



DUAL INDUCTION LOG

Company	LARIO OIL & GAS COMPANY		
Well	SMITH TRUST #1-3		
Field	FELL NORTHWEST		
County	WICHITA	State	KANSAS
Location:	API # : 15-203-20328-0000 2305' FSL & 335' FWL NW - NW - SW		Other Services CDL/CNL/PE MEL/SONIC
Permanent Datum	GROUND LEVEL	Elevation	3190
Log Measured From	KELLY BUSHING 11' A.G.L.	Elevation	K.B. 3201 D.F. 3199 G.L. 3190
Drilling Measured From	KELLY BUSHING		
SEC 3	TWP 18S	RGE 35W	
Date	4/3/18		
Run Number	ONE		
Depth Driller	5060		
Depth Logger	5058		
Bottom Logged Interval	5056		
Top Log Interval	00		
Casing Driller	8 5/8"@337'		
Casing Logger	337		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	9.1/62		
pH / Fluid Loss	9.0/8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.600@40F		
Rmf @ Meas. Temp	.450@40F		
Rmc @ Meas. Temp	.720@40F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.190@126F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	10:00 A.M.		
Maximum Recorded Temperature	126F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TIM LAUER		

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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 ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
SCOTT CITY, KS., 15W. ON HWY 96 TO "RD. 22", 2 1/2N., E. INTO
NOTE 22# LCM MATERIAL



MAIN SECTION

Database File: 2481pe.db
Dataset Pathname: pass3.7
Presentation Format: dil2
Dataset Creation: Tue Apr 03 23:47:09 2018
Charted by: Depth in Feet scaled 1:600

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

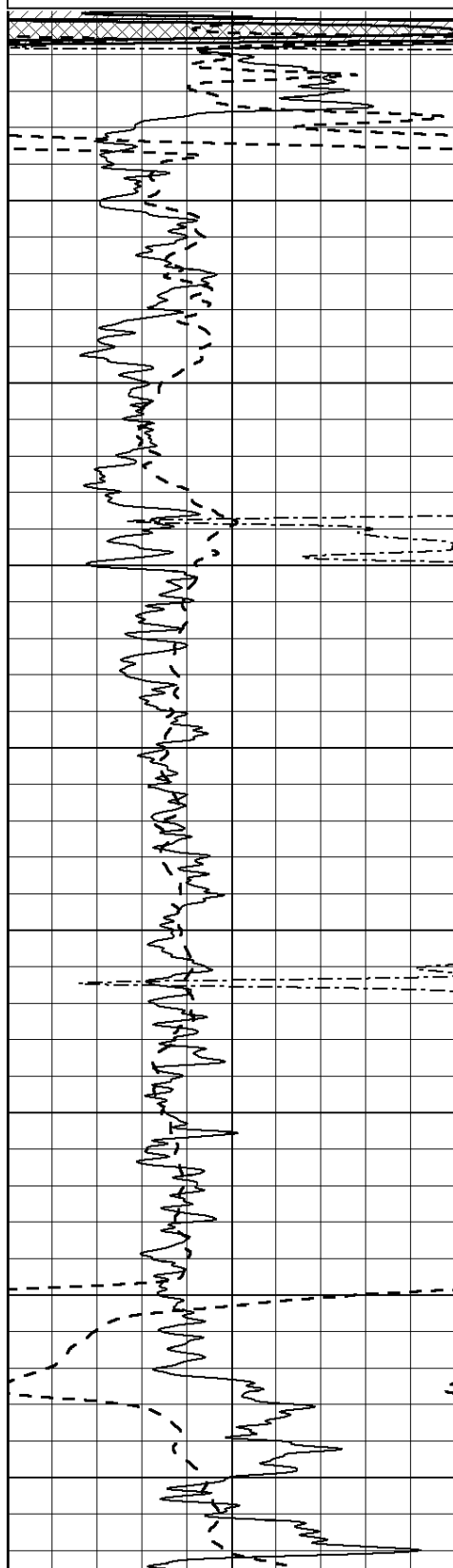
0	RLL3 (Ohm-m)	50
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0	RILD (Ohm-m)	50
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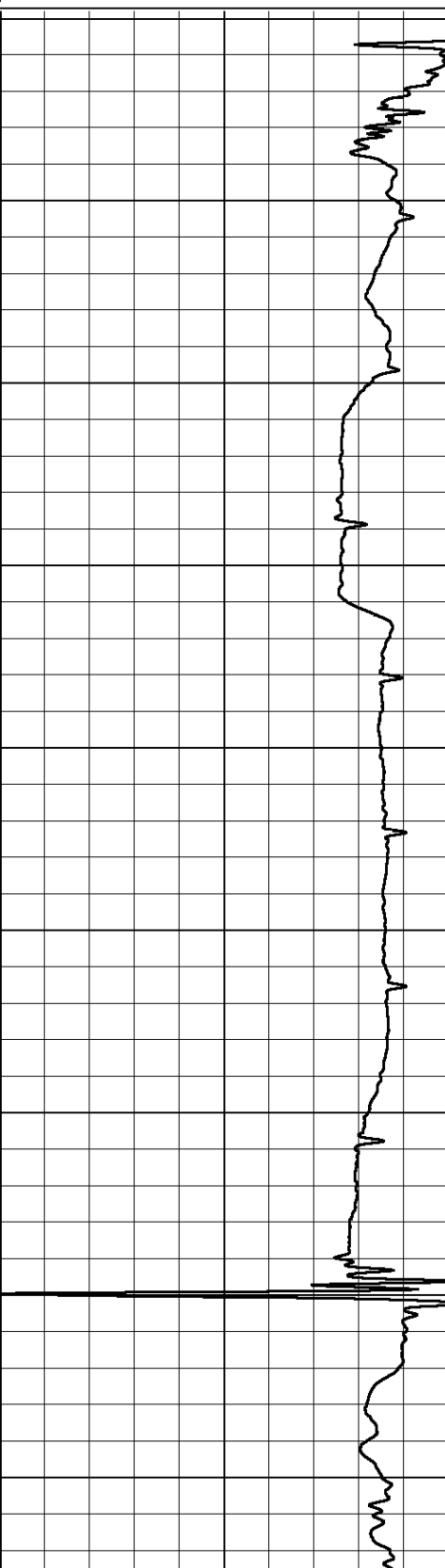
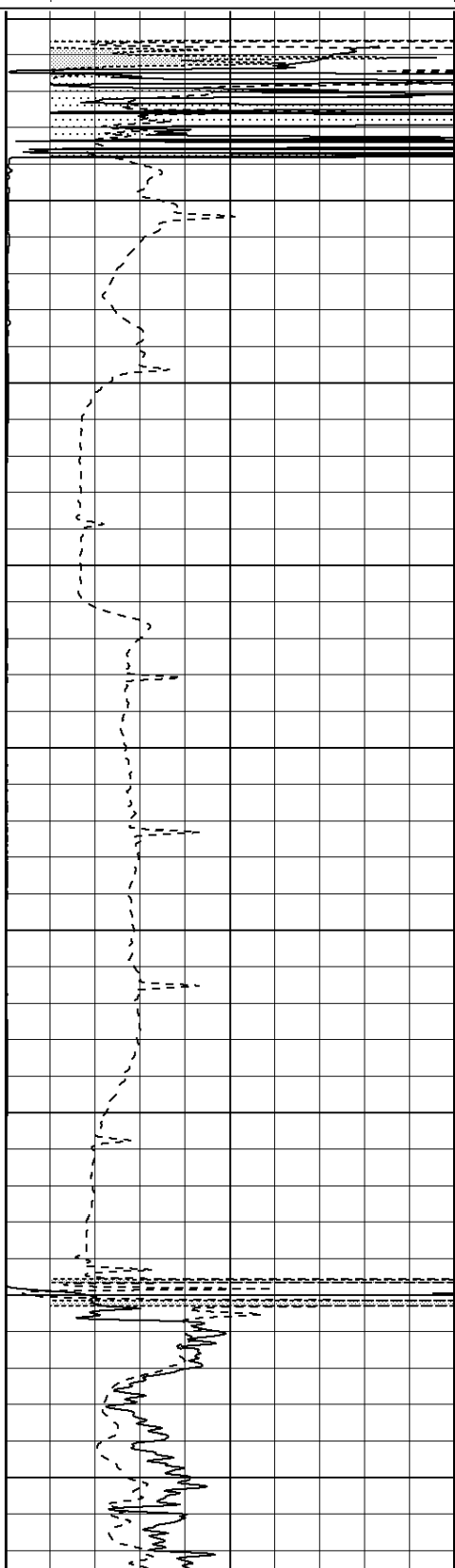
1000	CILD (mmho/m)	0
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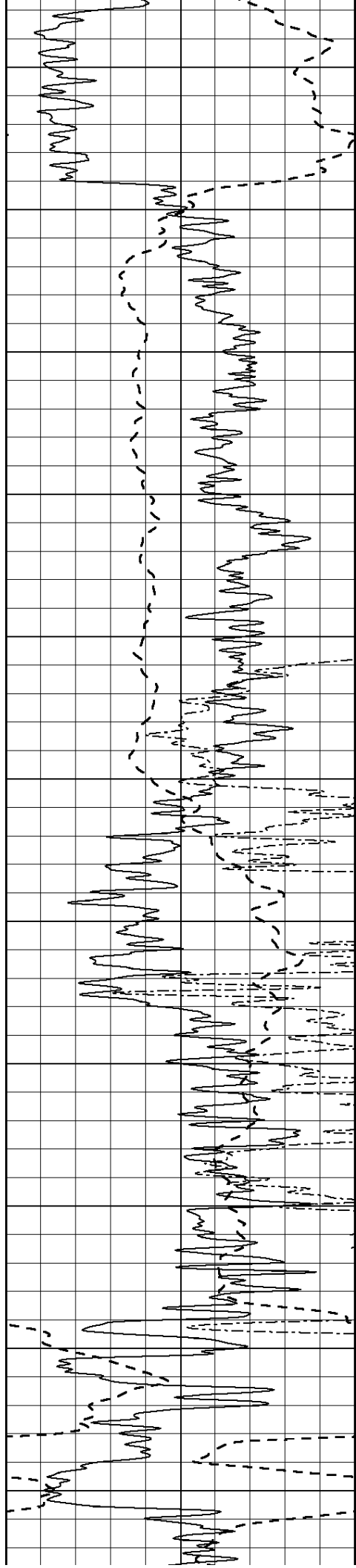
50	RILD X10 (Ohm-m)	500
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50	RLL3 X10 (Ohm-m)	500
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0
50
100
150
200
250
300
350
400





450

500

550

600

650

700

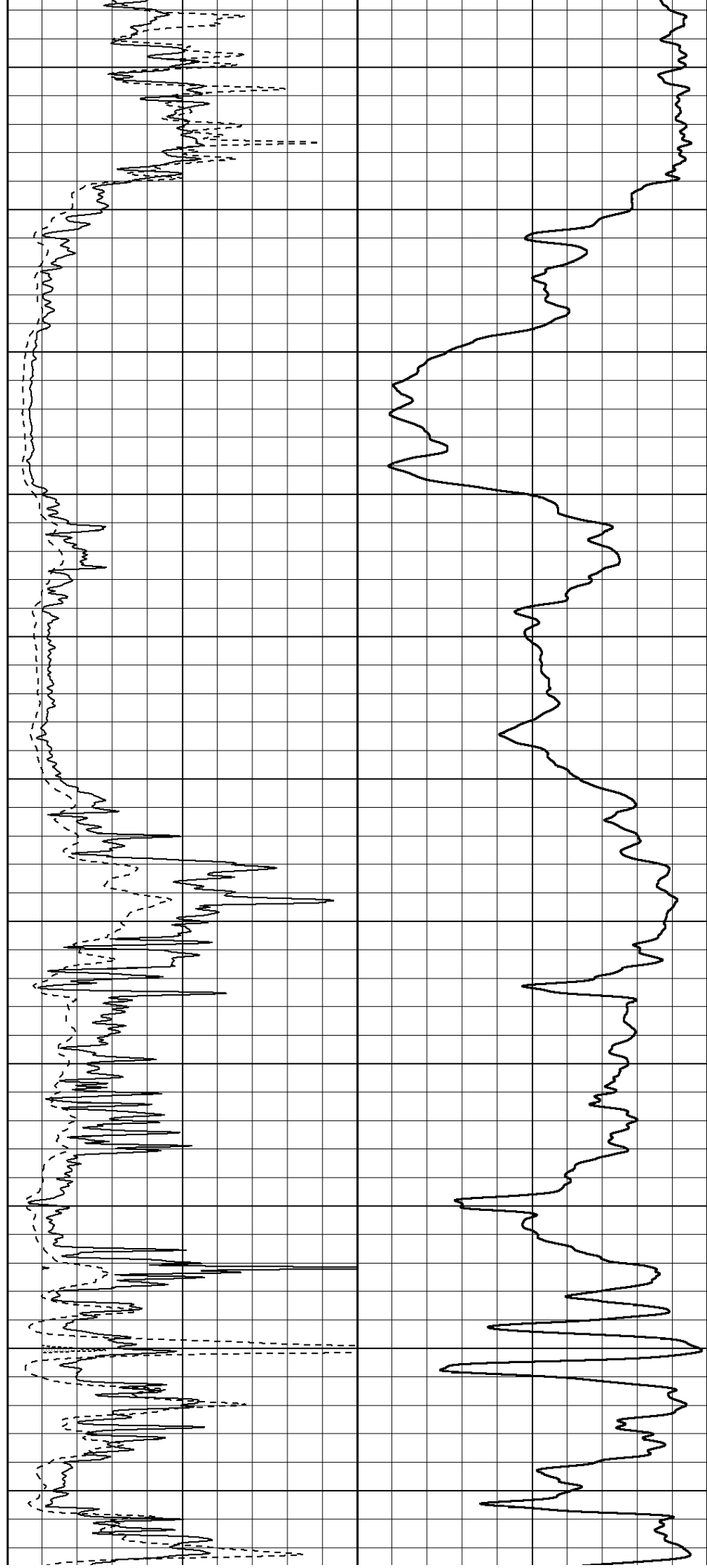
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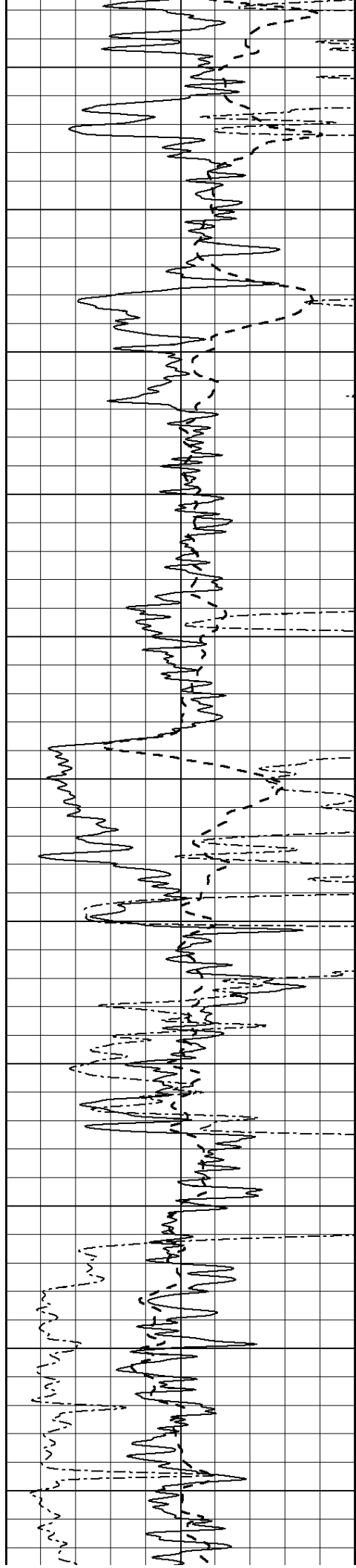
800

