



410155W9084 2.12844 DENYES

A-848

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REPORT ON AN

2.12844

AIRBORNE MAGNETIC
& VLF-EM SURVEY
DENYES, HALCROW AND
GREENLAW TOWNSHIPS
PORCUPINE
MINING DIVISION
ONTARIO

for

PATRIE EXPLORATION SERVICES

by

TERRAQUEST LTD.
Toronto, Canada

October 19, 1989

TABLE OF CONTENTS



410155W9084 2.12844 DENYES

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Page

1.	INTRODUCTION	1
2.	THE PROPERTY	1
3.	GEOLOGY	2
4.	SURVEY SPECIFICATIONS	2
	4.1 Aircraft and Instruments	2
	4.2 Lines and Data	3
	4.3 Tolerances	3
	4.4 Photomosaics	4
5.	DATA PROCESSING	4
6.	INTERPRETATION	5
	6.1 General Approach	5
	6.2 Interpretation	5
7.	SUMMARY	7

LIST OF FIGURES

- Figure 1 - General Location Map
- Figure 2 - Survey Area Map
- Figure 3 - Sample Record
- Figure 4 - Terraquest Classification of VLF-EM Conductor Axes

LIST OF MAPS IN JACKET

- No. A-848-1, Total Magnetic Field
- No. A-848-2, Vertical Magnetic Gradient
- No. A-848-3, VLF-EM Survey
- No. A-848-4, Interpretation



1 . INTRODUCTION

This report describes the specifications and results of a geophysical survey carried out for Patrie Exploration Services of P.O. Box. 105, Algoma Mills, Ontario, POR 1A0, Attn: Mr. J. Patrie by Terraquest Ltd., 240 Adelaide Street West, Toronto, Canada. The field work was completed between August 23rd and September 7th 1989 and the data processing, interpretation and reporting between September 8th and October 19th, 1989.

The purpose of a survey of this type is two-fold. First to prospect directly for anomalously conductive and magnetic areas in the earth's crust which may be caused by, or at least related to, mineral deposits. A second is to use the magnetic and conductivity patterns derived from the survey results to assist in mapping geology, and to indicate the presence of faults, shear zones, folding, alteration zones and other structures potentially favorable to the presence of gold and base-metal concentration. To achieve this purpose the survey area was systematically traversed by an aircraft carrying geophysical instruments along parallel flight lines spaced at even intervals, 100 metres above the terrain surface, and aligned so as to intersect the regional geology in a way to provide the optimum contour patterns of geophysical data.

2 . THE PROPERTY

The property is located in the southwestern third of Denyes township, and small areas of Halcrow and Greenlaw townships in the Porcupine Mining Division of Ontario approximately 35 kilometres east of the town of Chapleau. The properties can be accessed by helicopter or float plane using Sylvanite Lake for landing.

The latitude and longitude are 47 degrees 46 minutes, and 82 degrees 50 minutes respectively, and the N.T.S. reference is 410/15.

The survey area is shown in figure 2.

3 . GEOLOGY

Map References

1. Map 43B: Swayze Gold Area, Scale 1:63,360 ODM 1934
2. Map 2120: Halcrow and Denyes Townships. Scale 1:31,680 ODM 1966
3. Map 2121: Tooms and Greenlaw Townships. Scale 1:31,680 ODM 1966
4. Map 2352: Chapleau. Scale 1:250,000 ODM 1976

The survey area is underlain by Precambrian mafic to intermediate metavolcanics trending to the eastwest with minor associated felsic metavolcanics and clastic metasediments. Much of the area is covered with the drift; consequently the mapping is not very detailed.

Beyond the survey area numerous diabase dykes have been mapped trending variably from the northeast through to the northwest. The northeast-southwest trending Rundall Break cuts across the northern part of the survey area just north of Sylvanite Lake. Other faults and lineaments trend to the northwest, north and east.

The geological map shows several quartz veins throughout the metavolcanics and a gold, sulphide and carbonate showing in the northeast corner of Greenlaw Township at the west end of Lee Lake.

4. SURVEY SPECIFICATIONS

4.1 Aircraft and Instruments

The survey was carried out using a Cessna 206 aircraft, registration C-GUCE, which carries a high sensitivity magnetometer and a VLF electromagnetic detector.

The magnetometer is a high sensitivity, optically pumped cesium vapour magnetometer mounted in a wing tip extension, approximately 5 feet beyond the wing tip. The specifications of the magnetometer are as follows:

Working range:	20,000-100,000 gammas
Sensitivity:	0.001 gammas
Sampling rate:	0.02 seconds
Model:	BIW 2321H8
Manufacturer:	Scintrex, Concord Ontario.

The magnetometer processor is a PMAG 3000 and the data acquisition system is a PDAS 1000, both manufactured by Picodas Group Inc.

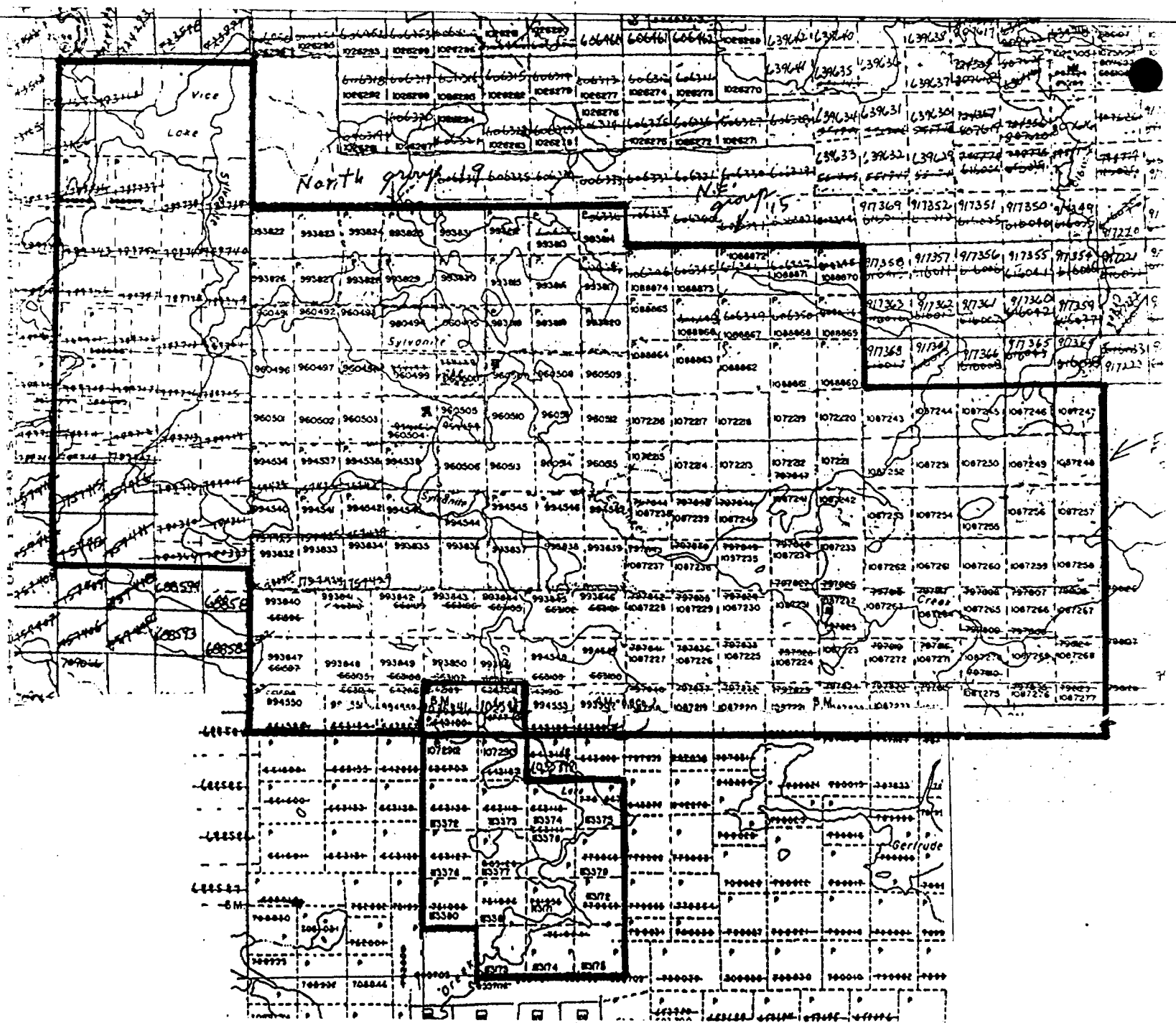
The signal to noise ratio of the magnetic response can be improved by a compensation technique provided by Picodas Group Inc. The sources of noise are permanent, induced and eddy current effects of the airframe, and the heading effects. The system uses three orthogonal fluxgate magnetometers to measure the aircraft attitude with respect to the earth's magnetic field vector. A mathematical model is used to solve this interference effect.

The VLF-EM unit uses three orthogonal detector coils to measure (a) the total field strength of the time-varying EM field and (b) the phase between the vertical coil and both the "along line" coil (LINE) and the "cross-line" coil (ORTHO). The LINE coil is tuned to a transmitter station that is ideally positioned at right angles to the flight lines, while the ORTHO coil transmitter should be in line with the flight lines. It's specifications are:

Accuracy:	1%
Reading Interval:	0.2 second
Model:	TOTEM 2A
Manufacturer:	Herz Industries, Toronto, Canada

The VLF sensor is mounted in a plastic tube projected forward from the

FIGURE 2. SURVEY AREA



idsection of the starboard wing.

Other instruments are:

- * King KRA-10A radar altimeter
- * PDAS-1000 data processor with 40 mByte cassette tape and 3 1/2" disk recorder manufactured by Picodas Group Inc.
- * GPS satellite and Loran-C navigation where possible
- * Video tape flight path confirmation, 1/10th second fiducial intervals and with electronic attitude compensation

4.2 Lines and Data

Line spacing:	100 metres
Line direction:	060 degrees
Terrain clearance:	100 m
Average ground speed:	193 km/hr
Data point interval:	
Magnetic:	11 metres
VLF-EM:	11 metres
Tie Line interval:	2 km
Channel 1 (LINE):	NAA Cutler, 24.0 kHz
Channel 2 (ORTHO):	NSS Annapolis, 21.4 kHz
Line km over total survey area:	507 line km

4.3 Tolerances

Line spacing: Any gaps wider than twice the line spacing and longer than 10 times the line spacing were filled in by a new line.

