



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company NEW GULF OPERATING, LLC.
Well WRIGHT #1
Field WILDCAT
County LOGAN
State KANSAS

Company NEW GULF OPERATING, LLC.
Well WRIGHT #1
Field WILDCAT
County LOGAN State KANSAS

Location: API # : 15-109-20893-0000
2023' FNL & 330' FEL
N/2 - SE - SE - NE
SEC 31 TWP 14S RGE 34W
Permanent Datum GROUND LEVEL Elevation 3049
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
PE/ME/L
Elevation
K.B. 3057
D.F. 3055
G.L. 3049

Date	11/16/10
Run Number	ONE
Depth Driller	4770
Depth Logger	4769
Bottom Logged Interval	4767
Top Log Interval	0
Casing Driller	8 5/8" @ 248'
Casing Logger	249'
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/52
pH / Fluid Loss	10.0/8.0
Source of Sample	FLOWLINE
Rim @ Meas. Temp	0.55 @ 77F
Rmf @ Meas. Temp	0.41 @ 77F
Rmc @ Meas. Temp	0.66 @ 77F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	0.34 @ 123F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	123F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JEFF GRONEMEG
Witnessed By	BOB STOLZLE
	JOE JOE BIRDWELL

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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

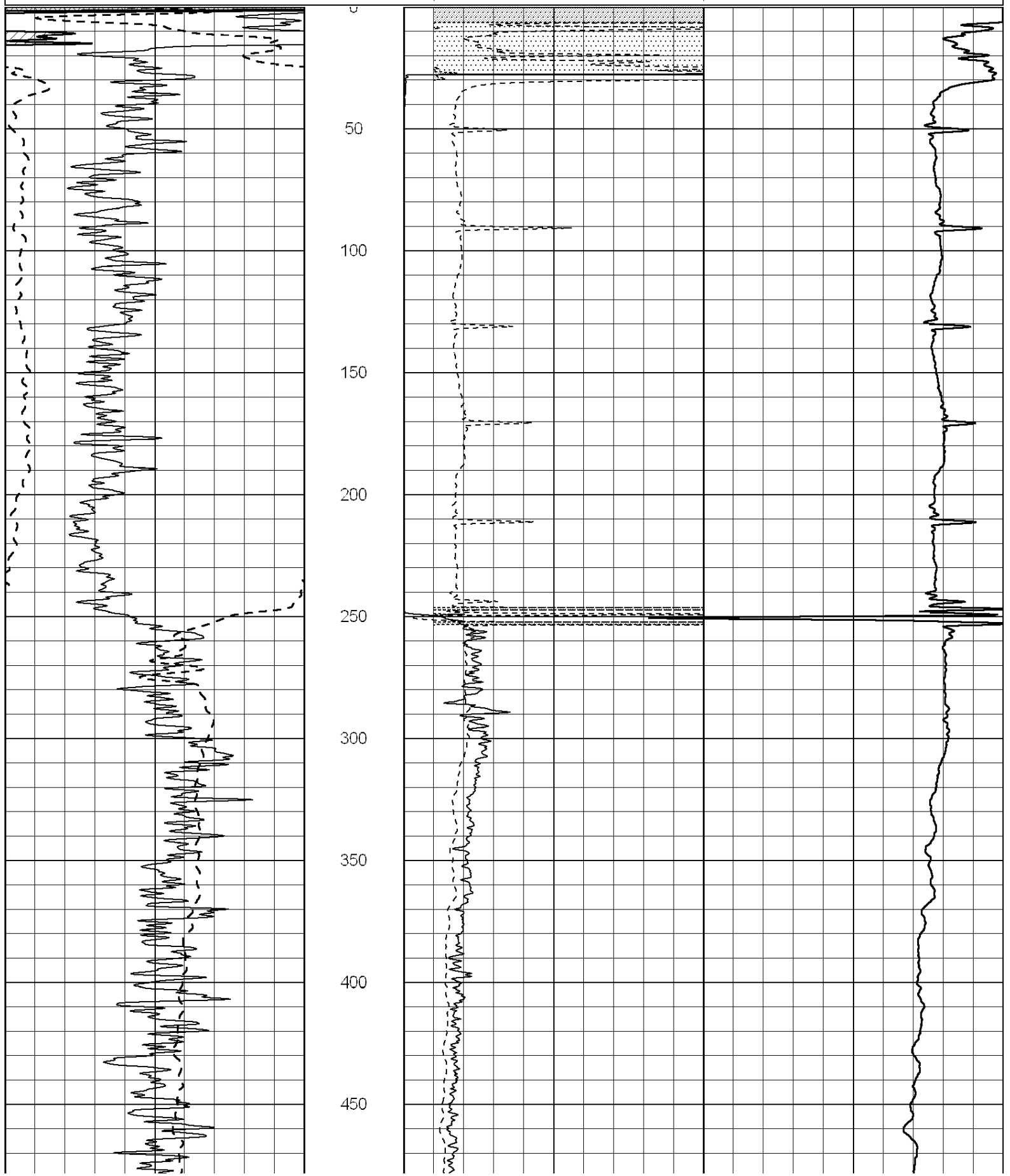
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
OAKLEY, KS - 23 MILES SOUTH TO GOLD RD. - 4 1/2 MILES WEST TO RD 390
NORTH & WEST TO INDIAN RD - 10 MILES WEST TO RD 290
SOUTH INTO

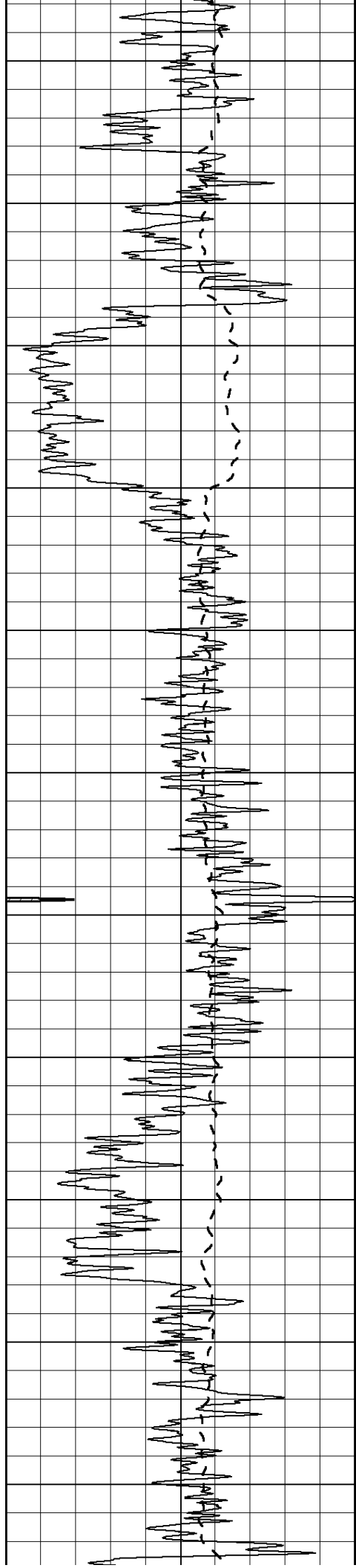
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

