



41016SW0072 2.8890 BENTON

010

T-5022

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

for
WEACO RESOURCES LTD.

RECEIVED

FEB 11 1986

by

MINING LANDS SECTION

TERRAQUEST LTD.
Toronto, Canada

October 4, 1985

TERRAQUEST LTD.





41016SW0072 2.8890 BENTON

010C

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

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1. INTRODUCTION

This report describes the specifications and results of a geophysical survey carried out for Weaco Resources Ltd. 805-475 Howe St., Vancouver, B.C. V6C 2B3 by Terraquest Ltd., 905 - 121 Richmond St. W., Toronto, Canada. The field work was performed on May 17, 1985 and the data processing, interpretation and reporting from May 18 to October 4, 1985.

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 Benton township, in the Porcupine Mining Division of Ontario about 50 kilometers west of the town of Gogama. The claims can be reached by logging road from the west to southwest.

The latitude and longitude are 47 degrees 44 min., and 82 degrees 27 min. respectively, and the N.T.S. reference is 41-O/9 & 16.

- The claim numbers are:
- P-622062-622087 (26)
 - P-837439-837441 (3)
 - P-837489-837548 (60)
 - P-837555-837578 (24)
 - P-837581-837588 (8)
 - P-837593-837596 (4)
 - P-837644-837654 (11)
 - P-837909-837915 (7)
- total 143 claims



