GEOPHYSICAL REPORT

ON THE

BARTLETT TOWNSHIP PROPERTY

FOR

OUTOKUMPU MINES

Qual # 2.12306

Submitted by: S.D. Anderson
Rayan Exploration Ltd.
June, 1995

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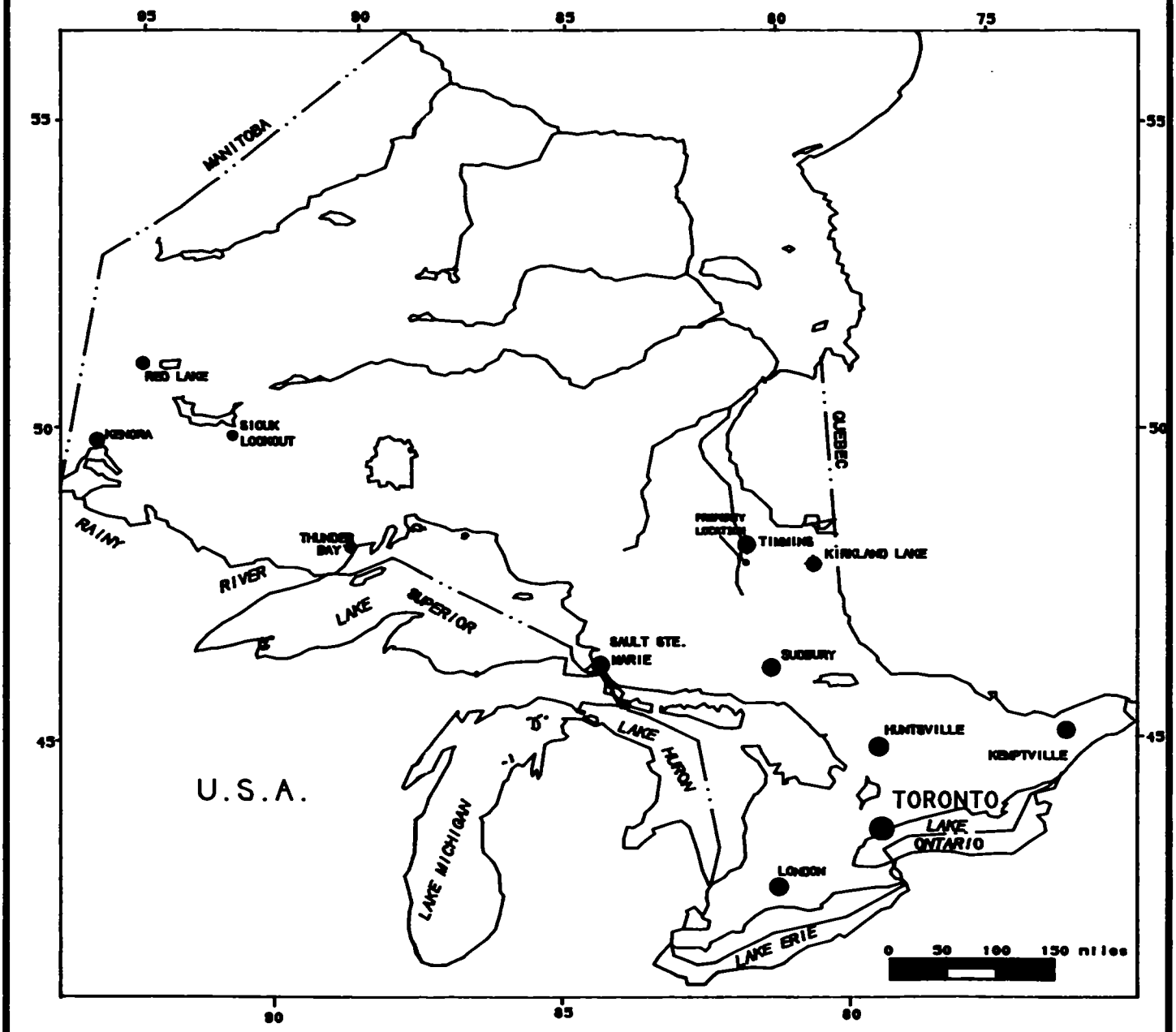
INTRODUCTION

Rayan Exploration Limited was hired by Outocumpu Mines Limited on a contract basis to conduct a geophysical work program on their Bartlett Township Project. This property is located in Bartlett Township, Porcupine Mining Division, District of Cochrane.

The work program was comprised of a Total Field Magnetometer and HLEM survey, which were carried out during the month of May, 1995.

The purpose of this program was to outline any geophysical responses that might indicate areas favourable for base metal deposition.

This report will deal with the parameters used for each of the surveys conducted, as well as the results obtained and interpretation of the results.



PROVINCE OF ONTARIO

Fig#1

OUTOKUMPU MINES LTD.		
BARTLETT TWP. PROPERTY		
LOCATION MAP		
Date:	Scale: 1"=150 mi	N.T.S.:
Drawn: R.M.	Approved: R.M.	File: LOC.

LOCATION AND ACCESS

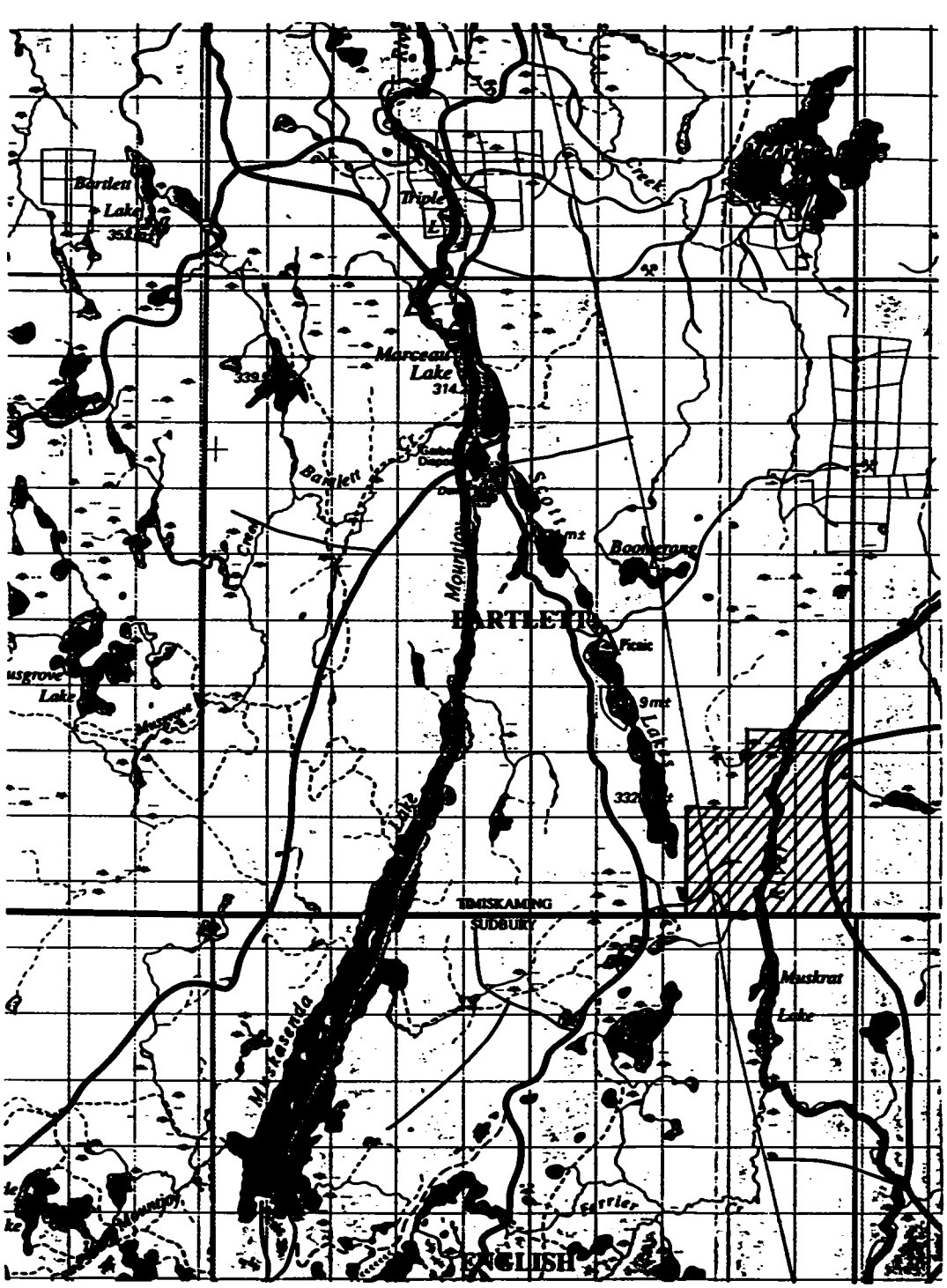
The Bartlett Township Property is located in Bartlett Township, District of Cochrane, Porcupine Mining Division. It is situated approximately 35km. south of the city of Timmins, Ontario. The claim block occurs within the southeast of the township. The Redstone River runs roughly north-south through the middle of the claim group and a hydro line cuts through the south west corner of the block.

