



42A14SE0018 2.16306 DUFF

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DEC 15 1995

MINING LANDS BRANCH

GEOPHYSICAL REPORT
FOR
FALCONBRIDGE LIMITED
ON
GRID 95-02
MANN BELT PROJECT
8269
DUFF TOWNSHIP
PORCUPINE MINING DIVISION
NORTHEASTERN ONTARIO

2.16306

Overl. # 2.5244

Prepared by: Paul Nielsen
Northwest Geophysics Ltd



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INTRODUCTION

The services of Northwest Geophysics Limited were retained by Falconbridge Limited to complete a linecutting and geophysical program on Grid 95-02, located in Duff Township within the Porcupine Mining Division, District of Cochrane, Northeastern, Ontario (Fig. 1).

The purpose of this program was to test the property for geological structures which would be favourable areas for base metal deposition.

Linecutting commenced on September 4, 1995 and was completed September 14, 1995. The geophysical program was completed between September 11, 1995 and September 25, 1995.

This report will deal with the results of the program as well as conclusions and follow up recommendations.

LOCATION AND ACCESS

Grid #95-02 is located in the east-central part of Duff Township, Porcupine Mining Division, District of Cochrane, Northeastern Ontario (Fig. 2).

Access to the property was ideal during the survey period. Highway 11 North extends west from the Town of Cochrane and provides access to the Dunn Lake Road which extends south into Duff Township then east to approximately 350 m north of the grid. The grid can be reached by 2 wheel vehicle from Cochrane in approximately 40 minutes.

CLAIM GROUP

The claim which contains Grid 95-02 is as follows:

P-1200929 (16 units)

Refer to Figure 3, copied from MNDM Claim Map # G3234 Duff Township, scale 1 inch=2640 feet.

PERSONNEL

Linecutting was completed by the following Northwest Geophysics personnel:

Francois Morin- Normetal, P.Q.

Robert Morin- Normetal, P.Q.
Daniel Mercier- Normetal, P.Q.

The field crew directly involved with collecting the survey data were as follows:

Mike Milani - Thunder Bay, Ontario
Dan McCollum - Thunder Bay, Ontario

The geophysical program was carried out under the direct supervision of Alfred Lambert. The plotting and computer compilation was completed by Paul Nielsen and Alfred Lambert of Northwest Geophysics Limited.

LINECUTTING PROGRAM

A detailed metric grid was first established on the property. All of the cross lines were chained at 25 meter station intervals with aluminum tags. In all, a total of 8.8 Km. of grid lines were established across the property.

GEOPHYSICAL PROGRAM

This program consisted of a Total Field Magnetic survey being done in conjunction with a Horizontal Loop, Electromagnetic (HLEM), survey.

The HLEM was completed on the cross lines only, the magnetic survey was carried out on grid lines as well as Baseline 0+00 and Tieline 8+00S.

MAGNETIC SURVEY

This survey was completed using the EDA OMNI IV System. Specifications for this instrument can be found as Appendix A of this report. The following parameters were kept constant throughout the survey period.

Linespacing	-100 meters
Station Record Interval	-12.5 meters
Diurnal Correction Method	-base station recorder
Base Station Record Interval	-30 sec reading interval
Unit Accuracy	- +/- 0.5 gammas
Reference Field	- 58,560 gammas
Datum Subtraction	- 59,000 gammas

The data was then corrected for diurnal variations, a base level of 59,000 gammas was removed from each reading, and the resultant data was plotted directly onto a vellum base map at a scale of 1:5,000. The data was then contoured at 10 gamma intervals wherever possible.

Copies of a contoured map, a map of reading postings and a map of profiles are included in the back pocket of this report.

HLEM SURVEY

This survey was completed using the Apex Parametrics MaxMin I System. Specifications for this instrument can be found as Appendix B of this report.

The following parameters were kept constant throughout the survey period.

Linespacing	-100 meters
Reading Interval	-25 meters
Coil Separation	-150 meters
Theoretical Search Depth	-75 meters
Frequencies Recorded	-440 Hz, 1760Hz
Parameters Measured	-inphase and quadrature components of the secondary field
Unit Accuracy	- +/- 0.5%

The collected data was then plotted onto a vellum base map, one map for each frequency, at a scale of 1:5000. The data was then profiled at 1cm to 5% for 440 Hz. and 1cm to 20% for 1760 Hz. The conductor axis for each zone was located and placed directly on the base map. A copy of these base maps are included in the back pocket of this report.

SURVEY RESULTS

The Maxmin HLEM survey was successful in locating three anomalous zones designated 'A', 'B', and 'C'. Anomaly 'A' is an east trending zone extending for a minimum of 500m centred on L600W at 450S. At 600W-450S the zone has an interpreted depth of 40m and conductivity of 14 mhos (1760 Hz) or 74m depth and conductivity of 19 mhos (440 Hz). Anomaly 'B' is a south-east trending zone extending for a minimum of 400m centred on L800W at 250S. The zone has an interpreted depth of 42m and conductivity of 4 mhos (1760 Hz.). Anomaly 'C' is a South-east to east trending zone extending for a minimum of 300m centred on L200W at 350 S. The zone has an interpreted depth of 32m and a conductivity of 5 mhos (1760 Hz).

The magnetic survey indicates a broad magnetic high (1200 gammas) occupying the north west portion of the grid. E.M. anomaly 'B' coincides directly with the central portion of this magnetic feature. E.M. anomaly 'A' flanks the south side of the magnetic feature.

CONCLUSIONS AND RECOMMENDATIONS

The surveys were successful in locating three conductive zones which warrant followup work.

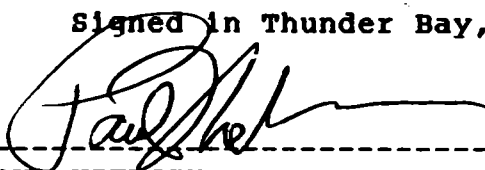
The high magnetic feature located in the northwest portion of the grid can be interpreted as a mafic intrusive body or circular sulphide bearing unit. Further surveying east and north of the grid to delineate the extents of the magnetic feature and strike extension of EM anomaly A and B is recommended.

CERTIFICATE

I, Paul E. Nielsen hereby certify that:

- I am a Canadian Citizen and reside at 170 Inglewood Crescent, Thunder Bay, Ontario, CANADA P7C 2E9.
- I have been actively engaged in base and precious metal exploration throughout Canada since 1974.
- I am a graduate of Lakehead University, Thunder Bay Ontario (HSc. Geology, 1974)
- I have no specific or special interest in the described property.

