



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

DUAL INDUCTION LOG

Company		LOTUS OPERATING COMPANY, LLC.	
Well	#2 BURGESS		
Field	STRANATHAN		
County	BARBER	State	KANSAS
Location:	APL # : 15-007-23968-0000		Other Services CDL/CNL/PE MEL/SONIC
Permanent Datum		GROUND LEVEL	Elevation 1426
Log Measured From		KELLY BUSHING 13' A.G.L.	
Drilling Measured From		KELLY BUSHING	Elevation K.B. 1439 D.F. 1437 G.L. 1426
Date	11/26/12		
Run Number	ONE		
Depth Driller	5486		
Depth Logger	5488		
Bottom Logged Interval	5486		
Top Log Interval	00		
Casing Driller	10 3/4"@285'		
Casing Logger	285		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,500 PPM	
Density / Viscosity	9.5/42		
pH / Fluid Loss	10.5/9.6		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.850@100F		
Rinf @ Meas. Temp	.638@100F		
Rinc @ Meas. Temp	1.02@100F		
Source of Rinf / Rinc	MEASUREMENT		
Rin @ BHT	.659@129F		
Time Circulation Stopped	3.5 HOURS		
Time Logger on Bottom	9:00 P.M.		
Maximum Recorded Temperature	129F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TIM HELLMAN		

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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
MEDICINE LODGE, KS. (HWY 160 & 281) 16S. ON HWY 281 TO "RATTLESNAKE RD.", 1W., 1/2S., W. INTO



NABORS

**COMPLETION
& PRODUCTION**

MAIN SECTION

Database File:

010022pe.db

Dataset Pathname:

pass3.5

Presentation Format:

dil2

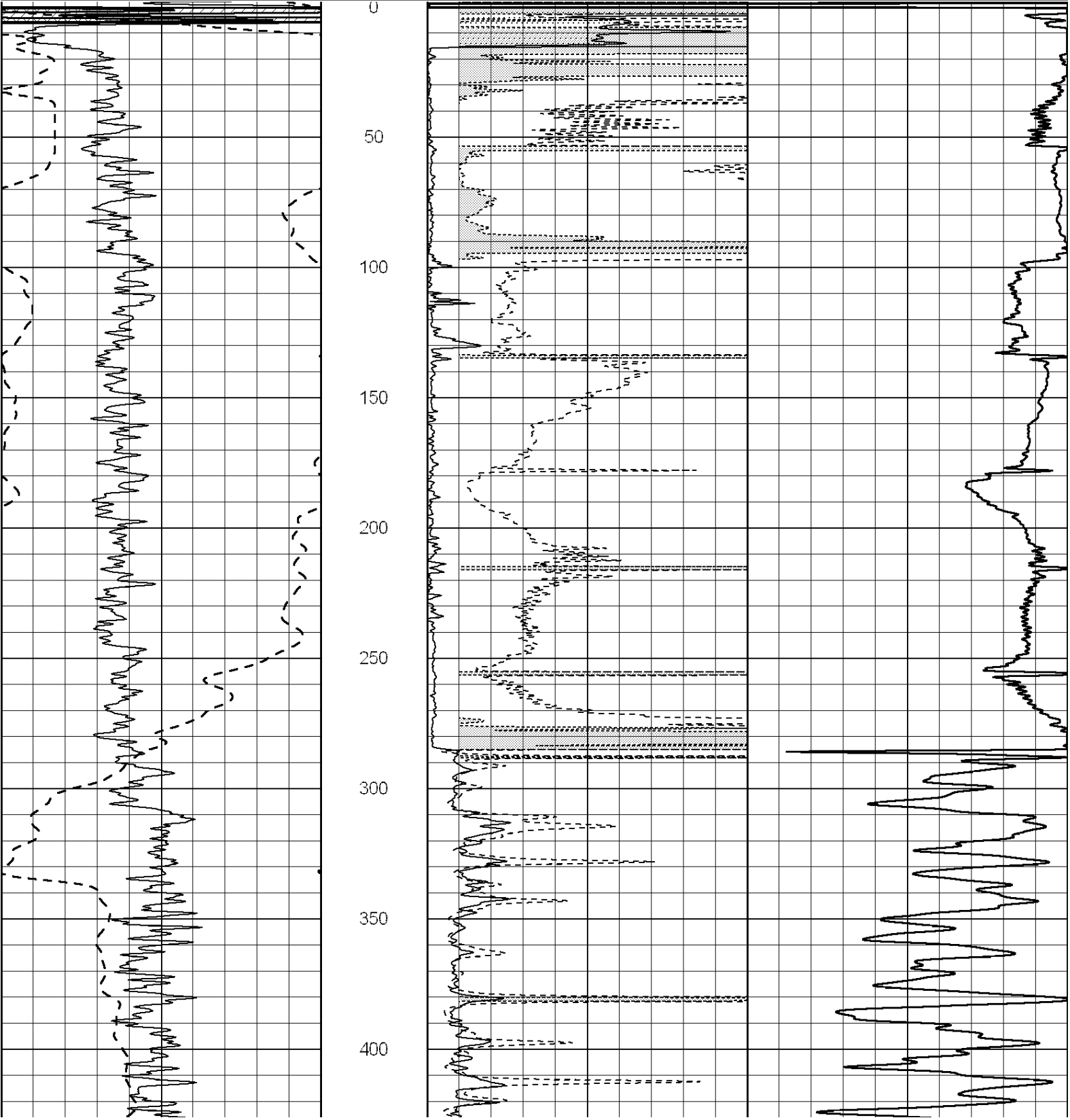
Dataset Creation:

Mon Nov 26 22:55:55 2012 by Calc SOC 120430

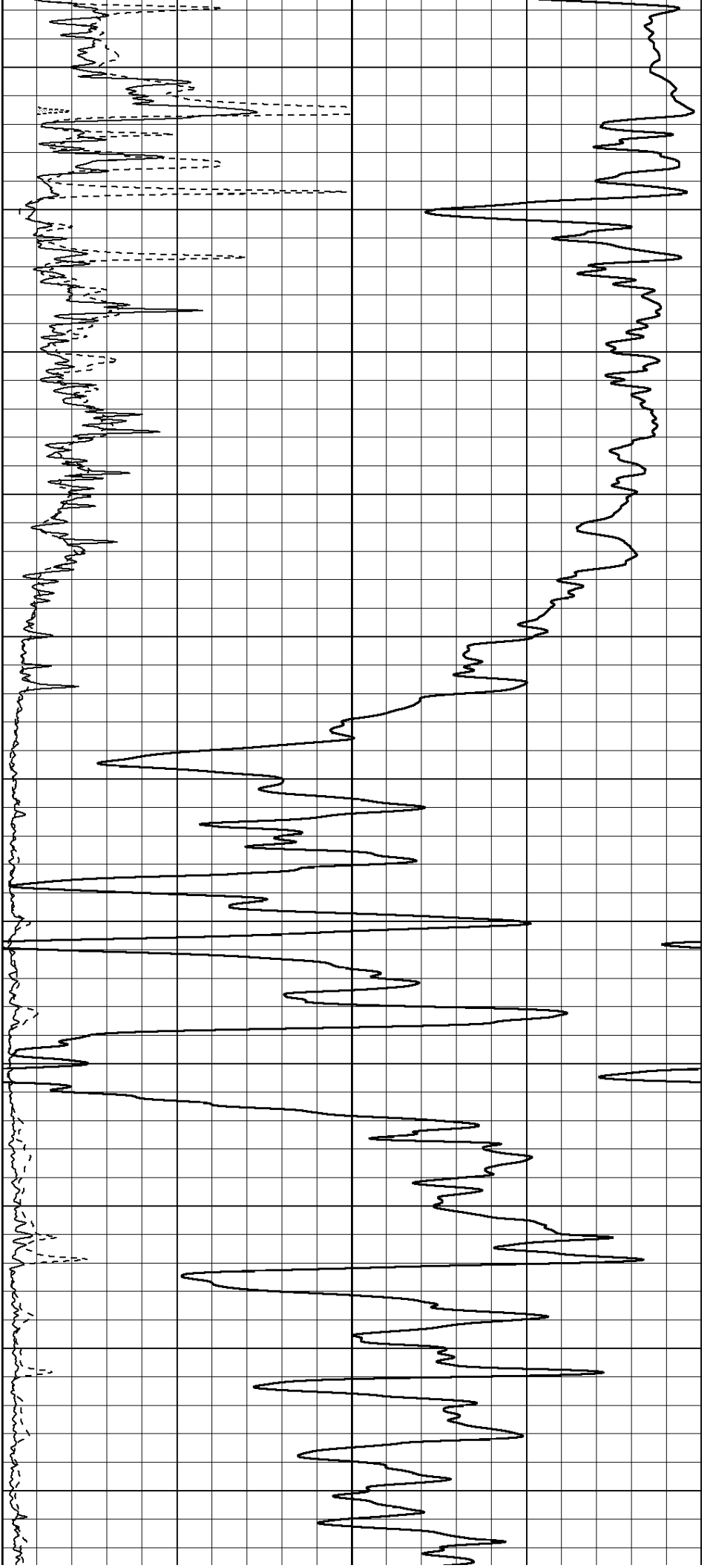
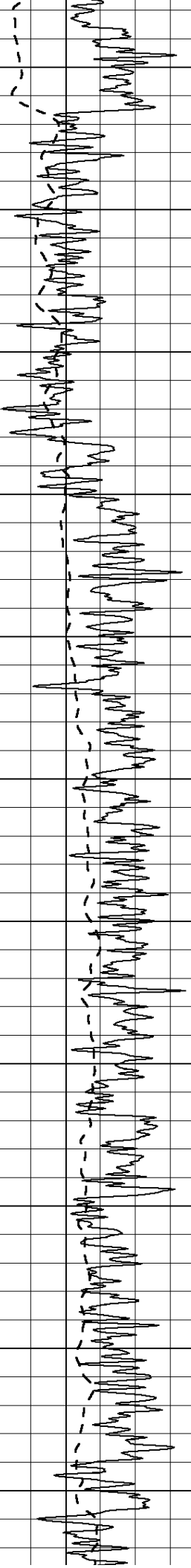
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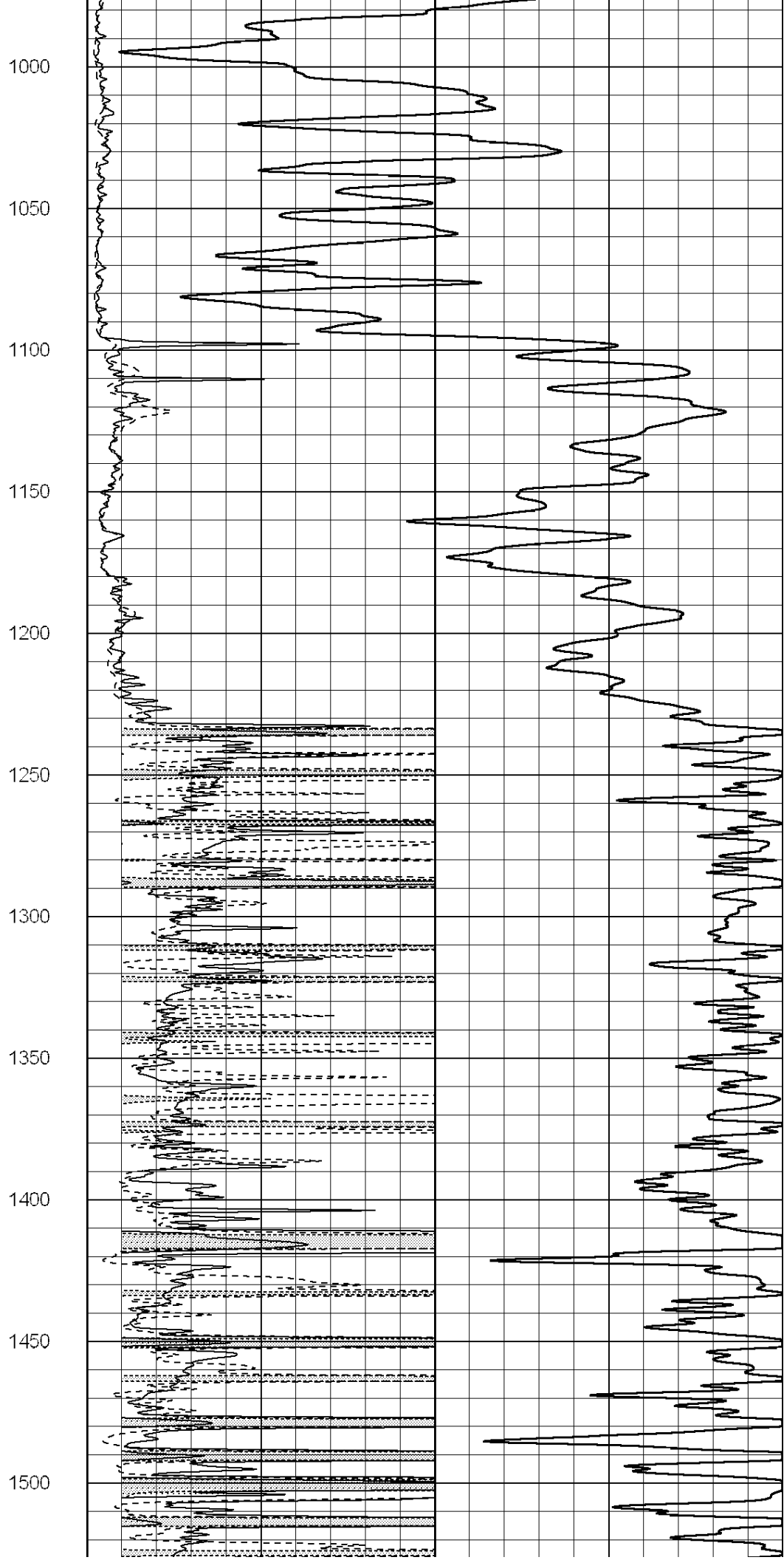
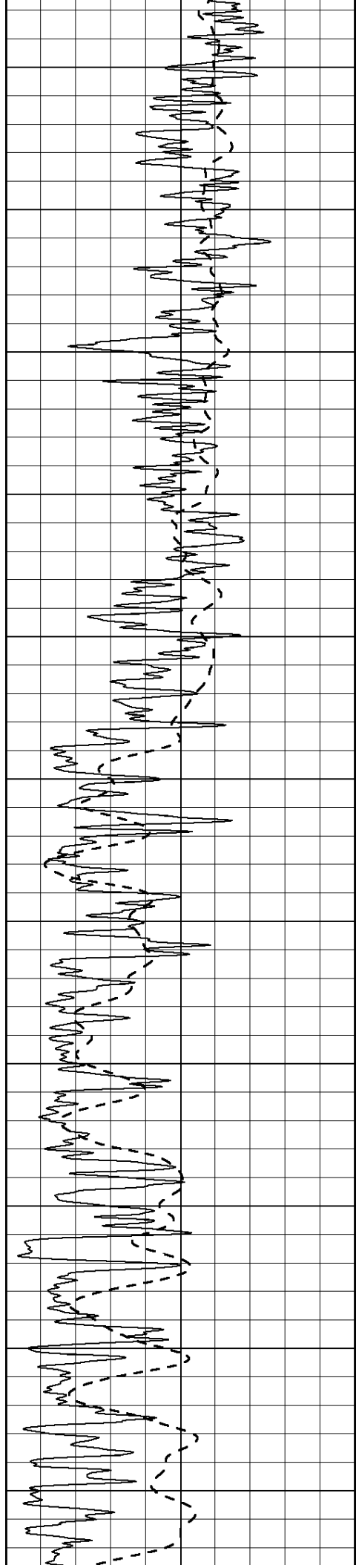
Depth in Feet scaled 1:600

