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A-529

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1. Telephone (416) 869-0010

REPORT ON AN AIRBORNE MAGNETIC AND VLF-EM SURVEY MALLARD TOWNSHIP PORCUPINE MINING DIVISION, ONTARIO

for

WEACO RESOURCES LTD.

by

TERRAQUEST LTD.
Toronto, Canada

February 4, 1986

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF MAPS IN JACKET

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1. Telephone (416) 869-0010

1. INTRODUCTION

This report describes the specifications and results of a geophysical survey carried out for Weaco Resources Ltd., 805-475 Howe St. W., Vancouver, B.C. V6C 2B3 by Terraquest Ltd., 905 - 121 Richmond St. W., Toronto, Canada. The field work was performed on June 9, 1985 and the data processing, interpretation and reporting from November 15, 1985 to February 4, 1986.

The purpose of a survey of this type is two-fold. One is 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 favourable 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 meters 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 Mallard township, in the Porcupine Mining Division of Ontario about 40 kilometers west of the town of Gogama and 85 kilometres east of Chapleau. The claims occur in several blocks as shown in figure 2 although the data are plotted contiguously onto one map per data type. The claims lie in the eastern third of the township and can be reached by logging roads from the Jerome Mine Road to the southwest.

The latitude and longitude are 47 degrees 42 min., and 82 degrees 14 min. respectively, and the N.T.S. reference is 41O/9.

The claim numbers are shown in figure 2 and listed below:

P.826498-826510	(13)
P.826516-826517	(2)
P.837238-837254	(17)
P.837258-837276	(19)
P.837284-837286	(3)
P.837288-837289	(2)
P.837301-837302	(2)
P.837318-837330	(13)
P.837342-837360	(19)
P.837889-837892	(4).....94 claims total

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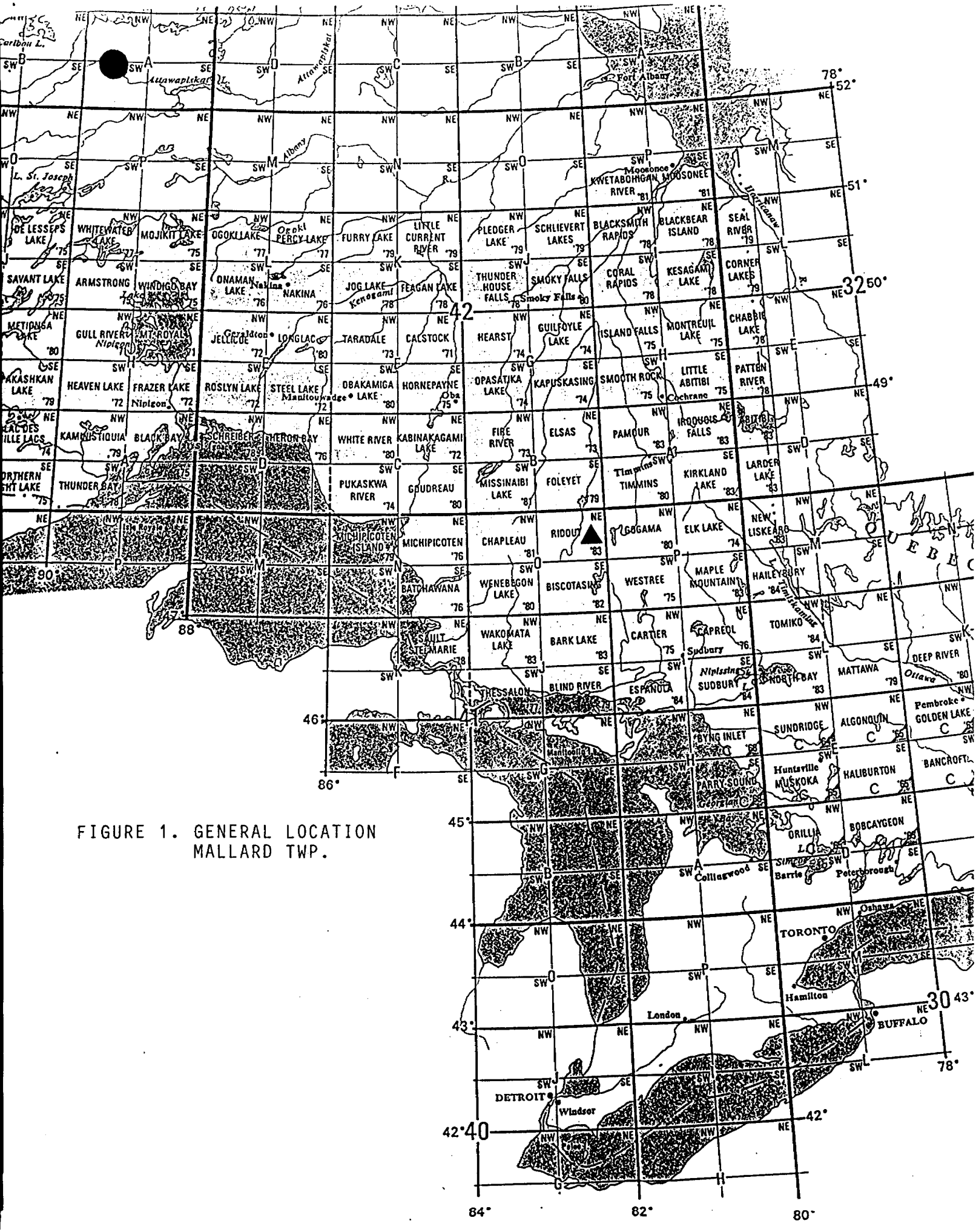

FIGURE 1. GENERAL LOCATION
MALLARD TWP.

