



**COMPLETION  
& PRODUCTION  
SERVICES CO.**

**DUAL  
INDUCTION  
LOG**

Company WOOLSEY OPERATING CO. LLC.  
Well MYERS A #1  
Field WILDCAT  
County BARBER  
State KANSAS

Company WOOLSEY OPERATING COMPANY, LLC.  
Well MYERS A #1  
Field WILDCAT  
County BARBER State KANSAS

Location: API # : 15-007-24132-00-00  
330' FNL & 330' FEL  
NE - NE - NE  
SEC 13 TWP 35S RGE 13W  
Permanent Datum GROUND LEVEL Elevation 1436  
Log Measured From KELLY BUSHING 12' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
CNL/CDL/PE  
Elevation  
K.B. 1448  
D.F. 1446  
G.L. 1436

Date	3/16/14
Run Number	ONE
Depth Driller	5600
Depth Logger	5600
Bottom Logged Interval	5598
Top Log Interval	00
Casing Driller	13 3/8" @ 220'
Casing Logger	219'
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/53
pH / Fluid Loss	10.5/8.8
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.750 @ 75F
Rmf @ Meas. Temp	.563 @ 75F
Rmc @ Meas. Temp	.900 @ 75F
Source of Rmf / Rmc	MEASUREMENT
Rim @ BHT	.430 @ 130F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	130F
Equipment Number	4854
Location	HAYS, KANSAS
Recorded By	IAN MABB
Witnessed By	BILL KLAVER

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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**

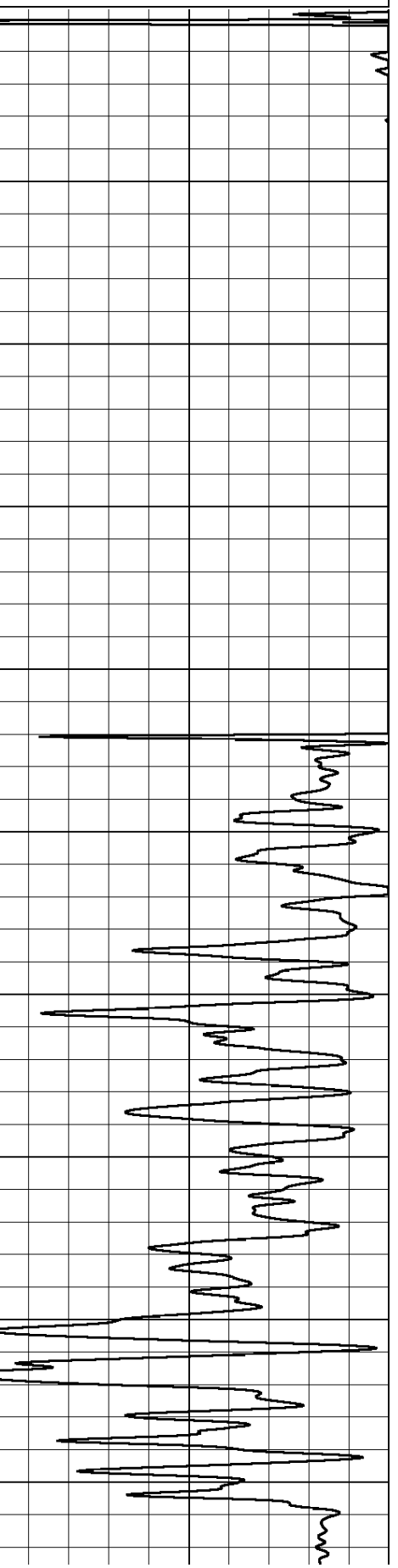
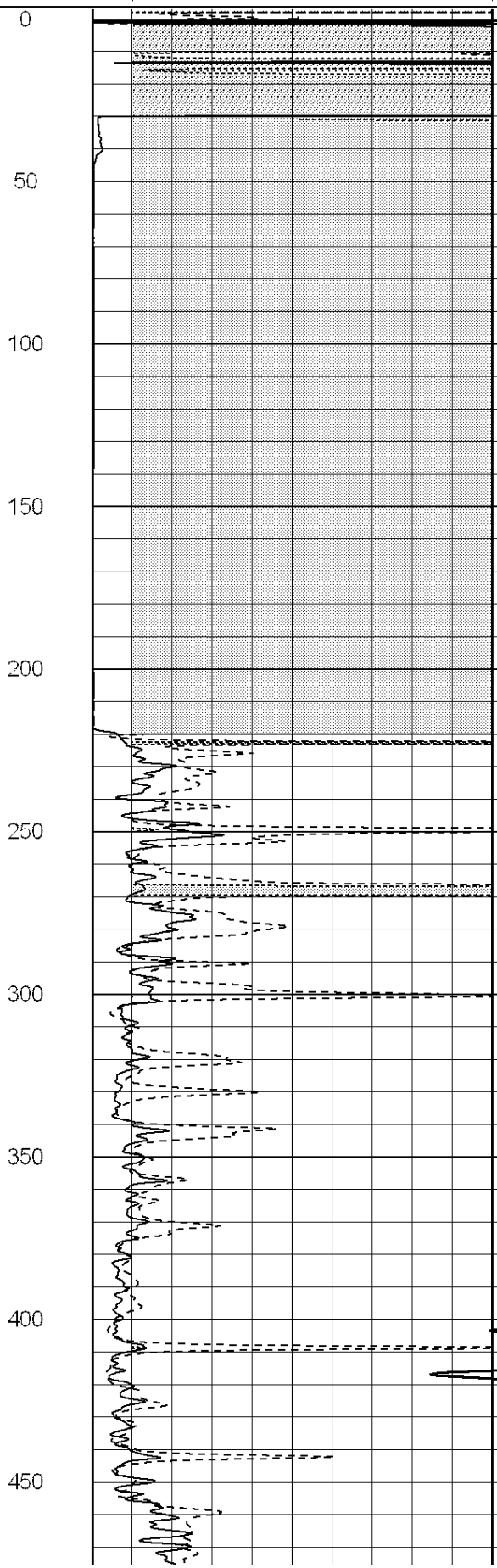
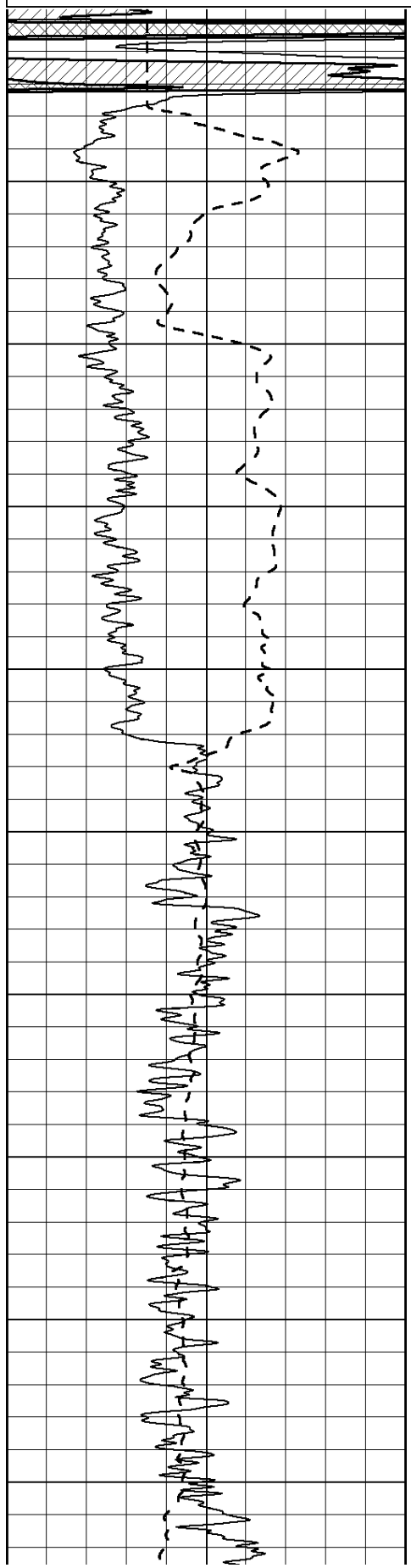
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
HARDTNER, KS., 1S. ON HWY 281 TO (STATE LINE), 1 1/2W., N. INTO

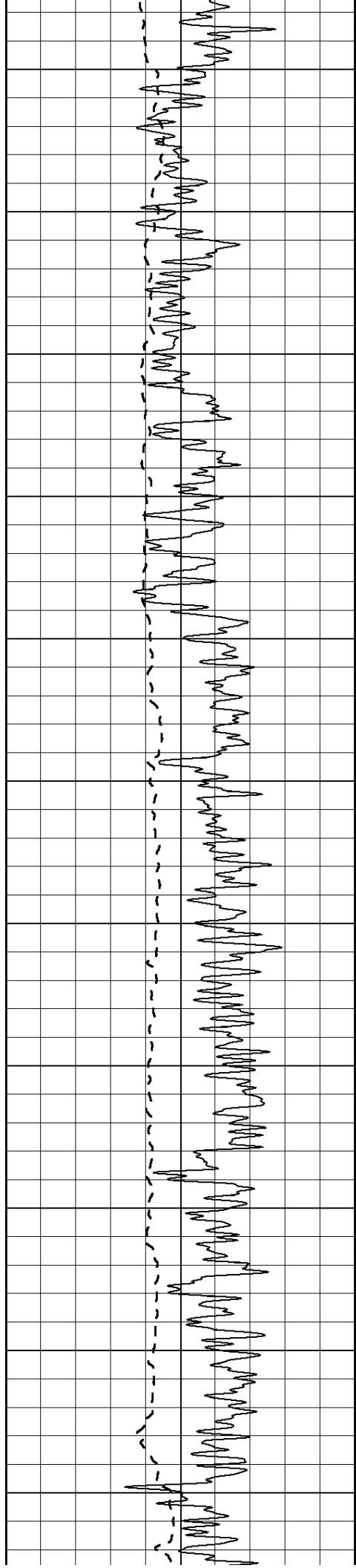
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





500

550

600

650

700

750

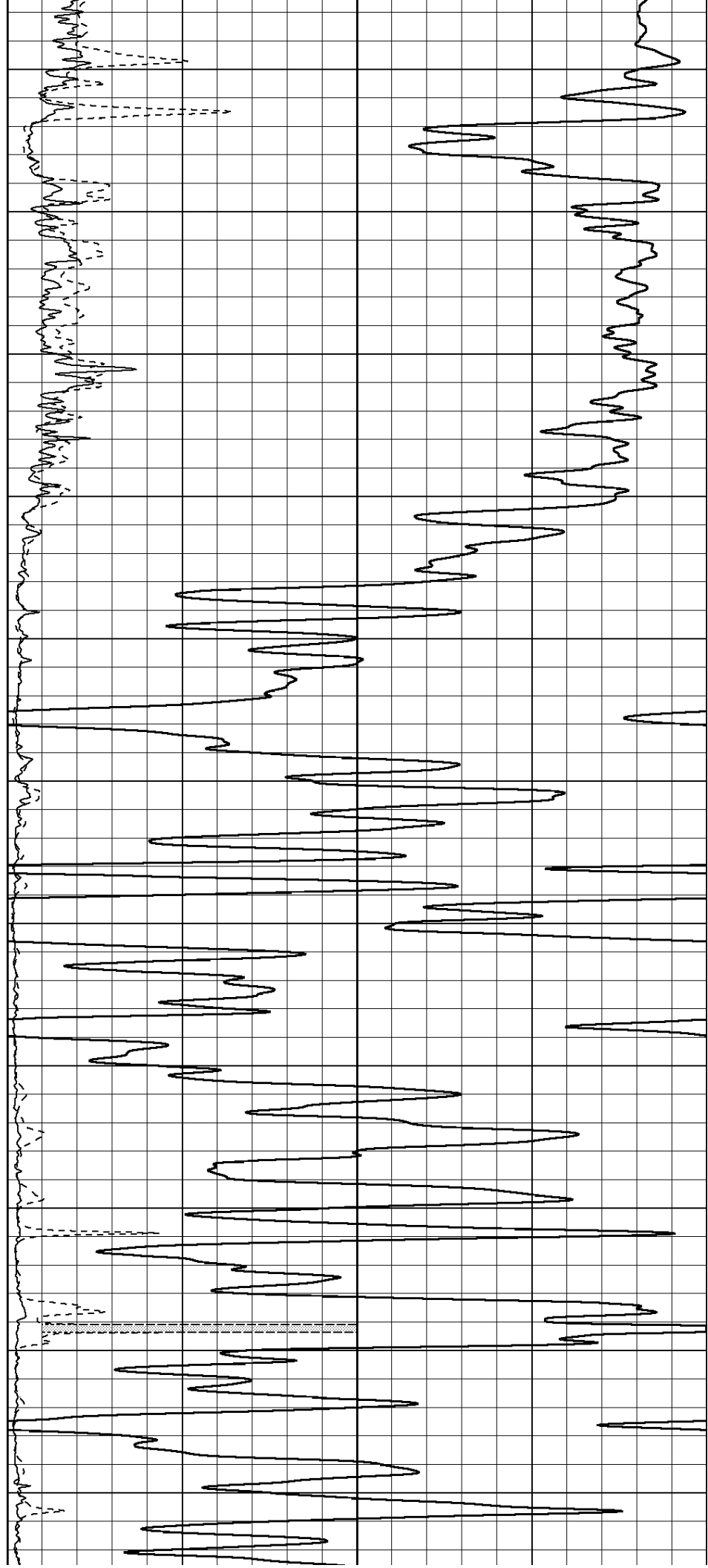
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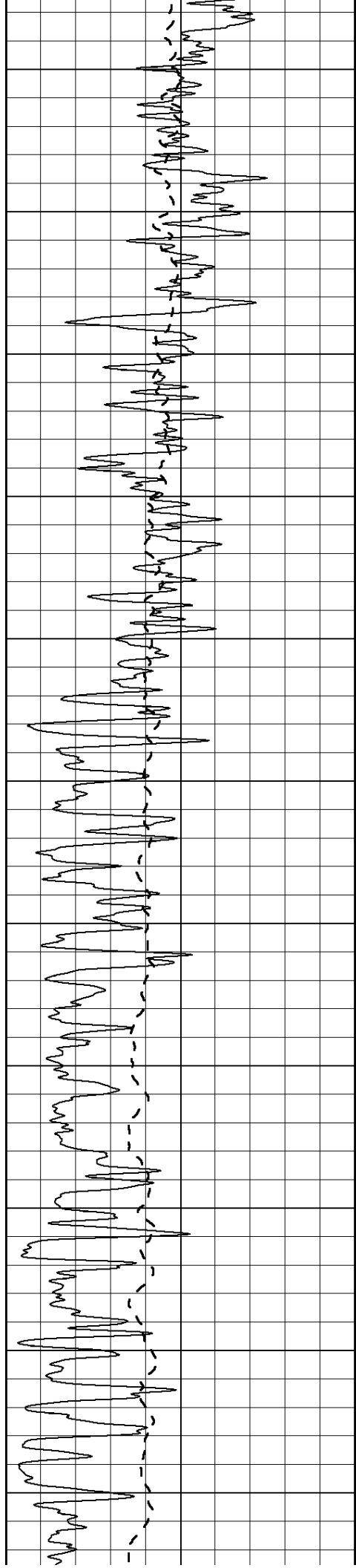
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1000





