



INTRODUCTION

A Honke EM 16 survey has been completed on five claims belonging to Canadian Magnemont Ltd. (Remo Upatowski) which is part of two larger groups almost adjacent to one another in Adams Township. ONTARIO

The picket lines were reestablished and the survey carried out in the latter part of March, 1972.

PROPERTY, LOCATION AND ACCESS

A block of two claims and a block of three claims almost a mile apart were covered by the survey. The west block includes claims 313772 and 313773 while the east block includes claims 313774, 313775 and 313776.

Both claim groups are in the extreme north sector of Adams Township about 10 miles south of Timmins, Ontario, and are part of larger groups held by Canadian Magnemont Ltd. (Remo Upatowski).

A gravel road west of the claims provides access to within three and four miles respectively of the claim blocks.

PREVIOUS WORK

A magnetic survey on behalf of the R. Upatowski interests was completed on the claims, as part of a larger survey, in the Spring of 1971 (See report by R. J. Bradshaw, May 13, 1971.)

Apart from surface prospecting, primarily for gold, no other specific work is indicated to have been carried out on the claims according to government files.

GEOLOGY

Issued in 1969, Map P571 by the Ontario Department of Mines, displays the geology of Adams Township. Rock exposure is exceedingly limited. The regional geology of the area is best displayed on a plan, at a scale of one inch to two miles, issued with Miscellaneous Paper 41 by the Ontario Department of Mines in 1970.

The southwest rim of a domical structure, centred in Shaw Township about 4 miles northeast, is present in the northeast sector of Adams Township. Nickel-bearing alpine type serpentized ultramafic intrusives form the rim of the dome. The Noranda-Inco nickel deposit in Langmuir Township, currently being prepared for production, is located at the contact of a serpentized ultramafic body.

Based on a few rock exposures it is postulated on Map P571 that the east block of claims is underlain by serpentized and carbonatized ultramafic to mafic intrusives. The west claim block is interpreted to be underlain to the north by ultramafic to mafic rocks and to the south, along a southeasterly trending contact, by amphibolitized mafic volcanic flows and pyroclastics.

ELECTROMAGNETIC SURVEY RESULTS AND INTERPRETATION

A plan at a scale of one inch to four hundred feet shows the survey data and conductor axes. An appendix to this report contains a description of the instrument and survey method.

West Block

Two main conductive zones are present on this block along with two one-line features.

The longest conductor trending northwesterly through the claim block generally corresponds to the contact zone between ultramafic to mafic rocks to the north and amphibolitized volcanic rocks to the south as interpreted from the magnetic survey.

There is insufficient criteria to provide a specific interpretation of the remaining conductors.

East Block

Five conductive zones have been outlined in the north two-thirds of the east block. In this area of carbonatization and serpentinization of ultramafic to mafic rocks, the conductivity may be caused by various types of mineralization and structures. This, together with probable conductive overburden in the area, lessens the possibility of a valid interpretation of the individual conductors. However, very strong conductivity is indicated to be present suggesting that sulphide mineralization might well account for some of the conductive features.

CONCLUSIONS AND RECOMMENDATIONS

The limited amount of EM 16 survey work carried out together with the nonsupport of a less sensitive electromagnetic survey, in particular, makes any valid interpretation of the apparent conductive zones difficult if not impossible.

Probable deep conductive overburden in the area indicates the need for utilization of a deep penetrating vertical loop type electromagnetic unit to discriminate between the various types of rock conductivity and eliminate effects from conductive overburden.

Respectively submitted,
SHIELD GEOPHYSICS LIMITED.

Timmins, Ontario,
April 7, 1972.

R. J. Bradshaw

R. J. Bradshaw,
Consulting Geologist



C E R T I F I C A T E

I, Ronald J. Bradshaw, residing at 480 Howard Street, Timmins, Ontario, a consulting geologist with office at 26 Pine Street South, Timmins, Ontario, do hereby certify that:

I attended Queen's University, Kingston, Ontario, and graduated with an Honours B.A. degree in Geological Sciences in 1958.

I am a Fellow of the Geological Association of Canada, a Member of the Canadian Institute of Mining and Metallurgy and of the Association of Professional Engineers of the Province of Ontario.

