



SUPERIOR  
Hays,  
Kansas

# SONIC LOG

Company MULL DRILLING COMPANY, INC.  
Well TUBS UNIT #1-21  
Field WILDCAT  
County KIOWA  
State COLORADO

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Well TUBS UNIT #1-21  
Field WILDCAT  
County KIOWA  
State COLORADO

Location: API # : 05-061-06849

378' FSL & 1319' FEL

SEC 21 TWP 18S RGE 45W

Permanent Datum GROUND LEVEL Elevation 3903  
Log Measured From KELLY BUSHING 13' A.G.L.  
Drilling Measured From KELLY BUSHING

Other Services  
CDL/CNL/PE  
DIL/MEL  
Elevation  
K.B. 3916  
D.F. 3914  
G.L. 3903

Date 11/17/10

Run Number TWO

Depth Driller 5000

Depth Logger 4998

Bottom Logged Interval 4985

Top Log Interval 300

Casing Driller 8 5/8" @ 327'

Casing Logger 324

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.2/53

pH / Fluid Loss 10.5/9.6

Source of Sample FLOWLINE

Rim @ Meas. Temp .850 @ 100F

Rmf @ Meas. Temp .638 @ 100F

Rmc @ Meas. Temp 1.02 @ 100F

Source of Rmf / Rmc MEASUREMENT

Rim @ BHT .680 @ 125F

Time Circulation Stopped 6 HOURS

Time Logger on Bottom 11:00 P.M.

Maximum Recorded Temperature 125F

Equipment Number 0836

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By MACKLIN ARMSTRONG

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

## Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
BRANDON, CO. 1W. ON HWY 96 TO "RD. 58", 1 1/2N., 1/4W., N. INTO

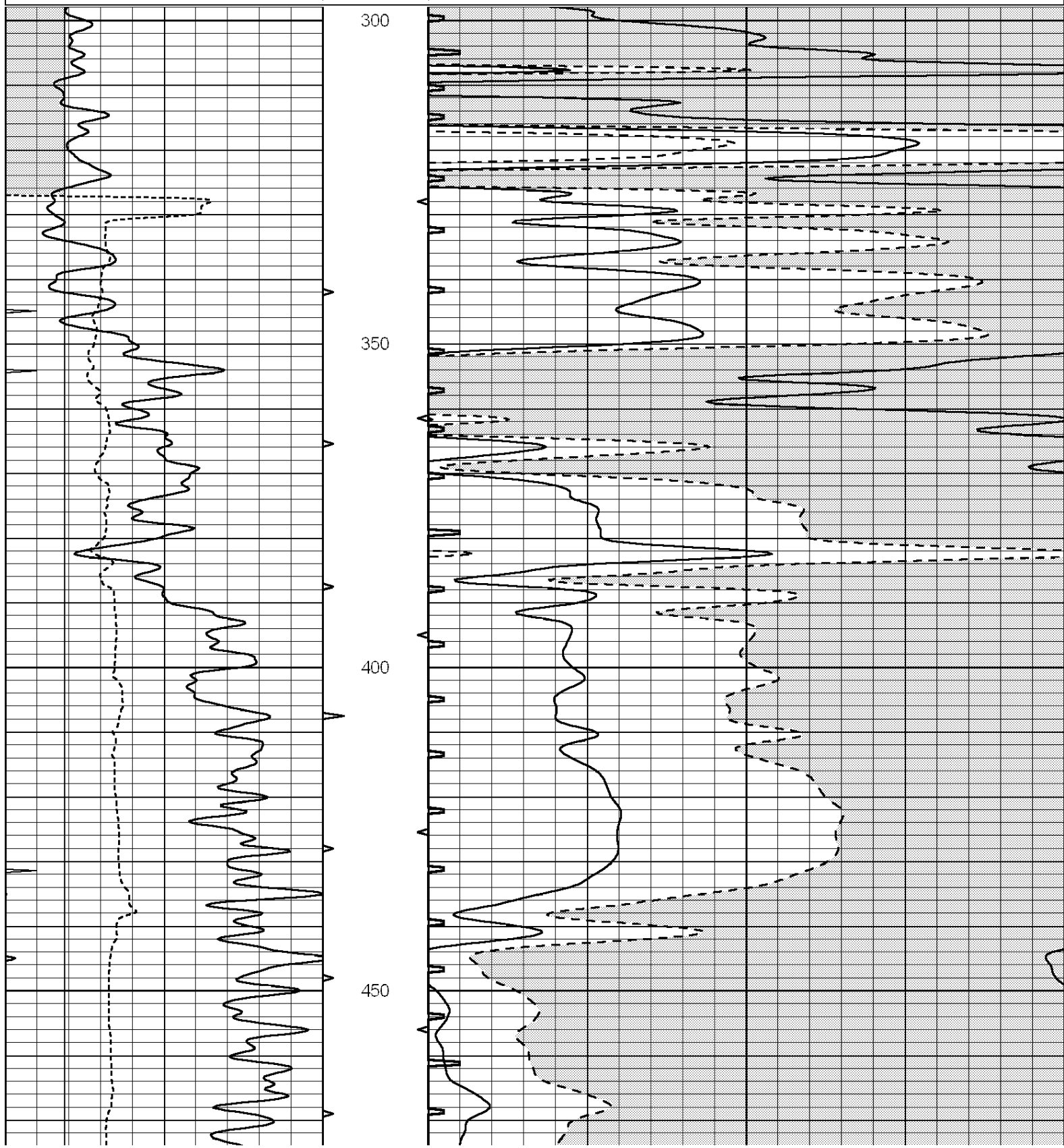


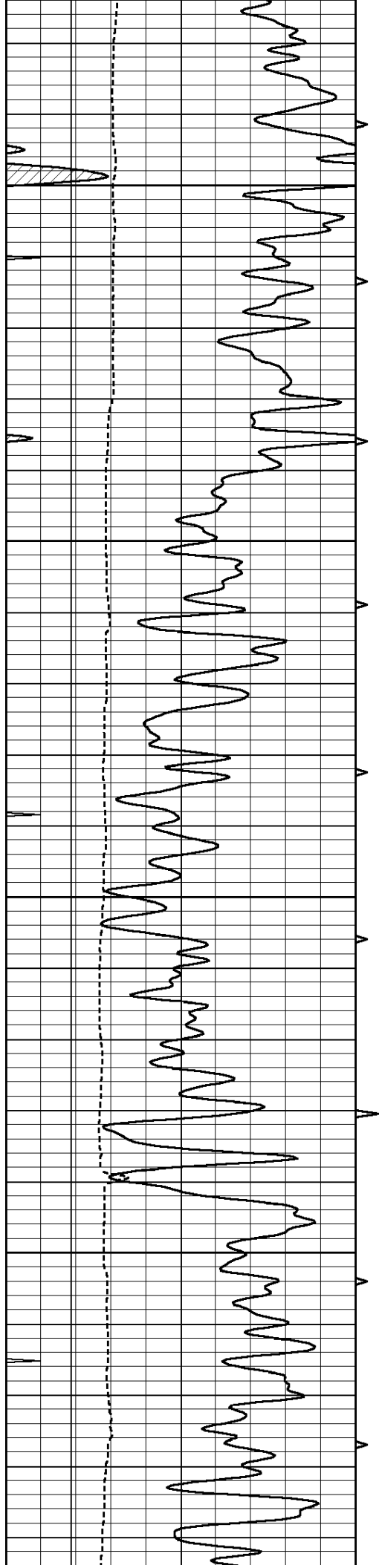
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# MAIN SECTION

Database File: 005803pe.db  
Dataset Pathname: pass12.4  
Presentation Format: slt  
Dataset Creation: Tue Nov 02 05:05:54 2010 by Calc Open-Cased 090629  
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	140	DELTA TIME (usec/ft)		40	
6	CALIPER (in)	16	10 (ft3)	0	30	SONIC POROSITY (pu)		-10
-----						-----		
0	MINMK	10	TBHV	0	ITT (msec)	20		
			0 (ft3)	10				



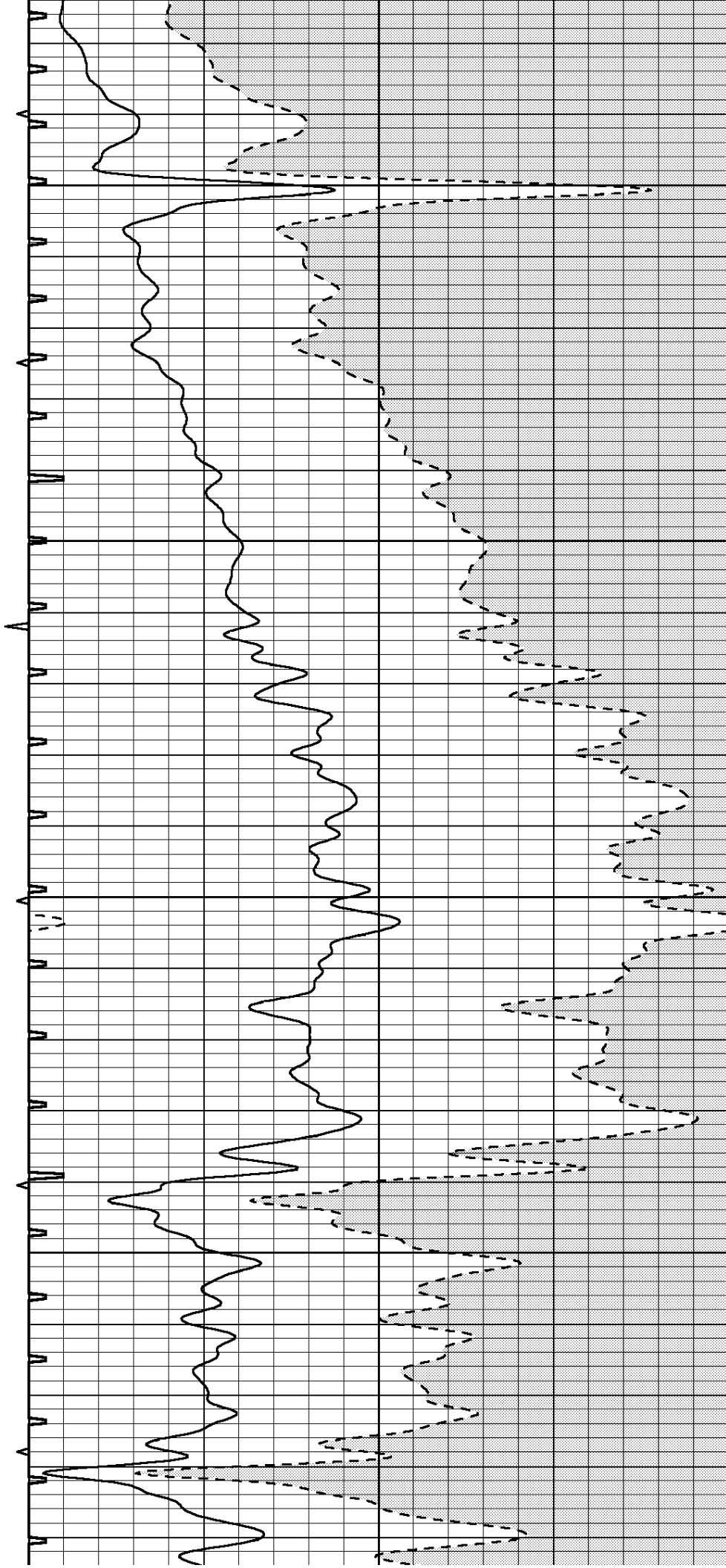


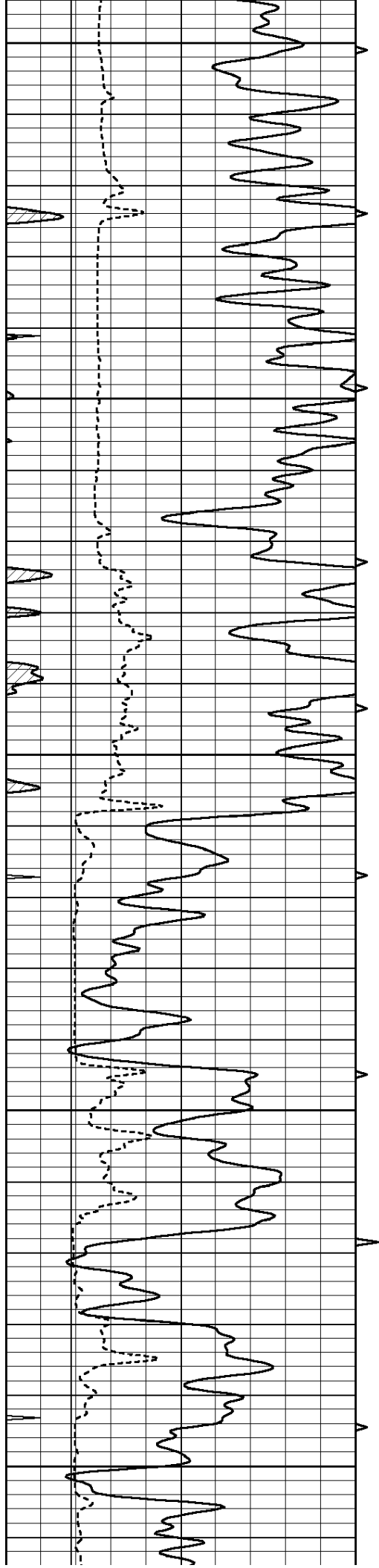
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550

