GEOPHYSICAL REPORT

ON THE

MARION/GENOA TOWNSHIP

EAST DETAILED GRID PROPERTY

FOR

FALCONBRIDGE LIMITED

BY: R.J. Meikle

Rayan Exploration Ltd.

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INTRODUCTION

This report deals with the results and parameters used to carry out a Horizontal Loop Electromagnetic and Proton Magnetometer Survey for Falconbridge Ltd. on the Genoa/Marion Township property, Porcupine Mining Division, Ontario. A geophysical interpretation is included based solely on the geophysical results. Correlation with the geological mapping program and other information will be done by Falconbridge personnel. The surveys were carried out by Rayan Exploration on a contract basis for Falconbridge Limited.

LOCATION AND ACCESS

The property is located approximately 47km NE of the village of Sultan, Ontario. More specifically, the property lies in the NTS 410/NE sheet called the Ridout Sheet on the Ministry of Natural Resources Map-1:100,000 scale, centered approximately 2km west of Rush Lake. The property straddles the N.S. boundary between Marion and Genoa Townships in the Porcupine Mining Division, Ontario (see Fig 1).

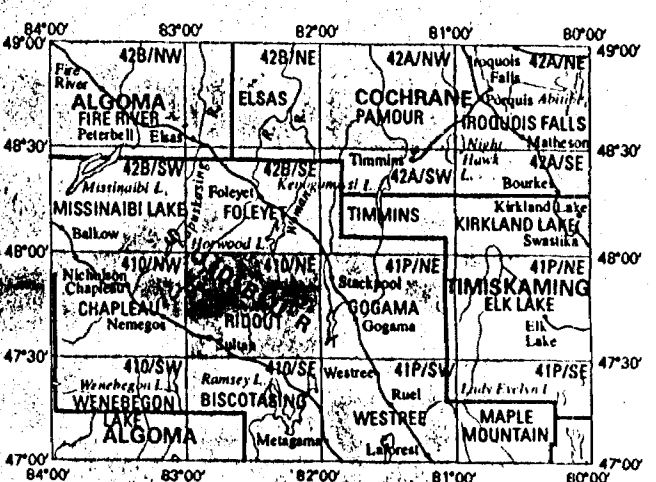
The property can be accessed in several different ways. For the current survey, access was by Hwy 101 West, approximately 55km west of Timmins, Ontario to the Kenogaming Logging Road, S-SW on this gravel road for approximately 47km at which point you are at the southern limits of Mallette's Lumber cutting with a 900m walk to the grid on a flagged trail. Access to the extreme west end of the grid was by float plane to Stake Lake.

Alternate access to the property is via Hwy 101 west from Timmins to Hwy 144 and south on this Hwy to the Shiningtree turn off. At this point a gravel resource road is taken west to approximately 25km before the village of Sultan. At this point a logging road goes north for approximately 35km north to the southwestern corner of Rush Lake in Mallard Township. A boat is required to go 9km north on Rush Lake to the NW corner where a trail has been flagged west to the grid.

N.T.S. 41O/NE

RIDOUT

PROVINCIAL SERIES



Index to adjoining maps of the 1:100 000 series

1:100 000

1 0 1 2 3 4 5 6 7 8 9

One centimetre represents one kilometre

PERSONNEL

The following personnel were directly involved with the project in July-August, 1992:

R.J. Meikle	Timmins, Ontario
Ted Anderson.....	Hanmer, Ontario
Wayne Pearson.....	Timmins, Ontario
Ed Brunet.....	Timmins, Ontario

CLAIM STATUS

The following 17 contiguous unpattened mining claims were covered by the current survey. The ones with an asterix beside them were only partly covered.

CLAIM #	TOWNSHIP	MINING DIVISION
583866*	Gena/Marion	Porcupine
583867*	"	Porcupine
583868*	"	Porcupine
583869*	"	Porcupine
583870	"	Porcupine
583873*	"	Porcupine
583879*	"	Porcupine
583880*	"	Porcupine
583881*	"	Porcupine
583882*	"	Porcupine
583883	"	Porcupine
583884	"	Porcupine
583885	"	Porcupine
583886	"	Porcupine
1189516	"	Porcupine
1190046*	"	Porcupine
1190047*	"	Porcupine

GEOLOGY

The property is underlain by mafic and intermediate volcanics on the north contact of a large granite intrusive which underlays the central and southern part of the grid area.

There is a predominant iron formation running parallel to and close to BL 500N. The current magnetic survey shows the iron formation appears to be discontinuous and variable in width and comprised of at least two parallel zones. This agrees with a compilation and mapping program of the area by A.M. Goodwin, Geological Report No. 38, 1965, Geology of Herman, Marion, and the Northern Part of Genoa Townships.

The property is currently being mapped in detail by Falconbridge personnel and a separate geological report will outline the property geology.

PREVIOUS WORK

The area was mapped by H.M. Bannerman (1934) and was looked at earlier by R.C. Allen (1909), and E.S. Moore (1927), primarily because of the strong "Woman River" iron formation.

Several companies have worked in the vicinity of the iron formation on the property. From "Geoscience Report 157 - Geology of the Chapleau Area, by P.C. Thurston, G.M. Siragusa, and R.P. Sage, 1957", the following companies worked in the area prior to 1977:

Central Sudbury Lead Zinc Mines Ltd.

Jefferson Mining Corp.

Mining Corp.

Luckey Creek Mining Co. Ltd.

R.J. Towsey Mining Co.

Stackpool Mining Co. Ltd.

More recently, Falconbridge has held the property for gold potential and currently, base metals. All of the above companies encountered copper, lead, zinc and magnetite in their exploration programs.

SURVEY PARAMETERS

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 Proton Precession Magnetometer

Station Interval - 10m

Line Interval - 100m,

Diurnal Correction Method - EDA Recording Base Station

Data Presentation - Magnetic Contours Maps 4055296M,4105296M (with data postings)

- 1:5000 scale
- Contour interval = 100 nano-teslas

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 respond better 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.

The Max-Min data was recorded manually and entered in to an XYZ format using Watfile. The XYZ files were processed using Geopac software. Plotting was done on a Hewlett-Packard Draftpro EXL pen plotter. A plan scale of 1:5000 was chosen with a profile scale of 1 cm = 10%. The results are presented on maps 4055296H-1777Hz and 4105296H-444Hz in the back of this report.

SURVEY RESULTS

HLEM SURVEY:

The Max-Min survey outlined several conductors labelled A-H inclusive on the two conductor axis maps, this report. The entire grid is remarkably non-conductive with the exception of a known strong iron formation along BL 5000N, and three one line conductors (F,G,H). The iron formation appears to pinch and swell in conductivity along the strike. There are at least two parallel zones observed approximately 20-30 meters apart. Resolution of the iron formation is impossible from the current survey because of incomplete coverage on the north flank. However, an attempt has been made to draw on the conductor axis with some liberty taken in interpolation. Thus, conductors A,B,C,D,E are all believed to be associated with the iron formation. This is by no means substantiated and correlation with the current geological mapping program should resolve this as there is an abundance of outcrop and numerous old trenches in the area. Conductor "E" is said to be associated with a PbS, ZnS showing (personal communication with

Falconbridge personnel).

The remaining conductors (F,G,H) are one line only responses. All three are quite conductive and appear less than 10m wide.

The following table summarizes the conductors found with an interpretation of conductivity, width and depth. Note that it was not attempted at some locations due to incomplete coverage and poor horizontal resolution of parallel zones.

CONDUCTOR	LOCATION(GRID)	WIDTH(m)	DEPTH(m)	CONDUCTIVITY(mhos)	REMARKS
"A"	13700E, 4920N	?	?	?	inc. cov.
	13800E, 4920N	?	?	?	inc. cov.
	13900E, 4930N	?	?	?	inc. cov.
	14000E, 4940N	?	?	?	inc. cov.
"B"	13500E, 4820N	<10	35	>60	poss paral zones
	13600E, 4840N	?	?	>40	poss paral zones
	13700E, 4840N	2 zones	?	>40	poss paral zones
	13800E, 4860N	2 zones	?	>40	poss paral zones
	13900E, 4880N	2 zones	?	moderate	incomplete cover
	14000E, 4900N			moderate	incomplete cover
	14100E, 4920N	2 zones	?	moderate	incomplete cover
	14200E, 4920N	2 zones	?	moderate	incomplete cover
"c"	14400E, 4920N			>40	incomplete cover
	14500E, 4920N			>40	incomplete cover
	14600E, 4940N			>40	incomplete cover
"D"	16600E, 4990N	?	?	>40	incomplete cover
	16800E, 5010N	?	?	>40	incomplete cover
"E"	16600E, 4960N	?	?	>40	incomplete cover
	16800E, 4950N	?	?	>40	incomplete cover
	16900E, ?	?	?	>40	incomplete cover
	17000E, ?	?	?	>40	incomplete cover
	17100E, ?	?	?	>40	incomplete cover
	17200E, ?	?	?	>40	incomplete cover
"F"	17300E, 4890N	<10m	<33m	90	one line response
"G"	17000E, 4790N	<10m	<20m	70	one line response
"H"	16600E, 4400N	narrow	<40m	60	one line response

It should be noted that the above interpretation is very unreliable due to the incomplete coverage on the north flank of the anomalies with the exception of conductors "F,G,H". Also the horizontal resolution with the 100m cable separation used was not good enough to resolve the suspected parallel conductors.

CONDUCTOR A:
- has a coincident magnetic response of up to 13000nT above background
- it is open on the east end where it appears to strike north off the grid
- strongly conductive but incomplete survey coverage to assess location etc.

CONDUCTOR B:
- has a coincident magnetic response of up to 16000nT above background
- this conductor is open to the west of the grid
- to the east it appears to be terminated between 14200E and 14300E and seems to continue on 14400E where it is labelled "Conductor C"
- highly conductive, possibly 2 parallel zones, resolution with 100m cable not good enough

CONDUCTOR C:
- probably a continuation of "B"
- same characteristics as "B"
- again coverage on north flank is incomplete but the conductivity is quite high
- starts on L14400 and strikes north off grid at 1460E

CONDUCTOR D: - is probably a continuation of "B,C"
- again there is incomplete coverage but it appears that the conductor has a coincident magnetic response and is highly conductive
- it is open to the west and east

CONDUCTOR E: - has a coincident magnetic response of up to 28000nT above background
- is parallel to and 30 - 40 meters south of "D"
- this conductor is said to be coincident with a Pb,Zn showing on L16800E as per Falconbridge personnel. A stacked profile of L168000E is included to cover the area of the showing.

CONDUCTOR F: - this is a one line, highly conductive feature which sits between two magnetic highs and does not appear to be coincident

CONDUCTOR G: - also a one line response, highly conductive,
- it sits on the south flank of the magnetic high situated just south of conductor "F".

CONDUCTOR H: - also a one line response
- has coincident magnetic high 2-3000nT above background

MAGNETOMETER RESULTS:

The magnetometer survey outlined several highly magnetic trends, the most predominant being the "Woman River Iron Formation" which undulates on or near the northern edge of the grid. This feature is rather continuous with a pronounced pinching and swelling along strike both in width and magnetic susceptibility. There appears to be some parallel banding or zoning within the unit. As mentioned under HLEM results there is conductivity associated with most of the strike length.

The second most predominant magnetic feature is a 20-30m wide magnetic high running across the grid approximately 200m south of the above mentioned iron formation. This feature appears to either truncate in the vicinity of 16500E or have a 90 degree bend to the south. The magnetic susceptibility and characteristics of this EW structure appear to be quite similar to the N-S part along L16500, 16600E. While not quite as magnetic as the above iron formation it appears to be a sub parallel iron formation. However, Falconbridge personnel have found this feature to be coincident with a mafic volcanic unit. Conductor "G" is situated on the NE corner of the nose fold proposed above.

A third magnetic high runs grid N-S along 17400E in the SE corner of the grid. It has the signature of a dike but should be ground checked to verify this. It's in an area that is presumed to be underlain by a granitic intrusive.

Two weaker grid N-S magnetic features were observed along the southern parts of L17000E and L16800E.

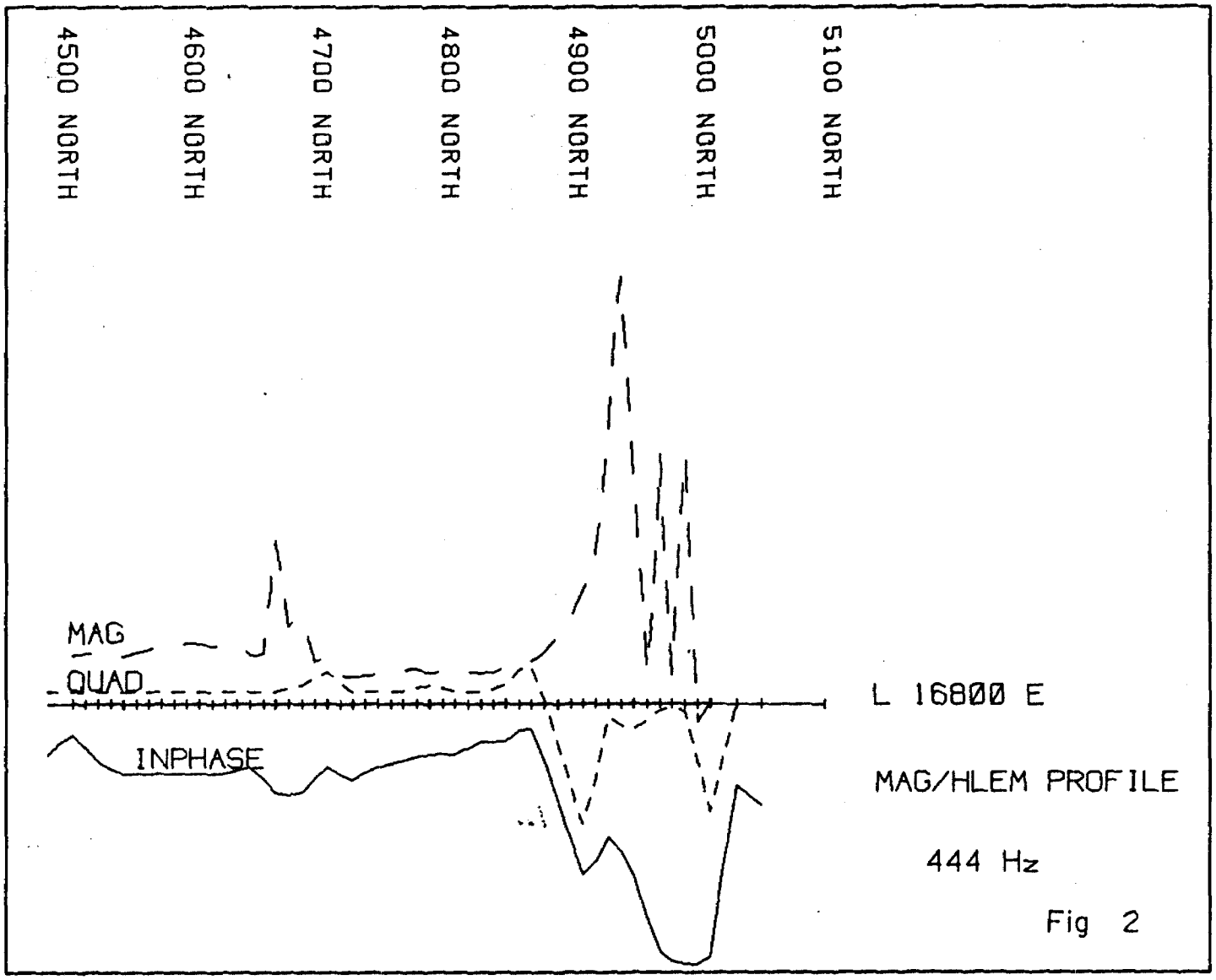

4500 NORTH
4600 NORTH
4700 NORTH
4800 NORTH
4900 NORTH
5000 NORTH
5100 NORTH
MAG
QUAD
INPHASE
L 16800 E
MAG/HLEM PROFILE
444 Hz

Fig 2

CONCLUSIONS AND RECOMMENDATIONS

The survey outlined several strongly conductive zones as well as two highly magnetic features. It is assumed by the author that the "Woman River Iron Formation" is not of primary importance for a base metal occurrence because the grid does not cover the unit on the north flank. Using this assumption, conductors A,B,C,D would not be a high priority as they are coincident with the iron formation. However, conductor "E" is thought to be coincident with a base metal showing and is not unlike the other conductors in geophysical similarities. If conductor "E" is indeed part of the iron formation then one could not rule out conductivity elsewhere along strike hosting base metal occurrences. At this point a thorough geological examination of the "showing" is needed to correlate with the geophysical results and further testing of A,B,C,D would depend on the results.