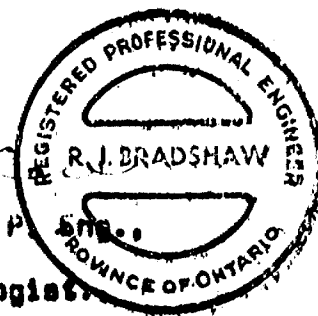
I have no interest either directly or indirectly in the shares or securities of Canadian Magnesium Ltd. (Reno Opatowski).

Timmins, Ontario,

April 7, 1972.


R. J. Bradshaw, P. Eng.

Consulting Geologist.



A P P E N D I X

INSTRUMENT DATA AND SURVEY METHOD

Electromagnetic Survey

A Ronka EM 16, number 35, was used for the survey.

This instrument is simply a sensitive receiver covering the frequency of the new VLF-transmitting stations with means of measuring the vertical field components. The VLF-transmitting stations operate for communications with submarines at frequencies between 17.8 and 24.0 Khz. The vertical antenna current of these transmitting stations creates a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary field radiating from these bodies. This equipment measures the vertical components of these secondary fields.

The receiver has two inputs, with two receiving coils built into the instrument. One coil has a normally vertical axis and the other is horizontal.

The signal from the coil with vertical axis is first minimized by tilting the instrument. The tilt angle is calibrated in percentages. The remaining signal in this coil is finally balanced out by a measured percentage of signal from the other coil.

After a suitable station is selected, at right angles to the direction of the survey lines, readings are made of the in-phase and quadrature components where the signal has been minimized to its greatest degree. The VLF-transmitting station at Cutler, Maine was used for this survey.

The lower end of the handle will, as a rule, point towards the conductor and the instrument is so calibrated that when approaching a conductor, the angles are positive in the in-phase component.

As with any electromagnetic unit, the largest and best conductors give the highest ratio of the in-phase and quadrature components.

GEC



900

file 2.822

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 Electromagnetic

Township or Area Adams Township

Claim holder(s) Canadian Magnemont Ltd.

Author of Report R. J. Bradshaw

Address 26 Pine St. S., Timmins, Ontario

Covering Dates of Survey March 27 - 30, 1972.
(linecutting to office)

Total Miles of Line cut 3.3

MINING CLAIMS TRAVERSED
List numerically

(prefix)	<u>313772</u>	(number)
	<u>313773</u>	
	<u>313774</u>	
	<u>313775</u>	
	<u>313776</u>	

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 40

--Magnetometer _____

--Radiometric _____

--Other _____

Geological _____

Geochemical _____

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

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

DATE: April 7, 1972 SIGNATURE: [Signature]
Author of Report

PROJECTS SECTION

Res. Geol. _____ Qualifications This

Previous Surveys L.D. Magnemont 2.466 - line cutting
was performed prior to recording of claims

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 5

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 171 Number of Readings 200 approx.
Station interval 100'
Line spacing 400'
Profile scale or Contour intervals 1" = 40%
(specify for each type of survey)

MAGNETIC

Instrument _____
Accuracy - Scale constant _____
Diurnal correction method _____
Base station location _____

ELECTROMAGNETIC

Instrument Ronka EM 16
Coil configuration _____
Coil separation infinite
Accuracy + or - 1%
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 17.8 Kc. - Cutler, Maine
(specify V.L.F. station)

