



42C13SE0066 2.16233 WHITE LAKE

010

**GEOPHYSICAL REPORT
FOR
ROYAL OAK MINES LIMITED
ON THE
WHITE LAKE PROPERTY
THUNDER BAY MINING DIVISION
NORTHERN, ONTARIO**

2.16233

**PREPARED BY: John C. Grant CET FGAC
August 1995**

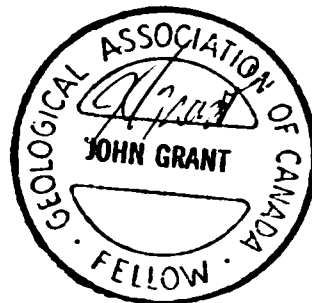




TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
PROPERTY LOCATION AND ACCESS.....	1
CLAIM NUMBERS.....	1
PERSONELL.....	2
GROUND PROGRAM.....	2
GEOPHYSICAL PROGRAM.....	2
MAGNETIC SURVEY.....	3
VLF-EM SURVEY.....	3
SURVEY RESULTS.....	4
CONCLUSIONS AND RECOMMENDATIONS.....	4
CERTIFICATE	
FIGURES 1- LOCATION MAP	
2- PROPERTY LOCATION MAP	
3- CLAIM SKETCH	
APPENDIX A - BRGM OMNI PLUS VLF/MAGNETOMETER SURVEY AND OMNI IV "TIE-LINE" MAGNETOMETER	
MAPS- MAGNETOMETER SURVEY	
- VLF DIP ANGLE 24.0 KHZ	
- VLF DIP ANGLE 21.4 KHZ	
- FRASER FILTER VLF 24.0 KHZ	
- FRASER FILTER VLF 21.4 KHZ	

INTRODUCTION

The services of Exsics Exploration Limited were retained by Royal Oak Mines Inc. to complete a linecutting and geophysical program across a portion of their claim holdings in the White Lake area of the Thunder Bay Mining Division of Northern Ontario. Figure 1.

The purpose of this program was to locate and outline favourable geological structure which would be a suitable horizon for gold deposition.

The linecutting program was completed between June 14 and July 2, 1995 and the follow up geophysical program was completed between July 30 and August 1995.

This report will deal with the results of the 1995 program.

PROPERTY LOCATION AND ACCESS

The White Lake Property is located on the south end of White Lake which is located in the Thunder Bay Mining Division of Northern Ontario. More specifically the survey area is located on the south end narrows of White Lake, immediately to the north of Highway 17 west. Figure 1 and 2.

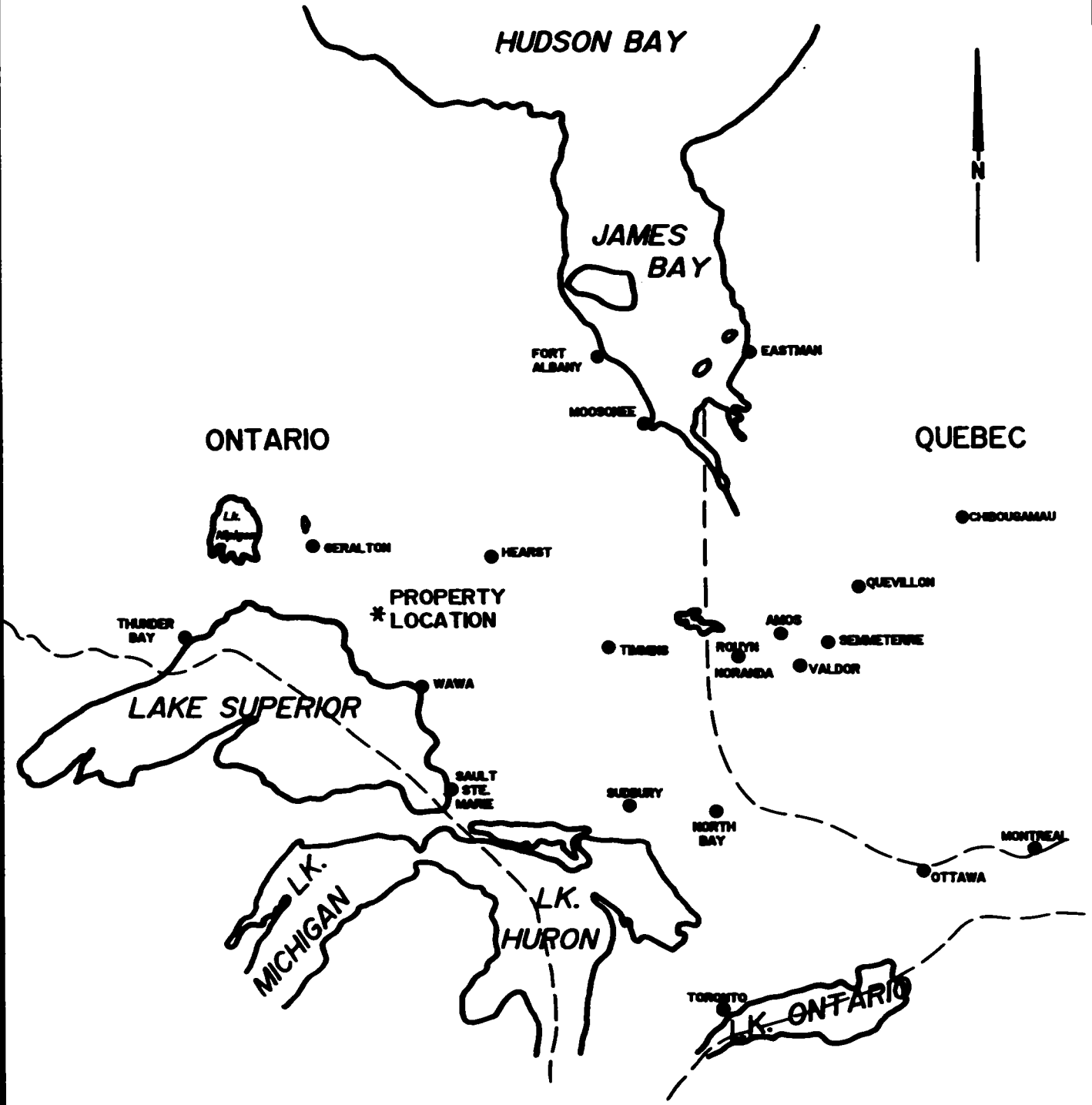
Access to the grid was ideal. Highway 17 west bridges the narrows of White Lake just to the south of the grid. A short boat ride up the narrows allows access to the west end of all cut lines. White Lake is situated approximately 25 kilometers west of White River and approximately 30 kilometers east of Hemlo. Figure 2.


