



31M05NE0010 2.11061 BUCKE

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GRID BU-1
BUCKE TOWNSHIP, ONTARIO
LARDER LAKE MINING DIVISION
NTS 31 M5

REPORT ON
MAGNETIC SURVEY

RECEIVED

APR 19 1988

MINING LANDS SECTION

A. JAMES WALKER P.Eng.

November 25, 1987



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ENCLOSURES

Grid BU-1	Magnetic Survey - Contours	1:5000
	Magnetic Survey - Values	1:5000
	Magnetic Survey - Profiles	1:5000

INTRODUCTION

Walker Exploration Ltd. carried out a magnetic survey over a 4 claim group located in the northwest part of Bucke Township, about 6 kilometers west of Haileybury.

Linecutting and chaining was done by John Adams and Gord Fitzgerald in October 1987. The magnetic survey was carried out October 28, 1987.

The survey was carried out with an EDA PPM 300 total field proton magnetometer, with an EDA PPM 400 base station for diurnal control.

SUMMARY

The magnetic high across the north part of the grid suggests a southerly dipping mafic intrusive. An east-west fault is suggested by the contours in the central part of the grid.

PREVIOUS WORK

In 1982 Monpros Ltd. flew the area with magnetic and electromagnetic surveys (AERODAT). In 1984, ground magnetic and magnetic gradiometer surveys were carried out by Monpros Ltd. A drill hole just west of the lot line (4 & 5) and about 150 meters south of the Concession Line (5/6) was drilled by Monpros in 1984 and reached diabase below glacial clay.

GEOLOGY

The area is underlain by Gowganda sediments. A diabase sill outcrop occurs on the west part of the claims overlaying the sediments. Cobalt sediments occur in the east of the claim, and overlying Ordovician limestones occur to the northeast.

SURVEY METHOD

The magnetic survey was performed with an EDA PPM 300 magnetometer, measuring total field to 0.1 gammas. Diurnal control was made by using an EDA PPM 400 base station magnetometer, located on line 0 at 100S. Value of the station is 58,640.

The field magnetometer and base station magnetometer have solid state memory for storage of values and locations of stations read. The instruments have built-in clocks which are synchronized each day. The units are plugged together each evening and the built-in computer programme in the base station allows for automatic diurnal correction of data collected. This corrected data was stored on the cassette of an HP85 computer in the field and later transferred to an IBM compatible computer.

Observations were made at 12.5 meter stations on lines with 100 meter spacing. Values are plotted on a plan at a scale of 1:5000. Contours of values are plotted on a separate sheet.

SURVEY RESULTS

Two parallel power lines cross the grid from the north to the south and interfere with the normal magnetic field for about 50 meters each side of the line.

The main feature of the contoured data shows a broad magnetic high (400 nT) across the north part of the grid trending east and suggests a southerly dipping mafic intrusive. An east-west fault is also suggested near the 4S tie line.

CONCLUSIONS

The previous drill hole intersected diabase on the prominent magnetic high. The diabase may be part of the sill which occurs to the west, or else a separate intrusion.

Respectfully submitted,



A. James Walker, P. Eng.

AJW:sb

SURVEY DATA

Grid BU-1.

Bucke Township, Larder Lake Mining Division, Ontario.

Geophysical Contractor - Walker Exploration Ltd.

Covering Dates - Linecutting - October 22-26, 1987
 - Magnetic Survey - October 28, 1987
 - Drafting - Oct. 30 - Nov. 5, '87
 - Report - November 25, 1987

Line Coverage - Linecutting - 7.2 km
 - Magnetic Survey - 7.2 km
 - Readings - 584
 - Line Spacing - 100 meters
 - Station Spacing - 12.5 meters

Crew

Linecutting - Gord Fitzgerald, Kirkland Lake, Ontario
 John Adams, Kirkland Lake
Magnetic Survey - J. Tough, Bracebridge, Ontario
 A. J. Walker, Oakville, Ontario
Drafting - R. T. Marcroft, Mississauga, Ontario
Field Report - A. J. Walker, Oakville, Ontario

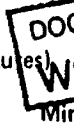
Instruments

- Magnetic Survey
- EDA PPM 300 Proton, Total field
Direct Reading, 0.1 Gamma
Solid State Memory.
 - EDA PPM 400 Base Station Recorder.



