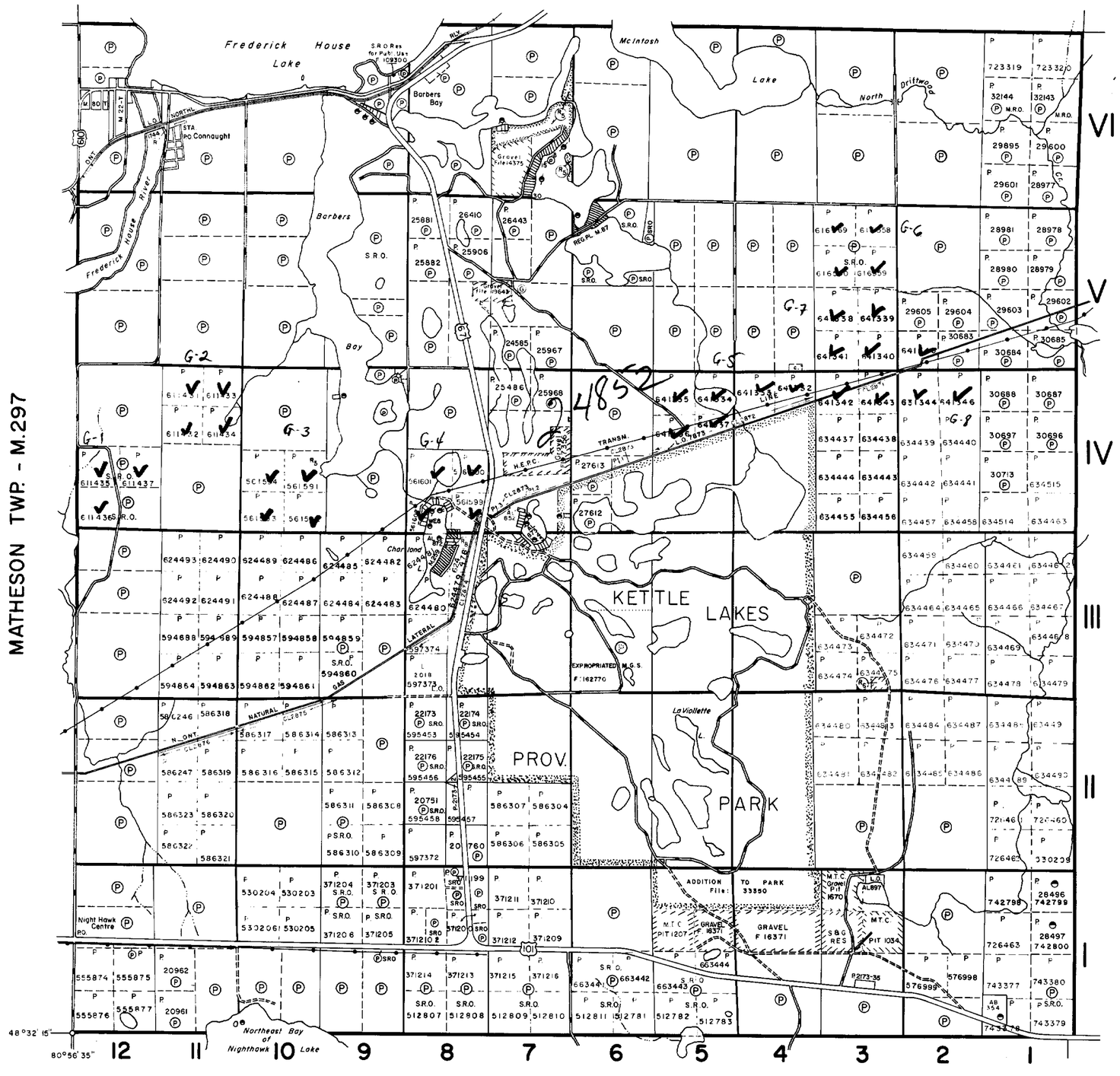
DUNDONALD TWP. - M.343

MATHESON TWP. - M.297

STOCK TWP. - M.388

MACKLEM TWP. - M.295



THE TOWNSHIP
OF

GERMAN

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

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

NOTES

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

Summer resort locations patented for surface rights only shown thus ◓

This township lies within the Municipality of CITY of TIMMINS.

Flooding Rights

- on Nighthawk Lake & Frederick House River to elev. 903.5' reserved to Ont Hydro
- on Frederick House Lake to elev. 903.0' to Ont. Hydro.

Areas withdrawn from staking under Section 42 of the Mining Act

	File	Date	Disposition
(P1) Public Access Res. S.R.O.		18/5/56	File 15870
(W6) W.76/77	54339	22/9/77	S.R.O.
(P2) Public Access Res.	169191	18/4/79	S.R.O.
(Q) QUARRY PERMIT			

DATE OF ISSUE
OCT 14 1983
Ministry of Natural Resources
TORONTO

PLAN NO. M.283

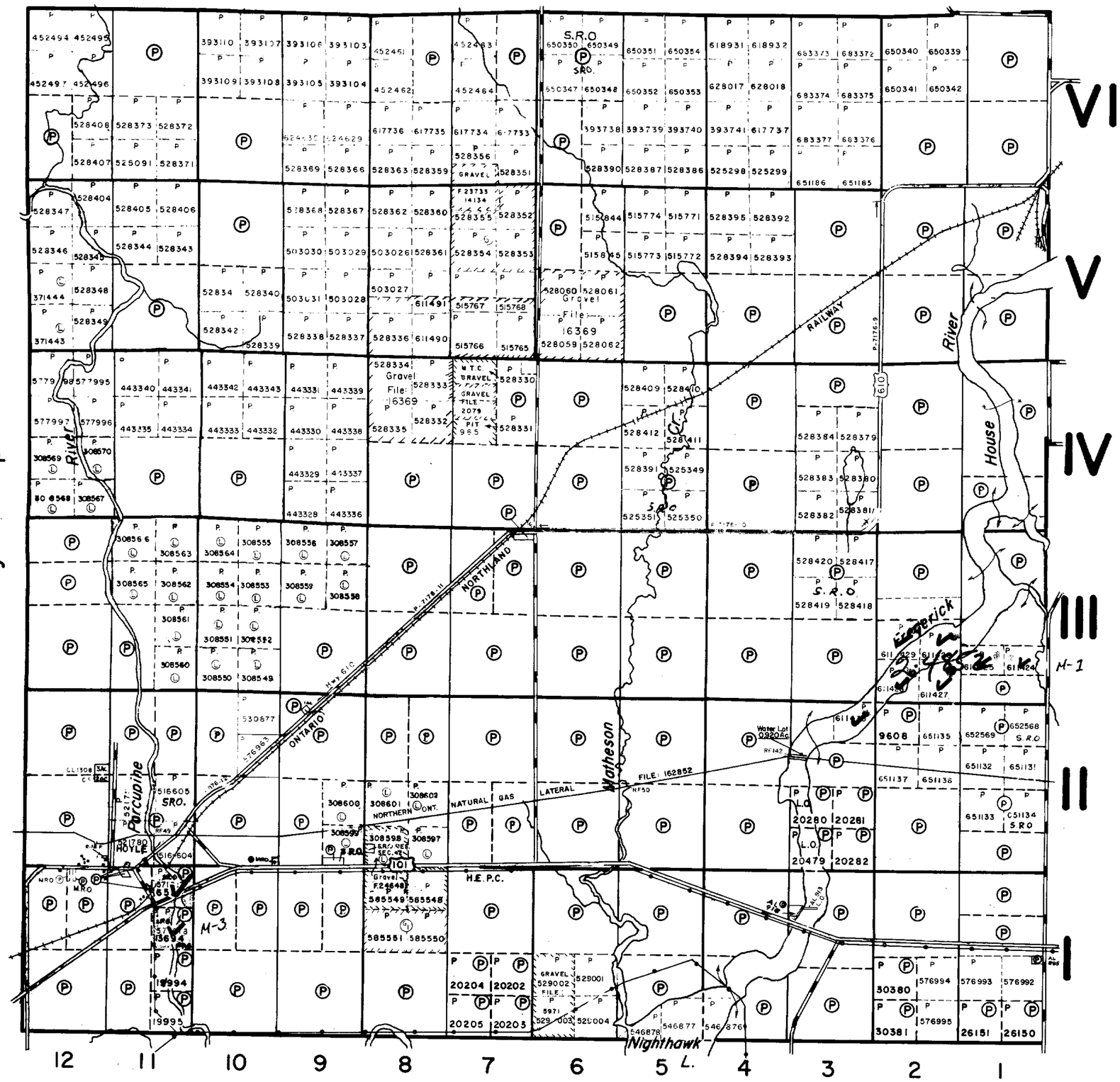
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Evelyn Twp.

Hoyle Twp.

German Twp.

Cody Twp.



THE TOWNSHIP OF MATHESON

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH= 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	(S) or C.S.
LEASES	(L)
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	

NOTES

Reserve Flooding Rights to 903' Contour to H.E.P.C. on Frederick House River.

400' Surface rights reservation around all lakes & rivers.

This township lies within the Municipality of CITY of TIMMINS.