1050

1100

1150

1200

1250

1300

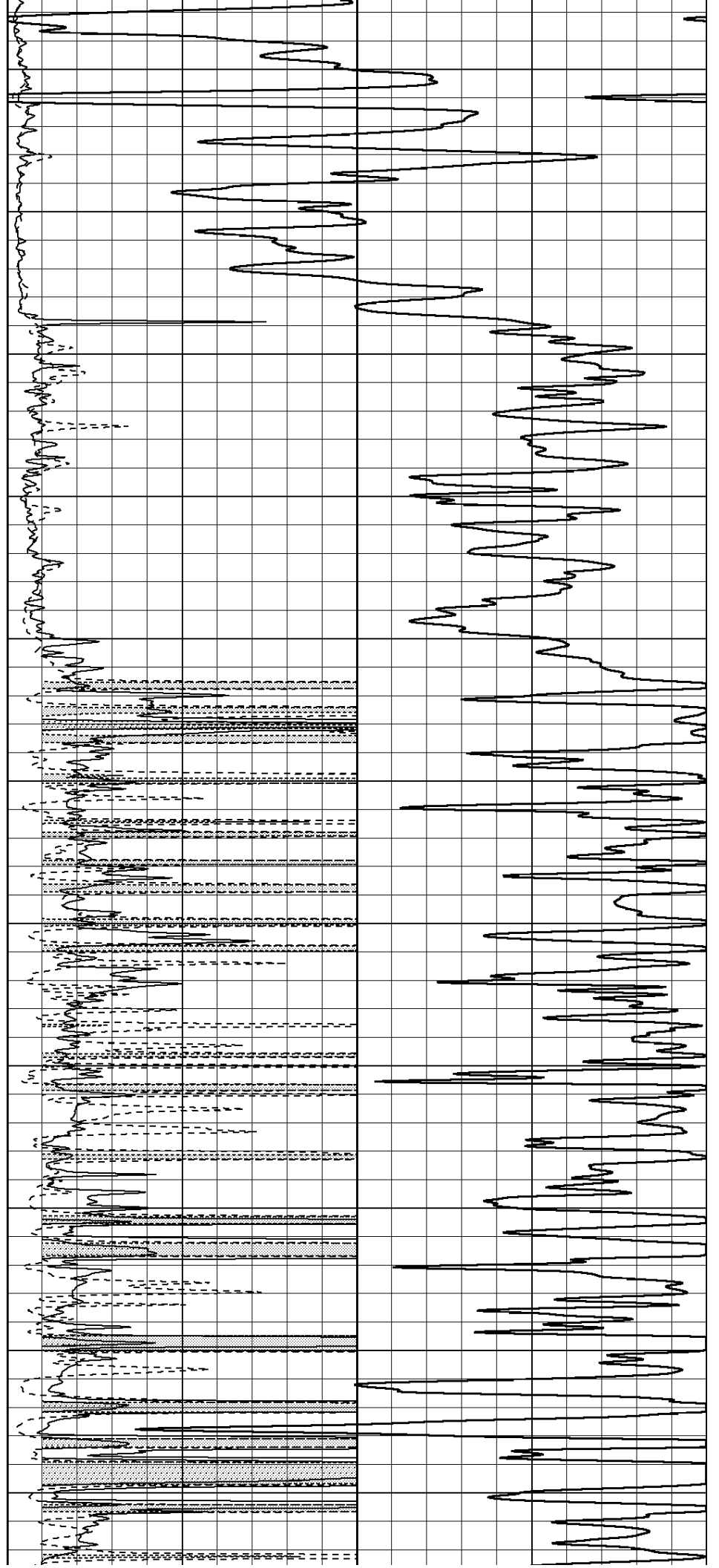
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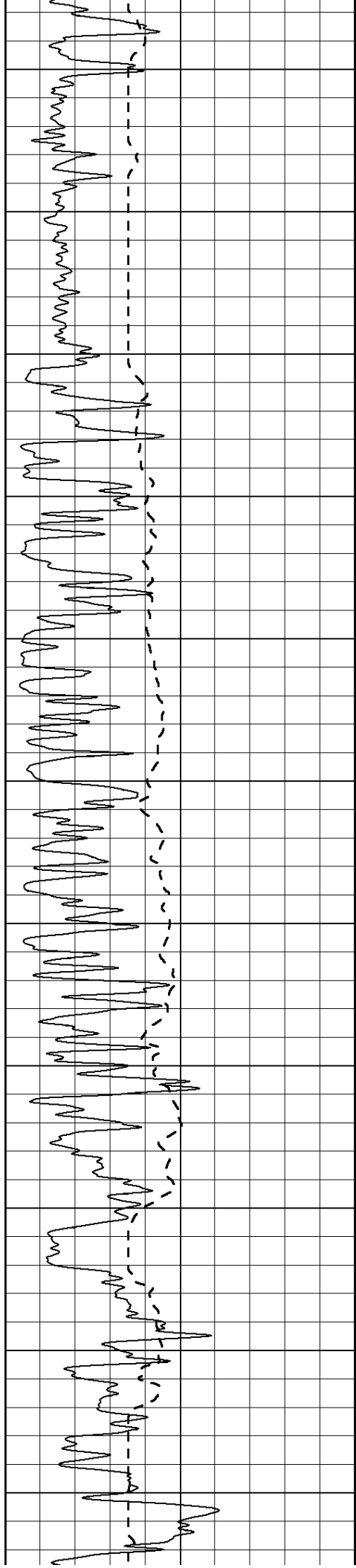
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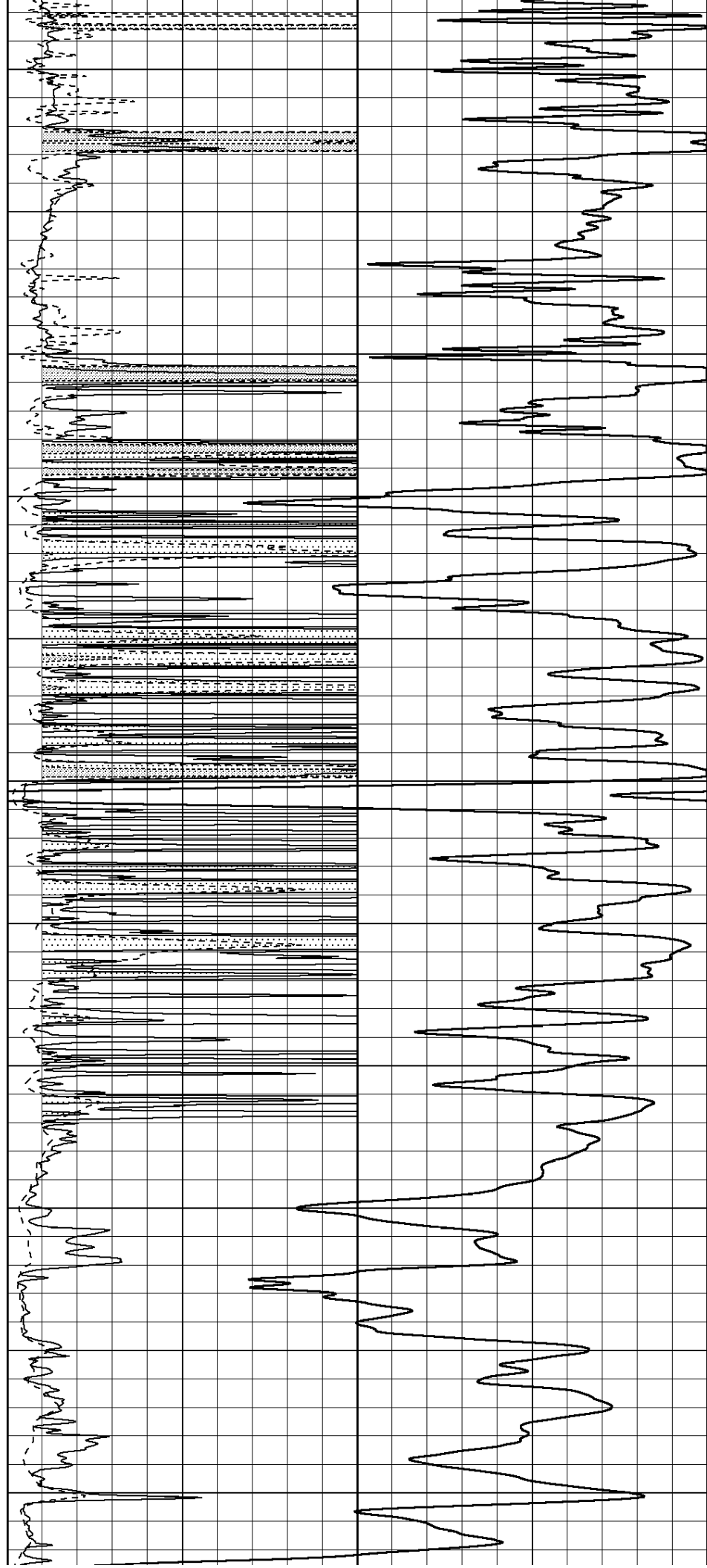
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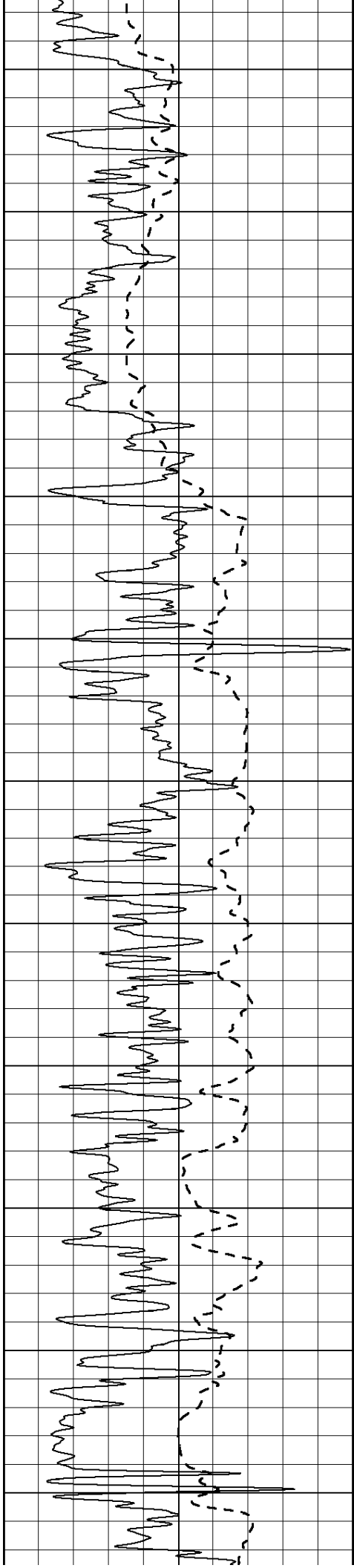
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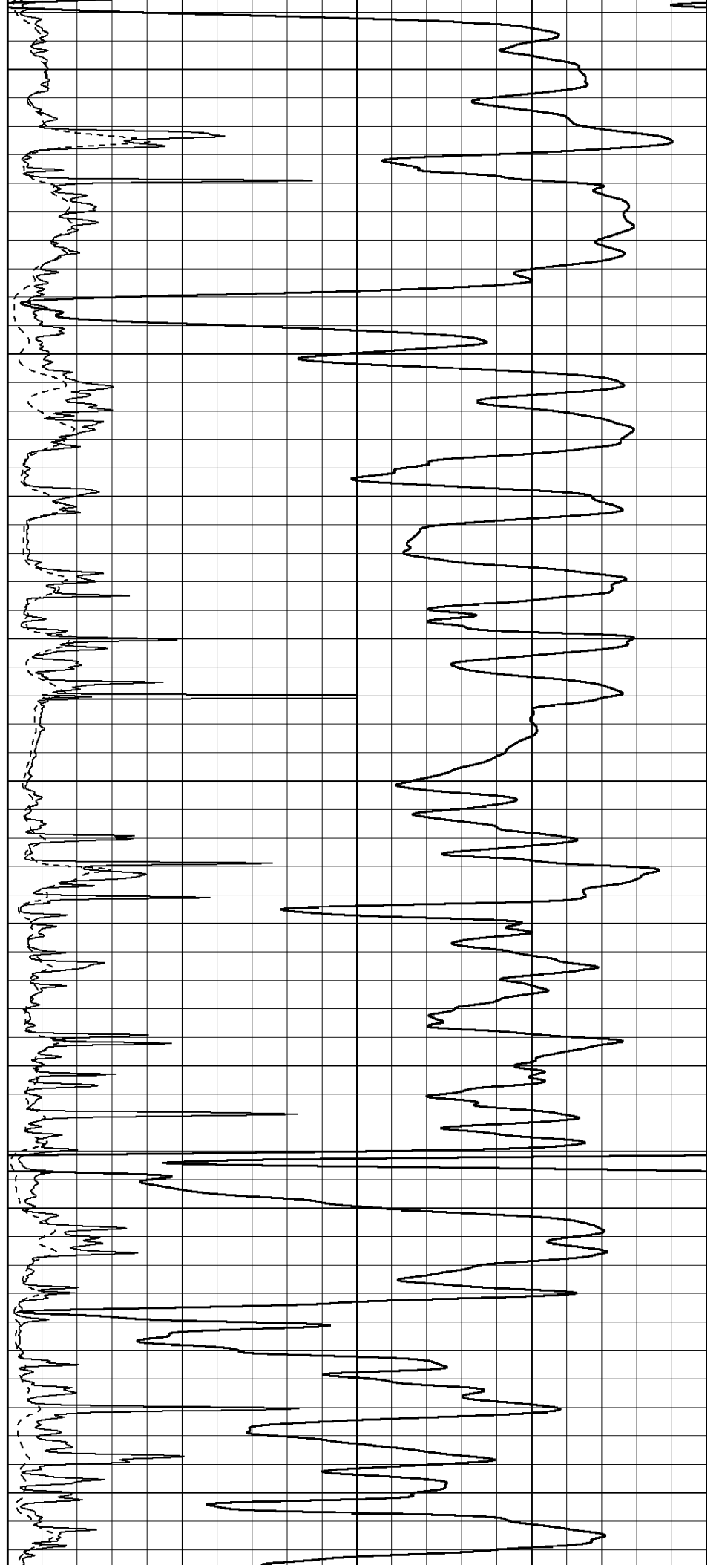
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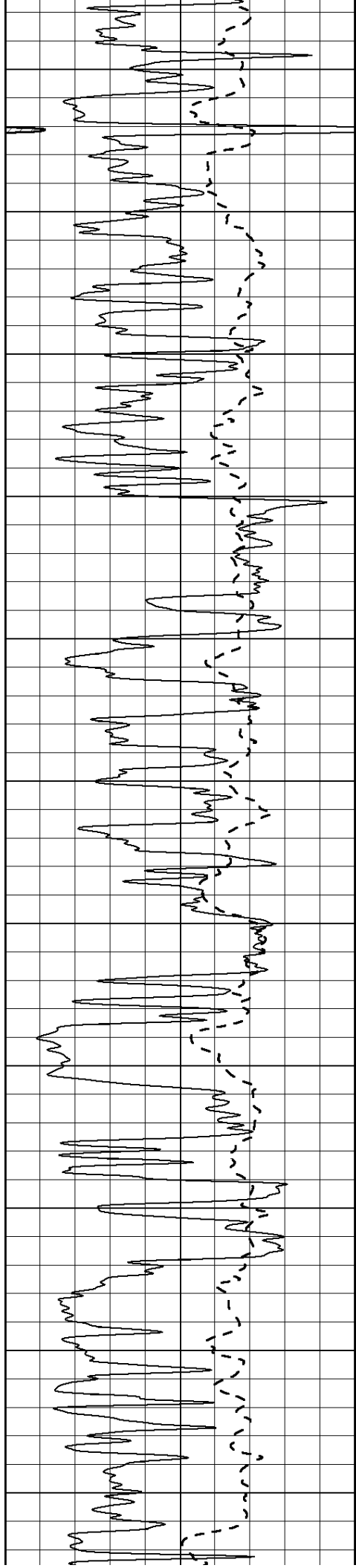
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2900

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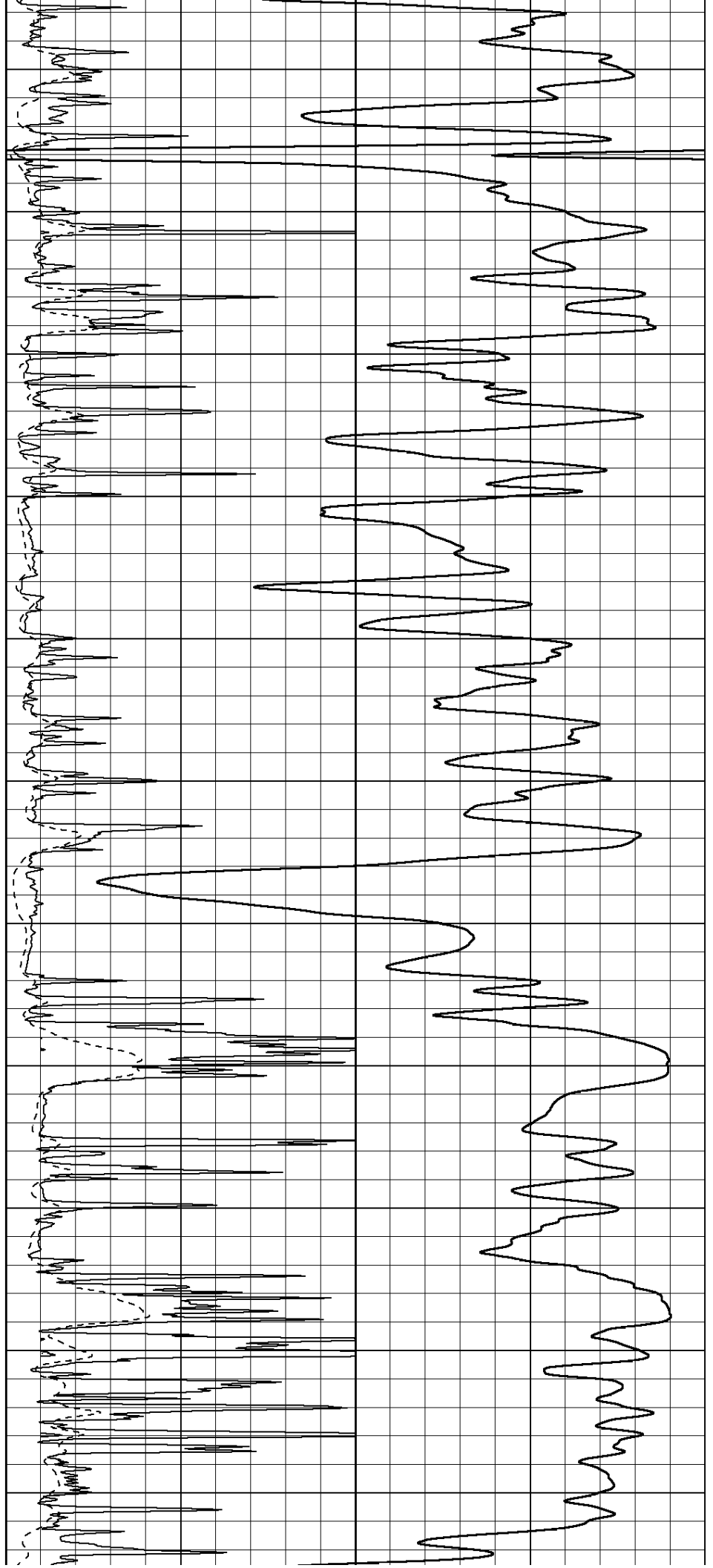
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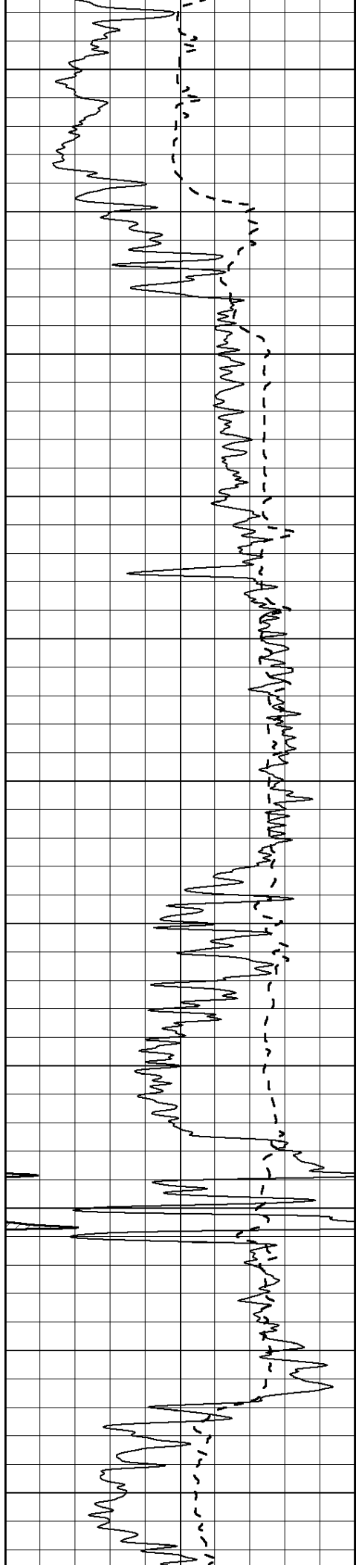
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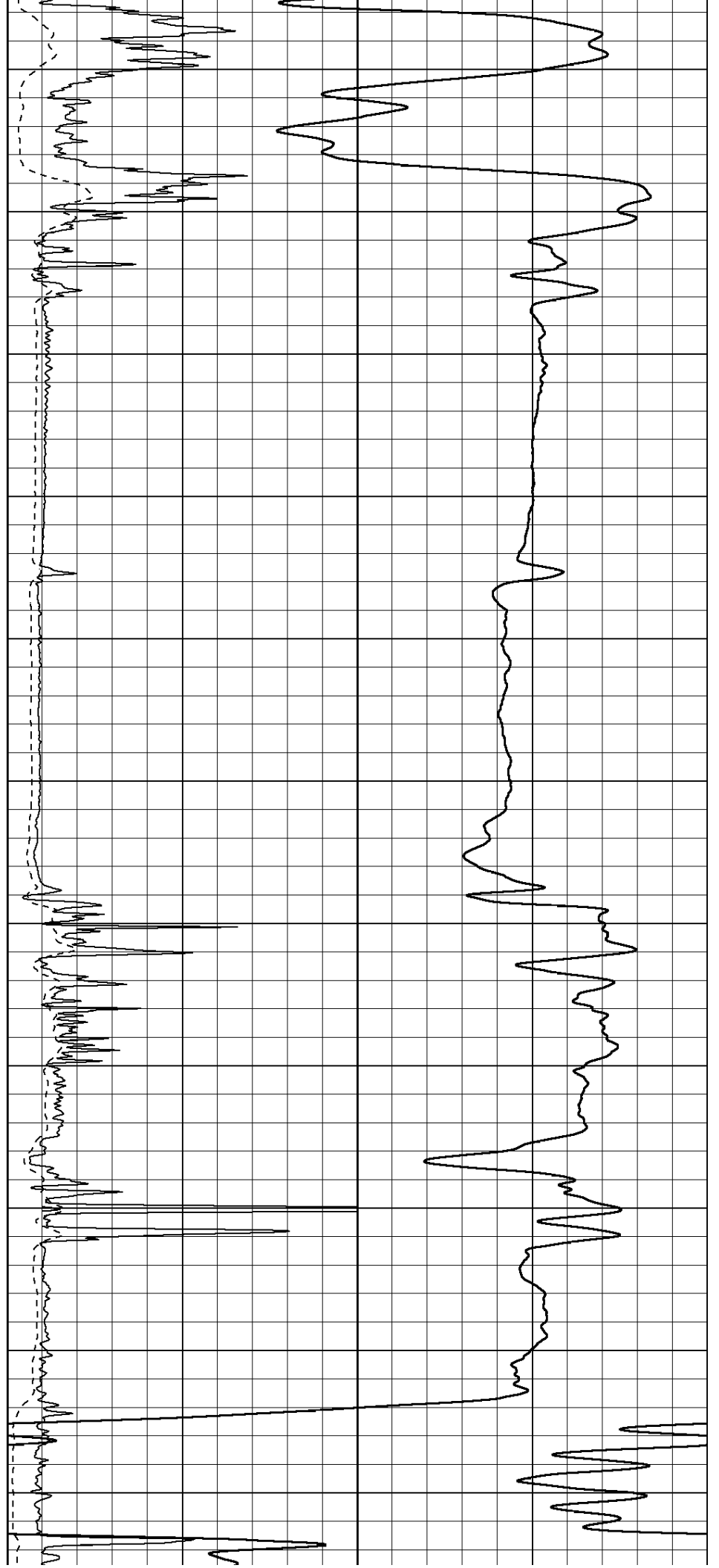
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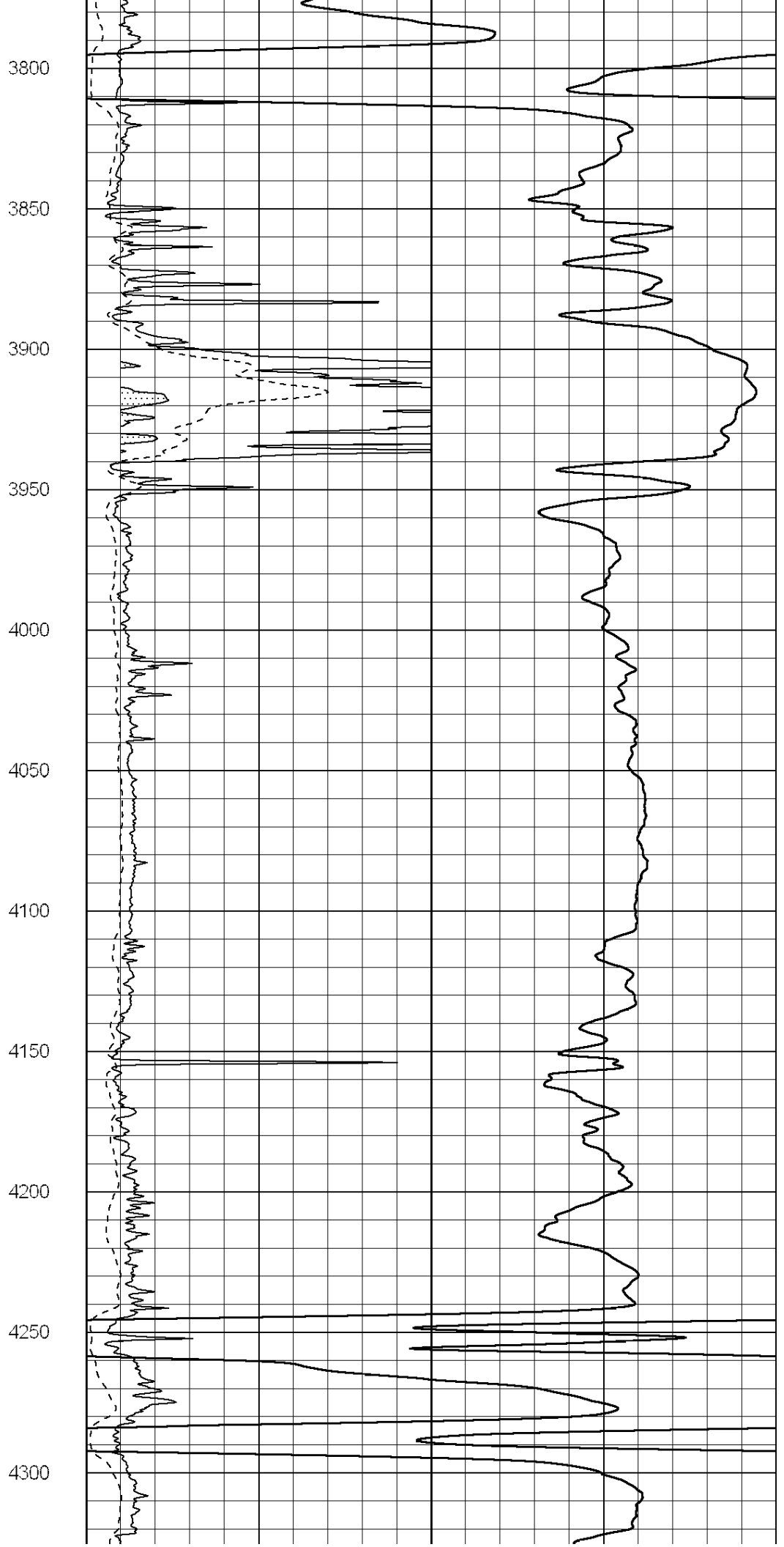
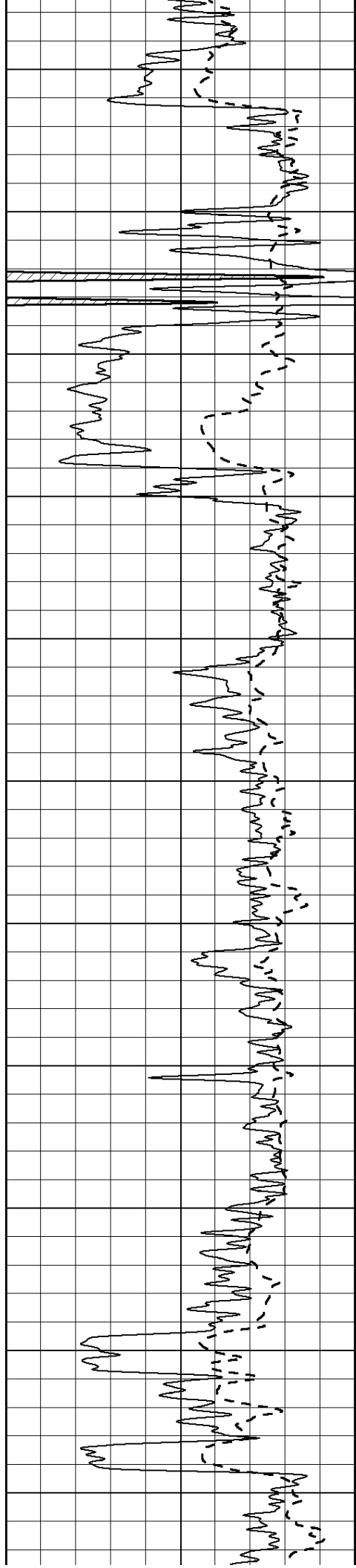
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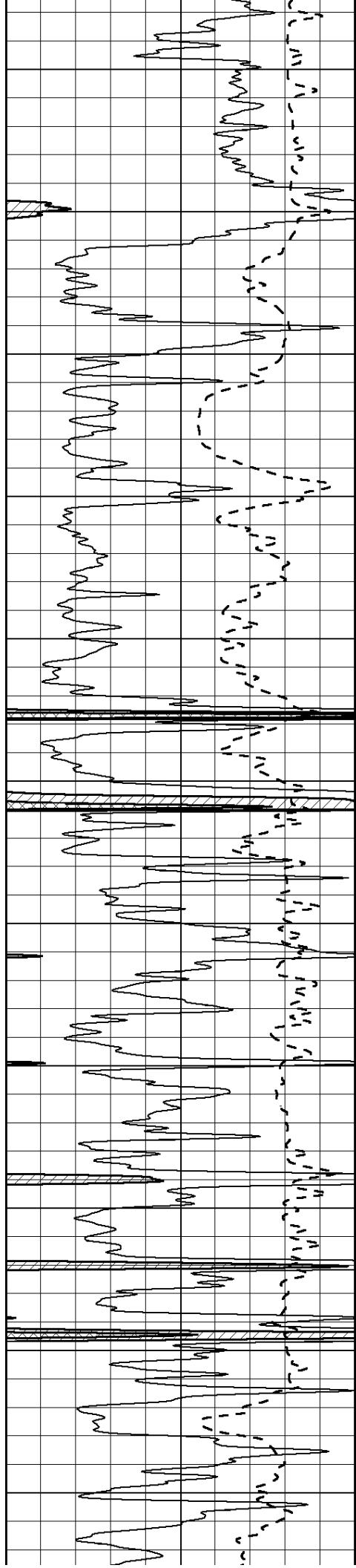
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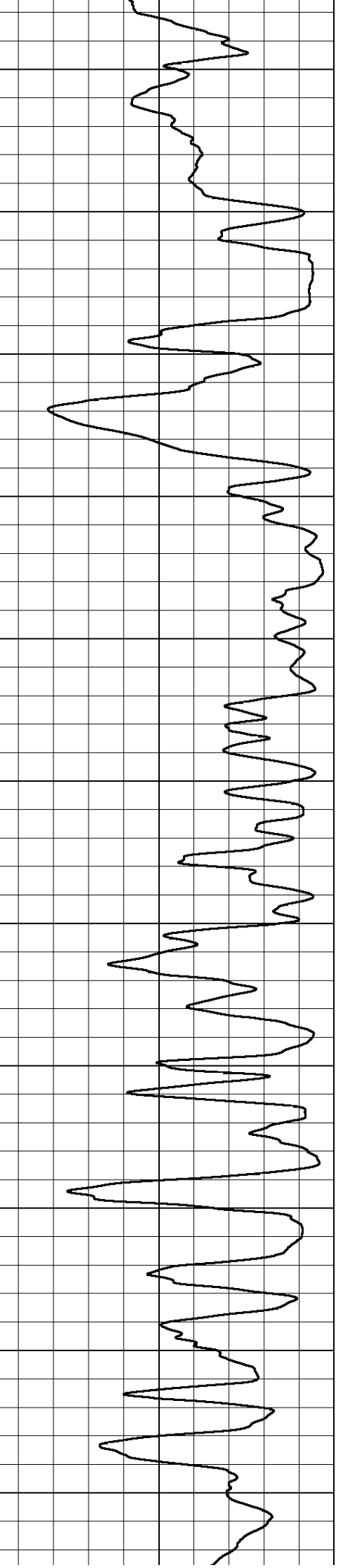
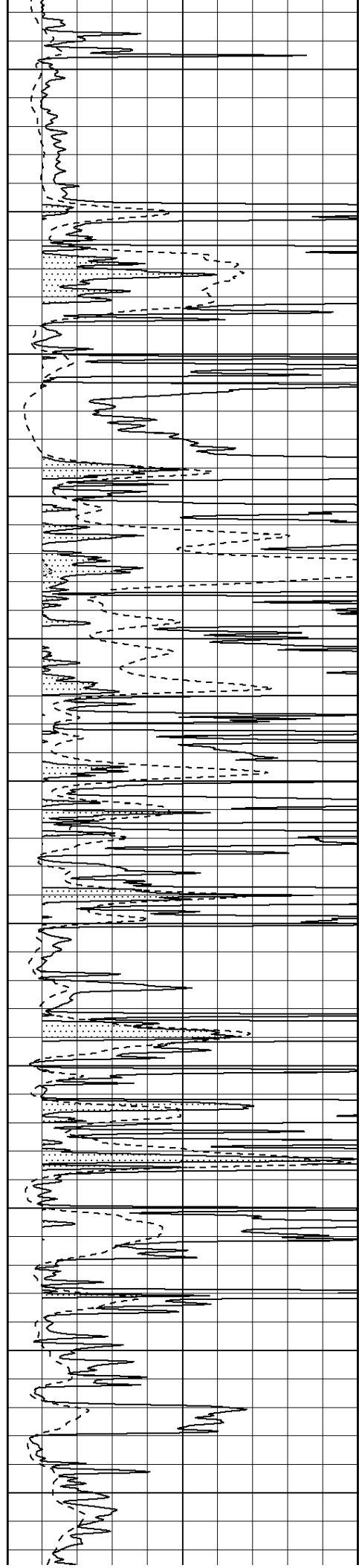
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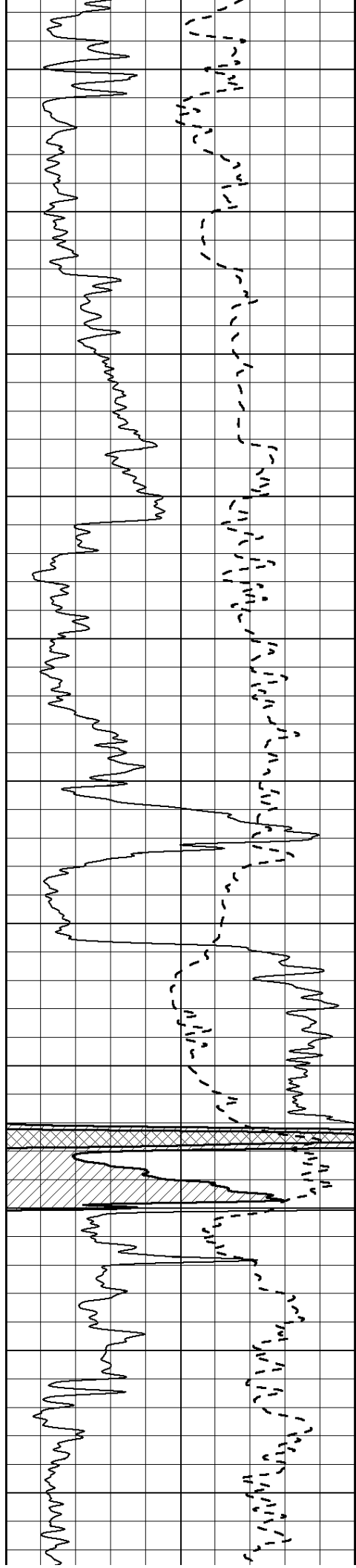
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5050

