SALE	Ⓢ or Ⓢ	C.S.
LEASES	Ⓢ	Ⓢ
LOCATED LAND	Ⓢ	Loc.
LICENSE OF OCCUPATION	Ⓢ	L.O.
MINING RIGHTS ONLY	Ⓢ	M.R.O.
SURFACE RIGHTS ONLY	Ⓢ	S.R.O.
ROADS	—	
IMPROVED ROADS	—	
KING'S HIGHWAYS	—	
RAILWAYS	—	
POWER LINES	—	
MARSH OR MUSKEG	—	
MINES	—	

NOTES

400' Surface rights reservation around all lakes and rivers.

Ramore Townsite Shown Thus: [Hatched Box]

Millsite Shown Thus: [Dotted Box]

Gravel Reserve Shown Thus: [Dashed Box]

MINING LANDS
DATE OF ISSUE
MAY 9 1973
MINISTRY
OF NATURAL RESOURCES

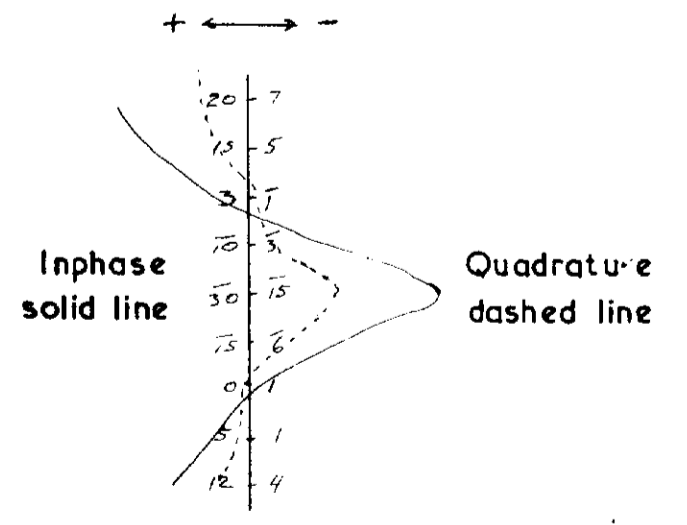
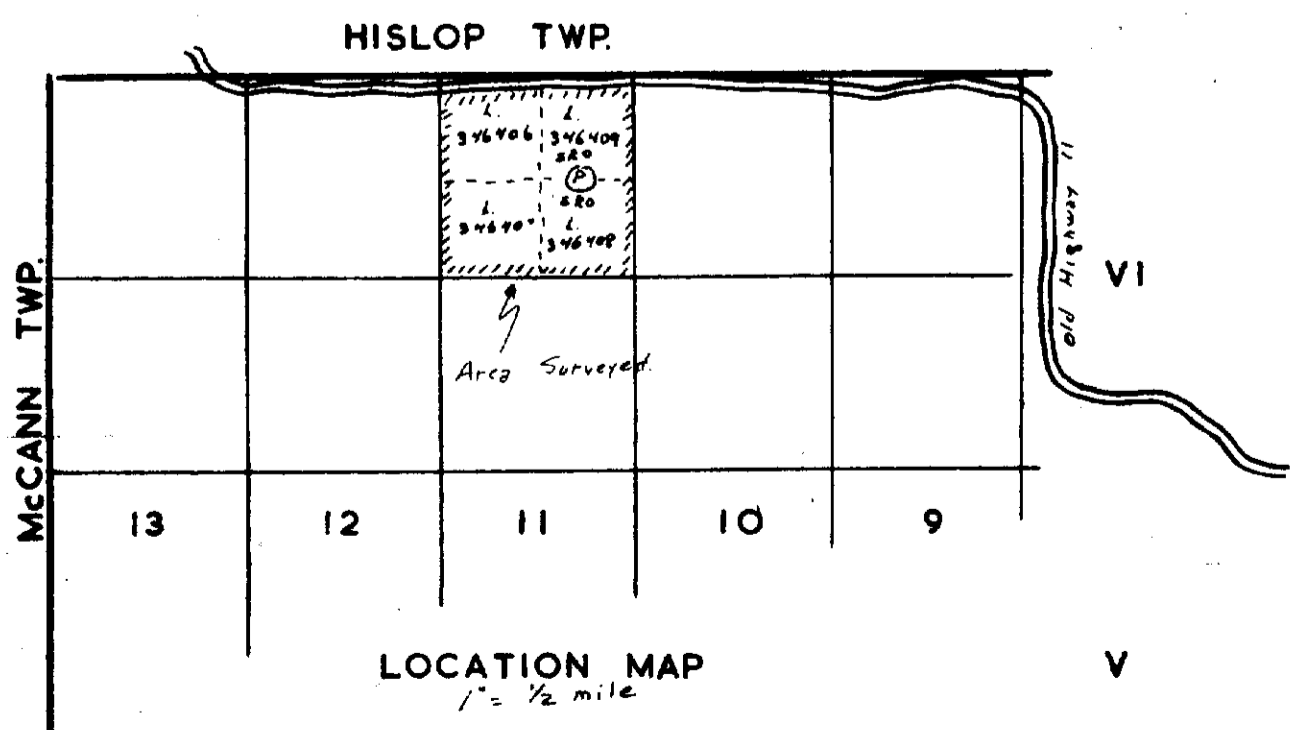
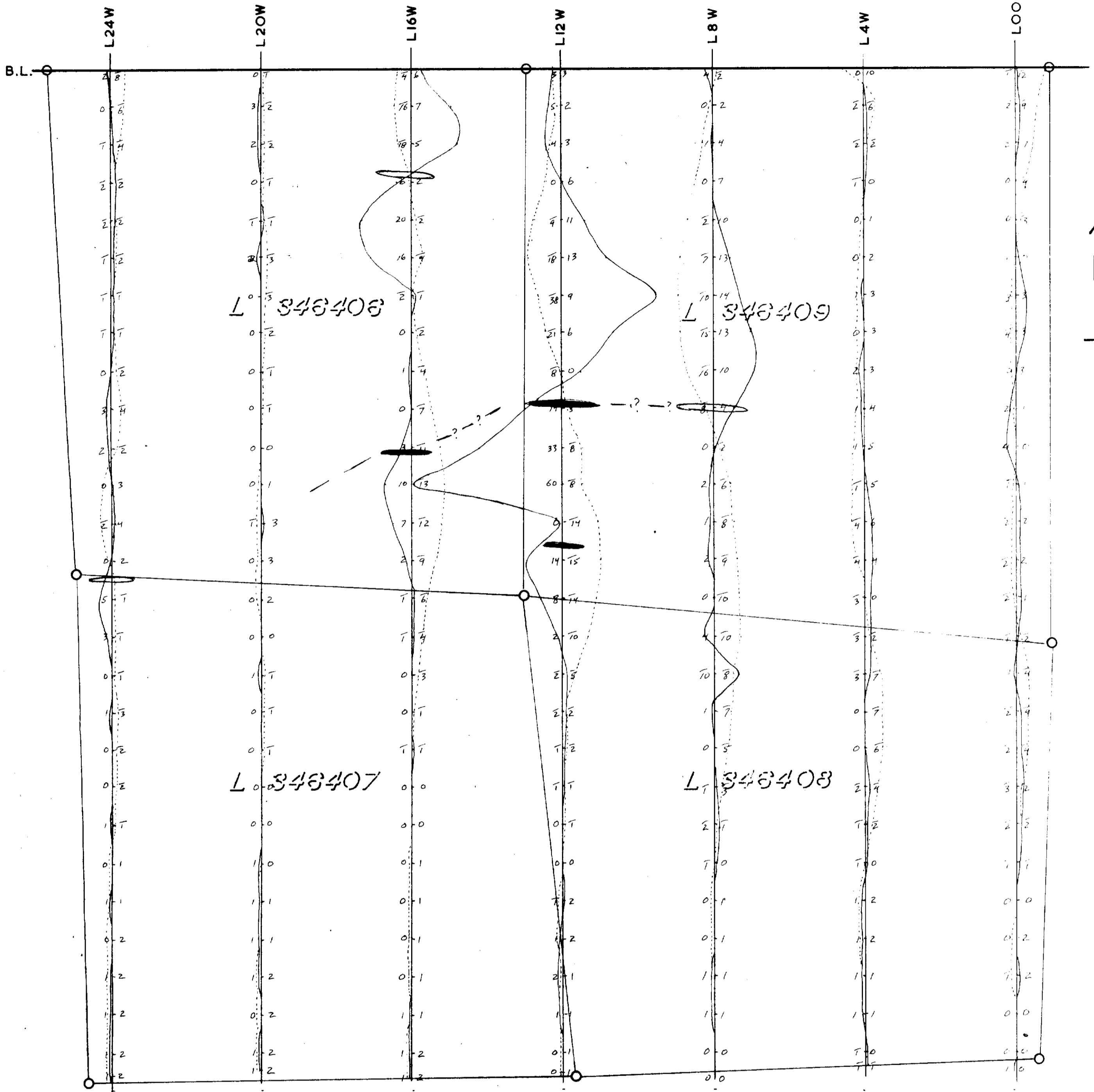
PLAN NO.- M. 381