Ministry of Northern Development and Mines
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)



31M05NE0010 2.11061 BUCKE

900

#99

Land Management

20. Dec. Cobalt

Type of Survey(s): **Ground Geophysical Magnetometer** Township or Area: **Bucke Twp**

Claim Holder(s): **LAC Minerals Ltd.** Prospector's Licence No.: **T-664**

Address: **91 Duncan Avenue, KIRKLAND LAKE, Ontario P2N 1Y2**

Survey Company: **Walker Exploration Ltd.** Date of Survey (from & to): **08 Day | 10 Mo. | 87 Yr. | 08 Day | 10 Mo. | 87 Yr.** Total Miles of line Cut: **7.1 km**

Name and Address of Author (of Geo-Technical report): **A.J. Walker 406 Canterbury, OAKVILLE Ontario**

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
L	953909				
	953910				
	953911				
	953912				

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
APR 28 1988
RECEIVED

LARDER LAKE
MINING DIV.
RECEIVED
MAR 17 1988
AM
7 18 19 10 11 12 13 14 15

RECEIVED
MAR 25 1988
LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: \$ ÷ 15 = Total Days Credits:

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work. **4**

Date: **March 15, 1988** Recorded Holder or Agent (Signature): *John Koval*

For Office Use Only

Total Days Cr. Recorded: **160** Date Recorded: **MARCH 17, 1988** Mining Recorder: *Acting J. J. [Signature]*

Date Approved as Recorded: **22 April 88** Branch Director: *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: **John Kovala 91 Duncan Avenue, KIRKLAND LAKE, Ontario P2N 1Y2**

Date Certified: **March 15, 1988** Certified by (Signature): *John Koval*

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 292 Number of Readings 584
Station interval 25 meter, readings 12.5 Fine spacing 100 meters
Profile scale 500 nT
Contour interval 25 nT

MAGNETIC

Instrument EDA PPM 300 Proton, Total Field
Accuracy - Scale constant 0.1 nT
Diurnal correction method Continuous, 15 seconds EDA PPM 400
Base Station check-in interval (hours)
Base Station location and value One Line 0, 100 South

ELROMAGNETIC

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

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

Dymond Twp. (M.468)

THE TOWNSHIP OF
OF
BUCKE

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH = 40 CH

LEGEND

- LEASES-MINING & SURFACE RIGHTS
- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KINGS HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- PATENTED S.R.O.
- CANCELLED

NOTES

- 400' surface rights reservation along shores of all lakes and rivers.
- Staking of mining claims within Townsites thus ~~only~~ only with consent of the Minister.
- Flooding rights to elevation 595' above level in Lake Timiskaming.
- Proposed Natural Gas Pipeline along Hwy through this township.
- N. half Lot B, Con.2 subject to sanitary of Constance Lake for Town of Haileybury.

Areas withdrawn from staking under 43 of the Mining Act, R.S.O. 1970 (Sec. 4)

