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1522 Clearwater Drive, Mississauga, Ont., Canada L5E 3A3 • Tel. (416) 278-1545



52J07NE0031 52J07NE0038B1 GREBE LAKE

010

REPORT OF RADIOMETRIC SURVEY  
KASHAWEOGAMA LAKE CLAIMS  
SAVANT LAKE AREA, ONTARIO

2.2603  
RECEIVED  
JAN 30 1978  
PROJECTS UNIT

for

RAY G. RAMSAY

by

J. B. Boniwell  
Exploration Geophysical Consultant

January 8, 1978



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LIST OF DRAWINGS

<u>Dwg. No.</u>	<u>Title</u>	<u>Scale</u>
EIC - 338	Grid Plan with Radiometric Profiles	1" = 400'



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INTRODUCTION

The claims holdings at Kashaweogamma Lake protect an iron-ore prospect set in silica-rich Algoma-type formations. A number of minerals have been deposited in this eugeosynclinal environment, and it was not known whether uranium might have been one of them. Given present-day prices and demand for uranium oxide, a first-pass effort to find out was seen as a worthwhile exercise.

Accordingly a radiometric survey was conducted over the claims in late 1977. Results are presented herein.



DESCRIPTION OF PROPERTY

The claims covered in this investigation are given below. They total 15 in number, all within the Patricia Mining Division, north-west Ontario.

<u>Claim No.</u>	<u>Twp.</u>
PA 295106	-
PA 295107	Conant
PA 295108	-
PA 295109	-
PA 328248	Conant
PA 328249	McCubbin
PA 328250	McCubbin
PA 328251	McCubbin & Conant
PA 328252	McCubbin & Conant
PA 346602	McCubbin
PA 346603	-
PA 346604	-
PA 346605	-
PA 346606	-
PA 346607	-

Each claim is a nominal 40 acres and is contiguous with its neighbour. The single coherent block so formed sits astride the common boundary between McCubbin and Conant Townships and the boundary both provide with the unsurveyed territory lying to the west. All claims are registered in the name of Mr. R. G. Ramsay of 10 Cook Street, Barrie, Ontario.

Access to the property is readily had overland from the Pickle Lake road (Ontario highway 599) which passes a scant 3 miles east of the property centre 12 miles north of the Savant Lake station on the C.N.R. transcontinental railway. The final section from highway 599 involves an old drill road which is amenable to



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appropriate bush vehicle transport in both summer and winter seasons.

Typical northern forest prevails throughout, spruce mainly, some birch and poplar in drained areas. The relief is minor but varies between outcrop or near-outcrop sections and muskeg swamp. Lee Lake to the north and Shallow Lake to the south, albeit relatively small, encroach upon the property from both sides.



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WORK UNDERTAKEN

A pre-existing grid of lines was utilized for present survey purposes. The spacing between lines on this grid varies, and not all lines were traversed, but the maximum separation never exceeded 400'. Stations along lines were occupied every 100' invariably.

The radiation measurements were effected with an ACR Geiger counter, model 161, manufactured by Industrial Services of Winnipeg, Manitoba. The sensitivity of this instrument is such that approximately 30 counts per minute is the equivalent of 0.005 milliroentgen per hour, and on the lowest range 30 counts per minute amounts to about one-quarter full scale deflection.

In the field, all the measurements were taken at ground level at the base of the reading station picket. The survey work itself was carried out by Mr. R. G. Ramsay of 10 Cook St., Barrie, Ontario between the 17th - 19th October, 1977. The statistical totals pertaining are:

Line traversed:	10.4 miles
Radiometric stations read:	570



DISCUSSION OF RESULTS

Despite the fact the Geiger counter is not a very sensitive measuring device for radioactivity - it primarily responds to beta radiation only - nevertheless it will, when operated in the manner described, provide a first order indication of anomalous concentrations of radioactive minerals in near-outcrop conditions. Thus the complete lack of any major departure from the narrow range of values 27-47 counts per minute is quite significant (Dwg. No. EIC-338); indeed the highest value recorded in the survey is 57, the lowest 17, that is, a symmetrical unimodal distribution prevails. In short there is no anomaly anywhere through the grid area.