600

650





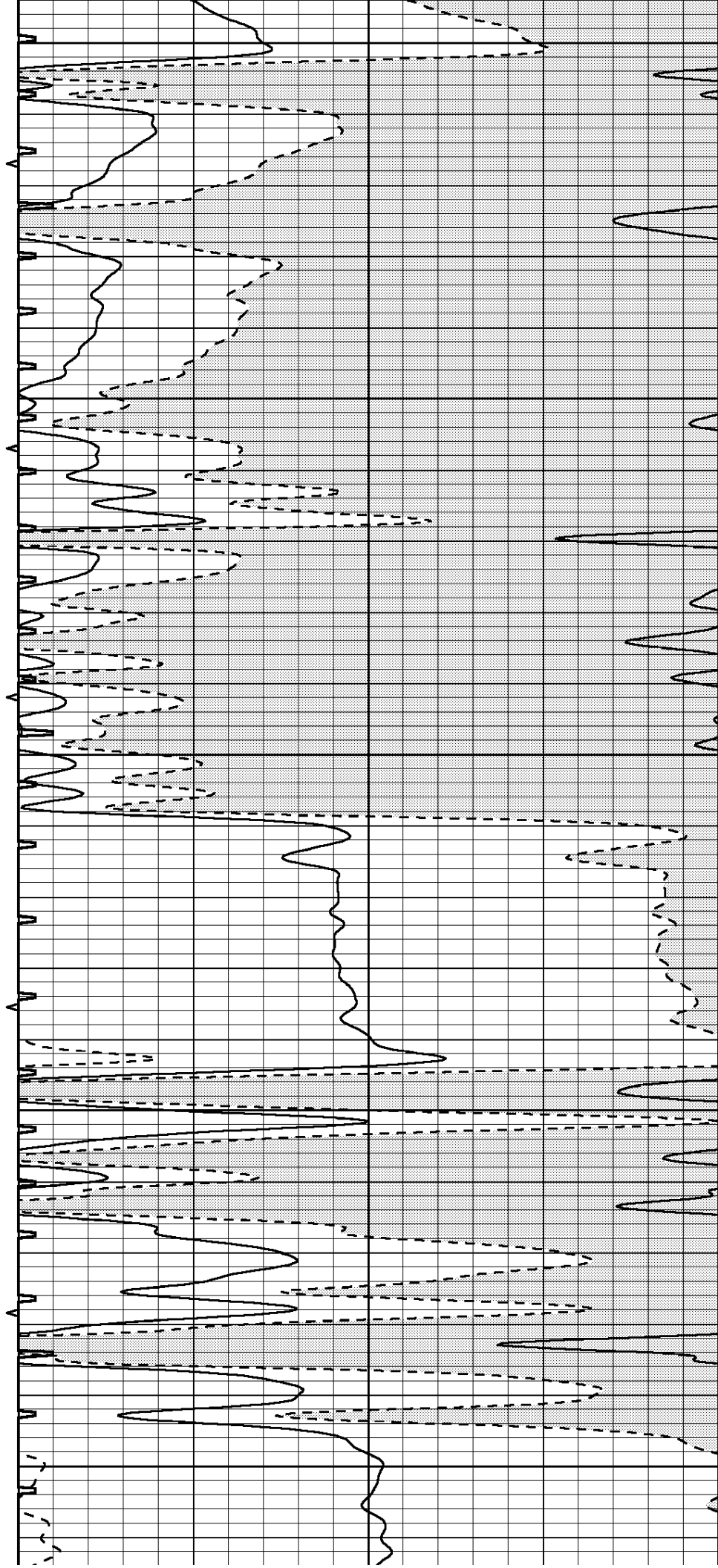
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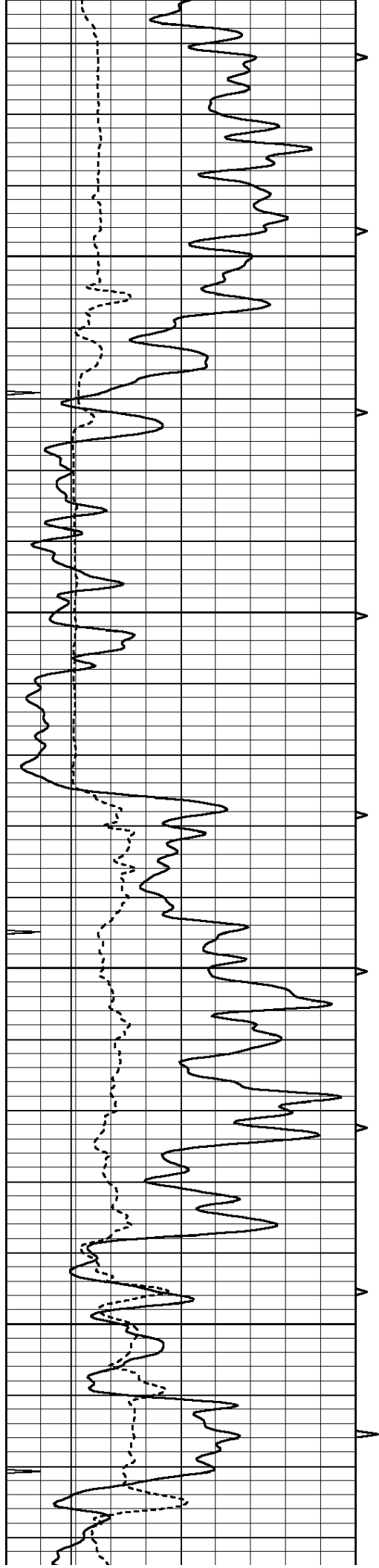
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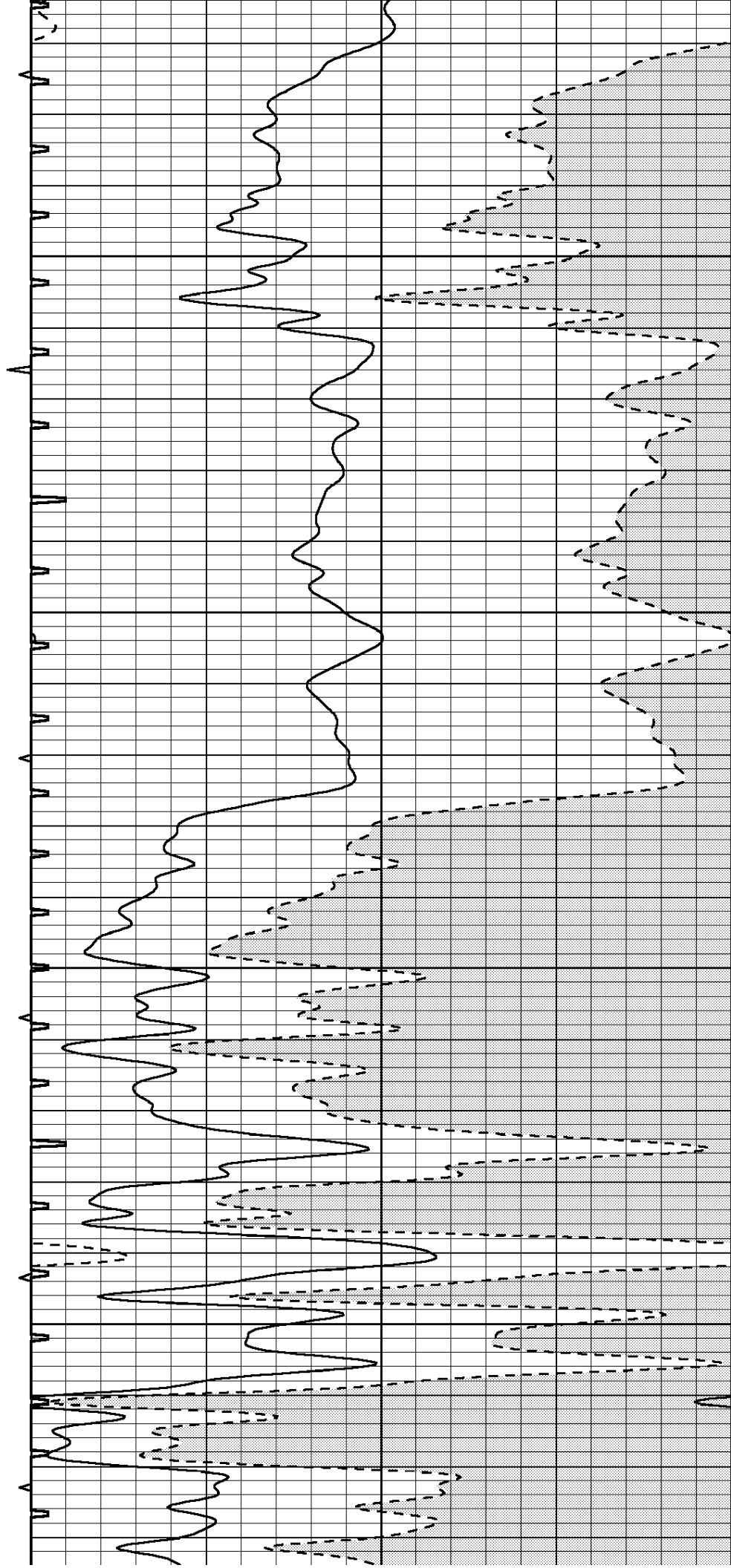


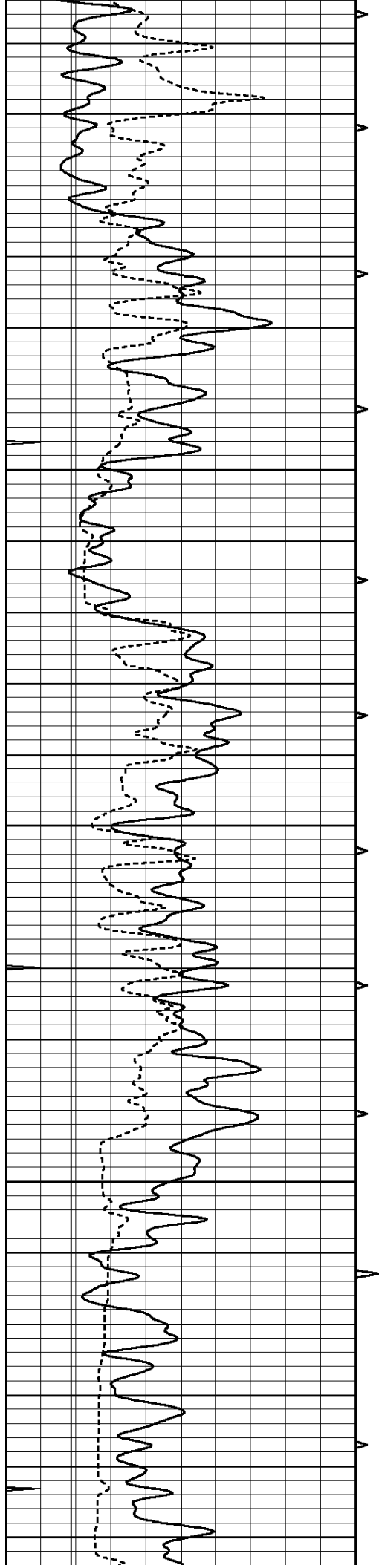
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1000

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1100





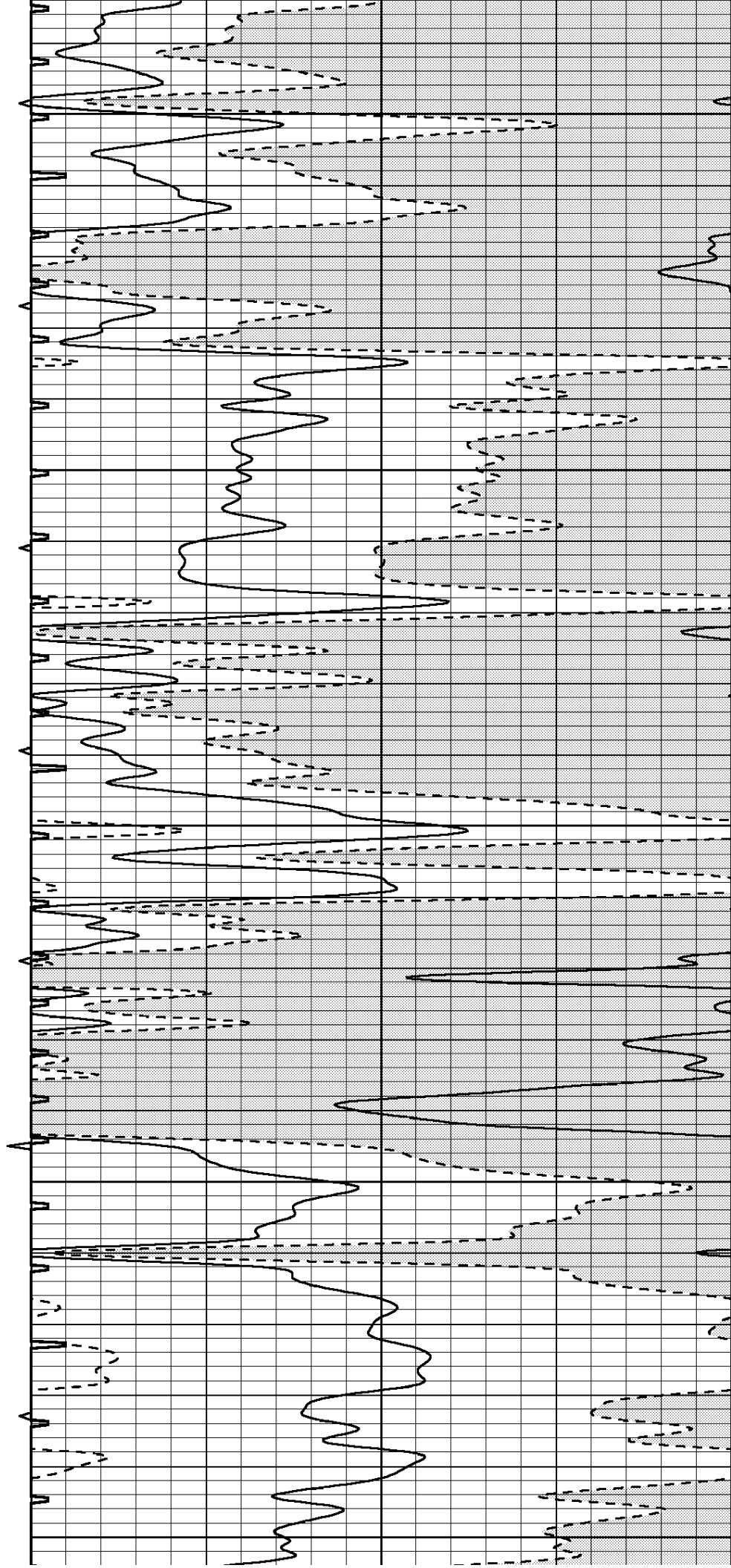
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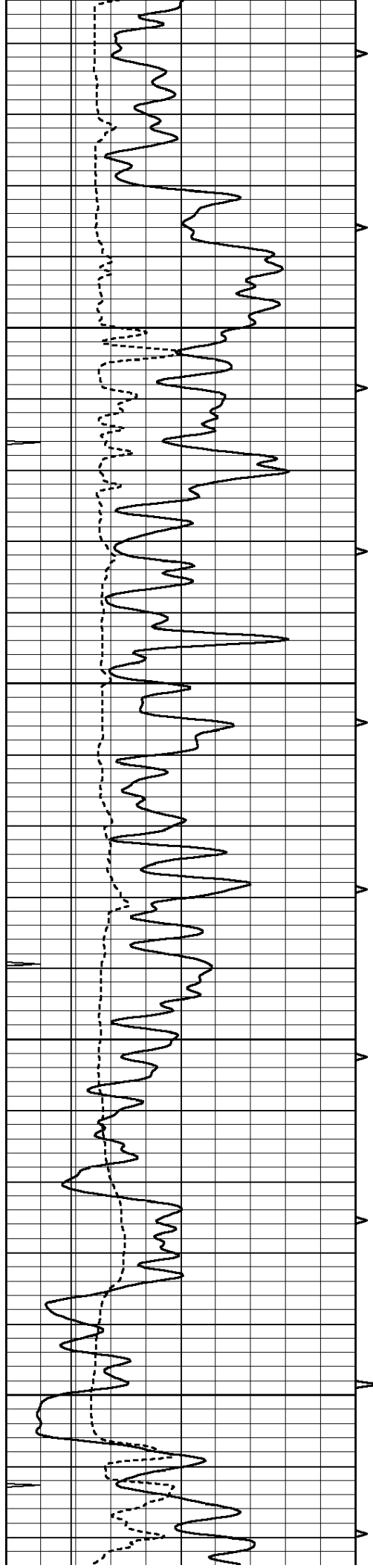
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1350