850

900

950





1000

1050

1100

1150

1200

1250

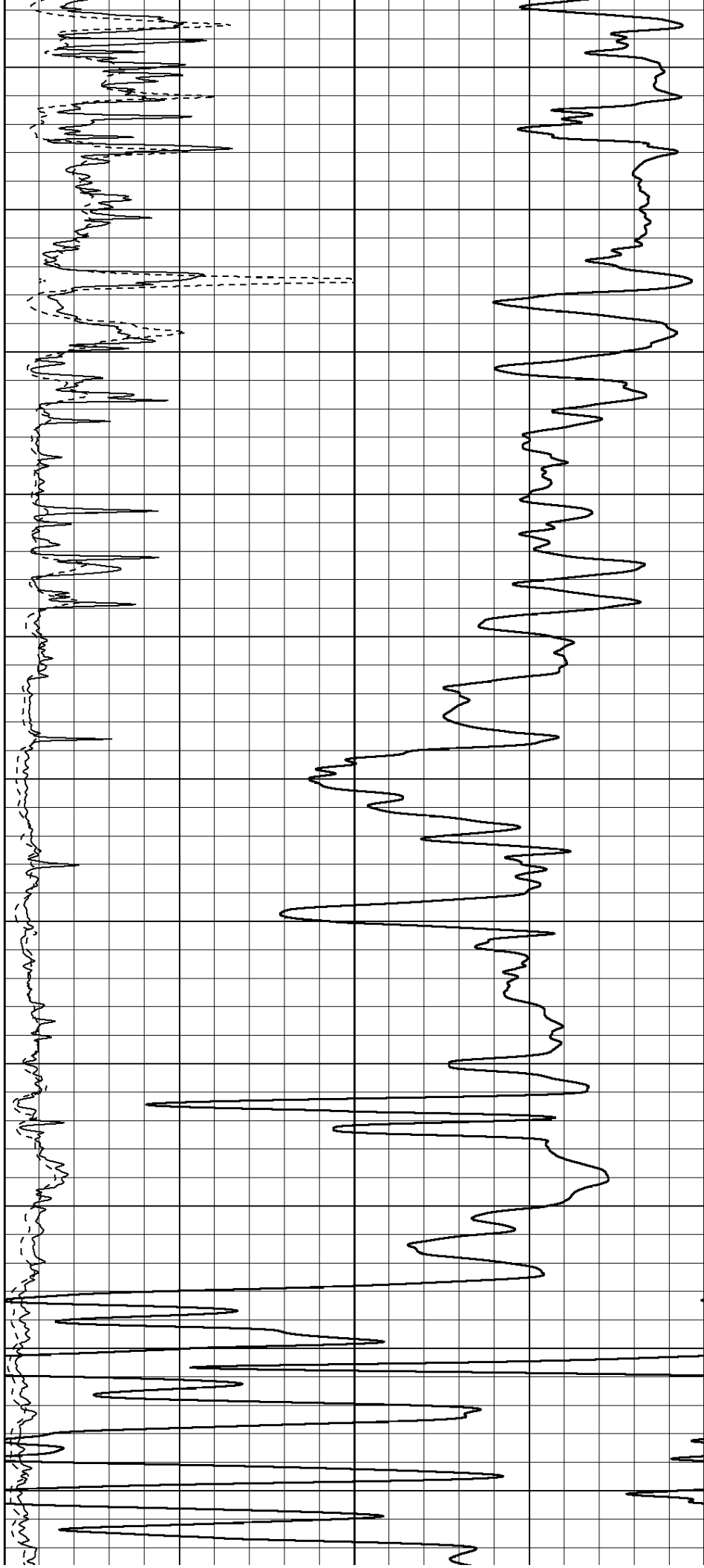
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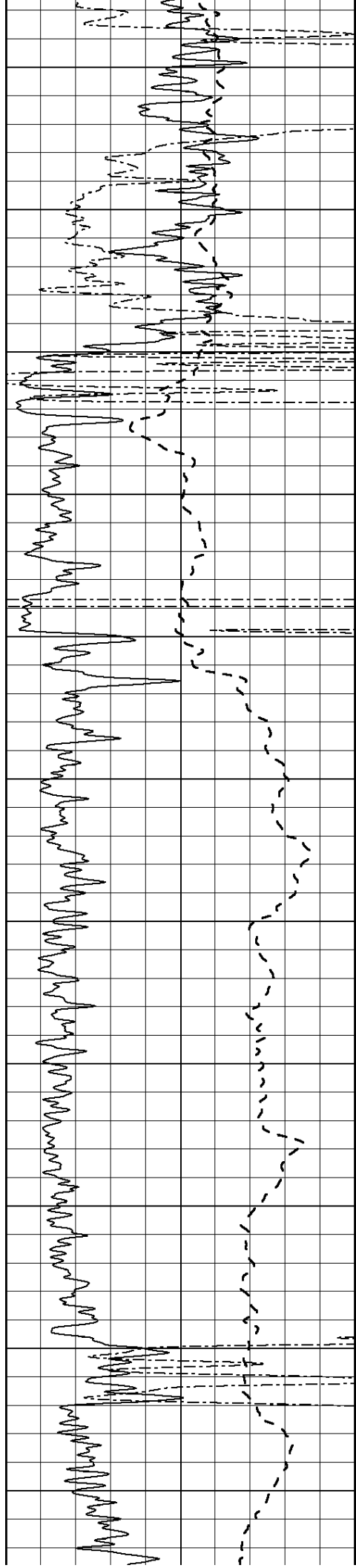
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1400

1450

1500





1550

1600

1650

1700

1750

1800

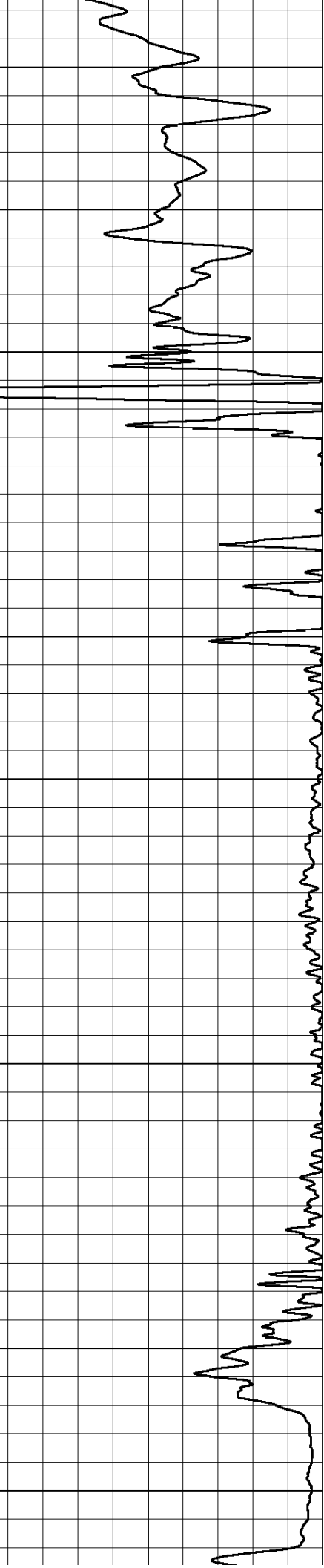
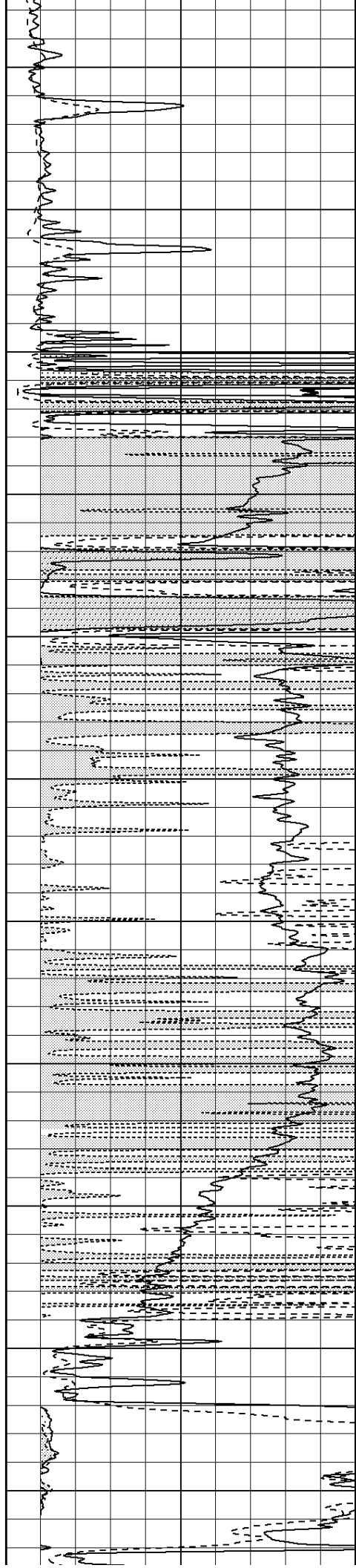
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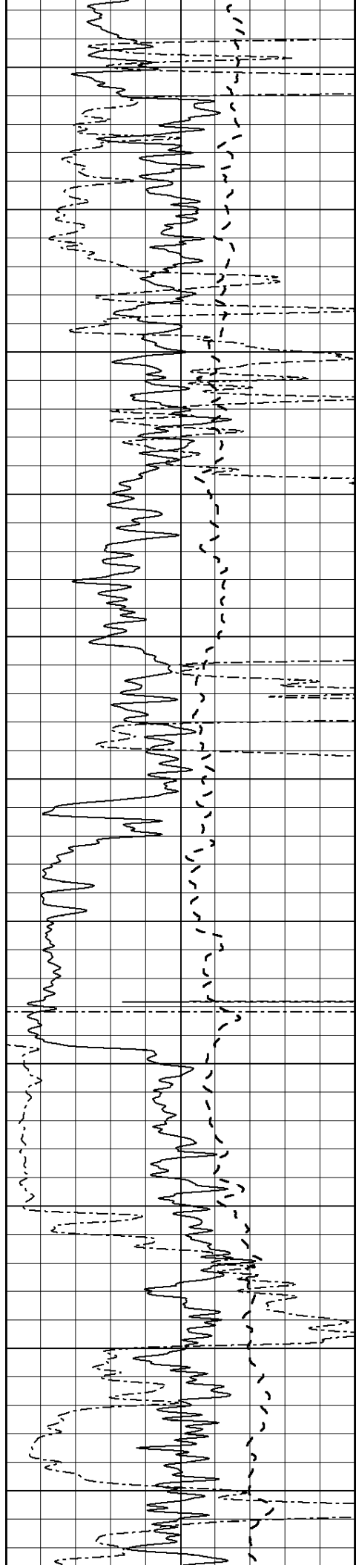
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1950

