

42A15NW0021 2 16640 HANNA

010

GEOPHYSICAL REPORT FOR FALCONBRIDGE LIMITED ON THE MANN BELT GRID #HAN96-04 HANNA TOWNSHIP, PORCUPINE MINING DIVISION NORTHEASTERN ONTARIO



•

2,16 840

Qual # 2.3943

PREPARED BY: J.C.Grant, CET, FGAC February, 1996



RECEIVED MAR 0 5 1856



010C

TABLE OF CONTENTS

INTRODUCTION	1
PROPERTY LOCATION AND ACCESS	1
CLAIM GROUP	1
PERSONNEL	2
LINECUTTING PROGRAM	2
GEOPHYSICAL PROGRAM	2,3
SURVEY RESULTS	3,4
CONCLUSIONS AND RECOMMENDATIONS	4
CERTIFICATE	
APPENDICIES: A: BRGM OMNI IV SYSTEM SPECIFICATIONS B: APEX PARAMETRICS, MAXMIN 11 SYSTEM	
LIST OF FIGURES: FIGURE 1, LOCATION MAP FIGURE 2, PROPERTY LOCATION MAP FIGURE 3, CLAIM MAP	
POCKET MAPS: CONTOURED MAGNETIC MAP MAXMIN 444HZ PROFILE MAP MAXMIN 1777HZ PROFILE MAP	

•

Page 1

INTRODUCTION

The services of Exsics Exploration Limited were retained by Falconbridge Limited to complete a line cutting and geophysical program on a group of claims located in Hanna Township, Grid #Han96-04, of the Porcupine Mining Division in Norteastern Ontario. Figure 1 and 2.

The purpose of this program was to locate and outline airborne targets in an area which was considered favourable for base metal deposition.

The linecutting of the grid began on January 15th, 1996 and was completed on January 30th, 1996. The geophysics was started on the 8th of February and was completed on the 11th of February, 1996. In all, a total of 12.8 kilometers of grid lines were established on the claim group.

PROPERTY LOCATION AND ACCESS

Grid, Han96-04, is located in the central-south section of Hanna Township, just to the southwest of Warrick Lake and to the east of the Fredrick House River. The entire grid is located approximately 28 kilometers northwest of the Town of Iroquois Falls. Figures 1 and 2.

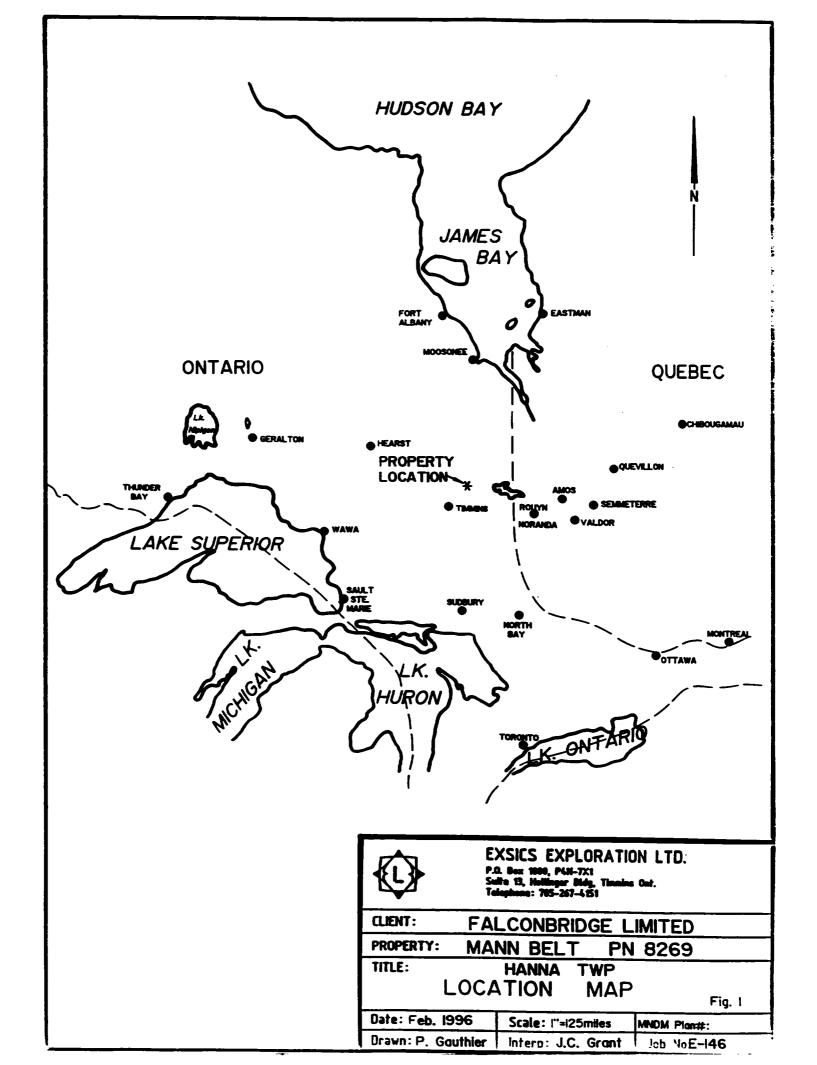
Access to the grid during the survey period was ideal. Falconbridge Limited has plowed open a road which follows the concession line between Concession V and V of Mann Township. This road is opened to the Bridge across the Fredrick House River. A second plowed road was then opened north off of this concession road and provides drivable access to the south section of the grid.Travelling time from Timmins to the grid is approximately 1.8 hours.

