



52E11SE9099 2.5408 SNOWSHOE BAY (SHOAL

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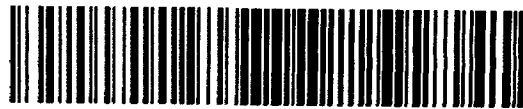
**MINING LANDS SECTION**

REPORT ON  
ELECTROMAGNETIC AND MAGNETIC  
SURVEYS  
SHOAL LAKE PROJECT  
ONTARIO  
N.T.S. 52E/10 & 11

A. GUBINS  
L. REED

JUNE 1982

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## INTRODUCTION

The purpose of this geophysical program was to delineate and extend the known gold-bearing zones of the former Duport Mining Company Limited property on Cameron Island in Shoal Lake. The secondary purpose of this program was to evaluate anomalies detected by a regional INPUT airborne electromagnetic survey completed by Questor Surveys Limited in the late fall of 1981.

## PROPERTY LOCATION AND ACCESS

The Shoal Lake Gold Prospect lies some 46km SW of Kenora, Ontario (see Figure 1) in N.T.S. blocks 52E/10 & 11. The property is owned by Consolidated Professor Mines Ltd. and was acquired as part of the assets of the Duport Mining Company Limited when it was amalgamated with Consolidated Professor in 1981. An agreement was entered into between Consolidated Professor and Selco Inc. in November, 1981, to do exploration work on the property.

The various claim holdings are detailed in Appendix A and are schematically shown on Figure 2. This report is only on the geophysical work covering the portion of the claims as shown on Figure 3 and described in Appendix B.

Access to the property was via the Rush Bay Road from the Trans-Canada Highway to Clytie Bay. From there a winter road was maintained to the drill camp on Cameron Island.

## GENERAL GEOLOGY

The regional geology consists of a sequence of supercrustal rocks (metavolcanics-metasedimentary), forming part of the Wabigoon Subprovince of the Shield. O.G.S. Map 2443 Kenora - Fort Frances Geological Compilation Series by Blackburn (1980) shows the regional relationships. Locally, the Shoal Lake Area

was mapped by Davies (1968) and the information is available as O.G.S. Preliminary Maps P.527 and P.528. Regional aeromagnetic coverage of the area is also available as G.S.C. Maps 1185G, 1186G, 1190G and 1191G.

Davies' mapping of the Shoal Lake area suggests a complex fold pattern within the metavolcanic - metasedimentary rocks based on stratigraphic top determinations. The oldest rocks in the area are noted as being the mafic metavolcanics in the vicinity of Bag Bay. The axis of a major northeast trending anticline passes just south of Dominique and Stevens Islands and northeast through the Canoe Lake Stock. However, due to the large expanse of lake coverage in the area, the local structure and stratigraphic relationships are poorly understood.

The Shoal Lake gold prospect on Cameron Island occurs within a series of northeast trending mafic metavolcanics. These basalt flows are intercalated with felsic tuffs and are intruded by a series of dioritic and gabbroic bodies. The gold mineralization along with arsenopyrite is apparently confined to thin, persistent tuff bands. Both north and south of this predominantly mafic sequence are more intermediate to felsic metavolcanics which may or may not be folded equivalents. Intruding the whole metavolcanic sequence are the Snowshoe Bag stock (west of Cameron Island) and the Canoe Lake stock (near Bay Bay). Both these stocks are felsic granitic bodies.

#### LINECUTTING

In order to facilitate the positioning and probably subsequent re-establishment of the grid over Shoal Lake, the base-line and some tie-lines were surveyed by Ross Johnson of Kenora. The 0+00 point on the base-line was the same as that established by previous grids and is located on the southern shore of Cameron Island. From this point the base-line was established at an azimuth of  $032^{\circ}$  astronomic for a distance of

20,500 feet north and 12,400 feet south. All lines were transit controlled with electronic distance measuring (EDM) instruments as the primary horizontal control along the base-line. All grid lines were turned using a transit and a steel tape was used for horizontal control along the grid lines. There is a 31 minute bend in the base-line at 0+00. This was required to re-position the grid exactly on the previous grid(s) established for Consolidated Professor.

The following additional tie-lines were also established but not surveyed: TL70W (148S to 108S), TL45W (140S to 30S), TL30W (144S to 205N), TL15W (30S to 125N), TL15E (50S to 125N), TL30E (61N to 165N), TL40E (25N to 61N), TL50E (42S to 25N), TL60E (25N to 101N), and TL80E (18S to 73N) for a total of 30.91 line-miles.

The line-cutting was carried out by Roy Carpenter and various associates from Red Lake, Ontario. Actual cutting on the grid was minimal as the majority of the grid was on Shoal Lake and most of the islands encountered had separate surface rights from mineral rights, thereby precluding some traverses. Further, all pickets on the lake were gathered up after the geophysical surveys in compliance with Ministry of Natural Resources regulations. A total of 197.19 line-miles of grid lines were established, together with the base-line and tie-lines, giving a grand total of 228.1 line-miles for this grid.

#### GEOPHYSICAL SURVEYS

Known previous geophysical work over the property starts as early as 1950, when Matachewan Consolidated Mines conducted a vertical-loop dip-angle survey. The next recorded work was an airborne electromagnetic and magnetic survey done by Sander Geophysics in 1974 for Consolidated Professor. Ground follow-up was done later in the year by Prospection Limited using a Ronka Mk. IV H.L.E.M. unit (300 foot coil spacing, 50 foot stations)

and a fluxgate magnetometer (100-foot stations). In 1981 Troop Exploration and Development Limited resurveyed most of the grid established by Prospection. This time a Max-Min II H.L.E.M. instrument was used at 1777 Hz and with a 100 metre coil spacing, which essentially duplicated the earlier survey by Prospection, and added very little additional information.

Selco in the fall of 1981 commissioned Questor Surveys Limited to do an INPUT survey over the whole of the Shoal Lake area. This survey substantially improved the regional database and generated specific targets not clearly defined by the Sander survey. Further, the INPUT survey showed a very high degree of variation in lake bottom conductivities. This in turn indicated that any EM follow-up technique be used with caution in order that overburden and bedrock conductors be distinguishable.

Ground follow-up to the INPUT survey was performed by Selco Staff with additional instrument operators supplied by W.A. Barclay Exploration Services and W.G. Wahl Limited (see Appendix C). The work was initiated January 22nd and was completed by March 3rd, 1982.

i) Electromagnetic Survey

The entire grid (Main Grid) was surveyed using Apex Parametrics Max-Min II's in the horizontal co-planar mode. The survey parameters were frequencies of 444 and 1777 Hz with a 400 foot-coil spacing. The station spacing was nominally 100 feet, but reduced to 50 foot intervals over anomalous areas or where readings changed by more than 3% over the station intervals. The line spacing varied from 200 foot intervals in the central portion of the grid (60S to 125N, 15W to 75E) to 400 foot intervals over the remainder of the grid.

The data set is presented at a 1 inch to 200 foot scale on 9 separate maps forming one contiguous grid. Only the lower

frequency (444 Hz) has been plotted in final form. The maps are labelled sheets 2 thru 10 out of a series of 10. (see Figure 4). Work covering the first sheet will be completed later in 1982.

To provide additional detail and in an attempt to discriminate between overburden and bedrock conductors the area bounded by 30S to 30N and 15W to 15E (Mine Grid) was resurveyed. The coil spacing was reduced to 200 feet while the same two frequencies (444 and 1777 Hz) were used. The line spacing was 100 feet with the station interval nominally being 50 feet, but reduced to 25 foot intervals over anomalous areas. The data set is presented at a scale of 1 inch to 100 feet as Drawing Number SO.3043(1) and SO.3043(2) for 444 and 1777 Hz respectively.

ii) Magnetic Survey

A total-field magnetic survey was carried out over the entire grid using the new generation of digital acquisition magnetometers. Two EDA PPM-300 total-field magnetometers and an EDA PPM-400 base-station magnetometer were used. These instruments are capable of automatically recording at each station the location, reading obtained, time of reading and various parameters describing the quality of the reading. The field magnetometers are also time-synchronized with the base-station thereby allowing automatic diurnal corrections (built-in feature) at the end of each survey day. Check-in errors after diurnal corrections were found to be usually less than 5 nanoteslas (nT). The bulk of the error was attributable to operator noise and/or improper location of the sensor at a check-in station. The diurnal corrections were so effective that a 10nT heading error was observed in a low gradient area.

The specific survey parameters were such that readings were taken every 50 feet along all lines and that the base-station sampling interval was 30 seconds. The base-station was established on Cameron Island and a datum of 59,850nT was

Removed from all readings. The data are presented in the same series and scale of sheets as the electromagnetic data, but there are two drawings each, one displays the posted magnetic values only, while the other sheet has the contoured interpretation. Some trend re-inforcement was required for the machine contouring done by Dataplotting Services of Toronto, due to variations in lithologic strikes and changes in sampling density (when line spacings increased from 100 to 200 or 200 to 400 foot intervals).

iii) Geophysical Survey Results

All zones of conduction have been marked on the electromagnetic plan maps using two density patterns to allow for the discrimination of bedrock and overburden response. The light, small dot pattern indicates zones of probable overburden response (buried valley, flanking edges of ridges, slope, etc.). The heavier, larger dot pattern shows zones of probable bedrock conduction. These zones have also been coded and are described in the summary table (see Table I). Further, these zones of probable bedrock conduction are also marked on the contoured magnetic plan maps to facilitate interpretation and speculation. Figure 5 shows the groupings by sheet of the prefix letter to each conductor described in the summary table.

A total of 25 probable or possible bedrock conductors were identified of which 4 have been drilled. These are:

<u>Conductor</u>	<u>DDH</u>	<u>Source</u>
B-4	82-35	Sulphide
B-6	82-34	Graphitic tuff
M-1	82-36	Graphitic chert + sulphides
M-2	82-38	Sulphides



Examination of the EM plan maps shows that overburden related zones of conduction are prevalent throughout the area. These vary from horizontal sheet responses to step and ridge responses. The EM depth-sounding survey indicated that values as low as 20 ohm-metres can be expected for the overburden. Consequently, the higher frequency data (1777 Hz) would not be very useful by itself in attempting to locate zones of weaker bedrock conduction and may be misleading when attempting to pick bedrock conductors. Figures 6 and 7 show a multi-frequency (222 to 3555 Hz) traverse across conductor B-4 on L116S. The low frequency fairly clearly shows the conductor, but at higher frequencies the quadrature response has become positive and the neighbouring overburden ridge or step suggests a multiple conductor. However, a frequency differencing filter (subtracting high-frequency data multiplied by the ratio of low to high frequency from low-frequency data) in this case does seem to suppress the overburden response. It is recommended that this technique be routinely applied in areas of high geologic noise, much the same way that VLF-EM data is routinely filtered and contoured to enhance the signal - to - noise ratio.

The magnetic plan maps quite clearly supplement the sparser geologic map (Davies, 1968) of the area. The following generalities concerning lithologies and magnetic expression in the area can be observed.

The mafic metavolcanics basalts (unit 1 of Davies, 1b, in particular) have a fairly strong magnetic expression as well as the coarser, fragmental intermediate (2d) volcanics. The mafic intrusives (6) have a more varied expression, for example the Stevens Island gabbro (6c, d) is very low, while the hornblendites and pyroxenites (6g,d) along the Sirdar Peninsula are high. The felsic metavolcanics (3b) along with some of the felsic intrusives (8) are subdued in their magnetic expression.

Structural elements observed from the magnetic patterns are as follows. A major discontinuity in the trends takes place in a zone running from Stevens Island to Felix Island. West of this zone the lithologies trend roughly  $060^{\circ}$ ; while east of this zone the trends are  $030^{\circ}$ : A conjugate set of faults can also be interpreted in the central area of the grid (30S to 40N). They appear to trend at  $090^{\circ}$  and  $150^{\circ}$  (all  $\pm 10^{\circ}$ ). The sense on the  $090^{\circ}$  appears to be right-lateral while with other trend it is difficult to say. Also there appears to be a high degree of variation in the sense of apparent off-set suggesting a rotational component to the faults. An east-west fault trend may also be present. Fold structures on the gross scale are not clearly evident in the area though a case may be made for the area around Cameron Island (however, one would have to take into account the major break in lithologic trends and the numerous faults).

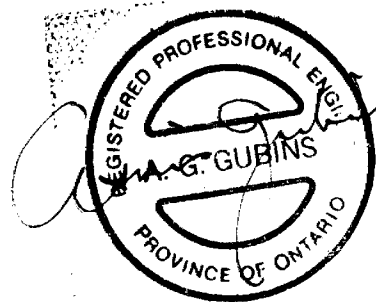
As far as mapping the lithologies containing the ore zone, some general comments can be made. The zone does appear to be terminated at the north end (see sheet 5 & 6 mag) and no obvious major fault off-sets are present. But a high magnetic unit along the base-line (starting at 103N and continuing northward) may warrant closer scouting (ie. a stratigraphic hole). To the south, the zone again appears to be fault terminated around L38S, however, the whole stratigraphic package is deflected to the west. Consequently, the area of interest may be from L60S to 40S and 30W (see sheet 3 contoured magnetic plan maps).

#### CONCLUSIONS & RECOMMENDATIONS

Table II summarizes the priorities attached to the conductors located in the regional exploration of the Shoal Lake gold prospect area. Some of these conductors have very good massive sulphide potential when viewed in conjunction with the sparse regional geology available (ie. they lie in a volcanic succession of mafic to felsics with coarse, fragmental felsic

nearby). Further, as some of these conductors have not been clearly defined (depth, strike extent, overburden or bedrock) some resurveying with different parameters or instruments of selected lines will be required next winter prior to drilling. Actually, all proposed drill-holes should be resurveyed as a matter of course to verify the repositioning of the grid.

Concerning the ore-zone, it appears from magnetics, to be confined to the area between L38S and L24N. Possible areas of investigation for continuations of this horizon would be around 30W from L60S to L40S (see mag high trend on Sheet 3) and back along strike to L36S. There are smaller broken up (faulted?) magnetic highs more or less all along the base-line (± 500 feet) northwards from L up to a major zone magnetic high zone starting at 103N. These warrant investigation to determine any continuity with the stratigraphy observed around Cameron Island.



References

BLACKBURN, C., 1978: O.G.S. Map 2443, Kenora-Fort Francis Geological Compilation Series.

DAVIES, J.C., (1968): O.G.S. Preliminary Maps P.527 & P.528

PRYSLAK, A.P., and TAYLOR, R.S., (1982): Preliminary Report on the Geology and Mineral Reserves of the Shoal Lake Gold Prospect, Consolidated Professor Mines Option, Selco Internal Report.

TROOP, A.J., (1980): Report on Geology and Mineral Reserves of the Cameron Island Deposit of Duport Mining Company Limited in North Shoal Lake Area, Kenora Mining Division, West Central Ontario, Canada, for Consolidated Professor Mines Limited.

Appendix A  
Claims Covered by this Report

K560974-998 incl.

Owner: "Consolidated Professor Mines Ltd."

K563869-919 incl.

K564180-202 incl.

K564073

K564075-086 incl.

Owner: Selco Inc.

K564144-169 incl.

K564203-220 incl.

K564283-288 incl.

K590002-010 incl.

Appendix B  
Instruments and Operators

The following instruments were used during the course of geophysical work on the Main Grid during the winter of 1982.