Signed in Thunder Bay,



PAUL NIELSEN
GEOLOGIST, BSc

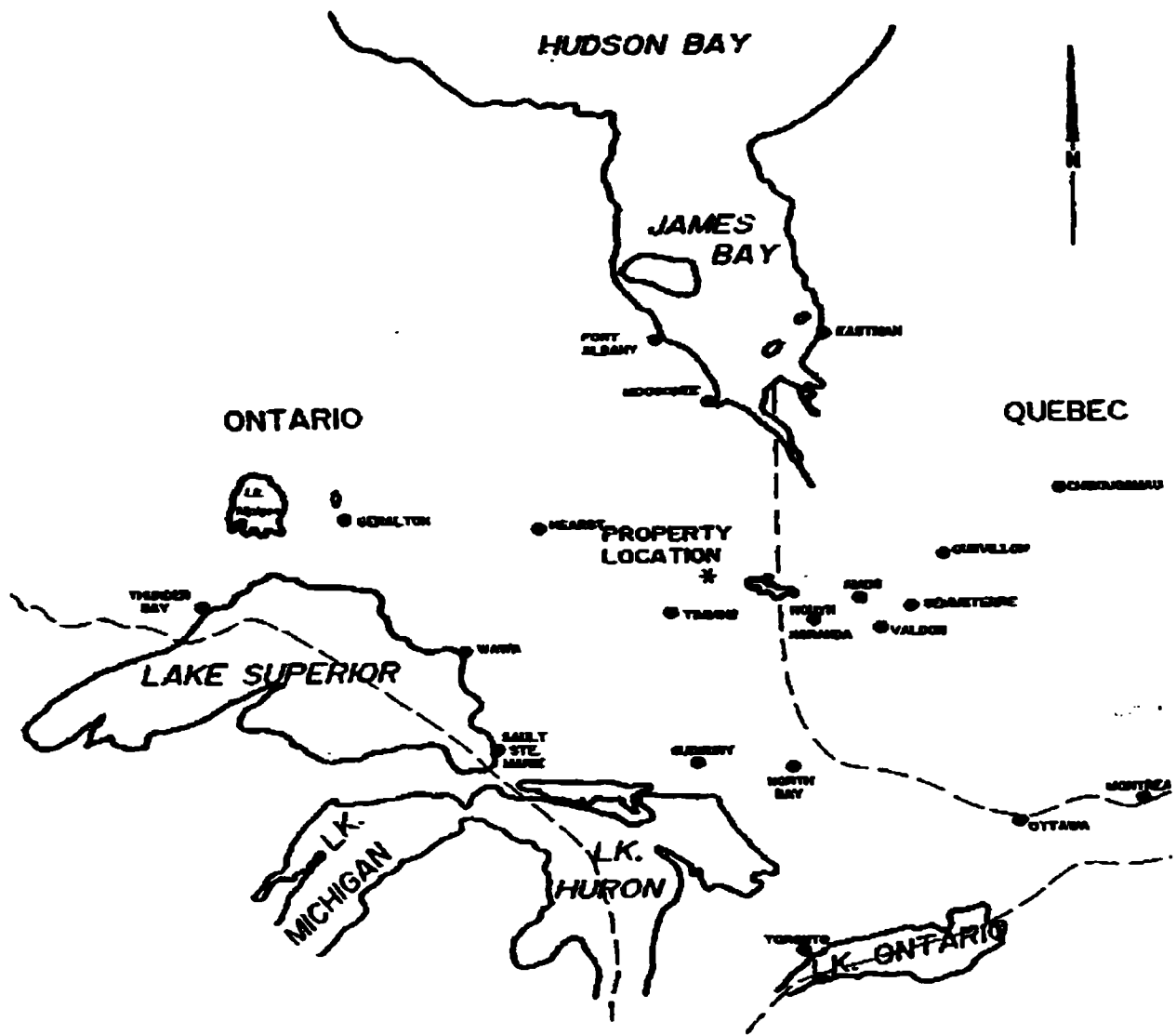


Fig. 1

Location Map

Mann Belt Project

FALCONBRIDGE LIMITED

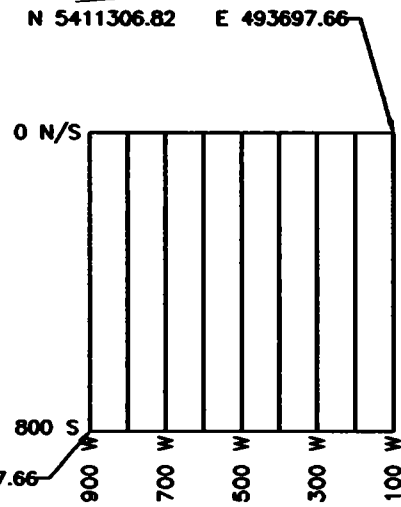
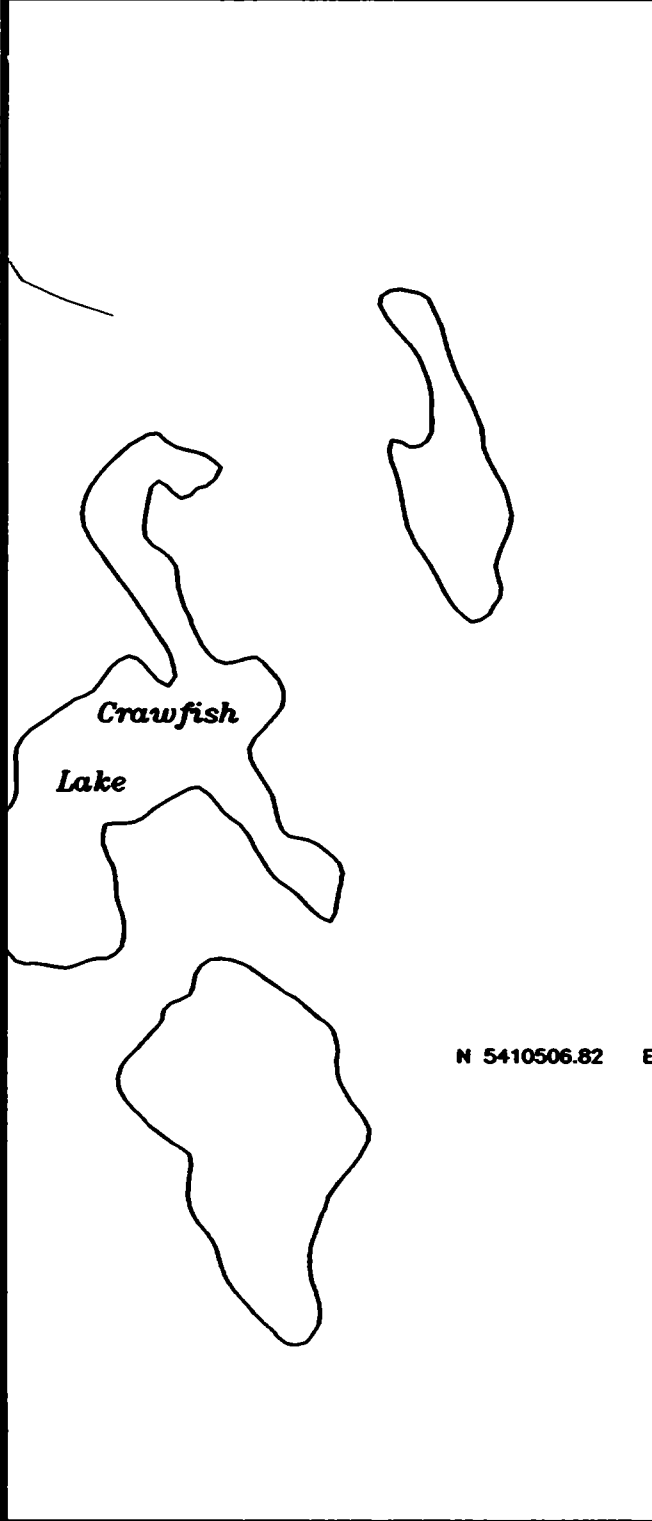
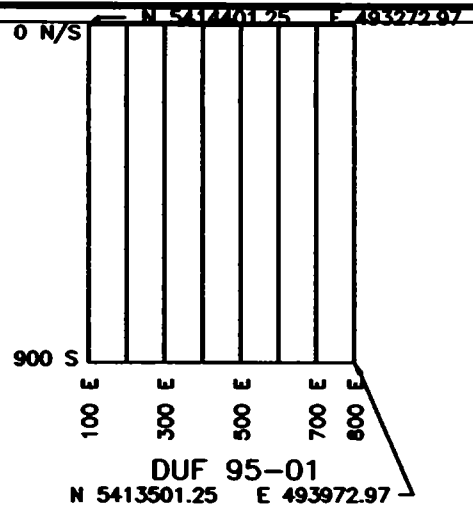
Exploration Division

Timmins ONTARIO

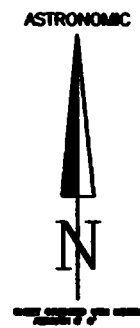


**MANN BELT PROJECTS
DUFF TOWNSHIPS
GRID SKETCH
COMPILATION MAP**

TRACER: T S	DATE: 04/95	REQ: 42-A/10	PROJECT: 0289
OWNER: TS	DATE: 02/06/95	MFP No:	FILE: 0289 C
SUPERVISOR: P J Nagel	DATE: 23/07/95	SCALE 1:20000 (metres)	
REVISION: d + 1	DATE: 08/09/95	0 100 200 300 400 1:20000	



