R. A. MacGREGOR, P.ENG.

REPORT ON VLF-EM SURVEYS

SKEAD TOWNSHIP, Ontario

Introduction

A VLF-EM survey was carried out in two areas in Skead Township. The results are shown on the enclosed plans.

Location, Access and Ownership

The claims covered by the survey are located in lots 5 and 7 Concession 6 and lots 8 and 9 Concession 5 Skead township. The claims are numbered L 442035 - 442036; L 442041 - 442043; L 442062 - 442064 inclusive and L 442054. They are recorded in the name of R. A. MacGregor, 134 Palace Drive, Sault Ste. Marie, Ontario.

Access can be had from Highway 624 about 7 miles south of Larder Lake, Ontario and from old logging roads leading from the highway.

Previous Exploration

There is little to be seen of previous exploration in the area. A few old pits for which no records are available occur on claim L 442035. Linecutting, with magnetometer and EM surveys have previously been carried out; however the lines are now largely overgrown.

Geology

The property is underlain by a volcanic sequence of rocks cut by Algoman felsic intrusives, and overlain by Temiskaming sediments.

Survey Procedure

A VLF-EM survey was carried out using a Crone Radem instrument set to the signal from Annapolis, Maryland (21.4 KHz). Readings were taken at 100 foot intervals using the procedure outlined in Appendix 1. The looping method was used for control of variation, the same as described for the magnetometer survey excepting that the time was noted for each station. An attempt was made to follow the previously cut lines, however these are largely overgrown. Pace and compass was used where old lines were not visible.

..... 2

Conclusions

A strong anomaly is noted crossing Claim L 442036 in a northwesterly direction. This may be a fault. A number of other weaker crossovers are noted in areas of muskeg or gravel overburden and may be due to topographic effects.

Respectfully submitted

R. MacGregor

September 1, 1978

R.A. MacGregor, P. Eng.

Ontario

File 2.2787

32D04SE0388 2.2787 SKEAD

900

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) VLF - EM

Township or Area Skead

Claim Holder(s) R.A. MacGregor
134 Palace Drive, Sault Ste. Marie

Survey Company ———

Author of Report R.A. MacGregor

Address of Author SAULT STE. MARIE

Covering Dates of Survey June 1 - 5, August 1978
(linecutting to office)

Total Miles of Line Cut ———

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	442035 ✓
L	442036 ✓
L	442041 ✓
L	442042 ✓
L	442043 ✓
L	442054 X
L	442062 ✓
L	442063 ✓
L	442064

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	20
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: Sept. 1/78 SIGNATURE: R MacGregor
Author of Report or Agent

Res. Geol. L.D. Qualifications 2.1102

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 9

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 509 Number of Readings 509

Station interval 100 ft Line spacing 400 ft

Profile scale 1" = 40°

Contour interval

MAGNETIC

Instrument

Accuracy -- Scale constant

Diurnal correction method

Base Station check-in interval (hours)

Base Station location and value

ELECTROMAGNETIC

Instrument Crone Radem

Coil configuration N/A

Coil separation N/A

Accuracy ± ½°

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency Annapolis, Maryland (21.4 KH) (specify V.L.F. station)

Parameters measured Dip angle of the resultant field

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

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

All unpatented mining claims accepted subject to survey, Section 118 of the Mining Act (R.S.O. 1970)

