

REPORT ON A

MAGNETOMETER AND GEOCHEMICAL

SURVEY

ON THE

KAM 1-14 MINERAL CLAIM GROUP

WATSON LAKE MINING

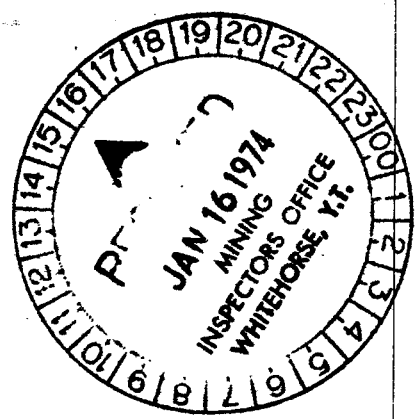
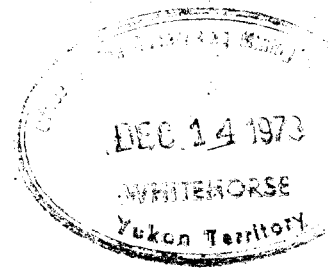
DIVISION

YUKON TERRITORY

FOR

GOLDEN GATE EXPLORATIONS LTD. (NPL)

VANCOUVER , B.C.



BY

STRATO GEOLOGICAL LTD.

19-448 Seymour Street,

Vancouver , B.C.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$4258.89

J.B. Craig
 Resident Geologist or
 Resident Mining Engineer

Considered as representation work under Section 53 of Yukon Quartz Mining Act.

[Signature]
 Commissioner of the Territory

SUMMARY & CONCLUSIONS

At the request of Mr. William Abraham, President of Golden Gate Explorations Ltd., (N.P.L.) at 425 Howe St., Vancouver, British Columbia, a survey consisting of grid layout, magnetometer reconnaissance, and reconnaissance geochemistry was carried out by Strato Geological Ltd. on the Kam 1 - 14 Mineral Claims located in the MacMillan Pass Area of the Yukon Territory.

Samples were taken on a regular grid at 400 ft. intervals and tested for lead and zinc. Results indicated strong anomalous trends on a north westerly bearing.

Magnetometer results revealed weak trends, which correlate to some degree with geochemical anomalies.

INTRODUCTION

Strato Geological Ltd. carried out a reconnaissance magnetometer and geochemical survey on the Kam 1 - 14 Mineral Claims on behalf of Golden Gate Explorations Ltd. (N.P.L.). Mr. John Graham and Mr. Philip Zinchuck, under the direction of Mr. Uno Leis (Manager) carried out the field program.

Initially the location of the property was established and the claim posts were tagged with the appropriate claim tags. Subsequently the exploration of the property was carried out.

WORK PROGRAM

The duration of the exploration program on the Kam 1 - 14 Mineral Claims was from October 1 - October 10, 1973. The work consisted of three phases:

1. Establishment of a grid over all the mineral claims.
2. Soil sampling the grid at 400 foot intervals.
3. A magnetometer survey over the property at 200 foot intervals.

The baseline of the grid was established over the claim location line to ensure that all work would be carried out within the bounds of the claim group. Crosslines were established at 800 foot intervals parallel to each other, and generally perpendicular to the baseline. The grid was clearly marked by ribboning with station points identified on the property.

Subsequently, soil samples were taken from the grid at the stations, generally at 400 foot intervals. Some stations were not sampled because of extreme humus depth or lack of development of a proper B horizon. The samples were taken from the "B" horizon to ensure conformity of sampling procedure.

These samples were placed into regular soil sample bags, properly identified, and shipped to Core Laboratories Ltd., of 325 Howe Street, Vancouver, B.C., where geochemical analysis was carried out for lead and silver. The sheets for this analysis are attached to this report.

The magnetometer survey was carried out by Mr. Philip Zinchuck, who has over two years experience in such surveys with Strato Geological Ltd., besides extensive experience in the exploration field prior to that time.

WORK PROGRAM - (Cont'd.)

A McPhar M700 Fluxgate Magnetometer was used to carry out the survey. This instrument measures the vertical field of the earth's magnetism, with a direct readout in gammas. It has a scale range of 1000 to 100,000 gammas with a maximum sensitivity of 20 gammas, and a readability of 5 gammas.

The readings were taken at 200 foot intervals with regular looping procedures to check for diurnal drift. Thus, the results plotted on the maps indicate corrected readings.

RESULTS

A. Geochemistry

The zinc geochemistry indicates various areas which lend themselves as serious targets for further exploration work. One of these anomalies is located in the central portion of the property and extends from L55W + 4S to L83W + 12N, a total length of approximately 3,500 feet. The general level of readings within this area is above 150 p.p.m., against a background level of less than 50 p.p.m. Similar anomalous areas are present on the east and west boundaries of the claim block. The western anomaly appears to extend from L97W + 4N to the edge of the grid at L110W + 8N, and possibly continues off the area surveyed.

Other more local anomalies are evident also and are shown on the enclosed maps.

The lead geochemistry reveals support for the centrally located zinc anomaly on the property. Against a background of less than 10 p.p.m., an anomalous zone contoured at 20 p.p.m. extends from L49W + 0 to L83W + 8N, a distance of 3300 feet. Within this zone is a 25 p.p.m. contour which extends from L50W + 0 to L02W + 4N.

RESULTS - (Cont'd.)

Other targets established from this survey indicate lead anomalies of significance on the north western portion of the grid and on the south western sector. Other less extensive zones are outlined on the enclosed maps.

The generally lower mobility of the lead ion compared to the zinc ion, generally helps to localize the source of the anomalies to a great extent. The coincidence of the geochemical anomalies in this instance is very significant, especially since the area has known lead-zinc occurrence. Detailed sampling over the anomalous areas would delineate the outline of the targets for further exploration work.

B. Magnetometer

The magnetometer results did not indicate any zones which were extensively anomalous. However, some weak magnetic trends may be a reflection of underlying geology.

C E R T I F I C A T E

I, Uno Leis, do hereby certify:

- [1] I am Manager of Strato Geological Ltd., with offices at # 19 - 448 Seymour Street, Vancouver 2, B.C.
- [2] I am a graduate of Carlton University, 1969, with the Degree of Bachelor of Science.
- [3] I am not a registered Engineer in the Province of British Columbia or of any province.
- [4] I have been engaged in geological exploration for four and one-half years throughout British Columbia, parts of Yukon Territory, and parts of Saskatchewan.
- [5] I have no direct, indirect, or contingent interest in the securities of Golden Gate Exploration Ltd. (N.P.L.) or the properties thereof nor do I intend to receive any interest.
- [6] This report is based on examination of the data obtained as a result of the survey.

DATED AT VANOCUVER, British Columbia, this 26th day of October, 1973.

Uno Leis, B. Sc.

Signed: _____

U. Leis

REPORT
ON THE
MAGNETOMETRIC AND GEOCHEMICAL SURVEYS
OF
THE KAM 1 - 14 GROUP OF CLAIMS
SUMMIT LAKE AREA
DONE BY
STRATO GEOLOGICAL LTD.
FOR
GOLDEN GATE EXPLORATIONS LTD. (N.P.L.)

BY
VICTOR ZACHANKO, P.ENG.

October 26, 1973.

Vancouver, B.C.

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INTRODUCTION

Strato Geological Ltd. requested the writer to submit a report on the magnetometric and geochemical surveys done by them for Golden Gate Explorations Ltd. (N.P.L.).

This report is to cover the surveys done on the Kam 1 - 14 claims as assessment work.

SUMMARY & CONCLUSIONS

The Kam 1 - 14 group of claims situated in Summit Lake area extend 2 claims wide, westward from the west side of the Pelly River. They are located at approximately 62° 32' N latitude and 129° 57' west longitude. They range in elevation from about 3,500' at the Eastern end of the group to 5,500' at the highest point toward the western end of the group.

The magnetometric survey shows low magnetic relief with north-south and northwest-southeast trends.

The geochemical survey indicates very strong zinc anomalies. The zinc results vary from a low of 2 ppm. to a high of 600 ppm. and the lead from 1 ppm. to 38 ppm.

