



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company		EDISON OPERATING COMPANY, LLC.	
Well		MALONE # 4-21	
Field		WILDCAT	
County		FORD	
State		KANSAS	
Company		VINCENT OIL CORP.	
Well		MALONE # 4-21	
Field		WILDCAT	
County		FORD	
State		KANSAS	
Location:		API # : 15-057-20952-00-00	
Permanent Datum		GROUND LEVEL	
Log Measured From		1670' FSL & 1675' FWL NE - SW - NE - SW	
Drilling Measured From		SEC 21 TWP 28S RGE 23W KELLY BUSHING 10' A.G.L. KELLY BUSHING	
Other Services		CNL/CDL/PE MEL/SON	
Elevation		K.B. 2443 D.F. 2441 G.L. 2433	
Date	11/8/14		
Run Number	ONE		
Depth Driller	5260		
Depth Logger	5262		
Bottom Logged Interval	5260		
Top Log Interval	00		
Casing Driller	8 5/8" @ 608'		
Casing Logger	602'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9,900 PPM	
Density / Viscosity	9.2/7.4		
pH / Fluid Loss	9.0/12.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	0.50 @ 79F		
Rmf @ Meas. Temp	0.38 @ 79F		
Rmc @ Meas. Temp	0.60 @ 79F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	0.31 @ 127F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	127F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	KENLEBLANC		

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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.

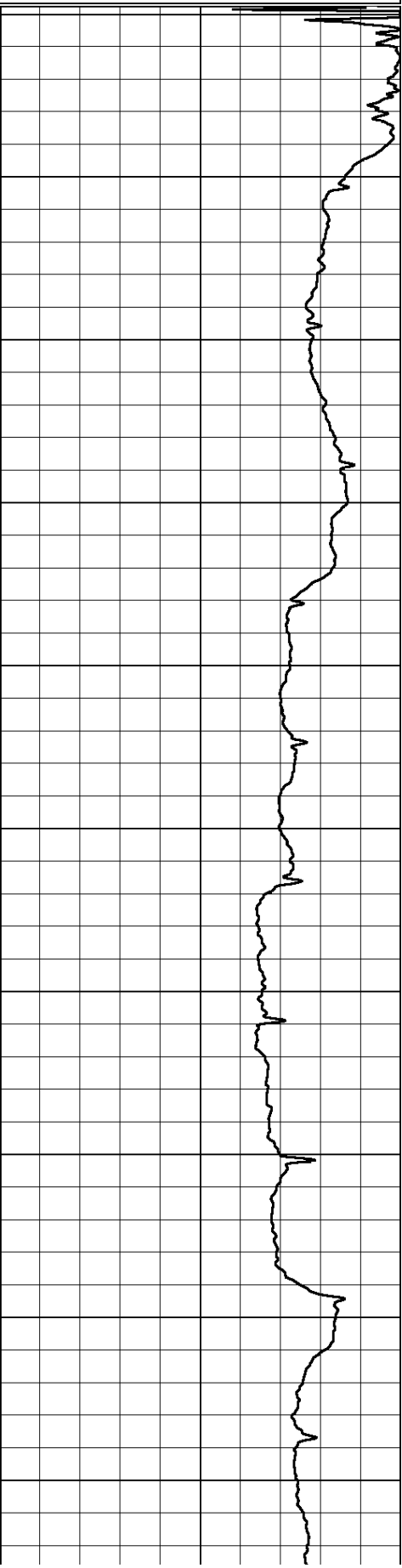
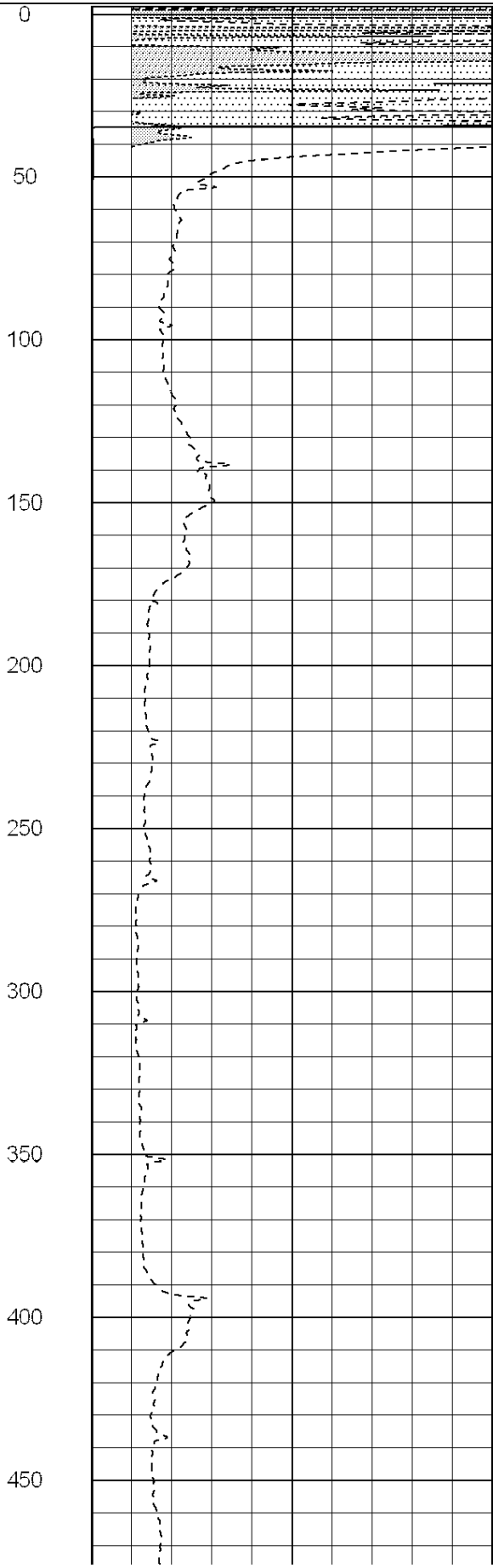
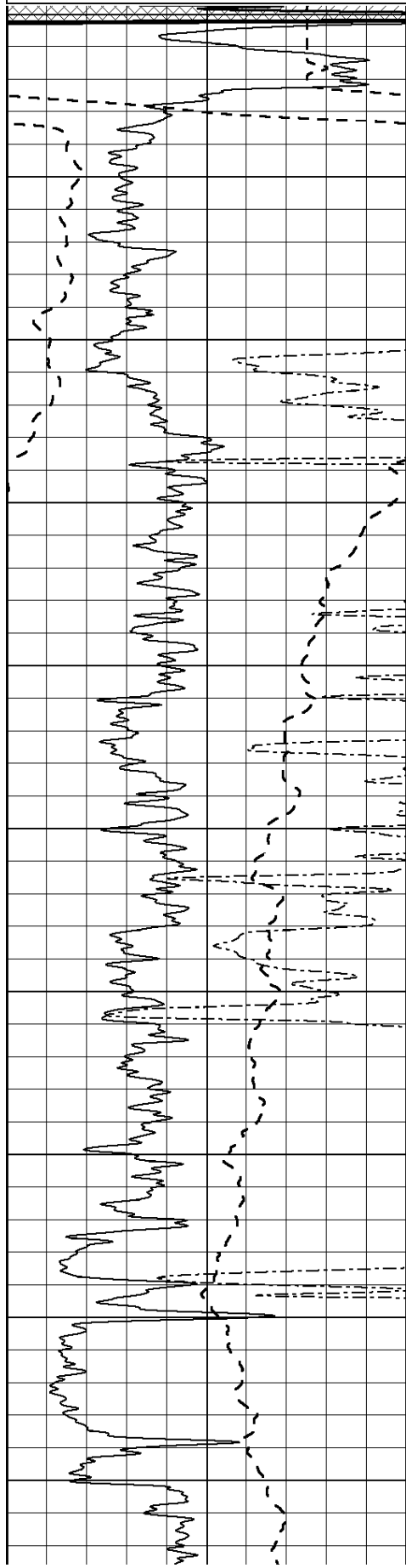
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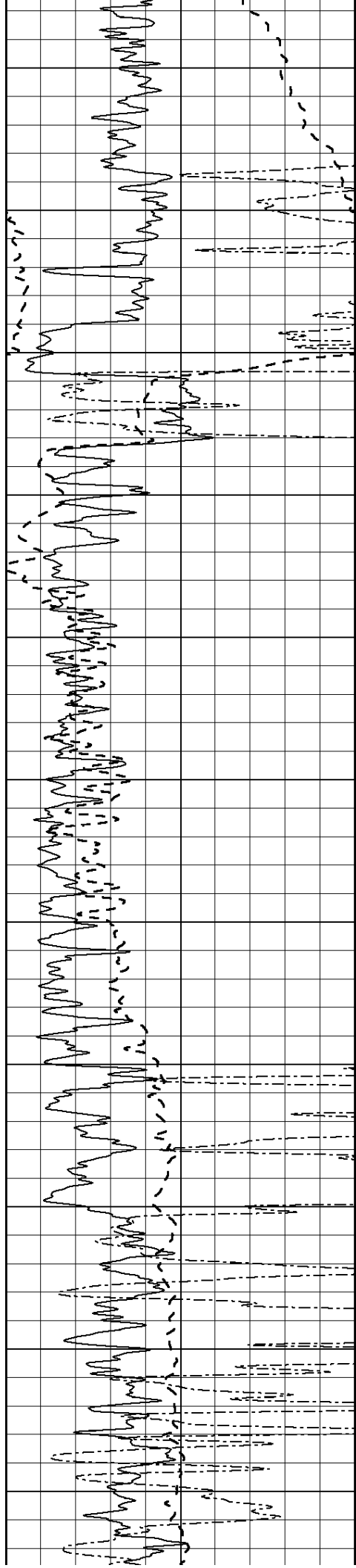
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
FORD, KS. - ON SATTLE RD. GO WEST TO RD 120 - 3 1/2 MILES SOUTH - EAST INTO

Database File: 25910pe.db
Dataset Pathname: pass5.3
Presentation Format: _dil2
Dataset Creation: Sat Nov 08 03:32:18 2014 by Calc SOC 120430
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
0	RILD (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