The property was accessed by travelling down Pine Street south from the city of Timmins for approximately 35km. Just south of Scott Lakes a bush road heads west from Pine Street to the Redstone River. This road provides access to the western portion of the grid as well as to the Redstone River. Here a canoe was used to cross the river and the eastern part of the property was accessed from this point.

PERSONNEL

The people directly involved in this program were all employed by Rayan Exploration Limited, and are as follows:

Wayne Pearson.....Timmins
Eddy Brunet.....Timmins
Aurel Chamont.....Timmins
All work was supervised by R.J. Meikle.



Client:	OUTOKUMPU MINES LTD.
Property:	BARTLETT TWP. PROPERTY
Title:	LOCATION MAP

RAYAN EXPLORATION LTD

CLAIMS

The Bartlett Township Property consists of 3 contiguous unpatented mining claims (36 units) recorded in Bartlett Township, Porcupine Mining Division. The claim numbers which make up the Bartlett Township Property are listed below.

CLAIM #	# OF UNITS
1204339	12
1204338	16
1204337	8

Outokumpu Mine Limited currently holds a 100% intrust in the claims listed above.

PREVIOUS WORK

The following is a brief outline of the work previously conducted, that covered, or partially covered, the Bartlett Township Property.

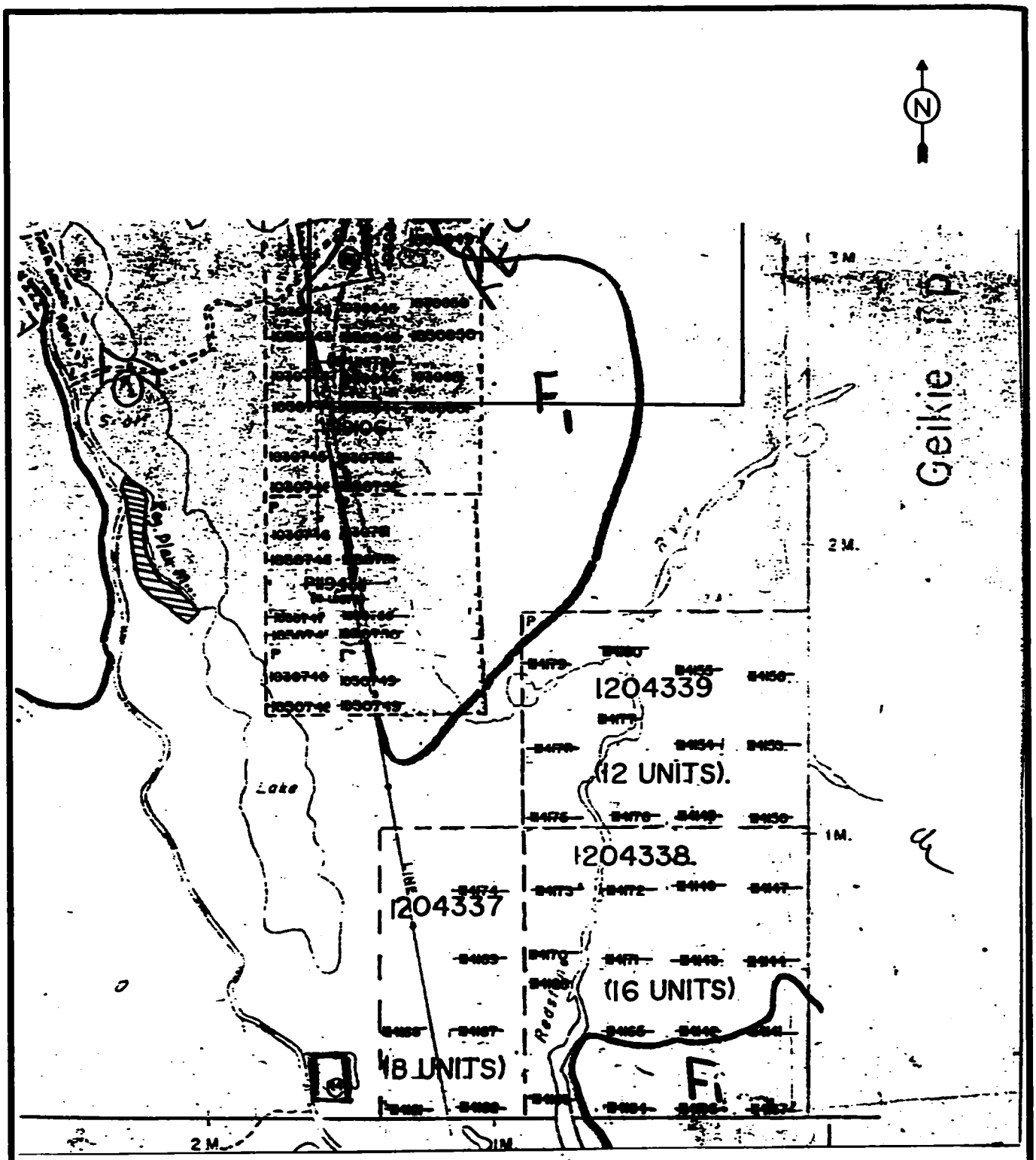
1952 DOMINION GULF COMPANY
- Magnetometer survey

1957 QUEENSTON GOLD MINES
- 5 DDH hole consisting of 2411 ft.

1965 CONIGO MINES LIMITED
- Magnetometer and HLEM survey
- DDH program, 12 holes

1965 TEXMONT MINES LIMITED
- Magnetometer and EM survey
- DDH program, 5 holes

1990 TIMMINS NICKEL INC.
- Airborne Magnetometer and VLF survey



Client: OUTOKUMPU MINES LTD.