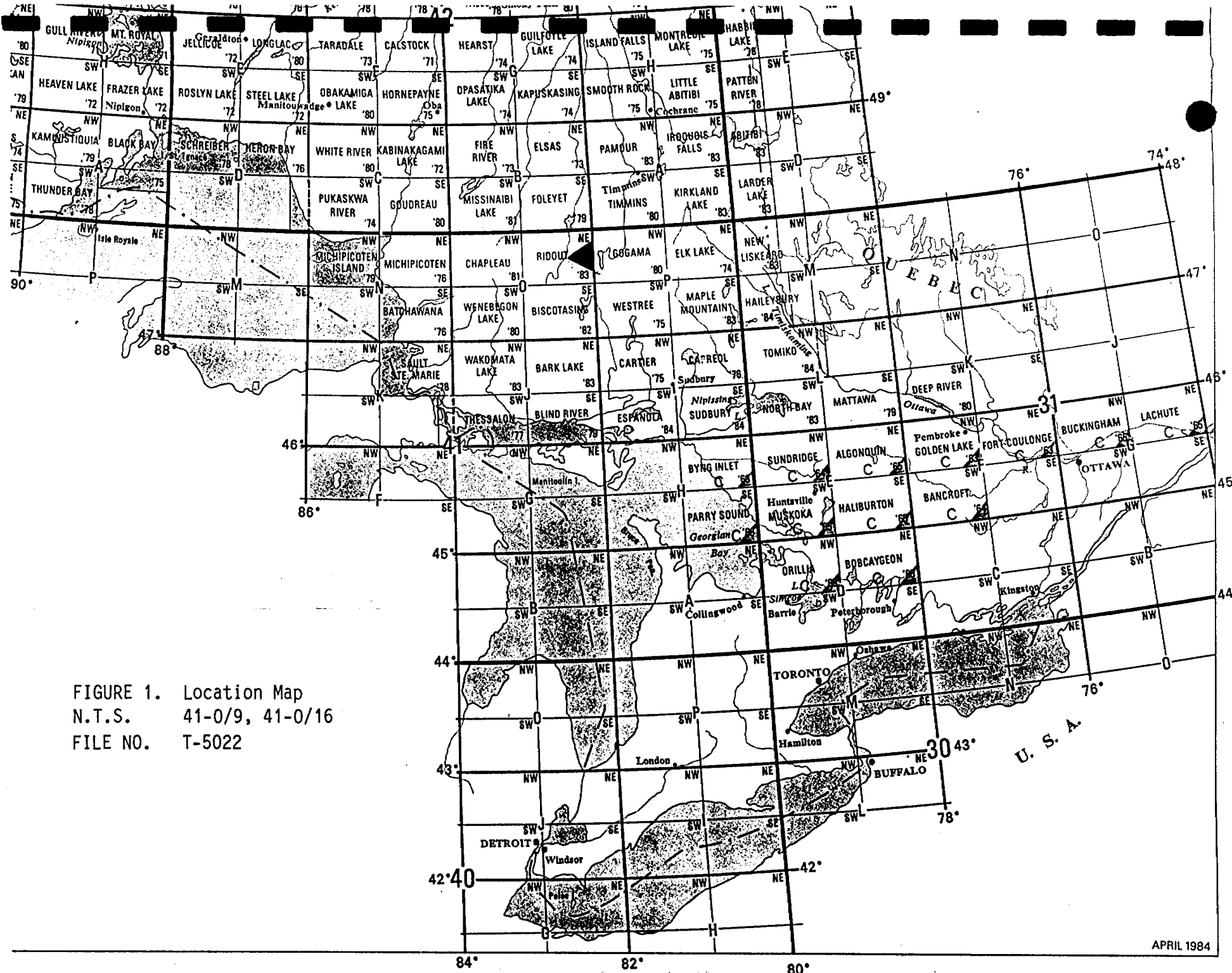


FIGURE 1. Location Map
 N.T.S. 41-0/9, 41-0/16
 FILE NO. T-5022

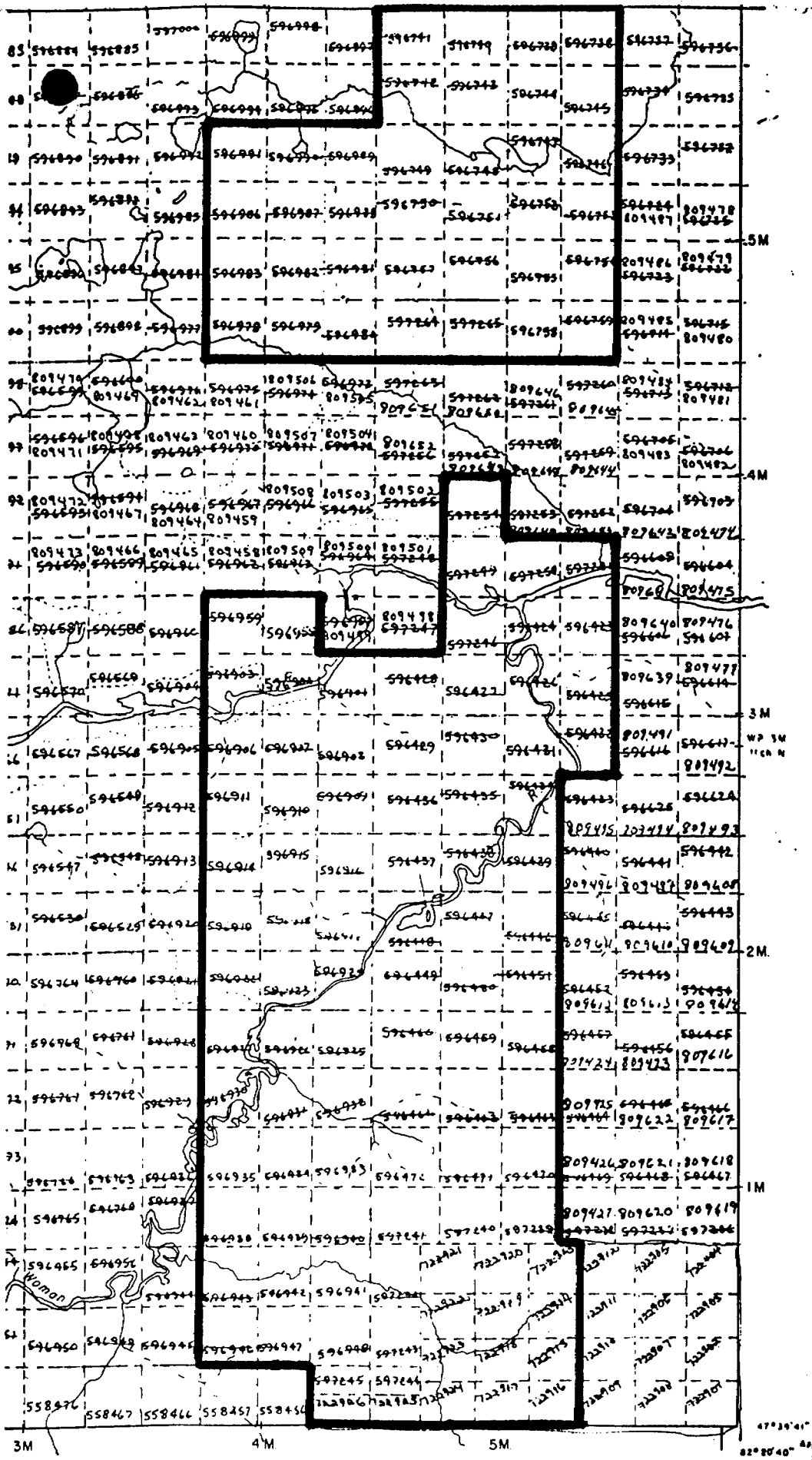


Figure 2. Survey Area
 Benton Twp.
 File T-5022

3. GEOLOGY

Map References

1. Map: 44g - Opeepeesway Lake Area. scale 1:63,360, O.D.M., 1935

The survey area has a large proportion of swamps and glacial landforms; outcrops preserve south trending glacial striae. The main suite of rocks underlying the claim group is the Keewatin volcanic group comprised of grey andesitic and basaltic lavas, light grey tuff and agglomerate. Poorly banded iron formations with pyrite replacements occur to the north and south. A band of northwest trending Timiskamian sediments are composed of greywacke and arkose.

Algonian intrusions of quartz diorite, diabase and gabbro-diorite occur as large conformable pods to the north and as small spotty exposures to the south. A large lens of quartz-feldspar-porphry occurs toward the east centre of the area along the north edge of Woman River.

Rare exposures of Matachewan diabase dikes occur throughout the area; differentiation between the Matachewan and Algonian diabase dikes can be problematic.

Regional north-northwest to north-northeast faults displace lithologies up to one kilometre horizontally.

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 orthogonal 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: 340
- j) Line km over claim groups: 300

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.



TERRAQUEST
DTE 09 01 85 TH 12 28 20: BY: M.M.
ACFT C-FAKK PN 8437 FLTN 051

PROG. VER. 280184-GRAD.
SURALT 100N

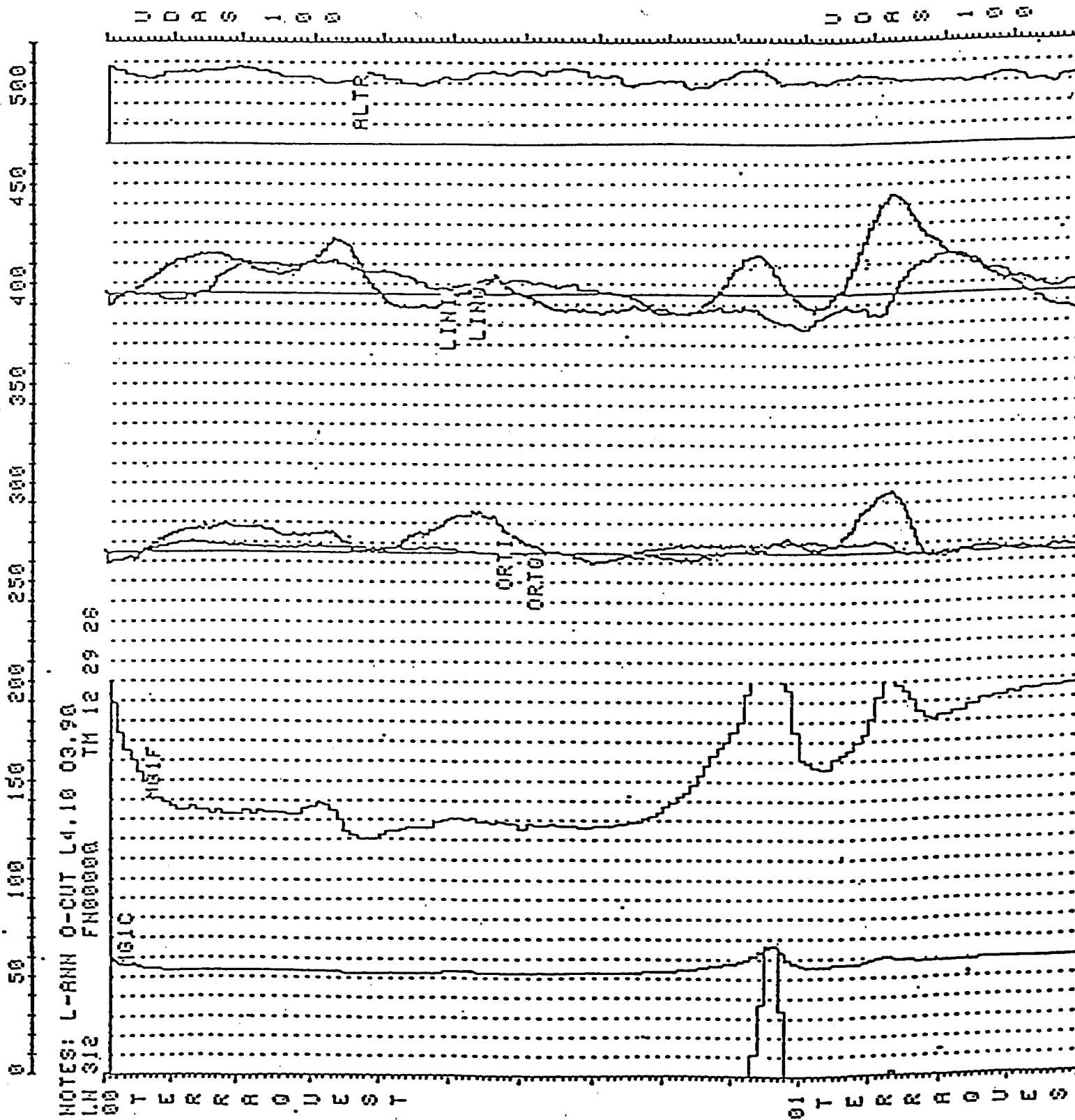


FIGURE 3. SAMPLE OF ANALOGUE DATA

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.