DUF 95-02



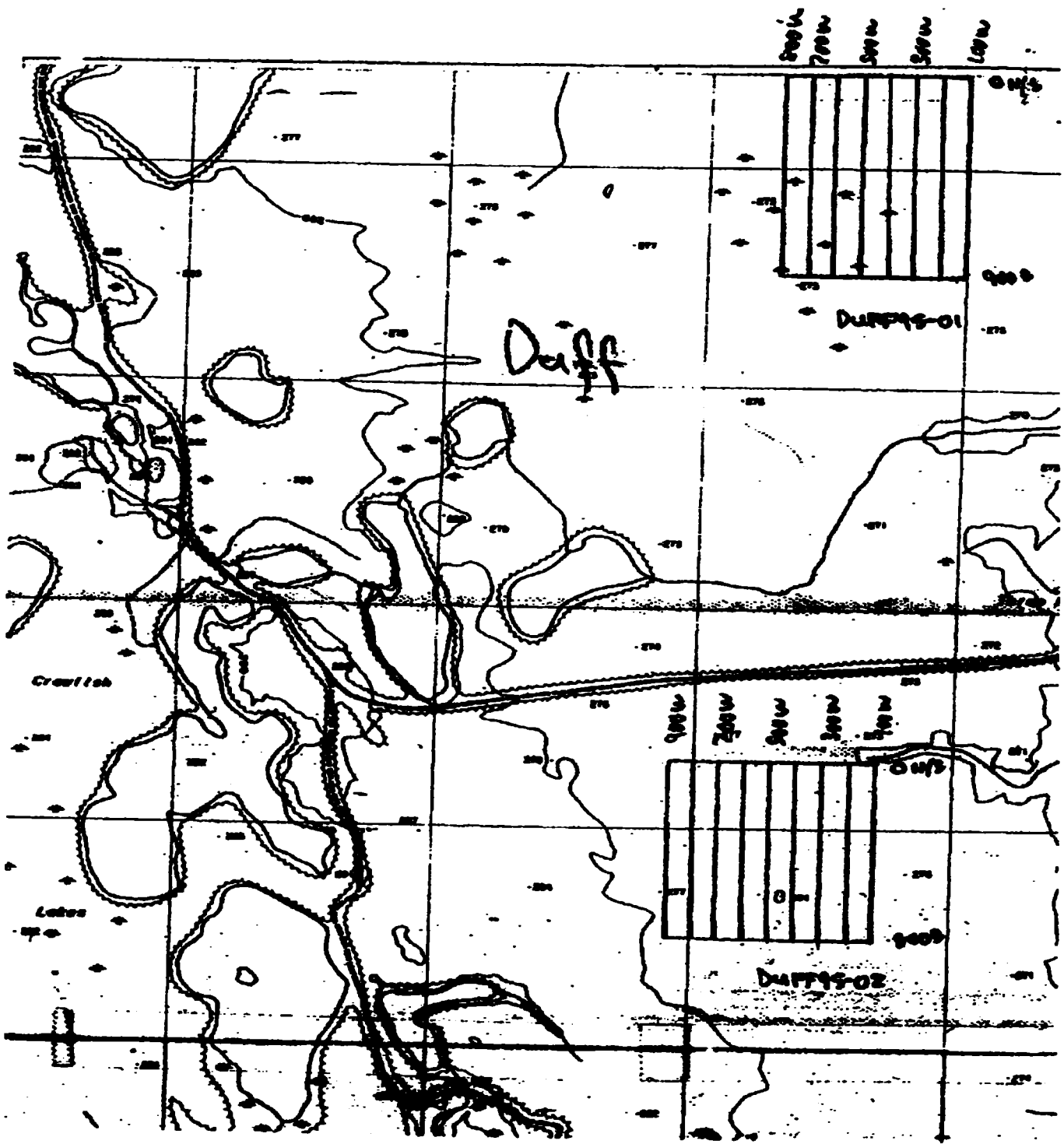


Fig. 2

Property Location Map
Grid Duff 95-01,02

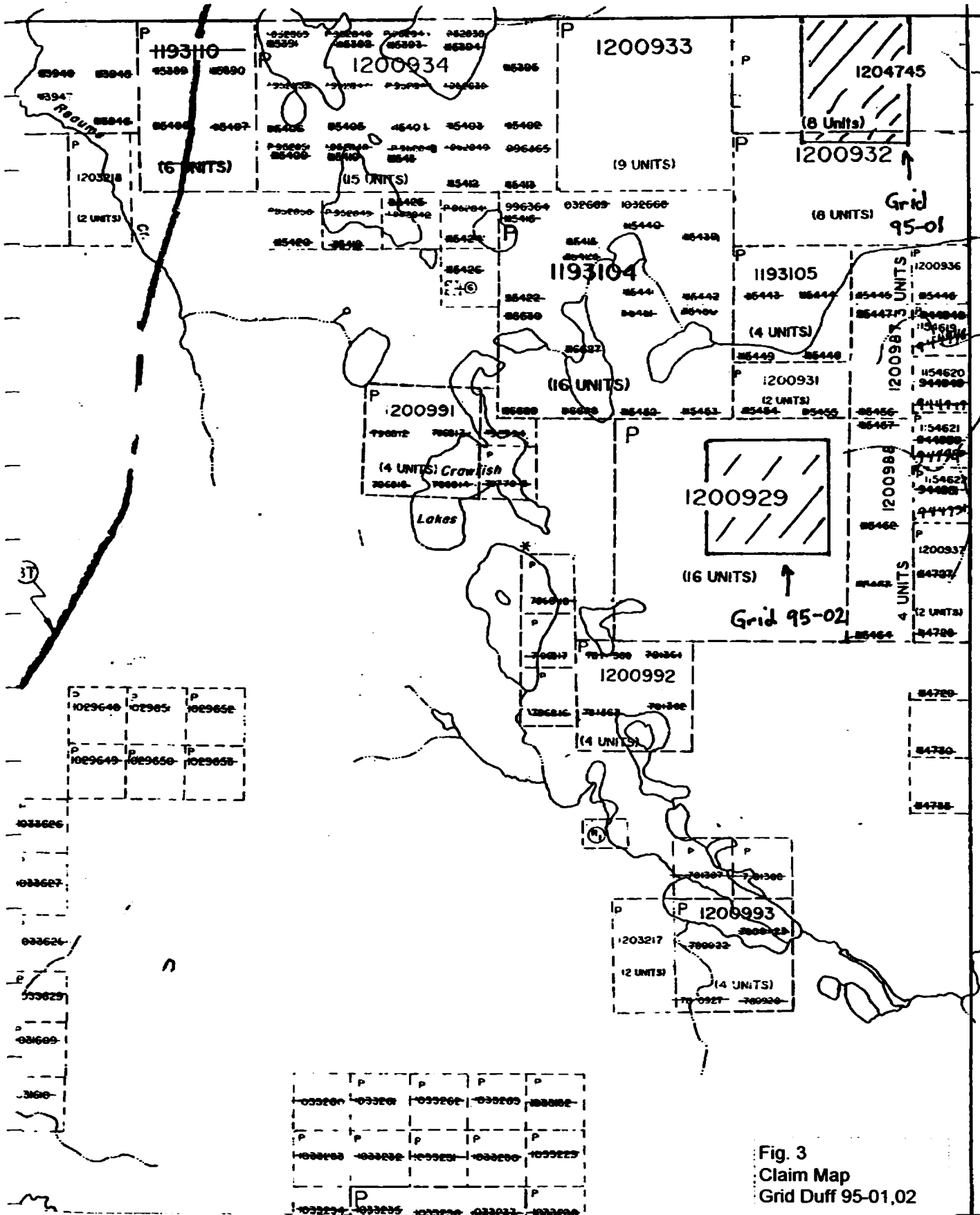


Fig. 3
 Claim Map
 Grid Duff 95-01,02

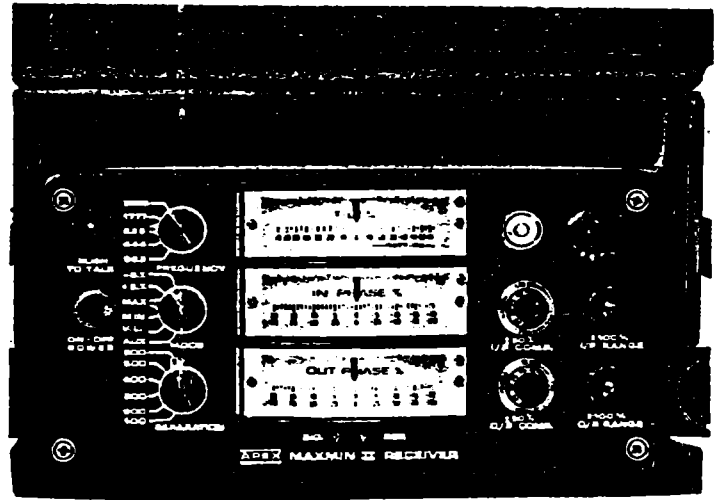
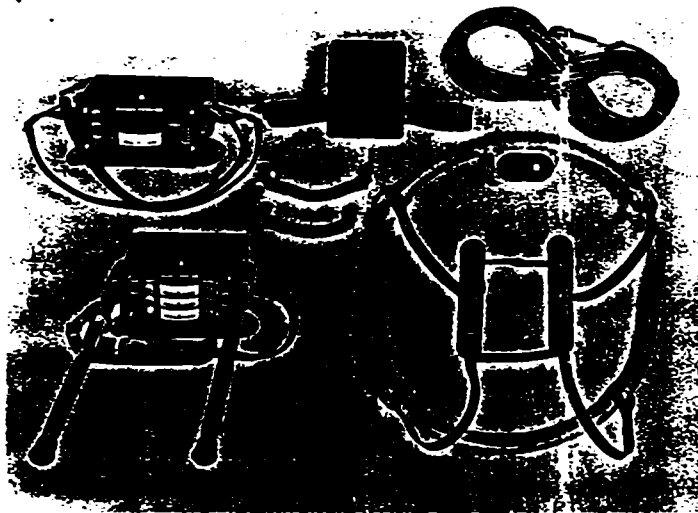
Specifications

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 (0.5m separation-standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0m separation-optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

EDA Instruments Inc.
4 Thorndcliffe Park Drive
Toronto, Ontario
Canada M4H 1H1
Telex: 06 23222 EDA TOR
Cable: Instruments Toron
(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



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 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.

Coil Separations: 25, 50, 100, 150, 200 & ± 50 m (MMID or 100, 200, 300, 400, 600 and 800 ft. (MMIF)). 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:** $\pm 20\%$, $\pm 100\%$ by push-button switch.
Quadrature: $\pm 20\%$, $\pm 100\%$ by push-button switch.
Tilt: $\pm 75\%$ slope.
Null (V.L.): Sensitivity adjustable by separation switch.

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

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

Transmitter Load, ...
- 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 x 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 $+60^{\circ}\text{C}$ (-40°F to $+140^{\circ}\text{F}$).

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 NORDVIK TOR

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number

W9560.00447

SEE PAGE 2.

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, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- 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) FALCONBRIDGE LIMITED		Client No. 130679
Address 571 Moneta Ave. P.O. Box 1140 Timmins, Ont. P4N7H9		Telephone No. (705) 267-1188
Mining Division PORCUPINE	Township/Area DUFF	M or G Plan No.
Date Work Performed	From: September 4, 1995	To: September 25, 1995

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	Line cutting, Magnetic + HLEM Surveys
Physical Work, Including Drilling	Taking Air Photos + Spotting Grids
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

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Total Assessment Work Claimed on the Attached Statement of Costs \$ 6378. 6044

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
NW Geophysics Ltd.	Box 3263 Thunder Bay Ont. P7B 5E8
Hillside Photo	66 Brousseau Ave. Timmins, Ont. P4N5Y2
Frank Renaudat Expl.	Box 1092 Timmins, Ont. P4N 7H9

(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	Recorded By (Signature)
Oct. 10 '95	Paul Nagel

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 NAGERL 571 Moneta Ave. Timmins, Ont.	
Telephone No.	Date
(705) 267-1188	Oct. 10 '95
Certified By (Signature)	
Paul Nagel	

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
<u>6044</u> <u>\$6378.</u>		<u>Undated</u> <u>Sany White</u>	
	Deemed Approval Date	Date Approved	
	<u>Jan. 9/96</u>		
	Date Notice for Amendments Sent		
			<p>NOV 11 1995</p> <p>@10:20am (C) CC</p>



Report of Work Conducted After Recording Claim

Mining Act

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

2-16300

- Instructions:
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining 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.

Recorded Holder(s) FALCONBRIDGE LIMITED		Client No. 130679
Address P.O. Box 1140, 571 MONETA AVE. TIMMINS, ONTARIO P4N 7H9		Telephone No. (705) 267-1188
Mining Division PORCUPINE	Township/Area DOFF	M or G Plan No.
Dates Work Performed From: September 4, 1995		To: September 25, 1995

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	LINCOLNING, MAGNETIC + HLEM SURVEY
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

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Total Assessment Work Claimed on the Attached Statement of Costs \$ 334.00 (PART OF \$6378 TOTAL)

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
NIG GEOPHYSICS LTD	Box 3263 THUNDER BAY, ON P7B 5E5

(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 Nov. 28/95	Recorded Holder's Signature (Signature) Christine Petch
--	---------------------------	---

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 CHRISTINE PETCH P.O. Box 1140, 571 MONETA AVE. TIMMINS, ONTARIO P4N 7H9		
Telephone No. (705) 267-1188	Date Nov. 28, 1995	Certified By (Signature) Christine Petch

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	RECEIVED NOV 30 1995 e 11:15 (c) CC PORCUPINE MINING DIVISION
	Deemed Approval Date	Date Approved	
	Date Notice for Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	1200929	16