Order No.	File	Date	Dir
150707			

PLAN NO - M.43

ONTARIO
MINISTRY OF NATURAL RES
SURVEYS AND MAPPING BRAN

VI

V

IV

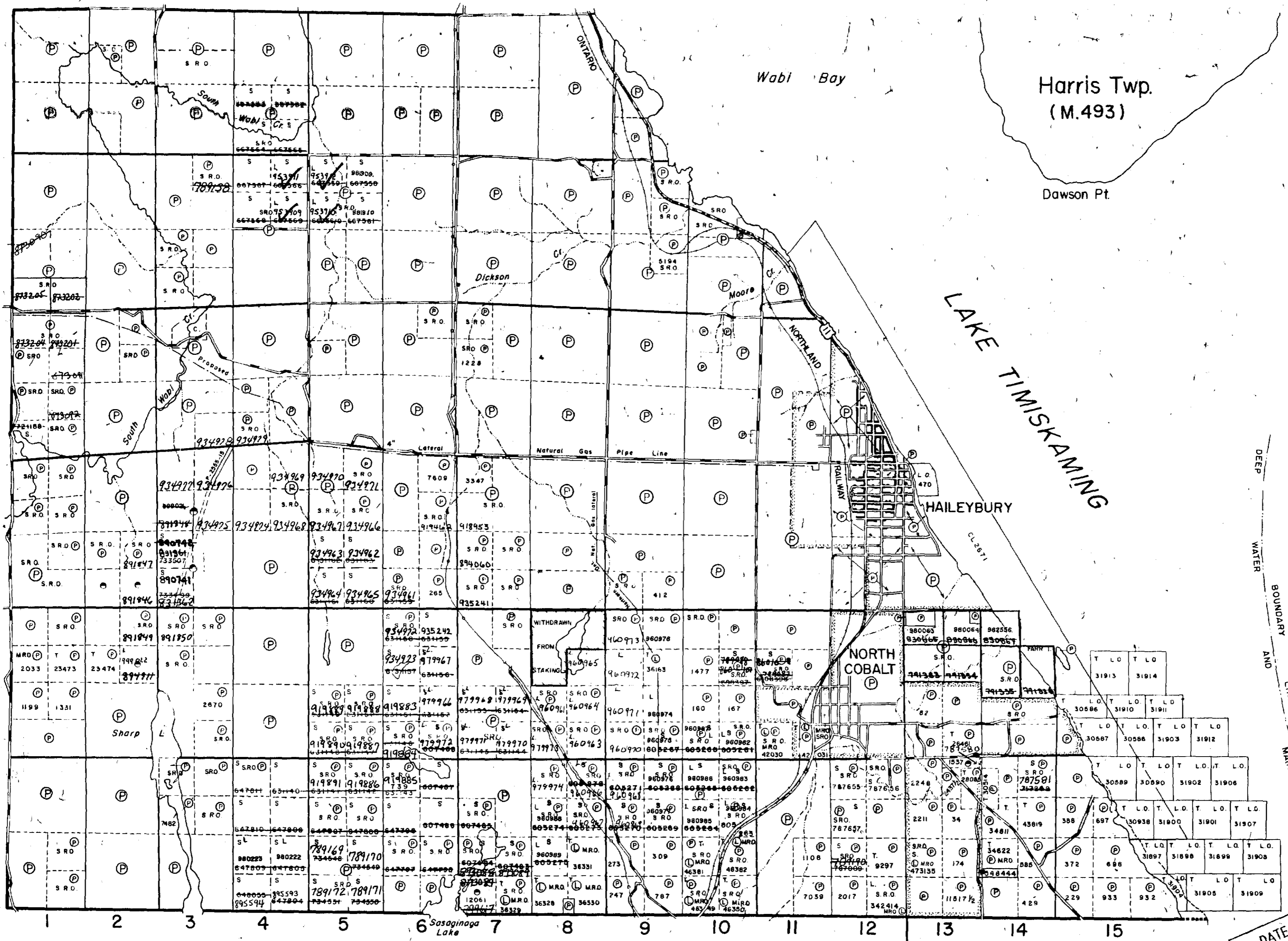
III

II

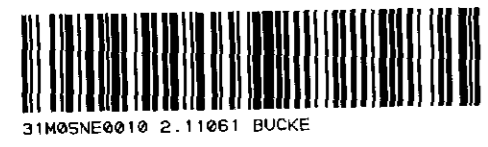
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Firstbrook Twp. (M.475)

