



EAGLEROCK LAKE GROUP  
SCHOLES TOWNSHIP  
DISTRICT OF TEMISKAMING  
ONTARIO

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General

A group of thirty-eight unpatented mining claims in Scholes Township, District of Temiskaming, staked by employees of this Company in June, November and December, 1955, was surveyed by magnetic and electromagnetic methods during the months of November, 1955 - June, 1956. These claims are numbered as follows:

T.36503-4-5-6

T.36978-9-80-1-2-3-4-5-6-7-8-9-90-1-2-3-4-5-6-7-8-9

T.37000-1-2

T.37238-9-40-1-2-3-4-5-6

Purpose of Survey

The purpose of the survey was to locate magnetic anomalies and electromagnetic conductors that may represent or lead to the discovery of valuable sulphide ore.

Company Conducting Survey

The dip needle and electromagnetic surveys were conducted by technicians employed by Noranda Mines, Limited and Crone Geophysics during the period November 18, 1955 - June 27, 1956.

Results of Electromagnetic Survey

The results of the electromagnetic survey are shown on the map accompanying this report. The receiver coil dip angle readings were taken at 100 foot intervals along east-west traverse lines 400 feet apart over the whole property (except water) and 200 feet apart over an area of about one claim in the showing area. Readings indicated as + (positive) represent a receiver coil dip angle to the right, and readings indicated as - (negative) represent a receiver coil dip angle to the left. All readings were taken with the transmitter set up at the location indicated

by the number at the end of each line of readings.

Following is the discussion of results supplied to this Company by Crone Geophysics.

"Electro Magnetic Survey Report  
Eagle Rock Lake Property.

Part "A"

Conductors (1) and (2) occur in mineralized, graphitic, iron formation. They are weak conductors most likely representing the graphite.

Conductors (3) and (4) are similar in that they have the same strike, are associated with strong magnetic highs and occur entirely within the porphyry. Further exploration of these anomalies is recommended.

Conductor (5) follows the porphyry diabase contact and is most likely caused by graphite in a small band of iron formation which also follows the contact.

Part "B"

The detailed region west of the camp contains a multitude of strong conductors. Conductors (1) and (2) are long, strong and appear to be connected with some major structure which could be faulting or iron formation.

Numerous short strong conductors occur at the end of conductors (1) and (2) generally striking N.30 to 60 E. These conductors are undoubtedly connected with the numerous pyrrhotite bands shown in the trenches and correspond with the general strike of the iron formation.

Other conductors shown in the area are weak and generally associated with the iron formation.

Further exploration should be concentrated on the (1) and (2) conductors."

Instrument and Sensitivity

The instrument used on the electromagnetic survey was a 500 watt - 1,000 cycle unit capable of a 1,500 foot range. This provides a  $10^0$  null at 1,500 feet. The E.M. unit consists of a transmitter assembly and a receiver assembly.

Stations Established

A total of 1,237 receiver stations were established, and 18 transmitter stations were set up. Twenty-four and one half miles of line was cut on the land area of the claim group, and 4.48 miles of grid was established on the lakes for winter work.

### Dip Needle Survey

The results of the dip needle survey are shown on the map accompanying this report. This survey was done previous to the electromagnetic survey, and assisted in the interpretation of this survey and the geological survey.

In general the area underlain by Eaglerock Lake and the land area south of the south boundary of 36,992 is flat magnetically, ranging from 0° to 5° dip, the general trend is for larger overall dips to occur on the north portion of the property.

Most of the anomalies obtained in the claim group can be attributed to the pyrrhotite-bearing iron formations which are most extensively developed in the area west of the camp on Eaglerock Lake, and in the far northwest corner of the claim group.

On lines 92 N. and 112 N., about 4-500 feet east of the base line, isolated anomalies occur in an area underlain by feldspar porphyry intrusive. A small vein of magnetite was noted near the location of the anomaly on line 92 N.

### Instrument and Sensitivity

The instrument used on the dip needle survey was a Sharp Super dip unit having a sensitivity of about 100 gammas per scale division. All readings were taken on the swing. The instrument was slightly adjusted to read zero at 54 N. 1150 E.

