



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company	RITCHIE EXPLORATION, INC.	Company	RITCHIE EXPLORATION, INC.
Well	#1 BECKER 13BC	Well	#1 BECKER 13BC
Field	WILDCAT	Field	WILDCAT
County	FORD	County	FORD
State	KANSAS	State	KANSAS
Location:	API # : 15-057-20846 575' FSL & 1110' FWL 85S & 120E OF E/2 - SW - SW SEC 13 TWP 17S RGE 26W	Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL Elevation 2633 KELLY BUSHING 12' A.G.L. KELLY BUSHING
			Other Services CDL/CNL SONIC
			Elevation K.B. 2645 D.F. 2643 G.L. 2633
Date	10/17/12		
Run Number	ONE		
Depth Driller	5259		
Depth Logger	5262		
Bottom Logged Interval	5260		
Top Log Interval	00		
Casing Driller	8 5/8" @ 374		
Casing Logger	372		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4400 PPM	
Density / Viscosity	9.1/55		
pH / Fluid Loss	10.5/10.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	0.60 @ 94F		
Rmf @ Meas. Temp	0.45 @ 94F		
Rmc @ Meas. Temp	0.72 @ 94F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	0.44 @ 127F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	127F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	IAN MABB	JEFF GRONEMEG	
Witnessed By	TED JOCHEMS		

<<< Fold Here >>>

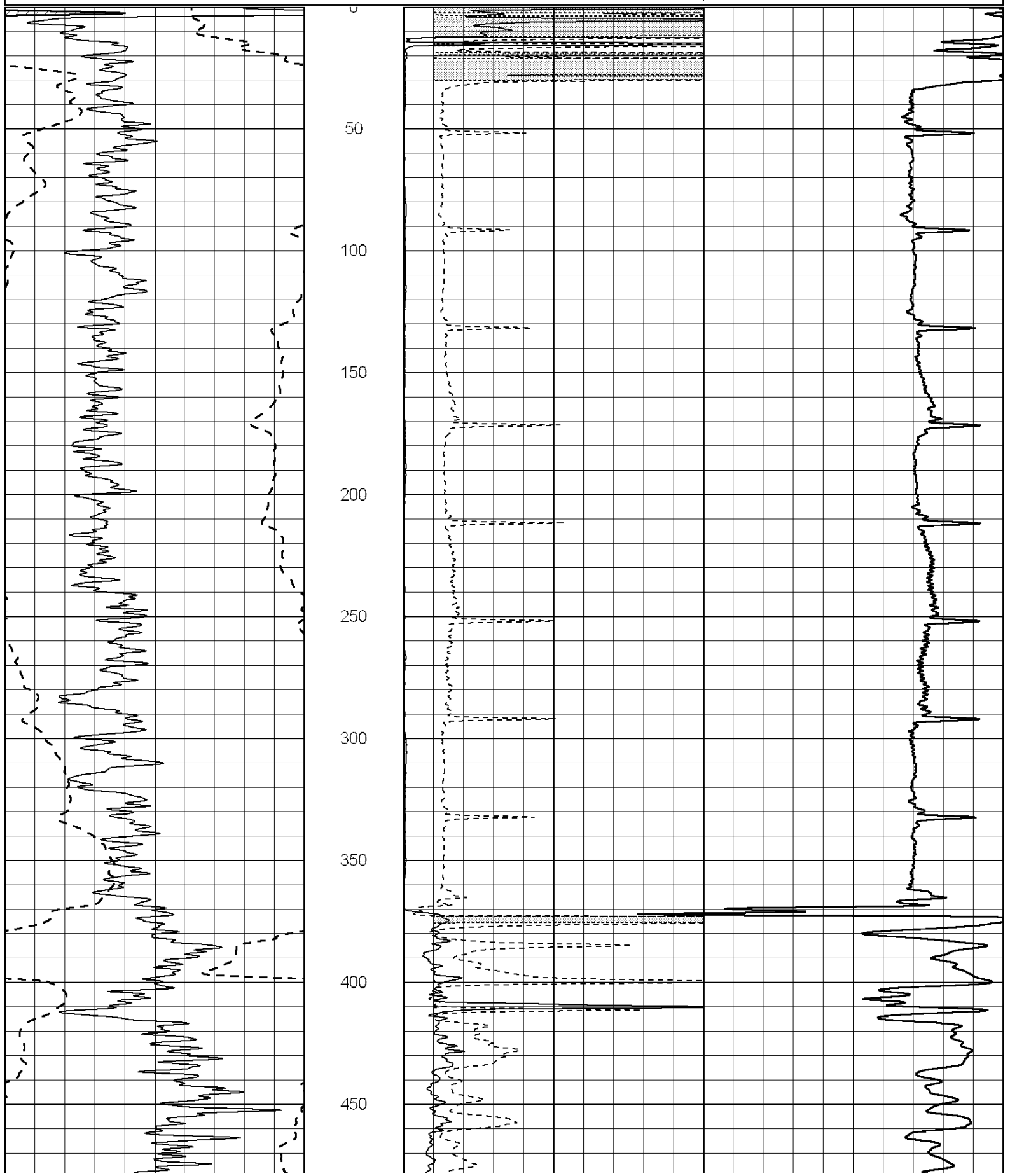
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

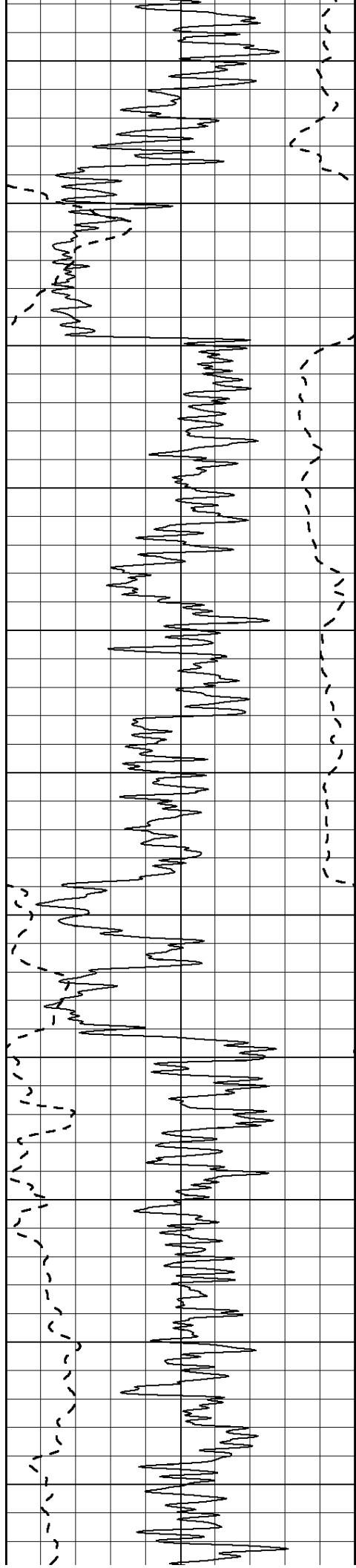
Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
SOUTH SIDE OF DODGE CITY, KS. JCT. 283 & 56, 6 MILES WEST ON 56 TO RD 105,
1 MILES SOUTH EAST INTO

Database File: 009750ddn.db
Dataset Pathname: pass3.2
Presentation Format: _dil2
Dataset Creation: Wed Oct 17 07:09:28 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

Charted by: _____			Depth in Feet scaled 1:600		
0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50
-100	SP (mV)	100	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

