REPORT ON

VLF-EM SURVEY

GAUTHIER AND McVITTIE TOWNSHIPS, ONTARIO

by

R.A. MacGregor, P. Eng.

May 7, 1986

I. INTRODUCTION

A VLF-EM survey was carried out over cut lines on a group of claims in Gauthier and McVittie Townships, Ontario. The results are shown on the plans in the back pocket.

II. LOCATION, ACCESS AND OWNERSHIP

The claims are located in the south-east part of Gauthier township along the east boundary with one claim in McVittie Township. There are eight claims numbered L736729 to 736732; L821910 and L821927 to 821928 recorded in the name of Lucien Lacasse, Box 231, Larder Lake, Ontario and L760496 recorded in the name of Daniel Lacasse, Larder Lake, Ontario.

Access to the property is by a road from Highway 66 about two miles west of Larder Lake which runs north along the east side of the Misema River crossing the one claim in McVittie Township. Acess to the claims in Gauthier Township is obtained by crossing the river from this road.

III. PREVIOUS EXPLORATION

A number of pits and trenches were noted on the claims attesting to previous work. This work includes two old small size shafts or deep pits. Most of this work appears quite old, and there are no known records of it. Some diamond drilling and geophysical work is recorded for the northerly claims in the assessment files.

IV. TOPOGRAPHY

The property consists of low rocky rises with swampy and drift covered areas between. The most easterly claims consists of a high gravel ridge on the east side of the Misema River. The swampy and drift covered areas are covered by black spruce, black ash and poplar, while the higher areas are covered by white spruce, hazel bushes and scrubby poplars.

V. SURVEY PROCEDURE

Lines were cut along the boundary lines of the claims, chained and picketed at 100-foot intervals. Lines were then run every 400 feet east and west and flagged.

A VLF-EM survey was carried out using a Phoenix VLF-2 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. In this method a base station is selected, and readings taken along lines describing a loop, arriving back at the starting base station in less than two hours. A second loop is then started using either the same base station or another which is tied to the previous loop. Readings are then corrected for diurnal variation by assuming the time between readings is the same and distributing any variation equally among the intervening readings. No correction was applied less than the accuracy of the base station readings.

VI. GEOLOGY

McVittie Township was previously mapped by Jas. E. Thomson and a geological map published as Map No. 50 b.

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The fine grained sediments consist almost entirely of greywacke, with several conglomerate bands. It is intruded by diabase dykes in two places. Outcrop is sparce with much of the claims covered by swamp. The greywacke is sheared and contains much crenulated bedding. It also contains inclusions of narrow beds of trachytic material.

The trachyte is pinkish in colour and brecciated in a number of places. A grab sample of trachyte breccia just west of the Misema River containing no visible mineralization was slightly anomalous in gold (160 ppb - check 130 ppb).

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Respectfully submitted

May 7, 1986

Robert A. MacGregor, P. Eng.

C E R T I F I C A T E

I, Robert A. MacGregor, certify:

1. I am a Mining Engineer residing at 134 Palace Drive, Sault Ste. Marie, Ontario. I have worked as a mining engineer and geologist for the past 20 years.

2. I am a member of the Association of Professional Engineers of the Province of Ontario and a member of the Canadian Institute of Mining and Metallurgy.

3. I attended Queen's University for two years in the Mining-Geology course.

4. I personally supervised the field work covered by this report.

May 7/86
DATE

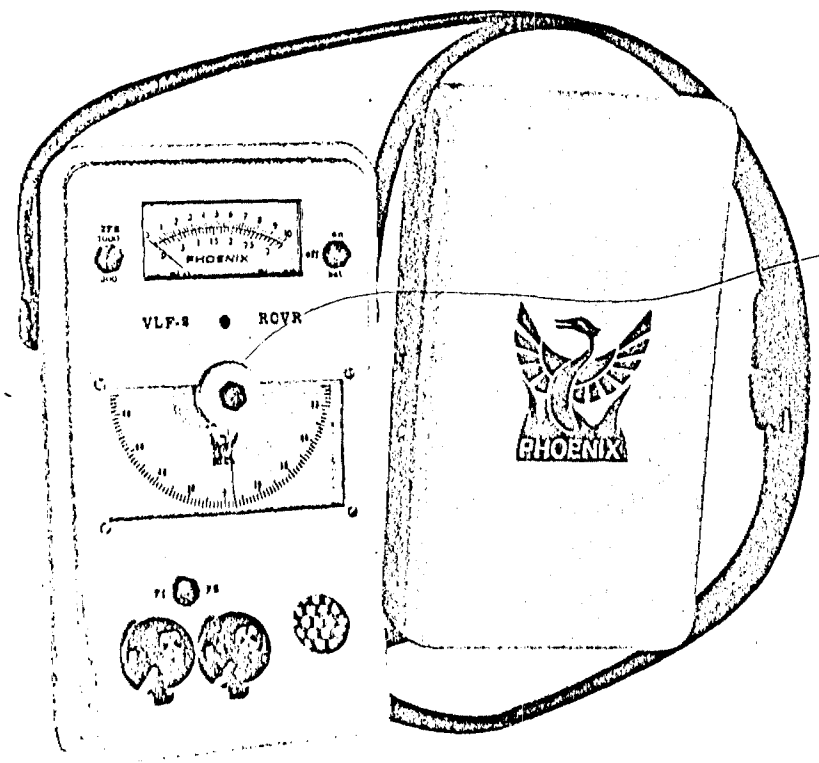
REGISTERED PROFESSIONAL ENGINEER
R. A. MacGREGOR
PROVINCE OF ONTARIO

R. A. MacGregor

VLF-2

Electromagnetic Unit

- Lightweight, low battery drain, rugged, simple to operate
- Two independent channels
- Each channel may select any station between 14.0 and 29.9 kHz
- Single crystal used for all frequencies
- Locking clinometer provides tilt-angle memory
- Superheterodyne detection and digital filtering provide extremely high selectivity and noise rejection



Military and time standard VLF transmitters are distributed over the world. These stations are used for geophysical EM surveying thus eliminating the need for a local transmitter and permitting one-man operation.

