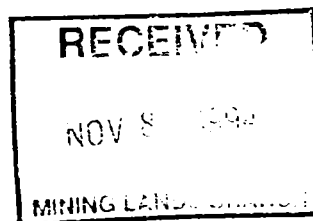


42A06SE0030 2.15681 ADAMS

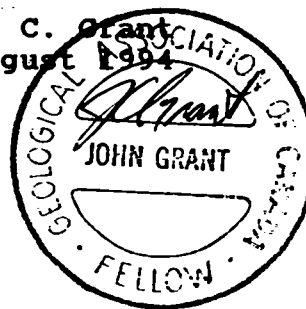
010

GEOPHYSICAL REPORT
FOR
OUTOKUMPU MINES LIMITED
ON THE
ADAMS/ELDORADO PROJECT
ADAMS & ELDORADO TOWNSHIP
PORCUPINE MINING DIVISION
TIMMINS, ONTARIO

2.15681



Prepared by: J. C. Grant
August 1994





42A06SE0030 2.15681 ADAMS

010C

TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
PROPERTY LOCATION AND ACCESS.....	1
CLAIM GROUP.....	1
PERSONNEL.....	2
LINECUTTING PROGRAM.....	2
GEOPHYSICAL PROGRAM.....	3
SURVEY RESULTS.....	4
MAGNETIC SURVEY.....	5
CONCLUSION AND RECOMMENDATIONS.....	5
CERTIFICATE	
FIGURE 1 - LOCATION MAP	
2 - PROPERTY LOCATION MAP	
3 - CLAIM SKETCH	
APPENDIX A - EDA OMNI IV	
B - APEX PARAMETRICS MAX MIN II SYSTEM	
MAPS - MAGNETIC SURVEY EAST SHEET	
- MAGNETIC SURVEY WEST SHEET	
- MAX MIN II 1777 HZ EAST SHEET	
- MAX MIN II 1777 HZ WEST SHEET	
- MAX MIN II 444 HZ EAST SHEET	
- MAX MIN II 444 HZ WEST SHEET	

INTRODUCTION

Outokumpu Mines Limited retained the services of Exsics Exploration Limited to complete a linecutting and geophysical program on their property located in Adams and Eldorado Townships.

A portion of their claim block had been surveyed in 1992 when the ground was held by Timmins Nickel. The purpose of this 1994 program was to extend the existing grid to cover the remaining claims held by Outokumpu Mines Limited. The new grid was then covered by ground geophysics with significant overlapping of the old grid so all the data could be merged together.

The intent of the program was to outline the iron formation horizons and to locate and detail the more subtle zones which would be favourable horizons for base metal deposition.

The linecutting program began in late June 1994 and the geophysical program was completed by the end of August 1994.

PROPERTY LOCATION AND ACCESS

The bulk of the property is located in the northeast and centraleast section of Adams Township with a portion located in the central west section of Eldorado Township. The northern section of the property extends into the southeast corner of Deloro Township. Figure 2 and 3.

The entire property is located approximately 16 km south of the City of Timmins.

Access to the property during the survey period is somewhat restricted. Initially the linecutting crews were put in by helicopter. However, an old access road, locally called the Shaw Creek Road, was found to cross the property. This road is only accessible by 4 wheel ATV units and is swampy in places and quite overgrown.

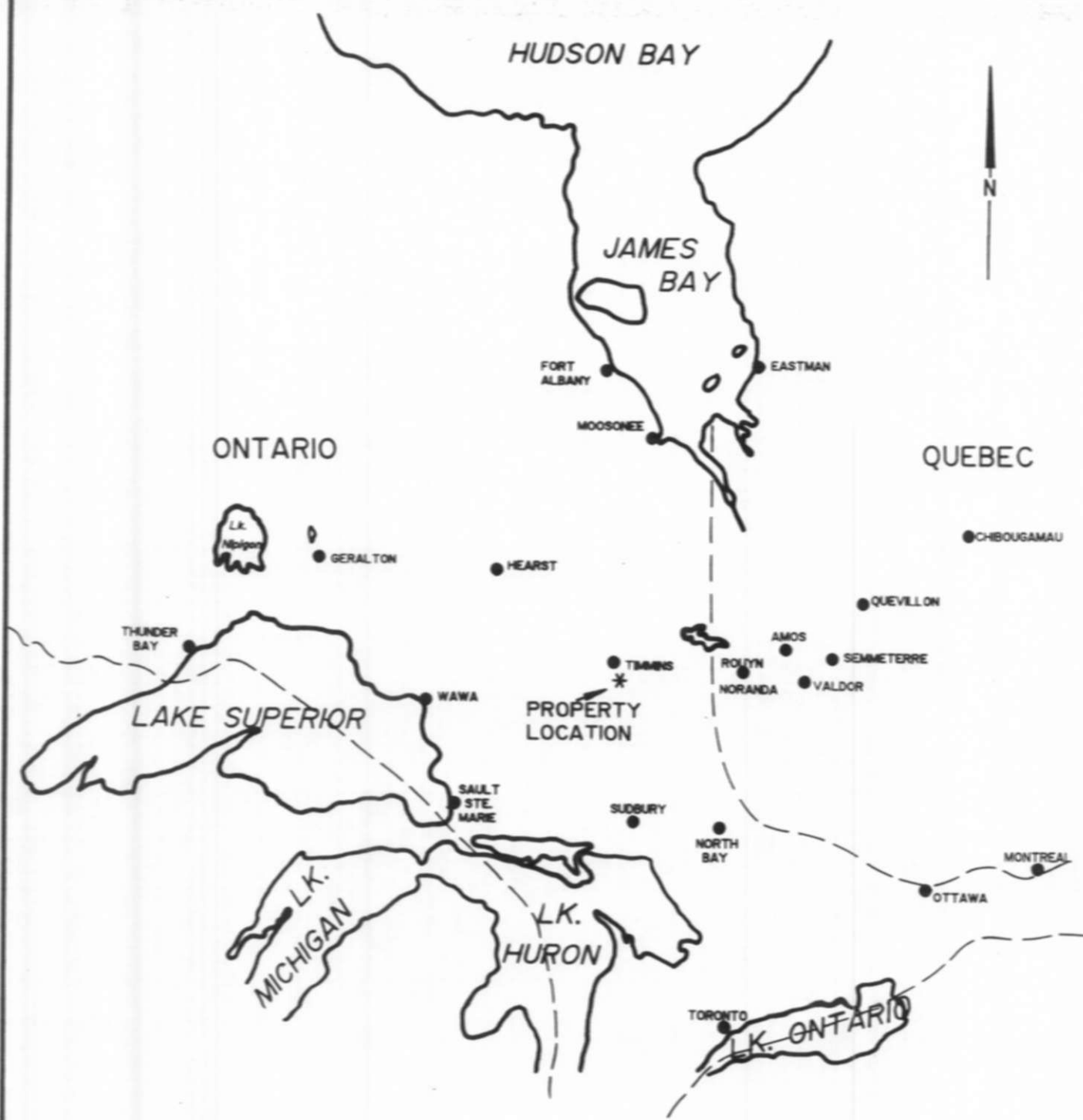
Travelling time from Timmins to the centre of the property is approximately 2 hours. Refer to Figures 1 and 2.


CLAIM GROUP

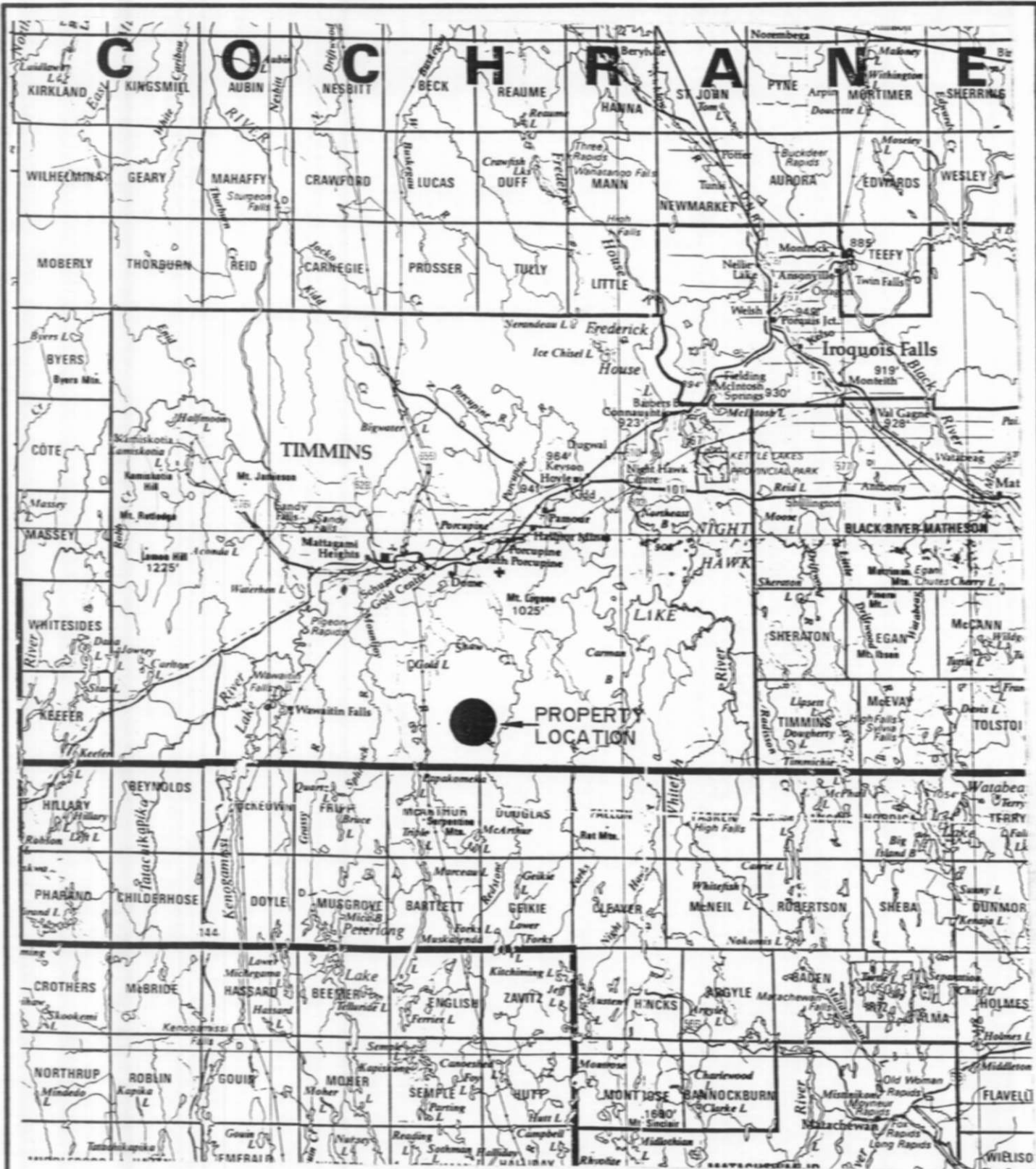
The following claim numbers represent the property held by Outokumpu Mines Limited in the project area.

