

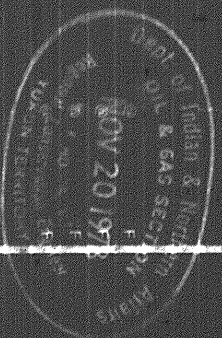
Schlumberger

DUAL LATEROLOG

PROVINCE FIELD WELL COMPANY

COMPANY COLUMBIA GAS DEVELOPMENT OF CANADA LTD
 WELL COLUMBIA ELK POINT #1111111111
 FIELD ELK POINT
 PROVINCE ALBERTA
 LOCATION 60 06 25 N 101 W 25 E 25
 Permanent Datum Elev. 2013.0
 Log Measured From 48 25 Ft Above Perm Datum
 Other Services
 ELEV. NB 2028.0
 CHF

Date 10 SEPT 78
 Run No. 140
 Log Reading 13225.0
 Feet Measured 9455.0
 Depth Reached 3260.0
 Bottom Depth 12740.0
 Csg. Driller 99990.0
 Mud Nature KEL POLY
 Dens. Visc 10.3 4.3
 Mud pH 10+
 Water Loss 14.6
 Rms. RMS 70 F
 Rmt 0.017 @ 294 F
 Rm Source of Sample FLDW LINE
 Bit Size 8 1/2"
 Operator 3:50 HRS
 Recorded By MLEOMB
 Witness BARTCH



REMARKS Drilling Stopped 0500 9+h Circulation Stopped 2400 121 Tool on Bottom 1053 7 BHT 294 OF

Stand Off = CENT Inches
 Cartridge No. B 987
 Panel No. B 775
 Sonde No. BB 924
 Mem. No. B 109
 G.R. Cart No. TAB 1439
 TTR No. D 733
 Cent. Device T CME-2

NOTE: LINE WAS MARKED WHITE PULLING OUT WITH THIS SURVEY. DEPTH MUST RESULTED IN THE LOG BEING RECORDED 10 FEET'S ALLOW WITH RESPECT TO THE FIRST RUN LOGS. ACTUAL DEPTH REACHED WAS 13750

GAMMA RAY CALIBRATION Background CPS Test Source CPS Galy. Increase Divisions Panel Sens. Tap for Cal

Time Entering Hole 1003 / 11 th
 Time Bottom Reached 1052 / 11 th
 Time Last Off Bottom 1053 / 11 th
 Distar TD to Thermometer 38 ft
 Time Out Of Hole 1244 / 11 th
 BHT No. 1 294 °F
 BHT No. 2 294 °F

Mud Resistivities Rm No. 1 0.121 ohm m @ 70 °F = 0.029 ohm m @ BHT
 Rm No. 2 0.116 ohm m @ 70 °F = 0.028 ohm m @ BHT
 Rm No. 3 0.120 ohm m @ 70 °F = 0.029 ohm m @ BHT

Rw from Drill Stem Test DST No. Rw = ohm m @ °F
 DST No. Rw = ohm m @ °F LOG TAPED
 DST No. Rw = ohm m @ °F Yes No

Mud Resistivities

Rm No. 1	0.121	ohm m @	70 °F	=	0.029	ohm m @	BHT
Rm No. 2	0.116	ohm m @	70 °F	=	0.028	ohm m @	BHT
Rm No. 3	0.120	ohm m @	70 °F	=	0.029	ohm m @	BHT

Rw from Drill Stem Test

DST No.	Rw =	ohm m @	°F	
DST No.	Rw =	ohm m @	°F	LOG TAPED <input checked="" type="checkbox"/>
DST No.	Rw =	ohm m @	°F	Yes No

SPONTANEOUS-POTENTIAL
MILLIVOLTS



GAMMA RAY
API UNITS

Sens 150 T.C. 1
Zero 0 div. to left
150 300

Speed in FPM

DEPTHS

RESISTIVITY
OHMS M² M

DEEP LATEROLOG

0.2 1.0 10 100 1000 2000

10,000 100,000

SHALLOW LATEROLOG

0.2 1.0 10 100 1000 2000

10,000 100,000

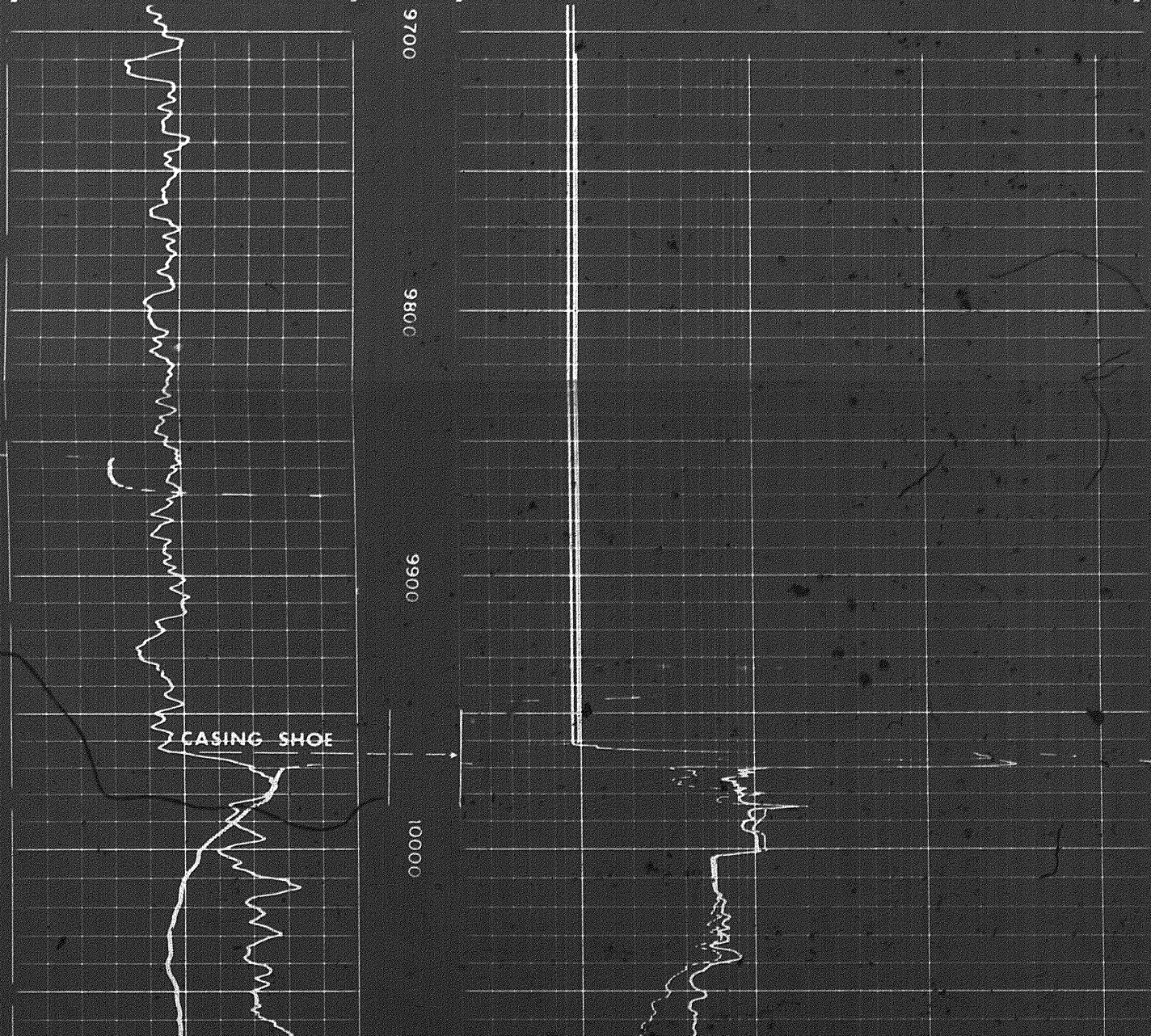
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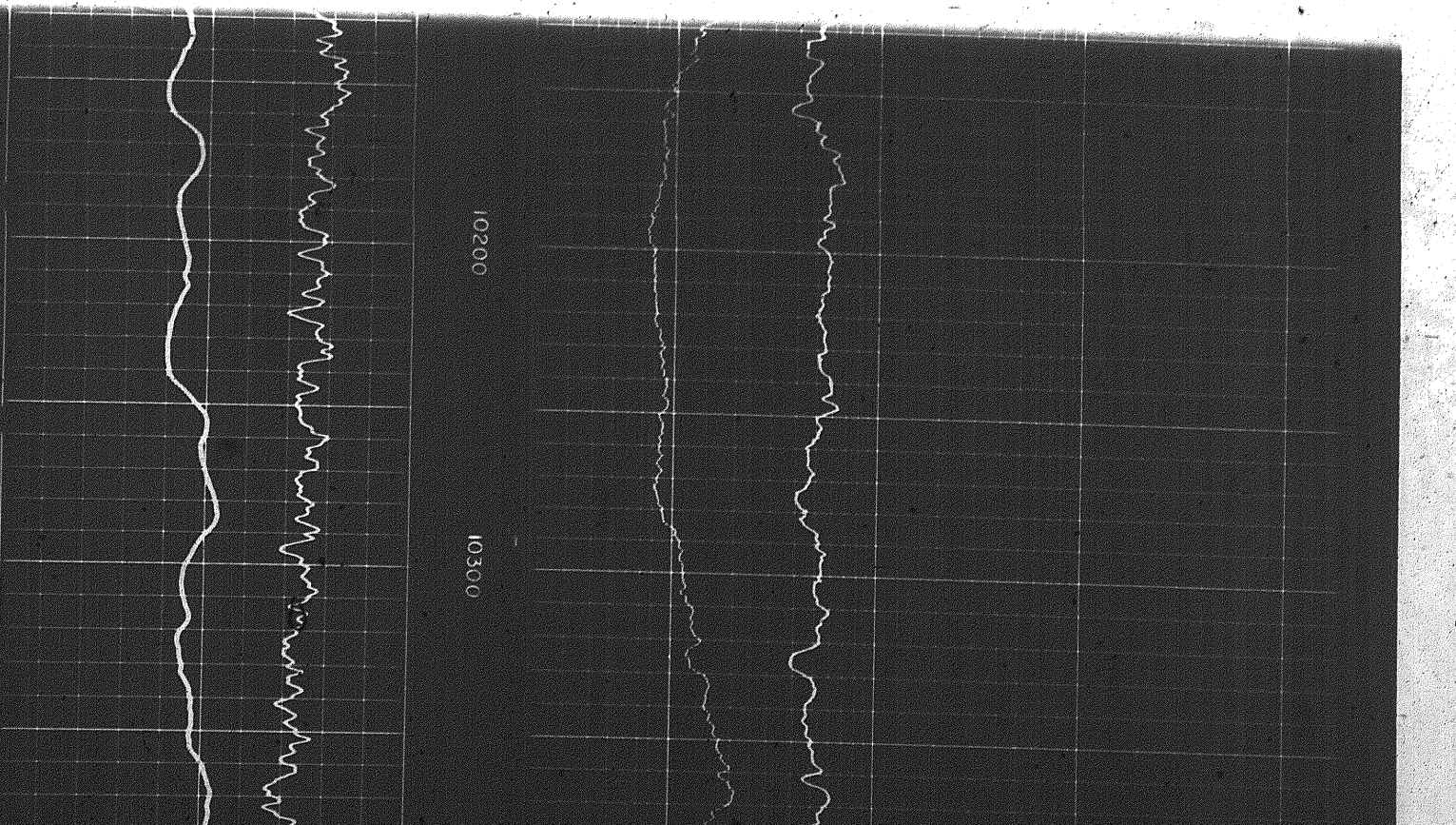
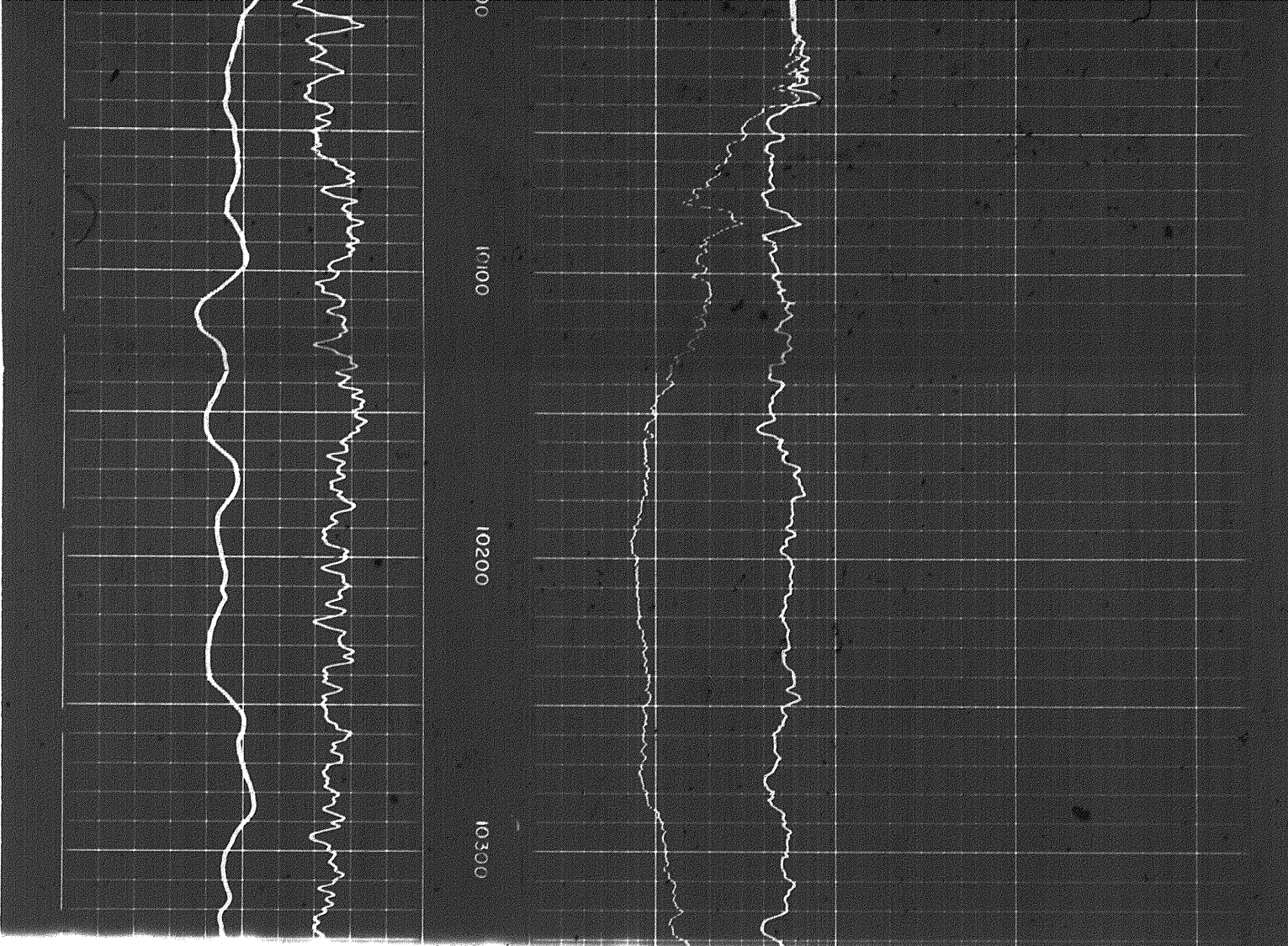
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9900

10000

CASING SHOE





10300

10400

10500

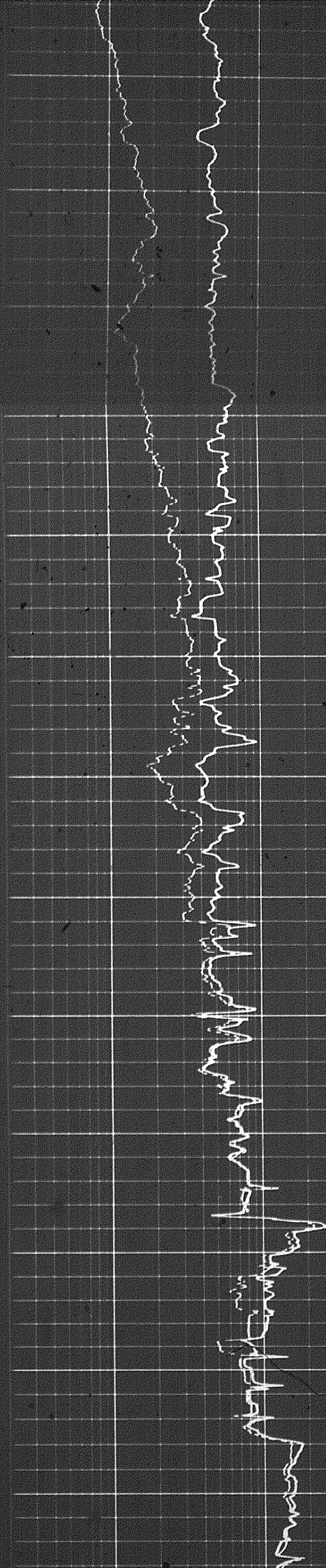
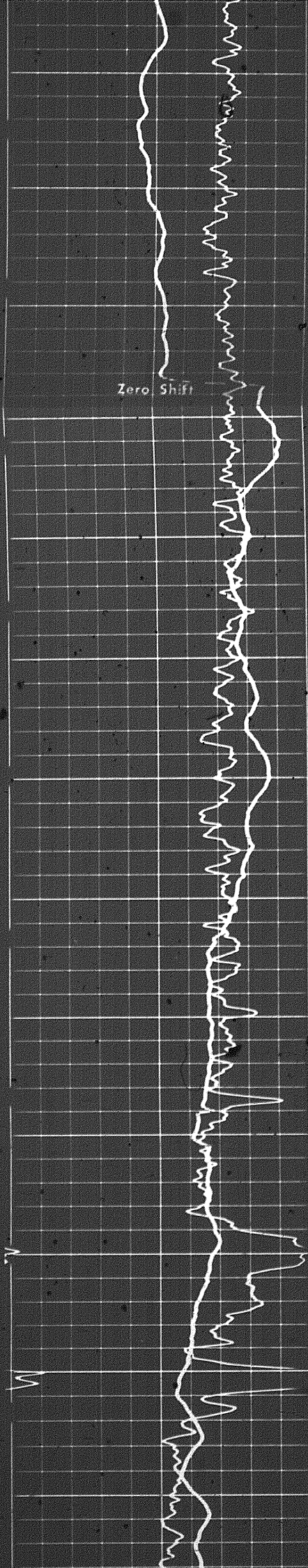
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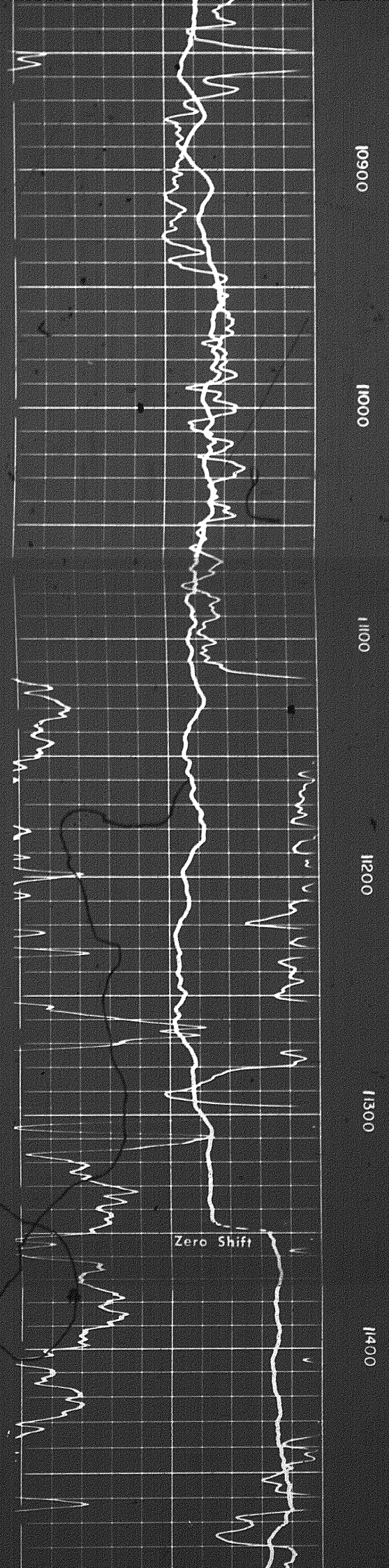
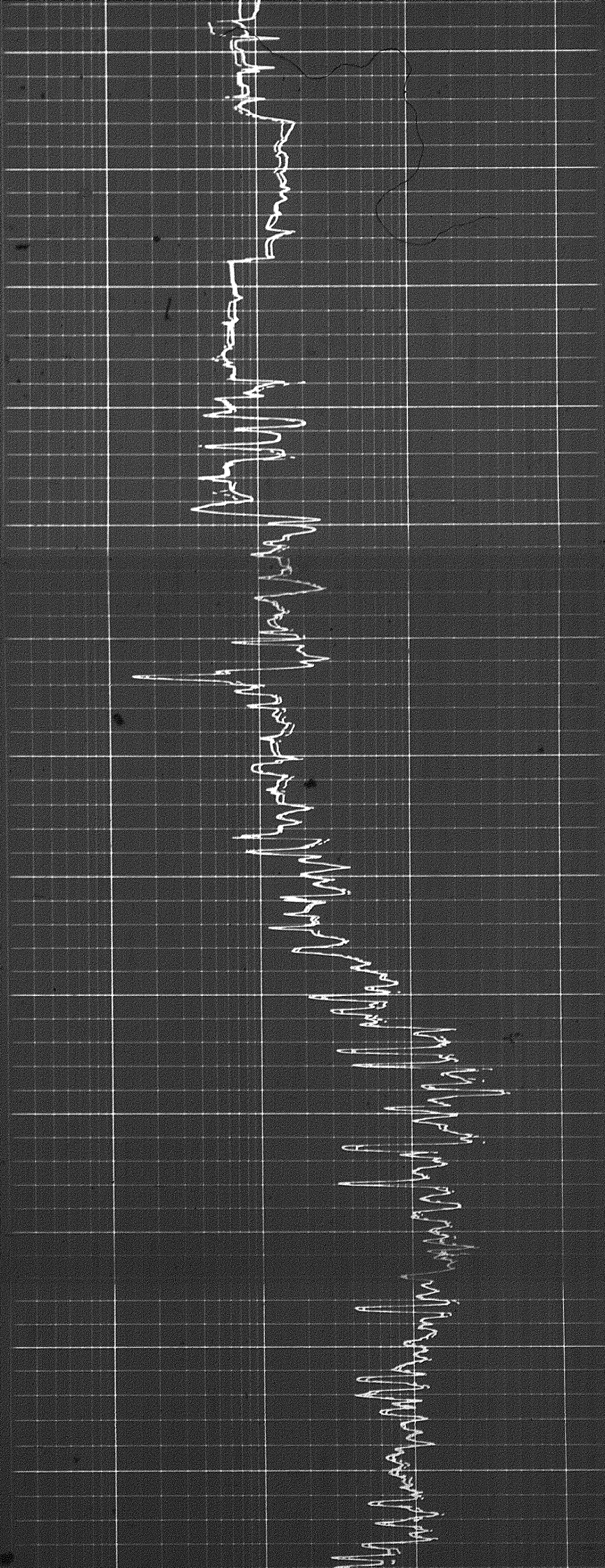
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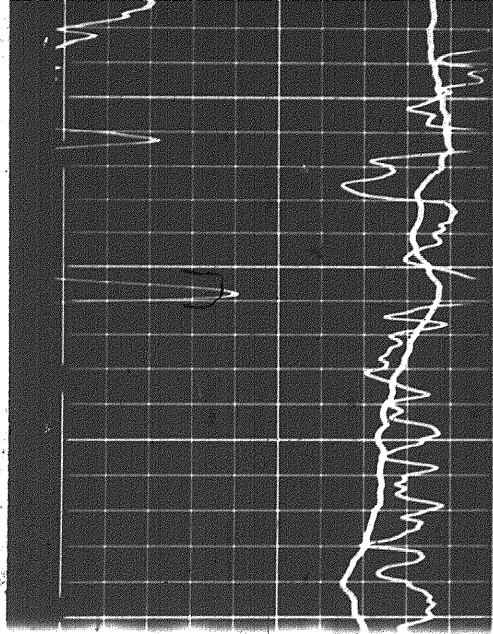
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Zero Shift