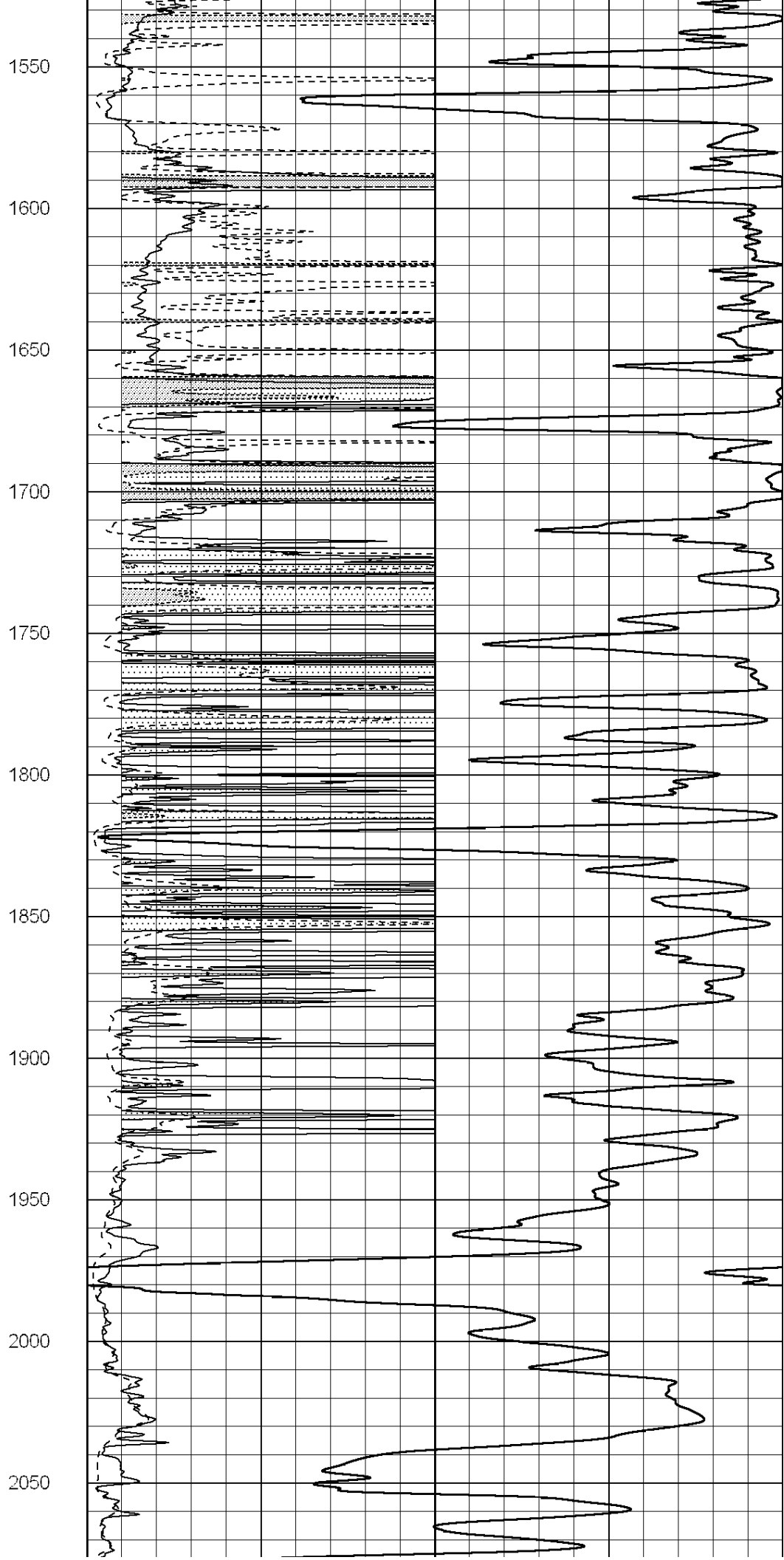
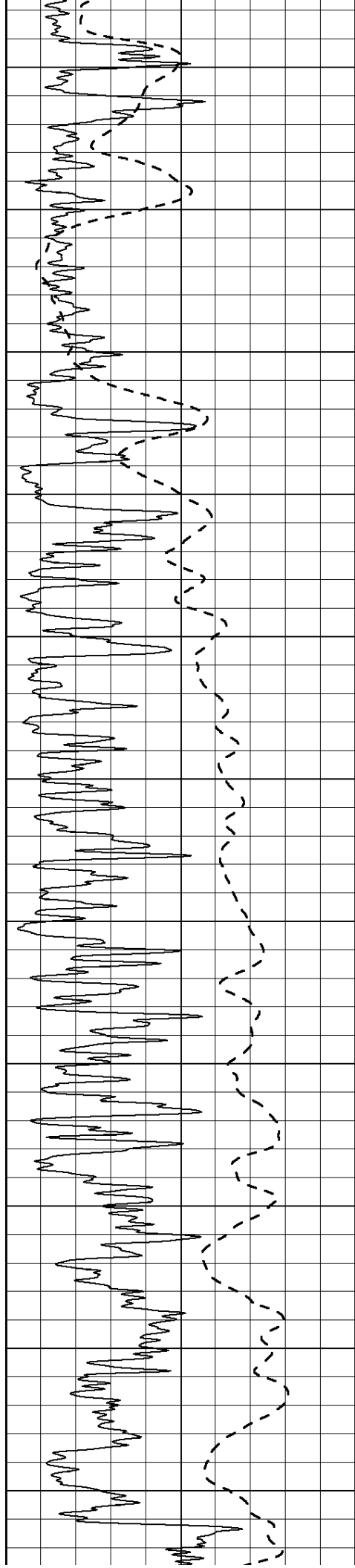
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-100	SP (mV)	100	0	RILD (Ohm-m)	50	
-----			1000			CILD (mmho/m)
			50	RILD X10 (Ohm-m)	500	
			50	RLL3 X10 (Ohm-m)	500	

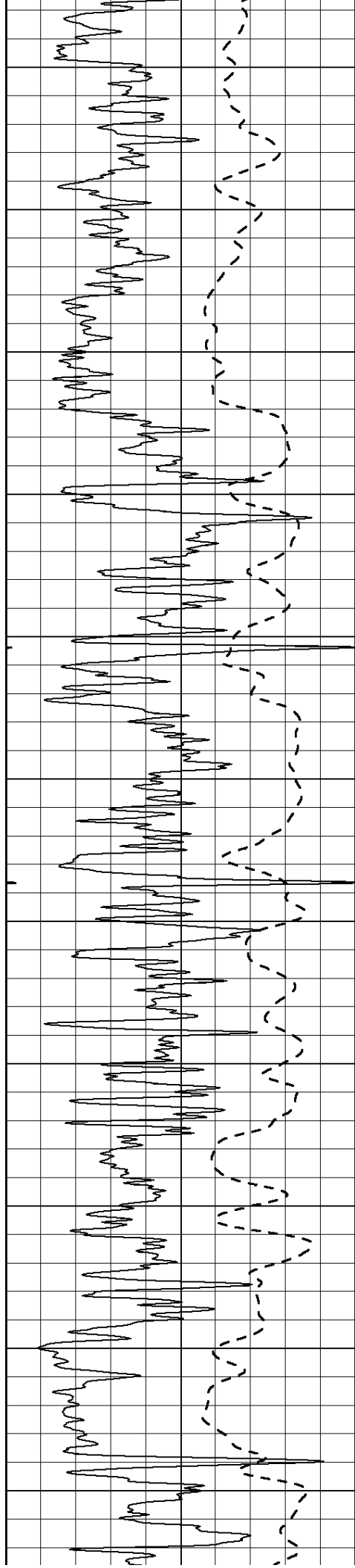


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2100

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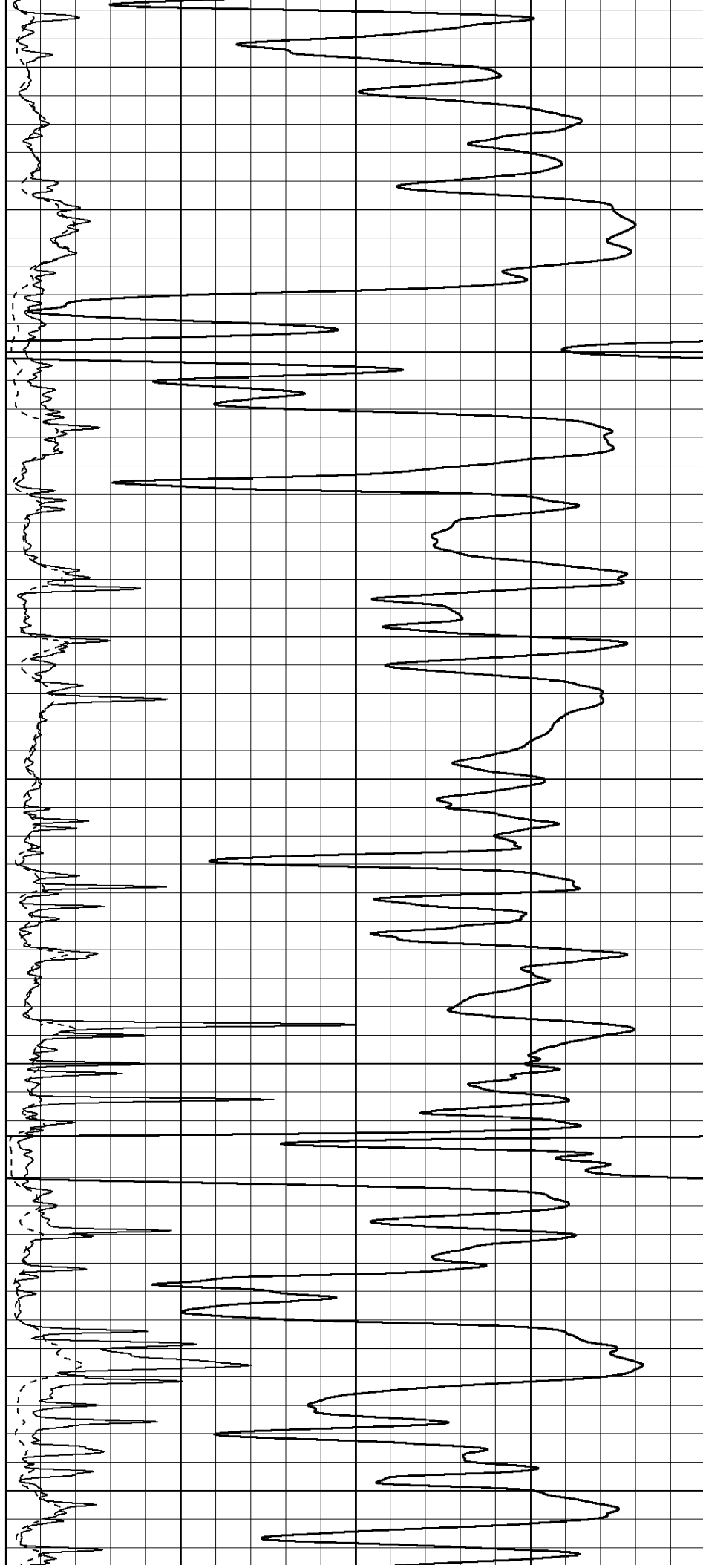
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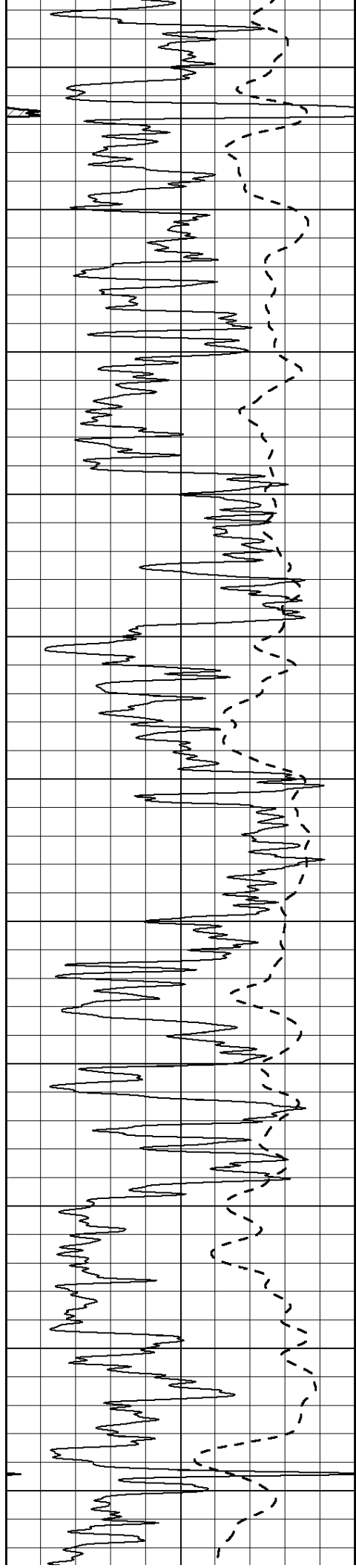
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2650