2000

2050





2100

2150

2200

2250

2300

2350

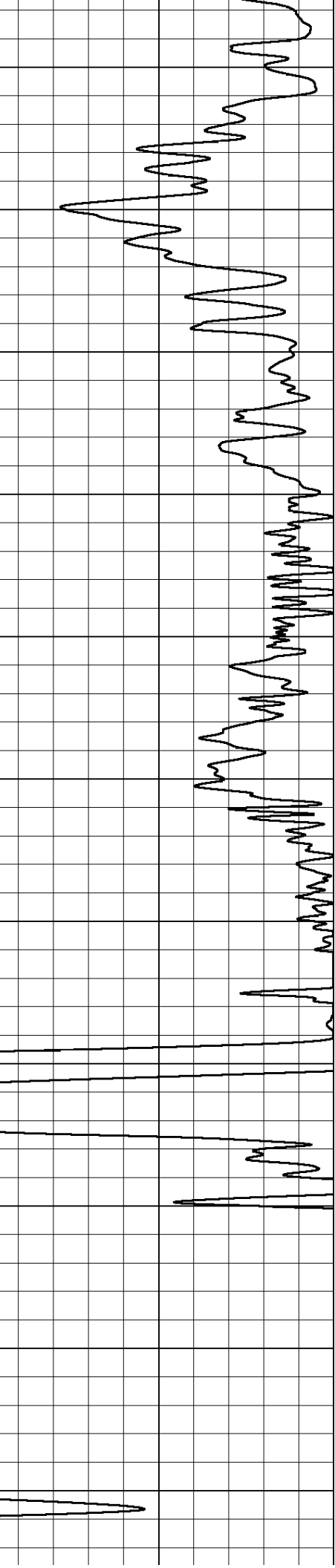
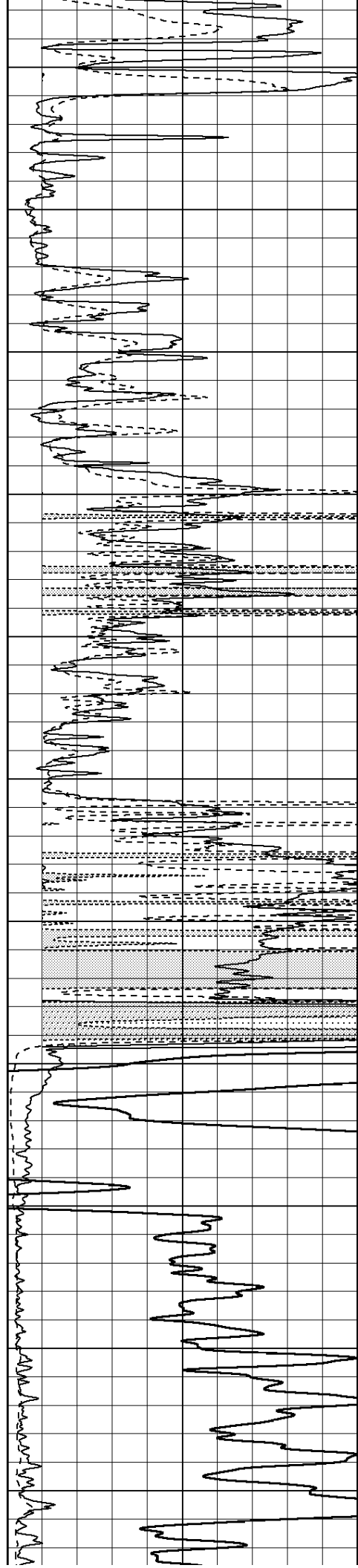
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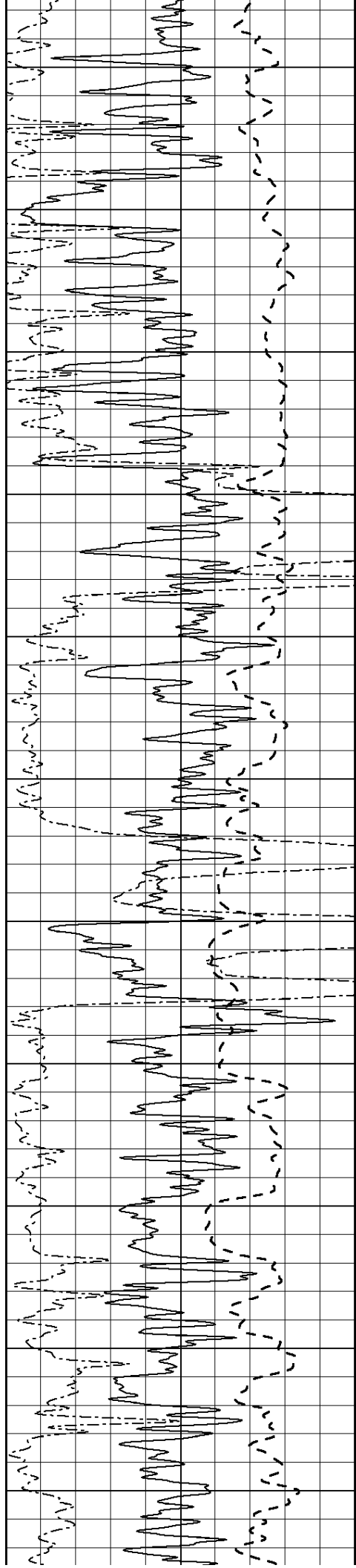
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2500

2550

2600





2650

2700

2750

2800

2850

2900

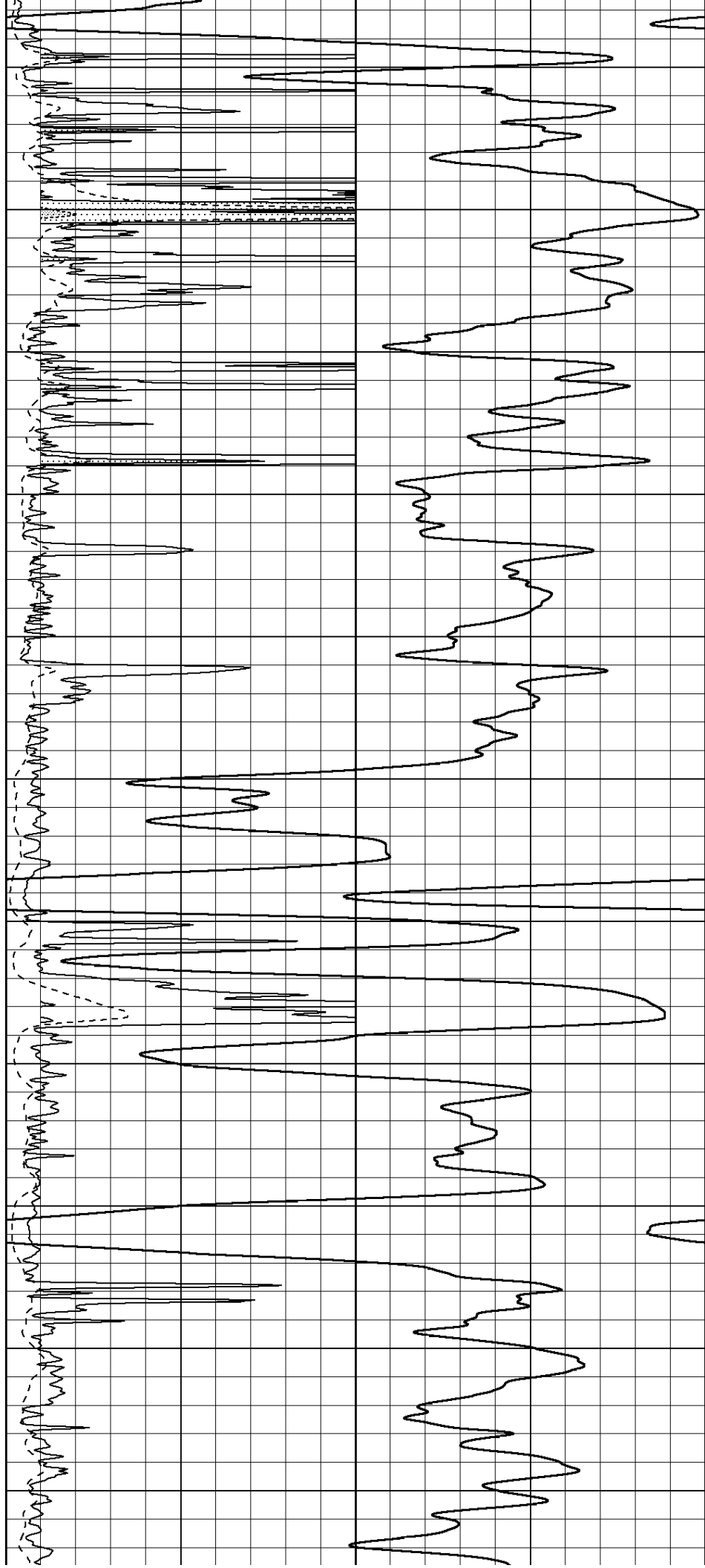
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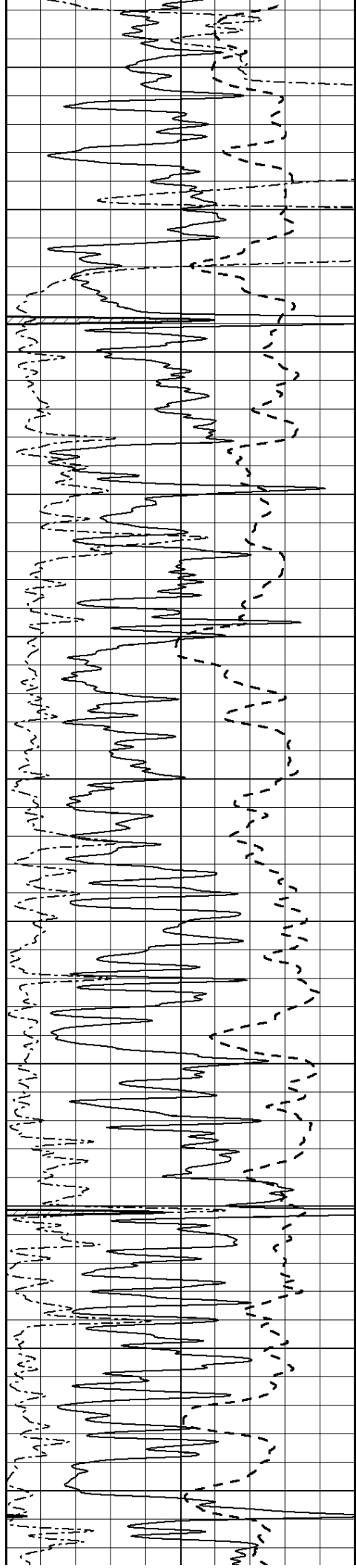
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3050

3100

3150





3200

3250

3300

3350

3400

3450

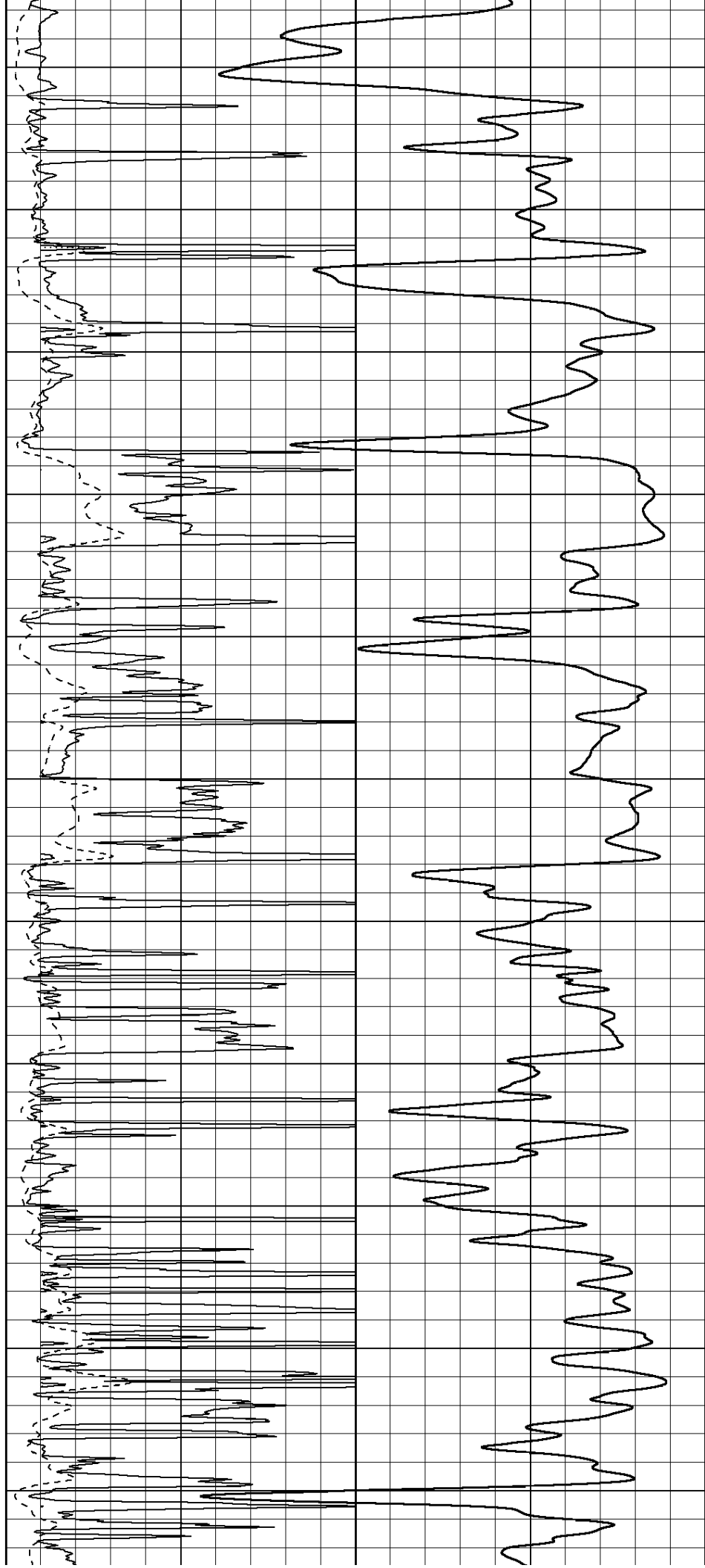
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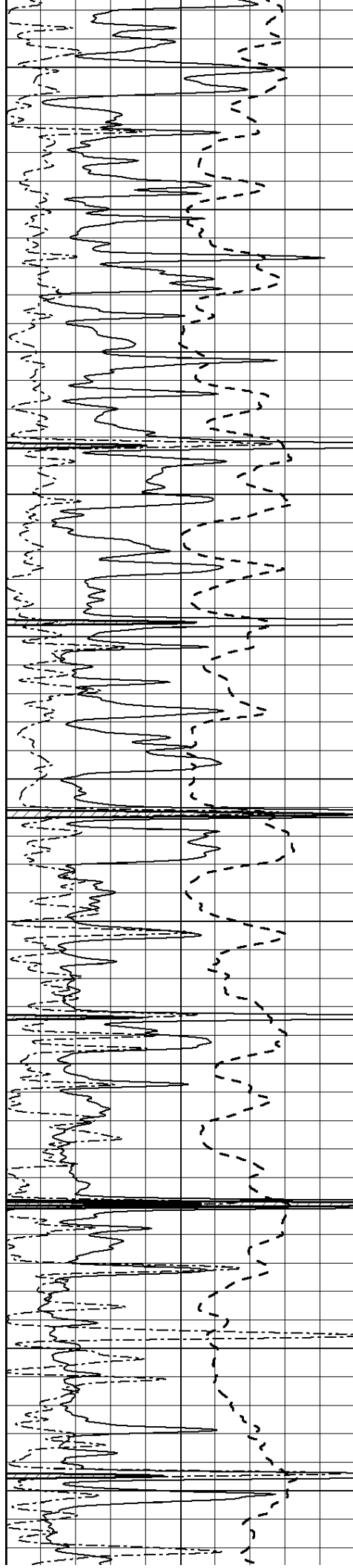
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3600

