



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

DUAL INDUCTION LOG

Company		MID-CONTINENT ENERGY OPERATING CO.	
Well	KALBACH UNIT #1-30		
Field	WILDCAT		
County	WICHITA	State	KANSAS
Location:	AP1 # : 15-203-20230-0000		Other Services CDL/CNL MEL
800' FSL & 2450' FEL			
Permanent Datum	GROUND LEVEL	Elevation	3314
Log Measured From	KELLY BUSHING 10' A.G.L.		
Drilling Measured From	KELLY BUSHING		
SEC 30 TWP 16S RGE 36W		Elevation K.B. 3324 D.F. 3322 G.L. 3314	
Date	9/8/13		
Run Number	ONE		
Depth Driller	5000		
Depth Logger	4999		
Bottom Logged Interval	4997		
Top Log Interval	0		
Casing Driller	8 5/8" @ 306'		
Casing Logger			
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES	9500 PPM
Density / Viscosity	9.2 / 60		
pH / Fluid Loss	10.0 / 7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.35 @ 94F		
Rmt @ Meas. Temp	0.26 @ 94F		
Rmc @ Meas. Temp	0.42 @ 94F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	0.26 @ 125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	125F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF GRONEWEG		
Witnessed By	TOM PRONOLD		

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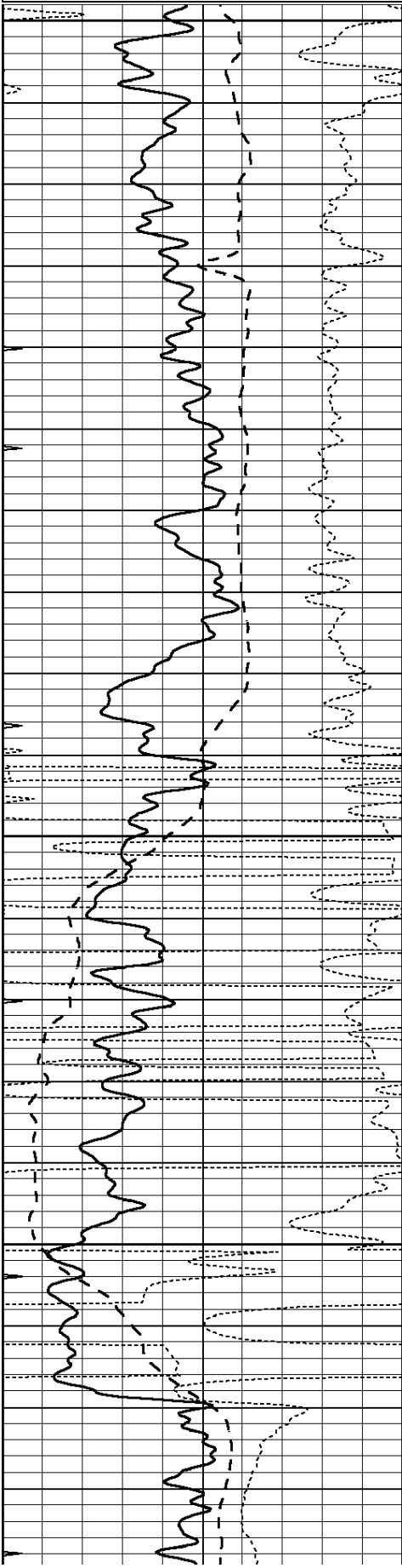
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

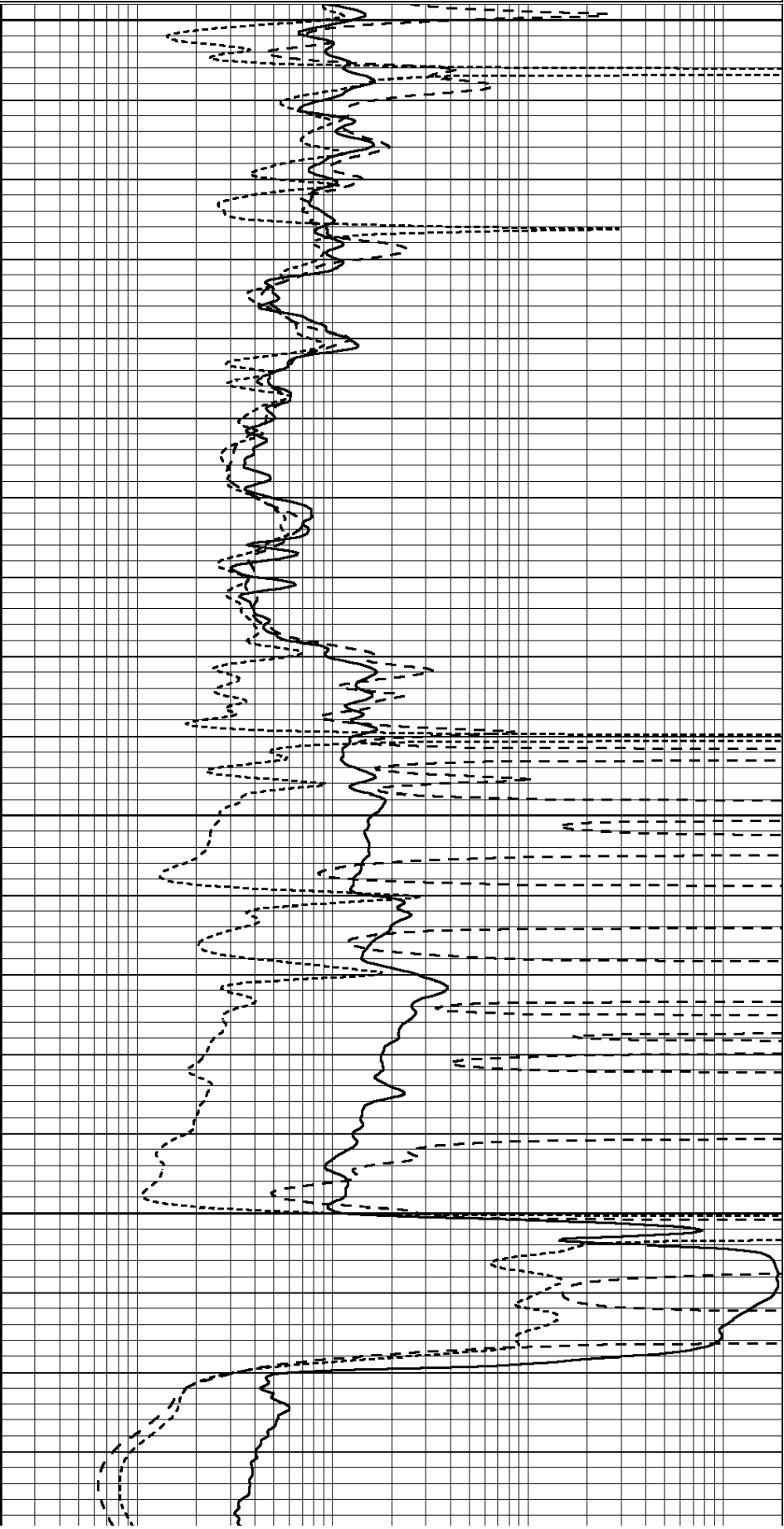
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