The three one line conductors, (F,G,H) should be examined on the ground and if not possible to explain they should be trenched and or drilled.

There are some noteworthy structural features outlined by the magnetometer survey. One such feature is a grid NE striking mag low which runs through the proposed nose fold at approximately 16400E/4700N. Because of the high horizontal magnetic gradient in the area, this break is not clearly evident on the magnetic contour maps but shows up quite well on the coloured magnetic image map. (not included in this report)

The other "structural break" is parallel to the above and runs from approximately 13500E/4200N - 15100E/5000N. Again it shows up better on the image map.

After compilation of all data, a closer look at the N-S part of the magnetic anomaly running along 16500E should be taken with some thought to running some detailed crosslines for better coupling with the zone.

CERTIFICATION

I, Raymond Joseph Meikle of Timmins, Ontario hereby certify that:

1. I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario, obtained in May 1975.

2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Germany and Chile.

3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries, .S. Middleton Exploration Services Ltd., self employed 1979-1985 (Rayan Exploration Ltd.) and currently with 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 1990.

5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from Falconbridge Limited.

Dated this 3rd day of September, 1992

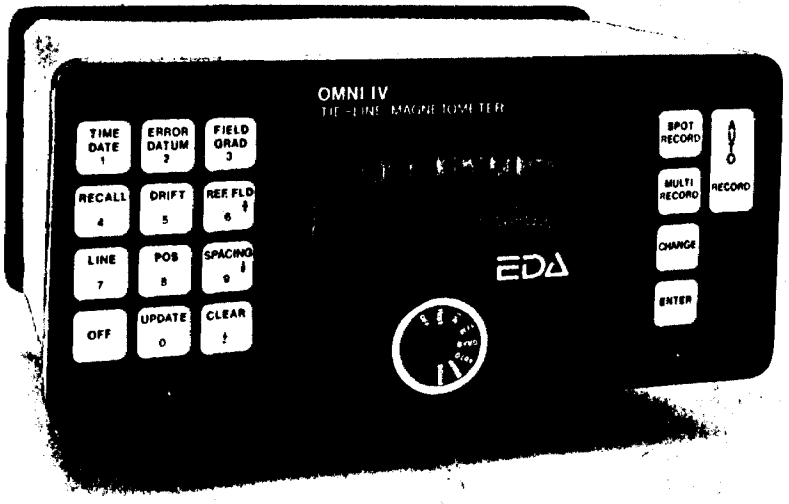
at Timmins, Ontario.

R.J. Meikle

APPENDIX A

OMNI IV "Tie-Line" Magnetometer

EDA



OMNI IV's Major Benefits

- Four Magnetometers in One
- Self Correcting for Diurnal Variations
- Reduced Instrumentation Requirements
- 25% Weight Reduction
- User Friendly Keypad Operation
- Universal Computer Interface
- Comprehensive Software Packages

Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from –40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	–40°C to +55°C; 0–100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

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

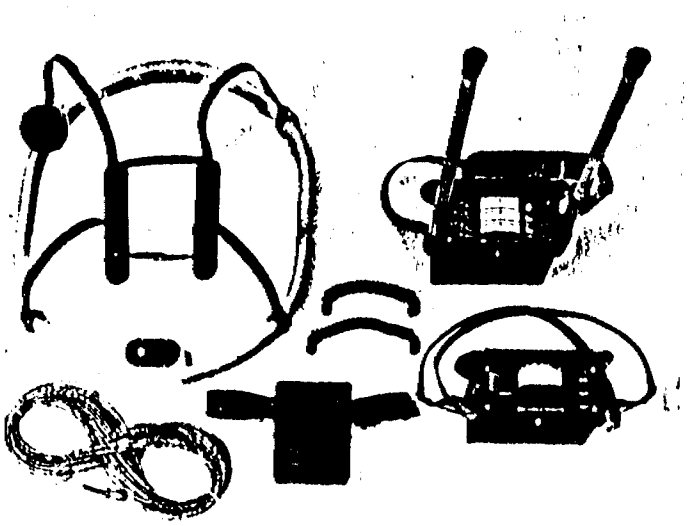
In U.S.A.
E D A Instruments Inc
5151 Ward Road
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422 9112

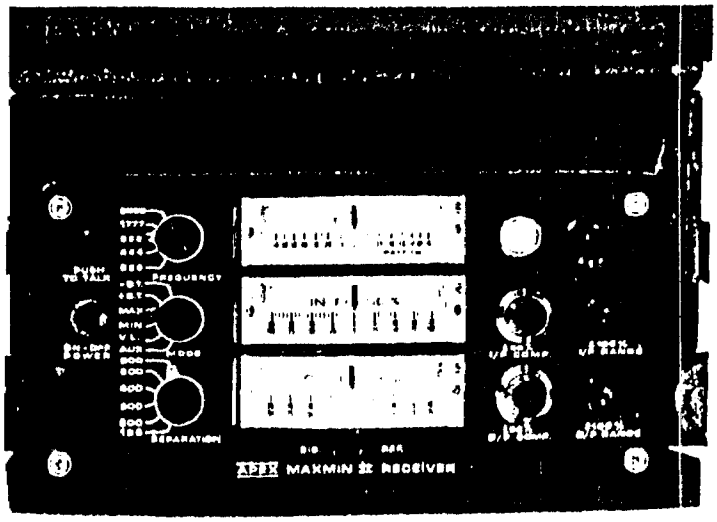
Printed in Canada

APPENDIX B

APEX MAXMIN II PORTABLE EM

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





SPECIFICATIONS:

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

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: 0.25% to 0.5%; Tilt: 1%.

Repeatability: ±0.25% to ±1% normally, depending on conditions, frequencies and coil separation used.

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

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

Transmitter Batteries: 12V 6Ah Gel-type rechargeable battery. (Charger supplied).

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 NORDVIK TOR

Ontario

41016SE0004 2.14747 GENOA

900

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

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

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

November 17, 1992

Our File: 2.14747
Transaction #W9260.119

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

Dear Sir/Madam:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS P583866 ET AL. IN MARION AND GENOA TOWNSHIPS

The assessment work credits for the Geophysical Surveys filed under Section 14 of the Mining Act Regulations have been approved as originally filed.

The approval date is November 16, 1992.

Please indicate this approval on your records.

Yours sincerely,

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

LJ/jl
Enclosures:

cc: Resident Geologist
Timmins, Ontario

Assessment Files Office
Toronto, Ontario

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9260.00119

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.

2.14747

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 Avenue, Timmins, ON, P4N 7H9		Telephone No.: (705) 267-1188
Mining Division: Porcupine	Township/Area: Marion and Genoa	M or G Plan No.: G-1131, G-1174
Dates Work Performed — From: ~~May 22, 1992~~ July 21/92 JA	To: August 3, 1992	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	Line Cutting and Ground Geophysics (Mag & HLEM)
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECEIVED
OCT 07 1992
MINING LANDS BRANCH

RECORDED
SEP 11 1992
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs $ 19,947.00

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
R.J. Meikle Rayan Exploration Ltd.	676 Murray Street, Timmins, ON, P4N 7B2
Georgex Exploration	353 Railway Street, Timmins, ON, P4N 2P4
J. Aultman Falconbridge Limited	P.O. Box 1140, 571 Moneta Avenue, Timmins, ON, 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 Holder or Agent (Signature)

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: Jim Aultman, c/o Falconbirdge Limited, P.O. Box 1140, 571 Moneta Avenue, Timmins, ON, P4N 7H9

Telepone No.	Date	Certified By (Signature)
(705) 267-1188	September 11, 1992	

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp: Mining Division
* 19,947.00	SEPT. 11/92		RECEIVED SEP 11 1992 @11:30 am BC
	Deemed Approval Date: DEC 10/92	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
	P-583862	1	Ø	$800.00	Ø	Ø
	P-583863	1	Ø	$800.00	Ø	Ø
	P-583864	1	Ø	$800.00	Ø	Ø
	P-583865	1	Ø	$800.00	Ø	Ø
	P-583866	1	$750.00	$800.00	Ø	Ø
	P-583867	1	$818.00	$800.00	$18.00	Ø
	P-583868	1	$1062.00	$800.00	$262.00	Ø
	P-583869	1	$1128.00	$800.00	$328.00	Ø
	P-583870	1	$834.00	$800.00	$34.00	Ø
	P-583871	1	Ø	$800.00	Ø	Ø
	P-583872	1	Ø	$800.00	Ø	Ø
	P-583873	1	$1511.00	$800.00	$711.00	Ø
	P-583876	1	Ø	$800.00	Ø	Ø
	P-583877	1	Ø	$800.00	Ø	Ø
	P-583878	1	Ø	$800.00	Ø	Ø
	P-583879	1	$160.00	$800.00	Ø	Ø
Le[illegible]	P-583880	1	$362.00	Ø	$362.00	Ø
	———		———	———	———	———
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0241 (03/91)

CONTINUED ON NEXT PAGE....

RECEIVED
OCT 07 1992
MINING LANDS BR.

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

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

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

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

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature: [signature] Date: Sept 11/92

Numéro de rapport sur les travaux exécutés pour l'affectation de la réserve	Numéro de claim	Nombre d'unités	Valeur des travaux d'évaluation exécutés sur ce claim	Valeur affectée à ce claim	Valeur transférée de ce claim	Réserve : travaux à réclamer à une date ultérieure
Lease	P-583881	1	$692.00	ø	$692.00	
	P-583882	1	$399.00	$800.00	ø	
	P-583883	1	$787.00	$800.00	ø	
Lease	P-583884	1	$1621.00	ø	$1621.00	
Lease	P-583885	1	$1054.00	ø	$1054.00	
	P-583886	1	$957.00	$800.00	$157.00	
	P-1189516	4	$3456.00	ø	$3065.00	$391.00
	P-1190046	2	$412.00	ø		$412.00
	P-1190047	16	$3944.00	ø		$3944.00
	26		$19,947.00	$15,200.00	$8304.00	$4747.00
	Nombre total de claims		Valeur totale des travaux exécutés	Valeur totale des travaux qui a été affectée	Total transféré	Réserve totale

RECEIVED
OCT 07 1992
MINING LANDS BRANCH

Les crédits que vous réclamez dans le présent rapport peuvent être réduits. Afin de diminuer les conséquences défavorables de telles réductions, veuillez indiquer l'ordre dans lequel vous désirez qu'elles soient appliquées à vos claims. Veuillez cocher (✓) l'une des options suivantes :

1. ☐ Les crédits doivent être réduits en commençant par le dernier claim sur la liste.
2. ☐ Les crédits doivent être réduits également entre tous les claims figurant dans le présent rapport.
3. ☐ Les crédits doivent être réduits selon l'ordre donné en annexe.

Si vous n'avez pas choisi d'option, la première sera appliquée.

Note 1 : Examples d'intérêts bénéficiaires : cessions non enregistrées, ententes sur des options, protocoles d'entente, etc. relatifs aux claims.

Note 2: Si des travaux ont été exécutés sur un terrain faisant l'objet de lettres patentes ou d'un bail, veuillez remplir ce qui suit:

Je certifie que le titulaire enregistré possédait un intérêt bénéficiaire sur le terrain faisant l'objet de lettres patentes ou d'un bail, au moment où les travaux ont été exécutés.

Signature

Date

0241 (05/91)

Ontario

Northern Development and Mines

Ministère du Développement du Nord et des mines

for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9260.00119

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	Labour3 days @ Main-d'oeuvre $200/day		
	Field Supervision Supervision sur le terrain	$600	$600
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type Georgex, Line Cutting	$9500	
	Rayan Exploration Geophysics	$7365	
			$16,865
Supplies Used Fournitures utilisées	Type		
	RECORDED		
	SEP 11 1992		
Equipment Rental Location de matériel	Type Receipt		
	Total Direct Costs Total des coûts directs		$17,465

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 (Ratcliff) Fixed Wing Flight	$385	
	(Huisson) Helicopter Flight	$2097	
	RECEIVED		$2482
Food and Lodging Nourriture et hébergement	OCT 07 1992		
Mobilization and Demobilization Mobilisation et démobilisation	MINING LANDS BRANCH		
	Sub Total of Indirect Costs Total partiel des coûts indirects		$2482
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		$2482
	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)		$19,947

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

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

Filing Discounts

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

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

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

Valeur totale du crédit d'évaluation	Évaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

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

that as a Agent of Falconbridge (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
	September 11, 1992

0212 (04/91)

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

LAND TITLES DIVISION OF SUDBURY — PARCEL 1656

RECENTLY: — ESTATE: FEE SIMPLE — TITLE: ABSOLUTE — SECTION L.S.W.S

SUBJECT TO THE RESERVATIONS, LIMITATIONS, PROVISOES AND CONDITIONS EXPRESSED IN THE GRANT FROM THE CROWN AS VARIED BY STATUTE THE OVERRIDING PROVISIONS OF THE LAND TITLES ACT AND OF ANY OTHER ACT AND THE ENCUMBRANCES RECORDED BELOW

SUBJECT TO SUBSEQUENT ENTRIES THIS PARCEL COMPRISES THE FOLLOWING LAND

LEGAL DESCRIPTION:

Situate in the Township of Genoa, in the District of Sudbury

BEING COMPOSED of those parts of the said township, designated as PARTS 1, 2, 3 and 4 on a plan and field notes deposited in the Land Registry Office at Sudbury as PLAN 53R-13460, comprising MINING CLAIMS P 583880, P 583881, P 583885 and P 583884 respectively, containing by admeasurement 62.670 hectares, be the same more or less.