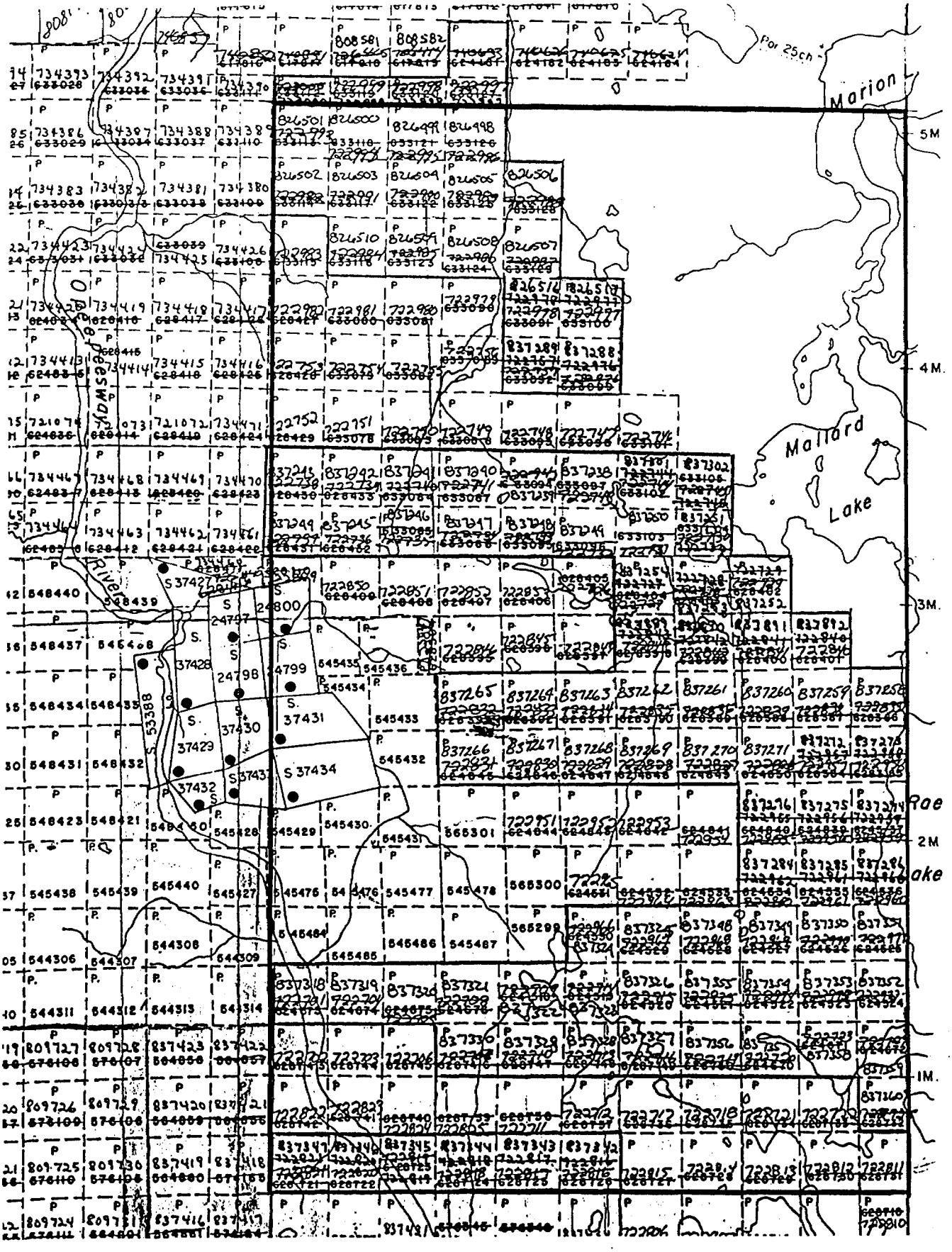

FIGURE 2. SURVEY AREA, CLAIMS MAP
MALLARD TWP. PROPERTY

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3. GEOLOGY

Map References

1. Map P.2342: Mallard Township. scale 1:15,840, O.G.S. 1980
2. Map 44g: Opeepeesway Lake Area. scale 1:63,360, O.D.M., 1935
3. Map 2352: Chapleau. scale 1:250,000, O.D.M., 1976

The main lithological units trend to the northwest. They progress from intermediate and mafic volcanics in the southwest corner to increasing proportions of dioritic intrusives across the centre to granitic intrusives in the northeast corner around Mallard Lake. Exposures are almost nonexistent over the felsic intrusives, hence the contacts are poorly defined.

Two occurrences of gold are mapped in the volcanics on the adjacent patented claims to the west.

4. SURVEY SPECIFICATIONS

4.1 Instruments

The survey was carried out using a Cessna 182 aircraft, registration C-FAKK, which carries a magnetometer and a VLF electromagnetic detector.

The magnetometer is a proton precession type with the sensor element mounted in an extension of the right wing tip. It's specifications are as follows:

Resolution:	0.5 gamma
Accuracy:	One gamma
Cycle time:	One second
Range:	20000 - 100000 gammas in 23 overlapping steps
Gradient tolerance:	Up to 5000 gammas per meter
Model:	GSM-8BA
Manufacturer:	GEM Systems Inc., 105 Scarsdale Rd., Don Mills, Ontario, M3B 2R5

The VLF-EM unit uses three orthoganol detector coils to measure (a) the total field strength of the time-varying EM field and (b) the phase relationship 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:	1/2 second

Model: TOTEM 2A
Manufacturer: Herz Industries, Toronto

The VLF sensor is mounted in the left wing tip extension.