2.18306		
Total Number of Claims		1

Value of Assessment Work Done on this Claim	Value Applied to this Claim
6044	6044
Total Value Work Done	
6044	
Total Value Work Applied	
6044	

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
RECEIVED DEC 15 1995 MINING LANDS DIVISION	
Total Assigned From	
Total Reserve	

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:

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 prioritized on the attached appendix.

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

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

ote 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

W9560.00447

(24) (2091)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	1200929	16
Total Number of Claims		1

Value of Assessment Work Done on this Claim	Value Applied to this Claim
334	334
2.16306	
Total Value Work Done	334
Total Value Work Applied	334

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
RECEIVED DEC 15 1995 MINING LANDS BRANCH	
Total Assigned From	Total

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



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

Mining Act/Loi sur les mines

Transaction No./N° de transaction

W9560.00447

SEE PAGE 2

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

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

1. Direct Costs/Coûts directs

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
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain	1000.00	1000.00
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type		
	N.W. Geophys.	4781.	
	Hillside Photo	80.00	
	F. Renaudat	40.00	4901.
Supplies Used Fournitures utilisées	Type		
	Flagging	10.00	
	Hip Chain		
			10.00
Equipment Rental Location de matériel	Type		
	TRUCK	41.90	
	ATV	41.25	
	GAS	50.00	133.15
Total Direct Costs Total des coûts directs			1604

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
			2.163.06
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilitation			

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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
	x 0.50 =

Remises pour dépôt

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

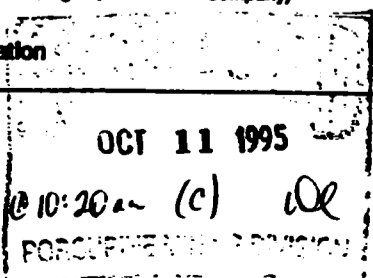
Valeur totale du crédit d'évaluation	Evaluation totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

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

that as PAUL NAGERL I am authorized (Recorded Holder, Agent, Position in Company)

to make this certification



Attestation de l'état des coûts

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

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

à faire cette attestation.

Signature: Paul Nagerl Date: Oct 10 '95



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

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type		
	NW: GEPHYSKS (4781 x 7%) 657	334.67	
			334
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			334

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 démoblisation			
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)			334

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

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

Filing Discounts

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

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

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

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

RECEIVED

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 C. PETCH I am authorized (Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts: DEC 15 1995

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

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

à faire cette attestation.

Signature: Chestere Petch Date: Nov. 28, 1995

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

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

December 20, 1995

Our File: 2.16306
Transaction #: W9560.00447

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 CLAIM
1200929 IN DUFF 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 December 18, 1995.

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

Yours sincerely,
ORIGINAL SIGNED BY:



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

SBB
SBB/jl
Enclosure:

cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

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

Description	Order No.	Date	Disposition	File
SEC 36/80	W/80	8/8/80	M+S	

THIRD SURFACE RIGHTS WITHDRAWN UNDER SECTION 36 OF THE MINING ACT, R.S.O. 1990 ORDER W-80/87 NR DATED MARCH 6, 1987

REOPENED FEBRUARY 3, 1989 ORDER NO. O-P 2/89 NR

THIS TWP SUBJECT TO FOREST ACTIVITY IN 1981/82. FURTHER INFORMATION ON FILE.