In view of the results obtained from the above surveys, the property warrants serious exploration.

Due to the great extent of the geochemical anomalies, I recommend that an induced polarization survey be done in conjunction with a detailed geological survey over the anomalous areas. This would define the sulphide mineralization at depth and help pin-point diamond drilling targets.

The cost of an I.P. Survey over the anomalous areas would be in the order of \$10,000.

When drill targets are established a diamond drilling programme could be set out. The cost of diamond drilling would be dependent on the I.P. results which would indicate the number and depth of holes required. Also, transportation is an expensive and variable cost in this area, so could only be established when the drill programme was set out.

PART B

INTRODUCTION

The Magnetometric and Geochemical Surveys were done by Strato Geological Ltd. for Golden Gate Explorations Ltd. (N.P.L.).

The work was carried out between October 1st and October 10th, 1973. The crew consisted of Philip Zinchuck and John Graham under the direction of Uno Leis (Manager and Technician). These men are all well experienced in this type of work.

PROPERTY, LOCATION AND ACCESS

The claim group consists of 14 claims, namely: Kam 1 - 14; Record Nos. Y70893 to Y70898; Y71485 to Y71492.

The claims are situated at approximately 62° 32' N latitude and 129° 57' W longitude, in the Summit Lake area about 12 miles slightly south of west from the Yukon - N.W. Territories border, within the Yukon territory. The claim group extends from the Pelly River Valley at approximately 3,500' elevation westward for 7 claim lengths to an elevation of 5,500'.

At present, access is by helicopter from Ross River or Watson Lake. However, with the large amount of work being carried out as planned by both major and junior companies, no doubt communications will improve rapidly.

GEOLOGY

The claim group is underlain by Palaeozoic rocks of the Ordovician and Silurian Age. These rocks consist of black and varicolored cherts; black, grey and greenish grey shales; minor chert-pebble conglomerates, quartzite, limestone and phyllite.

Intense folding and crumpling is characteristic of the shales and pervasive fracturing is common in the cherts.

The eastern end of the claim group overlaps the unconsolidated glacial and alluvial deposit along the Pelly Valley.

As yet no detailed geological survey has been done on the claim group.

WORK DONE

Magnetometric Survey

A baseline was run along the claim location line and crosslines run at 700 foot intervals. Readings were taken every 200 feet along the lines.

Line cutting and flagging consisted of 58,500 feet. A total of 585 readings were taken, then plotted and contoured at 100 gamma intervals (see enclosed plan).

The magnetometer used was a McPhar M700 self-levelling unit with direct read-out in gammas.

All readings were corrected for diurnal fluctuations.

Geochemical Survey

The geochemical samples were taken over the same grid as that set out for the magnetometric survey.

The samples were taken from the "B" horizon at 300' or 400' intervals along the lines. The variation in distance was mainly due to the topography and partly due to rock outcrops.

The samples were sent to Core Laboratories.

RESULTS

The magnetometer readings vary from -425 gammas to +225 gammas. The background level is approximately -80 gammas.

The soil geochemistry indicates the following results:

	<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>
170W 15S	23	6	12N	48	11	62W + 15S	5	4
8S	120	24	15N	119	22	8S	79	20
4S	25	1	BL100 W+4N	53	19	4N	270	29
8N	600	38	83 W+15S	78	17	8N	29	2
12N	31	4	8S	172	25	12N	107	9
104W 15S	115	19	4N	129	16	15N	16	4
12S	13	8	8N	168	20	BL55W 15S	76	21

RESULTS - (Cont'd.)

	<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>
8S	11	5	12N	267	19	8S	52	10
4S	228	22	12N	38	9	4S	150	21
8N	186	27	15N	27	7	4N	32	9
12N	13	2	76W+15S	72	13	8N	44	11
15N	12	5	12S	55	19	12N	223	22
97W 15S	28	18	8S	44	19	15N	50	16
12S	49	21	4N	79	8	BS48W 15S	21	4
8S	117	25	8N	197	23	12S	6	1
4S	135	21	12N	115	19	8S	9	2
4N	224	27	15N	8	5	4S	62	10
8N	120	22	69W 15S	30	6	4N	115	18
12N	52	10	12S	59	19	8N	14	3
15N	85	29	8S	51	11	12N	6	2
W 15S	23	12	8N	127	20	15N	270	30
8S	143	22	12N	60	3	BL 108W	95	16
4S	72	78	15N	7	3	104W	7	2
4N	64	12	BL20W +15S	5	3	100W	10	3
8N	35	14	12S	4	2	96W	35	3
41W+15S	31	22	4S	5	2	92W	5	1
8S	10	3	8N	4	2	68W	170	18
4S	2	1	20W + 4N	3	1	60W	110	25
4N	89	23	8N	14	22	52W	136	26
12N	4	3	12	11	3	48W	92	18
15	5	4	15	75	16	40W	6	6
34W + 15S	13	3	BL13W + 15S	51	23	44W	55	22
12	5	2	12S	55	20	36W	4	3
8S	6	5	8S	34	15	32W	20	6
4S	42	16	4S	37	19	28W	28	9
4N	76	21	4N	7	6	24W	5	3
8N	10	6	8N	52	26	20W	8	3
12N	35	17	12N	63	10	16W	38	18

RESULTS - (Cont'd.)

	<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>		<u>Zn.</u>	<u>Pb.</u>
BL27W + 15S	205	28	15N	130	26	12	108	23
12S	40	18	BL6W+12S	125	21	8	184	21
8S	18	15	" 8S	80	17	4W	178	20
4S	33	17	" 4S	300	22	0	212	18
4N	48	14	" 4N	167	24			
5N	6	4	" 8N	107	7			
12N	34	5	" 12N	192	9			
15N	9	4	" 15N	125	18			

COSTS

The costs of the surveys were supplied by Strato Geological Ltd.
as follows:

Mobilization and demobilization	\$ 645.90
Labour	1,240.00
Transportation	1,095.60
Room & Board	193.63
Drafting	245.14
Assaying	236.25
Equipment Rental	260.00
Engineering	200.00
Miscellaneous	120.37
Typing	<u>22.00</u>
	<u>\$4,258.89</u>

The above amount to be applied as assessment work on the 14 claims
@ \$100 per annum each as follows:

1972 - 73	\$1,400
1973 - 74	1,400
1974 - 75	<u>1,400</u>
	<u>\$4,200</u>

COMMENTS

The region generally referred to as the Summit Lake area has
received a great deal of attention recently.

A number of major companies as well as numerous junior companies
have blocks of claims in the area.

To date some promising results have been obtained in the area which
indicate that commercial orebodies will be proven when further work is done.

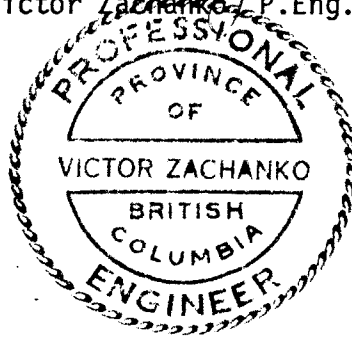
The Kam 1 - 14 claim group shows high geochemical anomalies associated
with magnetic areas slightly above background.

COMMENTS - (Cont'd.)

This group of claims warrants further serious investigation.

Respectfully submitted,

Victor Zachanko
Victor Zachanko, P.Eng.