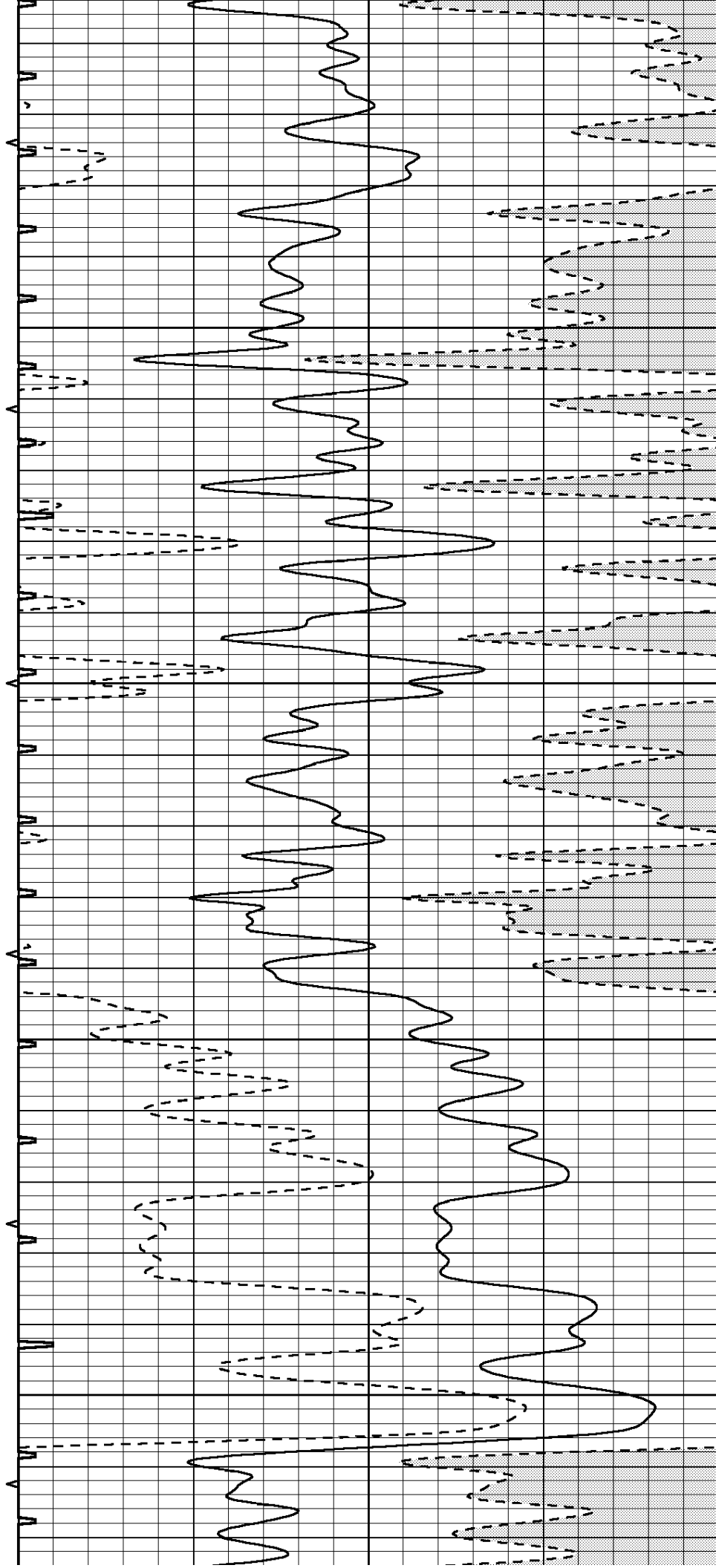


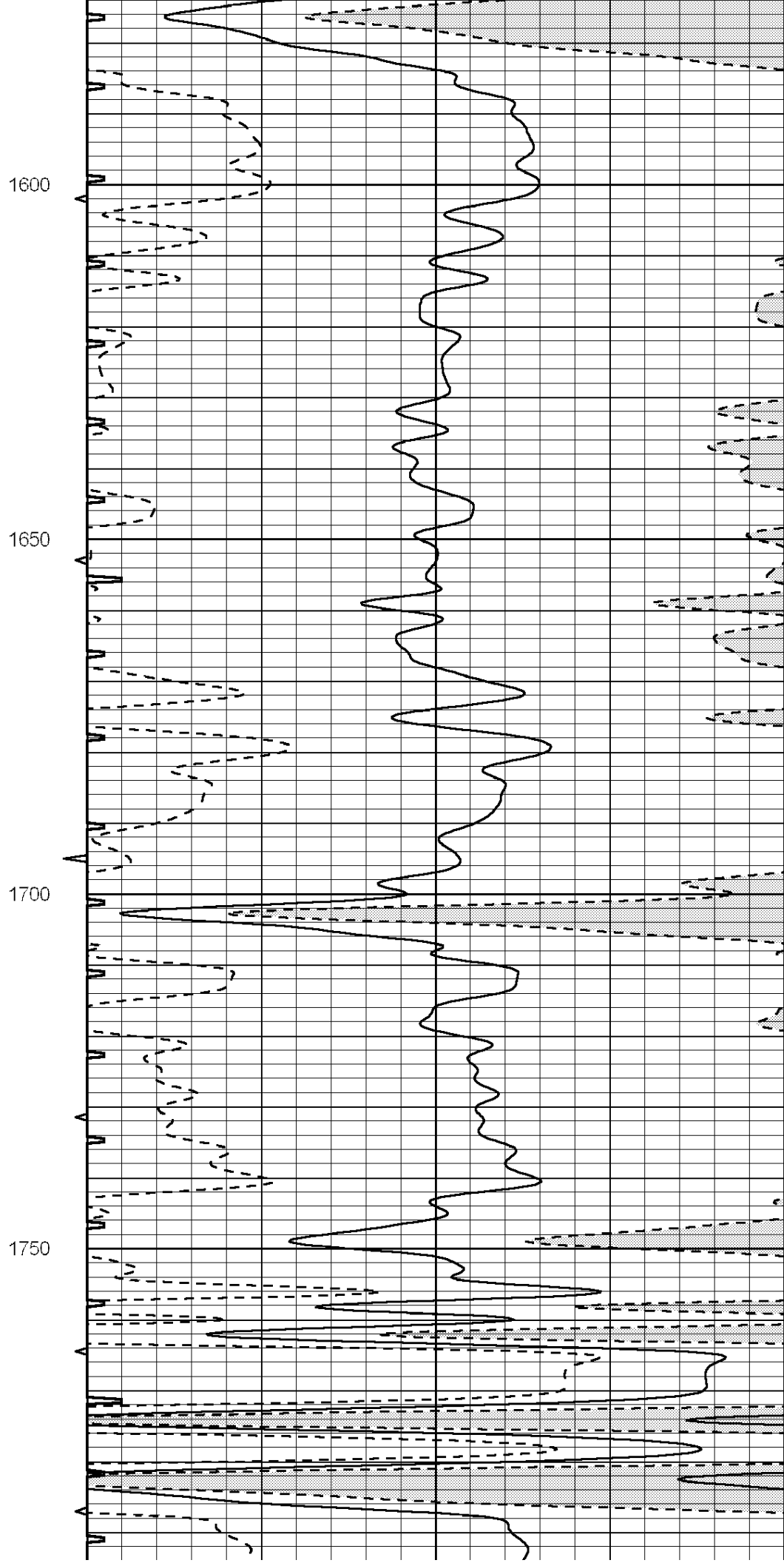
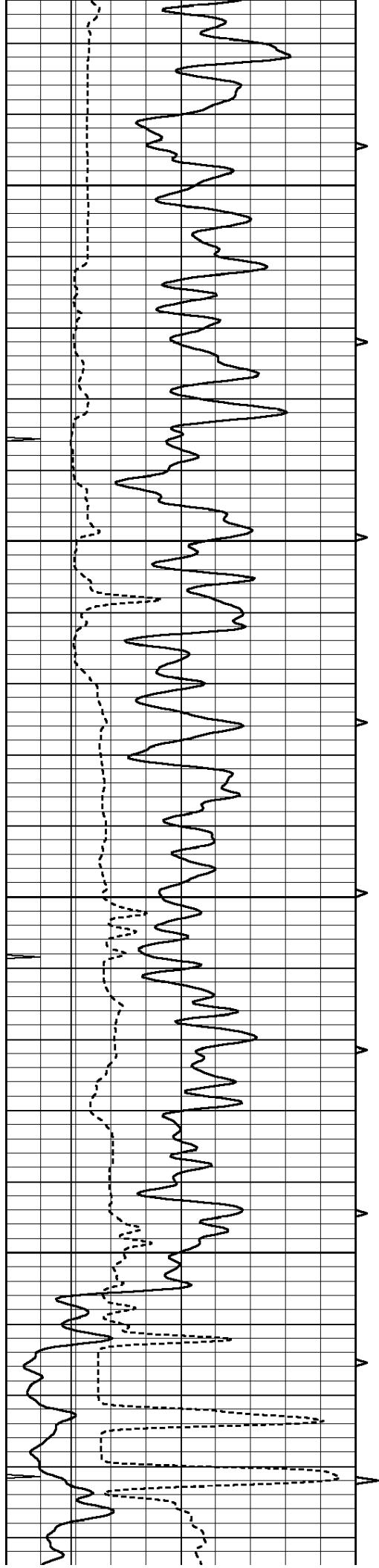
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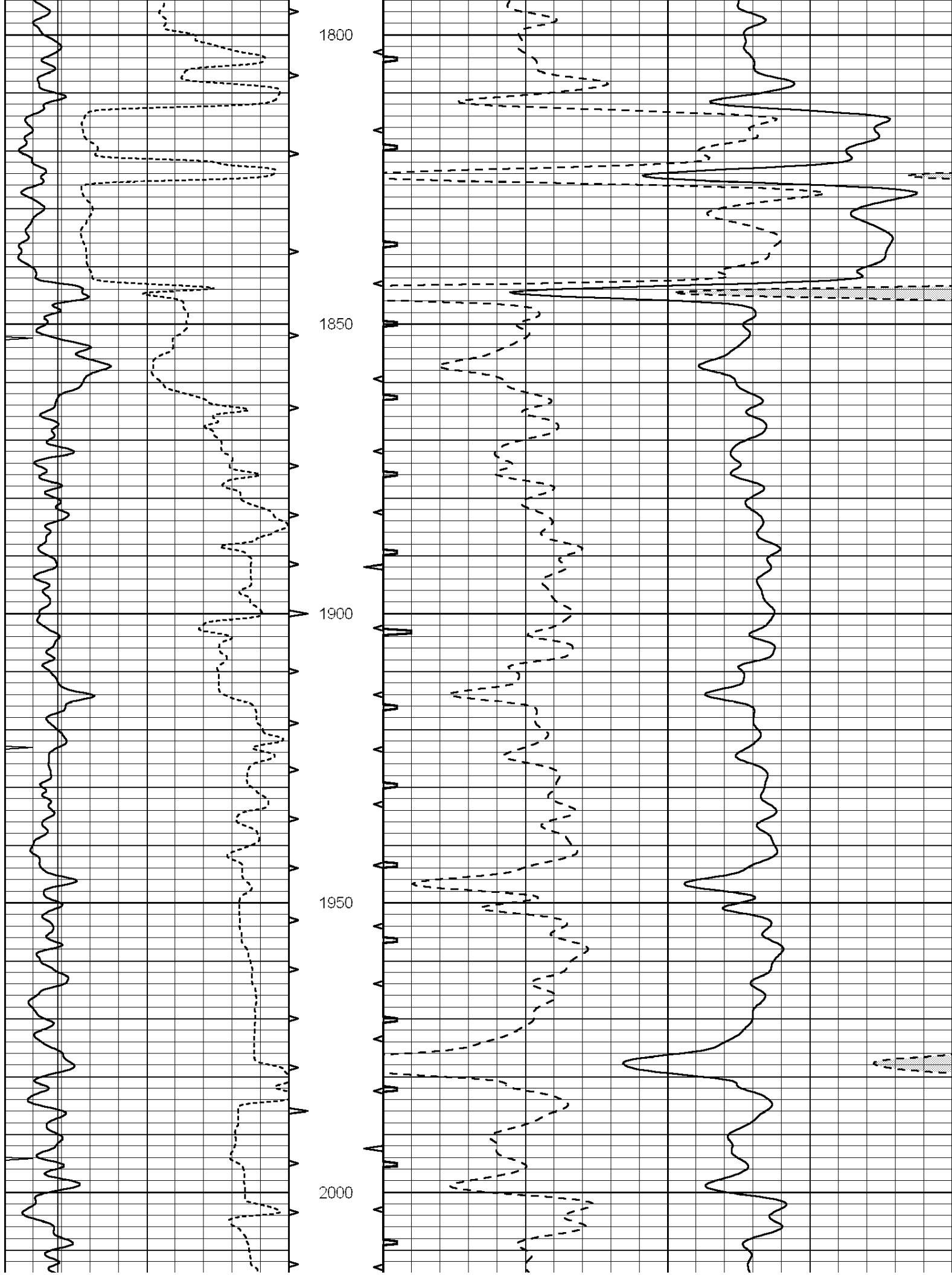
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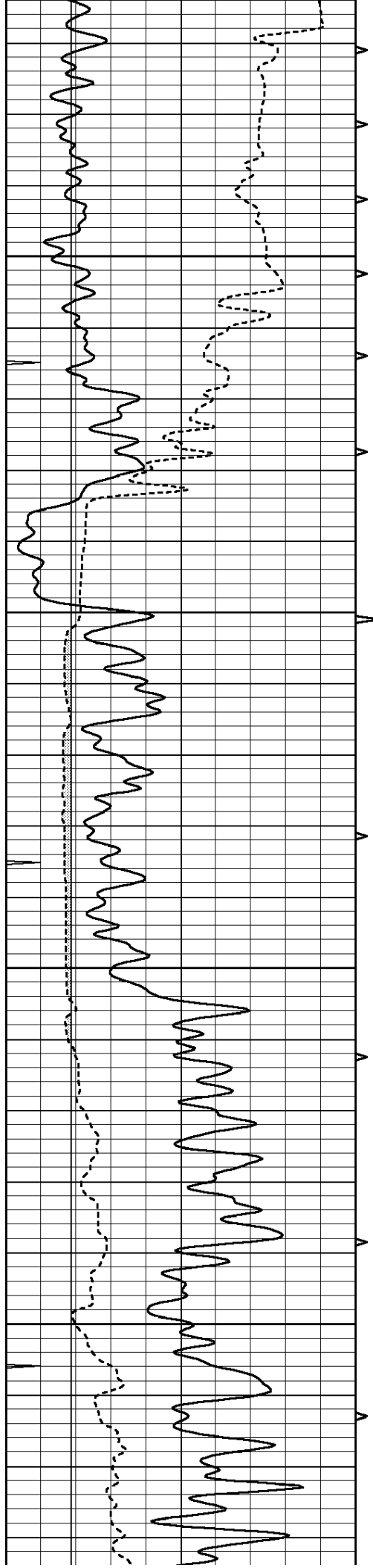
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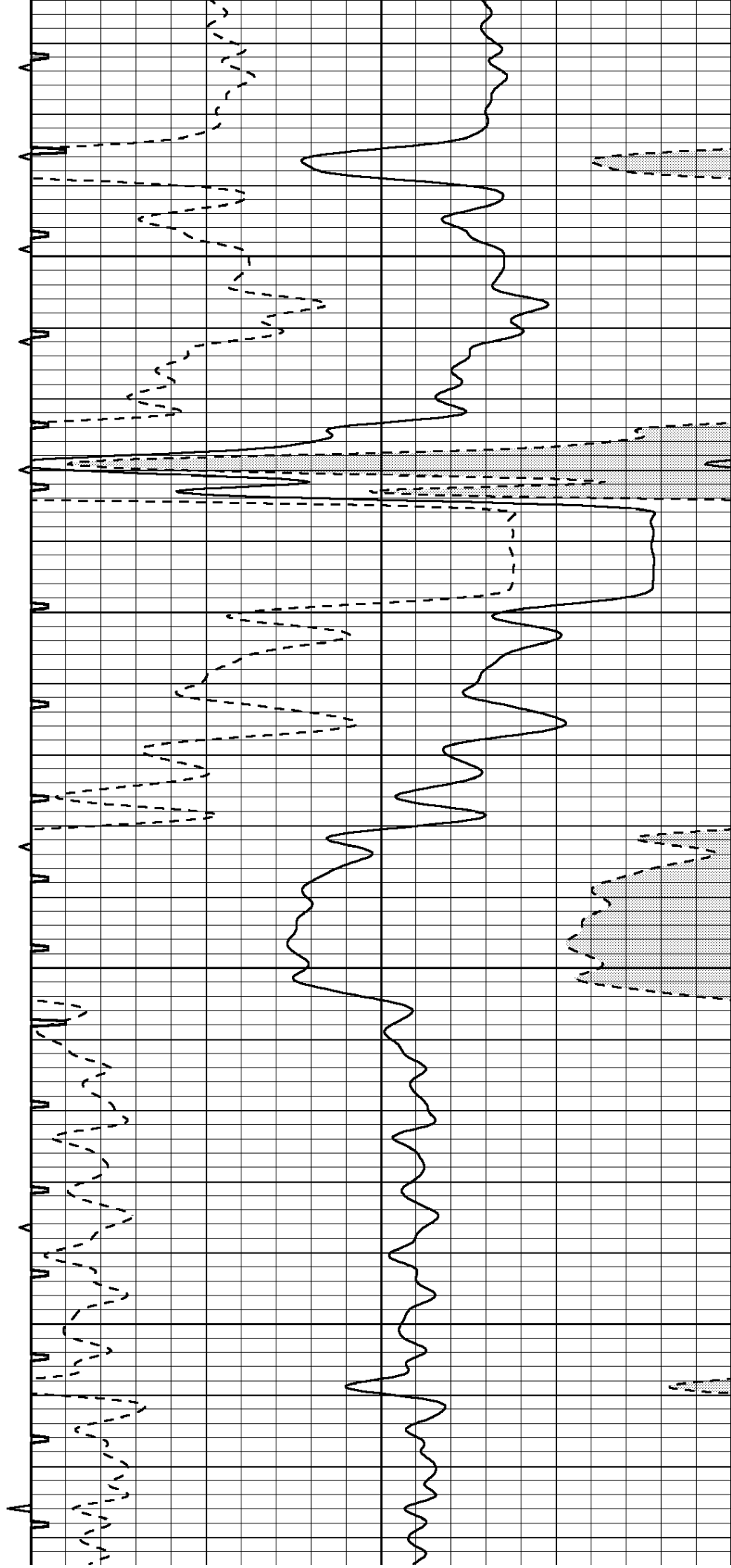


