

SUPPLEMENTARY REPORT
INDUCED POLARIZATION



32D05SE0068 63.1984 BEN NEVIS

010

IN
BEN NEVIS TOWNSHIP, ONTARIO,
FOR
DOME EXPLORATIONS LTD.

I. INTRODUCTION

In the period from May 29th till June 2nd, 1965, Canadian Aero Mineral Surveys Limited conducted an induced polarization survey on the "P. Roche Option" in Ben Nevis Township, Ontario, on behalf of Dome Exploration Limited. This survey is described in detail by J.G. Denholm in his report of June 17, 1965. Two anomalous zones were located. One of these was left open to the east at the completion of the survey with recommendations for detailed mapping and sampling as the anomaly was located in an area of outcrop. The purpose of the additional IP work carried out in July, 1965, was to outline the area of maximum IP response which had been indicated on Line 8E.

II. DISCUSSION OF RESULTS

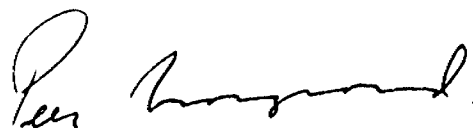
The additional IP coverage shows the peak responses of the eastern anomaly to be located at 1S-3S on Lines 8E and 10E. A maximum response of 12.1 milliseconds on Line 8E indicates the presence of polarizable material of a slightly higher concentration than in the source of the other anomaly located in the central position of the grid.

III. CONCLUSIONS AND RECOMMENDATIONS

The maximum IP response was obtained on Line 8E at 2S. A diamond drill hole to check the mineralization in the eastern zone should, therefore, be located on Line 8E as follows:

Collar at 4 + 00 S and drill north
along the line at 45° for 400 feet.

Respectfully submitted,



Peer Norgaard,
Senior Geophysicist.

OTTAWA, Ontario,
August 20, 1965.

REPORT
INDUCED POLARIZATION
IN
BEN NEVIS TOWNSHIP, ONTARIO
FOR
DOME EXPLORATION LTD.



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020

I. INTRODUCTION

Between May 29, 1965 and June 2, 1965, Canadian Aero Mineral Surveys Limited conducted an Induced Polarization survey on a property held by Dome Exploration Limited in Ben Nevis Township, Ontario. A total of 9,800 feet of line was surveyed.

The purpose of this survey was to determine the extent of known mineralization along a fault (main showing) and to check the neighbouring area for other anomalies.

The Induced Polarization survey employed high sensitivity, pulse-type equipment with a current-on time of 1.5 seconds and a measuring time of 0.5 seconds.

At each station the secondary or transient voltage is measured by integrating electronically for 0.5 seconds. The secondary voltage transient (in current-off time) arises from the return to 'normal' after the polarized state during the current-on time. Also at each station, the primary voltage between the same potential electrodes while the current is on is measured. Division of the integrated secondary voltage by the primary voltage gives a parameter indicative of the volume percent mineralization in the rock in the region of the particular station. This parameter is called the "chargeability" and is in units of milliseconds.

The grid consisted of an east-west base line 1600 feet long with nine cross lines, 1000 feet long and 200 feet apart. The cross lines were centered about the base line with XLO over the main showing and D.D.No. 1.

The gradient electrode array was employed with a 200-foot potential electrode spacing and with the current electrodes 4000 feet apart on line 0 + 00.

The chargeabilities and resistivities are plotted in profile form at scales of 1" = 5 milliseconds and 2" = 1 log cycle 1000 - 10,000 ohm-meters. A contour map of the chargeabilities is also provided.

II. INTERPRETATION OF RESULTS

Two anomalous zones were located on the grid system, both with peak chargeabilities of 11 to 12 milliseconds over a background of about 5 milliseconds and both with relatively high resistivities.

The first anomaly is on lines 6W to 4E from 0 + 00 to 3N, peaking at 1N on all lines. The sharp rise from background on the south side of the anomaly indicates the above background chargeabilities are due to mineralization of 1% or less by volume in the fragmental chert near the chert-dacite contact. Since this anomaly has been drilled on lines 2W, 0 and 2E, no further immediate exploration is suggested.