Terrain clearance: Portions of line which were flown above 125 metres for more than one km were reflight if safety considerations were acceptable.

Diurnal magnetic variation: Less than ten gammas deviation from a smooth background over a period of two minutes or less as seen on the base station analogue record.

Manoeuvre noise: nil

4.4 Photomosaics

For navigating the aircraft and recovering the flight path, semi-controlled mosaics of aerial photographs were made from existing air photos. Each photograph forming the mosaic was adjusted to conform to the NTS map system before the mosaic was assembled.

5. DATA PROCESSING

Flight path recovery was carried out in the field using a video tape viewer to observe the flight path as recorded by the Geocam video camera system. The flight path recovery was completed daily to enable reflights to be selected where needed for the following day.

TRACE 1: RAD Full Scale: 180.000 ft *

TRACE 2: V1-I Full Scale: 200.000 %

TRACE 3: V1-Q Full Scale: 200.000 % *

TRACE 4: V2-I Full Scale: 200.000 %

TRACE 5: V2-Q Full Scale: 200.000 % *

TRACE 7: MAG1 Full Scale: 875.000 nT

TRACE 9: MAG2 Full Scale: 875.000 nT

TRACE19: MAG1 Full Scale: 8.750 nT /m T-GR1

Line : 750.0N Time: 14:14: 5.0 Start Fid: 420 File: S9091014.B13

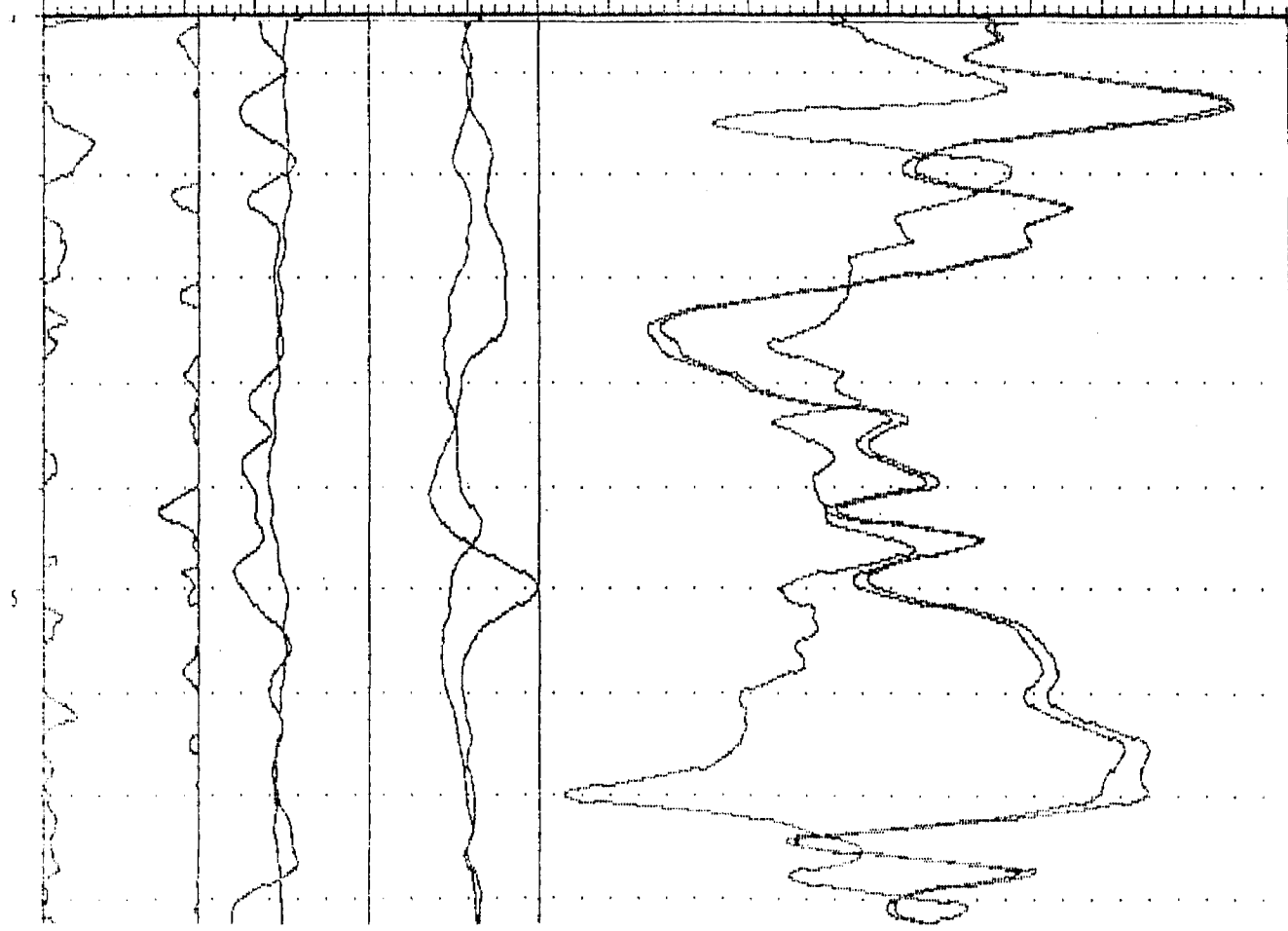


FIGURE 3. SAMPLE OF ANALOG DATA

The magnetic data was levelled in the standard manner by tying survey lines to the tie lines. The IGRF has not been removed. The total field was contoured by computer using a program provided by Dataplotting Services Inc. To do this the final levelled data set is gridded at a grid cell spacing of 1/10th of an inch at map scale.

The vertical magnetic gradient is computed from the gridded and contoured total field data using a method of transforming the data set into the frequency domain, applying a transfer function to calculate the gradient, and then transforming back into the spatial domain. The method is described by a number of authors including Grant, 1972 and Spector, 1968. The computer program for this purpose is provided by Paterson, Grant and Watson Ltd. of Toronto.

The VLF data was treated automatically so as to normalize the non conductive background areas to 100 (total field strength) and zero (quadrature). The algorithms to do this were developed by Terraquest and will be provided to anyone interested by application to the company.

All of these dataprocessing calculations and map contouring were carried out by Dataplotting Services Inc. of Toronto.

- Grant, F.S. and Spector A., 1970: Statistical Models for Interpreting Aeromagnetic Data; Geophysics, Vol 35
- Grant, F.S., 1972: Review of Data Processing and Interpretation Methods in Gravity and Magnetics; Geophysics Vol 37-4
- Spector, A., 1968: Spectral Analysis of Aeromagnetic maps; unpublished thesis; University of Toronto.

6. INTERPRETATION

6.1 General Approach

To satisfy the purpose of the survey as stated in the introduction, the interpretation procedure was carried out on both the magnetic and VLF data. On a local scale the magnetic gradient contour patterns were used to outline geological units which have different magnetic intensity and patterns or "signatures". Where possible these are related to existing geology to provide a geological identity to the units. On a regional scale the total field contour patterns were used in the same way.

Faults and shear zones are interpreted mainly from lateral displacements of otherwise linear magnetic anomalies but also from long narrow "lows". The direction of regional faulting in the general area is taken into account when selecting faults. Folding is usually seen as curved regional patterns. Alteration zones can show up as anomalously quiet areas, often adjacent to strong, circular anomalies that represent intrusives. Magnetic anomalies that are caused by iron deposits of ore quality are usually obvious owing to their high amplitude, often in tens of thousands of gammas.

VLF anomalies are categorized according to whether the phase response is normal, reverse, or no phase at all. The significance of the differing phase responses is not completely understood although in general reverse phase indicates either overburden as the source or a conductor with considerable depth extent, or both. Normal phase response is theoretically caused by surface conductors with limited depth extent. In some cases, a change in the orientation of the conductor appears to affect the sense of the phase response.

Areas showing a smooth VLF-EM response somewhat above background (ie. 110 or so) are likely caused by overburden which is thick enough and conductive enough to saturate at these frequencies. In this case no response from bedrock is seen.

The VLF-EM conductor axes have been identified and evaluated according to the Terraquest classification system (Figure 4). This system correlates the nature and orientation of the conductor axes with stratigraphic, structural and topographic features to obtain an association from which one or more origins may be selected. Alternate associations are indicated in parentheses.

6.2 Interpretation

The magnetic and VLF-EM data are shown in contoured format on maps at a scale of 1:10,000 in the back pocket. An interpretation map is also provided. The following notes are intended to supplement these maps.

The total magnetic field has a relief of approximately 800 gammas across the entire survey area and shows two dominant trends, one set to the northeast and one set to the northwest. Both sets contain narrow to broad, linear anomalies. Several large ovoid shaped areas characterized by weak and uniform magnetic responses occur across the southern part of the survey area.

The calculated vertical magnetic gradient improves the resolution of the dominant magnetic trends, particularly the higher intensity anomalies. The vertical magnetic gradient also enhances subtle magnetic anomalies that trend to the west northwest.

The schistocities and the general trend of the lithological unit as shown on the geological maps generally trend from 270 to 290 degrees and rarely to 310 degrees azimuth. Therefore magnetic anomalies that trend from 310 degrees through to the north and northeast have been interpreted to be derived from diabased dykes (Unit 7). Of the northeast trending set the dyke with the highest intensity occurs just north of Sylvanite Lake and coincides with the Rundall Break. This dyke set is parallel to the flight lines and consequently may not be as accurately delineated had the flight lines crossed at an angle. It is suggested that ground magnetic surveys be orientated at approximately 025 degrees azimuth.

