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2.857
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TEXMONT MINES ITMITED

ELECTROMAGNETIC AND MAGNETOMETRIC SURVEYS

12 CLAIM GROUP

BARTIETT, GEIKIE; DOUGLAS AND McARTHUR TOWNSHIPS

PORCUPINE MINING DIVISION

ONTARIO

## PROPERTY CLATMS ITST

The property consists of 12 contiguous Crown Jand_Mining Claims in the Porcupine Mining Division of Ontario, as follows:
Bartlett Township: P332611-12-13-14-15 and 16.
Geikie Township: P332609 and 10
McArthur Township: P332605 and 06
Douglas Township: P332607 and 08.

## IOCATION AND ACCESSIBIII TY

The property straddles the four comer junction of Bartlett, Geikie, Douglas and McArthur Townships, a distance of 20.5 air miles south-east of the town of Timmins.

Best means of access is by motor vehicle south from Timmins on the Papakomeka Lake - Texmont Mine Road for 27 miles to the Texmont Mine and then due north up a tractor road and walking trail up the Bartlett-Geikie Township boundary for $1 \frac{1}{4}$ miles to the south boundary of the claim group.

## GEOLOGY

The area is underlain by Proterozoic and Archean Rocks of the Precambrian Era. (see O.D.M. maps P631, 632, 745 and 746 which very adequately describe the geology).

The western part of the claims is underlain by volcanic rocks with interflow tuff and sediments including some iron formation. This is followed to the east by basic and ultrabasic rocks which form the northerm extension of the main peridotitic rocks to the south. The whole is intruded by felsic intrusives and diabase.

Nickel is the major economic mineral of the area and is found mainly in all phases of peridotitic rocks as logged, but further studies are underway to possibly more clearly define the favourable tupe of nickelliferous peridotite in the Tinmins Area.

## SUMMARY OF THE ELECTROMAGNETTC SURVEY

The property was gridded with cut, chained and picketed lines run east - west at mostiy 300 foot spacings using the rorthsouth township line between Bartlett and Geikie Townships as a Base Line as well as sub base lines parallel to the main base line.

Instrument used was the McPhar Model SSI5 E.M. Unit with $1000 / 5000 \mathrm{cos}$ frequency utilizing the fixed transmitter method. headings were taken at 100 foot station interyals and all conductive features were resurveyed in additional detail.

Five conductors were detected and are described as follows: Conductor No. 1

A fairly strong conductor with coincident high magnetics traced for 2,600 striking north-west and is caused by banded Iron Formation.

## Conductor No. 2

A weak conductor traced for 2,200 striking north-west. One drill hole intersected sediments with minor sulphides as well as peridotite with minor sulphides.

Conductor probably caused by the sediments and/or the contact with peridotitic rocks with possible accompanying shearing.

Conductor No. 3
A strong conductor traced for 2,300 feet striking northwest which plots over a small stream andswamp. Initial appraisal would attribute the conductor to this surface feature but it also plots along or near the contact of perodititic rocks to the east and felsic intrusive to the west and is quite possibly caused by a serpentinized sheared contact in the ultrabssic rock with possible sulphides.

## Conductor No. 4

This is a weak conductor and is possibly caused by conformable shear in basic rocks.

## Conductor No. 5

This is a medium to weak conductor lying in an area of peridotite and is probably caused by serpentinized peridotite with minor sulphides.

## SUMMARY OF THE MAGNETOMETRIC SURVEY

The survey was carried out over the same line grid as the Electromagnetic Survey using a McPhar Fluxgate Magnetometer Model M700.

Readings were taken at 50 foot station intervals over the entire grid.

Four magnetically high anomalous zones were detected and are described as follows:

Magnetic Zone "A"
This is a narrow linear structurally conformable anomaly which was traced for 1,000 feet striking northwest and is caused by a band of tuff with minor magnetite and pyrrhotite.

## Magnetic Zone "B"

This anomaly lies northeast of Zone "A" and is also long;: and narrow and traced for 3,000 feet, striking north-west conformable to structure and is also probably caused by tuff with minor magnetite and pyrrhotite.

## Magnetic Zone "C"

This is a long narrow anomaly traced for 2,800 feet striking north-west and also structurally conformable and is caused by a bed of bedded Iron Formation rich in magnetite.

Magnetic Zone "D"
This is an area of sporadic magnetic highs in a generally magnetically high area caused by undifferentiated basic and ultrabasic intrusives. The higher anomalies are probably due to the ultrabasic members such as serpentinized durite and peridotite rich in magnetite.

Respectfully submitted,


## 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 $\qquad$ GEOPHYSICAL
Township or Area_BARTLETT/GEIKIE/DOUGLAS/MCARTHUR TWPS
Claim holder (s) $\qquad$ TEXMONT MINES ITMITED

Author of Report
Address C.F. DESSON

1420 Highway \# 8, Willard, Ontario
Covering Dates of Survey Nov.21-Dec. 22/71; Jan.4-15/72.
Total Miles of Line cut
19.6
(includes base lines \& tie lines)

## SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.
ENTER 20 days for each additional survey using same grid.


AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys) Magnetometer $\qquad$ Electromagnetic $\qquad$ Radiometric (enter days per claim)
DATE


SIGNATURE:


PROJECTS SECTION
Res. Geol. $\qquad$ Qualifications This Previous Surveys x. $x$

MINING CLAIMS TRAVERSED List numerically

MacArthur Township (prefix) (number)
P.
P............... 332606

Douglas Township
P...............332607.
P...............332608.

Geipte. Township
. P.
332609.
R................ 332670

Bartlett Township
P.............. 332677
.P................ 332672
P.

332673
P.
P............... 332615

P
332616

Checked by $\qquad$ date $\qquad$

GEOLOGICAL BRANCH $\qquad$

Approved by date $\qquad$

GEOLOGICAL BRANCH


GRAVITY
Instrument
Scale constant
Corrections made

Base station value and location

Elevation accuracy

## INDUCED POLARIZATION - RESISTIVITY

## Instrument



Frequency
Range

Power
Electrode array
Electrode spacing $\qquad$
Type of electrode $\qquad$