To ensure that a station excites the prospective conductor, two stations at approximately right angles are used during a survey (see data on back).

The choice of 160 frequencies in the range 14.0 to 29.9 kHz permits the use of a local EM transmitter when no suitable regular VLF station is available.

PHOENIX GEOPHYSICS LIMITED

Geophysical Consulting and Contracting, Instrument Manufacture, Sale and Lease.

Head Office: 200 Yorkland Blvd. Willowdale, Ont., Canada, M2J 1R6. Tel: (416) 493-6350
1424 - 355 Burrard St. Vancouver, B.C., Canada, V6C 2G8. Tel: (604) 684-2285
[illegible] Tucson, Arizona, U.S.A. 85705. Tel: (602) 884-8542

Specifications

Parameter Measured	:	Orientation and magnitude of the major and minor axes of the ellipse of polarization.
Frequency Selection, Front Panel	:	Dual channel, front panel selectable (F1 or F2) each with independent precision 10-turn dial gain control.
Frequency Selection, Internal	:	F1 and F2 can be selected by internal switches within the range 14.0 to 29.9 kHz in 100 Hz increments.
Detection And Filtering	:	Superheterodyne detection and digital filtering provide a much narrower bandwidth and thus greater rejection of interfering stations and 60 cycle noise than conventional receivers.
Meter Display	:	2 ranges: 0 to 300 or 0 to 1000. Background is typically set at 100. Meter is also used as dip angle null indicator and battery test.
Audio	:	Crystal speaker. 2500 Hz used as null indicator.
Clinometer	:	±90°, +0.5° resolution. Normal locking, push button release.
Battery	:	One standard 9v transistor radio battery. Average life expectancy - 1 to 3 months (battery drain is 3 mA)
Temperature Range	:	-40° to + 60° C.
Dimensions	:	8 x 22 x 14 cm (3 x 9 x 6 inches).
Weight	:	850 grams (1.9 pounds).

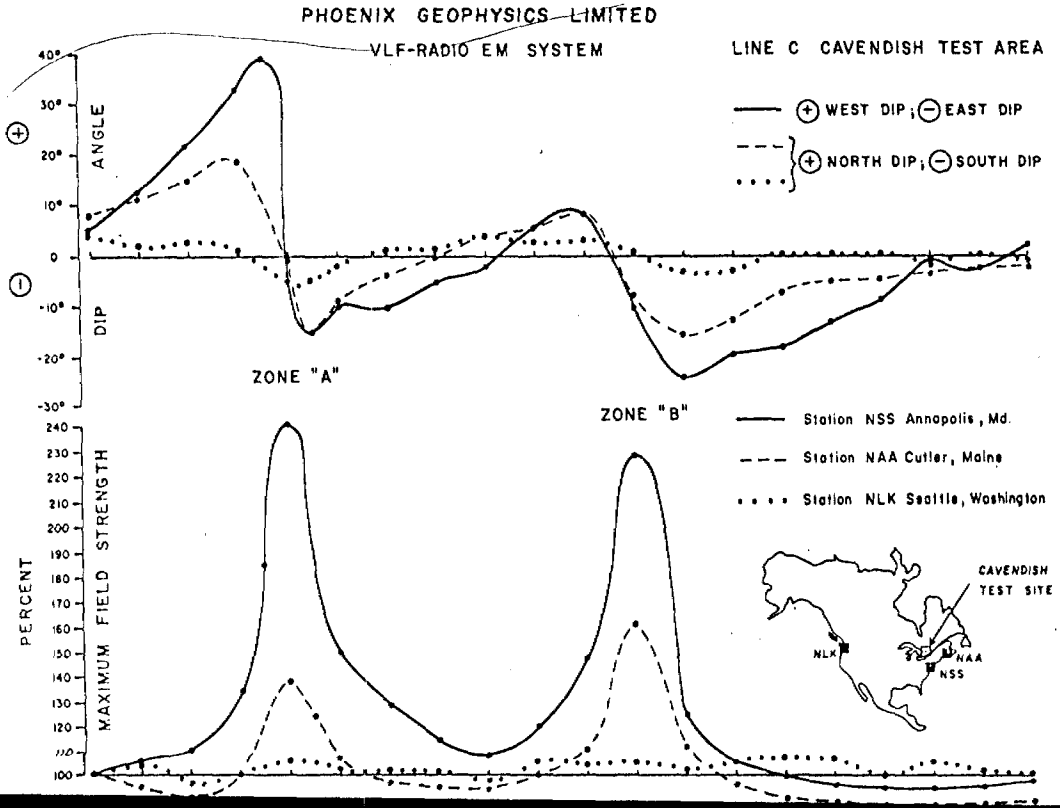
All of the established stations may be selected, or alternatively, a local VLF transmitter may be used which transmits at any frequency in the range 14.0 to 29.9 kHz.