Deloro Township

P-1198923	2 units
P-1198924	2 units



		
EXSICS EXPLORATION LTD. P.O. Box 1880, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151		
CLIENT: OUTOKUMPU MINES LTD.		
PROPERTY: ADAMS and ELDORADO TWPS.		
TITLE:		
LOCATION MAP		
Fig. 1		
Date: Aug. 1994	Scale: 1"=125miles	NTS:
Drawn: P.G.	Interp: J.C. Grant	Job No. E-60



EXSICS EXPLORATION LTD.

P.O. Box 1880, P4M-7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-267-4151

CLIENT: **OUTOKUMPU MINES LTD.**
 PROPERTY: **ADAMS and ELDORADO TWPS.**
 TITLE: **PROPERTY LOCATION** Fig. 2

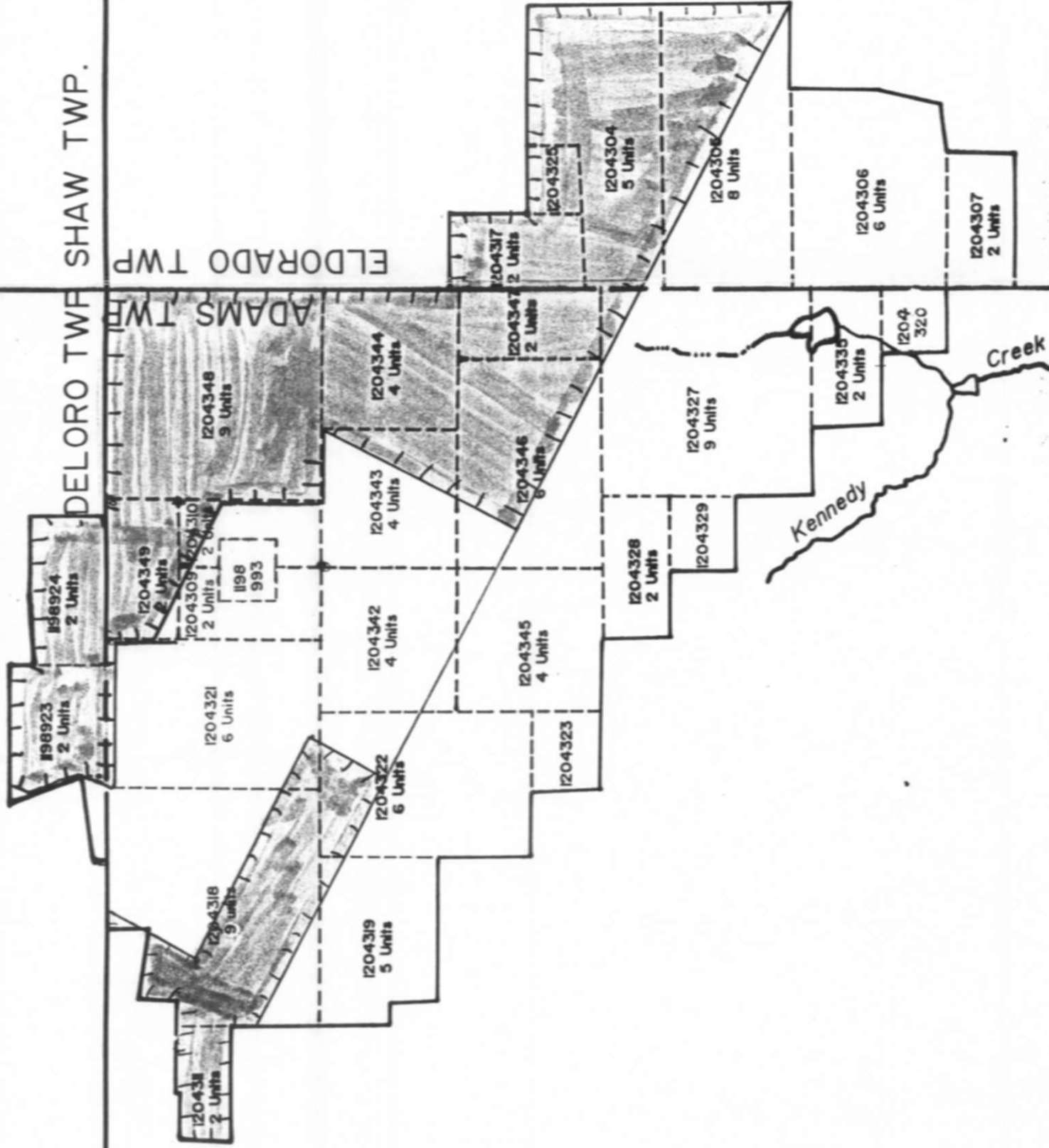
Date: Aug. 1994	Scale: 1:600,000	NTS:
Drawn:	Interp: P.G.	Job No. E-60

SHAW TWP.

DELORO TWP.

ELDORADO TWP.

ADAMS TWP.



AREA OF 1994 SURVEYS

EXSICS EXPLORATION LTD.

P.O. Box 988, P4W-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 795-267-451



CLIENT: OUTOKUMPU MINES LTD.

PROPERTY: ADAMS and ELDORADO TWPS.

TITLE: CLAIM SKETCH

Fig. 3

Date: Aug. 1994 Scale: 1"=1/2mile NTS

Drawn: P.G. Interp: J.C. Grant Job No E-60

Adam Township

P-1204311	2 units
P-1204318	98 units
P-1204321	6 units
P-1204349	2 units
P-1204309	2 units
P-1204310	2 units
P-1204348	9 units
P-1204319	5 units
P-1204322	6 units
P-1204342	4 units
P-1204343	4 units
P-1204344	4 units
P-1204323	1 unit
P-1204345	4 units
P-1204346	6 units
P-1204347	2 units
P-1204328	2 units
P-1204329	1 unit
P-1204327	9 units
P-1204335	2 units
P-1198993	1 unit

Eldorado Township

P-1204317	2 units
P-1204325	1 unit
P-1204304	5 units
P-1204305	8 units
P-1204306	6 units
P-1204307	2 units

Refer to Figure 3. Derived from MNDM Plan Maps G-3993 Deloro Township, G-3925 Adams Township, M-276 Eldorado Township.

PERSONNEL

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

Richard Mathieu	Operator Timmins
Robin Mathieu	Assistant Timmins
Todd Mathieu	Helper Timmins

The project was carried out under the supervision of J. C. Grant. All plotting and compilation was completed by P. Gauthier.

LINECUTTING PROGRAM

The linecutting grid consisted of a detailed metric grid which was started by re-establishing the existing baseline across the southern part of the property.

Cross lines were turned off of this baseline at 100 meter intervals as specified by Outokumpu Mines Limited. All of the crss lines, baselines, and tie lines were chained with a 20 meter station intervals. In all, a total of 109.10 km of grid lines were established over the property.

GEOPHYSICAL PROGRAM

This program consisted of a Total Field Magnetic Survey done in conjunction with a Horizontal Loop Electromagnetic, (HLEM), survey. The magnetic survey was completed over all of the cut lines but the HLEM Survey was completed on the crosslines only.

The magnetic survey was completed using the EDA OMNI IV System. Specifications for this system can be found as Appendix A of this report. The follwing parameters were kept consistent throughout the survey.

Line spacing	-100 meter
Station Spacing	-10 meter
Accuracy	- +/- 0.5 gamma
Reference Field	-58122 gammas
Datum Subtract	-57500 gammas
Base Station Interval	-30 second record time
Contour interval	-50 gamma

The collected magnetic data was then leveled to the existing survey's background. The resultant data was then plotted onto a base map at a scale of 1:5000 and contoured. This contoured base map can be found in the back pocket of this report.

The HLEM survey was completed using the Apex Parametrics Max Min II system. Specifications for this unit can be found as Appendix B of this report.

Line Spacing	-100 meter
Station Spacing	-20 meter
Frequencies Read	-1777 Hz, 444 Hz
Components Measured	-Inphase & Quadrature
Accuracy	- +/- 1.0%
Coil Seperation	-100 meter
Theoretical Search Depth	-50-60 meters
Profile Scale	-1cm = +/-20%

The collected data was then plotted onto a base map. 1 map for each frequency, at a scale of 1:5000. The data was then profiled.

The grid has been divided into two map sheets. They have been labelled the east sheet and west sheet.

SURVEY RESULTS

The geophysical results for the 1994 summer program has been divided into two sections, the West Sheet and East Sheet. Each section will be discussed separately with the overall results combined in the conclusions.

West Sheet

The HLEM Survey was not successful in outlining any significant conductive trends over the majority of this section. Several weak EM zones were detected but they would require additional follow-up work for a more complete definition. The following is a brief description of the questionable zones.

The single line response on L1300MW/2500MN relates to a magnetic low unit which is situated on the north flank of a moderate magnetic high.

The two line zone striking across lines 1300MW and 1400MW at 2050MN in fact may extend as far as 100MW of the east section. The entire conductor relates to a significant magnetic low structure.

The third target area which is situated on lines 1700MW and 1800MW at 1650MN appears to emanate from a strong magnetic high unit which shows evidence of minor cross structure along the west flank of the high. The EM zone does not continue west into the magnetic low.

Another weak EM target was located across lines 400MW to 4600MW at 380MN to 500MN. The best portion of this zone lies under line 4600MW. Interpretation of the 1777 HZ frequency puts the zone at a depth of 50-55 meters with a conductivity range of 4-5 MHOS.