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 was 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.

- 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 Magnetism; Geophysics, August 1972.
Spector, A.; Spectral Analysis of Aeromagnetic maps; unpublished thesis; University of Toronto, 1961.



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.

Areas showing a smooth 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.

6.2 Interpretation

The total field magnetic data has a relief of about 800 gammas, the strongest response being over the west trending, weakly banded iron formations to the south and the iron formations and mafic intrusives to the north. Magnetic dikes, mostly unit 8 (Algoman) and minor unit 11 (Matachewan) trend 310 and 340 degrees and cross-cut the stratigraphy.

The wide low-magnetic zone cutting across the centre of the area (map # 1) is attributed to a decreased proportion of magnetic dikes



and iron formations. The exposure of quartz-feldspar-porphyry which occurs in this zone cannot be mapped reliably by magnetic techniques. However it's geologically mapped location has been included on the interpretation map as it does coincide vaguely with a form of intermediate magnetic character.

The spotty nature of the vertical gradient data map is derived from numerous displacements by north-northeast trending faults and to a lesser degree by north-northwest trending faults. An extensive linear magnetic-low zone, observed on both magnetic maps extends from the southeast to northwest corners of the property. This feature which appears to weaken or partially obliterate several other magnetic trends, and which itself is displaced by later faulting, is interpreted to be a broad shear zone with a dominant dextral motion.

The Timiskamian sediments cannot be readily detected by the magnetic data as they generally possess very little to no magnetic response and they are magnetically overwhelmed by the adjacent iron formations and diabase dikes.

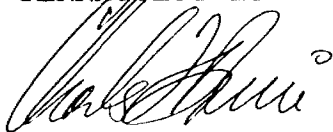
Numerous strong and moderate strength VLF-EM conductor axes parallel the general magnetic stratigraphy and are often displaced by or terminated against faults.

Anomalies which conform exactly to the outline of swamps or lakes can, in the first analysis, be attributed to conductive overburden and placed in a low priority for follow-up. This does not mean they should be discarded for intensive investigations. Those not related to overburden alone and conforming to stratigraphic trends or faults can be considered as possible conductive material in bedrock such as sulphide minerals or graphite. These are recommended for ground follow-up by electromagnetic or induced polarization methods.

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 have potential sulphide origin and have been recommended for additional investigation.

TERRAQUEST LTD.



Charles Q. Barrie, M.Sc.
Geologist

TERRAQUEST LTD.



WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY

ASSESSMENT WORK SUBMISSION - GEOPHYSICAL-AIRBORNE EM & MAG SURVEYS

BENTON TWP., PROCUPINE MINING DIVISION

Mining Claim No	Days Credit	Mining Claim No	Days Credit	Mining Claim No	Days Credit
P 622062	80	P 837500	80	P 837540	80
P 622063	80	P 837501	80	P 837541	80
P 622064	80	P 837502	80	P 837542	80
P 622065	80	P 837503	80	P 837543	80
P 622066	80	P 837504	80	P 837544	80
P 622067	80	P 837505	80	P 837545	80
P 622068	80	P 837506	80	P 837546	80
P 622069	80	P 837507	80	P 837547	80
P 622070	80	P 837508	80	P 837548	80
P 622071	80	P 837509	80	P 837644	80
P 622072	80	P 837510	80	P 837645	80
P 622073	80	P 837511	80	P 837646	80
P 622074	80	P 837512	80	P 837647	80
P 622075	80	P 837513	80	P 837648	80
P 622076	80	P 837514	80	P 837649	80
P 622077	80	P 837515	80	P 837650	80
P 622078	80	P 837516	80	P 837651	80
P 622079	80	P 837517	80	P 837652	80
P 622080	80	P 837518	80	P 837653	80
P 622081	80	P 837519	80	P 837654	80
P 622082	80	P 837520	80	P 837909	80
P 622083	80	P 837521	80	P 837910	80
P 622084	80	P 837522	80	P 837911	80
P 622085	80	P 837523	80	P 837912	80
P 622086	80	P 837524	80	P 837913	80
P 622087	80	P 837525	80	P 837914	80
P 837439	80	P 837526	80	P 837915	80
P 837440	80	P 837527	80		
P 837441	80	P 837528	80	Total 107	8560 Days
P 837489	80	P 837529	80	claims	Credit
P 837490	80	P 837530	80		
P 837491	80	P 837531	80		
P 837492	80	P 837532	80		
P 837493	80	P 837533	80		
P 837494	80	P 837534	80		
P 837495	80	P 837535	80		
P 837496	80	P 837536	80		
P 837497	80	P 837537	80		
P 837498	80	P 837538	80		
P 837499	80	P 837539	80		

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 _____

RECEIVED

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 _____

WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY

ASSESSMENT WORK SUBMISSION - GEOPHYSICAL-AIRBORNE EM & MAG SURVEYS

BENTON TWP., PROCUPINE MINING DIVISION

P 622062	P 837500	P 837540
P 622063	P 837501	P 837541
P 622064	P 837502	P 837542
P 622065	P 837503	P 837543
P 622066	P 837504	P 837544
P 622067	P 837505	P 837545
P 622068	P 837506	P 837546
P 622069	P 837507	P 837547
P 622070	P 837508	P 837548
P 622071	P 837509	P 837644
P 622072	P 837510	P 837645
P 622073	P 837511	P 837646
P 622074	P 837512	P 837647
P 622075	P 837513	P 837648
P 622076	P 837514	P 837649
P 622077	P 837515	P 837650
P 622078	P 837516	P 837651
P 622079	P 837517	P 837652
P 622080	P 837518	P 837653
P 622081	P 837519	P 837654
P 622082	P 837520	P 837909
P 622083	P 837521	P 837910
P 622084	P 837522	P 837911
P 622085	P 837523	P 837912
P 622086	P 837524	P 837913
P 622087	P 837525	P 837914
P 837439	P 837526	<u>P 837915</u>
P 837440	P 837527	
P 837441	P 837528	Total 107
P 837489	P 837529	claims
P 837490	P 837530	
P 837491	P 837531	
P 837492	P 837532	
P 837493	P 837533	
P 837494	P 837534	
P 837495	P 837535	
P 837496	P 837536	
P 837497	P 837537	
P 837498	P 837538	
P 837499	P 837539	

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, Urtec 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. 150 Over claims only approx. 110

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 _____

March 24, 1986

Your File: 60-86
Our File: 2.8890

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

Dear Sir:

RE: Notice of Intent dated March 6, 1986
Geophysical (Electromagnetic & Magnetometer)
Surveys on Mining Claims P 622062, et al,
in Benton Township

The assessment work credits, as listed with the
above-mentioned Notice of Intent, have been approved
as of the above date.