LEOTI, KS - 9 MILES NORTH TO COUNTY RD F - 1 1/2 MILES EAST - NORTH INTO

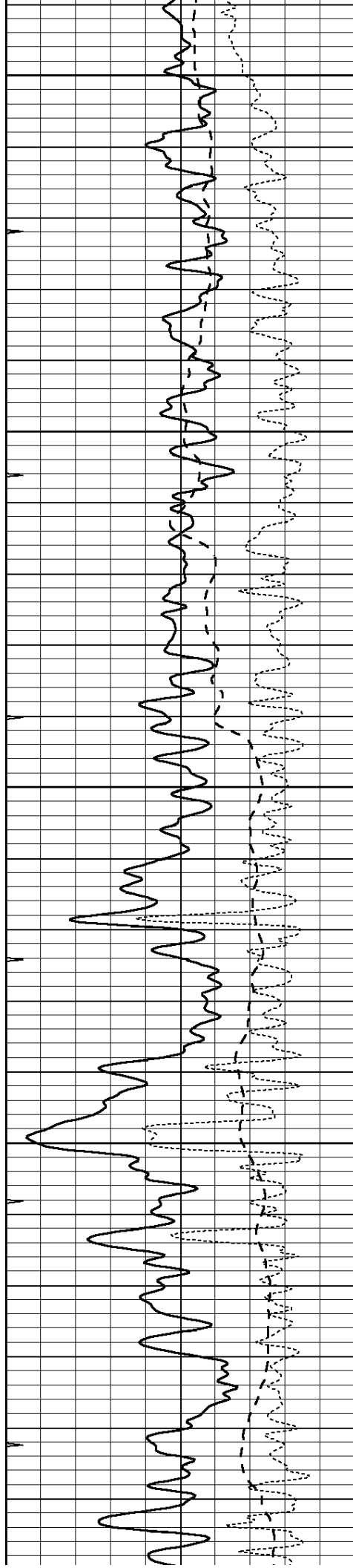
Database File: 011776ddn.db
Dataset Pathname: pass4.3
Presentation Format: _dil
Dataset Creation: Sun Sep 08 18:14:53 2013 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





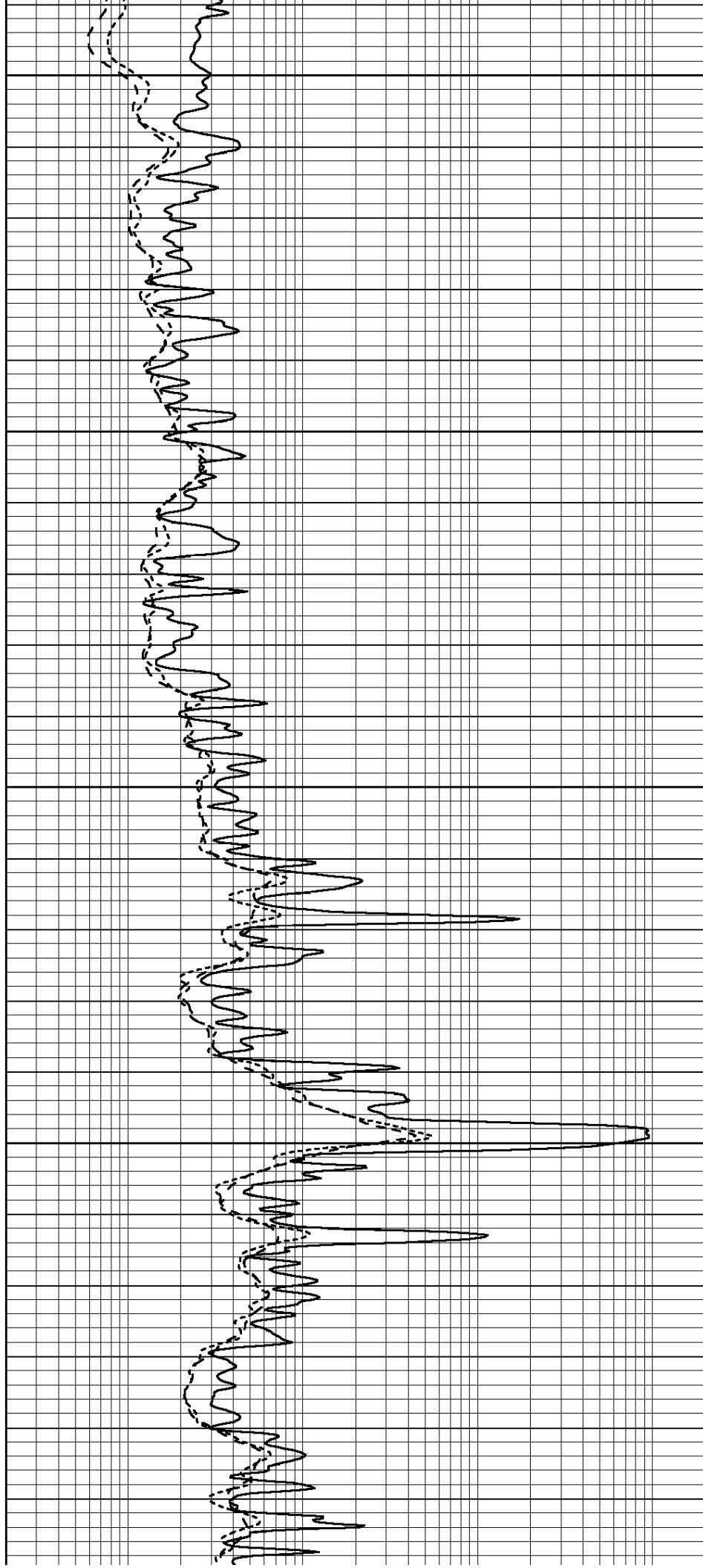
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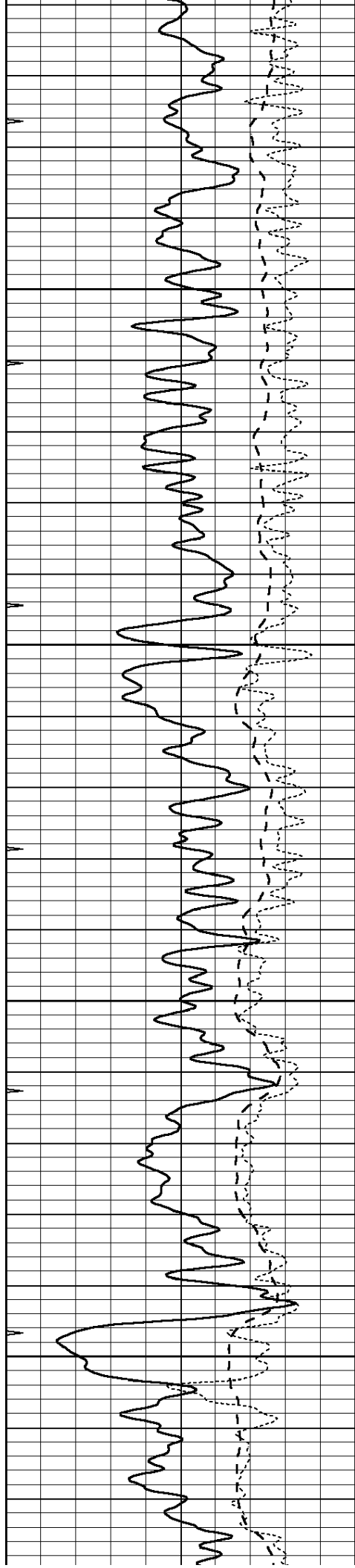