Apex Max-Min II H.L.E.M. Units S/N 1031  
S/N 793  
S/N 438  
EDA PPM-300 Total-field Magnetometers #054  
#070  
EDA PPM-400 Base-station Magnetometers #055  
Geonics EM-34-3 S/N 0878

Operators:

- 1) Selco Inc.  
Suite 1700  
55 University Ave.  
Toronto, Ontario  
M5J 2H7  
A. Carpenter
  
- 2) W.A. Barclay Exploration Services  
10 Hurontario Street  
Mississauga, Ontario  
L5G 3G7  
J. Reddick  
B. Goble
  
- 3) W.G. Wahl Limited  
(now Derry, Michner, Booth and Wahl)  
401 Bay Street  
Toronto, Ontario  
M5H 2Y4  
R. Harwood  
C. Delow

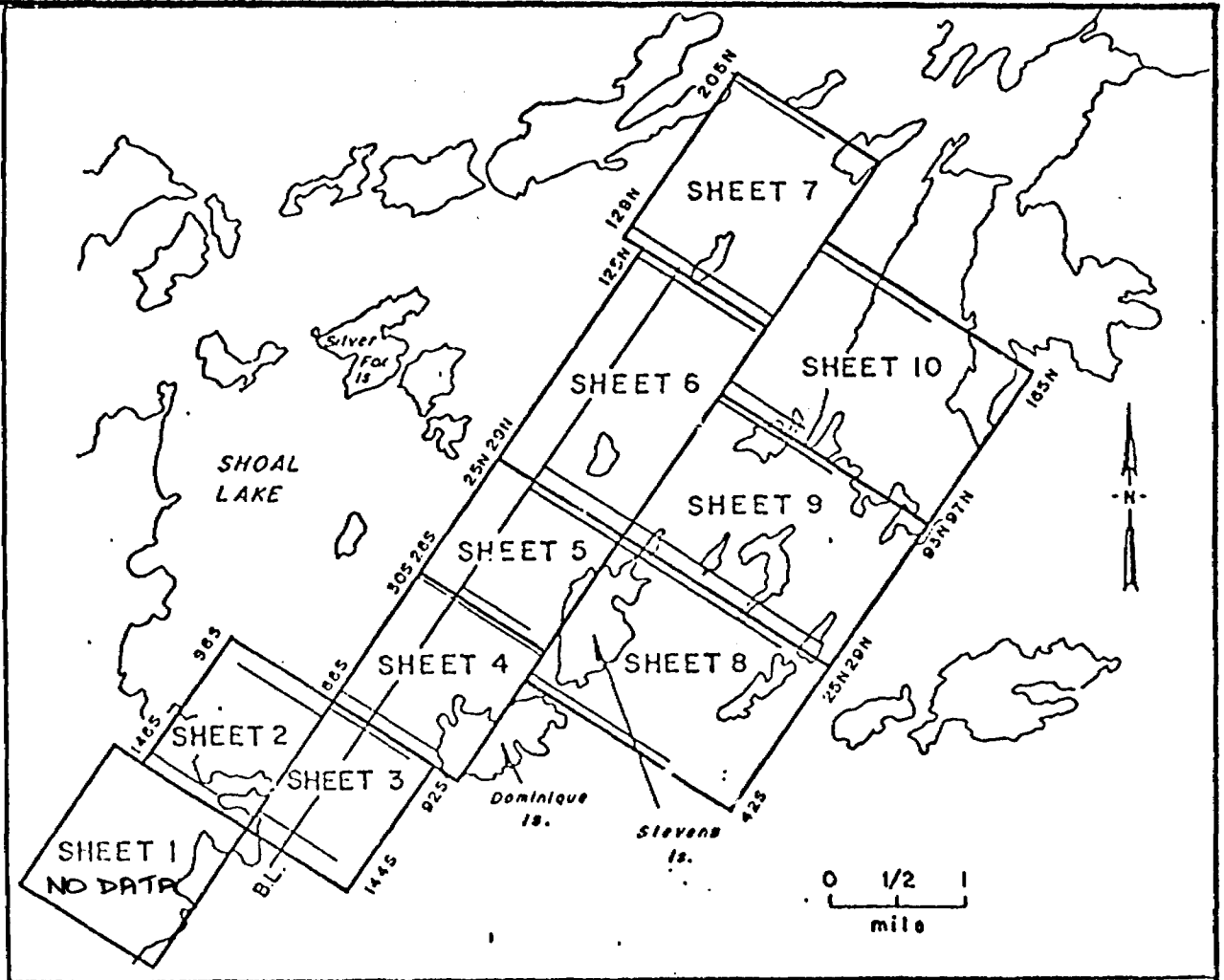
LIST OF FIGURES

FIGURE

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7. Filtered EM Data L116S

LIST OF TABLES

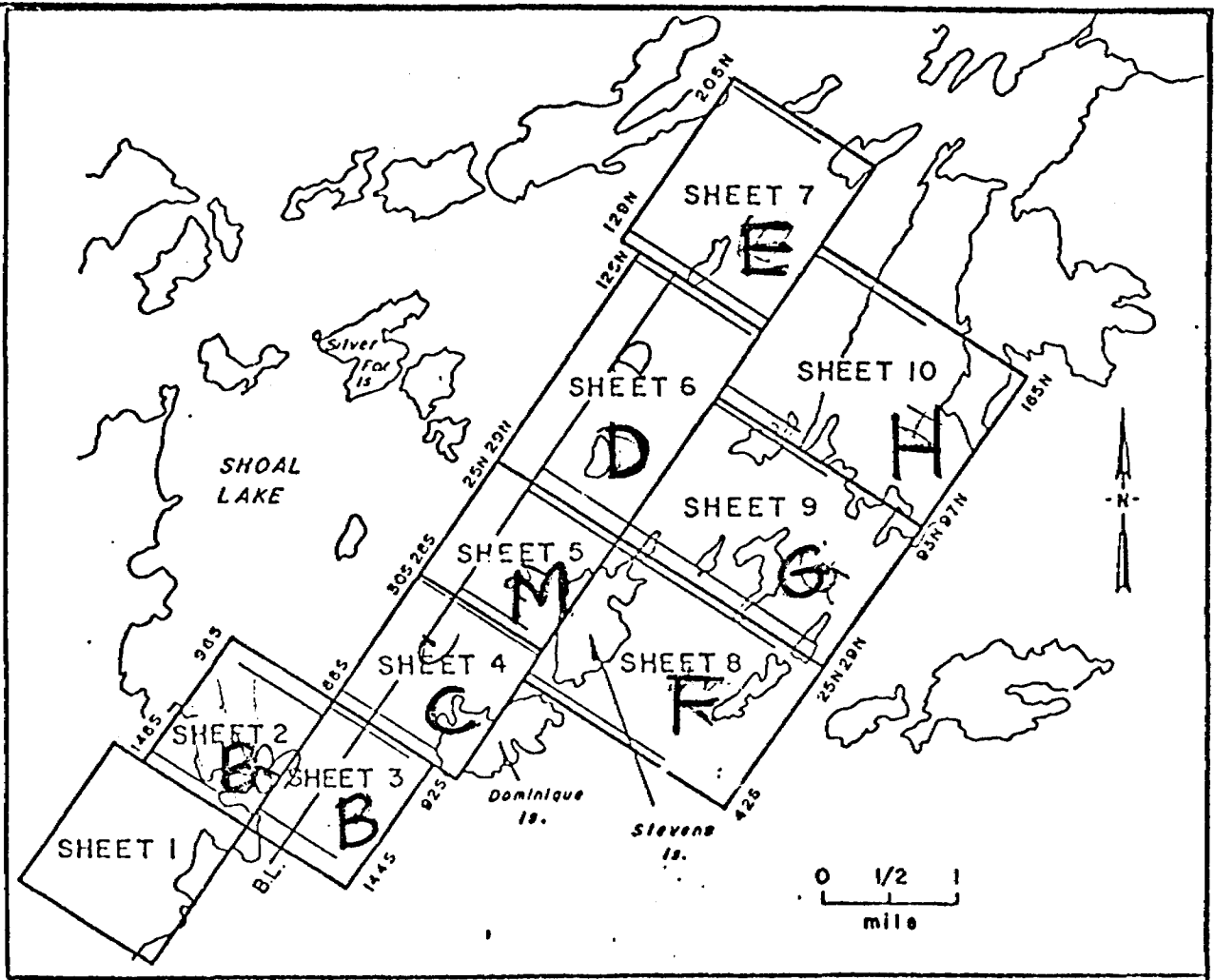
- I EM Conductors
- II Anomaly Priority Summary



SHEET LAYOUT PLAN MAP

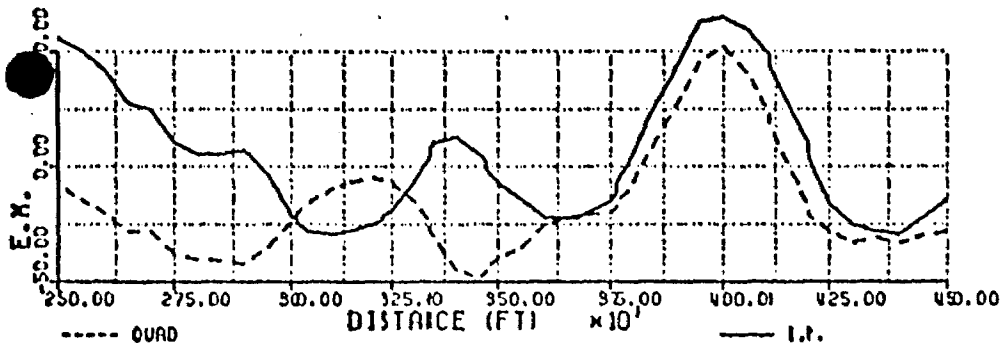
FIGURE 4



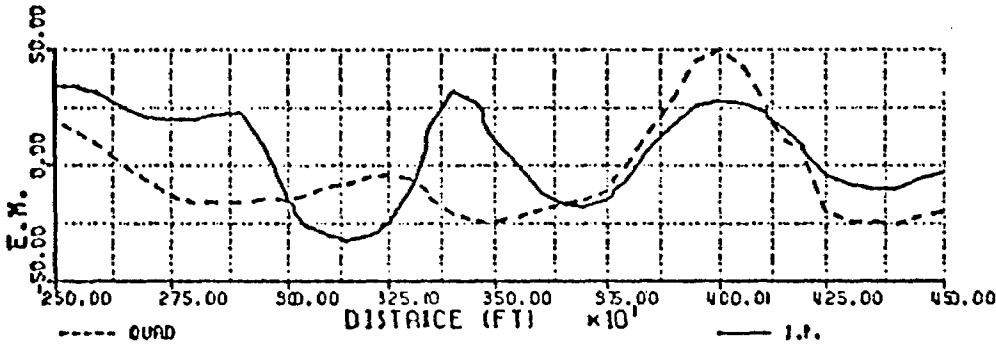


PREFIX-CODE FOR EM CONDUCTOR, LOCATIONS

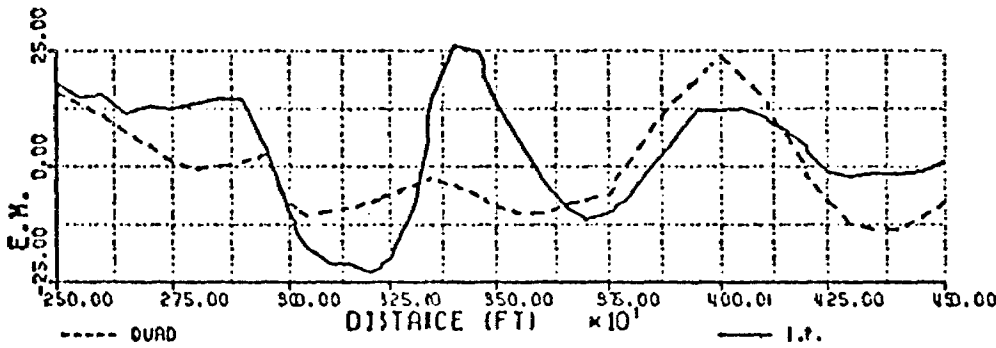
FIGURE 5



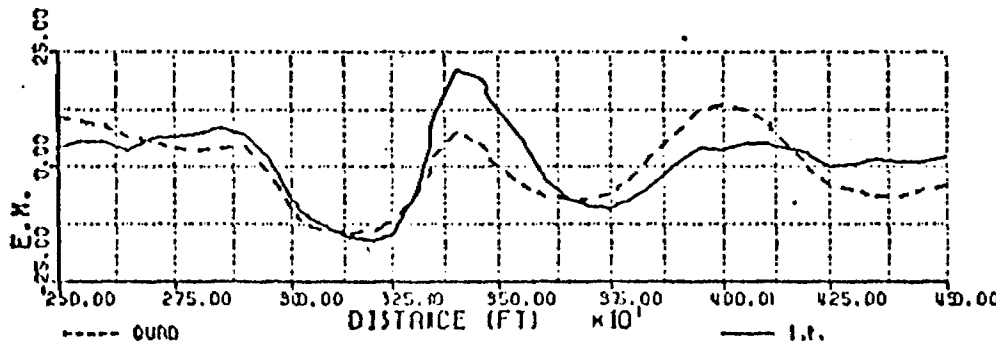
SHOAL LAKE L116S H.L. EM DATA 3555HZ



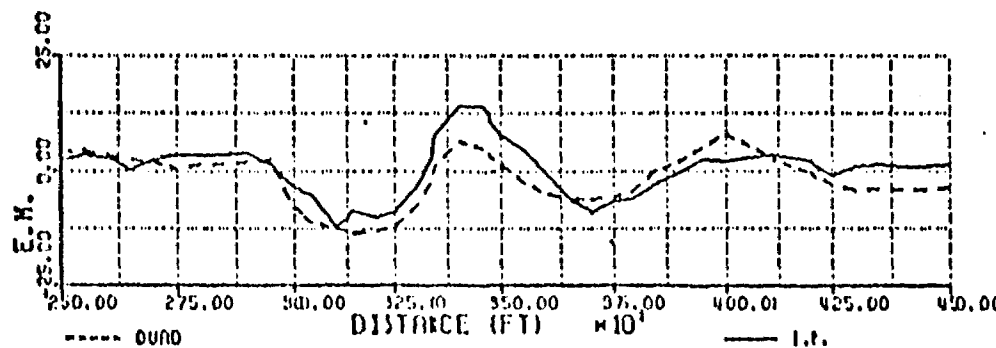
SHOAL LAKE L116S H.L. EM DATA 1717HZ



SHOAL LAKE L116S H.L. EM DATA 888HZ

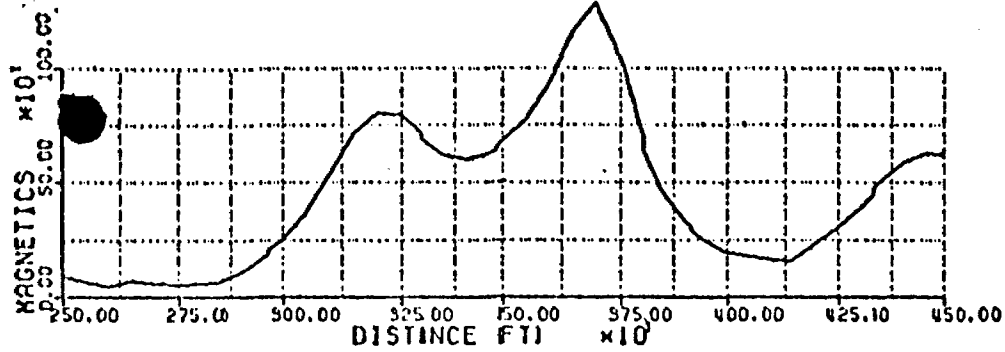


SHOAL LAKE L116S H.L. EM DATA 444HZ

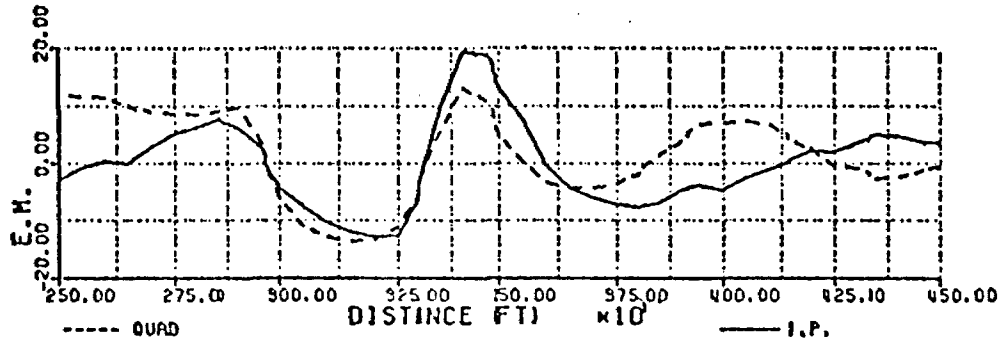


SHOAL LAKE L116S H.L. EM DATA 222HZ

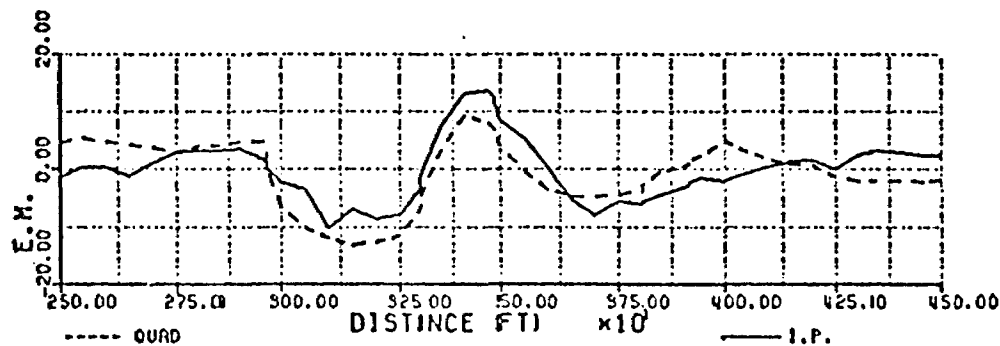
FIGURE 6



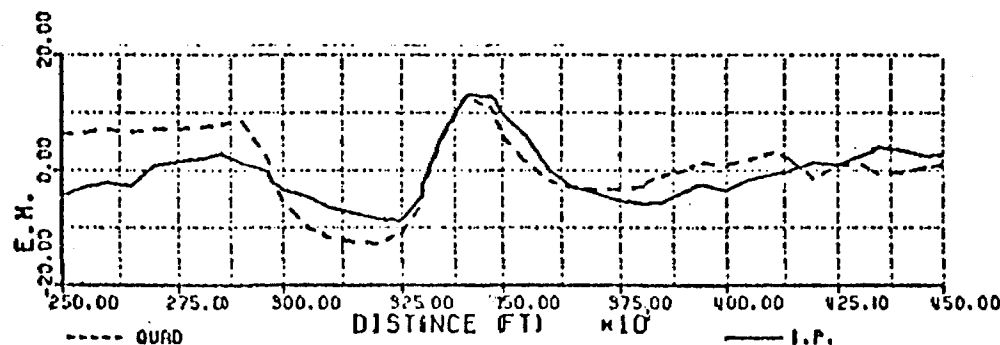
SHOAL LAKE PROJECT L116S MAGNETIC DATA



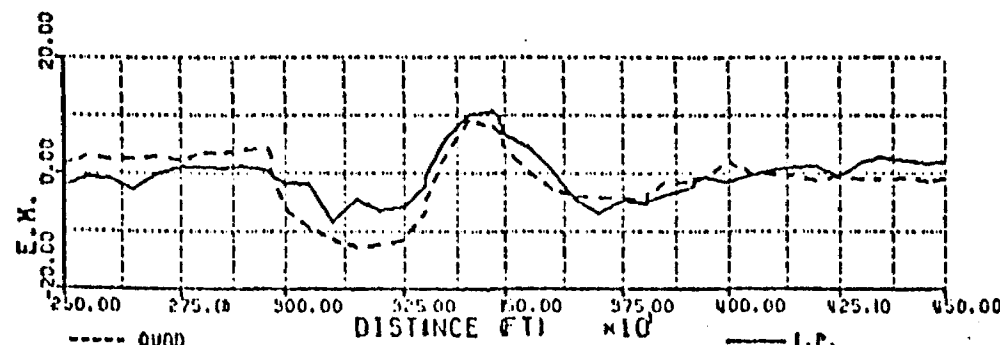
SHOAL LAKE L116S EN FILTER 444/3555 HZ



SHOAL LAKE L116S EN FILTER 222/3555 HZ



SHOAL LAKE L116S EN FILTER 444/1777 HZ



SHOAL LAKE L116S EN FILTER 222/1777 HZ

FIGURE 7  
18/...