Please inform the recorded holder of these mining
claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

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

Telephone: (416) 965-4888

DK/mc

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

Mr. G.H. Ferguson
Mining & Lands Comm.
Toronto, Ontario

E.A. Gallo
148 Allanhurst Drive
Islington, Ontario
M9A 4K7

Resident Geologist
Timmins, Ontario

Terraquest Ltd
Suite 905
121 Richmond Street West
Toronto, Ontario M5H 2K1
Attention: C.Q. Barrie



Recorded Holder	WEACO RESOURCES LTD
Township or Area	BENTON TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ 40 _____ days	
Magnetometer _____ 40 _____ days	P 622070 to 87 inclusive
Radiometric _____ days	837439 to 41 inclusive
Induced polarization _____ days	837489 to 548 inclusive
Other _____ days	837644 to 54 inclusive
	837909 to 15 inclusive
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input checked="" type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

--

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey	<input checked="" type="checkbox"/> insufficient technical data filed
P 622062 to 69 inclusive	

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Ontario

March 19/86

Ministry of
Northern Development
and Mines

March 4, 1986

Your File: 60-86
Our File: 2.8890

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

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette 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

DK/mc
Encl.

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

Mr. G.H. Ferguson
Mining & Lands Comm.
Toronto, Ontario

E.A. Gallo
148 Allanhurst Drive
Islington, Ontario
M9A 4K7

Terraquest Ltd
Suite 905
121 Richmond Street West
Toronto, Ontario M5H 2K1
Attention: C.Q. Barrie