### Stations Established

A total of 2,828 instrument stations were established. In addition to the 24.5 miles of line cut for the E.M. and dip needle surveys on land a grid totalling 4.48 miles of line was established on the ice surface of the lake.

General Geology

The property is underlain by Keewatin type greenstones and iron formation, Huronian sediments, and by feldspar porphyry, and Nipissing diabase intrusives.

The Keewatin rocks, altered basic and intermediate volcanics and at least two bands of siliceous iron formation strike east-west across the north part of the group, and generally north-south in the eastern portion west of Eaglerock Lake. They there form a large fold, but because of the lack of structural (top determination) data it is not possible to tell whether it is a syncline or anticline.

Unconformably overlying the Keewatin rocks the Huronian conglomerate, greywacke, and quartzite are best exposed around the west shore of Eaglerock Lake near and on the island.

Quartz and feldspar porphyry intrusives cut the Keewatin rocks, notably in the north portion of the group, but the relationship with the Huronian sediments are unknown as nowhere were the two formations seen in contact.

Nipissing diabase outcrops as prominent steep-sided, flat-topped hills, and is a capping over much of the older rocks. It represents a flat-lying dyke, but nowhere were older rocks seen on the upper surface, so its original thickness is not known.

In general the property has a medium to heavy covering of glacial debris, and outcrops are relatively scarce.

Respectfully submitted,



E. S. WOOLVERTON  
GEOLOGIST.

RSW:s  
Aug. 27/56.

STATEMENT OF WORK  
GEOPHYSICAL SURVEY  
EAGLEROCK LAKE GROUP

<u>Line Cutting, Picketing, Chaining</u>			
Eiler Maki, Worthington, Ont.	Nov. 18 - Dec. 20, 1956	32	
Wayne Cameron, Worthington, Ont.	Nov. 18 - Dec. 20, 1956	32	
Leo Turcotte, Ottawa, Ont.	Apr. 1 - May 5, 1956	35	
G. Lafleche, Trout Creek, Ont.	Apr. 1 - May 5, 1956	<u>35</u>	134
<u>Instrument Work</u>			
W.H. Reed, Sault Ste. Marie, Ont.	Jan. 5 - Feb. 15, 1956	40	
G. Lafleche, Trout Creek, Ont.	Jan. 5 - Feb. 15, 1956	40	
R. McCullough, Toronto, Ont.	May 1 - June 22, 1956	52	
G. Lalievre, Toronto, Ont.	May 1 - June 22, 1956	52	
W. Woychuk, Toronto, Ont.	May 15 - June 22, 1956	<u>37</u>	<u>221</u>
			355
<u>Consultation and Supervision</u>			
R.S. Woolverton, Don Mills, Ont.	Nov. 30 - June 27, 1956 (Equivalent 8 hour days)		15
D. Crone, Cooksville, Ont.	Jan. 1 - June 27, 1956 (Equivalent 8 hour days)		15
<u>Field Draughting</u>			
W. Woychuk, Toronto, Ont.	May 15 - June 22, 1956 (Equivalent 8 hour days)		9
<u>Office Draughting</u>			
C. King, Toronto, Ont.	Mar. 22 - June 27, 1956 (Equivalent 8 hour days)		19
<u>Report Preparation</u>			
R.S. Woolverton, Don Mills, Ont.	Nov. 30 - June 27, 1956		4
D. Crone, Cooksville, Ont.	Jan. 1 - June 27, 1956		<u>4</u>
	Total 8 hour man days		<u>421</u>

Assessment work days  $\frac{421 \times 4}{38} = 44$  days per claim

Amount submitted per claim 40

Certified by



R.S. Woolverton,  
Geologist.

RSW:s

Aug. 23/56.

NUMBER

NAME

Eaglerock Lake property of Noranda Mines Ltd.

LOCATION

Scholes township - Eaglerock Lake, T 36503 to 36506  
T 36978 to 37002  
T 37238 to 37246

OWNERSHIP

Noranda Mines Ltd.

