

41P11SW0256 2.3846 ASQUITH

010

PATINO MINES (QUEBEC) LIMITED

MAGNETOMETER SURVEY

SHINING TREE I PROJECT

Annett Option
Asquith Township
Shining Tree
Ontario

Larder Lake Mining Division
District of Sudbury
Ontario

Chibougamau (Quebec)
April, 1981

INTRODUCTION

The property, described in this report, consist of 11 contiguous claims held under option by Patino Mines (Quebec) Limited from Mr. R. Annett, Shining Tree, Ontario. All the claims are located within the township of Asquith and are numbered as follows:

L531398	L512386	L531425
L531399	L512387	L531426
L531400	L512388	L531427
L531401	L578736	

A grid was cut over this property during the month of December, 1980 and this was followed by a magnetometer survey, which was conducted during the month of February, 1981.

LOCATION AND ACCESS

The property is located on the south-east and north-west side of highway 560, approximately one kilometer to the north-east of the hamlet of Shining Tree. The highway 560 is the only means of access between the hamlet and Elk Lake, one hundred kilometers to the east and highway 144, forty kilometers to the west.

In addition to highway 560, several bush roads provide access onto the property, however most of these roads are only suitable for four wheel drive vehicles.

TOPOGRAPHY AND GEOLOGY

The physiography of the claim group consists of gently undulating terrain. There are no extensive deposits of glacial till. In general only a thin blanket of humus and glacial till covers the whole area.

The area is mostly underlain by a sequence of early Precambrian metalvolcanic rocks. They are composed mainly of northwest trending metabasaltic flows and pillows with minor flows of felsic to intermediate metavolcanic rocks. The metavolcanic sequence is intruded by a series of feldspar porphyry intrusives.

LINE CUTTING

To facilitate the survey a grid, consisting of 8.1 miles of line, was cut. The grid comprises of a base line, which strikes 325°N and cross lines, which are located at intervals of 400 feet and are perpendicular to the base line. Both the base line and the cross lines have stations, which are marked by means of a picket, at intervals of 100 feet.

MAGNETOMETER SURVEY

The magnetometer survey was conducted using the Sintrex M.P.2. portable proton magnetometer. This magnetometer is known as nuclear precession magnetometer and measures the total magnetic field. The instrument utilizes the property of some nuclei which have a net magnetic moment which, coupled with their spin, cause them to precess about an axial magnetic field. The magnetometer depends on the measurement of the free-precession frequency of protons (hydrogen nuclei) which have been polarized in a direction approximately normal to the terrestrial field.

The proton source is a small bottle of hydrocarbon fluid. The polarizing field is obtained by passing direct current through a solenoid which is wound around the bottle. When the solenoid current is abruptly cut off, the proton precession about the earth's magnetic field is detected as a transient voltage building up and decaying over an interval of about three seconds duration, modulated by the precession frequency.

The modulation signal is amplified to a suitable level and the frequency is measured.

Readings were taken at intervals of hundred feet along the base line and fifty feet along the cross lines. The readings along the base line served as standard by which each of the cross line results were corrected to compensate for diurnal variations of the local magnetic field. A total of 679 stations were read.

INTERPRETATION OF THE MAGNETOMETER SURVEY RESULTS

The survey has indicated that there are three distinctive magnetic anomalies which traverse the property in an approximately south-east to northwest direction. The first of these anomalies is situated on claims L512386 and L512387, the second on claims L531399 and 531400 and final anomaly on claims L578736, L531400 and L531427.

These magnetic anomalies appear to correspond with the general strike of the country rocks. They may therefore represent magnetic variations within the different lithological units of the volcanic sequence.

In addition to the three main trends there are also several minor anomalies, in the western half of the claim group. These too may be the result of lithological variations.

CONCLUSIONS AND RECOMMENDATIONS

It is difficult to interpret the results of this survey without a detailed knowledge of the geology underlying the claim group. A geological mapping program therefore should be conducted over the property in order that an appropriate interpretation may be undertaken.

A P P E N D I X I

Professional Qualifications

Mr. David Roger Scammell, B.Sc.