Notice of Intent
for Technical Reports

March 6, 1986

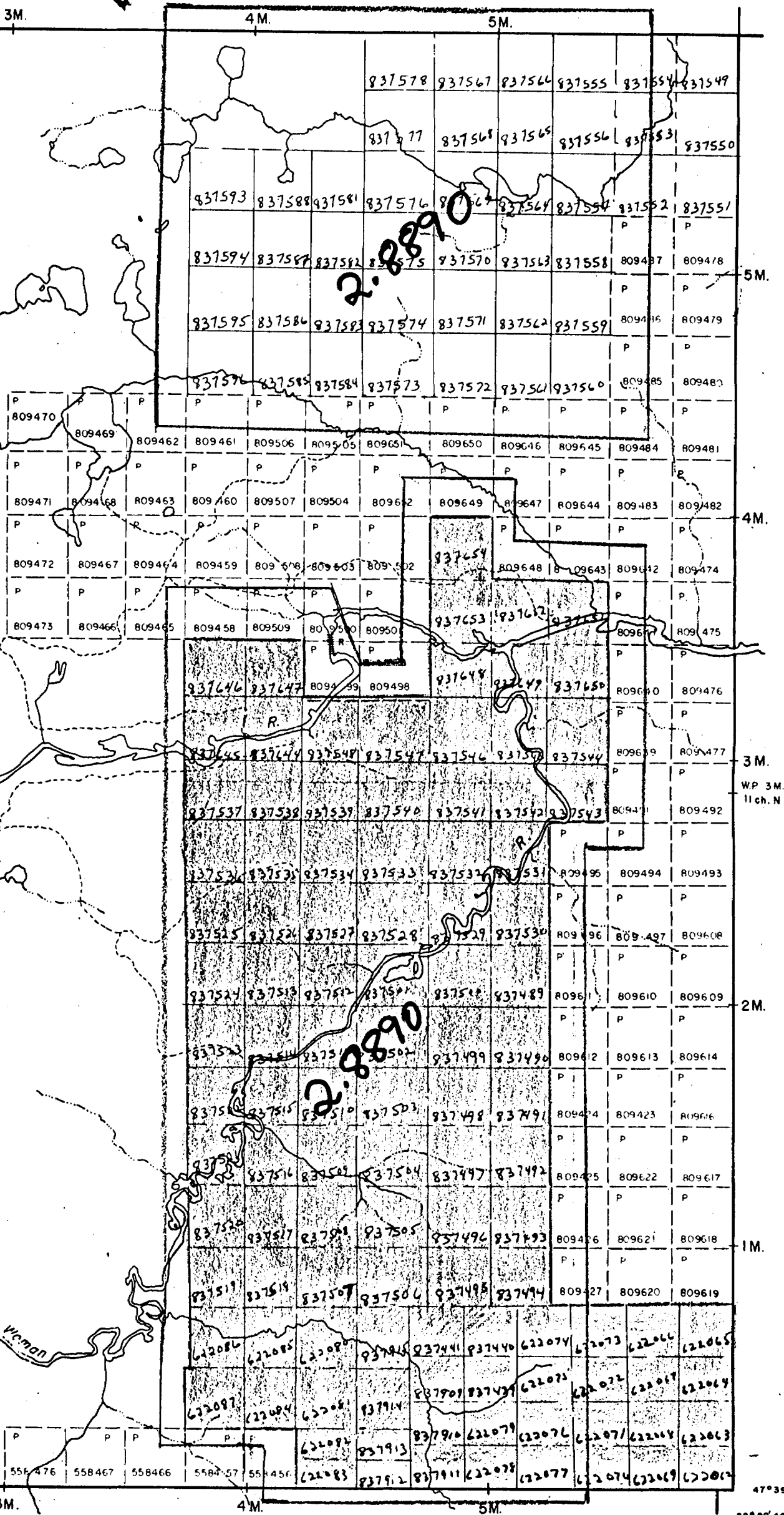
2.8890/60-86

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



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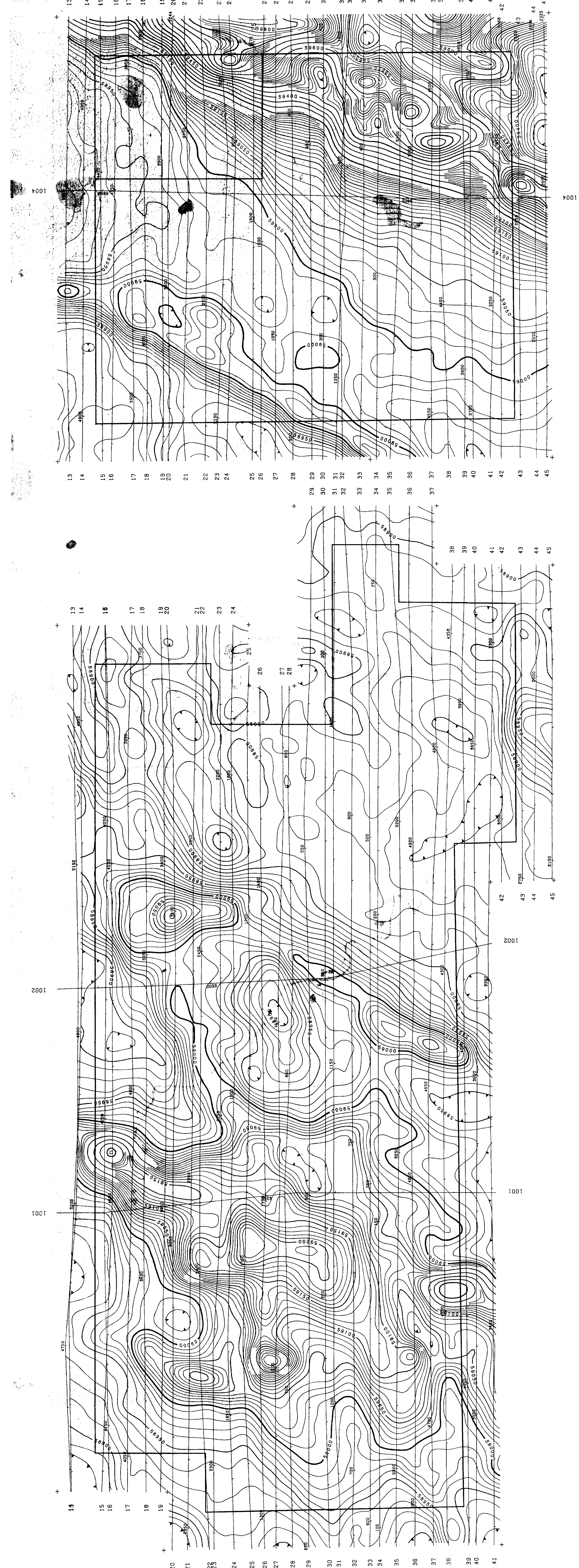
MALLARD TP.

W.P. 3M.
11 ch. N

47°39'41"
82°20'40" Approx.



Ontario

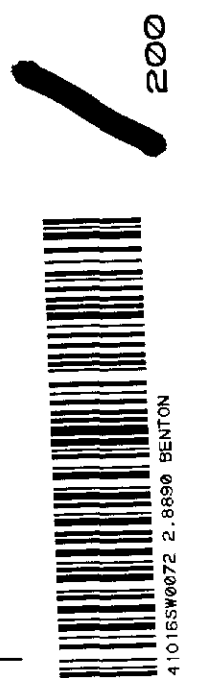


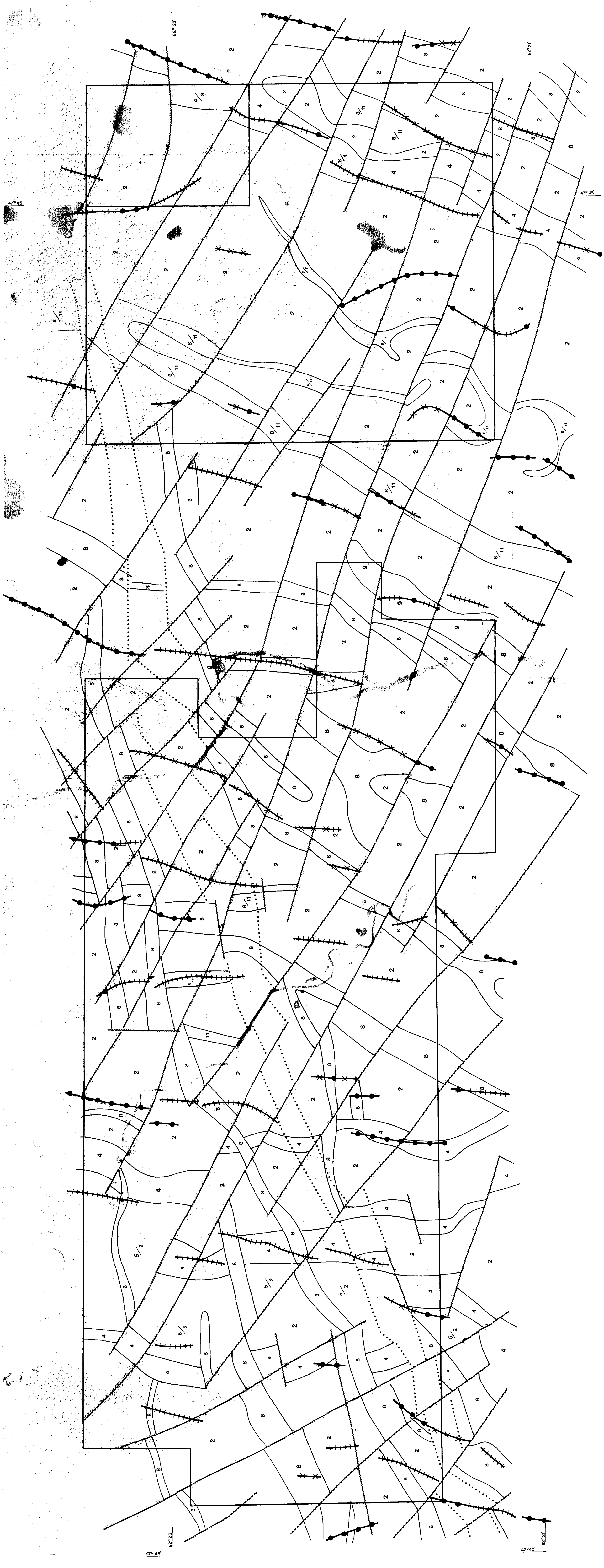
2890

LEGEND
 PROPERTY BOUNDARY ———
 ROAD ———
 RIVER ———
 100 meters
 200 meters
 500 gamma
 250 gamma
 50 gamma
 10 gamma

WEACO RESOURCES LTD.
 AIRBORNE MAGNETIC SURVEY
 TOTAL MAGNETIC FIELD
 BENTON TWP.
 N.I.S. NO. 41 0/9 41 0/6 DRAWING NO. T-5022-1
 SCALE 1: 10,000 DATE AUG. 1985
 TERRAQUEST LTD.
 TORONTO, CANADA

N.T. TRANSMITTER
 CHIRP 24.0 MHz
 100.7 Hz





LEGEND
 PROPERTY BOUNDARY
 TERRAIN ELEVATION
 LINE SPACING

WEACO RESOURCES LTD.
 INTERPRETATION
 BENTON TWP.
 N.T.S. NO. 41 0/9 - 41 0/6 DRAWING NO. T-5022-4
 SCALE 1 : 10,000 DATE: AUG. 1985
 TERRAQUEST LTD.
 TORONTO, CANADA