1000 CILD (mmho/m) 0

50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





500

550

600

650

700

750

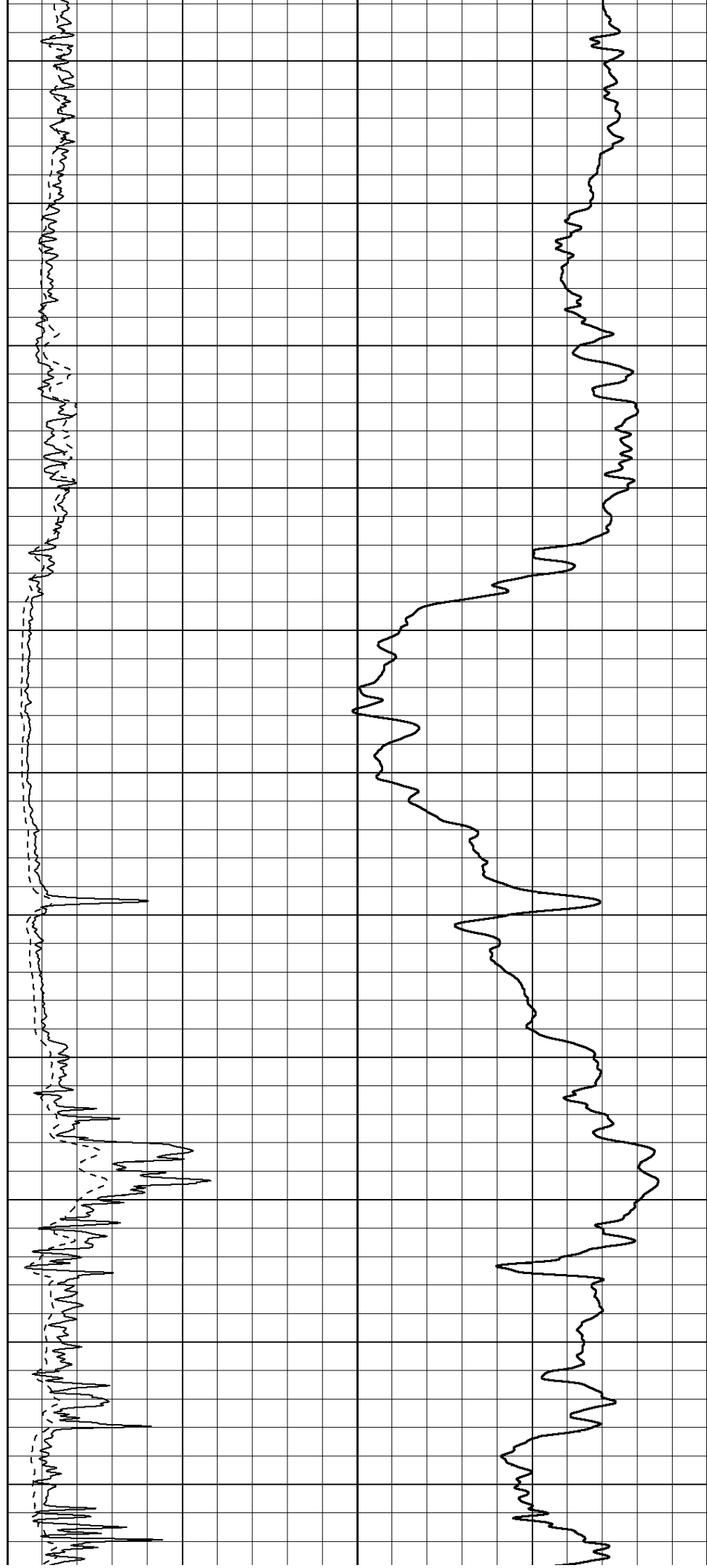
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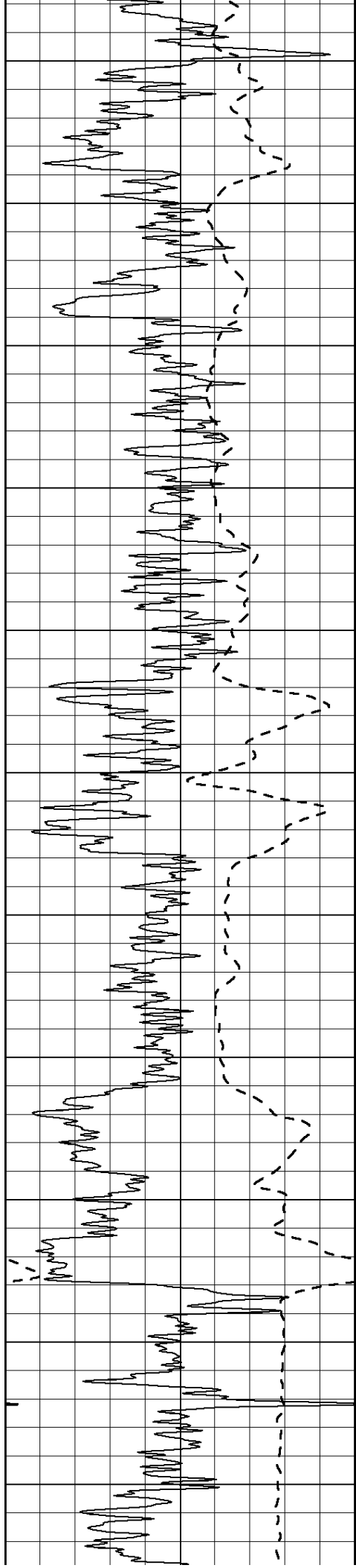
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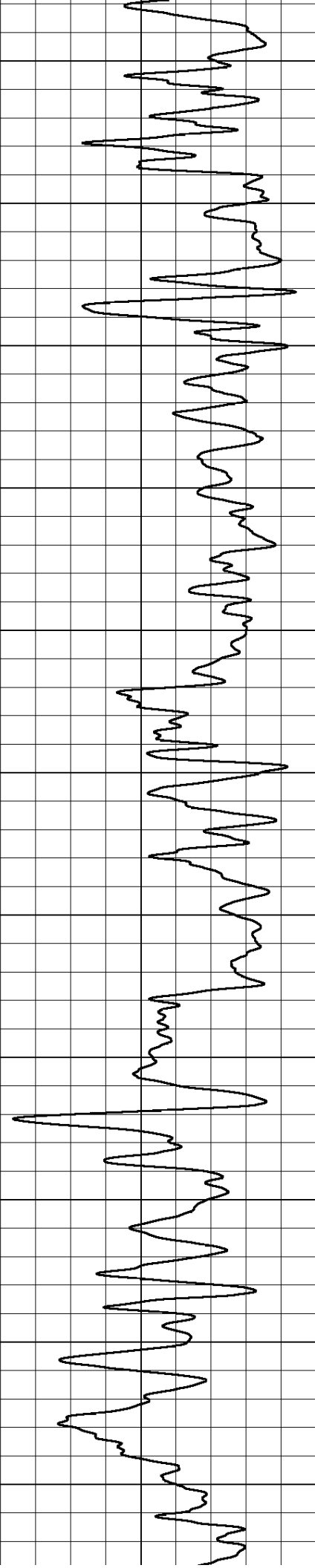
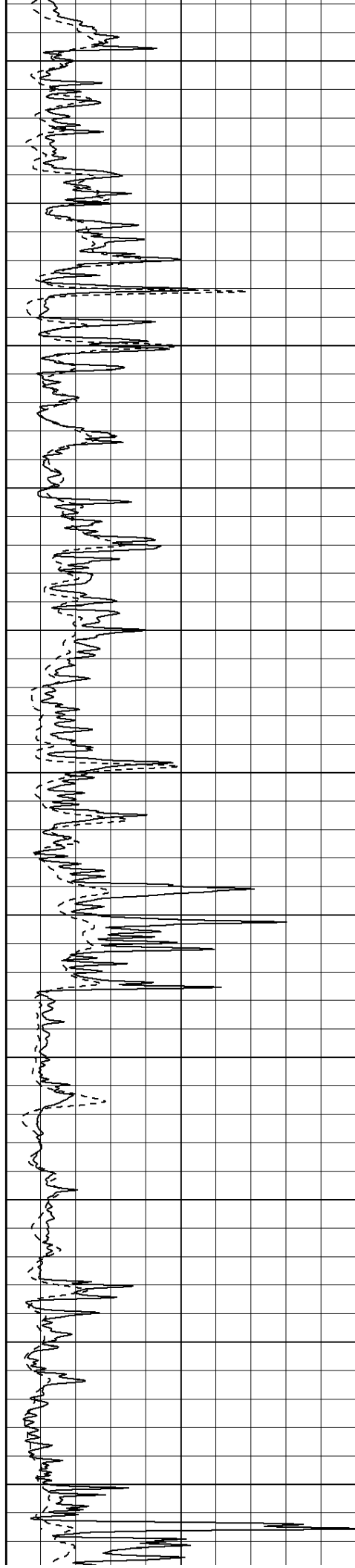
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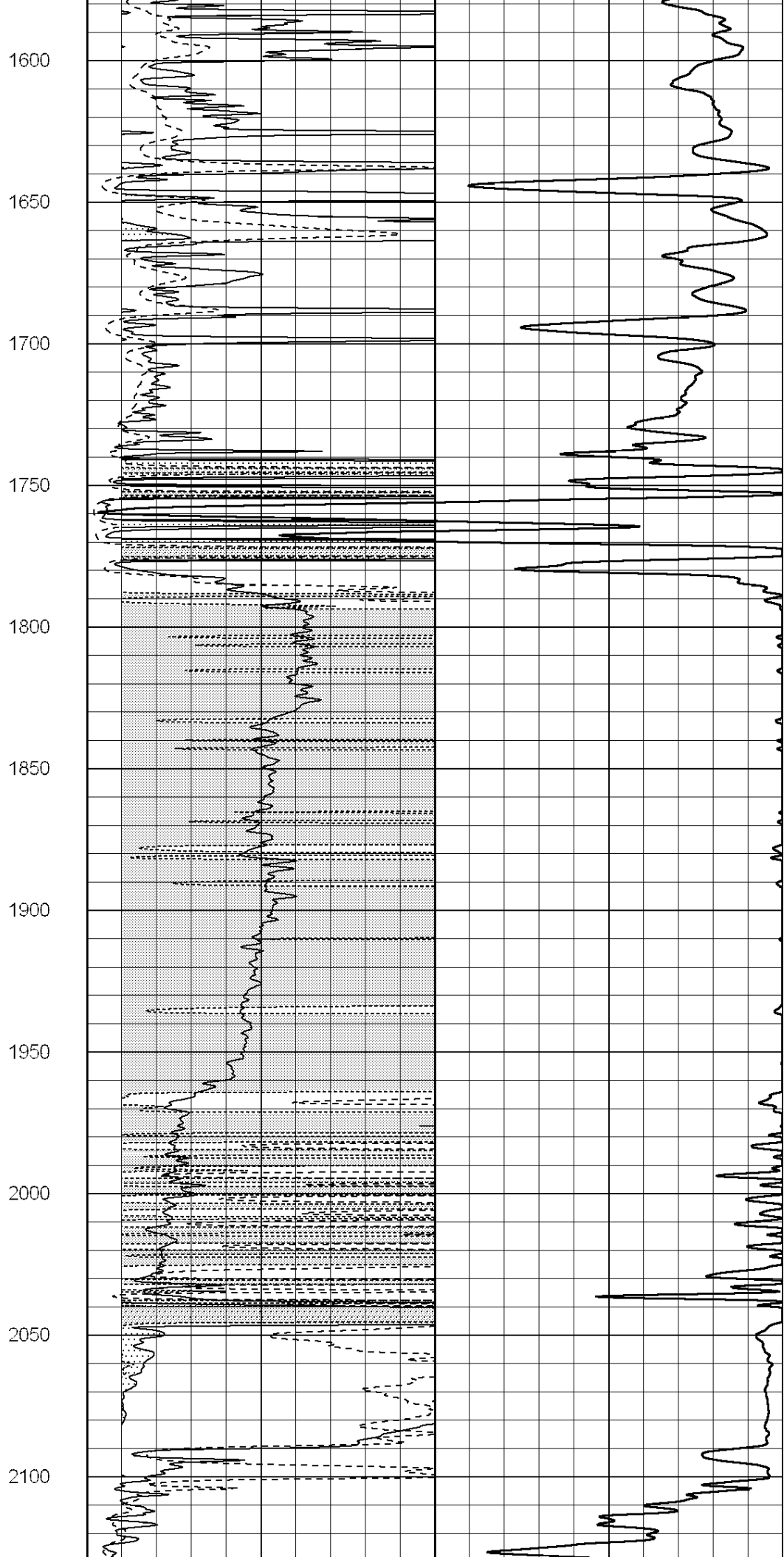
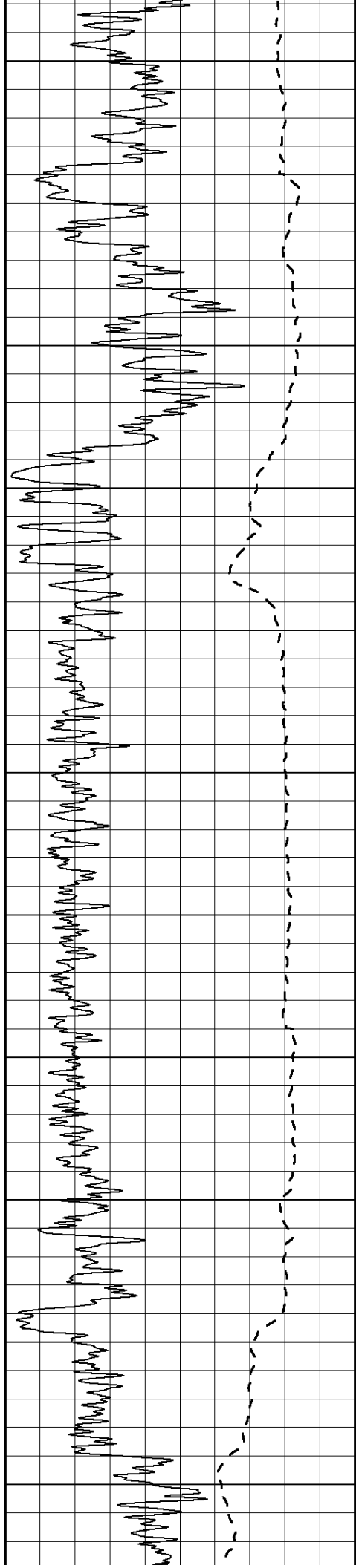
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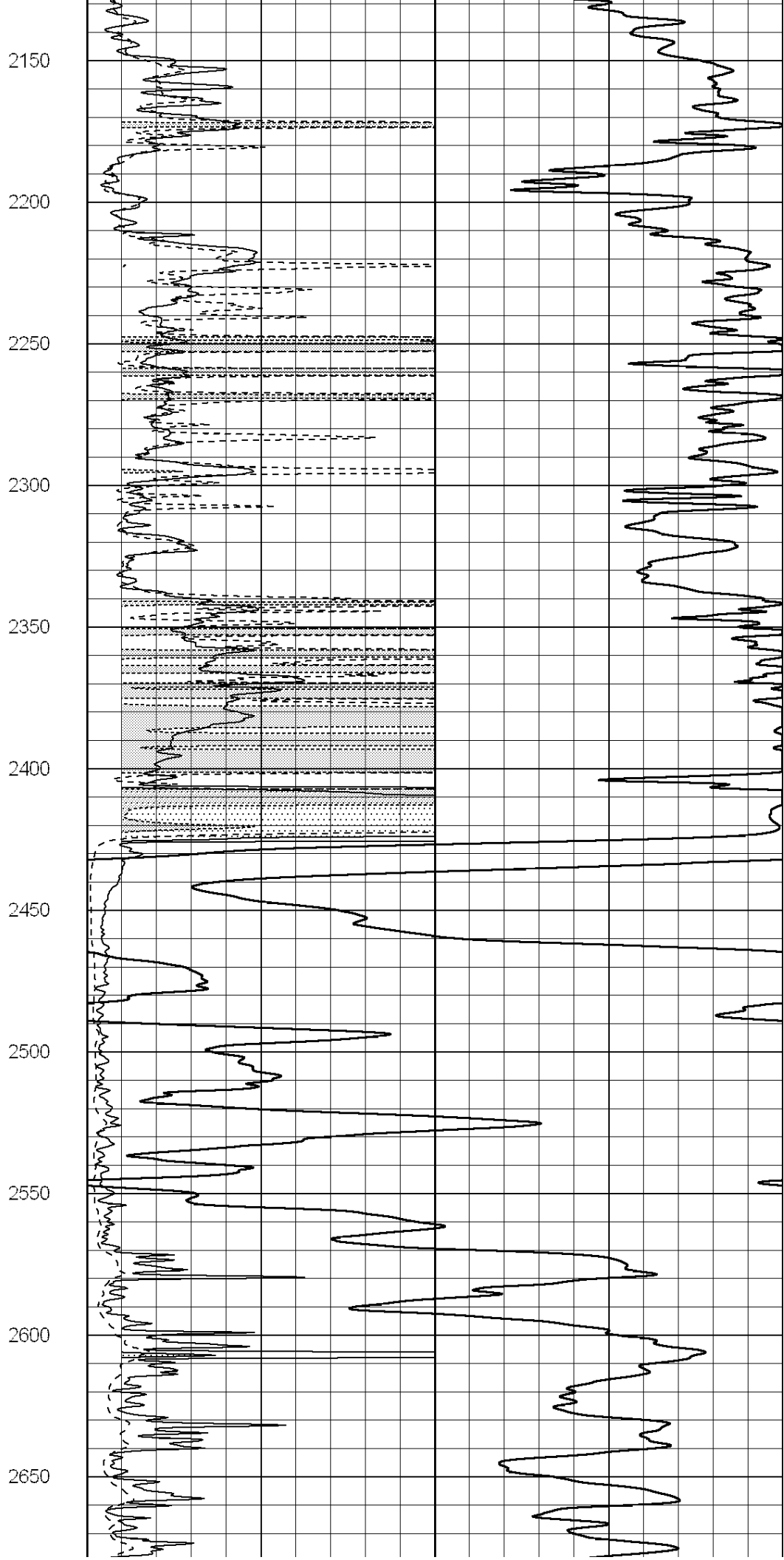
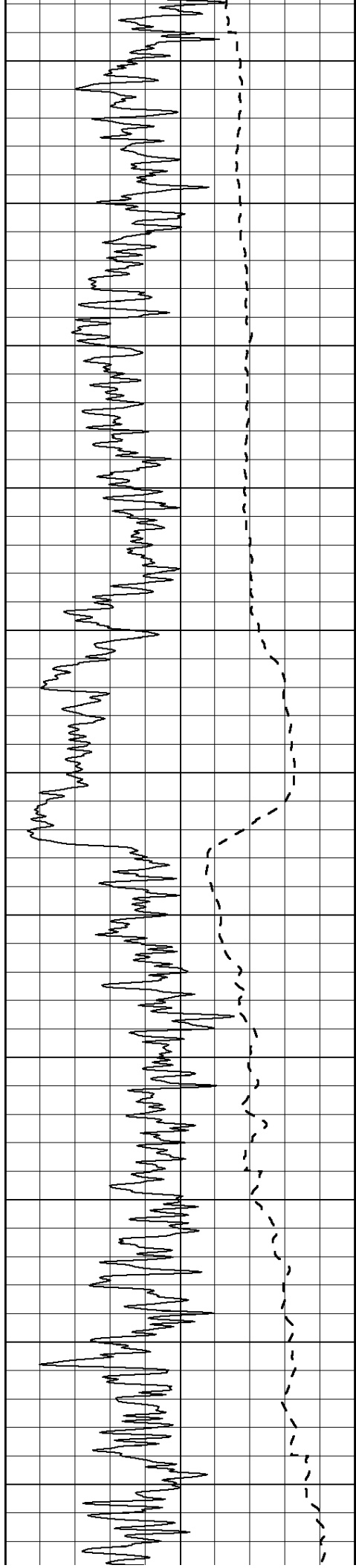


