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REPORT

COVERING

MAGNETIC AND ELECTROMAGNETIC SURVEYS

Post Lake Claim Group - Kennco Option

STURGEON LAKE AREA, PATRICIA MINING DIVISION, ONTARIO

CLAIMS: 52

MAPS: 2

SURVEYS: - Magnetic - Sharpe MF-2 Fluxgate
- Electromagnetic - Sharpe SE-600 Vertical loop Broadside.

MAGNETIC AND ELECTROMAGNETIC SURVEYS

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- Electromagnetic - Sharpe SE-600 Vertical Loop Broadside

MAPS: 2

LOCATION AND ACCESS:

The claim group is situated on the northeast shore of Post Lake. Access is via bush plane or the winter road from the Mattabi Mine on Abitibi block #7, or via bush road south from Sturgeon Lake. The claims are a portion of a large contiguous group extending from Post Lake to Quest Lake. The claim numbers covered by the surveys and this report are as follows: 227640 to 227643, 227953 to 227959, 227960, 227961, 227963, 227964, 227965, 227969 to 227984, 243401, 243402, 243412 to 243416, 243419 to 243422, 243425 to 243427, 244442, 246763 to 246765 and 246770, 246771. Total number of claims 52.

PREVIOUS WORK AND REPORTS:

Maps

Ontario Department of Mines	Bell Lake Sheet	#1117G
Ontario Department of Mines	Sioux Lookout	#2169

The government airborne magnetic map has a strong magnetic high underlying Post Lake and another magnetic high 1 1/2 miles northwest of

Post Lake. The high under Post Lake is probably due to iron formation within a sedimentary band shown on the geological map as underlying and along the northeast shore of Post Lake. The remaining claim group area is mapped as being predominately andesite.

LINECUTTING:

A 400' line interval grid was cut under contract to George Potter of Kirkland Lake, Ontario. A total of 51 miles of line were cut during the period January 15 to April 1, 1970.

GEOPHYSICAL EQUIPMENT, METHOD AND OPERATORS:

Both surveys were carried out by Garnet Flaherty of Bracebridge, Ontario during the period June 20 to September 25, 1970.

Magnetic Survey - A Sharpe MF-2 Fluxgate magnetometer was used measuring the vertical component of the earth's magnetic field directly in gammas, with an accuracy of $\pm$ 10 gammas. Normal survey procedures of setting up base stations and correcting for drift were carried out. Total number of stations 2267.

Electromagnetic Survey - A Sharpe SE-600 EM unit was used with the vertical loop, broadside method and a Tx to Rx coil separation of 400'. The dip angle of the resultant field was measured in degrees. Frequency is 1600 Hz. Some detail work using the fixed transmitter method and the same equipment was also carried out over anomalous areas. Total number of stations 2407.

INTERPRETATION:

Five strong conductors marked A, B, C, D, & E, were detected along with several weak anomalies. Two strongly magnetic areas produced reverse anomalies.

Conductor A - Length 1600', dip approximately vertical, no magnetic correlation. A proposed test drill hole should be collared on line 98W, 16+00S drilling grid south at -45° for 400'.

Conductor B - Length 1200', dip approximately vertical, no magnetic correlation. This conductor is on strike with "A" and has the same characteristics. Proposed test drill hole to be collared on line 138W, 15+00 south, drilling grid south at -45°.

Conductor C - This conductor is strong for 1000' and continues on as a weak anomaly to the west. It occurs in a broad magnetic low caused by a strongly magnetic formation 800' to the north. A proposed test drill hole should be collared on line 158W, 24+00N and drilling grid north at -45° for 400'.

Conductor D - Length 800 open to the east, no magnetic correlation. A proposed test drill hole should be collared on line 54W 24+00 south, drilling grid south at -45° for 400'.

Conductor E - Length 3000' and may continue eastword as a weaker anomaly. This conductor has consistent magnetic correlation in the order of 200 gammas. It is weaker than the other anomalies perhaps due to heavier overburden. A proposed test drill hole should be

collared on line 74W at 17+00 north drilling grid south at -45° for 400'.

Respectfully submitted,

REGISTERED PROFESSIONAL ENGINEER
J. D. CRONE
PROVINCE OF ONTARIO

J. Duncan Crone, B.A., P.Eng.
Geophysicist.
October 16, 1970.

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SPECIAL PRO...

ASSESSMENT WORK DETAILS

Type of Survey: Magnetometer
A separate form is required for each type of survey

Chief Line Cutter or Contractor: —
Name

Party Chief: G. Flaherty — Address: Bracebridge, Ontario
Name

Consultant: J.D. Crone, — Address: 3607 Wolfedale Road, Mississauga, Ontario.
Name

COVERING DATES Line Cutting: —

Field Geology or Geophysics: June 20 to September 25, 1970

Office: October 1 to October 16, 1970.