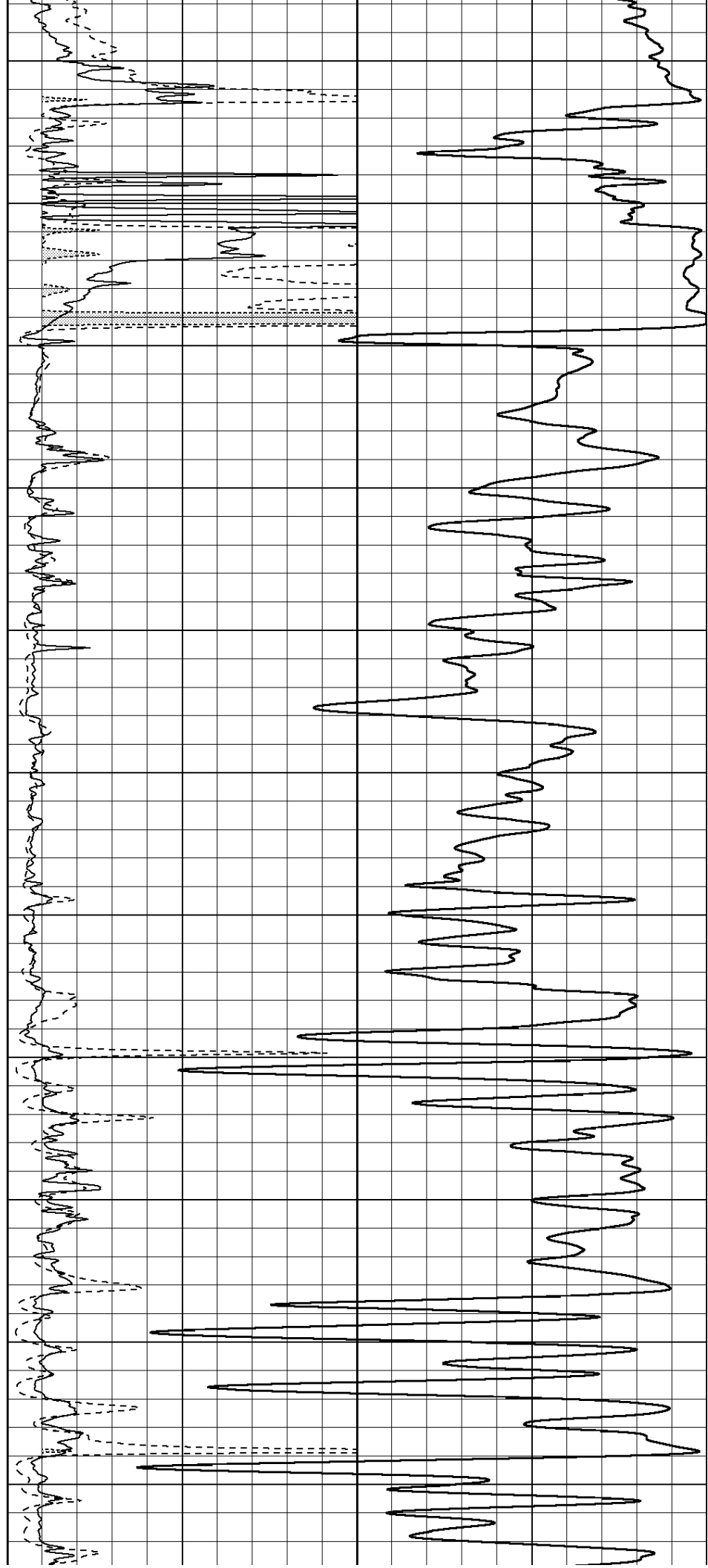
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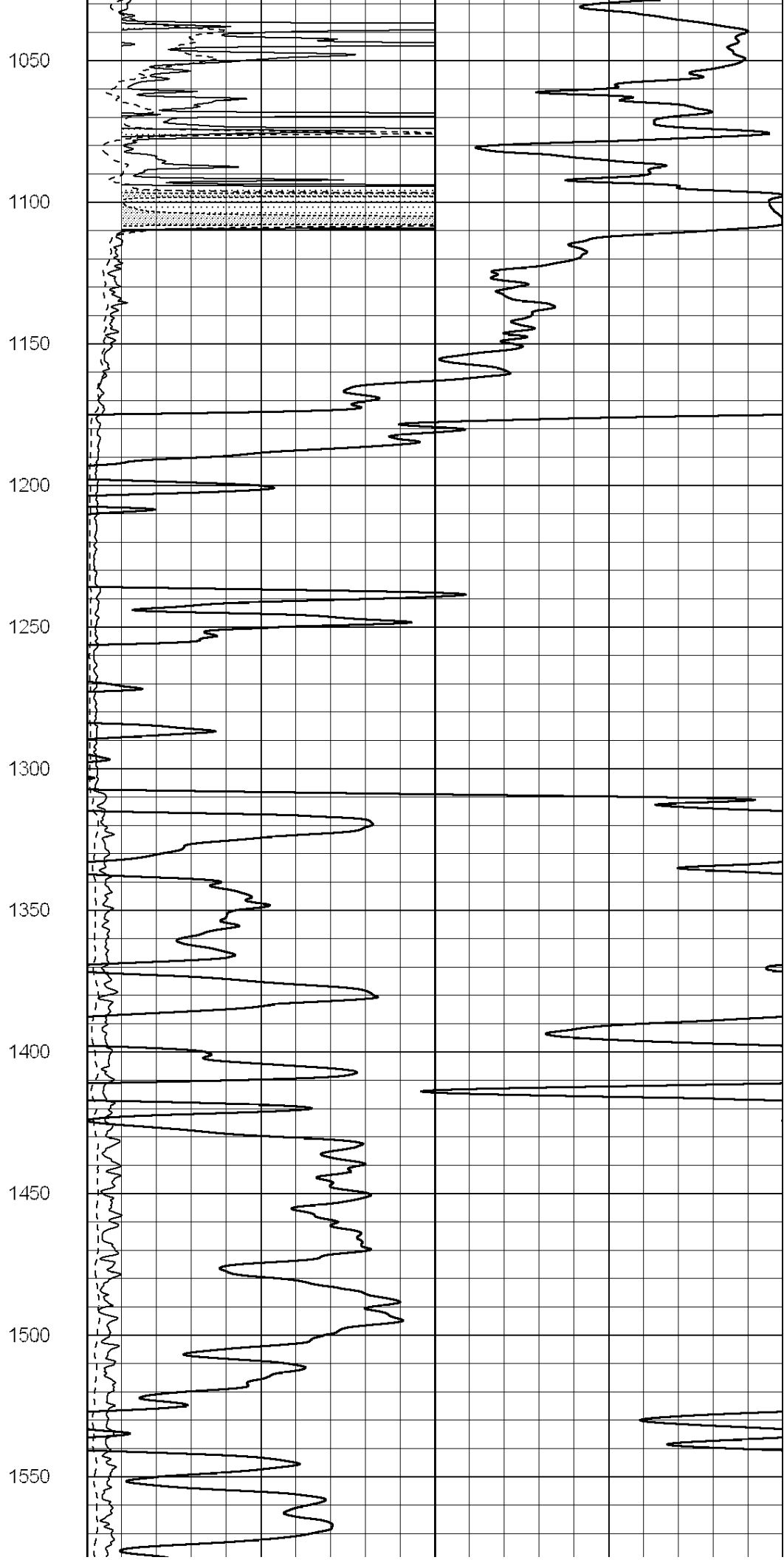
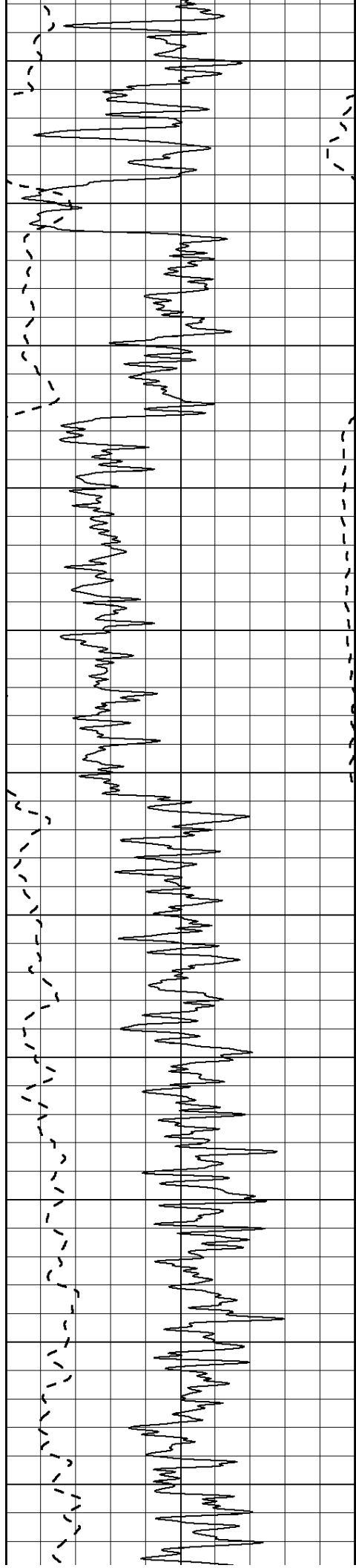
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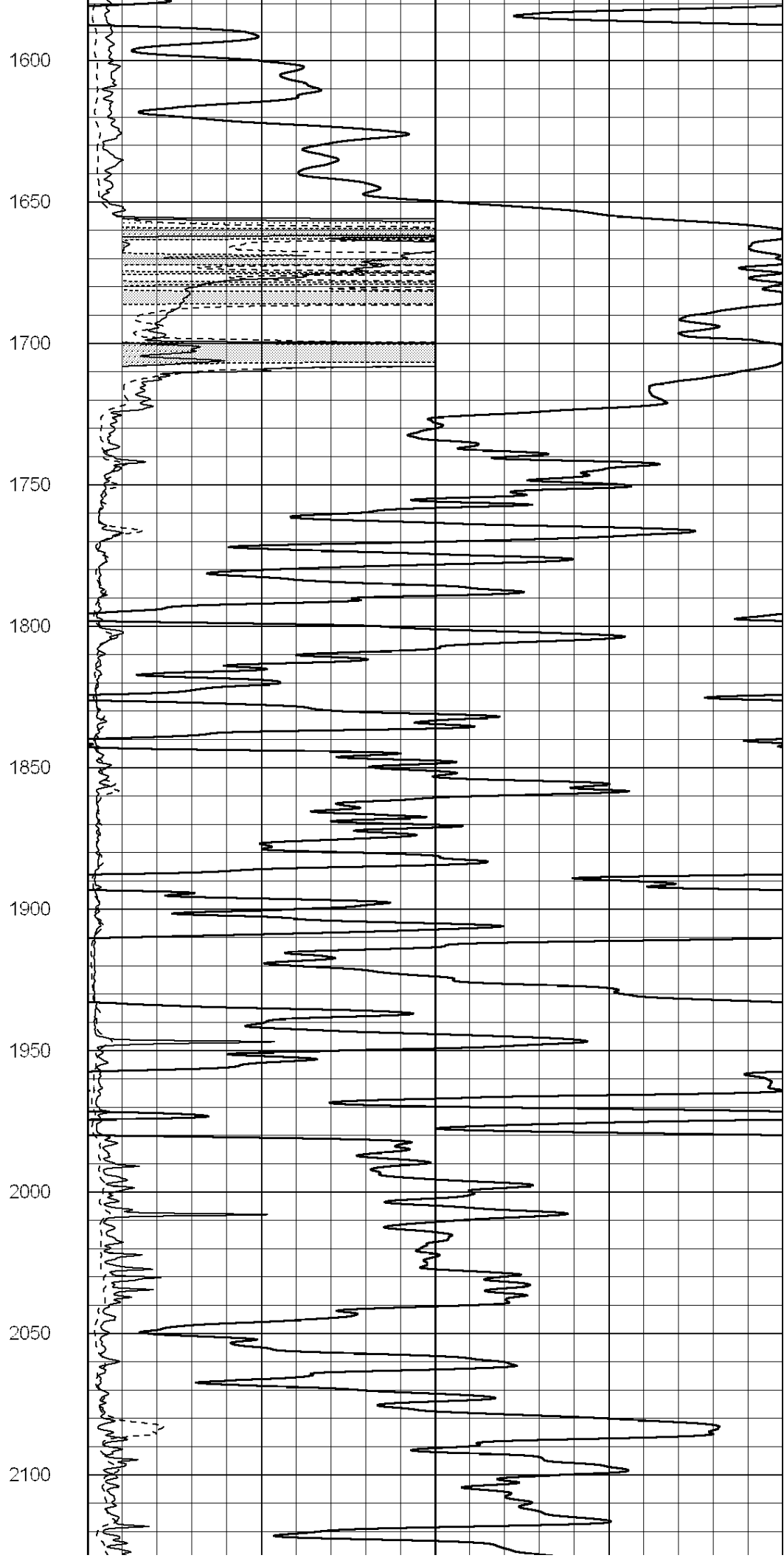