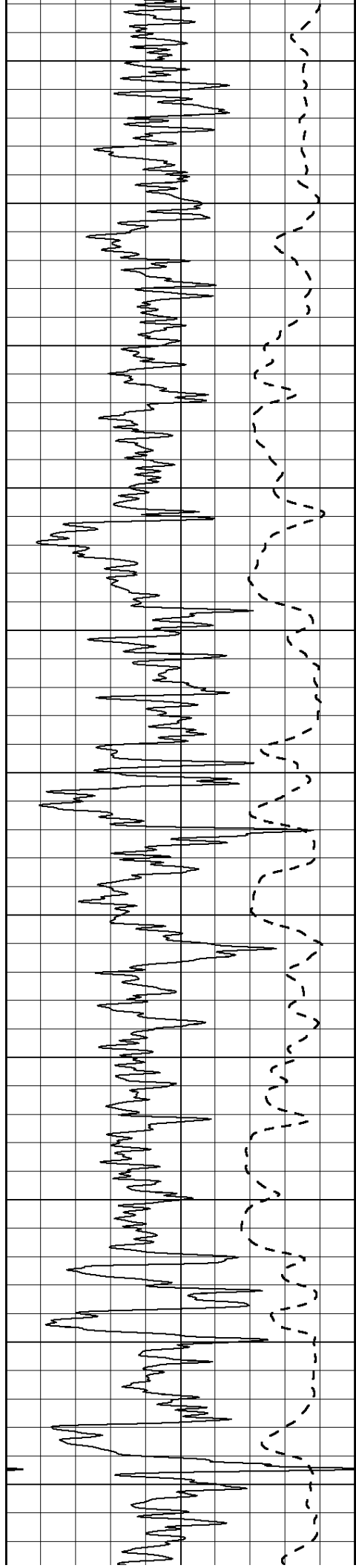


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1500
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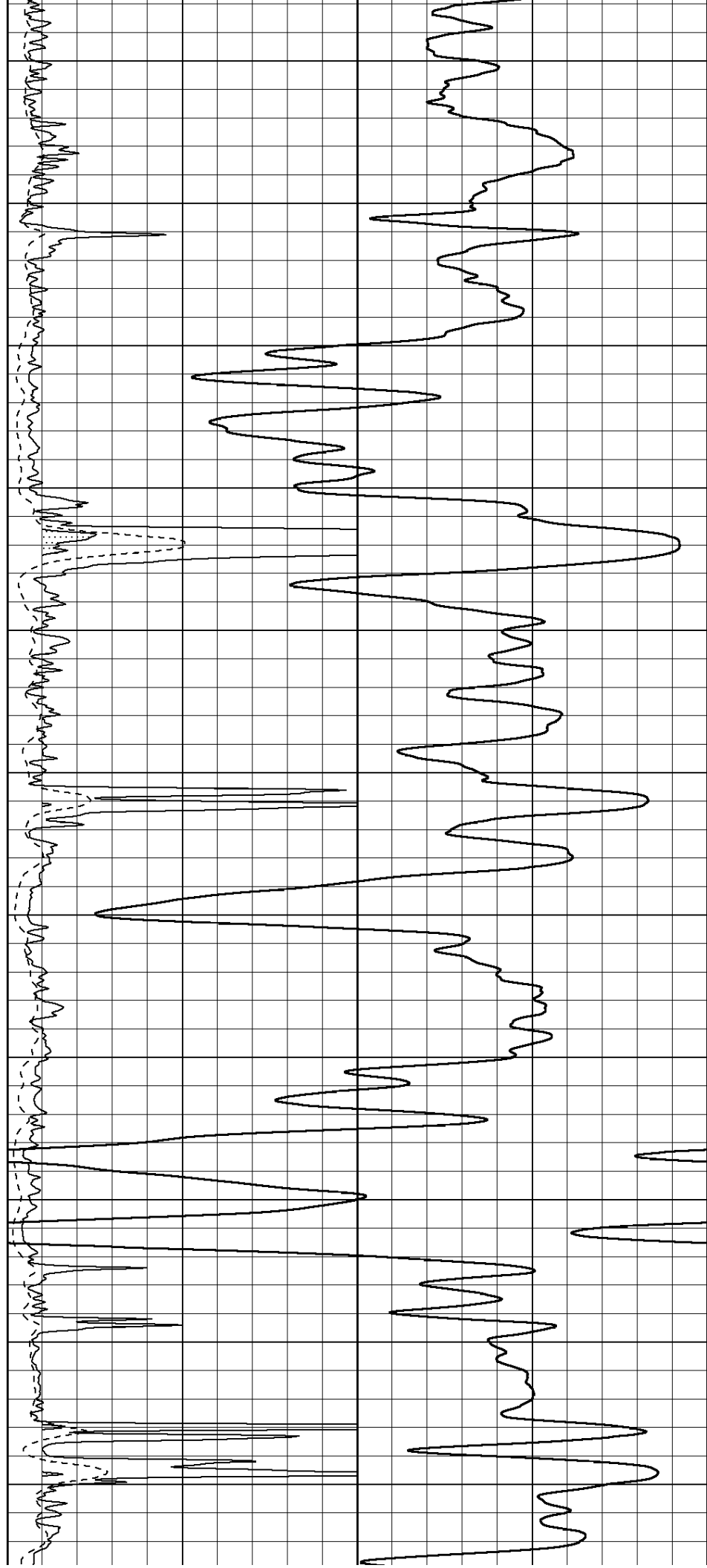
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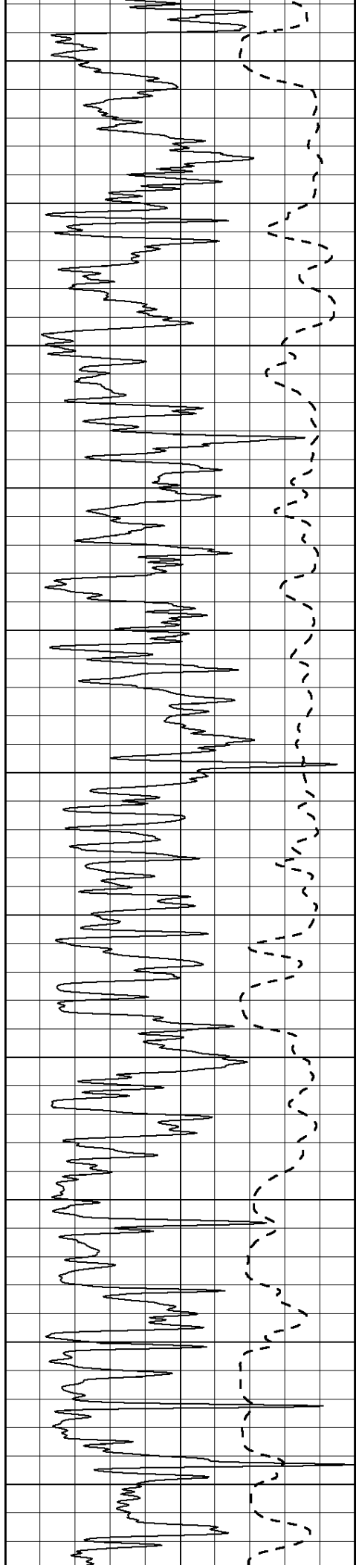
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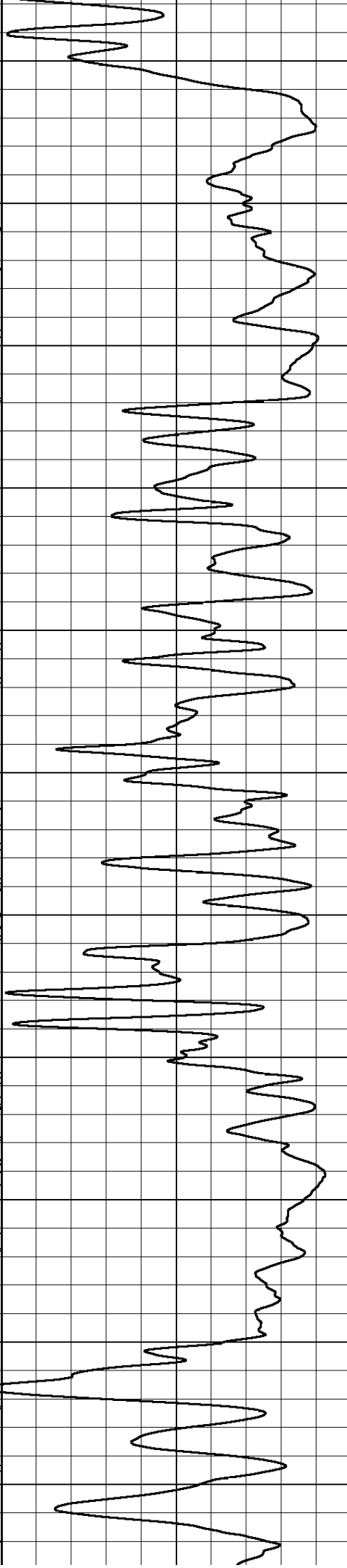
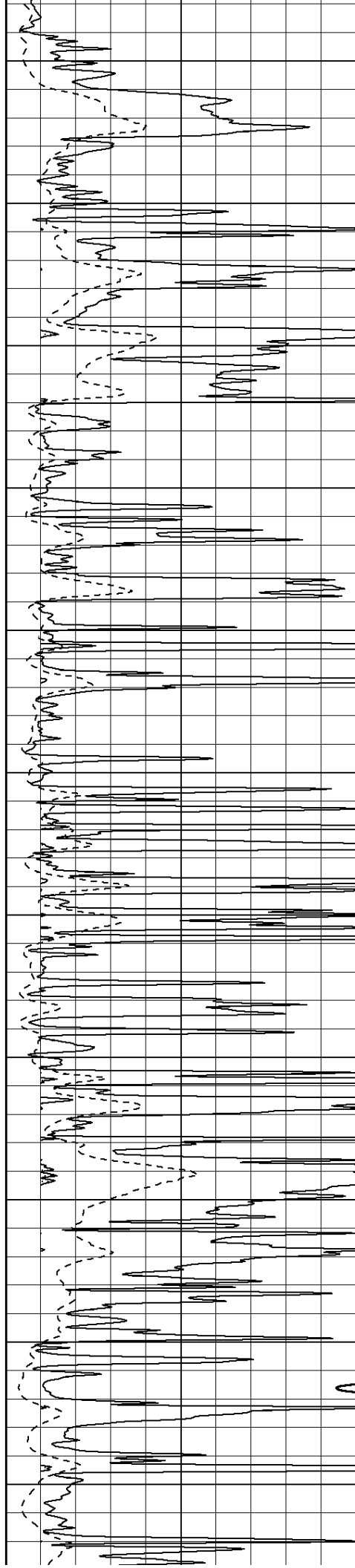
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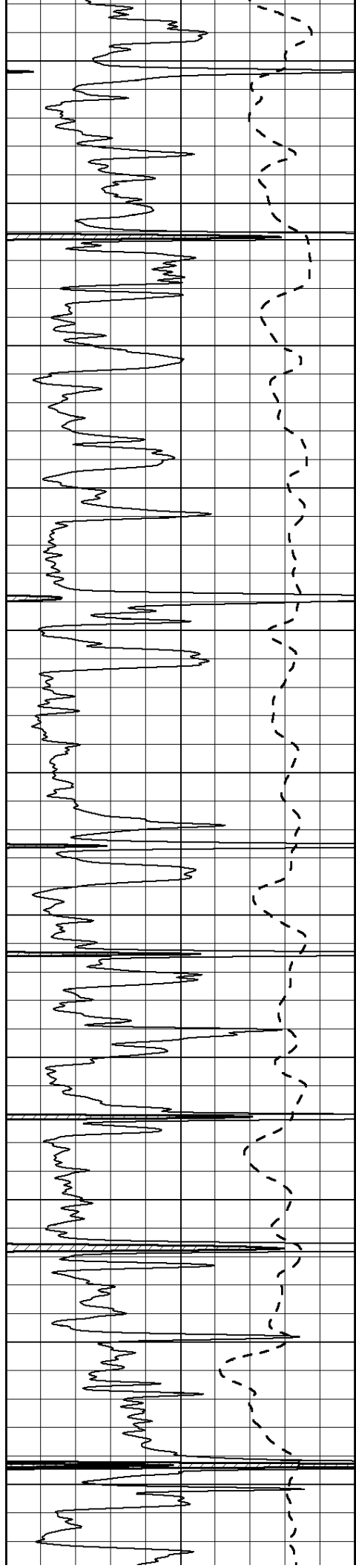
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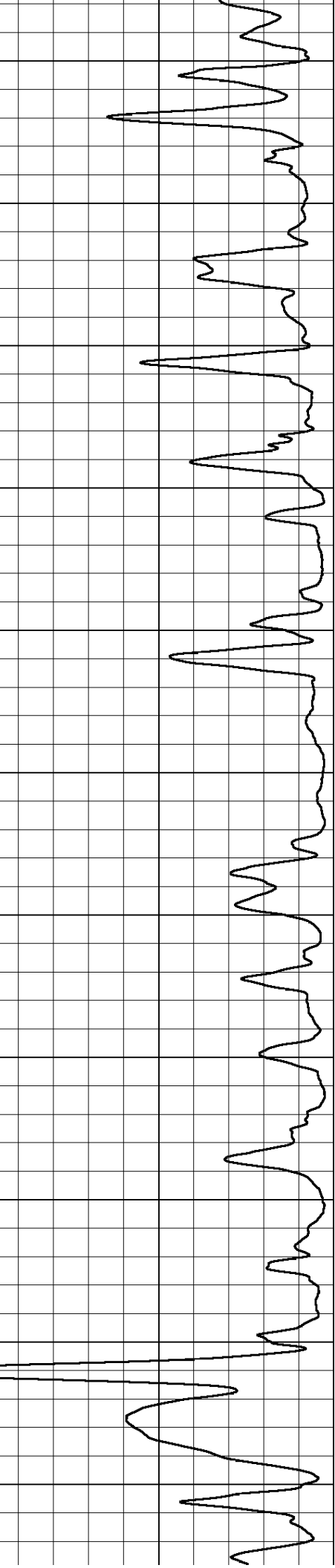
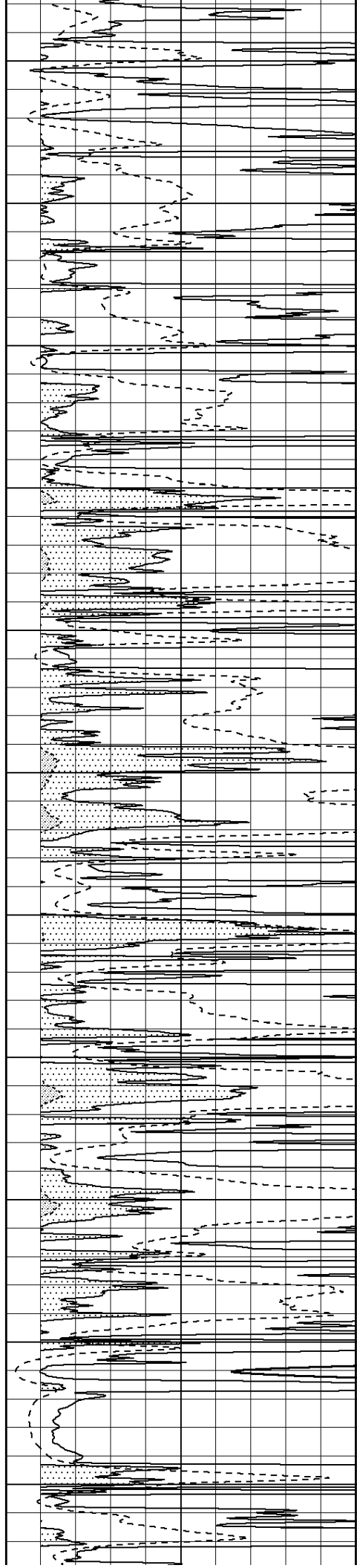