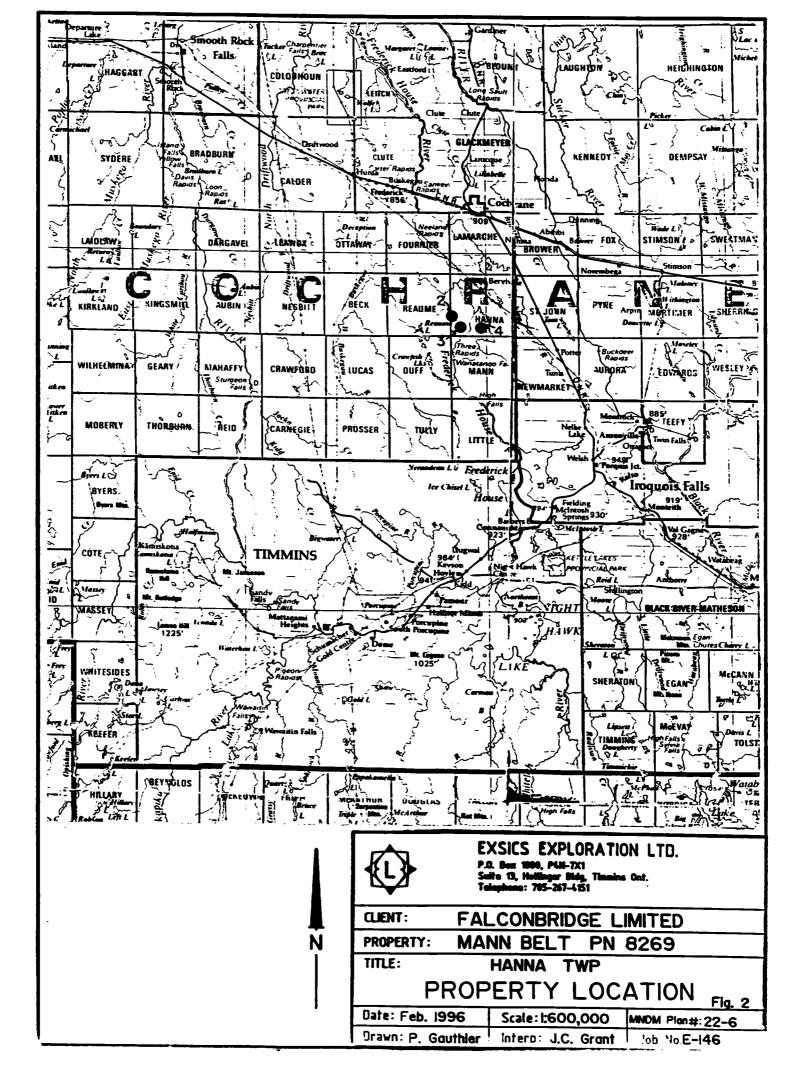
CLAIM GROUP

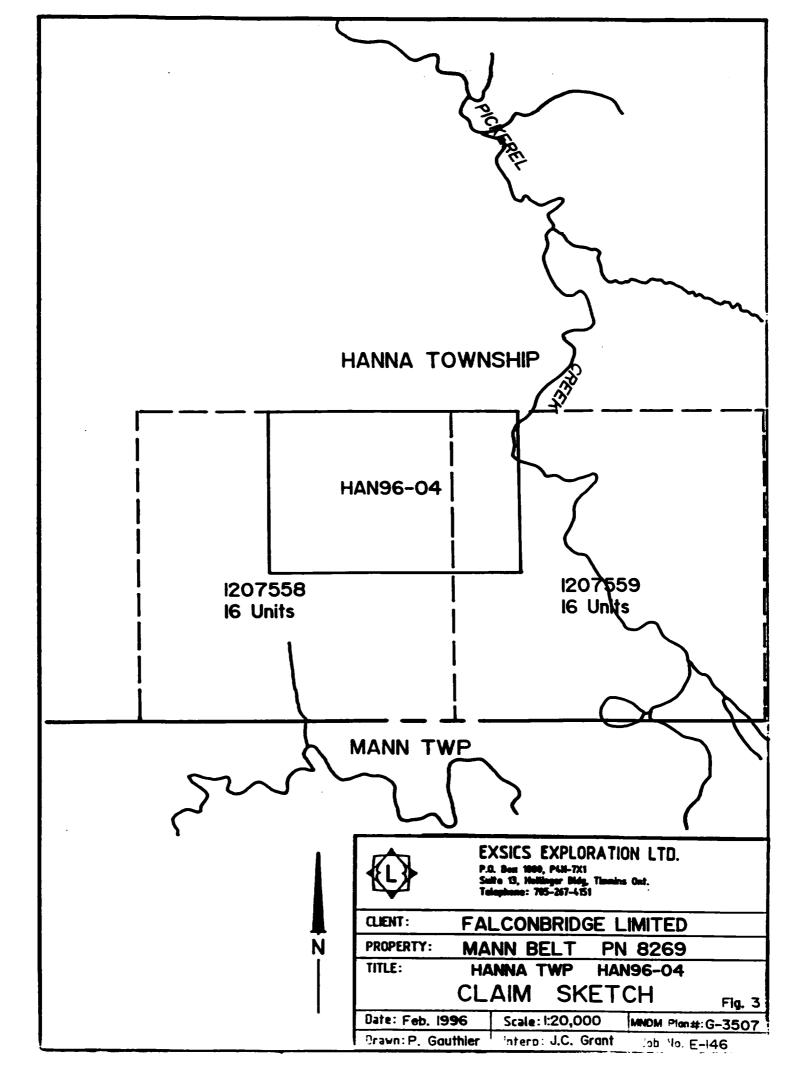
The claim numbers which were partially covered by the grid are as follows.

P-1207558	16	units
P-1207559	16	units

Refer to figure 3, copied from the MNDM Plan map #G-3507, of Hanna Township, scale 1:20,000.







PERSONNEL

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

Bruce Pigeon.....South Porcupine, Ontario John DerWeduwen....South porcupine, Ontario Todd Mathieu.....Timmins, Ontario

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

LINECUTTING PROGRAM

The grid consisted of 100 meter line spacing and 25 meter station spacing. The baseline was turned off from a starting point which had been located earlier by Falconbridge personnel. This point was called line 0+00/baseline. The basline was cut at 270 degrees from this line to 400MW and at 090 degrees from line 0+00 to 800ME. The lines were chained from the baseline to tieline 800MN.

GEOPHYSICAL PROGRAM

This program consisted of a total field magnetic survey done in conjuction with a Horizontal Loop, electromagnetic, HLEM, survey. The magnetic survey was completed on the entire cut grid however the HLEM survey was completed on the cross lines only.

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 Parameterics, MaxMIn II system. Specifications for this system can be found as Appendix B of this report.

MAGNETIC SURVEY:

The following parameters were kept constant throughout the survey.

100 meters
25 meters
12.5 meters
Base station recorder
30 seconds
57960 gammas
57500 gammas
+/- 0.1 gamma
Earth's total magnetic field

Page 3

The collected, corrected and levelled data was then plotted directly onto a base map at a scale of 1:5000 and then contoured at 20 gamma intervals where possible. A copy of this base map is included in the back pocket of this report.

HLEM SURVEY:

The following parameters were kept constant throughout the survey.