This inescapable fact is additionally brought home by a comparison of recorded results with local physiographic condition. The transitions along traverses from outcrop to swamp to esker to creek exert no observable and consistent influence on the data whatsoever. The results are truly random therefore and reflect no more than the usual variance of radioactive data in background.

CONCLUSIONS AND RECOMMENDATIONS

It can be readily concluded there is no radioactive anomaly present within the subject claims. Such an outcome is not unduly surprising, but uranium being the widespread element it is (and increasingly it is being demonstrated it occurs in a far wider range of settings than hitherto conceived), it could not be excluded here as a mineral possibility without the necessary testing. That possibility has now been put to rest.

No further action is recommended on the basis of the present survey results.



JBB:sb

January 8, 1978

J. B. Boniwell

Exploration Geophysical Consultant





52J07NE0031 52J07NE0038B1 GREBE LAKE

900

File 2.2403

### GEOPHYSICAL -- GEOLOGICAL -- GEOCHEMICAL TECHNICAL DATA STATEMENT

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 RADIOMETRIC  
 Township or Area MCCUBBIN TOWNSHIP + GREBE LAKE ALSO M. - 1844 + M. 1842  
 Claim holder(s) R. G. RAMSAY  
10 COOK ST BARRIE ONT  
 Author of Report J. B. BENIWELL  
 Address 1522 CLEARWATER DRIVE MISSISSAUGA  
 Covering Dates of Survey OCT. 17/77 to JAN 8/77 ONT.  
 (linecutting to offset 11)  
 Total Miles of Line cut 10.4

MINING CLAIMS TRAVERSED	
List numerically	
PA. <u>295106</u>	(prefix) (number)
PA. <u>295107</u>	
PA. <u>295108</u>	<u>1/3</u>
PA. <u>295109</u>	
PA. <u>327249</u>	
PA. <u>327250</u>	
PA. <u>327251</u>	
PA. <u>327252</u>	<u>1/3</u>
PA. <u>346602</u>	
PA. <u>346603</u>	
PA. <u>346604</u>	
PA. <u>346605</u>	
PA. <u>346606</u>	
PA. <u>346607</u>	
<u>PLEASE NOTE</u>	
<u>NO ASSESSMENT</u>	
<u>CREDITS REQUESTED</u>	
<u>FOR CLAIM PA 327249</u>	
<u>AS IT IS MOSTLY</u>	
<u>WATER COVERED.</u>	
TOTAL CLAIMS	<u>14</u>

If space insufficient, attach list

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

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)  
 Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
 (enter days per claim)  
 DATE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_  
 Author of Report

PROJECTS SECTION L.D.  
 Res. Geol. \_\_\_\_\_ Qualifications 63.1284  
 Previous Surveys \_\_\_\_\_  
 Checked by \_\_\_\_\_ date \_\_\_\_\_  
 GEOLOGICAL BRANCH \_\_\_\_\_  
 Approved by \_\_\_\_\_ date \_\_\_\_\_  
 GEOLOGICAL BRANCH \_\_\_\_\_  
 Approved by \_\_\_\_\_ date \_\_\_\_\_

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 570 Number of Readings 570  
Station interval 100 FT.  
Line spacing 400 FT.  
Profile scale or Contour intervals 1" = 100 C.P.M.  
(specify for each type of survey)

MAGNETIC

Instrument \_\_\_\_\_  
Accuracy - Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base station location \_\_\_\_\_

ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)

GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_

Elevation accuracy \_\_\_\_\_

INDUCED POLARIZATION - RESISTIVITY

Instrument \_\_\_\_\_  
Time domain \_\_\_\_\_ Frequency domain \_\_\_\_\_  
Frequency \_\_\_\_\_ Range \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument A.R.C. GIEGER COUNTER MODEL 161

Values measured BETA RADIATION.

Energy windows (levels) ?

Height of instrument GROUND LEVEL Background Count 24-47 CPM.

Size of detector 3"

Overburden CLAY, SAND, GRAVEL AVE. DEPTH 0-5 FT. LOCAL DEPTH TO 40 FT.  
(type, depth - include outcrop map) GEOLOGICAL MAP INCLUDED WITH REPORT.

