



52J02SE8689 2.6020 SQUAW LAKE

010

Proton Magnetometer
and
VLF Electromagnetic
Surveys

The Horn Project
NTS 52-J-2

Phantom Exploration Services Ltd.

RECEIVED

NOV 14 1983

MINING LANDS DEPT.

October, 1983

R. D. Middaugh

2-6020

INTRODUCTION

Steep Rock Resources Inc. of Atikokan, Ontario contracted Phantom Exploration Services Ltd. of Thunder Bay, Ontario, to conduct magnetic and electromagnetic surveys on the Horn project during the spring and summer of 1983.

LOCATION, ACCESS AND GRID

The survey area is located about three kilometers due north of Coveney Island on Sturgeon Lake approximately 25 kilometers south of Savant Lake, Ontario. The area is protected by 23 unpatented mining claims numbered 668458-463 inclusive, 612062-065 inclusive, 611965-970 inclusive, 668507-508 inclusive, 668511-513 inclusive, 601528 and 601958. These claims are either held by or under option to Steep Rock Resources Inc.

Access to the general area via highway # 599 is excellent all year round. From various access points on the west side of Sturgeon Lake, the property can be reached by boat or snow machine depending on the season.

The grid was established by Steep Rock Resources Inc. who contracted the work to Mr. Don McEachern of Fort Frances, Ontario. Approximately 42 kilometers of line were cut, chained, and picketed at 25 meter intervals. The work was done during the spring and summer of 1983.

PERSONNEL

The day to day and the over-all supervision of the geophysical program was under R. D. Middaugh of Phantom Exploration Services Ltd.

INSTRUMENTATION

Magnetic

A proton precession magnetometer (model MP-2) manufactured by Scintrex Ltd. of Concord, Ontario was used for this survey. The total field measurement was read with a resolution of one gamma and all values were corrected for diurnal variations using a MBS-2 model base station recorder, also manufactured by Scintrex. Readings were recorded at 25 meter intervals on the grid lines.

Electromagnetic

A VLF EM-16 unit manufactured by Geonics Ltd. of Mississauga, Ontario was used for this survey. Both in and out of phase components were taken at 25 meter intervals on the grid lines. the transmitter station used was Annapolis, Maryland with a frequency of 21.4 KHz.

DISCUSSION OF RESULTS

Magnetic

The survey area is presented in plan form on two maps at a scale of 1:2500. The corrected data is plotted on these maps and contoured at 100 gamma intervals where feasible. The datum was selected to be 59,000 gammas.

While no regional gradient is evident, the magnetic data does indicate a sequence of rocks that exhibits a north to north-east regional trend. The influence of felsic intrusives, represented by the large low containing little magnetic relief located under the lake west of the baseline, have altered the north-east trend of the rocks to a north-south alignment on the western portion of the property. The eastern portion of the property retains the north-east trend which predominates the general area.

The sequence is magnetically heterogenous which is typical of volcanic terraines. The magnetic highs are generally narrow in width and discontinuous along strike. Magnetic lows intimately associated with these highs probably represent interflow exhalative sulphide rich zones within the volcanic sequence. This is particularly true of the feature located between lines 2+00 N at 1+00 E and 22+00 N at 15+00 E.

Electromagnetic

The survey area is presented in plan form at a scale of 1:2500 on two maps with a vertical scale set at 1 cm = 5% for the EM profiles. A second set of maps at the same scale presents the filtered data which is contoured at +20 intervals.

Ideally the survey lines should be along the lines of the primary magnetic field which is at right angles to the direction to the transmitter station being used. Unfortunately on this grid the orientation of the survey lines are approximately 60° from this ideal. Compounding the problem is the fact that the ideal survey lines are coincident with the regional strike. The meaning of the resulting data is therefore not understood and consequently any interpretation of this data is highly speculative.

Two notable supposed anomalies are discussed below.

Line 6+00N to 14+00N at 6+00E to 7+00E

This conductive trend has moderate to good conductivity but no direct magnetic association. The anomaly has a north-south trend that cuts across the magnetic trend and the northern half is coincident with a lake.

Line 7+00N to 18+00N at 11+00E to 12+00E

This conductive trend has moderate conductivity and minor magnetic association although it cuts across the magnetic trend more than it is associated with it.

CONCLUSIONS AND RECOMMENDATIONS

The area is underlain by a north-east striking near vertical dipping sequence of volcanogenic rocks. This sequence has been intruded by a large body of felsic composition located on the western portion of the survey area.

While the VLF survey is of questionable value the magnetometer survey outlines the more sulphide rich exhalative zones within the volcanic sequence.

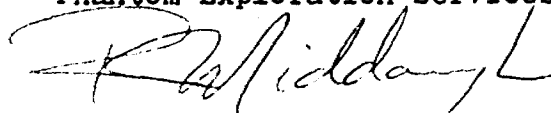
Detailed mapping and prospecting should be carried out in order to better evaluate both the geophysical results and the economic potential of the area. Since the main economic interest on the property is gold mineralization, geochemical sampling of a suitable nature may better define gold bearing horizons not necessarily outlined by the geophysical methods used to date.

A second electromagnetic survey such as Max-Min or CEM should be considered to verify the VLF survey and if necessary to resurvey the property.

Subsequent to the above recommendations a drill program should be considered to test any resulting target areas.

Submitted by

Phantom Exploration Services Ltd.



R. D. Middaugh Geologist

APPENDIX

- Map 1. VLF Survey Profiles West Part
- Map 2. VLF Survey Profiles East Part
- Map 3. VLF Survey Filtered Data West Part
- Map 4. VLF Survey Filtered Data East Part
- Map 5. Magnetometer Survey West Part
- Map 6. Magnetometer Survey East Part



52J02SE6689 2.6020 SQUAW LAKE

Natural Resources

File _____

Ontario

900

MINING GEOLOGICAL - GEOCHEMICAL TECHNICAL DATA STATEMENT

THUNDER BAY MINING DIVISION

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.

RECEIVED 10 1983 112,123,4,5

Type of Survey(s) Magnetic and Electromagnetic
Township or Area Squaw Lake (M1904)
Claim Holder(s) Sherridon Johnson
Steep Rock Resources Inc.
Survey Company Phantom Exploration Services Ltd
Author of Report R. D. Middaugh
Address of Author RR # 14 Alice Ave Thunder Bay
Covering Dates of Survey March 10/83-Nov 8/83
Total Miles of Line Cut 42 kilometers

MINING CLAIMS TRAVERSED

List numerically Pa 668458

Pa 668459 (prefix) (number)

Pa 668460

Pa 668461

Pa 668462

Pa 668463

Pa 612 062

Pa 612063

Pa 612064

Pa 612065

Pa 611965

Pa 611966

Pa 611967

Pa 611968

Pa 611969

Pa 611970

Pa 668507

Pa 668508

Pa 668511

Pa 668512

Pa 668513

Pa 601528

Pa 601958

TOTAL CLAIMS 23

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 40

-Magnetometer 20

-Radiometric

-Other

Geological

Geochemical

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

Magnetometer Electromagnetic Radiometric (enter days per claim)

DATE: Nov 8/83 SIGNATURE: R. D. Middaugh Author of Report or Agent

Res. Geol. Qualifications

Previous Surveys

Table with 4 columns: File No., Type, Date, Claim Holder

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 1602 Number of Readings Mag 1602 VLF 1521
 Station interval 25 meters Line spacing 100 meters
 Profile scale 1 cm = 5%
 Contour interval Mag 100 gammas VLF +20

MAGNETIC

Instrument Scintrex Proton Magnetometer (MP-2)
 Accuracy – Scale constant + 1 gamma
 Diurnal correction method Base Station Recorder
 Base Station check-in interval (hours) _____
 Base Station location and value Savant Lake 60040 gammas

ELECTROMAGNETIC

Instrument Geonics EM-16
 Coil configuration _____
 Coil separation _____
 Accuracy + 1%
 Method: Fixed transmitter Shoot back In line Parallel line
 Frequency Annapolis Maryland
(specify V.L.F. station)
 Parameters measured in and out of phase components

GRAVITY

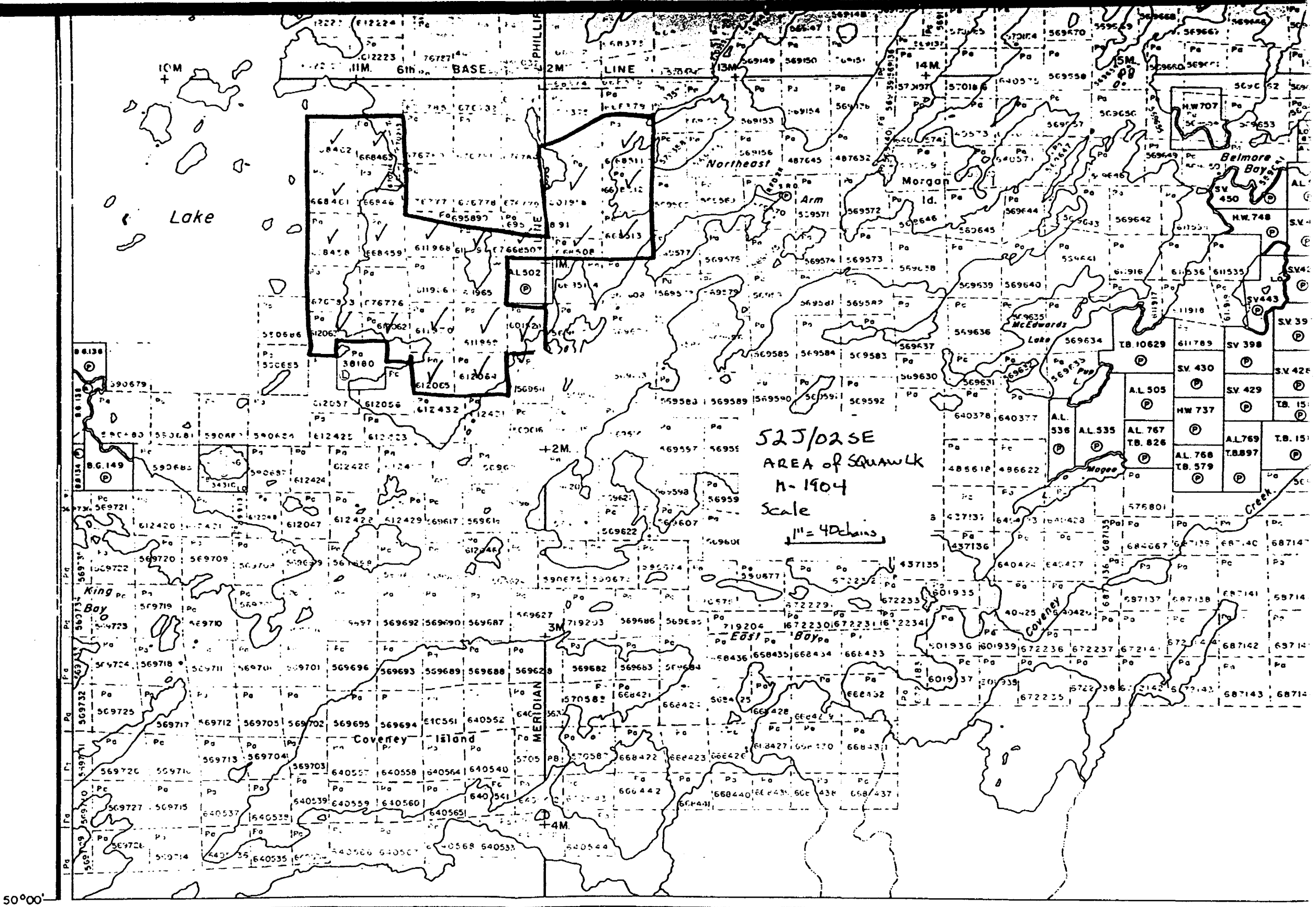
Instrument _____
 Scale constant _____
 Corrections made _____
 Base station value and location _____
 Elevation accuracy _____

**INDUCED POLARIZATION
RESISTIVITY**

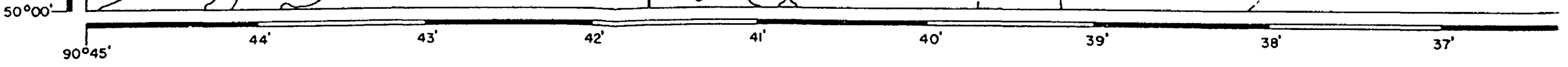
Instrument _____
 Method Time Domain Frequency Domain
 Parameters – On time _____ Frequency _____
 – Off time _____ Range _____
 – Delay time _____
 – Integration time _____
 Power _____
 Electrode array _____
 Electrode spacing _____
 Type of electrode _____

M.2879

Fourbay Lake Area



525/02 SE
 AREA of SQUAWK
 N-1904
 Scale
 1" = 40 chains



Quest Lake Area - M.2875



Ministry of
Natural
Resources
Ontario

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

#83-108

Instructions:

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

Dec 13/83

F.L.M.
Mining Lands

The Mining Act

26020

Type of Survey(s) Geophysical Surveys Mag and EM	Township or Area Squaw Lake, M-1904
Claim Holder(s) Sherridon Johnson, Vulcan, Alberta	Prospector's Licence No. S-3513
Address	
Survey Company Phantom Exploration Services Ltd	Date of Survey (from & to) Day: April 83
Name and Address of Author (of Geo-Technical report) Raymond A. Bernatchez, P.Eng. Atikokan, Ontario	Total Miles of line Cut 4.0 Km

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	611967	60			
	611968	60			

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OCT 13 1983
MINING LANDS SECTION

PATRICIA MINING DIV.
RECEIVED
OCT 14 1983
A.M. P.M.
7 8 9 10 11 12 1 2 3 4 5 6

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.