TABLE I - EM CONDUCTORS

SHEET	CONDUCTOR	LOCATION	STRIKE, DIP,LENGTH	IP/QP	CONDUCTIVITY, DEPTH	MAGNETIC ASSOCIATION	PRIORITY	COMMENTS
2	B-1	132S,70W	045 <sup>0</sup> ,70 <sup>0</sup> NW ~600'	~1	80 ft., 20 mhos	Small, 400nT coincident anomaly	medium	Lies along flank of thin (50ft.) mag. horizon
2	B-2	120S,66+50W	070 <sup>0</sup> ,60 <sup>0</sup> SE(?) ~400'	~2.4	80 ft., 30 mhos	coincident 5000nT anomaly	high	Conductive portion of a magnetic horizon adjacent B-1. Probably Pyrrhotite.
2	B-3	128S,52+25W	025 <sup>0</sup> ,? dip 600'(?)	~2.1(?)	120ft., (?) 55 mhos (?)	in mag low	low	Possibly overburden response, but data coverage insufficient to be clear. Should be re-surveyed next winter
3	B-4	(116S,47+50W) to (112S,48+ 50W)	020 <sup>0</sup> ,70 <sup>0</sup> NW 700'	~2	120 ft., 45 mhos	along flank of 700nT mag high	high	Could possibly be folded part of B-5 with nose of fold between L108S and L112S Run cross-lines next winter.see DDH 82-35 (Sulphides)
3	B-5	(120S,30+50W) to (112S,32W)	025 <sup>0</sup> ,70 <sup>0</sup> NW? 1000'	~2	85 ft., 40 mhos	along flank of 700nT mag high	high	Along outside of a closed mag feature Possibly folded + continuous with B-4. Does not appear to be adequately investigated

SHEET	CONDUCTOR	LOCATION	STRIKE, DIP,LENGTH	IP/QP	CONDUCTIVITY, DEPTH	MAGNETIC ASSOCIATION	PRIORITY	COMMENTS
8	F-1	(14N,78E) to (18N,77+ 50E)	030 <sup>0</sup> ,(?) near vertical 600'	1.5 - 2.5	85 ft., 35 mhos	along side of small, short 100nT mag high	high	Strike extension of sulphide showing on nearby island. Good discrete sulphide target.
8 & 9	F-2	(22N,65+50E) to (29N,64+ 50E)	030 <sup>0</sup> ,(?) near vertical, 900'	1	140 ft.,(?) 15 mhos	none	low	Possibly an overburden/ ridge response. Best area of conduction is on L29N.
8 & 9	F-3	(18N,75E) to (33N,74E)	035 <sup>0</sup> , near vertical, 1600'	3-5	120 ft.,(?) 70 mhos	coincident with 600nT narrow high	high	S end of conductor (L18-22N) may be over- burden response. Best target on L29N.
9	G-1	(57N,44E) to (73N,42E)	030 <sup>0</sup> , near vertical to NW, up to 2000'(broken?)	1-4.5	90 ft., 90 mhos	L57-61N along flank of one mag. high, L65-73N along different flanks of two other mag. highs	medium	Conductor could be fault controlled due to manner in which it disrupts mag patterns. Best target L65N. L57N to L61N have poorer response, could even be overburden.
9	G-2	(45N,49E) to (49N,49+50E)	030 <sup>0</sup> , near vertical, 600'(?)	1.5	115 ft., 3 mhos	along flank of larger forma- tional high	medium - low	Could possibly be an overburden/ridge type response. Should be resurveyed with lower frequencies and different coil spacings.

SHEET	CONDUCTOR	LOCATION	STRIKE, DIP,LENGTH	IP/QP	CONDUCTIVITY, DEPTH	MAGNETIC ASSOCIATION	PRIORITY	COMMENTS
5	M-2	(6S,19+50W) to (2N,15+25W)	065 <sup>0</sup> ,? NW 900' dis- continuous	~1	120 ft.(?) 18 mhos	along flank of small 1000nT high	medium	Lens or pod with smaller discontinuous segments May be folded portion of M-1, but probably is a stratigraphically lower unit. See DDH 82-38 (sulphides in tuff)
5	M-3	(17N,7+50W) to (21N,8W)	020 <sup>0</sup> (?) - curved, blob- like, dip varies? SE-NW, 500 to 600'	3.5-5	40 ft., 80 mhos	coincident with high mag (>7,000nT)	high	Resembles nose of fold with sulphide thicken- ing or sulphide lens with feeder intact. Drilled by Con. Prof., but not adequate.
5	M-4	(5N,1+50W) to (12N,2W)	025 <sup>0</sup> (avg.) - curved ? dip	N.D.	N.D.	noisy area (cultural), indeterminate	-	Mine workings on Cameron Island
5 & 6	M-5	(22N,9+25W) to (31N,2+50W)	065 <sup>0</sup> ,60 <sup>0</sup> SE(?) 1300'	~2.5	90 ft., 35 mhos	along flank of 2500nT mag	medium	Appears to be continua- tion of M-1 but lies on S side of mag high and appears to dip to the SE.
6	D-1	93N,37+50W	(?)060 <sup>0</sup> , ? dip length indeter- minate	~0.2	40 ft.,(?) 3 mhos	along flank of broad, 100nT high	low	Probably an overburden response, but does not have adequate coverage to fully categorize.
7	E-1	(141N,13+50W) to (205N,11+ 75W)	040 <sup>0</sup> ,near vertical >6400'	~1-4, avg.3	40-70 ft., ~90 mhos	no direct mag roughly parallel to broader 500nT high	low	Formational conductor (graphitic?) may be useful as a strati- graphic marker.

SHEET	CONDUCTOR	LOCATION	STRIKE, DIP,LENGTH	IP/QP	CONDUCTIVITY, DEPTH	MAGNETIC ASSOCIATION	PRIORITY	COMMENTS
3	B-6	128S,24W	020 <sup>0</sup> ,60 <sup>0</sup> NW, 4400'	~5	110 ft., 75 mhos	associated with a broader 600nT high	low	Could be a fault off- set from B-5. Possible conductive response or end-effect on L124, 27W. See DDH 82-34 (graphitic tuff?)
3	B-7	(L116S,6+25W to (L108S,5W)	040 <sup>0</sup> ,? vertical, up to 800'	~1 or less	160 ft.(?) 10 mhos	L116-120S coincident with small, narrow 500nT mag.	low - med.	Should be resurveyed using larger coil spacing.
4	C-1	(72S,33W) to (60S,29W)	045 <sup>0</sup> ,? NW 1500' discontinuous	~1	(?) 130 ft. (?) 45 mhos	in gradient to a larger 900nT trend	med.- low	Either a deep conducto or overburden step response associated with mag high to west. P.E.M. Survey would resolve ambiguity.
5	M-1	(12S,25+50W) to (8N,13+50W)	060 <sup>0</sup> ,60 <sup>0</sup> NW 3200'	1.5 - 2.3	60 ft., } 60 mhos } middle 120 ft. } 60 mhos } s. end	along flank of S end (L14S-L2S) coincident (L0-L12N) along flank (L13N-L18N)	low - med.	Faulted between 0 and 2S, S end appears deeper and no longer coincident with mag. N end also faulted(?) dragged(?). M-5 could be continuation. M-2 may or may not be same horizon folded. See DDH 82-36 (graphite cherts + minor sulphides)

SHEET	CONDUCTOR	LOCATION	STRIKE, DIP,LENGTH	IP/QP	CONDUCTIVITY, DEPTH	MAGNETIC ASSOCIATION	PRIORITY	COMMENTS
9	G-3	(45N,79E) to (53N,77+50E)	020 <sup>0</sup> , near vertical 1000' (?)	~1	90 ft., 6 mhos	cross-cuts magnetic stratigraphy(?)	low	Possible overburden response. Best target on L49N. Could be same horizon as F-3. Should be re-surveyed with different parameters.
9	G-4	73N,73+50E	020 <sup>0</sup> (?), near vertical, open to N	~1-5	125 ft., 30 mhos	along flank of 150nT form- ational mag.	medium - low	Conductor should be traced out to property limits and then reassessed in light of local geology.
10	H-1	L97N,42E	030 <sup>0</sup> , near vertical, open to S	0.8	70 ft., 10 mhos	coincident with 100nT high	medium	Conductor should be checked and traced S onto island. Possibly correlates with G-1 H-2 could also be along same horizon.
10	H-2	(L105N,42+ 50E) to (L109N,42+ 50E)	030 <sup>0</sup> , near vertical, 500'	~2	160 ft., 35 mhos	coincident, narrow 1000nT mag	high	Best target on L105N. Appears to merge with an overburden response and continues to L141N. Should be checked with different survey parameters.
10	H-3	(L98N,48+25E) to (L10N,47+ 50E)	025 <sup>0</sup> , near vertical, 500'	~1	125 ft., 15 mhos	along flank of formational feature	low	Probably overburden response, but should be re-checked if H-1 and H-2 re-surveyed.



TABLE II  
ANOMALY PRIORITY SUMMARY

FOLLOW - UP		2nd PASS	NO WORK	
HIGH	MEDIUM	MED-LOW	LOW	NO INTEREST
B-2	B-1	B-7	B-3	M-4
B-5	B-4	C-1	B-6	
M-3	M-2	M-1	D-1	
F-1	M-5	G-2	E-1	
F-3	G-1	G-4	F-2	
H-2	H-1		G-3	
			H-3	

LIST OF DRAWINGS - MAIN GRID (1":200')

<u>SHEET</u>	<u>MAG</u>	<u>EM</u>
2	SO.3393(1&2)	SO.3393B
3	SO.3394(1&2)	SO.3394B
4	SO.3395(1&2)	SO.3395B
5	SO.3396(1&2)	SO.3396B
6	SO.3397(1&2)	SO.3397B
7	SO.3398(1&2)	SO.3398B
8	SO.3399(1&2)	SO.3399B
9	SO.3400(1&2)	SO.3400B
10	SO.3401(1&2)	SO.3401B



FWM

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

Mar 26 / April - 83 # 4-8



52E11SE9099 2.5408 SNOWSHOE BAY (SHOAL)

900

SHOAL - P1 (Cont'd)

The Mir

Type of Survey(s) **Geophysical** M.2704 SNOWSHOE BAY

Claim Holder(s) **Selco Inc.** Prospector's Licence No. **T190**

Address **55 University Ave., Suite 1700, Toronto, Ontario M5J 2H7**

Survey Company **Selco Inc.** Date of Survey (from **Jan 82** to **May 83**) Total Miles of line Cut

Name and Address of Author (of Geo-Technical report)  
**A. Gubins - 55 University Ave., Suite 1700, Toronto, Ontario M5J 2H7**

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	
K	564180		K	590005	
	564181			590006	
	564182				
	564183				
	564184				
	564203				
	564204				
	564205				
	564206				
	564207				
	564208				
	564209				
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	564212				
	564213				
	564214				
	564215				
	564216				
	564217				
	564218				
	564219				
	564220				

RECEIVED  
JAN 31 1983  
MINING LANDS SECTION

RECEIVED  
KENORA MINING DIV.  
JAN 25 1983  
7:39 AM

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.

564180

Total number of mining claims covered by this report of work. **25**

For Office Use Only

Total Days Cr. Recorded **1500** Date Recorded **Jan 25/83** Mining Recorder *[Signature]*

Date Approved as Recorded **Jan 25/83** Branch Director *[Signature]*

Date **Jan 25 1983** Recorder/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  
**A. Gubins - 55 University Ave., Suite 1700, Toronto, Ontario M5J 2H7**

Date Certified **Jan 25/83** Certified by (Signature) *[Signature]*



FWM  
Ministry of  
Natural  
Resources  
Ontario

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

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.

#5-83

SHOAL - P1

The Mining Act

Type of Survey(s) <b>Geophysical</b>		Township or Area <b>M.2704 SNOWSHOE BAY</b>	
Claim Holder(s) <b>Selco Inc.</b>		Prospector's Licence No. <b>T190</b>	
Address <b>55 University Ave., Suite 1700, Toronto, Ont. M5J 2H7</b>			
Survey Company <b>Selco Inc.</b>		Date of Survey (from & to) Jan '82 Mar '83 Day Mo. Yr. Day Mo. Yr.	
Name and Address of Author (of Geo-Technical report) <b>A. Gubins - 55 University Ave., Suite 1700, Toronto, Ont. M5J 2H7</b>		Total Miles of line Cut <b>- 50 miles</b>	

Credits Requested per Each Claim in Columns at right

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)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- 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		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
K	564073		K	564155	
	564075			564156	
	564076			564157	
	564077			564158	
	564078			564159	
	564079			564160	
	564080			564161	
	564081			564162	
	564082			564163	
	564083			564164	
	564084			564165	
	564085			564166	
	564086			564167	
	564144			564168	
	564145			564169	
	564147			590003	
	564148			590004	
	564149				
	564150				
	564151				
	564152				
	564153				
	564154				

RECEIVED  
JAN 31 1983  
MINING

KENORA MINING DIV.  
RECEIVED  
JAN 25 1983  
AM 7:8:9 10:11:12:1:2:3:4:5:6 PM

564073

Total number of mining claims covered by this report of work. **40**

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.

For Office Use Only

Total Days Cr. Recorded **2400** Date Recorded **Jan 25/83**

Date Approved as Recorded **Jan 25/83** Mining Officer *[Signature]*

Date **Jan 24/83** Reported Holder or Agent (Signature) *[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  
**A. Gubins - 55 University Ave., Suite 1700, Toronto, Ont. M5J 2H7**

Date Certified **JAN 24/83** Certified by (Signature) *[Signature]*

2.5408

4-8

2.5408

1983 09 21

Mr. Wade Mathew  
Mining Recorder  
Ministry of Natural Resources  
808 Robertson Street  
Box 5160  
Kenora, Ontario  
P9N 3X9

Dear Sir:

RE: Geophysical (Electromagnetic and Magnetometer)  
Survey on Mining Claims K 564073 et al in the  
Area of Snowshoe Bay

---

The Geophysical (Electromagnetic and Magnetometer) Survey  
assessment work credits as listed with my Notice of Intent  
dated August 25, 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 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

D. Kinvig:mc

Encl.

cc: Selco Incorporated  
Suite 1700  
55 University Avenue  
Toronto, Ontario  
M5J 2H7  
Attention: J.E. Rackley

cc: Resident Geologist  
Kenora, Ontario



Ontario

Ministry of Natural Resources

# Technical Assessment Work Credits

File 2.5408

Date 1983 08 25

Mining Recorder's Report of Work No. 4-8

Recorded Holder **SELCO INC**

Township or Area **SNOWSHOE BAY AREA**

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ 20 days Magnetometer _____ 40 days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	K 564180 to 84 inclusive 564203 to 20 inclusive 564075 to 86 inclusive 564144-45 564147 to 69 inclusive 590003 to 06 inclusive

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

K 564073



*Sept 16/83*

Your file: 4-8

Our file: 2.5408

1983 08 25

Mr. Wade Mathew  
Mining Recorder  
Ministry of Natural Resources  
808 Robertson Street  
Box 5160  
Kenora, Ontario  
P9N 3X9

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

*not*  
D. Kinvig:mc

Encls:

cc: Selco Incorporated  
Suite 1700  
55 Univeristy Avenue  
Toronto, Ontario  
M5J 2H7  
Attn: J.E. Rackley

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



Ministry of  
Natural  
Resources

Notice of Intent  
for Technical Reports

1983 08 25

2.5408

#4-8

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.





May 24/83

Mining Lands Comments


To: Geophysics *Mr. Roger Barlow*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>July 26/83</i>	Signature <i>Douglas H. Pitcher</i>
--	---	------------------------	-------------------------------------

To: Geology - Expenditures

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
-----------------------------------	---	------	-----------

To: Geochemistry

Comments

*L.D.*

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
-----------------------------------	---	------	-----------

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

1983 03 08

2.5408

Mining Recorder  
Ministry of Natural Resources  
Box 5160  
Kenora, Ontario  
P9N 3X9

Dear Sir:

We have received reports and maps for a Geophysical  
(Electromagnetic & Magnetometer) Survey submitted under  
Special Provisions (credit for Performance and Coverage)  
on Mining Claims K 564073 et al in the Area of Snowshoe  
Bay.