The majority of the magnetic anomalies trend to the northwest and are interpreted to be related to diabase dykes (Unit 7). Despite the fact that only one exposure of diabase has been mapped within the property several

FIGURE 4

TERRAQUEST CLASSIFICATION OF VLF-EM CONDUCTOR AXES

<u>SYMBOL</u>	<u>CORRELATION</u>	<u>ASSOCIATION: Possible Origins</u>
a , A	Coincident with magnetic stratigraphy	Bedrock magnetic horizons: stratabound mineralogic origin or shear zone
b , B	Parallel to magnetic stratigraphy	Bedrock non-magnetic horizons: stratabound mineralogic origin or shear zone
c , C	No correlation with magnetic stratigraphy	Association not known: possible small scale stratabound mineralogic origin, fault or shear zone, overburden
d , D	Coincident with magnetic dyke	Dyke or possible fault: mineralogic or electrolytic
f , F	Coincident with topographic lineament or parallel to fault system	Fault zone: mineralogic or electrolytic
ob , OB	Contours of total field response conform to topographic depression	Most likely overburden: clayey sediments, swampy mud
cul , CUL	Coincident with cultural sources	Electrical, pipe or railway lines

NOTES

- 1 - Upper case symbols denote a relatively strong total field strength
- 2 - Underlined symbols denote a relatively strong quadrature response
- 3 - Mineralogic origins include sulphides, graphite, and in fault zones, gouge
- 4 - Electrolytic origins imply conductivity related to porosity or high moisture content

prominent northwest trending dykes have been mapped in the northern parts of Denyes and Halcrow Townships, several of which occur along strike from the magnetically defined dykes in the survey area. It is cautioned that the interpreted widths may be somewhat exaggerated due to the overwhelming effect commonly associated with strong magnetic susceptibilities.

While the magnetic data provides considerable detail in the delineation of the diabase dykes and post intrusive structures, these responses overwhelm and dominate those from the stratigraphic lithologies. It may be possible to resolve this problem by either trend de-enhancement procedures such as those provided by Geosoft Inc. or by shadow maps with sun rays parallel to the dyke trends.

Most of the exposures of the intermediate to mafic metavolcanics (Unit 1), the felsic metavolcanics (Unit 2) and the metasediments (Unit 3) correlate with weak to moderate magnetic responses. As mentioned above, many of these responses may be derived from the adjacent diabase dykes. The moderate to subtle anomalies trending to the west northwest identified on the interpretation map as Unit 1m may be derived from either an increase in concentration of magnetic minerals such as magnetite or pyrrhotite within the metavolcanics, or a change in composition generally to more mafic proportions, possibly including hypabyssal metavolcanics. It is difficult to discriminate between the northwest trending diabase dykes and the 1m Unit where the orientations are similar.

The southern part of the area containing the large, ovoid, low-magnetic zones has not been mapped in detail due to extensive drift cover. It is suggested that clastic metasediments occur throughout these areas. Alternatively these magnetic lows may be related to alteration zones characterized by a loss in magnetic character such as hematization, silicification, sericitization or carbonatization.

Numerous northeast trending faults have been interpreted from the magnetic data, some of which coincide with topographic lineaments. There appear to be two dominant sets: one at 080 degrees and one at 050 degrees. The latter set may be related to the Rundall Break event. Several poorly defined faults or shear zones trend to the northwest. It is suspected that more structures of similar orientation exist but are difficult to identify as they would be parallel to the dominant magnetic fabric.

The VLF-EM data has identified numerous weak to moderate strength conductor axes trending relatively uniformly to the southeast. This uniformity and orientation indicates that only those conductor axes that couple well with the VLF-EM transmitter (100 degrees azimuth) have been identified. The strongest conductor axes coincide with the edges of lakes or swampy areas and are probably derived from conductive overburden. The quadrature responses are consistently low across the entire survey area, possibly indicating that thin conductive overburden may mask or reduce the measured responses from bedrock sources.

A few conductor axes either coincide with or are parallel to magnetic stratigraphy and therefore may possess stratabound bedrock origins. These

may be caused by graphite, disseminated to massive sulphides, or porous flow tops. These should be investigated on the ground using EM or IP techniques.

Numerous northwest trending conductor axes have been interpreted to be caused by structures such as faults or shear zones. This interpretation is suggested by the coincidence with either magnetically defined faults or topographic lineaments and by the long sweeping nature of the conductor axes. This type of conductivity may be related to a) minerals such as sulphides, gouge, or graphite along the structure, or b) an ionic effect created by water or porosity within the structure or along the upper weathered and leached edge. Many such features are recessive and commonly associated with conductive overburden. Structures identified by either VLF-EM or magnetic methods possess potential for epithermal type mineralization.

7. SUMMARY

An airborne combined magnetic and VLF-EM survey has been carried out at 100 metre line intervals with data reading stations at 11 metres along the flight lines. All data is produced on maps at a scale of 1:10,000.

The magnetic data has been used to identify and delineate numerous diabase dykes across the survey area. The responses from these dykes overwhelm those from the surrounding lithologies. Several west-northwest trending magnetically active horizons within the intermediate to mafic metavolcanics have been mapped across the central and southern parts of the survey area. It is suggested that the low responses across the southern part of the survey area may be related clastic metasediments.

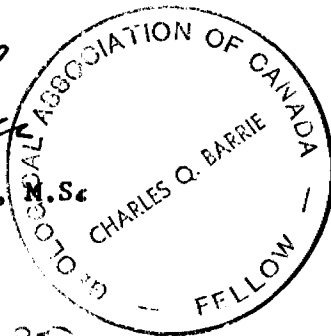
Magnetically interpreted faults sets have orientations of 080, 050 and approximately 330 azimuth. Most of the VLF-EM conductor axes appear to be associated with conductive overburden and some with structural sources trending to the northwest. A few appear to be related to stratigraphy and have been recommended for ground follow-up.

TERRAQUEST LTD.

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Geologist

Qual.

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Patrie Exploration Services
P.O. Box 105 · Ph. (705) 849-2391 848-8386
ALGOMA MILLS
ONTARIO P0R 1A0

Oct. 31/89

2. 12844

Dear Sir or Madam

Enclosed is the Technical data
for the airborne geophysical survey
carried out in Peryes & Halverson types.

Work reports as per documents # W-8906-432
433 + 434 + 435 + 436
and W 8906-441 + 442 Thank you

J.P. Patrie



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

DOCUMENT
437



410155W9084 2.12844 DENYES

900

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey	Township or Area Denyes Township
Claim Holder(s) Daniel F. Patrie	Prospector's Licence No. C-32612
Address P.O. Box 45, Massey, ON POP 1P0	
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08 89 09 09 89 Day Mo. Yr. Day Mo. Yr.
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7	

Credits Requested per Each Claim in Columns at right			Mining Claims Traversed (List in numerical sequence)		
Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend. Days Cr.
			Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic		P	993812	993840
	- Magnetometer			993813	993841
	- Radiometric			993814	993842
	- Other			993815	993843
For each additional survey: using the same grid: Enter 20 days (for each)	Geological			993816	993844
	Geochemical			993817	993845
	Geophysical			993818	993846
	- Electromagnetic			993819	993847
Man Days Complete reverse side and enter total(s) here	- Magnetometer			993820	993848
	- Radiometric			993821	993849
	- Other			993822	993850
	Geological			993823	993851
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40		993824	993907
	Magnetometer	40		993825	
Expenditures (excludes power stripping)	Radiometric			993826	994548
				993827	994549
Type of Work Performed				993828	994550
				993829	994551
Performed on Claim(s)				993830	994552
				993831	994553

RECEIVED
SEP 18 1989
10 05 AM

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
JAN 25 1990
RECEIVED

RECORDED
SEP 18 1989

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date **9/9/89** Recorded Holder or Agent (Signature) **Daniel F. Patrie**

For Office Use Only

Total Days Cr. Recorded **3040** Date Recorded **SEPT. 18/89** Mining Recorder **[Signature]**

Date Approved as Recorded **Jan. 25/90** Branch Director **[Signature]**

Total number of mining claims covered by this report of work. **38**

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

DOCUMENT No.
W 8906-433

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey		Township or Area Denyes Township
Claim Holder(s) Jean P. Patrie		Prospector's Licence No. C-29877
Address P.O. Box 105, Algoma Mills, ON POR 1A0		
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08 89 08 09 89	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7		

Credits Requested per Each Claim in Columns at right		
Special Provisions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here: RECEIVED SEP 18 1989	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Mining Claims Traversed (List in numerical sequence)					
Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
	1088860				
	1088861				
	1088862				
	1088863				
	1088864				
	1088865				
	1088866				
	1088867				
	1088868				
	1088869				
	1088870				
	1088871				
	1088872				
	1088873				
	1088874				

RECORDED
SEP 18 1989

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work. **15**

Date **Sept. 8/89** Recorder/Holder or Agent (Signature) *J.P. Patrie*

For Office Use Only

Total Days Cr. Recorded **1200** Date Recorded **SEPT. 18/89** Mining Recorder *[Signature]*

Date Approved as Recorder **Jan. 25/90** Branch Director *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

DOCUMENT No.
11/3000-434

The Mining Act

- Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

NOVEMBER 7

Type of Survey(s) Airborne Magnetic - VLF Survey		Township or Area Halcrow Township
Claim Holder(s) Jean P. Patrie	2. 12244	Prospector's Licence No. C-29877
Address P.O. Box 105, Algoma Mills, ON POR 1A0		
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08, 89 08 09, 89	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7		

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
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	1087527			1087549	
	1087528			1087550	
	1087529			1087551	
	1087530			1087552	
	1087531			1087553	
	1087532			1087554	
	1087533			1087555	
	1087534			1087556	
	1087535			1087557	
	1087536			1087558	
	1087537			1087559	
	1087538			1087560	
	1087539			1087561	
	1087540			1087562	
	1087541			1087563	
	1087542			1087564	
	1087543			1087565	
	1087544			1087566	
	1087545				
	1087546				
	1087547				
	1087548				

Expenditures (excludes power stripping)

Type of Work Performed
SEP 18 1989

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date **Sept. 8/89** Recorded Holder or Agent (Signature) **J.P. Patrie**

For Office Use Only

Total Days Cr. Recorded **3200** Date Recorded **SEPT. 18/89** Mining Recorder **[Signature]**

Date Approved as Recorded **Jan 25/90** Branch Director **[Signature]**

Total number of mining claims covered by this report of work. **40**

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

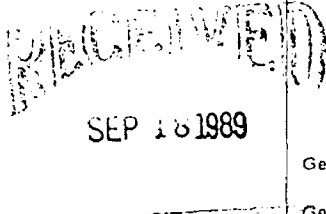
DOCUMENT No.
11/2906-435

NOVEMBER 7
Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey		Township or Area Denyes Township	
Claim Holder(s) Jean P. Patrie		Prospector's Licence No. C-29877	
Address P.O. Box 105, Algoma Mills, ON POR 1A0			
Survey Company Terraquest Ltd.		Date of Survey (from & to) 21 08 89 08 09 89 Day Mo. Yr. Day Mo. Yr.	
Total Miles of line Cut			
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7			

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
Man Days Complete reverse side and enter total(s) here	Geochemical	
	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Geological	
	Geochemical	
	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	1087251			1087273	
	1087252			1087274	
	1087253			1087275	
	1087254			1087276	
	1087255			1087277	
	1087256				
	1087257				
	1087258				
	1087259				
	1087260				
	1087261				
	1087262				
	1087263				
	1087264				
	1087265				
	1087266				
	1087267				
	1087268				
	1087269				
	1087270				
	1087271				
	1087272				

RECORDED
SEP 18 1989

Expenditures (excludes power stripping)

Type of Work Performed				
Performed on Claim(s)				
Calculation of Expenditure Days Credits				
Total Expenditures	÷	15	=	Total Days Credits
\$				
Instructions Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.				