Pa. 611967

Total number of mining claims covered by this report of work. **2**

Date: October 13/83
Recorded Holder or Agent (Signature): R.A. Bernatchez, P.Eng.

For Office Use Only

Total Days Cr. Recorded: 120
Date Recorded: Oct. 14, 1983
Date Approved as Recorded: 87.7.16
Mining Reporter: [Signature]
Branch Director: [Signature]

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying
Raymond A. Bernatchez, Steep Rock Resources Inc.
Atikokan, Ontario.

Date Certified: Oct. 13/83
Certified by (Signature): R.A. Bernatchez, P.Eng.



Ministry of
Natural
Resources
Ontario F.W.M.

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

#83-139

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

Mining Lands

The Mining Act

26020

Type of Survey: Geophysical Magnetic and Electromagnetic Township or Area: Sydney Lake M-1904
 Claim Holder(s): Steep Rock Resources Inc. Prospector's Licence No.: A 18514
 Address: 710 - 40 University Ave.
 Survey Company: Phantom Explo. Services Ltd. Date of Survey (from 8/19/83 to 8/21/83) Total Miles of line Cut: 25 km approx.
 Name and Address of Author (of Geo-Technical report): R.A. Middaugh RR 14 Alice Ave Thunder Bay Ont.

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
PA	668458				
	668459				
	668460				
	668461				
	668462				
	668463				
	668507				
	668508				
	668511				
	668512				
	668513				
	601528				
	601958				

RECEIVED
DEC 28 1983

MINING LANDS DIV.

PATRICIA MINING DIV.
RECEIVED
DEC 15 1983
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

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.

R. 601528 Total number of mining claims covered by this report of work. 13

For Office Use Only
 Total Days Cr. Recorded: 780 Date Recorded: Dec. 15, 1983
 Date Approved as Recorded: 84.7.16 Mining Recorder: [Signature]
 Director: [Signature]

Date: Dec 18/83 Recorded Holder or Agent (Signature): R.A. Bernatchez P. Eng.

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: R.A. Bernatchez Steep Rock Resources Inc
 Atikokan, Ontario, P0T 1C0 Date Certified: Dec 12/83 Certified by (Signature): R.A. Bernatchez



Ministry of
Natural
Resources
F.O.M.

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

83-142

March 6

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

Mining Lands

The Mining Act

2.6020

Type of Survey(s) Geophysical - E.M. (VLF) and Mag		Township or Area Squaw Lake M-1904
Claim Holder(s) Sherridan Johnson		Prospector's Licence No. S-3513
Address Vulcan, Alberta		
Survey Company Phantom Expl Services Ltd	Date of Survey (from & to) April/83 Oct/83	Total Miles of line Cut Total over 23 claims 25 km
Name and Address of Author (of Geo-Technical report) R.D. Muddaugh RR #4 Alice Ave. Thunder Bay Ontario P7B 5E5		

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	612062	*			
	612063				
	611969				
	611970				

* Unacceptable as claims were cancelled under Sections 85-1(c) & 76-3 The Mining Act.
Hearing set for Jan. 9, 1984

Expenditures (excludes power stripping)

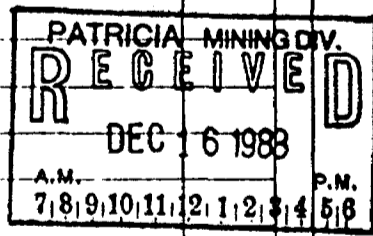
Type of Work Performed

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 column at right.



P. 611967 Total number of mining claims covered by this report of work. **4**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
120	Dec. 16, 1983	<i>[Signature]</i>
	Date Approved as Recorded	Director
	84.7.16	<i>[Signature]</i>

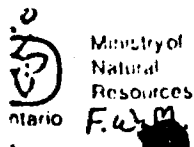
Date **Dec 13/83** Reported Holder or Agent (Signature) *[Signature]*

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying
R.A. Bernatchez Steep Rock Resources Inc.
Atikokan Ontario P0T 1C0

Date Certified **Dec 13/83** Certified by (Signature) *[Signature]*



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

83-143

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. Day Cr." columns.
- Do not use shaded areas for

Mining Claims

The Mining Act

2.6020

March 6

Type of Survey(s) Geophysical (E.M. and Mag) Township or Area Squaw Lake N-1964
 Claim Holder(s) Steep Rock Resources Inc Prospector's Licence No. A 18514

Address 710-40 University Ave Toronto Ontario M5J 2G5

Survey Company Phantom Expl. Services Ltd. Date of Survey (from & to) April 1983 Oct 1983 Total Miles of line cut 25 Km.
Day | Mo. | Yr. | Day | Mo. | Yr. | Total over 23 claims

Name and Address of Author (of Geo-Technical report) R.D. Middaugh RR#4 Alice Ave Thunder Bay Ontario P7B 5E5

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

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

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

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

Expenditures (excludes power stripping)

Type of Work Performed _____

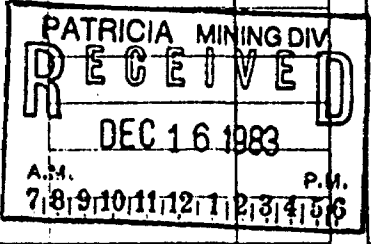
Performed on Claim(s) _____

Calculation of Expenditure Days Credits

Total Expenditures \$ _____	÷	15	=	Total Days Credits _____
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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.

Mining Claim			Expend. Days Cr.	Mining Claim			Expend. Days Cr.
Prefix	Number			Prefix	Number		
Pa	612064						
	612065						



Pa. 612064

Total number of mining claims covered by this report of work. 2

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
120	Dec. 16 1983	[Signature]
	Date Approved as Recorded	Asst. Director
	8.7.16	[Signature]

Date Dec 13/83 Recorded Holder or Agent (Signature) R.A. Bernatchez P. Eng.

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 R.A. Bernatchez P. Eng. Steep Rock Resources Inc.
A.L. King Ontario P.O. Box 100 Date Certified Nov 13/83 Certified by (Signature) R.A. Bernatchez P. Eng.



Ministry of Natural Resources Ontario

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

#84-28

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.

F.M.M. Mining Lands

The Mining Act

2.6020

Apr 6/84

Type of Survey(s) Geophysical - Magnetometer and EM-VLF Township or Area Squaw Lake (M 1904)

Claim Holder(s) Sherridon Johnson, Vulcan, Alberta Prospector's Licence No. S 3513

Address P.O. Box 725 Torch 2B0

Survey Company Phantom Exploration Services Ltd. Date of Survey (from & to) April 1983 Total Miles of line Cut 2.4 Km.

Name and Address of Author (on Geo-Technical report) R.R. 4, Alice Ave., Thunder Bay, Ontario P7B 5E5

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Table for credits requested per each claim. Columns: Special Provisions, Geophysical (Electromagnetic, Magnetometer, Radiometric, Other), Geological, Geochemical, Days per Claim.

Table for mining claims traversed. Columns: Mining Claim (Prefix, Number), Expend. Days Cr., Mining Claim (Prefix, Number), Expend. Days Cr.

Expenditures (excludes power stripping)

Form for expenditures including Type of Work Performed and 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 February 3/84, Recorded Holder or Agent (Signature) R.A. Bernatchez

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: R.A. Bernatchez, 1101 St. Joseph St, Sault Ste. Marie, Ont. P7T 1C0. Date Certified Feb 3 1984.

RECEIVED FEB 15 1984 MINING LANDS SECTION

PATRICIA MINING DIV. RECEIVED FEB - 6 1984 A.M. P.M. 7 8 9 10 11 12 1 2 3 4 5 6

P. 612062

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

For Office Use Only: Total Days Cr. Recorded 120, Date Recorded Feb. 6, 1984, Mining Recorder signature, Date Approved as Recorded 84.7.16, Director's signature.



Ministry of
Natural
Resources

Geotechnical
Report
Approval

File
2.6020

Mar 8/84

Mining Lands Comments

- No claim lines, claim #'s

To: Geophysics *Mr. Barlow.*

Comments

Approved Wish to see again with corrections

Date
March 19/84

Signature
RRL

To: Geology - Expenditures

Comments

Approved Wish to see again with corrections

Date

Signature

To: Geochemistry

Comments
L.D.

Approved Wish to see again with corrections

Date

Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

# 83-143	Mag	E.M	# 83-142	Mag	E.M
PA-612064	✓	✓	PA-668458	✓	✓
612065	✓	✓	59	✓	~✓
			60	✓	✓
# 83-142			61	✓	✓
PA-611967	✓	✓	62	✓	✓
611970	✓	✓	668463	✓	✓
			668504	~✓	~✓
# 83-108			668508	✓	✓
PA-611967	✓	✓	668511	1/4✓	1/4✓
611968	✓	~✓	12	✓	✓
			668513	1/4✓	1/4✓
# 84-28			601528	1/4✓	1/4✓
PA-612072	✓	✓	601958	1/4✓	1/4✓
612063	✓	✓			

D.K.



April 9, 1984

Our File: 2.6020

Sherridan Johnson
18 Front Street
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

RE: Geophysical (Electromagnetic and Magnetometer)
Survey submitted on Mining Claims # 668458
et al in the Area of Squaw Lake

Enclosed are the plans, in duplicate, for the above-mentioned survey. Please have the author of the report show claim lines and claims numbers and return all maps to this office as soon as possible.

For further information, please contact Mr. F.W. Matthews at (416)965-6918.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-6918

M.E. Anderson:mc

cc: Mining Recorder
Sioux Lookout, Ontario

Encl.

2.6020

STEEP ROCK RESOURCES INC.
40 UNIVERSITY AVENUE, SUITE 710
TORONTO, ONTARIO
MSJ 2G5

RECEIVED	
Land Management Branch	
CLASSIFIED	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
MAY 12 1984	
L. GOOD	

May 9, 1984
Atikokan, Ontario POT 100

S. E. Yundt, Director
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario M7A 1W3

Dear Sir:

Re: Geophysical surveys (Mag and EM) on mining claims 668507-08, 668511-14 inclusive, 601528, 601958, completion of partial survey under your file #2.6020 in the area of Squaw Lake (M-1904). (See Report of Work #83-139 Dec. 12, 1983)

We would like to submit the enclosed maps as partial fulfilment of assessment work required on the above mentioned claims. The report that accompanies these maps was sent down at an earlier date under your file No. 2.6020. The report under file No. 2.6020 does not cover the water area of the claims. The water area was covered by geophysical survey during the month of March, 1984 and was not available until the end of April.