PRINCIPAL METALS PRESENT

Copper

DEVELOPMENT

Test pits and trenches; electromagnetic and magnetic surveys; geological surveying.

GEOLOGY

Mineralized zones in siliceous iron formation in Kewatin-type greenstones. Main zone is 300 feet long and from 2 to 30 feet wide. Mineralization consists of pyrite, pyrrhotite, low chalcopyrite, minor chalcocite.

PRODUCTION

(Production figures, if any, will be supplied by the Ontario Department of Mines Statistician)

ORE RESERVES OR DIMENSIONS

AND GRADE OF BODIES

No copper ore indicated to date. Mineralization over 300 feet, varies from 2 to 30 feet wide. Best channel sample 0.51% Cu over 3 feet. At north end channel sample average 0.20% Cu over 28 feet.

SELECTED REFERENCES

REMARKS

Further work by Noranda directed toward drilling of E.M. anomaly.

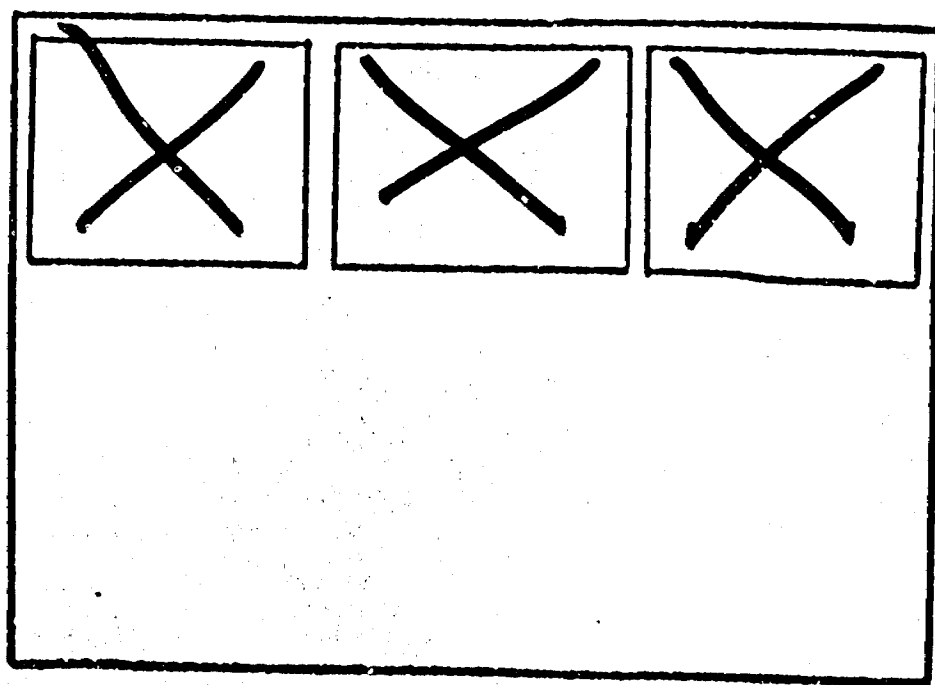
(Signed) *R.M. Salvestro*

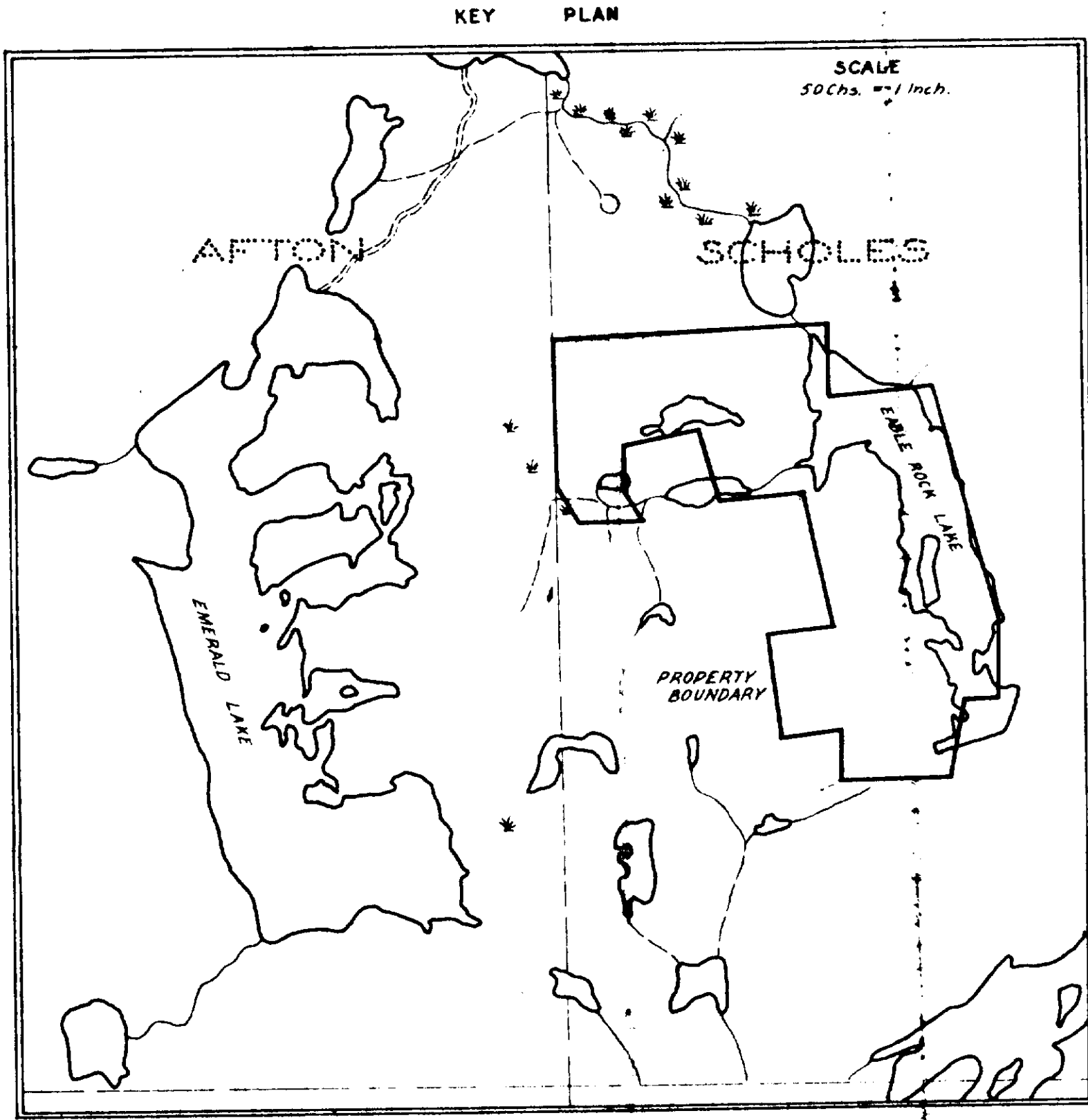
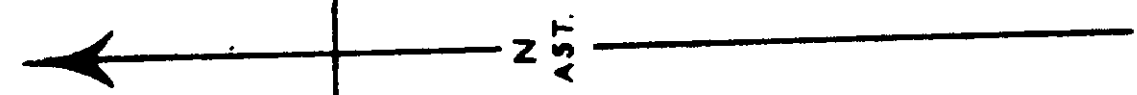
Please return to:

Resident Geologist,  
Ontario Department of Mines,  
Box 48,  
Swastika, Ontario.

SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS  
SCHOLES-0020-A1-#1  
#2  
#3

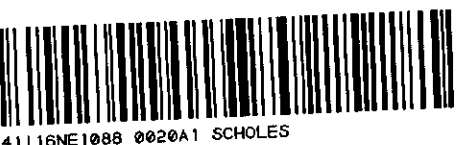
LOCATED IN THE MAP  
CHANNEL IN THE FOLLOWING  
SEQUENCE (X)



