## OXTARIO

## General

A group of eleven unpatented mining claims in borne Township District of Sudbury, held by this Company under an option agreement with A. Proulx, Timing, Ontario, was surveyed by electromagnetic methods during the months of September and October, 2955. These claims are numbered as follows


Purpose of Survey
The purpose of the survey was to locate electromagnetic conductors that may represent or lead to the discovery of valuable sulphide ores.

Company Conducting Survey
The electromagnetic survey was conducted by technicians employed by Noranda Mines, Limited during the period, September 15 to November 7, 1955. Results of Survey

Tho ronults of tho electromagnetic survey are shown on the map accompanying this report. The receiver coil dip angle readings were taken at 100 foot intervals along north-south traverse lines 400 foot apart. Reading accompanied by the letter s represent a receiver coil dip angle southward and those accompanied by the letter represent a receiver coil dip angle northward. All readings ware taken with the transmitter set up at the location indicated by the number at the and
ot oach line of readinge. At stations whero the signal was too indistinct or inductive interference blanked out the signal, the station 1: narked M.R.

In general the survey rovealed that the aras underiain by the clain gronp is fairly flat electromagnetioally. Two crosesors vere obtained in the northeast portion of the clain group; on that portion over which ilnes were cut at 200 foot intervals.

One crossover, indlcating a conductor between lines 12 s . and 245, at 8 to 900 foet south of the baseline, is rather weak, and no indication of the nature of the conductor could be determined although bedrock is woll exposed in the conductor area. Because of its weakness it is not considered to be significant.

A fairly strong conductor oxtends from line 188. to line 24 E . striking $⿴ 囗 .60^{\circ} \mathrm{E}$. about 500 feet north of the base line. Steoper dip angles on the north side of the indicated conductor suggesta that the conductor dipe northward. As this conductor 1108 in low, wot ground; no indication of the possible nature of the conductor is observable. A series of strong faults trends in this direction from tho southwost portion of the claim group and the conductor is belioved to represent one of these faults. As such conductors due to electrolytic solutions along fault planes are common in $20 w$ wet ground this conductor deacribed above is not deemed worthy of further investigation, which could only bo by diamond driliing.

Onfortunately a zone of varying withe along the C.P.R. railway was unreadable with the instrument because of interference both by faloe results caused by currents induced in steel tracks and fences, and by atatic interforence caused by telegraph and telephone IInes along the right of way. This sone is indicated on the map by stations markod M. R. (no reading).

## Instrument and Sensitirity

The instrument used on the olectromagnetic ourjey wae a Hophar E.X. 1,000 cycle ground unit capable, with the large transmitter used; of a 2,500 foot range. The $\mathrm{E} . \mathrm{X}$. unit ornsists of a tranamittor assumbly and a recoiver assembly.

## Statione Eztabilshod

Eight transaitter stations wore eatablishod, and receiver stations wore set up et 100 foot intervals along traverse ines 400 foet apart. Over the showing nrea in the northeast part of the. property, traxerses were made at 200 foot intervals. For the eight large coil transmitter stations established, 543 receiver stations were established.

General Oeology
The main portion of the claid group is underiain by nodiun to coarso grained gabbro which is intrusive into quartzite of probatle Missisagi age. The quartsite outcrops as narrow strip along the hill facing north toward the railway tracks, and the formation strikes about N. $70^{\circ} \mathrm{g}$. and dips stociply northward. North of this hill, which is a prominent feature of the landscape, the claims are underlain by swamp and stream and a heavy overburden of sand and gravel. No outcrops of bedrock occur north of the railway on the claim group.

RSW:
Reepeotivily submittod,

Bec. 28/55.
R. S. Woolvortion.

## BTATEMEHT OF MORK

## PRODLX OPTIOK

LOREE TONHSEIP
DISTRICF OF 8UDBURI

Line cuttinge chaining and Picketing
Eiler Maki, Northington, Ontario September 26 - October 13, 195526

Instrument Mork
Operator: $\begin{aligned} & \text { R.M. Daridaon, Minnipeg, Kanitoba } \\ & \text { Septenber } 16 \text { - Morember } 1,1955\end{aligned}$
Assiatantz K. Weiler, Sudbury, Ontario
September 16 - November $1,1955: 39$
Consultation and Superviaion
R. S. Woolvorton, Don Mills, Ontario Soptember 15 - November 7, 1955 (equivelent 8 hour days)

## Piold Draughting

R.M. Davidson (equivalont 8 hour days) 3

Office Draughting
B.A. Shaw, Toronto, Ontario November 1-4, 1955 4

Report Preparation
R. S. Woolverton, Don Kills, Ontario Rovember 8 - 9, 1955

Total 8 hour man dajs 118
Aseossment work deys $118 \times 4$ - 472
Assesament work per claim $\quad \frac{472}{11}=\quad 42.9$
Anount submitted per ciain 40

Cortified by


RSW: 8
Goologiat.


See Accompanying Map (s) IDentified as LORNE-OO13-A1 \#1
$\qquad$
$\qquad$
Located in The Map Channel in The following Sequence ( X )