Province of Quebec



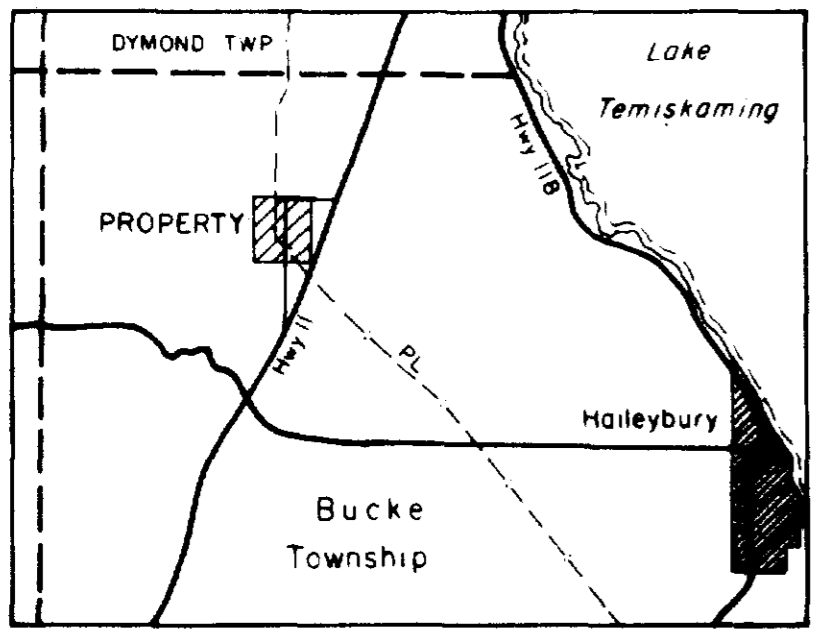
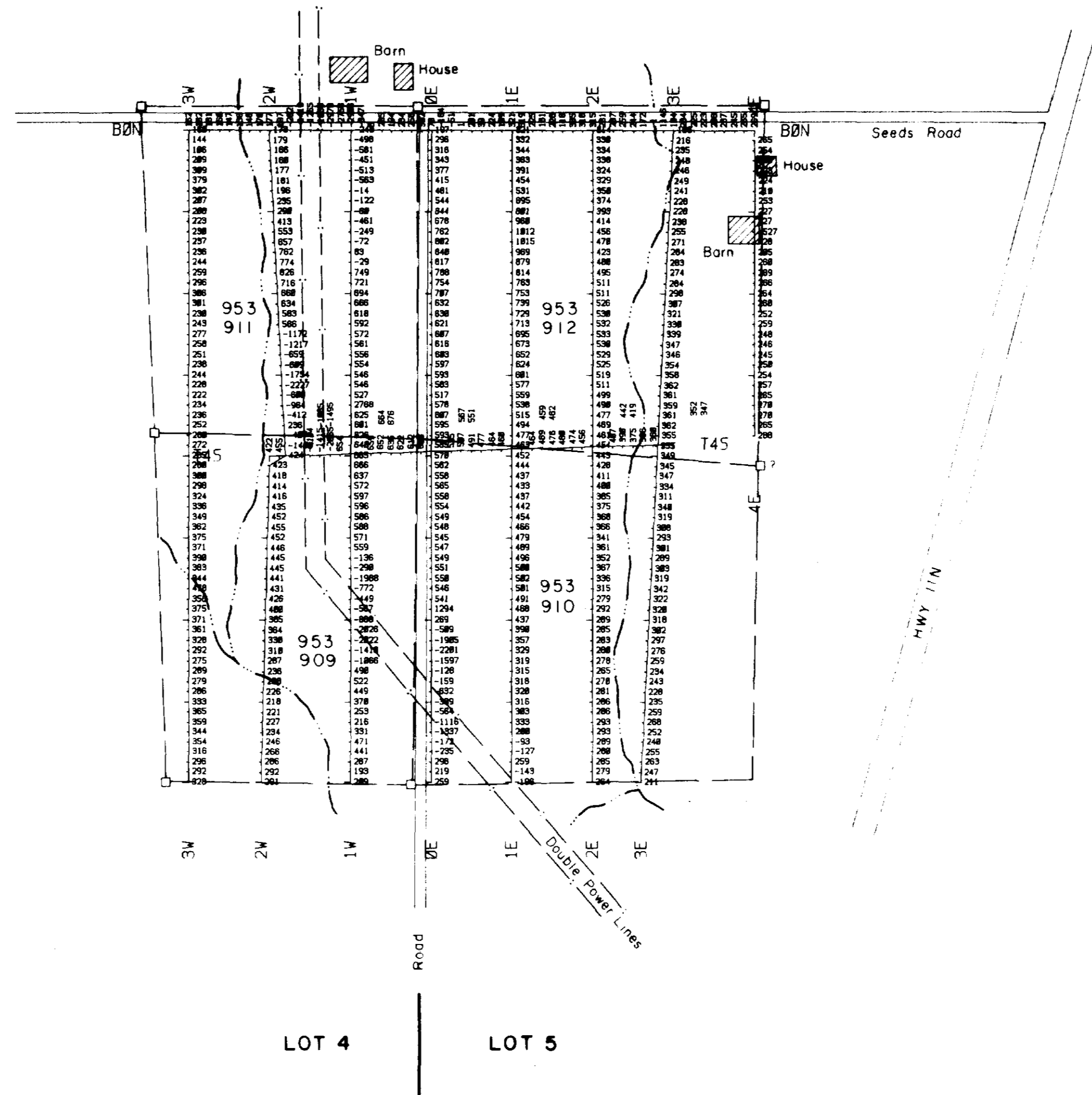
DATE OF ISSUE
APR 14 2008
LARDER LAKE
MINING RECORDERS OFFICE



