010

GEOPHYSICAL REPORT
FOR
OUTOKUMPU MINES LIMITED
ON THE
BANNOCKBURN PROPERTY
BANNOCKBURN TOWNSHIP
LARDER LAKE MINING DIVISION
NORTHEASTERN, ONTARIO

2.16614

Qual. # 23943

Prepared by: J.C.Grant, CET, FGAC

April, 1996

010C

TABLE OF CONTENTS

INTRODUCTION

The services of Exsics Exploration Limited were retained by Outokumpu Mines Limited to complete a linecutting and geophysical program on a group of their claims located in Bannockburn Township of the Larder Lake Mining Division of Northeastern, Ontario.

The purpose of this program was to test the property's potential for favourable geological structure which would be suitable horizons for base metal deposition. The program commenced on the 19th of February and was completed on the 3rd of April, 1996. A total of 44.39 kilometers of grid lines were cut and surveyed on the property. This report will deal with the results of this recent ground program.

PROPERTY LOCATION AND ACCESS

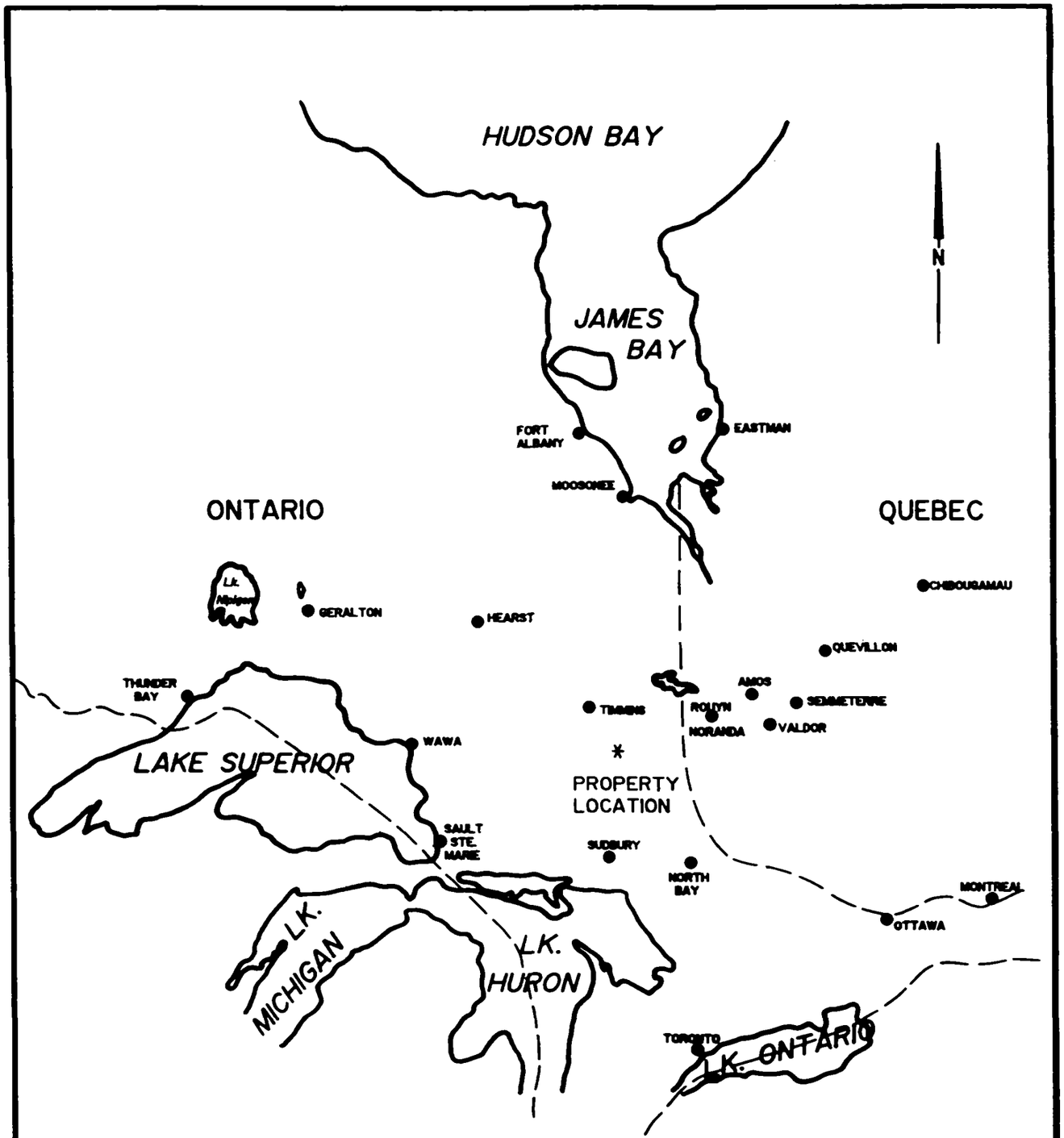
The Bannockburn property is located in the west central section of Bannockburn Township of the Larder Lake Mining Division of Northeastern, Ontario. Figure 1. More specifically it is located to the immediate east of Bannockburn Lake and to the immediate north of Clark Lake. The property is also partially covered by Charlewood Lake and Zurbrigg Lake. The entire property is located approximately 16 kilometers northwest of the Town of Matchewan which in turn is serviced by highway 66. This highway travels southwest off of Highway 11 south which services the Town of Kirkland Lake. Figure 2.