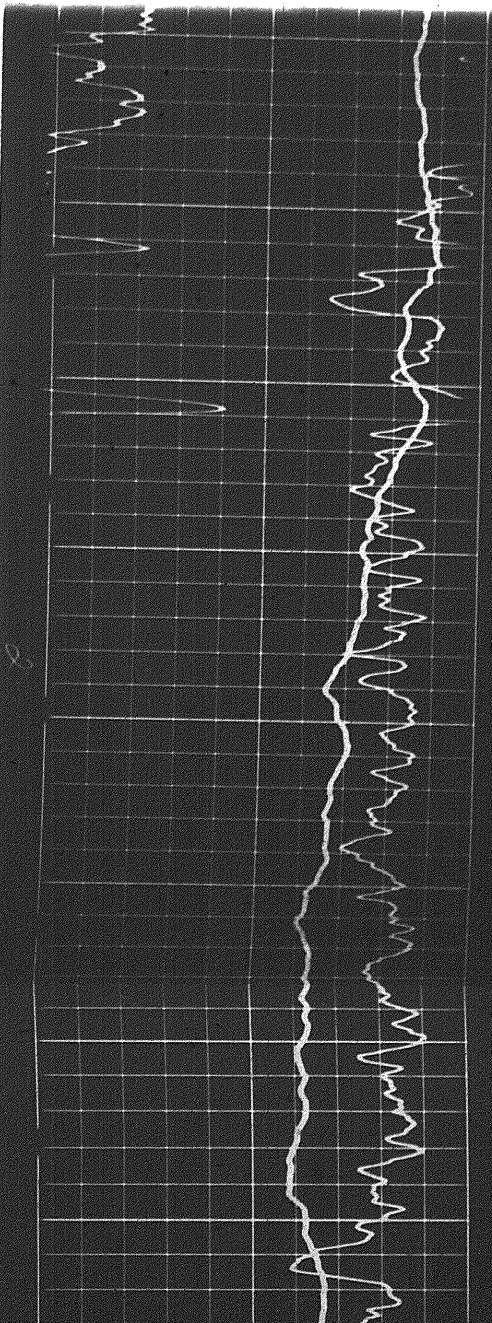
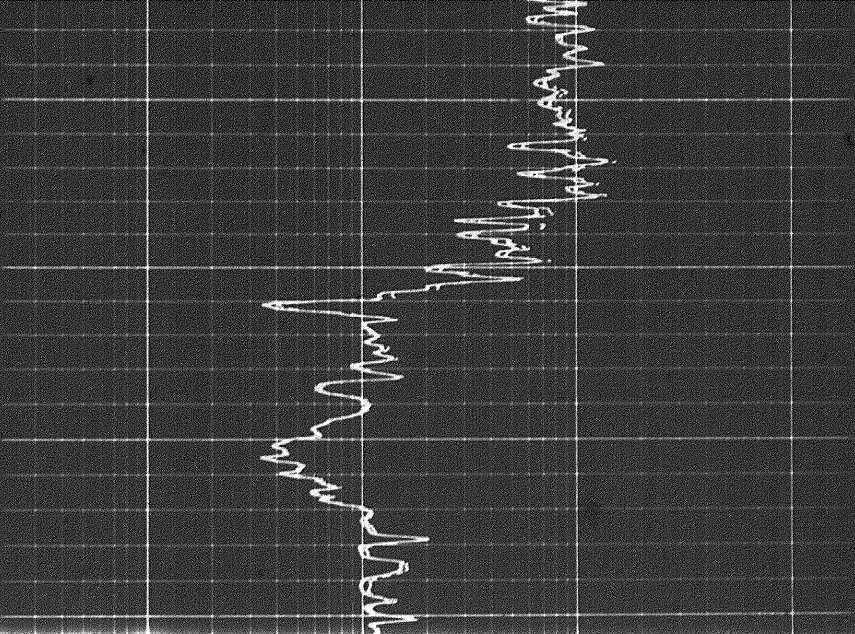






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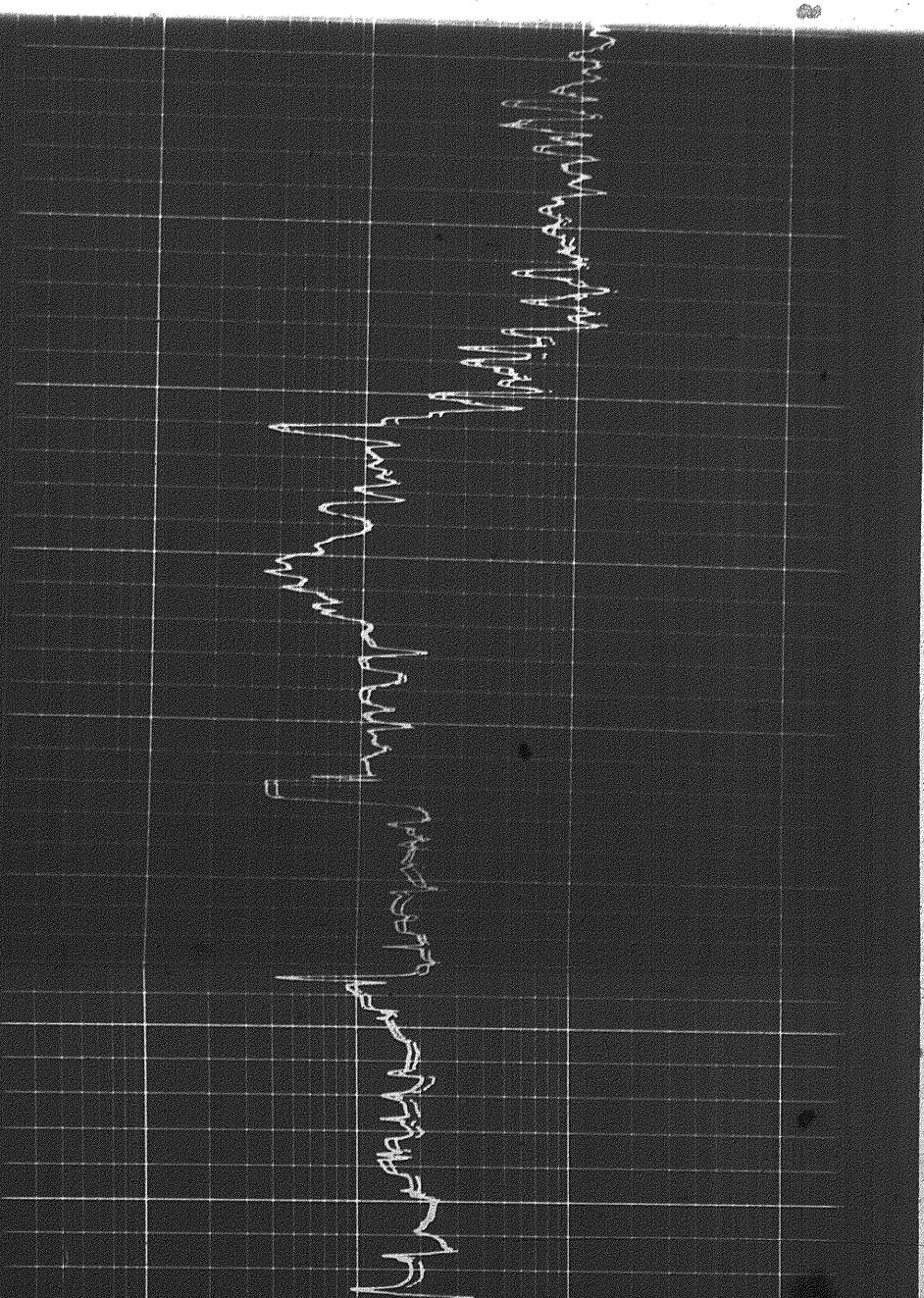


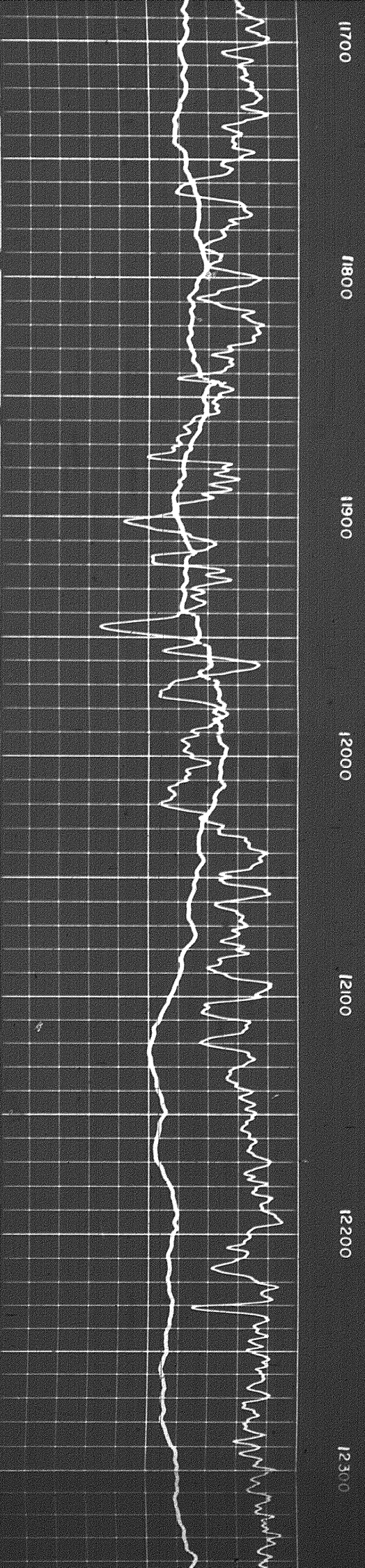
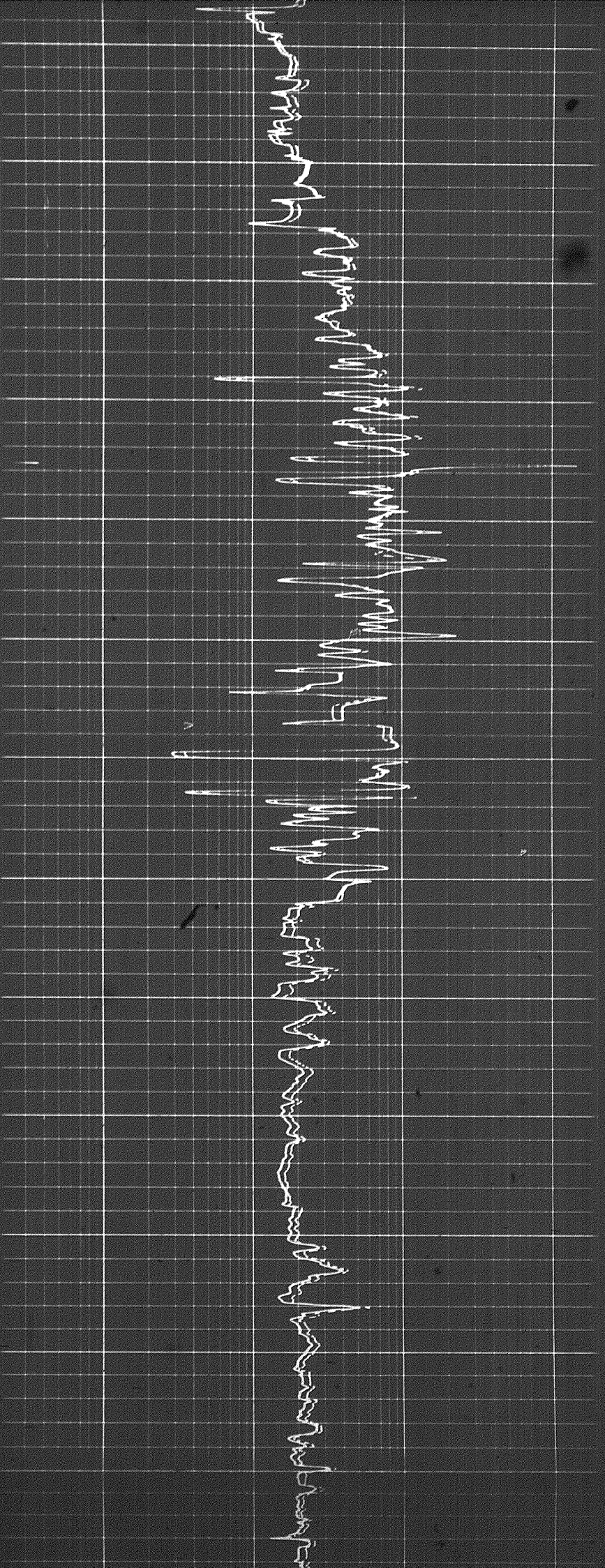
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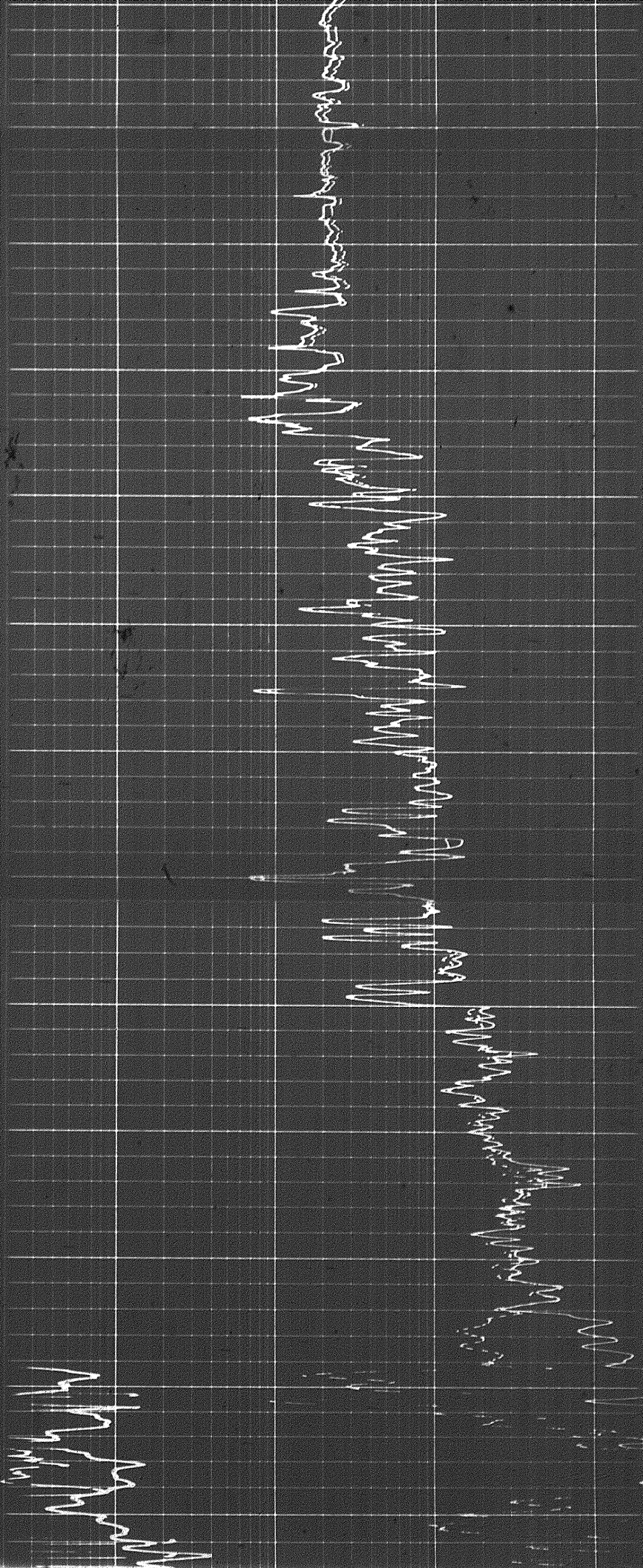
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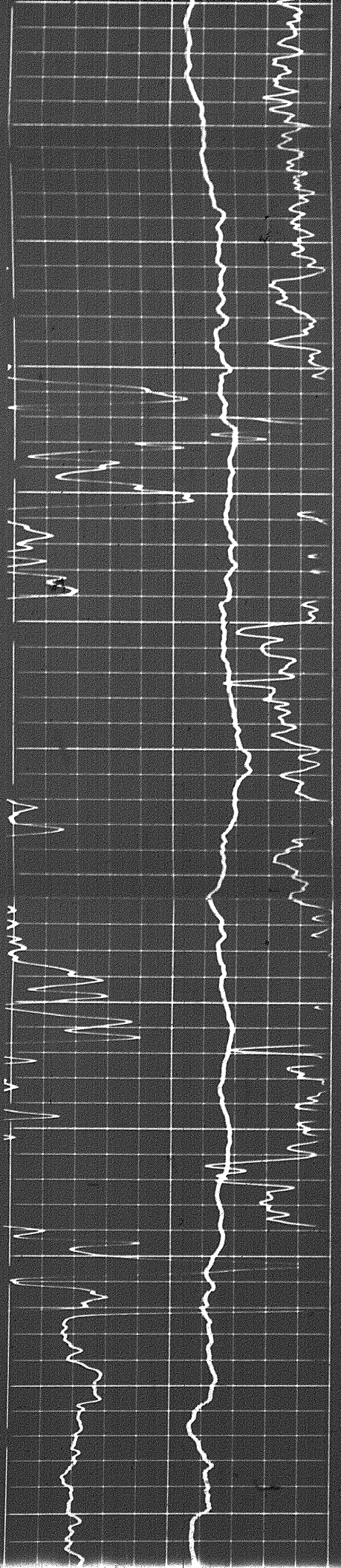
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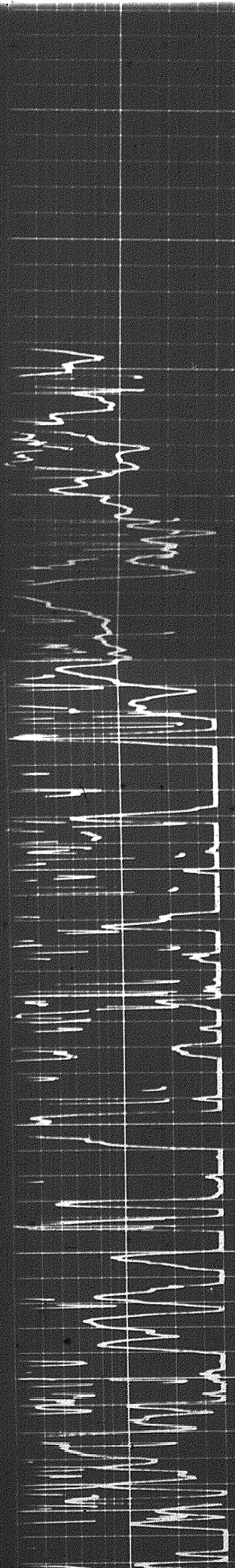
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12700

12800



Handwritten notes at the top of the page, possibly describing the recording conditions or the subject of the study.



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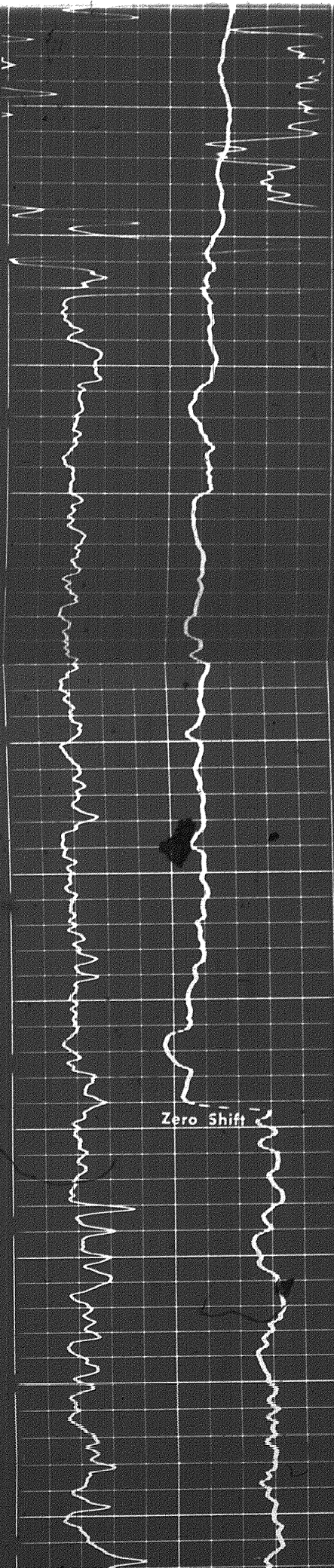
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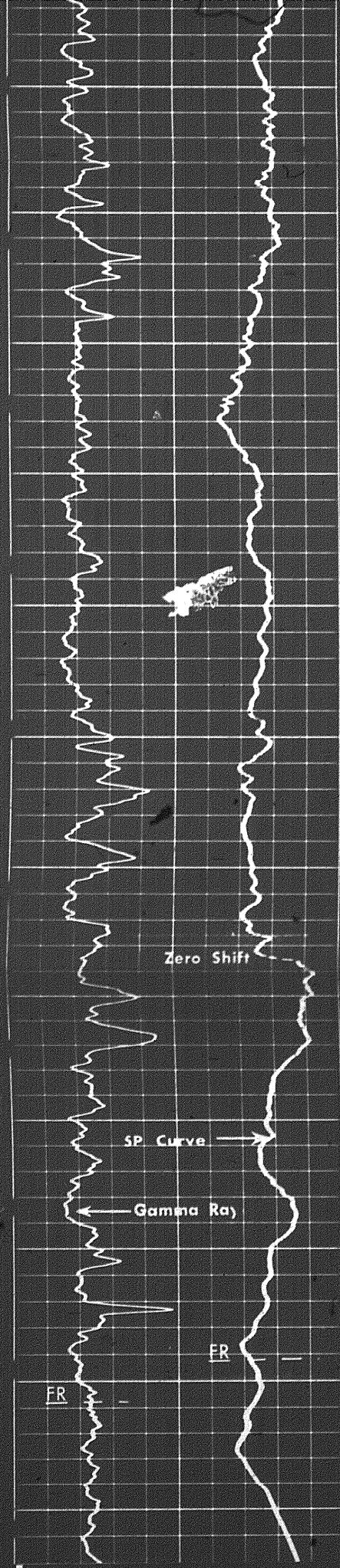
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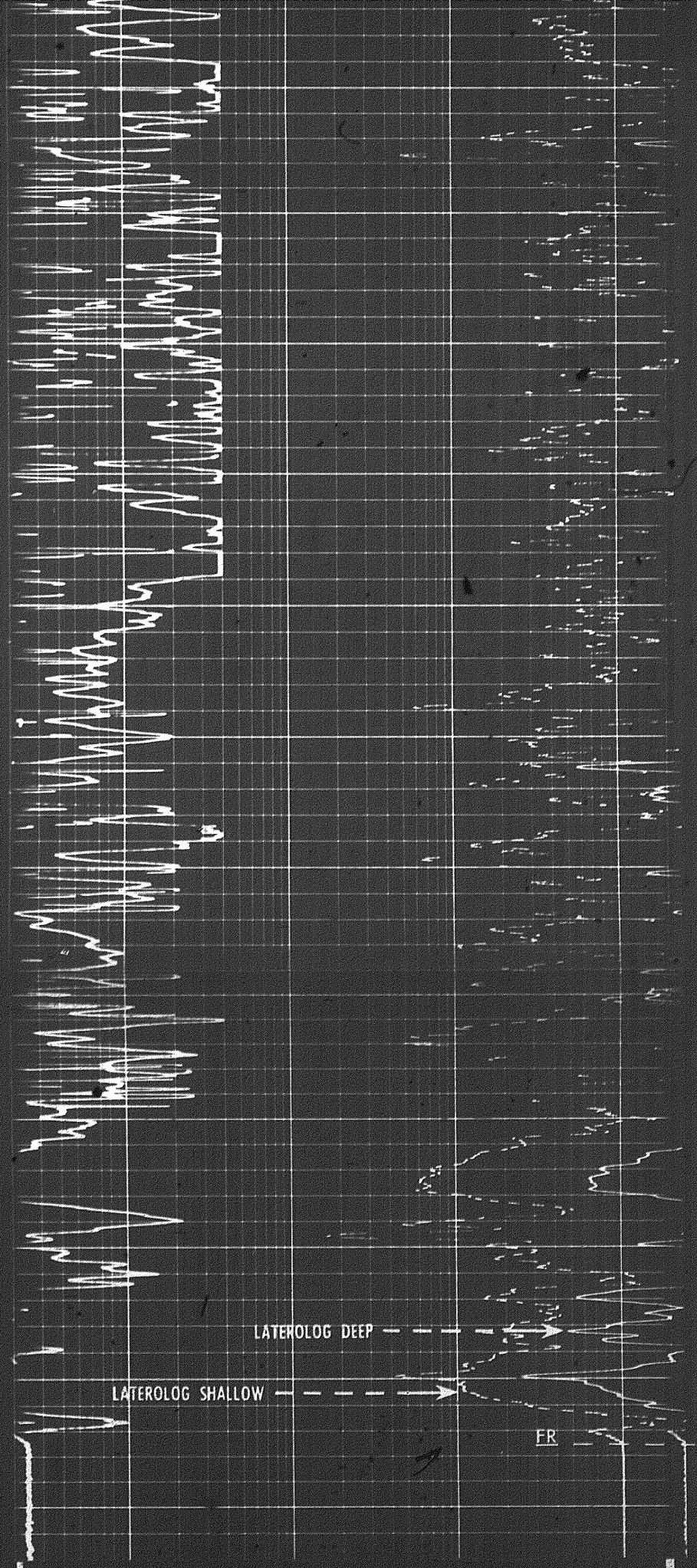
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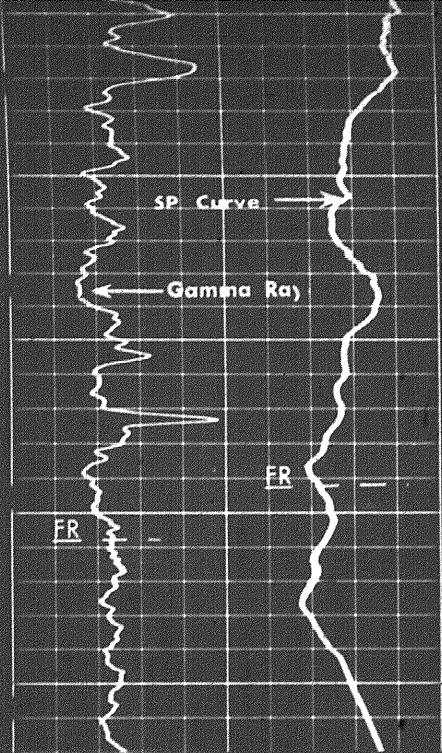
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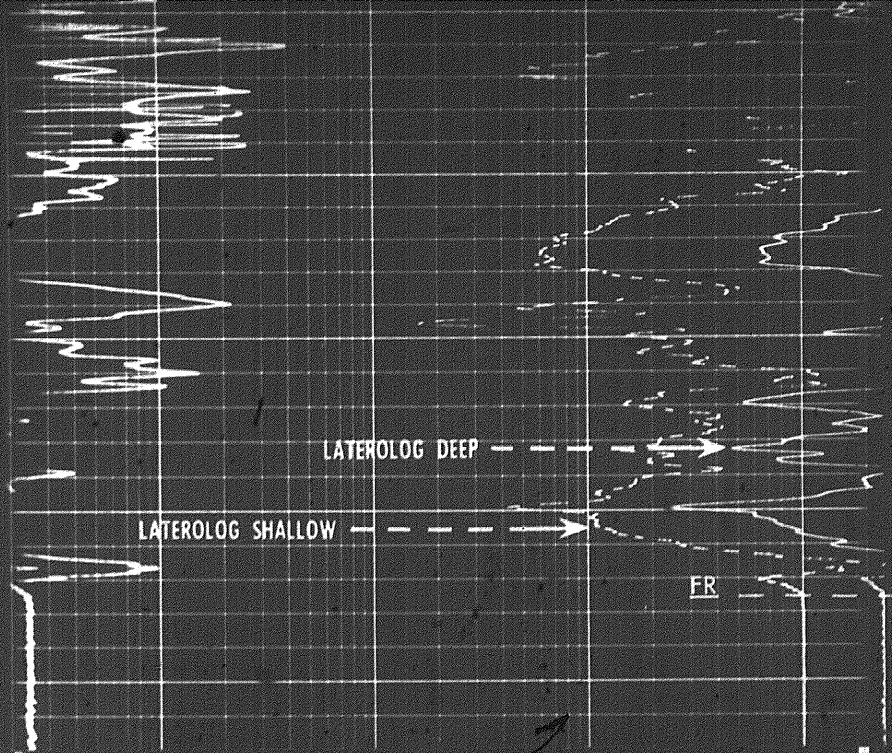
13200
13300
13400
13500
13600
13700