Parameters measured _____

GRAVITY

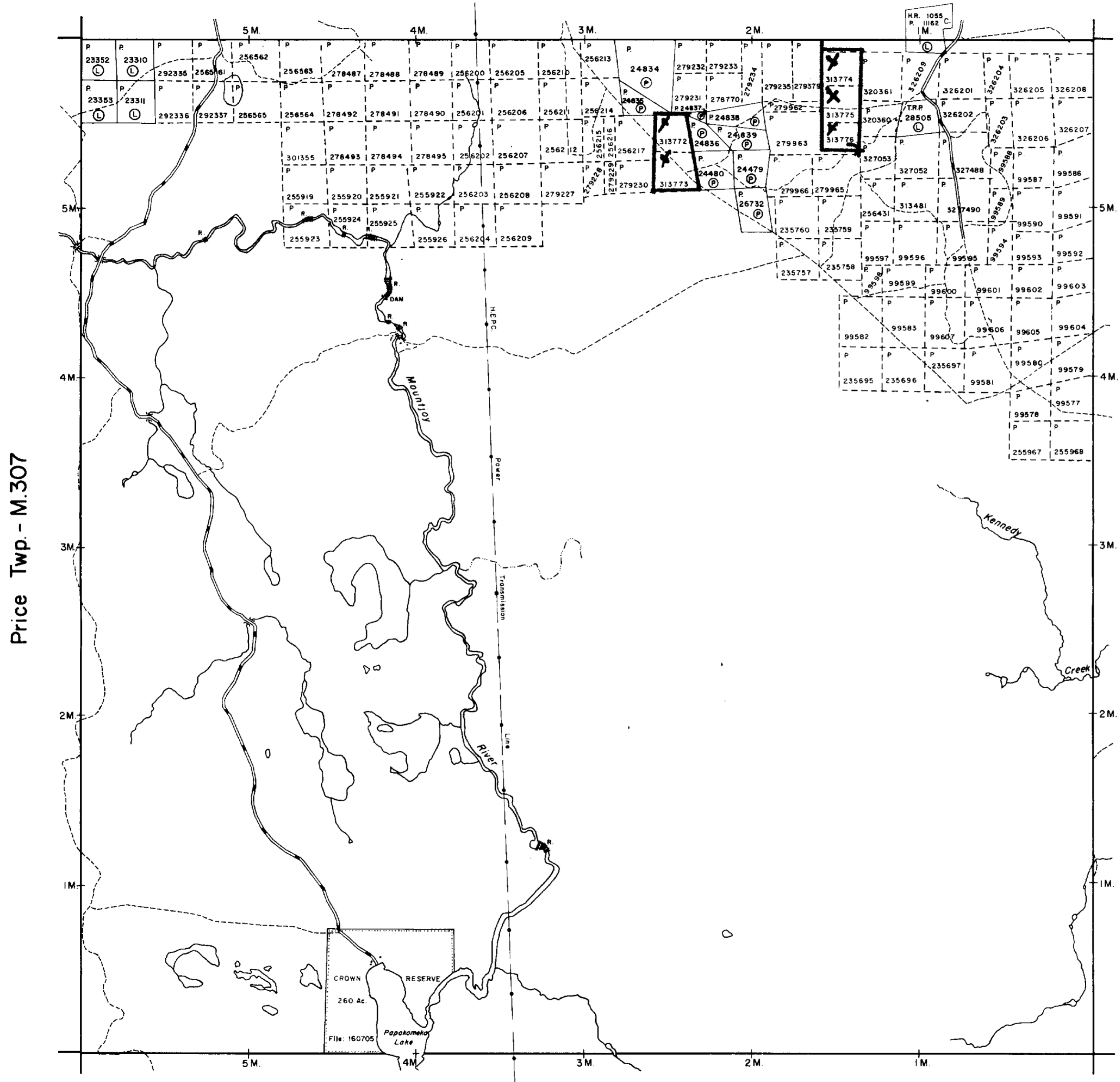
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION -- RESISTIVITY

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

Deloro Twp - M.272



THE TOWNSHIP
OF
ADAMS

DISTRICT OF
TIMISKAMING

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE 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 Ⓧ
- CANCELLED C.

