



41P14NE0118 2.1477 SOTHMAN

477

010

Ecstall Mining Limited
Report on Geophysical Work
in
Sothman Township

Claims: L 367829 - L 367837

A geophysical survey, comprising magnetometer and horizontal loop traverses was carried out over this group of 9 contiguous claims, located in Lots 11 and 12, Con. IV and V, Sothman Township.

The property may be reached by gravel road from Timmins and then by a bush road which passes about $\frac{1}{4}$ mile north of the claims.

Previous work on the property consists of trenching and drilling by Buffalo Ankerite Gold Mines Ltd. in 1946-7 and drilling by Preston East Dome Mines Ltd. in 1951. The latter also carried out a limited reconnaissance magnetometer survey around Budd Lake but no results have been submitted.

J.A. SLANKIS

APRIL, 1974

Although it is impossible to determine the exact location of the drill holes with respect to the present grid, the following holes were probably located between Lines 0+00 and 3+00W, from 4+00S to 12+00N:

Buffalo Ankerite Gold Mines #1, 2, 3, 4, 5 and 6

Preston East Dome Mines #1, 2, 3, 4 and 7

Buffalo Ankerite drill holes #10 and 11 were spotted around 12+00N on Line 27+00W.

The trenching and drilling immediately west of Budd Lake explored a carbonated and sheared N-S zone of rhyolitic agglomerate where minor amounts of gold had been found. The drilling results were generally negative with the best hole returning 8 feet of 0.2 ounces of gold per ton. Appreciable pyrite and some pyrrhotite mineralization was intersected by most of the holes but no ore grade economic sulphides were found.

The two drill holes in the north-western part of the claim group intersected carbonate cut by feldspar porphyry dykes. Pyrite was the only sulphide present.

The most recent detailed geological map of this area is Map #1953-3, Township of Sothman, published by the Ontario Department of Mines.

Results:

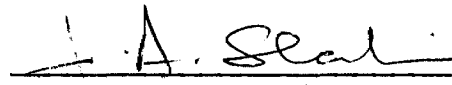
The horizontal loop survey shows no definite anomalies. There is a weak Quadrature response at 5+50S on Line 3+00W which is likely an overburden response. At 9+50N on Line 0+00 both In-phase and Quadrature show positive response, an effect that might be produced by a conductive zone running more or less parallel to the traverse line at some distance from it. This might warrant additional investigation by a few E-W traverses although, in view of the past drill results in this area, it is probably caused by pyrite.

The magnetic field pattern is in fair agreement with the geology on Map 1953-3. The strong N-S magnetic trend centered on Line 6+00W reflects a zone of dune-peridotite, with the lower magnetics to the east corresponding to acid and intermediate volcanics. West of the magnetic high the somewhat lower and uniform field strengths reflect the presence of low-susceptibility conglomerates which overlie the ultrabasics. The magnetic low along the western edge of the claim group is caused by granite.

Conclusions:

As the magnetic results have merely confirmed the geology inferred from outcrops and from drilling and as no significant electromagnetic responses were observed in areas not already thoroughly tested by drilling, no further work can be recommended on the basis of geophysics alone.

JAS:ss


J. A. Slankis



41P14NE0118 2.1477 SOTHMAN

020

Ecstall Mining Limited
Report on Geophysical Work
in
Sothman Township

Claims: L 371512 - L 371515

A geophysical survey, consisting of horizontal loop and magnetometer traverses was carried out over this group of four contiguous claims, located in Lot 4 of Con. V and VI of Sothman Township.

Access to the property is by a good gravel road south from Timmins and then bush roads lead to the south-west corner of the property. A 4-wheel drive vehicle is recommended.

Previous work on the property consists of considerable trenching in the S-W corner and one drill hole by Consolidated Canorama Explorations Ltd. in 1964. The approximate location of the hole is at 7+00S on Line 3+80E of the present grid. The bearing was S70°E (presumably astronomical), the dip -45°, and length 305 feet.

APRIL, 1974

J.A. SLANKIS

Excepting 15-20 foot sections of acid volcanics at the top and near the bottom, the hole encountered a sequence of tuffs and tuff-agglomerates. Three 15-25 foot sections are heavily mineralized with pyrite and pyrrhotite and minor amounts of these are found throughout the hole. No economic mineralization is reported.

Results:

Magnetic trends are generally east-west with what appears to be a diabase dyke crossing the property from 14+00N on Line 12+00E to 1+00S on Line 32+27E. The high magnetics in the northern part probably reflect a zone of gabbroic rocks. The central portion of the claims appears to be underlain by acid volcanics as suggested by Map 1953-3, Township of Sothman. In the southern part there are three parallel zones of higher susceptibility, representing either basic rocks or possibly pyrrhotite-rich sections. As shown on the magnetic map, there may be two faults in this area.

The horizontal loop survey shows anomalous responses at the south end of Lines 3, 6, and 9+00E. All the anomalies reflect the presence of poor conductors and it is not clear whether the anomaly on Line 6+00E is caused by a single zone or two closely spaced ones.