Other instruments are:

. King KRA-10A Radar altimeter
. UDAS-100 data processor with Digidata nine track tape recorder, manufactured by Urtec Ltd., Markham, Ontario.
. Geocam video camera and recorder for flight path recovery, manufactured by Geotech Ltd., Markham, Ontario.

4.2 Lines and Data

a) Line spacing: 100 meters
b) Line direction: 360 degrees
c) Terrain clearance: 100 meters
d) Average ground speed: 156 km/hr.
e) Data point interval:
Magnetic: 42 meters
VLF-EM: 21 meters
f) Tie Line interval: 2 kilometers
g) Channel 1 (LINE): NAA Cutler, Me., 24.0 kHz
h) Channel 2 (ORTHO): NSS Annapolis. 21.4 kHz
i) Line km over total survey area: 360
j) Line km over claim groups: 170

4.3 Tolerances

a) 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.
b) Terrain clearance: Portions of line which were flown above 125 meters for more than one km were reflown if safety considerations were acceptable.
c) Diurnal magnetic variation: Less than twenty gammas deviation from a smooth background over a period of two minutes or less as seen on the base station analogue record.
d) Manoeuvre noise: Approximately +/-5 gammas.

4.4 Photomosaics

For navigating the aircraft and recovering the flight path, mosaics of aerial photographs were made from existing air photos. In order to provide a semi-controlled base the photos were laid down on a topographic map which had been photographically adjusted to the photo scale. The laydown was then photographed and printed at the final map scale.

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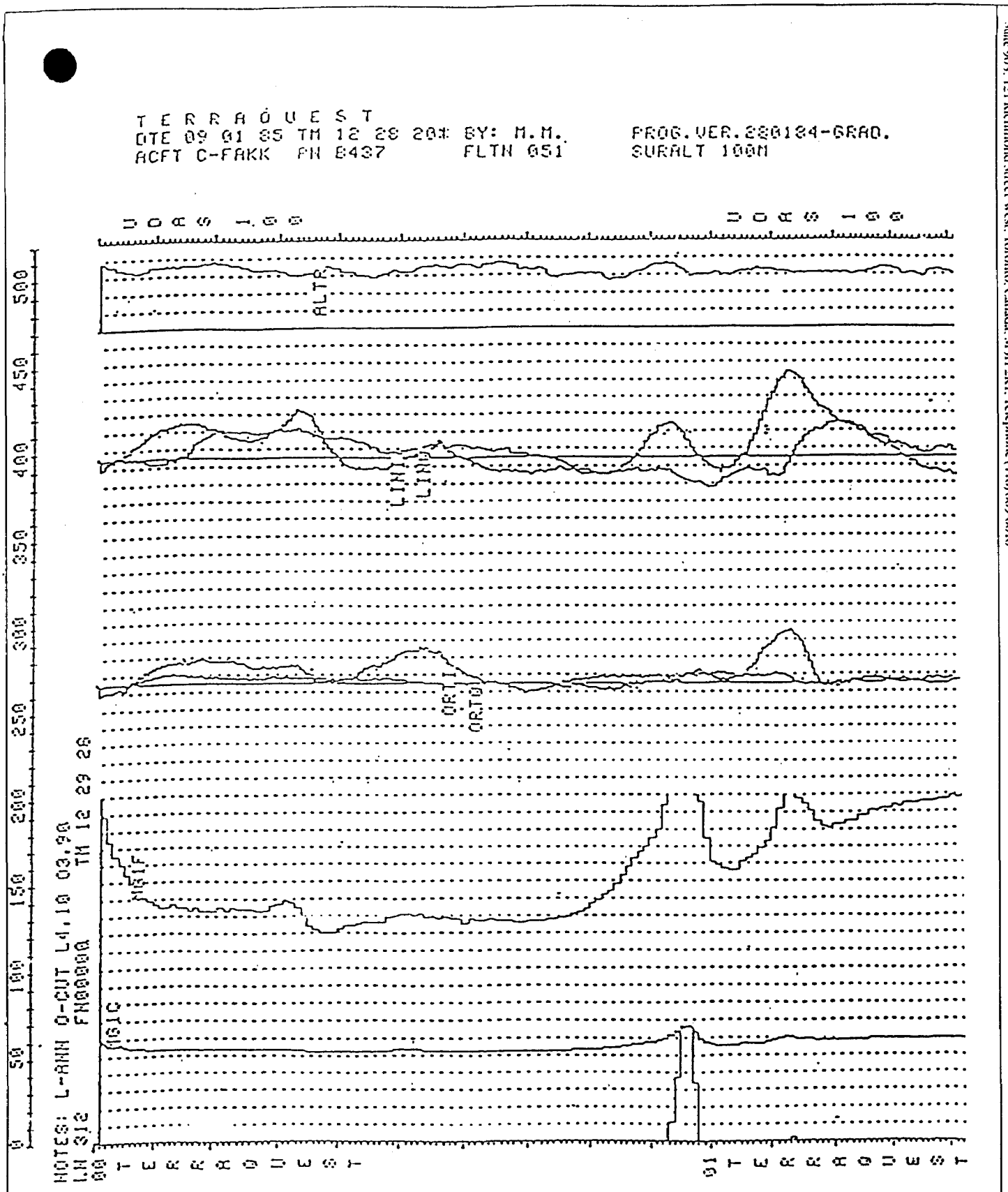

FIGURE 3. SAMPLE OF ANALOGUE DATA

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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.

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 1/4 the flight line spacing.

The vertical magnetic gradient is computed from the 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 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.