RESERVATIONS:

DATE OF ISSUE
OCT 14 1983
Ministry of Natural Resources
TORONTO

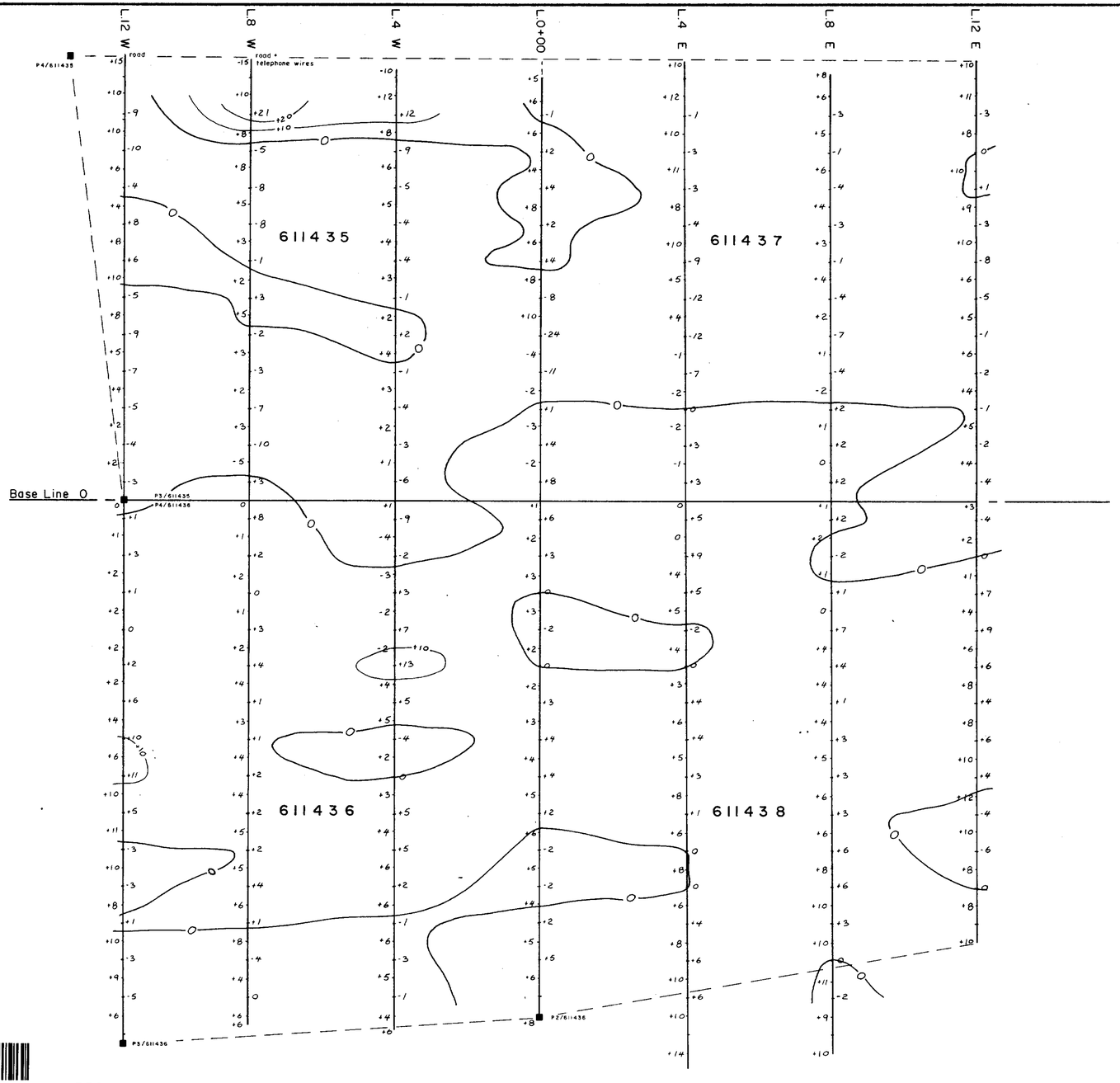
SAND AND GRAVEL

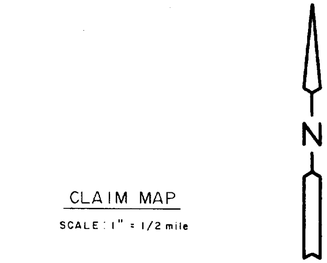
(G) QUARRY PERMIT

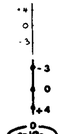
(G)1 MNP GRAVEL RESERVE FILE 24648

PLAN NO.- M-297

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS, MAPPING BRANCH







LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : + 10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

Cutler, Maine (NAA) Station used. Notes calculated S - N

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID - G - I

AREA: GERMAN TWP., ONT.

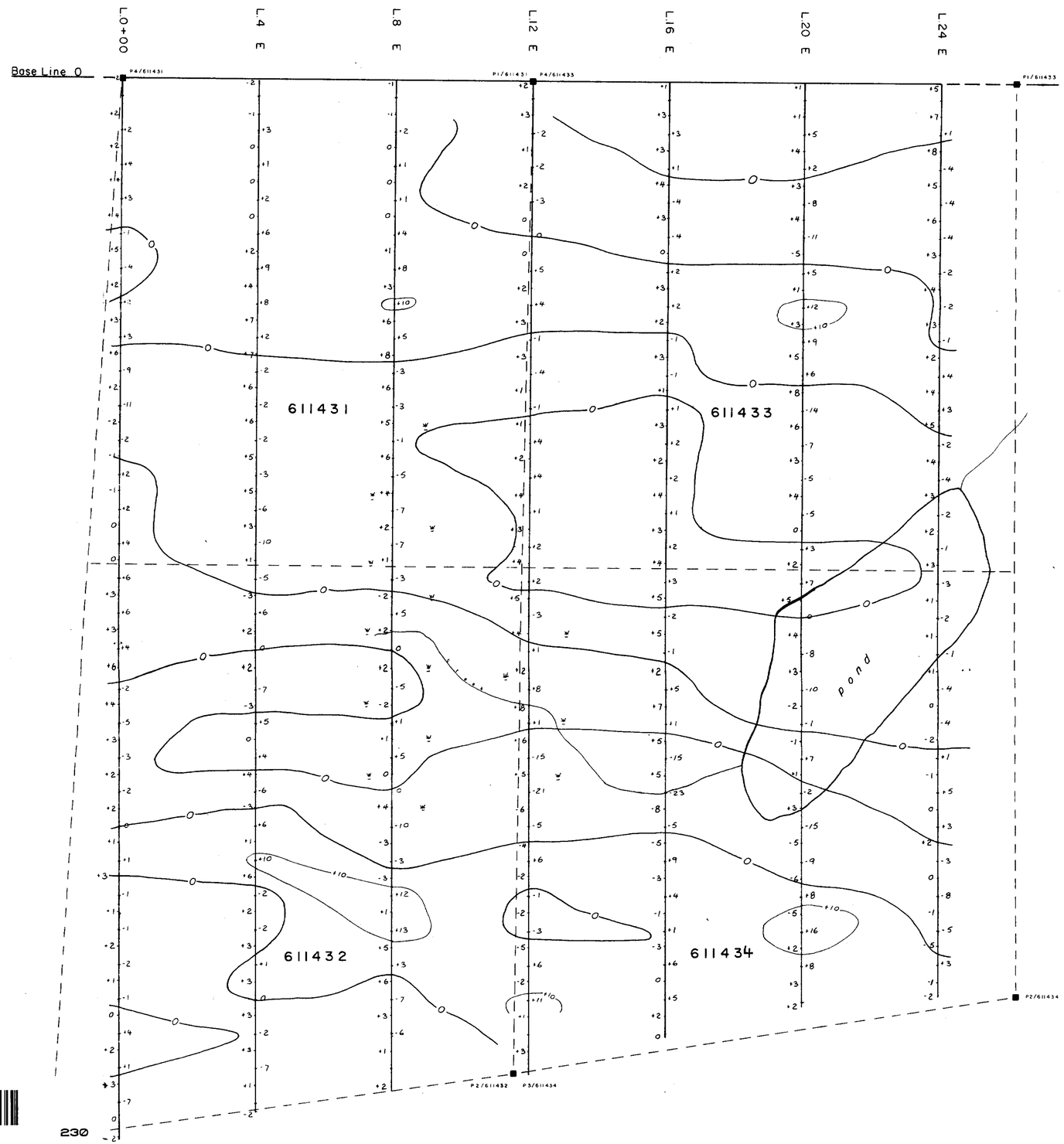
SCALE: 1" = 200 ft

DATE: April, 1982

H. FERGUSON GEOPHYSICS LTD.

DRAWN BY: g

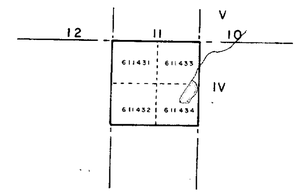
MAP OR SHEET NO



N

CLAIM MAP

SCALE : 1" = 1/2 mile



LEGEND

- IN-PHASE RAW DATA
- MEASUREMENT STATIONS ALONG PICKET LINES
- FRASER REDUCTION METHOD USED
- CONTOUR INTERVAL : + 10
- ELECTRICAL CONDUCTOR
- INSTRUMENT USED : GEONICS EM - 16
- CLAIM POST
- SWAMP

REGISTERED PROFESSIONAL ENGINEER D. M. ROSS PROVINCE OF ONTARIO

D M Ross

Cutler, Maine (NAA) Station used. Notes calculated S - N

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

24852

PROJECT: GRID - G-2

AREA: GERMAN TWP., ONT.