Coleman Twp. (M.454)

Lorrain Twp. (M.536)

CON VI
CON V



NTS 31M 5

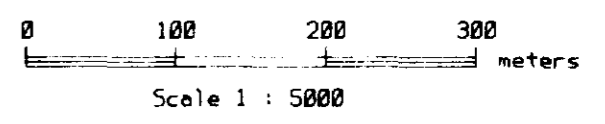
LEGEND
 Stream, Swamp, Lakeshore.....
 Claim Post and line.....
 Instrument..... EDA PPM-500
 Base Station..... EDA PPM-400
 Base level..... 58000 nt



GRID BU 1 BUCKE TOWNSHIP
HAILEYBURY ONTARIO

MAGNETOMETER SURVEY

TOTAL FIELD VALUES



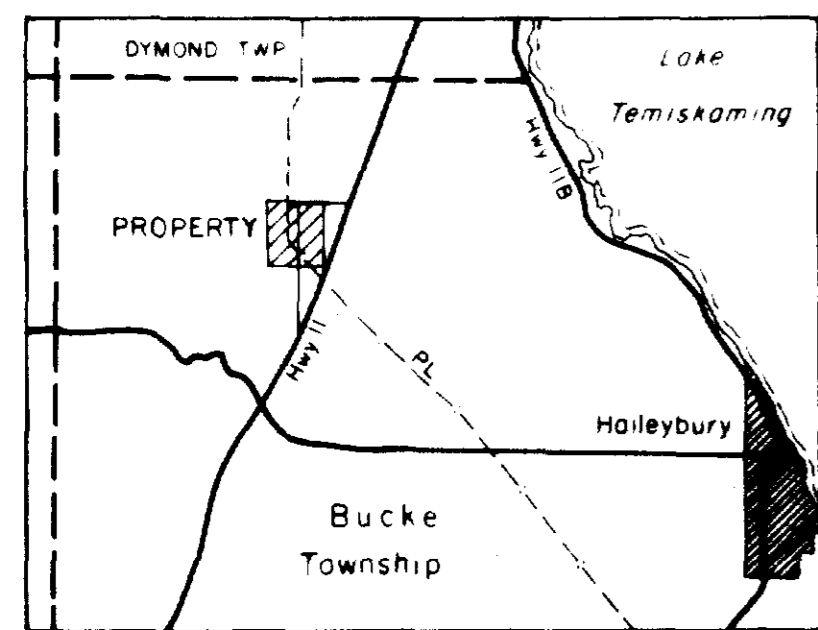
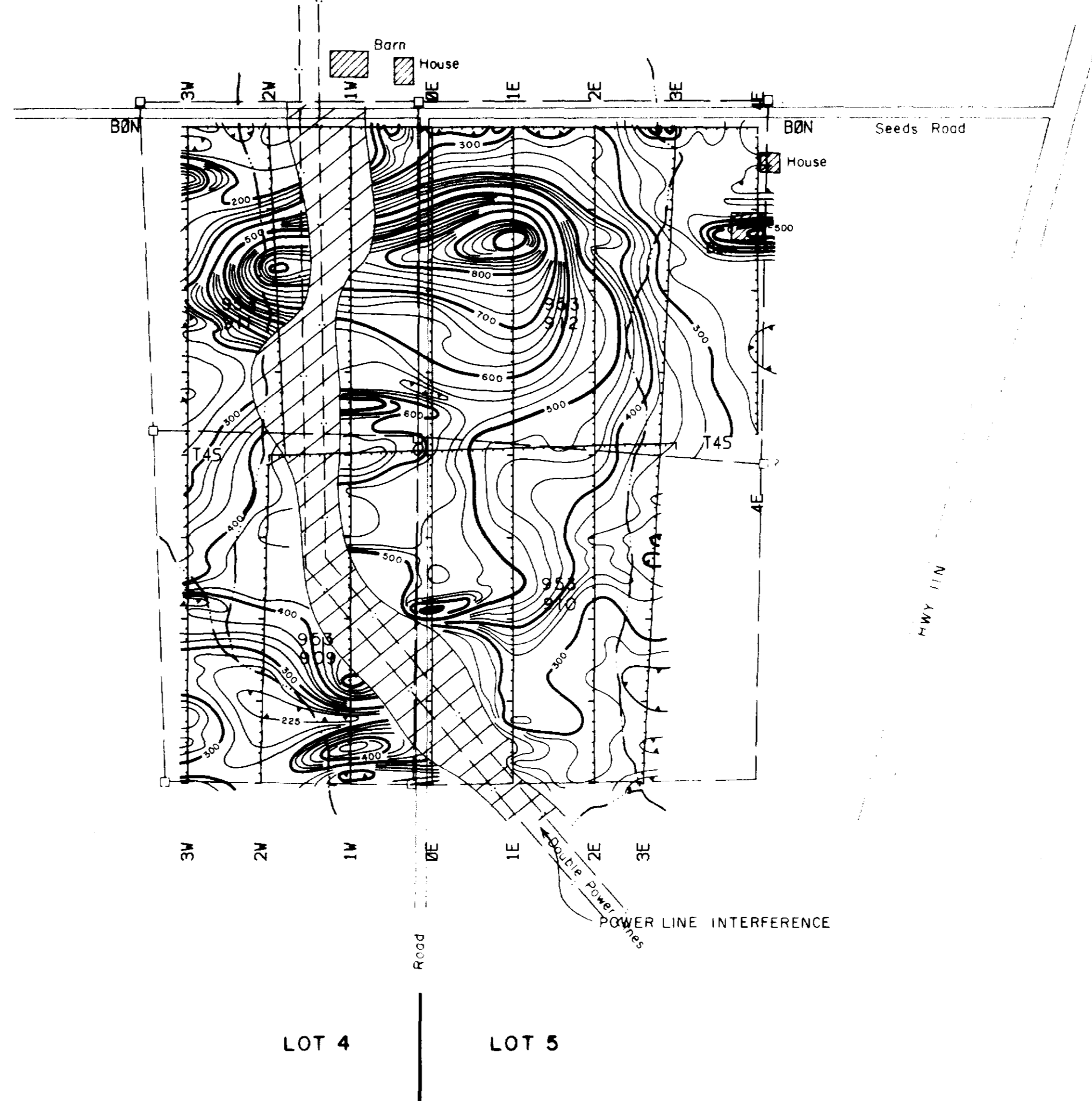
Scale 1 : 5000

