



REPORT
ON
GEOPHYSICAL SURVEYS
ON PROPERTIES
IN
MCARTHUR TOWNSHIP
ONTARIO

INTRODUCTION

Ground geophysical work, consisting of both electromagnetic and magnetometer surveys, were completed over 12 claims in McArthur Township in the Porcupine Mining Division, Ontario. The program was carried out in March and April 1972.

The following report and accompanying maps describe the results of the surveys and give a geological interpretation of the results.

CONCLUSIONS AND RECOMMENDATIONS

The Electromagnetic survey outlined one definite conductor and 5 possible conductors. The definite conductor (conductor "A") requires more detailed geophysical work to determine the strike.

However it coincides with an area where two previous drill holes are recorded and it has probably been tested by these holes.

The 5 possible conductors are extremely weak and are probably caused by conductive overburden.

PROPERTY AND LOCATION

The property consists of 12 unpatented claims covering approximately 480 acres. These are all registered with the Ontario Department of Mines as follows and are shown on the accompanying maps.

<u>Claim No.</u>	<u>Status</u>	<u>Acres</u>
P 320800	Unpatented	40
P 320802	"	40
P 320803	"	40
P 320804	"	40
P 320805	"	40
P 320806	"	40
P 320807	"	40
P 320808	"	40
P 320809	"	40
P 320810	"	40
P 320812	"	40
P 320813	"	40

The claims are located in the southeast quarter of McArthur Township, Porcupine Mining Division, Ontario.

GEOLOGY

The northeast two-thirds of the claims are underlain by

serpentinized dunite-peridotite and the southwest third of the property is underlain by felsic volcanics. The general strike is northwest.

SURVEY METHODS AND PRESENTATION OF RESULTS

The Electromagnetic survey employed the S.E.-600 Electro-
magnetic instrument operated in the vertical coil configuration,
using the broadside method with a transmitter-receiver separation
of 400 feet. Readings of the dip angle at 1600 C.P.S. were re-
corded at station intervals of 100 feet.

If one thinks of the plane of the receiving coil as that of a geologic bed, then the tilt angles at the null in the proximity of a typical conductor approximate the shape of an anticline with the conductor axis under the crest of the anticline.

The Magnetic readings were taken with a McPhar M700 Flux-
gate magnetometer measuring the variations of the vertical compon-
ent of the earth's magnetic field. The magnetic responses, as plotted on the accompanying map, are corrected for diurnal variation and instrument drift.

The electromagnetic and magnetic results are plotted on separate maps on a scale of 200 feet to the inch.

Survey readings were taken along chain and compass lines
at 400 foot line spacings.

INTERPRETATION OF RESULTS

The Electromagnetic survey, as plotted on the accompanying map outlines one definite conductor and five possible conductors. The definite conductor requires more detailed geophysical work in order to outline the strike. However it coincides with the location of two previously recorded drill holes and has probably been tested by these old holes. The five possible conductors are probably caused by conductive overburden.

The magnetometer readings over the northeast two-thirds of the claims are relatively high, reflecting the underlying ultra-basic rocks.

Respectfully Submitted



E. W. Bazinet, P. Eng.

Timmins, Ontario.

April 30, 1972.



GEOPH



900

2.856
RECEIVED
MAY - 3 1972
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 Geophysical
Township or Area Mc Arthur Twp.
Claim holder(s) E. W. BAZINET

Author of Report E. W. BAZINET
Address 456 Brousseau Ave Timmins Ontario
Covering Dates of Survey March 1, 1972 to April 30, 1972
(linecutting to office)
Total Miles of Line cut Chain & Compass Lines 12.58 Miles

MINING CLAIMS TRAVERSED
List numerically

CLAIM NUMBER	CREDITS
P320800	40
P320802	40
P320803	40
P320804	40
P320805	40
P320806	40
P320807	40
P320808	40
P320809	40
P320810	40
P320812	40
P320813	40

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

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

ENTER 20 days for each
additional survey using
same grid.