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_  
(specify for each type of survey)

Accuracy \_\_\_\_\_  
(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

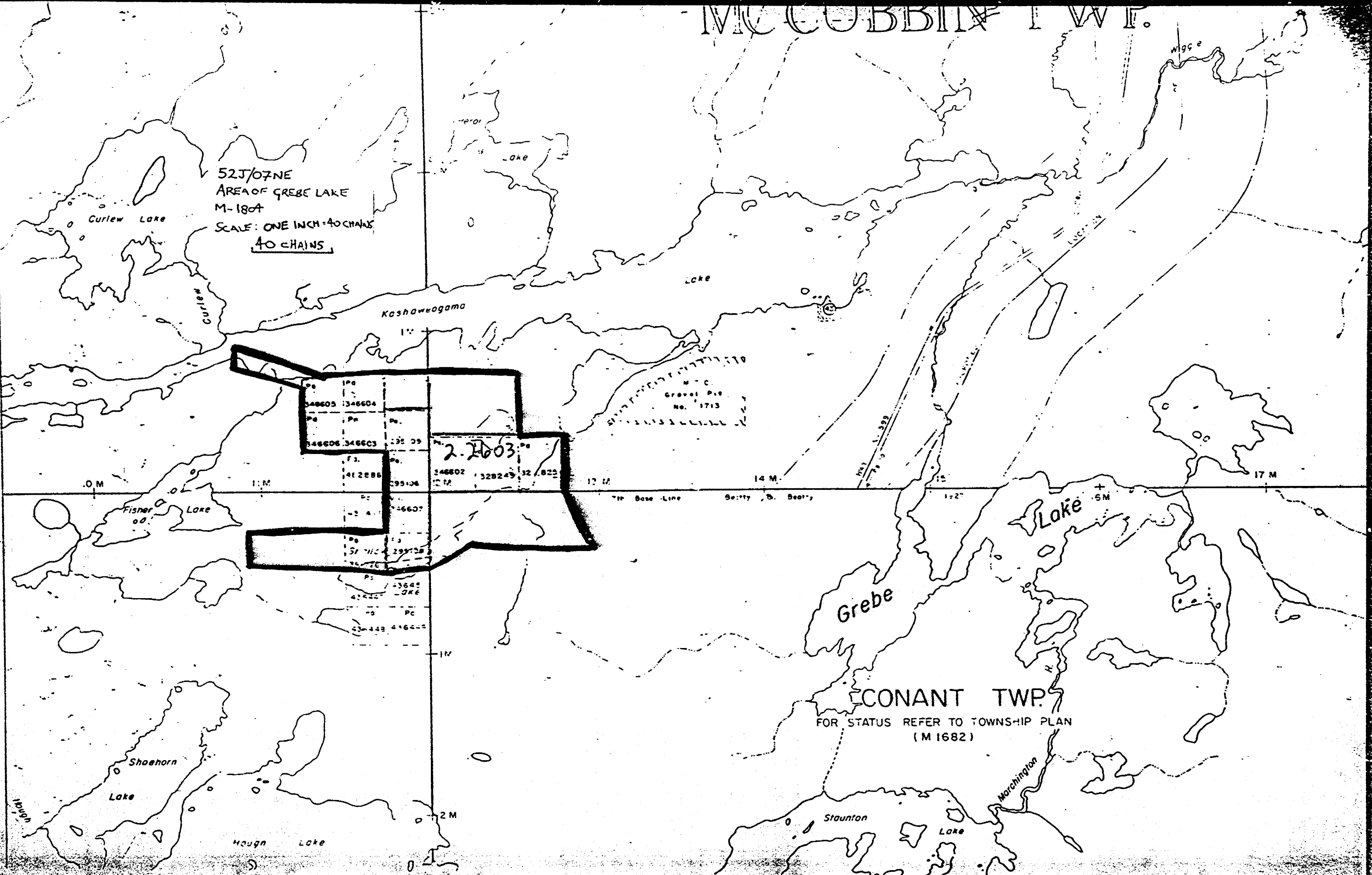
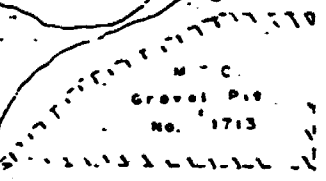
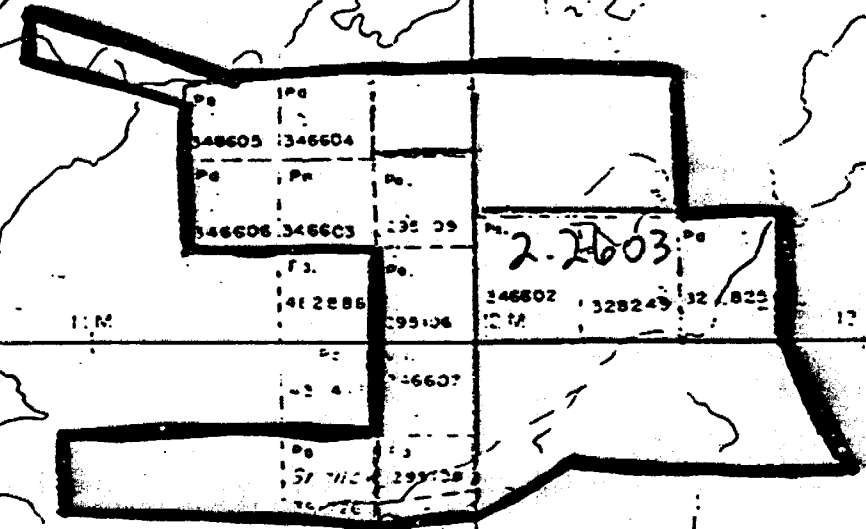
Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