F-2 SUBJECT TO FOREST ACTIVITY IN 1982/83.

SNOWMOBILE TRAIL NOTICE RECEIVED DEC 13 1999

Subdivision of this township into lots and concessions was annulled May 10, 1963.

SAND and GRAVEL

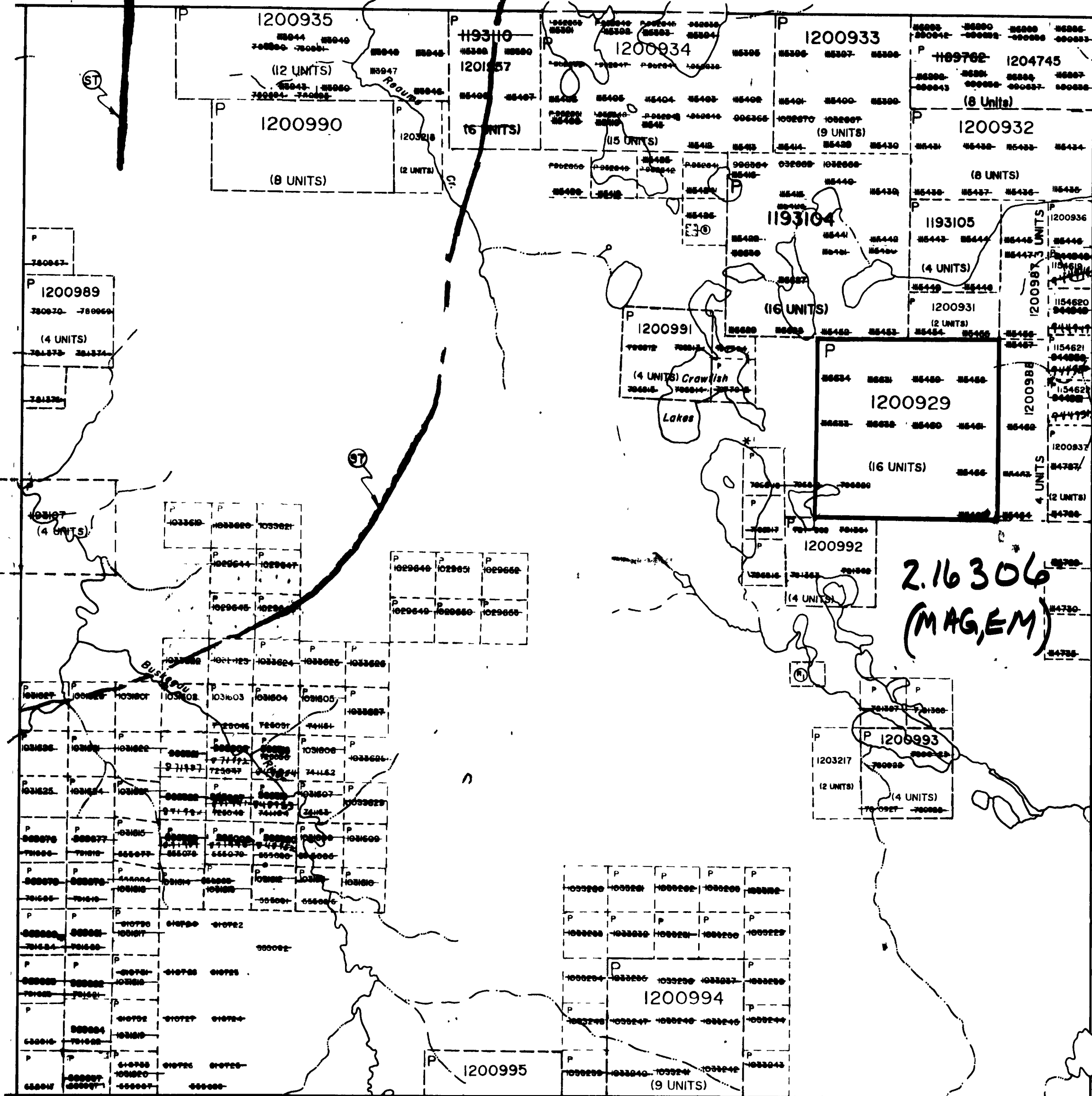
QUARRY PERMIT

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 LANDS.

REAUME TP.

LUCAS TP.

TULLY TP.



SE CORNER CO-ORDINATES (Approx.)
LAT. 48° 47' 50"
DEP. 81° 04' 28"

LEGEND

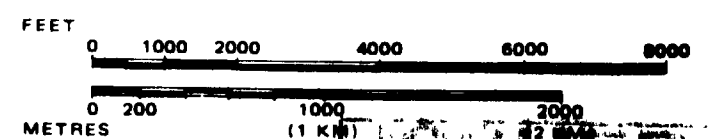
- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
- TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES
- LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	○
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	■
" MINING RIGHTS ONLY	■
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○
LAND USE PERMIT	○

RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1963 AND IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS



2.16306
DEC 13 1999

TOWNSHIP PORCUPINE MINING DIVISION

DUFF
M.N.R. ADMINISTRATIVE DISTRICT
COCHRANE RECEIVED
MINING DIVISION DEC 15 1995
PORCUPINE
LAND TITLES / REGISTRY BRANCH
COCHRANE