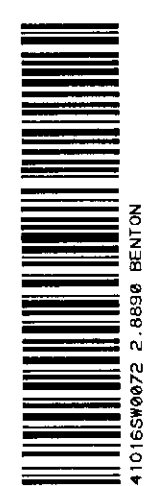
2880

LEGEND

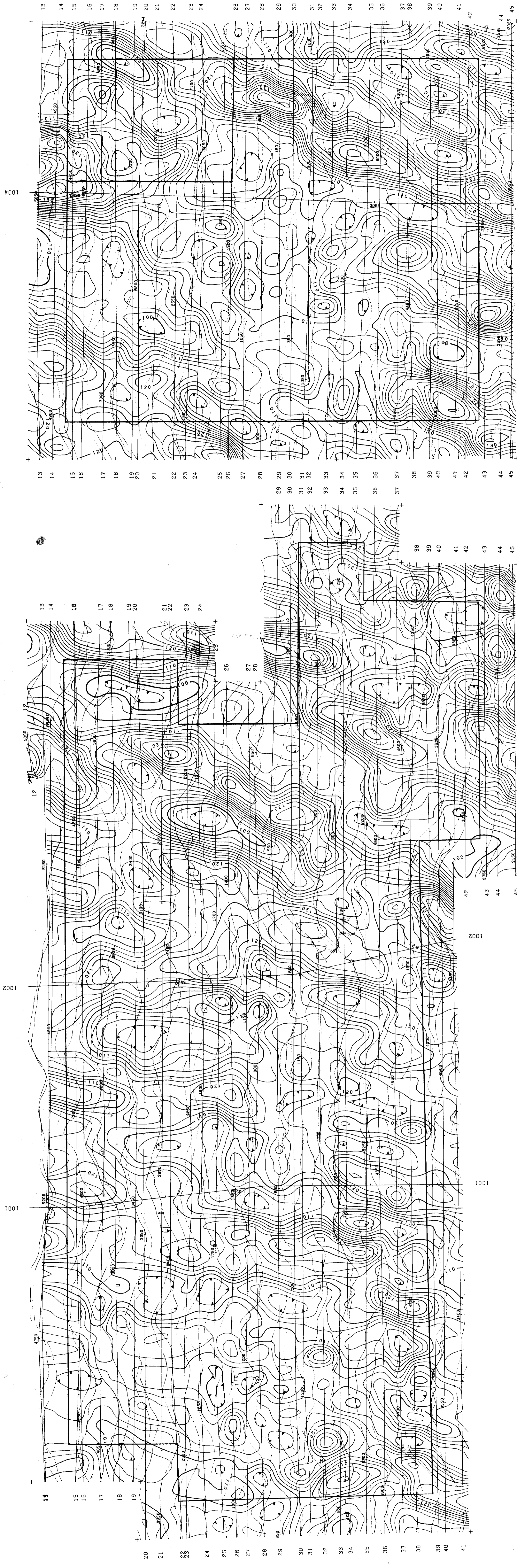
INTERPRETATION
 Contact
 Fault
 Property Boundary
 VLF-EM Conductor Axes
 normal quadrature
 reverse quadrature
 in phase only (no quadrature)
 interpreted shear zone

LITHOLOGY
 Matachewan
 Algoman
 Timiskamian
 Kenora
 Diabase dykes
 Dikes and bases of quartz-
 felsic porphyry
 Quartz diorite, diabase, gabbro-
 diorite
 Sediments: greywacke, arkose
 Porphy banding iron formation
 Volcanics: andesite and basalt
 grey lavas, light grey tuff
 and agglomerate

VLF TRANSMITTER
 CHIRP 24.0 kHz
 100.7 A2



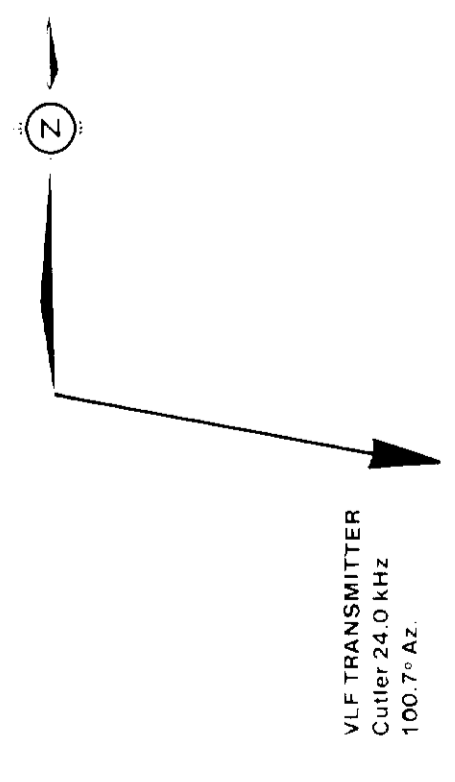
10-0000000-2-0000 BENTON

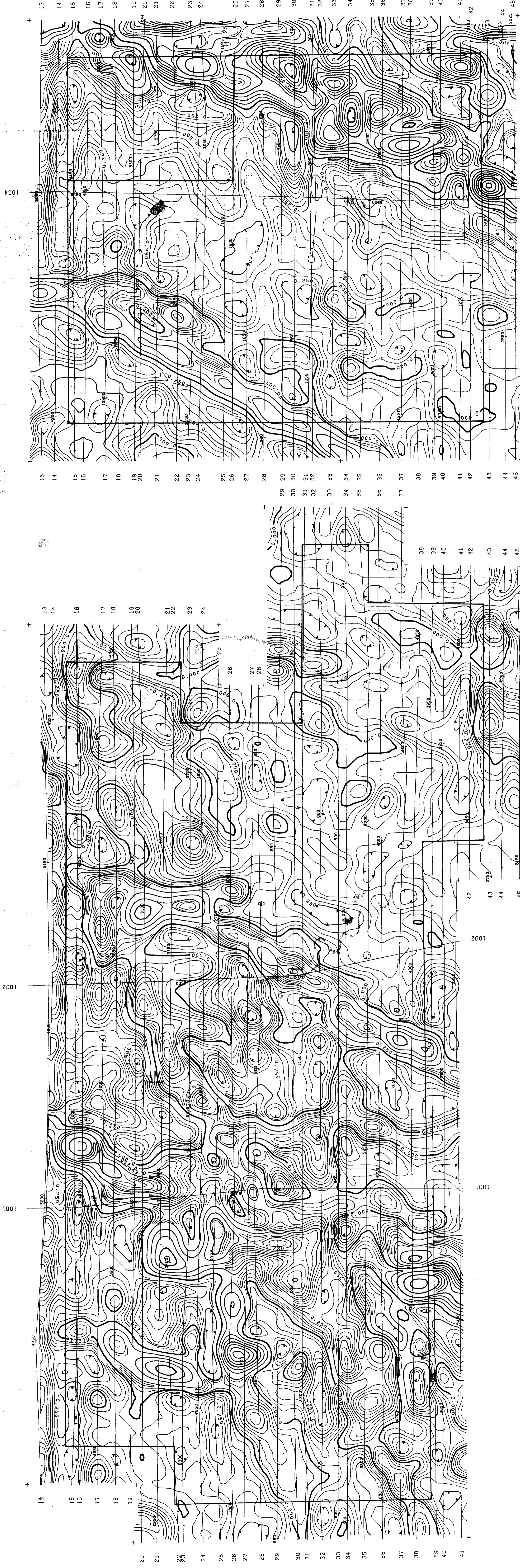


2890

LEGEND
 PROPERTY BOUNDARY
 DISTANCE
 100 METERS
 200 METERS
 500 METERS
 1000 METERS
 FIELD STRENGTH
 50%
 10%
 2%
 QUADRATURE
 +10%
 -10%