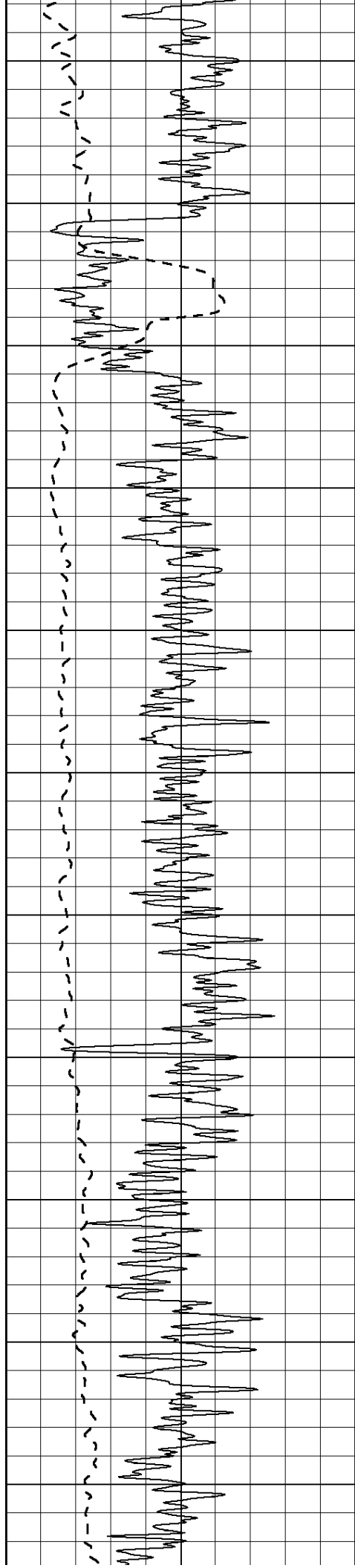
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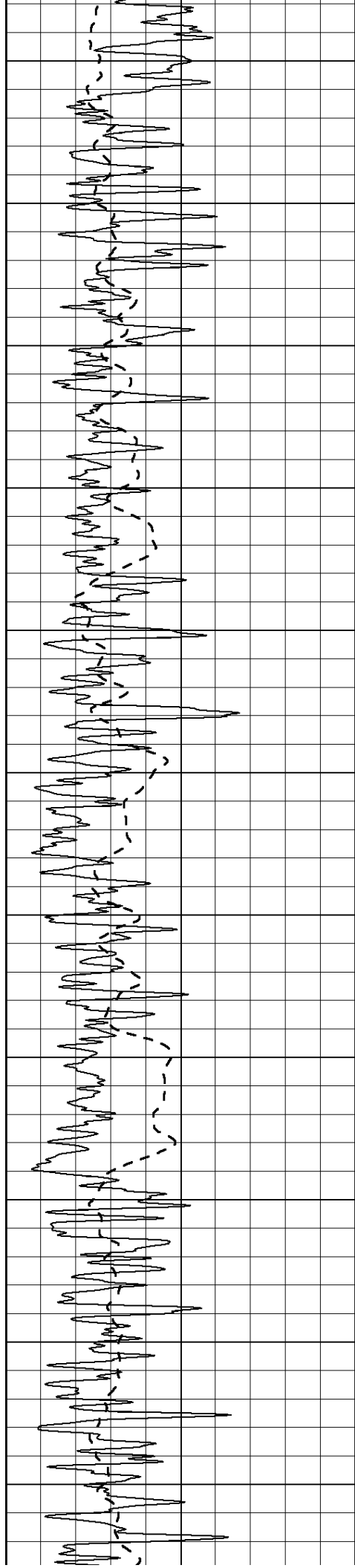
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1000









