

31L07NW2010

2.20235

MATTAWAN

010

NTS 32 L/7

2 20235

**GROUND GEOPHYSICAL SURVEYS  
TOWER LAKE PROPERTY (East)  
Magnetometer and VLF-EM Surveys**

**Mattawan Township**

March 2000

**RECEIVED**  
MAR 29 2000  
9:05  
GEOSCIENCE ASSESSMENT  
OFFICE

31107M2010 2.20235 MATAMAN 010C



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- Magnetometer contour map
- VLF Profiles map - NAA Cutler, Maine

## 1.0 INTRODUCTION:

From March 19 to 26, 2000 a program of linecutting and geophysical surveys was carried out on the Tower Lake Property held by R.

↳ Komarechka of Suite 1, 38 Haig St., Sudbury, Ontario P3C 1E2.

The geophysical work was executed by David Laronde and reported on by David Laronde of Meegwich Consultants Inc. P.O. Box 482, Temagami, Ontario POH 2H0.

**Linecutting:** A total of 10.00 km of linecutting was done. 7.600 km was cut from a 2.400 km. long baseline running at an azimuth of 320 degrees. All 10 km of line were surveyed with total field magnetics and VLF electromagnetics. All the lines were cut by Denis Theberge and Reg Morin with chainsaw and are considered to be very good quality.

## 2.0 PROPERTY:

The 17 unit (340 hectare) property consists of a contiguous group of seven mining claims numbered situated in subdivided Mattawan Township. The claims are located in Lots 2,3,4,5,6 of Concessions IX,X,XI and are in the Sudbury Mining District.

The claims are numbered as follows:

Claim No.	No. of units	Due date
1237432	3	March 3, 2002
1237433	4	March 3, 2002
1229912	2	April 6, 2000
1224151	1	April 6, 2000
41230156	3	April 6, 2000
1230129	1	April 6, 2000
1230149	3	April 6, 2000

### **3.0 LOCATION AND ACCESS:**

The property is located 16 km northwest of the town of Mattawa, Ontario which is 60 km east of the city of NorthBay along Hwy 17.

The claim group is accessed from a seasonal, high quality logging road which branches off Hwy 533 some 13 km northwest of Mattawa. A secondary logging road heads north through the property off the main logging road. This secondary roads winds its way for 2 km. onto the property. A 4 wheel drive vehicle is recommended since the road can be rugged in places.

#### **4.0 MAGNETOMETER SURVEY:**

A total of 10.00 km was surveyed (800 readings) at 12.5 meter stations on lines spaced at 200 meters.

**4.1 Instrumentation:** A GEM Systems GSM 19 Overhauser Magnetometer, Serial no. 58479 was used for the survey. A base station (Scintrex EDA Omni IV) was set up to monitor and correct for the diurnal variation during the course of the survey. These instruments are micro-processor based and measure the earth's total magnetic field to an accuracy of one-tenth of a gamma.

**4.2 Survey Results:** The results are presented in contour form at on plans at 1:5000 scale.

There were two massive highs detected that are both about 500 meters across. They are centered on L 1800 N at 450 E and on L 800 N at 150 E. The intensity of these two feature range up to 1000 nT above background.

For the most part the remainder of the grid is around background values with the exception of a disturbance in the extreme northwest corner of the grid.

## 5.0 VLF Electromagnetic Survey:

A total of 10.00 km was surveyed for a total of 400 readings taken at 25 meter stations on lines spaced at 100 meters.

**5.1 Instrumentation:** A Geonics VLF-EM receiver was used for the survey. The VLF transmitter station was Cutler, Maine NAA transmitting at 24.0 kHz. The measured quantities are the in-phase and quadrature components of the vertical magnetic field measured as a percentage of horizontal primary field (read to a resolution of +/- 1%). All readings were taken facing north.

**5.2 Survey Results:** The results of the survey are presented in profile form on plans at 1:5000 scale.

In many cases weak VLF conductors are electrolytic (bedrock shears and fractures, overburden filled bedrock troughs and valleys) or poorly connected metallic grains such as stringer sulphides.

Generally speaking there are several weak conductors that may fall into the above category and have a possible non-metallic source. Nevertheless anomalies that warrant a field check for possible metallic sources are A,B,C and D.

A very weak (partial) response along the creek parallel to the baseline is noted.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS:**

The magnetometer survey has outlined two massive highs that likely represent mafic intrusive bodies (gabbro). The southern most feature is a little more intense indicating more magnetic mineral content than the northerly twin.

