

SCHLUMBERGER

BOREHOLE COMPENSATED
SONIC LOG

SCHLUMBERGER OF CANADA Calgary Alberta

PROVINCE YUKON TERRITORIES
FIELD
WELL 10E SPRING RIVER YT
N-58
COMPANY IMPERIAL OIL ENTERPRISES LTD.

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WELL 10E SPRING RIVER YT
N-58
FIELD
PROVINCE YUKON TERRITORIES
LOCATION 69° 07' 52" N LAT
138° 44' 05" W LONG
Permanent Datum GL Elev. 304
Log Measured From KB 14 Ft. Above Perm. Datum
Other Services: DIL, FDC, HRT, HDT, LCS, DCS
Elev. KB 318
GL 304
CBF

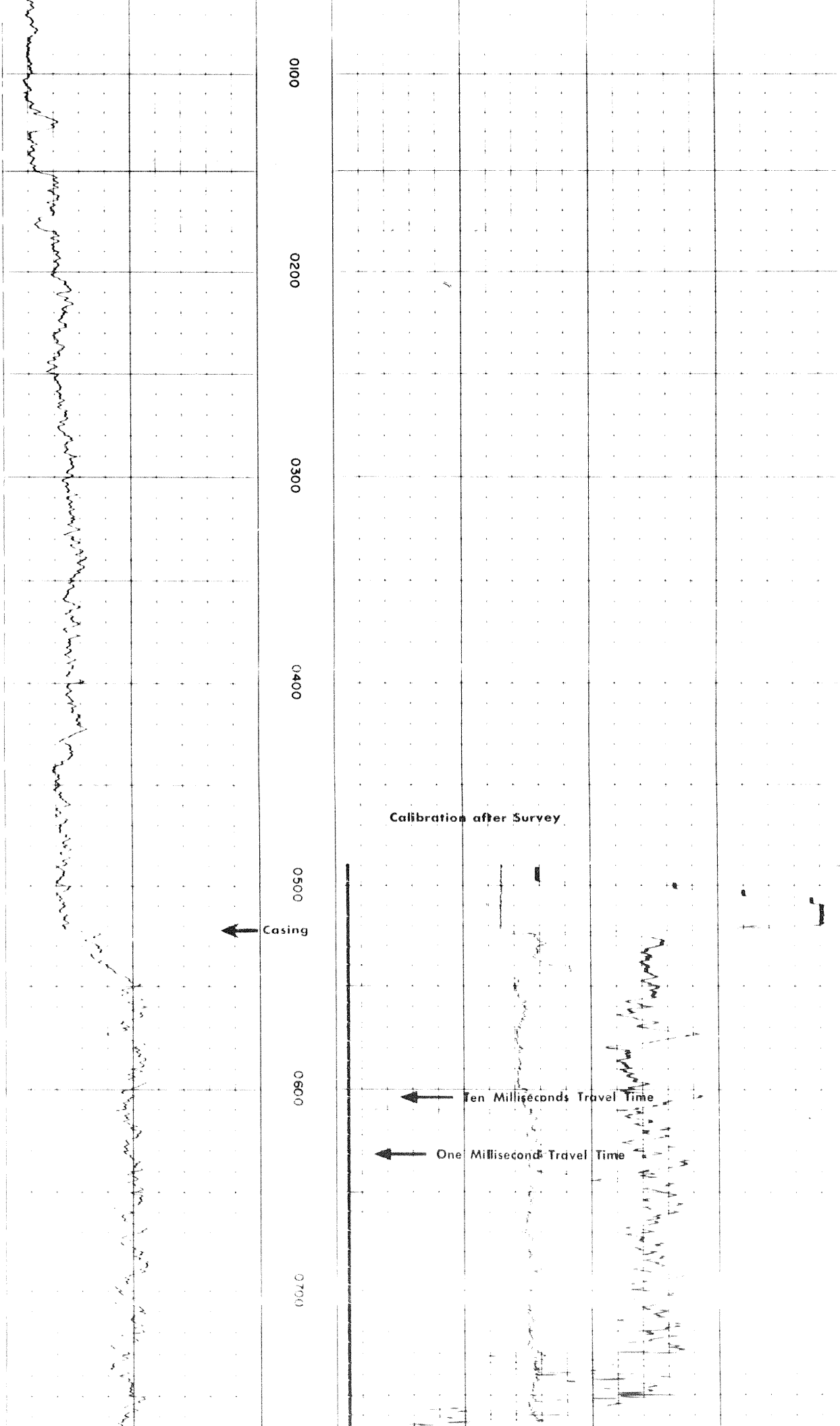
Date	Run No.	First Reading	Last Reading	Feet Measured	Depth Reached	Bottom Driller	Csg SOC	Mud Nature	Dens	Water pH	Water Loss	Res.	Rot (NEAS)	Bit Size	Span	Op. Rig Time	Truck No.	Recorded By	Witness
6 FEB 71	ONE	1980	1978	50	1930	1982	1981	523	10.2	9.5	10.0	RMKS @	2.78	RMKS	2	3 HRS	OSU-C 363 REM	NICKERSON	HEBERT
14 MAR 71	TWO	6995	1978	5017	1982	1981	1978	523	9.2	9.5	-	RMKS @	1.87	RMKS	2	5 HRS	OSU-F 363 REM	NICKERSON	KAP JACK & STAPLES

5 5 APR 71 CAL EMP

REMARKS		1st Run Service Order # 5697	
Drilling Stopped 2130 / 5th	Circulation Stopped 2150 / 5th	Tool on Bottom 0400 / 6th	B.H.T. RMKS @
RUN 2 1900 / 13th	1900 / 13th	2400 / 13th	112
Caliper No. D D 1128	MUD SAMPLES: Rm#1 = 2.78 50°F	BIT SIZE: 12 1/4" - 1970	
Cartridge No. A A 279	RUN 1 Rm#2 = 2.76 50°F	RUN 1 8 11/16" - 1981	
Panel No. A 114 A 114	Rm#3 = 2.81 50°F		
Sonde No. A 75	RUN 1 BHT - 84°F TOOL OFF BOTTOM AT PASS 0432 / 6th		
Centralizer Type VCD & BUMPERS	BHT - 82°F TOOL OFF BOTTOM PASS 0600 / 6th		
	DRILLERS CIRCULATING TEMPERATURE 110°F		
	RUN 2 TEMPERATURE RECORDED 40° ABOVE FIRST READING 0107 / 14th.		
	INTEGRATED TRAVEL TIME RECORDED 7" DEEP.		
	BIT SIZE: 9 1/2" - 6998	8 11/16" - 7009	
GAMMA RAY CALIBRATION:			
Background CPS. RUN 1 28	Test Source CPS. 440	Galv. Increase Divisions 10.0	Panel Sens. Tap for Cal. PGP-D
RUN 2 20	380	10.0	PGP-D

GAMMA RAY API UNITS	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot
Sens. 150 T.C. 2 Zero 0 div. to left	200	125 50
150 300	350	275 200
	SCALE CHANGE - 1980'	
	CALIPER	
	7 8 9 10 11 12 13 14 15 16	

1 of



0100

0200

0300

0400

0500

0600

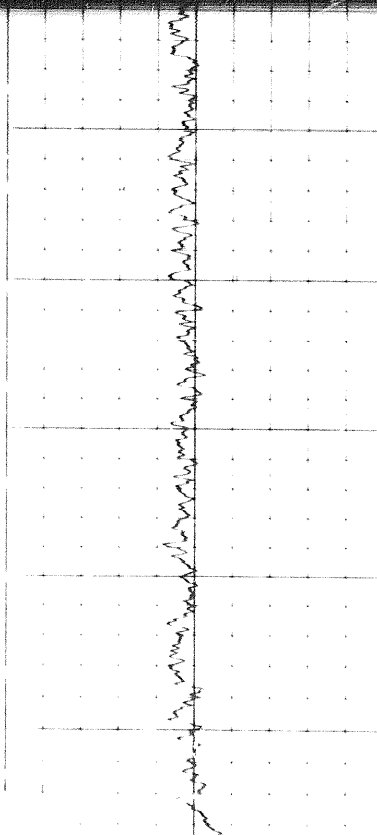
0700

Calibration after Survey

← Casing

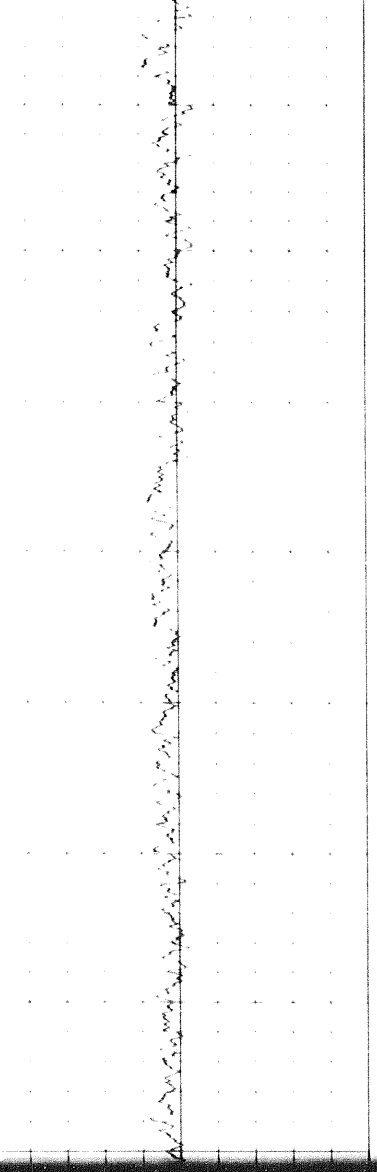
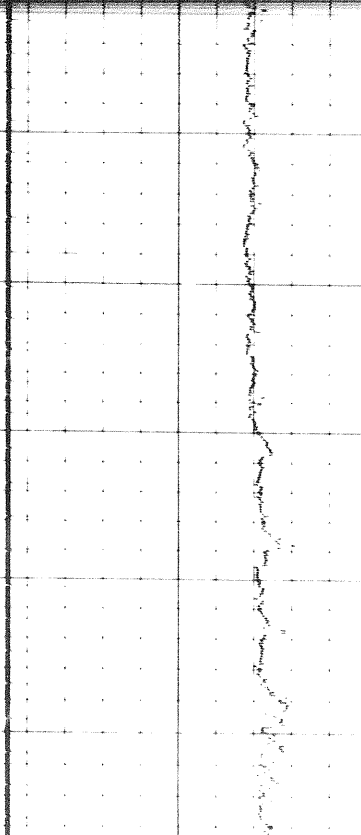
← Ten Milliseconds Travel Time

← One Millisecond Travel Time



1000

1000

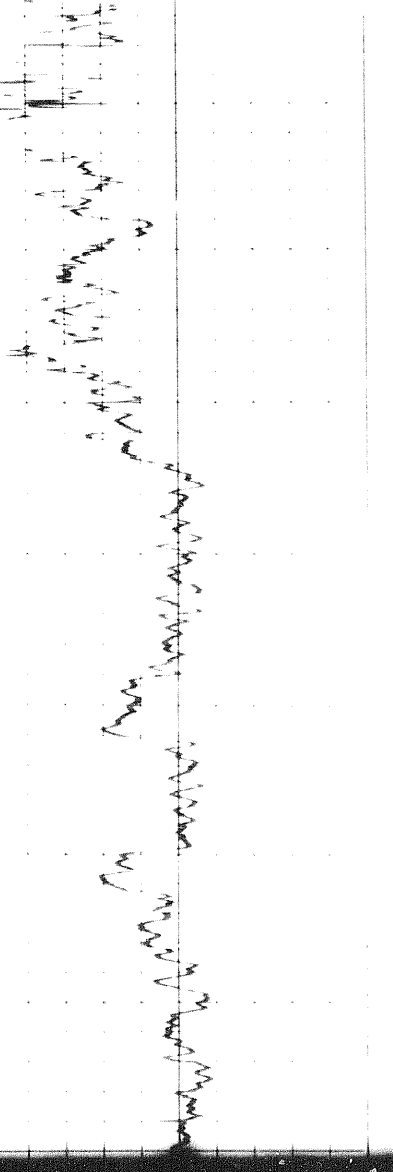
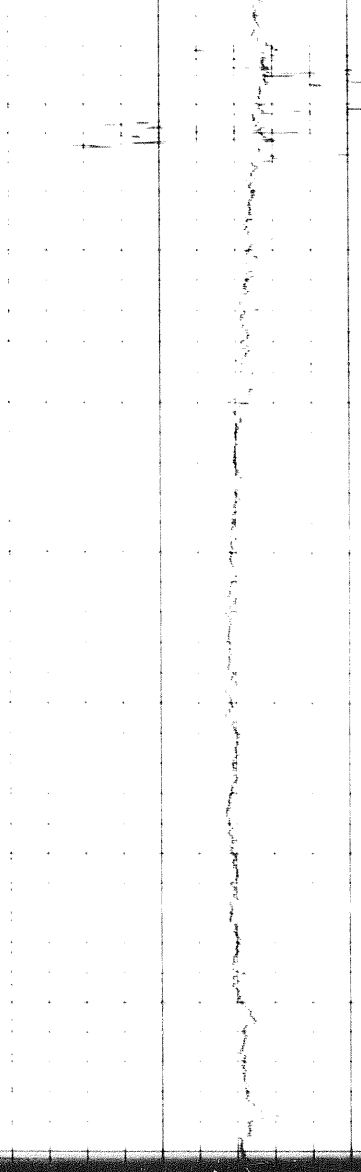


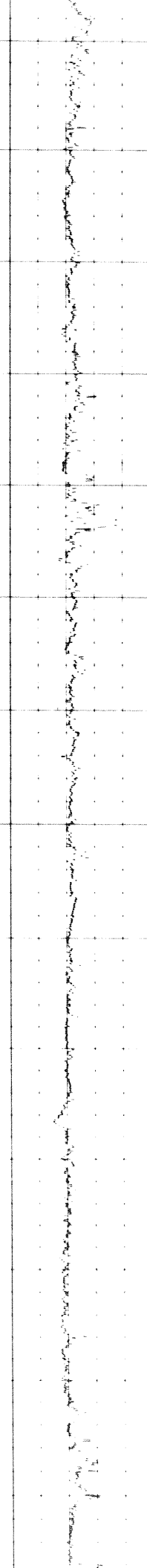
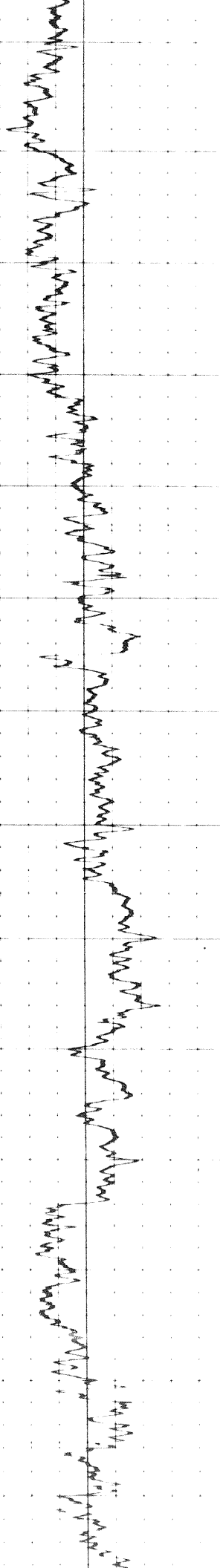
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1000

0900

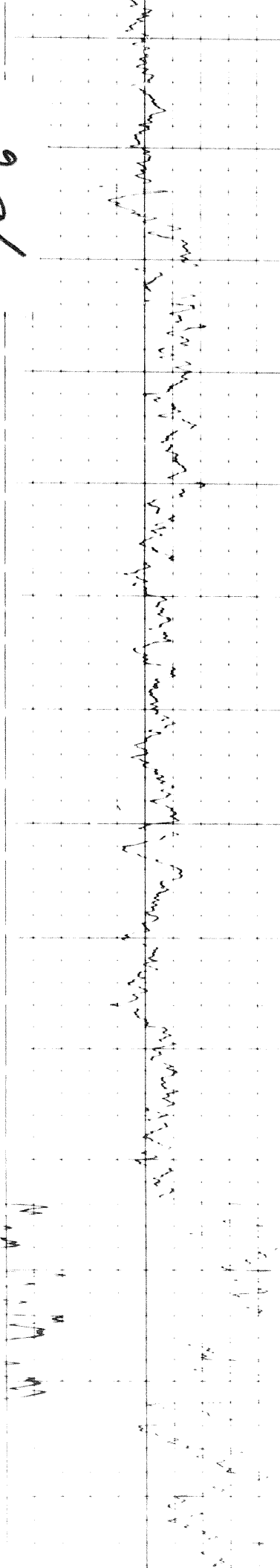
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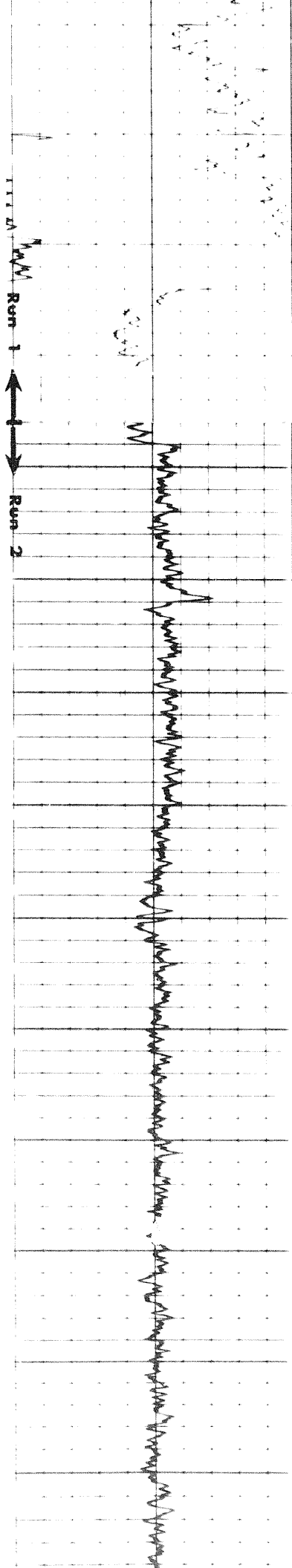


1200 1300 1400 1500 1600 1700 1800

207



Run 1
Run 2



1800
1900
2000
2100
2200
2300
2400

CALIPER

6 7 8 9 10 11 12 13 14 15 16

Scale Change

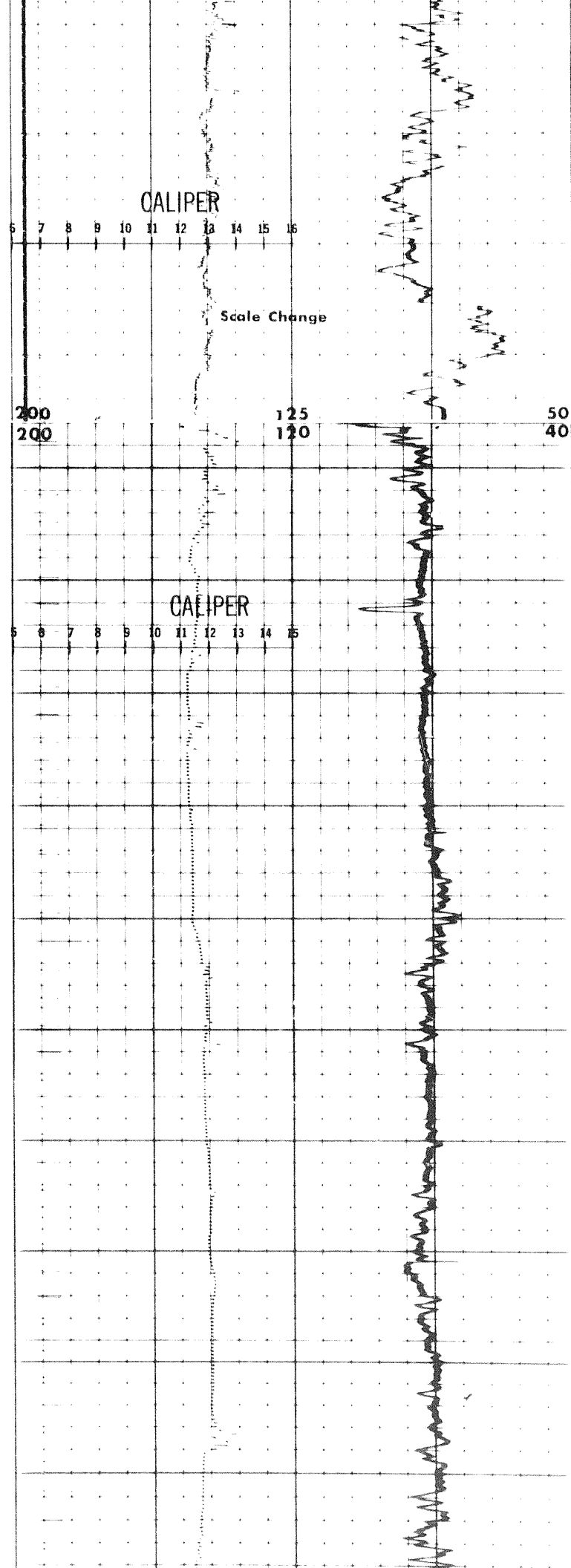
200
200

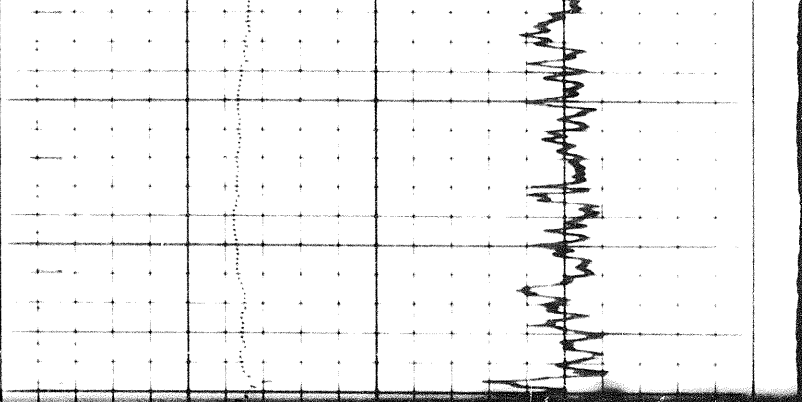
125
120

50
40

CALIPER

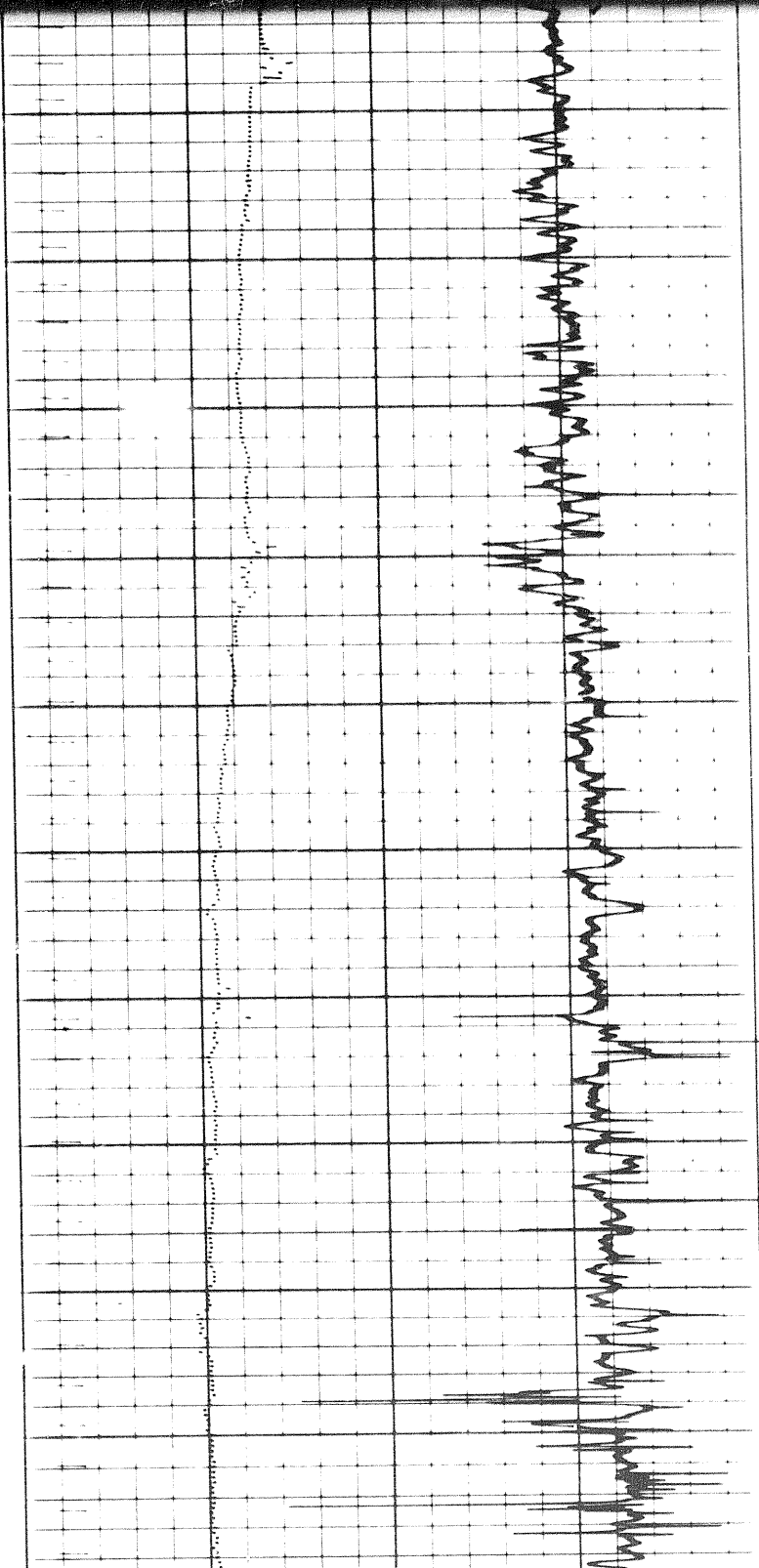
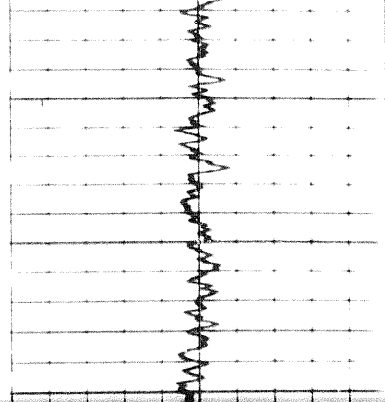
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2500

092



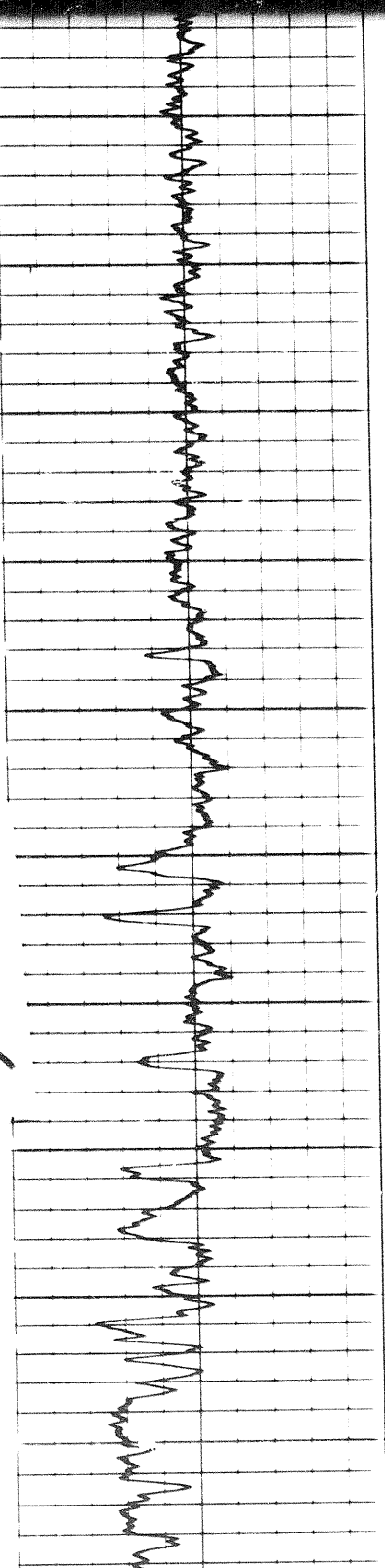
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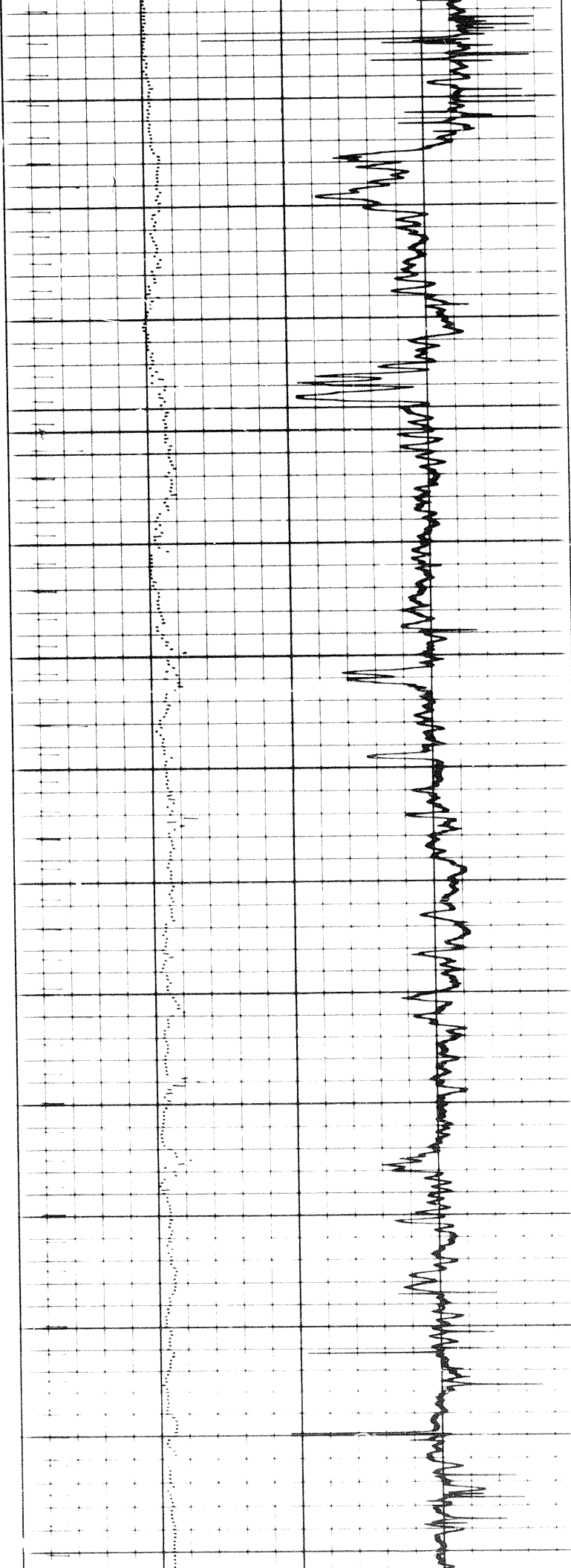
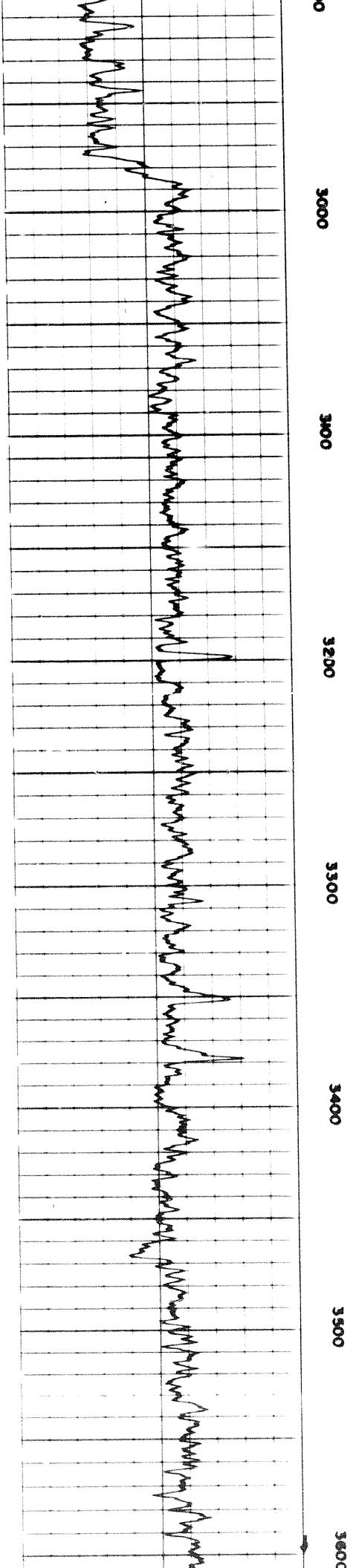
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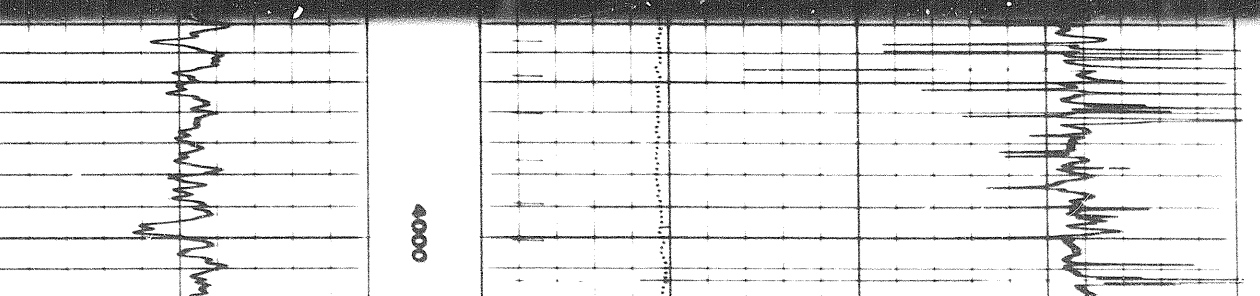
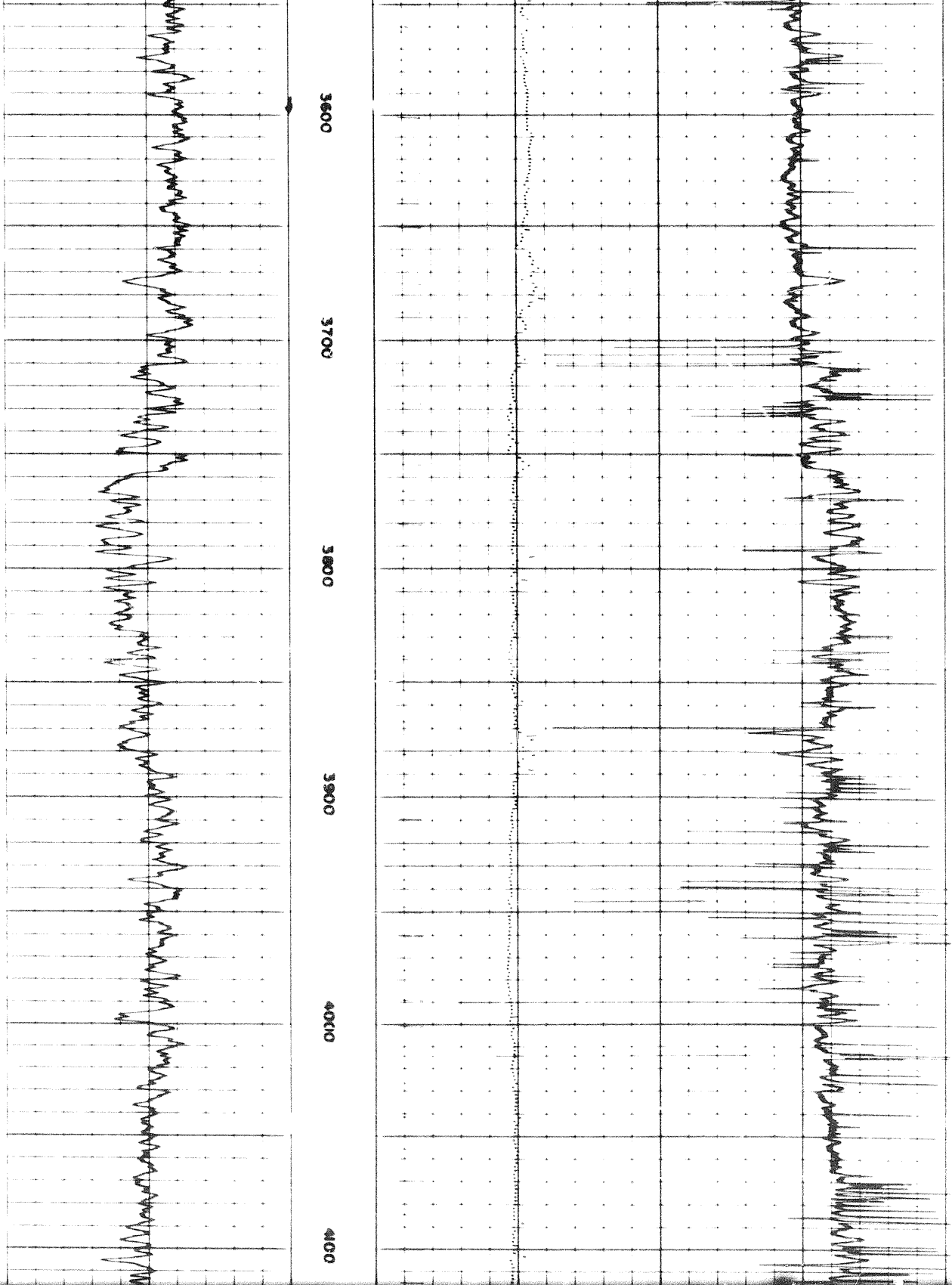
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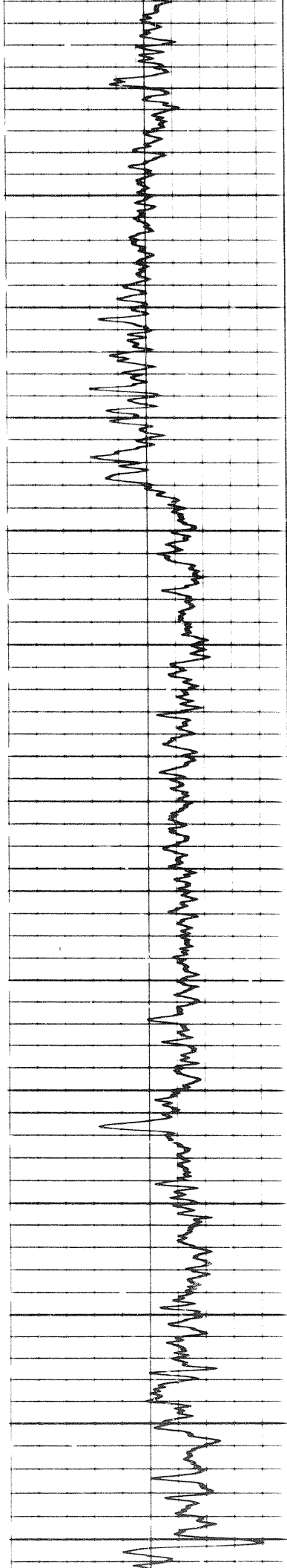


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4 of 4



4000

4100

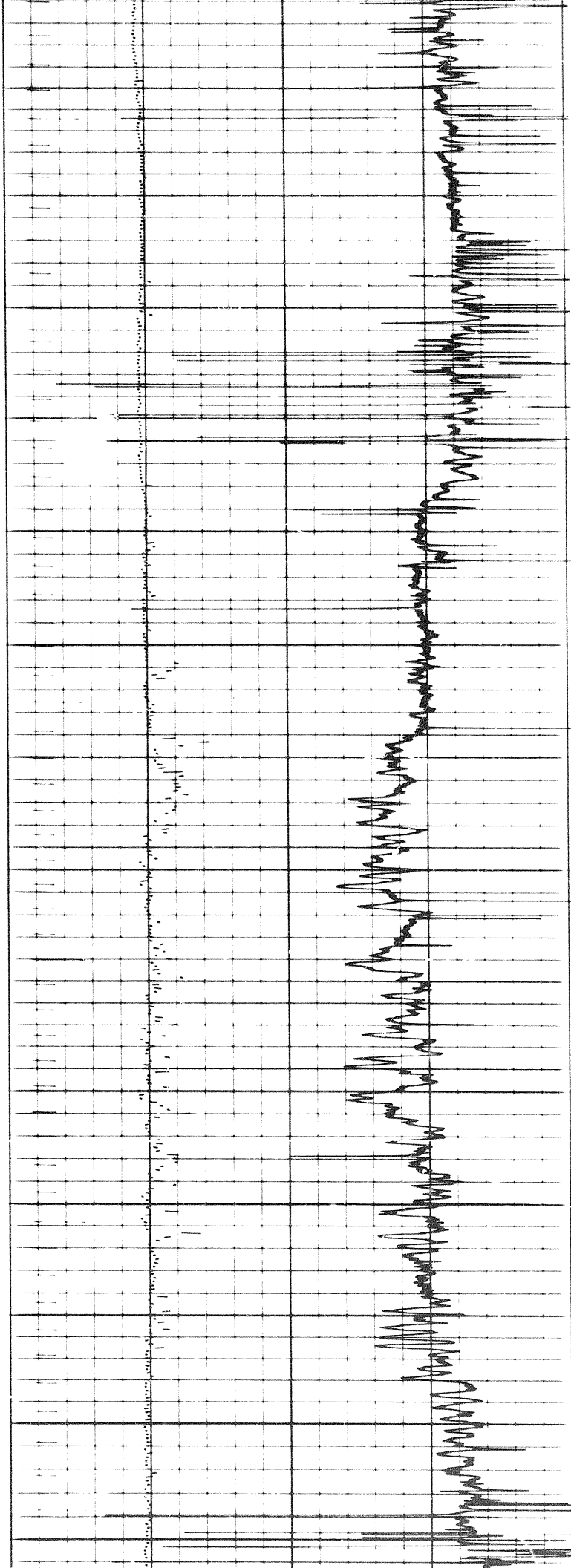
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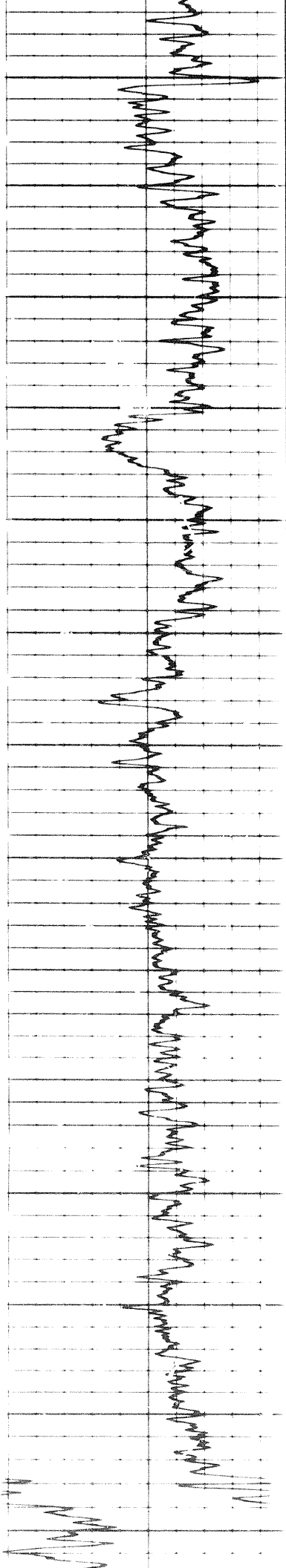
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4400

