



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company LOTUS OPERATING COMPANY, LLC.	
Well LADNER #1	
Field STRANATHAN	
County BARBER	State KANSAS
Location: API # : 15-007-23566-0000	
600' FSL & 2260' FWL	
SEC 35 TWP 34S RGE 12W	
Permanent Datum GROUND LEVEL Elevation 1417	Other Services CDL/CNL/PE MEL/SONIC
Log Measured From KELLY BUSHING 13' A.G.L.	
Drilling Measured From KELLY BUSHING	Elevation K.B. 1430 D.F. 1428 G.L. 1417
Date 8/15/10	
Run Number ONE	
Depth Driller 5220	
Depth Logger 5222	
Bottom Logged Interval 5220	
Top Log Interval 00	
Casing Driller 10 3/4"@260'	
Casing Logger 260	
Bit Size 7 7/8"	
Type Fluid in Hole CHEMICAL MUD	CHLORIDES 4,500 PPM
Density / Viscosity 9.5/49	
pH / Fluid Loss 10.5/8.8	
Source of Sample FLOWLINE	
Rin @ Meas. Temp .600@99F	
Rinf @ Meas. Temp .450@99F	
Rinc @ Meas. Temp .720@99F	
Source of Rinf / Rinc MEASUREMENT	
Rin @ BHT .468@127F	
Time Circulation Stopped 3 HOURS	
Time Logger on Bottom 2:20 P.M.	
Maximum Recorded Temperature 127F	
Equipment Number 0836	
Location HAYS, KANSAS	
Recorded By JEFF LUEBBERS	
Witnessed By JOE BAKER	