CLAIM NUMBERS

The White Lake Property is comprised of a large number of claims. This report will deal with the coverage of a portion of the property which was surveyed by the 1995 program. The claim numbers which were covered by the program are as follows:

TB-1110122	-9 units
TB-782943	-2 units portion
TB-782944	-15 units
TB-1110123	-8 units
TB-1110124	-4 units

Refer to Figure 3, copied from MNDM Plan Map of White Lake Area.



			EXSICS EXPLORATION LTD.: P.O. Box 1000, P4M-7X1 Suite 13, Hallinger Bldg, Timmins Ont. Telephone: 705-267-4151		
			CLIENT: ROYAL OAK MINES INC.		
PROPERTY: WHITE LAKE PROPERTY			TITLE:		
LOCATION MAP			Fig. 1		
Date: July 1995		Scale: 1"=125miles		MNDM Plan#:	
Drawn: P. Gauthier		Interp: J.C. Grant		Job No.: E-115	

49°00'

48°30'

N

M

THUNDER

BAY

PUKASKWA

NATIONAL

PROPERTY LOCATION



EXSICS EXPLORATION LTD.

P.O. Box 1000, P4M-2C1
Suite 2, Hollinger Bldg, Timmins Ont.
Telephone: 705-367-4851

CLIENT: ROYAL OAK MINES INC.

PROPERTY: WHITE LAKE PROPERTY

TITLE: PROPERTY LOCATION

Fig. 2

Date: July 1995

Scale: 1:600,000

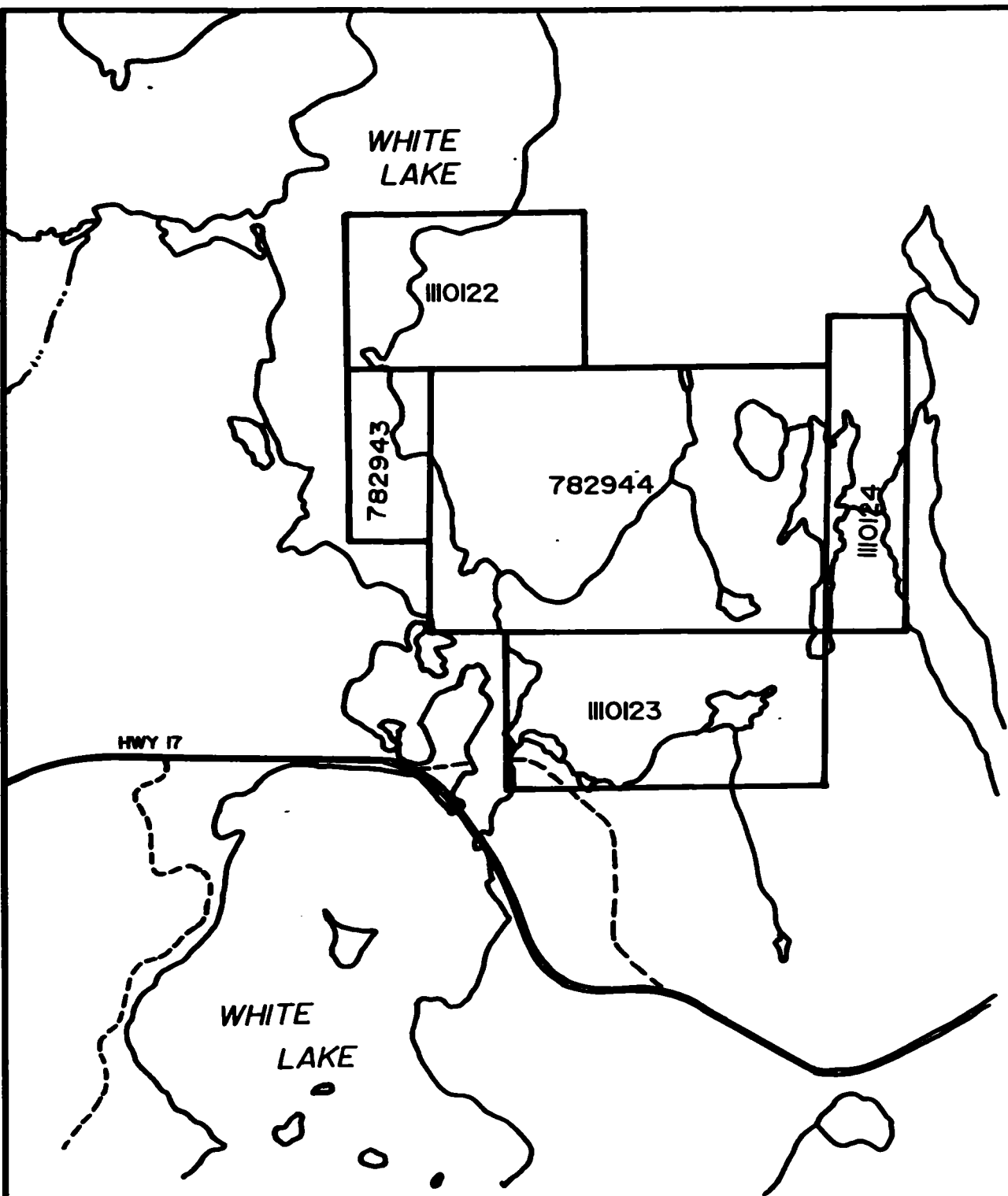
MMDM Plan#: 22-6


Drawn:

Interp: J.C. Grant

Job No. E-115





			EXSICS EXPLORATION LTD. P.O. Box 1000, P4M-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151		
			CLIENT: ROYAL OAK MINES INC.		
PROPERTY: WHITE LAKE PROPERTY			TITLE:		
CLAIM SKETCH			Fig. 3		
Date: July 1995		Scale: 1"=1/2MILE		MNDM Plan#:	
Drawn: P. Gauthier		Interp: J.C. Grant		Job No. E-115	

PERSONNEL

The field crew directly responsible for collecting all of the field data were as follows:

John DerWeduwen	-Timmins, Ontario
Paul Otis	-Timmins, Ontario

The work was completed under the direct supervision of John Grant. The collected data was compiled and plotted by P. Gauthier of Exsics Exploration Limited.