VLF Station	Frequency (kHz)
Bordeaux, France	15.1
Odessa (Black Sea)	15.6
Rugby, U.K.	16.0
Moscow, U.S.S.R.	17.1
Yosamai, Japan	17.4
Hegaland, Norway	17.6
Cutler, Maine	17.8
Seattle, Washington	18.6
Malabar, Java	19.0
Oxford, U.K.	19.6
Paris, France	20.7
Annapolis, Maryland	21.4
Northwest Cape, Australia	22.3
Loulualei, Hawaii	23.4
Buenos Aires, Argentina	23.6
Rome, Italy	27.2

Field Data

The results below illustrate the need for using two orthogonal stations when the strike of the prospective conductor is not well-known. The dip angle and amplitude data measured using station NLK in Seattle, Washington, show only a very weak anomaly associated with the two conductive sulphide zones at Cavendish, Ontario.

The results obtained using Cutler, Maine reveal a more prominent anomaly, but the best response was obtained using Annapolis, Maryland since the station lies almost due south and the transmitted electromagnetic field is thus maximum-coupled with the North-South trending conductors.



Mining Lands Section

File No 2.9116

Control Sheet

TYPE OF SURVEY: ✓ GEOPHYSICAL

_____ GEOLOGICAL

_____ GEOCHEMICAL

_____ EXPENDITURE

MINING LANDS COMMENTS:

P. Hurst

Signature of Assessor

June 5/86

Date

Ministry of Northern Affairs and Mines
Ontario

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

W86 08 00186 · #182.186 27116.

Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
VLF-EM	Gauthier & McVittie

Claim Holder(s)	Prospector's Licence No.
Lucien Lacasse	K-18234
Daniel Lacasse	K-19953
Address: Box 231 LARDER LAKE, Ontario	79 Commissioner St. Larder Lake, Ontario POK 1LO

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Colex Exploration Inc.	22 04 86 (Day Mo. Yr.) 27 04 86 (Day Mo. Yr.)	

Name and Address of Author (of Geo-Technical report)
R.A. MacGregor, 134 Palace Dr., Sault Ste. Marie, Ontario P6B 5H5

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	20
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		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 Prefix	Mining Claim Number	Expend. Days Cr.
L	736729	
	736730	
	736731	
	736732	
	821910	
	821927	
	821928	
	&	
	760496	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED 1986 MINING LANDS SECTION

LARDER LAKE MINING DIVISION
RECEIVED
MAY 12 1986

RECORDED
MAY 12 1986
Receipt # _____

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. 8

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
160	MAY 12 1986	Acting
	Date Approved as Recorded 16.6.6	Branch Director

Date	Recorded Holder or Agent (Signature)
May 7, 1986	

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
R.A. MacGregor, 134 Palace Dr., Sault Ste. Marie, Ont. P6B 5H5

Date Certified	Certified by (Signature)
May 7/86	

1362 (85/9)

May 22, 1986 File: 2.9116

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

We received reports and maps on May 14, 1986 for a Geophysical (Electromagnetic) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims L 736729, et al, in the Townships of Gauthier and McVittie.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone:(416) 965-4888

AB/mc
cc: Lucien Lacasse
Dobie, Ontario
P0K 1B0

Daniel Lacasse
Larder Lake, Ont.
P0K 1L0

R.A. MacGregor
134 Palace Drive
Sault Ste. Marie, Ontario
P6B 5H7

Ministry of Northern Affairs and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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 Gauthier & McVittie Twps.

Claim Holder(s) Lucien Lacasse
Daniel Lacasse

Survey Company Colex Exploration Inc.

Author of Report R.A. MacGregor

Address of Author 134 Palace Dr., S.S. Marie

Covering Dates of Survey 22/04/86 - May 7/86
(linecutting to office)

Total Miles of Line Cut _____

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: May 7 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.1102

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	736729
	736730
	736731
	736732
	821910
	821927
	821928
	760496

If space insufficient, attach list

TOTAL CLAIMS 8

837 (85/9)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 459 Number of Readings 459

Station interval 100' Line spacing 400'

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 Phoenix VLF-2

Coil configuration N/A

Coil separation N/A

Accuracy ± ½°

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

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

Parameters measured Dip angle of 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