Total number of mining claims covered by this report of work. **27**

For Office Use Only		Mining Recorder	
Total Days Cr. Recorded	Date Recorded	Date approved as Recorded	
2160	SEPT. 18/89	JON 25/90	
		Branch Inspector	

Date	Recorded Holder or Agent (Signature)
Sept. 8/89	J.P. Patrie

Certification Verifying Report of Work
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

NOVEMBER 7

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey 2. 12844		Township or Area Denyes Township
Claim Holder(s) Jean P. Patrie		Prospector's Licence No. C-29877
Address P.O. Box 105, Algoma Mills, ON POR 1A0		
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08 89 08 09 89	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7		

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side (and enter total(s) here) SEP 18 1989	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Prefix	Mining Claim		Expend. Days Cr.	Prefix	Mining Claim		Expend. Days Cr.
	Number				Number		
P							
	1072211				1087229		
	1072212				1087230		
	1072213				1087231		
	1072214				1087232		
	1072215				1087233		
	1072216				1087234		
	1072217				1087235		
	1072218				1087236		
	1072219				1087237		
	1072220				1087238		
					1087239		
	1087218				1087240		
	1087219				1087241		
	1087220				1087242		
	1087221				1087243		
	1087222				1087244		
	1087223				1087245		
	1087224				1087246		
	1087225				1087247		
	1087226				1087248		
	1087227				1087249		
	1087228				1087250		

Expenditures (excludes power stripping)	
Type of Work Performed	SEP 18 1989
Performed on Claim(s)	
Calculation of Expenditure Days Credits	
Total Expenditures	Total Days Credits
\$	÷ 15 =
Instructions Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.	

Total number of mining claims covered by this report of work. **43**

Date Sept. 8/89	Recorded Holder or Agent (Signature) J.P. Patrie
--------------------	---

For Office Use Only		Mining Recorder <i>[Signature]</i>
Total Days Cr. Recorded 3440	Date Recorded SEPT. 18/89	
Date Approved as Recorded Jan. 25/90		Branch Director <i>[Signature]</i>

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.



Ministry of Northern Development and Mines

PLEASE NOTE: 7

Re: W 8906-436

DOCUMENT No. 8906-478

Instructions

- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

*Reports submitted by S. Patrie

Mining Act

Report of Work (Geophysical, Geological and Geochemical Surveys)

Type of Survey(s) Airborne Magnetic - VLF Survey	Mining Division Porcupine	Township or Area Greenlaw Township
Recorded Holder(s) Michael Alexander Tremblay	Prospector's Licence No. M-21667	
Address P.O. Box 183 Timmins, Ontario		Telephone No. 705-264-9052
Survey Company Terraquest Ltd		
Name and Address of Author of Geo-Technical Report Terraquest Ltd, 240 Adelaide Street West, Toronto, Ont.		Date of Survey (from & to) 21 Oct 89 to 28 Oct 89

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days (This includes line cutting)	Electromagnetic Magnetometer	
For each additional survey using the same grid: Enter 20 days (for each)	Other Geological Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical Electromagnetic Magnetometer Other Geological Geochemical	Days per Claim
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys	Electromagnetic Magnetometer Other	40 40

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
*	P	1072912	P	1113174	
*	P	1072913	P	1113175	
	P	1113372			
	P	1113373			
	P	1113374			
	P	1113375			
	P	1113376			
	P	1113377			
	P	1113378			
	P	1113379			
	P	1113380			
	P	1113381			
	P	1113171			
	P	1113172			
	P	1113173			

RECEIVED
OCT 26 1989
MINING LANDS SECTION
RECORDED
OCT 11 1989

Total miles flown over claim(s)
Date **Oct. 10 / 89** Recorded Holder or Agent (Signature) *Mike Tremblay*

*20/20 MAX REACHED

Total number of mining claims covered by this report of work **17**

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work, having performed the work or witnessed same during and/or after its completion and annexed report is true

Name and Address of Person Certifying
M. A. Tremblay
P.O. Box 183 Timmins

Telephone No. **705-264-9052** Date **Oct 10 / 89** Certified By (Signature) *Mike Tremblay*

For Office Use Only

Total Days Cr. Recorded 1280	Date Recorded Oct. 11 / 89	Mining Recorder <i>[Signature]</i>
Date Approved as Recd. []	Professional Manager, Mining Lands <i>[Signature]</i>	

Received Stamp

RECEIVED
OCT 11 1989
E-107 (6/89) 1280

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey	Township or Area Denyes Township
Claim Holder(s) Jean P. Patrie	Prospector's Licence No. C-29877
Address P.O. Box 105, Algoma Mills, ON POR 1A0	
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08 89 - 08 09 89
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7	

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here SEP 18 1989	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40 17
	Magnetometer	40 17
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
	960491	17/17		960513	17/17
	960492	11		960514	11
	960493	11		960515	11
	960494	11			
	960495	11			
	960496	11			
	960497	11			
	960498	11			
	960499	11			
	960500	11			
	960501	11			
	960502	11			
	960503	11			
	960504	11			
	960505	11			
	960506	11			
	960507	11			
	960508	40/40			
	960509	17/17			
	960510	11			
	960511	11			
	960512	11			

RECORDED
SEP 18 1989

Expenditures (excludes power stripping)

Type of Work Performed
Performed on Claim(s)
Calculation of Expenditure Days Credits
Total Expenditures \$ <input type="text"/> ÷ 15 = Total Days Credits <input type="text"/>

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date Sept. 8/89	Recorded Holder or Agent (Signature) J.P. Patrie
--------------------	---

For Office Use Only		
Total Days Cr. Recorded 896	Date Recorded SEPT. 12/89	Mining Recorder [Signature]
	Date Approved as Recorded	Branch Director [Signature]

Total number of mining claims covered by this report of work. 25

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

DOCUMENT No.
11/30016-441

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

November 07

The Mining Act

Type of Survey(s) Airborne Magnetic - VLF Survey		Township or Area Denyes Township
Claim Holder(s) Daniel F. Patrie		Prospector's Licence No. C-32612
Address P.O. Box 45, Massey, ON POP 1P0		
Survey Company Terraquest Ltd.	Date of Survey (from & to) 21 08 89 08 09 89	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Terraquest Ltd., 240 Adelaide Street West, Toronto, ON M5H 1W7		

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	Radiometric	
	Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
	994536				
	994537				
	994538				
	994539				
	994540				
	994541				
	994542				
	994543				
	994544				
	994545				
	994546				
	994547				
	993832				
	993833				
	993834				
	993835				
	993836				
	993837				
	993838				
	993839				

RECORDED
SEP 13 1989

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
600	SEP 13 1989	<i>[Signature]</i>
	Date Approved as Recorded	Inspector
		<i>[Signature]</i>

Date: 9/9/89
Recorded Holder or Agent (signature): *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Raney Twp. - M.1069

THE TOWNSHIP OF

DENYES

DISTRICT OF SUDBURY

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE Ⓢ
- 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 —
- PATENTED FOR S.R.O. Ⓟ