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: 416/965-1380

A. Barr:sc

cc: Selco Incorporated  
Suite 1700 - 55 University Ave  
Toronto, Ontario  
M5J 2H7  
Attn: J.E. Rackley

**SELCO INC.**



55 University Avenue Suite 1700  
Toronto Ontario M5J 2H7 Telephone: (416) 361 0794  
Telex: 06 22537 Cable: Selcoex Toronto

February 28, 1983

Ministry of Natural Resources  
Mining Lands Section  
Room 6450, Whitney Block  
Queen's Park  
Toronto, Ontario

**RECEIVED**  
MAR 1 1983  
MINING LANDS SECTION

Dear Sir,

RE: SHOAL PROJECT - PROPERTY 1 - M.2704

Further to our Report of Work (January 24, 1983) please find enclosed the following:-

CONTENT

(in duplicate)

Geophysical Report Technical Data Sheet Drawings No.	<u>MAG</u>	<u>EM</u>	<u>Sheet</u>
	SO.3393(1&2)	SO.3393B	2
	SO.3398(1&2)	SO.3398B	7
	SO.3399(1&2)	SO.3399B	8
	SO.3400(1&2)	SO.3400B	9

Yours very truly,

SELCO INC.

J.E. Rackley  
Claims Control Co-ordinator

JER:rt  
Encl.



Ministry of Natural Resources

File Shoal - P1

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

**RECEIVED**  
MAR 1 1983  
MAR 1 1983  
MINING LANDS SECTION  
MINING LANDS SECTION

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

Type of Survey(s) Geophysical  
Township or Area \_\_\_\_\_  
Claim Holder(s) Selco Inc.  
Survey Company Selco Inc.  
Author of Report A. Gubins  
Address of Author 55 University Ave., Suite 1700, Toronto,  
Covering Dates of Survey January '82 - February '83  
(linecutting to office)  
Total Miles of Line Cut 50 miles

MINING CLAIMS TRAVERSED	
List numerically	
K	564073
(prefix)	(number)
K	564075
K	564076
K	564077
K	564078
K	564079
K	564080
K	564081
K	564082
K	564083
K	564084
K	564085
K	564086
K	564144
K	564145
K	564147
K	564148
K	564149
K	564150
K	564151
K	564152
K	564153
<b>TOTAL CLAIMS</b> <u>65</u>	

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

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Feb. 28. 83 SIGNATURE: [Signature]  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 22544

Previous Surveys

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 EM=4875 Mag = 6000 Number of Readings EM = 4875 Mag = 6000

Station interval 50' and 100' Line spacing 100' and 200'

Profile scale 1":20%

Contour interval Every 25 gammas to 500
Every 100 gammas to 4000 gammas
Every 250 gammas thereafter

Instrument EDA-PPM-300

MAGNETIC

Accuracy - Scale constant 1 gamma

Diurnal correction method Automatic correction of data stored on field magnetometer
using stored base stn. data.

Base Station check-in interval (hours) 30 second sampling interval on base

Base Station location and value EDA-PPM-400 on Cameron Island 59,850 Gamma

ELECTROMAGNETIC

Instrument Apex Max-Min II

Coil configuration Horizontal Coplanar

Coil separation 400'

Accuracy 1%

Method: [ ] Fixed transmitter [ ] Shoot back [ ] In line [ ] Parallel line

Frequency 444 Hz (specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method [ ] Time Domain [ ] Frequency Domain

Parameters - On time Frequency

- Off time Range

- Delay time

- Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_  
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

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 \_\_\_\_\_

GEOCHEMICAL SURVEY – PROCEDURE RECORD



Numbers of claims from which samples taken \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Number of Samples \_\_\_\_\_  
Type of Sample \_\_\_\_\_  
(Nature of Material)  
Average Sample Weight \_\_\_\_\_  
Method of Collection \_\_\_\_\_  
Soil Horizon Sampled \_\_\_\_\_  
Horizon Development \_\_\_\_\_  
Sample Depth \_\_\_\_\_  
Terrain \_\_\_\_\_  
Drainage Development \_\_\_\_\_  
Estimated Range of Overburden Thickness \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Mesh size of fraction used for analysis \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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General \_\_\_\_\_  
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**ANALYTICAL METHODS**

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

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

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (\_\_\_\_\_ tests)

Name of Laboratory \_\_\_\_\_

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General \_\_\_\_\_  
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(Cont'd)

K 564154	K 564203
K 564155	K 564204
K 564156	K 564205
K 564157	K 564206
K 564158	K 564207
K 564159	K 564208
K 564160	K 564209
K 564161	K 564210
K 564162	K 564211
K 564163	K 564212
K 564164	K 564213
K 564165	K 564214
K 564166	K 564215
K 564167	K 564216
K 564168	K 564217
K 564169 ✓	K 564218
K 564180 ✓	K 564219
K 564181 ✓	K 564220 ✓
K 564182	K 590003 ✓
K 564183	K 590004 ✓
K 564184 ✓	K 590005 ✓
	K 590006 ✓



Expenditures)

ont'd)

The Mining Act

Note: -

The Mining Act

25408

Note: -

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

Township M.

Township or Area

M.2704 SNOWSHOE BAY

Prospector's Licence No.

T190

Ave., Suite 1700, Toronto, Ontario M5J 2H7

00, Toronto, Ont. M5J 2H7

Date of Survey (from & to) Jan '82 Mar '83

Date of Survey (from & to) Jan '82 Mar '83

Total Miles of line Cut - 50 miles

ty Ave., Suite 1700, Toronto, Ontario

te 1700, Toronto, Ont. M5J 2H7

Magnetic	Days per Claim	Mining Claims Traversed (List in numerical order)			
		Prefix	Number	E.M.	Expend. Days Cr.
	20	K	564180	✓	
	40		564181	✓	
		1/4	564182	✓	
		✓	564183	✓	
			564184	✓	
			564203	✓	
			564204	✓	
			564205	✓	
			564206	✓	
			564207	✓	
			564208	✓	
			564209	1/2	
			564210	1/4	
			564211	✓	
			564212	✓	
			564213	✓	
			564214	✓	
			564215	✓	
			564216	✓	
			564217	✓	
			564218	1/4	
			564219	✓	
			564220	✓	

Magnetic	Days per Claim	Mining Claims Traversed (List in numerical sequence)			
		Prefix	Number	E.M.	Expend. Days Cr.
		K	564073	NOT DONE	
			564075	✓	
			564076	✓	
			564077	✓	
			564078	✓	
			564079	✓	
			564080	✓	
			564081	✓	
			564082	✓	
			564083	✓	
			564084	✓	
			564085	✓	
			564086	✓	
			564144	1/4	
			564145	✓	
			564147	✓	
			564148	✓	
			564149	✓	
			564150	✓	
			564151	✓	
			564152	✓	
			564153	✓	
			564154	✓	

Magnetic	Days per Claim	Mining Claims Traversed (List in numerical sequence)			
		Prefix	Number	E.M.	Expend. Days Cr.
		K	564155	✓	
			564156	✓	
			564157	✓	
			564158	✓	
			564159	✓	
			564160	✓	
			564161	✓	
			564162	✓	
			564163	✓	
			564164	✓	
			564165	✓	
			564166	✓	
			564167	✓	
			564168	✓	
			564169	✓	
			590003	✓	
			590004	✓	
			590005	✓	
			590006	✓	

KIE... MINING DIV... JAN 25 1983

564180

564073

Total number of mining claims covered by this report of work. 40

For Office Use Only  
Total Days Credits Recorded 1500  
Date Recorded Jan. 25/83

For Office Use Only  
Total Days Credits Recorded 2400  
Date Recorded Jan 25/83

- The only claim not covered is K: 564073.

I hereby certify that the facts set forth in the Report of Work annexed hereto, having performed the work the annexed report is true.

Suite 1700, Toronto, Ontario M5J 2H7

1700, Toronto, Ont. M5J 2H7

Date Certified JAN 24/83

Date Certified JAN 24/83

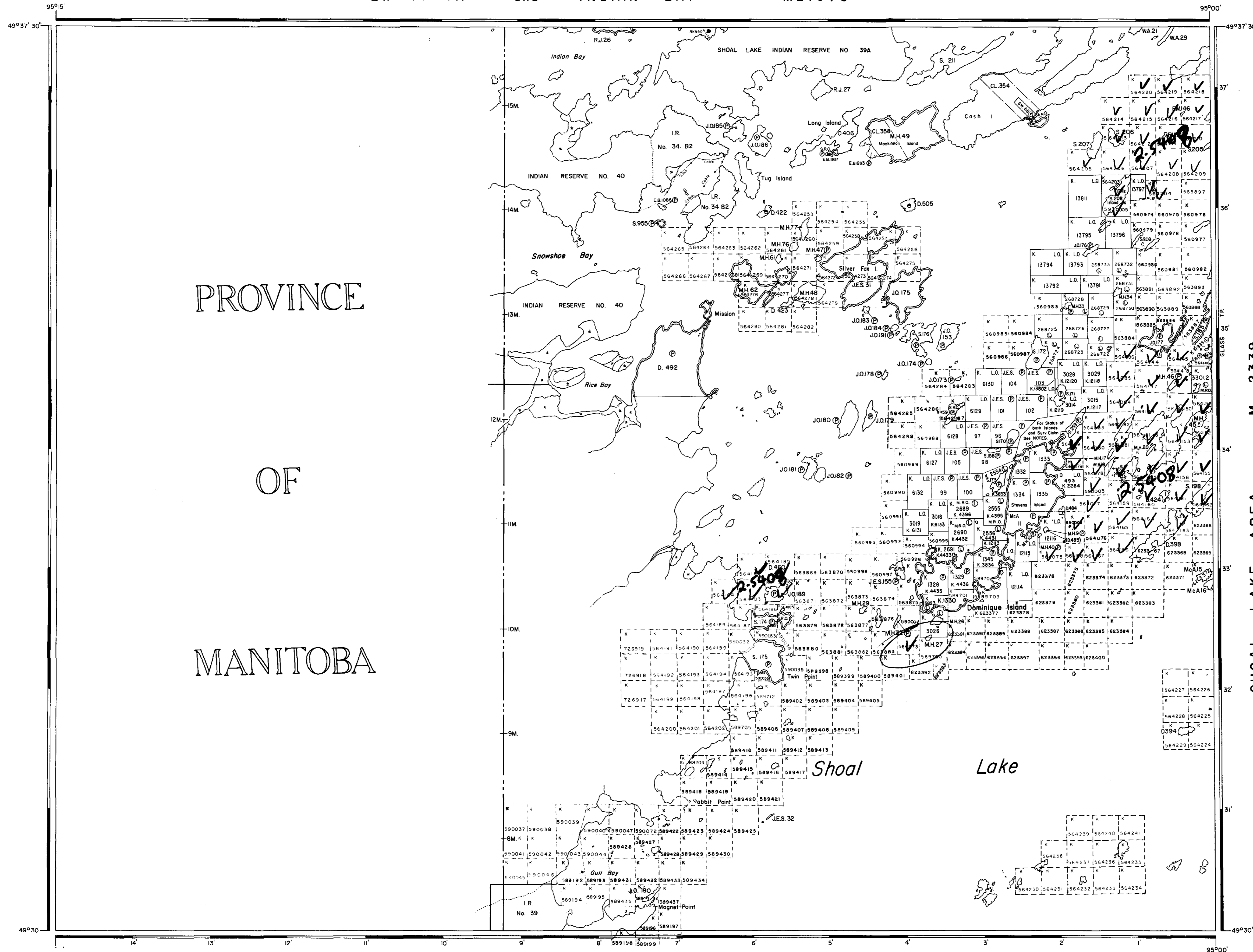
Certified by (Signature) D.K.

AREA OF  
**SNOWSHOE BAY**  
 SHOAL LAKE  
 DISTRICT OF  
 KENORA  
 KENORA  
 MINING DIVISION  
 SCALE: 1-INCH = 40 CHAINS

PROVINCE

OF

MANITOBA



**LEGEND**

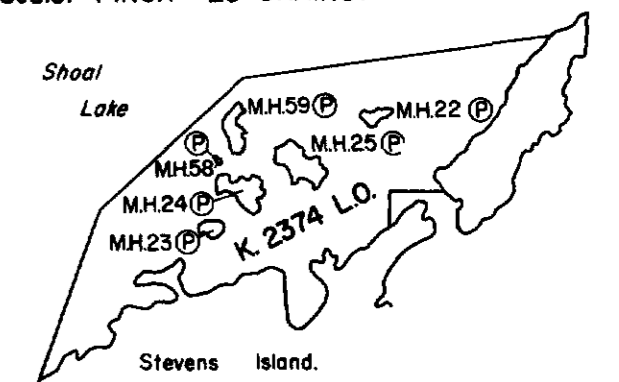
- PATENTED LAND ● or ⊙
- CROWN LAND SALE C.S.
- LEASES ⊙
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED
- PATENTED S.R.O.

**NOTES**

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

Flooding rights reserved up to 1064' above sea level.

Scale: 1 INCH = 20 CHAINS.

