



42A11NW0008 63.1471 PROSSER

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Report on Properties of  
Natural Exploratory Ltd

REPORT  
ON  
PROPERTIES OF NATIONAL EXPLORATIONS LIMITED  
TIMMINS AREA OF ONTARIO

Introduction

The following report pertains to ground geophysical and geological surveys of the properties of National Explorations Limited in Prosser and Murphy Townships, Timmins area of Ontario.

Location

Prosser Twp. property consists of four claims numbered 62172, 62173, 62174, and 62175, and is situated approximately 15 miles north of Timmins. The best method of transportation is by helicopter from Timmins in that there is no suitable access road through this very wet section of Ontario.

Murphy Twp. property consists of four claims numbered 57812, 57813, 57826, and 57827, and is located some ten miles north of Timmins, but can be reached by an old lumber road consequently helicopter transportation is not required.

### Method of Survey

Both properties were surveyed on a 200 foot grid, and in order to carry out this survey a baseline was run in a north-easterly direction on the Prosser Twp. property and in an east-west direction on the Murphy Twp. property. Picket lines were cut and chained at 200 foot intervals from the baseline to cover the entire claim groups. Geological surveys, in addition, were carried out on this same grid.

### Geophysical Survey

Both electromagnetic and magnetic geophysical surveys were carried out with magnetic stations being read every 50 feet where possible along the cut lines, and electromagnetic profiles every 200 feet. Conductor indications were detailed where necessary by additional electromagnetic setups. A Sharpe A-2 magnetometer with a sensitivity of approximately 20 gammas per scale division was employed on the magnetic surveys, and a vertical loop large coil EM unit for the electromagnetic surveying. This unit was chosen because of its high penetration in areas of deep overburden. The Ronka equipment, because of the depth

of overburden, was not used on either the Murphy or Prosser Twps. as a check instrument.

### Discussion of Results

#### Murphy Twp.

The magnetic data indicates that the choice of an E-W baseline was correct in that the general trend of magnetic information would appear to be in this direction. The enclosed map depicts the magnetic information contoured to 100 gammas, and depicts certain isolated magnetic anomalies of quite reasonable magnitude but of minimal linear extent. The electromagnetic coverage superimposed on the magnetic information did not produce conductors associated with any magnetic anomalous areas, or in fact anywhere on this property.

The claim group was mapped geologically and a reasonable amount of outcrop was found to exist for this generally muskeg covered area. The rock types indicated were sedimentary greywacke and various volcanics which can be grouped together as greenstone. There would appear to be a contact between the sedimentary and volcanic groups on claims 57813 and 57826. This would appear to be

evident from the magnetic information in that the major variations in magnetic intensity appear to be in the greenstone. No mineralization other than minor pyrite in the volcanics was in evidence in any of the outcrop examined on the claim group.

Prosser Twp.

Various surveys, that is geological and geophysical, were carried out in the same manner as in Murphy Twp. with the exception that the baseline direction was run in a north-easterly direction. The choice of this direction would appear to be correct as can be seen from the compilation of magnetic information. A geological examination of the ground was made but unfortunately no outcrops were found to exist on the claim group, and as a result the geological examination does not add to the geophysical information. The area was found to be about 90% covered with muskeg and swamp, with two smaller areas covered by spruce and poplar.

The geophysical map with this report combines the magnetic information contoured at 100 gamma intervals, a coverage electromagnetic survey in hashed lines, and the detailed electromagnetic coverage in more solid outline on the one map.

From this information it would appear that 3 or possibly 5 weak conductive areas exist on the property. These areas could be joined up to produce two conductive zones only. It is the feeling of the writer, however, that these conductors should be considered as separate entities, and are described herein.

Conductor #1: This conductor is on the north flank of a magnetic anomaly on lines 16N and 18N, approximately 350W. The conductor is of weak intensity but is definite in its appearance. It could be caused by either sulphide mineralization with heavy overburden, or a shear or broken ground.

Conductor #2: This conductor is located on lines 20N and 22N, approximately 600W. It is again a weak conductor and could possibly be joined with conductor #1, but because of the magnetics this would not appear the case in that in order to join these two conductors they would have to transverse the normal north-easterly magnetic trend.

