ROTO MINERAL CLAIMS

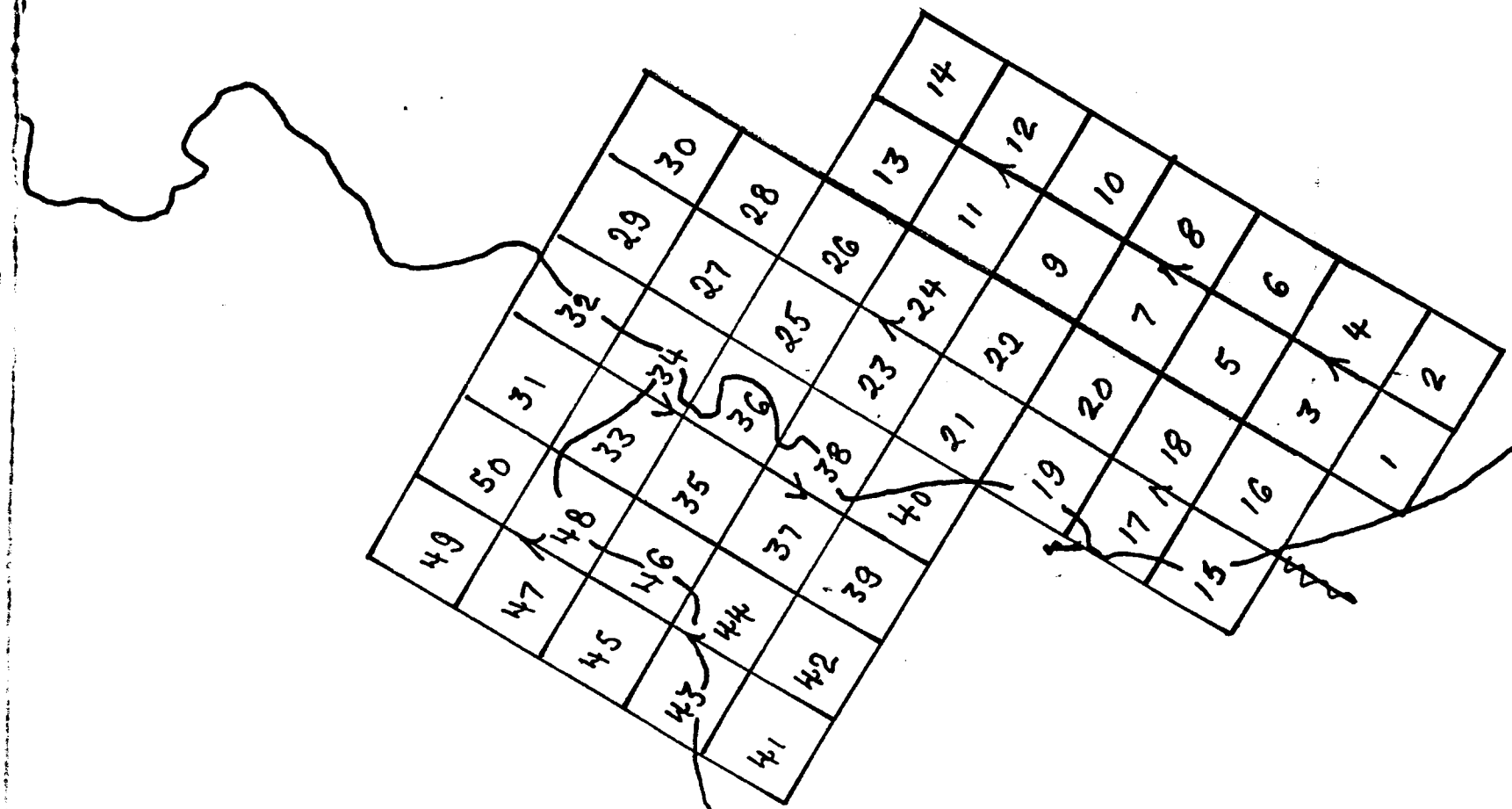
105 K 5

015909

N

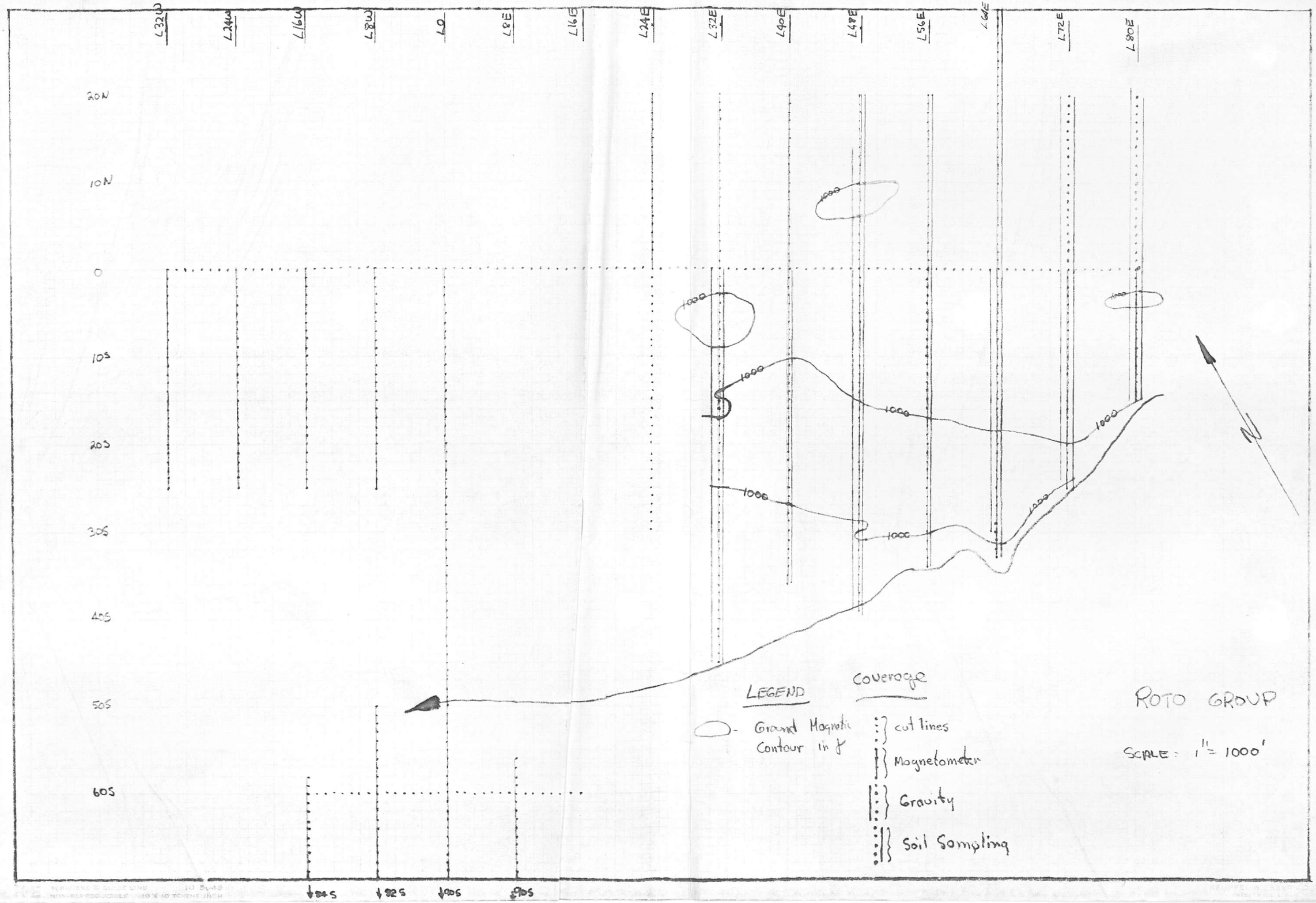
Location:

