

DUAL INDUCTION LOG

Company	VAL ENERGY, INC.	Company	VAL ENERGY, INC.
Well	McKAY #1-29	Well	McKAY #1-29
Field	WILDCAT	Field	WILDCAT
County	BARBER	County	BARBER
State	KANSAS	State	KANSAS
Location:	AP1 #: 15-007-24360-0000 2310' FNL & 2060' FEL E/2 - SW - SW - NE	Other Services CDL/CNL/PE MEL/SONIC	
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL KELLY BUSHING 12' A.G.L. KELLY BUSHING	Elevation K.B. 1751 D.F. 1749 G.L. 1739	
Date	10/15/19		
Run Number	ONE		
Depth Driller	4803		
Depth Logger	4804		
Bottom Logged Interval	4802		
Top Log Interval	00		
Casing Driller	8 5/8"@347'		
Casing Logger	347		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	9.4/55		
pH / Fluid Loss	10.0/9.2		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.700@68F		
Rinf @ Meas. Temp	.525@68F		
Rinc @ Meas. Temp	.840@68F		
Source of Rinf / Rinc	MEASUREMENT		
Rin @ BHT	.387@123F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	9:45 P.M.		
Maximum Recorded Temperature	123F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	DAVE BARKER		

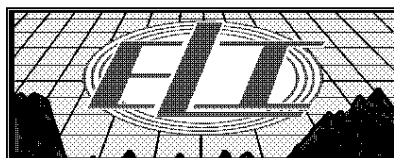
<<< Fold Here >>>

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 ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS

SAWYER, KS., 5 1/2S. ON HWY 281 TO "ELM MILLS RD., 1/2W. TO "MINGONA RD.", 2S. TO CATTLE
GUARD, 2E. ON OPEN RANGE RD., VEER NORTH AT RED CATTLE PENS



MAIN SECTION

Database File: 3971pe.db
Dataset Pathname: pass3.1M
Presentation Format: dil2
Dataset Creation: Tue Oct 15 23:53:19 2019
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

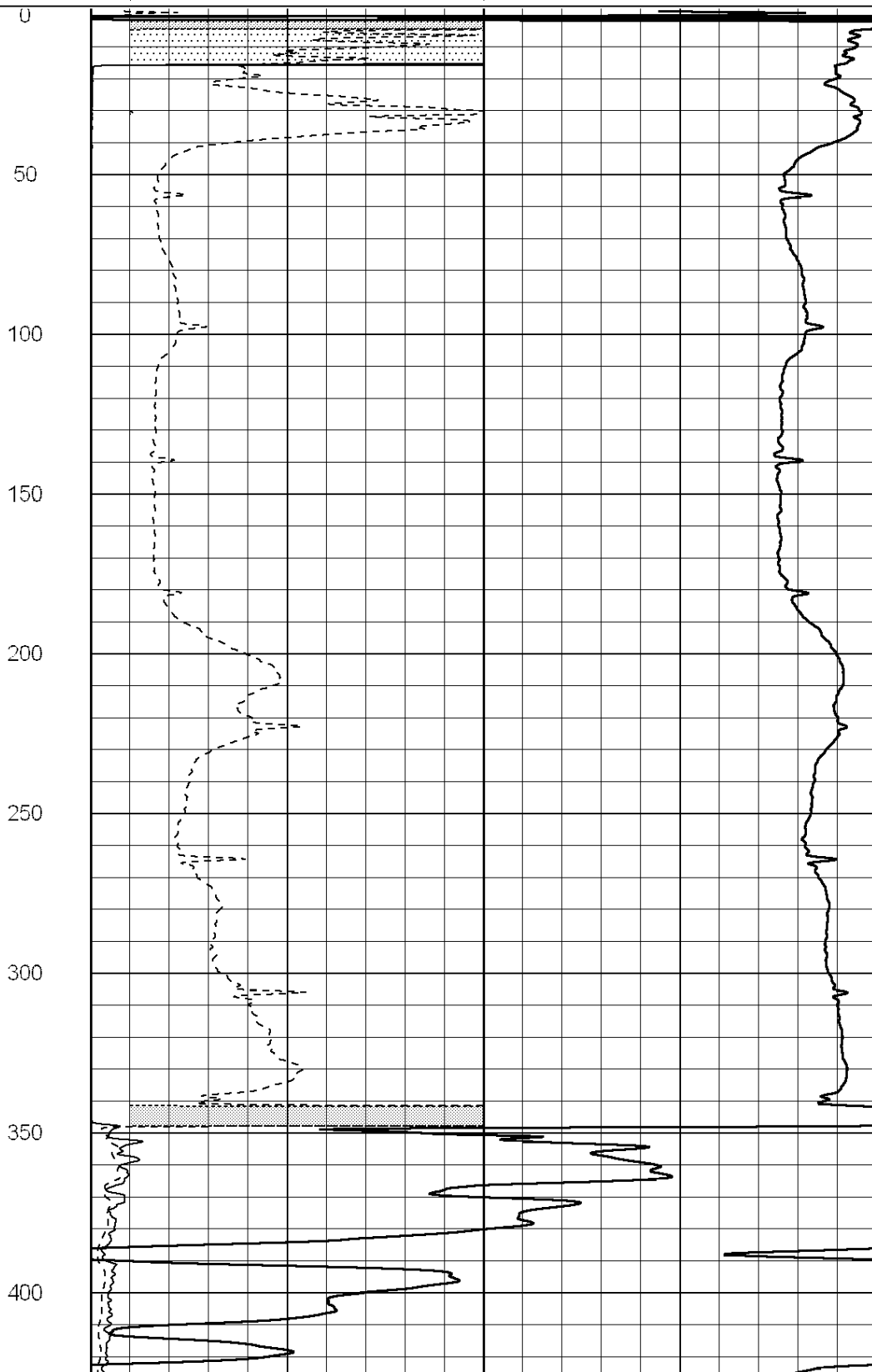
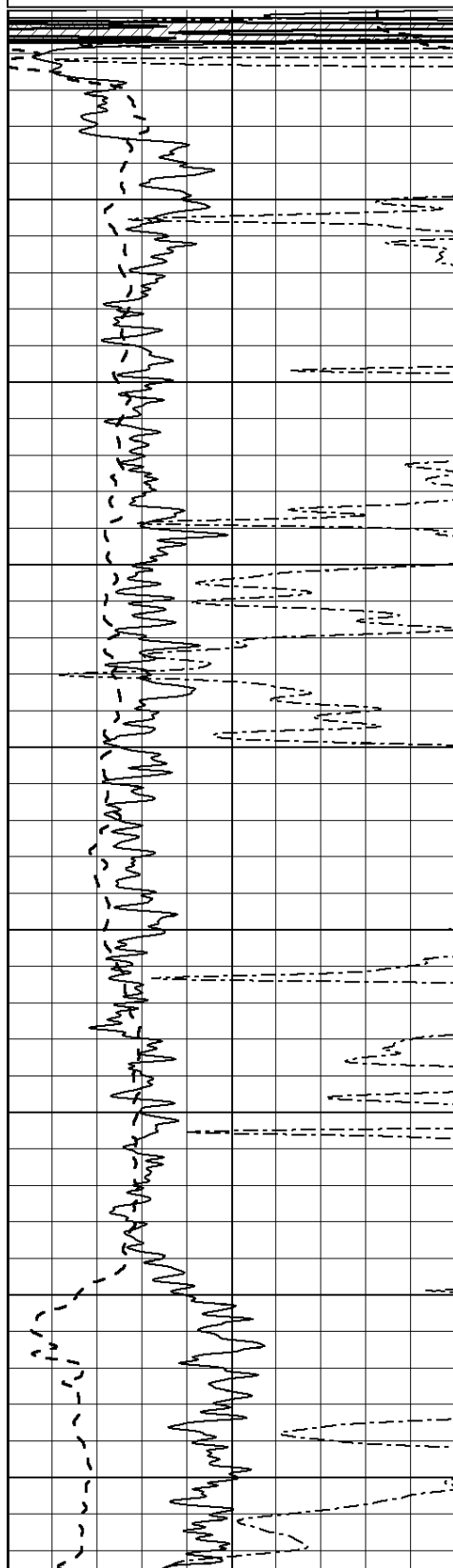
0	RLL3 (Ohm-m)	50
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0	RILD (Ohm-m)	50
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1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
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50	RLL3 X10 (Ohm-m)	500
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450

500

550

600

650

700

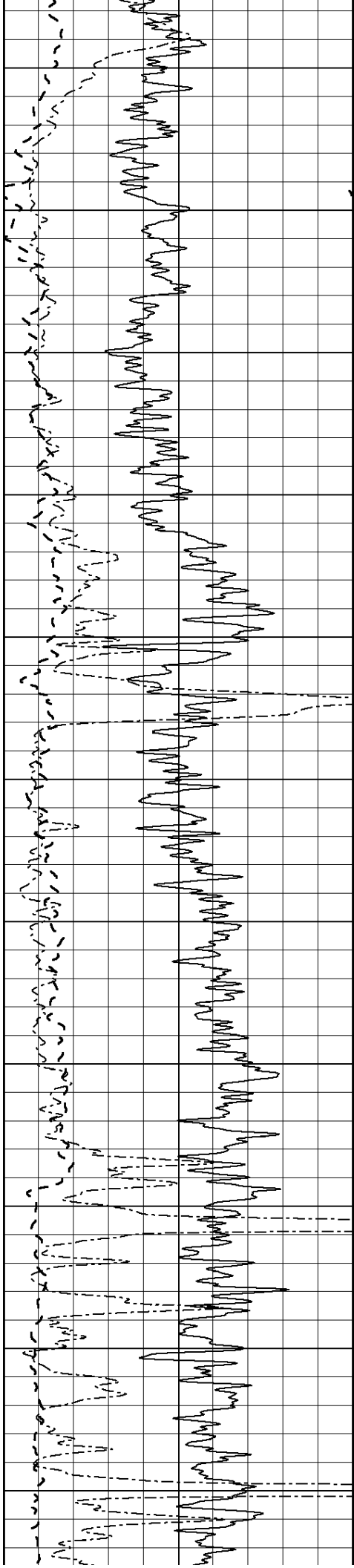
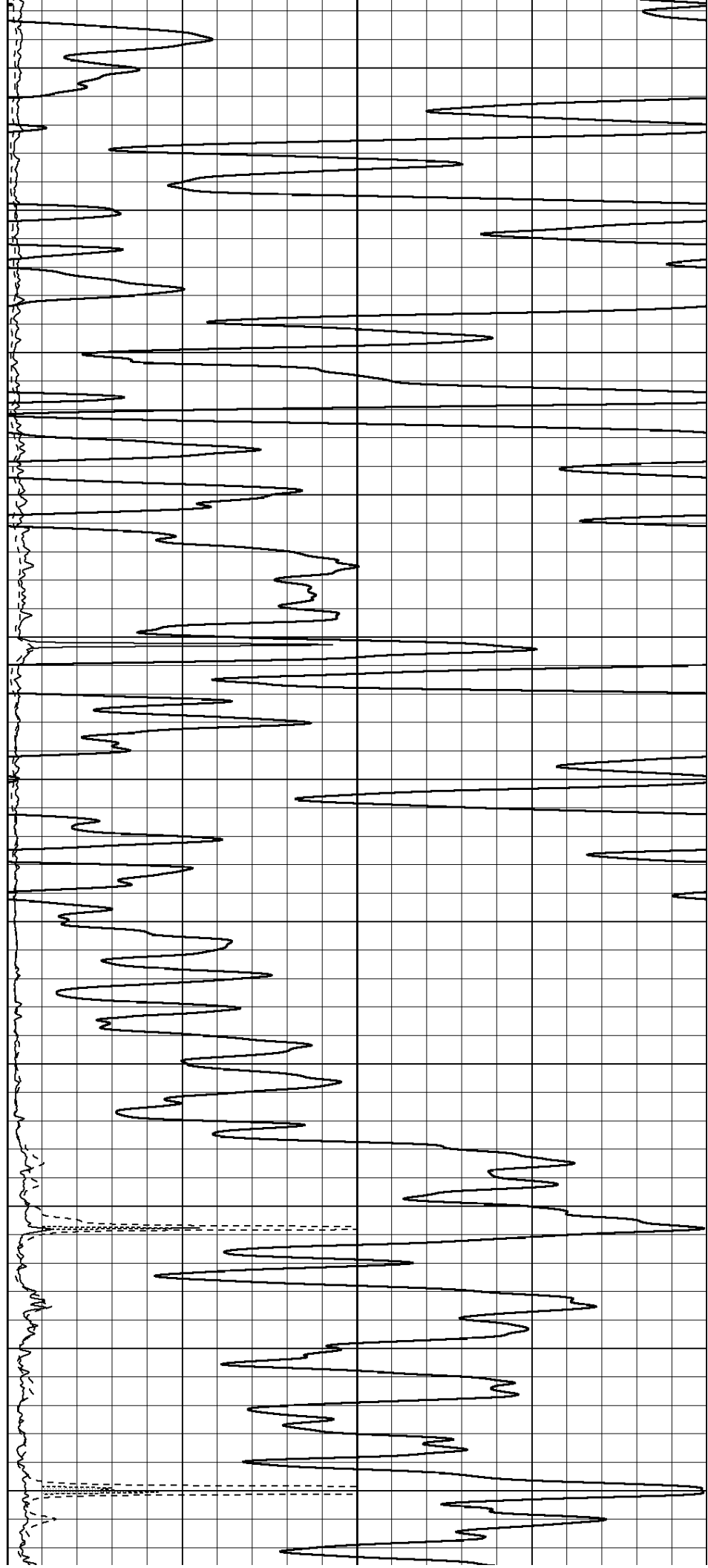
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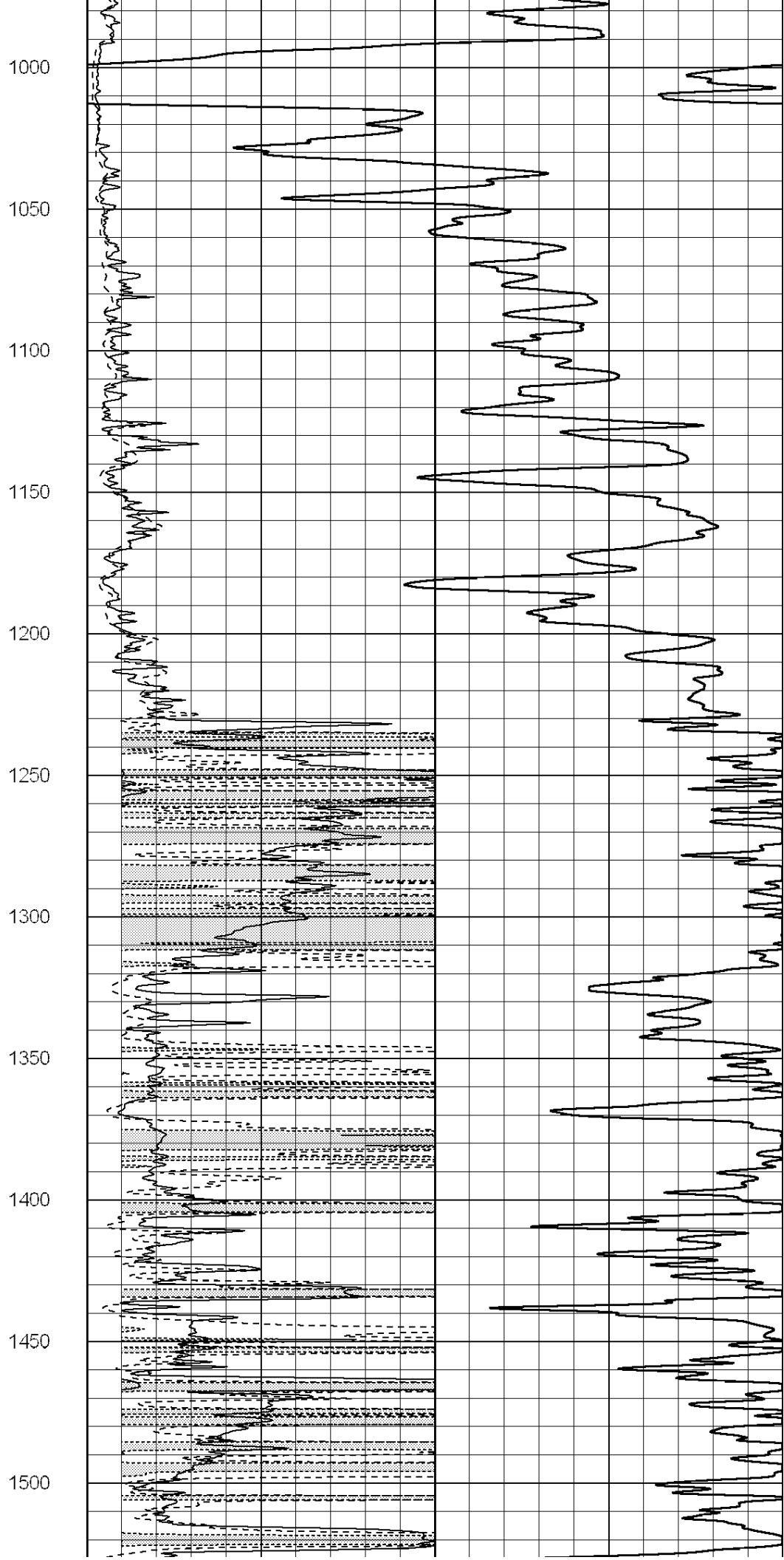
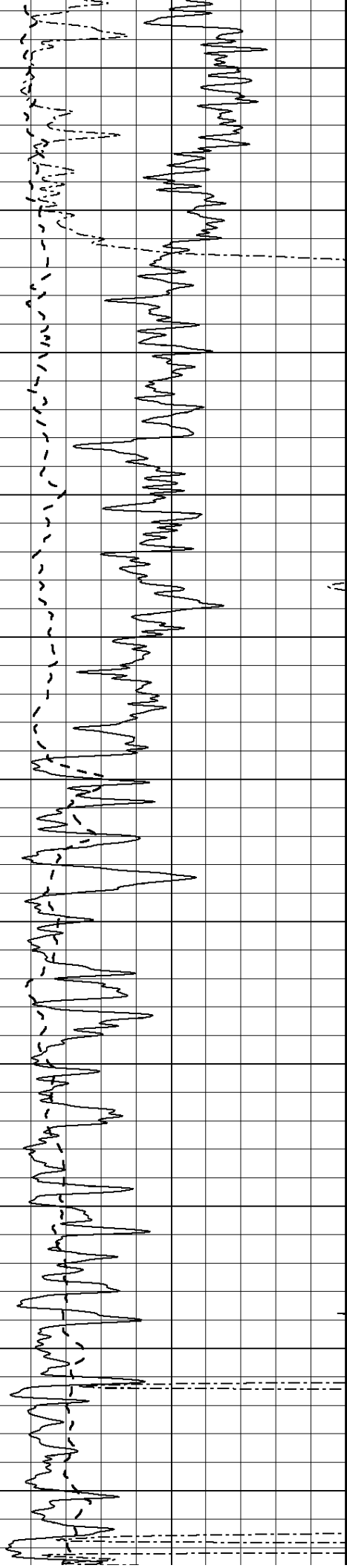
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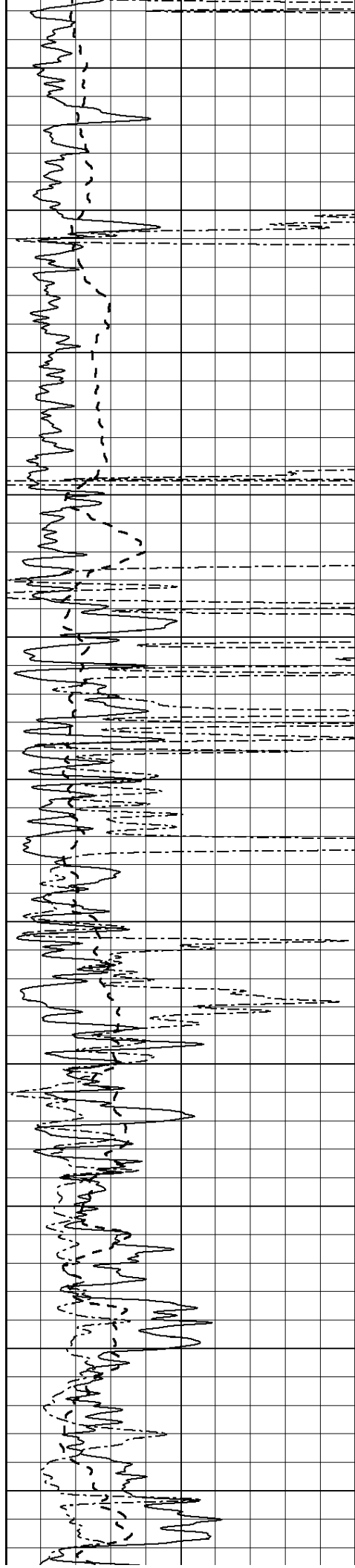
850