The entire zone has good strong magnetic correlation in excess of 700 gammas above the general background. This could suggest the zone relates to a narrow stringer of iron formation which most likely is just within the search depth range of the survey.

East Sheet

Three features were also noted on the east sheet, again they represented weak questionable zones.

The first feature is the eastern extension which as been discussed earlier.

A second feature strikes across lines 1300MW to 800MW. Interpretation of the 1777 HZ frequencies places the zone just within the search depth range of the survey. The zone lies at a depth of 50 meters with weak conductivity of 2-3 MHOS. The zone lies along the contact between two magnetic high units.

The third single line response was noted on L200MW at 420MN. Again the feature has been interpreted on the 1777 HZ frequency and lies at a depth of 40 meters with weak conductivity of 2-3 MHOS. The zone relates to a spot magnetic high within a broader magnetic high unit.

The remainder of the grid was relatively quiet.

MAGNETIC SURVEY

Generally the magnetic survey was successful in mapping the geology of the grid.

Commencing on the east section of the grid, there appears to be a major cross structure paralleling Line 1300 & 1400 ME. The magnetic structure cross cutting lines 1400ME to 900ME striking at 360 degrees may in fact relate to the Burrows Benedict Fault.

The structure cross cutting lines 1000ME to 700ME at 100 degrees to 110 degrees may relate to diabase dike.

The somewhat distorted magnetic high structure first noted on lines 300ME between 150MN and 400MN may relate to a known iron formation which generally crosses the grid at approximately 310 degrees.

To the north of the iron formation and in the area of lines 100MW/1900MN and 1300MW/1800MN there is a well defined magnetic bullseye which may relate to a concentration of iron rich sulphide.

Two other similar type zones have been noted across lines 1800MW and 1400MW and lines 2300MW and 2100MW. Although not as strong magnetically as the aforementioned bullseye, they may relate to sulphide rich zones of unknown composition.

A similar elongated bullseye is situated between lines 800MW and 1400MW at 100MN to 200MN. This feature relates to a mapped Komatite flow structure (refer to OGS Map 2455).

Generally the remainder of the grid to the west is relatively flat in comparison to the eastern portion. The spot highs may relate to iron rich sulphides in various concentrations.

CONCLUSIONS AND RECOMMENDATIONS

As discussed earlier, the HLEM survey outlined several areas of minor interest. These EM zones are generally weak narrow features which would require further follow-up to better define them.

The magnetic survey was successful in mapping the property geology which appears to be a composition of iron formations and ultramafic intrusives which have been cross cut by faults and diabase dikes.

There also appears to be areas of sulphide rich concentrations of unknown composition which appear as lenses and bullseyes which show pinching and swelling along strike.

A follow-up program would consist of detailed mapping although the property is quite wet. A larger coil separation on the HLEM survey may also enhance the weak existing EM zones. Also, a deep penetrating large loop survey may also be considered as a follow-up program.

Respectfully Submitted

John C. Grant. CET



CERTIFICATE

I, John C. Grant, hereby certify that:

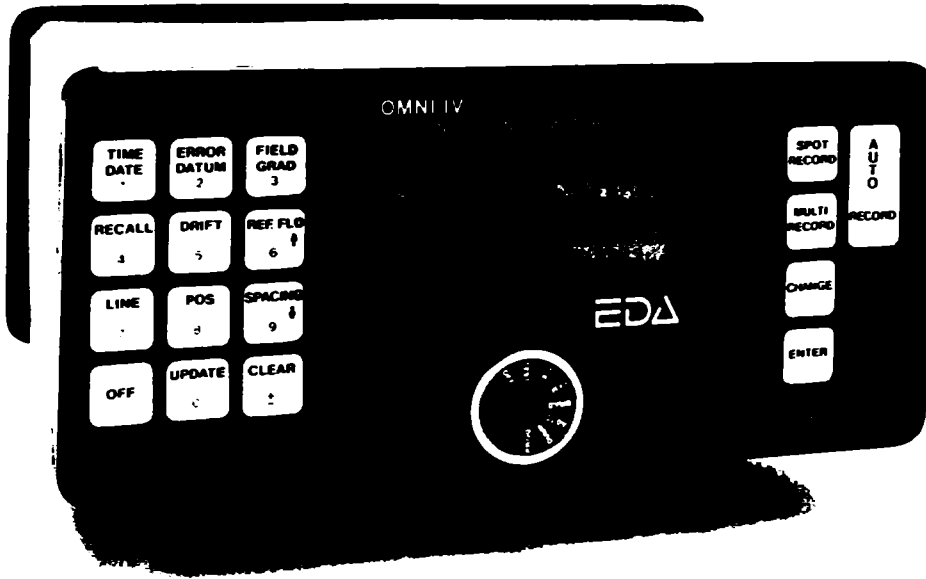
- 1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury, Campus. I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited (5 years), North Bay office, and as Exploration Manager 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 seventeen (17) 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,



APPENDIX A

OMNI IV "Tie-Line" Magnetometer



- 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
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°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 (0.5 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

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

APPENDIX B

MAXWELL MODEL 100

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.

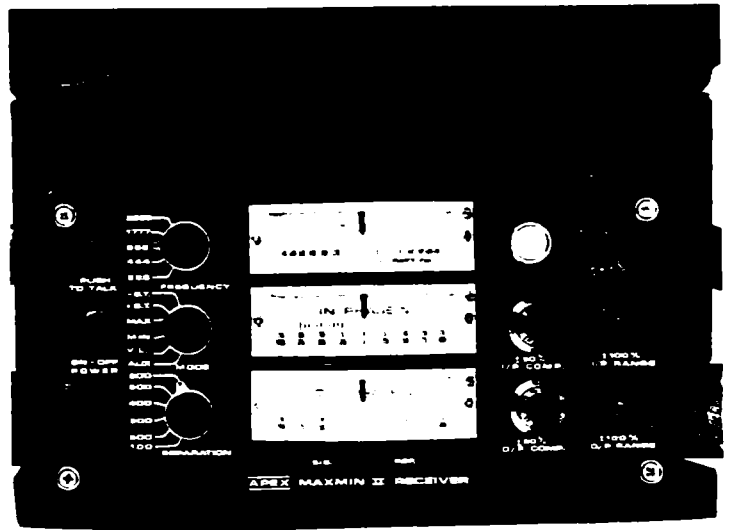
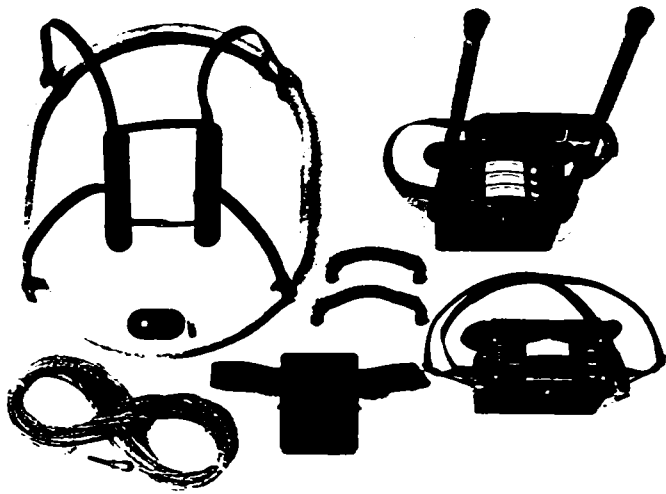
Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.

Reliable data from depths of up to 180m (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 & 250m (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 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90mm 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.

- 222Hz : 220 Atm²
- 444Hz : 200 Atm²
- 888Hz : 120 Atm²
- 1777Hz : 60 Atm²
- 3555Hz : 30 Atm²

9V trans radio type batteries (4). Life: approx. 35hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

12V 6Ah 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

Report of Work Conducted After Recording Claim

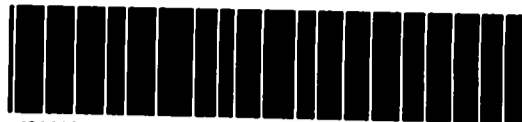
Mining Act

Transaction Number
W9460.00209

AMENDED.

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, Wabush, Ontario, P3E 6A5, telephone (705) 870-7264.

- Instructions:
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

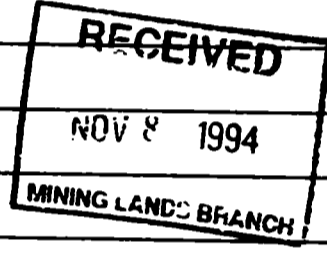


900

Recorded Holder(s) OUTOKUMPU MINES LTD.	Client No. 178525
Address Box 1123, TIMMINIS, P4N 7H9	Telephone No. 264-5024
Mining Division PORCUPINE	M or G Plan No. 6-3925, M-276
Township/Area Also ADAMS & ELDOONDO	
Date Work Performed From: July 5, 1994	To: August 28, 1994

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	LIEUTING, MAGNETIC & HLEM SURVEYS.
Physical Work, Including Drilling	
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	



Total Assessment Work Claimed on the Attached Statement of Costs \$ **45,265**

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
John Grant	Summit Hotel Box 1880, Timmins, Ont.
ESSIES Exp. LTD.	Box 1880, Timmins, Ont P4N-7K1
Richard & Robin Morrison	Box 1880, Timmins, Ont P4N-7K1
TOPP MORRISON	Box 1880, Timmins, Ont. P4N-7K1

Verification 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 Sept 30, 1994	Recorded Holder or Agent (Signature) <i>[Signature]</i>
------------------------------	--

Verification 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
John C. Grant Box 1880, Timmins, Ont.

Response No. 267-4151	Date	Certified By (Signature) <i>[Signature]</i>
---------------------------------	------	--

Office Use Only

Total Value Cr. Recorded 45,265	Date Recorded	Mining Recorder	Received Stamp
Deemed Approval Date DEC. 29, 1994	Date Approved		
Date Notice for Amendments Sent			

MINED
W9460.00209

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claims Units
12043110		2
12043180		9
12043220		6
11989230		2
11989240		2
12043490		2
12043480		9
12043460		6
12043470		2
12043170		2
12043250		1
12043050		5
12043050		8
12043450		4
12043440		4
12043090		2
12043100		2
Total Number of Claims		17

Value of Assessment Work Done on this Claim	Value Applied to this Claim
1992	800
4074	3400
800	2400
1992	800
1992	800
1992	800
1946	800
8917	3600
3214	2400
1992	800
1991	800
1041	400
4753	2000
3576	3200
1267	400
3983	1600
91	800
453	800
44,134	27,200
Total Value Work Done	
Total Value Work Applied	

RECEIVED
NOV 8 1994
MINING LANDS BRANCH

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
1192	0
4774	0
0	0
1192	0
1,192	0
1,196	0
4852	465
814	0
1,192	0
1,191	0
641	0
2,753	0
376	0
0	0
2303	0
0	0
0	0
0	0
19,498	465
Total Assigned from	
Total Reserve	

See attached page for additional claims

Amounts Paid
Oct 24, 1994

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.