The VLF-EM anomalies encountered are weak for the most part. Due to the nature of the survey it is difficult to ascertain mineral or metallic source anomalies. Conductors A,B,C and D should be investigated further for metallic sources. A field visit and hand trenching could be done as follow-up work.

Other further work should consist of adding lines at 100 meter intervals for improved resolution of the magnetic features outlined.

**References**

Airborne map supplied by client. Source unknown.



## CERTIFICATE OF AUTHOR

I, David Laronde of the town of Temagami, Ontario hereby certify:

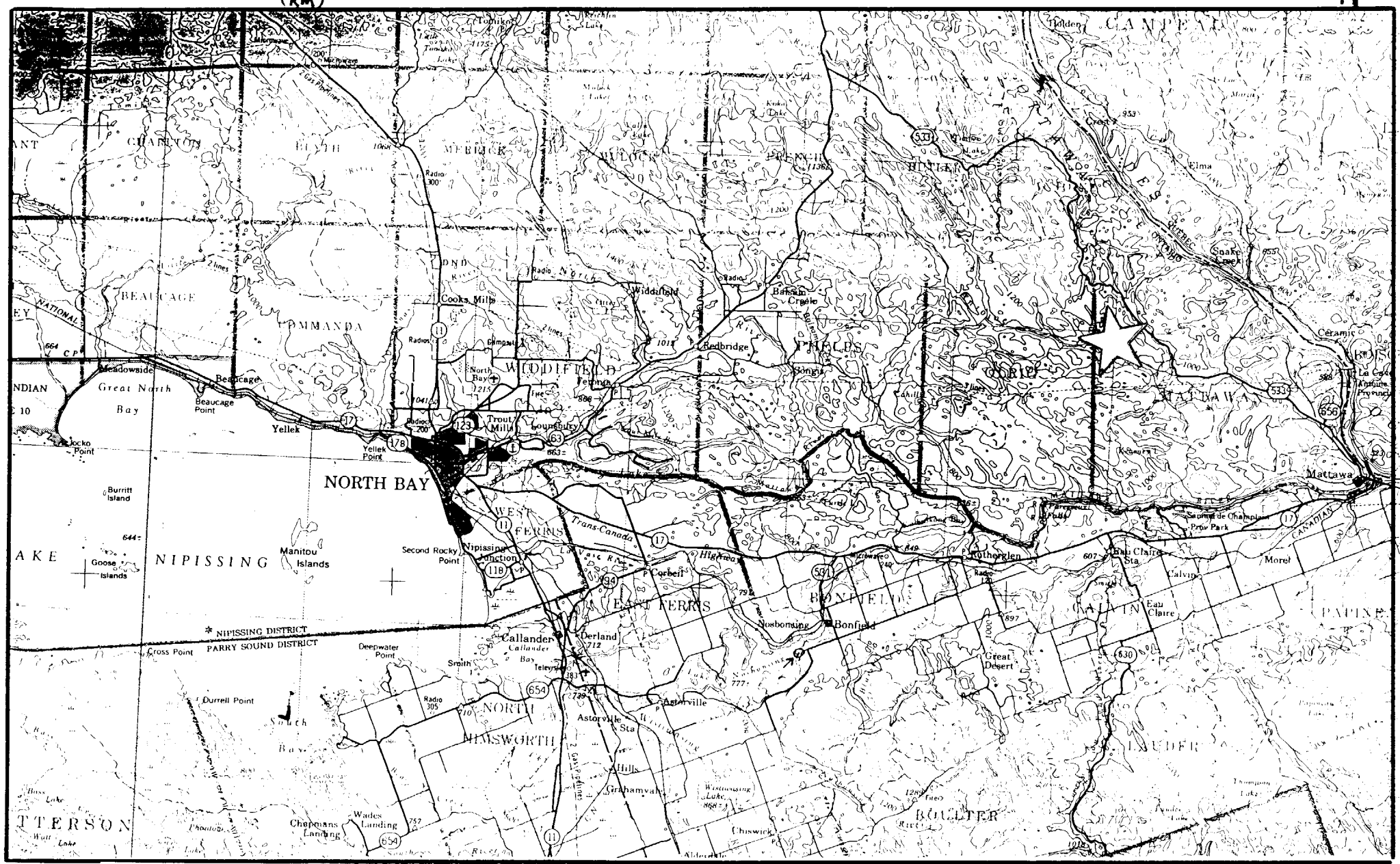
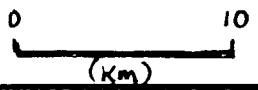
1. That I am a geology engineering technologist and have been engaged the mineral exploration industry for the past 20 years.
2. That I am a graduate of Cambrian College in Sudbury with a diploma in Geology Engineering Technology 1979.
3. That my knowledge of the property described herein was acquired by field work and documentation.