Property: BARTLETT TWP. PROPERTY

Title:

CLAIM SKETCH

RAYAM EXPLORATION LTD

GEOPHYSICAL PROGRAM

The geophysical program conducted took the form of a Magnetometer and HLEM survey. The entire property was covered which resulted in a total of 67.5km of grid line surveyed by Magnetometer and 55.5km by the HLEM Survey. A brief description of the instruments, as well as the parameters used for both the surveys will follow.

MAGNETOMETER THEORY

An EDA Omni Plus Proton Precession magnetometer was used to carry out the magnetometer survey. The instrument is synchronized with an EDA recording base station to help eliminate magnetic diurnal variation. This should ensure an accuracy of less than 10 Nt.

The Proton Precession method involves energizing a wire coil immersed in a hydrocarbon fluid. This causes the protons in the proton rich fluid to spin or precess simulating spinning magnetic dipoles. When the current is removed the protons precess about the direction of the earth's magnetic field, generating a signal in the same coil which is proportional to the total magnetic field intensity. In this way, the horizontal gradient of the earth's magnetic field can be measured and plotted in plan form with values of equal intensity joined to form a contour map.

This presentation is useful in correlating with other data sets to aid in structural interpretation. Individual magnetic responses can be interpreted for dip, depth and width estimates after profiling the data.

The following parameters were employed for the survey:

Instrument - EDA Omni Plus Proton Precession Magnetometer
Station Interval - 10m
Line Interval - 100m
Diurnal Correction Method - EDA Recording Base Station
Data Presentation - Magnetic Contours Map
- Magnetic Data Posting Map
- 1:5000 scale

HORIZONTAL LOOP EM SURVEY

The Horizontal Loop EM survey was carried out with an Apex Max-Min II instrument. These surveys are commonly called "Max-Min" surveys in recent times.

The Max-Min II instrument can operate at five frequencies (3555HZ, 1777HZ, 888HZ, 444HZ, 222HZ)., and is capable of coil separations from 25 meters to 200 meters. Although it can be used in the vertical loop mode as well as minimum coupled, it is most often used in the Maximum Coupled, Co-Planer mode which is in effect a Horizontal Loop Electromagnetic Survey.

The instrument records the "In-Phase" and "Out-of-Phase" components of the anomalous resultant field from a conductor as a percentage of the primary field strength. Both components are used in the interpretation of the results. Generally, the larger the ratio of peak negative responses between In-Phase and Out-of-Phase, the higher the conductivity of the anomaly. A ratio of 1:1 is considered a medium conductor.

The purpose of reading more than one frequency is to obtain more information about the conductor itself as well as the conductivity of the overburden etc. The higher frequencies will respond to weaker conductive features such as faults, conductive overburden etc. As a result the signal from these frequencies can attenuate very quickly, possibly not penetrating to the bedrock at all. The lower frequencies having a longer wavelength tend to penetrate deeper and generally only respond to anomalies with a higher order of conductance,. Thus as with most geophysical techniques it is a trade off as to depth of penetration vs. conductance threshold detectable. The use of multi frequency surveys helps to alleviate this problem at a minimal extra cost.

The Max-Min survey was carried out using an Apex Max-Min II instrument reading 1777HZ and 444HZ with a constant coil spacing of 100 meters. The Maximum Coupled mode was employed with the coils co-planer. A reading interval of 20 meters was used. Because of the very flat surface topography, no slope or topographic corrections were necessary. The entire survey was read with unit serial no. 1057 with twice daily phase mix testing to ensure that the data would be consistent across the surveyed area.

A plan scale of 1:5000 was chosen with a profile scale of 1cm = 10% for 444Hz., and 1cm = 20% for 1777Hz. was used. The results are presented on maps in the back of this report.

SURVEY RESULTS

The work program conducted on the Bartlett Township Property was successful in outlining a number of geophysical responses that might be of interest. This includes magnetic features as well as HLEM conductors. The HLEM conductor axis have been marked and labelled zones A through M. All areas of interest will be discussed individually and in further detail below.

Zone A:
- L28N/690W, open to the north
- d/s of 65M, conductivity of >80 mhos
- coincident mag high, with flanking low dipole to the east

Zone B:
- L19N/1450W to L24N/1310W, open to the north
- L20N, d/s of 42M, conductivity of 70 mhos
- L23N, d/s of 48M, conductivity of 35 mhos
- coincident mag low on most lines

Zone C:
- L14N/1525W to L17N/1540W
- L16N, d/s of 23M, conductivity of 10 mhos
- coincident with strong mag high

Zone D:
- L15N/1620W
- d/s of 58M, conductivity of 15 mhos
- no apparent mag correlation

Zone E:
- L12N/1690W
- d/s of 23M, conductivity of 9 mhos
- flanked to the west by a strong mag high, and to the east by a strong low

Zone F:
- L10N/1630W
- d/s of 38M, conductivity of 25 mhos
- situated within an broad mag high

Zone G:
- L9N to L10N, at 1910W
- L9N, d/s of 23M, conductivity of 35 mhos
- L10N, d/s of 38M, conductivity of 25 mhos
- strong coincident mag on L9N
- appears to be dipping west

Zone H:
- L21N/630W
- possibly very deep and very conductive
- no significant mag correlation

Zone I: - L19N to L20N, at 790W
- L20N, d/s of 45M, very conductive
- flanked to the east and west by mag lows

Zone J: - L17N/730W
- d/s of 50M, very conductive
- coincident with strong mag high

Zone K: - L14N/130W to L17N/170W
- L15N, d/s of 57M, very conductive
- coincident mag low

Zone L: - L9N/325W
- d/s of 60M, very conductive
- coincidental mag high

Zone M: - L0/180W, open to the south
- d/s of 42M, conductivity of 25 mhos
- coincidental mag low

RECOMMENDATIONS AND CONCLUSIONS

All of the conductive zones discussed under results would appear to be legitimate bedrock responses. All of these should be further tested in order to help determine a possible source.

The strong magnetics associated with a number of the zones might suggest the presence of iron formation.

One of the first work programs that should be considered would be geological mapping of the grid. If any of the conductors are located within areas of outcropping, the source of the conductor might be resolved. It is possible that a some of the one-line conductors outlined, especially zone B through G, might be influenced by the same structure, or structures. This is difficult to determine due to the complex magnetic signature occurring throughout most of the block. Geological mapping might help in resolving this.

The data obtained from this work program should compiled with any other geological or geophysical data available on the area. This should help in establishing a priority list for the zones described in this report, or possibly even resolve some of them enough to test with a diamond drill program.

If it is felt that additional geophysical coverage is needed to help resolve any of the zones, a Deep-EM survey might be considered. This would provide greater depth penetration, and additional information as to the strike and dip of the conductor.

CERTIFICATION

I, Steve Anderson of Timmins, Ontario hereby certify that:

1. I hold a three year Technologist Diploma from Sir Sandford College , Lindsay, Ontario, obtained in May 1981.

2. I have been practising my profession since 1979 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, and Saskatchewan.