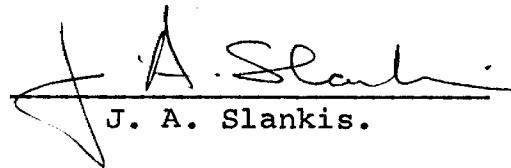
The present results are not sufficiently detailed to determine the relationship between the conductors detected, especially in view of possible faulting. Similarly, due to probable end effects, attempts to analyze the profiles give widely different results from line to line. Unfortunately, the previous drill hole was apparently drilled more or less parallel to strike so that it is impossible to correlate drill results with the geophysics.

Recommendations:

Outline the conductors more accurately by means of a horizontal loop survey along existing lines and intermediate lines. The coil separation can be reduced as it is unlikely that the zones are deeply-buried. A more detailed magnetic

survey would also be useful as at present there is no definite correlation between magnetics and E-M.

JAS:ss


J. A. Slankis.

GEOPHYSICAL - GEOLOGICAL
TECHNICAL DATA



900

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.

PROJECTS UNIT

Type of Survey Geophysical
Township or Area Sothman Township
Claim holder(s) Ecstall Mining Limited
P.O.Box 175, Suite 5000, Commerce Court, Toronto
Author of Report J. A. Slankis
Address As above
Covering Dates of Survey May 26, 1973
(linecutting to office)
Total Miles of Line cut 9.26

MINING CLAIMS TRAVERSED
List numerically

L	367829	covered
(prefix)	(number)	
L	367830	
L	367831	
L	367832	
L	367833	
L	367834	
L	367835	
L	367836	
L	367837	

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	20
ENTER 20 days for each additional survey using same grid.	40
Geophysical	
-Electromagnetic	
-Magnetometer	
-Radiometric	
-Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 24/4/74 SIGNATURE: J. A. Slankis
Author of Report or Agent

PROJECTS SECTION
Res. Geol. _____ Qualifications 2, 686
Previous Surveys 63A.32 (Geological) done in 1947
Checked by 63.1699 (EM + Mag) different instruments - done in 1965
GEOLOGICAL BRANCH _____

Approved by LD _____ date _____
GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 9

OFFICE USE ONLY

If space insufficient, attach list

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS MAG: 478 MAG: 533
Number of Stations EM: 424 Number of Readings EM: 424
Station interval 100 Feet
Line spacing 300 Feet
Profile scale or Contour intervals MAG: 100 Gamma Contours EM: 1"=20% Profiles
(specify for each type of survey)

MAGNETIC

Instrument ELSEC #592, Proton Precession, Total Field Magnetometer
Accuracy - Scale constant +/- 2 Gammas
Diurnal correction method Looping
Base station location On Line 0+00 at Base Line

ELECTROMAGNETIC

Instrument GEONICS EM-17
Coil configuration Horizontal Loop
Coil separation 300 Feet
Accuracy +/- 2% on In-phase and Quadrature
Method: [] Fixed transmitter [] Shoot back [x] In line [] Parallel line
Frequency 1600 Hz
Parameters measured In-phase and Quadrature components of secondary field as percent of transmitted field.
GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location

Elevation accuracy

INDUCED POLARIZATION - RESISTIVITY

Instrument
Time domain Frequency domain
Frequency Range
Power
Electrode array
Electrode spacing
Type of electrode

File 2.1423
RECEIVED

MAY 8 1974

PROJECTS UNIT

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 Geophysical
Township or Area Sothman Township
Claim holder(s) Ecstall Mining Limited
P.O. Box 175, Suite 5000, Commerce Ct. Toronto
Author of Report J. A. Slankis
Address As above
Covering Dates of Survey June 6, 1973-April 19, 1974
(linecutting to office)
Total Miles of Line cut 7.3

MINING CLAIMS TRAVERSED
List numerically

L 371512
(prefix) (number)
L 371513
L 371514
L 371515

g

If space insufficient, attach list

<u>SPECIAL PROVISIONS CREDITS REQUESTED</u>	<u>DAYS per claim</u>
Geophysical	
-Electromagnetic	<u>20</u>
-Magnetometer	<u>40</u>
-Radiometric	
-Other	
Geological	
Geochemical	

ENTER 40 days (includes line cutting) for first survey.
ENTER 20 days for each additional survey using same grid.

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: 19/4/74 SIGNATURE: J. A. Slankis
Author of Report or Agent

PROJECTS SECTION

Res. Geol. Qualifications 2,686
Previous Surveys 63.1270 (Mag + Geology)
done in 1963 and 64

Checked by _____ date _____

GEOLOGICAL BRANCH

LD
Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

TOTAL CLAIMS 4

OFFICE USE ONLY

Semple Twp. - M. 1100

THE TOWNSHIP OF
OF
SOTHMAN

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓞ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS — — — — —
- IMPROVED ROADS = = = = =
- KING'S HIGHWAYS — + — + — + —
- RAILWAYS — | — | — | —
- POWER LINES — — — — —
- MARSH OR MUSKEG * * *
- MINES ⚡
- CANCELLED C.

NOTES

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

Flooding Rights—L.O. 7191 File No. 1162 vol. 4.