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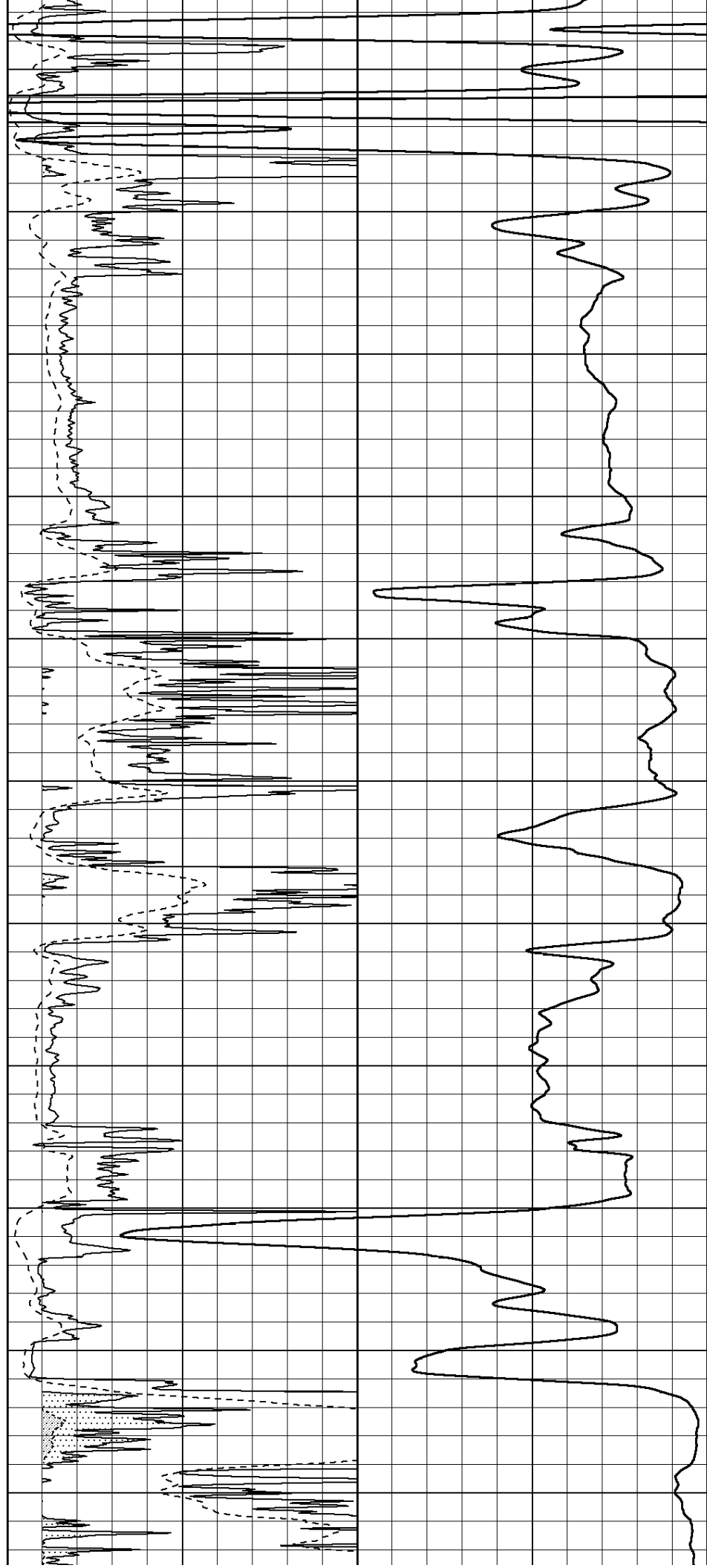
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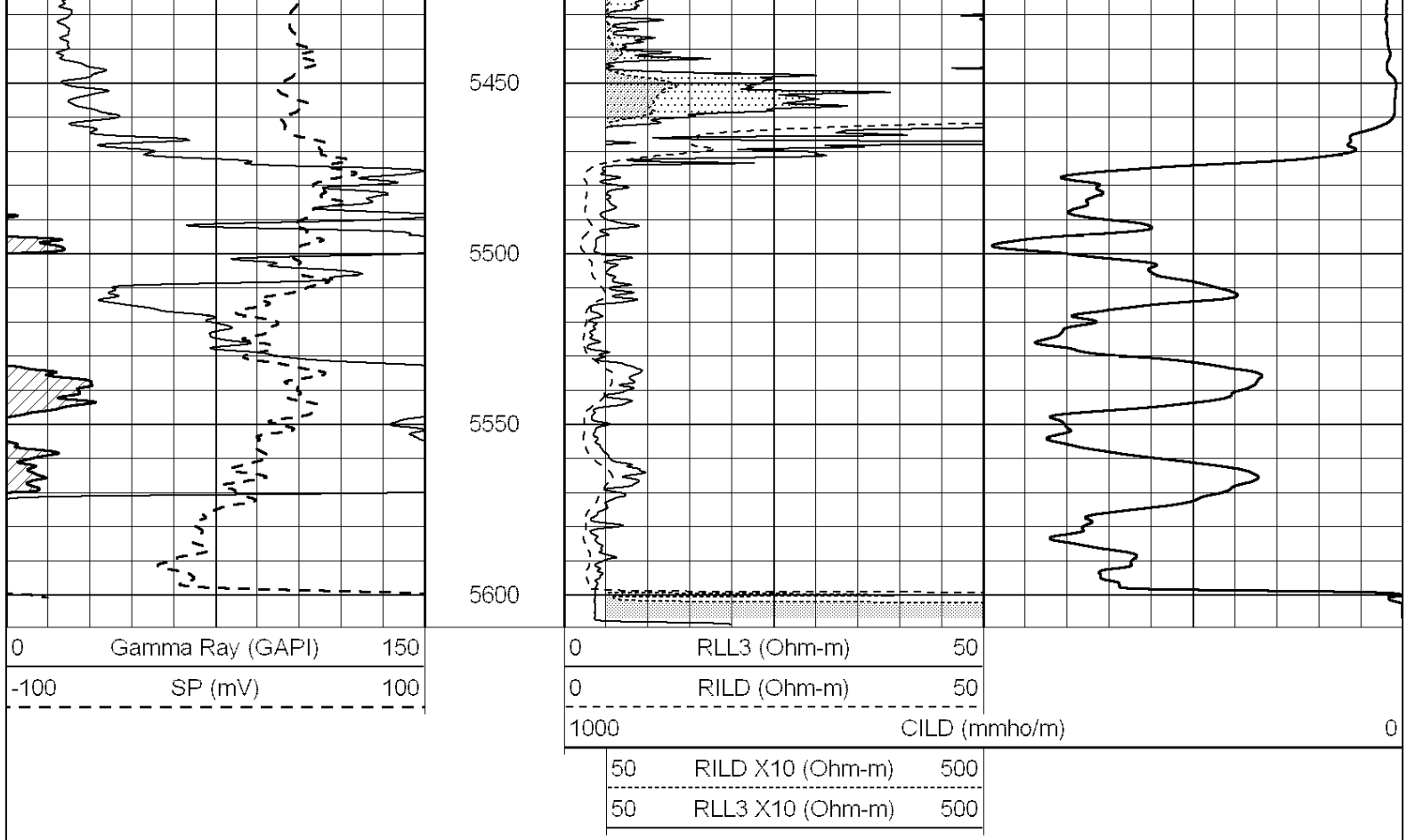
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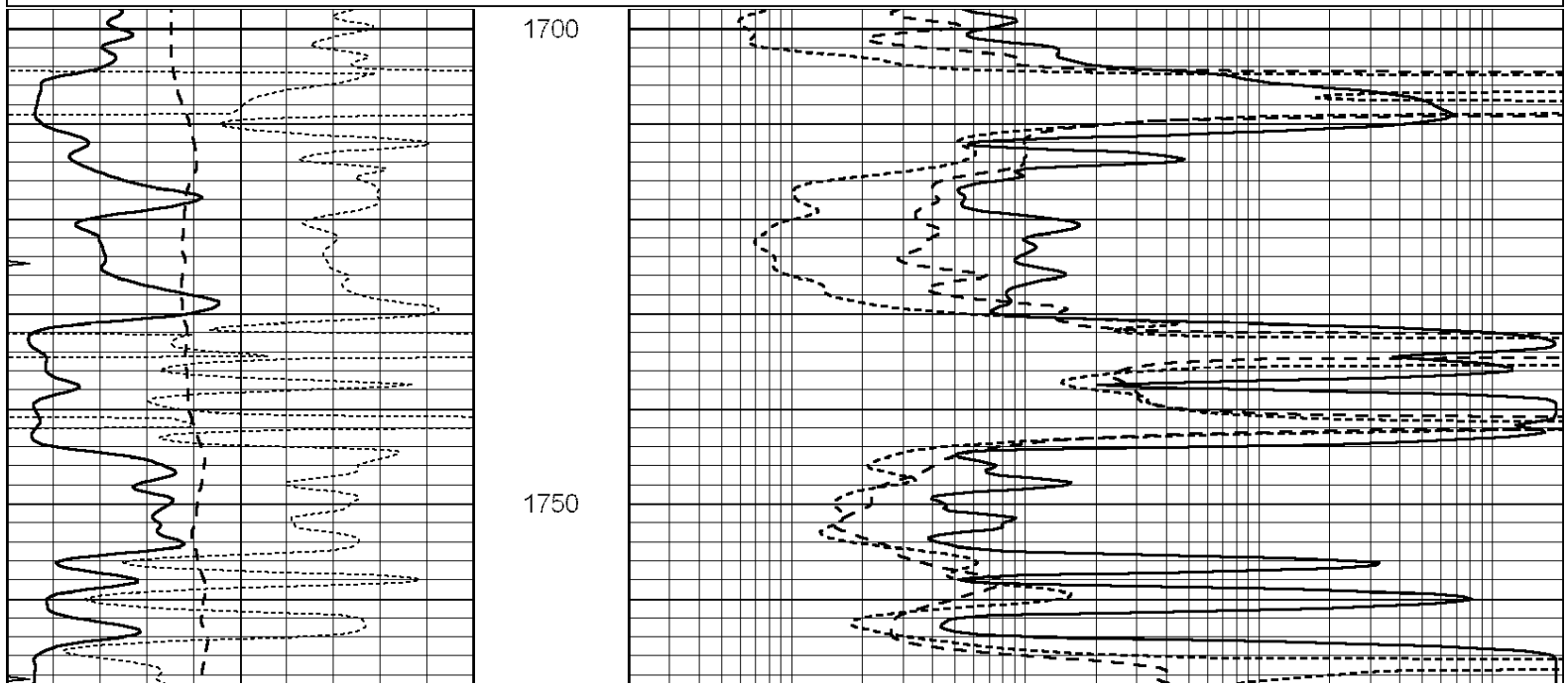
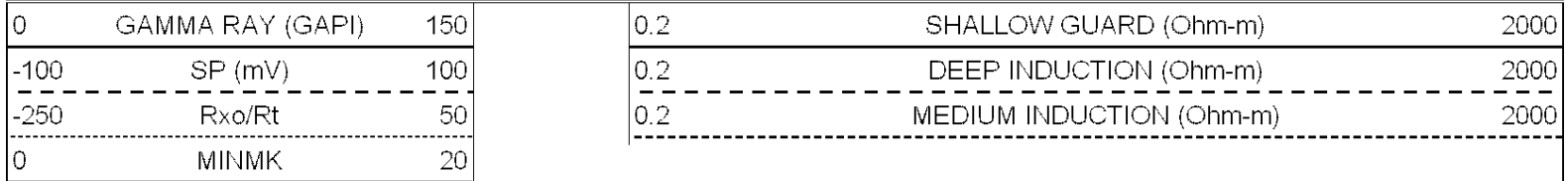
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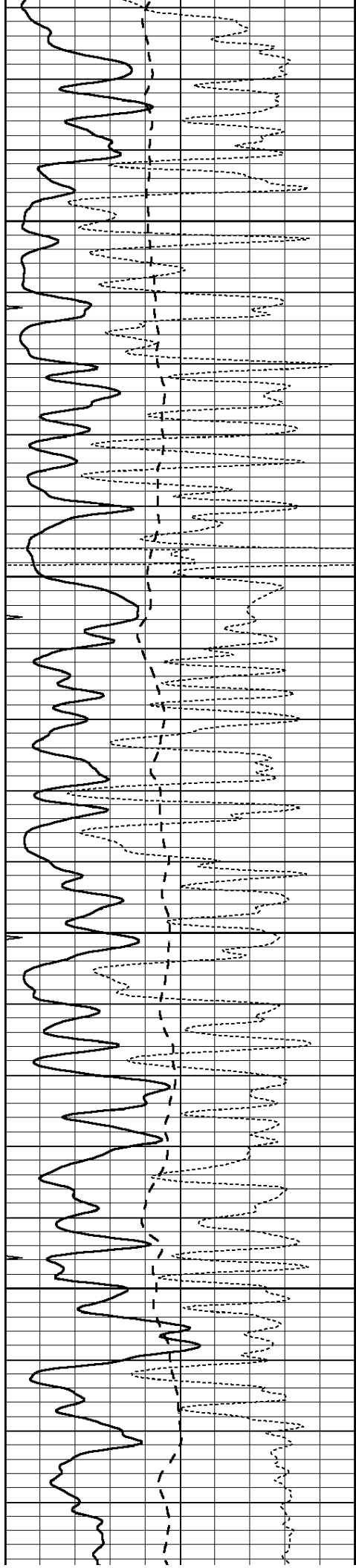
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 Presentation Format: \_dil  
 Dataset Creation: Sun Mar 16 10:11:40 2014 by Calc SOC 120430  
 Charted by: Depth in Feet scaled 1:240