3. I have been employed directly with Asamera Oil Inc. Urangellschaft Canada Ltd.. Nanisivik Mines Ltd., R.S. Middleton Exploration Services Ltd.,and Rayan Exploration Ltd.

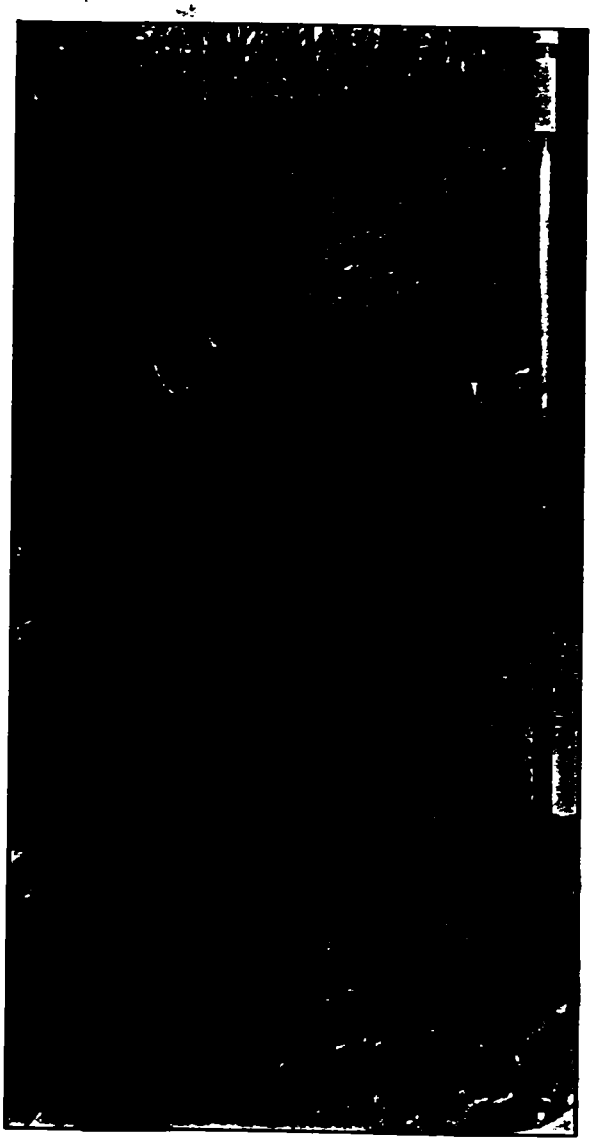
4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the field work conducted on the property during 1995.

Dated this 5th day of June 1995

at Timmins, Ontario.

APPENDIX 'A'

OMNI PLUS
VLF/Gradiometer System



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°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°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

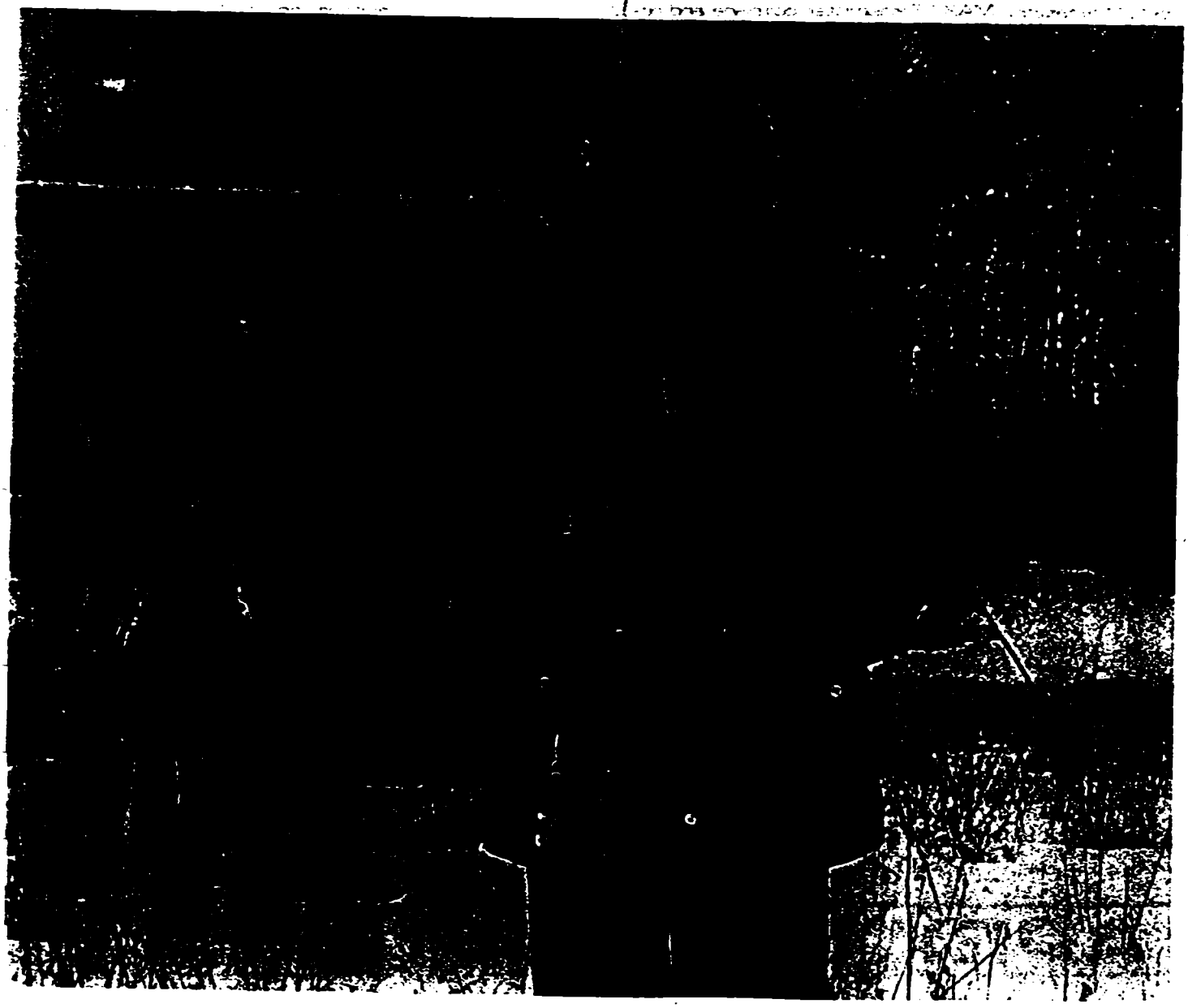
In USA,
EDA Instruments Inc.,
5151 Ward Road,
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422-9112