4500

4600





4700

4800

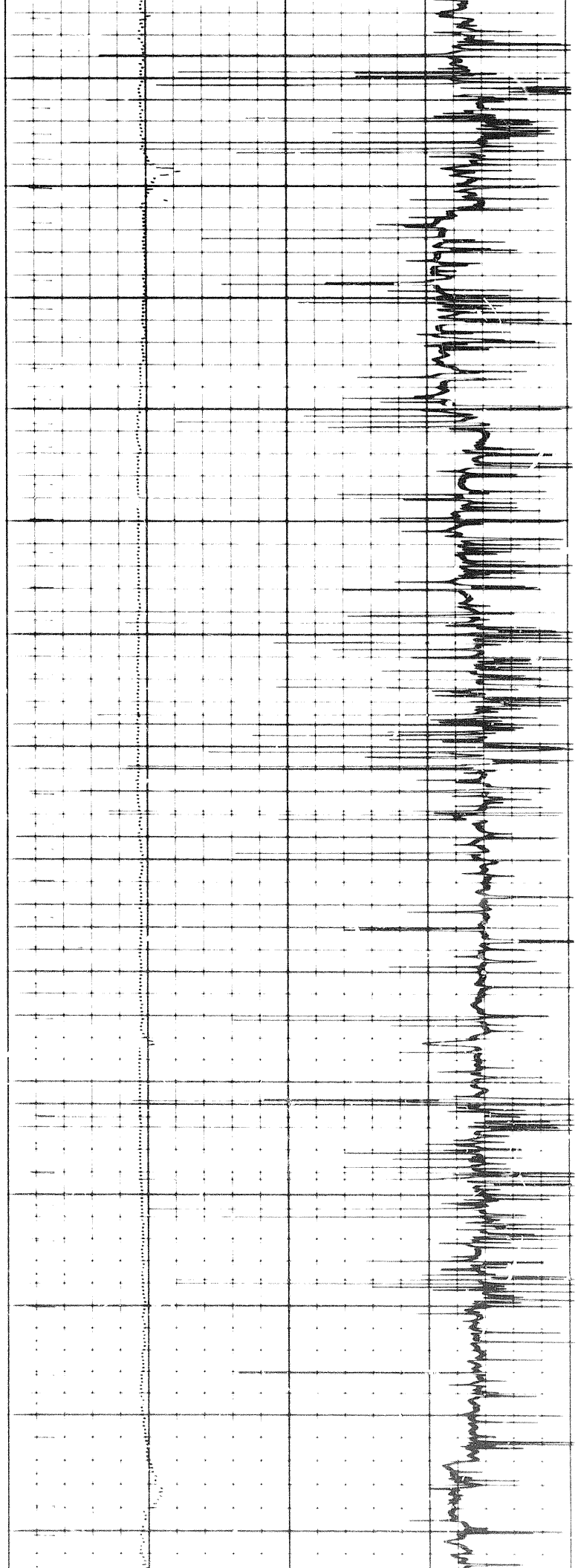
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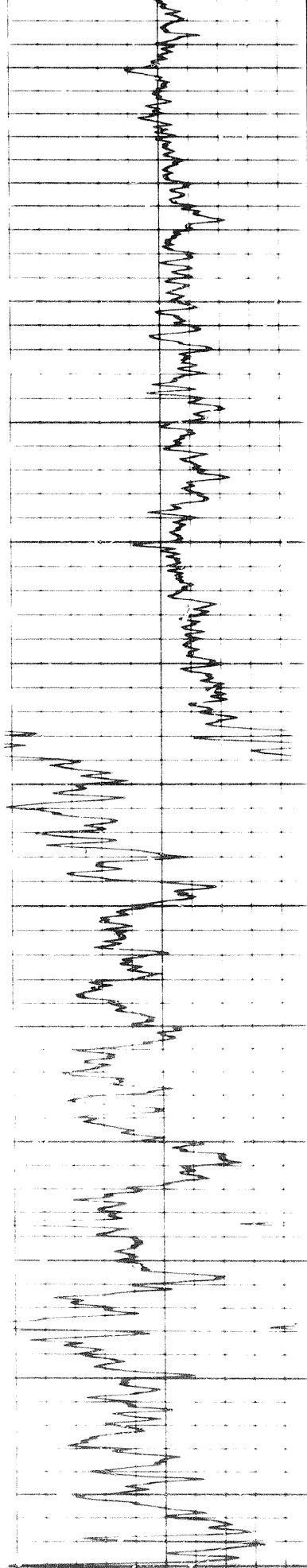
5000

5100

5200

5300





0.000

5.000

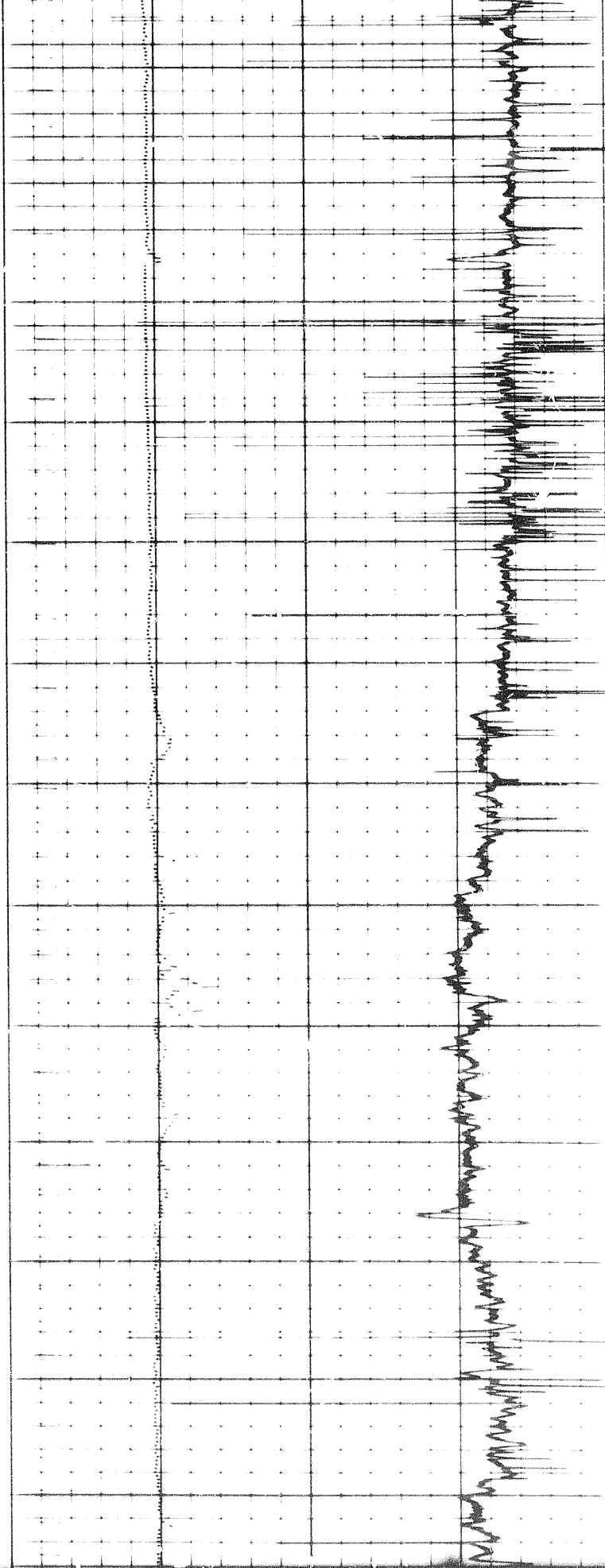
0.020

5.300

0.040

5.600

5.800



0.000

5.000

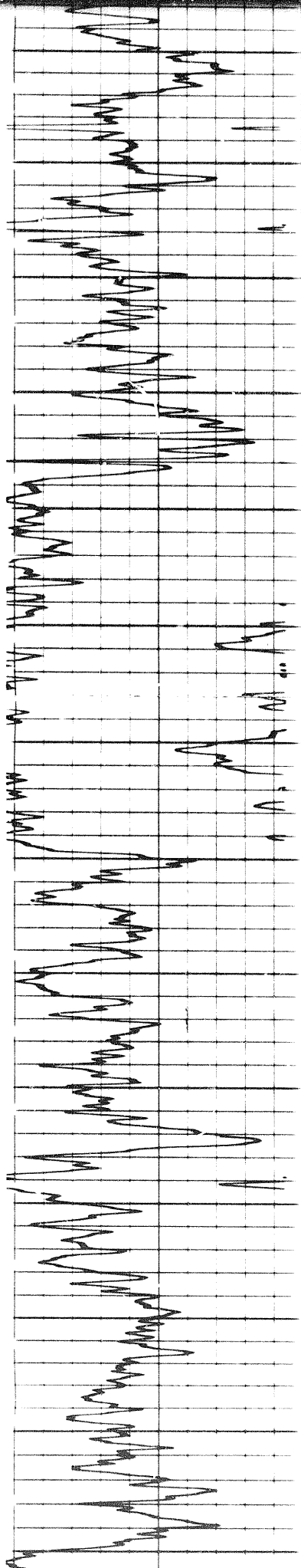
0.020

5.300

0.040

5.600

5.800



5500

5600

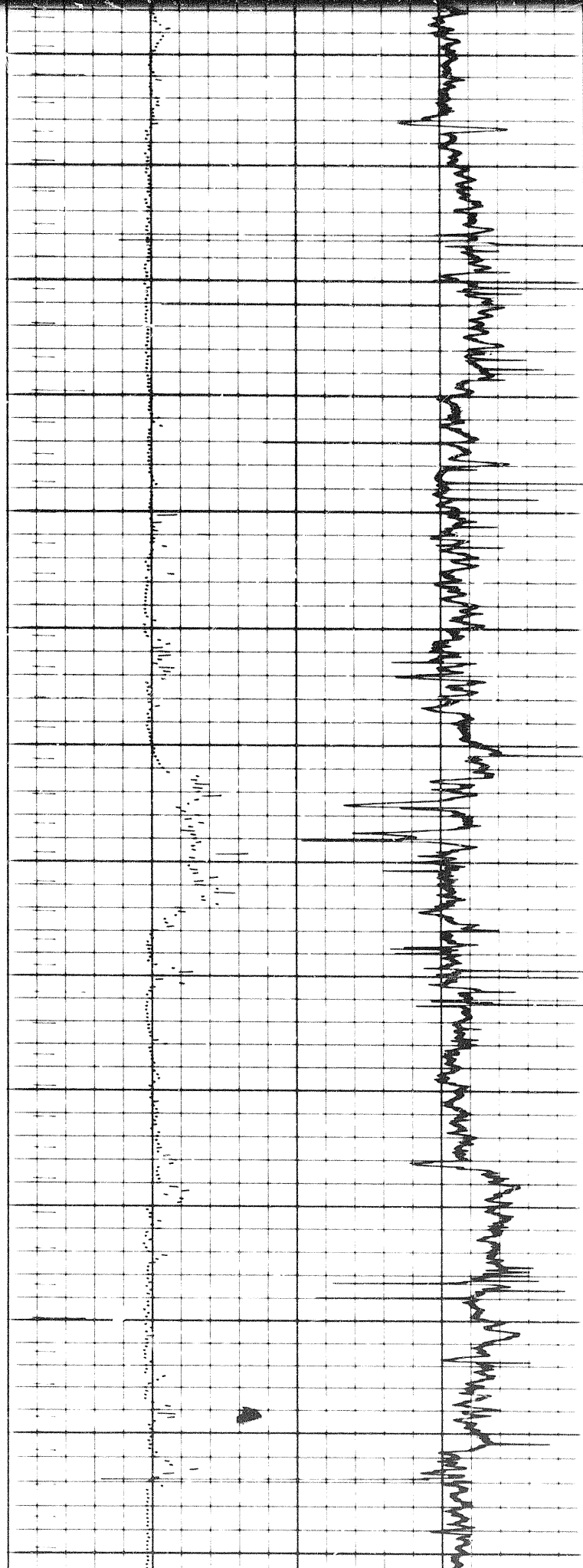
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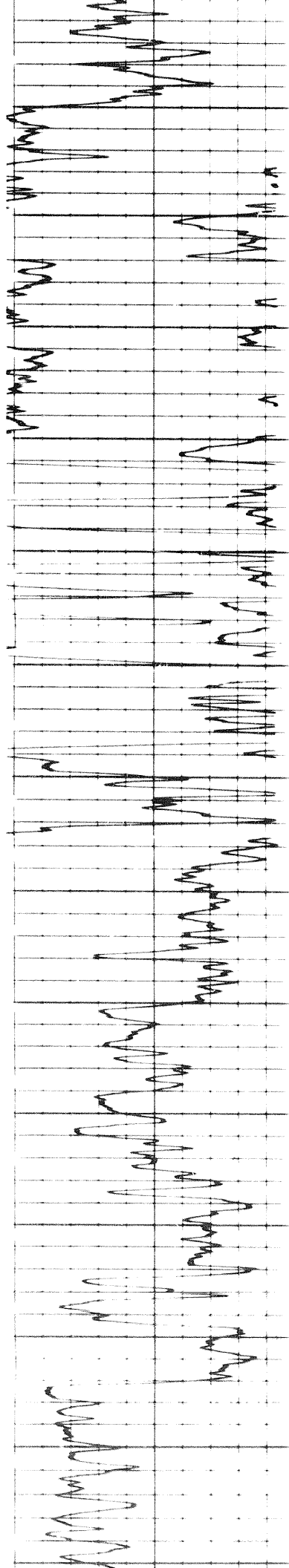
5800

5900

6000

6100





6100

6200

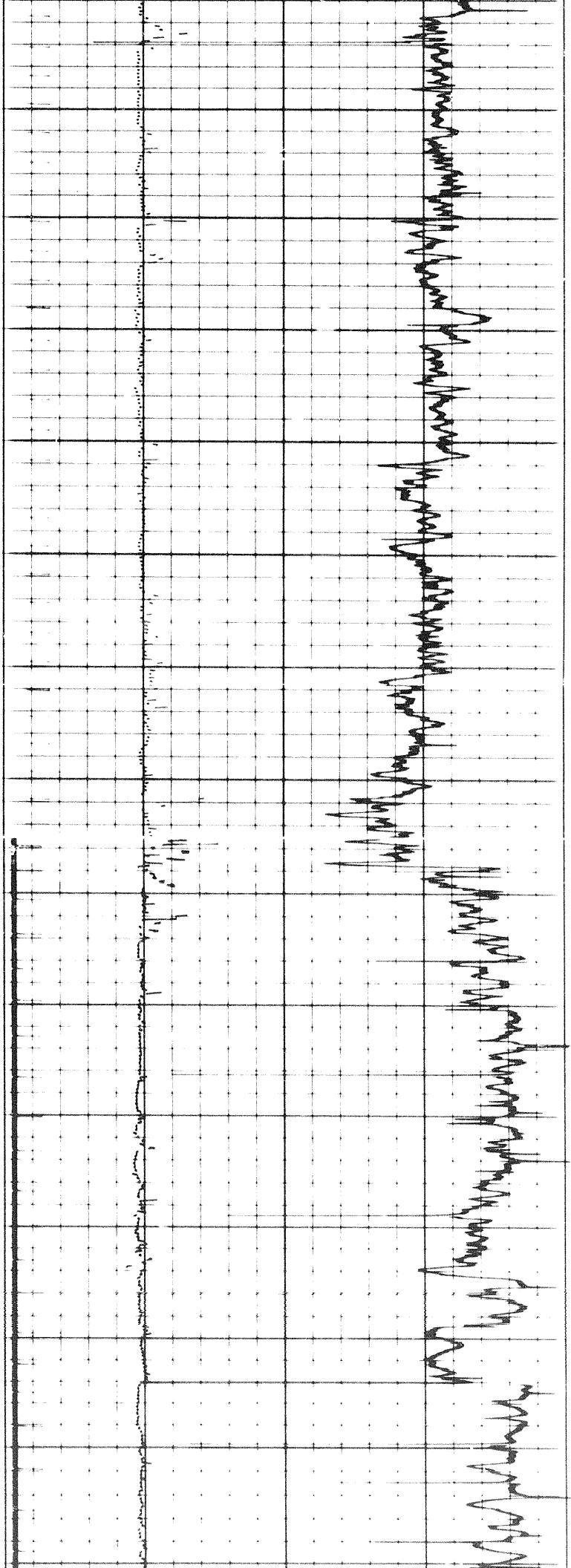
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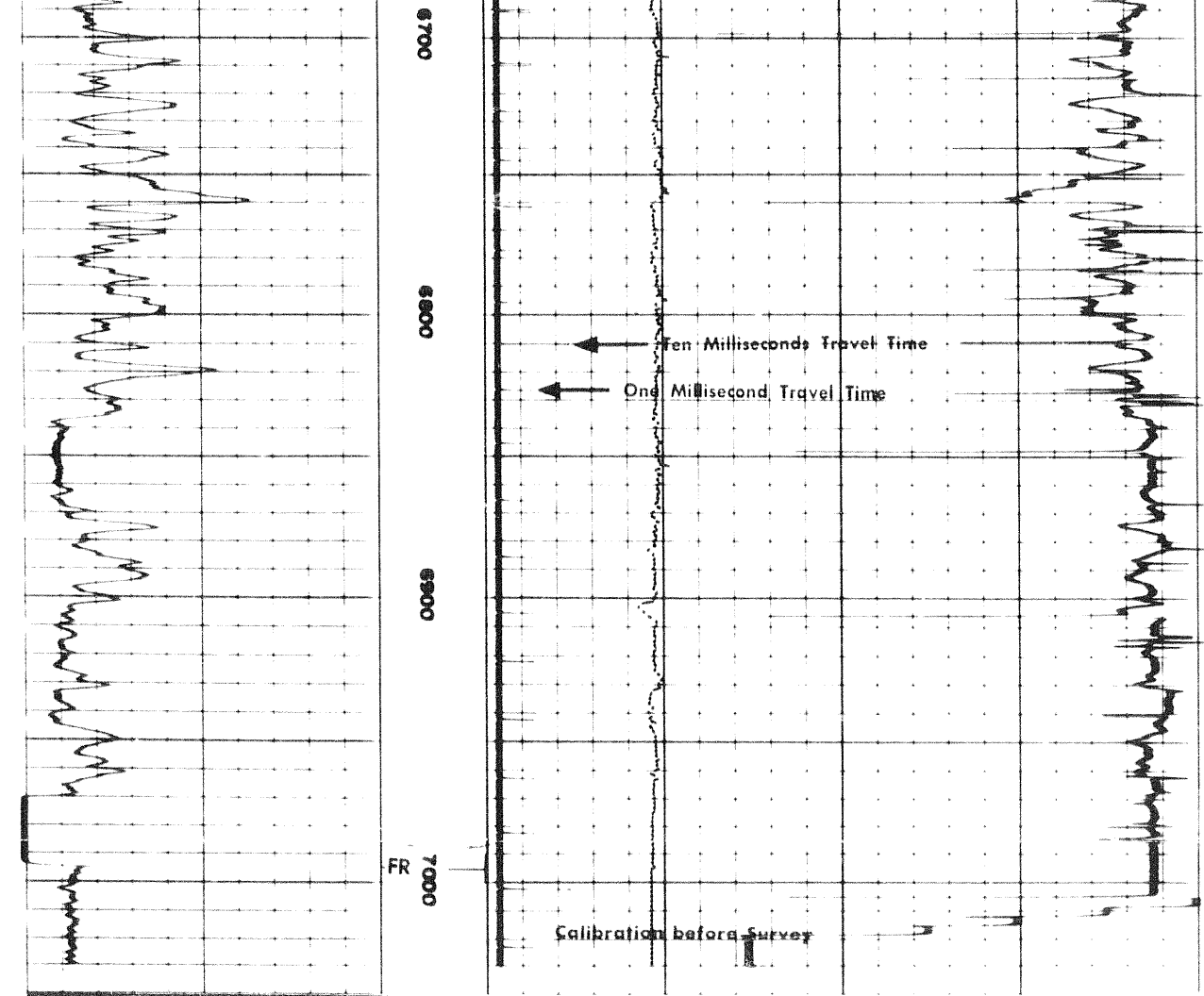
6400

6500

6600

6700





Speeds in FR

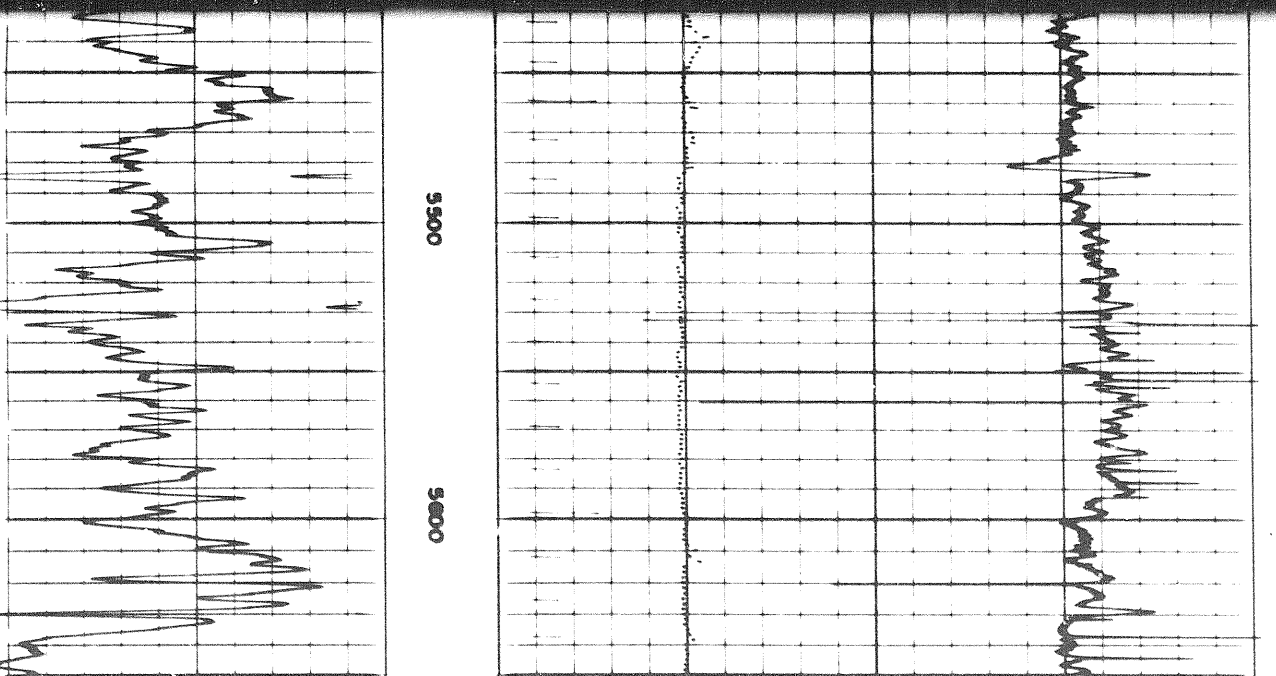
Sens	150	IC	2
Zero	0	div to left	
0	150		300

FR 7000

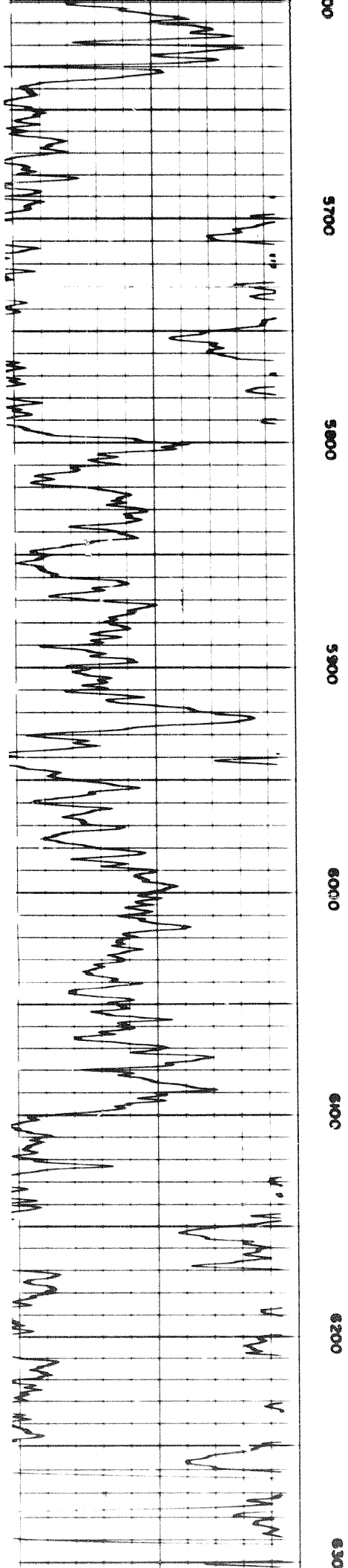
Calibration before Survey

CALIPER

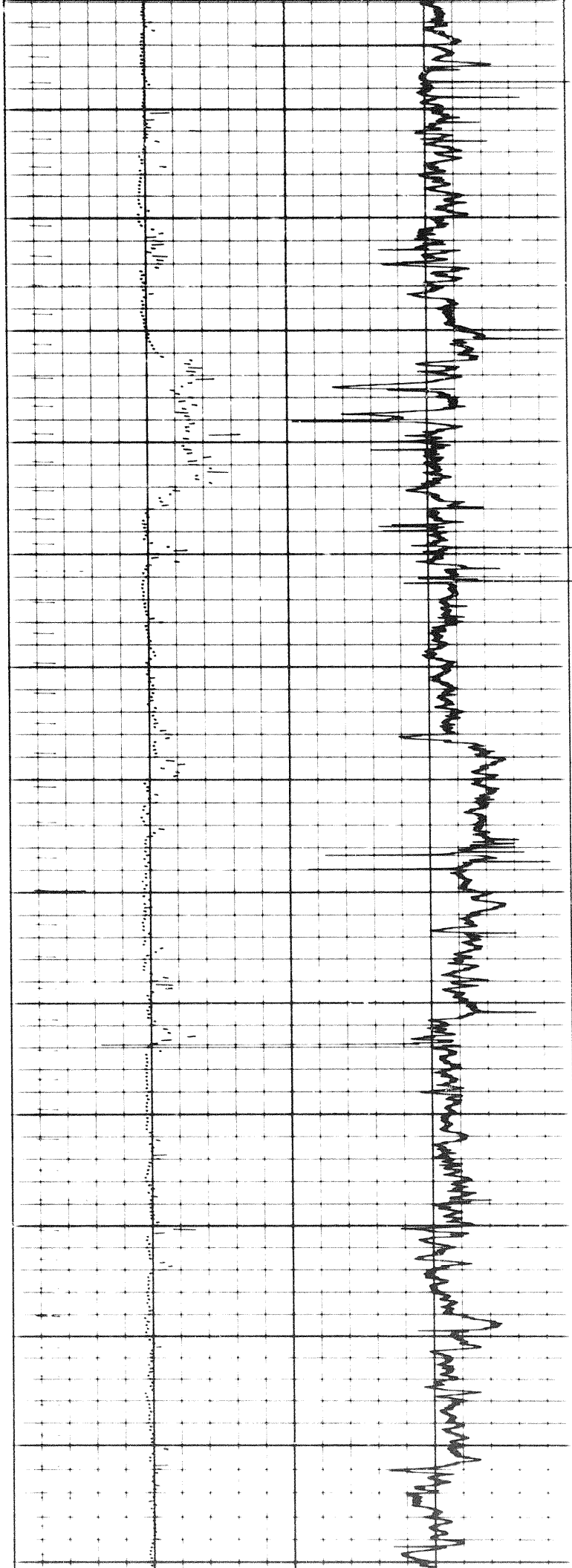
6	7	8	9	10	11	12	13	14	15
360						280			200
200						120			40

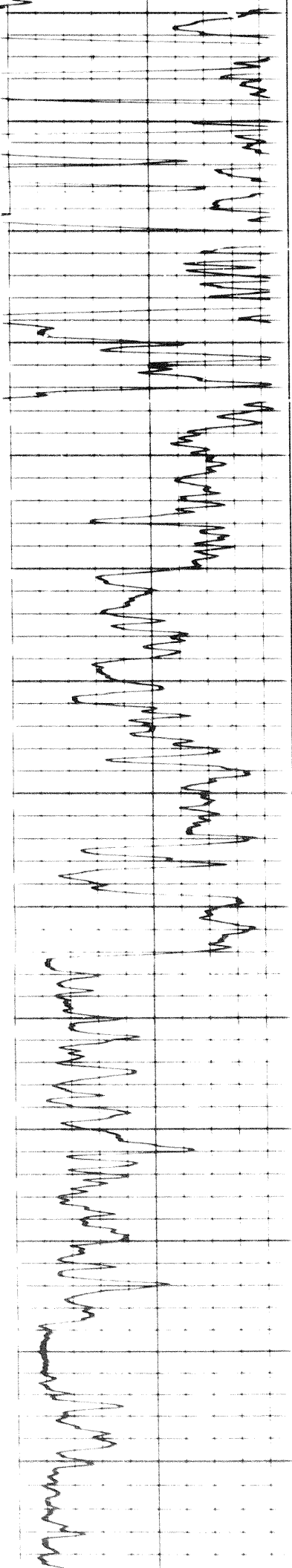


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6000 5700 5800 5900 6000 6100 6200 6300





6300

6400

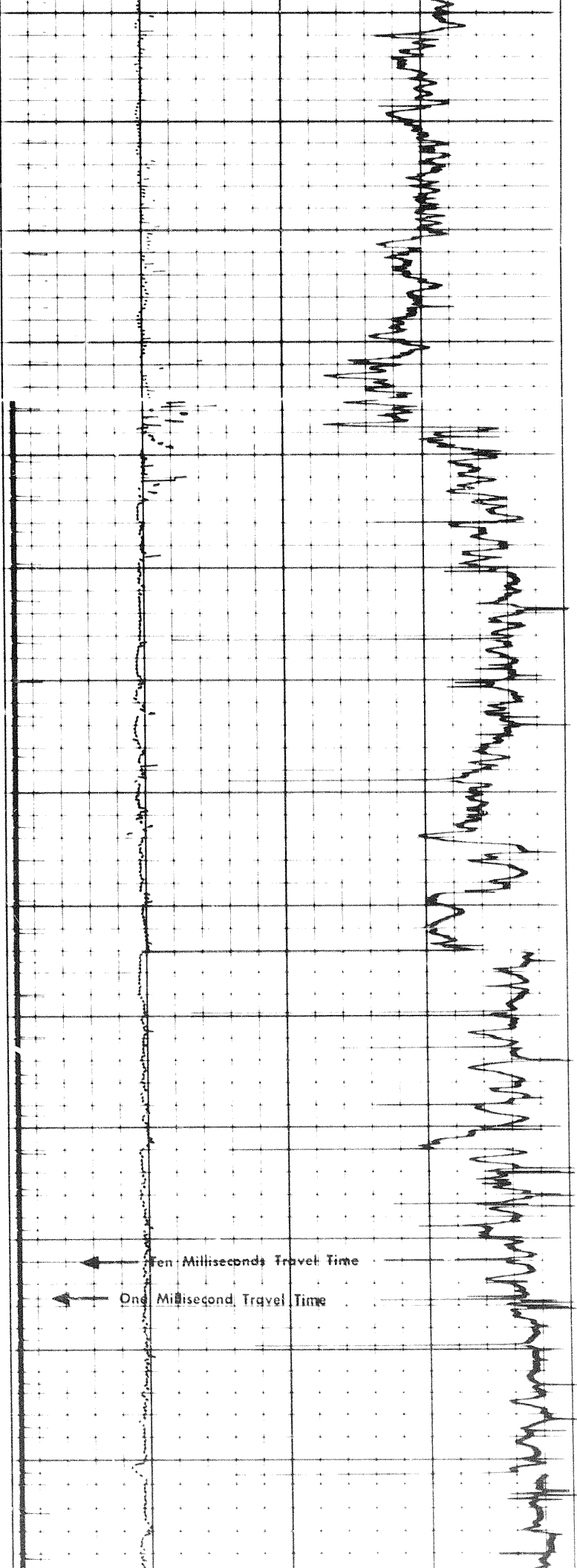
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6600

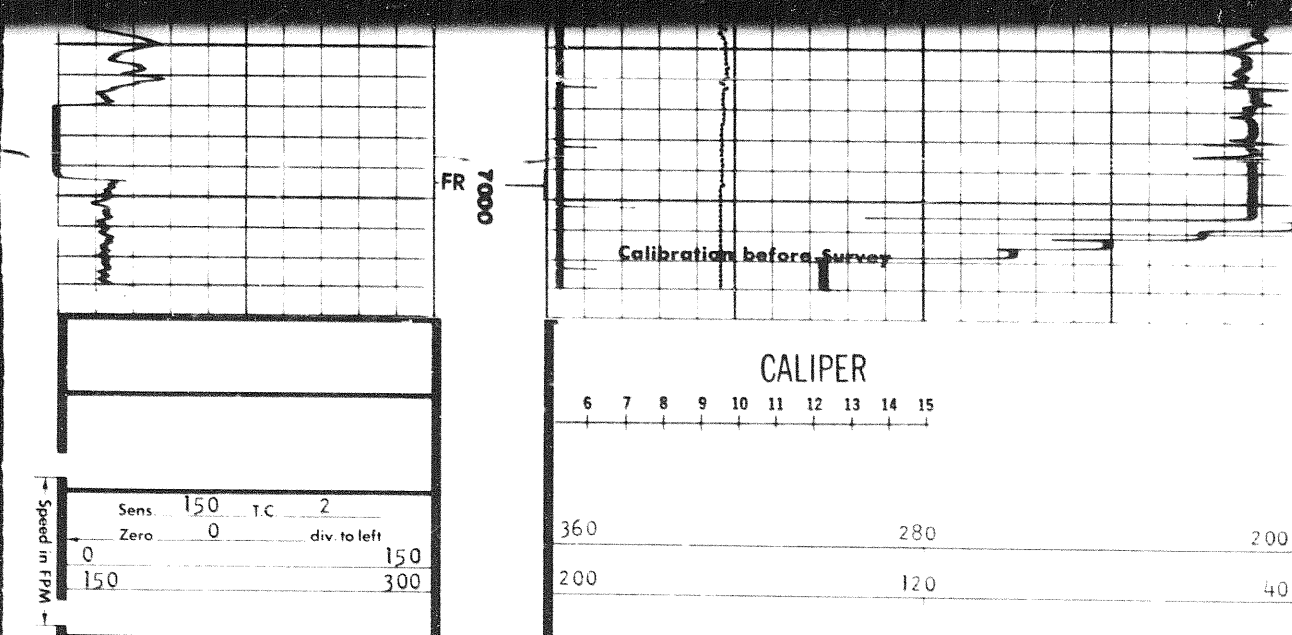
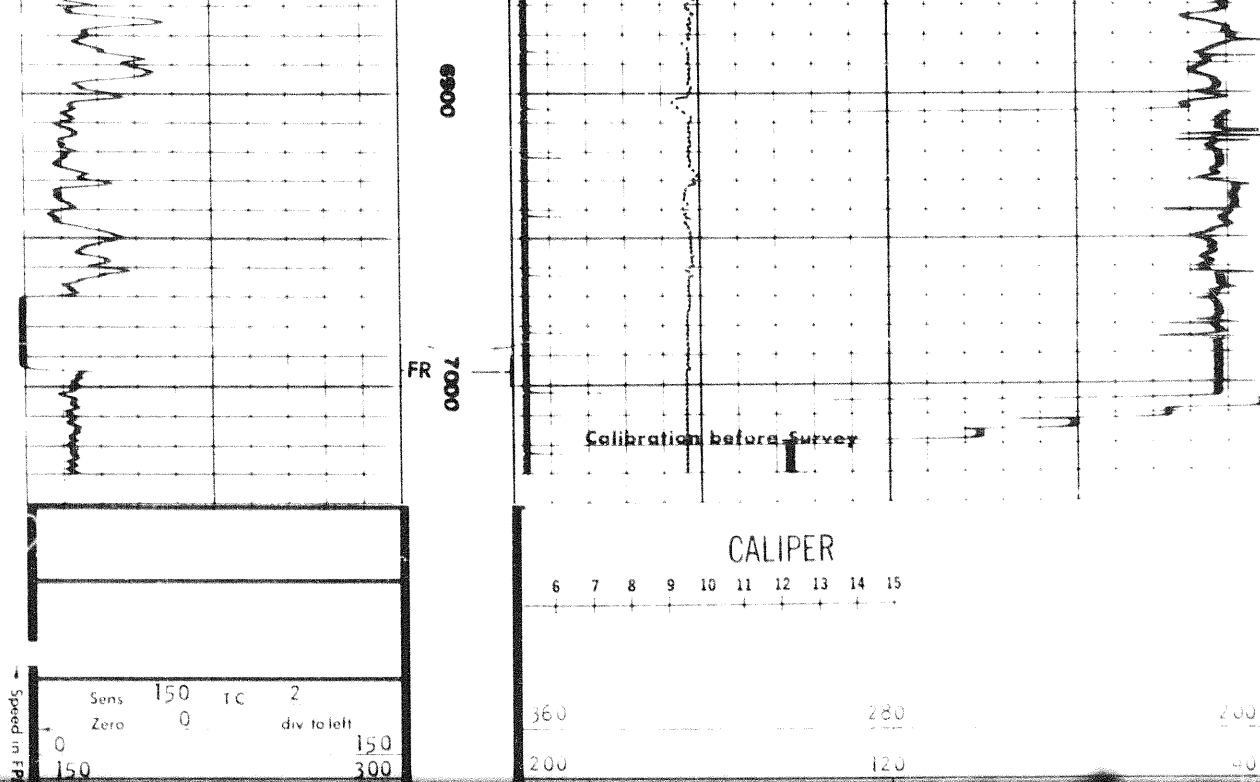
6700

6800

6900



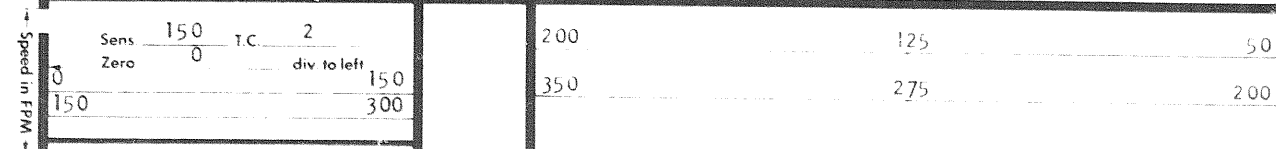
↑ Ten Milliseconds Travel Time
↑ One Millisecond Travel Time



GAMMA RAY API UNITS	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot
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DETAIL LOG
5" = 100' RUN 1

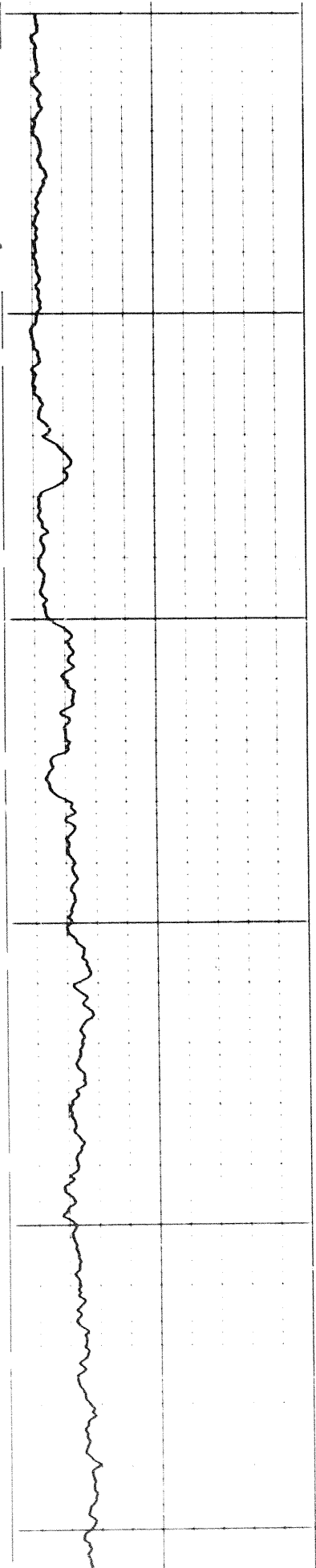
GAMMA RAY API UNITS	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot
------------------------	--------	---