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

Grant, F.S. and Spector A.; 1970; Statistical Models for Interpreting Aeromagnetic Data; Geophysics, Vol 35

Grant, F.S.; Review of Data Processing and Interpretation Methods in Gravity and Magnetics; Geophysics, August 1972.

Spector, A.; Spectral Analysis of Aeromagnetic maps; unpublished thesis; University of Toronto, 1961.

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distinguished from the intermediate to mafic volcanics (Unit 1, the locations of Unit 2 being based solely on the geological maps.

Some volcanic horizons possess enhanced magnetic trends and have been interpreted as hypabyssal felsic volcanics (Unit 2h) or as subunits (Unit 1m) of the intermediate to mafic volcanics. These may be related to disseminated sulphides such as pyrrhotite or increased proportions of mafic constituents. As the magnetic activity of Unit 1m increases it becomes difficult to discriminate from weaker or thinner trends of Unit 4.

The felsic batholithic rocks (Unit 6) coincide with moderately low magnetic responses. The contact is difficult to pinpoint due to magnetic overwhelming by the dykes and gabbroic intrusives, and the gradational nature of the contact.

Faults that displace magnetic stratigraphy trend primarily to the north and are relatively continuous. Fewer, shorter faults trend to the northeast. Faults or shear zones parallel to magnetic trends would be difficult to detect.

Several long, formational-type VLF-EM conductor axes occur parallel to magnetic stratigraphy. These possess reasonable potential for sulphide origins within the bedrock and should be investigated on the ground by EM or I.P. methods. Alternatively they may be related to overburden especially in areas of depressed topography, or to graphitic zones. Northeast trending conductor axes may be related to fault systems.

7. SUMMARY

A combined magnetic and VLF-EM survey has been done on the survey area at a data density of approximately 1.6 km. per mineral claim. The magnetic data has been used to modify and update the existing geology and has shown a number of new contacts and faults. A number of VLF-EM conductor axes were found of which some are believed to be have potential sulphide origin and have been recommended for additional investigation.

TERRAQUEST LTD.

Charles Q. Barrie, M.Sc.

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1. Telephone (416) 869-0810

Ministry of Natural Resources
Ontario

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

W.R.# 06

WP606-61

The Minin

41009NW0006 2.9006 MALLARD

900

Type of Survey(s)
Geophysical- Electromagnetic & Magnetometer | Mallard Twp.

Claim Holder(s)
Weaco Resources Ltd. George Fournier John Dallaire Mike Peplinski A. Beaudoin

Prospector's Licence No.
T-1846

Address
Suite 805, 475 Howe St., Vancouver, B.C. V6C 2B3

Survey Company
Terraquest Ltd.

Date of Survey (from & to)
08 06 85 | 05 02 86
Day | Mo. | Yr. | Day | Mo. | Yr.

Total Miles of line ~~XX~~ flown
approx. 95

Name and Address of Author (of Geo-Technical report)
C. Q. Barrie, Suite 905, 121 Richmond St. West, Toronto, Ontario M5H 2K1

Credits Requested per Each Claim in Columns at right

		Days per Claim
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	
	- Electromagnetic	
	- Magnetometer	
	- 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.		Days per Claim
	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P.	See Attached List				

RECEIVED
FEB 17 1986
MINING LANDS SECTION

RECORDED
FEB 14 1986

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECEIVED
FEB 14 1986

Calculation of Expenditure Days Credits
Total Expenditures $ ÷ 15 = Total 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. 94

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
7520	Feb. 14/86	
	Date Approved as Recorded	Provincial Manager
	86.4.18	

Date	Recorded Holder or Agent (Signature)
Feb. 10, 1986	E. A. Gallo

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.

Name and Postal Address of Person Certifying
E. A. Gallo, 148 Allanhurst Drive, Islington, Ontario M9A 4K7

Date Certified	Certified by (Signature)
Feb. 10, 1986	E. A. Gallo

1362 (81/9)

WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY ASSESSMENT WORK SUBMISSION

Geophysical- Electromagnetic and Magnetometer

MALLARD TWP., PORCUPINE MINING DIVISION

Mining Claim No	Days Credit	Mining Claim No	Days Credit	Mining Claim No	Da Cre
P 826498	80	P 837263	80	P 837345	80
P 826499	80	P 837264	80	P 837346	80
P 826500	80	P 837265	80	P 837347	80
P 826501	80	P 837266	80	P 837348	80
P 826502	80	P 837267	80	P 837349	80
P 826503	80	P 837268	80	P 837350	80
P 826504	80	P 837269	80	P 837351	80
P 826505	80	P 837270	80	P 837352	80
P 826506	80	P 837271	80	P 837353	80
P 826507	80	P 837272	80	P 837354	80
P 826508	80	P 837273	80	P 837355	80
P 826509	80	P 837274	80	P 837356	80
P 826510	80	P 837275	80	P 837357	80
P 826516	80	P 837276	80	P 837358	80
P 826517	80	P 837284	80	P 837359	80
P 837238	80	P 837285	80	P 837360	80
P 837239	80	P 837286	80	P 837889	80
P 837240	80	P 837288	80	P 837890	80
P 837241	80	P 837289	80	P 837891	80
P 837242	80	P 837301	80	P 837892	80
P 837243	80	P 837302	80		
P 837244	80	P 837318	80	Total 94 claims	752
P 837245	80	P 837319	80		
P 837246	80	P 837320	80		
P 837247	80	P 837321	80		
P 837248	80	P 837322	80		
P 837249	80	P 837323	80		
P 837250	80	P 837324	80		
P 837251	80	P 837325	80		
P 837252	80	P 837326	80		
P 837253	80	P 837327	80		
P 837254	80	P 837328	80		
P 837258	80	P 837329	80		
P 837259	80	P 837330	80		
P 837260	80	P 837342	80		
P 837261	80	P 837343	80		
P 837262	80	P 837344	80		

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geophysical - Electromagnetic & Magnetometer

Township or Area Mallard Twp.