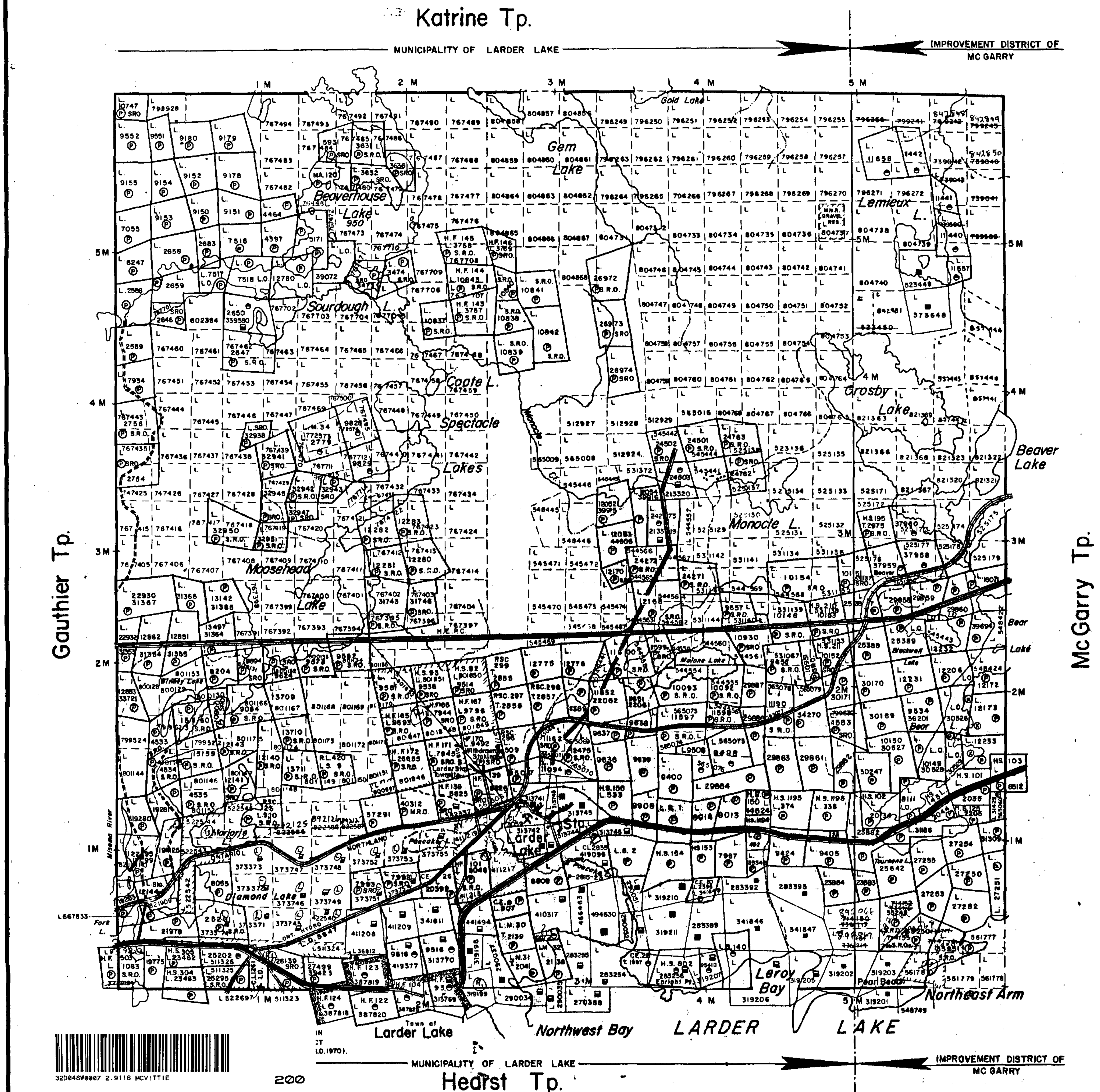
Electrode array

Electrode spacing

Type of electrode

2.9116

136729	✓										
30	✓										
31	✓										
32	✓										
821910	✓										
21	✓										
28	✓										
160496	✓										



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 OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	Ⓟ or ●
" , SURFACE RIGHTS ONLY	Ⓟ S.R.O. or
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	Ⓛ or ■
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	L.O. or ▼
ORDER-IN-COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

McVITTIE

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

MAY 15 1986

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

TIMISKAMING

Ministry of Natural Resources Ontario

Land Management Branch

Date SEPTEMBER 1984

Number G-3163

32D04SW0007 2.9116 MCVITTIE

200

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

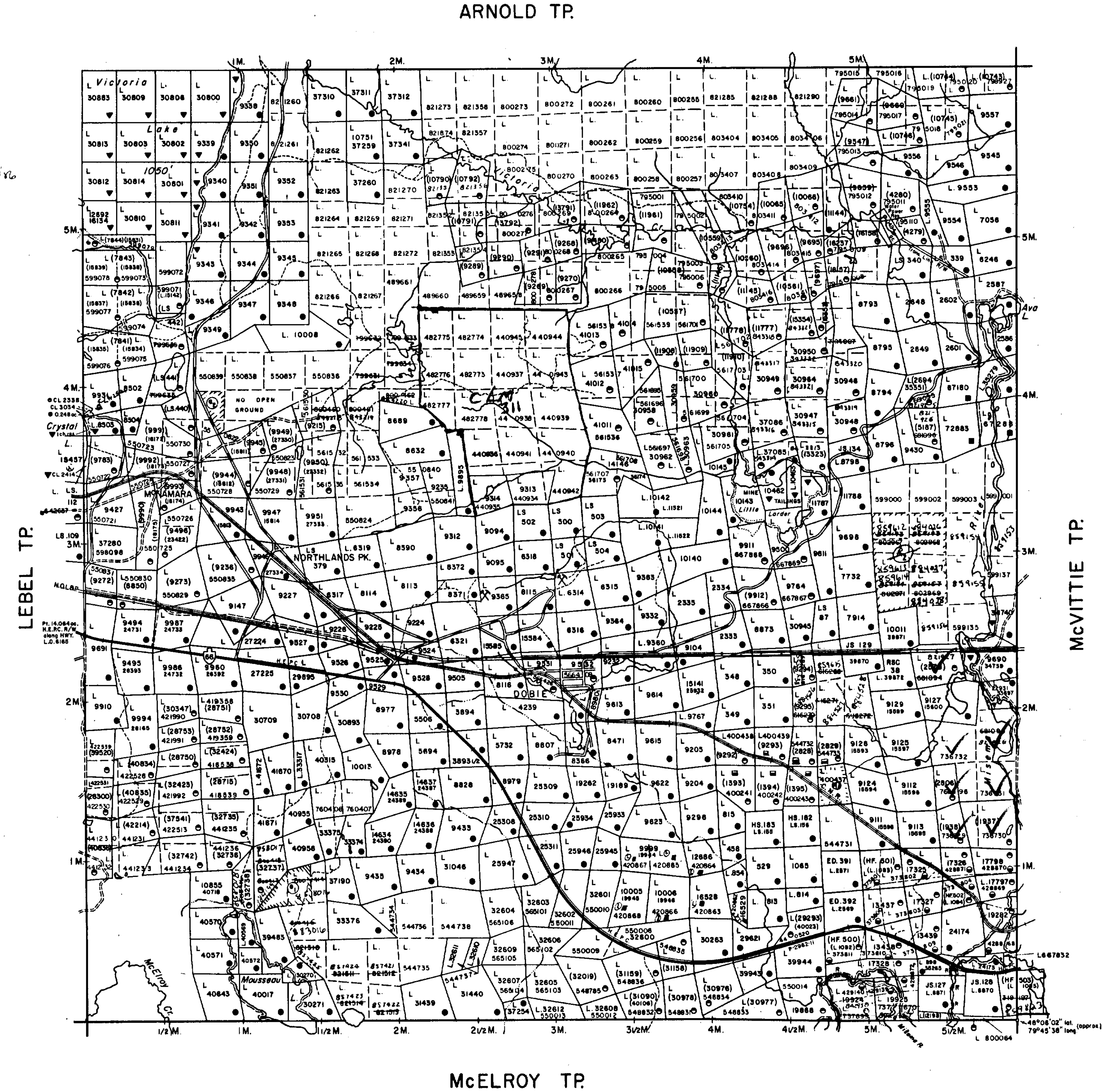
Description	Order No.	Date	Disposition	File
(R1) ~~Sec 36/80~~	~~W 36/85~~	~~24/12/85~~	~~M+S~~	
Sec. 36/80	O22/85	30/12/85	M+S	
(R1) Sec. 36/80	W38/85	30/12/85	M+S	
(R2) Sec 36/80	W14/86	31/01/86	M+S	
Sec 36/80	05/86	31/01/86	M+S effec. 9:00 am Feb. 14/86	