2150

2200

2250

2300

2350

2400

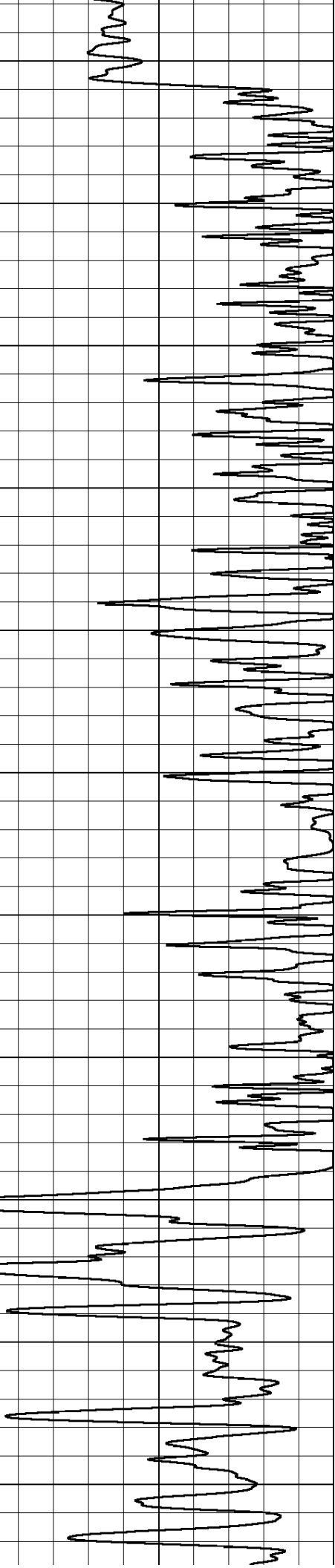
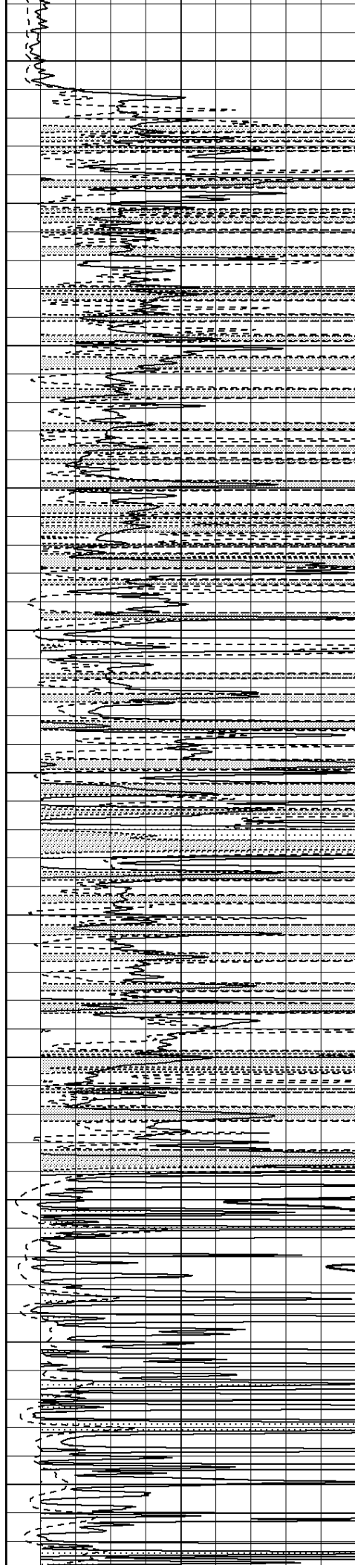
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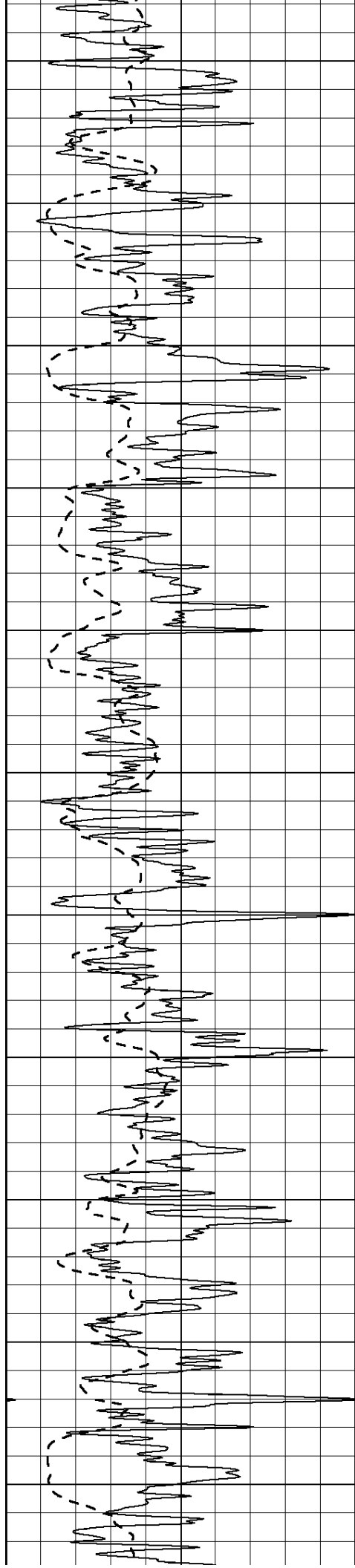
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2550