Speed in F
Sens. 150 T.C.
Zero 0 div. to left
150
300



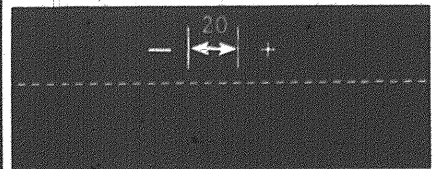
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Speed in FPM

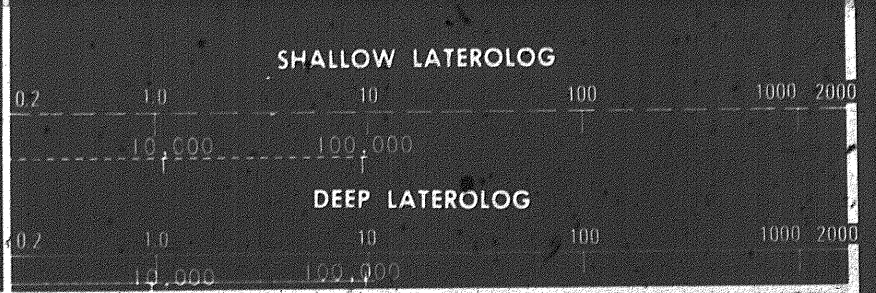
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Zero	0	div. to left	
	150		
	300		

GAMMA RAY
API UNITS



SPONTANEOUS-POTENTIAL
MILLIVOLTS

DEPTHS



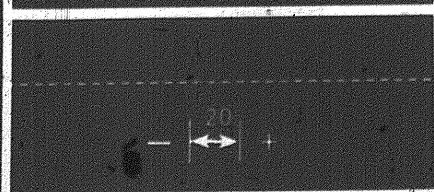
RESISTIVITY
OHMS M²/M

DETAIL LOG
5' = 100'

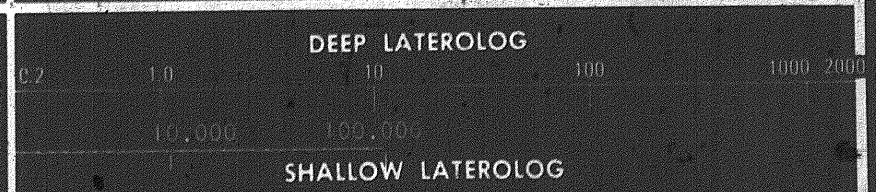
SPONTANEOUS-POTENTIAL
MILLIVOLTS

DEPTHS

RESISTIVITY
OHMS M²/M



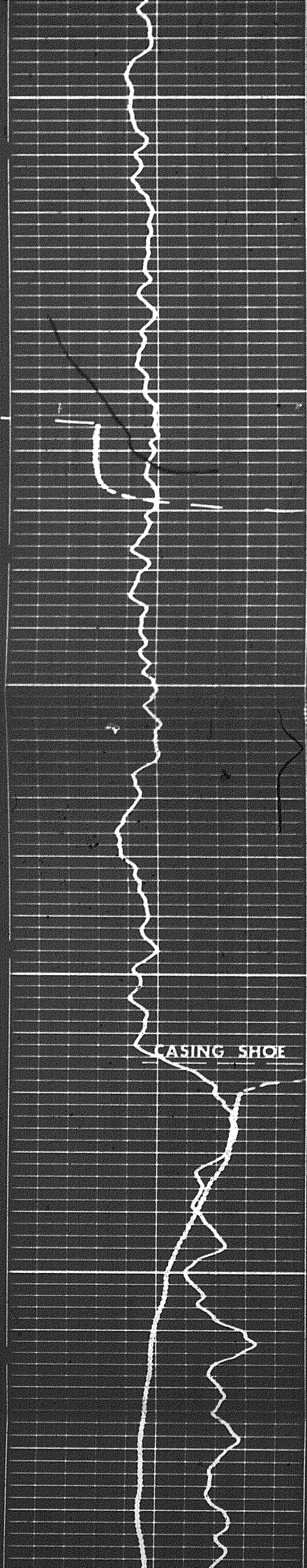
GAMMA RAY
API UNITS



RESISTIVITY
OHMS M²/M

5'

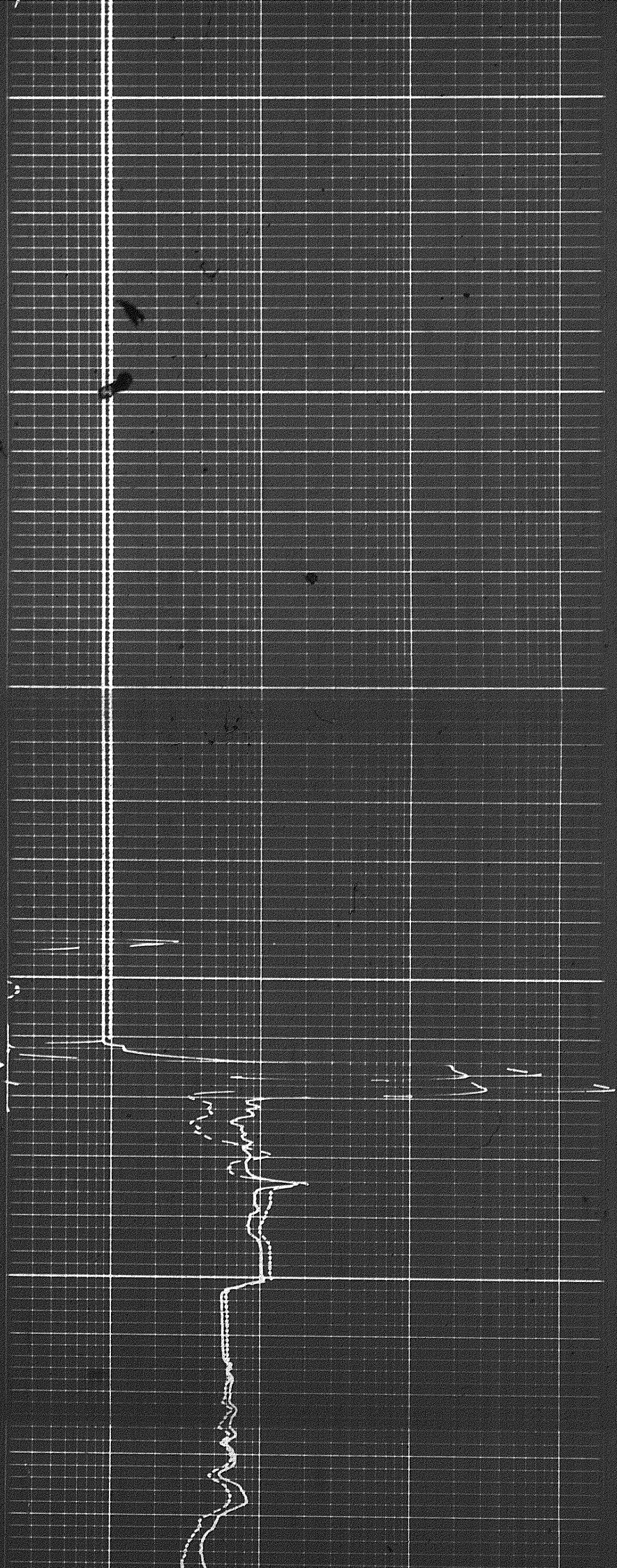
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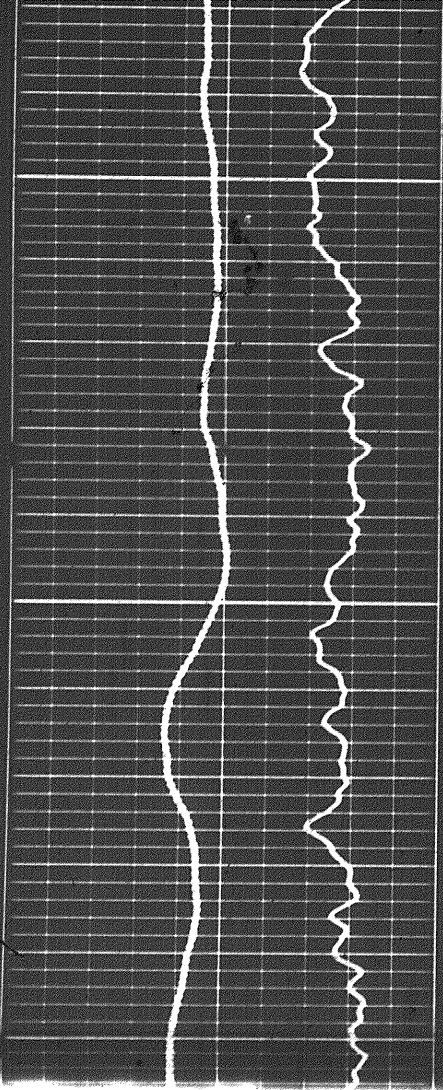


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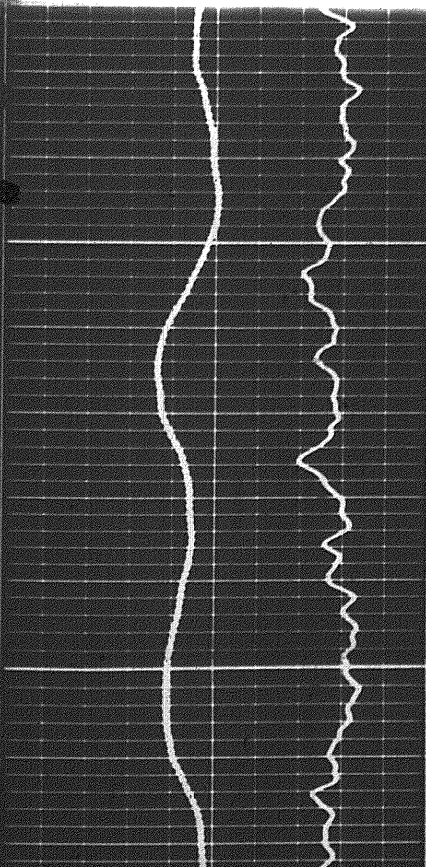
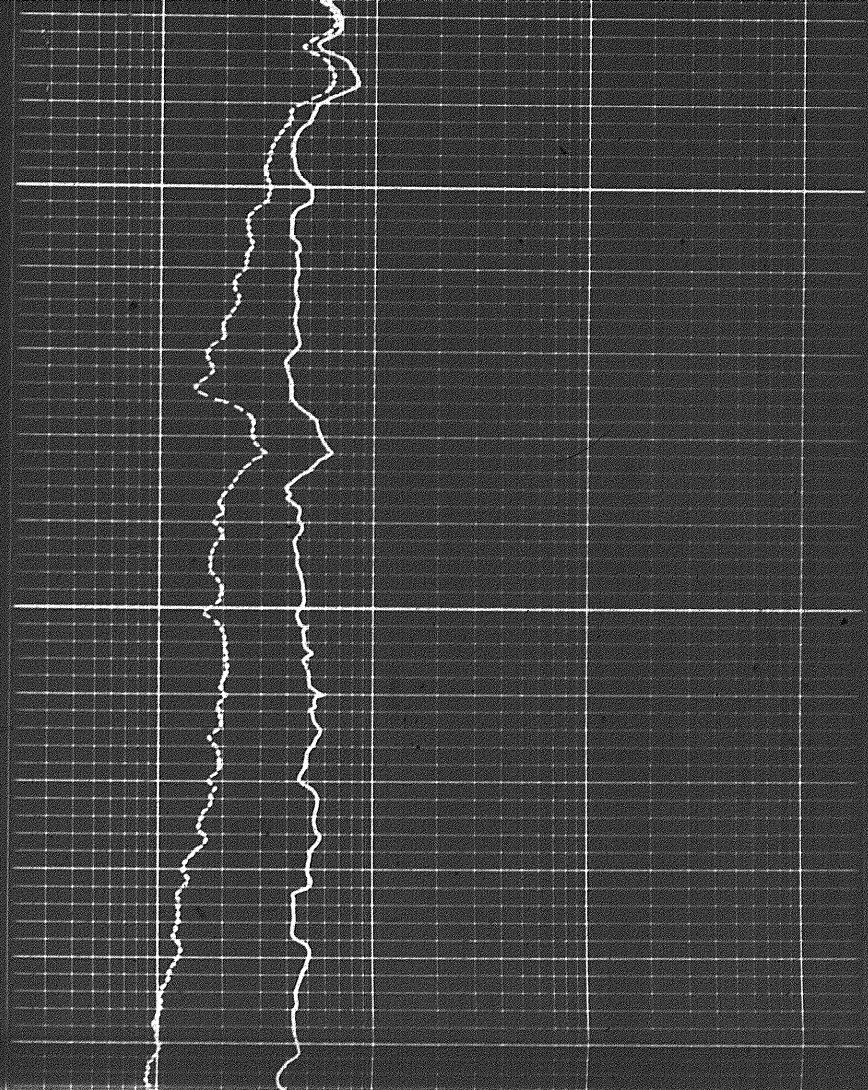
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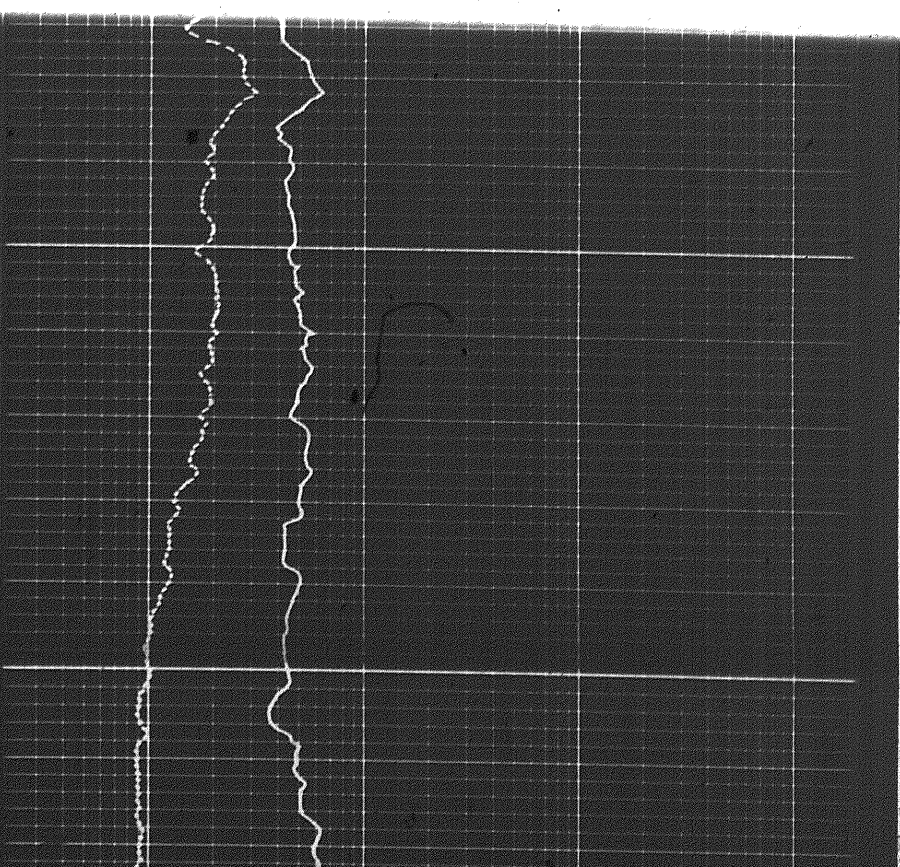


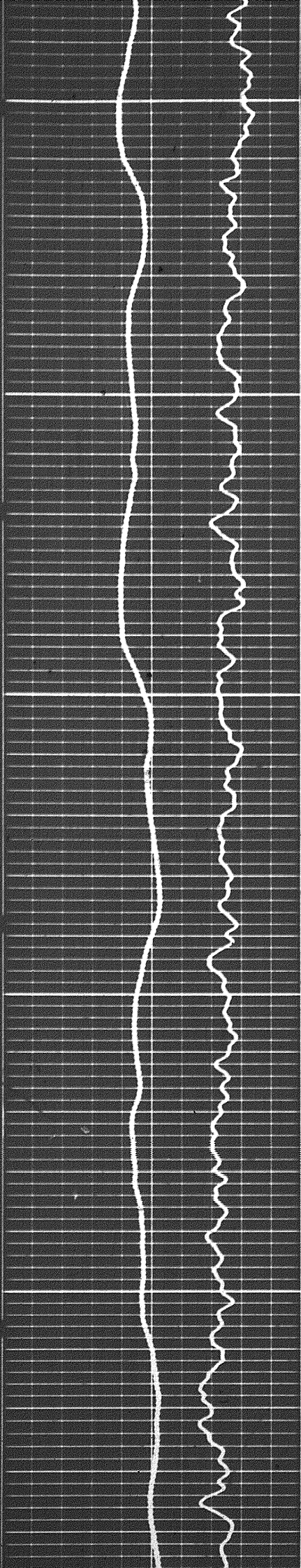


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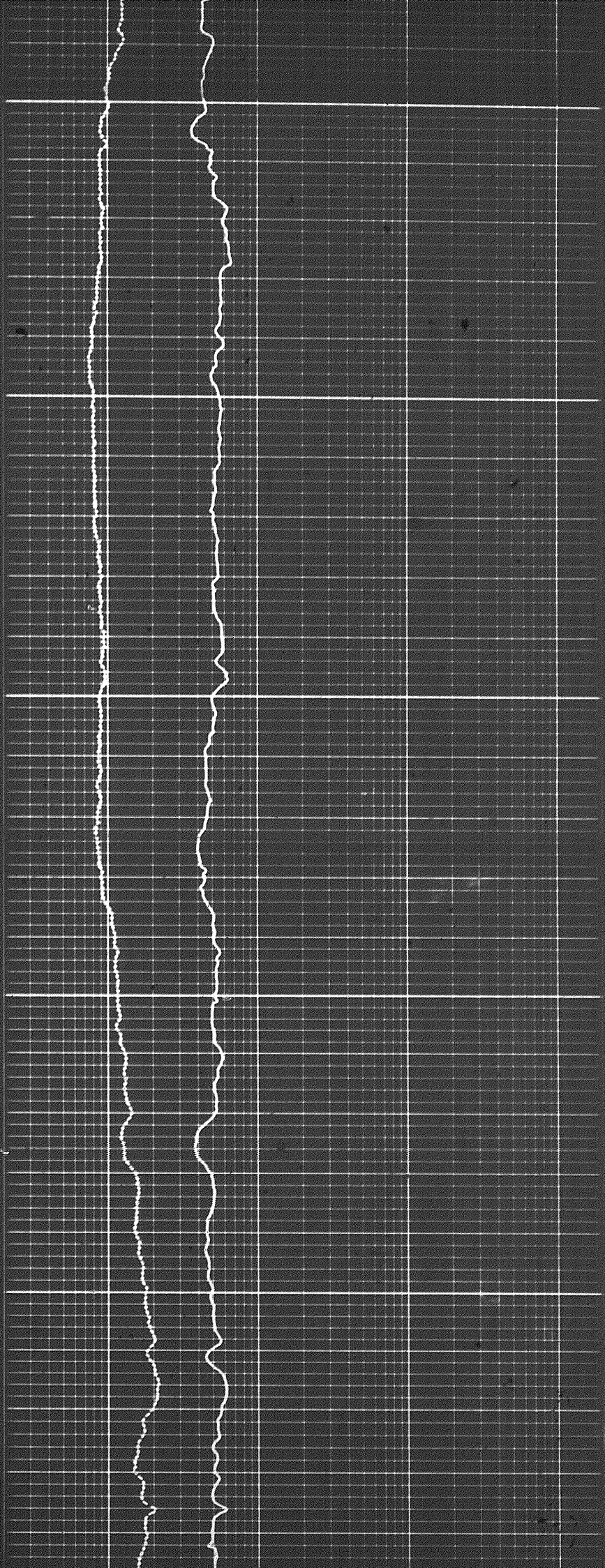
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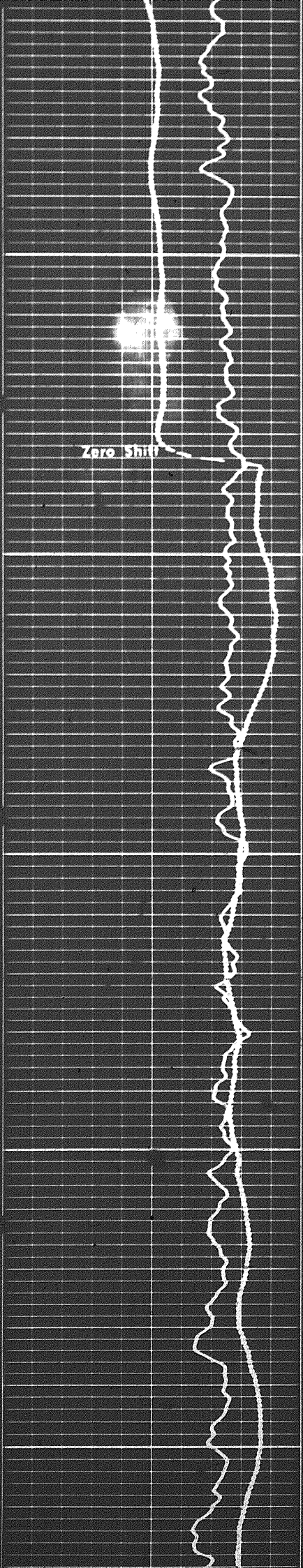