- MINING LANDS -
DATE OF ISSUE
 MAY - 9 1974
 MINISTRY OF NATURAL RESOURCES

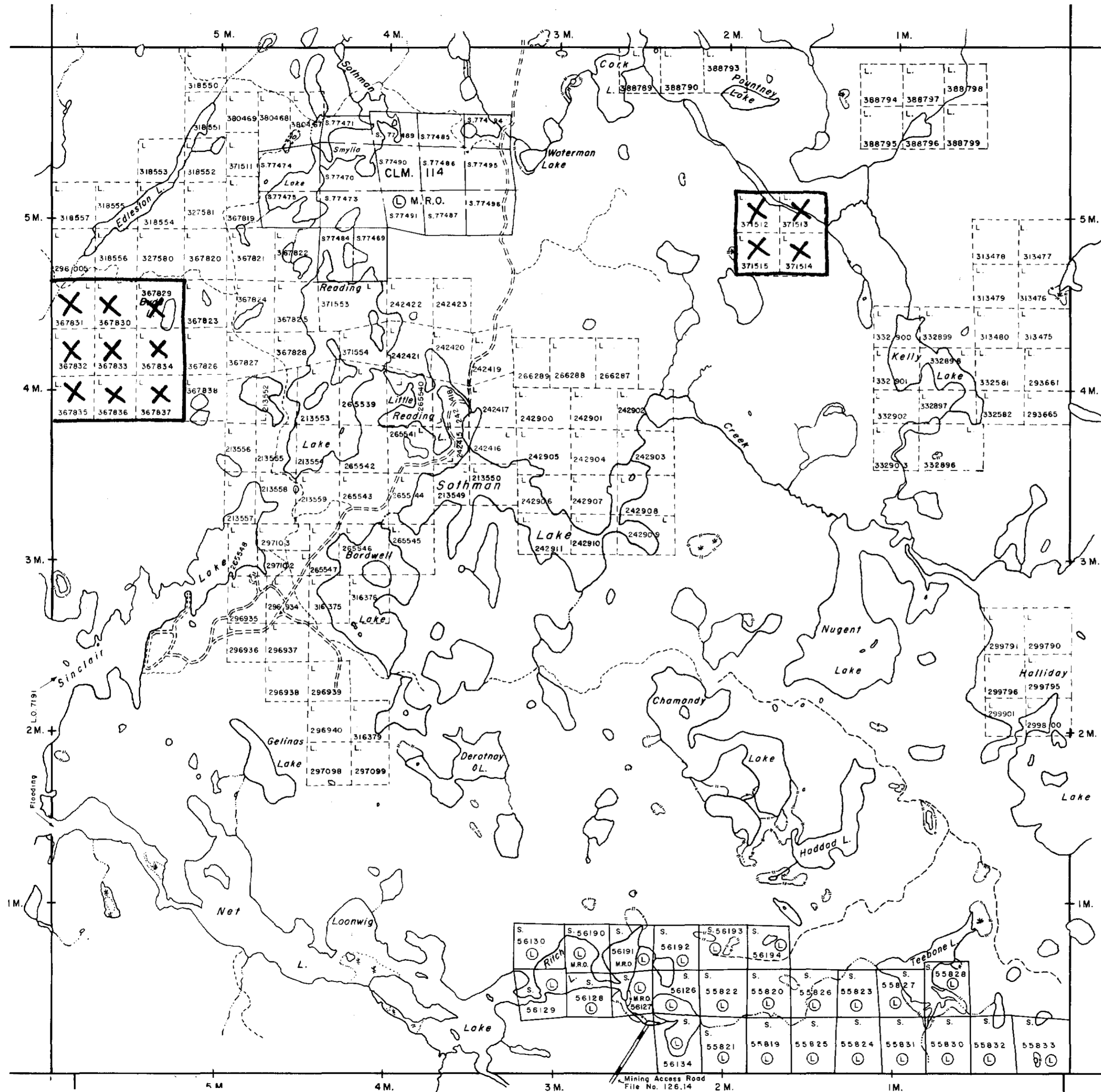
File - 2.1477

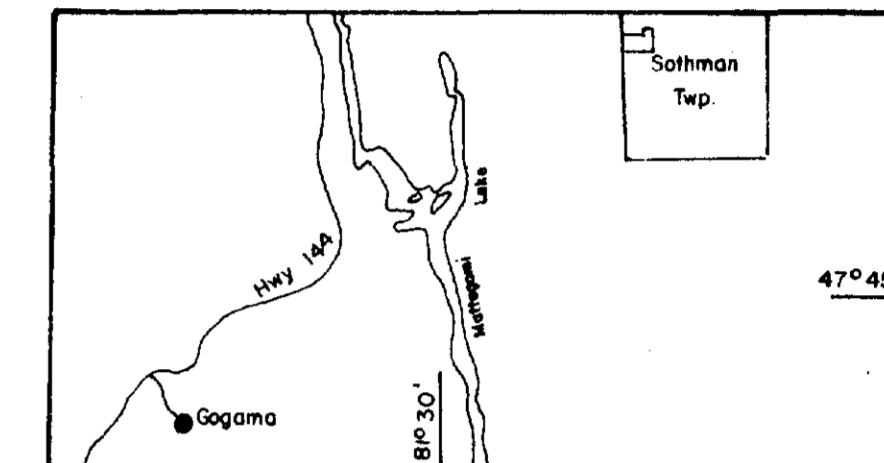
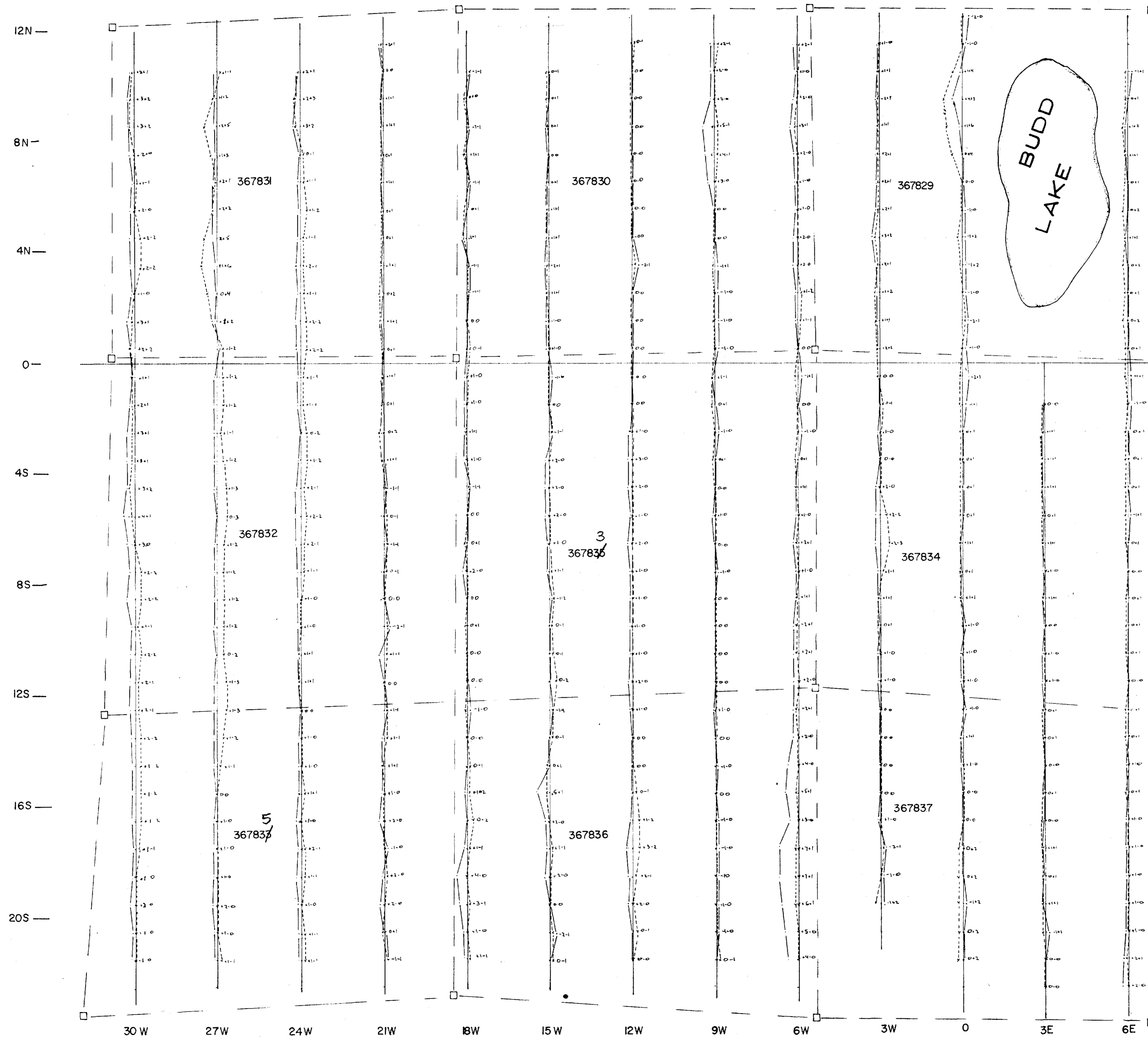
PLAN NO. **M-1121**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Nursey Twp. - M. 1031

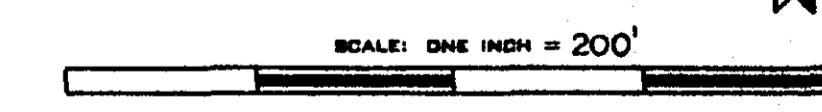
Halliday Twp. - M. 910





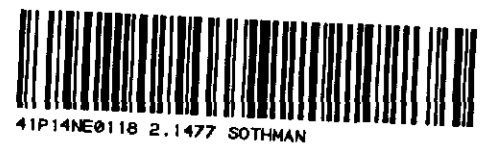
INSTRUMENT:
 Geonics EM-17
 300' cable
 1600Hz

NOTE:
 Profile Scale: 1"=20'
 in Phase: - - - - -
 Quadrature: x - - - x
 Rds: ← → - Rds.