2600

2650





2700

2750

2800

2850

2900

2950

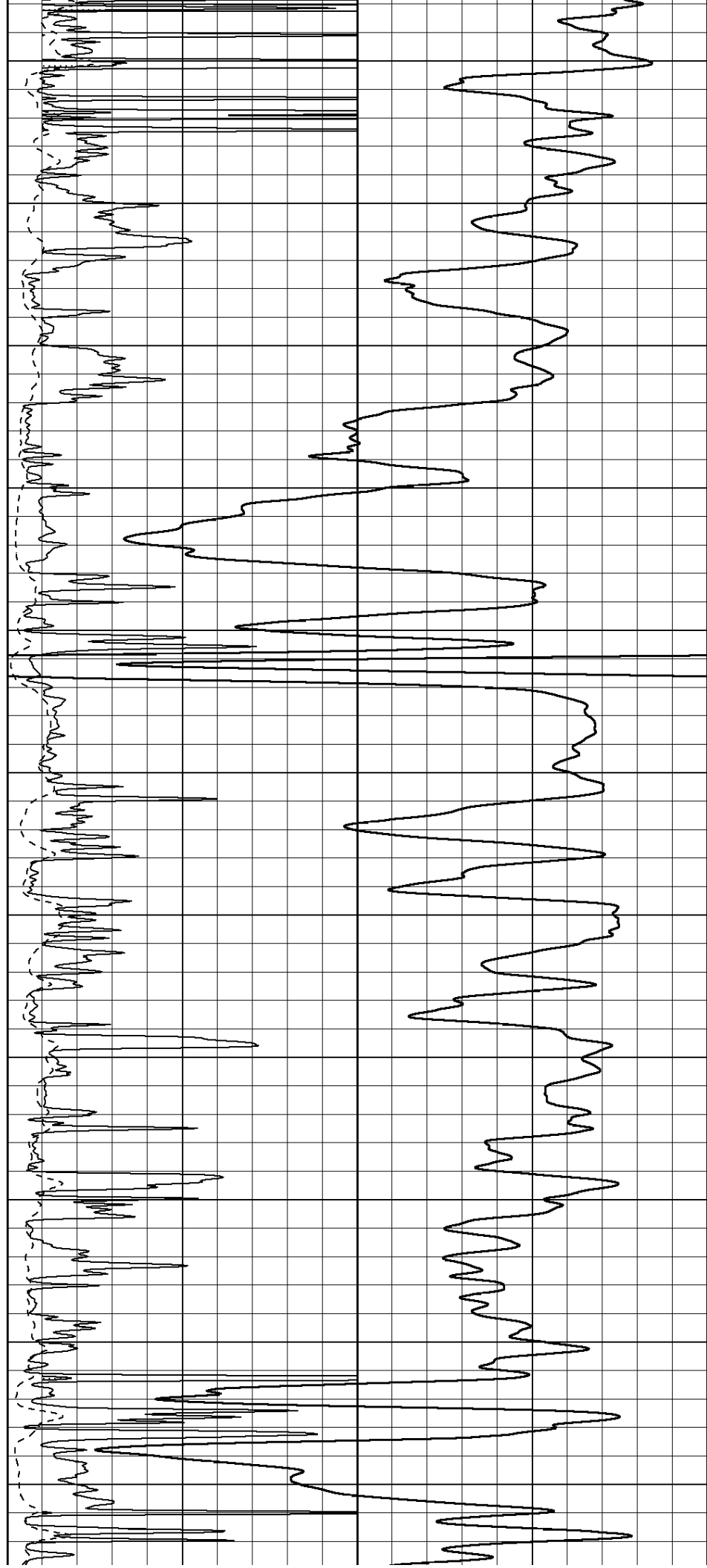
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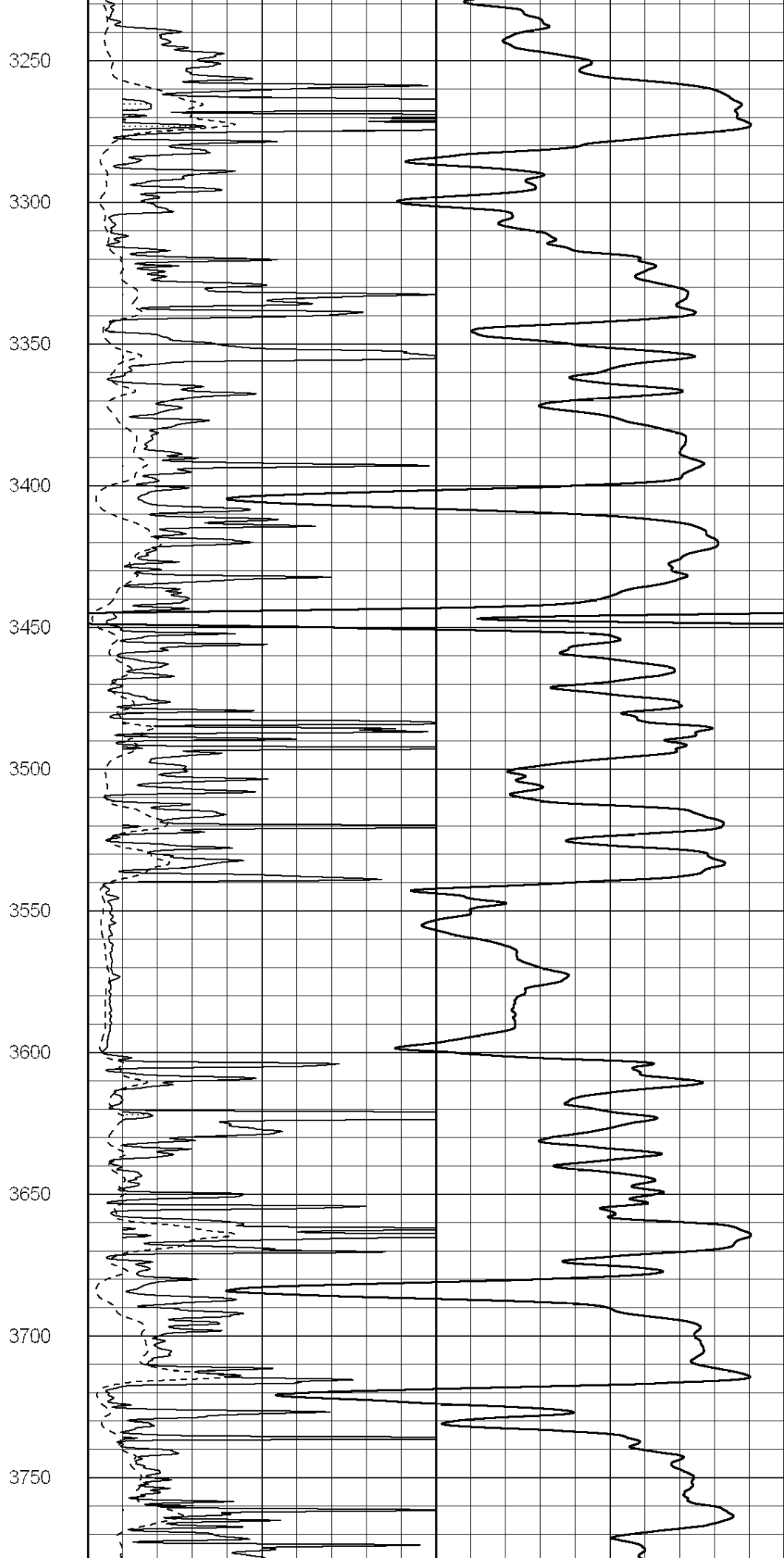
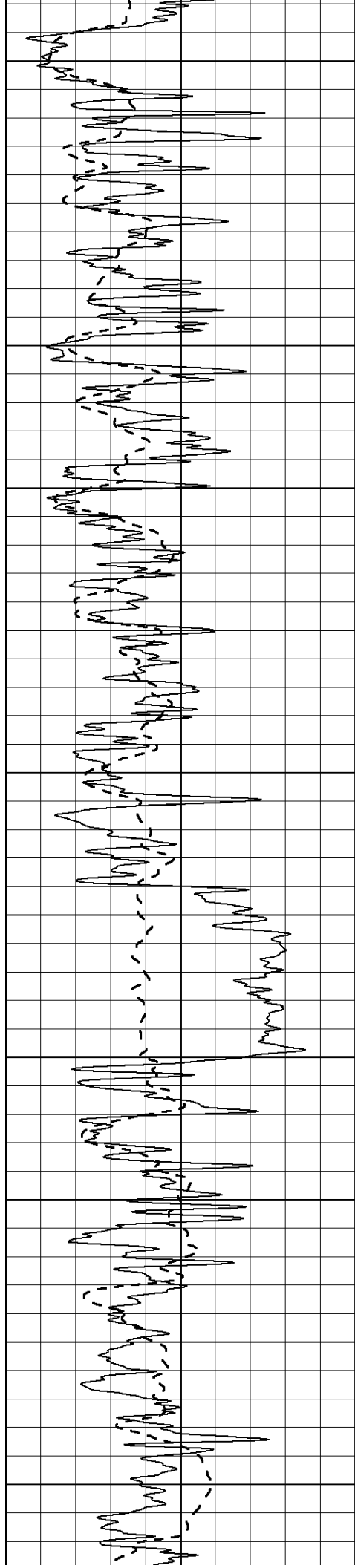