Access to the grid during the survey period was ideal. A local outfitter had opened the gravel road from highway 566 which leads northwest from Matachewan to a cabin located approximately 2 kilometers from the northwest corner of the grid. A short skidoo ride from the cabin would access the grid.

CLAIM GROUP

The claim numbers which form the Bannockburn property are as follows:

L-1198913	1 unit
L-1198903	1 unit
L-1198911	8 units
L-1198912	4 units
L-1198916	4 units
L-1198917	1 unit
L-1206090	1 unit
L-1203764	1 unit



EXSICS EXPLORATION LTD.
P.O. Box 1990, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

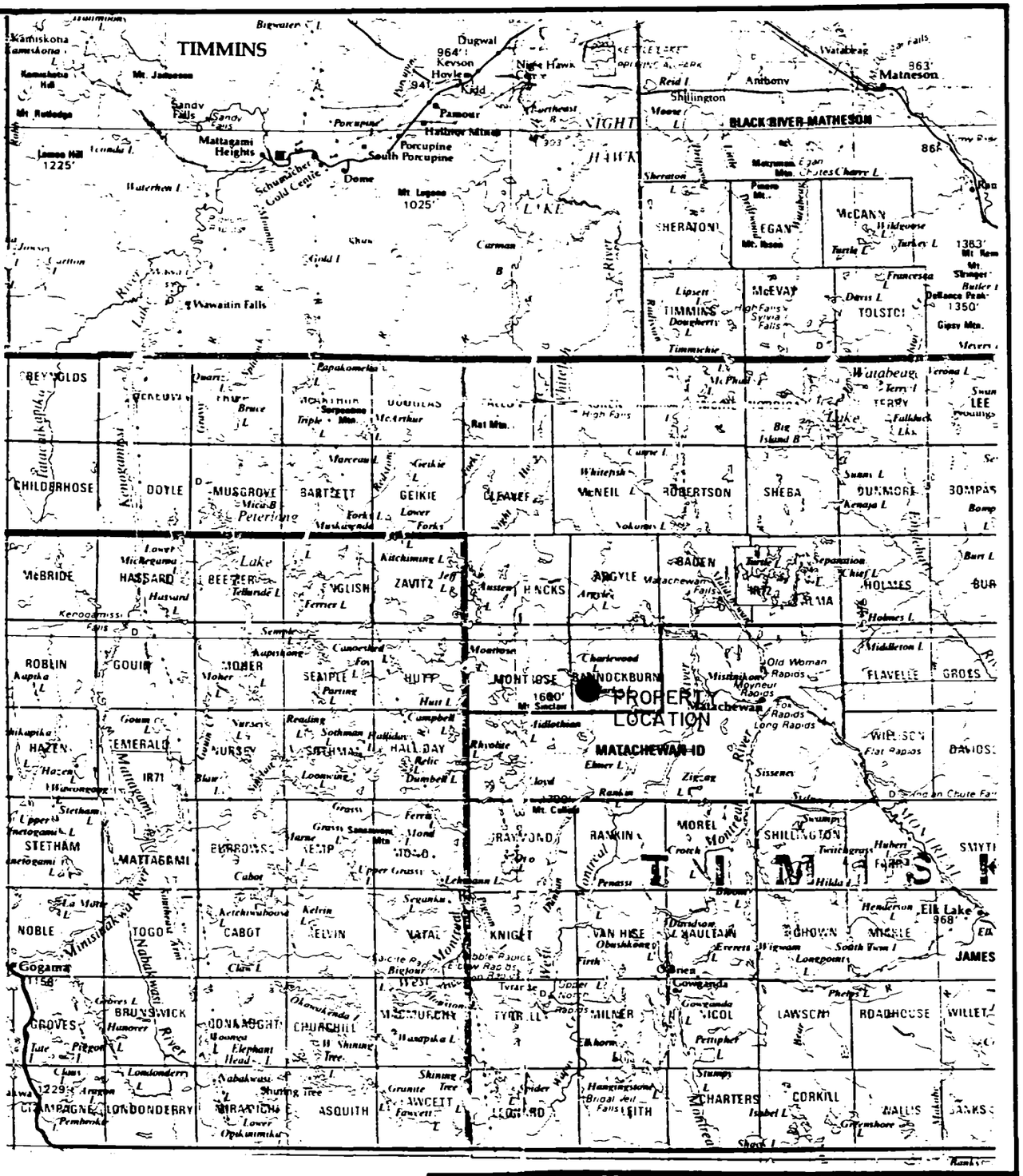
CLIENT: OUTOKUMPU MINES LIMITED

PROPERTY: BANNOCKBURN TWP

TITLE: LOCATION MAP

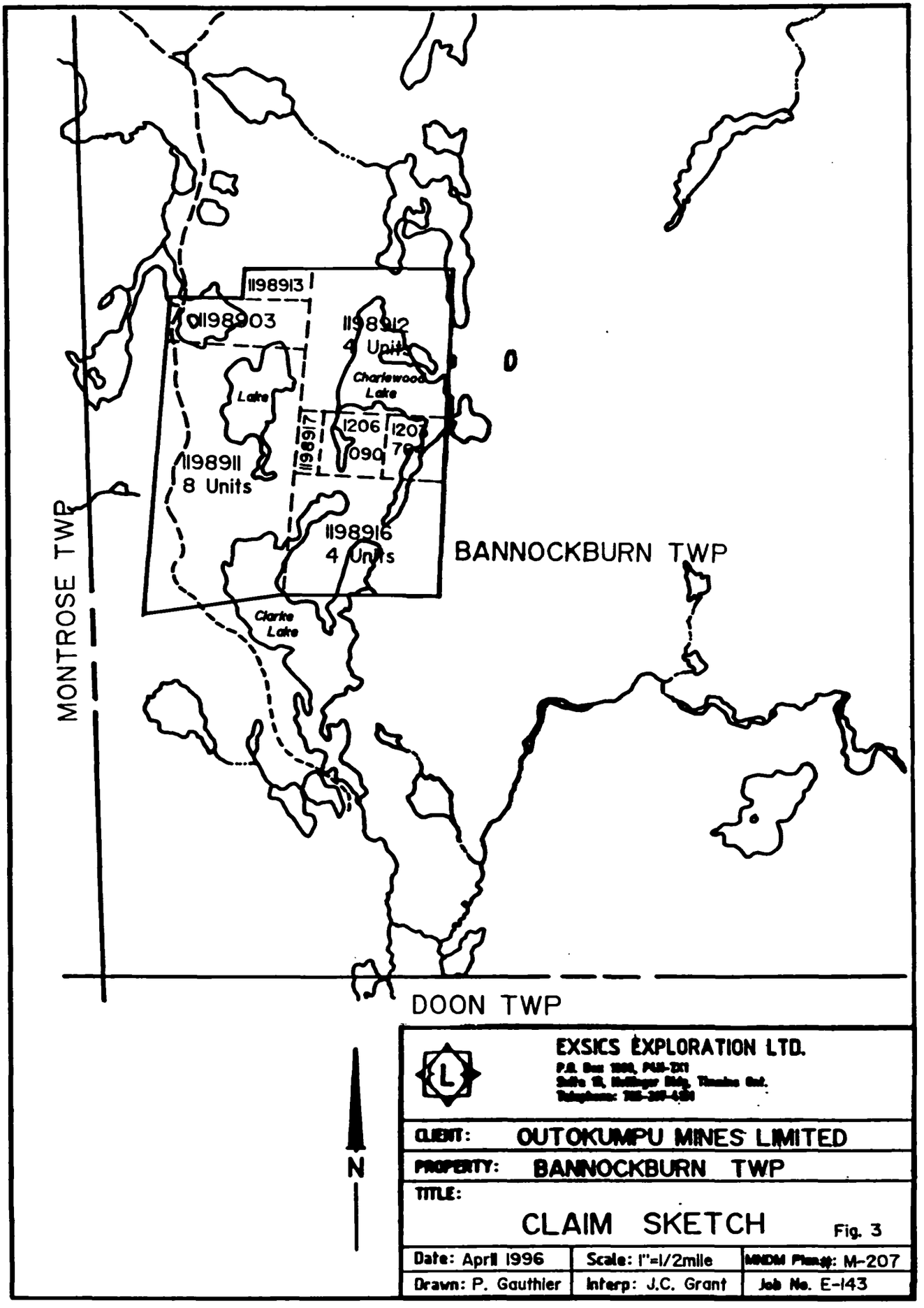
Fig. 1

Date: April 1996	Scale: 1"=125miles	MNDM Plan#:
Drawn: P. Gauthier	Interp: J.C. Grant	Job No. E-143



EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT:	OUTOKUMPU MINES LIMITED
PROPERTY:	BANNOCKBURN TWP
TITLE:	PROPERTY LOCATION — Fig. 2
Date: April 1996	Scale: 1:600,000 — MNDM Plan#: 22-6
Drawn:	Interp: J.C. Grant — Job No. E-143


1198913
1198903
1198912
4 Units
Charlewood Lake
Lake
1206
1207
1090
1198917
1198911
8 Units
1198916
4 Units
BANNOCKBURN TWP
MONTROSE TWP
Clarke Lake
DOON TWP
N
EXSICS EXPLORATION LTD.
CLIENT: OUTOKUMPU MINES LIMITED
PROPERTY: BANNOCKBURN TWP
TITLE:
CLAIM SKETCH
Fig. 3
Date: April 1996
Scale: 1"=1/2mile
MNDM Plan: M-207
Drawn: P. Gauthier
Interp: J.C. Grant
Job No. E-143

PERSONNEL

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

Richard Mathieu..... Timmins, Ontario
Robin Mathieu..... Timmins, Ontario
Todd Mathieu..... Timmins, Ontario

The work was completed under the direct supervision of J.C. Grant and all of the plotting and computor compilation was completed by P. Gauthier of Exsics Exploration Limited.