INSTRUMENT DATA Make, Model and Type: Sharpe MF-2 Fluxgate

Scale Constant or Sensitivity: S. Constant 20 gamma; Sensitivity ± 10 gammas

Or provide copy of instrument data from Manufacturer's brochure.

Total Number of Stations Within Claim Group: 2267

Number of Miles of Line cut Within Claim Group: —

ASSESSMENT WORK CREDITS REQUESTED

Geological Survey: ____ Days per Claim

Geophysical Survey: 20 Days per Claim

MINING CLAIMS TRAVERSED

PA-227640 to 227643 incl; PA-227953 to 227961 incl; PA-227963 to 227965 incl; PA-227969 to 227984 incl; PA-243401; PA-243402; PA-243412 to 243416 incl; PA-243419 to 243422 incl; PA-243425 to 243427 incl; PA-246442; PA-246763 to 246765 incl; PA-246770; PA-246771.

52 claims

TOTAL

REGISTERED PROFESSIONAL ENGINEER
J. D. CRONE
PROVINCE OF ONTARIO

DATE October 21, 1970 SIGNED

Special provision credits do not apply to Radiometric Surveys.

SPECIAL PROVISION

ASSESSMENT WORK DETAILS

Type of Survey Electromagnetic
A separate form is required for each type of survey

Chief Line Cutter or Contractor C. Potter (Name) Kirkland Lake, Ontario (Address)

Party Chief G. Flaherty (Name) Bracebridge, Ontario. (Address)

Consultant J.D. Crone, (Name) 3607 Wolfedale, Road, Mississauga, Ontario. (Address)

COVERING DATES Line Cutting January 15 to April 1, 1970

Field Geology or Geophysics June 20 to September 25, 1970

Office October 1 to October16, 1970

INSTRUMENT DATA Make, Model and Type Sharpe SE-600 Unit-Vetical Loop Broadside.

Scale Constant or Sensitivity Dip Angle of Resuttant Field to 1/2 degree

Or provide copy of instrument data from Manufacturer's brochure.

Total Number of Stations Within Claim Group 2407 Number of Miles of Line cut Within Claim Group 51

ASSESSMENT WORK CREDITS REQUESTED

Geological Survey____ Days per Claim

Geophysical Survey 40 Days per Claim

MINING CLAIMS TRAVERSED

PA-227640 to 227643 incl; PA-227953 to 227961 incl; PA-227963 to 227965 incl; PA-227969 to 227984 incl; PA-243401; PA-243402; PA-243412 to 243416 incl; PA-243419 to 243422 incl; PA-243425 to 243427 incl; PA-245442; PA-246763 to 246765 incl; PA-246770; PA-246771.

52 claims

TOTAL

REGISTERED PROFESSIONAL ENGINEER J. D. CRONE PROVINCE OF ONTARIO

DATE October 21, 1970 SIGNED H. Flaherty

Special provision credits do not apply to Radiometric Surveys.

ONTARIO

PROJECTS SECTION — DEPARTMENT OF MINES AND NORTHERN AFFAIRS — FILE: 2.213

TECHNICAL ASSESSMENT WORK CREDITS

Recorder Holder: Mr. Leslie Scott, Mr. Gordon Houston and Mr. George Potter

Township or Area: Quest and Sixmile Lakes Areas

Type of Survey and number of Assessment Days Credits per claim	
GEOPHYSICAL	Airborne ☐ Ground ☒
Magnetometer	17.6 days
Electromagnetic	35 days
Radiometric	days
GEOLOGICAL	days
GEOCHEMICAL	days
SECTION 84 (14)	days
Special Provision ☒	Man days ☐

NOTICE OF INTENT TO BE ISSUED

☒ Credits have been reduced because of partial coverage of claims.

☐ Credits have been reduced because of corrections to work dates and figures of applicant.

☐ NO CREDITS have been allowed for the following mining claims as they were not sufficiently covered by the survey:

_____

_____

_____

_____

_____

Mining Claims

PA. 227640 to 43 Inclusive
227953 to 61 Inclusive
227963 to 65 Inclusive
227969 to 84 Inclusive
243401 - 02
243412 to 16 Inclusive
243419 to 22 Inclusive
243425 to 27 Inclusive
245442
246763 to 65 Inclusive
246770 - 71

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical – 80; Geological – 40; Geochemical – 40;

AREA CODE — 416
TELEPHONE — 365-6918

ONTARIO

WHITNEY BLOCK,
QUEEN'S PARK
TORONTO 182, ONT.