900

950







1550

1600

1650

1700

1750

1800

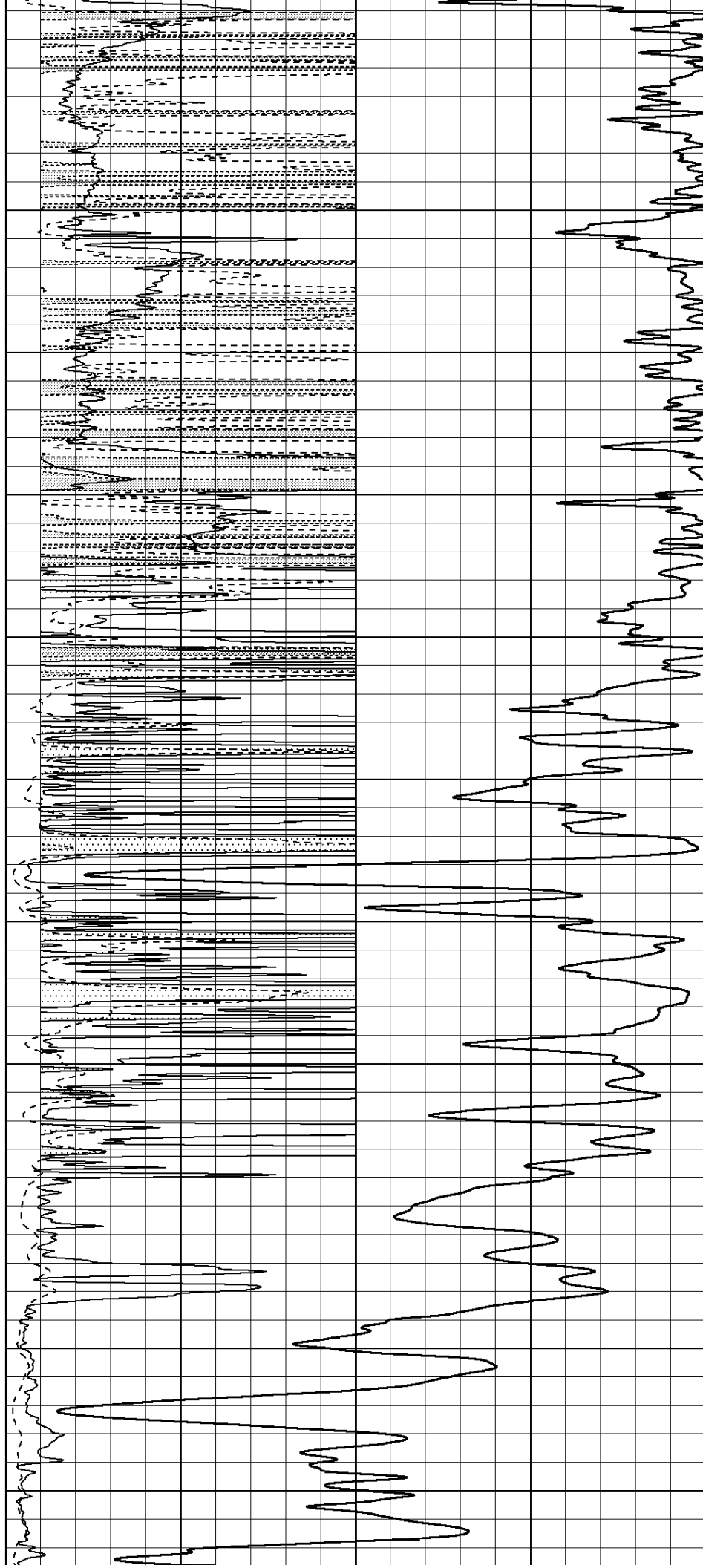
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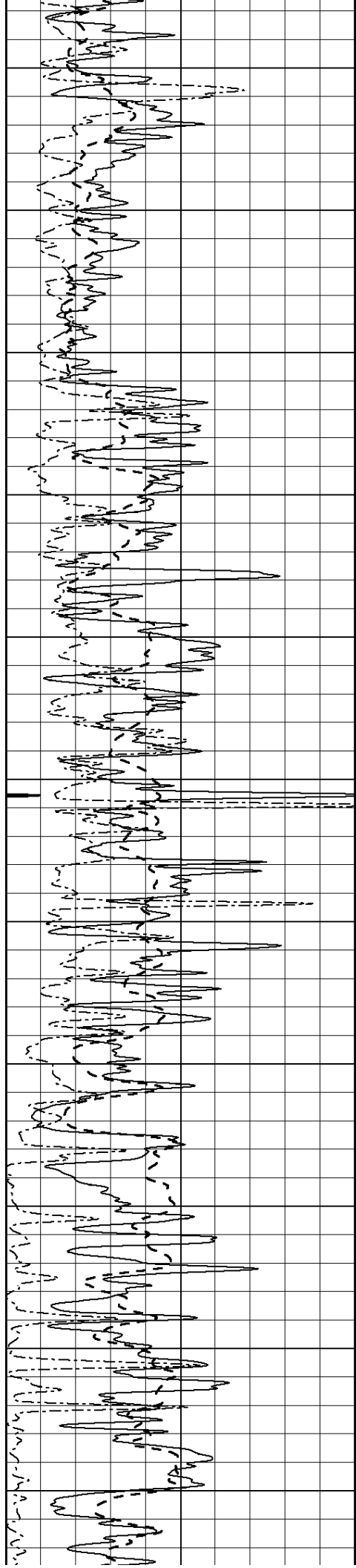
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

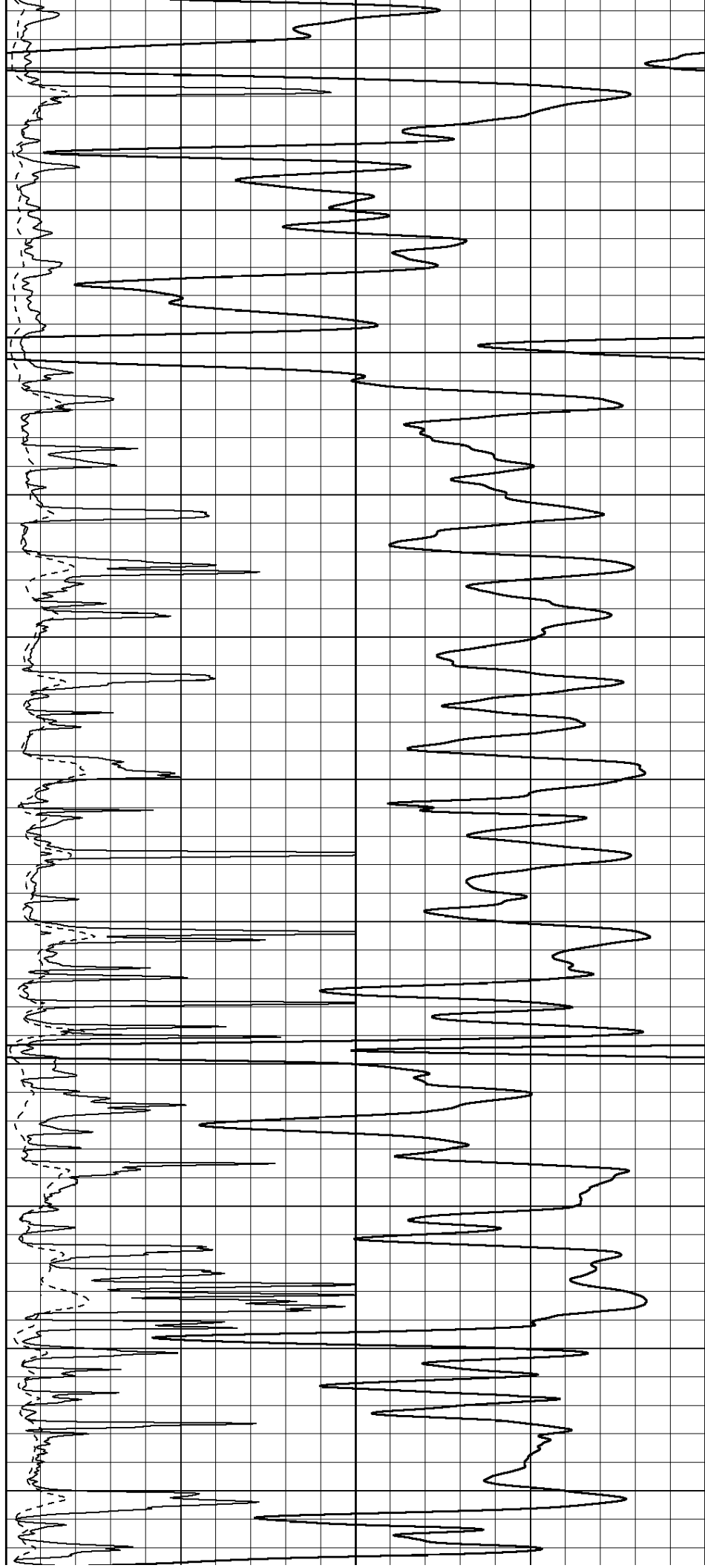
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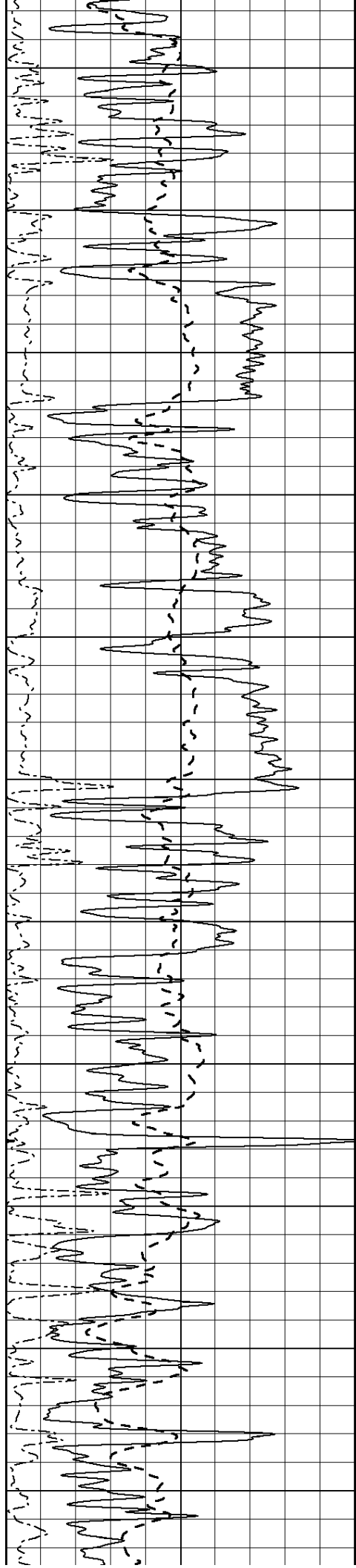
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2500