GROUND PROGRAM

The ground program was completed in two phases. The first phase of the program was to cut a detailed metric grid across the property. This was done by establishing a north-south baseline along the west boundary of the claim group. Cross lines were then turned off of this baseline at 100 meter intervals from line 5400MN to 7500MN and cut to the eastern boundary of the claim group. A series of north-south tielines were also cut at 400 meter intervals to control the accuracy of the cross lines. All of the cut lines were chained with 20 meter pickets.

Phase two of the program was to complete a Total Field Magnetic survey as well as a Horizontal Loop, Electromagnetic, HLEM, survey across the cut lines. The Magnetic survey was completed using the BRGM, OMNI IV system. Specifications for this system can be found as Appendix A of this report. The HLEM survey was completed using the Apex Parametrics, MaxMin II system. Specifications for this system can be found as Appendix B of this report.

The following parameters were kept constant for each survey method throughout the survey period.

Magnetic Survey:

Line spacing	100 meters
Station spacing	20 meters
Reading interval	10 meters
Diurnal monitoring	base station recorder
Record interval	30 seconds
Reference field	57950 gammas
Datum subtract	57500 gammas
Unit accuract	+/- 0.1 gammas
Parameters measured	Earth's total magnetic field

The collected, corrected and levelled magnetic data was then plotted diectly onto a base map at a scale of 1:5000 and then contoured at 10 gamma intervals where possible. A copy of this contoured base map is included in the back pocket of this report.

HLEM Survey:

Line spacing	100 meters
Station interval	20 meters
Reading interval	20 meters
Coil seperation	120 meters
Theoretical search depth	60-70 meters
Frequencies recorded	1777hz, 444hz
Parameters measured	inphase and quadrature components of the secondary field
Unit accuracy	+/- 0.5 percent

The collected data was then plotted onto a base map, one base map for each frequency, and then profiled at 1cm to +/- 10 percent. An interpretation for all of the conductive zones has been placed on these base maps were possible. The interpretation consists of the depth to source and the approximate conductivity of the zone. A copy of each of these maps is also included in the back pocket of this report.

SURVEY RESULTS

The surveys were successful in locating and outlining several conductive zones across the grid. Each of the zones will be discussed seperately and in detail below.

ZONE A:

This target represents the strongest zone outlined on the grid. It represents a legitimate bedrock conductor situated at a depth to source of 38 to 70 meters and with a conductivity range of 7 to 14 mhos. The zone appears to continue off of the grid to the north although it seems to be weakening. The best portion of the target lies along the north flank of a moderate magnetic high unit with the best response correlating to a mag high of 300 gammas above the background. This response is on line 7300MN at 4140ME. The southern extension of the zone appears to have been cut off by a massive magnetic high unit striking into the grid from the southeast which extends to line 6700MN. The strongest part of this intrusive is situated across lines 6300MN to 6700MN.

ZONE B:

This target represents a weak questionable zone at this writing.The target may be outside the present search depth capabilities of this survey. The zone correlates to a weak slumping in the magnetic contours with a weak magnetic high association on the north extension and a weak magnetic low association on the southern extension. The zone closely parallels a stronger Zone, C, which runs to the immediate west of this target.

ZONE C:

This zone represents the second strongest target on the grid. The strike of the zone appears to have been interrupted by a weak cross structure striking northwest across lines 6700MN to 7200MN which continues off of the grid to the northwest. The strongest portion of the zone lies across lines 6800MN to and including 6600MN. This portion of the zone is situated at a depth to source of 65 to 70 meters and has a conductivity range of 6 to 12 mhos. The zone may in fact extend as far as line 6000MN suggesting that the zone is either deepening to the south and or that the zone has been faulted or folded by another cross structure striking north-northwest across lines 5500MN to the first mentioned cross structure striking northwest across lines 6700MN to 7200MN. This cross structure which has shifted the south portion of Zone C may be represented by weak mag lows which can be lined up on lines 5700MN,5900MN,6100MN,6400MN and 6800MN where it then seems to strike into the northwest striking structure.

ZONE D:

This zone represents a weak questionable zone at this writing and in fact, may relate to the effects of what appears to be a diabase dike striking northwest across lines 7200MN to 7500MN. The dike is represented by magnetic high bullseyes on the above mentioned lines.

ZONE E:

This zone also represents a weak questionable zone at this writing. Again it is more of an inphase response with little or no out of phase response suggesting it may relate to topography. The north extension of the zone strikes into the massive magnetic unit striking northwest into the grid. The zone also appears to continue off of the grid to the south-southwest. In fact, the entire zone outlined by the surveys appears to lie along the western flank of the intrusive and may represent the contact.