ROTO CLAIMS



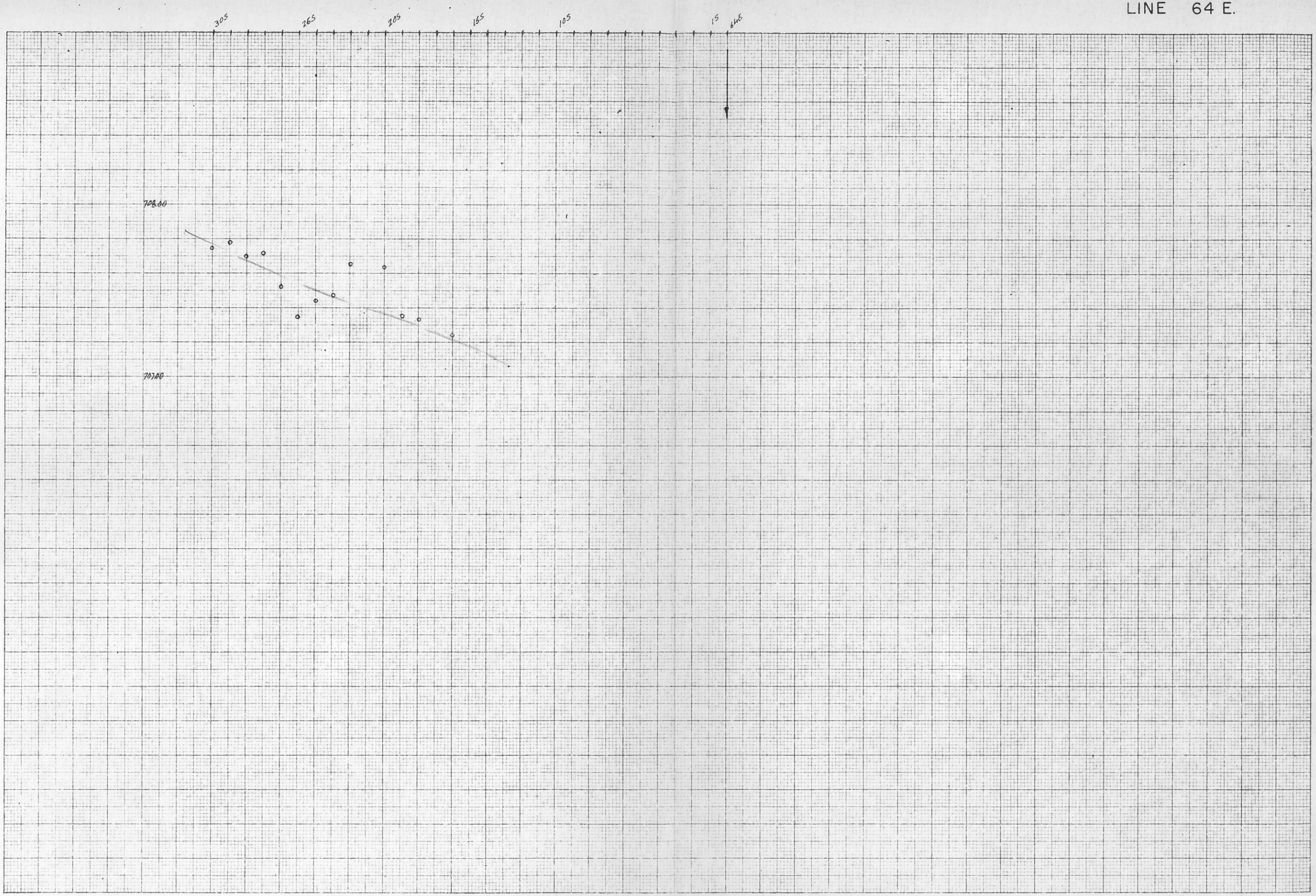
Example:

Post #1
Roto #1
1500' W
1500' L


L32W
L24W
L16W
L8W
0
L8E
L16E
L24E
L32E
L40E
L48E
L56E
L64E
L72E
L80E
20N
10N
0
10S
20S
30S
40S
50S
60S
1000
1000
1000
1000
1000
1000
LEGEND
Ground Magnetic Contour in γ
Coverage
cut lines
Magnetometer
Gravity
Soil Sampling
ROTO GROUP
SCALE: 1" = 1000'

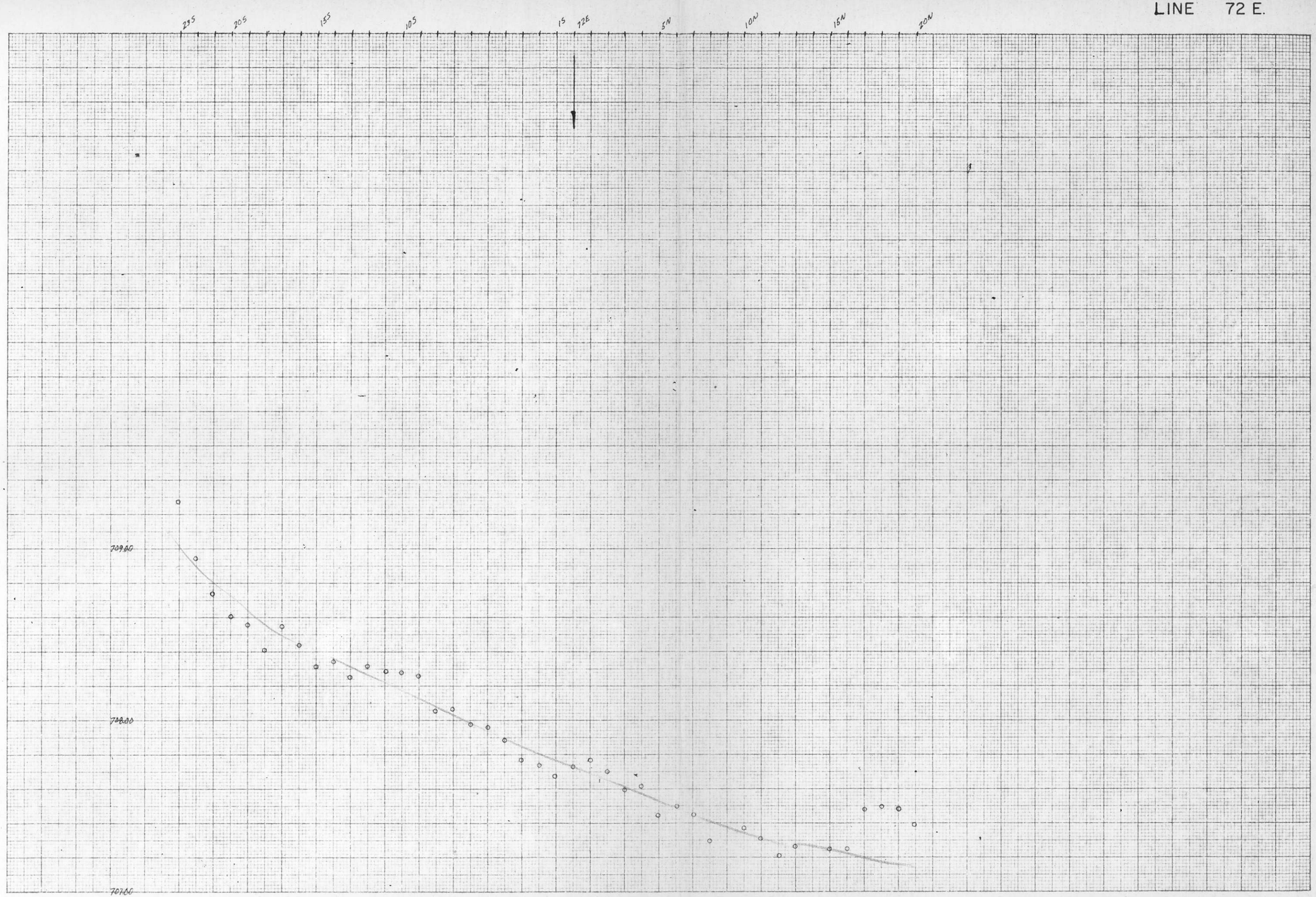
30 N
20N
10N
0
10S
20S
30S
40S
50S
60S
70S
32W
24W
16W
8W
0
8E
16E
24E
32E
40E
48E
56E
64E
72E
80E
3160
3140
3180
3200
3240
CLAIM GRID ROLL
CREEK
ANVIL
CAMP
ROSE CREEK
TOPOGRAPHIC CONTOUR
3100
ISOMAGNETIC CONTOUR (ANVIL SURVEY)
EM CONDUCTOR (ANVIL SURVEY)
PROPOSED PICKET LINE LOCATION
ROTO CLAIMS
1000 500 0 1000 2000
105 KS
ISB
A4/70

LINE 64 E.