SAND and GRAVEL

(1)	M.T.C.	PIT No. 1666	FILE 101421
(2)	M.T.C.	PIT 3F-27	

32D04SW0007 2.9116 MCVITTIE

210



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
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" , SURFACE RIGHTS ONLY	◧
" , MINING RIGHTS ONLY	◨
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	⊛
CANCELLED	⊕
SAND & GRAVEL	◔

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TOWNSHIP

GAUTHIER

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

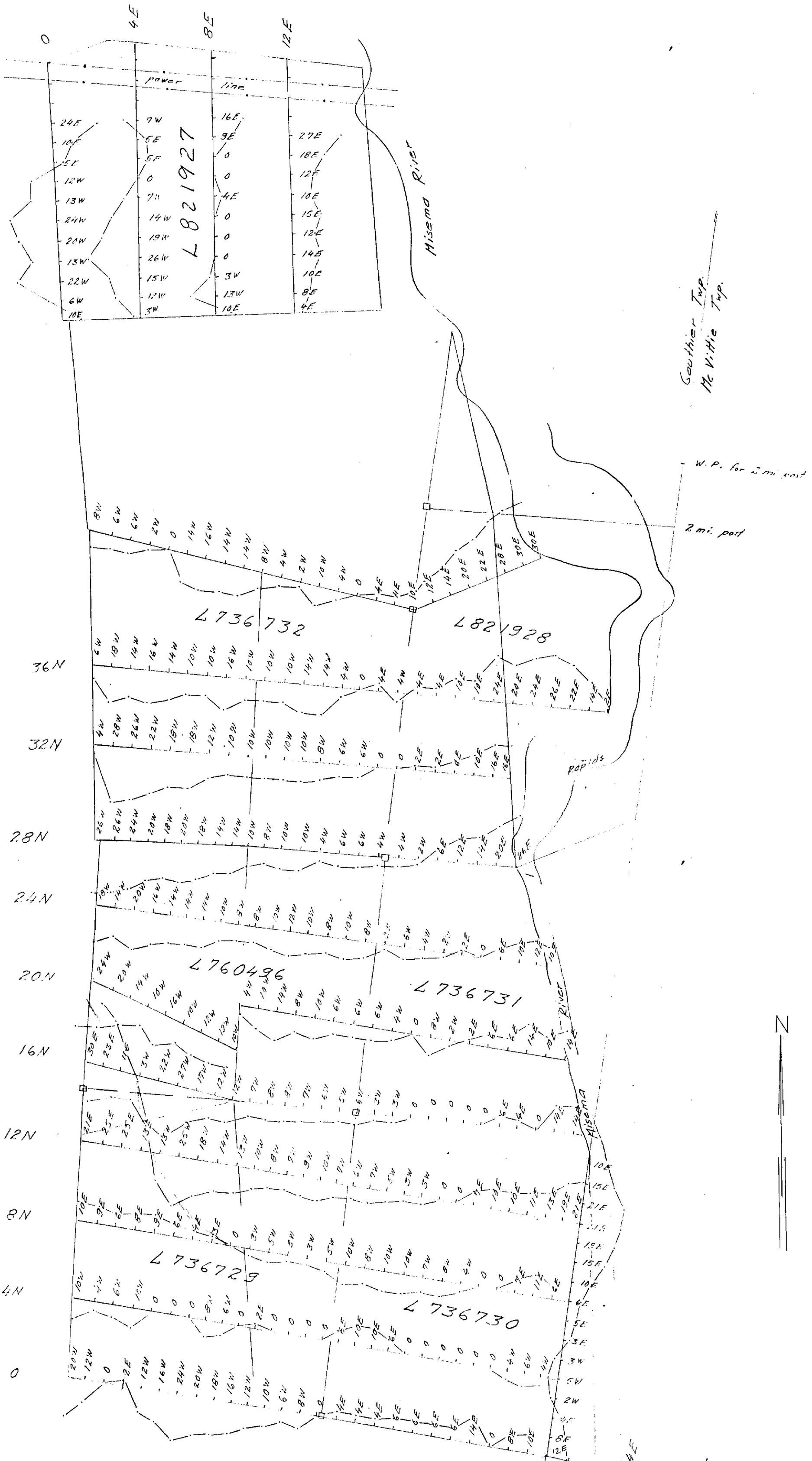
TIMISKAMING

Ontario — Ministry of Natural Resources — Land Management Branch

Date JANUARY, 1985

MAY 29 1986

Number **G-3211**



VLF-EM SURVEY
Misema River
Gauthier & McVittie Township
Ontario
Scale 1" = 400'