WEACO RESOURCES LTD.
 AIRBORNE VLF-EM SURVEY
 CONTOURS OF TOTAL FIELD STRENGTH
 PROFILES OF QUADRATURE
 BENTON TWP.
 N.T.S. NO. 41 0/9 - 41 0/16 DRAWING NO. T-5022-3
 SCALE 1:10,000 DATE AUG 1985
 TERRAQUEST LTD.
 TORONTO, CANADA





2890

LEGEND
 PROPERTY BOUNDARY
 TERMINAL CLEARANCE
 LINE SPACING
 5000 gammas / meter
 1000 gammas / meter
 250 gammas / meter
 500 gammas / meter

WEACO RESOURCES LTD.
 AIRBORNE MAGNETIC SURVEY
 VERTICAL MAGNETIC GRADIENT
 Calculated From Total Field
 BENTON TWP.
 N.I.S. NO. 41 0/9 - 41 0/16 DRAWING NO. T-5022-2
 SCALE 1:10000 DATE AUG 1985

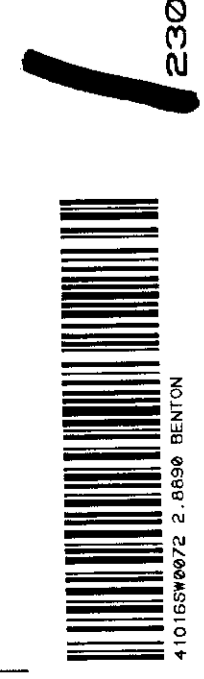
TERRAQUEST LTD.
 TORONTO, CANADA

1001
 2001

1004

1000

1000



1000

WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY

ASSESSMENT WORK SUBMISSION - GEOPHYSICAL-AIRBORNE EM & MAG SURVEYS

BENTON TWP., PROCUPINE MINING DIVISION

Mining Claim No	Days Credit	Mining Claim No	Days Credit	Mining Claim No	Days Credit
P 622062	80	P 837500	80	P 837540	80
P 622063	80	P 837501	80	P 837541	80
P 622064	80	P 837502	80	P 837542	80
P 622065	80	P 837503	80	P 837543	80
P 622066	80	P 837504	80	P 837544	80
P 622067	80	P 837505	80	P 837545	80
P 622068	80	P 837506	80	P 837546	80
P 622069	80	P 837507	80	P 837547	80
P 622070	80	P 837508	80	P 837548	80
P 622071	80	P 837509	80	P 837644	80
P 622072	80	P 837510	80	P 837645	80
P 622073	80	P 837511	80	P 837646	80
P 622074	80	P 837512	80	P 837647	80
P 622075	80	P 837513	80	P 837648	80
P 622076	80	P 837514	80	P 837649	80
P 622077	80	P 837515	80	P 837650	80
P 622078	80	P 837516	80	P 837651	80
P 622079	80	P 837517	80	P 837652	80
P 622080	80	P 837518	80	P 837653	80
P 622081	80	P 837519	80	P 837654	80
P 622082	80	P 837520	80	P 837909	80
P 622083	80	P 837521	80	P 837910	80
P 622084	80	P 837522	80	P 837911	80
P 622085	80	P 837523	80	P 837912	80
P 622086	80	P 837524	80	P 837913	80
P 622087	80	P 837525	80	P 837914	80
P 837439	80	P 837526	80	P 837915	80
P 837440	80	P 837527	80		
P 837441	80	P 837528	80		
P 837489	80	P 837529	80		
P 837490	80	P 837530	80		
P 837491	80	P 837531	80		
P 837492	80	P 837532	80		
P 837493	80	P 837533	80		
P 837494	80	P 837534	80		
P 837495	80	P 837535	80		
P 837496	80	P 837536	80		
P 837497	80	P 837537	80		
P 837498	80	P 837538	80		
P 837499	80	P 837539	80		
				Total 107 claims	8560 Days Credit



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 Benton 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. O. Barrie, 121 Richmond St. West

Address of Author Suite 905, Toronto, Ont. M5H 2K1

Covering Dates of Survey May 17 - Oct. 4, 1985
(linecutting to office)

Total Miles of Line ~~Cut~~ Flown - Approx. 150

MINING CLAIMS TRAVERSED
List numerically

See attached list
(prefix) (number)

If space insufficient, attach list

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim.

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

ENTER 20 days for each
additional survey using
same grid.

- 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: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 28305

Previous Surveys

File No.	Type	Date	Claim Holder

RECEIVED
FEB 11 1986
MINING LANDS SECTION

TOTAL CLAIMS 107

OFFICE USE ONLY

WEACO RESOURCES LTD.

LIST OF CLAIMS TO ACCOMPANY

ASSESSMENT WORK SUBMISSION - GEOPHYSICAL-AIRBORNE EM & MAG SURVEYS

BENTON TWP., PROCUPINE MINING DIVISION

P 622062	P 837500	P 837540
P 622063	P 837501	P 837541
P 622064	P 837502	P 837542
P 622065	P 837503	P 837543
P 622066	P 837504	P 837544
P 622067	P 837505	P 837545
P 622068	P 837506	P 837546
P 622069	P 837507	P 837547
P 622070	P 837508	P 837548
P 622071	P 837509	P 837644
P 622072	P 837510	P 837645
P 622073	P 837511	P 837646
P 622074	P 837512	P 837647
P 622075	P 837513	P 837648
P 622076	P 837514	P 837649
P 622077	P 837515	P 837650
P 622078	P 837516	P 837651
P 622079	P 837517	P 837652
P 622080	P 837518	P 837653
P 622081	P 837519	P 837654
P 622082	P 837520	P 837909
P 622083	P 837521	P 837910
P 622084	P 837522	P 837911
P 622085	P 837523	P 837912
P 622086	P 837524	P 837913
P 622087	P 837525	P 837914
P 837439	P 837526	<u>P 837915</u>
P 837440	P 837527	
P 837441	P 837528	Total 107
P 837489	P 837529	claims
P 837490	P 837530	
P 837491	P 837531	
P 837492	P 837532	
P 837493	P 837533	
P 837494	P 837534	
P 837495	P 837535	
P 837496	P 837536	
P 837497	P 837537	
P 837498	P 837538	
P 837499	P 837539	