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
--	-----------	------

MINING CLAIMS BRANCH
 W 9460.00209

2.1568

Claim Number	Number of Claims	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Applied to other Claims	Priority to be given to this claim
1204319	5	181	2000	0	0
1204321	6	588	2400	0	0
1204327	9	362	400	0	0
1204342	4	0	1,600	0	0
1204323	1	0	400	0	0
1204345	4	0	1,600	0	0
1204328	2	0	800	0	0
1204329	1	0	400	0	0
1204335	2	0	800	0	0
1204306	6	0	2,400	0	0
1204307	2	0	800	0	0
1204320	1	0	400	0	0
1198995	1	0	400	0	0
Total Value Work Done	13	1,131	17,600	0	0

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such decisions, please indicate from which claims you wish to prioritize the deferral 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.

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

RECEIVED
 NOV 5 1994
 MINING CLAIMS BRANCH

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
---	-----------	------

Number of credits, etc. relating to this report	Value of credits, etc. relating to this report	Value of credits, etc. relating to other claims	Value of credits, etc. relating to other claims	Priority to be given to this claim	Priority to be given to this claim	Number of credits, etc. relating to this report	Value of credits, etc. relating to this report



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

Statement of Costs for Assessment Credit
État des coûts aux fins du crédit d'évaluation

Transaction No./N° de transaction
634460.00209

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 claims. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, 4th Floor, 180 Cedar Street, Sudbury, Ontario P2E 6A6, telephone (705) 670-7264.

Les renseignements personnels contenus dans le présent formulaire sont recueillis en vertu de la Loi sur les mines et servent à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte des renseignements au chef provincial des terres minières, ministère du Développement du Nord et des Mines, 4^e étage, 180 rue Cedar, Sudbury (Ontario) P2E 6A6, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Total Total global
Wages Salaires	Labour Main-d'œuvre		
	Field Supervision Surveillance sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-consultant	Type LIBERTINE	25,573.00	
	MANA	7,492.00	
	NUEM	10,950.00	44,015.00
Supplies Used Fournitures utilisées	Type		
Equipment Used Location de matériel	Type 1/4" BORE		
	7/8" BORE	1,350.00	
Total Direct Costs Total des coûts directs			44,015.00

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Total Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilité			
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)			
Value Total de 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 the assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses déclarées 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

- Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
- Work filed three, four or five years after completion is claimed at 80% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.80 =	

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale soumise au crédit d'évaluation.
- Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 80 % de la valeur totale de crédit d'évaluation soumise. Voir les calculs ci-dessous.

Valeur totale de crédit d'évaluation	Évaluation totale demandée
x 0.80 =	

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 Richard G. Gohart I am authorized
(Provincial Miner, 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 exacts possibles 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 Richard G. Gohart je suis autorisé
(Ministre enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature: Richard G. Gohart Date: Sept 30, 1994



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

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

November 15, 1994

Our File: 2.15681
Transaction #: W9460.00209

Mining Recorder
Ministry of Northern Development
and Mines
60 Wilson Avenue,
1st Floor
Timmins, Ontario
P4N 2S7

Dear Sir/Madam:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
P.1204311 ET AL IN ADAMS & ELDORADO TOWNSHIPS**

Assessment work credits have been approved as outlined on the report of work form for the submission. The credits have been approved under Section 14 Geophysics (Mag & EM), Mining Act Regulations.

The approval date is November 15, 1994.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5861.

ORIGINAL SIGNED BY:

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

LJ/jl
Enclosures:

cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario

C-3925

M.R.O. - MINING RIGHTS
 S.R.O. - SURFACE RIGHTS ONLY
 M.-S. - MINING AND SURFACE RIGHTS

Description Order No. Date Disposition File

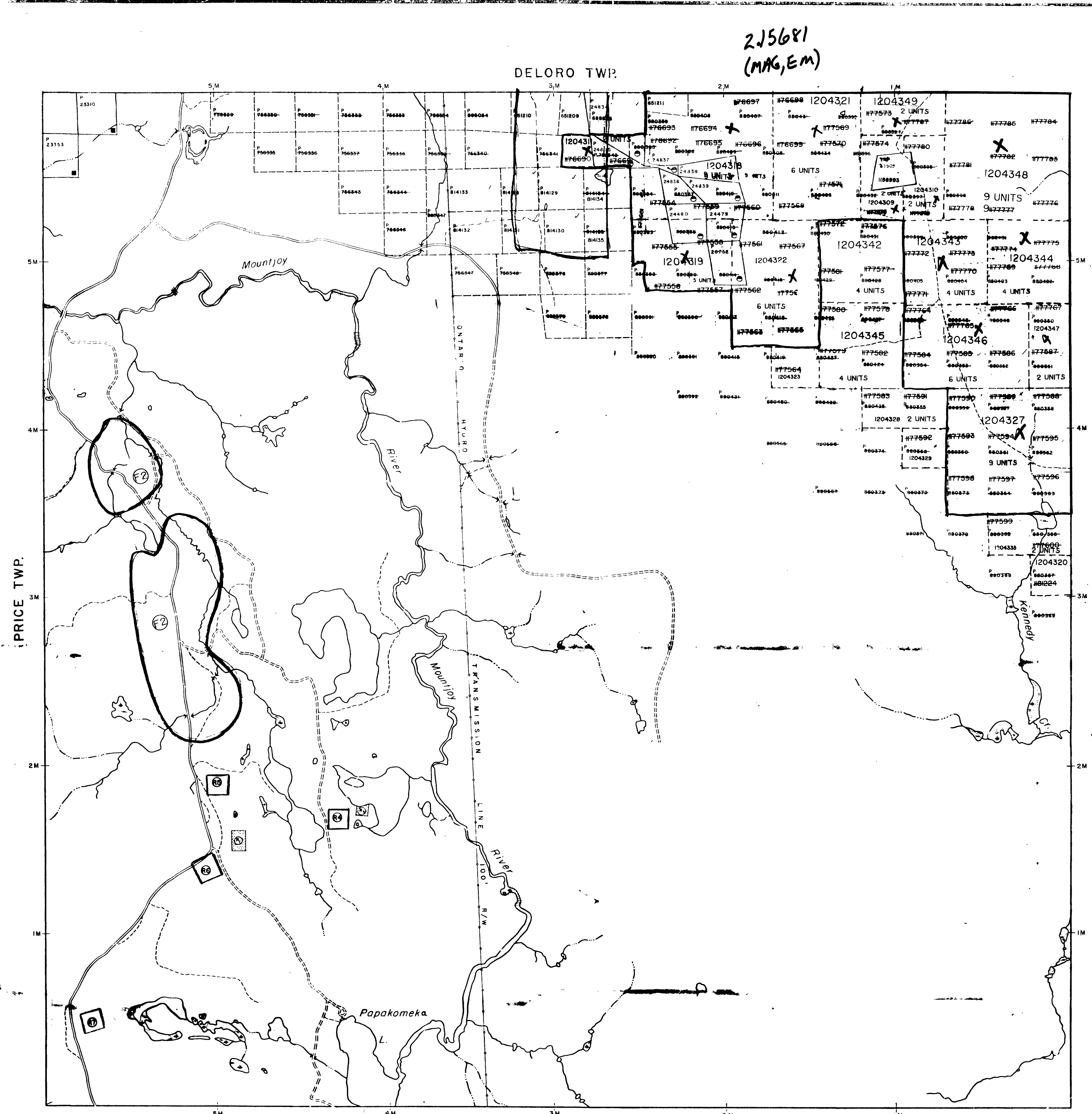
MNR RECEIVE 424177 12/11/77 277 280 157213

- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 87/84 HER DATED 84-MAY-02
- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 88/84 HER DATED 84-MAY-02
- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 89/84 HER DATED 84-MAY-02
- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 89/84 HER DATED 84-MAY-02
- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 89/84 HER DATED 84-MAY-02
- MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 89/84 HER DATED 84-MAY-02

2MADA

C-3925

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

TOWNSHIP'S BASE LINES, ETC.

LOTS MINING CLAIMS PARCELS, ETC.

UNSURVEYED LINES

LOT LINES

MINING CLAIMS E.T.C.

RAILWAY AND RIGHT OF WAY

UTILITY LINES

NON PERENNIAL STREAM

FLOODING OR FLOODING RIGHTS

SUBDIVISION OR COMPOSITE PLAN

RESERVATIONS

ORIGINAL SHORELINE

MARSH OR MUSKEG

M.T.

