



52G14SW9162 83.2748 PRESS LAKE

010

SCURRY - RAINBOW OIL LIMITED
BRIAR COURT OPTION
ELECTROMAGNETIC AND MAGNETIC
SURVEYS
WATCOMB -- CLARKDON AREA
NORTH-WESTERN ONTARIO

63.2748

SCURRY-RAINBOW OIL LIMITED
ELECTROMAGNETIC AND MAGNETIC
SURVEY

OF

Claims ^{Pa} 45970 to 45984 incl.

46100 to 46111 incl.

47099 to 47108 incl.

46365 to 46366 incl.

47360

221017 to 221020 incl.

BRIAR COURT OPTION
WATCOMB--CLARKDON AREA
NORTH-WESTERN ONTARIO

Long. $91^{\circ} 12' E$ -- $91^{\circ} 15' 30'' W$

Lat. $49^{\circ} 48' 20'' N$ -- $49^{\circ} 49' 35'' N$

N. T. S. 52 G/11

AUTOPOSITIVES STORED
SEPERATELY

SW. Pt STURGEON LAKE M-2200

SUMMARY

During the period November 9, 1969 to January 19, 1970 we completed an electromagnetic and magnetic survey over 47 contiguous claims in the Watcomb-Clarkdon area, Ontario (See listing Page 1)

Several conductive zones were outlined by the electromagnetic survey. Some of these have been recommended for diamond drilling.

The magnetic survey indicated a general background intensity of about 18--2000 gammas; that has been intruded by NE and EW dykes or plugs of varying intensities from 2000 to 6000 gammas. These have been interpreted as meta-gabbros or diorites. The magnetic "low" areas that flank the intrusives may be interpreted as NE--SW shear zones especially in the area of Block "D" & "H" line 24 +00 S to line 8 +00 north on the detailed grid.

LOCATION AND ACCESS

The property is located 2 miles southwest of Sturgeon Lake, Patricia Mining Division, District of Kenora. The claims are just west of Ontario Highway 599, and about half way between Ignace and Savant Lake.

Access to the property is readily afforded by an abandoned railway spur line that cuts northeast through the property and crosses the highway some 3/4 mile beyond the north boundary of the group. A branch of the Canadian National Railway crosses the country enroute from Fort William to Sioux Lookout and Winnipeg, some 3 miles southwest of the property.

GENERAL GEOLOGY (See O. D. M. --Watcomb--Clarkdon Area)

The consolidated rocks underlying the property are all Pre-Cambrian in age. The rocks consist of sheared meta-volcanics intruded by meta-gabbroic and meta-dioritic stocks and irregular masses.

In the western portion, the meta-volcanics pass through a xenolithic-rich granite to the young "core area" of massive medium-grained granite.

ECONOMIC GEOLOGY

(Re. Steep-rock Mining - 1956)

- A. A zone of copper molybdenum mineralization in quartz-veins cutting the granites some 1200 feet south of the North-East end of Shanty Lake, has been exposed by trenching. Analysis of 84 samples ran 0.19 MoS₂ and .03 Cu.
- B. A showing of copper mineralization located on claim 221018 was recently exposed by stripping and trenching. Some 80 feet of quartz bearing shear zone in gabbro about 3 feet wide has been exposed striking Northeast and dipping vertical. The shear is mineralized with disseminated chalcopyrite. On the North edge of the shear there is a discontinuous zone of massive chalcopyrite in widths up to 30 inches. Grab samples from this zone assayed from 4--11% Cu.
- C. Disseminated chalcopyrite has been noted in a shear zone approximately 1 1/2 miles North of Pike Lake within the claim block.

LINE CUTTING

85.5 miles of grid lines @ 200' intervals have been established in the claim block.

This includes a detailed portion on block "D" and "H" of the master grid plan.

The work was performed by -

G. Potter, Contractor
Kirkland Lake, Ontario

and additional line cutting by Scurry-Rainbow personnel.

METHOD AND INTERPRETATION OF ELECTROMAGNETIC RESULTS

The surveys were carried out with units manufactured by Crone Geophysics of Toronto, Ontario

- (1) J. E. M.
- (2) W. E. M.

The J. E. M. unit is a battery powered unit employing two coils and operating at frequencies of 1, 800 C. P. S. and 480 C. P. S. This method is independent of receiver to transmitter alignment, distance of separation or elevation differences even on extremely rough terrain. Electromagnetic readings were taken every 100 feet along pre-cut lines spaced 200 feet apart. In areas of recorded conductivity readings were taken every 50 feet.

High frequency readings were plotted on the right of the grid line and low frequency readings were plotted to the left of the line. Conductivity is measured from the ratio of maximum resultant angles of the high and low frequency employed.

The shape and position of the conductor can be measured from a profile of the J. E. M. results.

V. E. M. - (Vertical loop E. M.)

The V. E. M. unit is especially designed for deep penetration through conductive overburden and for detailing the J. E. M. survey for strike and Dip definition - utilizing a different coupling system.

This unit operates on 2 frequencies -

Low frequency - 480 C. P. S.

High frequency - 1, 800 C. P. S.

at a maximum range of 2, 000 feet and is powered by a 12 volt battery system.

Stations are read at the same interval as in the J. E. M. survey.

METHOD AND INTERPRETATION OF MAGNETOMETER RESULTS

The magnetic survey was carried out and with a M-700 magnetometer which is a vertical field magnetometer employing the fluxgate system.

The instrument is self-levelling and a self-cancelling circuit permits rapid, accurate measurements of the earth's magnetic field from a meter without adjustments or calculations. The instrument can be adjusted electronically to measure vertical fields from plus 100, 000 gammas to minus 100, 000 gammas. Hence there is no need for auxilliary magnets or complicated latitude adjustments.

Magnetic readings were taken every 100 feet, and 50 foot intervals where required on lines spaced 200 feet apart. Base-line stations were recorded and used throughout the survey for diurnal correction. The magnetics are expressed by magnetic contours on the accompanying maps.

RESULTS AND RECOMMENDATIONS

Several E. M. anomalies, some with magnetic correlation have been defined by the surveys.

The most significant E. M. anomaly is located on parts of block "D" and "H" of the master grid plan. The preliminary survey on the north-south grid system indicated a N--E and S--W trending zone - a detailed grid system was cut from a base line with a bearing of N. 50° E to cover the anomalous area - (See plate 1 -- Detailed grid map).

The detailed grid system was surveyed with the J. E. M. and the V. E. M. units. These surveys outlined a conductive zone some 1200 feet in length-with good conductivity and excellent ratios, indicating a narrow zone of near massive sulphides coming to surface.

The strike of the conductor maintained a N 50° bearing but the dip of the conductor varies from approximately near vertical to 30° - to the south-east. Two weak zones north-west and south-east of the main conductor were indicated by the V. E. M. and J. E. M. units. The varying amplitudes of the J. E. M. curves probably indicates increased or decreasing amounts of overburden material along strike. Weaker anomalies on strike some 4--500 feet from the main zone suggest that the zone is continuous over a greater strike length than is indicated.

Weak J. E. M. anomalies and V. E. M. anomalies are outlined on block "C". These occur in or near a magnetic high pattern on the south contact of the interpreted rhyolites mapped by the O. D. M. (plate III).

A small J. E. M. anomaly and a V. E. M. is indicated on the extreme north-west corner of the claim block. Weak E. M. responses are also noted on the south part of block "G". A total of 81.7 miles of E. M. and 75.3 miles of magnetometer were completed on the survey.

RECOMMENDATIONS

Diamond drilling of the detailed zone (plate 1) is recommended. This zone should be tested with a series of 4 foot holes (minimum) from 2 +00 N to 8 +00 south.

Hole #1

Location - Line 0 +00 - 2 +00 easterly.

Bearing - N 40° W (along line)

Dip - -50°

Depth - ± 500 feet

Hole #2

Location - Line 2 +00N - 1 +50 East

Bearing N -40°W (along line)

Dip - -40°

Depth - ± 450 feet

Hole #3

Location - Line 4 +00 South - 2 +50 East

Bearing - N -40° W along line

Dip - -45°

Depth - ± 400'

Hole #4

Location - Line 8 +00 South - 3 +50 East

Bearing - N -40° W on line

Dip - -50°

Depth - ± 500'

Drilling of the weak E. M. zones with magnetic correlation on block "C" is recommended to test the favourable Rhyolite contact.

The copper-molybdenum showing area should be examined for possible drill hole targets. This could be done with a limited induced polarization survey - in the trenched area. The J. E. M. survey indicated only minor conductivity possibly due to the highly disseminated type of mineralization.

Several isolated magnetic zones with minor conductivity have been recorded; these areas (selected) should be investigated with diamond drilling.

SCURRY - RAINBOW OIL LIMITED



D. R. DEAL.
Senior Engineer - Geophysical
Mining Division

/ad

APPENDIX

Personnel Employed on Survey

WORK (BREAK-DOWN) SUBMITTED TO ONTARIO GOVERNMENT -

BRIAR COURT/STURGEON LAKE

Line-Cutting (additional)

Douglas Moore - Calgary, Alberta	Nov. 9--29, 1969	20 days
George Patterson, La Ronge, Sask.	Nov. 9--29, 1969 Jan. 12--19, 1970	20 days

Geophysical Surveys

Electromagnetic - Crone -	Horizontal-Loop
Crone -	Vertical-Loop

Employees:

J. K. Lytle - 539 - 8th Avenue S. W. Calgary, Alberta	Nov. 9--Dec. 15/69 37 x 7	259 days
	Jan. 8--19, 1970 12 x 7	84 days
Ivan Loranger - 539 - 8 Ave. S. W. Calgary, Alberta	Nov. 9--Dec. 15/69 37 x 7	259 days
	Jan. 8--19, 1970 12 x 7	84 days
G. Patterson, La Ronge, Sask.	Dec. 1--15, 1969	105 days

Magnetic Survey

Type Instrument - McPhar Fluxgate

Lawrence Kearney, 539 - 8 Ave. S. W. Calgary, Alberta	Nov. 10--Dec. 14/69 35 x 7	245 days
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Supervisor - Project - (Geophysical)

D. Doal, 153 Holland St. N. W.
Calgary, Alberta

Nov. 11--Jan 19/70
20 x 7

140 days

G. Potter, Contractor (Line-cutting)
Kirkland Lake, Ontario

(Work Breakdown submitted as of January 1969)