Claim Holder(s) Weaco Resources Ltd.

Suite 805, 475 Howe St., Vancouver, B.C. V6C 2B3

Survey Company Terraquest Ltd.

Author of Report C. Q. Barrie, Suite 905

Address of Author 121 Richmond St. West, Toronto, Ont M5H 2K1

Covering Dates of Survey June 8/85 - Feb. 5/86 (linecutting to office)

Total Miles of Line ~~Cut~~ Flown approx. 95

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim.

Geophysical
–Electromagnetic _____
–Magnetometer _____
–Radiometric _____
–Other _____
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer 40 Electromagnetic 40 Radiometric _____ (enter days per claim)

DATE: Feb. 10, 1986 SIGNATURE: _____ Author of Report or Agent

Res. Geol. _____ Qualifications 2.8305

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

See attached list
(prefix) (number)

If space insufficient, attach list

TOTAL CLAIMS 94

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) VLF Electromagnetic and Magnetometer

Instrument(s) Herz Totem 2A Gem GSM-8BA Proton Precession

(specify for each type of survey)

Accuracy 1 % 1 Gamma

(specify for each type of survey)

Aircraft used Cessna 182

Sensor altitude 100 meters

Navigation and flight path recovery method King KRA-10A Radar Altimeter, Urtel UDAS-100 Data Processor with Digidata 9 track recorder, and Geotech Geocam Video Camera.

Aircraft altitude 100 meters Line Spacing 100 meters

Miles flown over total area approx. 100 Over claims only approx 95

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY ASSESSMENT WORK SUBMISSION

Geophysical- Electromagnetic and Magnetometer

MALLARD TWP., PORCUPINE MINING DIVISION

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P 826504	P 837269	P 837351
P 826505	P 837270	P 837352
P 826506	P 837271	P 837353
P 826507	P 837272	P 837354
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P 826509	P 837274	P 837356
P 826510	P 837275	P 837357
P 826516	P 837276	P 837358
P 826517	P 837284	P 837359
P 837238	P 837285	P 837360
P 837239	P 837286	P 837889
P 837240	P 837288	P 837890
P 837241	P 837289	P 837891
P 837242	P 837301	P 837892
P 837243	P 837302	
P 837244	P 837318	Total 94 claims
P 837245	P 837319	
P 837246	P 837320	
P 837247	P 837321	
P 837248	P 837322	
P 837249	P 837323	
P 837250	P 837324	
P 837251	P 837325	
P 837252	P 837326	
P 837253	P 837327	
P 837254	P 837328	
P 837258	P 837329	
P 837259	P 837330	
P 837260	P 837342	
P 837261	P 837343	
P 837262	P 837344	

April 7, 1986 Report of Work 61/86

Weaco Resources Ltd
Suite 805
475 Howe Street
Vancouver, B.C.
V6C 2B3

Dear Sirs:

RE: Mining Claims P 826498, et al, in Mallard Township

We have not received the reports and maps (in duplicate) for Airborne (Magnetometer & Electromagnetic) Surveys on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on February 14, 1986 the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on April 15, 1986.

If the material is not submitted to this office by April 15, 1986 we will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

AB/mc
cc: C.Q. Barrie
Toronto, Ontario

E.A. Gallo
Islington, Ontario

Mining Recorder
Timmins, Ontario
Encl.

Mining Lands Section

File No 2.9006

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

all claims covered

L.D.

L.D.

D. Hurst

Signature of Assessor

April 15/86.