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2900

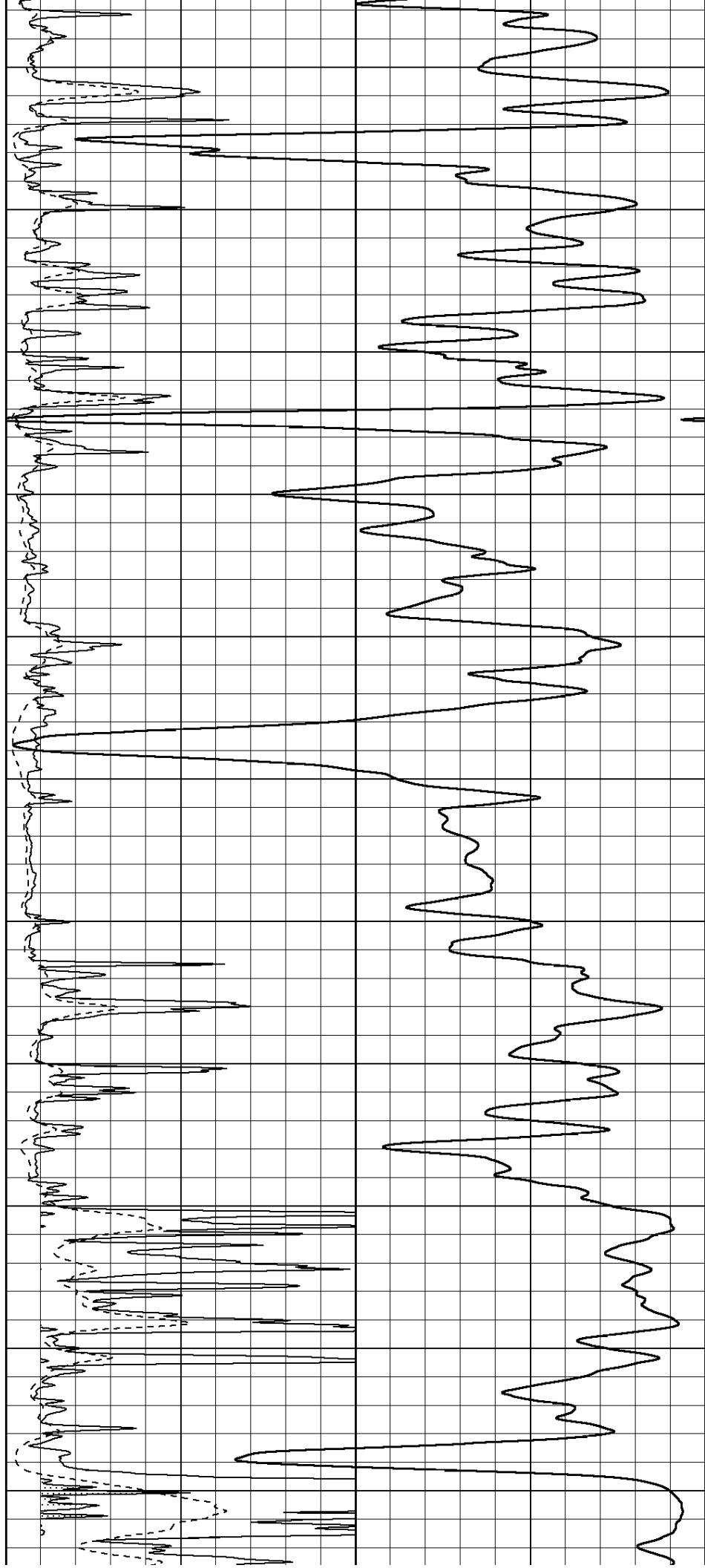
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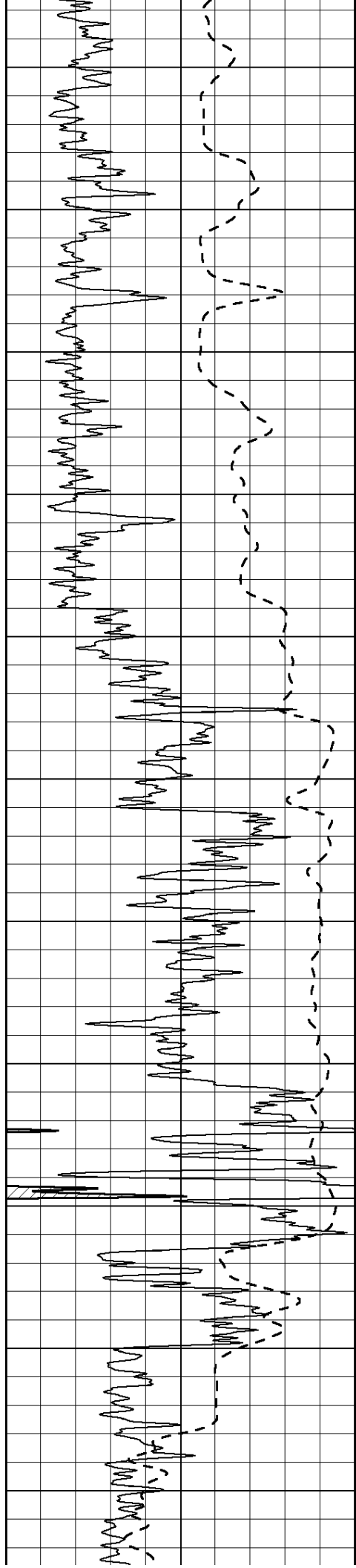
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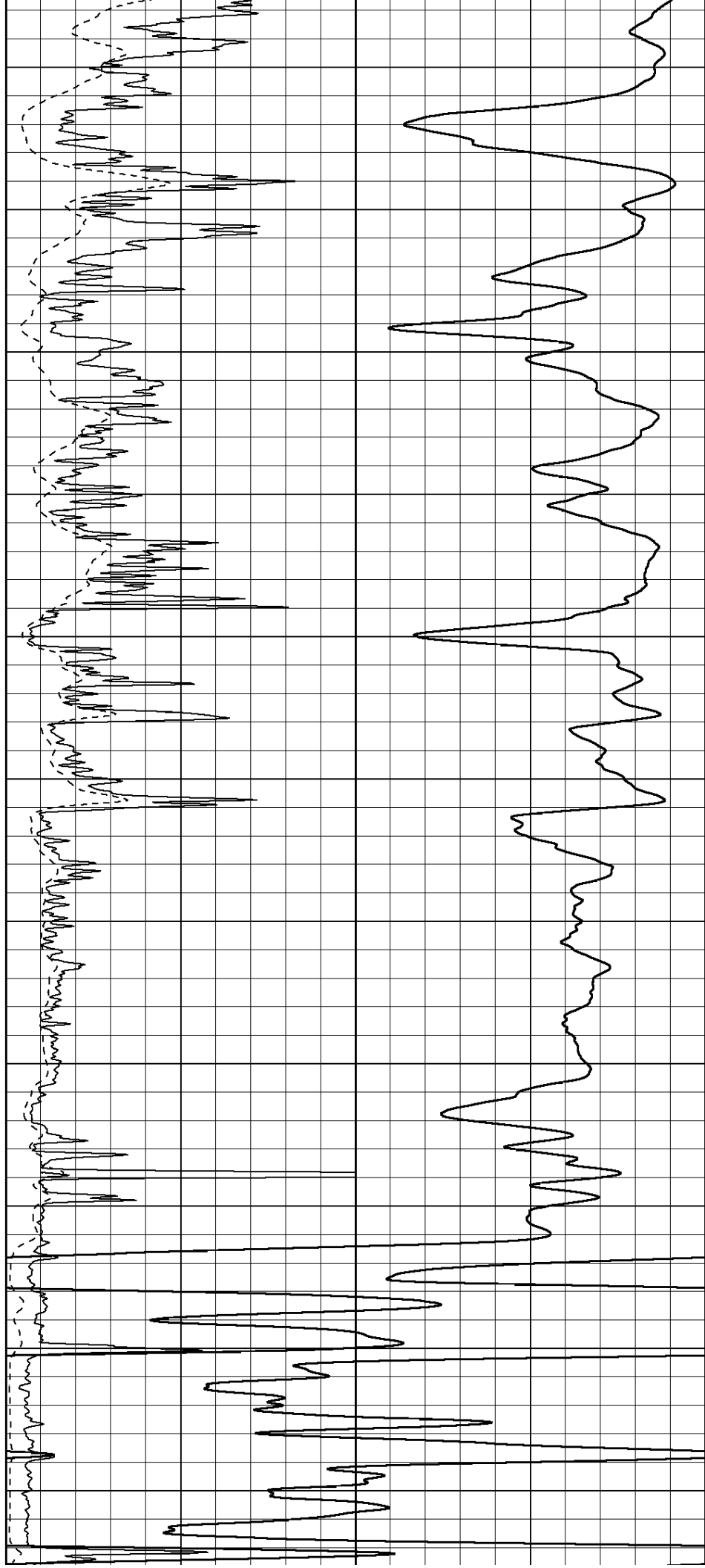
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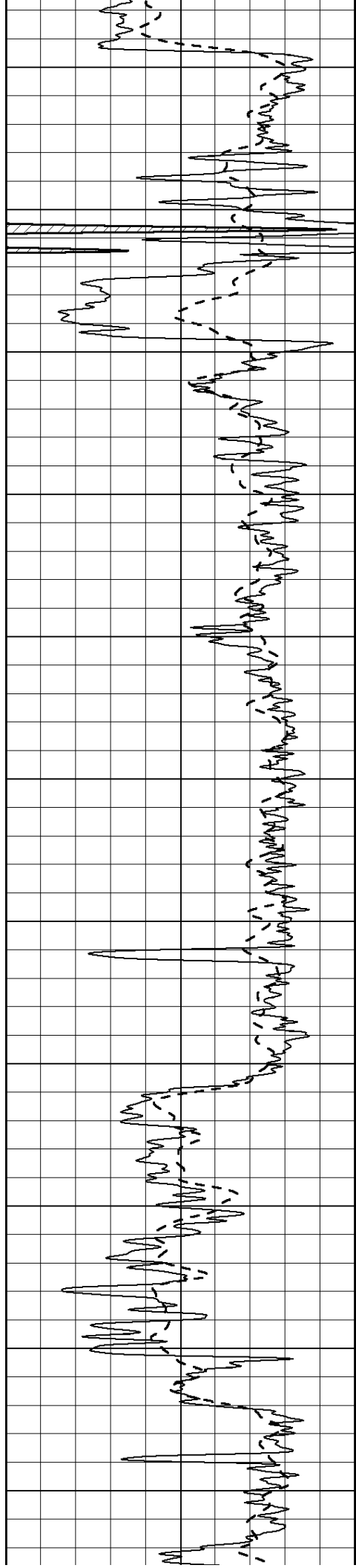
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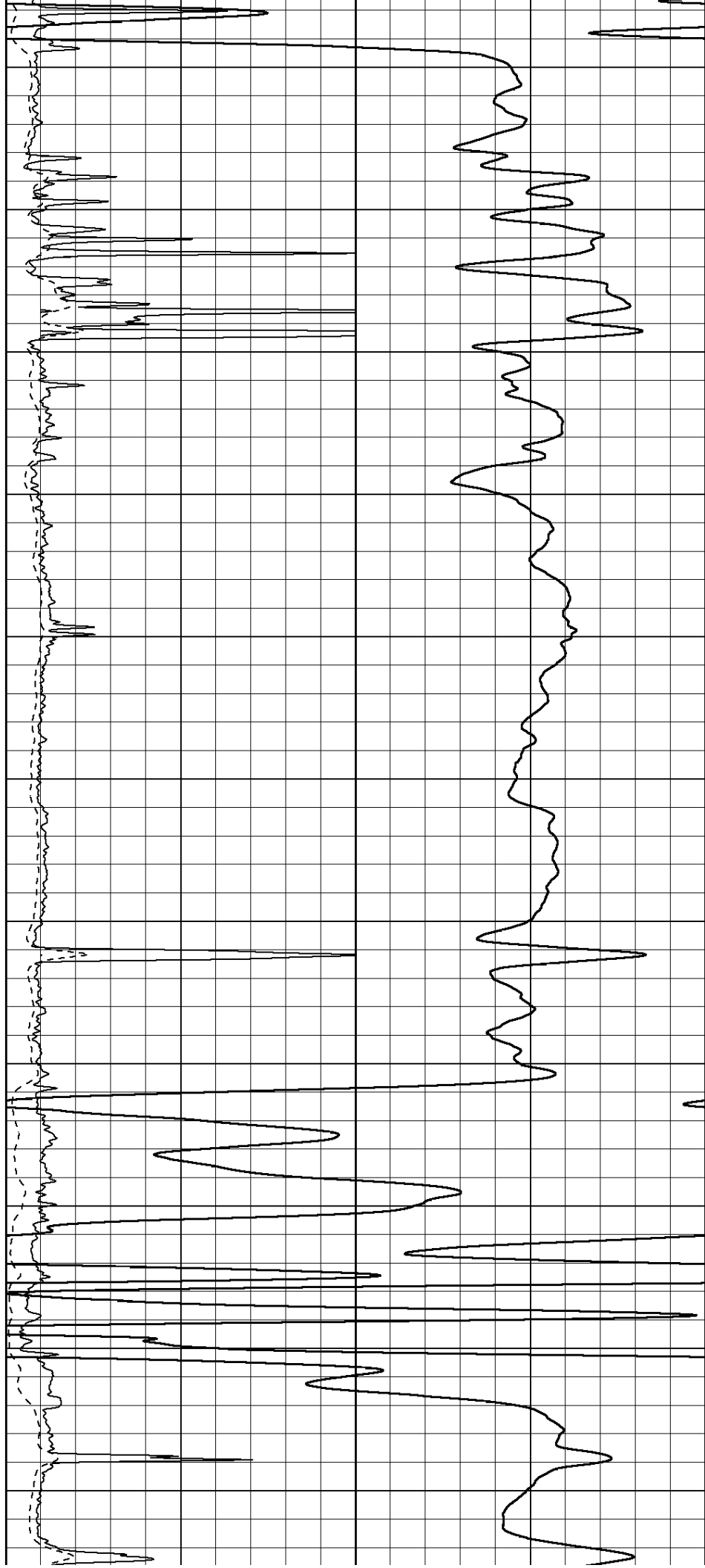
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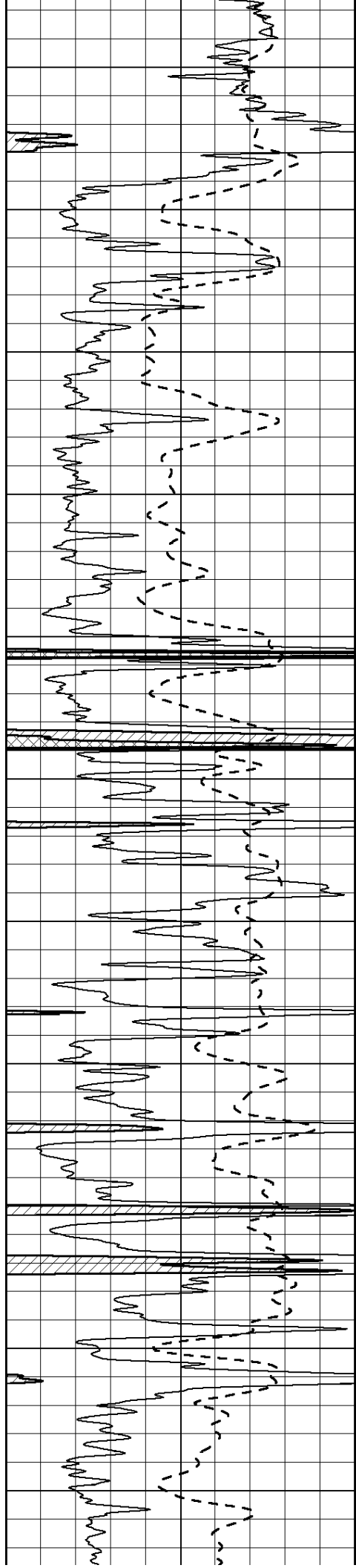
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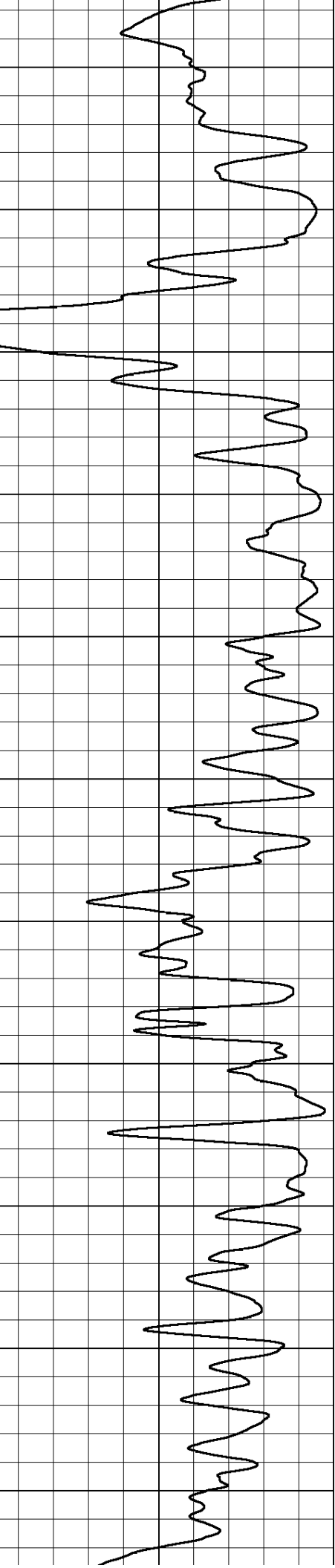
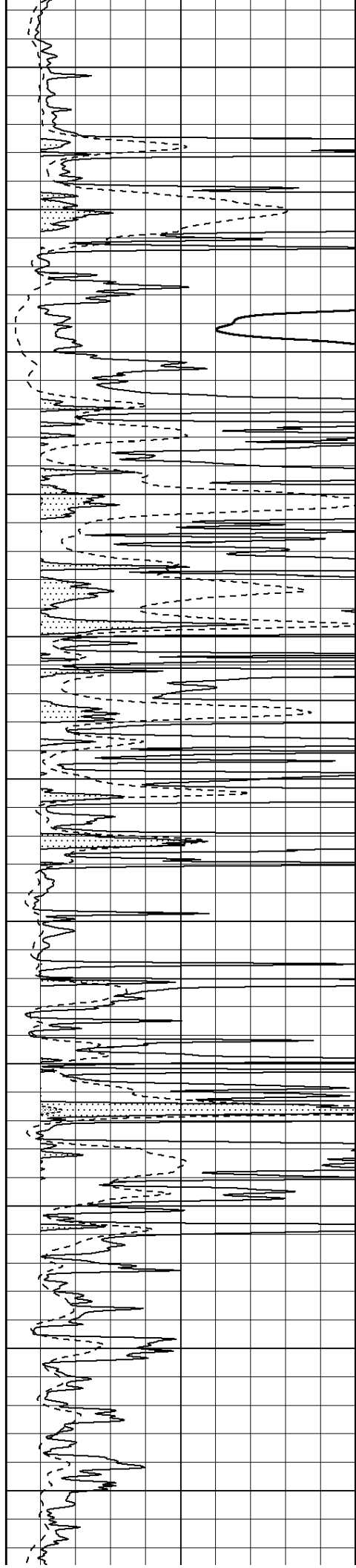
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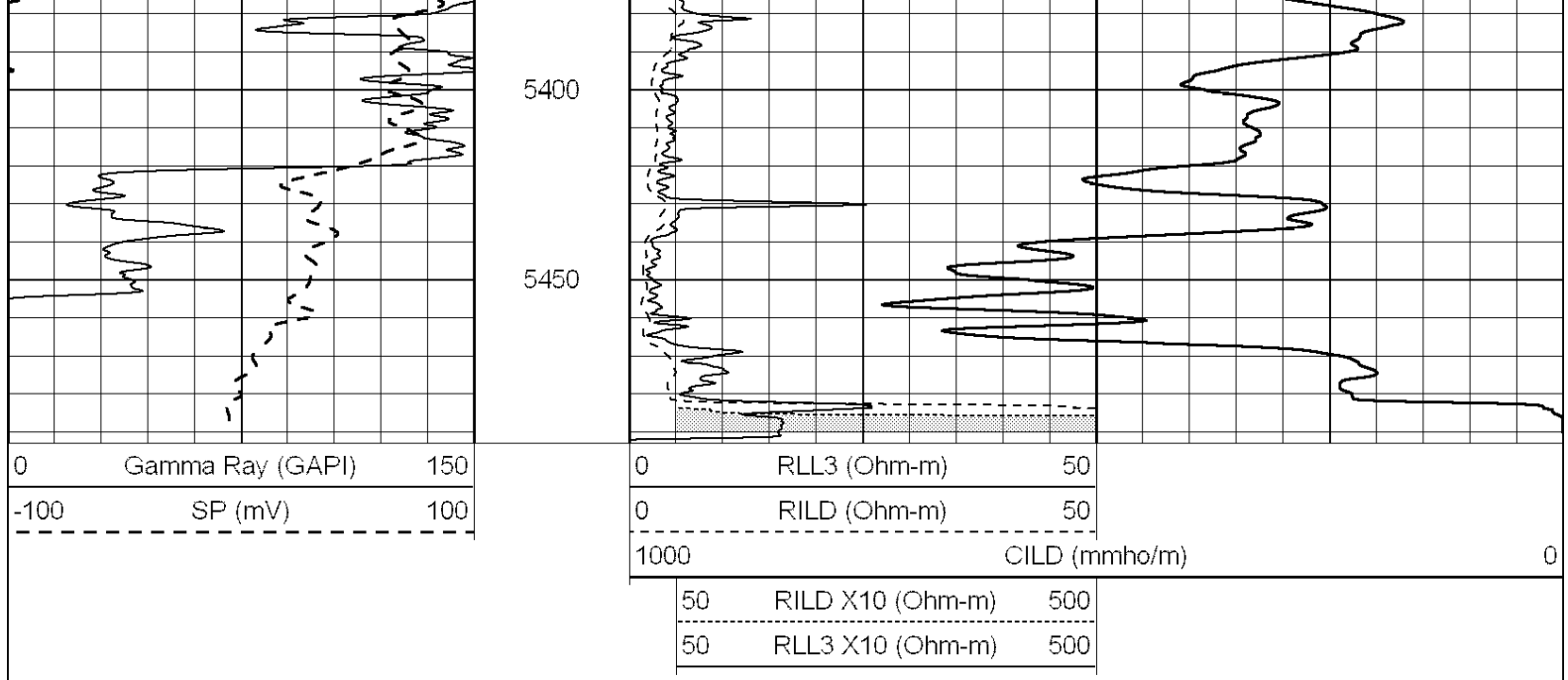
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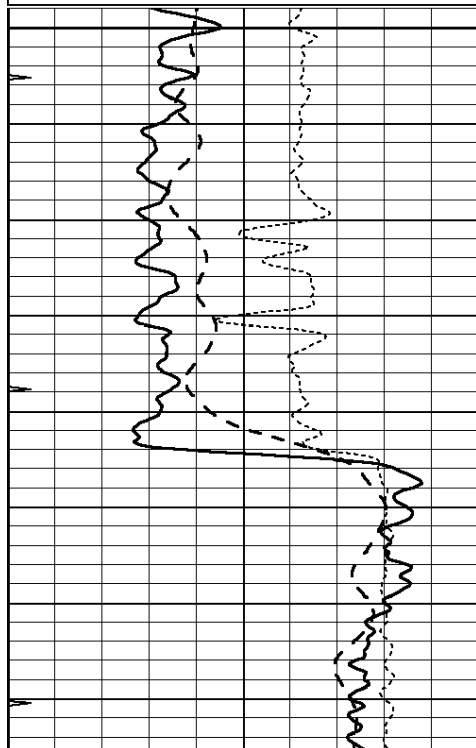
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MAIN SECTION