REFERENCES

1. Geological Survey of Canada area maps.
2. Strato Geological Ltd. magnetometer and geochemical results.

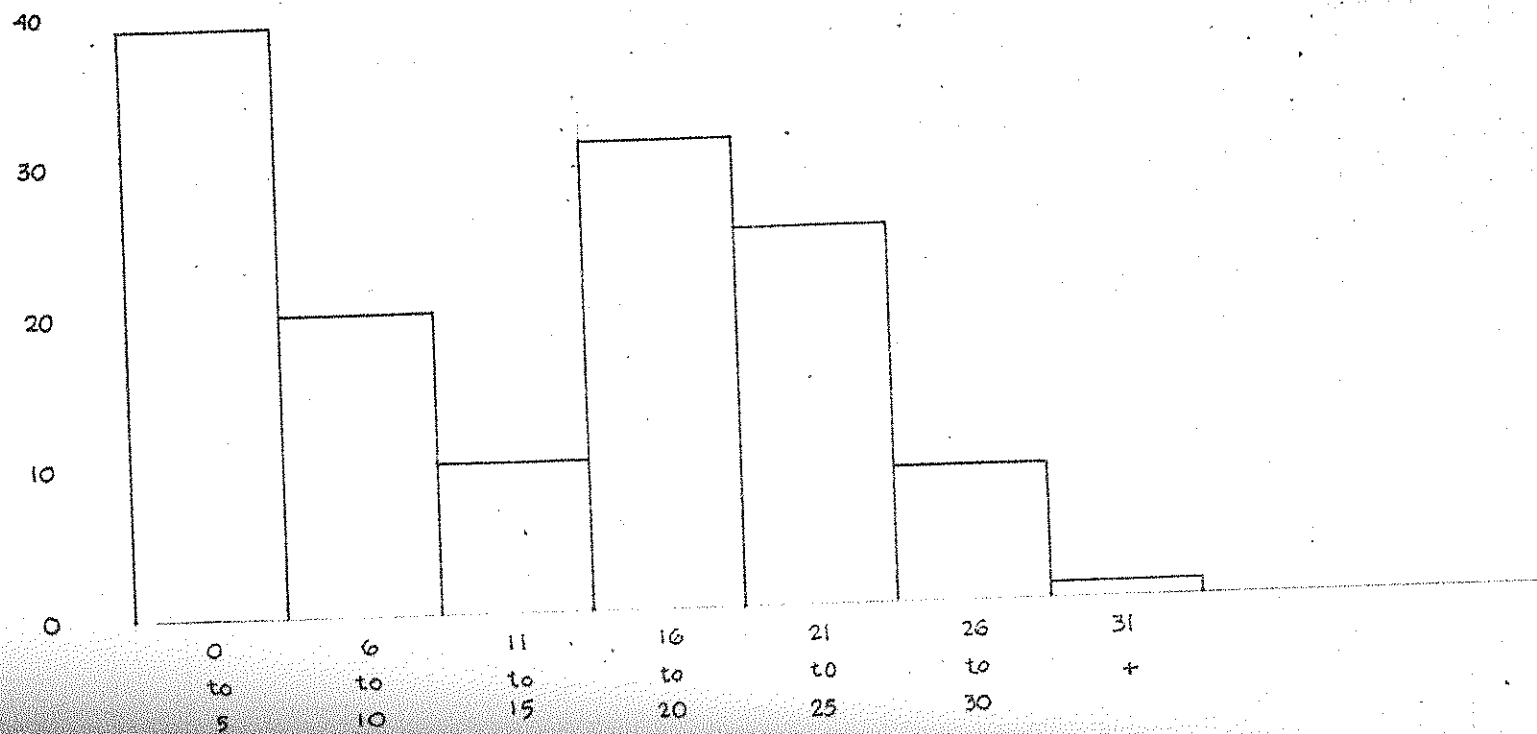
C E R T I F I C A T I O N

I, Victor Zachanko, of 2730 Philip Avenue, in the City of North Vancouver, in the Province of British Columbia, hereby certify as follows:

- 1] That I hold the degree of B.Sc. in Mining Engineering (with honours), University of Toronto, 1936.
- 2] That I am a registered Professional Engineer of the Provinces of British Columbia and Ontario and reside at 2730 Philip Avenue, North Vancouver, B.C.
- 3] That my mining experience embraces all phases of mining, and I have worked throughout Canada, Australia, Fiji, Tanzania, and parts of U.S.A. and Mexico.
- 4] That I have no interest either directly or indirectly in the securities of the Company, nor do I expect to receive any.
- 5] The the information contained herein was obtained from perusal of the material listed in "References". I have not been on the ground surveyed.

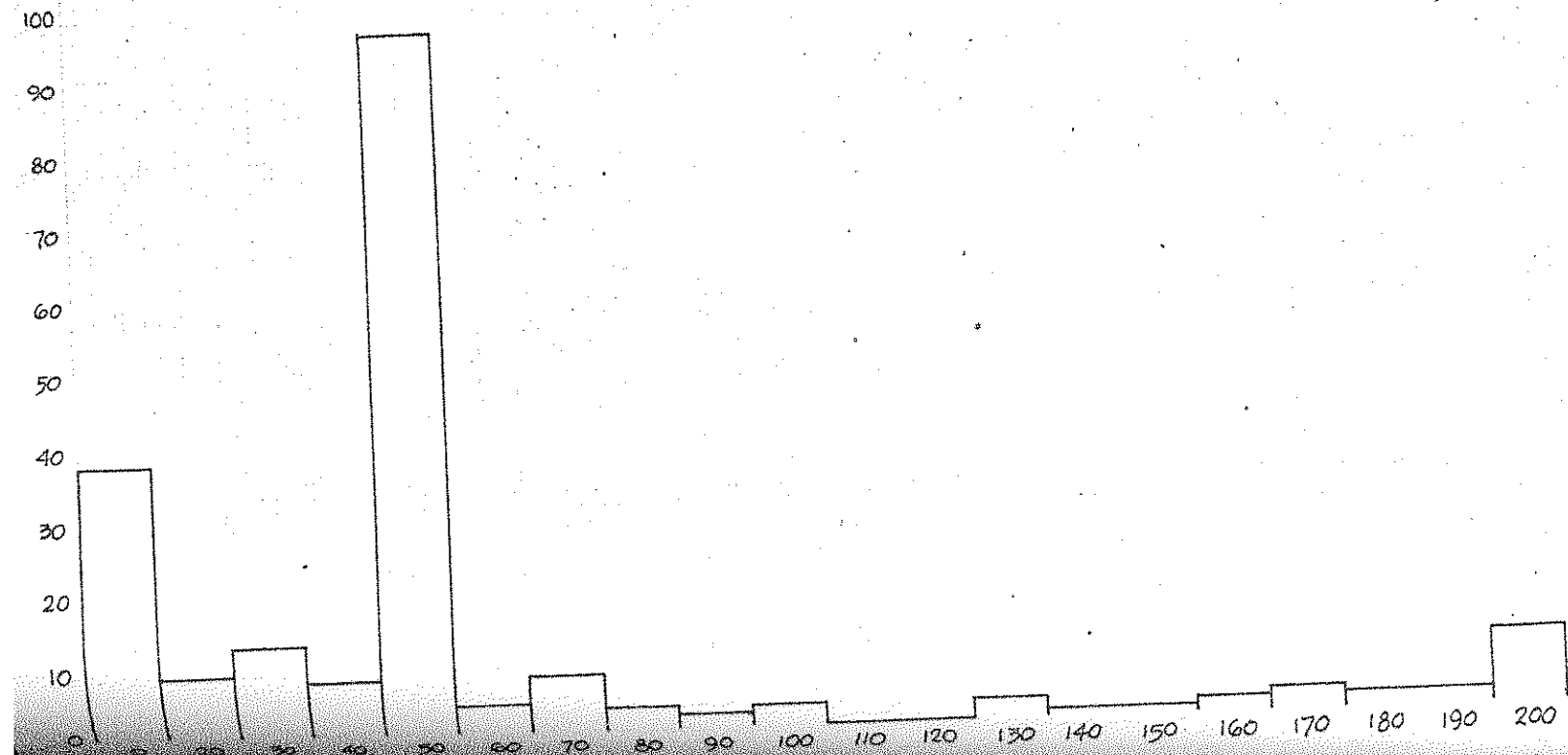
Victor Zachanko.
Victor Zachanko, Eng.
A circular seal for a Professional Engineer in the Province of British Columbia. The seal features a double-line border. Inside, the text "PROFESSIONAL" is at the top, "OF" is in the center, "VICTOR ZACHANKO" is in the middle, "BRITISH COLUMBIA" is at the bottom, and "ENGINEER" is at the very bottom.

RANGE OF GEOCHEMICAL READINGS. Pb - p.p.m.



NUMBER OF SAMPLES.