2550

2600





2650

2700

2750

2800

2850

2900

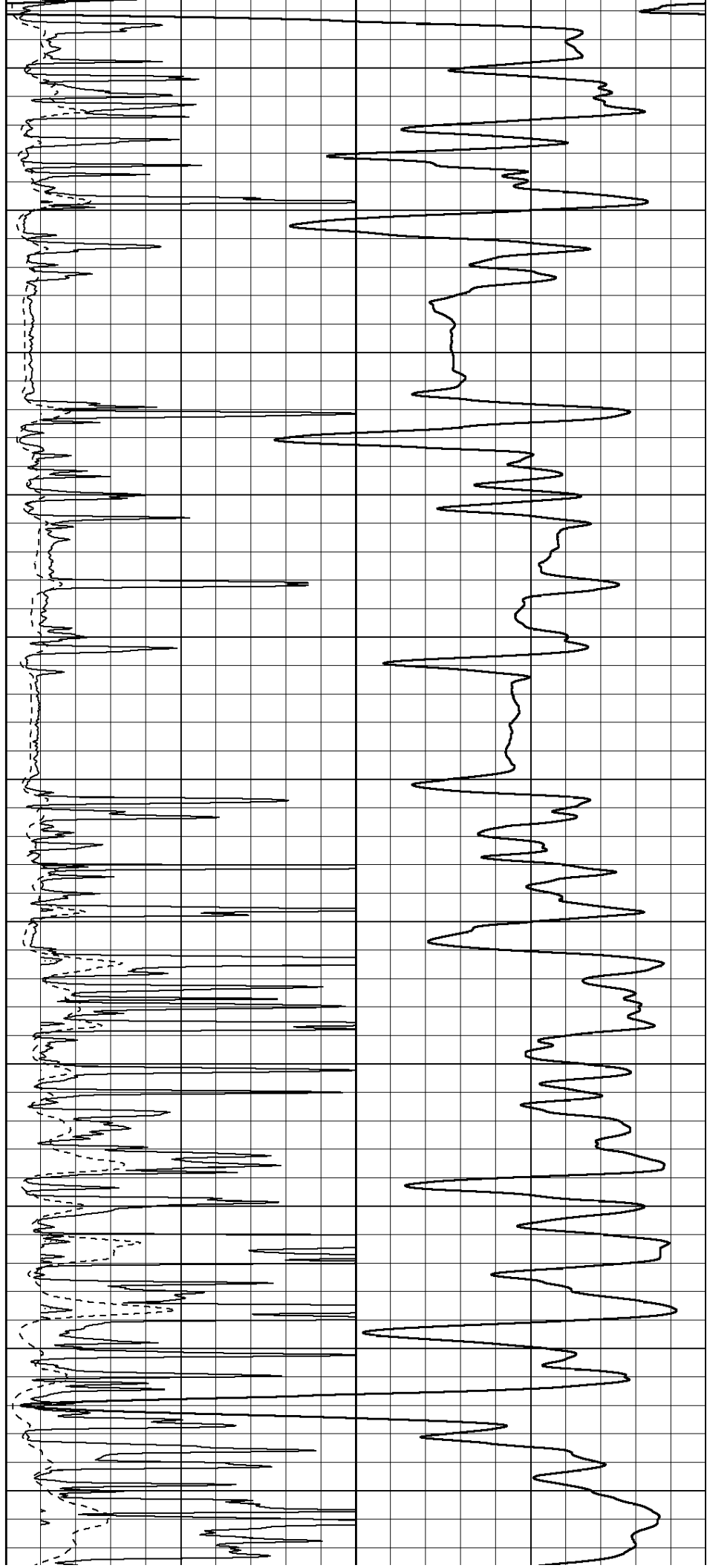
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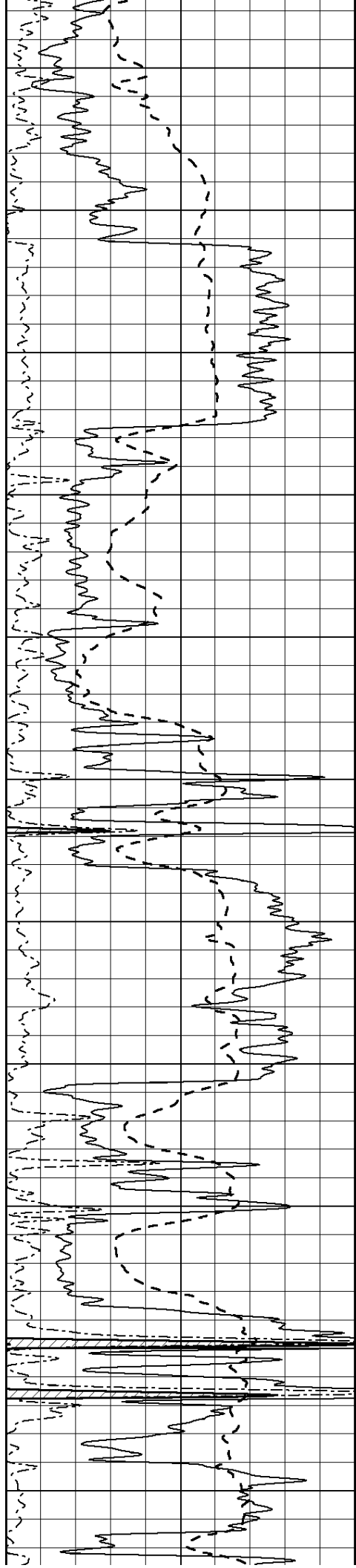
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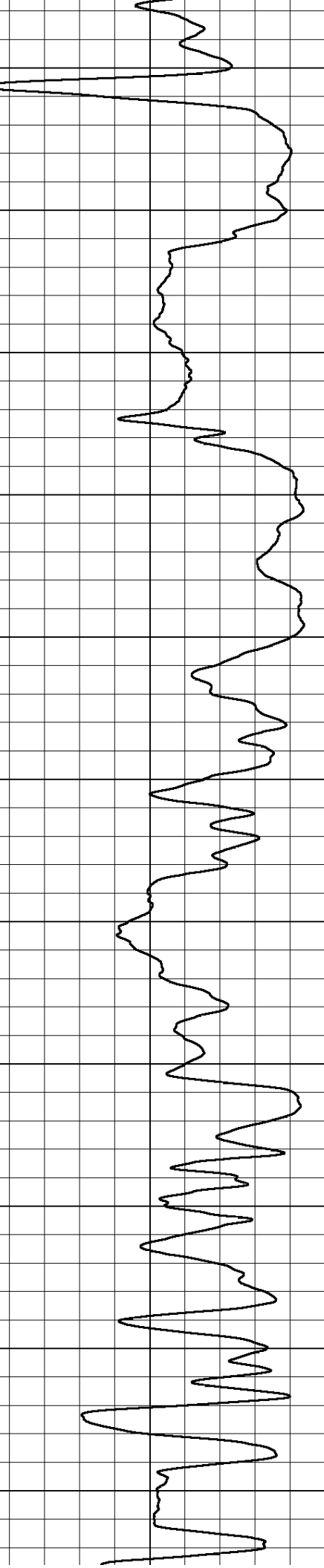
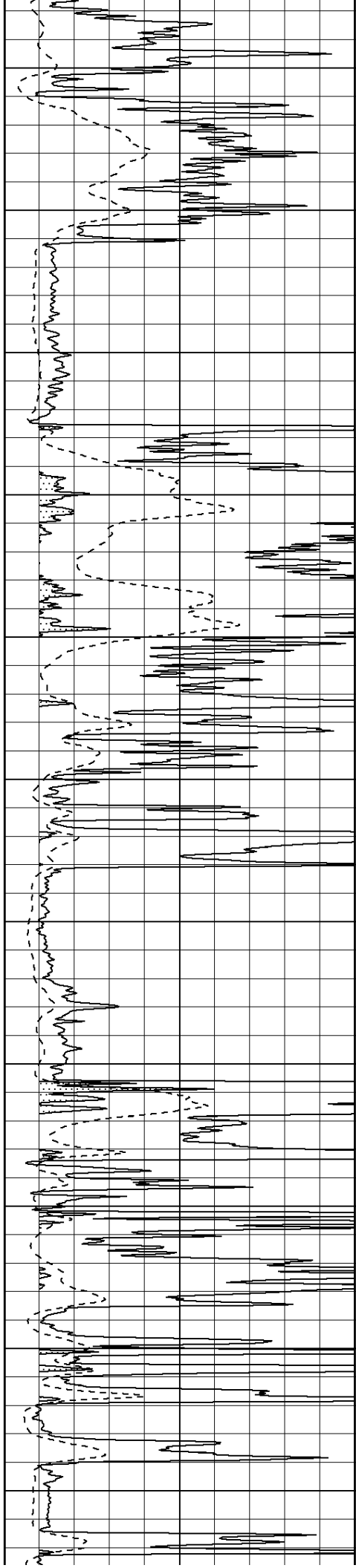
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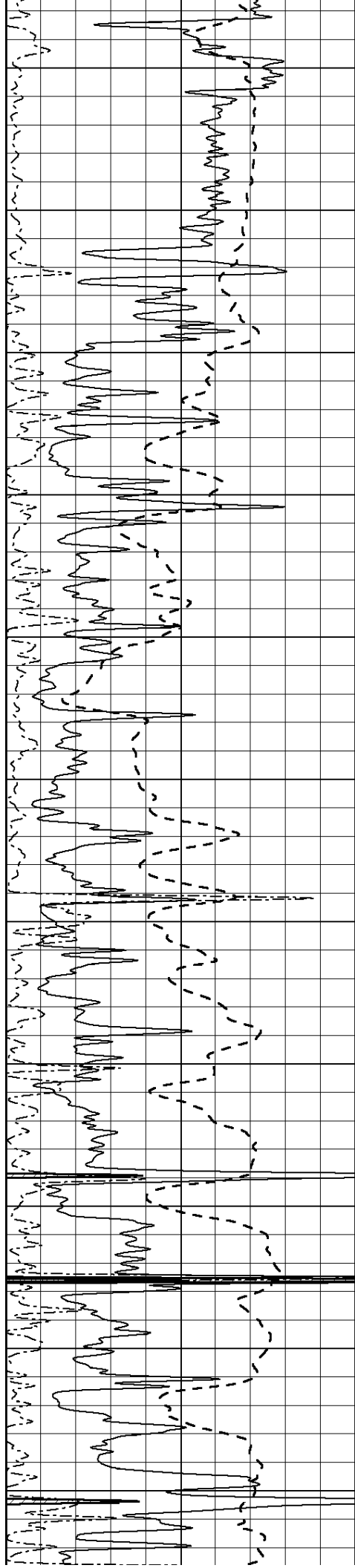
3150





3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700





3750

3800

3850

3900

3950

4000

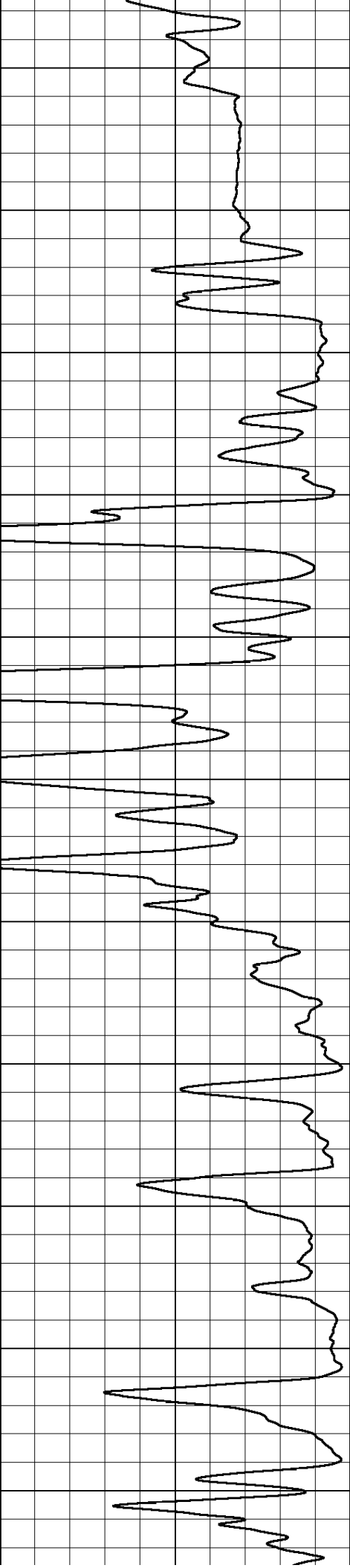
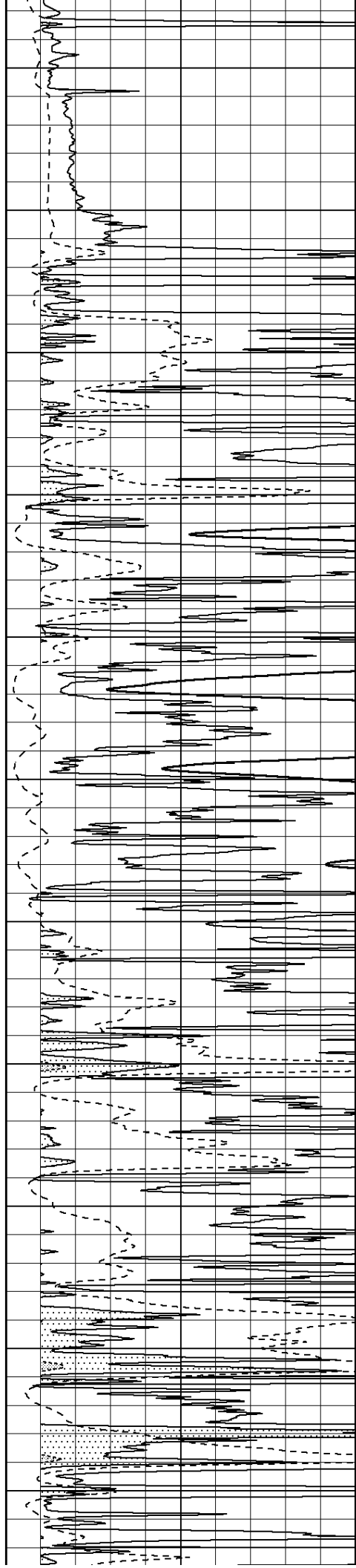
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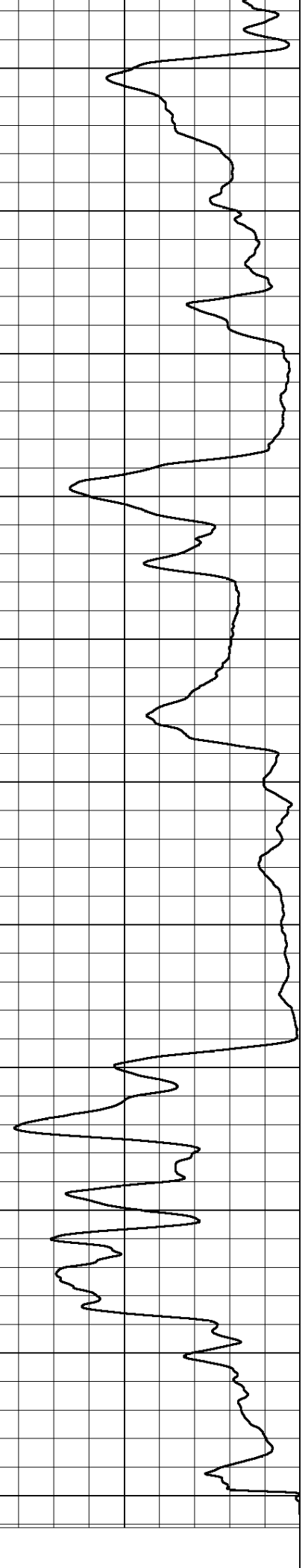
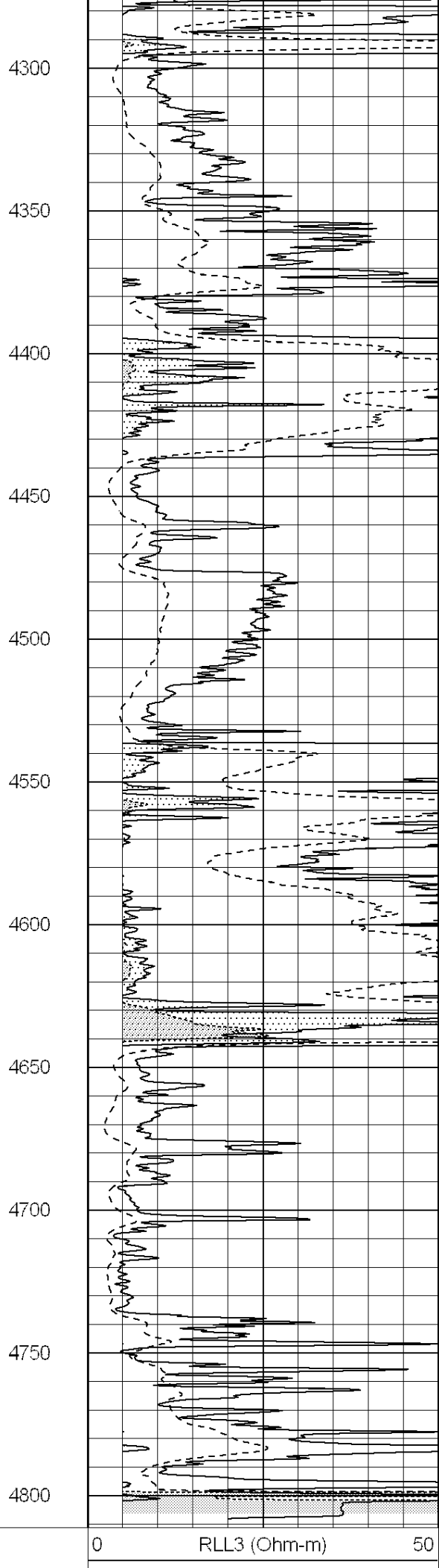
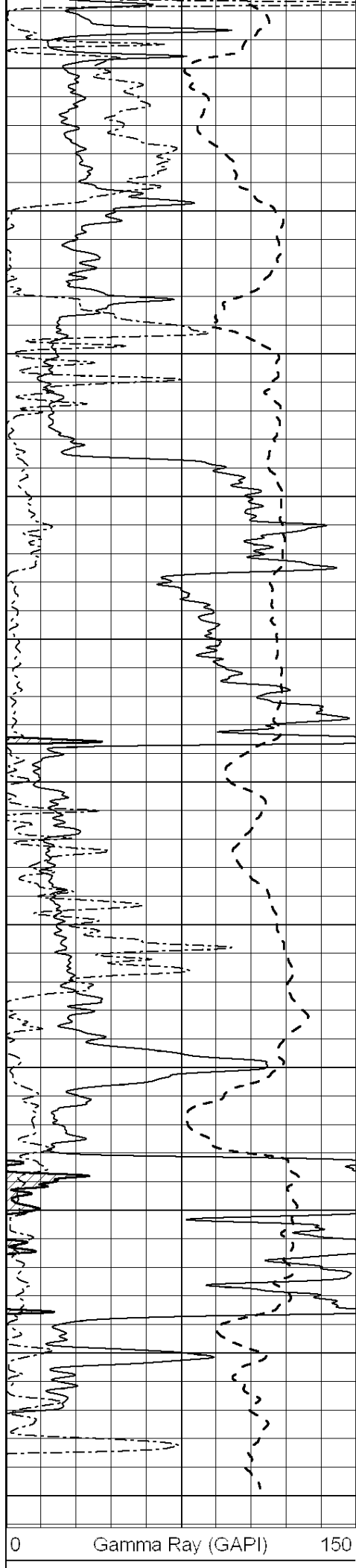
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4150