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

2-1218



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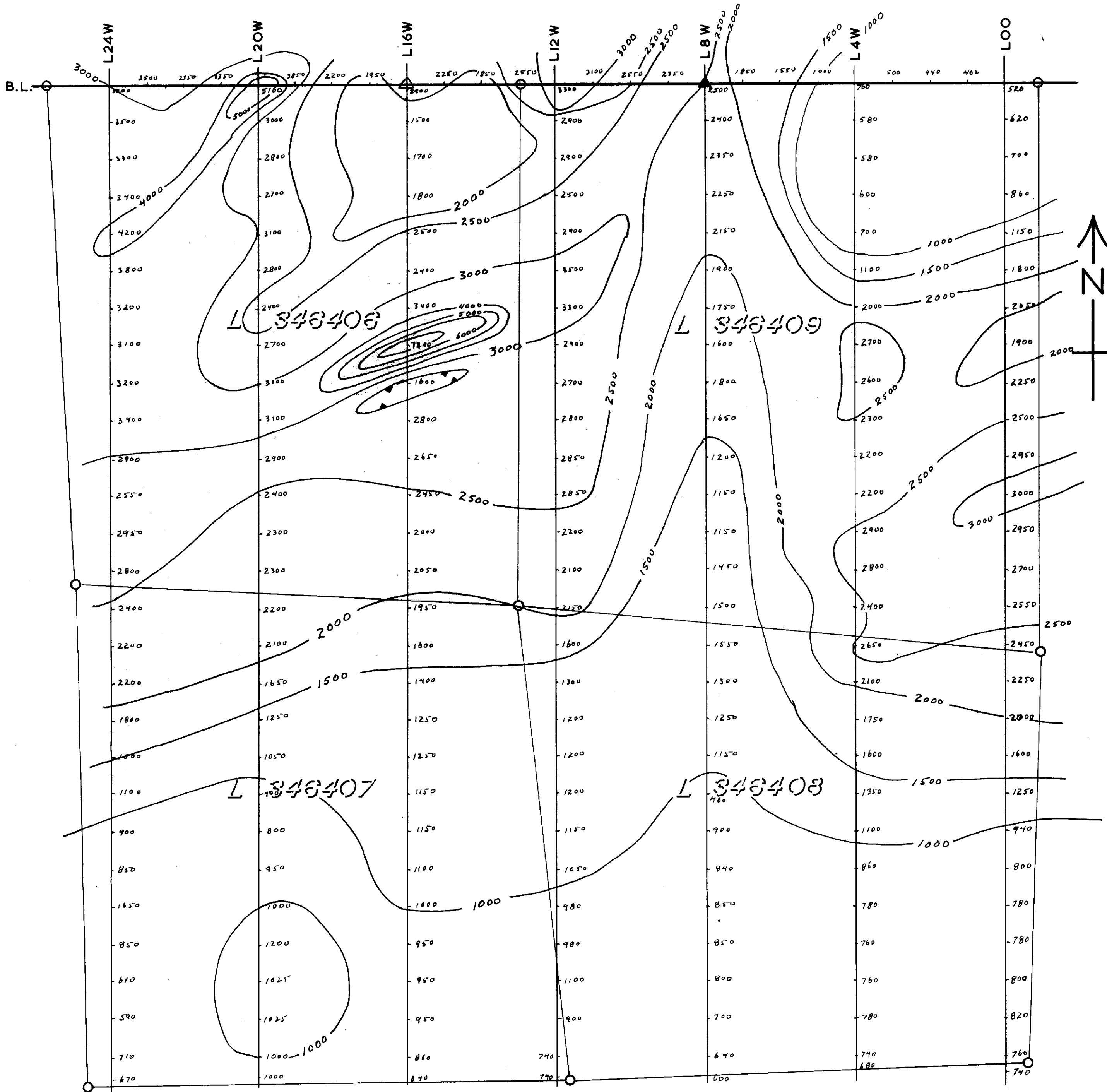
Transmitting Station: CUTLER, MAINE