Date

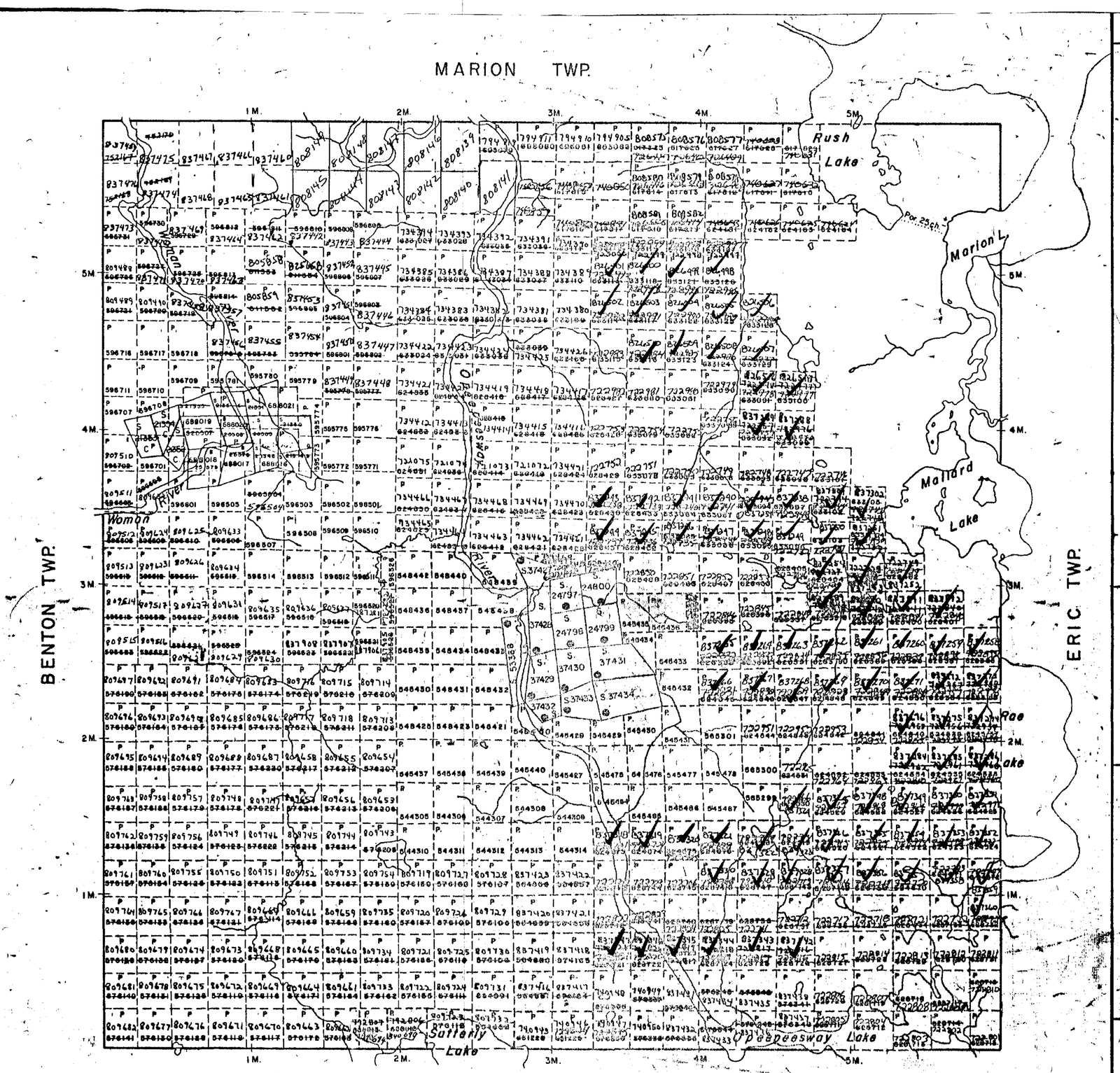
DISPOSITION OF CROWN LANDS

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.

NOTES

400' Surface Rights Reservation around all lakes and rivers.



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

Up to date as of: Dec 19/85

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

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

ACRES	HECTARES
40	16

TOWNSHIP OF MALLARD

DISTRICT OF SUDBURY

MINING DIVISION PORCUPINE

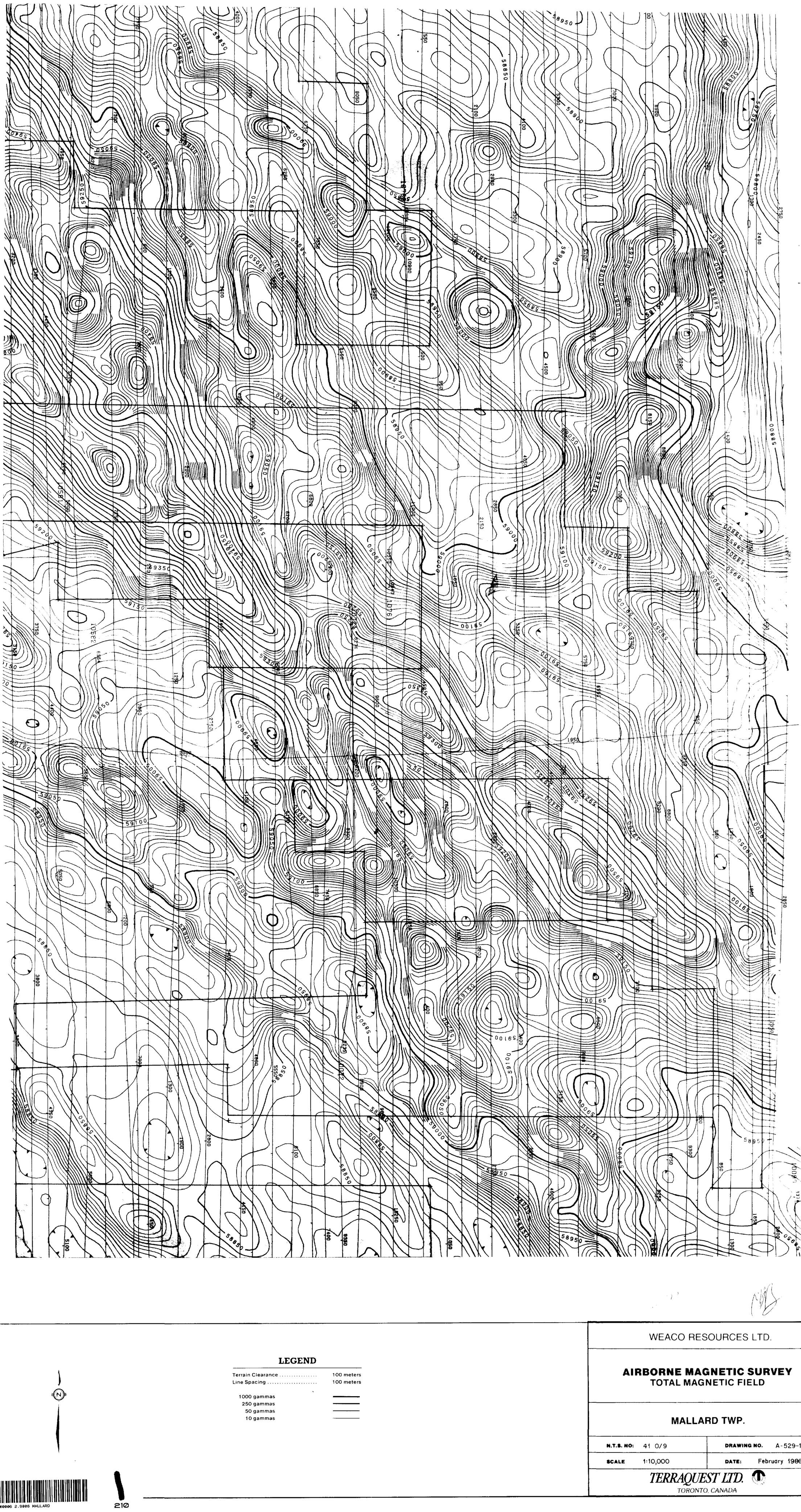
Ministry of Natural Resources — Surveys and Mapping Branch