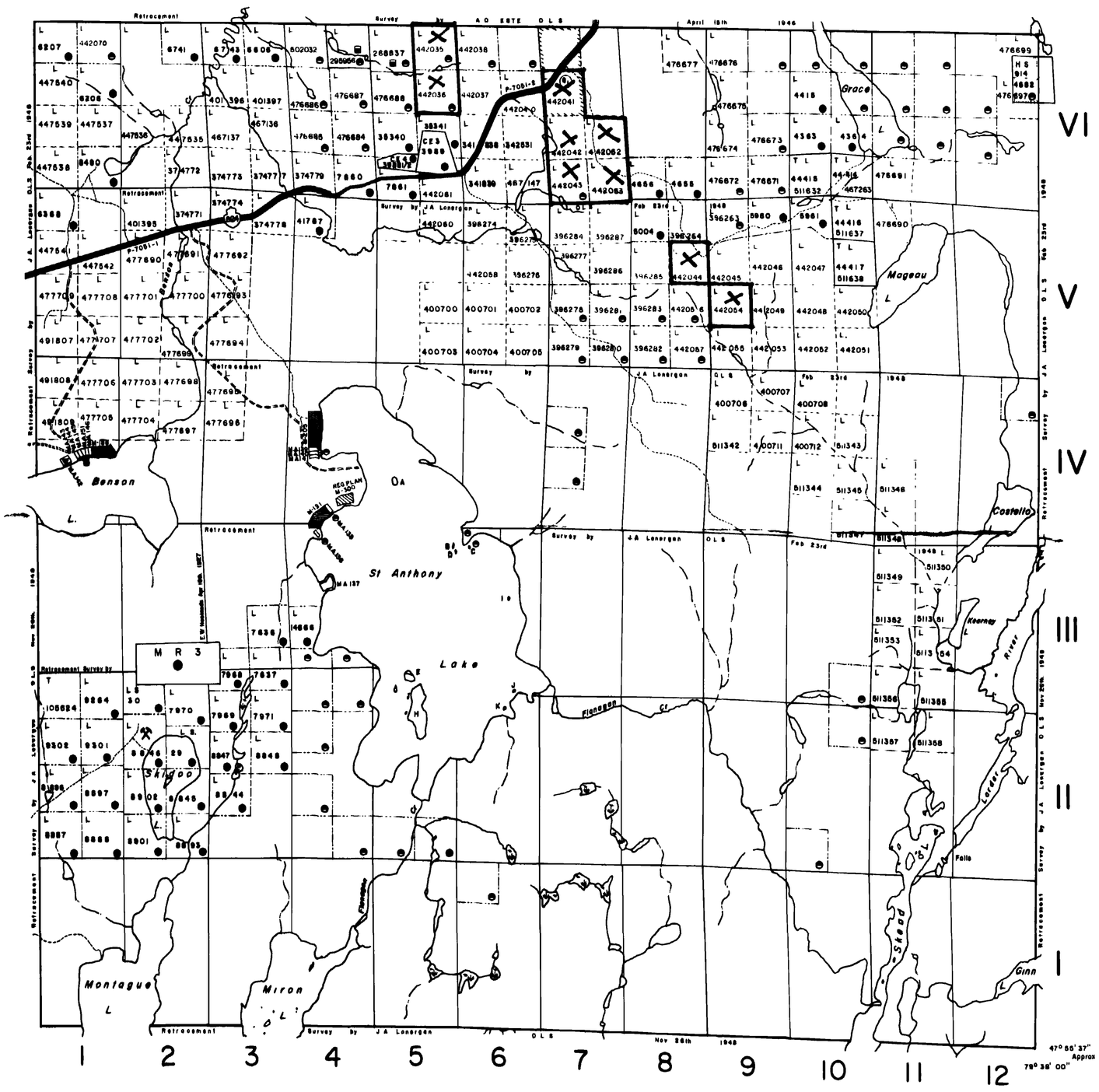
SAND and GRAVEL

(M) MTC PIT No 1230

HEARST TP. M.354

CATHARINE TP. M.336

RATTRAY TP. M.384



BAYLY TP. M.323

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◑
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◧
" MINING RIGHTS ONLY	◨
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	CS
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	(X)
SAND & GRAVEL	(S)

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 500 400 600 800 1KM 8KM

ACRES	HECTARES
40	16

TOWNSHIP

SKEAD

DISTRICT

TIMISKAMING

MINING DIVISION

LARDER LAKE

Ministry of Natural Resources

Ontario Surveys and Mapping Branch

Date 10/4/74

Whitney Block
Queen's Park, Toronto

Plan No M.387

200

A.T.V.