MCCUBBIN TWP.

52J/07NE  
AREA OF GREBE LAKE  
M-1804  
SCALE: ONE INCH = 40 CHAINS  
40 CHAINS



CONANT TWP.

FOR STATUS REFER TO TOWNSHIP PLAN  
(M 1682)



Recorded Holder **Raymond G. Ramsay**

Township or Area **Conant Township, and Grebe Lake & McCubbin Twp.**

Type of survey and number of Assessment days credit per claim	Mining Claims
<p><b>Geophysical</b></p> <p>Electromagnetic _____ days</p> <p>Magnetometer _____ days</p> <p>Radiometric <u>20</u> days</p> <p>Induced polarization _____ days</p> <p>Section 86 (18) _____ days</p> <p>Geological _____ days</p> <p>Geochemical _____ days</p> <p>Man days <input type="checkbox"/> Airborne <input type="checkbox"/></p> <p>Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/></p>	<p><b>P. 295106 to 09 inclusive</b></p> <p><b>328249 to 52 "</b></p> <p><b>346602 to 07 "</b></p>
<p><b>Notice of Intent to be Issued:</b></p> <p><input type="checkbox"/> Credits have been reduced because of partial coverage of claims.</p> <p><input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.</p> <p><input type="checkbox"/> No credits have been allowed for the following mining claims as they were not sufficiently covered by the survey:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	

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;



Ministry of  
Natural  
Resources

Your file:

1978-06-28

Our file: 2.2603

Mrs. Doris Cosco  
Acting Mining Recorder  
Ministry of Natural Resources  
P.O. Box 669  
Court House  
Sioux Lookout, Ontario  
POV 2T0

Dear Mrs. Cosco:

Re: Mining Claims Pa. P. 295106 et al, Conant Township  
and Grebe Lake & McCubbin Township, File 2.2603

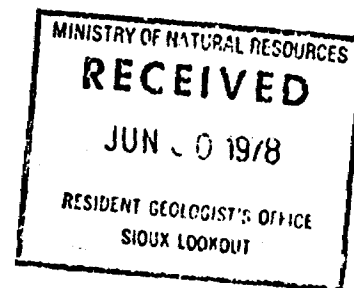
The Geophysical (Radiometric) assessment work credits  
as shown on the attached statement have been approved  
as of the above date.

Please inform the recorded holder of these mining claims  
and so indicate on your records.

Yours very truly,

A handwritten signature in dark ink, appearing to read "J. R. McGinn".