3650

3700





3750

3800

3850

3900

3950

4000

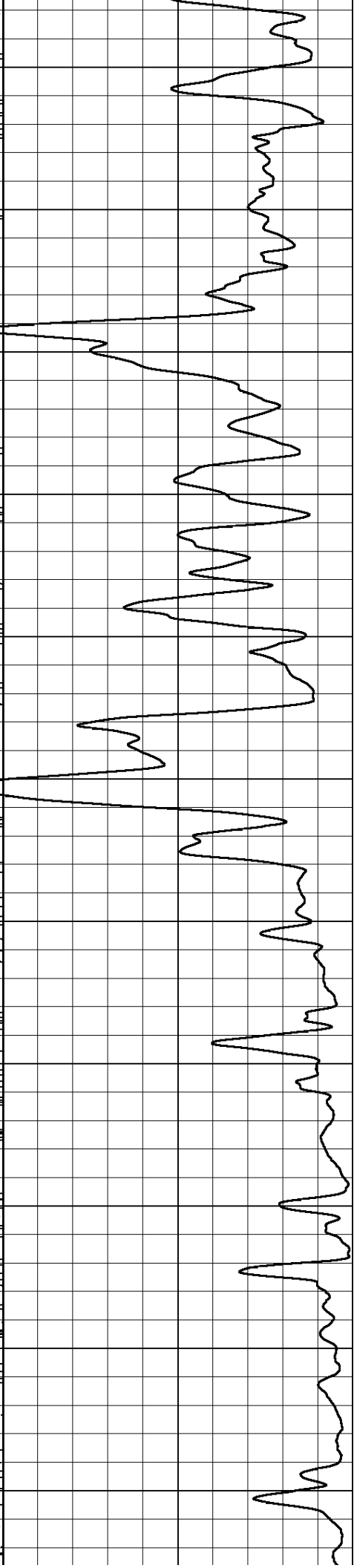
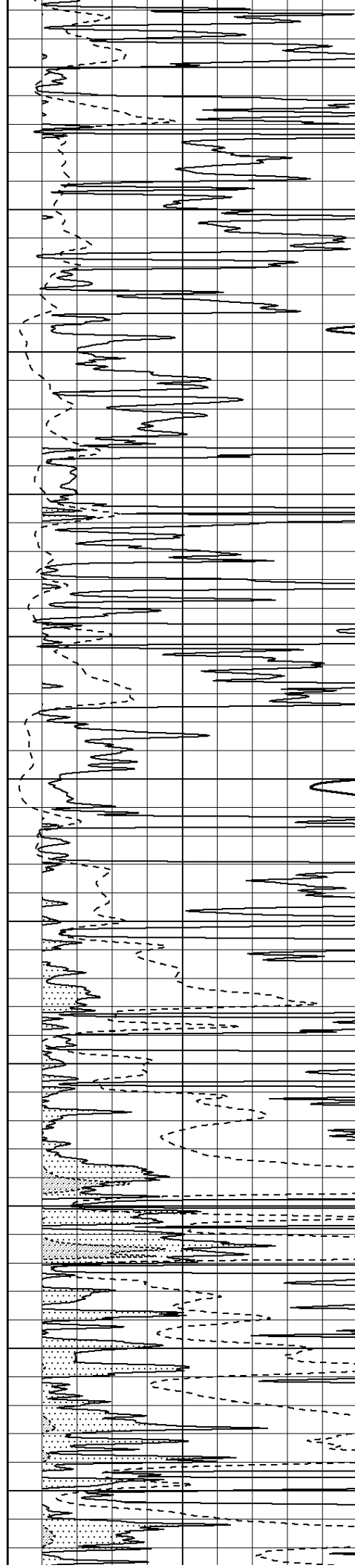
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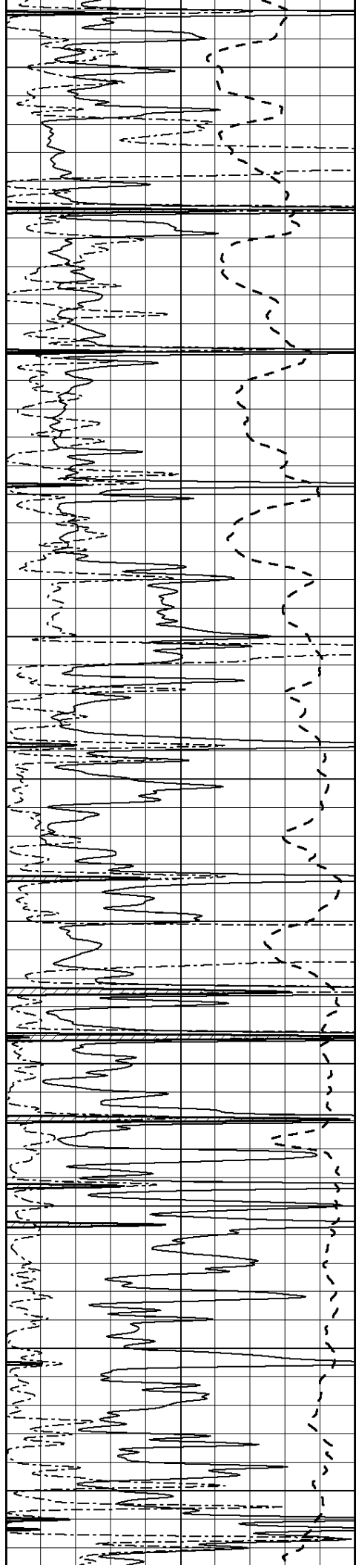
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4150

4200

4250





4300

4350

4400

4450

4500

4550

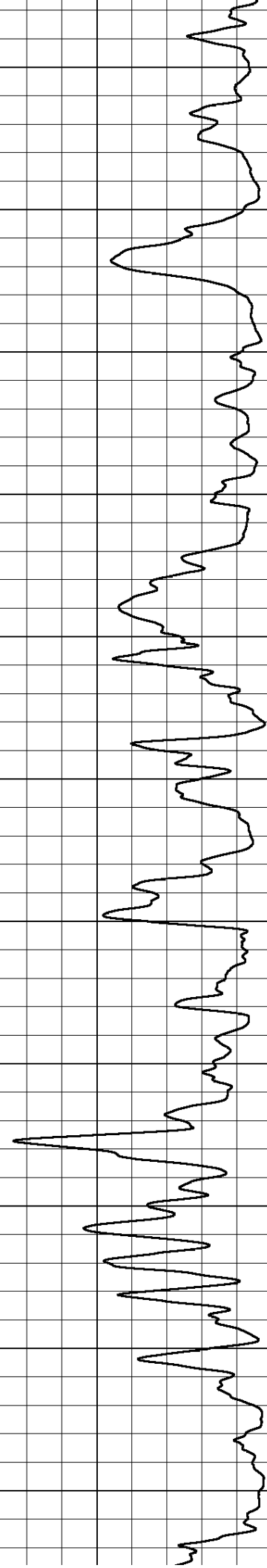
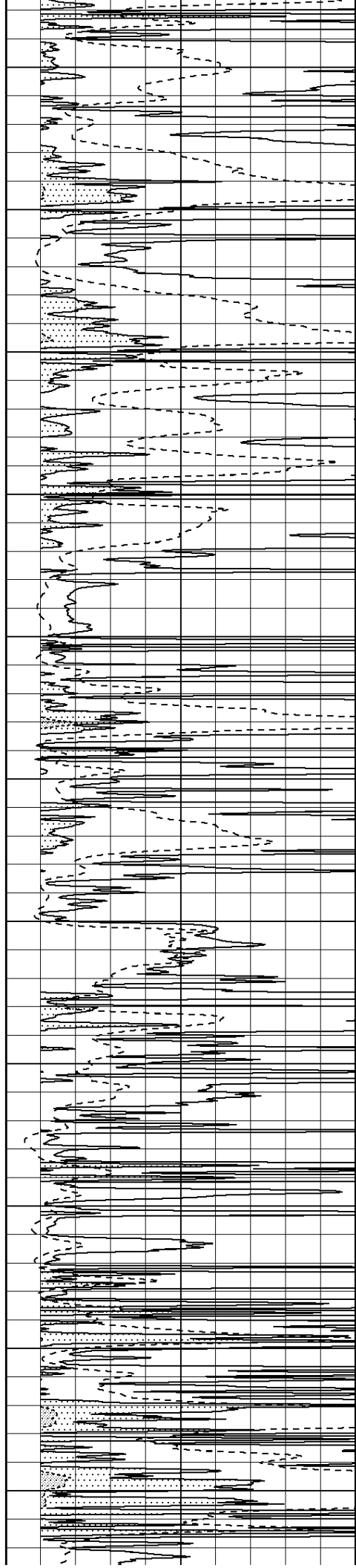
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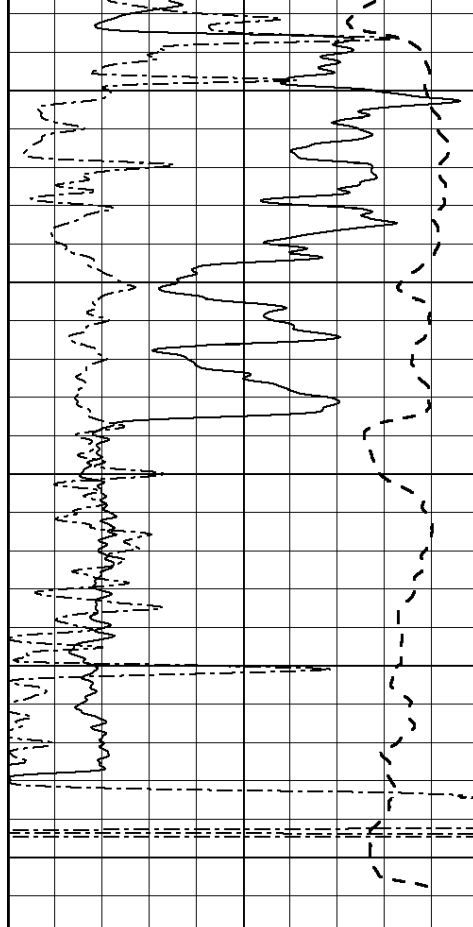
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4700

4750

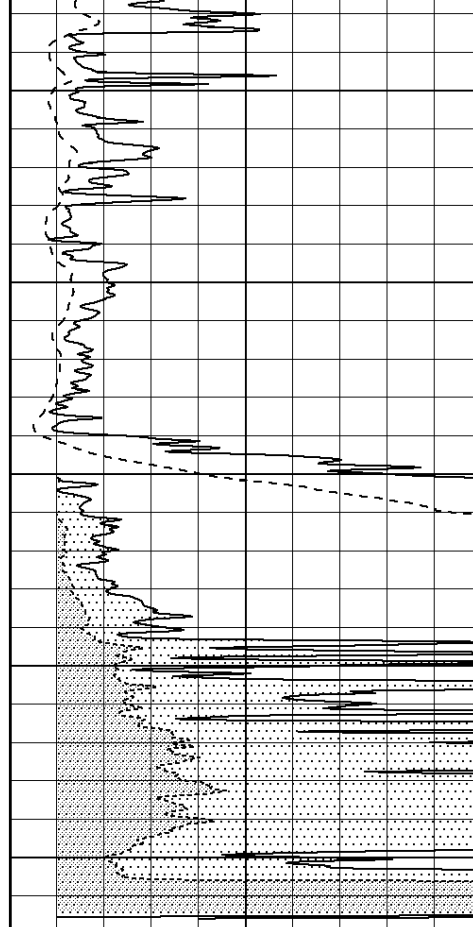
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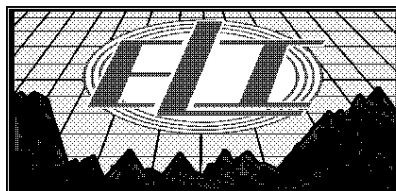
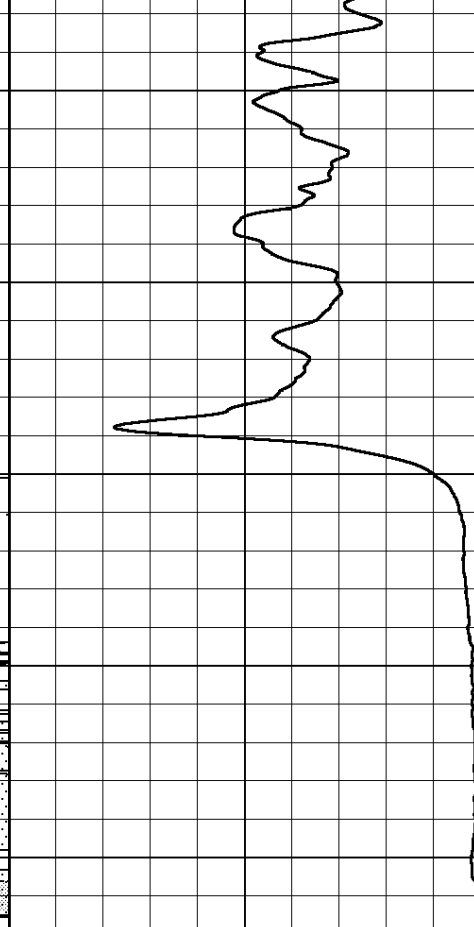