Database File: 010022pe.db
 Dataset Pathname: pass3.5
 Presentation Format: dil
 Dataset Creation: Mon Nov 26 22:55:55 2012 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

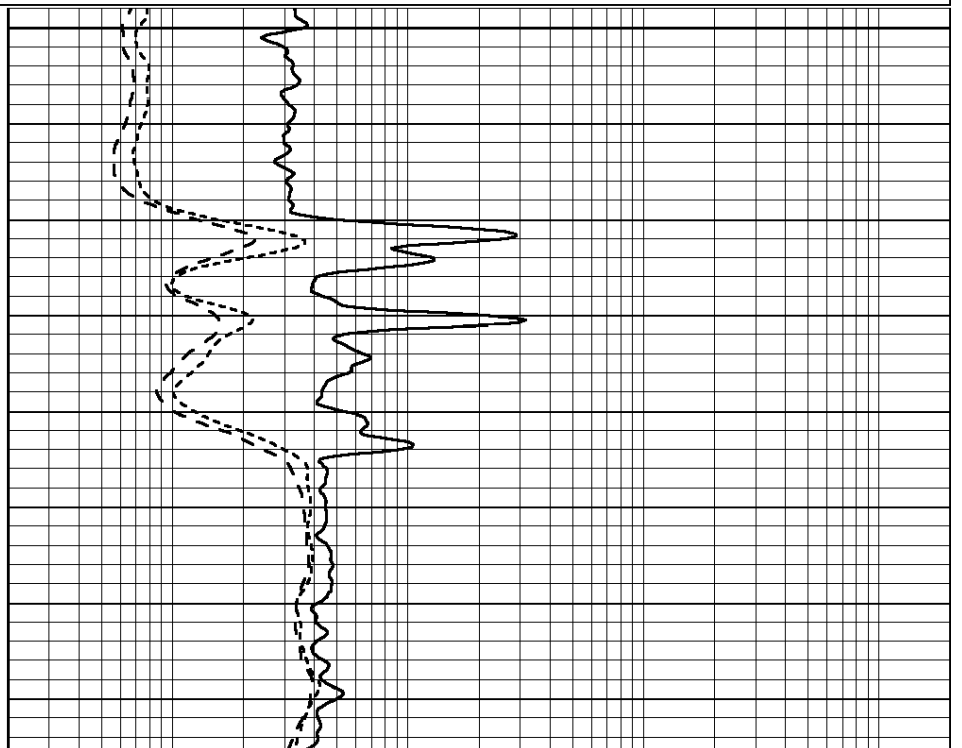
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