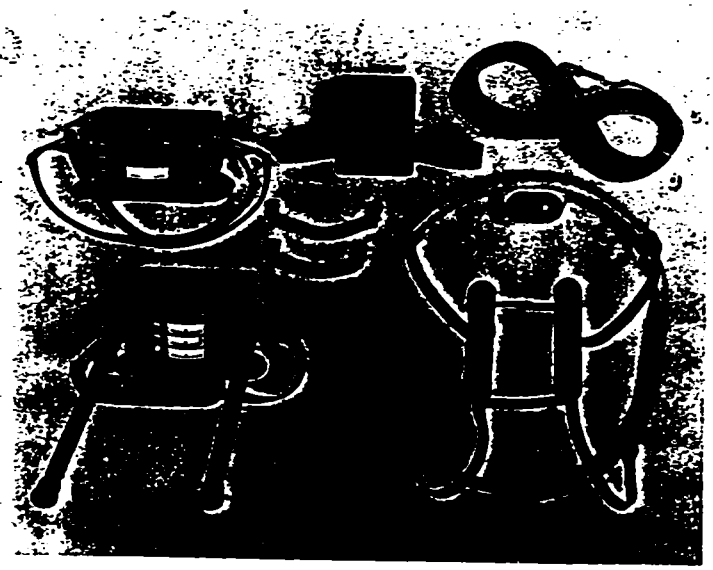
Printed in Canada

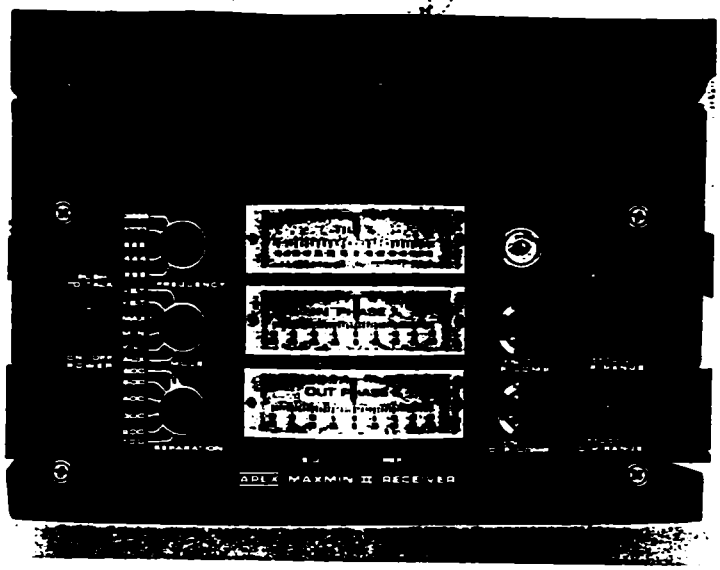
APPENDIX "B"

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.







SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555 Hz.

Modes of Operation:
- MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference 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.

Coil Separations: 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.

Parameters Read:
- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in V.L. mode.

Readouts:
- 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.

Scale Ranges:
- 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.

Readability: In-Phase and Quadrature: 0.5 %.
Tilt: 1%

Repeatability: ±0.5% to ±1% normally, depending on conditions, frequencies and coil separation used.

Transmitter Output:
- 222Hz : 175 Atm²
- 444Hz : 160 Atm²
- 888Hz : 100 Atm²
- 1777Hz : 60 Atm²
- 3555Hz : 30 Atm²

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

Transmitter Batteries: 12V 7.5Ah Gel-Cell rechargeable batteries (2 × 6V in series).

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warning lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F).

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weight: 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.

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

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

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9560.00306

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) 670-7284.

2.16143

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 comp
- Technical reports and maps must accompa
- A sketch, showing the claims the work is a

42A03NE0005 2.16143 BARTLETT

900

Recorded Holder(s): Outokumpu Outokumpu Mines Ltd.		Client No. 178525
Address: P.O. Box 1123, Suite 30a, 637 Algonquin Blvd. E		Telephone No. (705) 264-5024
Mining Division: Porcupine	Township/Area: Bartlett Twp	M or G Plan No. M-262
Dates Work Performed From: July 1, 1994	To: July 5, 1995	

Work Performed (Check One Work Group Only)

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

RECEIVED
AUG 15 1995
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 32,167

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
Steve Anderson (Geophysical Report)	Rogen Explorations Ltd., 676 Murray St., Timmins, Ontario P4N 7B2
M.C. Exploration Services Inc. (Line cutting)	P.O. Box 362, Porcupine, Ontario, P0N 1C0

(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: July 5, 1995	Recorded Holder or Agent (Signature): Paul

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: Paul Davis, Outokumpu Mines Ltd., P.O. Box 1123, Timmins, Ontario, P4N 7H9

Telepone No.	Date	Certified By (Signature)
(705) 264-5024	July 5, 1995	Paul

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Recorded
$32,167		Gary White updated	RECEIVED (c) JUL 7 1995 TB 9:15 PORCUPINE MINING DIVISION
	Deemed Approval Date: OCTOBER 5/95	Date Approved	
	Date Notice for Amendments Sent		

0241 (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
	1204337	8	7,148	6,400	0	748
	1204338	16	14,297	12,800	0	1,497
	1204339	12	10,722	9,600	0	1,122
	3		32,167	28,800	0	3,367
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0841 (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.

2 • 16143

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

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

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: W9560.00306

2.16143

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, 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	$ 18,287.50	
	Type: Geophysical Surveys	$ 13,880.00	
	Mag and Hor-Mag		$ 32,167.50
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		$ 32,167.50

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 =	

RECEIVED (c) JUL 7 1995 TB 9:15. PORCUPINE MINING DIVISION

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 a 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
	July 5, 1995

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

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

August 31, 1995

Our File: 2.16143
Transaction #: W9560.00306

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

Dear Mr. White:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS 1204337 et al. IN BARTLETT TOWNSHIP

Assessment credits have been approved as outlined on the report of work form. The credits have been approved under Section 14 (Geophysical) of the Mining Act Regulations.

The approval date is August 29, 1995.