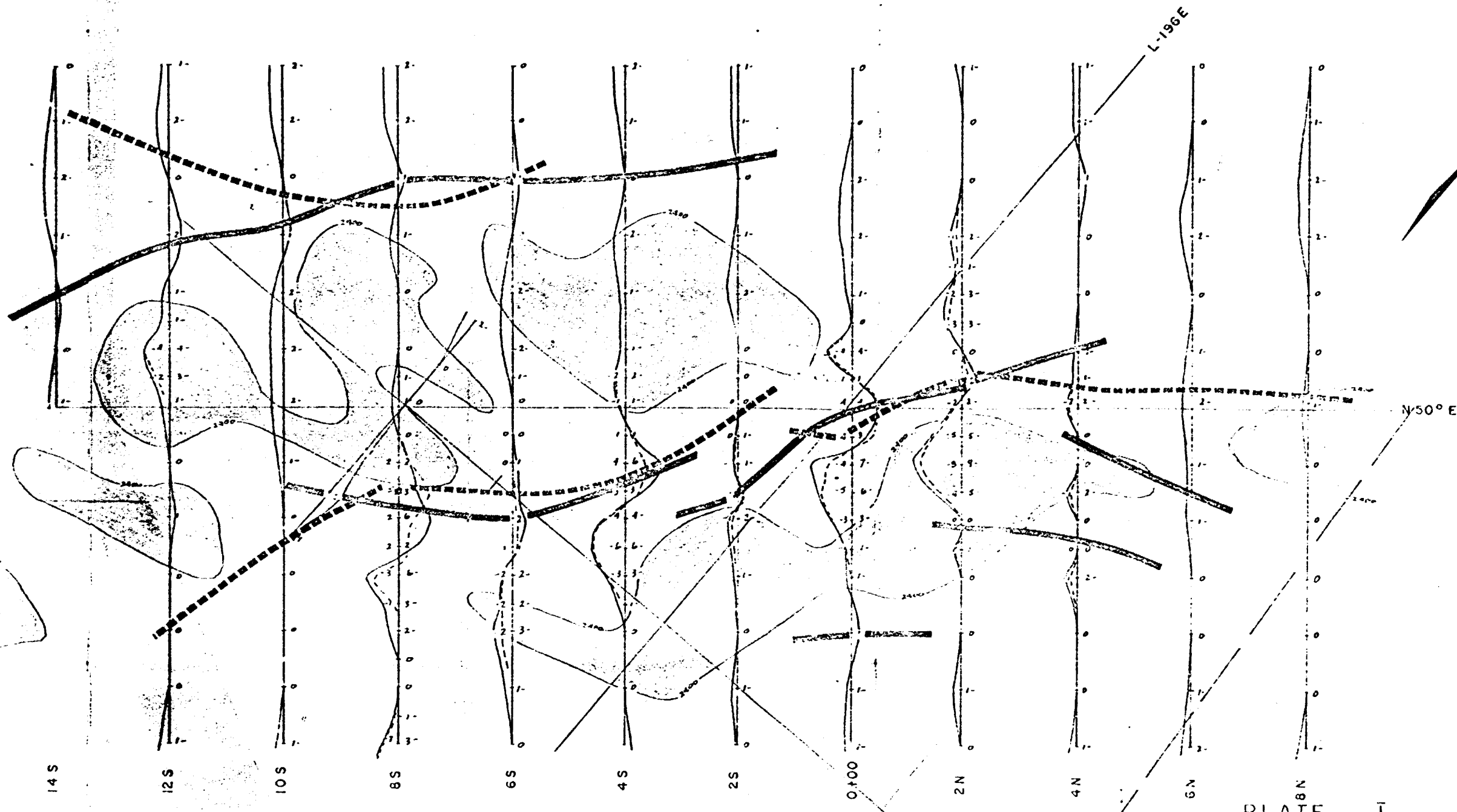


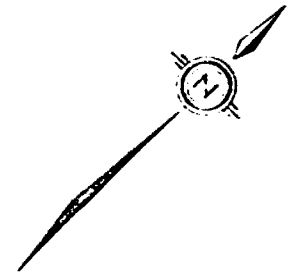
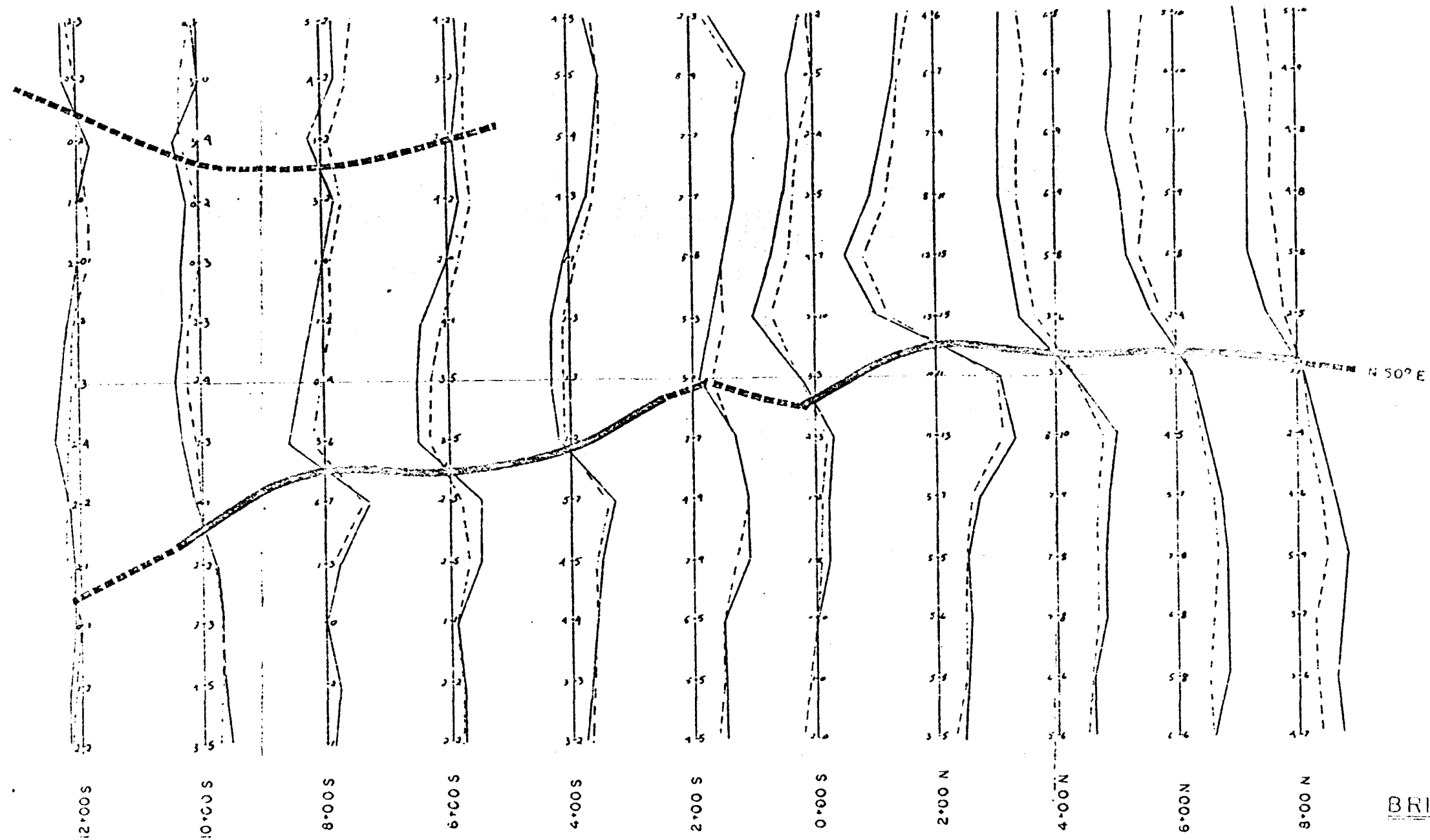
PLATE I

BRIAR COURT OPTION
 DETAILED --- MAG & J.E.M.

LEGEND

- AXIS OF VERTICAL LOOP CONDUCTOR
- AXIS OF HORIZONTAL LOOP CONDUCTOR
- ▨ MAGNETIC HIGH ABOVE +2400
- MAGNETIC LOW BELOW -2400

SCALE: 1" = 200'



OK.

PLATE II

BRIARCOURT OPTION

DETAILED - VERTICAL LOOP

SCALE 1" = 200'

1" = 20°

———— HIGH FREQUENCY

----- LOW FREQUENCY

----- CONDUCTOR AXIS

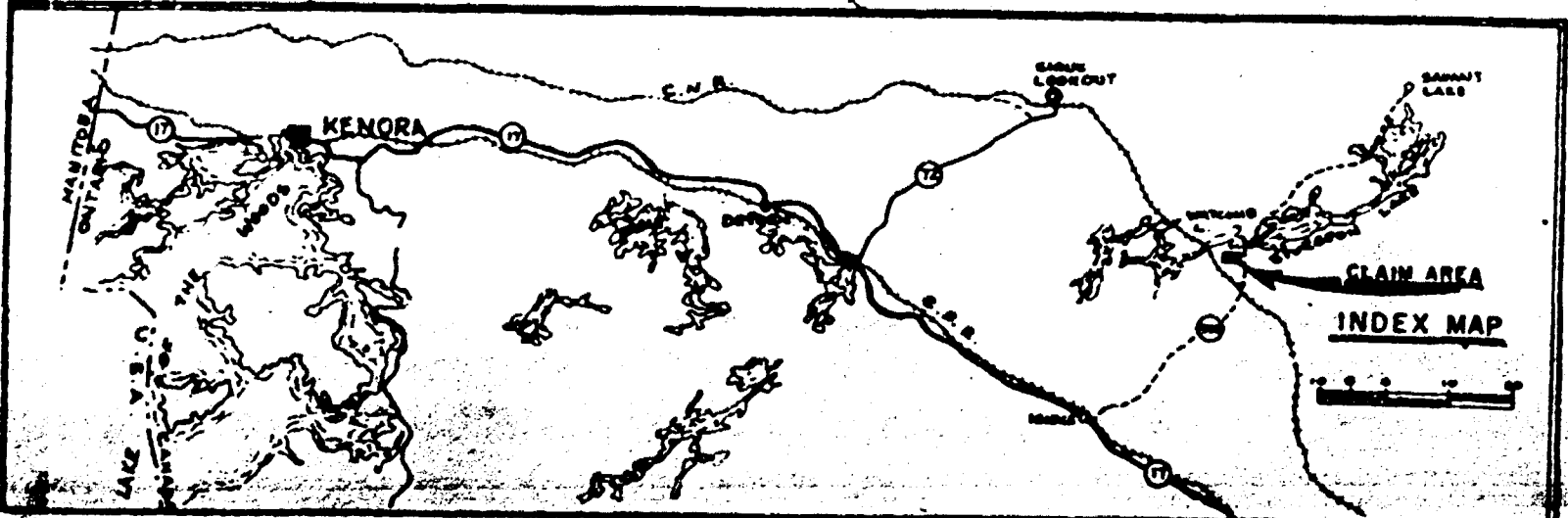
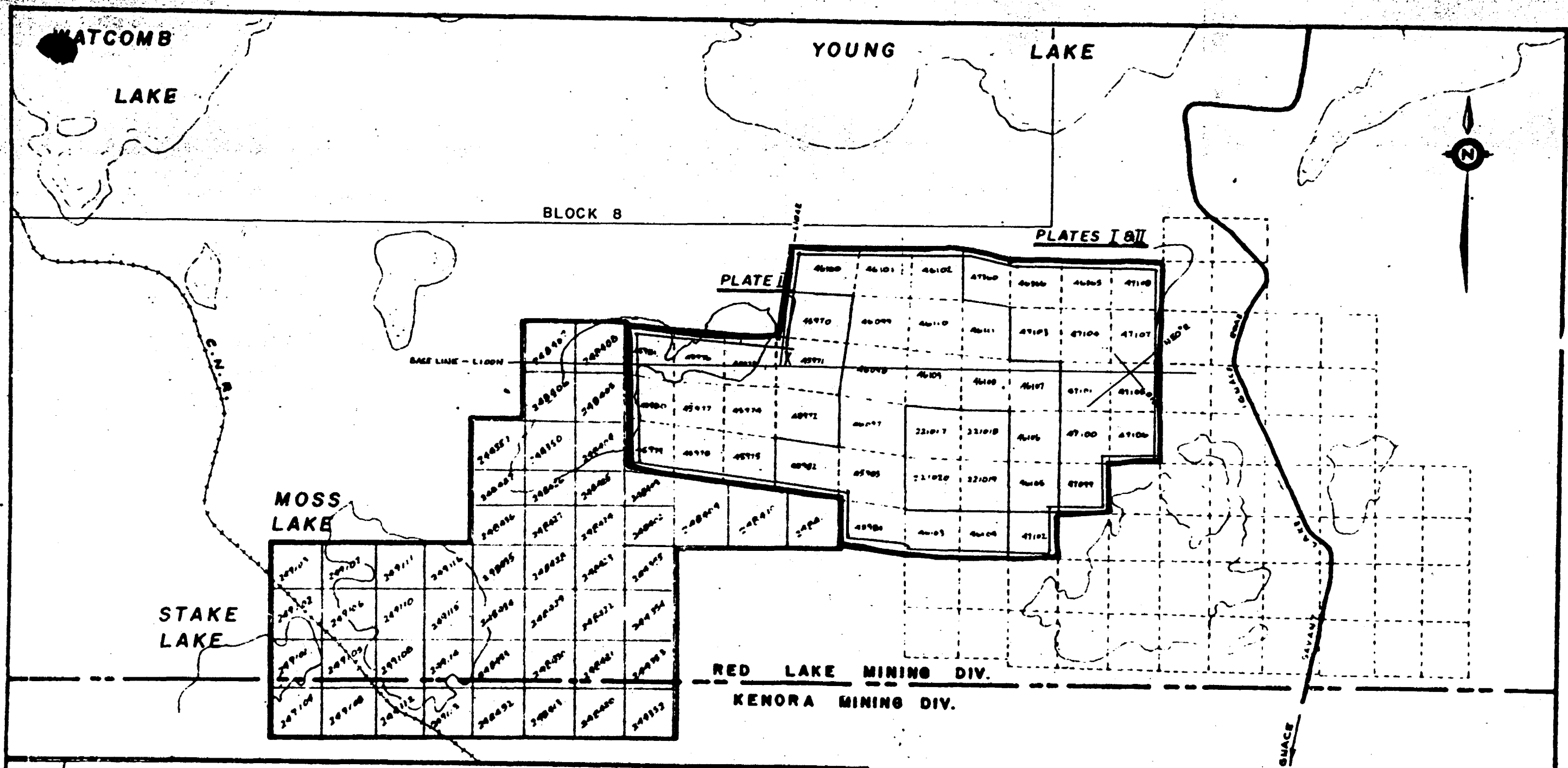