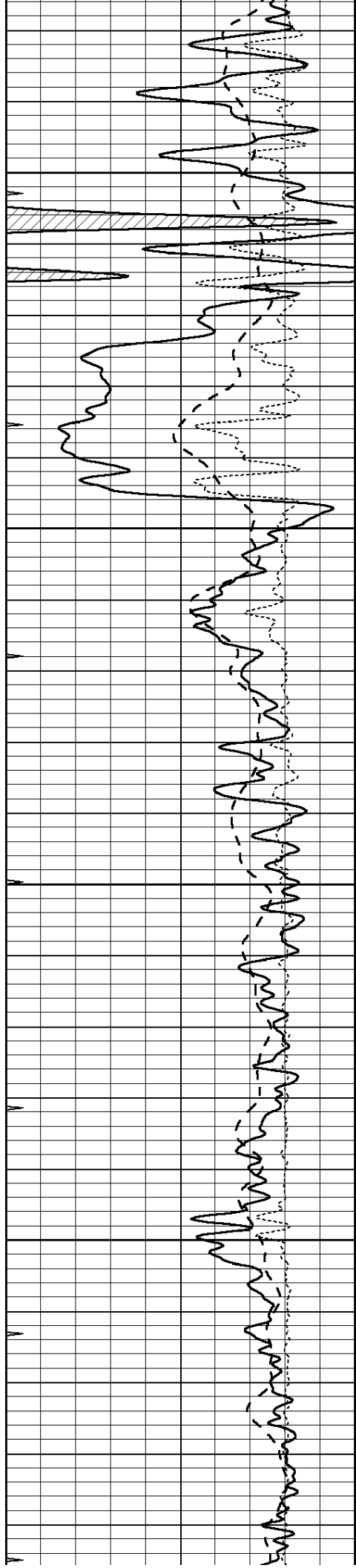
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3700

3750



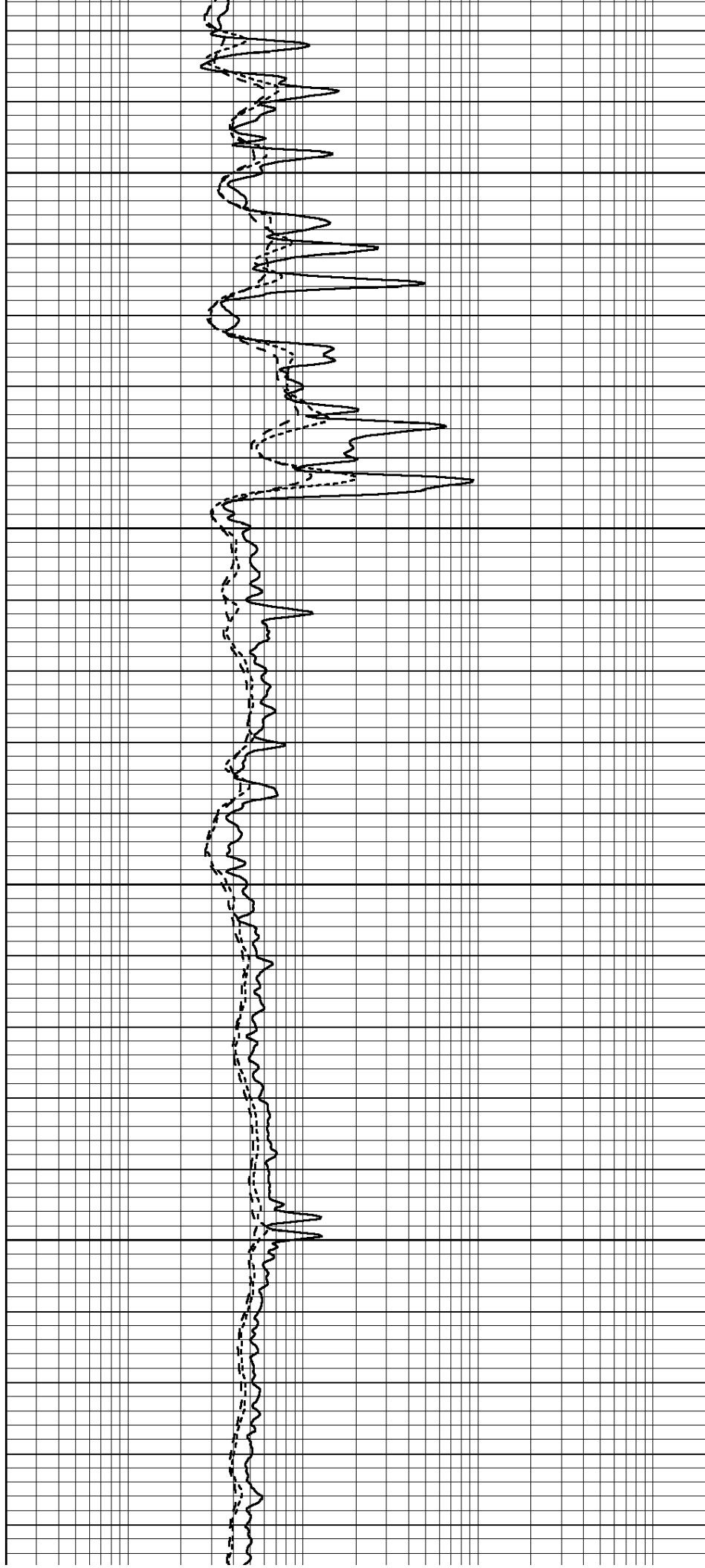


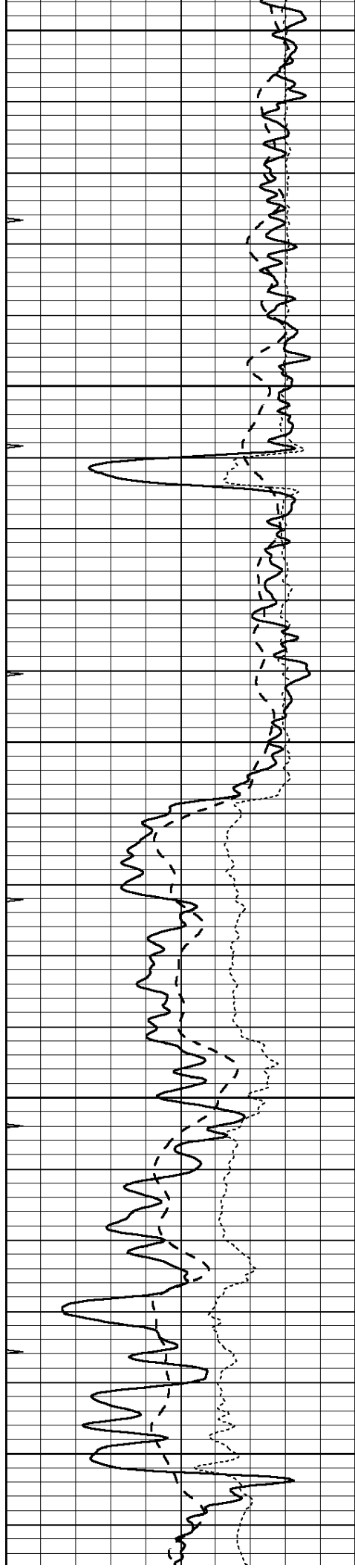
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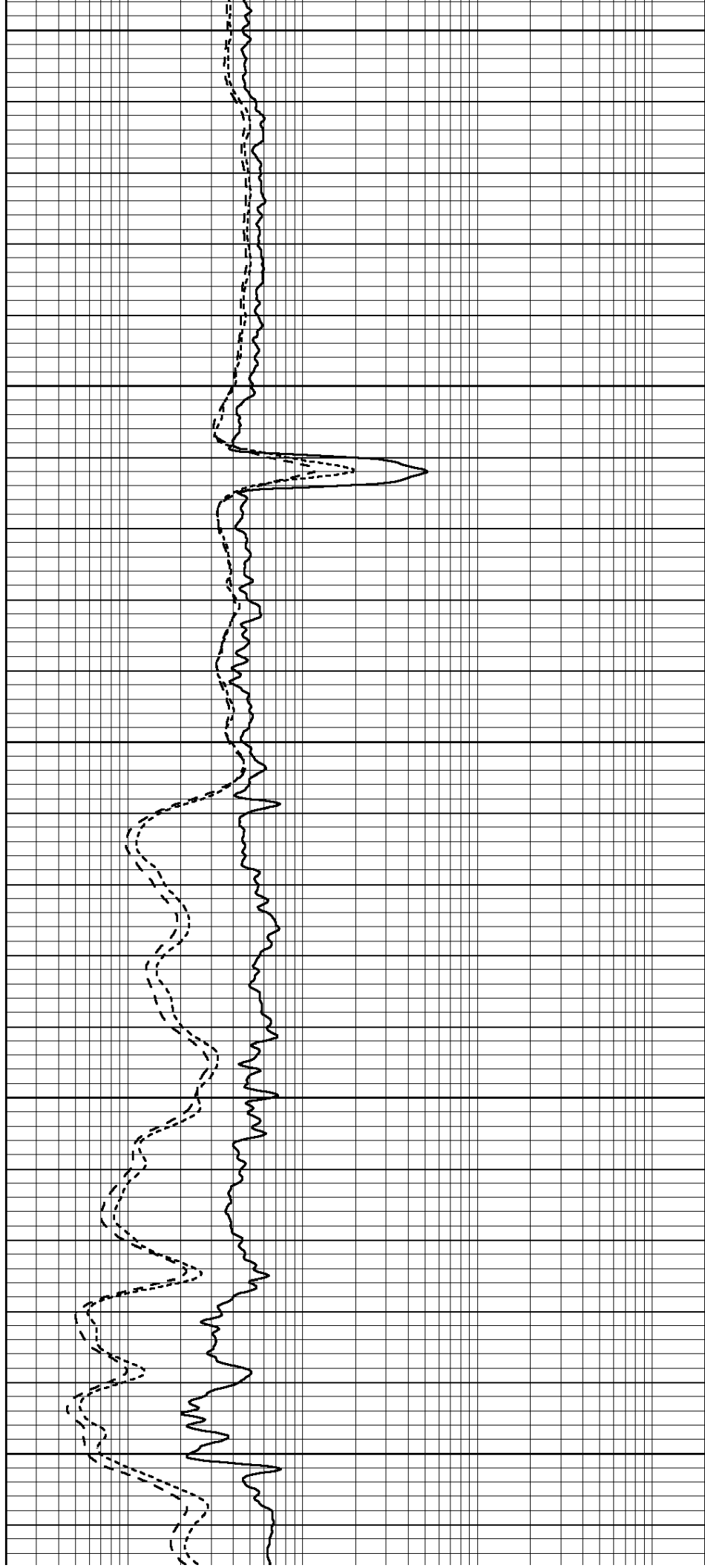
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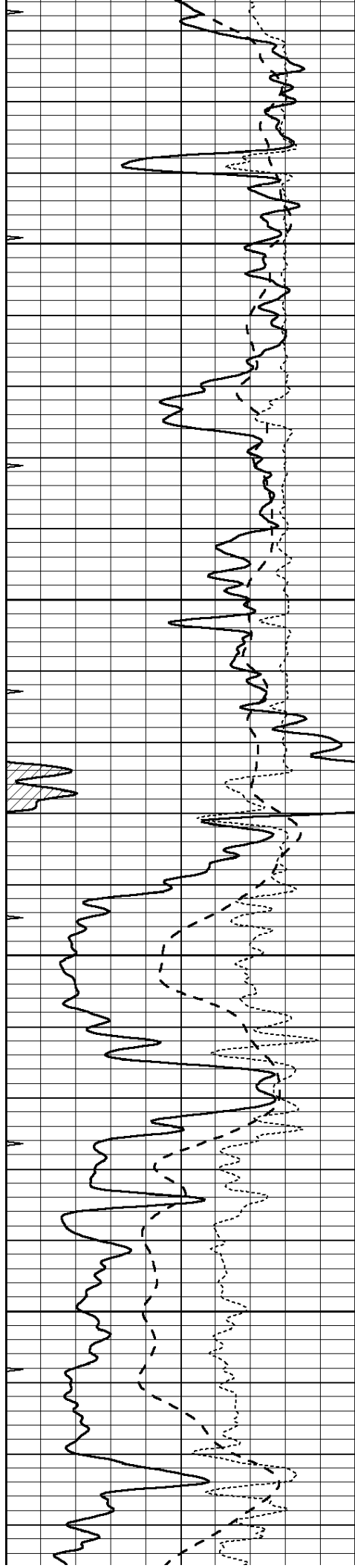
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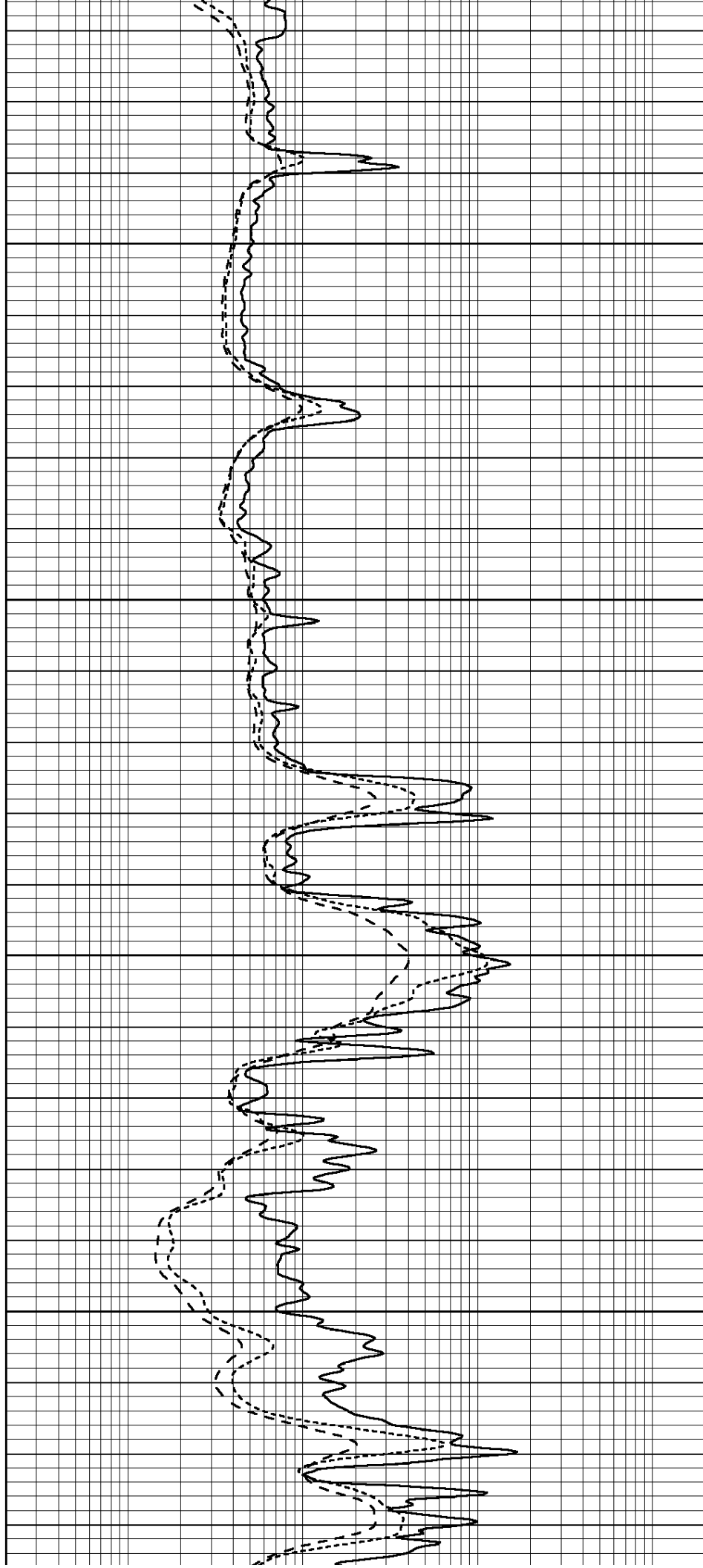