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

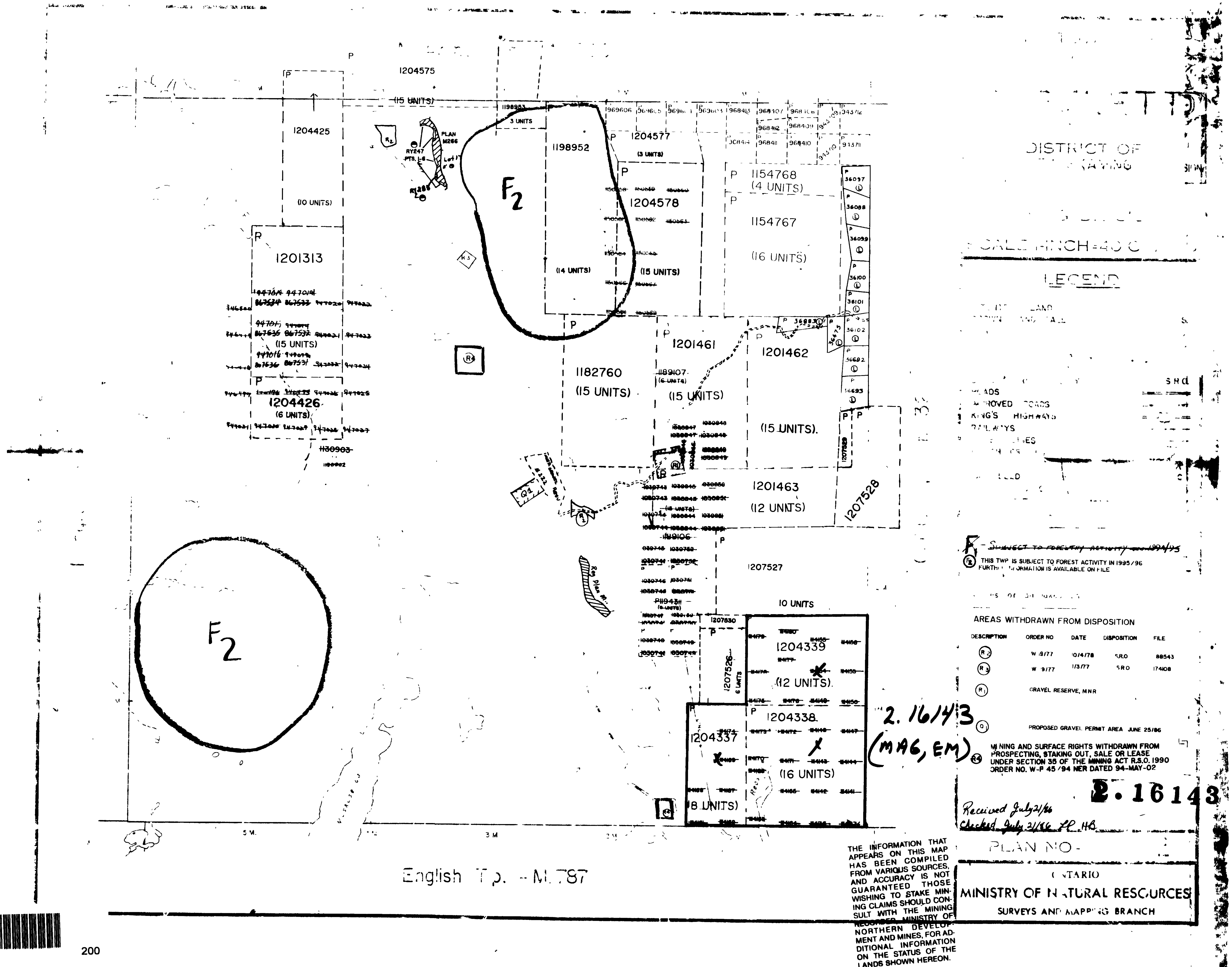
Yours sincerely,

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

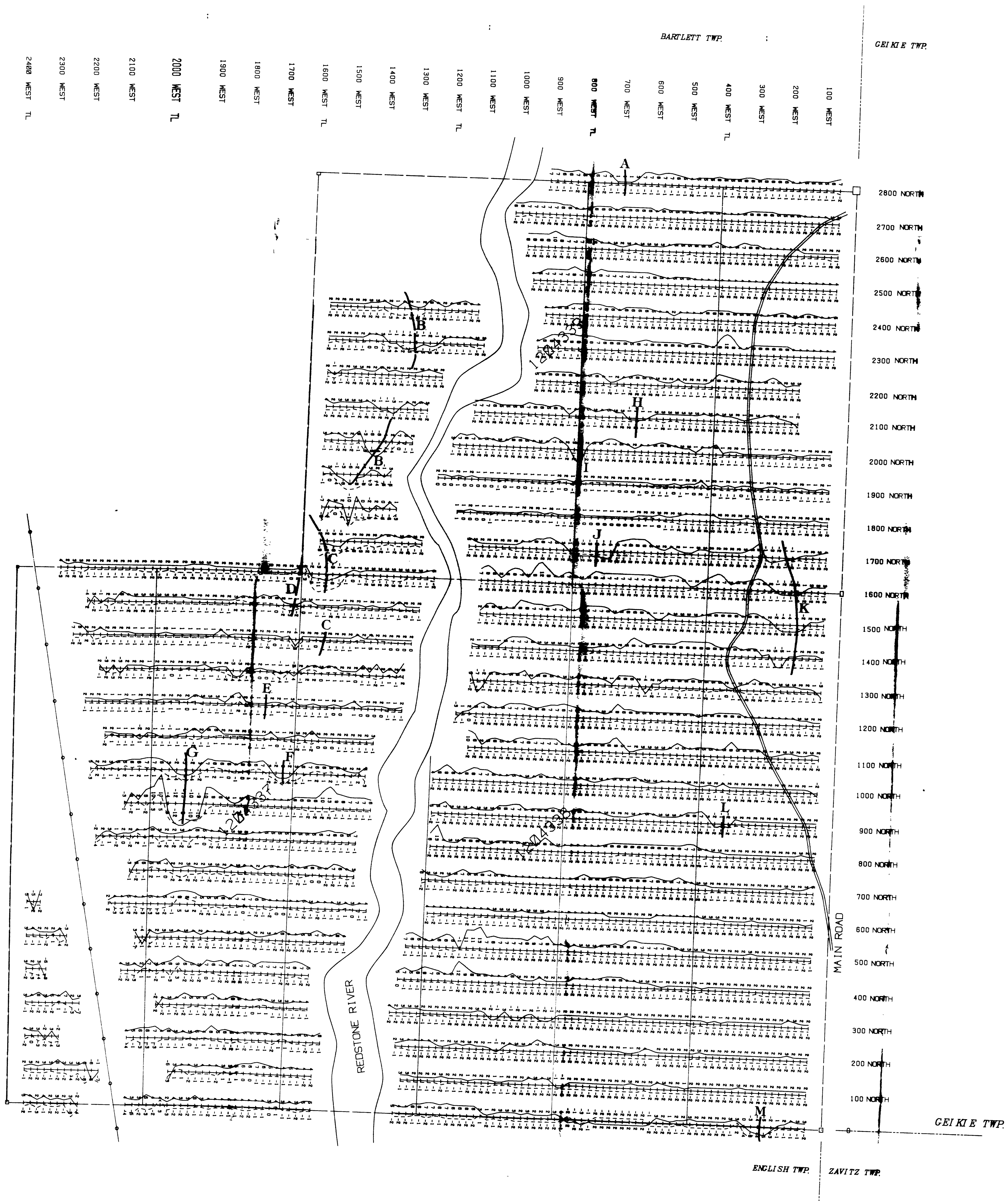
SBB/sb

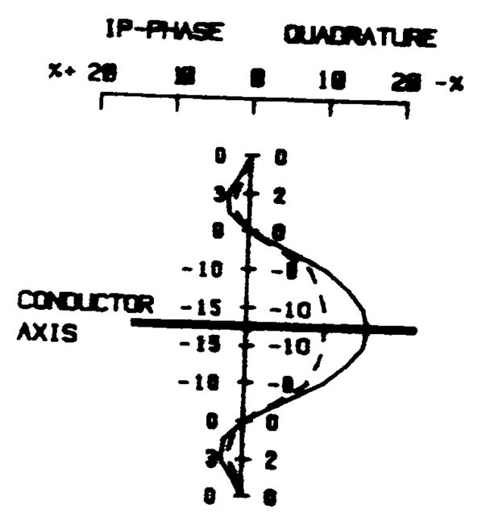
cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario



42A03NE0005 2.16143 BARTLETT





IN-PHASE ————
QUADRATURE – – – –

CONDUCTORS

GOOD
MED
POOR

HLEM LEGEND

INSTRUMENT: APEX - MAXMIN II
MODE: MAXIMUM COUPLED, CO-PLANAR
READING INTERVAL : 20m
COIL SEPERATION: 100m
FREQUENCY: 444Hz
PROFILE SCALE: 1cm = 10%