Instrument: Phoenix VLF-2
Station: Annapolis, Maryland (21.4 KHz)
Scale: 1" = 400

7116

010

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Geology (Continued)

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Respectfully submitted

May 7, 1986

Robert A. MacGregor, P. Eng.

C E R T I F I C A T E

I, Robert A. MacGregor, certify:

1. I am a Mining Engineer residing at 134 Palace Drive, Sault Ste. Marie, Ontario. I have worked as a mining engineer and geologist for the past 20 years.

2. I am a member of the Association of Professional Engineers of the Province of Ontario and a member of the Canadian Institute of Mining and Metallurgy.

3. I attended Queen's University for two years in the Mining-Geology course.

4. I personally supervised the field work covered by this report.

May 7/86
DATE

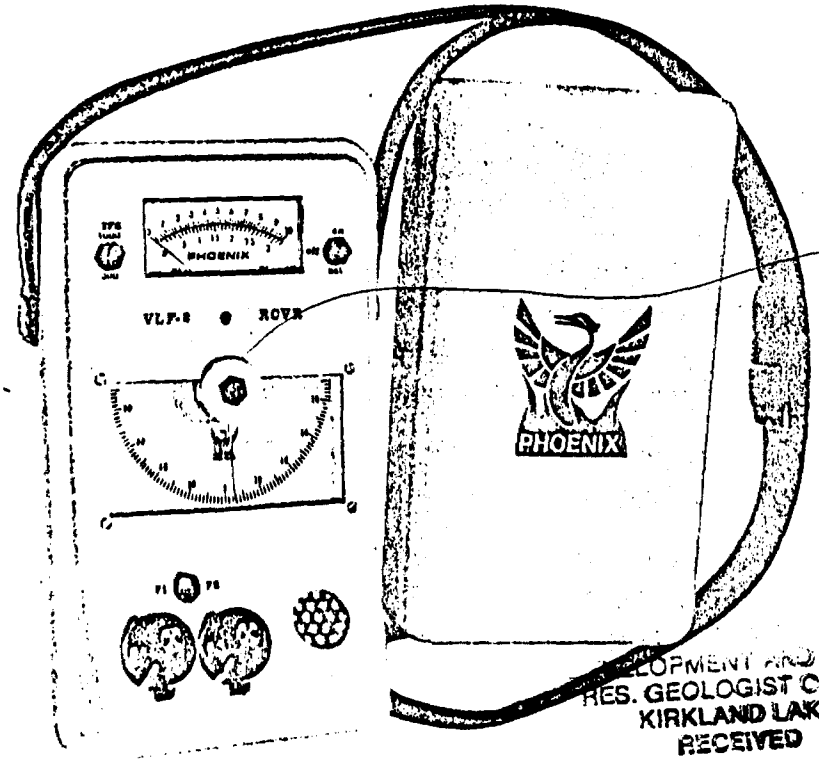
REGISTERED PROFESSIONAL ENGINEER
R. A. MacGREGOR
PROVINCE OF ONTARIO

R. A. MacGregor

VLF-2

Electromagnetic Unit

- Lightweight, low battery drain, rugged, simple to operate
- Two independent channels
- Each channel may select any station between 14.0 and 29.9 kHz
- Single crystal used for all frequencies
- Locking clinometer provides tilt-angle memory
- Superheterodyne detection and digital filtering provide extremely high selectivity and noise rejection



Military and time standard VLF transmitters are distributed over the world. These stations are used for geophysical EM surveying thus eliminating the need for a local transmitter and permitting one-man operation.

To ensure that a station excites the prospective conductor, two stations at approximately right angles are used during a survey (see data on back).

The choice of 160 frequencies in the range 14.0 to 29.9 kHz permits the use of a local EM transmitter when no suitable regular VLF station is available.

PHOENIX GEOPHYSICS LIMITED

Geophysical Consulting and Contracting, Instrument Manufacture, Sale and Lease.

Head Office: 200 Yorkland Blvd. Willowdale, Ont., Canada, M2J 1R6. Tel: (416) 493-6350
[illegible] Burrard St. Vancouver, B.C. Canada. V6C 2G8. Tel: (604) 684-2285

Specifications

Parameters Measured	:	Orientation and magnitude of the major and minor axes of the ellipse of polarization.
Frequency Selection, Front Panel	:	Dual channel, front panel selectable (F1 or F2) each with independent precision 10-turn dial gain control.
Frequency Selection, Internal	:	F1 and F2 can be selected by internal switches within the range 14.0 to 29.9 kHz in 100 Hz increments.
Detection And Filtering	:	Superheterodyne detection and digital filtering provide a much narrower bandwidth and thus greater rejection of interfering stations and 60 cycle noise than conventional receivers.
Meter Display	:	2 ranges: 0 to 300 or 0 to 1000. Background is typically set at 100. Meter is also used as dip angle null indicator and battery test.
Audio	:	Crystal speaker. 2500 Hz used as null indicator.
Clinometer	:	±90°, +0.5° resolution. Normal locking, push button release.
Battery	:	One standard 9v transistor radio battery. Average life expectancy - 1 to 3 months (battery drain is 3 mA)
Temperature Range	:	-40° to + 60° C.
Dimensions	:	8 x 22 x 14 cm (3 x 9 x 6 inches).
Weight	:	850 grams (1.9 pounds).