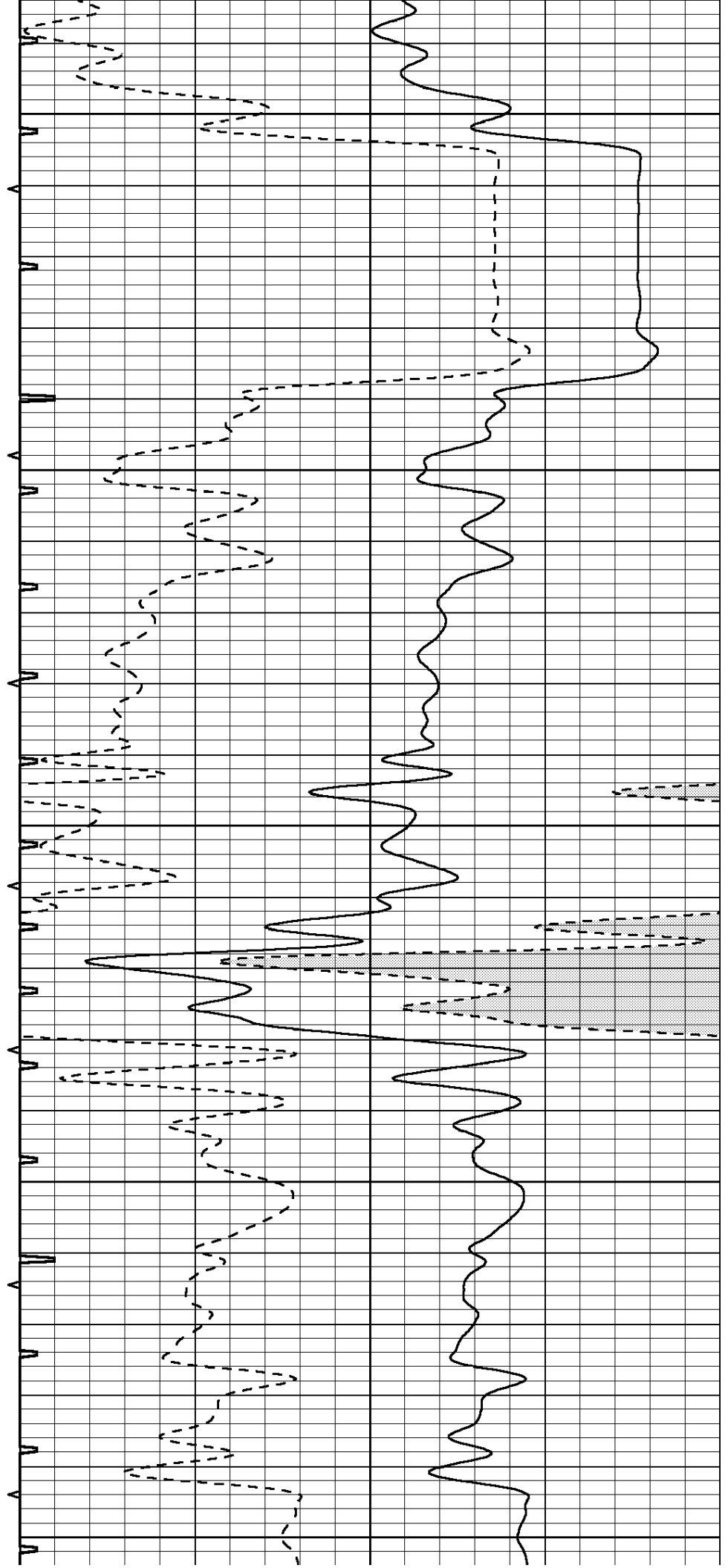
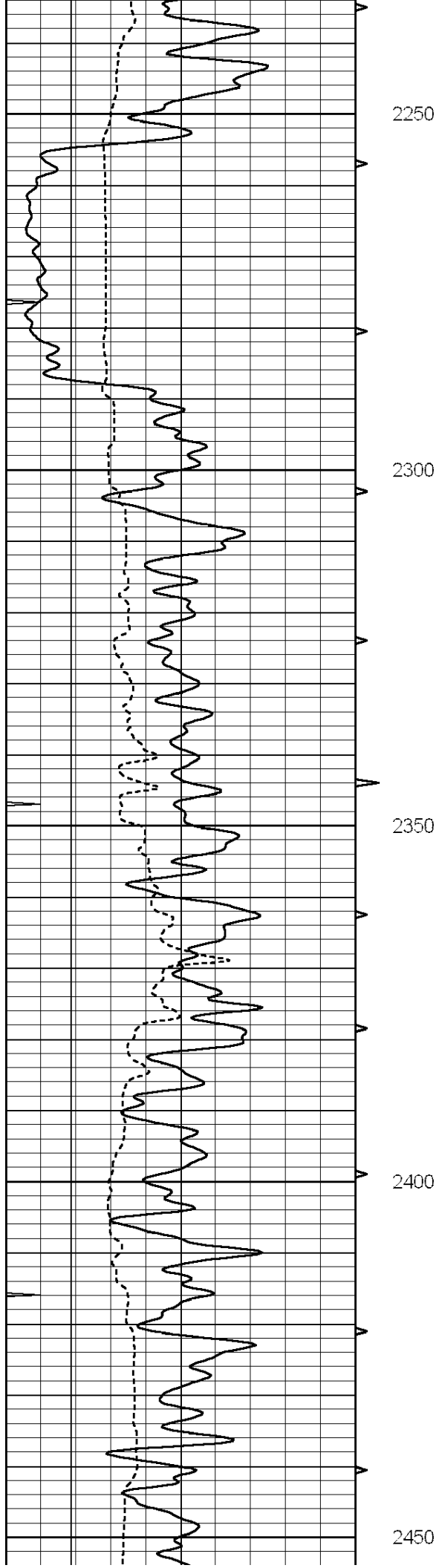
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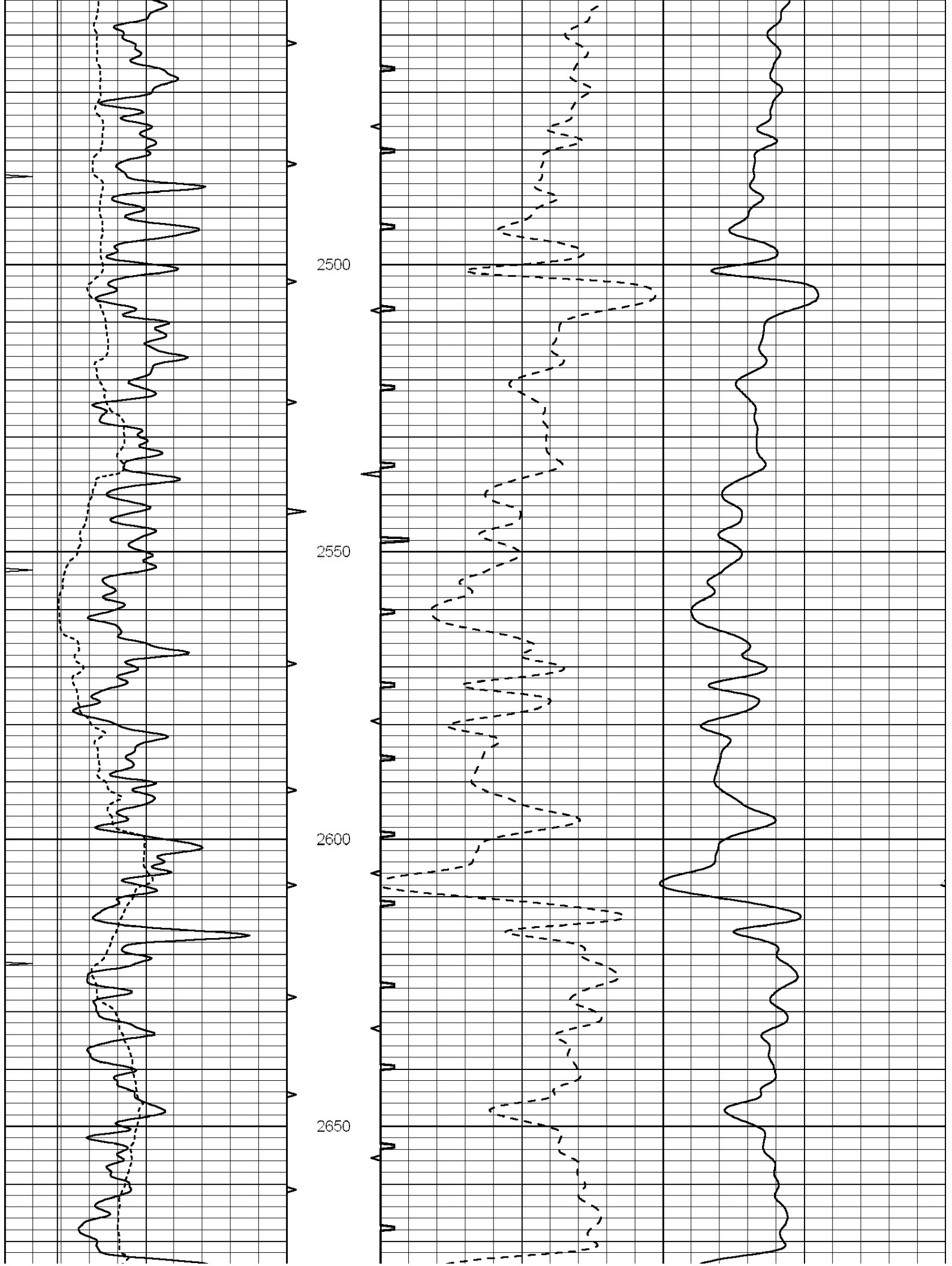
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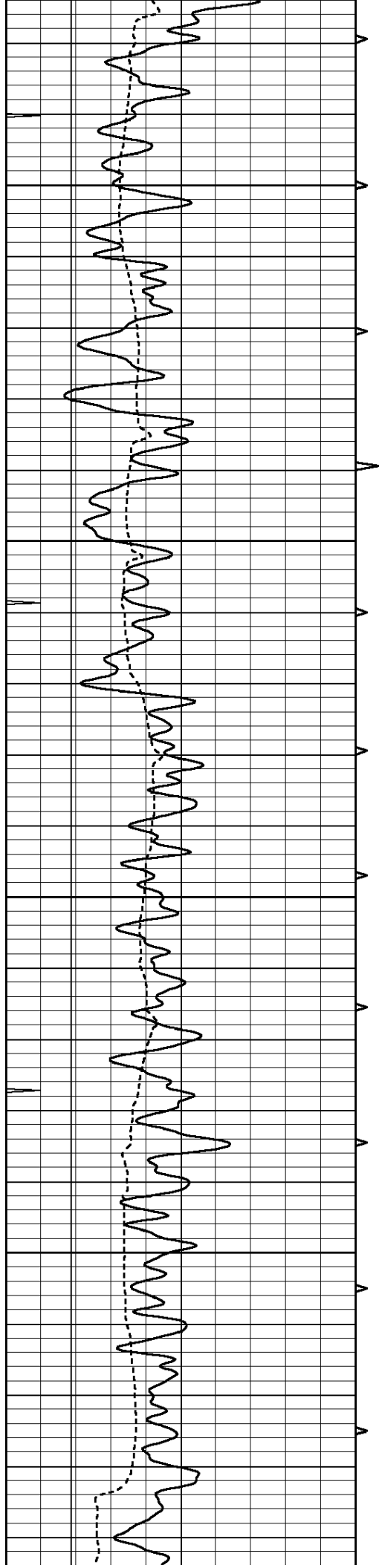
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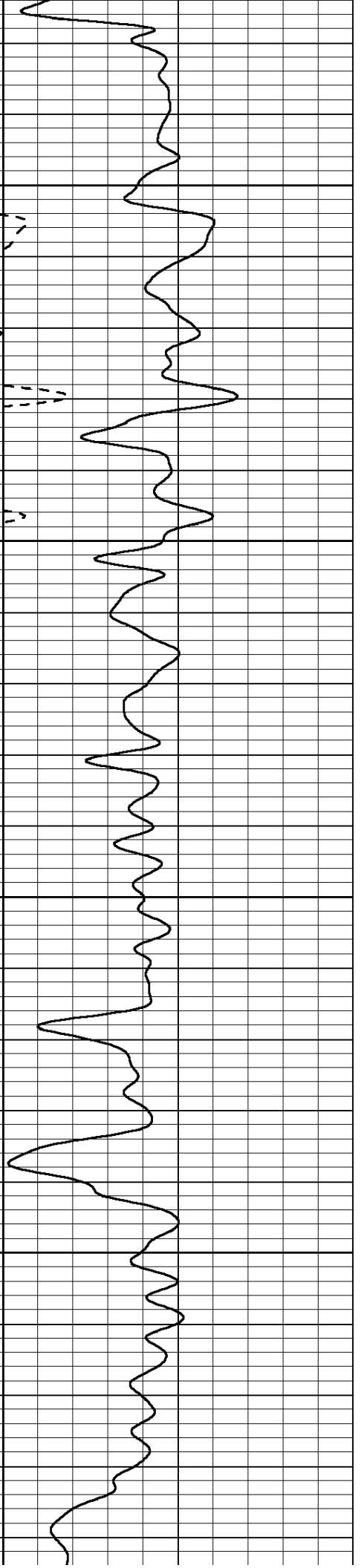
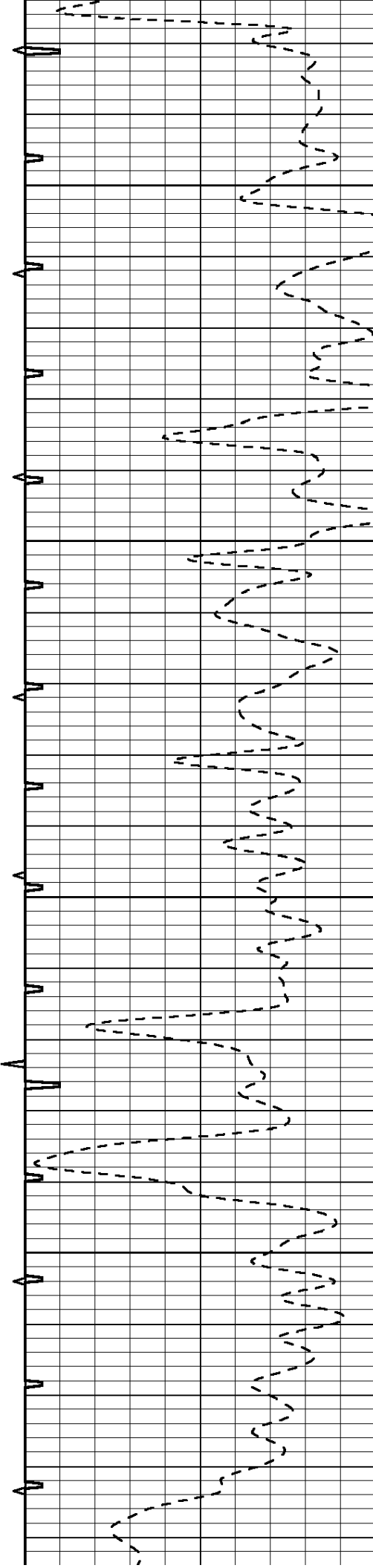