TOGETHER WITH all and singular easements, advantages and appurtances, which are now or at any time during the term hereby granted, may be held, occupied or enjoyed therewith for the purpose of mining upon and under the said lands; and also with full power, subject to the reservations hereinafter contained, to the said Lessee and his contractors, agents and workmen to dig, sink, drive, bore, make and use excavations, pits, shafts, levels, drifts, tunnels, wells, water-courses and other works for winning, raising and removing the mines, ores and minerals in or on or under the said lands; and to make and construct on the said lands, races, drains, dams, reservoirs, roads, tramways and railways; and to erect on the said lands all buildings, furnaces, roasting-beds, engines, pumps, machinery and appliances necessary for the purpose of winning, raising treating and reducing the mines, ores and minerals in or on or under the said lands and for effectually carrying on all such mining and reducing works.

SAVING, EXCEPTING and RESERVING unto Us, Our Heirs and Successors, ten per cent of the surface rights of the Land hereby demised for roads and the right to lay out and construct roads where the Crown or its officers may deem proper.

SAVING, EXCEPTING and RESERVING the surface rights on and over any public or colonization roads or any highway crossing the Land hereby demised at the date of these Lease Letters.

SAVING, EXCEPTING and RESERVING all deposits of sand, gravel and peat together with the right of the Crown or its designates to enter and remove same without compensation.

SAVING, EXCEPTING and RESERVING all timber and trees standing, being or hereafter found growing upon the Land hereby leased, and the right to enter upon such Land to carry on forestry, to cut and remove any timber or trees thereon, and to make necessary roads for such purposes.

SAVING, EXCEPTING and RESERVING the free use, passage and enjoyment of, in, over and upon all navigable waters which shall or may hereafter be found on or under or to be flowing through or upon any part of the said parcels or tracts of Land hereby demised as aforesaid and reserving also right of access to the shores of all rivers, streams and lakes for all vessels, boats and persons, together with the right to use so much of the banks thereof not exceeding one chain in depth from the high watermark as may be necessary for fishery or public purposes.

SUBJECT to the conditions and provisions in MINING LEASE 106448.

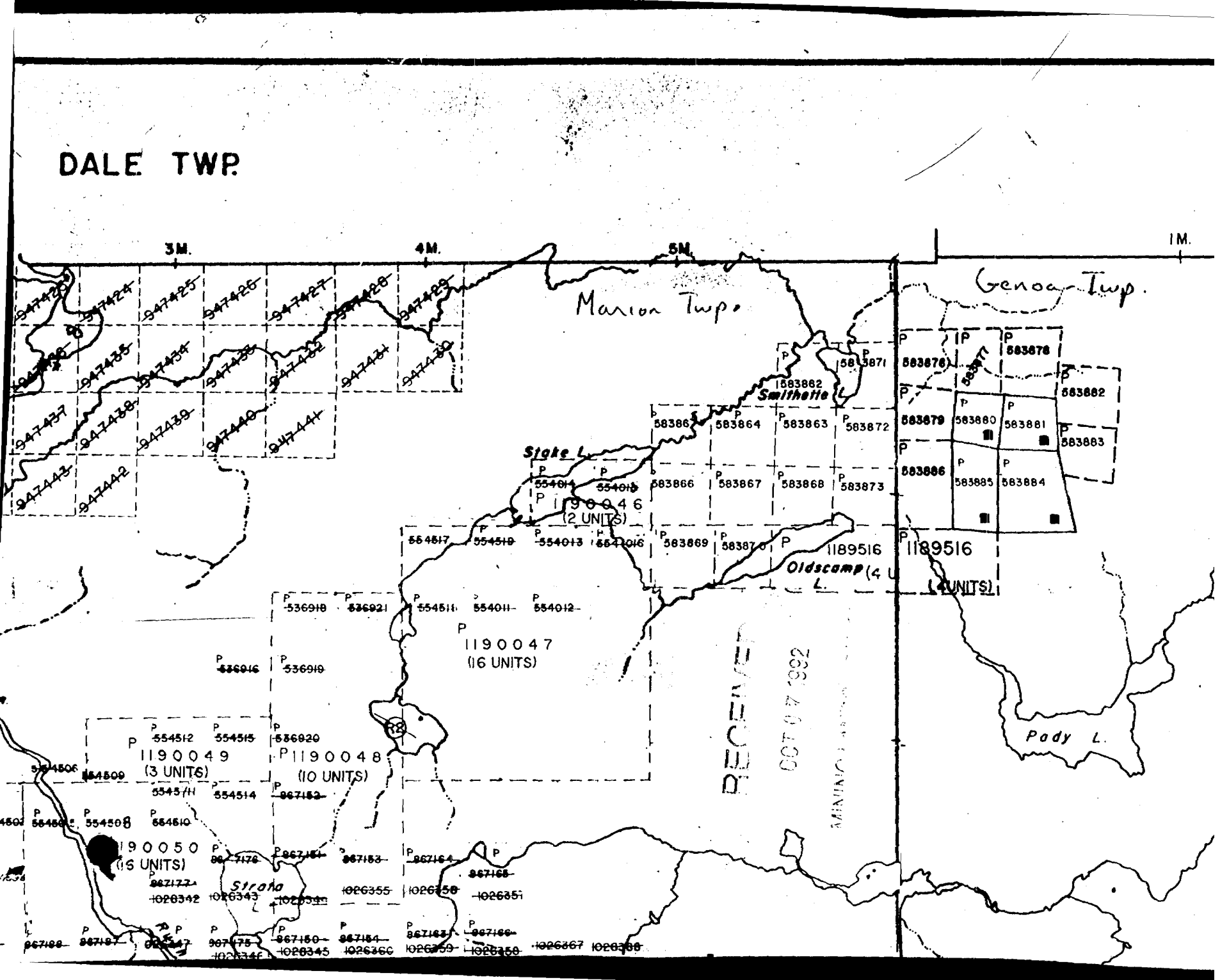
REGISTRATION NUMBER	INSTRUMENT	REGISTRATION DATE (DAY MONTH YEAR)	GRANTOR	GRANTEE (APPLICANT CAUTIONER CLAIMANT ETC.)	CONSIDERATION ETC.	LAND · REMARKS · SIGNATURE
725147	Mining Lease	92 01 24		FALCONBRIDGE LIMITED FALCONBRIDGE LIMITEE 571 Moneta Avenue, Box 1140 Timmins, Ontario P4N 7J9		A. DEPUTY LAND REGISTRAR

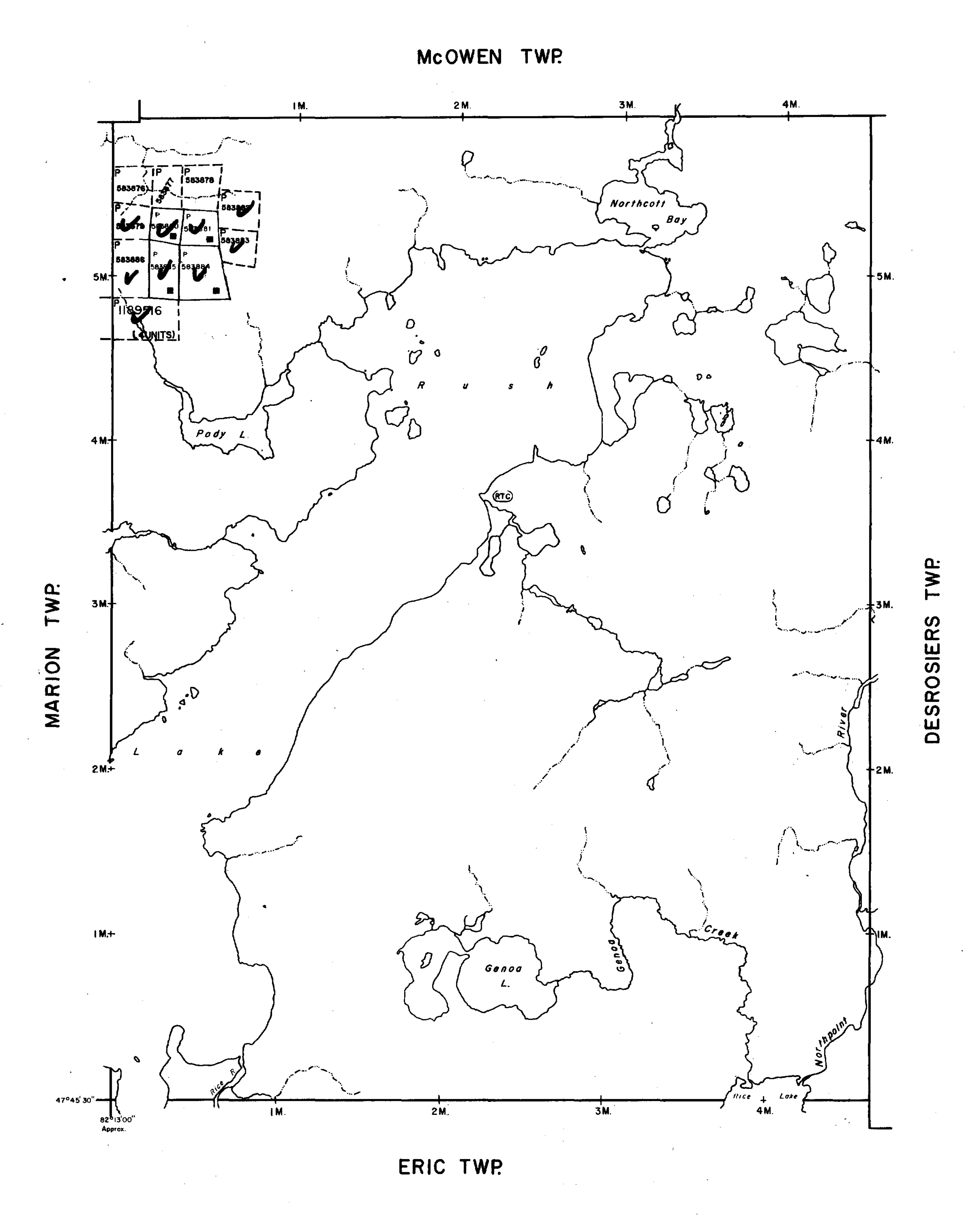
RECEIVED
OCT 0 7 1992
MINING LANDS BRANCH

I HEREBY CERTIFY THIS TO BE A TRUE COPY
OF PARCEL REGISTER 1656 L. SWS
DATED AT SUDBURY THIS 8th DAY OF September 1992 at 4:00pm

~~DEPUTY~~ LAND REGISTRAR

LAND REGISTRY OFFICE SUDBURY 53


DALE TWP.
3M.
4M.
5M.
1M.
Marion Twp.
Genoa Twp.
Smithette L.
Stake L.
Oldscamp (4) L.
Strona
Pody L.
1190046
(2 UNITS)
1190047
(16 UNITS)
1190048
(10 UNITS)
1190049
(3 UNITS)
1190050
(15 UNITS)
1189516
(4 UNITS)
82
RECEIVED
OCT 07 1982
MINING



SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 (1 KM) 2000 (2 KM)

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
L.U.P. LAND USE PERMIT	

RTC REMOTE TOURIST CAMPS

NOTES

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

LEASE, SURFACE & MINING RIGHTS ■

TOWNSHIP

GENOA

M.N.R. ADMINISTRATIVE DISTRICT

CHAPLEAU

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY

Ministry of Natural Resources

Ministry of Northern Development and Mines

Ontario

Date: REVISED FEB. 1990

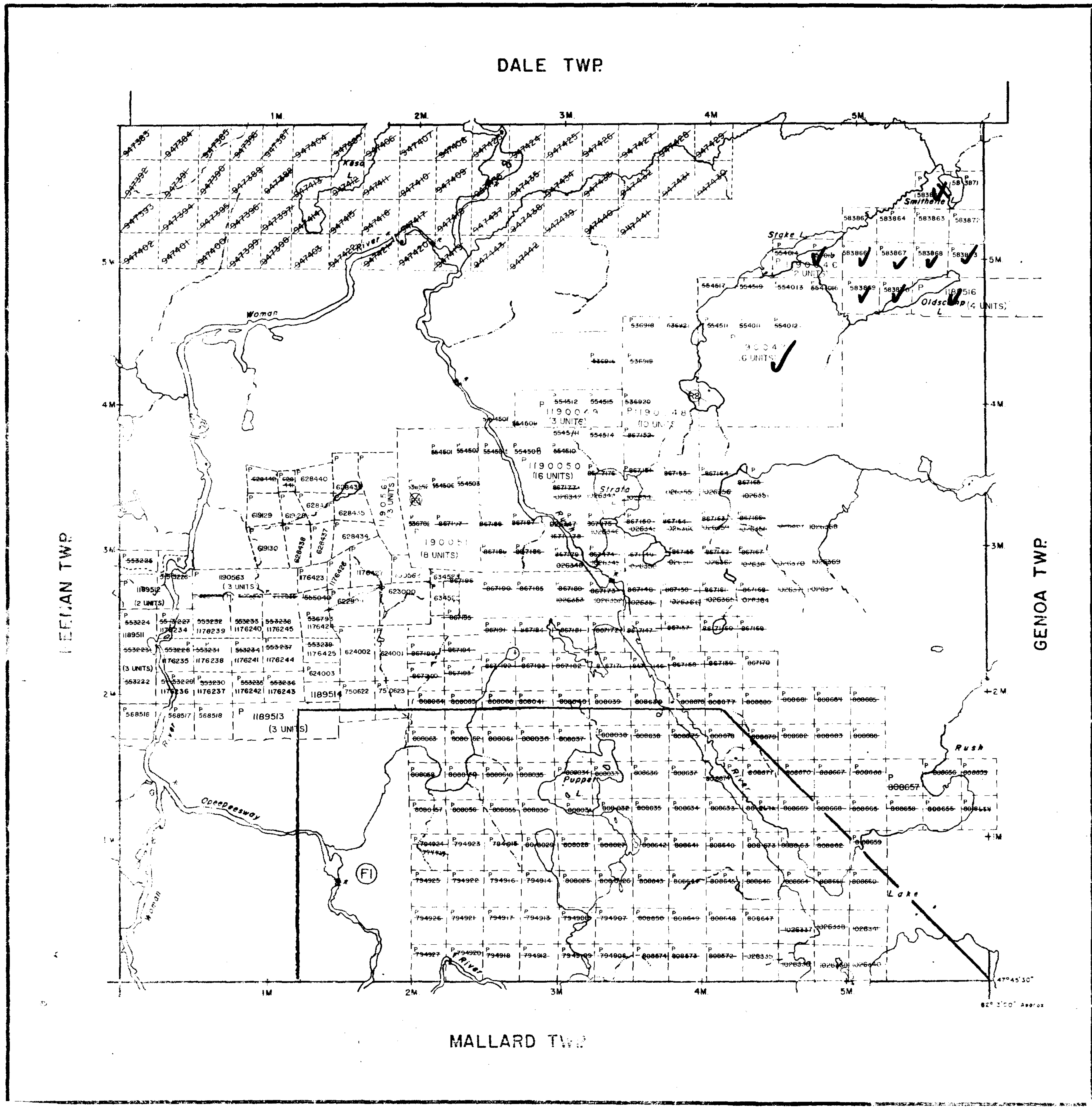
ACTIVATED AUGUST 18, 1992 BY D.C.