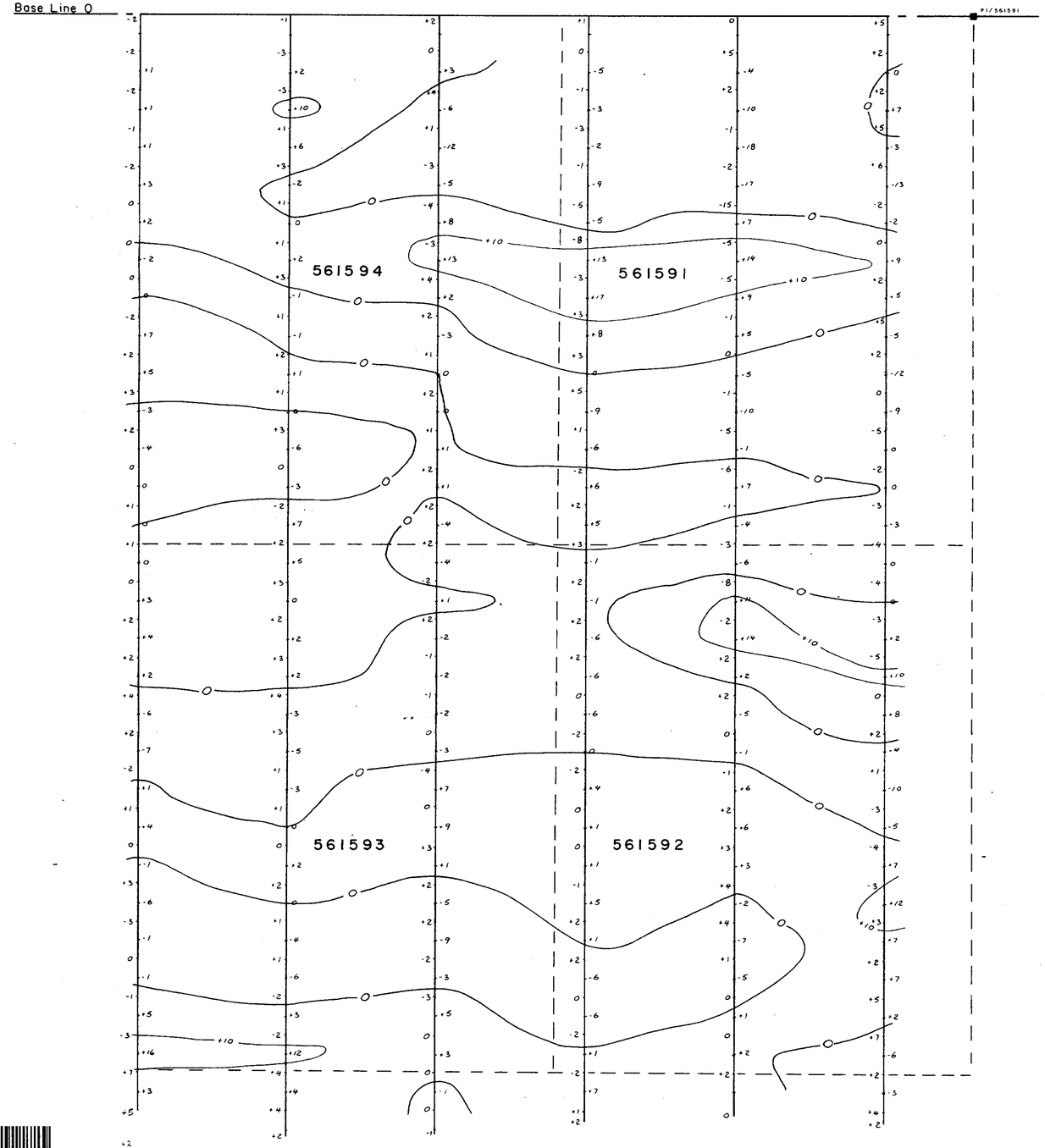
SCALE: 1" = 200 ft

DATE: April, 1982

FRASER, EISBLOCK GEOPHYSICS LTD.

DRAWN BY: J

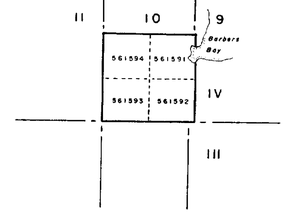
MAP OR SHEET NO.



N

CLAIM MAP

SCALE: 1" = 1/2 mile



LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : +10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

Cutler, Maine (NAA) Station used. Notes calculated S - N

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID - G - 3

AREA: GERMAN TWP., ONT.

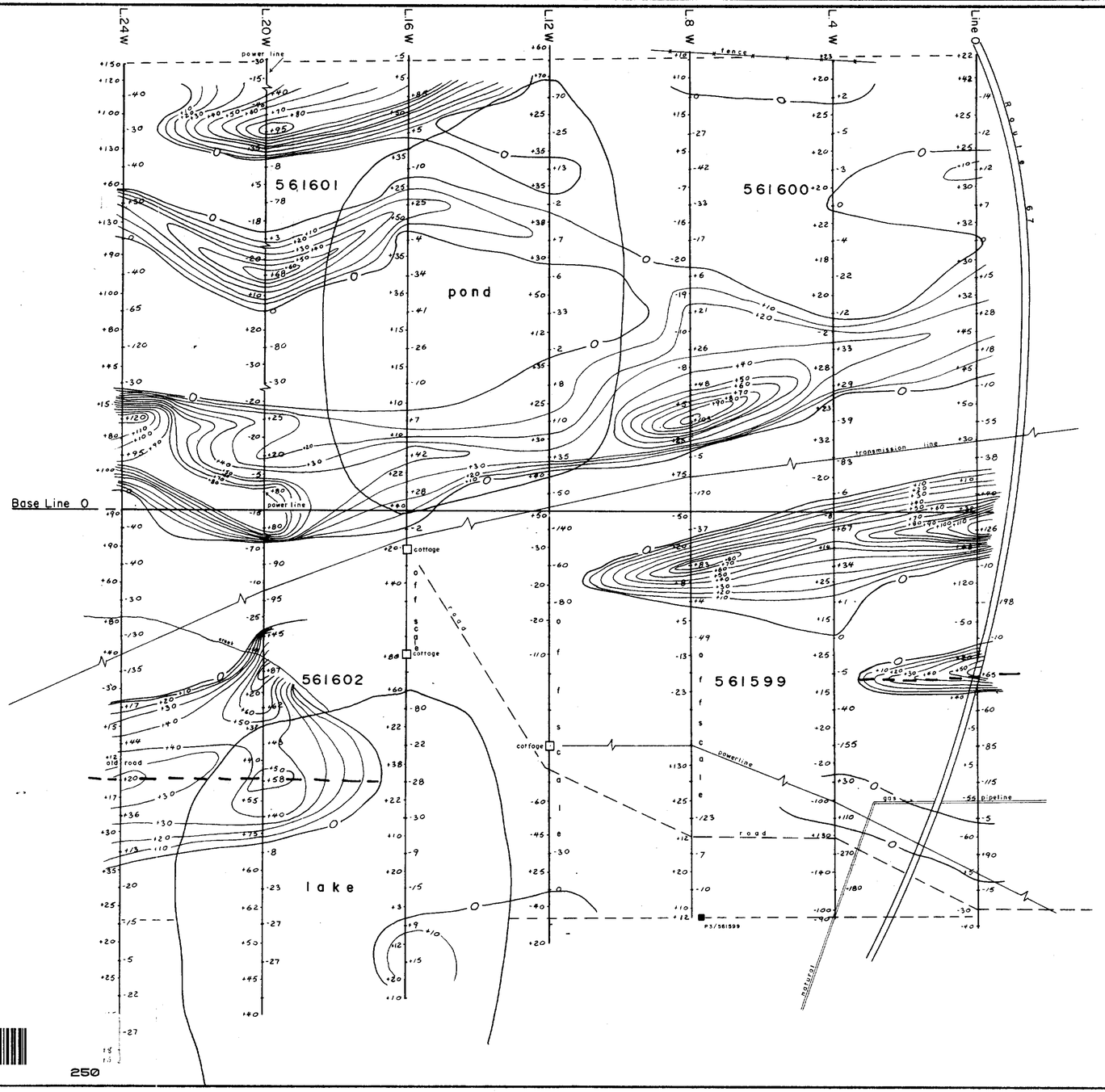
H. PERSSENBER GEOPHYSICS LTD.

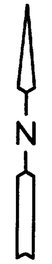
SCALE: 1" = 200 ft

DATE: April, 1982

DRAWN BY: g

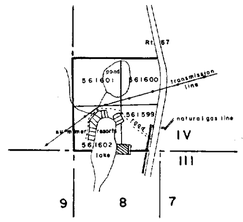
MAP OR SHEET NO





CLAIM MAP

Scale: 1" = 1/2 mile



LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : +10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

D M Ross

Cutler, Maine (NAA) Station used. Notes calculated S - N

TYPE OF WORK: EM - 16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID-G-4

AREA: GERMAN TWP., ONT.

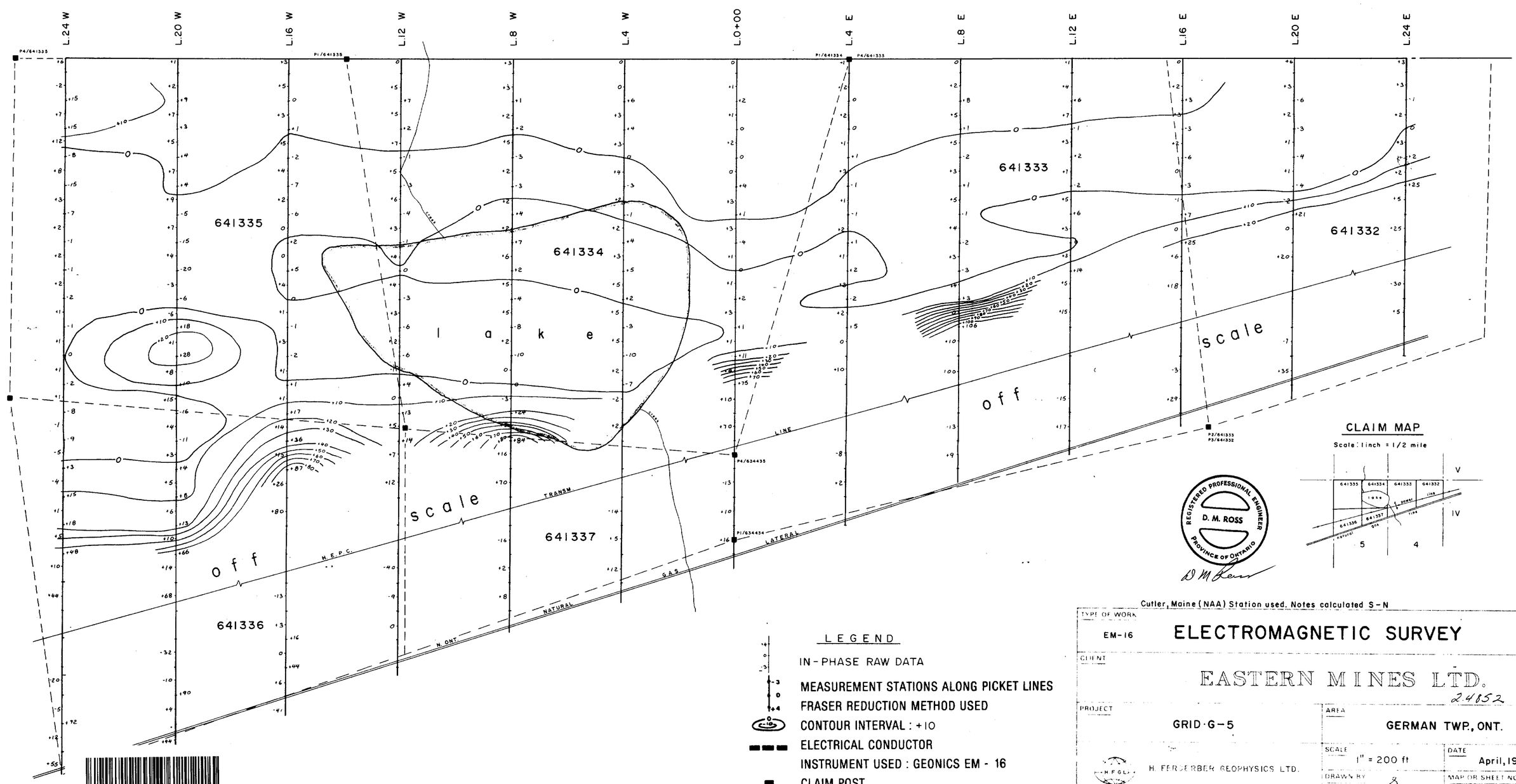
H. FINGERBER GEOPHYSICS LTD.