The collected data was then plotted directly onto a base map at a scale of 1:5000, one base map for each frequency, and then profiled at 1cm to +/-20%. An interpretation for each line of the conductor was done as far as depth to source and apparent conductivity in Mhos and was put directly onto the base map. A copy of these base maps are included in the back pocket of this report.

SURVEY RESULTS

The geophysical surveys were successful in locating and outlining one moderately strong conductive horizon on the grid. This feature strikes east-west across the entire grid at approximately 250MN and it appears to continue off of the grid in both directions. The zone relates to a legitimate bedrock conductor situated at a depth to source of 65 to 85 meters on the western extension and this portion of the zone has a conductivity value ranging from 4 to 7 mhos. The eastern portion of the zone is situated at a depth of 80 to 90 meters and has a conductivity range of 4 to 6.5 mhos. The zone appears to dip near vertical.

A second zone appears to have been noted on line 800MW at 525MN and may continue off of the grid to the east. More coverage of this zone would be required to better define the source of the target.

Page 4

The main conductive zone has a direct magnetic high association suggesting the target is situated within the ultramafic intrusive. The second shorter feature is also contained within a good magnetic high unit.

CONCLUSIONS AND RECOMMENDATIONS

The surveys were successful in locating and outlining one good conductive zone on the grid and the start of a second parallel zone. Both of the zones have a good magnetic signature suggesting they are within the intrusive unit. This intrusive has been well defined by the magnetic survey.

A follow-up program should consist of diamond drilling of the better conductive zone and should the hole return encouraging results then the coverage of the shorter zone should be completed.

Respectfully submitted

J.C.Grant, CET, FGAC. February, 1996.



CERTIFICATE

I, John C. Grant, hereby certify that:

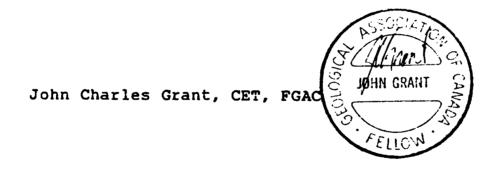
1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury, Campus. I have worked subsequentely as an Exploration Geophysicist for Teck Exploration Limited (5 years), North Bay office, and as Exploration Manager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



APPENDIX A

•

•



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

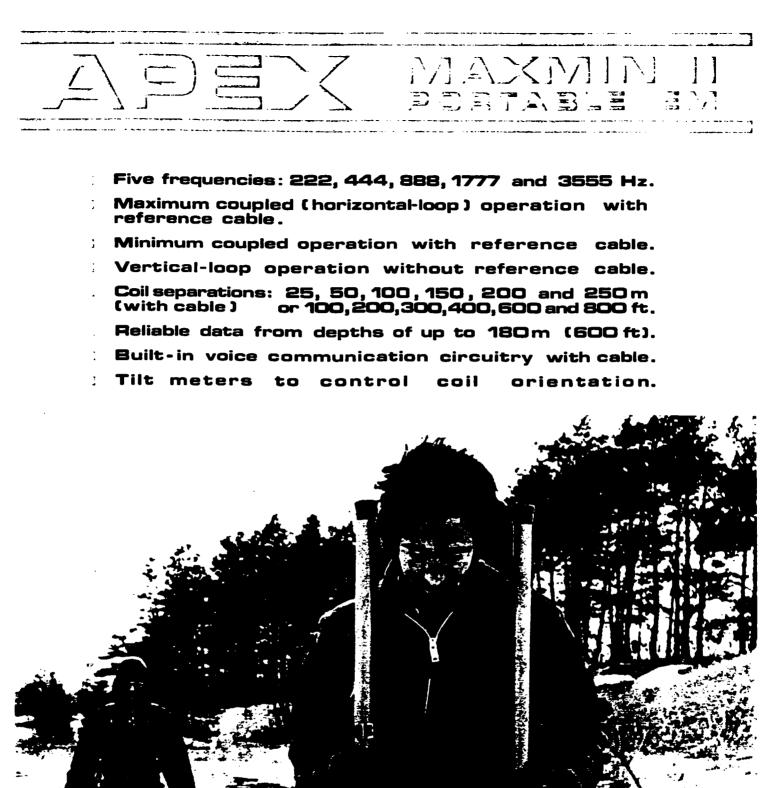
Specifications

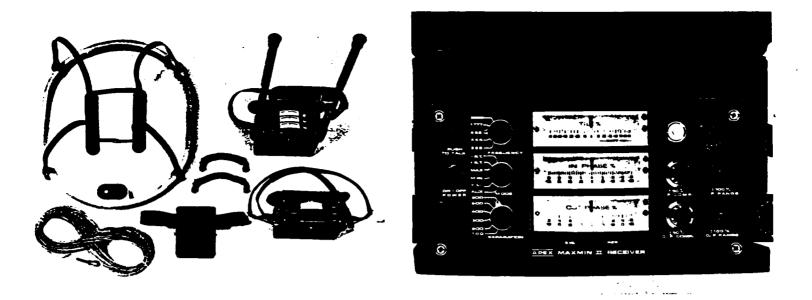
	18,000 to 110,000 gammas. Roll-over display feature
	dammar
	- Tuning value is calculated accurately utilizing a specially
AL OMATIC Fine Tuning	developed tuning algorithm
	 ± 15% relative to ambient field strength of last stored value
Display Resolution	·· 0.1 gamma
PT Cessing Sensitivity	
SC ISCICAL EFFOR Resolution	0.01 03mm3
Absolute Accuracy	+ ± 1 gamma at 50,000 gammas at 23°C
St Idard Memory Capacity	± 2 gamma over total temperature range
)tal Field or Gradient	4 200 data to 1
Tie-Line Points Base Station	100 data blocks or sets of readings
	Custom-designed, ruggedized liquid crystal display with an Operating temperature
	operating temperature range from -40°C to +55°C. The
	USPRAY CUILLAIRS SIX NUMERIC digits decimal point batton
	sucus monitor, signal decay rate and signal amplitude
8 32 Serial I/O Interface	
Tadient Tolerance	· 2400 baud, 8 data bits, 2 stop bits, no parity
Stadient Tolerance	6,000 gammas per meter (field proven)
	 A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
×	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Jr lient Sensors	0.5 meter sensor separation (standard) normalized to
	saminas/meter. Optional 1.0 meter sensor separation
	Remains flexible in temperature range specified, includes
	Programmable from 5 seconds up to 60 minutes in 1
Derating Environmental Range	
o er Supply	Non-magnetic rechargeable sealed lead-acid battery
	and use of Dell' rechargeable Nicad or Disposable battone
	station operation
la ery Cartridge/Belt Life	- 2,000 to 5,000 readings, for sealed lead acid nower supply
	we period in a upon a minipient temperature and rate of
Veights and Dimensions	readings
1 strument Console Only	2.8 kg, 238 x 150 x 250mm
ICad 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
L 3d-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
I 30-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
1.5 m separation - standard)	
(1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
	Instrument console: sensor: 3-meter cable, aluminum
	Sectional series Statt, DOWER SUDDIV harness accompty
Base Station Option	Standard orstern alua 70 mature et a
C 3diometer Option	Standard System plus SU meter cable
· · · · · · · · · · · · · · · · · · ·	Source of 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 APPENDIX B

