

Schlumberger

**BOREHOLE COMPENSATED
SONIC LOG**
SCHLUMBERGER OF CANADA
Calgary, Alberta

PROVINCE ALBERTA
FIELD WILDCAT
WELL COLUMBIA ET AL F02AN1111
COMPANY CUMMINS LTD

COMPANY
WELL
FIELD
PROVINCE ALBERTA
LOCATION 05' 27" N
Permanent Datum
Log Measured from
Elev
Ft Above Perm Datum
Other Services
ELEV. KB
GL
CBI

Date	Run No	First Reading	Lost Reading	Feet Measured	Depth Reached	Bottom Driller	Log SOC	Log Driller	Mud Nature	Dens	Mud pH	Water Loss	Res	Rmt	Rmc	Bit Size	Spore	Op. Rig Time	Truck No	Recorded By	Witness



REMARKS
Drilling Stopped 0900 / 9th Circulation Stopped 2400 / 10th Tool on Bottom 1442 / 11th B.H.T. 308 °F 1st Run Service Order # 3082

Caliper No. B 358
Cartridge No. EA 523
Panel No. JH 98
Sonde No. NA 1136
Centralizer Type 2 FIN TYPE AND CALIPER

CSG Size 9 5/8 In.
CSG Wt. lb./Ft.

GAMMA RAY CALIBRATION
Background CPS 100 Test Source CPS 260 Galv. Increase Divisions Panel Sens. Tap for Cal

Time Entering Hole
Time Bottom Reached
Time Last Off Bottom BHT No. 1 308 °F
Distance TD to Thermometer 36 BHT No. 2 308 °F
Time Out Of Hole

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

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

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

Sens 150 TC 2 140 30

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

GAMMA RAY
API UNITS

DEPTHS

SONIC
INTERVAL TRANSIT TIME
microseconds per foot

Speed in FPM

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

150 300

CALIPER
hole diameter in inches

6 7 8 9 10 11 12 13 14

140 20
240 190

NOTE: SCALE CHANGE AT 12,195'

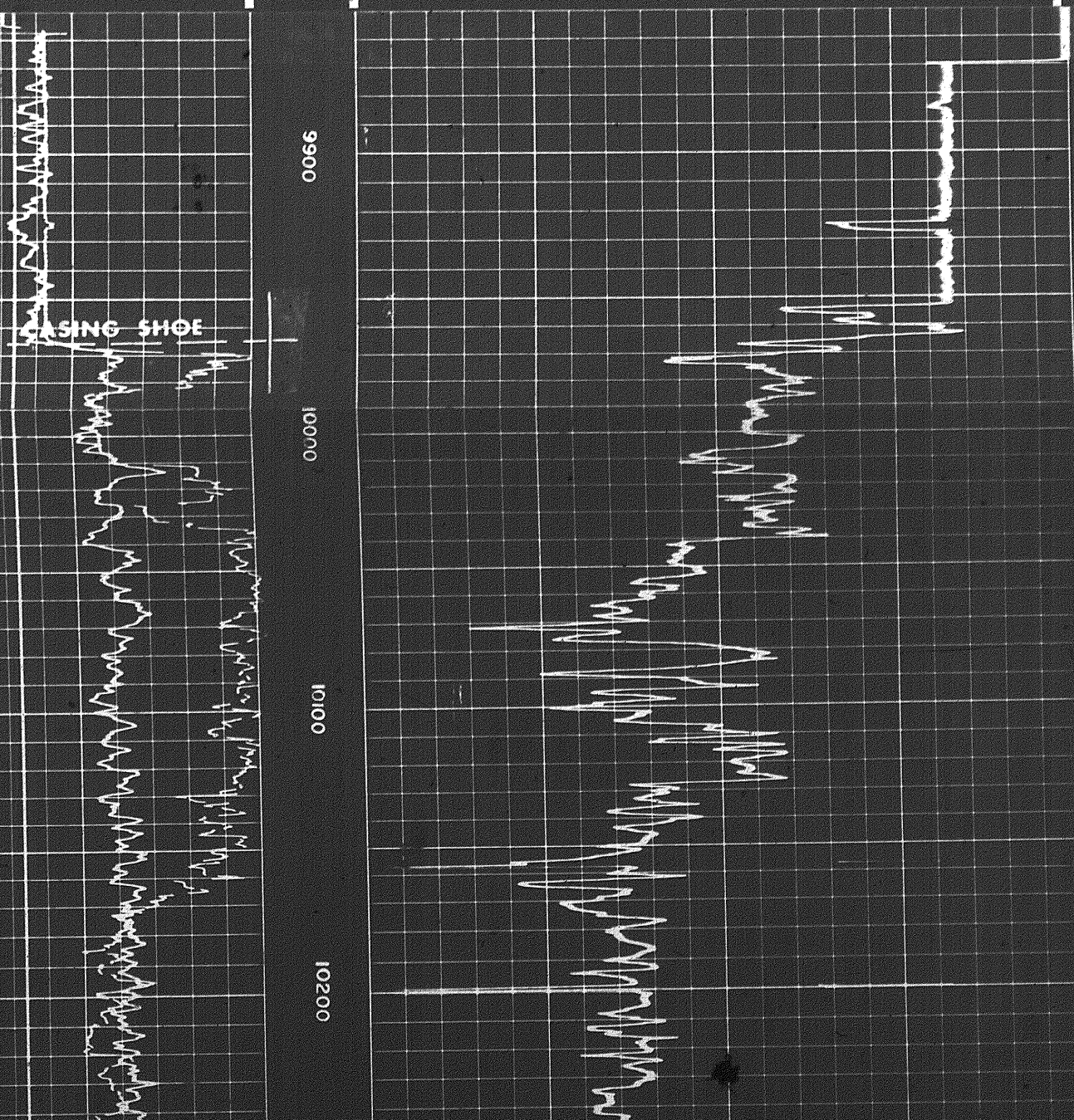
CASING SHOE

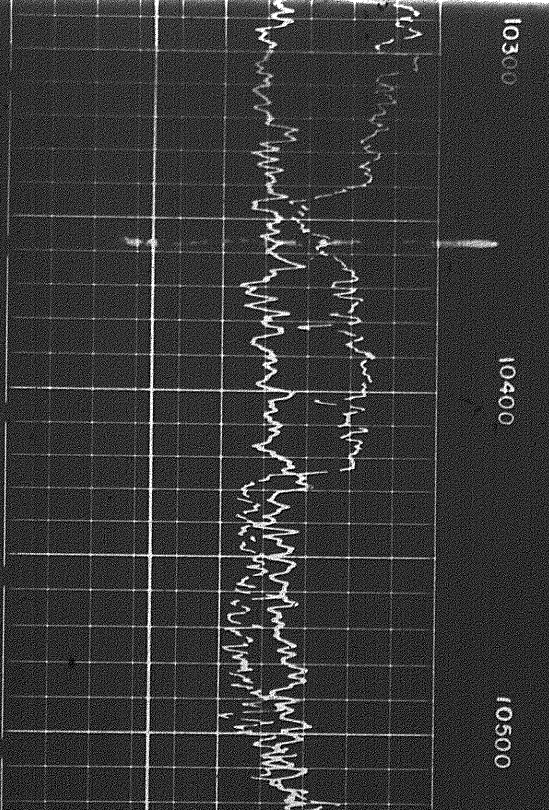
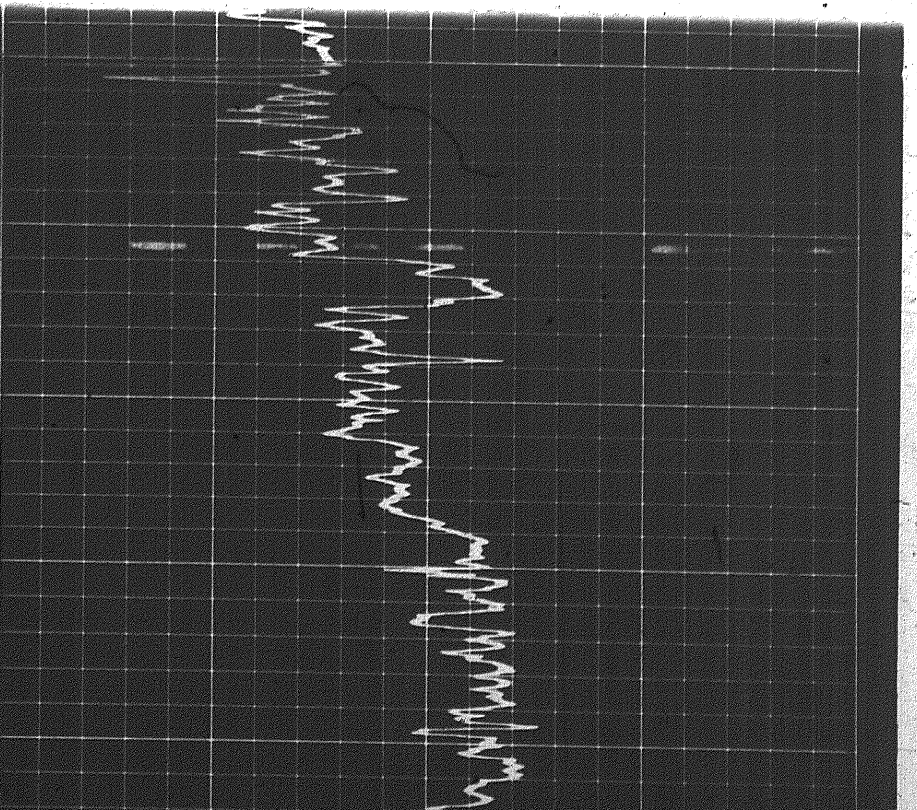
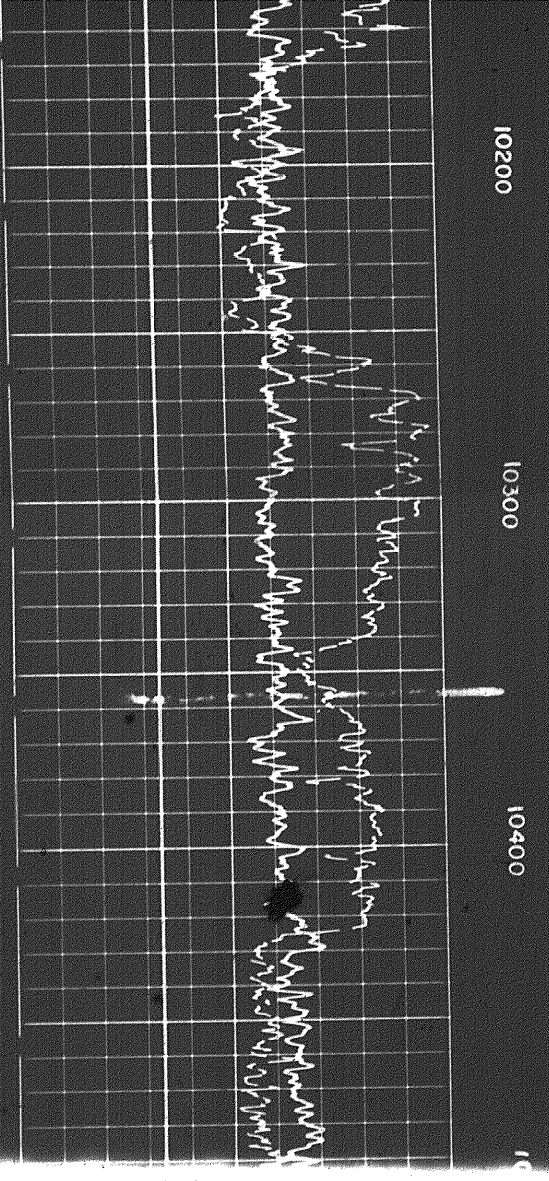
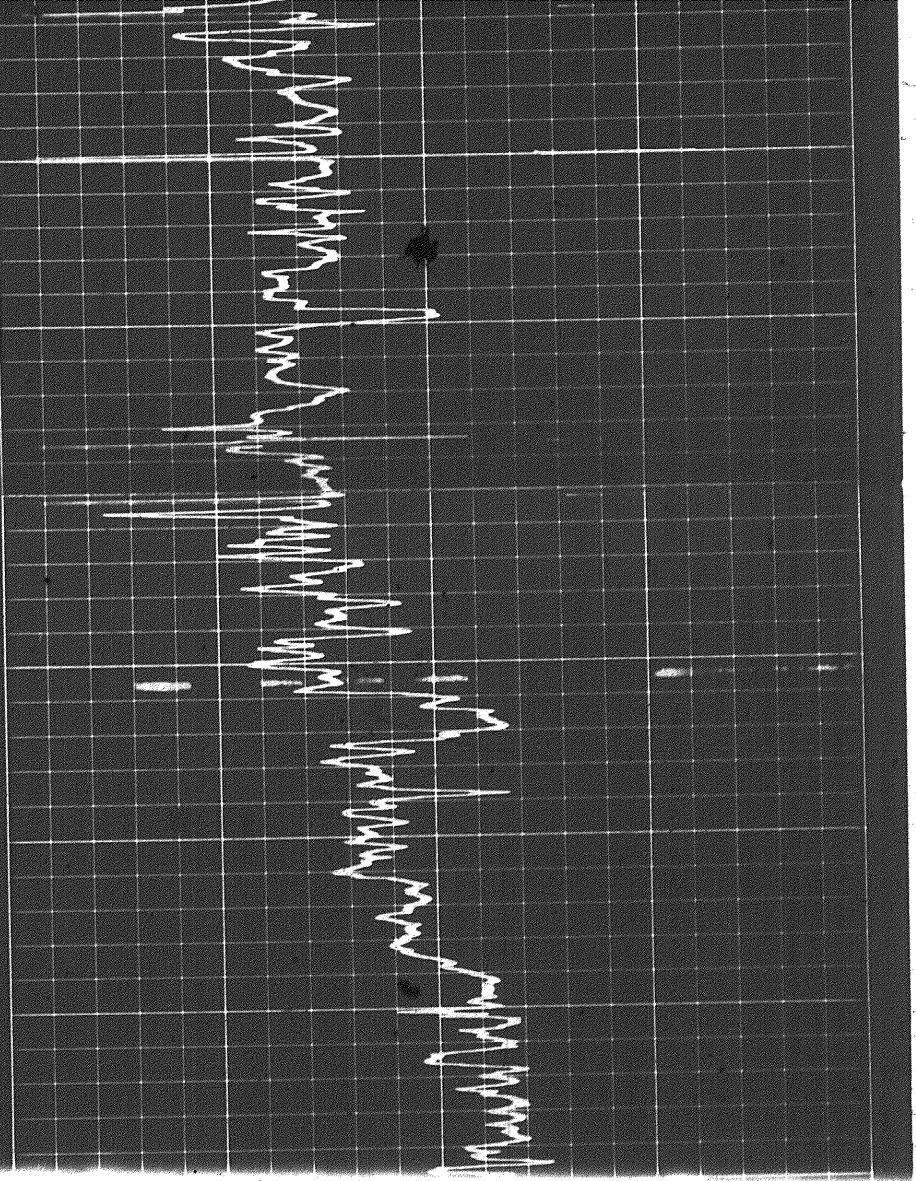
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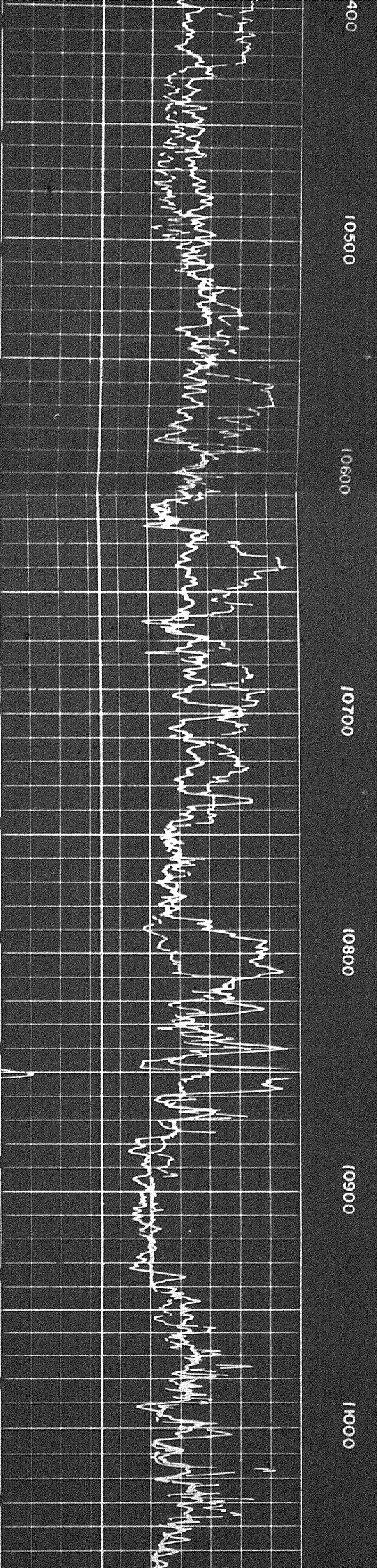
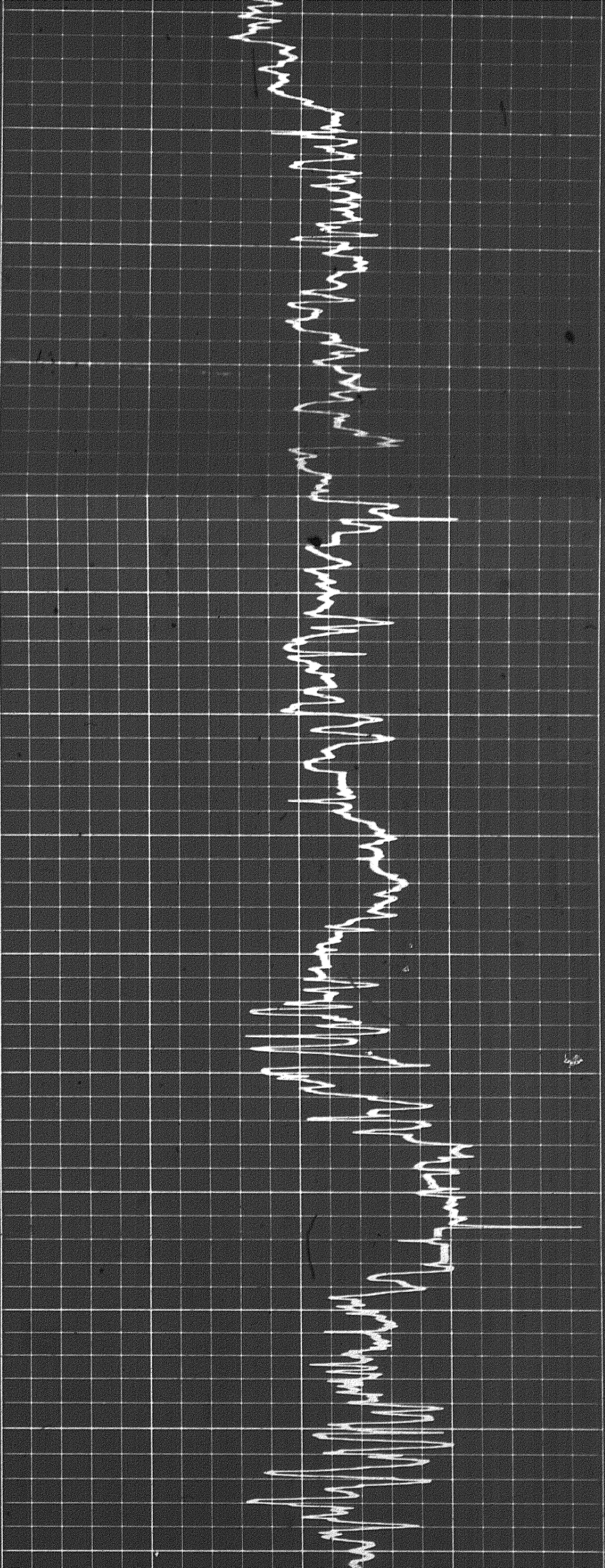
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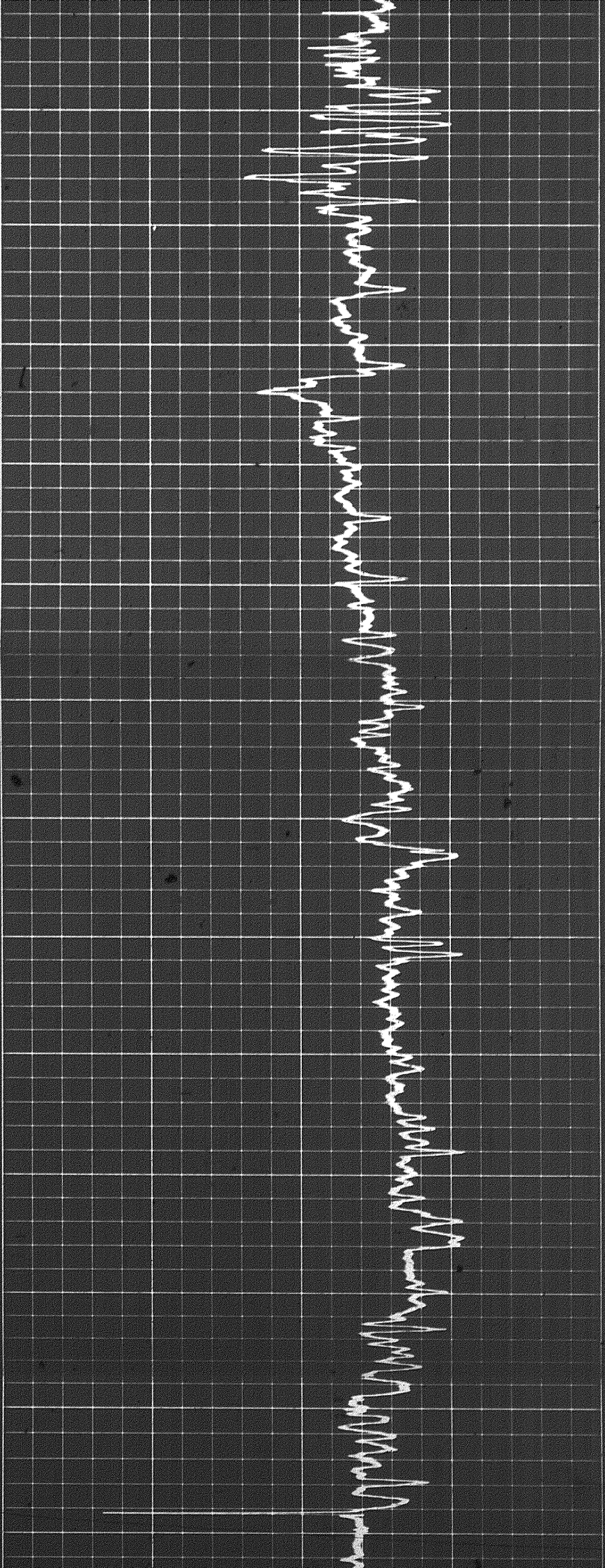
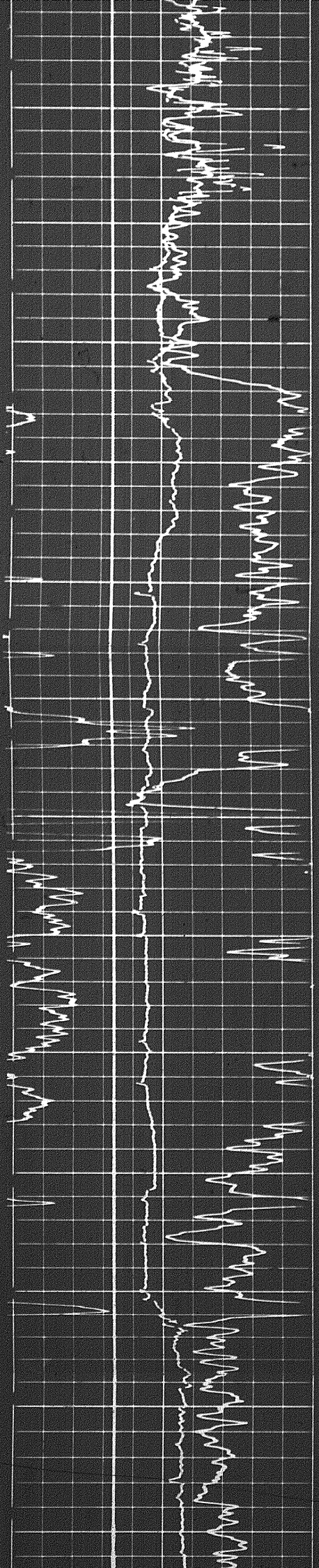
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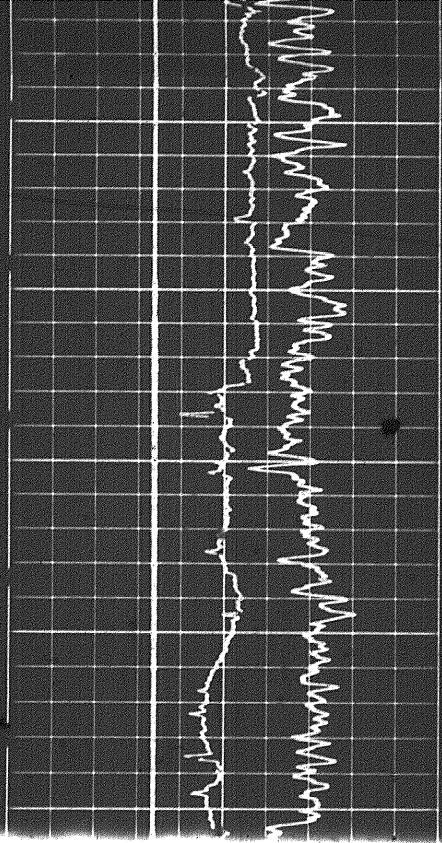
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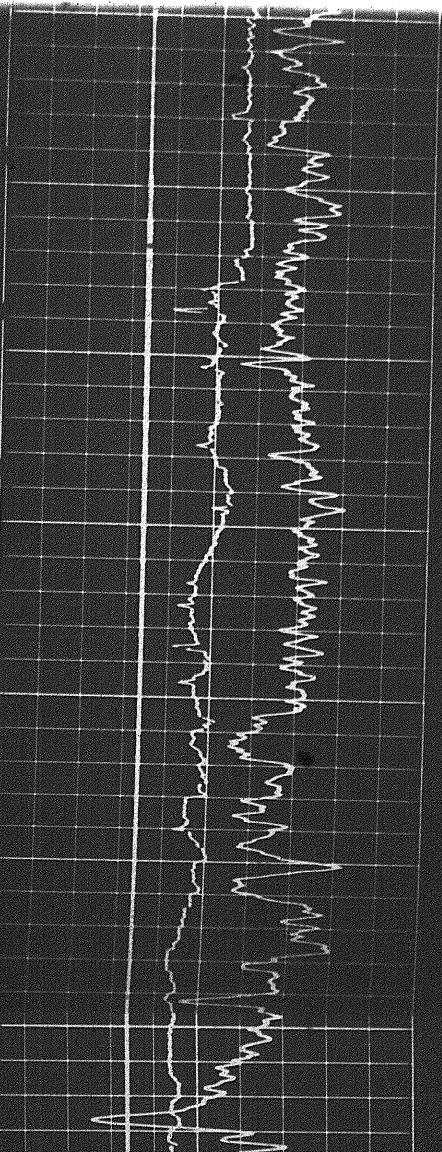
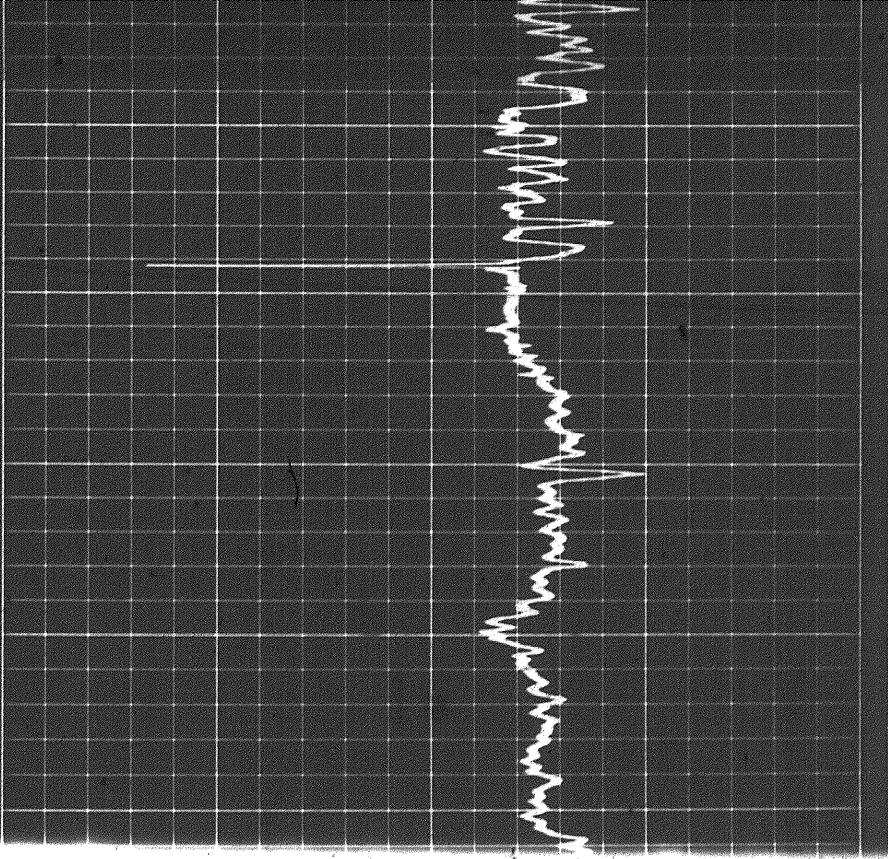