The second anomaly is on lines 4E, 6E, and 8E, from 0 to 3S. Again, peak chargeabilities of 12 milliseconds indicate 1% or less metallic minerals by volume. The accompanying high resistivities indicate the mineralization is in a silicious rock and as the geology indicates, a fragmental andesite.

Higher than background chargeabilities also exist on lines 6W to line 0 + 00 from 3S to 6S. Again, the geology shows a fragmental chert in the area and thus the anomalous readings may be due to less than 1% by value of metallic material in this chert.

III. RECOMMENDATION FOR FUTURE WORK

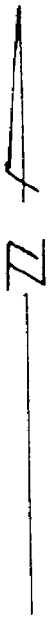
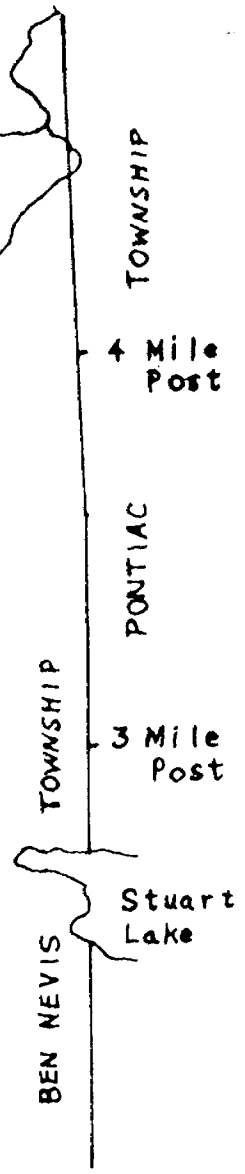
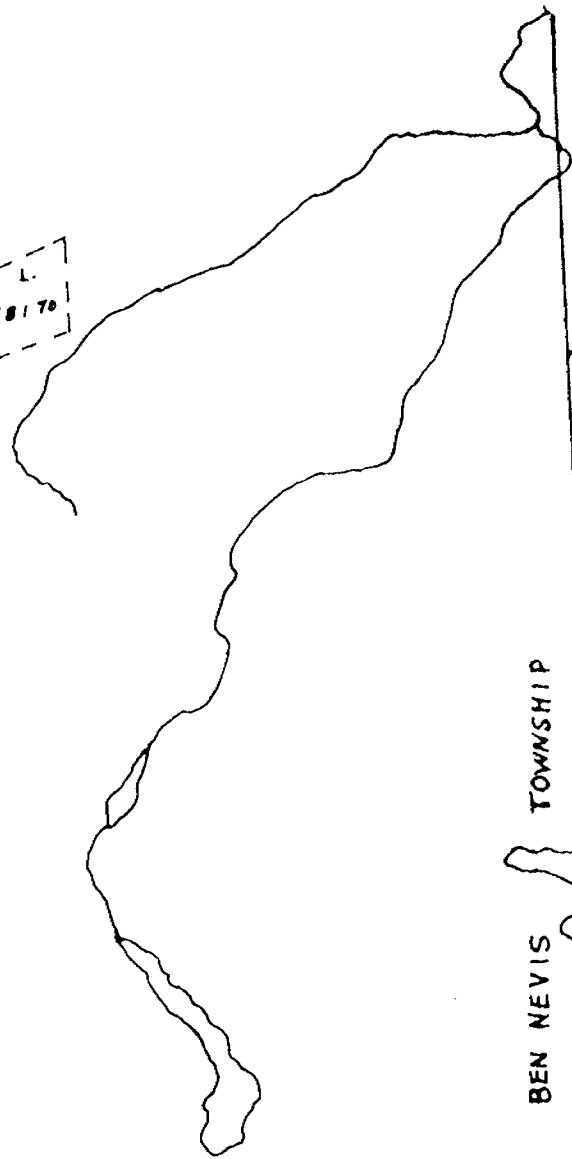
Immediate surface sampling and detailed mapping is recommended on the large out crop areas of the record anomaly on lines 6E and 8E. One drill hole collared at 4 + 50S on line 8E and dipping 45° to the north for 400 feet is recommended to further check this anomaly for mineralization. Based upon the results from these projects, further induced polarization east of the present grid would extend and outline the rest of the eastern anomaly.

Respectfully submitted,

John G. Denholm
per pp.

OTTAWA, Ontario,
June 17, 1965.