•





: *	222, 444, 888, 1777 and 3555 Hz.	Tenna in artici, c	±0.25% to ±1% normally, depending
• .: •	MAX: Transmitter coilplane and re- ceiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer cable.	Shekara tatan Tukawa	on conditions, frequencies and coil separation used. :- 222Hz : 220Atm ² - 444Hz : 200Atm ²
	MIN: Transmitter coil plane horizon- tal and receiver coil plane ver- tical (Min-coupled mode). Used with reference cable.		- 888Hz : 120 Atm ² - 1777Hz : 60 Atm ² - 3555Hz : 30 Atm ²
	V.L.: Transmitter coil plane verti- cal and receiver coil plane hori- zontal (Vertical-loop mode). Used without reference cable, in parallel lines.	Transmitter	9V trans. radio type batteries (4). Life: approx. 35hrs. continuous du- ty (alkaline, 0.5 Ah), less in cold weather.
Luciaecon tiunas	25,50,100,150,200 & 250m (MMII) or 100, 200, 300, 400,600 and	Battor:36	12V 6 Ah Gel-type rechargeable battery. (Charger supplied).
	800 ft. (MMIF). Coilseparations in V.L.mode not re- stricted to fixed values.	Recension Outre	Light weight 2-conductor teflon cable for minimum friction. Unshield- ed. All reference cables optional at extra cost. Please specify.
- erenssona Pess	 In-Phase and Quadrature compo- nents of the secondary field in MAX and MIN modes. 	Voca Linic	Built-in intercom system for voice communication between re-
	- Tilt-angle of the total field in V.L. mode .		ceiver and transmitter operators in MAX and MIN modes, via re- ference cable.
7 (3 136 1 7	- Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No null- ing or compensation necessary.	Indicator Lighta:	Built-in signal and reference warn- ing lights to indicate erroneous readings.
	- Tilt angle and null in 90mm edge- wise meters in V.L.mode.	Tamosnatura Canga	:-40°C to+60°C (-40°F to+140°F).
20 Bra (Flogue)	In-Phase: ±20%,±100% by push-	Facel ion action	: 6kg (13 lbs.)
	button switch. Guadrature: ±20%, ±100% by push-	Transmittor Vaigno	: 13kg (29 lbs.)
	button switch. Tilt: ±75% slope . Null [V.L]: Sensitivity adjustable by separation switch.	Shisplog Laight	: Typically 60kg (135 lbs.), depend- ing on quantities of reference cable and batteries included. Shipped in two field/shipping cases.
Purentine	In-Phase and Quadrature: 0.25 % to 0.5 %; Tilt: 1%.	Specifications subje	ct to change without notification
	200 STEELCASE R	D.E., MARKHAM, (DNT., CANADA, L3R 1G2

•

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

Ministry of . Ministry of . Ministry of . All Ministry of . Ontario	Report of W After Record	Report of Work Conducted After Recording Claim		W9660.00297		
Personal Information collected an Ible form this collection should be directed to the J Budbury, Onterio, PBE 645, telephone (7)	Provincial Manager, Mirrin					
Instructions: - Please type or p	int and submit in du	42A15NW0021 2 16640	HANNA	90		

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 statich, showing the claims the work is assigned to, must accompany this form.

FALCON BRIDGE LIMITED		Chert He. 130679
571 Moneta Ave. P.O. Box 1140	Timmins, Ont. P4N 7H9	(705) 267-1188
Porcupine	HANNA	M er G Plan Ha.
Part From: JANUARY IS		Y 11, 1996

Work Performed (Check One Work Group Only)

Work Group	Туре
Geotechnical Survey	Linecutting 12.8 km, May 12.8 km, HLEM. 10.4 km
Physical Work, including Dritting	
Rehabilitation	
Other Authorized Work	
Азекуз	
Assignment from Reserve	

7546 Total Assessment Work Claimed on the Attached Statement of Costs 3 ____

Note: The Minister may reject for assessment work oredit 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		
Exsles Exploration Ltd.	No. Box 1880 Suite 13 Hollinger Blog. Timmins, Ont.		
• •			
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
······································			

(attach a schedule if necessary)

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

I cardily that at the lime the work was performed, the claime covered in this work report were recorded in the current holder's name or held under a bandicial interest. April 12/94 CI, Performed Holder or Agent (Elemente) by the current recorded holder.	
---	--

10

.

Certification of Work Report

Its completion and annexed reg	iont le true.	k report, heving performed the work or winessed same during and/or after
CHRISTINE	No. 571 Moneta Ave. P.O. VETCH	Box 140 Timmins Ont. P4N 749
Telepone He. (705)267-1188	April 12/96	Carlled By (Eignand) C · T R. 10

For Office Use Only

-10.10	Day	Nor Color What	TA	5 1575
afei (an t)			PORCOPINE	<u> </u>

900	
-----	--

2.16640

Ministry of Northern Development and Mines Ministère du

Dévéloppement 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

W96 $0 \, 0_{\rm C}$ L

Transaction No./Nº de transaction

GKIU HANTS-04

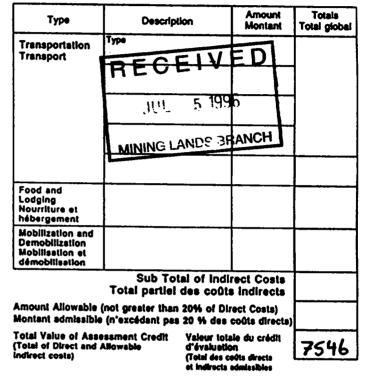
16

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, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

2. Indirect Costs/Coûts Indirects

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

2.