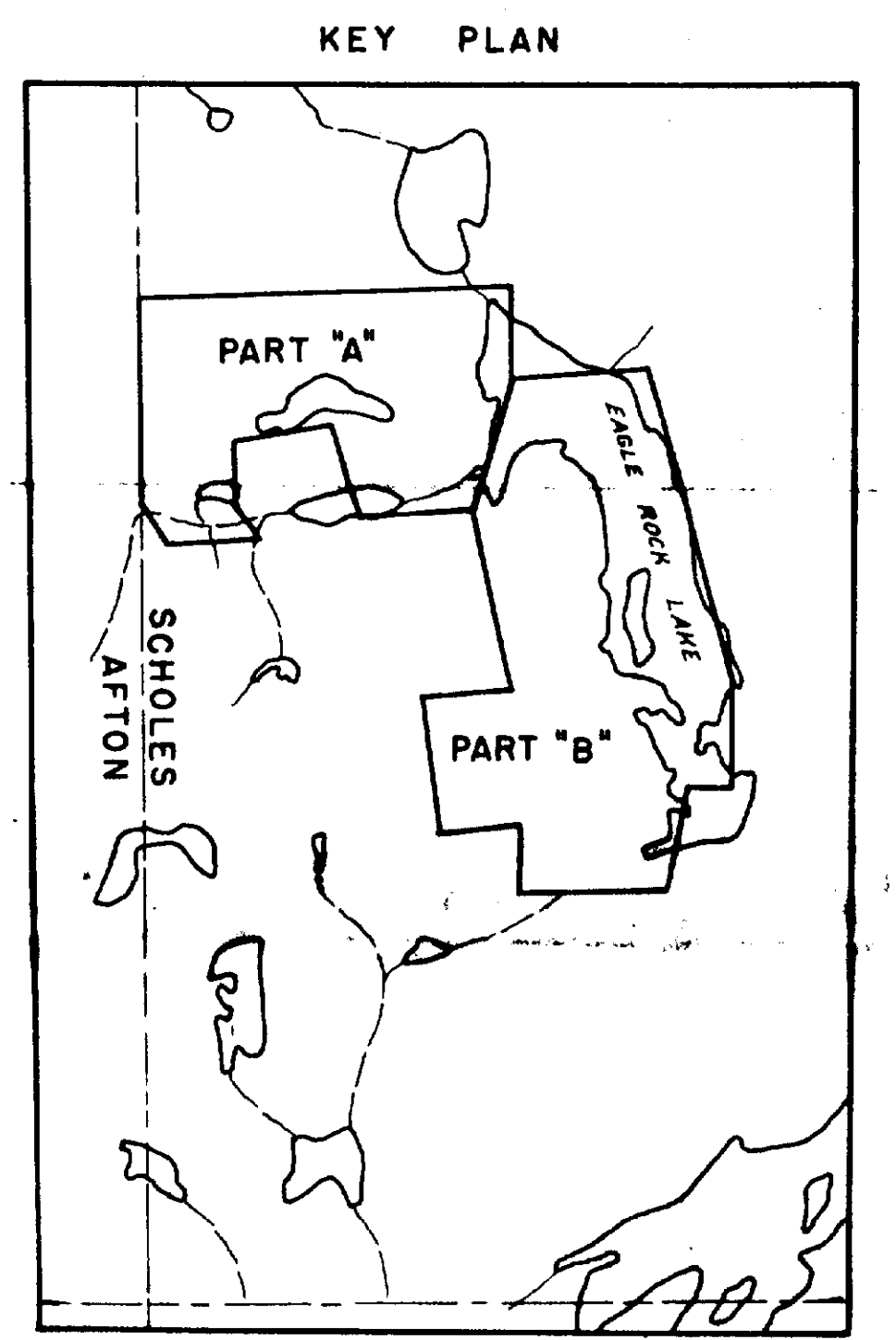