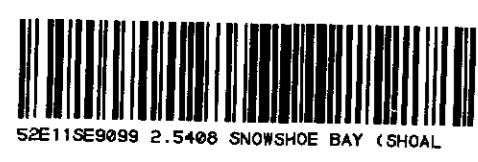


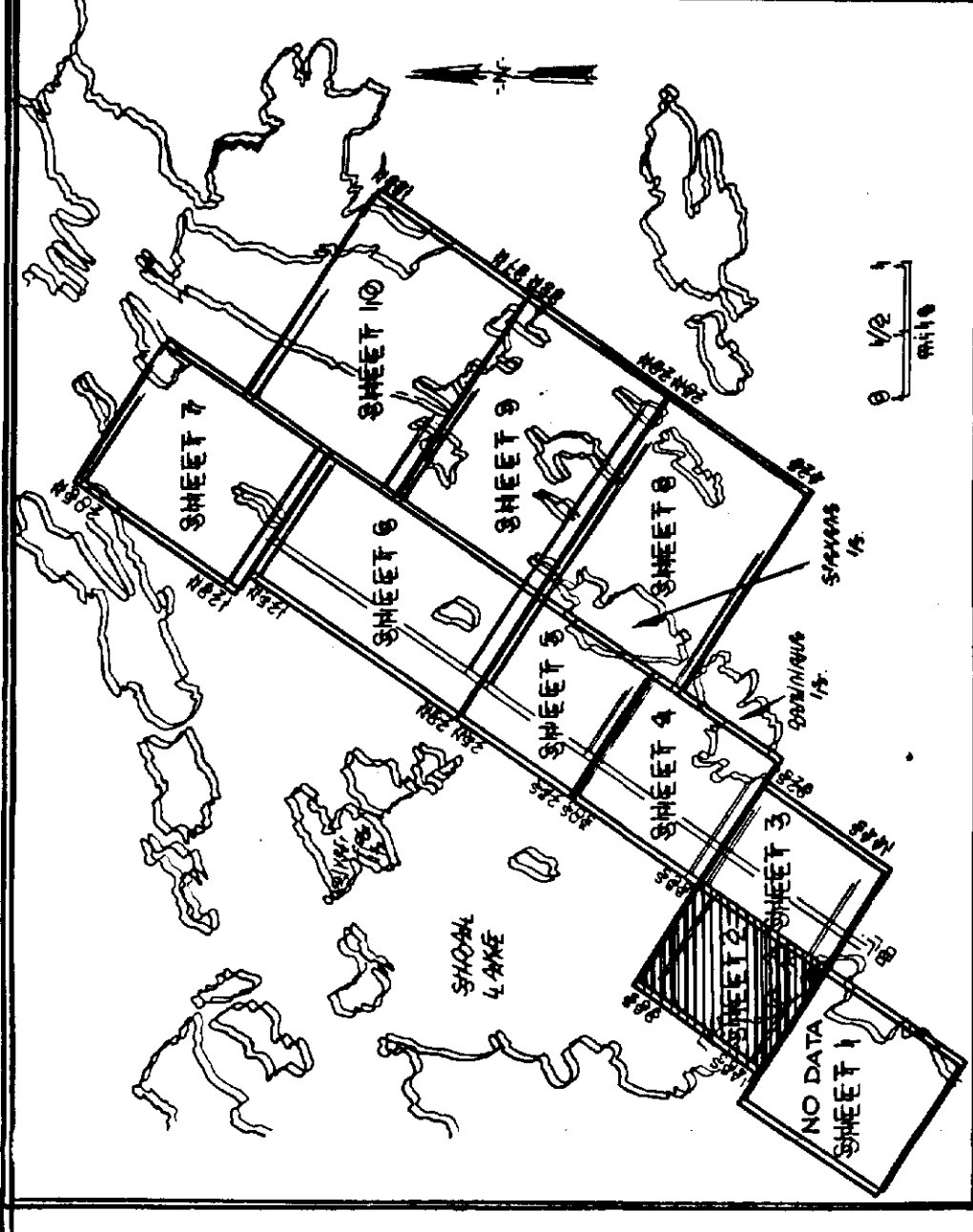
SHOAL LAKE AREA M - 2339

DATE OF ISSUE  
 AUG - 5 1983  
 Ministry of Natural Resources  
 TORONTO

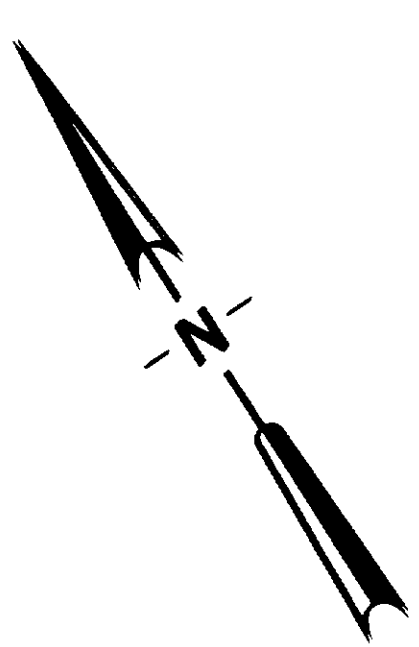
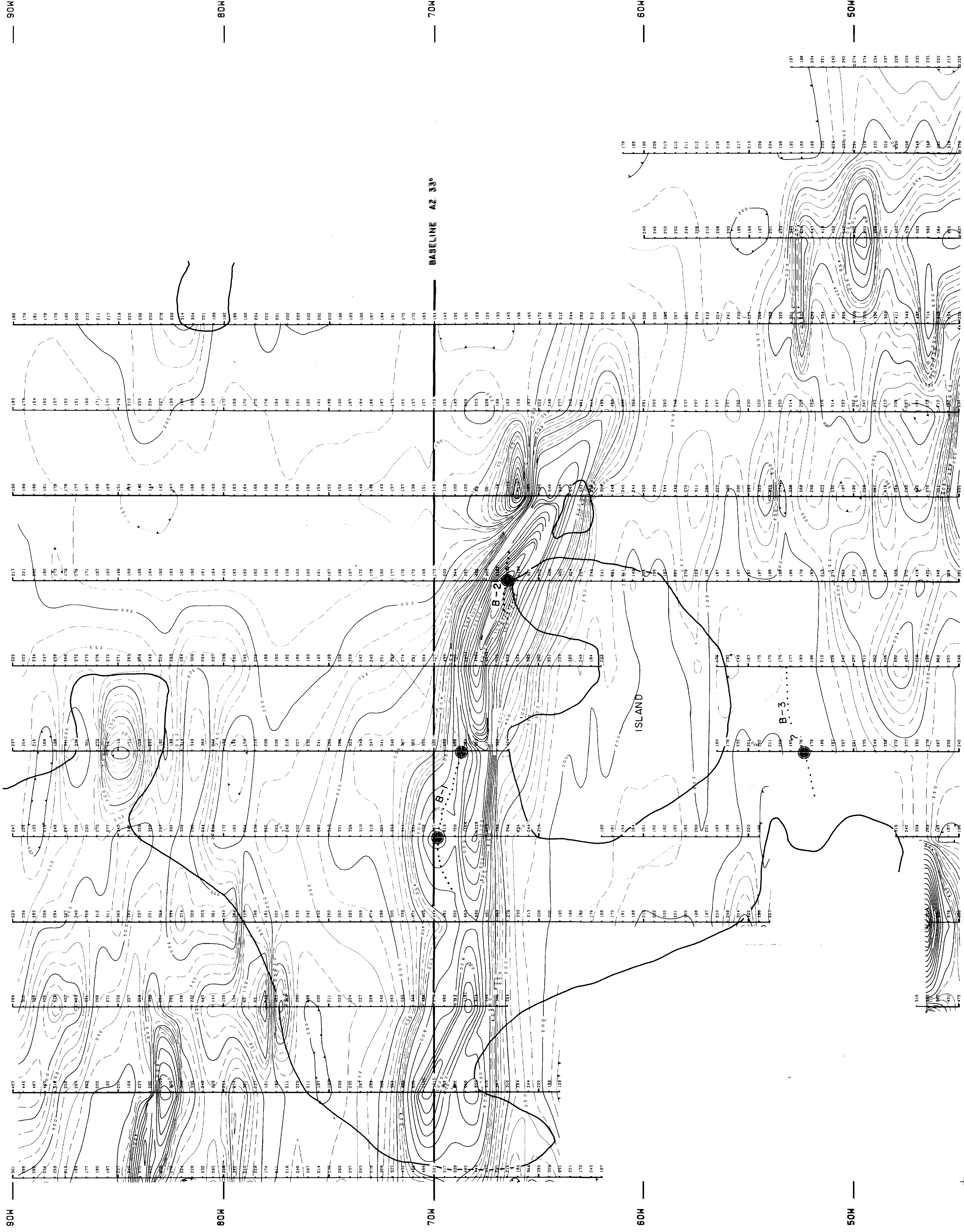
ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

Date 17th JAN. 1974 Plan No. M-2704  
 National Topographic Series 52 E-11



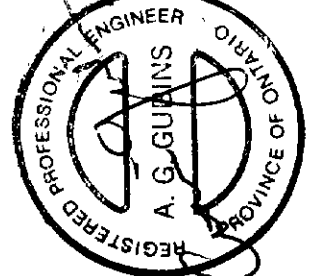
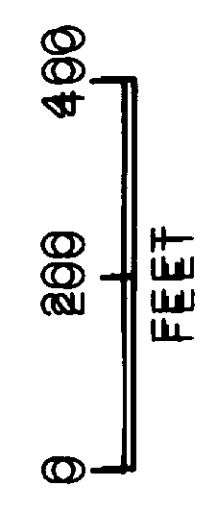


148.000 144.000 140.000 136.000 132.000 128.000 124.000 120.000 116.000 112.000 108.000 104.000 100.000 96.000



**MAGNETOMETER INSTRUMENT**  
 TYPE: EIA-PPW-3100  
 Readings in Gauss: 1.00  
 Base: 1.25  
 Profile: Every 25 Gauss to 500 Gauss  
 Counter Interval: Every 100 Gauss to 1000 Gauss

OTHER INFORMATION	
SEE DRAWING NO.	TYPE
80 3333(2)	MAG
80 3333B	H.L.M. - BLAINS



**BELCO INC. EXPLORATION**

**SHOAL LAKE PROJECT**

PROPERTY: \_\_\_\_\_

MAIN GRID = MAG. SURVEY

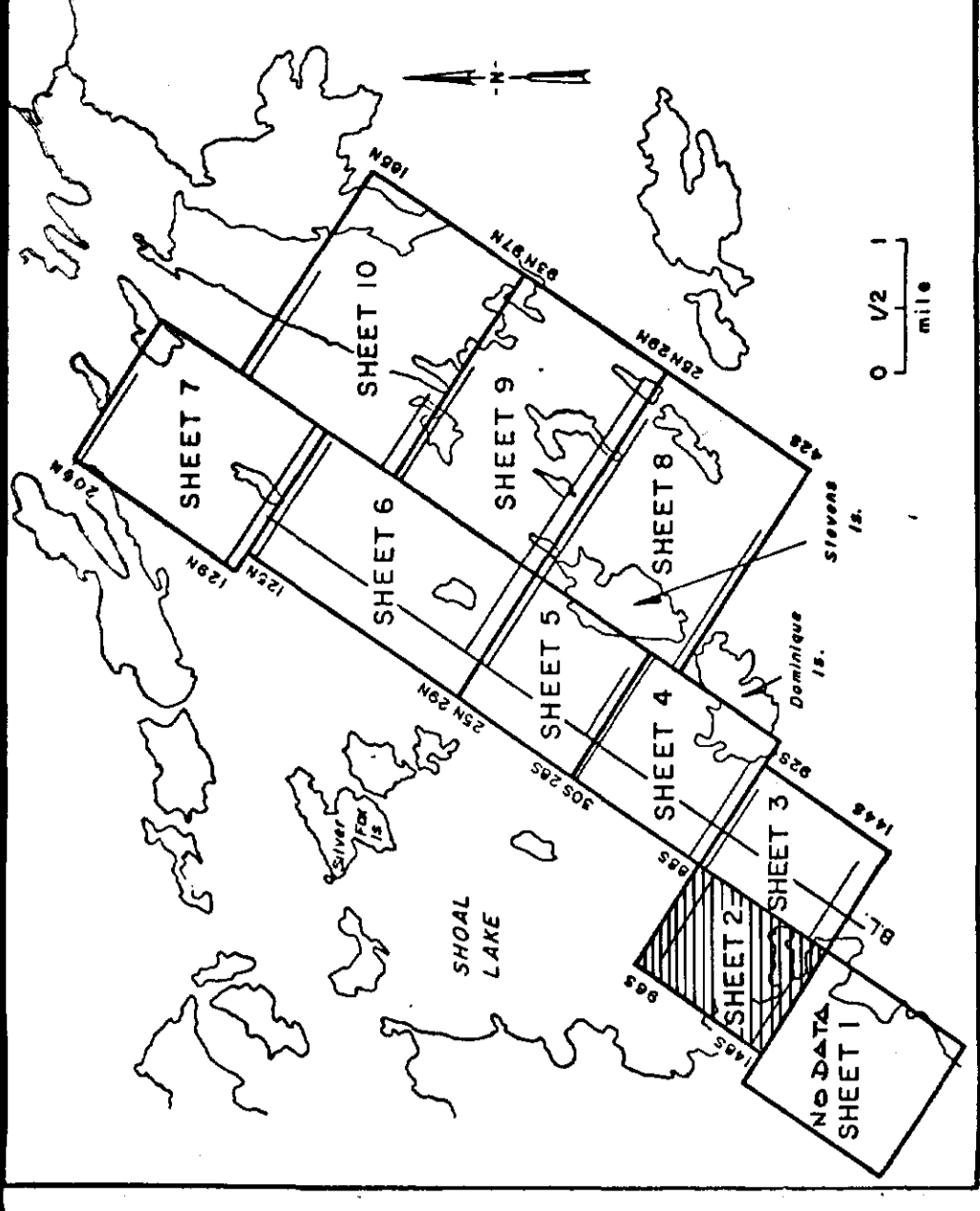
CONTOUR VALUES

(SHEET 8 of 10) 25478

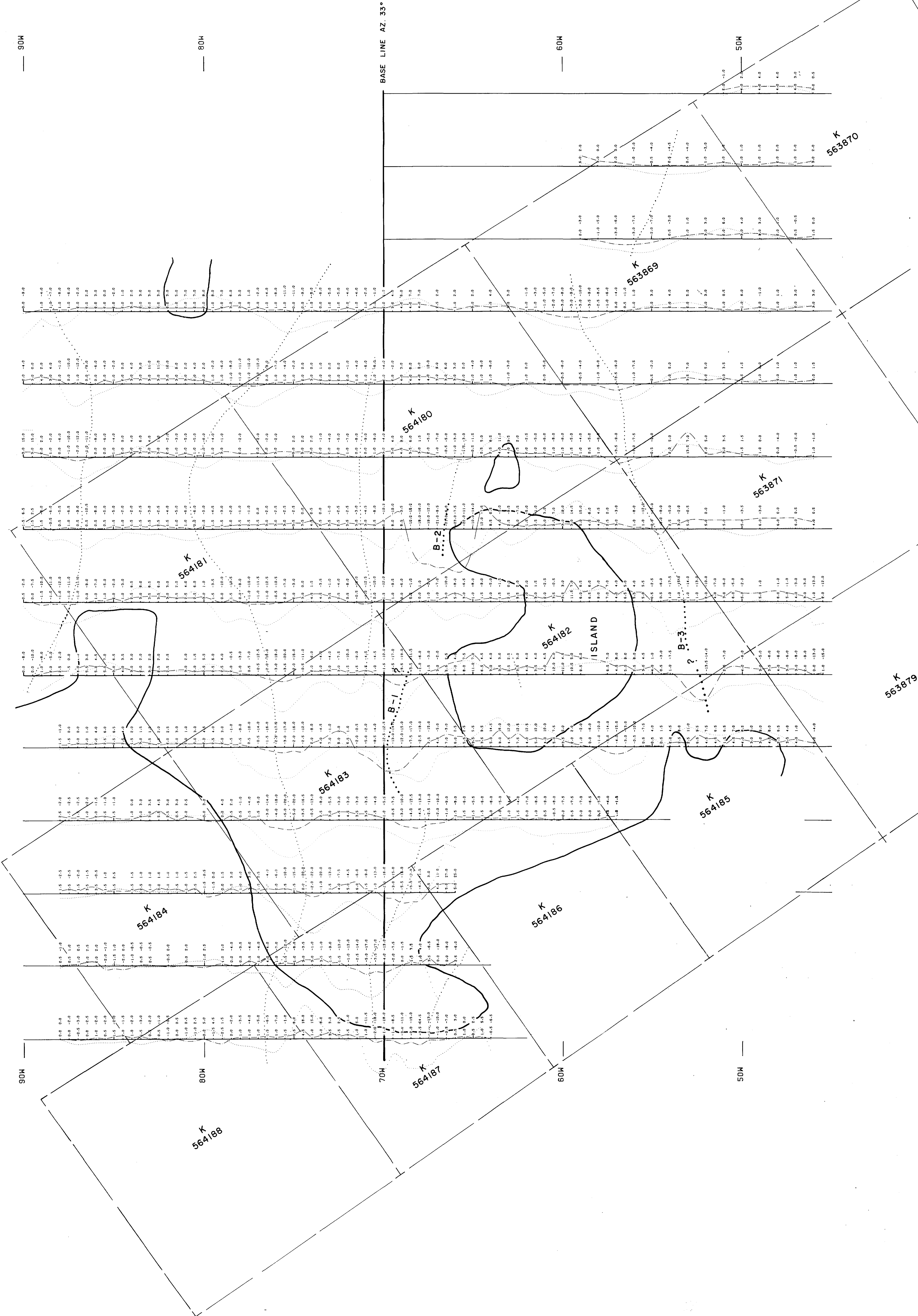
DATE: 5/31/1988

PLANNING: 80 3333(2)

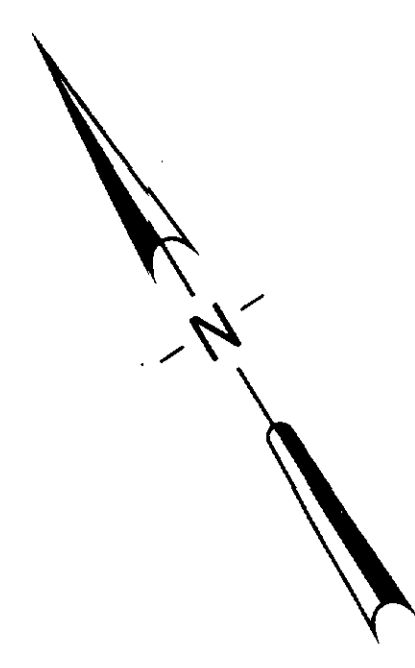




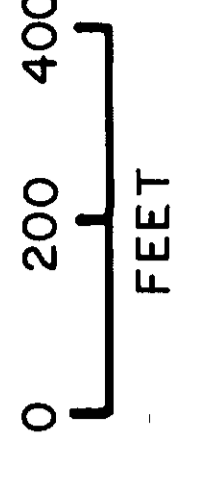
148.000 144.000 140.000 136.000 132.000 128.000 124.000 120.000 116.000 112.000 108.000 104.000 100.000 96.000



**ELECTROMAGNETIC INSTRUMENT**  
 TYPE: APEX MAX-MIN II  
**HORIZONTAL LOOP (Percent of Primary Field)**  
 Frequency: 4.44 Hz  
 Cable Length: 400'  
 In Phase:  $\bullet\text{---}\bullet$   
 Out of Phase:  $\text{---}\bullet\text{---}\bullet$   
 Conductor Width: 7/32"  
 Profile Scale: 1" = 20'



OTHER INFORMATION	
SEE DRWG. NO.	TYPE
SO.3393(1)	MAG.
SO.3393(2)	MAG.