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 ellet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Remises pour dépôt

- 1. Les travaux déposés dans les deux ans sulvant leur achévement 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	Evaluation totale demandée
× 0,50 =	

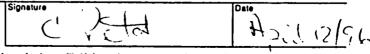
Attestation de l'état des coûts

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 cl-joint.

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

à faire cette attestation.



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

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). Ouestions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Codar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

1. Direct Costs/Coûts directs

Туре	Description	Amount Montant	Totais Totai globs	
Wages Salaires	Labour Main-d'oeuvre	300		
	Field Supervision Supervision sur le terrain	300	600-	
Contractor's and Consultant's Fees	timecutting	3582	Invoice # 403,	
Droits de l'entrepreneur	HLEM	3150	406	
et de l'expert- consell	Mag	J	6732	
Supplies Used Fournitures utilisées	Type Flagging	10		
	Pieket tags	54		
			64	
Equipment Rental Location de	Truck	100		
natériei	Snow mobile	50		
			150	
	7546			

Note: The rocorded 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.

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:

Iotal Value of Assessment Credit Total Assessment Claimed × 0.50 =

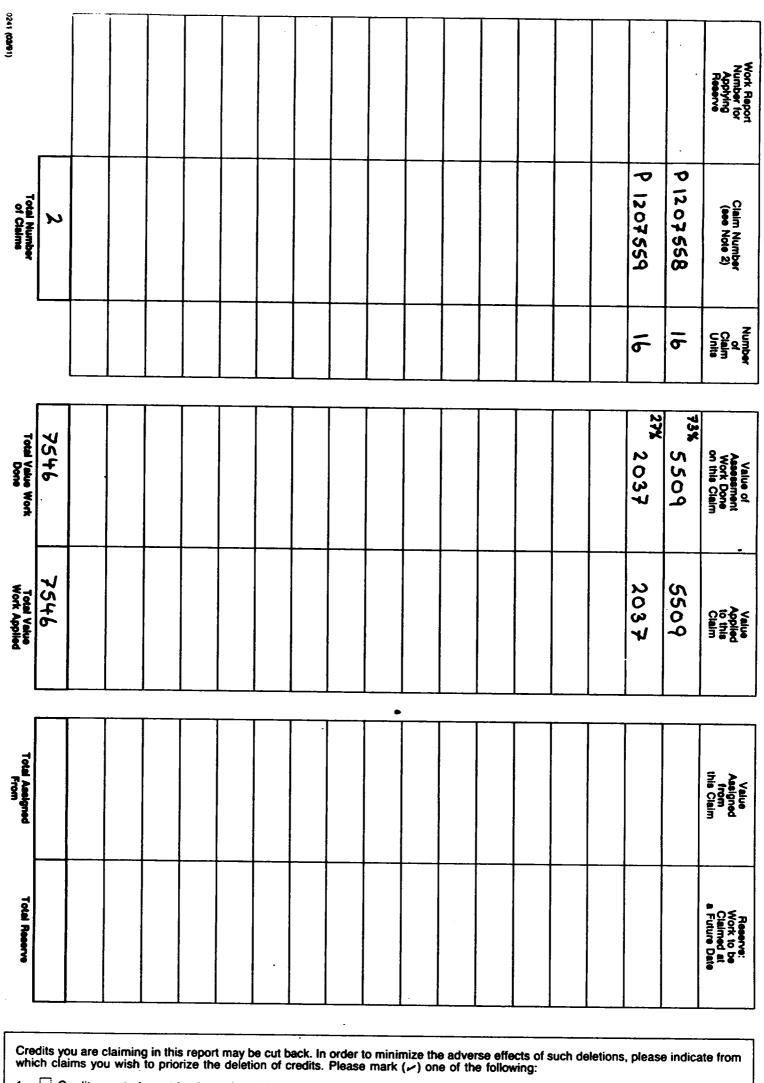
Certification Verifying Statement of Costs

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.

to make this certification

0212 (G4/51)



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. Tredits are to be cut back as priorized on the attached appendix. P1207558

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	Signature	Date	
	or leased land at the time the work was performed.			
-				



Ministère du Ministry of Développement du Nord Northern Development Geoscience Assessment Office et des Mines and Mines 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5 Telephone: (705) 670-5853 (705) 670-5863 Fax: July, 19 Our File: 2.16640 Transaction **#:** W9660.00297

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

Dear Mr. White:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIMS P.1207558 & 1207559 IN HANNA 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, Geophysics (MAG & EM), of the Assessment Work Regulation.

The approval date is July 18, 1996.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5858.

Yours sincerely, ORIGINAL SIGNED BY:

Ron Cookiel.

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

LBJ/jf

cc: Resident Geologist Timmins, Ontario /Assessment Files Library Sudbury, Ontario



EXSICS EXPLORATION LIMITED

CONTRACTING & CONSULTING GEOPHYSICS

Tel. (705) 267-4151 Fax (705) 264-5790

P.O. Box 1880 Timmins, Ontario P4N 7X1

2.15640

INVOICE #:403 PROJECT #:E-146

ON ACCOUNT WITH: Fa

Falconbridge Limited P.O. Box 1140 Timmins, Ontario RECEIVED JUL 5 1996 MINING LANDS BRANCH

Attention: Paul Negerl

G.S.T. REGISTRATION # 113433791

RE: Linecutting on grids in Hanna, 96-02,96-03,96-04

AT A RATE OF:

96-02, 12.5 kilometers @ \$265.00/km	\$3312.50
96-03, 20.5 kilometers @ \$265.00/km	\$5432.50
96-04, 12.8 kilometers @ \$265.00/km	\$3392.00
sub-total	
7% GST	<u>\$ 849.59</u>
sub-total	\$12986.59
5 boxes of tags, PST, GST Incl	<u>\$ 207.00</u>
TOTAL OF THIS INVOICE:	\$13193.59

DATE: February 7, 1996

RECEIVED FEEDS 1859 SIGNED: 8269

PAYMENT DUE UPON RECEIPT OF INVOICE. TERMS: NET 30, 2% INTEREST PER MONTH ON OVERDUE ACCOUNTS.