Dated at Temagami this 27th day of March 2000.



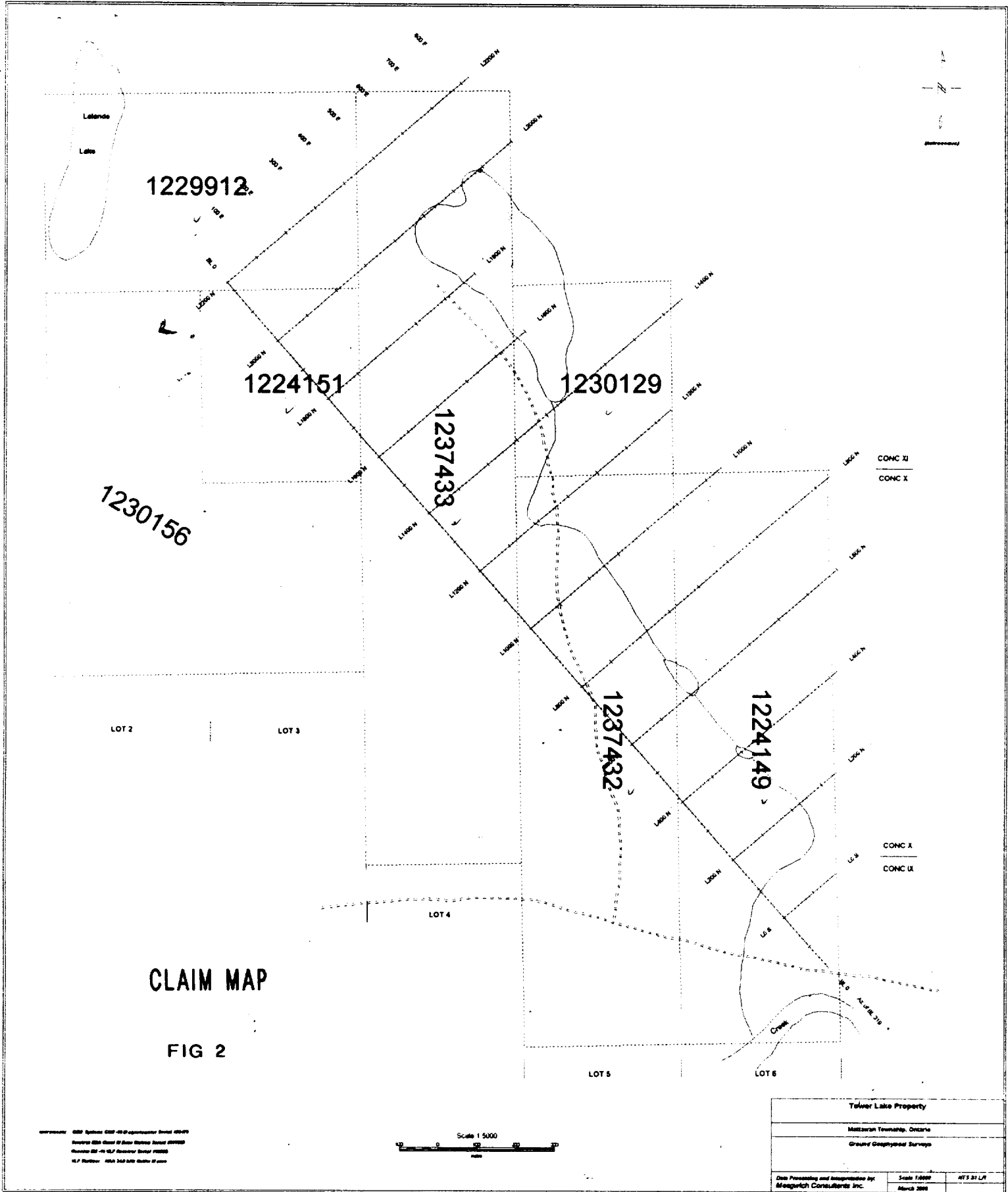
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David Laronde