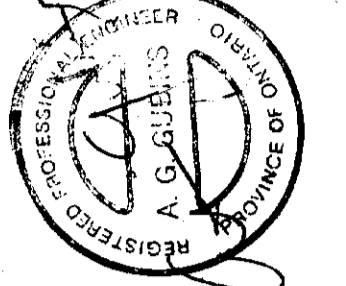
**SELCO INC.** EXPLORATION

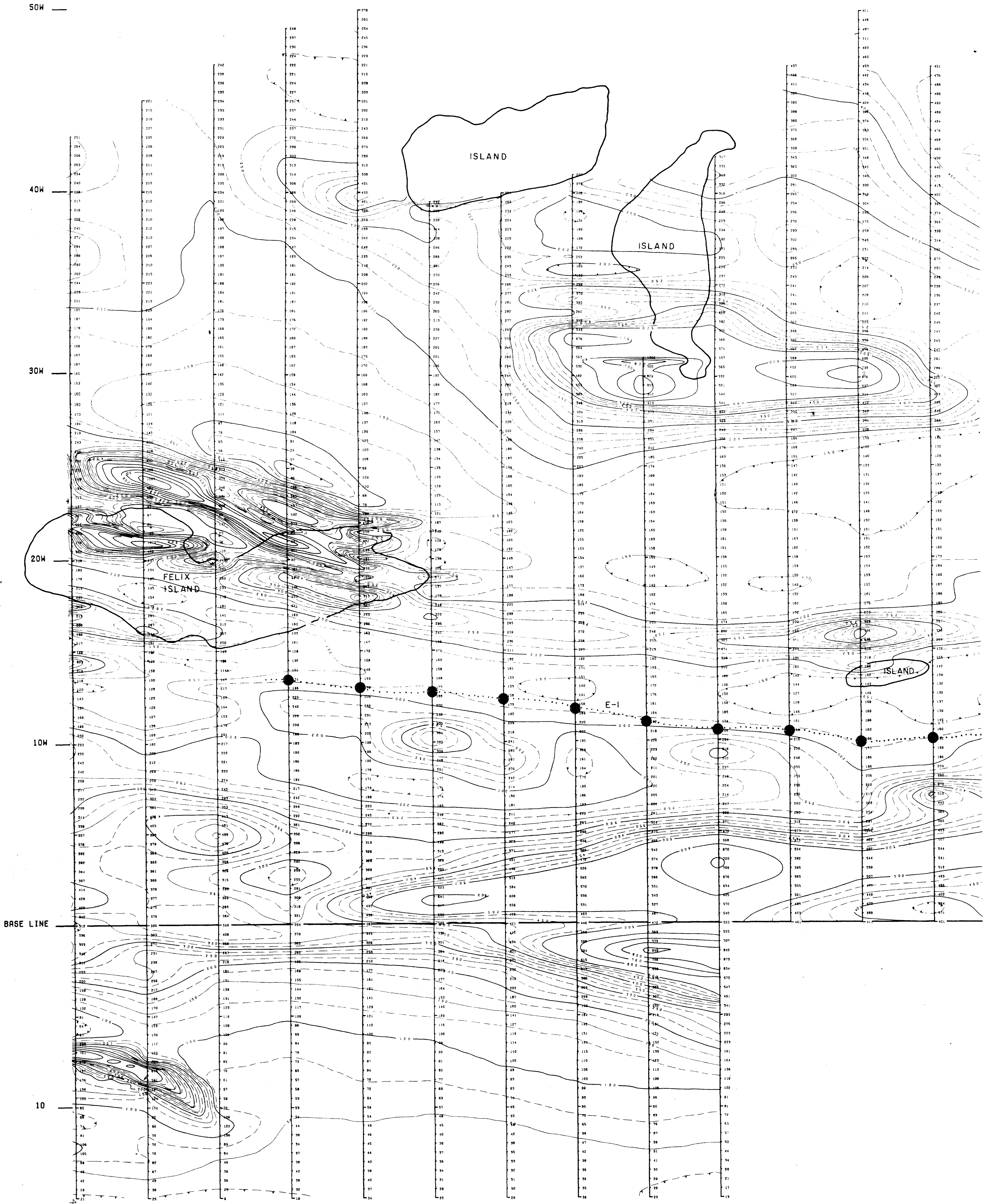
SHOAL LAKE PROJECT  
 PROPERTY I  
 MAIN GRID - H.L.E.M. SURVEY

(SHEET 2 of 10) 25408

DATE: 02 - March 1982  
 DRAWN BY: J.L.  
 TRACED BY: J.L.  
 DATE: April 1982

PLAN  
 SO. 3393B





129.00N 133.00N 137.00N 141.00N 145.00N 149.00N 153.00N 157.00N 161.00N 165.00N 169.00N 173.00N 77.00N 181.00N

50W

40W

30W

20W

10W

BASE LINE

10E

ISLAND

ISLAND

FELIX ISLAND

ISLAND

564205 K

564213 K

564214 K

564215 K

59005 K

564203 K

564206 K

564207 K

564212 K

564211 K

58006 K

56094 K

564204 K

564208 K

564209 K

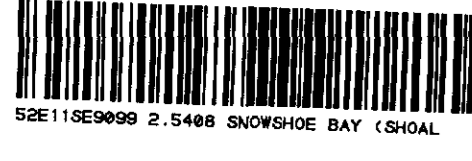
56095 K

56397 K

56098 K

56096 K

56097 K



10E

20E

30E

40E

50E

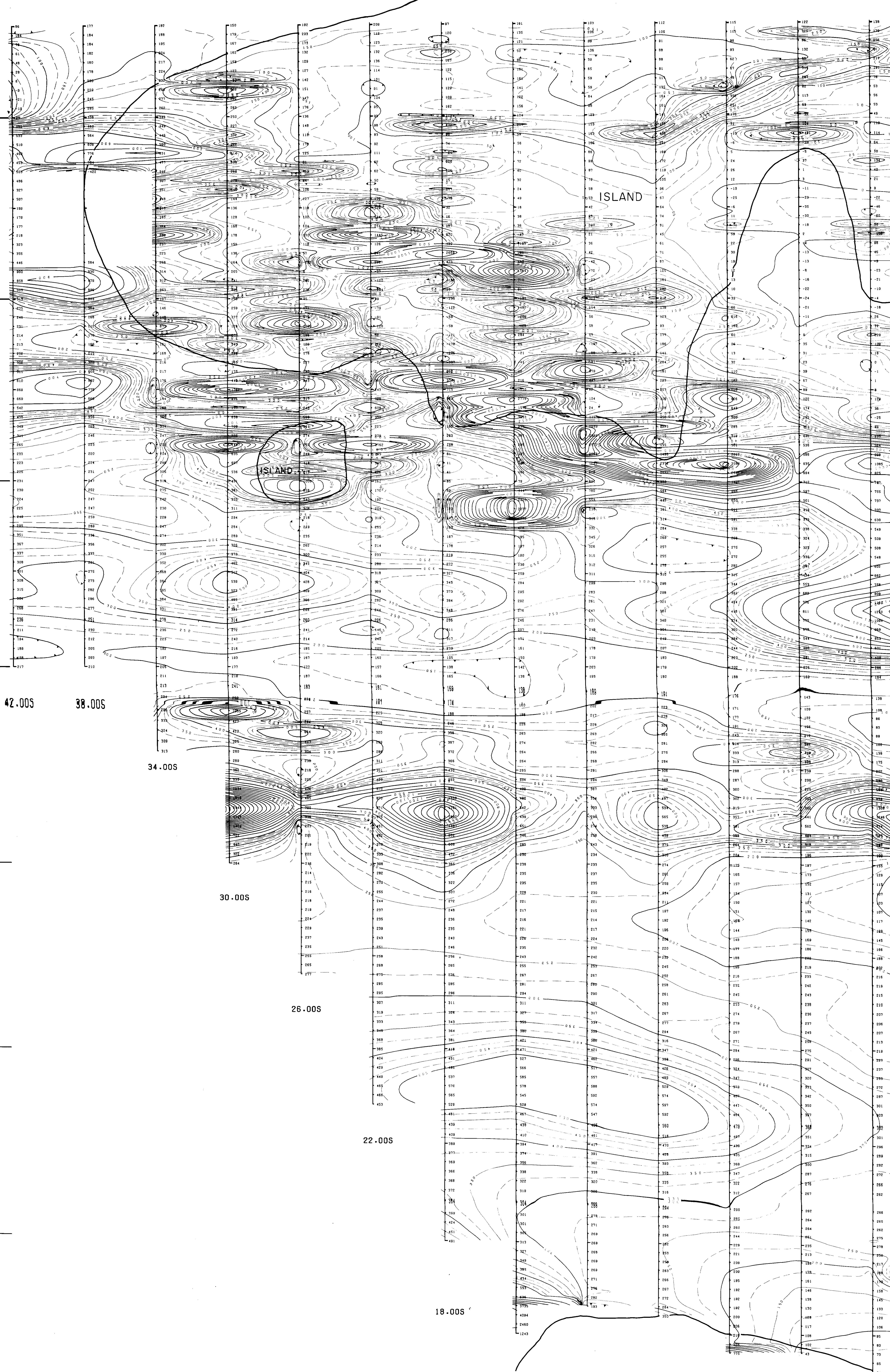
60E

70E

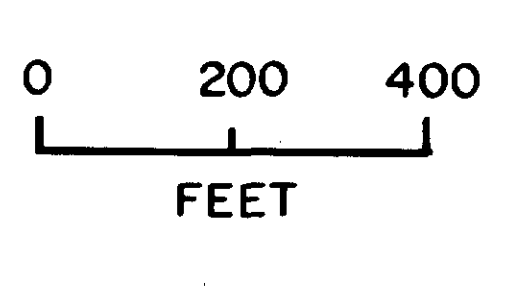
80E

90E

100E



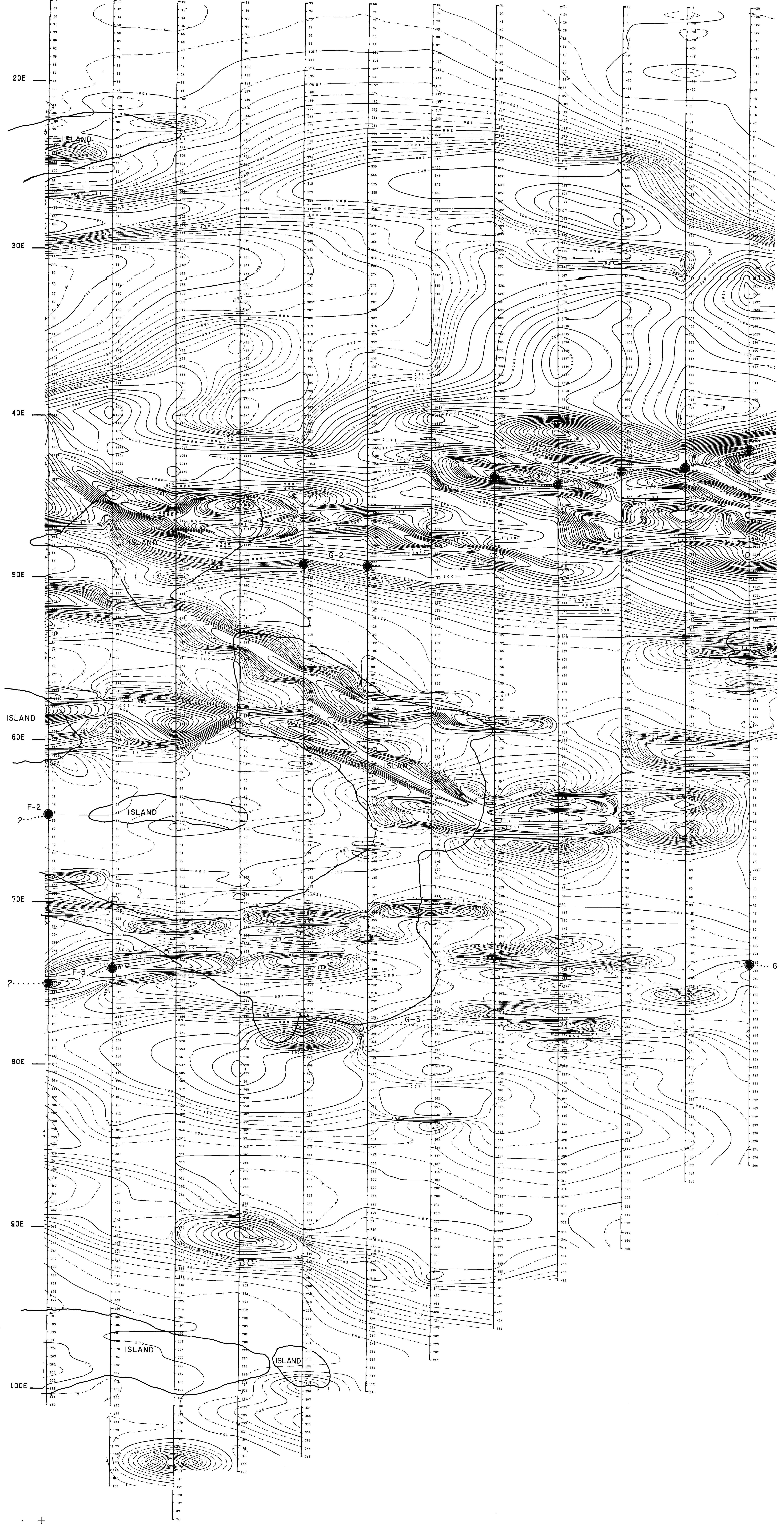
**MAGNETOMETER INSTRUMENT**  
 TYPE: EDA-PPM-300  
 Readings in Gauss: 1.00  
 Base: 2795  
 Profile: 1.00  
 Contour Interval: Every 25 gammas to 500 gammas  
 Every 100 gammas to 2500 gammas  
 Every 500 gammas thereafter



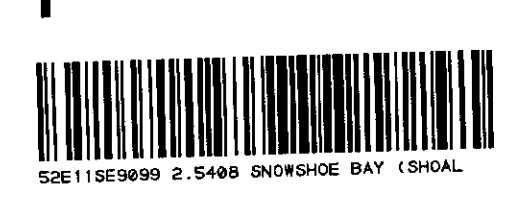


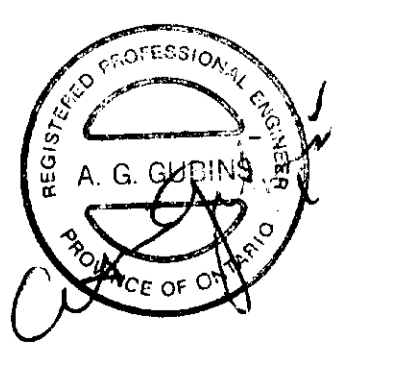
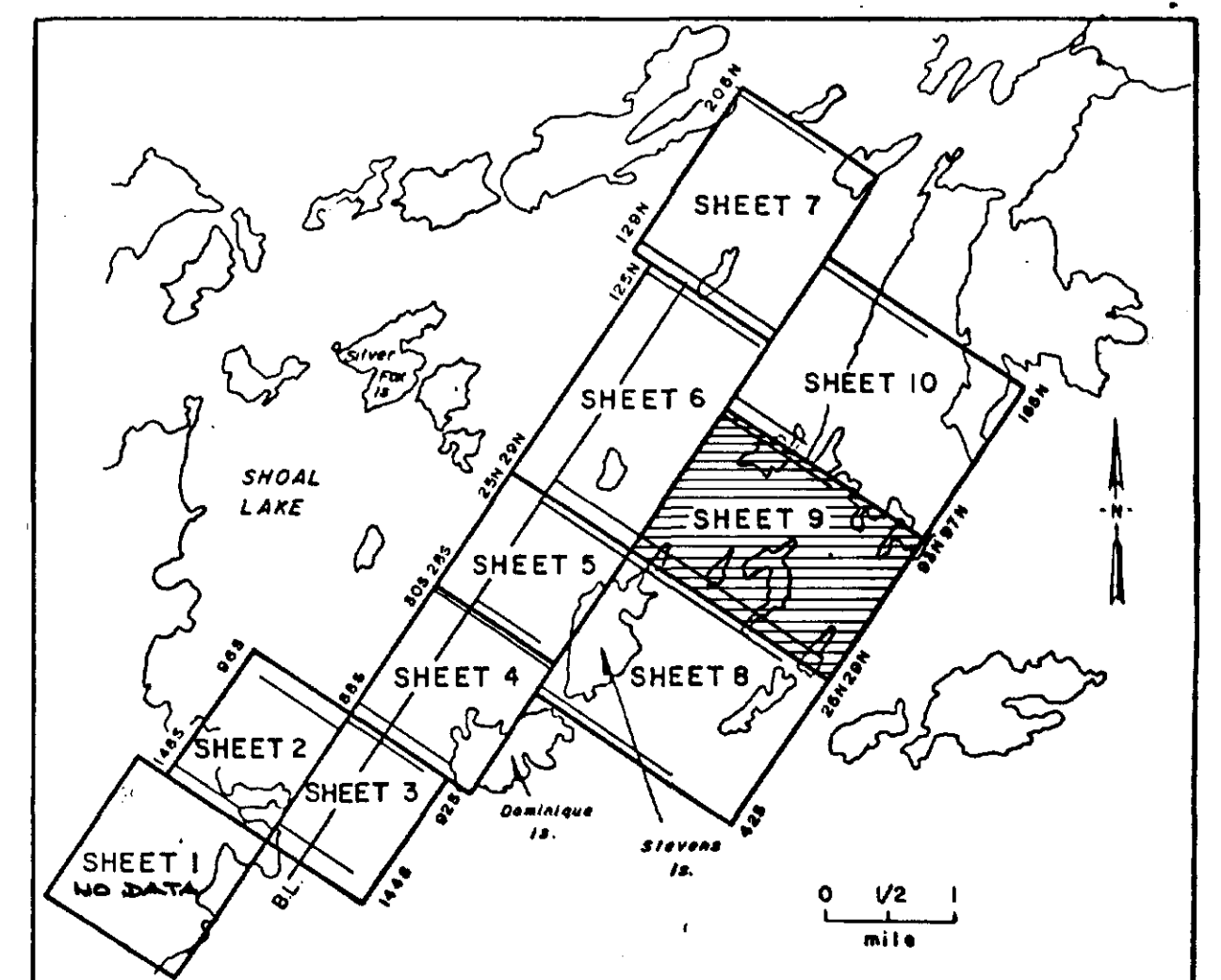
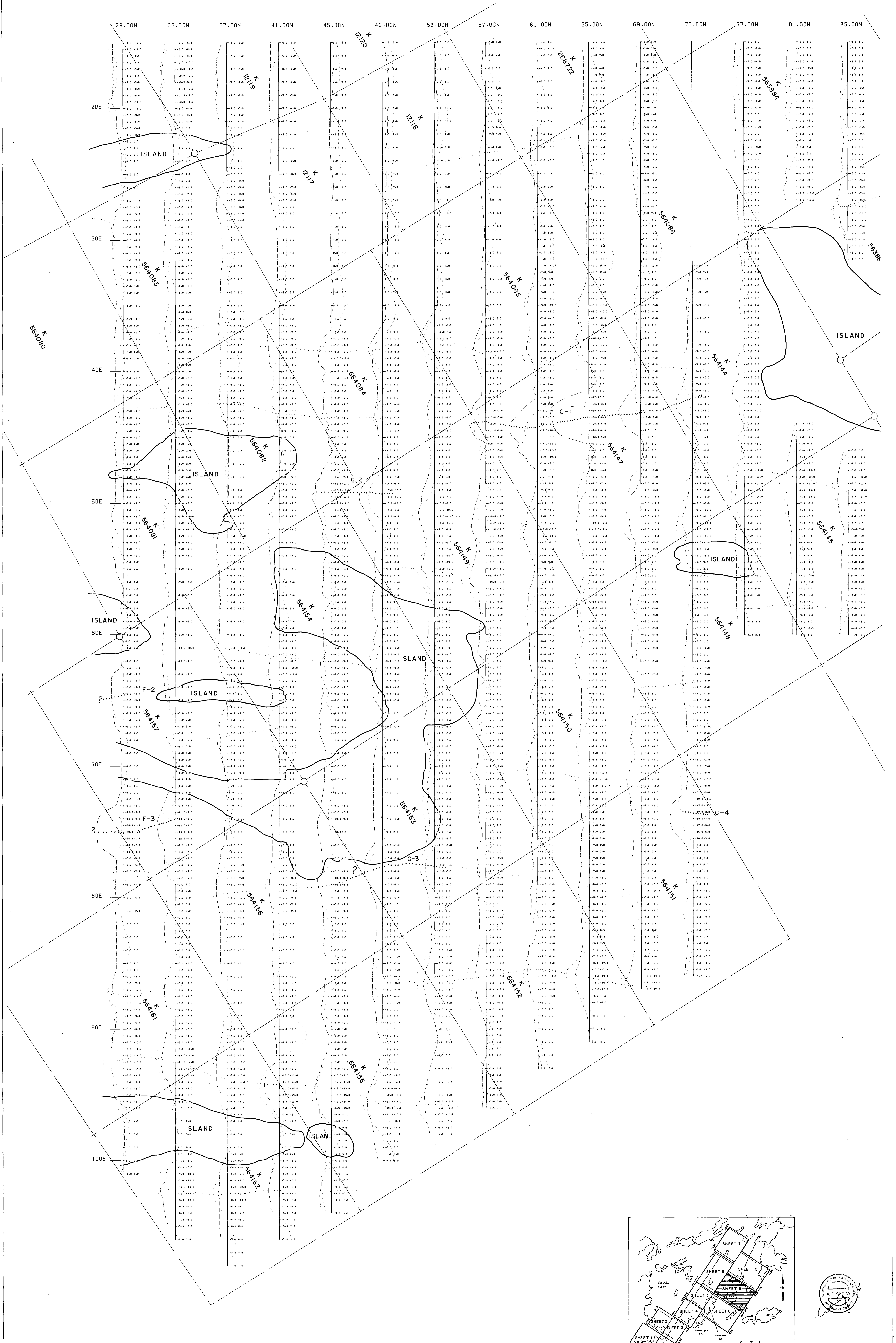