- Geophysical
 - Electromagnetic 20
 - 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, 1972 SIGNATURE: E. W. Bazinet
Author of Report

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.2086

Previous Surveys LD

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 12

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 540 Number of Readings 540

Station interval 100 feet

Line spacing 400 feet

Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument M 700 Mc Phar

Accuracy - Scale constant Maximum Sensitivity of 20 gammas per scale division on 1000 gamma range

Diurnal correction method Corrected base stations established along base lines - check in at least every hour

Base station location Base line at line 0

ELECTROMAGNETIC

Instrument Scintrex S.E. - 600

Coil configuration Vertical configuration - Broadside Method

Coil separation 400 feet

Accuracy Plus or Minus one degree

Method: Fixed transmitter Shoot back In line Parallel line

Frequency 1600 C.P.S.

Parameters measured Tilt angle in degrees. (specify V.L.F. station)

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION - RESISTIVITY

Instrument _____

Time domain _____ Frequency domain _____

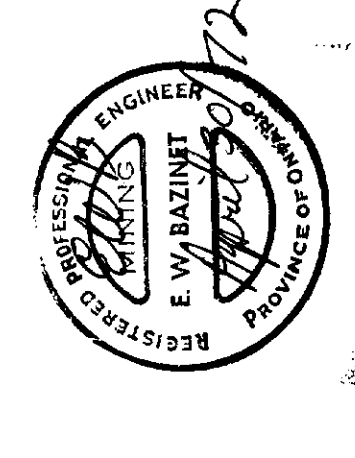
Frequency _____ Range _____

Power _____

Electrode array _____

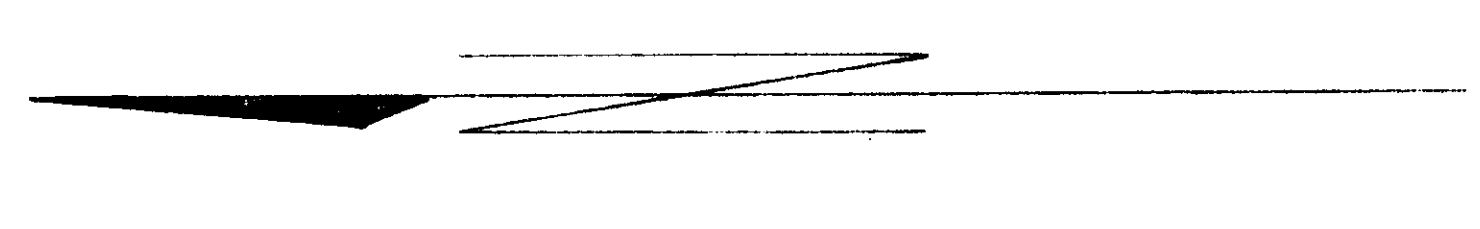
Electrode spacing _____

Type of electrode _____

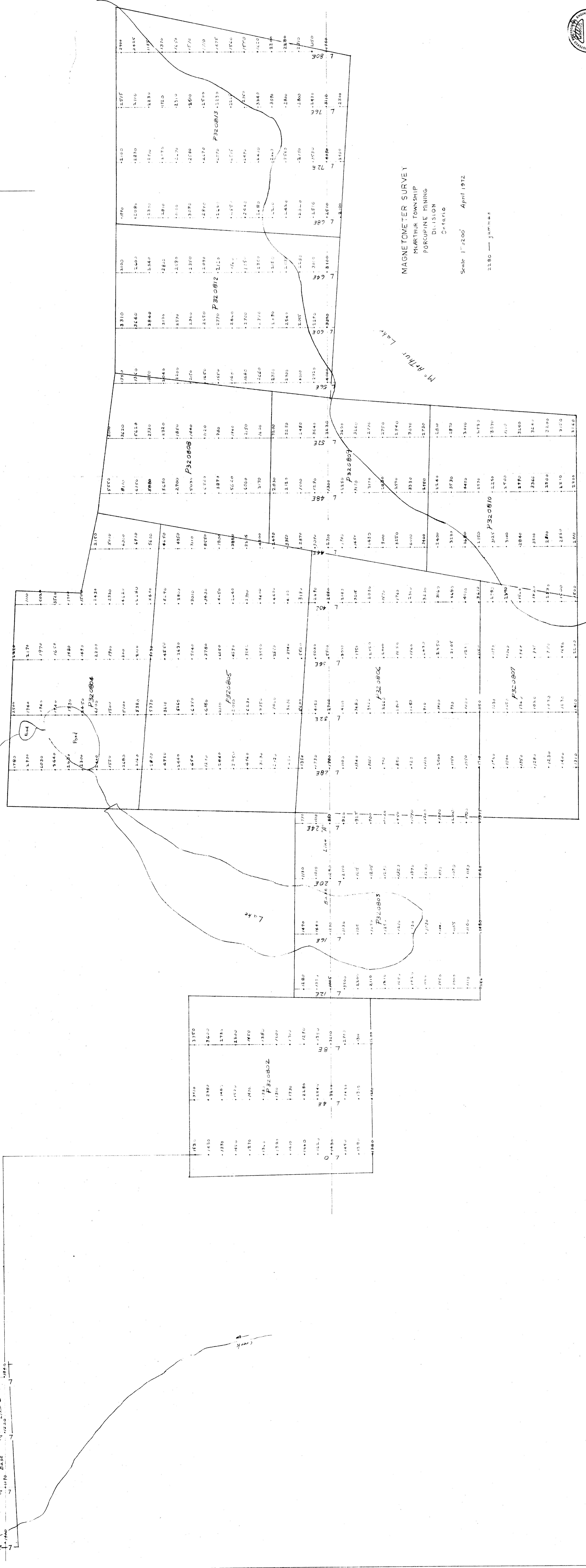


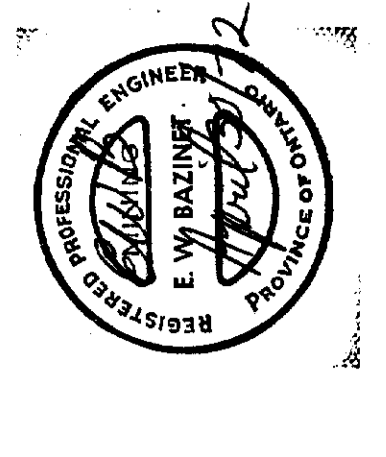
M.S.

MAGNETOMETER SURVEY
MCARTHUR TOWNSHIP
PORCUPINE MINING
DIVISION
Ontario
Scale 1" = 200' April 1912
2280 — JAMES



1780	1785	1790	1795	1800	1805	1810	1815	1820	1825	1830	1835	1840	1845	1850	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
1780	1785	1790	1795	1800	1805	1810	1815	1820	1825	1830	1835	1840	1845	1850	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000