We would like to submit these maps to form part of the geophysical reports submitted with your File No. 2.6020. The water areas are outlined in red on the geophysical maps.

We would hope that by submitting the balance of this work that we would obtain the complete 20 and 40 days assessment work requested in File No. 2.6020.

Yours truly,

Raymond A. Bernatchez, P.Eng.
Raymond A. Bernatchez, P.Eng.
Geologist

Encls.

RAB*blk

*New maps to be returned
for signature*

*New maps to be returned
for signature*

TELEPHONE (416) 977-1450
TELEX 065-24758

2,6020

STEEP ROCK RESOURCES INC.
40 UNIVERSITY AVENUE, SUITE 710
TORONTO, ONTARIO
M5J 2G5

Atikokan, Ontario POT 100
May 9, 1984

Mr. S. E. Yundt, Director
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario M7A 1W3

Dear Sir:

Re: Geophysical (EM and Mag) survey on mining claims
PA 668458 et al in the area of Squaw Lake (M-1904)

We enclose plans in duplicate for the above-mentioned survey
showing claim lines and claim numbers.

Yours truly,

Raymond A. Bernatchez, P.Eng.

Raymond A. Bernatchez, P.Eng.
Geologist

Encl.

RAB*blk

RECEIVED	
Land Management Branch	<input type="checkbox"/>
PLEASE	<input type="checkbox"/>
1984	
M.L. GOOD	
R. 6643	

May 25, 1984

Our File: 2.6020

Steep Rock Resources Inc
40 University Avenue
Suite 710
Toronto, Ontario
M5J 2G5

Dear Sirs:

RE: Geophysical (Mag & EM) Survey on
 Mining Claims Pa 668507 et al in
 the Squaw Lake Area.

Returned herein are the plans for the above
described survey. Please have the author of
the report sign each copy of the maps and return
them to this office quoting File 2.6020.

For further information, if required, please
contact Mr. R. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-6918

S. Hurst:sc

Encls:

cc: Mining Recorder
 Sioux Lookout, Ontario

1983 12 02

2.6020

Mr. Albert Hanson
Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Sioux Lookout, Ontario
POV 2T0

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 PA 668458 et al in the Area of Squaw Lake.

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

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

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

A. Barr:mc

cc: Sherridon Johnson
18 Front Street
Sioux Lookout, Ontario
POV 2T0

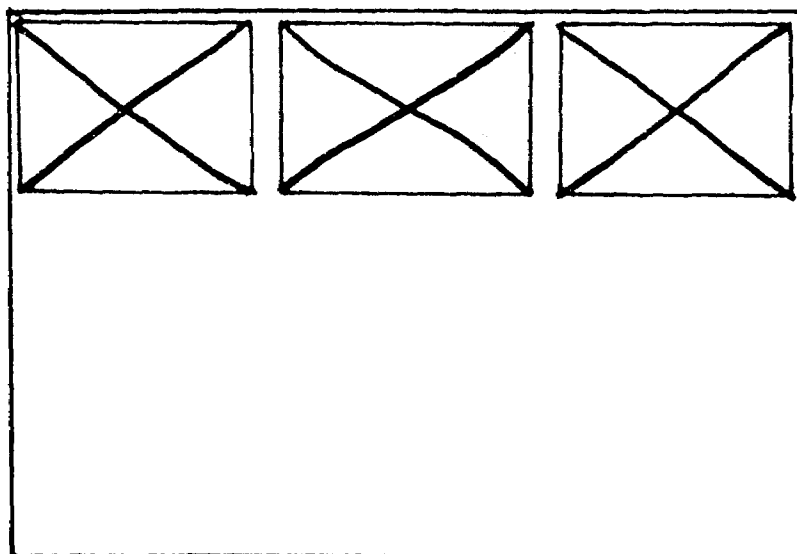
cc: R.D. Middaugh
R.R. #14
Alice Avenue
Thunder Bay, Ontario
P7C 4Z2

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

52J/02SE-0072 #1-3

LOCATED IN THE MAP
CHANNEL IN THE
FOLLOWING SEQUENCE

(X)



FOR ADDITIONAL

INFORMATION

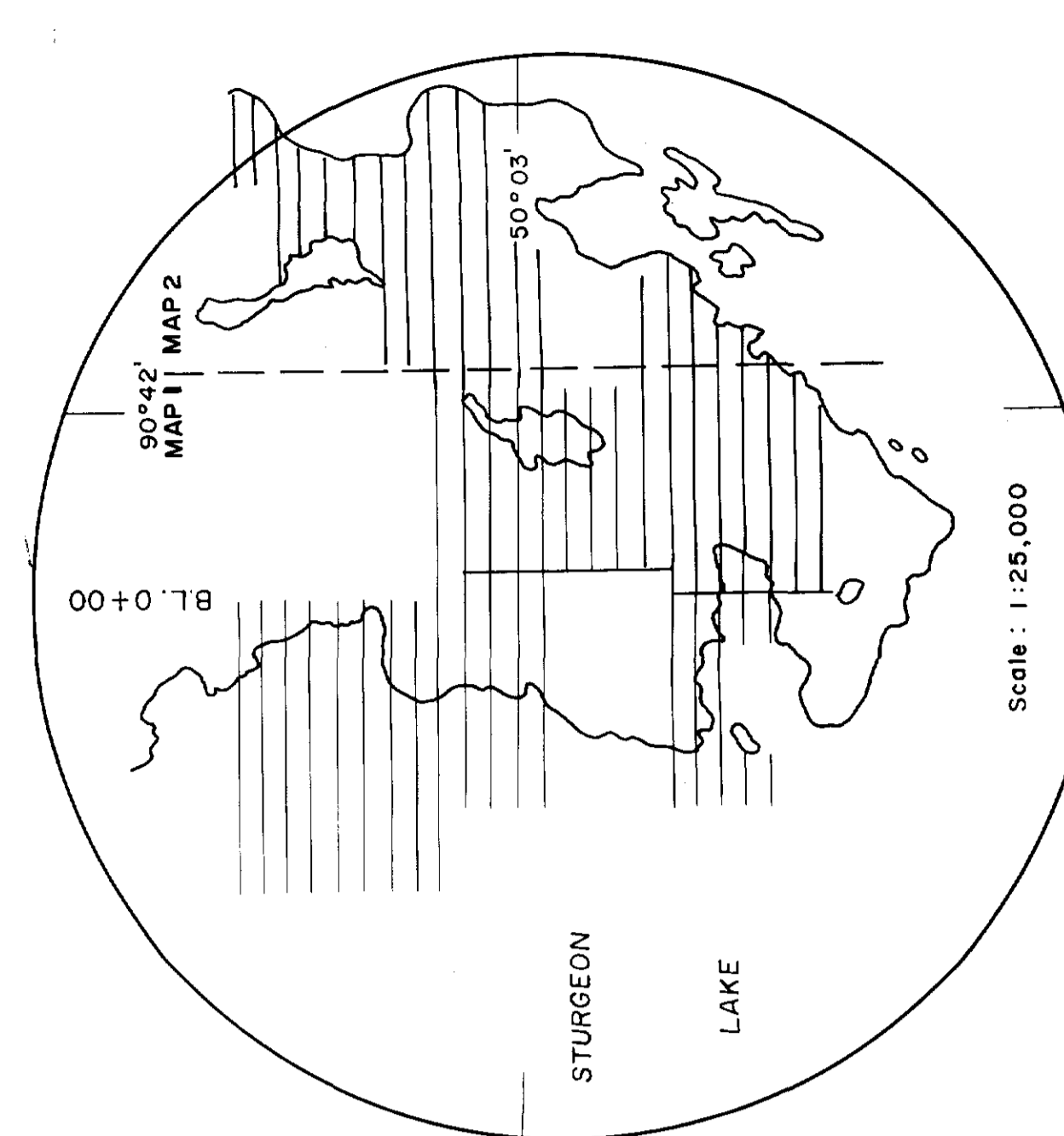
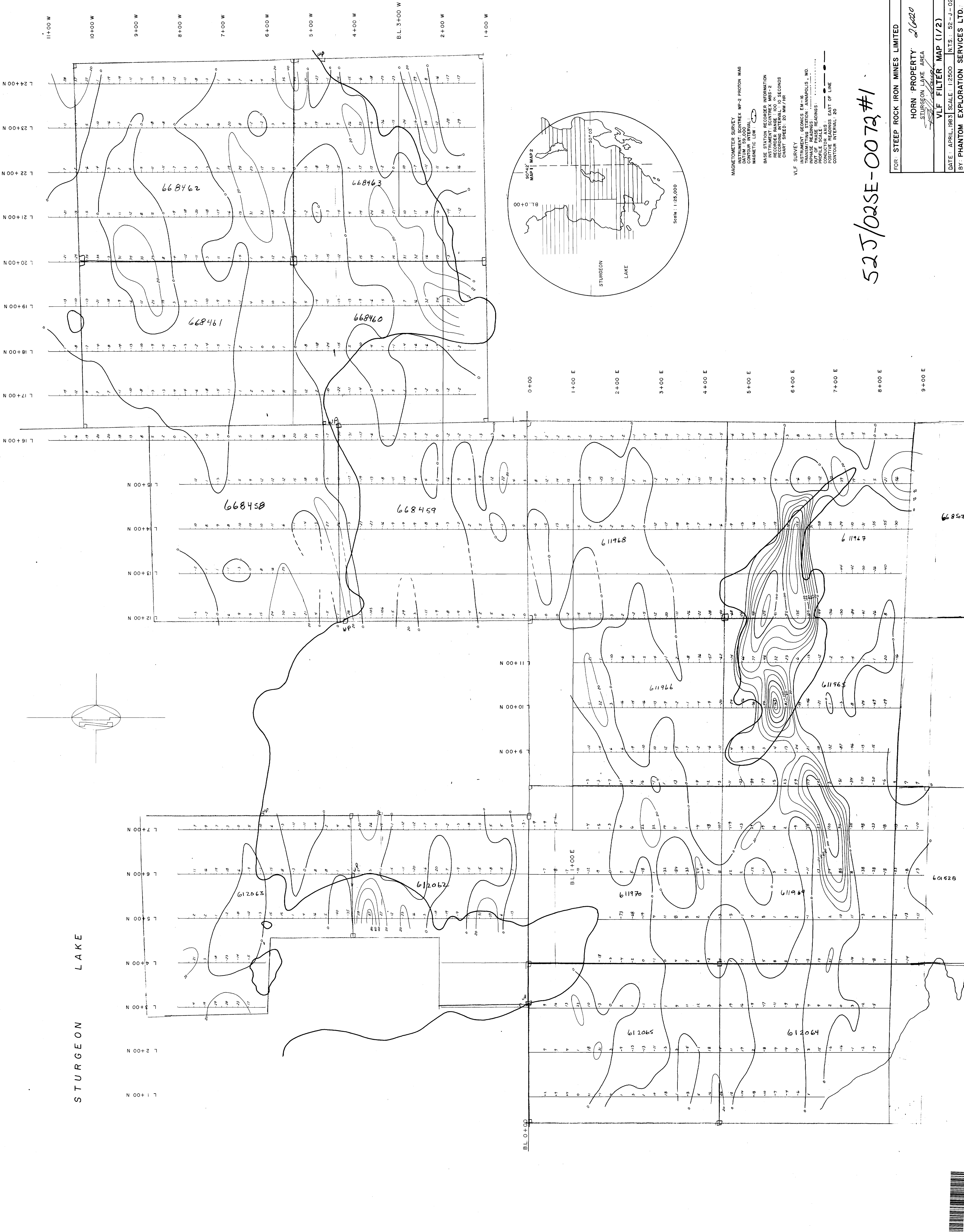
SEE MAPS:

52J/02SE-0072 #4-8

525/02NE-0016-A1

LOAD 16mm

STURGEON LAKE



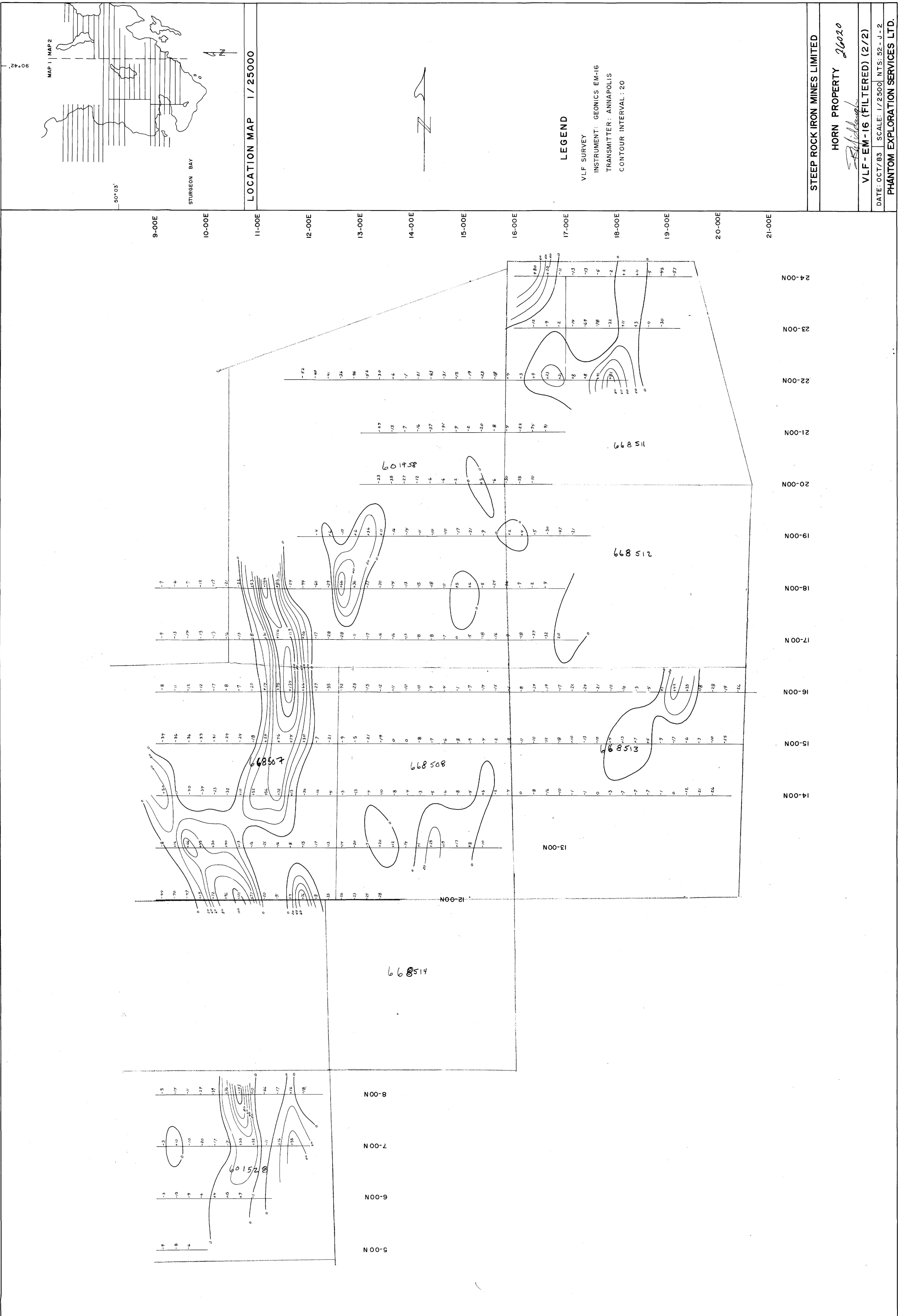
MAGNETOMETER SURVEY
 INSTRUMENT: SCINTREX MP-2 PROTON MAG
 CONTOUR INTERVAL: 10
 MAGNETIC LOW
 BASE STATION RECORDER INFORMATION
 INSTRUMENT: SCINTREX MBS-2
 RECORDER RANGE: 100
 RECORDER RANGE: 100
 CHART SPEED: 20 MM/HR

VLF SURVEY
 INSTRUMENT: GEONICS EM-16
 TRANSMITTING STATION: ANNAPOLIS, MD.
 PROFILE SCALE: 1:1000
 POSITIVE READINGS EAST OF LINE
 CONTOUR INTERVAL: 20

525/02SE-0072 #1

FOR: STEEP ROCK IRON MINES LIMITED
 HORN PROPERTY
 STURGEON LAKE AREA
 VLF FILTER MAP (1/2)
 DATE: APRIL 1983 SCALE: 1:25000 NTS: 52-J-02
 BY: PHANTOM EXPLORATION SERVICES LTD.





STEEP ROCK IRON MINES LIMITED

HORN PROPERTY 26020

VLF-EM-16 (FILTERED) (2/2)