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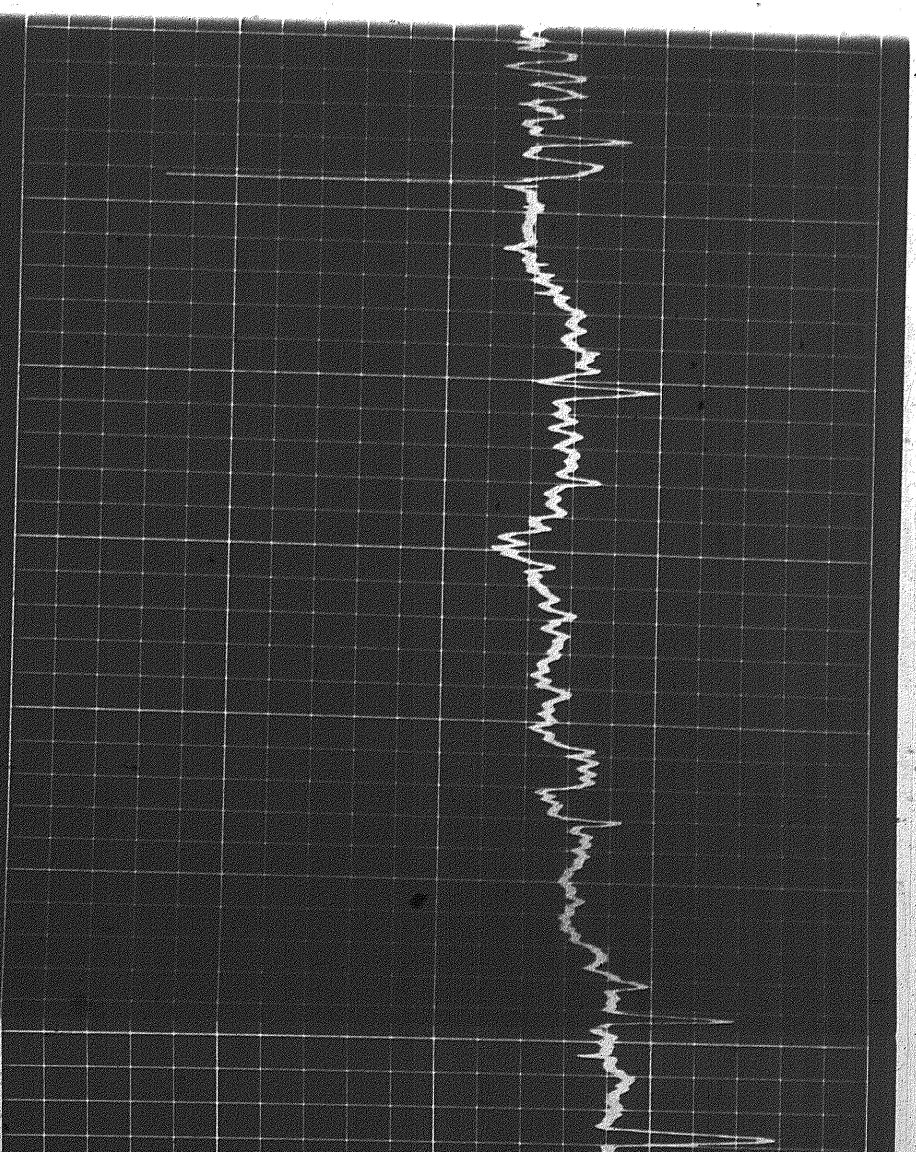
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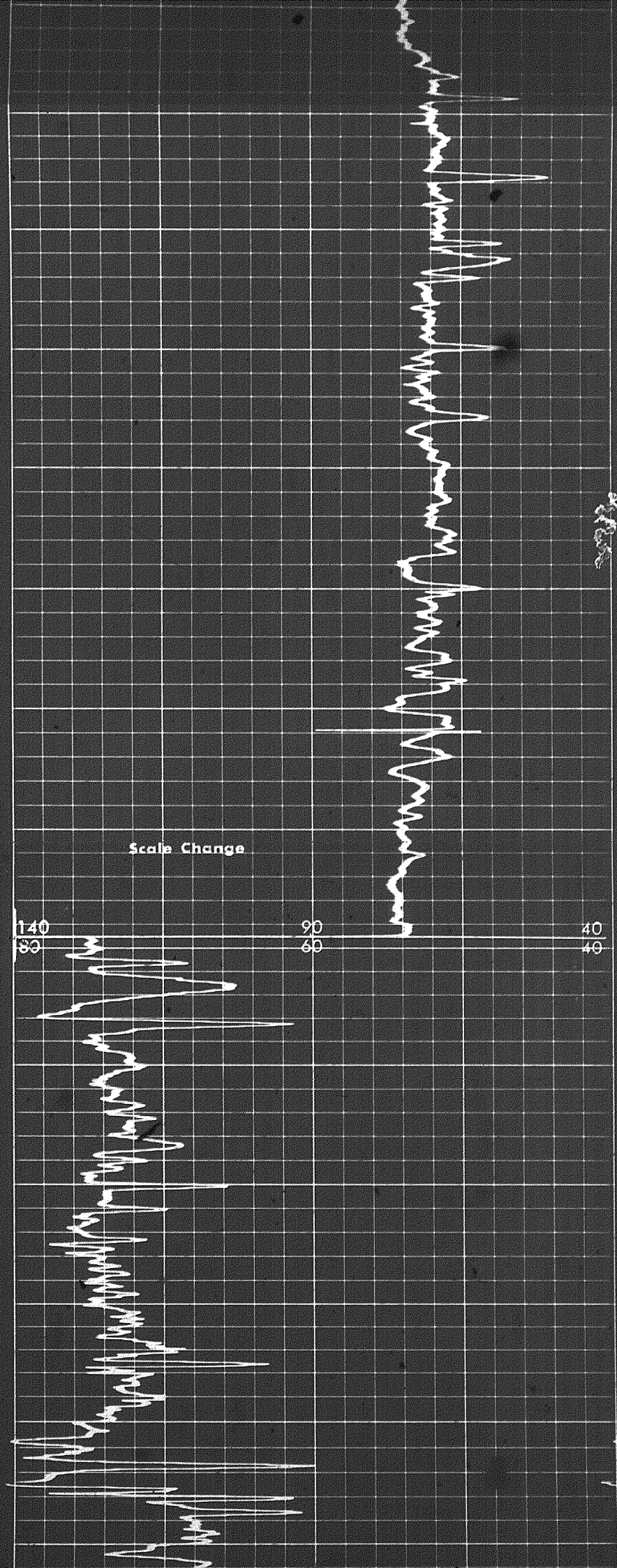
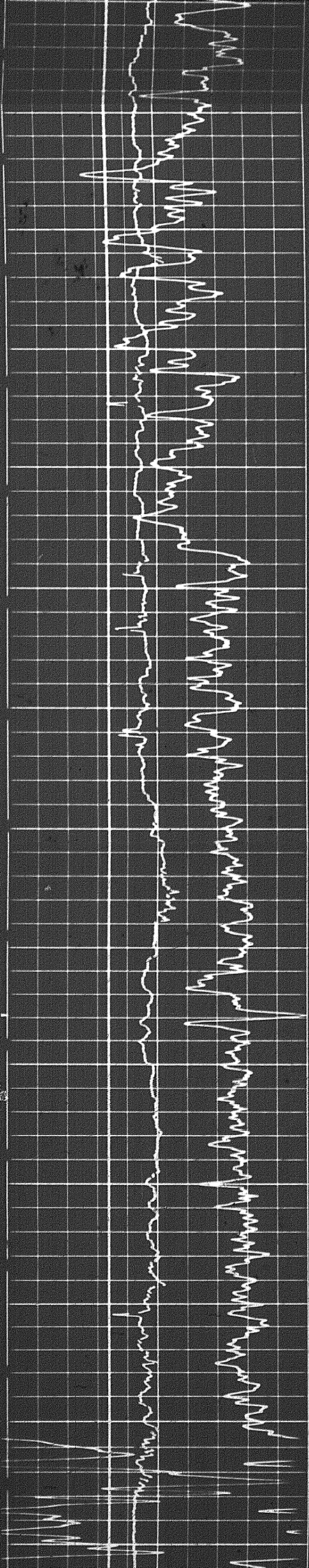


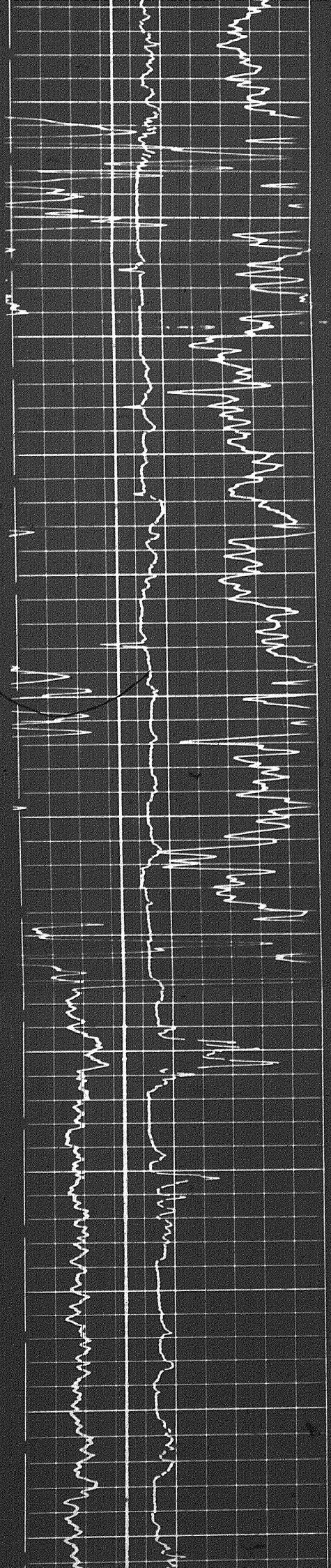
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1700

1800







12400

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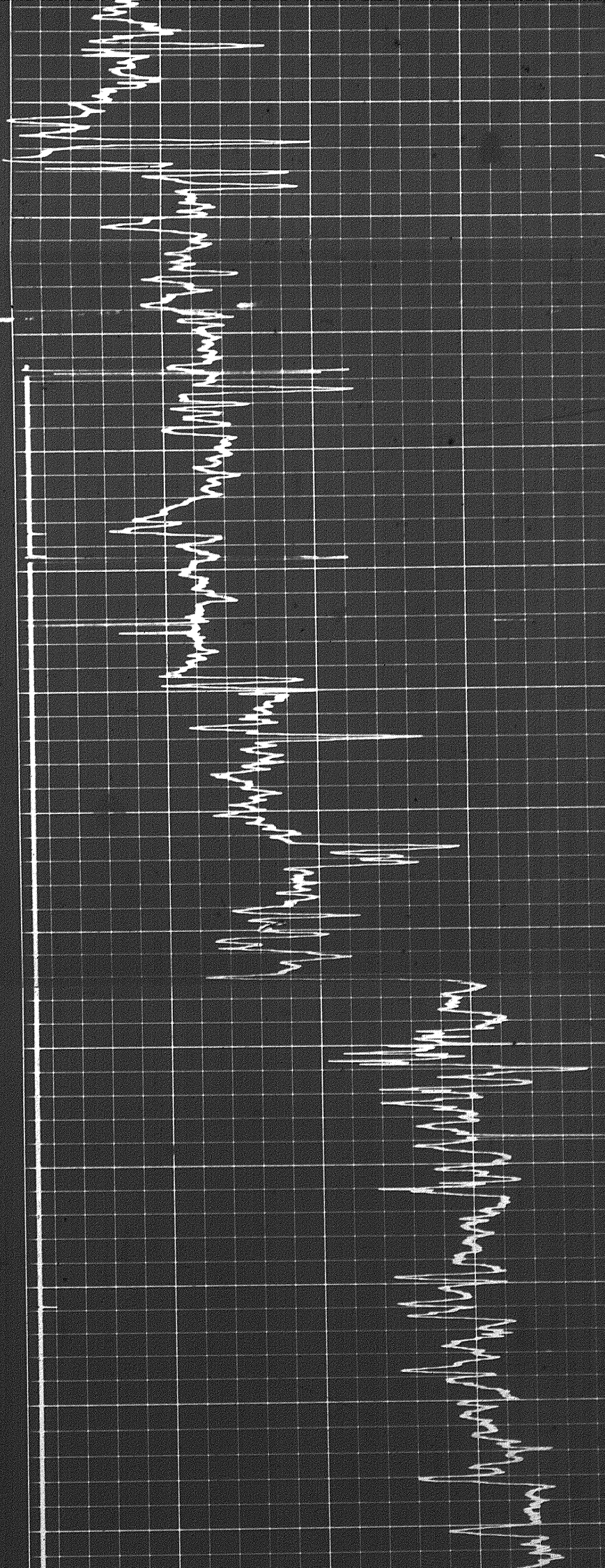
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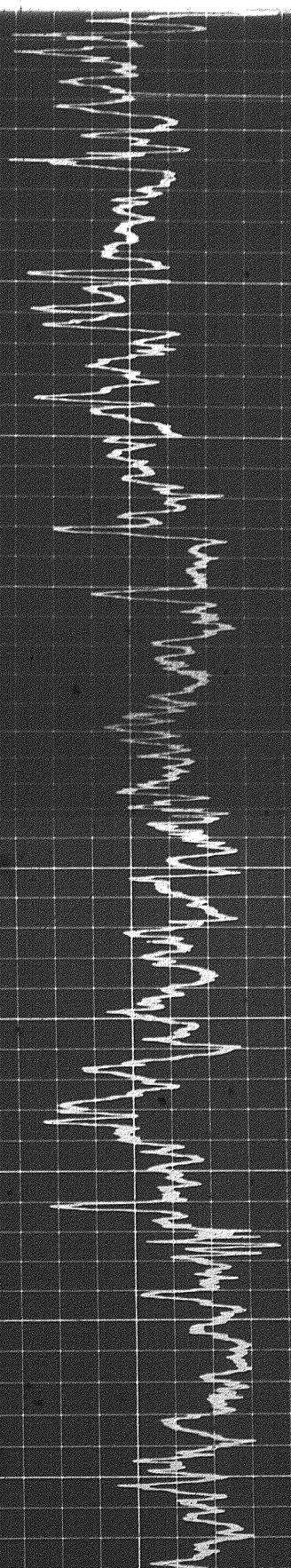
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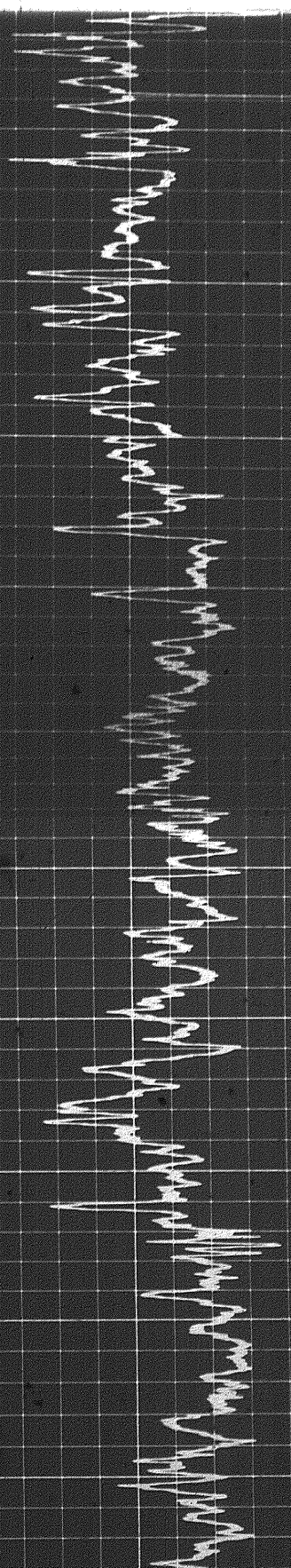
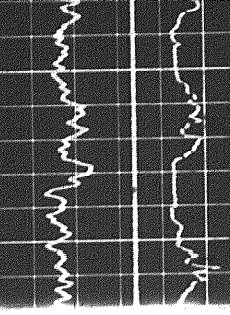
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13000





13000



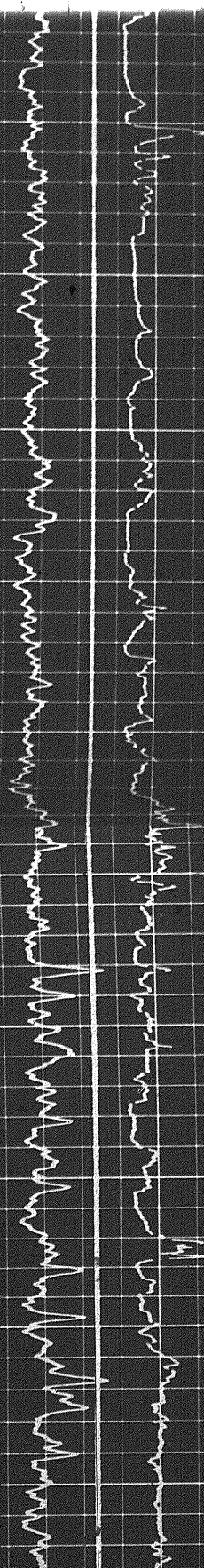
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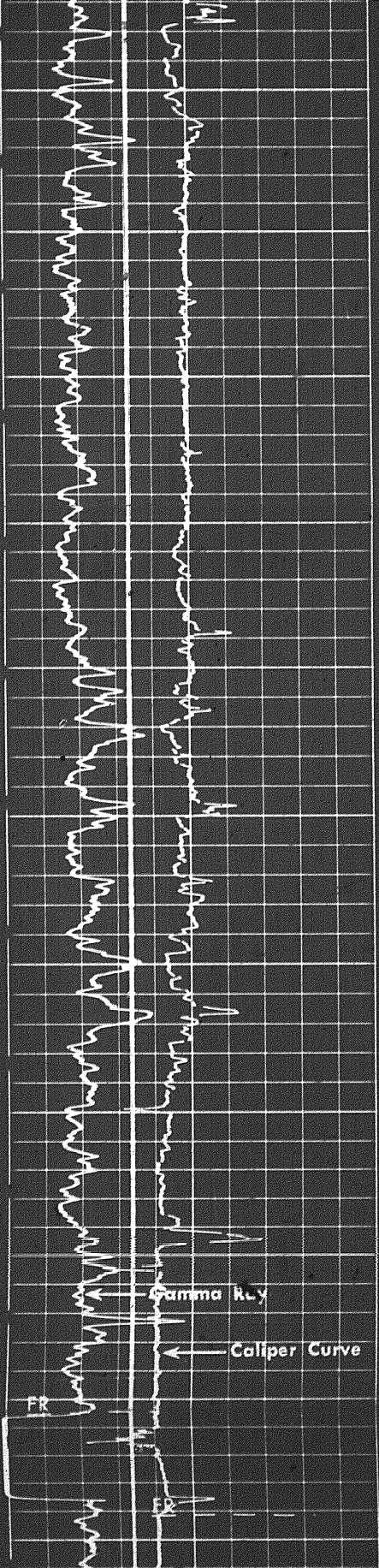
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13100