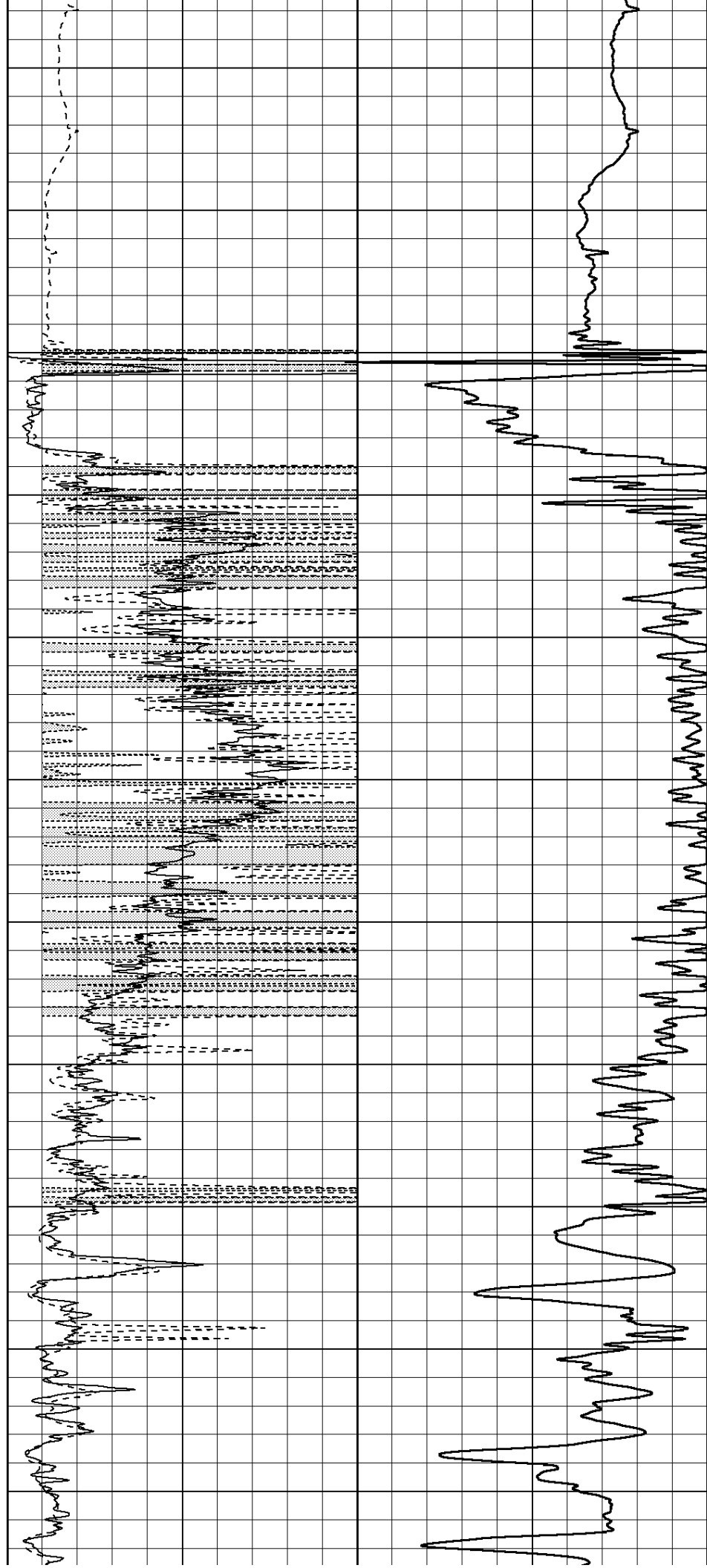
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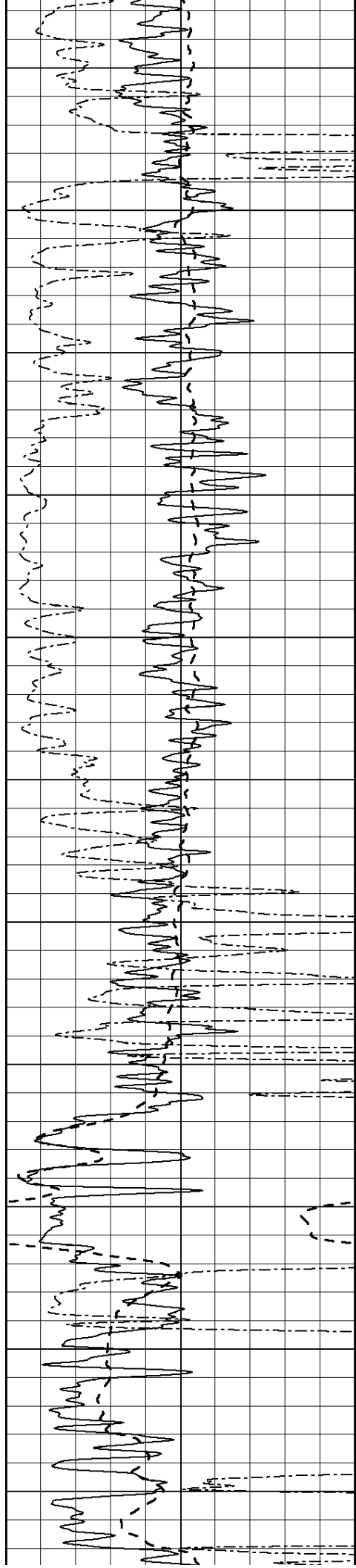
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900

950

1000





1050

1100

1150

1200

1250

1300

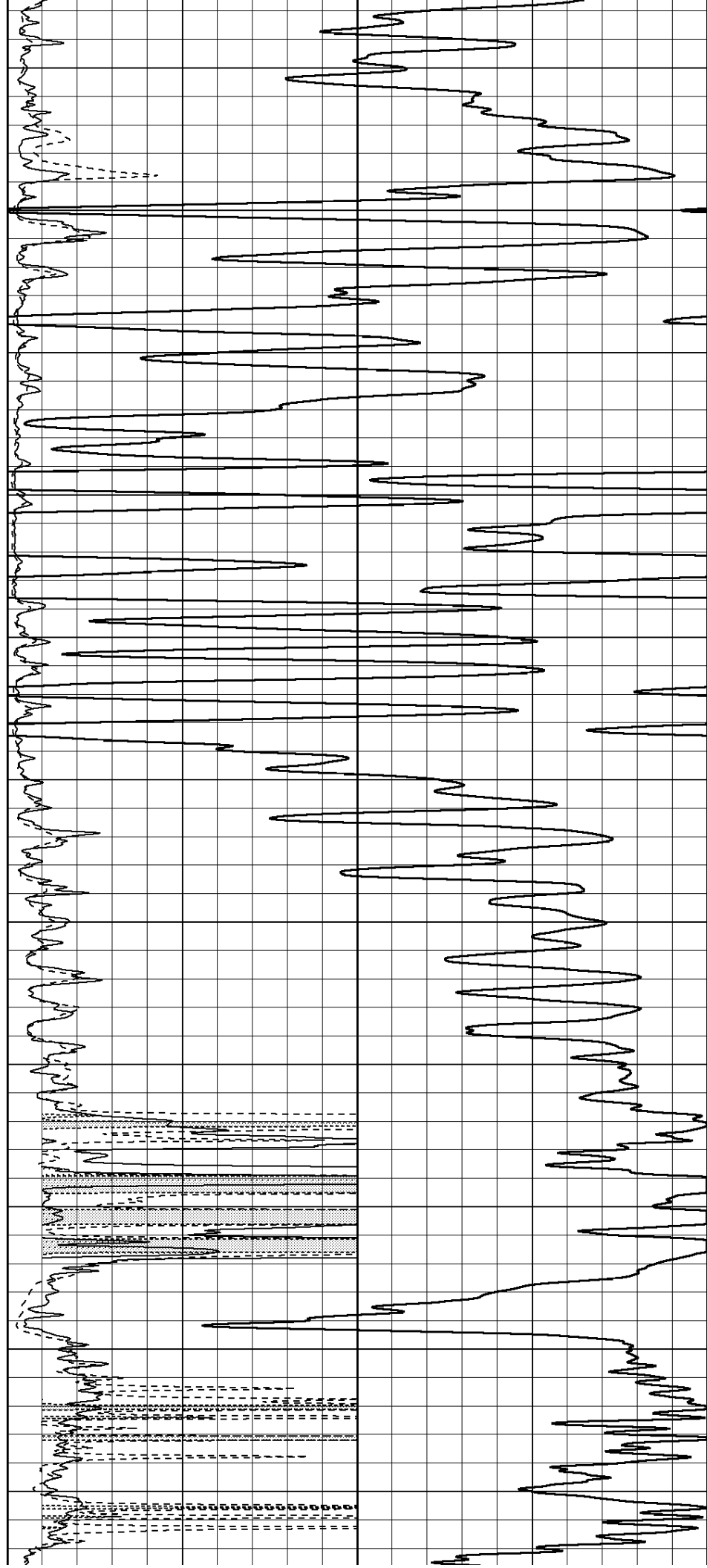
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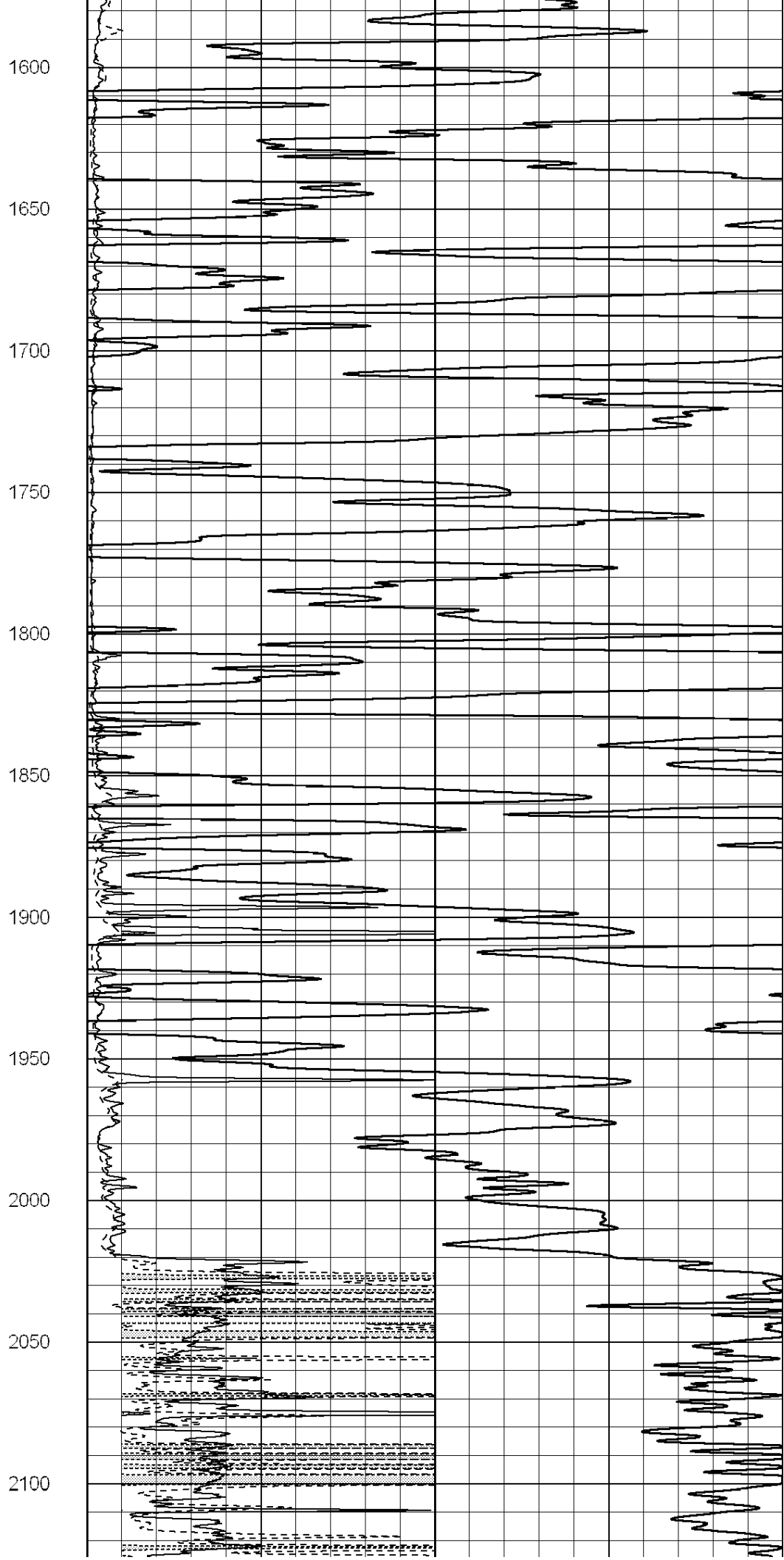
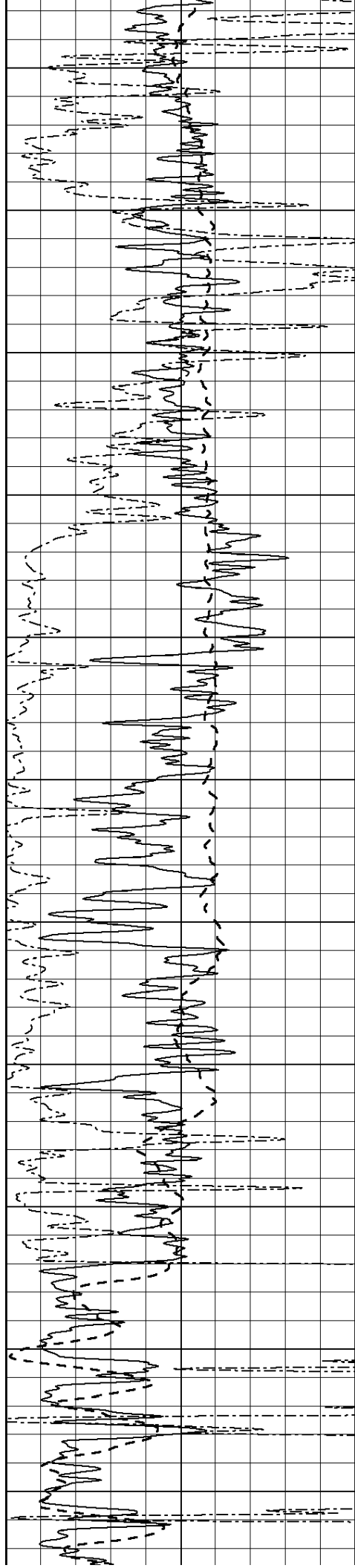
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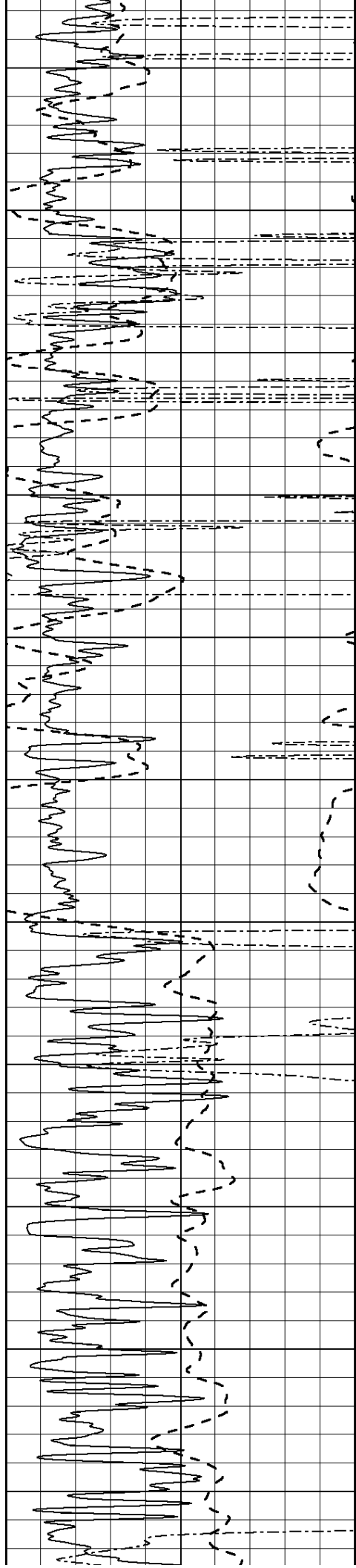
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1500