4200

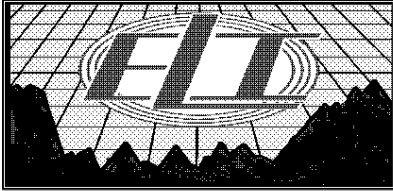
4250





100	SP (mV)	100
0	RWA (Ohm-m)	1

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

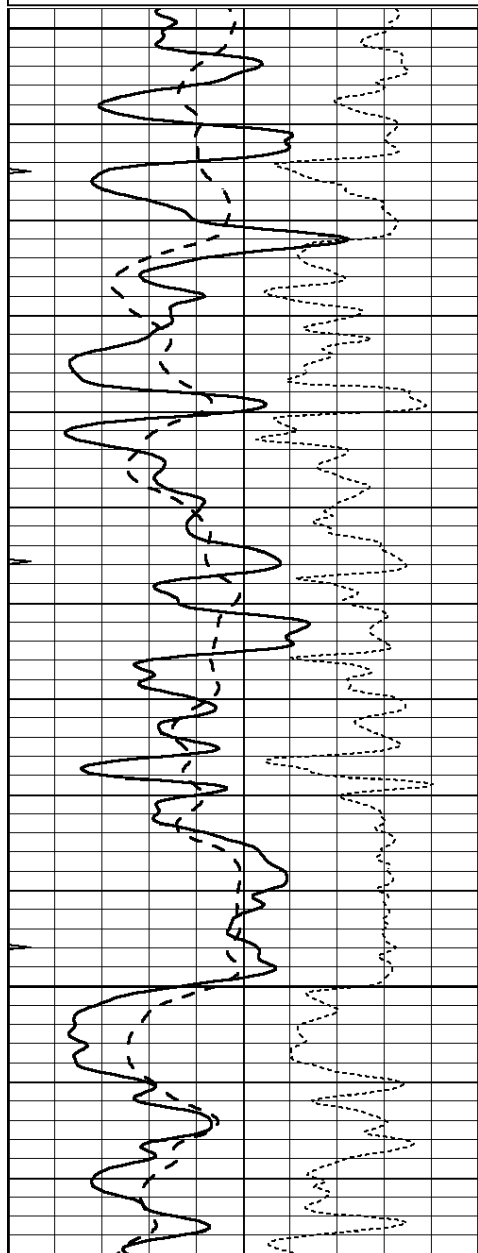


MAIN SECTION

Database File: 3971pe.db
 Dataset Pathname: pass3.1M
 Presentation Format: _dil
 Dataset Creation: Tue Oct 15 23:53:19 2019
 Charted by: Depth in Feet scaled 1:240

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

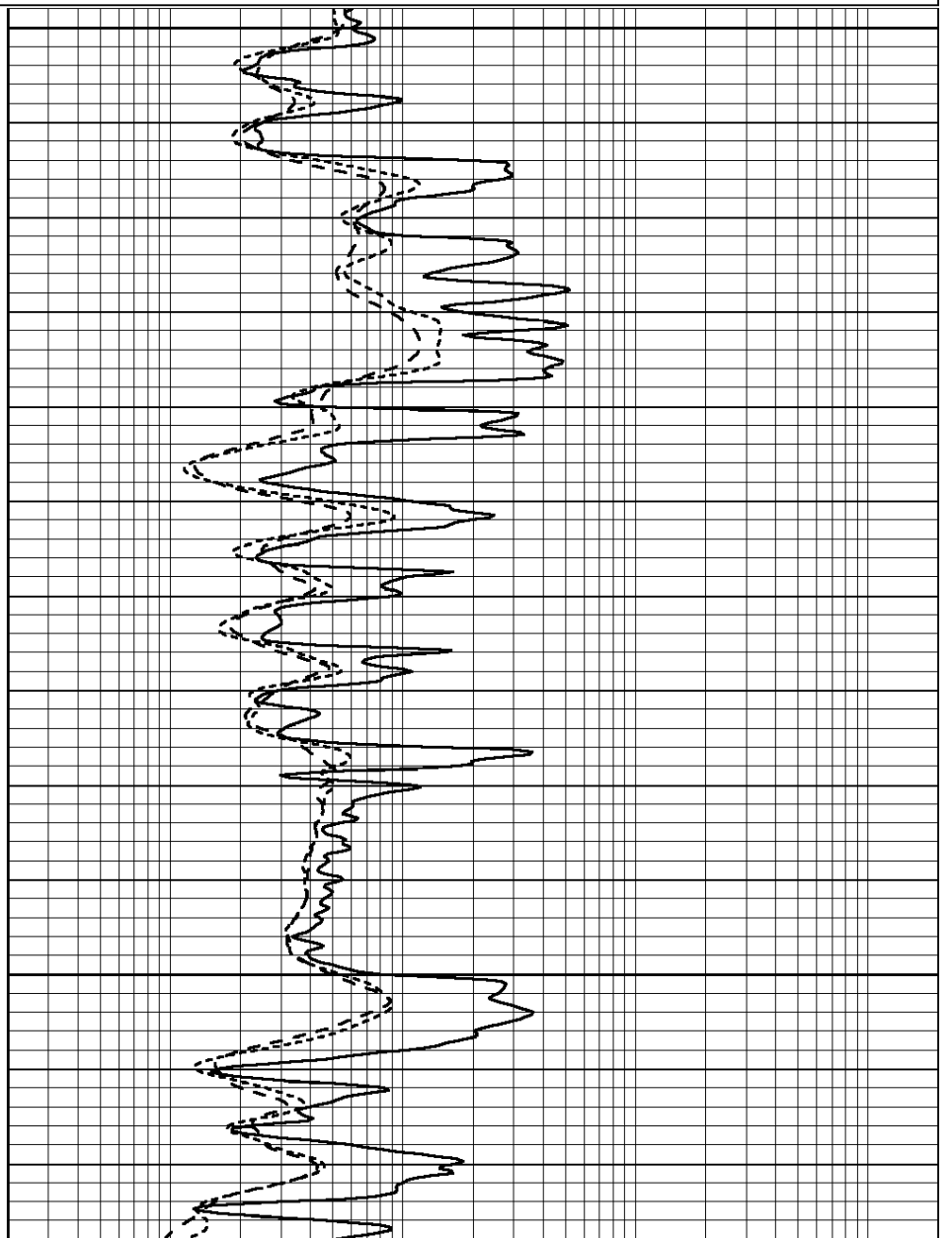
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

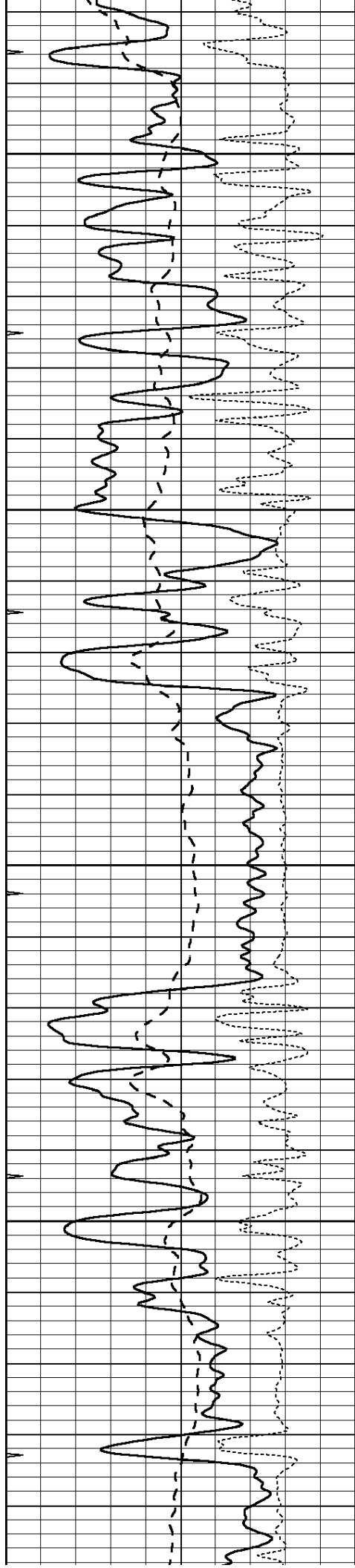


2500

2550

2600



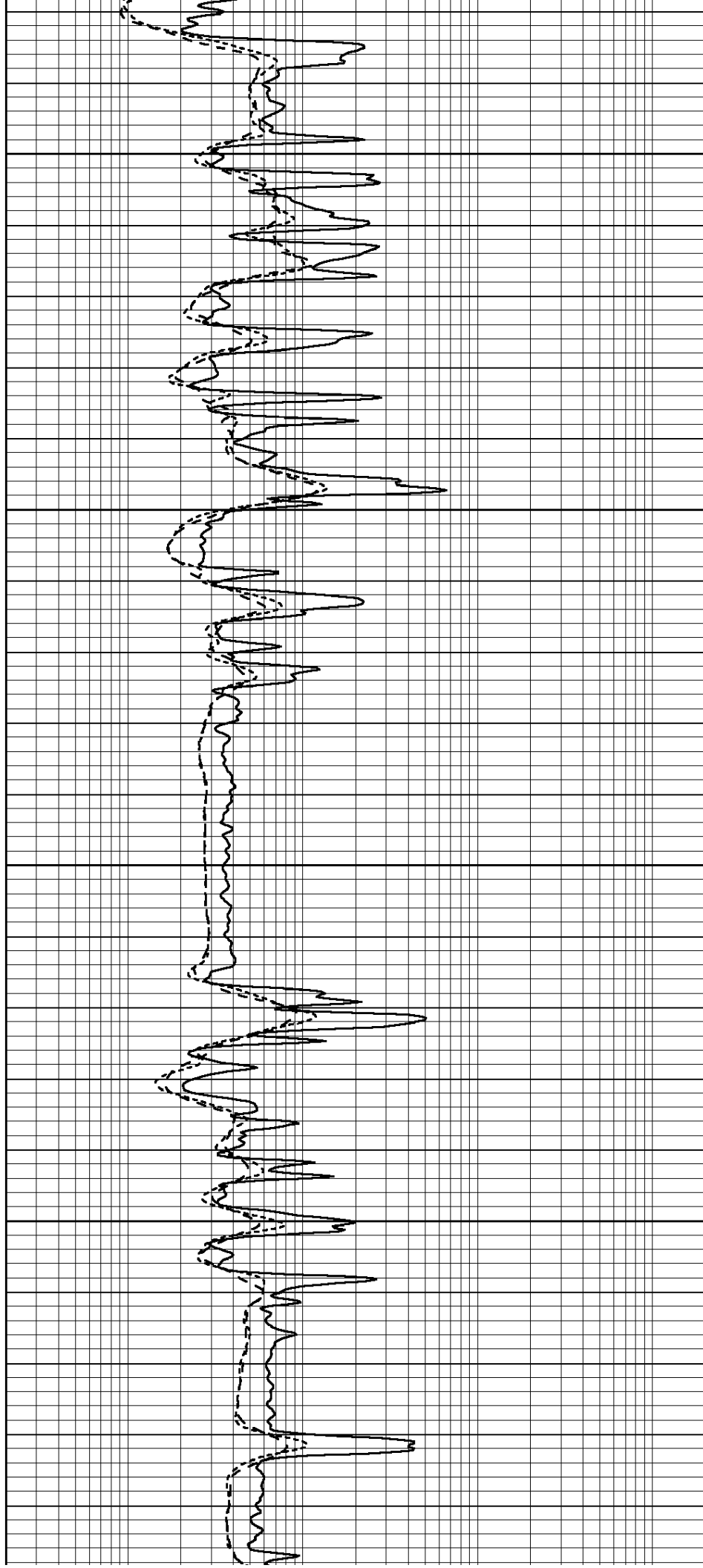


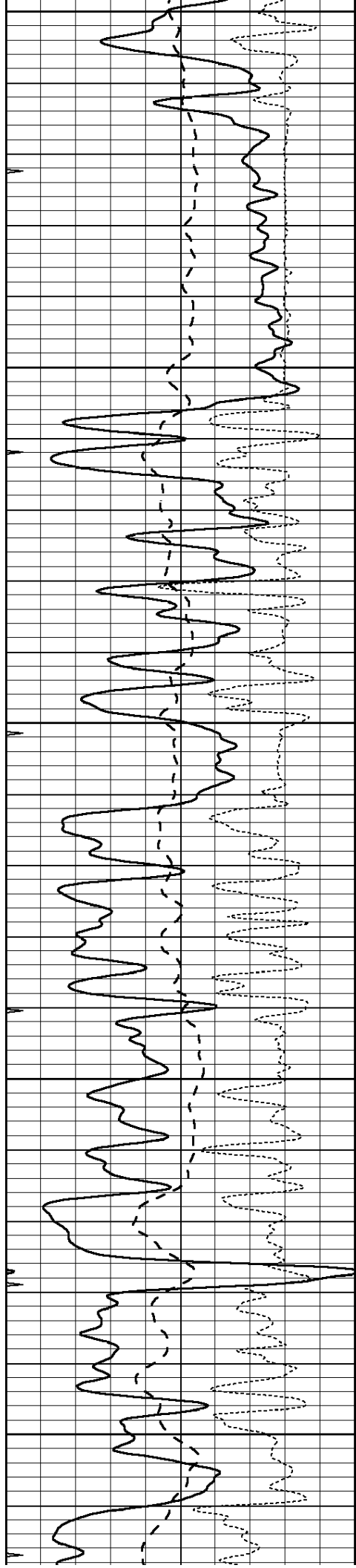
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2700