CALIPER

7 8 9 10 11 12 13 14 15 16

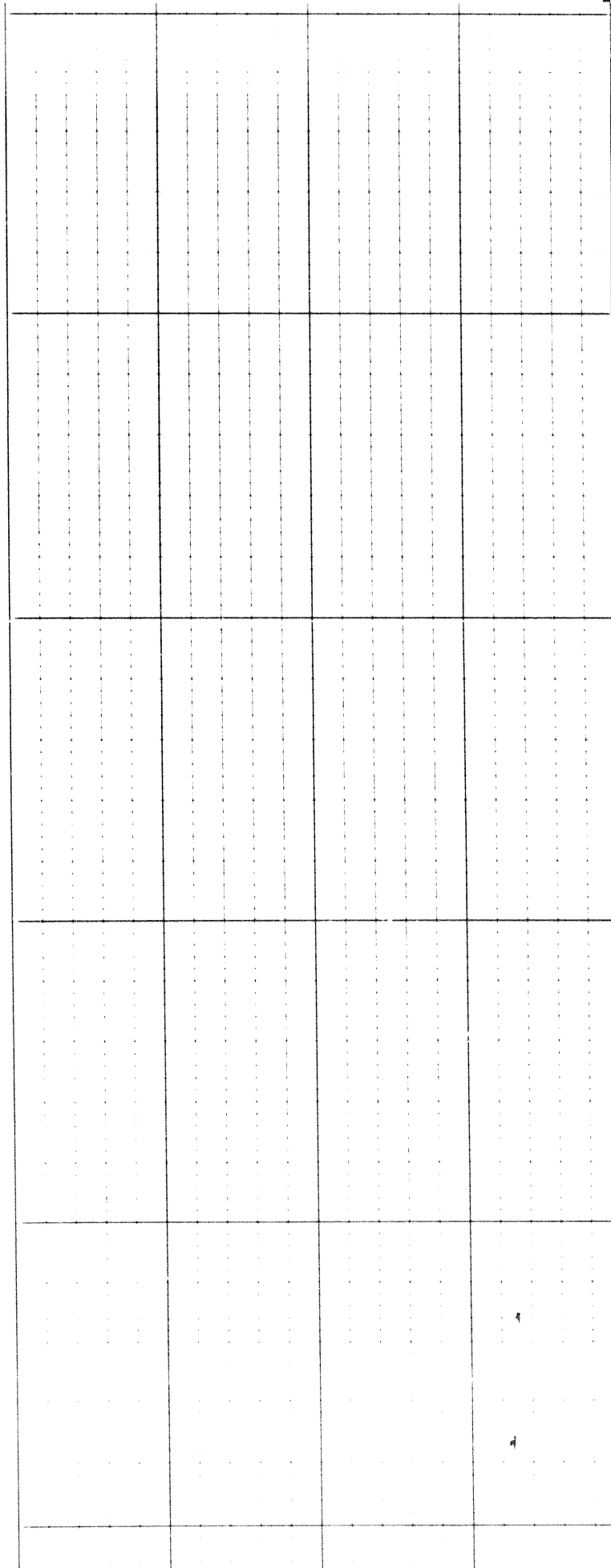
6 of



0100

0200

0300



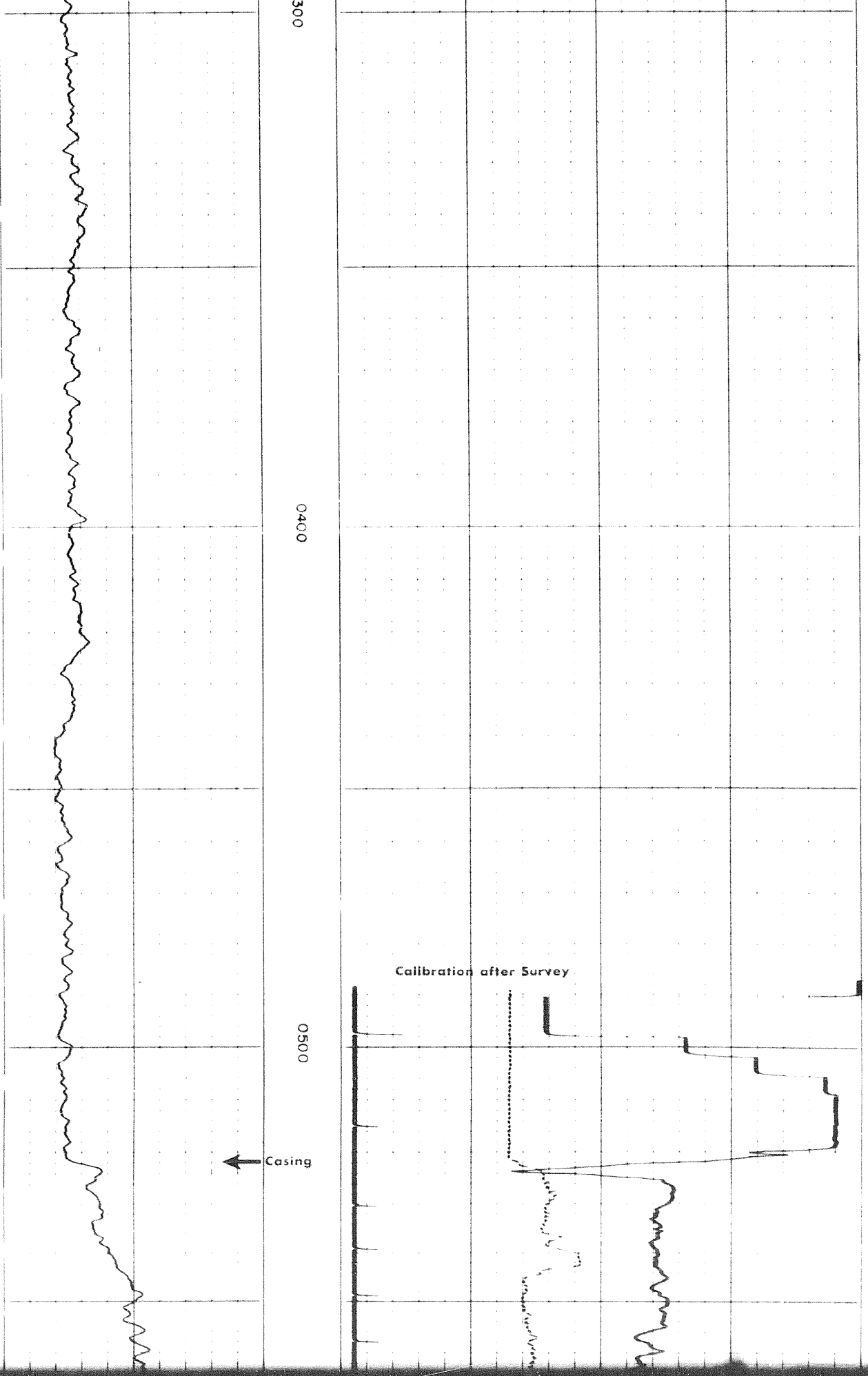
300

0400

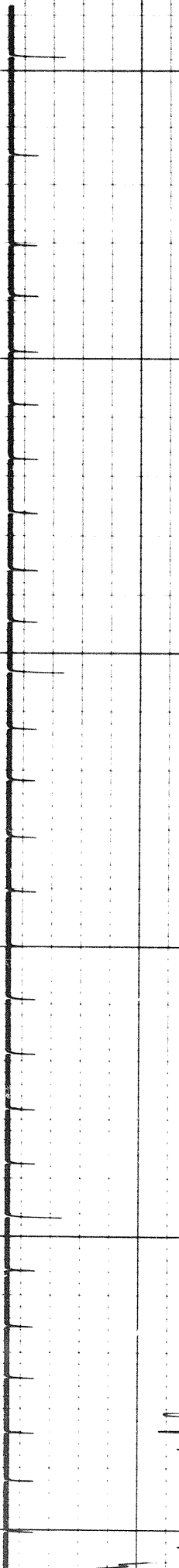
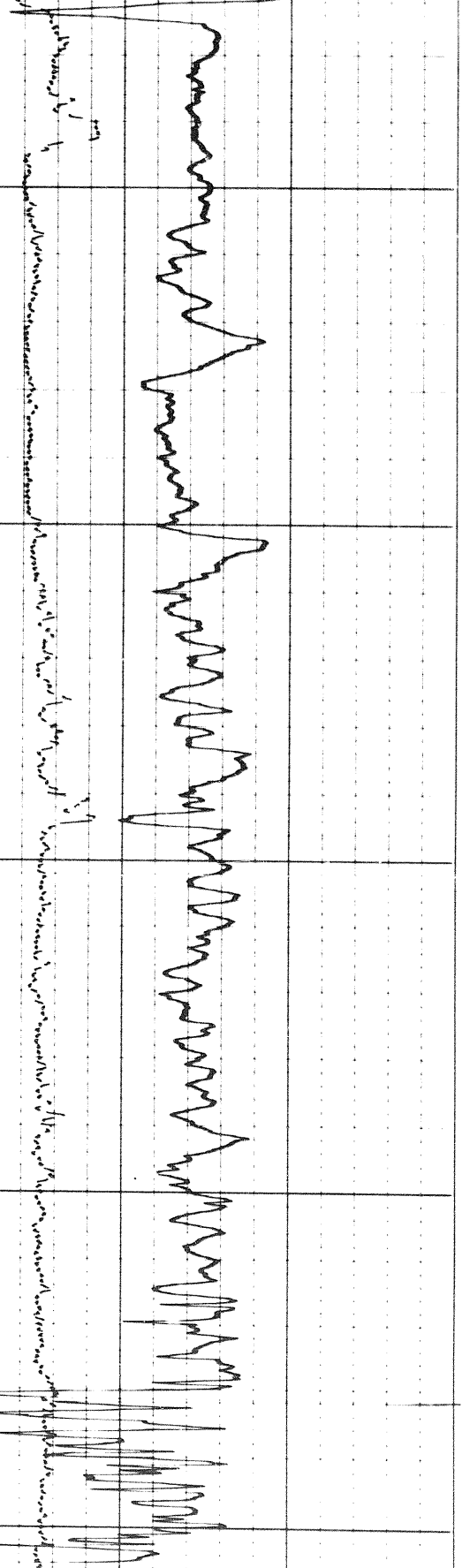
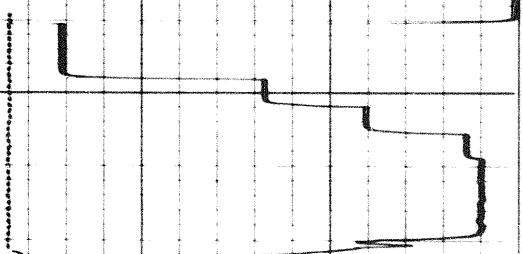
0500

← Casing

Calibration after Survey



Calibration after Survey

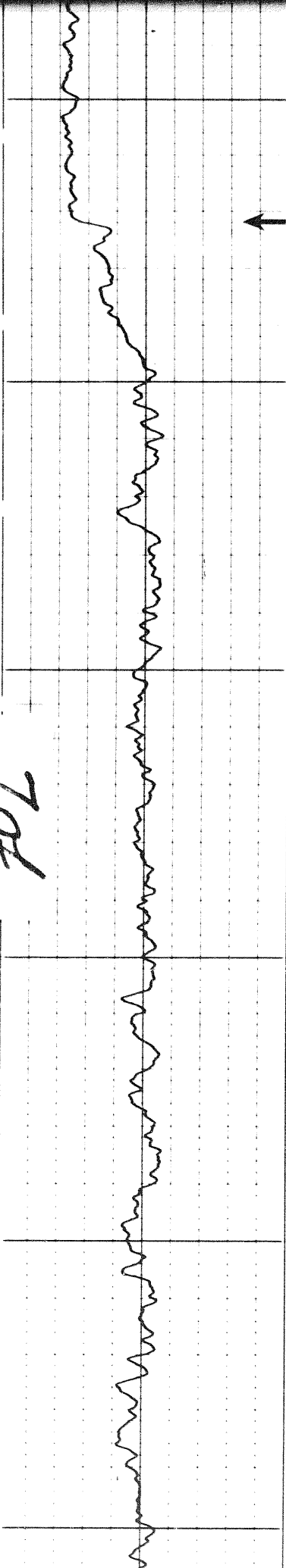


0500

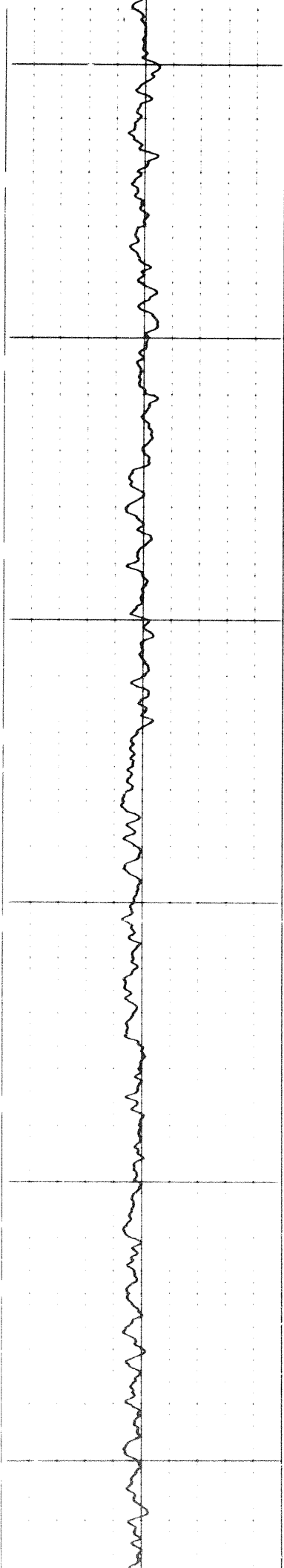
0600

0700

← Casing



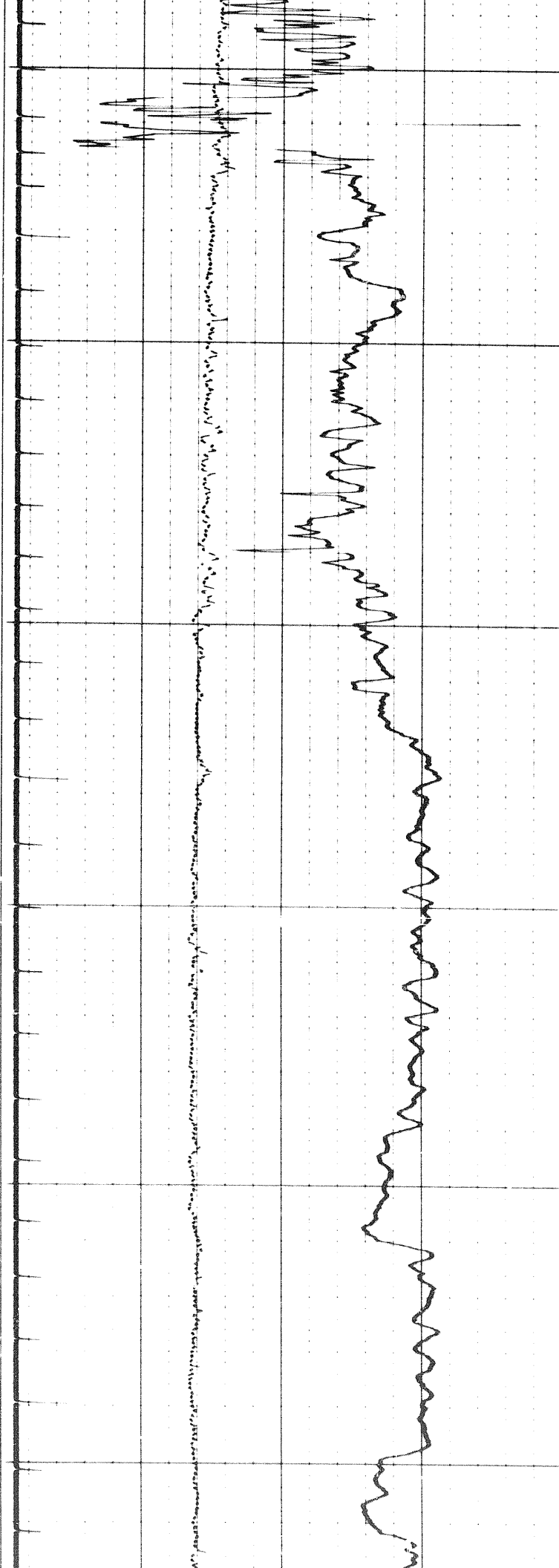
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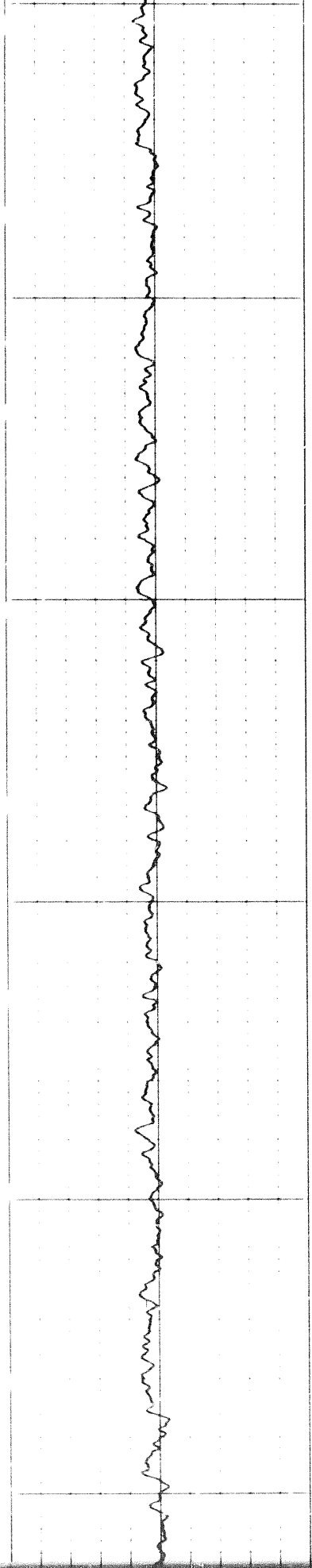


0001

0060

0080

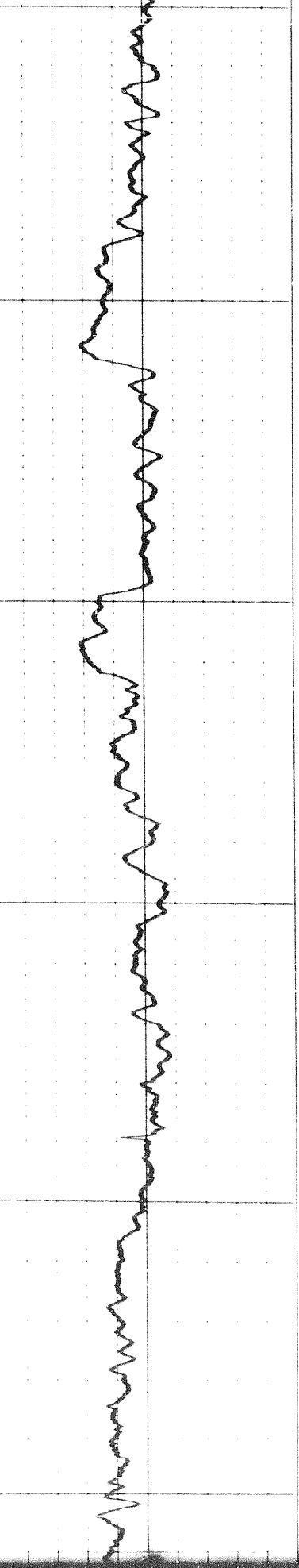
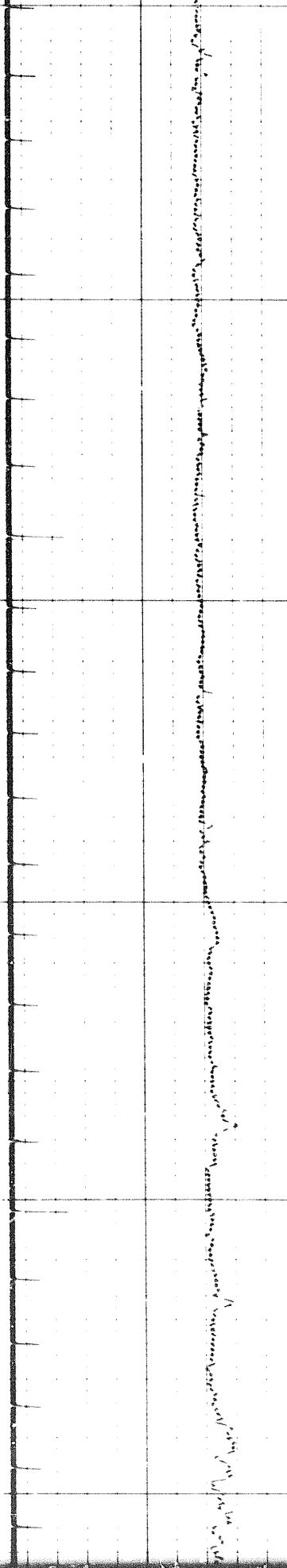


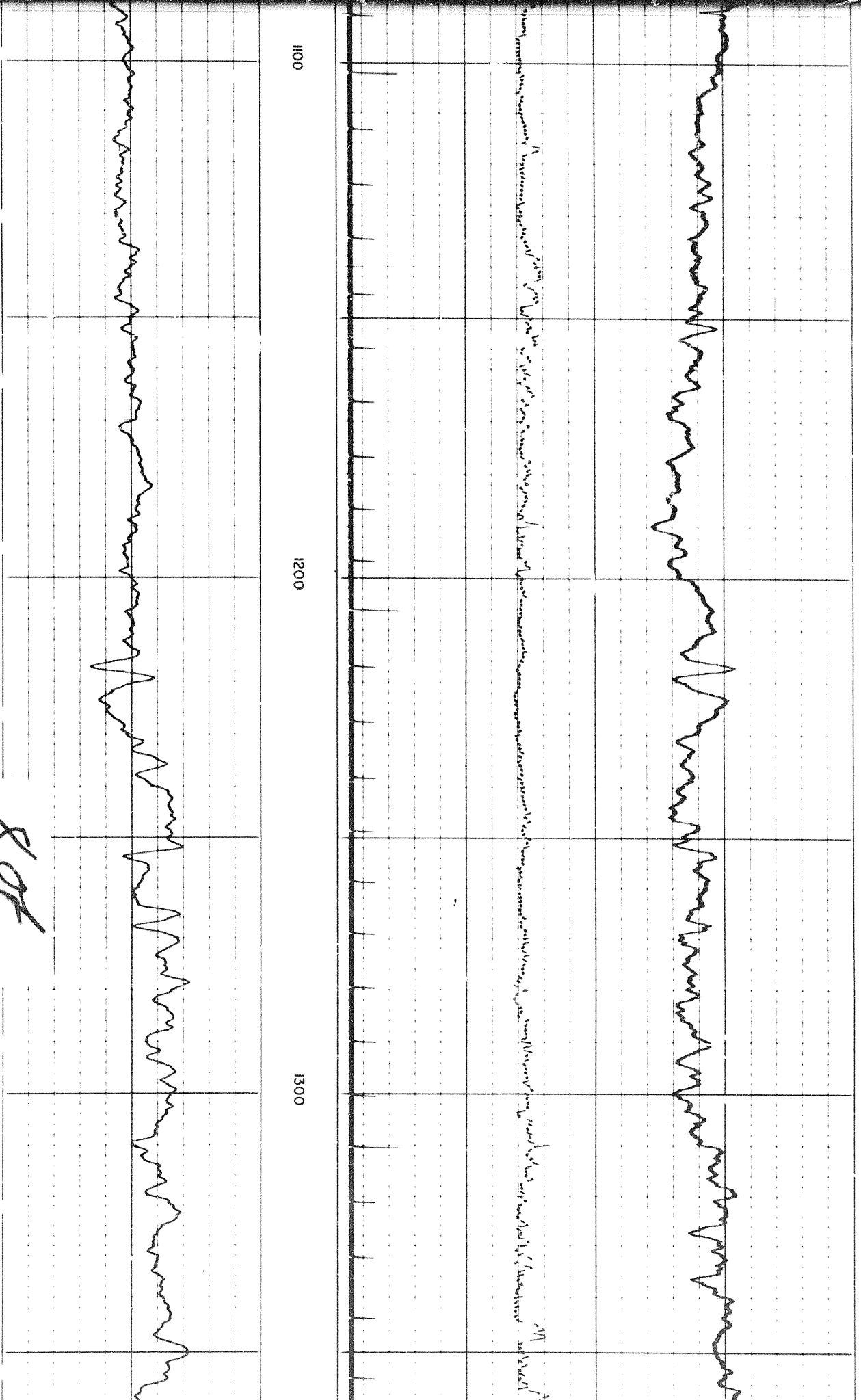


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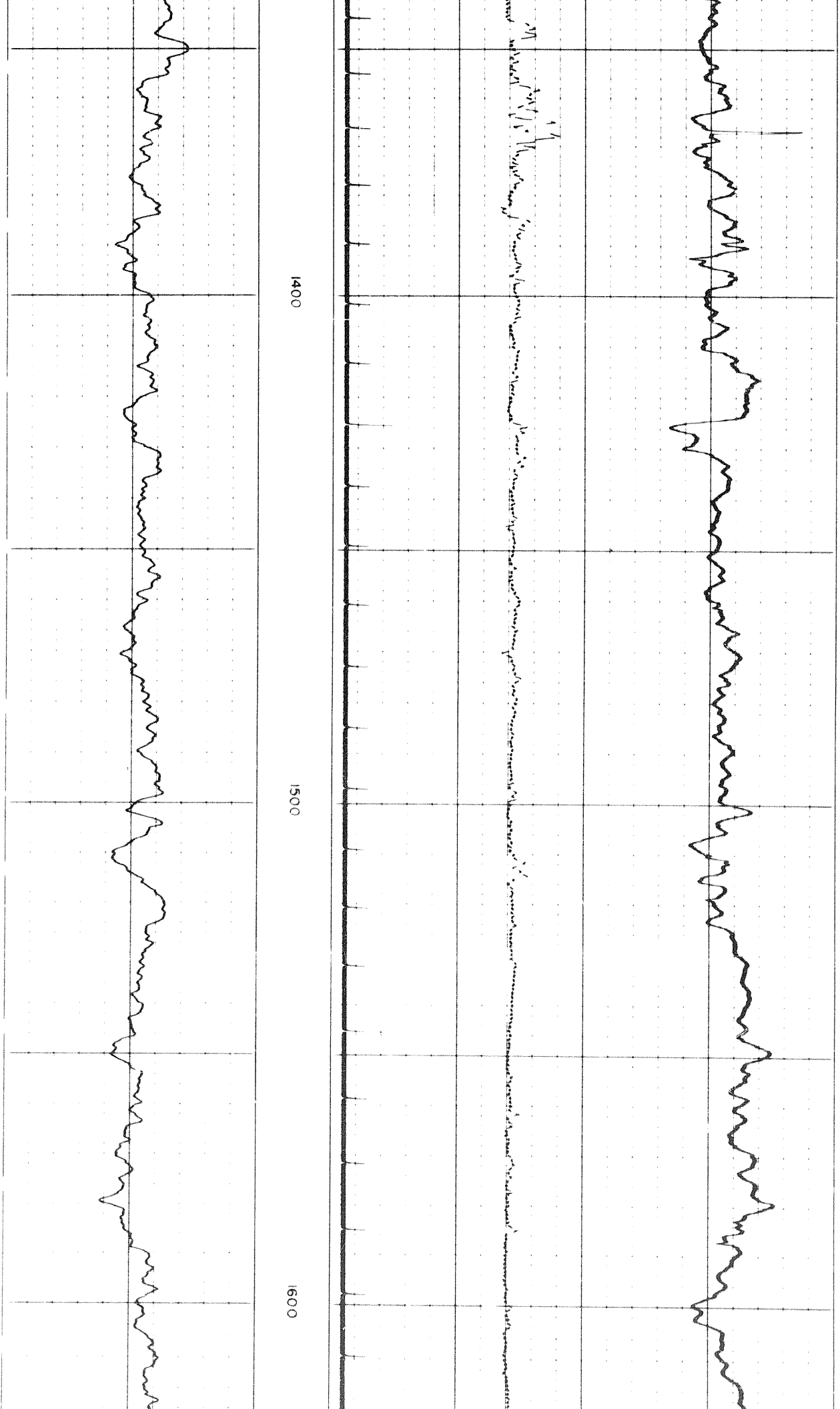
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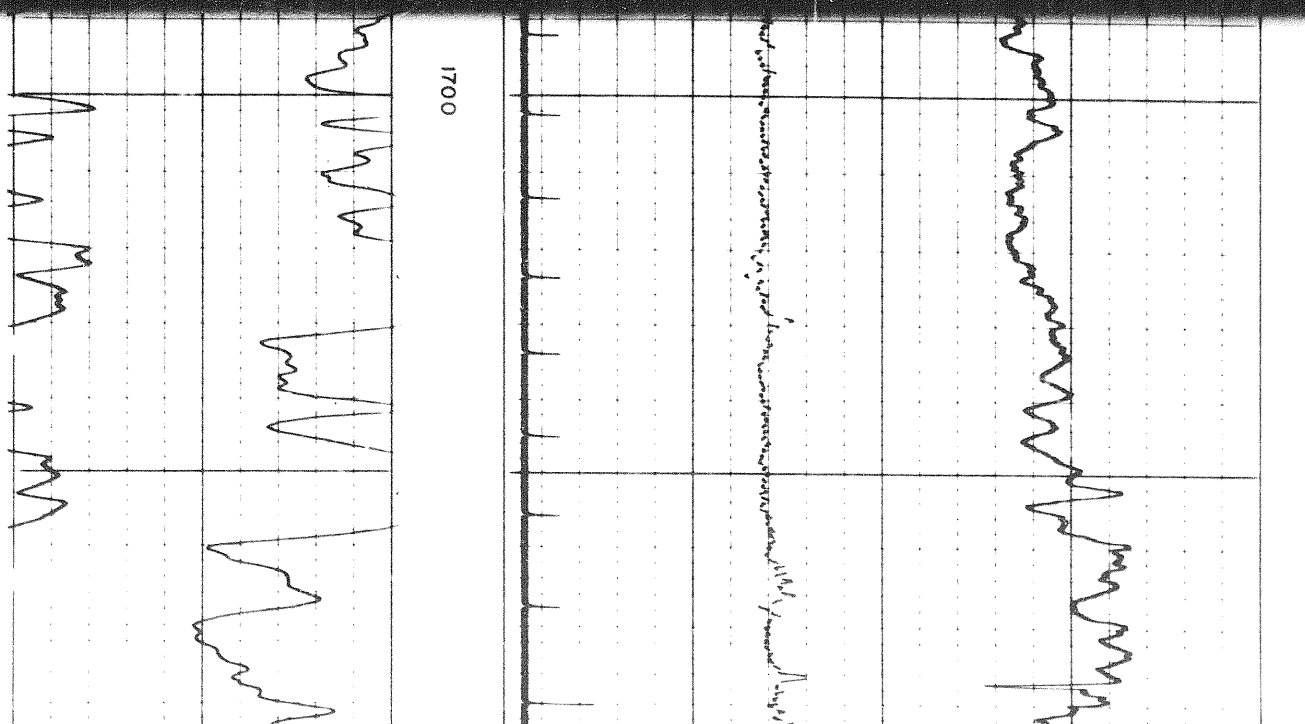
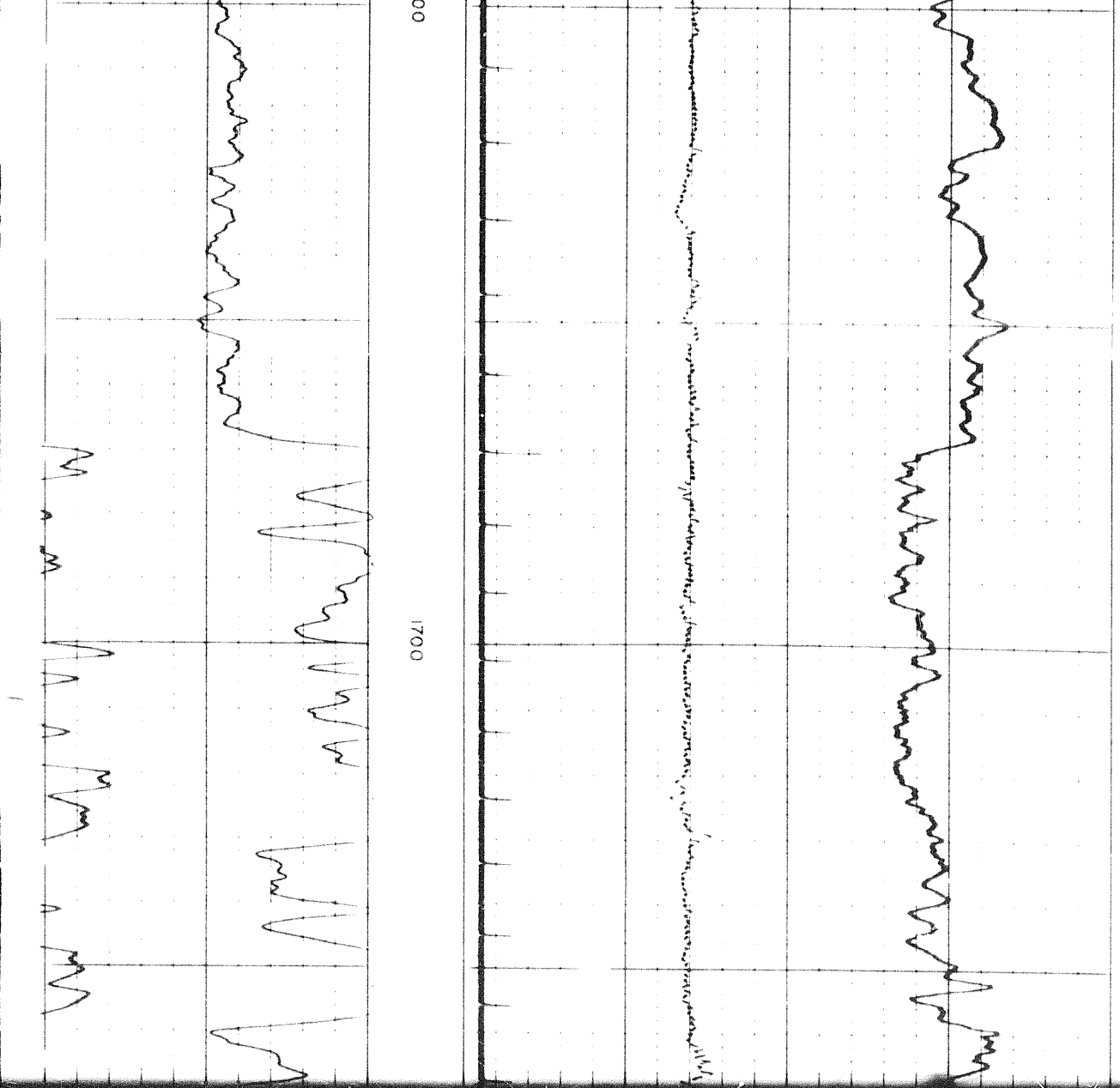
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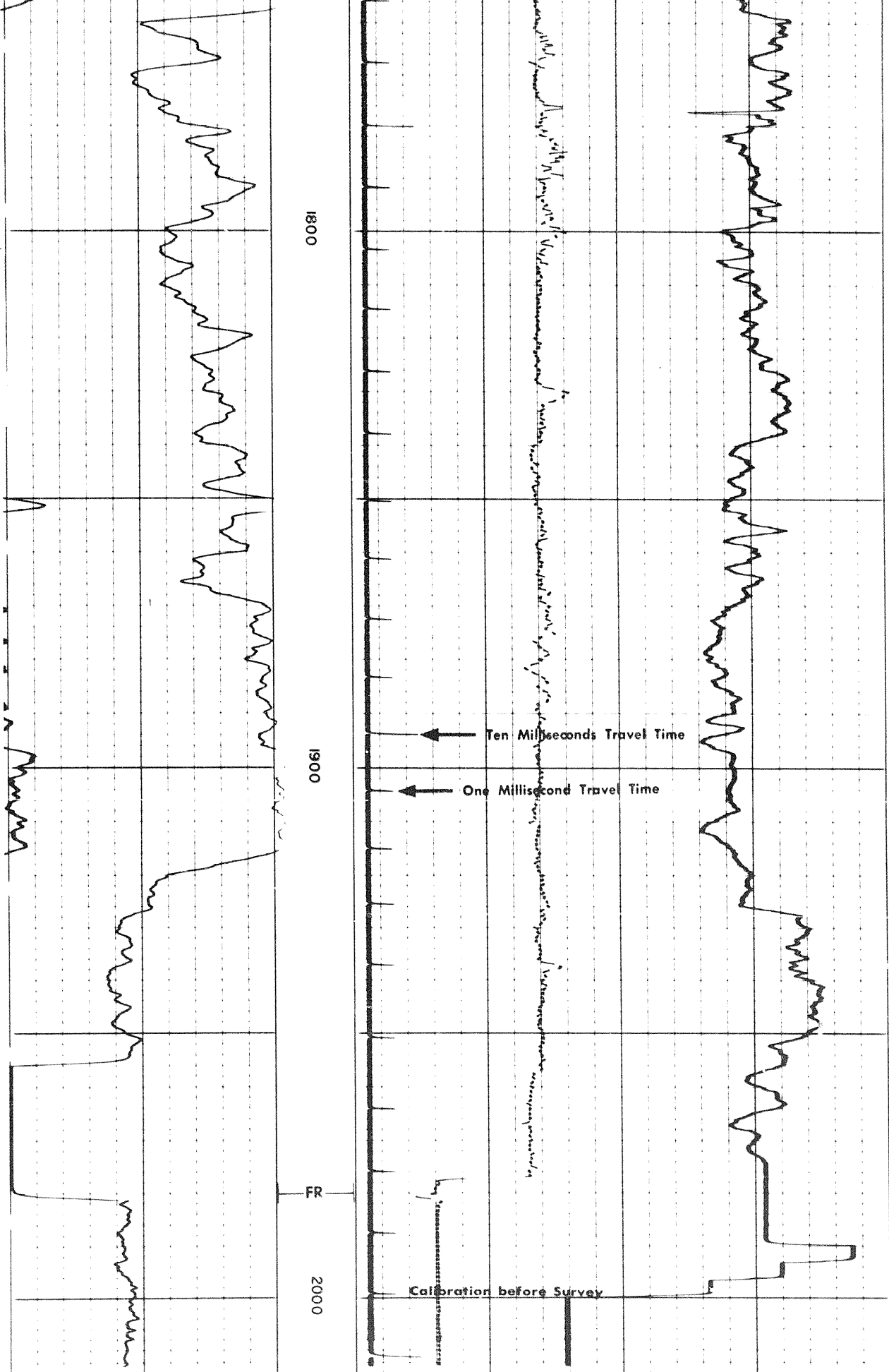


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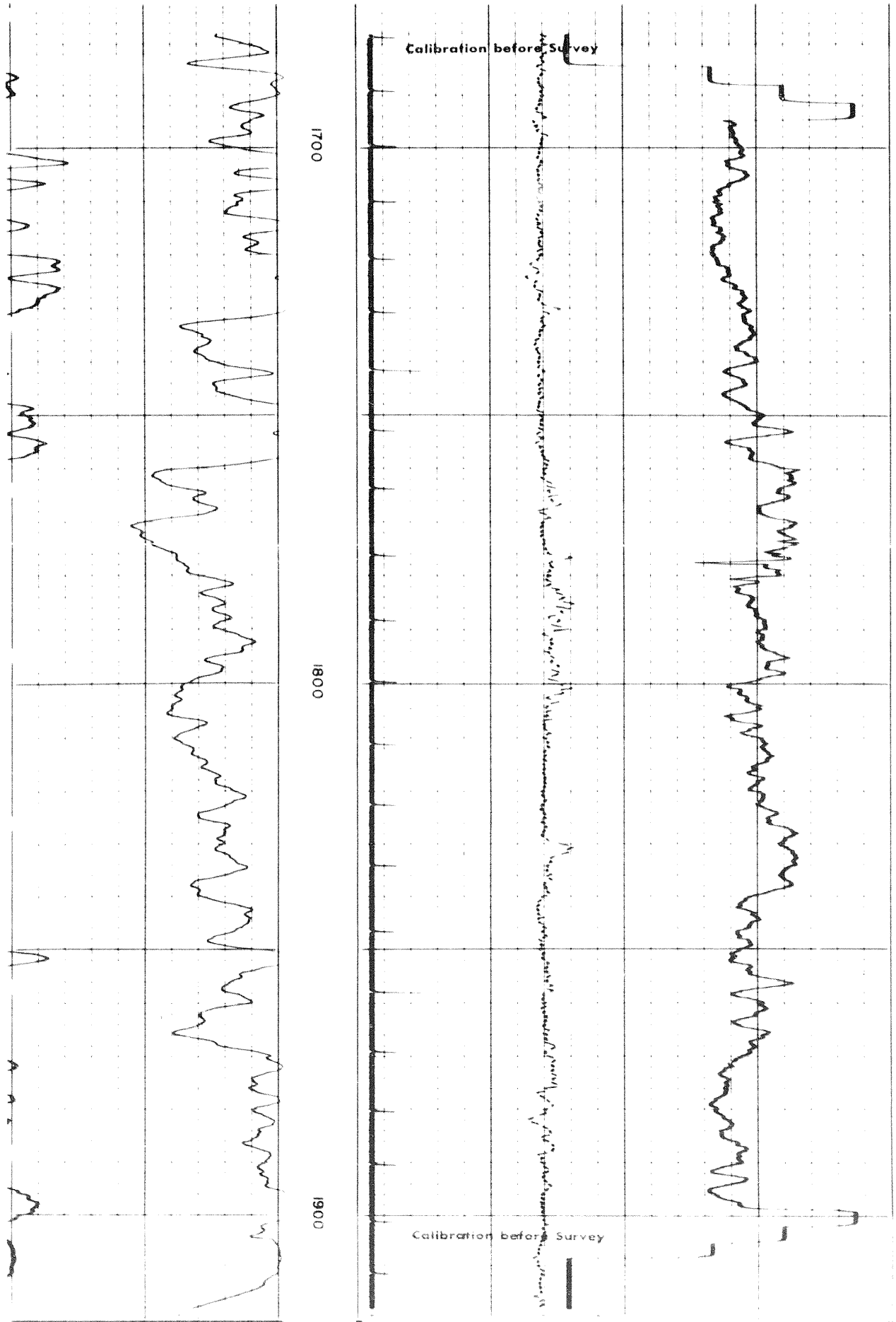