13200

13300





13300

13400

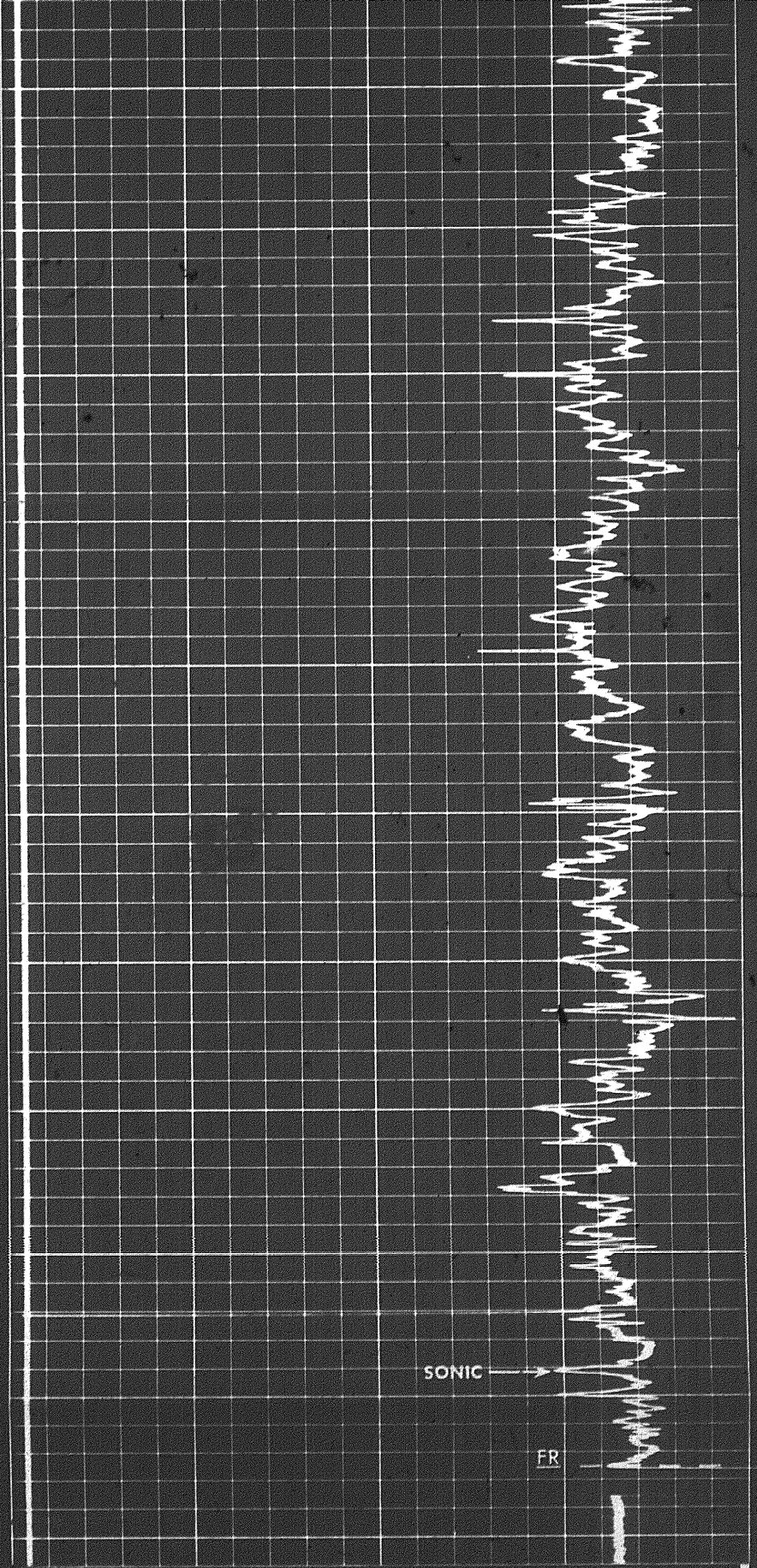
13500

13600

13700

6 7 8 9 10 11 12 13 14

CALIPER



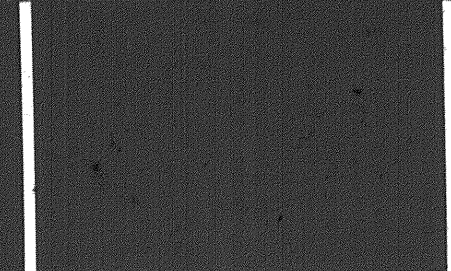
SONIC

FR

00

FR

Handwritten scribbles



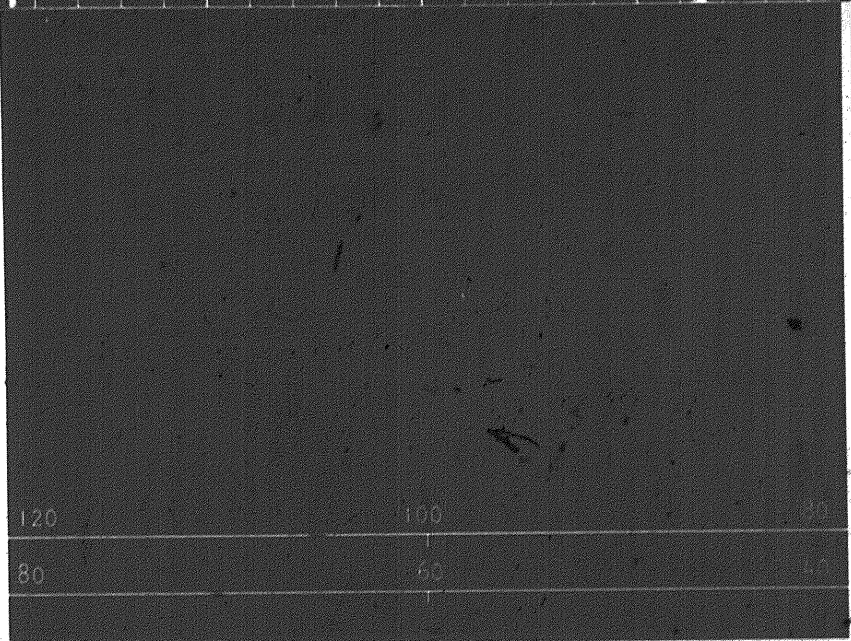
6 7 8 9 10 11 12 13 14

CALIPER
hole diameter in inches

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

Speed in FPM

150 150 300



120 100 80 60

GAMMA RAY
API UNITS

DEPTH

SONIC
INTERVAL TRANSIT TIME
microseconds per foot

DETAIL LOG
5" = 100'

GAMMA RAY
API UNITS

DEPTH

SONIC
INTERVAL TRANSIT TIME
microseconds per foot

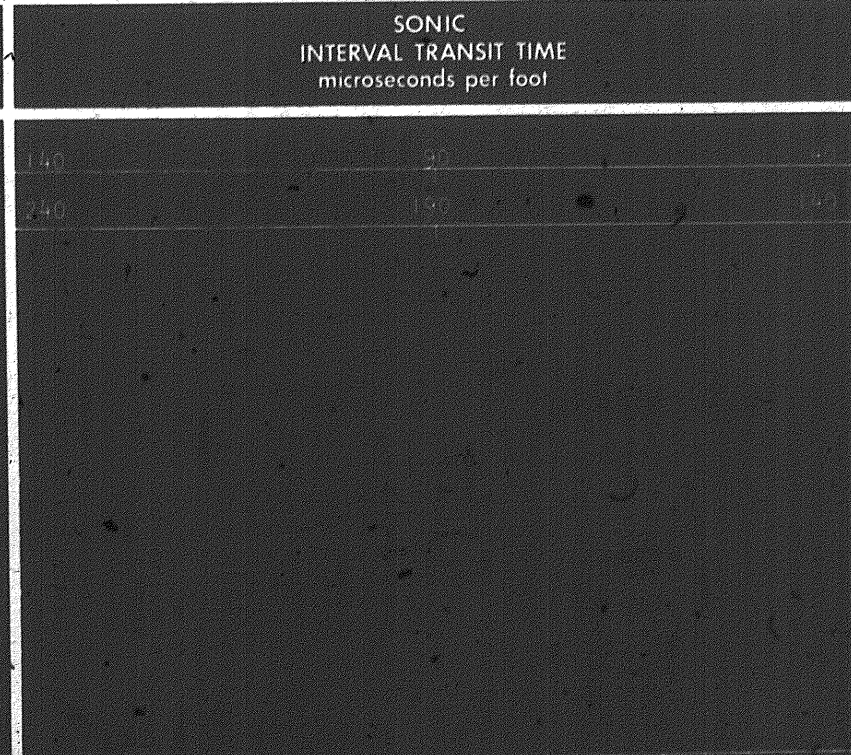
Sens. 150 T.C. 2
Zero 0 div. to left

Speed in FPM

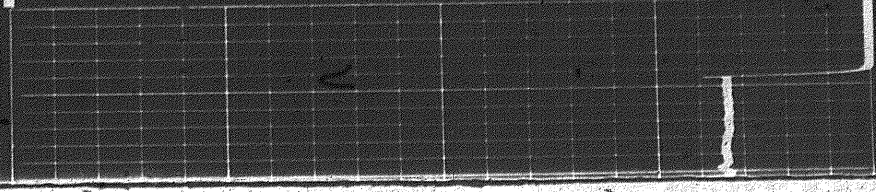
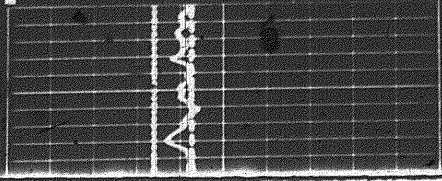
150 150 300

CALIPER
hole diameter in inches

6 7 8 9 10 11 12 13 14



140 120 100 80

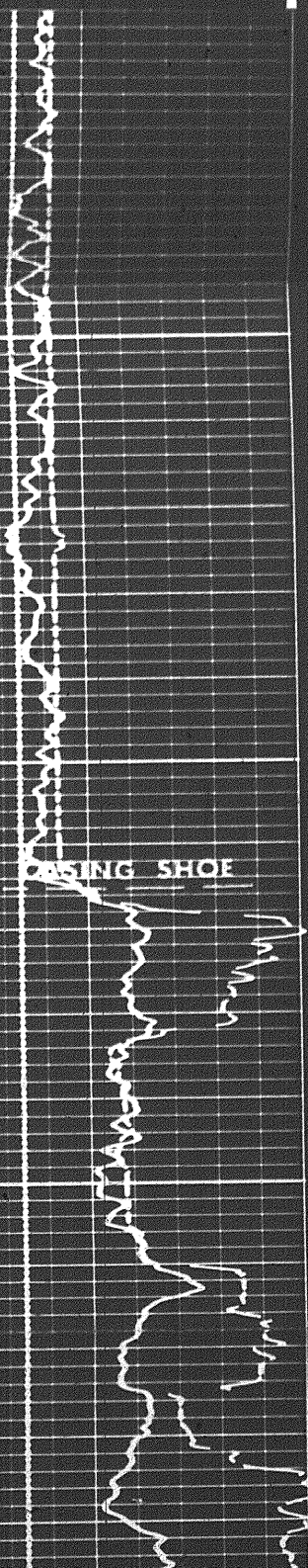


Handwritten mark

PM

CALIPER
hole diameter in inches

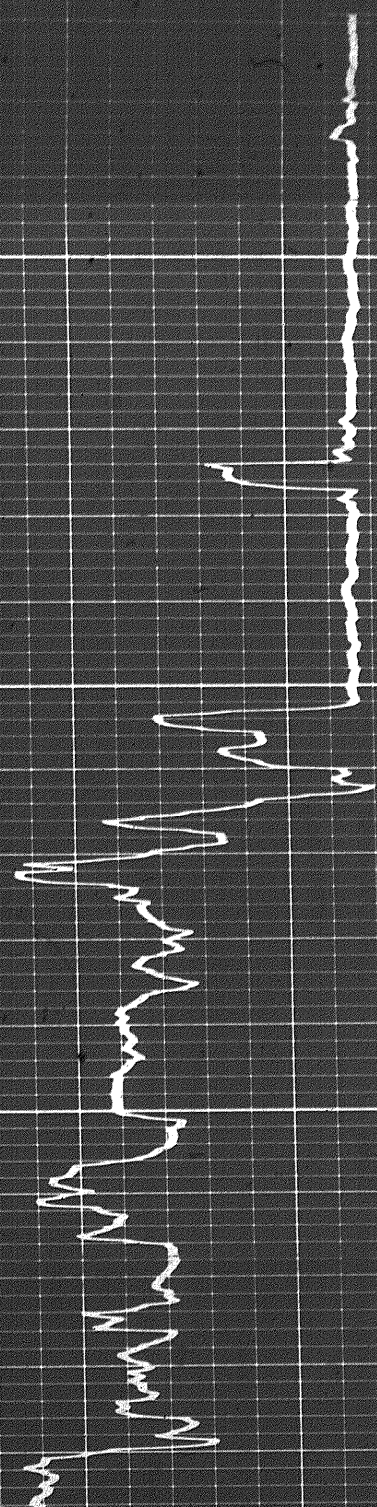
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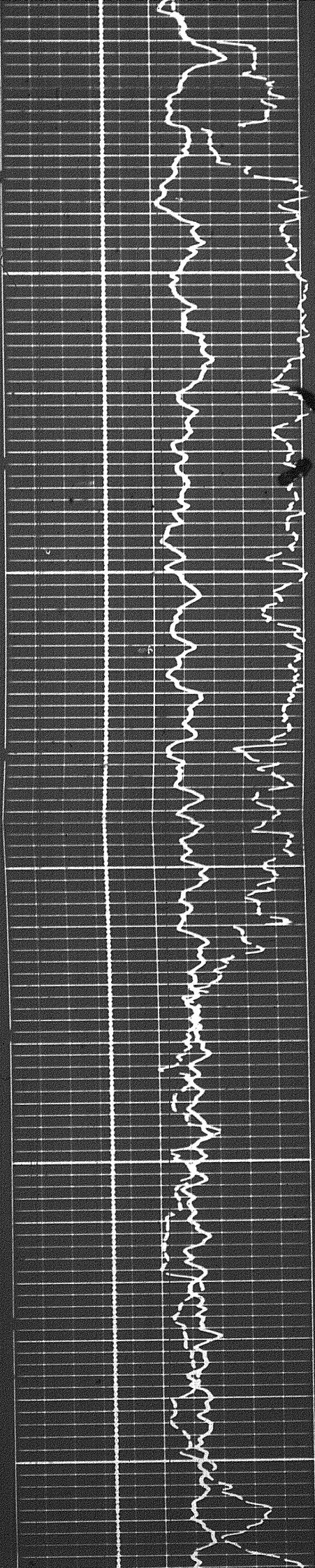


CASING SHOE

9966

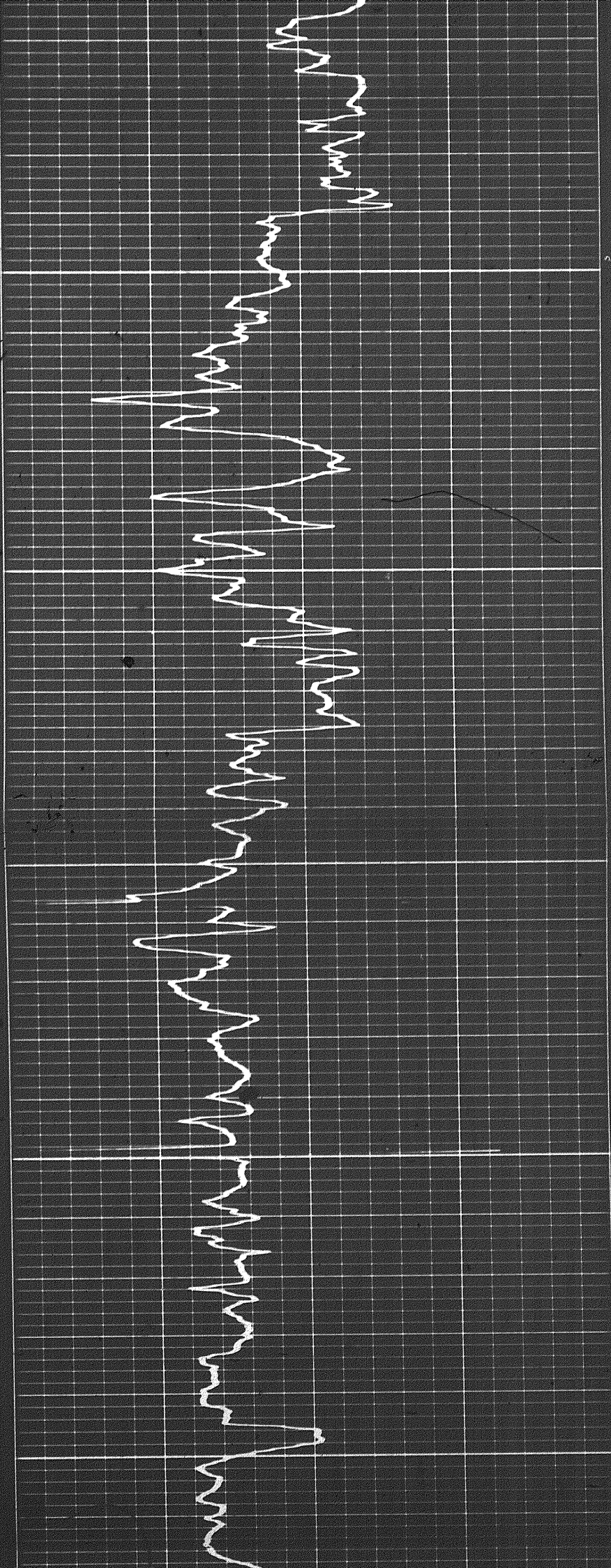
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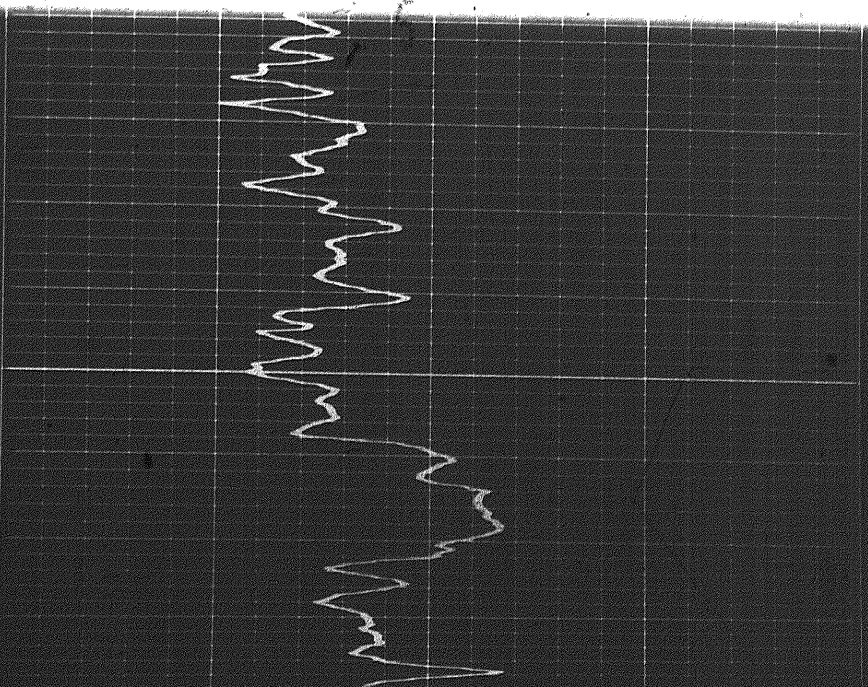
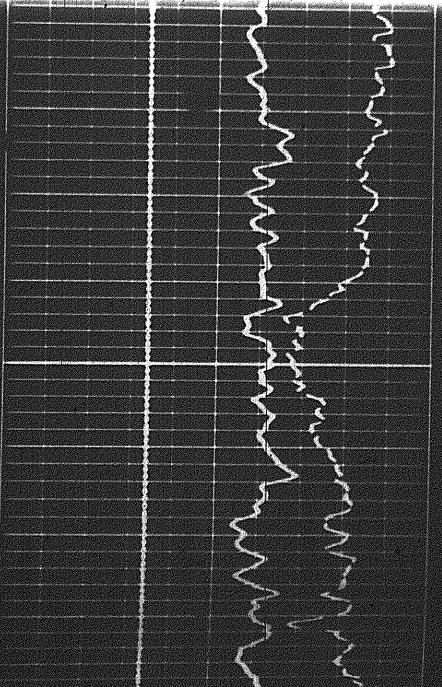
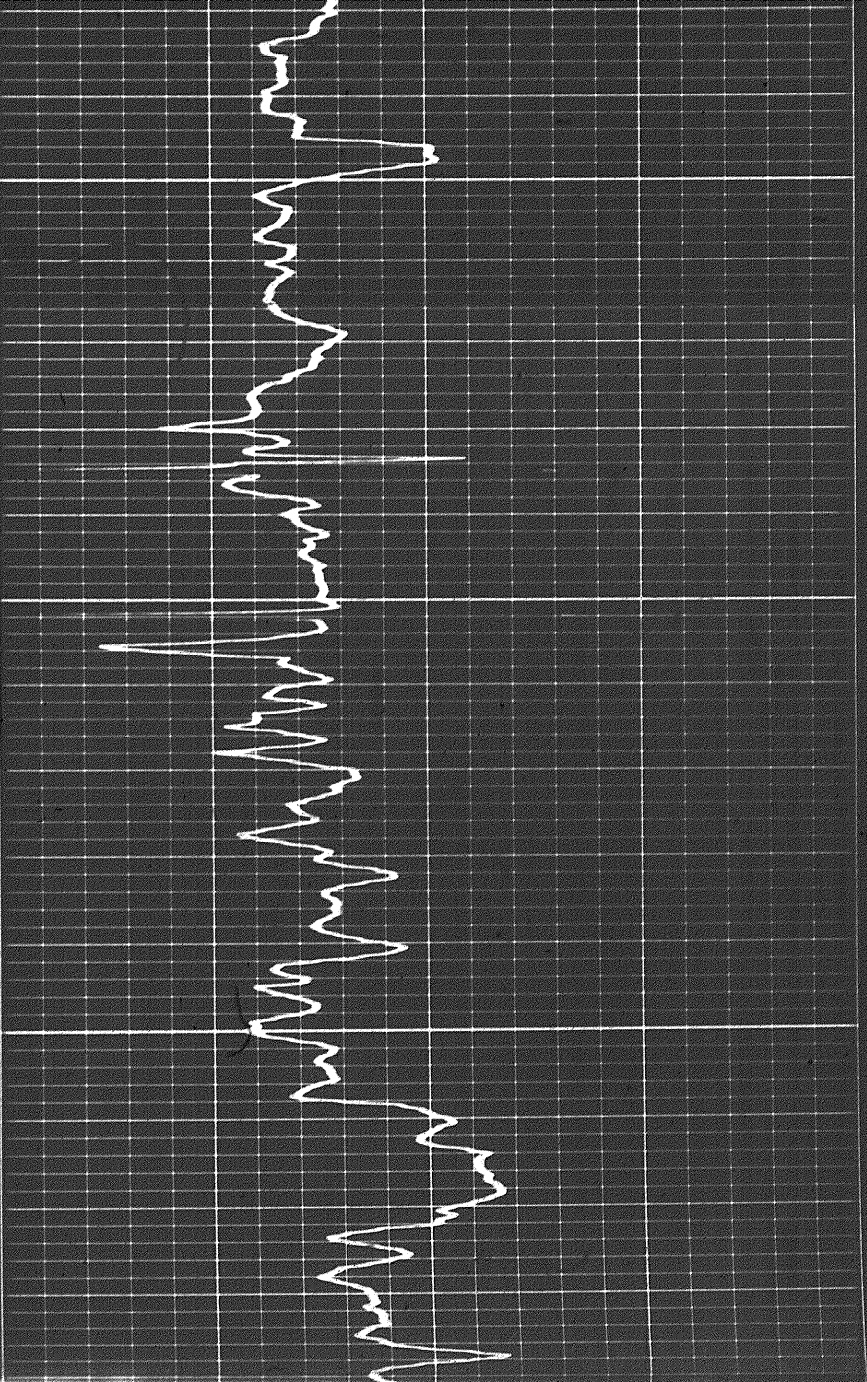
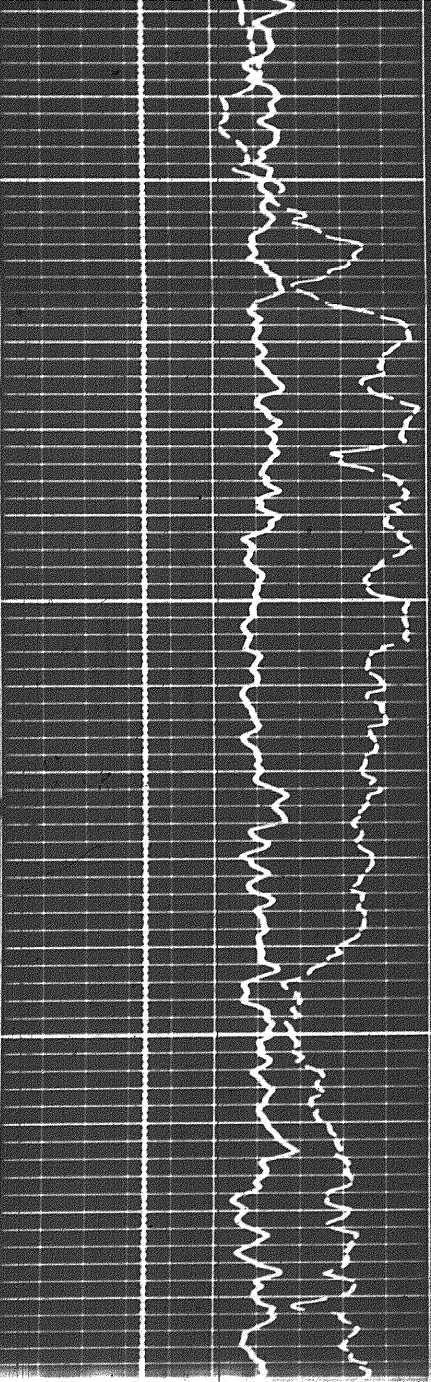


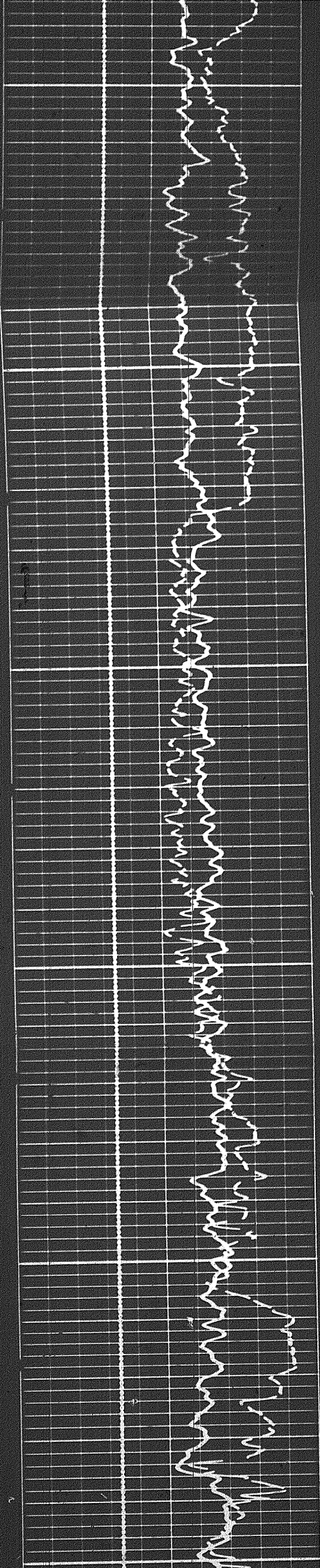
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10200