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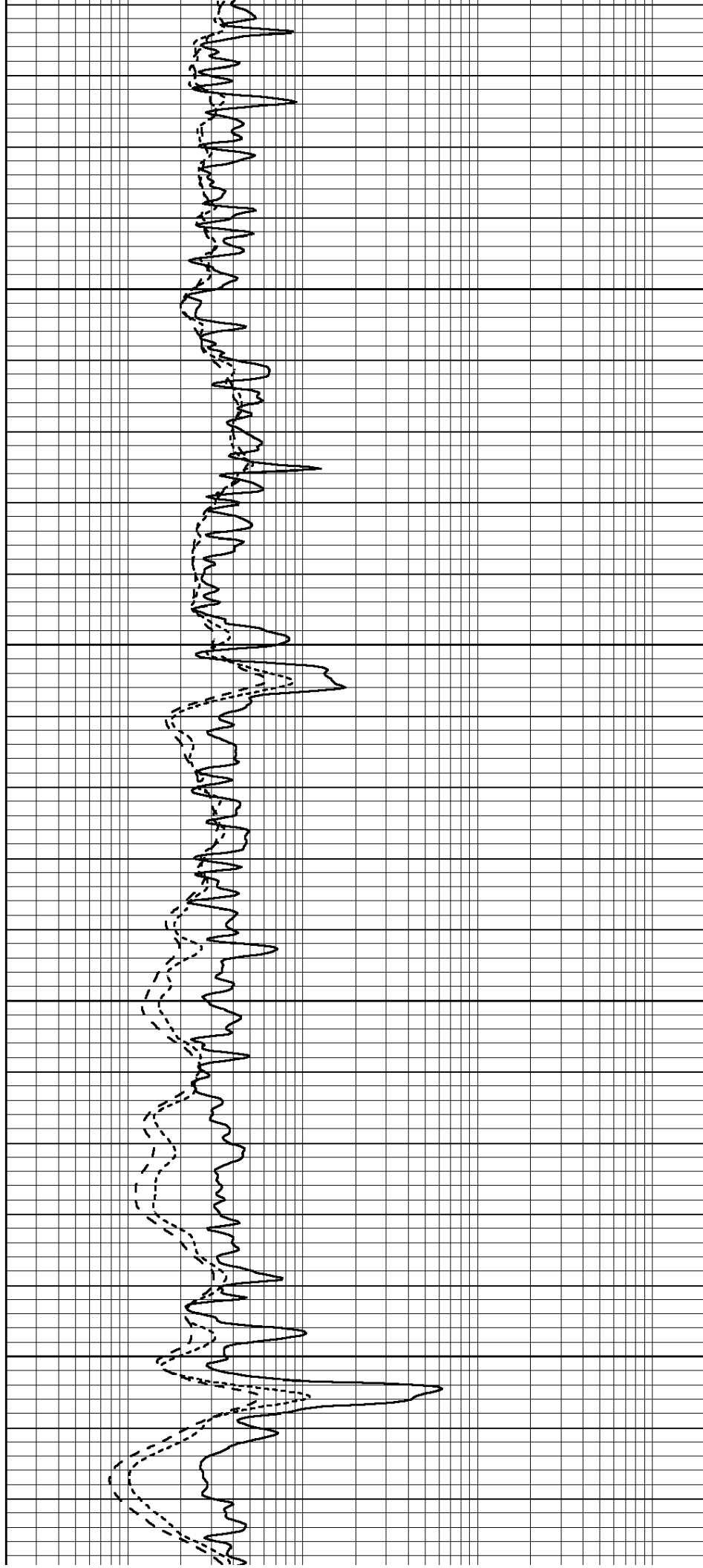


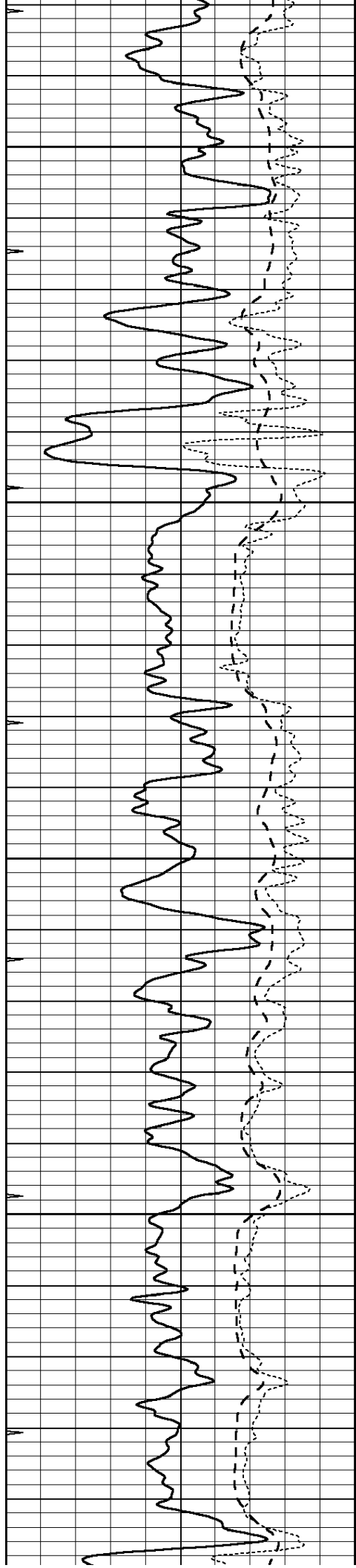
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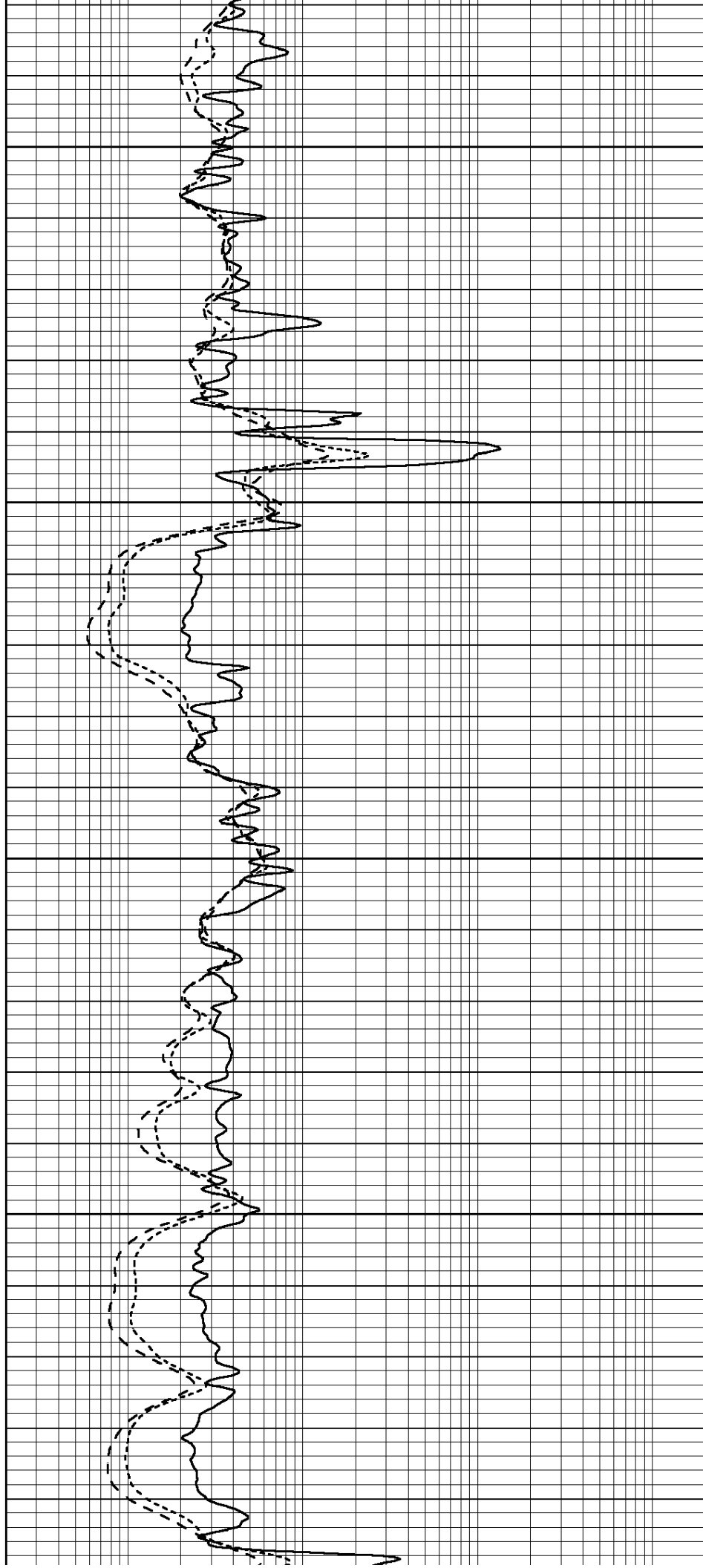
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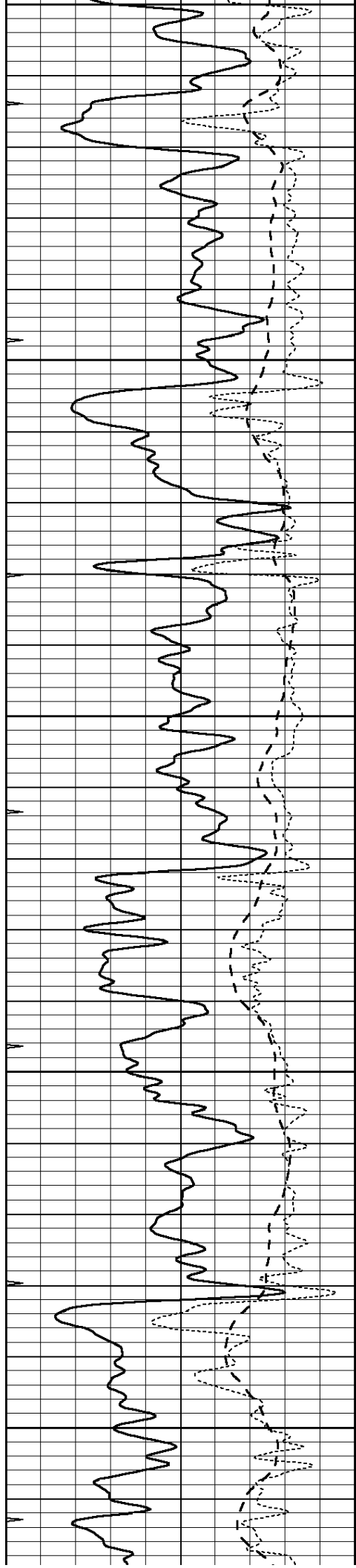
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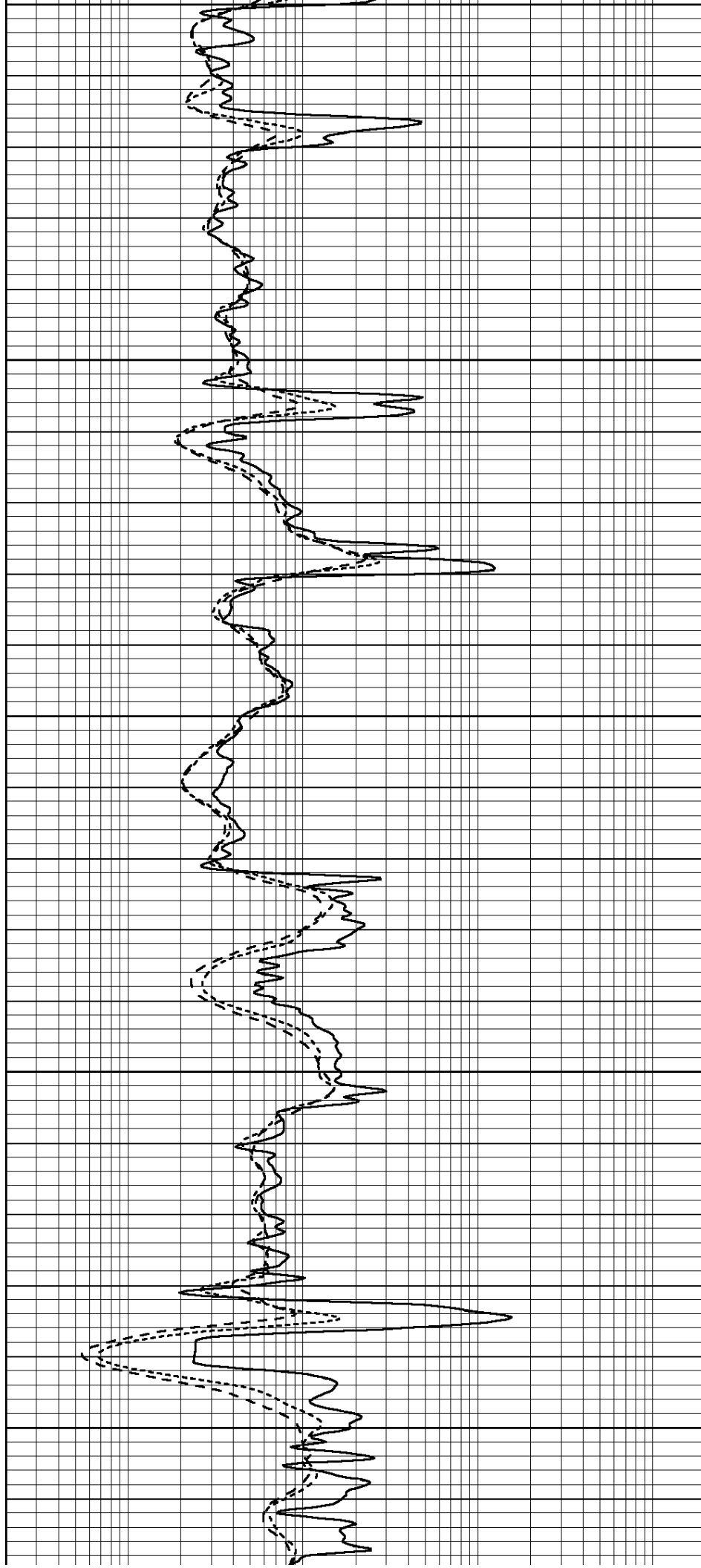