906



REPEAT SECTION



1700

1800

1900

Calibration before Survey

Calibration before Survey

CALIPER

7 8 9 10 11 12 13 14 15 16

Speed in FPM

Sens 150 T.C. 2
Zero 0 div to left
0 150
150 300

300
200

275
125

200
200

GAMMA RAY API UNITS	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot
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DETAIL LOG

Speed in FPM

Sens 150 T.C. 2
Zero 0 div to left
0 150
150 300

		CALIPER										
		7	8	9	10	11	12	13	14	15	16	
		350								275		200
		200								125		200

GAMMA RAY API UNITS	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot
------------------------	--------	---

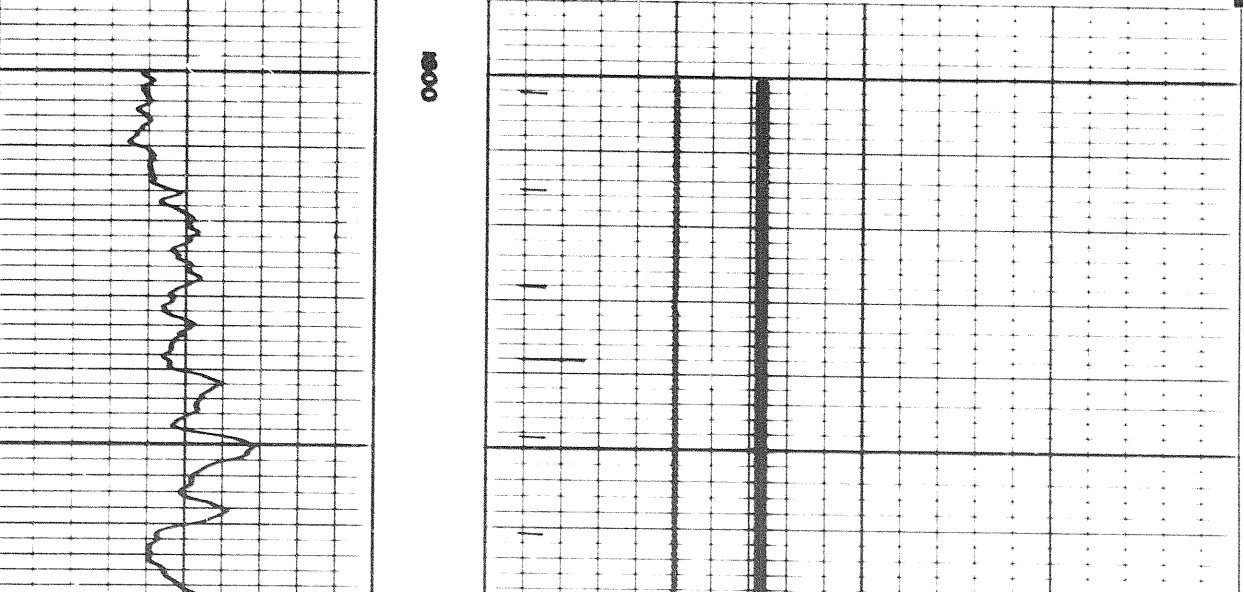
DETAIL LOG
5" = 100' RUN 2

Speed in FPM

Sens 150 T.C. 2
Zero 0 div to left
0 150
150 300

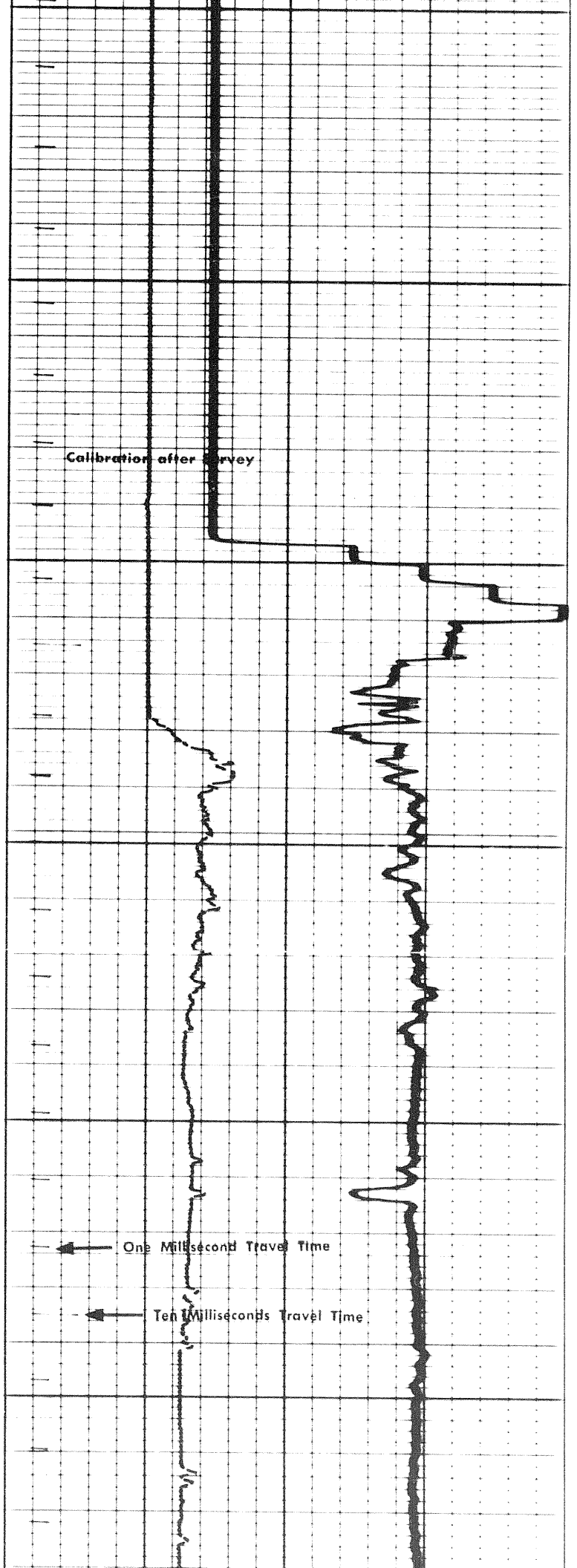
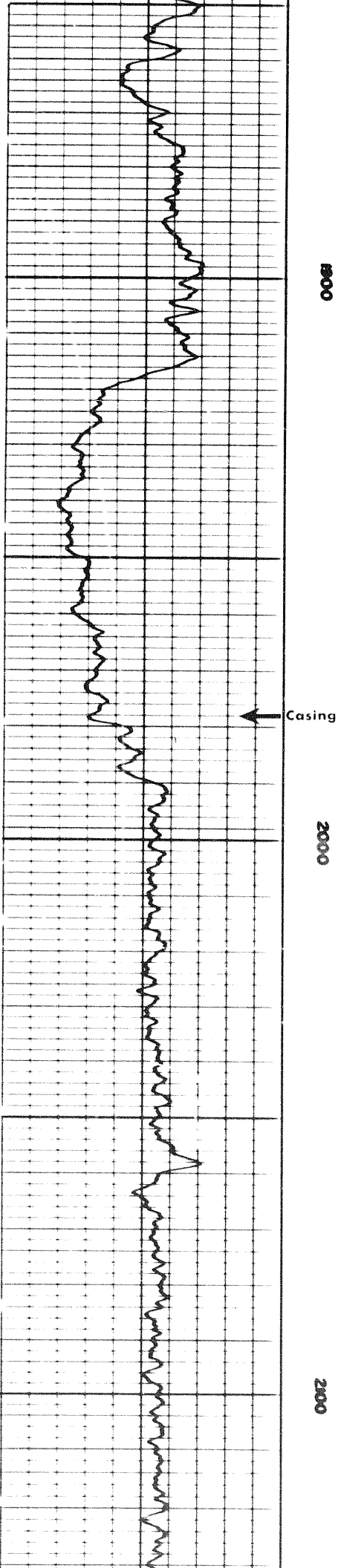
		200								120		40
		360								280		200

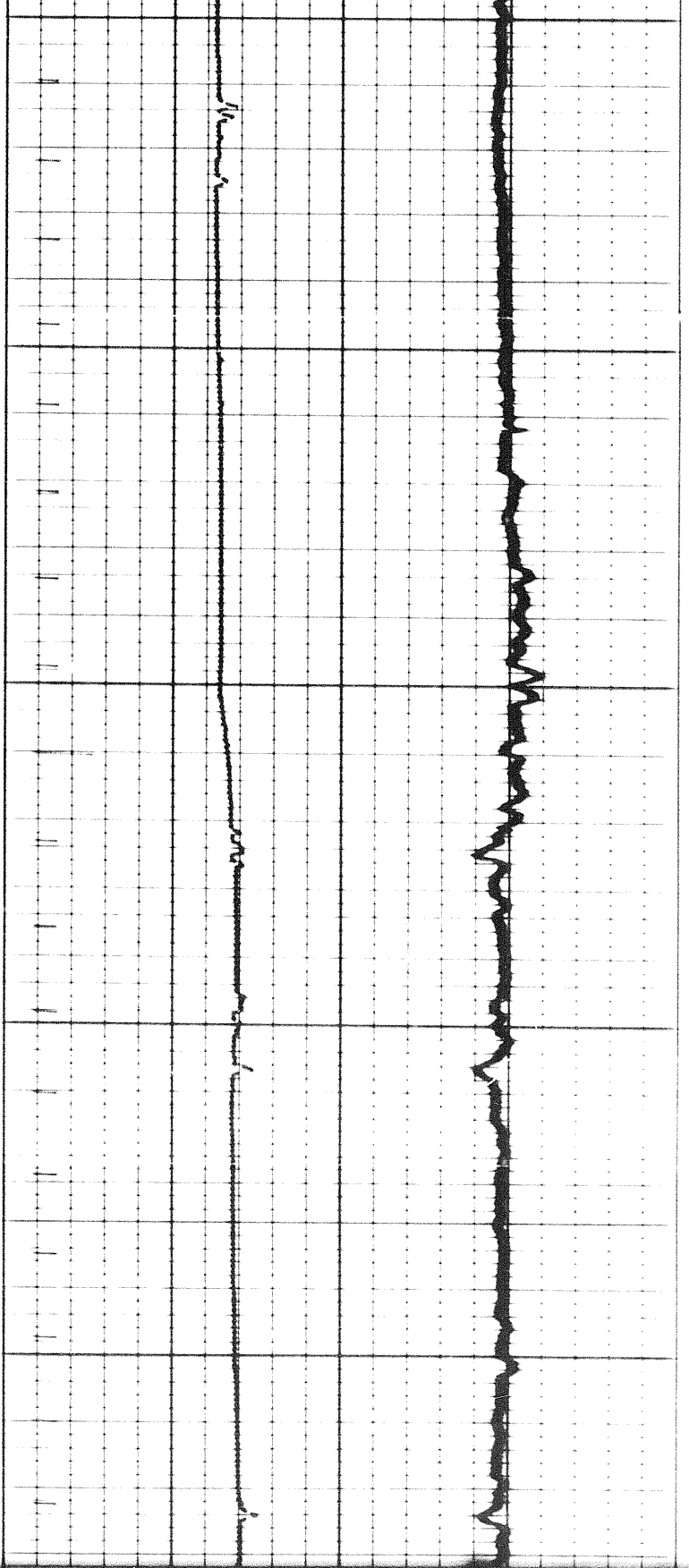
		CALIPER									
		6	7	8	9	10	11	12	13	14	15



1800

15 of 70 of

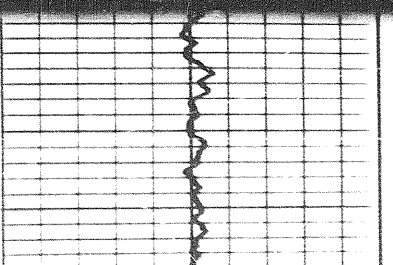
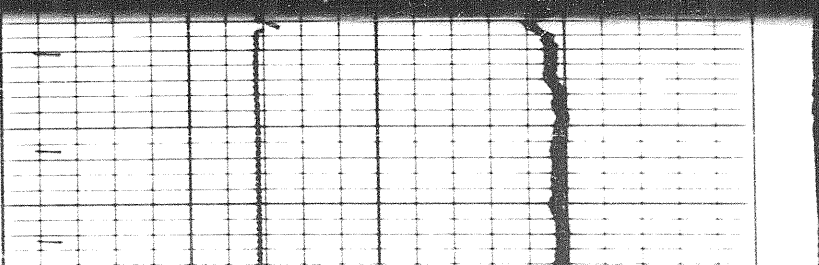
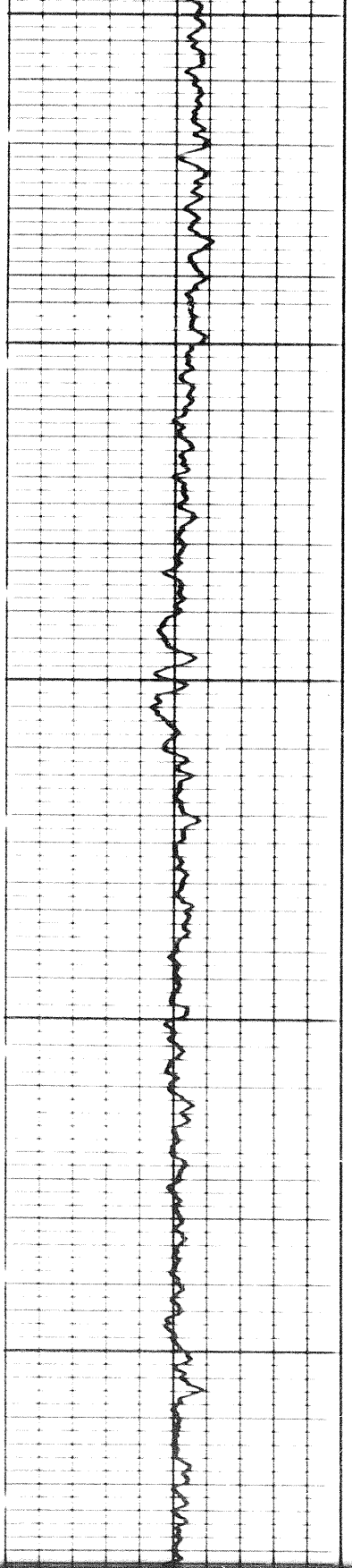




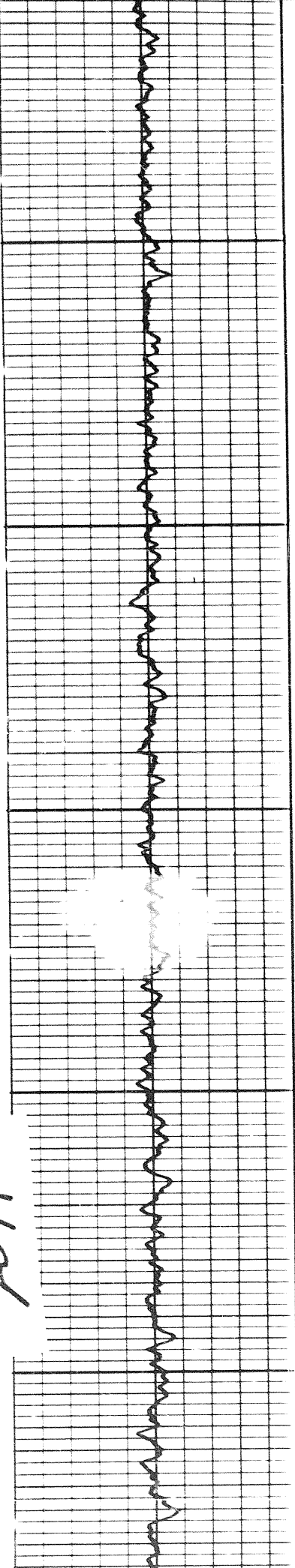
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2200

2300



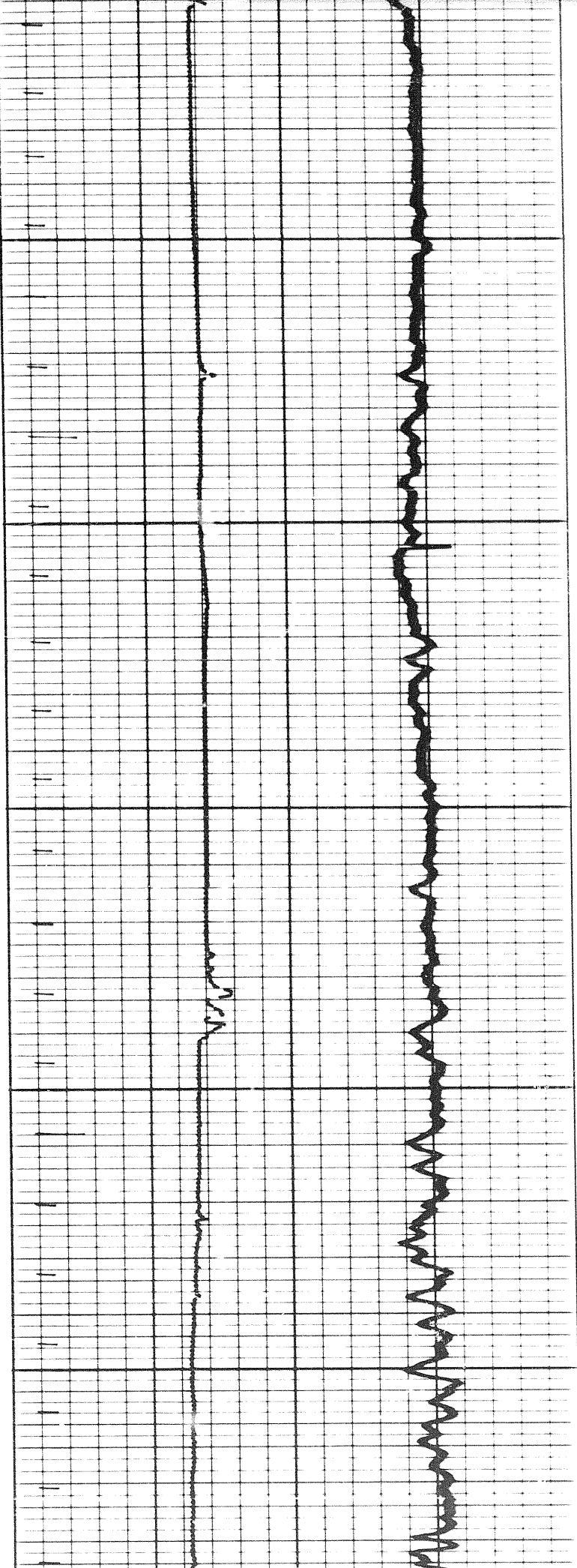
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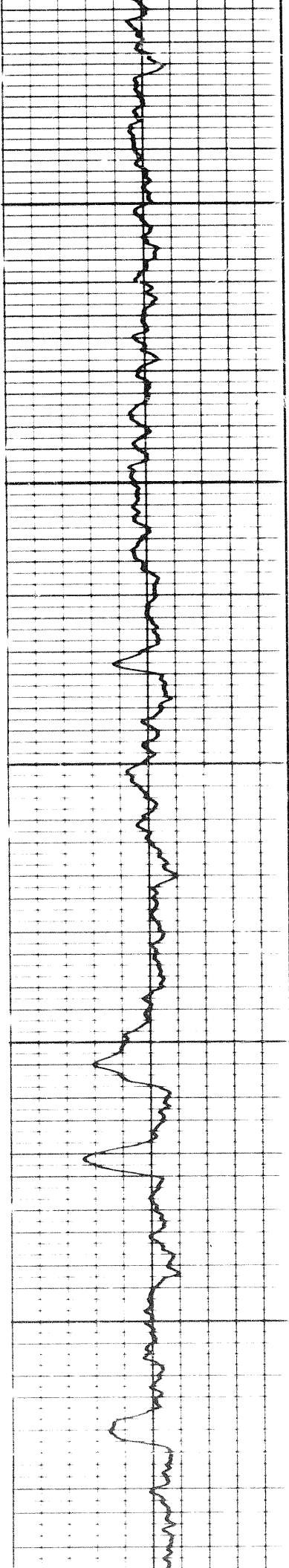


2300

2400

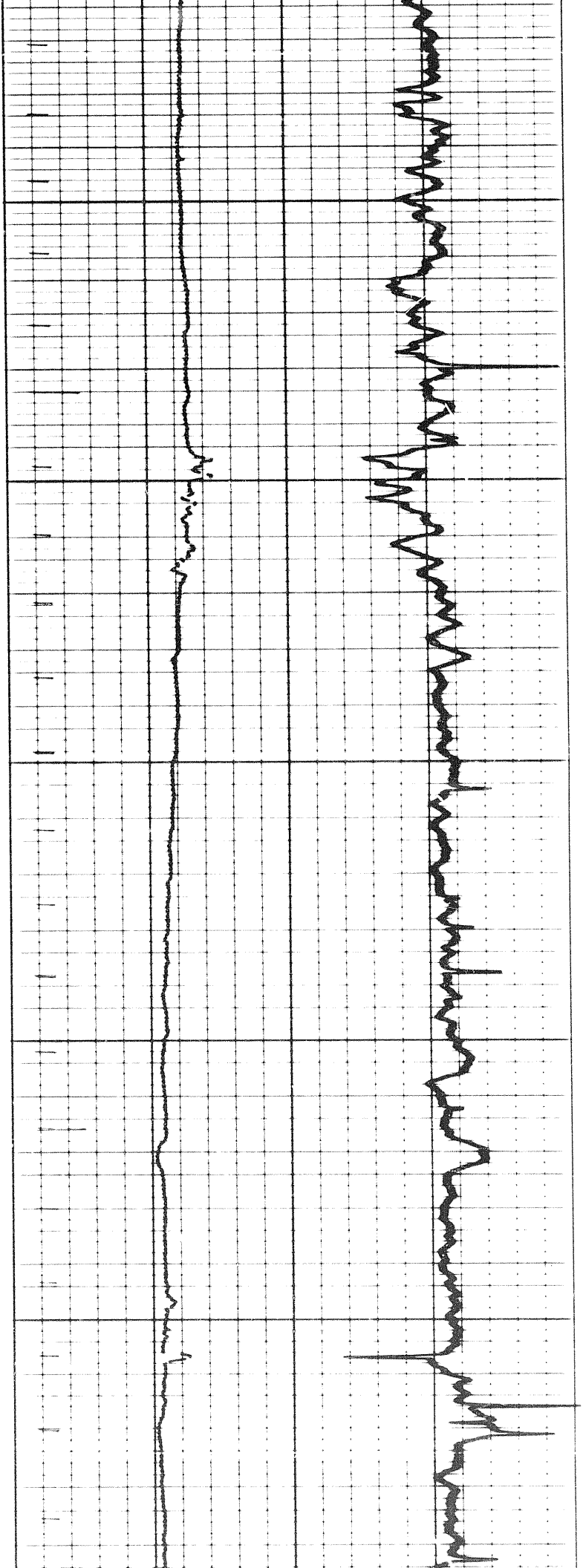
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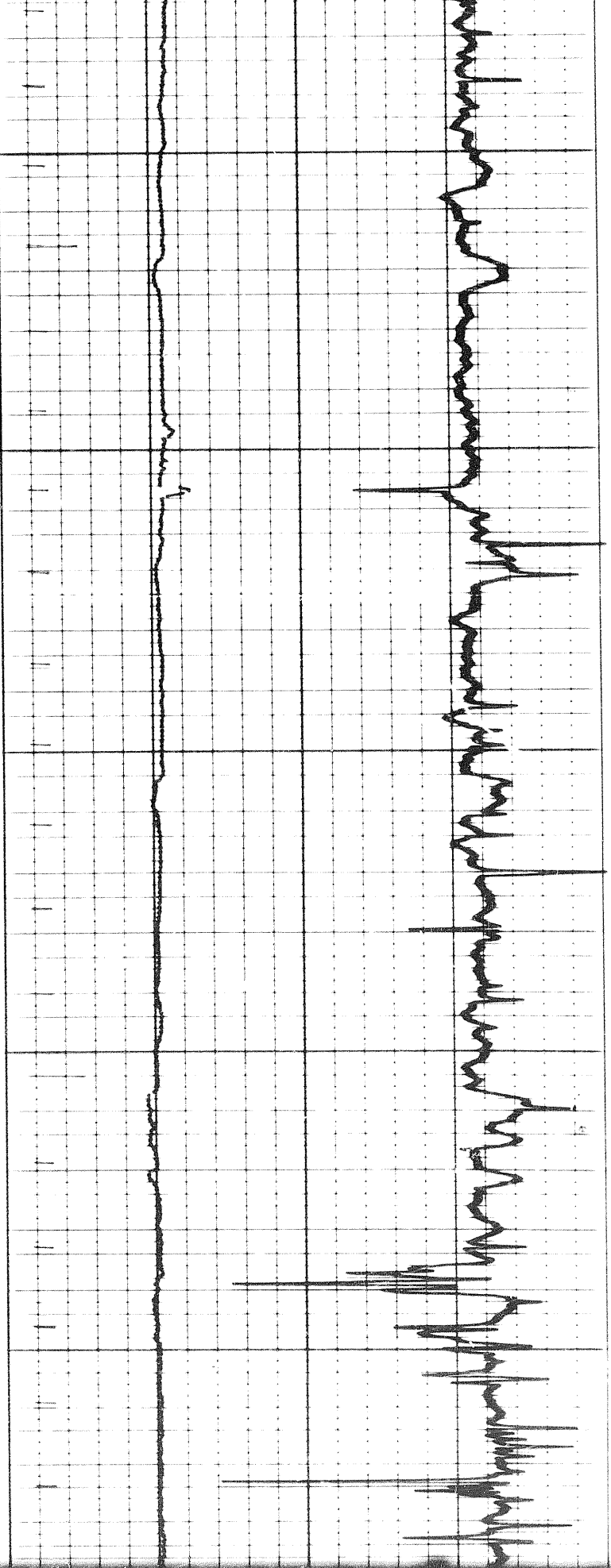




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2700

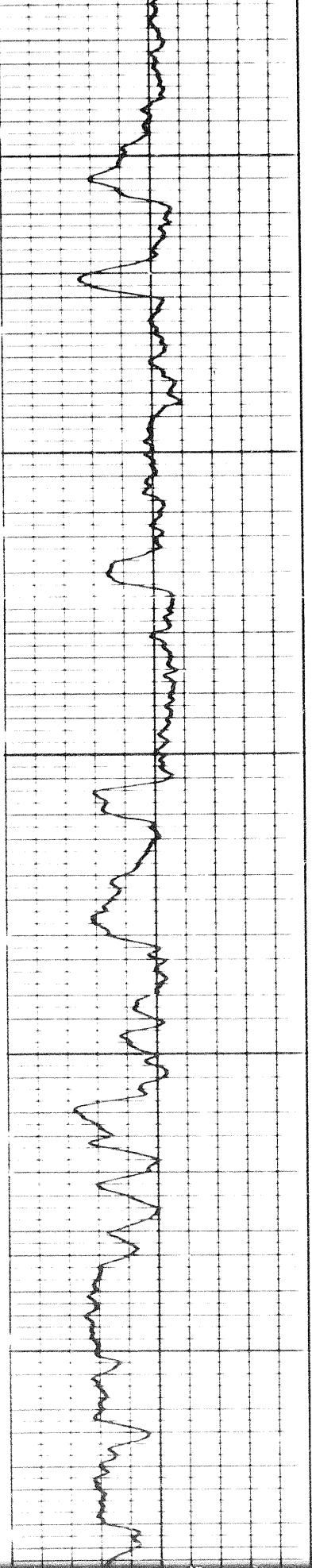


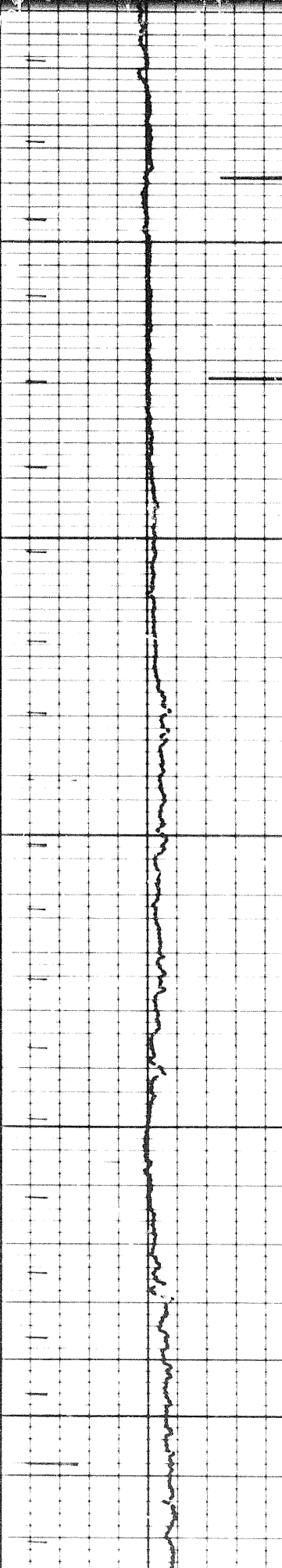
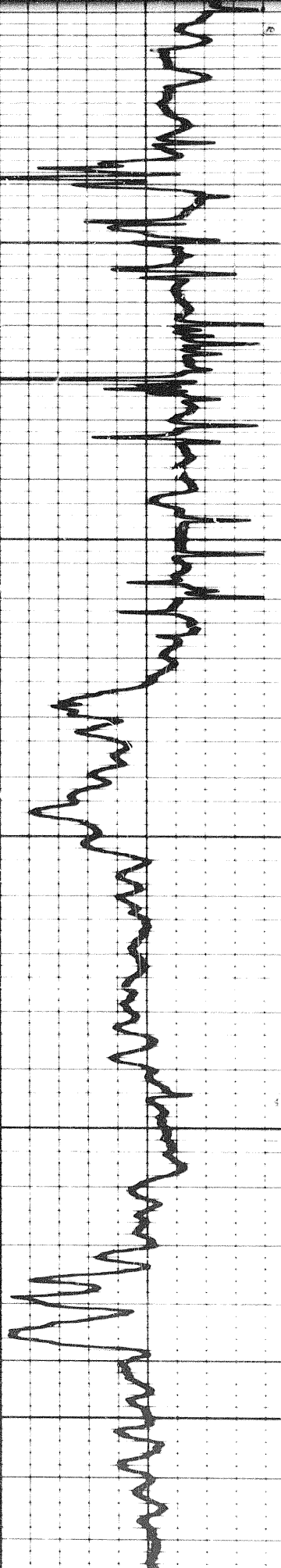


2700

2800

2900



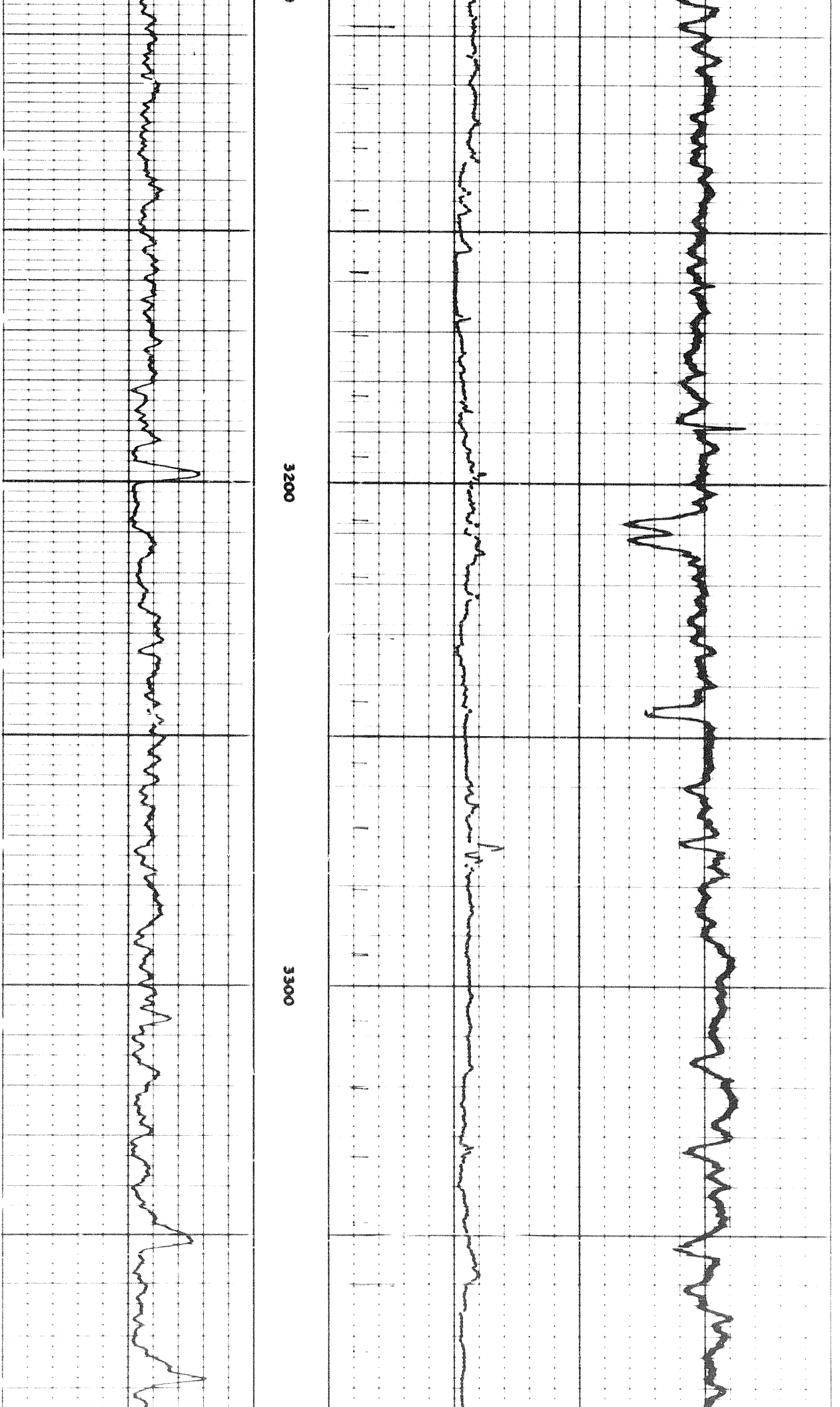


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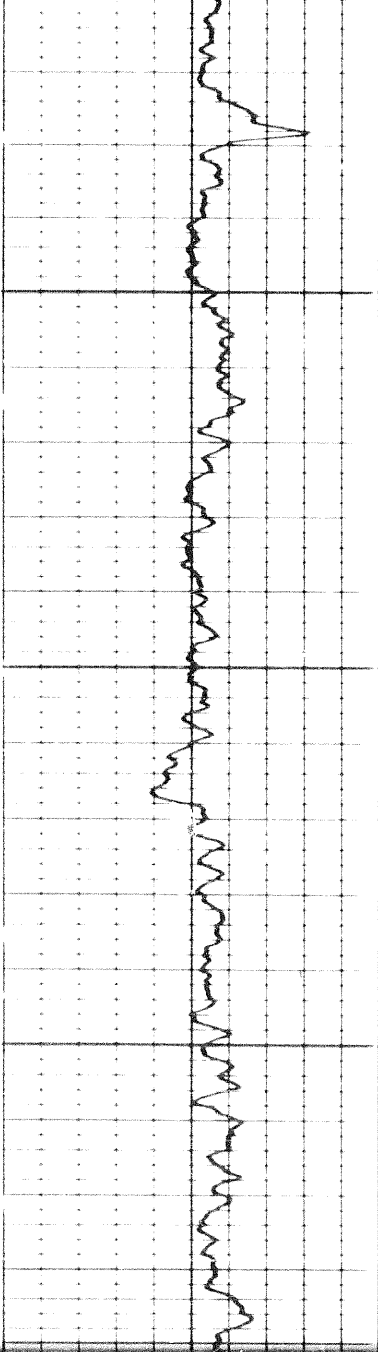
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12 of