1550







2150

2200

2250

2300

2350

2400

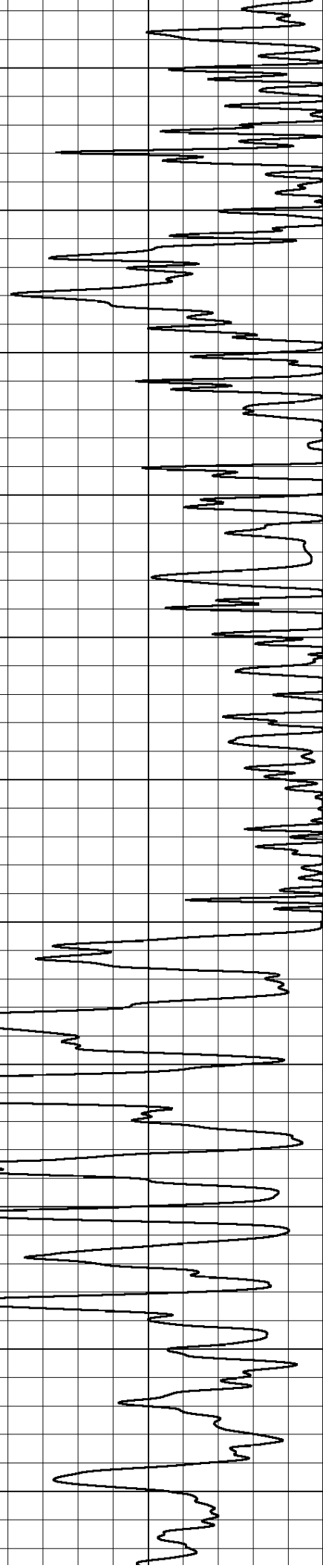
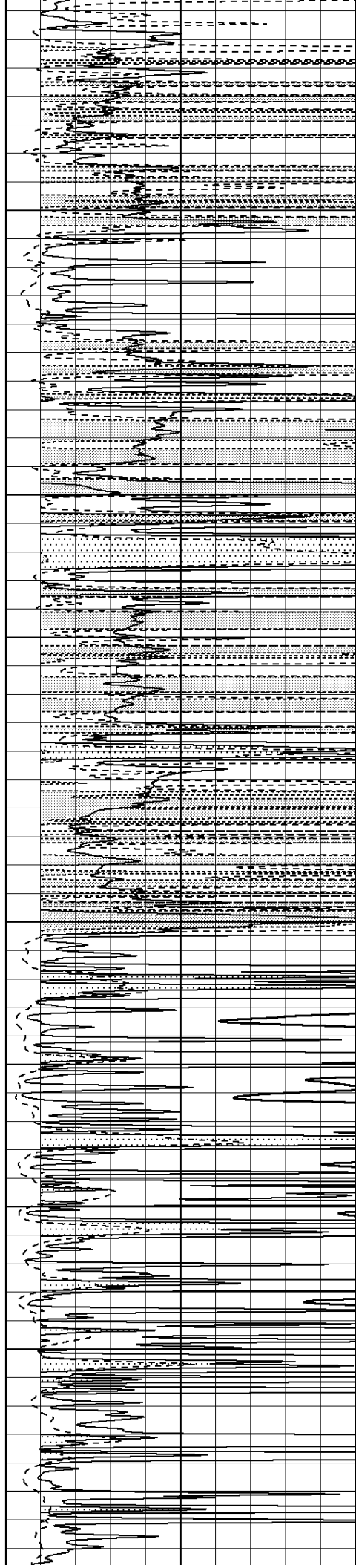
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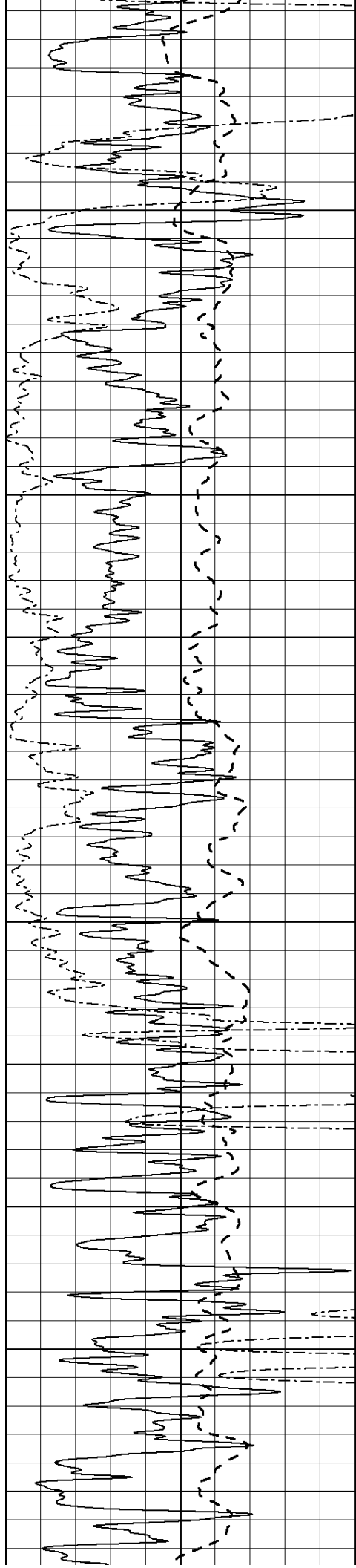
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2550

2600

2650





2700

2750

2800

2850

2900

2950

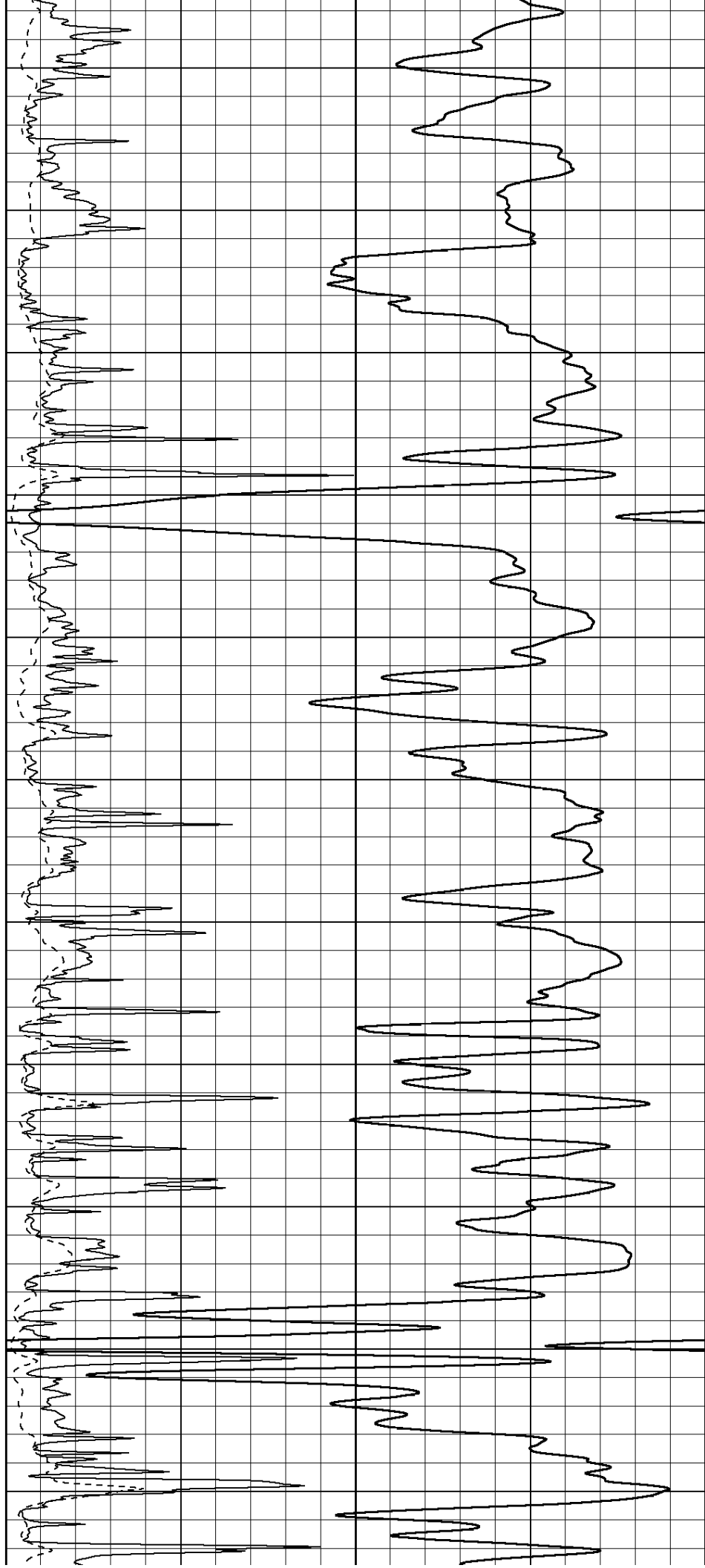
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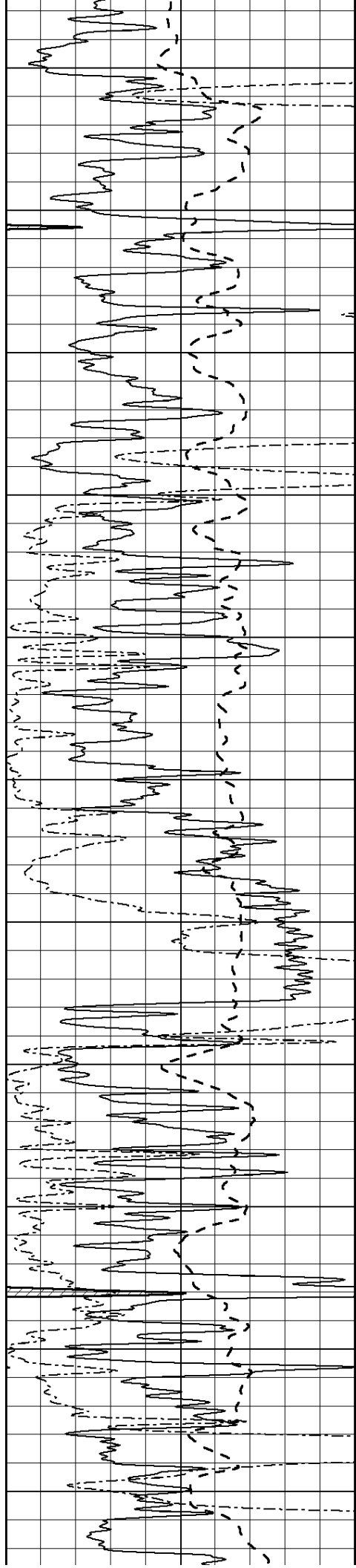
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3150