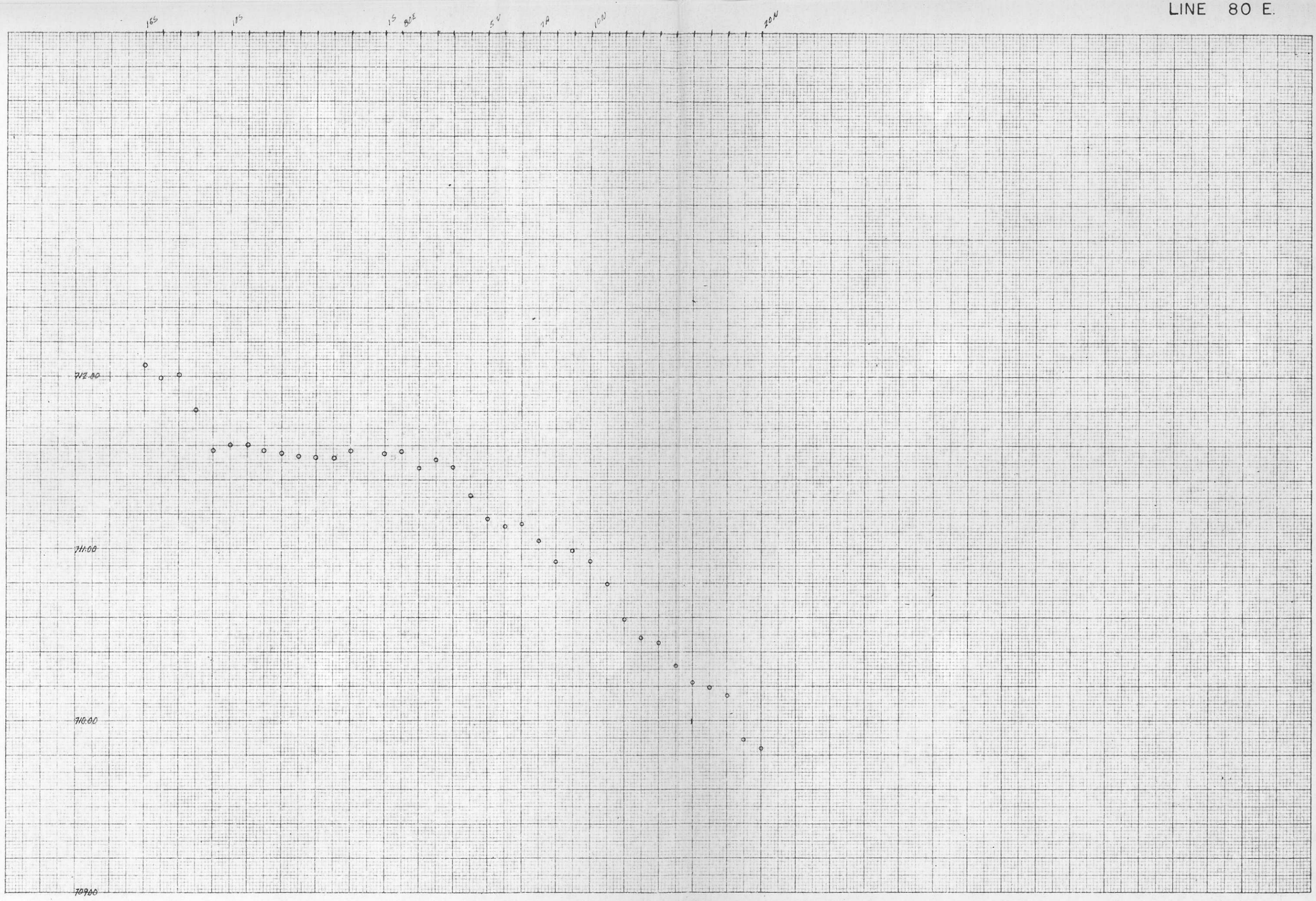
KE 10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM.
KEUFFEL & ESSER CO.
MADE IN U.S.A.

LINE 72 E.



KE 10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM.
KEUFFEL & ESSER CO.

LINE 80 E.



KE 10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM.
KEUFFEL & ESSER CO.
MADE IN U.S.A.

LINE 48 E.

393 355 305 205 105 1S 48E 5N 10N 14N

710.00

709.00

708.00

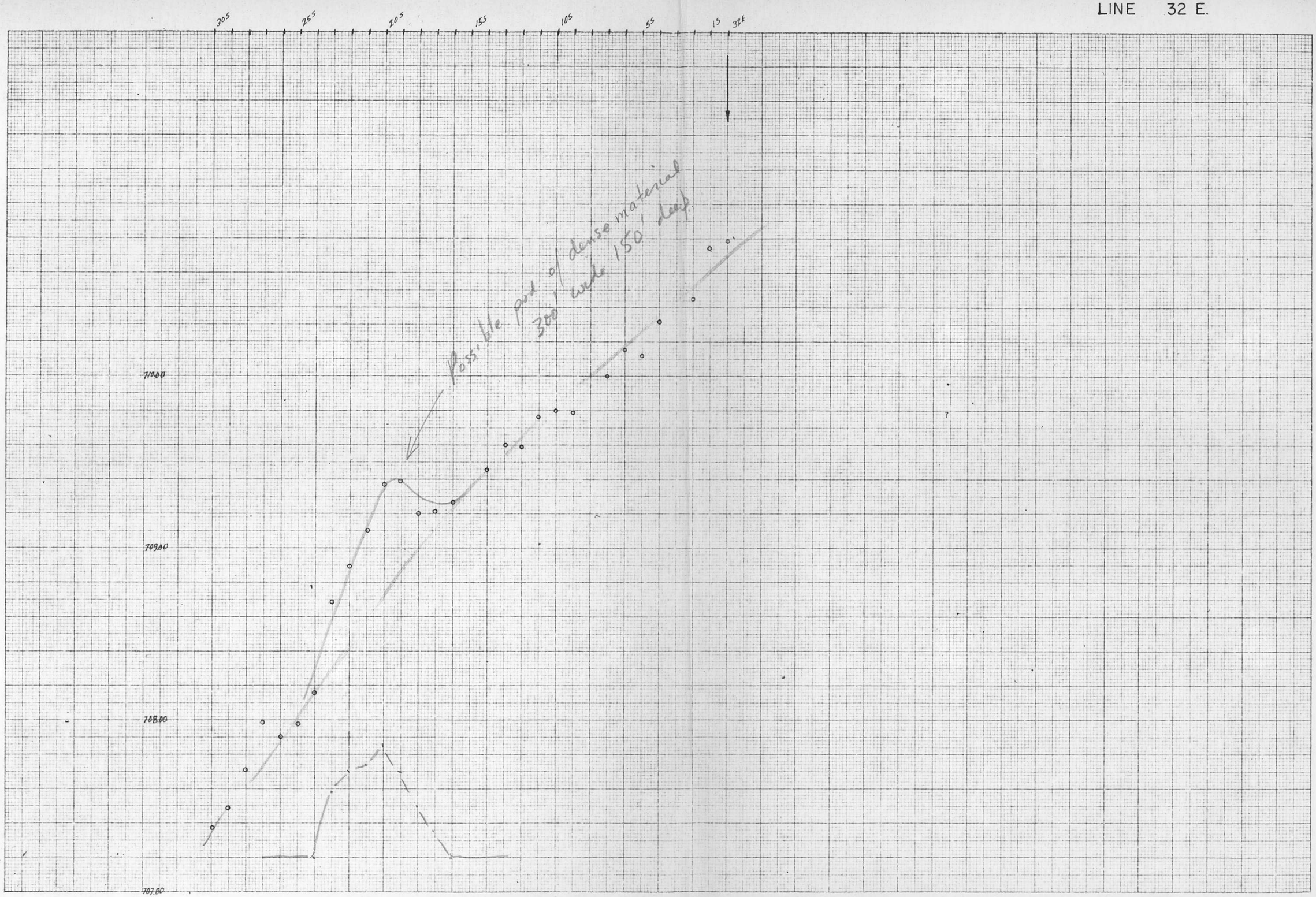
707.00

706.00

Large mass
(basic intrusive)

K&E 10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM
KEUFFEL & ESSER CO.