GROUND PROGRAM

This program consisted of two phases. Phase 1 of the program was the cutting of a detailed metric grid across the aforementioned claims. A transit controlled baseline was first cut at a azimuth of 341 from the powerline and cut to the south limits of the property and to the shore of White Lake on the north. Cross lines were then turned off of this baseline at two hundred meter intervals except for a detail section of 100 meter line spacing across the north section of the grid. All of the cut lines were chained with 20 meter pickets which were metal tagged. In all, a total of 31.3 kilometers of grid lines were established across the property.

Phase 2 of the ground program consisted of a Total Field Magnetic Survey done in conjunction with a 2 directional, Very Low Frequency, (VLF) Electromagnetic Survey. This program was completed over the entire cut grid at 12.5 meter station intervals.

Both surveys are ideal tools for mapping both the buried and exposed geological structure on the property.

A low pass filtering was done on each frequency read. This filtering is called Fraser Filtering and results in placing a high positive value over shallow buried anomalies and a weaker positive value over deeper buried zones. It also acts as an excellent tool for structural trends, extending VLF zones which may show as weak deflections when profiling the data.

GEOPHYSICAL PROGRAM

The magnetic and VLF-EM survey was completed using the BRGM OMNI Plus and OMNI IV system. Specifications for these systems can be found as Appendix A and B of this report. The following parameters were kept constant throughout the survey period.

Magnetic Survey:

Linespacing	-100 and 200 meter
Reading interval	-12.5 meters
Reference Field	-58750 gamma
Datum Subtraction	-58000 gamma
Unit Accuracy	- +/- 0.5 gammas
Measurment	-earth's total magnetic field
Diurnal Correction	-Base Recorder
Base Station Record Interval	-30 seconds

VLF-EM Survey:

Linespacing	-100 and 200 meters
Reading interval	-12.5 meters
First Frequency	-24.0 KHZ, Cutler Maine
Second Frequency	-21.4 KHZ Annapolis Maryland
Unit Accuracy	- +/- 0.5 %
First Frequency Direction to grid	-295 degrees
Second Frequency Direction to grid	-340 degrees

The collected magnetic data was corrected by merging the field unit and base station unit. This corrected data had a datum of 58000 gammas removed from it for ease in plotting only. The corrected, leveled data was then plotted onto a mylar base map at a scale of 1:5000 and contoured at 20 gamma intervals where possible. A copy of this contoured magnetic map is included in the back pocket of this report.

The collected VLF data was plotted directly onto a mylar basemap also at a scale of 1:5000 utilizing the inphase values recorded. The data was then profiled at 1 cm to +/- 20% where possible. Any and all conductor axis were placed on the map. This procedure was done for each frequency read. A copy of each mylar profiled map is included in the back pocket of this report.

A Fraser Filtering of each frequency was also done. This resultant data was put on mylar base maps, again maps for each frequency, and then all positive values were contoured at 2 unit intervals where possible. A copy of each contour map is also included in the back pocket of this report.

When interpreting the VLF data, it is important to remember that the unit will react to all types of geological, cultural and topographical features. It responds to creeks, rivers, lake shores, outcrop to swamp contacts, shear zones, fault zones and electrically charged units. That is why all other available data should be considered when reviewing the VLF data before spotting drill holes. The VLF unit is a good reconnaissance tool and conductive zones should be tested by prospecting or other EM surveys for better and more definite interpretation before eliminating or drilling them.

SURVEY RESULTS

Both of the VLF frequencies outlined a number of structural trends across the property. Annapolis Maryland had a better transmitting angle to the survey grid and thus reacted well to the northwest-southeast trending features outlined by the magnetic survey. Cutler Maine also reacted to these same trends but not as well. It was read to outline any cross structures which may have been missed by the Annapolis frequency.

The 21.4 Khz VLF Survey results matches the magnetics survey results of the property. Both surveys were successful in locating and outlining a number of parallel structural trends which strike northwest-southeast across the property. The VLF survey suggest the units dip southwest to near vertical.

The magnetic survey outlined an area of interest generally striking northwest-southeast across the central west section of the grid limits. The area has been outlined on the magnetic map. It is comprised of a number of elongated bullseyes and cigar shape highs with moderate magnetic low associations to the west and east. These cigar shape and bullseyes could represent minor bodies, dikes and sills composed of gabbros and granite type units.

The VLF conductors, especially those outlined by the 21.4 Khz frequencies, appear to correlate to the east and west edges of these dikes and sills. In particular, a major VLF structure can be traced from L1000MS/2250MW and 2000MW across the grid to L1400MN/2640MW and 2520MW.

Another area of interest would be the multiple VLF conductors outlined across lines 800MN to 1200MW. The magnetics suggest this might be an area of two directional cross structure. These would be northwest-southeast and north-northeast-south-southwest.

A number of the magnetic spot highs may also relate to iron rich sulphide areas which should be prospected further.

CONCLUSIONS AND RECOMMENDATIONS

In concluding, there are at least 4 main structural trends situated across the grid. One such area would be the strong VLF zones east of the lakes situated on lines 1000MS/1600MW to 200MN/1500MW. I would suggest that the lakes may represent a fault structure and the area to the east should be prospected further. Abundant outcrop in the area should lend itself well to this type of follow-up.

Another area of interest would be the parallel conductive zones situated between 1600MW and 200MW across lines 100MS and 400MN. Both VLF stations outline these zones. They lie within and along a number of magnetic highs and should be followed up.

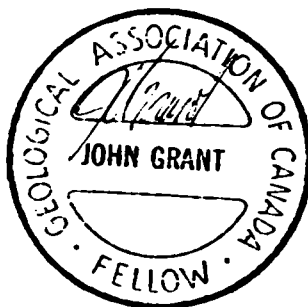
A third area of interest would be the parallel, somewhat broken up VLF zones situated between 2000MW and 2500MW from 1000MS to 1400MN. Both VLF stations outlined these zones and they all lie within an interesting magnetic unit. A number of VLF zones parallel this feature, albeit somewhat shorter, to the west. These VLF zones may emanate from the larger network to the east.

The last area of interest was outlined better by the 24.0 KHz frequency. It appears to be more consistent and uniform. The main structure crosses lines 1000MS/2980MW to 700MN/2860MW. The structure appears to dip near vertical to slightly southwest. The north extension of this zone appears to split and divide to the east and west suggesting a number of cross structures striking in several directions may be evident between lines 800MN and 1400MN. The area should be prospected in detail to better define the unit.