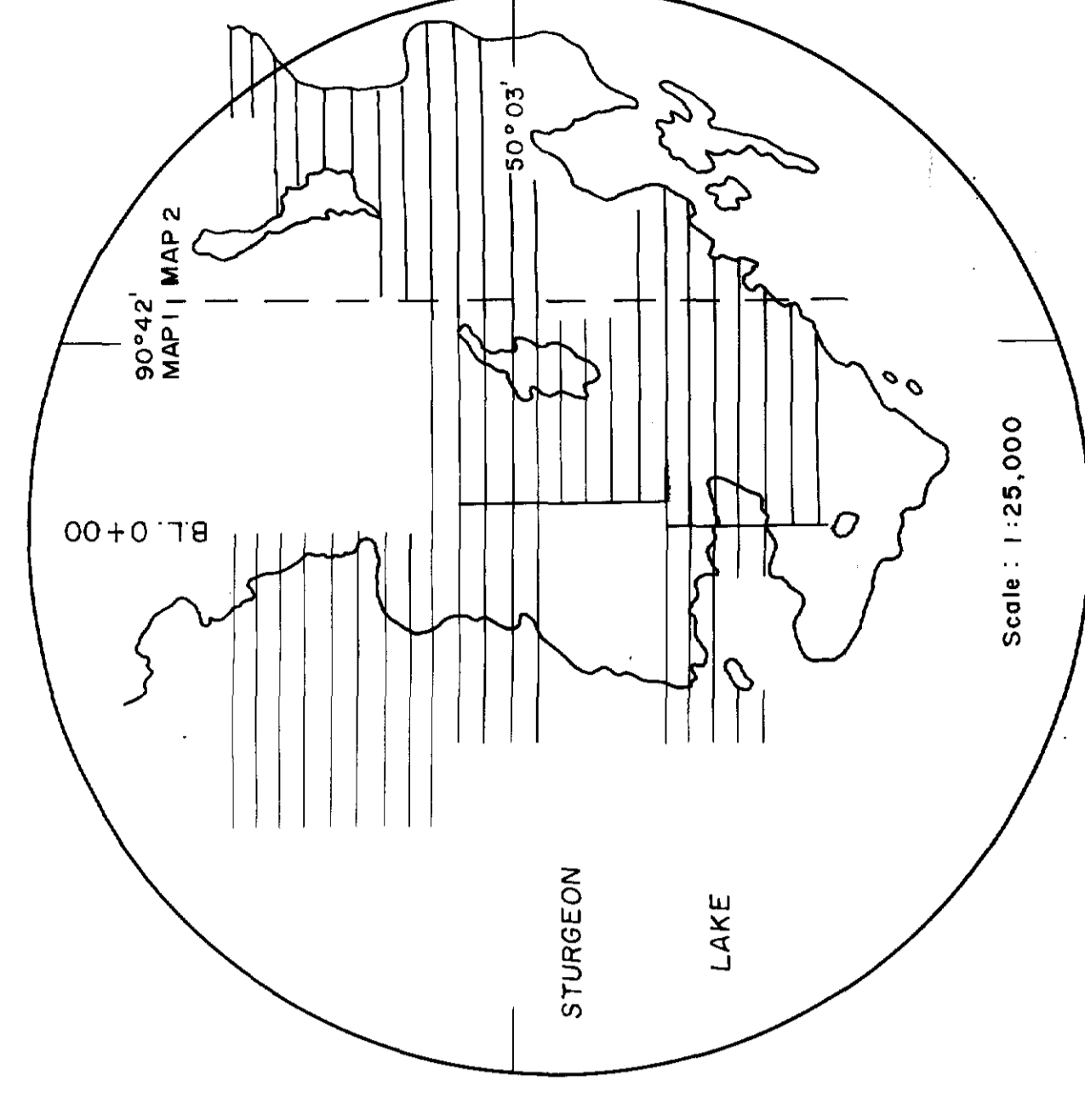
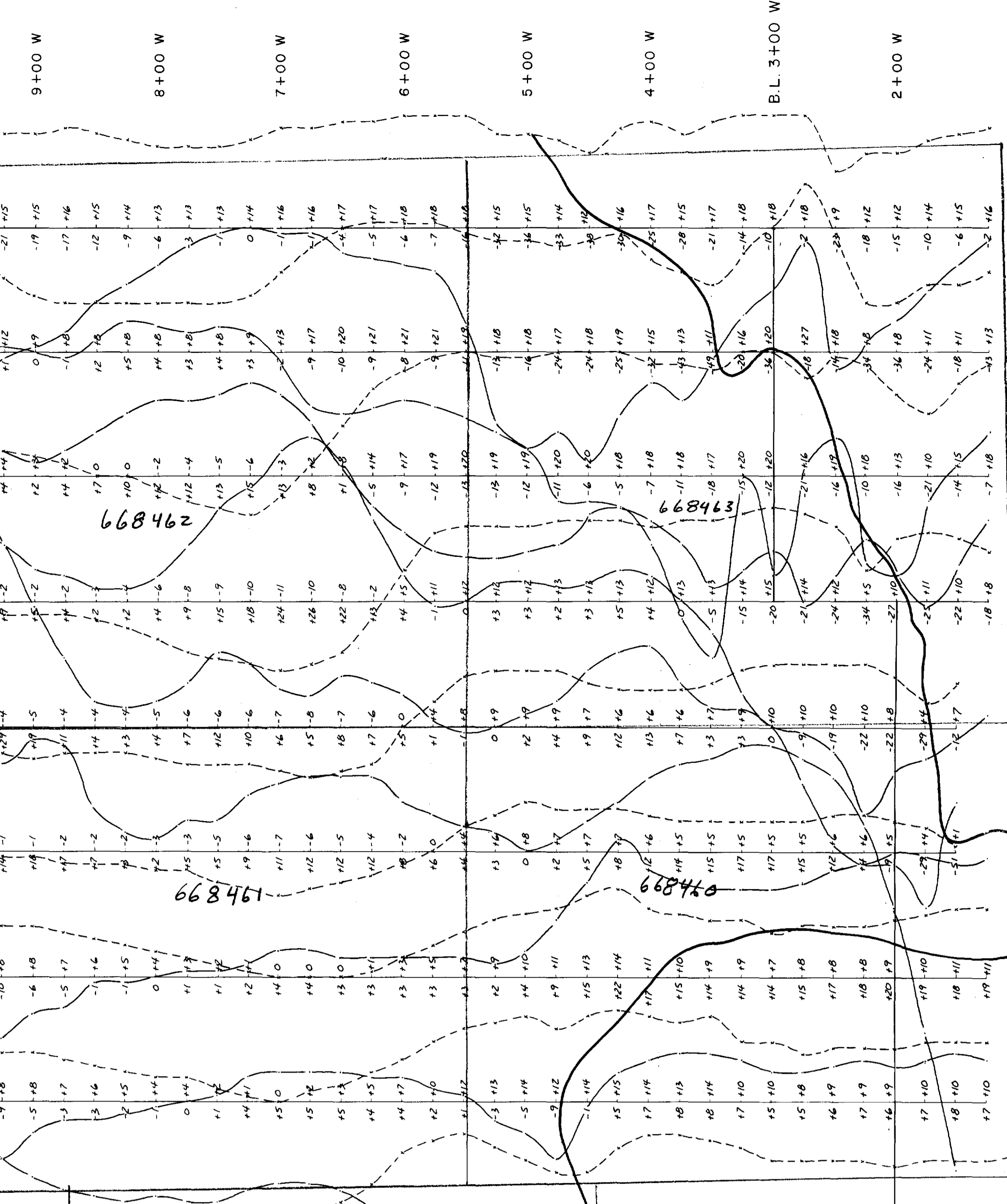
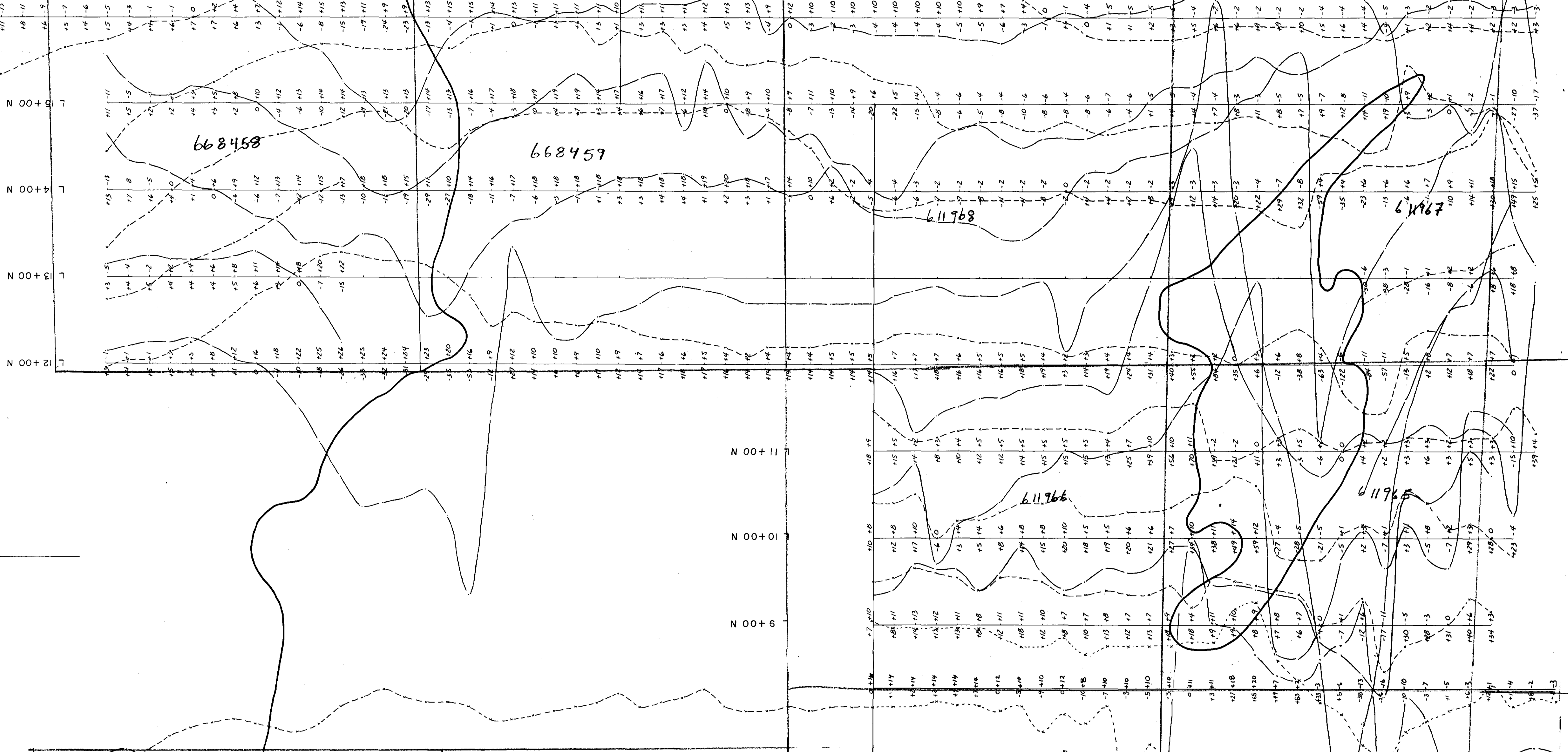
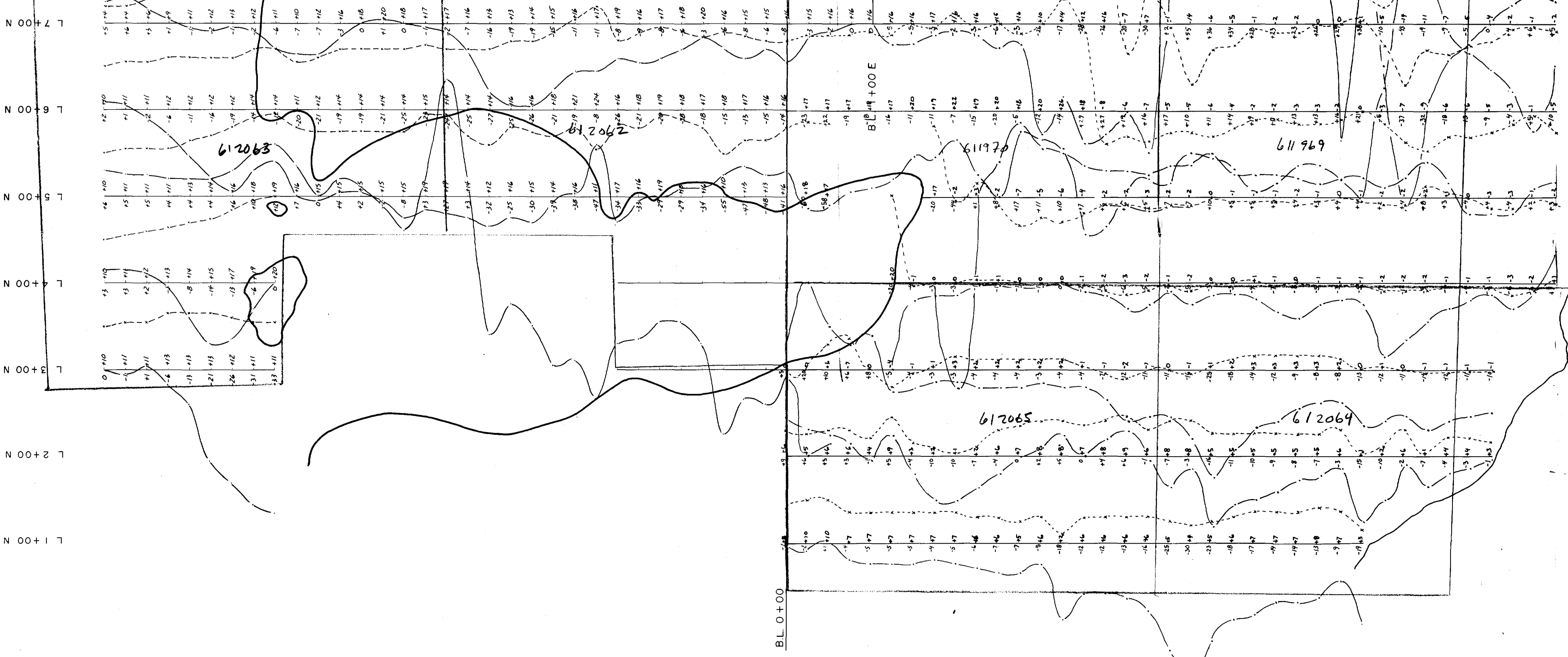
DATE: OCT/83 SCALE: 1/2500 NTS: 52-J-2

PHANTOM EXPLORATION SERVICES LTD.

52J/02SE-0072, #2



STURGEON LAKE

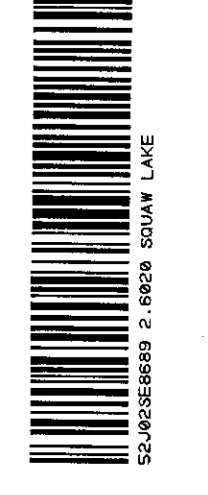


MAGNETOMETER SURVEY
 INSTRUMENT: SCINTREX MP-2 PROTON MAG
 CONTOUR INTERVAL: 5'
 MAGNETIC LOW: 0
 BASE STATION RECORDER INFORMATION
 INSTRUMENT: SCINTREX MBS-2
 RECORDER RANGE: 100
 CHART SPEED: 20 MM/HR
 VLF SURVEY
 TRANSMITTING STATION: ANNAPOLIS, MD.
 PROFILE READINGS:
 POSITIVE READINGS EAST OF LINE
 CONTOUR INTERVAL: 5'

52J/02SE-0072, # 3

FOR: STEEP ROCK IRON MINES LIMITED
 HORN PROPERTY
 STURGEON LAKE AREA 26420
 VLF PROFILE MAP (1/2)
 DATE: APRIL 1983 SCALE: 1:25000 INTS.: S2-J-02
 BY: PHANTOM EXPLORATION SERVICES LTD.

52J/02SE-0072, #4



PHANTOM EXPLORATION SERVICES LTD.