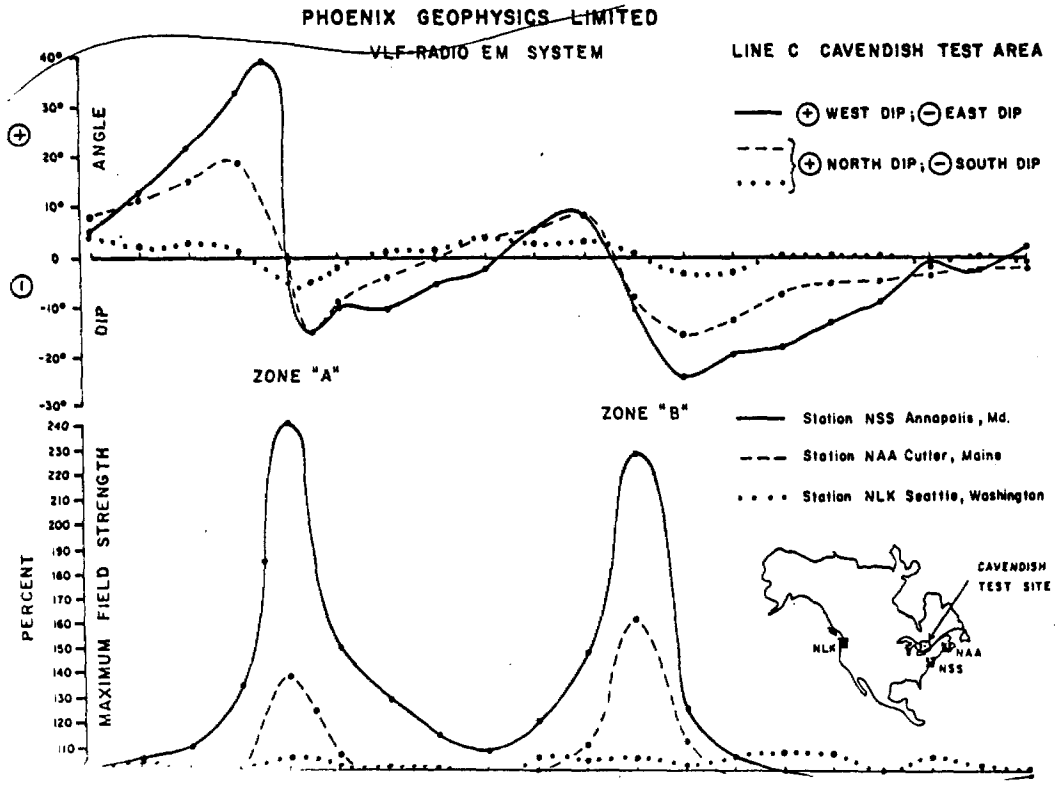
All of the established stations may be selected, or alternatively, a local VLF transmitter may be used which transmits at any frequency in the [illegible] kHz.

VLF Station	Frequency (kHz)
Bordeaux, France	15.1
Odessa (Black Sea)	15.6
Rugby, U.K.	16.0
Moscow, U.S.S.R.	17.1
Yosamai, Japan	17.4
Hegaland, Norway	17.6
Cutler, Maine	17.8
Seattle, Washington	18.6
Malabar, Java	19.0
Oxford, U.K.	19.6
Paris, France	20.7
Annapolis, Maryland	21.4
Northwest Cape, Australia	22.3
Lauluolei, Hawaii	23.4
Buenos Aires, Argentina	23.6
Rome, Italy	27.2

Field Data

The results below illustrate the need for using two orthogonal stations when the strike of the prospective conductor is not well-known. The dip angle and amplitude data measured using station NLK in Seattle, Washington, show only a very weak anomaly associated with the two conductive sulphide zones at Cavendish, Ontario.

The results obtained using Cutler, Maine reveal a more prominent anomaly, but the best response was obtained using Annapolis, Maryland since the station lies almost due south and the transmitted electromagnetic field is thus maximum-coupled with the North-South trending conductors.



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 459 Number of Readings 459

Station interval 100' Line spacing 400'

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 Phoenix VLF-2

Coil configuration N/A

Coil separation N/A

Accuracy ± 4°

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

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

Parameters measured Dip angle of resultant field

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

RESISTIVITY

Power

Electrode array

Electrode spacing

Type of electrode

Ontario

Ministry of Northern Affairs and Mines

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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 Gauthier & McVittie Twps.

Claim Holder(s) Lucien Lacasse
Daniel Lacasse

Survey Company Colex Exploration Inc.