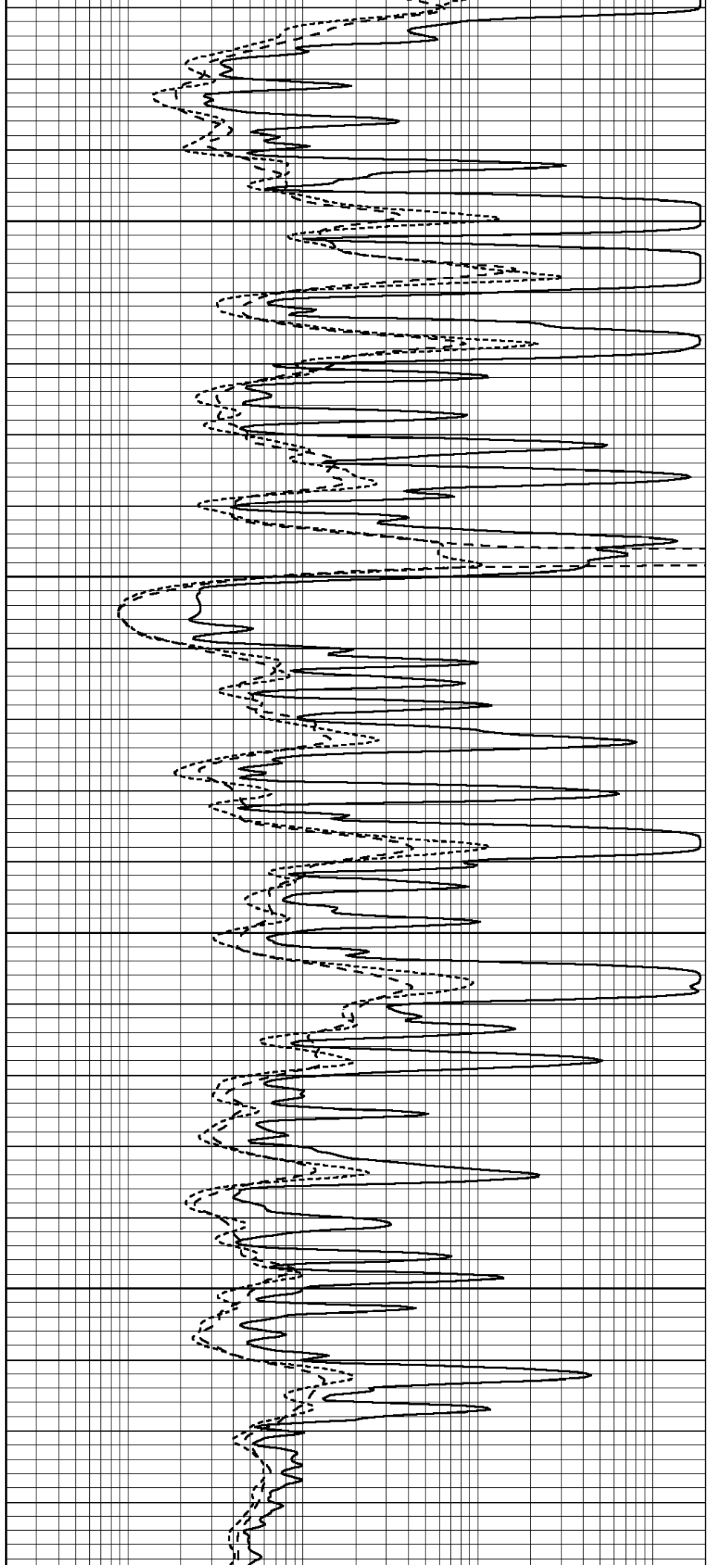


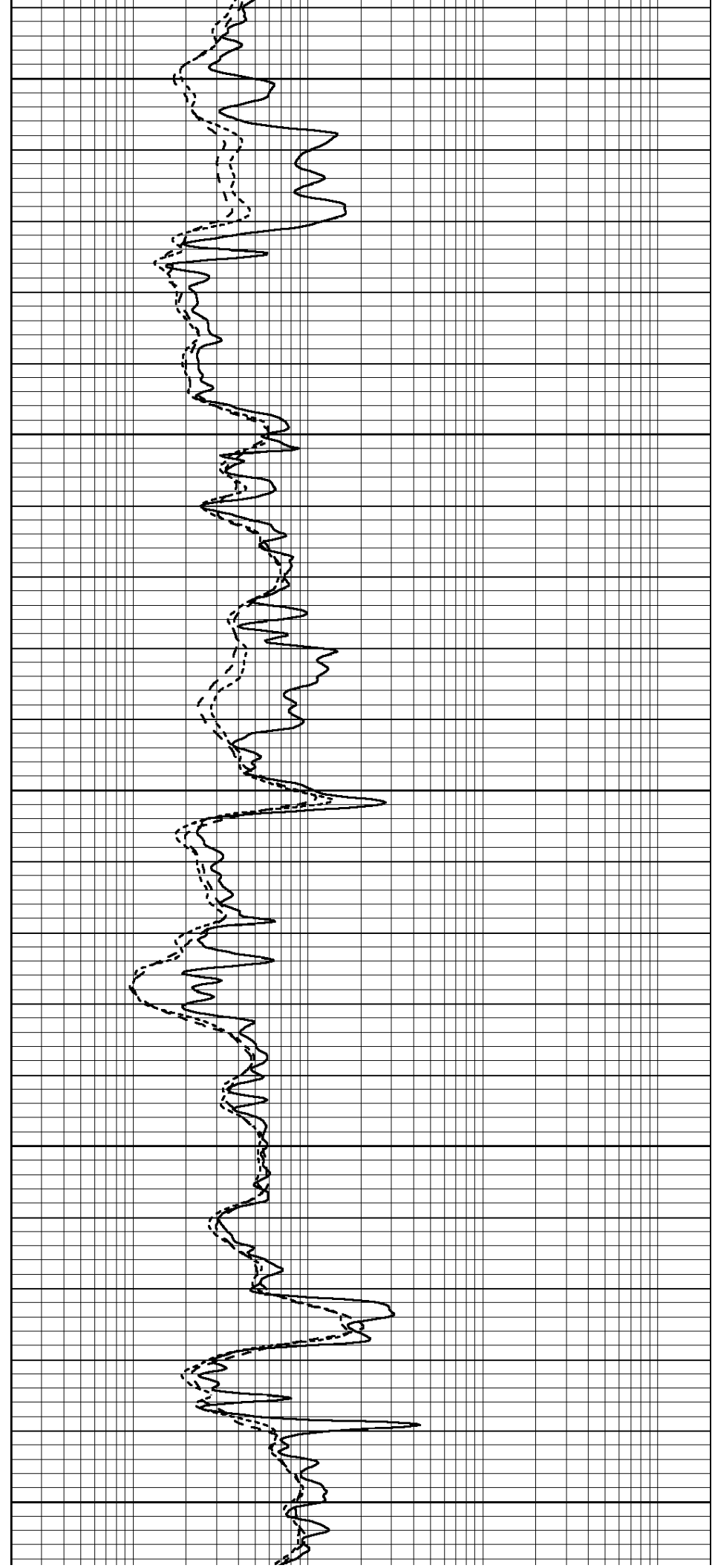
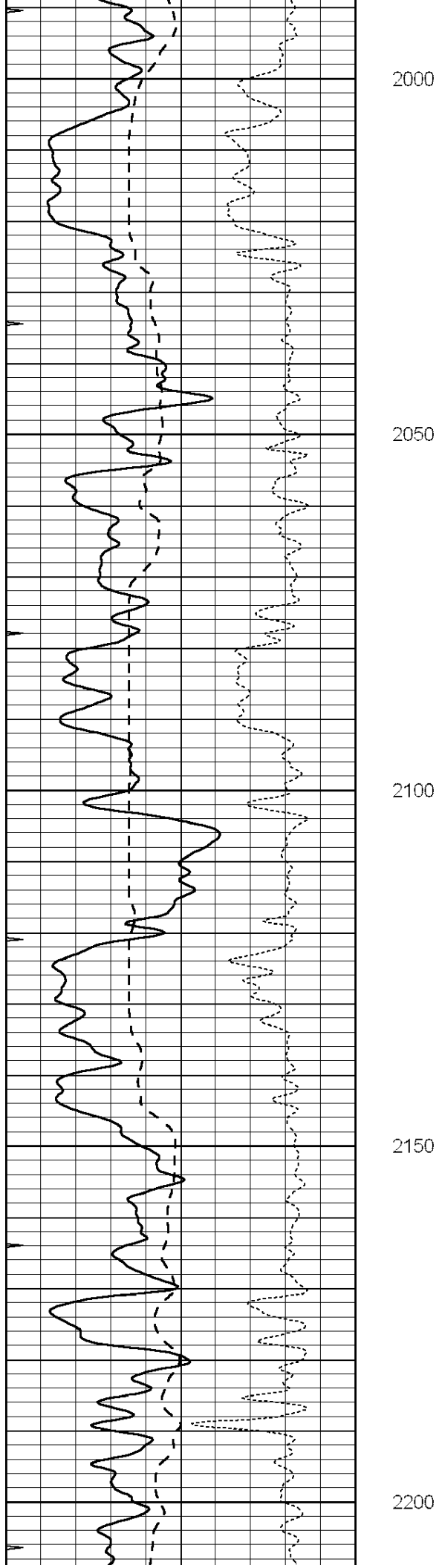
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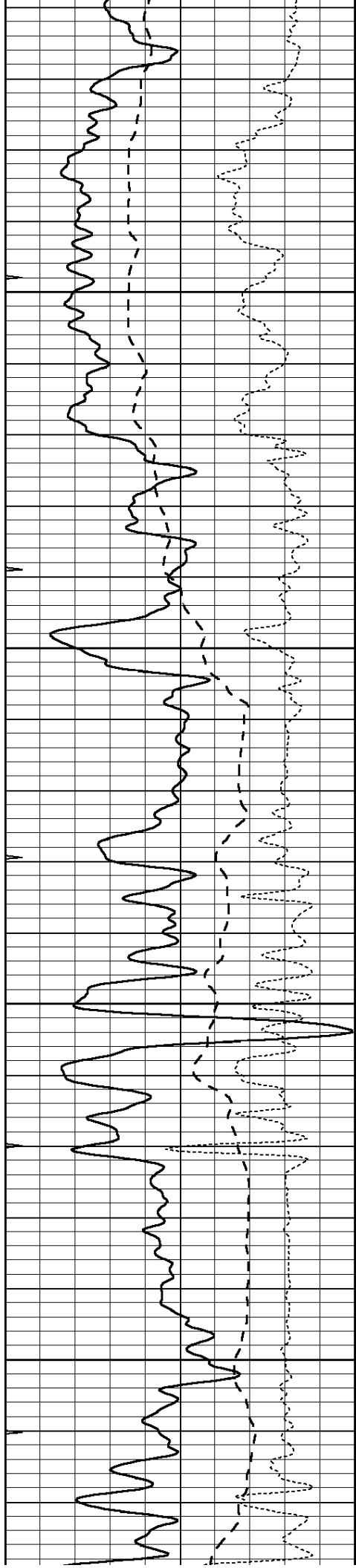
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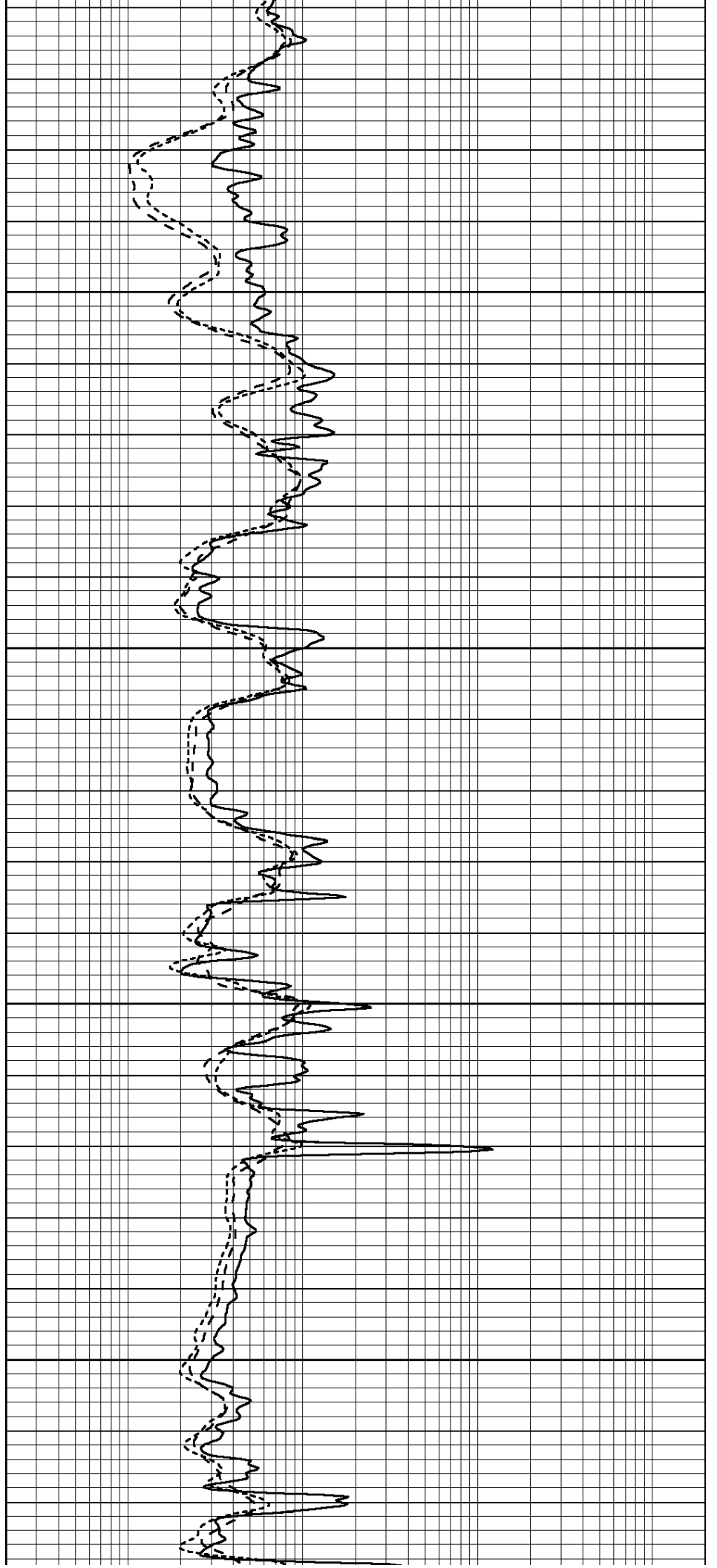


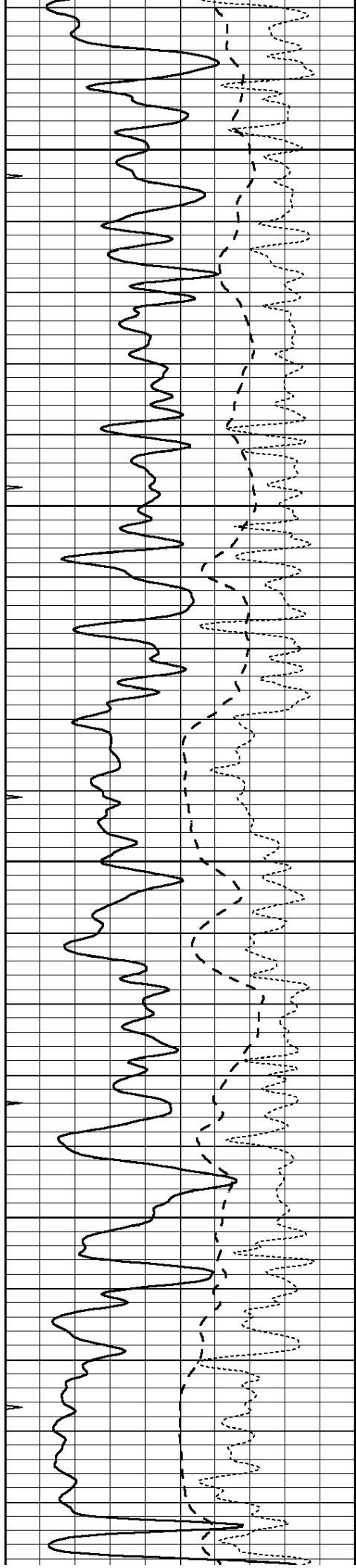
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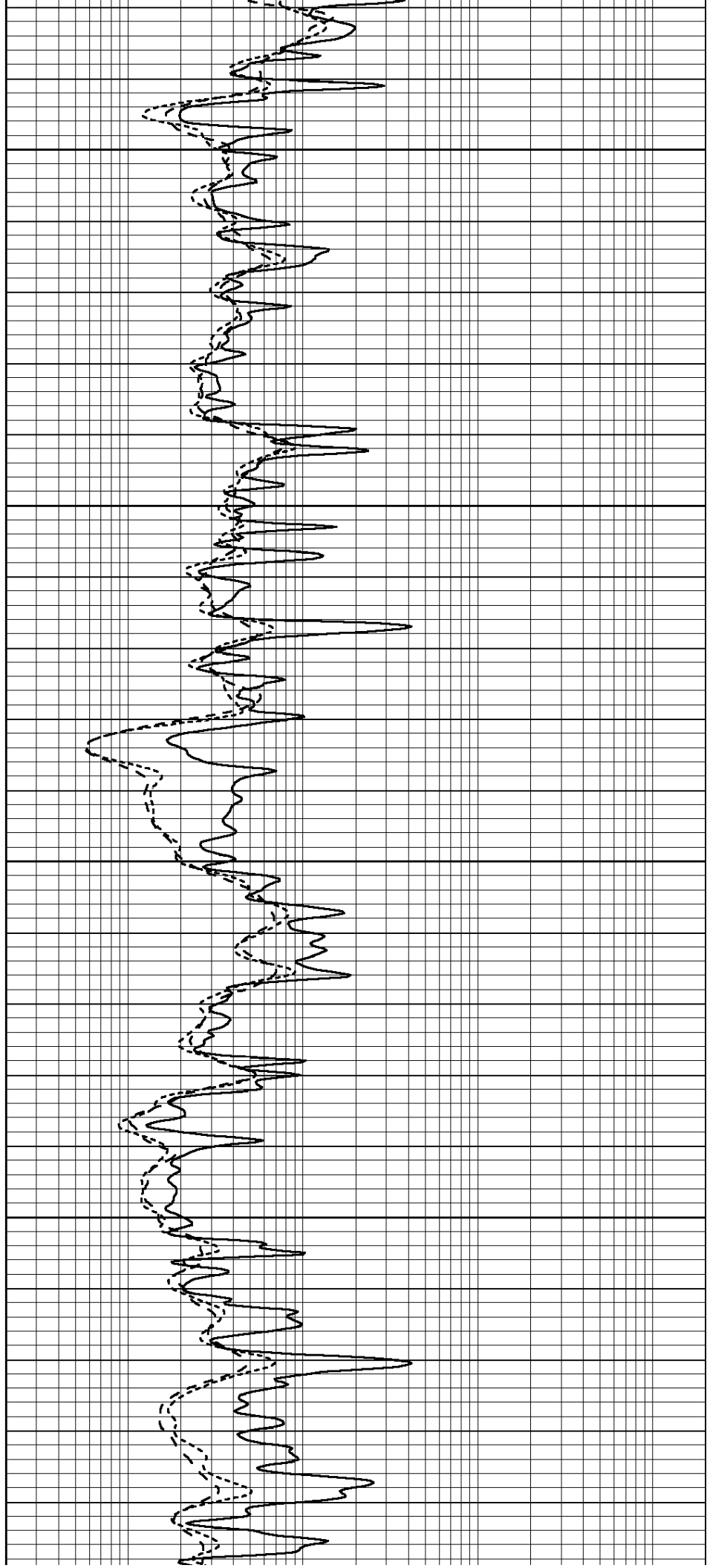