PLATE IV
BRIARCOURT OPTION
CLAIMS MAP

OPTION CLAIMS 
 SRO CLAIMS 

SCALE 1" = 1/2 MILE

10/2

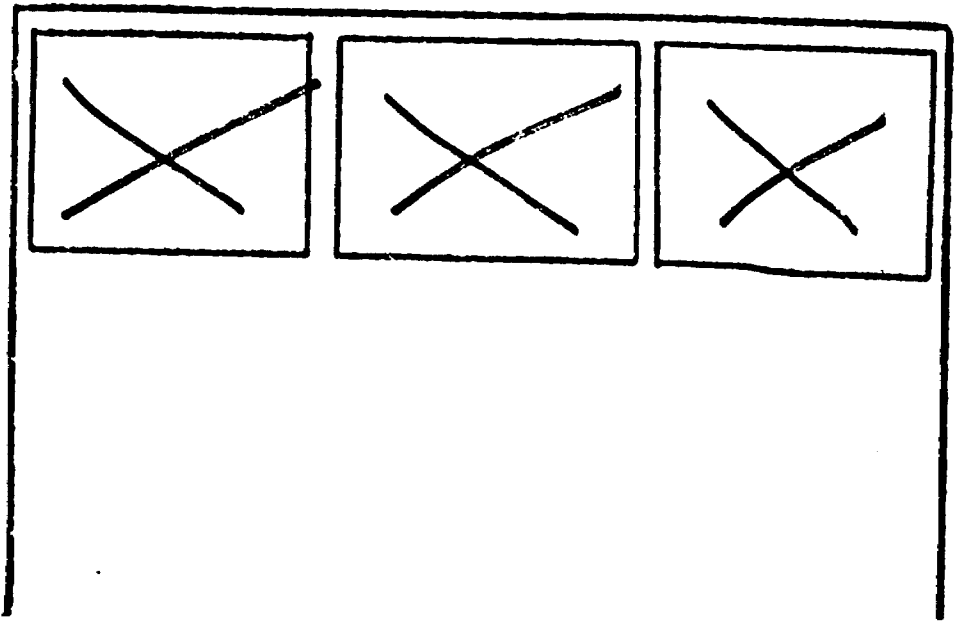


SEE ACCOMPANYING
MAP(S) IDENTIFIED AS
52G/14SW-0019-#1

----- #2

----- #3

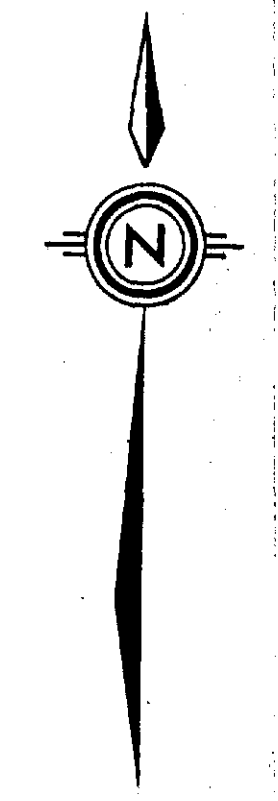
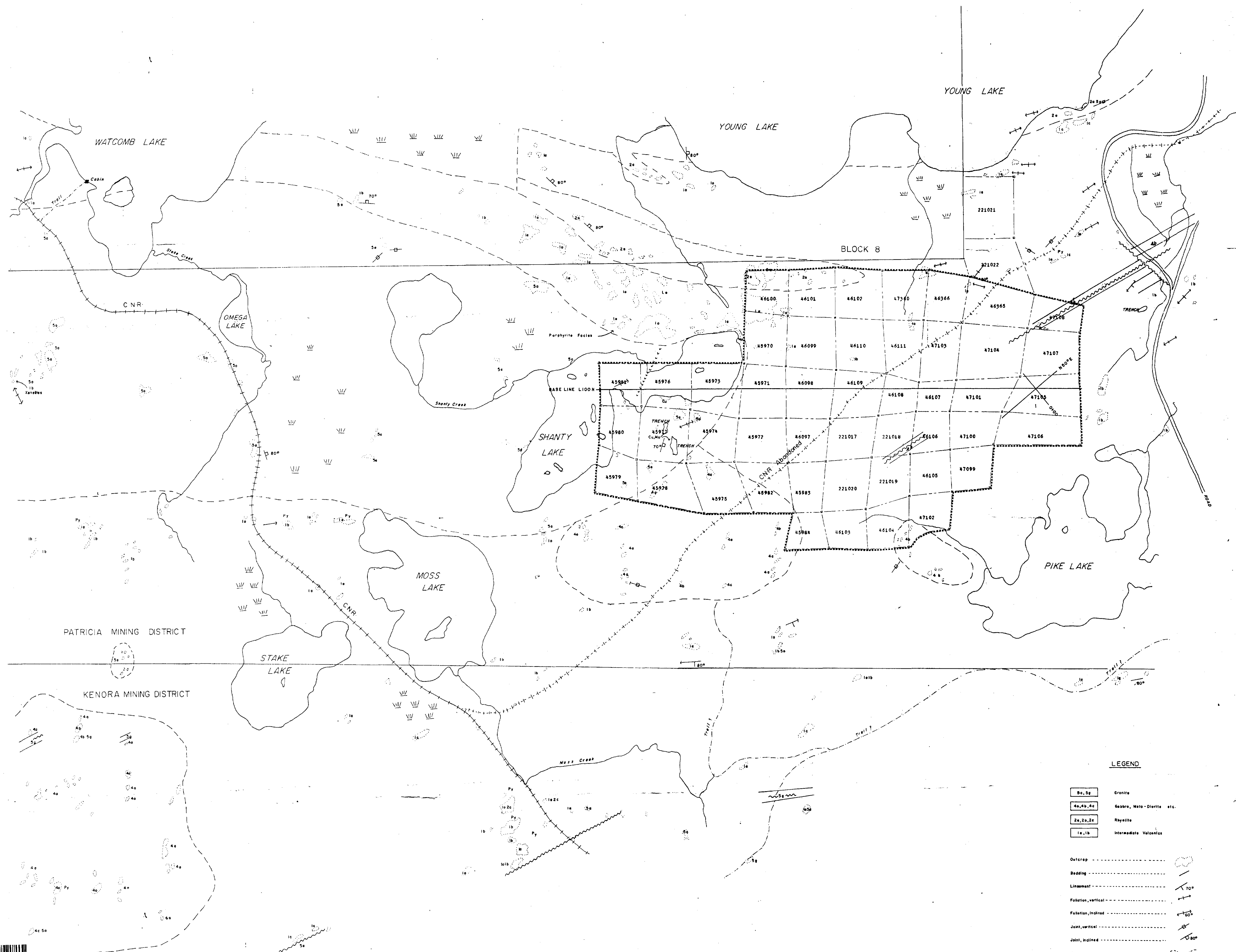
LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)



FOR ADDITIONAL
INFORMATION

SEE MAPS:

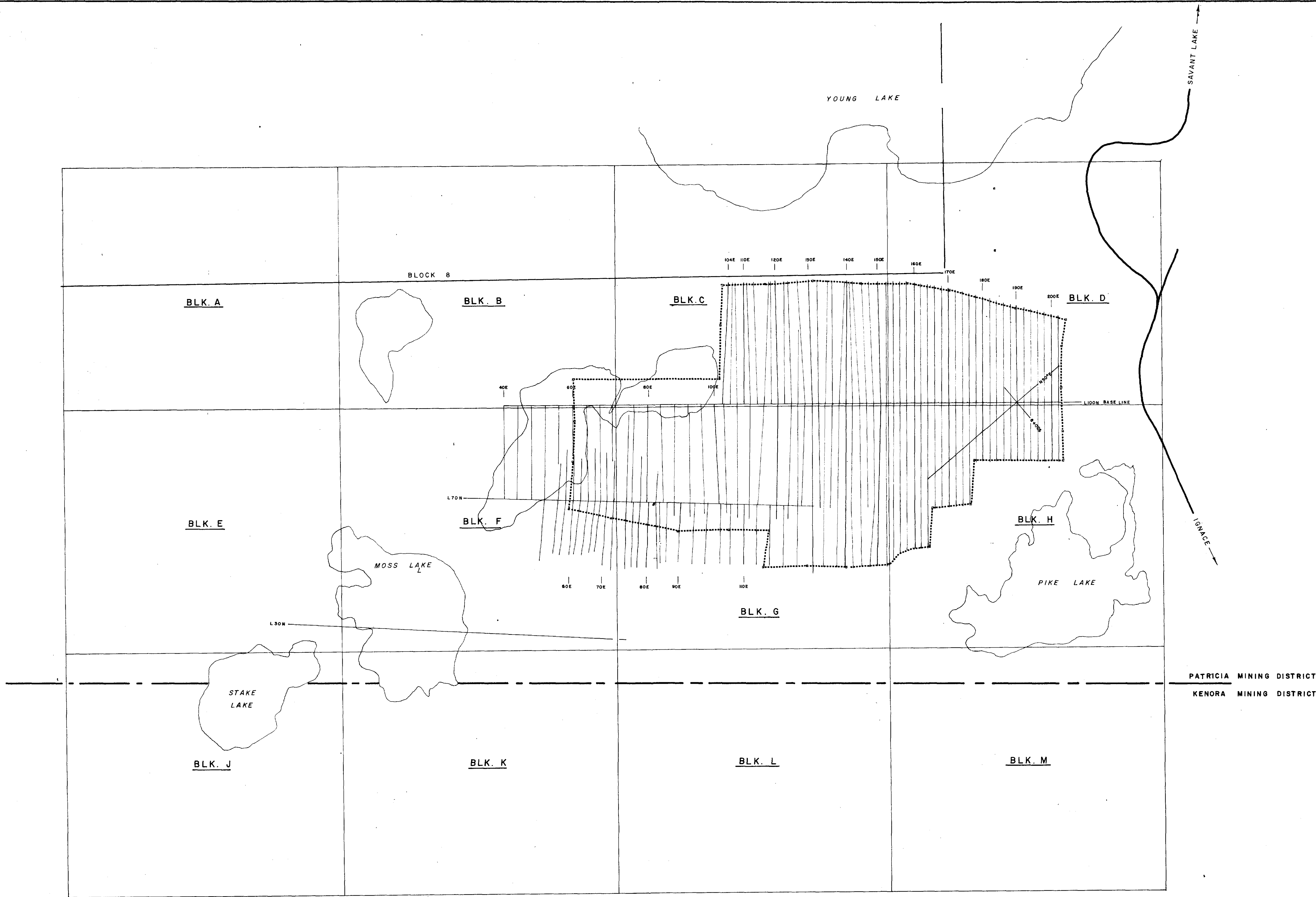
52G/14SW-0019 #4-#19



LEGEND

- 5a, 5b Granite
- 4a, 4b, 4c Gabbro, Mafic - Diorite etc.
- 2a, 2b, 2c Rhyolite
- 1a, 1b Intermediate Volcanics
- Outcrop
- Bedding
- Lineament
- Foliation, vertical
- Foliation, inclined
- Joint, vertical
- Joint, inclined
- Contact
- Fault

52G/145W-0019-#1

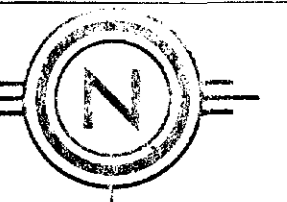


ASSESSMENT AREA

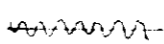
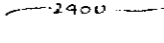




52G/14SW-0019-#2
 63.2748 *Auty*

DRAWN R.M.	SCALE 1" = 1320'	SCURRY-RAINBOW OIL LTD.	MASTER BLOCK PLAN
TRACED	DATE MAR. 1970		BRIARCOURT OPTION
APPROVED			STURGEON LAKE, ONT.
			FILE NO. STUR 2-6-2 130/0