Ontario

Date 13/2/1980

National Topographic Series

Plan No. M.849



LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters
1000 gammas	
250 gammas	
50 gammas	
10 gammas	

WEACO RESOURCES LTD.

AIRBORNE MAGNETIC SURVEY
TOTAL MAGNETIC FIELD

MALLARD TWP.

N.T.S. NO: 41 O/9	**DRAWING NO.** A-529-1
SCALE 1:10,000	**DATE:** February 1986

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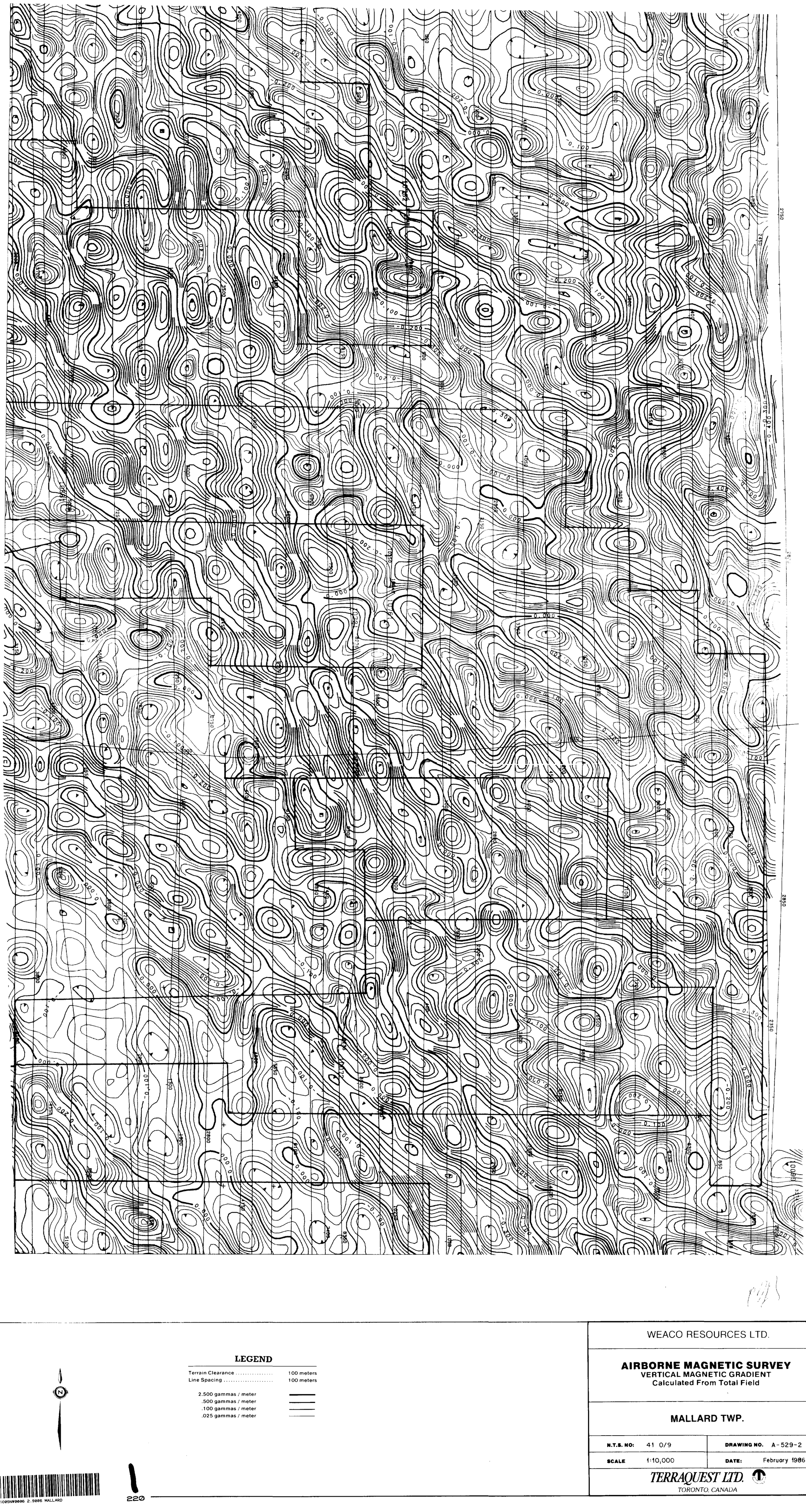

LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters
2.500 gammas / meter	
.500 gammas / meter	
.100 gammas / meter	
.025 gammas / meter	

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AIRBORNE MAGNETIC SURVEY

VERTICAL MAGNETIC GRADIENT
Calculated From Total Field

MALLARD TWP.