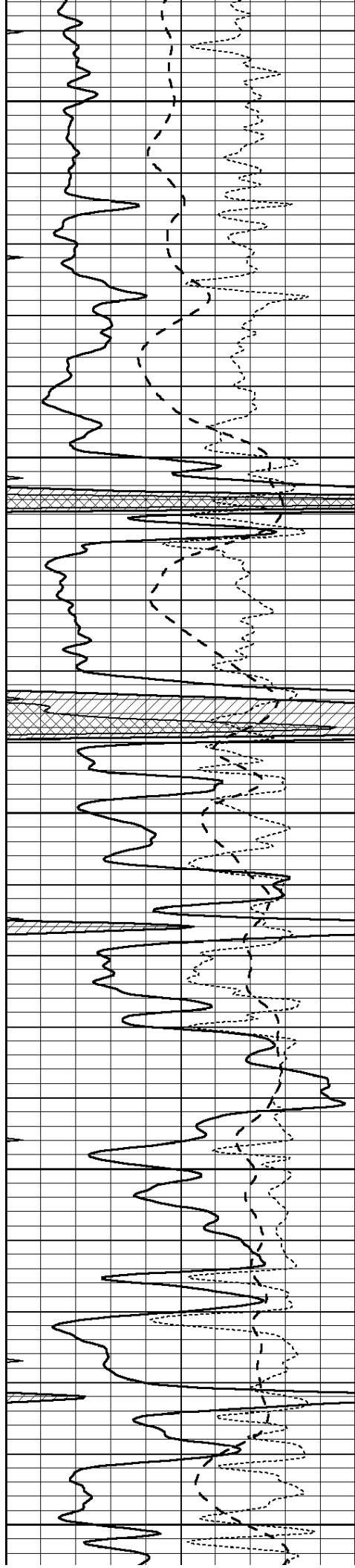
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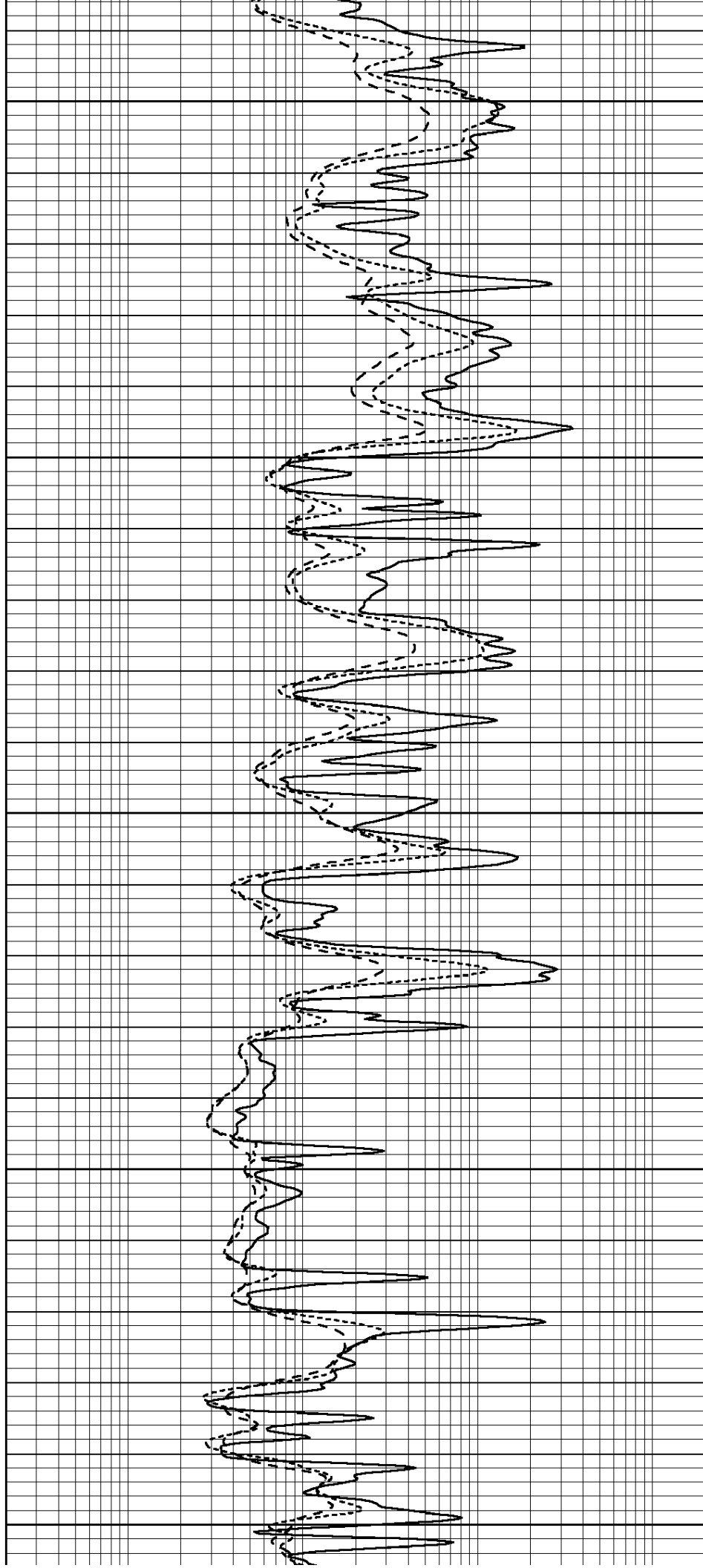
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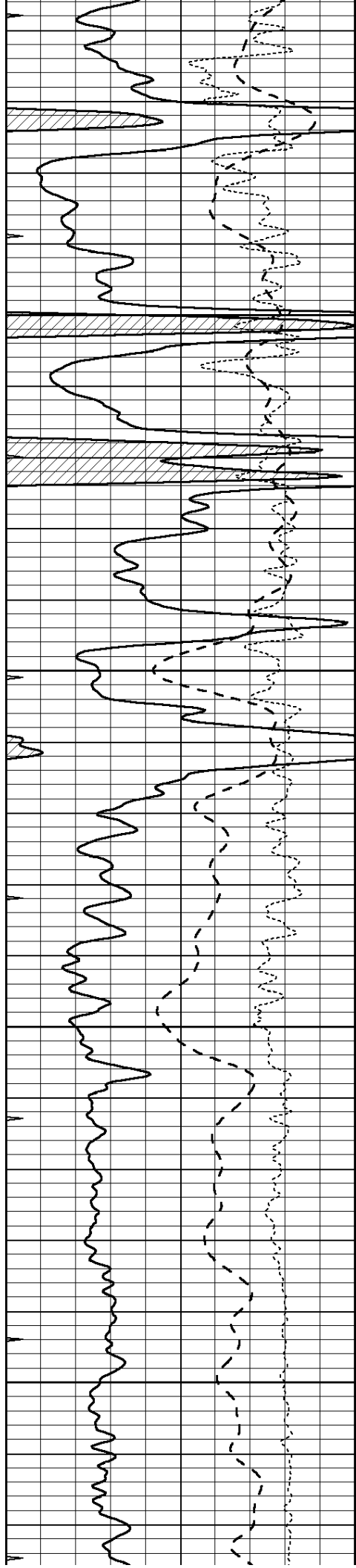
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4650