TRAVERSE MARKING

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	○

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1910, CHAP. 360, SEC. 63, SUBSEC. 1

100 0 1000 Metres

10 0 10 20 30 40 50 60 70 Chains

500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000

THIS TWP. SUBJECT TO FOREST ACTIVITY IN 1994/95 FURTHER INFORMATION AVAILABLE ON FILE

ISSUED
 NOV - 3 1994
 PORCUPINE MINING DIVISION

2.15681

TOWNSHIP **ADAMS** RECEIVED NOV 8 1994

M.N.R. ADMINISTRATIVE BRANCH **TIMMINS** MINING LANDS BRANCH

MINING DIVISION **PORCUPINE**

LAND TITLES / REGISTRY DIVISION **COCHRANE**

Ministry of Natural Resources Ontario

Ministry of Northern Development and Mines

Date: SEPTEMBER, 1986

Checked: [Signature]

Number: **G-3925**

C-3925

2MADA

C-3925



Shaw Tp. - M.311

THE TOWNSHIP OF
OF
2.15681
ELDORADO

DISTRICT OF
TIMISKAMING

RECEIVED
NOV 8 1994
MINING DIVISION

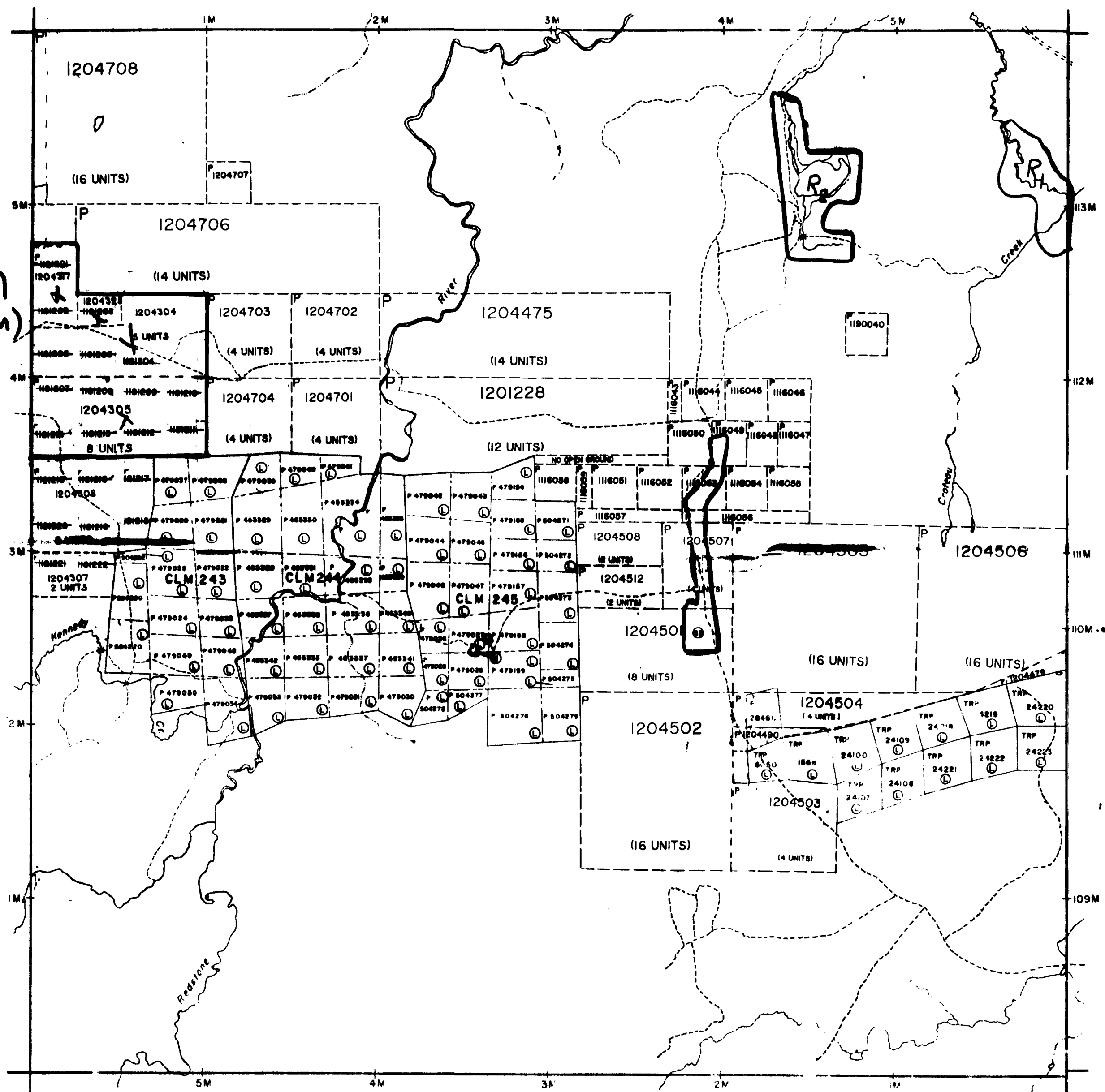
SCALE: 1-INCH = 40 CHAINS

R.15681
(MAG, EM)

Adams Tp. - M.261

Langmuir Tp. - M.292

Douglas Tp. - M.274



NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers

① GRAVEL, FILE 192287
② GRAVEL, FILE 171598 AND FILE 172954

R₁ DUCKS UNLIMITED PENDING APPLICATION UNDER THE PUBLIC LANDS ACT S.R.O. WITHDRAWN

R₂ DUCKS UNLIMITED PENDING APPLICATION UNDER THE PUBLIC LANDS ACT S.R.O. WITHDRAWN

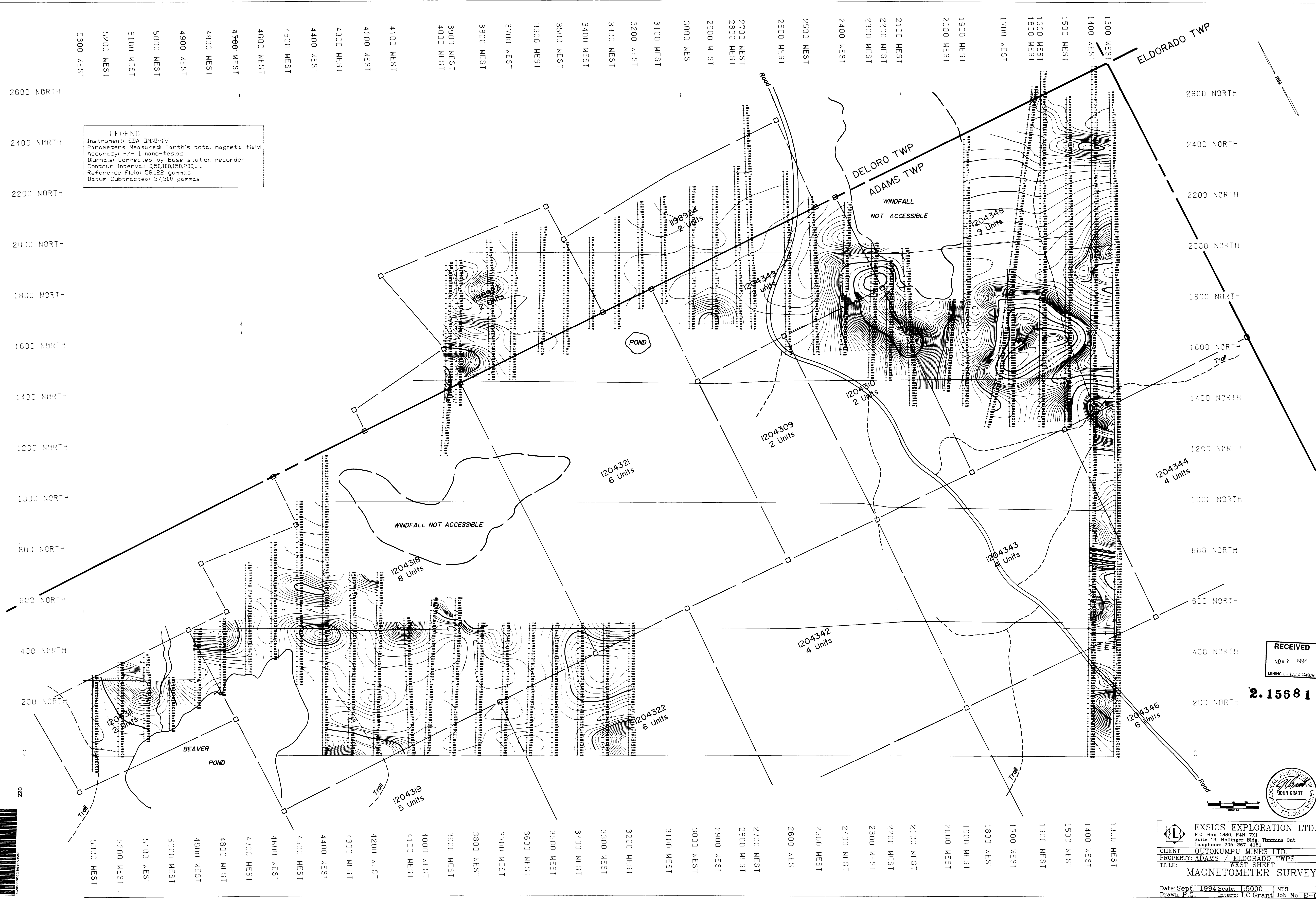
ISSUED
NOV - 3 1994
PORCUPINE MINING DIVISION

ACTIVATED APRIL 26/94
PLAN NO. **M.276**

MINISTRY OF
NATURAL RESOURCES
CITIZENSHIP

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.

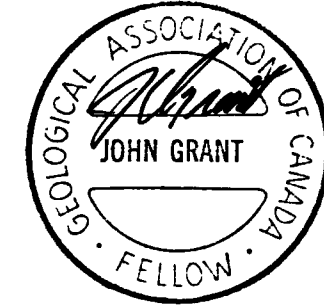




LEGEND
 Instrument: EDA DMNI-IV
 Parameters Measured: Earth's total magnetic field
 Accuracy: +/- 1 nano-teslas
 Diurnals: Corrected by base station recorder
 Contour Interval: 0.50, 1.00, 1.50, 2.00,
 Reference Field: 58122 gammas
 Datum Subtracted: 57,500 gammas