N.T.S. NO:	41 O/9	DRAWING NO.	A-529-2
SCALE	1:10,000	DATE:	February 1986

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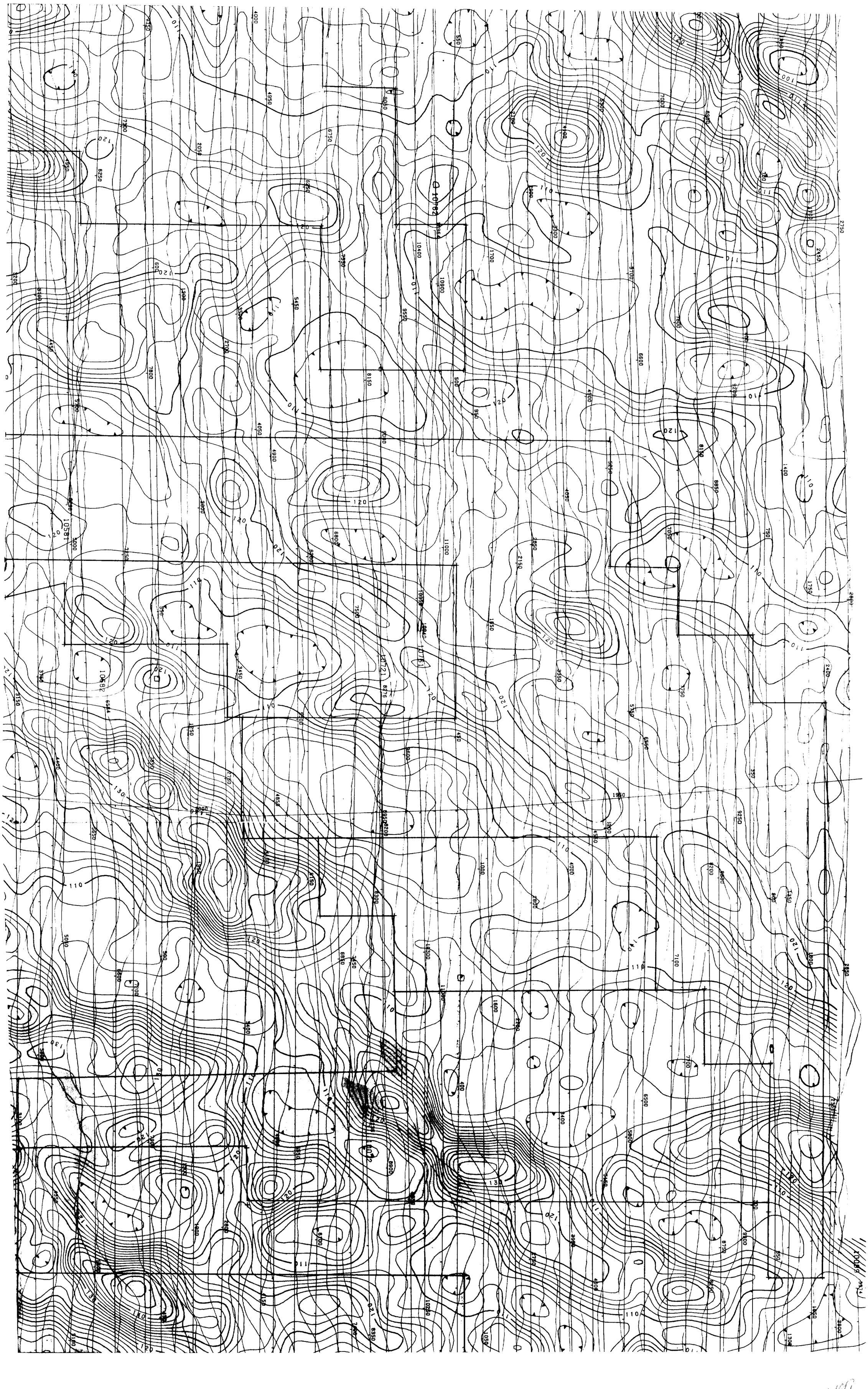
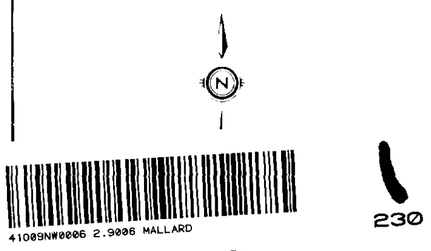
41009NW0006 2.9006 MALLARD

220



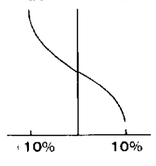


LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters

Field Strength
- 50%
- 10%
- 2%

QUADRATURE



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AIRBORNE VLF-EM SURVEY
CONTOURS OF TOTAL FIELD STRENGTH
PROFILES OF QUADRATURE

MALLARD TWP.

N.T.S. NO: 41 O/9	DRAWING NO. A-529-3
SCALE 1:10,000	DATE: February 1986

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LEGEND

INTERPRETATION

- Contact
- Fault
- Property Boundary

VLF-EM Conductor Axes

- normal quadrature
- reverse quadrature
- in phase only (no quadrature)

LITHOLOGY

MIDDLE PRECAMBRIAN

- 14 — Diabase, granophyre dykes and sheets

EARLY PRECAMBRIAN

- 9 — Diabase dykes
- 6 — Felsic batholithic intrusives
- 4 — Mafic and ultramafic intrusives
- 2h — Hypabyssal felsic metavolcanics
- 2 — Intermediate to felsic metavolcanics
- 1m — Magnetic unit within 1
- 1 — Mafic to intermediate metavolcanics

SYMBOLS

- ▲ — Mineralization

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INTERPRETATION

MALLARD TWP.

N.T.S. NO: 41 O/9	DRAWING NO. A-529-4
SCALE 1:10,000	DATE: February 1986

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