LOCATION MAP

FIG 1



1229912

1224151

1230129

1237433

1230156

1237432

1224149

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

CLAIM MAP

FIG 2

Surveyed: 2008 System: 2007-10-01 Representative: 2008-01-01  
 Revised: 2008-01-01 of Date: 2008-01-01  
 Drawing: 2008-01-01 of Date: 2008-01-01  
 S.P. Number: 1000 2008-01-01



Telver Lake Property		
Maitland Township, Ontario		
Ground Geophysical Survey		
<small>           Data Processing and Interpretation by            Mergewich Consultants Inc.         </small>	<small>           Scale 1:2000            March 2008         </small>	<small>           NTS 21 LP         </small>

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## INSTRUMENT SPECIFICATIONS

### MAGNETOMETER / GRADIOMETER

Resolution:	0.01 nT (gamma), magnetic field and gradient.
Accuracy:	0.2 nT over operating range.
Range:	20,000 to 120,000 nT.
Gradient Tolerance:	Over 10,000 nT/m
Operating interval:	3 seconds minimum, faster optional. Readings initiated from keyboard, external trigger, or carriage return via RS-232-C.
Input/Output:	6 pin weatherproof connector, RS-232C, and (optional) analog output.
Power Requirements:	12 V, 200 mA peak (during polarization), 30 mA standby. 300mA peak in gradiometer mode.
Power Source:	Internal 12 V, 2.6 Ah sealed lead-acid battery; standard, others optional. An External 12V power source can also be used.
Battery Charger:	<b>Input:</b> 110 VAC, 60 Hz. Optional 110/220 VAC, 50/60 Hz. <b>Output:</b> dual level charging.
Operating Ranges:	Temperature: -40 °C to +60 °C. Battery Voltage: <b>10.0 V minimum to 15V maximum.</b> Humidity: <b>up to 90% relative, non condensing.</b>
Storage Temperature:	-50°C to +65°C
Display:	<b>LCD:</b> 240 x 64 pixels, or 8 x 30 characters. Built in heater for operation below -20°C
Dimensions:	<b>Console:</b> 223 x 69 x 240mm. <b>Sensor staff:</b> 4 x 450mm sections. <b>Sensor:</b> 170 x 71mm dia. <b>Weight:</b> Console 2.1kg, Staff 0.9kg, Sensors 1.1kg each.

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### VLF

Frequency Range:	15 - 30.0 kHz.
Parameters Measured:	Vertical In-phase and Out-of-phase components as percentage of total field. 2 components of horizontal field. Absolute amplitude of total field.
Resolution:	0.1%.
Number of Stations:	Up to 3 at a time.
Storage:	Automatic with: time, coordinates, magnetic field/gradient, slope, EM field, frequency, in- and out-of-phase vertical, and both horizontal components for each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	14 x 15 x 9 cm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb).

# VLF-EM GEONICS

Page 1

## EM16 SPECIFICATIONS

MEASURED QUANTITY	Inphase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	Inphase: $\pm 150\%$ Quad-phase: $\pm 40\%$
RESOLUTION	$\pm 1\%$
OUTPUT	Nulling by audio tone. Inphase indication from mechanical inclinometer and quadphase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz (15-30 kHz optional) VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	ON/OFF switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells.
DIMENSIONS	53 x 21.5 x 28 cm
WEIGHT	Instrument: 1.8 kg Shipping: 8.35 kg

### CAUTION:

EM16 inclinometer may be damaged by exposure to temperatures below  $-30^{\circ}\text{C}$ . Warranty does not cover inclinometers damaged by such exposure.



31L07NW2010 2.20235 MATTAWAN 900

Subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about this form should be directed to the Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.  
- Please type or print in ink.

**1. Recorded holder(s) (Attach a list if necessary)**

Name	ROBERT GERALD KOMARECHKA	Client Number	153168
Address	545 GRANITE ST. SUDBURY ONTARIO P3C 2P4	Telephone Number	(705) 673-0873
		Fax Number	(705) 673-0873
Name		Client Number	
Address		Telephone Number	
		Fax Number	

**2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.**

<input checked="" type="checkbox"/> Geotechnical: prospecting, surveys, assays and work under section 18 (regs)	<input type="checkbox"/> Physical: drilling stripping, trenching and associated assays	<input type="checkbox"/> Rehabilitation
Work Type	Office Use	
GEOTECHNICAL - LINECUTTING, MAG, VLF	Commodity	
	Total \$ Value of Work Claimed	5885
Dates Work Performed	NTS Reference	
From 19 Day MARCH 2006 To 26 Day MARCH 2006		
Global Positioning System Data (if available)	Township/Area	Mining Division
	MATTAWAN	Sudbury
	M or G-Plan Number	Resident Geologist District
	G1633	Sudbury

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
- provide proper notice to surface rights holders before starting work;  
- complete and attach a Statement of Costs, form 0212;  
- provide a map showing contiguous mining lands that are linked for assigning work;  
- include two copies of your technical report.