TOPO LEGEND

Claim Line
Claim Post Located
Claim Post Assumed
Claim Line
Gravel Road
Highway
Hydro Line
Township Line

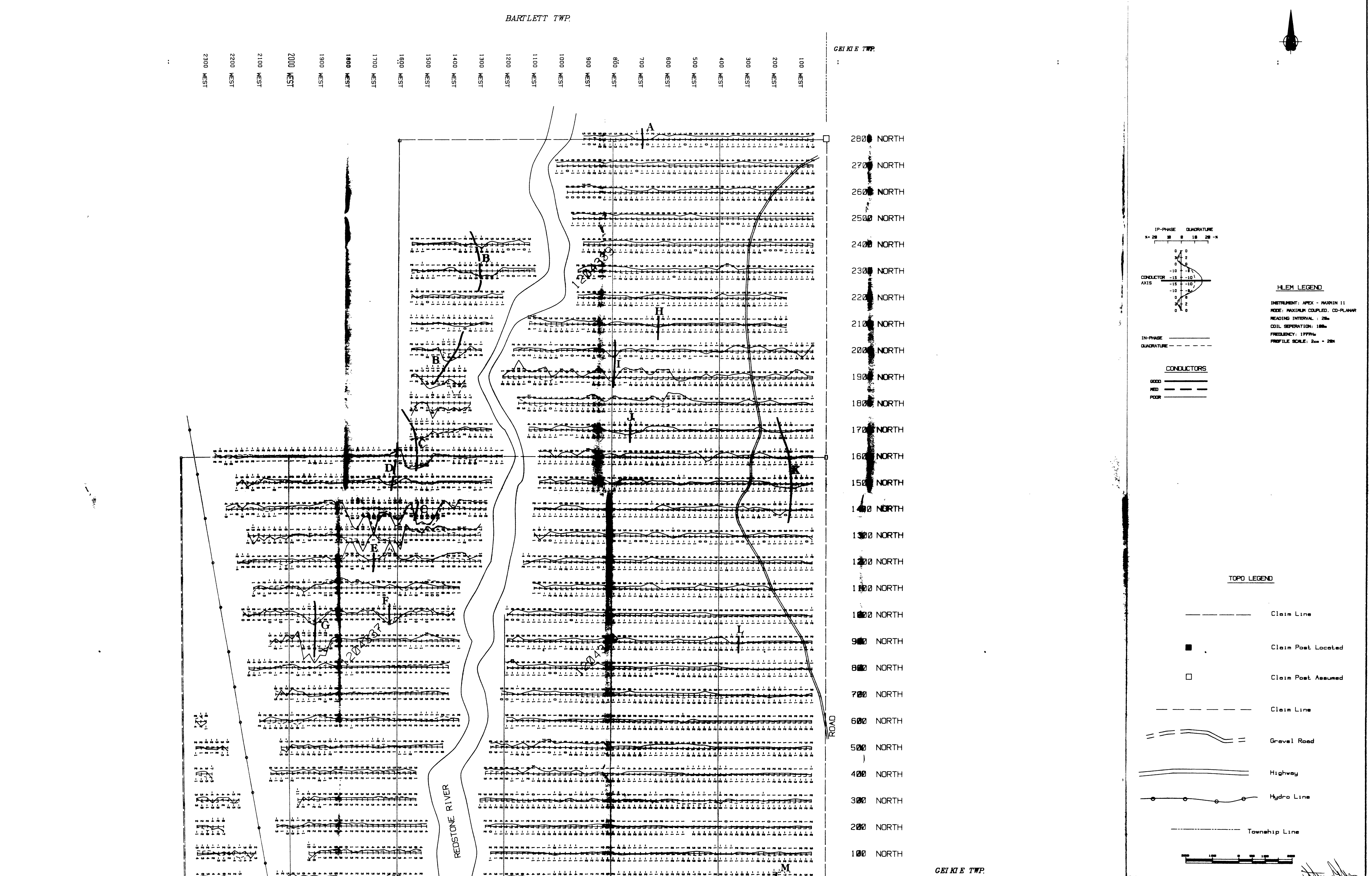
Client:	OUTOKUMPU MINES LTD.
Property:	BARTLETT PROPERTY
Title:	HORIZONTAL LOOP SURVEY 444 Hz.
Processed: RJM	Checked: RJM
Date: MAY. 1995	Township: BARTLETT
Province:	N.T.S.

RAYAN EXPLORATION LTD.

2.16143

42A03NE0005 2.16143 BARTLETT

210



Client: *OUTOKUMPU MINES LTD.*

Property: BARTLETT PROPERTY

Title: HORIZONTAL LOOP SURVEY 1777 Hz.