10300

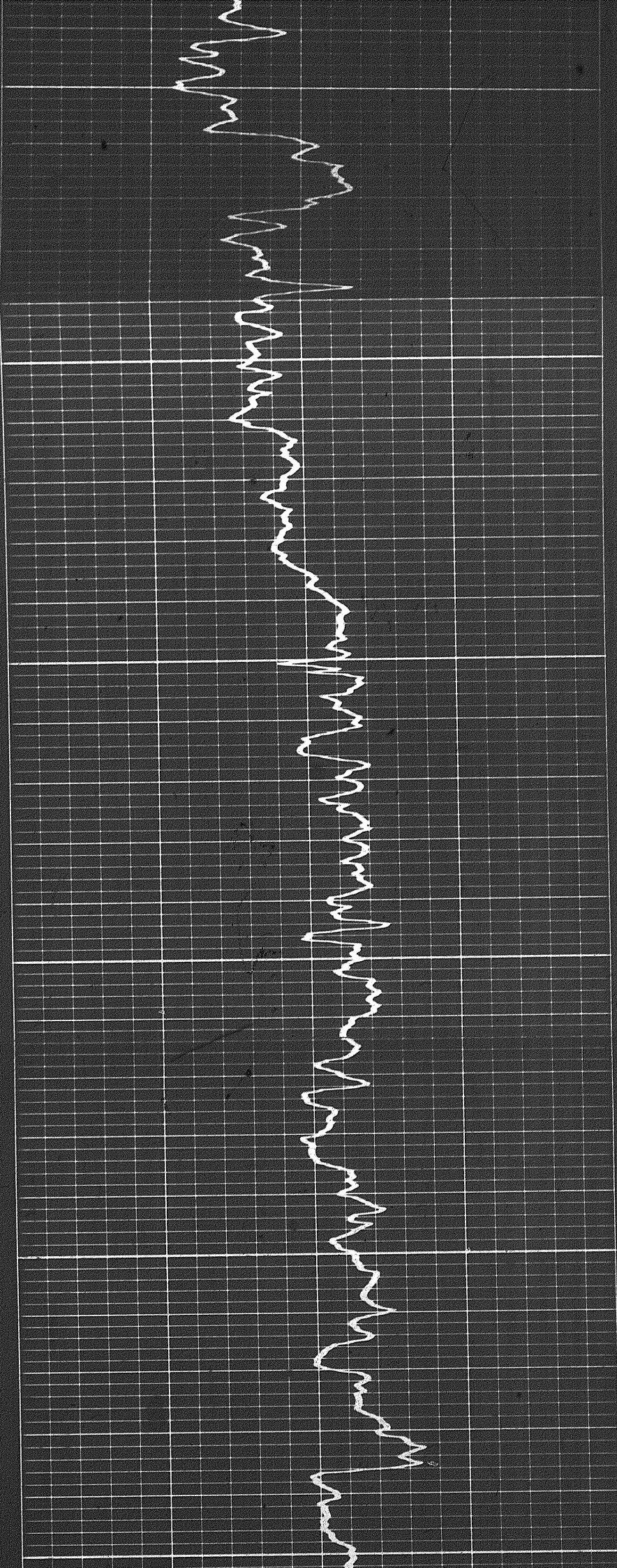


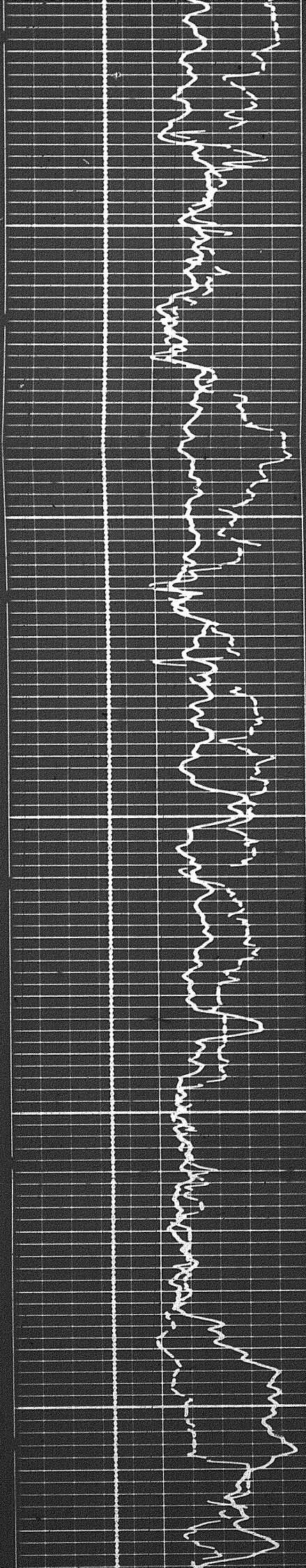


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10500

10600



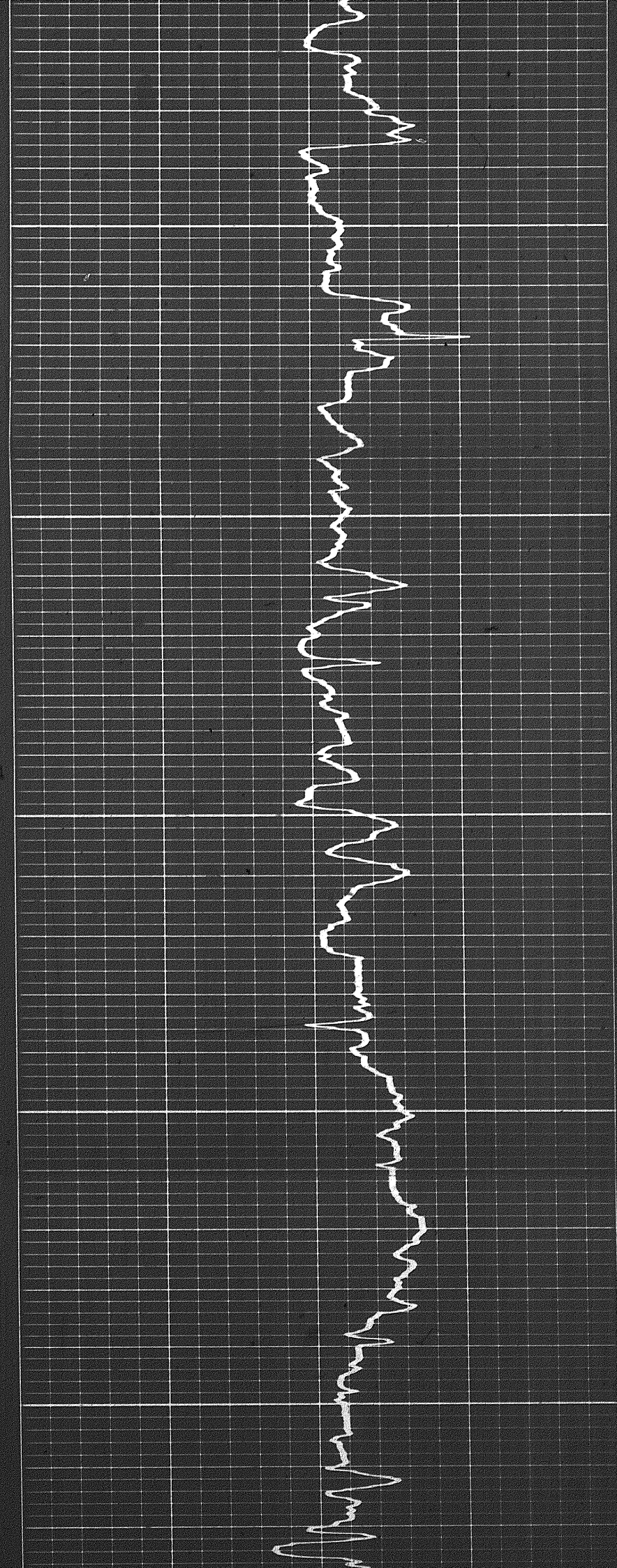


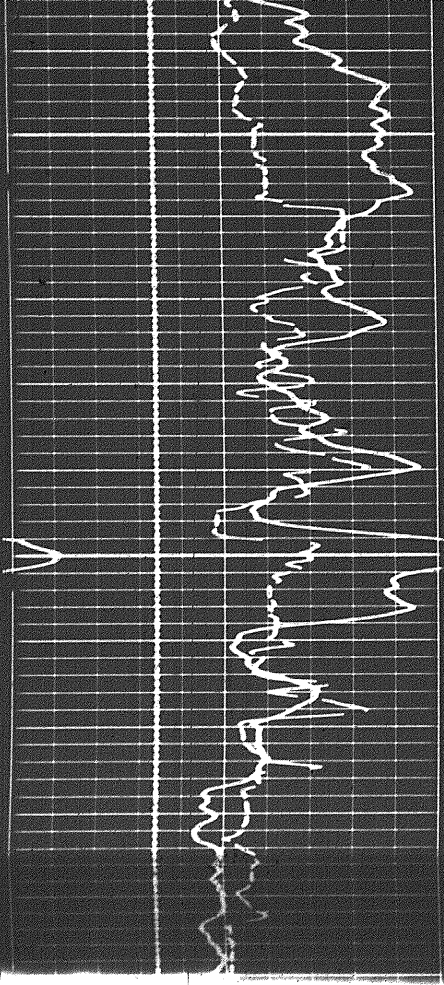
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10

10700

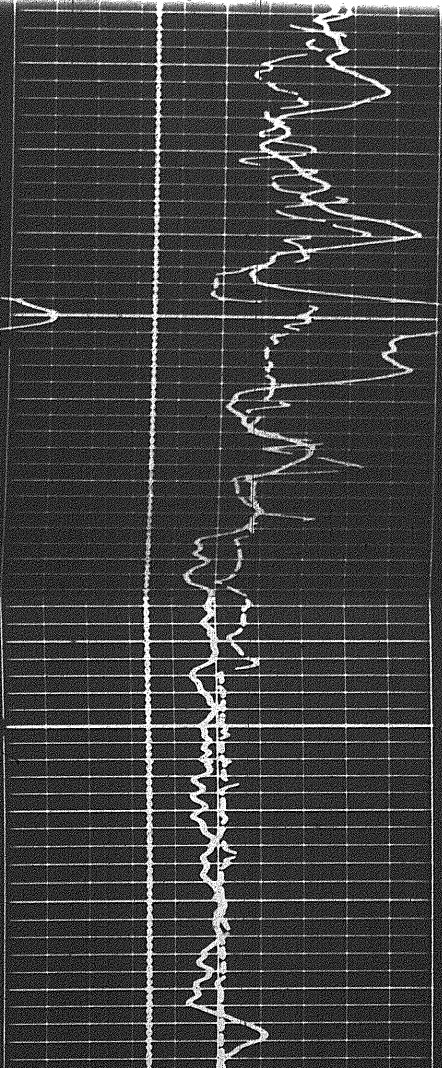
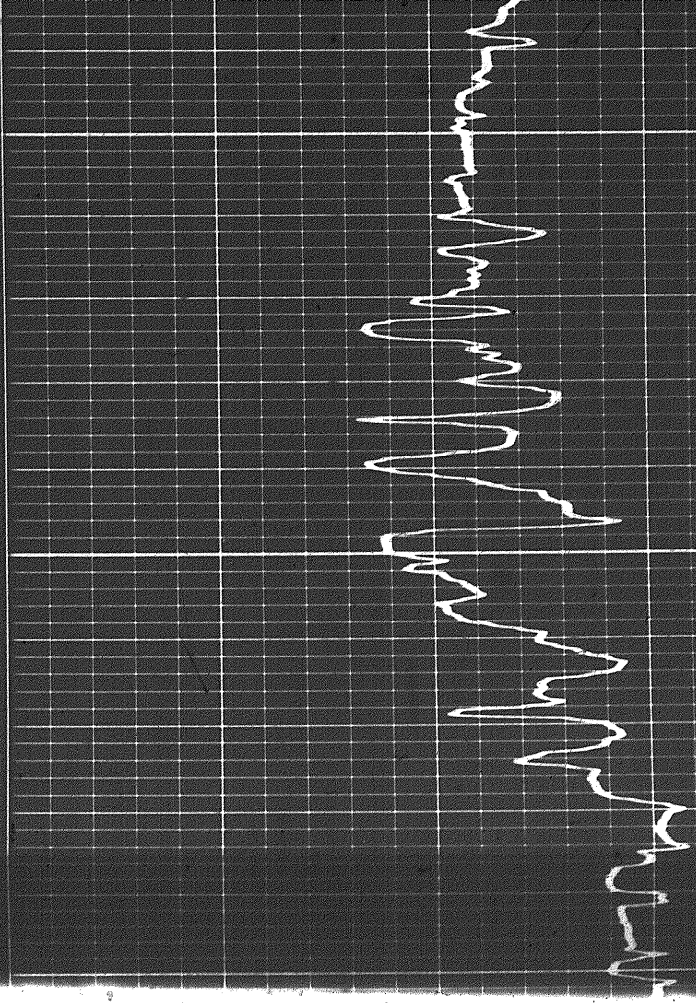
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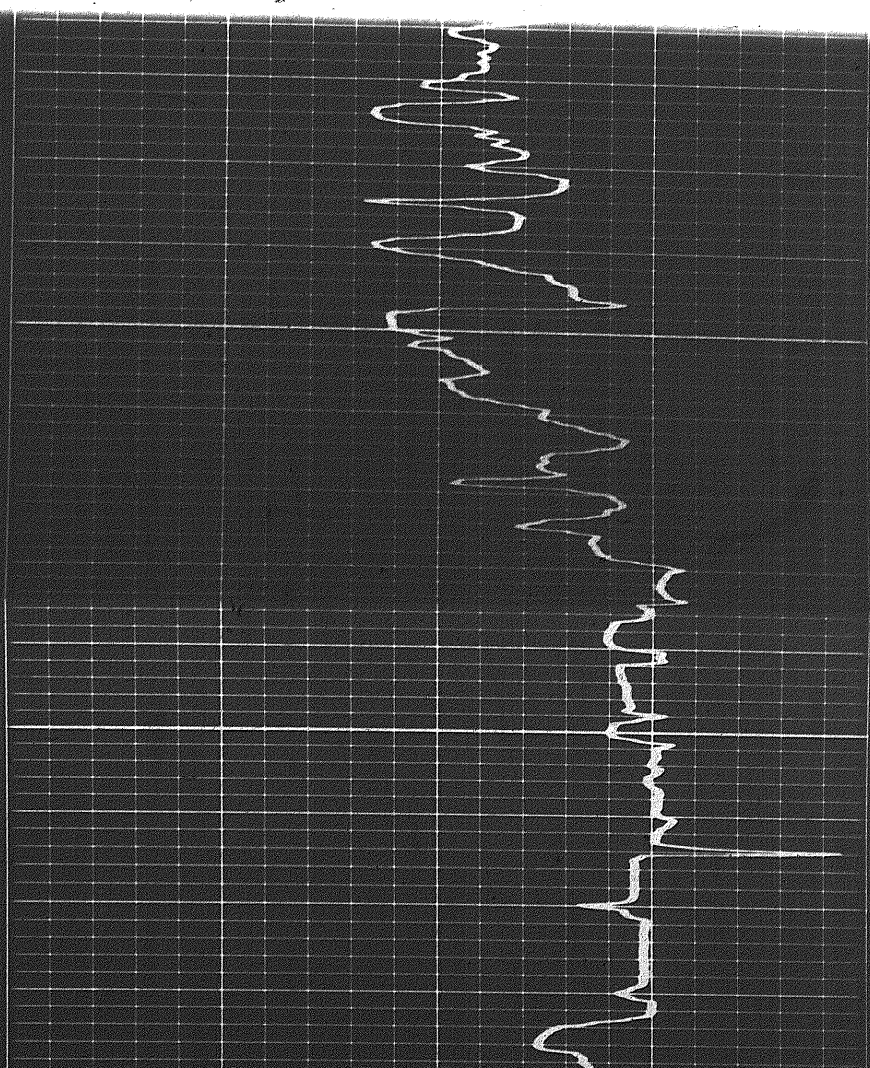


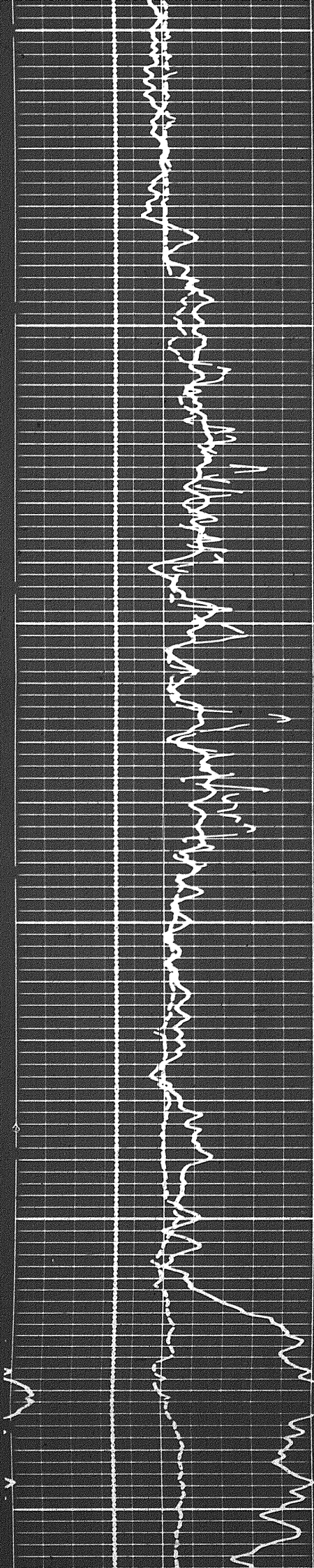
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10901



00601

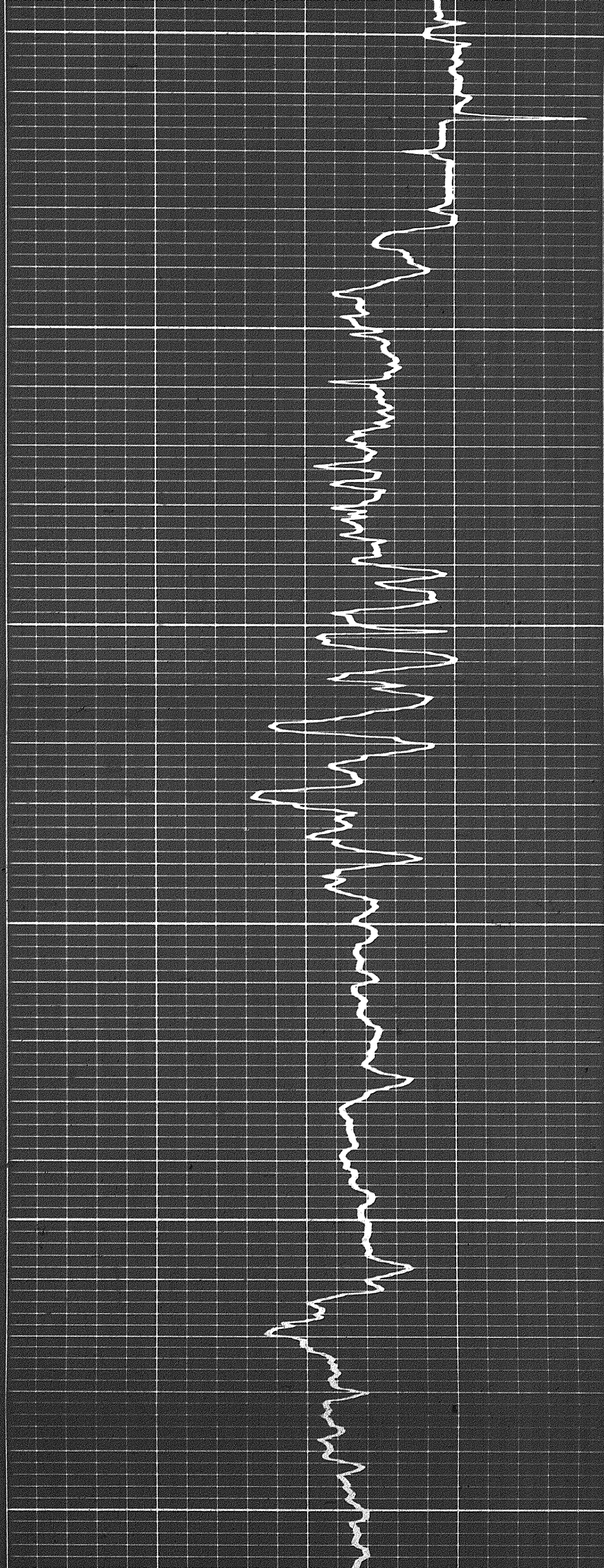


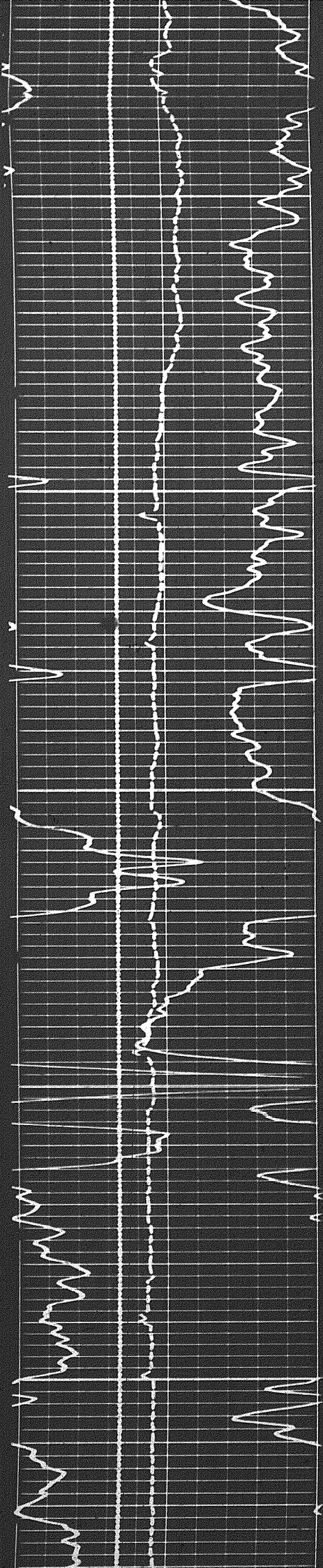


0011 /

0001 /

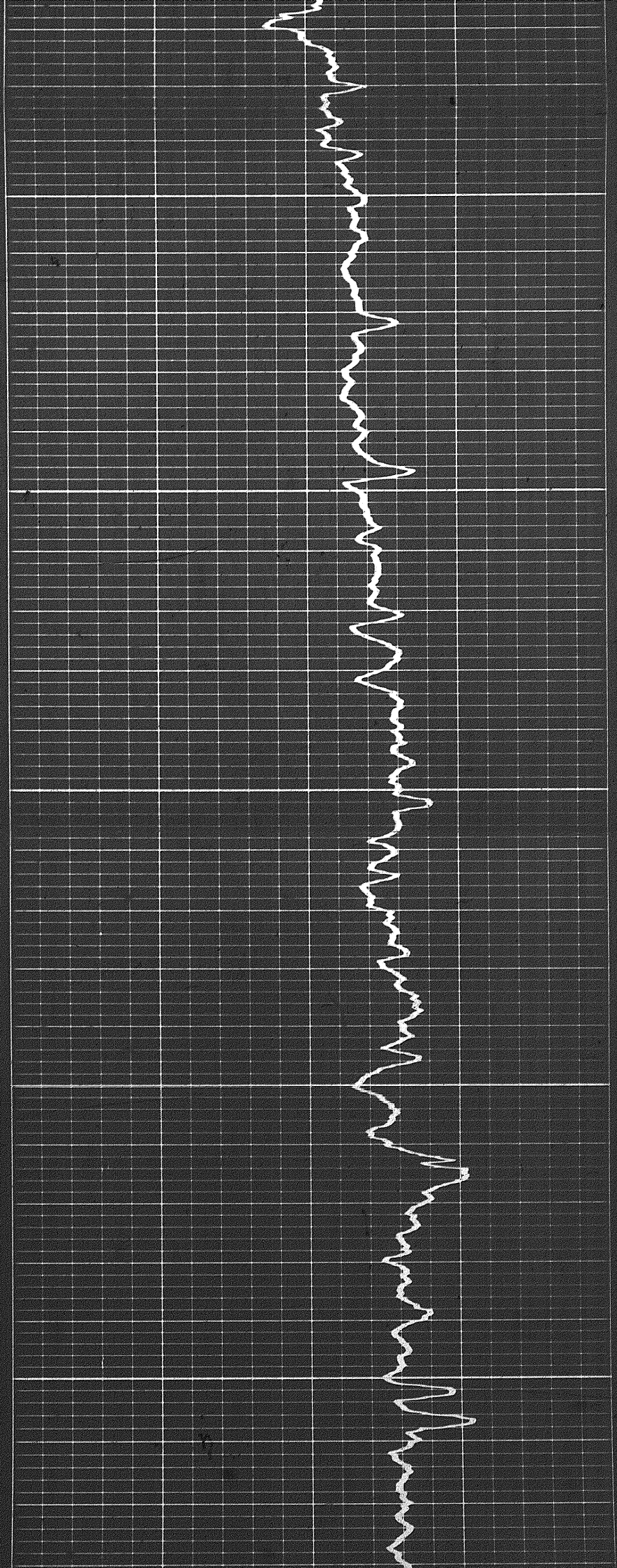
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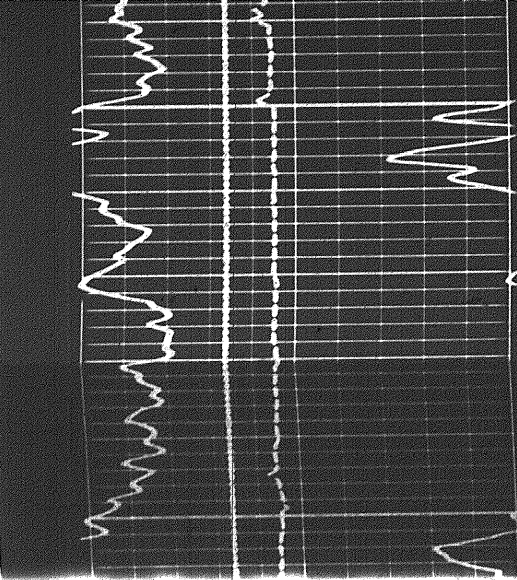