2750

2800





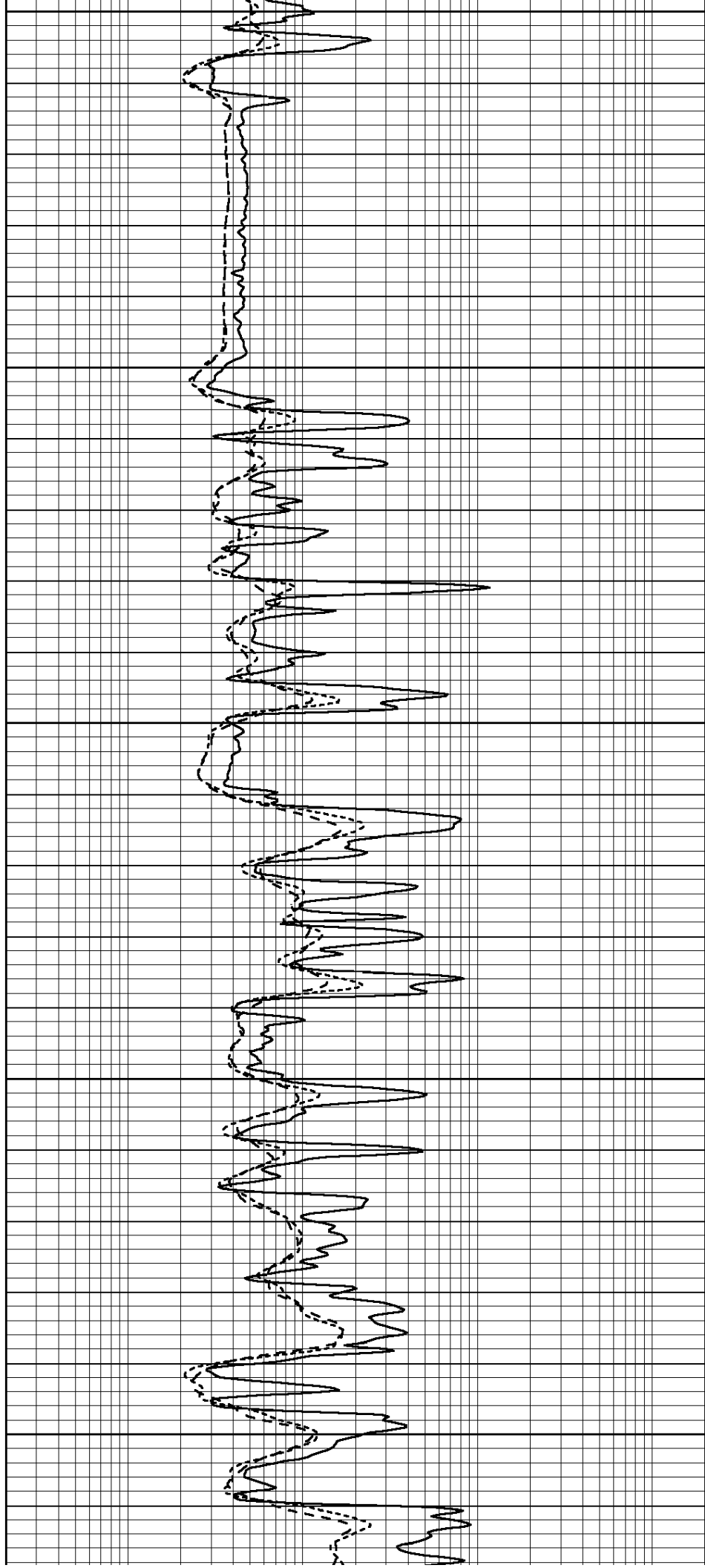
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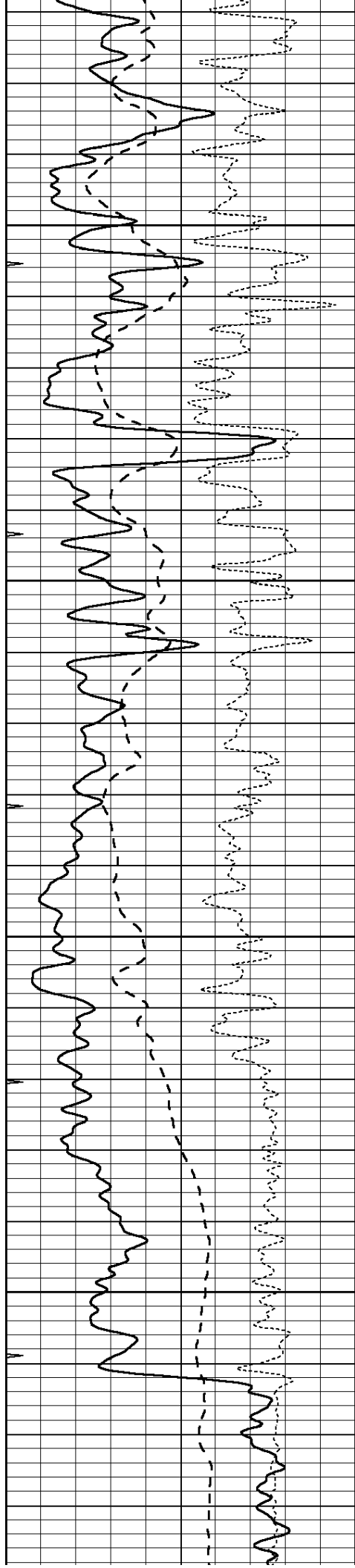
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2950

3000

3050



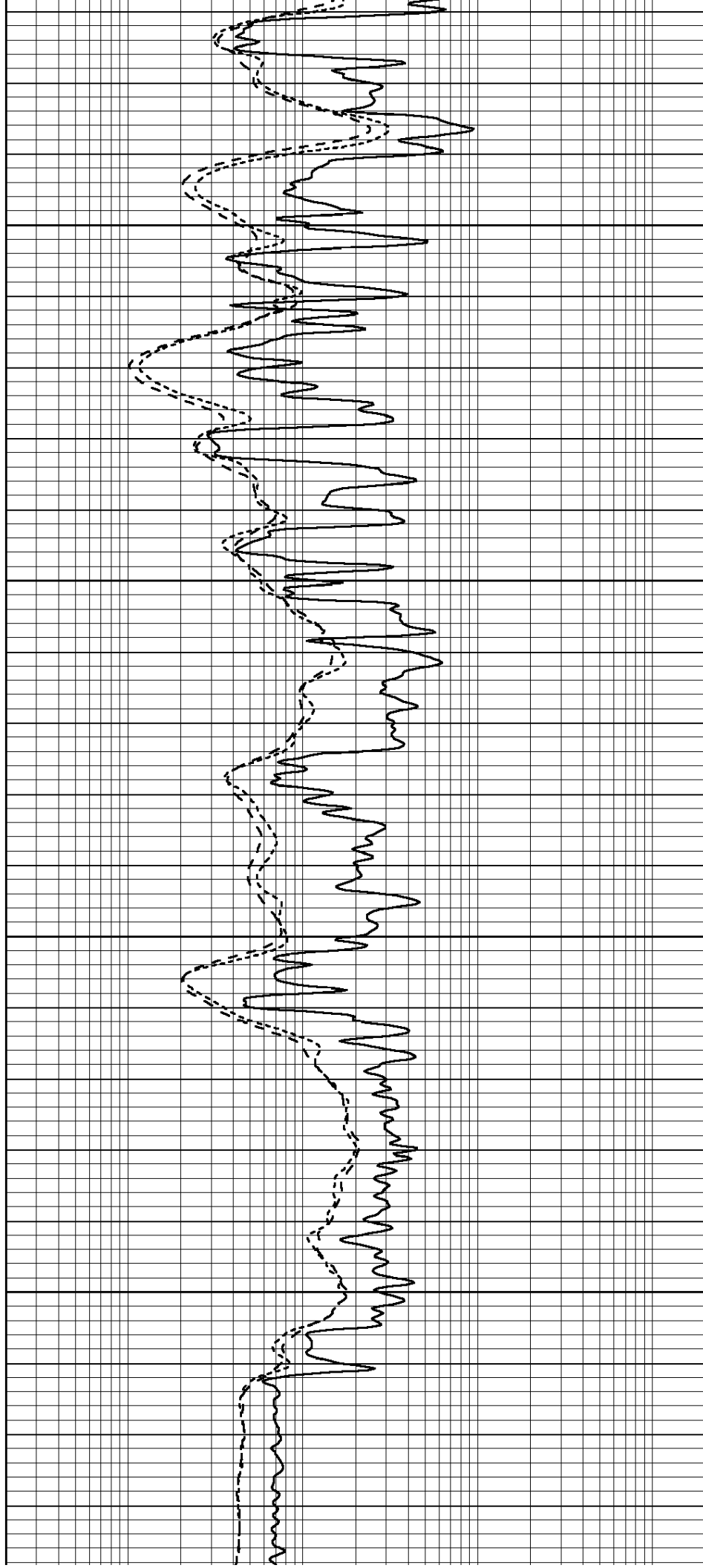


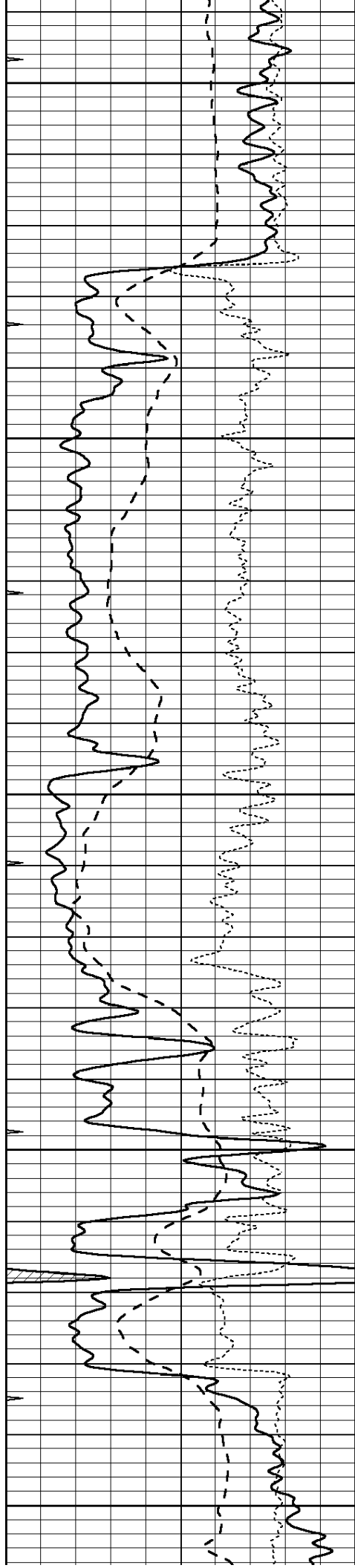
3100

3150

3200

3250





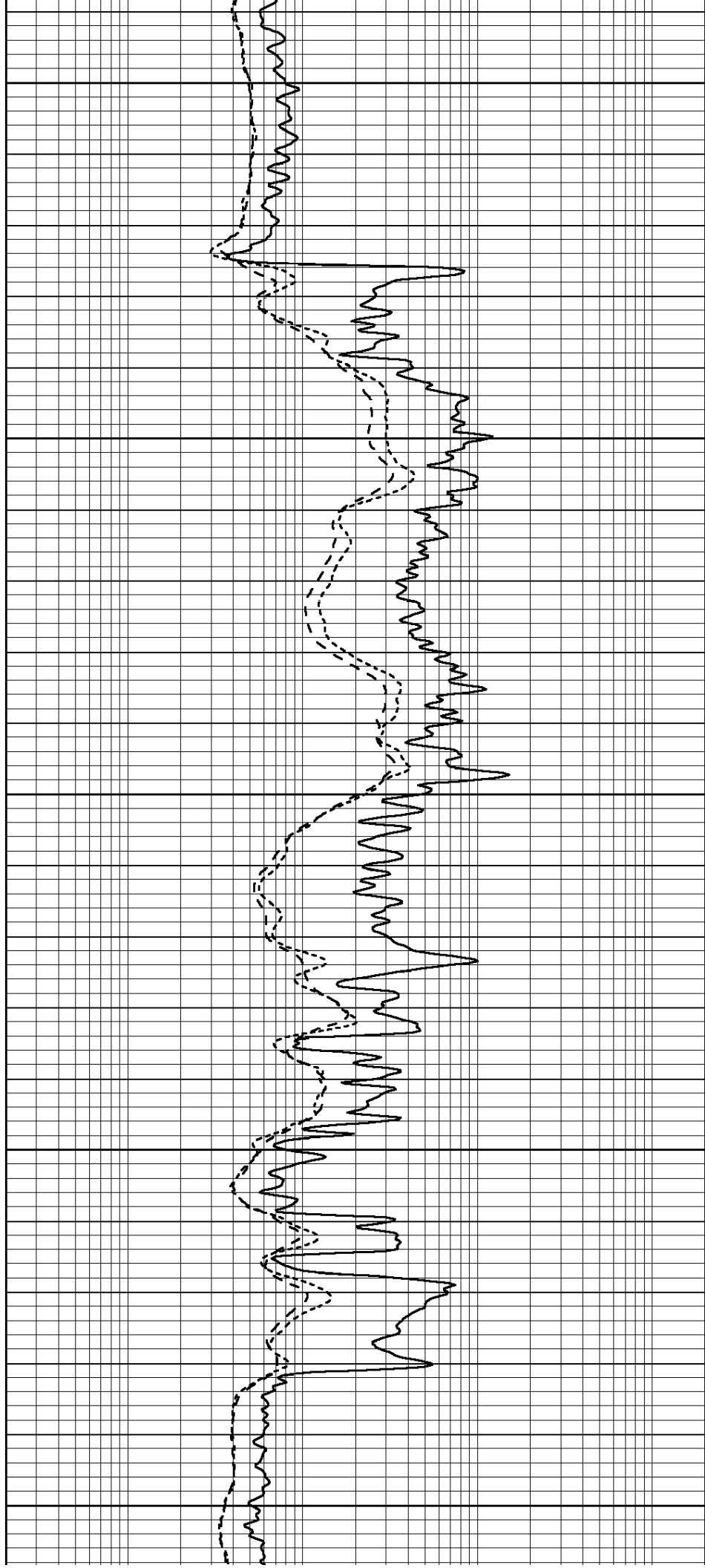
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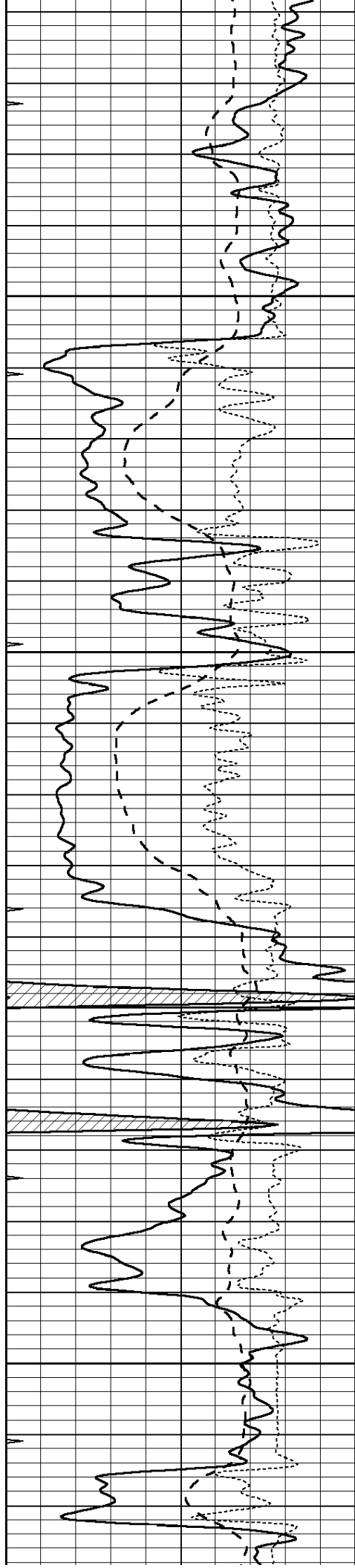
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3400