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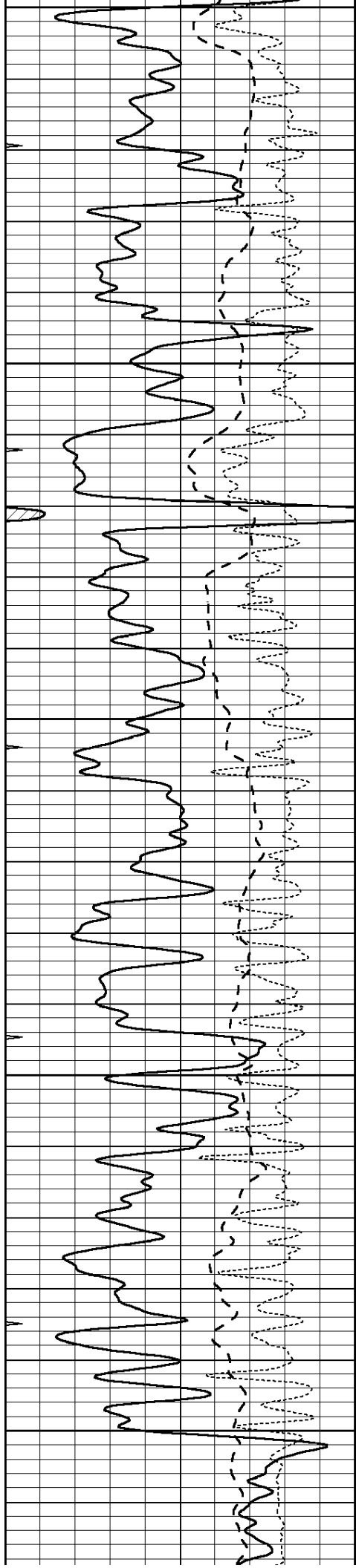
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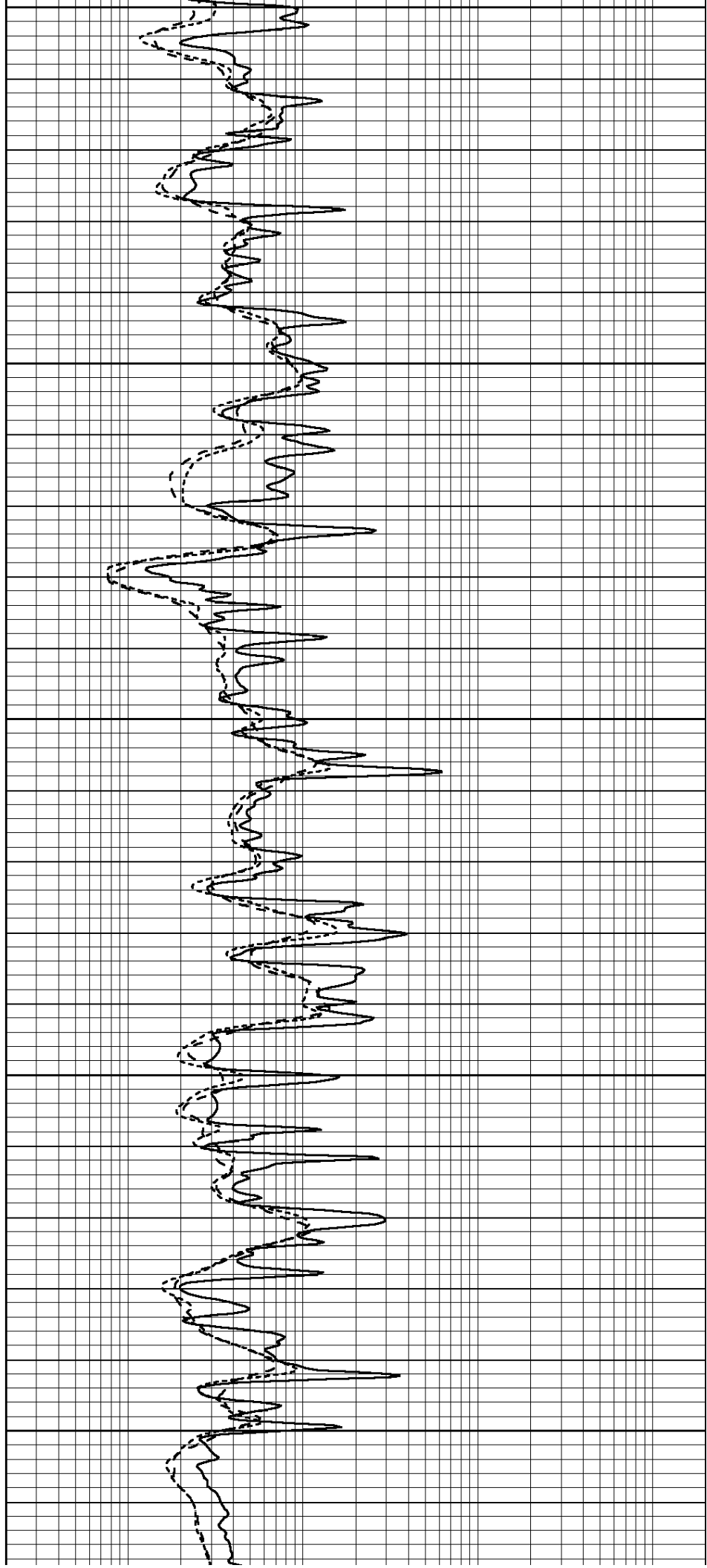
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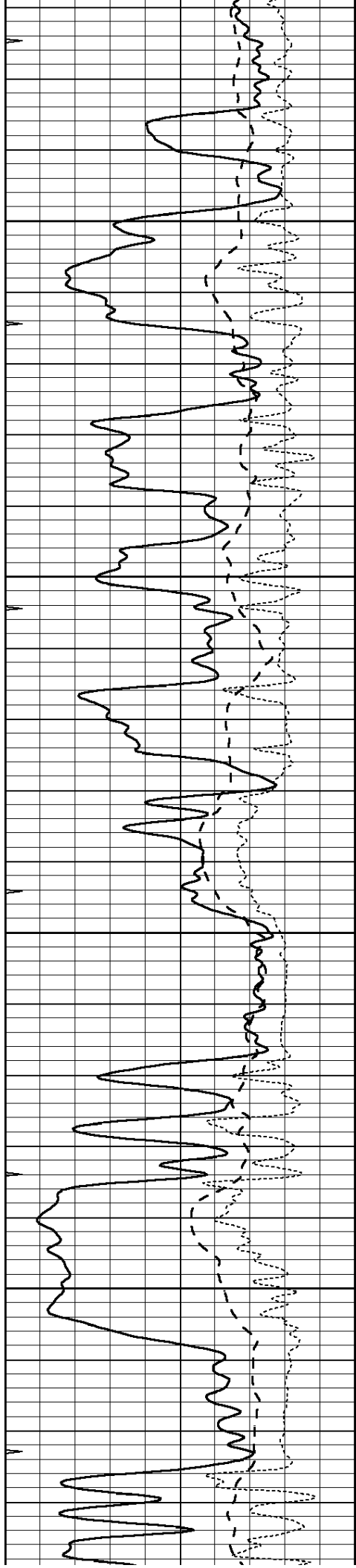
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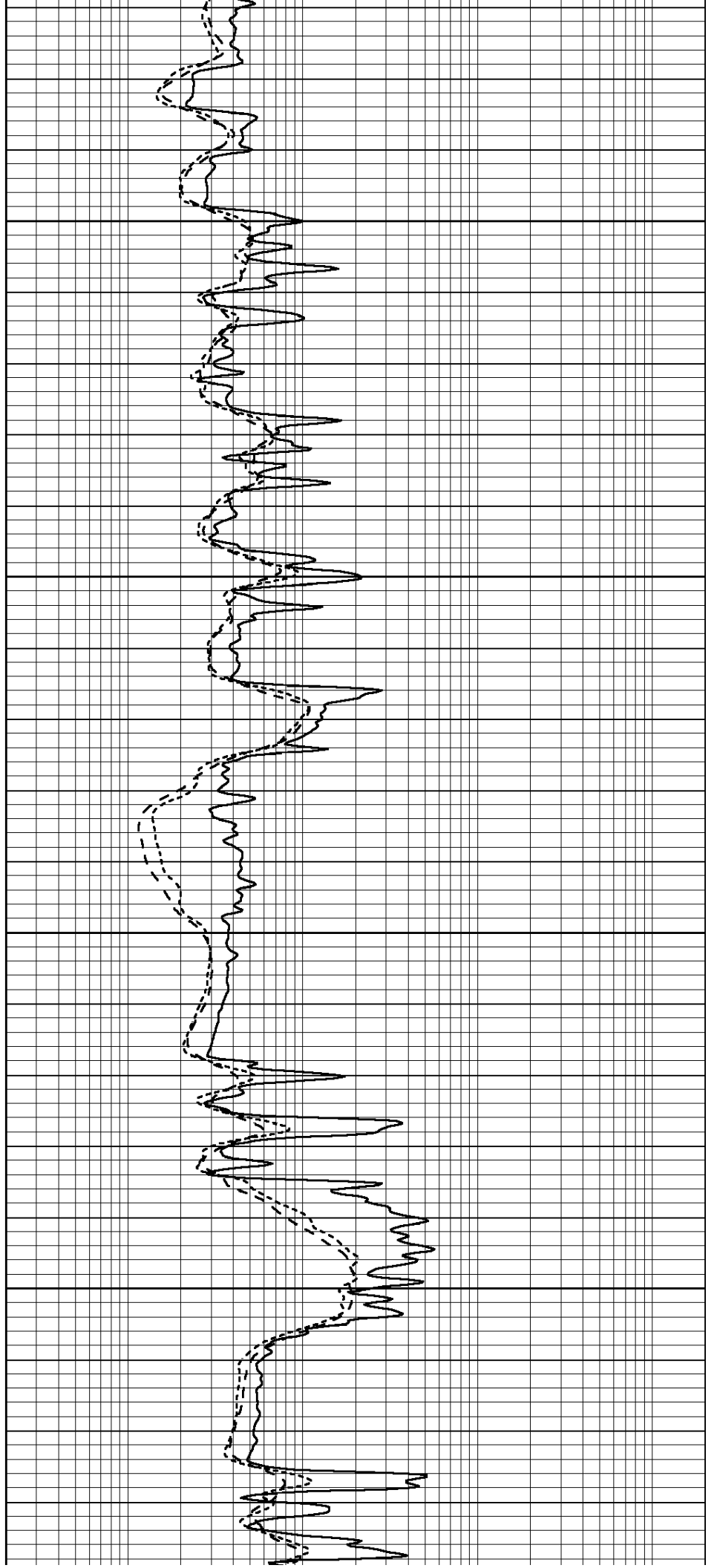


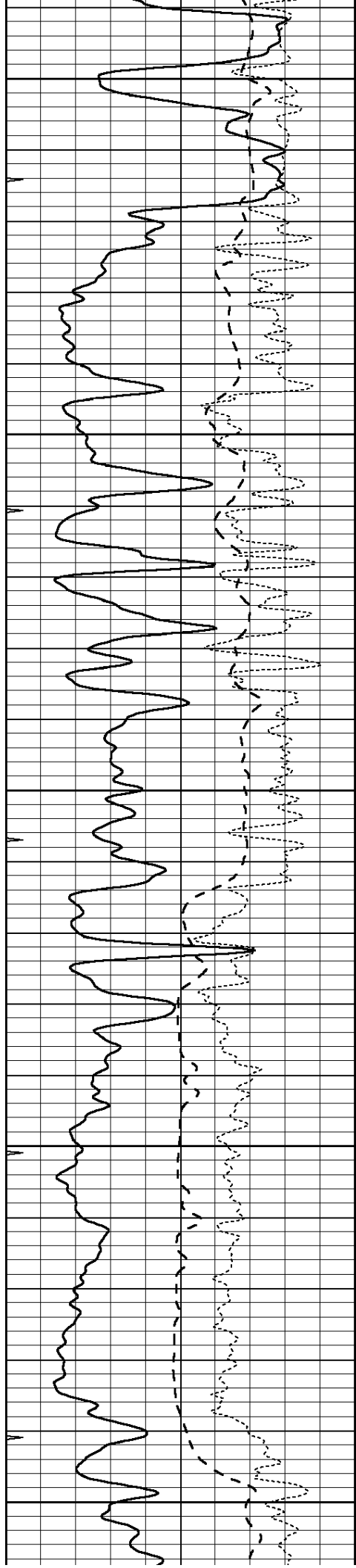
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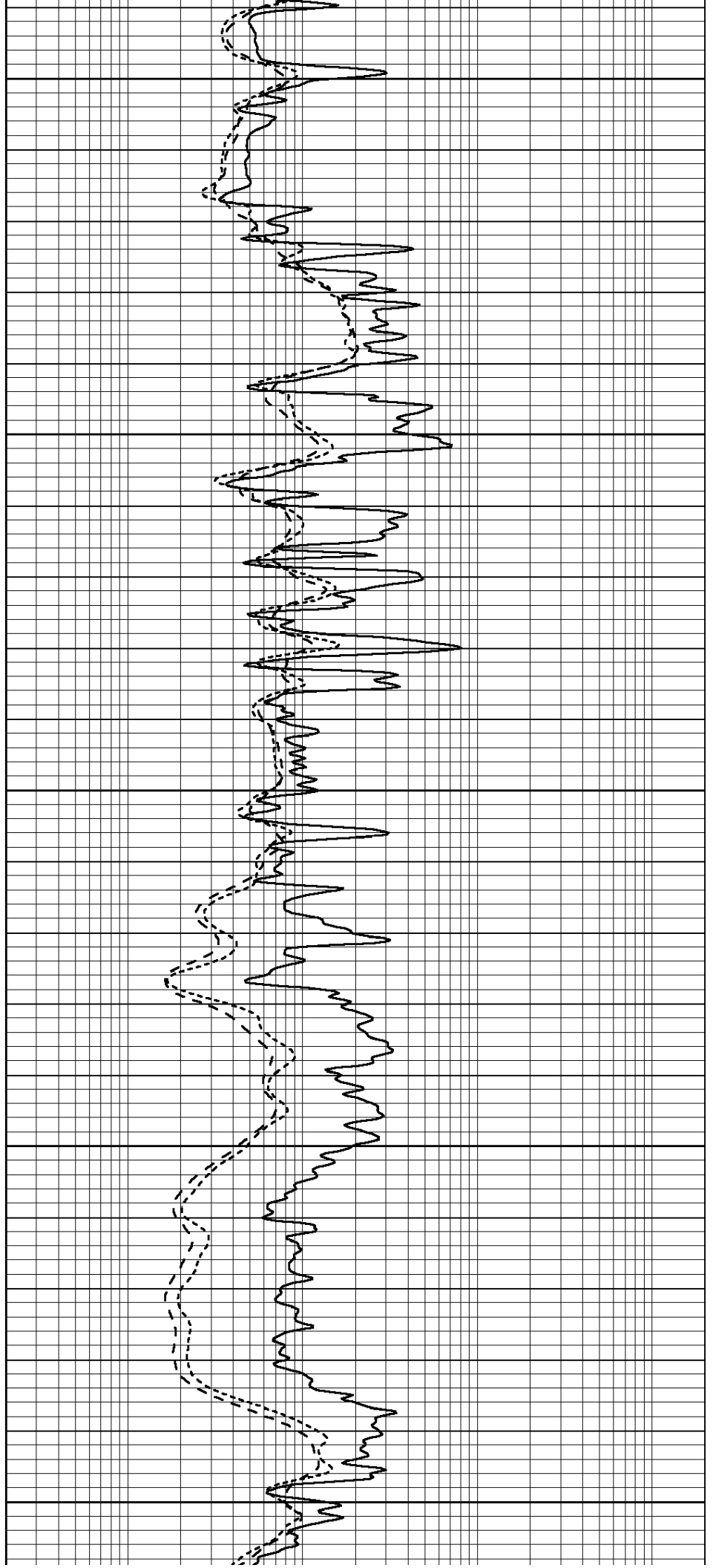
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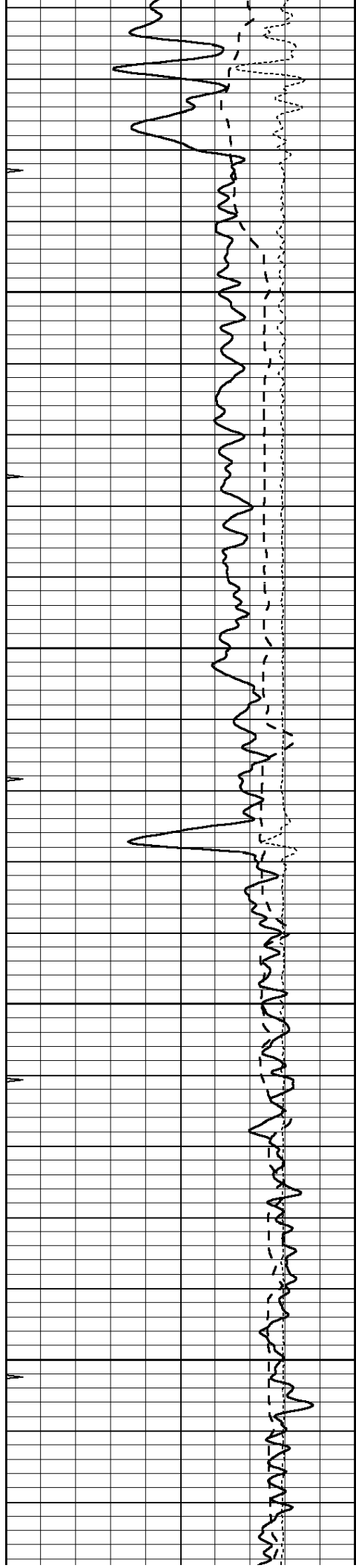
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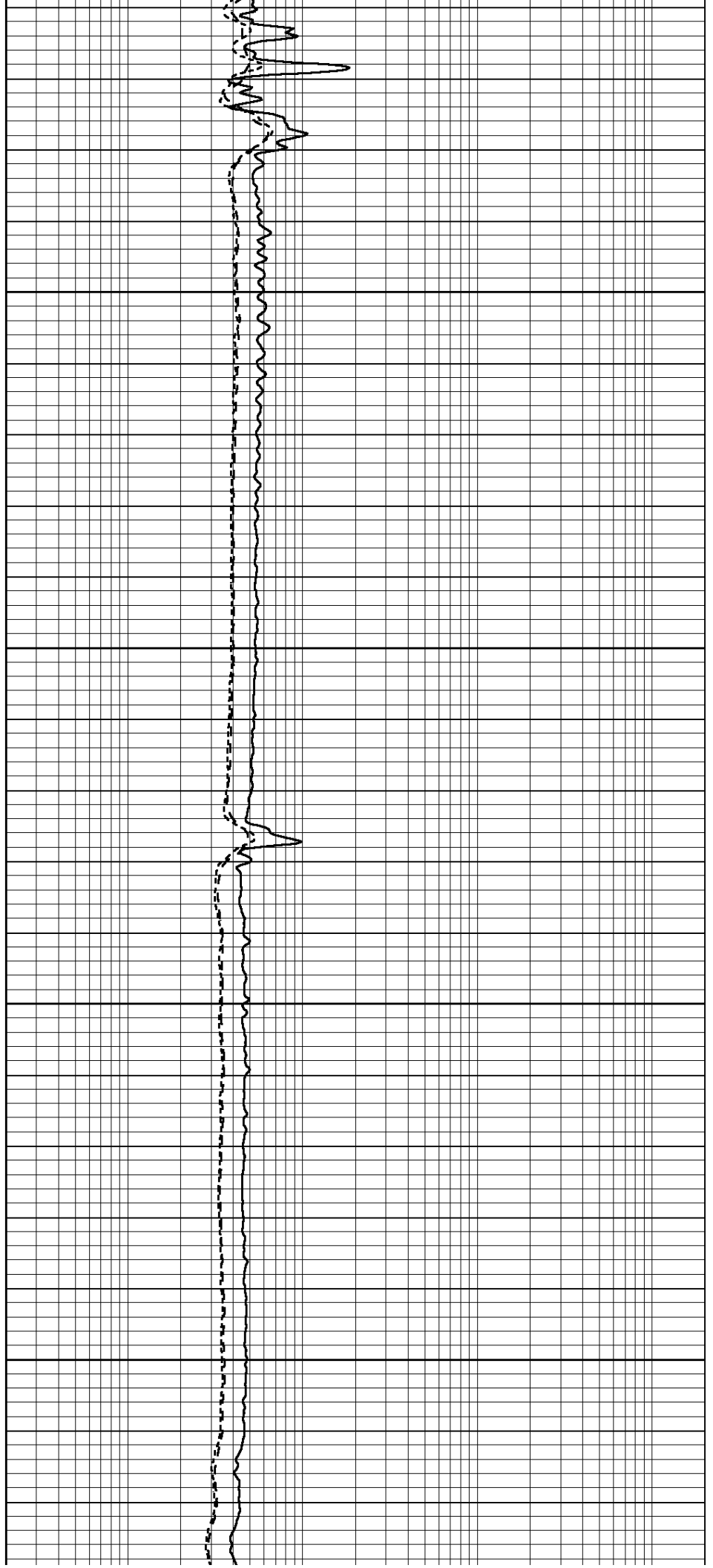