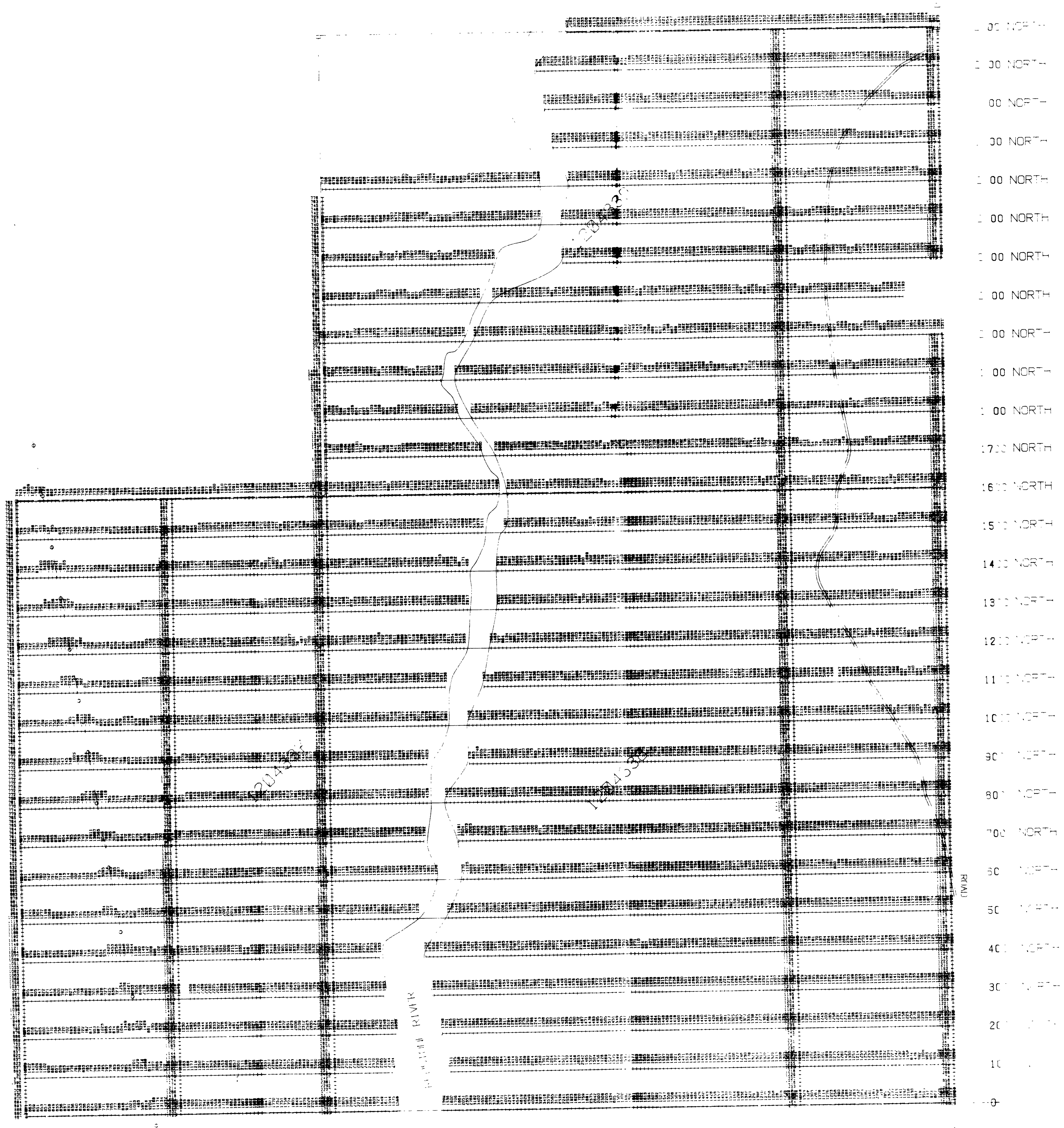
2.16143

Processed: RJM	Checked: RJM
Date: MAY. 1995	Township: BARTLETT
Province: ONT.	N.T.S.:
Scale: 1:5,000	Drawing: 1777

RAYAN EXPLORATION LTD.
CONTRACT/CONSULTING GEOPHYSICS
TIMMINS, ONTARIO
(705)-268-4805

42A03NE0005 2.16143 BARTLETT

220



PRECESSION MAGNETOMETER

TOPO LEGEND

Claim Line

Claim Post Located

Claim Post Assumed

Claim Line

Gravel Road

Highway

Hydro Line

Township Line

200 100 0 50 100 200

Client OUTOKUMPU MINES LTD.

Property

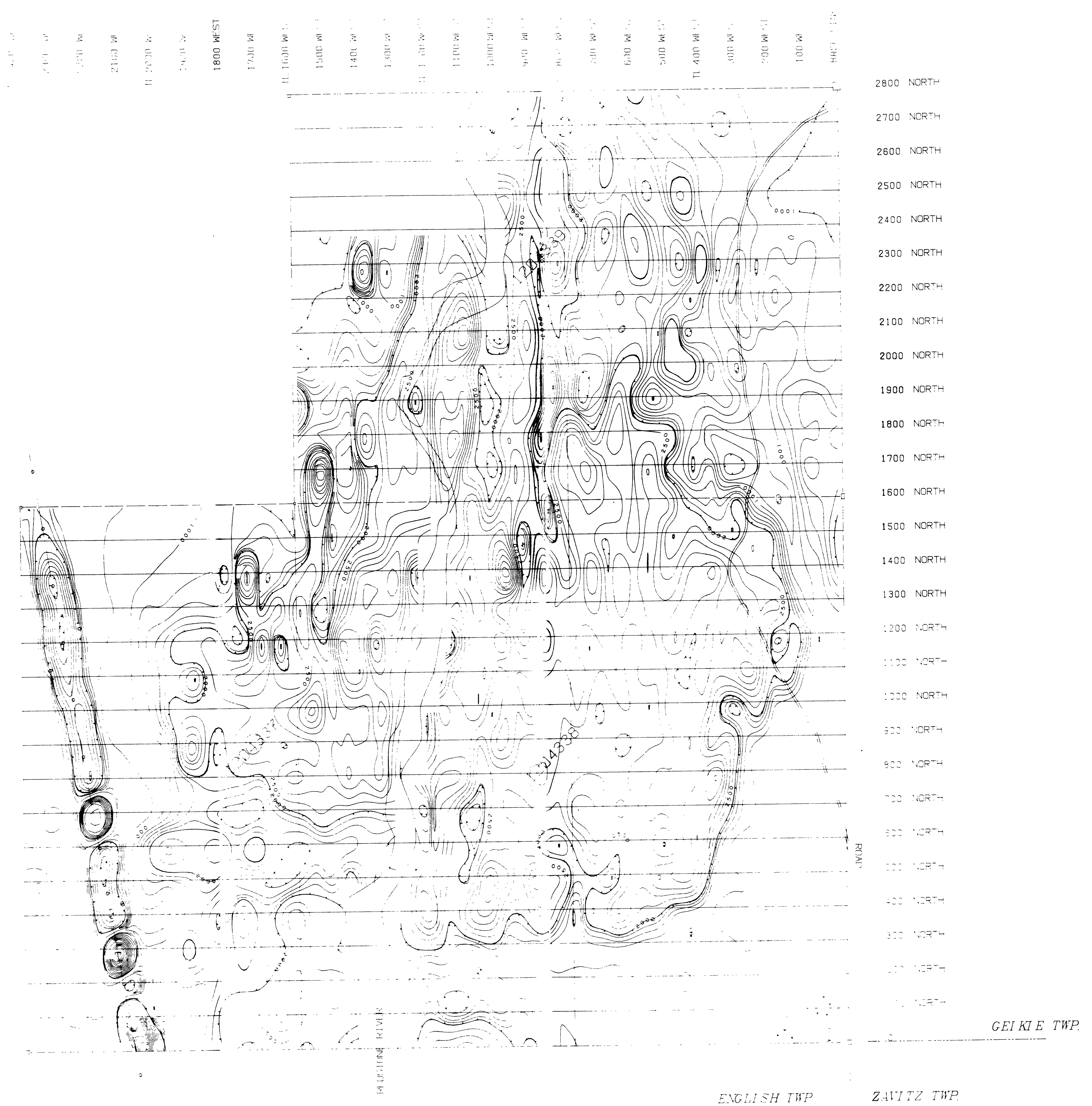
Title

2.16

RAYAN

42A03NE0005 2 16143 BARTLETT

230



LEGEND

INSTRUMENT EDA OMNI PROTON PRECESSION MAGNETOMETER
PARAMETERS MEASURED EARTH'S TOTAL MAGNETIC FIELD (NANO-TESLAS)
READING INTERVAL 10m
CONTOUR INTERVAL 0 < 500 nT
0 TO 2000 = 200 nT
2000 > IS 500 nT

DIURNAL CORRECTION METHOD RECORDING OMNI BASE STATION
DATUM SUBTRACTED FROM ALL PLOTTED READINGS 57000 nT

TOPO LEGEND

Claim Line
Claim Post Located
Claim Post Assumed
Claim Line
Gravel Road
Highway
Hydro Line

200 100 0 50 100 200

Client	OUTOKUMPU MINES LTD.
Property	BARTLETT PROPERTY
Title	CONTOURED TF MAGNETOMETER SURVEY

Processed RJM	Checked RJM	RAYAN EXPLORATION LTD. CONTRACT/CONSULTING GEOPHYSICS TIMMINS ONTARIO (705)-268-4866
Date MAY 1995	Township BARTLETT	
Province ONT	N T S	
Scale 1 5,000	Drawing MAG CNT	

240