Conductors #3, 4 & 5 are located on lines 14N to 24N in the south-easterly section of the property on claim 62172. Again, these conductors could be joined

and could be considered as one lengthy conductor of some 1,000 feet, but again if this were done the conductors would have to cut across normal magnetic trends and this would normally not produce a compatible configuration. It is suggested, therefore, that there are three separate locations with conductor 4 appearing on two lines, conductor 3 on three lines, and conductor 5 on one line, but because of the profiles adjacent to conductor 5, this conductor could conceivably pass through the magnetic anomaly located on lines 20 and 22N, 9E. The conductors are weak in intensity but have a better gradient than conductor #1. It is suggested that overburden in this section of the property is less than in the areas of conductors 1 and 2.

### Conclusions

It would appear that at this time no further work should be carried out in the Murphy Twp. property, but the results should be weighed against any information which may arise from adjoining properties on which exploration is presently being carried out.

A minimum of two bore holes, and a maximum of five, are suggested for the Prosser Twp. property. The location of these bore holes would be:  
Conductor No. 1 - 18N, 2+50W, drilling grid west at an angle of 55°.

Conductor No. 3 - 22N, 10S, drilling east at 55°

Additional holes could be located as follows:

Conductor No. 2 - Line 22N, 5+50W

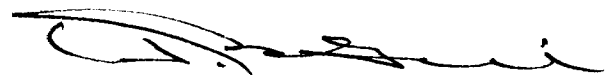
Conductor No. 4 - Line 16N, 7+50E

Conductor No. 5 - Line 24N, 7+50E

Further drilling would be dependent upon the results obtained in any of the above initial holes.

Respectfully submitted,

SULMAC EXPLORATION SERVICES LIMITED



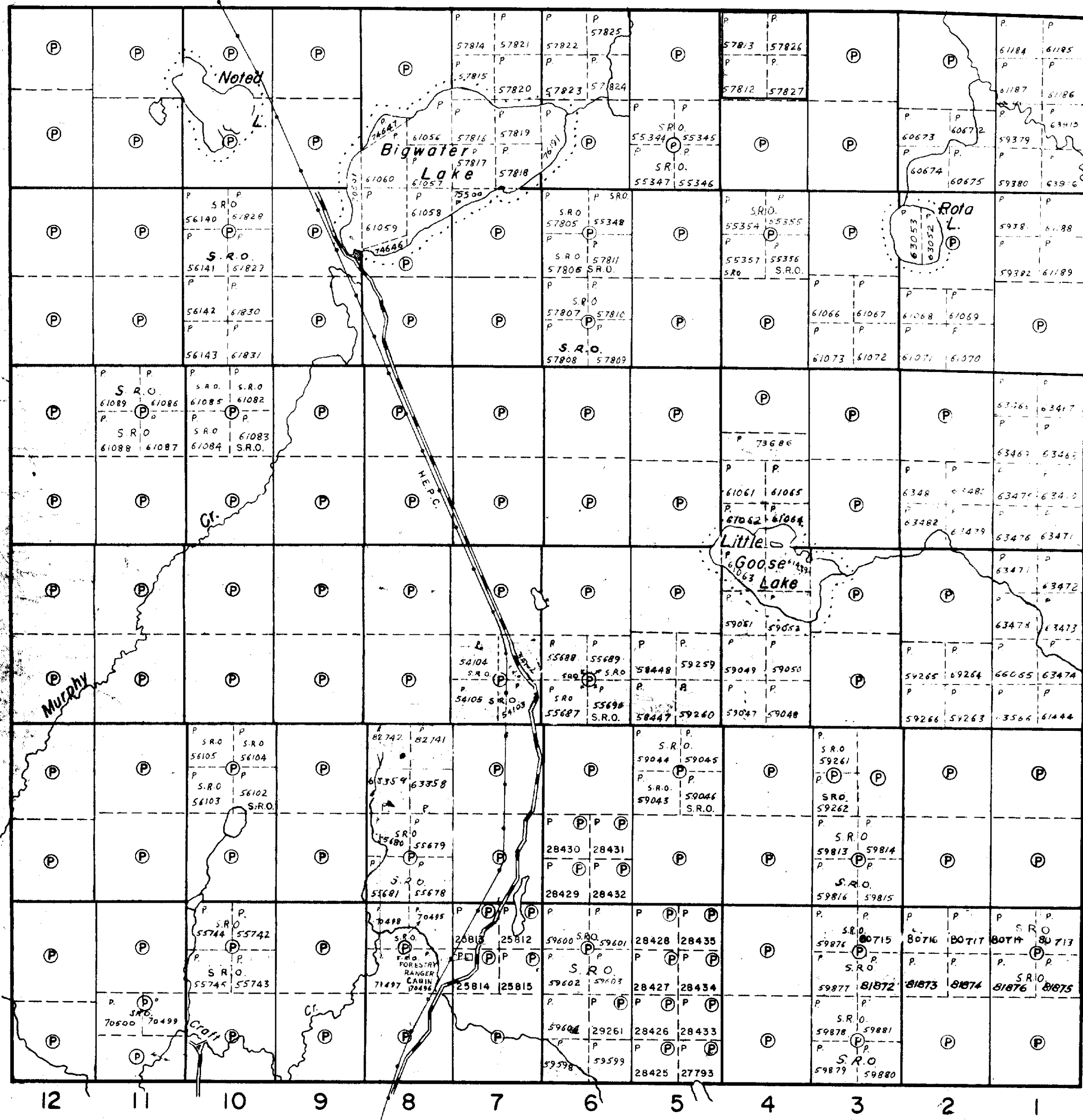
W. P. McGill, M.A., P.Eng.