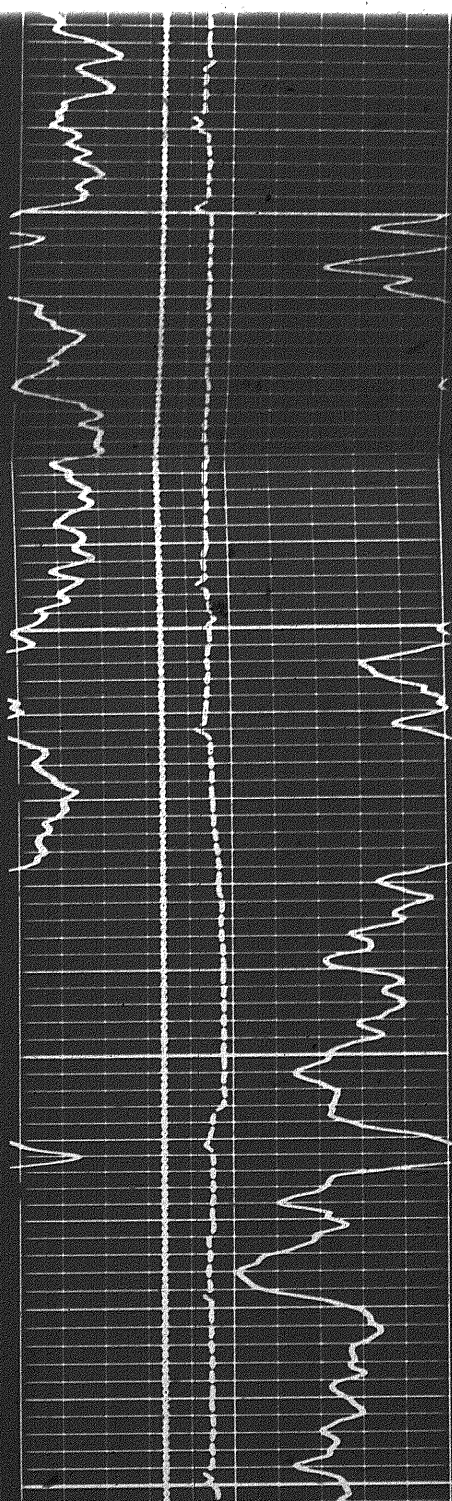
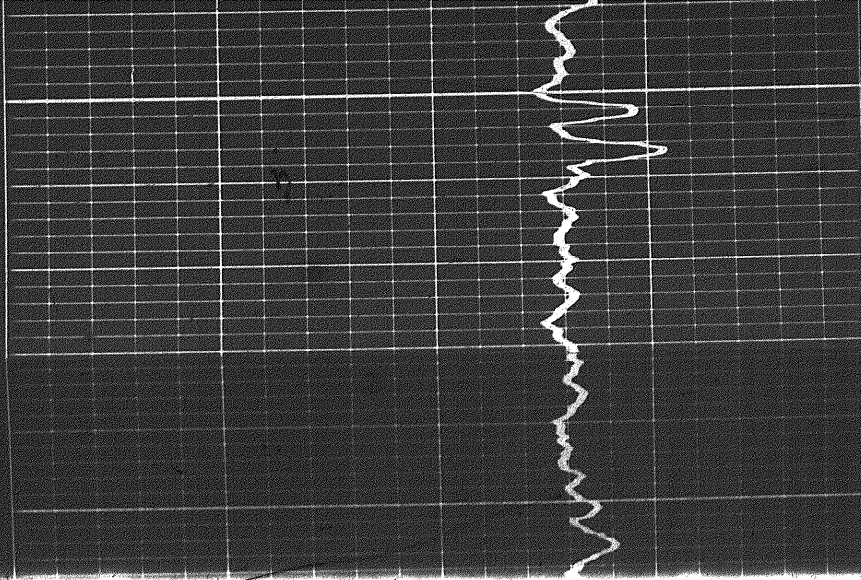
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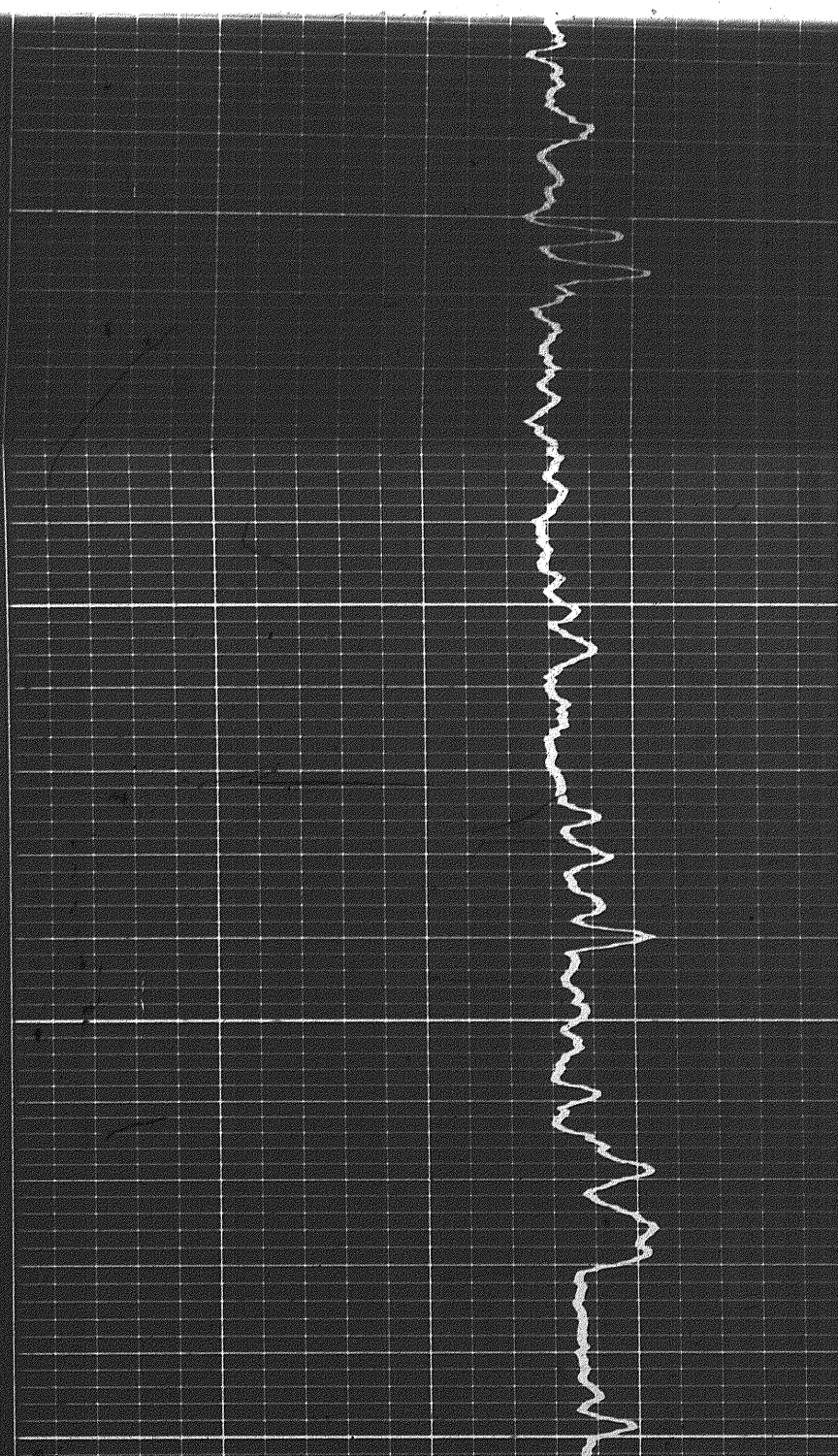




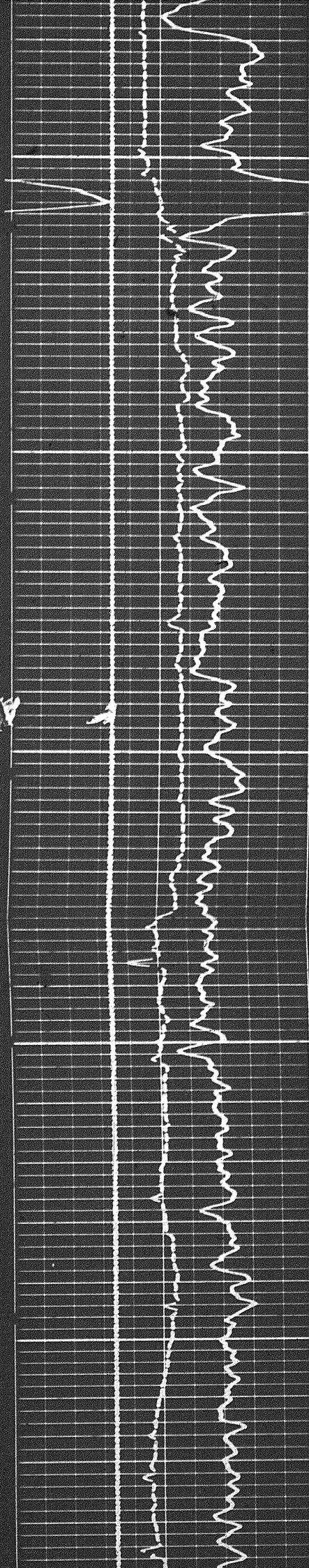
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11400



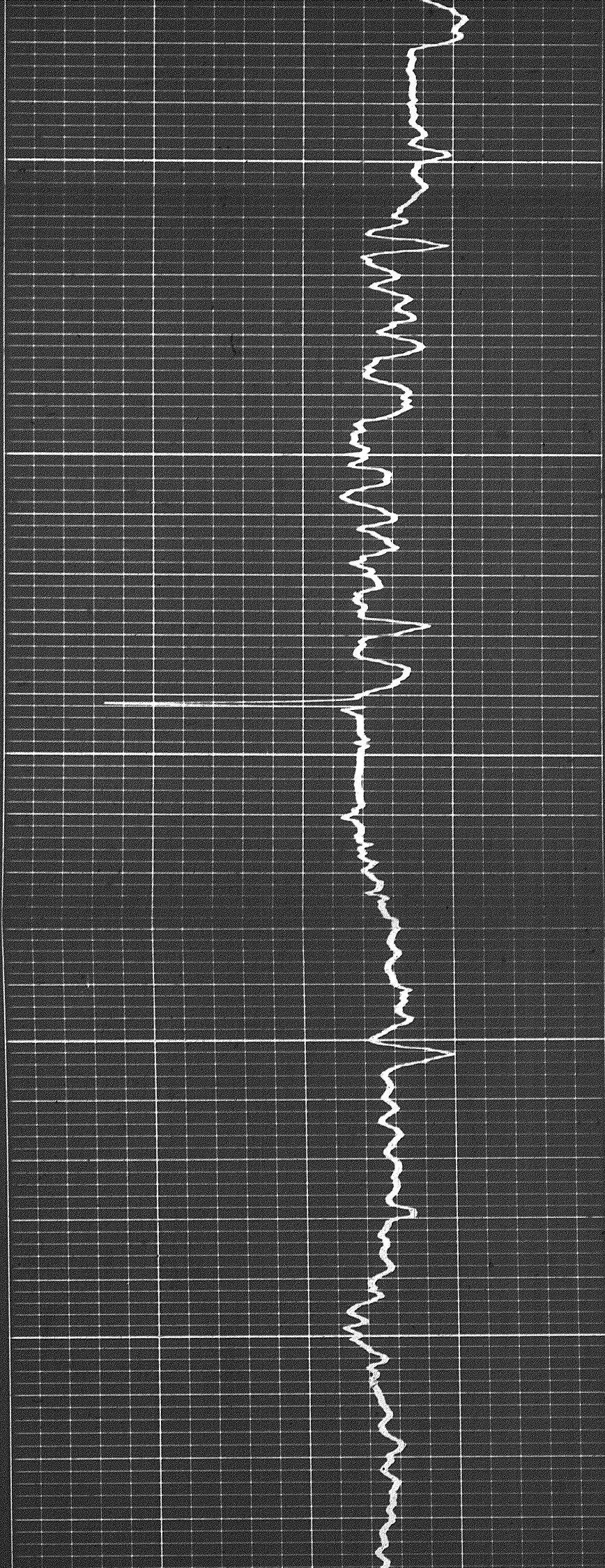
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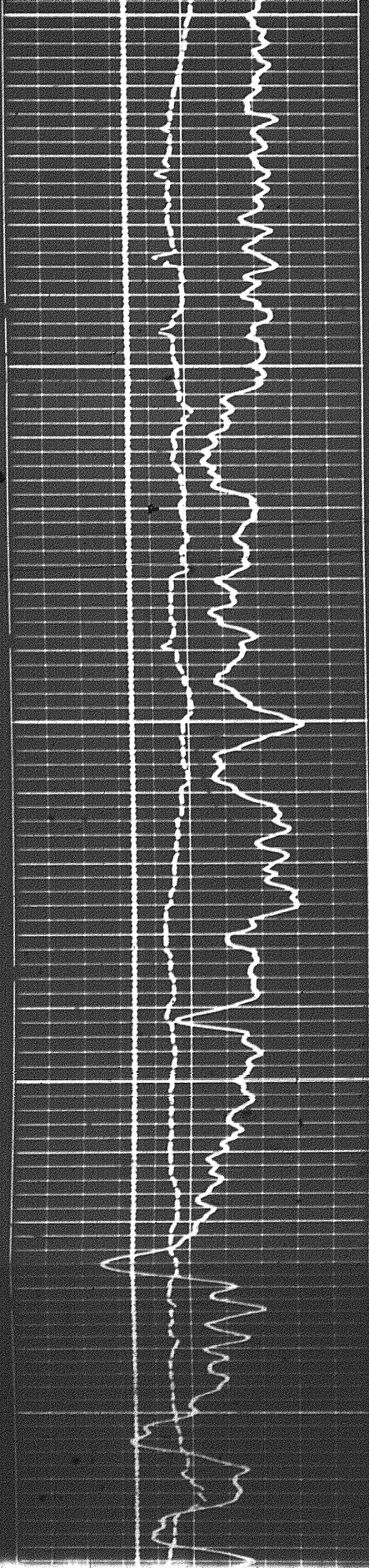


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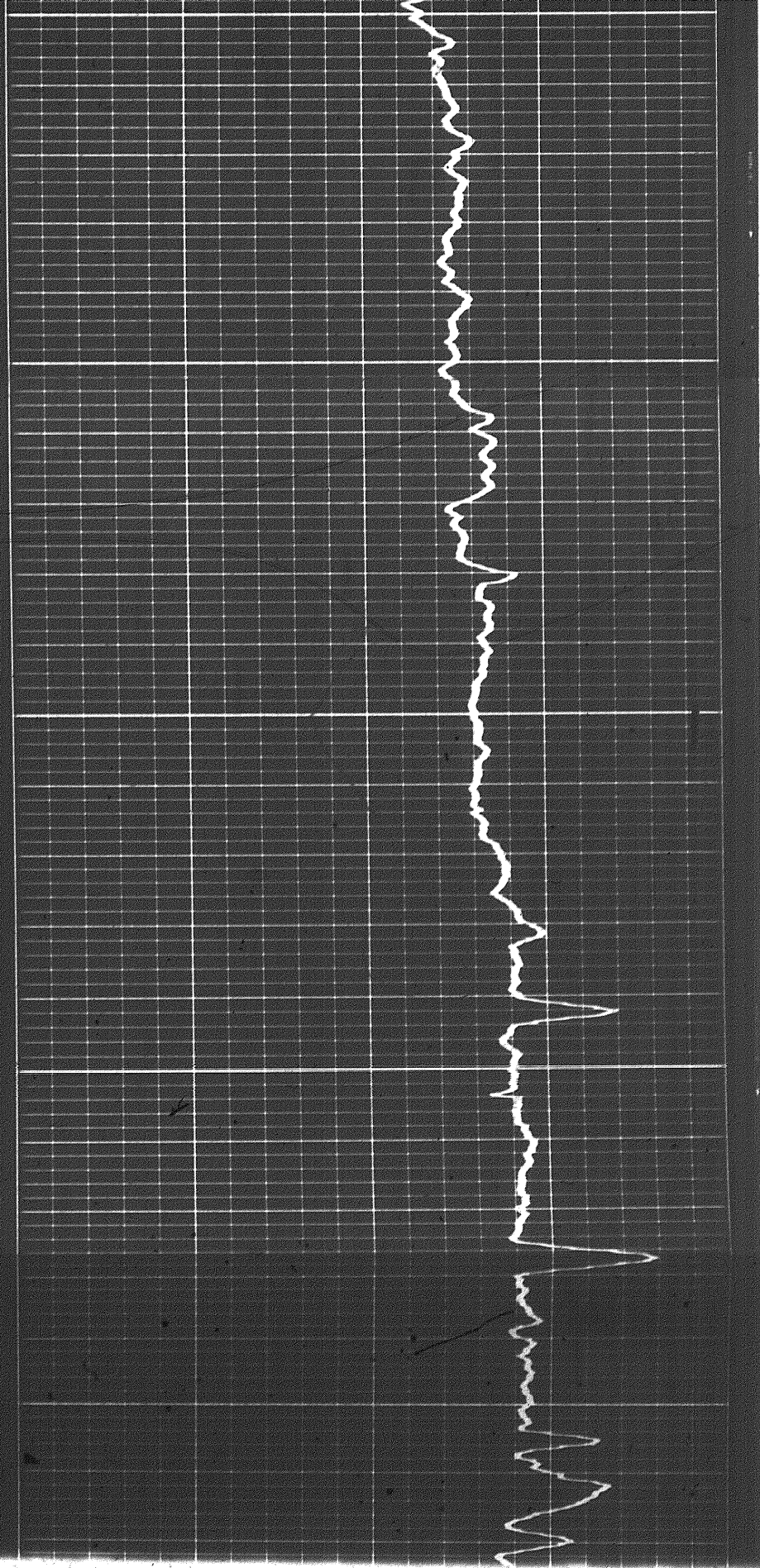
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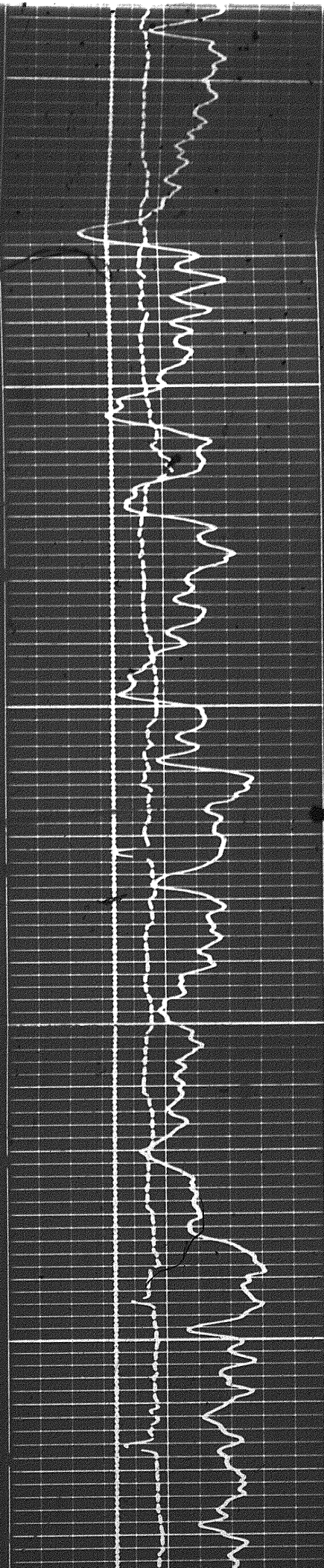




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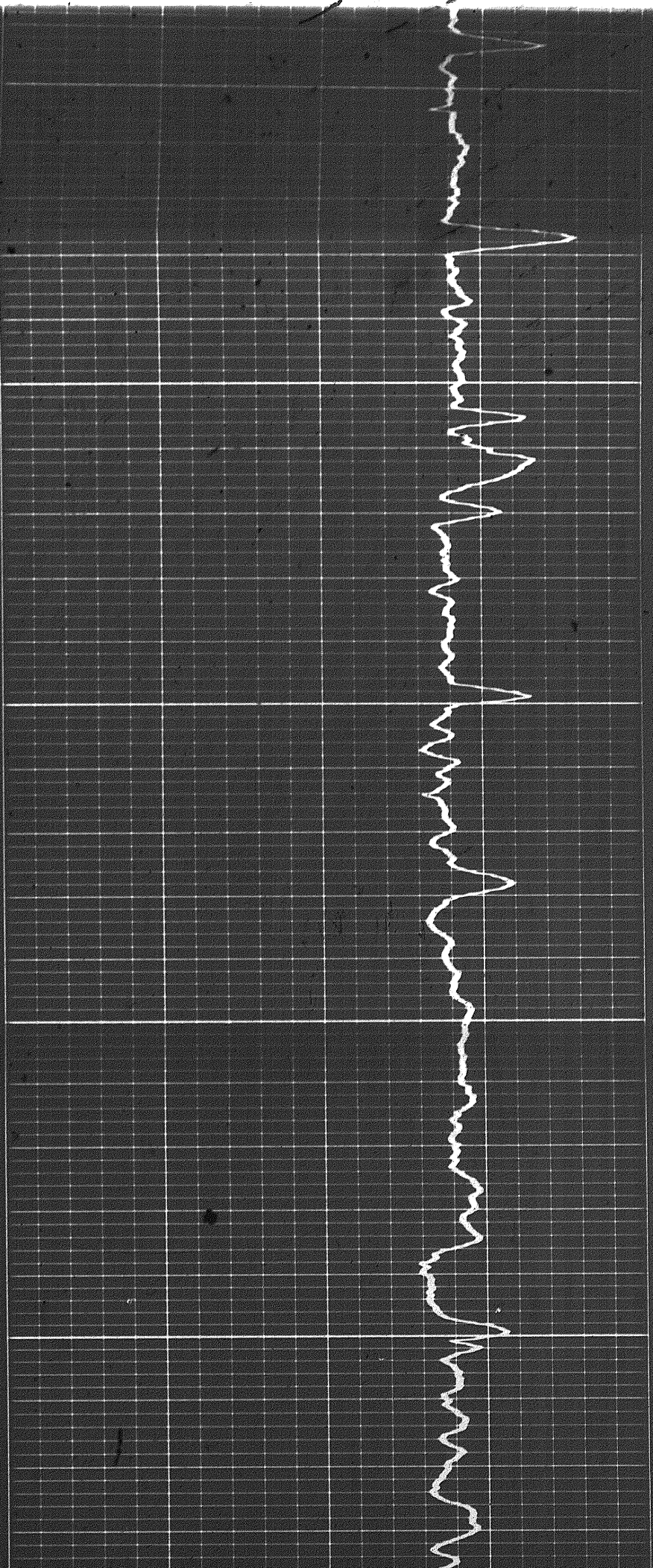
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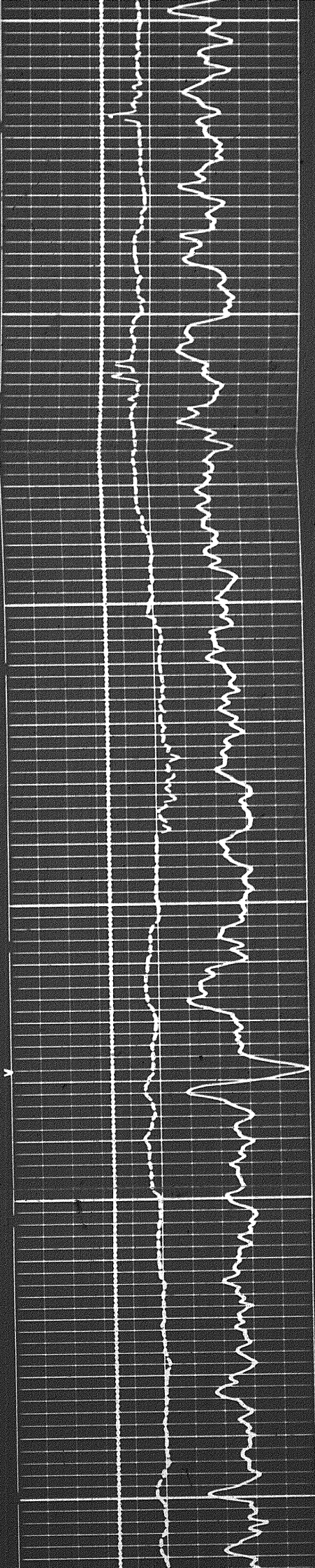