-



EXSICS EXPLORATION LIMITED CONTRACTING & CONSULTING GEOPHYSICS

Tel. (705) 267-4151 Fax (705) 264-5790

P.O. Box 1880 Timmins, Ontario P4N7X1

2.16640

INVOICE #:406 PROJECT #:E-146

RECEIVED

MINING LANDS BRANCH

5 1996

JUL

ON ROCOUNT WITH! Falconbridge Limited P.O. Box 1140 Timmins, Ontario P4N 7H9

ATTENTION: Paul Nager]

G.S.T. REGISTRATION # 113433791

RE: Max Min and Magnetic Survey on Hanna Han 96-04

AT A RATE OF: 10.4 Km of Max Min @ \$160.00/Km 12.8 Km of Magnetic @ \$100.00/Km	\$1,664.00 \$ <u>1,280.00</u>
74 G8T	\$2,944.00 \$ <u>206.08</u>
TOTAL OF THIS INVOICE:	\$ <u>3,150.08</u>

DATE: February 12, 1996

BIGNED Kavan Taton

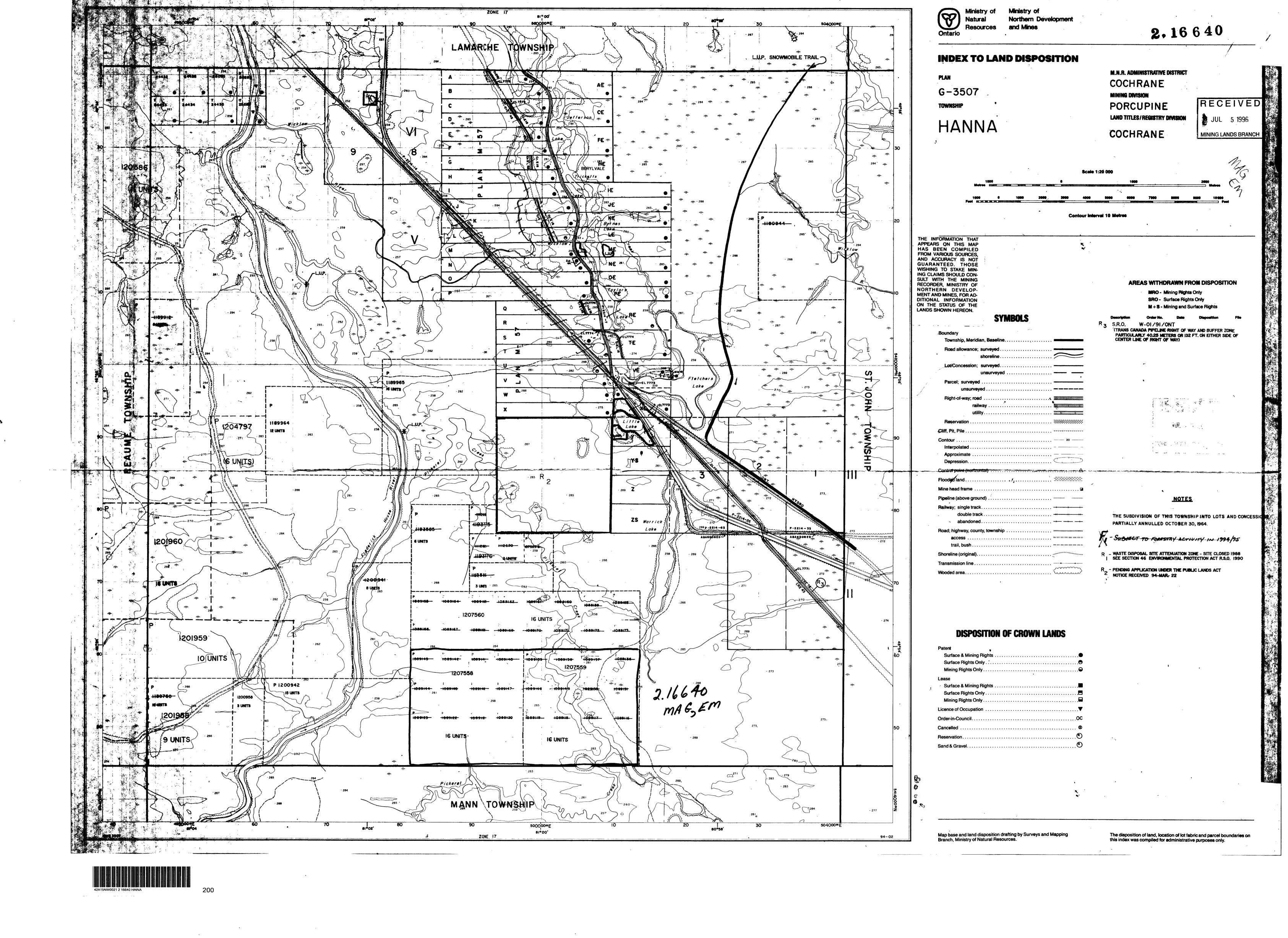
.