0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

4850
4900
4950
5000
5050



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

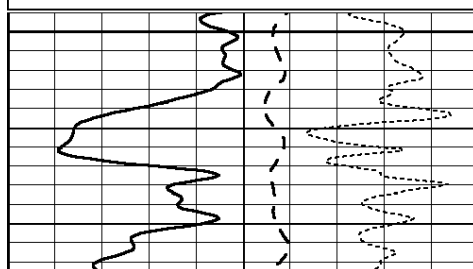


ANHYDRITE

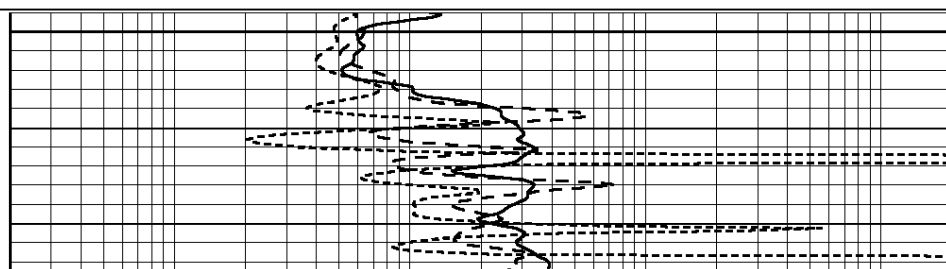
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Dataset Pathname: pass3.8
Presentation Format: _dil
Dataset Creation: Tue Apr 03 23:47:32 2018
Charted by: Depth in Feet scaled 1:240

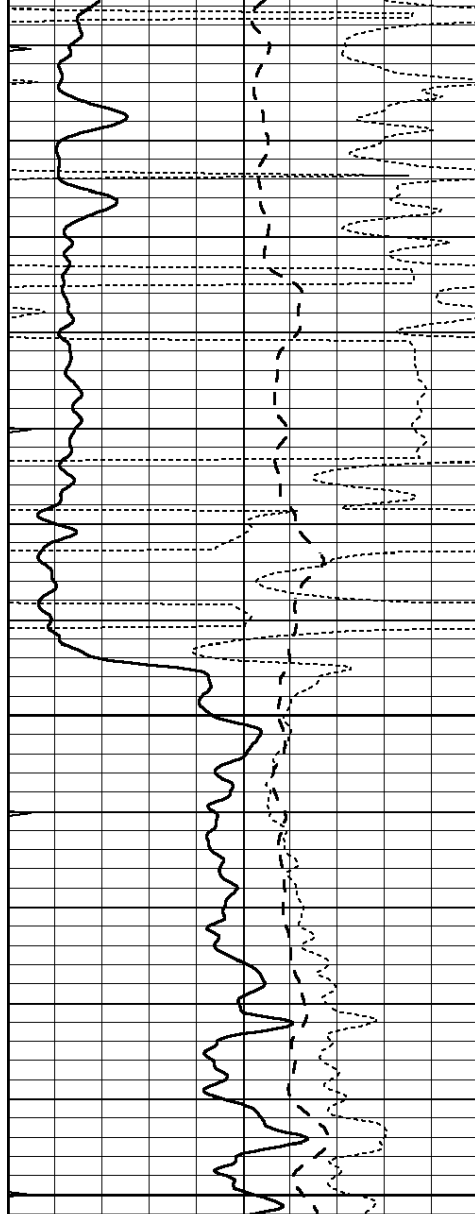
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



2350



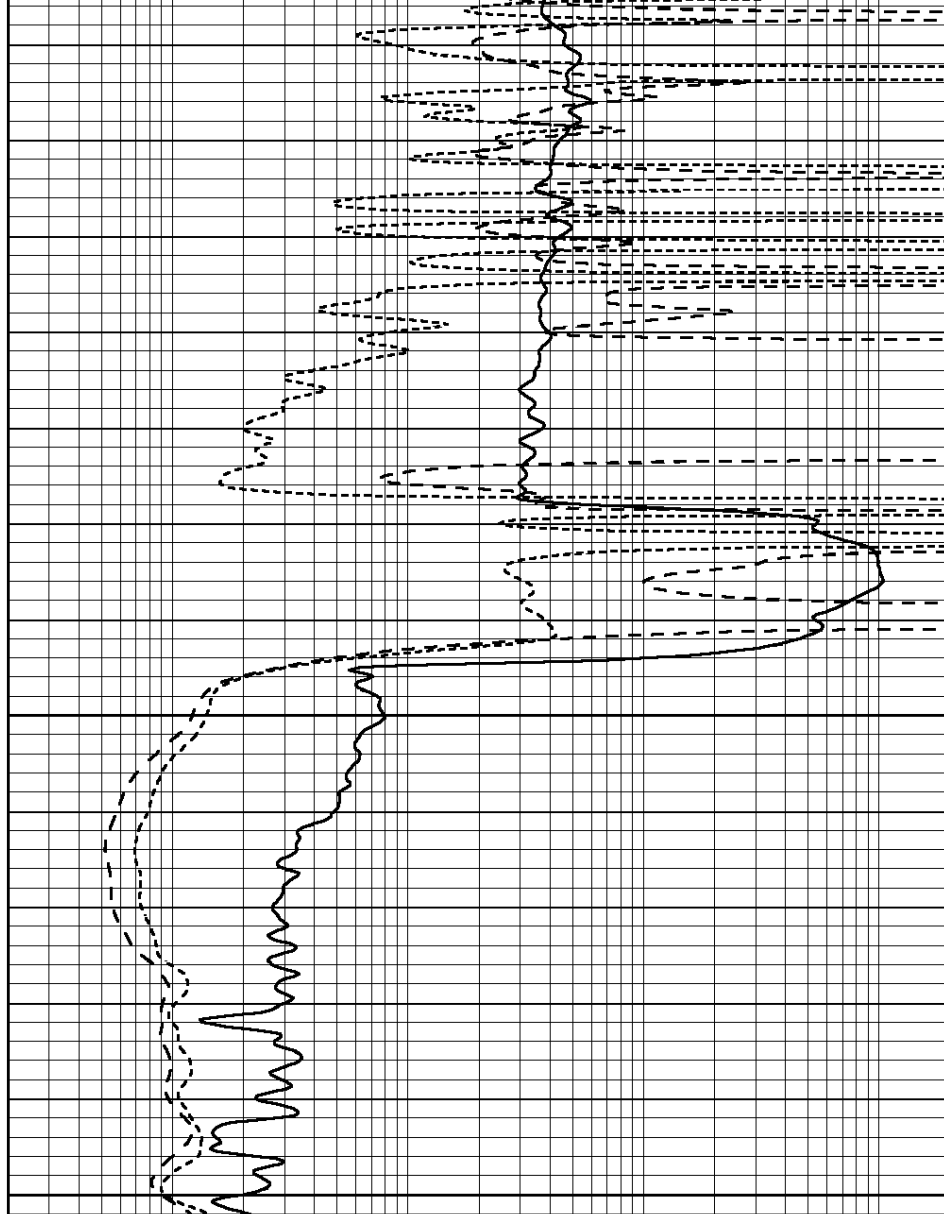


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

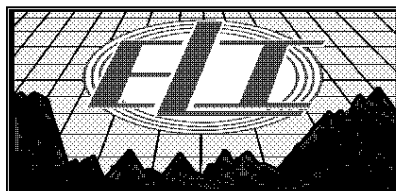
2400

2450

2500



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

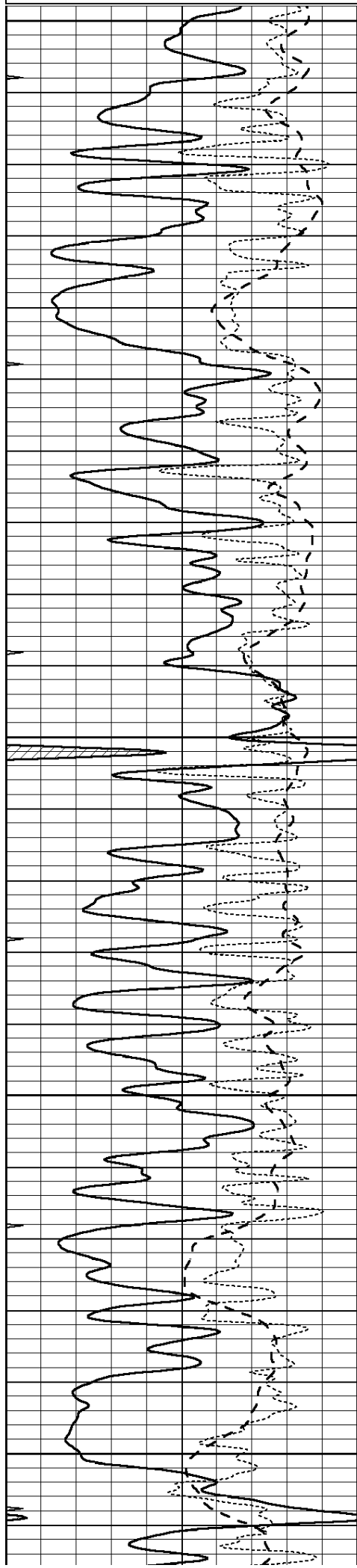


MAIN SECTION

Database File: 2481pe.db
 Dataset Pathname: pass3.7
 Presentation Format: _dil
 Dataset Creation: Tue Apr 03 23:47:09 2018
 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



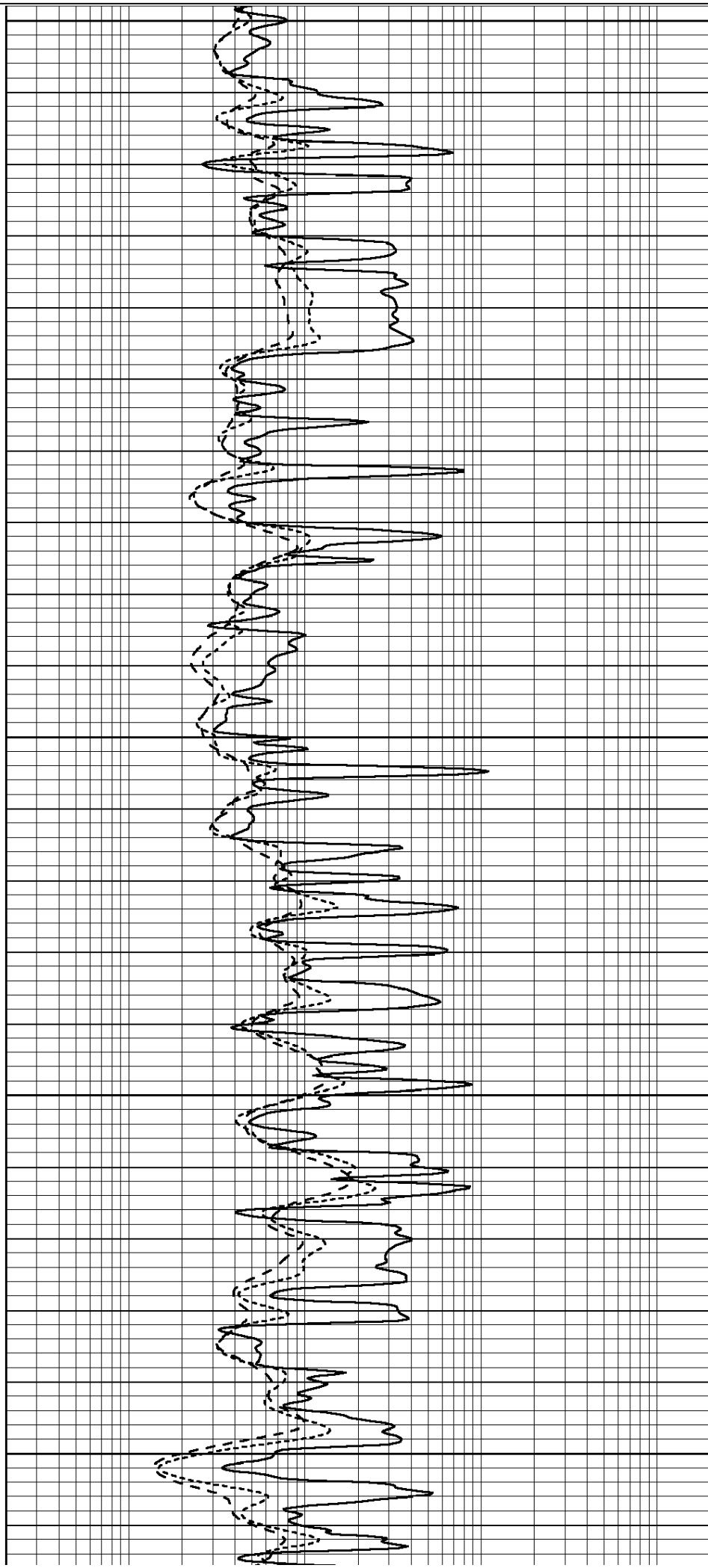
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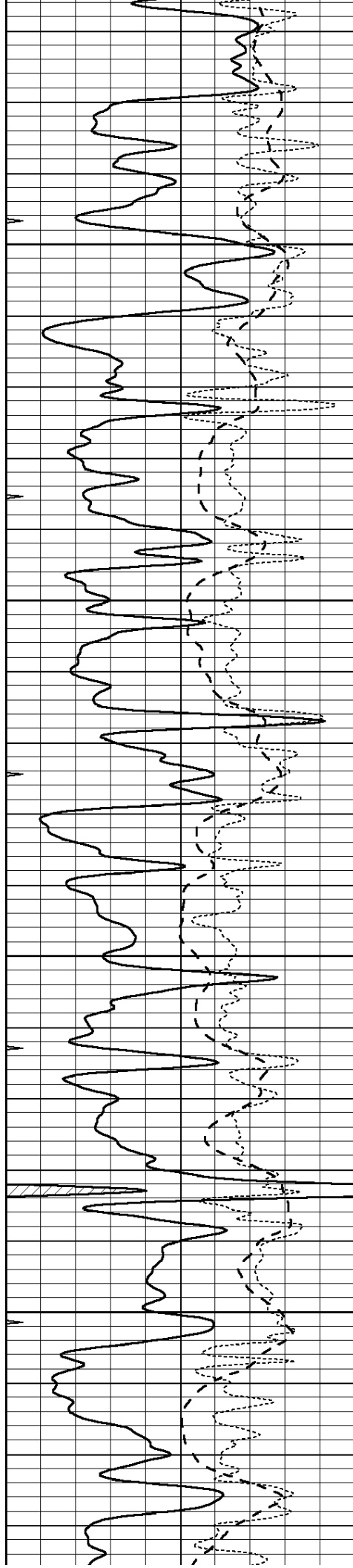
3550