J. R. McGinn, Director  
Lands Administration Branch  
Whitney Block, Room 6404  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416-965-6918



DN/mw

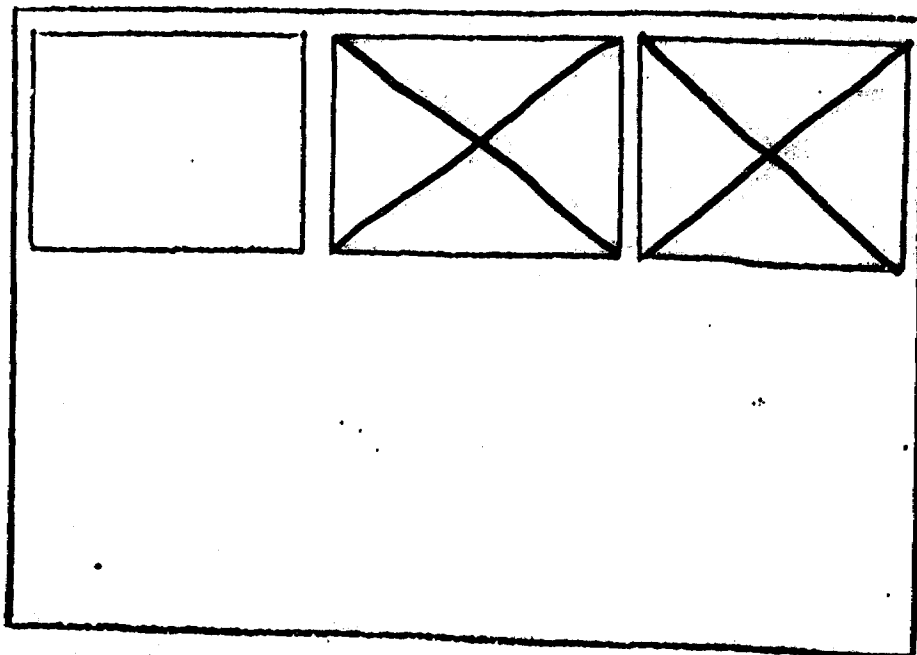
cc: Mr. Raymond Ramsay  
Barrie, Ontario

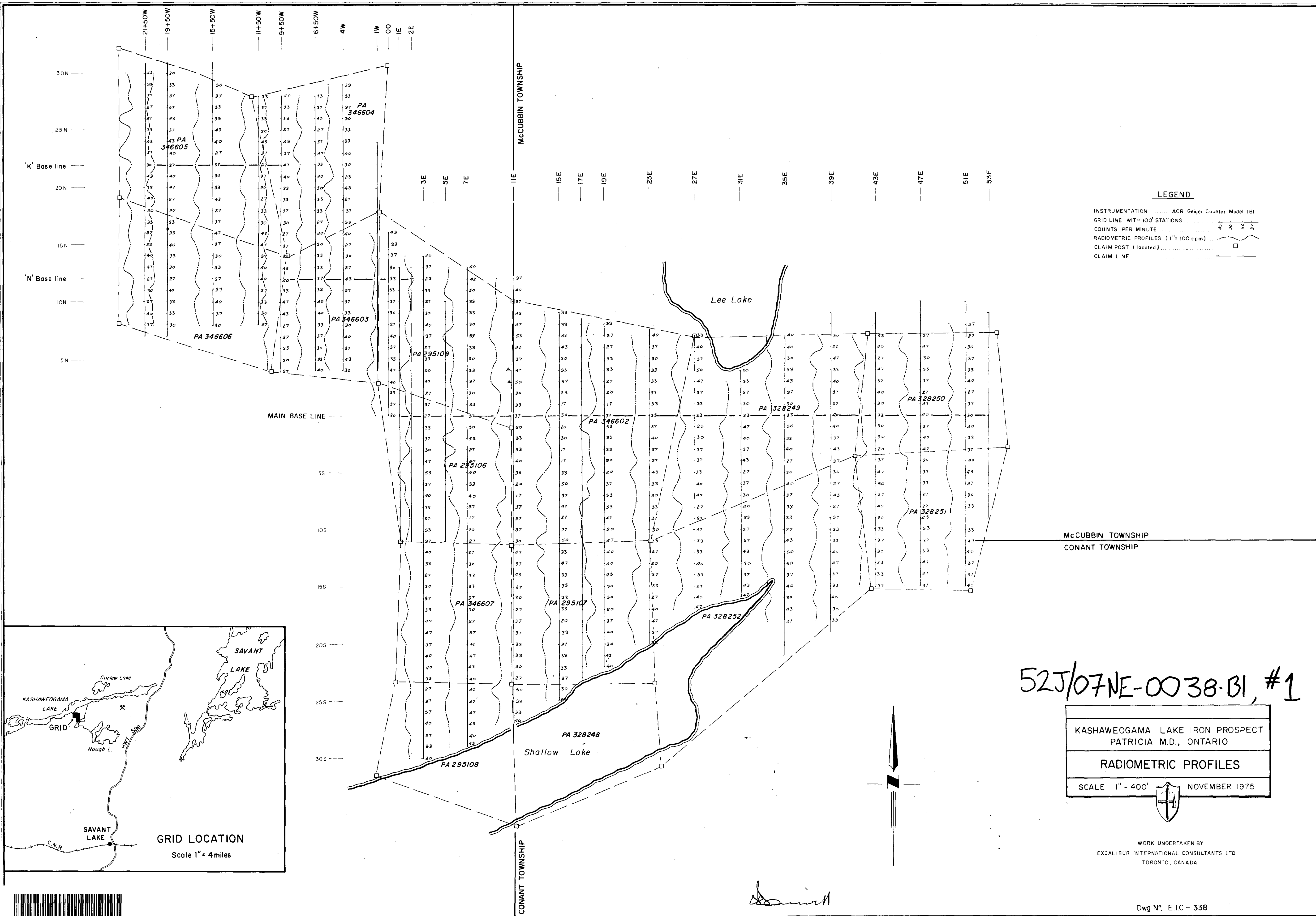
cc: Resident Geologist  
Sioux Lookout, Ontario

SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

52J/07NE-0038-B #1, 2

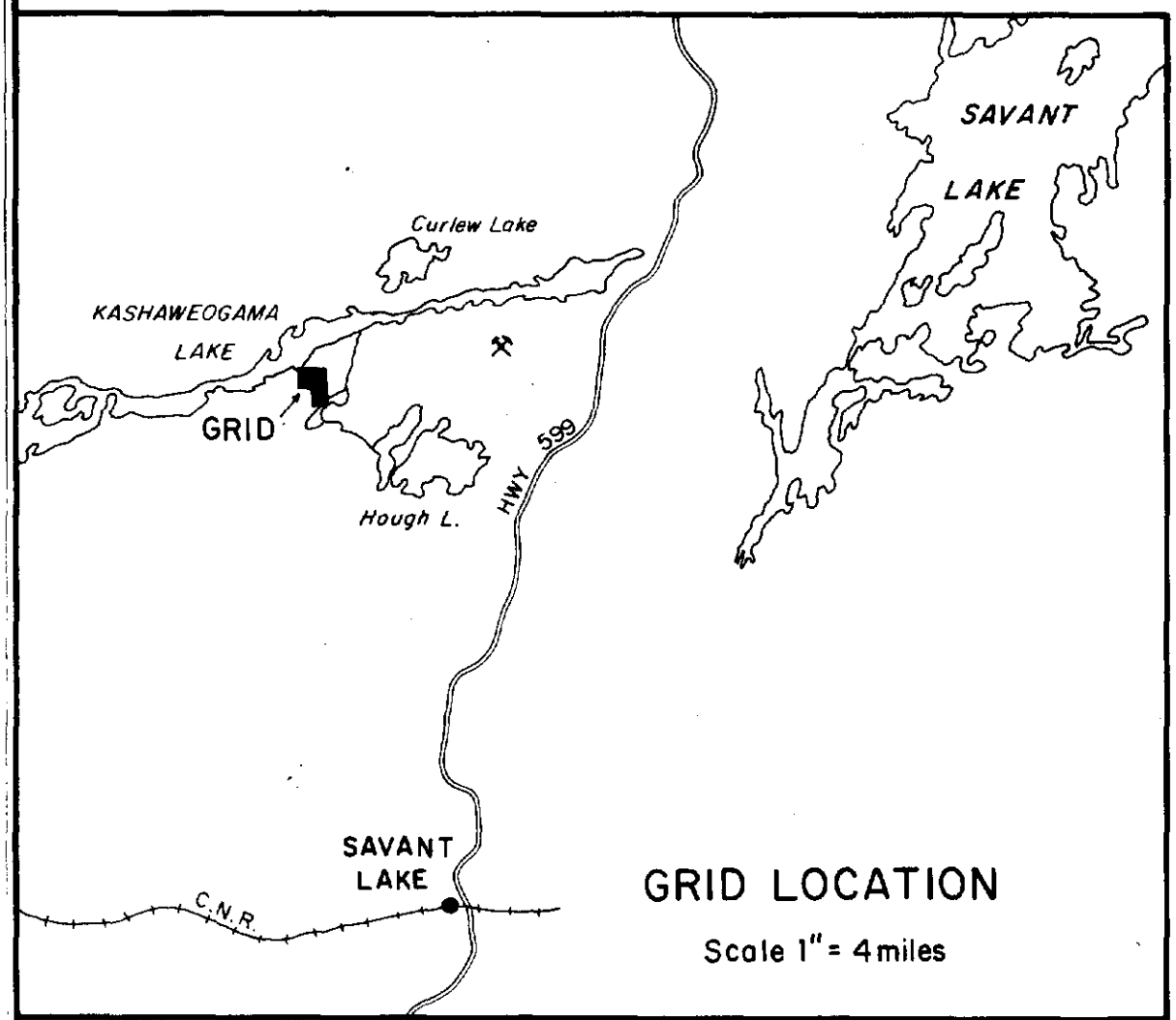
LOCATED IN THE MAP  
CHANNEL IN THE FOLLOWING  
SEQUENCE (X)