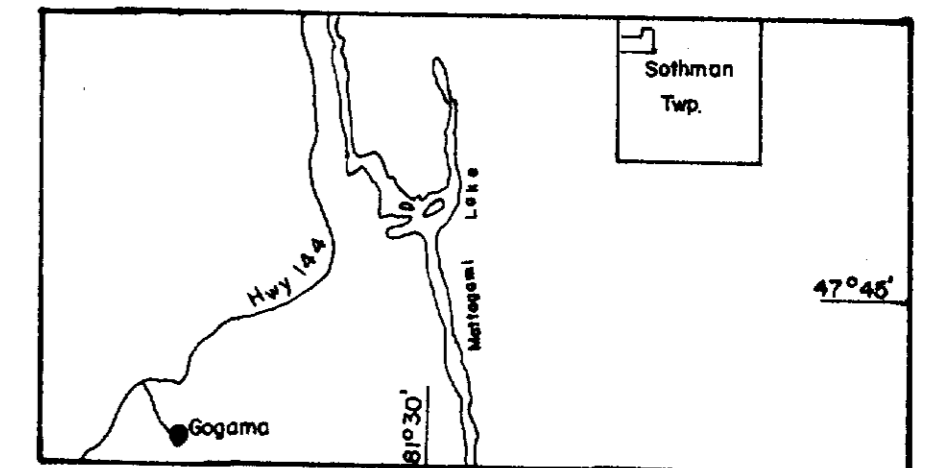
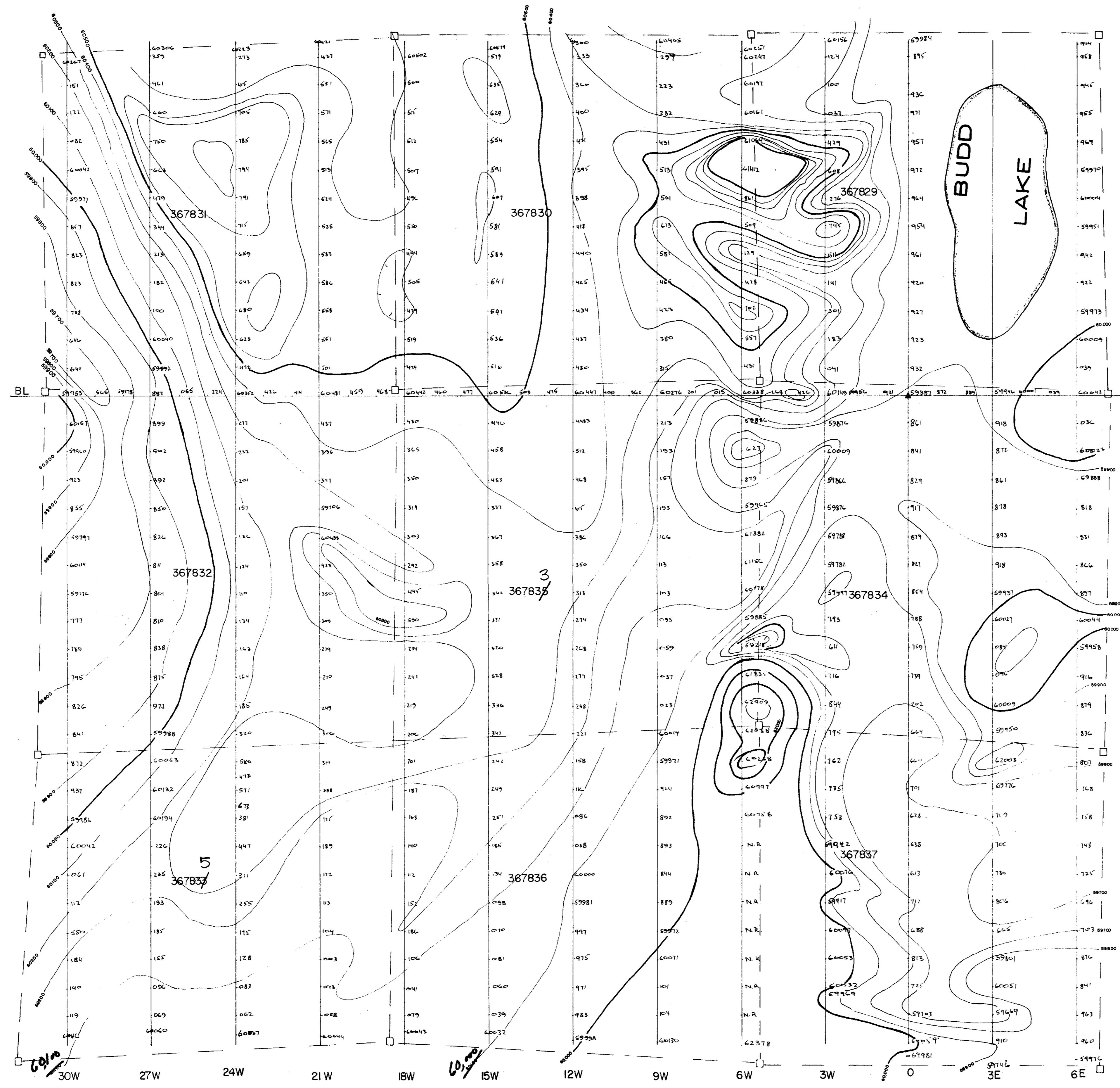