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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., 16S. ON HWY 281 TO MM #8, (RATTLESNAKE TRAIL RD.) 1W., 1S., 1W., N. INTO



SUPERIOR
Hays,
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MAIN SECTION

Database File: 005583pe.db
Dataset Pathname: pass3.12
Presentation Format: dil2
Dataset Creation: Sun Aug 15 16:30:12 2010 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

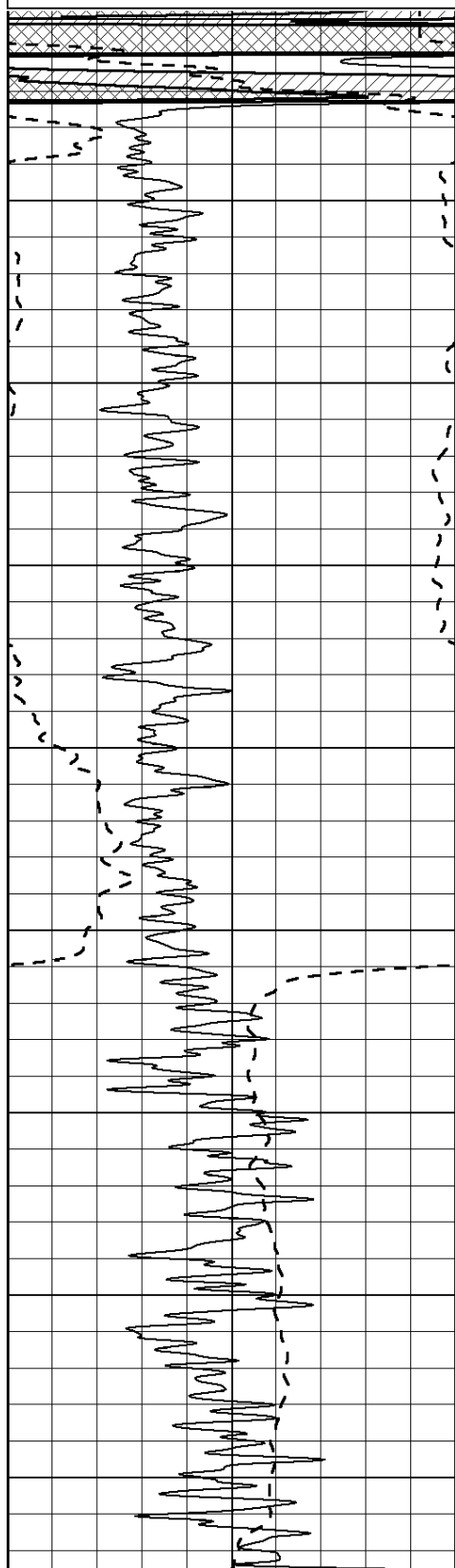
0	RLL3 (Ohm-m)	50
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0	RILD (Ohm-m)	50
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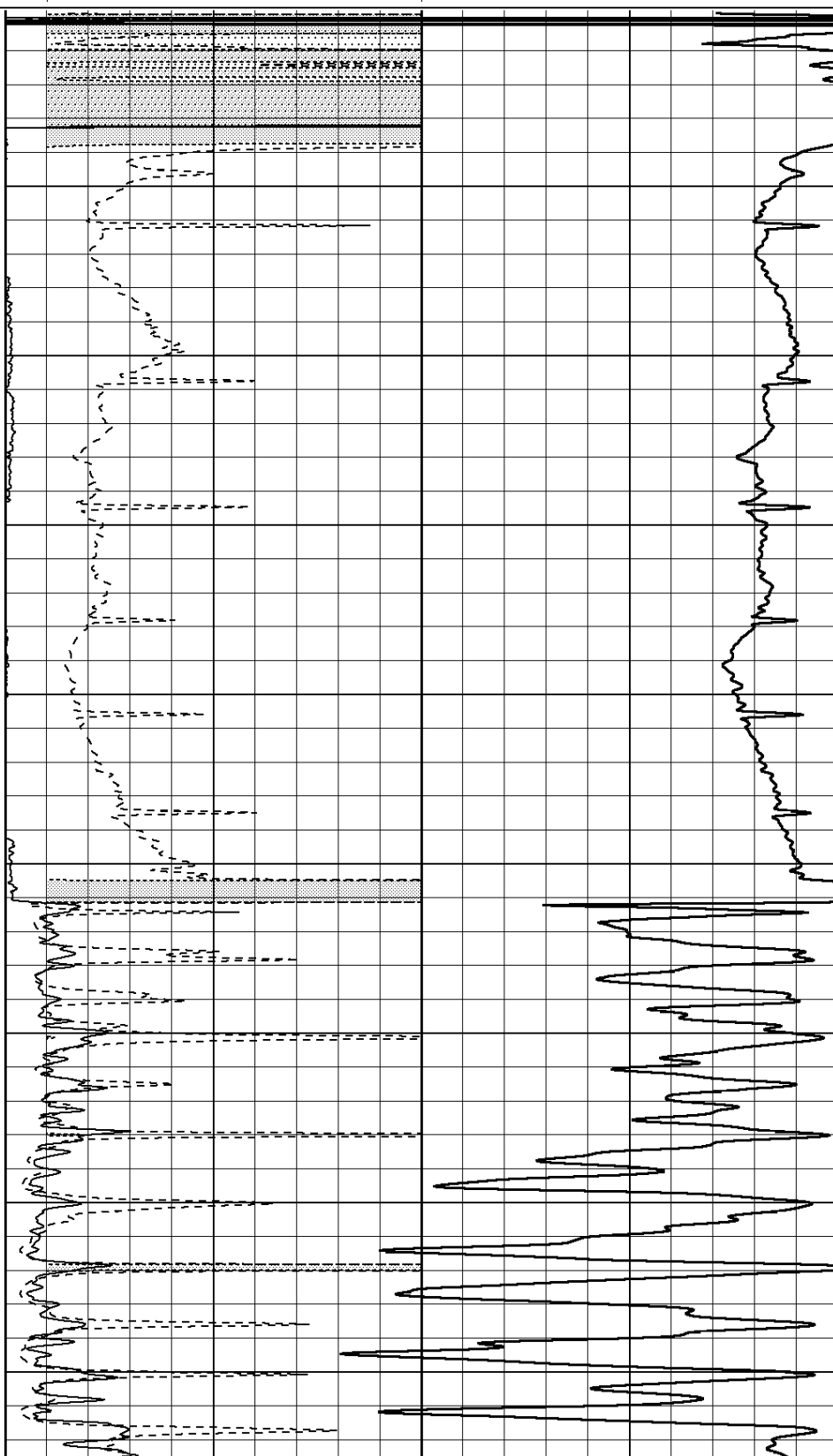
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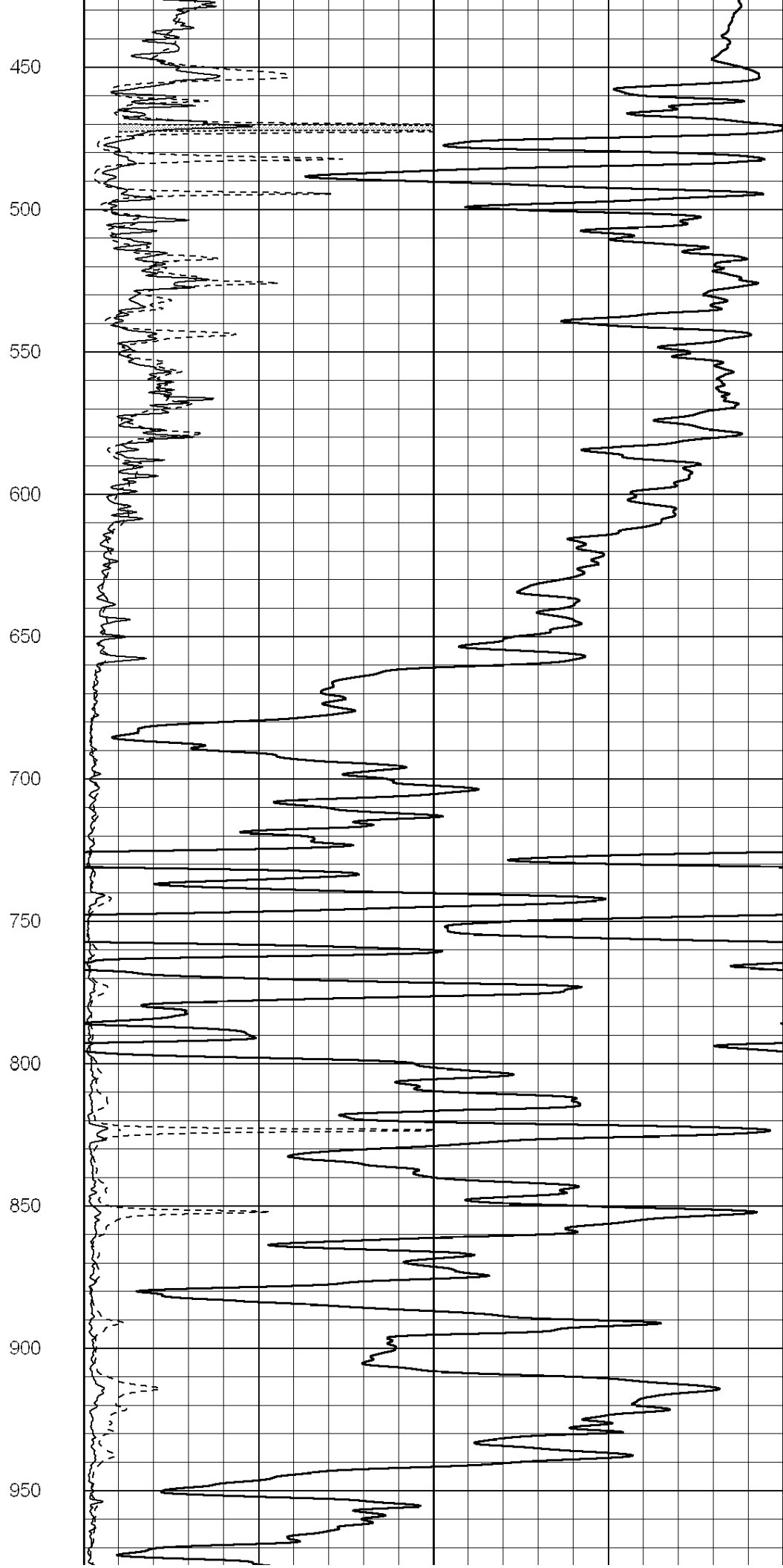
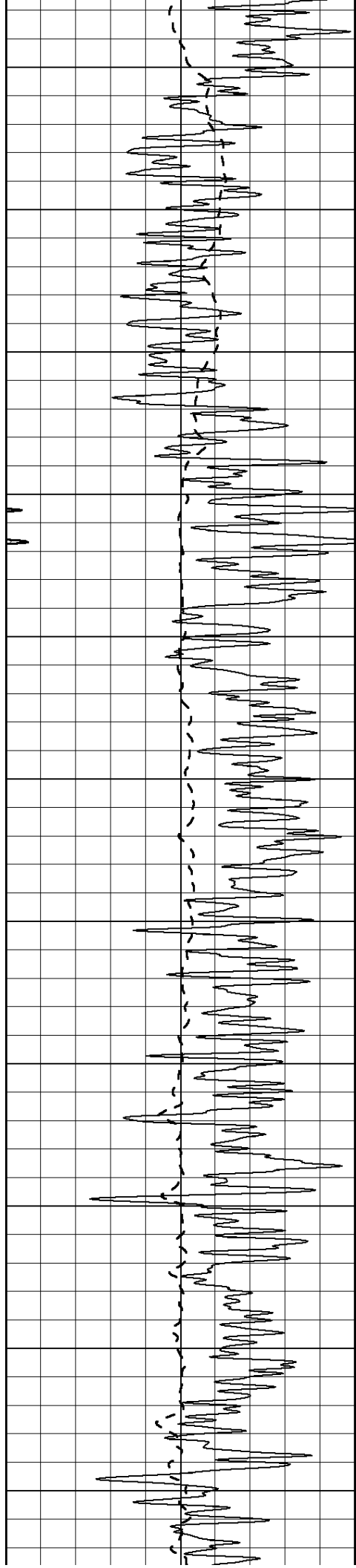
50	RILD X10 (Ohm-m)	500
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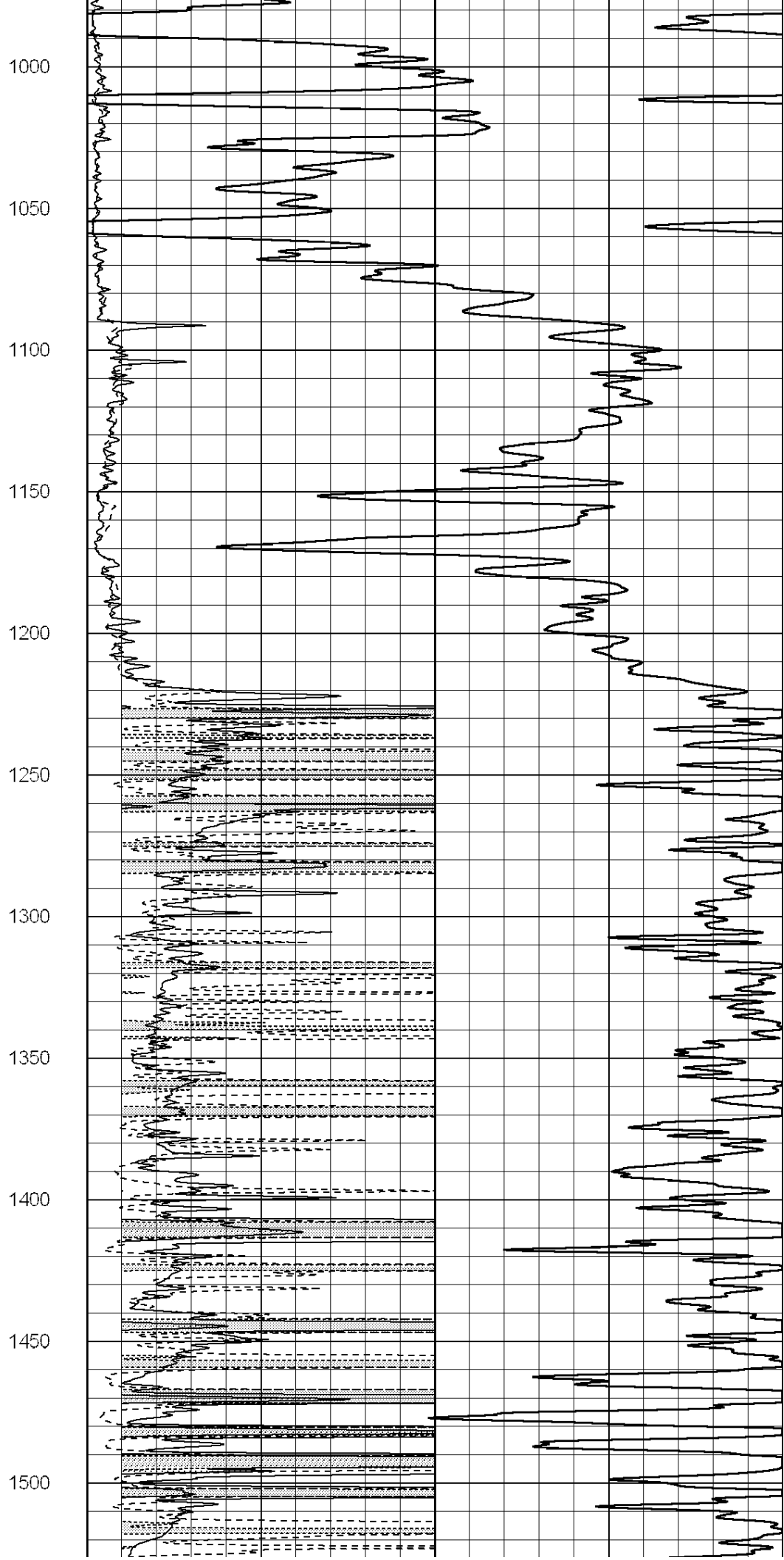
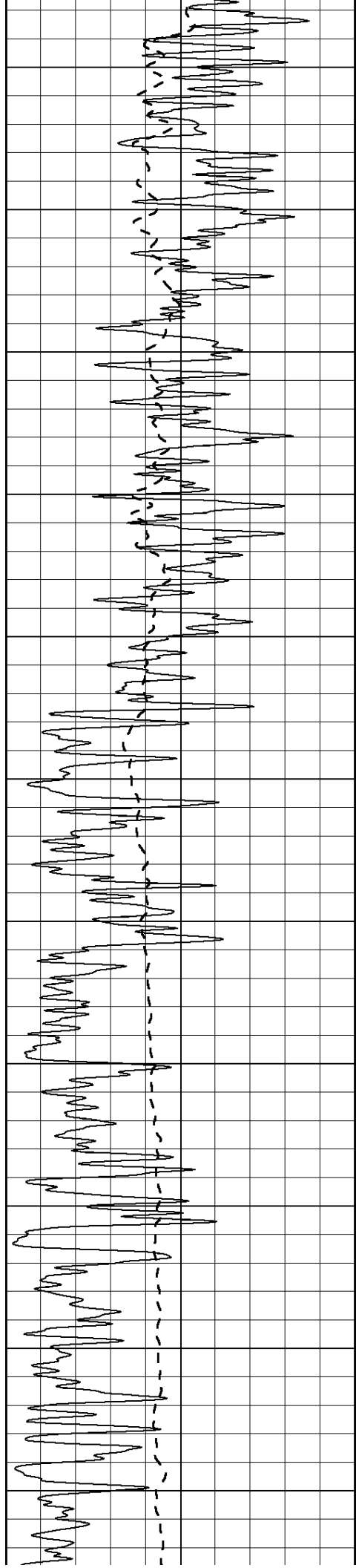
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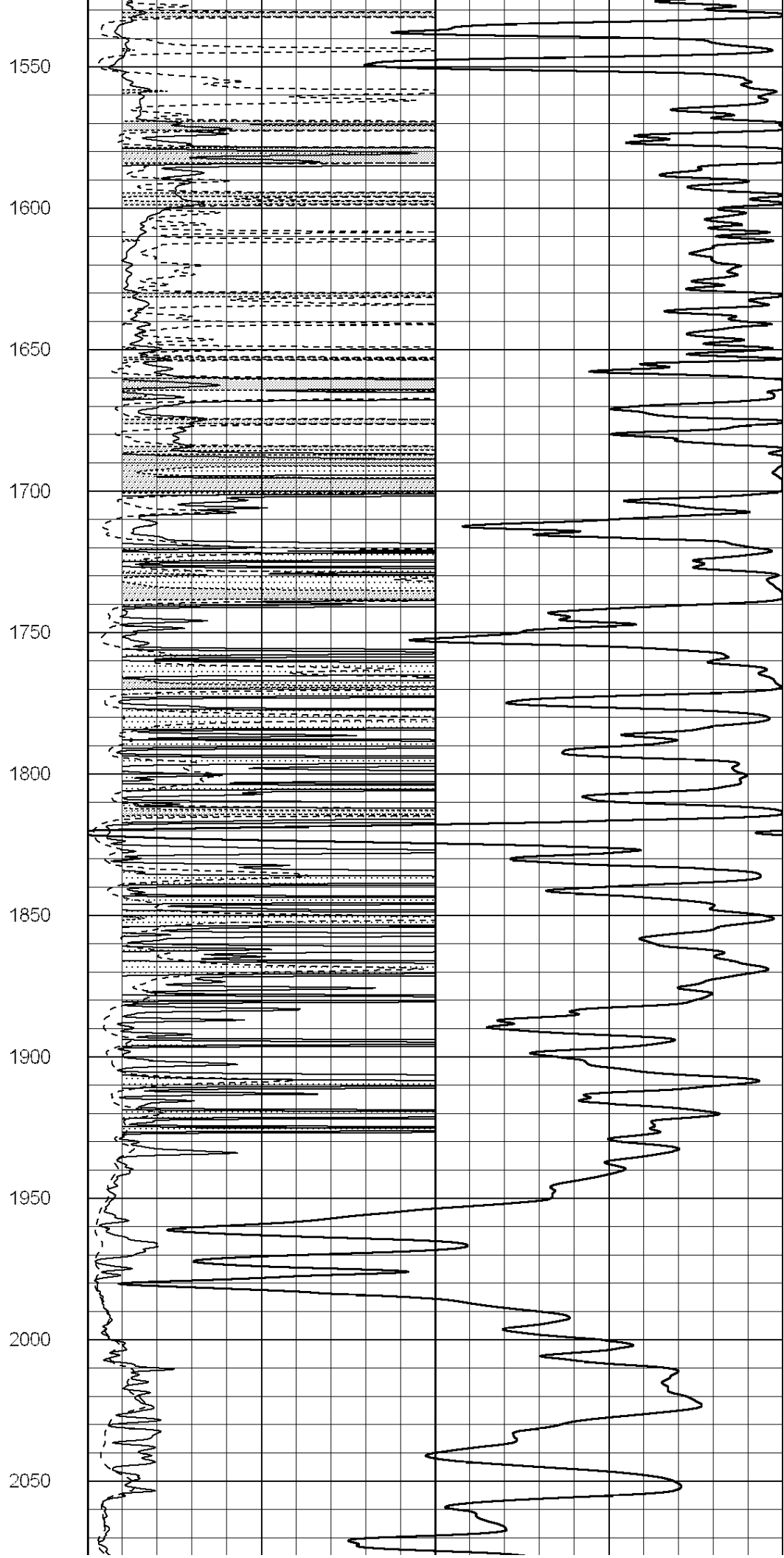
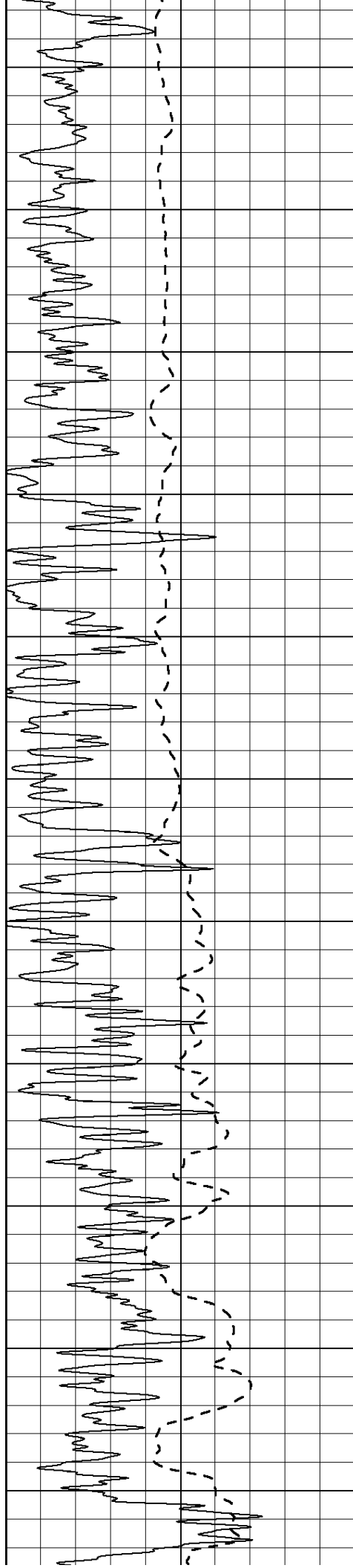