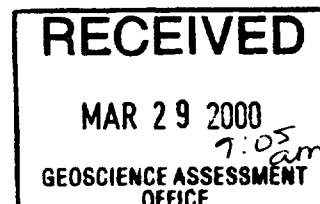
**3. Person or companies who prepared the technical report (Attach a list if necessary)**

Name	MEEGWICH INC (DAVID LARONDE)	Telephone Number	(705) 569-2909
Address	P.O. BOX 482 TEMAGAMI ONTARIO P0H 2H0	Fax Number	(705) 569-2817
Name		Telephone Number	
Address		Fax Number	
Name		Telephone Number	
Address		Fax Number	

**4. Certification by Recorded Holder or Agent**

I, ROBERT G. KOMARECHKA (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent	Date
<i>Robert G. Komarechka</i>	MARCH 28/00
Agent's Address	Telephone Number
545 GRANITE ST. SUDBURY ONTARIO P3C2P4	(705) 673-0873
	Fax Number
	(705) 673-0873



5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W0070.00064

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	<del>1906.00</del> \$ 8,892	\$ 4,000	0	\$4,892
1 S1224149	3 <del>RAK</del>	<del>1905.96</del>	1200		
2 S1224151	1 <del>RAK</del>	<del>469.00</del> 469.00	400		
3 S1229912	2	275.00	800		
4 S1230129	1 <del>RAK</del>	<del>475.96</del>	400		
5 S1230156	3	<del>476.00</del> 0	1200		
6 1237432	3 <del>RAK</del>	<del>115.00</del> 115.00	0		320.55
7 1237433	4 <del>RAK</del>	<del>1644</del> 1644	0		1569.45
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		5885.00	4000		1885.00

I, ROBERT G. KOMARECHKA, do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Registered Holder or Agent Authorized in Writing

Date

MARCH 28 / 00

6. Instruction for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

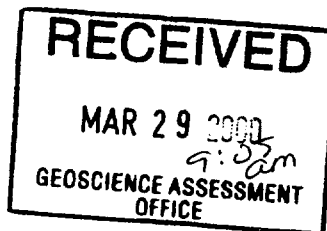
Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)







Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9845  
Fax: (877) 670-1555

May 5, 2000

ROBERT GERALD KOMARECHKA  
545 GRANITE ST.  
SUDBURY, Ontario  
P3C-2P4

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.20235

**Status**

**Subject: Transaction Number(s):** W0070.00064 Approval

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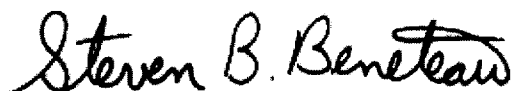
We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact LUCILLE JEROME by e-mail at [lucille.jerome@ndm.gov.on.ca](mailto:lucille.jerome@ndm.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Steve B. Beneteau  
Acting Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

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**Submission Number:** 2.20235

**Date Correspondence Sent:** May 05, 2000

**Assessor:** LUCILLE JEROME

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<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W0070.00064	1224149	MATTAWAN	Approval	May 05, 2000

**Section:**

14 Geophysical MAG

14 Geophysical VLF

**Correspondence to:**

Resident Geologist  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

ROBERT GERALD KOMARECHKA  
SUDBURY, Ontario

Assessment Files Library  
Sudbury, ON

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**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
1. SEC 28/30	W-2/82	12/4/82	M.R.O.	27470
2. CROWN RESERVE			S.R.O.	18187
3. WITHDRAWAL	W-8-82/88	02/08/88	M.R.O.	196180
4. SEC 35 W-LL-P148/99	ONT	MAY 14/99	M+S	
5. SEC 35 W-LL-P131/99	ONT	MAY 14/99	M+S	
6. SEC 35 W-LL-P123/99	ONT	MAY 15/99	M+S	

MINING CLAIMS STAKED IN THIS TOWNSHIP ARE SUBJECT TO SEC. 44 OF THE MINING ACT, R.S.O. 1970.