Author of Report R.T. MacGregor

Address of Author 134 Palace Dr., S.S. Marie

Covering Dates of Survey 22/04/86 - May 7/86
(linecutting to office)

Total Miles of Line Cut _____

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: May 7 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	736729
	736730
	736731
	736732
	[redacted]
	821910
	821927
	821928
	[redacted]
	760496

MINISTRY OF NORTHERN AFFAIRS AND MINES
RES. GEOLOGIST OFFICE
KIRKLAND LAKE
RECEIVED
JUN 13 1986

TOTAL CLAIMS _____

If space insufficient, attach list

837 (85/9)

Ontario and Mines

(Geophysical, Geological, Geochemical and Expenditures)

Mining

32D04SW0007 2.9116 GAUTHIER

900

Type of Survey(s)

[redacted]-EM

Claim Holder(s)		Prospector's Licence No.
Lucien Lacasse	Daniel Lacasse	K-18234 K-19953
Address Box 231 LARDER LAKE, Ontario	79 Commissioner St. Larder Lake, Ontario POK 1LO	

Company	Date of Survey (from & to)	Total Miles of line Cut
Colex Exploration Inc.	22 04 86 (Day Mo. Yr.) 27 04 86 (Day Mo. Yr.)	

Name and Address of Author (of Geo-Technical report)

R.A. MacGregor, 134 Palace Dr., Sault Ste. Marie, Ontario P6B 5H5

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	736729	
	736730	
	736731	
	736732	
	821910	
	821927	
	821928	
	&	
	760496	

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
RES. GEOLOGIST OFFICE
KIRKLAND LAKE
RECEIVED
JUN 13 1986

RECEIVED
LARDER LAKE MINING DIVISION
MAY 12 1986

RECORDED
MAY 12 1986
Receipt # _____

Total number of mining claims covered by this report of work: 8

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: S ÷ 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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
160	MAY 12 1986	Acting
	Date Approved as Recorded 86.6.6	Branch Director

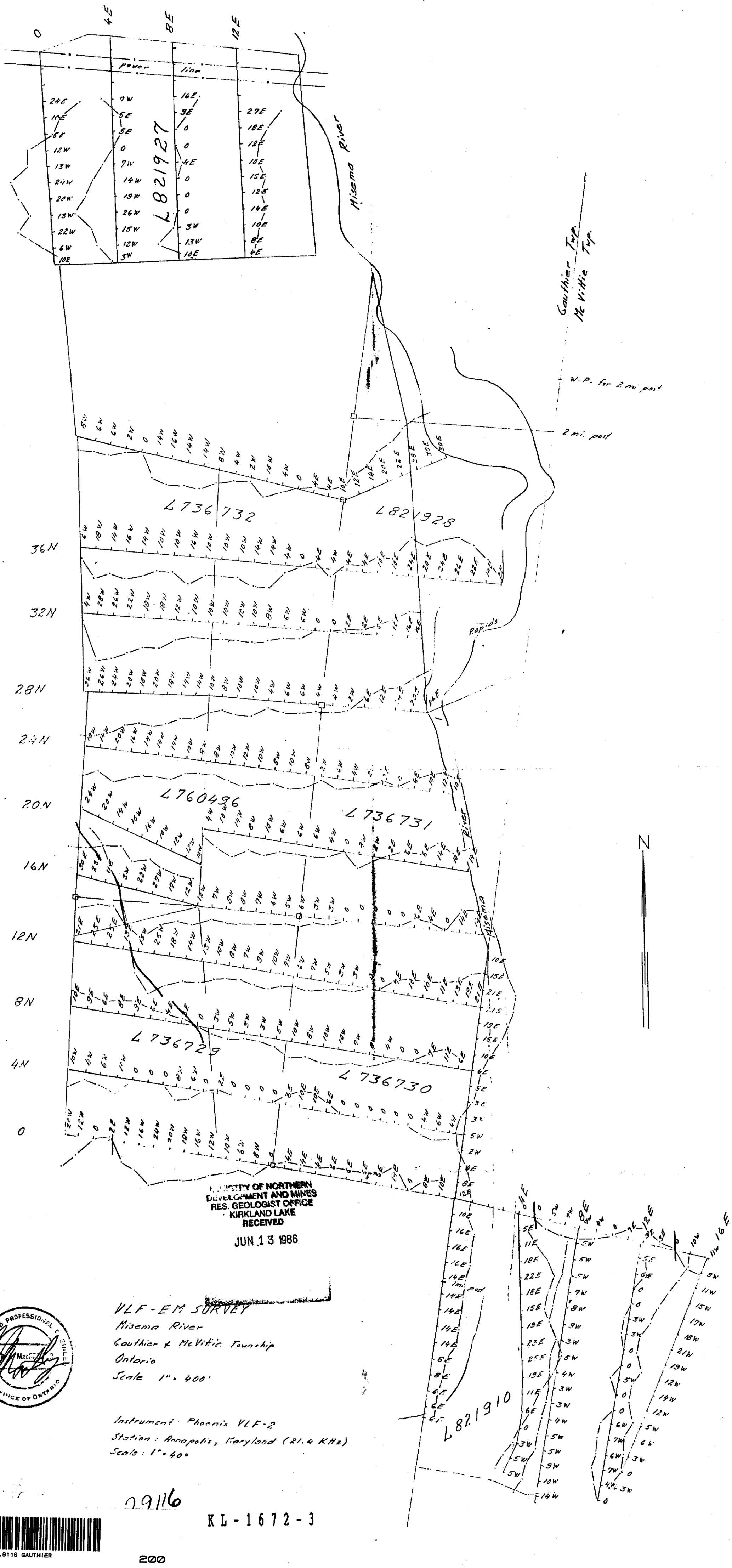
Date	Recorded Holder or Agent (Signature)
May 7, 1986	

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

R.A. MacGregor, 134 Palace Dr., Sault Ste. Marie, Ont. P6B 5H5



REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

VLF-EM SURVEY
Misema River
Gauthier & McVittie Township
Ontario
Scale 1" = 400'

Instrument: Phoenix VLF-2
Station: Annapolis, Maryland (21.4 KHz)
Scale: 1" = 40'

KL-1672-3