Should detail, mapping and/or geochem return encouraging results then on Induced Polarization Survey should be contemplated over select lines over the 4 main VLF structural targets.

Respectfully Submitted,

John C. Grant, CET FGAC



CERTIFICATE

I, John C. Grant, hereby certify that:

1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury, Campus. I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited (5 years), North Bay office, and as Exploration Manager and Geophysicist for Exsics Exploration Limited from 1980 to present.

2) I am a Member of the Certified Engineering Technologist Association since 1984.

3) I am a member of the Geological Association of Canada.

4) I have been actively engaged in my profession for the last twenty (20) years, including all aspects of exploration studies, surveys and interpretations.

5) I have no specific or special interest in the described property. I have been retained as a Consulting Geophysicist. for property appraisal.

John Charles Grant, CET, FCAC



APPENDIX A



Major Benefits of the OMNI PLUS

- **Combined VLF/Magnetometer/Gradiometer System**
- **No Orientation Required**
- **Three VLF Magnetic Parameters Recorded**
- **Automatic Calculation of Fraser Filter**
- **Calculation of Ellipticity**
- **Automatic Correction of Primary Field Variations**
- **Measurement of VLF Electric Field**



Specifications*

Frequency Tuning Range	15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured	Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from -40°C to $+55^{\circ}\text{C}$. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	-40°C to $+55^{\circ}\text{C}$; 0 - 100% relative humidity; Weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only.
Weights and Dimensions	
Instrument Console	2.8 kg, 128 x 150 x 250 mm
Sensor Head	2.1 kg, 130 dia. x 130 mm
VLF Electronics Module	1.1 kg, 40 x 150 x 250 mm
Lead Acid Battery Cartridge	1.8 kg, 235 x 105 x 90 mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40 mm
Disposable Battery Belt	1.2 kg, 540 x 100 x 40 mm

*Preliminary

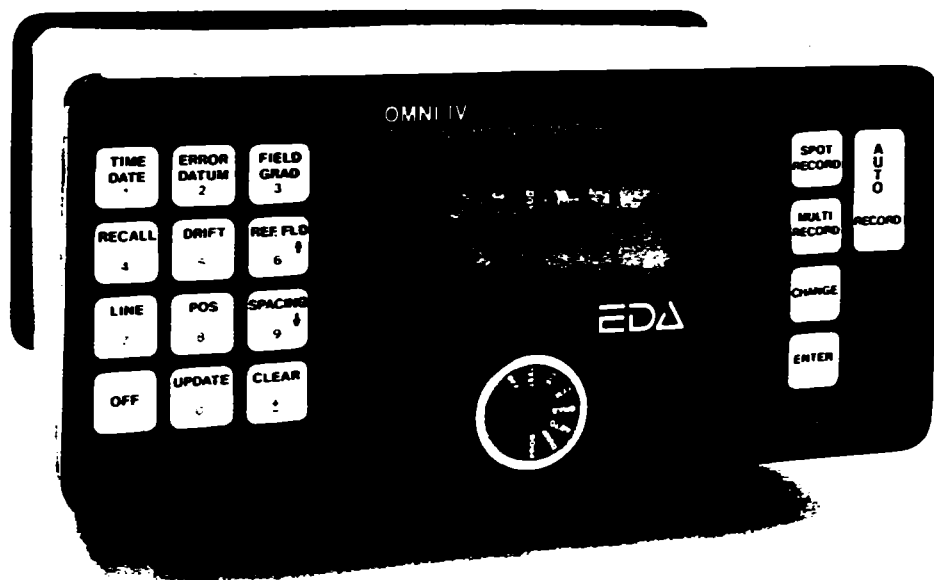
EDA Instruments Inc.,
4 Thorncliffe Park Drive,
Toronto, Ontario
Canada M4H 1H1
Telex: 06 23222 EDA TOR,
Cables: Instruments Toronto
(416) 425-7800

In USA,
EDA Instruments Inc.,
5151 Ward Road,
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422-9112

Printed in Canada

OMNI IV "Tie-Line" Magnetometer

EDA



- Four Magnetometers in One
- Self Correcting for Diurnal Variations
- Reduced Instrumentation Requirements
- 25% Weight Reduction
- User Friendly Keypad Operation
- Universal Computer Interface
- Comprehensive Software Packages



Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	$\pm 15\%$ relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to $+55^{\circ}\text{C}$. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to $+55^{\circ}\text{C}$; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

EDA Instruments Inc.
4 Thorncliffe Park Drive
Toronto, Ontario
Canada M4H 1H1
Telex: 06 23222 EDA TOR
Cable: Instruments Toronto
(416) 425 7800

In U.S.A.
EDA Instruments Inc.
5151 Ward Road
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422 9112

Printed in Canada



Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9540-263

2.16233

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions:
- Please type or print and submit in duplicate
 - Refer to the Mining Act and Regulations / Recorder.
 - A separate copy of this form must be con
 - Technical reports and maps must accomp
 - A sketch, showing the claims the work is



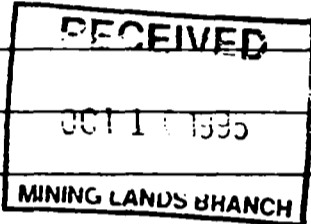
42C13SE0066 2.16233 WHITE LAKE

900

Recorded Holder(s) <i>Thomas Carril & Daniel MacDougall optioned to Royal Oak Mines</i>		Client No. <i>116260 + 16209E</i>
Address <i>P.O. Bag 2010, Timmins, Ont. P4N 7X7</i>		Telephone No. <i>(705) 360-1141</i>
Mining Division <i>Thunder Bay</i>	Township/Area <i>White Lake</i>	M or G Plan No. <i>6-0622 + 6-0623</i>
Date Work Performed From: <i>June 14 1995</i>		To: <i>August 6 1995</i>

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	<i>Linecutting + Magnetic + VLF Surveys</i>
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	



Total Assessment Work Claimed on the Attached Statement of Costs \$ 14170

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
<i>John Grant / Exsks Exploration Ltd.</i>	<i>P.O. Box 1880, Timmins, Ont. P4N 7X1</i>

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date <i>Sept 19, 1995</i>	Recorded Holder or Agent (Signature) <i>Mary F. Stalker</i>
--	------------------------------	--