3600

3650

3700



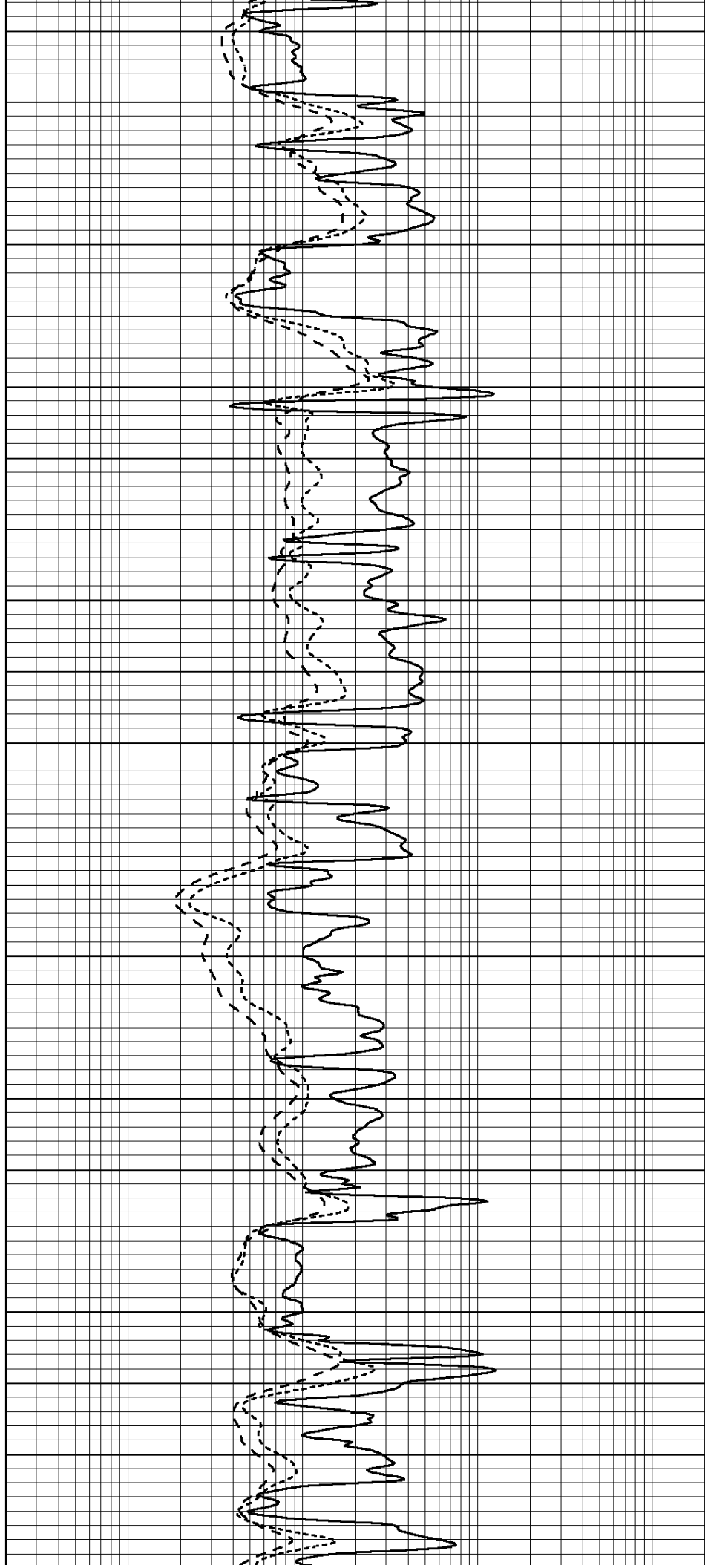


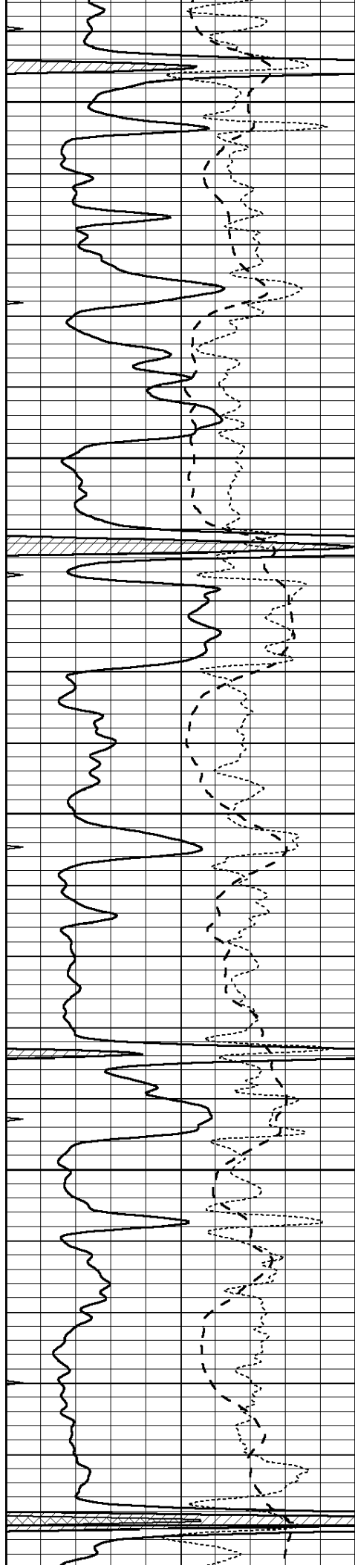
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3800

3850

3900





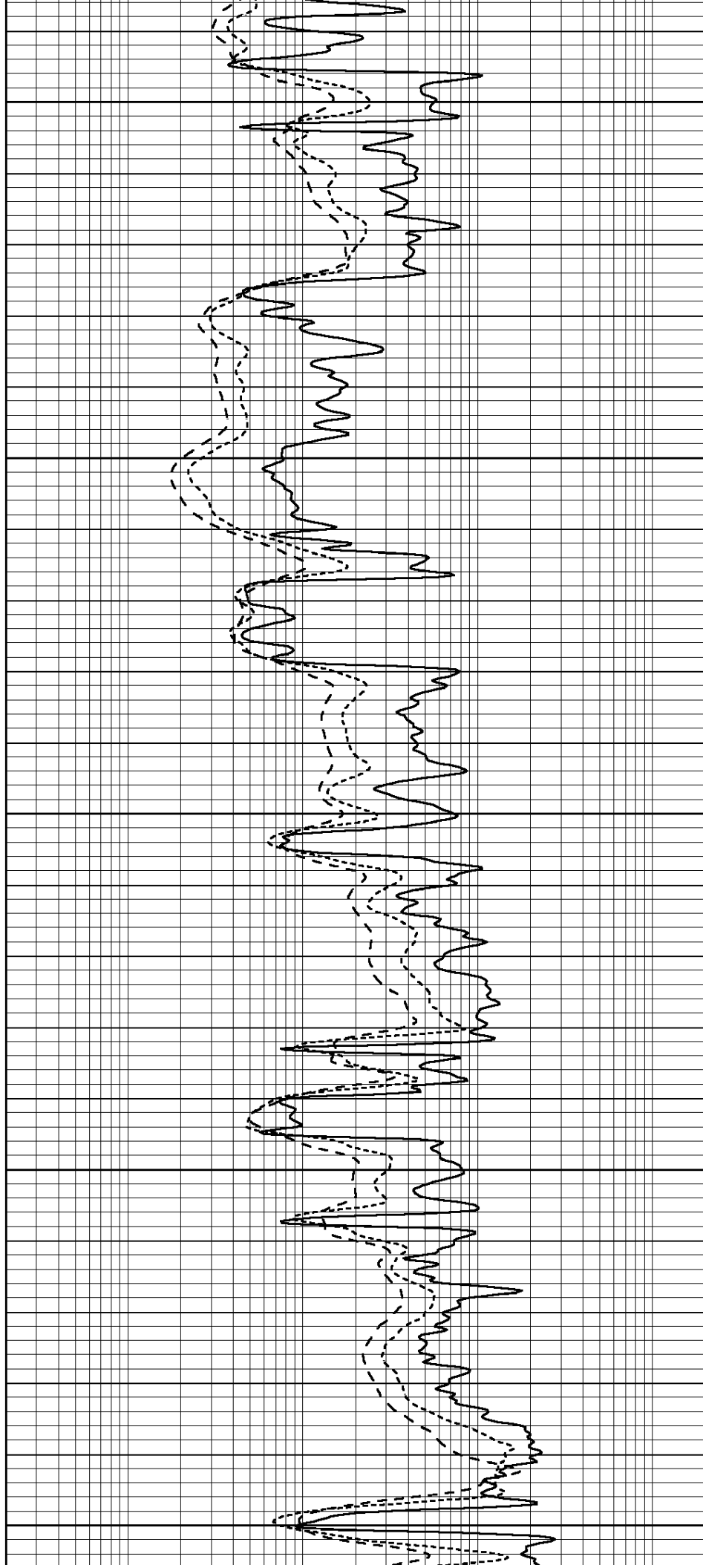
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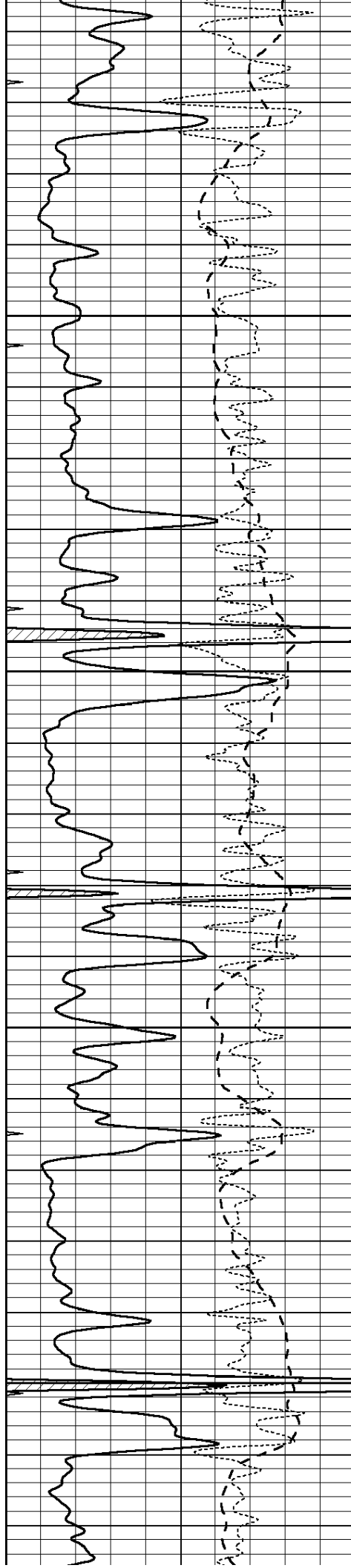
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4050

4100

4150



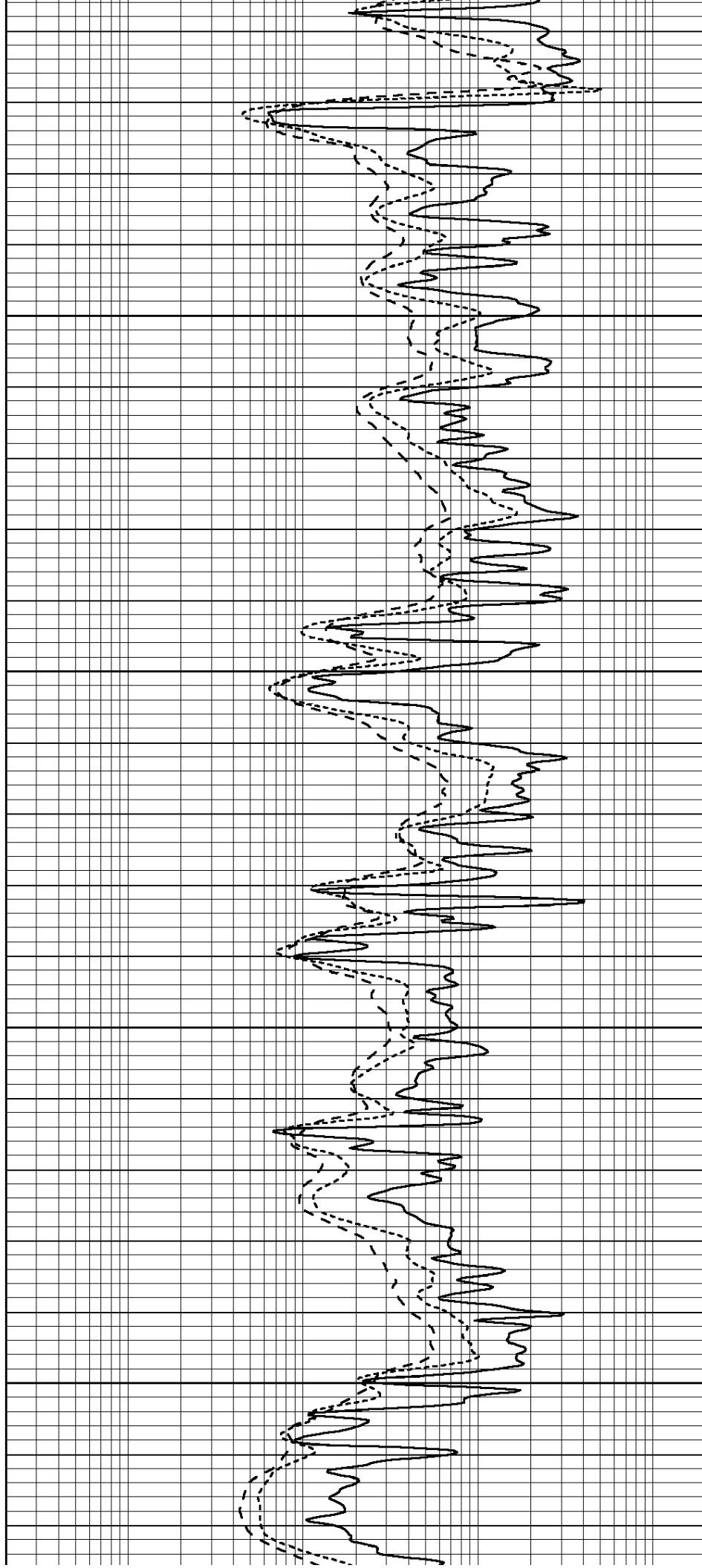


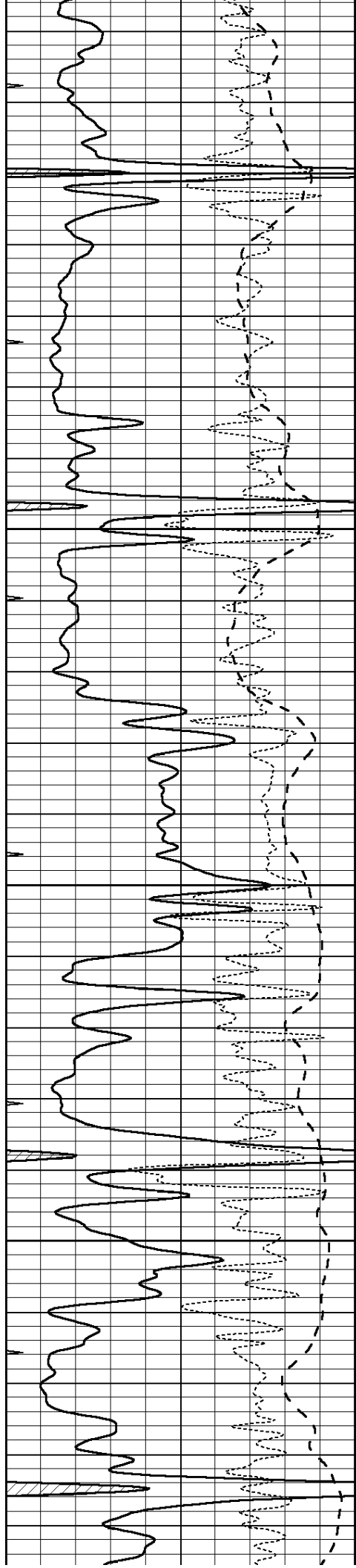
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4250