CONCLUSIONS AND RECOMMENDATIONS

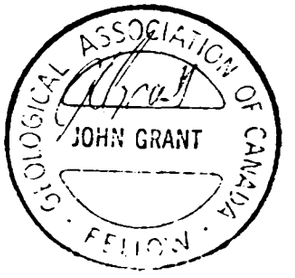
The surveys were successful in locating and outlining several conductive zones across the grid. At this writing, zones A and C represent the best target areas for follow-up drilling. Both of these targets represent good bedrock conductors situated at or within the search capabilities of this program.

Zones A and C could be drill tested from these survey results, however, there seems to be abundant outcroppings in and around the zones which should be mapped in detail to better define the host rocks of the target areas.

Should the drilling or mapping programs return encouraging results, then zones B and E should be followed up further by a deeper penetrating EM system to better define their sources.

Respectfully submitted

J.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 subsequentely 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.

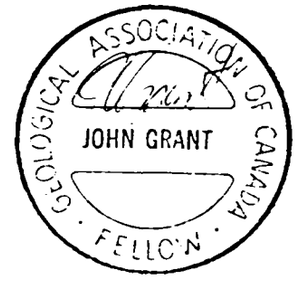
2) I am a Member of the Certified Engineering Technologist Association since 1984.

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 by the claim holders.

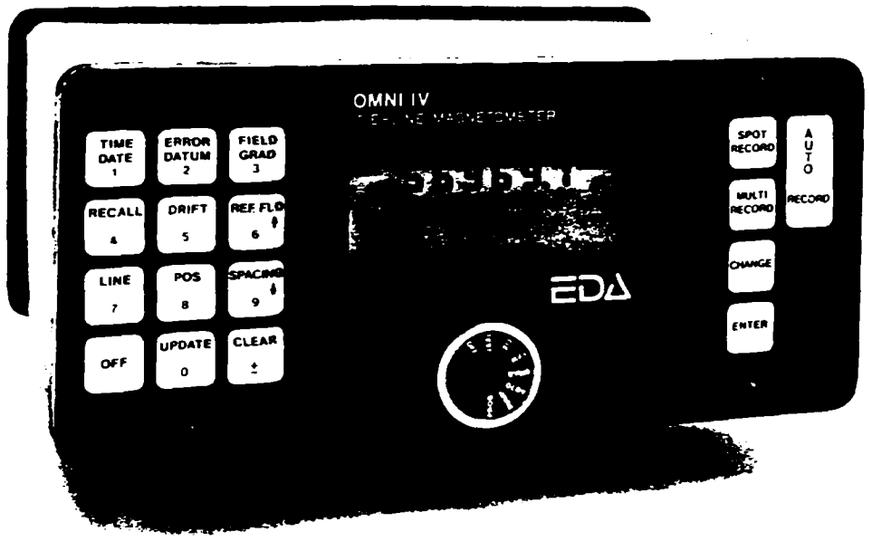
John Charles Grant, CET, FGAC



APPENDIX A

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	± 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
Line-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°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°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 (.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m 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

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

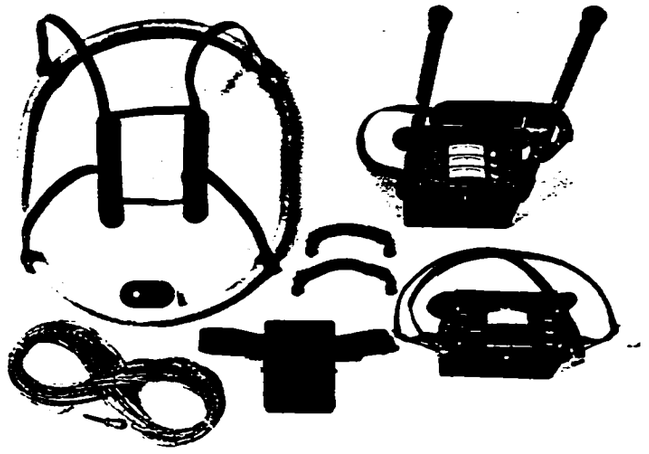
In U.S.A.
E D A Instruments Inc.
5151 Ward Road
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422 9112

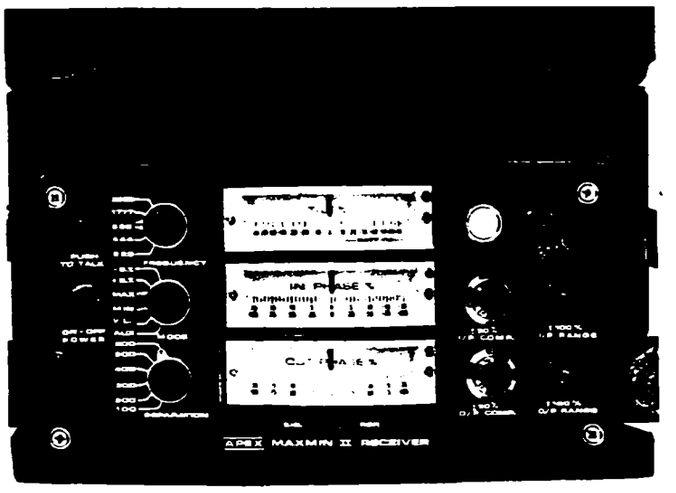
Printed in Canada

APPENDIX B

APEX MAXMIN II
PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180 m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