CHECKED BY B.B.

Number: G-1131

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

GENOA TWP.



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

~~MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING, SALE OR LEASE, SECTION 36 OF THE MINING ACT RSO 1980 ORDER NO. W-60/86~~

(R3) SURFACE AND MINING RIGHTS REOPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 36 OF THE MINING ACT RSO 1980. EFFECTIVE 90-NOV-05 AT 7 AM E.S.T. ORDER NO. O-P 6/90 NR DATED 90-OCT-22.

SCALE: 1 INCH = 40 CHAINS

~~(R) MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 36 OF THE MINING ACT RSO 1980 ORDER NO. W-58/87 NR DATED 87-NOV-18 AT 1:00 P.M.~~

FEET 0 1000 2000 4000 6000
METRES 0 200 1000 2000 (1 KM) (2 KM)

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	⚒
CANCELLED	C.
PATENTED S.R.O.	
LAND USE PERMIT	

NOTES

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

~~(R) MINING AND SURFACE RIGHTS WITHDRAWN FROM STAKING UNDER SEC. 36 ... ORDER NO. W-11/87 DATED 87-FEB-3 (P 555037 TO 039 INCL.)~~

(F1) THIS TWP. IS SUBJECT TO FOREST ACTIVITIES IN 1992/93 FURTHER INFORMATION AVAILABLE ON FILE.

(R2) MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE AND LEASE UNDER SECTION 36 OF THE MINING ACT RSO 1980 EFFECTIVE 90-NOV-05 AT 7 AM E.S.T. ORDER NO. O-P 07/90 NR DATED 90-OCT-22

TOWNSHIP

MARION

M.N.R. ADMINISTRATIVE DISTRICT

CHAPLEAU

(R) SURFACE AND MINING RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT, R.S.O. 1990. EFFECTIVE 92-MAY-03 AT 7:00 AM E.S.T. ORDER NO. O-P-1/92 NER DATED 92-APR-15

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY

Ministry of Natural Resources — Ontario

Date JULY 1956

G-1174

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

5299000mN 405000mE 410000mE 5299000mN

P 583862 P 583871 P 583876 P 583877 P 583878

P 583865 P 583864 P 583863 P 583872 P 583879 P 583880 P 583881

P 583867

P 583866 P 583873 P 583886 P 583885 P 583884

P 1190046 P 583868

P 583869 P 583870

Oldscamp Lake

P 1189516

P 1190047

P 1190049

P 1190048

5296000mN 405000mE 410000mE 5296000mN

BL 50N (075') 135E 136E 137E 138E 139E 140E 141E 142E 143E 144E 145E 146E 147E 148E 149E 150E 151E 152E 153E 154E 155E 156E 157E 158E 159E 160E 161E 162E 163E 164E 165E 166E 167E 168E

TL 45N

TL 43N

TL 40N

Symbols

CONTACTS

- Outcrop (small, observed, inferred, boulder/float)
- Geological Boundary (observed, approximate, assumed)
- Geological Boundary (gradational, geophysically inferred)
- Flow Contact (defined, approximate)

MEASUREMENTS

- Bedding with tops known (horizontal, inclined, vertical, overturned, dip unknown)
- Bedding with tops unknown (inclined, vertical, dip unknown)
- Pillow top (horizontal, inclined, vertical, overturned, dip unknown)
- Spinifex top
- Schistosity, gneissosity, cleavage or foliation (horizontal, inclined, vertical, dip unknown) (No. of ticks = generation – S1, S2, S3)
- Jointing (horizontal, inclined, vertical, dip unknown)
- Lineation (horizontal, inclined, vertical)
- Folding – defined folds S- fold, Z- fold, multiple S, multiple Z)
- Folding – undetermined type
- Fault (defined, approximate, assumed) (inclined, vertical, movement w/circle on downthrow side)
- Fault (Geophysically inferred, Lineament inferred)
- Thrust Fault (defined, approximate, assumed) (teeth indicate upthrust side)
- Shear zone
- Dyke, vein (defined, approximate, assumed)
- Anticline, Antiform (with or without plunge, overturned)
- Syncline, Synform (with or without plunge, overturned)
- Glacial striae (ice movement known, unknown) (numbers indicate relative age)
- Limit of Geological Mapping

PHYSICAL WORK

- Mineral Occurrence
- Trench (1:20,000 +, 1:5,000 –)
- Diamond Drill Hole (collar surveyed, collar located, collar unlocated)
- Overburden Drill Hole
- Mine, quarry or glory hole (active, abandoned)
- Shaft (vertical, inclined, raise, winze)
- Adit, Ramp
- Rock Dump, Tailings
- Gravel Pit (active, abandoned)

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Four wheel drive road
- Track
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Esker
- Claim Post (OLS surveyed, inspected survey, located, unlocated, witness, in water)
- Grids (current grid, old grid)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)

3855308	3905308	3955308	4005308	4055308	4105308	4155308	4205308	4255308
3855305	3905305	3955305	4005305	4055305	4105305	4155305	4205305	4255305
3855302	3905302	3955302	4005302	4055302	4105302	4155302	4205302	4255302
3855299	3905299	3955299	4005299	4055299	4105299	4155299	4205299	4255299
3855296	3905296	3955296	4005296	4055296	4105296	4155296	4205296	4255296
3855293	3905293	3955293	4005293	4055293	4105293	4155293	4205293	4255293
3855290	3905290	3955290	4005290	4055290	4105290	4155290	4205290	4255290
3855287	3905287	3955287	4005287	4055287	4105287	4155287	4205287	4255287
3855284	3905284	3955284	4005284	4055284	4105284	4155284	4205284	4255284
3855281	3905281	3955281	4005281	4055281	4105281	4155281	4205281	4255281
3855278	3905278	3955278	4005278	4055278	4105278	4155278	4205278	4255278

NEWTON BENTON HEENAN DALE MALLARD MARION McOWEN ERIC GENOA GARDHOUSE FRATER DESROSIERS

INDEX MAP 0 5 10km

UTM NORTH

ASTRONOMIC NORTH

SHEET ORIENTED UTM NORTH AZIMUTH 359°01'

2.14747

FALCONBRIDGE LIMITED

Exploration Division Timmins ONTARIO

GENOA & MARION TOWNSHIPS

GRIDS & PROPERTY MAP

NORTHEAST SHEET

TRACED:	DATE:	NTS: 41-O/16	PROJECT: 8668
DRAWN: d e l	DATE: 03/09/92	MAP No. 4055296	FILE: 4055296P
SUPERVISED: J Ashman	DATE: 01/09/92	SCALE: 1:2000 (metric)	
REVISED:	DATE:	0 50 100 150 200	

Symbols

CONTACTS

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- Geological Boundary (gradational, geophysically inferred)
- Flow Contact (defined, approximate)

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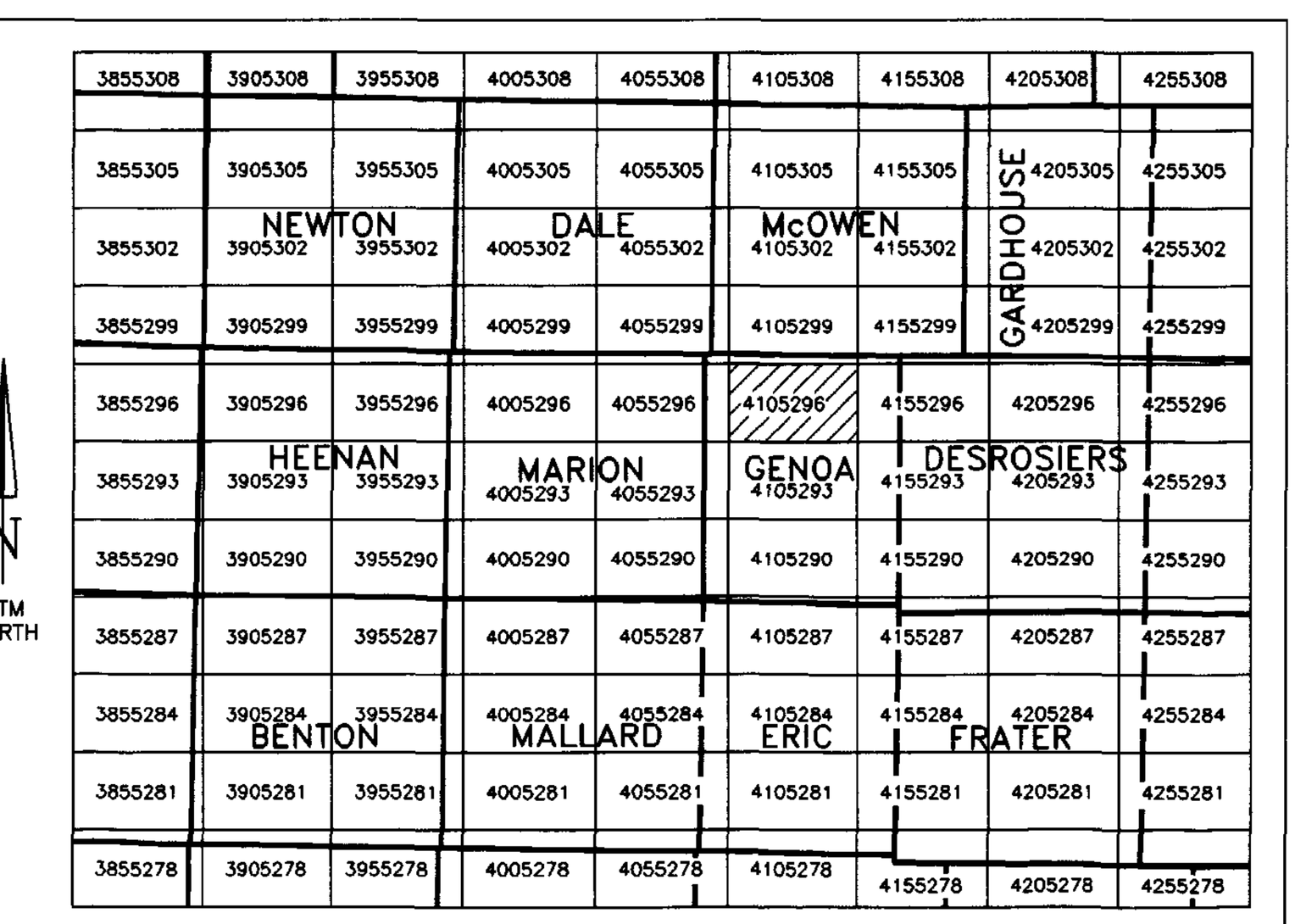
- Thrust Fault (defined, approximate, assumed) (teeth indicate upthrust side)
- Shear zone
- Dyke, vein (defined, approximate, assumed)
- Anticline, Antiform (with or without plunge, overturned)
- Syncline, Synform (with or without plunge, overturned)
- Glacial striae (ice movement known, unknown) (numbers indicate relative age)
- Limit of Geological Mapping

PHYSICAL WORK

- Mineral Occurrence
- Trench (1:20,000 +, 1:5,000 –)
- Diamond Drill Hole (collar surveyed, collar located, collar unlocated)
- Overburden Drill Hole
- Mine, quarry or glory hole (active, abandoned)
- Shaft (vertical, inclined, raise, winze)
- Adit, Ramp
- Rock Dump, Tailings
- Gravel Pit (active, abandoned)

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Four wheel drive road
- Track
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Esker
- Claim Post (OLS surveyed, inspected survey, located, unlocated, witness, in water)
- Grids (current grid, old grid)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)



INDEX MAP

ASTRONOMIC

SHEET ORIENTED UTM NORTH AZIMUTH 359°04'