Ministry of Natural Resources
Land Management Branch
Ontario

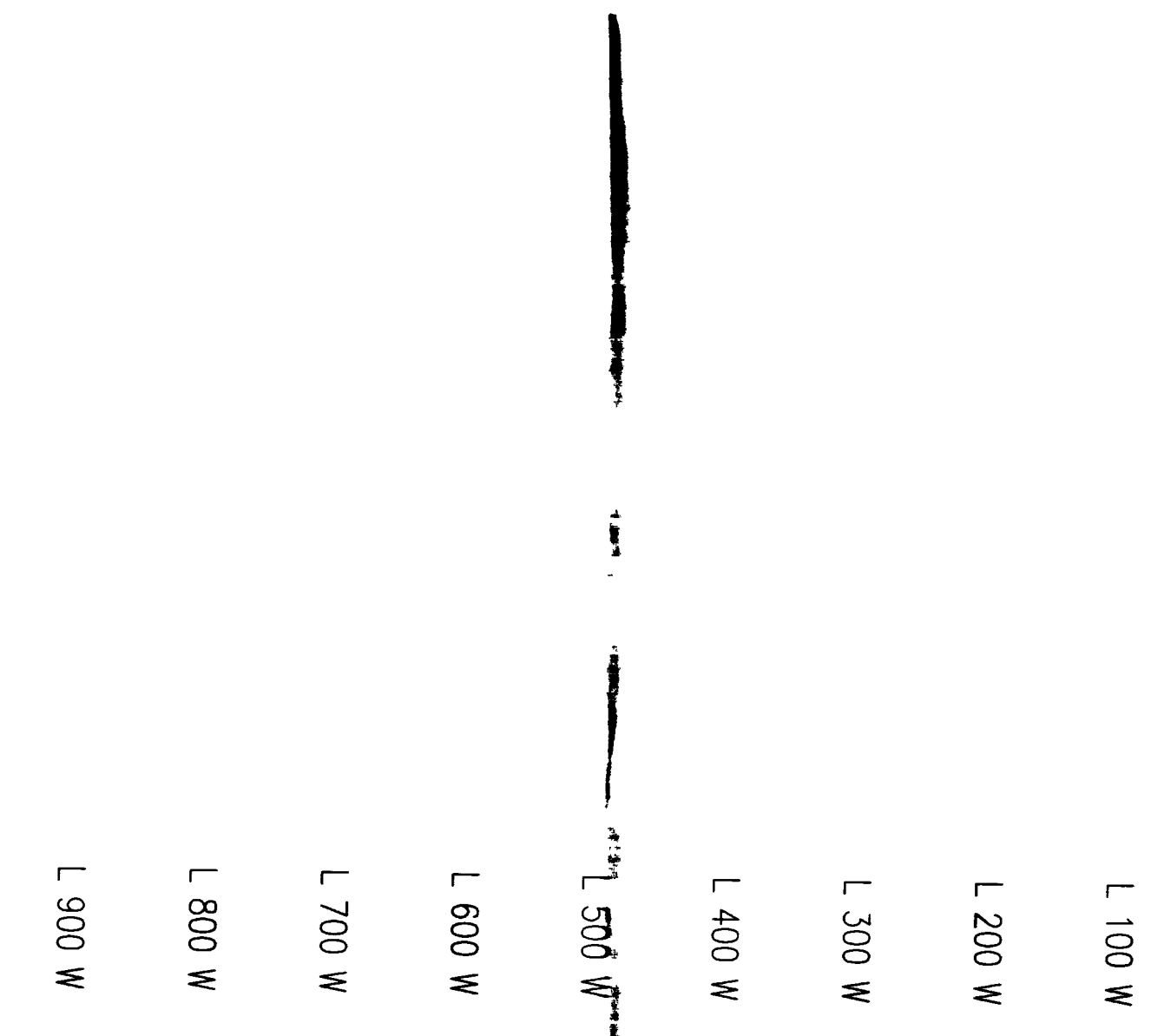
Date MARCH, 1985
Number G-3234



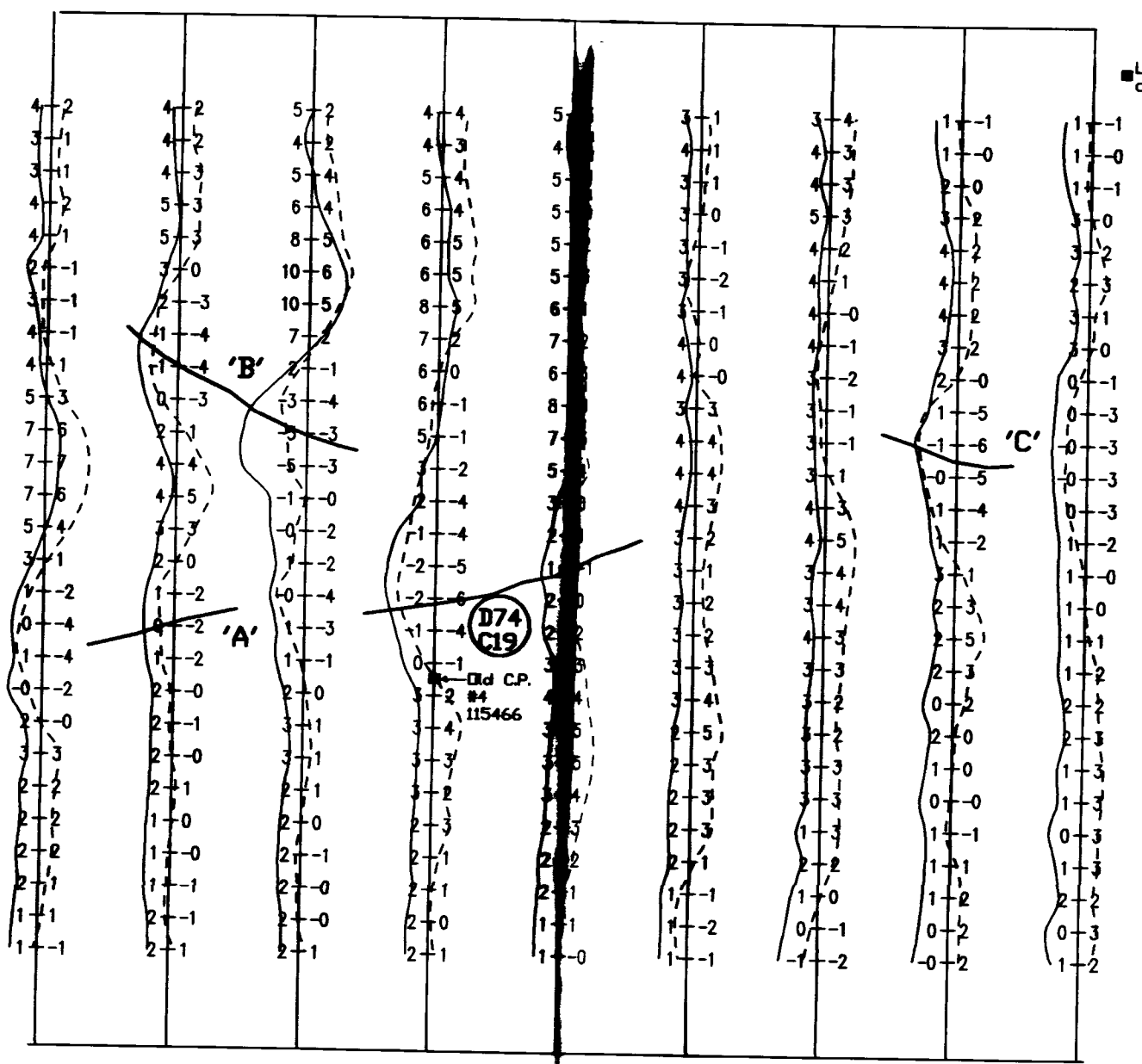
2/25 3:02
 Fri 13 Sep 1995 at 13:59 Normal Profile Centre of Plot at 400.00 / 400.00 Serial # 190188 Registered User: NORTHWEST GEOPHYSICS LTD.



BASELINE 0+00



LP 1200 m N
of #3-1200988



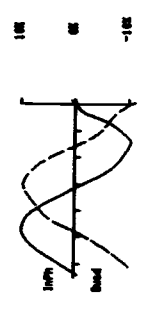
TIELINE 8+00S



Duff 95-02
444 Hz

Depth in metres
 Conductivity mhos

GRID DUFF 95-02



Instrument : WADSWORTH
 Coil Spacing : 150m
 Vertical Scale : 1cm = 50
 Frequency : 440 Hz
 In Phase : 50
 Quadrature : 60

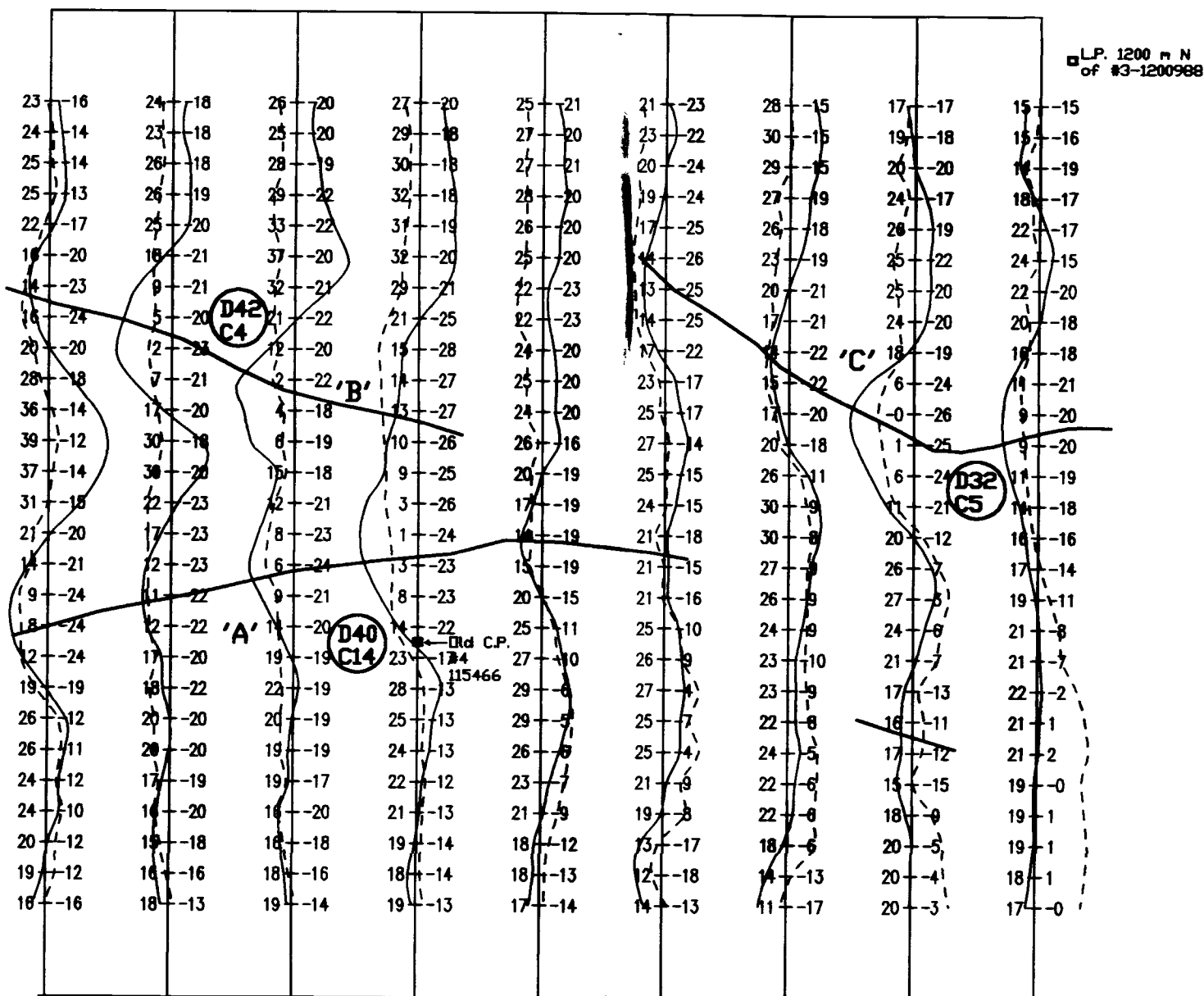
FALCONBRIDGE LIMITED	
HLEM SURVEY FREQ. 440 HERTZ	
PROJECT: MANN BELT	PROJECT # : 8269
BASELINE AZIMUTH : 90 Deg.	
SCALE = 1 : 5000	DATE : 9/ 9/95
SURVEY BY : NWG	NTS : 42 A/14
NORTHWEST GEOPHYSICS LTD.	