	222, 444, 888, 1777 and 3555 Hz.
	MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. cable. MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable. V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.
	25, 50, 100, 150, 200 & 250 m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIIF). Coil separations in V.L. mode not restricted to fixed values.
	- In-Phase and Quadrature components of the secondary field in MAX and MIN modes. - Tilt-angle of the total field in V.L. mode.
	- Automatic, direct readout on 90 mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary. - Tilt angle and null in 90 mm edgewise meters in V.L. mode.
	In-Phase: ±20%, ±100% by push-button switch. Quadrature: ±20%, ±100% by push-button switch. Tilt: ±75% slope. Null (V.L.): Sensitivity adjustable by separation switch.
	In-Phase and Quadrature: 0.25% to 0.5% ; Tilt: 1%.
	±0.25% to ±1% normally, depending on conditions, frequencies and coil separation used.
	- 222 Hz : 220 Atm² - 444 Hz : 200 Atm² - 888 Hz : 120 Atm² - 1777 Hz : 60 Atm² - 3555 Hz : 30 Atm²
	9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.
	12V 6 Ah Gel-type rechargeable battery. (Charger supplied).
	Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.
	Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.
	Built-in signal and reference warning lights to indicate erroneous readings.
	-40°C to +60°C (-40°F to +140°F).
	6kg (13 lbs.)
	13kg (29 lbs.)
	Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO Telex: 06-966773 NORDVIK TOR

Ministry of Northern Development and Mines

Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: DOCUMENT No. W 9680 • 00329

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

2.16614

nstructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Re the Mining Recorder.
- A separate copy of this form m
- Technical reports and maps mu
- A sketch, showing the claims th

41P15NW0002 2 16614 BANNOCKBURN

900

Recorded Holder(s)		Client No.
Outokumpu Mines Ltd.		178525
ddress		Telephone No.
P.O. Box 1123, Timmins, Ontario P4N 7H9		(705) 264-5024
Mining Division	**Township/Area**	**M or G Plan No.**
Larder Lake	Bannockburn Township	
Dates Work Performed From: Feb 19/96	To: Apr. 13/96	

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	Line cutting, Mag Survey, Mag-VLF Survey
Physical Work, Including Drilling	
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

RECEIVED
JUN 19 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 21,760

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.

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

Name	Address
John Grant Ensizes Exploration Ltd.	P.O. Box 1880, Timmins, Ontario, P4N 7X1

attach a schedule if necessary)

ertification 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	Recorded Holder or Agent (Signature)
	June 10/96	Paul

ertification 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

Paul Davis, P.O. Box 1123, Timmins, Ontario, P4N 7H9

Telepone No.	Date	Certified By (Signature)
(705) 264-5024	June 10/96	Paul

or Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
21760	96 June 17		RECEIVED LARDER LAKE MINING DIVISION JUN 17 1996
	Deemed Approval Date: Sept 15	Date Approved	
	Date Notice for Amendments Sent		

241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1198911	8	$8,289 =	$4,400 =	$6,400 =	$1,889 =
	1198912	4	$4,145 =	$3,200 =	$3,200 =	$945 =
	1198913	1	$1,036 =	$800 =	$800 =	$236 =
	1198914	4	$4,140 =	$3,200 =	$3,200 =	$940 =
	1198917	1	$1,036 =	$800 =	$800 =	$236 =
	1203764	1	$1,036 =	$800 =	$800 =	$236 =
	1206040	1	$1,036 =	$800 =	$800 =	$236 =
	1207453	1	$1,036 =	$800 =	$800 =	$236 =
Total Number of Claims	8		Total Value Work Done $21,760 =	Total Value Work Applied $16,800 =	Total Assigned From $16,800 =	Total Reserve $4,960 =

(1241 (03/91)

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 priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☑ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

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
	Paul	June 10/96

Ontario and Mines

Ministère du Développement du Nord et des mines

for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

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 quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e 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 Line Cutting	11,280	
	Magnetic Survey	4,513	
	HLEM Survey	5,967	21,760
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		21,760

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)**			

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
× 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
× 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 (Recorded Holder, Agent, Position in Company) I am authorized

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 _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
Paul	June 10/96

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

Ministry of Northern Development and Mines
Ministère du Développement du Nord et des Mines

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

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

August 30, 1996

Our File: 2.16614
Transaction #: W9680.00329

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

Dear Mr. Spooner:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIM(S) 1198911 ET AL. IN BANNOCKBURN TOWNSHIP

Assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission. The credit has been approved under Section 14, Geophysical (MAG,EM), of the Assessment Work Regulation.