John G. Denholm,
Geophysicist.



MAP SHOWING LOCATION OF
 PETER ROCHE CLAIMS
 BEN NEVIS TWP., ONTARIO
 1" = 1/2 mile C.H.S. 19/5/66



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900

File: 63.1984

THE MINING ACT

Assessment Work Credits

NAME: DOME EXPLORATION (CANADA) LIMITED

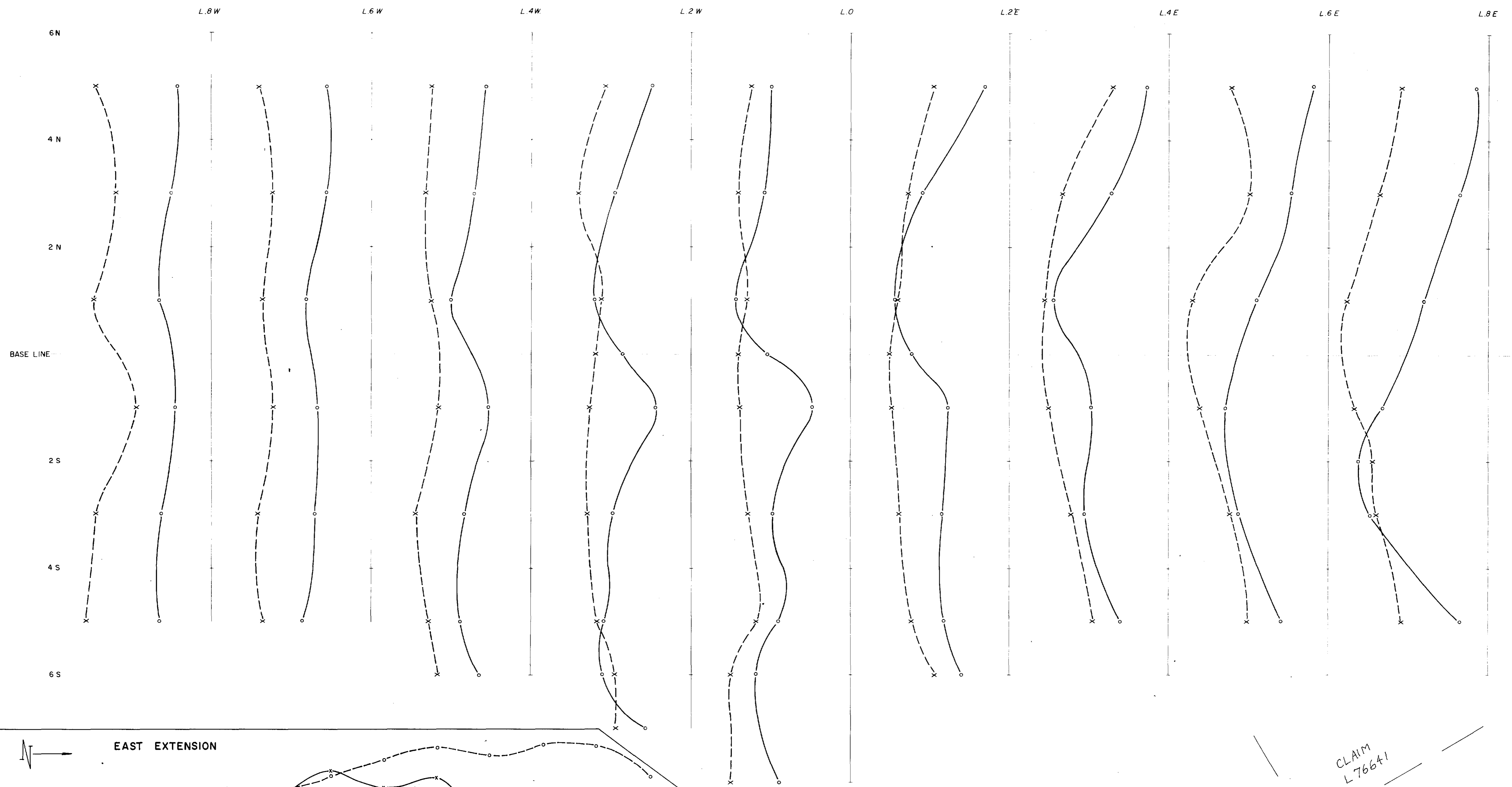
TOWNSHIP OR AREA: BEN NEVIS TOWNSHIP

TYPE OF SURVEY: INDUCED POLARIZATION

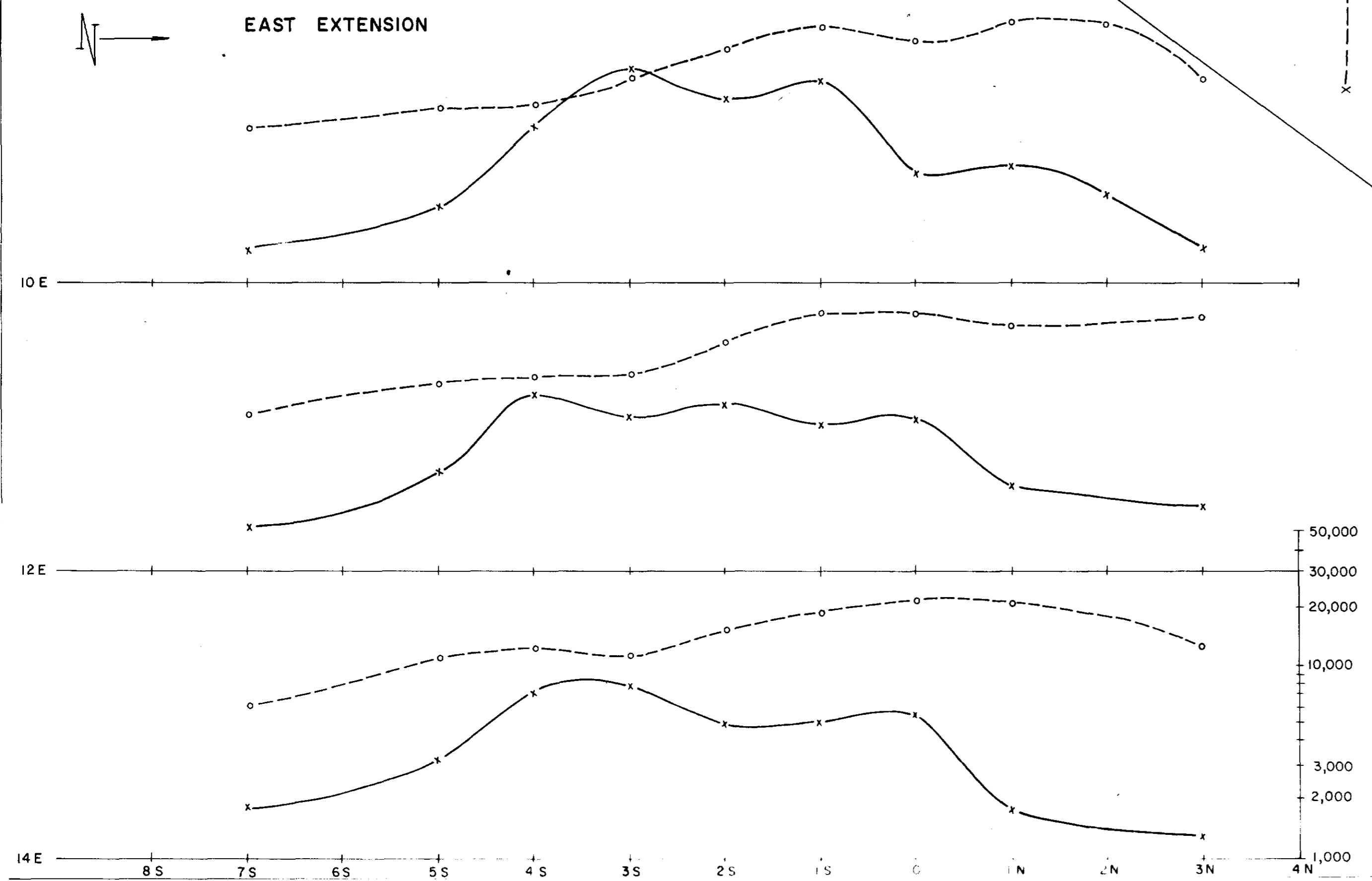
assessment credits:

L 76641 - 80 days

L 76642 - 58 days



EAST EXTENSION



CLAIM L76642

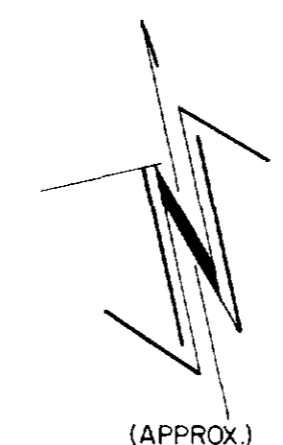
CLAIM L76641

LEGEND

ELECTRODE CONFIGURATION... GRADIENT ARRAY
 ELECTRODE SPACING... 200 FEET
 CHARGEABILITY: 1" = 5.0 MILLISECONDS
 RESISTIVITY: (2" = 1 LOG CYCLE 1000-10,000 OHM METERS)

SCALE

1 INCH = 100 FEET



(APPROX.)

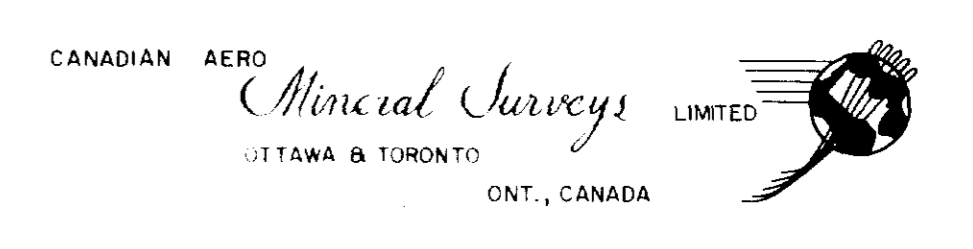
INDUCED POLARIZATION SURVEY
 WITH EAST EXTENSION