SCALE: 1" = 200 ft

DATE: April, 1982

DRAWN BY: g

MAP OR SHEET NO



CLAIM MAP

Scale: 1 inch = 1/2 mile

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

D M Ross

LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : +10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

Cutler, Maine (NAA) Station used. Notes calculated S-N

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID-G-5

AREA: GERMAN TWP., ONT.

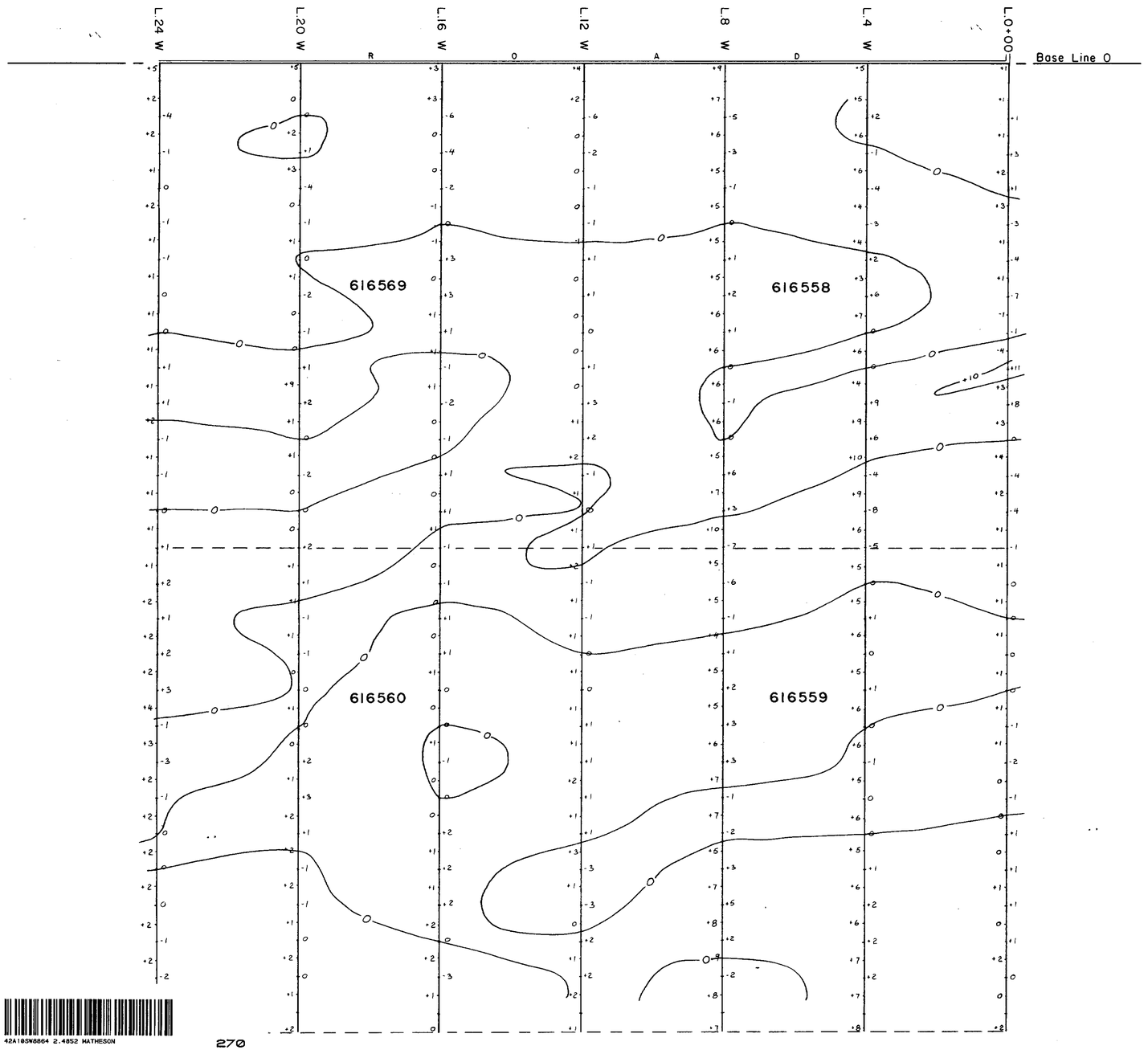
SCALE: 1" = 200 ft

DATE: April, 1982

H. FERGUSON GEOPHYSICS LTD.

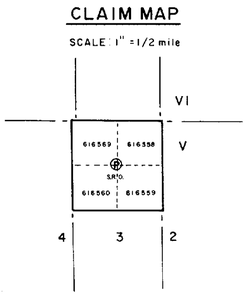
DRAWN BY: g

MAP OR SHEET NO.



CLAIM MAP

SCALE: 1" = 1/2 mile



N

LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : + 10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

Cutler, Maine (NAA) Station used. Notes calculated S-N

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID · G-6

AREA: GERMAN TWP., ONT.

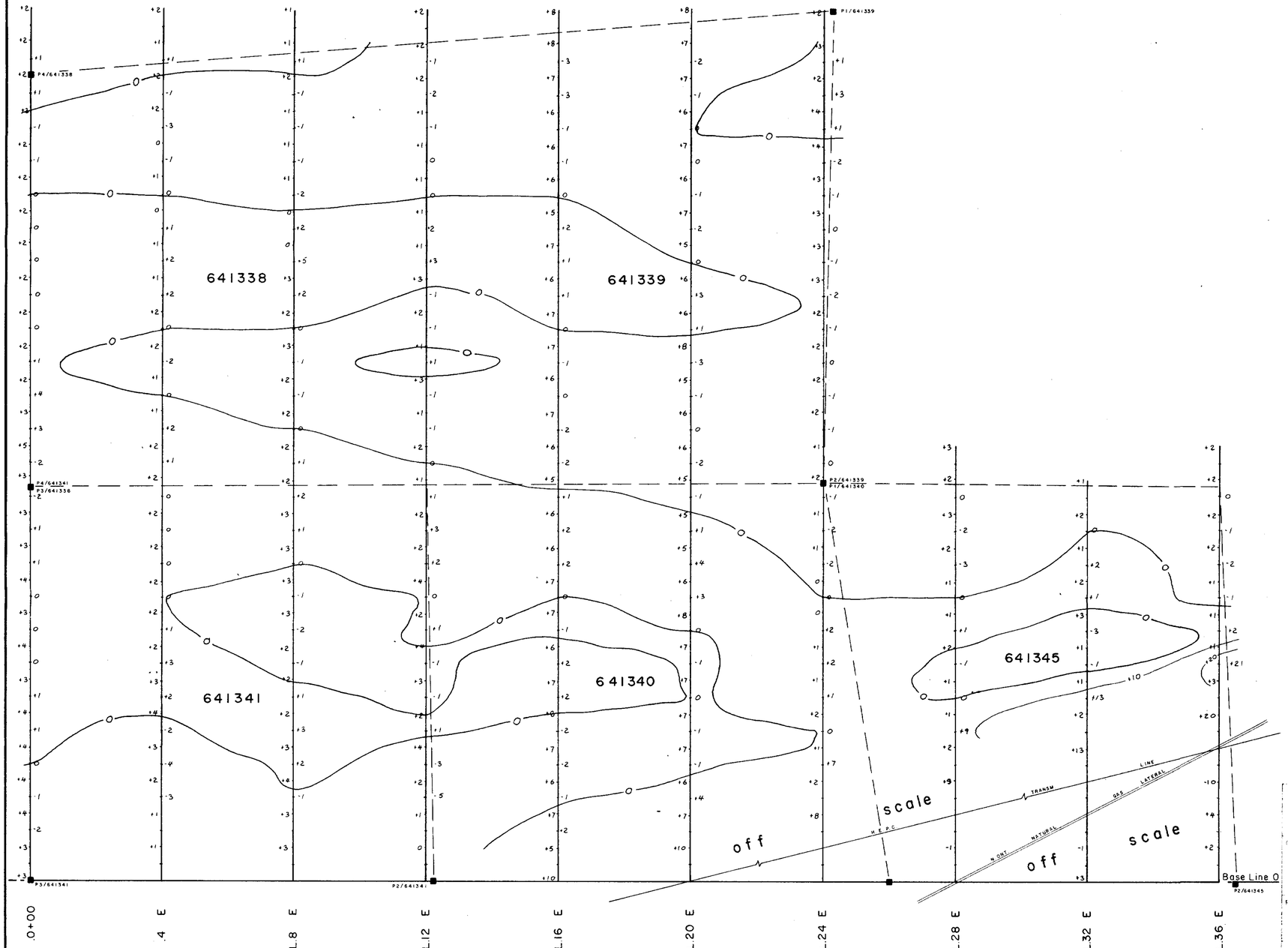
H. FERDERBER GEOPHYSICS LTD.