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying <i>Mary Stalker Royal Oak Mines, P.O. Bag 2010, Timmins, Ont. P4N 7X7</i>		
Telephone No. <i>(705) 360-1141</i>	Date <i>September 19, 1995</i>	Certified By (Signature) <i>Mary F. Stalker</i>

For Office Use Only

Total Value Cr. Recorded <i>\$14,170</i>	Date Recorded <i>Acting</i>	Mining Recorder <i>[Signature]</i>	THUNDER BAY MINING DIVISION RECEIVED SEP 22 1995 AM 7,8,9,10,11,12,1,2,3,4,5,6 PM
	Deemed Approval Date <i>Dec 21 1995</i>	Date Approved	
	Date Notice for Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	H10122	9
	782943	2
	782944	15
	110124	4
	110123	8
Total Number of Claims		5

Value of Assessment Work Done on this Claim	Value Applied to this Claim	
2400	3600	
400	800	
7770	6000	
1200	1200	
2400	2570	
Total Value Work Done		14170
Total Value Work Applied		14170

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date	
1770		
Total Assigned From		1770
Total Reserve		0

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

2 . 1 6 2 3 3

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------



Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

W9540-263

2.16233

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Licensing	8151	
	Geophysics	6019	
			14170
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			14170

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	14170

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Project geologist for Royal Oak Mines I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature <u>Mary F. Stalko</u>	Date <u>Sept. 19, 1995</u>
------------------------------------	-------------------------------

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.16233
Transaction #W9540.00263

November 15, 1995

Mining Recorder
Ministry of Northern Development & Mines
435 James Street South
Suite B003
Thunder Bay, Ontario
P7E 6E3

Dear Mr. Weirmeir:

**SUBJECT: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
110122 ET AL. IN WHITE LAKE AREA**

Assessment work credits have been approved as outlined on the original report of work forms for this submission. The credits have been approved under Section 14, Geophysics(MAG,VLF), Mining Act Regulations.

The approval date is **November 15, 1995**. Please indicate this approval on the claim record sheets.

If you have any questions regarding this correspondence, please contact Bruce Gates at (705) 670-5856.

ORIGINAL SIGNED BY:



Ron Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

³⁰⁹ BIG/jl
Enclosure:

cc: Resident Geologist
Thunder Bay, Ontario

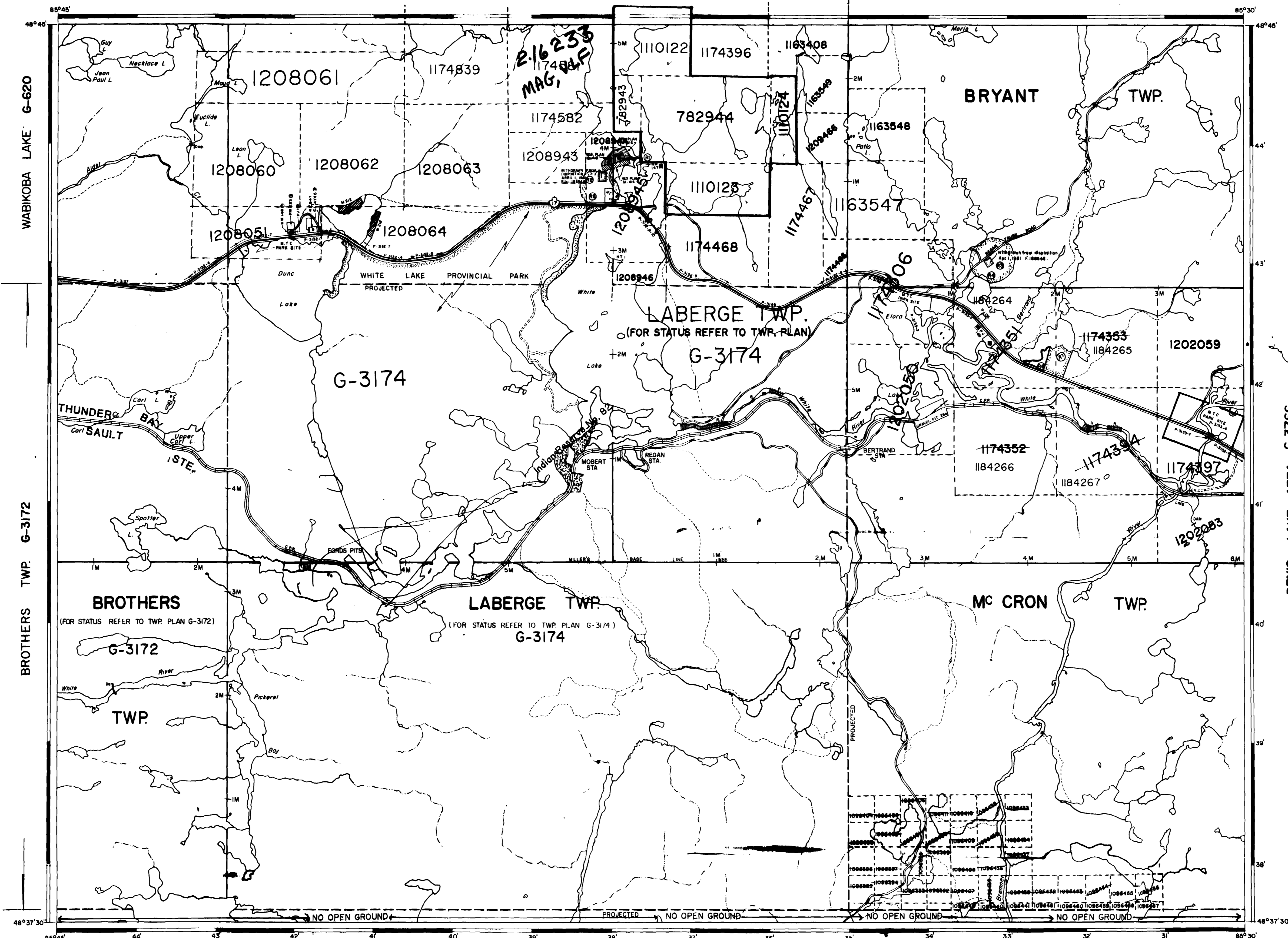
✓ Assessment Files Library
Sudbury, Ontario