DEPARTMENT OF MINES AND NORTHERN AFFAIRS
MINING LANDS BRANCH

April 21st, 1971.

Mr. W.A. Buchan,
Mining Recorder,
Court House,
Sioux Lookout, Ontario.

Re: Mining Claims PA. 227640 et al,
Quest and Sixmile Lakes Areas,
File No. 2.213

Dear Sir:

The Geophysical (Magnetometer and Electromagnetic) assessment work credits as listed with my Notice of Intent dated April 6th, 1971, have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Matthews,
Supervisor,
Projects Section.

c.c.Mr. George Potter,

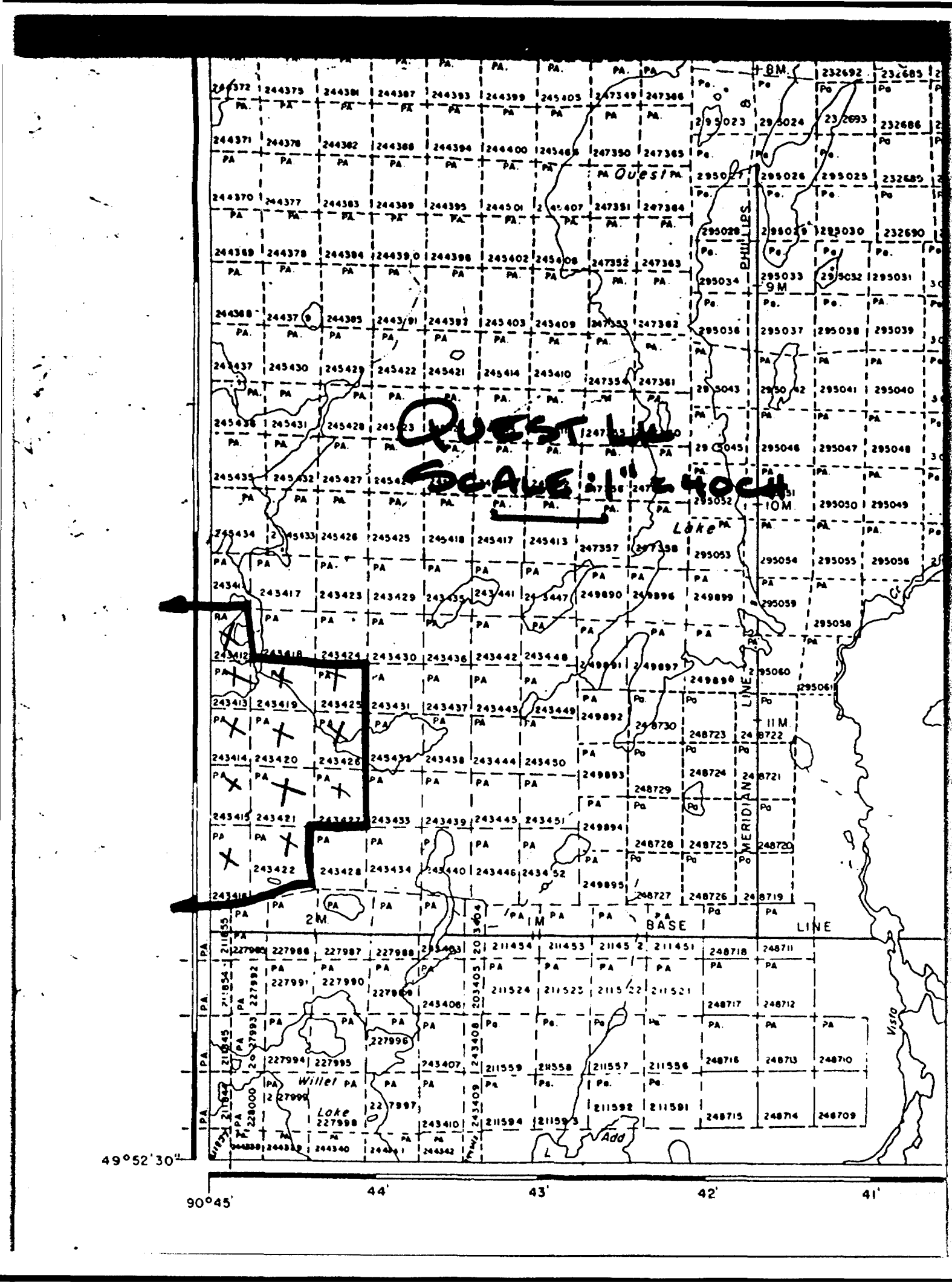
c.c.Mr. G. Houston,