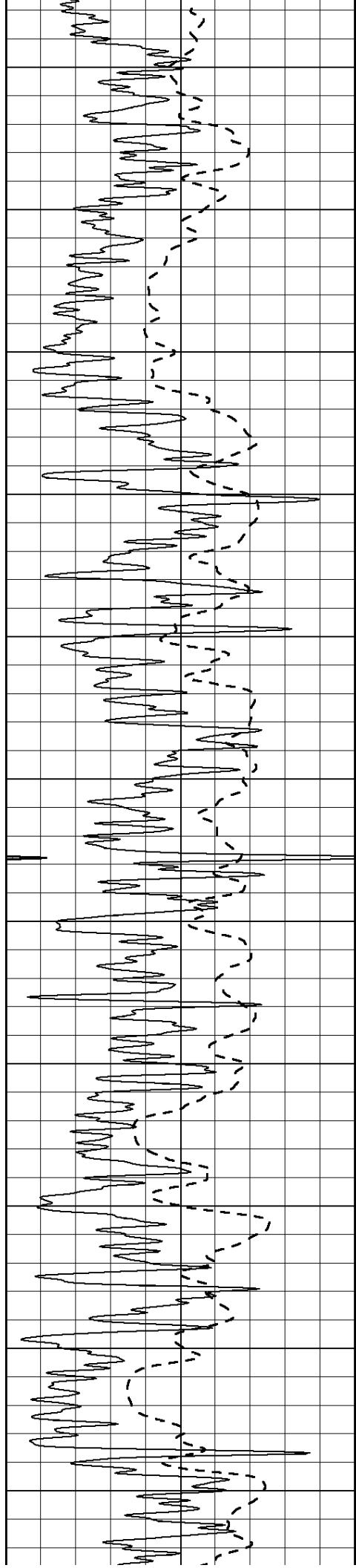
0
50
100
150
200
250
300
350
400











2100

2150

2200

2250

2300

2350

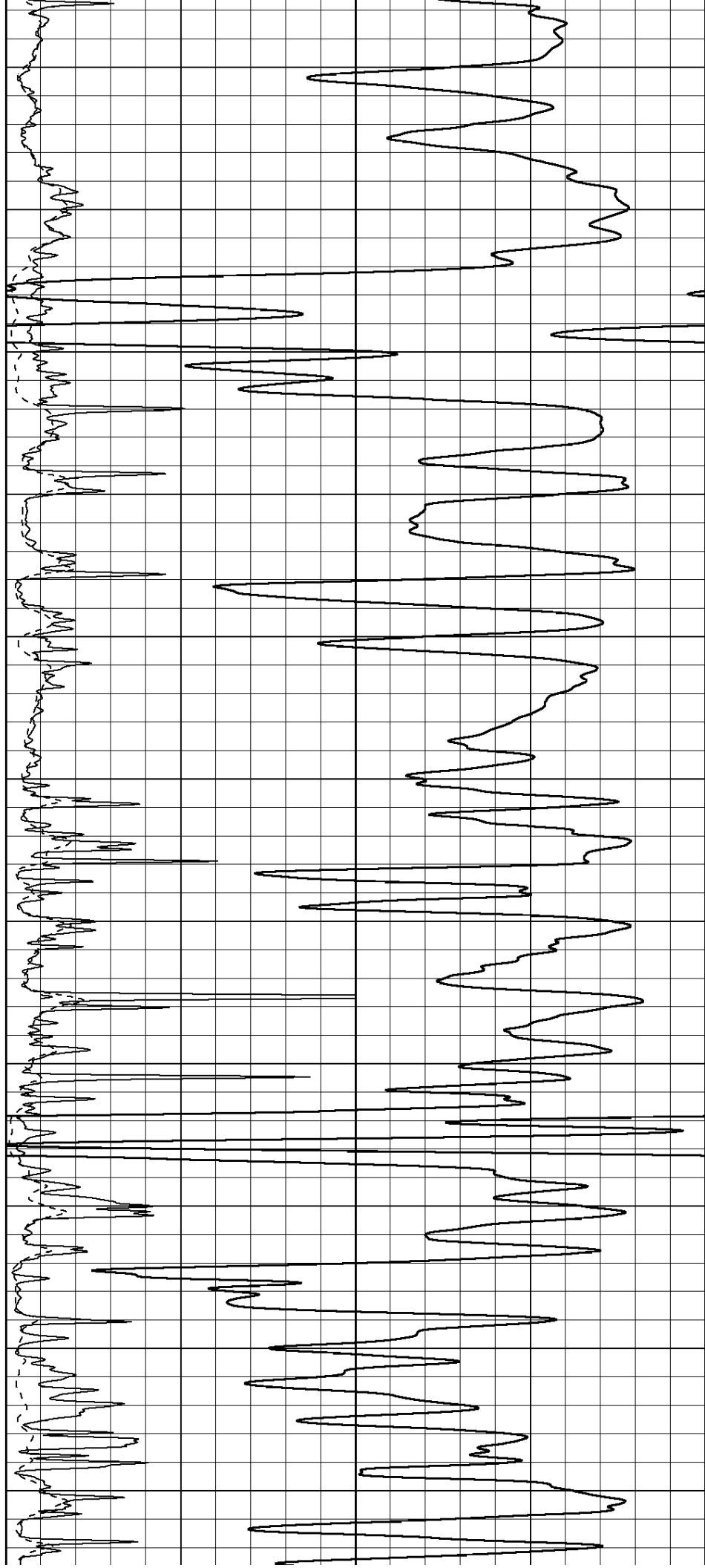
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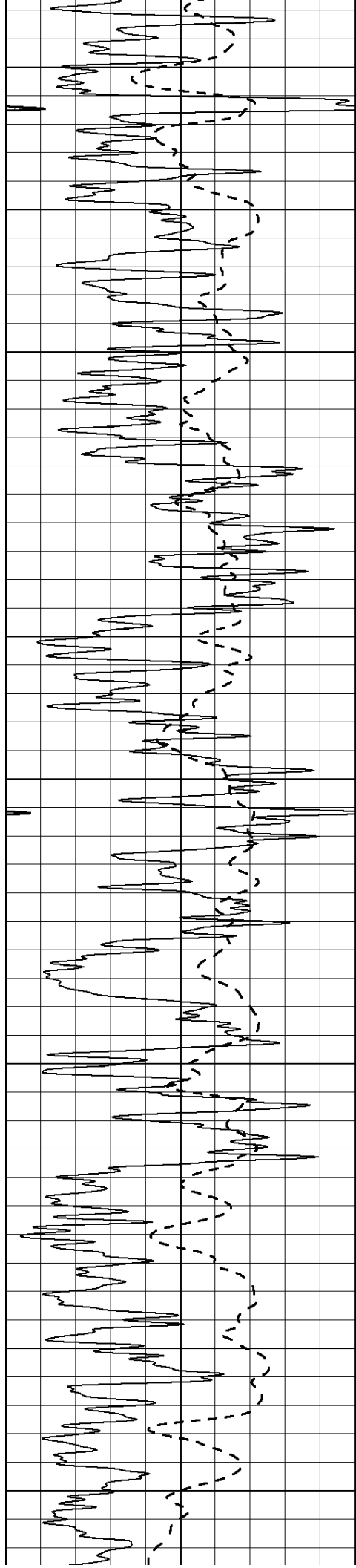
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2500

2550

2600





2650

2700

2750

2800

2850

2900

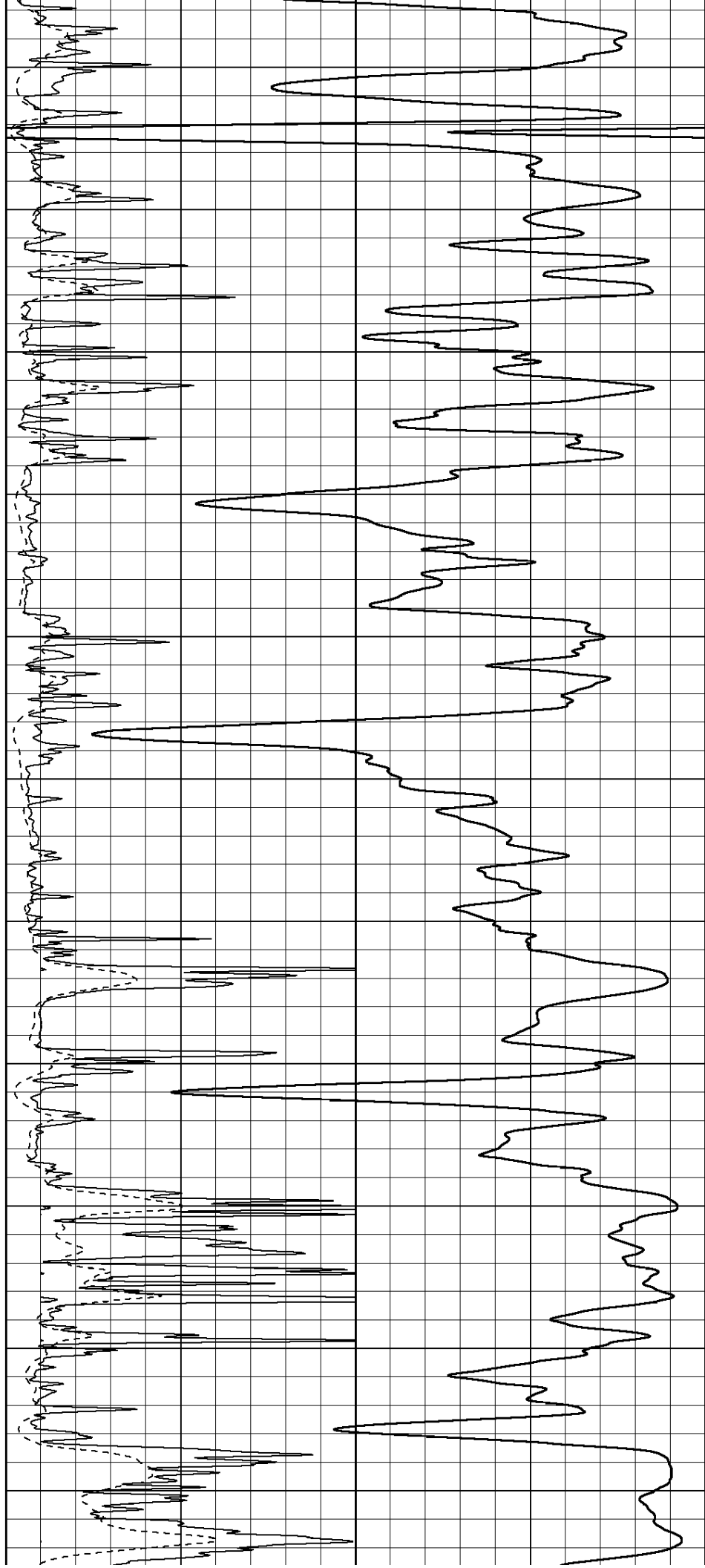
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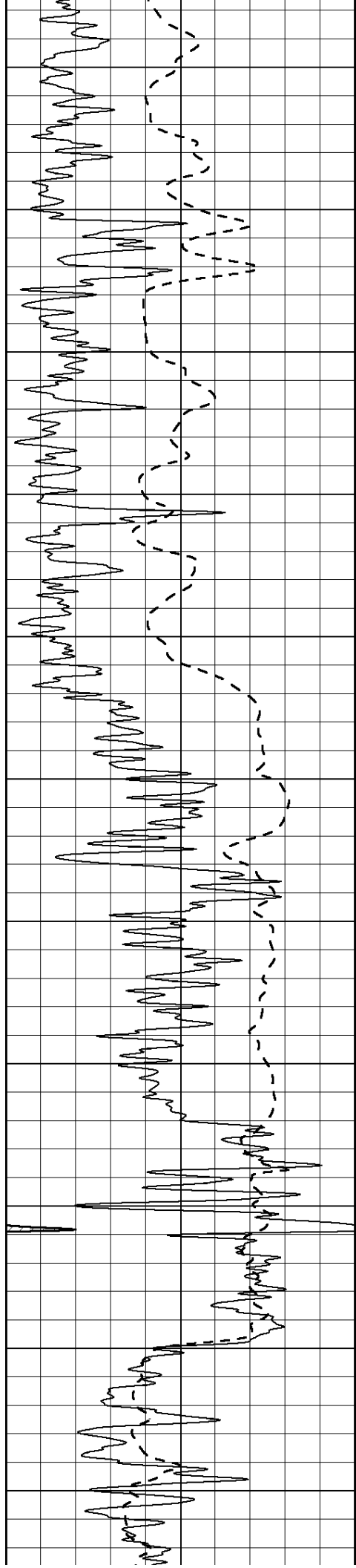
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3050

3100

3150





3200

3250

3300

3350

3400

3450

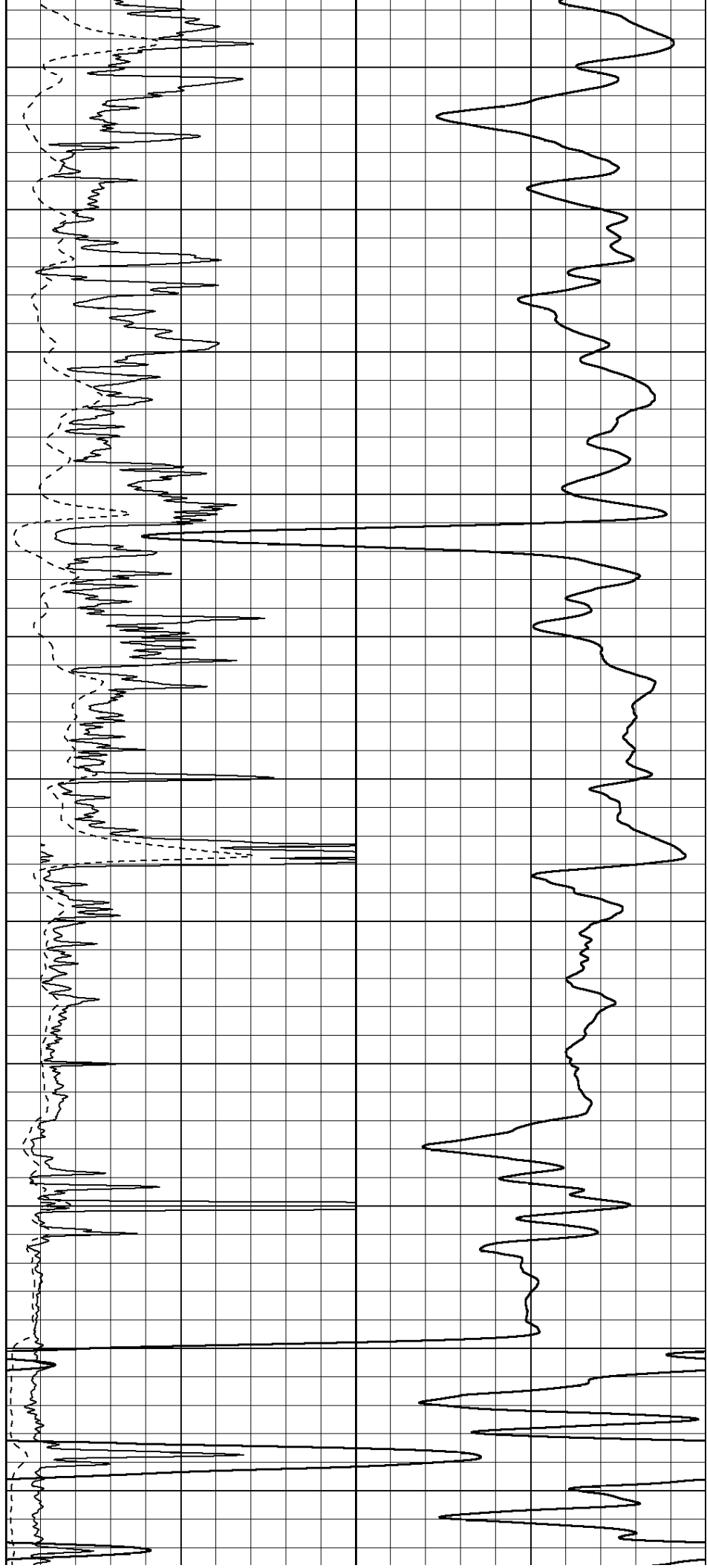
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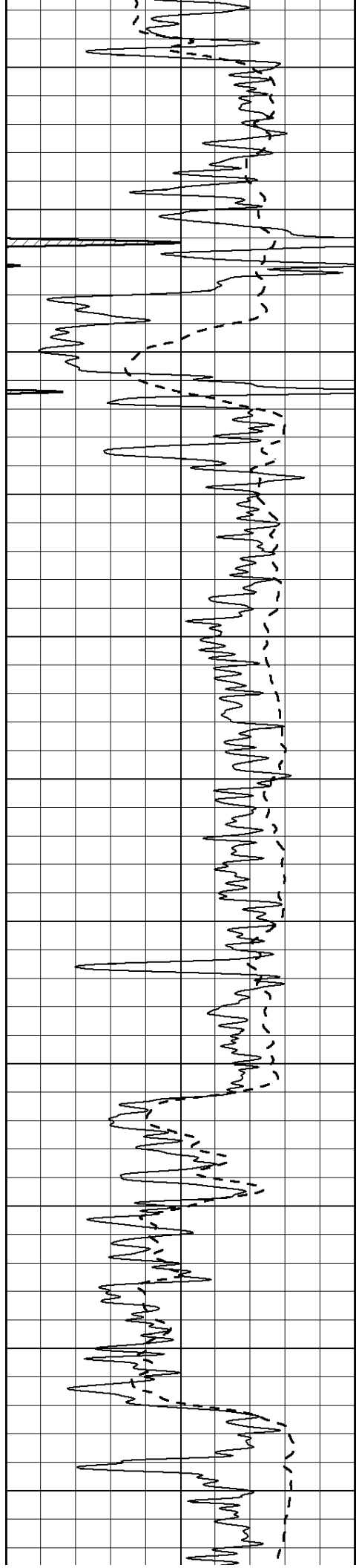
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3600