NOTES

AREAS WITHDRAWN FROM DISPOSITION

M.R.D. - MINING RIGHTS ONLY	S.R.D. - SURFACE RIGHTS ONLY	M. & S. - MINING AND SURFACE RIGHTS		
Description	Order No.	Date	Disposition	File
① CROWN RESERVE	S.R.D.	163006 vJ		
② SEC.36/80 W.3/81 1/4/81	S.R.D.	188546		
③ SEC.36/80 W.8/81 1/4/81	S.R.D.	188546		
④ SEC.36/80 W.7/82 5/4/82	S.R.D.	188546		
⑤ SEC.36/80 W.10/82 7/4/82	S.R.D.	163006 vJ		
⑥ SEC.36/80 W.12/81 11/07/81 M&S				
⑦ Pending application for Surface Rights P.L.R. No. 20,190				

WHITE LAKE AREA (NORTH PART) G-622



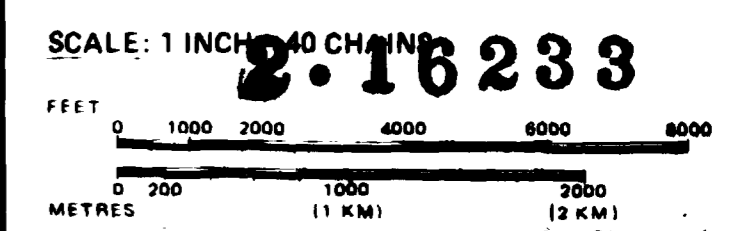
LEGEND

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	

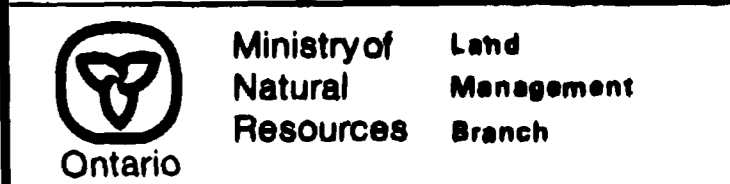
DISPOSITION OF CROWN LANDS

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	
LAND USE PERMITS FOR COMMERCIAL TOURISM, OUTPOST CAMPS	

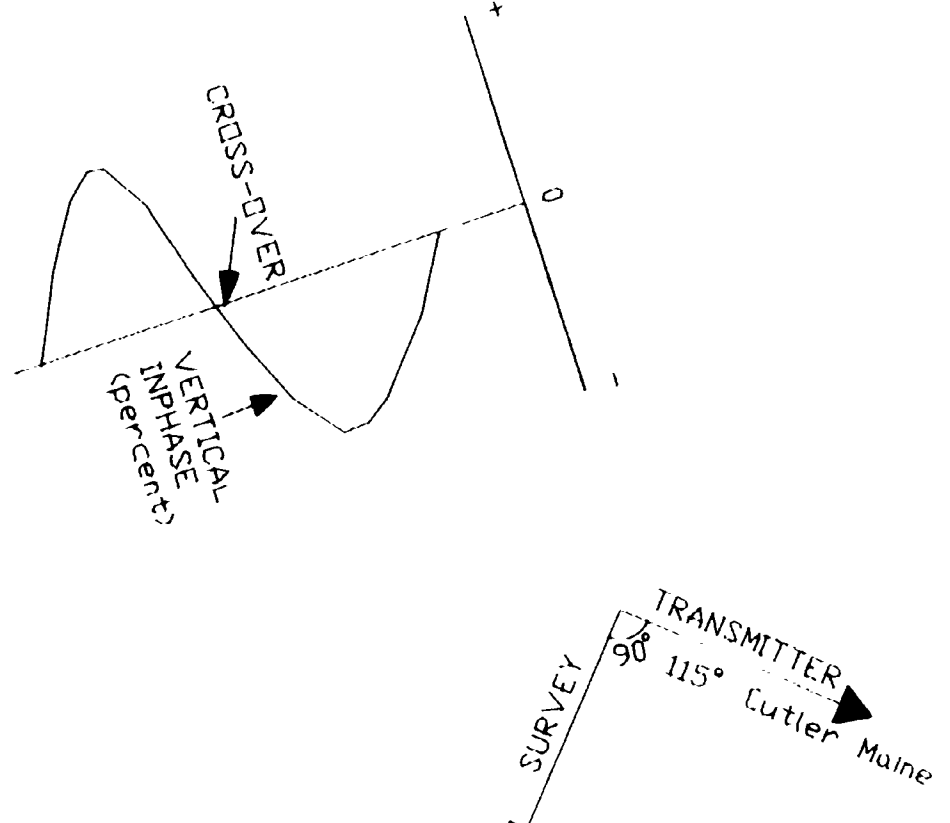
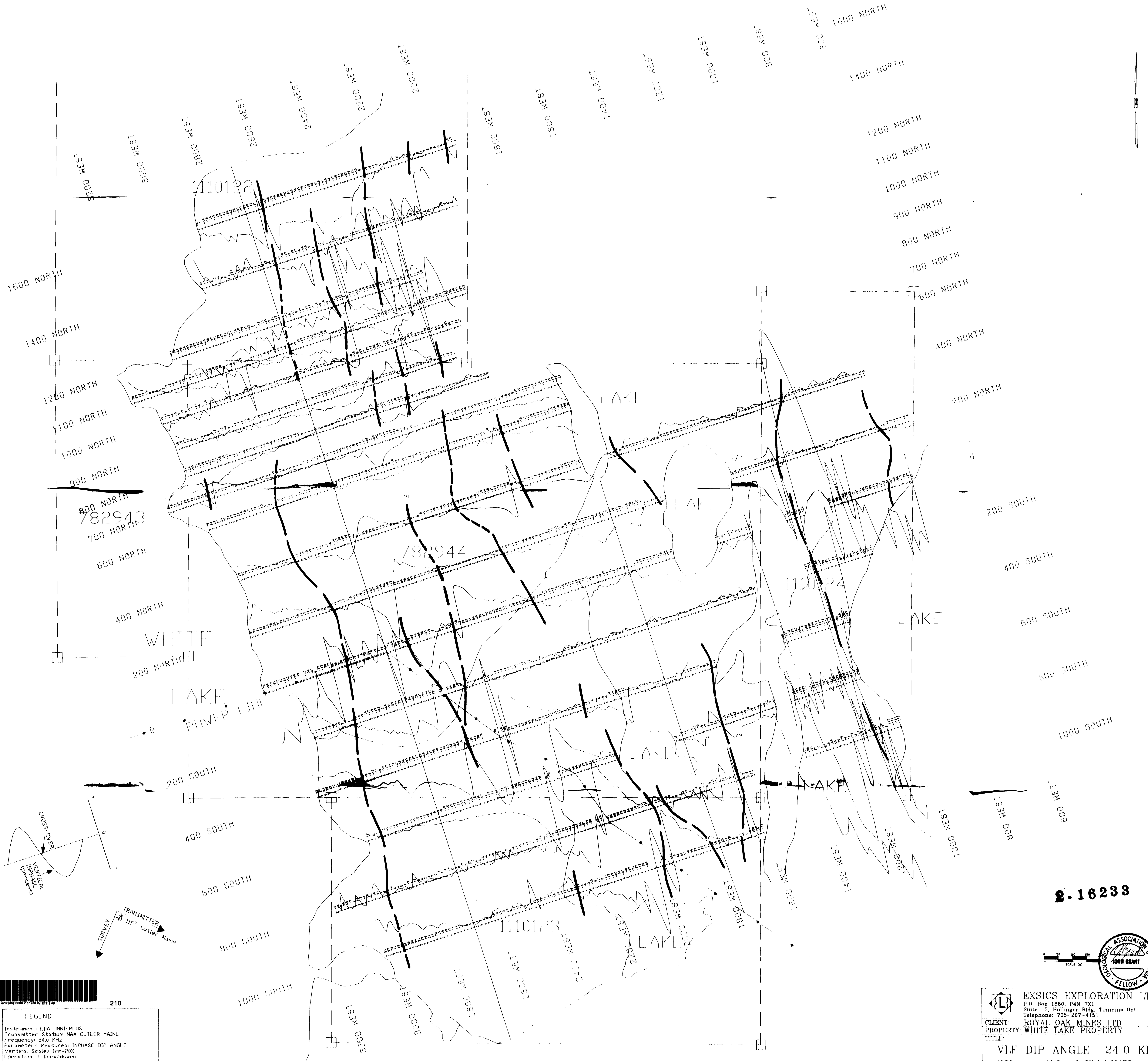
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 1, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 390, SEC. 63, SUBSEC. 1.