**LEGEND**

- INSTRUMENTATION ..... ACR Geiger Counter Model 161
- GRID LINE WITH 100' STATIONS ..... ————
- COUNTS PER MINUTE ..... 45 30 15
- RADIOMETRIC PROFILES (1" = 100 cpm) ..... ————
- CLAIM POST (located) ..... □
- CLAIM LINE ..... ————



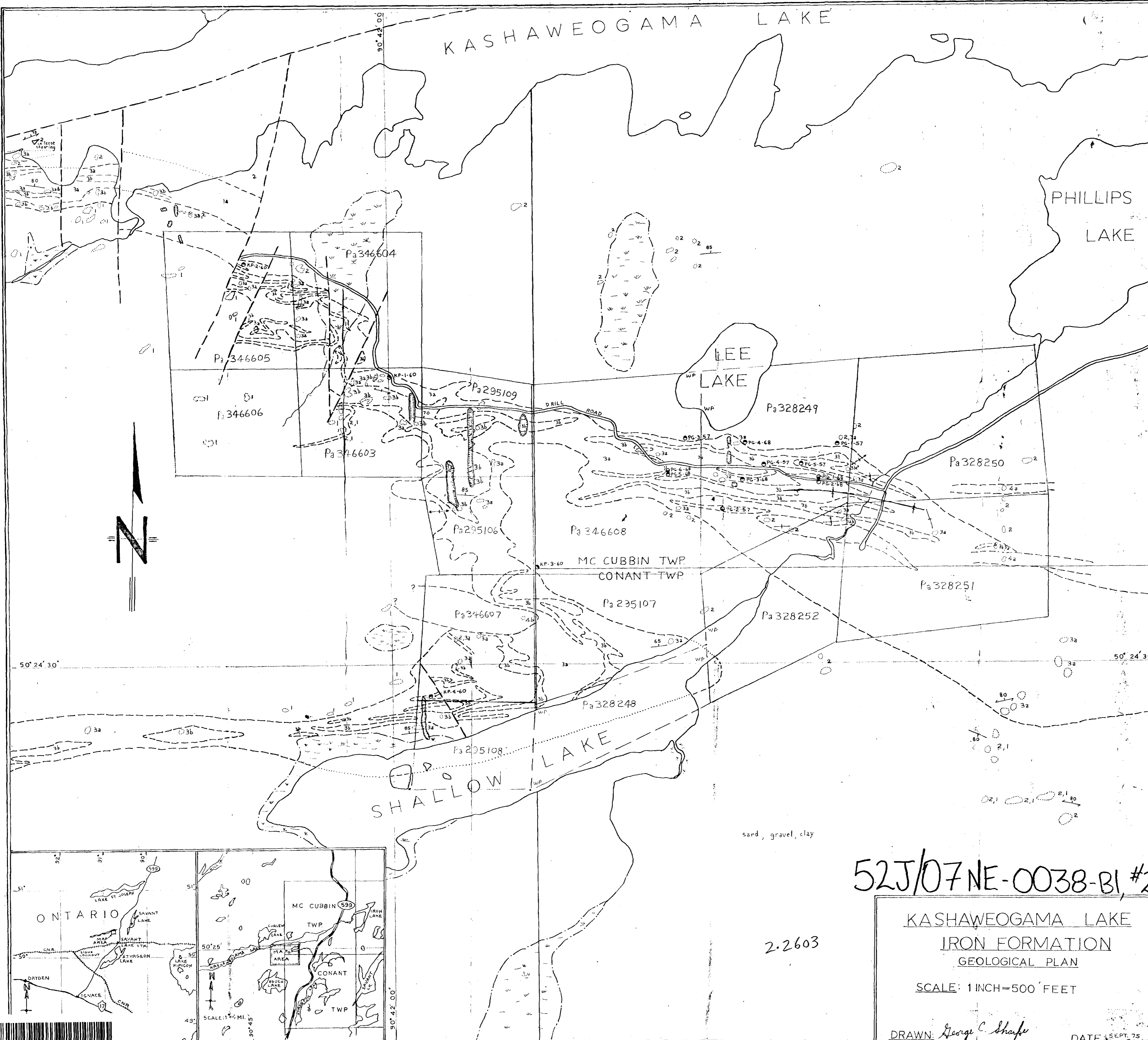
52J/07NE-0038-B1, #1

KASHAWEOGAMA LAKE IRON PROSPECT PATRICIA M.D., ONTARIO	
<b>RADIOMETRIC PROFILES</b>	
SCALE 1" = 400'	NOVEMBER 1975

WORK UNDERTAKEN BY  
EXCALIBUR INTERNATIONAL CONSULTANTS LTD.  
TORONTO, CANADA







**LEGEND**

- CENOZOIC**
- RECENT
    - Unconsolidated Swamp and Stream Deposits
  - PLEISTOCENE
    - Unconsolidated Clay, Sand, Gravel, and Boulder
- PRECAMBRIAN**
- ARCHEAN**
- LATE MAFIC INTRUSIVES
    - 4a Gabbro, Amphibolite 4b Diorite
  - IRON FORMATION
    - 3a ALGOMA Type: Quartz-Magnetite RICHER PHASE