NOTES

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

L. U. P.

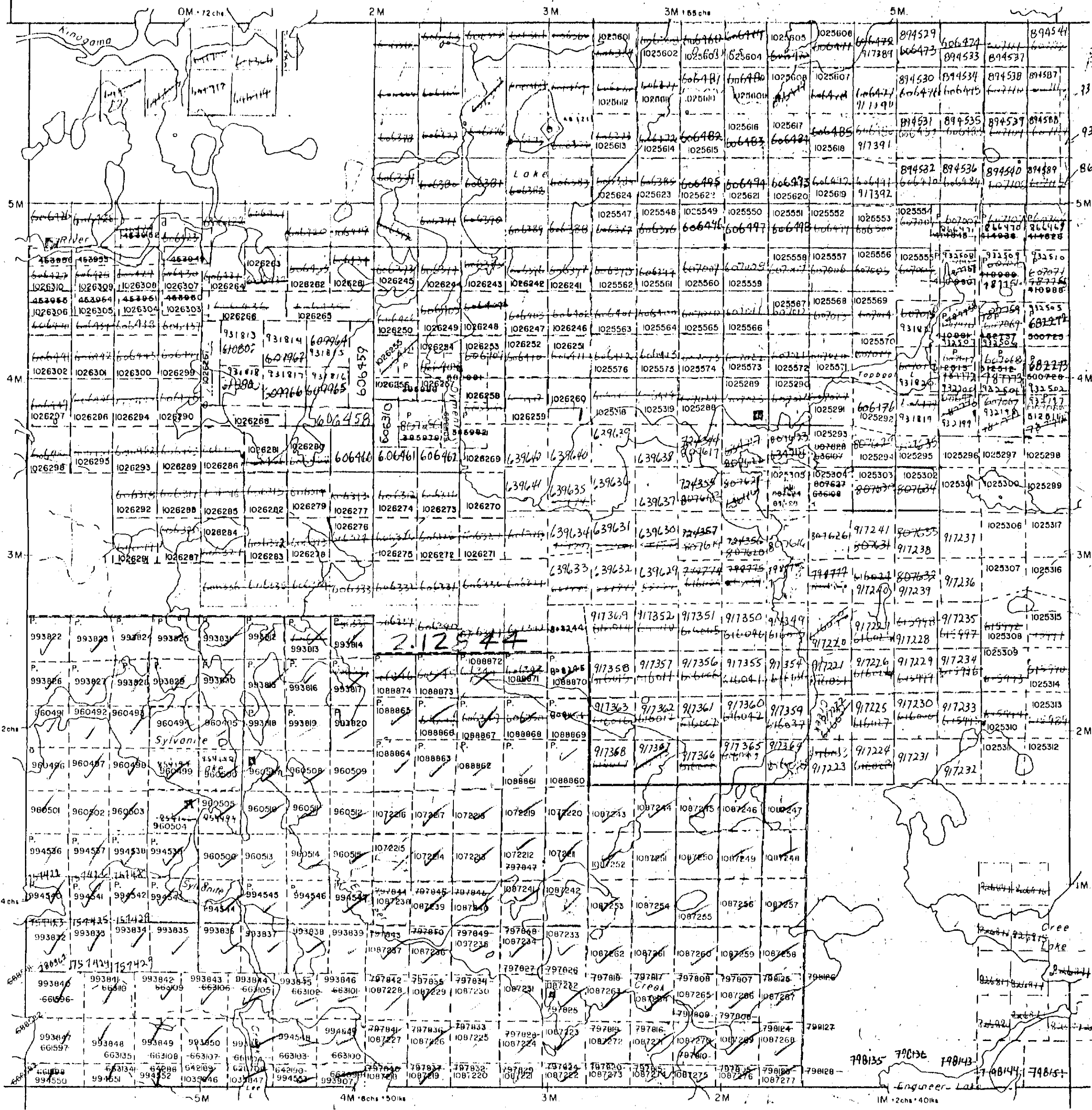
Received Jan. 4/80

PLAN NO. M.758

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Halcrow Twp. - M.906

Swayze Twp. - M.1150



Greenlaw Twp. - M.895



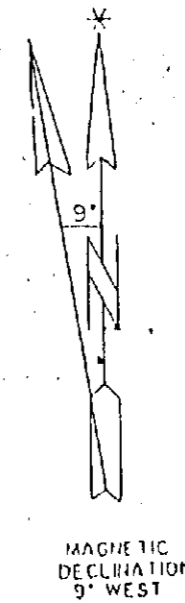
Crockett Twp. - M.740

THE TOWNSHIP OF
OF
HALCROW

DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

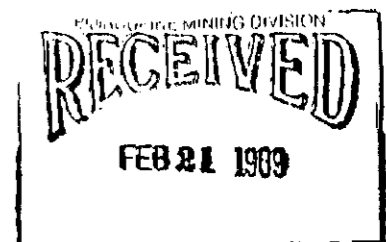


LEGEND

- | | |
|-----------------------|--------|
| 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. |

NOTES

400' Surface Rights Reservation around all lakes and rivers.



Received May 8/80

PLAN NO. **M.906**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Lackner Twp. - M.975

Denyes Twp. - M.758

Tooms Twp. - M.1159



410155W9884 2.12844 DENYES

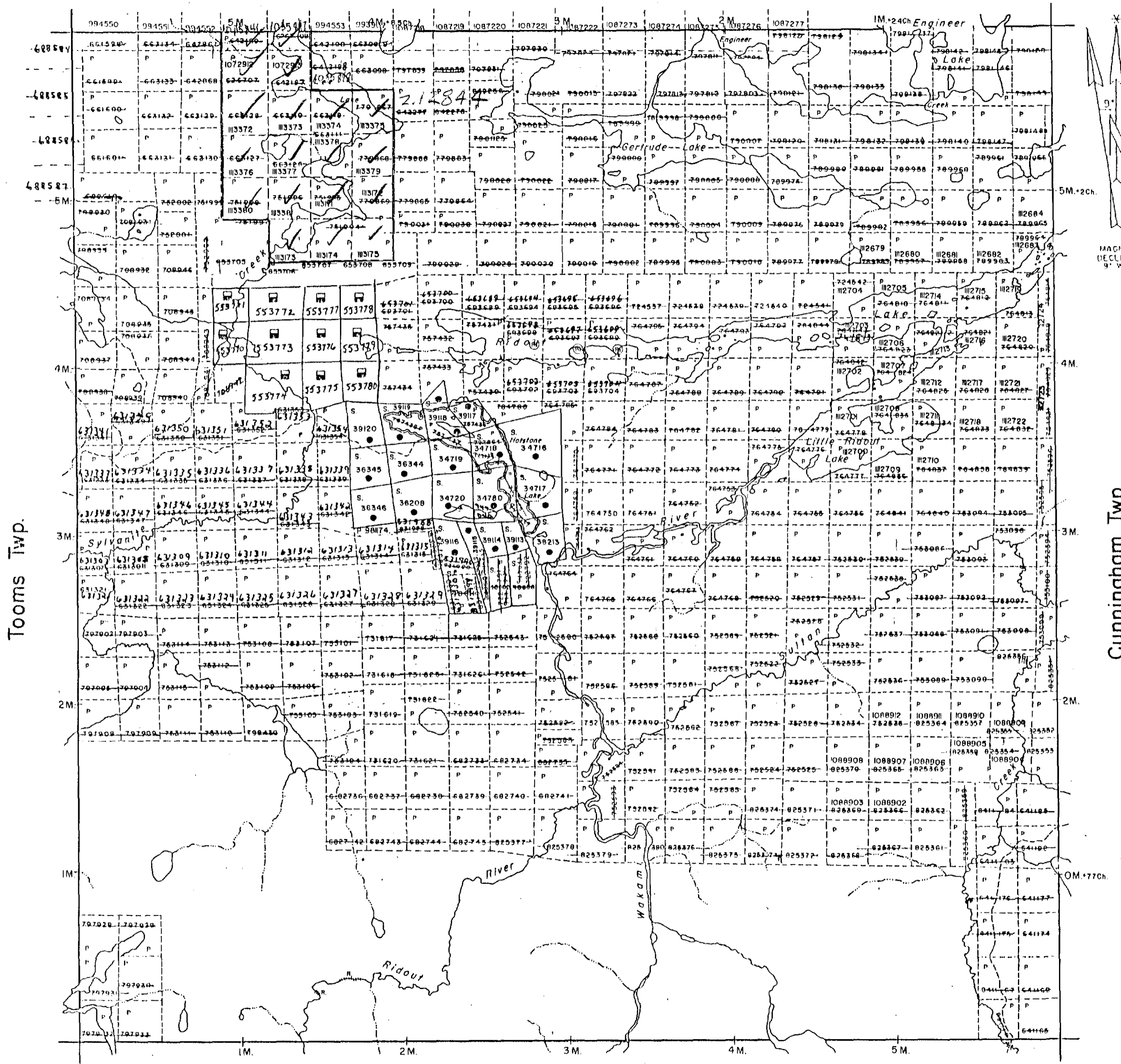
AREAS WITHDRAWN FROM DISPOSITION

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

Description Order No. Date Disposition File

(M) - CLAIMS WITHDRAWN UNDER SECTION 26 OF THE MINING ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.
 (S) - CLAIMS WITHDRAWN UNDER SECTION 26 OF THE MINING ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.
 (C) - CLAIMS WITHDRAWN UNDER SECTION 26 OF THE MINING ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

Denyes Twp.



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	⊕

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS

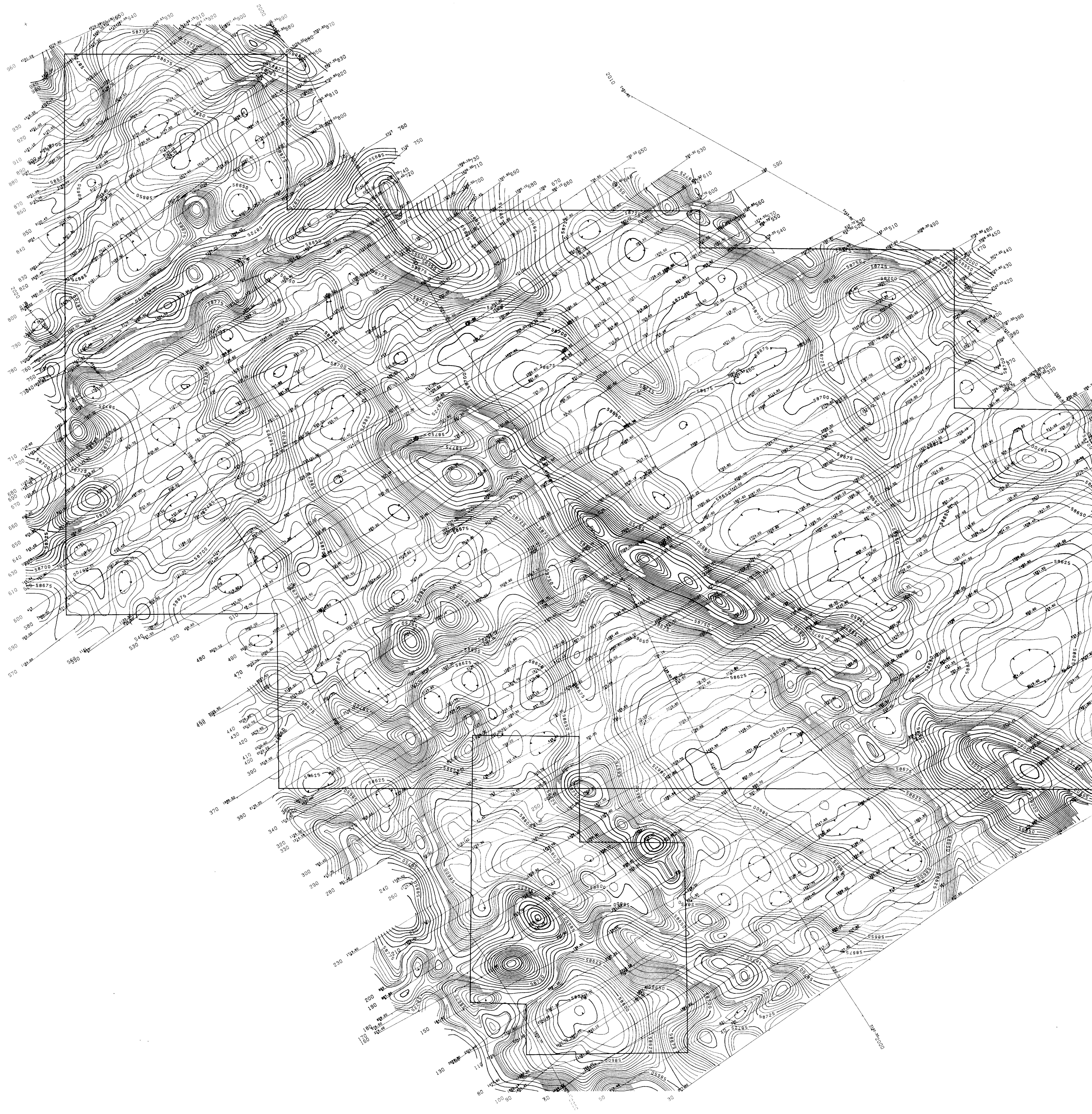
RECEIVED
MAY 28 1989

TOWNSHIP
GREENLAW
 M.N.R. ADMINISTRATIVE DISTRICT
 CHAPLEAU
 MINING DIVISION
 PORCUPINE
 LAND TITLES / REGISTRY DIVISION
 SUDBURY