3450

3500



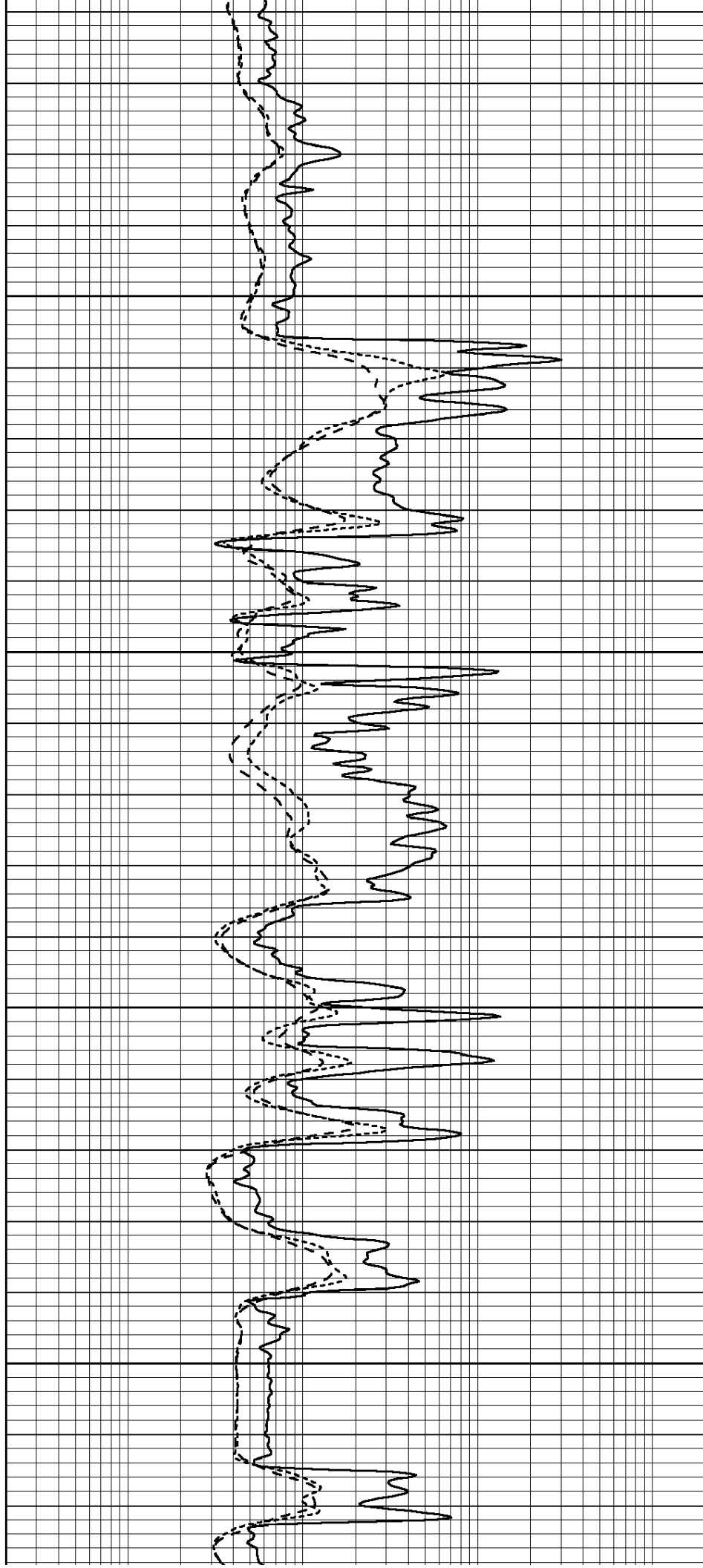


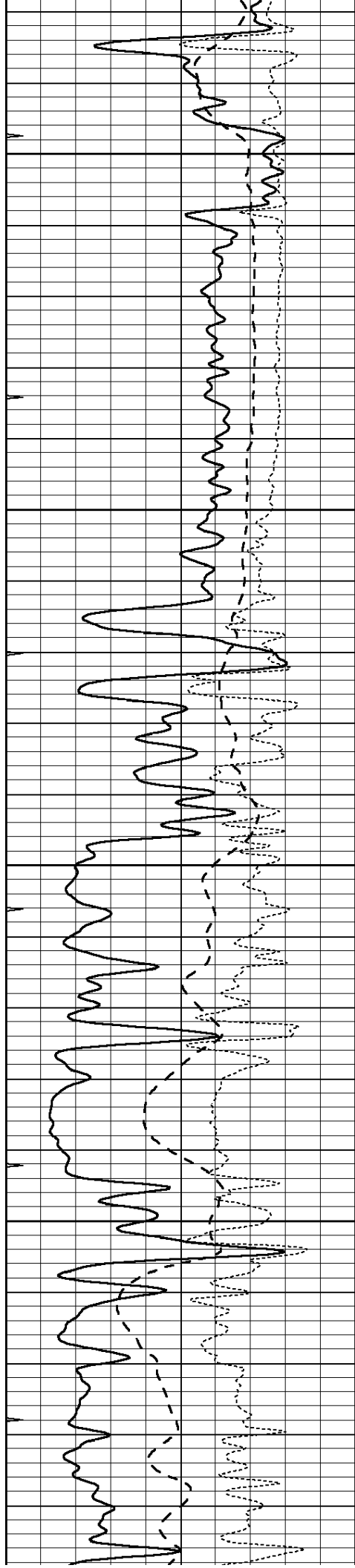
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3600

3650

3700



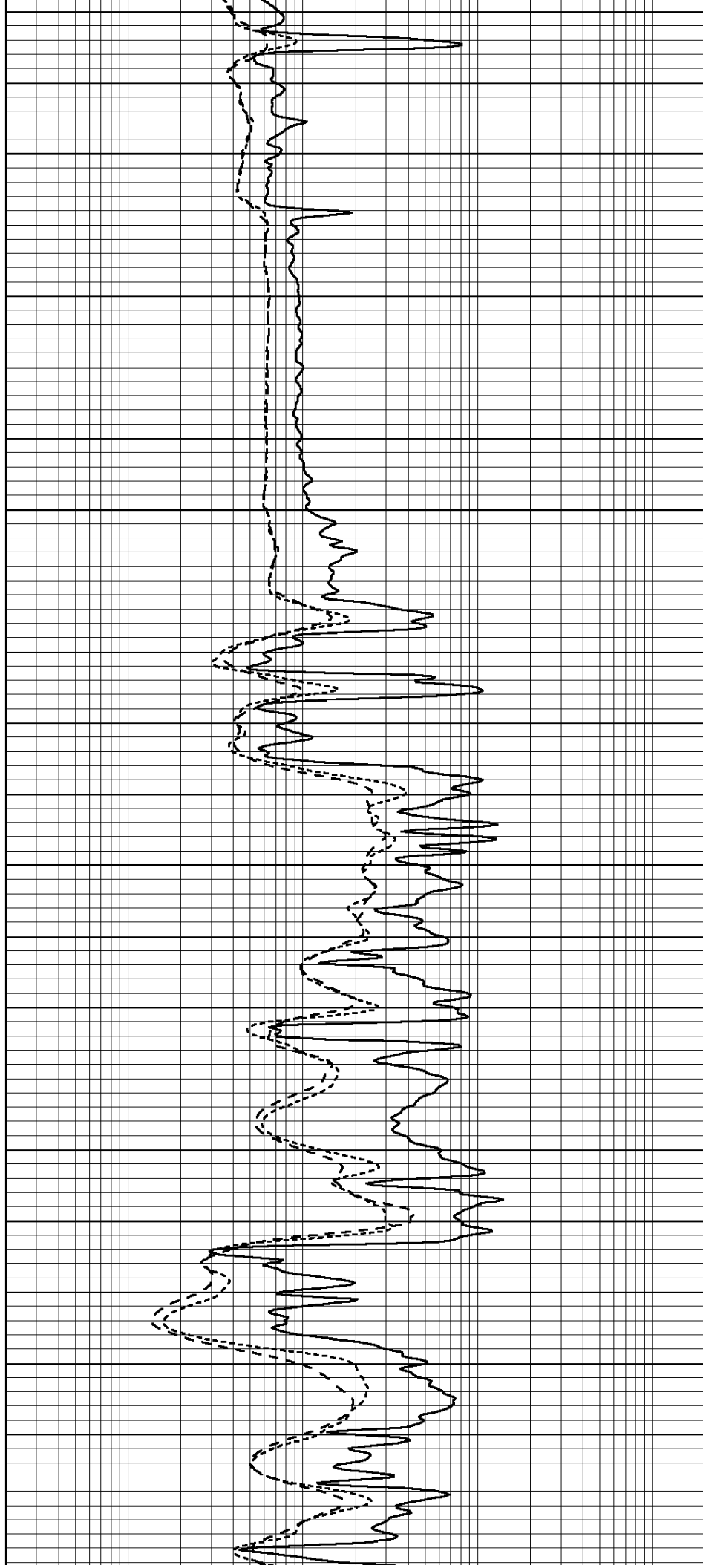


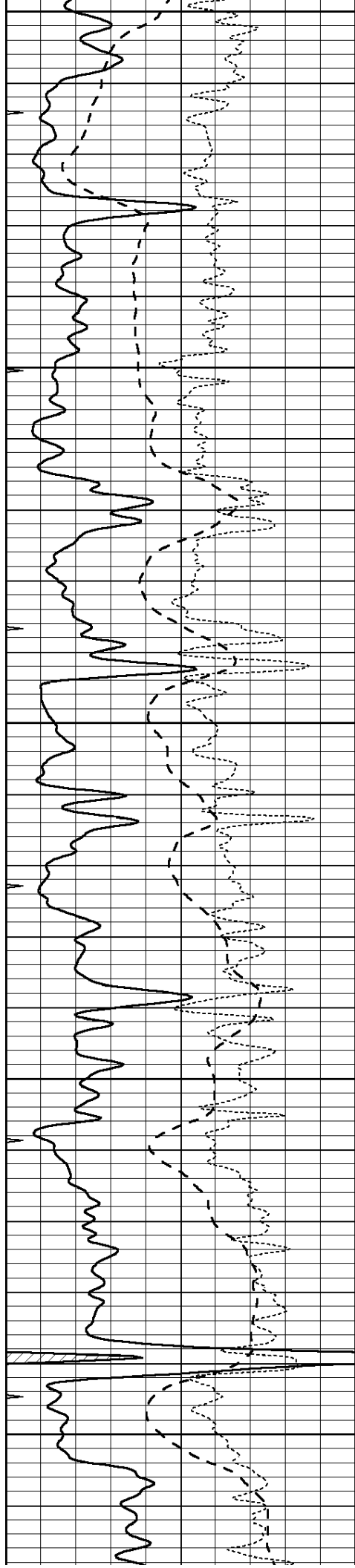
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3800

3850

3900





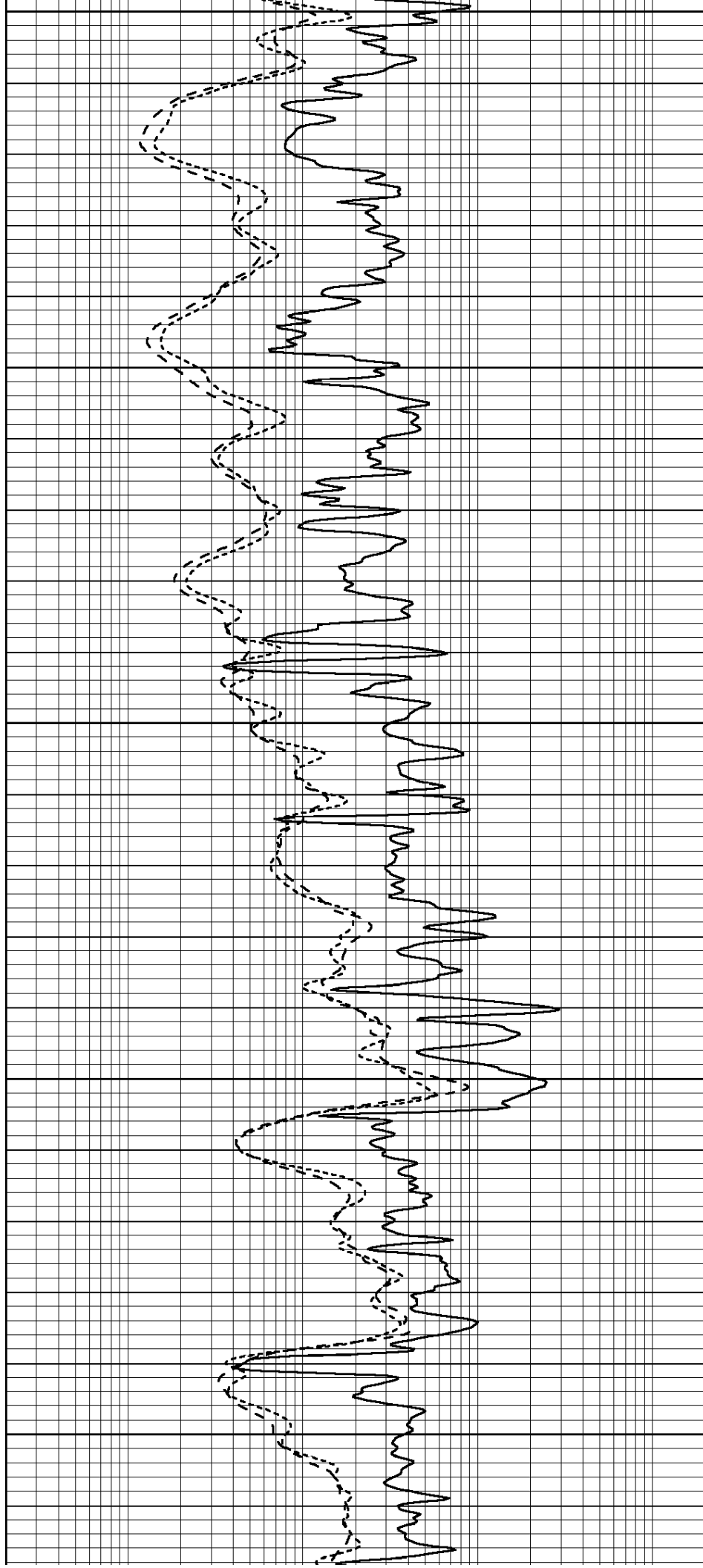
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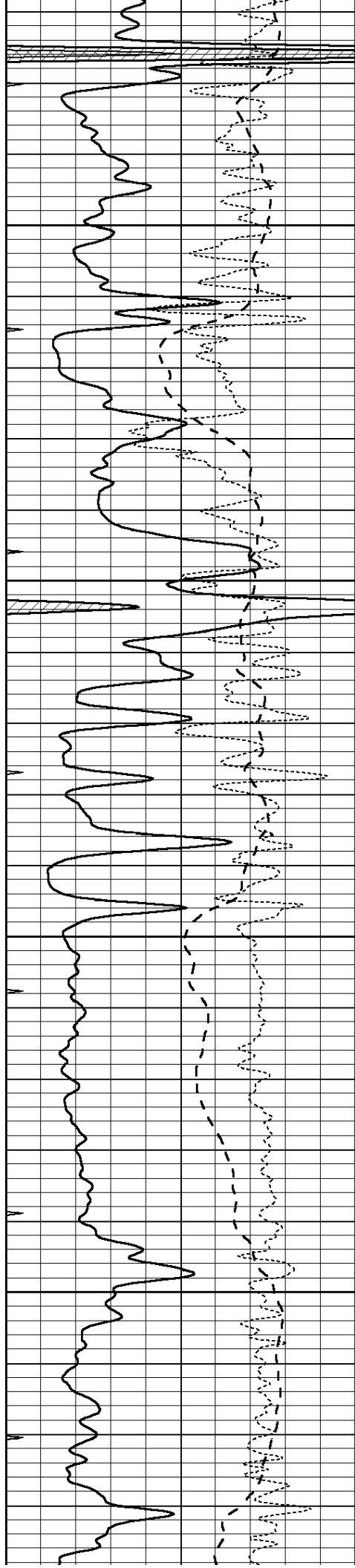
4000