AREA **WHITE LAKE**
(SOUTH PART)
M.N.R. ADMINISTRATIVE DISTRICT
TERRACE BAY/WAWA
MINING DIVISION
**THUNDER BAY/
SAULT STE. MARIE**
LAND TITLES / REGISTRY DIVISION
THUNDER BAY

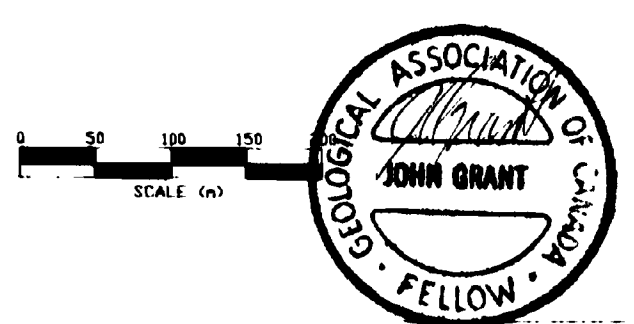


Date: AUGUST 1984 19
Number: **G-623**
In service Nov. 04/94.



4021502004 9 10314 WHITE LAKE 210
LEGEND
 Instrument: EDA OMNI-PLUS
 Transmitter: Station NAA CUTLER MAINE
 Frequency: 24.0 KHz
 Parameters Measured: INPHASE DIP ANGLE
 Vertical Scale: 1m-P0Z
 Operator: J. Derweduwen

2.16233



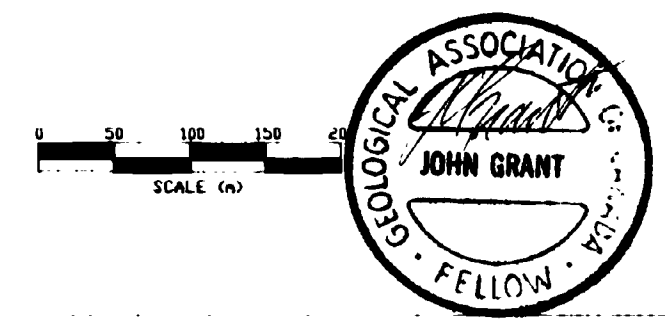
EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7X1
 Suite 13, Hollinger Bldg. Timmins Ont.
 Telephone: 705-267-4151
CLIENT: ROYAL OAK MINES LTD
PROPERTY: WHITE LAKE PROPERTY
TITLE:
V.I.F. DIP ANGLE 24.0 KHz
 Date: July 1995 Scale: 1:5000 NTS
 Drawn: P. Gauthier Interp: J.C. Grant Job No. E-115