3650

3700





3750

3800

3850

3900

3950

4000

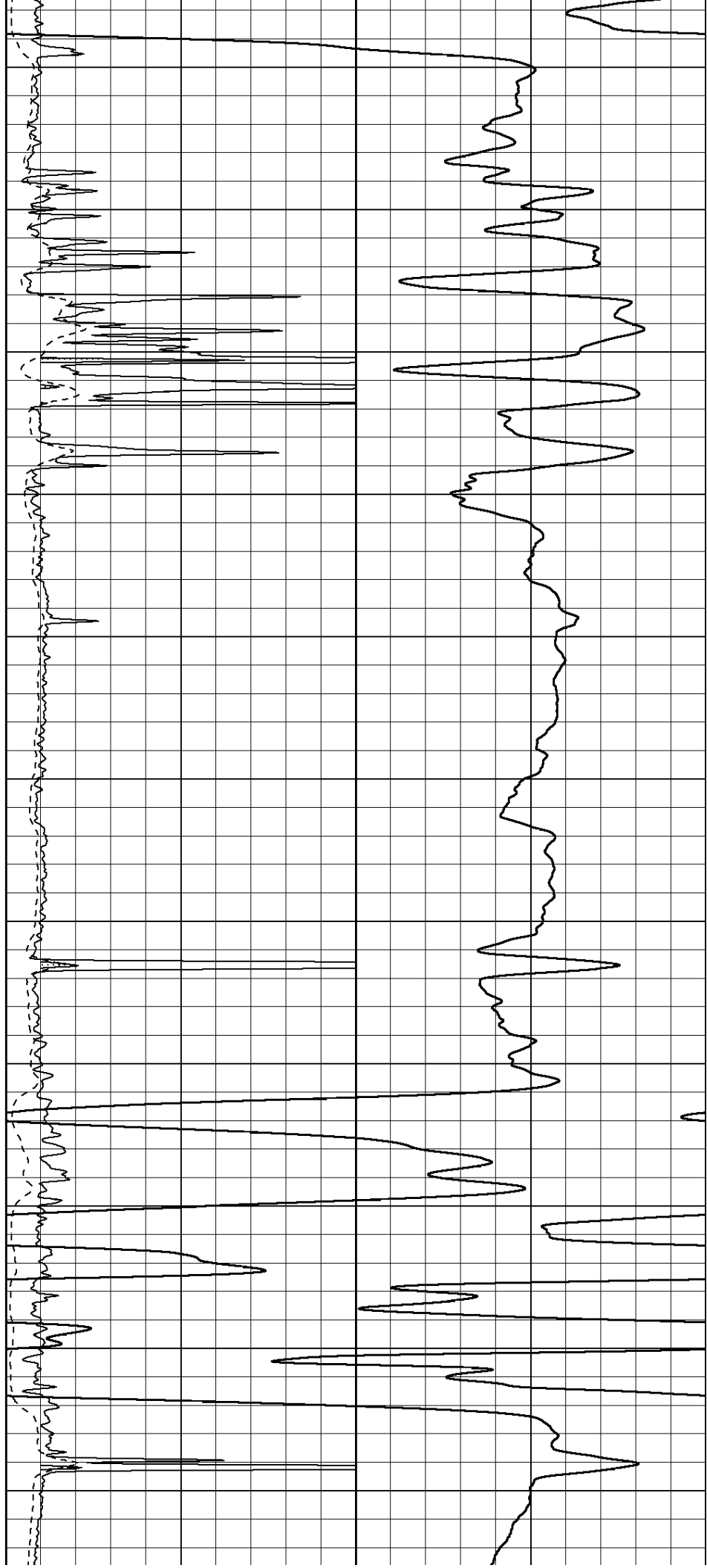
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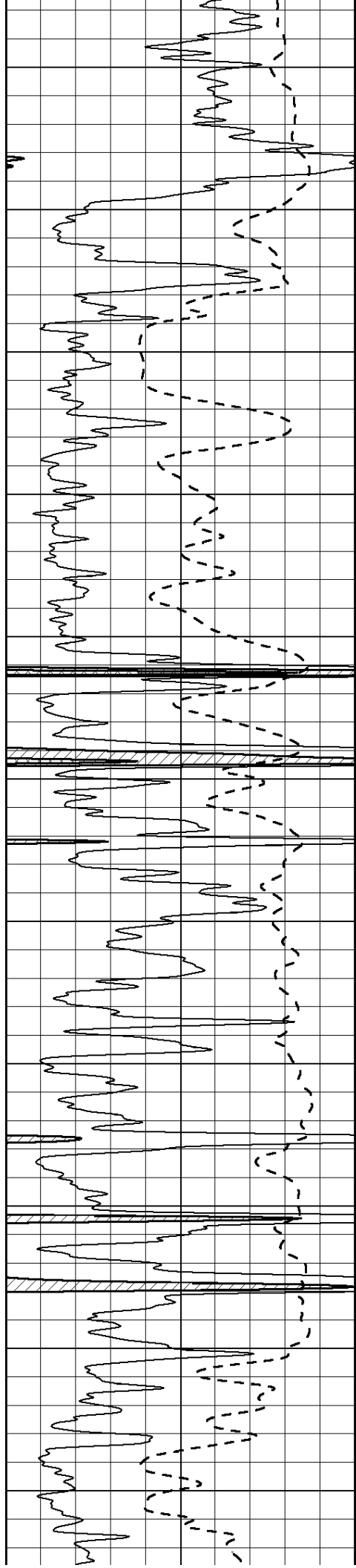
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4150

4200

4250





4300

4350

4400

4450

4500

4550

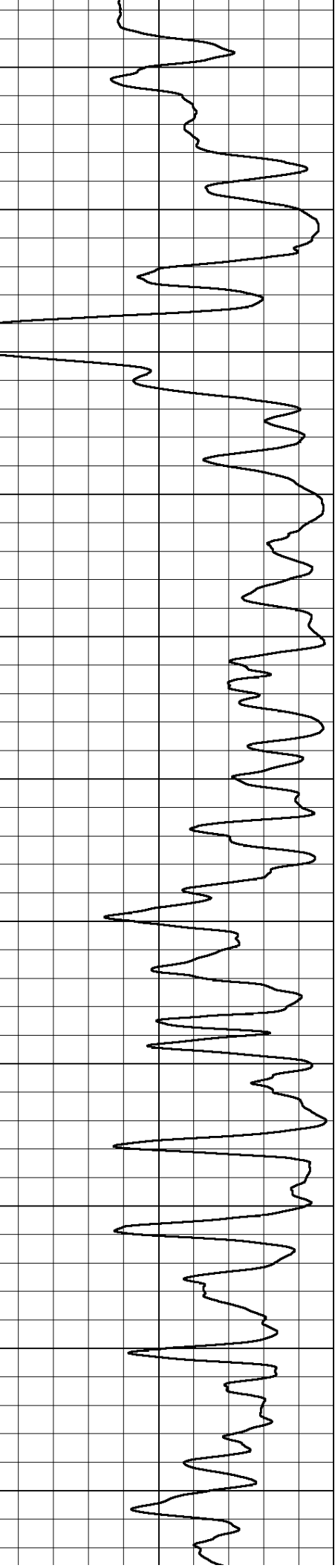
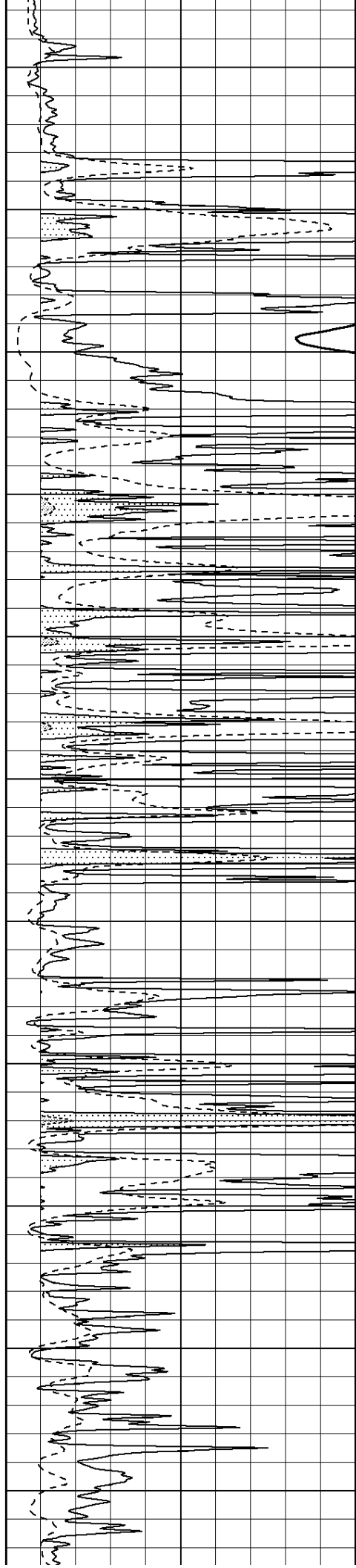
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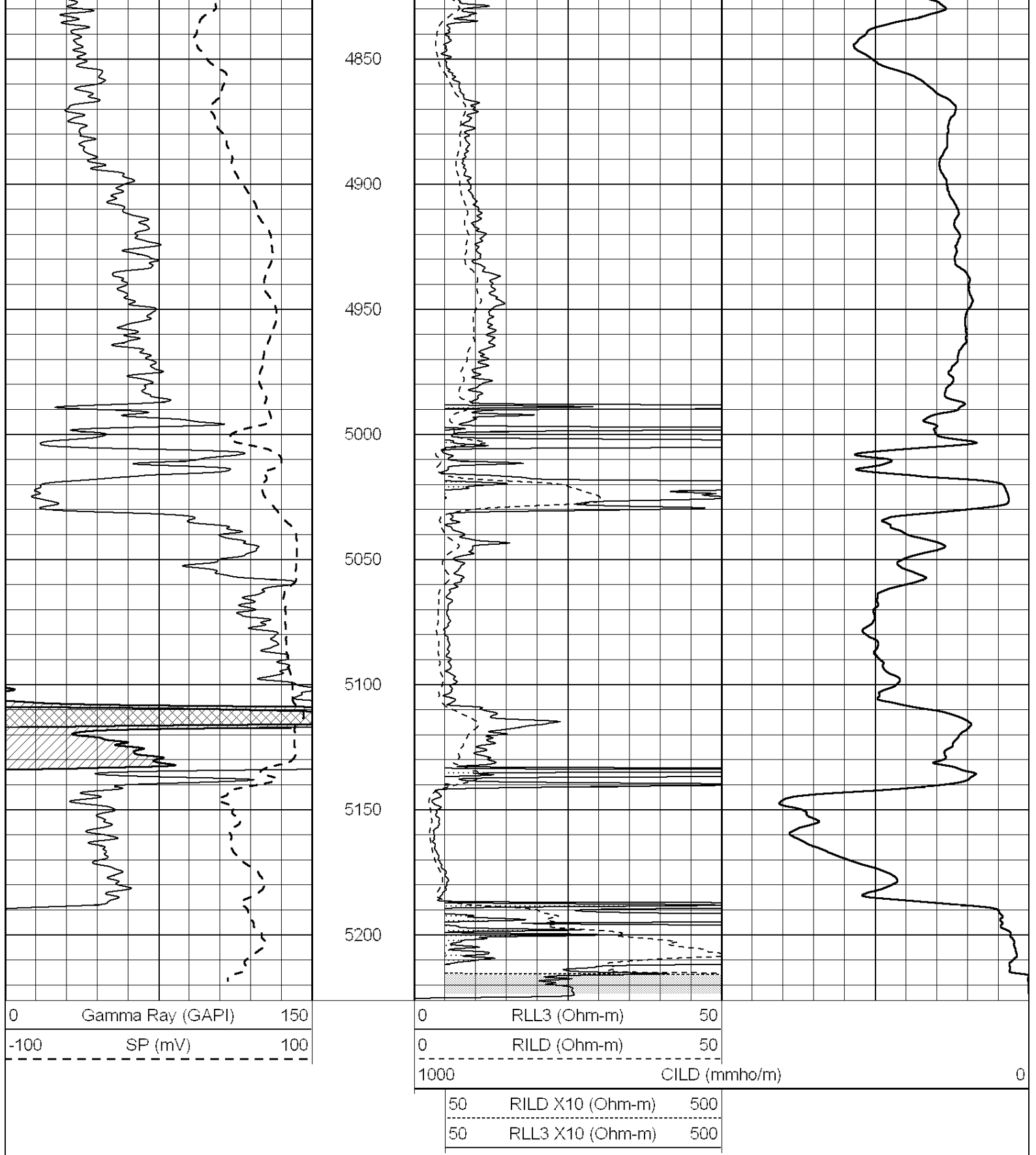
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4800



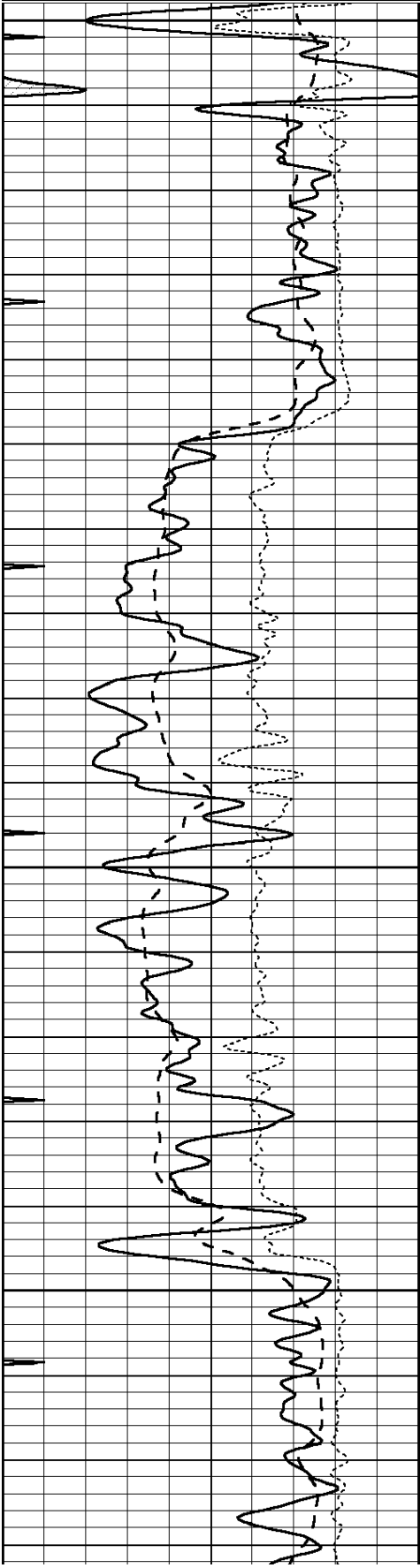


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MAIN SECTION

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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