B.L. 'A'

VLF-EM SURVEY

LOTS 8&9 CONCESSION 5

SKEAD TOWNSHIP

Scale: 1" = 400'

Tie Line

L 44044

L 44054

INSTRUMENT: CRONE RADEM
STATION: ANNAPOLIS, MARYLAND (21.4KHz)
SCALE: 1" = 40'

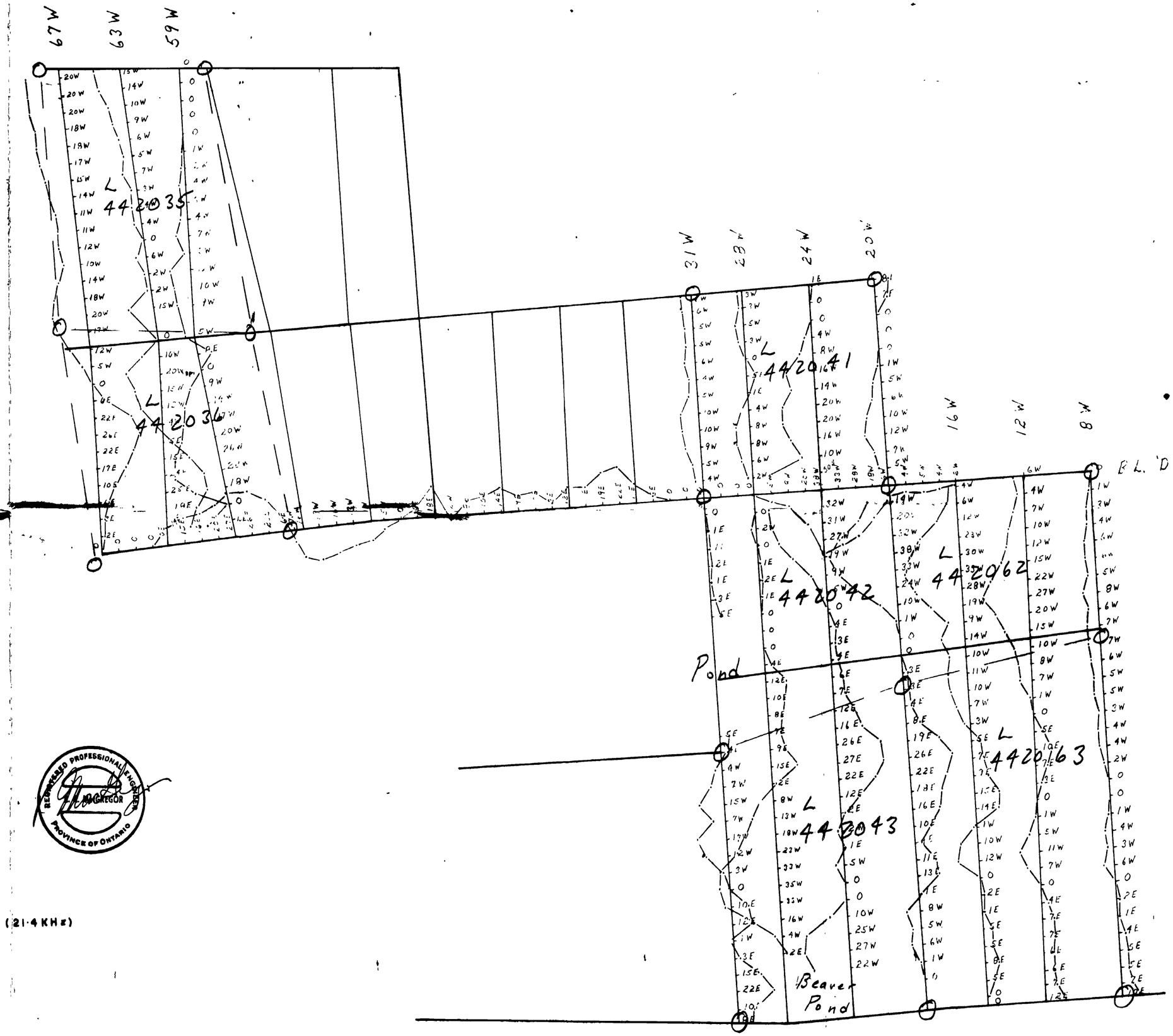
REGISTERED PROFESSIONAL ENGINEER
R. V. MacGREGOR
PROVINCE OF ONTARIO

B.L. 'C'

2.2787

210

Lot 8 | Lot 9



VLF-EM SURVEY
LOTS 5&7 CONCESSION 6
SKEAD TOWNSHIP
Scale 1"=400'

INSTRUMENT: CRONE RADEM
STATION: ANNAPOLIS, MARYLAND (21.4 KHz)
SCALE: 1"=40°

REGISTERED PROFESSIONAL ENGINEER
A. D. MACGREGOR
PROVINCE OF ONTARIO