2.14747

FALCONBRIDGE LIMITED

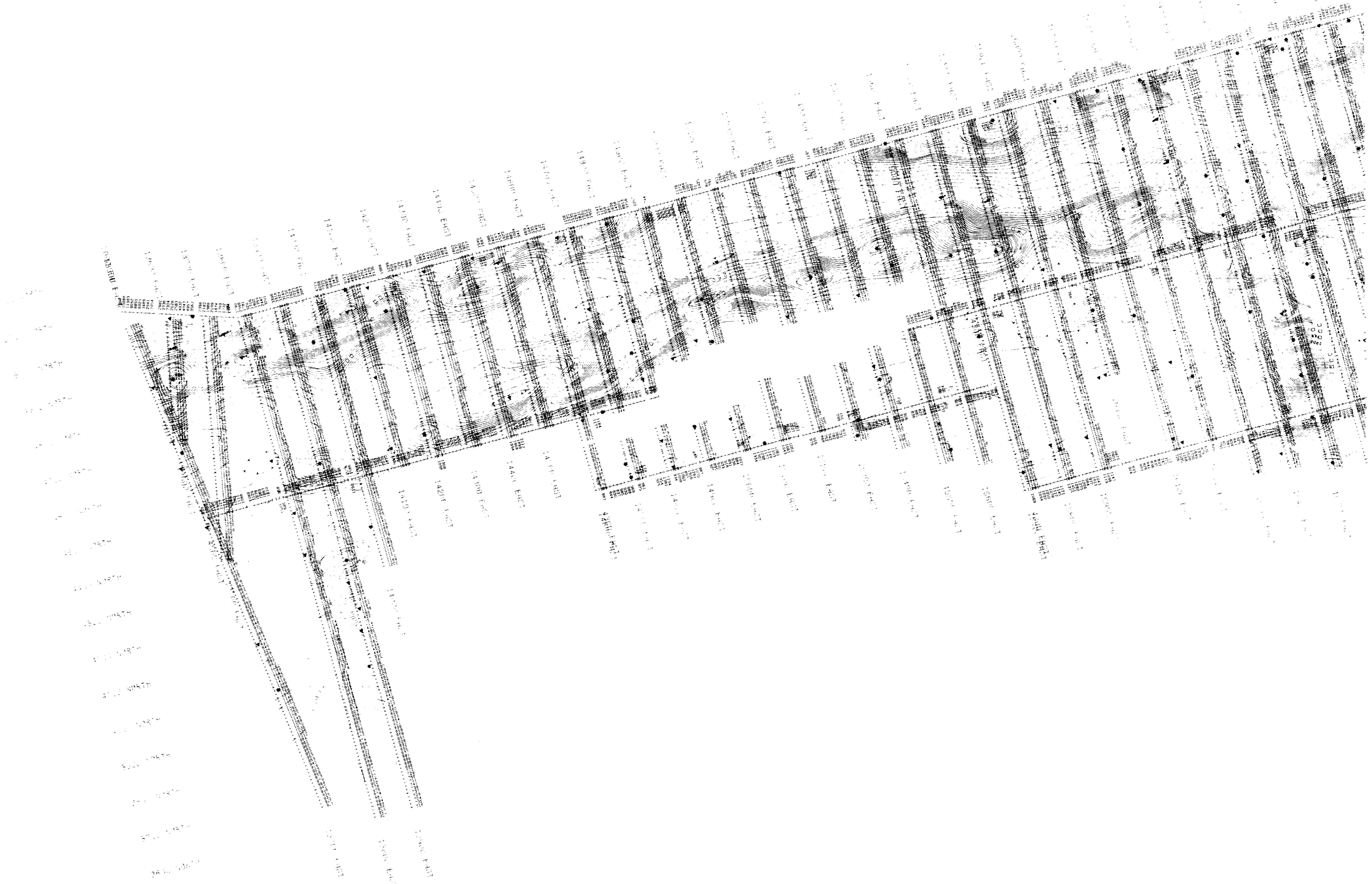
Exploration Division — Timmins ONTARIO

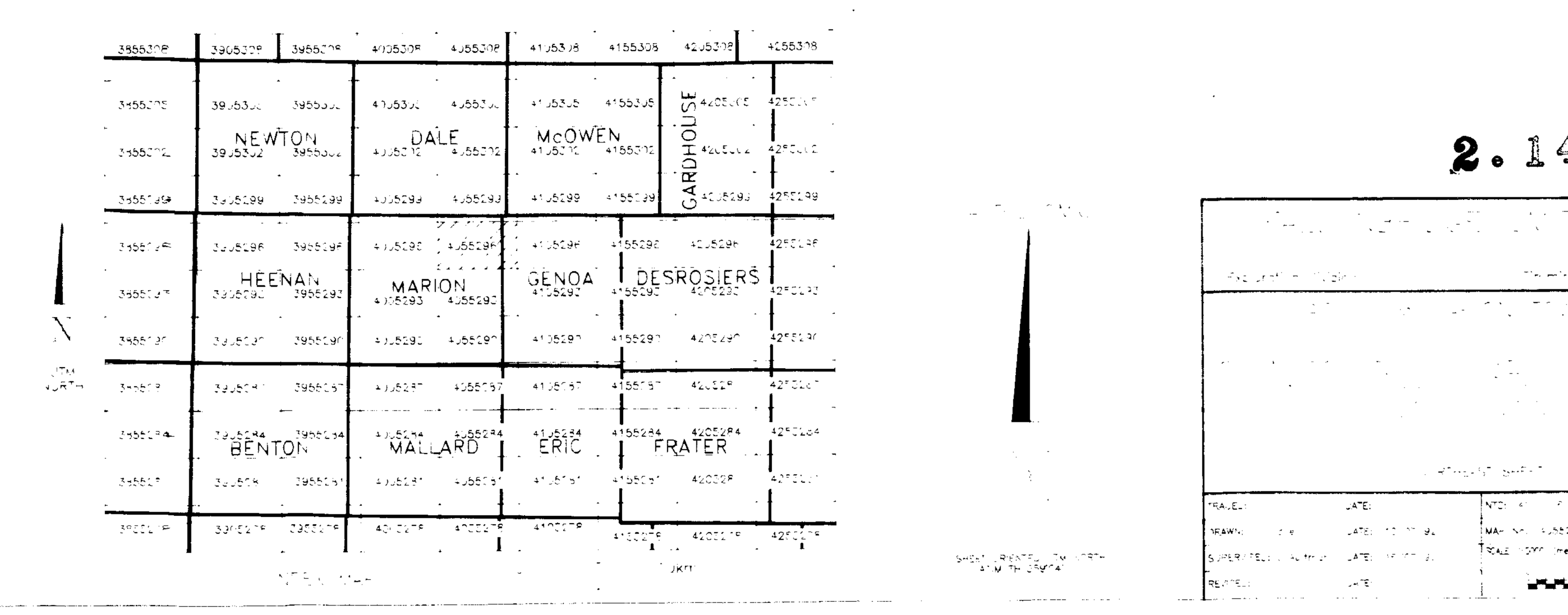
GENOA TOWNSHIP

GRIDS & PROPERTY MAP

NORTHWEST SHEET

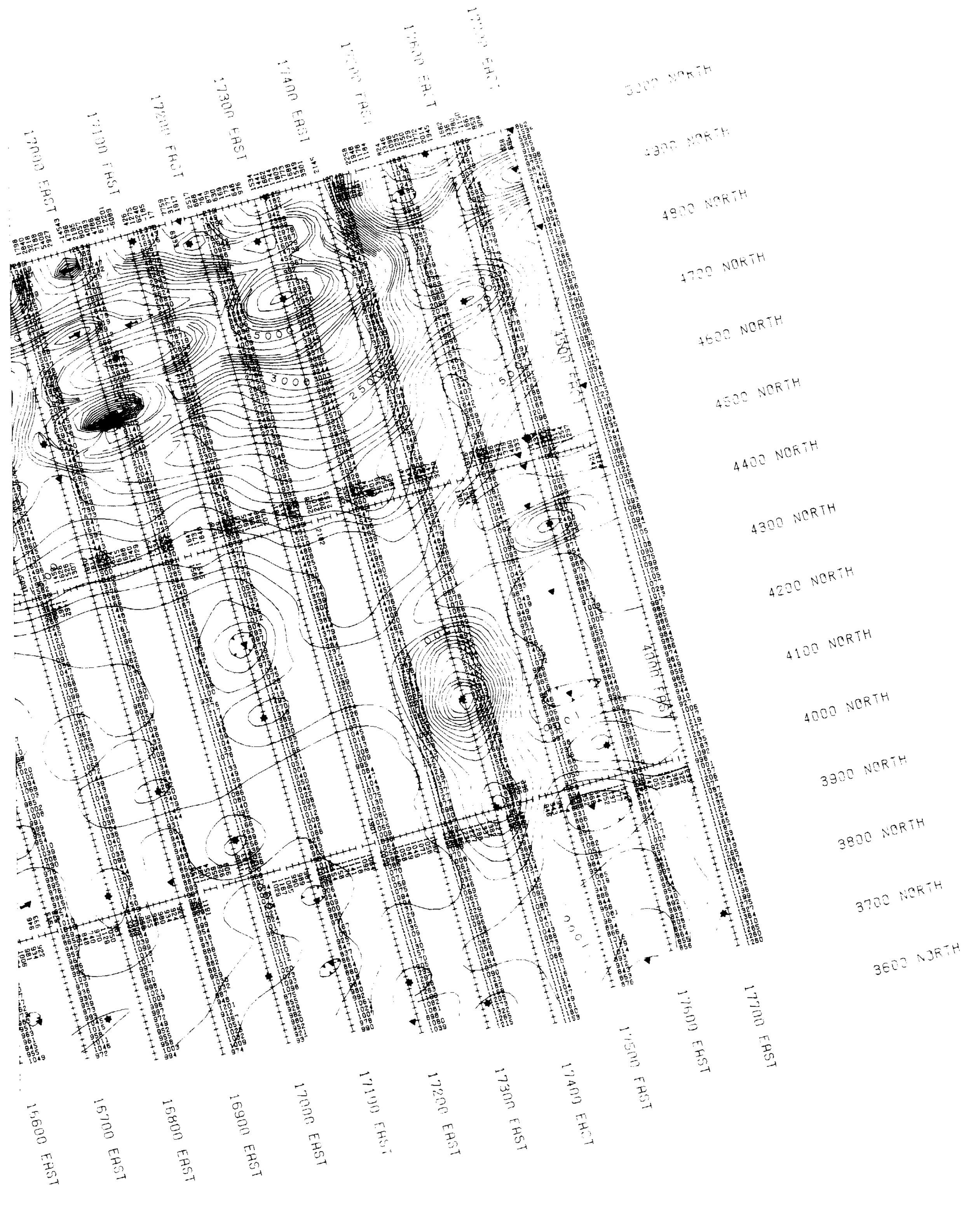
TRACED:	DATE:	NTS: 41-O/16	PROJECT: 8668
DRAWN: d e l	DATE: 03/09/92	MAP No: 4105296	FILE: 4105296P
SUPERVISED: J Aultman	DATE: 01/09/92	SCALE: 1:5000 (metres)	0 50 100 150 200
REVISED:	DATE:		





*- Magnetic High
Δ- Magnetic Low

2.14717



LEGEND

INSTRUMENT: OMNI PLUS PROTON MAGNETOMETER

DIURNALS CORRECTED BY: OMNI BASE STATION

READING INTERVAL: 10 METERS

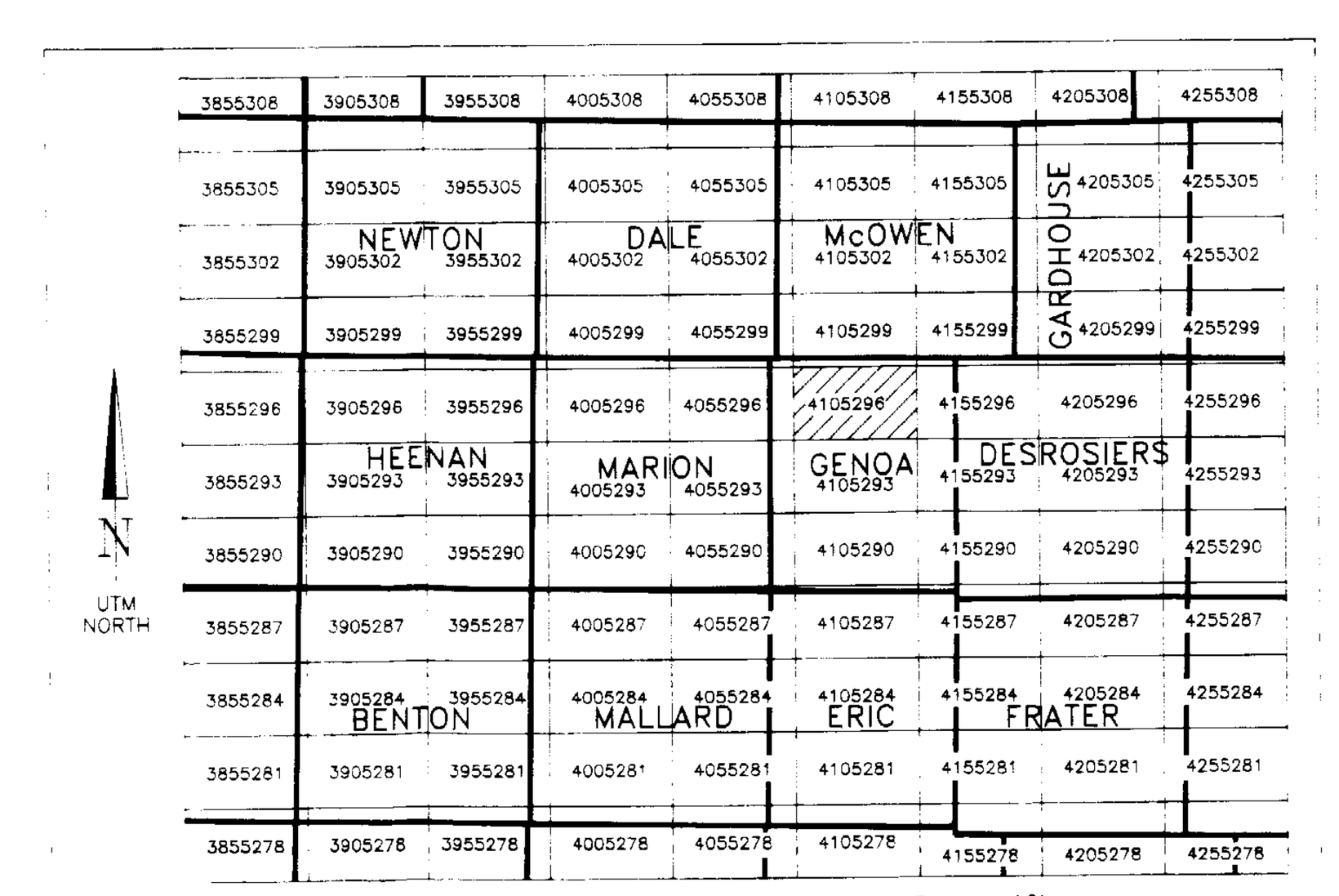
CONTOUR INTERVAL: 100 NANO-TESLAS

DATUM SUBTRACTED: 57000 NANO-TESLAS

SURVEYED BY: RAYAN EXPLORATION LTD.