The approval date is August 30, 1996. Please indicate this approval on the claim record.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5855.

Yours sincerely,
ORIGINAL SIGNED BY:

for Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

SBB/jf

cc: Resident Geologist
Kirkland Lake, Ontario

✓ Assessment Files Library
Sudbury, Ontario

TRIM LINE

2.16614

M.207

BANNOCKBURN

ARGYLE TWP. - M.203

MONTROSE TWP. - M.237

POWELL TWP. - M.241

DOON TWP. - M.217

THE TOWNSHIP OF

BANNOCKBURN

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

DISPOSITION OF CROWN LANDS

- PATENT, SURFACE AND MINING RIGHTS
- " , SURFACE RIGHTS ONLY
- " , MINING RIGHTS ONLY
- LEASE, SURFACE AND MINING RIGHTS
- " , SURFACE RIGHTS ONLY
- " , MINING RIGHTS ONLY
- LICENCE OF OCCUPATION

ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES
CANCELLED C.

NOTES

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

SAND AND GRAVEL

(61) M.T.C. GRAVEL PIT 3F-25

(62) M.T.C. GRAVEL PIT 1374

(RI) ~~SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING, SECTION 36/80 ORDER NO. W 65/83~~

(RI) Mining & Surface Rights Reopened to prospecting, sale or lease Order O-L-10/95, previously withdrawn under Order W-65/83

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE ELK LAKE MANAGEMENT UNIT

AND MAY BE SUBJECT TO FORESTRY OPERATIONS

THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT P.O BOX 129
SWASTIKA, ONT
P0K 1T0
705-642-3222

PLAN NO. M.207

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

CIRCULATED JANUARY 27, 1995

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

2.16614 (MAG, EM)

200

TRIM LINE

TL 3400 E
TL 3800 E
TL 4200 E
TL 4600 E
BASELINE
N
L 7500 N
L 7400 N
L 7300 N
L 7200 N
L 7100 N
L 7000 N
L 6900 N
L 6800 N
L 6700 N
L 6600 N
L 6500 N
L 6400 N
L 6300 N
L 6200 N
L 6100 N
L 6000 N
L 5900 N
L 5800 N
L 5700 N
L 5600 N
L 5500 N
L 5400 N
A
B
C
D
E
11MHD
-38m
14MHD
-70m
7MHD
-66m
6MHD
-65m
12MHD
-70m
Lake
1198903
1198913
1198912
Charlewood
Lake
1198917
1206090
1203764
1198911
8 Units
1198916
4 Units
Lake
RECEIVED
JUN 9 1996
MINING LANDS BRANCH
2.16614
0 50 100 150 200
SCALE (m)
210
41P15NW0002 2.16614 BANNOCKBURN

In-phase
Out-of-phase
Conductor Axis
-30 -15 0 +15 +20 +25
-15 0 +15 +20 +25
+25 -15 -10 -5 0 +5 +10
MAX-MIN 11
+
-

LEGEND

Instrument: Apex Parametrics Max-Min 11
Mode: Maximum Coupled, Horizontal Loop Survey
Parameters Measured: Inphase (%)
Out of phase (%)
Frequency: 444 Hz
Coil Seperation: 120m
Operator: R. & R. Mathieu
Profile Scale: 1cm=+/-10%

EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT: OUTOKUMPU MINES LIMITED
PROPERTY: BANNOCKBURN TWP
TITLE:

MAX-MIN II 444 Hz

Date: April 1996	Scale: 1:5000	NTS:
Drawn: P.Gauthier	Interp: J.C.Grant	Job No.: E-143

TL 3400 E
TL 3800 E
TL 4200 E
TL 4600 E
BASELINE
L 7500 N
L 7400 N
L 7300 N
L 7200 N
L 7100 N
L 7000 N
L 6900 N
L 6800 N
L 6700 N
L 6600 N
L 6500 N
L 6400 N
L 6300 N
L 6200 N
L 6100 N
L 6000 N
L 5900 N
L 5800 N
L 5700 N
L 5600 N
L 5500 N
L 5400 N
1198913
Lake
1198903
1198912
Charlewood
Lake
1198917
1206090
1203764
1198911
8 Units
1198916
4 Units
Clarke
Lake
A
B
C
D
E
N

MINING LANDS BRANCH

2.16614

0 50 100 150 200
SCALE (m)

41P15NW0002 2 16614 BANNOCKBURN

In-phase
Out-of-phase
Conductor Axis
+25 +15 0 -15 -30 -15 0 +15 +20 +25
+10 +5 0 -5 -10 -15 -10 -5 0 +5 +10
MAX-MIN 11

LEGEND

Instrument: Apex Parametrics Max-Min 11
Mode: Maximum Coupled, Horizontal Loop Survey
Parameters Measured: Inphase (%)
Out of phase (%)
Frequency: 1777 Hz
Coil Seperation: 120m
Operator: R. & R. Mathieu
Profile Scale: 1cm=+/-10%