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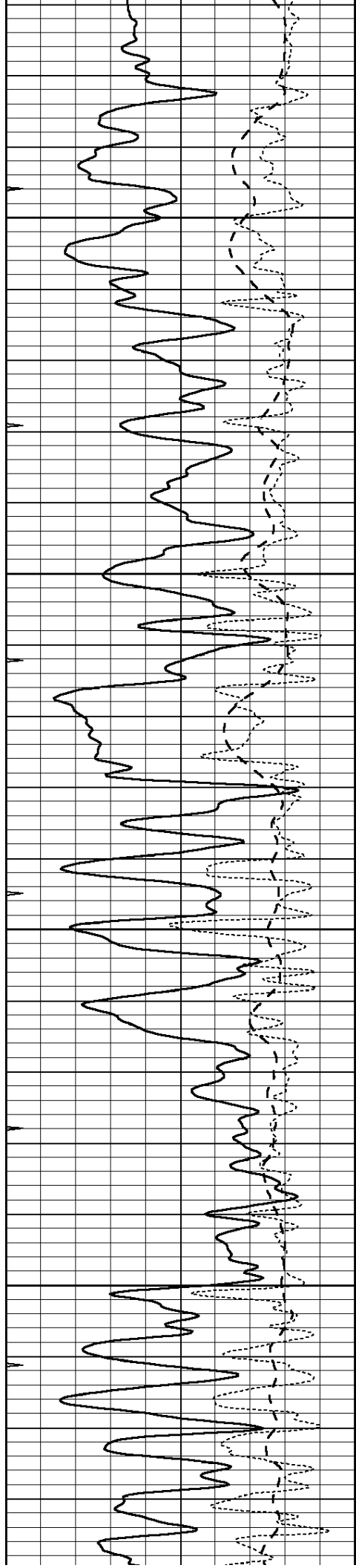
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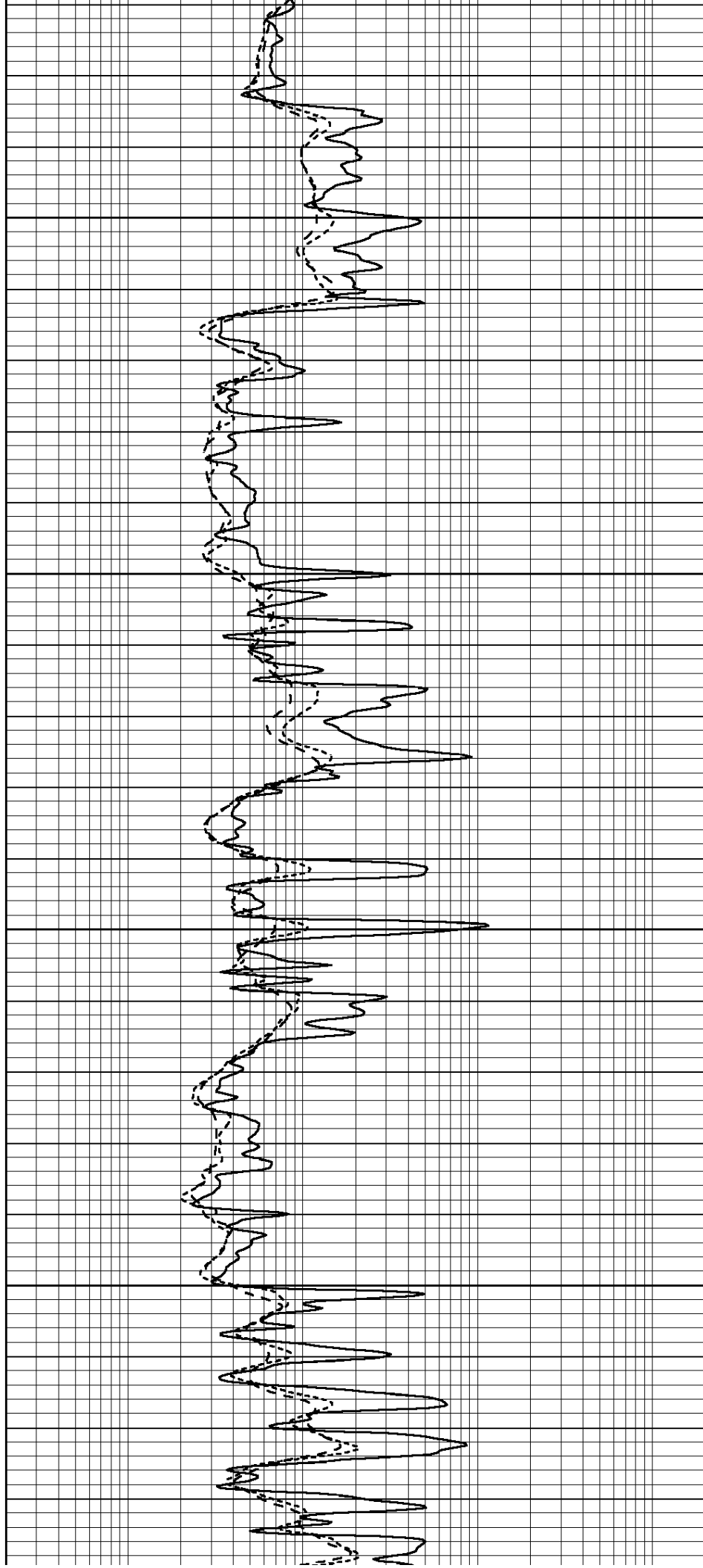


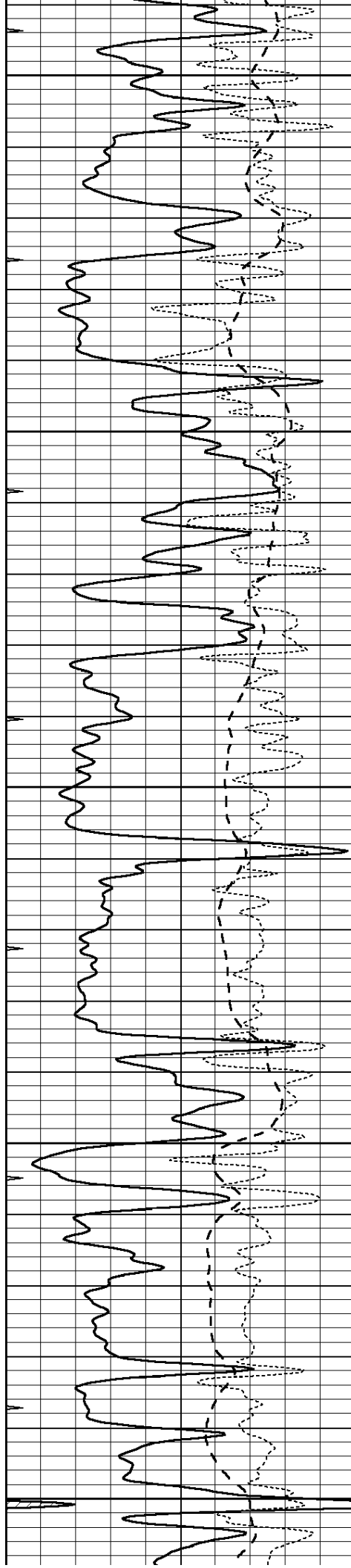
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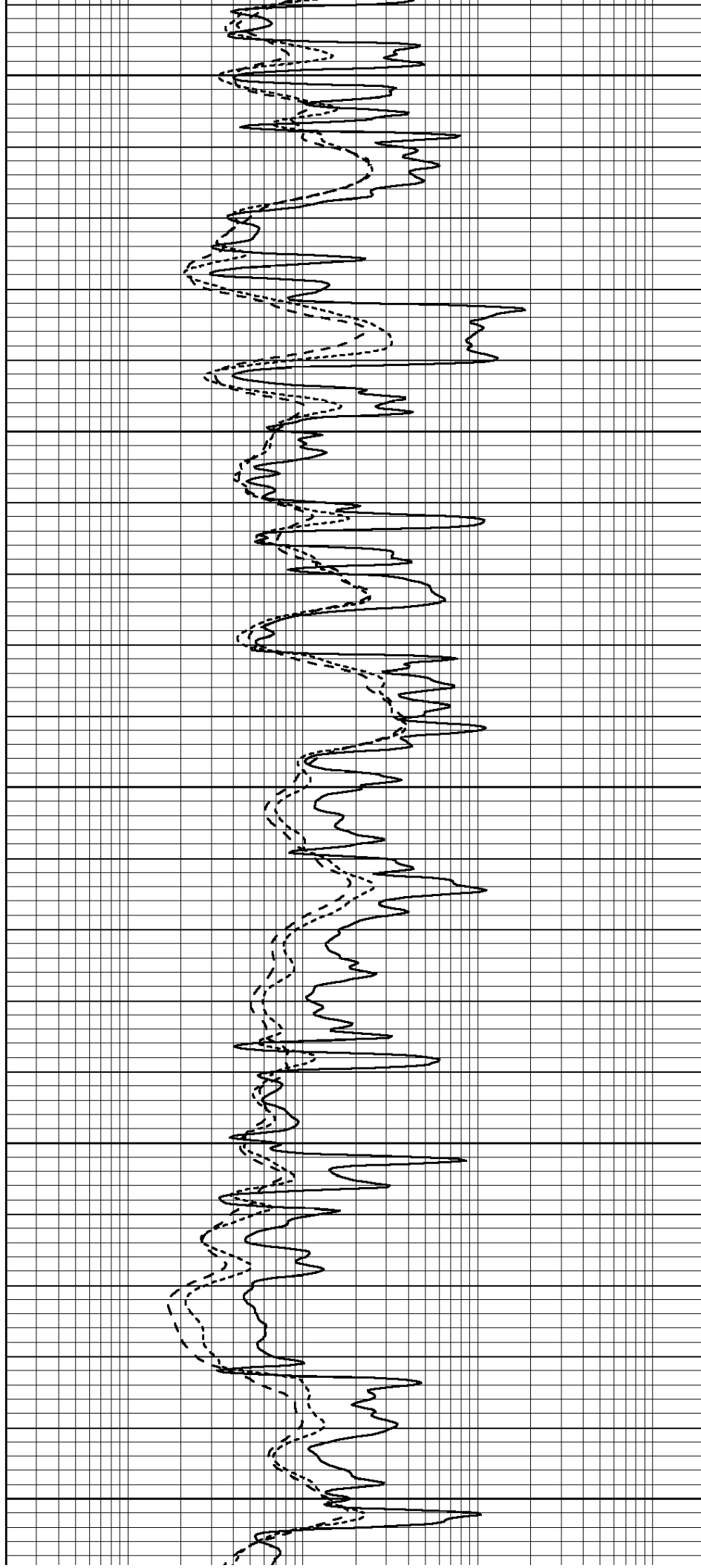
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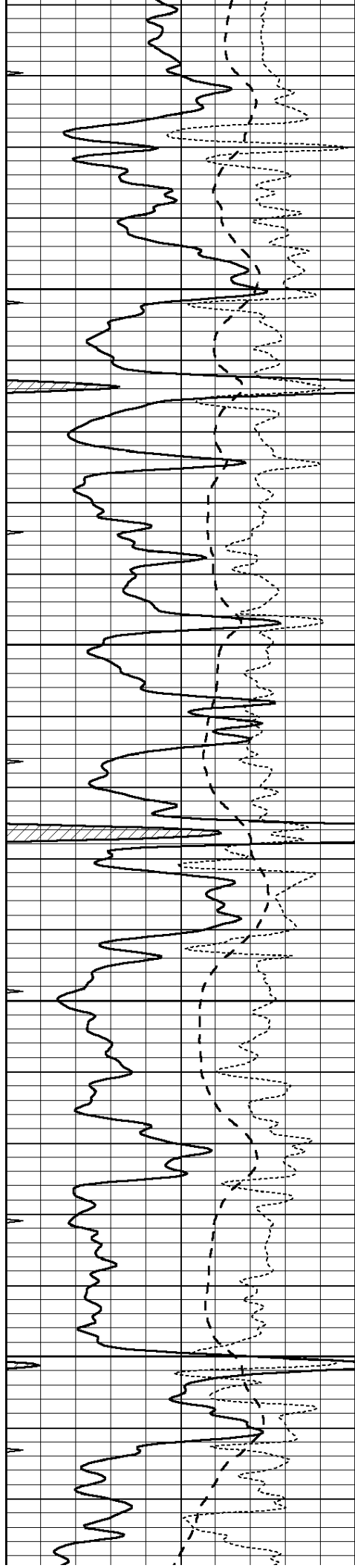