EMSW

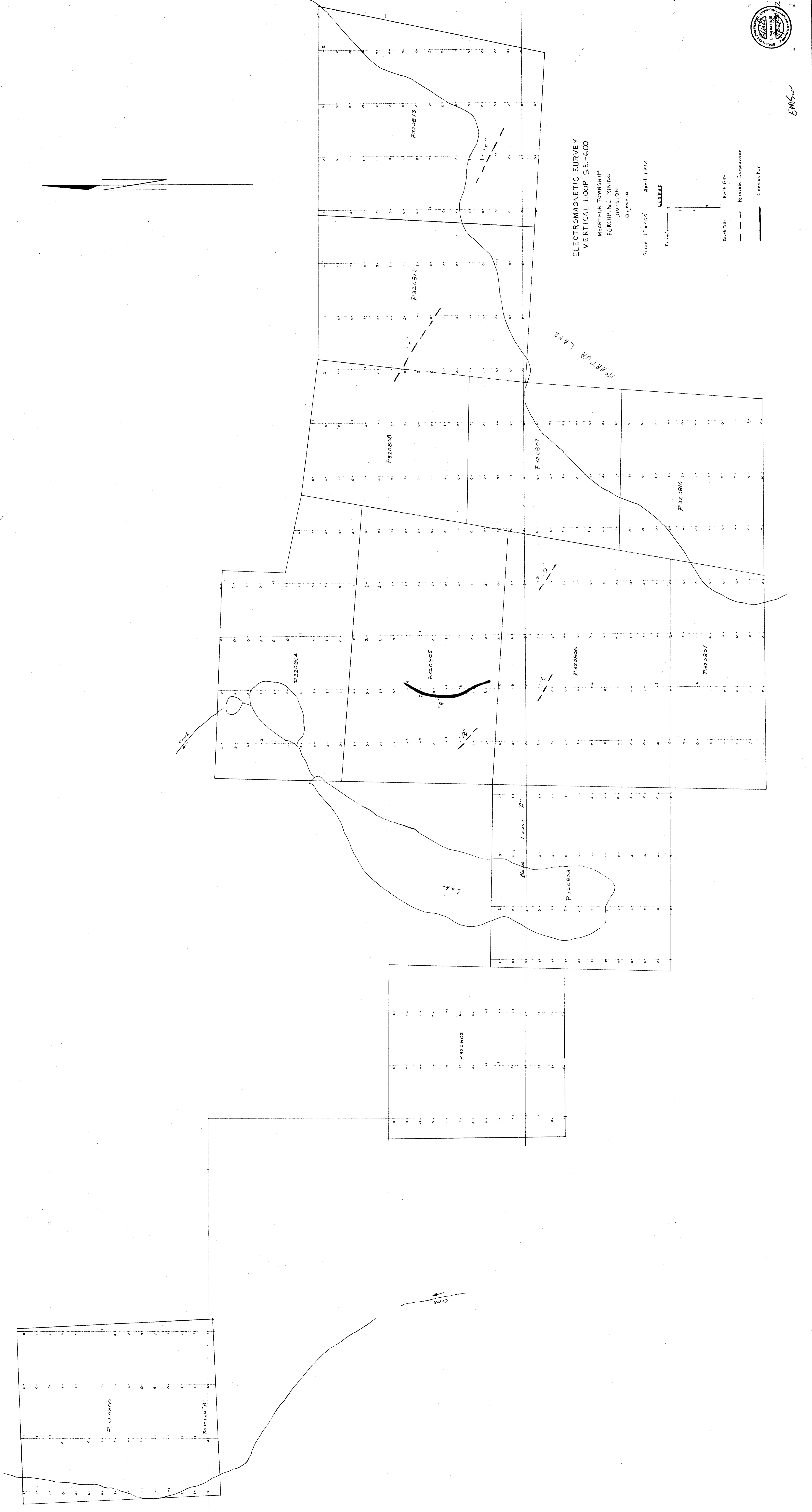
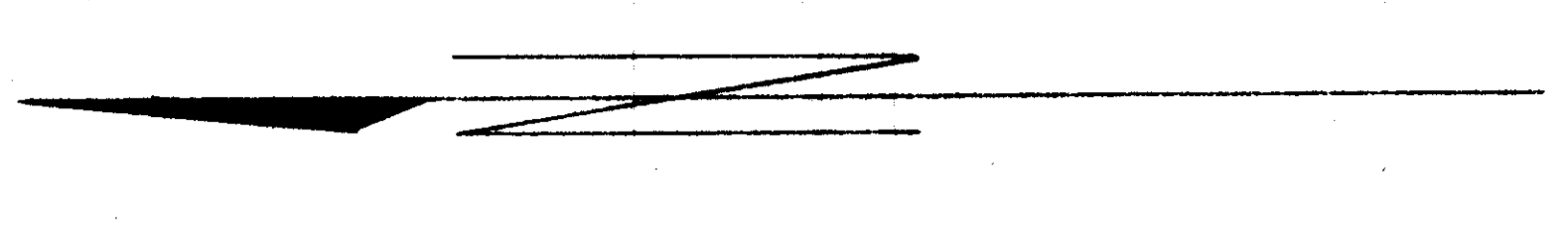
ELECTROMAGNETIC SURVEY
VERTICAL LOOP SE-600

MCARTHUR TOWNSHIP
PORKUPINE MINING
DIVISION
Ontonagon

Scale 1"=200' April 1972

LEGEND

- North Title
- South Title
- - - - - Possible Conductor
- Conductor



250