SCALE: 1:2500 N.T.S. 52-J-2

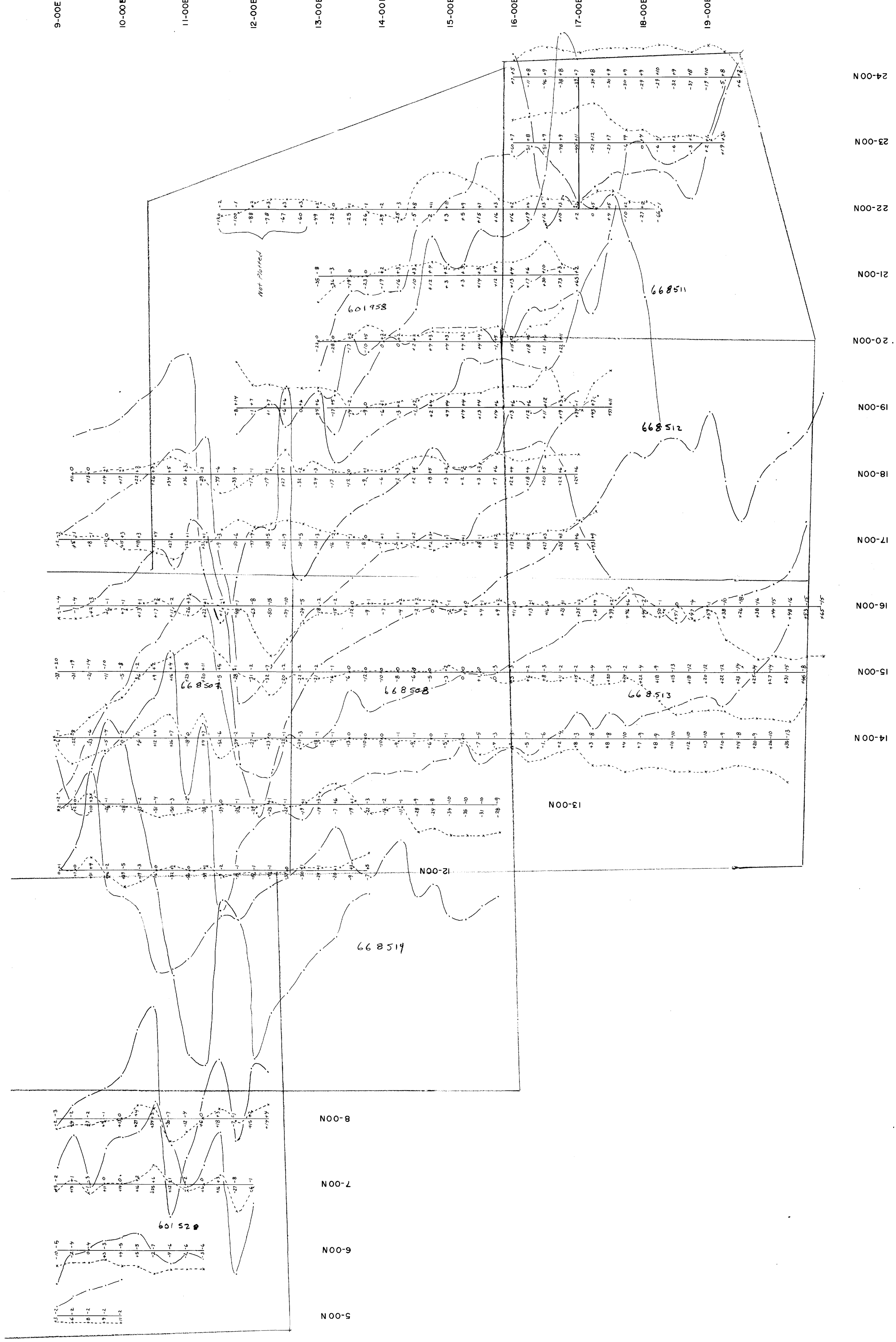
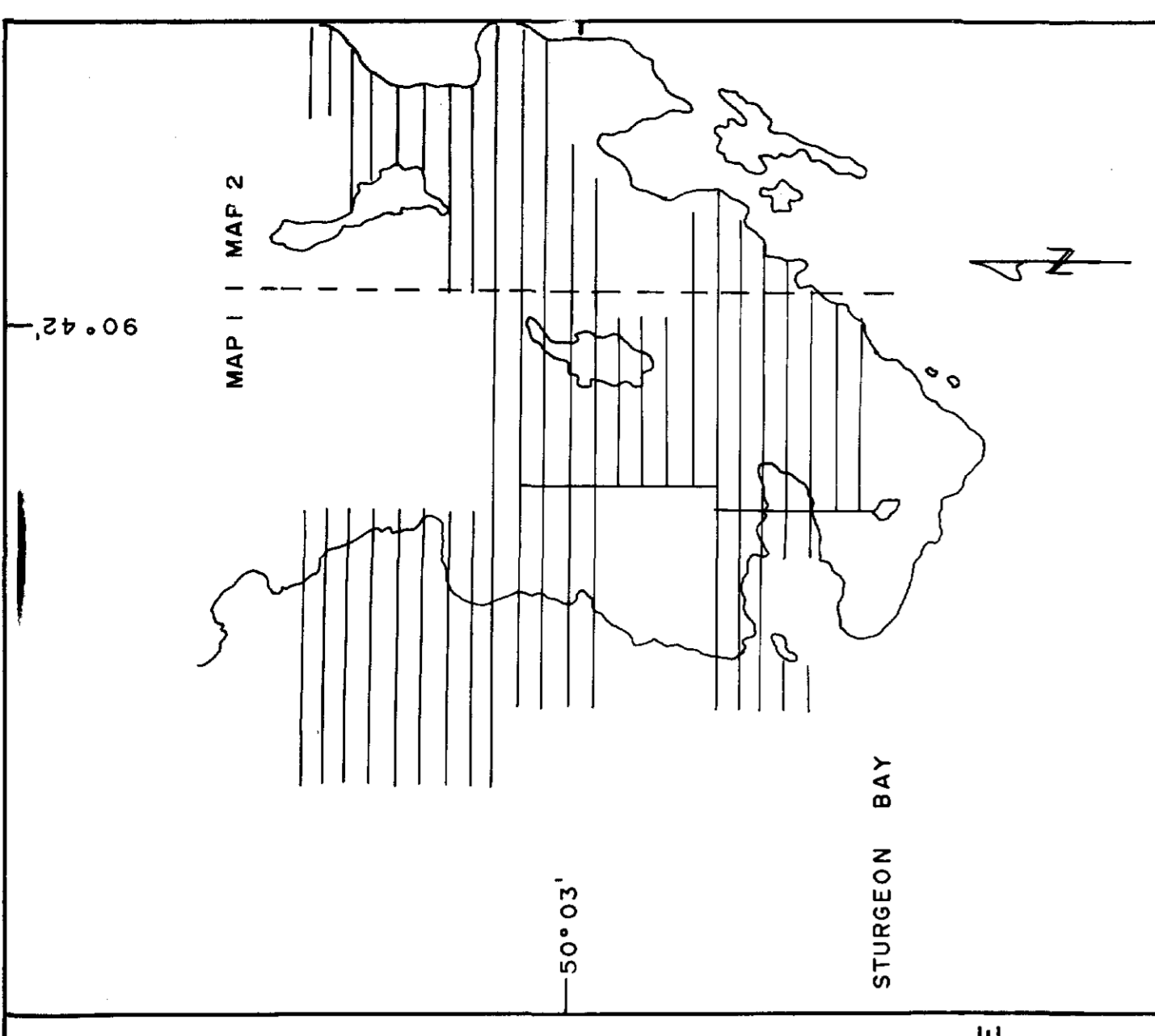
VLF-EM-16 (PROFILES) (2/2)

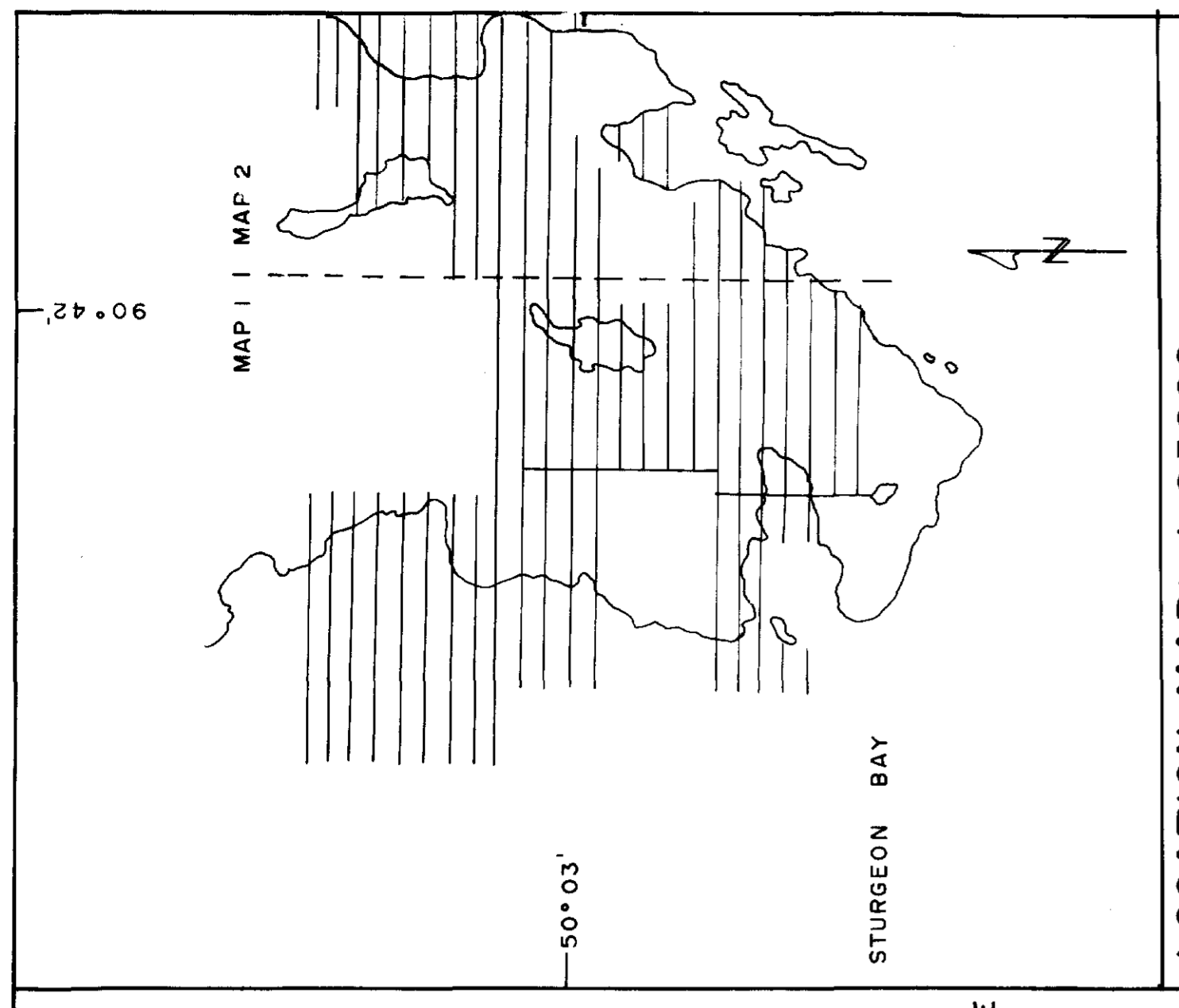
HORN PROPERTY 2620

STEEP ROCK IRON MINES LIMITED

LEGEND
 VLF SURVEY
 INSTRUMENT: GEONICS EM-16
 TRANSMITTER: ANNAPOLIS
 IN PHASE READINGS: - - - - -
 QUADRATURE: ······
 PROFILE SCALE: 5% = 1 CM
 POSITIVE READINGS NORTH OF LINE

LOCATION MAP: 1:25000





9-00E 10-00E 11-00E 12-00E 13-00E 14-00E 15-00E 16-00E 17-00E 18-00E 19-00E

24-00N 23-00N 22-00N 21-00N 20-00N 19-00N 18-00N 17-00N 16-00N 15-00N 14-00N

13-00N 12-00N 11-00N 10-00N 9-00N 8-00N 7-00N 6-00N 5-00N

668507 668508 668513 668514 668511 668512

AL 502 (P)