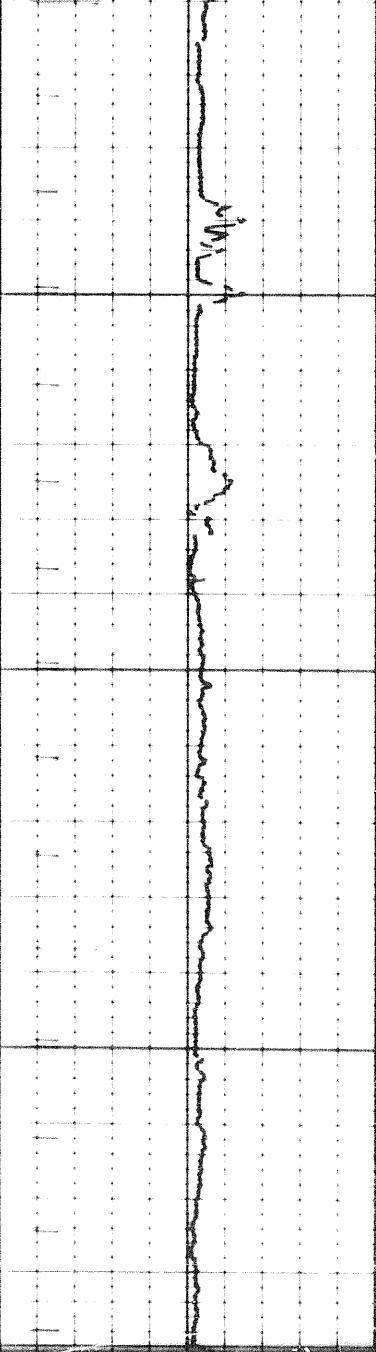


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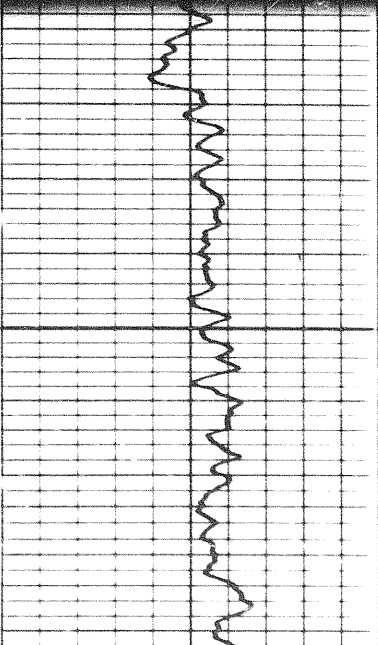
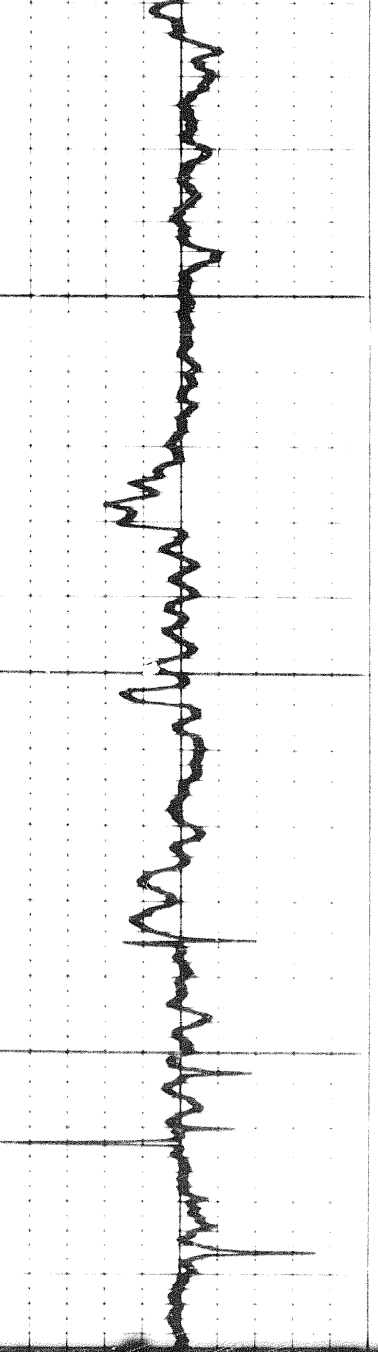
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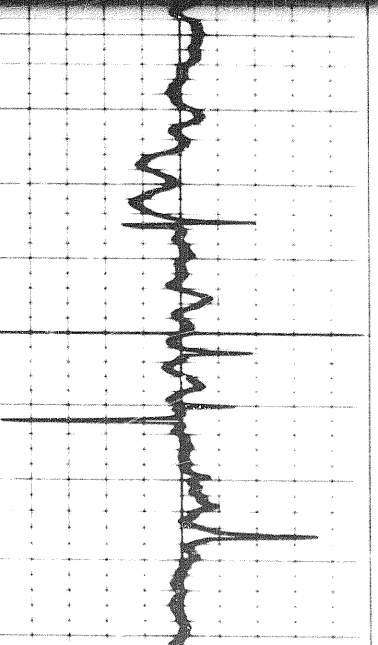
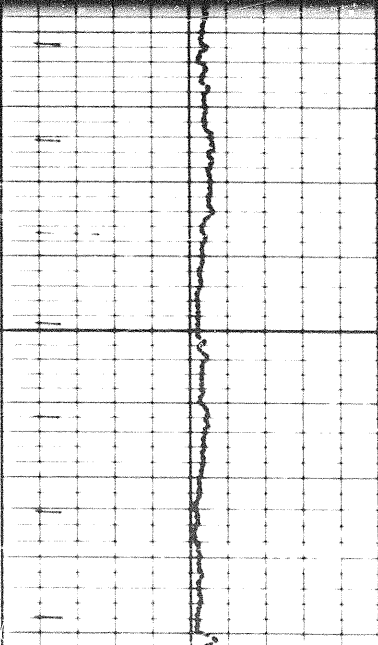
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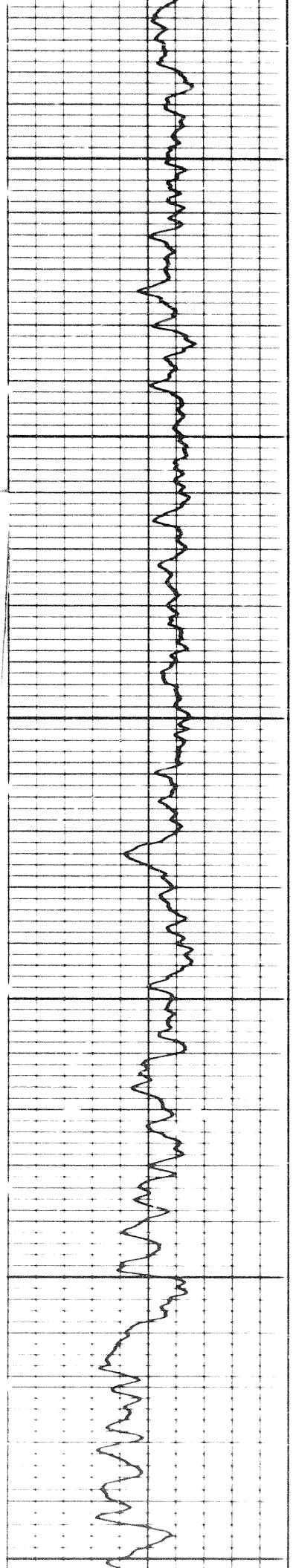
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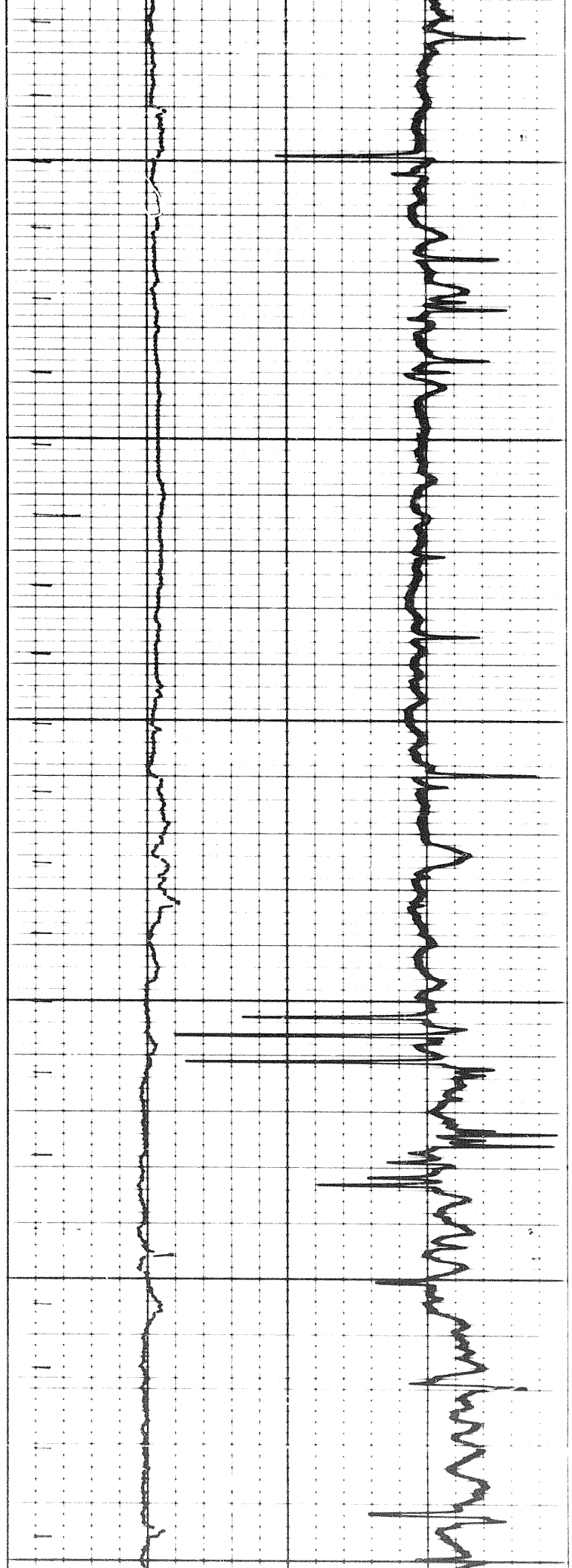
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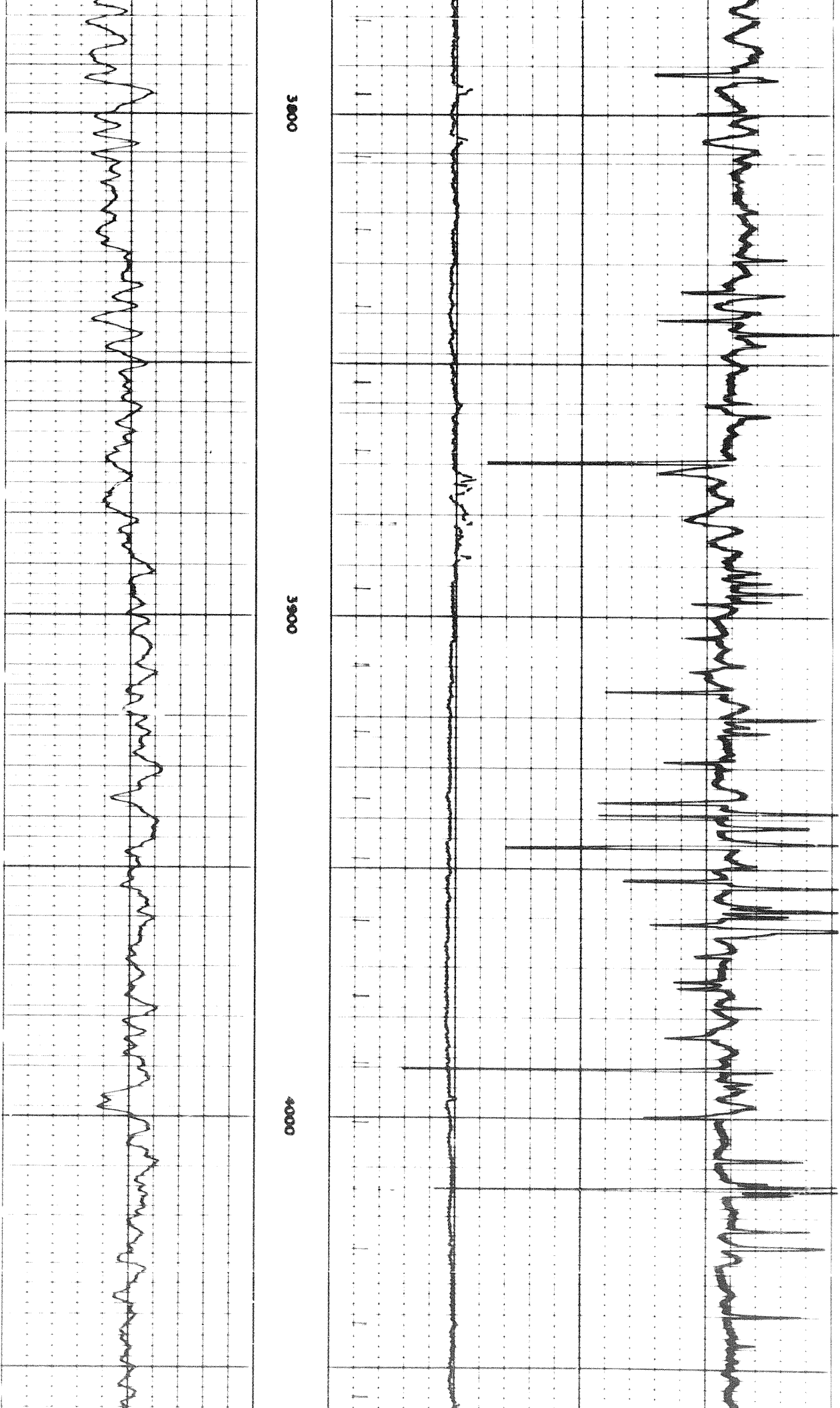


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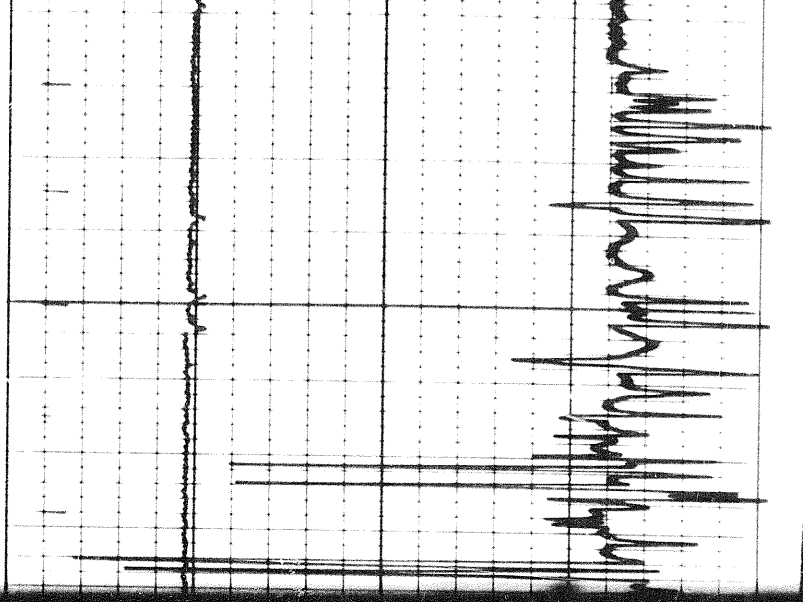




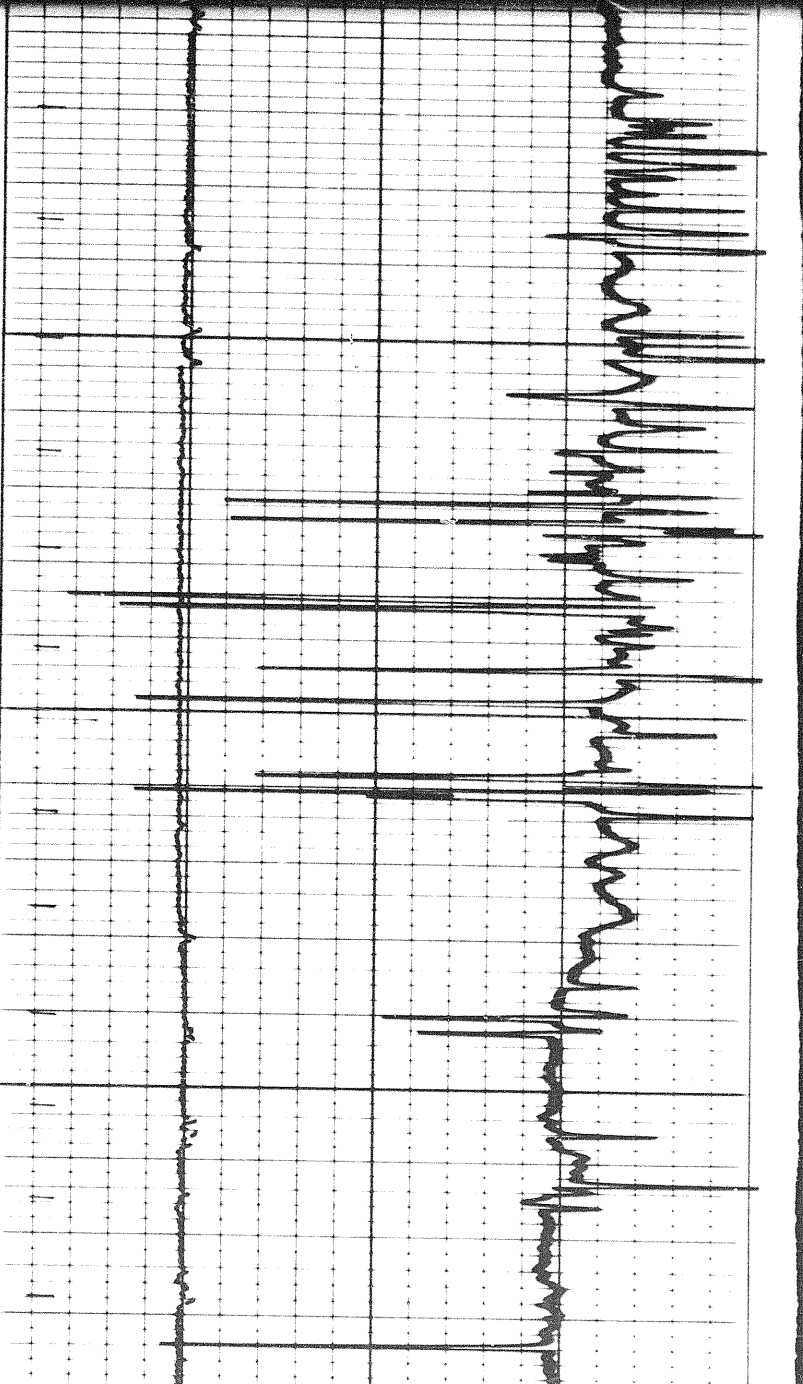
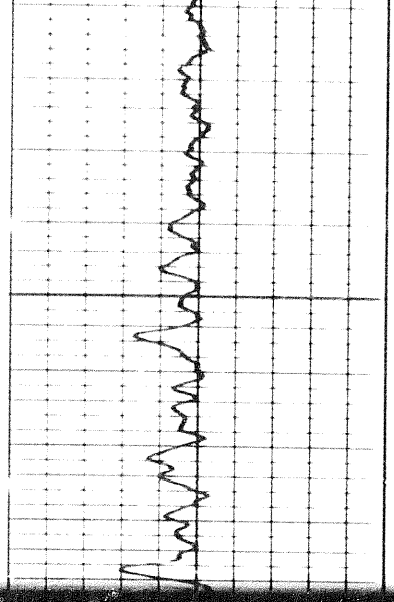
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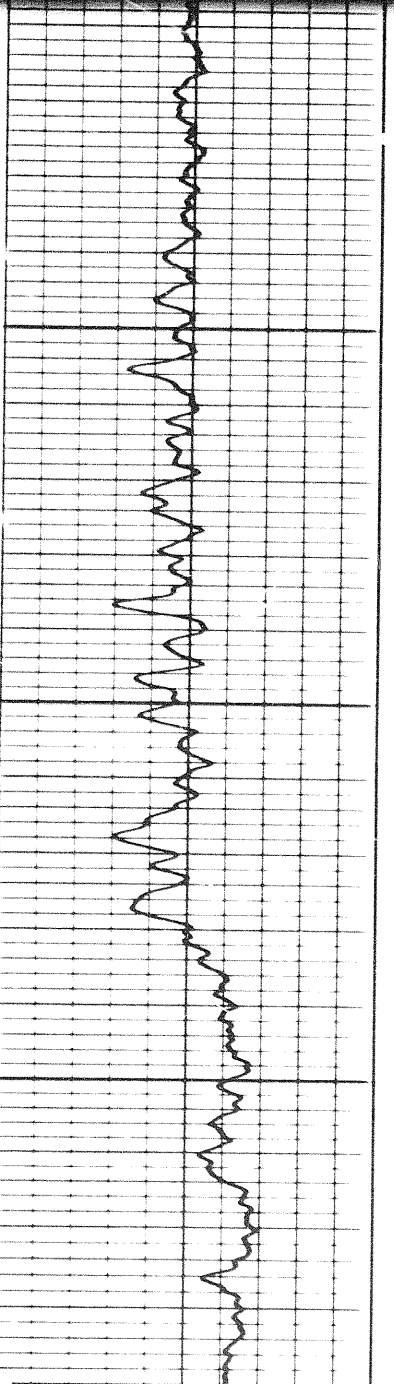
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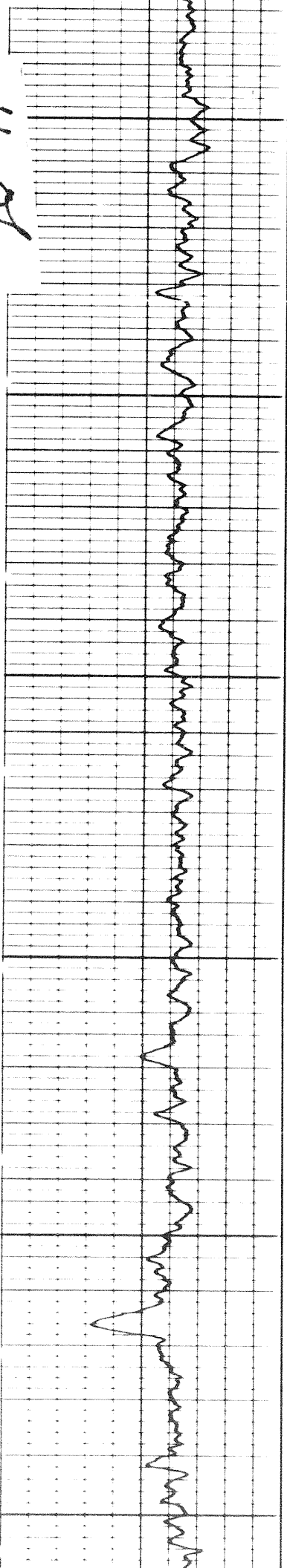


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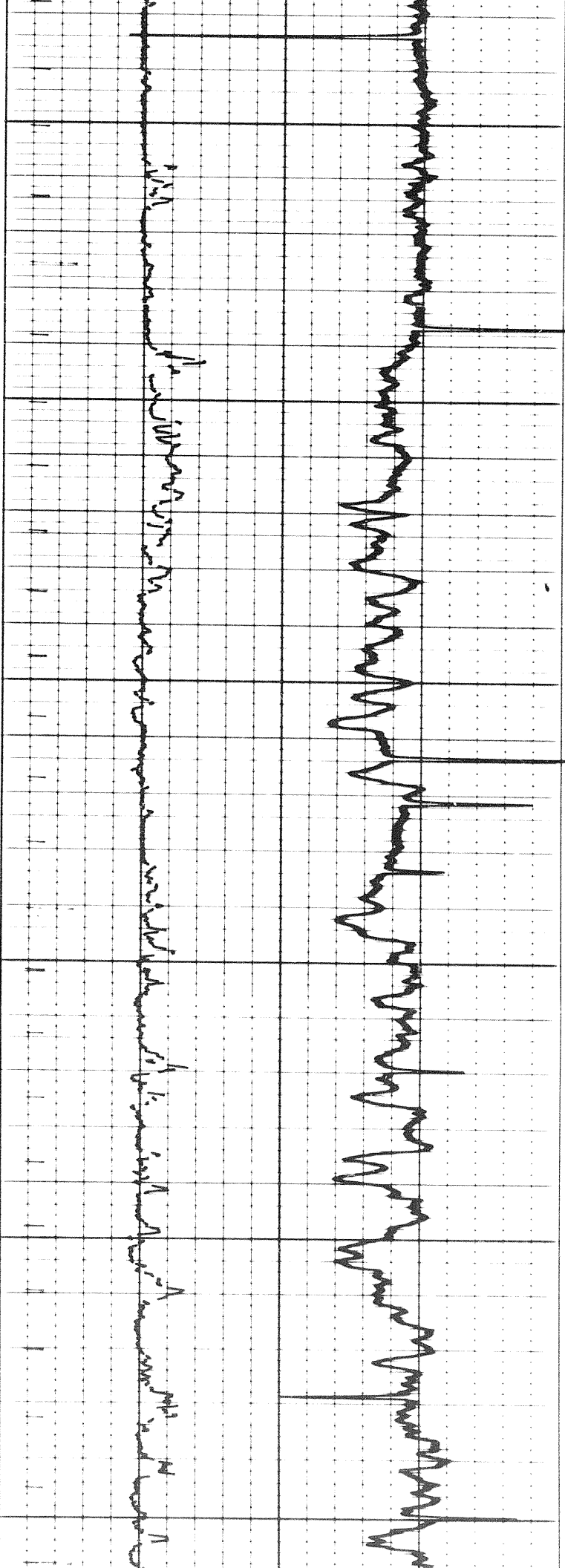
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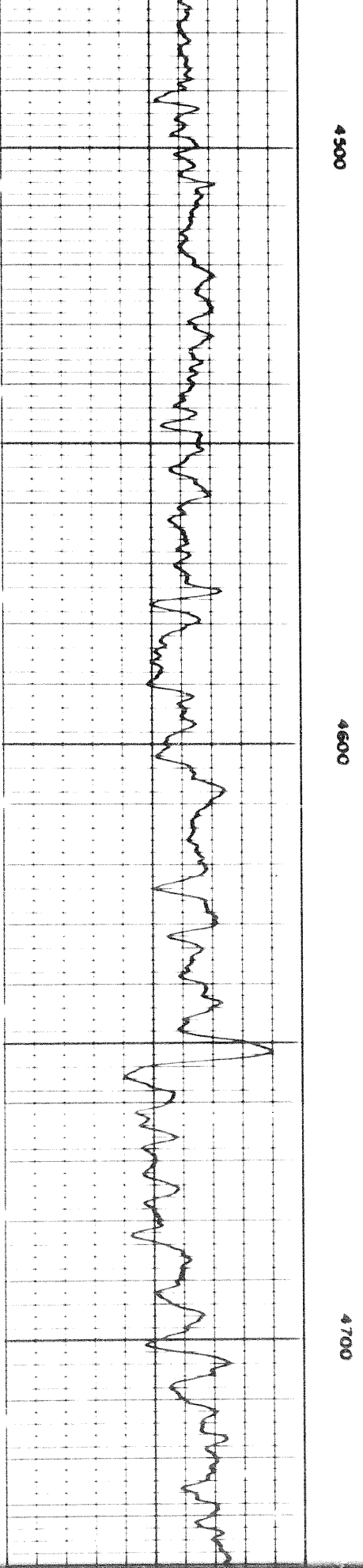
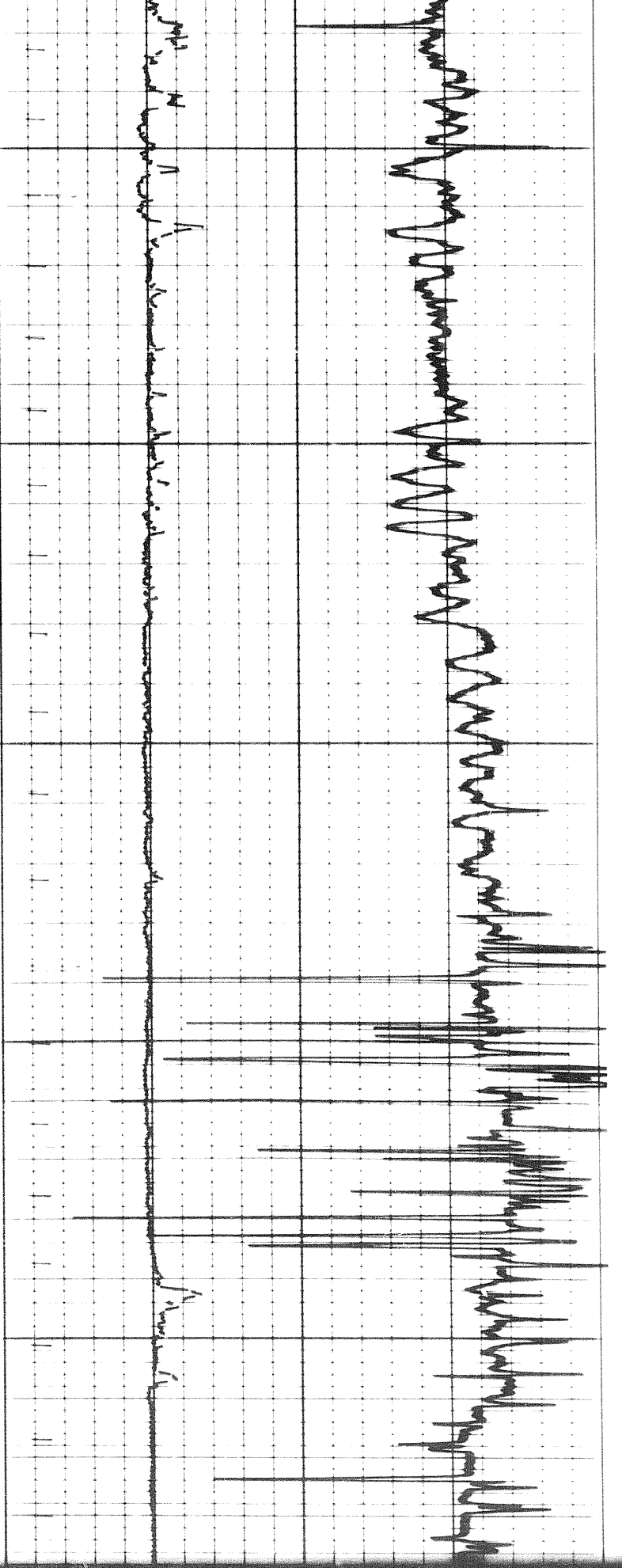


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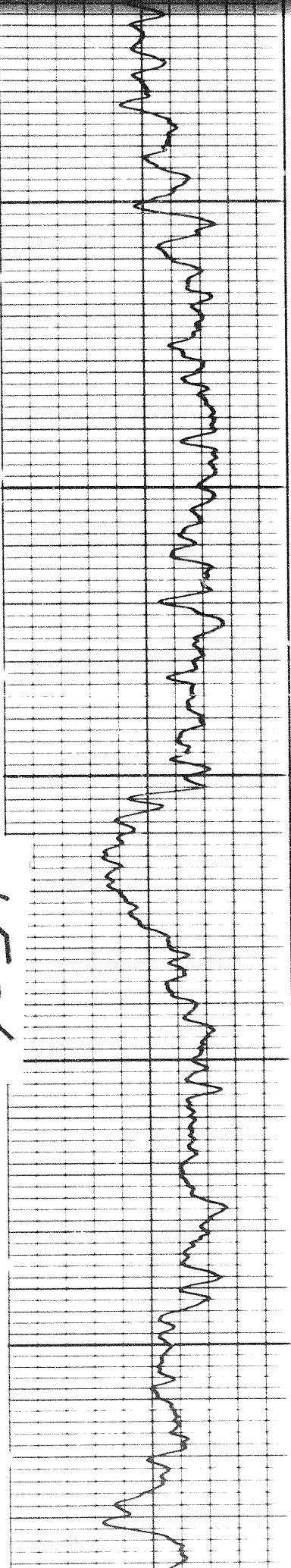
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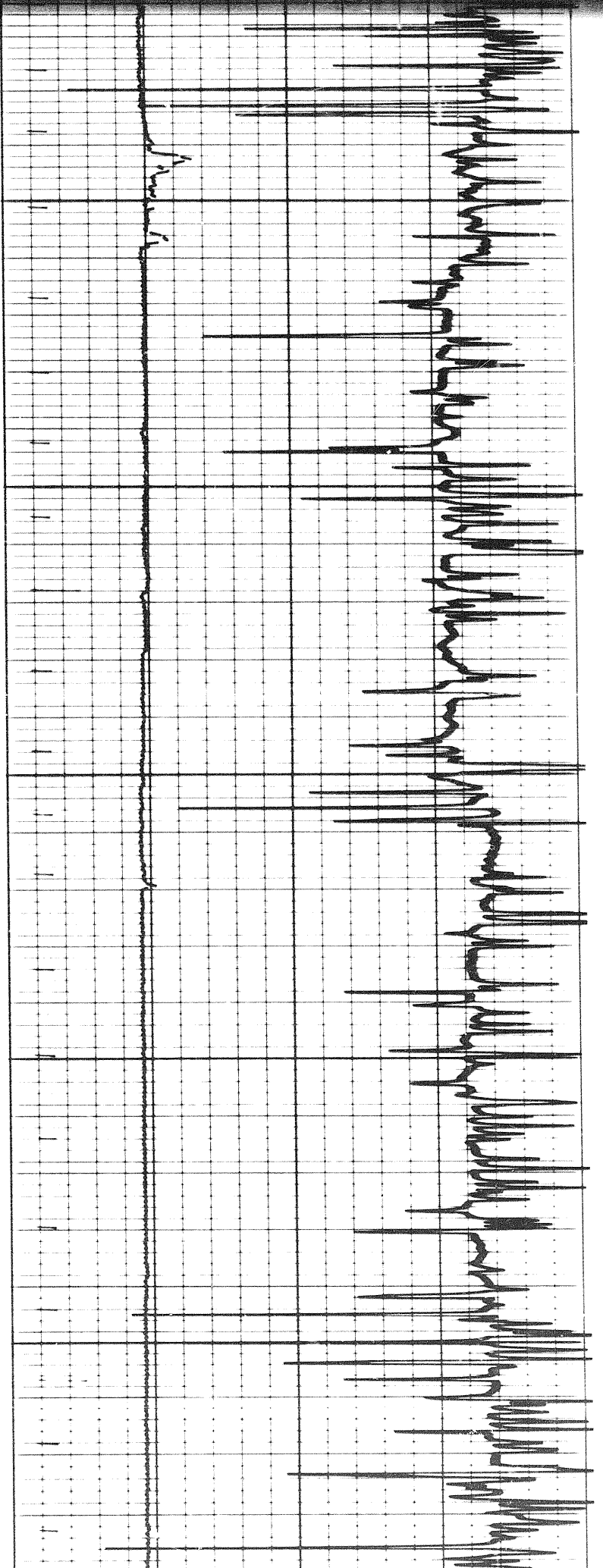
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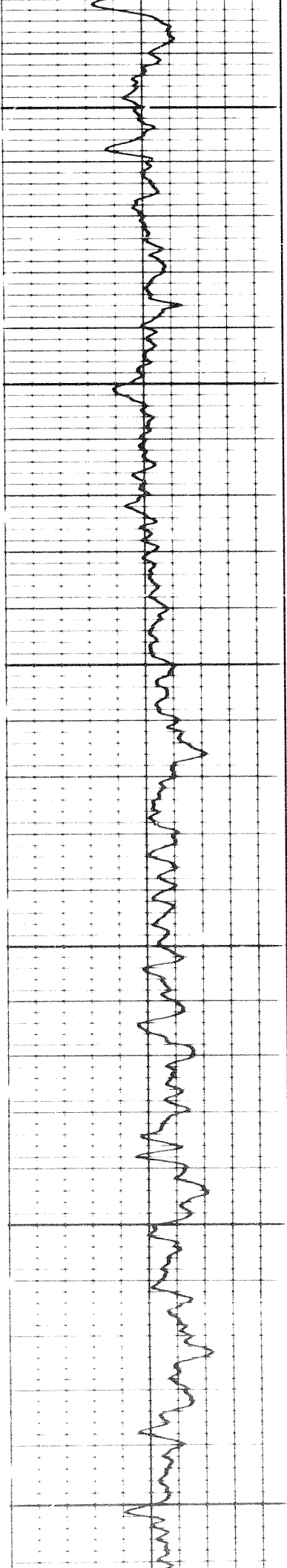


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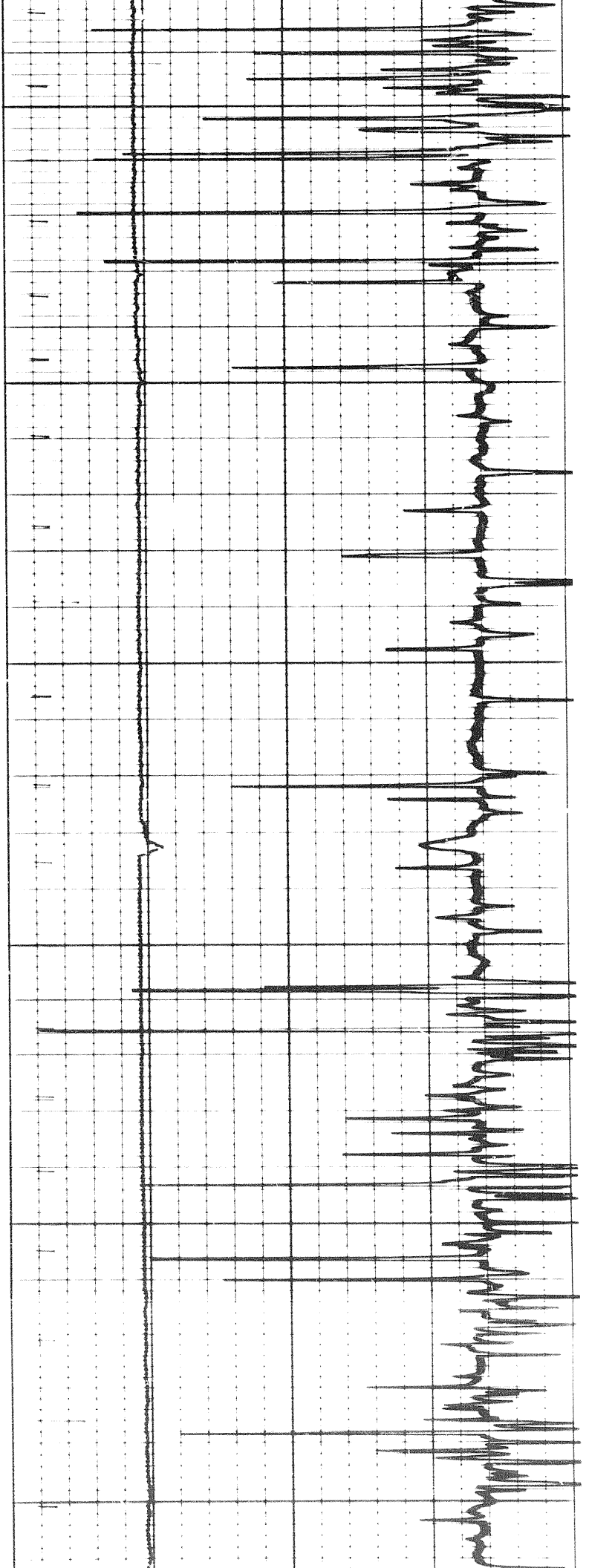


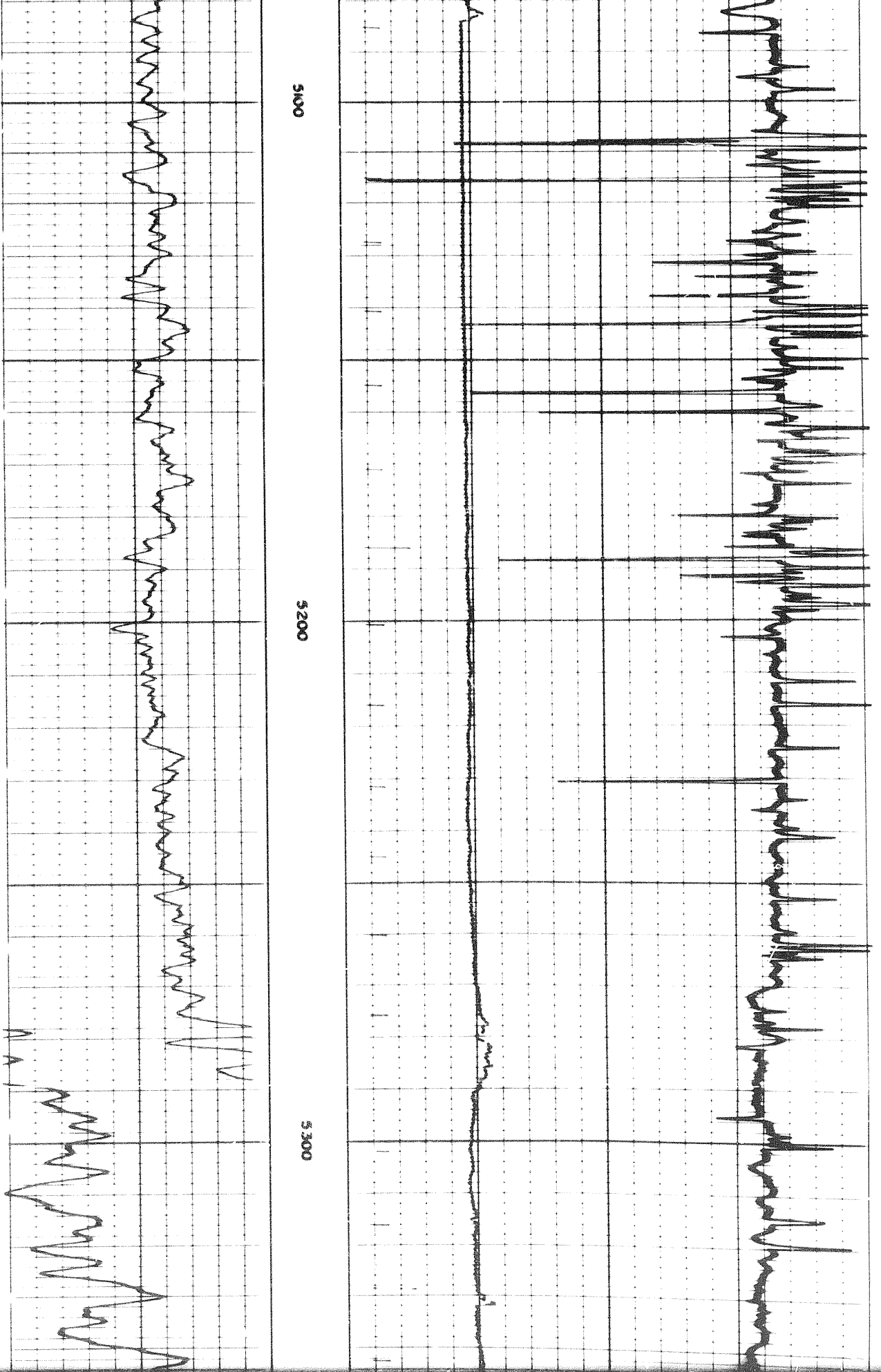


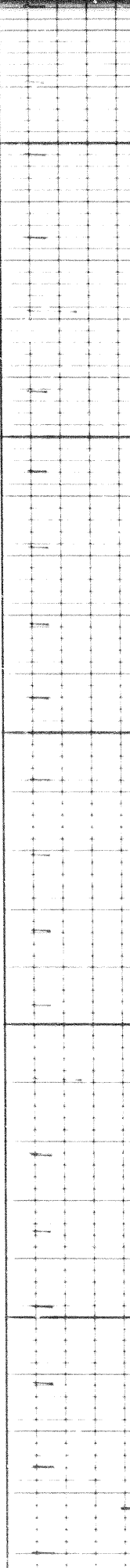
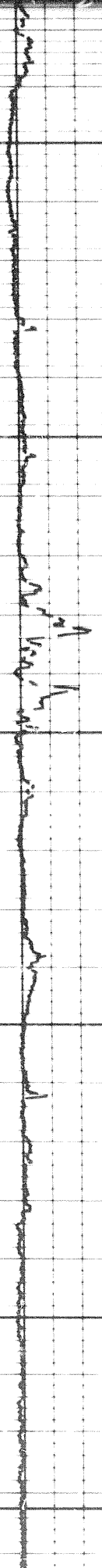
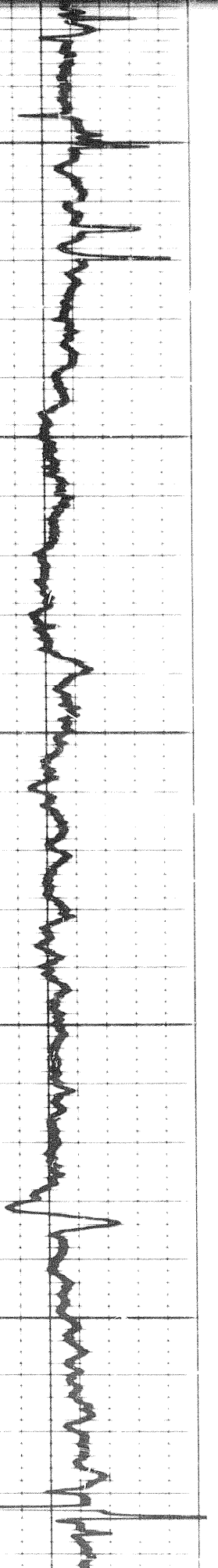
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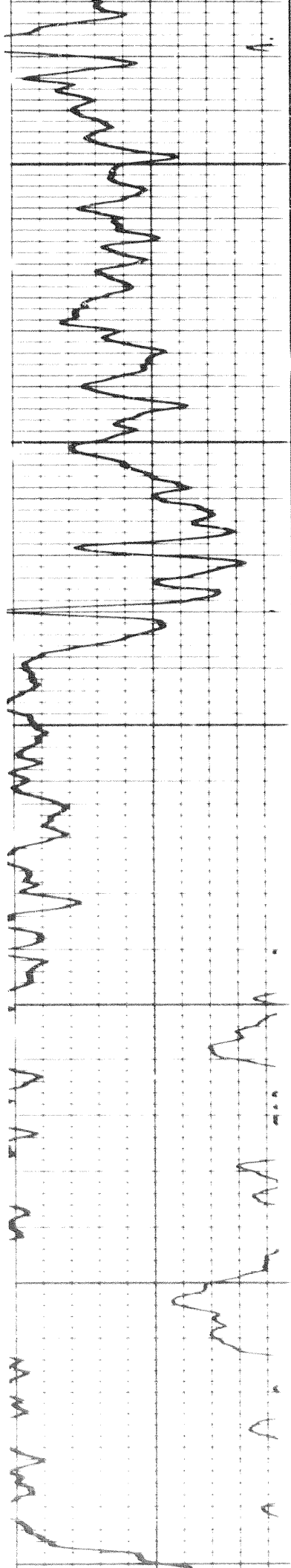
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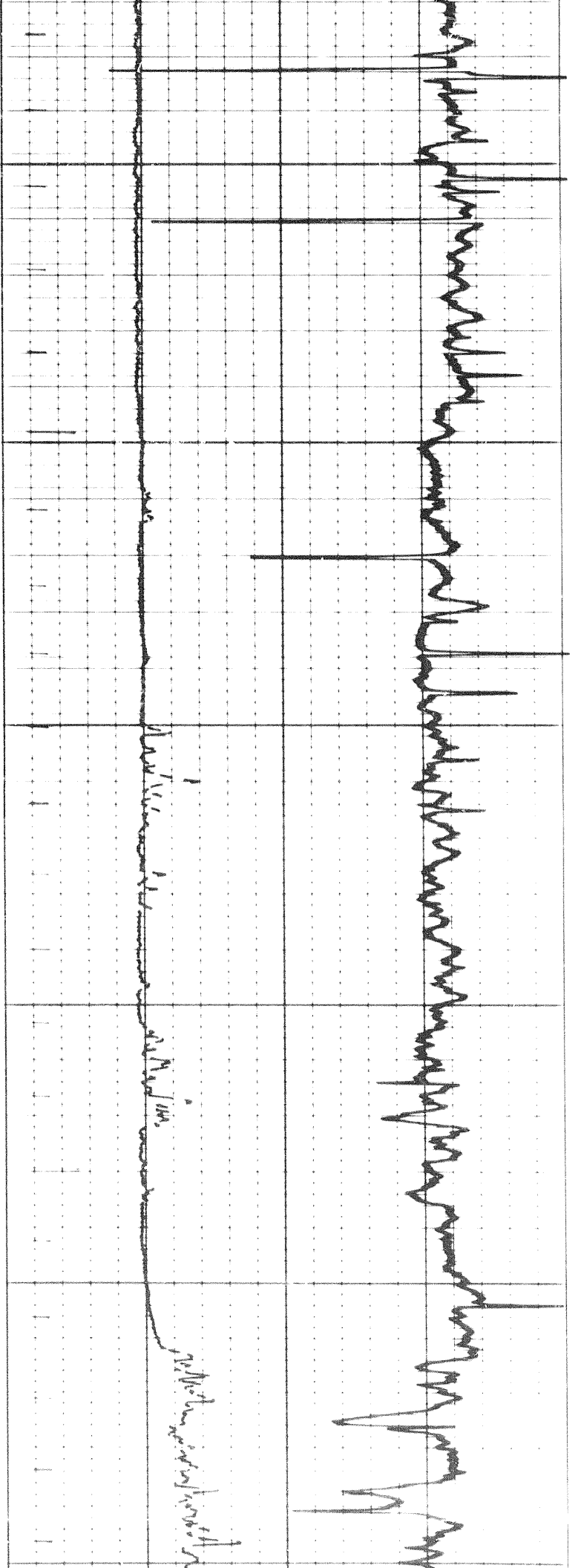
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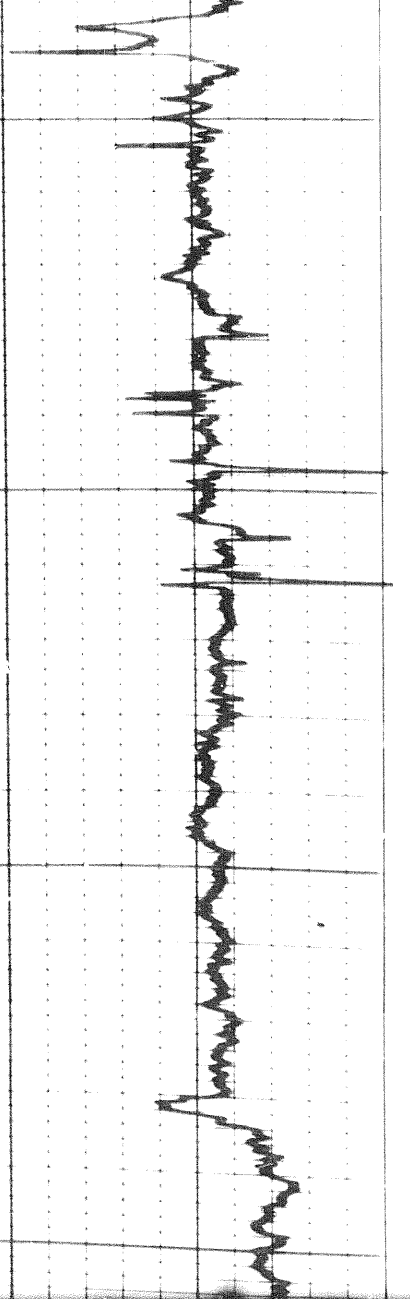