RECEIVED
 NOV 5 1994
 MINING DIVISION

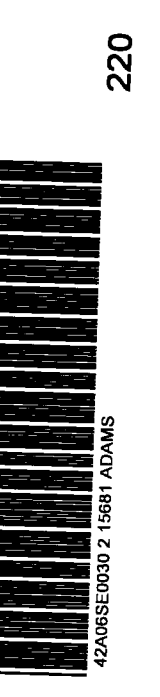
2.15681

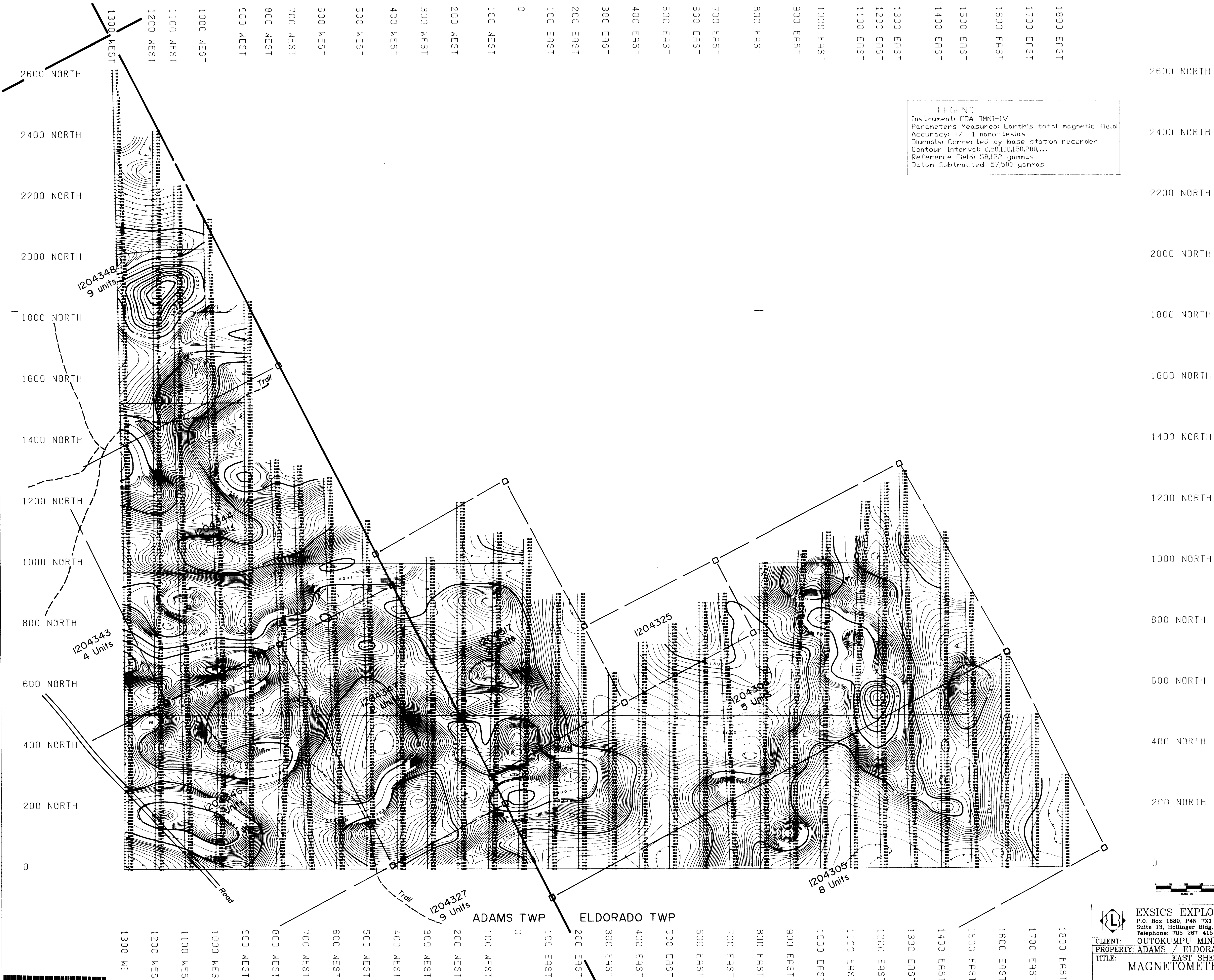


EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-287-4151

CLIENT: **OUTOKUMPU MINES LTD.**
 PROPERTY: **ADAMS / ELDORADO TWPS.**
 TITLE: **MAGNETOMETER SURVEY**

Date: Sept. 1994 Scale: 1:5000 NTS:
 Drawn: P.G. Interp: J.C. Grant Job No.: E-60





LEGEND
 Instrument: EDA OMNI-IV
 Parameters Measured: Earth's total magnetic field
 Accuracy: +/- 1 nano-teslas
 Diurnals: Corrected by base station recorder
 Contour Interval: 0,50,100,150,200,.....
 Reference Field: 58,122 gammas
 Datum Subtracted: 57,500 gammas

RECEIVED
 NOV 8 1994
 MINING LANDS BRANCH

2.15681

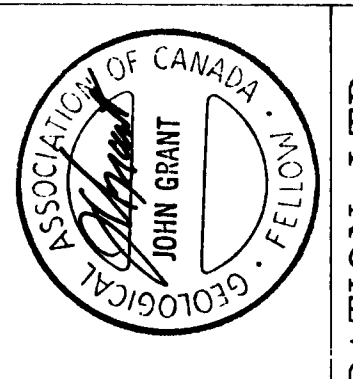


ESXICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-267-4151
 CLIENT: OUTOKUMPU MINES LTD.
 PROPERTY: ADAMS / ELDORADO TWPS.
 TITLE: EAST SHEET
MAGNETOMETER SURVEY
 Date: Sept. 1994 Scale: 1:5000 NTS:
 Drawn: P.G. Interp: J.C. Grant Job No: E-60



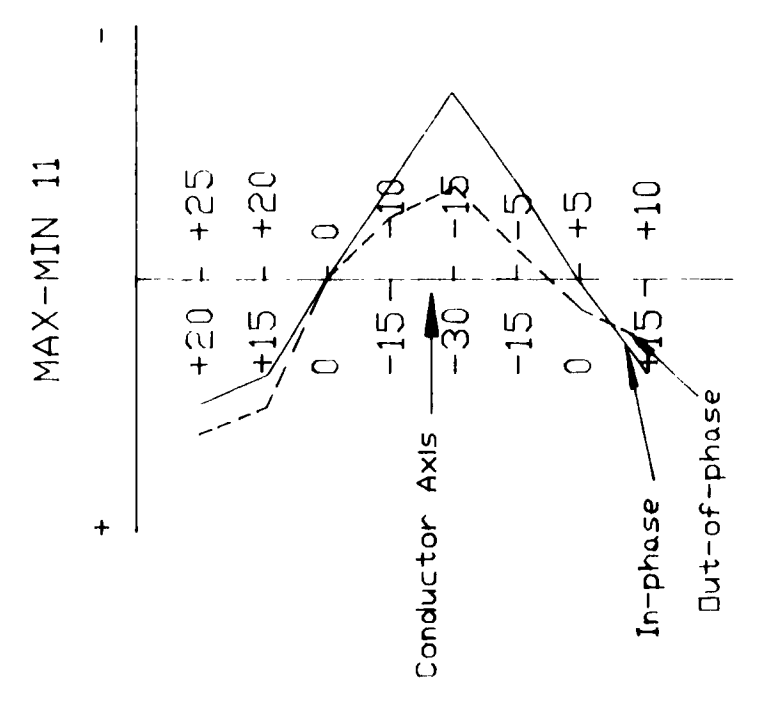
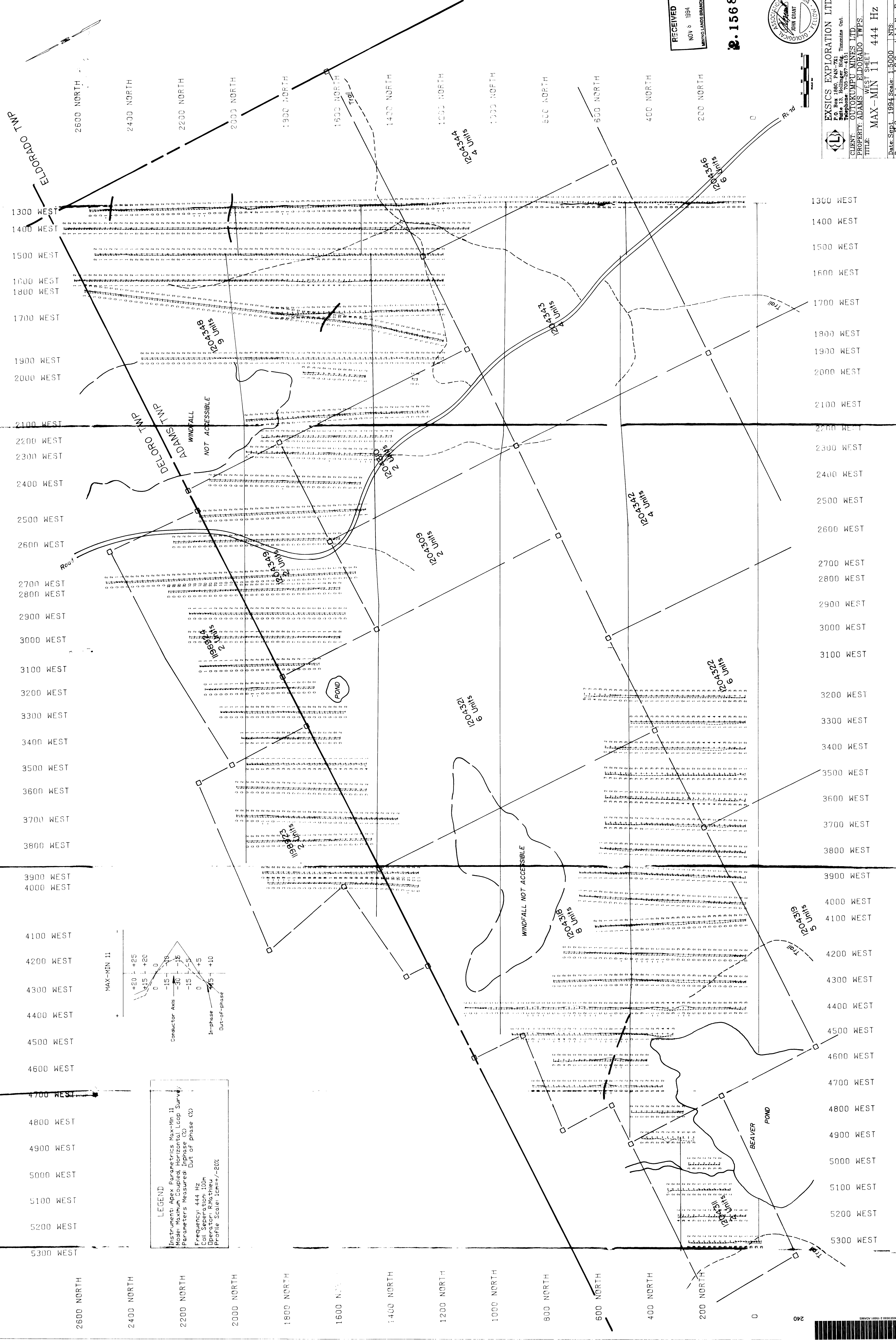
RECEIVED
NOV 6 1994
MINING LANDS BRANCH