Mining Lands Section

File No 28890

Control Sheet

TYPE OF SURVEY

- GEOPHYSICAL
- GEOLOGICAL
- GEOCHEMICAL
- EXPENDITURE

MINING LANDS COMMENTS:

< Benton >

L.D.
Lgd

Signature of Assessor

Date

March 24, 1986

Your File: 60-86
Our File: 2.8890

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

Dear Sir:

RE: Notice of Intent dated March 6, 1986
Geophysical (Electromagnetic & Magnetometer)
Surveys on Mining Claims P 622062, et al,
in Benton Township

The assessment work credits, as listed with the
above-mentioned Notice of Intent, have been approved
as of the above date.

Please inform the recorded holder of these mining
claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

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

Telephone: (416) 965-4888

DK/mc

cc: Meaco Resources Ltd
Suite 805
475 Howe Street
Vancouver, B.C.
V6C 2B3

E.A. Gallo
148 Allanhurst Drive
Islington, Ontario
M9A 4K7

Resident Geologist
Timmins, Ontario

Mr. G.H. Ferguson
Mining & Lands Comm.
Toronto, Ontario

Terraquest Ltd
Suite 905
121 Richmond Street West
Toronto, Ontario M5H 2K1
Attention: C.Q. Barrie



Recorded Holder
WEACO RESOURCES LTD

Township or Area
BENTON TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic <u>40</u> days	
Magnetometer <u>40</u> days	P 622070 to 87 inclusive
Radiometric _____ days	837439 to 41 inclusive
Induced polarization _____ days	837489 to 548 inclusive
Other _____ days	837644 to 54 inclusive
	837909 to 15 inclusive
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/>	Airborne <input checked="" type="checkbox"/>
Special provision <input type="checkbox"/>	Ground <input type="checkbox"/>
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

[Empty box for special credits]

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

P 622062 to 69 inclusive

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Ontario

March 19/86

Ministry of
Northern Development
and Mines

March 4, 1986

Your File: 60-86
Our File: 2.8890

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

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette 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

DK/mc
Encl.

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

Mr. G.H. Ferguson
Mining & Lands Comm.
Toronto, Ontario

E.A. Gallo
148 Allanhurst Drive
Islington, Ontario
M9A 4K7

Terraquest Ltd
Suite 905
121 Richmond Street West
Toronto, Ontario M5H 2K1
Attention: C.Q. Barrie



Notice of Intent
for Technical Reports

March 6, 1986

2.8890/60-86

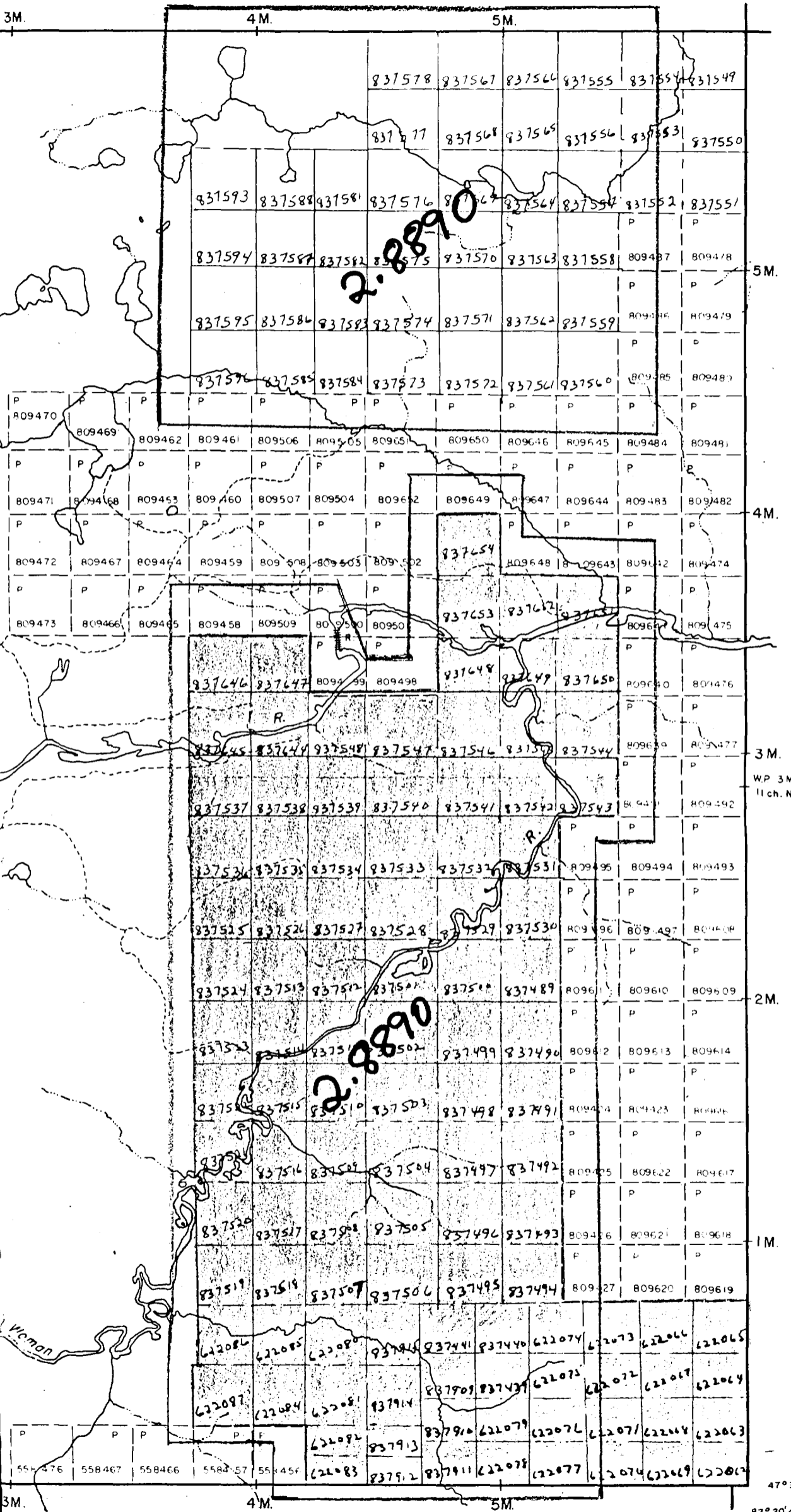
An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

TP



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MINI
PC
LAND
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Ont

MALLARD TP

47°39'41"
82°20'40" Approx