3200





3250

3300

3350

3400

3450

3500

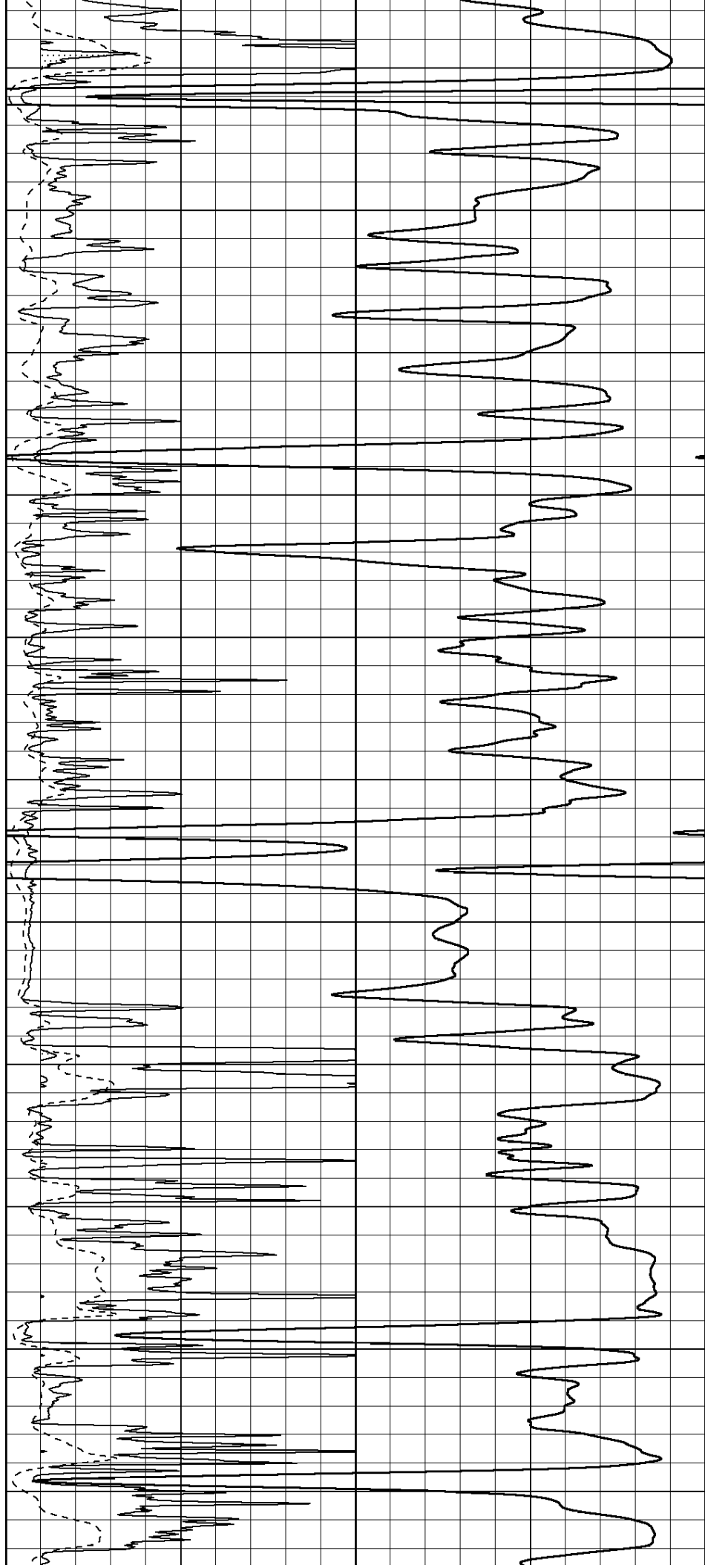
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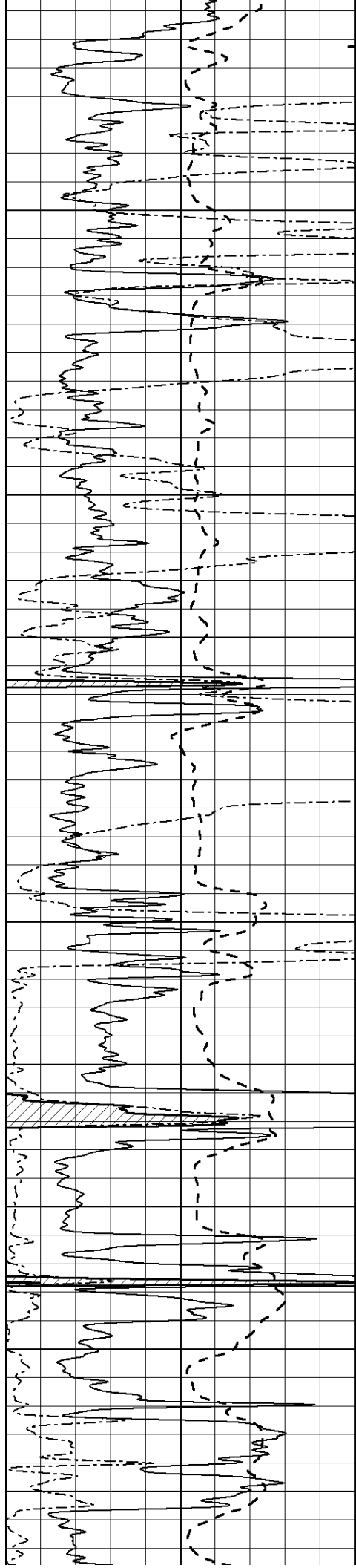
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3700

3750





3800

3850

3900

3950

4000

4050

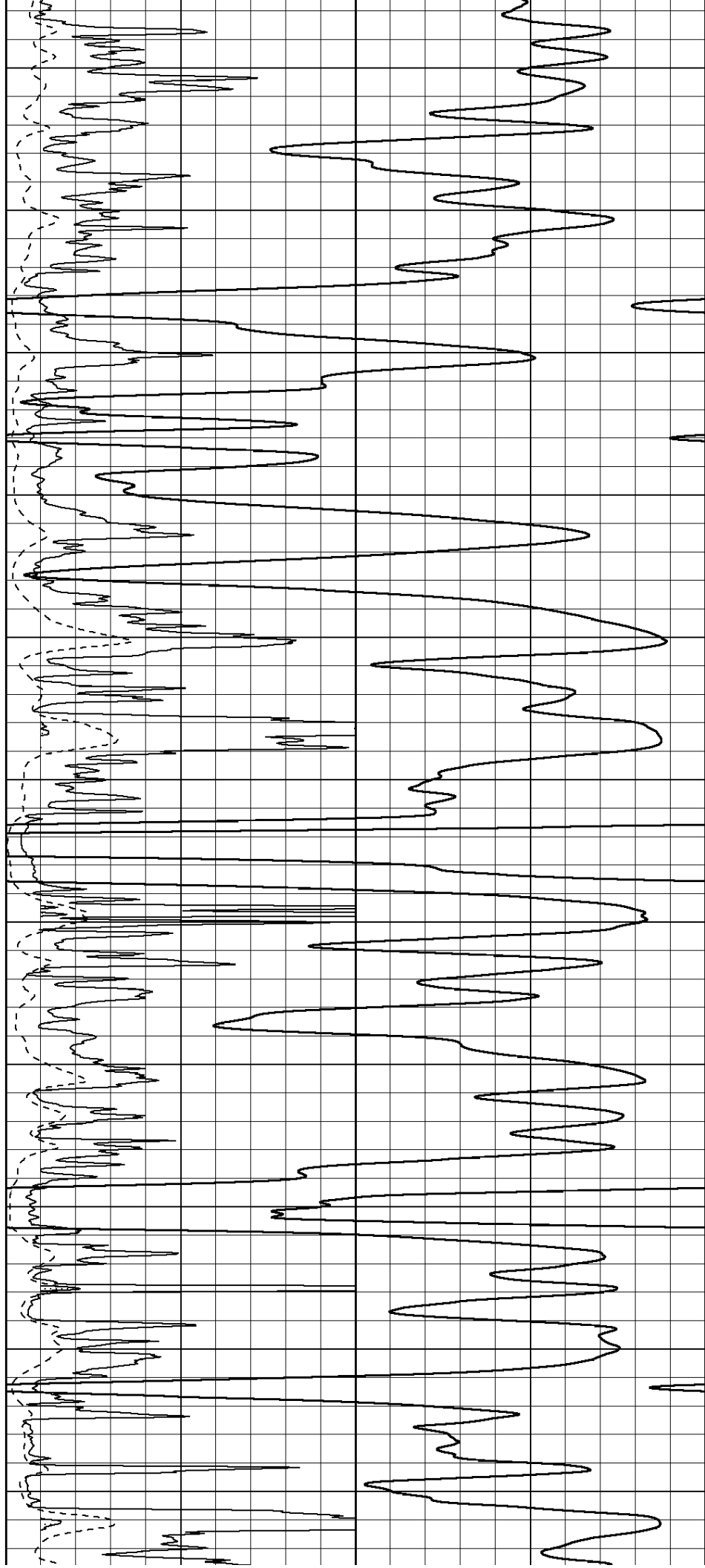
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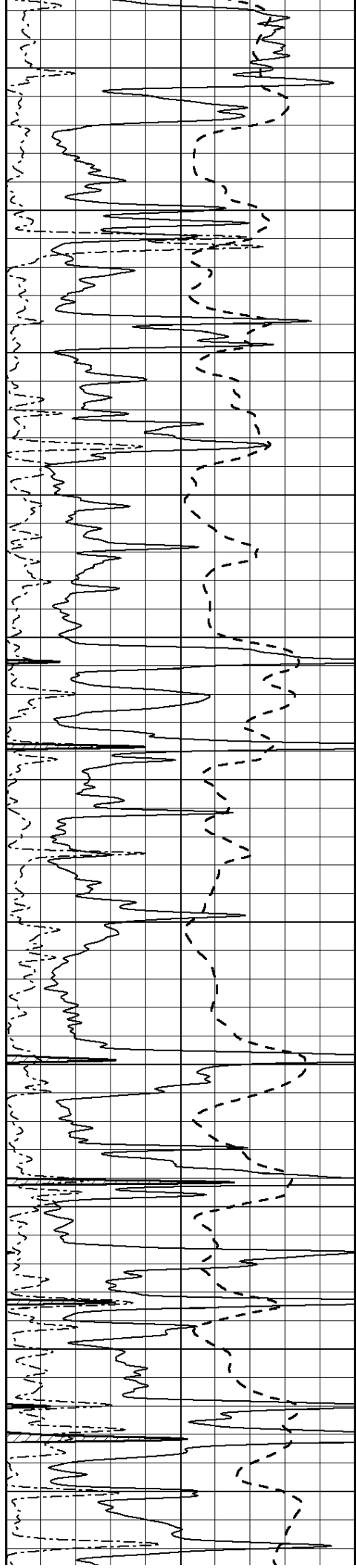
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4200