2. 15681



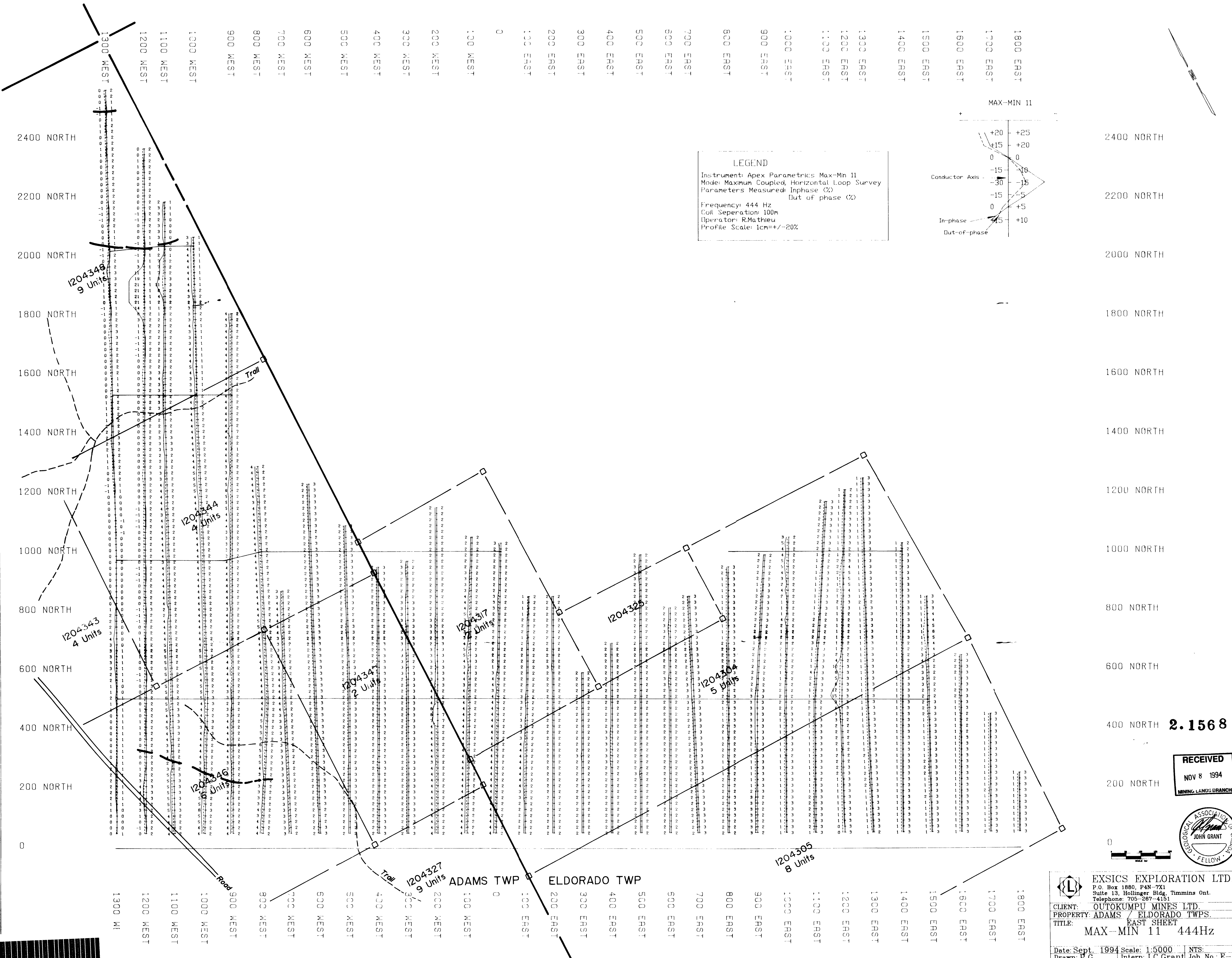
EXSICS EXPLORATION LTD.
P.O. Box 1980, P.A.N.-721
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4133
FAX: 705-267-4134
CLIENT: OUTOKUMPU MINES LTD.
PROPERTY: ADAMS WINDFALL TWP.
TITLE: MAX-MIN 11 WEST SHEET
MAX-MIN 11 444 Hz

Date: Sept. 1994 Scale: 1:5000 NTS
Drawn: P.G. Interp: J.C. Grant Job No.: F-60

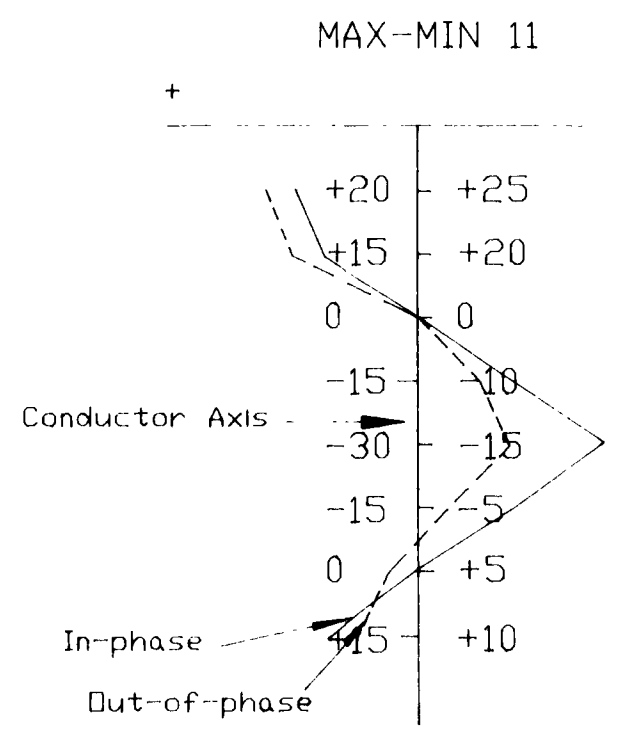


LEGEND
Instrument: Apex Parametrics Max-Min 11
Pole: Maximum Coupled Horizontal Loop Survey
Parameters Measured: In-phase Phase (%)
Out-of-phase (%)
Frequency: 444 Hz
Coil Separation: 100m
Operator: R.Mathieu
Profile Scale: 1cm=+-20%





LEGEND
 Instrument: Apex Parametrics Max-Min 11
 Mode: Maximum Coupled, Horizontal Loop Survey
 Parameters Measured: In-phase (X) Out of phase (Z)
 Frequency: 444 Hz
 Coil Separation: 100m
 Operator: R.Mathieu
 Profile Scale: 1cm=+/-20%