- Graduated University of London, England, 1970
- Member of the Prospectors and Developers Association
- 1970 - 1972: Worked for the International Nickel Company of Canada Limited (Thompson, Manitoba) as a grade control geologist.
- 1972 - 1973: Worked for McIntyre Porcupine Coal Mines Limited (Grand Cache, Alberta) as an exploration and structural geologist.
- 1973: Joined Patino Mines (Quebec) Limited Chibougamau, Quebec). Present position is a Senior Exploration Geologist and have worked on various properties in Ontario and Quebec.

D. R. Scammell

D.R. Scammell, B.Sc.

Chibougamau, Quebec

April 7th, 1981



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(s) MAGNETOMETER
 Township or Area ASQUITH
 Claim Holder(s) PATINO MINES (QUE) LTD.
C.P. 8000, CHIBOUGAMAU, QUE.
 Survey Company PATINO MINES (QUE) LTD.
 Author of Report MR. D. R. SCAMMELL
 Address of Author C.P. 8000, CHIBOUGAMAU, QUE. 801221
 Covering Dates of Survey DEC. 1980 To FEB. 1981
 (linecutting to office)
 Total Miles of Line Cut 8.1

MINING CLAIMS TRAVERSED List numerically	
L (prefix)	531398 ✓ (number)
L	531399 ✓
L	531400 ✓
L	531401 ✓
L	512386 ✓
L	512387 ✓
L	512388 ✓
L	578736 ✓
L	531425 ✓
L	531426 ✓
L	531427 ✓
TOTAL CLAIMS <u>11</u>	

If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	-Electromagnetic _____
ENTER 20 days for each additional survey using same grid.	-Magnetometer <u>40</u>
	-Radiometric _____
	-Other _____
	Geological _____
	Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
 (enter days per claim)

DATE: 10TH APRIL 1981 SIGNATURE: D. R. Scammell
 Author of Report or Agent

Res. Geol. _____ Qualifications 23518

Previous Surveys

File No.	Type	Date	Claim Holder
			L.D.

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations ~~519~~ 337 Number of Readings 679
Station interval 100 feet Line spacing 400 feet
Profile scale
Contour interval 400 gammas

MAGNETIC

Instrument Sintrex M.P. 2.
Accuracy - Scale constant + or - 1 gamma
Diurnal correction method Using base line as standard to correct readings
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

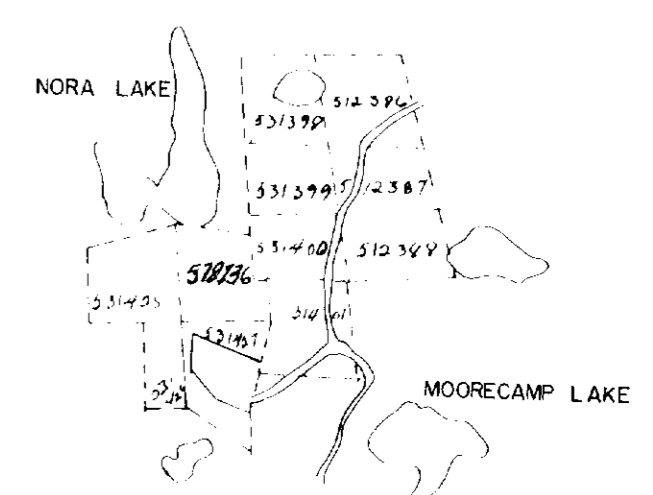
Instrument
Coil configuration
Coil separation
Accuracy
Method: [] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency (specify V.L.F. station)
Parameters measured