July 6, 1964





Wark Twp.



THE TOWNSHIP OF

# MURPHY

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

## LEGEND

- PATENTED LAND (P)
- CROWN LAND SALE (S or C.S.)
- LEASES (L)
- 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 (X)

## NOTES

- 400' Surface rights reservation around all lakes & rivers
- No disposition of sand & gravel from May 8th, 1964 until further notice

*KE (PLAN)*

PLAN NO.-M-303

DEPARTMENT OF MINES  
—ONTARIO—

Jessop Twp.

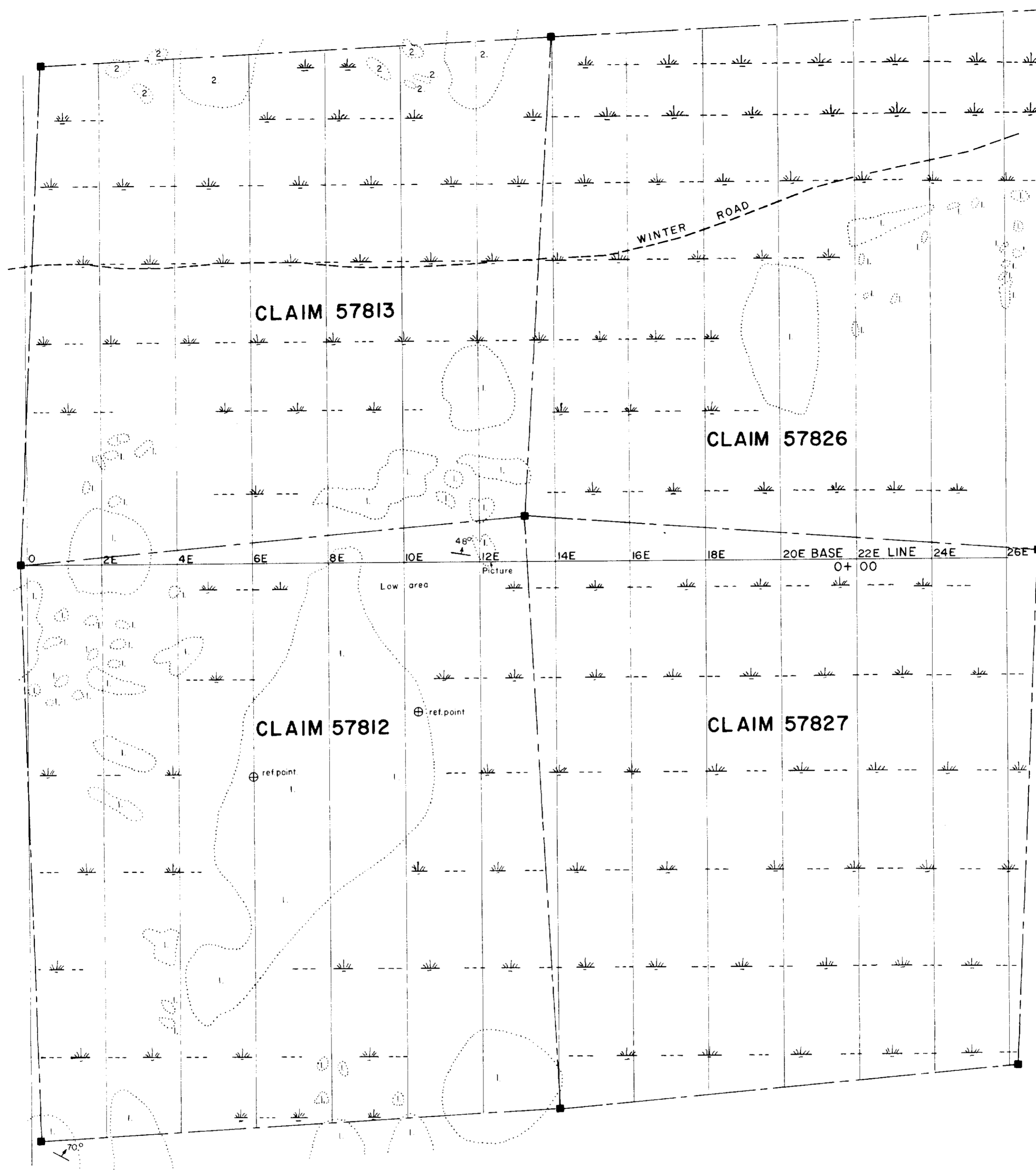
Hoyle Twp.