4050

4100

4150



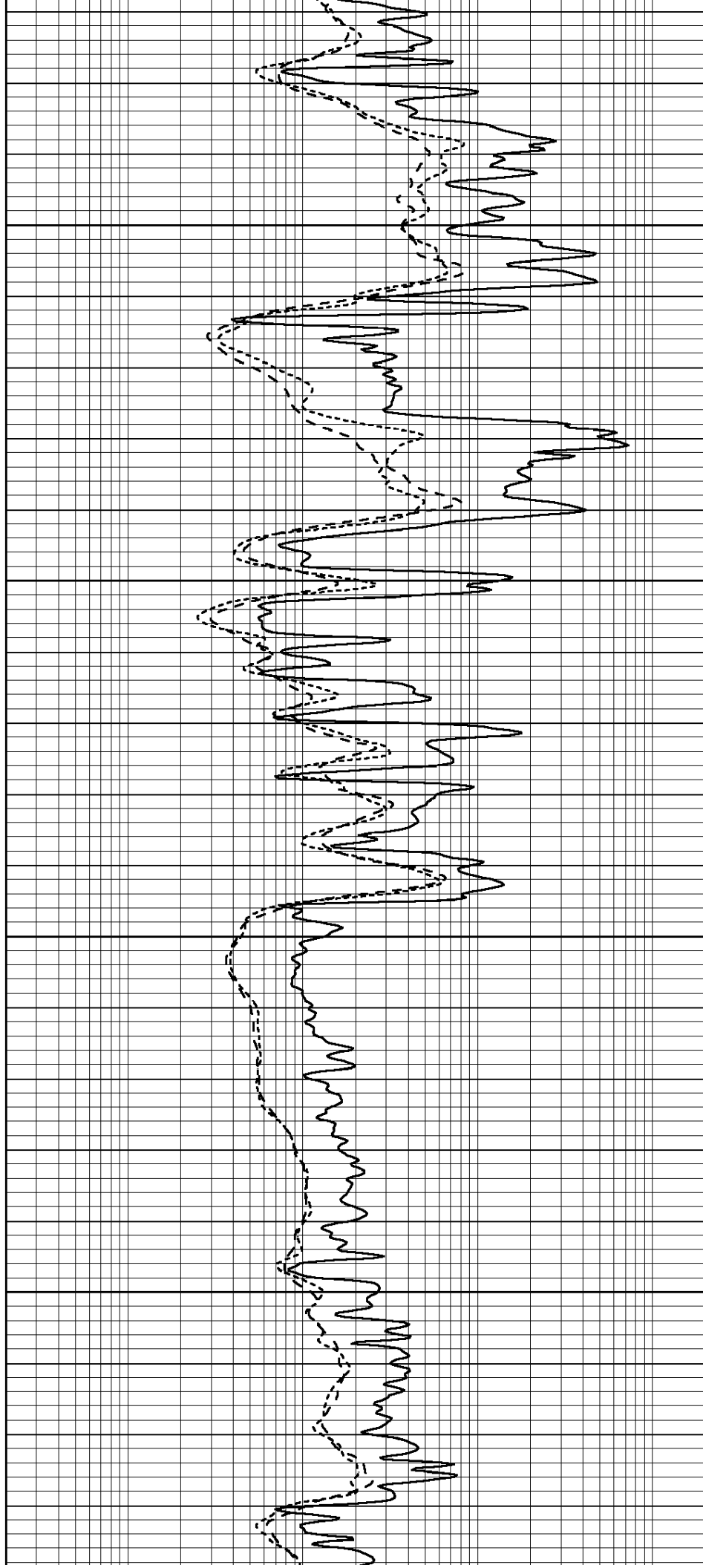


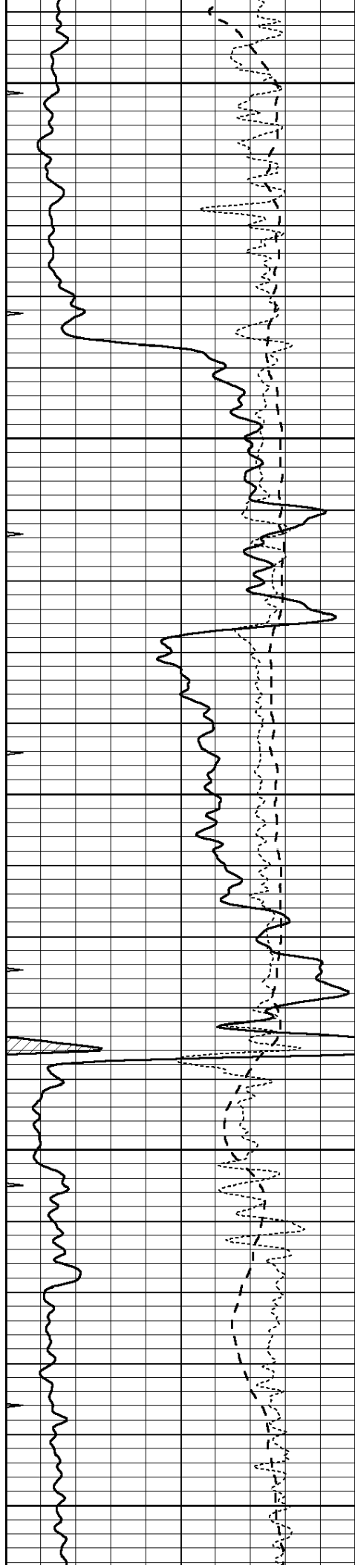
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4250

4300

4350





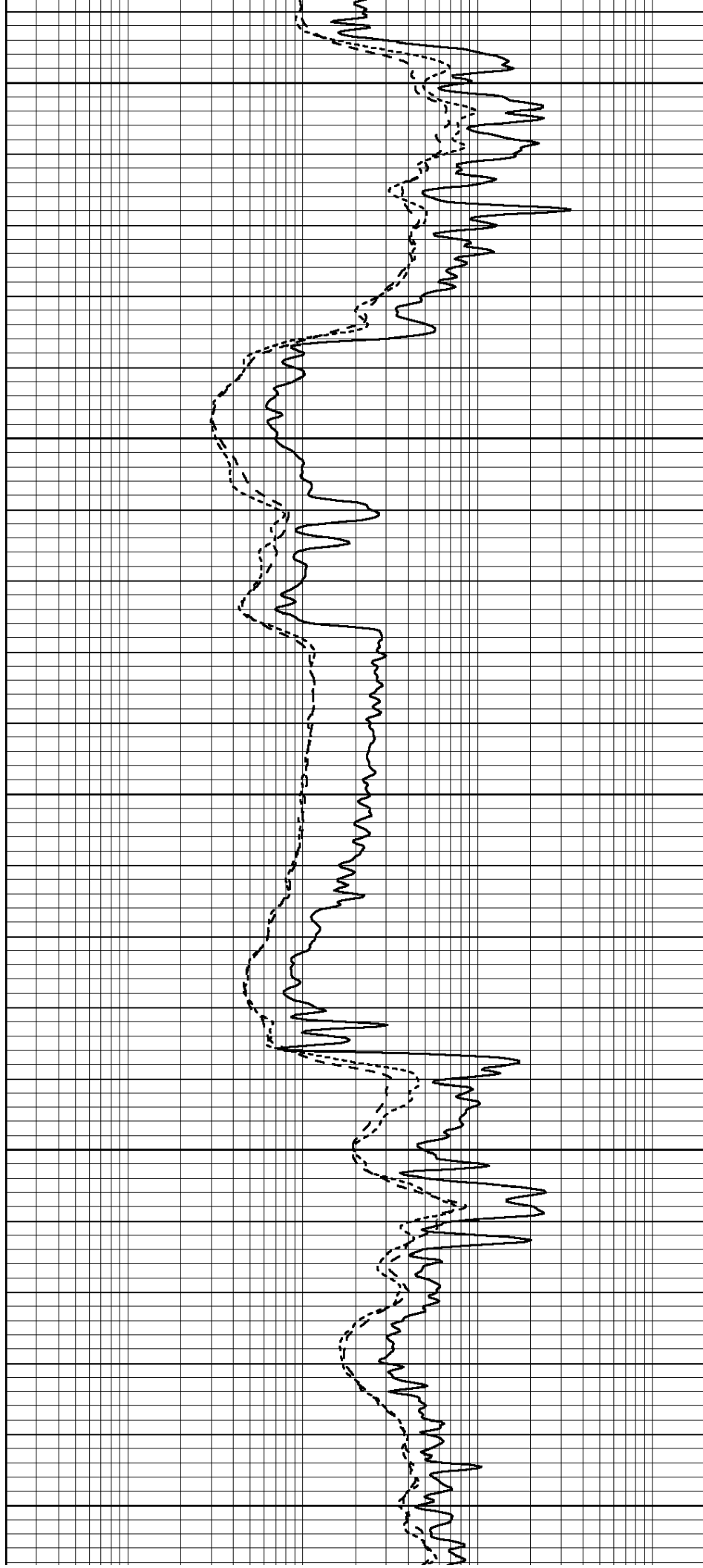
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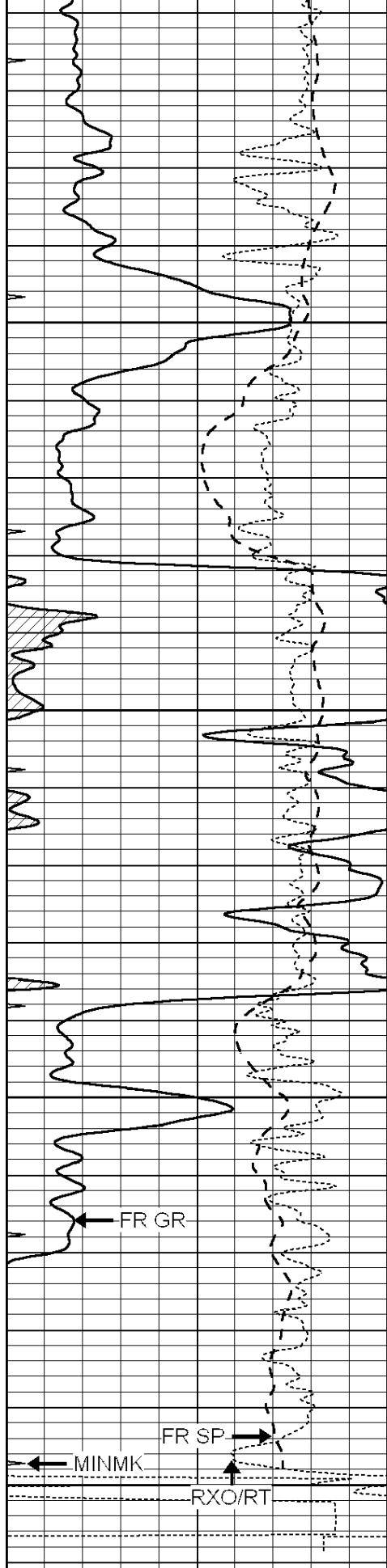
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4500

4550

4600





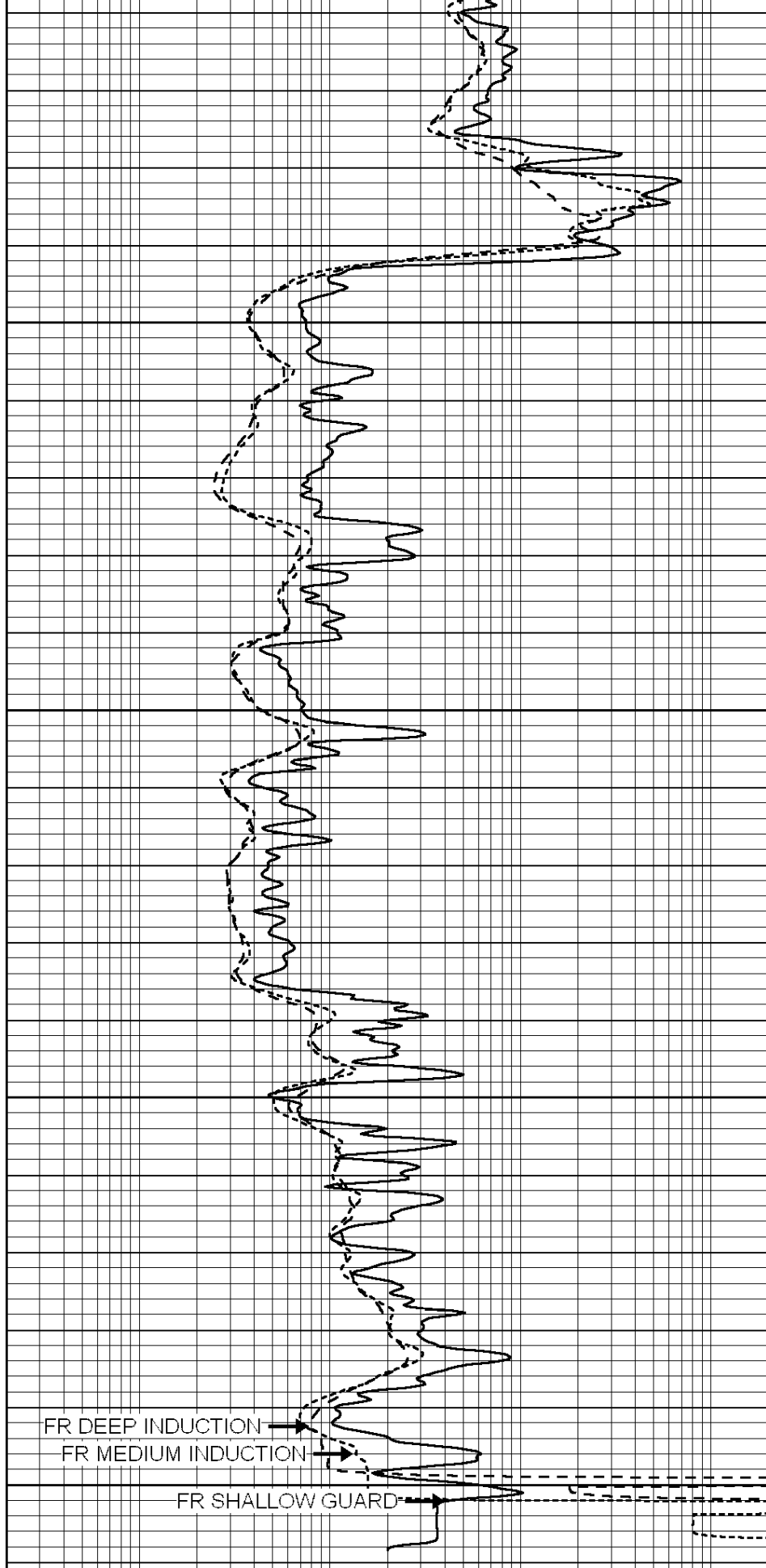
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4700

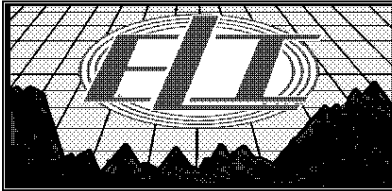
4750

4800
LTD 4804

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

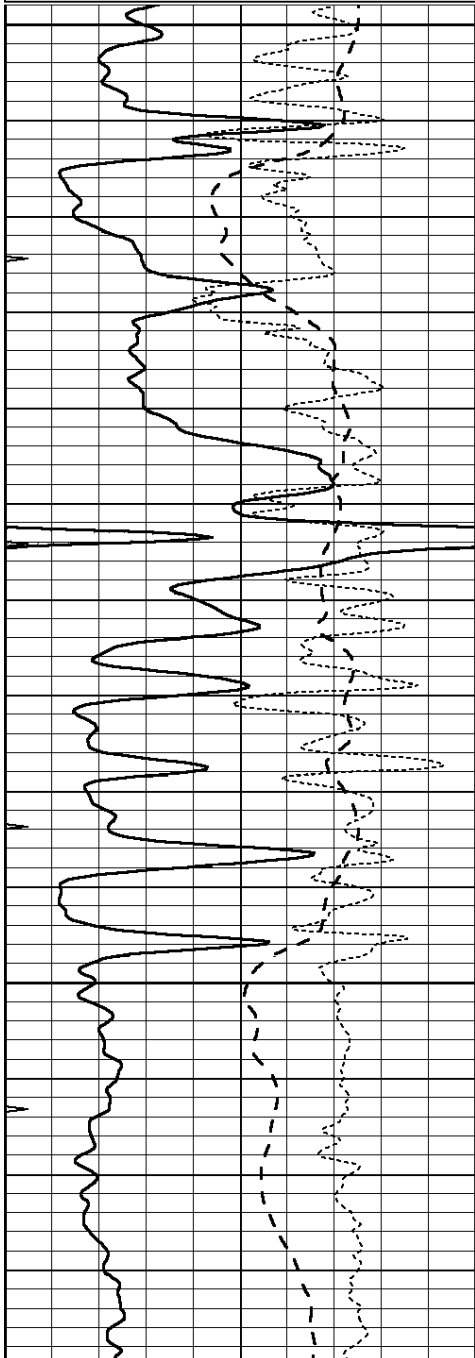


REPEAT SECTION

Database File: 3971pe.db
Dataset Pathname: pass2.8
Presentation Format: _dil
Dataset Creation: Tue Oct 15 23:28:53 2019
Charted by: Depth in Feet scaled 1:240