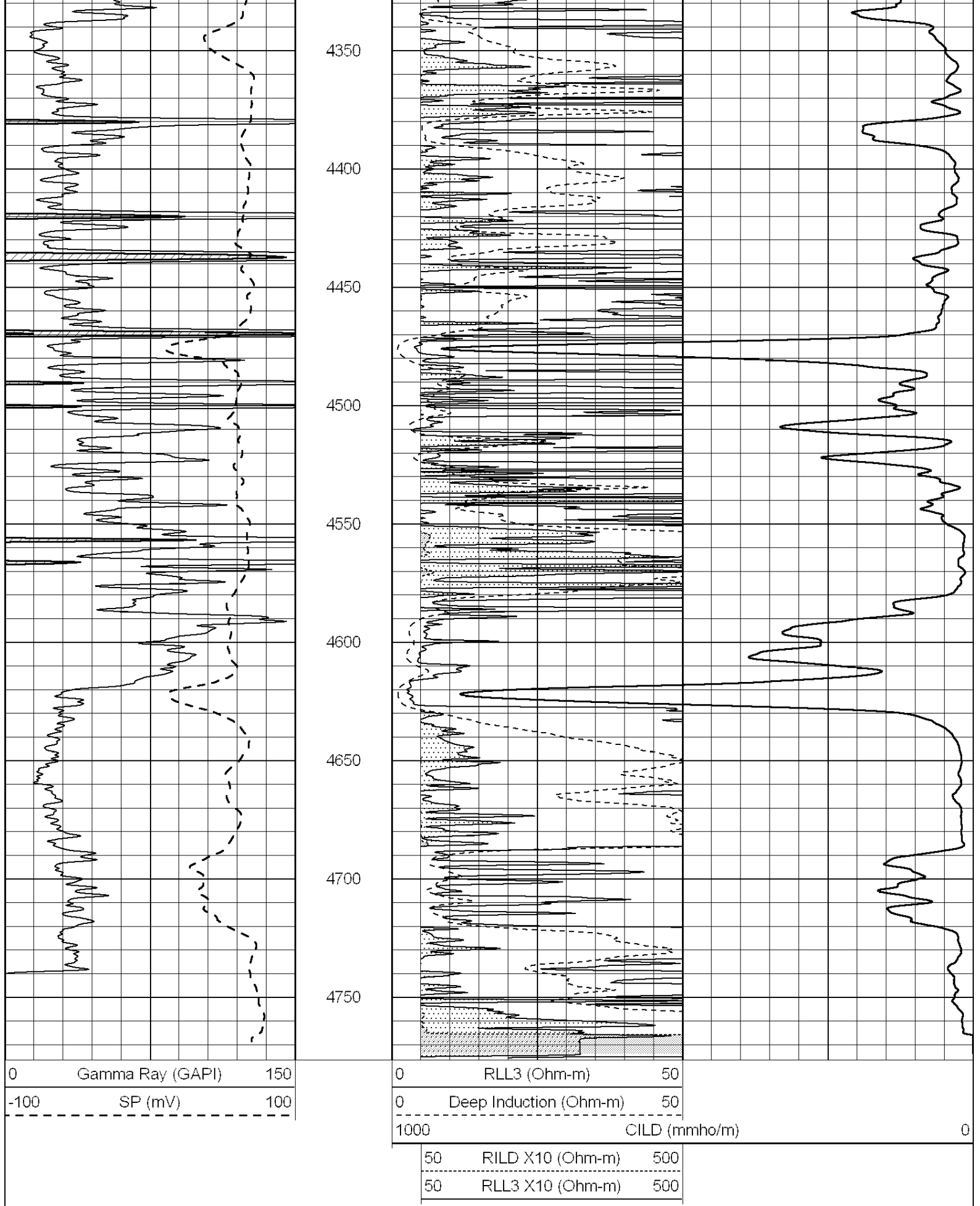
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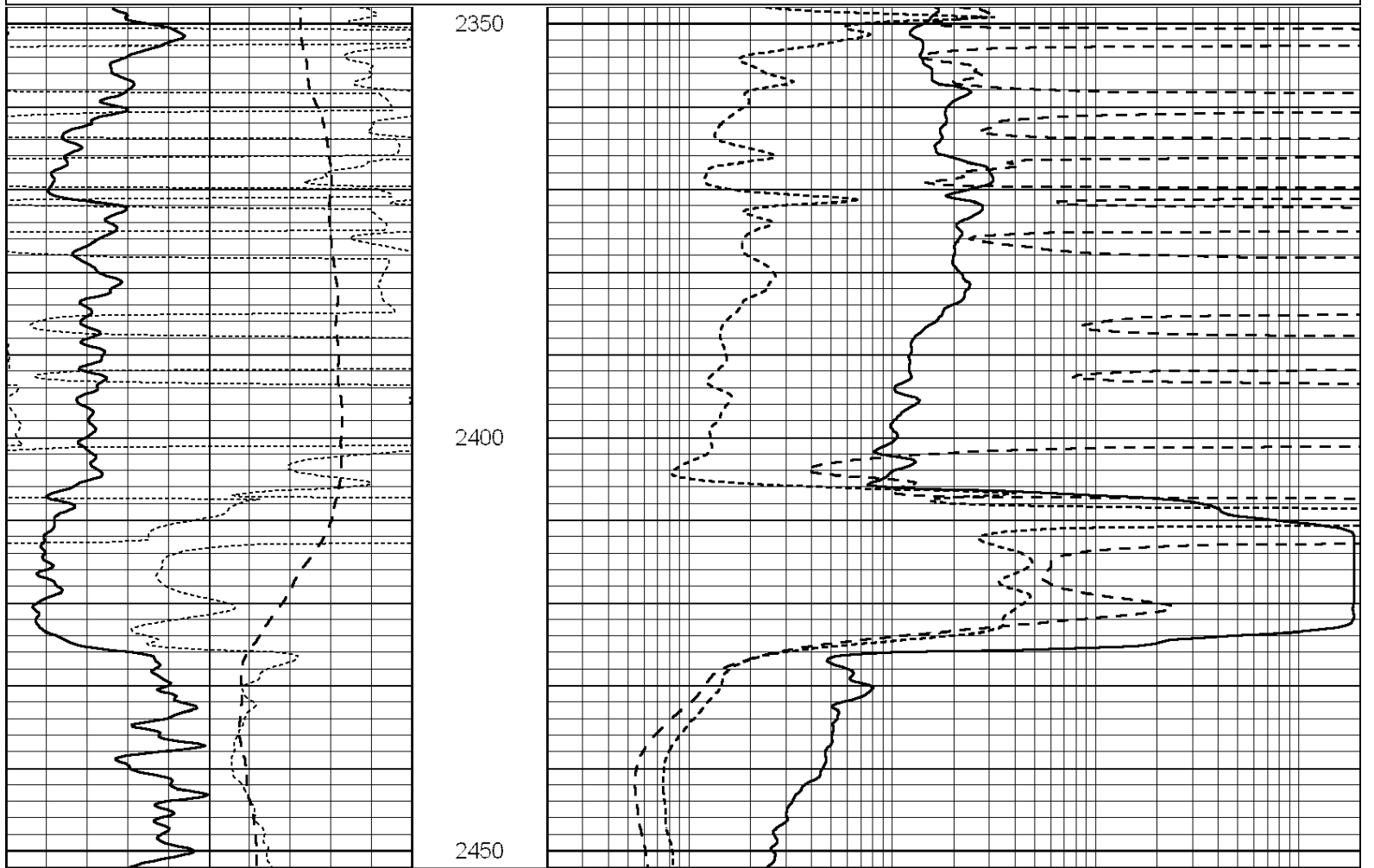
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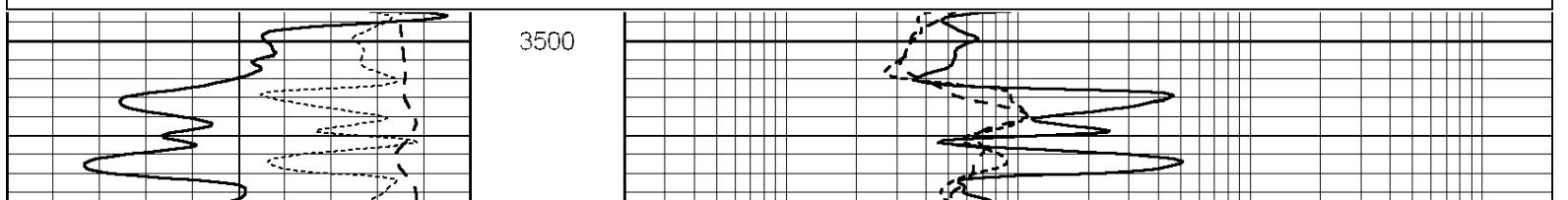
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 Dataset Pathname: pass3.5
 Presentation Format: dil

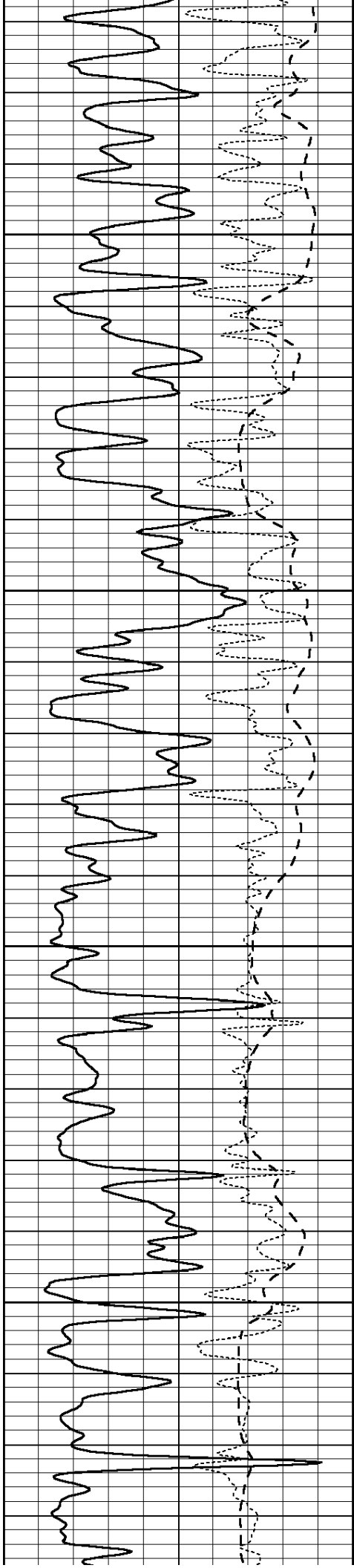
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-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