RECEIVED FEB 15 1996

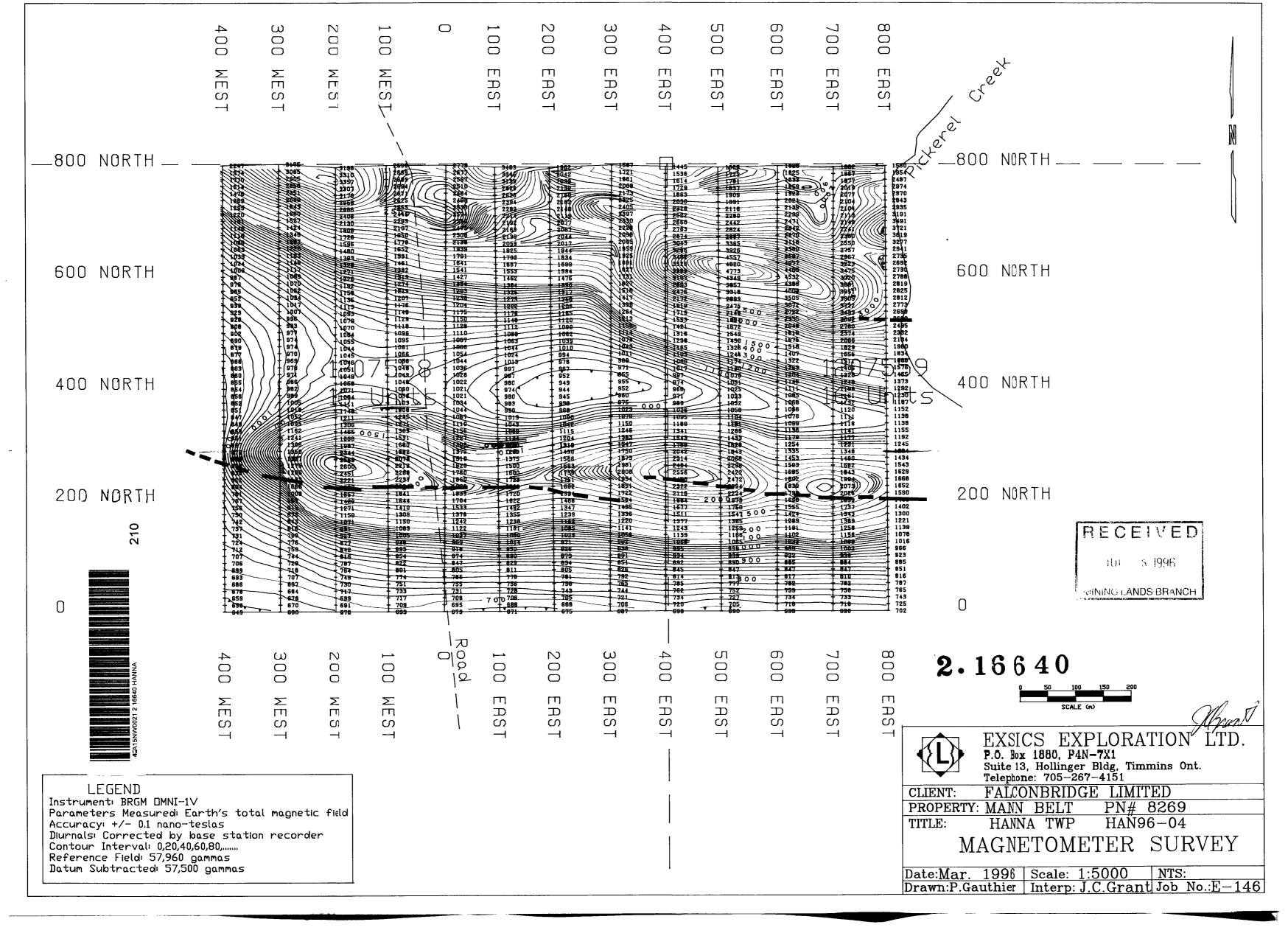
8219 Paul Dayil

PAYMENT DUE UPON RECEIPT OF INVOICE. TERNS: NET 30, 28 INTEREST PER NONTH ON OVERDUE ACCOUNTS. 4615 9/

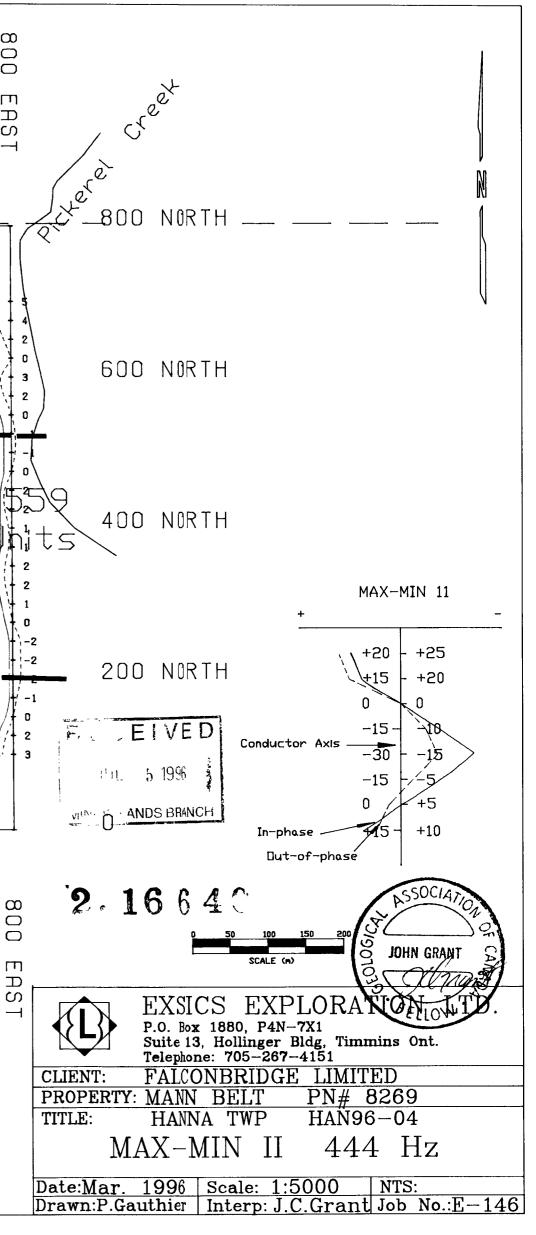
.



.