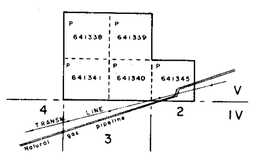
SCALE: 1" = 200 ft

DATE: April, 1982

DRAWN BY: g

MAP OR SHEET NO:





CLAIM MAP

Scale : 1" = 1/2 mile

N

LEGEND

IN - PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : + 10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

Cutler, Maine (NAA) Station used. Notes calculated S - N

TYPE OF SURVEY: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852

PROJECT: GRID - G - 7

AREA: GERMAN TWP., ONT.

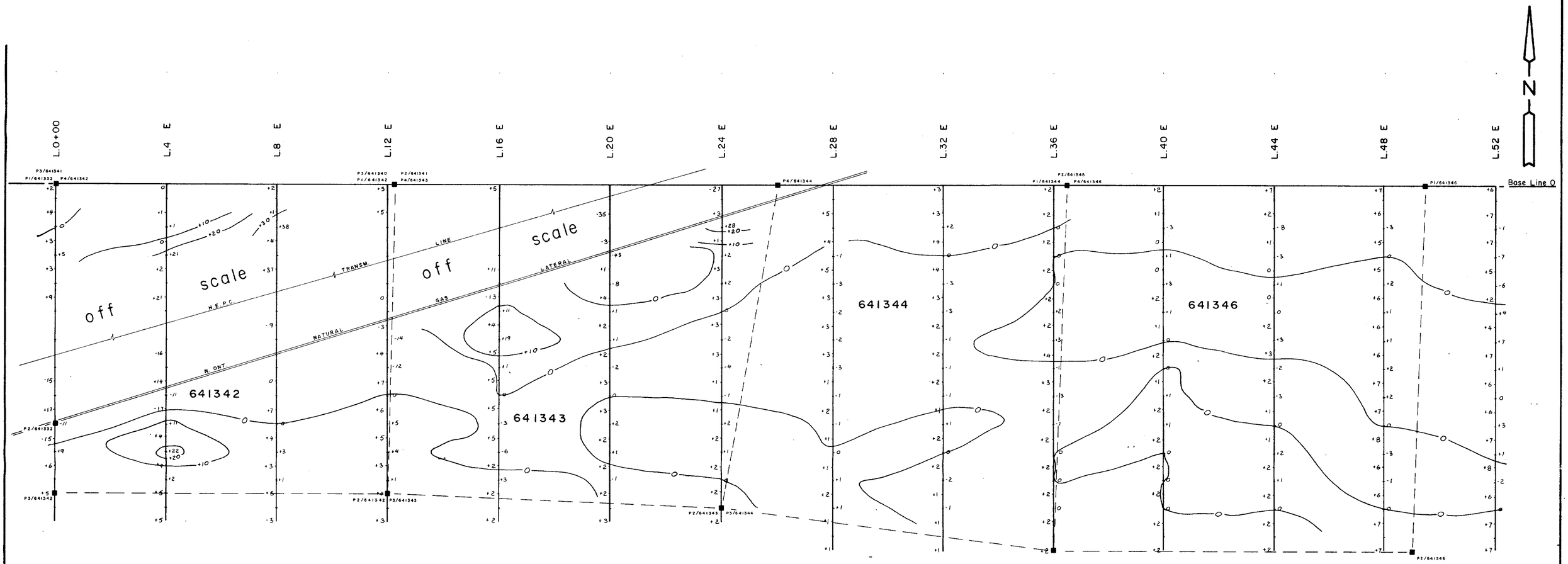
SCALE: 1" = 200 ft

DATE: April, 1982

CONSULTANT: [illegible] GEOPHYSICS LTD

DRAWN BY:

MAP OR SHEET NO.



LEGEND

IN - PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

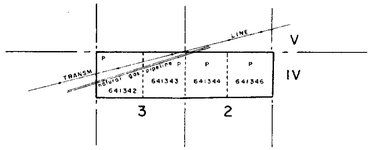
CONTOUR INTERVAL : + 10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP



CLAIM MAP
Scale : 1" = 1/2 mile

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

D M Ross

Cutler, Maine (NAA) Station used. Notes calculated S - N.

TYPE OF WORK: EM - 16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

2.4852.

PROJECT: GRID - G - 8

AREA: GERMAN TWP., ONT.

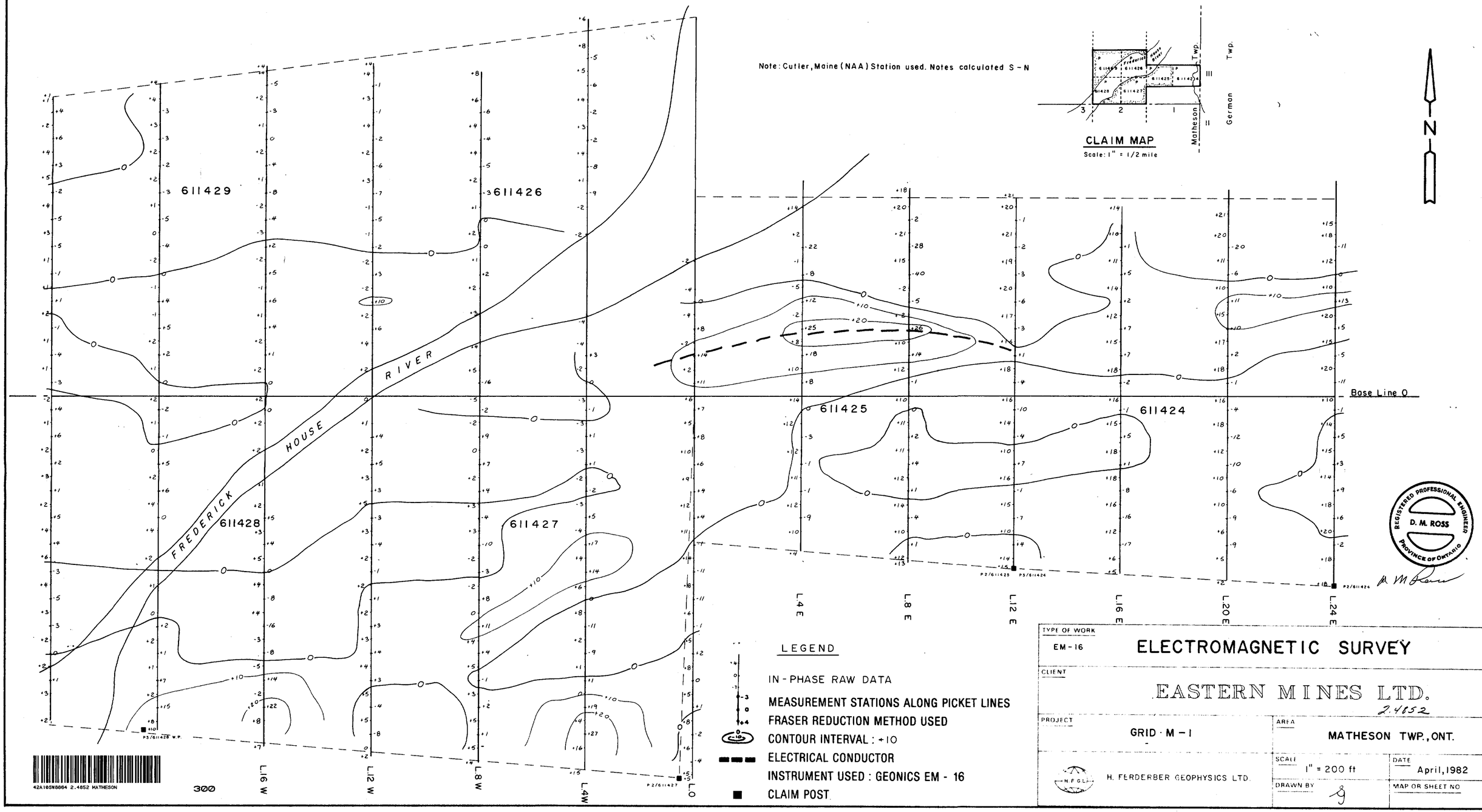
H. FENDERBER GEOPHYSICS LTD.