310-6512 (L.V. P. 126 C.R.)  
 See Calvin Township Loc. # 11  
 File for Plan of Prov. Park

JUNE 1ST, OPENING  
 ONTARIO GAZETTE VOL. 123-13  
 MARCH 31, 1990 AND VOL. 123-18 MAY 5, 1990  
 PT. LOT 37, CONC. V MRO



**REFERENCES**

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

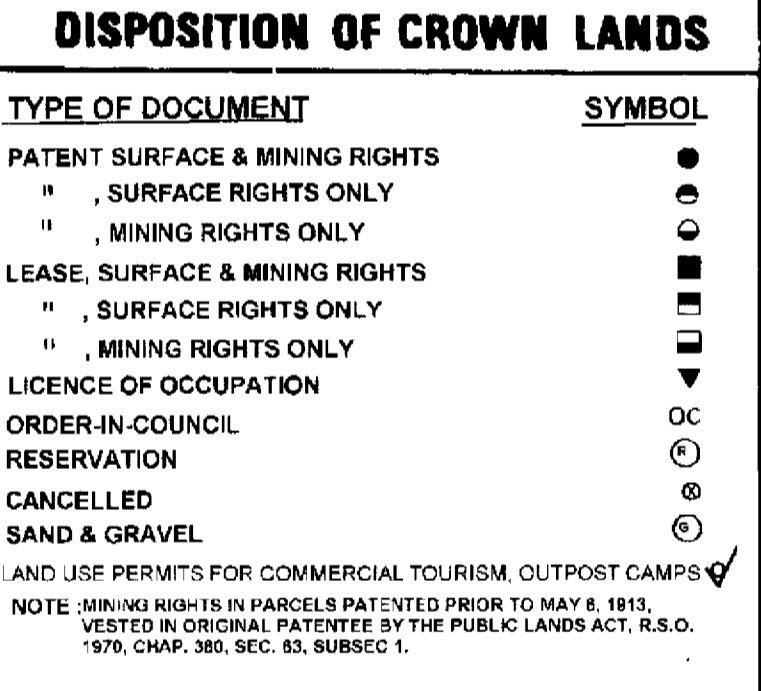
**LEGEND**

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	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
AND USE PERMITS FOR COMMERCIAL TOURISM, OUTPOST CAMPS	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CAP. 305, SEC. 53, SUBSEC. 1.



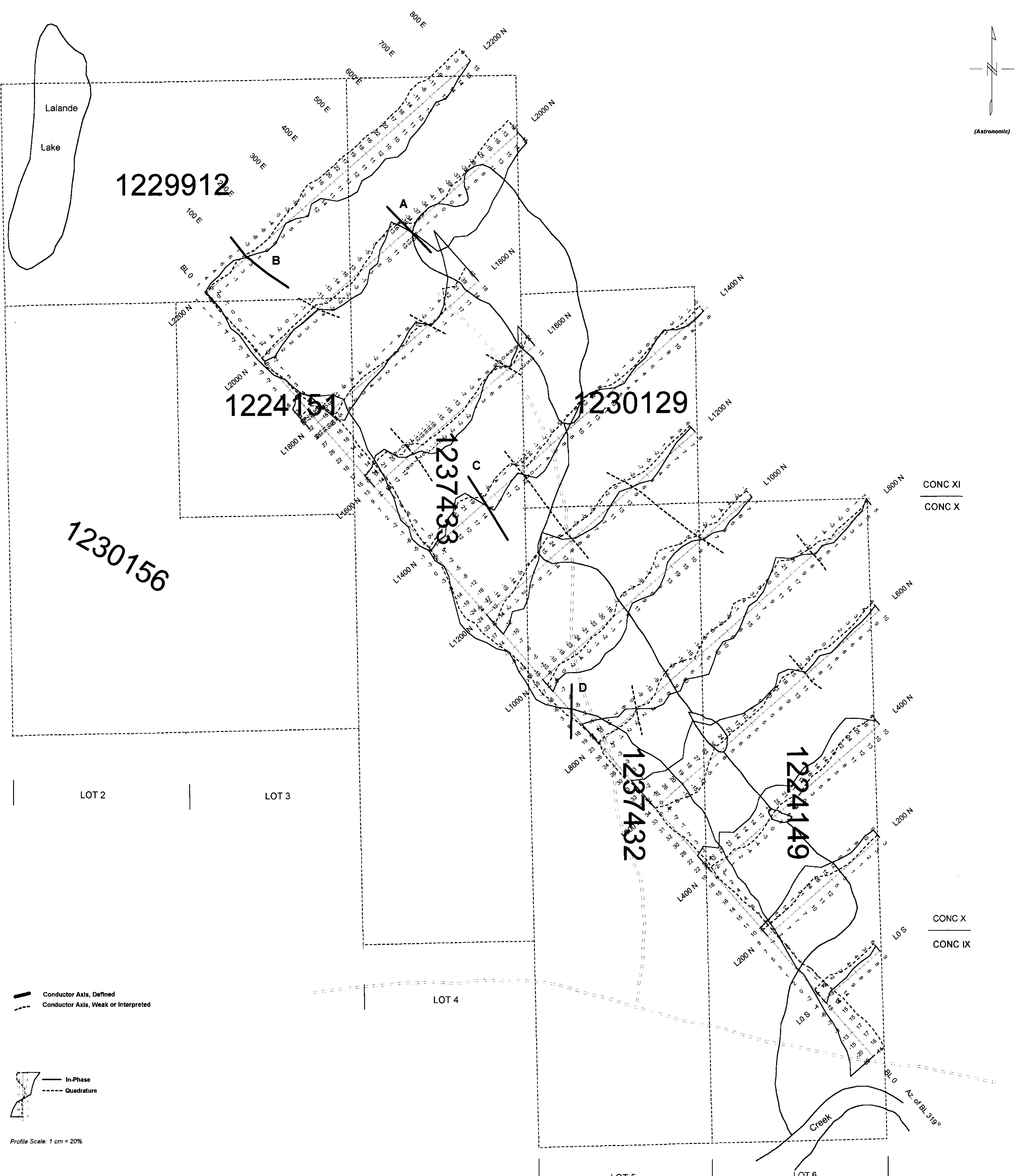
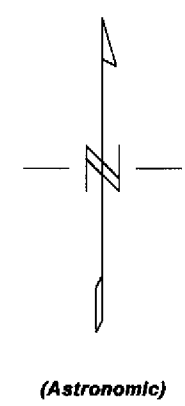
**TOWNSHIP**  
**MATTAWAN**  
 THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED.