29.00N 33.00N 37.00N 41.00N 45.00N 49.00N 53.00N 57.00N 61.00N 65.00N 69.00N 73.00N

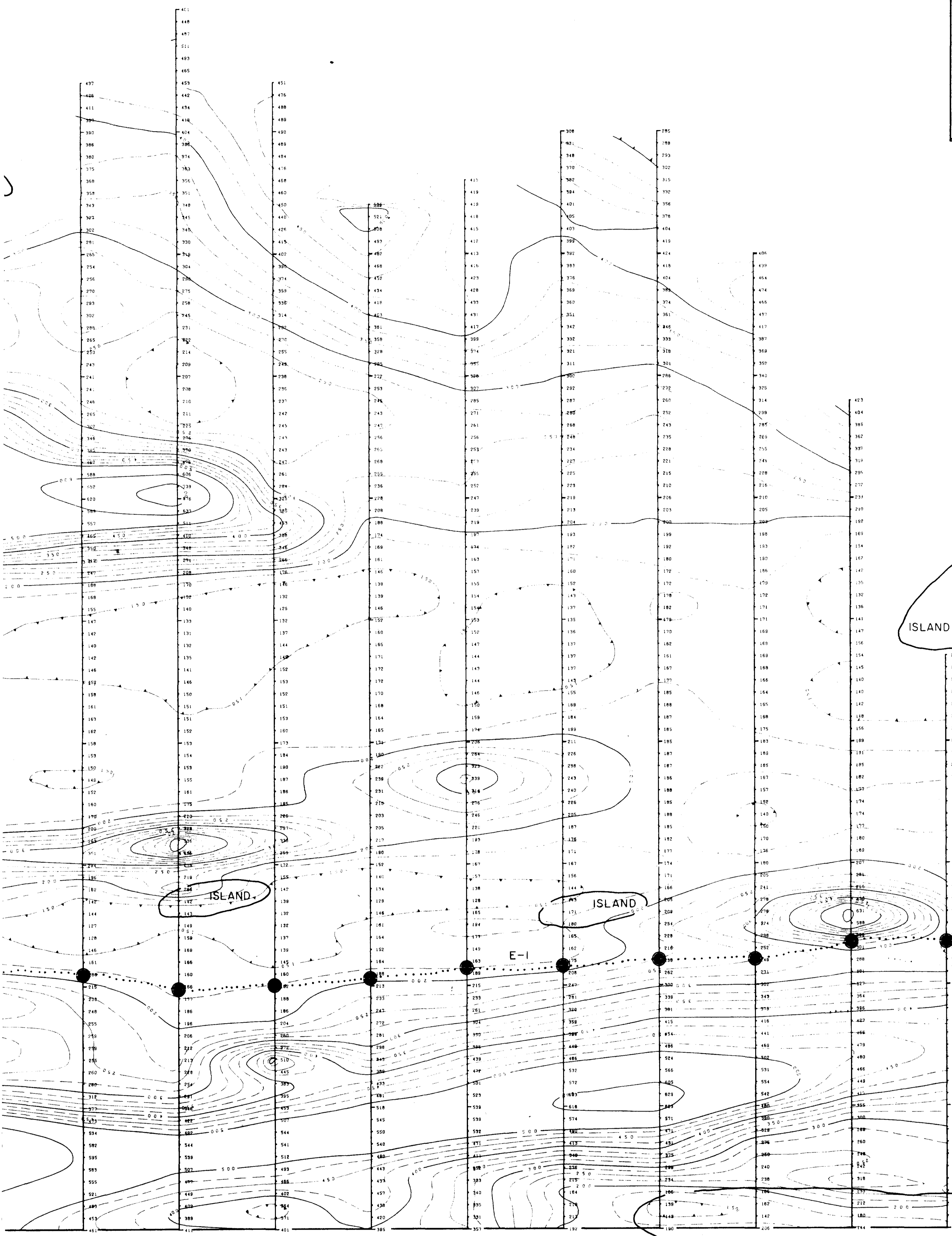
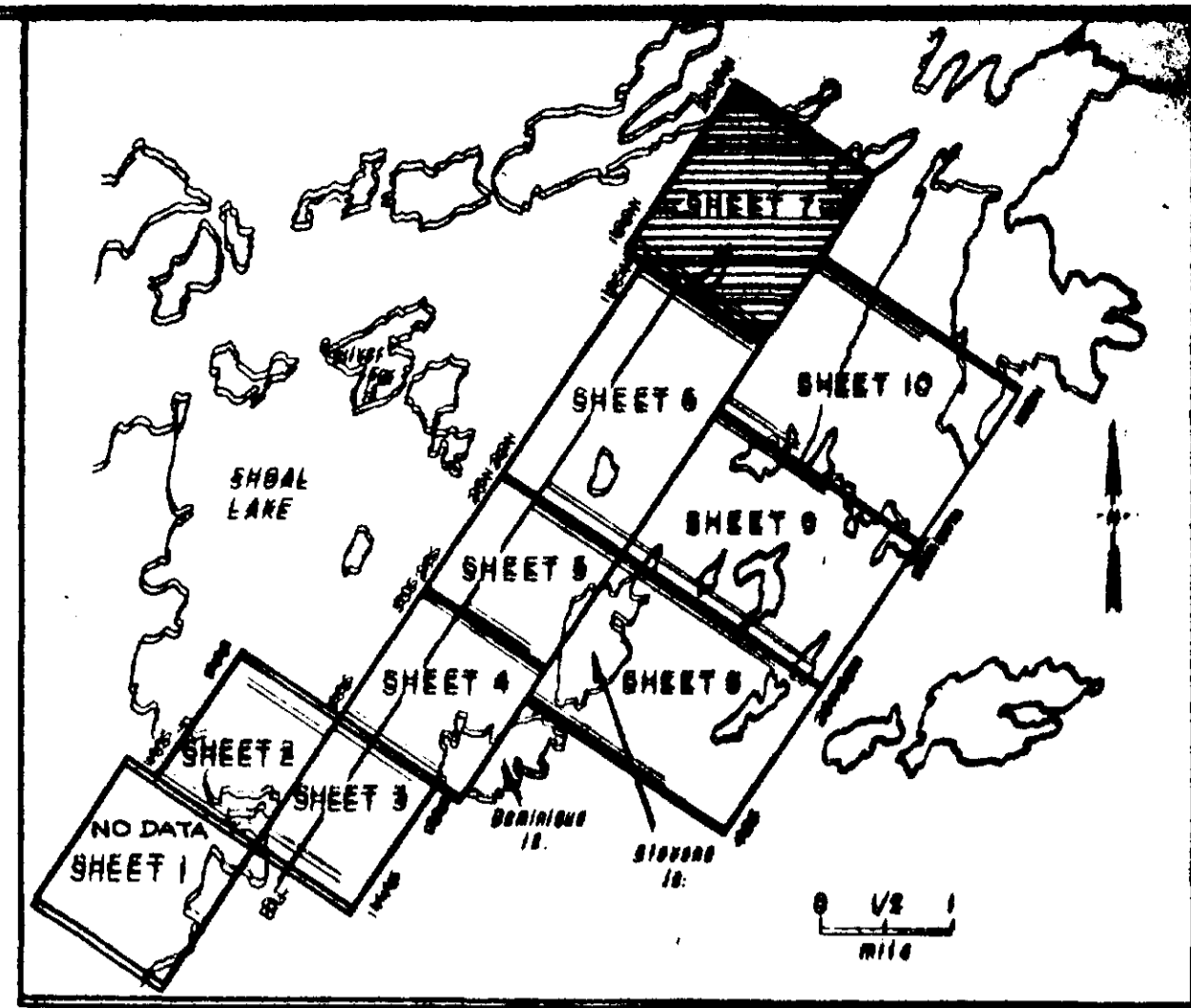


20E  
30E  
40E  
50E  
60E  
70E  
80E  
90E  
100E





ON 169.00N 173.00N 177.00N 181.00N 185.00N 189.00N 193.00N 197.00N 201.00N



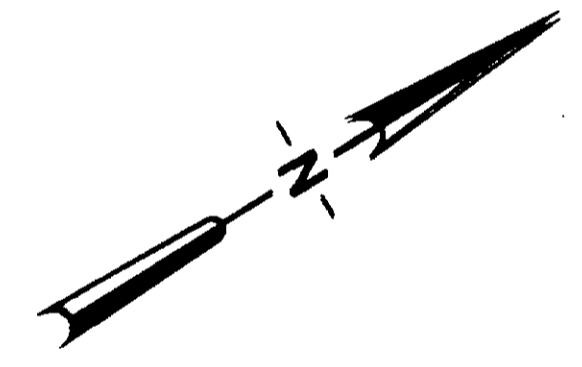
— 40W

— 30W

— 20W

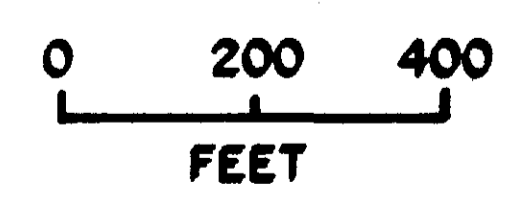
— 10W

BASE LINE AZ. 333°



**MAGNETOMETER INSTRUMENT**  
 TYPE: EDA-PPM-300  
 Readings in Gammas:  $\begin{cases} 271 \\ 362 \\ 343 \end{cases}$   
 Base:  
 Profile:  
 Contour Interval: Every 25 gammas to 500 gammas  
 Every 100 gammas thereafter

OTHER INFORMATION	
SEE DRWG. NO.	TYPE
SO.3398(2) SO.3398B	MAG. H.L.E.M., CLAIMS



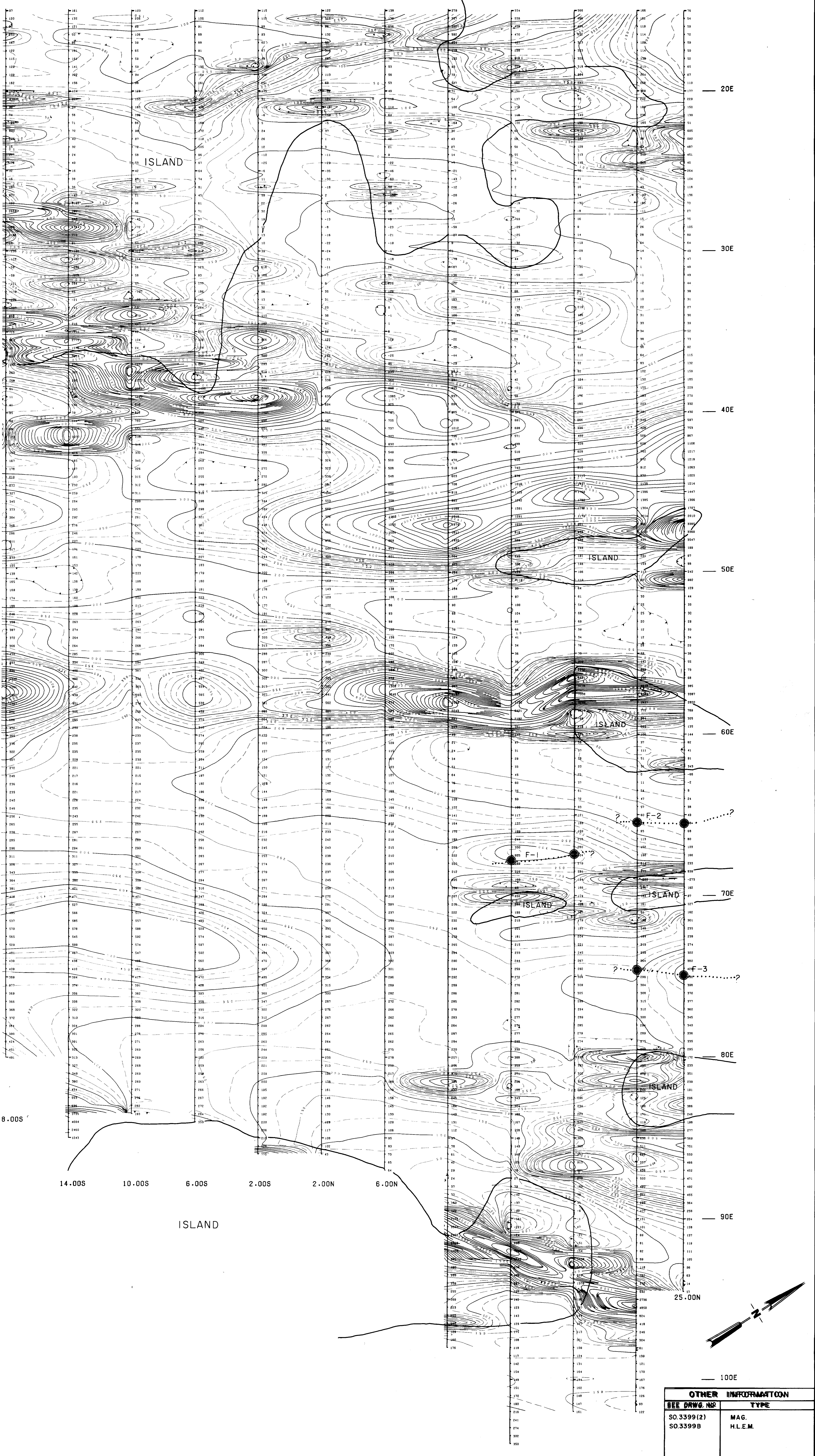
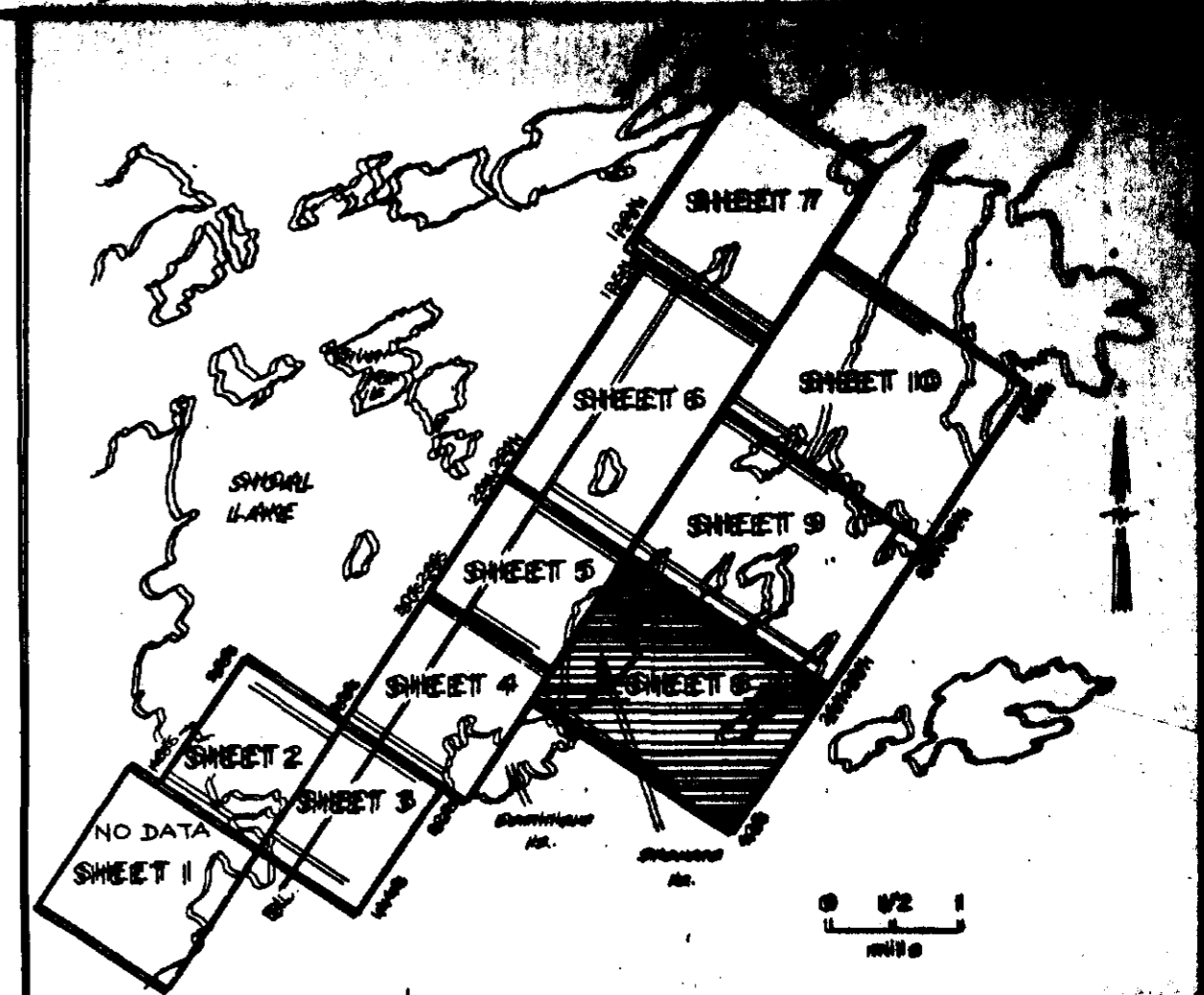
**SELCO INC. EXPLORATION**