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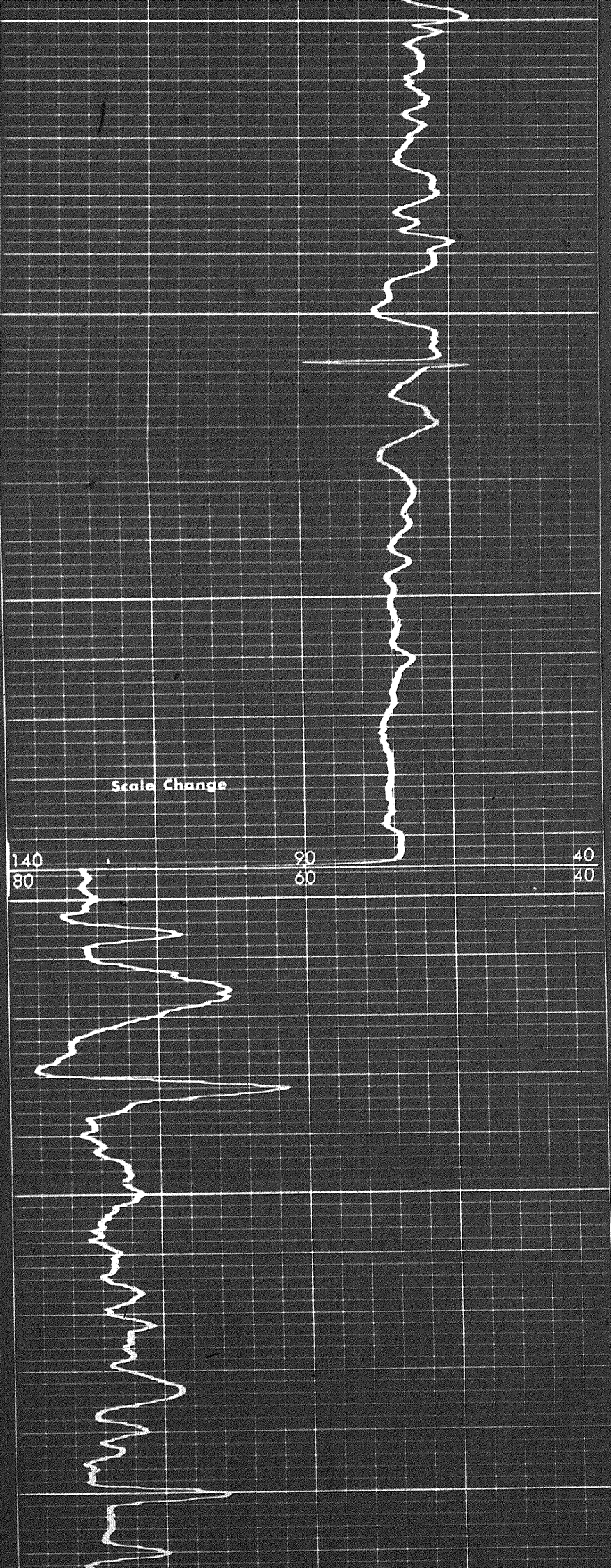




12100

12200

12300

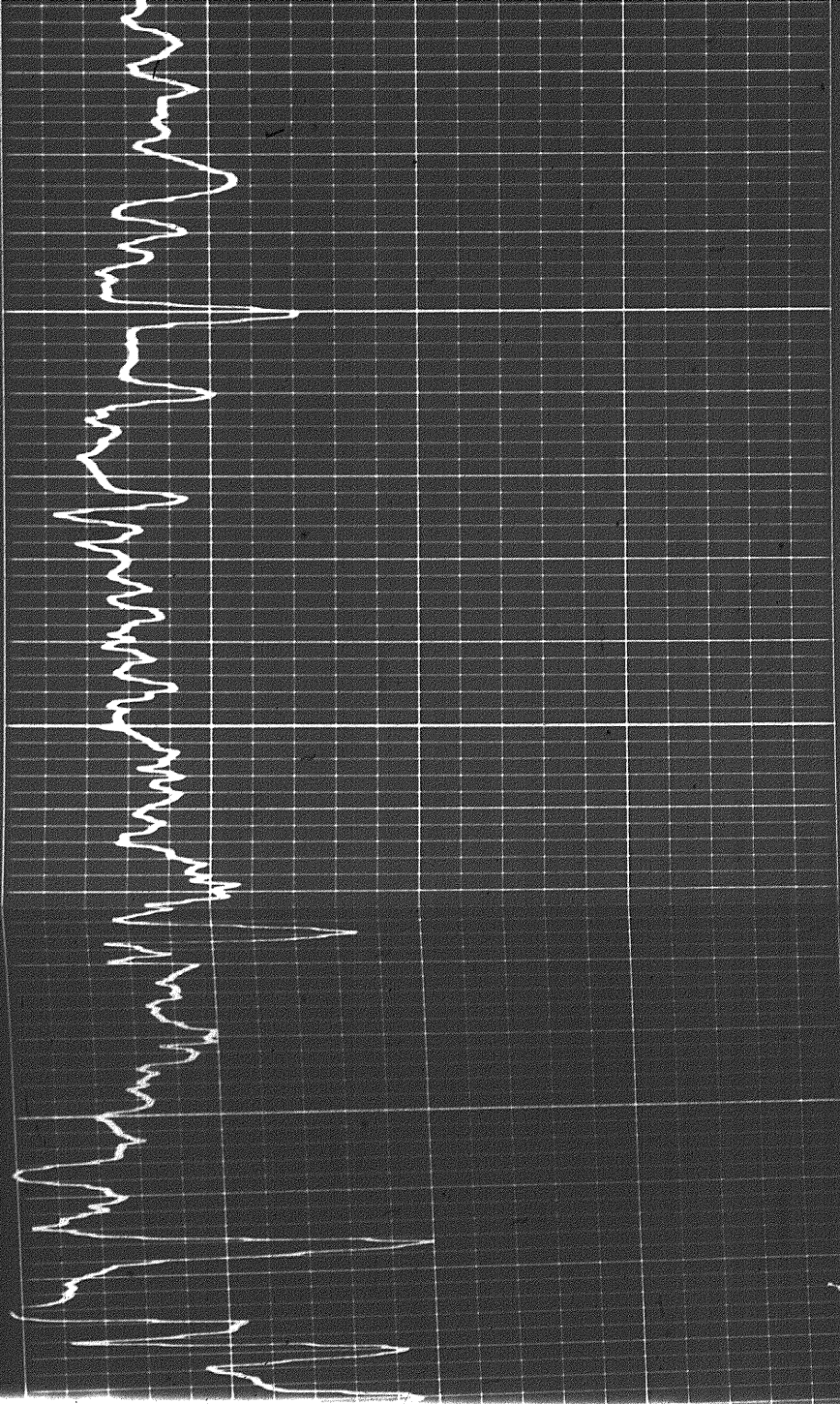


Scale Change

140
80

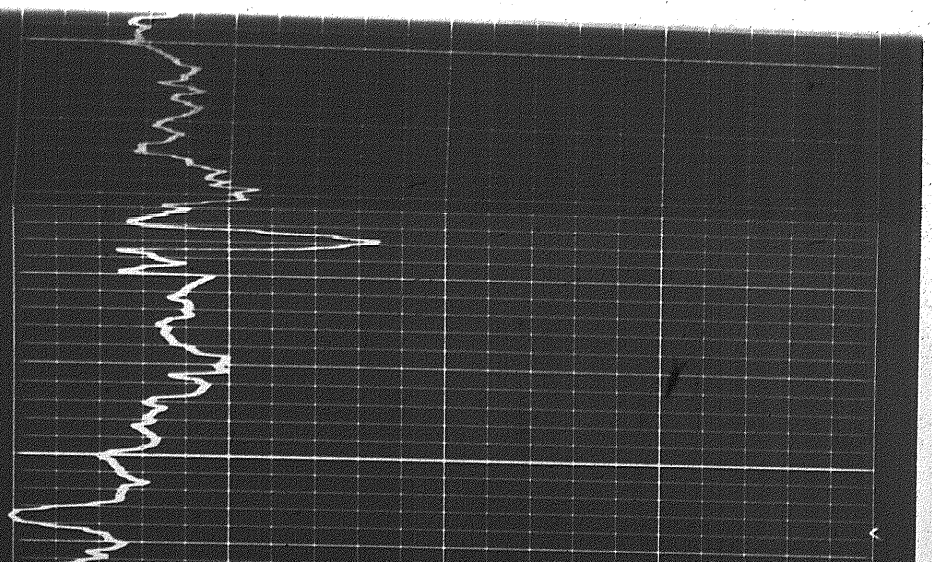
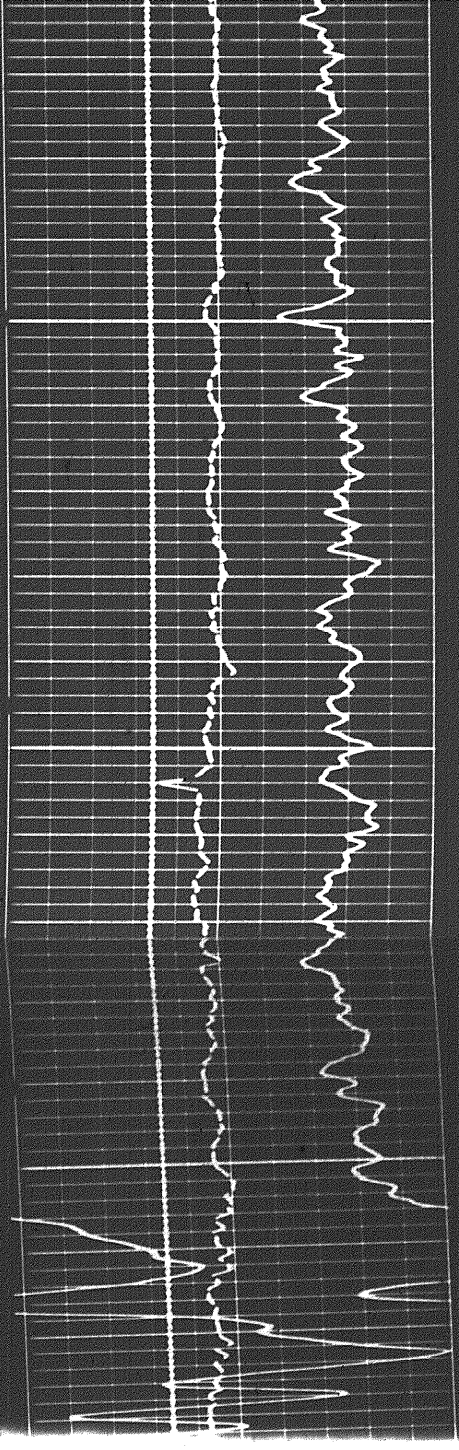
20
60

40
40

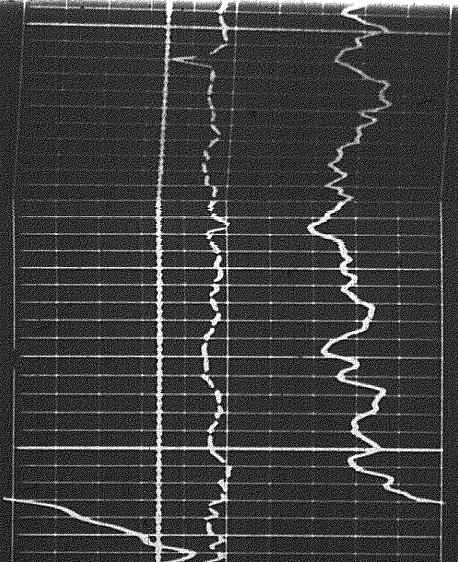


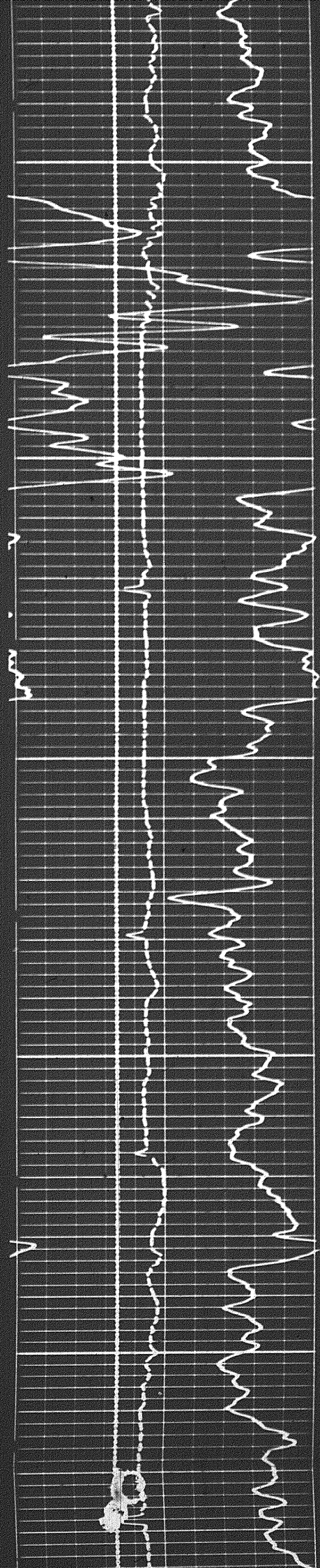
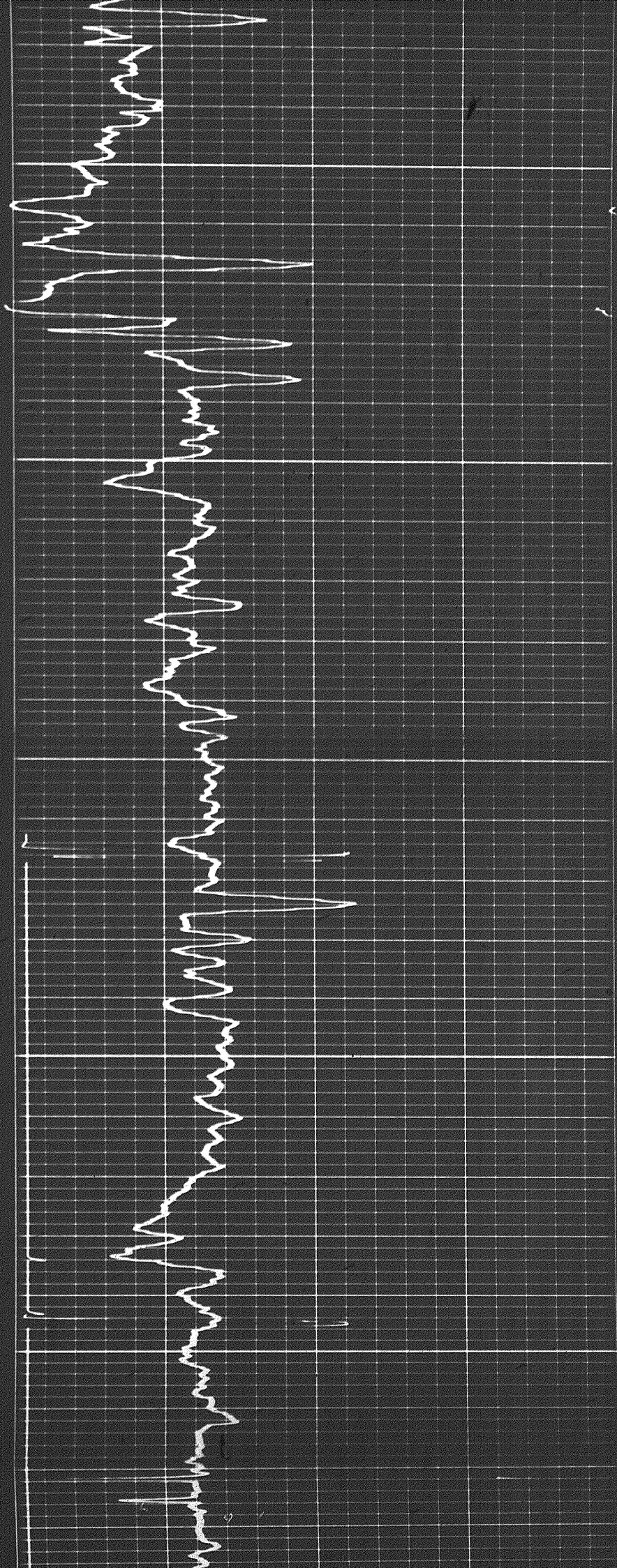
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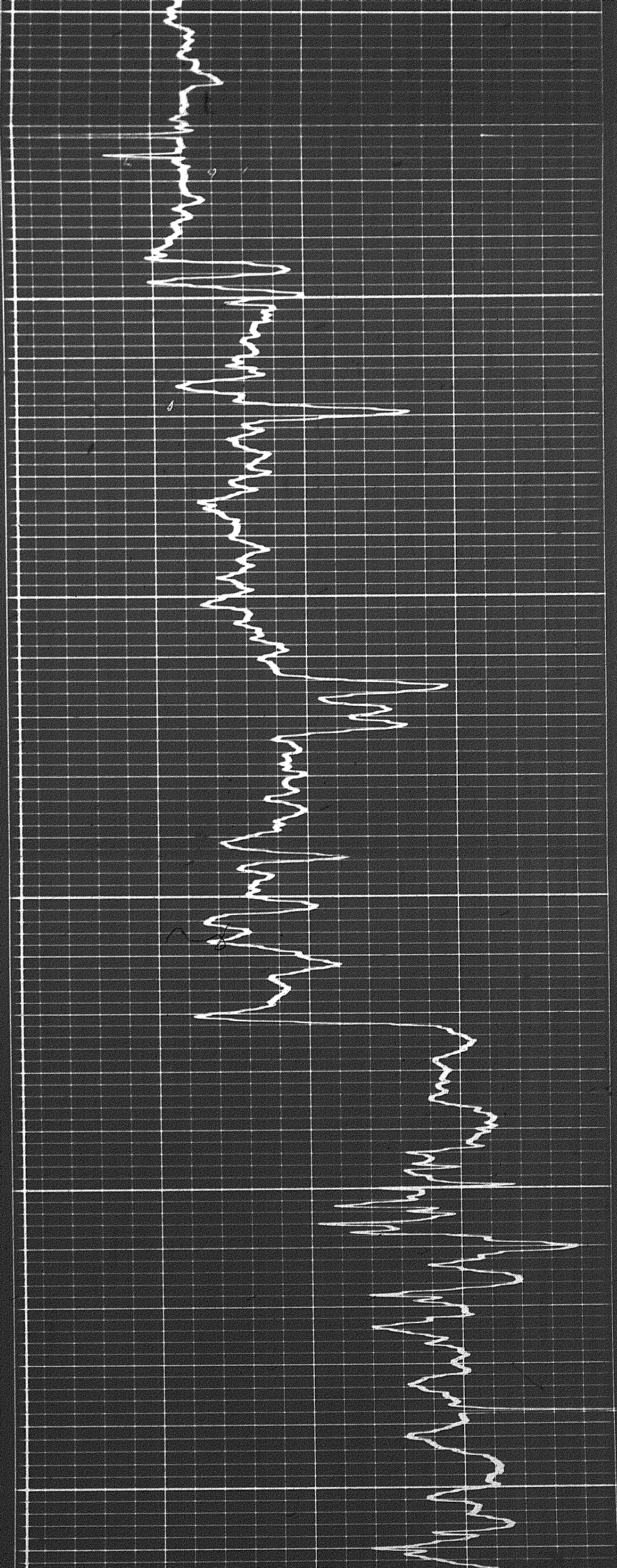
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12400



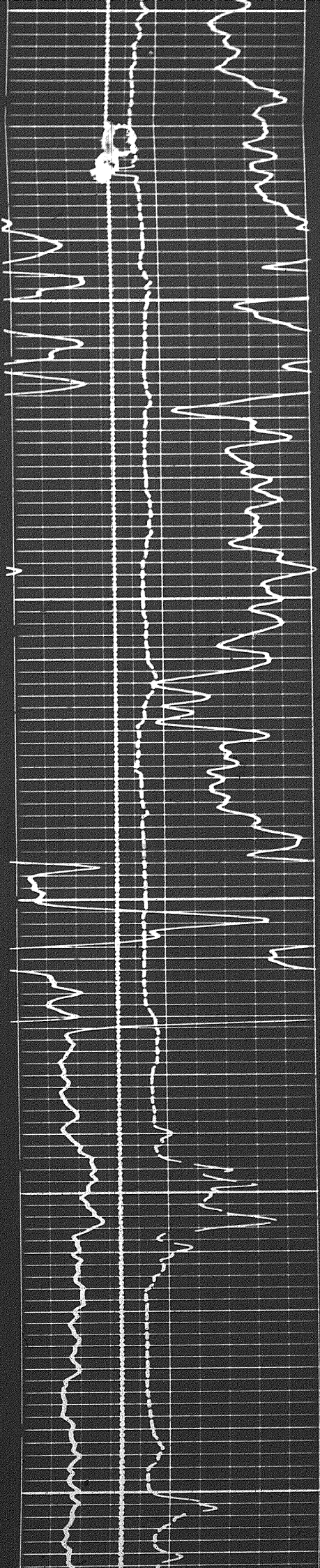


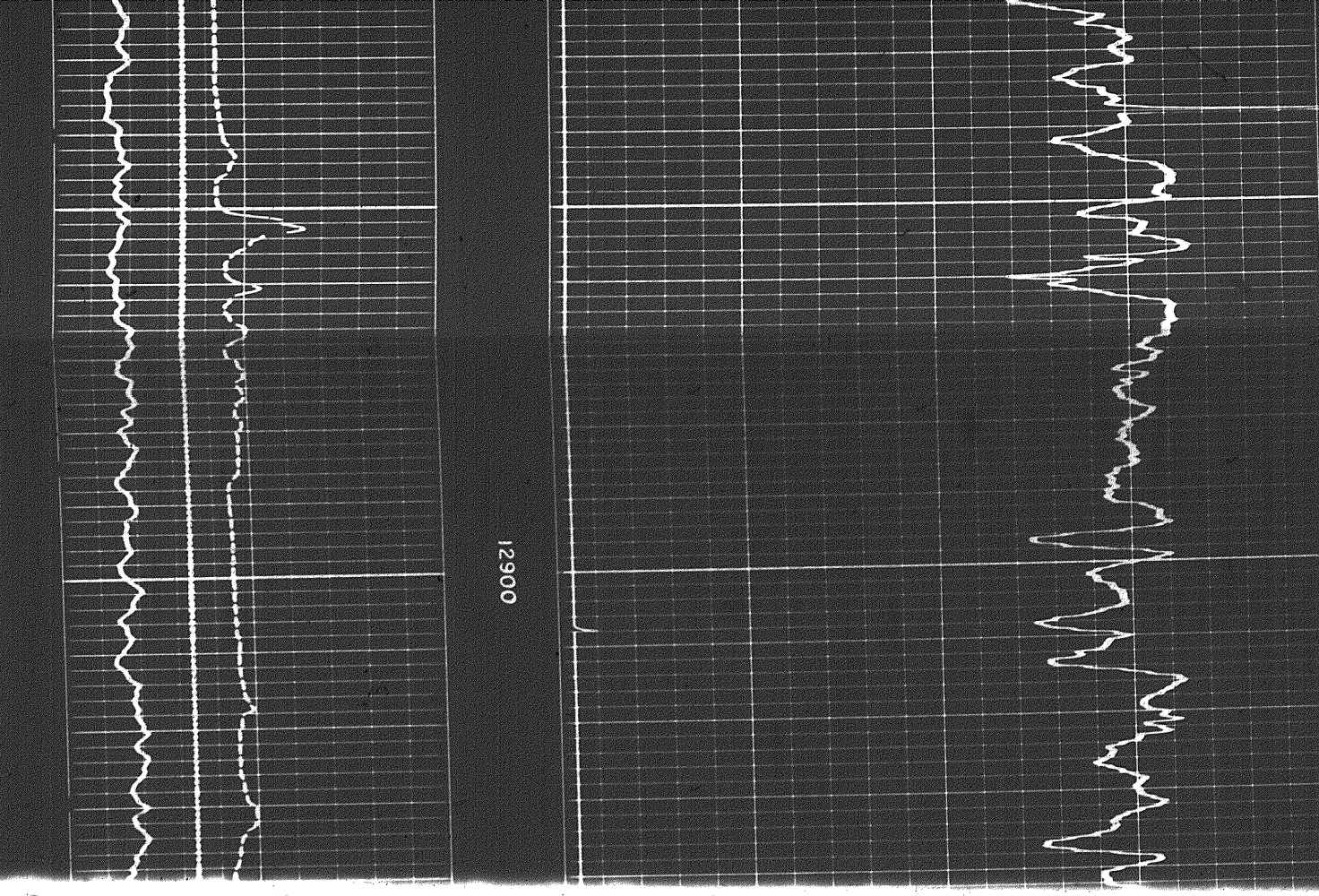
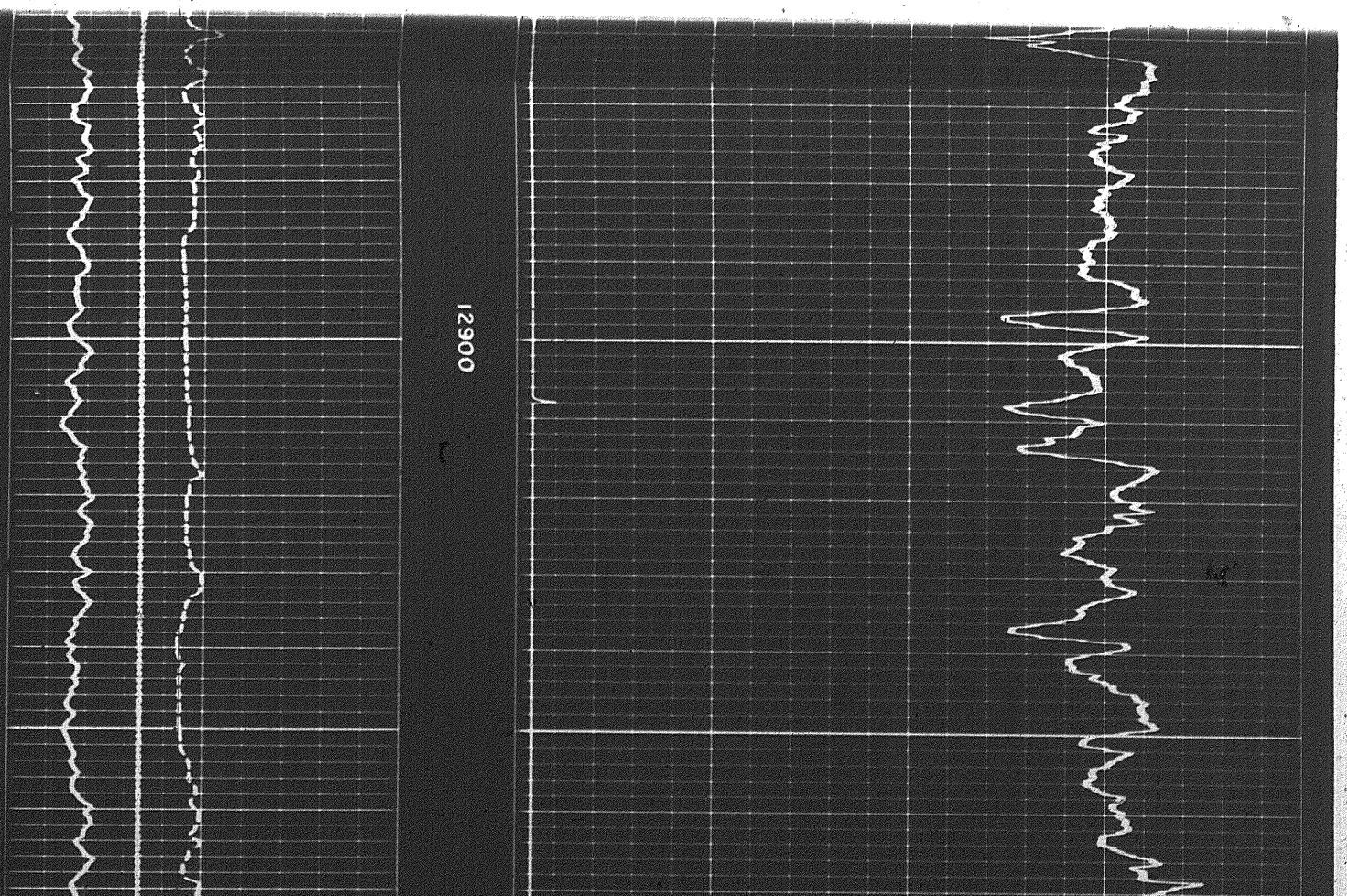