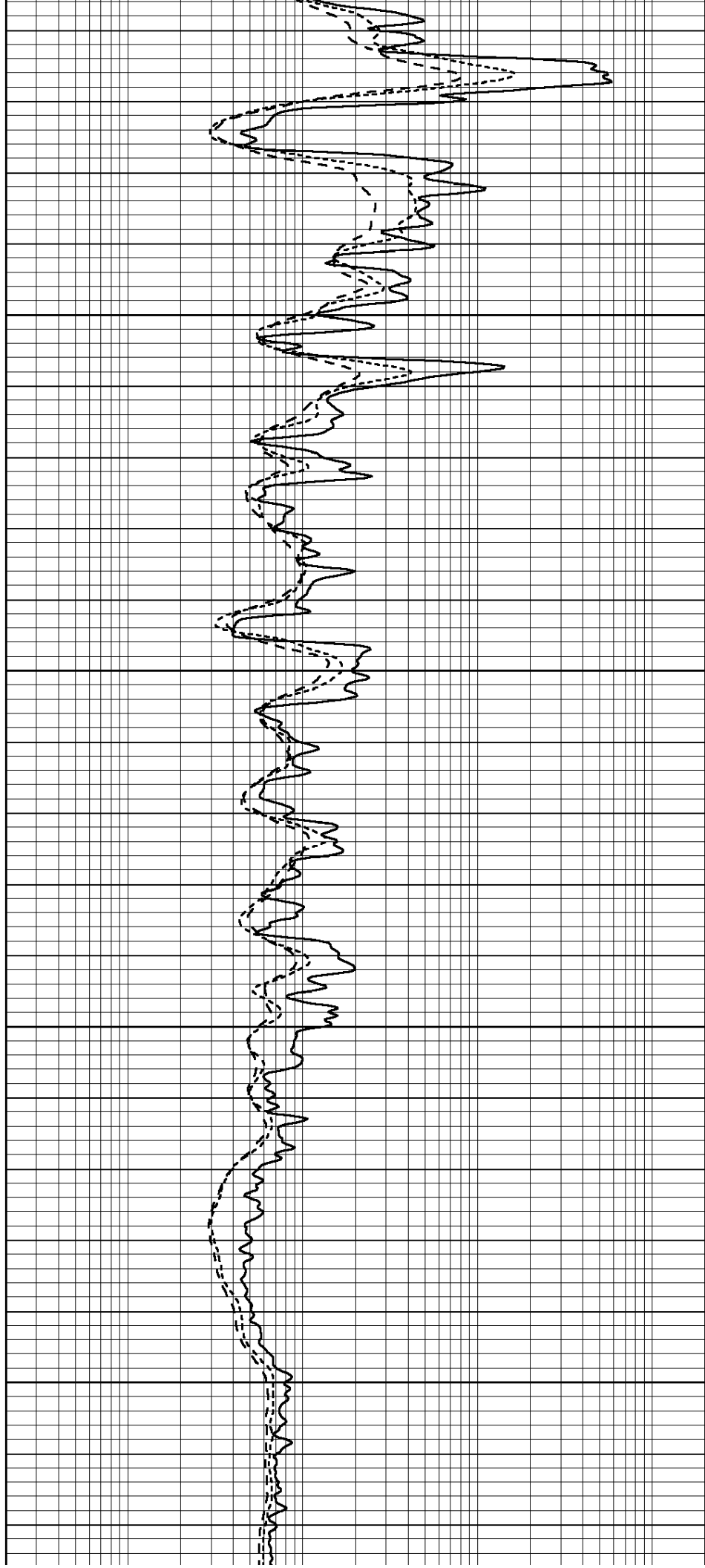


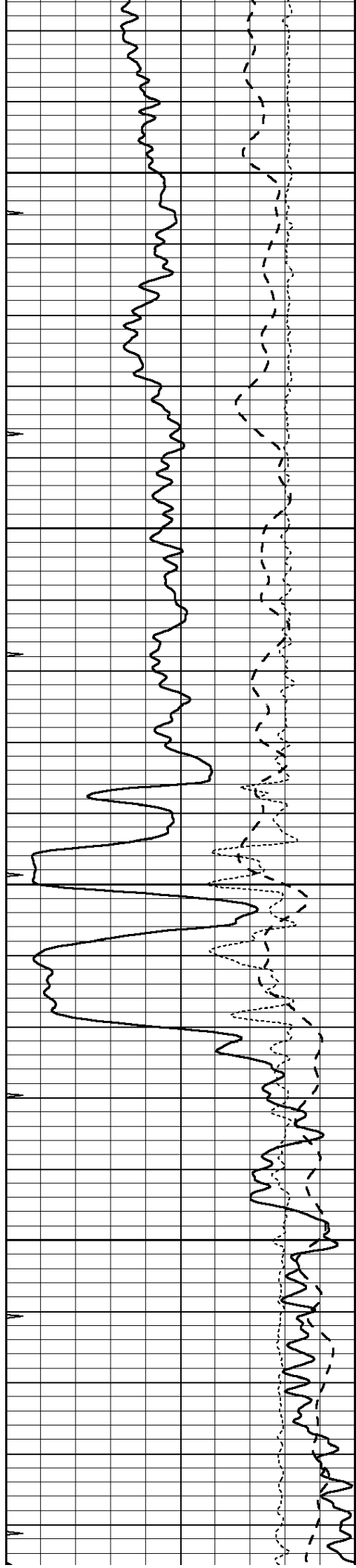
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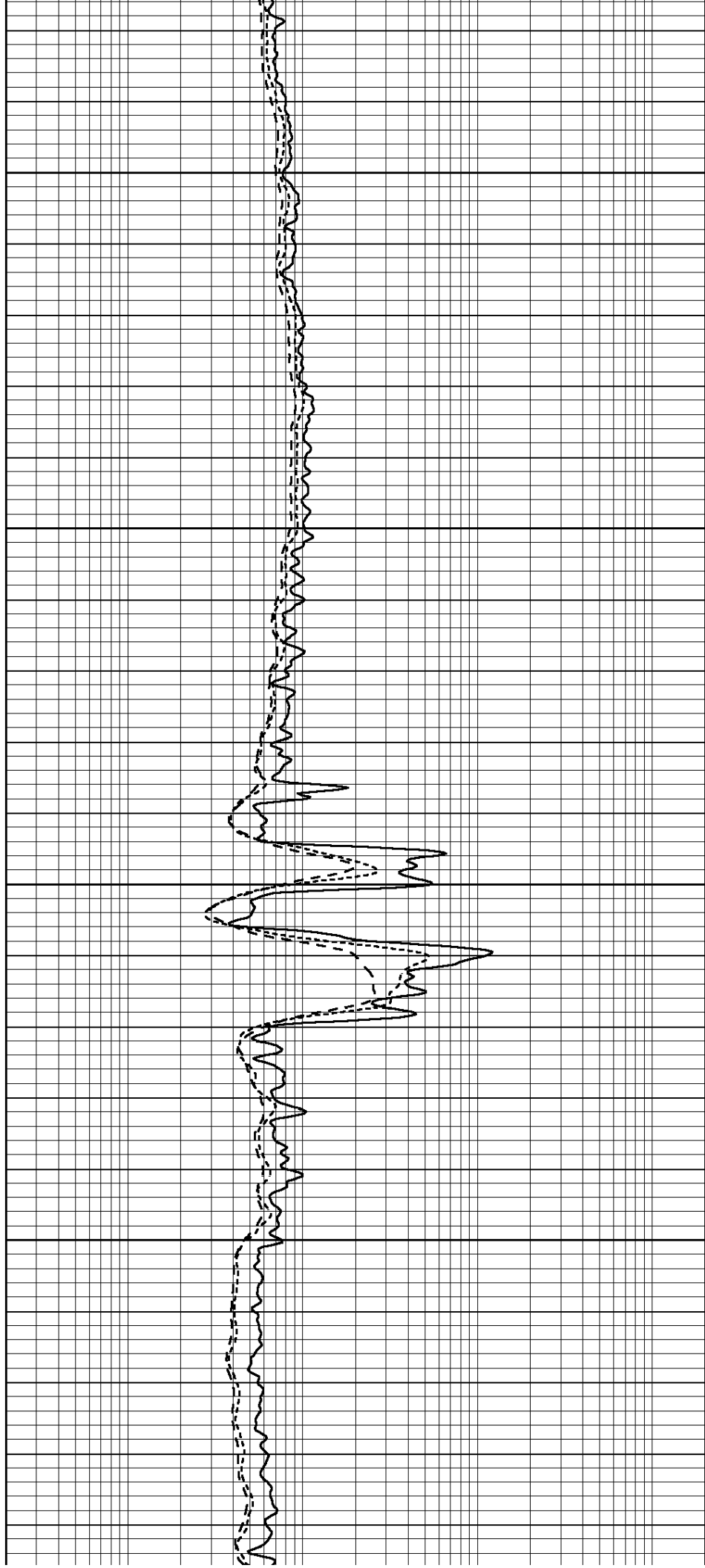


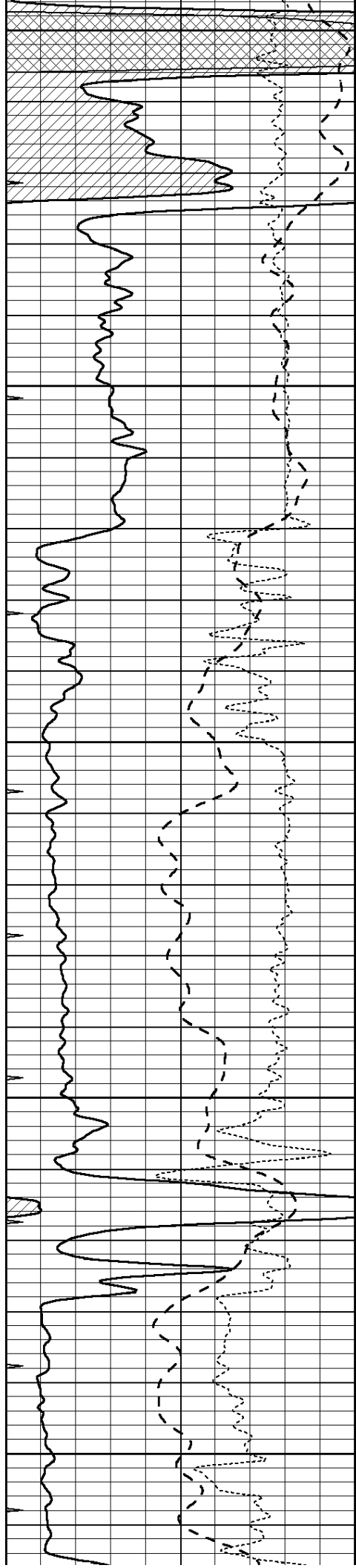
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5050





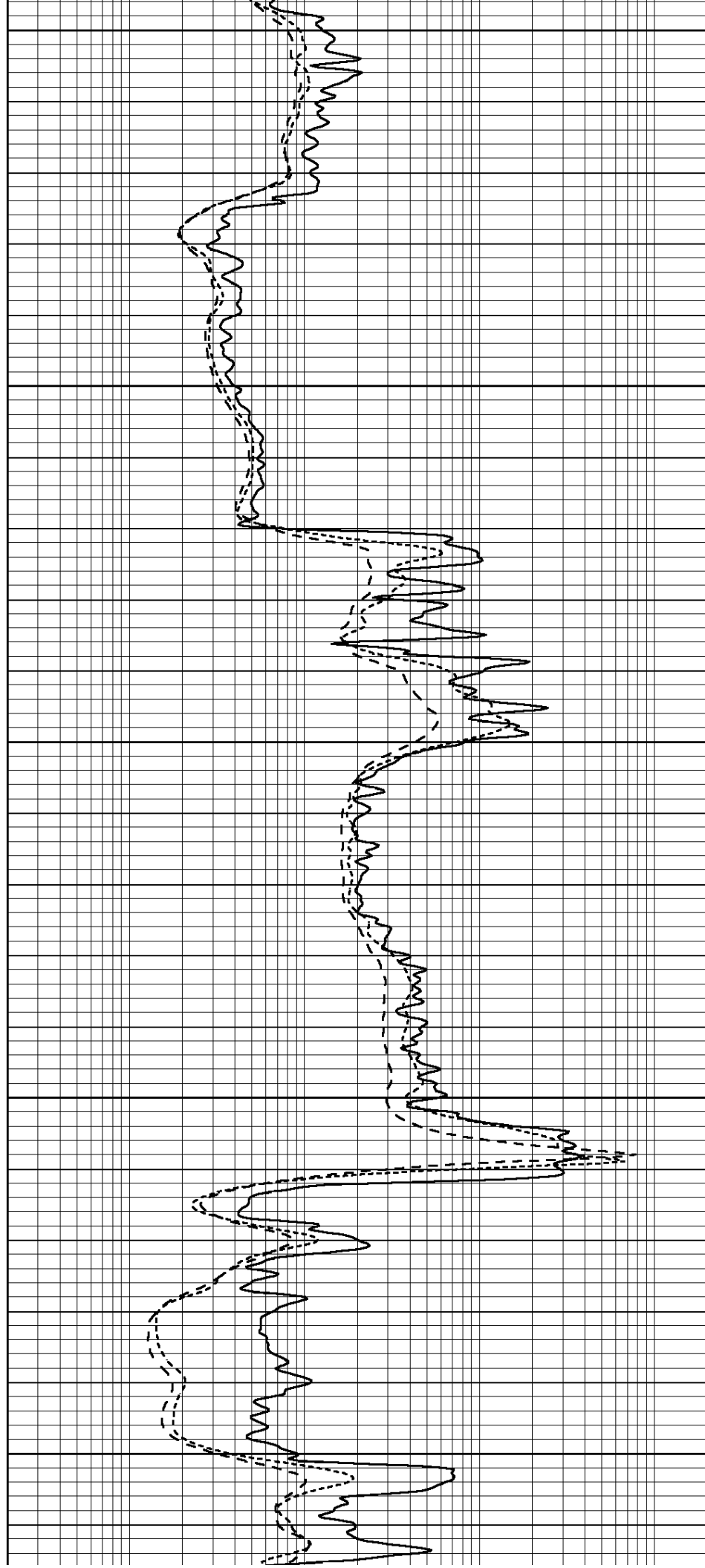
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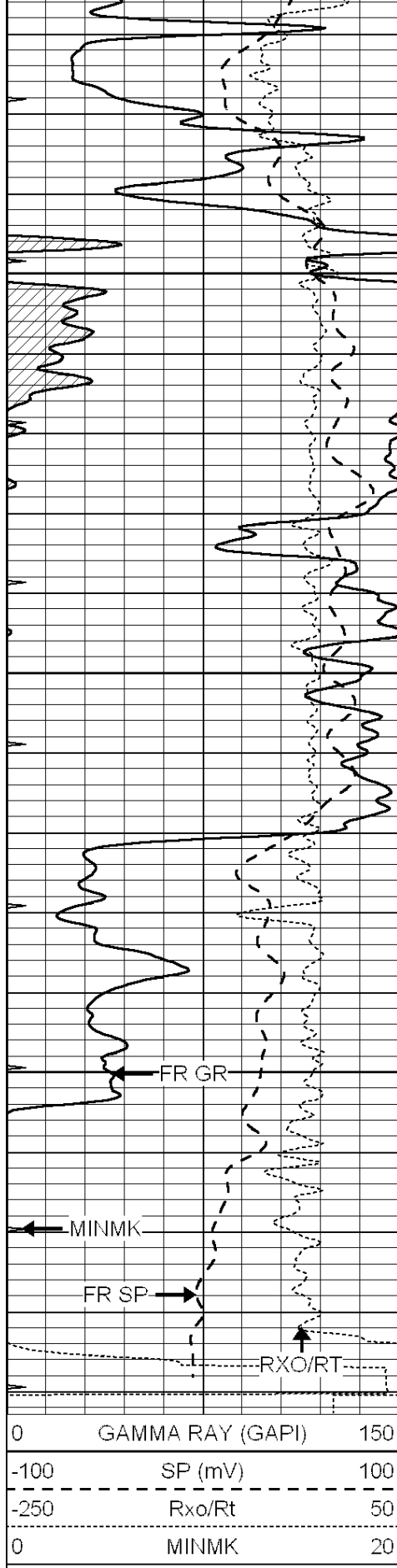
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5300