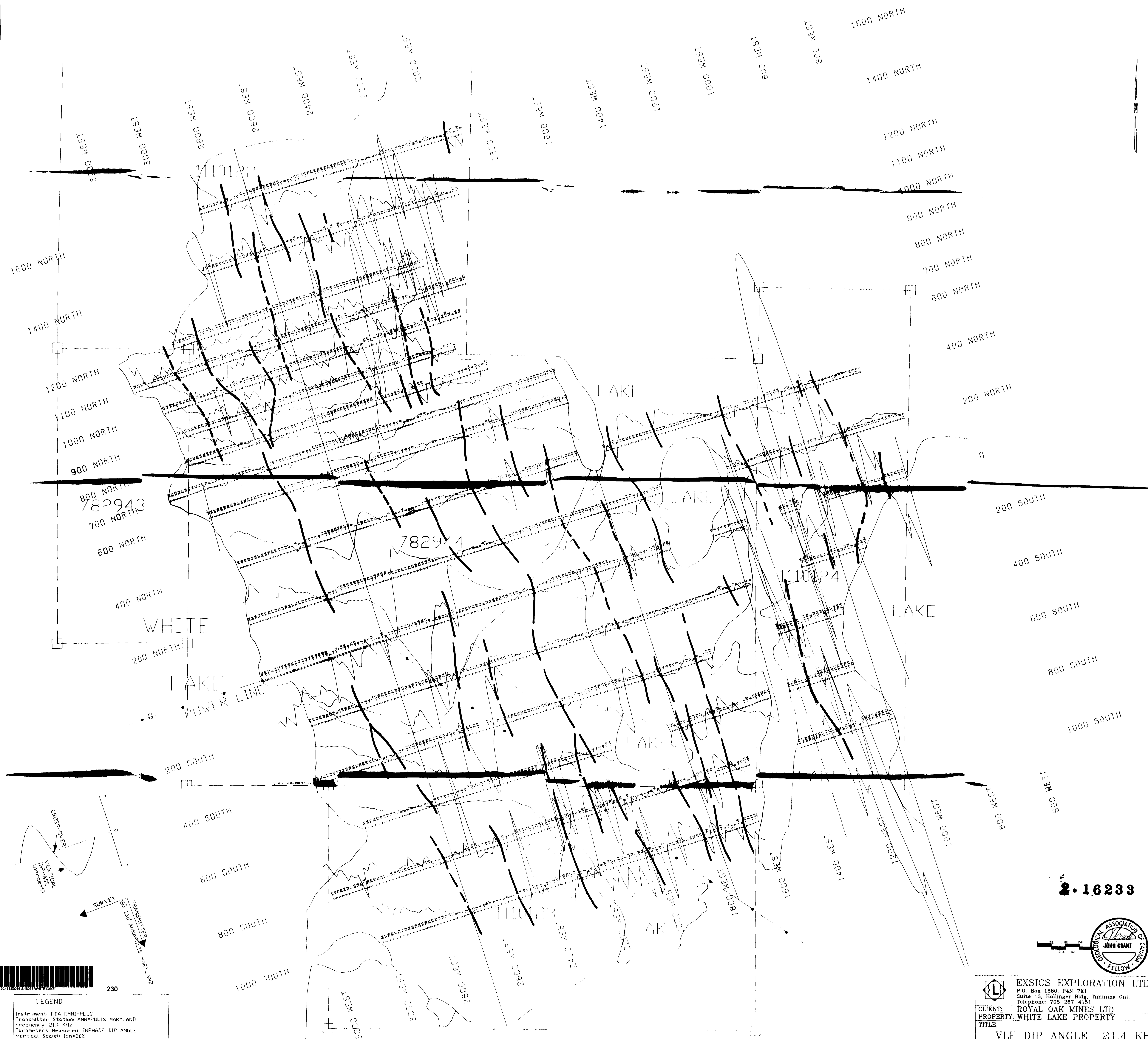
220

LEGEND
 Instrument: EDA LMNI-PLUS
 Transmitter Station: NAA CUTLER MAINE
 Frequency: 24.0 KHz
 Values Filtered: INPHASE DIP ANGLE
 Contour Interval: 0.2, 4, 6, 8, 10, ...
 Operator: J. Derweduwen

2.16233



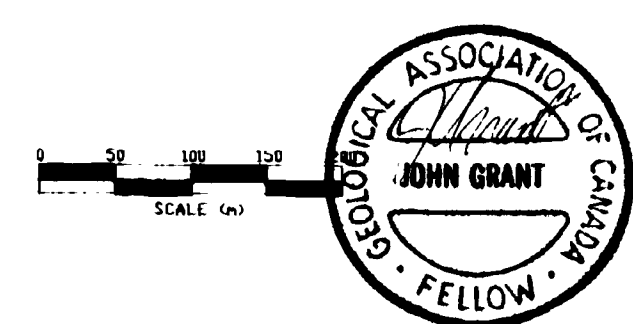
EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N 7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-287-4151
CLIENT: ROYAL OAK MINES LTD
PROPERTY: WHITE LAKE PROPERTY
TITLE: 24.0 KHz
FRASER FILTERED VLF
 Date: July 1995 Scale: 1:5000 NTS:
 Drawn: P. Gauthier Interp: J.C. Grant Job No: E-115



230

LEGEND
 Instruments: FDA OMNI-PLUS
 Transmitter: Station ANNAPULIS MARYLAND
 Frequency: 21.4 KHz
 Parameters Measured: INPHASE DIP ANGLE
 Vertical Scale: 1cm=20Z
 Operator: J. Derwauwen

• 16233



EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7Y1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705 267 4151
 CLIENT: ROYAL OAK MINES LTD
 PROPERTY: WHITE LAKE PROPERTY
 TITLE: VLF DIP ANGLE 21.4 KHz
 Date: July 1995 | Scale: 1:5000 | NTS:



240

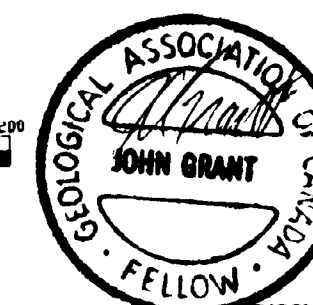
LEGEND

Instrument: EDA OMNI-PLUS
Transmitter Station: ANNAPITIS MARYLAND
Frequency: 21.4 KHz
Values Filtered: INPHASE DIP ANGLE
Contour Interval: 0.2, 4.6, 8, 10
Operator: J. Derweduwen



2.16233

SCALE 1:5000



EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705 287-4151
CLIENT: ROYAL OAK MINES LTD
PROPERTY: WHITE LAKE PROPERTY
TITLE: 21.4 KHz
FRASER FILTERED VLF
Date: July 1995 | Scale: 1:5000 | NTS:
Drawn: P. Gauthier | Interp: J.C. Grant | Job No: E-11

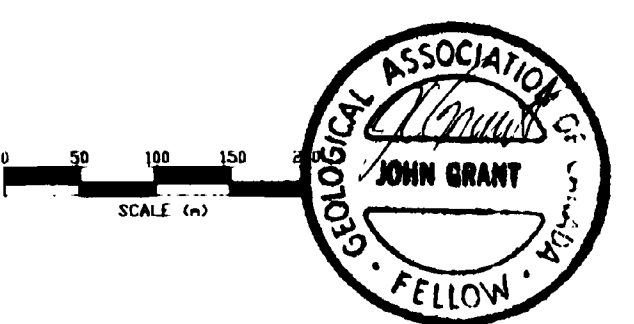


250

LEGEND
 Instruments: FDA OMNI-IV
 Parameters: Measured Earth's total magnetic field
 Accuracy: +/- 1 nano-teslas
 Diurnal: Corrected by base station recorder
 Contour Interval: 0,20,40,60,80,100,
 Reference field: 58,750 gammas
 Datum Subtracted: 58,000 gammas

--- Assumed Geological Contact
 - - - Diabase Dike

2.16233



EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N 7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-267-4151
 CLIENT: ROYAL OAK MINES LTD
 PROPERTY: WHITE LAKE PROPERTY
 TITLE: MAGNETOMETER SURVEY
 Date: July 1995 | Scale: 1:5000 | NTS:
 Drawn: P.Gauthier | Interp: J.C.Grant | Job No.: R-115