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

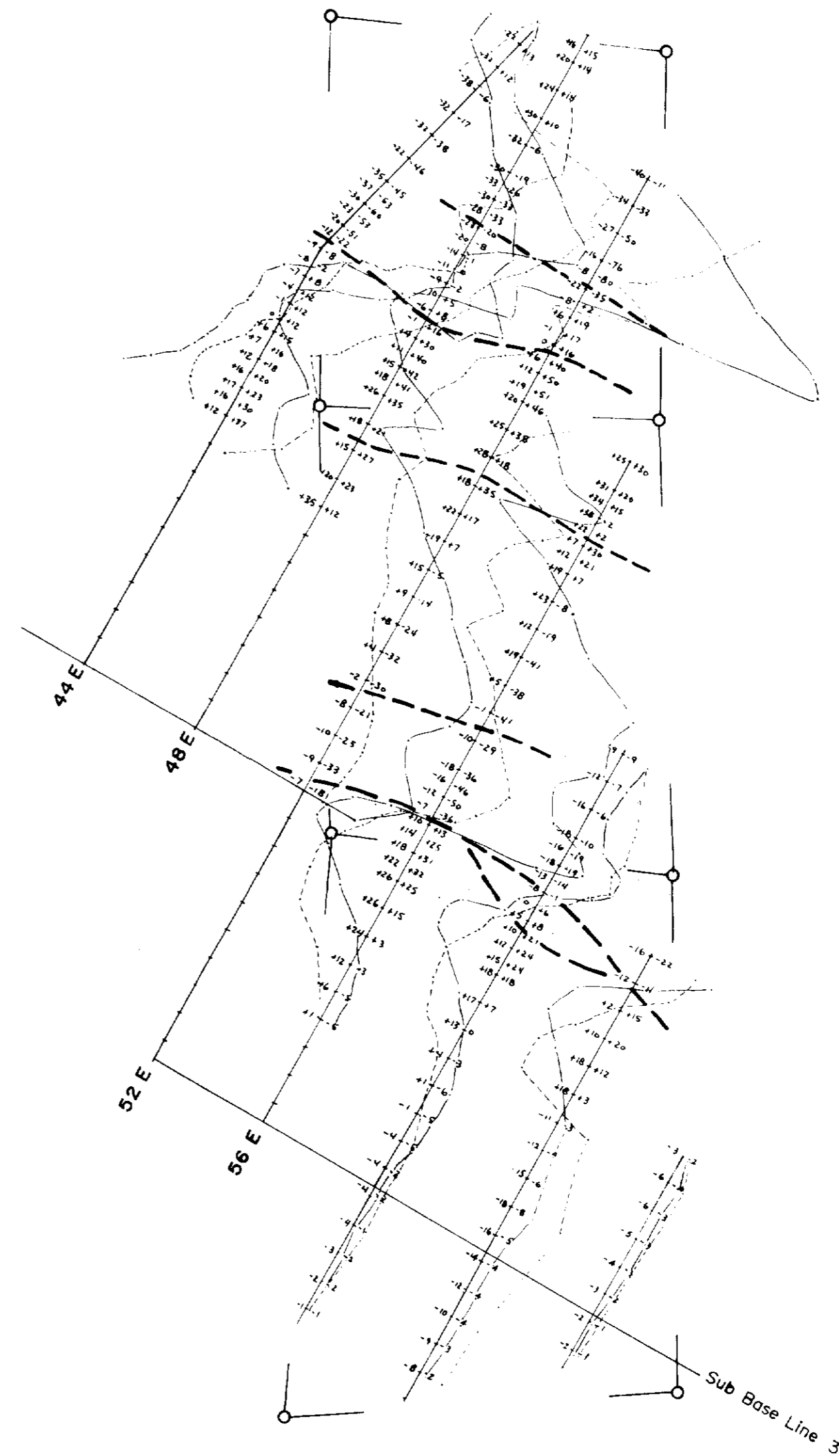
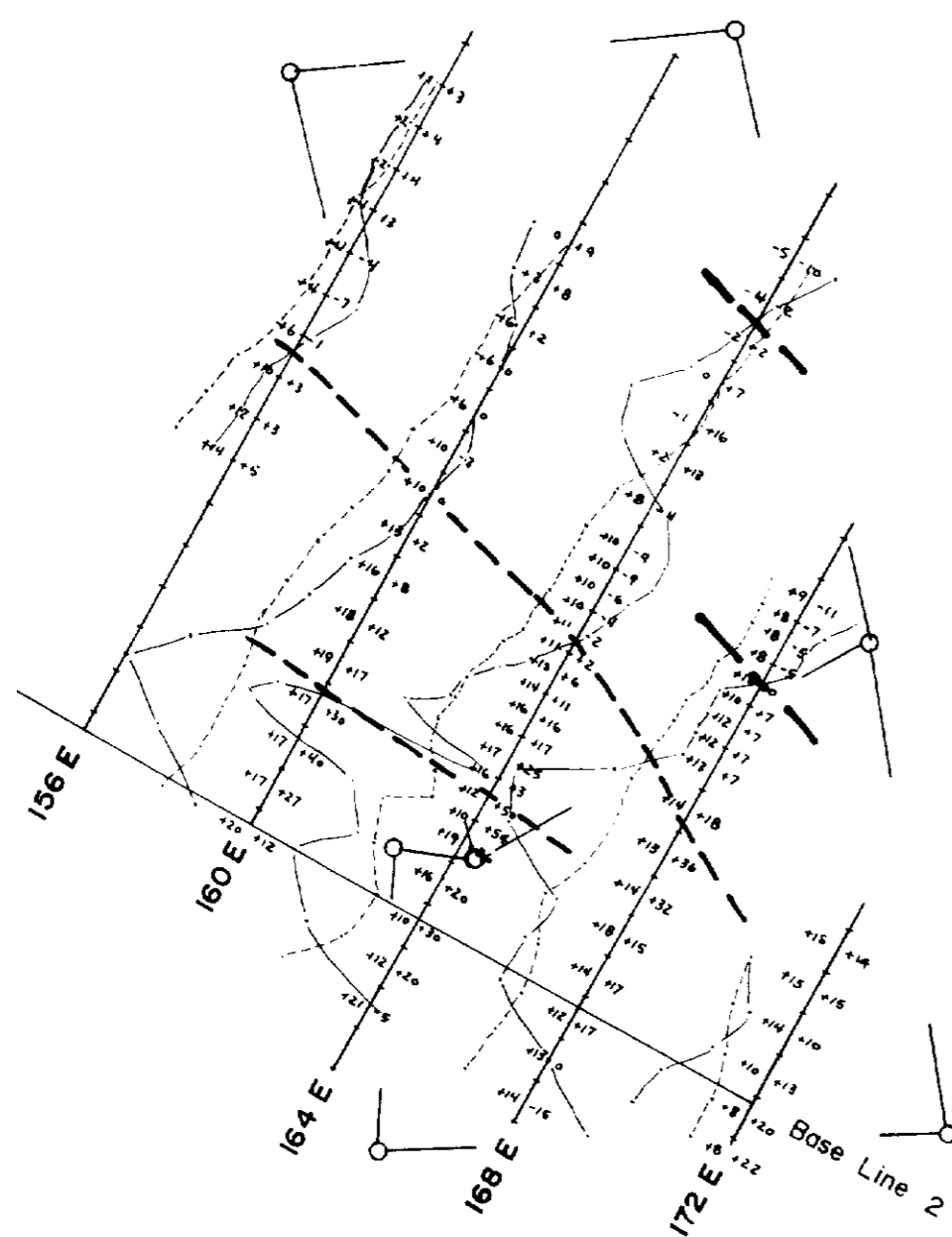
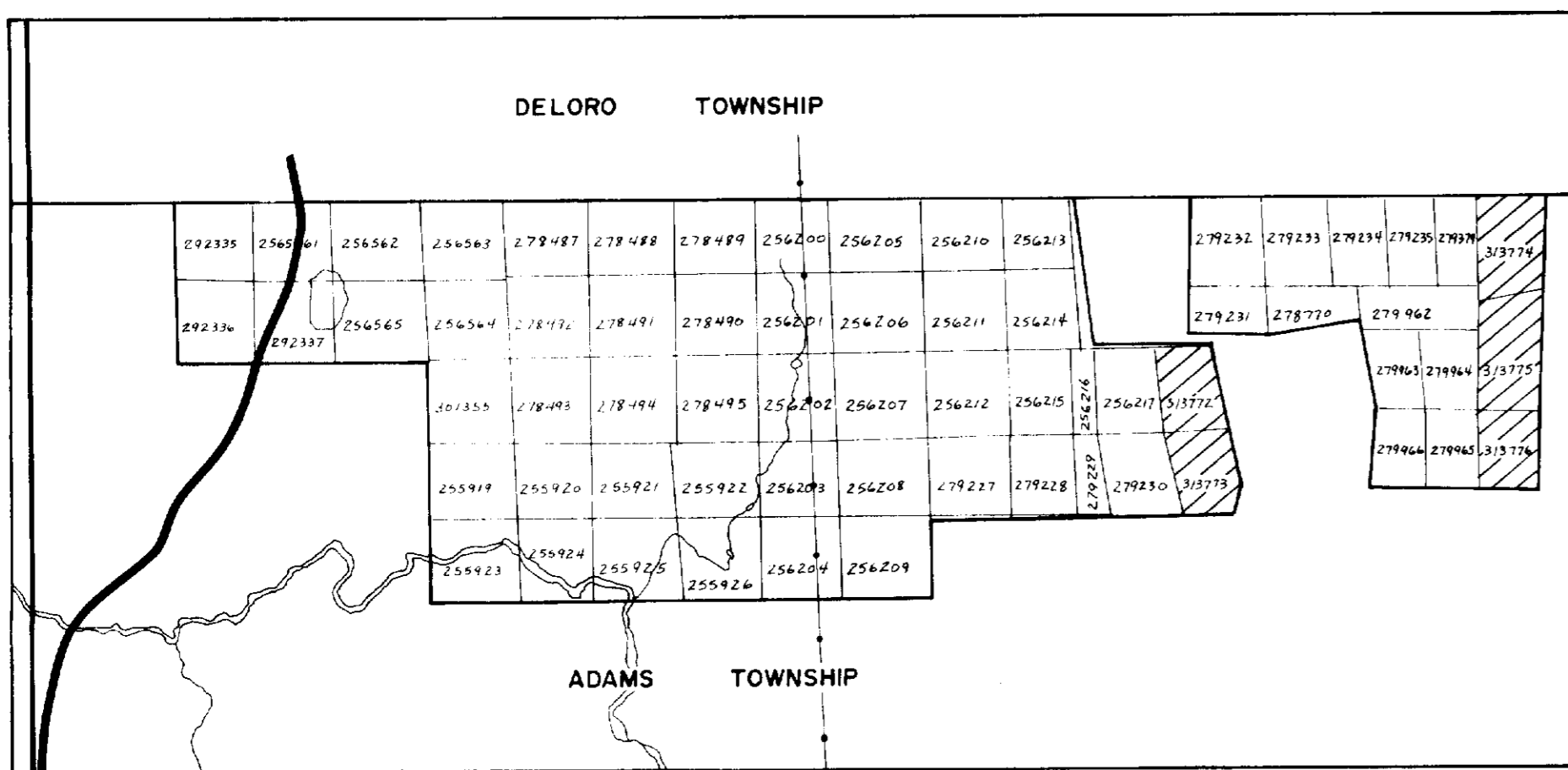
2.882

DATE OF ISSUE
APR 2 1972
ONT. DEPT. OF MINES
AND NORTHERN AFFAIRS

PLAN NO. **M.261**

**ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS**



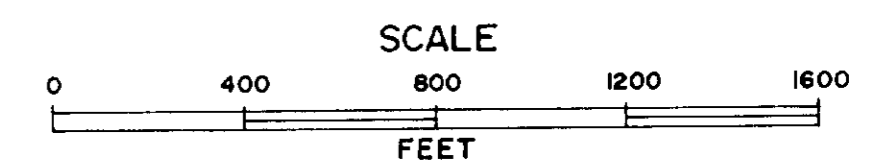


LEGEND

- / Measurement station along picket line
- /s In phase readings (%) plotted to right of line
- / Quadrature readings (%) plotted to left
- Profile scale: 1" = 40%
- - - Conductor axis

INSTRUMENT: Ronka EM 16 - No. 36, Readings taken using station NAA, Cutler, Maine.

ELECTROMAGNETIC SURVEY
ON THE
REMO OPATOWSKI CLAIM GROUP
ADAMS TOWNSHIP, ONTARIO
BY
SHIELD GEOPHYSICS LIMITED



APRIL 1972 2.822