LINE 32 E.



KE 10 X 10 TO THE CENTIMETER 47 1512
25 X 38 CM. MADE IN U.S.A.
KEUFFEL & ESSER CO.

BASE LINE

32 E. 36 40 44 48 52 56 60 64 70 72 76 80 E.

7100.00

7090.00

7080.00

7070.00

K&E 10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM. MADE IN U.S.A.
KEUFFEL & ESSER CO.

ATLAS-ROTO

LINE 32E

710.00

709.00

708.00

707.00

706.00

ROTO CLAIM BLOCK

10 X 10 TO THE CENTIMETER 47 1512
KEUFFEL & ESSER CO.

LINE 48 E

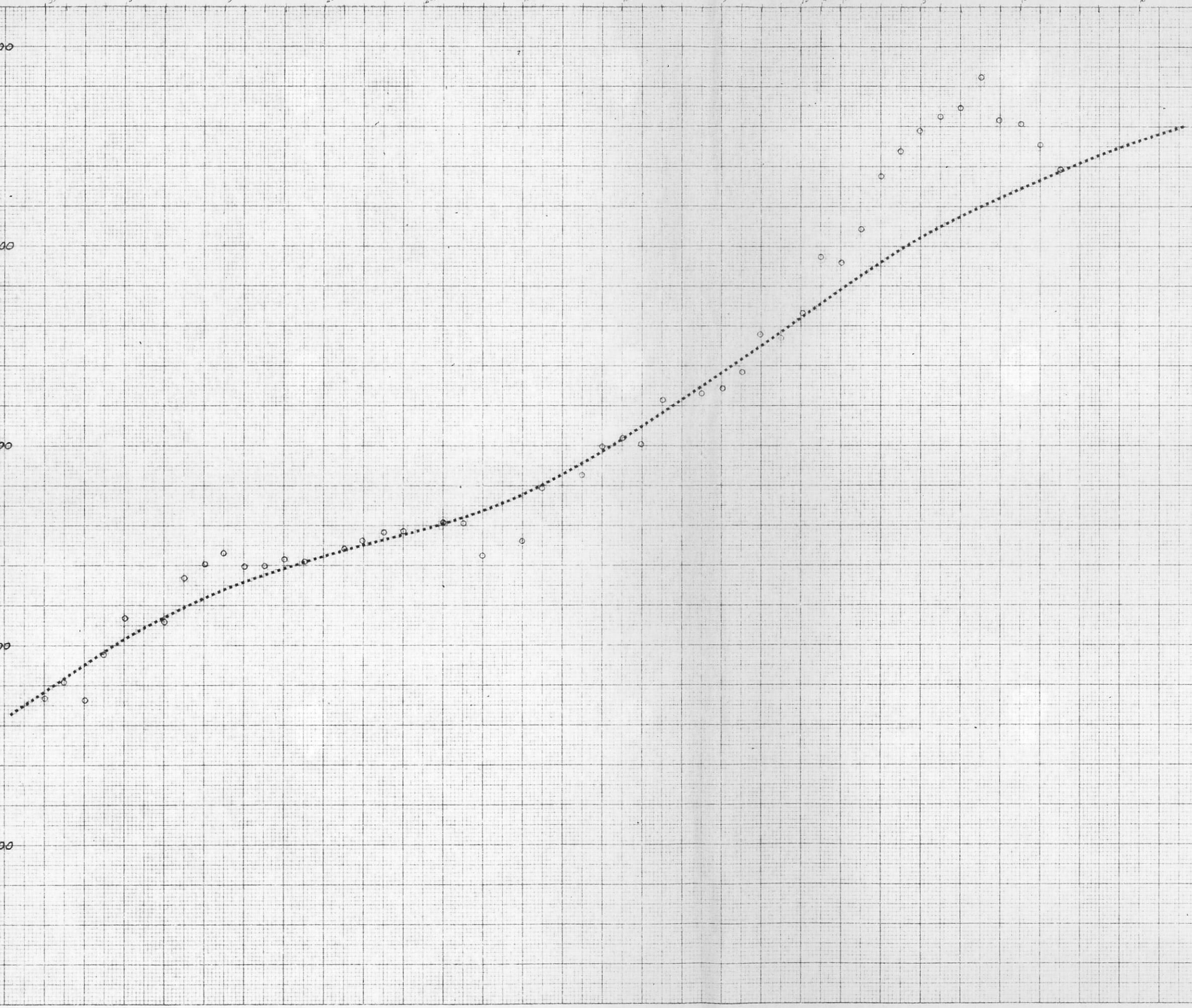
710.00

709.00

708.00

707.00

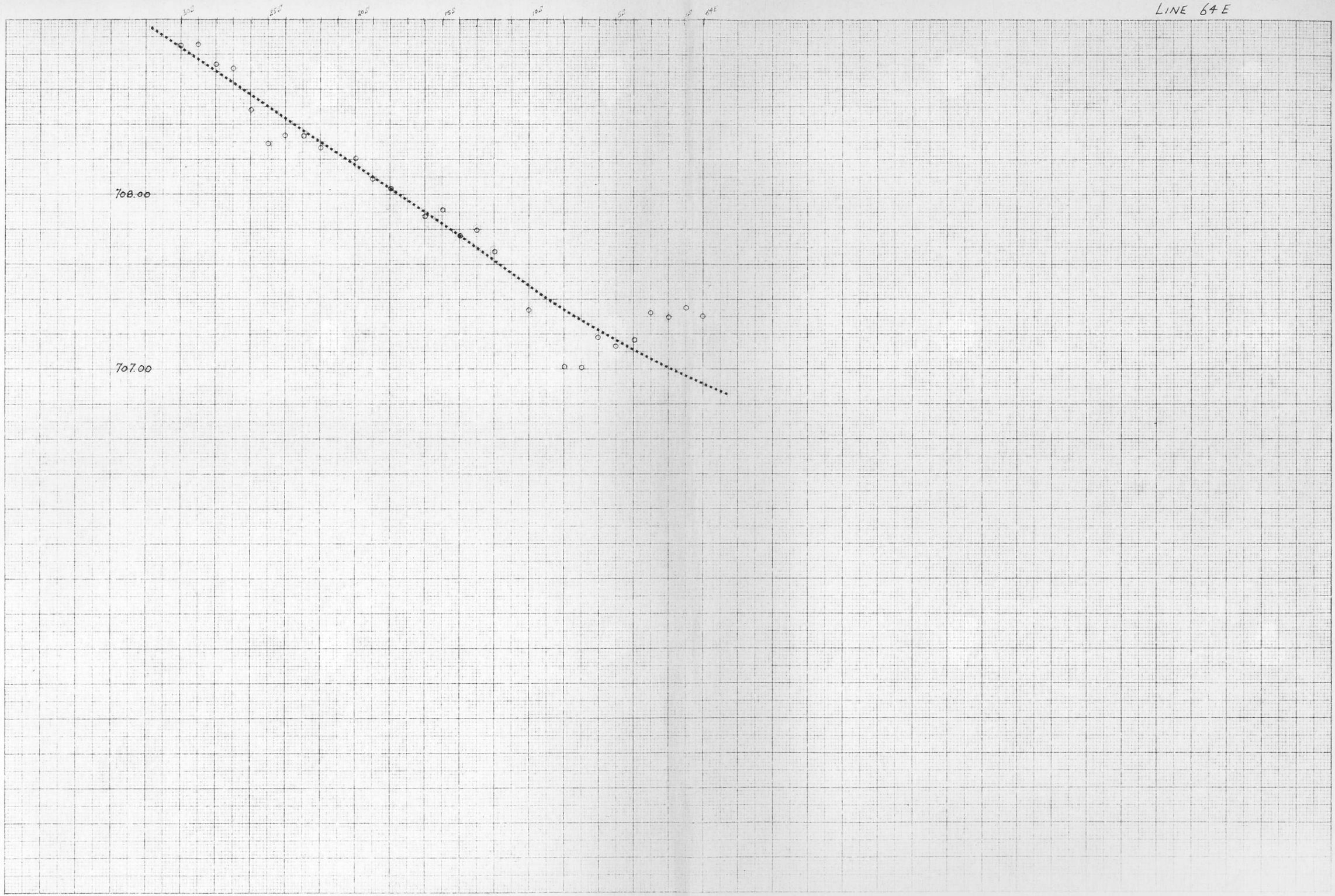
706.00



ROTO CLAIM BLOCK

10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM.
KEUFFEL & ESSER CO.

LINE 64 E



10 X 10 TO THE CENTIMETER 47 1512
25 X 25 CM.
KEUFFEL & ESSER CO.

LINE 72 E

330 | 00 | 50 | 100 | 50 | 0 | 72E N | 50 N | 100 N | 150 N | 200 N

710.00

709.00

708.00

707.00

706.00

ROTO CLAIM BLOCK

K+E 10 X 10 TO THE CENTIMETER 47 1512 • MADE IN U.S.A.
25 X 38 CM.
KEUFFEL & ESSER CO.

LINE 80 E.

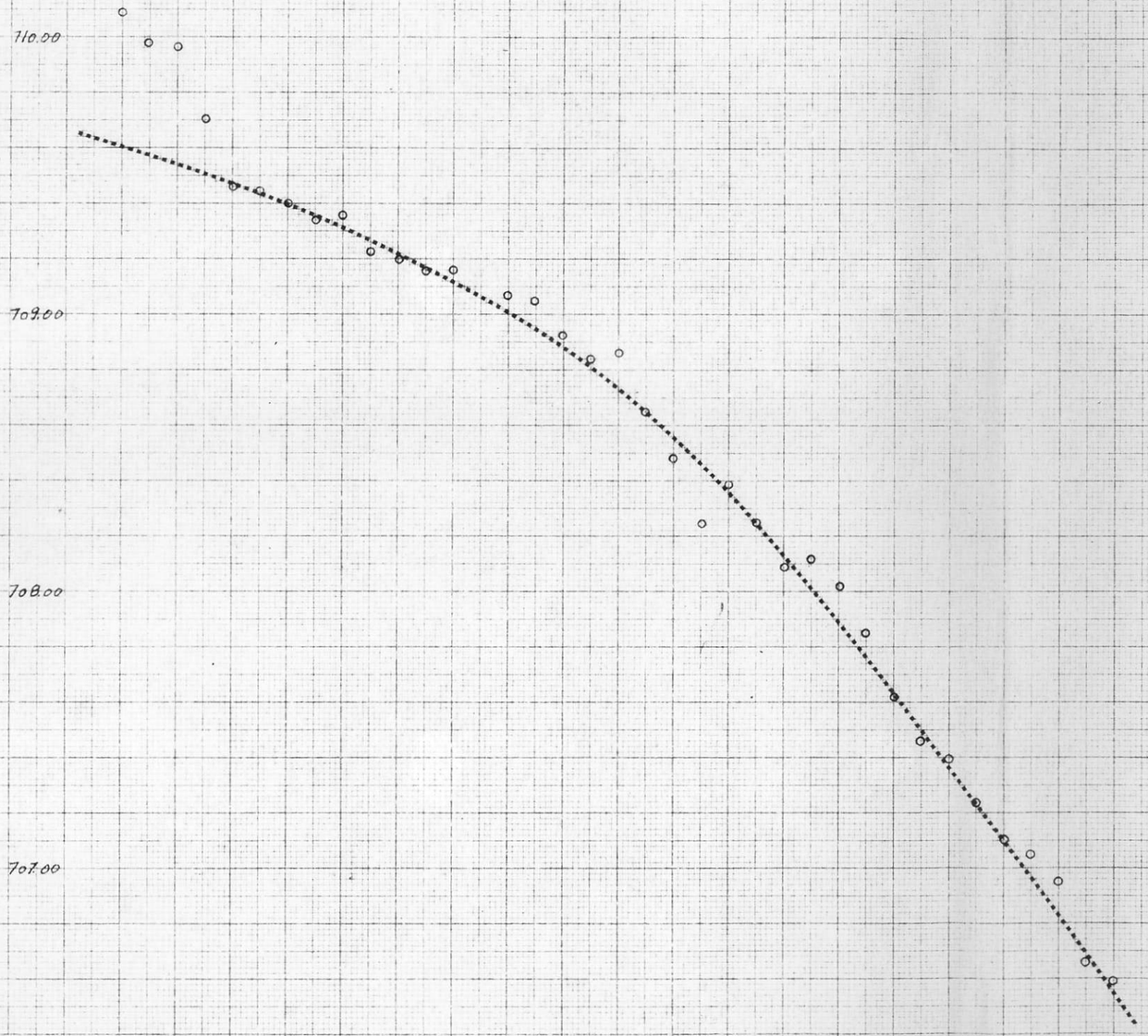
15S 10S 5S 1S 80 E 1N 5N 7A 10N 15N 20N

710.00

709.00

708.00

707.00



KEUFFEL & ESSER CO. 10 X 10 TO THE CENTIMETER 47 1512

ATLAS - ROTO

30 N
20N
10N
0
10S
20S
30S
40S
50S
60S
70S
32W
24W
16W
8W
0
8E
16E
24E
32E
40E
48E
56E
64E
72E
80E
3160
3140
3180
3200
3240
3100
CREEK
ANVIL
CAMP
ROSE CREEK
N
TOPOGRAPHIC CONTOUR
ISOMAGNETIC CONTOUR (ANVIL SURVEY)
EM CONDUCTOR (ANVIL SURVEY)
PROPOSED PICKET LINE LOCATION
ROTO CLAIMS
1000 500 0 1000 2000
105 KS
J&B 84/10

INTRODUCTION

In August and September, 1970, Overland Exploration Services (1969) Ltd., conducted a gravity survey on various properties in the Yukon Territory for Atlas Explorations Limited. This report is a discussion of each of the properties surveyed by Overland. All of the claims surveyed were northwest of the Faro townsite and were accessible only by helicopter. Atlas Explorations supplied the line cutting and the camp, while Overland supplied surveyor, surveyor-helper, meterman, and an interpretation of data collected.

SURVEY & FIELD PROCEDURE

The Horizontal and Vertical Survey was conducted with a T-1A Theodolite. Stations were located and elevated along each of the grid lines. The elevation where possible, was then closed across the extremities of the grid lines, all of the closures thus formed were under 2.5 feet. The gravity readings were taken with a Worden Master meter and stations were metered on a two and one-half hour run from base to base interval. The base station plots were used for graphing the diurnal gravity drift which in turn was applied to all station readings. Each gravity station run had several repeat stations from preceding runs in order to prove the repeatability of the gravity meter. The repeats were all within a 0.00 to 0.08 milligal range. All gravity readings were corrected for diurnal tidal drift, Bouguer Free-Air-Correction, latitude correction, and terrain correction. A density factor of 0.060 for a surface density of 2.65 has been used in this interpretation.