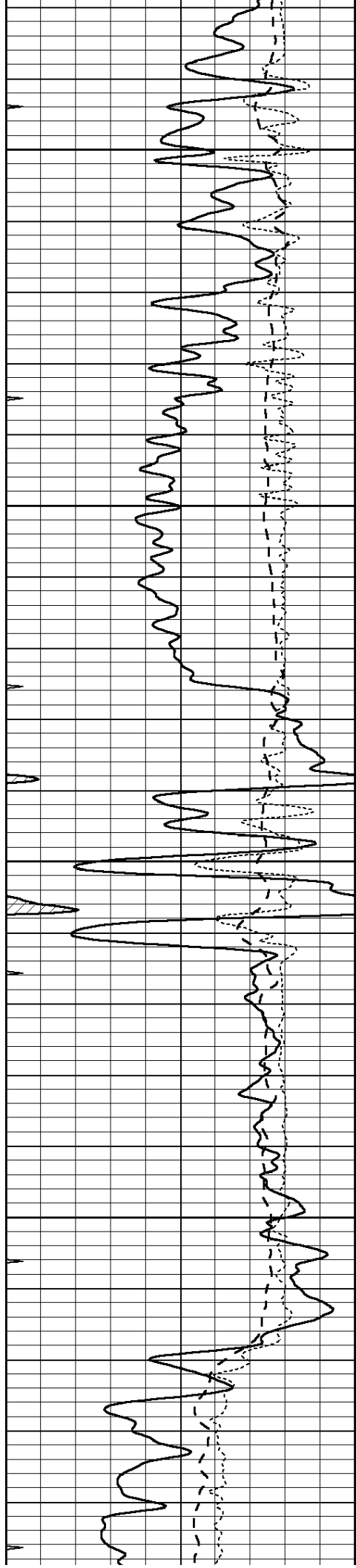
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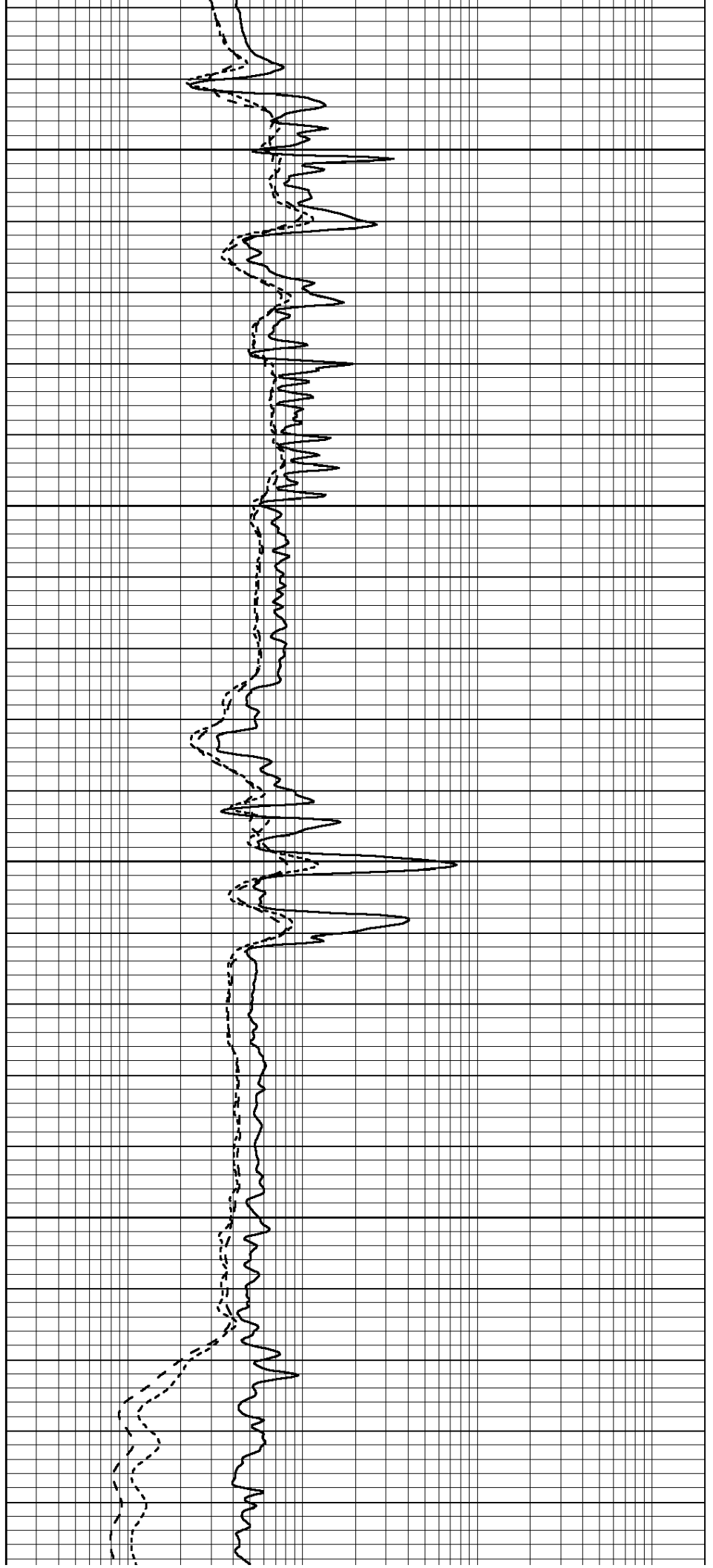


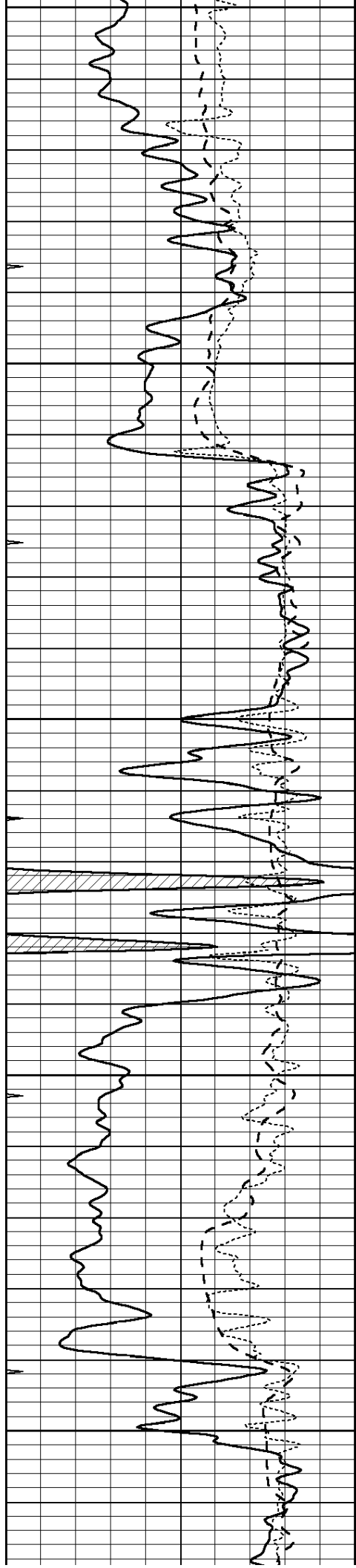
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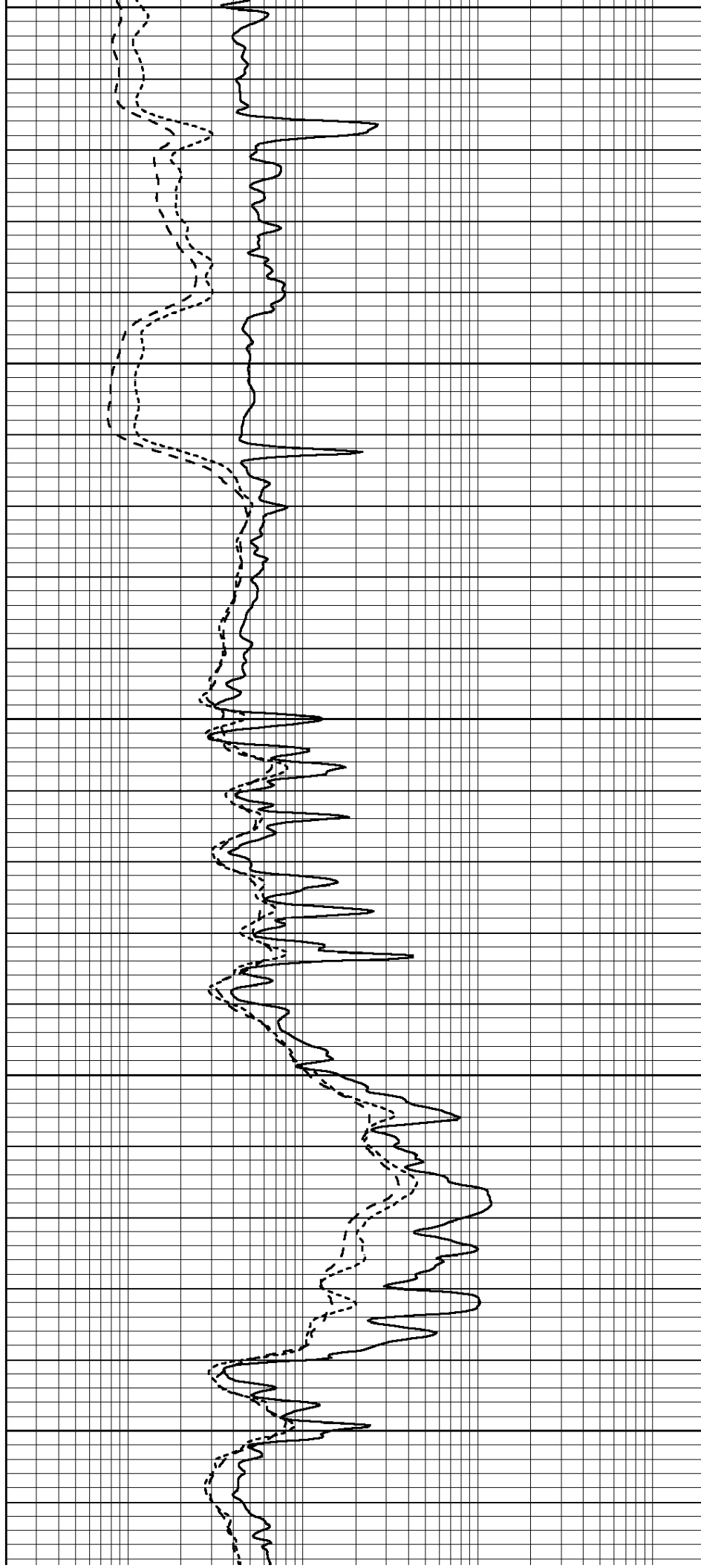
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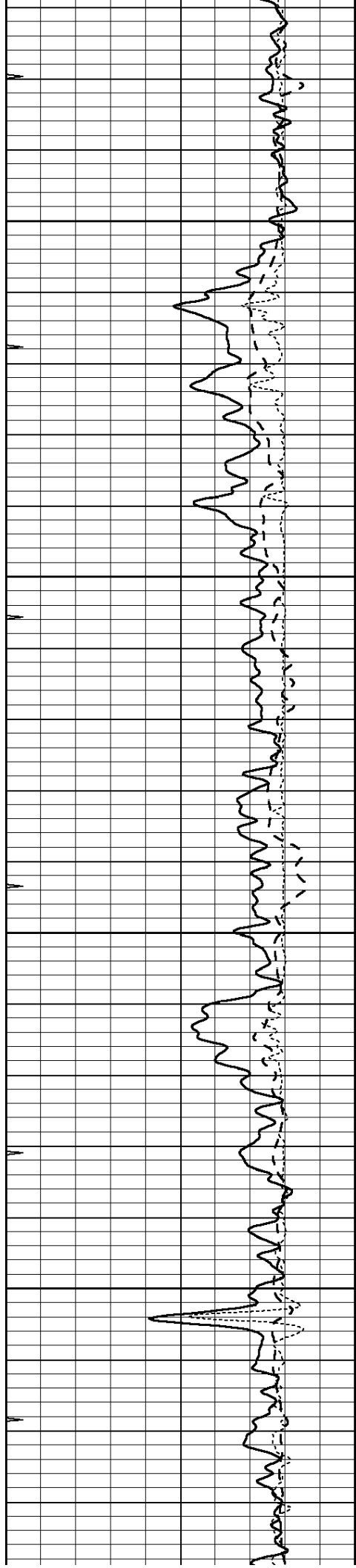
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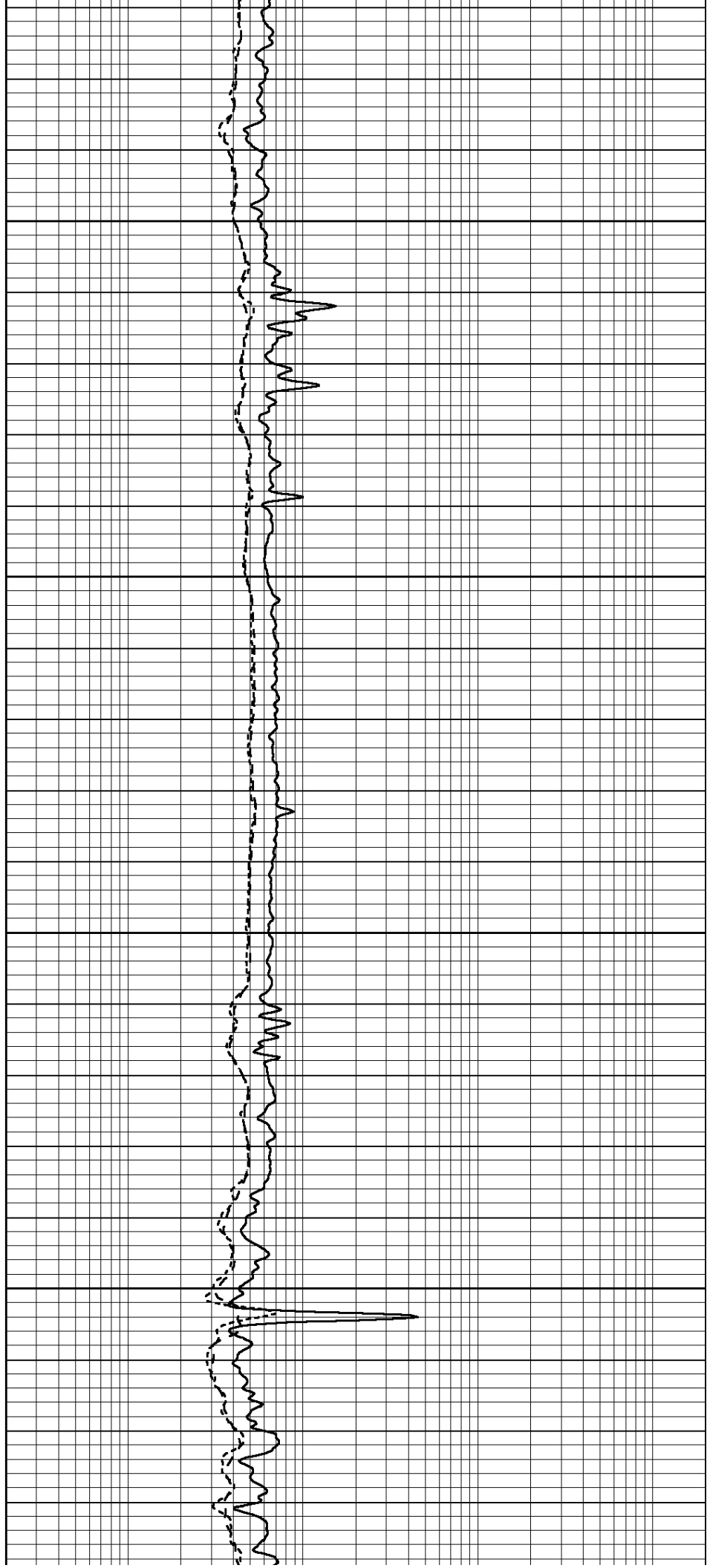