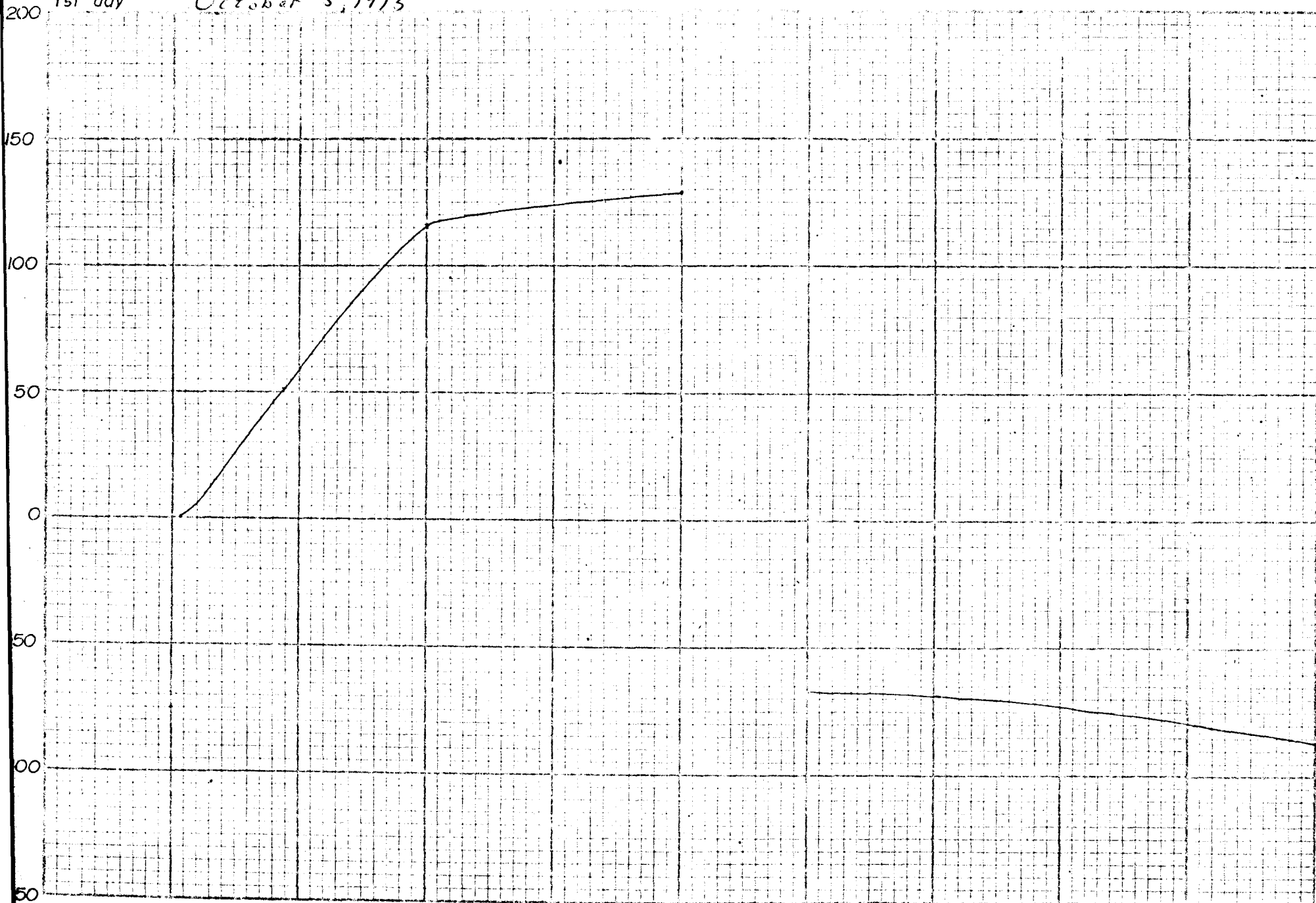
RANGE OF GEOCHEMICAL READINGS. Zn - p.p.m.



NUMBER OF SAMPLES.

1st day

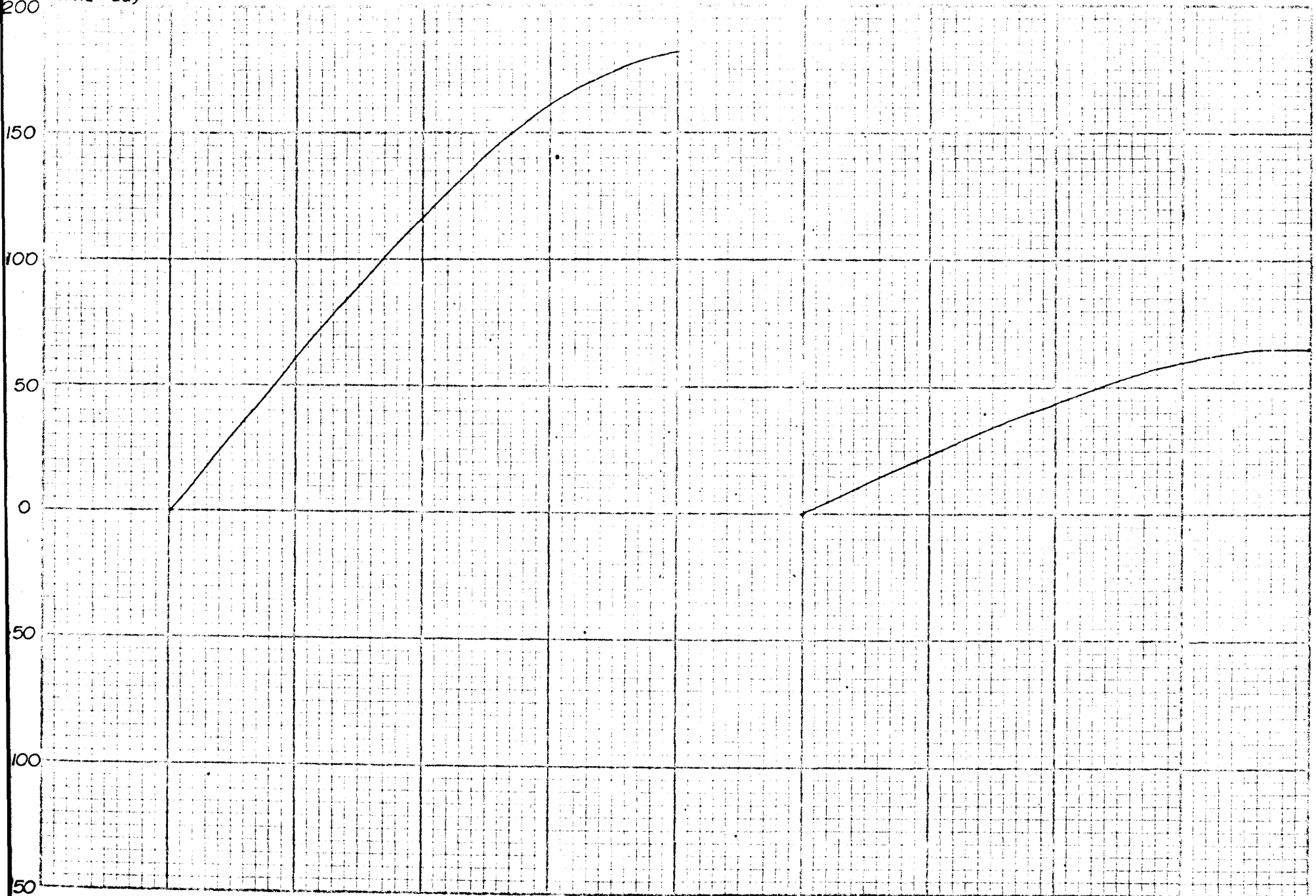
October 3, 1973



DIURNAL VARIATIONS (GAMMAS)