DATA

Bouguer Free-Air Correction Factor	-	0.06
Latitude Correction	-	4911.15 feet/milligal
Density	-	2.65
Diurnal Drift	-	Taken from Base Plots
Terrain Corrections	-	Taken where necessary
Meter Number	-	Worden No. 806
Meter Constant	-	0.08351
Base Value	-	Arbritary Value of 500 milligals

ROTO CLAIMS

The total expenditure on the Roto Claims is $1,215.00 and this figure includes a portion of the travel time and expenses involved in the totalled Atlas Gravity Project which is applicable to the Roto Block.

BOUGUER MAP

The Bouguer Map of the Roto Claims shows a low (mass deficient) area trending southwest-northeast through the center of the Claim Block. Flanking this central low area we have a steady rise in the gravity gradient to the southeast and to the northwest. There are two visual areas of interest on the Bouguer Map. One is an isolated high appearing in the mid-point of Line No. 32 East, and the second is a high nosing which crosses the north end of Line No. 48 East.

Both of these points are residual anomalies on the Residual Gravity Map, and will be discussed in that portion of the report.

RESIDUAL MAP

The areas of interest on the Residual Map are contoured as gravity highs. One appears midway along Line No. 32 East, and from this profile alone it would appear that this mass source has very little areal extent. The north end of Line No. 48 East shows a larger gravity positive, but , it does not attain the magnitude necessary to equate it to the gravity reflection of a lead-zinc-sulphide body. There is, of course, always the possibility that the high point of any gravity anomaly may be lying to one side of the profile line and in this case any anomaly may be greatly enhanced by parallel lines placed on either side of the anomalous area. However, from the appearance of this feature on Line No. 48 East we feel that the causative mass does not have sufficient density contrast with the

surrounding media to indicate the presence of a sulphide body. The same statement holds true for the anomaly observed on the north end of Line No. 64 East. This anomaly is only partially formed and were the line run north of the Base Line we might find that this positive has a much greater build-up.

There is enough encouragement at the north end of the Roto Block to justify running north lines from 64 East, 54 East, 40 East and extending 48 East for approximately 10 stations to the north.

CERTIFICATE OF QUALIFICATIONS

I, David K.Y. Chen, Geophysicist, of 6405 Center Street North, Calgary 47, Alberta Canada, hereby certify that:

1. I am a professional geophysicist associated with Overland Exploration Services (1969) Ltd., 1347 - 12th Avenue S.W., Calgary 3, Alberta, Canada.

2. I have no direct or indirect interest in, nor do I have or expect to receive any direct or indirect interest in any properties or securities of Atlas Explorations Limited.

3. I have attended the National Hunan University of Changsha, Hunan, China, 1947, receiving a Bachelor of Science Degree in Mining Engineering; that I hold a Master's Degree in Earth Sciences (geophysics major) from New Mexico Institute of Mining Technology at Socorro, New Mexico, U.S.A. During the period of 1964-67 I undertook part-time graduate studies in geophysics at Washington University, St. Louis, Missouri, U.S.A. I have completed all requirements of the graduate courses for my Ph. Degree work in geophysics except the thesis.

4. Since 1957, I have been intensively engaged in seismic, gravity and magnetic surveys and interpretations for oil/ore exploration in the U.S.A. and Far East with several Chinese, U.S. and Canadian oil and geophysical companies. In 1947, I was engaged as a Petroleum Engineer supervising oil well drilling and production. In 1957, I became involved in the geophysical oil/ore exploration field. I have held the following positions.

- Geophysicist
- Research Geophysicist
- Assistant Professor in Geophysics.

5. I am a member of the following academic and professional societies:

- Society of Exploration Geophysicists
- American Geophysical Union
- European Association of Exploration Geophysicists
- Association of Professional Engineers of Alberta
- Geological Society of Republic of China
- Chinese Petroleum Institute
- Chinese Institution of Mining and Metallurgical Engineers.

DAVID K.Y. CHEN
Professional Geophysicist

DKYC/jp

CREW PERSONNEL

Lorne Michalovsky - 66 Wakefield Drive S.W.
CALGARY 5, Alta.

Chris Moffatt - 2112 Lincoln Drive S.W.
CALGARY 10, Alberta

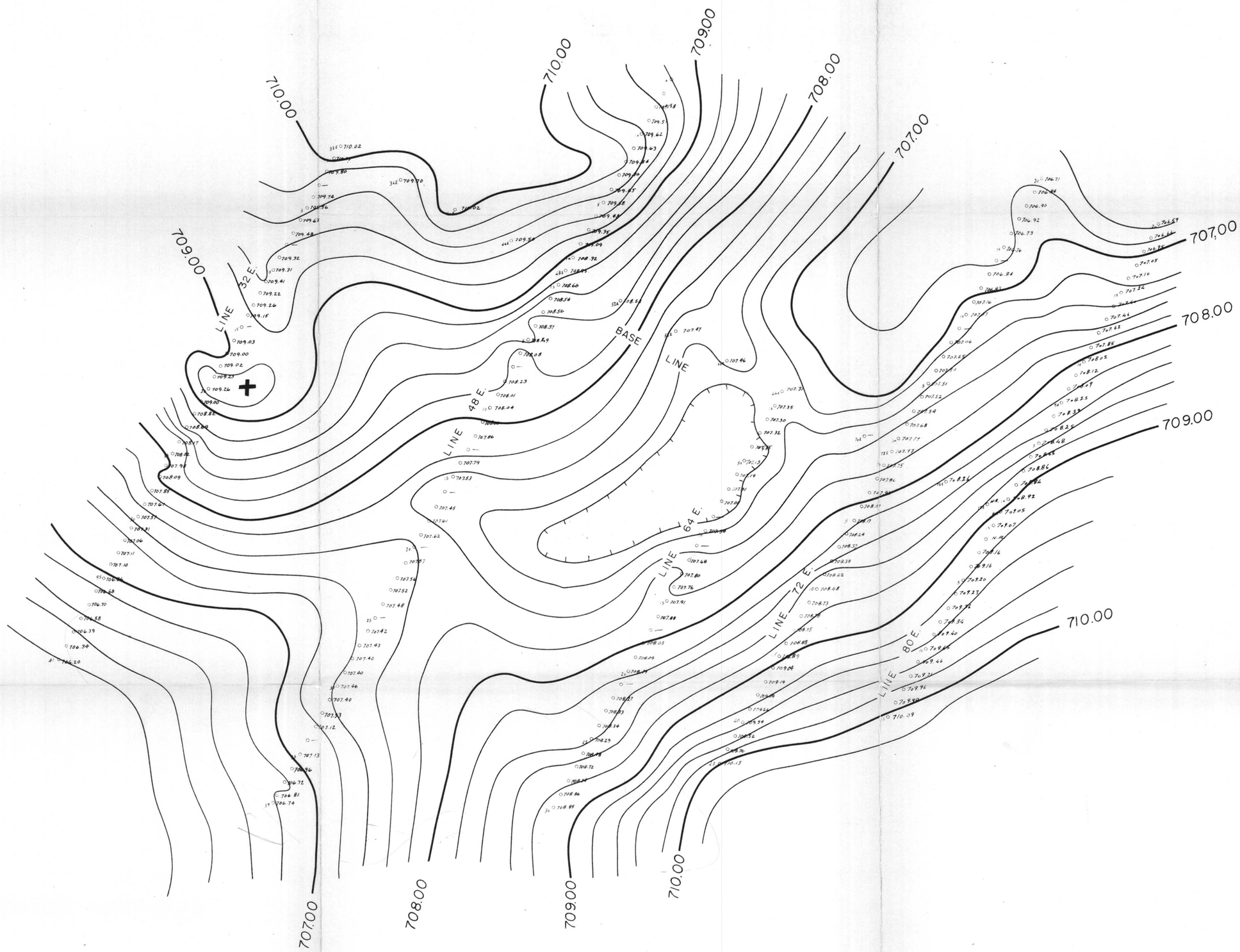
Gerald Pikula - Box 52
AMSTERDAM, Saskatchewan

Larry McCorquodale - 2203 Lancing Avenue
CALGARY 10, Alberta

OFFICE PERSONNEL - Supervisors

David K.Y. Chen - 1347 - 12th Avenue S.W.
CALGARY 3, Alberta

W.T. Salt - 1347 - 12th Avenue S.W.
CALGARY 3, Alberta



N

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

OES

OVERLAND

EXPLORATION SERVICES (1969) LTD.