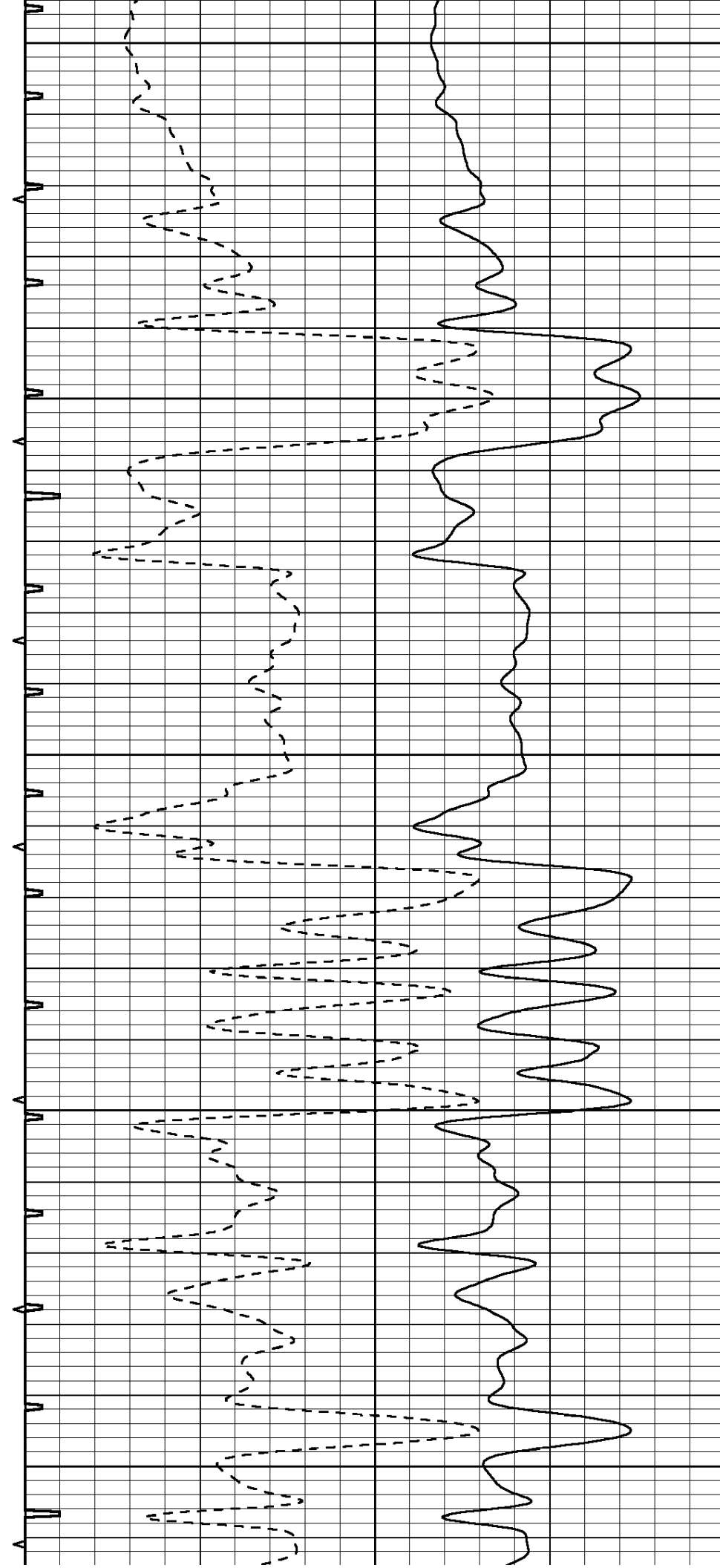
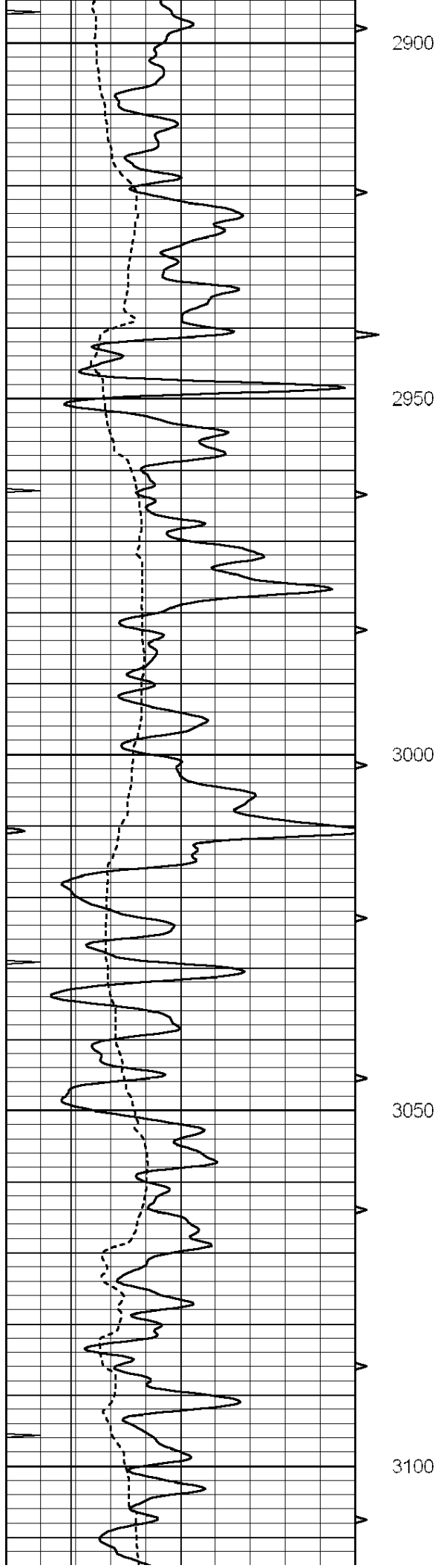
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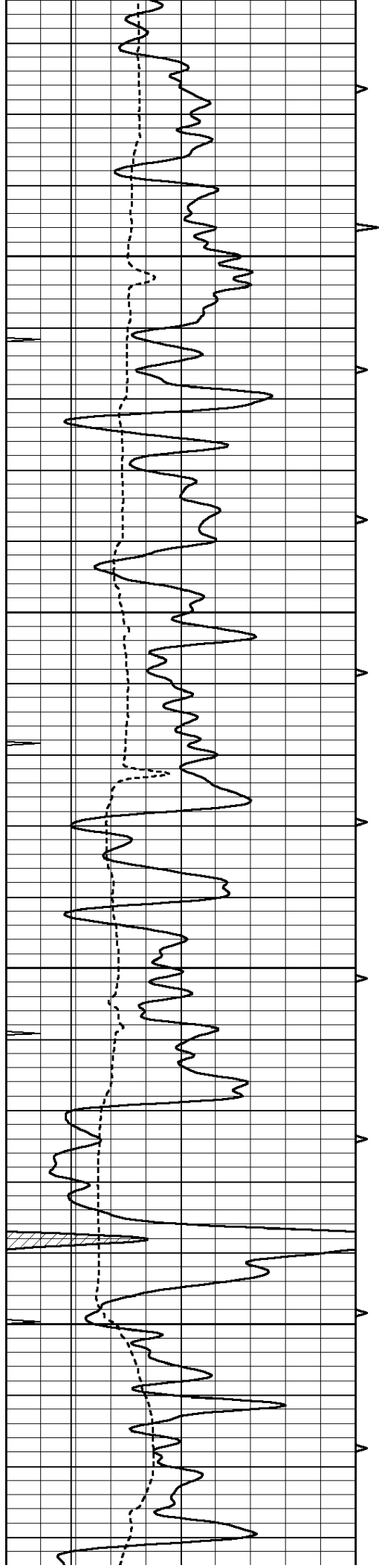
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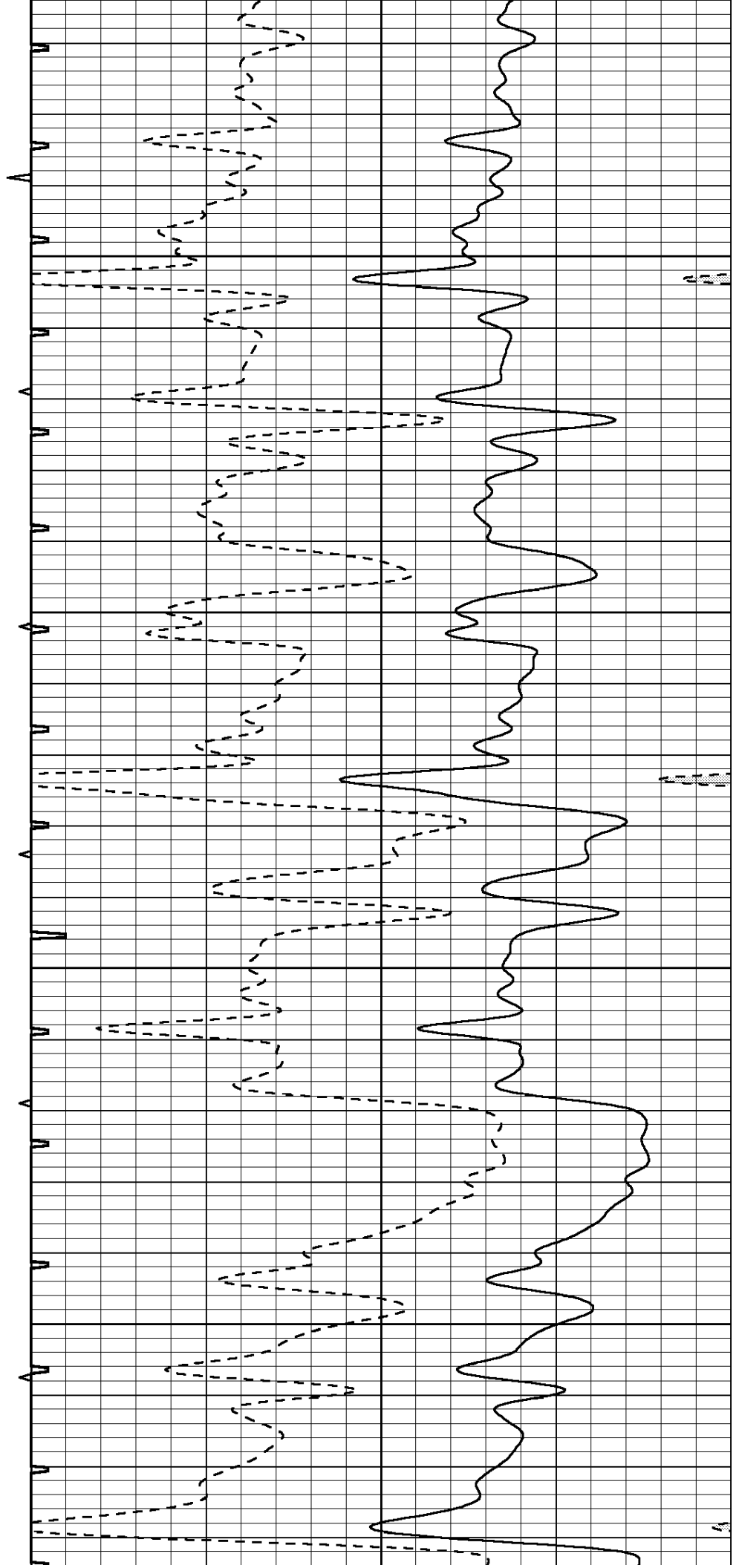