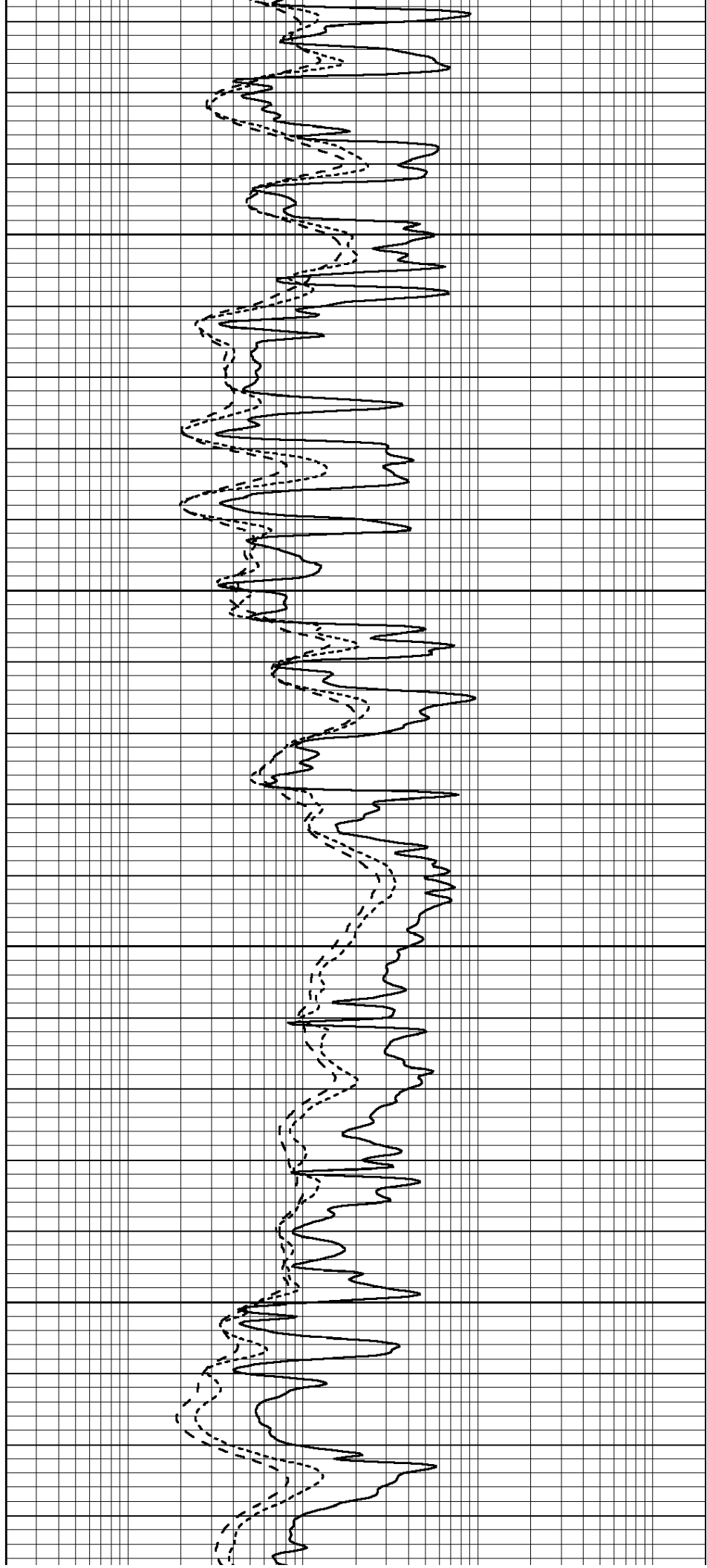


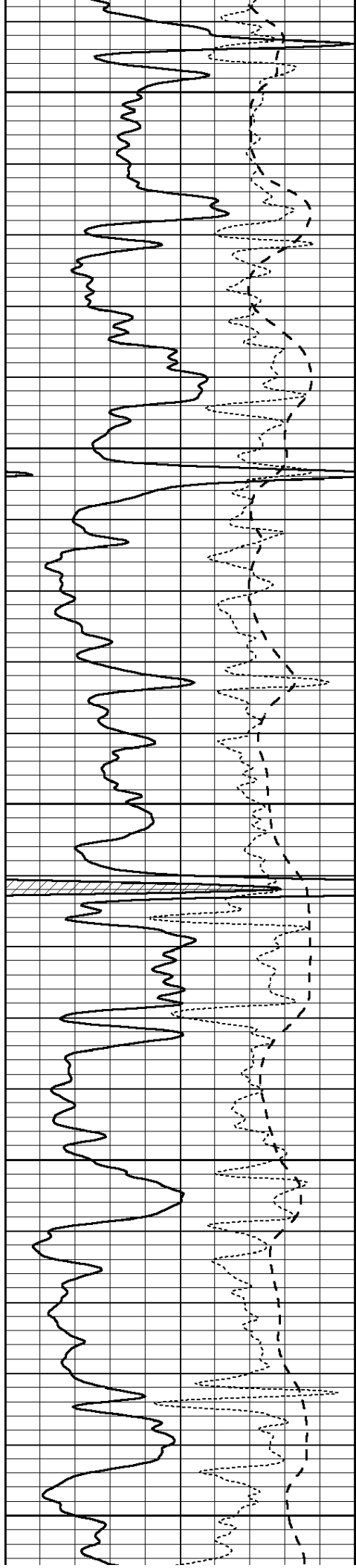
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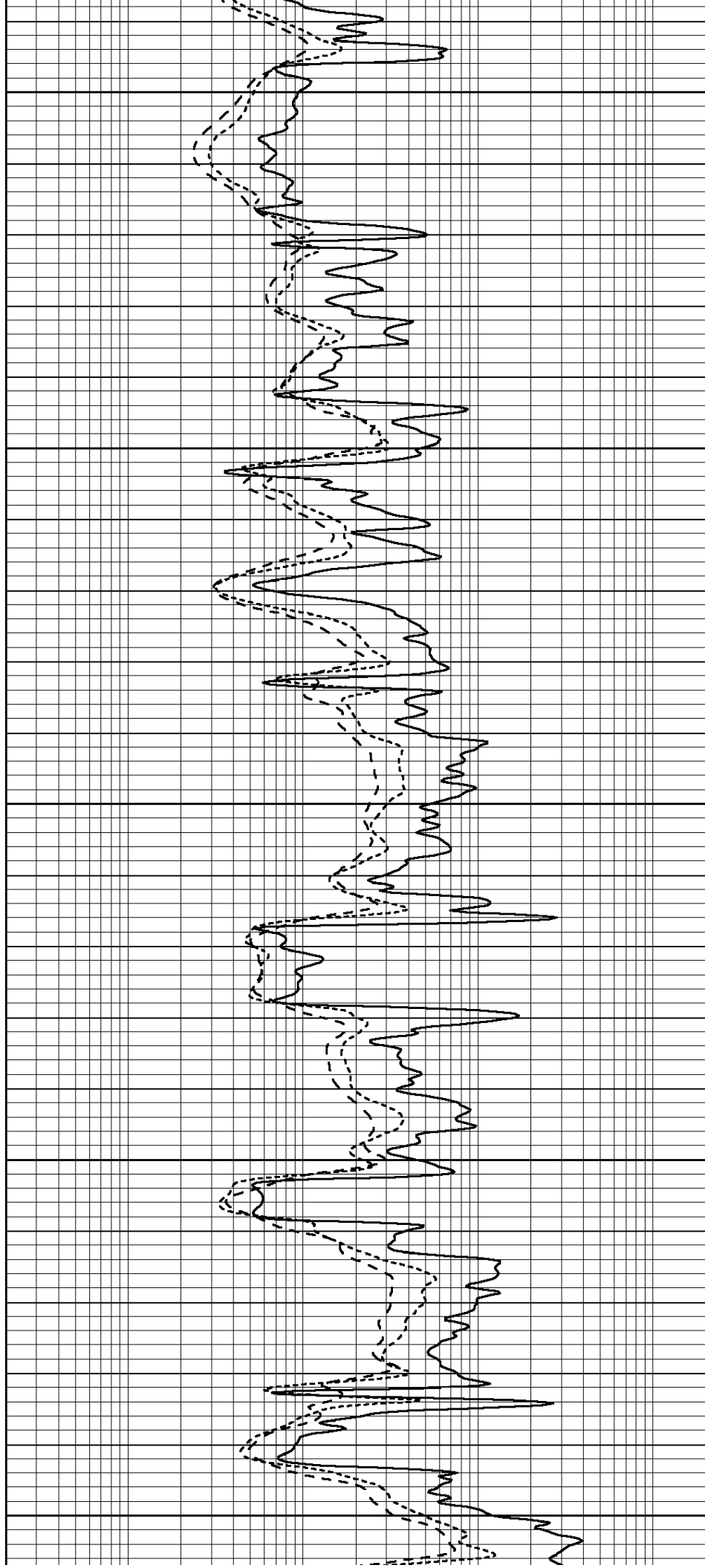
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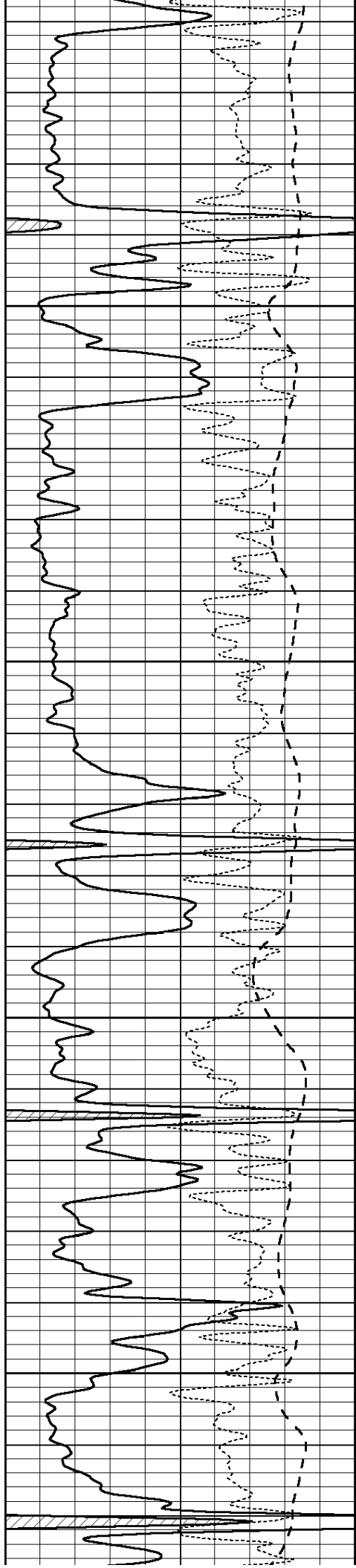
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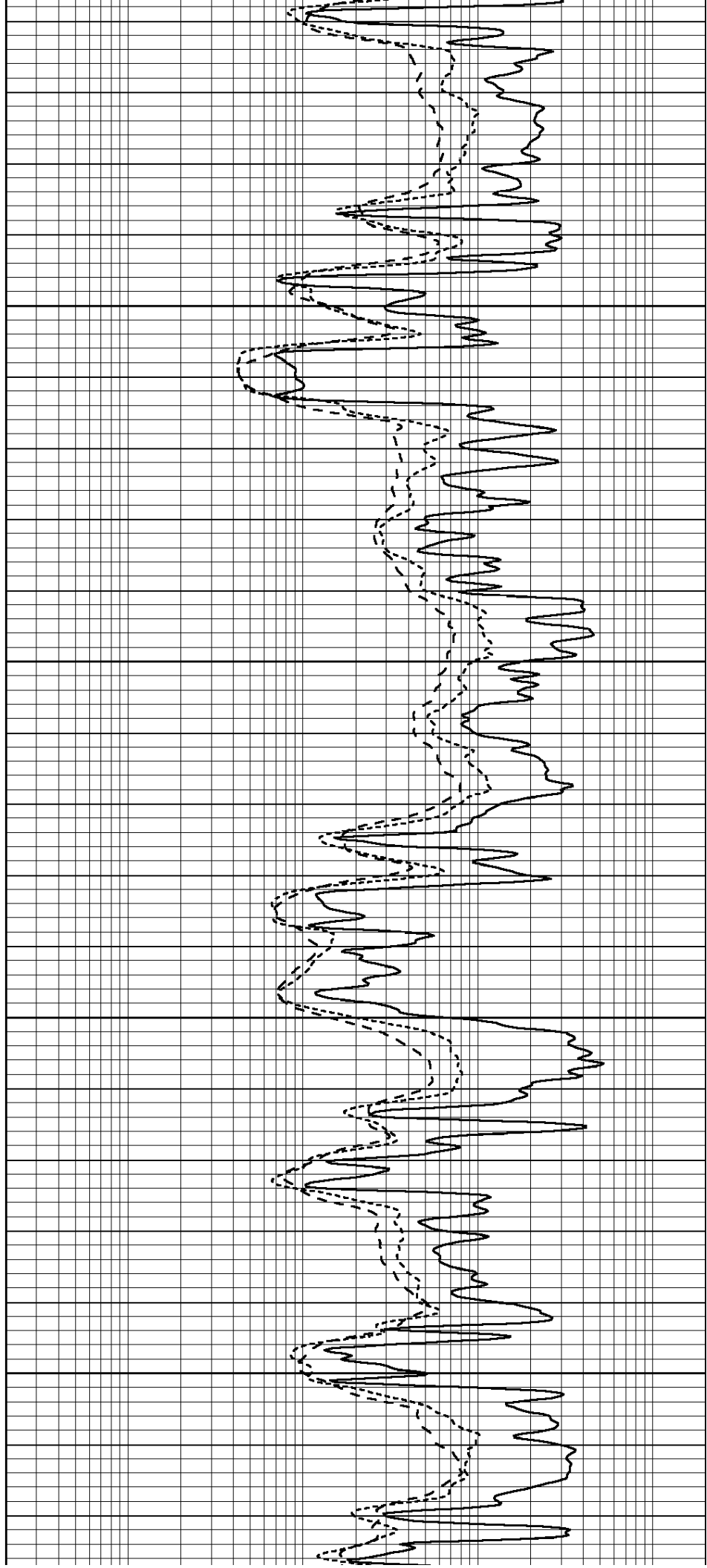


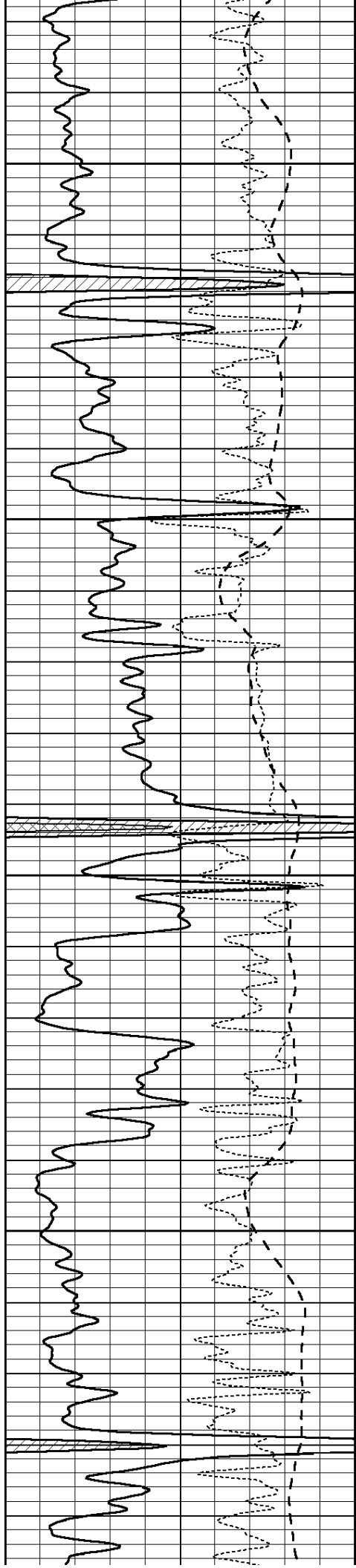
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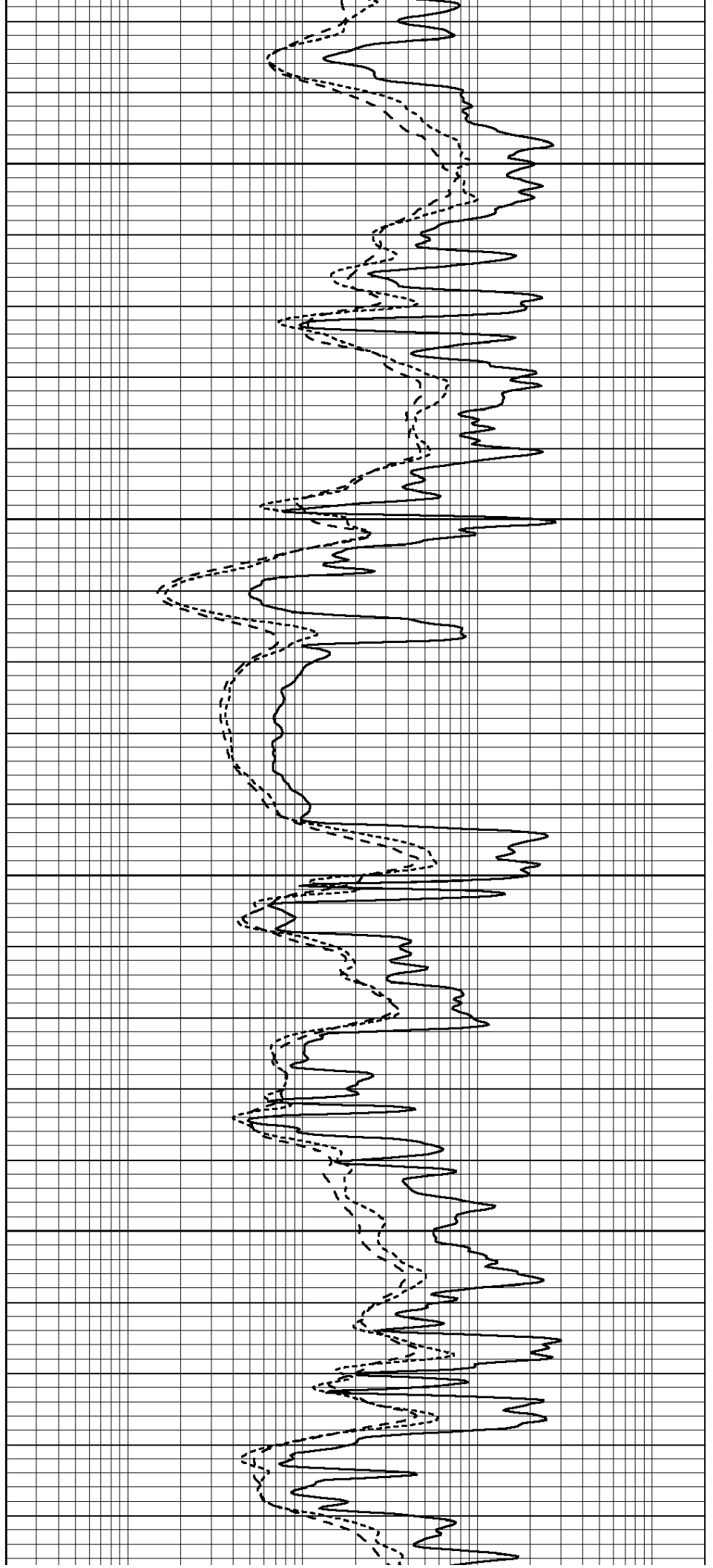