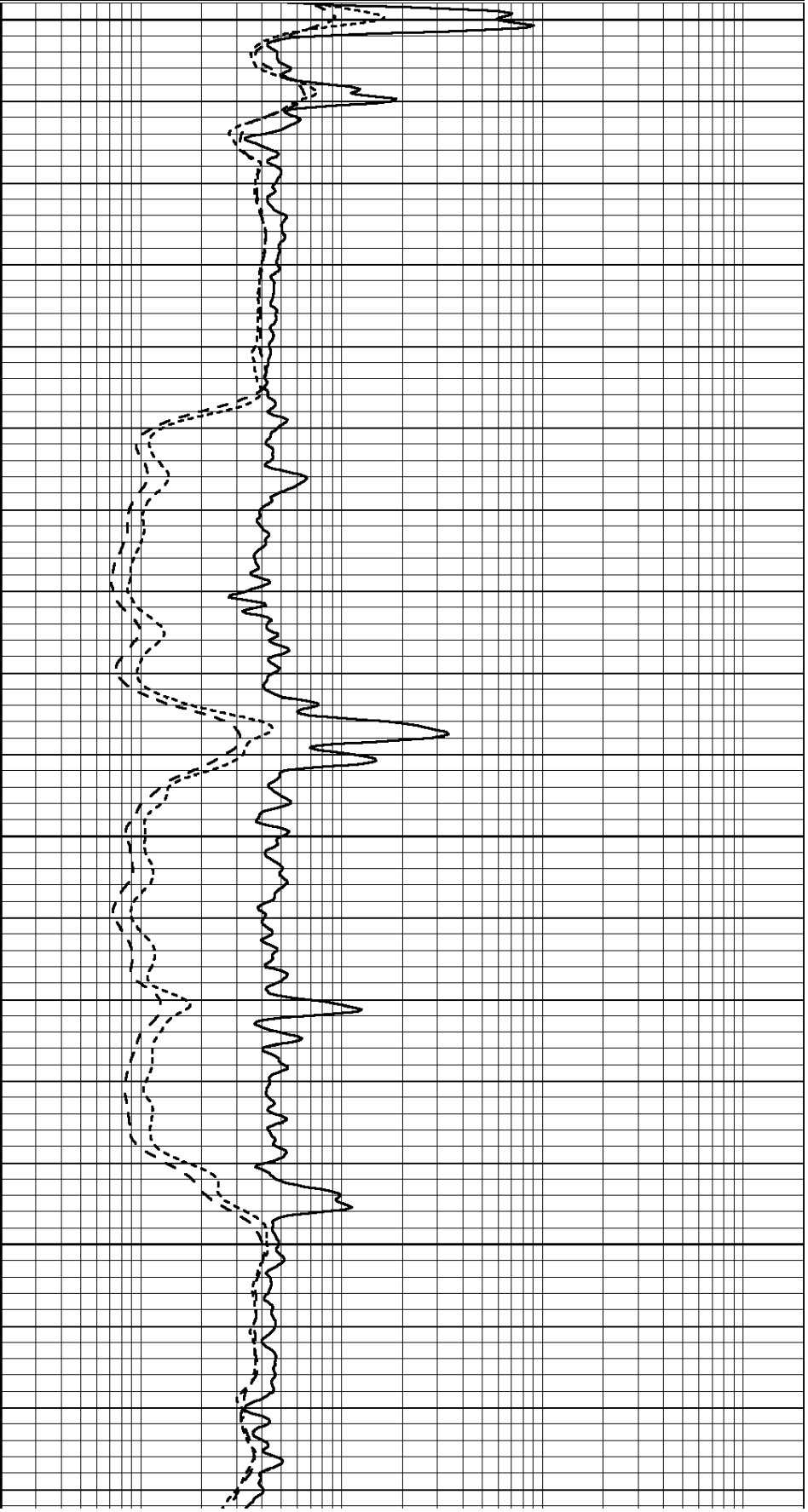


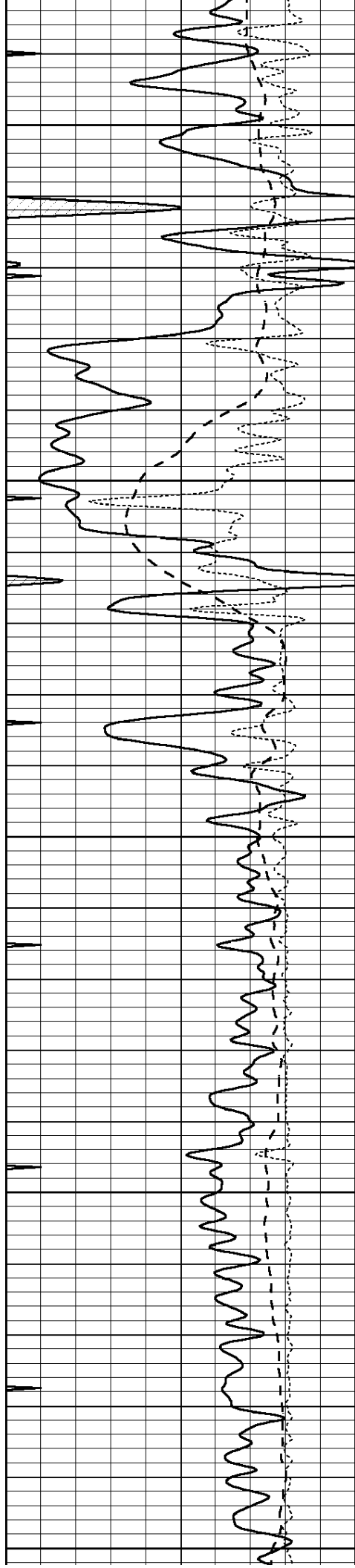
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3700

3750





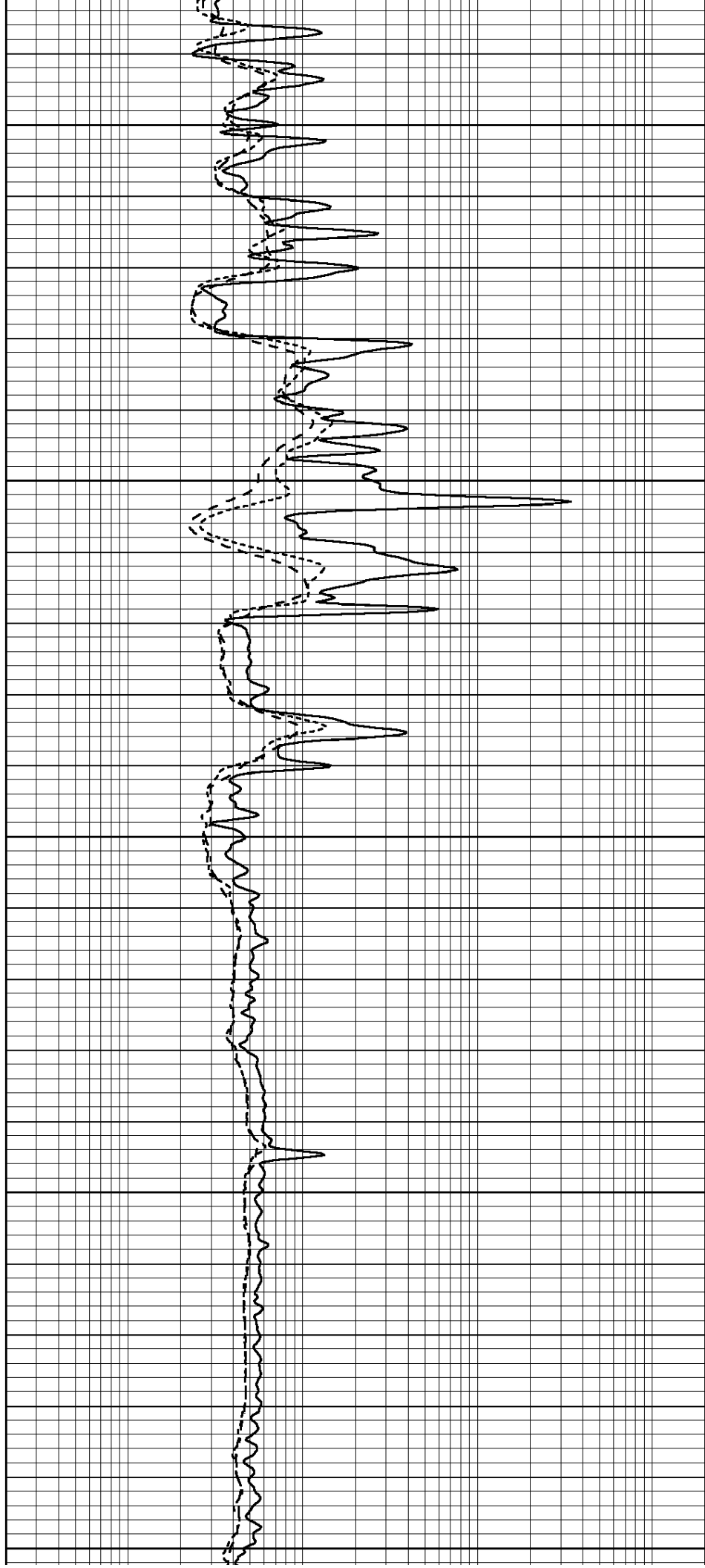
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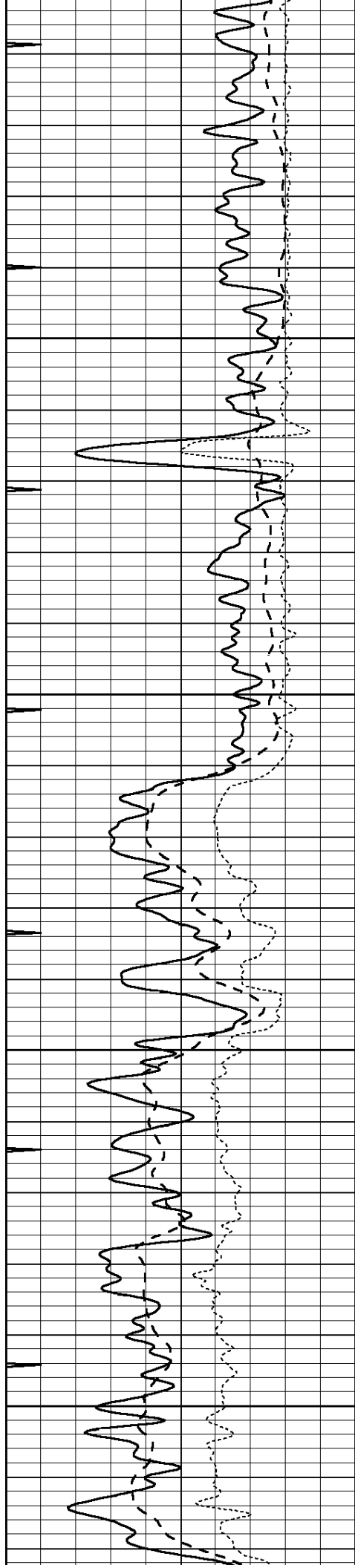
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3900

3950

4000



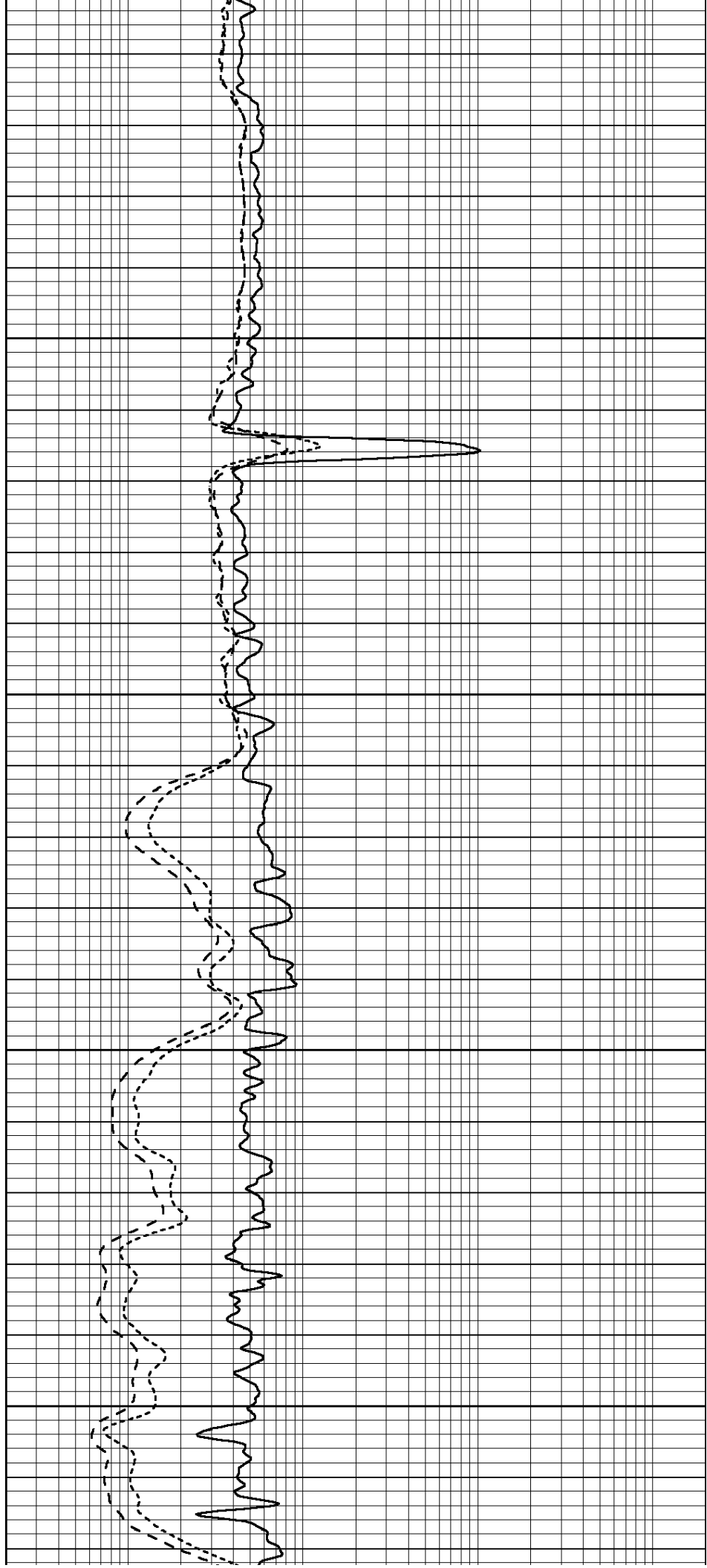


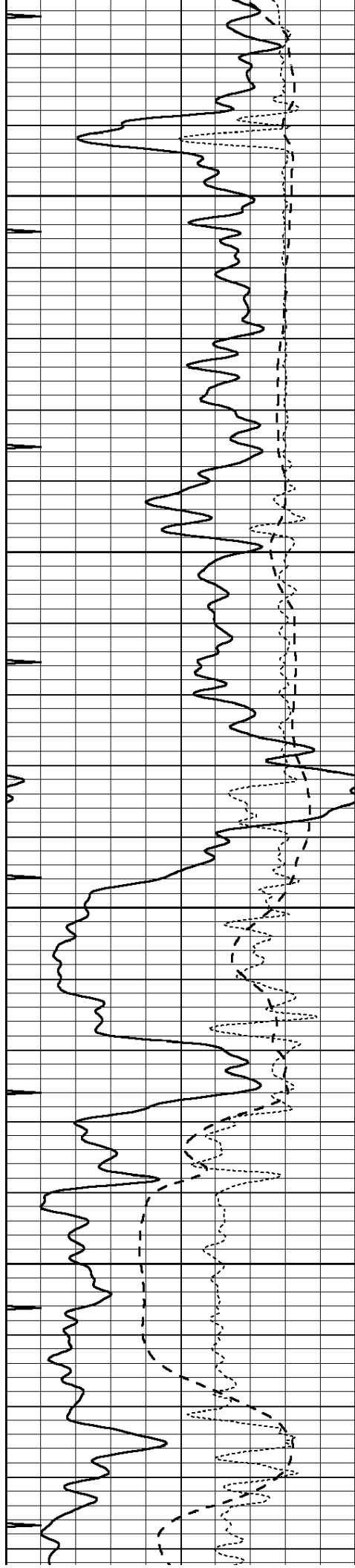
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4100