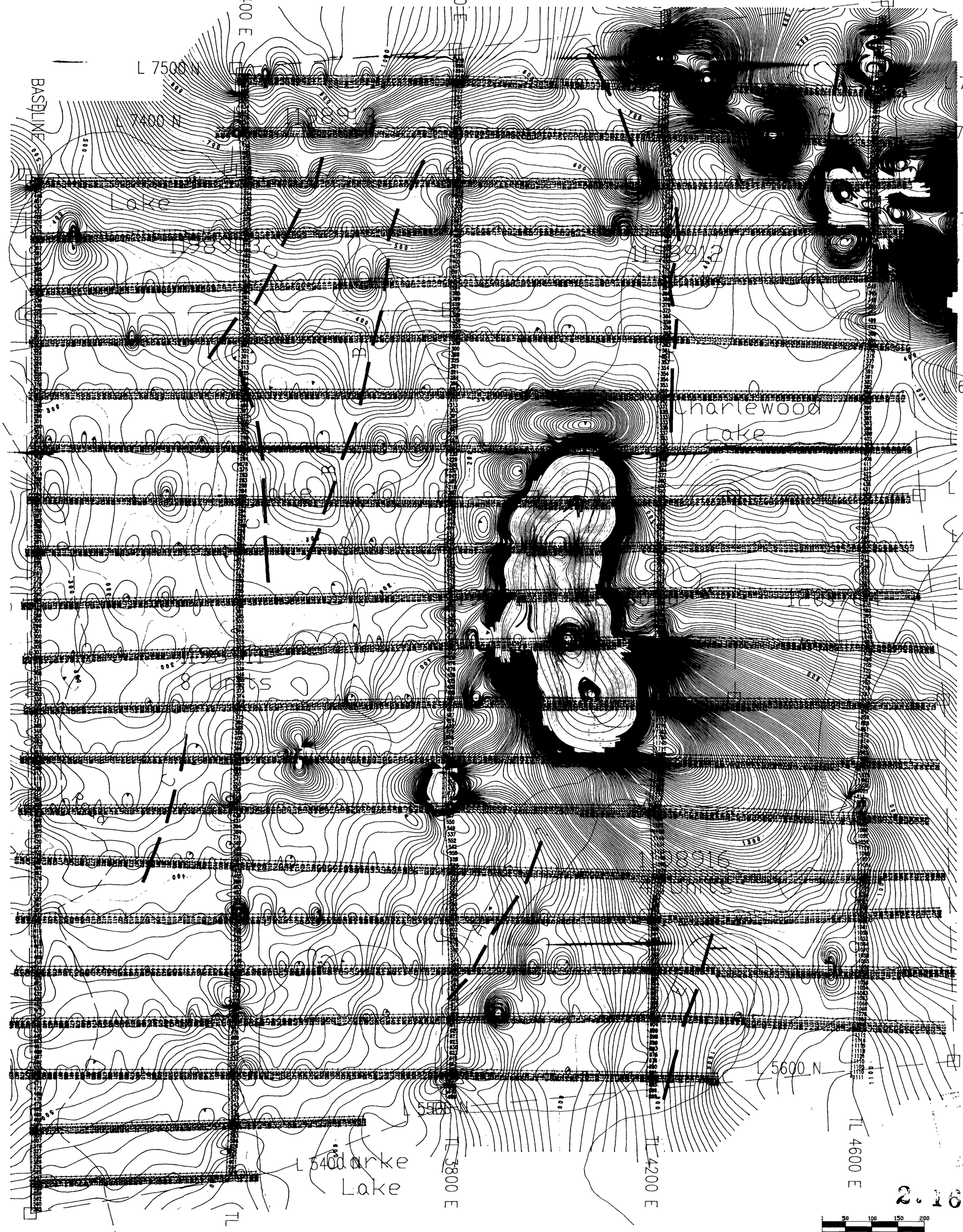
EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT: OUTOKUMPU MINES LIMITED
PROPERTY: BANNOCKBURN TWP

TITLE:

MAX-MIN II 1777 Hz

Date:April 1996	Scale: 1:5000	NTS:
Drawn:P.Gauthier	Interp: J.C.Grant	Job No.:E-143



LEGEND

Instrument: BRGM OMNI-1V
Parameters Measured: Earth's total magnetic field
Accuracy: +/- 0.1 nano-teslas
Diurnals: Corrected by base station recorder
Contour Interval: 0,10,20,30,40,50,.....
Reference Field: 57,950 gammas
Datum Subtracted: 57,500 gammas

EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151

CLIENT: OUTOKUMPU MINES LIMITED
PROPERTY: BANNOCKBURN TWP
TITLE:

MAGNETOMETER SURVEY

Date: April 1996	Scale: 1:5000	NTS:
Drawn: P.Gauthier	Interp: J.C.Grant	Job No.: E-143

2.16617

41P15NW0002 2 16614 BANNOCKBURN