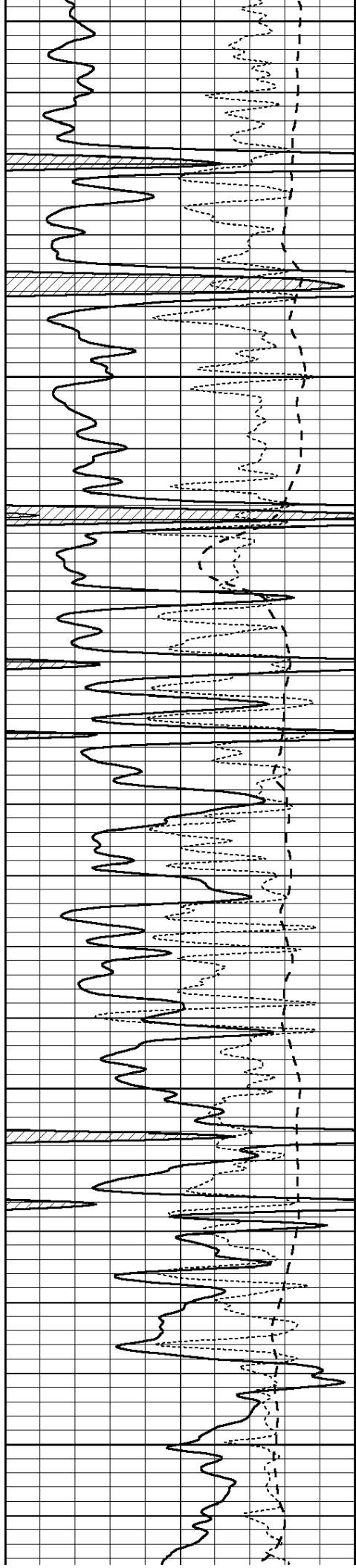
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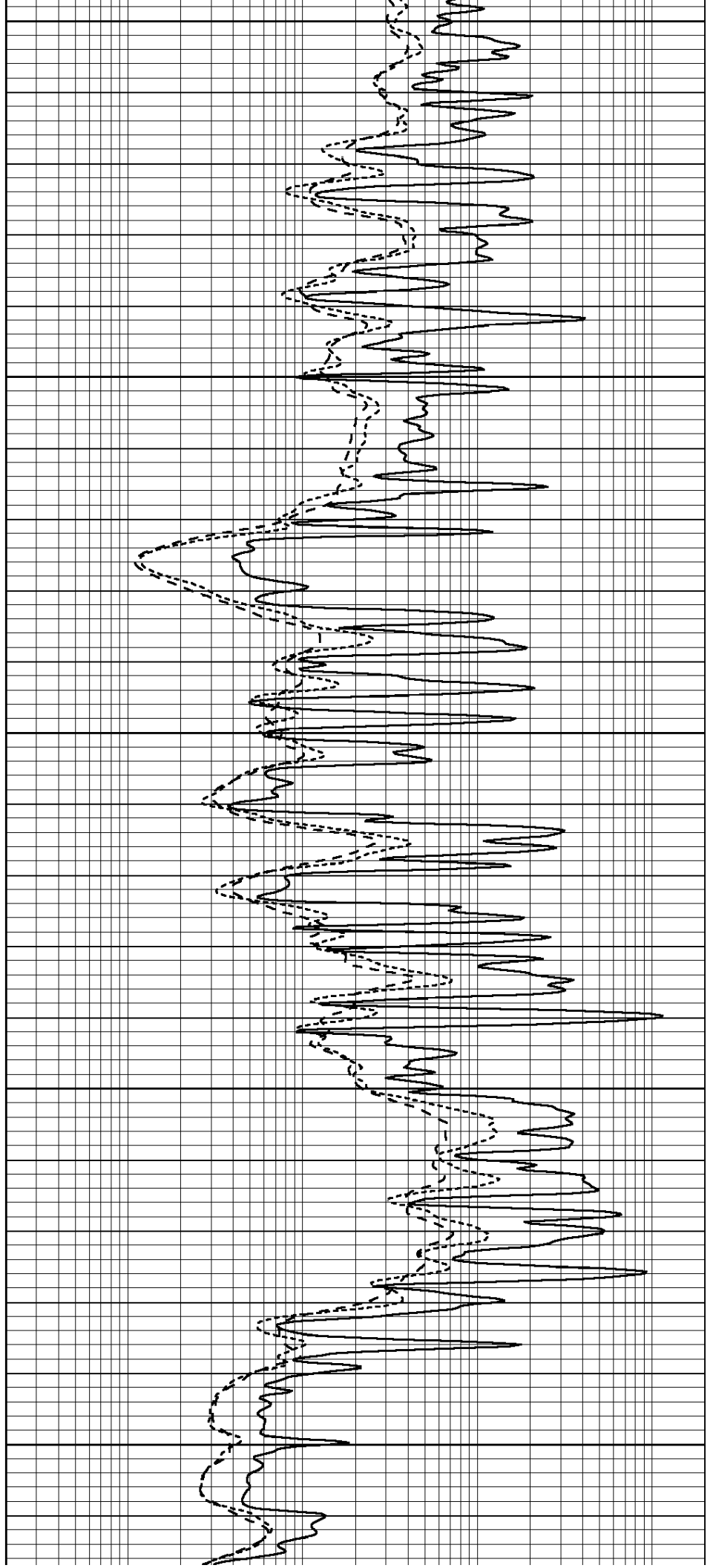
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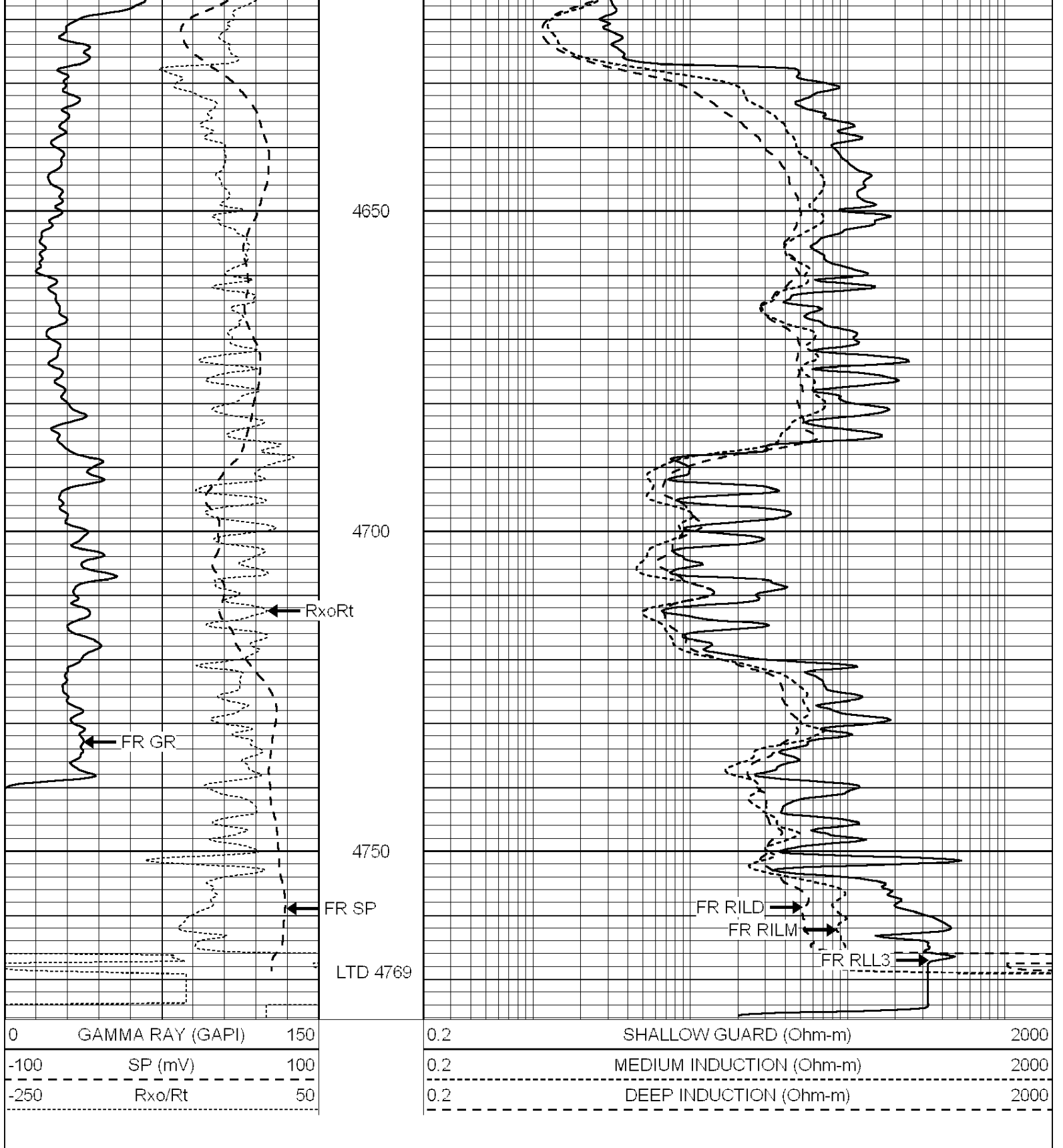
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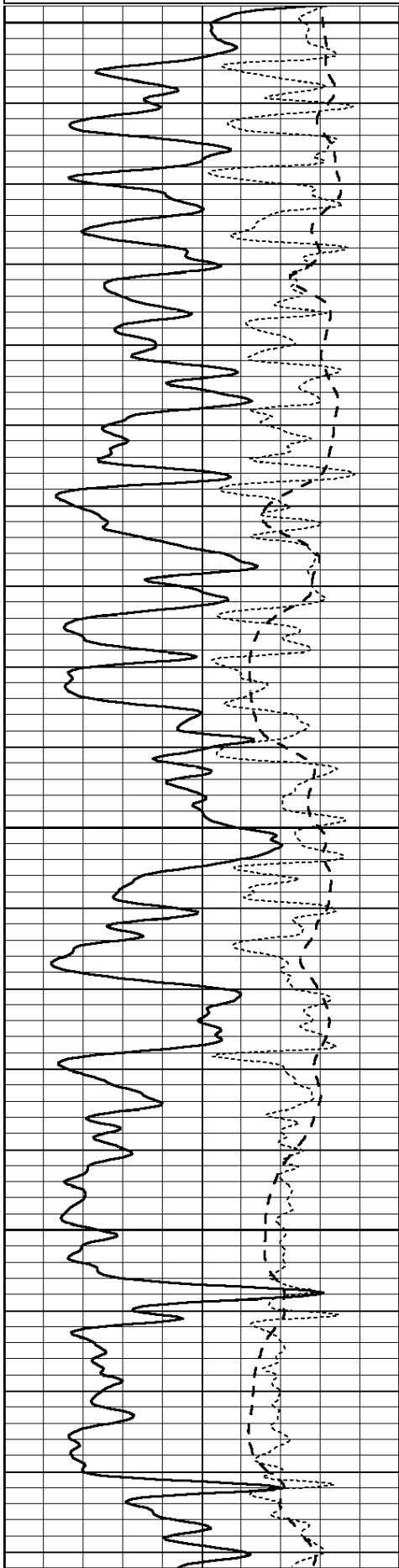
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 006039pe.db
 Dataset Pathname: pass2.5
 Presentation Format: _dil
 Dataset Creation: Tue Nov 16 15:52:37 2010 by Calc Open-Cased 090629