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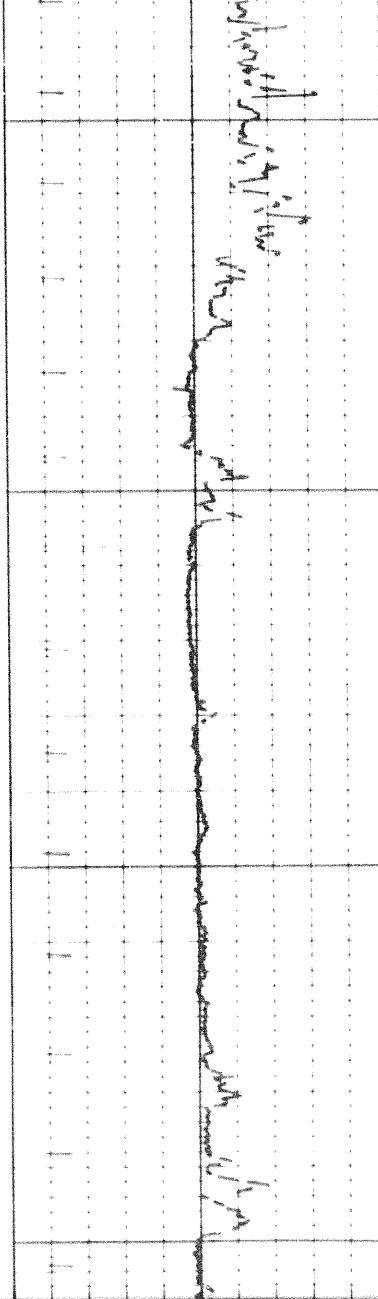
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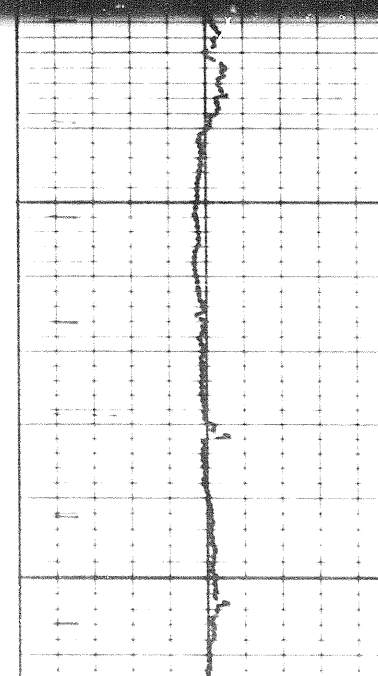
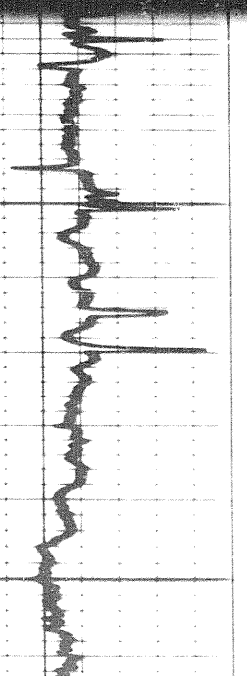
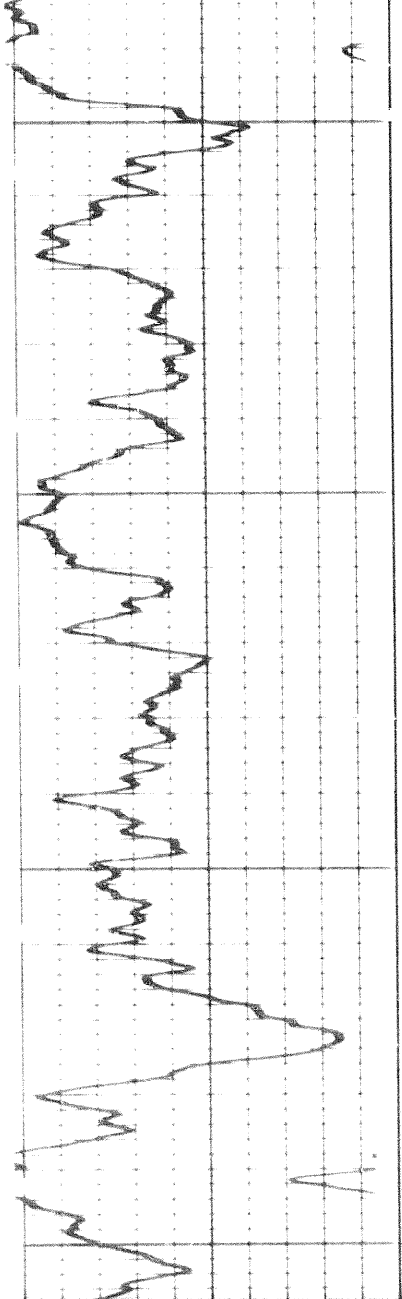


sinus rhythm
normal PR interval

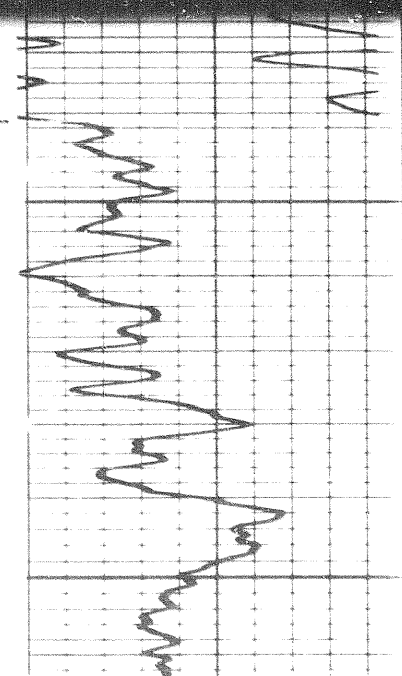


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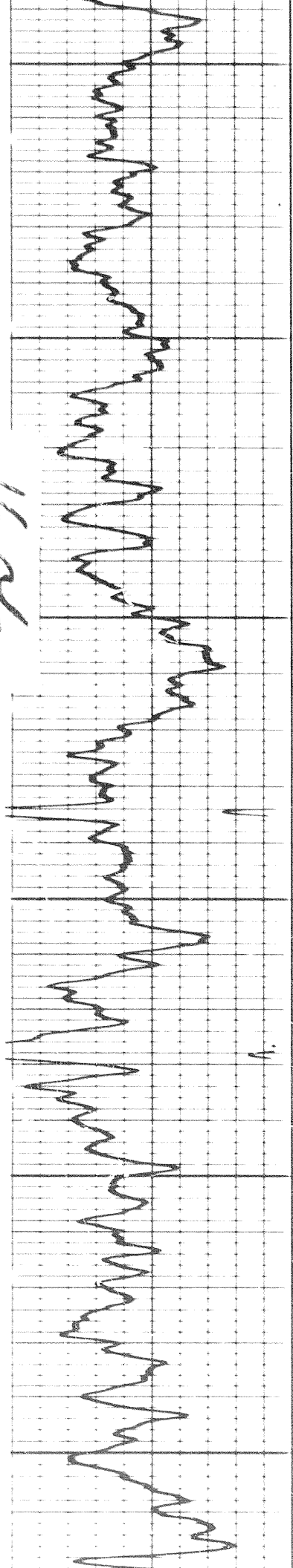
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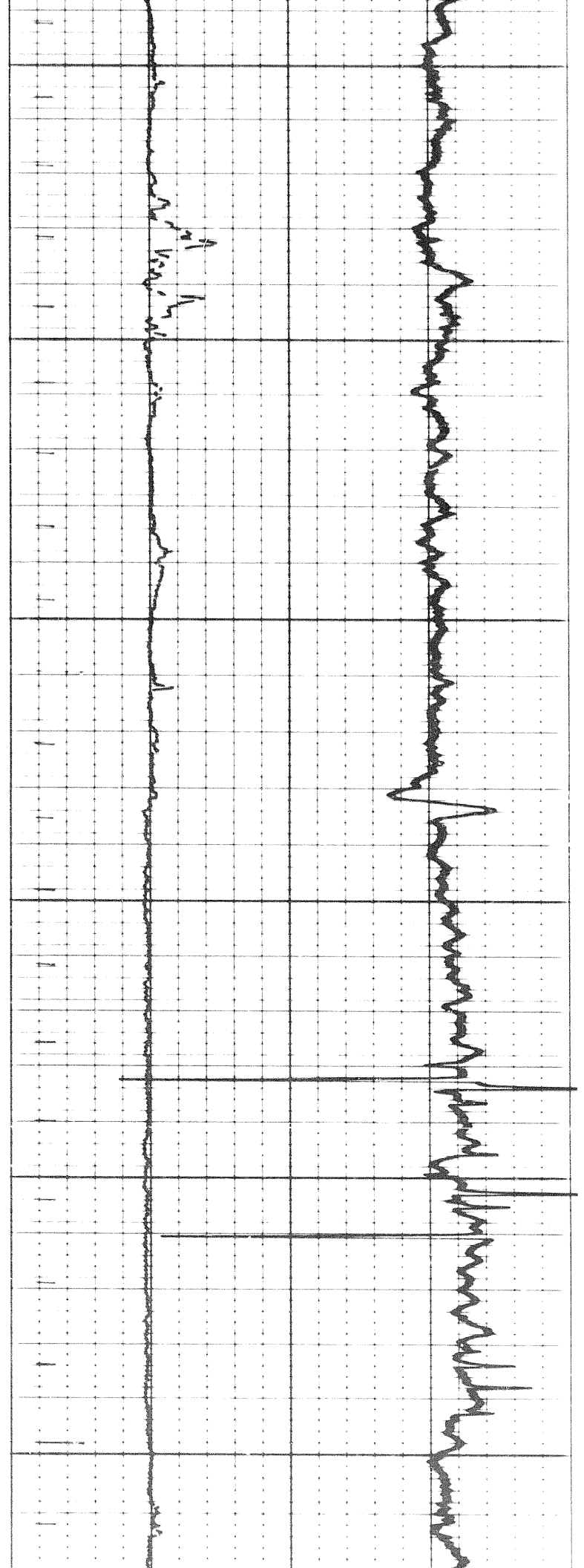
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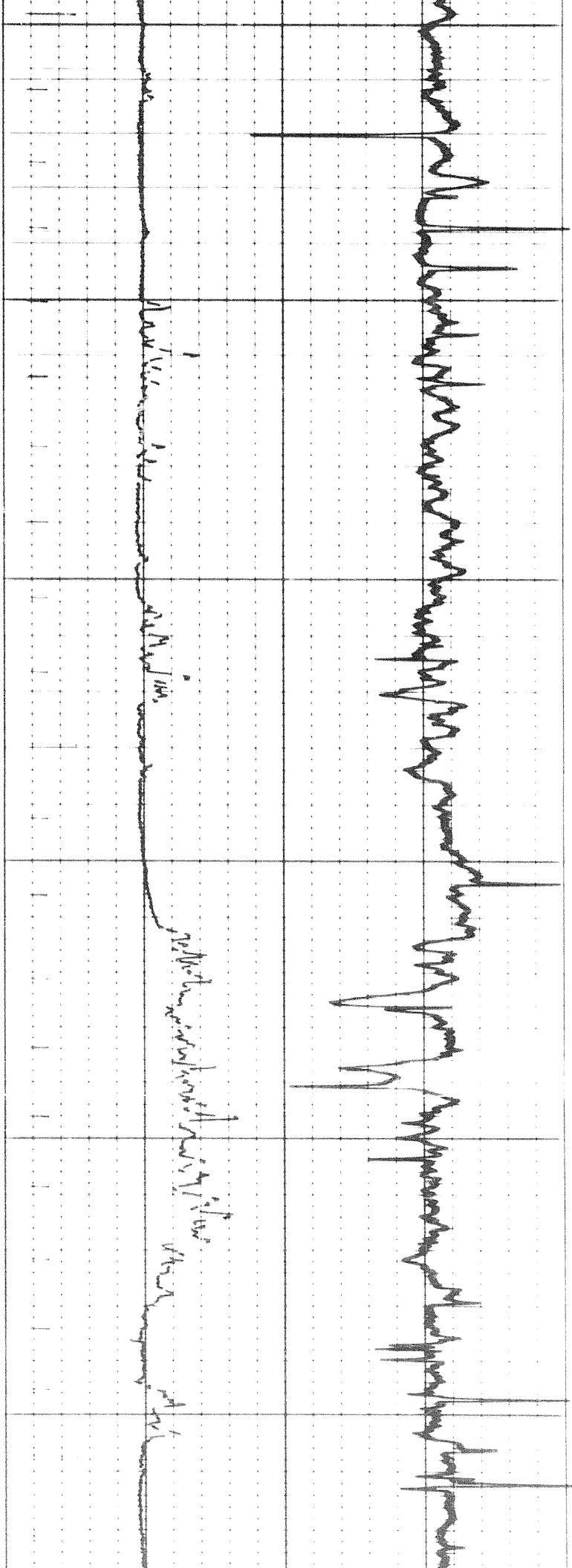


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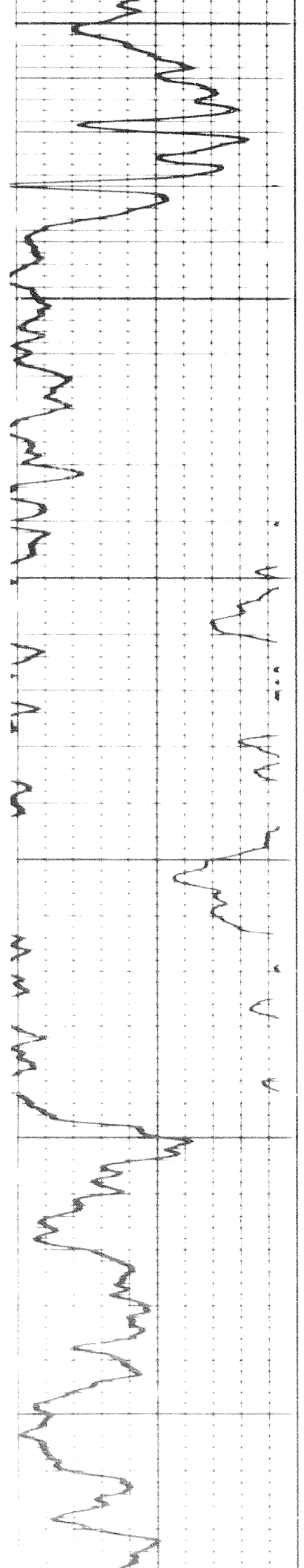




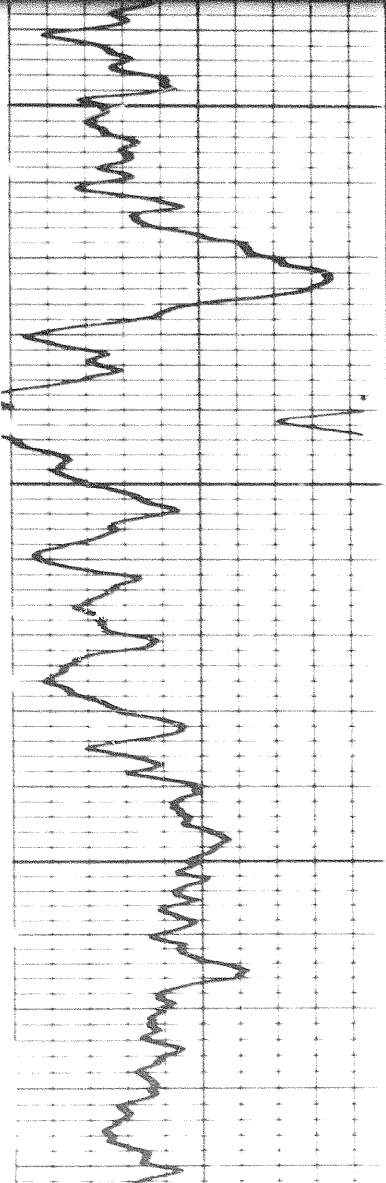
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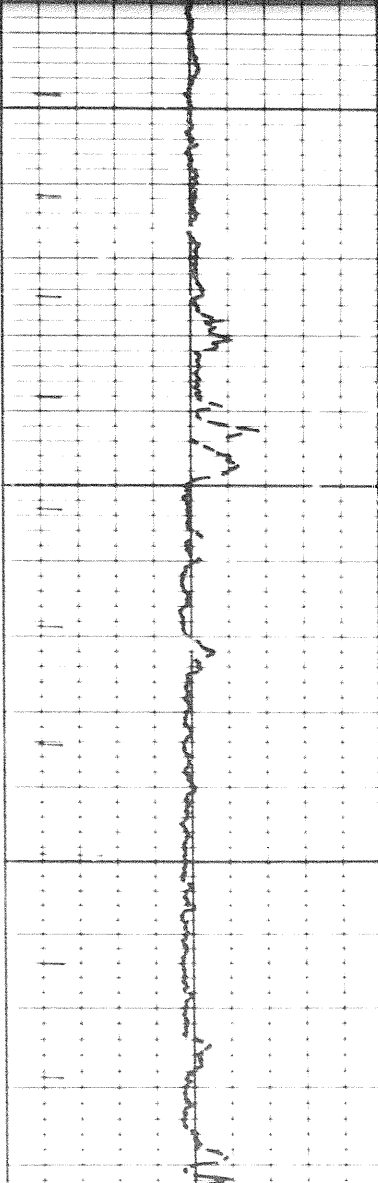
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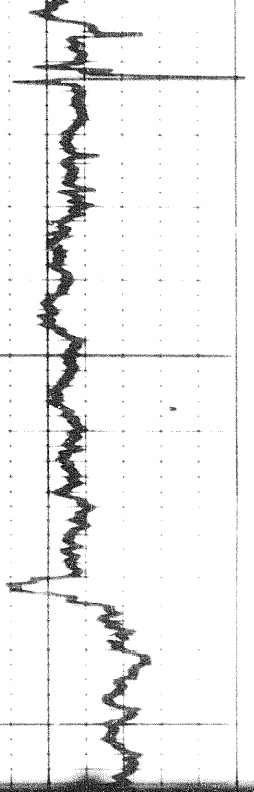
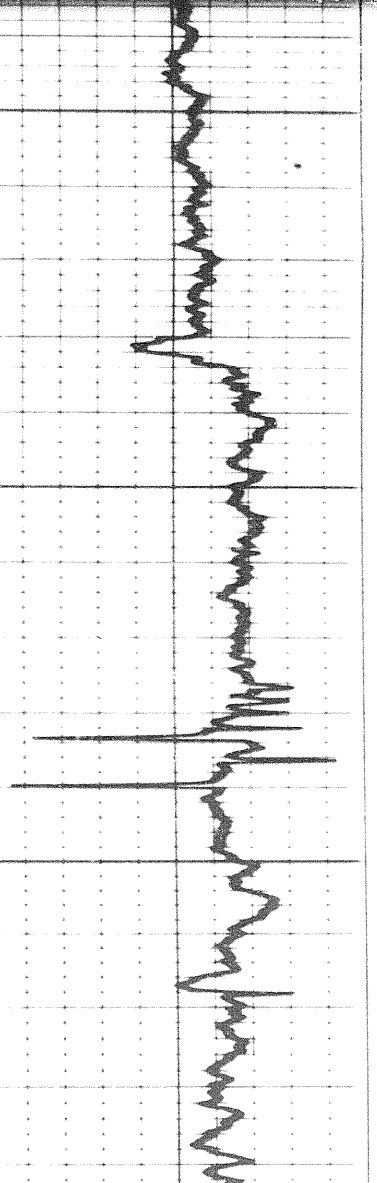
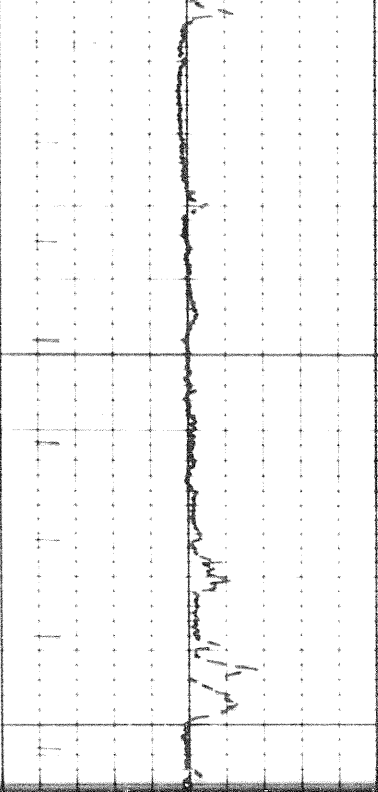
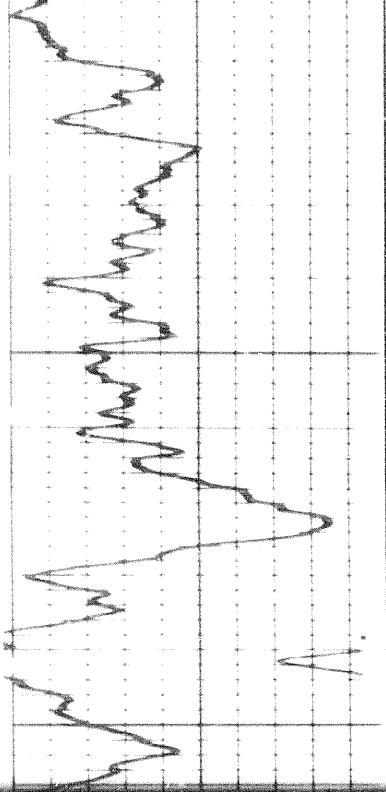
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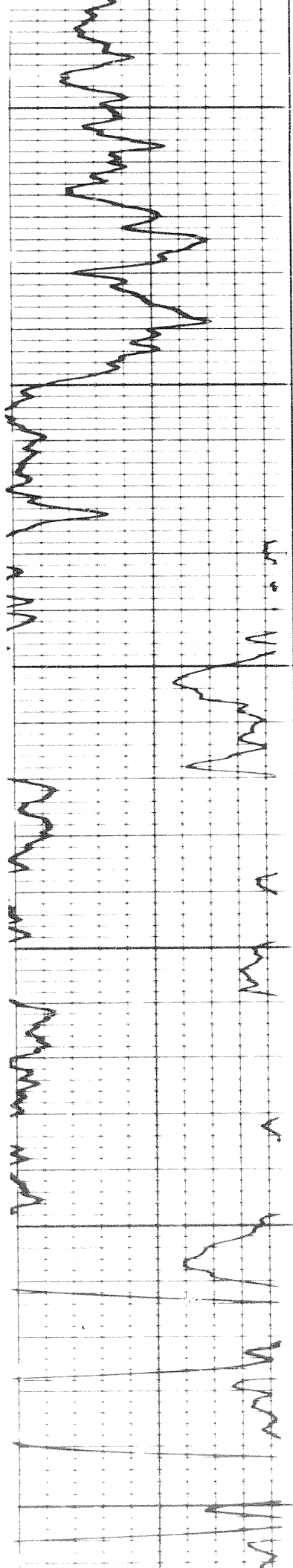
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5900



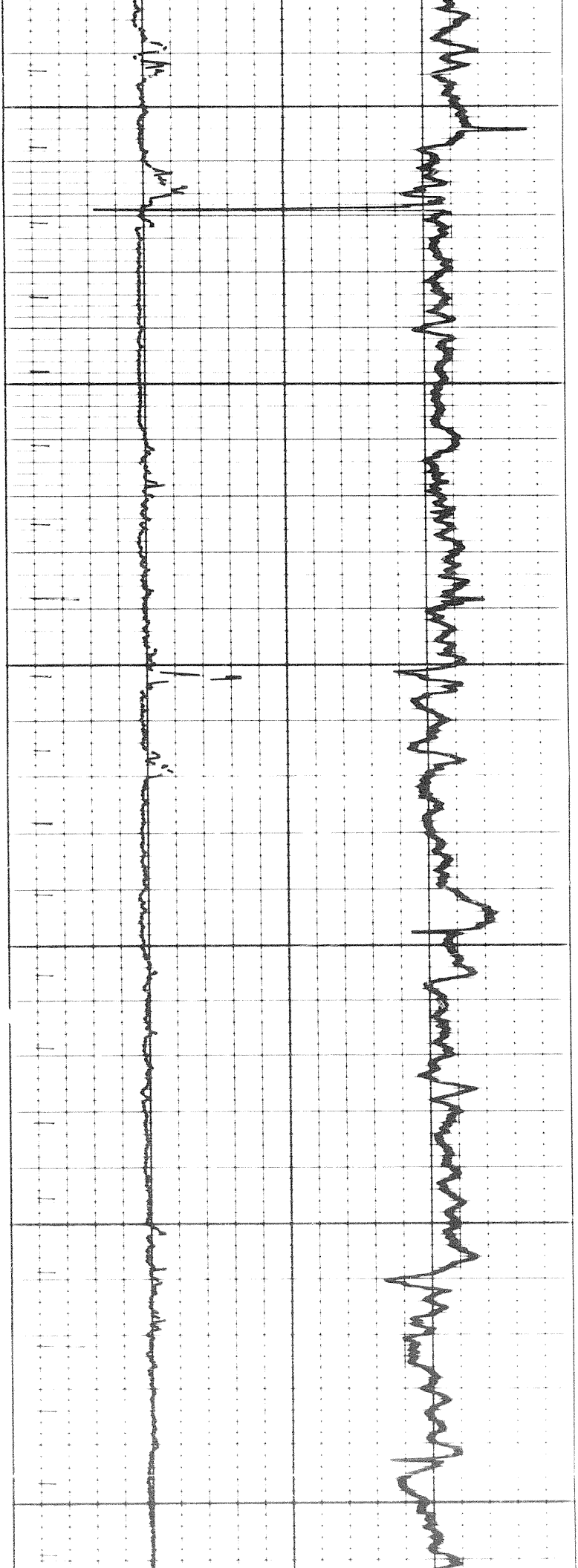
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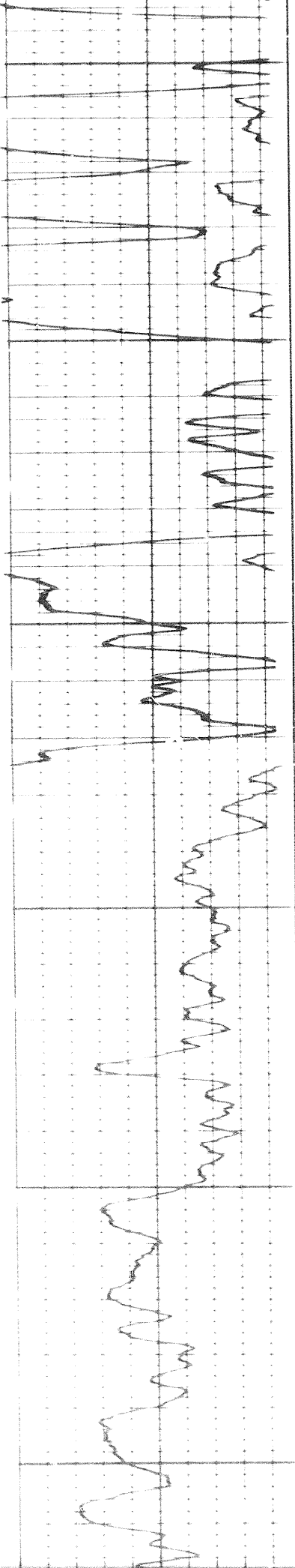


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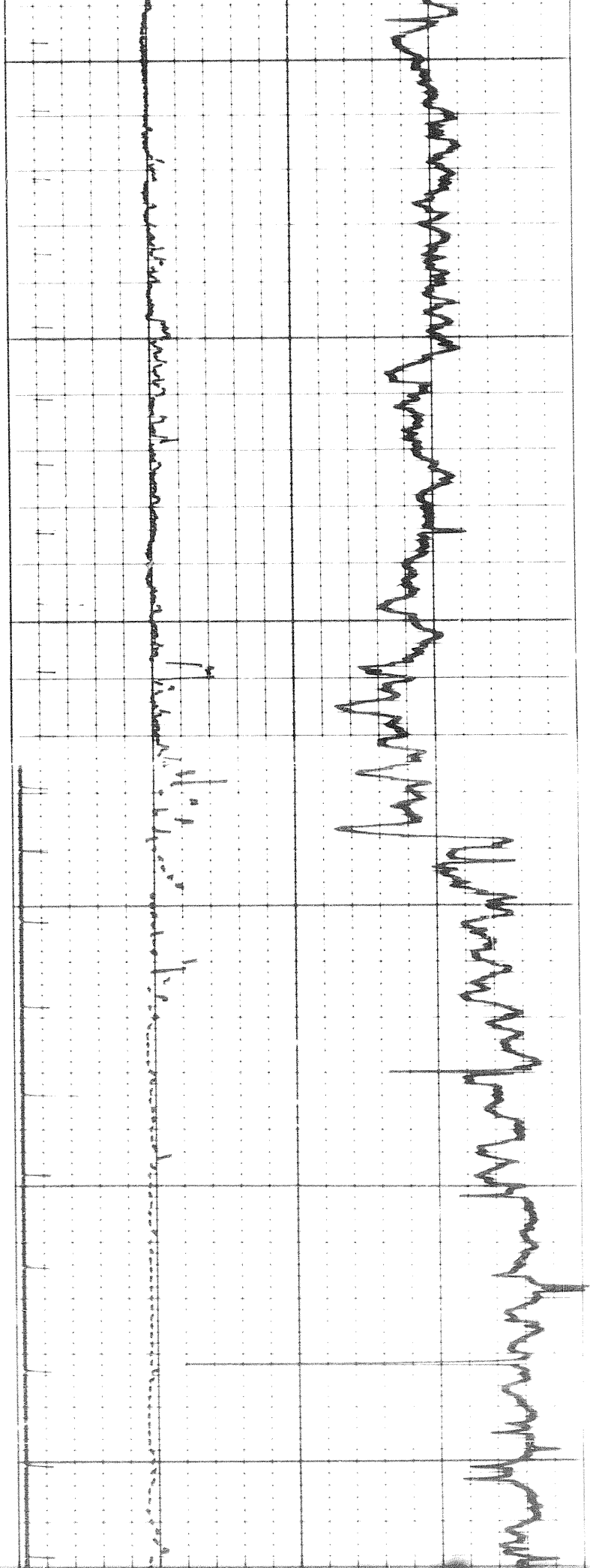




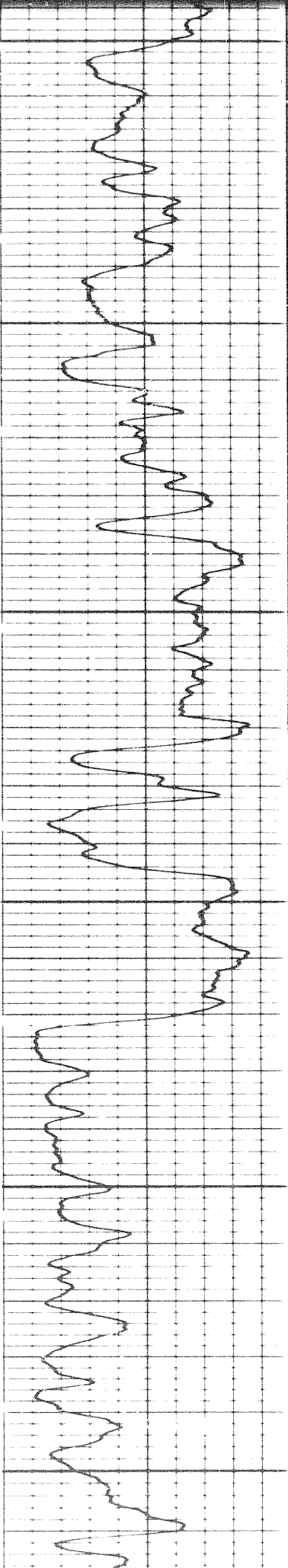
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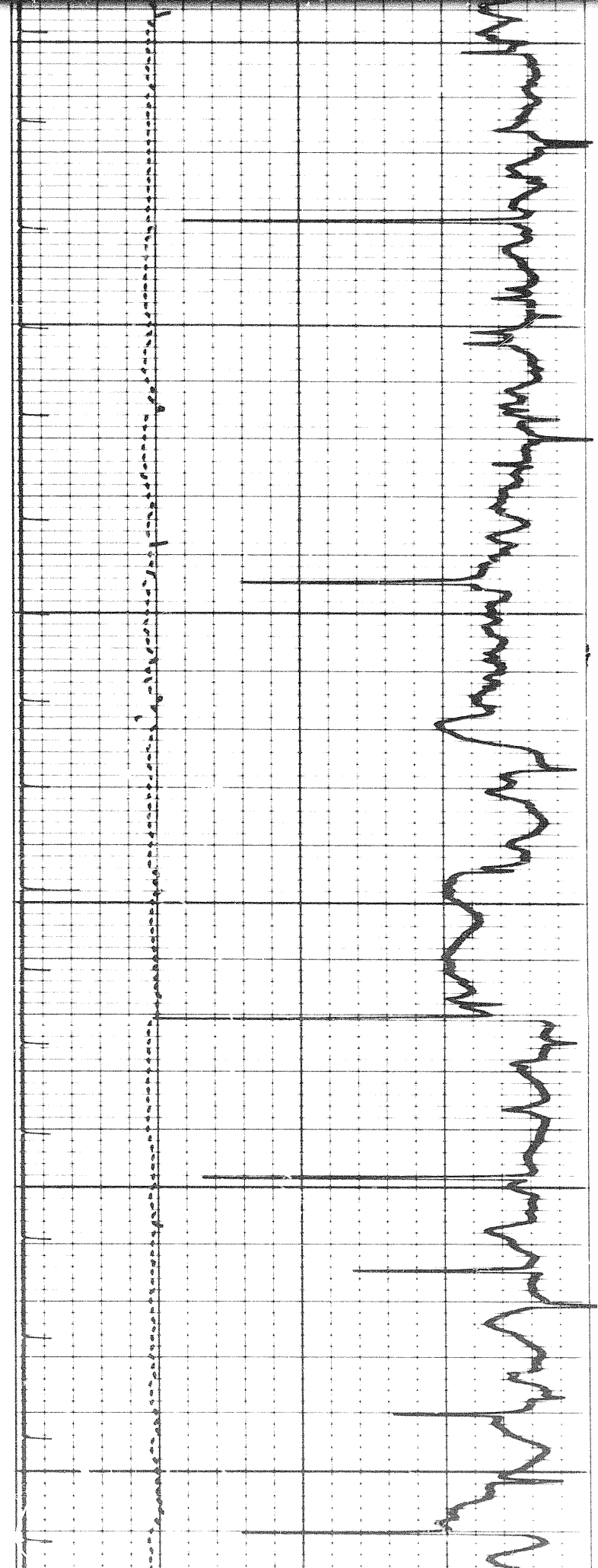
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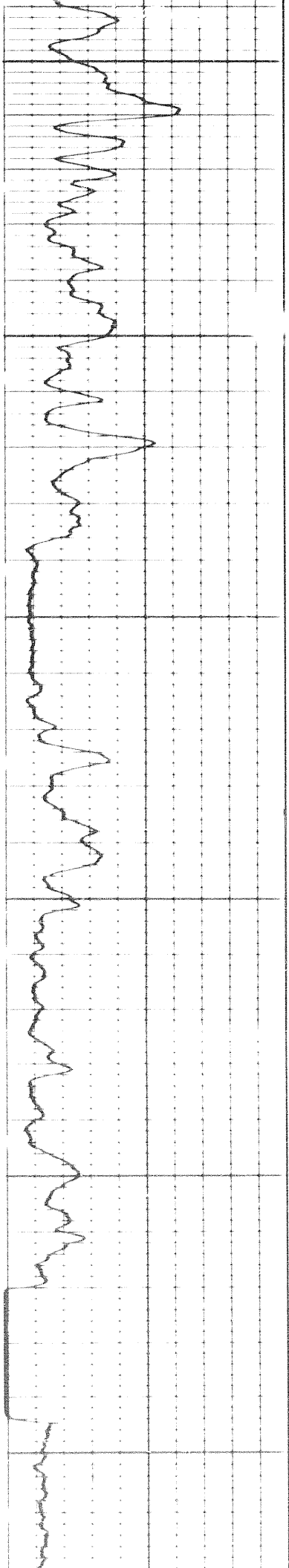


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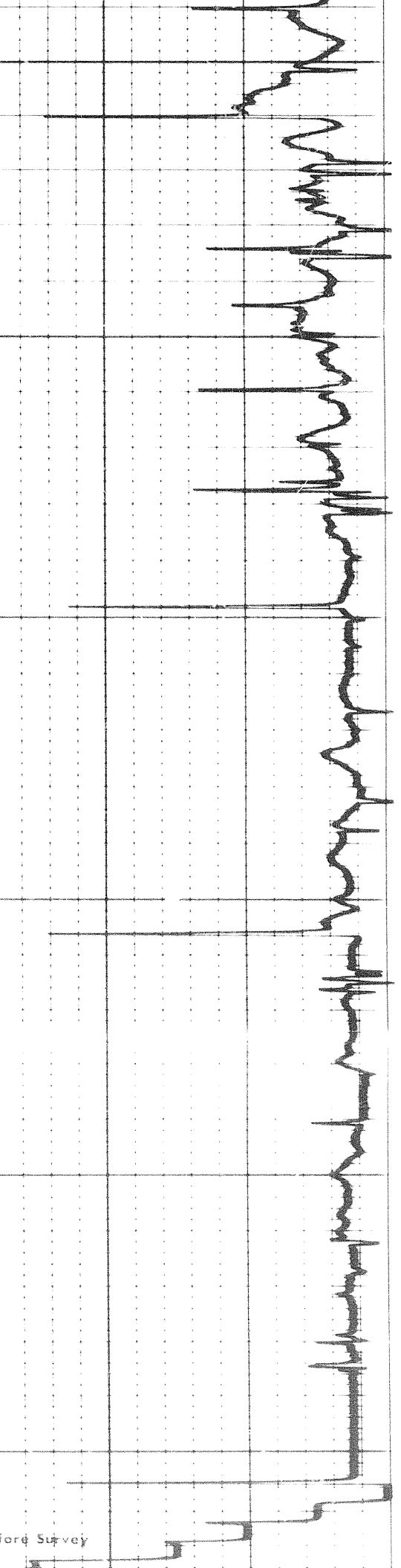
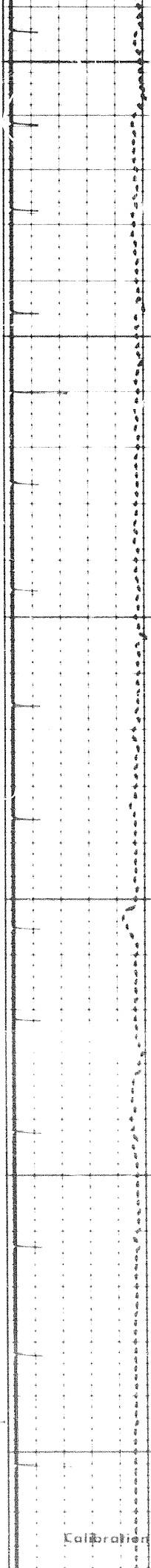