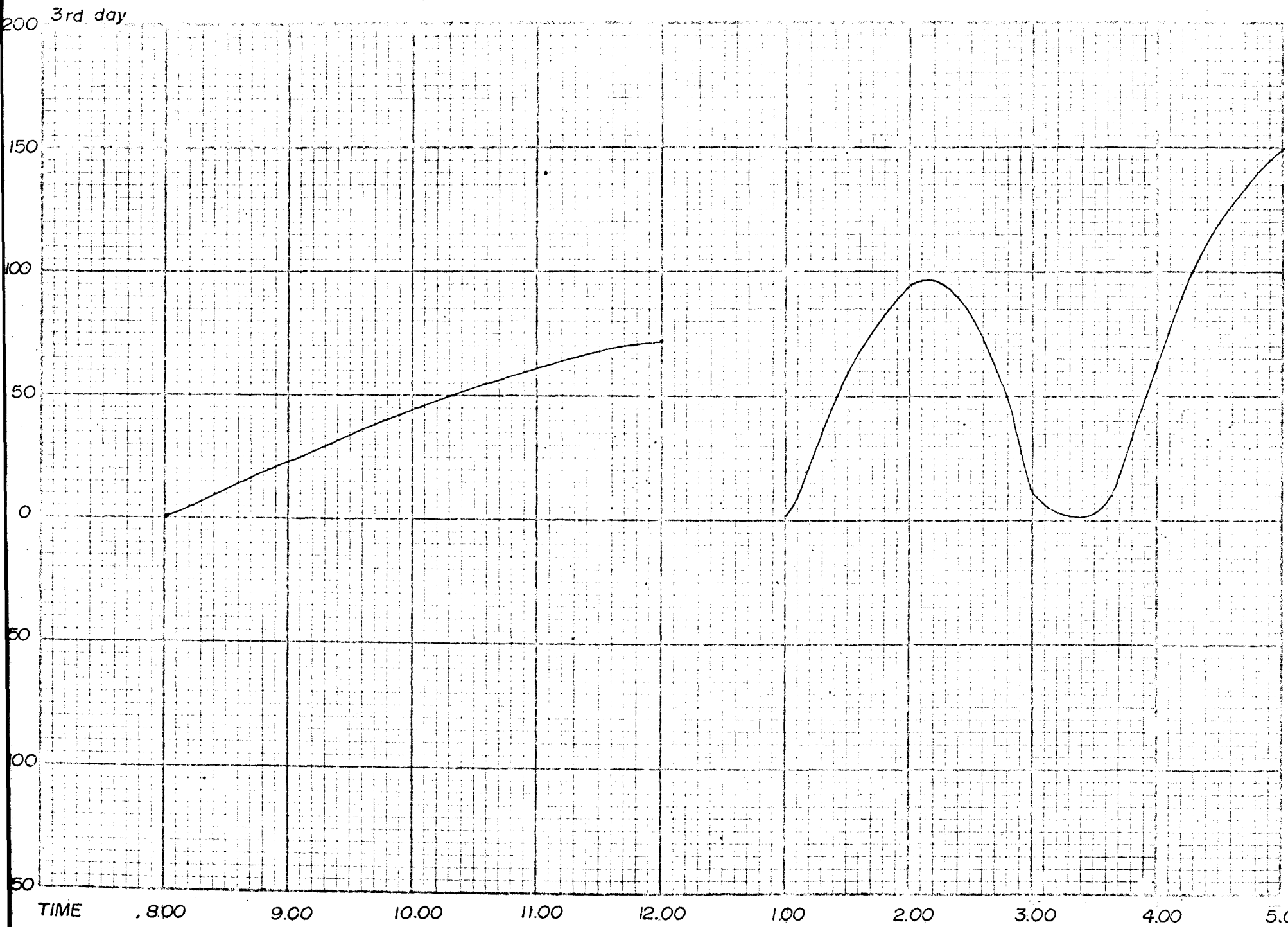
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2nd day



