Report on Electromagnetic Survey
LARCHE \& ROUSSEAU PROPERTY
BADEN TOWNSHIP, ONTARID
Larder Lake Mining Division

Introduction :
Ground geophysical work, consisting of an electromagnetic survey, was completed over the entire six-claim Larche \& Rousseau Property located in Baden fownshiog The program was carried out from May 23 to June 2. 1973a

This report and accompanying map describe the survey and gives an interpretation of the results.

Property Description:
The property consists of six unpatented, contiquous, 40 -acre claims (total area of approximately 240 acres) all located in Baden Township, Larder Lake Mining Division, Ontario and are numberad as follows ...

CLAIM NOS.
L. $267332 \& 33$......................... 2 claims
L. 353676-79 inclusive ................. $\frac{4 \quad \text { " }}{6 \text { elaims }}$

At the date of this Report the Recorded holder
of the aforementioned six claims is Mr. John P. Larche, 721 Churchill Street, Timmins, Ontario.

## Location \& Access:

The property is located approximately eight miles northwest of the town of Matachewan, Dntario.

Access to the property cen be gained from Highway 566 via either tractor road (approximately 4.5 miles ) or by canoe ( 3.5 miles ); or via float-equipped aircraft from Porcupine Lake ( 37 miles).

Geology :

The claims are underlain by Keewatin volcenice, cut by later dykes of diabase, syenite and quartz porphyry. Outcrop on the property is sparse.

From 200 ft . west to 400 ft . east at the base line, a series of parallel shears, across widthe ranging from thirty to fifty feet, extend for length of over 500 ft . and cut greenstones and syenite. The shears strike $\mathrm{N} 80^{\circ} \mathrm{E}$ and dip $80^{\circ}$ south; they contain quartz stringers. The wallrock is greatly altered and contains pyrite. Significant gold values have been established in this erea.

Previous Work :

Prior to the geophysicel survey described herein, the only work done on the property has been stripping and trenching.

Electromagnetic Survey:

An east-west base line was cut and chained for control, and north-south pace and compess E.M. survay at 400-foot spacing and 100-foot readings was conducted by J. Larche and A. Rousseau; all readings were taken while facing north.

Type of Inttrument:
A Ronka EM-16 V.L.F. Iectromeonotic unit, was used. The trensmitting station was NoA,A. Cutler, Maine. For detalls of instrument see the attached brochure.

Interpretation of Results:
Only one anomaly of interest was detected ... located from line 4 West to line 12 East. It may be that this anomaly would continue further to the east if it were not for interference from an old abandoned transmission line that traverses the property.

Over said anomaly the In-phase readings indicate - strong crossover, however, the Quadrature does not respond well. Since the anomaly is located in an area of overburden its cause is presently unknown ... it may be due to either topographical effects; conductive shear zones; and/or disseminated sulphides.

In order to aid in evaluating the cause of said anomaly, it is recommended that additional "check surveys" be conducted utilizing either Magnetometer or an Hórizontal Loop Electromagnetic Unit.

Respectfully submitted,


John P. Larch

Timmins, Ontario
August 9, 1973 TECHNIC

Type of Survey___EEOPHYSICAL
Township or Area BADEN TOWNSHIP
Claim holder (s) John P. Larch

Author of Report John P. Larch
Address 721 Churchill St.; Timmins, Ontario
Covering Dates of Survey May 23 rd -August 10th, 1973
Total Miles of Line cut Base Line: 4,345 ft.

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 $\qquad$

DATE: Aug. 9, 1973 SIGNATURE:


PROJECTS SECTION
Res. Geol.
Res. Geol.
Previous Surveys $L, D$.
Premermermer
(enter days per claim) See entry Qualifications $10 / 7 / 1973$

Checked by $\qquad$ date $\qquad$

## GEOLOGICAL BRANCH

$\qquad$

Approved by
date $\qquad$

GEOLOGICAL BRANCH

Approved by
date

## GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS


Accuracy - Scale constant
Diurnal correction method $\qquad$
Base station location $\qquad$

## ELECTROMAGNETIC

Instrument__ Ronk EM-15 VLF Unit
Coil configuration___ (meesure In-phase \& Quadrature)

## Coil separation_ infinite

Accuracy_ $\quad-1 \%$
Method:
[] Fixed transmitter
Shoot backIn line
Parallel line
Frequency_ 17.8 kHz NAA Cutler, Maine (specify V.L.F. station)
Parameters measured $\qquad$ In-Phase \& Quadrature

## GRAVITY

Instrument $\qquad$
Scale constant
Corrections made $\qquad$

Base station value and location $\qquad$

Elevation accuracy
INDUCED POLARIZATION - RESISTIVITY
Instrument $\qquad$
Time domain Frequency domain
Frequency_________________
Power
Electrode array
Electrode spacing
Type of electrode $\qquad$