4250

4300





4350

4400

4450

4500

4550

4600

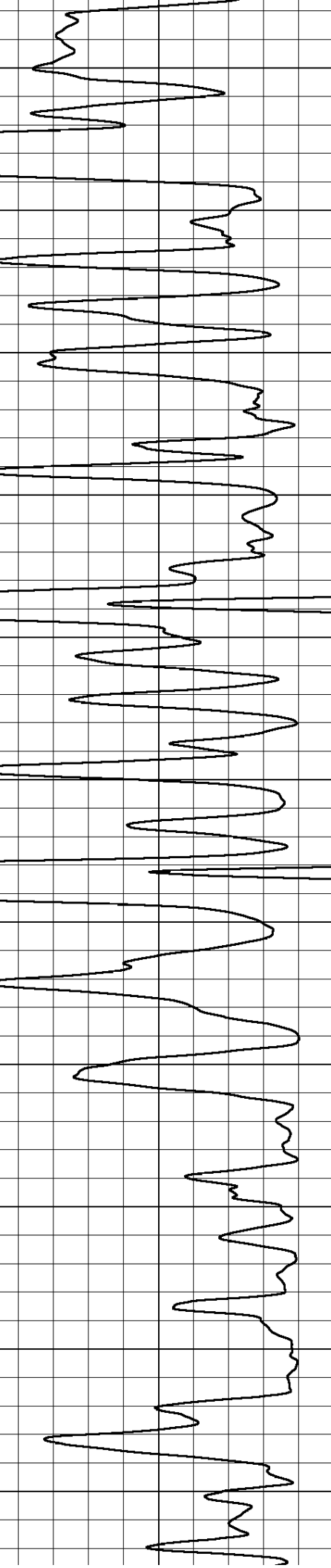
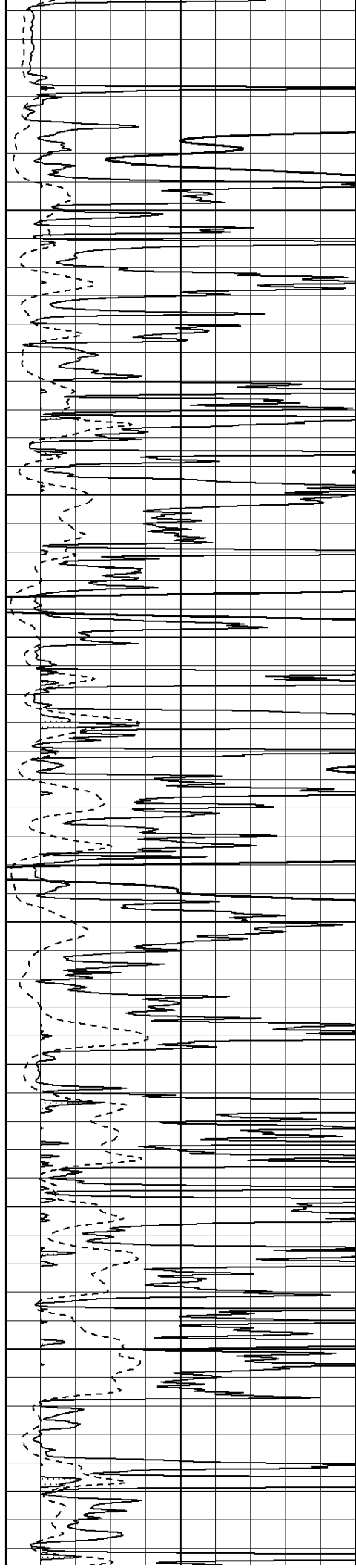
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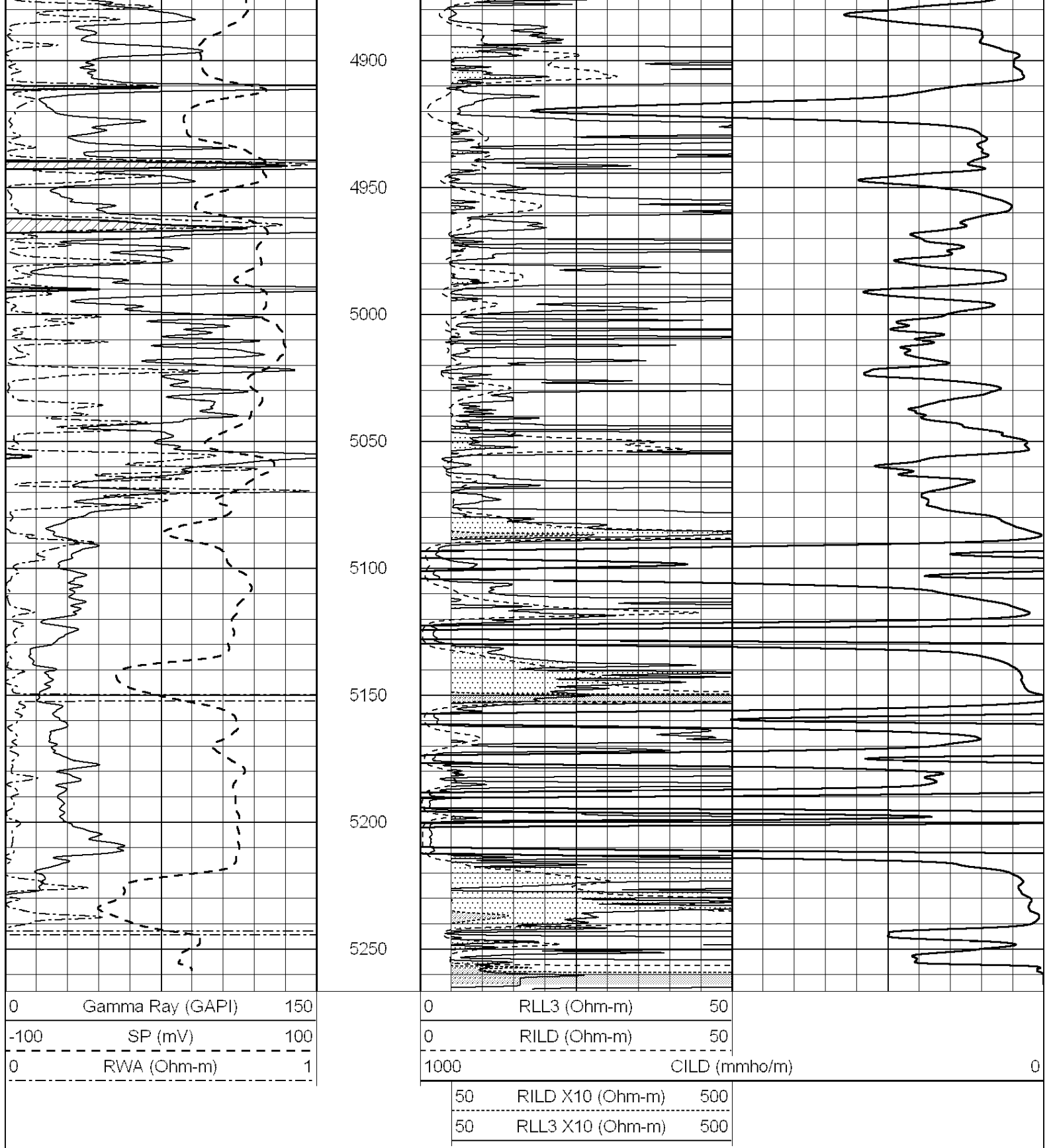
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4750

4800

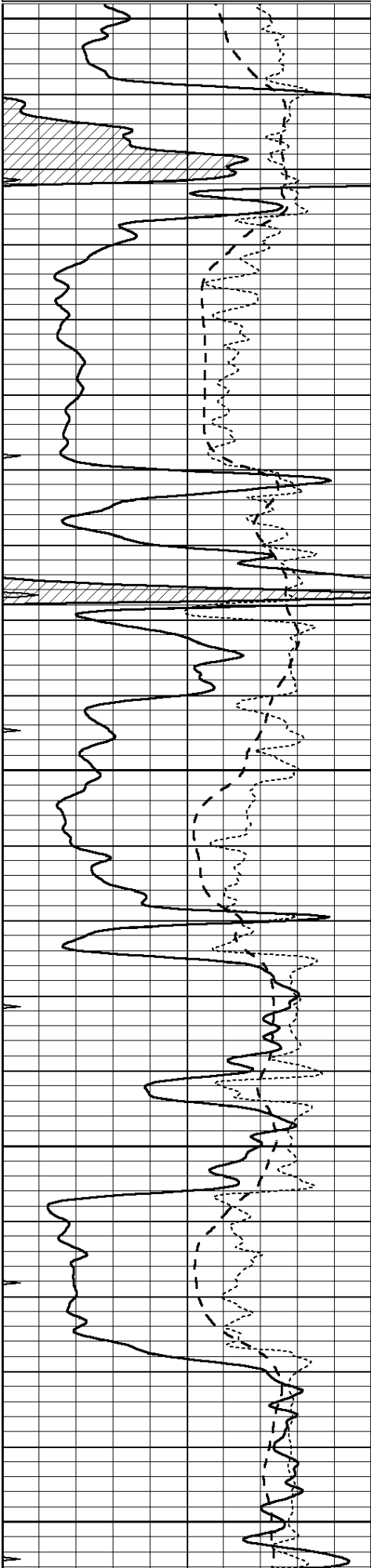
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Database File: 25910pe.db
Dataset Pathname: pass5.2
Presentation Format: _dil
Dataset Creation: Sat Nov 08 02:49:55 2014 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

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



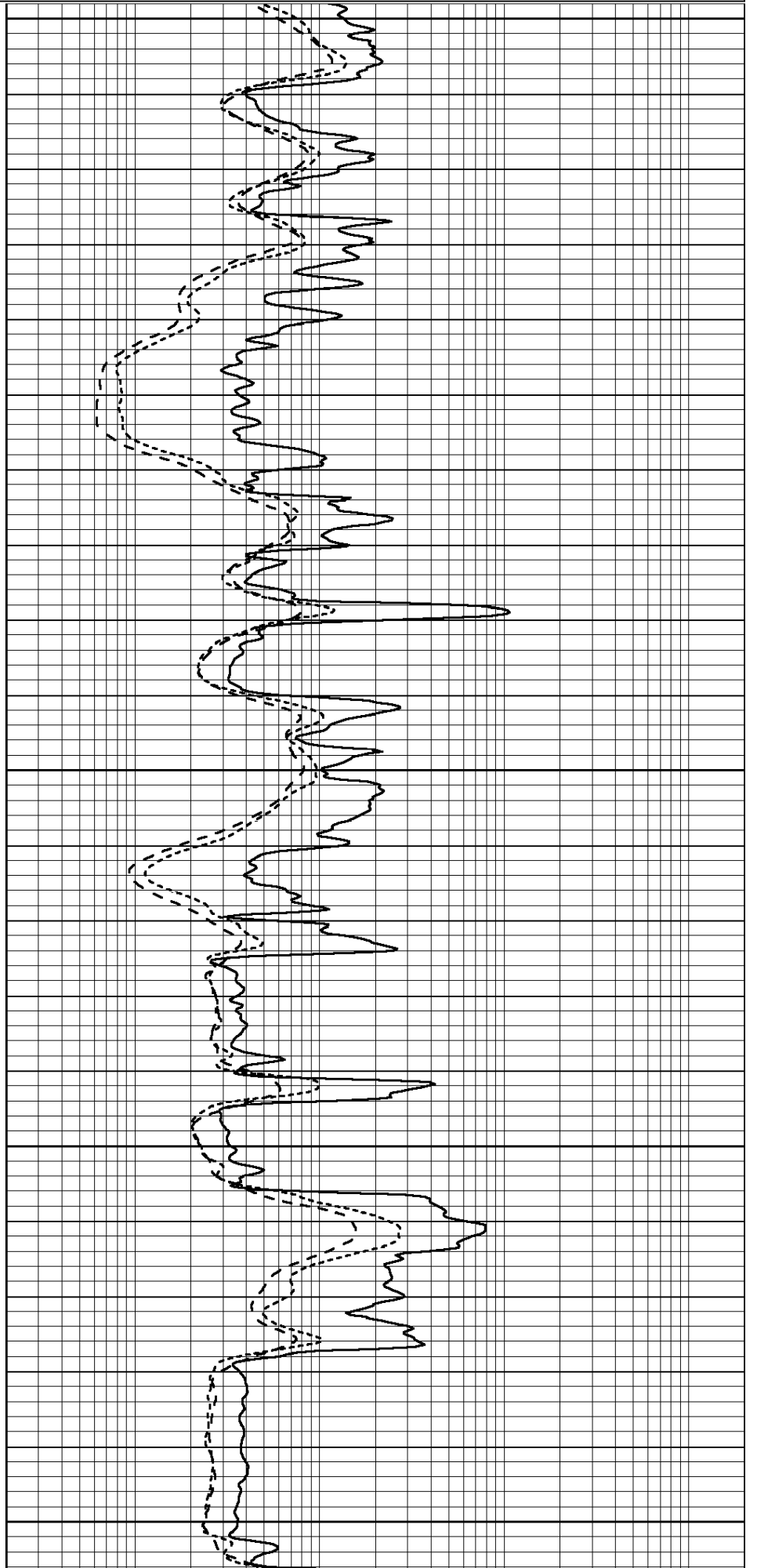
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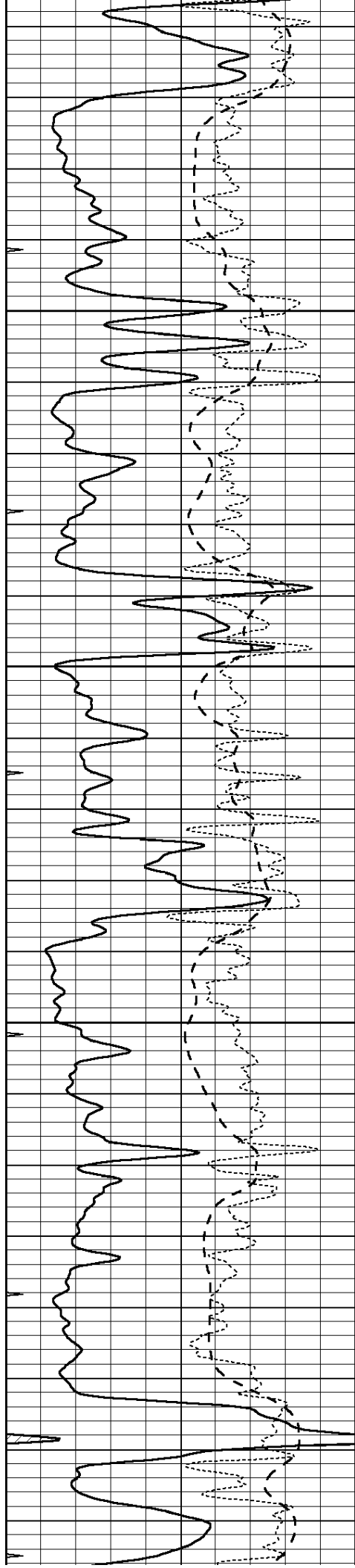
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4250