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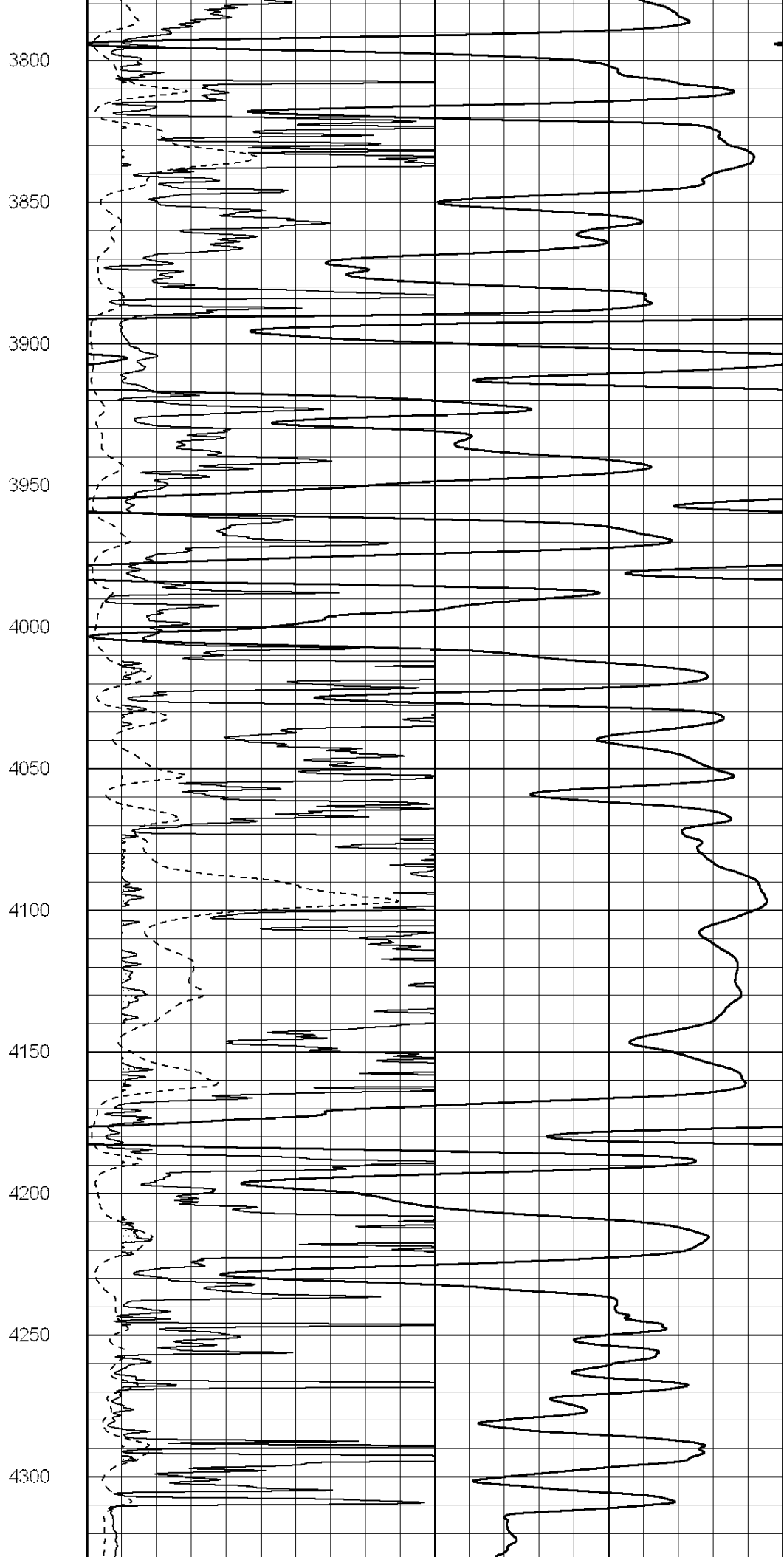
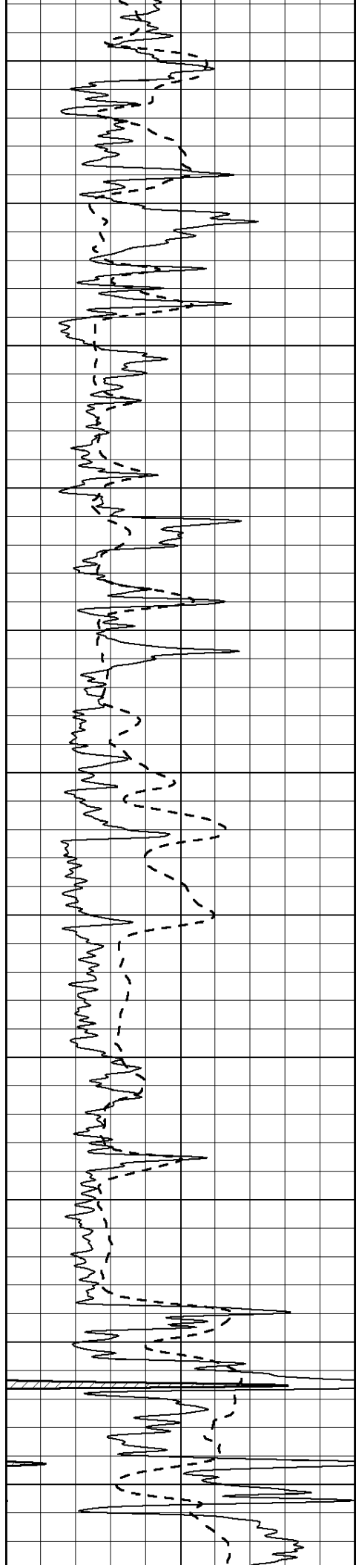
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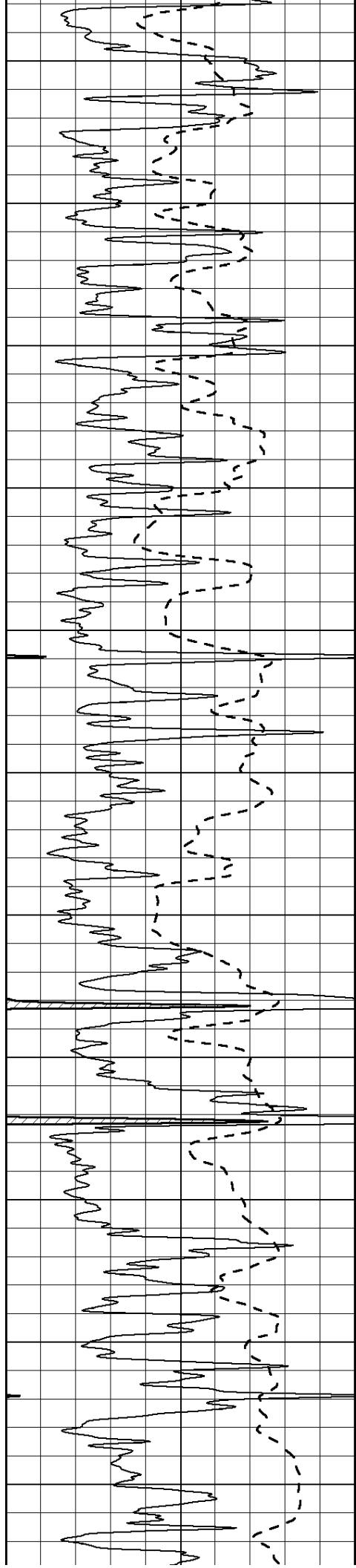
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3200