LEGEND

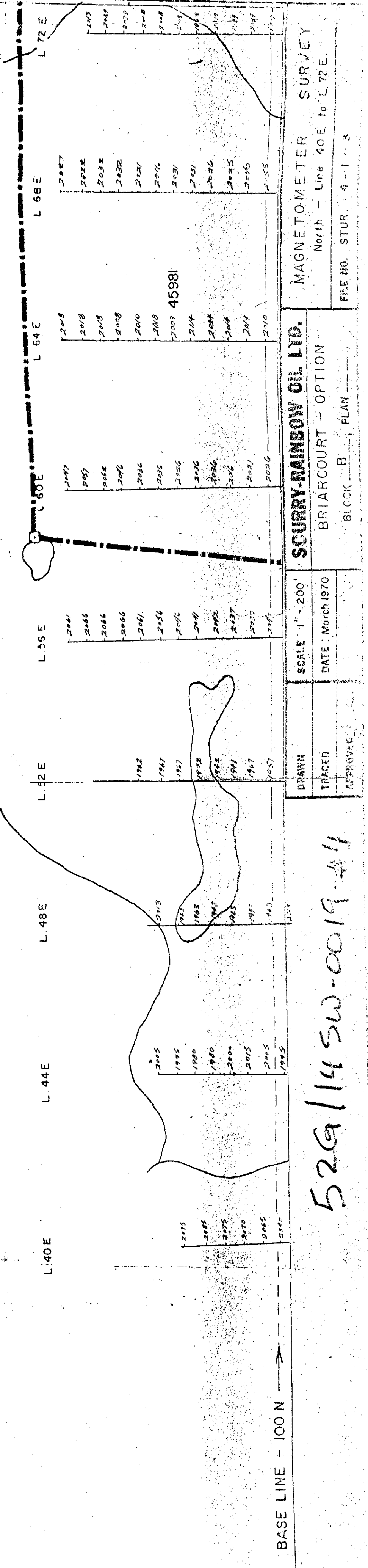
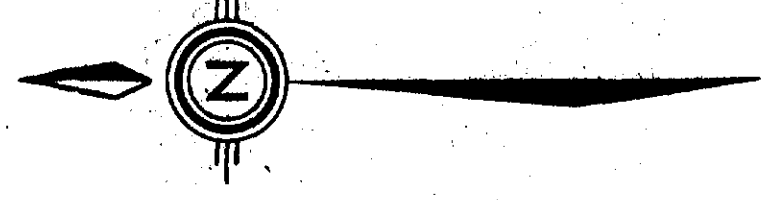
-  HORIZONTAL E.M. (WEAK NEGATIVE CONDUCTORS)
-  MAGNETIC HIGHS (+2400)
-  MAGNETIC HIGHS (2000 - 2400)
-  MAGNETIC LOWS (1300 - 1800)
-  AXIS VERTICAL LOOP CONDUCTOR (WEAK)
-  AXIS HORIZONTAL LOOP (E.M.) CONDUCTOR

52G/14SLD-0019#3

DRAWN R.M.	SCALE 1" = 200'	SCURRY-RAINBOW OIL LTD.	MAGNETOMETER SURV
TRACED	DATE JAN 1970	BRIARCOURT OPTION	WITH INDICATED CONDUCTO
APPROVED		KENORA DISTRICT, ONT	FILE NO. PLATE

63-2145



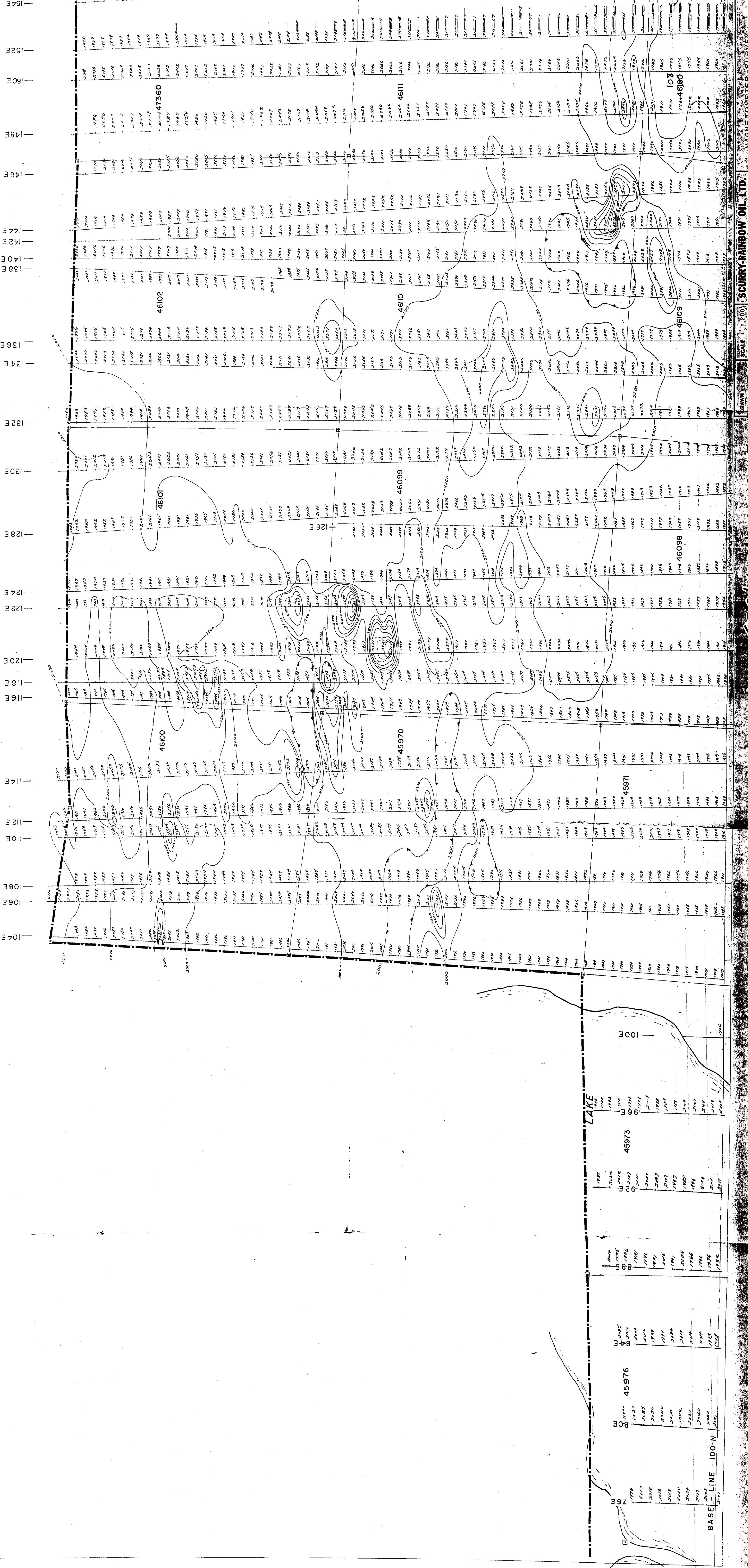
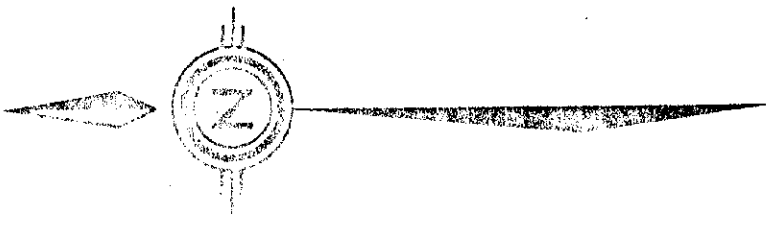


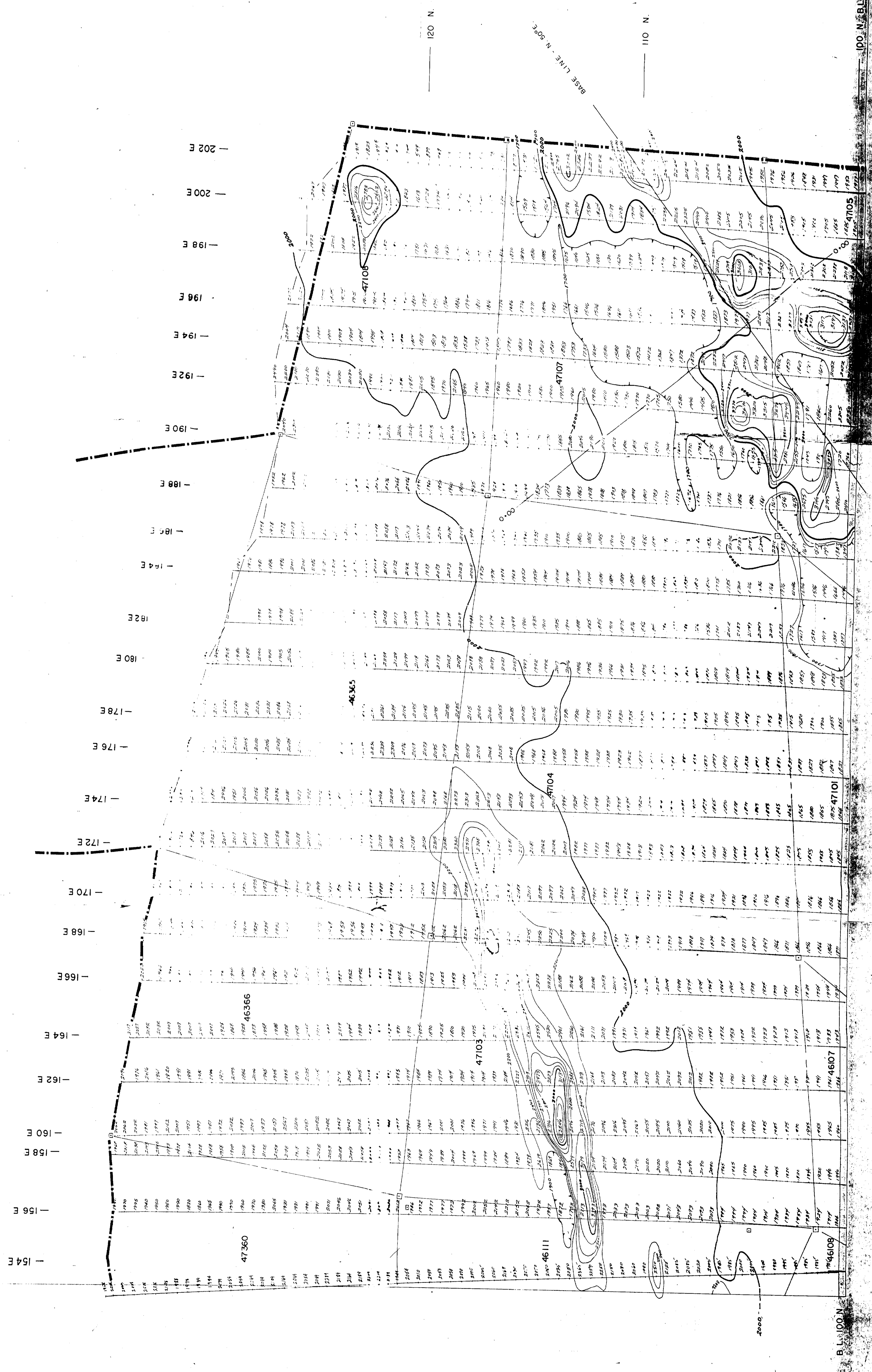
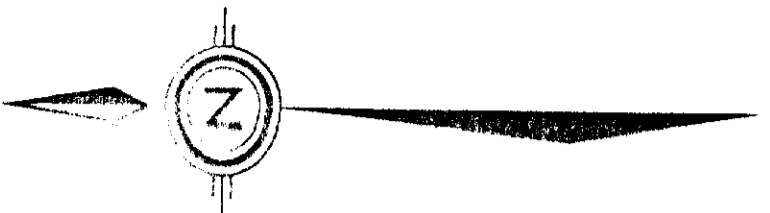
SCURRY-RAINBOW OIL LTD.
MAGNETOMETER SURVEY
BRIAR-COURT - OPTION
BLOCK - B, REAR