Tisdale Twp.

M-303

B.D.





GEOLOGICAL SURVEY.

LEGEND

- |   |  |
|---|--|
| 1 | Breccia and Greenstone (interbedded).                      |
| 2 | Greywacke.   |
|   | Claim post and boundary.                                   |
|   | Muskeg or swamp.   |
|   | Outcrop margin.  |
|   | Strike and dip.  |
|   | Reference point, (prominent outcrop easily seen from air). |

**NATIONAL EXPLORATION LIMITED**

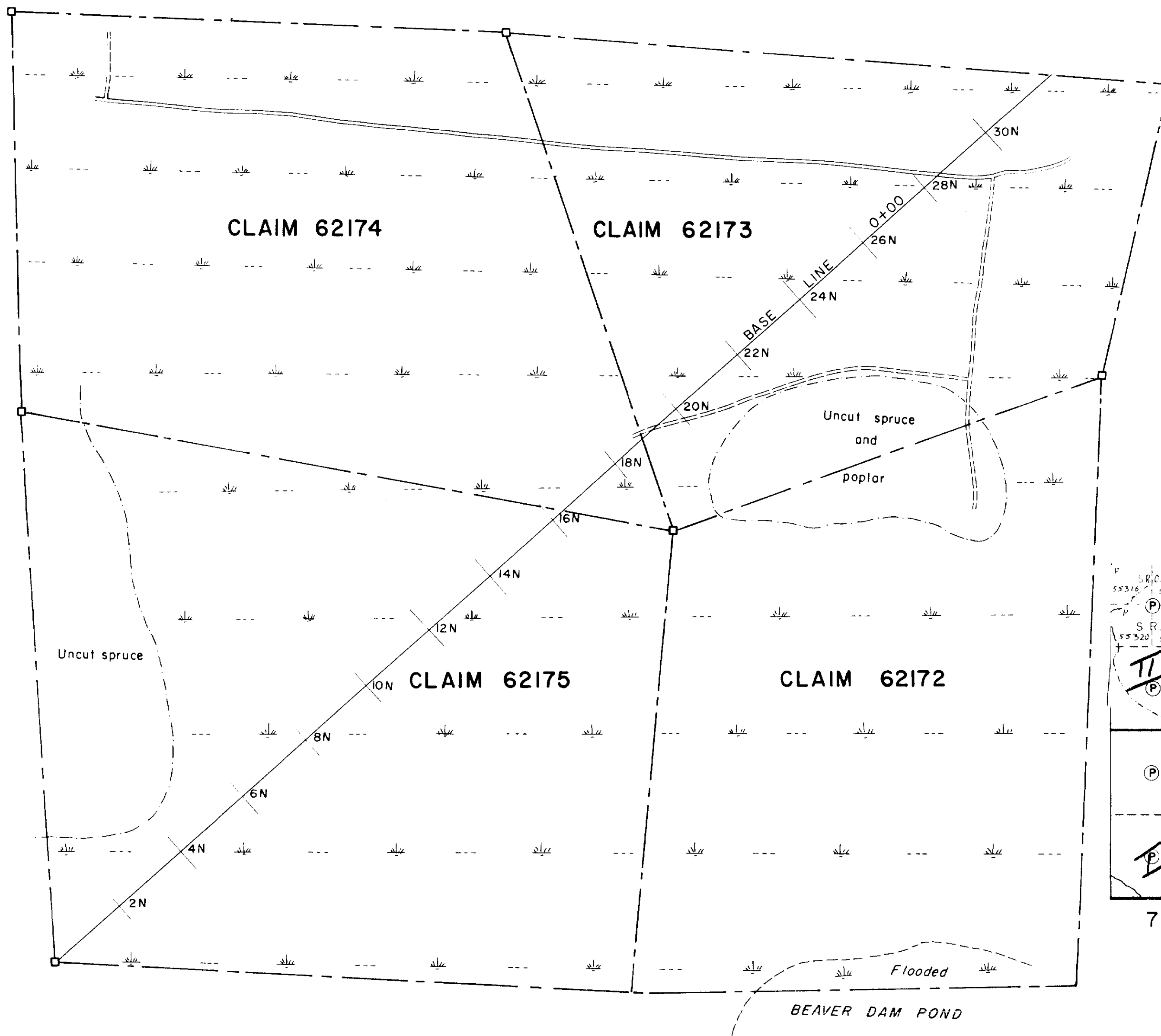
MURPHY TOWNSHIP, ONTARIO

SULMAC EXPLORATION SERVICES LIMITED.

Scale: 1" = 200'

JUNE 1964





S.R.C. 55316	S.R.C. 55317			S.R.O. 63442	S.R.O. 63442
(P)	(P)	(P)	(P)	(P)	(P)
S.R.O. 55320	S.R.O. 55321			S.R.O. 63444	S.R.O. 63445
(P)	(P)	(P)	(P)	(P)	(P)
(P)	(P)	(P)	(P)	(P)	(P)
(P)	(P)	(P)	(P)	(P)	(P)
(P)	(P)	(P)	(P)	(P)	(P)
(P)	(P)	(P)	(P)	(P)	(P)
7	6	5	4		

LEGEND

- Muskeg and swamp.
- Outline of wooded areas and topographic heights.
- Winter road.
- Pond (swampy)