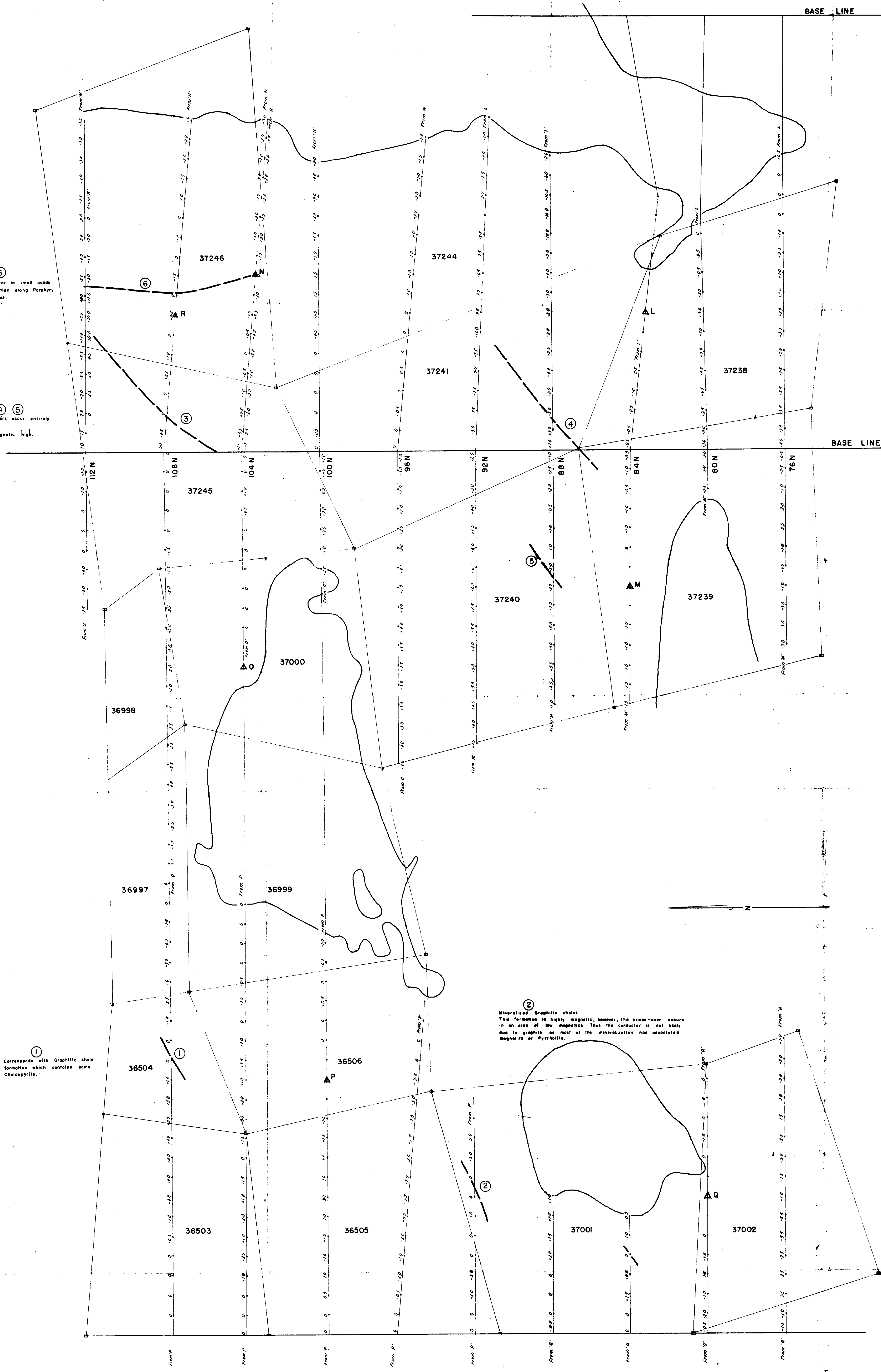