Ontario Ministry of Natural Resources Land Management Branch

Date MARCH, 1985 Number **G-3235**

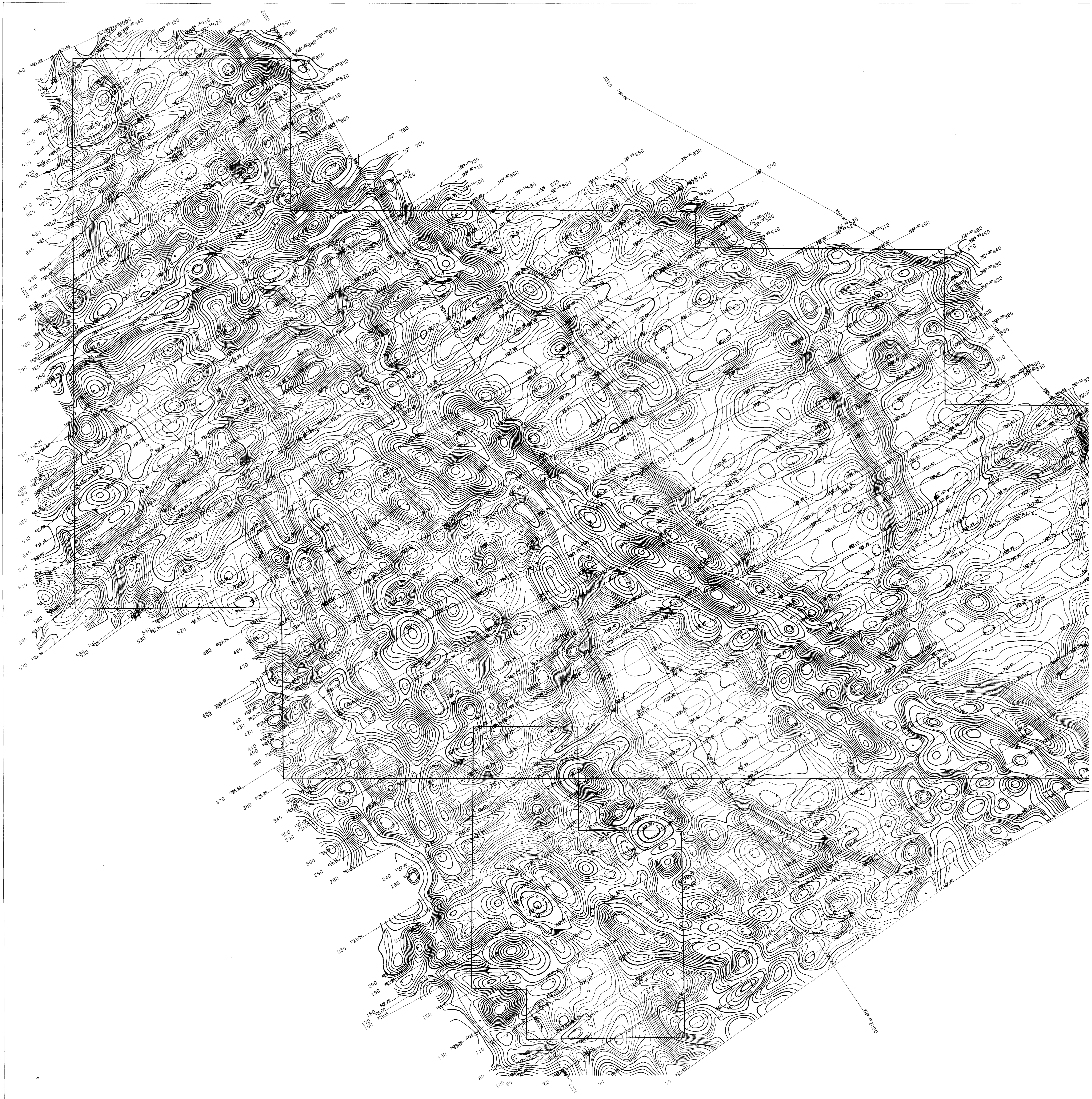




LEGEND

- Survey Altitude 100 metres MTC
- Line Spacing 100 metres
- Survey Boundary
- TOTAL MAGNETIC FIELD**
- 500 gammas
- 100 gammas
- 25 gammas
- 5 gammas



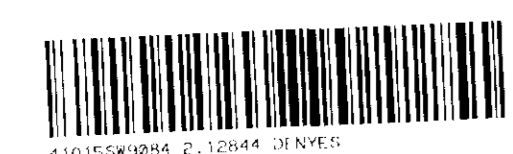


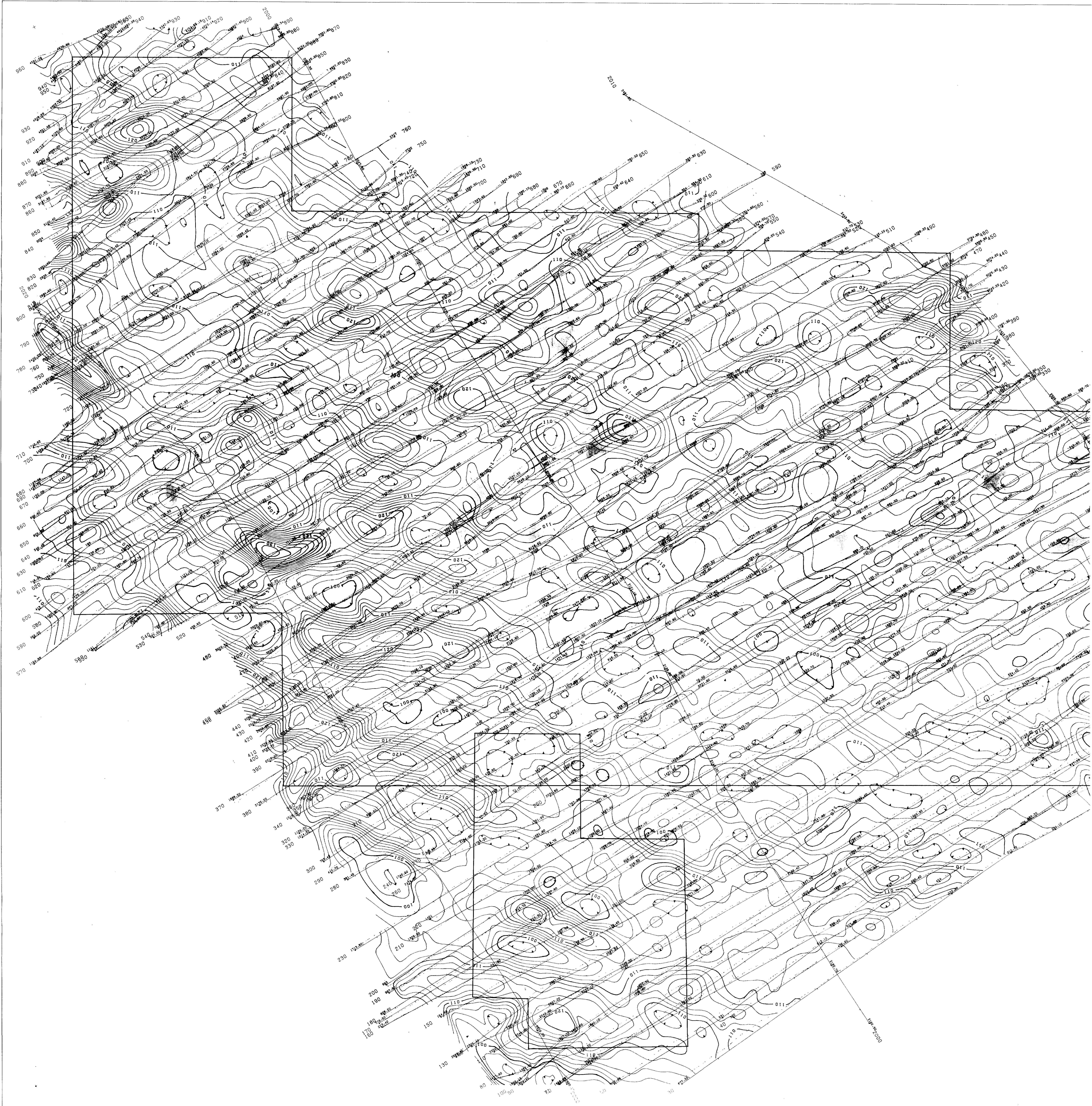
LEGEND

Survey Altitude 100 metres MTC
 Line Spacing 500 metres
 Survey Boundary

VERTICAL MAGNETIC GRADIENT

2.500 gammas/metre
 0.500 gammas/metre
 0.100 gammas/metre
 0.025 gammas/metre





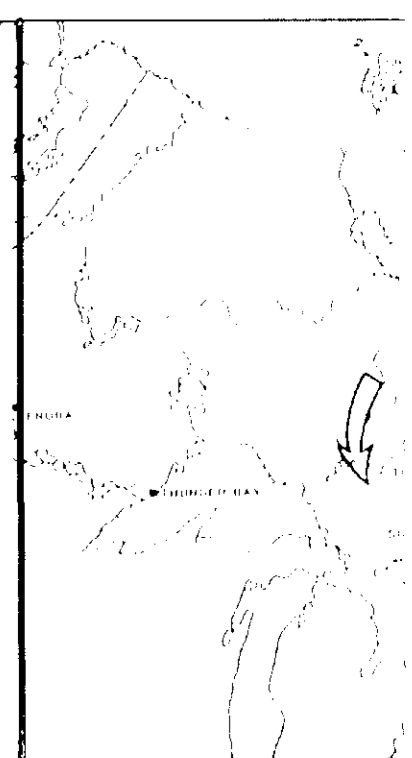
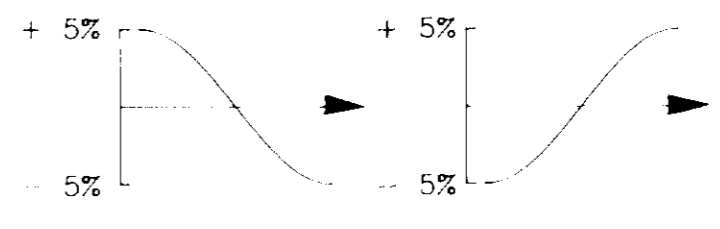
VLF Transmitter
 NAA Cutler, 24.0 kHz
 Azimuth 100