**NATIONAL EXPLORATION LIMITED**

PROSSER TOWNSHIP, ONTARIO

GEOLOGICAL MAP

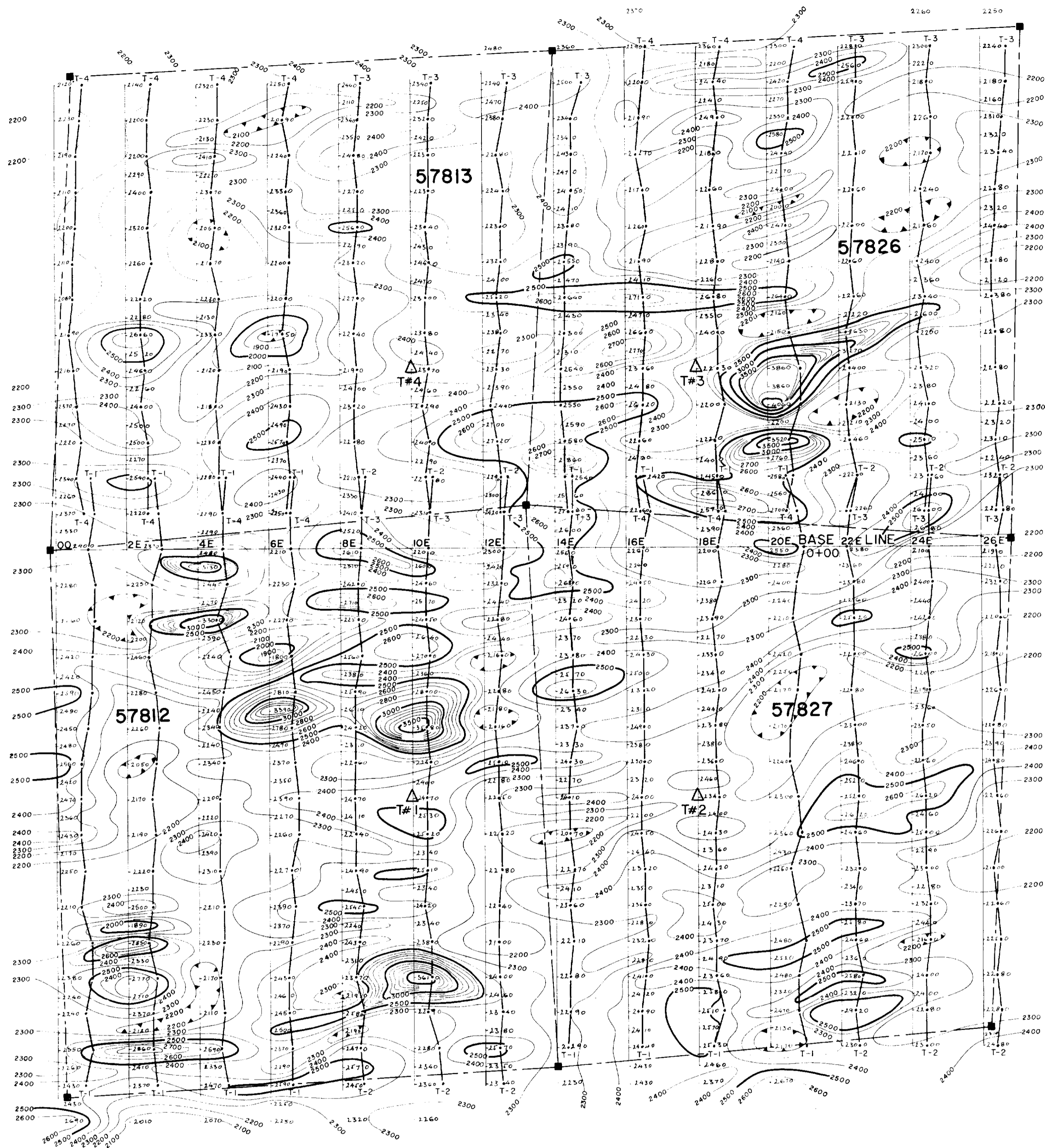
SULMAC EXPLORATION SERVICES LIMITED.

Scale: 1"=200'

*[Signature]*  
July 4, 1964

June 1964





**MAGNETOMETER SURVEY**

**E.M. SURVEY RECONNAISSANCE**

Contour Interval 100 gammas.

1000, 500 gamma contours.

100 gamma contours.

Reading in gammas.

Magnetic Depression.

Profile of Electromagnetic Reading. (a)

$I = 20^\circ$  of Dip Angle.

△ T#3 Electromagnetic Transmitter Location.

— T-3 — Transmitter Location Reference.

— — Conductor Axis.

■ — Claim Post and Boundary.