    - 3b LEANER PHASE
  - METASEDIMENTS
    - 2 Greywacke, Arkose, Argillite, Chert
  - METAVOLCANICS FELSIC TO INTERMEDIATE
    - 1 Dacite, Andesite, Tuffs

- 00 BEDROCK OUTCROP
- Bedding, TOP UNKNOWN (INCLINED, VERTICAL)
- Bedding TOP (ARROW) FROM GRAIN GRADATION VERTICAL
- SCHISTOSITY (INCLINED, VERTICAL)
- FOLIATION (VERTICAL)
- SYNCLINAL AXIS
- GEOLOGICAL BOUNDARY
- FULT
- TRENCH, PIT
- DRILL HOLE WITH NUMBER
- MUSKEG

**SOURCES OF INFORMATION**

ALGOMA STEEL CORP. LTD. (ALGOMA ORE, DIV.)  
EXPLORATION DEPT. MAPS AND PLANS

ONTARIO DIV. OF MINES  
WD. BOND: PRELIM GEOL. MAPS:  
MC CUBBIN TWP 1972  
CONANT TWP 1973  
GEOLOGY 1971, 1972, 1975

52J/07NE-0038-B1, #2

**KASHAWEOGAMA LAKE  
IRON FORMATION  
GEOLOGICAL PLAN**

SCALE: 1 INCH=500 FEET

DRAWN: *George C. Sharpe* DATE: SEPT. 75

2.2603