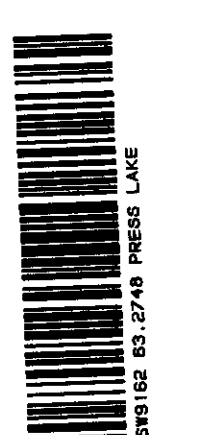
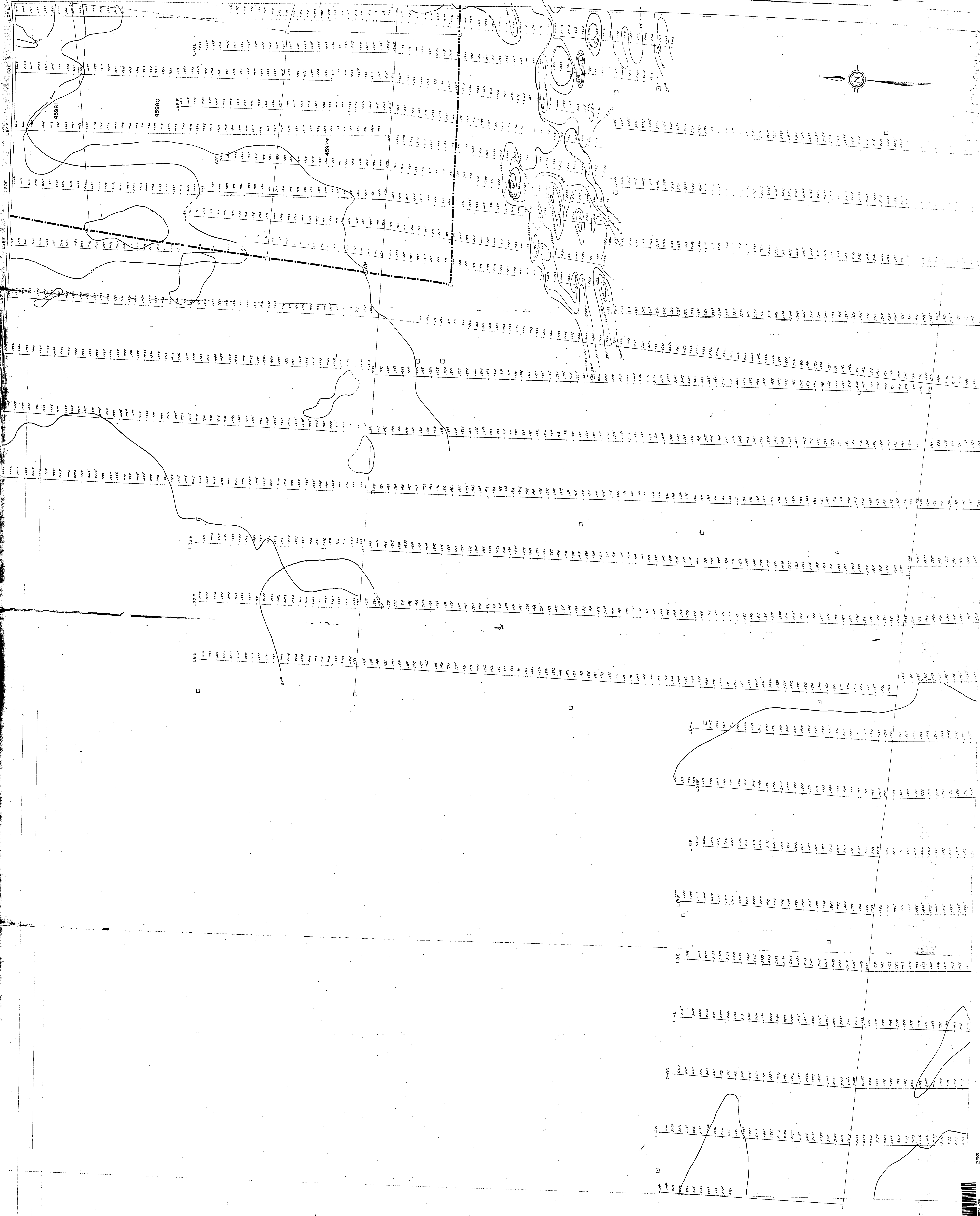
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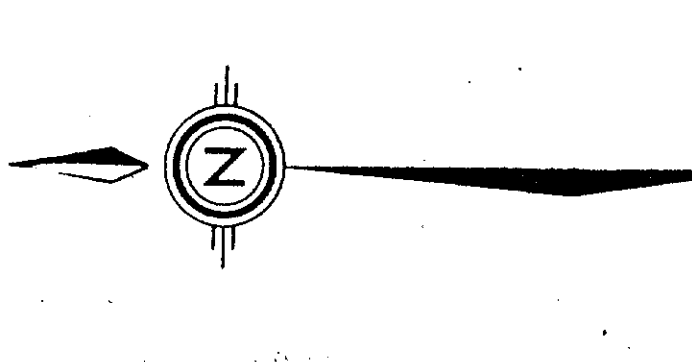
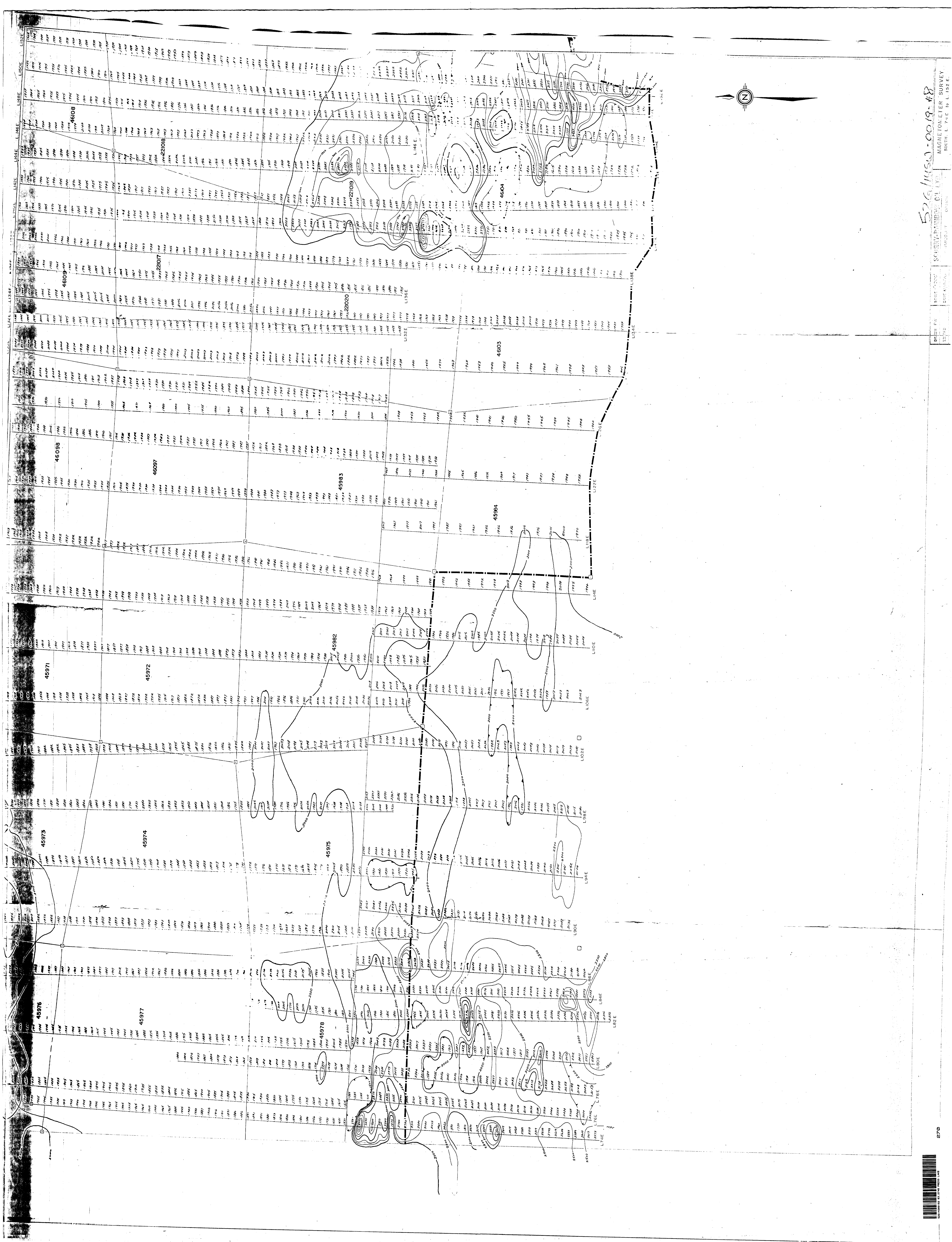
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529/14 SW-0019-44