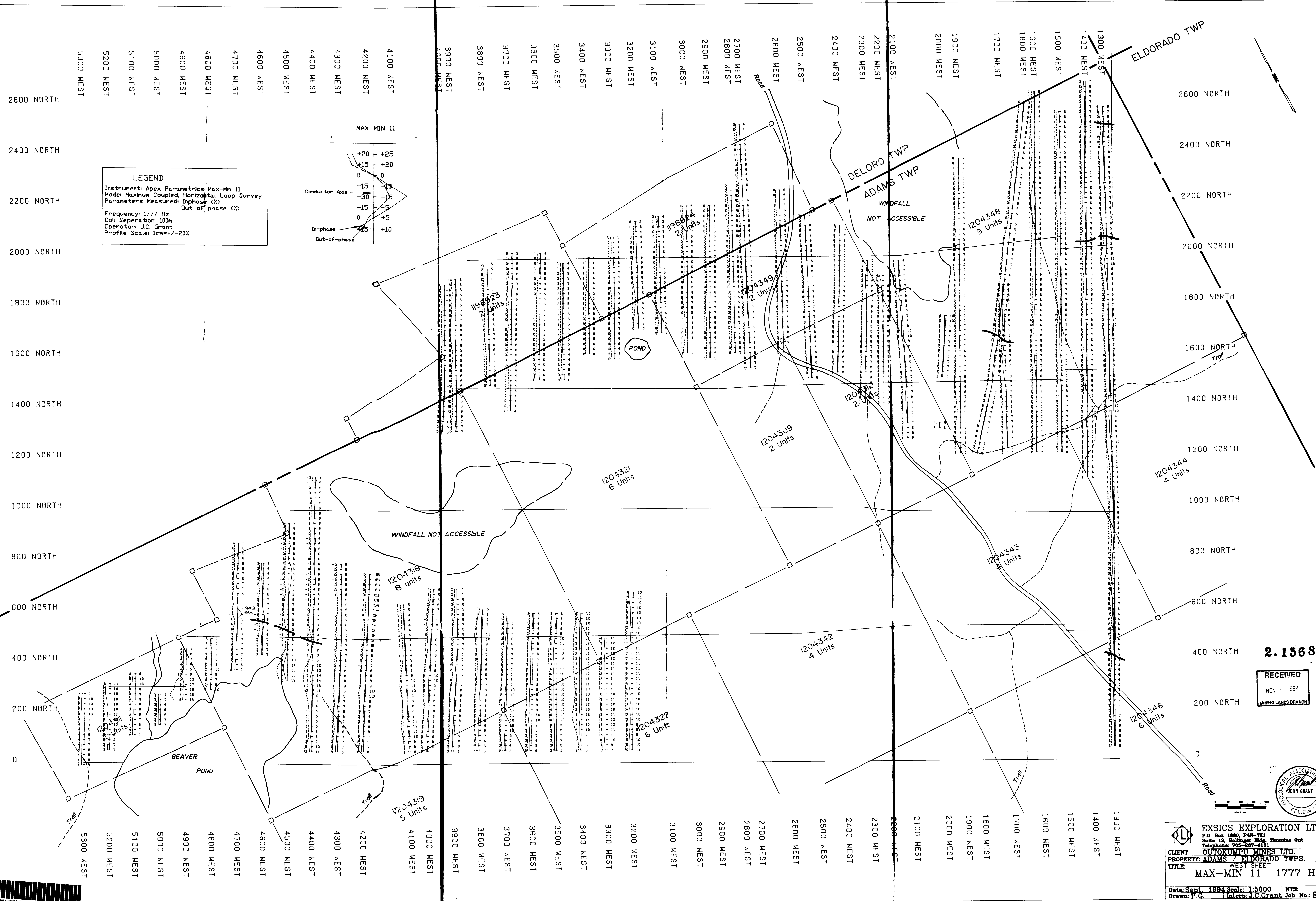


2.1568 1

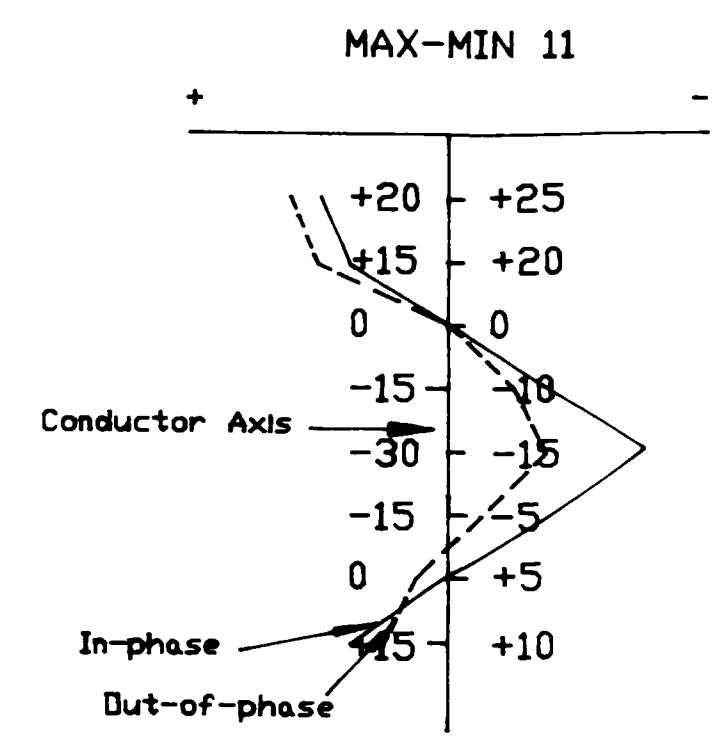
RECEIVED
 NOV 8 1994
 MINING LANDS BRANCH



EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7X1
 Suite 13, Hollinger Bldg. Timmins Ont.
 Telephone: 705-267-4151
 CLIENT: **OUTOKUMPU MINES LTD.**
 PROPERTY: **ADAMS / ELDORADO TWP.**
 TITLE: **EAST SHEET**
MAX-MIN 11 444Hz
 Date: Sept. 1994 Scale: 1:5000 NTS:
 Drawn: P.G. Interp: J.C.Grant Job No.: E-60

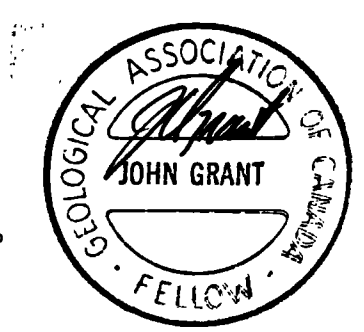


LEGEND
 Instrument: Apex Parametrics Max-Min 11
 Mode: Maximum Coupled, Horizontal Loop Survey
 Parameters Measured: Inphase (%)
 Frequency: 1777 Hz
 Coil Separation: 100m
 Operator: J.C. Grant
 Profile Scale: 1cm=+/-20%

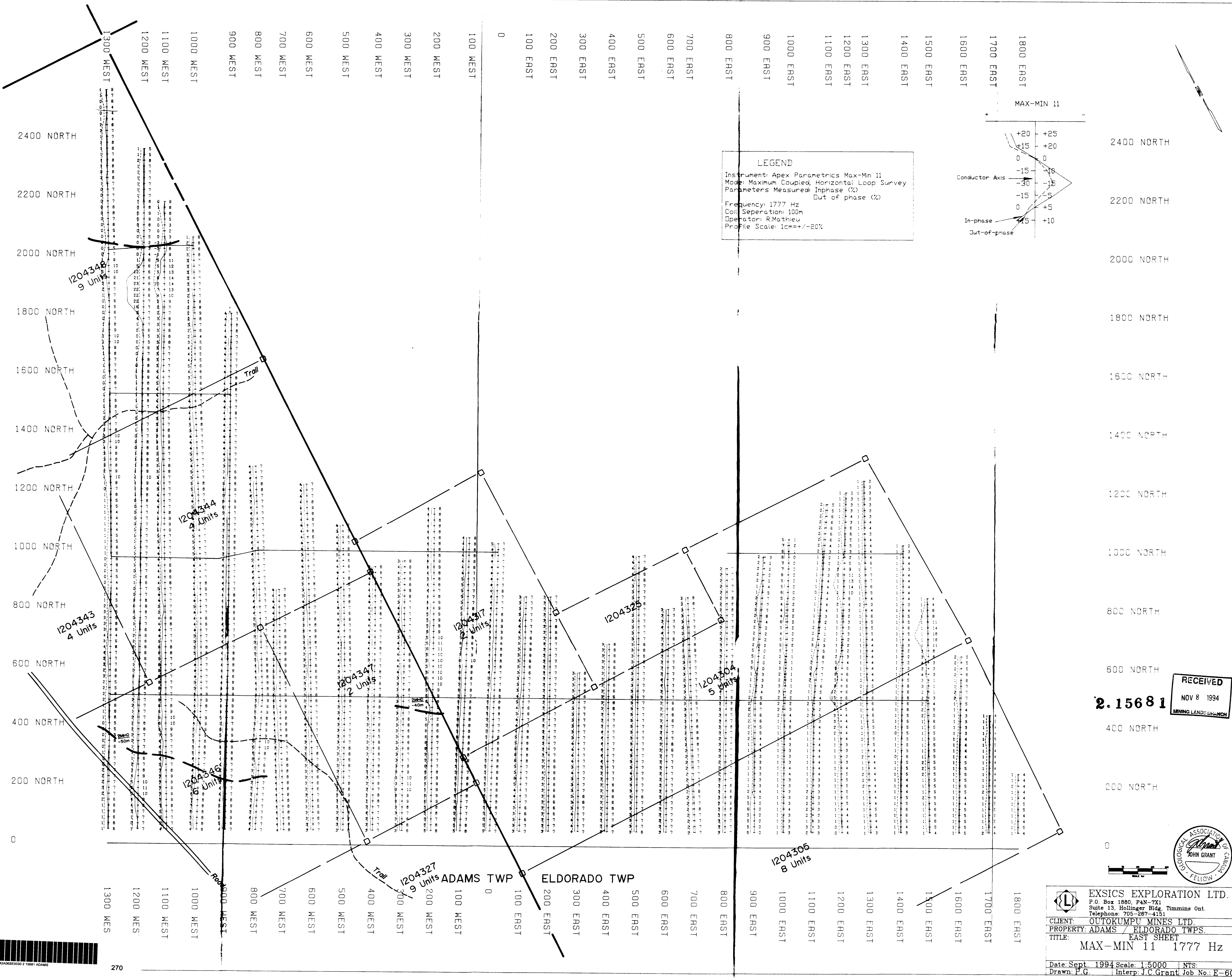


2.15681

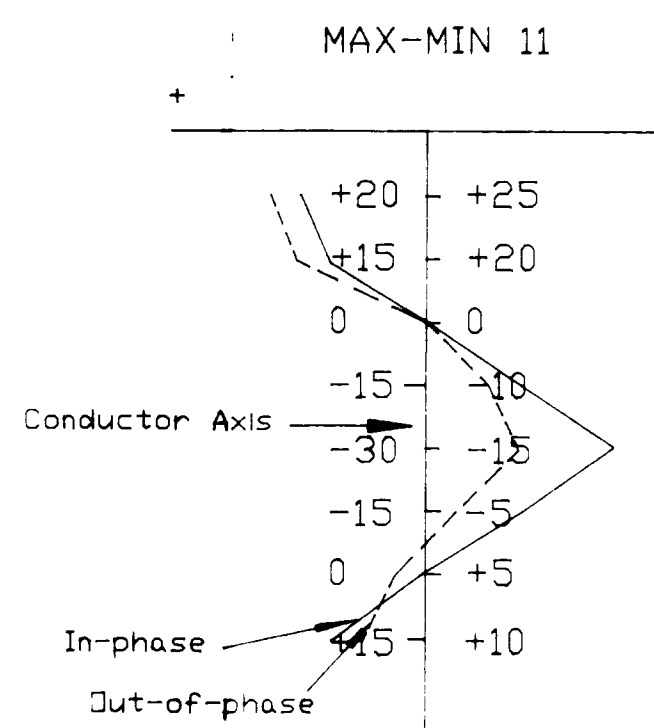
RECEIVED
 NOV 8 1994
 MINING LANDS BRANCH



EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7K1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-267-4151
 CLIENT: **OUTOKUMPU MINES LTD.**
 PROPERTY: **ADAMS / ELDORADO TWP'S.**
 TITLE: **WEST SHEET**
MAX-MIN 11 1777 Hz
 Date: Sept. 1994 Scale: 1:5000 NTS:
 Drawn: P.G. Interp: J.C. Grant Job No.: E-60

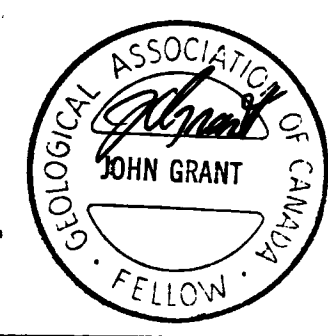


LEGEND
 Instrument: Apex Parametrics Max-Min 11
 Mode: Maximum Coupled, Horizontal Loop Survey
 Parameters Measured: In-phase (%) Out of phase (%)
 Frequency: 1777 Hz
 Coil Separation: 100m
 Operator: R.Mathieu
 Profile Scale: 1cm=+/-20%



RECEIVED
 NOV 8 1994
 MINING LANDS BRANCH

2.15681



EXSICS EXPLORATION LTD.
 P.O. Box 1880, P4N-7X1
 Suite 13, Hollinger Bldg, Timmins Ont.
 Telephone: 705-267-4151
 CLIENT: **OUTOKUMPU MINES LTD.**
 PROPERTY: **ADAMS / ELDORADO TWPS.**
 TITLE: **EAST SHEET**
MAX-MIN 11 1777 Hz
 Date: Sept. 1994 Scale: 1:5000 NTS:
 Drawn: P.G. Interp: J.C. Grant Job No.: E-60