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

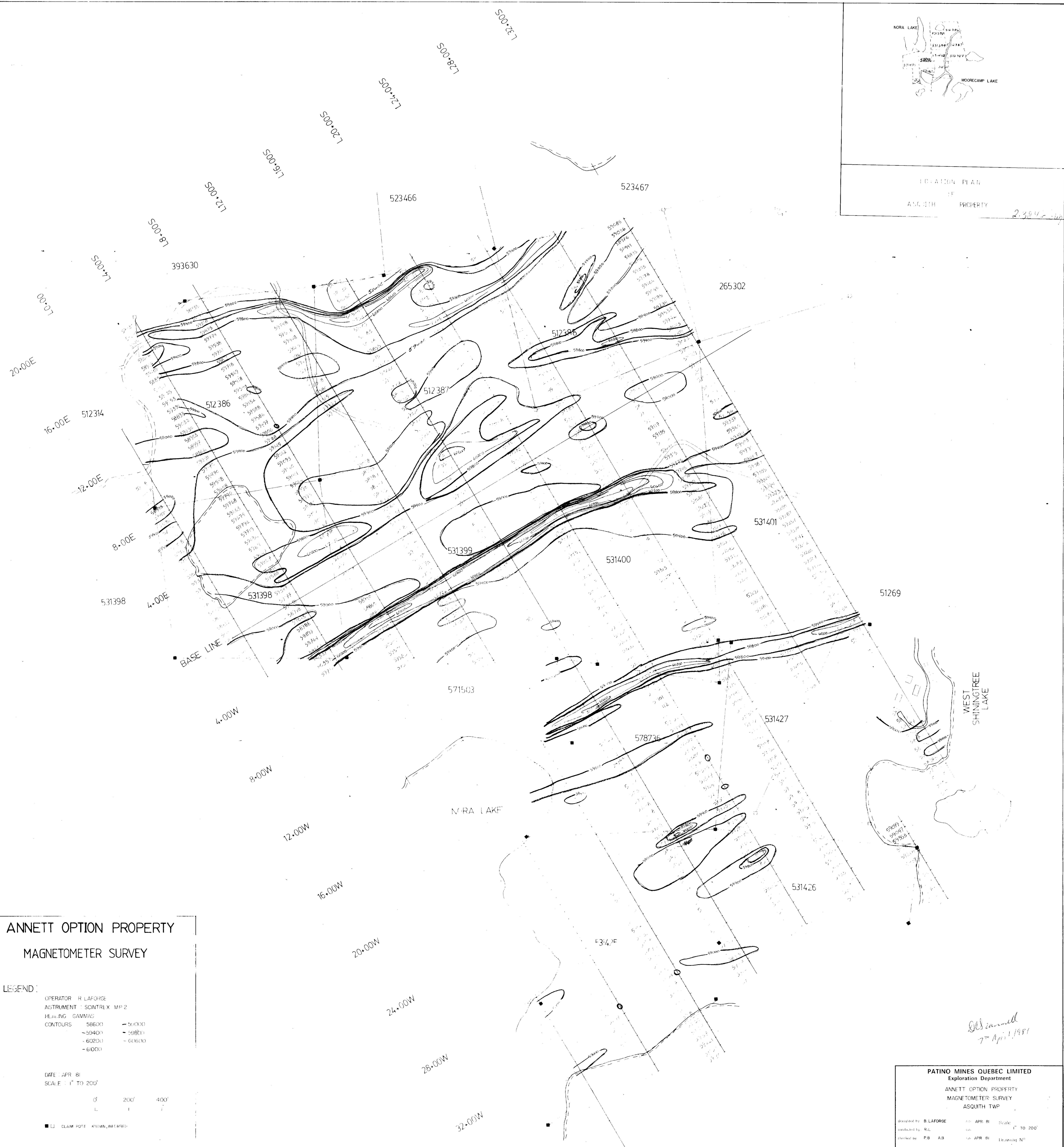
INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode



EDUCATION PLAN
OF
ANQUITH PROPERTY

2394



**ANNETT OPTION PROPERTY
MAGNETOMETER SURVEY**

LEGEND:
 OPERATOR R. LAFORGE
 INSTRUMENT SCINTREX MP 2
 MEASURING GAMMAS
 CONTOURS 58600 - 59000
 -59400 - 59800
 -60200 - 60600
 -60000
 DATE APR 81
 SCALE 1" TO 200'
 0' 200' 400'
 ■ CLAIM POST KNOWN UNREPEATED

Oldham
7th April 1981

PATINO MINES QUEBEC LIMITED
 Exploration Department
 ANNETT OPTION PROPERTY
 MAGNETOMETER SURVEY
 ANQUITH TWP
 Drawn by B. LAFORGE 10 APR 81 Scale 1" TO 200'
 Checked by R.L. 11 APR 81
 Checked by P.B. AB 12 APR 81 Drawing No.