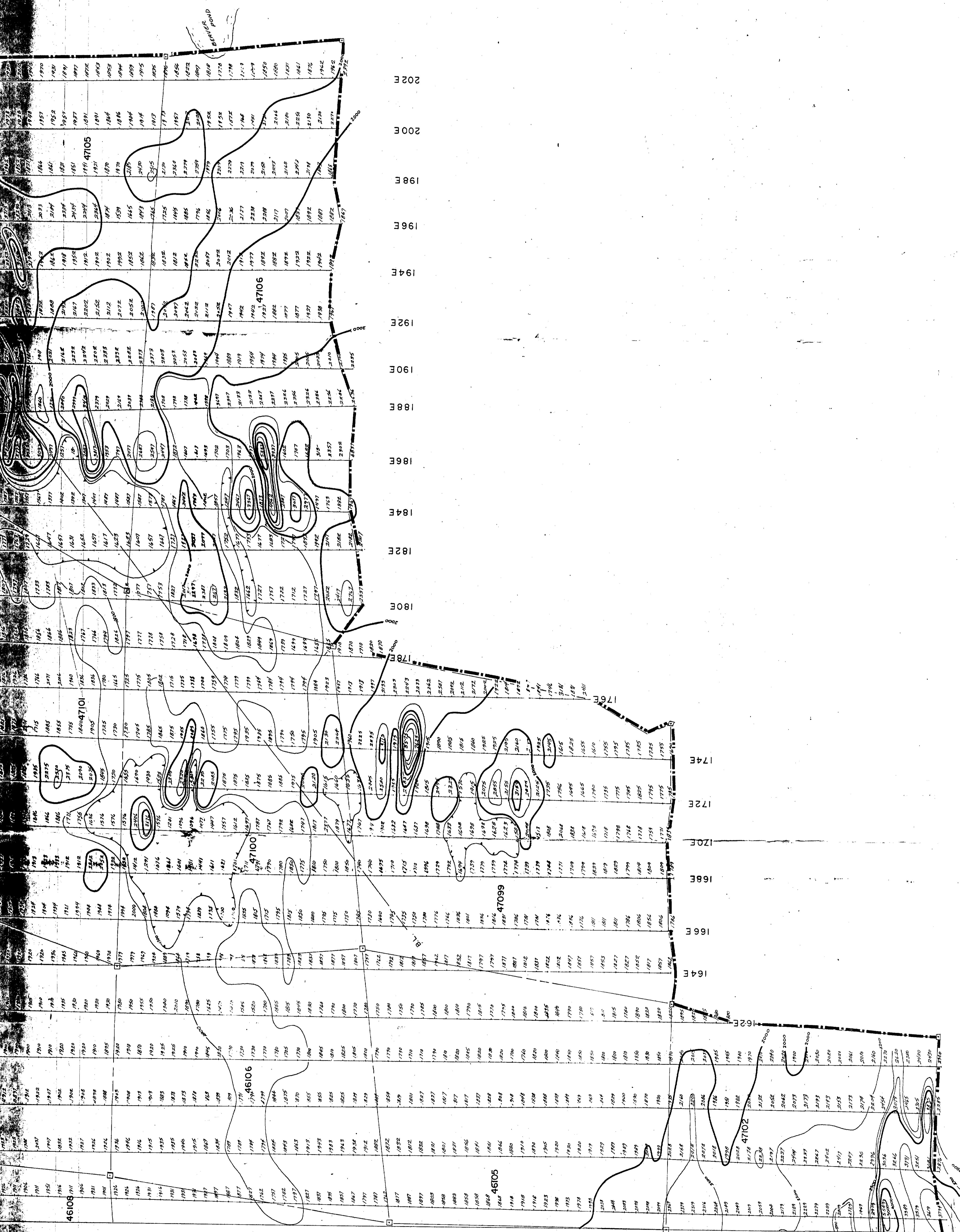






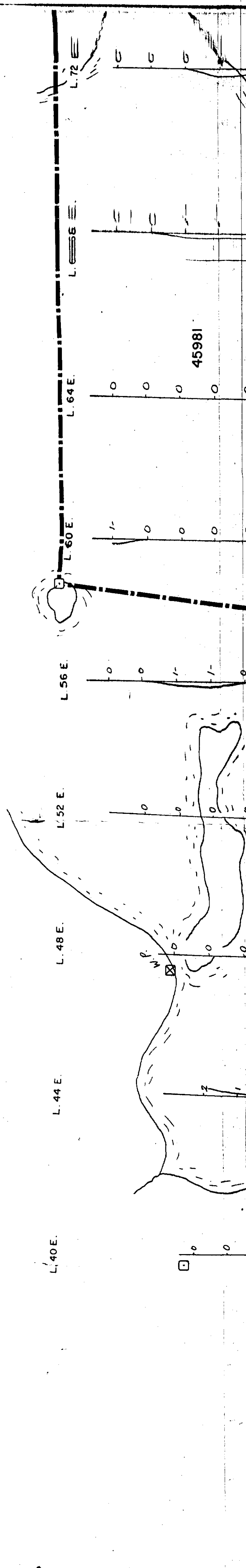


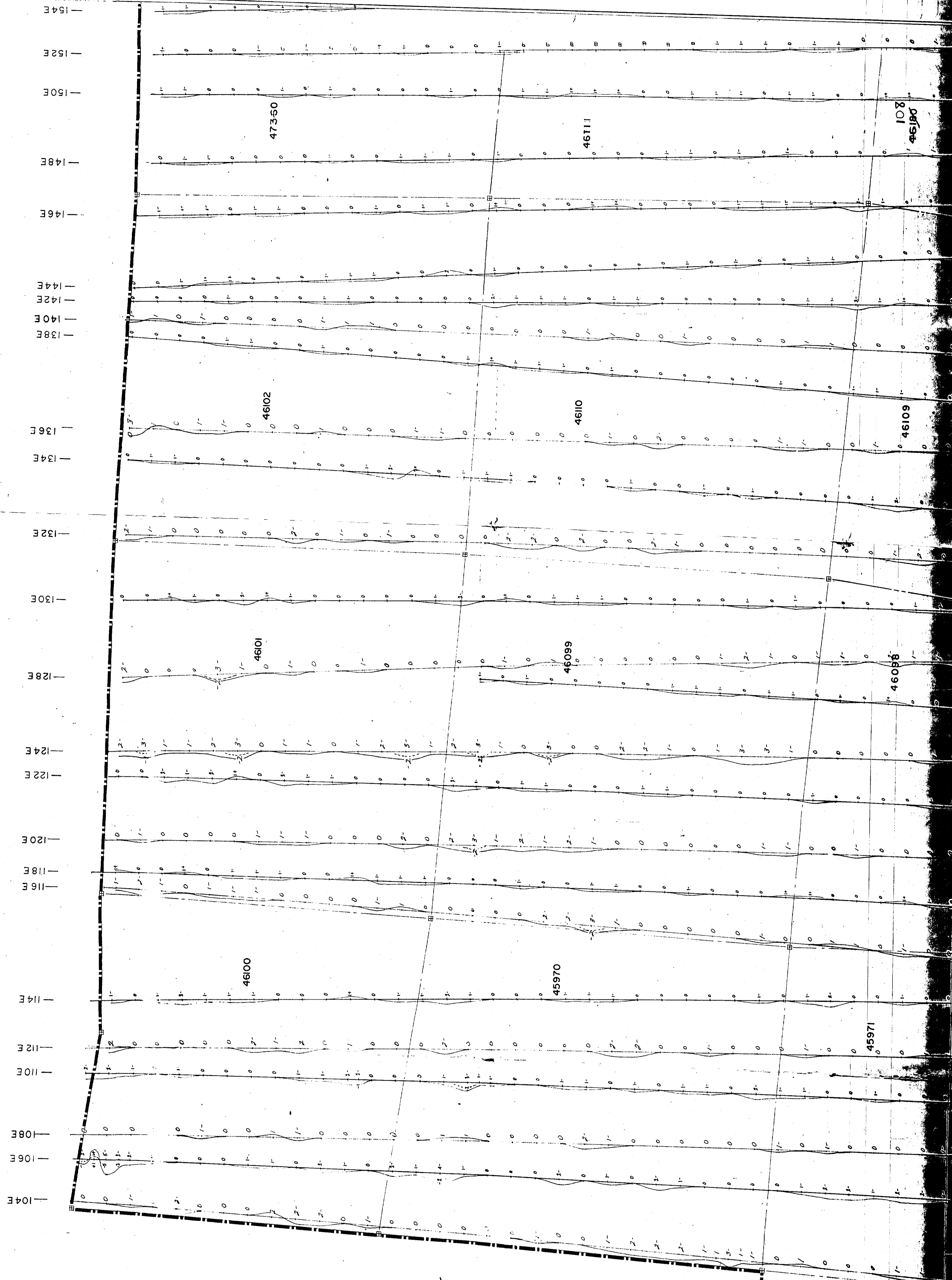
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MAGNETOMETER SURVEY
SOUTH L 7-E IN L 192-E



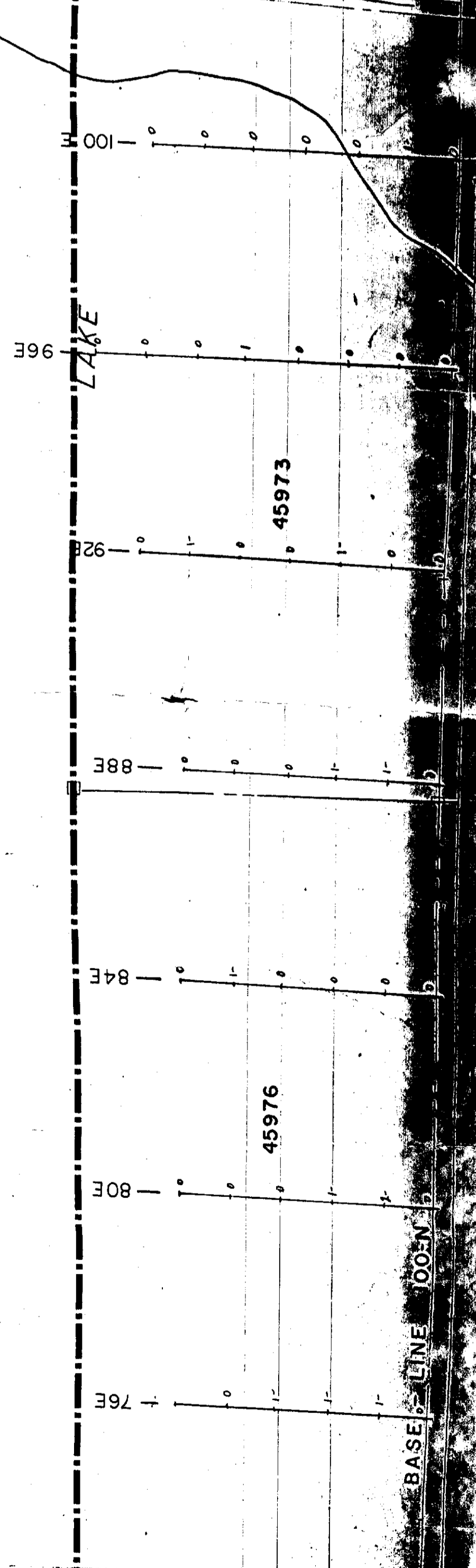


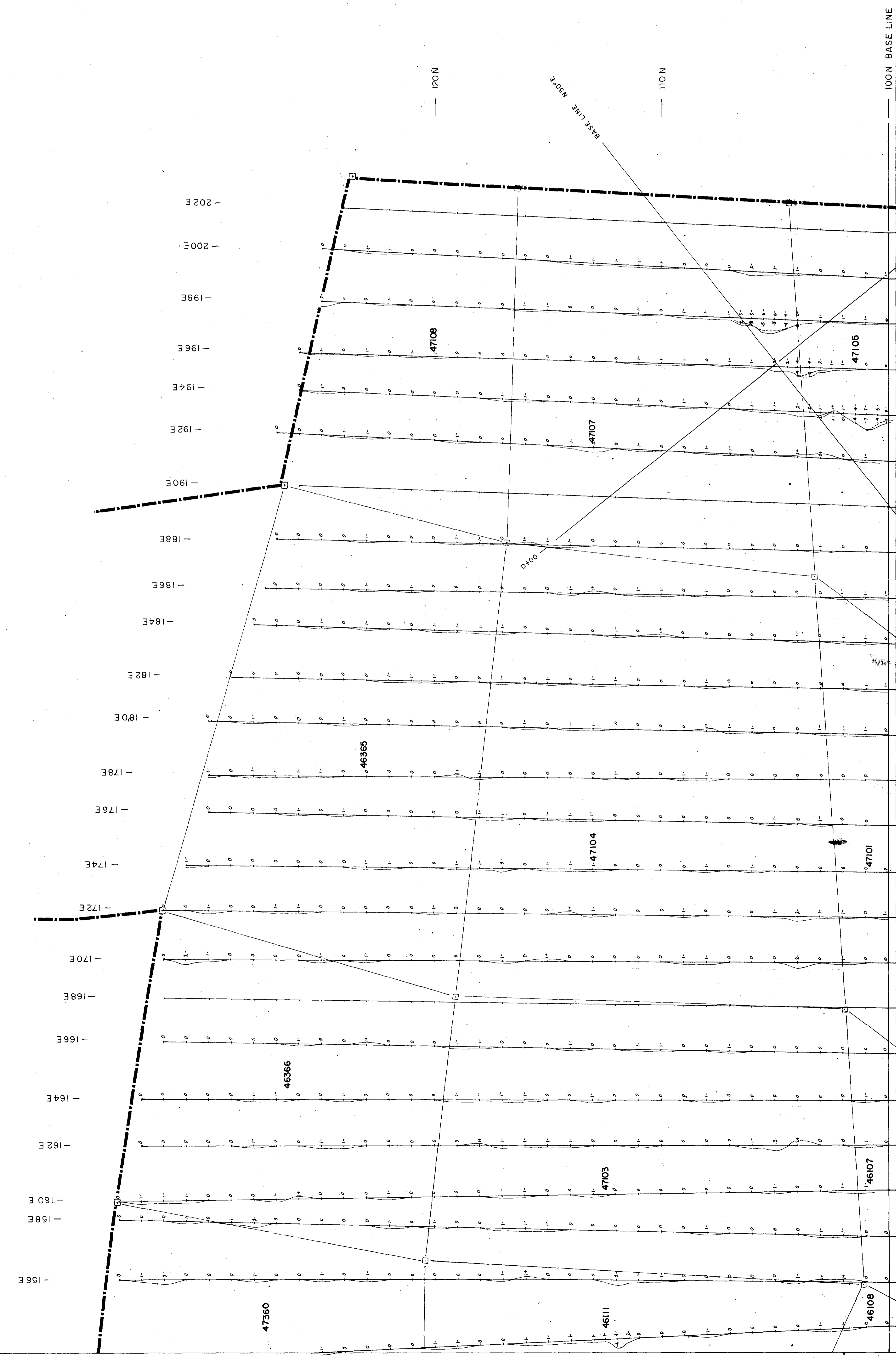
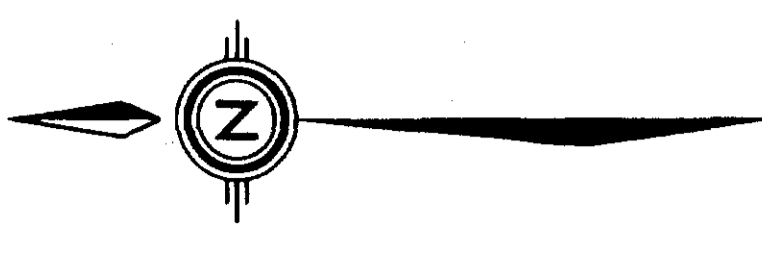
526143070019-10
SCURRY RAINBOW OIL LTD.
SURVEY
SCALE 1:5000
DATE 1988
SHEET 3 OF 3





1" = 20'
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LOW FREQ - LEFT



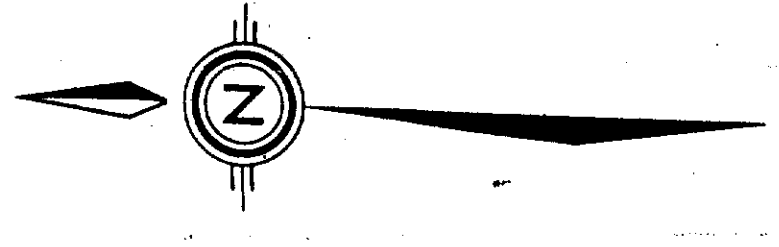


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DATE MAR. 1970
APPROVED [Signature]