4150

4200



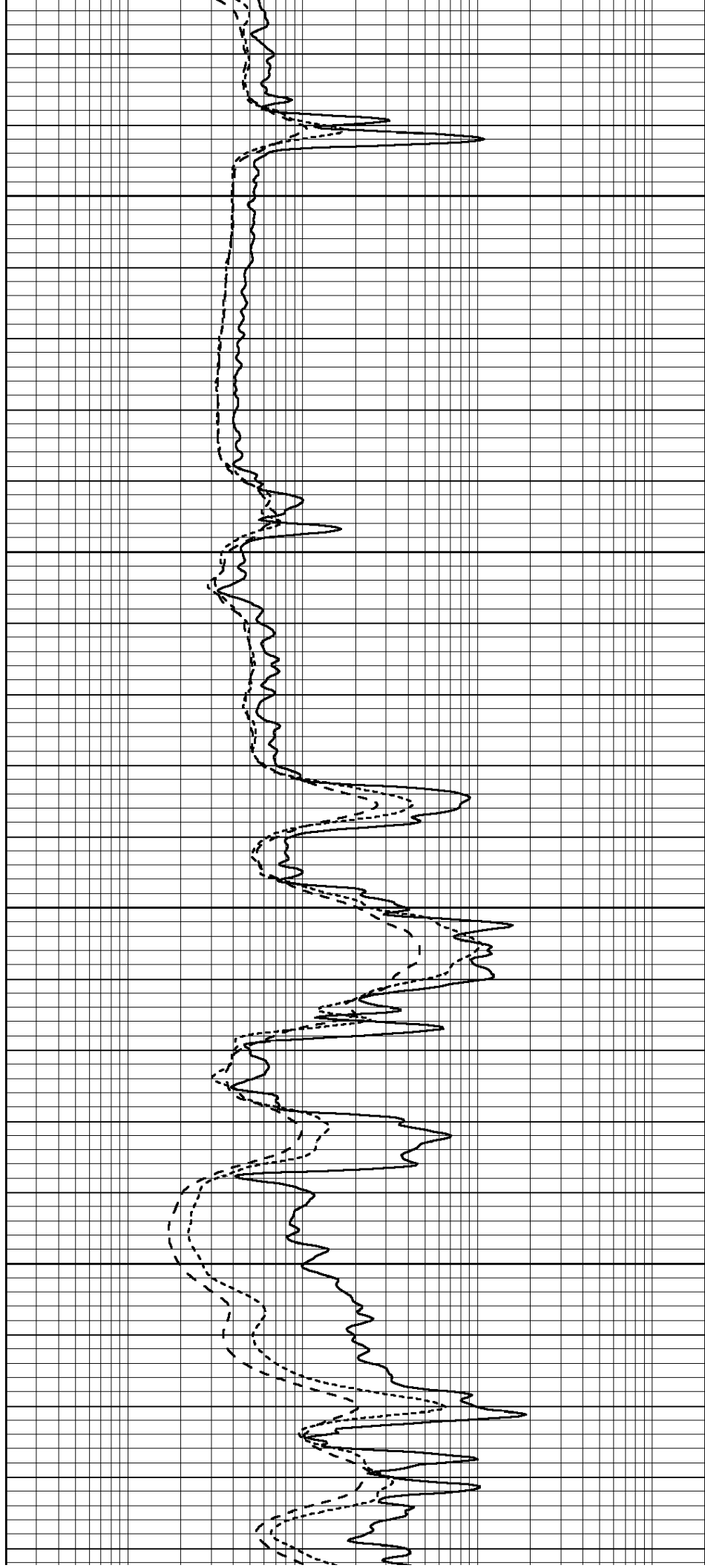


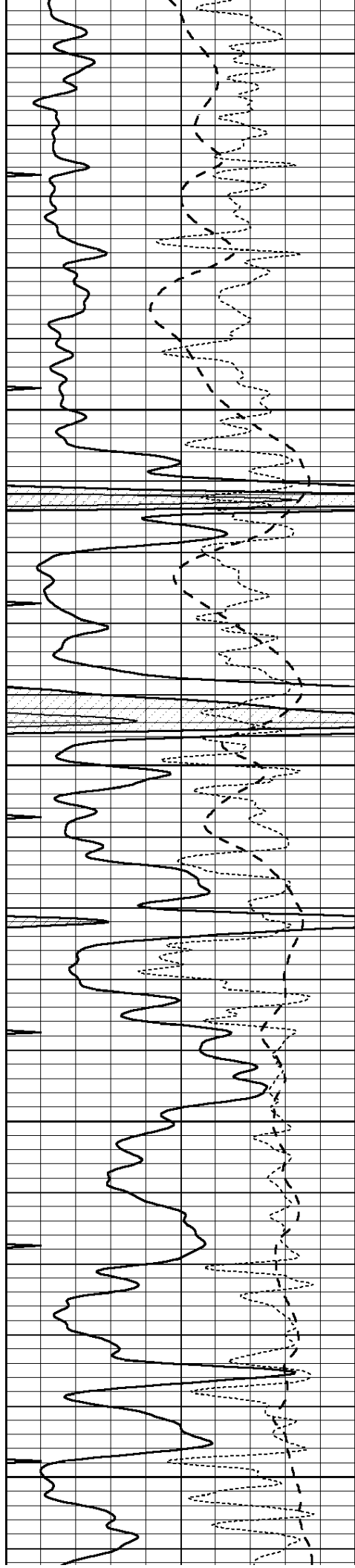
4250

4300

4350

4400





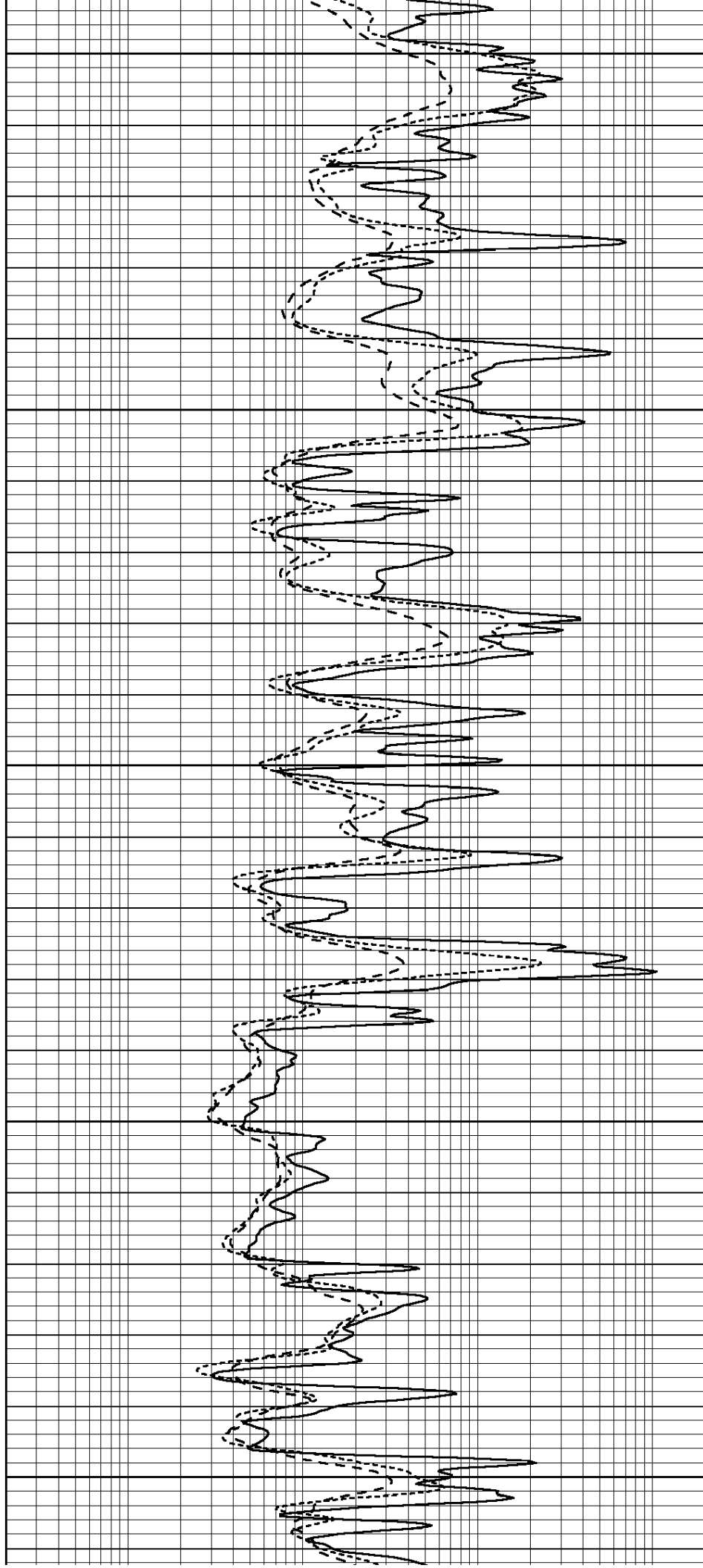
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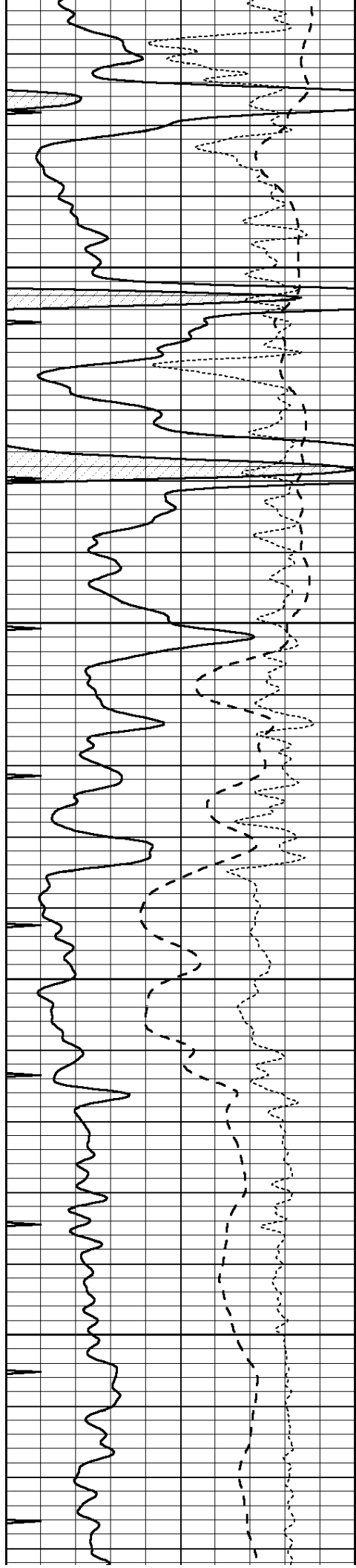
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4550