 PROFILE PRESENTATION

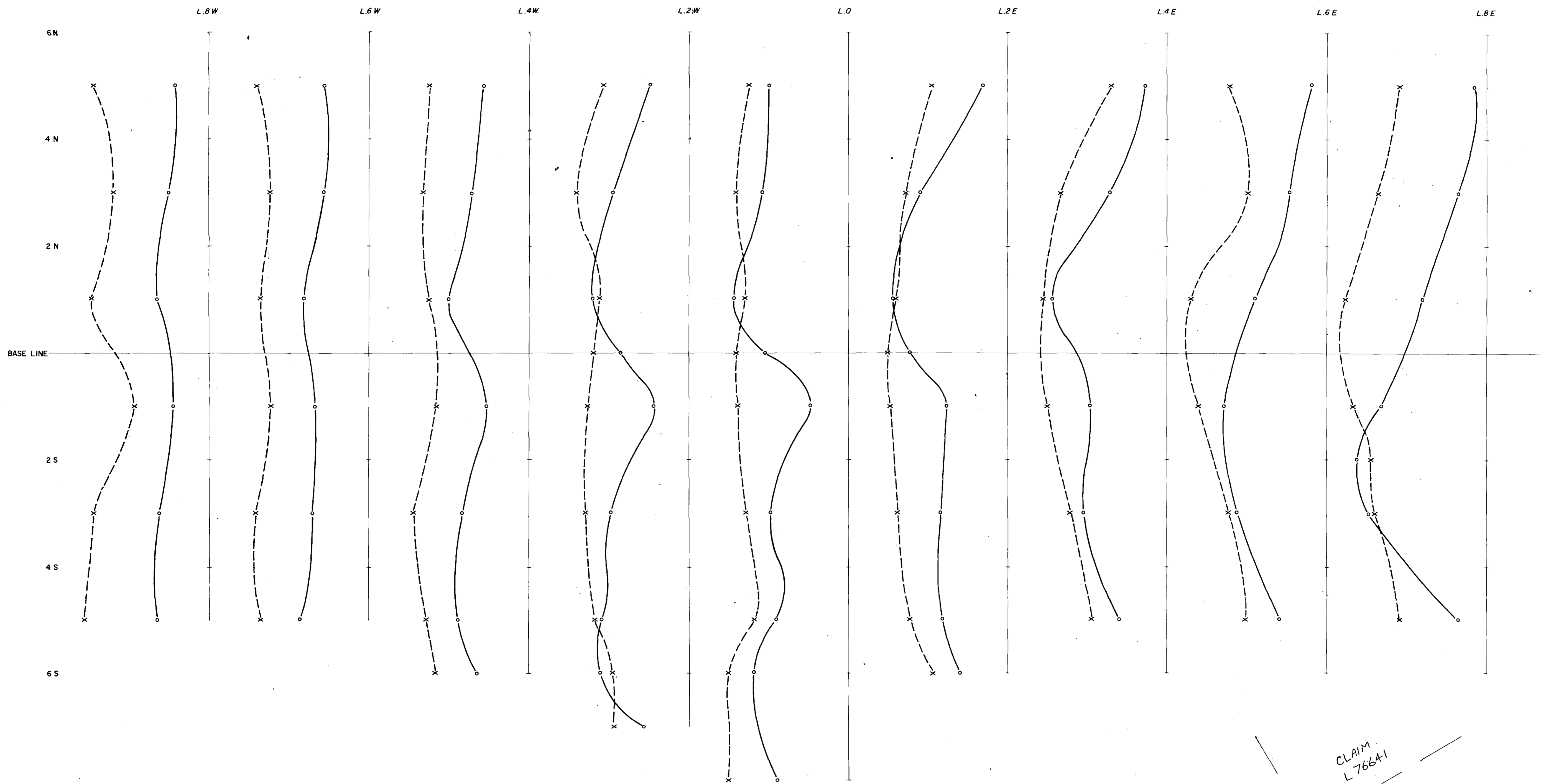
BEN NEVIS TOWNSHIP AREA, ONTARIO

FOR

DOME EXPLORATIONS (CANADA) LIMITED

BY

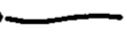





CLAIM
L 76642

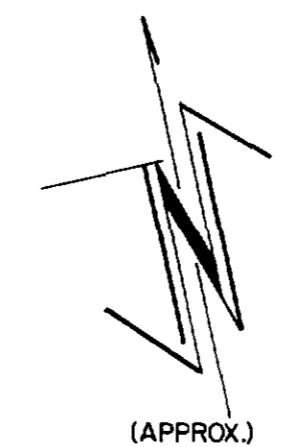
CLAIM
L 76641

LEGEND

ELECTRODE CONFIGURATION... GRADIENT ARRAY
 ELECTRODE SPACING... 200 FEET
 CHARGEABILITY: $t^m = 5.0$ MILLISECONDS 
 RESISTIVITY:  (2" = 1 LOG CYCLE 1000 - 10,000 OHM METERS)