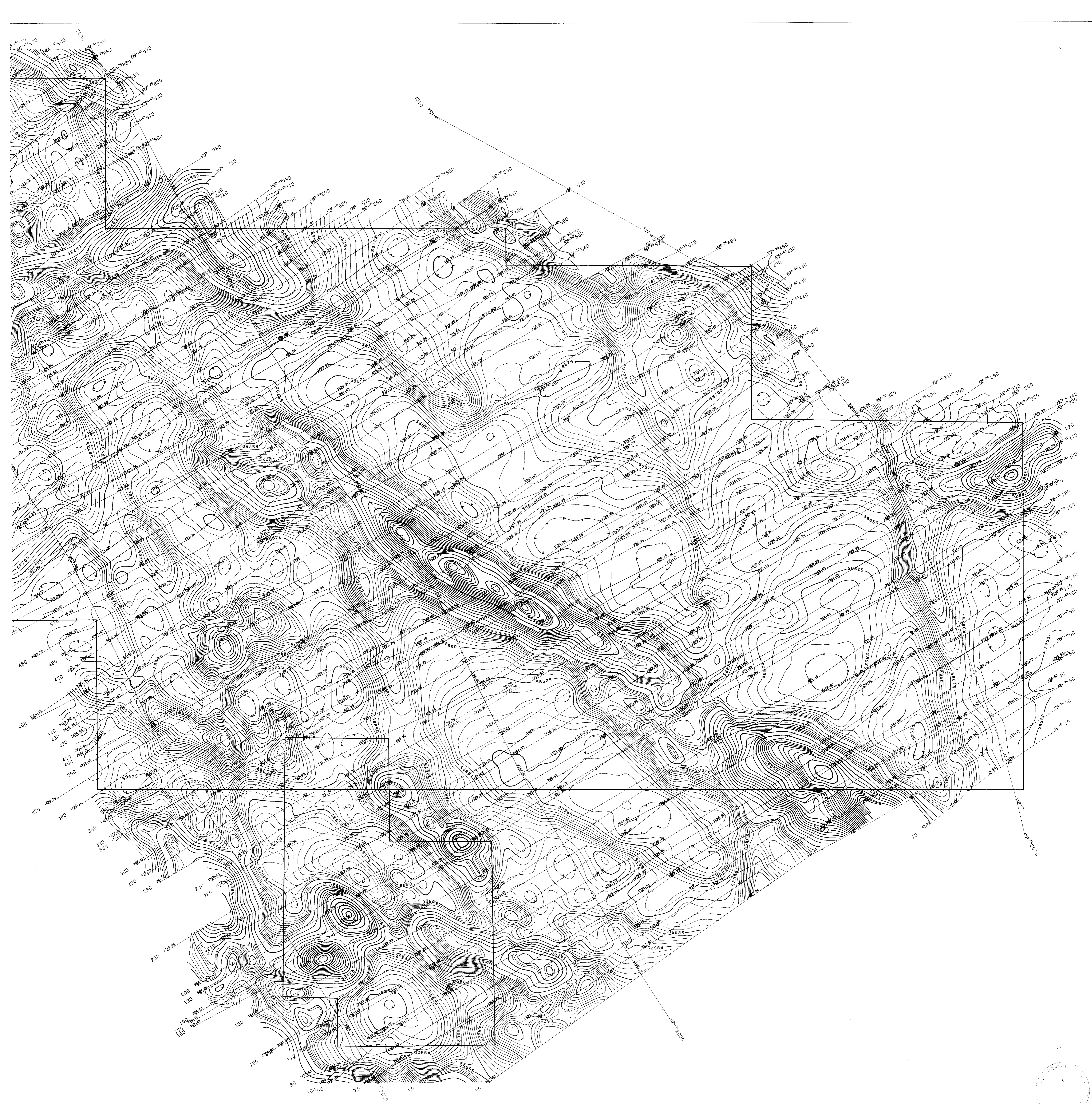
250



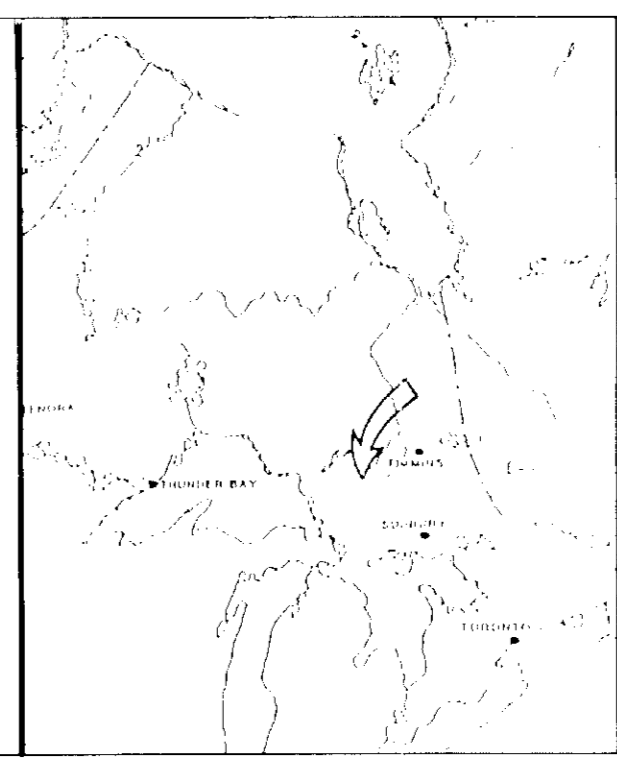
LEGEND

- Survey Altitude 100 metres MTC
- Line Spacing 100 metres
- Survey Boundary
- TOTAL FIELD STRENGTH (Contours)
 - 20%
 - 10%
 - 5%
 - 2%
- QUADRATURE (Profiles along Flight Lines)
 - Normal Slope
 - Reverse Slope

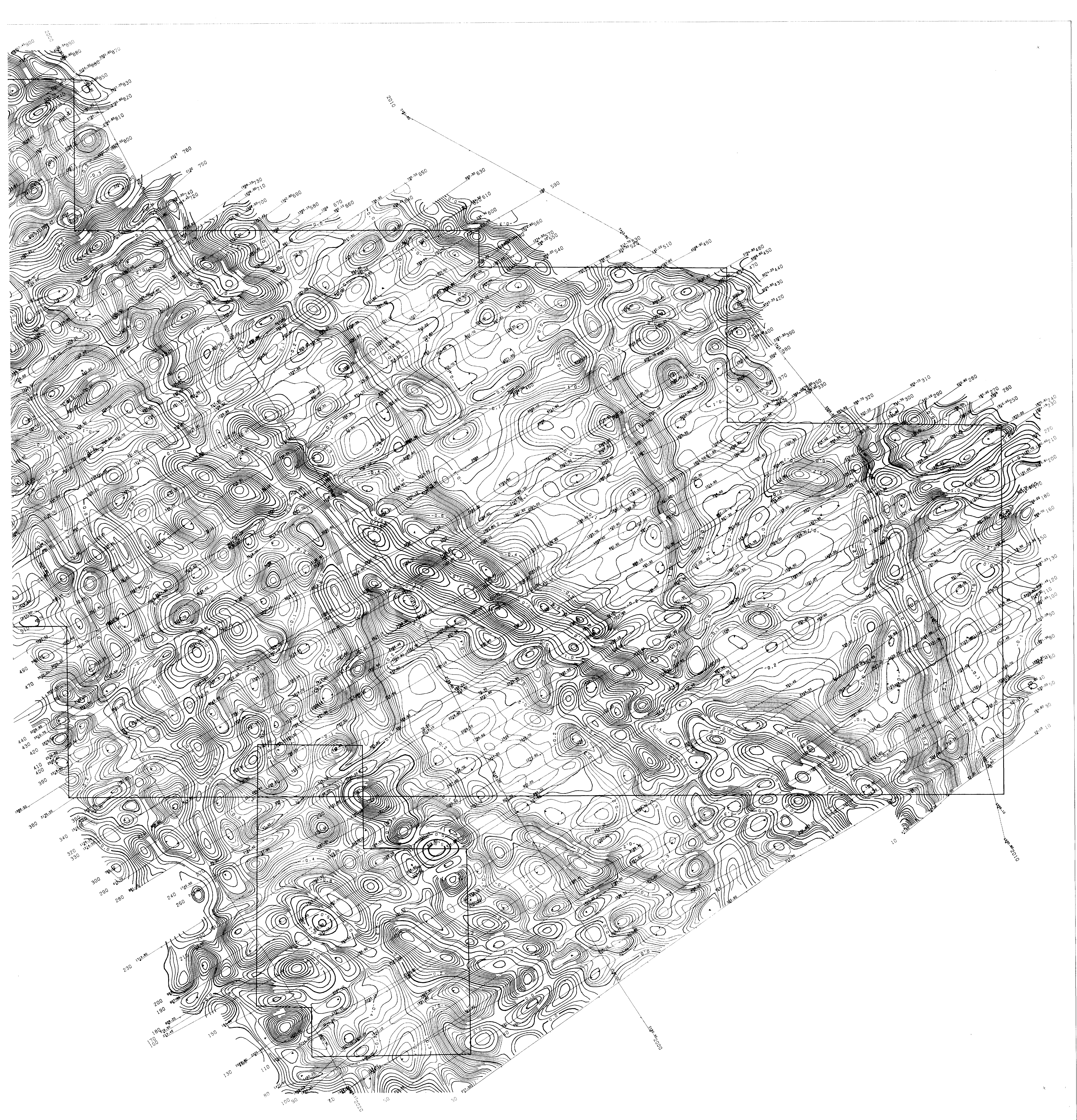




LEGEND
 Survey Altitude 100 metres MFC
 Line Spacing 100 metres
 Survey Boundary
TOTAL MAGNETIC FIELD
 500 gammas
 600 gammas
 700 gammas
 800 gammas