4600

4650



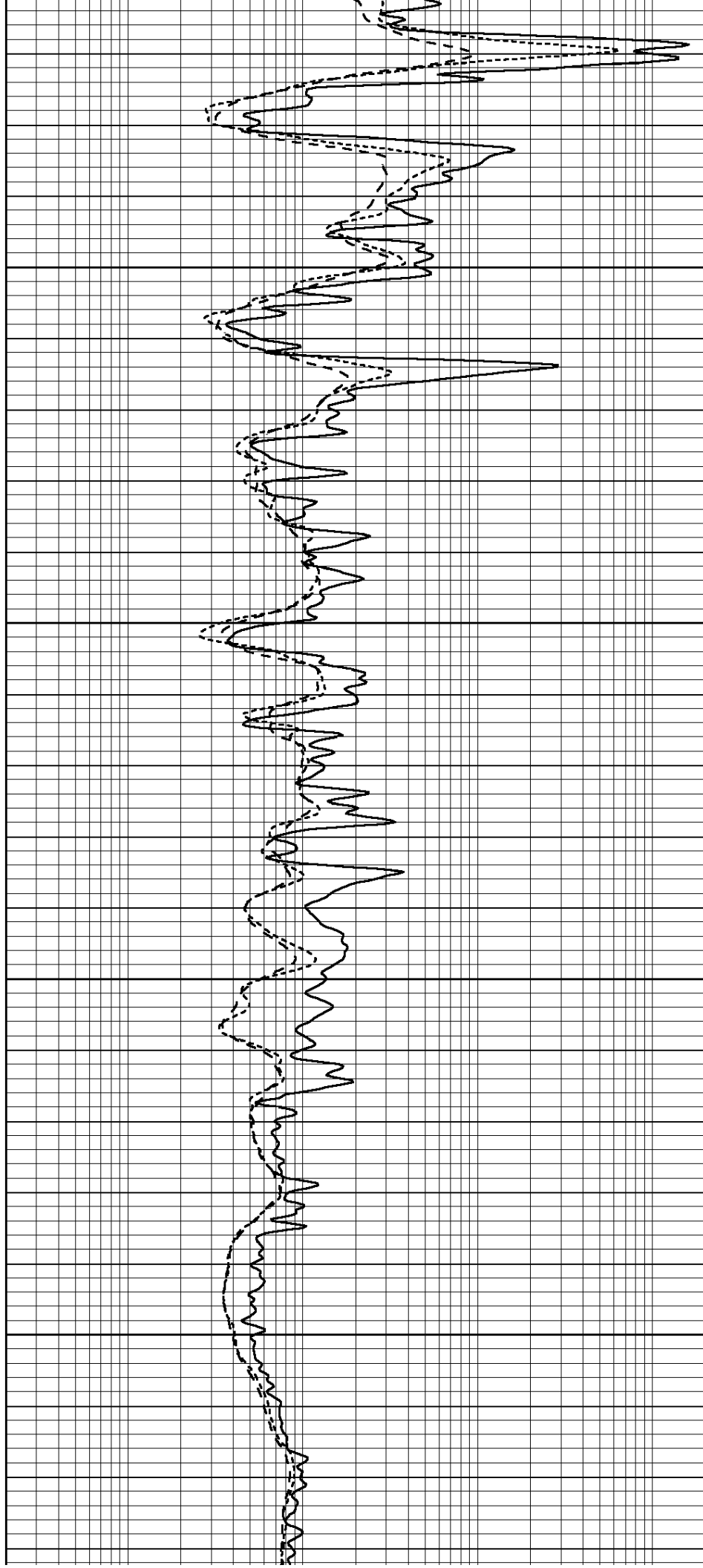


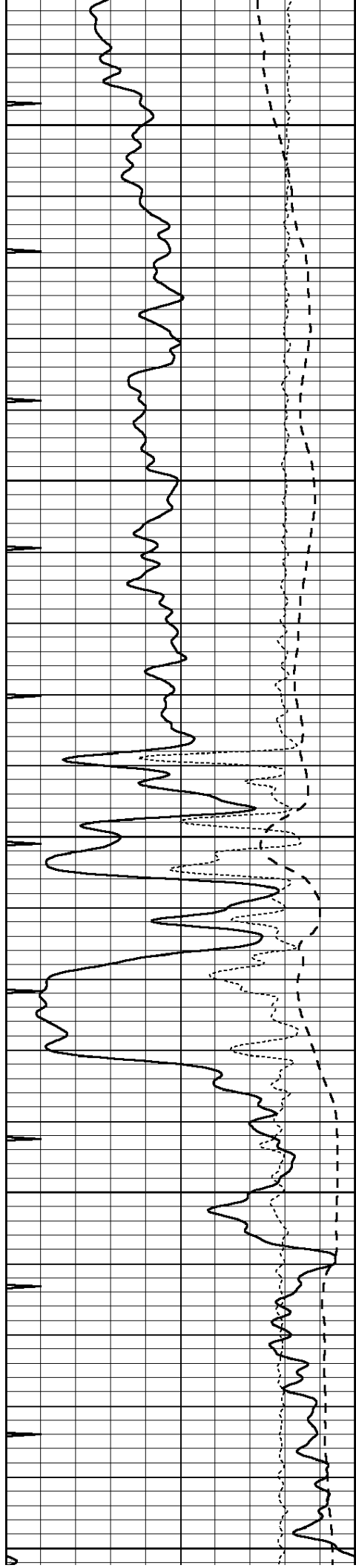
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4800

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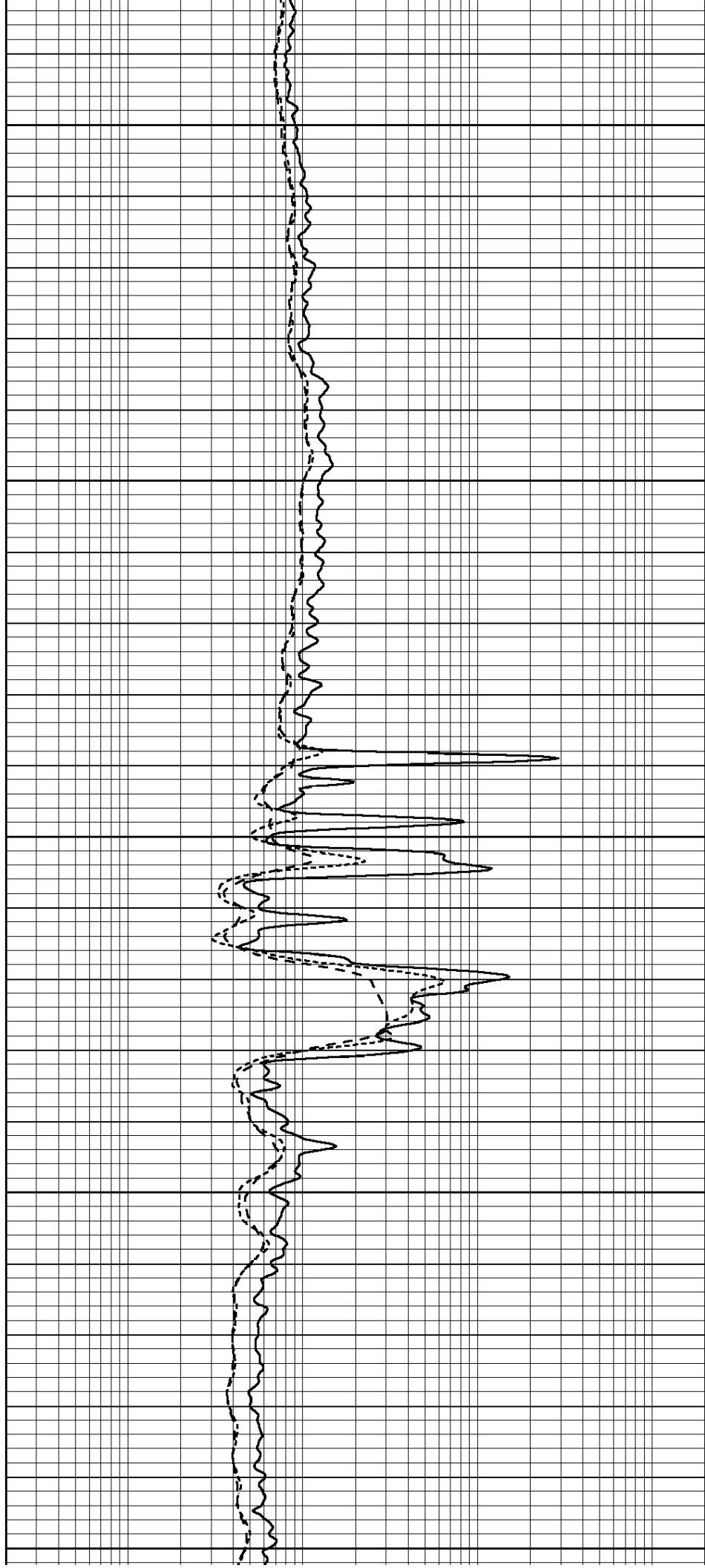
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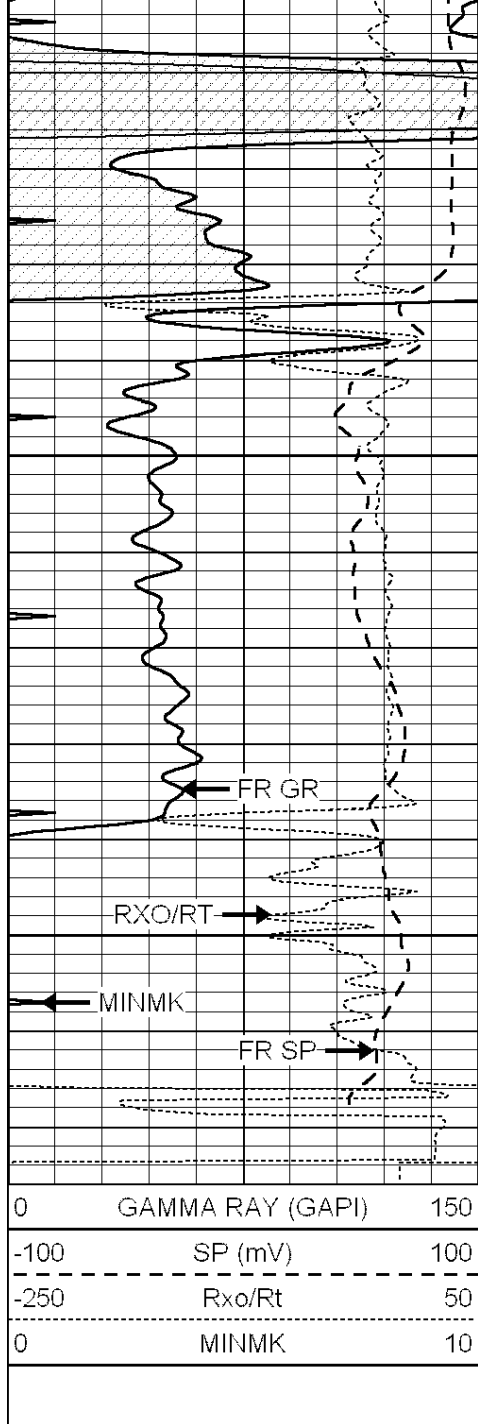
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5000

5050

5100

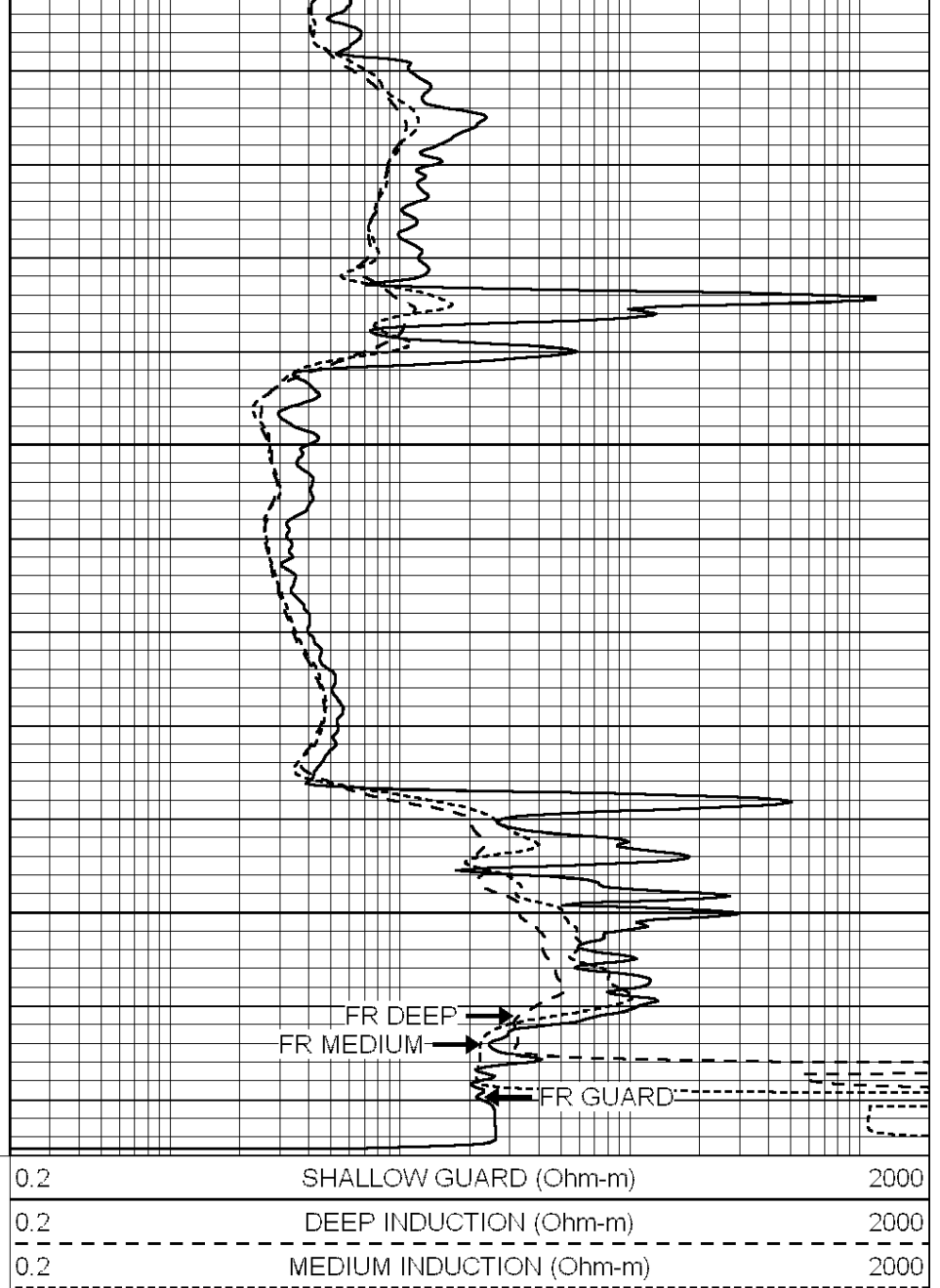




5150

5200

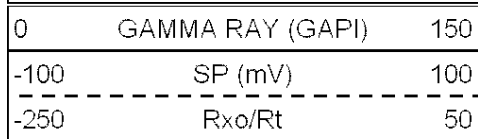
LTD 5222



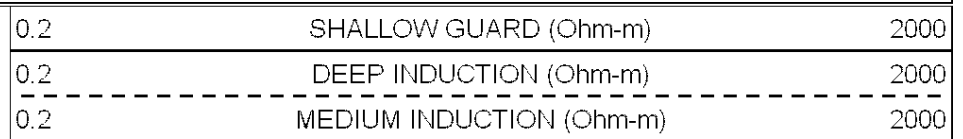
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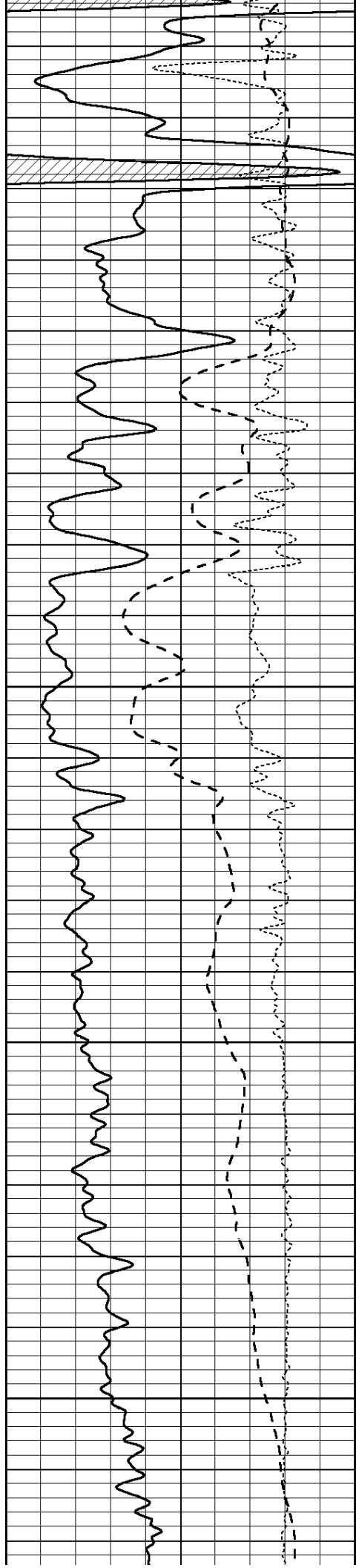
REPEAT SECTION

Database File: 005583pe.db
 Dataset Pathname: pass2.8
 Presentation Format: dil
 Dataset Creation: Sun Aug 15 16:21:53 2010 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240