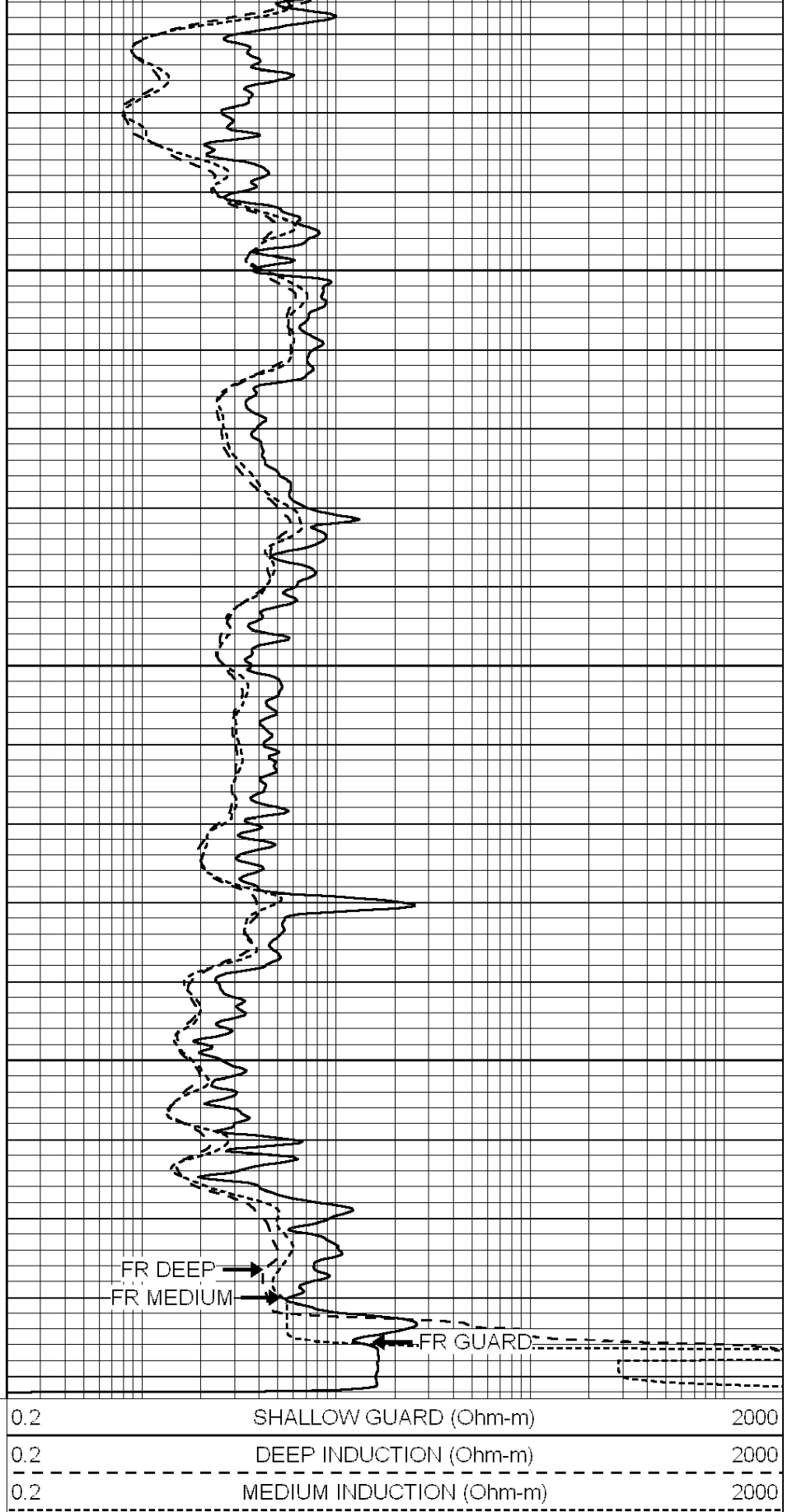


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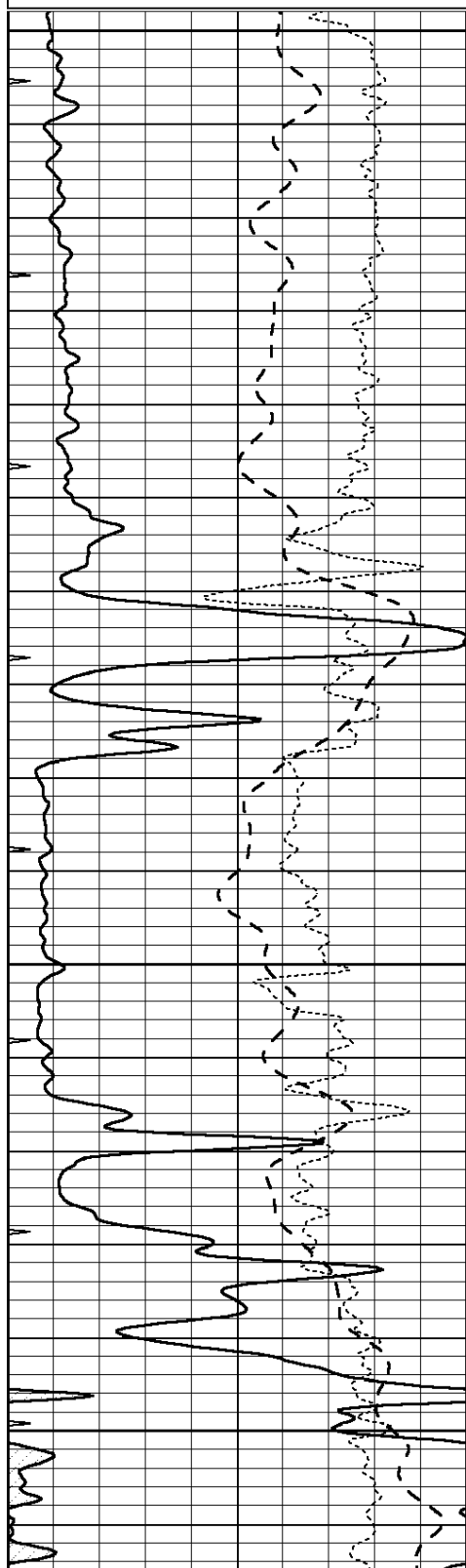
LTD 5488



Database File: 010022pe.db
 Dataset Pathname: pass2.9
 Presentation Format: dil
 Dataset Creation: Mon Nov 26 22:59:17 2012 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

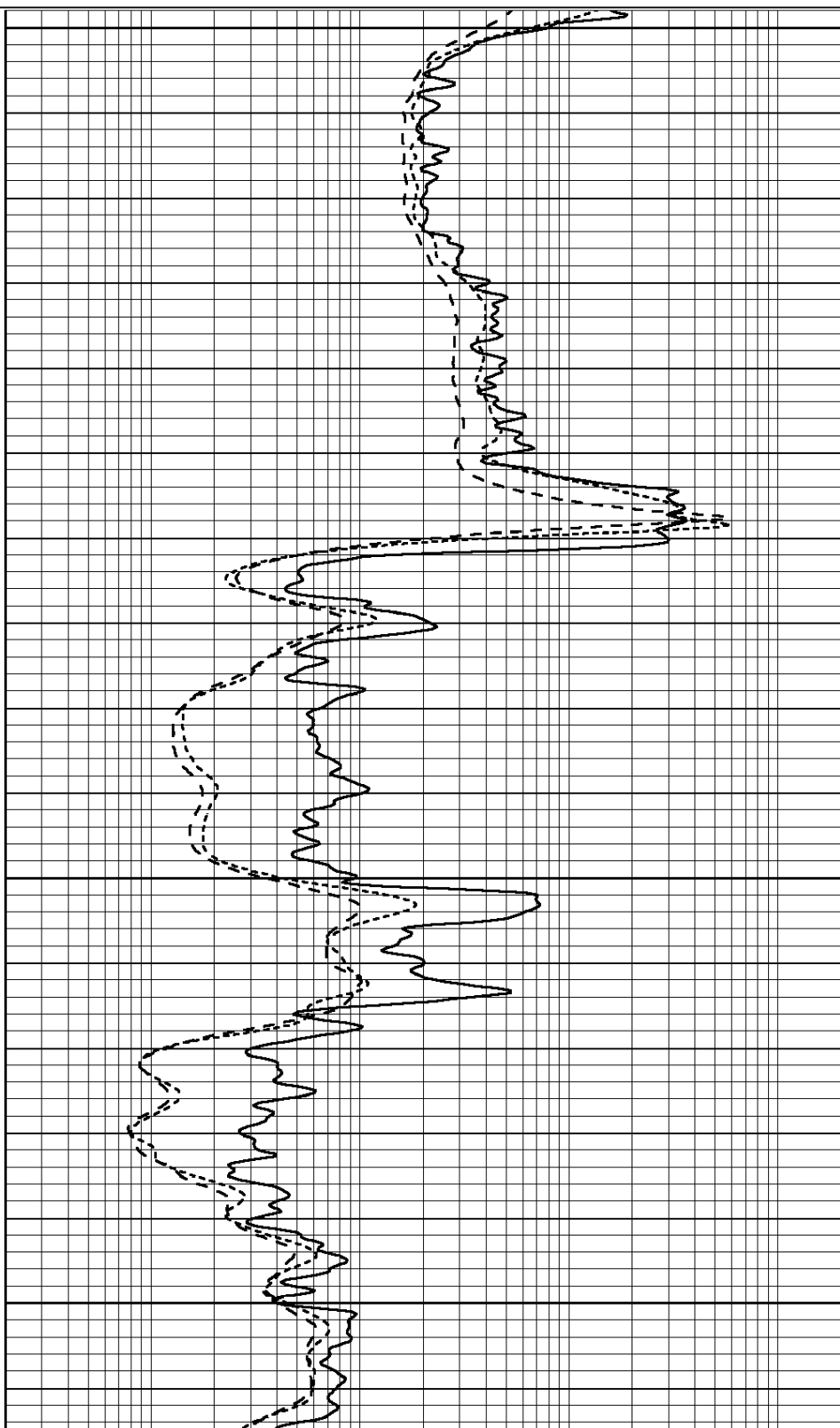


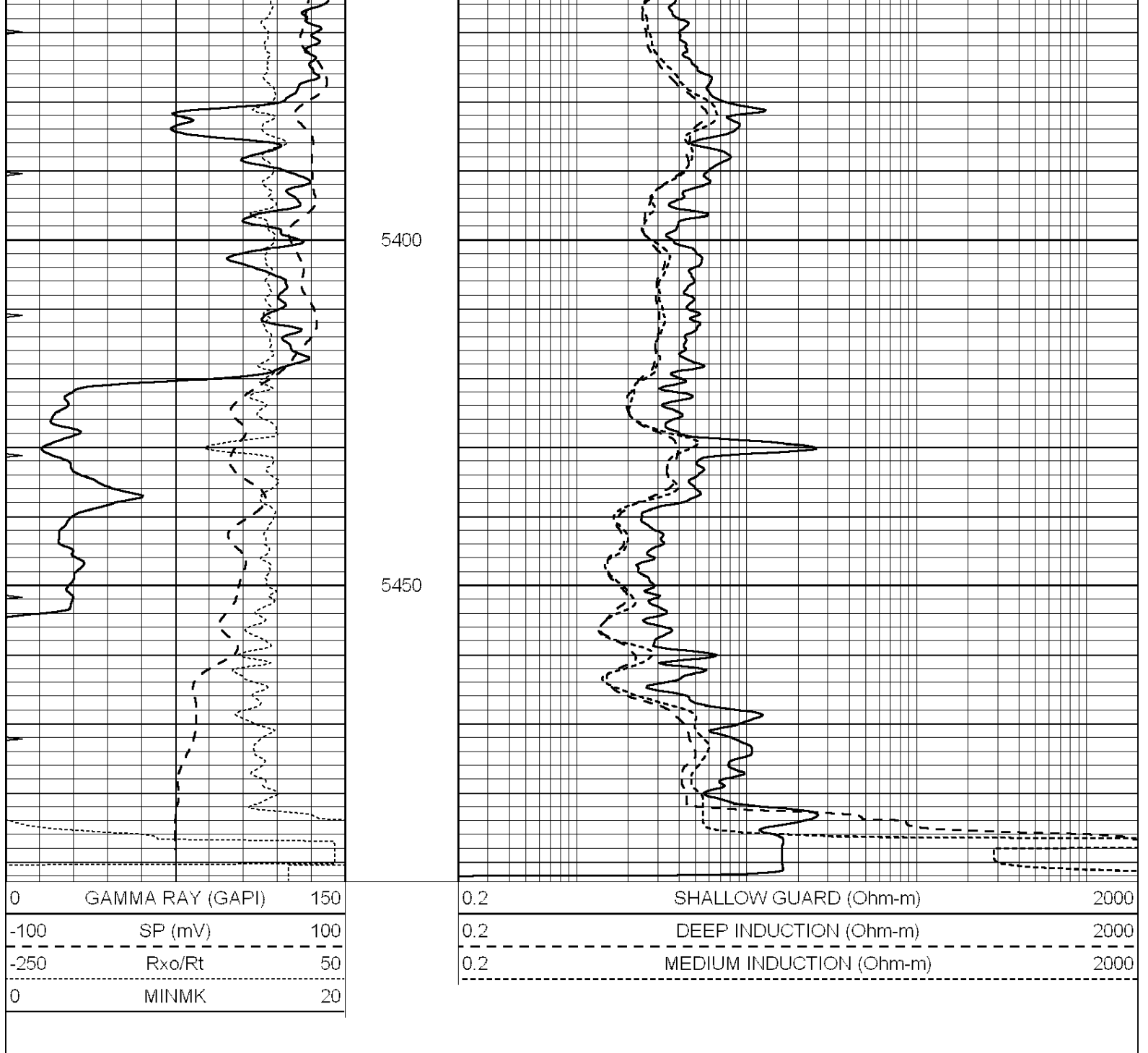
5200

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Calibration Report

Database File: 010022pe.db
 Dataset Pathname: pass3.5
 Dataset Creation: Mon Nov 26 22:55:55 2012 by Calc SOC 120430

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Mon Nov 26 21:14:04 2012

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	9.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-14.000
Internal:	Zero	Cal		Zero	Cal		m	b

Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555
Litho Density Calibration Report Serial: 006 Model: PRB Performed Sun Aug 15 09:48:41 2010								
Litho Density Calibration								
	Background	Magnesium		Aluminum		Sandstone		
Window 1	1686.6	11612.8		3932.0		12718.8		cps
Window 2	1531.4	9204.7		3267.8		9851.9		cps
Window 3	1198.3	4733.6		1952.5		4920.6		cps
Window 4	317.3	321.2		325.9		303.6		cps
Long Space	0.0	7673.3		1736.4		8320.4		cps
Short Space	1.7	2548.5		1657.2		2628.8		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe				2.5700		1.5500		
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio		: 0.569		
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept		: -18.1		
Caliper								
	Readings	Reference						
Low Ref	3.5	6.6						
High Ref	5.5	15.0						
	Gain: 4.4			Offset: -8.8				
Compensated Neutron Calibration Report								
	Serial Number:		070808					
	Tool Model:		Probe					
PRE-SURVEY VERIFICATION								
	Detector	Readings		Measured		Target		
	Short Space	cps						
	Long Space	cps		pu		pu		
POST-SURVEY VERIFICATION								
	Detector	Readings		Measured		Target		
	Short Space	cps						
	Long Space	cps		pu		pu		
Gamma Ray Calibration Report								
	Serial Number:		070559					
	Tool Model:		OPEN_GR					
	Performed:		Wed Sep 19 15:58:00 2012					
	Calibrator Value:		1.0		GAPI			
	Background Reading:		0.0		cps			
	Calibrator Reading:		1.0		cps			
	Sensitivity:		0.3000		GAPI/cps			