L 900 W
L 800 W
L 700 W
L 600 W
L 500 W
L 400 W
L 300 W
L 200 W
L 100 W

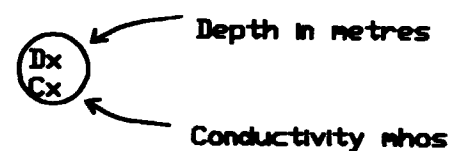
BASELINE 0+00



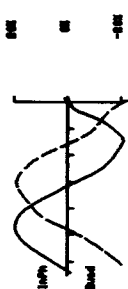
TIELINE 8+00S

L 900 W
L 800 W
L 700 W
L 600 W
L 500 W
L 400 W
L 300 W
L 200 W
L 100 W

Duff 95-02
1760 Hz



GRID DUFF 95-02



Instrument : MASHIN
 Coil Spacing : 150m
 Vertical Scale : 1cm = 20Z
 Frequency : 1760 Hz
 In Phase : 20Z
 Quadrature : -15Z

FALCONBRIDGE LIMITED	
HLEM SURVEY	
FREQ. 1760 HERTZ	
PROJECT: MANN BELT	PROJECT #: 8269
BASELINE AZIMUTH : 90 Deg.	
SCALE = 1 : 5000	DATE : 9/ 9/95
SURVEY BY : NMG	NTS : 42 A/14
NORTHWEST GEOPHYSICS LTD.	

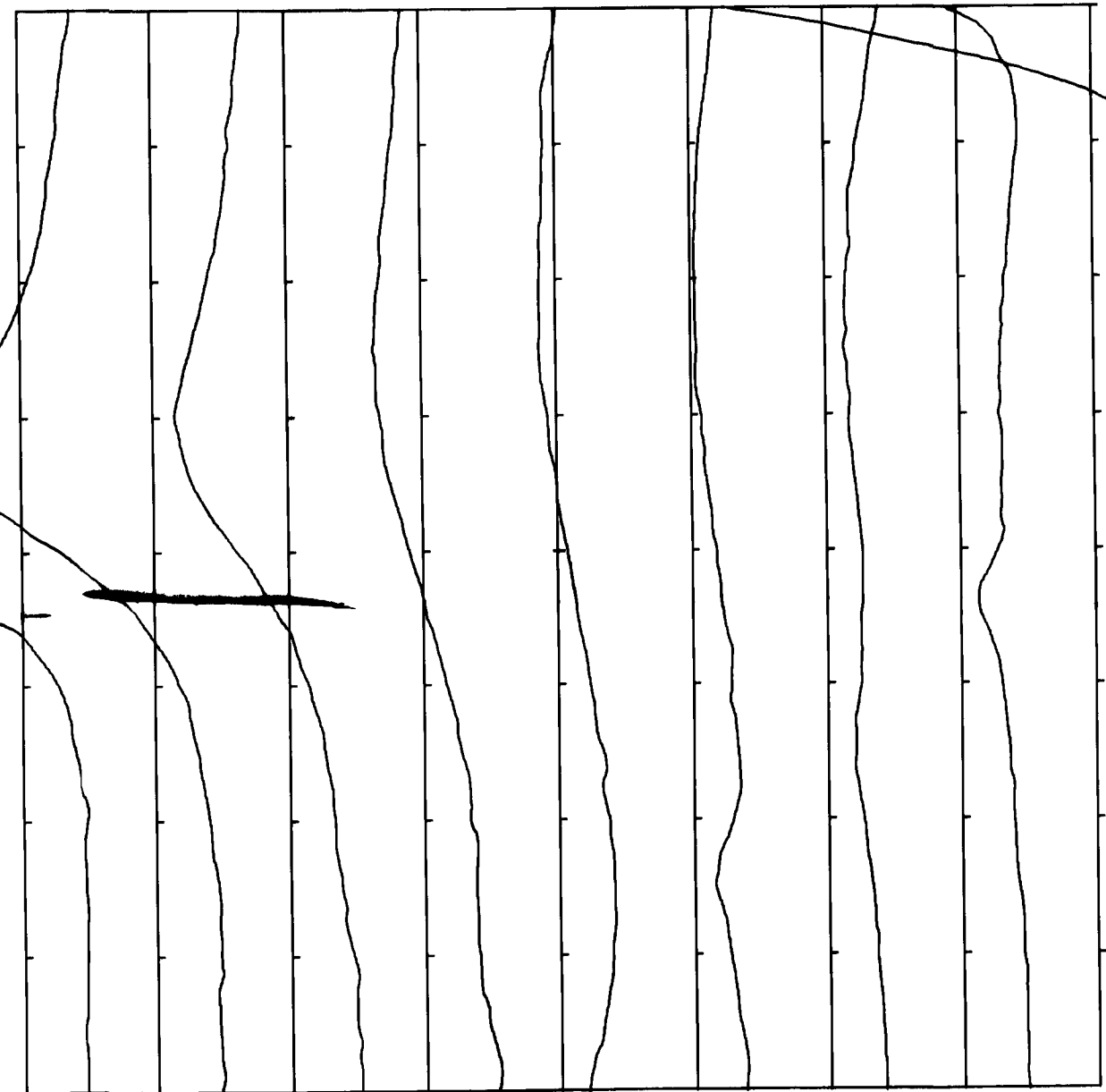




900W
—
800W
—
700W
—
600W
—
500W
—
400W
—
300W
—
200W
—
100W

BASELINE 0+00

TIELINE 8+00S



Duff 95-02
TFM

GRID DUFF 95-02



Instrument	: DMNI
Field	: TOTAL
Datum	: 59000.0 nT
Contour Interval	:
Profile Scale	: 200 nT / Cm
Conductor Axis	:

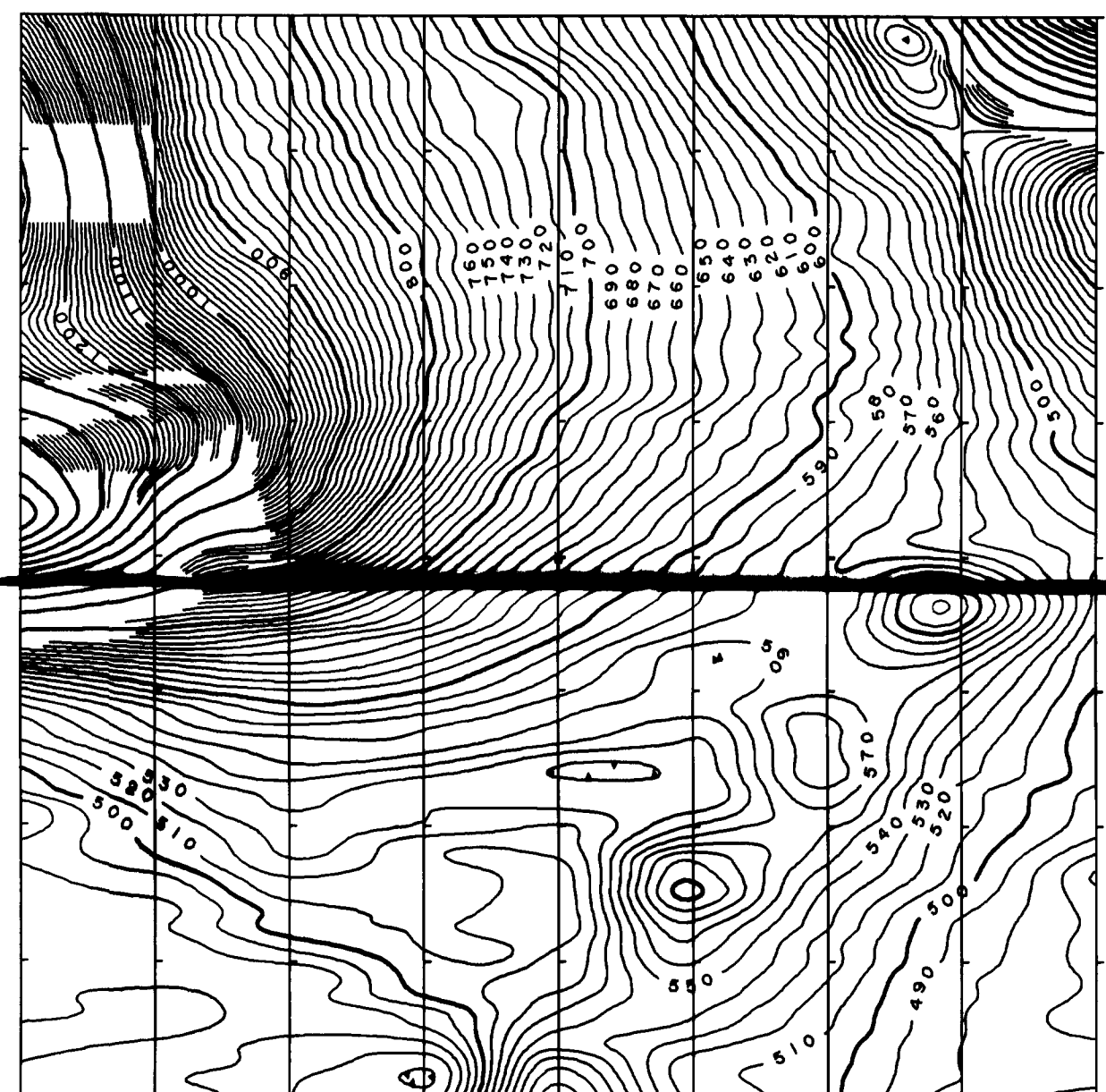
FALCONBRIDGE LTD.	
MAGNETOMETER SURVEY	
PROJECT: MANN BELT PROJECT # : 8269	
BASELINE AZIMUTH : 90 Deg.	
SCALE = 1 : 5000	DATE : 9/11/95
SURVEY BY : NWG	NTS : 42 A/14
NORTHWEST GEOPHYSICS LTD.	





900W
800W
700W
600W
500W
400W
300W
200W
100W

BASELINE 0+00



TIE LINE 8+00S

Duff 95-02

GRID DUFF 95-02



Instrument : OMNI
Field : TOTAL
Datum : 59000.0 nT

Contour Interval : 10.0 mT

Conductor Axis :

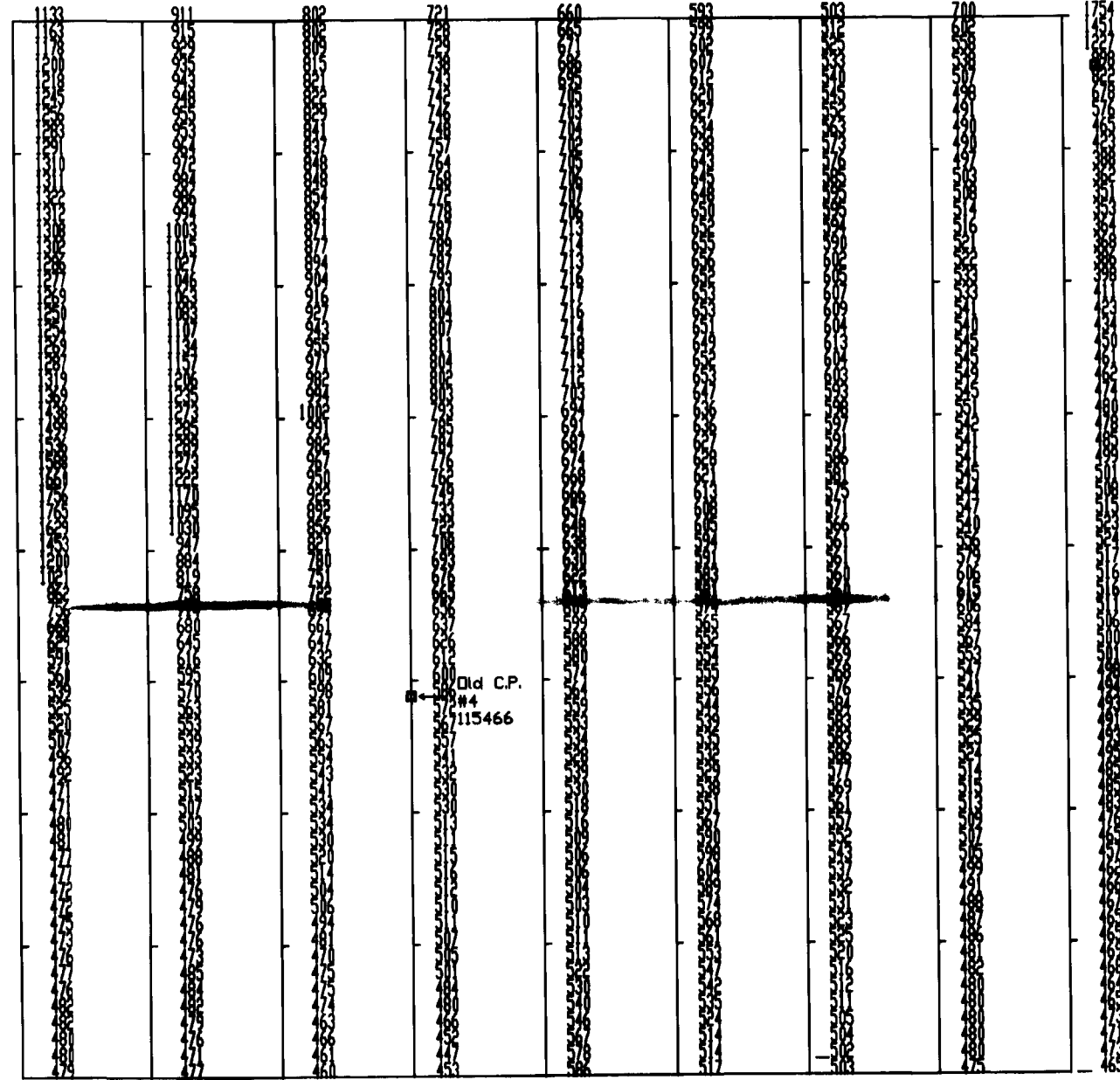
FALCONBRIDGE LTD.	
MAGNETOMETER SURVEY	
PROJECT: MANN BELT PROJECT # : 8269	
BASELINE AZIMUTH : 90 Deg.	
SCALE = 1 : 5000	DATE : 9/11/95
SURVEY BY : NVG	NTS : 42 A/14
NORTHWEST GEOPHYSICS LTD.	





900W
800W
700W
600W
500W
400W
300W
200W
100W

BASELINE 0+00



TIELINE 8+00S

Duff 95-02

GRID DUFF 95-02



Instrument : DMNI
Field : TOTAL
Datum : 59000.0 nT

Contour Interval :

Conductor Axis :

FALCONBRIDGE LTD.	
MAGNETOMETER SURVEY	
PROJECT: MANN BELT	PROJECT #: 8269
BASELINE AZIMUTH : 90 Deg.	
SCALE = 1 : 5000	DATE : 9/11/95
SURVEY BY : NVG	NTS : 42 A/14
NORTHWEST GEOPHYSICS LTD.	