J.E.M. SURVEY
BRISACOURT OPTION
STURSON LAKE, ONT.
L-154E TO L-202E

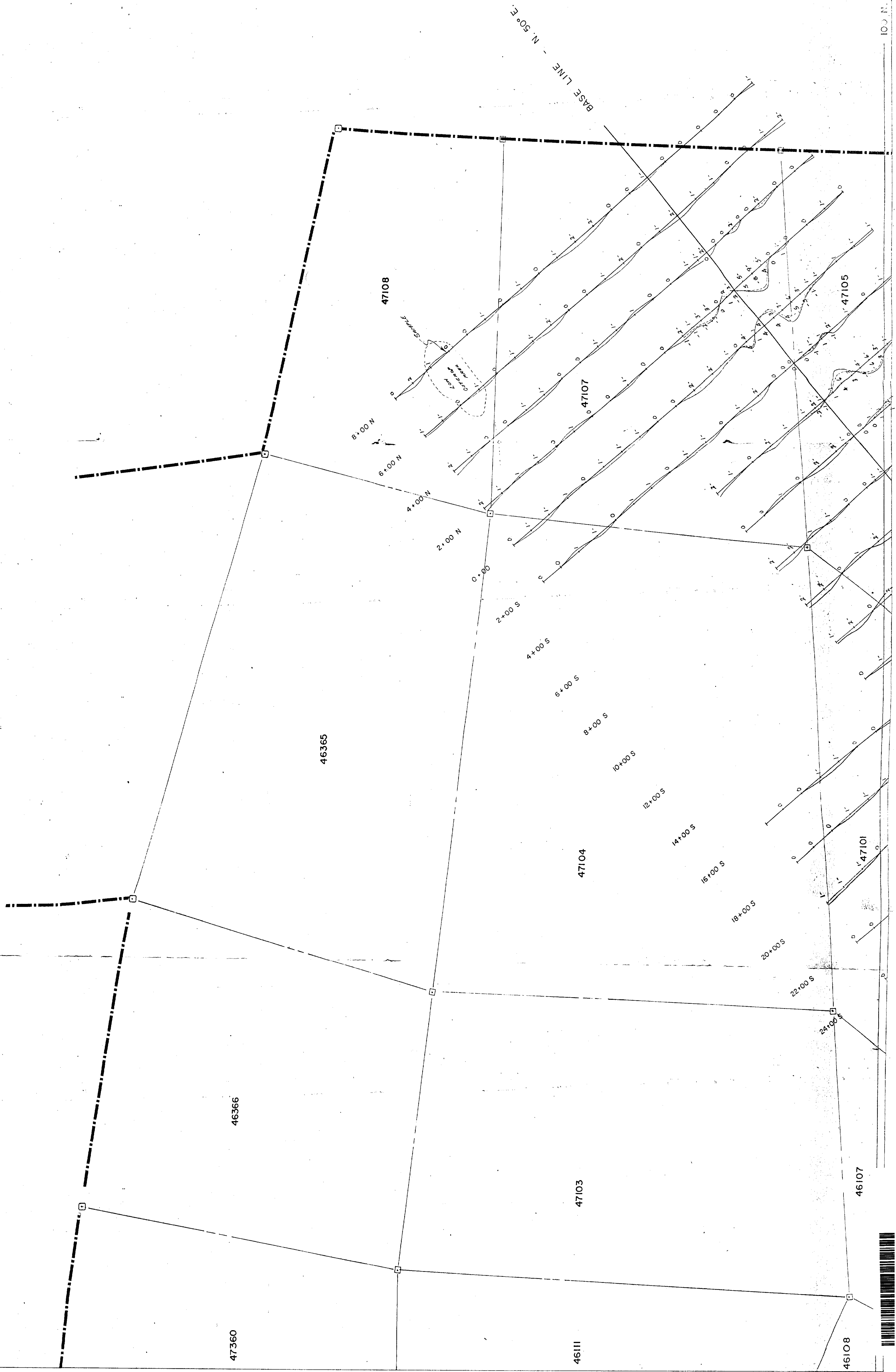
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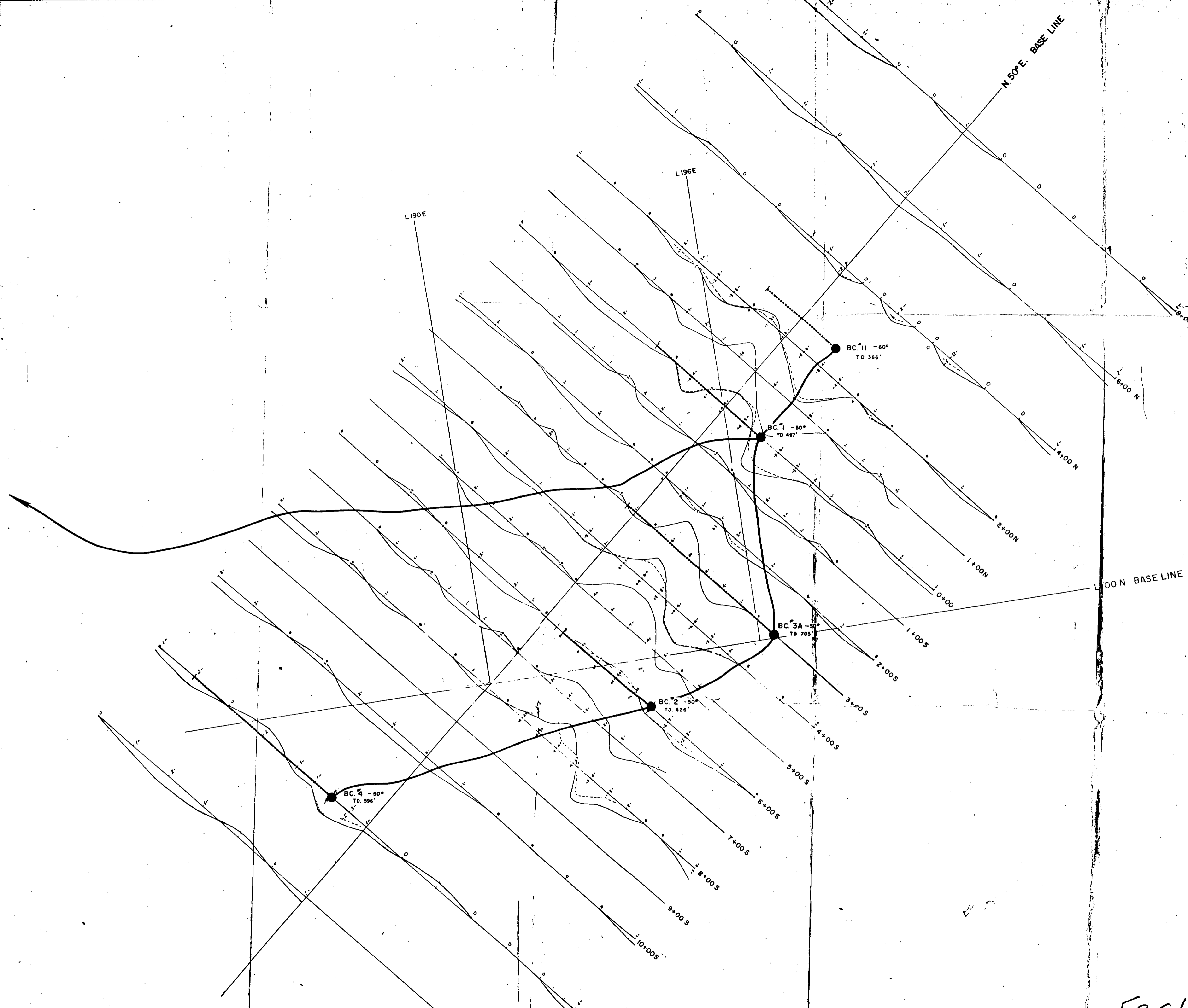
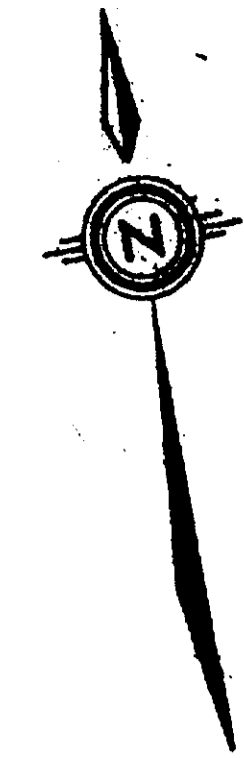


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526/1450-009-#13



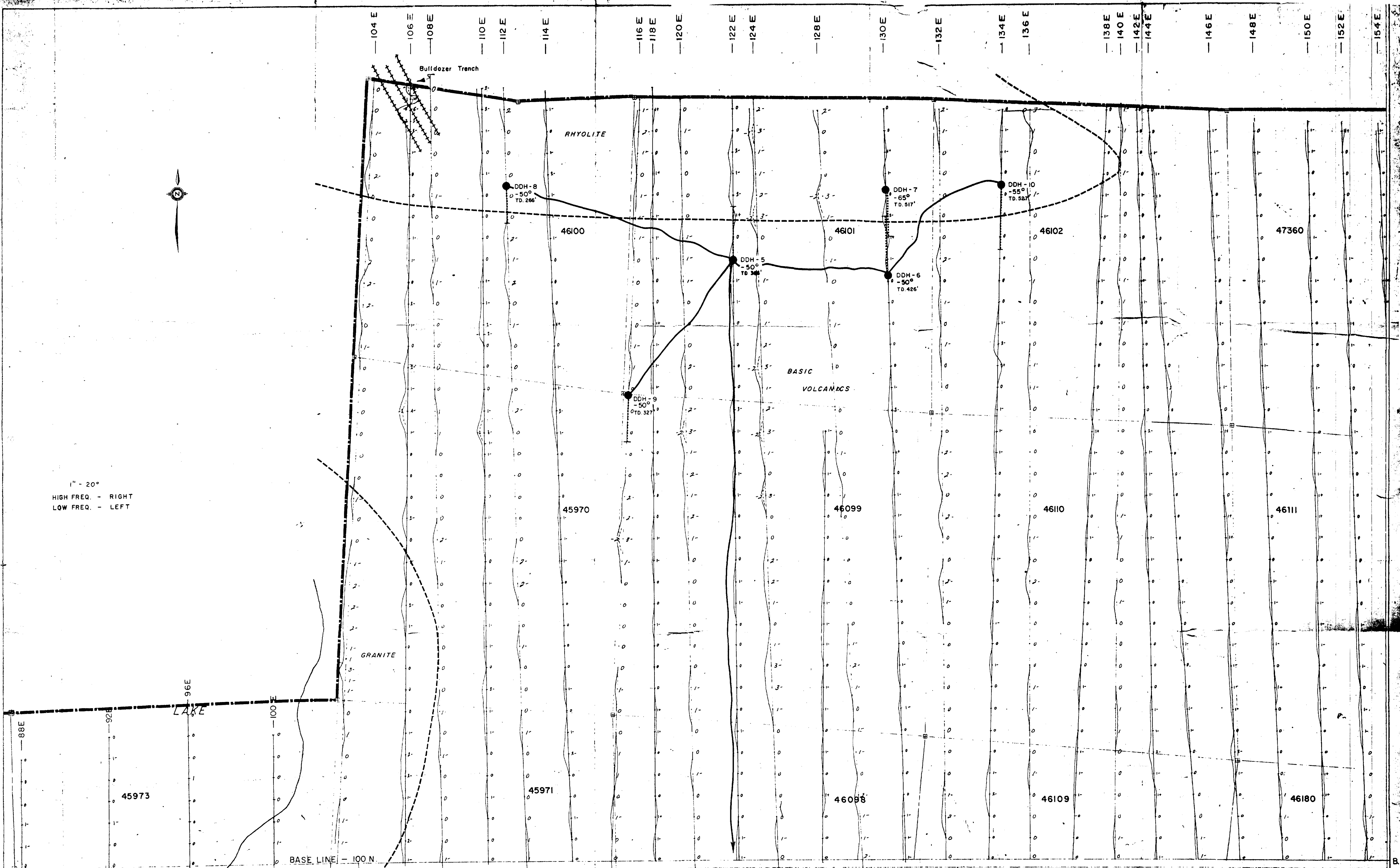
10 J. N. B. L.