* - Magnetic High

Δ - Magnetic Low



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ASTRONOMIC

2.14747

FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

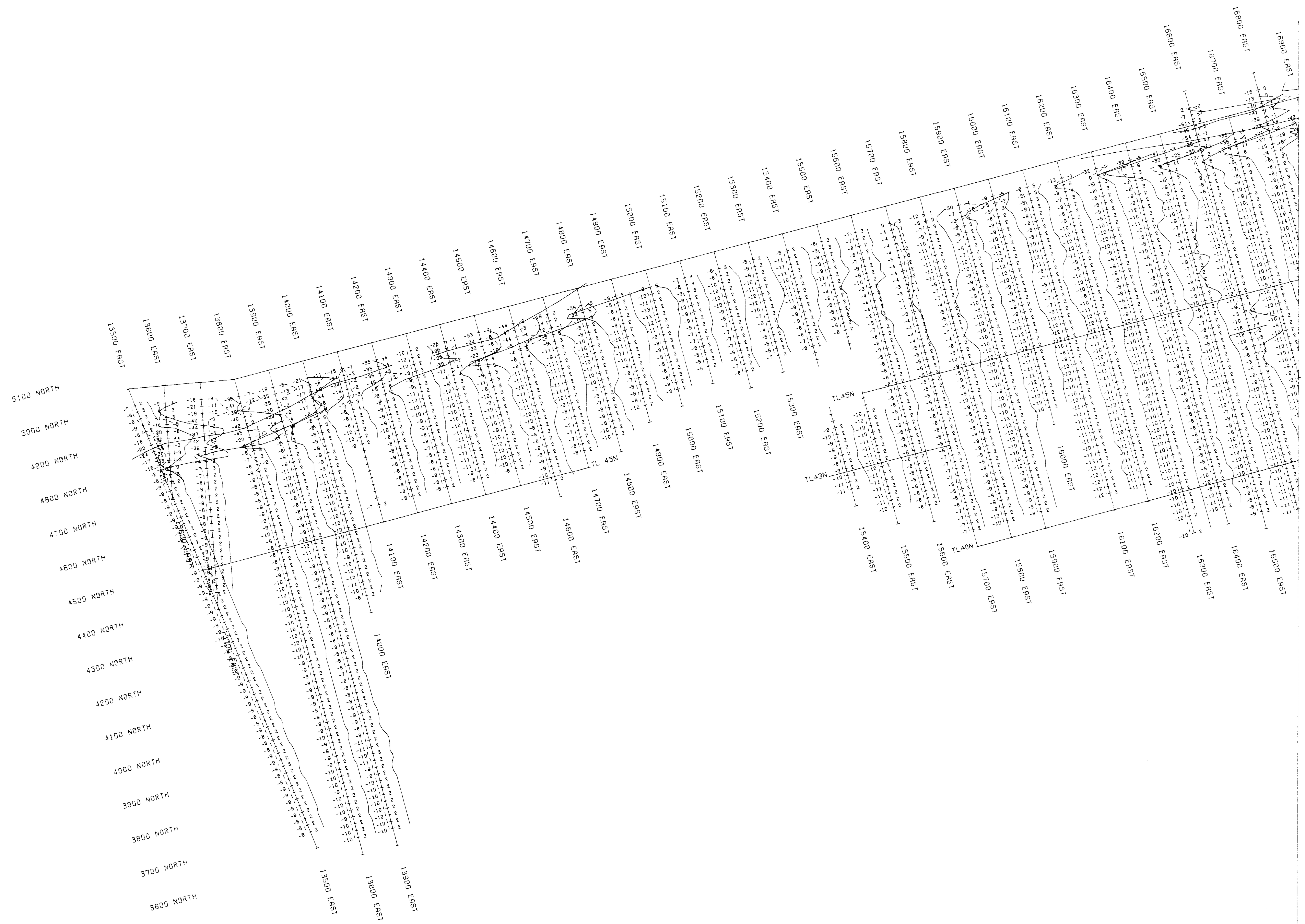
GENOA TOWNSHIP

CONTOURED GROUND MAG (TOTAL FIELD)

NORTHWEST SHEET

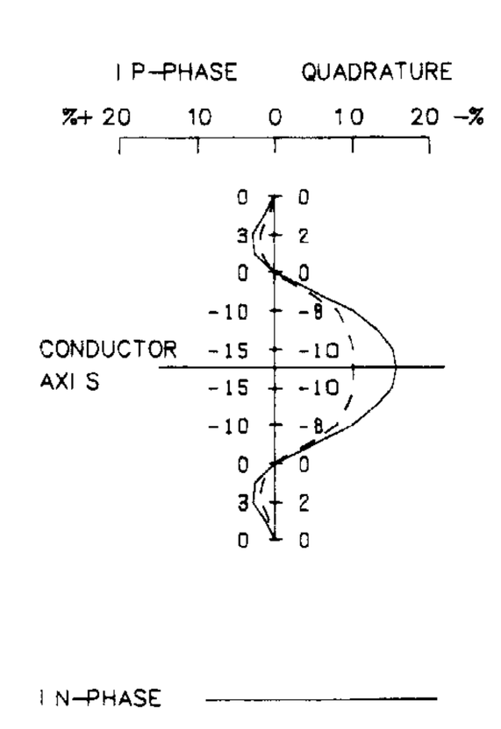
TRACED:	DATE:	NTS: 41-O/16	PROJECT: 8668
DRAWN: d e l	DATE: 16/07/92	MAP No: 4055296	FILE: 4105296M
SUPERVISED: J Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres)	0 50 100 150 200
REVISED:	DATE:		

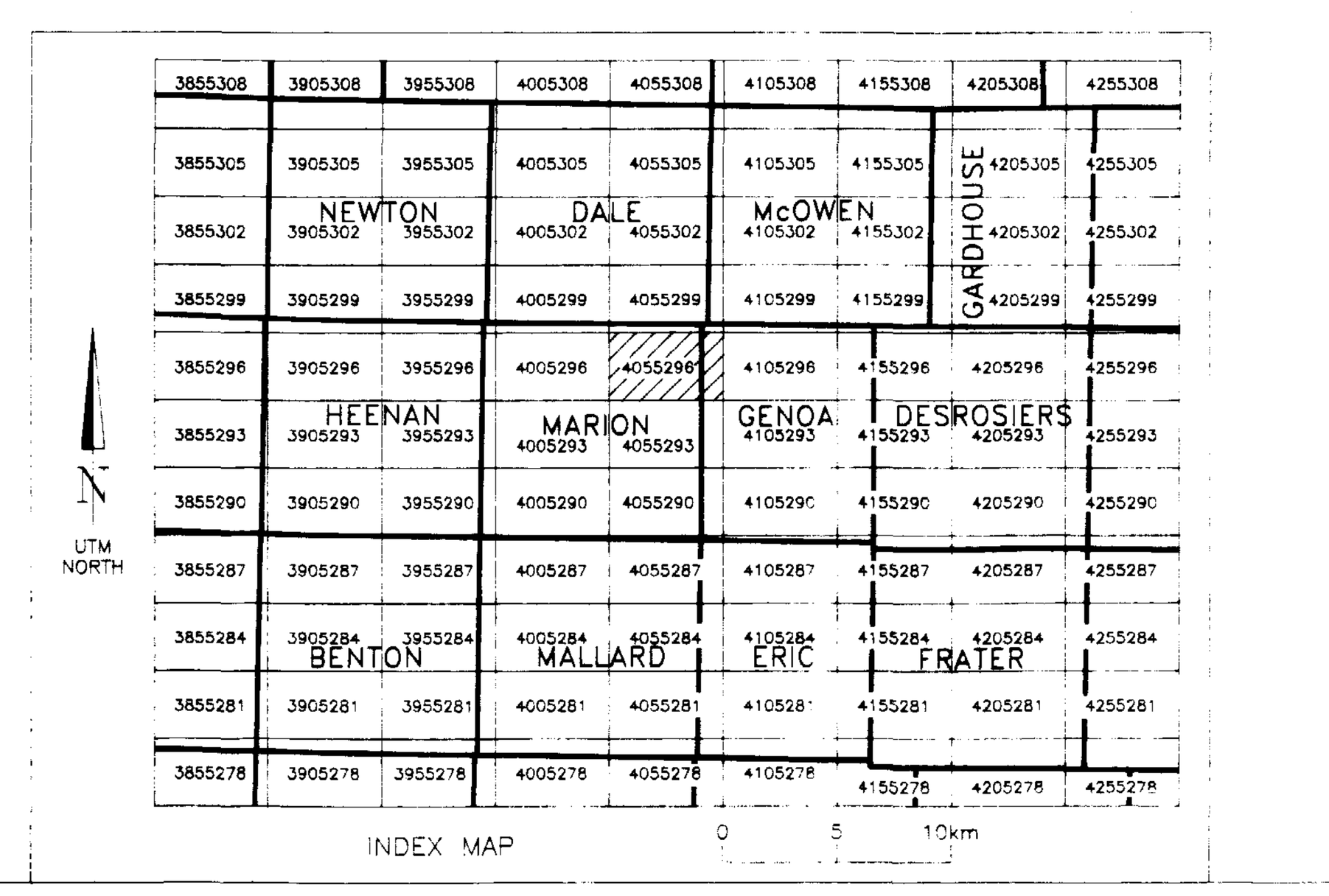
250



LEGEND

INSTUMENT: APEX MAX-MIN 11
MODE: MAXIMUM COUPLED, CO-PLANAR
READING INTERVAL : 20 M
COIL SEPERATION: 100 M
FREQUENCY: 444 Hz.
SURVEYED: RAYAN EXPLORATION LTD.





ASTRONOMIC

2.14747

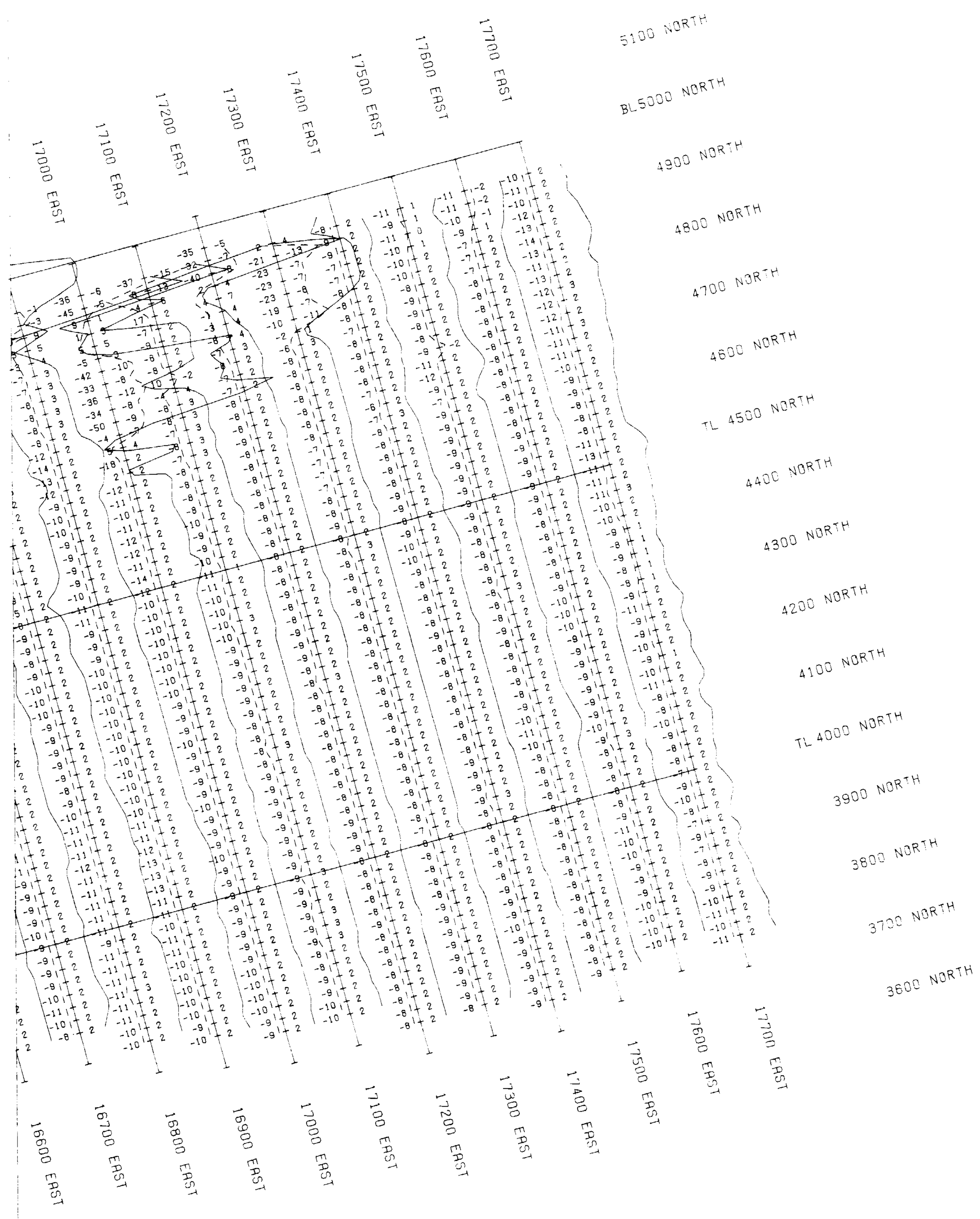
FALCONBRIDGE LIMITED
Exploration Division Timmins ONTARIO

GENOA & MARION TOWNSHIPS

HLEM 444 Hz
(100 m CABLE)

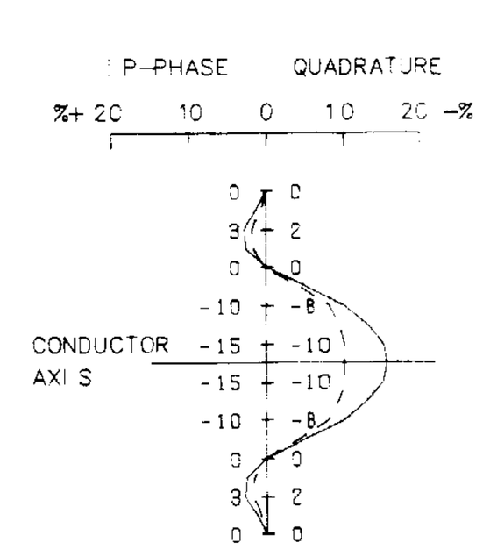
NORTHEAST SHEET

TRACED:	DATE:	NTS: 41-O/16	PROJECT: 9668
DRAWN: d e l	DATE: 16/07/92	MAP No: 4055296	FILE: 4055296H
SUPERVISED: J Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres) 0 50 100 150 200	
REVISED:	DATE:		

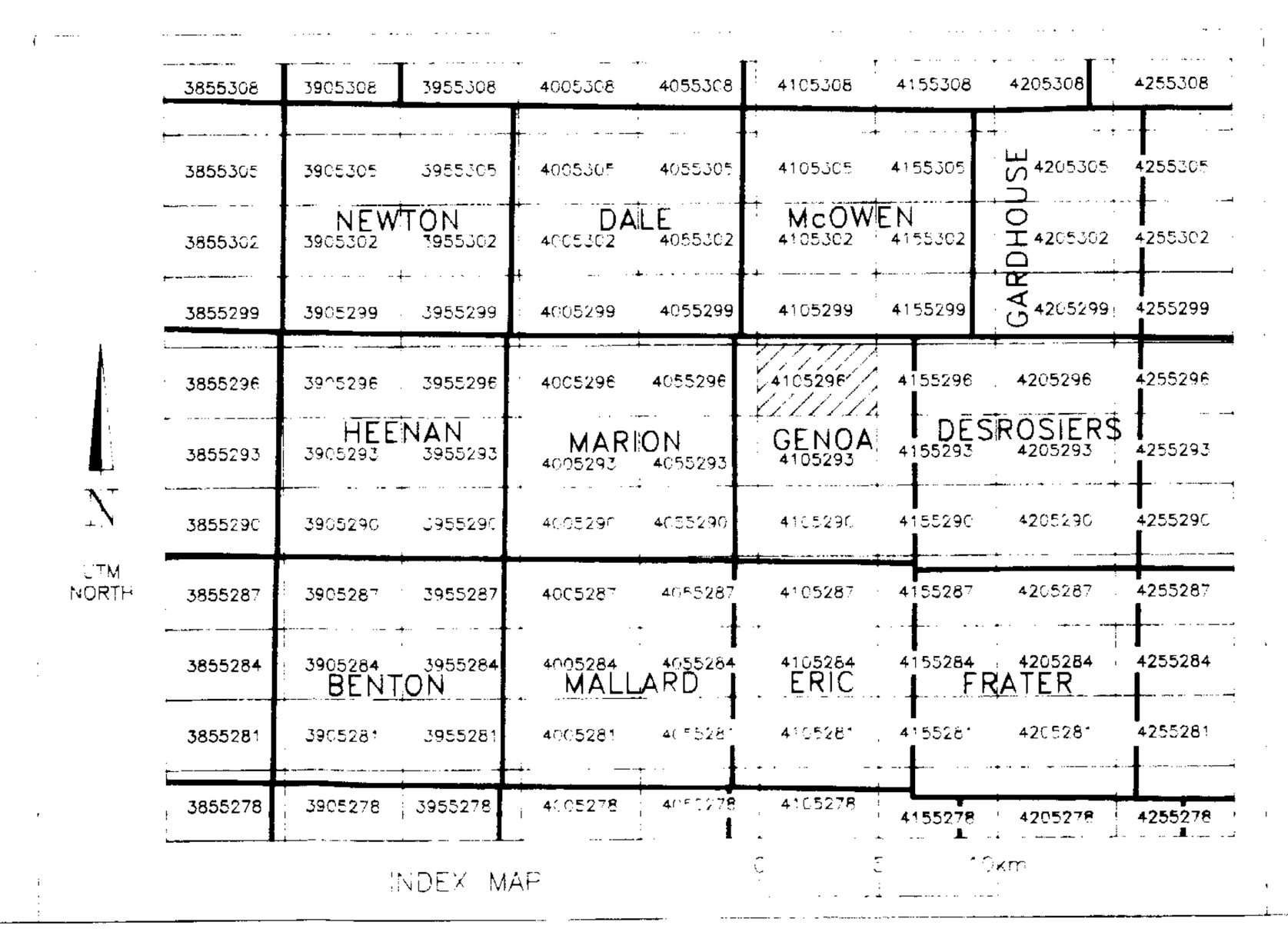


LEGEND

INSTUMENT: APEX MAX-MIN 11
MODE: MAXIMUM COUPLED, CO-PLANAR
READING INTERVAL : 20 M
COIL SEPERATION: 100 M
FREQUENCY: 444 Hz.
SURVEYED: RAYAN EXPLORATION LTD.