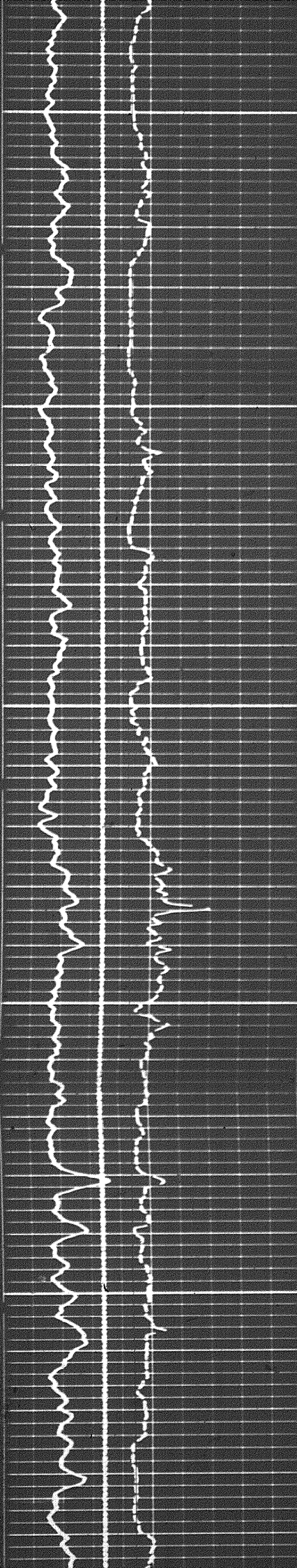
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12700

12800

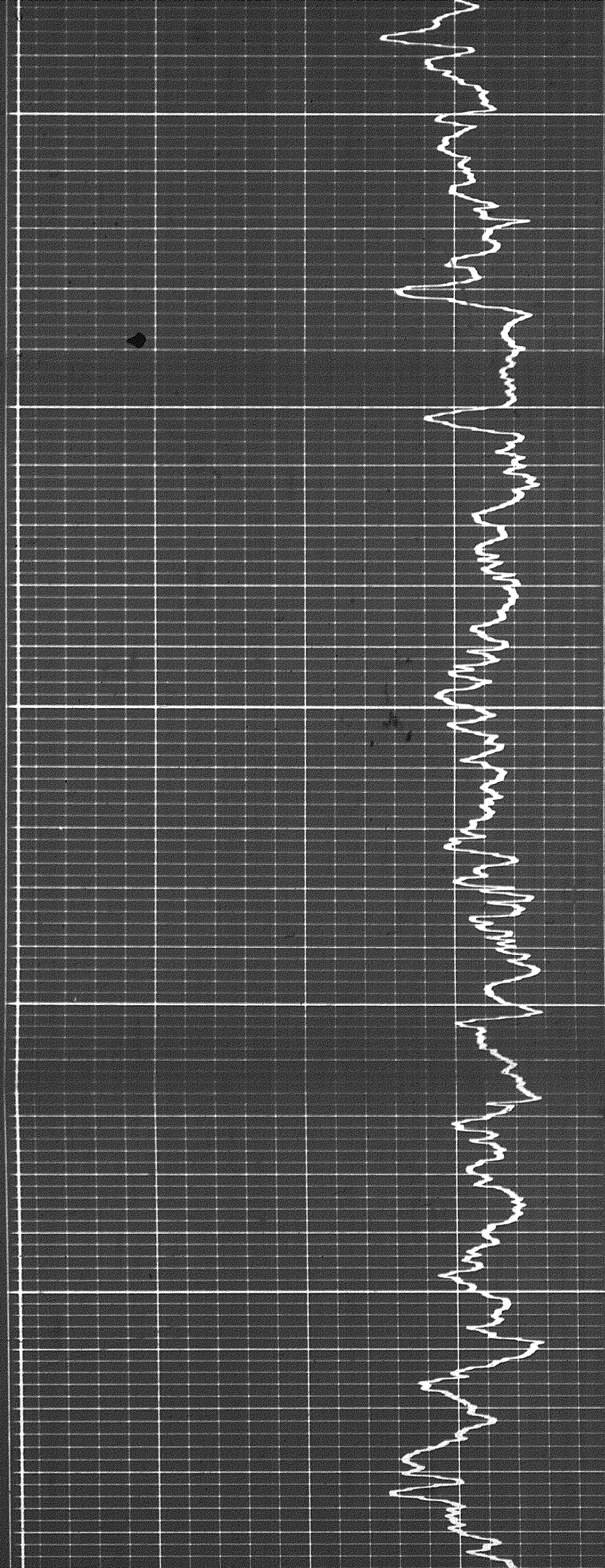


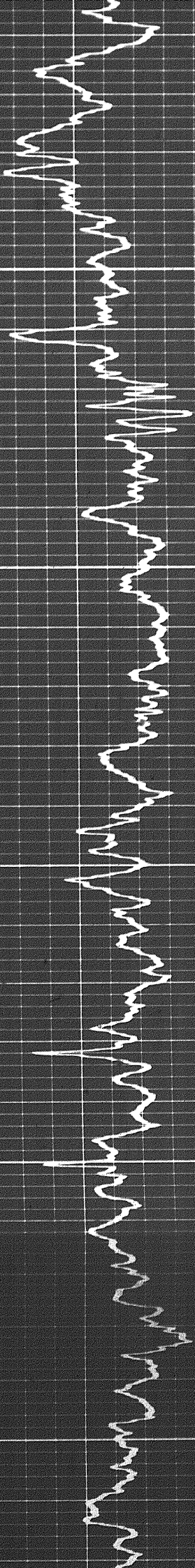




13000

13100

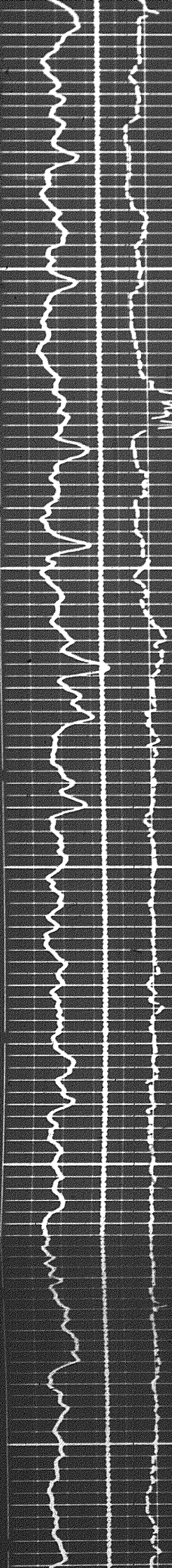


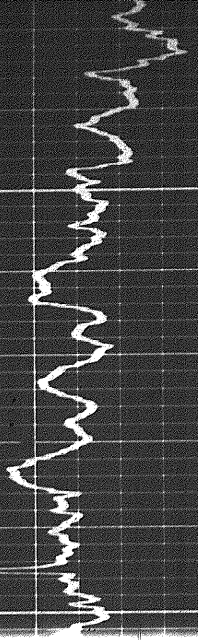


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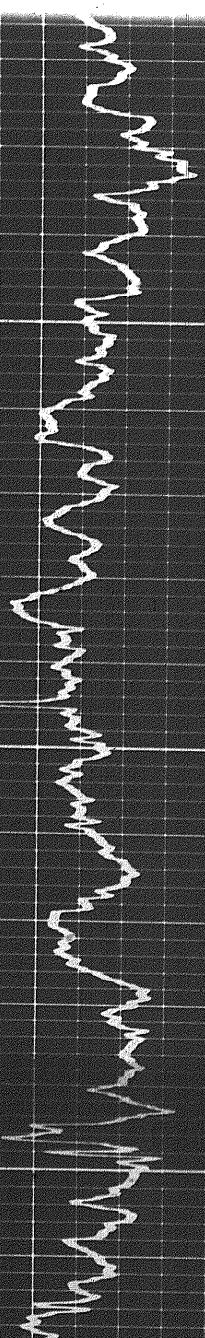
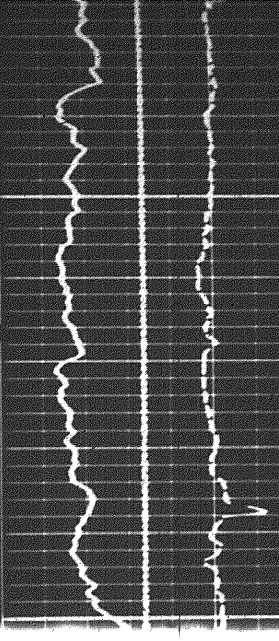
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13400

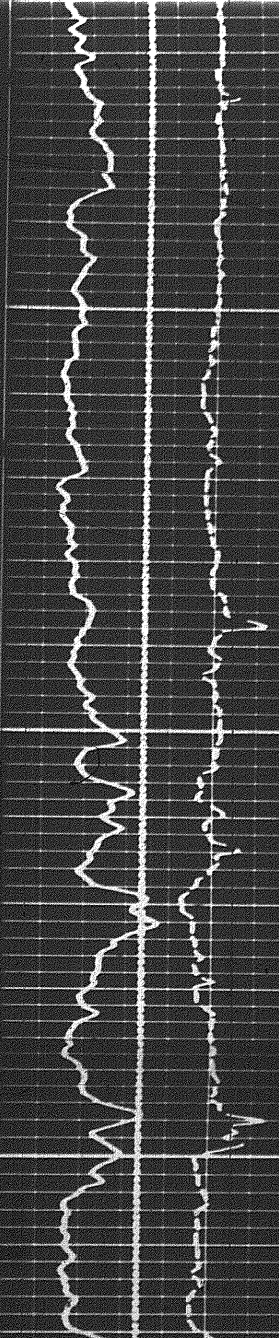




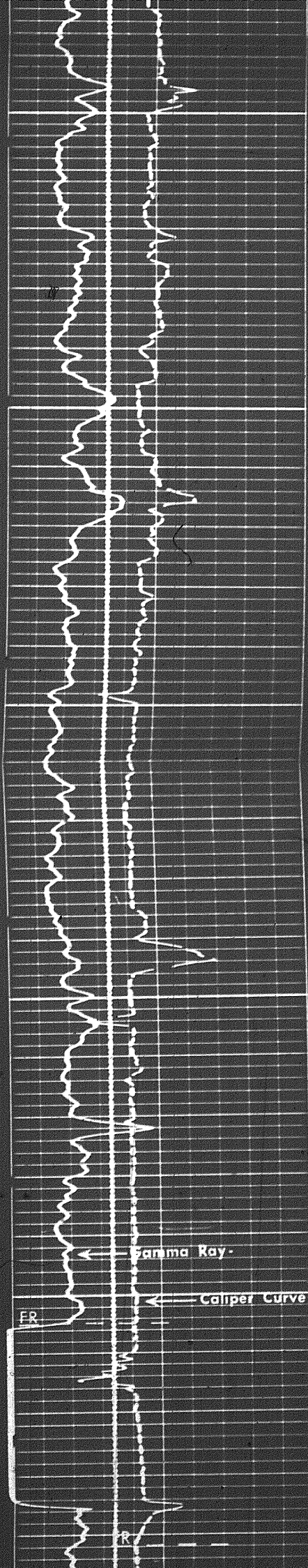
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13400



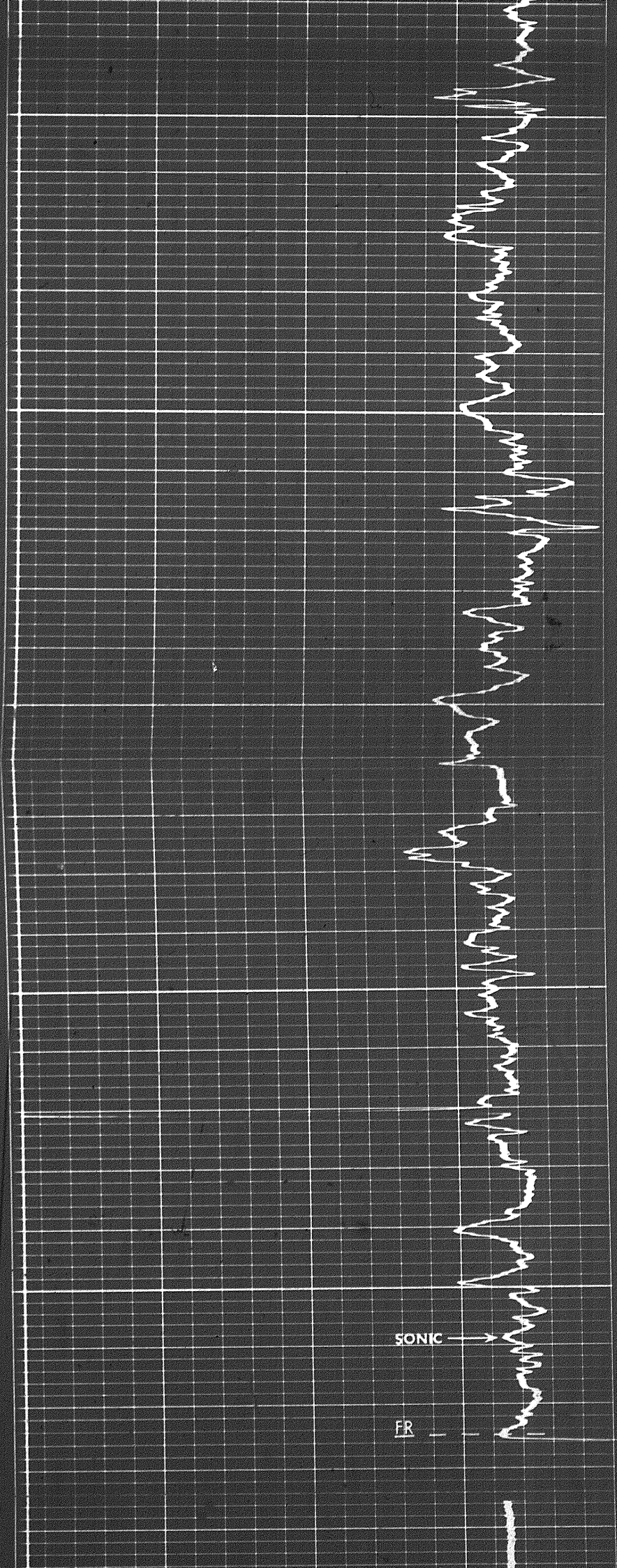
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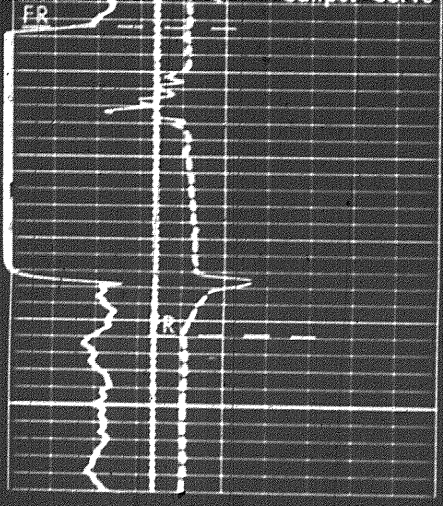


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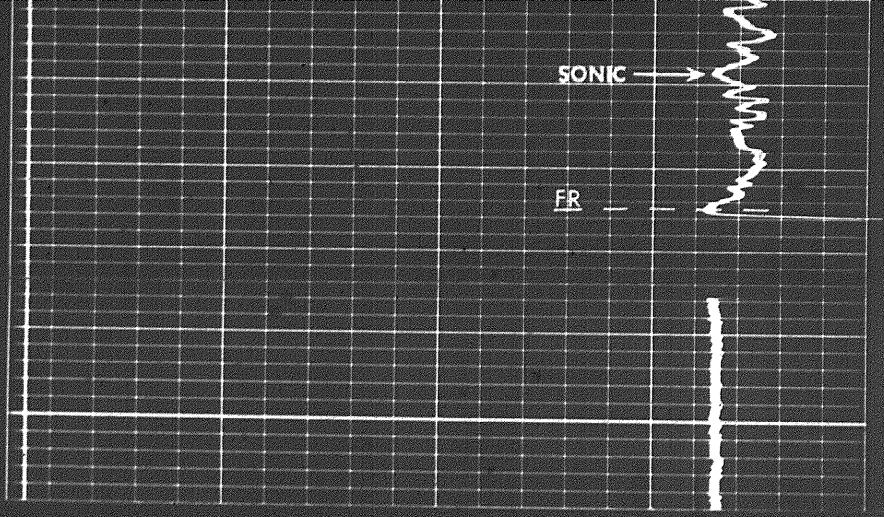
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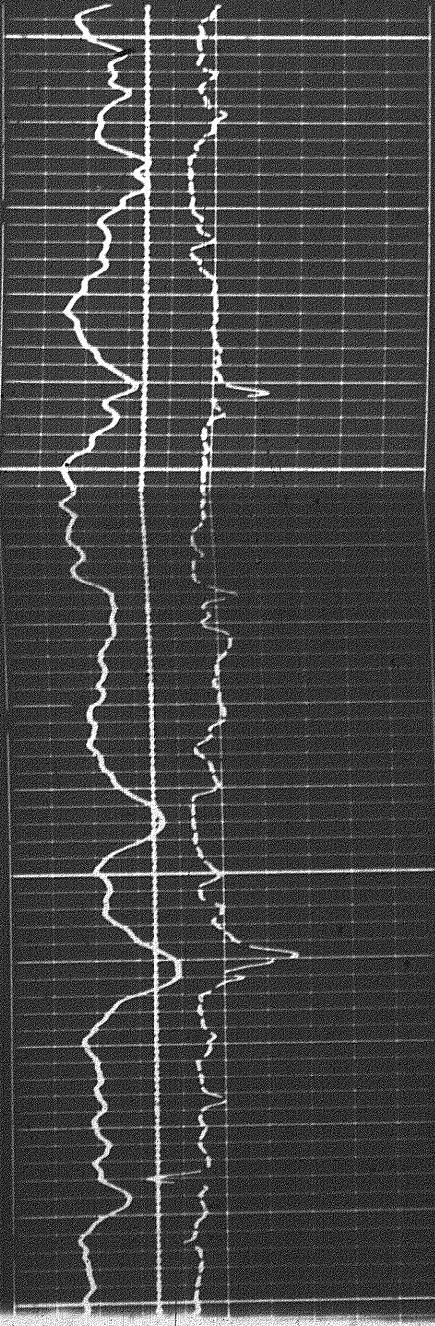


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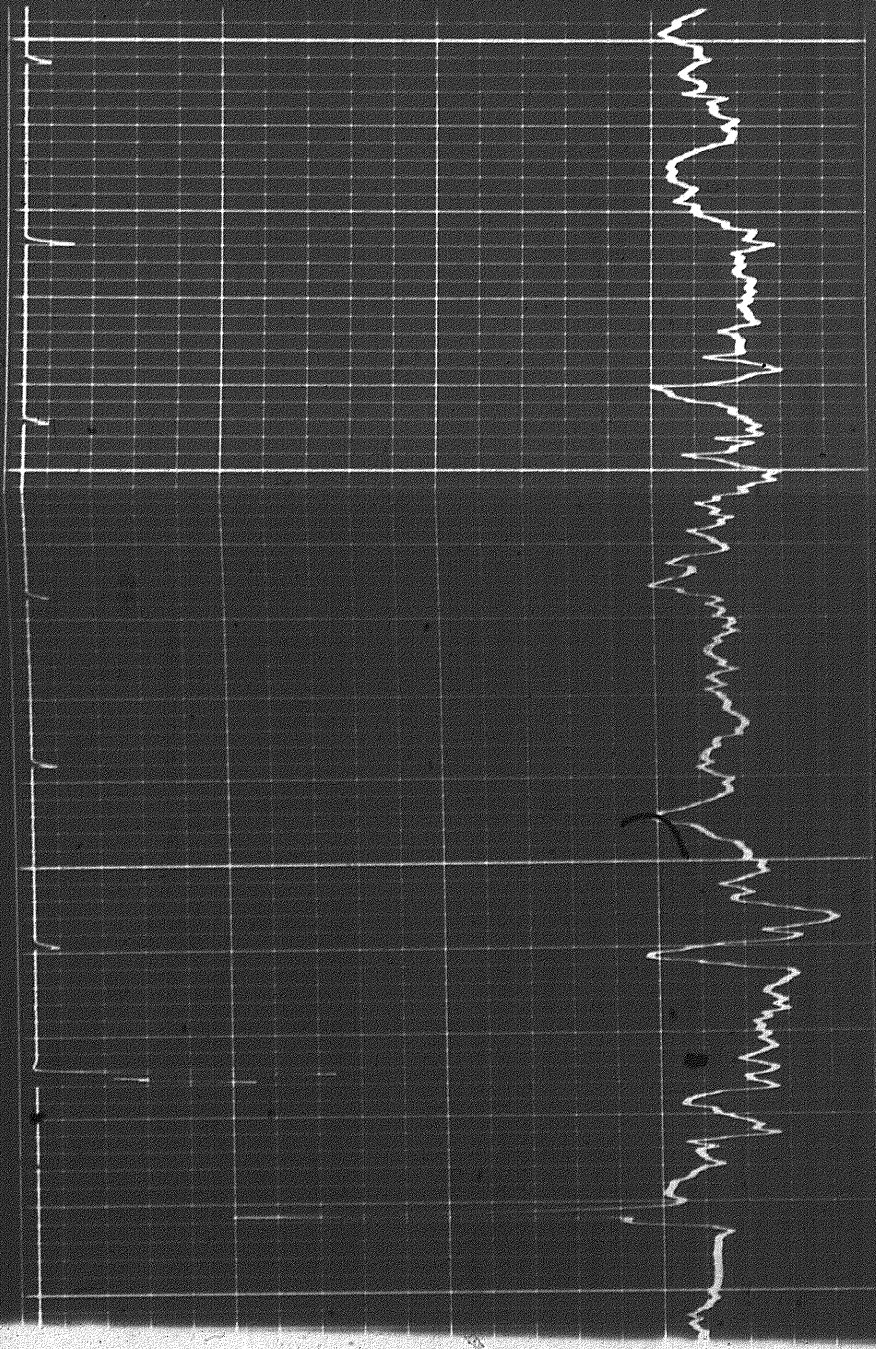
REPEAT SECTION