NORANDA MINES LTD.  
**EAGLE ROCK LAKE GROUP**  
DIP NEEDLE SURVEY  
SCALE  
1 Inch = 400 Feet

SCHOLLES-0020-A1-#1



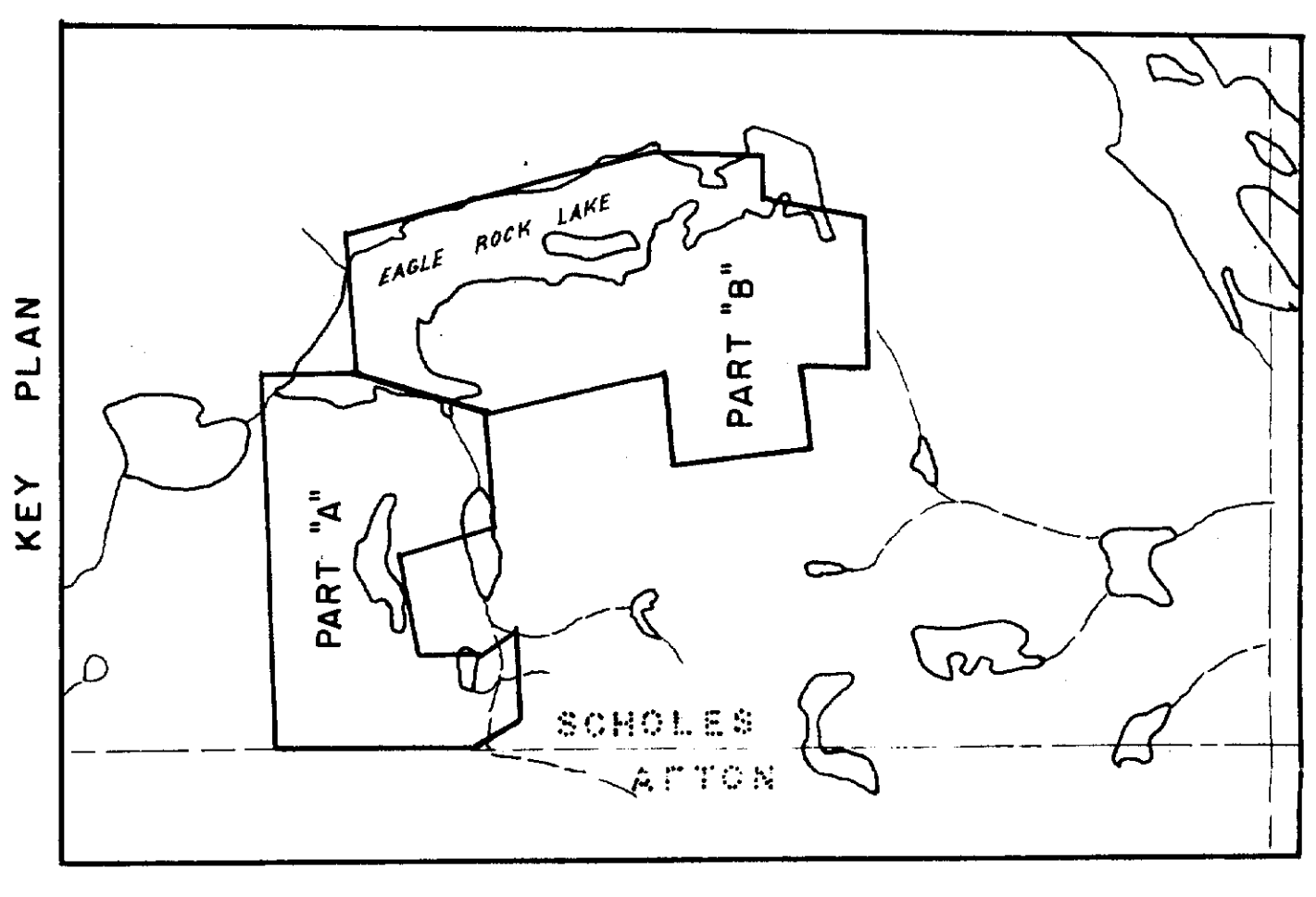




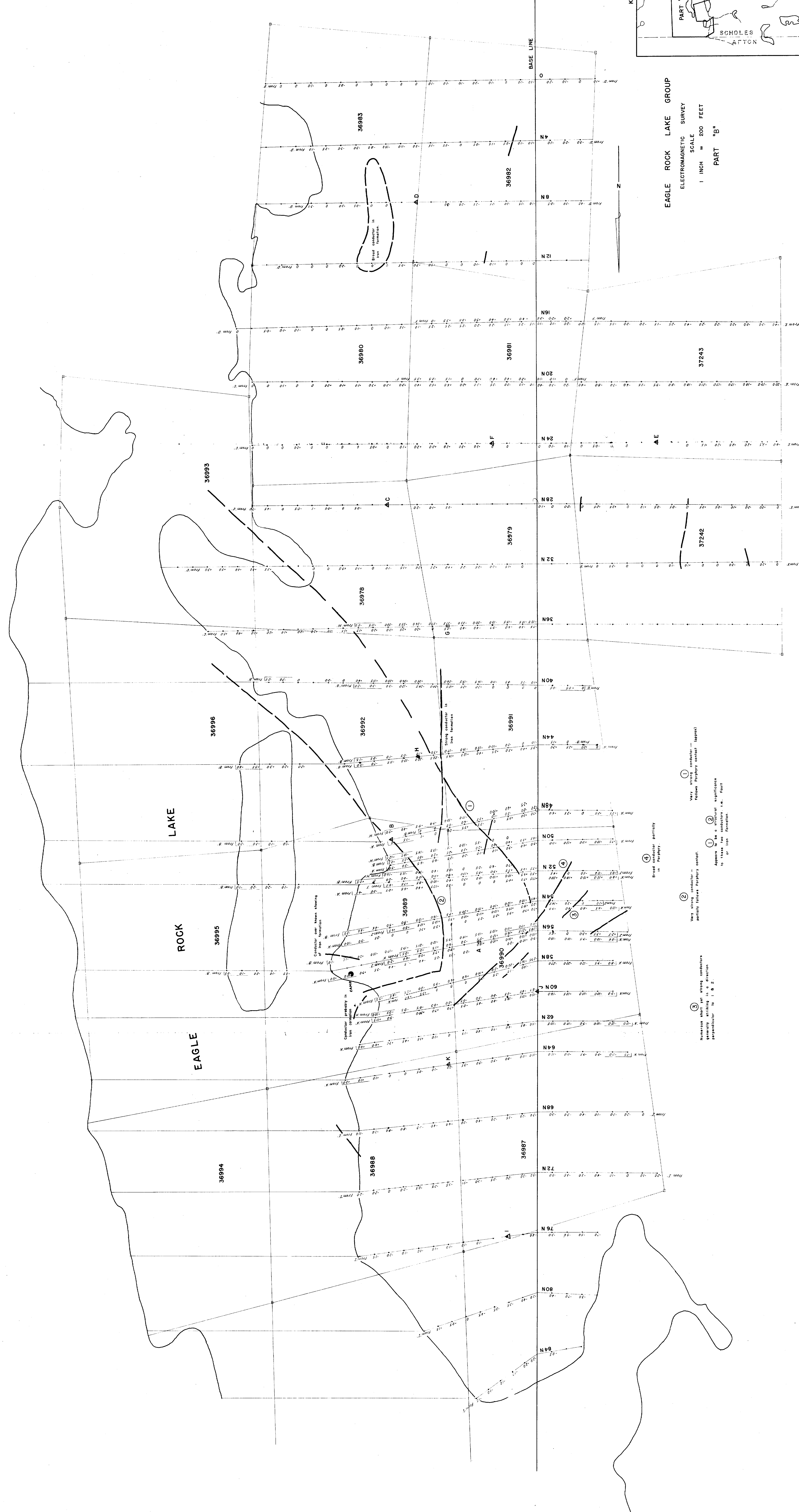
EAGLE ROCK LAKE GROUP  
ELECTROMAGNETIC SURVEY  
SCALE  
1 INCH = 200 FEET  
PART "A"

SCHOLES-0020-A1-72





EAGLE ROCK LAKE GROUP  
ELECTROMAGNETIC SURVEY  
SCALE  
1 INCH = 200 FEET  
PART "B"



- Notes:
- ① Very strong conductor - usually follows property contact.
  - ② Weak conductor - usually follows property contact.
  - ③ Numerous small but strong conductors randomly scattered in a direction perpendicular to 1, 2 & 3.
  - ④ Areas with no conductors, i.e., flat of iron formation.