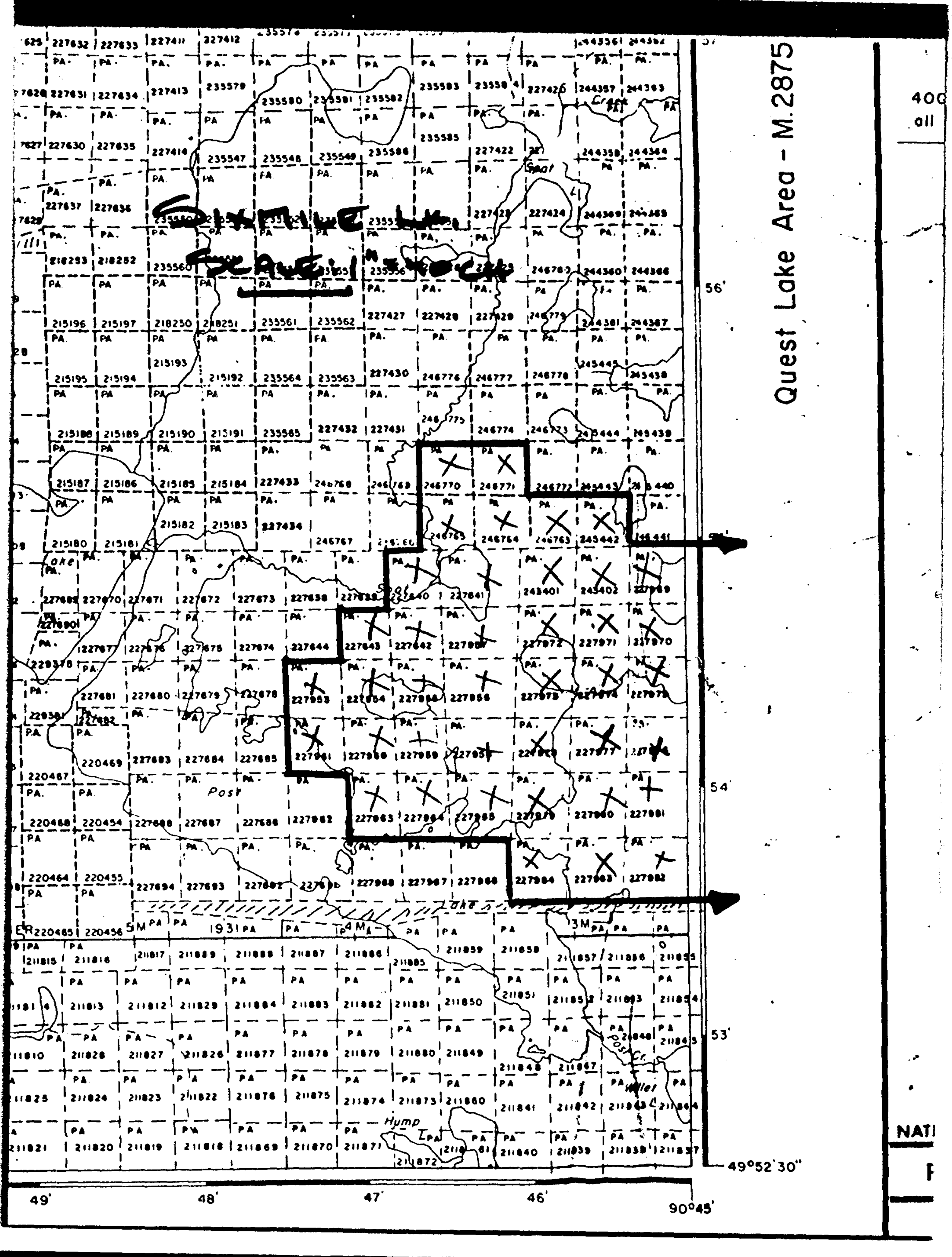
c.c.Mr. Leslie Scott,

c.c.Kennco Explorations (Canada)Ltd.,

c.c.Mr. H. L. King. ✓

FWM/mr


QUEST LAND
SCALE: 1" = 40CH
Ouest
Lake
Willet
Lake
Add
PHILLIPS
MERIDIAN
LINE
BASE
LINE
8M.
9M
10M
11M
2M
1M
49°52'30"
90°45'
44'
43'
42'
41'



Quest Lake Area - M.2875
SIXMILE LK.
SCALE 1" = ...
Creek
Post
Post Cr.
Hump L.
Lake
5M
4M
3M
1931
56'
54'
53'
49°52'30"
49'
48'
47'
46'
90°45'
400
all
NATI

SEE ACCOMPANYING

MAP(S) IDENTIFIED AS

52G|15NE-0020-A1-#1

#2

LOCATED IN THE MAP

CHANNEL IN THE FOLLOWING

SEQUENCE (X)