SCALE

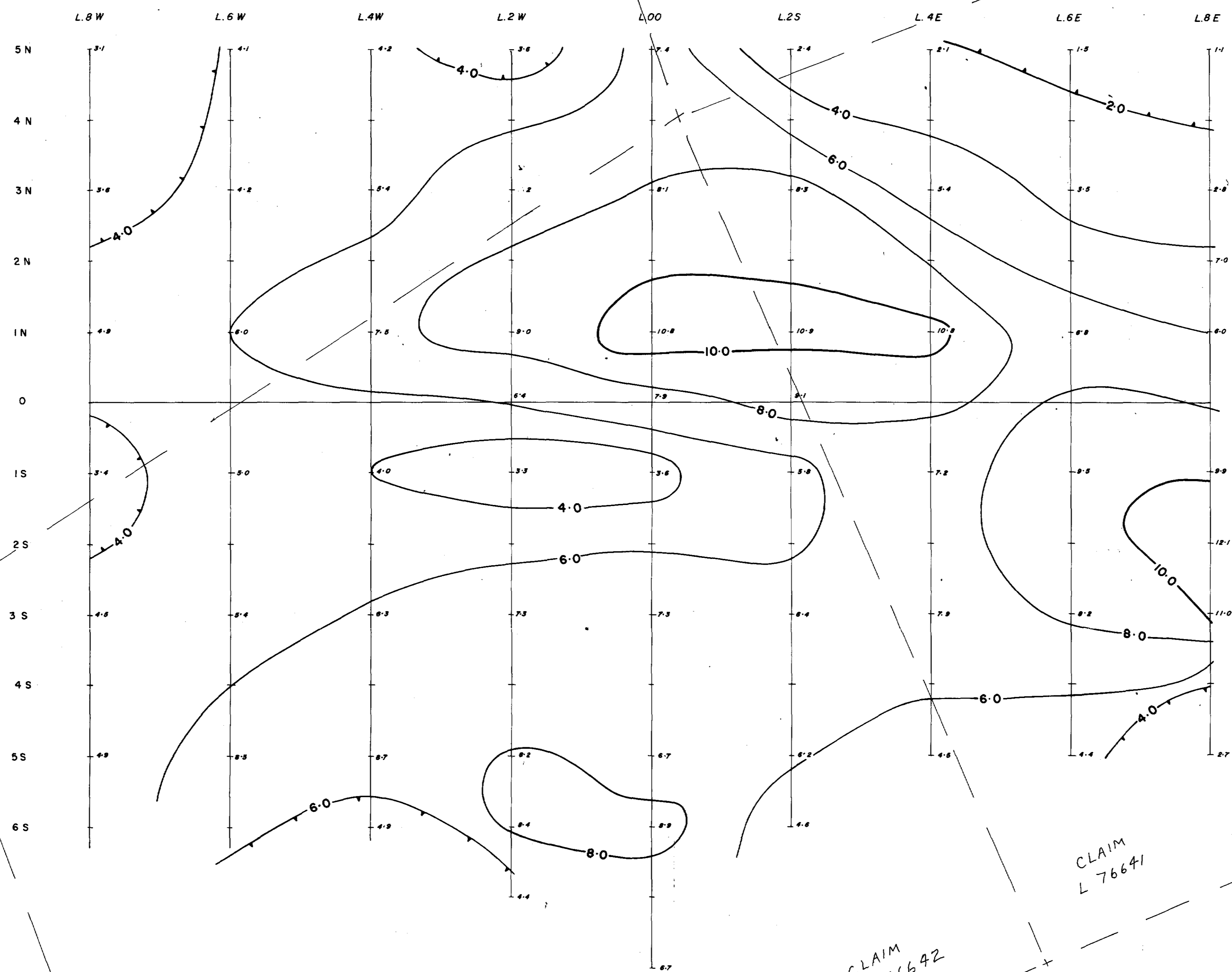
1 INCH = 100 FEET



INDUCED POLARIZATION SURVEY
 PROFILE PRESENTATION
BEN NEVIS TOWNSHIP AREA, ONTARIO
 FOR
DOMEX EXPLORATIONS (CANADA) LIMITED

BY
 CANADIAN AERO *Mineral Surveys* LIMITED
 OTTAWA & TORONTO
 ONT., CANADA





LEGEND
 ELECTRODE CONFIGURATION... GRADIENT ARRAY
 ELECTRODE SPACING... 200 FEET
 CHARGEABILITY... MILLISECONDS
 CONTOUR INTERVAL... 2.0 MILLISECONDS