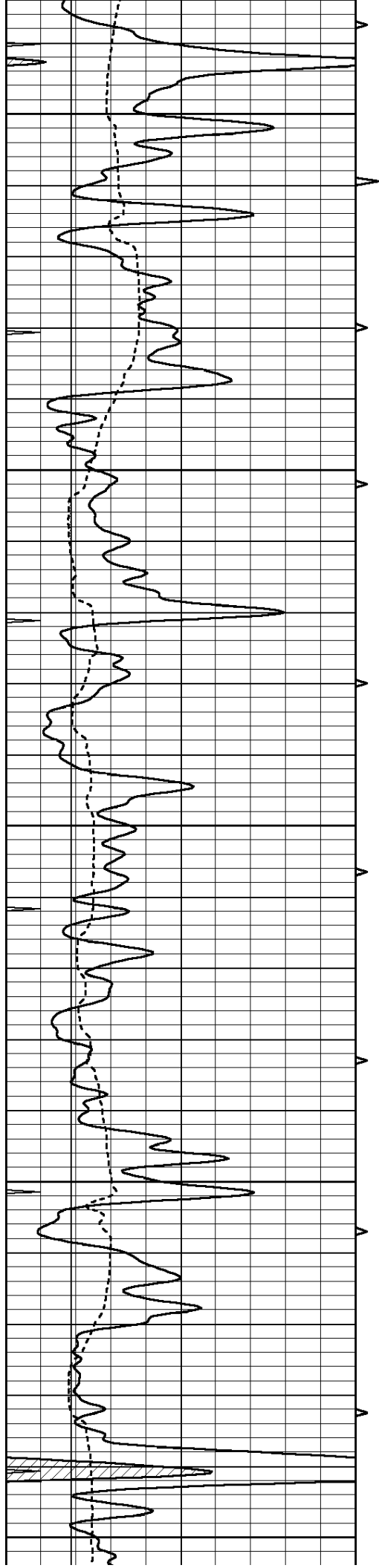
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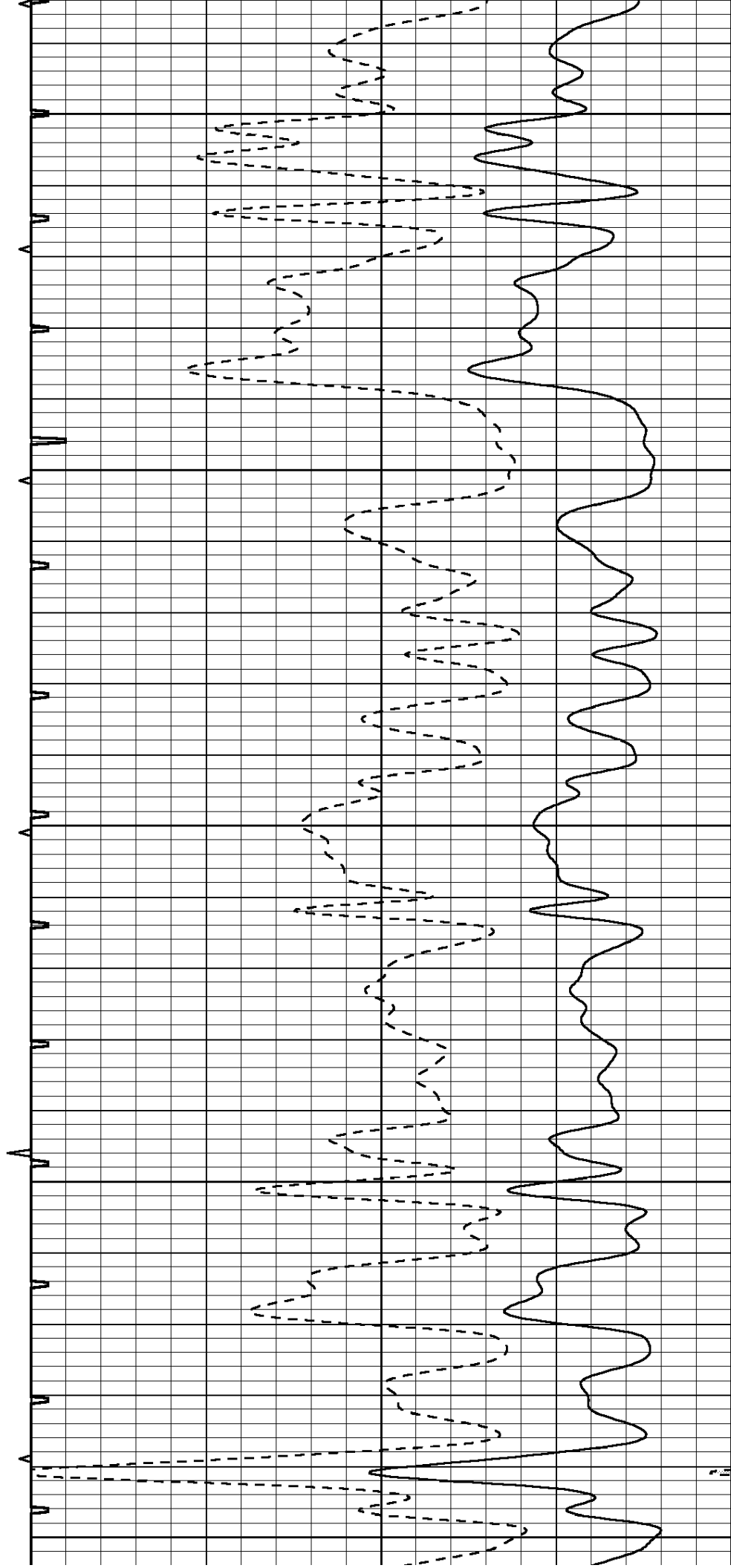
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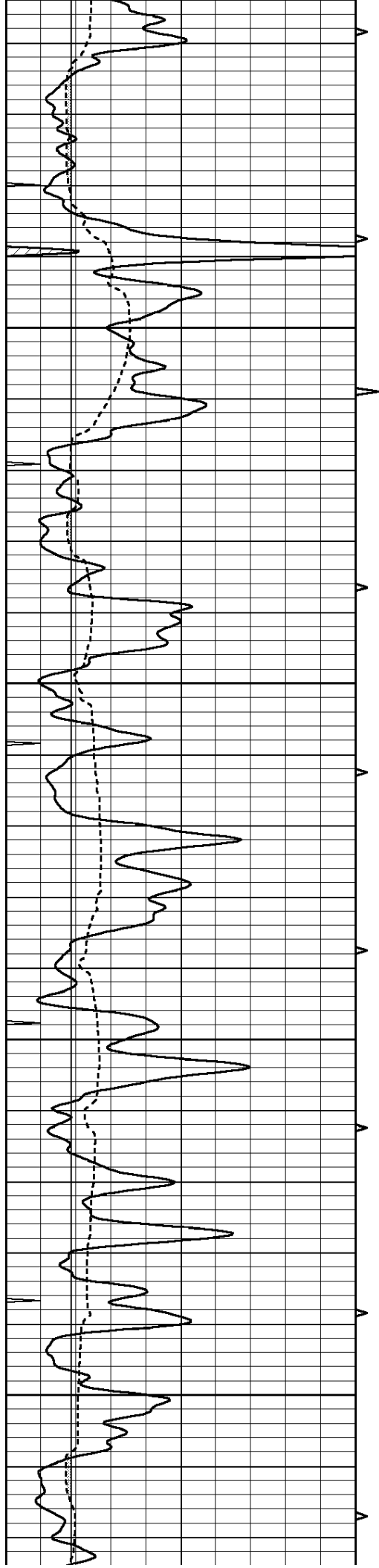
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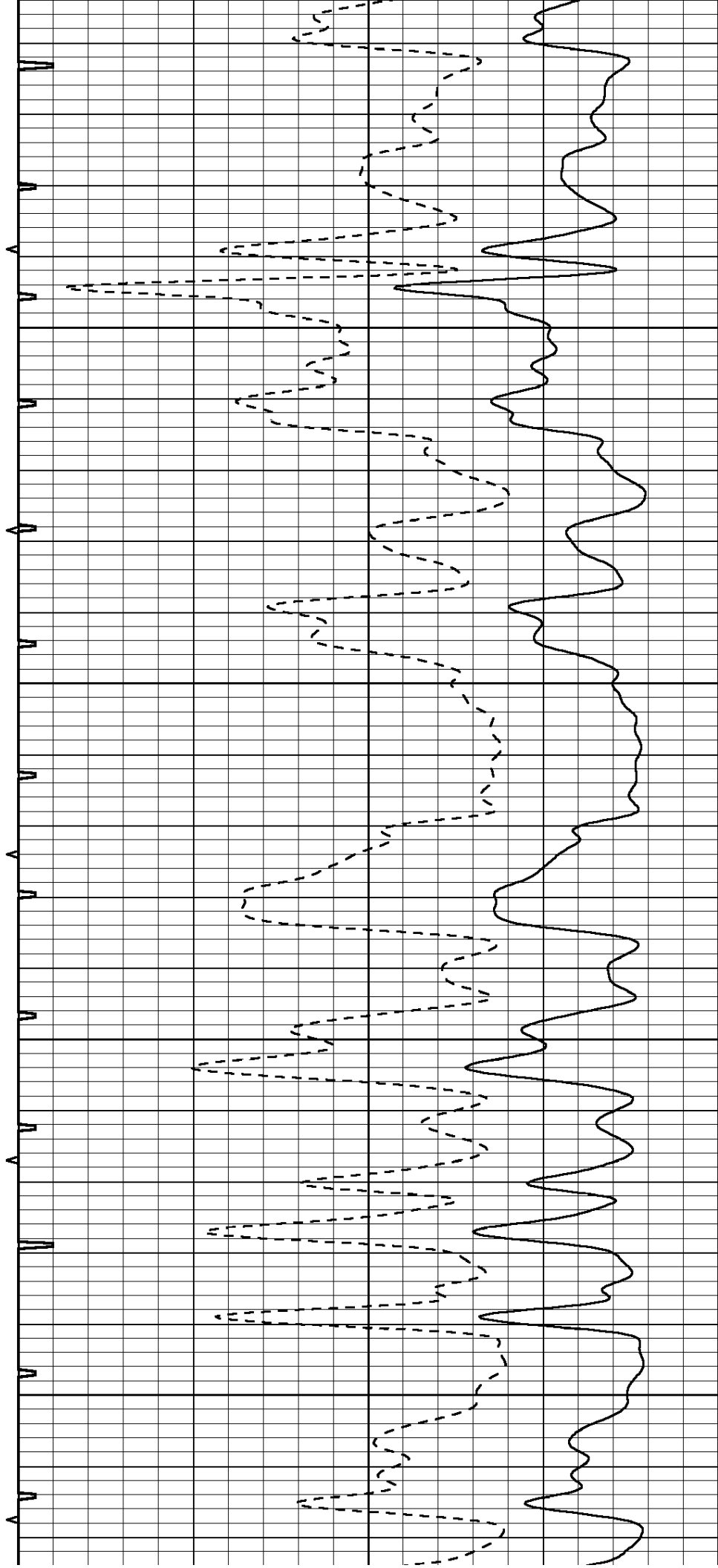