52G/14SW-0019 #14

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APPROVED		STURGEON LAKE, ONT.	PRE-NO. STUR. 2-3-3

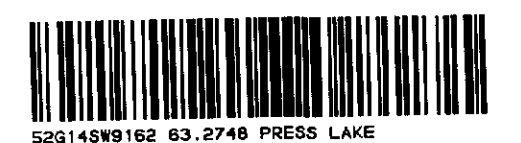


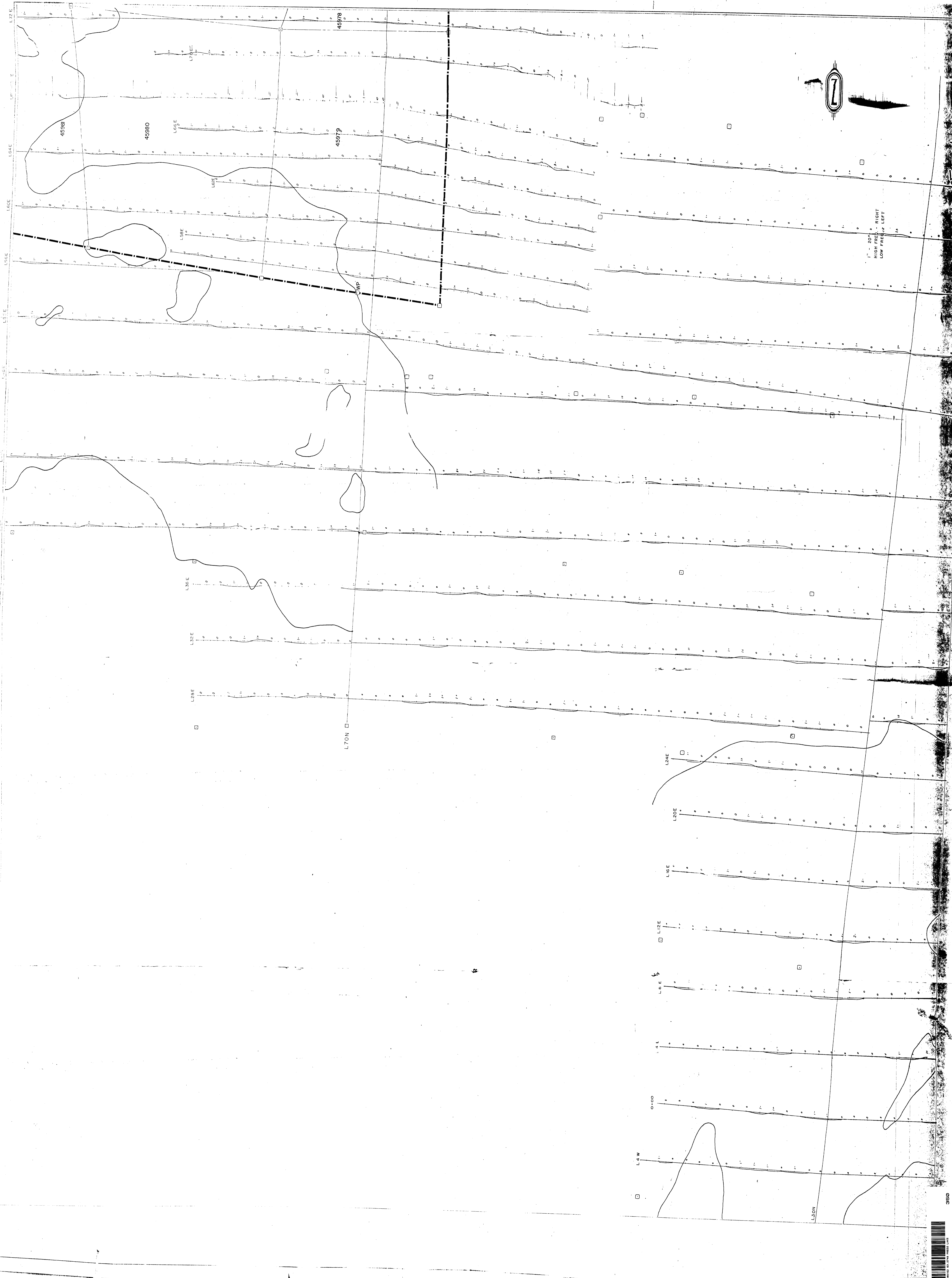


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529/14SW-00 19-#15

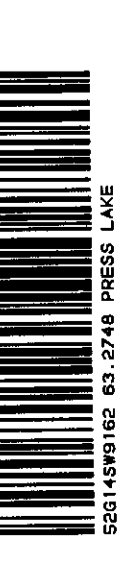
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TRACED	DATE JAN. 1970	BRIARCOURT - OPTION	NORTH - L. 104 E. to 154 E.
APPROVED [Signature]	REVISED - July 70	STURGEON LAKE, ONT.	FILE NO. STUR. - 2-3-1
		BLOCK C	PLAN

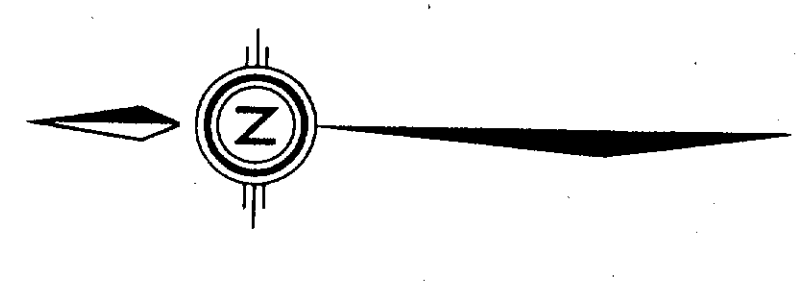
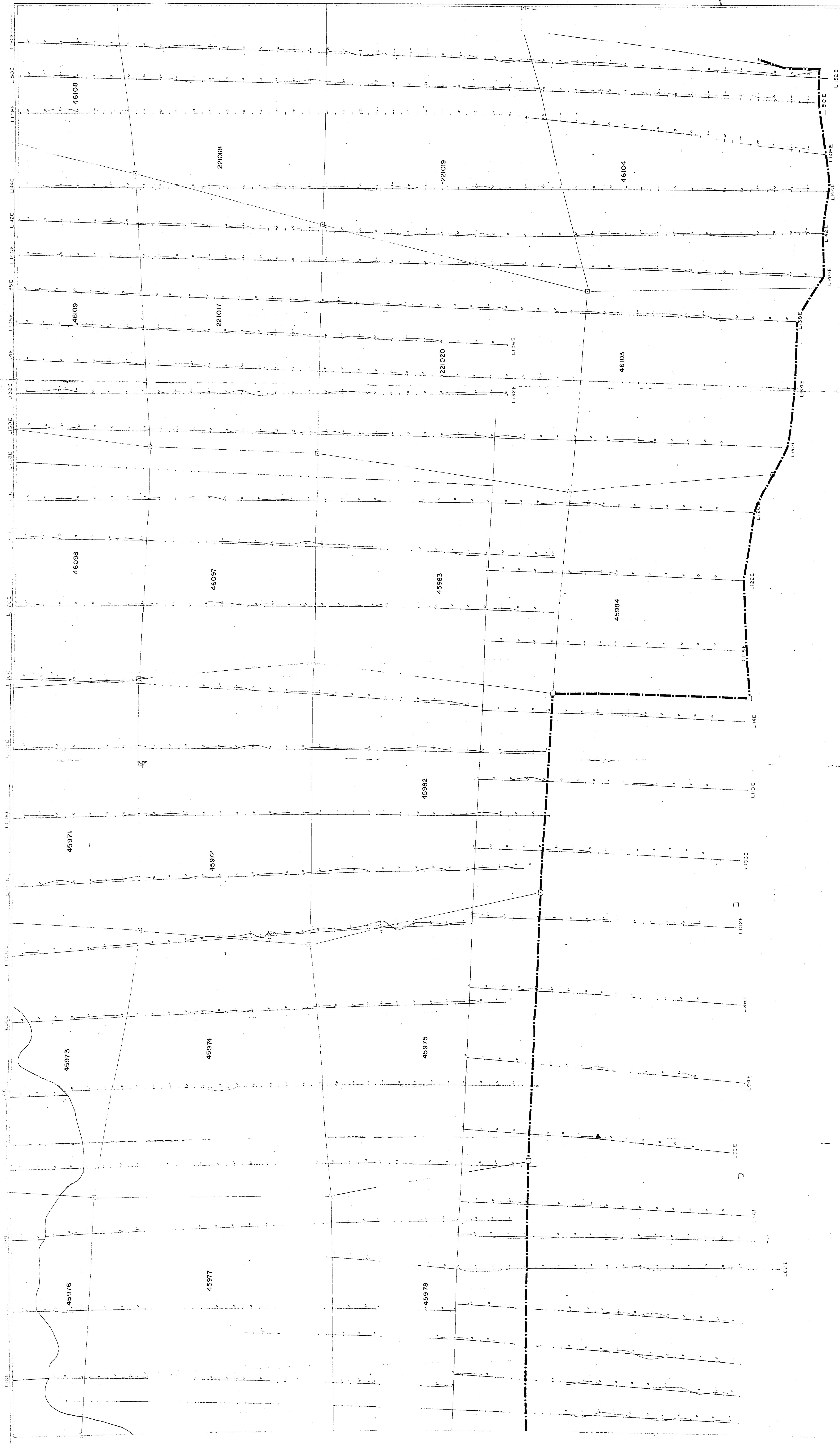




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LOW FREQ. LEFT

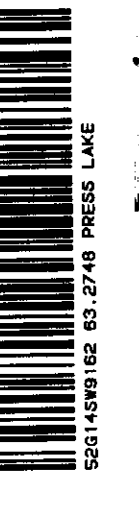
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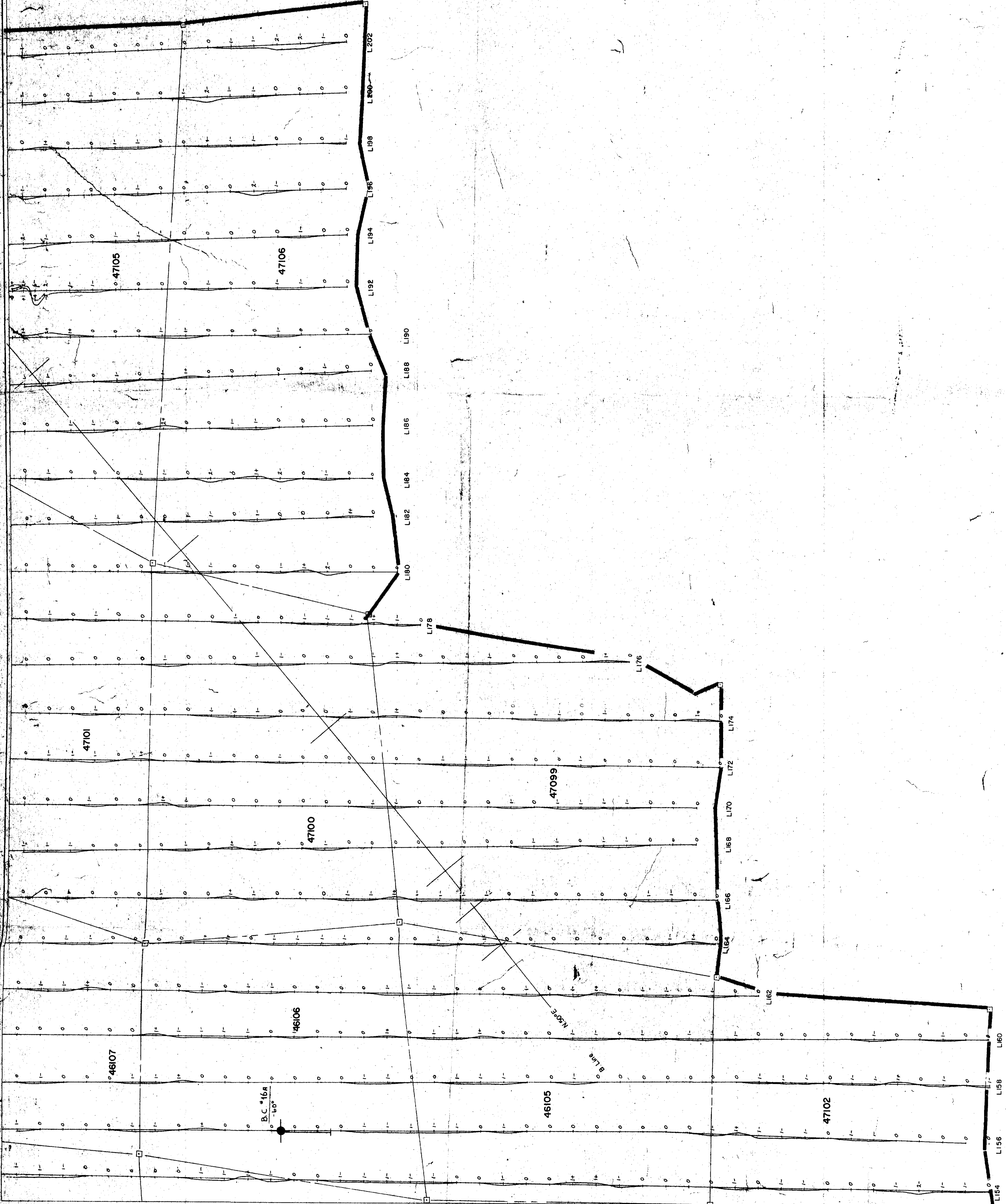




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LOW END - LEFT

526/145W-019 #17



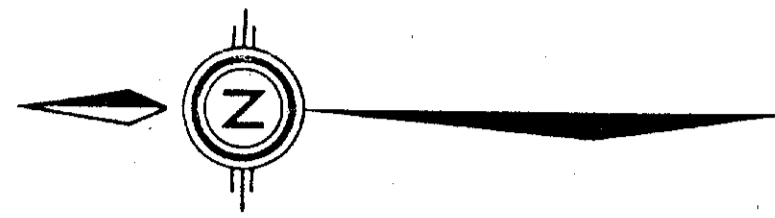


LEGEND
HIGH PREG. --- RIGHT
LOW PREG. --- LEFT
1" = 20'

529/145W-0019-#18

W. M. SURVEY
BOSTON, MASS. 02111





1" = 50'
HIGH FREQ. - RIGHT
LOW FREQ. - LEFT

526145N-0019-4-129