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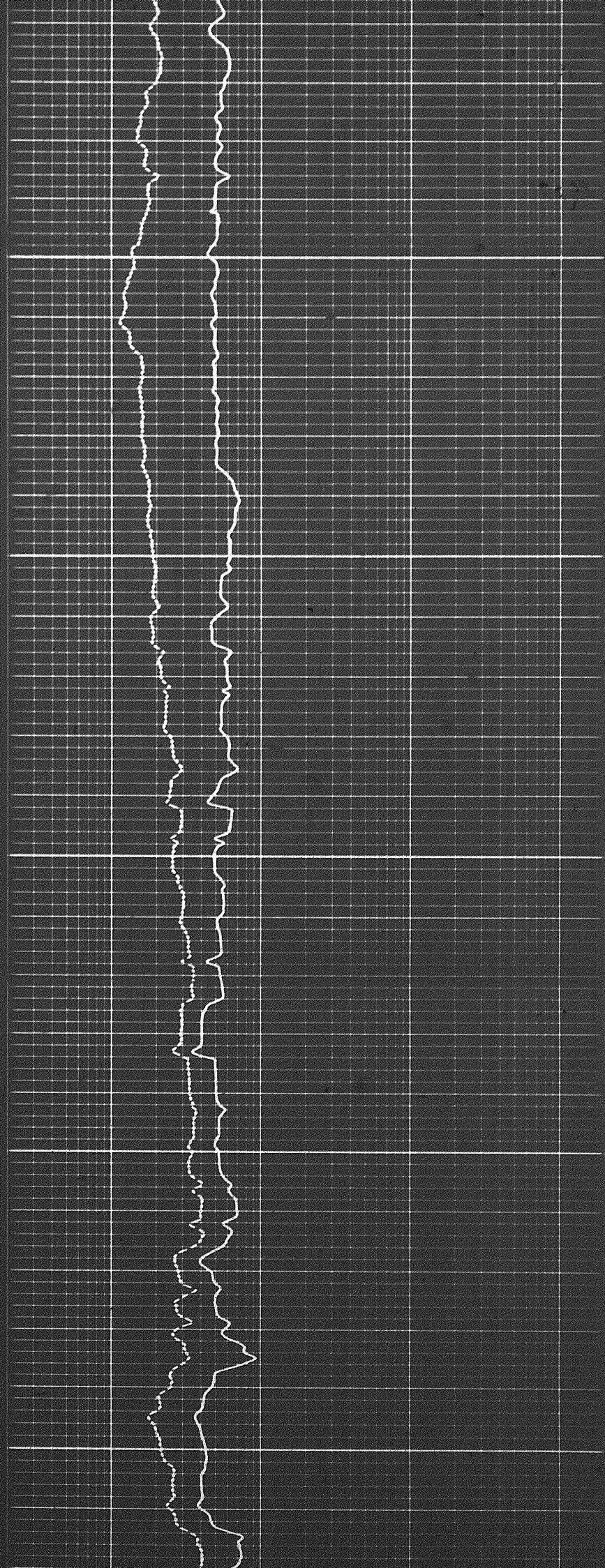


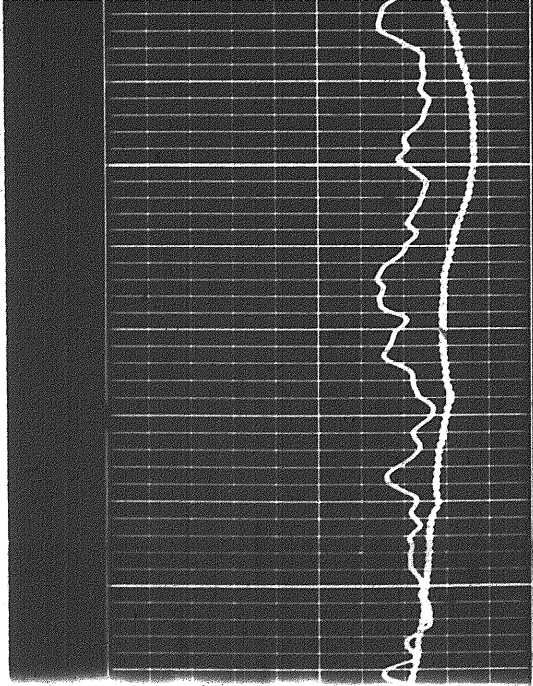


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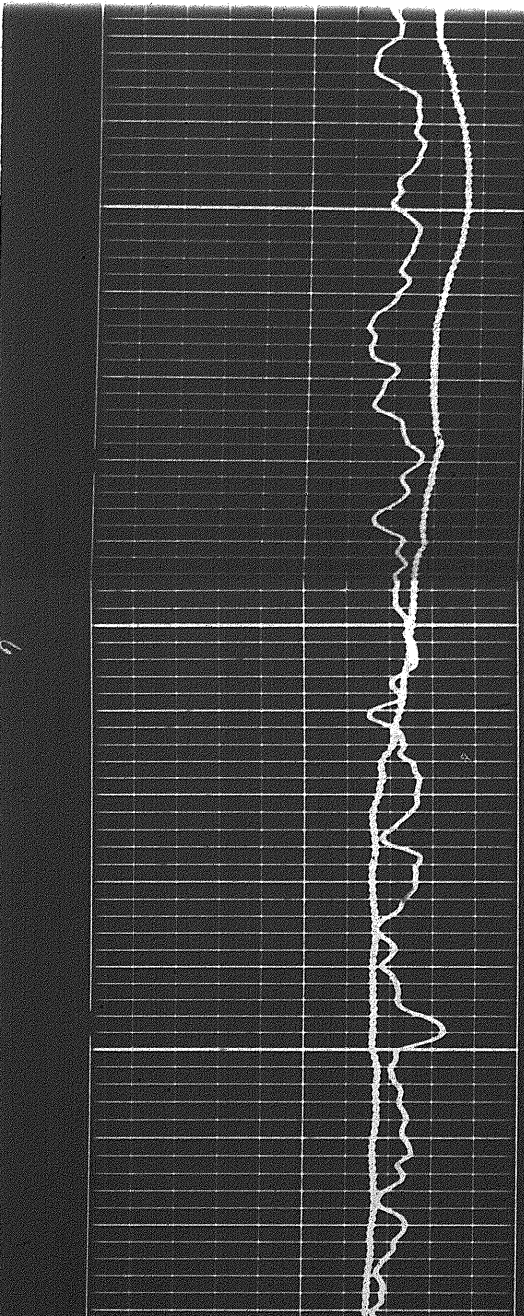
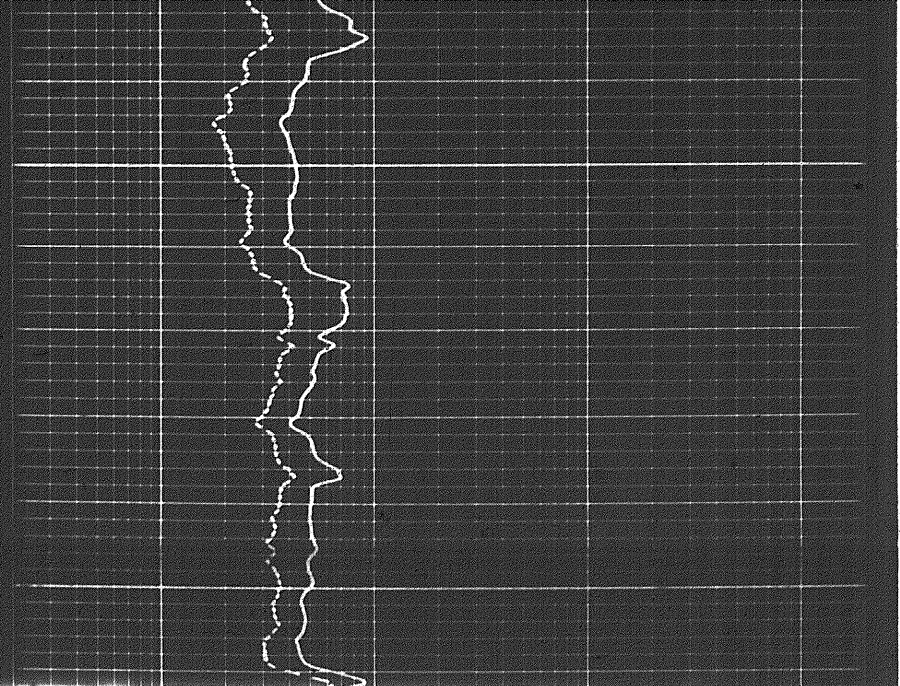
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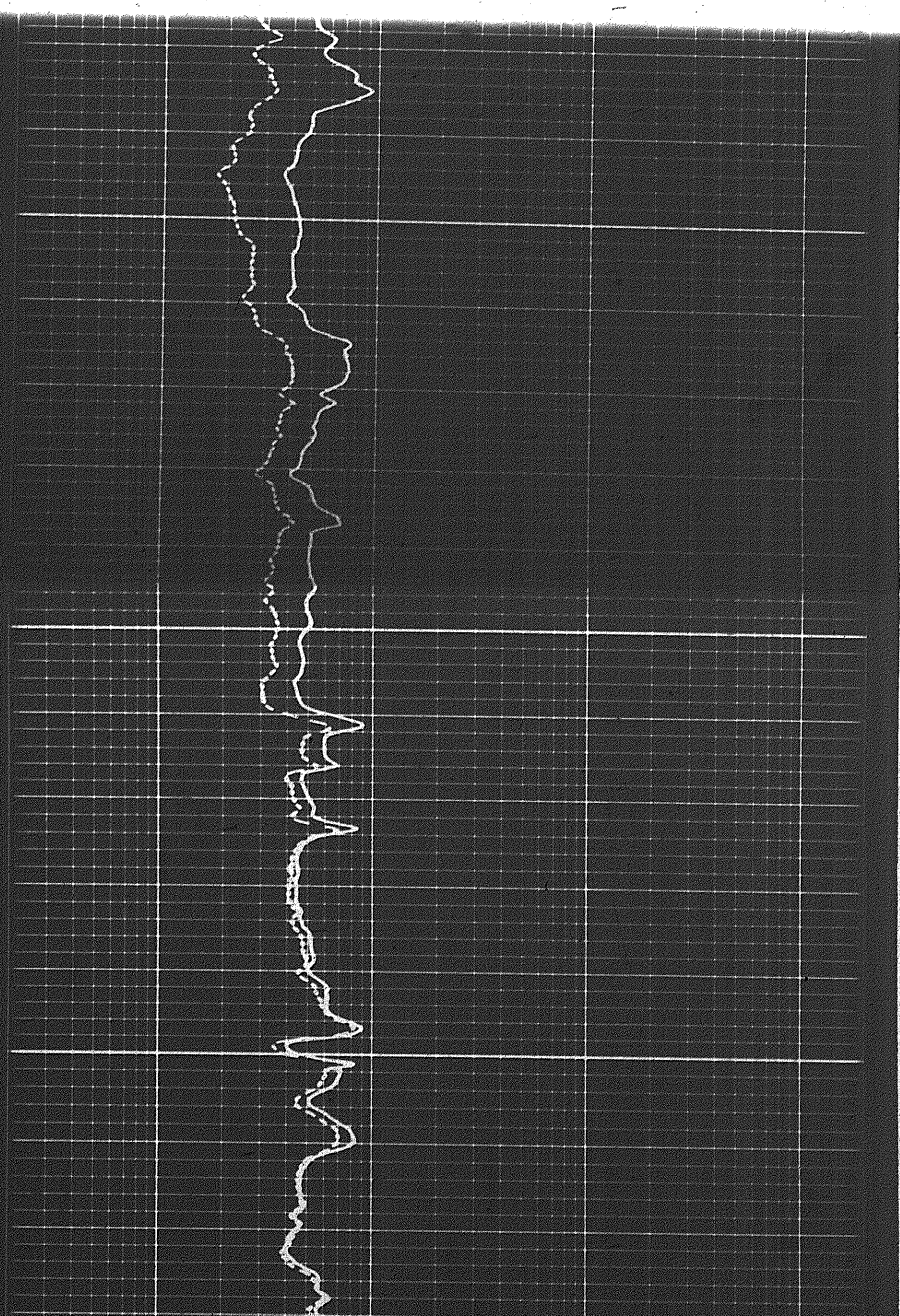


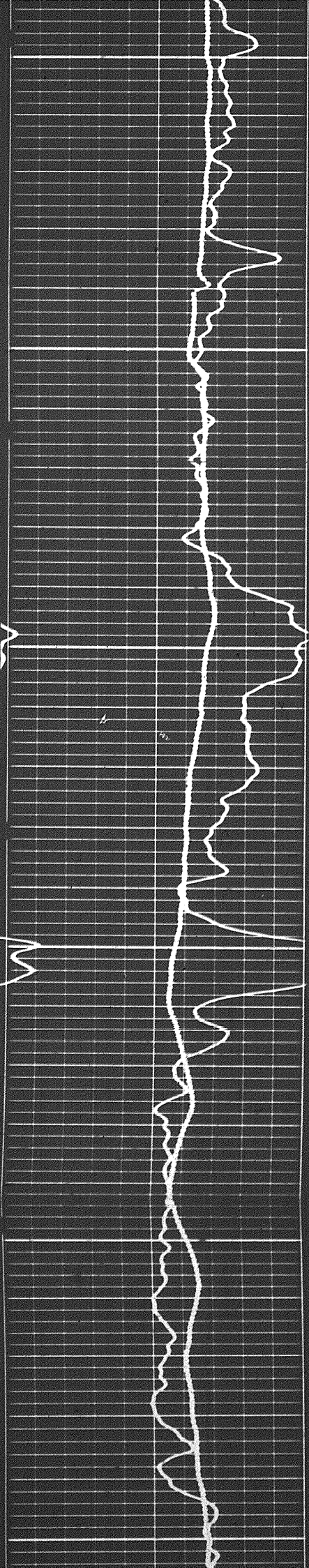
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10600

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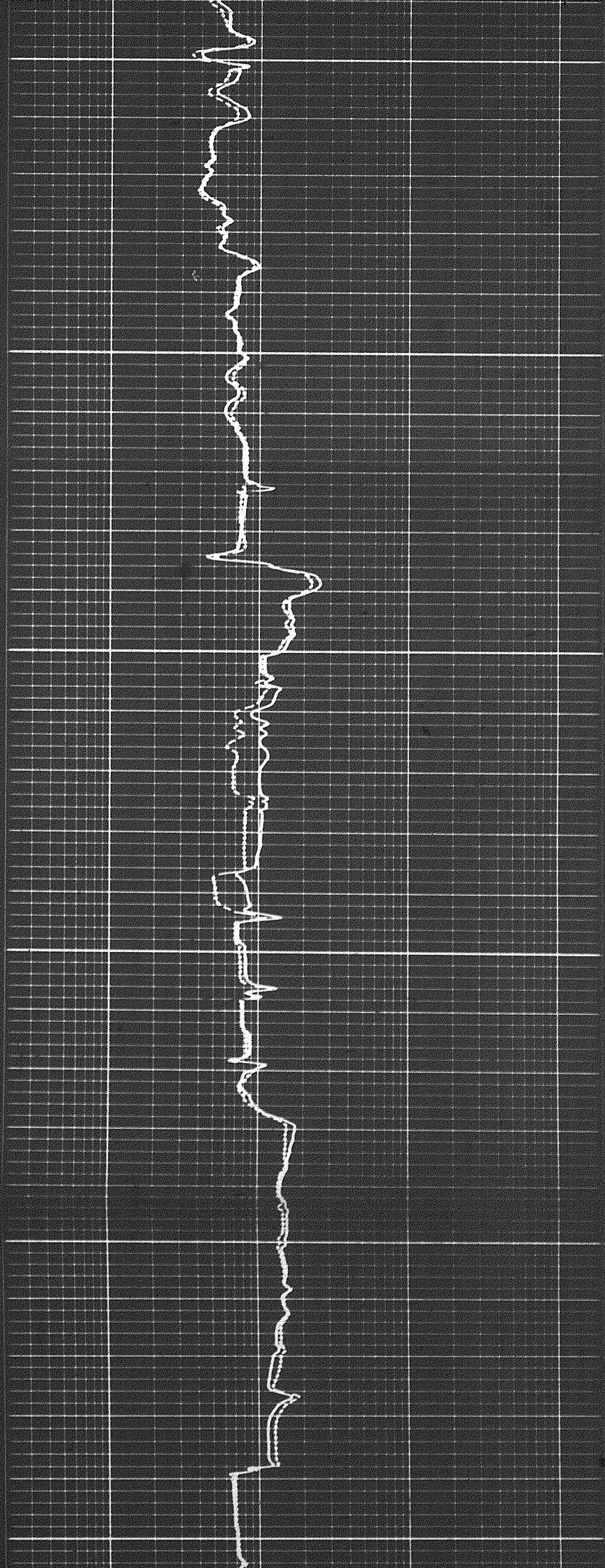


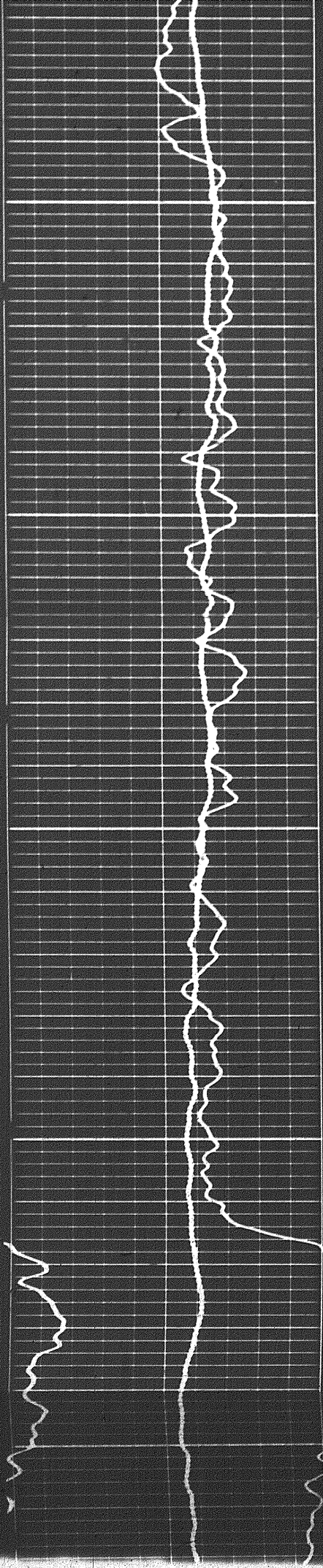


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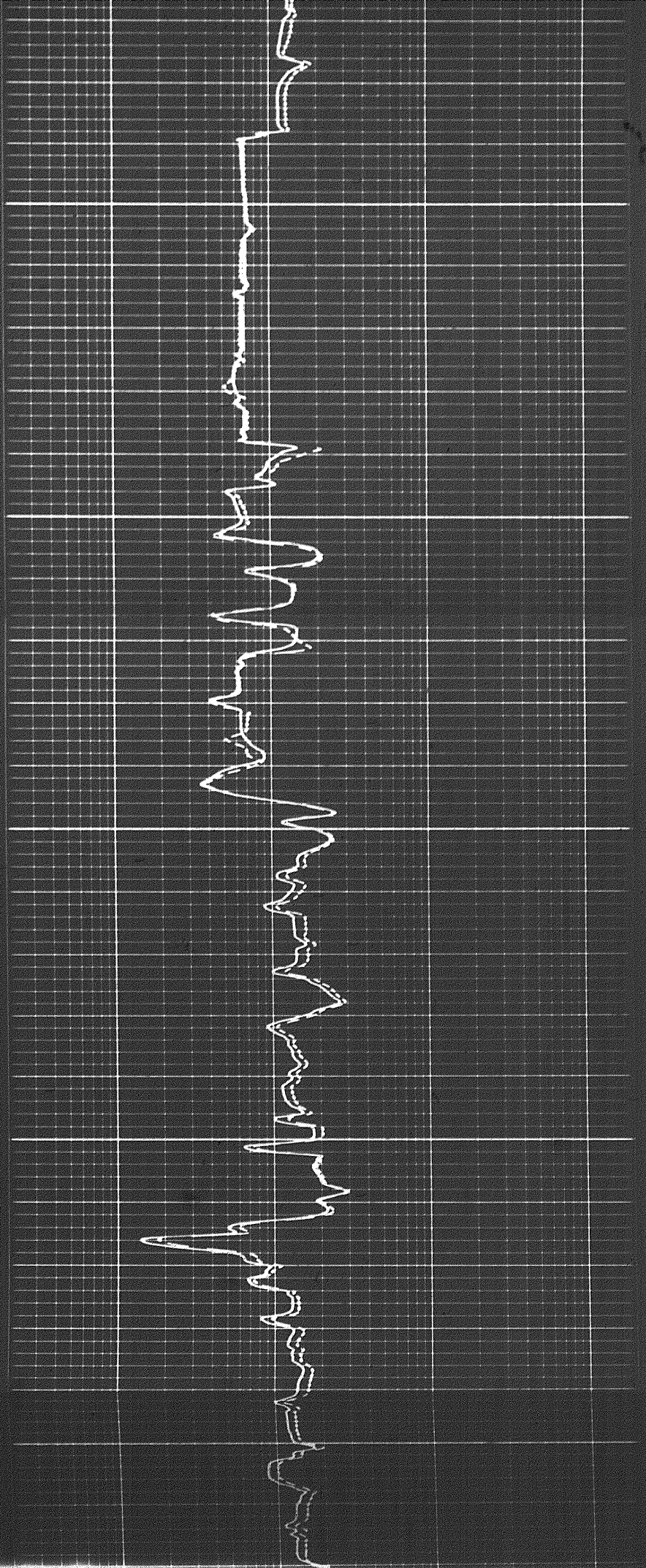
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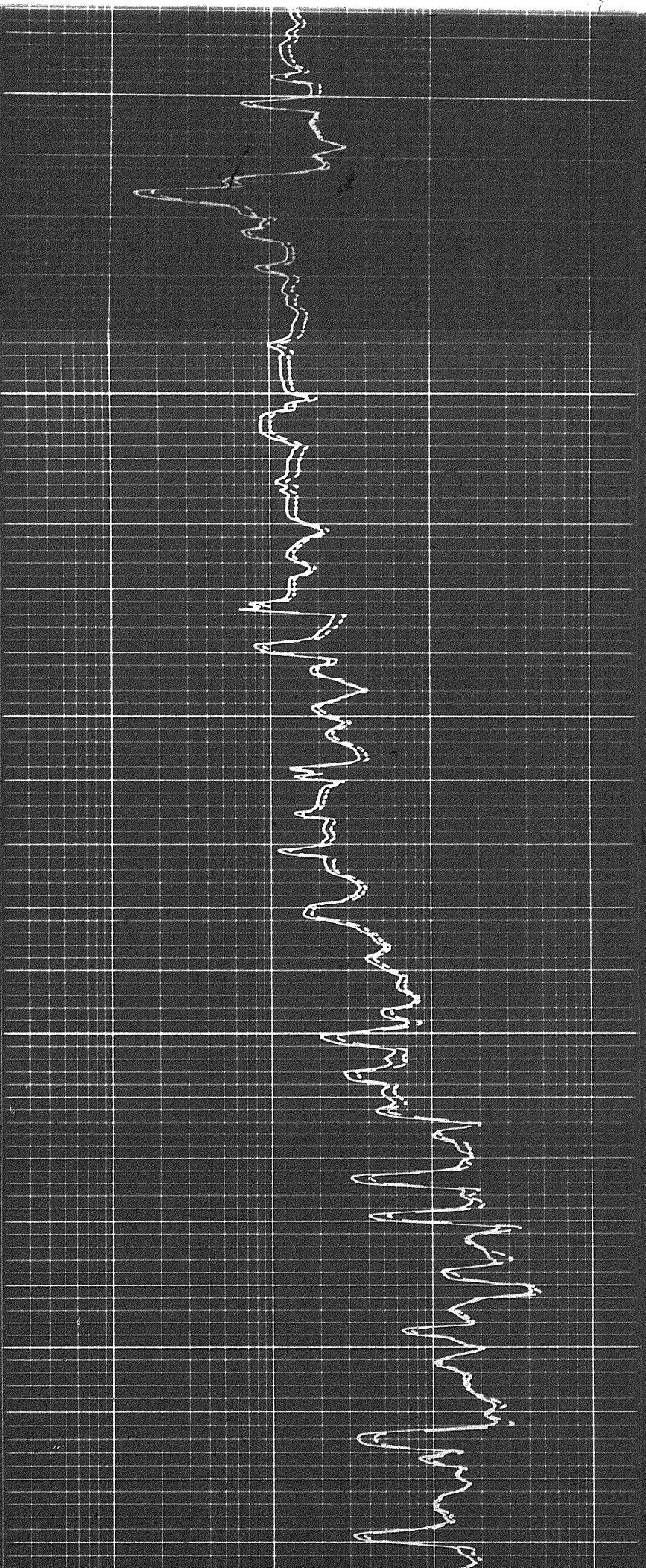




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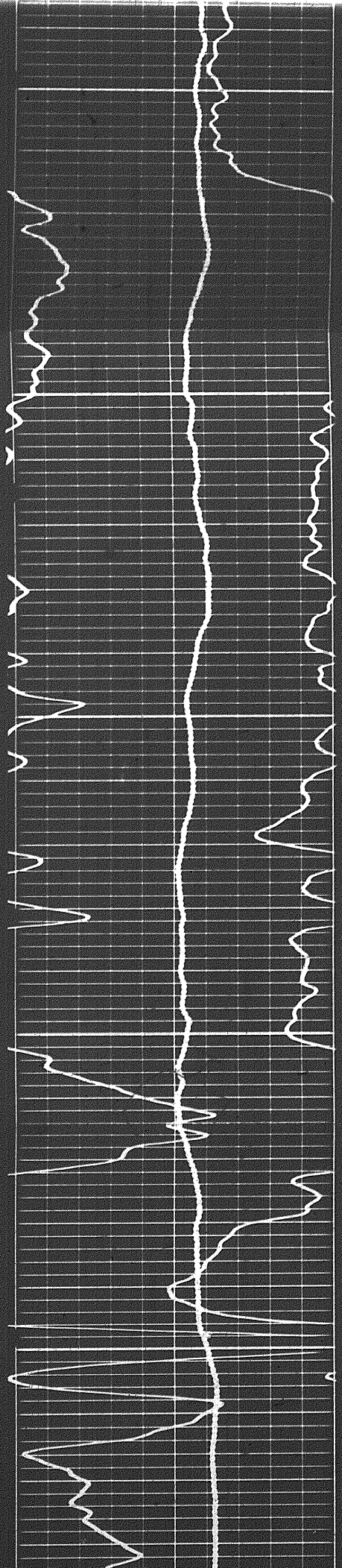