	400 M	а 00 6	2 0 0 Ψ	100 W		100 E	200 E	300 E	400 E	500 E	600 E	700 E	800 E
	WEST	WEST	U U U U U	MEST/		ΑST	AST	AST	. AST	HS T	HST	. AST	E HS –
800 NORTH				`\ `\									
600 NORTH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{1}{2} + \frac{4}{2} + \frac{3}{2} + \frac{4}{2} + \frac{4}$	2 + 6 2 + 2 2 + 6 4 + 6 2 + 2 2 + 1 2 + 5 4 + 5 2 + 3 2 + 3 2 + 3 2 + 5 4 + 5 3	$ \begin{array}{c} 1 & 5 \\ 2 & 6 \\ 1 & 5 \\ 2 & 5 \\ 2 & 5 \\ 2 & 5 \\ 2 & 6 $	2 - 5 1 - 4 2 - 4 2 - 4 1 - 4 2 - 4 5 - 5 1	3 + 6 2 + 2 2 + 2 2 + 2 2 + 4 1 + 3 1 + 3 2 + 4 2 + 4 2 + 4 2 + 4 2 + 4	3 + 2 2 + 2 1 + 2 1 + 2 1 + 2 2 + 3 2 + 5 2	3 - 4 3 - 3 2 - 1 2 - 1 1 - 2 1 - 2 1 - 1 1 - 1 1 - 1 1 - 2	4 + 4 4 + 3 4 + 3 2 + 2 2 + 2 2 + 2 2 + 2 2 + 2 2 + 2 3 + 3 3 + 3	4 - 1 3 - 0 3 - 0 3 - 1 3 - 1 3 - 1 3 - 1 3 - 1 3 - 1 3 - 1	4 0 3 0 3 0 3 0 2 0 2 0 2 1 1 3 1 3 1 1	5 - 3 5 - 0 4 - 1 4 - 1 4 - 1 3 - 1 3 - 2 3 - 1	5 7 6 5 5 5 5 7 6 3 2 2
400 NORTH	3 2 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5	3 - 5 3 - 4 3 - 3 2 - 3 3 - 4 2 - 3 01 -21 -21 -21 -68m ³ - 4 -68m ³ - 4 -74 -74 -74 -74 -74 -74 -74 -7		3 = 6 3 = 7 3 = 7 5 = 7 6 = 7 7 = 7 8 = -7 5 = -7 6 = -7 7 = -7 6 = -7 6 = -7 6 = -7 6 = -7 7 =	2^{2} 5 3^{3} 6 2^{2} 6 2^{2} 5 3^{2} 4 3^{3} 4 2^{2} 2 2^{2} 1 3^{2} 2 2^{2} 1	2 - 4 2 - 5 2 - 5 2 - 6 2 - 4 2 - 3 2 - 2 1 - 2	2 + 4 3 + 5 2 + 3 2 + 3 3	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 - 3 3 - 3 3 - 2 2 - 1 3 - 1 3 - 1 3 - 1 3 - 1 2 - 0 21	3 + 1 3 + 2 3 + 2 4 + 2 4 + 3 3 + 1 4 + 0 3 + 1 2 + -1	3 - 1 3 - 4 3 - 2 4 - 3 4 - 3 3 - 2 3 - 1 2 - 0	3 + 1 3 + 2 2 + 1 3 + 2 3 + 2 4 + 2 3 + 2 3	
200 NORTH	1 - 0 - 4 - 2 4 - 2	-3 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	-3 -3 -3 -3 -3 -3 -3 -3	$\begin{array}{c} -3 \\ -2 \\ -2 \\ -4 \\ -1 \\ 1 \\ -2 \\ 2 \\ -2 \\ 2 \\ -2 \\ 2 \\ -2 \\ -$	-1 -1 -1 -1 -1 0 -1 -1 1 -1 1 -1 1 -1 2 -1 3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 1 \\ 2 \\ 7 \\ 3 \\ 3 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 4 \\ 1 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \text{SMH(1)} \\ \text{SMH(2)} \\ \text{OM} 1 \\ \text{I} \\ -2^{-1} \\ \text{I} \\ -1 \\ 2 \\ \text{I} \\ 0 \\ 3 \\ 1 \\ 2 \\ 4^{1} \\ 3 \end{array}$	MHD ¹ 86m1 1 2 4
0				2 1 1									
	400	300	200	100		100	200	300	400	500	600	700	
	Σ E S T	WEST	Σ Ε Γ Γ	WEST	1	EAST	EAST	EAST	EAS T-	EAST	EAST	EAST	רי ב ט
LEGEND Instrument: Apex Parametr Mode: Maximum Coupled, Hor Parameters Measured: Inpl Dut	rizontal La	oop Surve	У										
Frequency: 444 Hz Coil Seperation: 200m Operator: J. DerWeduwen, Profile Scale: 1cm=+/-10%	·						42A15N	W0021 2.16640 HA			220		



	400 WEST	300 WEST	200 WEST	100 WEST		100 EAST	200 EAST	300 EAST	400 EAST	500 EAST	600 EAST	700 EAST	800 EAST
_800 NORTH													
600 NORTH	427 625 725 924 1323 1520 2217 2216	1612 1812 1911 2112 1715 1717 1716	22 -5 23 -5 22 -6 21 -6 20 -5 20 -8 18 -7 19 -9	206 225 224 195 197 $23 - 5$ $23 - 5$ $23 - 5$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2410 2212 1813 1813 1714 1812 1812 1812 1812 1812 $18 - 12$	1820 1720 1620 1818 1718 1817 2215 2015 2015	2519 2222 1625 1723 1523 1425 1525 1425 1525 16 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1732 1830 1532 1333 1433	18 16 19 19 11
400 NORTH	$22^{i}16$ $24^{i}13$ $22^{i}12$ $14^{i}13$ $16^{i}13$ $18^{i}11$ $15^{i}10$ $11^{i}_{1} - 14$	$20'_{1}13$ $18'_{1}15$ $18'_{1}15$ $17'_{1}17$ $17'_{1}16$ $13'_{1}15$	19 -11 20 -10 13 -33 17 -17 17 -17 17 -17 17 -19 18 -18 11 -18	22 - 5 23 - 6 24 - 7 23 - 8 25 - 8 25 - 8 -13 16 - 17	20 -13	$1\frac{9}{10} - 12$ $20 - 12$ $20 - 12$ $21 - 13$ $23 - 11$ $19 - 15$ $19 - 14$ $16 - 17$	23'13 $24'14$ $24'14$ $22'18$ $19'18$ $19'18$ 1920 $20'19$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20 + (-25) $20 + (-27)$ $19 + (-27)$ $17 + (-29)$ $16 + (-28)$ $15 + (-31)$ $14 + (-32)$ $15 + (-32)$ $15 + (-32)$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 12 19 16 16 14 15 14 16
200 NORTH	1212 1510 159 218 229 $22'_{1}14$ 1920 1620	1 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7 -18 2 -19 -4 -20 -2 -21 2 -21 8 -20 12 -21 17 -21 $7 -21 $	$ \begin{array}{c} 14 & -17 \\ 9' & -14 \\ 7 & -18 \\ 9' & -17 \\ 12 & -17 \\ 16' & -15 \\ 18' & -16 \\ 23' & -15 \\ \end{array} $	14 + -17 1318 1318 1318 1616 1614 2412 2511 2711	10 -23 824 925 925 926 1225	$12 + \frac{1}{128}$ $10 + \frac{1}{128}$ $10 + \frac{1}{128}$ $9 + \frac{1}{128}$ $9 + \frac{1}{128}$ $9 + \frac{1}{128}$ $8 + -\frac{3}{12}$ $10 + -\frac{3}{10}$ $13 + -\frac{3}{128}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9 - 33 - 33 9 - 33	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	13 9 7 5 7 10 12 17 20
0				18 + -22 1524									
	, 200	300	200	100	Road	100	200	300	400	500	600	700	
	WEST	WEST	ME S T	WEST		EAST	EAST	EAST	EAST	EAST	EAST	EAST	ח ב ט
LEGEND Instrument: Apex Parameti Mode: Maximum Coupled, Hor Parameters Measured: Inp Dut	rizontal Lo	oop Survey					1.000 000 00						
Frequency: 1777 Hz Coll Seperation: 200m Operator: J. DerWeduwen, Profile Scale: 1cm=+/-20%	B.Pigeon						42A15NV	N0021 2.16640 HA	NNA		230		