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

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

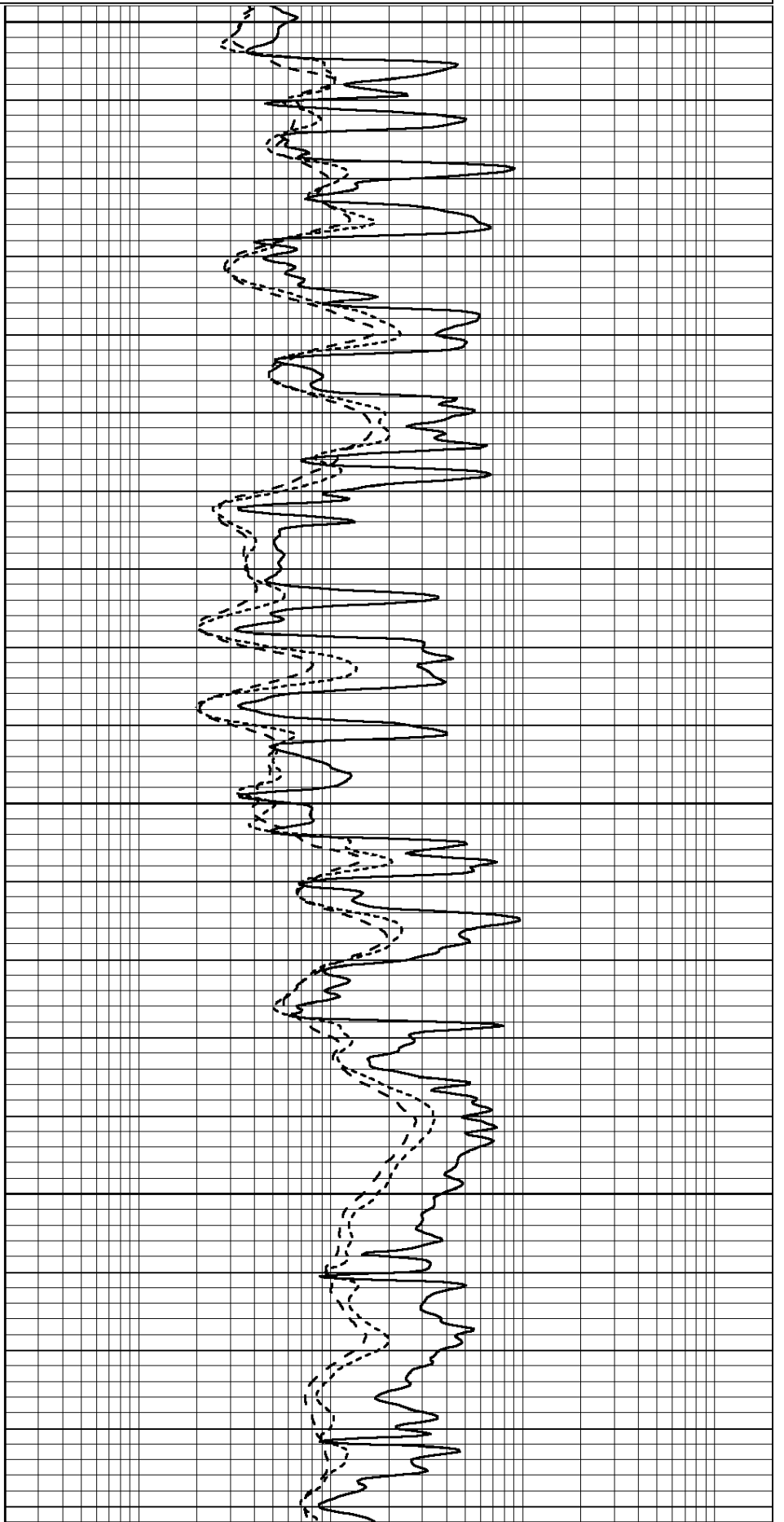


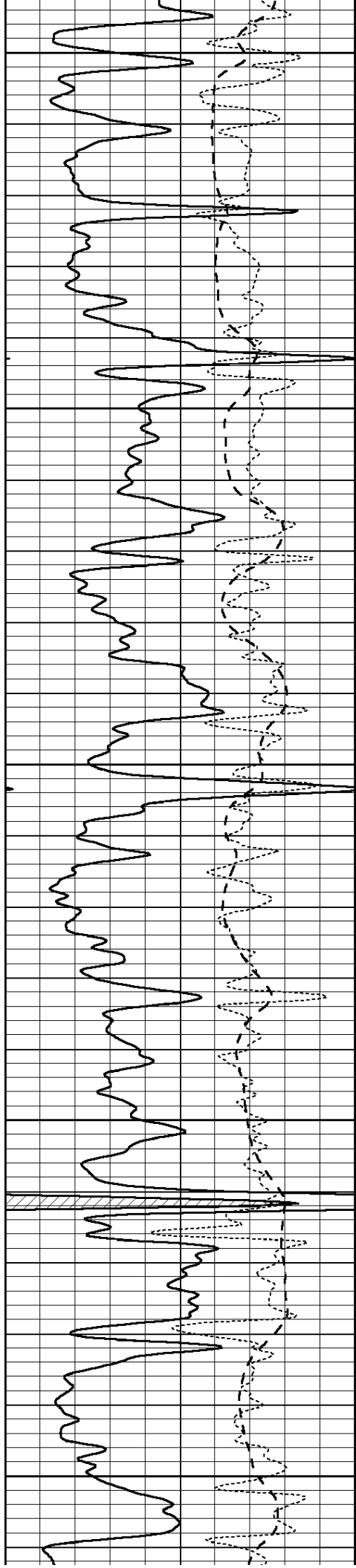
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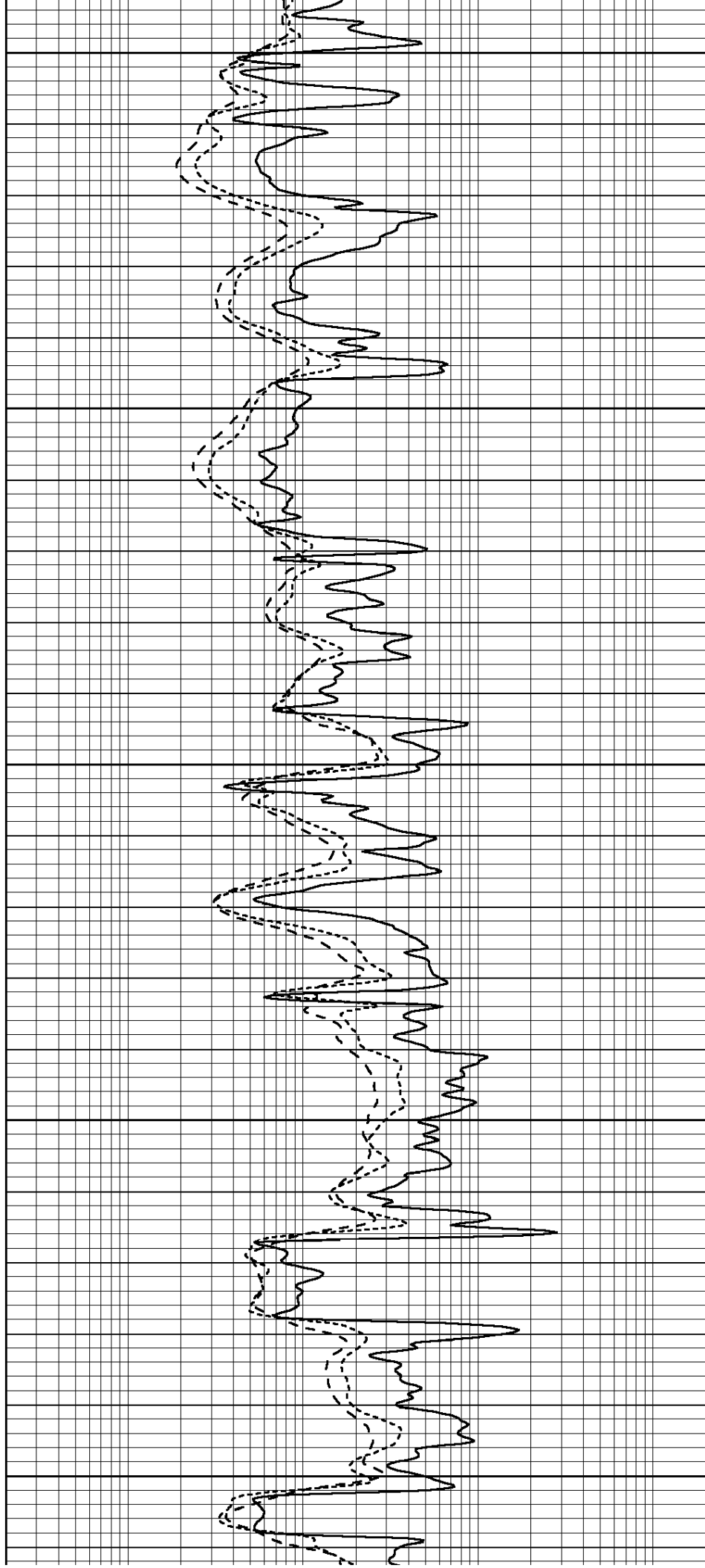
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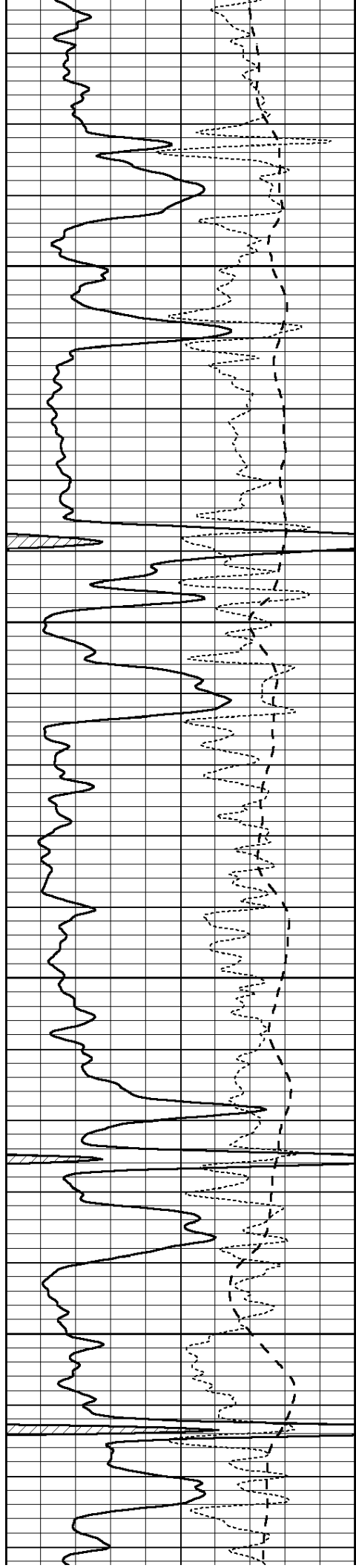
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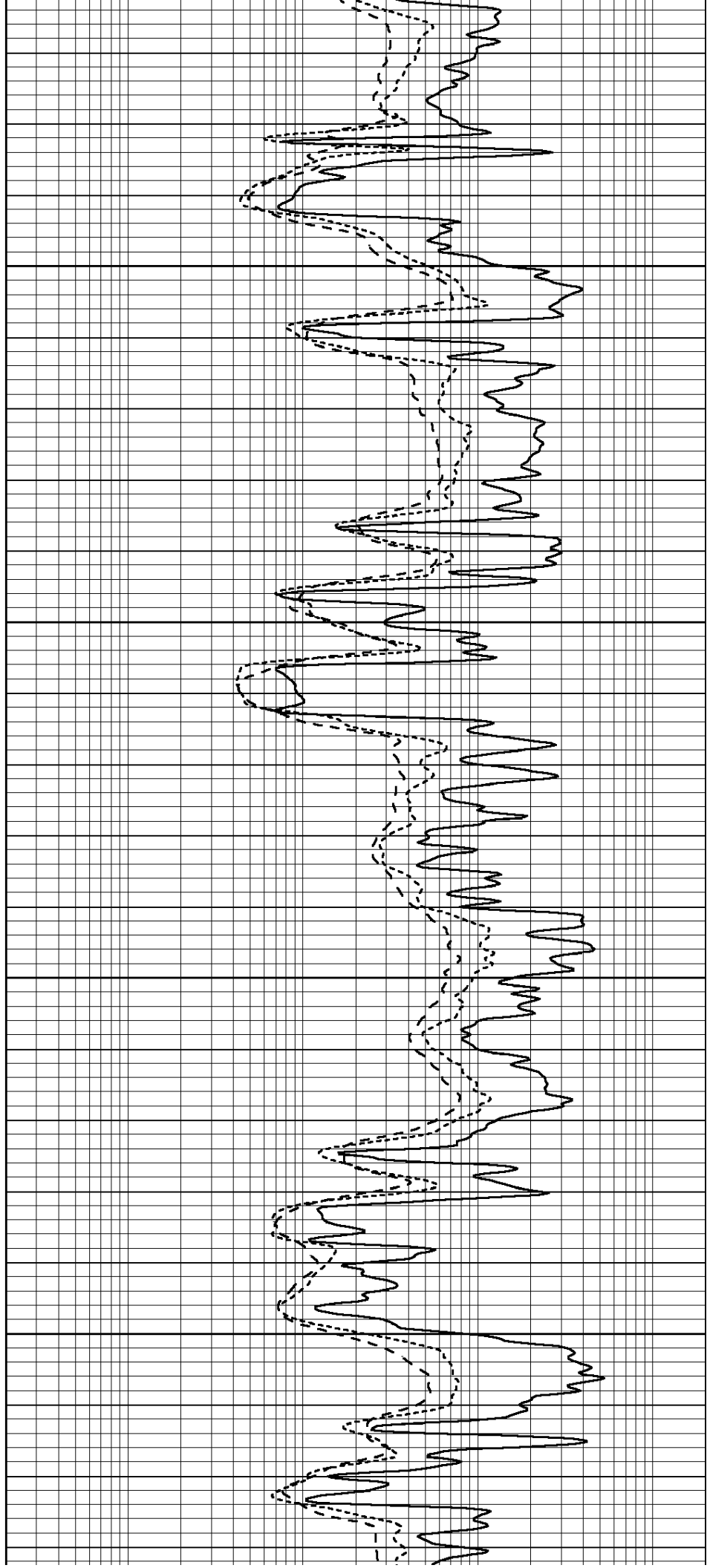