FOR

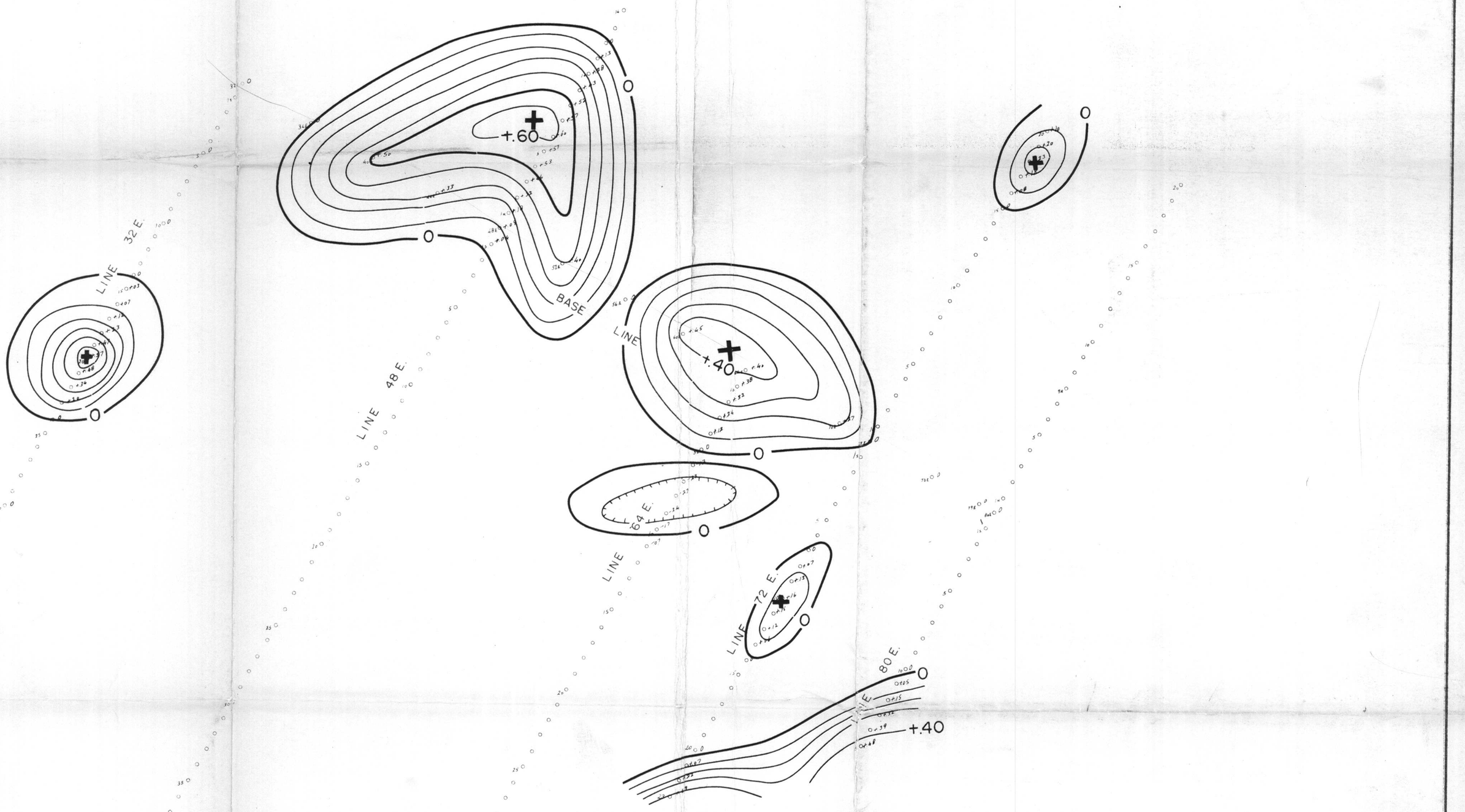
ATLAS EXPLORATIONS LIMITED

ROTO CLAIM BLOCK

BOUGUER GRAVITY MAP

Scale 1" = 400'

C.I. 0.20 mgl.



OES

OVERLAND

EXPLORATION SERVICES (1969) LTD.

FOR

ATLAS EXPLORATIONS LIMITED

ROTO CLAIM BLOCK

RESIDUAL GRAVITY MAP

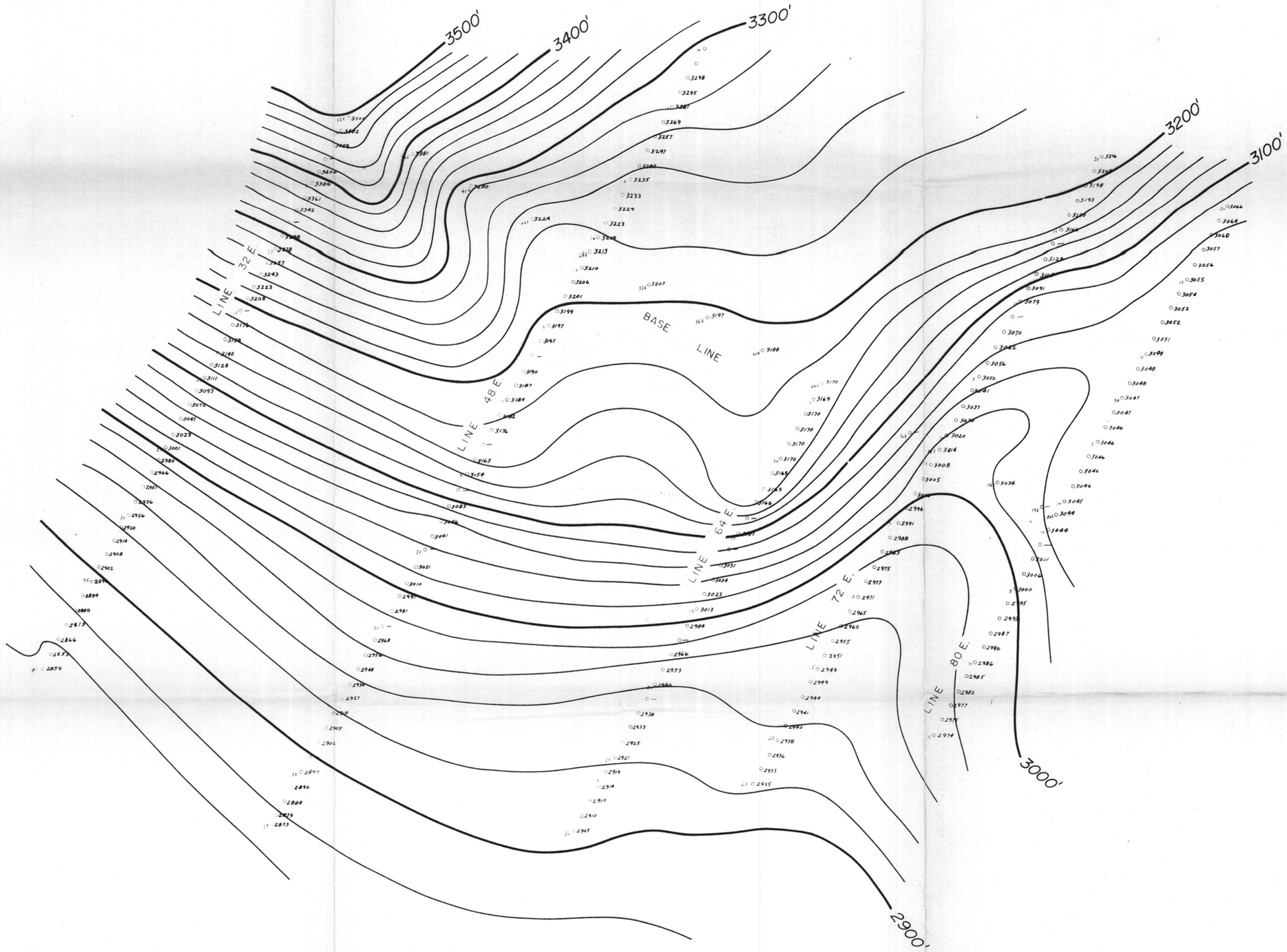
Scale 1" = 400'

C.I. 0.10 mgl.

inches
0 1 2
0 1 2 3 4 5
centimetres

YUKON GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



N

OES

OVERLAND

EXPLORATION SERVICES (1969) LTD.