**SHOAL LAKE PROJECT**  
**PROPERTY I**  
**MAIN GRID - MAG. SURVEY**  
**CONTOUR VALUES**  
 (SHEET 7 of 10) 25408

Checked by: M.C. Date: Mar-12  
 Drawn by: D. J. Date: May 1964  
 Project No: SO.3398(2)

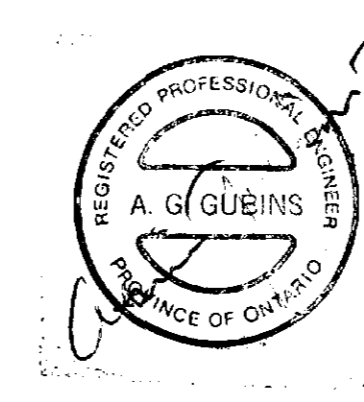
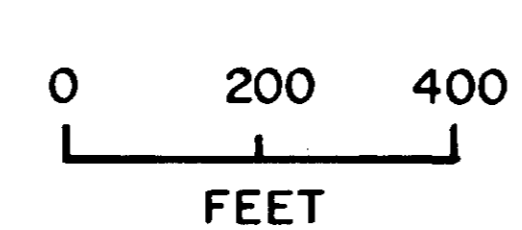






OTHER INFORMATION	
SEE DRWG. NO.	TYPE
S0.3399(2)	MAG.
S0.3399B	H.L.E.M.

**MAGNETOMETER INSTRUMENT**  
 TYPE: EDA - PPM-300  
 Readings in Gammas: 6.26  
 Base: 9795  
 Profile: 14994  
 Contour Interval: Every 25 gammas to 500 gammas  
 Every 100 gammas to 2500 gammas  
 Every 500 gammas thereafter



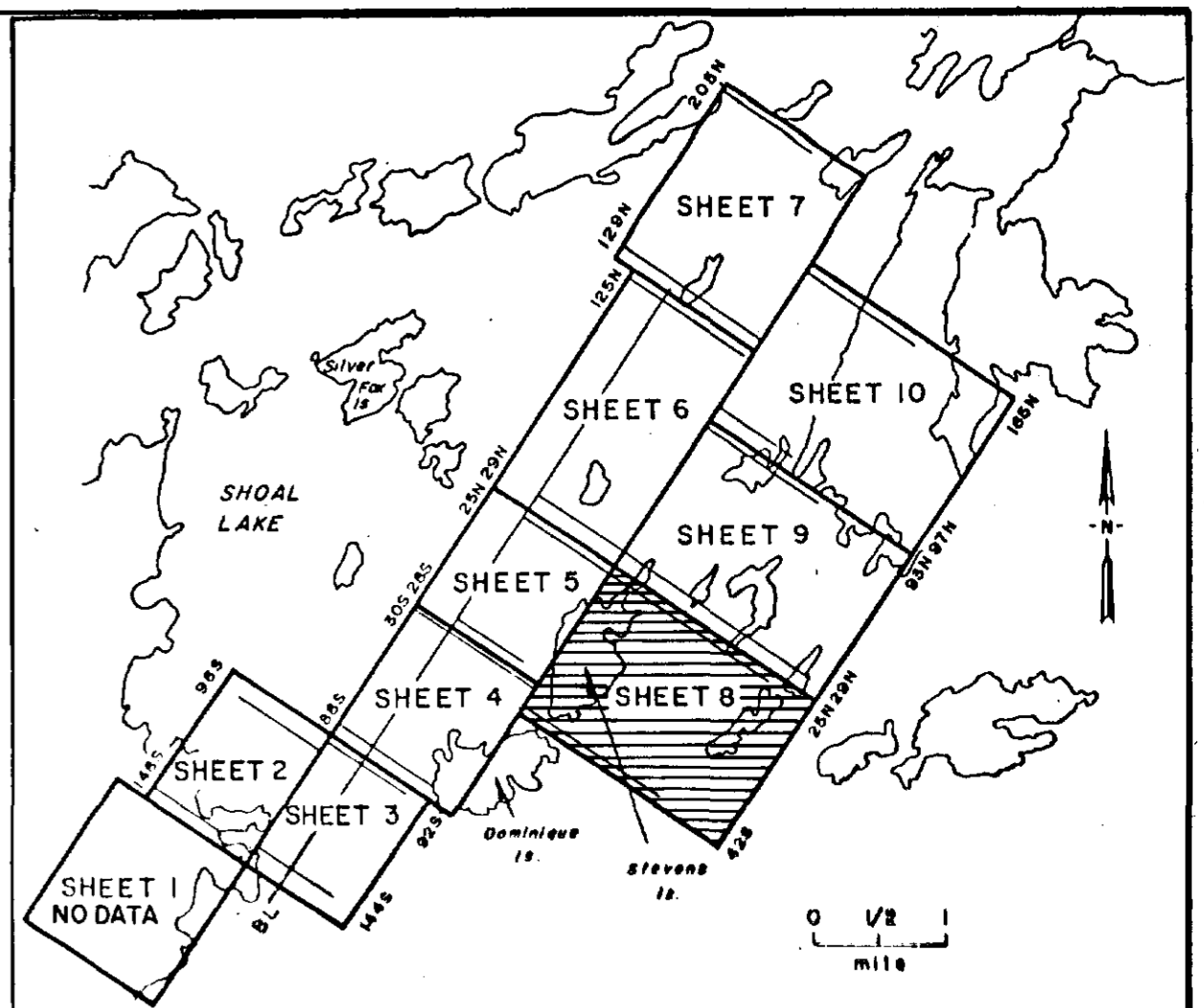
**SELCO INC.** EXPLORATION

**SHOAL LAKE PROJECT**  
 PROPERTY 1  
 MAIN GRID - MAG. SURVEY  
 CONTOUR VALUES

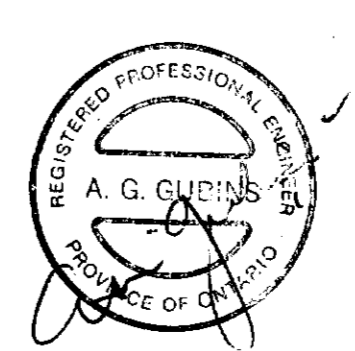
(SHEET 8 of 10) 25408

DRAWN BY: M.C.	DATE: 22nd Mar '62	R.T.S.
TRACED BY: Daley	DATE: May 1962	PLM

**S0.3399(2)**



**ELECTROMAGNETIC INSTRUMENT**  
 TYPE: APEX MAX-MIN II  
 HORIZONTAL LOOP (Percent of Primary Field)  
 Frequency: 444 Hz  
 Cable Length: 400'  
 In Phase: Out of Phase:   
 Conductor Width:   
 Profile Scale: 1" = 20'



**SELCO INC.** EXPLORATION

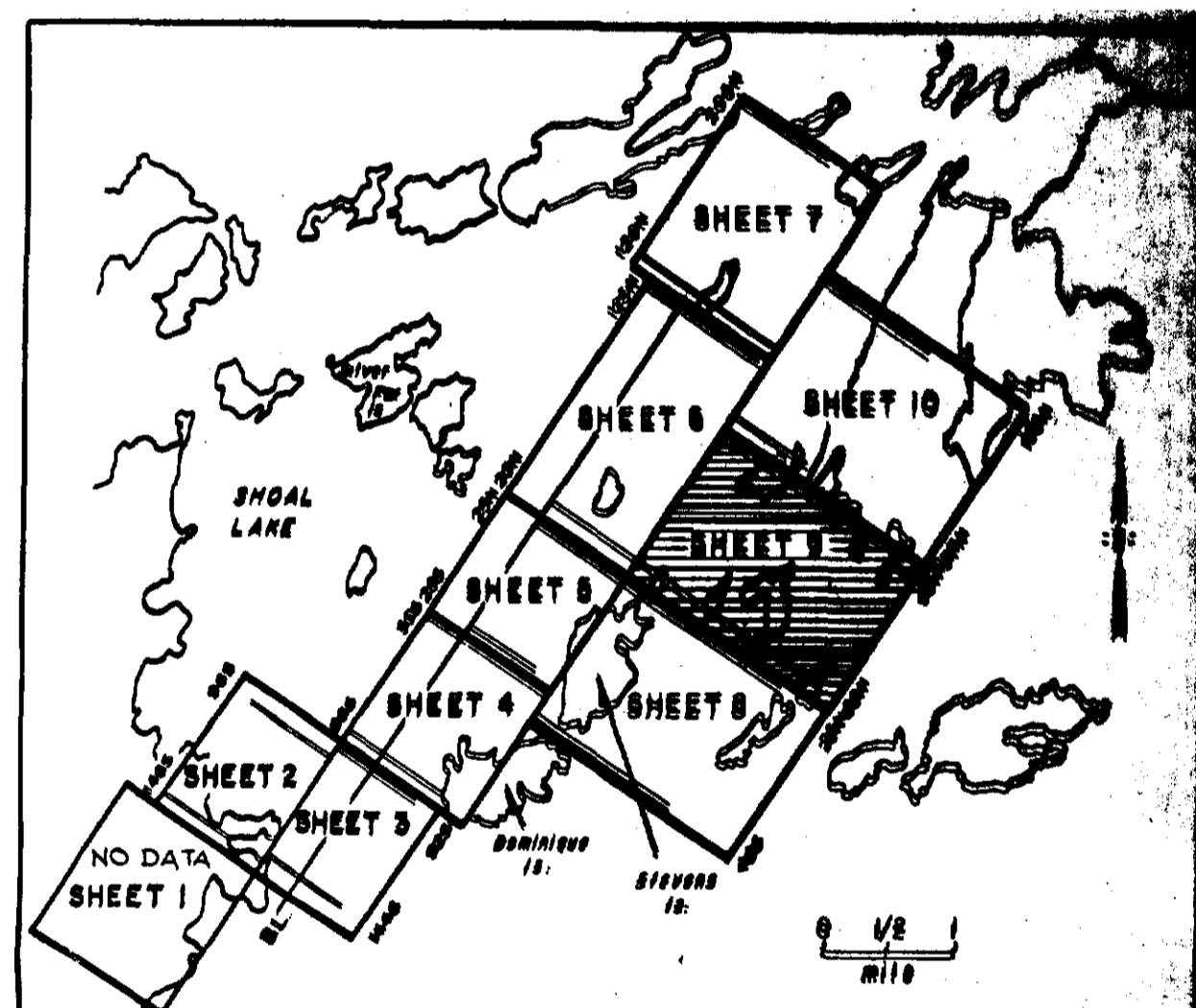
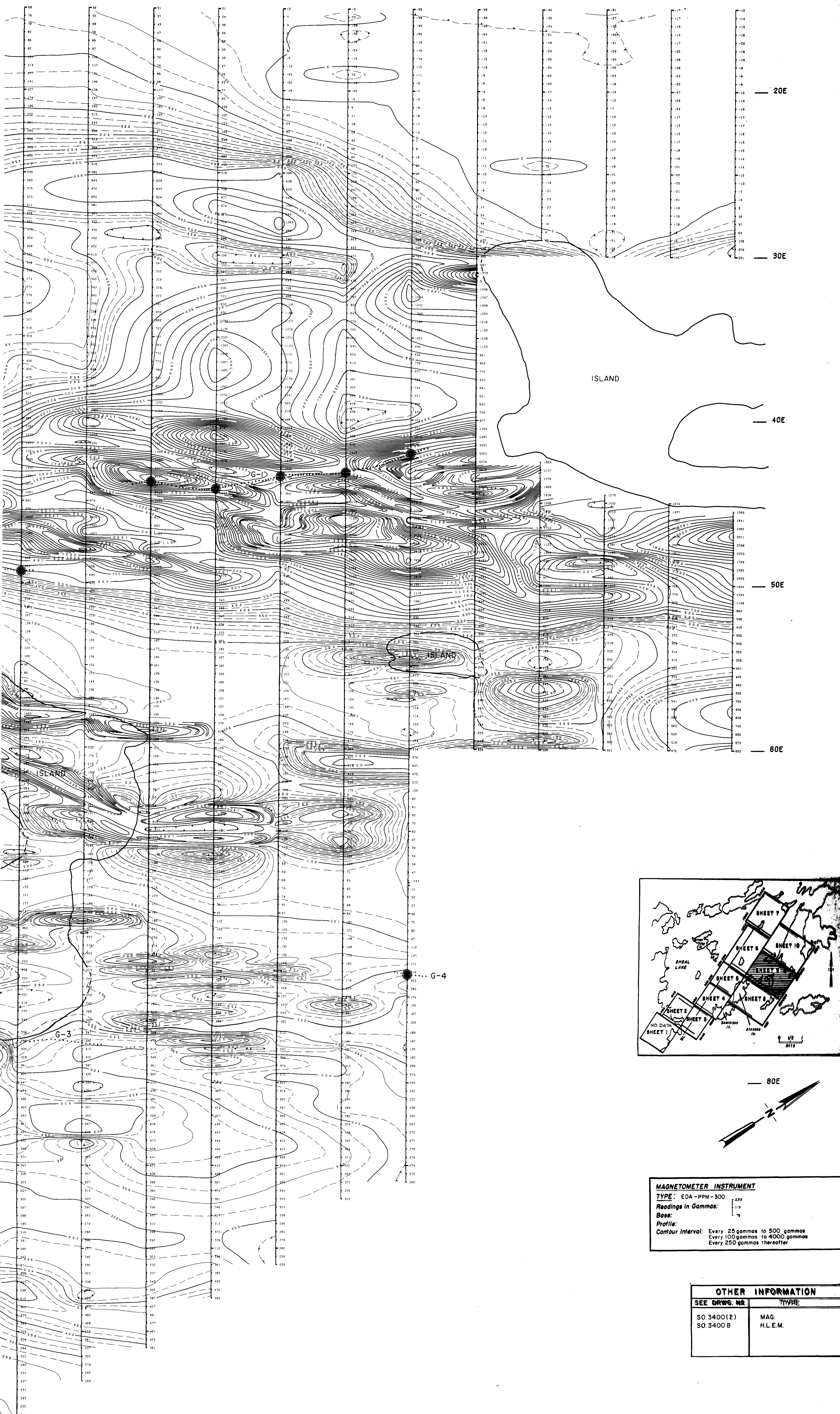
**SHOAL LAKE PROJECT**  
 PROPERTY 1  
 MAIN GRID - H.L.E.M. SURVEY  
 (SHEET 8 of 10) 23408

SEE DRWG. NO.	TYPE
S0.3399(1)	MAG.
S0.3399(2)	MAG.

0 200 400 FEET

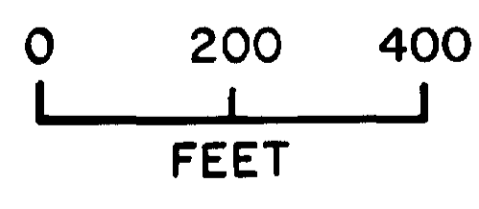
DRAWN BY	DATE	N.T.S.	PLAN
M.C.	Jan 82, Msr 82		
TRACED BY	DATE		
Dataplot J.L.	Apr 1982		S0.3399B

49.00N 53.00N 57.00N 61.00N 65.00N 69.00N 73.00N 77.00N 81.00N 85.00N 89.00N 93.00N



**MAGNETOMETER INSTRUMENT**  
 TYPE: EDA-PPM-300  
 Readings in Gammas: 233  
 Base: 115  
 Profile: 79  
 Contour Interval: Every 25 gammas to 500 gammas  
 Every 100 gammas to 4000 gammas  
 Every 250 gammas thereafter

OTHER INFORMATION	
SEE DRWG. NO.	TYPE
SO 3400(2)	MAG.
SO 3400 B	H.L.E.M.



**SELCO INC.** EXPLORATION

**SHOAL LAKE PROJECT**  
 PROPERTY I  
 MAIN GRID - MAG. SURVEY  
 CONTOUR VALUES  
 (SHEET 9 of 10) 15408

DRAWN BY: MG	DATE: 30-Mar-82	N.T.S.	PLAN
TRACED BY: Detlof	DATE: May 1982		<b>SO 3400(2)</b>