**M.N.R. ADMINISTRATIVE DISTRICT**  
**NORTH BAY**  
**MINING DIVISION**  
**SUDBURY**  
**LAND TITLES REGISTRY DIVISION**  
**NIPISSING**

Ministry of Natural Resources  
 Land Management Branch

Date: OCTOBER 1984  
 Number: **G-1633**

RECEIVED  
 MAY 29 2000  
 GEOLOGICAL SURVEY OF CANADA



CONC XI  
CONC X

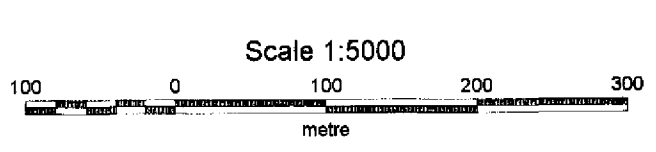
CONC X  
CONC IX

— Conductor Axis, Defined  
- - - Conductor Axis, Weak or Interpreted

— In-Phase  
- - - Quadrature

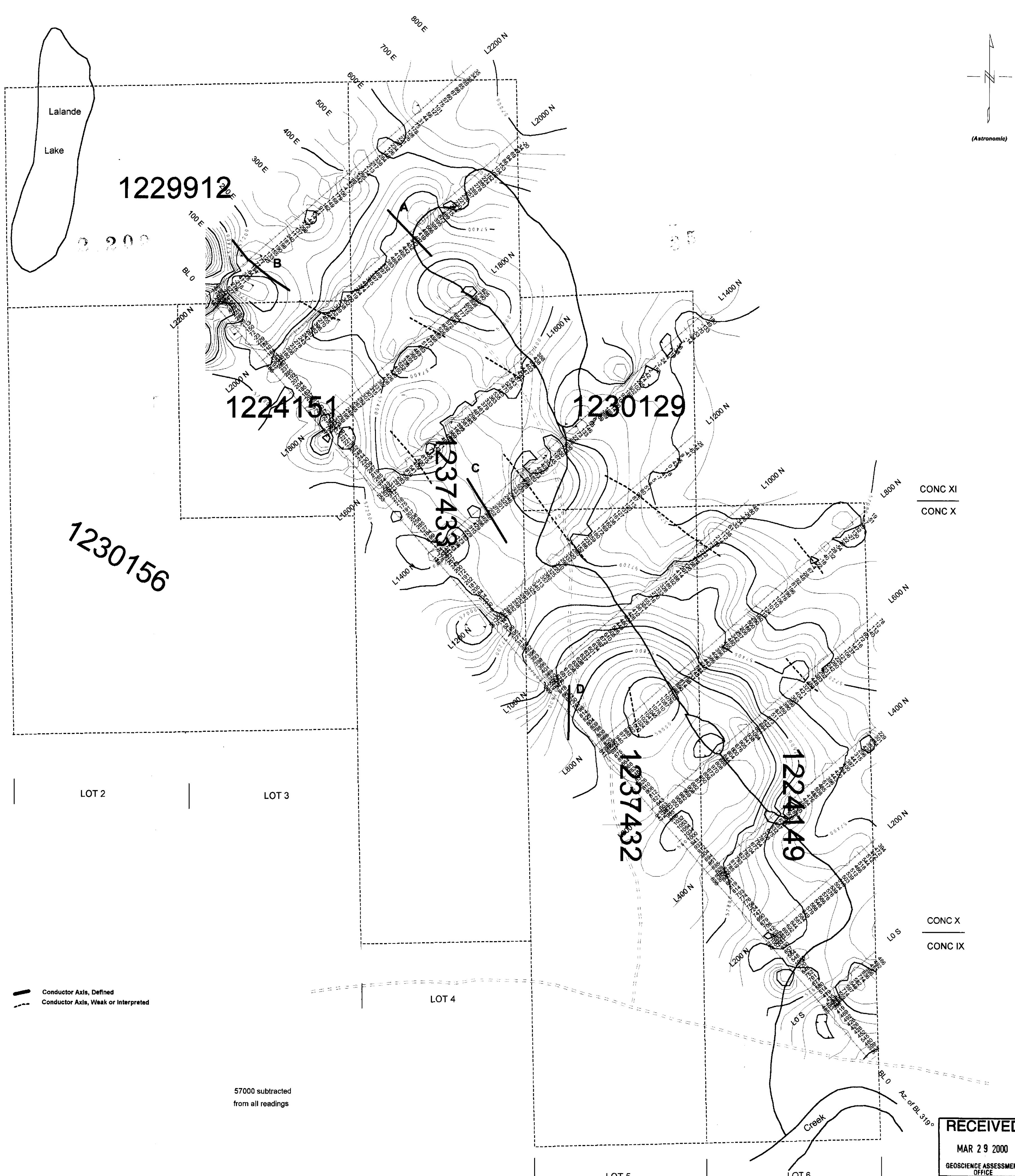
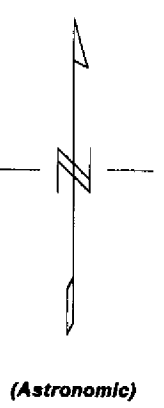
Profile Scale: 1 cm = 20%

Instruments: GEM Systems GSM-19 Magnetometer Serial #58479  
Scintrex EDA Omni IV Base Station Serial #228225  
Geonics EM-16 VLF Receiver Serial #10585  
VLF Station: NAA 24.0 kHz Cutler Maine



<b>Tower Lake Property</b>		
Mattawan Township, Ontario		