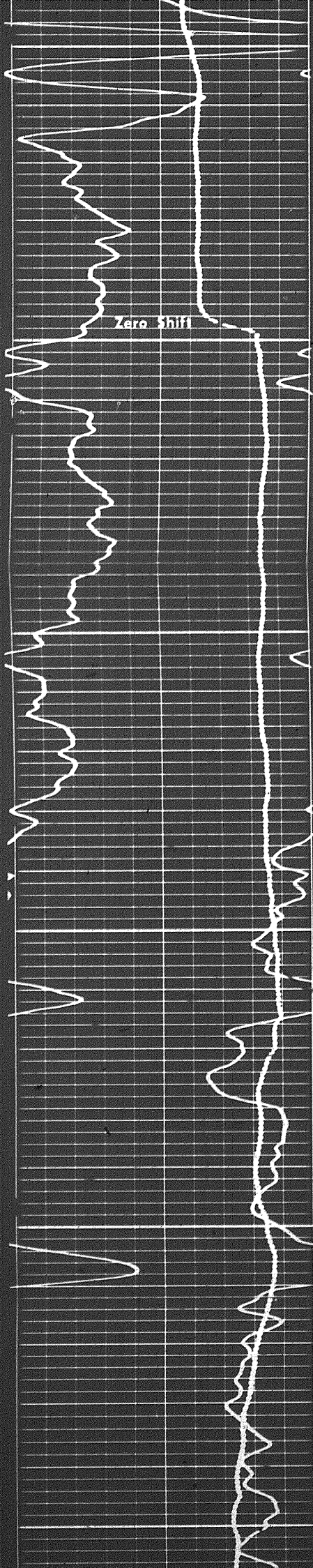


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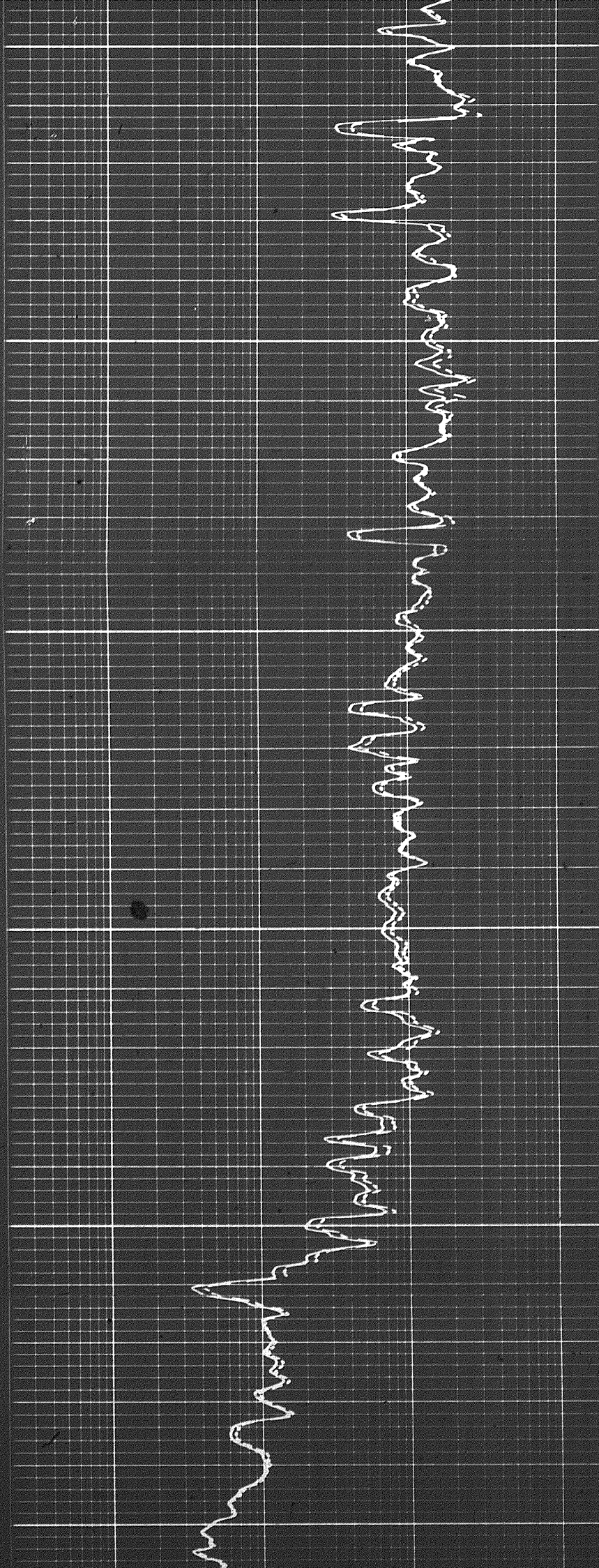


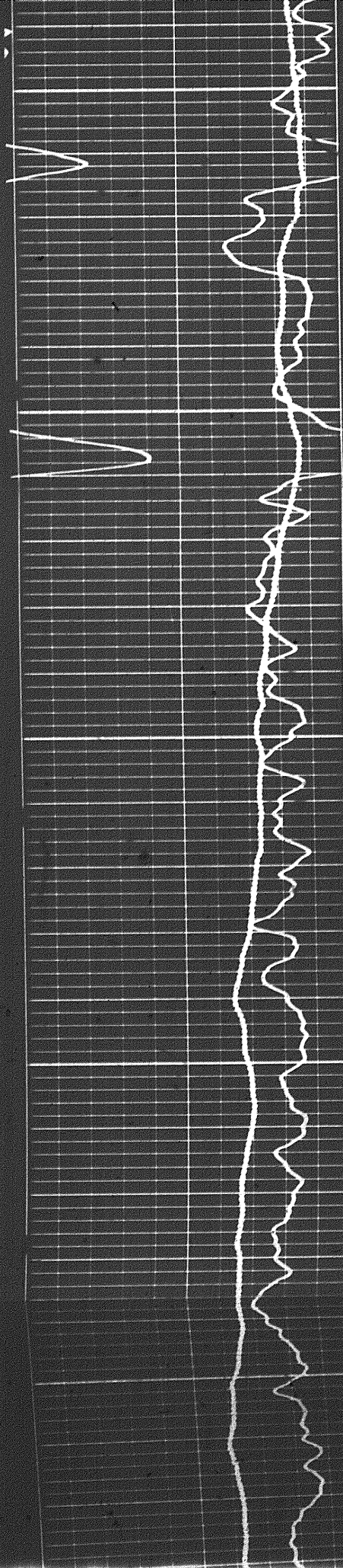


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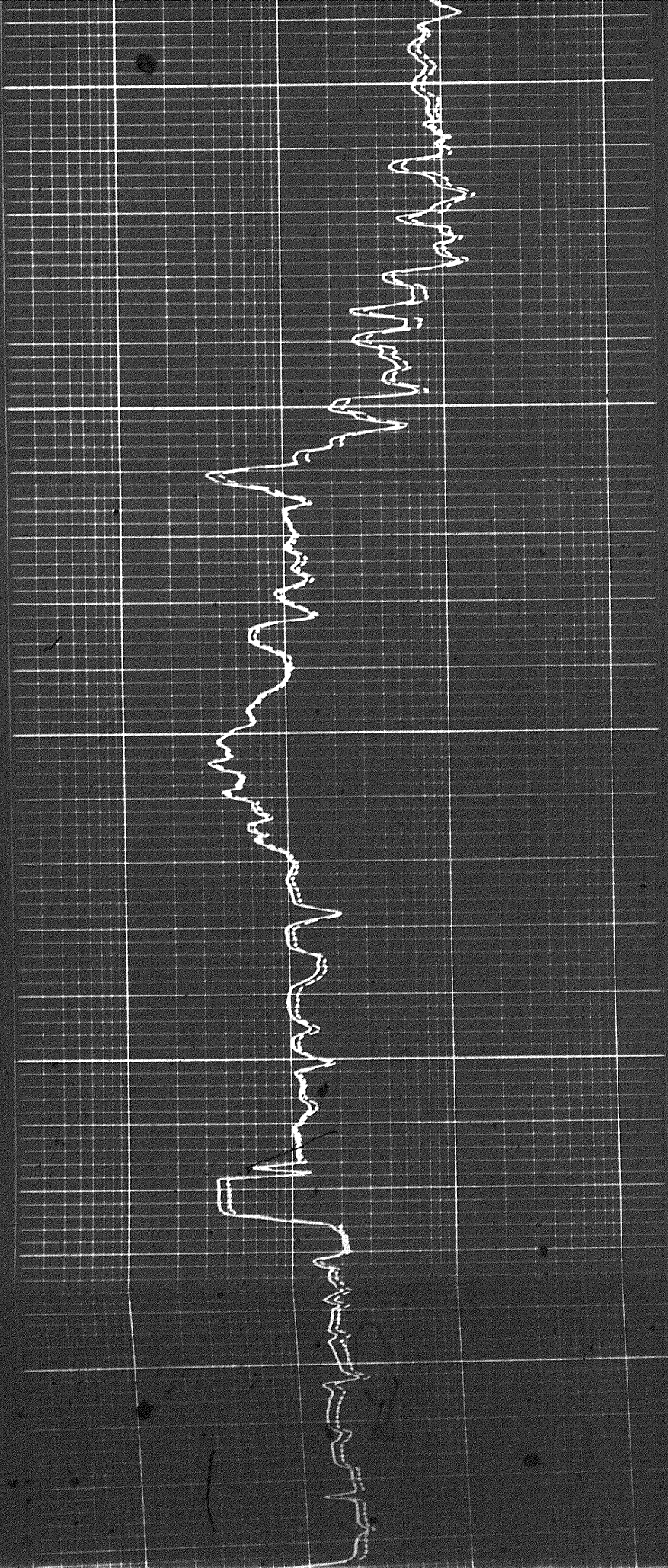
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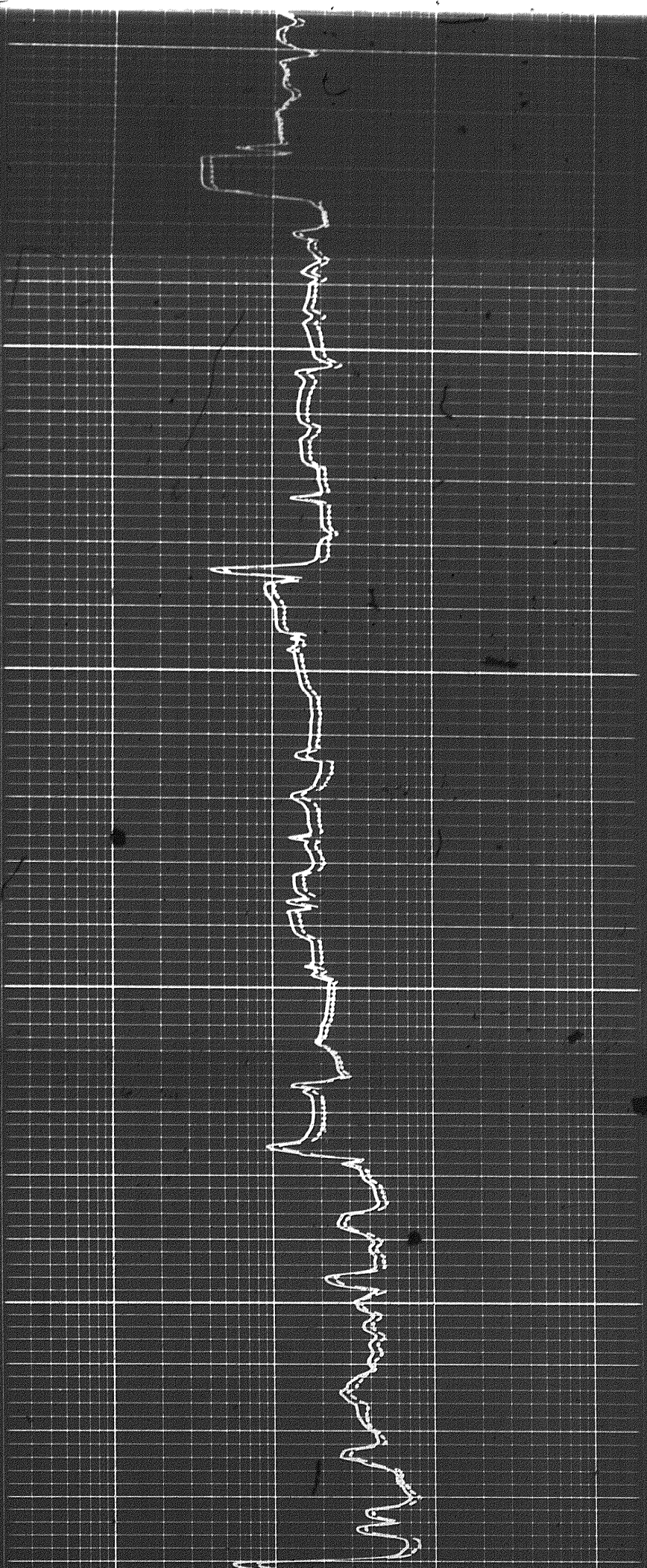
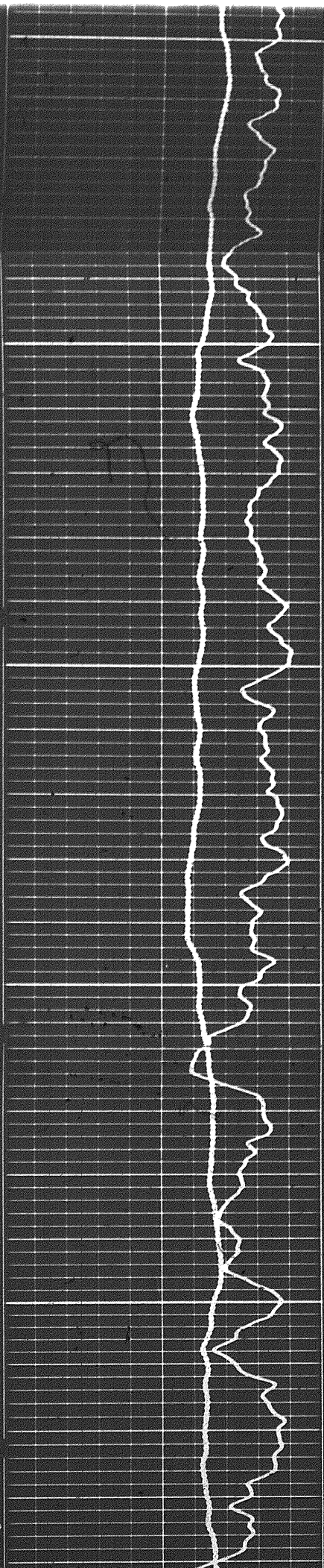
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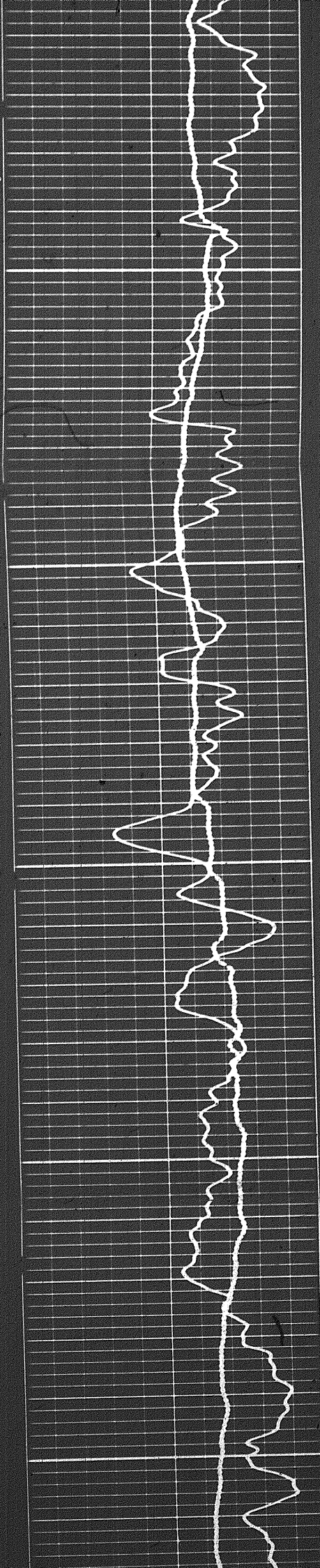


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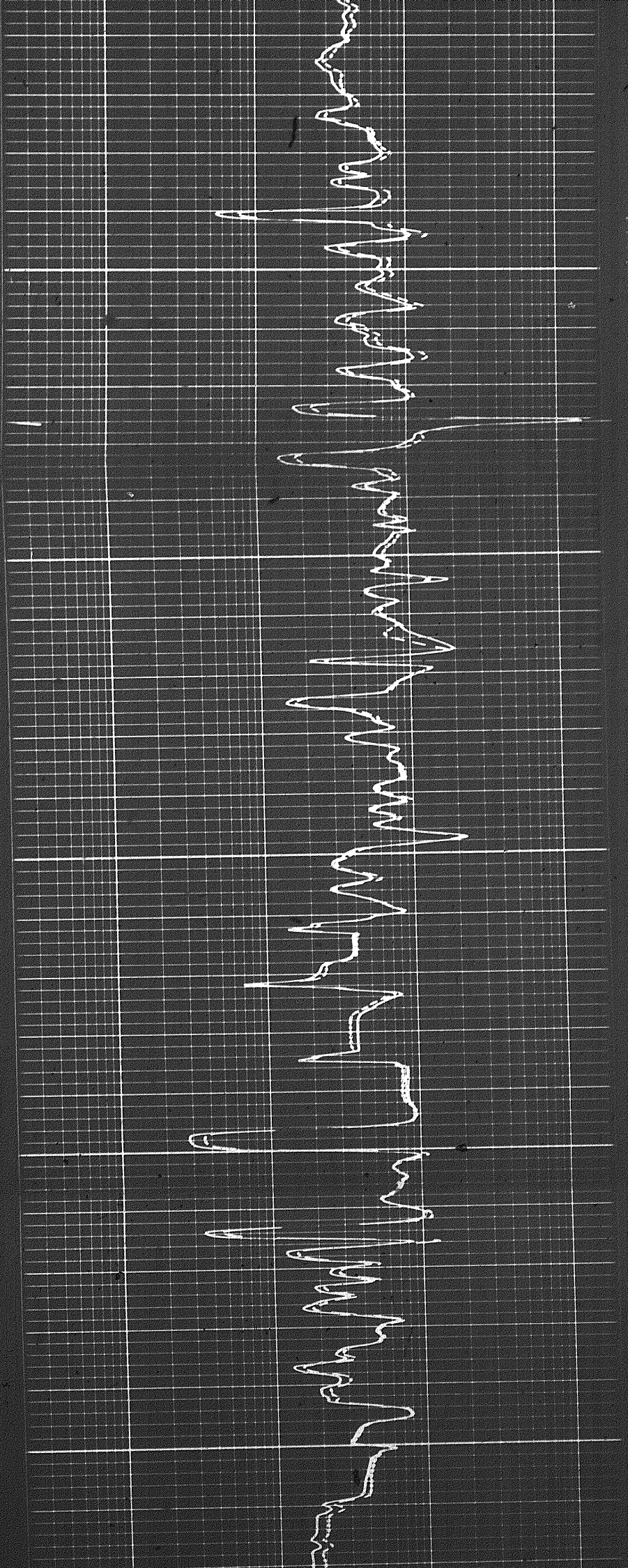
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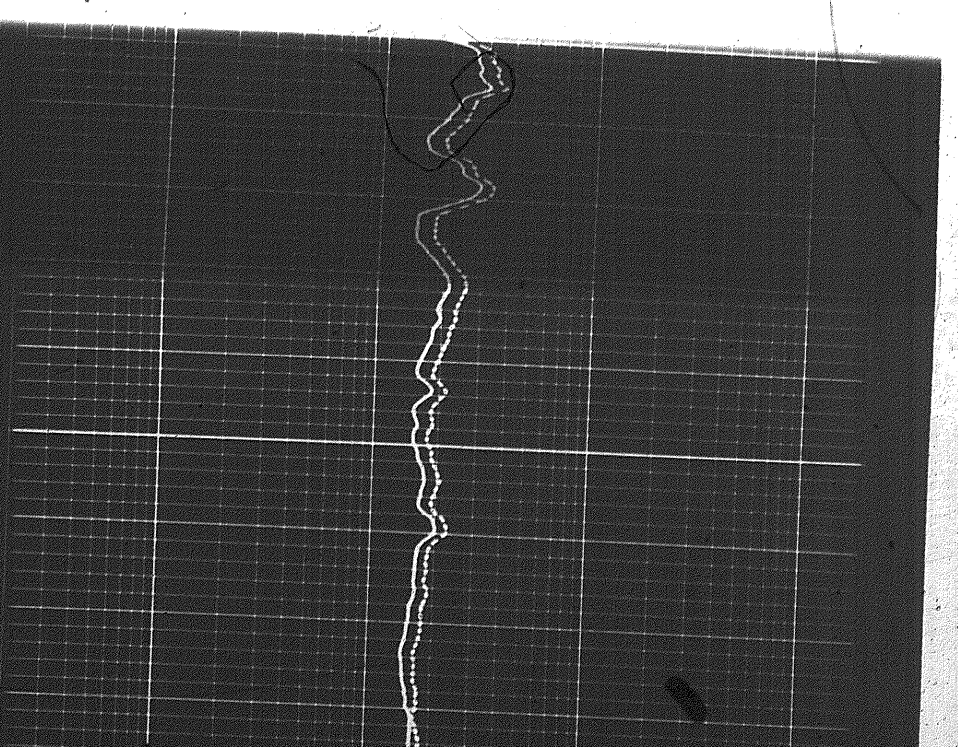
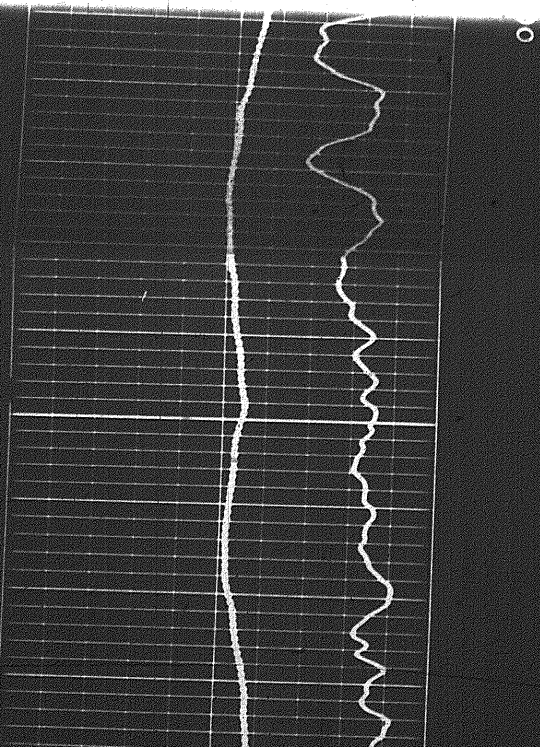
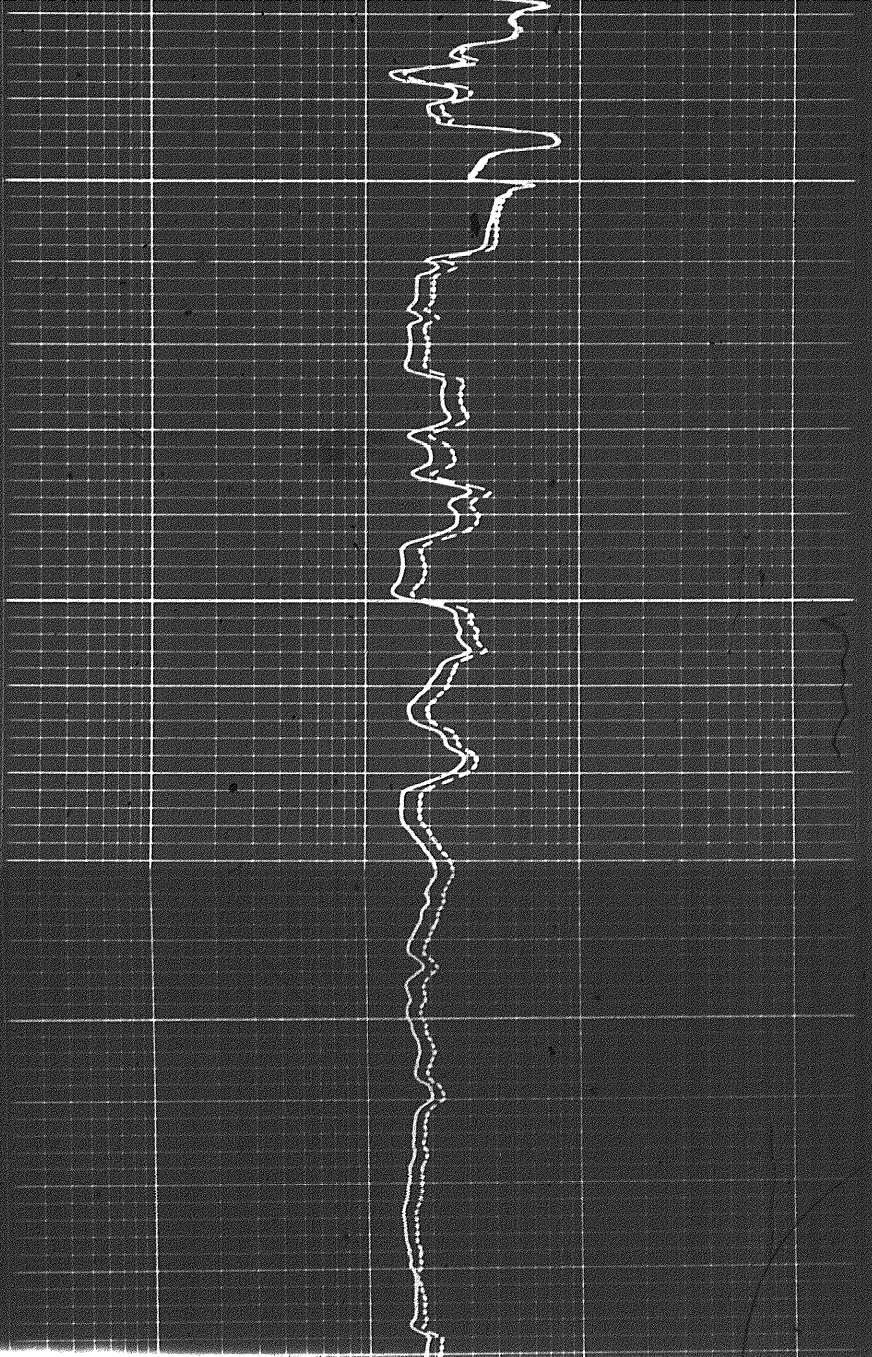
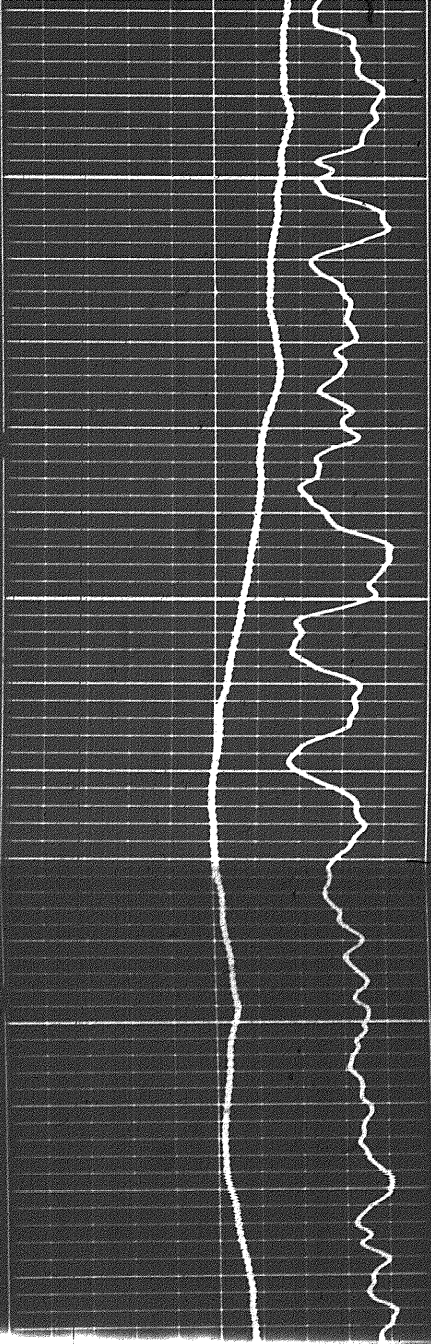