4350

4400

4450

4500

4550

4600

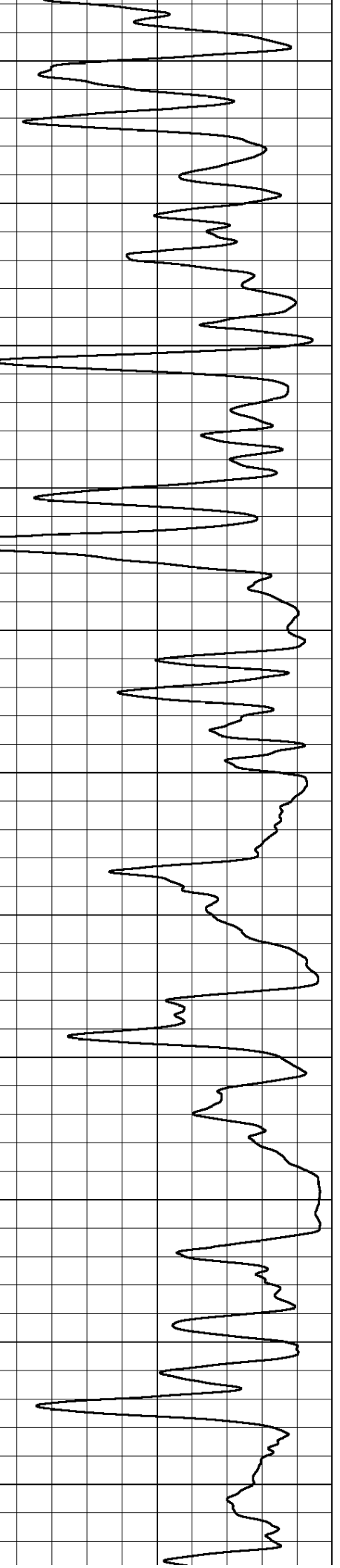
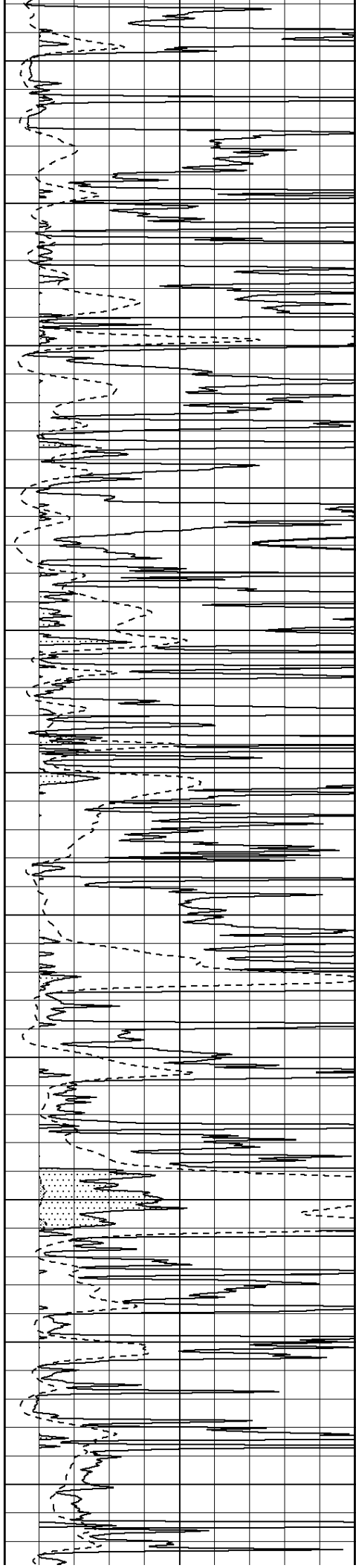
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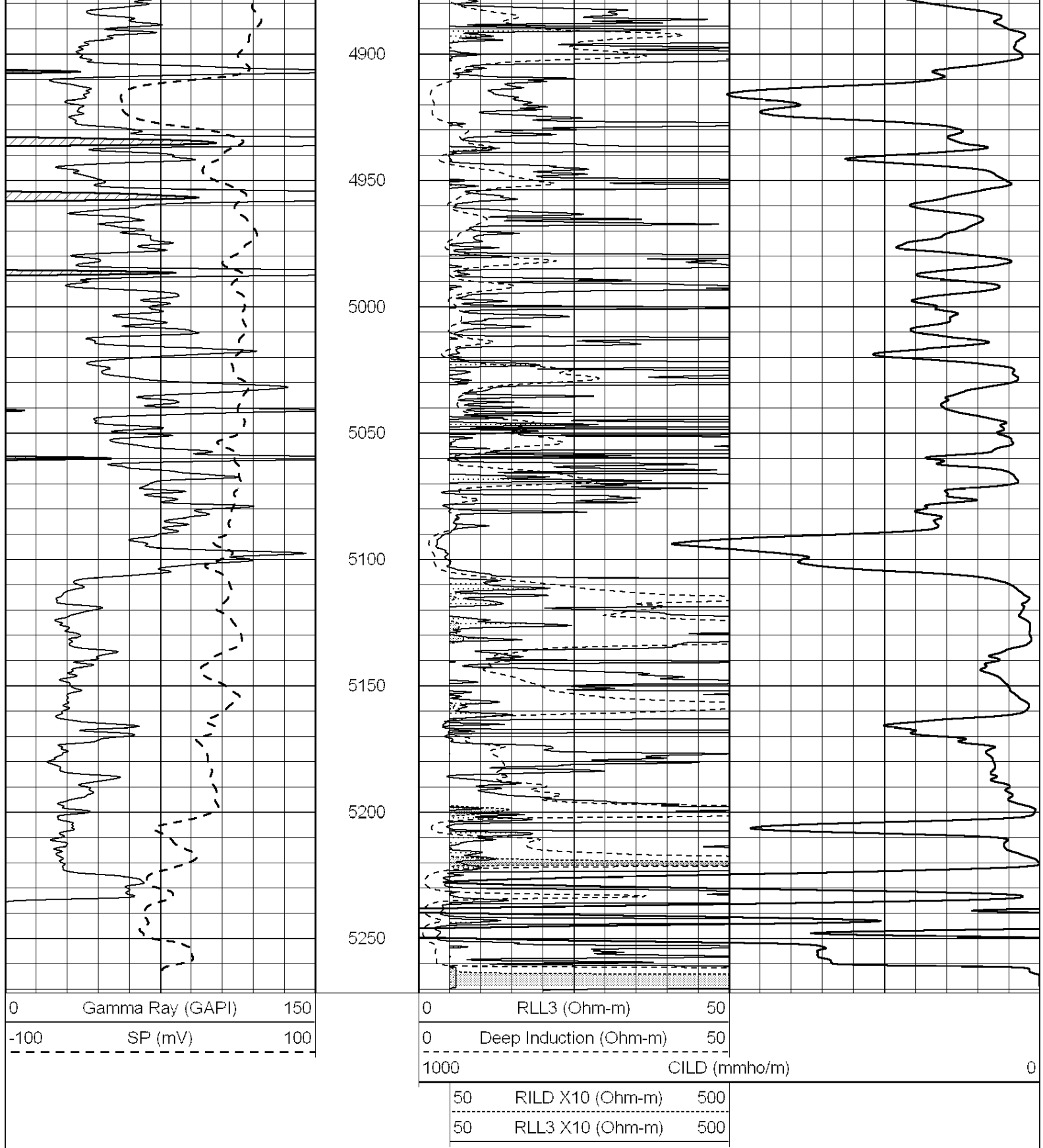
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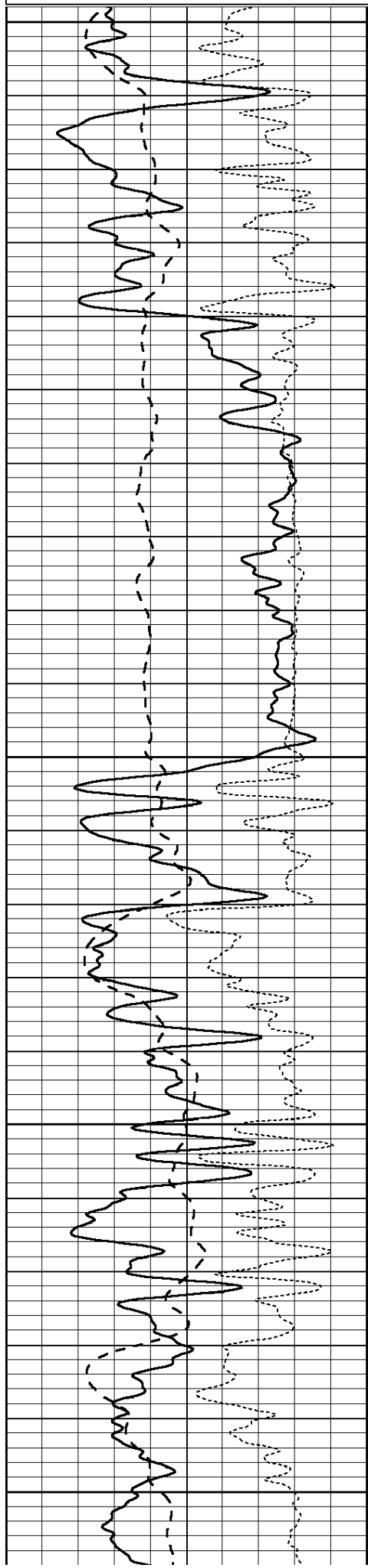
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 Dataset Pathname: pass3.1
 Presentation Format: _dil
 Dataset Creation: Wed Oct 17 06:37:34 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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