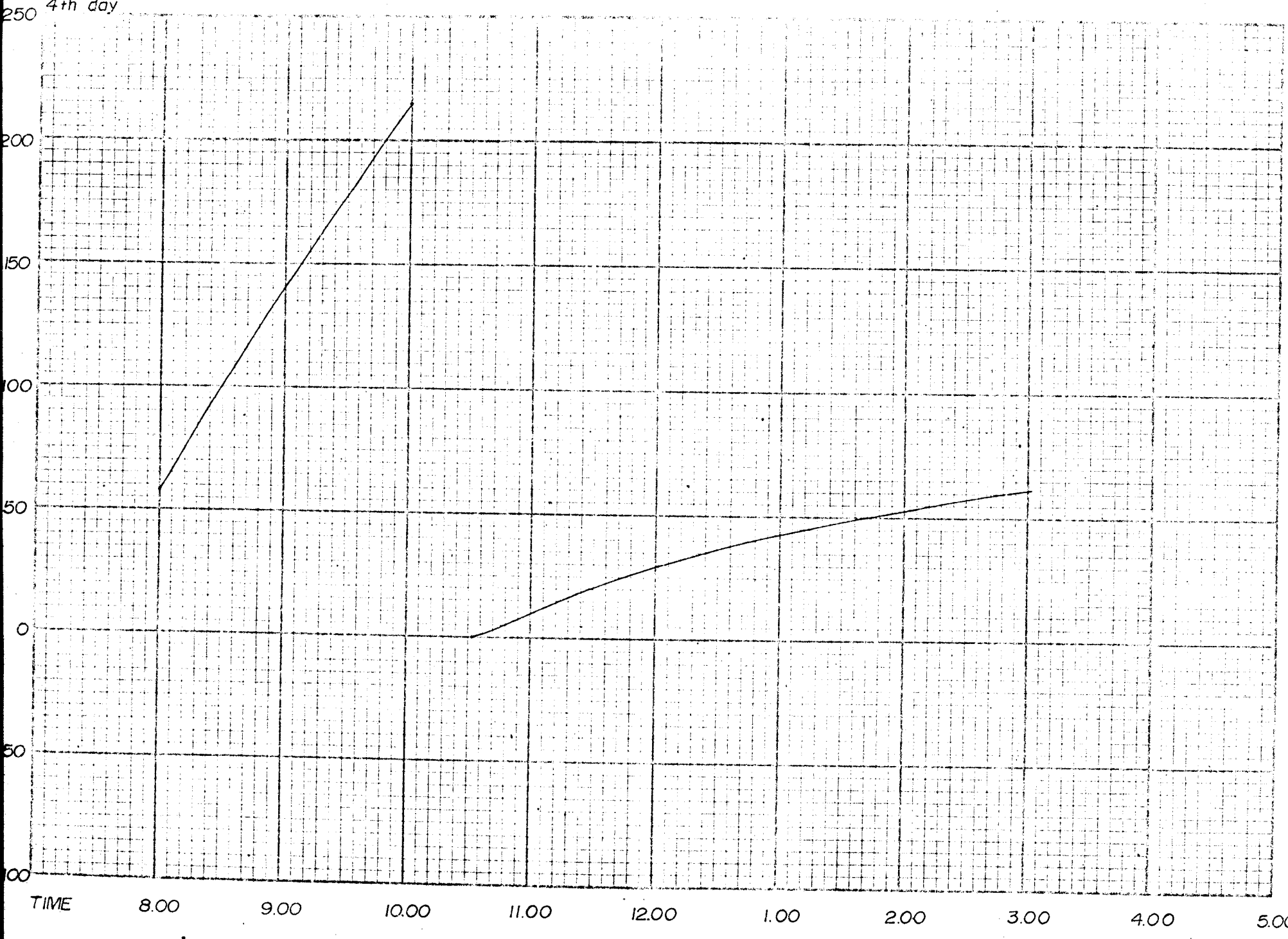
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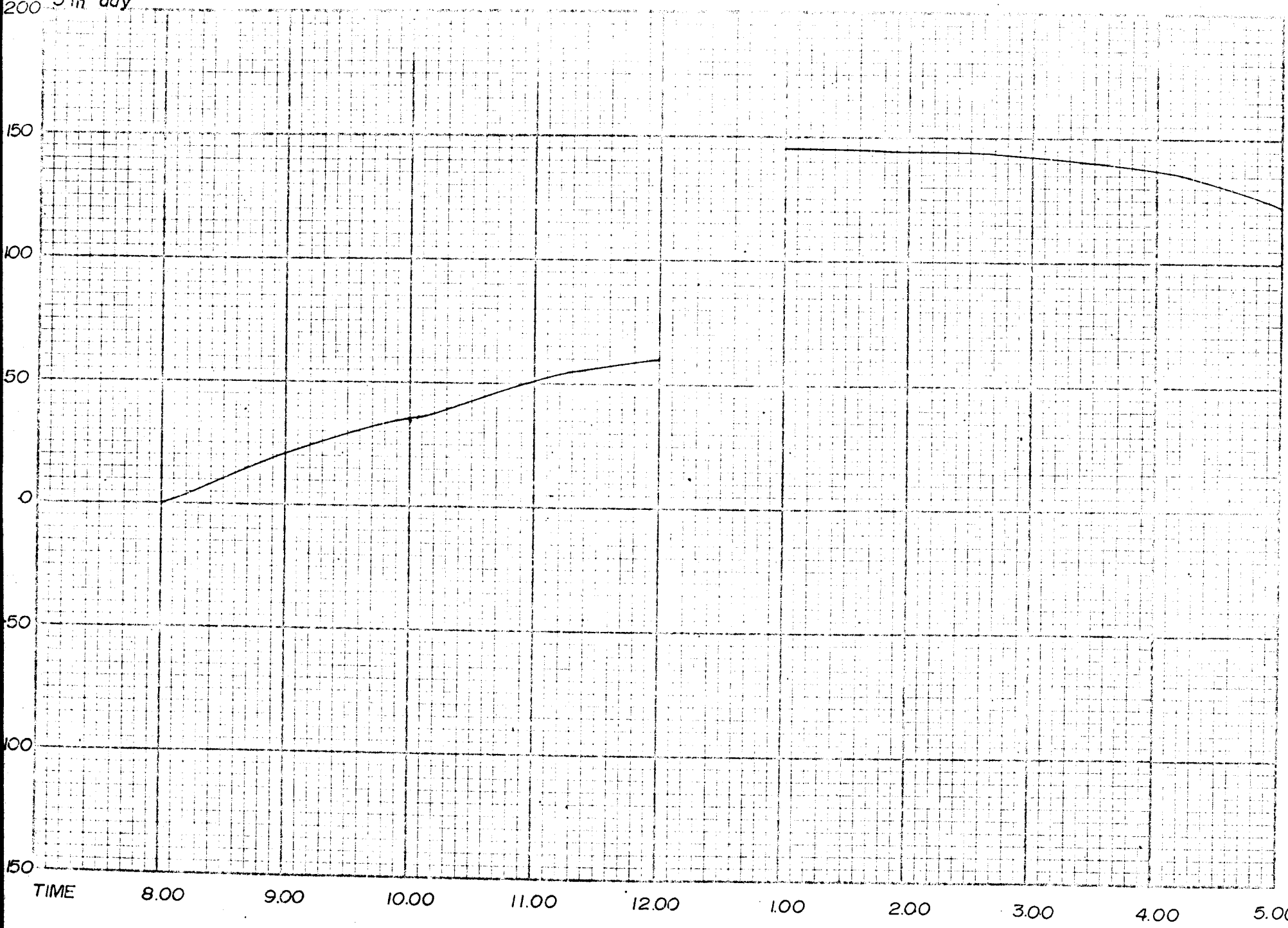
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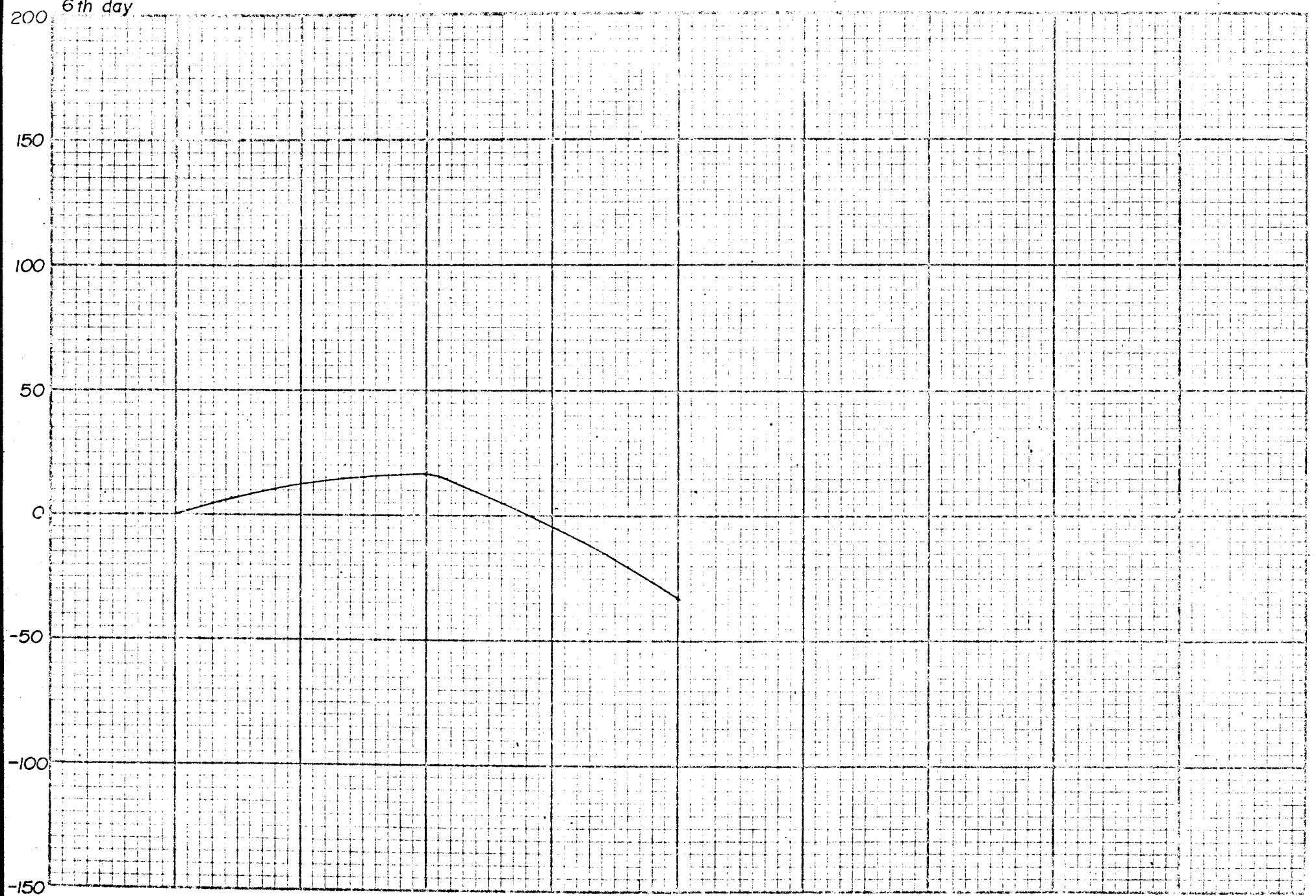
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5th day