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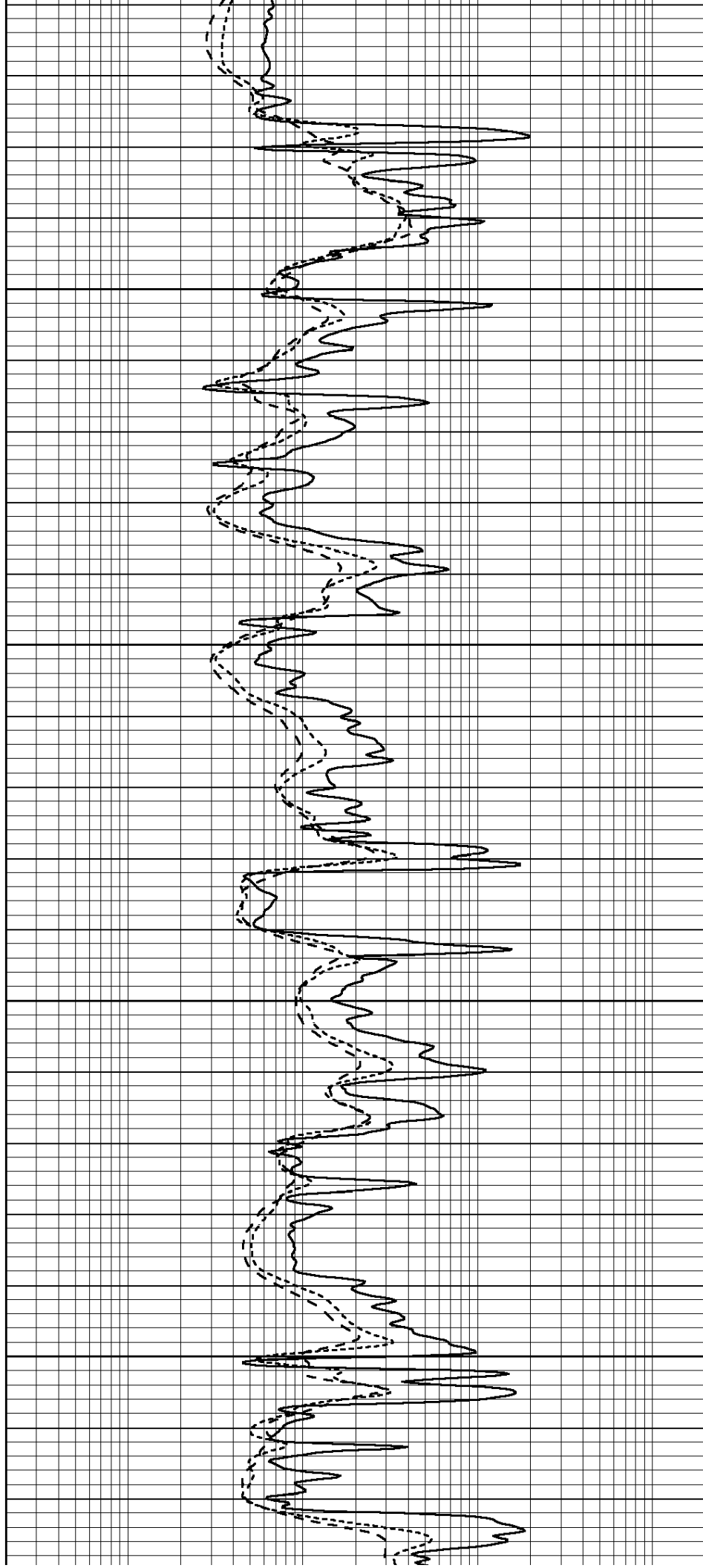


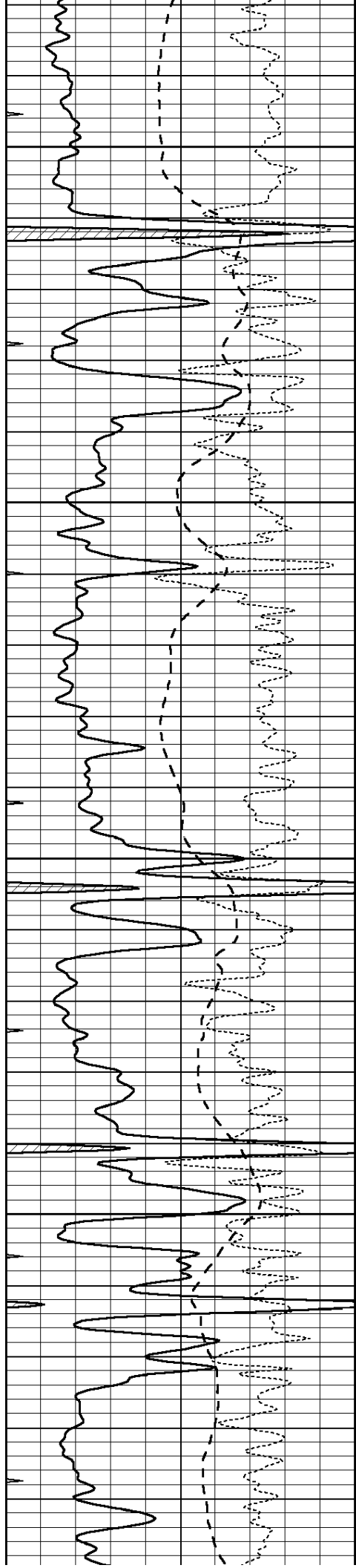
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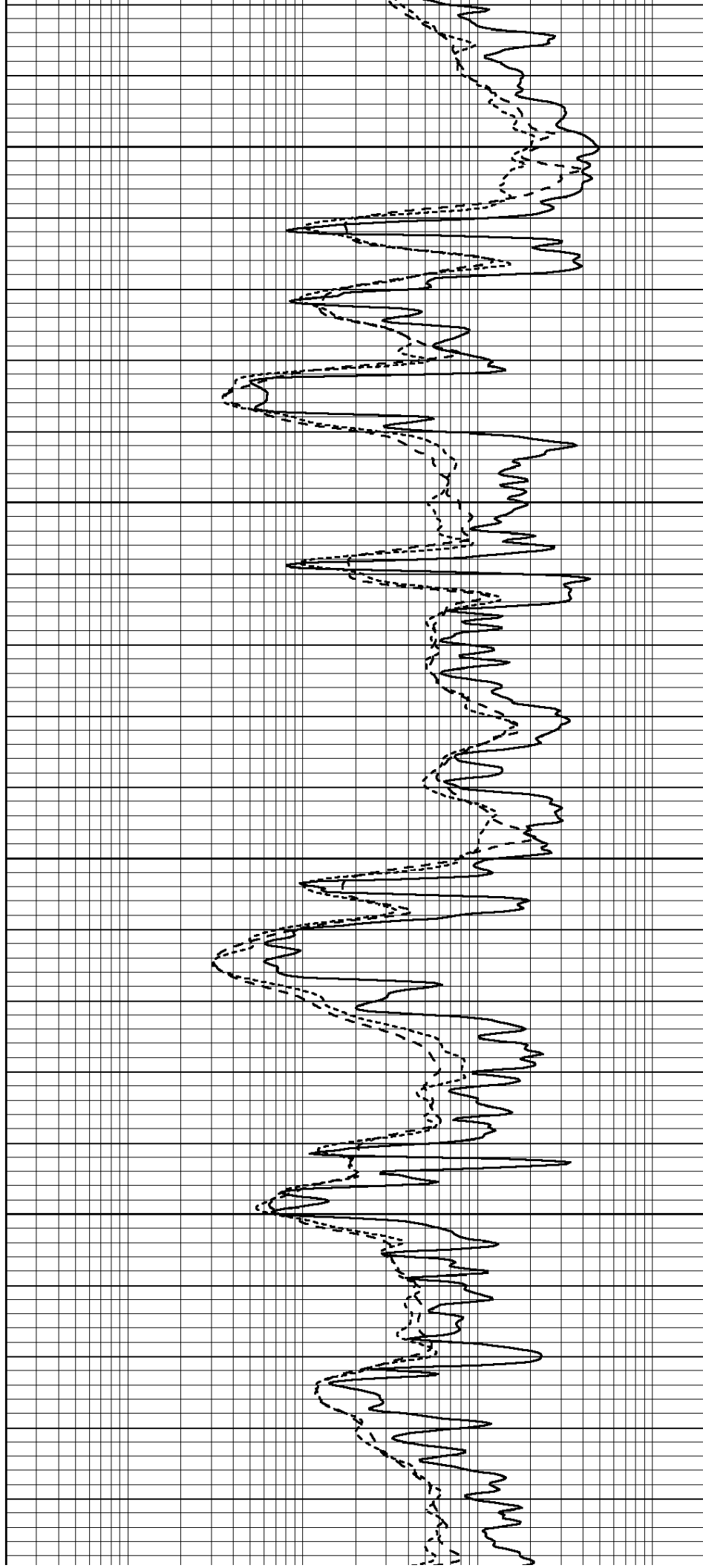


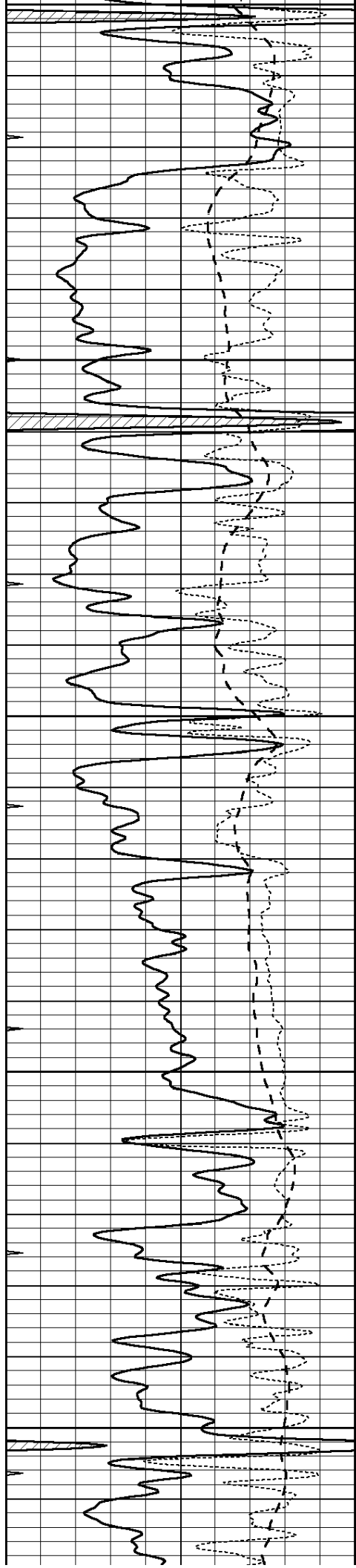
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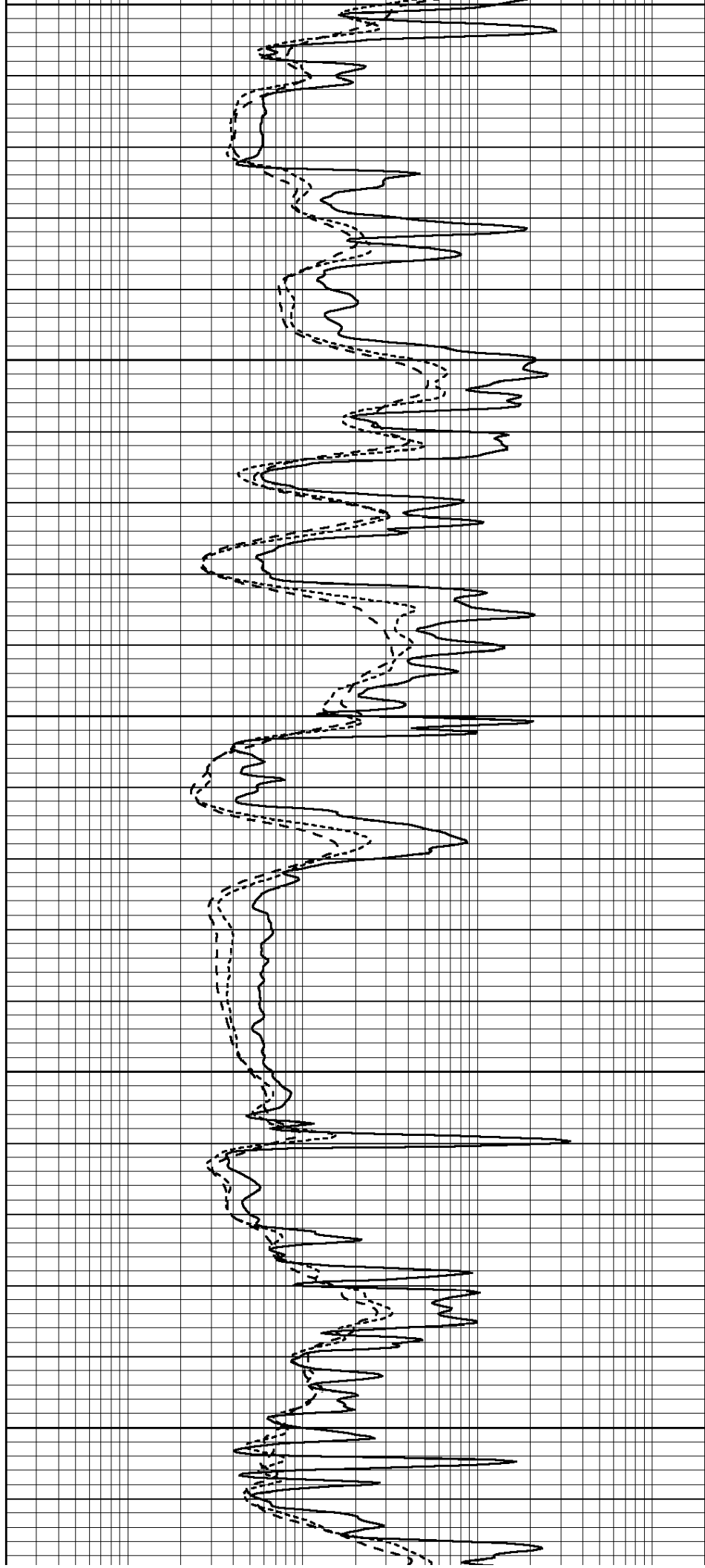
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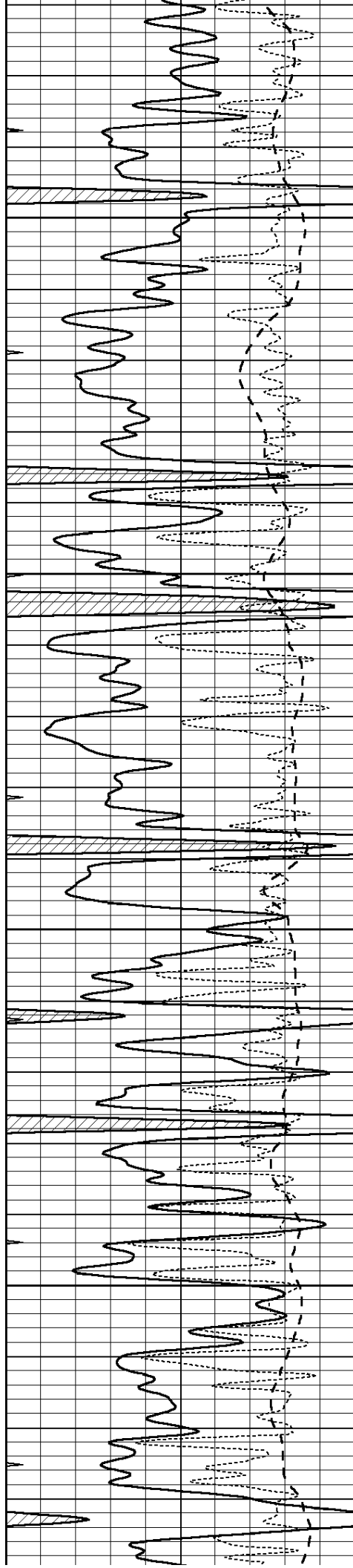