601528

601958

LEGEND

VLF SURVEY

INSTRUMENT: GEONICS EM-16

TRANSMITTER: ANNAPOLIS

IN PHASE READINGS: - - - - -

QUADRATURE: ······

PROFILE SCALE: 5% = 1 CM

POSITIVE READINGS NORTH OF LINE

STEEP ROCK IRON MINES LIMITED

HORN PROPERTY

R. McKeown 26020

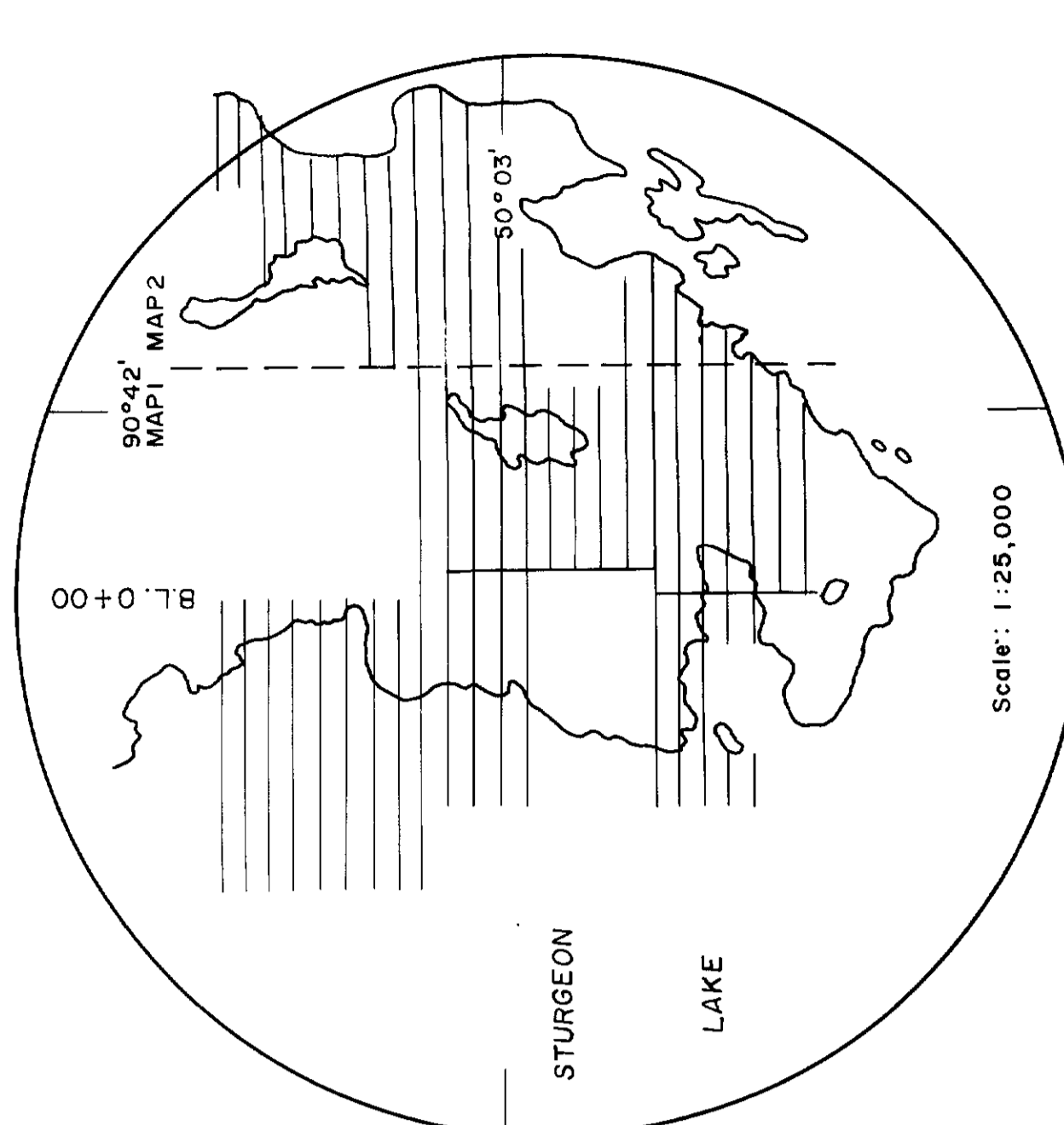
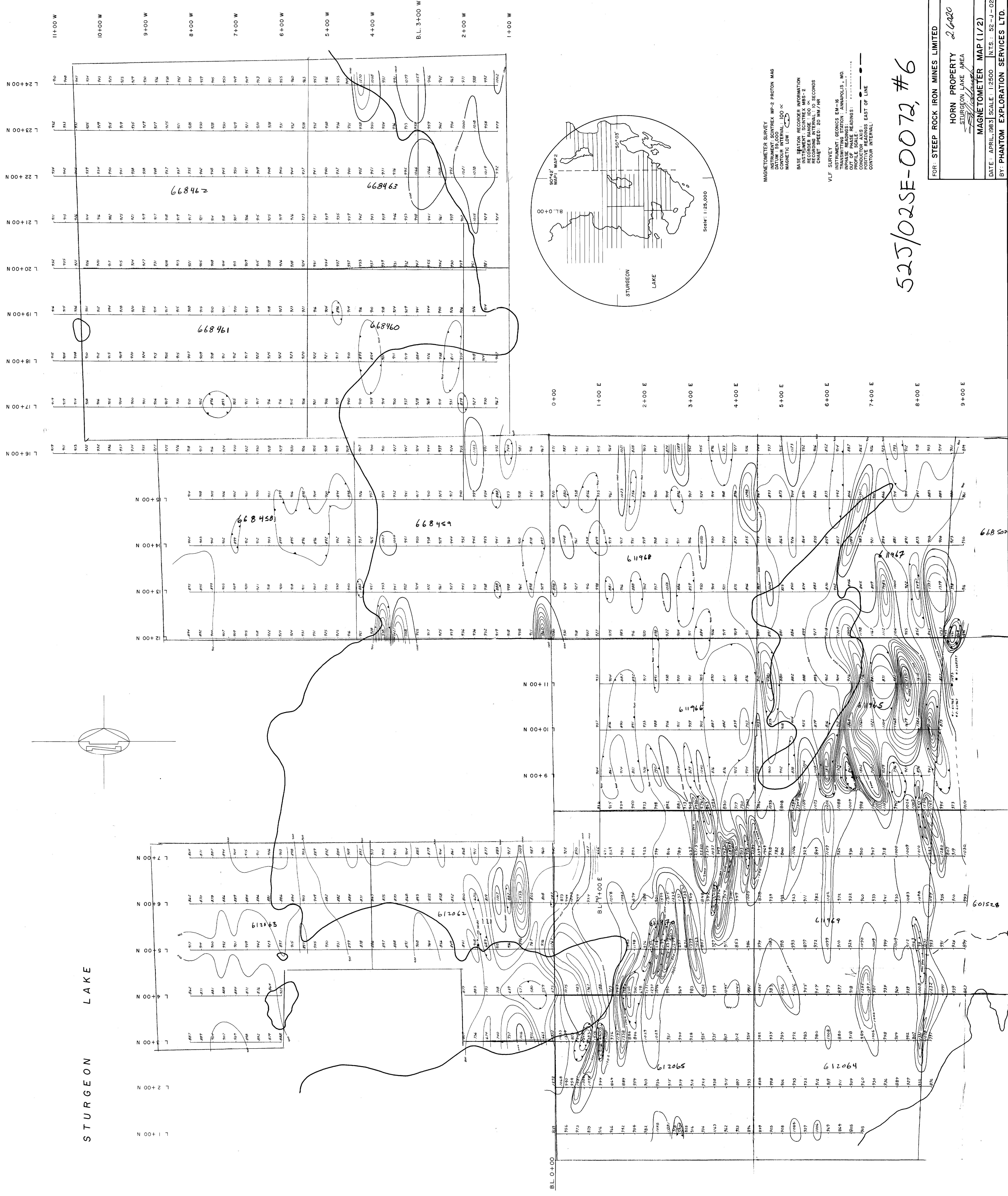
VLF-EM-16 (PROFILES) (2/2)

DATE: OCT/83 | SCALE: 1:2500 | N.T.S. 52-J-2

PHANTOM EXPLORATION SERVICES LTD.

525/02SE-0072, #5

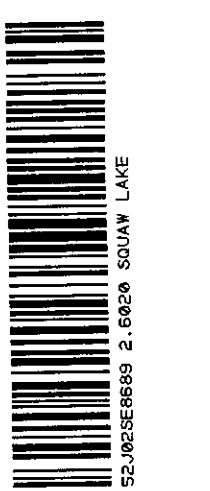
STURGEON LAKE



MAGNETOMETER SURVEY
 INSTRUMENT: GEONICS EM-16
 DATE: APRIL 1983
 SCALE: 1:25000
 DATE: APRIL 1983
 SCALE: 1:25000
 DATE: APRIL 1983
 SCALE: 1:25000

FOR: STEEP ROCK IRON MINES LIMITED
 HORN PROPERTY
 STURGEON LAKE AREA
 MAGNETOMETER MAP (1/2)
 DATE: APRIL 1983
 SCALE: 1:25000
 DATE: APRIL 1983
 SCALE: 1:25000
 DATE: APRIL 1983
 SCALE: 1:25000

525/02SE-0072, #6



525/025E-0072, # 7

26020

FOR STEEP ROCK IRON MINES LIMITED

HORN PROPERTY

MAGNETOMETER MAP (2/2)
DATE: OCT/83 SCALE: 1/2500 INTS: 52-J-2
PHANTOM EXPLORATION SERVICES LTD.

CHART SPEED: 20 MM/HR

INTERVAL: 10 SECONDS

RANGE: 100 γ

INSTRUMENT: MBS-2 (SCINTREX)