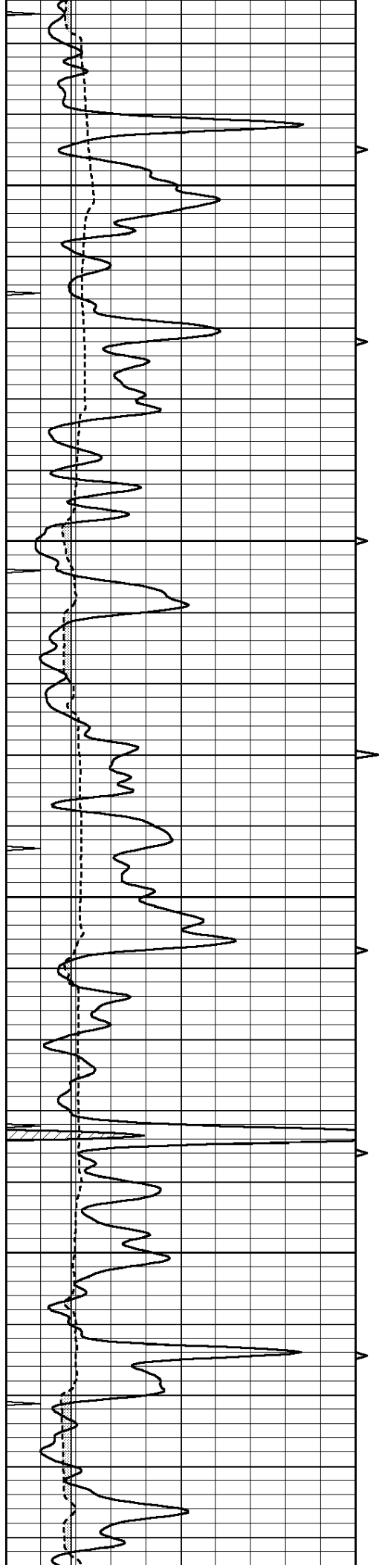
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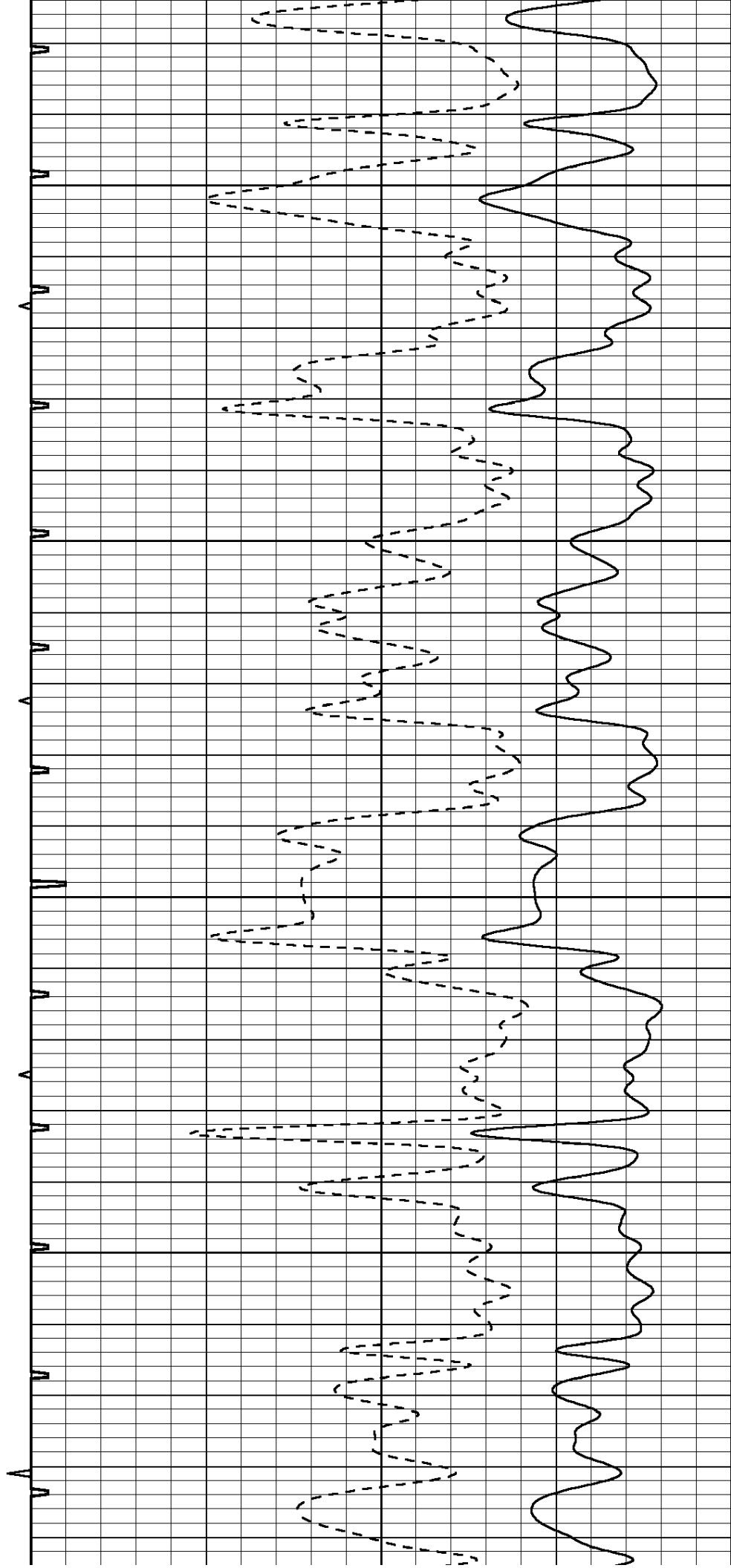


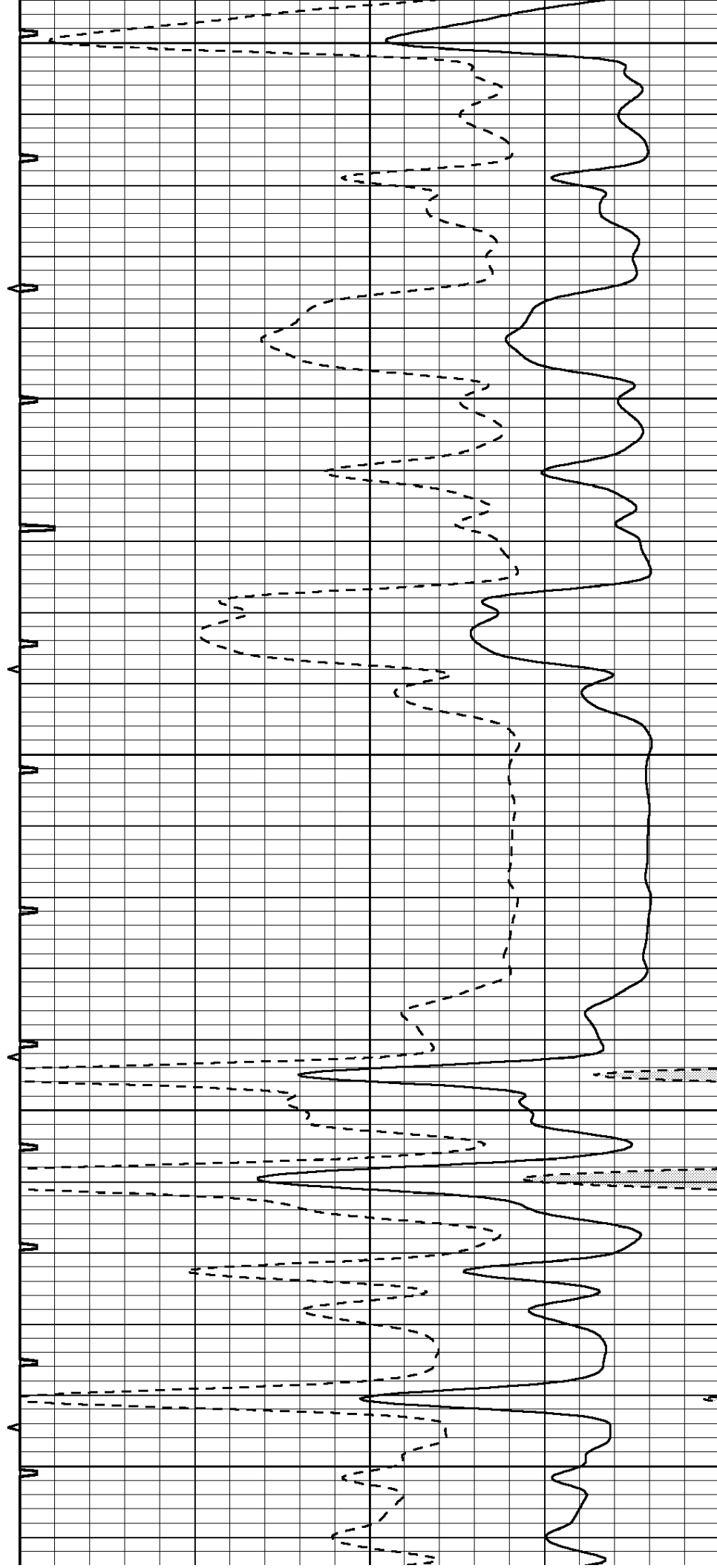
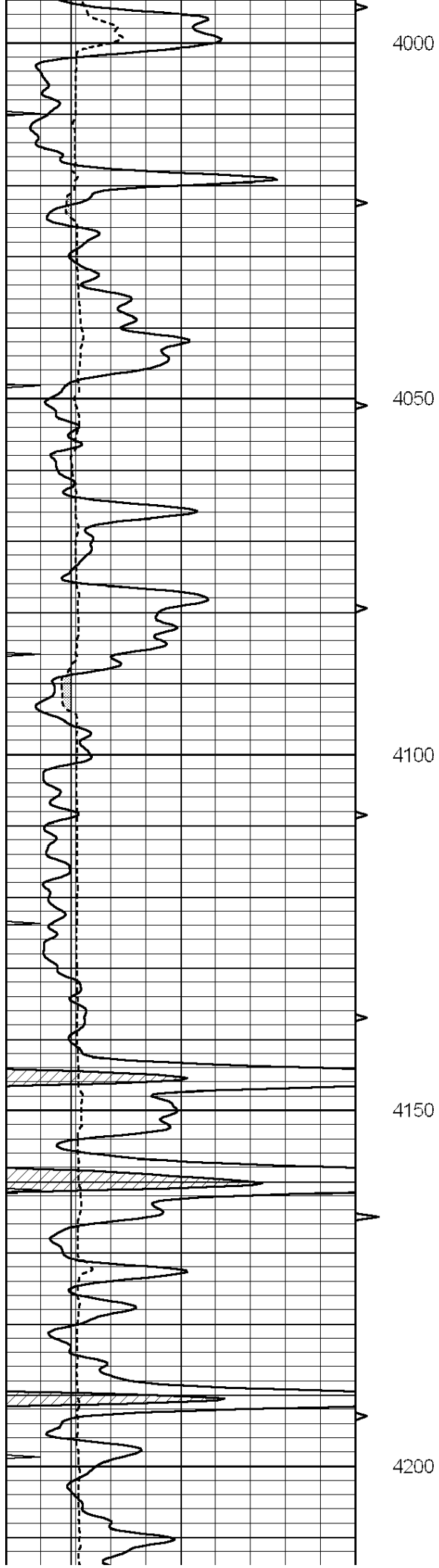
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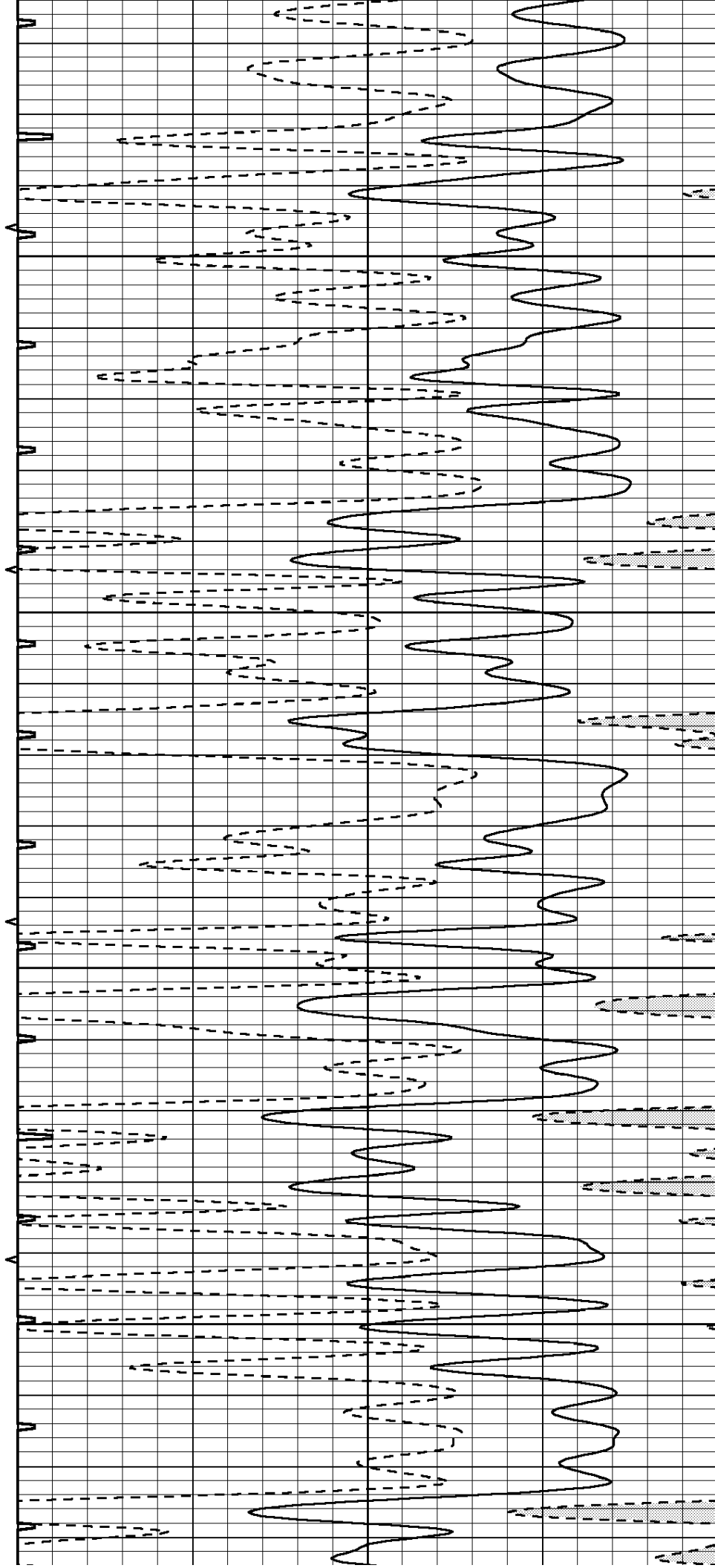