4300

4350



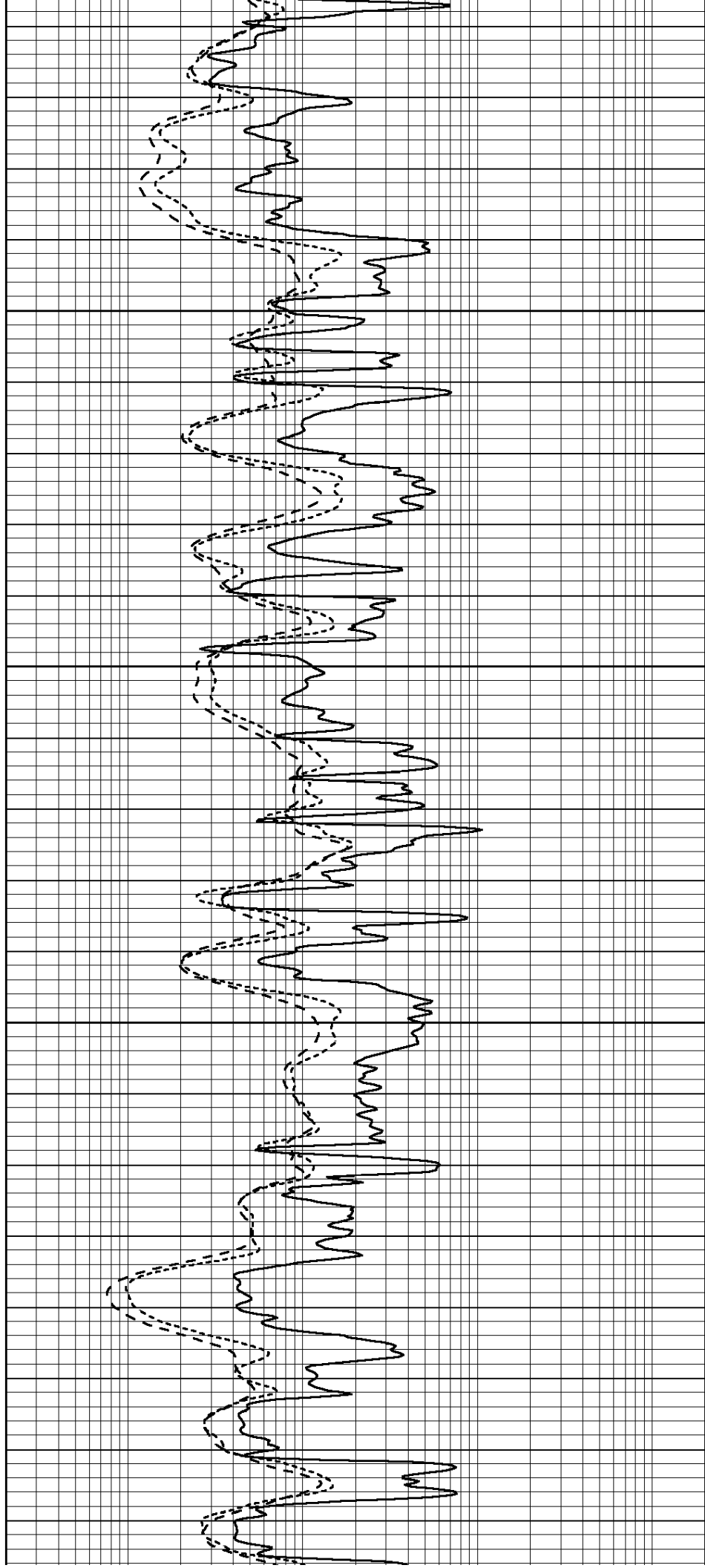


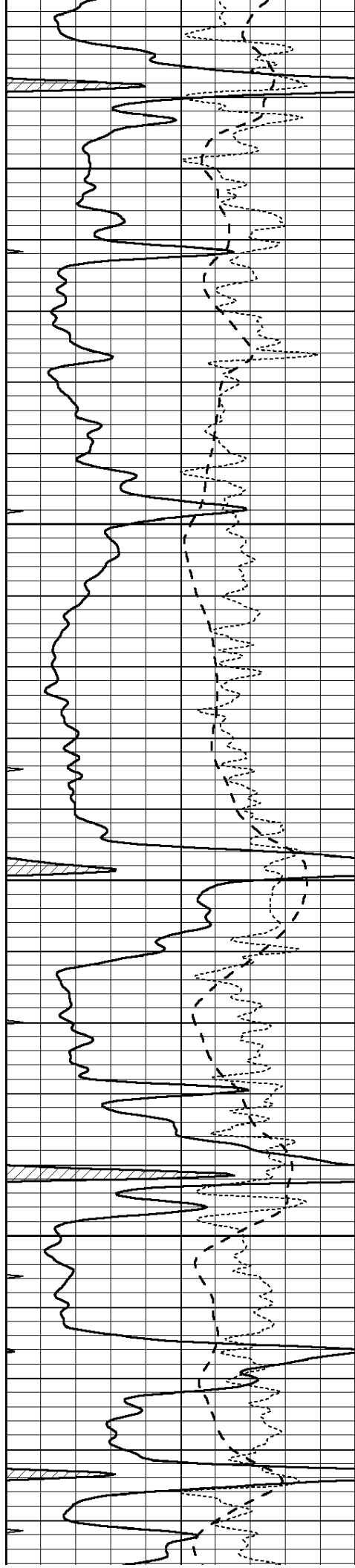
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4450

4500

4550



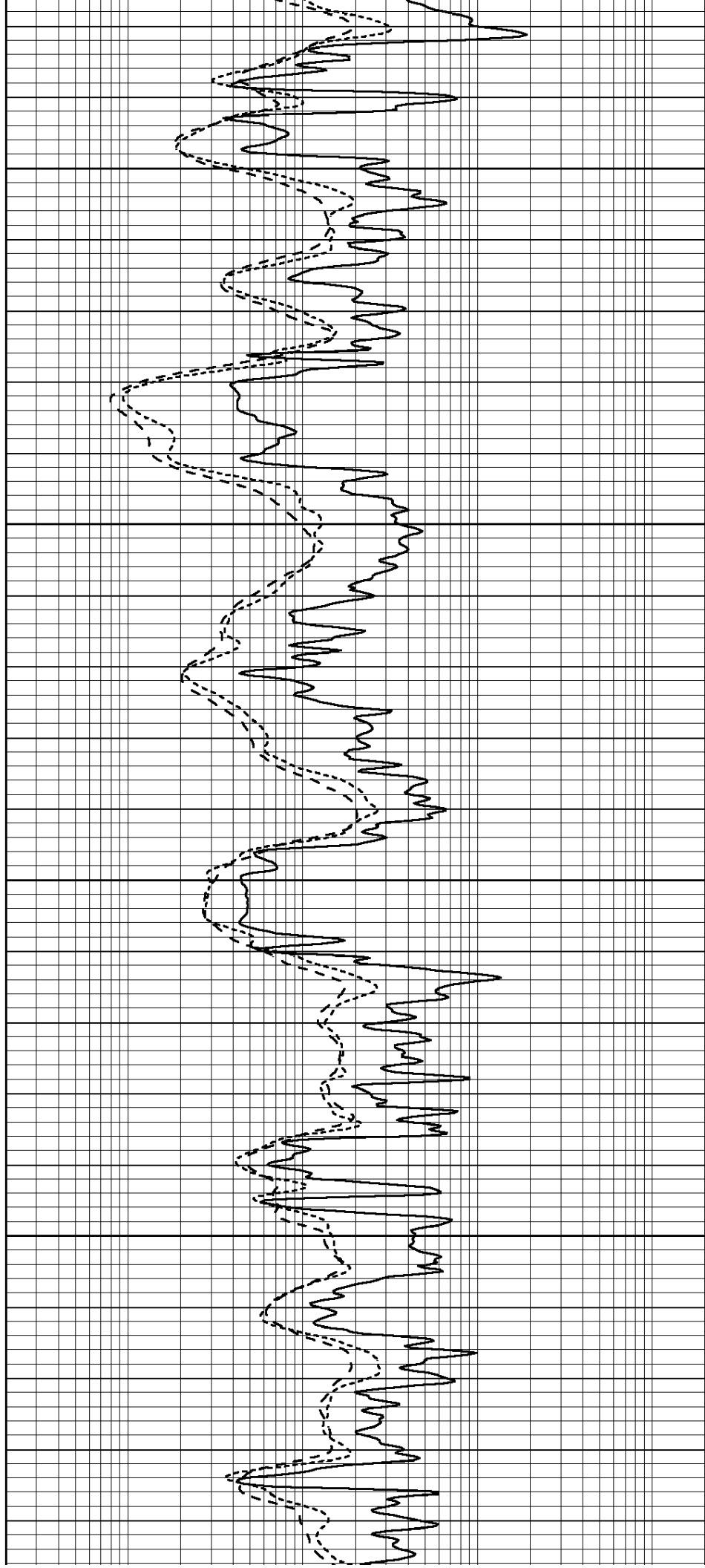


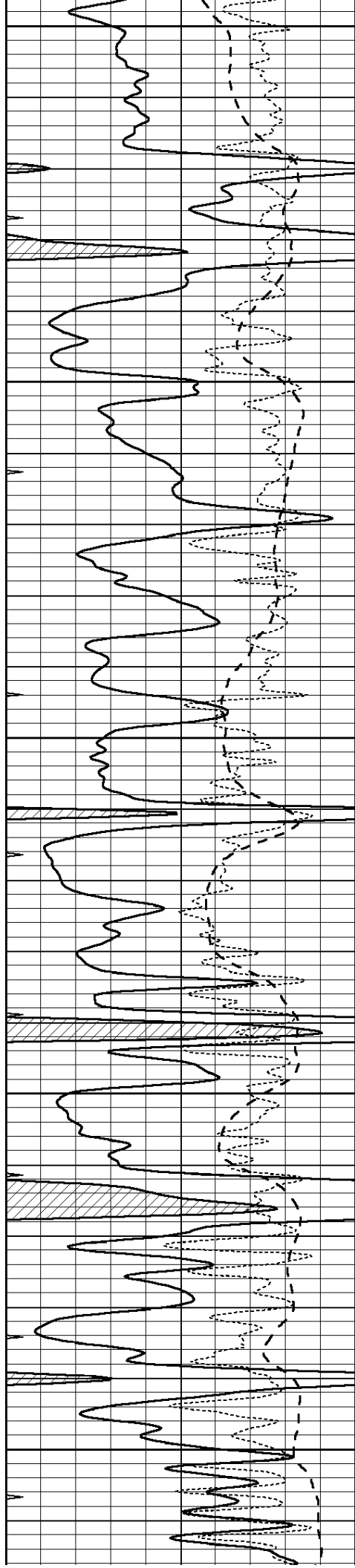
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4650