4700



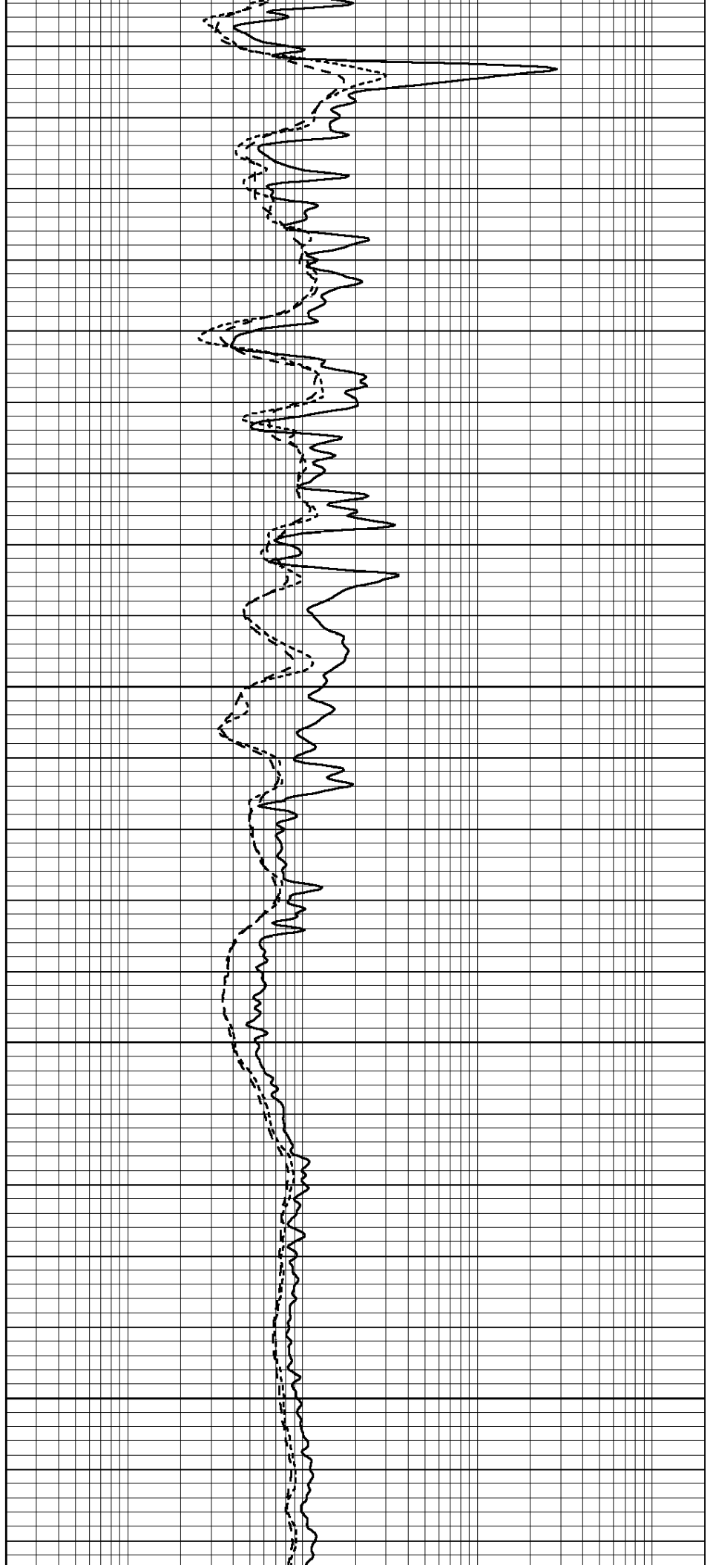


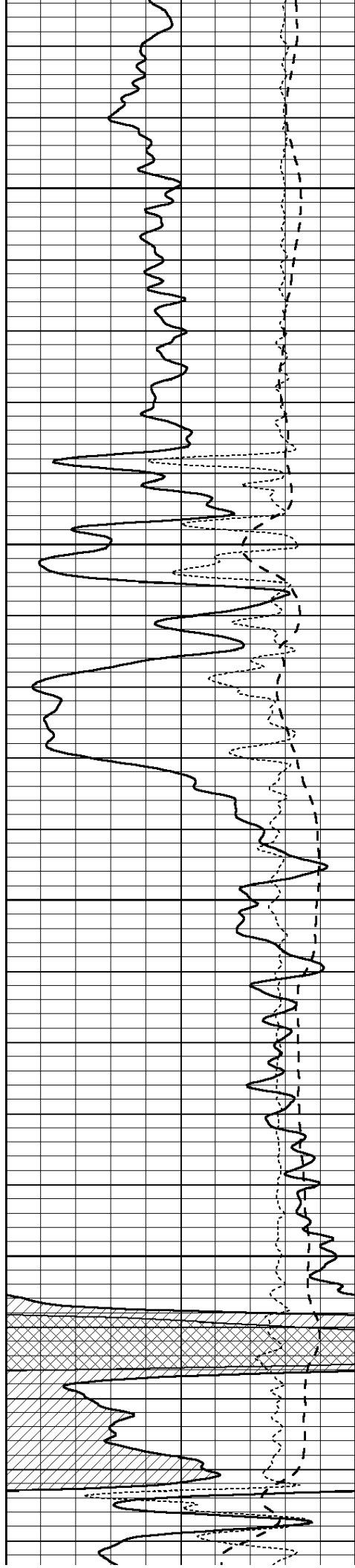
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4850

4900



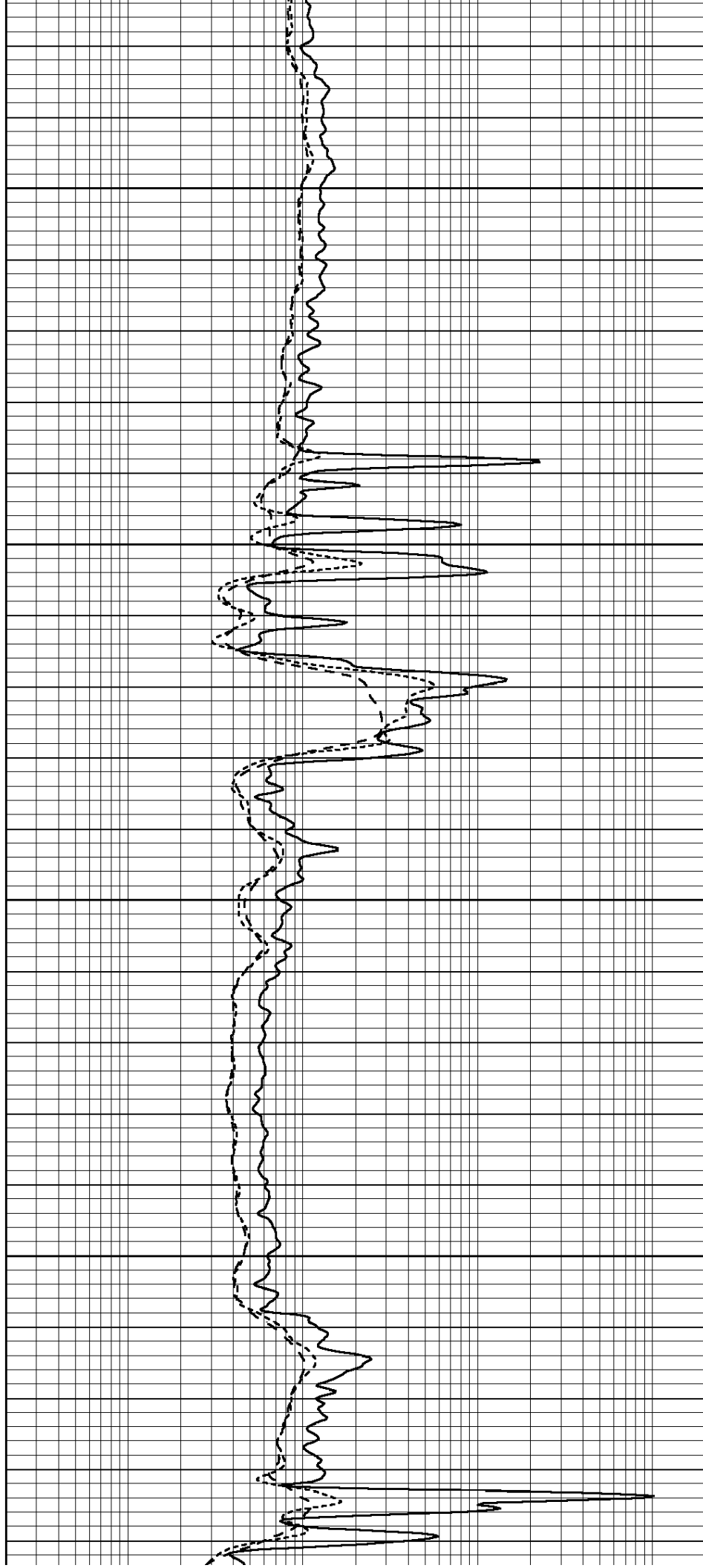


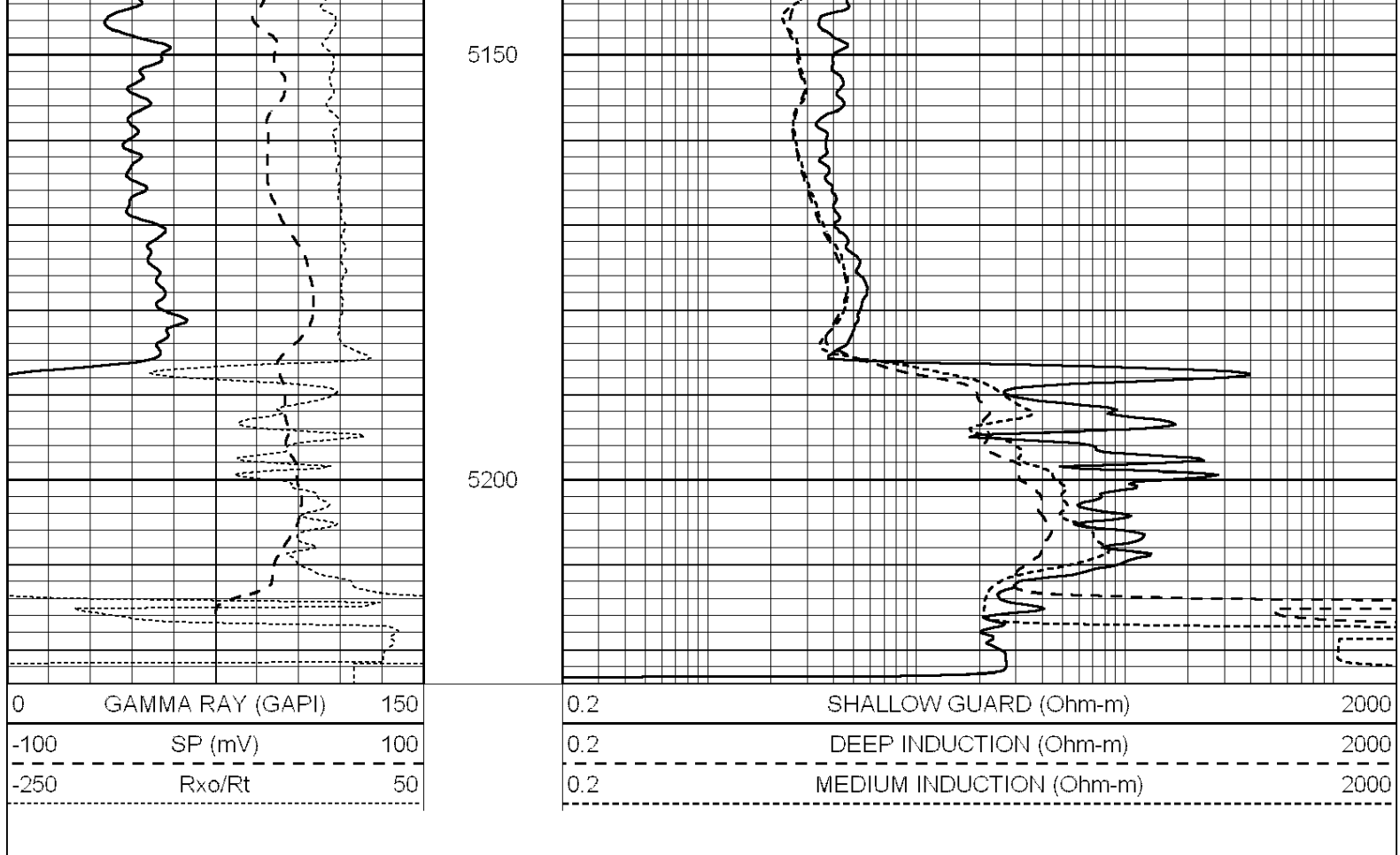
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5000

5050

5100





Calibration Report

Database File: 005583pe.db
 Dataset Pathname: pass3.12
 Dataset Creation: Sun Aug 15 16:30:12 2010 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL6-GEAR
 Performed: Sun Aug 15 13:35:29 2010

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.644	V	0.000	400.000	mmho/m	660.000	-5.000
Medium	0.020	0.738	V	0.000	462.500	mmho/m	740.000	-25.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	1.000	V	0.000	1.000	mmho/m	1.000	0.000
Medium	0.000	1.000	V	0.000	1.000	mmho/m	1.000	0.000

Litho Density Calibration Report
 Serial: 004N Model: PRB
 Performed Tue Sep 08 13:49:55 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1535.8	11161.3	3721.6	12498.8	cps
Window 2	1402.6	9435.7	3219.7	10417.7	cps
Window 3	1077.6	4422.0	1779.2	4753.4	cps
Window 4	337.3	342.8	337.4	343.7	cps
Long Space	0.0	8033.1	1817.0	9015.1	cps
Short Space	1.0	1071.0	1120.1	1010.0	cps

Short Space	1.2	16/1.8	1138.1	1813.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.5	Rib Slope	: 1.017	Density/Spine Ratio	: 0.573
Spine Angle	: 75.5	Spine Slope	: 3.865	Spine Intercept	: -19.7
Caliper					
Low Ref	Readings 1.2	Reference 6.4			
High Ref	3.2	14.0			
	Gain: 3.8		Offset: 1.7		
Compensated Neutron Calibration Report					
		Serial Number:	NEU_4I		
		Tool Model:	G		
CALIBRATION					
	Detector	Readings	Target		Normalization
	Short Space	996.00 cps	1000.00 cps		1.0000
	Long Space	977.00 cps	1000.00 cps		1.0000
Gamma Ray Calibration Report					
	Serial Number:	GR4			
	Tool Model:	OPEN			
	Performed:	Sun Aug 15 14:45:58 2010			
	Calibrator Value:	200.0	GAPI		
	Background Reading:	0.0	cps		
	Calibrator Reading:	189.0	cps		
	Sensitivity:	1.5000	GAPI/cps		