Ground Geophysical Surveys VLF - EM Survey Profiles of the In-Phase and Quadrature		
Data Processing and Interpretation by: <b>Meegwich Consultants Inc.</b>	Scale 1:5000 March 2000	NTS 31 L/7





CONC XI  
CONC X

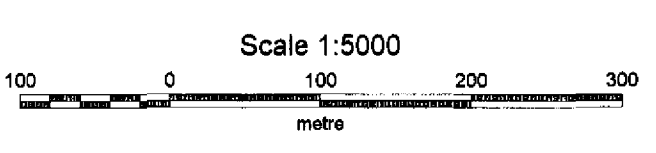
CONC X  
CONC IX

— Conductor Axis, Defined  
- - - Conductor Axis, Weak or Interpreted

57000 subtracted  
from all readings

**RECEIVED**  
MAR 29 2000  
GEOSCIENCE ASSESSMENT  
OFFICE

Instruments: GEM Systems GSM-19 Magnetometer Serial #58479  
Scintrex EDA Omni IV Base Station Serial #228225  
Geonics EM-16 VLF Receiver Serial #10585  
VLF Station: NAA 24.0 KHz Cutler Maine



Tower Lake Property		
Mattawan Township, Ontario		
Ground Geophysical Surveys		
Total Field Magnetics		
Contours		
Data Processing and Interpretation by:	Scale 1:5000	NTS 31 L/7
Meegwich Consultants Inc.	March 2000	