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

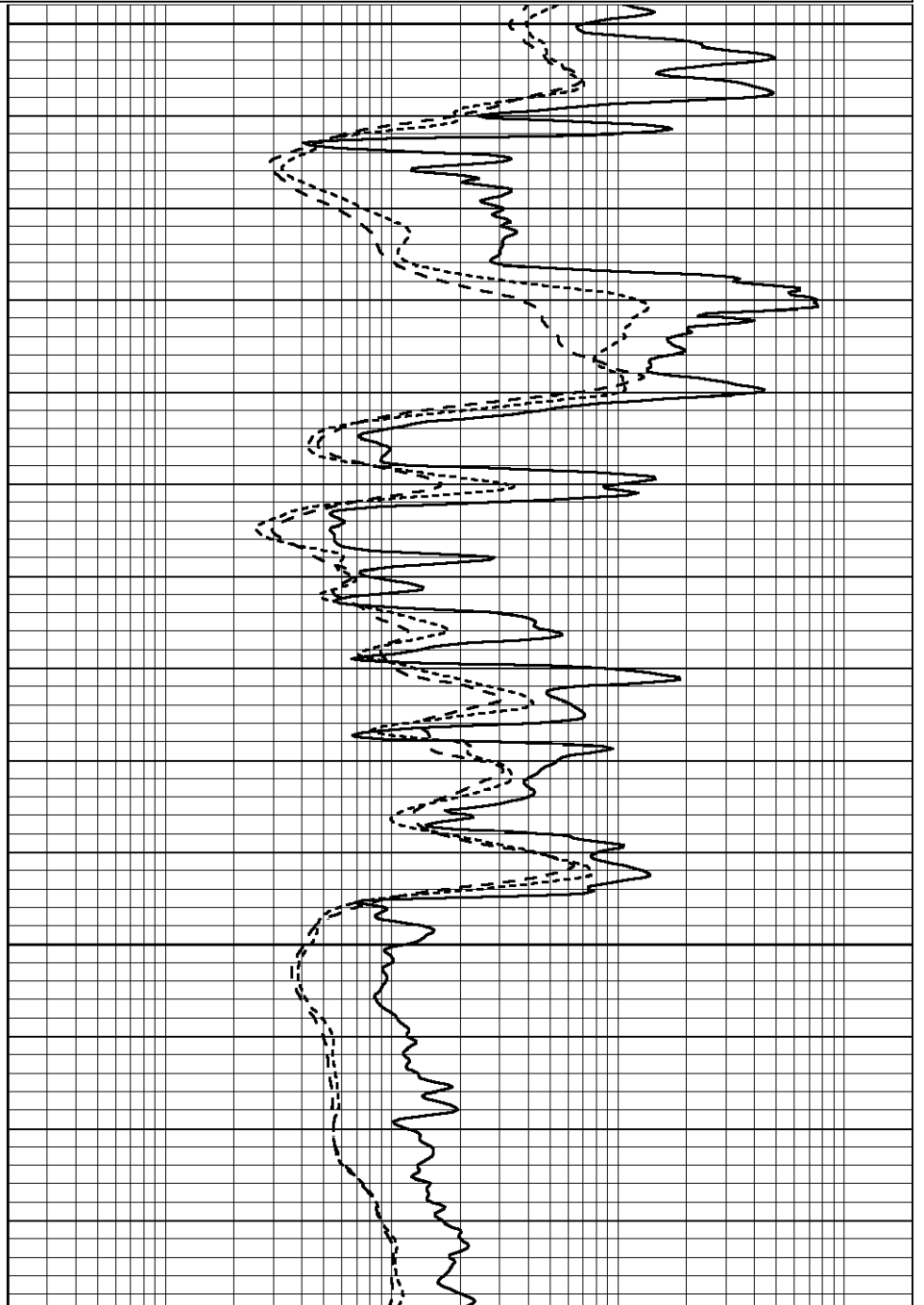
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

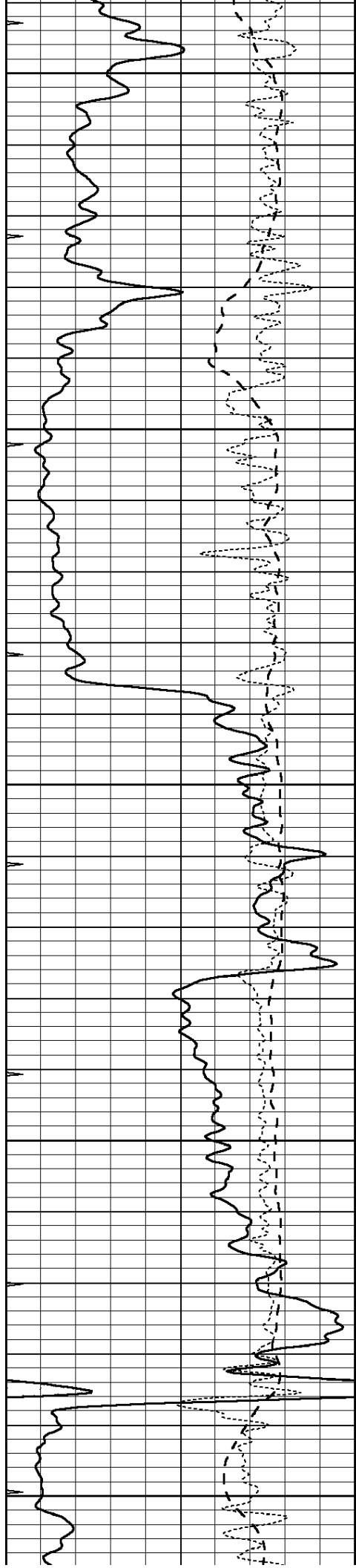


4200

4250

4300





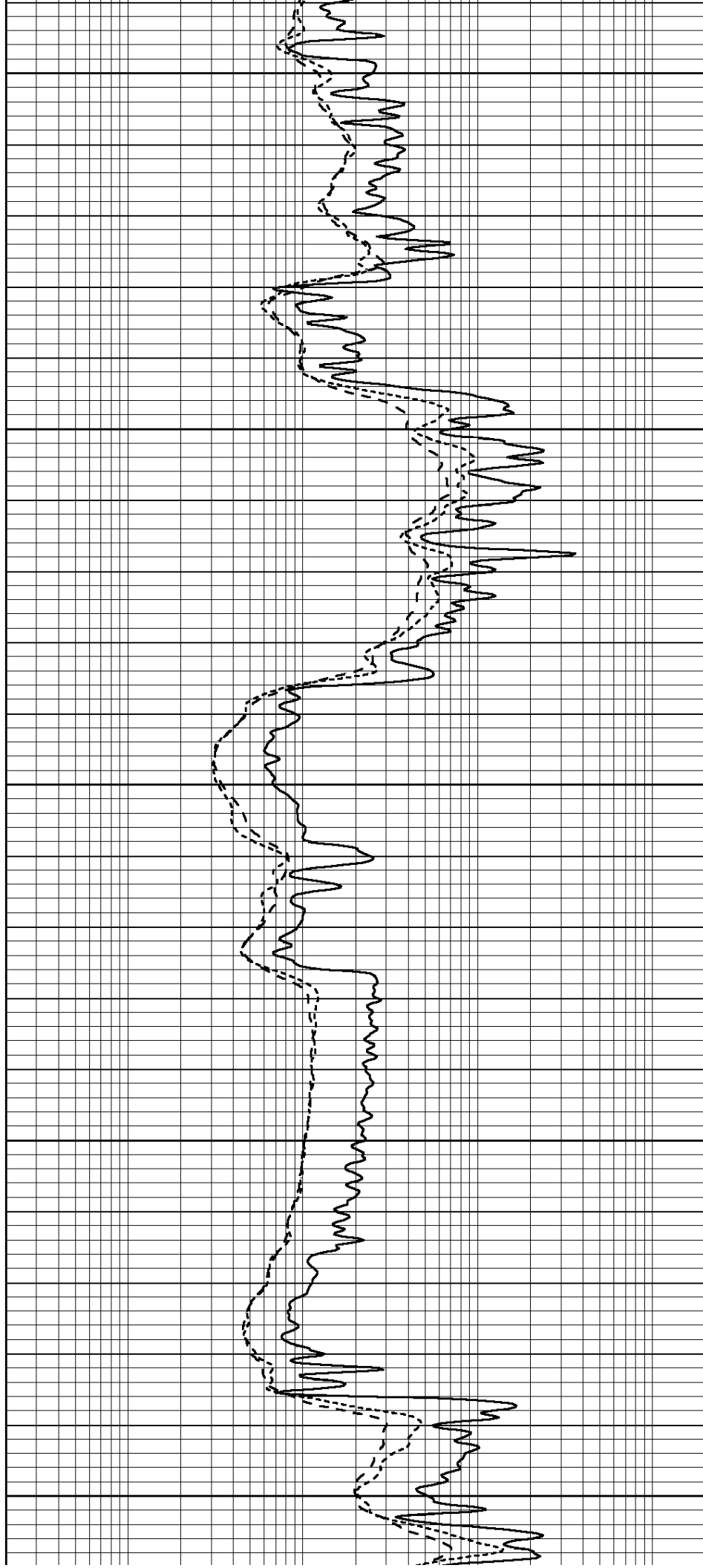
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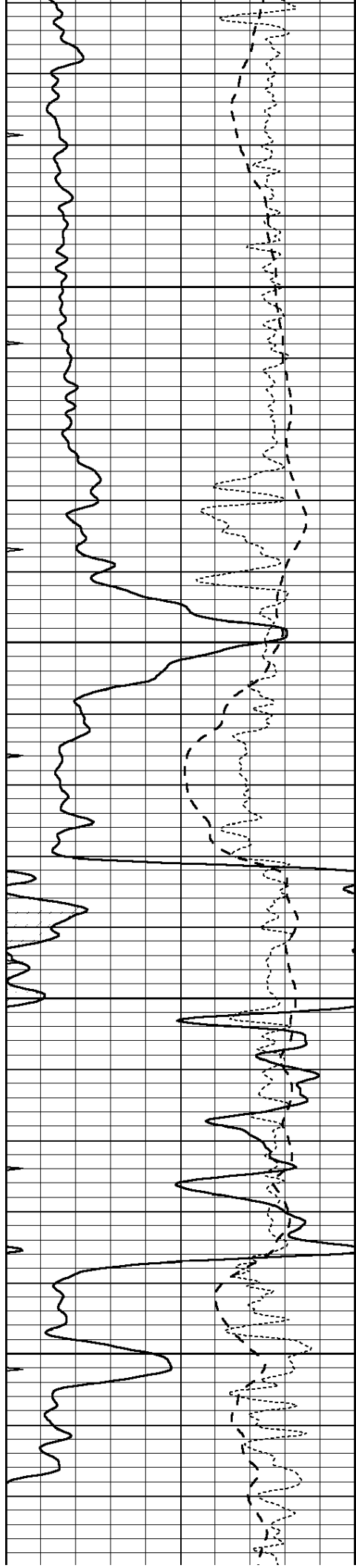
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4450

4500

4550



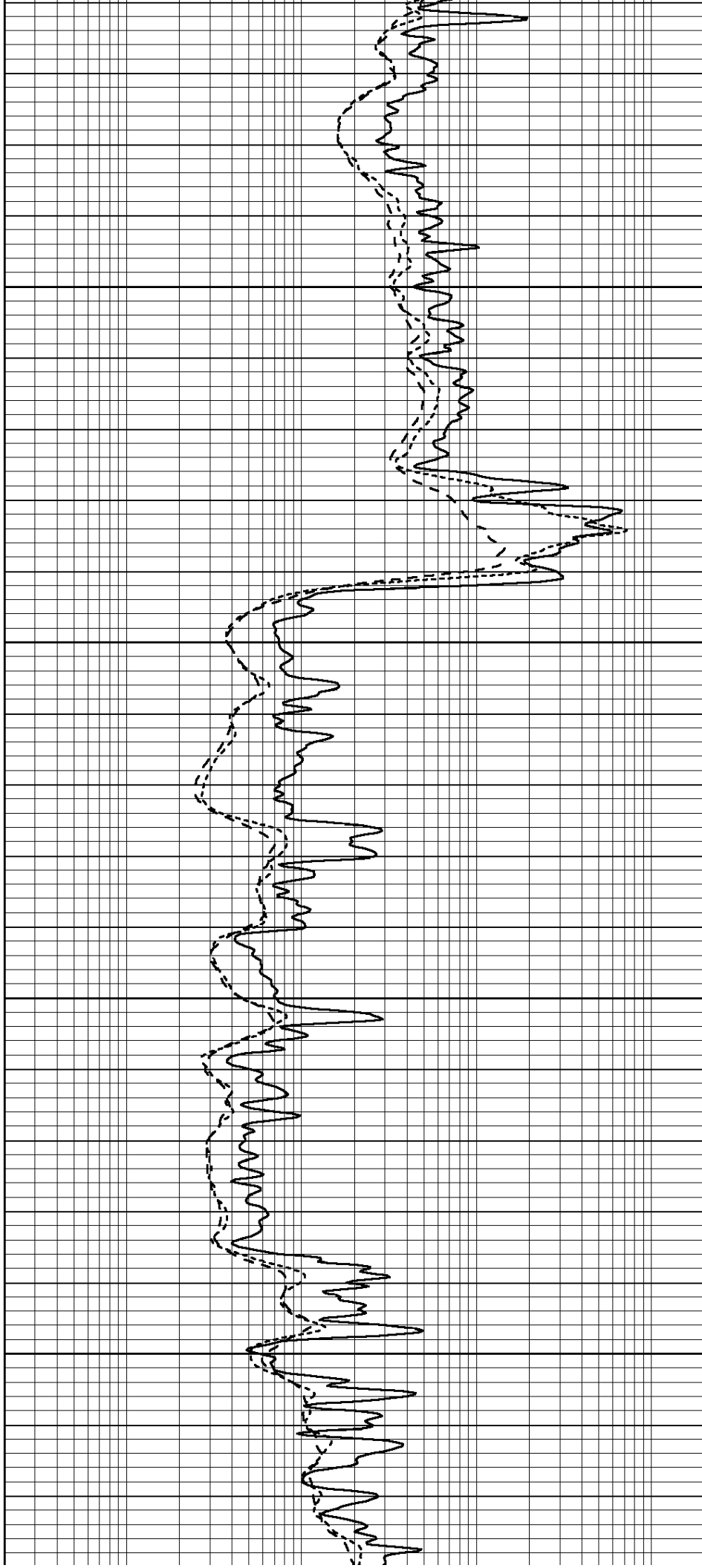


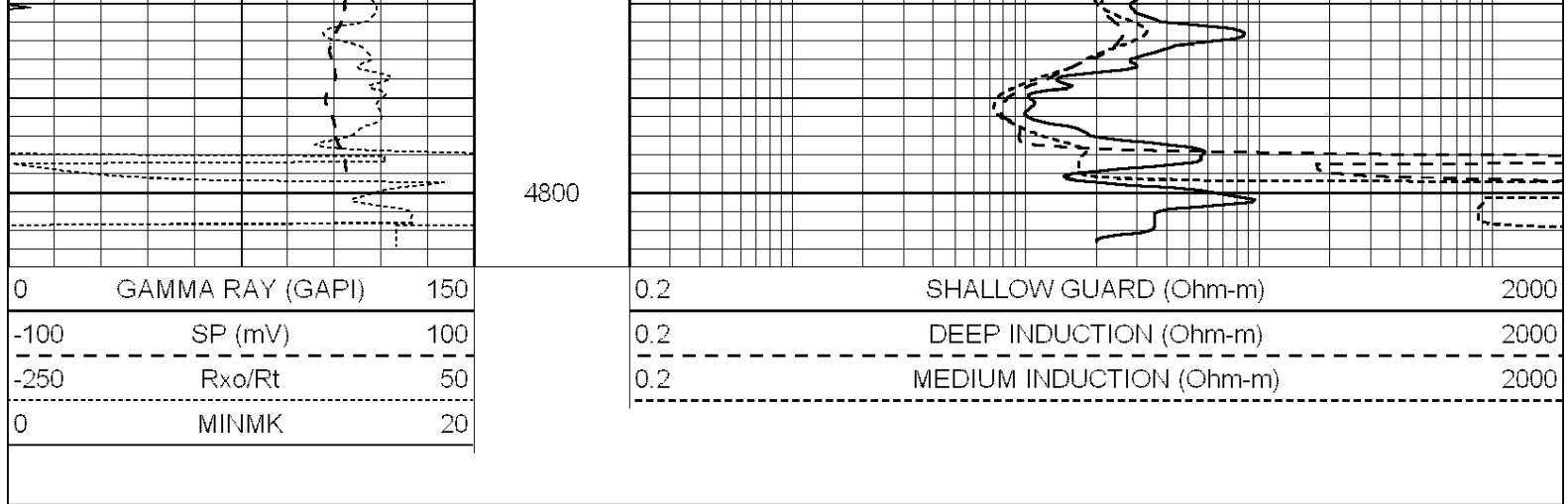
4600

4650

4700

4750





Calibration Report									
Database File:		1598ddn.db							
Dataset Pathname:		pass4							
Dataset Creation:		Wed Aug 30 02:13:00 2017 by Log SOC 120430							
Dual Induction Calibration Report									
Serial-Model:					PROBE7-DILG				
Surface Cal Performed:					Wed Aug 30 00:06:33 2017				
Downhole Cal Performed:					Mon Jul 28 12:02:56 2008				
After Survey Verification Performed:					Mon Jul 28 12:02:56 2008				
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	0.000	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-44.000	
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				
Master Calibration					Performed Mon Aug 21 11:27:42 2017				

	Background	Magnesium	Aluminum	Sandstone	
Window 1	837.1	10632.5	2945.1	12110.1	cps
Window 2	772.0	9117.4	2570.1	10197.3	cps
Window 3	631.7	4669.0	1481.9	5042.9	cps
Window 4	187.0	187.5	185.9	189.9	cps
Long Space	0.0	8345.4	1798.1	9425.3	cps
Short Space	1.1	1927.9	1285.9	2050.2	cps
Rho		1.7100	2.5960	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio	: 0.558
Spine Angle	: 75.2	Spine Slope	: 3.790	Spine Intercept	: -19.6

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	

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Compensated Neutron Calibration Report					
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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					
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Serial Number:		070558			
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Tool Model: OPEN_GR
Performed: Wed May 31 00:09:32 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.2800 GAPI/cps