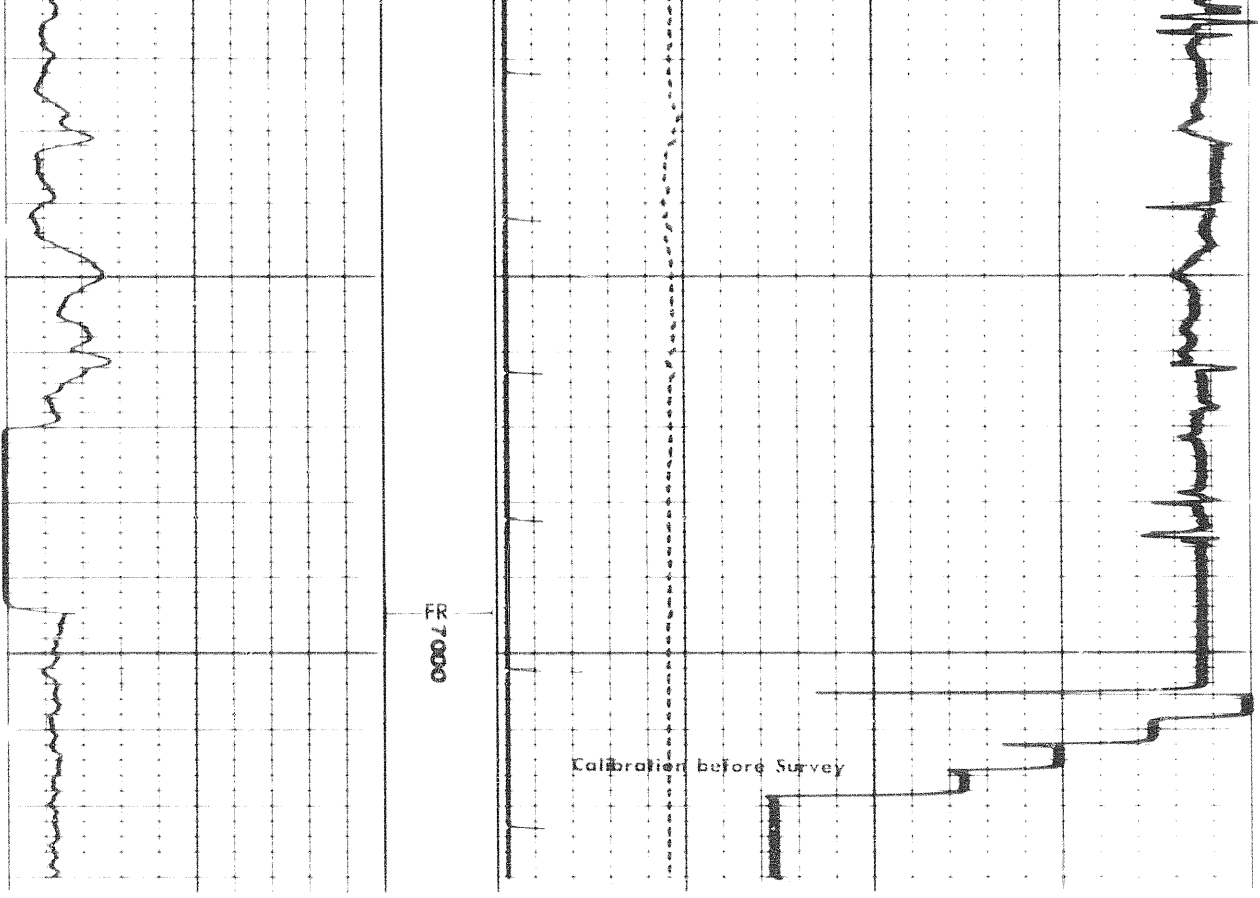
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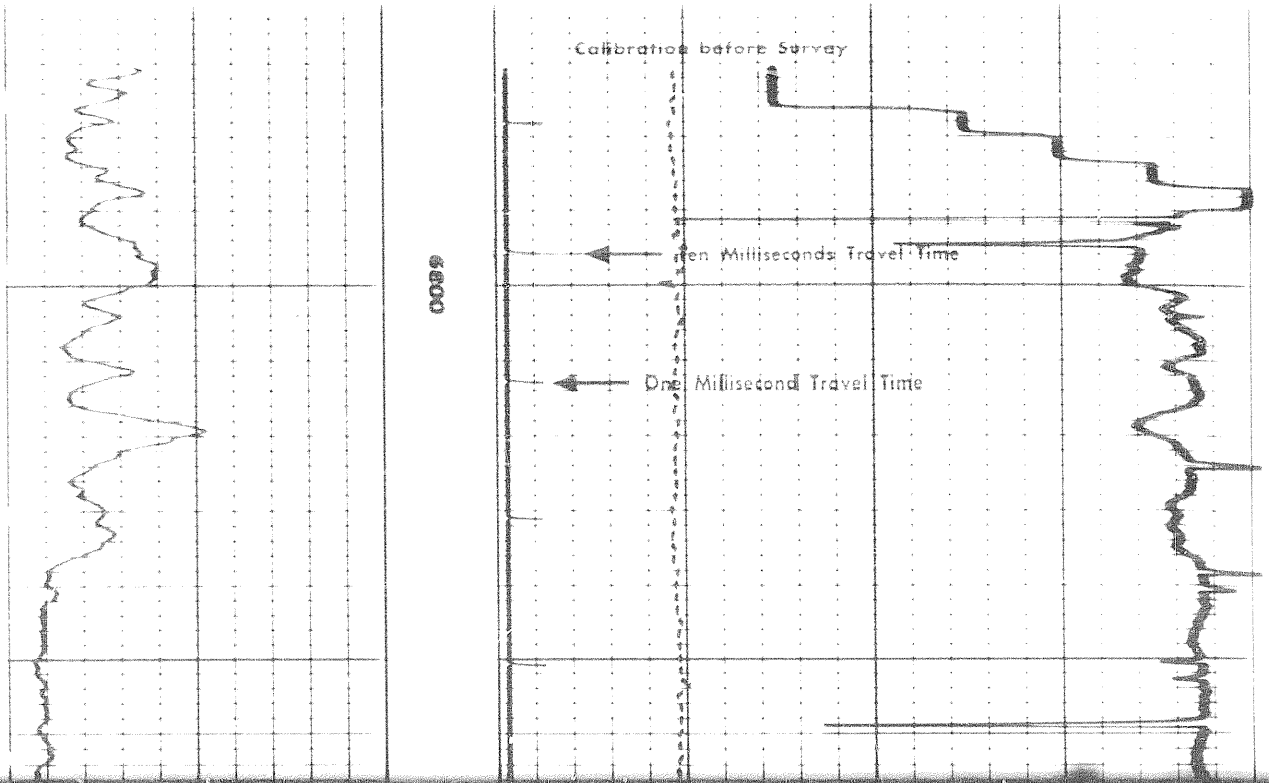
7000



Calibration before Survey



REPEAT SECTION



		CALIPER									
		6 7 8 9 10 11 12 13 14 15									
Speed in FPM	Sens. 150 T.C. 2										
	Zero 00 div. to left	350					275				
	0 150	200					125				
	150 300						50				

GAMMA RAY API UNITS	DEPTH	SONIC INTERVAL TRANSIT TIME microseconds per foot
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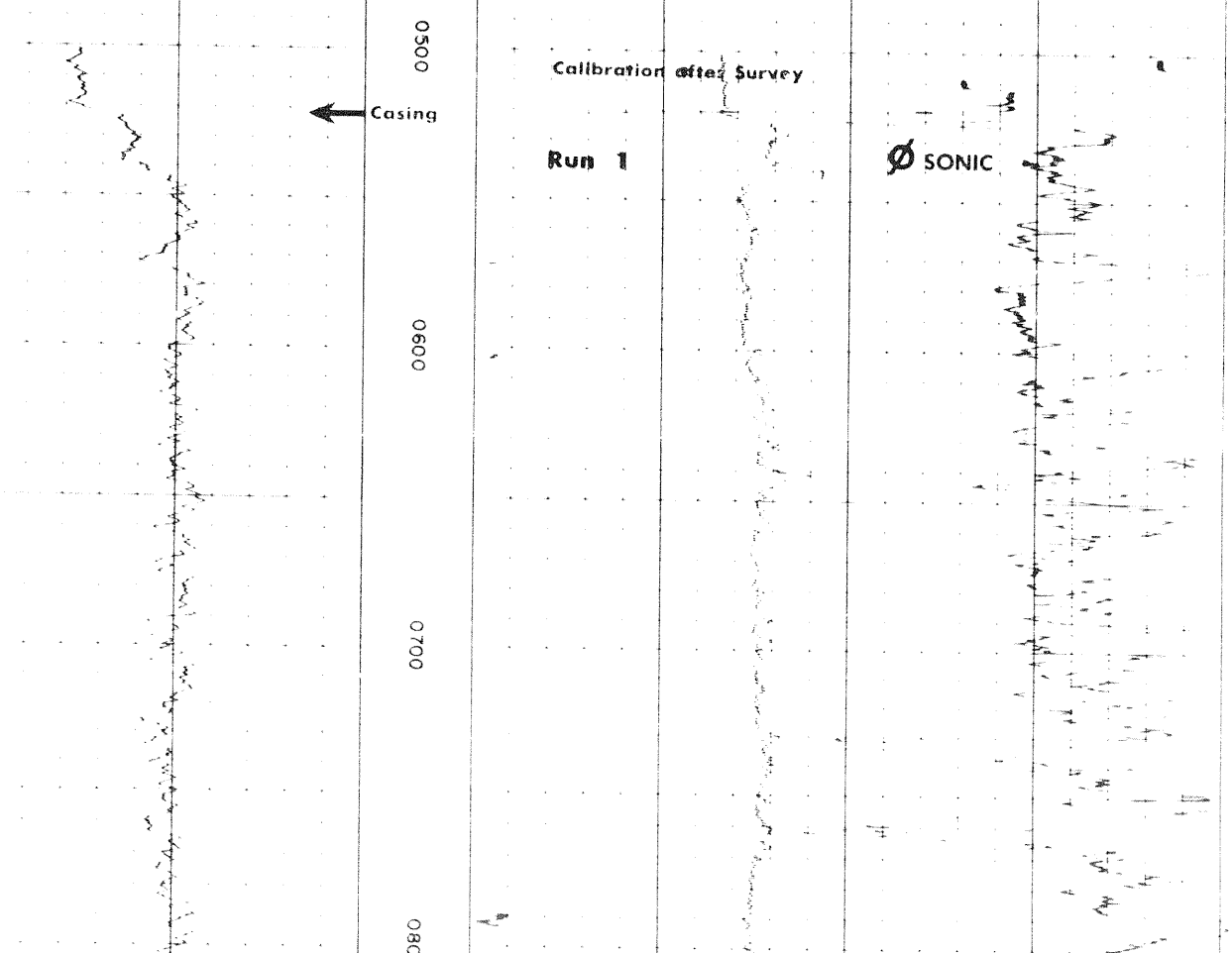
DETAIL LOG
2" = 100' RUN 1

CALIPER hole diameter in inches	DEPTH	POROSITY (%)
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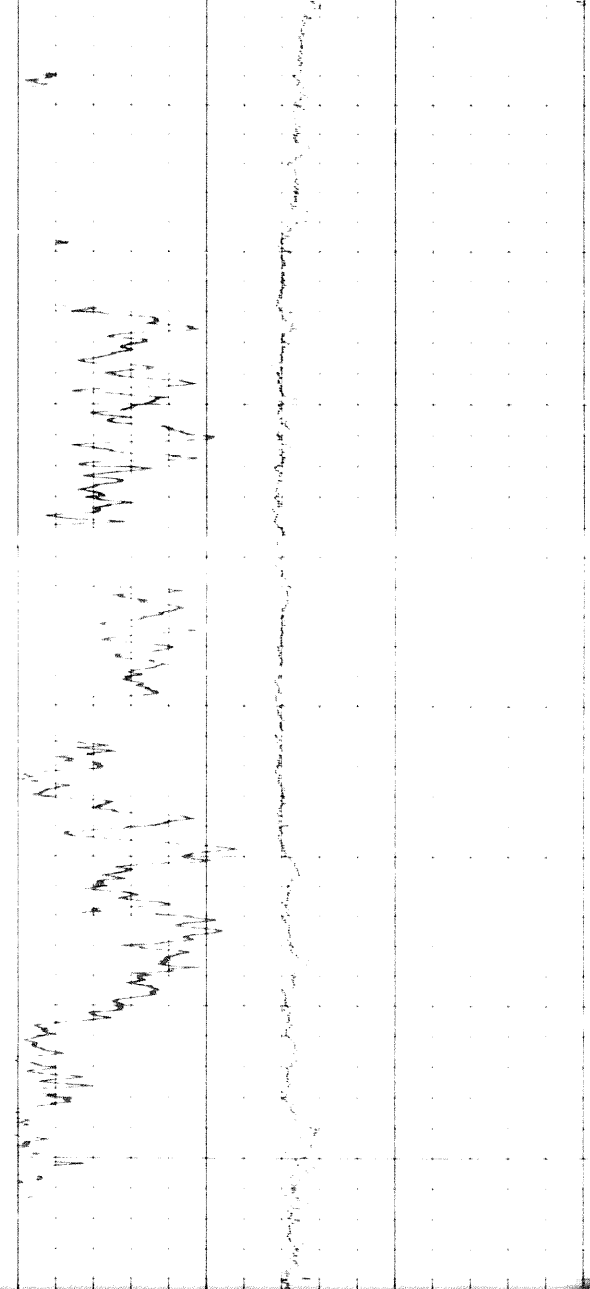
Speed in FPM	LIMESTONE	
	30	-10

GAMMA RAY API UNITS		<p style="text-align: right;">Catsh = 100 Vf = 5300 Vm = 18000</p>
Sens. 150 T.C. 2		
Zero 0 div. to left		
0 150		
150 300		

CALIPER									
7 8 9 10 11 12 13 14 15 16									



Handwritten notes at the top of the page, including a circled 'D' in the upper right corner.

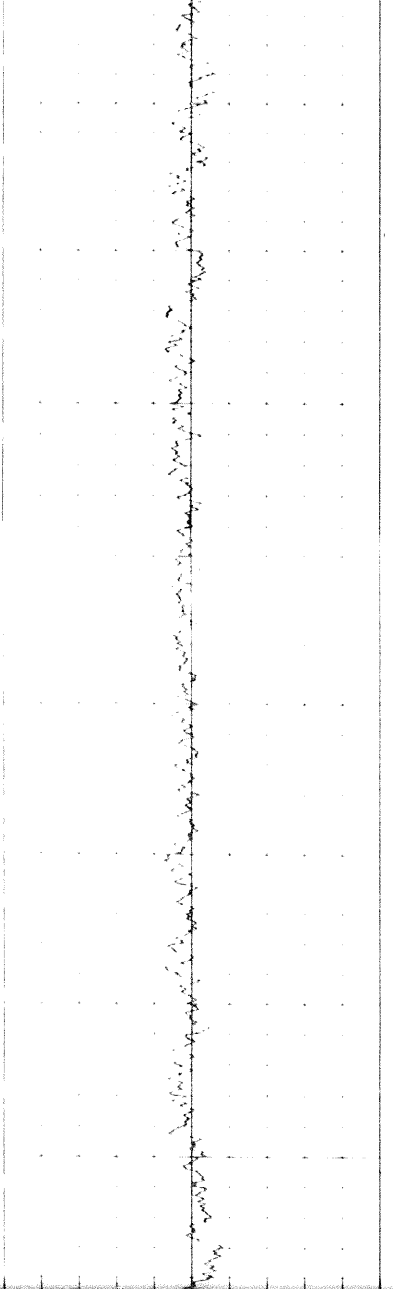


0800

0900

1000

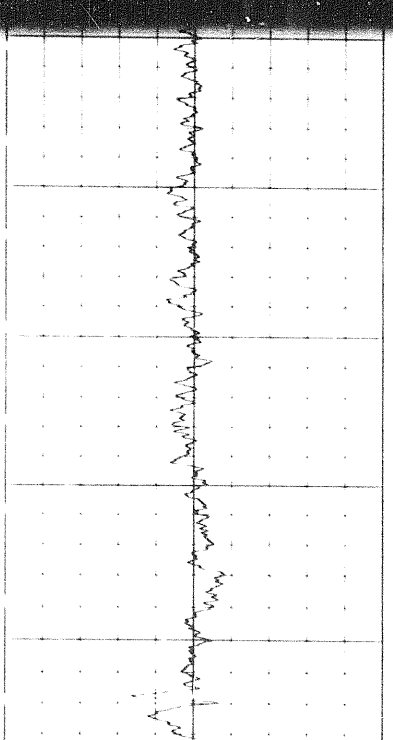
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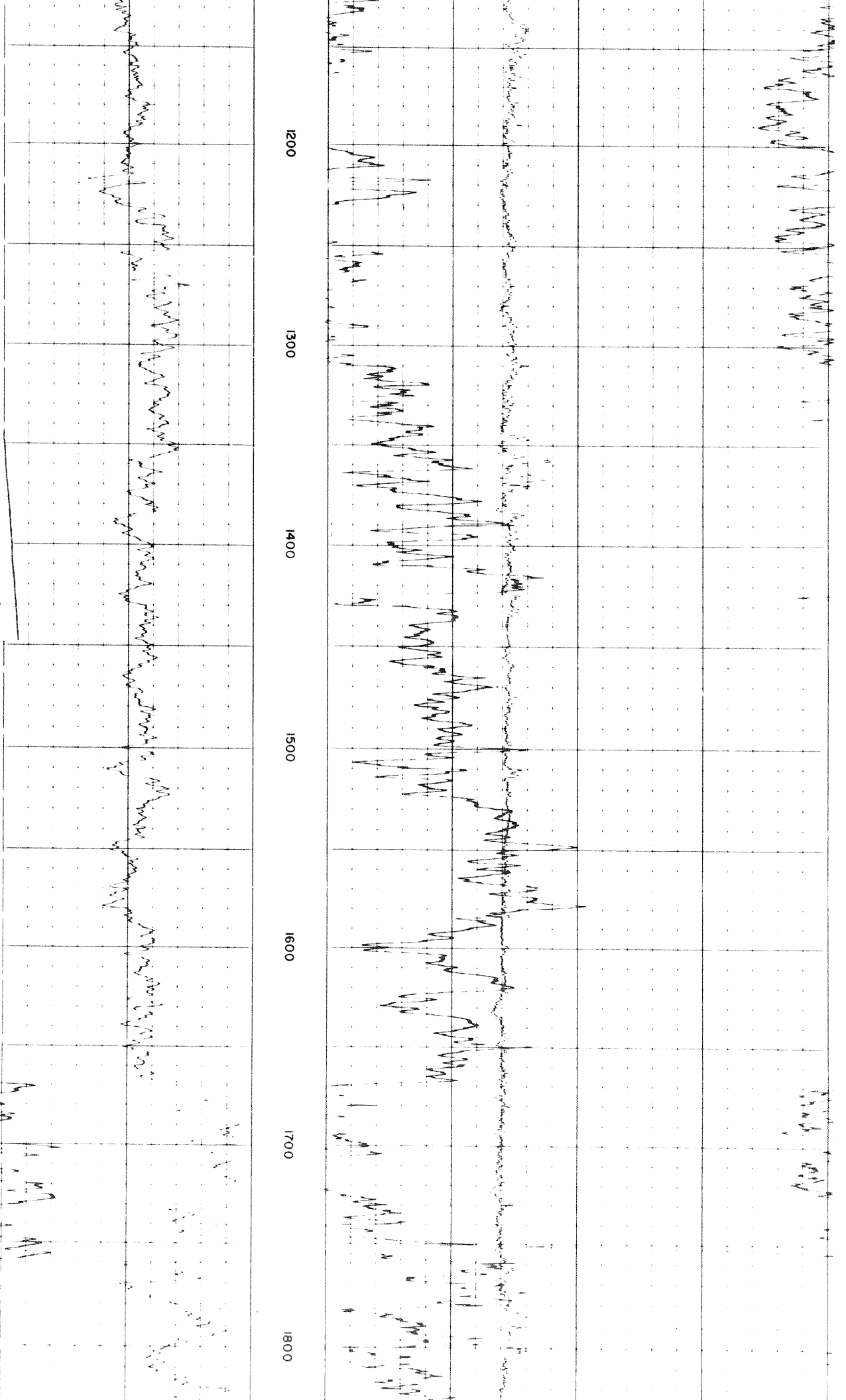
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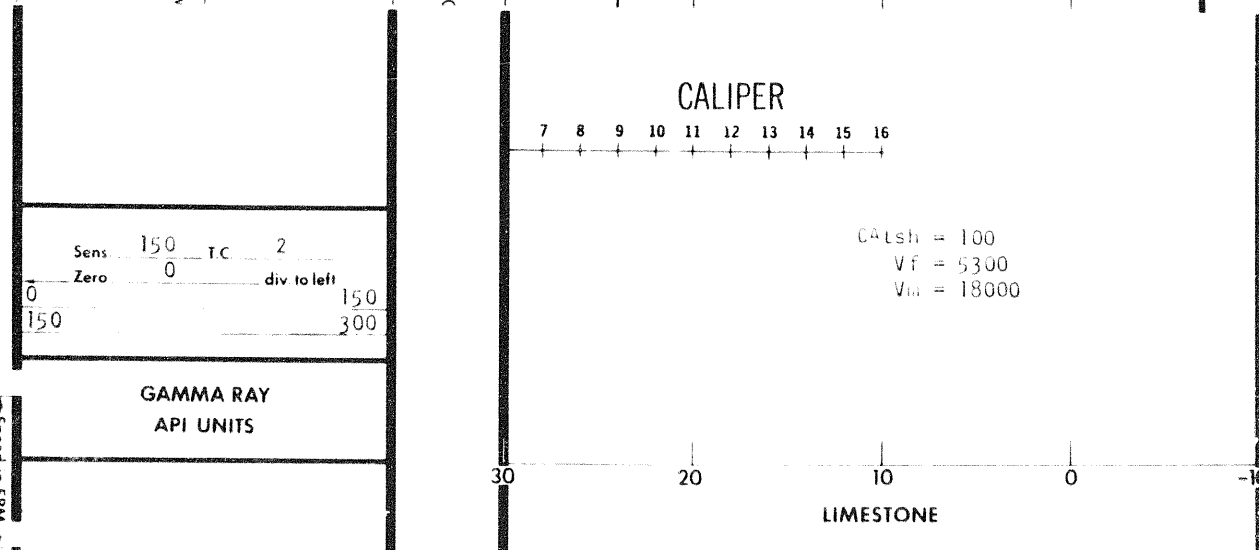
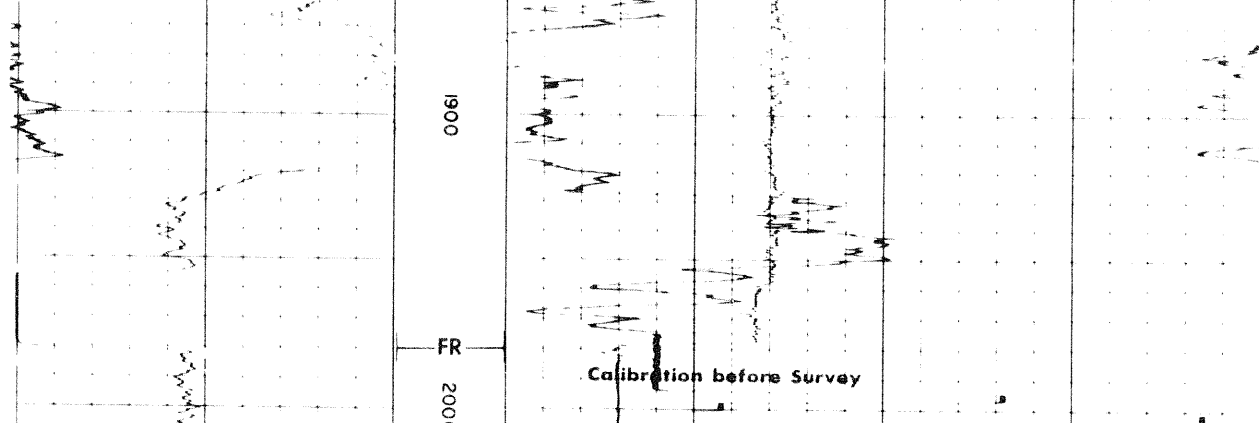
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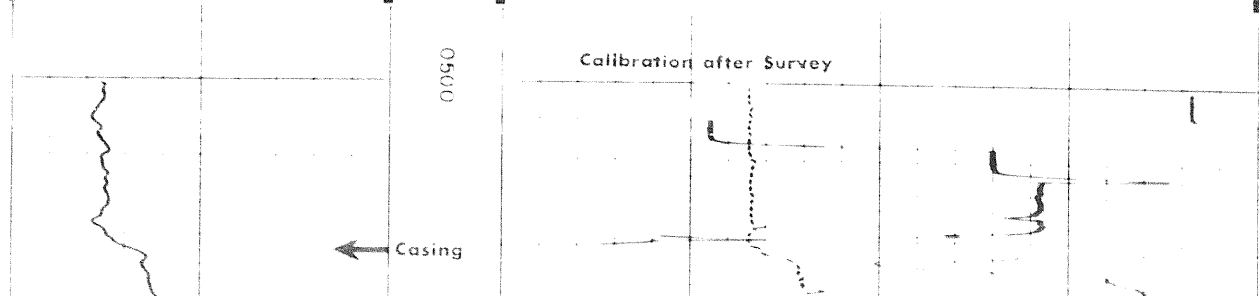
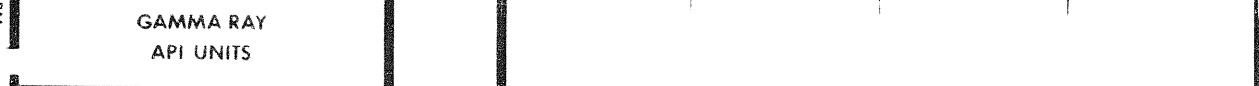


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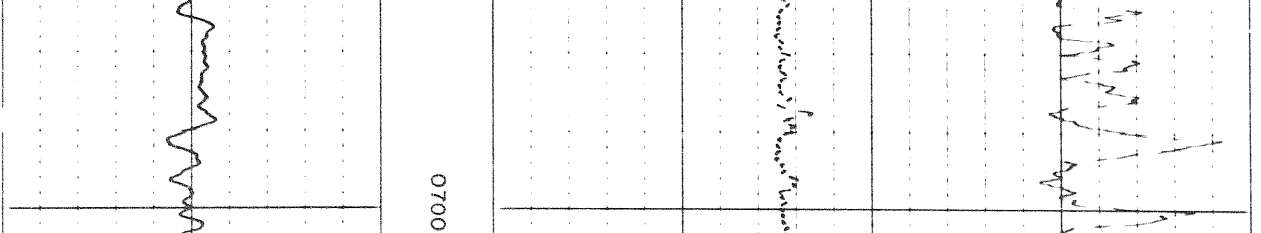
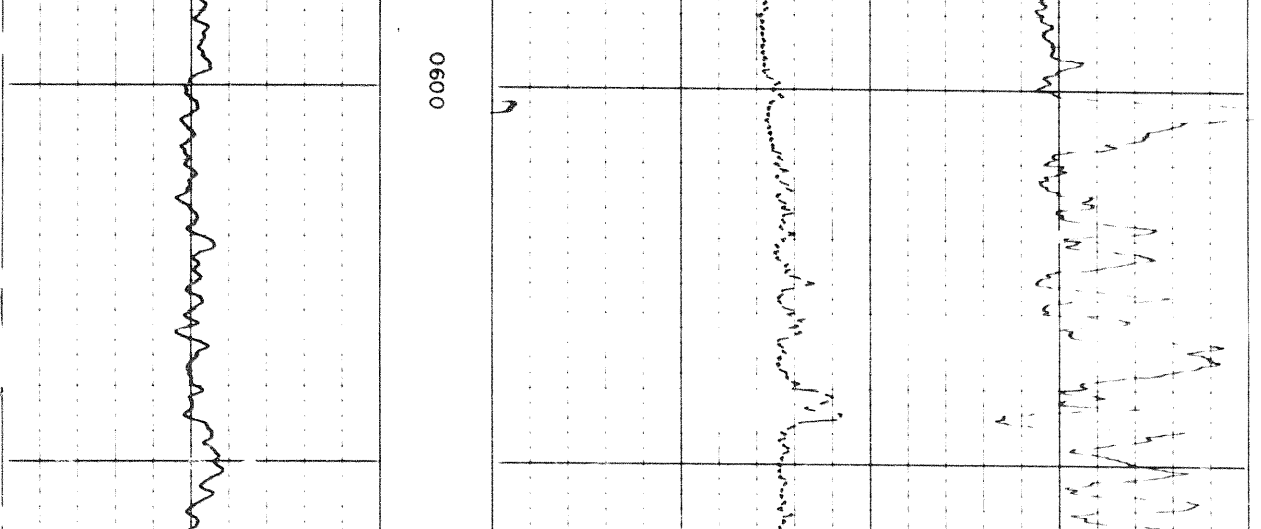
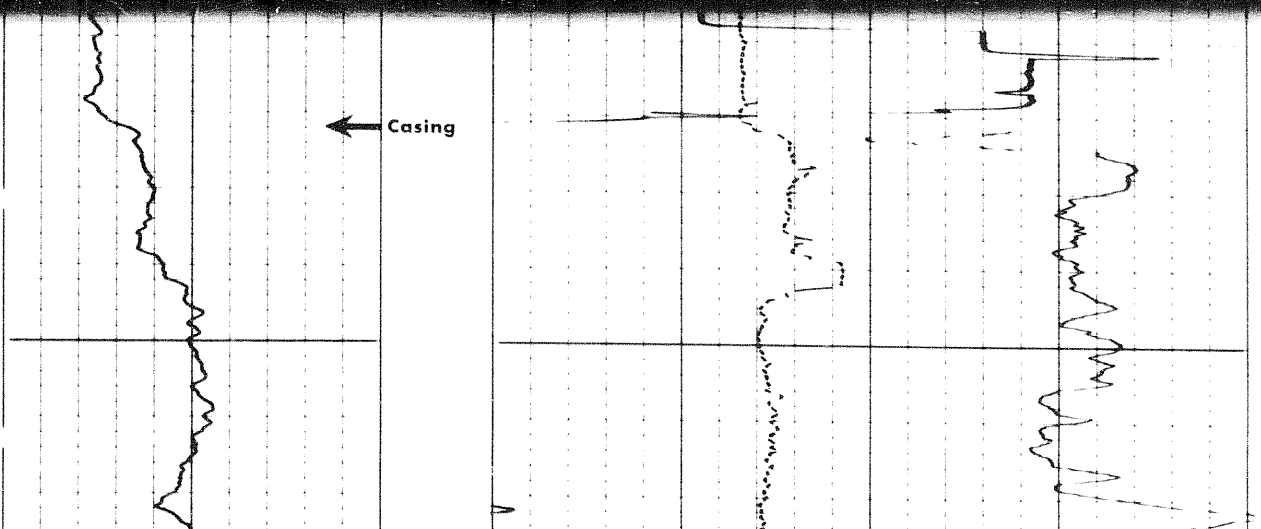
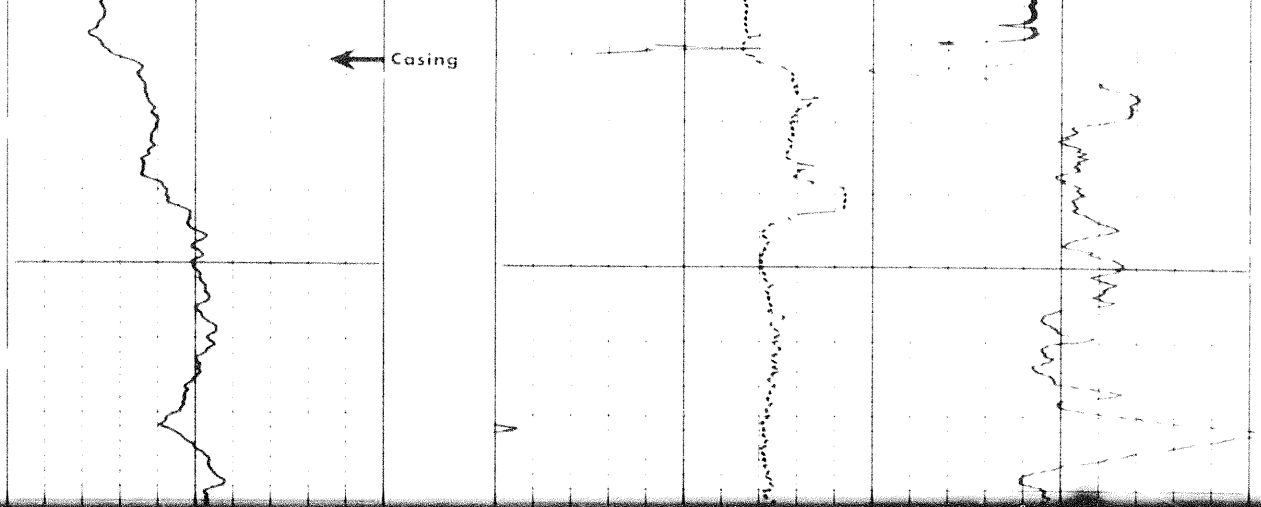




DETAIL LOG
5" = 100' RUN 1

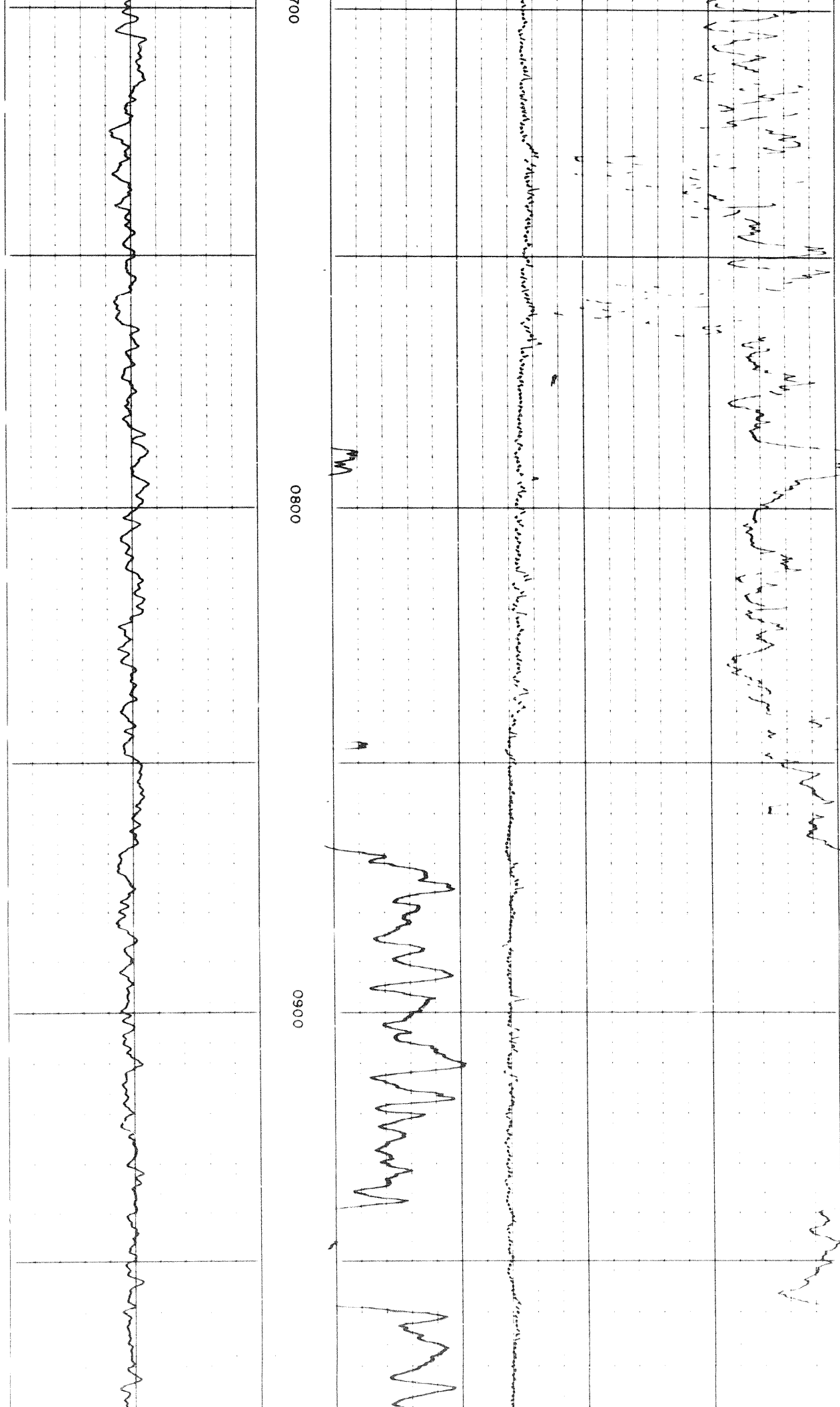


21 of



0600

0700



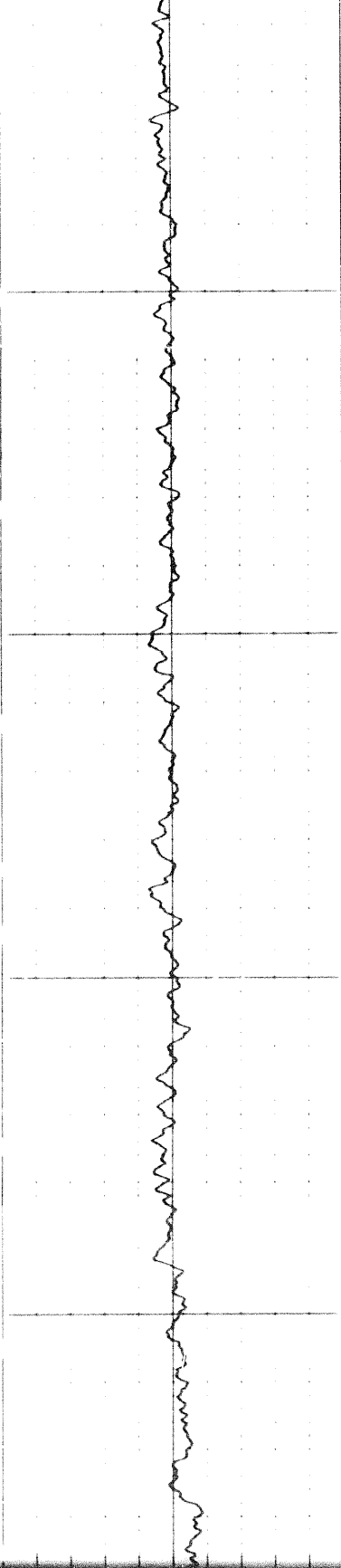
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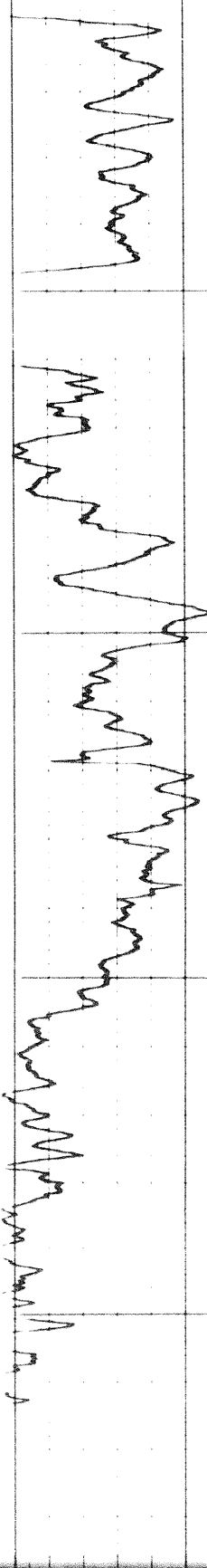
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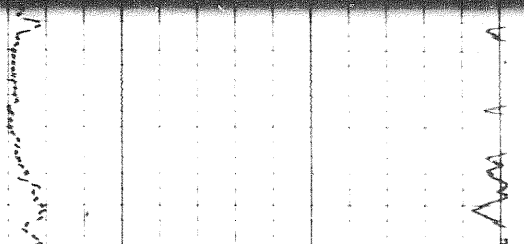
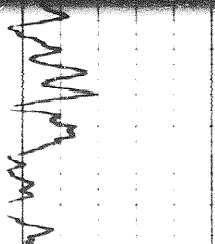
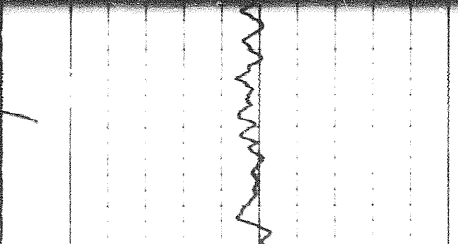
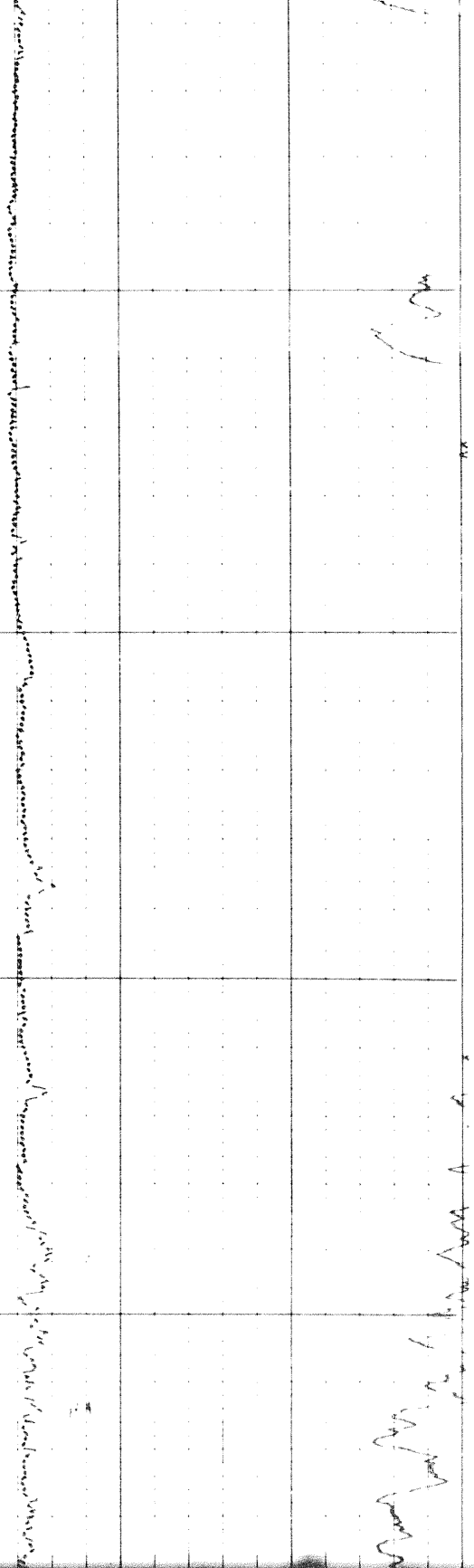
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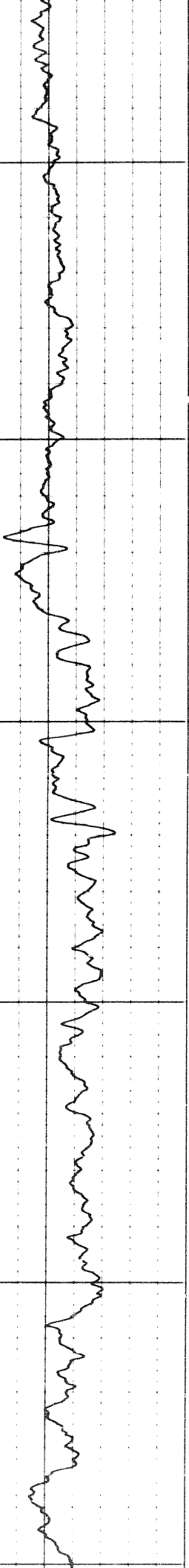
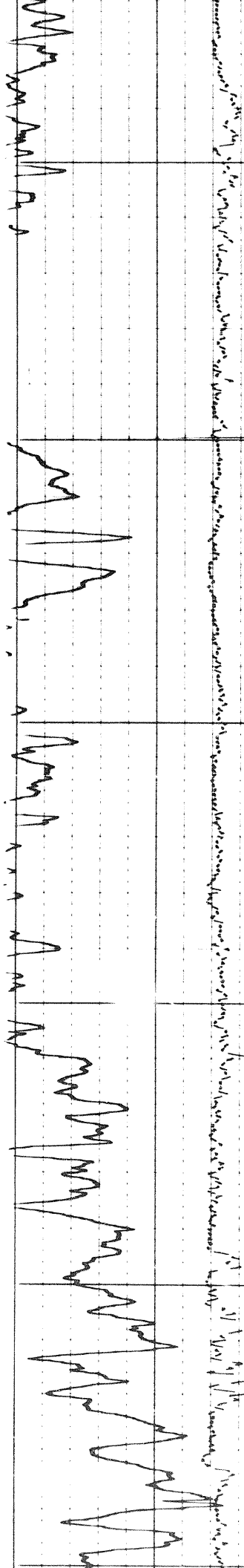
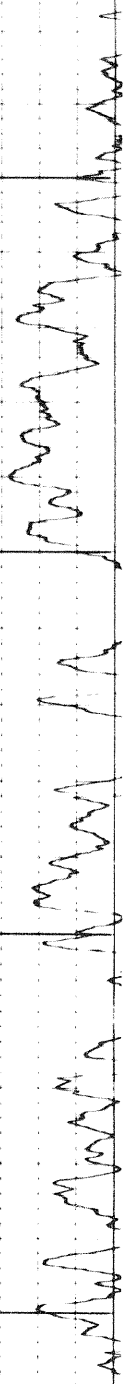