ECSTALL MINING LTD.		
HORIZONTAL LOOP SURVEY		
SOTHMAN 51		
WORK BY	DRAWN BY	DATE
D.T. & B.B.	JP	June 1973

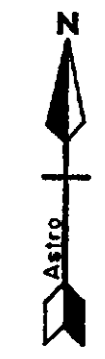
J.A. Slane 24/4/74



12N
8N
4N
0
4S
8S
12S
16S
20S



contour interval 100 gamma
FO



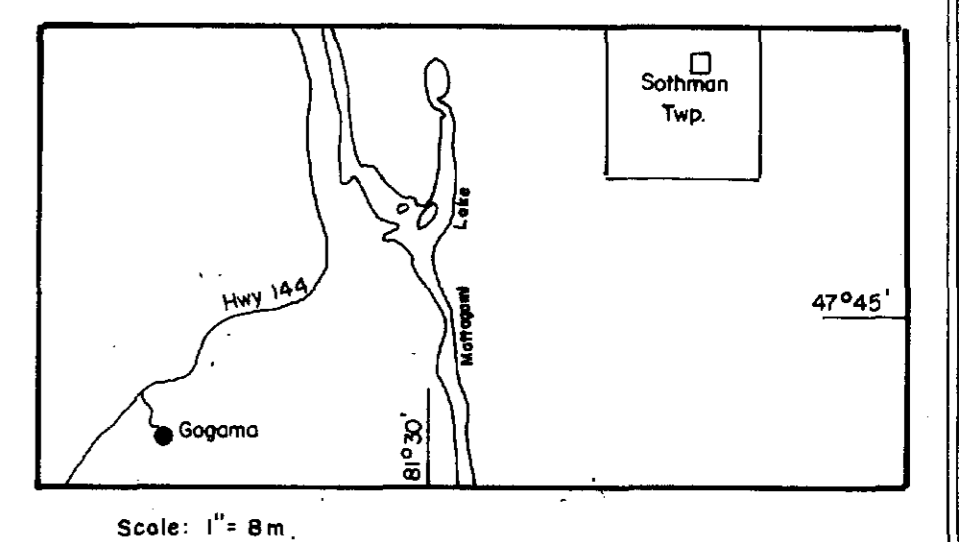
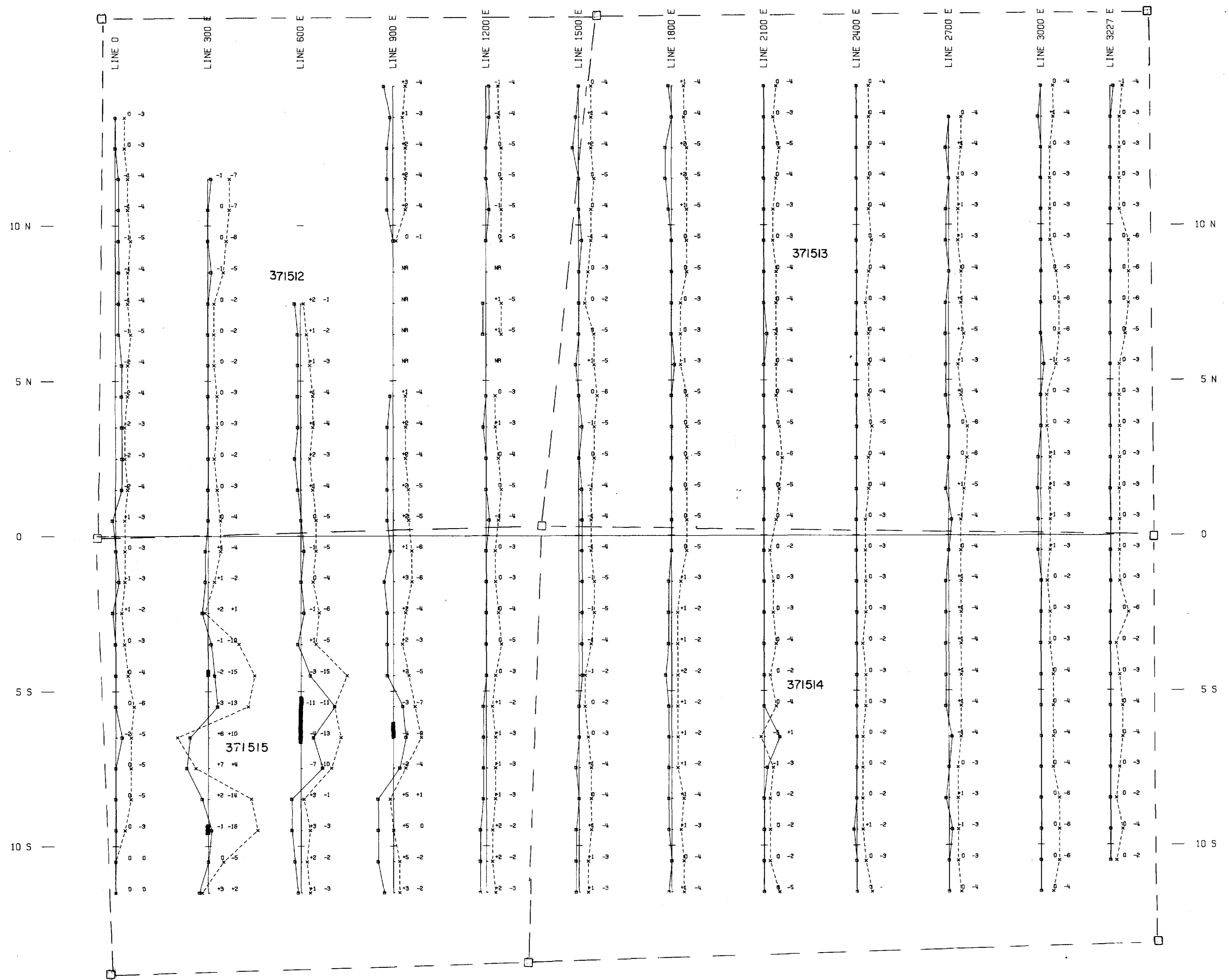
SCALE: ONE INCH = 200'