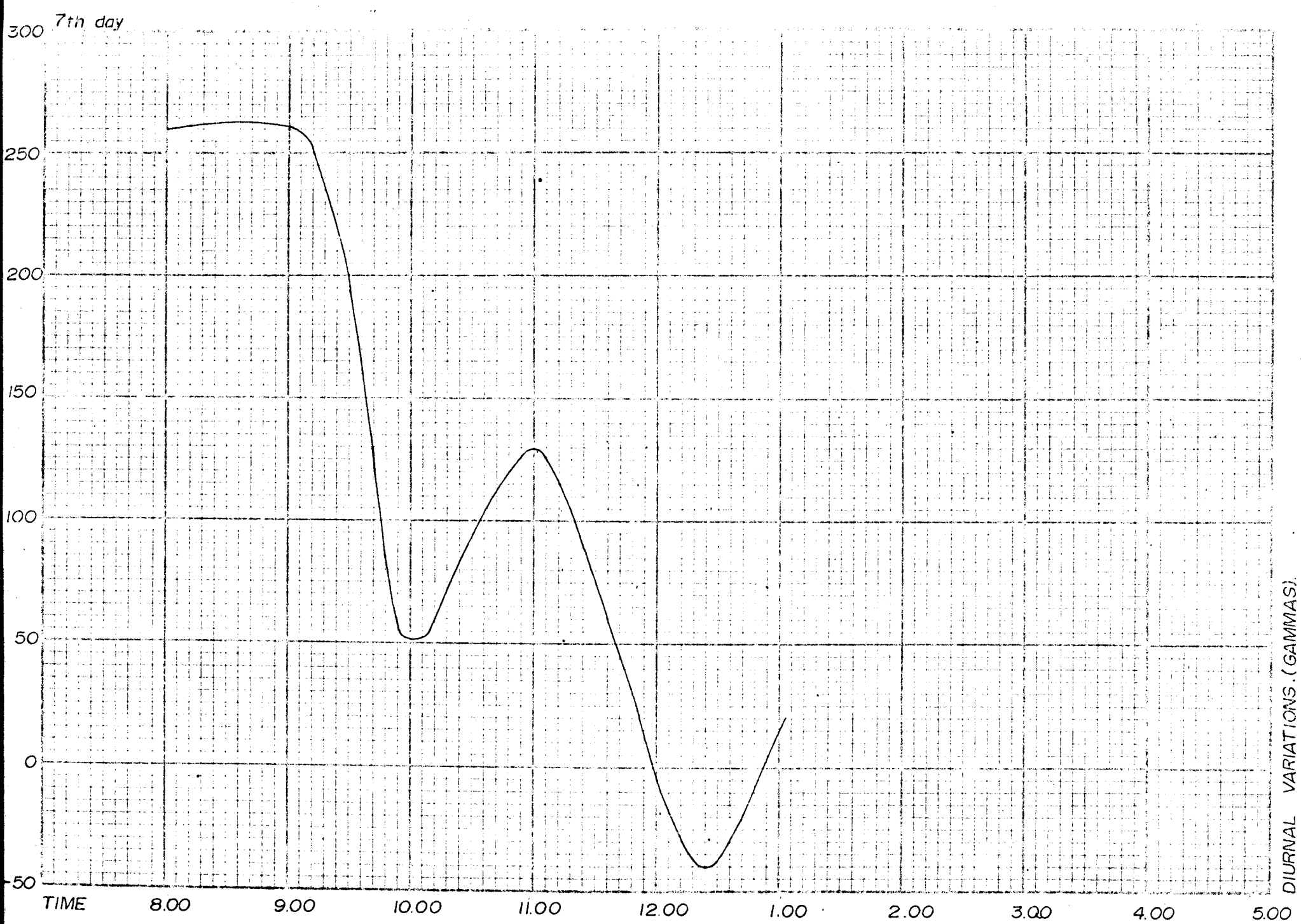
DIURNAL VARIATIONS. (GAMMAS).

6th day



TIME 8.00 9.00 10.00 11.00 12.00 1.00 2.00 3.00 4.00 5.00

DIURNAL VARIATIONS (GAMMAS)





ASSAYERS
CHEMISTS
GEOCHEMISTS

CORE LABORATORIES LTD.

325 Howe Street Vancouver 1, B.C. Phone 688-3504

Certificate of Analysis

REPORT NO.
1136-30-7031

SAMPLE(S) FROM: STRATO GEOLOGICAL LTD
19 - 448 Seymour St.,
Vancouver, B.C.

SAMPLE NO.	Cu (ppm)	Pb (ppm)
1104-153	23	6
83	120	24
43	25	1
3N	600	38
12N	31	4
104N-153	115	19
125	13	8
83	11	5
48	48	9
4N	228	22
8N	186	27
12N	13	2
15N	12	5
974-153	28	18
125	49	21
83	117	25
43	135	21
4N	224	27
8N	120	22
12N	52	10
15N	85	29
904-153	23	12
83	143	22
43	72	18
4N	64	12
8N	35	14
12N	48	11
15N	119	22
811004-4N	53	19
834-153	78	17
83	172	25
4N	129	16
8N	163	20
12N	267	19
12N	38	9

DATE 24 October 1973

SIGNED



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325 Howe Street Vancouver 1, B.C. Phone 688-3504

Certificate of Analysis

REPORT NO.
1136-30-7031

SAMPLE(S) FROM: STRATO GEOLOGICAL LTD (Page 2)

SAMPLE NO.	Zn (ppm)	Pb (ppm)
83.4+15N	27	7
76.4+15S	72	13
12S	55	19
8S	44	19
4N	79	8
8N	197	23
12N	115	19
15N	8	5
69.4+15S	30	6
12S	59	19
8S	51	11
8N	127	20
12N	60	3
15N	7	3
62.4+15S	5	4
8S	79	20
4N	270	29
8N	29	2
12N	107	9
15N	16	4
BL55.4+15S	76	21
8S	52	10
4S	150	21
4N	32	9
8N	44	11
12N	223	22
15N	50	16
BL48.4+15S	21	4
12S	6	1
8S	9	2
4S	62	10
4N	115	18
8N	14	3
12N	6	2
15N	270	30

DATE 24 October 1973

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REPORT NO.
1136-30-7031

SAMPLE(S) FROM: STRATO GEOLOGICAL LTD (Page 3)

SAMPLE NO.	Zn (ppm)	Pb (ppm)
4L1+15S	31	22
8S	10	3
4S	2	1
4N	89	23
12N	4	3
15N	5	4
34N+15S	13	3
12S	5	2
8S	6	5
4S	12	16
4N	76	21
8N	10	6
12N	35	17
BL27N+15S	205	28
12S	40	18
8S	18	15
4S	33	17
4N	48	14
8N	6	4
12N	34	5
15N	9	4
BL-20N+15S	5	3
12S	4	2
4S	5	2
8N	4	2
20N+4N	3	1
8N	14	22
12N	11	3
15N	75	16
BL13N+15S	51	23
12S	55	20
8S	34	15
4S	37	19
4N	7	6
8N	52	26

DATE 24 October 1973

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Certificate of Analysis

REPORT NO.
1136-30-7031

SAMPLE(S) FROM: STRATO GEOLOGICAL LTD (Page 4)

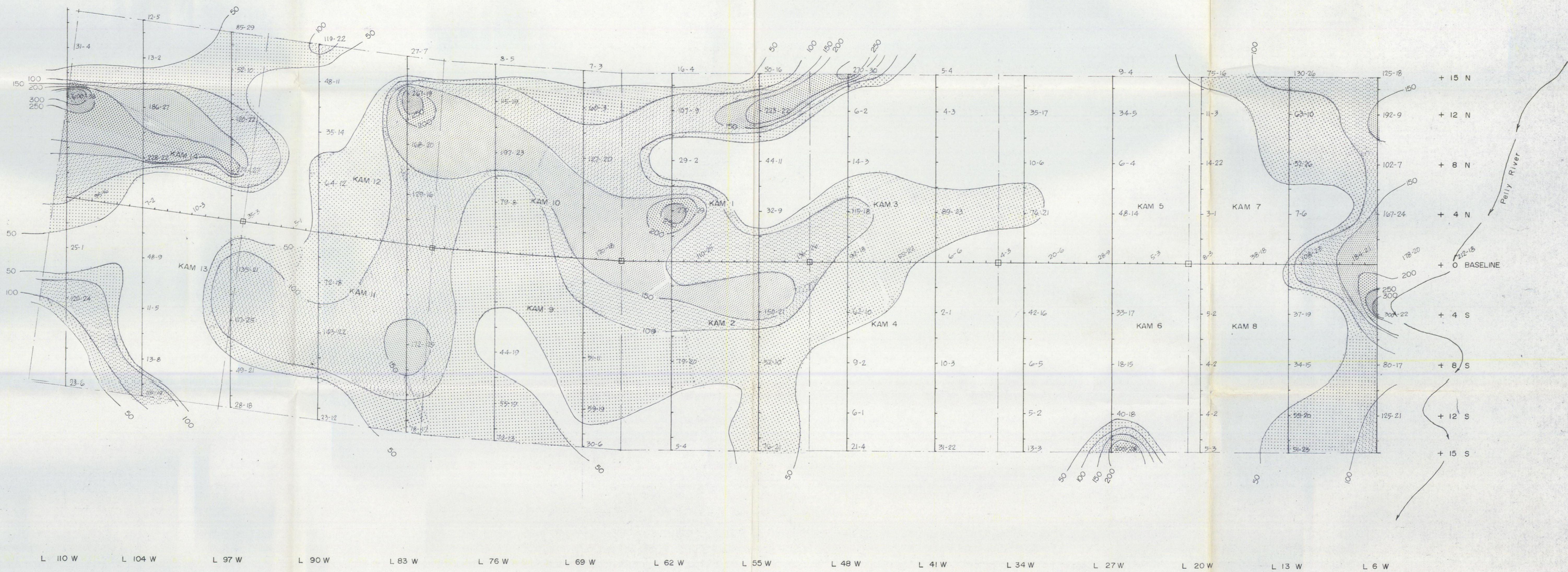
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BL13N+12N	63	10
15N	130	26
BL6N+12S	125	21
8S	80	17
4S	300	22
4N	167	24
8N	102	7
12N	192	9
15N	125	18
BL-100N	95	16
104N	7	2
100N	10	3
96N	35	3
92N	5	1
60N	170	18
60N	110	25
52N	136	26
48N	92	18
44N	55	22
40N	6	6
36N	4	3
32N	20	6
28N	28	9
24N	5	3
20N	8	3
16N	38	10
12N	103	23
8N	164	21
4N	173	20
0	212	18