0001



COII



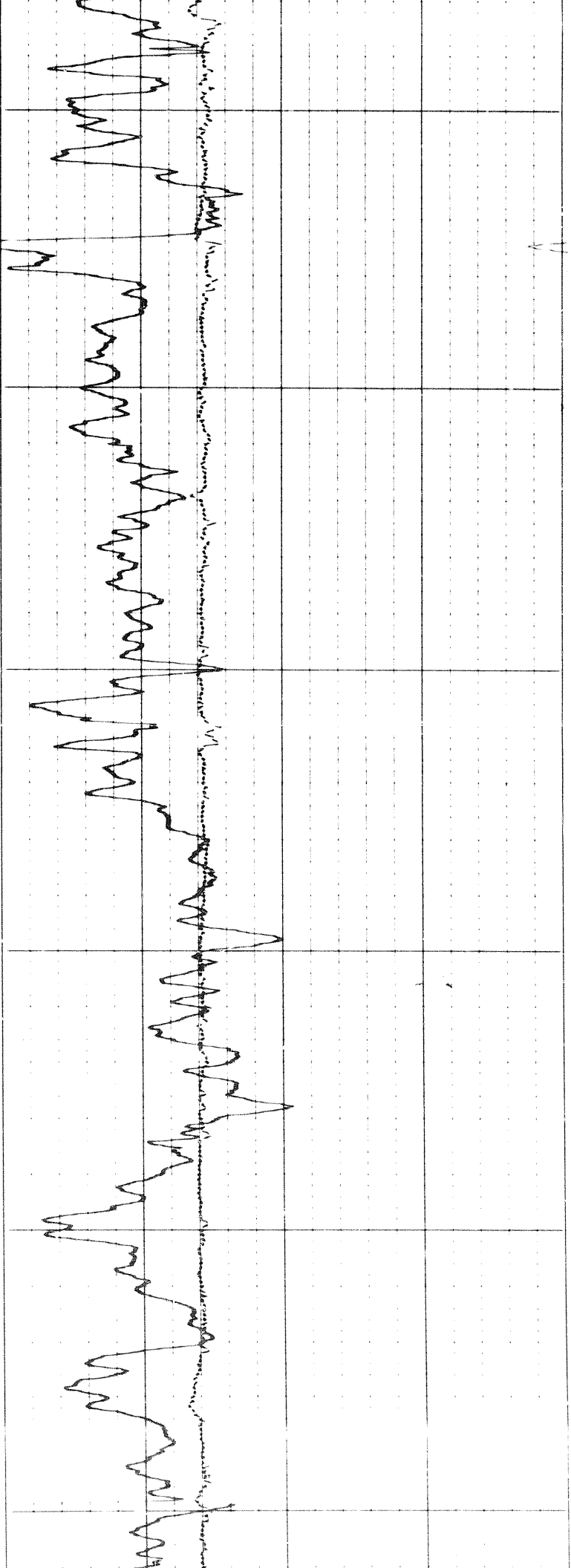


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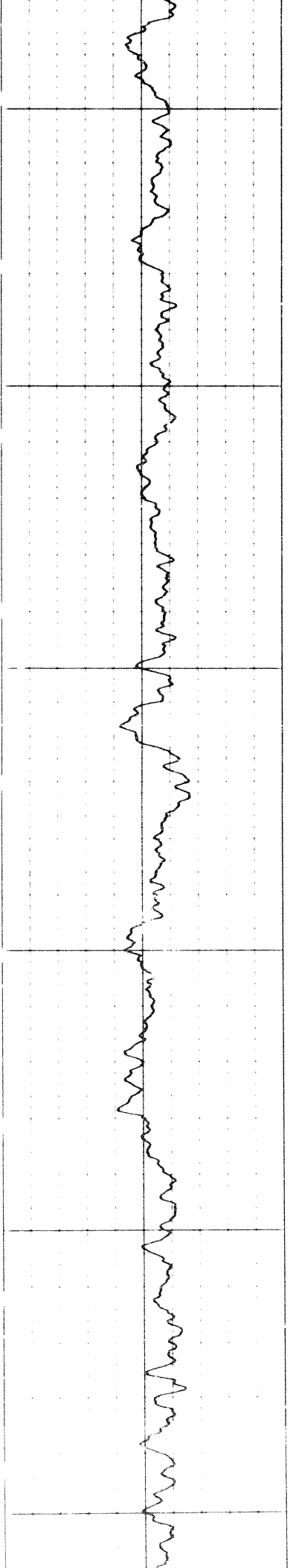
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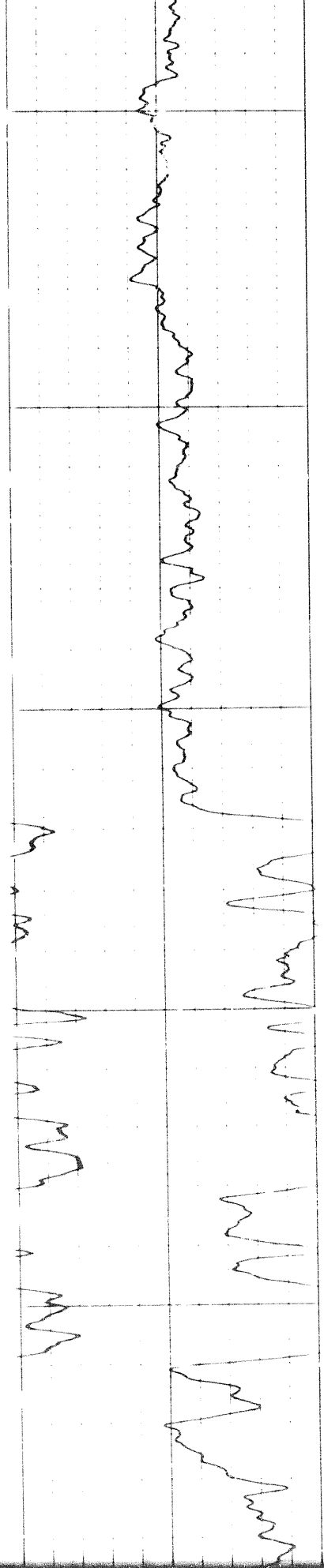


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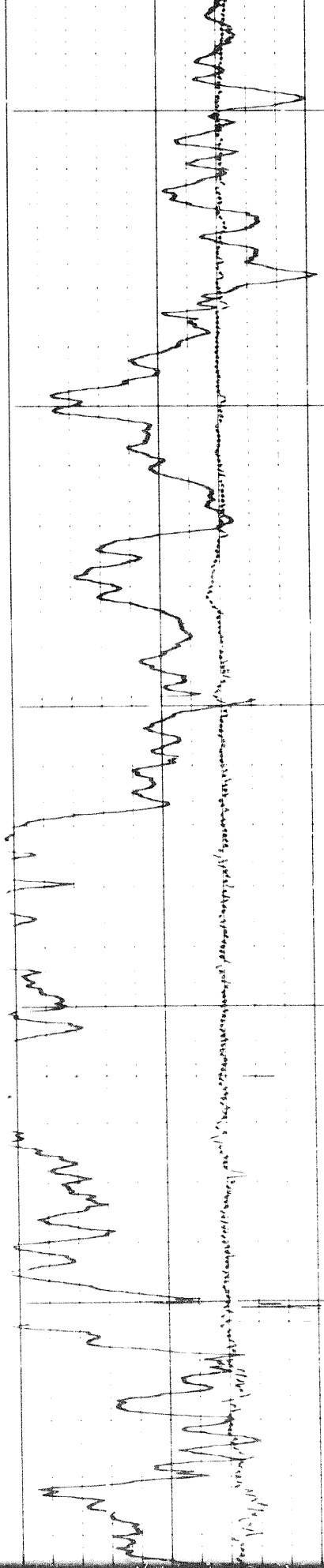
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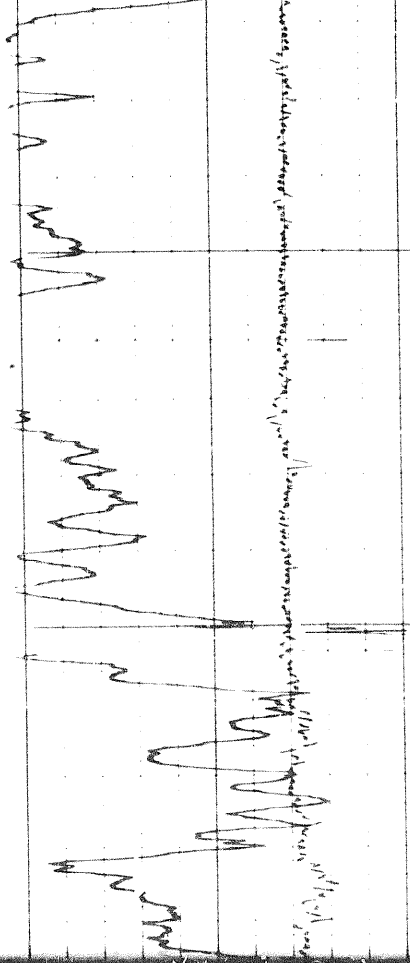
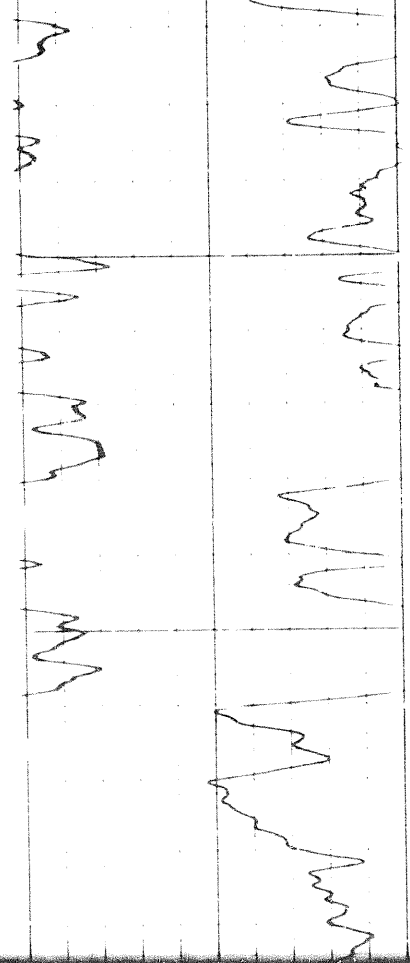




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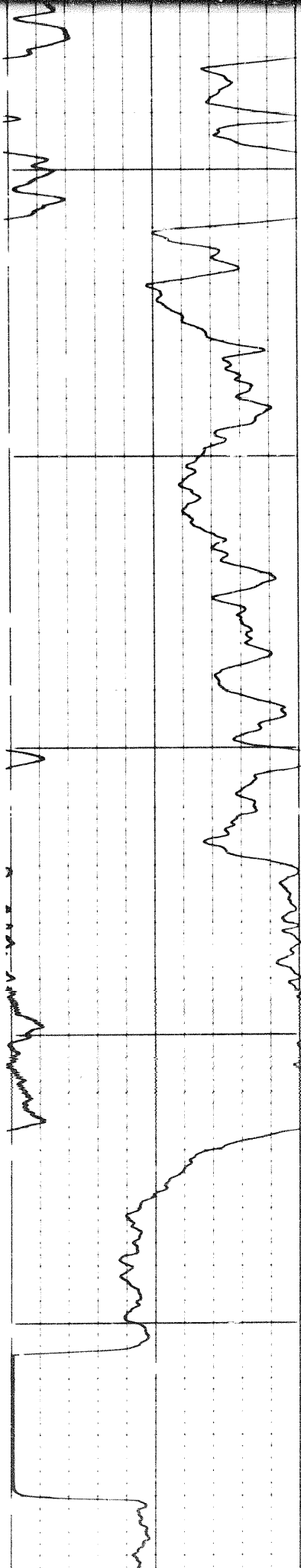


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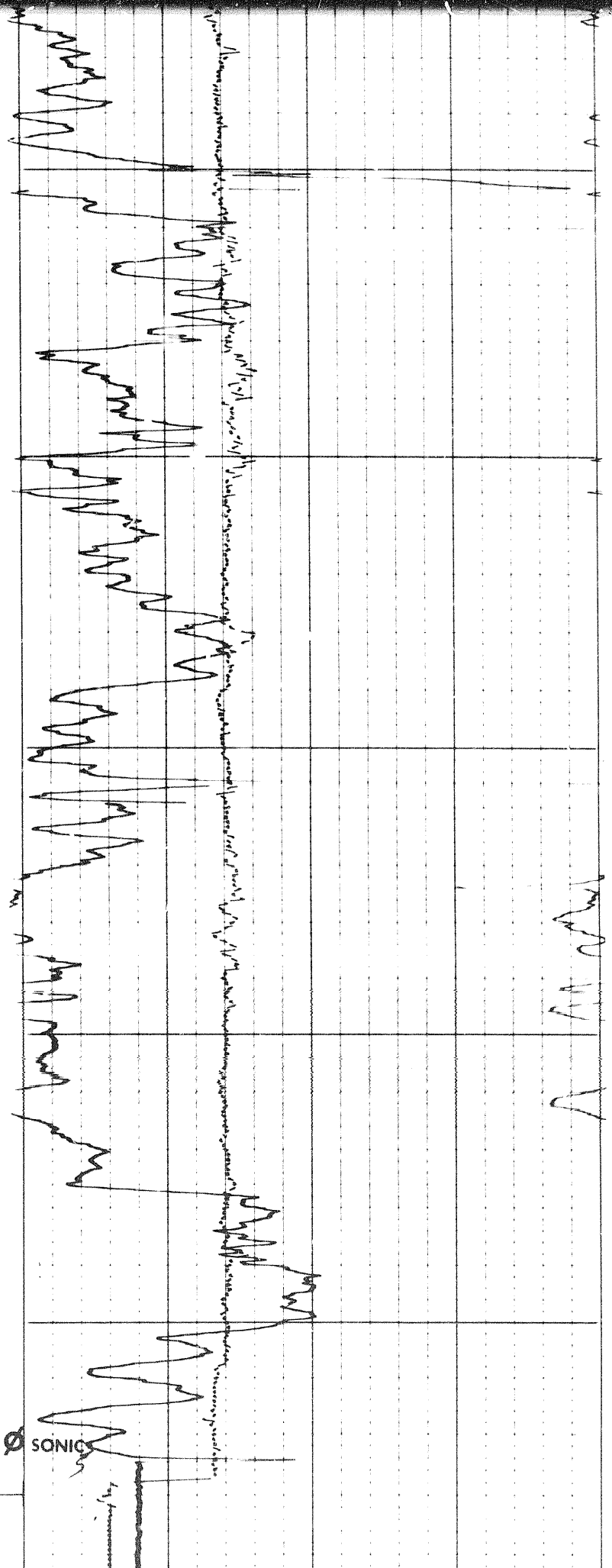
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2307



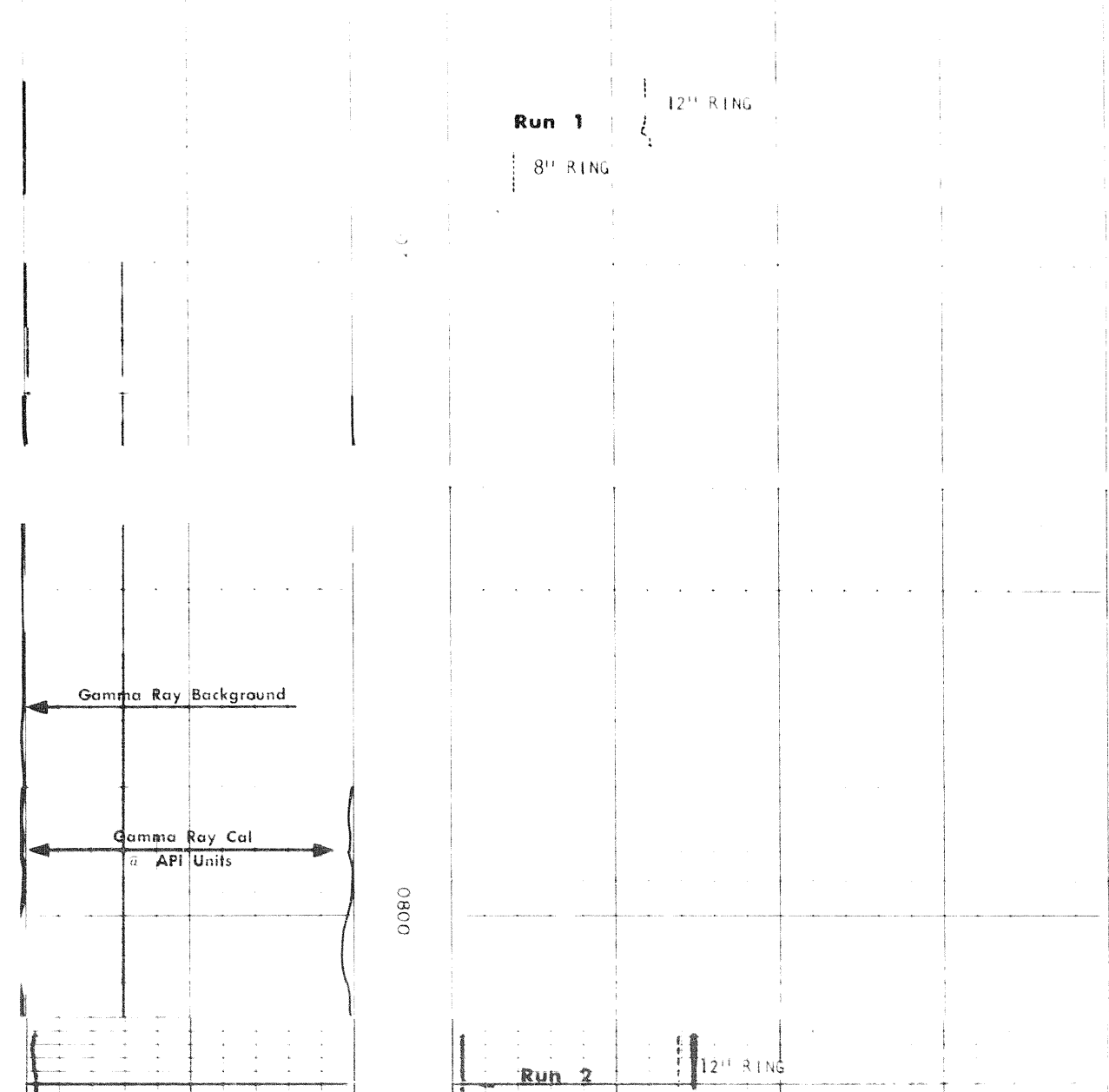
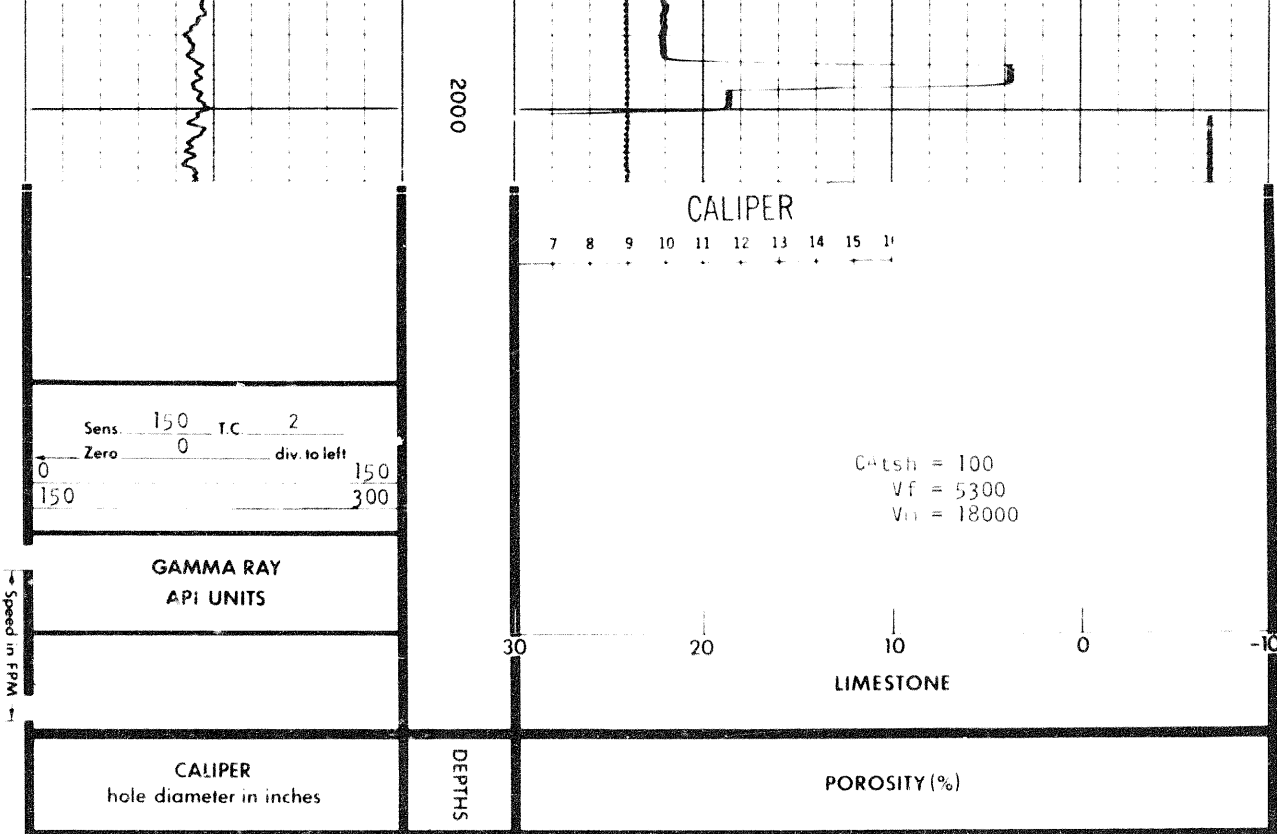
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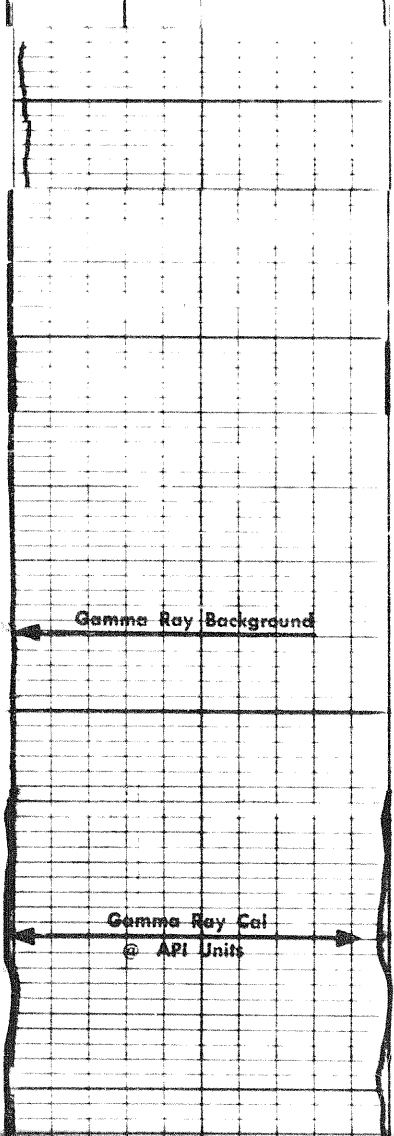
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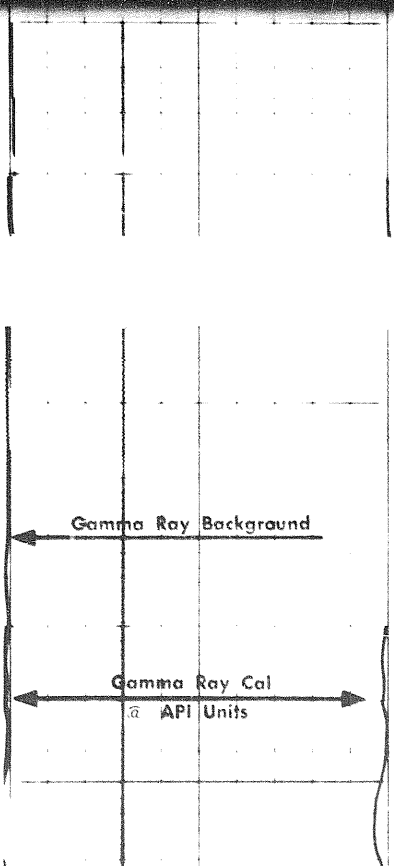
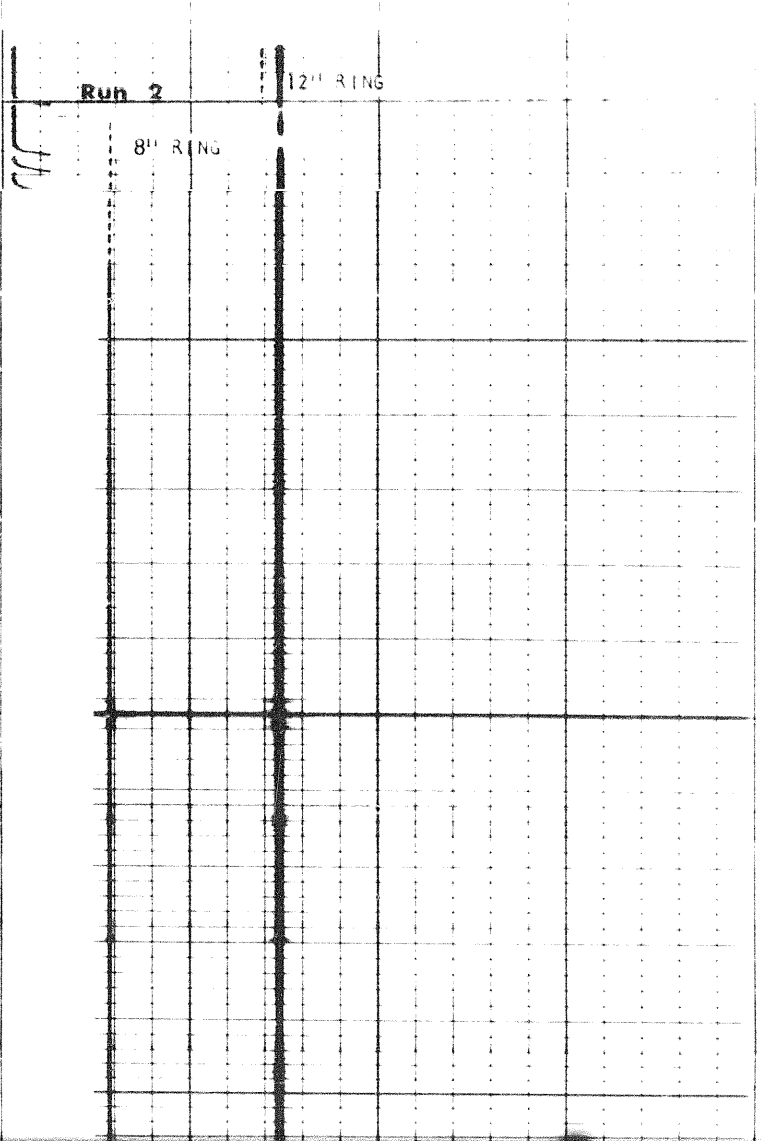
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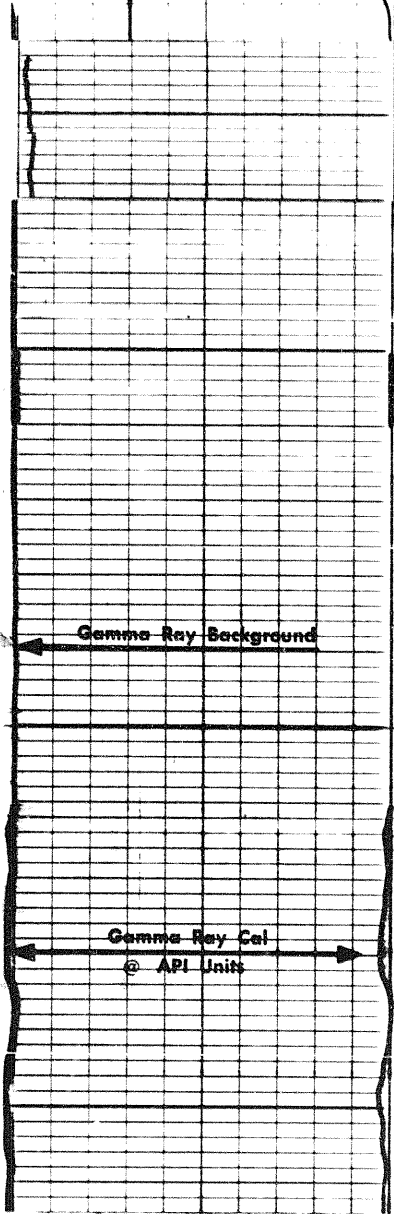


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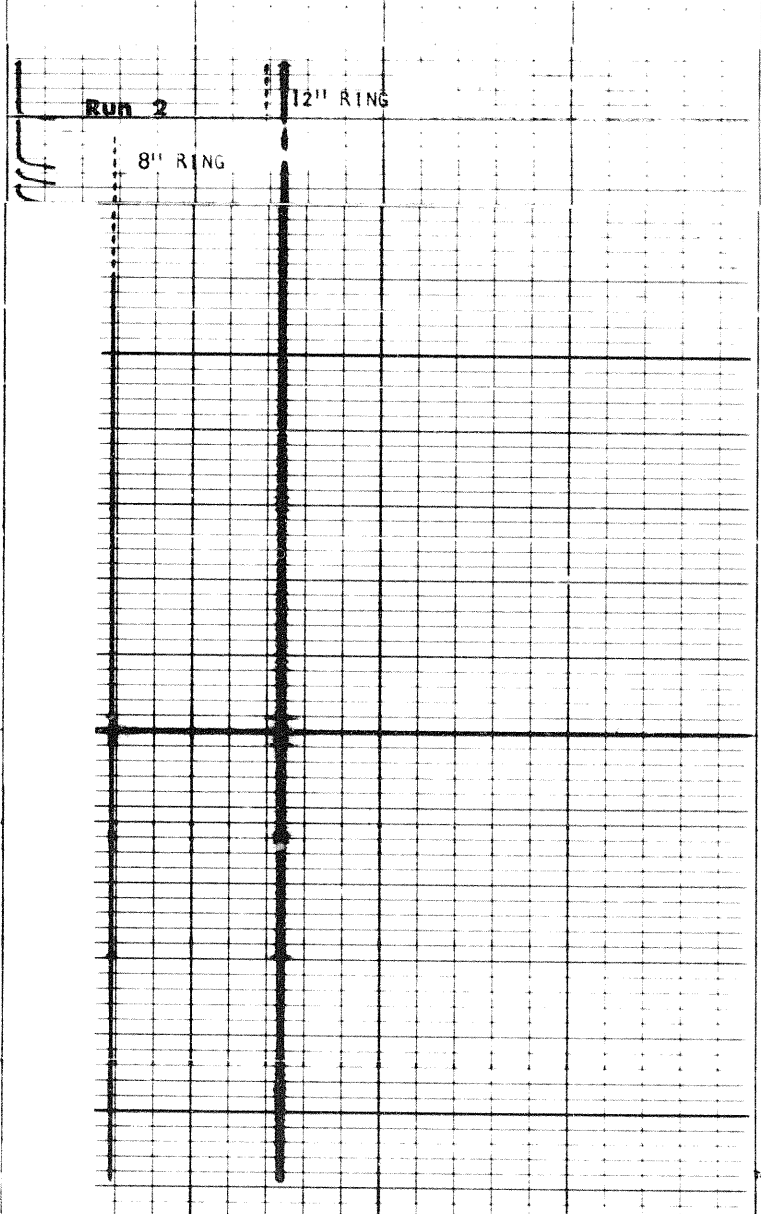


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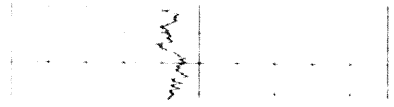
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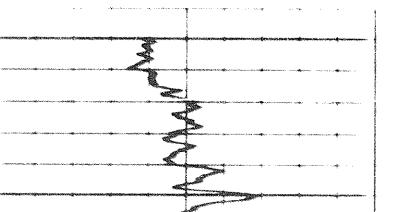
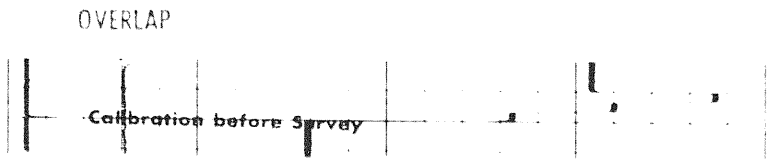
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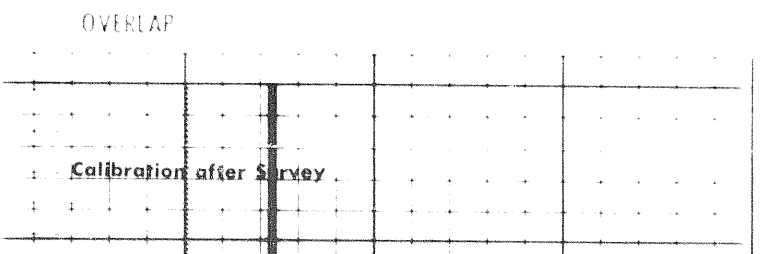
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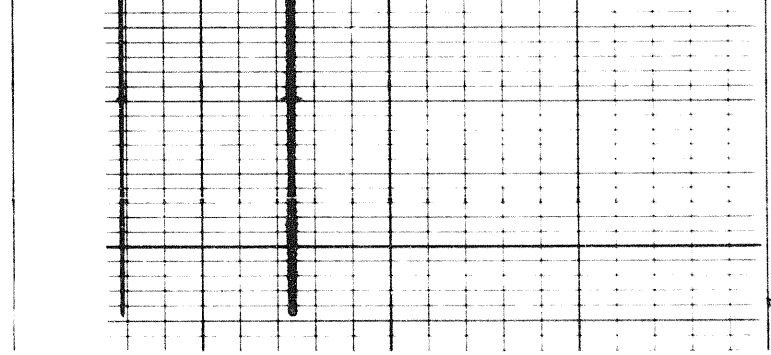
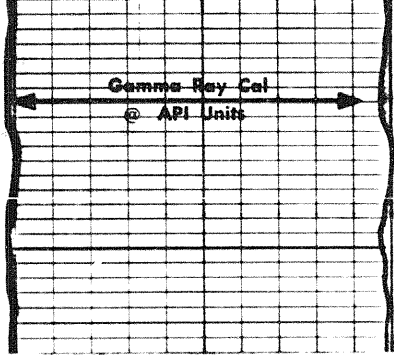


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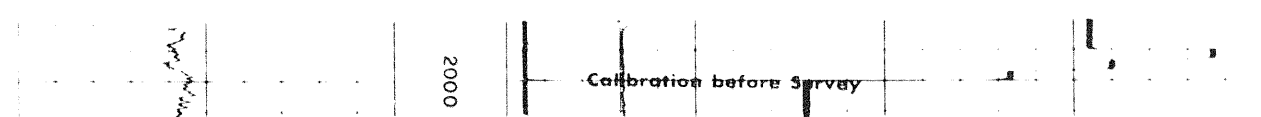
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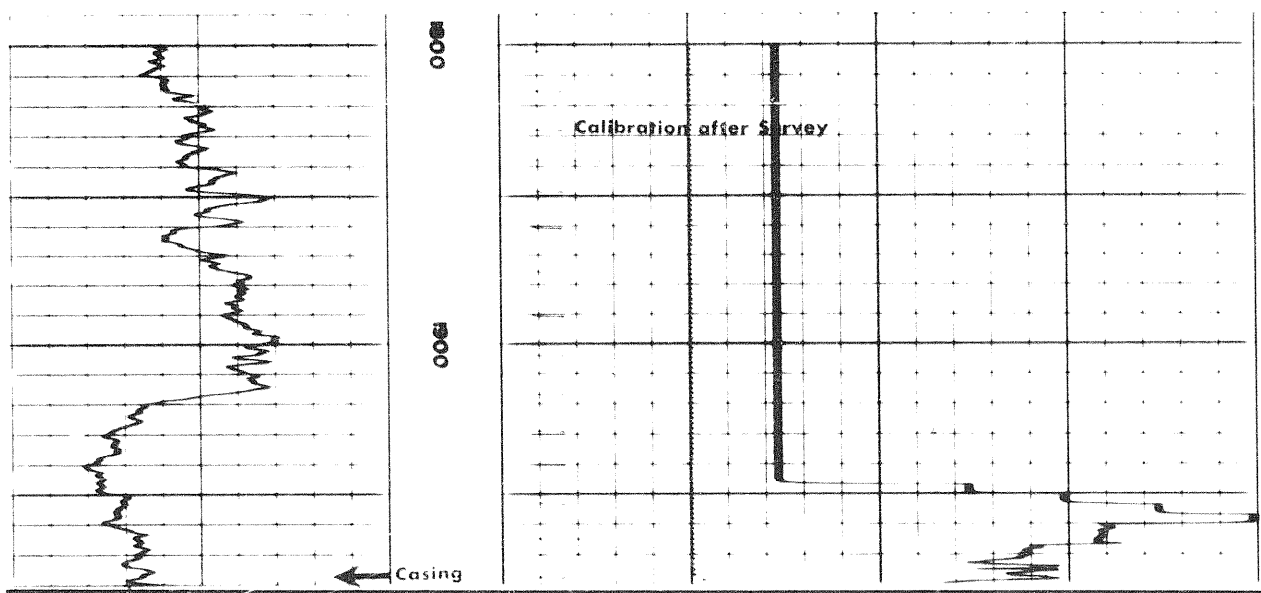



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OVERLAP



OVERLAP



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