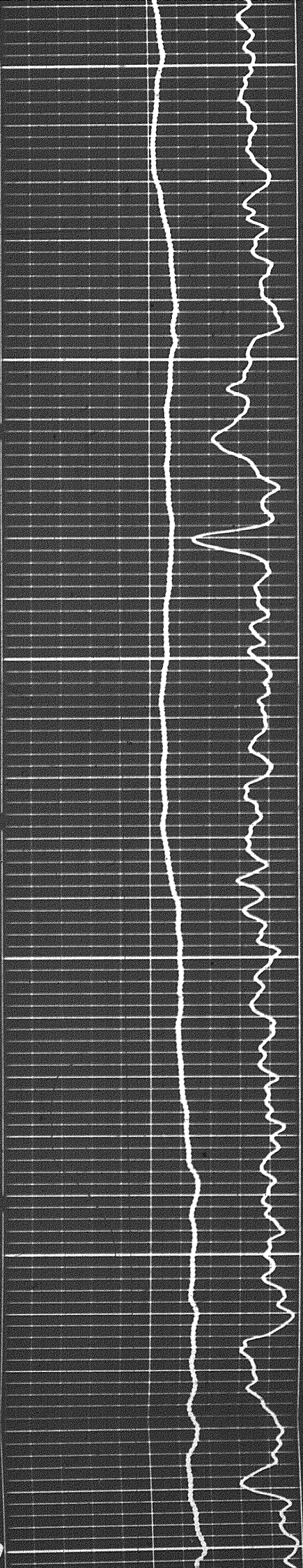
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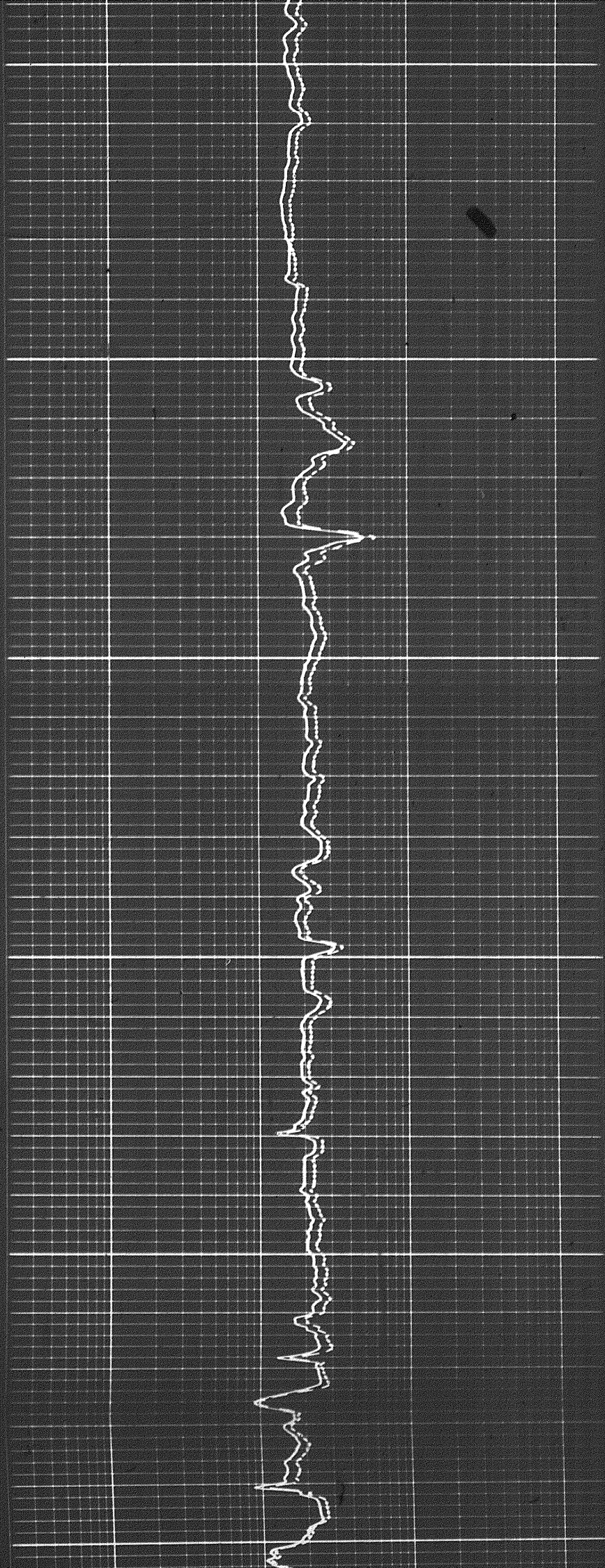


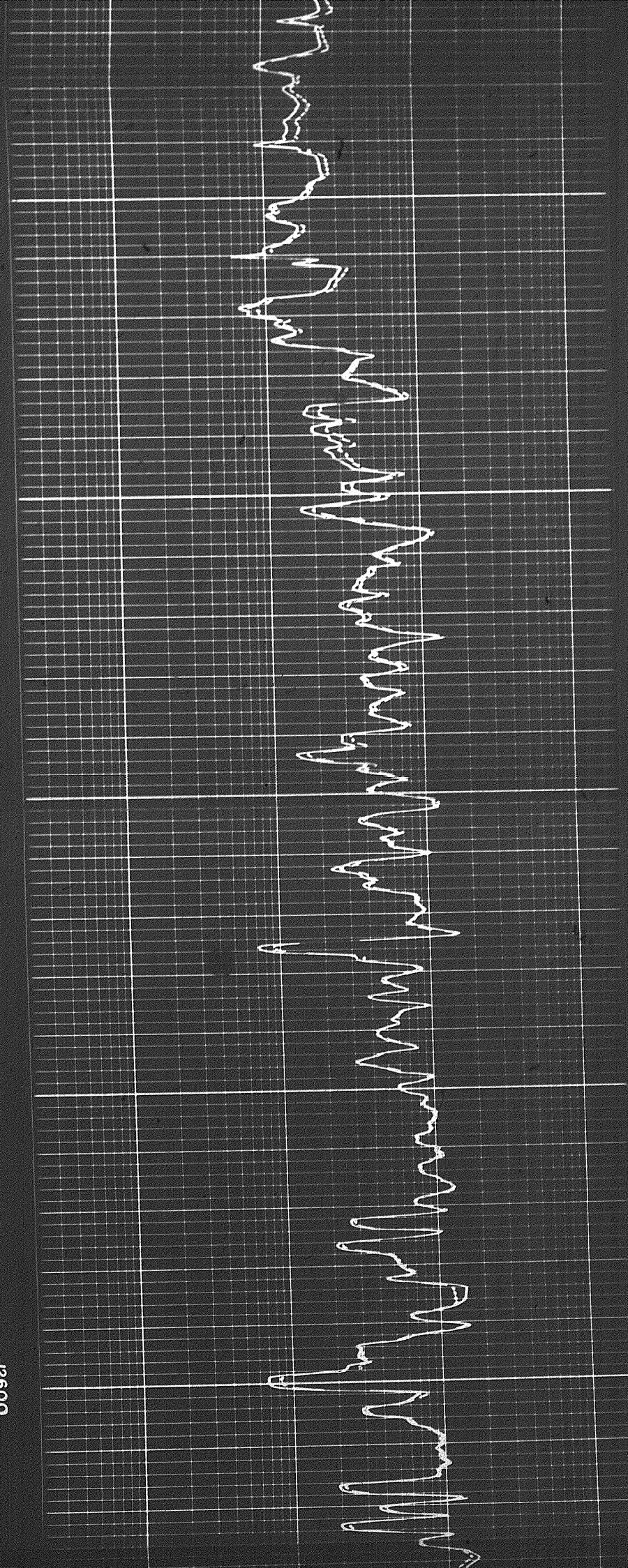


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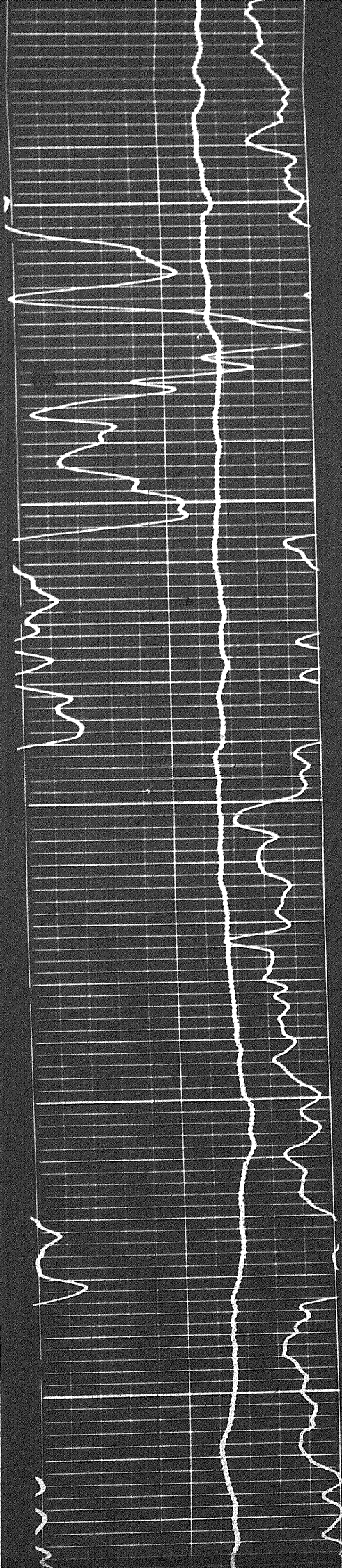


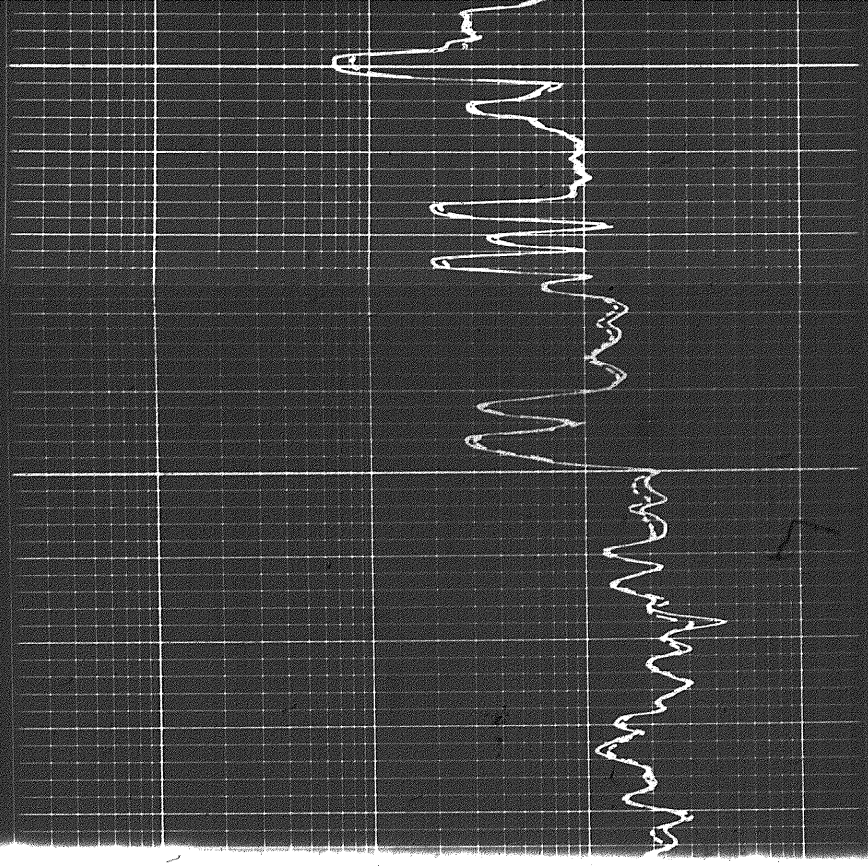


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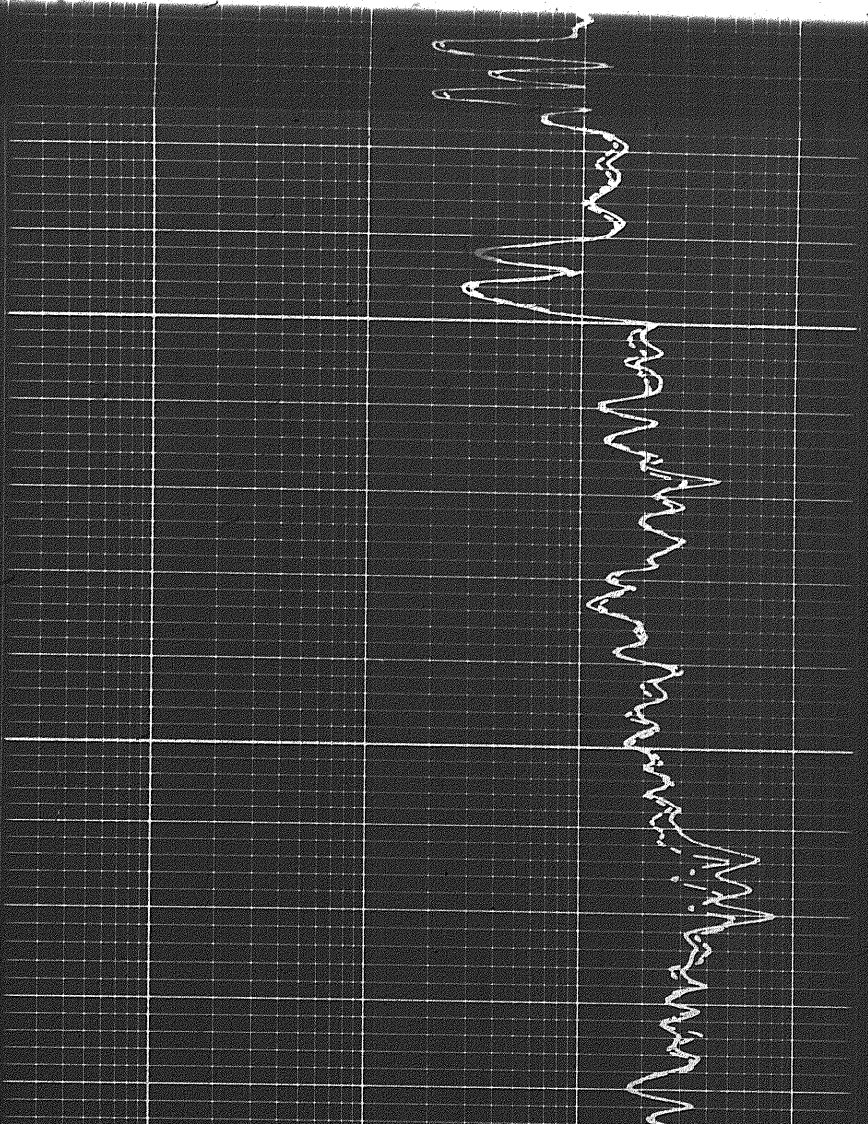
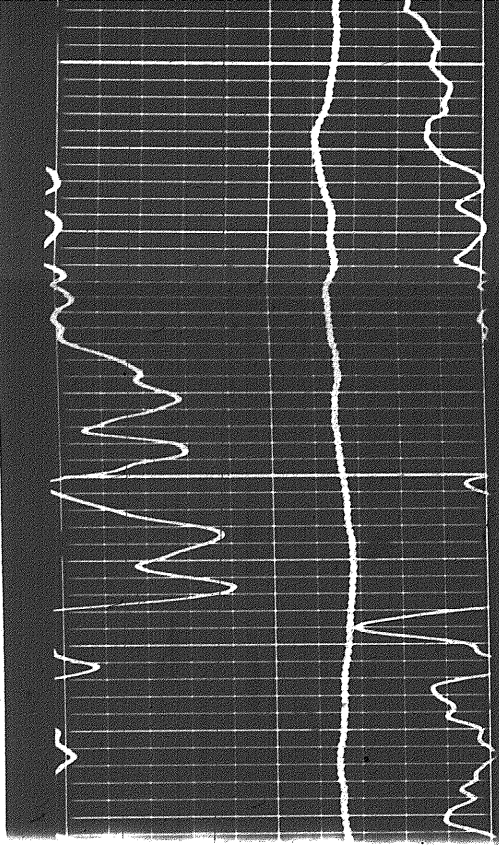
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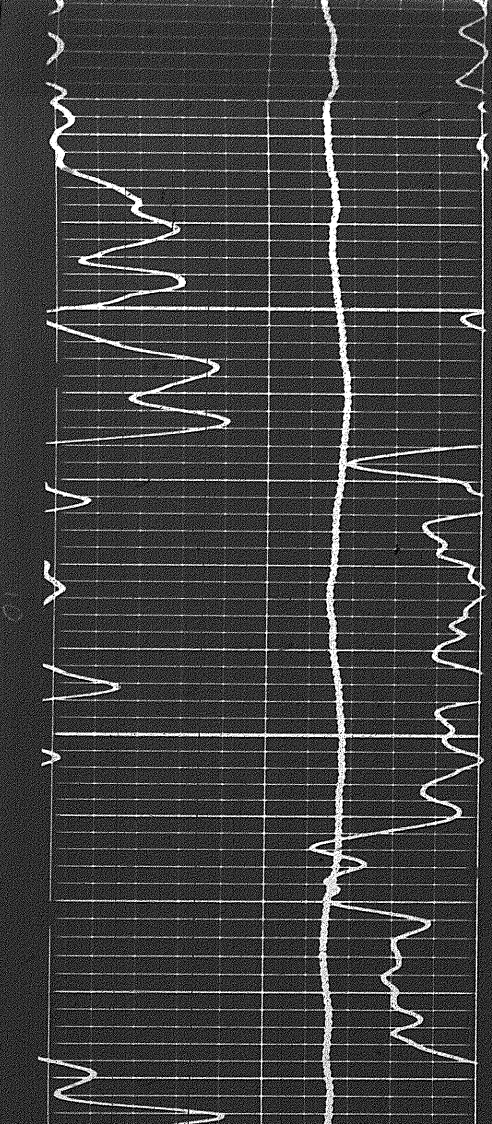