FOR

ATLAS EXPLORATIONS LIMITED

ROTO CLAIM BLOCK

SURFACE ELEVATION MAP

Scale 1" = 400' C.I.: 20 FT.

inches
0 1 2
0 1 2 3 4 5
centimetres

YUKON GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

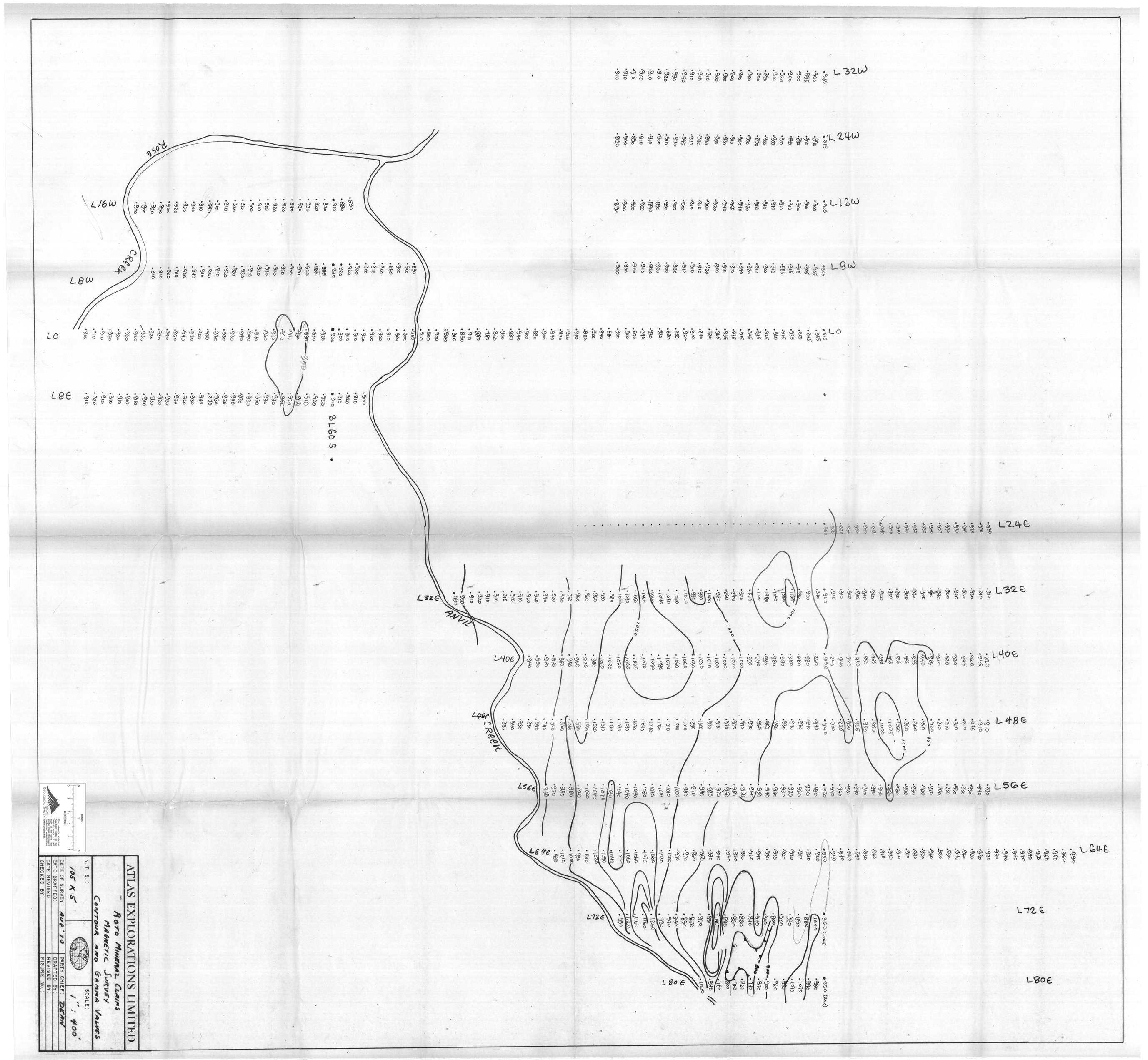
ATLAS EXPLORATIONS LIMITED

ROTO MINERAL CLAIMS

MAGNETIC SURVEY

CONTOUR AND GAMMA VALUES

N. T. S.		SCALE:
105 K 5		1" : 400'
DATE OF SURVEY: AUG. '70		PARTY CHIEF: DEAN
DATE DRAFTED:		DRAFTED BY:
DATE REVISED:		REVISED BY:
CHECKED BY:		FIGURE No.



L 32 W
L 24 W
L 16 W
L 8 W
L 0
L 8 E
BL 60 S
L 24 E
L 32 E
L 40 E
L 48 E
L 56 E
L 64 E
L 72 E
L 80 E

L 64 E.
35,17,116
39,15,98
54,28,116
57,31,165
50,27,98
49,25,114
52,26,112
48,23,112
36,28,120
55,32,112
54,32,124
60,34,128
41,23,[illegible]
36,19,114
45,16,95
48,16,96
66,23,162
57,30,108
29,12,66
44,11,53
29,12,95
29,11,86
54,16,78
41,12,70
41,18,129
24,7,53
9,9,20
41,13,92
23,12,84

L 72 E
30,19,80
26,20,84
34,21,116
41,25,80
41,19,66
41,20,100
36,9,85
[illegible],34
35,10,87
33,31,95
15,15,26
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30,18,58
69,17,78
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69,9,27
14,10,99
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18,7,8
41,15,84
42,15,77
35,11,98

L 80 E
15,10,58
24,11,54
36,11,50
41,17,112
33,17,74
33,17,82,
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32,[illegible],80

L 32 E
32,17,66
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L 40 E
24,7,41
42,10,38
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13,13,54
20,12,86
20,17,69
18,12,56
10,11,30
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29,12,68
38,21,108
39,26,114

L 48 E
21,2,22
15,6,33
15,7,27
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L 56 E
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32,9,68
21,6,31
26,10,72
[illegible],8,41
[illegible],5,58
23,10,62
30,4,44
15,11,75

CU
PB
ZN

very faint but coincident
Cause probably similar to Lorna?
? downhill from mag, not covered by gravity.
? Source may be up valley?
— of significance.

CREEK
ANVIL
~S6
~S5
~S4
~S3
~S2
~S1
95750
95749

Lines with no values shown were not sampled.

inches
0 1 2
0 1 2 3 4 5
centimetres
This reference scale bar was added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
YUKON GEOLOGICAL SURVEY

ATLAS EXPLORATIONS LIMITED

ROTO MINERAL CLAIMS
SOIL SAMPLING SURVEY
GEOCHEMICAL VALUES

N. T. S.: 105 H5		SCALE: 1" TO 400'
DATE OF SURVEY: SEPT '70		PARTY CHIEF: DEAN
DATE DRAFTED:		DRAFTED BY:
DATE REVISED		REVISED BY:
CHECKED BY:		FIGURE No.