SCALE
 1 INCH = 100 FEET

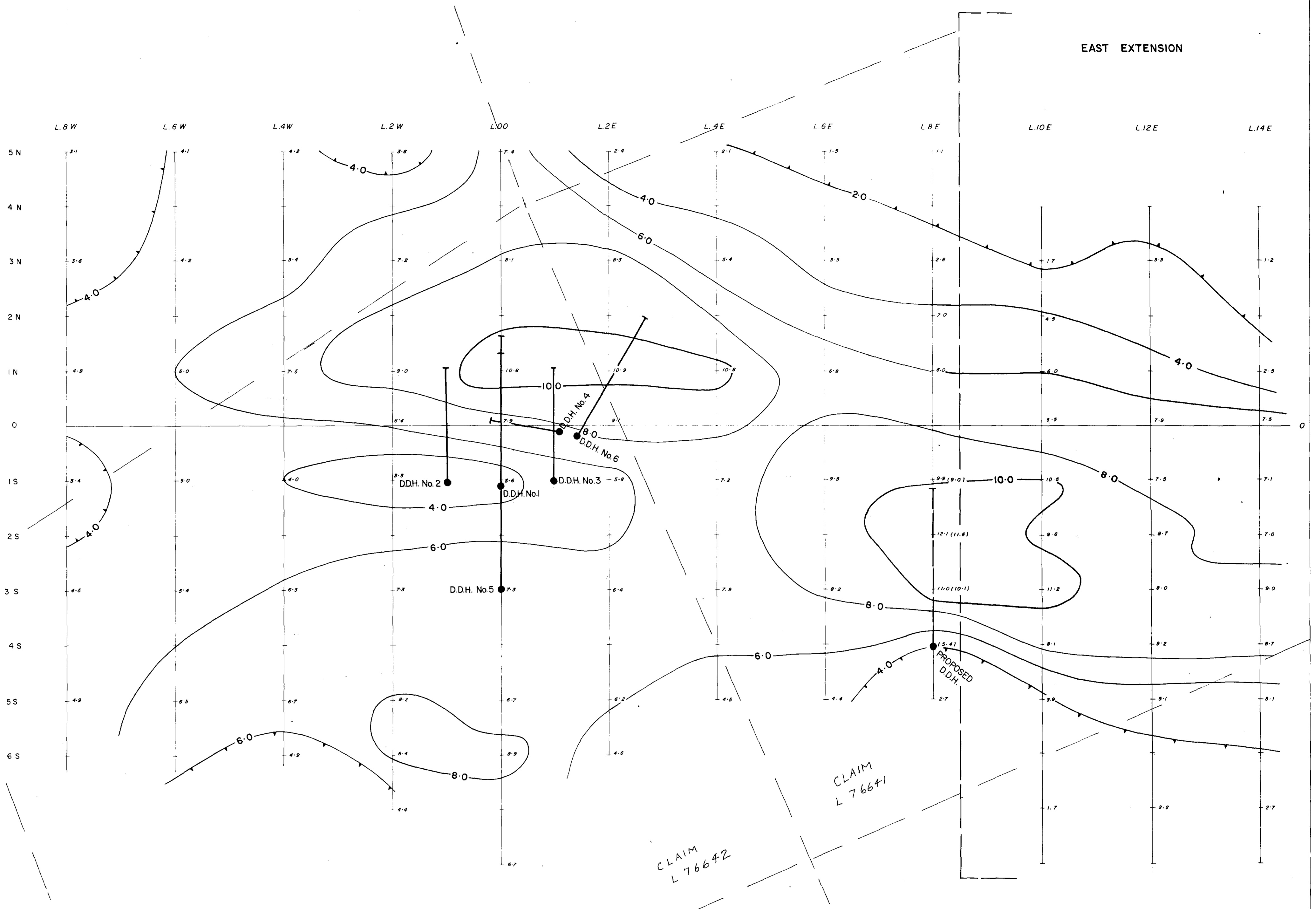


INDUCED POLARIZATION SURVEY
CHARGEABILITY CONTOUR PLAN
BEN NEVIS TOWNSHIP AREA, ONTARIO

FOR
DOMEX EXPLORATIONS (CANADA) LIMITED

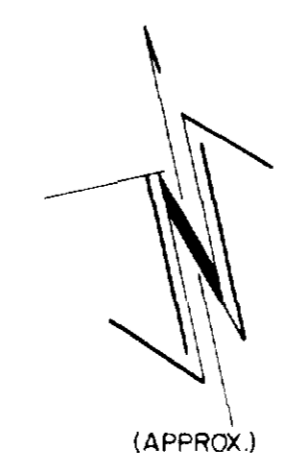
BY
 CANADIAN AERO *Mineral Surveys* LIMITED
 OTTAWA & TORONTO
 ONT., CANADA





LEGEND
 ELECTRODE CONFIGURATION ... GRADIENT ARRAY
 ELECTRODE SPACING ... 200 FEET
 CHARGEABILITY ... MILLISECONDS
 CONTOUR INTERVAL ... 2.0 MILLISECONDS

SCALE
 1 INCH = 100 FEET



INDUCED POLARIZATION SURVEY
 CHARGEABILITY CONTOUR PLAN + DDH LOC
 BEN NEVIS TOWNSHIP AREA, ONTARIO

FOR
 DOME EXPLORATIONS (CANADA) LIMITED

BY
 CANADIAN AERO
Mineral Surveys LIMITED
 OTTAWA & TORONTO
 ONT., CANADA

63.1984