4300

4350



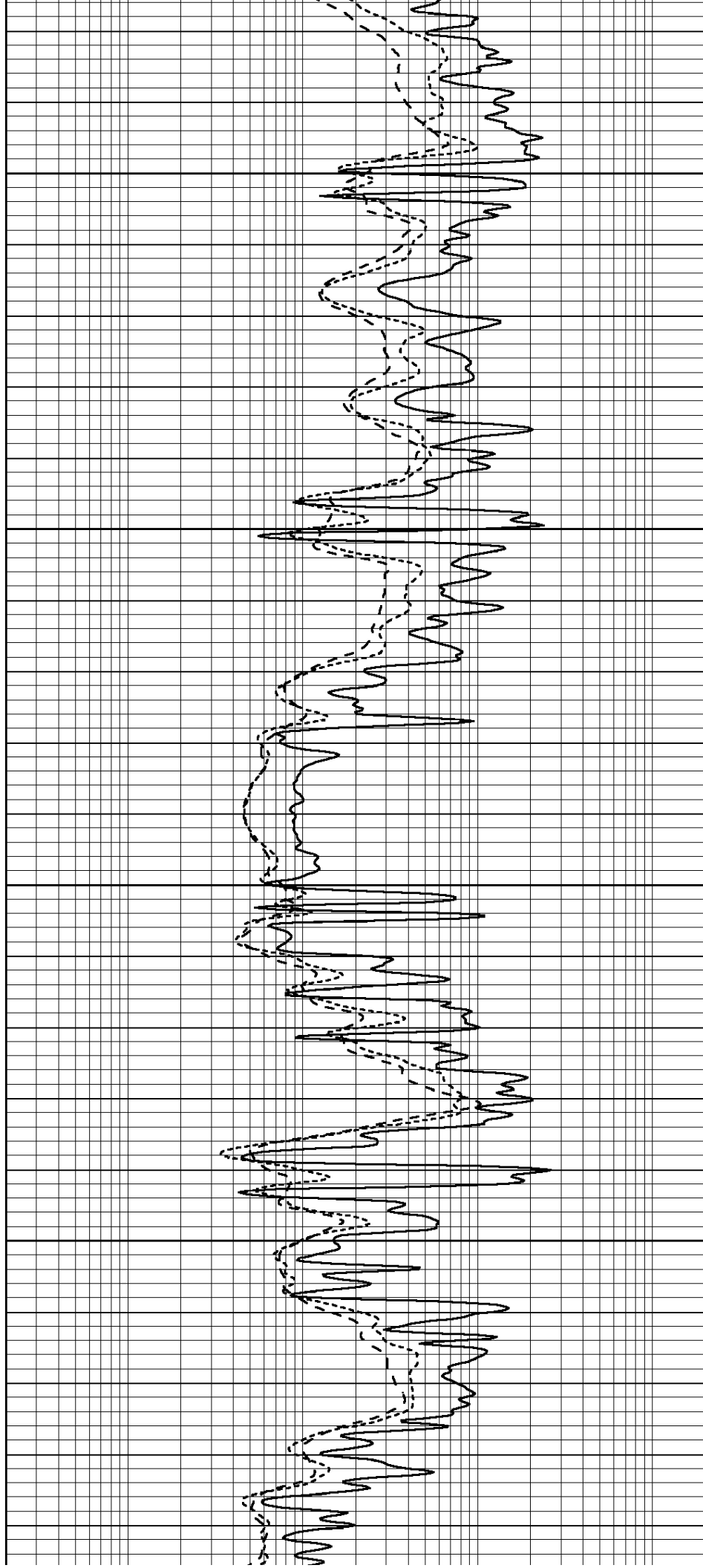


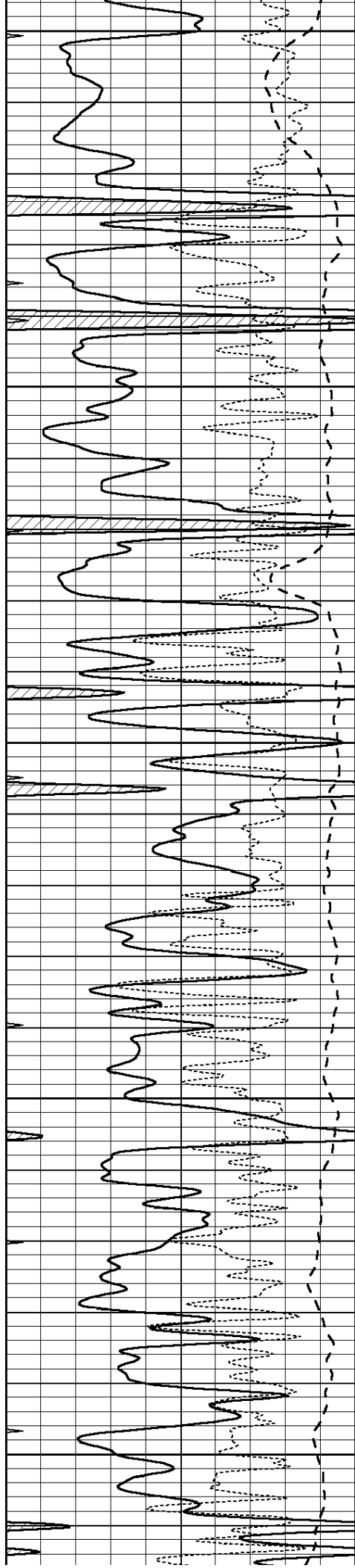
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4450

4500

4550





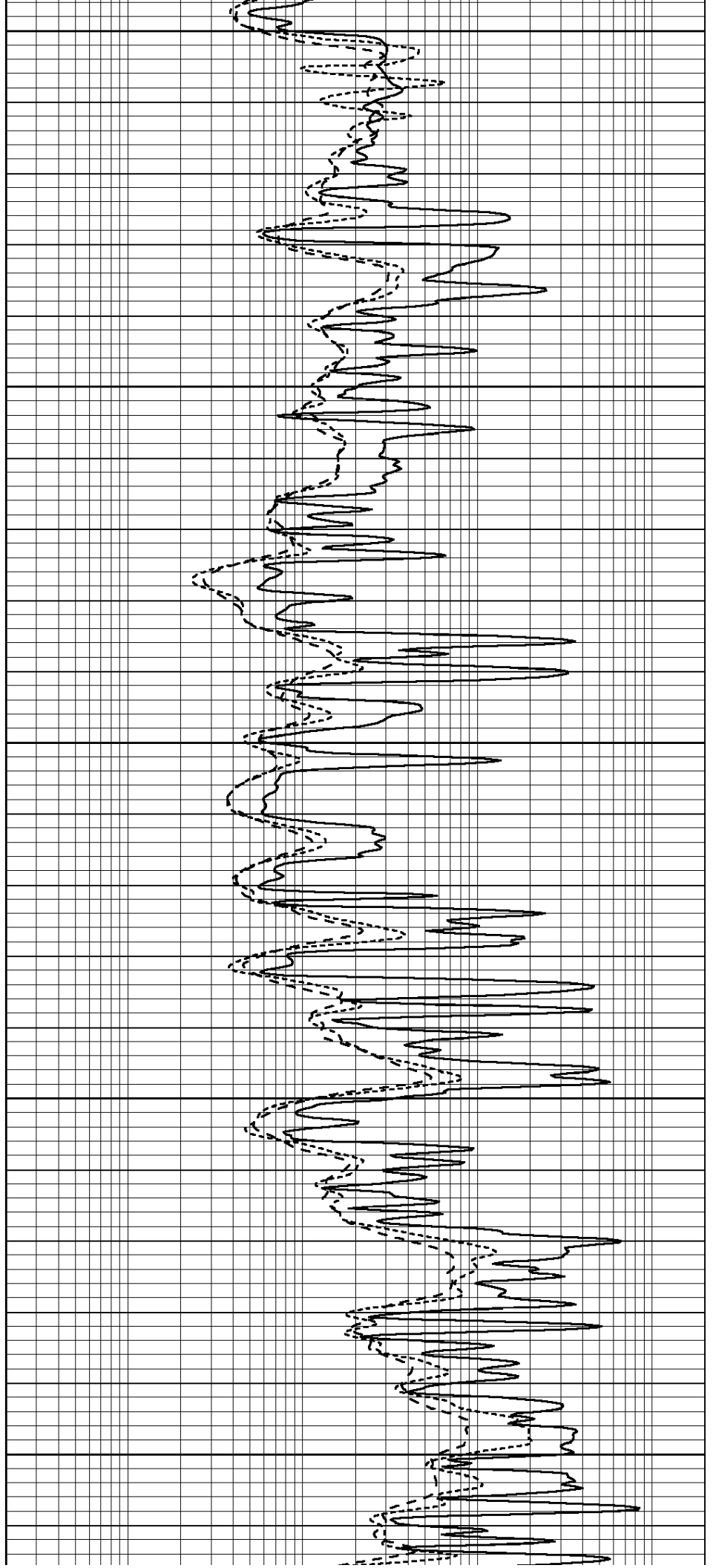
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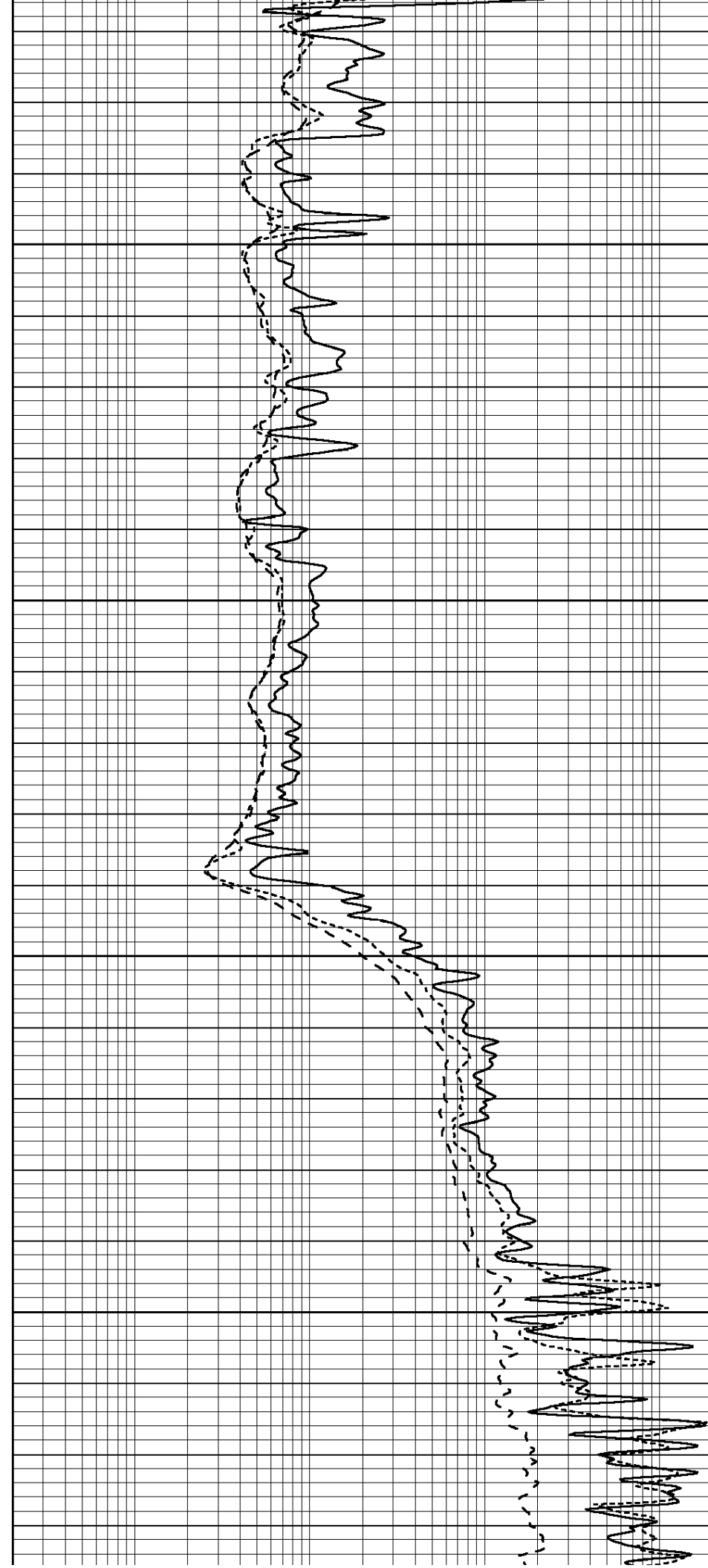
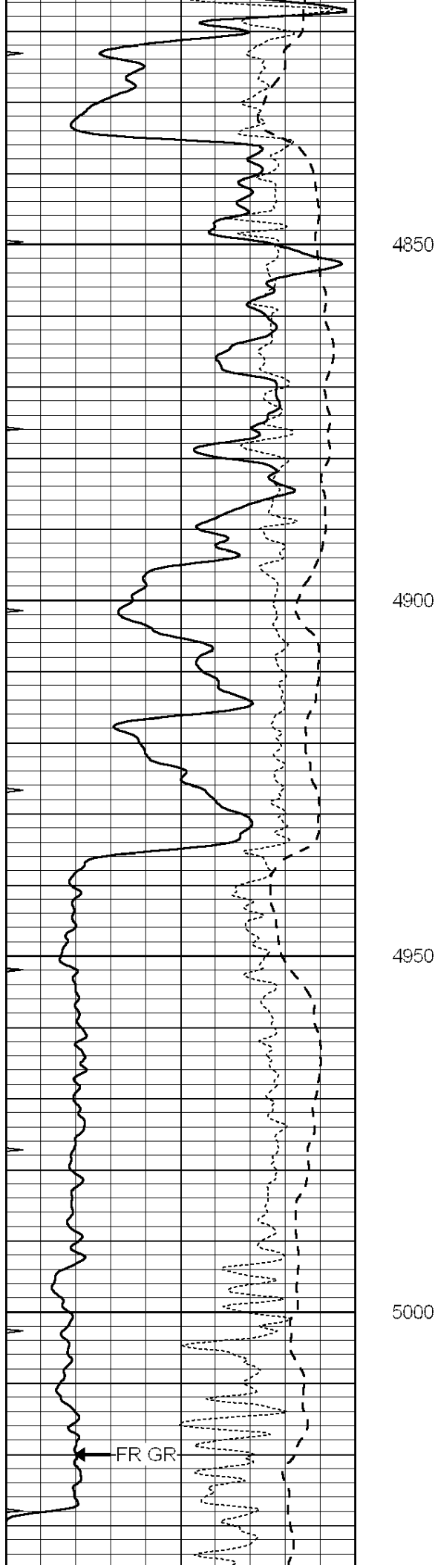
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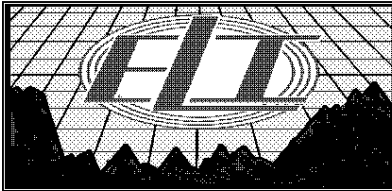
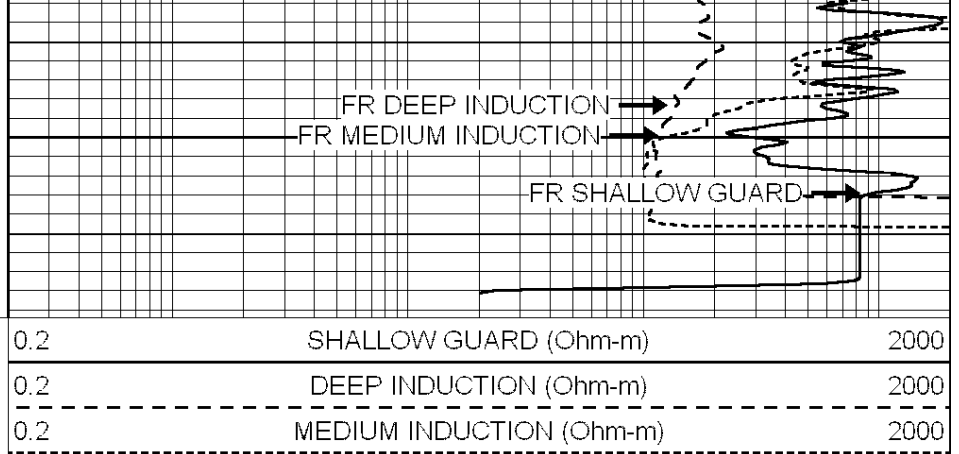
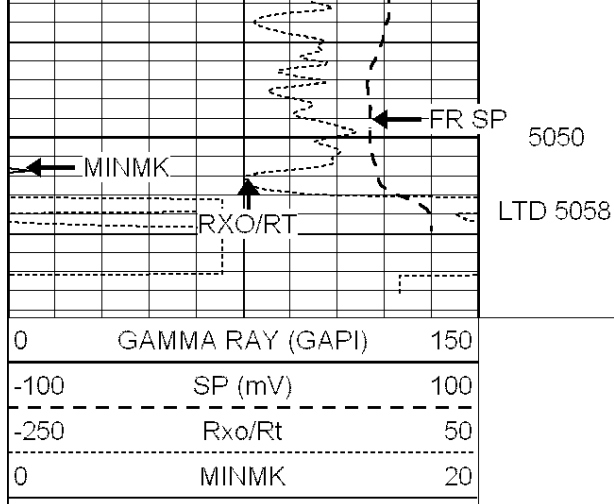
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4750