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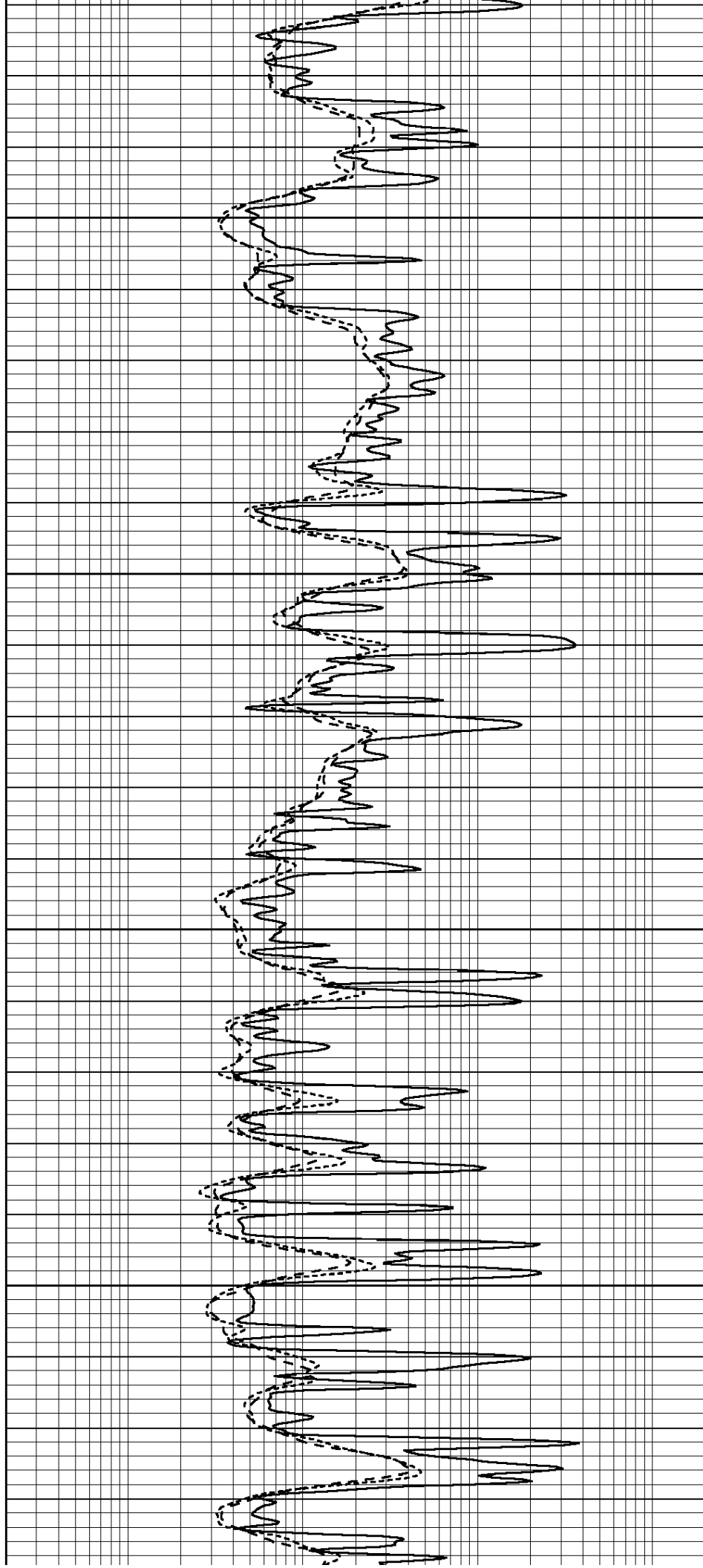


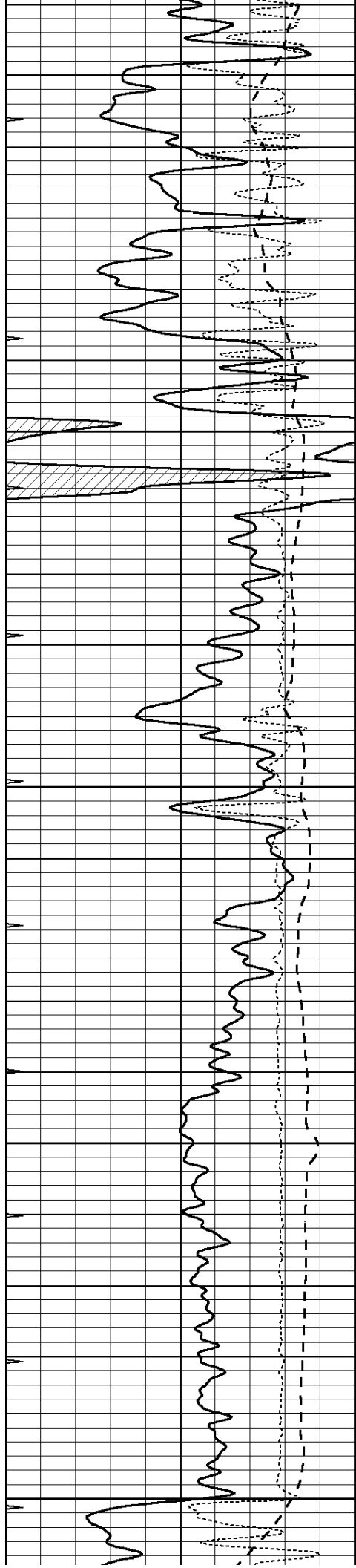
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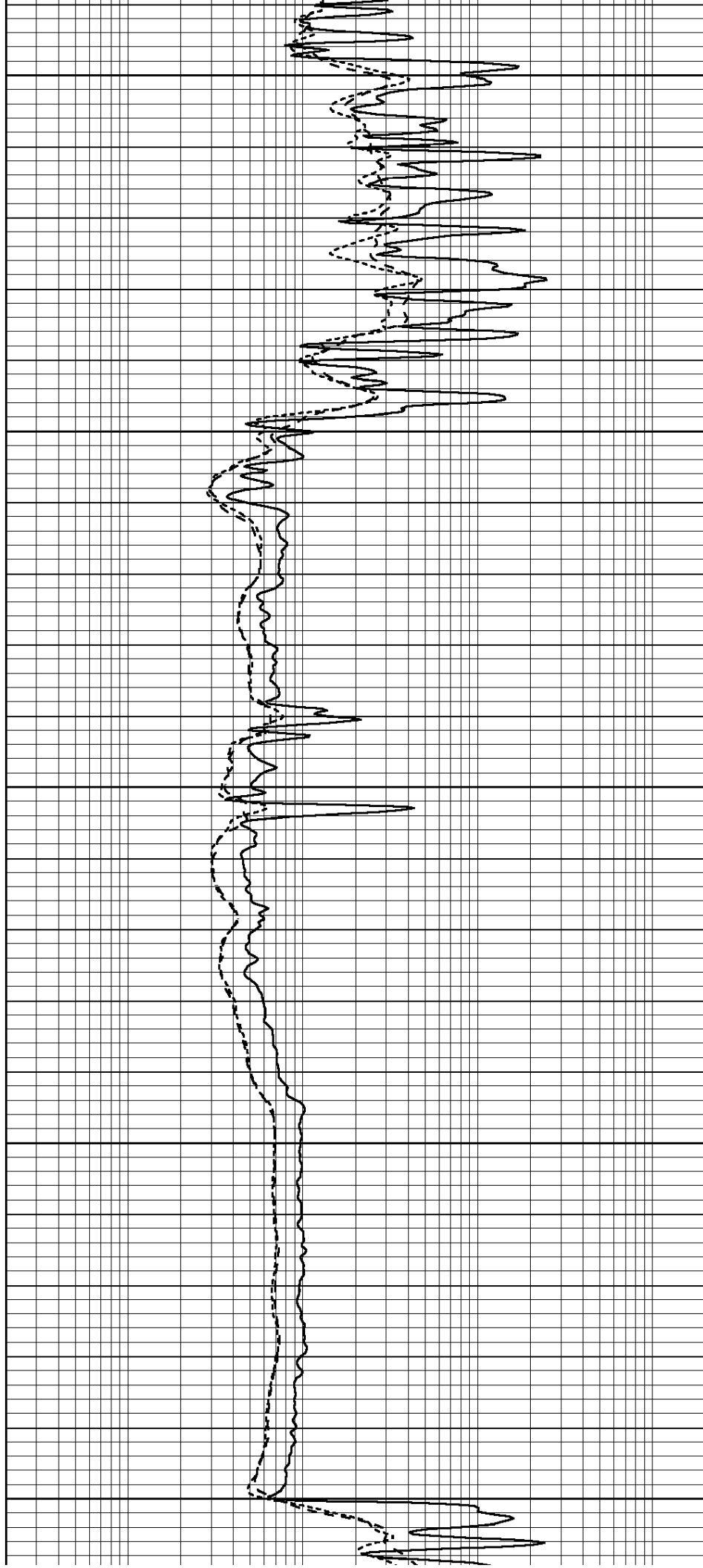
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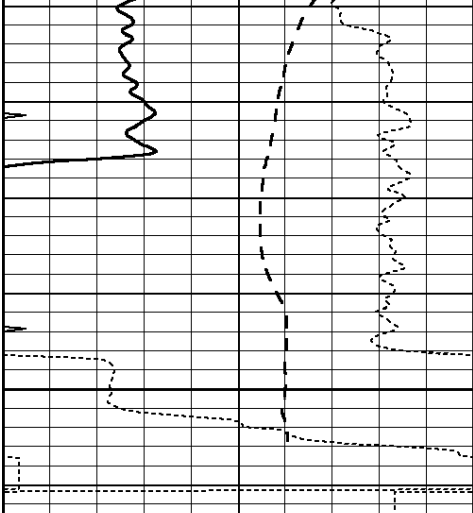
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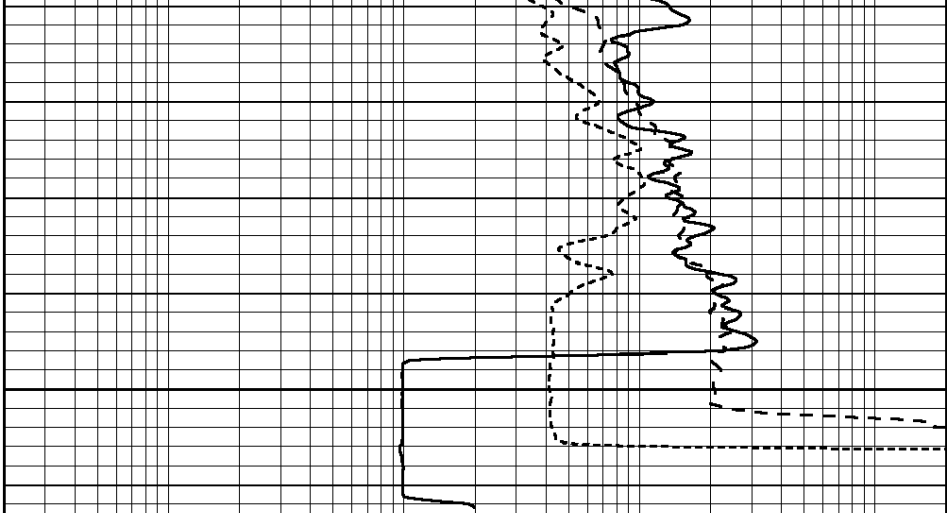
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