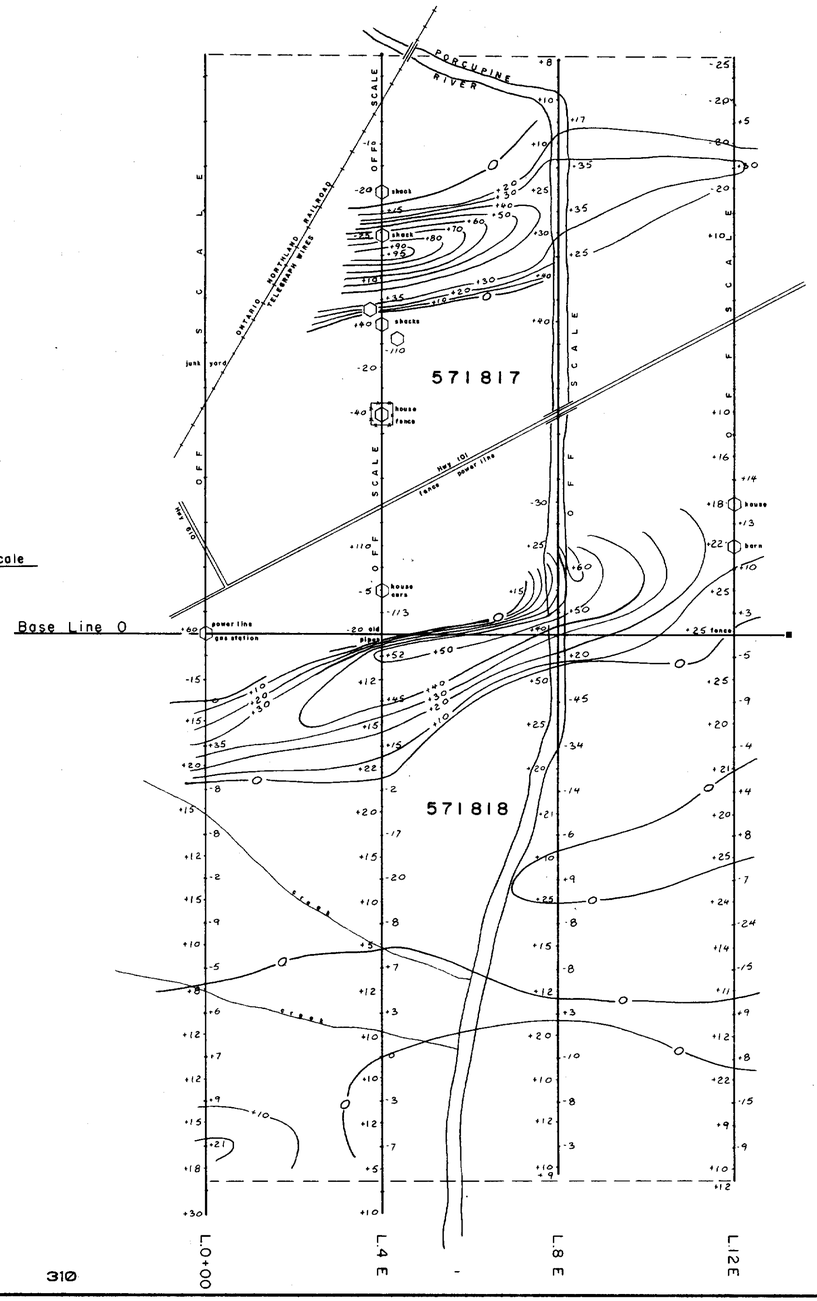
SCALE: 1" = 200 ft

DATE: April, 1982

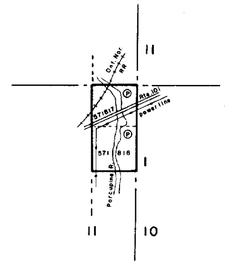
DRAWN BY: g

MAP OR SHEET NO.


Note: Cutler, Maine (NAA) Station used. Notes calculated S - N
CLAIM MAP
Scale: 1" = 1/2 mile
Twp.
Matheson
German
N
611429
611426
611428
611427
611425
611424
FREDERICK HOUSE RIVER
Base Line 0
L16 W
L12 W
L8 W
L4W
L0
L4 E
L8 E
L12 E
L16 E
L20 E
L24 E
LEGEND
IN-PHASE RAW DATA
MEASUREMENT STATIONS ALONG PICKET LINES
FRASER REDUCTION METHOD USED
CONTOUR INTERVAL : +10
ELECTRICAL CONDUCTOR
INSTRUMENT USED : GEONICS EM - 16
CLAIM POST
REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO
TYPE OF WORK
EM-16
ELECTROMAGNETIC SURVEY
CLIENT
EASTERN MINES LTD.
2.4852
PROJECT
GRID - M - 1
AREA
MATHESON TWP., ONT.
H. FERDERBER GEOPHYSICS LTD.
SCALE
1" = 200 ft
DATE
April, 1982
DRAWN BY
MAP OR SHEET NO
42A10SW8864 2.4852 MATHESON
300



Note: Highway not shown to scale



CLAIM MAP

Scale: 1" = 1/2 mile

N

LEGEND

IN-PHASE RAW DATA

MEASUREMENT STATIONS ALONG PICKET LINES

FRASER REDUCTION METHOD USED

CONTOUR INTERVAL : +10

ELECTRICAL CONDUCTOR

INSTRUMENT USED : GEONICS EM - 16

CLAIM POST

SWAMP

Cutler, Maine (NAA) Station used. Notes calculated S - N

REGISTERED PROFESSIONAL ENGINEER D. M. ROSS PROVINCE OF ONTARIO

TYPE OF WORK: EM-16

ELECTROMAGNETIC SURVEY

CLIENT: EASTERN MINES LTD.

PROJECT: GRID - M - 3

AREA: MATHESON TWP, ONT. 2.4852

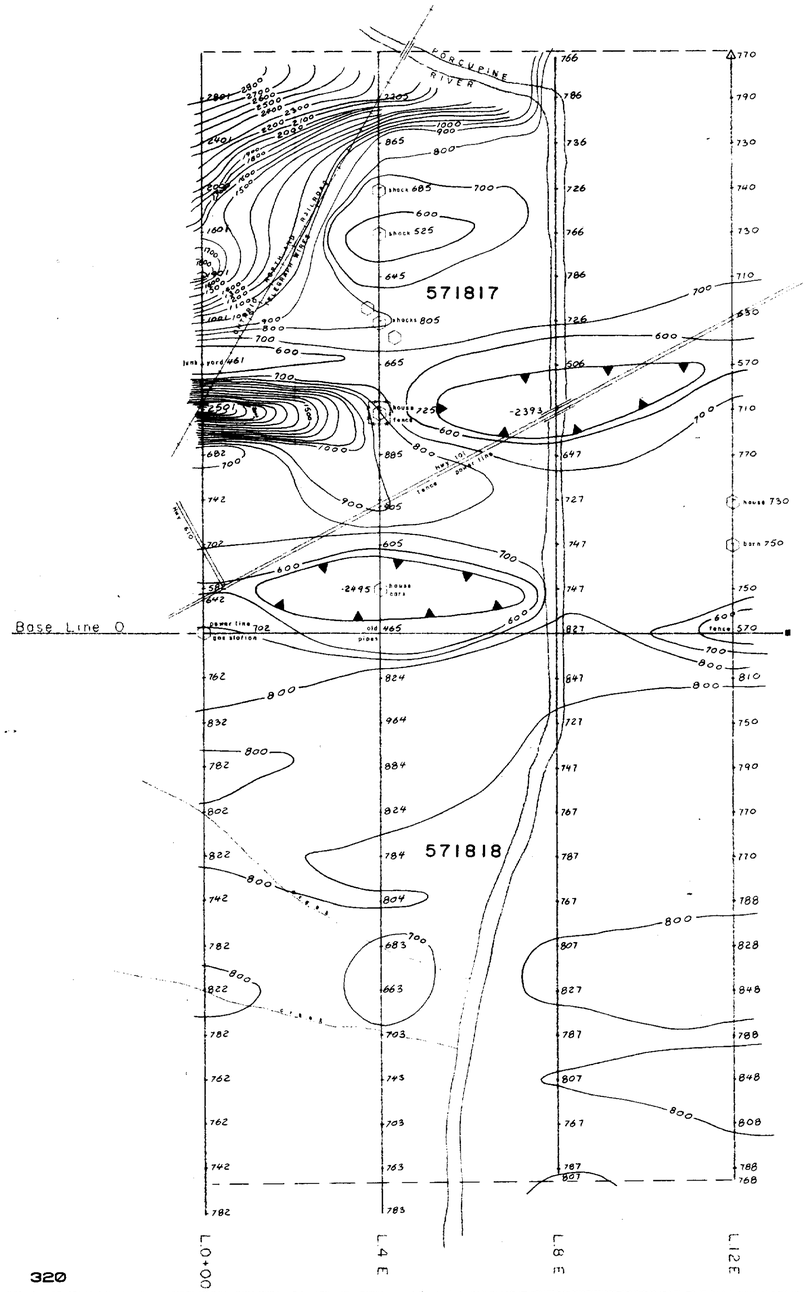
SCALE: 1" = 200 ft

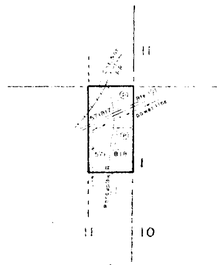
DATE: April, 1982

DRAWN BY

MAP OR SHEET NO: 1

H. FRÖDERBERG GEOPHYSICS LTD.





CLAIM MAP

Scale 1" = 1/2 mile

N

LEGEND

- MEASUREMENT STATIONS ALONG PICKET LINES
- +300 / -300 RELATIVE VALUES OF THE VERTICAL COMPONENT FORCE OF THE EARTH'S MAGNETIC FIELD (In Gammas)
- +300 MAGNETIC CONTOURS
- BASE STATION
- ELECTRICAL CONDUCTOR
- _____ TO _____GAMMAS
- _____ TO _____GAMMAS
- OVER _____GAMMAS

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

D M Ross

MAGNETOMETER SURVEY

GRID · M - 3

MATHESON TWP., ONT.

April, 1982

2.4852

REPORT ON GEOPHYSICAL SURVEYS ON THE PROPERTIES OF EASTERN MINES LIMITED MATHESON AND GERMAN TOWNSHIPS NORTHEASTERN ONTARIO

by

H. FERDERBER GEOPHYSICS LTD.

Val d'Or, Que. April 27, 1982

REPORT
ON
GEOPHYSICAL SURVEYS
ON THE PROPERTIES OF
EASTERN MINES LIMITED
MATHESON AND GERMAN TOWNSHIPS
NORTHEASTERN ONTARIO

INTRODUCTION

A VLF (very low frequency) electromagnetic survey has been carried out on several groups of claims, acquired by Eastern Mines Limited, in Matheson and German townships, District of Cochrane, Ontario. This type of survey has been used successfully to outline gold-bearing shear zones in the area.

A magnetic survey was completed over one claim group in Matheson Township.

The following report and accompanying maps describe the results of the geophysical surveys and gives an interpretation of the results.