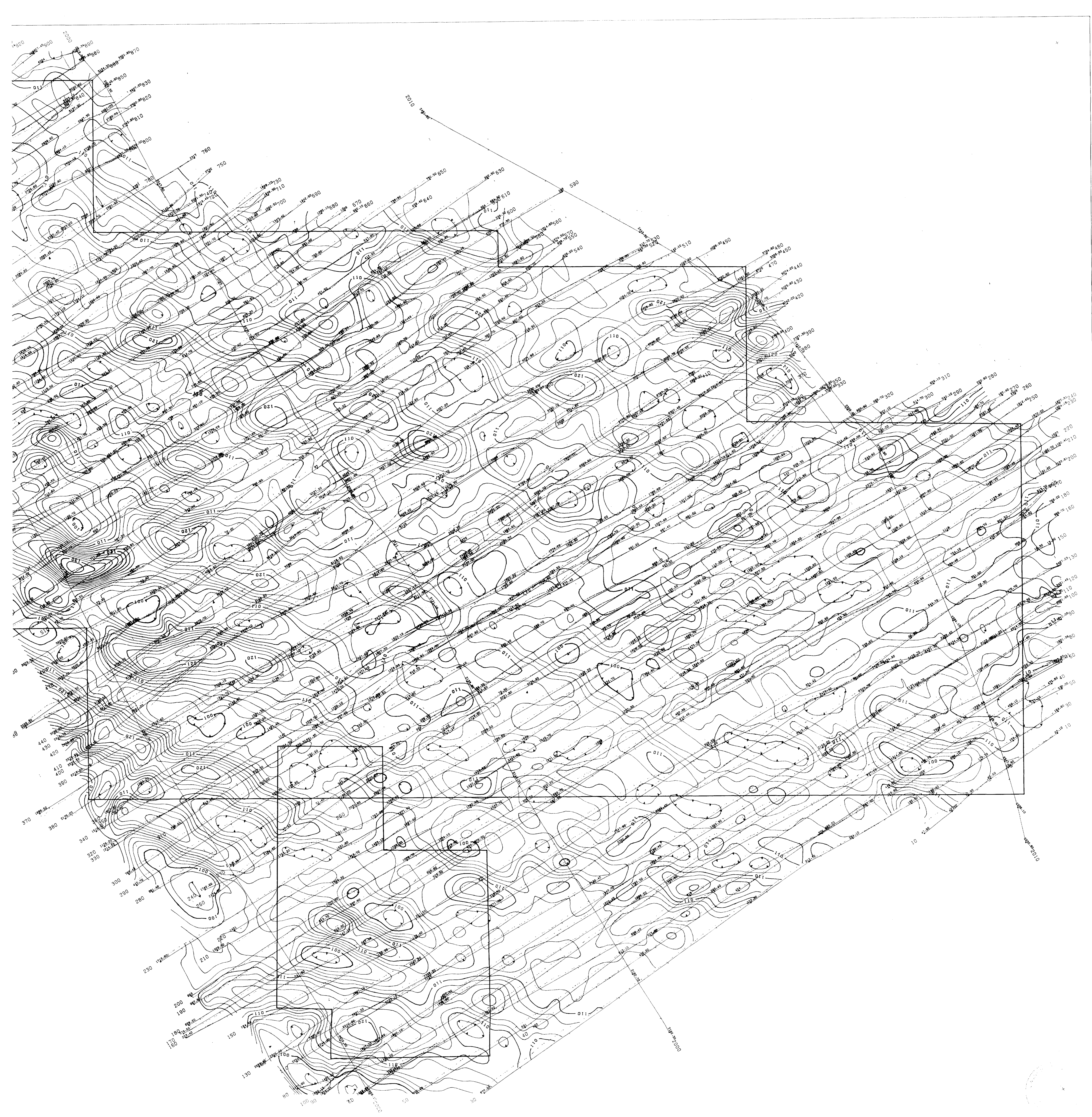


PATRIE EXPLORATION SERVICES
AIRBORNE MAGNETIC SURVEY
 TOTAL MAGNETIC FIELD
 DENYES, HALCROW & GREENLAW TWP.
 ONTARIO
 N.T.S. NO. 410/10.15 DRAWING NO. A-848-1
 SCALE: 1 : 10,000 DATE: September 1989
TERRAQUEST LTD.
 TORONTO, CANADA



LEGEND
 Survey Altitude 100 metres MTC
 Line Spacing 100 metres
 Survey Boundary
VERTICAL MAGNETIC GRADIENT
 1.000 gammas/metre
 0.500 gammas/metre
 0.100 gammas/metre
 0.025 gammas/metre

PATRIE EXPLORATION SERVICES	
AIRBORNE MAGNETIC SURVEY VERTICAL MAGNETIC GRADIENT Calculated From Total Field	
DENYES, HALCROW & GREENLAW TWP.S. ONTARIO	
N.T.S. NO. 410/10,15	DRAWING NO. A-848-2
SCALE: 1 : 10,000	DATE: September 1989
TERRAQUEST LTD. TORONTO, CANADA	



LEGEND

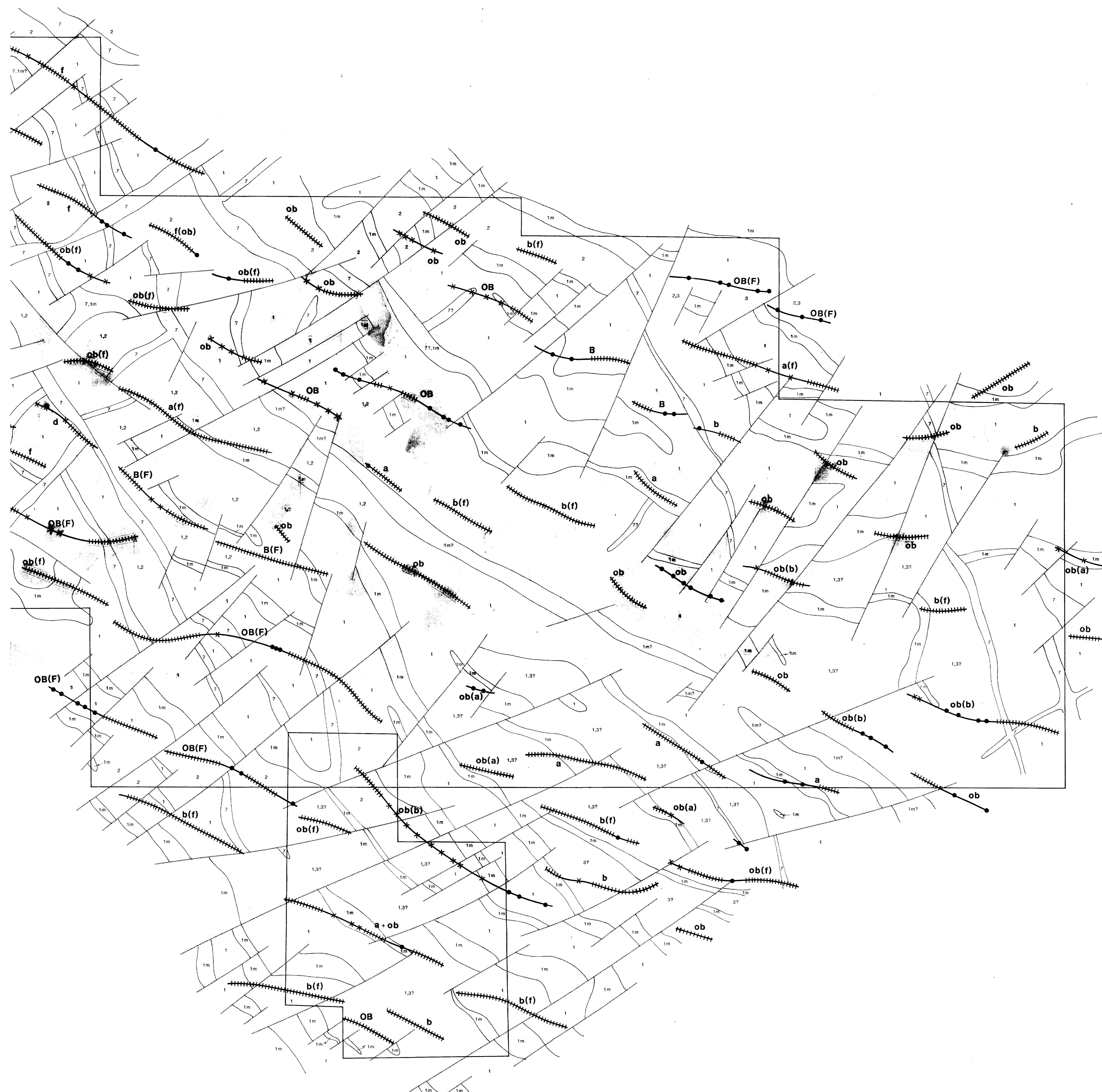
Survey Altitude 100 metres MSL
 Line Spacing 700 metres
 Survey Boundary

TOTAL FIELD STRENGTH (Contours)

100
 200
 300
 400
 500
 600
 700
 800
 900
 1000

QUADRATURE (Profiles along Flight Lines)
 Normal Slope
 Reverse Slope

PATRIE EXPLORATION SERVICES	
AIRBORNE VLF-EM SURVEY CONTOURS OF TOTAL FIELD STRENGTH PROFILES OF QUADRATURE	
DENYES, HALCROW & GREENLAW TWPS. ONTARIO	
A.P.S. NO. 410/1015	DRAWING NO. A 84B-3
SCALE 1 : 10,000	DATE September 1989
TERRAQUEST LTD. TORONTO, CANADA	



LITHOLOGY

- 7 Diabase Dyke
- 3 Metasediments
- 2 Felsic Metavolcanics
- 1m Magnetic unit within 1
- 1 Mafic to Intermediate Metavolcanics

LEGEND

- Survey Altitude 100 metres MTC
 - Line Spacing 100 metres
 - Survey Boundary
 - INTERPRETATION**
 - Contact
 - Fault
 - VLF-EM Conductor Axes**
 - Normal Quadrature
 - Reverse Quadrature
 - Total Field Only
- See text for classification of VLF-EM conductor axes

PATRIE EXPLORATION SERVICES

INTERPRETATION

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