WALKER EXPLORATION LTD.
Mississauga Ontario.
OCTOBER 1987

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CON VI
CON V



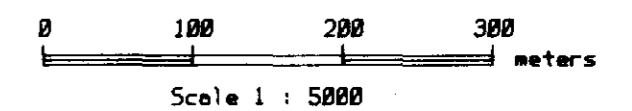
NTS 31 M 5

LEGEND

- Stream, Swamp, Lakeshore.....
- Claim Post and line.....
- Instrument..... EDA PPM-500
- Base Station..... EDA PPM-400
- Contours of Total Field..... 25nt Interval
- 25nt contour.....
- 100nt contour.....
- 500nt contour.....
- Depression.....



GRID BU 1 BUCKE TOWNSHIP
HAILEYBURY ONTARIO
MAGNETOMETER SURVEY
TOTAL FIELD CONTOURS



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Mississauga Ontario.
OCTOBER 1987

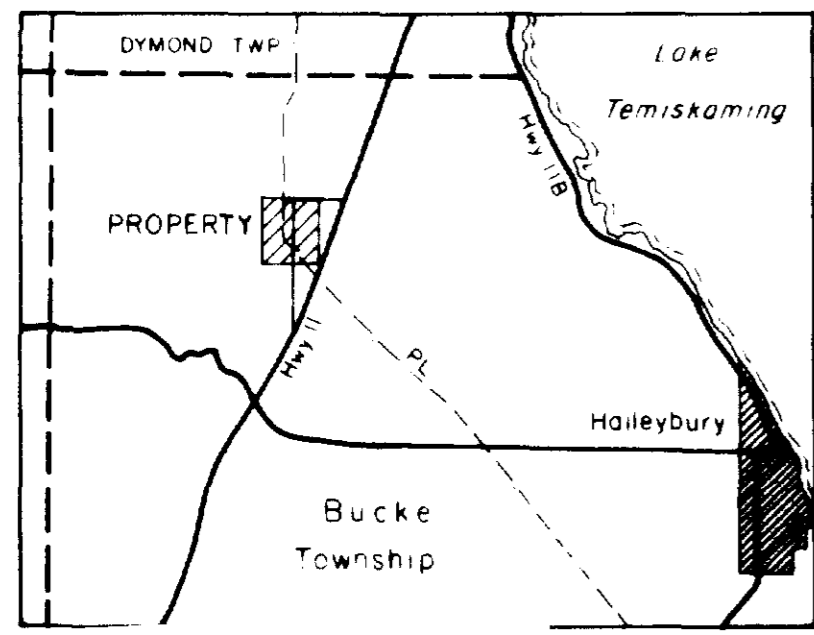
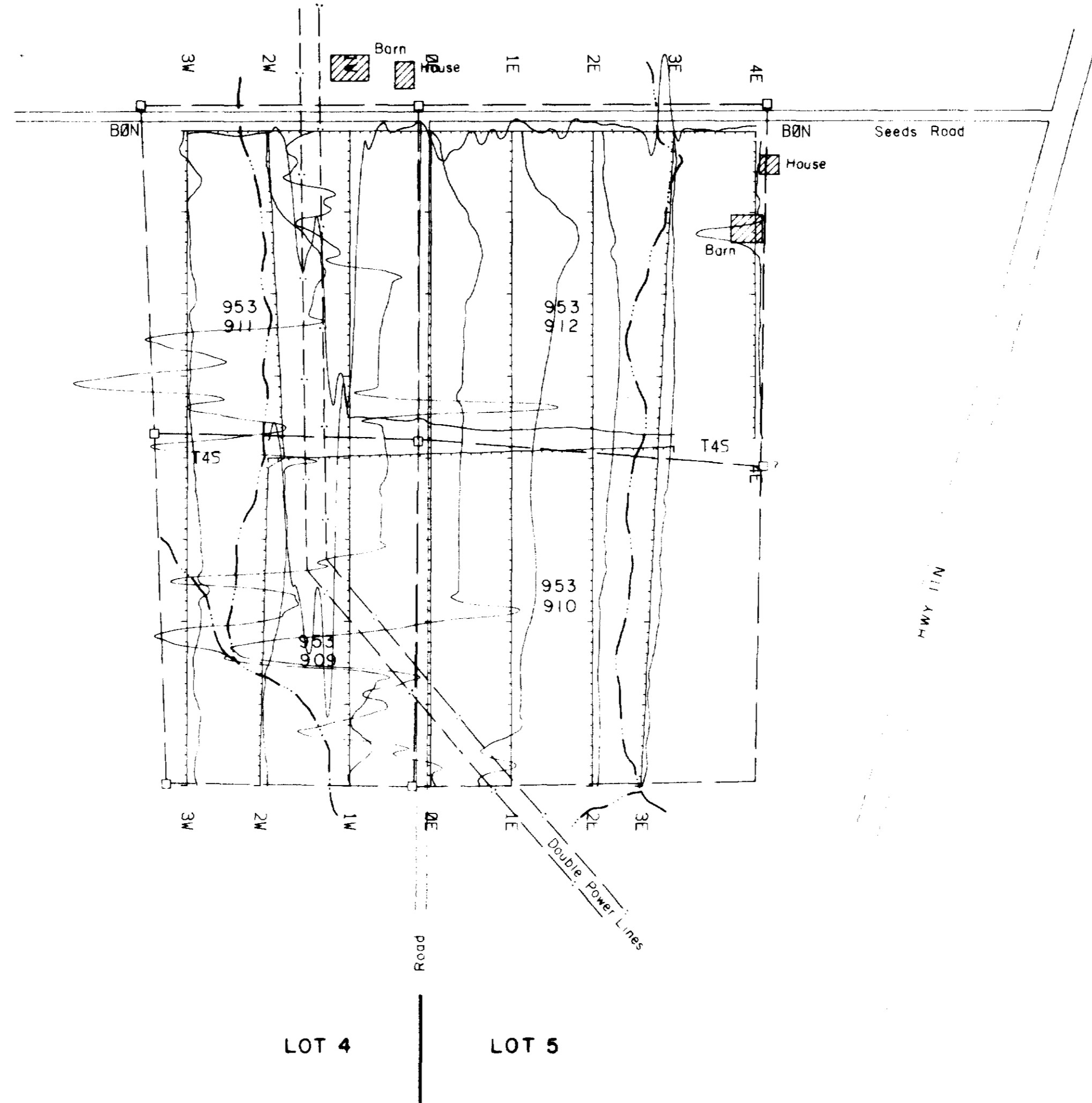
DRG. 1B



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CON VI

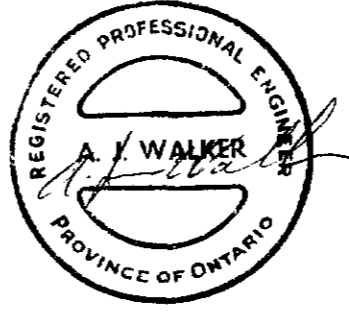
CON V



NTS 31M5

LEGEND

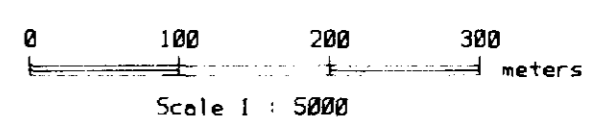
- Stream, Swamp, Lakeshore.....
- Claim Post and line.....
- Instrument..... EDA PPM-500
- Base Station..... EDA PPM-400
- Base level..... 58200 nt
- Profile, Scale = 500 nt/cm.....



GRID BU 1 BUCKE TOWNSHIP
HAILEYBURY ONTARIO

MAGNETOMETER SURVEY

TOTAL FIELD PROFILES



WALKER EXPLORATION LTD.
Mississauga Ontario,
OCTOBER 1987

DRG. 1C

2.11061