IN-PHASE ————
QUADRATURE — — —



INDEX MAP

ASTRONOMIC

SHEET ORIENTED UTM NORTH AZIMUTH 359°4'

2.14747

FALCONBRIDGE LIMITED

Exploration Division Timmins ONTARIO

GENOA TOWNSHIP

HLEM 444 Hz
(100 m CABLE)

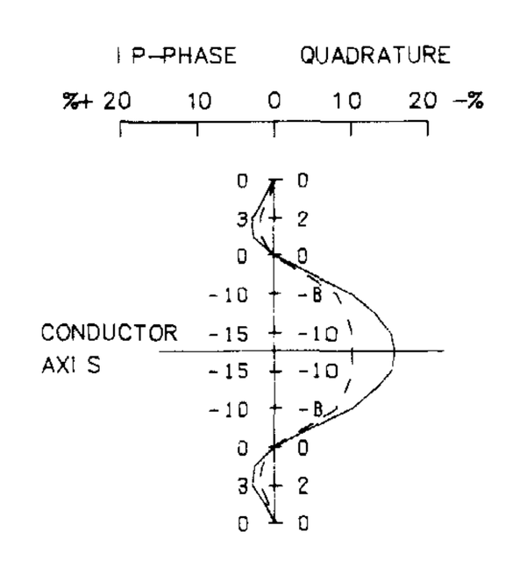
NORTH-WEST SHEET

TRACED:	DATE:	NTS: 41-O/16	PROJECT: 9668
DRAWN: d.e.l.	DATE: 16/07/92	MAP No: 4055296	FILE: 4105296H
SUPERVISED: J. Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres)	
REVISED:	DATE:	0 50 100 150 200	

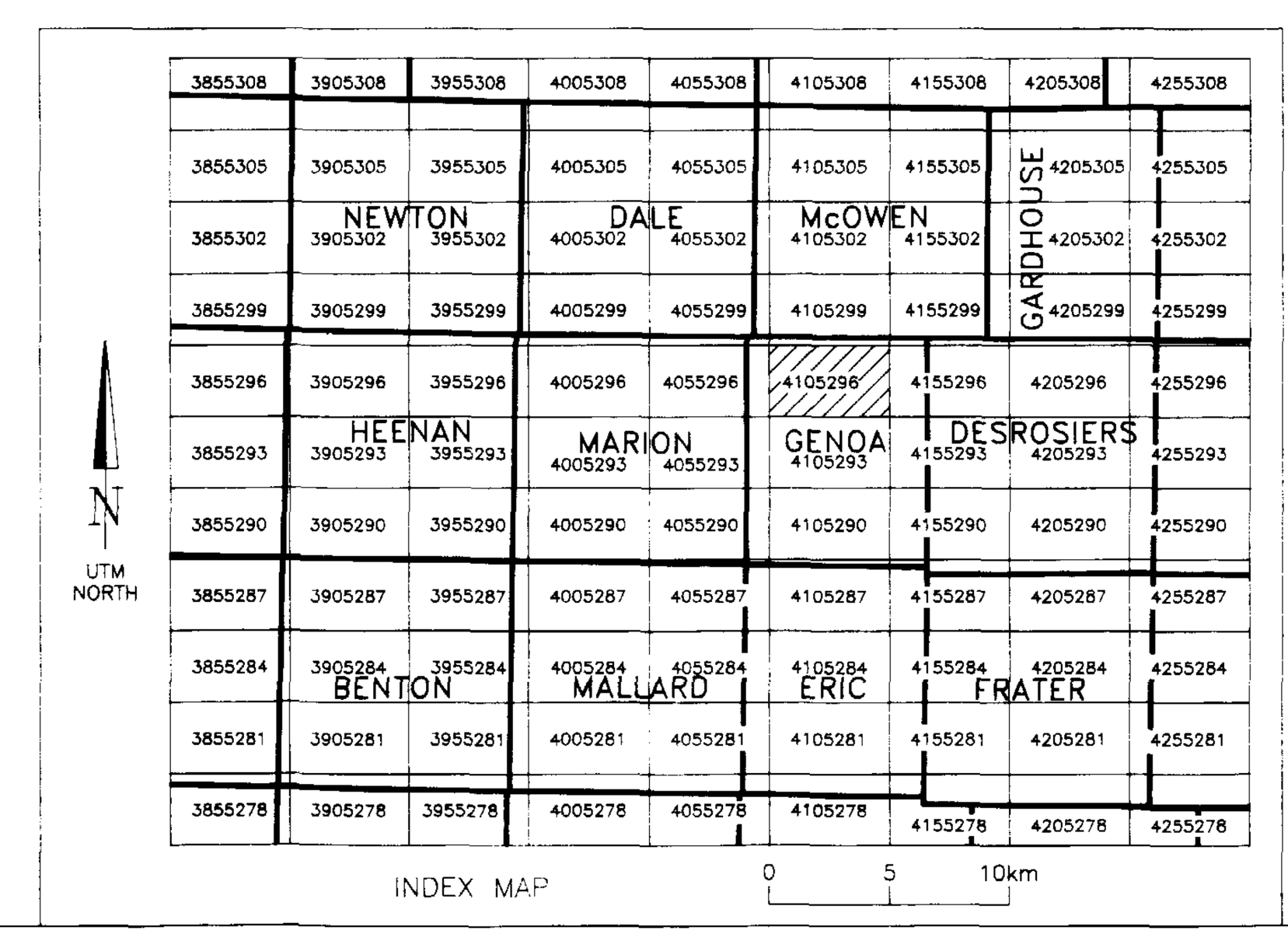
270

LEGEND

INSTUMENT: APEX MAX-MIN 11
MODE: MAXIMUM COUPLED, CO-PLANAR
READING INTERVAL : 20 M
COIL SEPERATION: 100 M
FREQUENCY: 1777 Hz.



IN-PHASE ————————
QUADRATURE — — — — — —



INDEX MAP

ASTRONOMIC

SHEET ORIENTED UTM NORTH

2.14747

FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

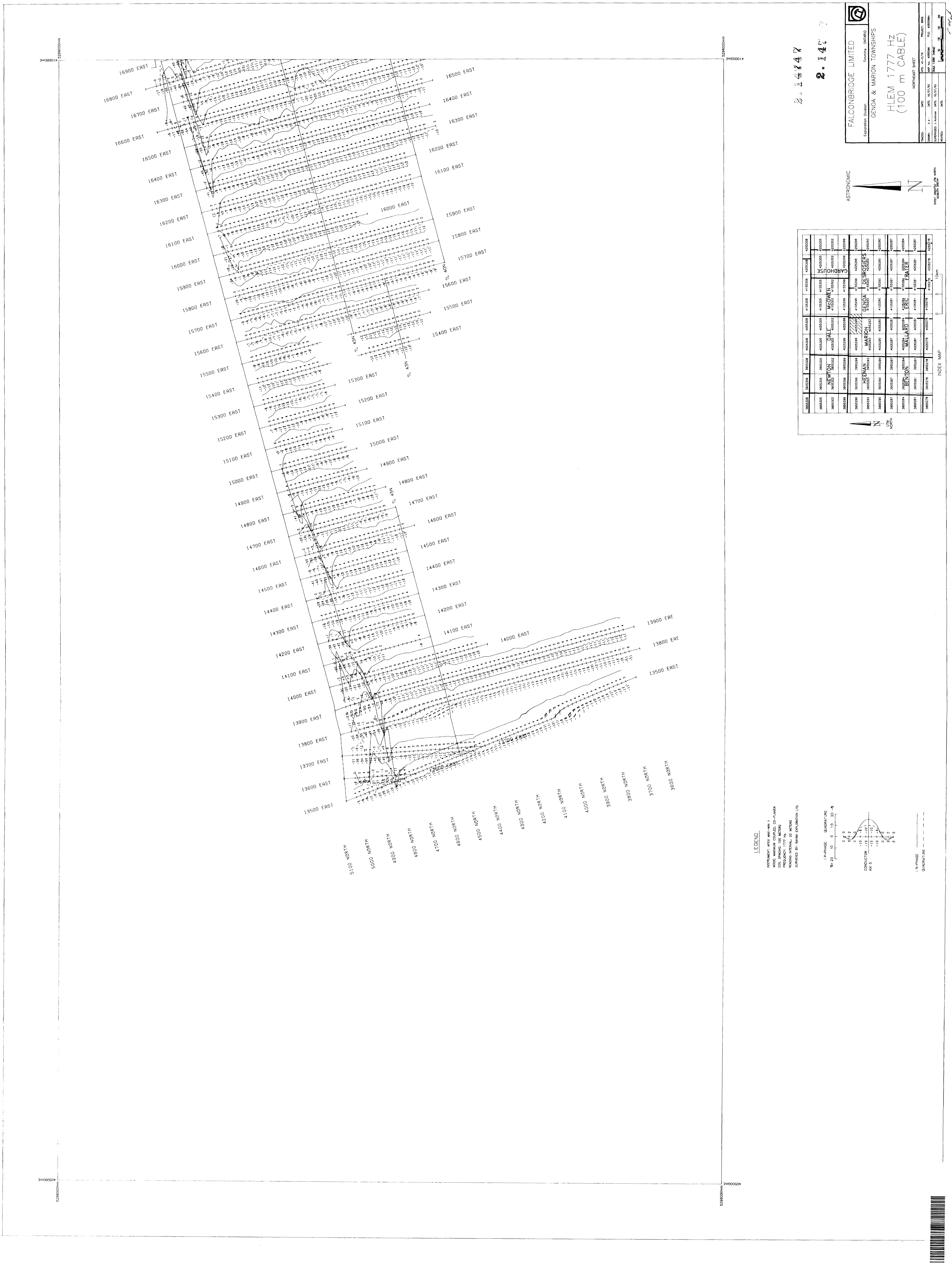
GENOA TOWNSHIP

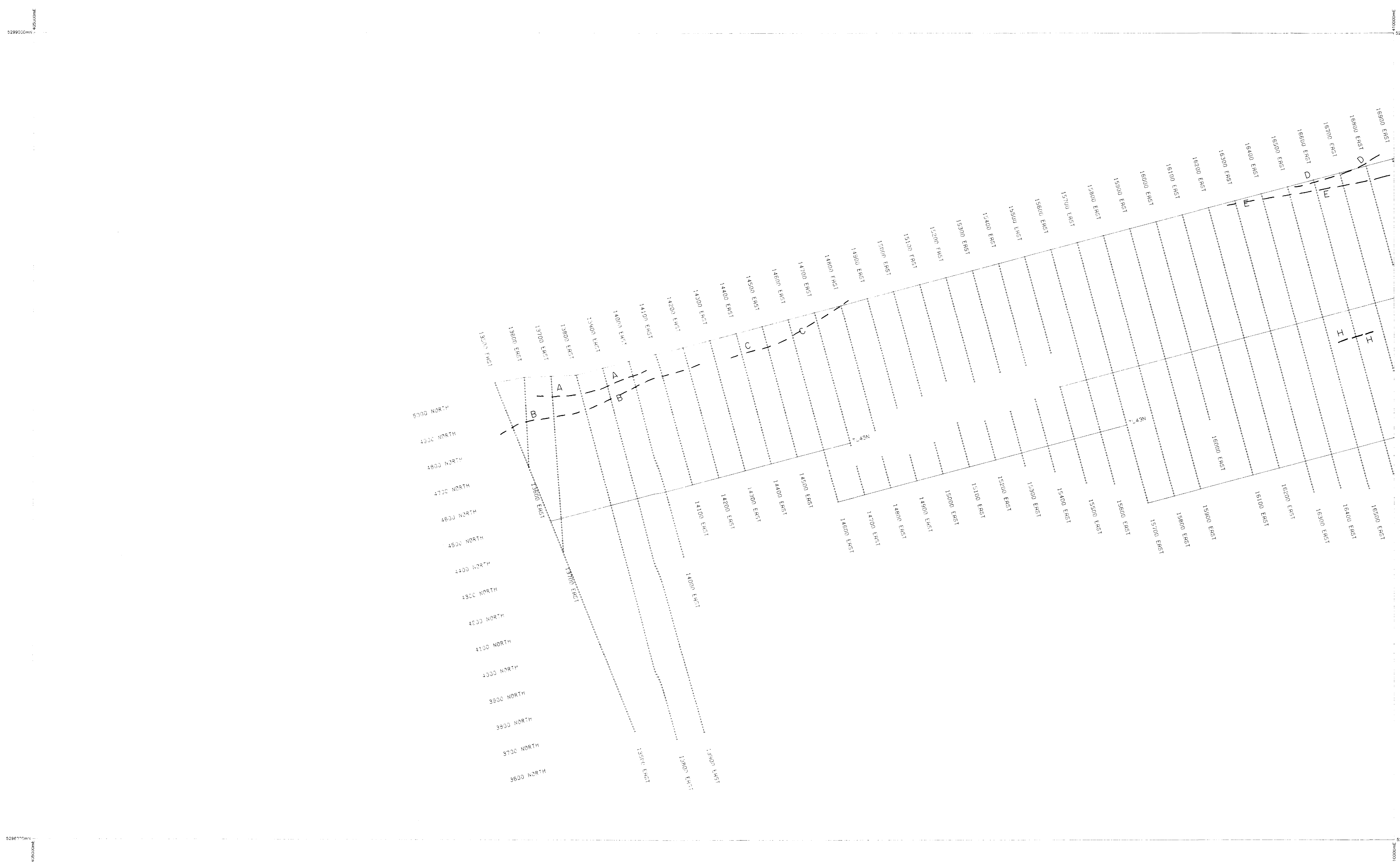
HLEM 1777 Hz (100 m CABLE)