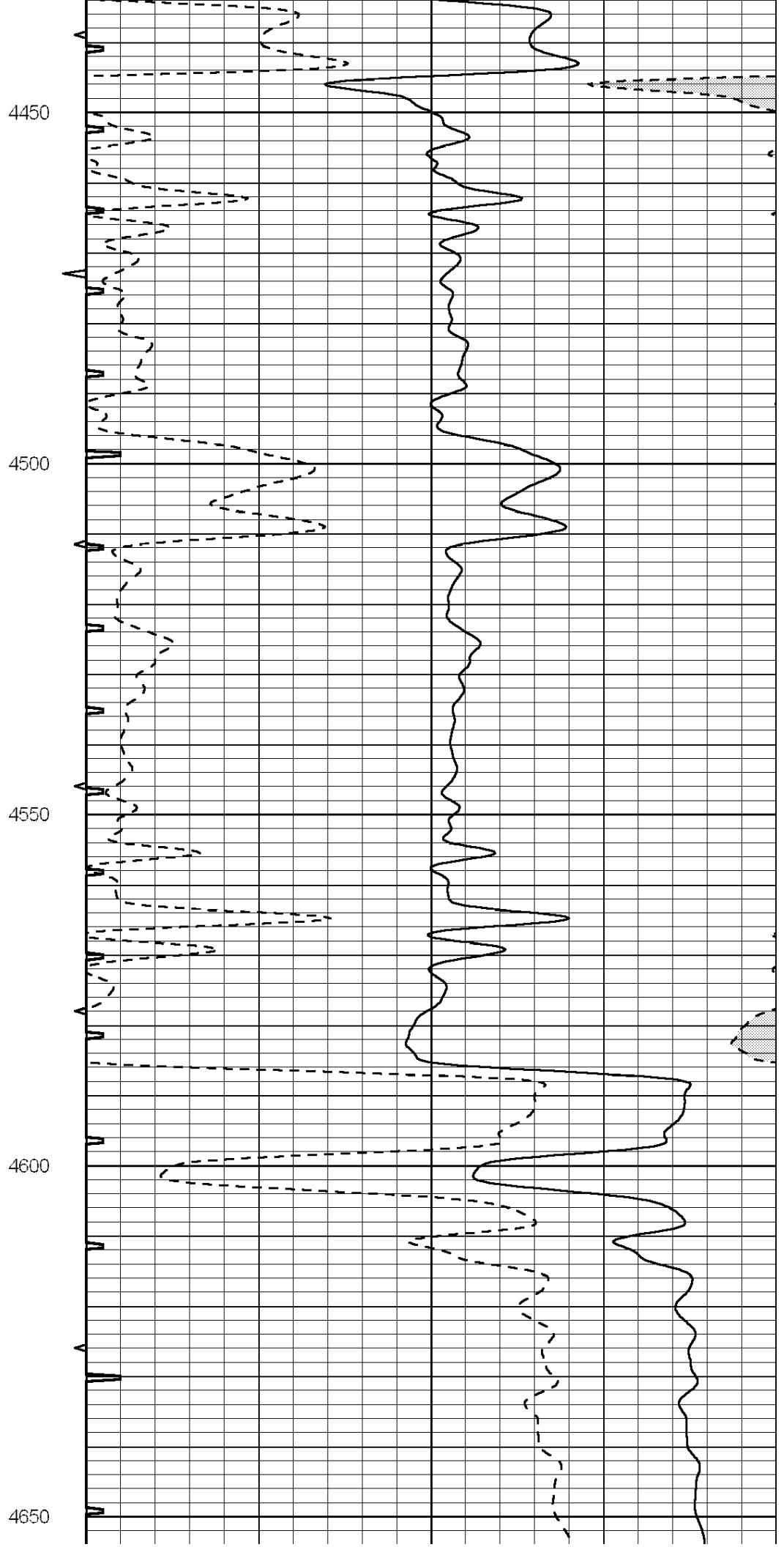
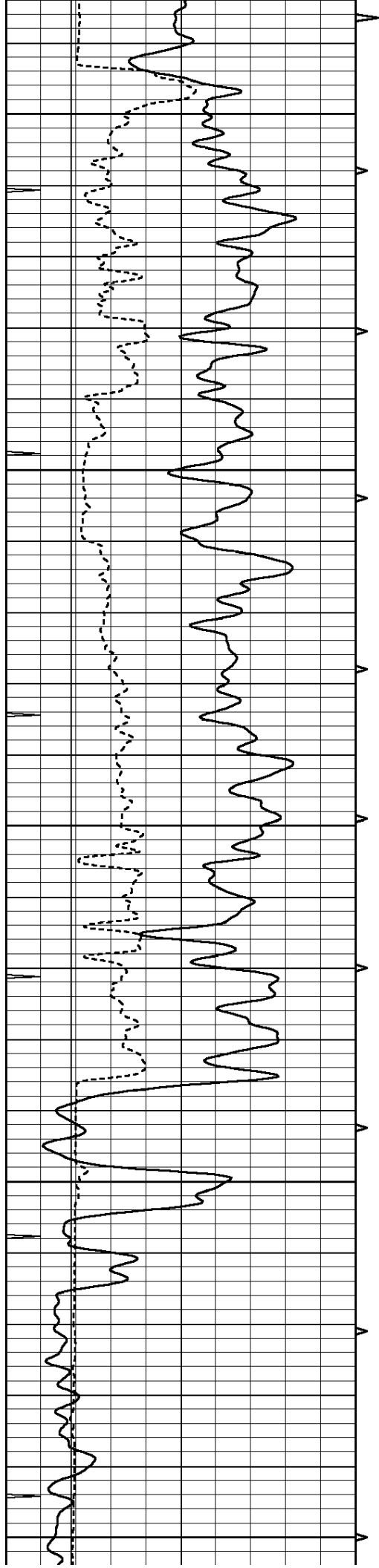
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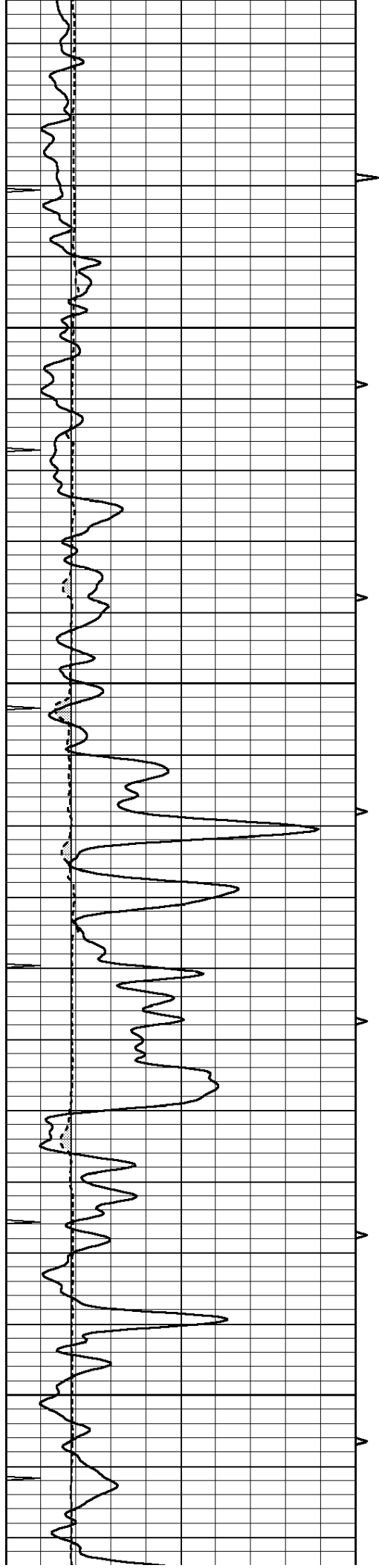
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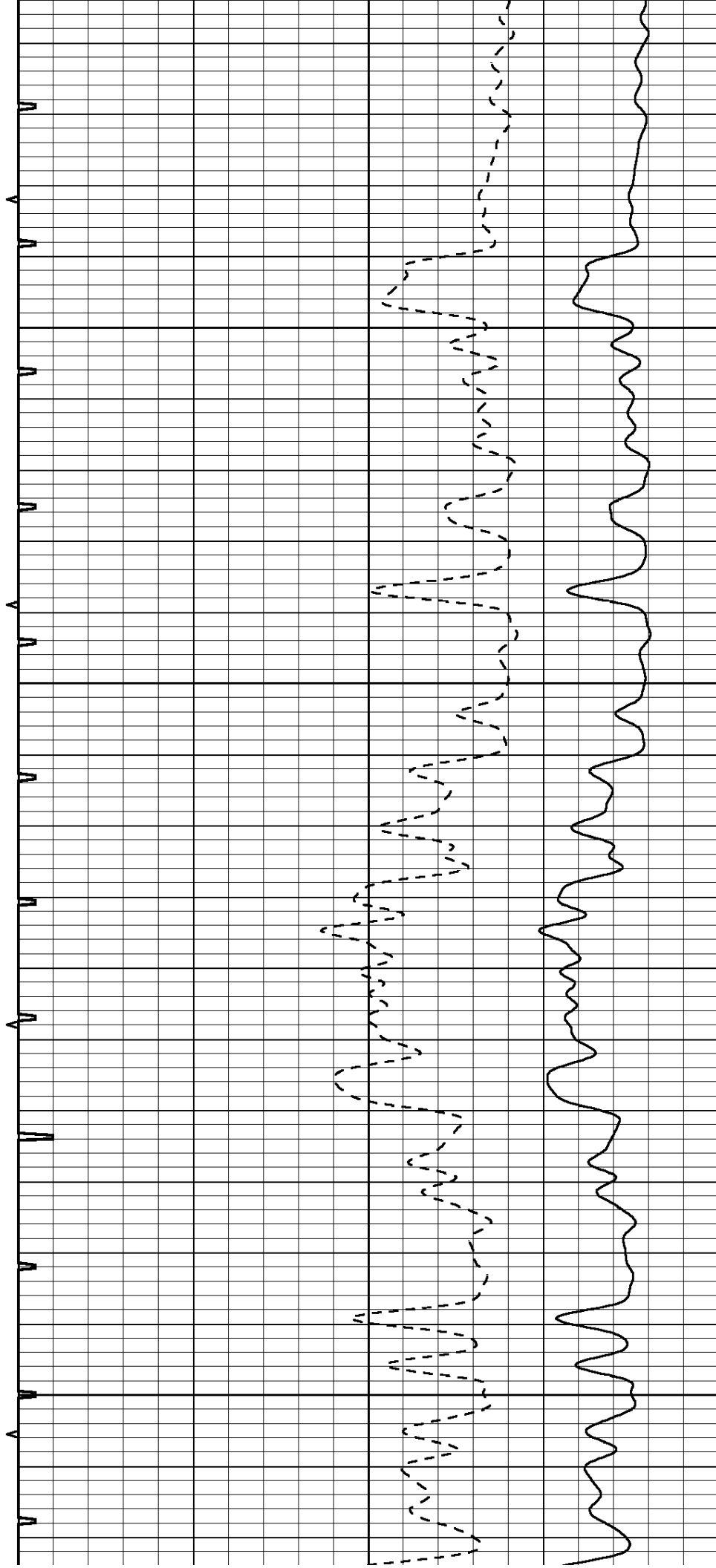


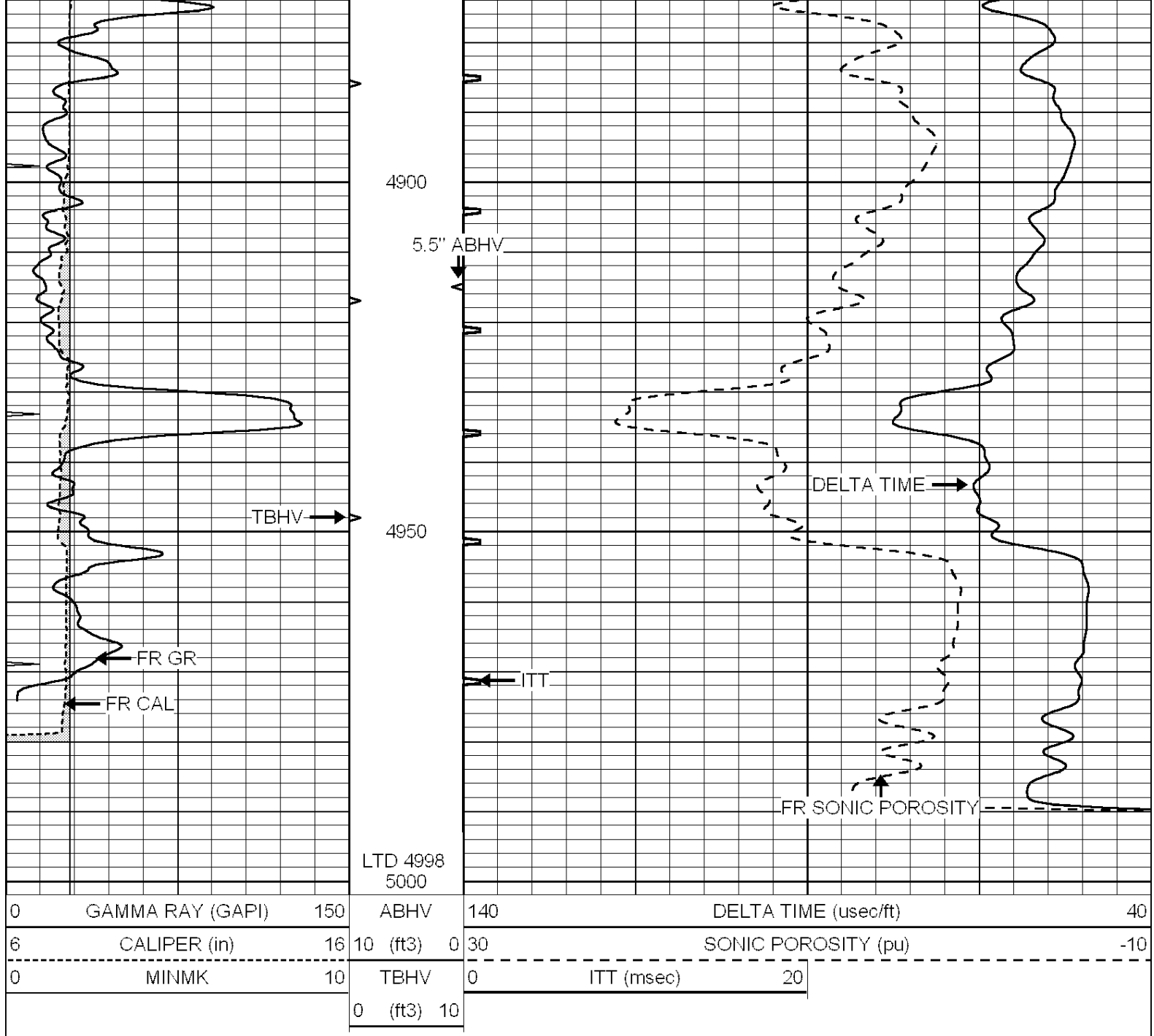
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# REPEAT SECTION

Database File: 005803pe.db  
Dataset Pathname: pass11.2  
Presentation Format: slt  
Dataset Creation: Tue Nov 02 04:09:31 2010  
Charted by: Depth in Feet scaled 1:240

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6	CALIPER (in)	16	10 (ft3) 0	30	SONIC POROSITY (pu)		-10
-----							
0	MINMK	10	TBHV	0	ITT (msec)	20	
			0 (ft3) 10				