**NATIONAL EXPLORATION LIMITED**

MURPHY TOWNSHIP, ONTARIO

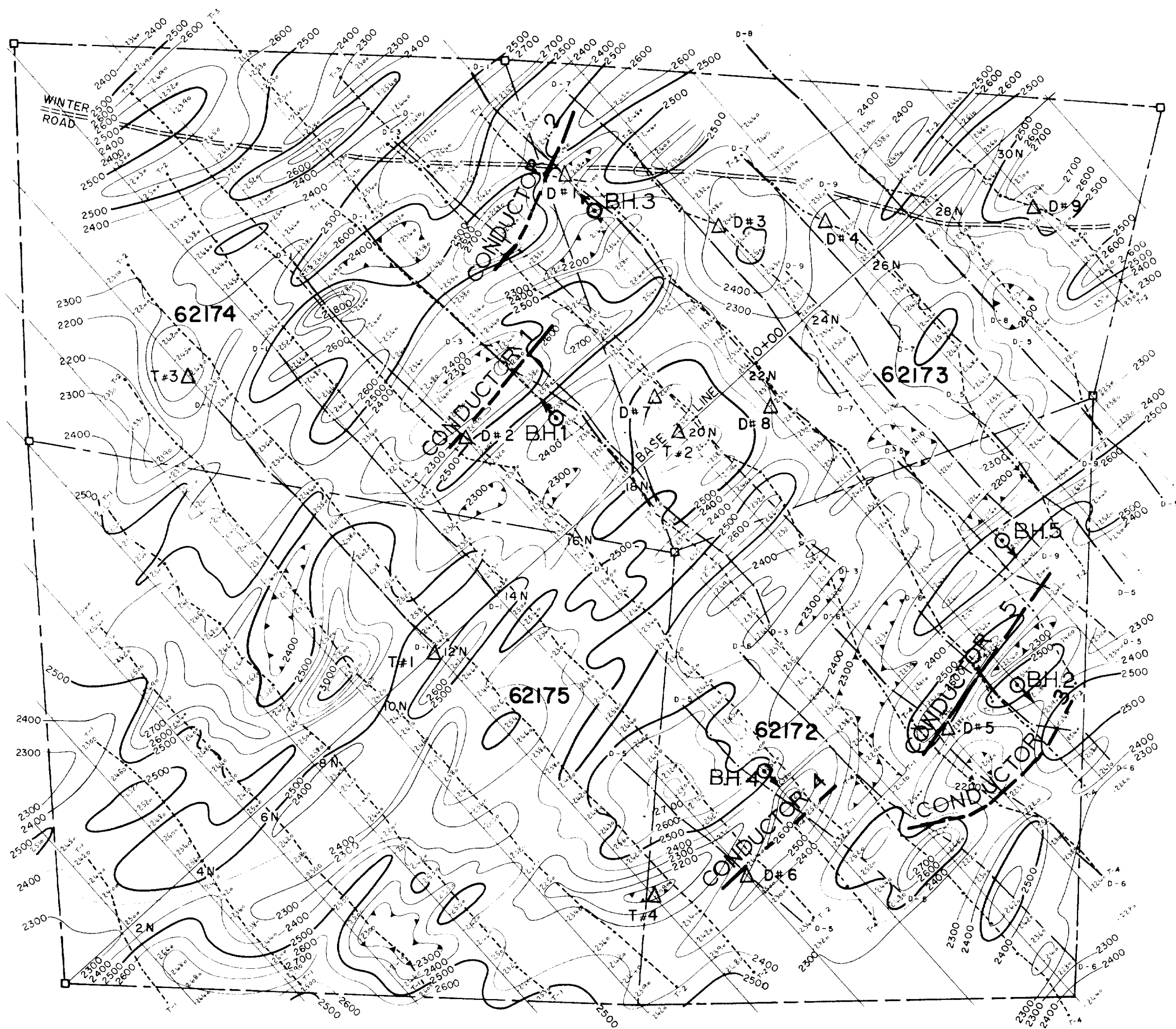
SULMAC EXPLORATION SERVICES LIMITED.

Scale: 1" = 200'

JUNE 1964

*[Signature]*  
July 6, 1964





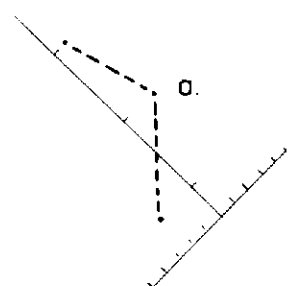
## LEGEND

### MAGNETOMETER SURVEY

Contour Interval 100 gammas.

- 1000, 500 gamma contours.
- 100 gamma contours.
- Reading in gammas.
- Magnetic Depression.

### E.M. SURVEY RECONNAISSANCE



$\Delta$  T#3

--- T-3

— — —

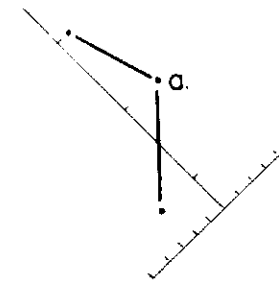
Profile of electromagnetic reading (a.).  
I" = 20° of dip angle.

Electromagnetic transmitter location.

Transmitter location reference.

Conductor axis.

### E.M. SURVEY DETAIL



$\Delta$  D#2

--- D-3

— — —

# NATIONAL EXPLORATION LIMITED

PROSSER TOWNSHIP, ONTARIO

SULMAC EXPLORATION SERVICES LIMITED.

Scale: 1" = 200'

June 1964

*W. R. G. Inc.*  
July 6, 1964