ELECTROMAGNETIC SURVEY
K & F PROPERTY
 PLAYFAIR TWP.



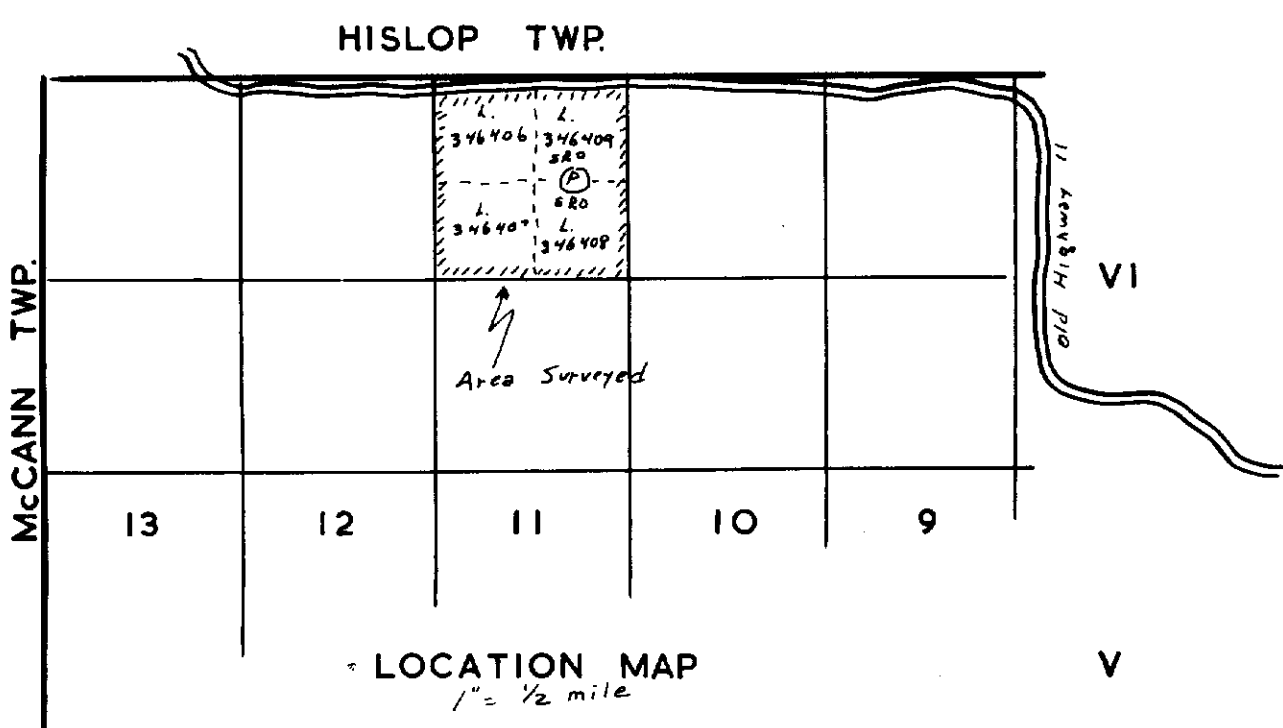
APR 30 '73

H. G. Harper



LEGEND

- over 5000 Gammas
- 4000 to 5000 Gammas
- 3000 to 4000 Gammas
- 2500 to 3000 Gammas
- 2000 to 2500 Gammas
- 1500 to 2000 Gammas
- 1000 to 1500 Gammas
- under 1000 Gammas



MAGNETOMETER SURVEY

K & F PROPERTY

PLAYFAIR TWP.



APR 30 '73

H. G. Harper