PROPERTY

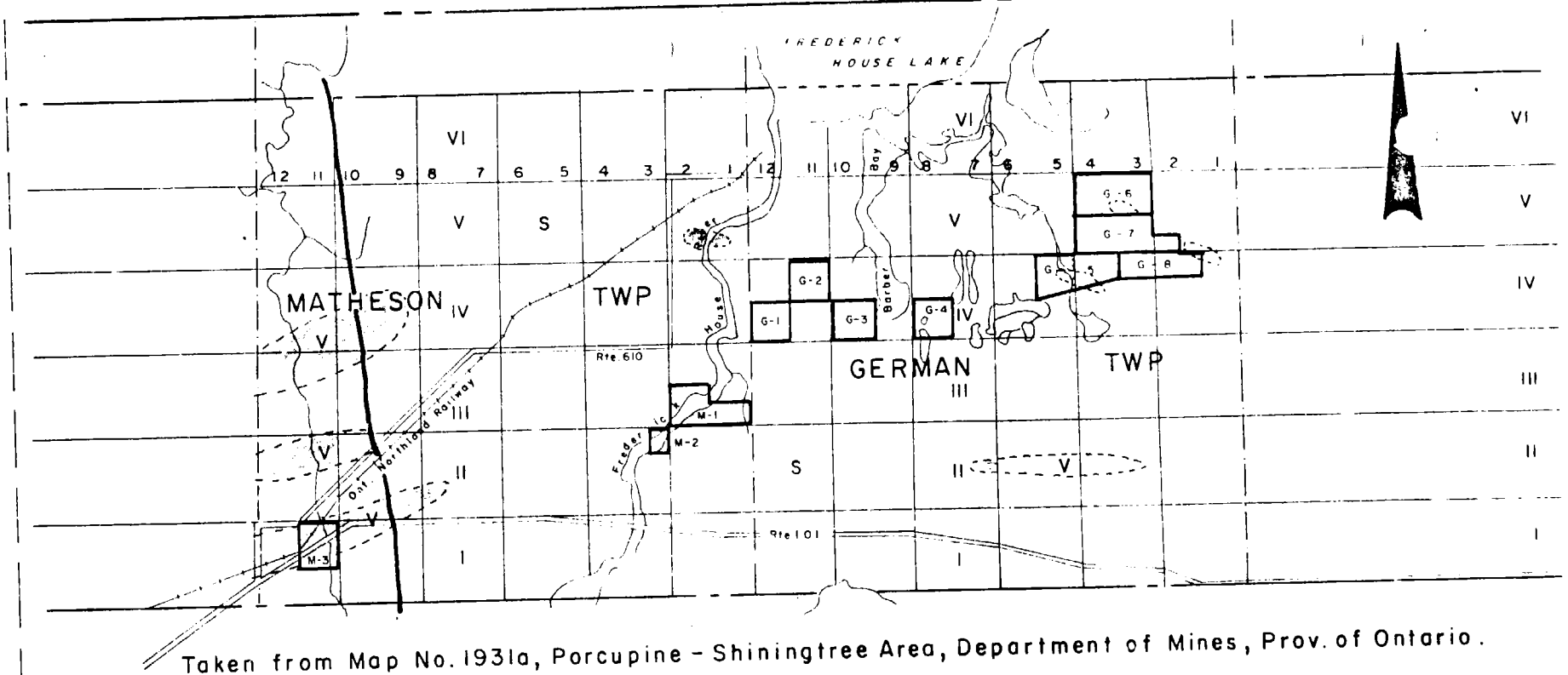
The company holds 44 claims in 11 groups in Matheson and German townships (figure 1) located in the Porcupine Mining Division, Ontario. The centre of the area is approximately 20 miles northeast of Timmins. Highways 101 and 610 provide access to all properties.

The nine claims in three groups in Matheson Township and 35 claims in eight groups in German Township are registered with the Ontario Ministry of Natural Resources on Plan No. M-297 and M-283.

The claims are listed by townships in Appendix 1 at the end of the report.

GENERAL GEOLOGY

The general geology of the townships can be seen on O. D. M. Map 2205, the Timmins - Kirkland Lake Sheet, published in 1972. The bedrock similar to that of the Timmins area is all of Precambrian age; much of it



Taken from Map No. 1931a, Porcupine - Shiningtree Area, Department of Mines, Prov. of Ontario.

LEGEND

Diabase Dykes : Quartz Feldspar Porphyry : Mafic Intrusives : S Sedimentary : V Meta Metavolcanics :

GRID LOCATION PLAN & GENERAL GEOLOGY

for

EASTERN MINES LTD.

in

MATHESON & GERMAN TWPS., ONT.

SCALE: 1" = 2 miles DATE: APRIL, 1982

Fig. 1

REGISTERED PROFESSIONAL ENGINEER
D. M. ROSS
PROVINCE OF ONTARIO

9

is covered by Pleistocene boulder-clay tills and glaciofluvial outwash deposits of sand and gravel. The oldest rocks are mafic metavolcanics (commonly referred to as Keewatin) which are mostly andesitic in composition, and good pillows occur in some localities.

The Timiskaming sediments underlie most of the area. A medium grained grey wacke is the most dominant rock type with interbedded siltstone, slate, argillite and pebble conglomerate.

These older formations have been intruded by small stocks, bosses, sills and dykes of igneous rocks ranging in composition from serpentinite to sialic porphyry. These igneous intrusions are not all of the same age; the youngest are north-trending olivine diabase dykes.

Gold mineralization in the area is generally associated with quartz-carbonate vein material along carbonatized zones which are most common in massive volcanics at or near the sedimentary-volcanic boundary. The carbonatized zones generally strike east-west and dip vertically to steeply north.

SURVEY METHODS AND INSTRUMENT DATA

The VLF (very low frequency) electromagnetic survey was conducted over previously cut lines at 200-foot intervals in a north-south direction. The equipment used was the Geonics EM-16 system.

The VLF method uses the radiation from powerful military radio transmitters at low frequencies as primary signals as opposed to portable transmitters in the conventional EM methods. The transmitter station used in the present survey is located at Cutler, Maine. The instrument has two receiving coils and the parameters measured are:

(1) The vertical in-phase component (tangent of the tilt angle)

(2) The vertical out-of-phase component (quadrature component).

The interpretation of the results uses the relative measurements of these two parameters and it is possible to outline such poor conductors as sheared contacts, breccia zones, faults, and alteration zones, as well

as the good sulphide conductors. Because VLF anomalies are produced by a wide range of geological affects, profiles tend to show a complex "cluttered" pattern and additional assistance is required to distinguish trends. By the use of the Fraser method of filtering tilt angle profiles, the readings are converted into contourable data and it is this data that are plotted on the accompanying map.

The magnetic survey was carried out over the same network of lines (Grid M-3, Map 2) using a MF-1 fluxgate magnetometer. The instrument measures the vertical component of the earth's magnetic field in gammas. The normal diurnal corrections were applied to the readings and the results plotted and contoured at a scale of 1 inch to 200 feet.

RESULTS OF THE GEOPHYSICAL SURVEYS

Results of the VLF-EM surveys are shown as Fraser reduction values on the accompanying maps at a scale of one inch to 200 feet.

The electromagnetic survey has indicated several areas of conductivity with off scale readings on Grids G-4 and G-5 in German Township. One weak conductor on G-4, south of the baseline in claim P-561602 appears to be the only conductive response not represented by man-made substance (telegraph, transmission lines, etc.). All other grids G-1, -2, -3, -6, -7, and -8 are devoid of any conductive response. There grids are situated within the inferred sediments which, combined with weak conductor, leads one to believe they are of no economic significance.

In Matheson Township the electromagnetic survey was conducted on two of three grids. The survey was not performed on Grid M-2 which consists of one claim P-611430 underlain mostly by open water of the Fredrick House River.

On Grid M-1 a weak east-west conductor was mapped for a length of 600 feet. No economic significance is placed on the weak response as the grid is underlain by the inferred sediments.

The conductor on Grid M-3, located north of the baseline, east of the railroad and north of the power line may be related to the underlying bedrock.

Off scale readings were recorded in the area of power lines of M-3.

CONCLUSIONS AND RECOMMENDATIONS

Most of the area has been prospected since gold was discovered in the area in 1907 and many of the claims in Matheson and German townships have been brought to patent, with considerable drilling having been done.

No significance is attached to any of the electromagnetic conductors mapped during the survey. The only conductor which may be a response from the underlying bedrock and has an associated magnetic low (one station) occurs in an area of several volcanic outcroppings and may be explained by examination on the ground.

It is recommended before contemplating further work on these properties, a study should be made of the assessment files in Timmins of former work on the claims and adjoining lands.

From the results of the surveys, there are no targets for a drilling program or additional exploration. It is recommended that the present work be filed with the Ministry of Natural Resources and the claims be kept in good standing until the anniversary dates in 1983. Prior to the expiry date, a re-assessment of the claims could be made, based on any new information in the area.

Respectfully submitted,

H. FERDERBER GEOPHYSICS LTD.

D. M. Ross, P. Eng.

Val d'Or, Que.
April 27, 1982

CERTIFICATION

David M. Ross of the Town of Val d'Or, Quebec, do hereby certify:

THAT I am a practicing Geologist residing at 368 Rue Poirier, Val d'Or, Quebec J9P 5C1.

THAT I am a registered Professional Engineer in good standing in the Province of Ontario.

THAT I have received the degree of B. Sc. in Geology from Acadia University, Wolfville, Nova Scotia in 1956, and practiced my profession continuously since my graduation.

THAT the following is a true record of my employment and experience:

1955	4 mos.	Junior Geologist. Geological Survey of Canada.
1956-60	4 yrs.	Geologist. Kennco Explorations (Quebec) Ltd. Quebec
1960-64	4 yrs.	Project Geologist. Denison Mines Ltd. Maine
1964-68	4 yrs.	Contract Geologist. Several clients listed on the Toronto, Vancouver and Montreal stock exchange.
1968-69	1½ yrs.	Geologist. David S. Robertson & Associates Ltd. Blind River, Ontario.
1969-70	1½yrs.	Chief Geologist. Broulan Reef Mines Ltd. Espanola, Ontario.
1971	3 mos.	Contract Geologist. U.S. Smelting Refining and Mining Company, Toronto.
1971-74	3½ yrs.	Associate. David S. Robertson & Associates Ltd. Sydney, Australia.
1974-79	4½ yrs.	Associate. David S. Robertson & Associates Ltd. Blind River, Ontario.
1979-80	1 yrs.	District Geologist. Saskatchewan Mining and Development Corp. LaRange, Saskatchewan.
1980-83	3 yrs.	Chief Geologist. Prospecting Geophysics Ltd. Val d'Or, Quebec.