ECSTALL MINING LTD.		
MAGNETIC SURVEY		
SOTHMAN 51		
WORK BY	DRAWN BY	DATE
W.C. & P.C.	JP	June 1973

INSTRUMENT
Eisec 592
Total field Proton Mag
▲ Magnetic Base Station (at 0+00 on BL)

J.A. Slavin 2A/4-74

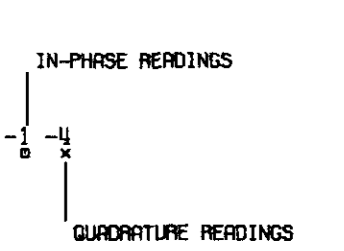




KEY MAP

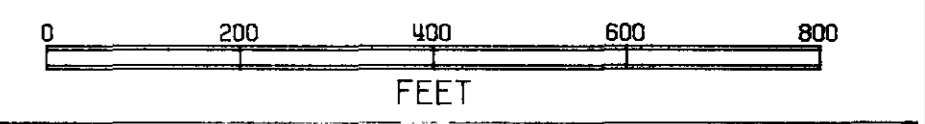


LEGEND



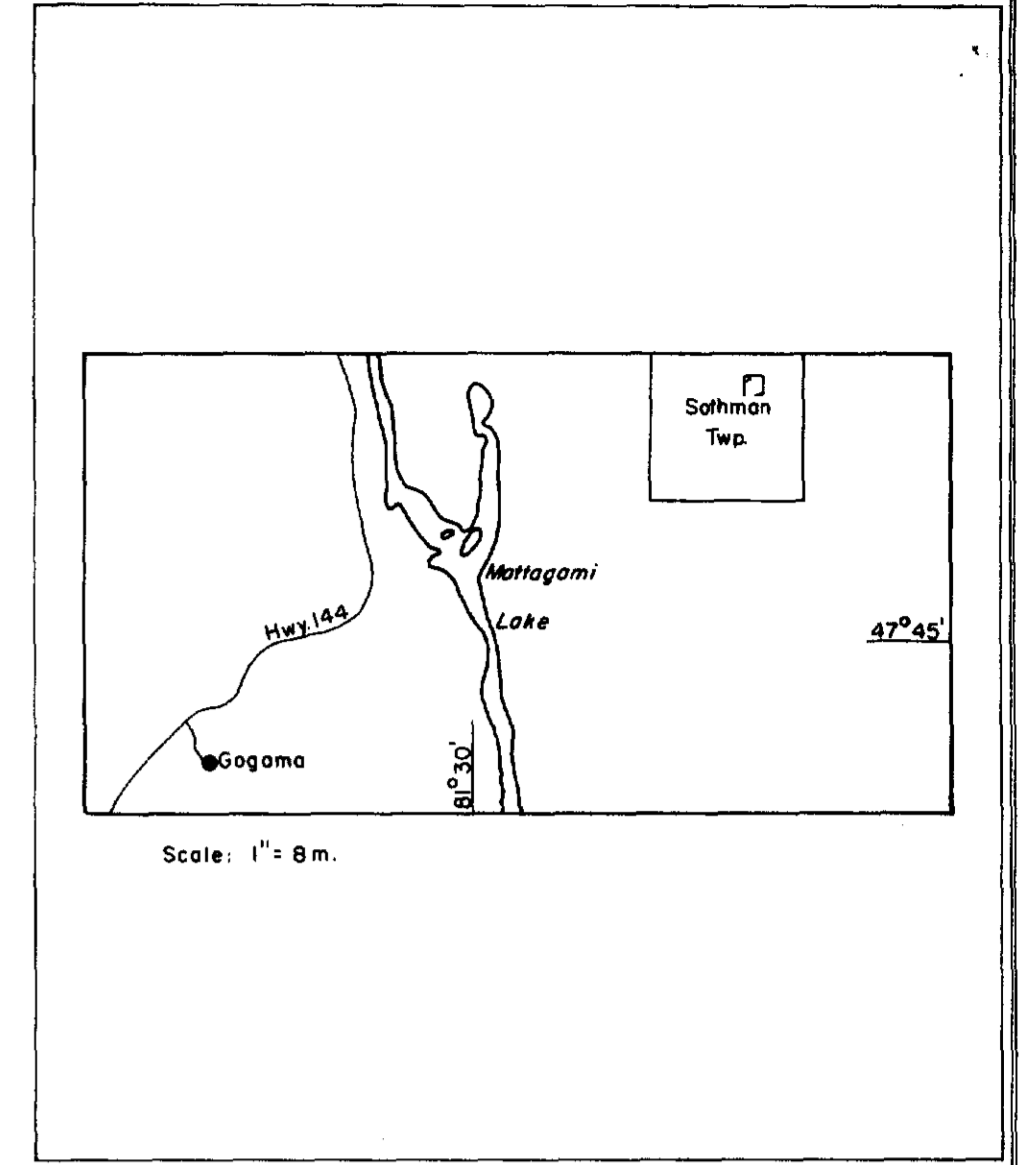
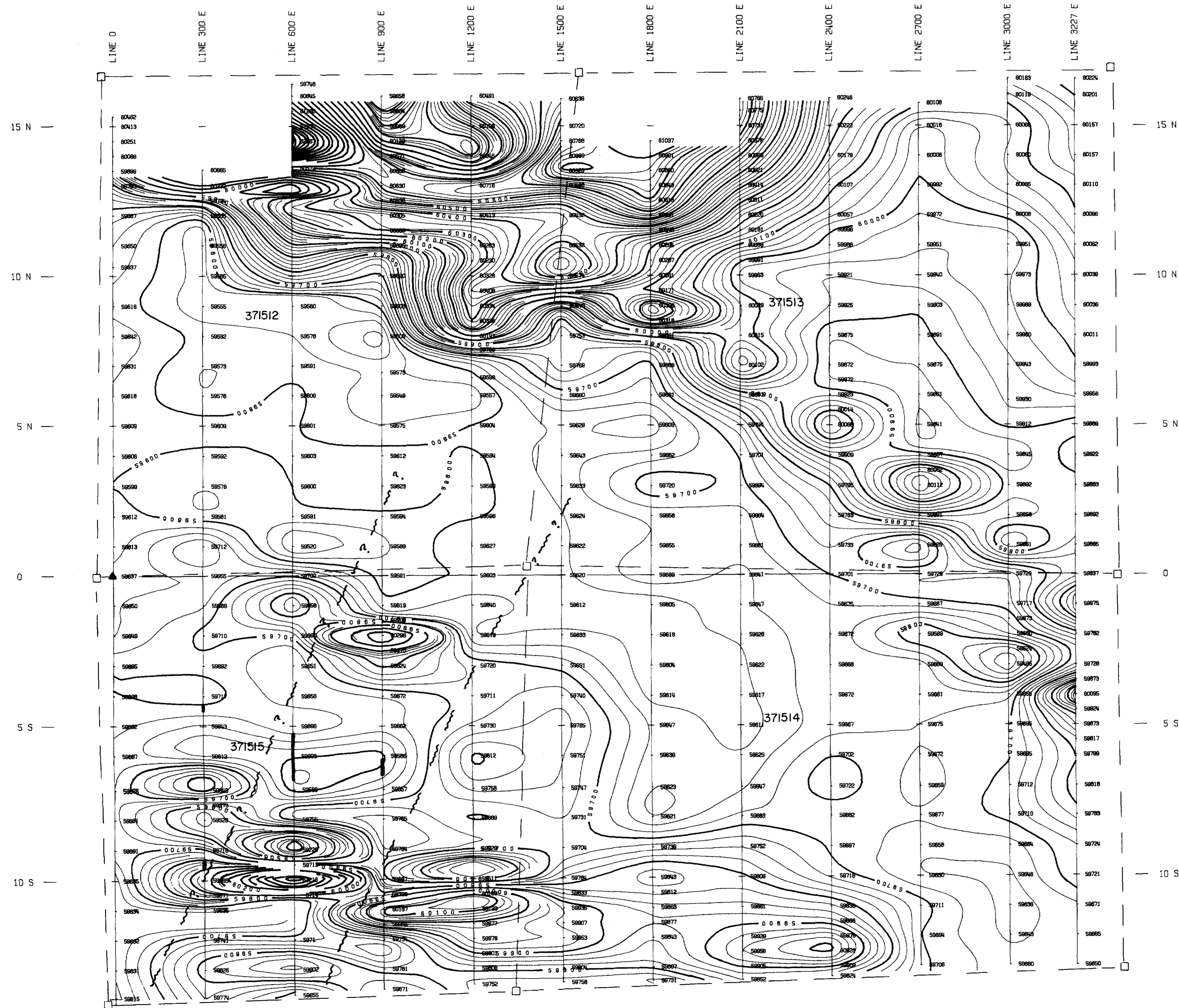
INSTRUMENT: GEONICS EM 17
 FREQUENCY: 1600 HZ
 COIL SPACING: 300 FEET
 PLOTTING SCALE: 1" = 20'