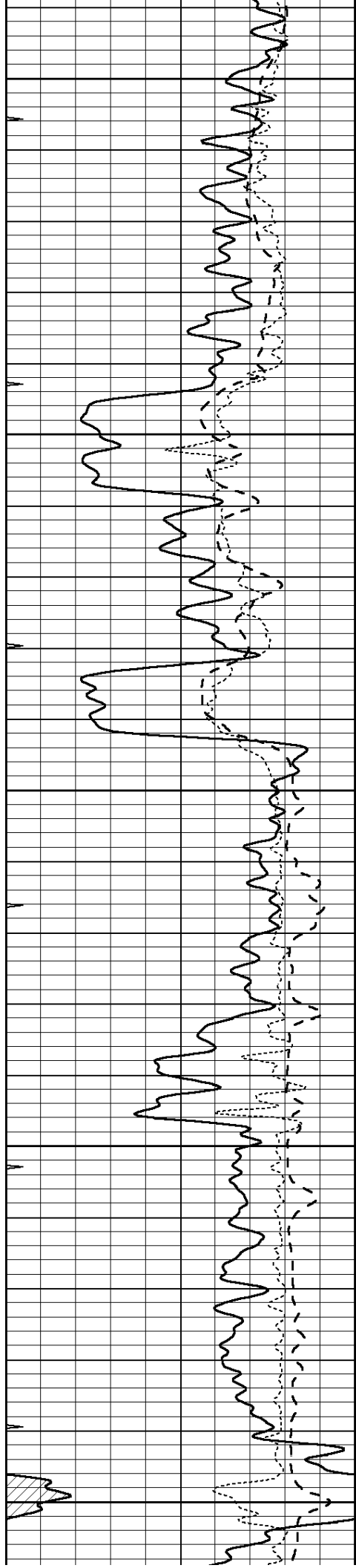
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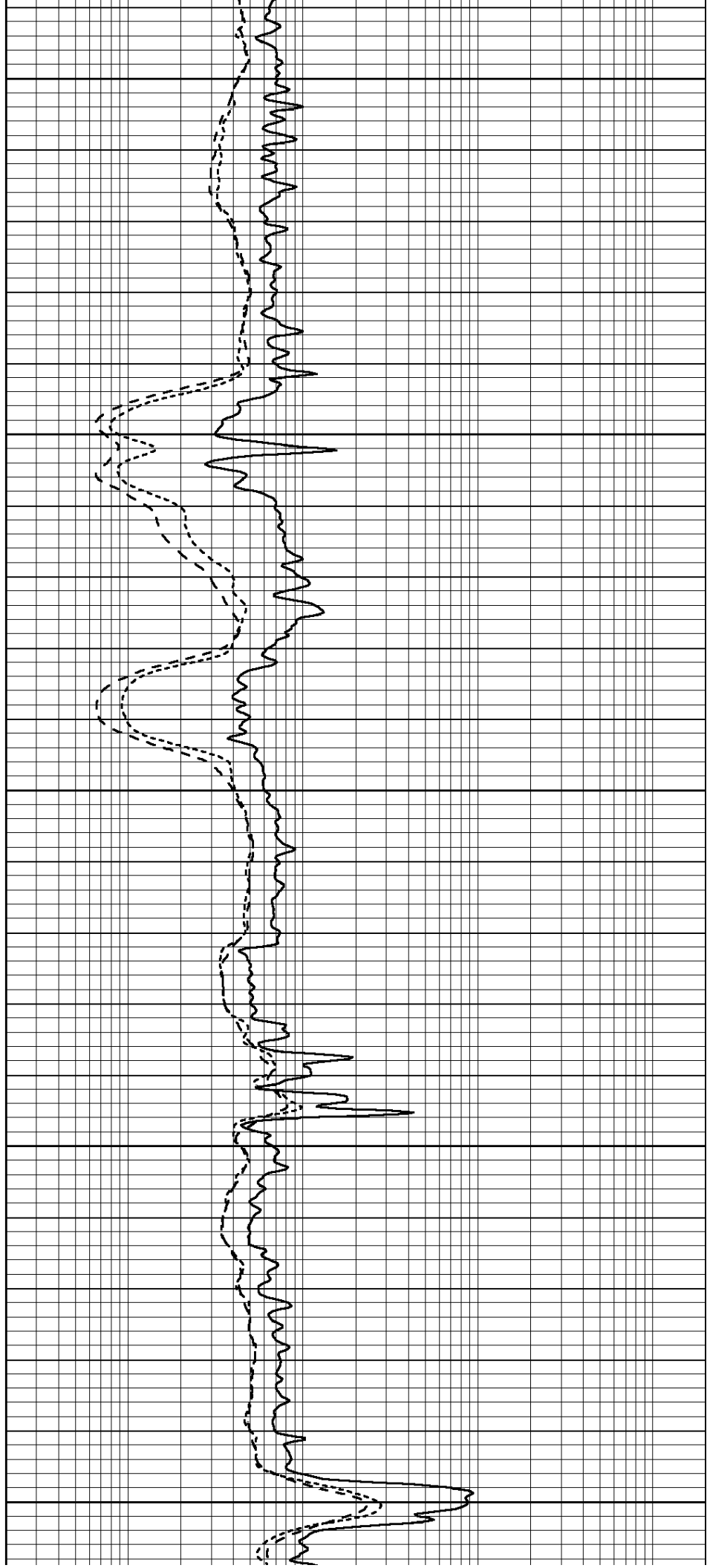
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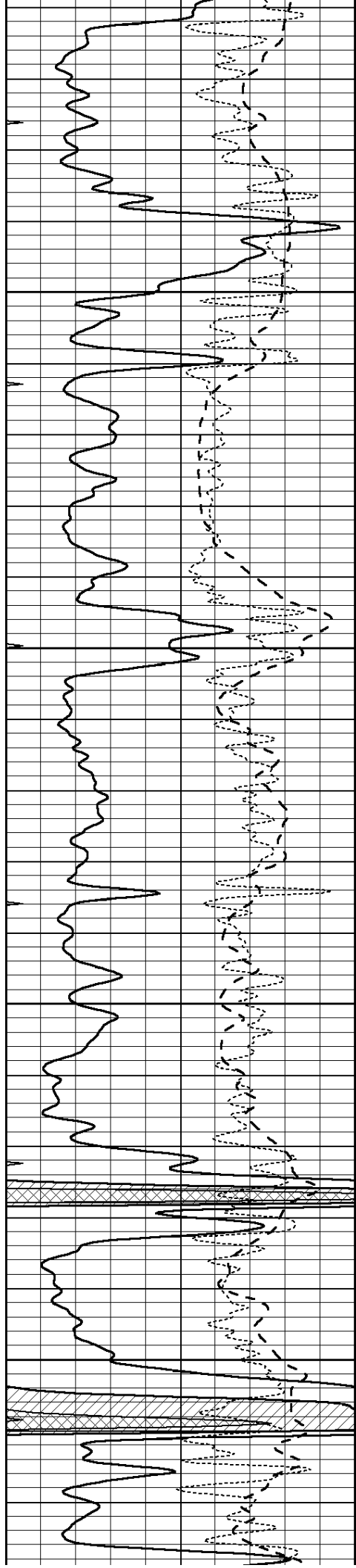
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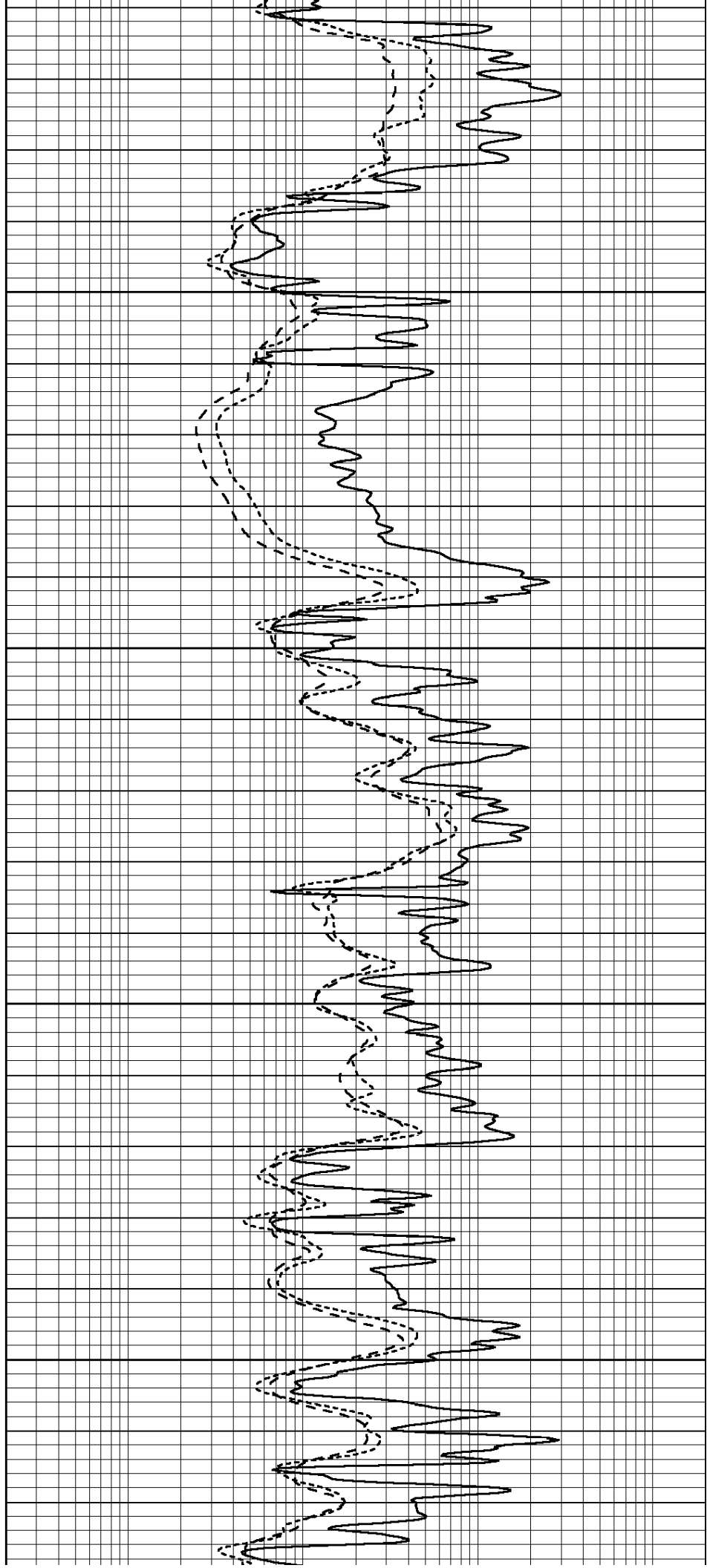


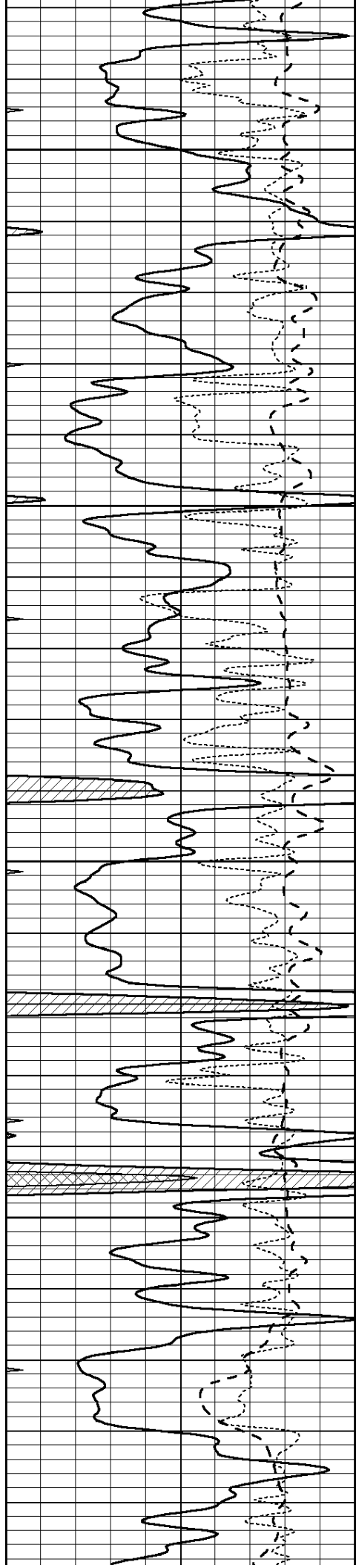
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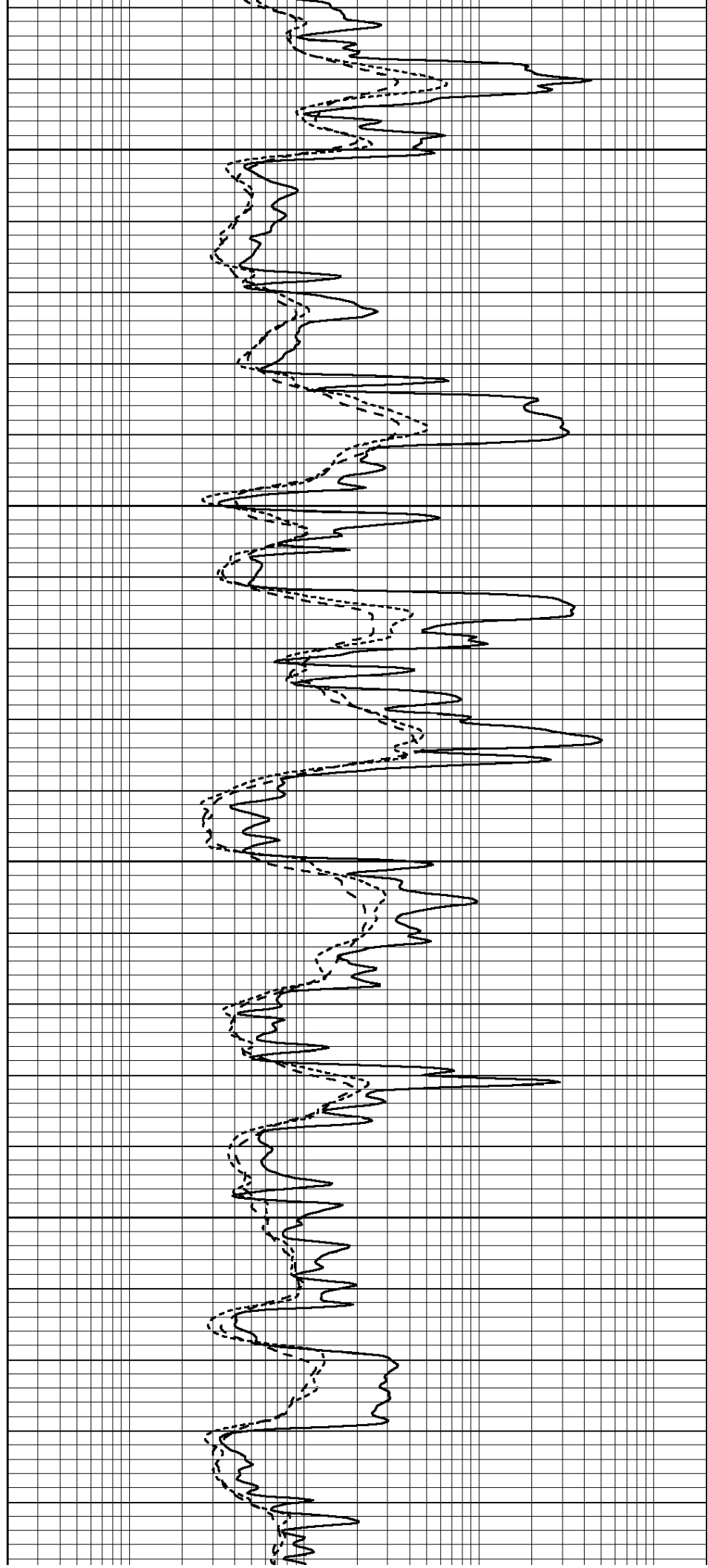


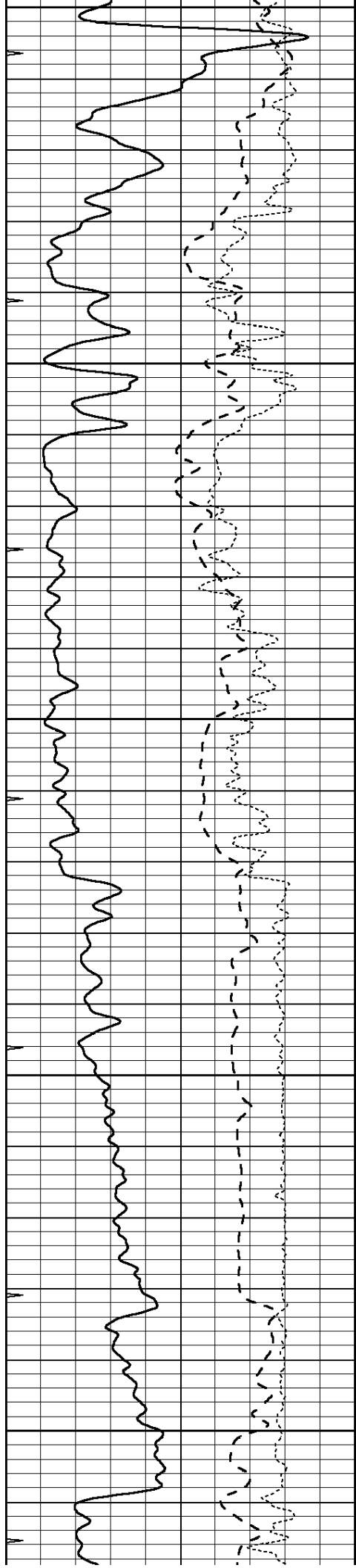
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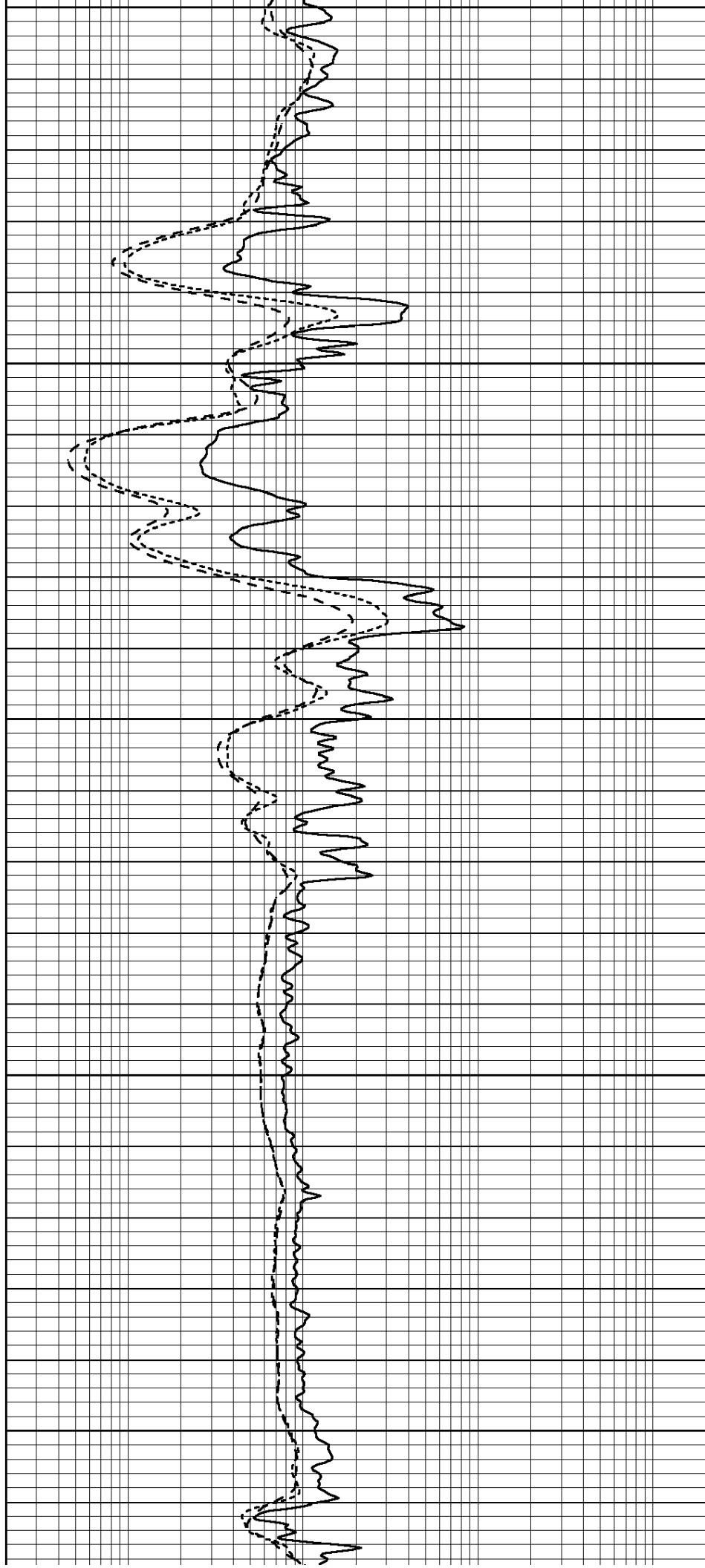
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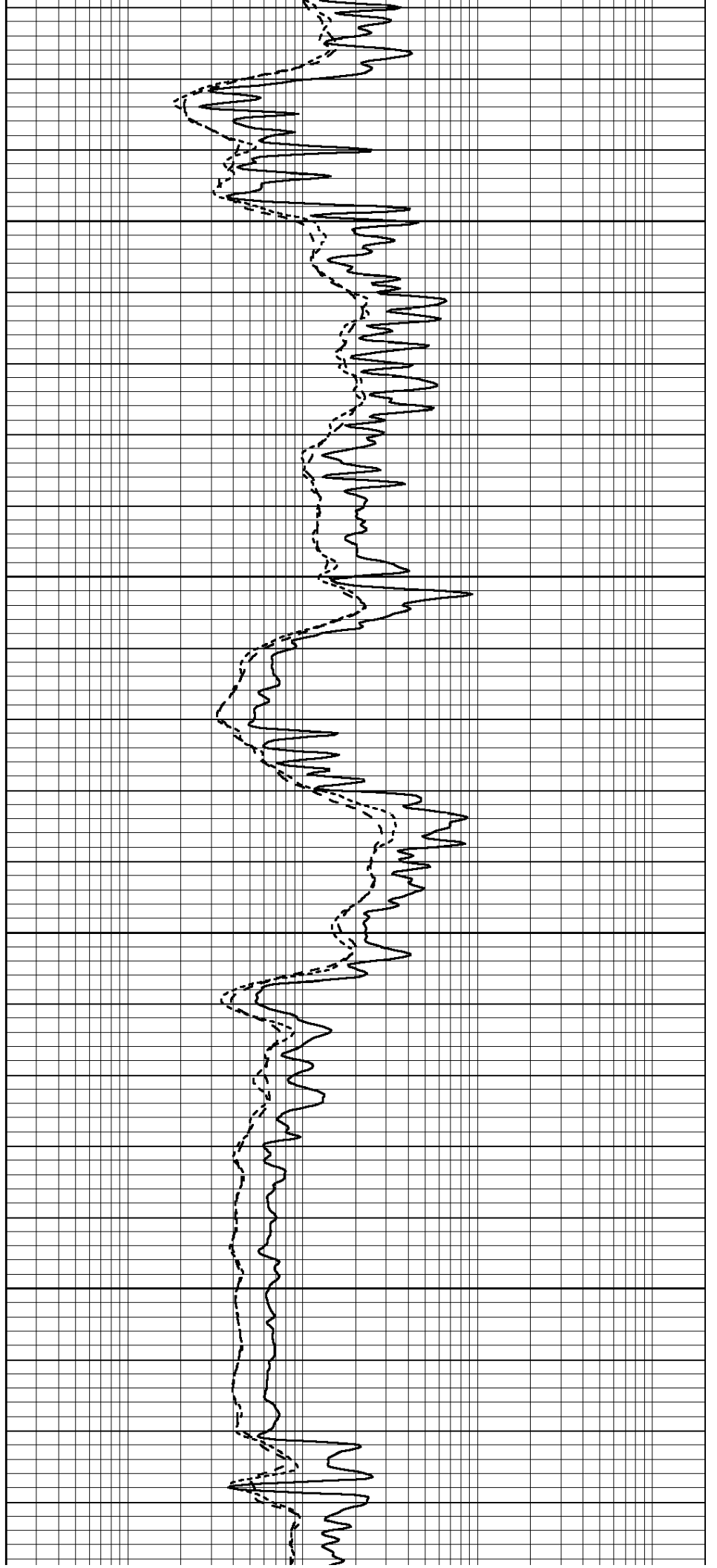