4800

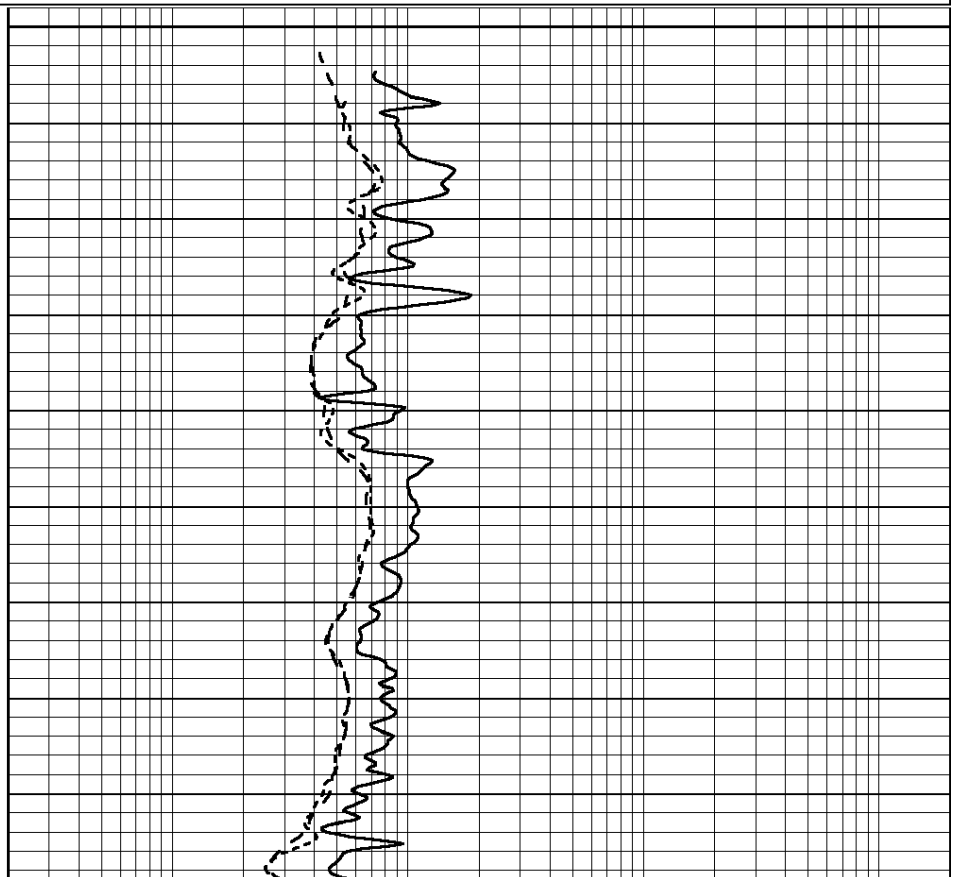
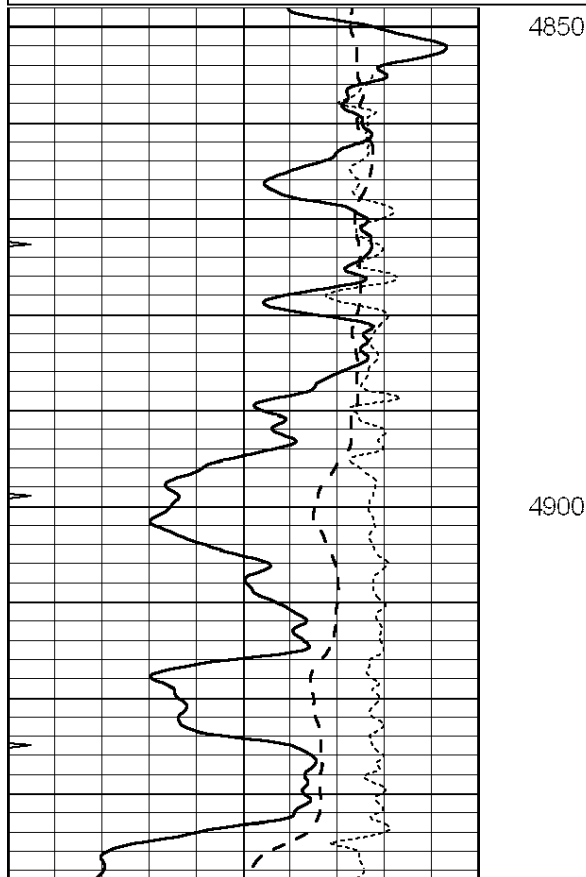
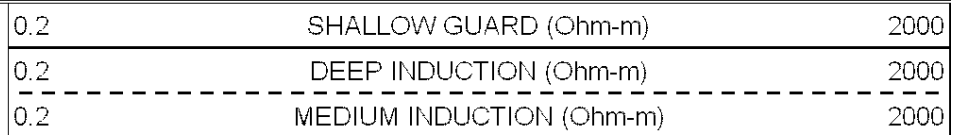
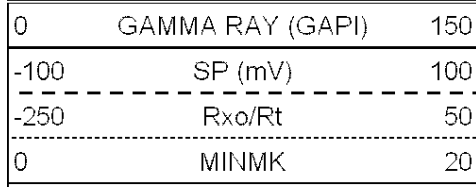


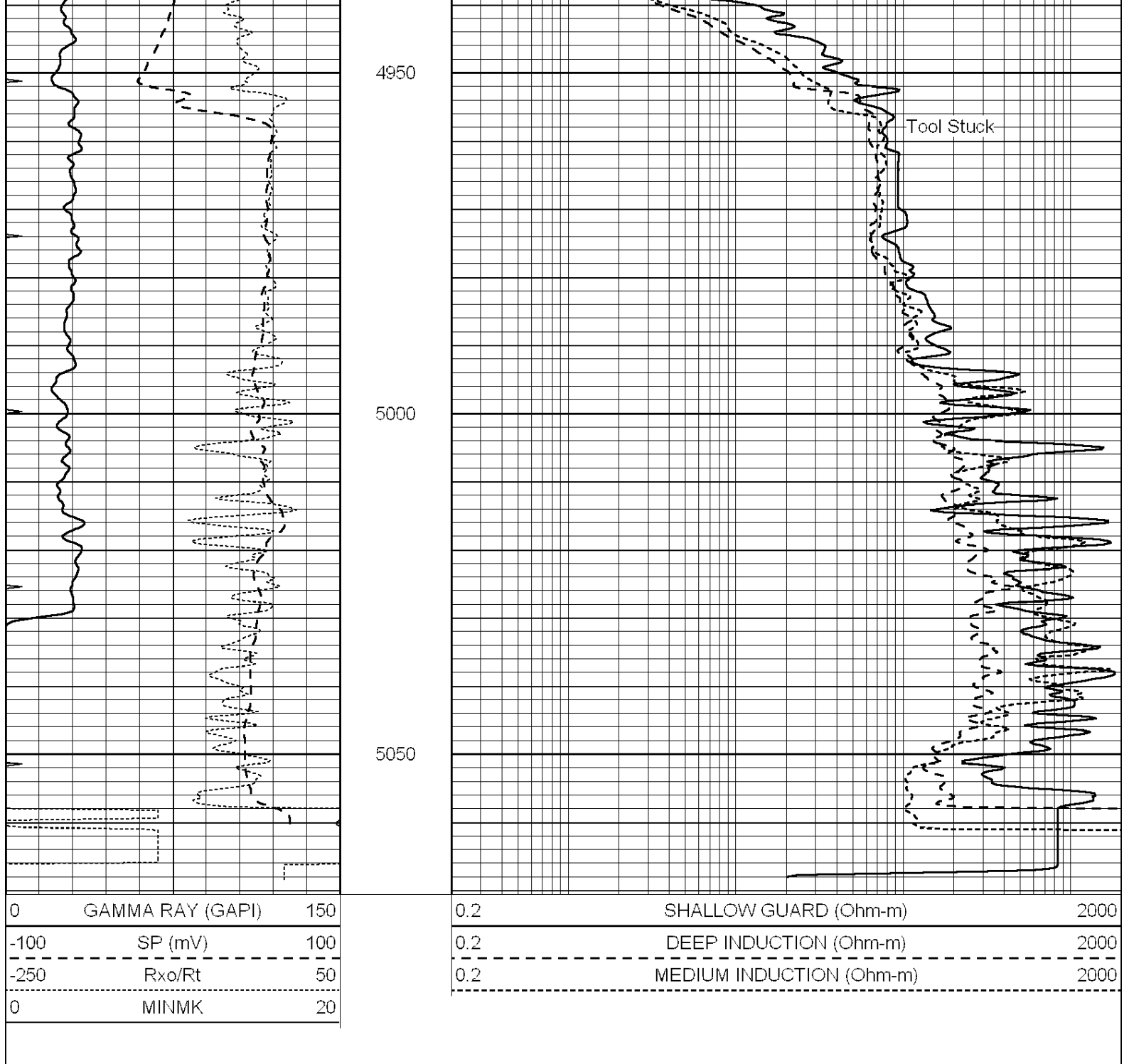




REPEAT SECTION

Database File: 2481pe.db
 Dataset Pathname: pass2.10
 Presentation Format: _dil
 Dataset Creation: Tue Apr 03 22:29:27 2018
 Charted by: Depth in Feet scaled 1:240





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 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	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:		070558		
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		