← + READINGS - READINGS →

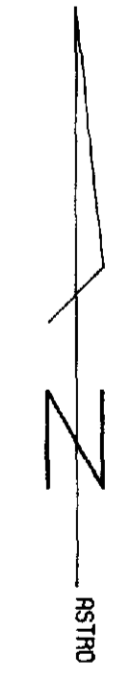


ECSTALL MINING LTD.	
HORIZONTAL LOOP SURVEY	
SOTHMAN 55	
WORK BY	DATE
	July 1973

J. A. Seal 19/4/74

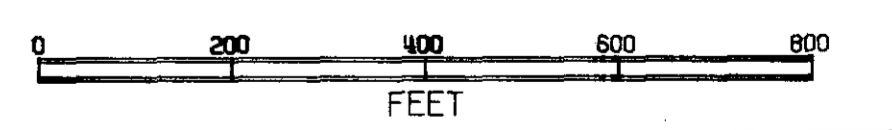


KEY MAP



LEGEND

INSTRUMENT: ELSEC # 592N
 TYPE: PROTON PRECESSION, TOTAL FIELD
 READINGS IN GAMMAS
 ▲ Magnetic Base Station



ECSTALL MINING LTD.	
MAGNETIC SURVEY	
SOTHMAN 55	
WORK BY	DATE
	July 1973

J. A. Seabrook 19/4/74