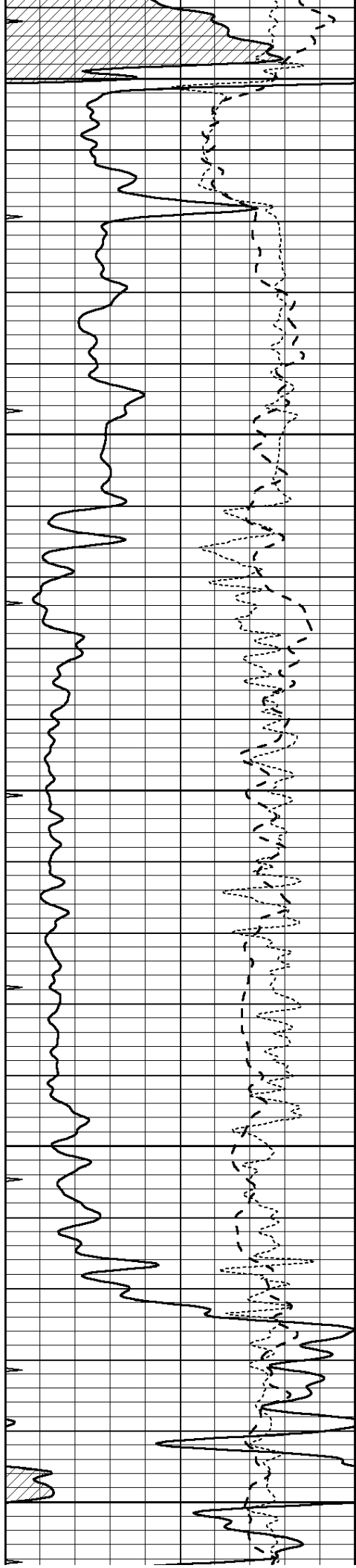
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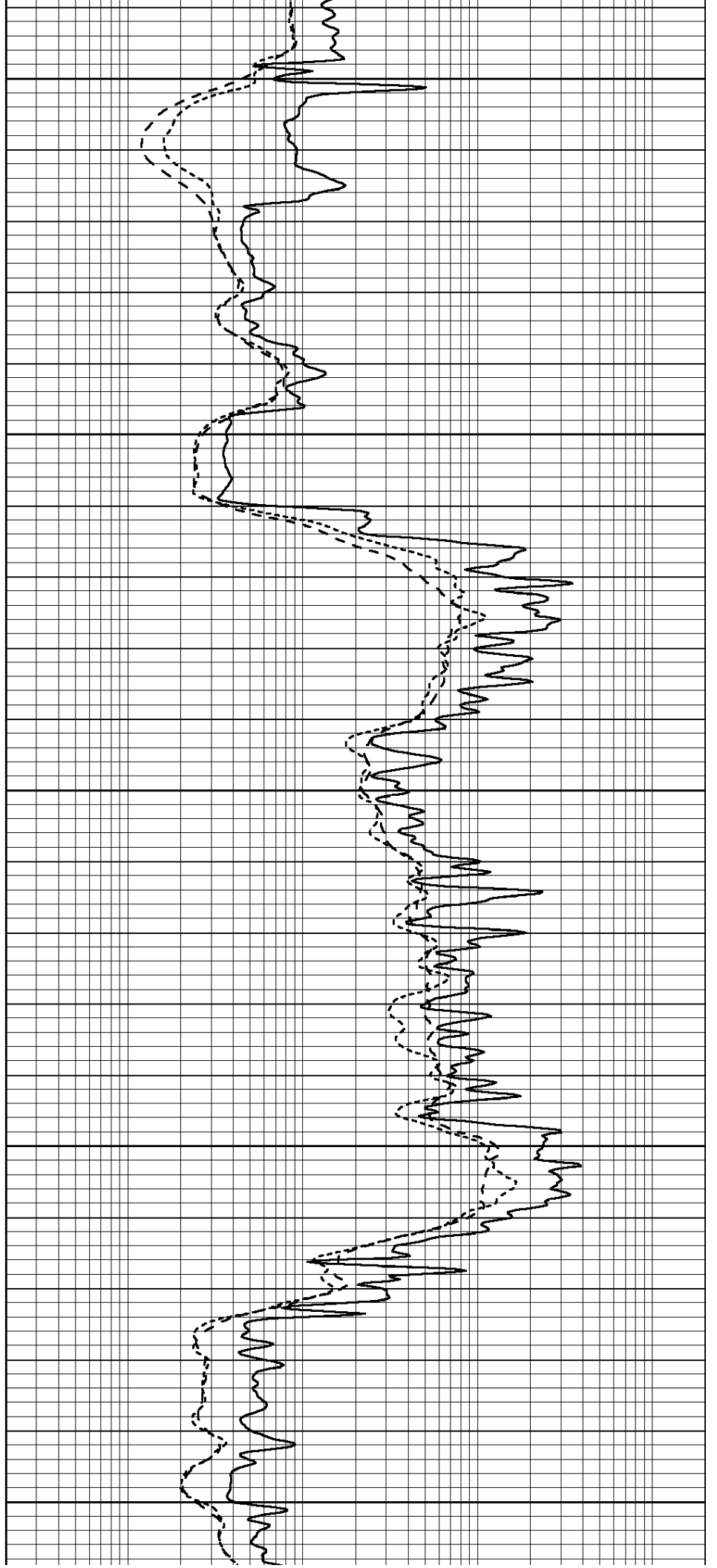
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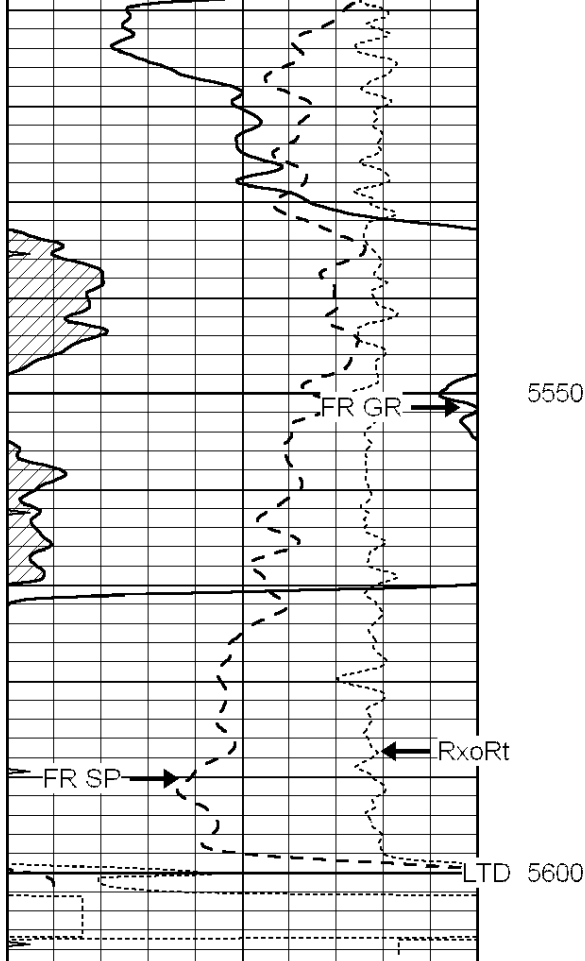
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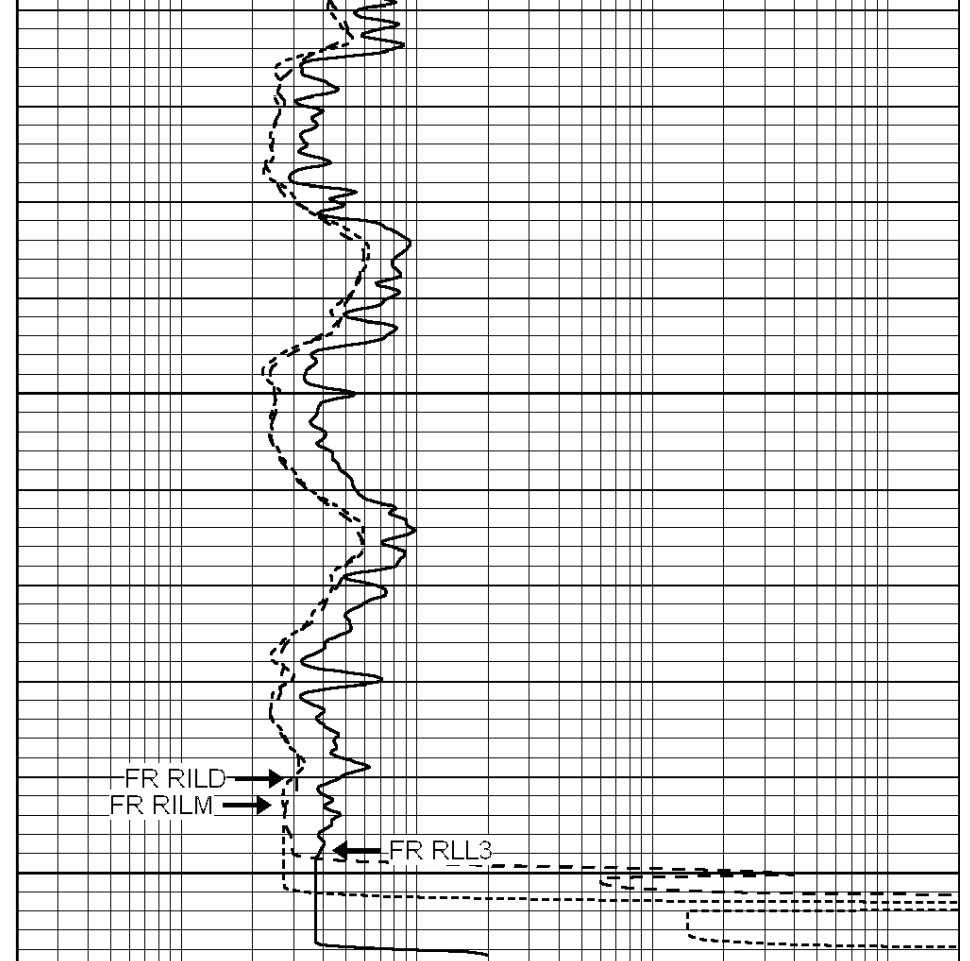
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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



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

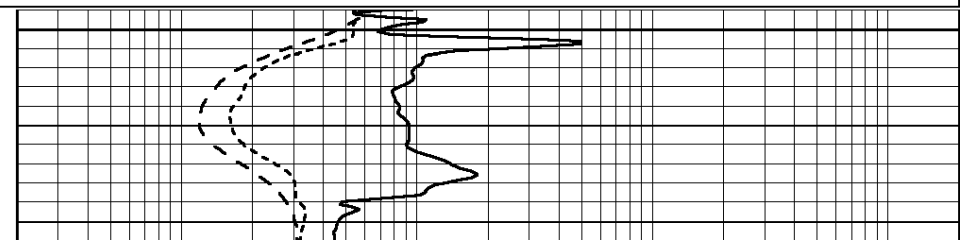
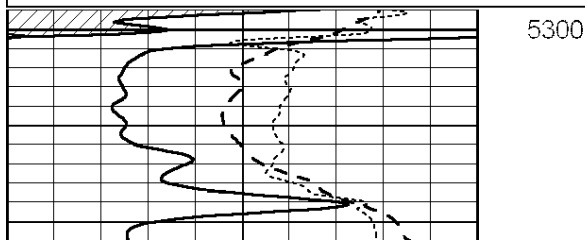


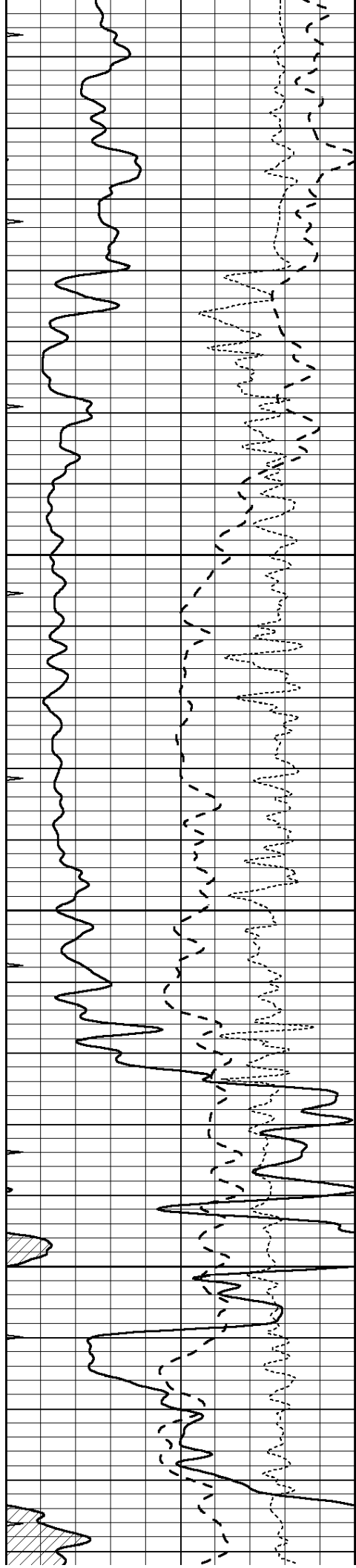
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 Dataset Pathname: pass2.3.2  
 Presentation Format: \_dil  
 Dataset Creation: Sun Mar 16 08:05:27 2014 by Calc SOC 120430  
 Charted by: Depth in Feet scaled 1:240

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



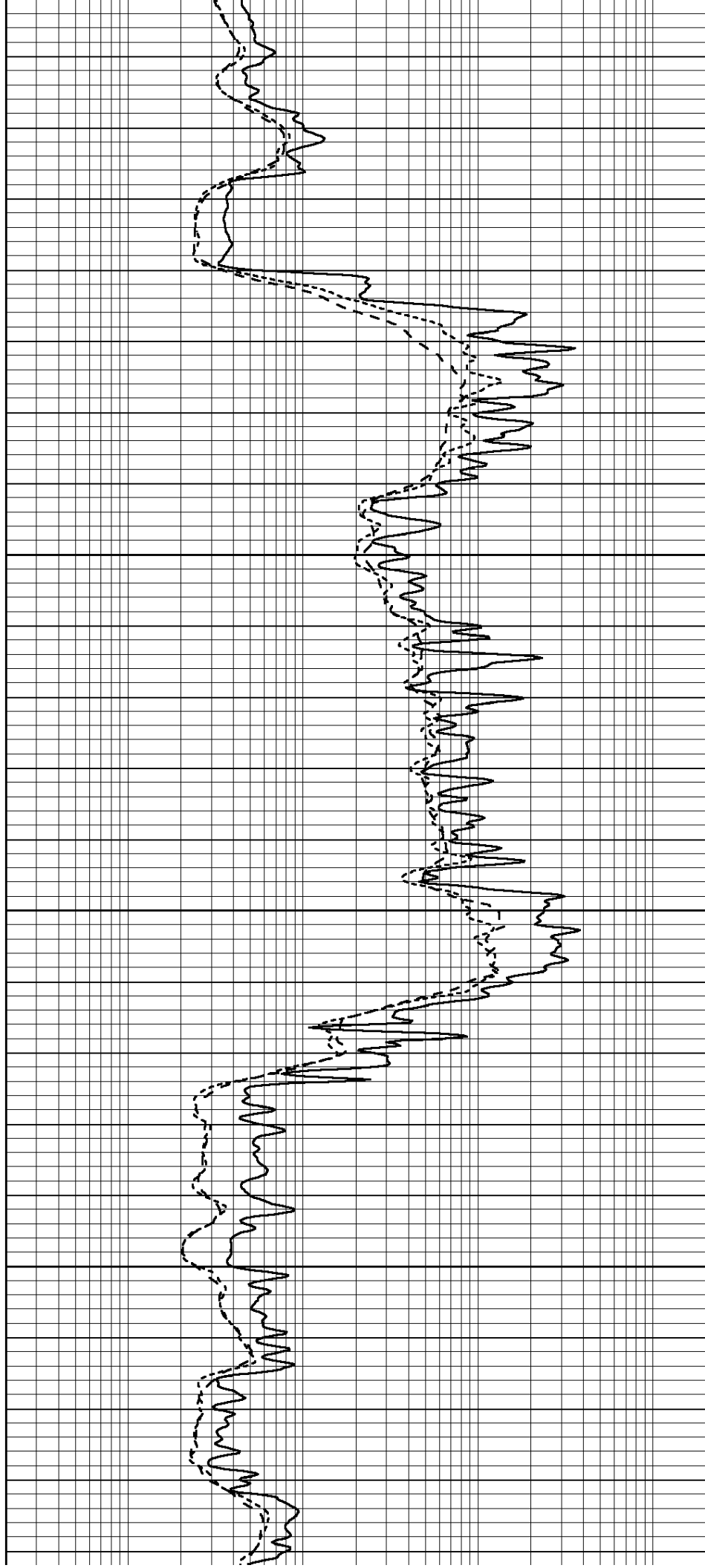


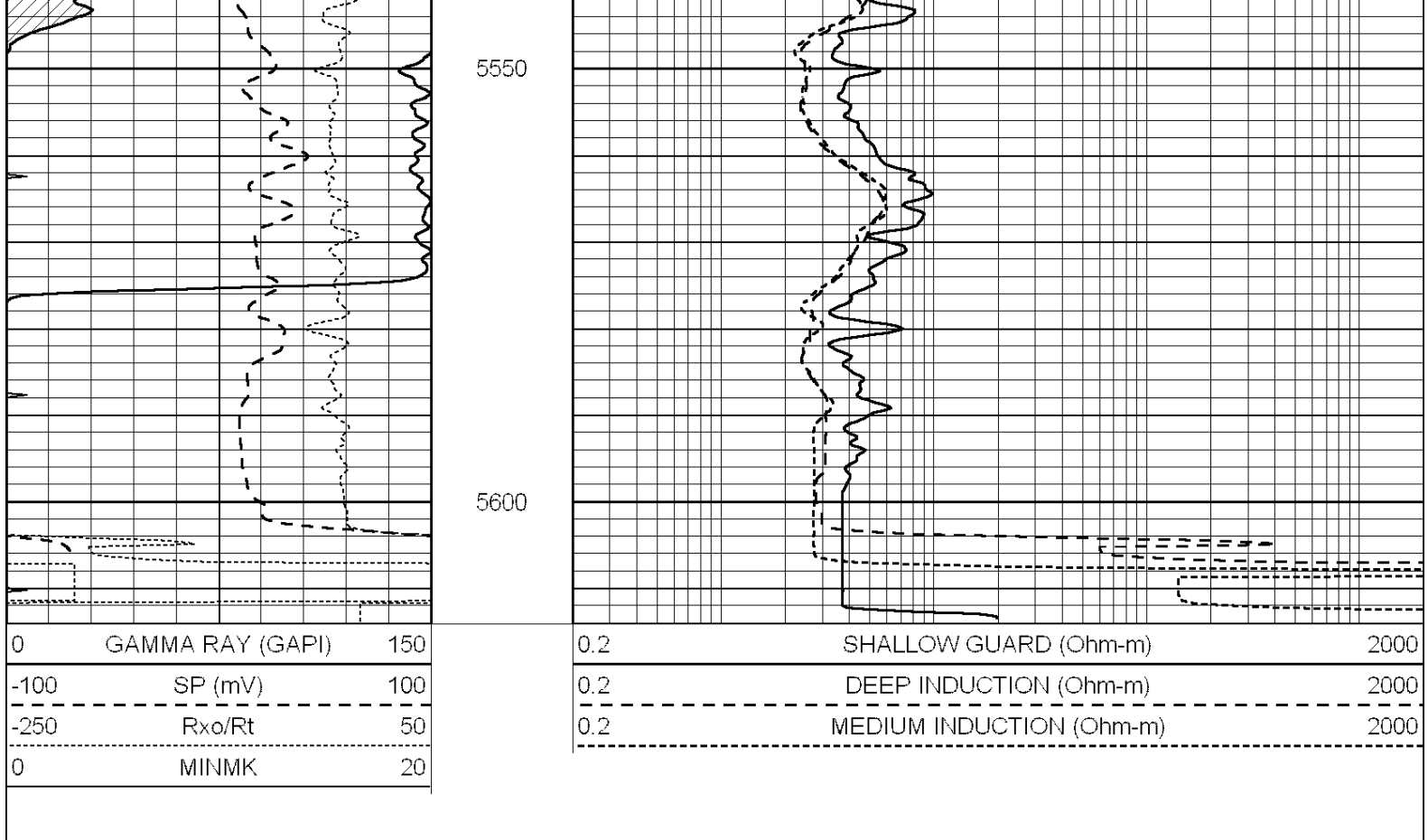
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5450

5500





Calibration Report

Database File: 22269pe.db  
 Dataset Pathname: pass3.5  
 Dataset Creation: Sun Mar 16 10:11:40 2014 by Calc SOC 120430

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG  
 Surface Cal Performed: Sat Mar 08 04:15:46 2014  
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008  
 After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop		m	b
Deep	-0.014	0.629			0.000	400.000	mmho/m	650.000	-14.000
Medium	0.039	0.728			0.000	464.000	mmho/m	660.000	-17.000
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.011	0.610			0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712			0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings				References			Results	
	Zero	Cal			Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000	
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000	
LL3		7.500	V		1400.000	Ohm-m			
		0.000	V		20.000	Ohm-m			
		-7.200	V		4000.000	mmho-m			

After Survey Verification



	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report  
Serial: 004N Model: PRB

Master Calibration

Performed Mon Jun 03 09:36:56 2013

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1417.6	10391.4	3464.6	11537.5	cps
Window 2	1295.0	8959.7	3050.1	9816.4	cps
Window 3	1105.1	5464.2	2051.0	5838.8	cps
Window 4	315.0	317.7	312.9	319.8	cps
Long Space	0.0	7664.6	1755.0	8521.3	cps
Short Space	1.8	1582.4	1040.8	1699.4	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 44.1	Rib Slope	: 0.970	Density/Spine Ratio	: 0.574
Spine Angle	: 74.1	Spine Slope	: 3.519	Spine Intercept	: -17.0

Before Survey Verification

Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification

Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number: 070808  
Tool Model: Probe

PRE-SURVEY VERIFICATION

Detector Readings Measured Target

Short Space  
Long Space

cps  
cps

pu

pu

POST-SURVEY VERIFICATION

Detector

Readings

Measured

Target

Short Space  
Long Space

cps  
cps

pu

pu

Gamma Ray Calibration Report

Serial Number: 070558  
Tool Model: OPEN\_GR  
Performed: Mon Mar 03 06:21:24 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.2500 GAPI/cps