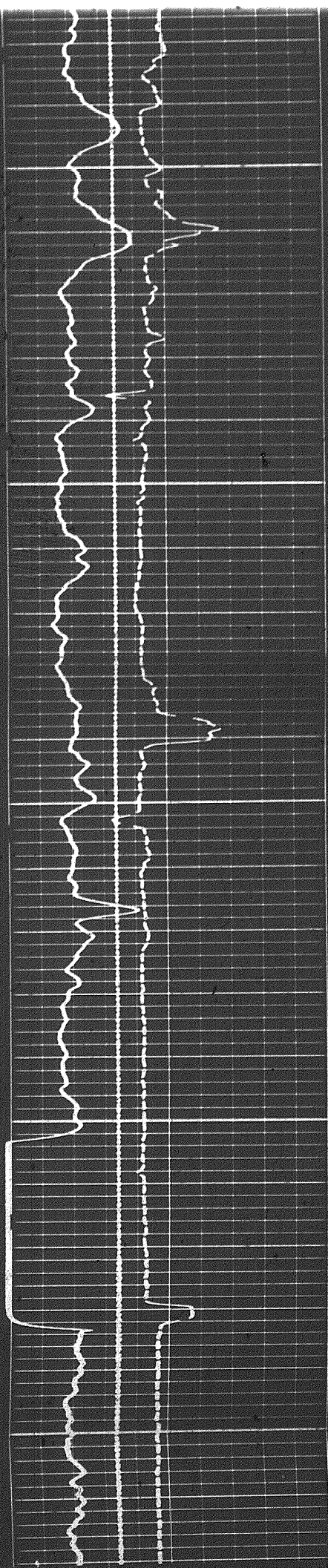
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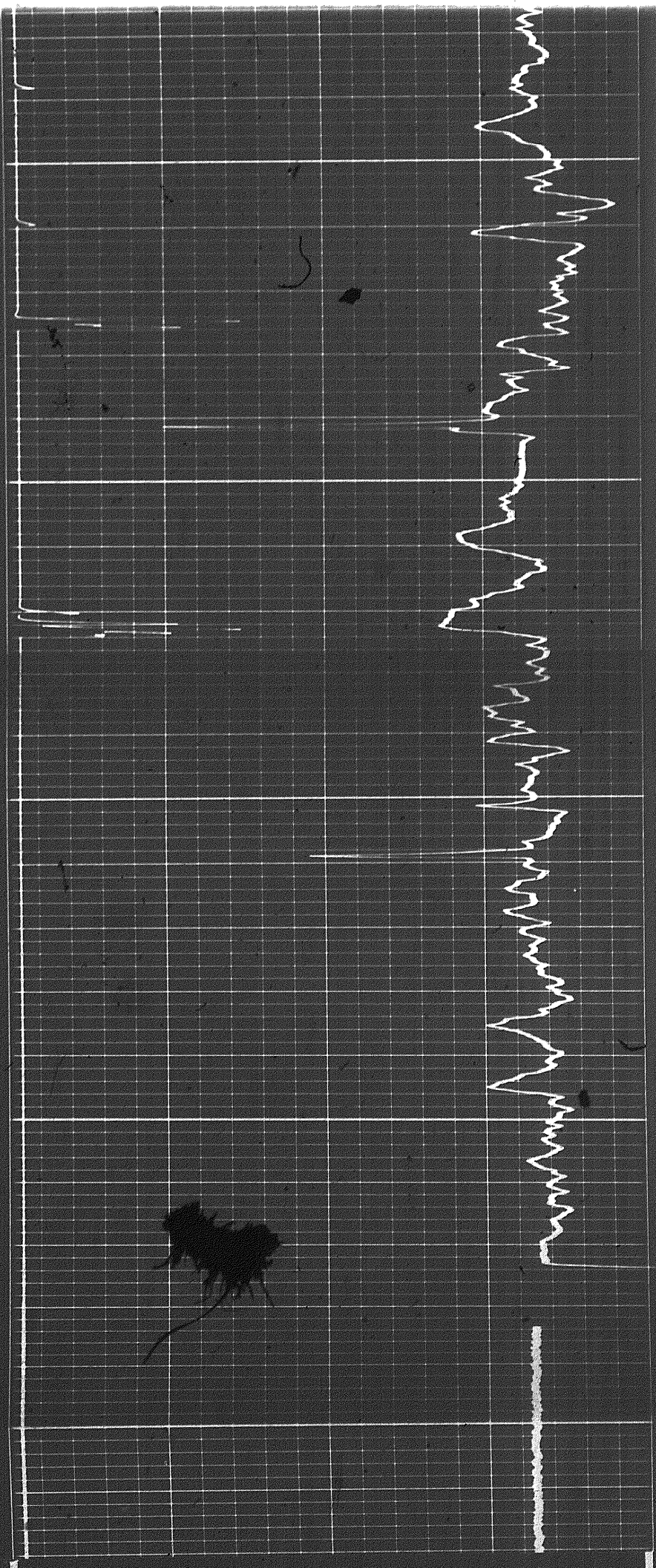
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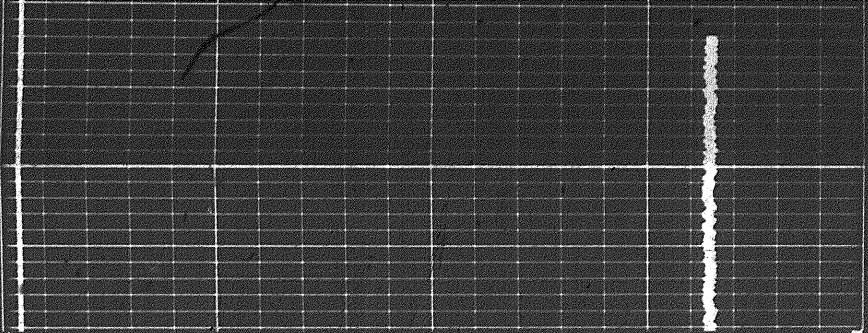
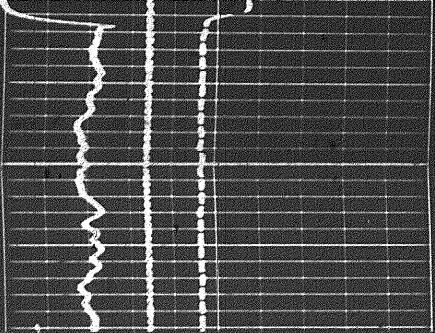




13600

13700





6 7 8 9 10 11 12 13 14

CALIPER
hole diameter in inches

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

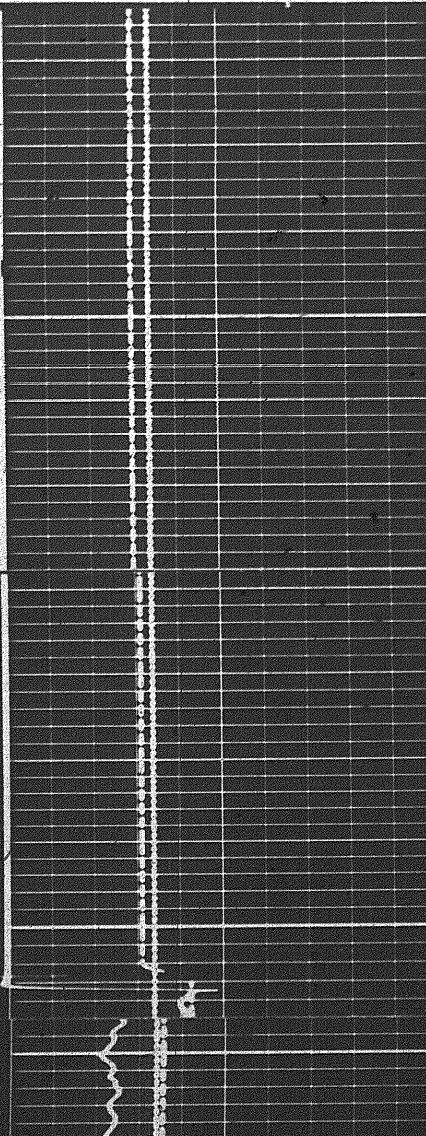
Speed in FPM

120 100 80
80 50 40

GAMMA RAY
API UNITS

DEPTH

SONIC
INTERVAL TRANSIT TIME
microseconds per foot

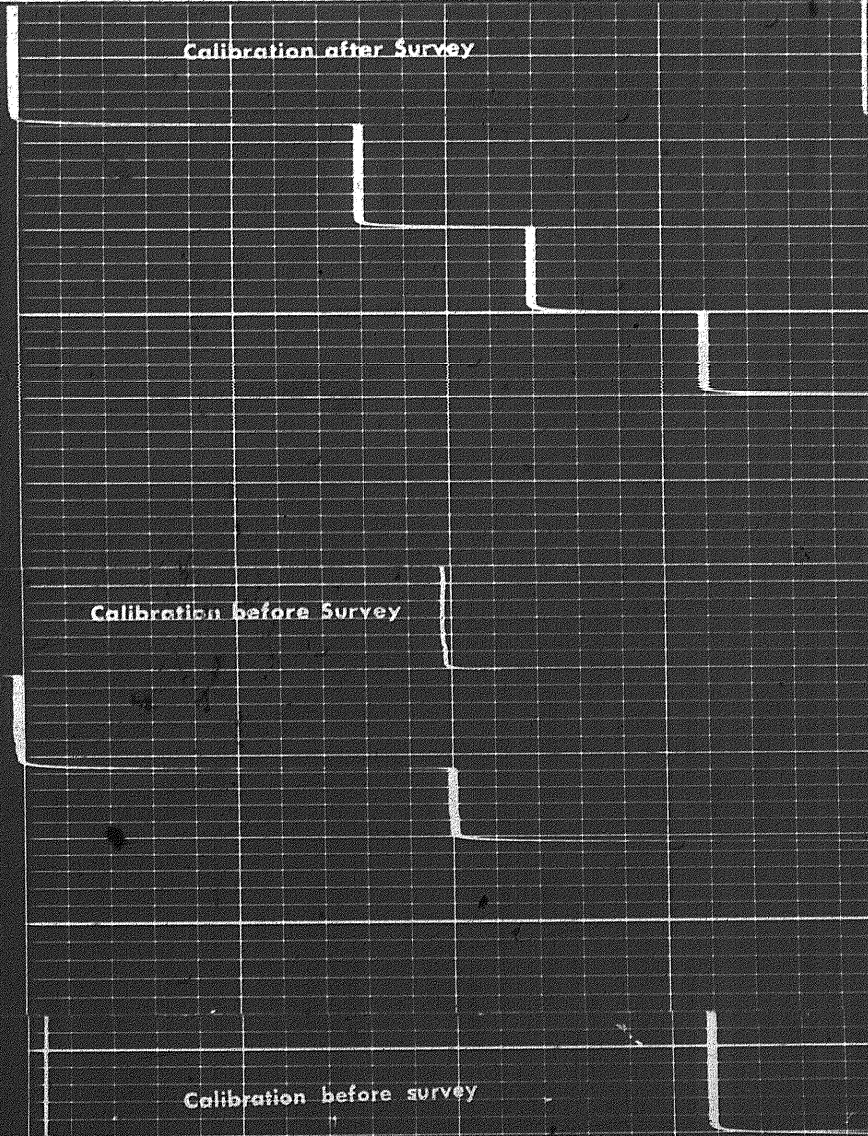


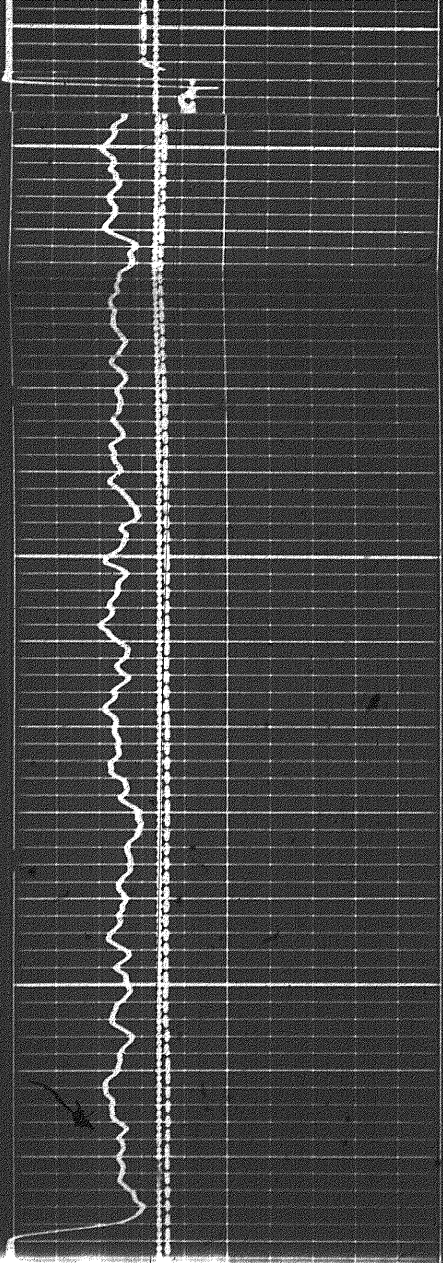
6
5
4
3
2
1
5
4
3
2
1
1300

Calibration after Survey

Calibration before Survey

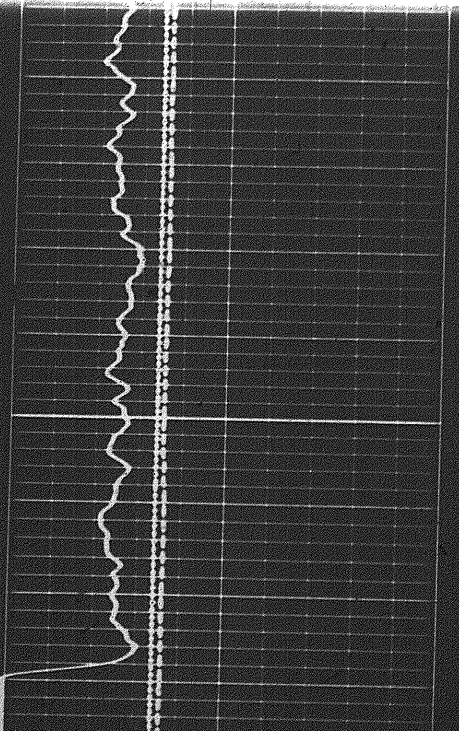
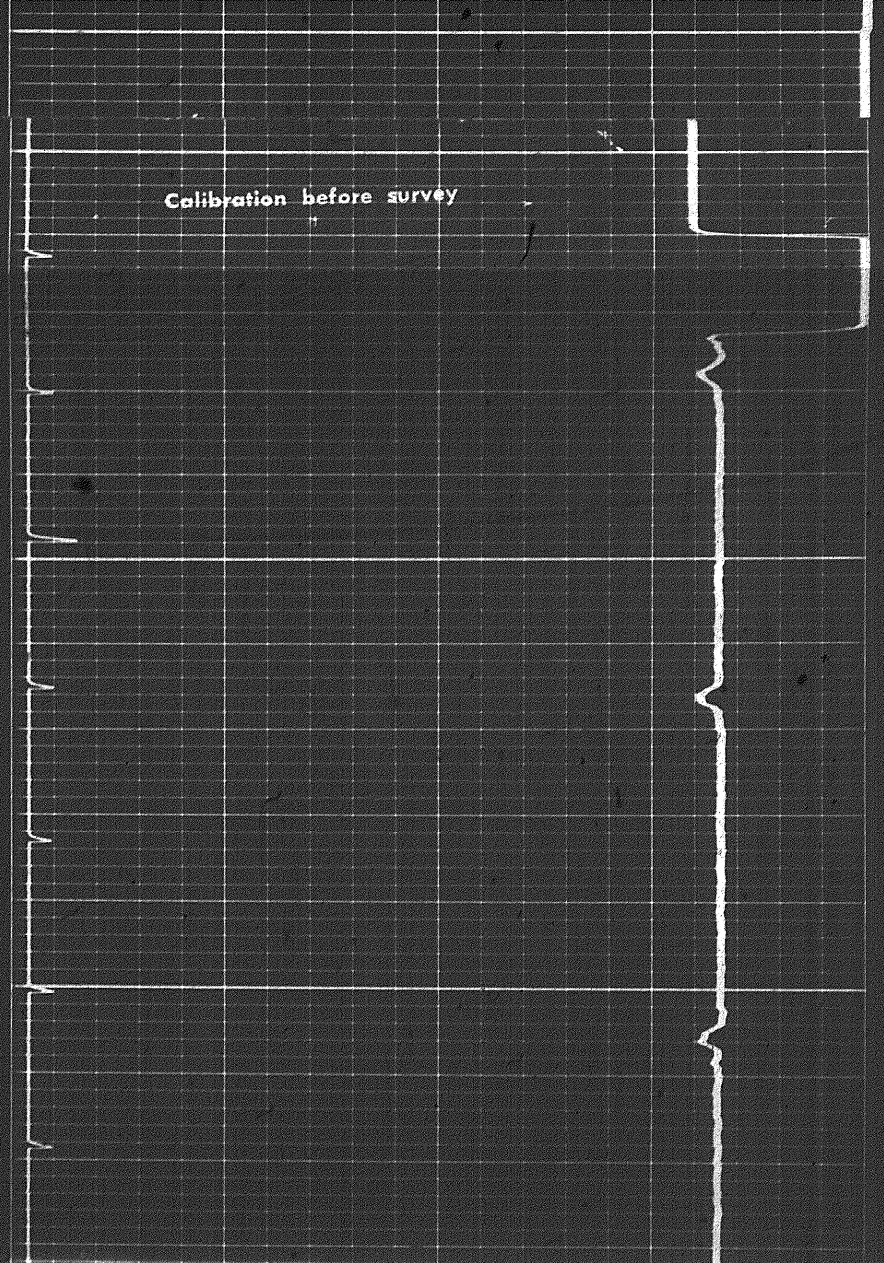
Calibration before survey



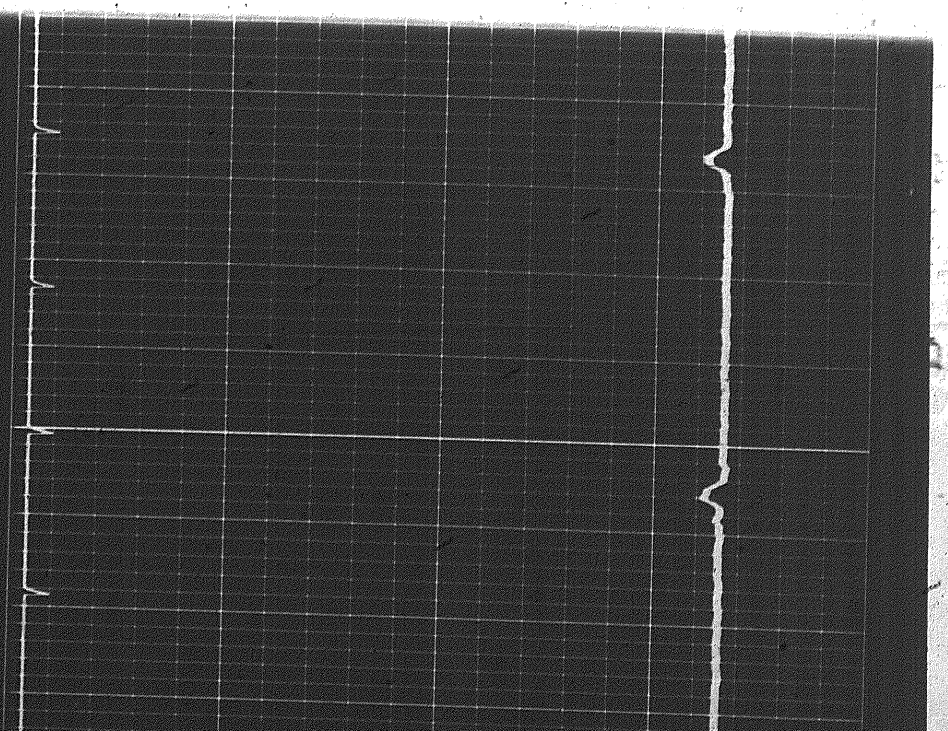


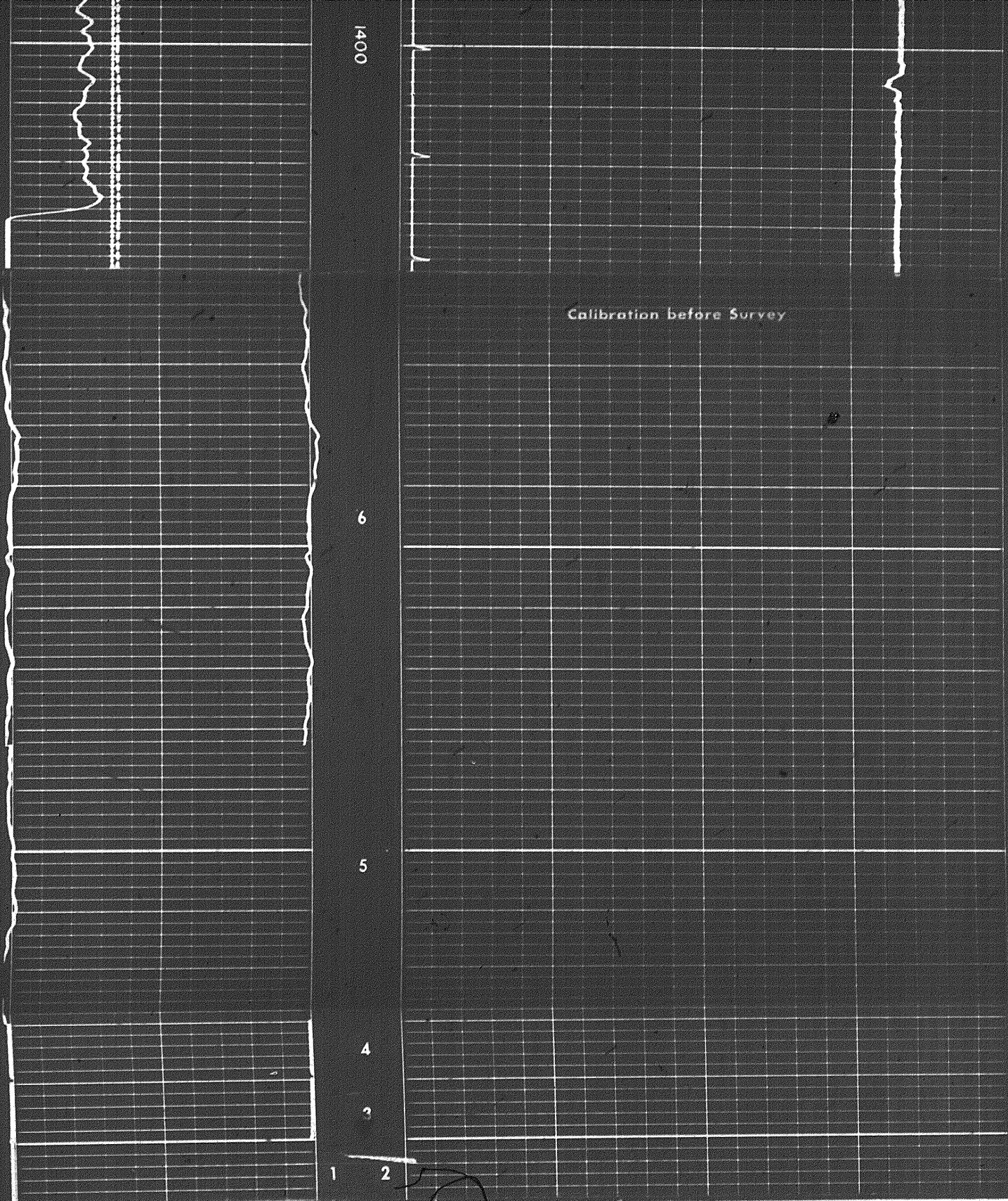
1300

1400



1400





BOREHOLE COMPENSATED SONIC CALIBRATION CODING

- 1. MECHANICAL ZERO
- 2. 40 μ SEC/FT
- 3. 60 μ SEC FT
- 4. 80 μ SEC/FT
- 5. 100 μ SEC/FT
- 6. 140 μ SEC/FT

GAMMA RAY CALIBRATION CODING

- 1. MECHANICAL ZERO
- 2. ELECTRICAL ZERO
- 3. RECORDER SENSITIVITY

BOREHOLE COMPENSATED SONIC CALIBRATION CODING

1. MECHANICAL ZERO
2. 40 μ SEC/FT
3. 60 μ SEC/FT
4. 80 μ SEC/FT
5. 100 μ SEC/FT
6. 140 μ SEC/FT

GAMMA RAY CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO
3. RECORDER SENSITIVITY
4. MEMORIZER SENSITIVITY
5. BACKGROUND
6. CALIBRATION

COMPANY COLUMBIA GAS DEVELOPMENT OF CANADA LTD.
WELL COLUMBIA ET AL KOTANFEE #7 5-37
FIELD WILDCAT
PROVINCE YUKON

SCHL. FR 13742.0
SCHL. TD 13742.0
DRLR. TD 13742.0
Elev.:
KB 2033.0
DF
GL 2013.0