BASE STATION RECORDER

MAGNETIC LOW

CONTOUR INTERVAL: 100/500 GAMMAS

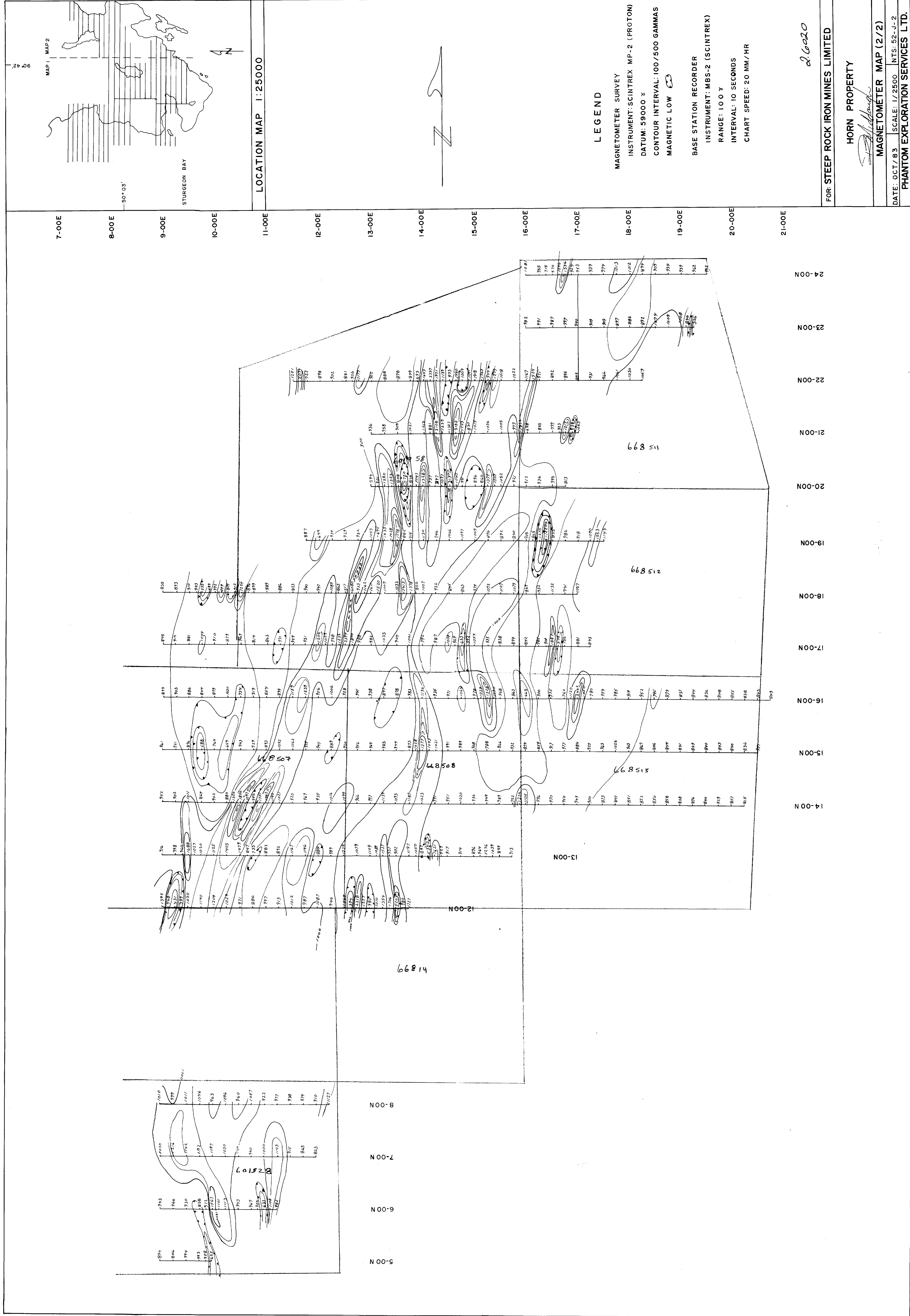
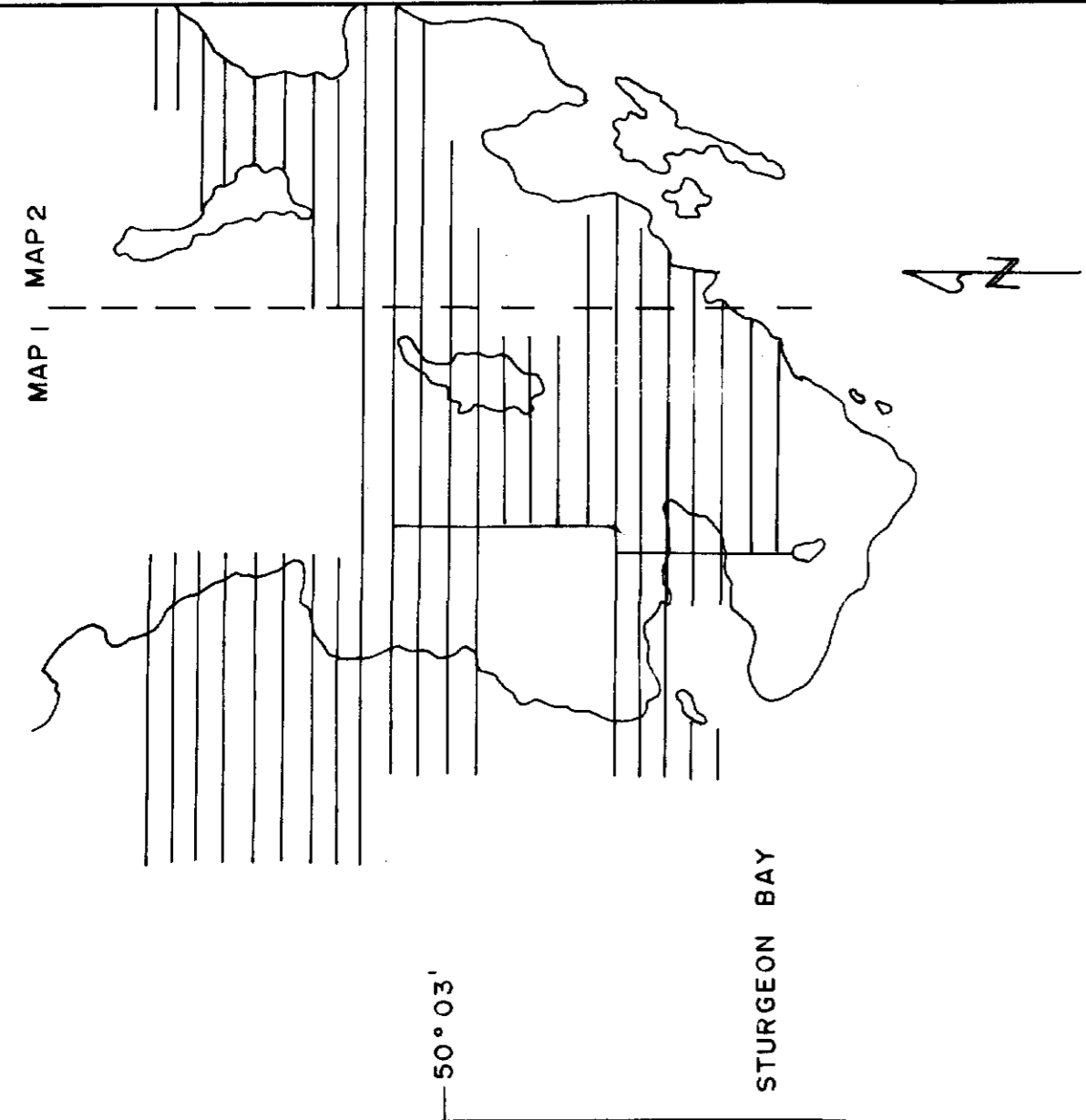
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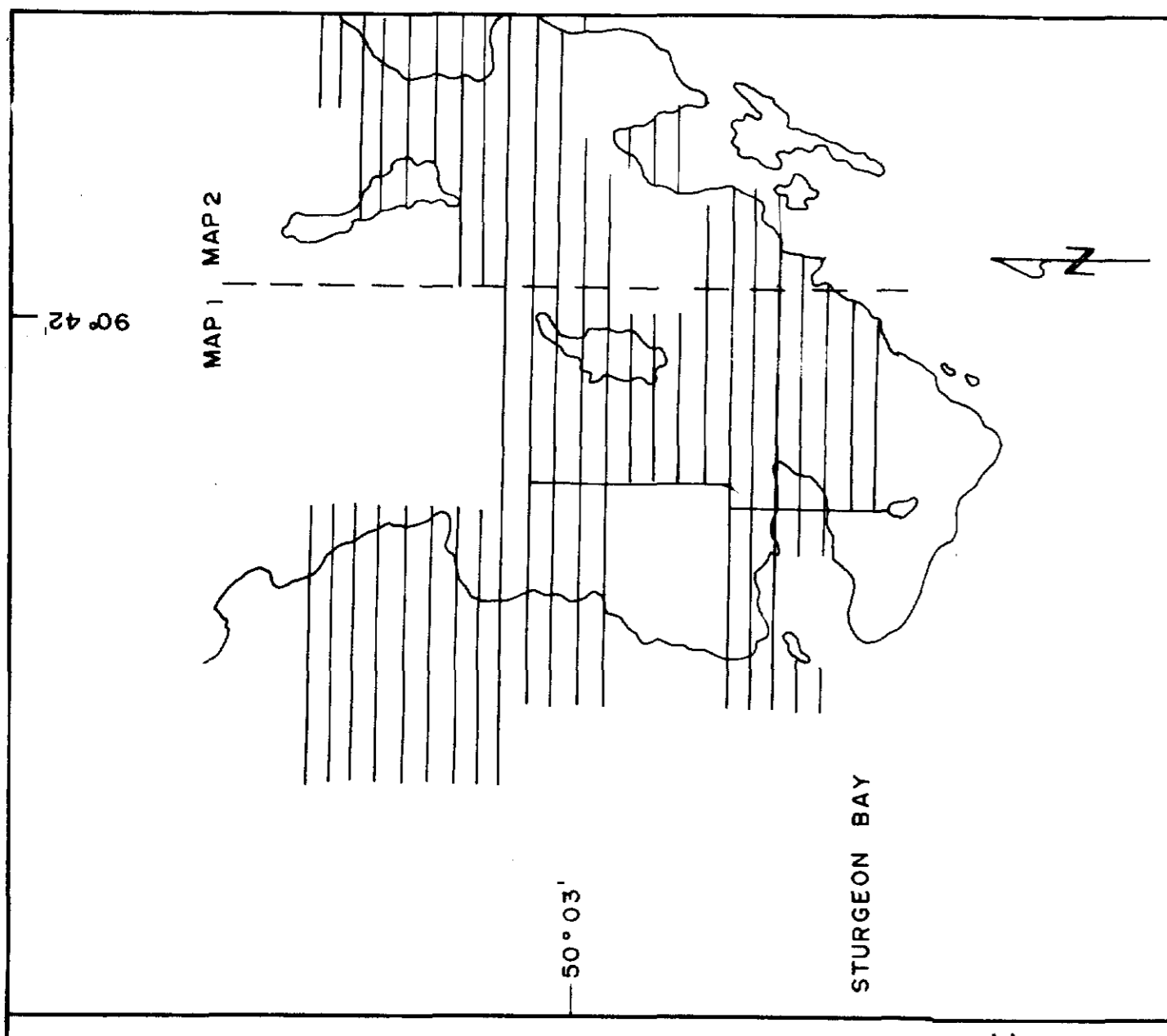
INSTRUMENT: SCINTREX MP-2 (PROTON)

MAGNETOMETER SURVEY

LEGEND

LOCATION MAP 1:25000





MAP 1, MAP 2
50° 03'

STURGEON BAY

LOCATION MAP 1:25000

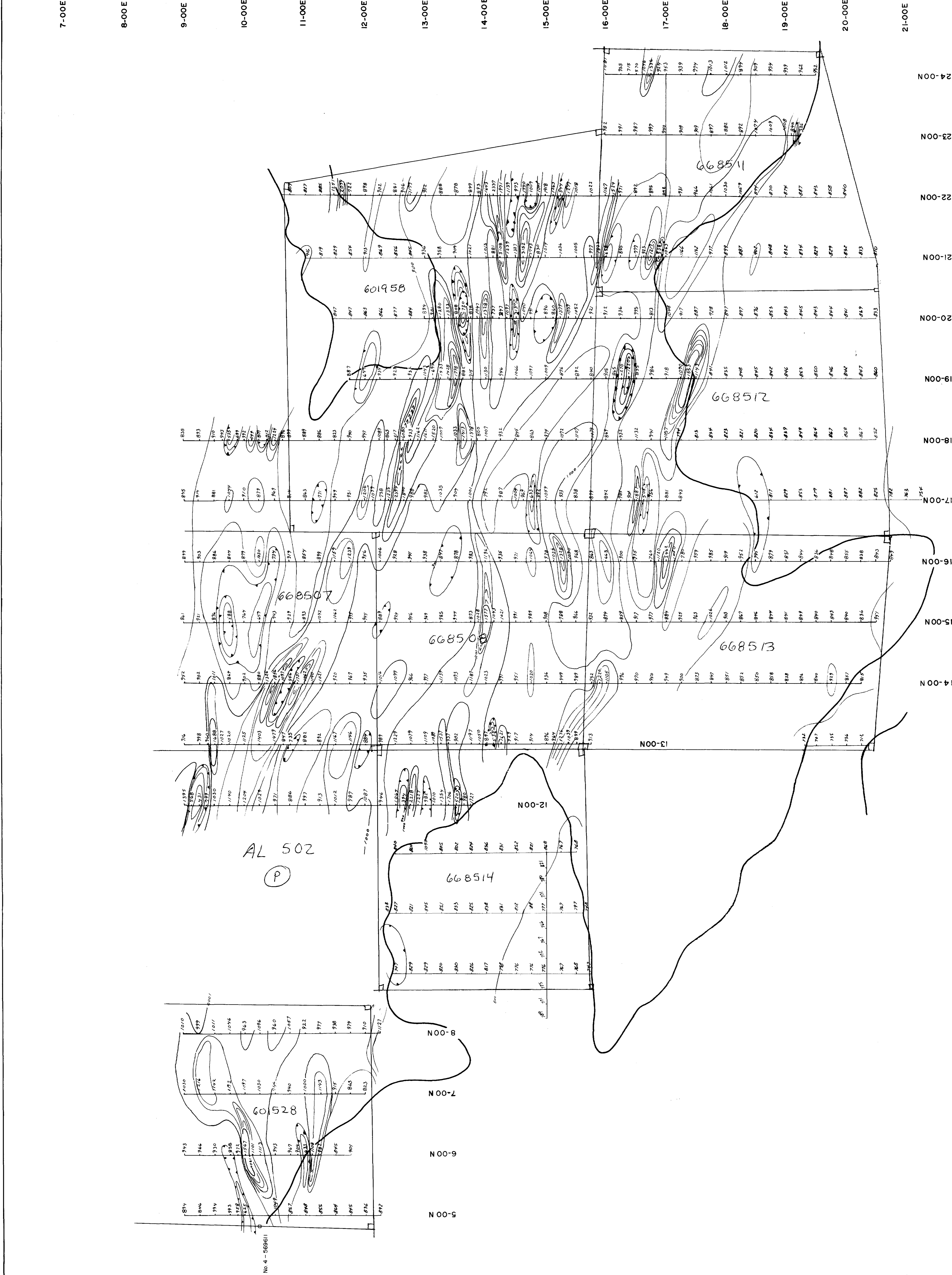
FOR: STEEP ROCK IRON MINES LIMITED

HORN PROPERTY

MAGNETOMETER MAP (2/2)

DATE: OCT/83 SCALE: 1:25000 NTS: 52-J-2

PHANTOM EXPLORATION SERVICES LTD.



7-00E 8-00E 9-00E 10-00E 11-00E 12-00E 13-00E 14-00E 15-00E 16-00E 17-00E 18-00E 19-00E 20-00E 21-00E

24-00N 23-00N 22-00N 21-00N 20-00N 19-00N 18-00N 17-00N 16-00N 15-00N 14-00N 13-00N 12-00N 11-00N 10-00N 9-00N 8-00N 7-00N 6-00N 5-00N

601958

608507

608508

608512

608513

608514

60528

AL 502

(P)

52J/02SE-0072 #8