4700

4750





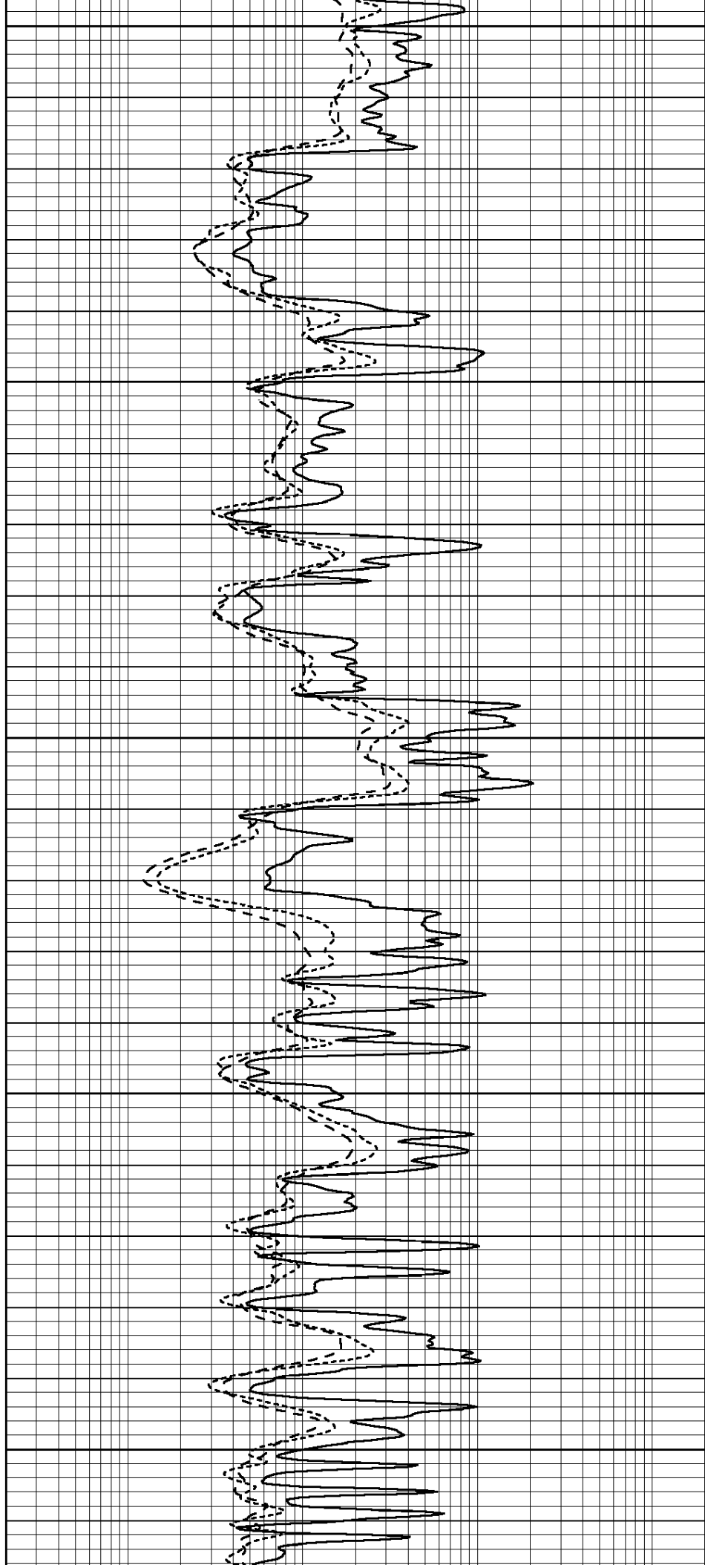
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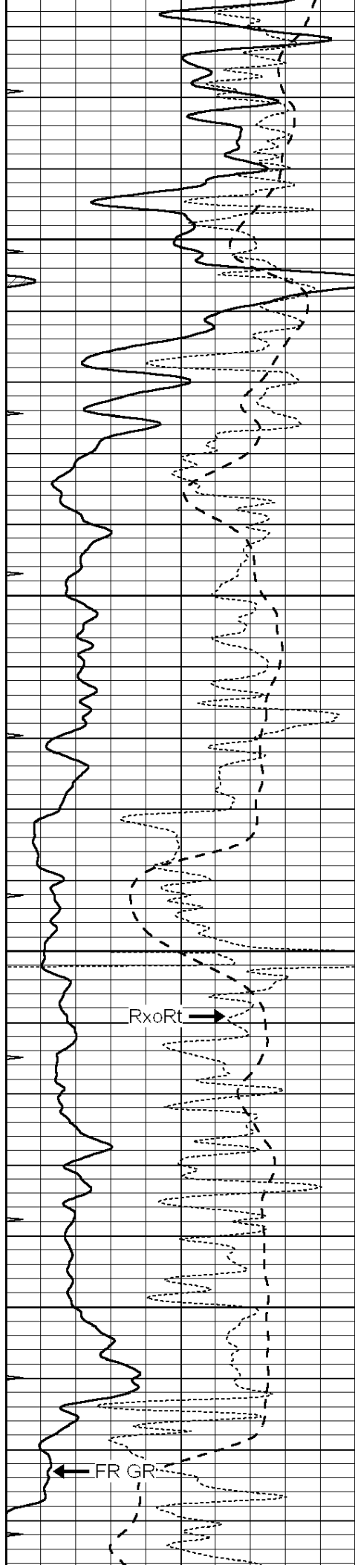
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4900

4950

5000



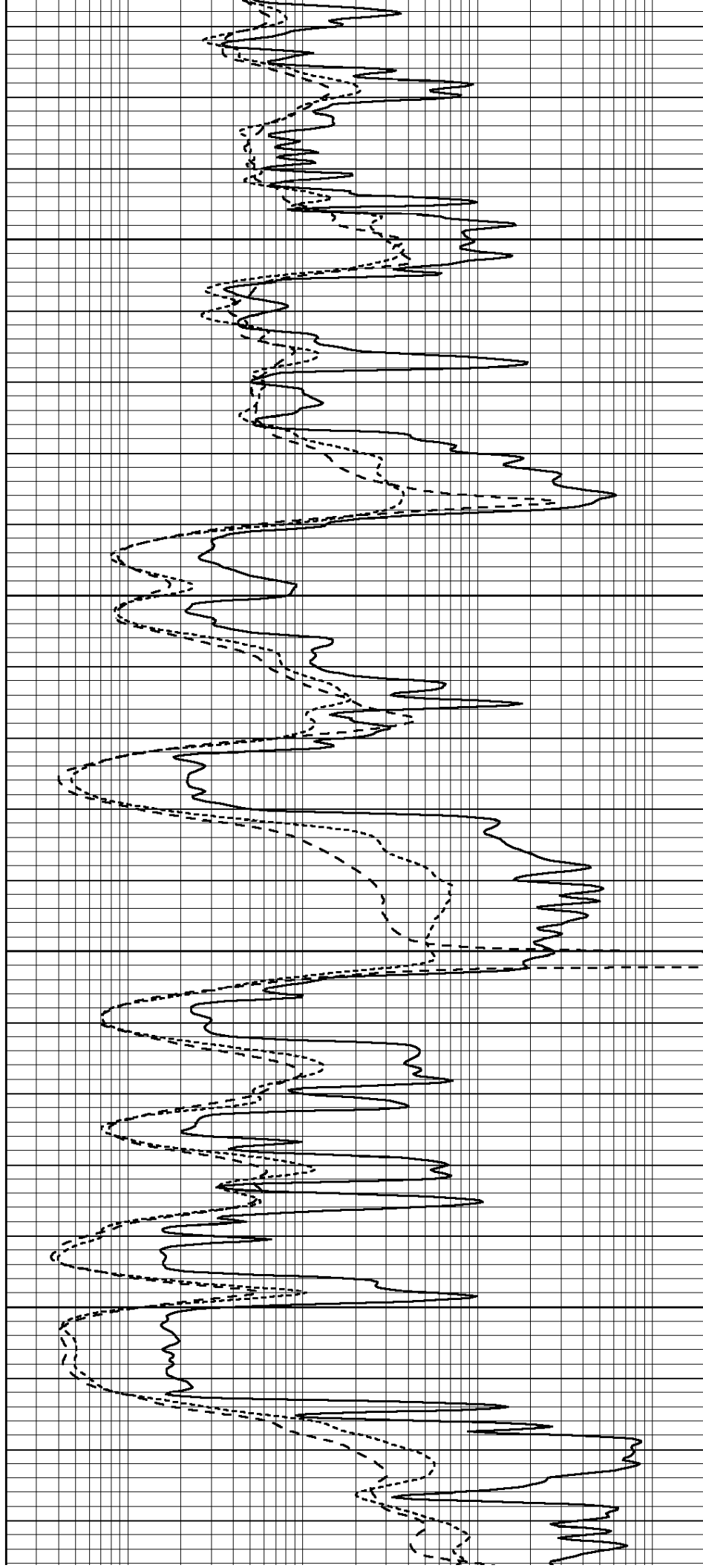


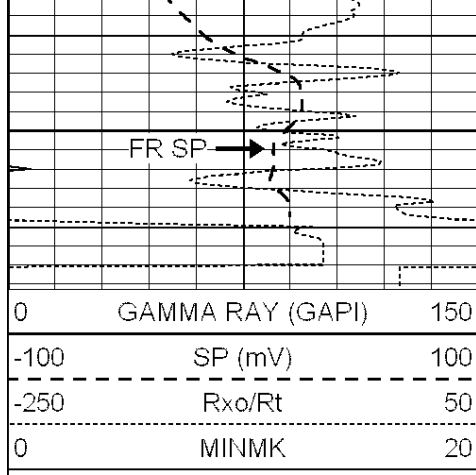
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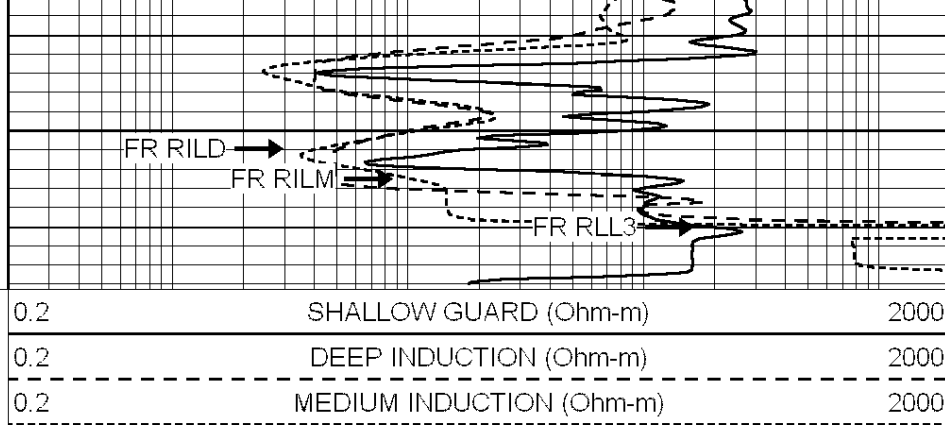
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5200



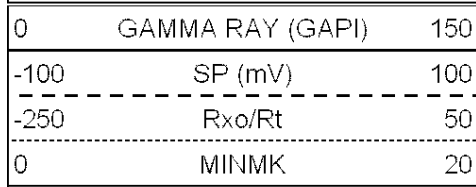


5250
LTD 5262



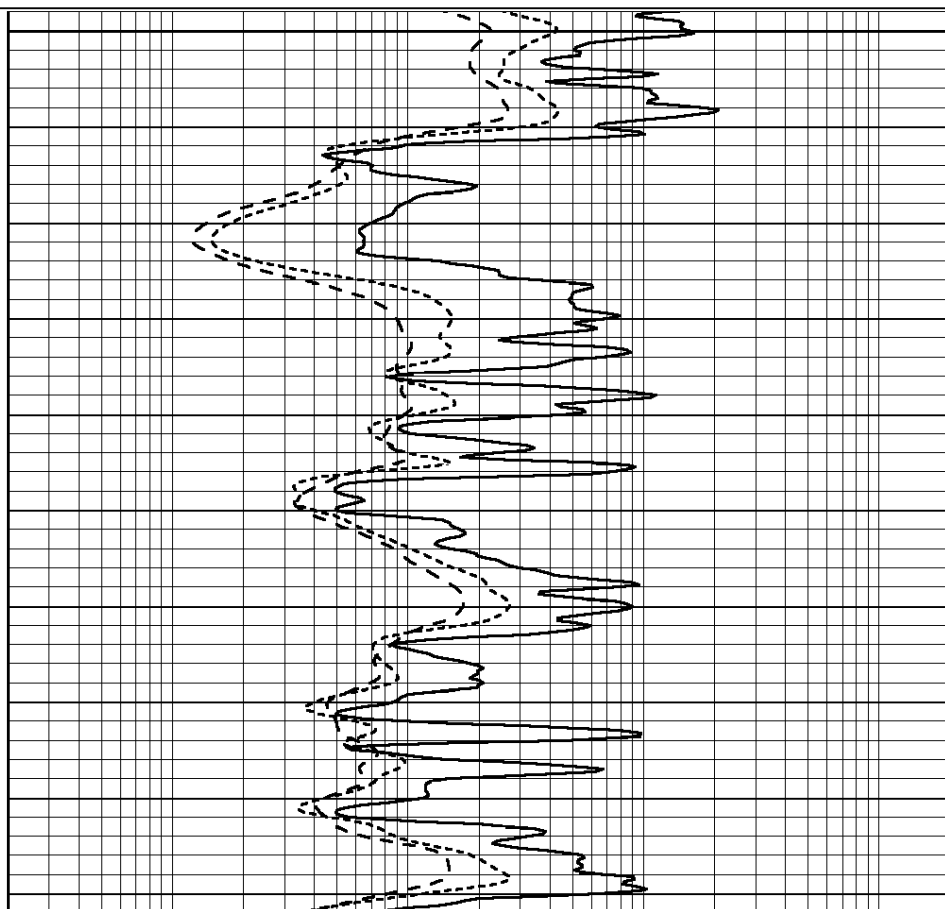
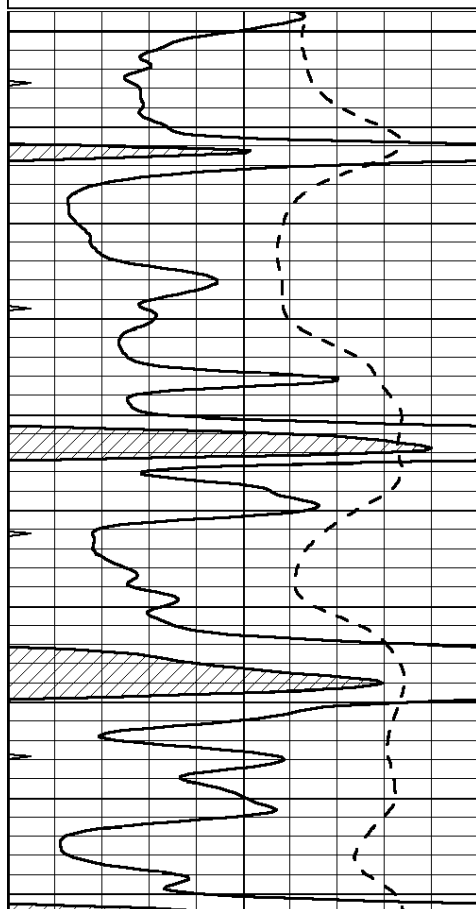
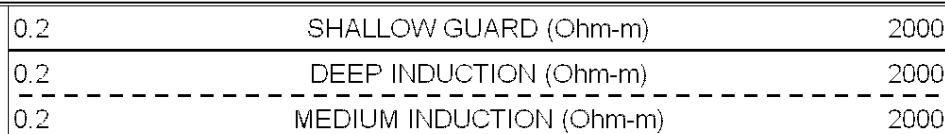
REPEAT SECTION