Dated at Val d'Or, Quebec
9th day of Sept. 1983

David M. Ross, P. Eng

APPENDIX I

GERMAN TOWNSHIP

Claim Nos.	No. of Claims.	Grid	Concession	Lot	
P-611435-38	4	G-1	IV	12	
P-611431-34	4	G-2	IV	11	
P-561591-94	4	G-3	IV	10	
P-561599-602	4	G-4	IV	8	
P-641332-33	2	G-5	IV	4	
P-641334-37	4	G-5	IV	5	
P-616558-60	3	G-6	V	3	
P-616569	1	G-6	V	3	
P-641338-40	4	G-7	V	3	
P-641345	1	G-7	V	2	
P-641342-43	2	G-8	IV	3	
P-641344	1	G-8	IV	2	
P-641345	1	G-8	IV	2	

MATHESON TOWNSHIP

P-611424-25	2	M-1	III	1	
P-611426-29	4	M-1	III	2	
P-611430	1	M-2	II	3	Not done
P-571817-18	2	M-3	I	11	
TOTAL CLAIMS	44				

W8206-087

2.485

Ministry of Natural Resources
Ontario

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

Matheson Twp The Min

42A10SW8864 2.4852 MATHESON

900

Type of Survey(s)	Township or Area
Claim Holder(s)	Prospector's Licence No.
Address	
Survey Company	Date of Survey (from & to) Day / Mo. / Yr. / Day / Mo. / Yr. — Total Miles of line Cut
Name and Address of Author (of Geo-Technical report)	

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	S 71817	40 MAG. 2ND
	S 71818	
	611424	
	611425	
	611426	
	611427	
	611428	
	611429	
	611430	

E.M. only

RECEIVED
APR 20 1982
MINING LANDS SECTION

PORCUPINE MINING DIVISION
RECEIVED
MAR 26 1982
AM 7 8 9 10 11 12 1 2 3 4 5 PM

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

See revised Statement

Total number of mining claims covered by this report of work: 9

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECORDED
MAR 31 1982
Receipt No.

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
40	March 31/82	
	Date Approved as Recorded	Provincial Mining Recorder

Date	Recorded Holder or Agent (Signature)
March 26/82	

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

W8206-193

24852

RECEIVED

JUN 14 1982

MINING LANDS SECTION

Ministry of Natural Resources
Ontario

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

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.

German Twp # 193 P-616558

Type of Survey(s): ELECTROMAGNETIC	Township or Area: GERMAN
Claim Holder(s): Don MCKinnon	Prospector's Licence No.: M1538 1
Address: Box 1130 TIMMINS ONT	
Survey Company: FERGERBER GEOPHYSICS LTD	Date of Survey (from & to): 22 3 82 (Day / Mo. / Yr.) — 28 3 82 (Day / Mo. / Yr.)
Total Miles of line Cut: 34 MILES	
Name and Address of Author (of Geo-Technical report): Hal BERGMANN P.Eng 70 CHIWELL CRESCENT Willowdale ONT M2J 1G1	

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

RECORDED
MAY 28 1982
Receipt No. .....

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	616558	
	616559	
	616560	
	616569	
	561601	
	561600	
	561599	
	561602	
	611431	
	611432	
	611433	
	611434	
	611435	
	611436	
	611437	
	561594	
	561593	
	561592	
	561591	
	641332	
	641333	
	641334	
	641335	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	641336	
	641337	
	641338	
	641339	
	641340	
	641341	
	641342	
	641343	
	641344	
	641345	
	641346	

PORCUPINE MINING DIVISION
RECEIVED
MAY 18 1982
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 34

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.

Date	Recorded Holder or Agent (Signature)
MAY 18 82	D'McK

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1360	May 28/82	
	Date Approved as Recorded: Oct 24/83	Regional Mining Recorder

Ministry of Natural Resources
Ontario

Geotechnical Report Approval

File 2.4852

Mining Lands Comments

- No quick data -

☑ To: Geophysics Mr. Barlow

Comments

☑ Approved ☐ Wish to see again with corrections | Date May 11/83 | Signature R Rule

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geochemistry

Comments

LD

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block (Tel: F 1380)

LIST OF CLAIMS

GERMAN TOWNSHIP

Claim No.	No. of Days
P611435	40
436	40
437	40
438	40
P611431	40
432	40
433	40
434	40
P561591	40
592	40
593	40
594	40
P561599	40
600	40
601	40
602	40
P641332	40
333	40
334	40
335	40
336	40
337	40
P616558	40
559	40
560	40
P616569	40
P641338	40
339	40
340	40
P641342	40
343	40
344	40
345	40

MATHESON TOWNSHIP

Claim No.	No. of Days
P611424	40
425	40
426	40
427	40
428	40
429	40
P571817	60
818	60

2.4852

1983 11 30

Your File: 87

Our File: 2.4852

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Geophysical (Electromagnetic & Magnetometer) Survey on Mining Claims P 561600 et al in the Township of German

The Geophysical (Electromagnetic & Magnetometer) Survey assessment work credits as listed with my Notice of Intent dated November 10, 1983 have been approved as of the above date.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

R. Pichette:sc

Bc: Don McKinnon
Box 1130
Timmins, Ontario

cc: Resident Geologist
Timmins, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.4852

Date 1983 11 10

Mining Recorder's Report of Work No. #87

Recorded Holder: DON McKINNON

Township or Area: MATHESON TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	FOR ELECTROMAGNETIC ONLY
Electromagnetic 40 days	P 571817 - 18 611424 to 29 inclusive
Magnetometer 20 days	
Radiometric ____ days	FOR MAGNETOMETER ONLY
Induced polarization ____ days	P 571817 - 18
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ 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

☐ not sufficiently covered by the survey ☒ Insufficient technical data filed

P 611430

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on

Ministry of Natural Resources

ario

Nov. 25/83

Your file: 87

1983 11 10

Our file: 2.4852

Mining Recorder
Ministry of Natural Resources
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. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

R. Pichette:mc

Encls:

cc: Don McKinnon
Box 1130
Timmins, Ontario

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Ministry of
Natural
Resources

Ontario

Notice of Intent

for Technical Reports

1983 11 10

2.4852
#87

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 his 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 direct to the Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

September 7, 1983 2.4852

REGISTERED

Mr. Don McKinnon
Box 1130
Timmins, Ontario

Dear Sir:

RE: Geophysical (Electromagnetic & Magnetometer) Survey submitted on Mining Claims P 561600 et al in the Township of German.

Enclosed is a copy of our letter dated June 8, 1983, requesting additional information for the above mentioned survey.

Unless you can provide the required data by September 21, 1983 the mining recorder will be directed to cancel the work credits recorded on March 31, 1983.

For further information, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

S. Hurst:sc

Encls:

cc: Mining Recorder
Timmins, Ontario

1983 09 07 2.4852

REGISTERED

H. Ferderber Geophysics Limited
169 Perrault Avenue
Val D'Or, Quebec.

Dear Sirs:

RE: Geophysical (Electromagnetic & Magnetometer) Survey on Mining Claims P 561600 et al in the Township of German.

Enclosed is a copy of our letter dated June 8, 1983, requesting additional information for the above mentioned survey.

Unless you can provide the required data by September 21, 1983 the mining recorder will be directed to cancel the work credits recorded on March 31, 1983.

For further information, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

S. Hurst:sc

Encls:

cc: Mining Recorder
Timmins, Ontario

2.4852

June 8, 1983

Don McKinnon
Box 1130
TIMMINS, Ontario

Dear Sir:

Re: Geophysical (Electromagnetic & Magnetometer)
Survey submitted on Mining claims P561600
et al in the Township of German

We are endeavouring to compile a list of qualificationsof those persons who sign reports and maps of geotechnical surveys submitted to this Ministry for assessment work credits. It would be appreciated therefore if you would please furnish a brief resume of the qualifications of Mr. D.M. Ross.

Enclosed is a copy titled "Qualifications of Author of Geotechnical Survey report submitted for assessment work credits" for your reference.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

R.Pichette:eib

cc: Mining Recorder
Timmins, Ontario

encl.

1982 06 15 2.4852

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmâns, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 611424 et al in the Townships of German and Matheson.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

J. Skura/amc

cc: Prospecting Geophysics Ltd.
Willowdale, Ontario

cc: H. Ferderber Geophysics Ltd.
Val d'Or, P.Q.

PROSPECTING GEOPHYSICS LTD.

GEOPHYSICAL & GEOLOGICAL SURVEYS

70 CHISWELL CRESCENT, WILLOWDALE, ONTARIO M2N 6E1 · TEL. 416-226-2388

May 27, 1982

Mr. E. F. Anderson
Director
Land Management Branch
Room 6450
Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Anderson:

Re: Claims P611424 - P611438; P561591-P561602; P641332-P641345
P616555-P616560 and P616569; P571817-P571818

Enclosed you will find two copies of the report and maps covering geophysical surveys carried out on the above-mentioned claims in German and Matheson Townships.

The work has been recorded at the Mining Recorder's office in Timmins.

Yours truly,

PROSPECTING GEOPHYSICS LTD.

H. J. Bergmann, P. Eng.

HJB:bss
Encls.

File no. 2.4852

	EM
PG16558	✓
559	✓
560	✓
561601	✓
600	✓
599	✓
602	✓
611431	✓
432	✓
433	✓
434	✓
435	✓
436	✓
437	✓
561594	✓
593	✓
592	✓
591	✓
641332	✓
641333	✓
334	✓
335	✓
336	✓
337	✓
338	✓
339	✓
340	✓
341	✓
342	✓
343	✓
344	✓

	EM	mag
346	✓	
571817	✓	✓
571818	✓	✓
611424	✓	
425	✓	
426	✓	
427	✓	
428	✓	
429	✓	
430		← no maps submitted

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) Electromagnetic and Magnetic
Township or Area German and Matheson
Claim Holder(s) _____

Survey Company H. Ferderber Geophysics Ltd.
Author of Report D. Ross, P. Eng.
Address of Author 169 Perrault Avenue, Val d'Or, PQ
Covering Dates of Survey March 1 - April 27, 1982
(linecutting to office)
Total Miles of Line Cut 42

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	40 / 20
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: May 27/82 SIGNATURE: H. J. Bergmann
(Author of Report or Agent)

Res. Geol. _____ Qualifications 2 yrs

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

See list attached

TOTAL CLAIMS 43

If space insufficient, attach list

OFFICE USE ONLY

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) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____