NORTHWEST SHEET

TRACED:	DATE:	NTS: 41-0/16	PROJECT: 8668
DRAWN: d e l	DATE: 16/07/92	MAP No: 4055296	FILE: 4105296H
SUPERVISED: J Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres) 0 50 100 150 200	
REVISED:	DATE:		

280


2.14747
FALCONBRIDGE LIMITED
Exploration Division
Timmins ONTARIO
GENOA & MARION TOWNSHIPS
HLEM 1777 Hz
(100 m CABLE)
NORTHEAST SHEET
TRACED: DATE:
DRAWN: d e l DATE: 16/07/92
SUPERVISED: J Aultman DATE: 16/07/92
REVISED: DATE:
NTS: 41-0/16
PROJECT: 8668
MAP No: 4055296
FILE: 4055296H
SCALE 1:5000 (metres)
ASTRONOMIC
N
SHEET ORIENTED UTM NORTH
AZIMUTH 359°04'
INDEX MAP
LEGEND



LEGEND

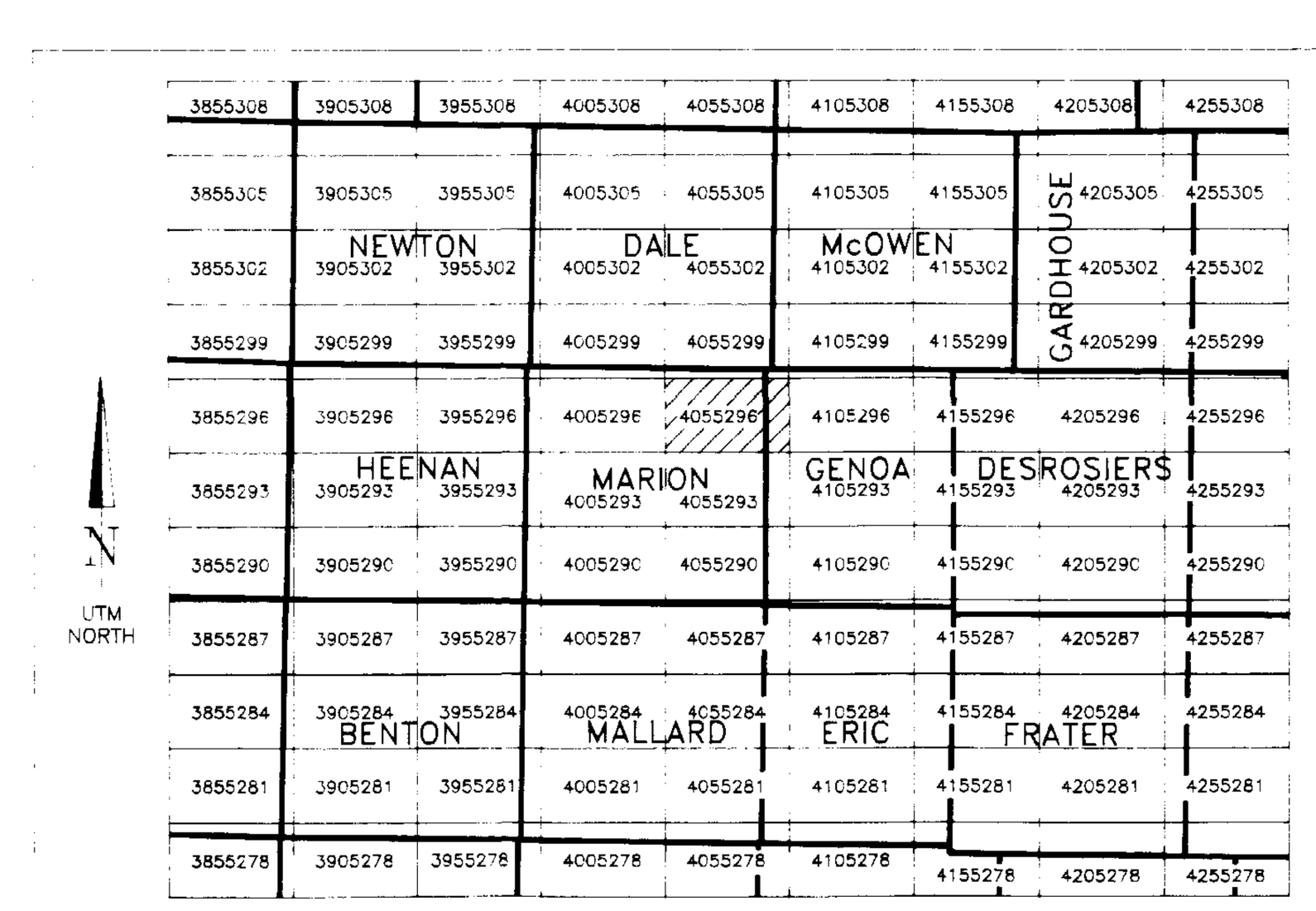
INSTRUMENT: APEX MAX-MIN II

MODE: HORIZONTAL CO-PLANER, MAX COUPLED

READING INTERVAL: 100 METERS

COIL SPACING: 100 METERS

CONDUCTOR AXIS: 444Hz
1777Hz



INDEX MAP

ASTRONOMIC

SHEET ORIENTED UTM NORTH

2.14747

FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

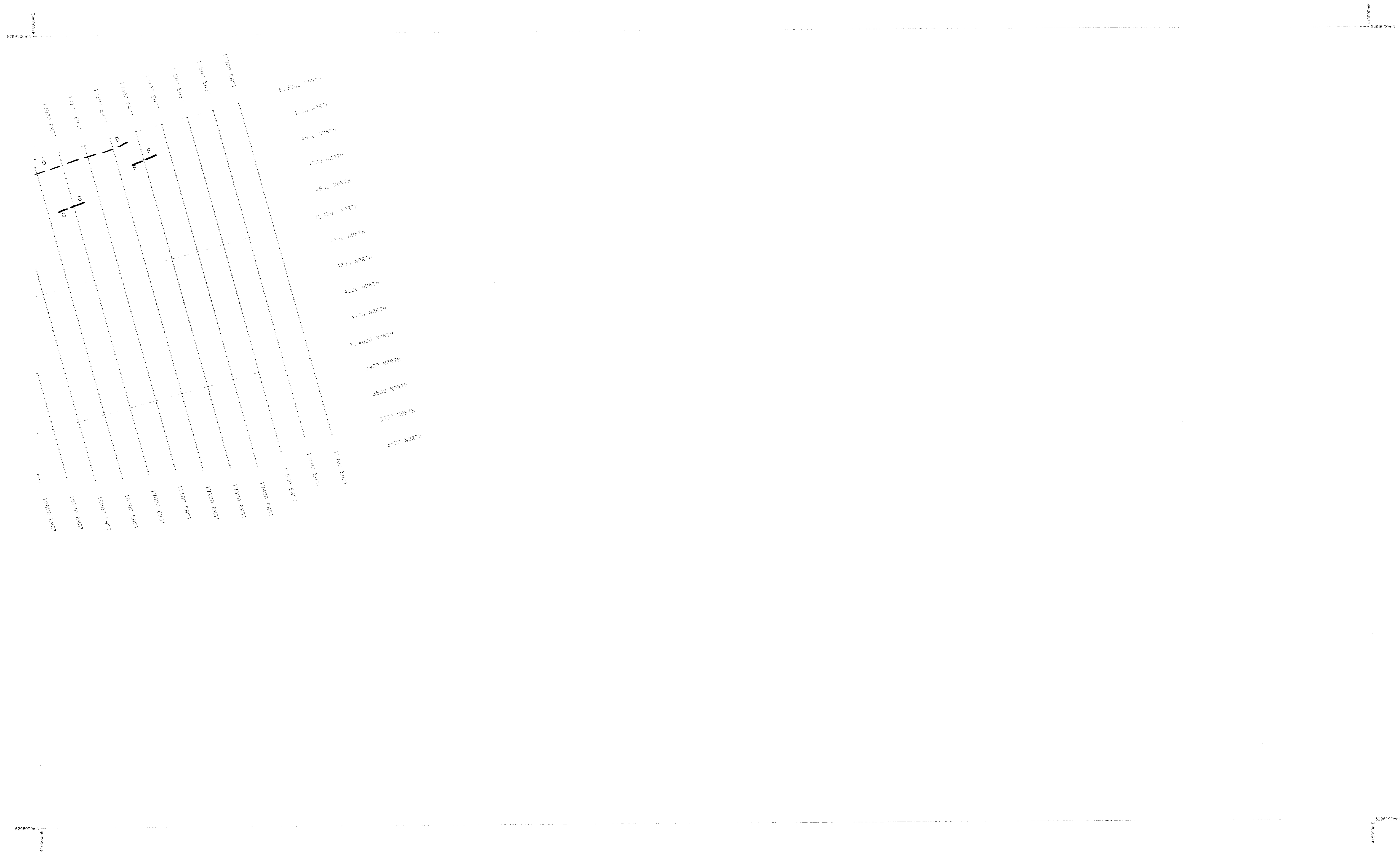
GENOA & MARION TOWNSHIPS

GROUND EM CONDUCTORS

NORTHEAST SHEET

TRACED:	DATE:	NTS: 41-O/16	PROJECT: 8668
DRAWN: d e i	DATE: 16/07/92	MAP No: 4055296	FILE: 4055296H
SUPERVISED: J. Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres)	
REVISED:	DATE:	0 50 100 150 200	

300



LEGEND

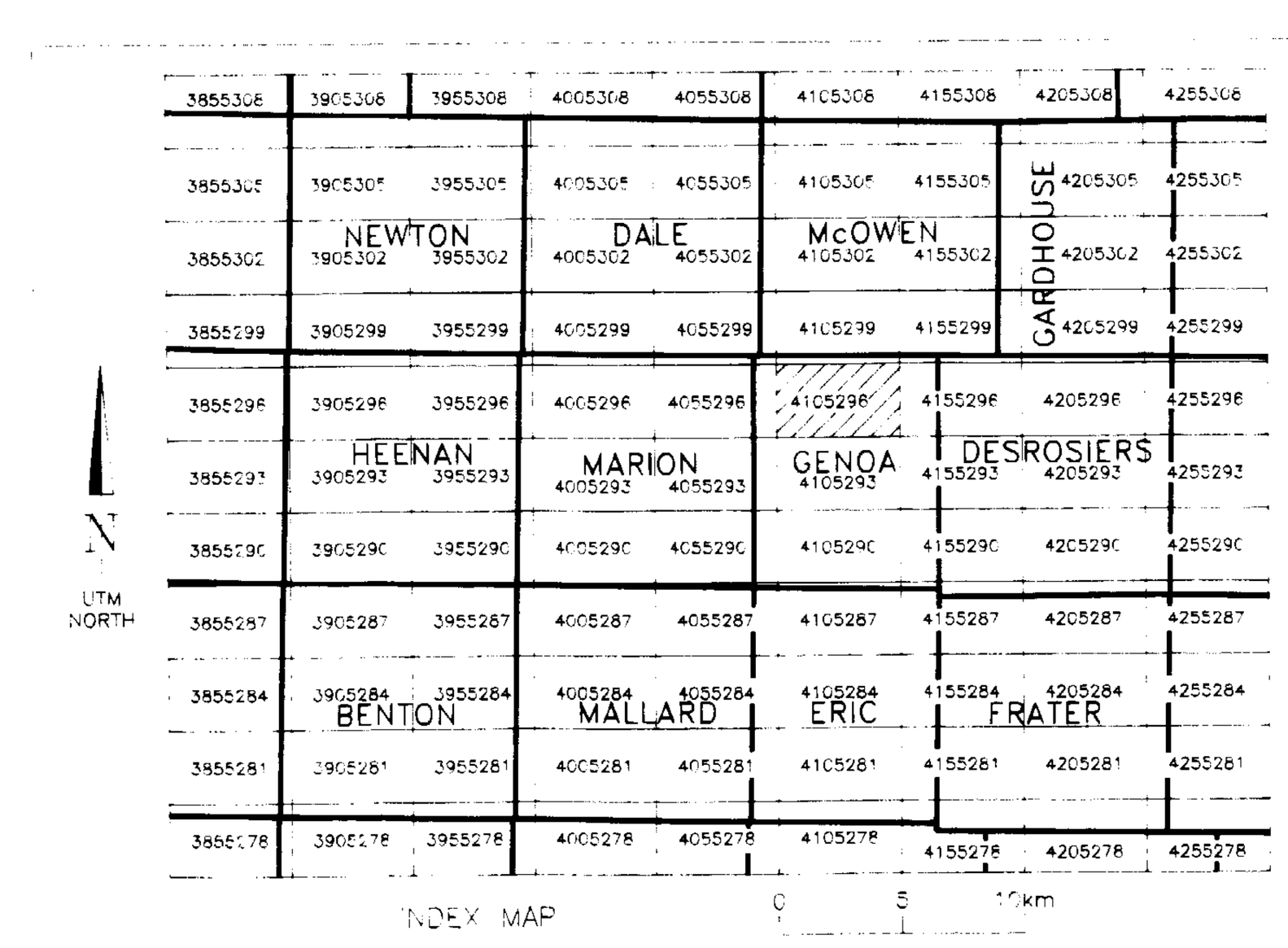
INSTRUMENT: APEX MAX-MIN II

MODE: MAXIMUM COUPLED, CO-PLANER, HORIZONTAL

READING INTERVAL: 20 METERS

CONDUCTOR AXIS: 1777Hz - - - -

444Hz — — —



ASTRONOMIC

SHEET ORIENTED UTM NORTH AZIMUTH 359°04'

2.14747

FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

GENOA TOWNSHIP

GROUND EM CONDUCTORS

NORTHWEST SHEET

TRACED:	DATE:	NTS: 41-O/16	PROJECT: 5668
DRAWN: d e	DATE: 16/07/92	MAP No: 4055296	FILE: 4105296H
SUPERVISED: . Aultman	DATE: 16/07/92	SCALE: 1:5000 (metres)	0 50 100 150 200
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