DATE 24 October 1973

SIGNED 

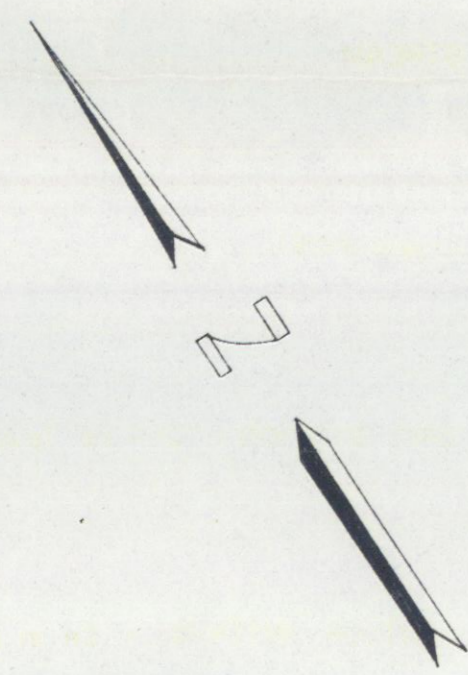
PULP AND REJECTS DISCARDED AFTER 3 MONTHS




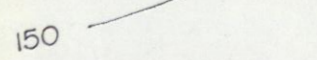
PROVINCIAL ASSAYER



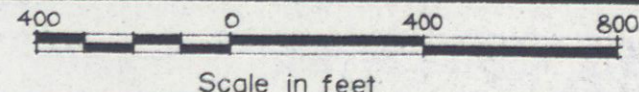

L 110 W L 104 W L 97 W L 90 W L 83 W L 76 W L 69 W L 62 W L 55 W L 48 W L 41 W L 34 W L 27 W L 20 W L 13 W L 6 W

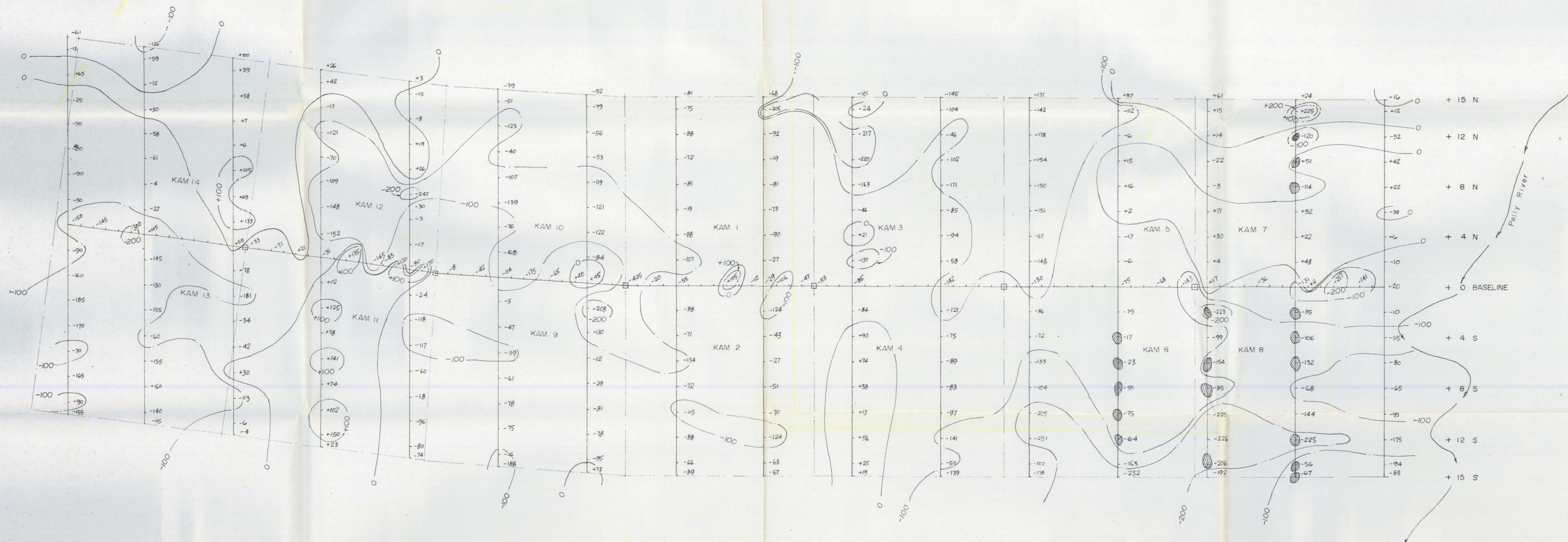
LEGEND



-  STREAM
-  CLAIM POST
-  GRID STATION - Zn - Pb (p.p.m.)
-  CONTOUR INTERVAL - Zn in p.p.m.

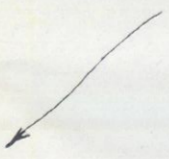


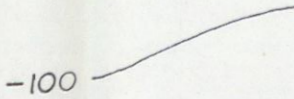


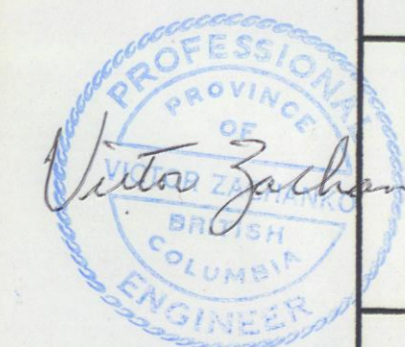
GOLDEN GATE EXPLORATIONS LTD (N.P.L.)	
GEOCHEMICAL SURVEY	
KAM 1-14 MINERAL CLAIM GROUP	
SUMMIT LAKE AREA	
YUKON TERRITORY	
 Scale in feet	October 1973
 STRATO GEOLOGICAL LTD. 19-448 Seymour street, Vancouver, B.C.	

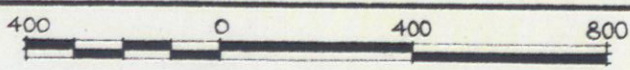



L 110 W L 104 W L 97 W L 90 W L 83 W L 76 W L 69 W L 62 W L 55 W L 48 W L 41 W L 34 W L 27 W L 20 W L 13 W L 6 W

LEGEND

-  STREAM
-  CLAIM POST
-  GRID STATION - READINGS IN GAMMAS.
-  -100 GAMMAS CONTOUR INTERVAL.



GOLDEN GATE EXPLORATIONS LTD (N.P.L.)	
MAGNETOMETER SURVEY	
KAM 1-14 MINERAL CLAIM GROUP SUMMIT LAKE AREA YUKON TERRITORY	
 Scale in feet	October 1973
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