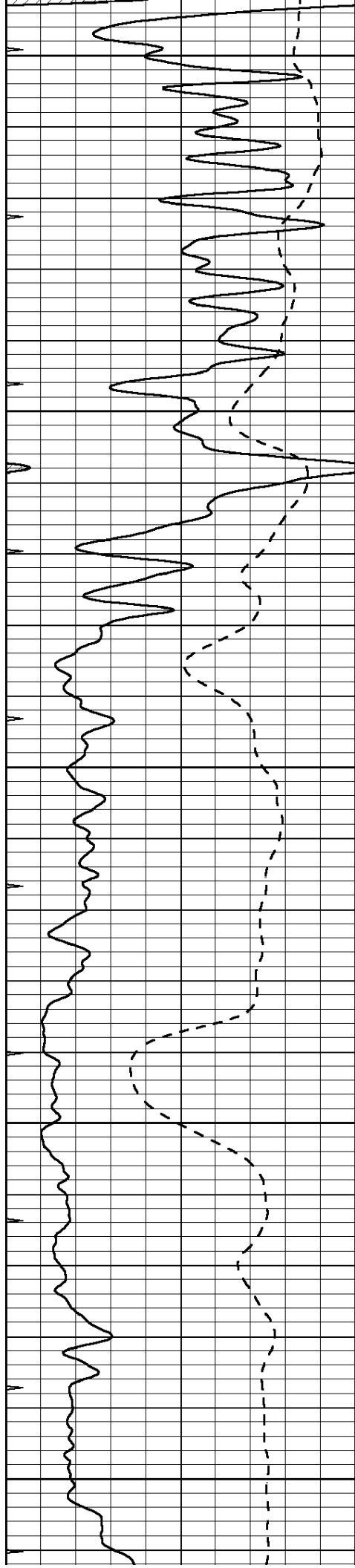
Database File: 25910pe.db
 Dataset Pathname: pass2.3
 Presentation Format: _dil
 Dataset Creation: Sat Nov 08 02:31:52 2014
 Charted by: Depth in Feet scaled 1:240



4900

4950





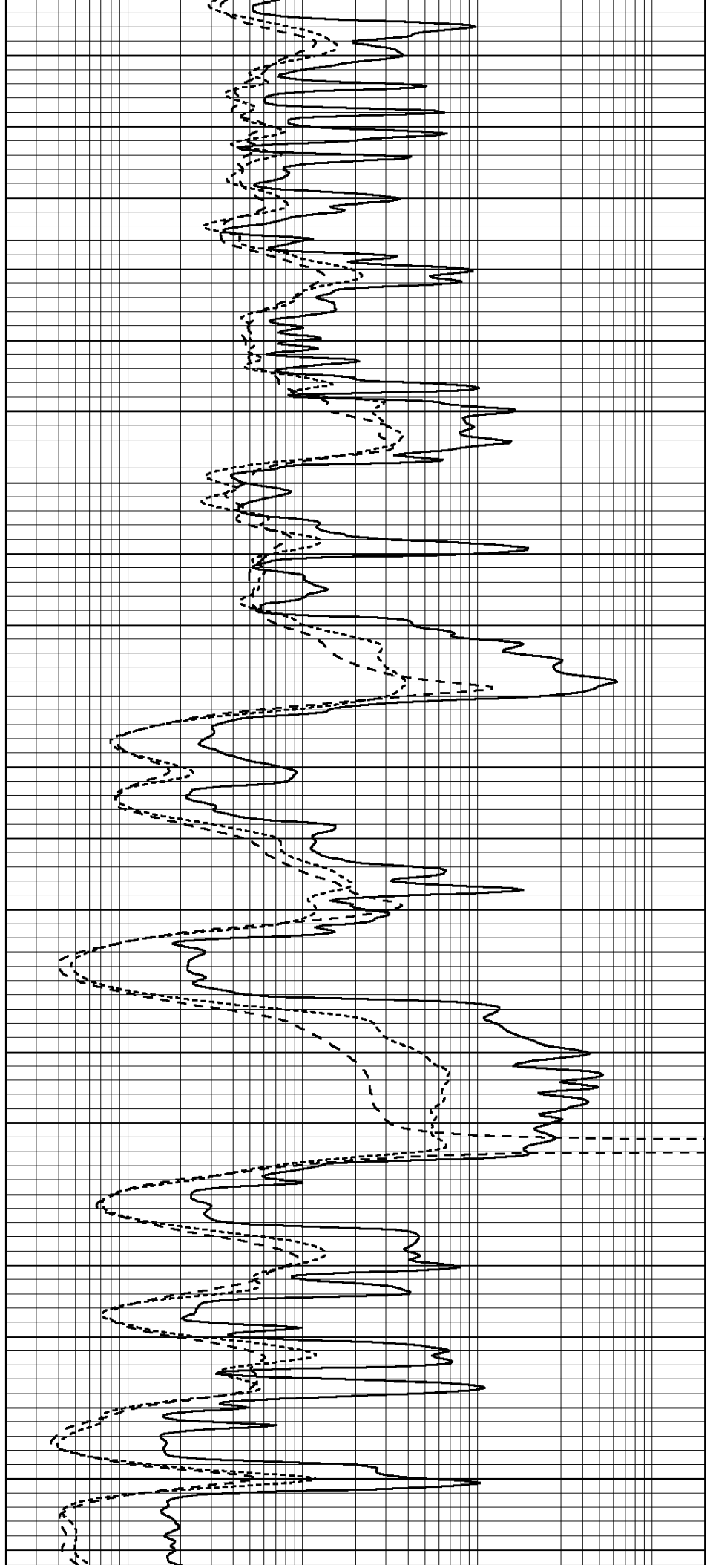
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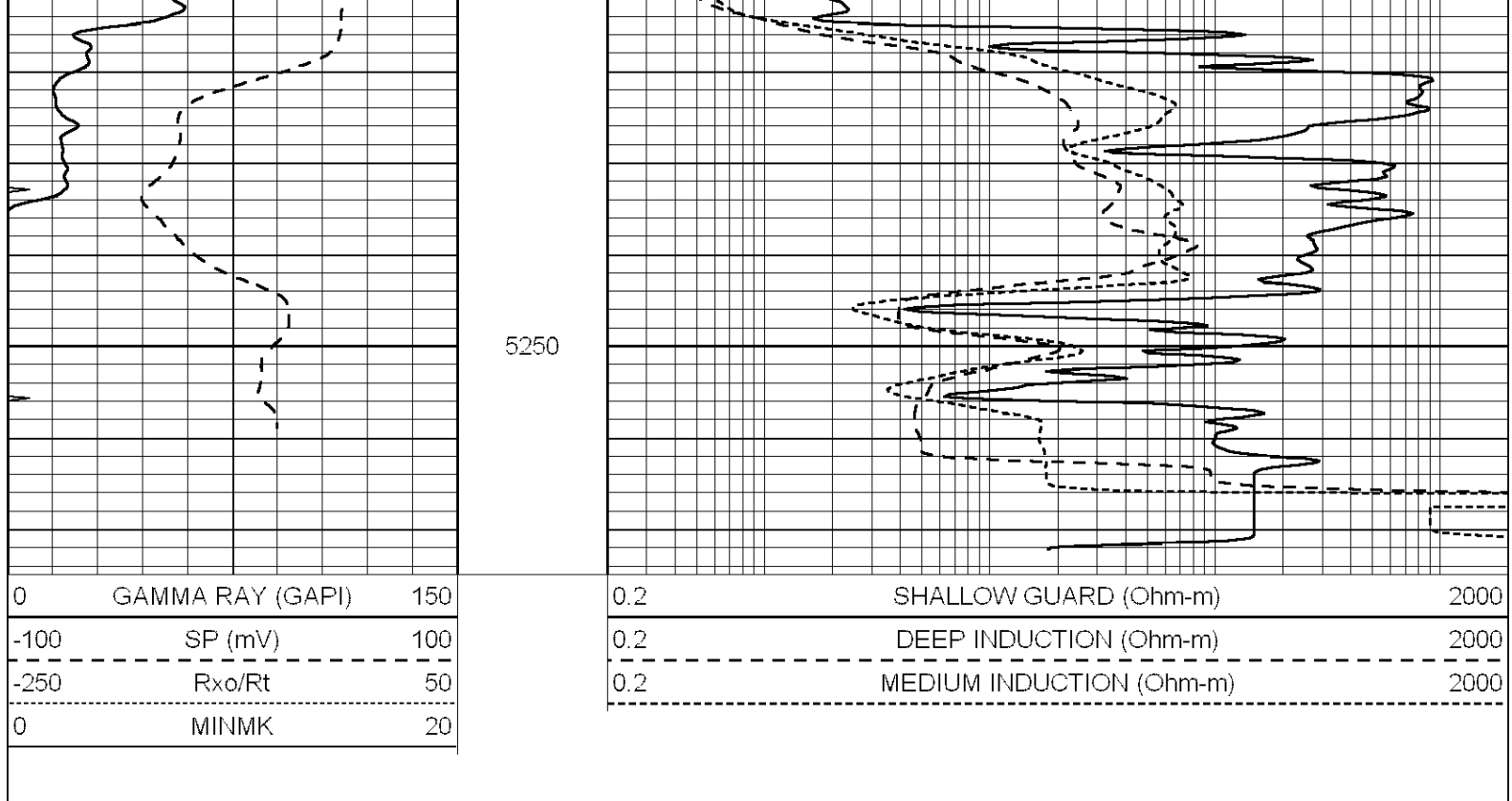
5050

5100

5150

5200





Calibration Report

Database File: 25910pe.db
 Dataset Pathname: pass5.3
 Dataset Creation: Sat Nov 08 03:32:18 2014 by Calc SOC 120430

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Wed Nov 05 06:16:07 2014
 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	670.000	-10.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	670.000	-20.000
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'

	Zero	Cal		Zero	Cal		mm	g
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 Fri May 30 11:01:00 2014					
	Background	Magnesium	Aluminum	Sandstone				
Window 1	1378.8	10804.6	3492.0	12453.4			cps	
Window 2	1262.4	9313.5	3076.7	10594.7			cps	
Window 3	1077.6	5668.7	2076.0	6314.8			cps	
Window 4	306.4	313.0	306.4	315.6			cps	
Long Space	0.0	8051.0	1814.3	9332.3			cps	
Short Space	1.9	1706.1	1146.0	1707.6			cps	
Rho		1.7100	2.5900	1.3800			g/cc	
Pe		0.0000	2.5700	1.5500				
Rib Angle	: 45.0	Rib Slope	: 1.002	Density/Spine Ratio			: 0.571	
Spine Angle	: 75.0	Spine Slope	: 3.745	Spine Intercept			: -18.9	

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	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:	Mon Jun 30 21:53:39 2014		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	