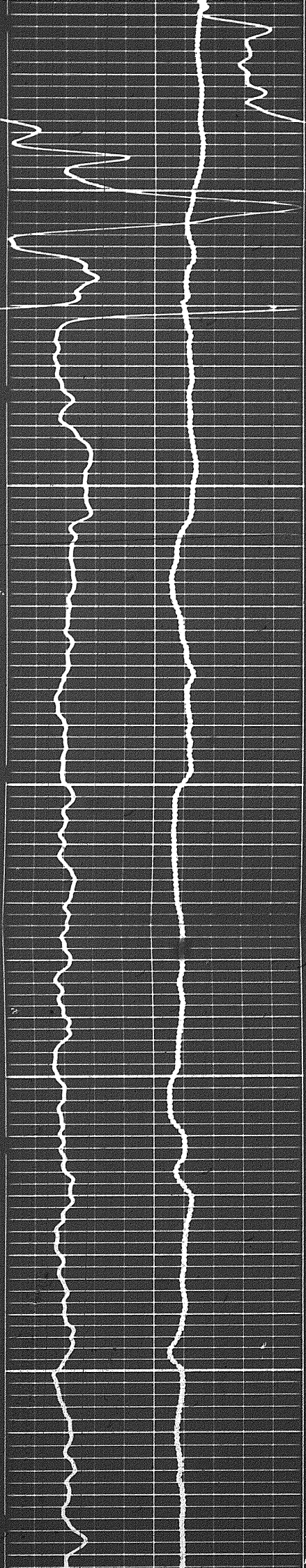


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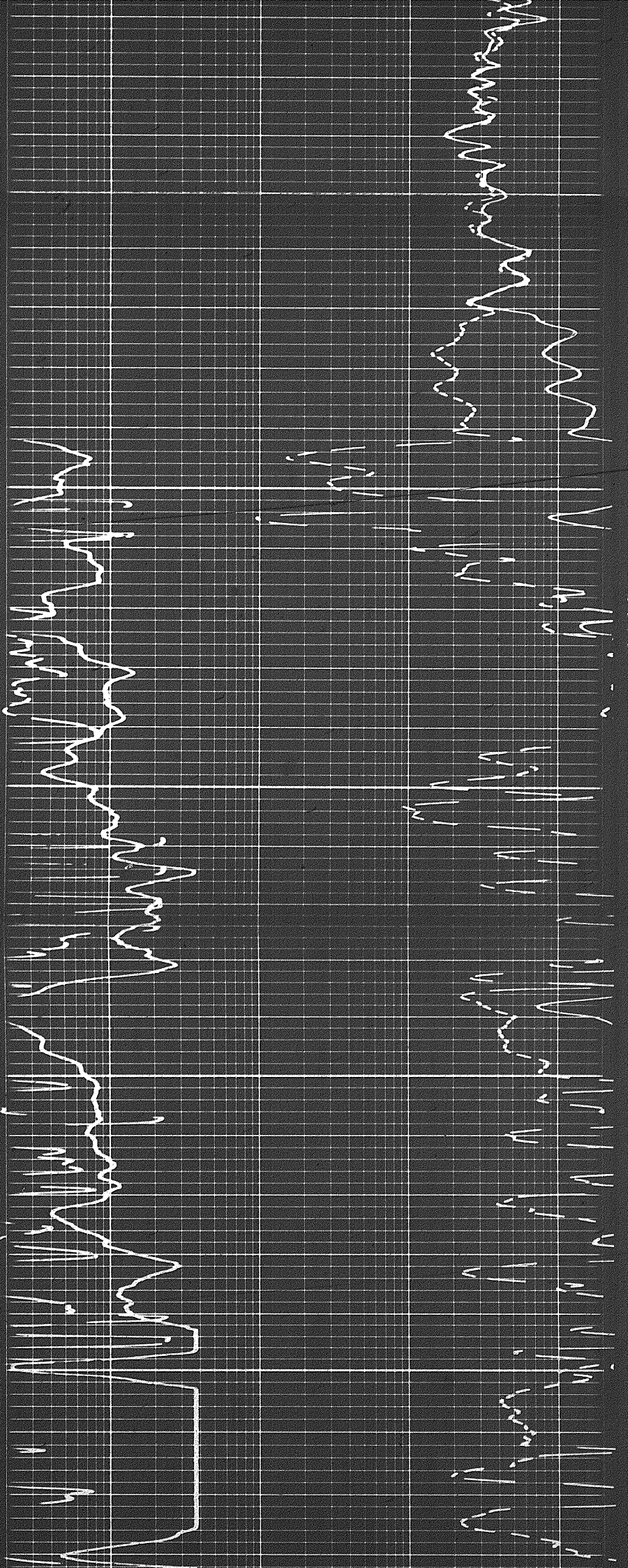
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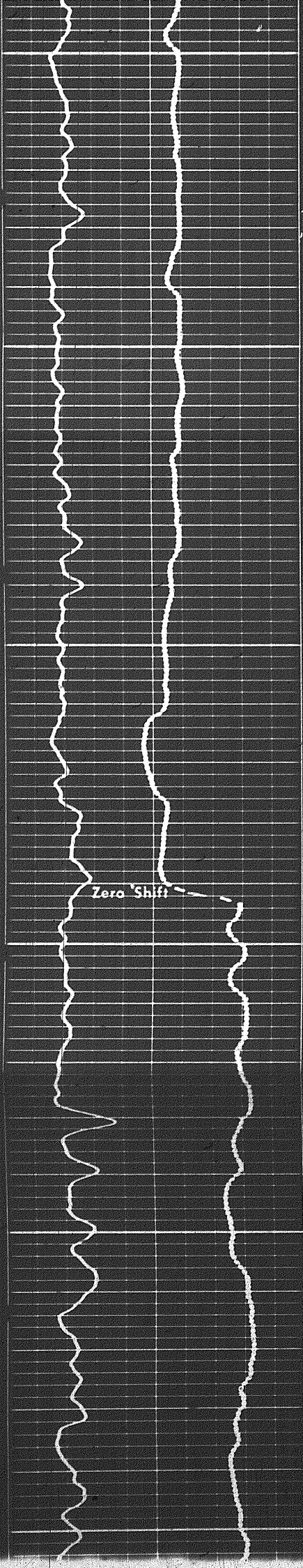




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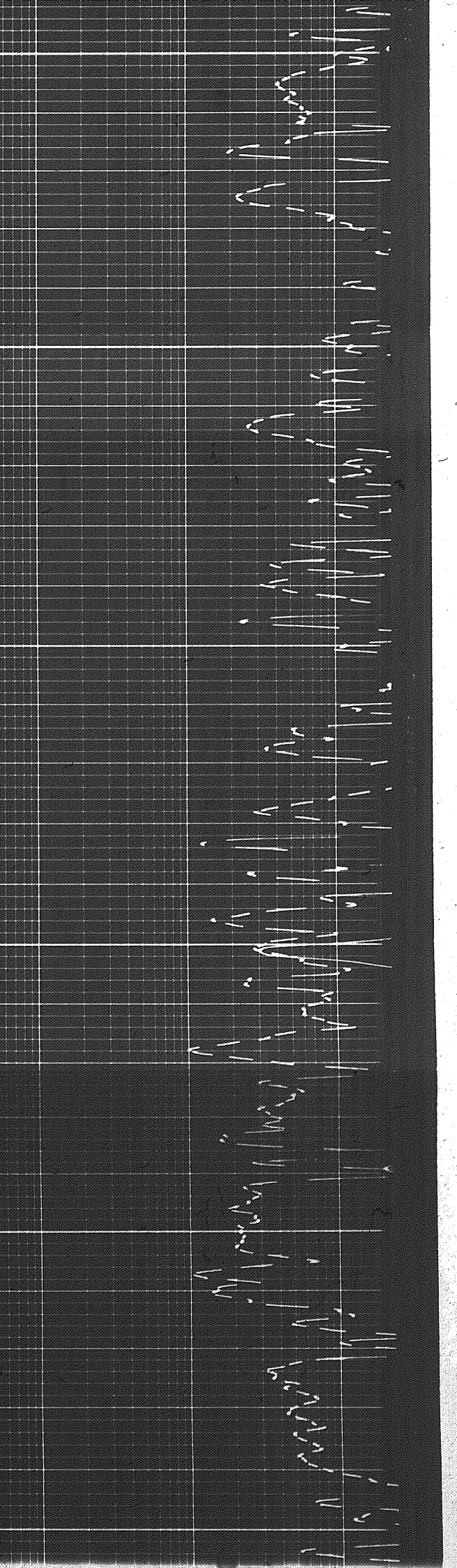
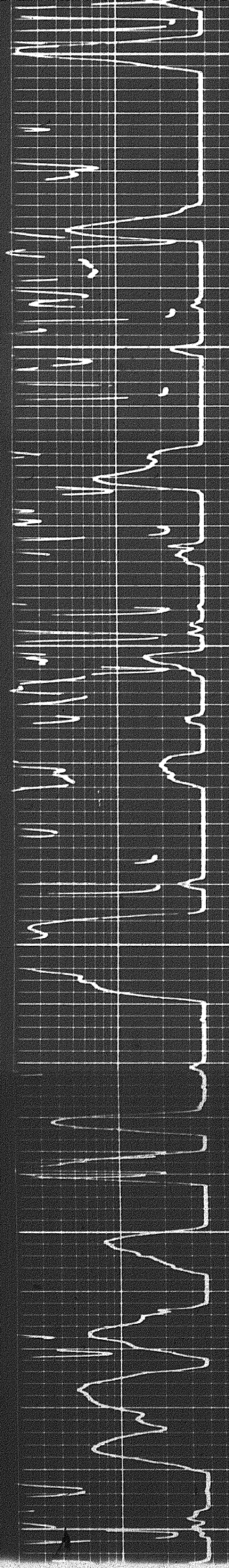


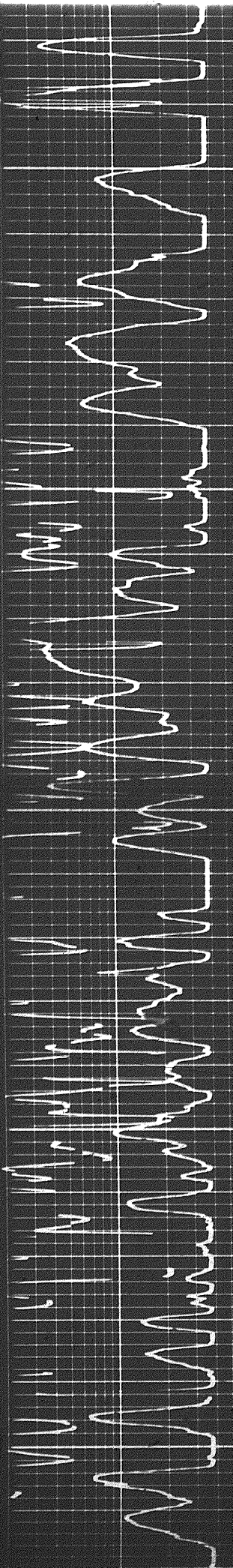
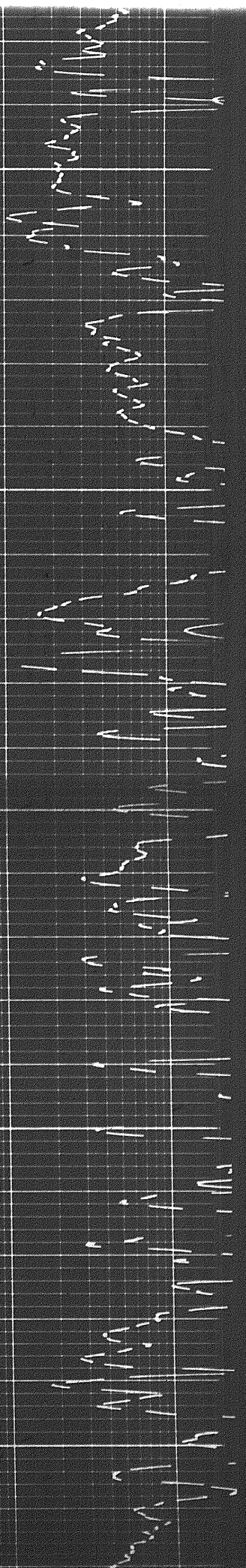


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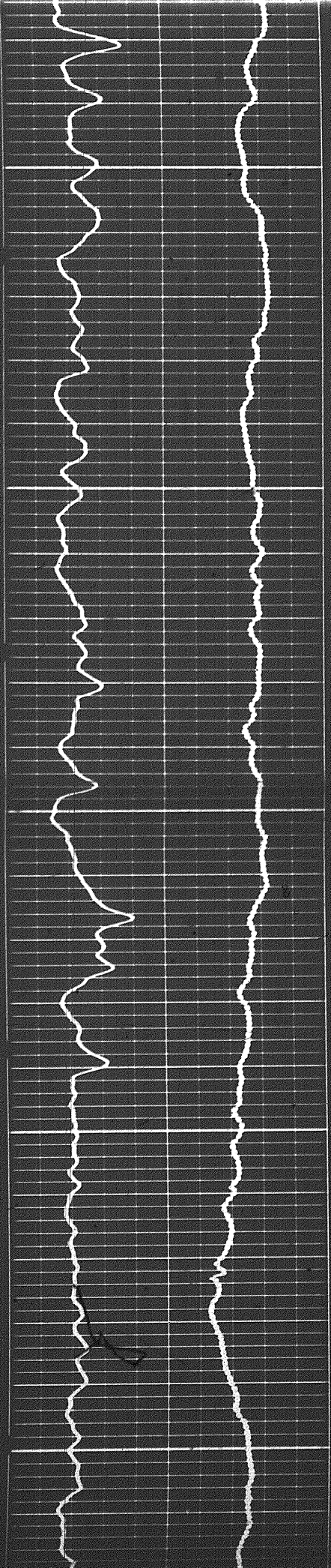
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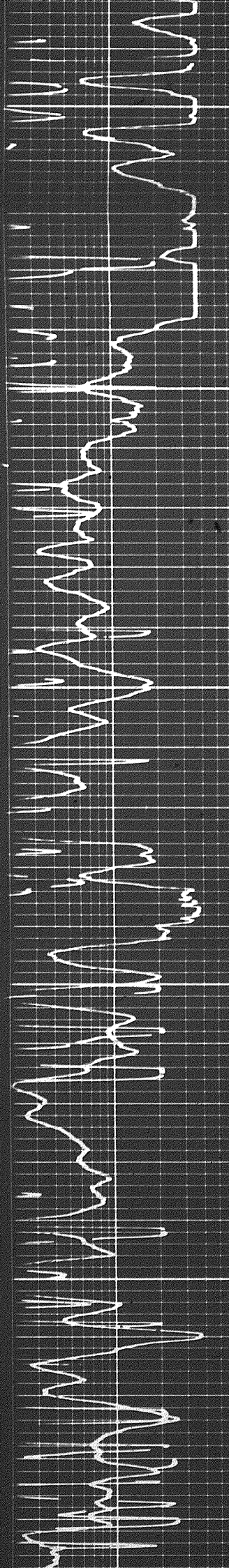
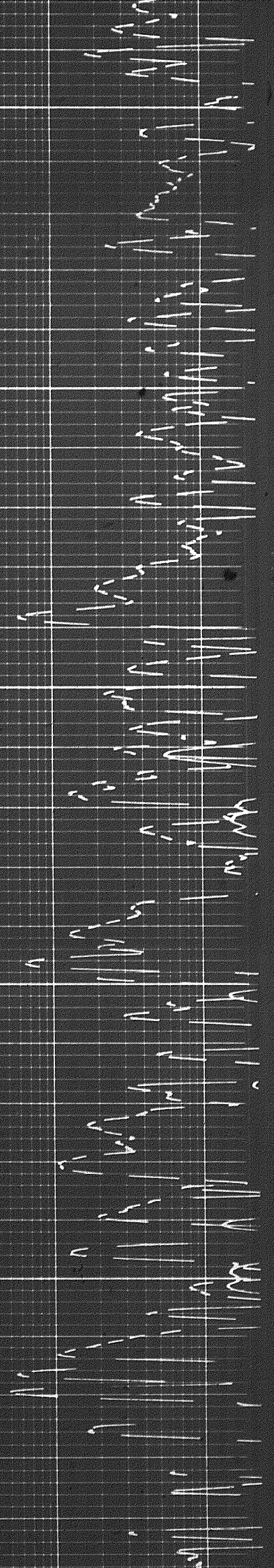




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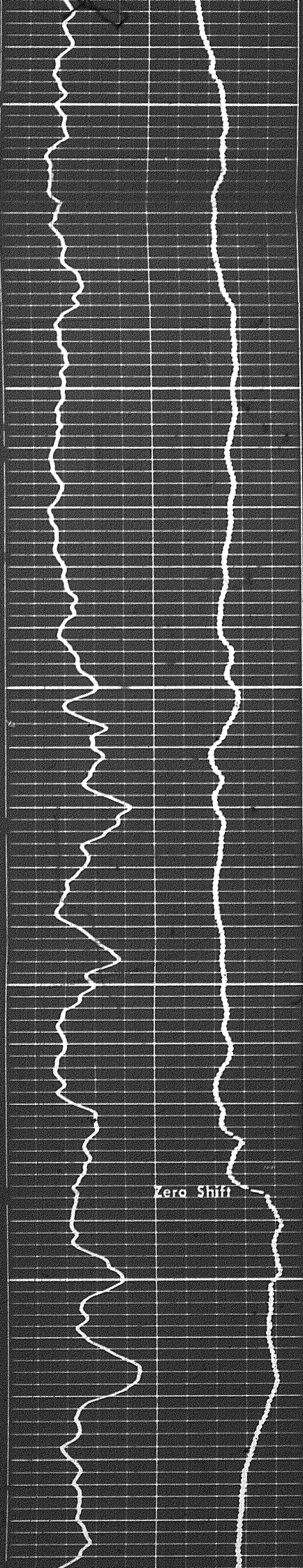