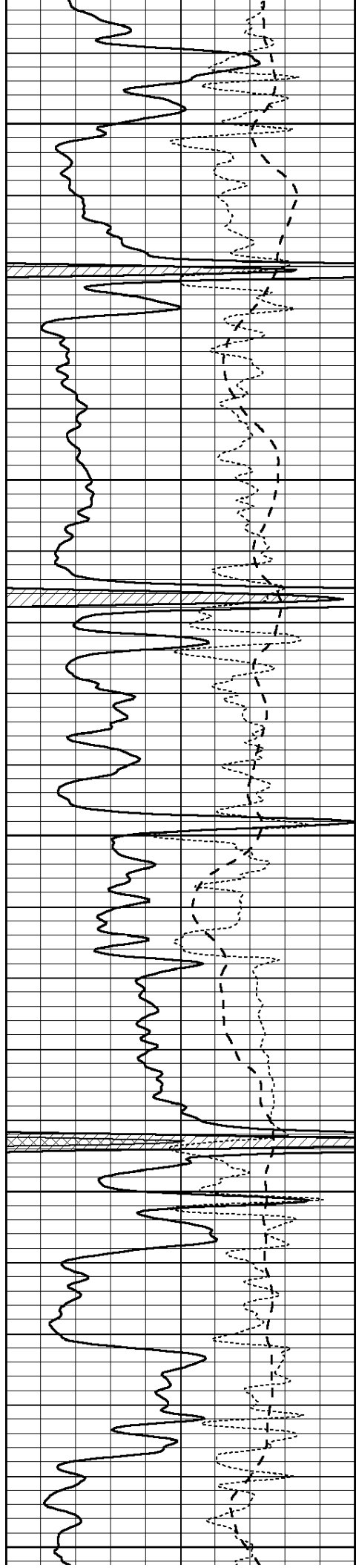
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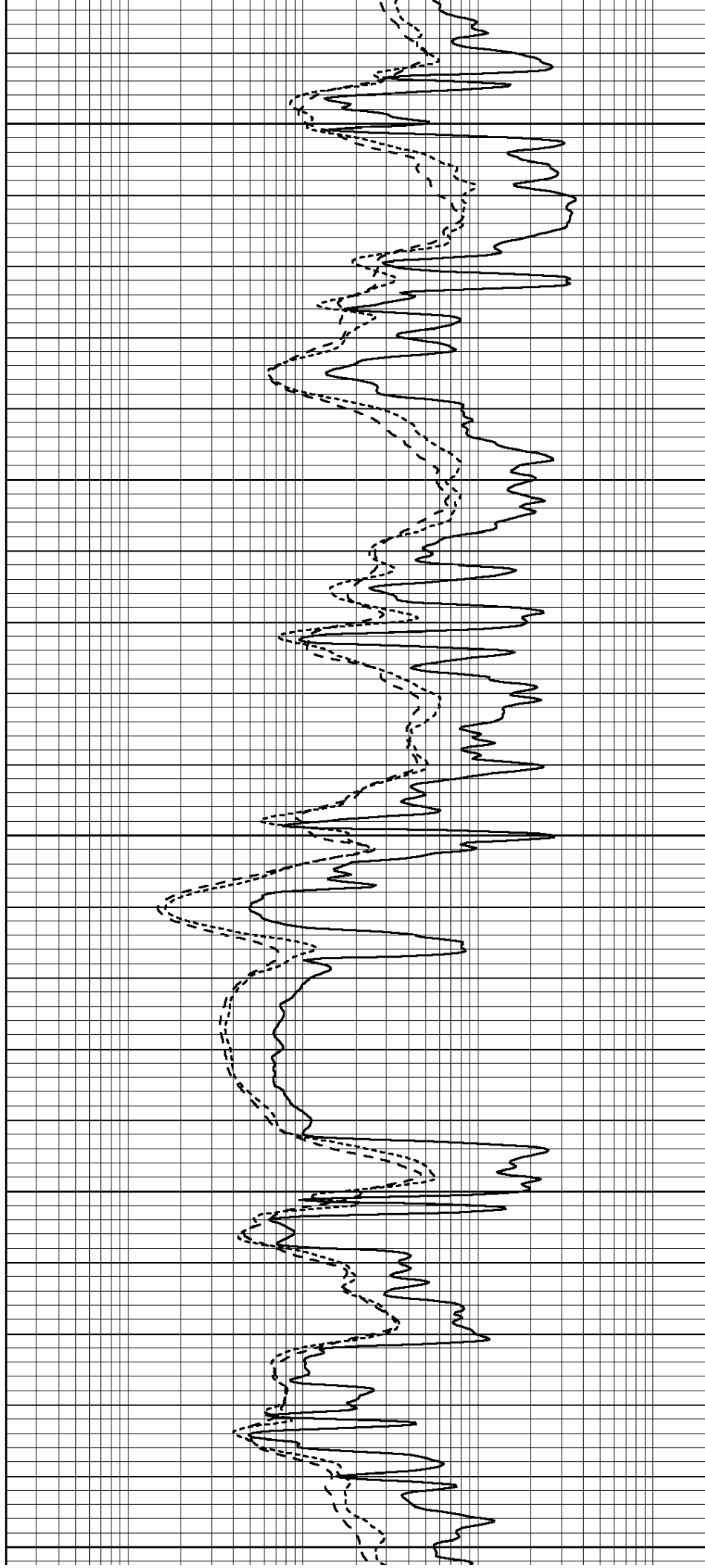
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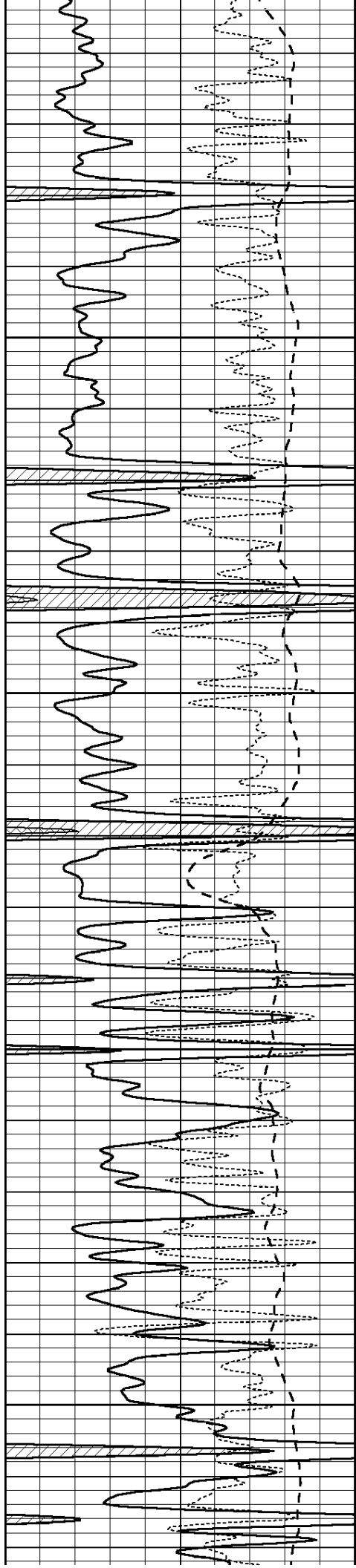
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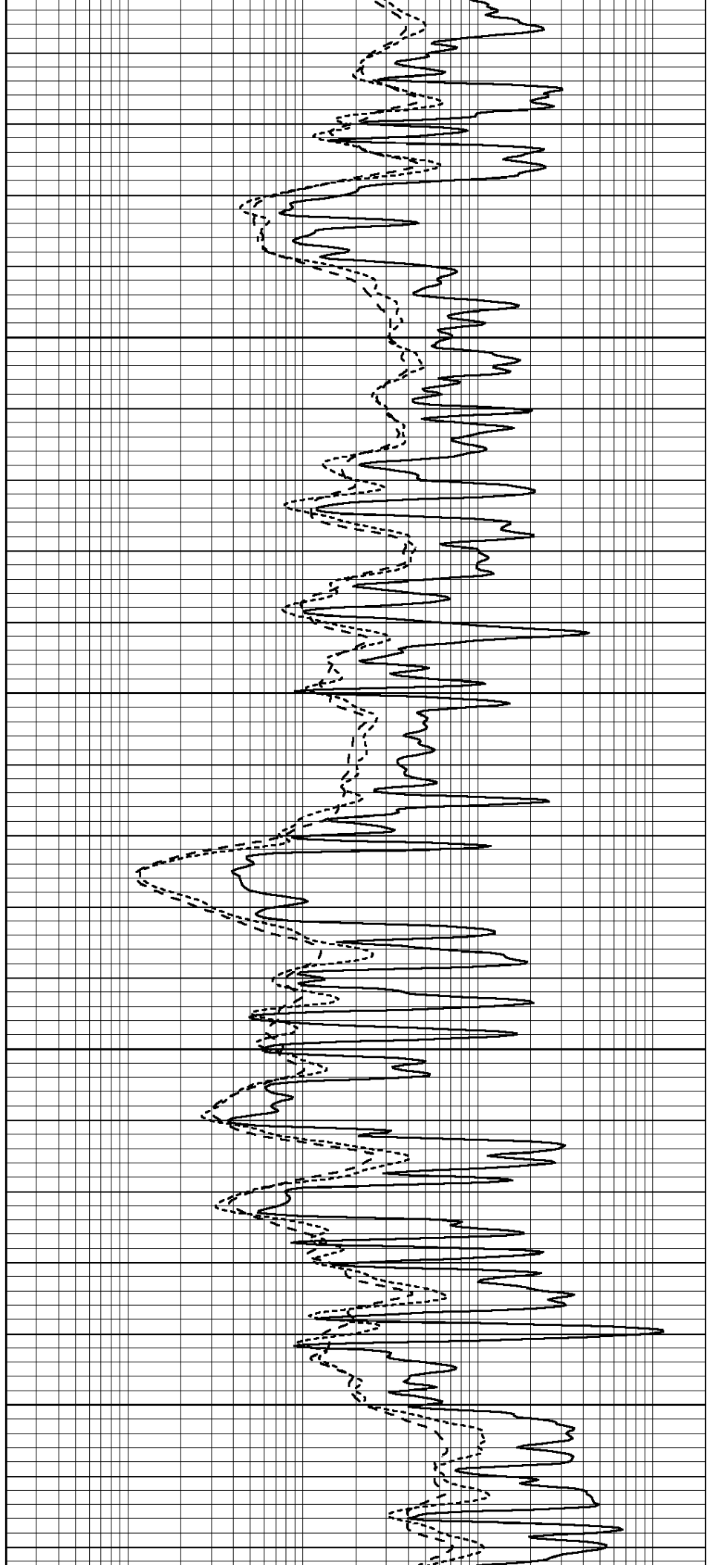


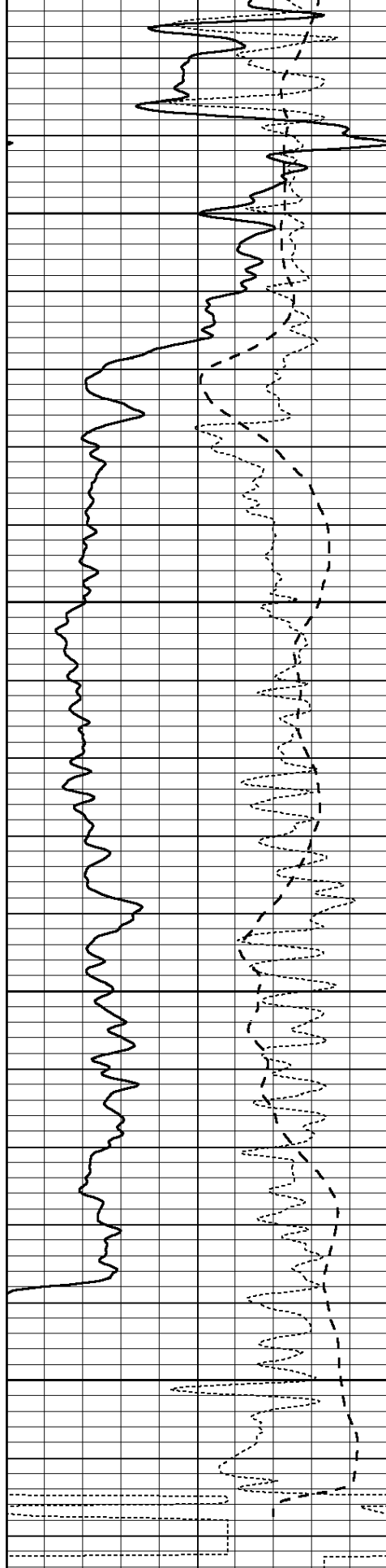
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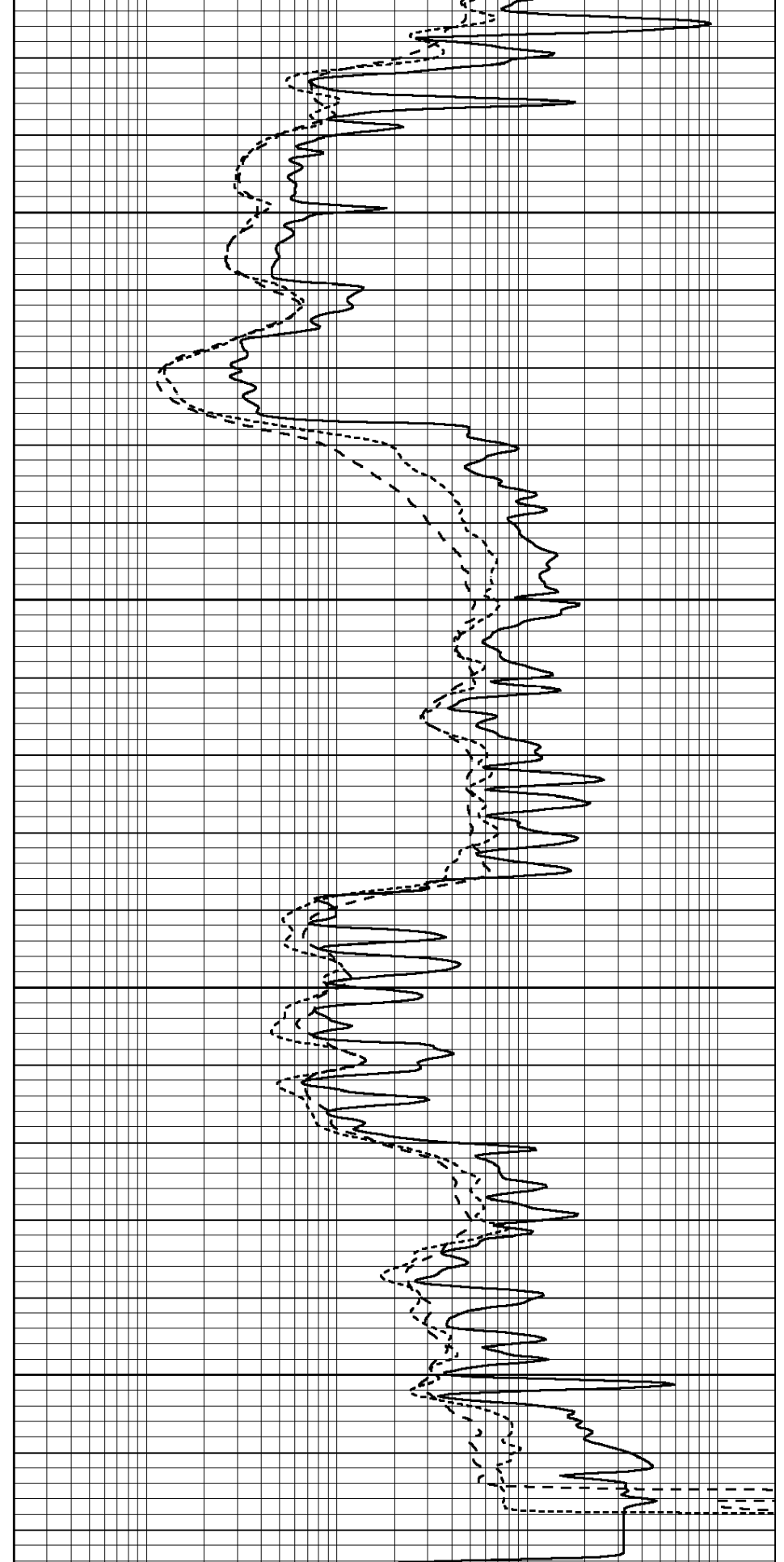
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-100	SP (mV)	100
-250	Rxo/Rt	50

4600

4650

4700

4750



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

Calibration Report

Database File: 006039pe.db
 Dataset Pathname: pass3.5
 Dataset Creation: Tue Nov 16 16:49:16 2010 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE7-DILG
 Surface Cal Performed: Wed Jul 30 06:14:24 2008
 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			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	621.923	8.759
Medium	0.039	0.728	V	0.000	464.000	mmho/m	673.322	-26.058
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	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: 002 Model: PRB
 Performed Mon Oct 29 15:40:49 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1056.3	9118.0	2809.7	10378.4	cps
Window 2	969.9	7671.9	2431.6	8565.8	cps
Window 3	683.8	2939.8	1161.0	3161.8	cps
Window 4	231.4	231.6	226.7	230.8	cps
Long Space	0.0	6702.0	1461.7	7595.9	cps
Short Space	1.2	1433.6	959.4	1568.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle : 45.2 Rib Slope : 1.008 Density/Spine Ratio : 0.559
 Spine Angle : 75.2 Spine Slope : 3.791 Spine Intercept : -18.7

Caliper	Readings	Reference	
Low Ref	2.3	8.0	
High Ref	4.3	14.0	
	Gain: 3.1		Offset: -0.9

Compensated Neutron Calibration Report

Serial Number:	5I
Tool Model:	G

CALIBRATION						
Detector	Readings		Target		Normalization	
Short Space	1.00	cps	1.00	cps	1.0000	
Long Space	1.00	cps	1.00	cps	1.0000	

Gamma Ray Calibration Report

Serial Number:	GR6	
Tool Model:	OPEN	
Performed:	Wed Jul 14 14:14:30 2010	
Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps
Sensitivity:	0.5335	GAPI/cps