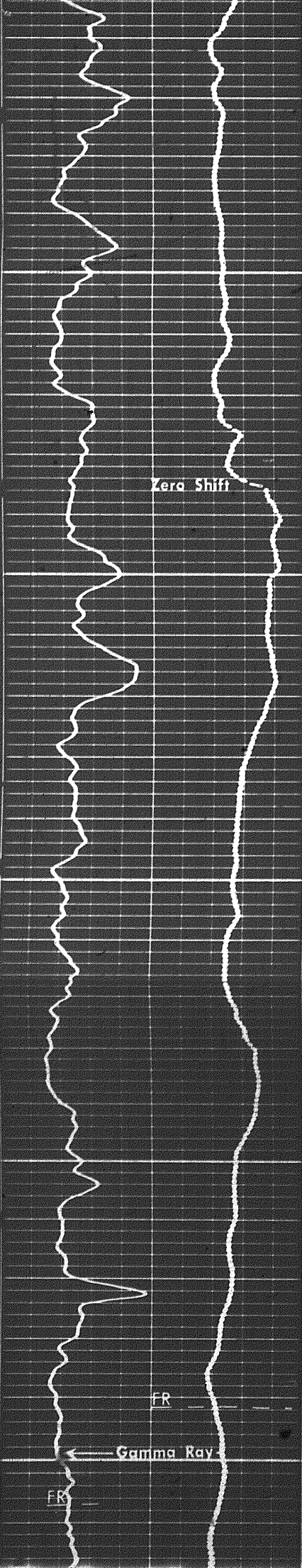


13400

13500

13





Zero Shift

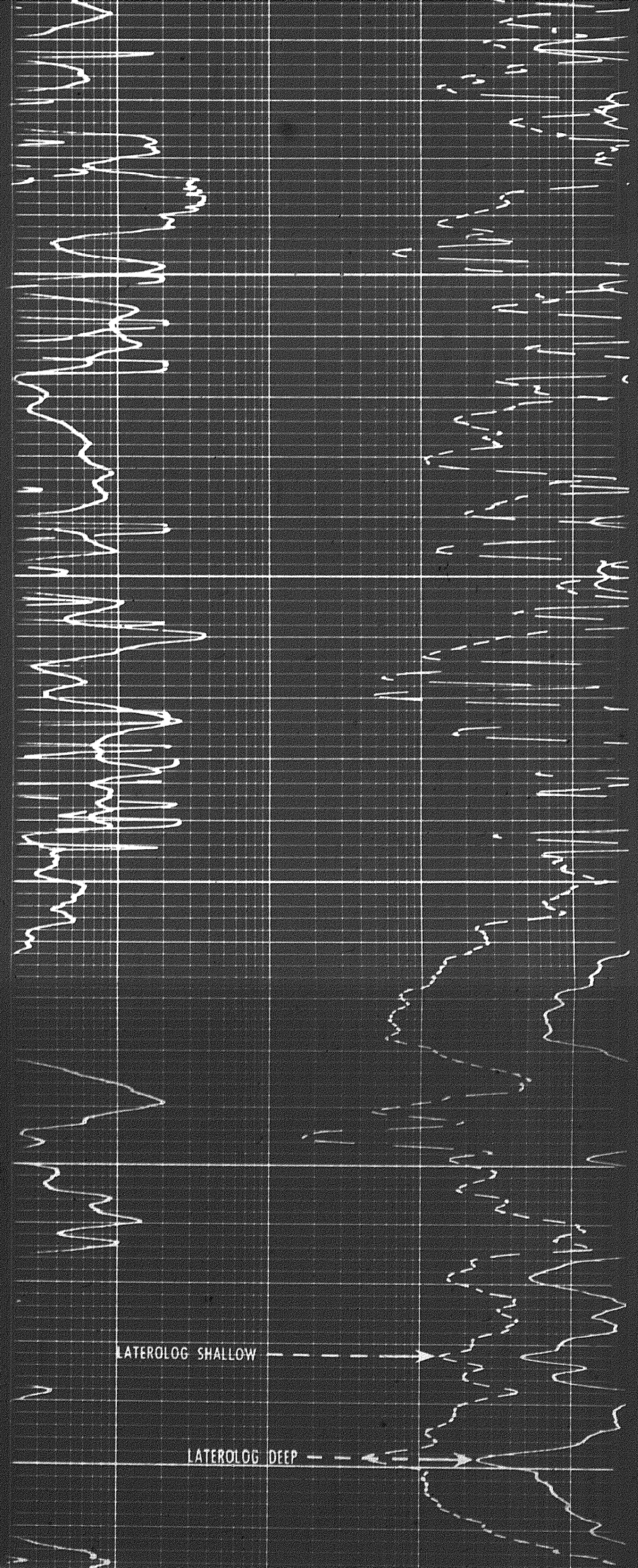
FR

FR

13500

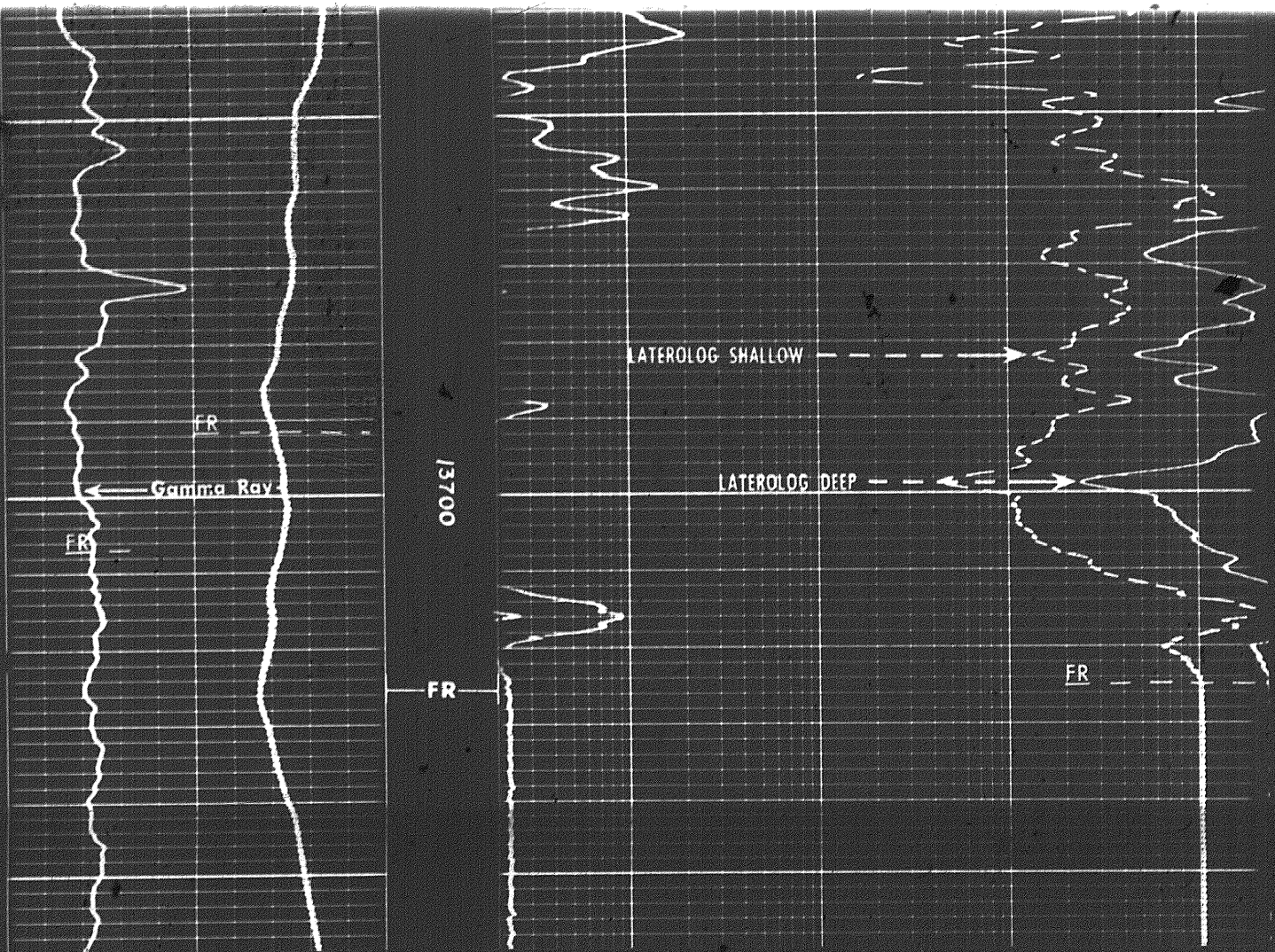
13600

13700



LATEROLOG SHALLOW

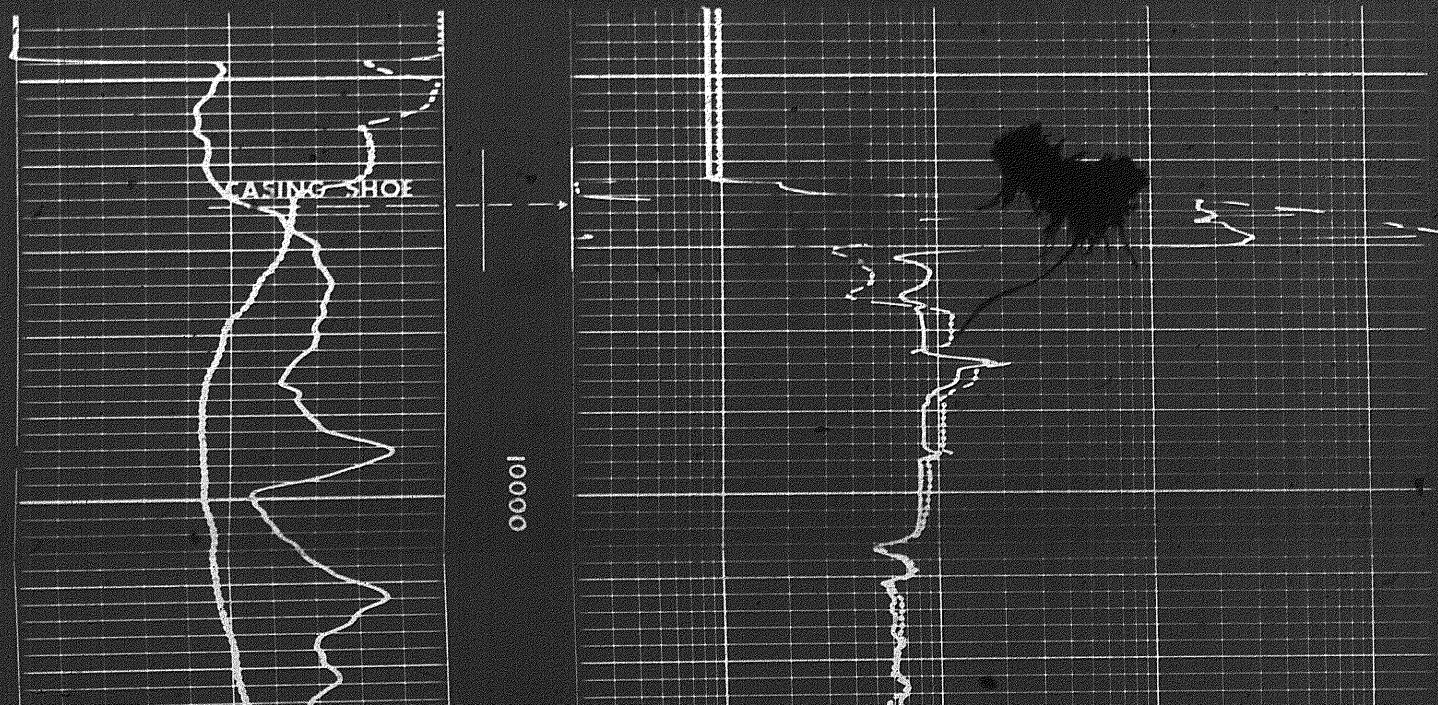
LATEROLOG DEEP



REPEAT SECTION

↓

X 3000



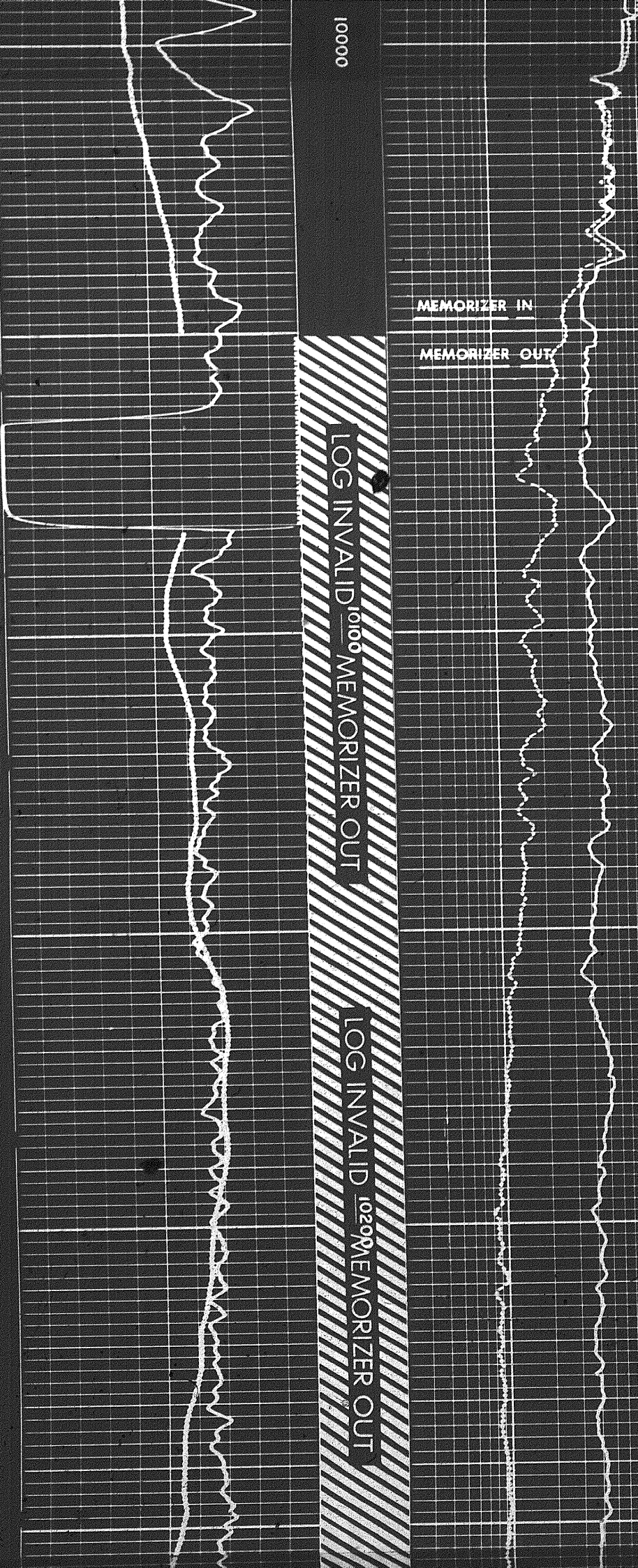
10000

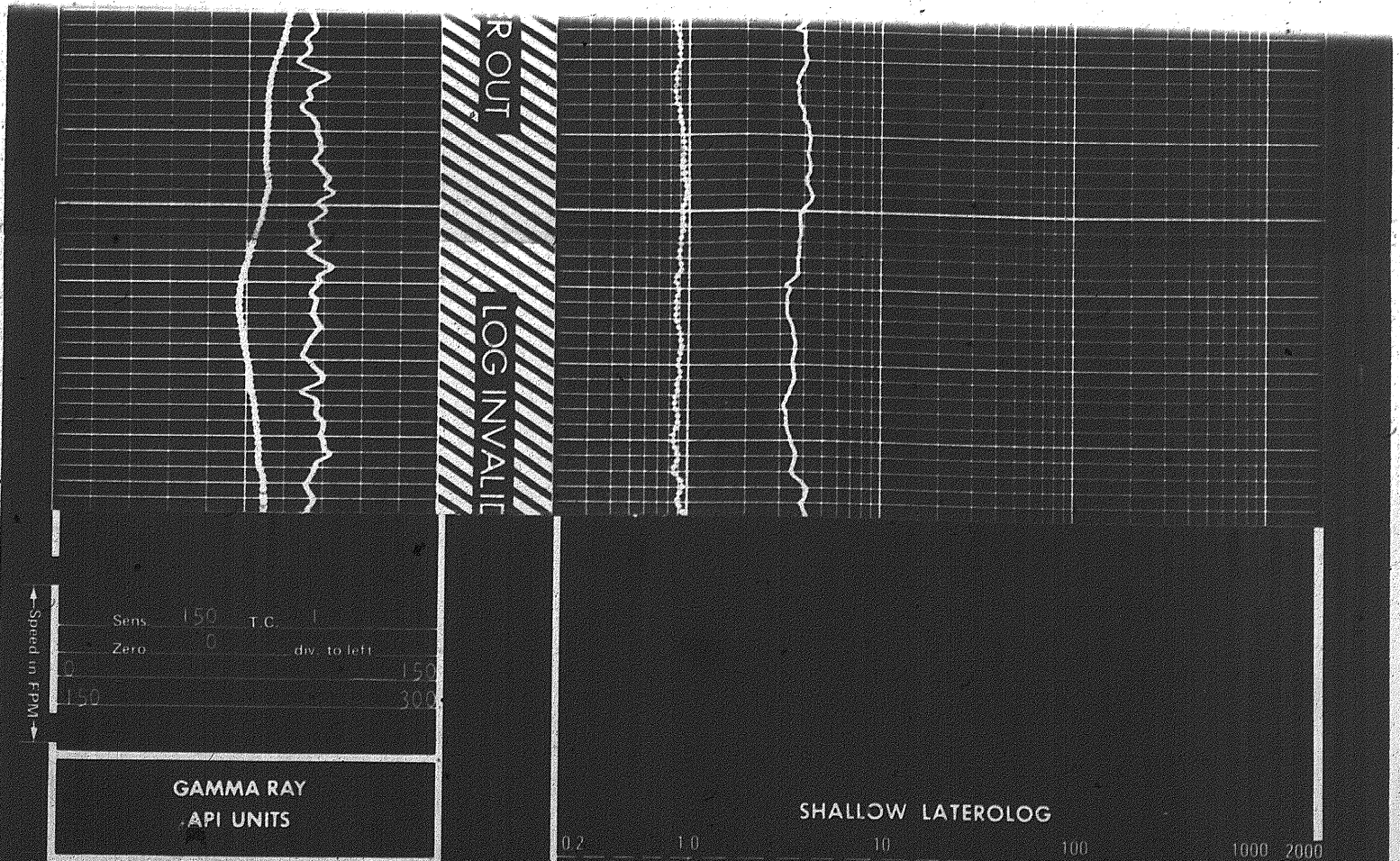
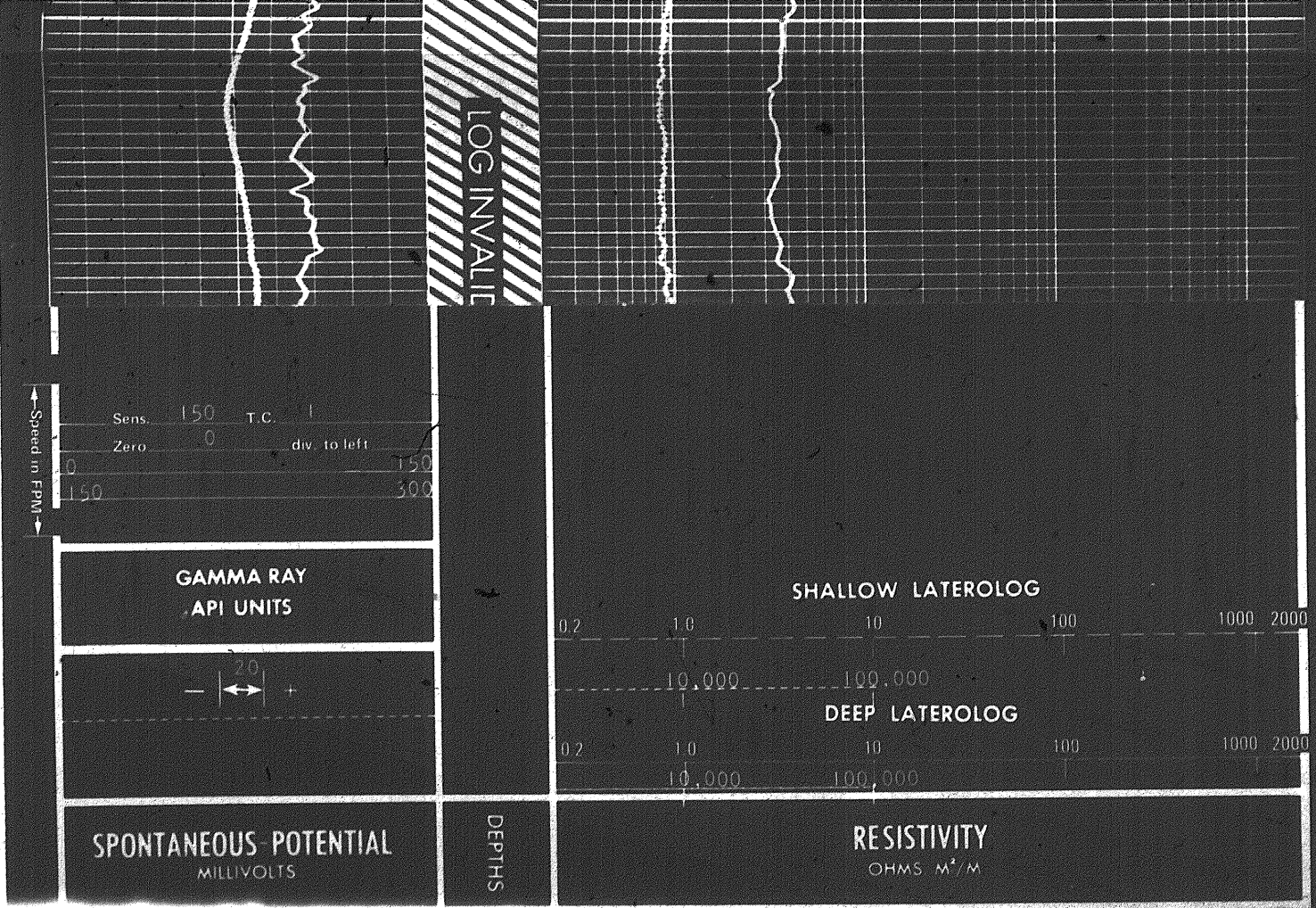
MEMORIZER IN

MEMORIZER OUT

LOG INVALID ¹⁰¹⁰⁰ MEMORIZER OUT

LOG INVALID ¹⁰²⁰⁰ MEMORIZER OUT

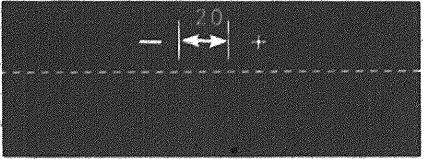




F.P.M. →

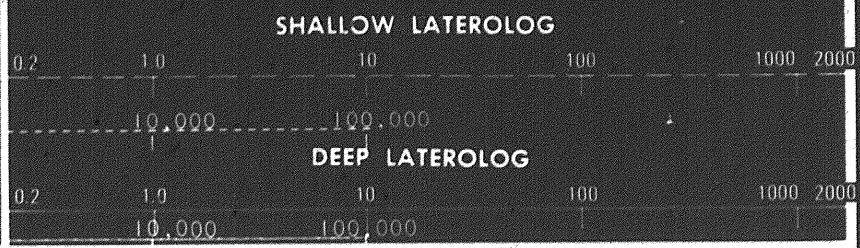
150 300

GAMMA RAY
API UNITS

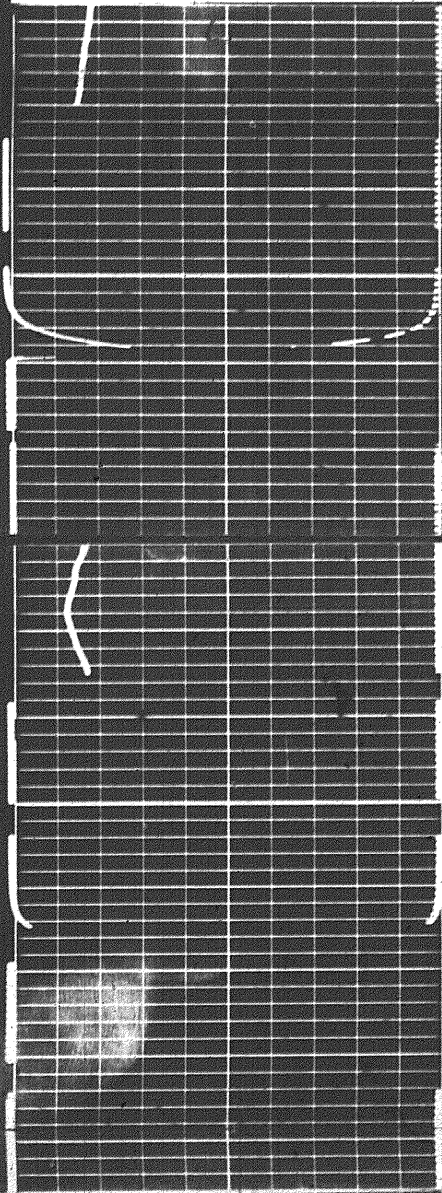


SPONTANEOUS-POTENTIAL
MILLIVOLTS

DEPTHS



RESISTIVITY
OHMS M²/M



5

4

3

2

1

5

4

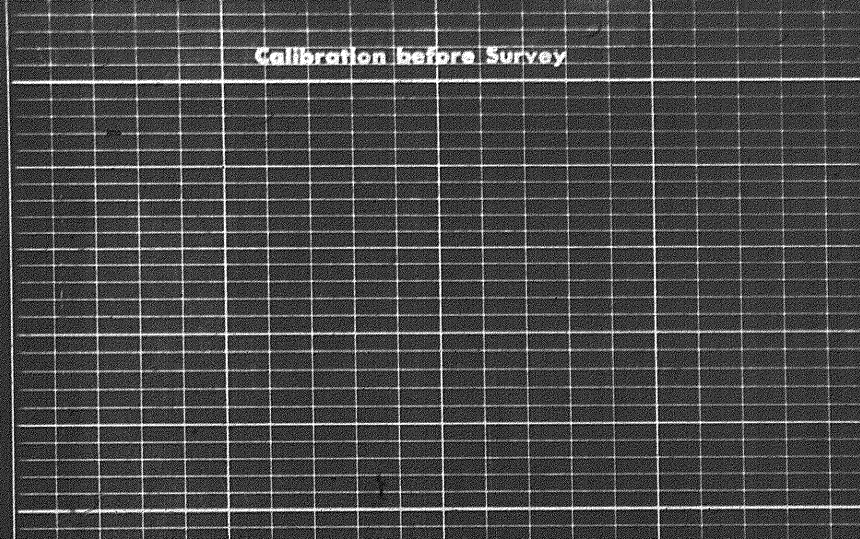
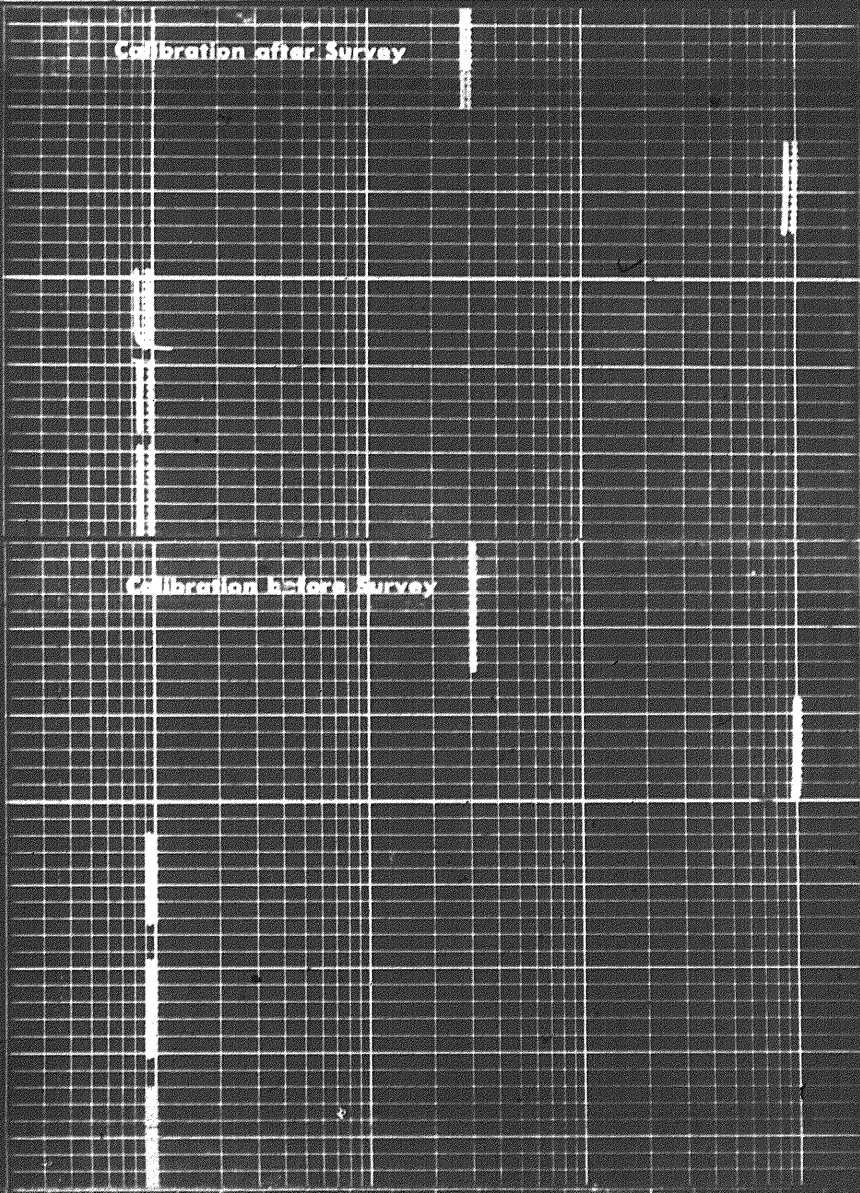
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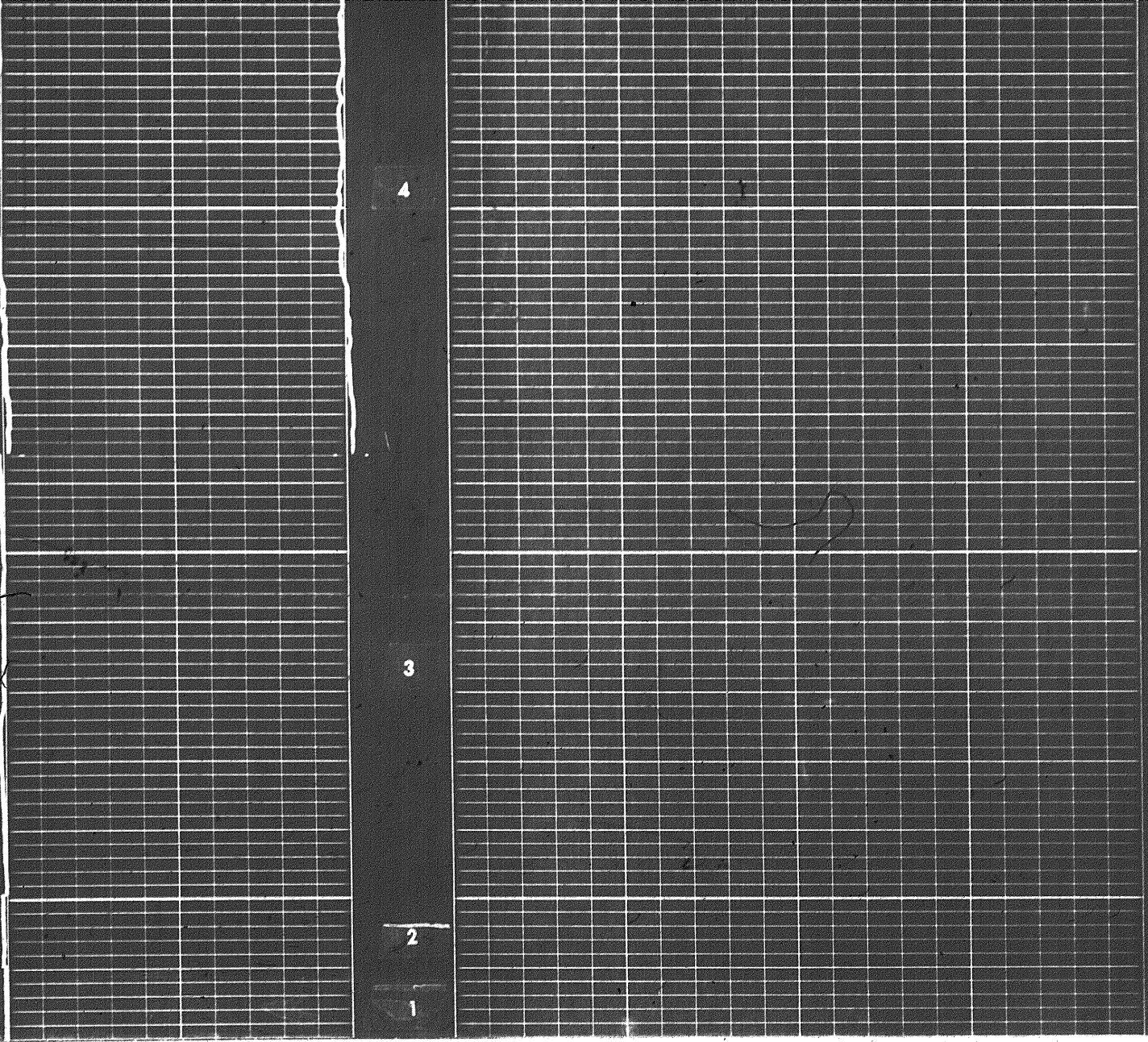
2

1

5

4





DUAL LATEROLOG CALIBRATION FILM CODING

Dual Laterolog Calibration Coding

- 1. Mechanical Zero
- 2. Record Set (SP Calibrate)
- 3. Test - 1 (: ohm-m)
- 4. Test - 2 (1000 ohm-m)
- 5. Tool Cal (31.6 ohm-m)

Gamma Ray Calibration Coding

- 1. Mechanical Zero
- 2. Test - 1 - Electrical Zero
- 3. Tool Cal - Background
- 4. Tool Cal - Test Jig On
- 5. Cal Check f = _____

COMPANY COLUMBIA GAS DEVELOPMENT OF CANADA LTD

WELL COLUMBIA ET AL KOTANEELEE YF E-37

FIELD WILDCAT

PROVINCE YUKON

SCHL. FR 137210

SCHL. TD 137400

DRLR. TD 137400

Elev.:

KB 0030

DF

GL