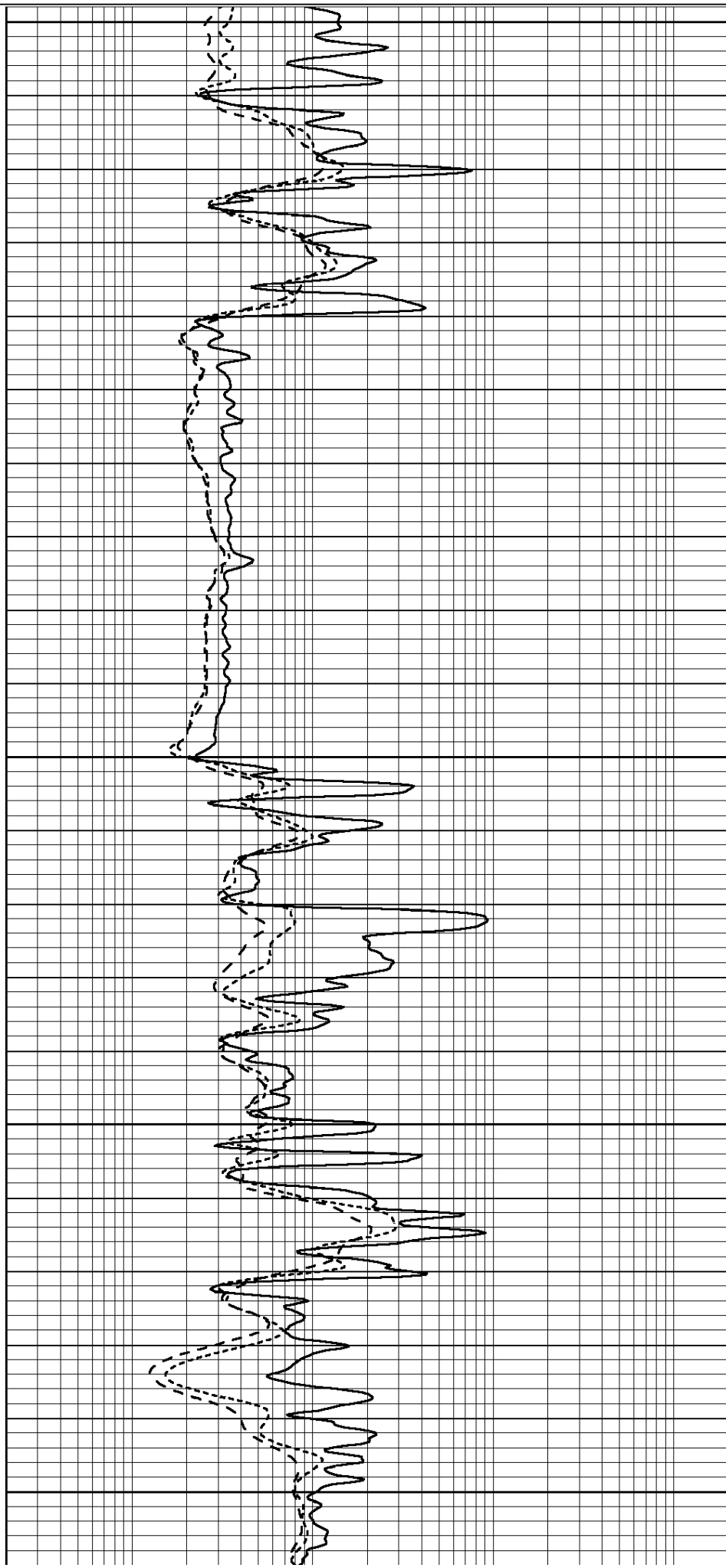
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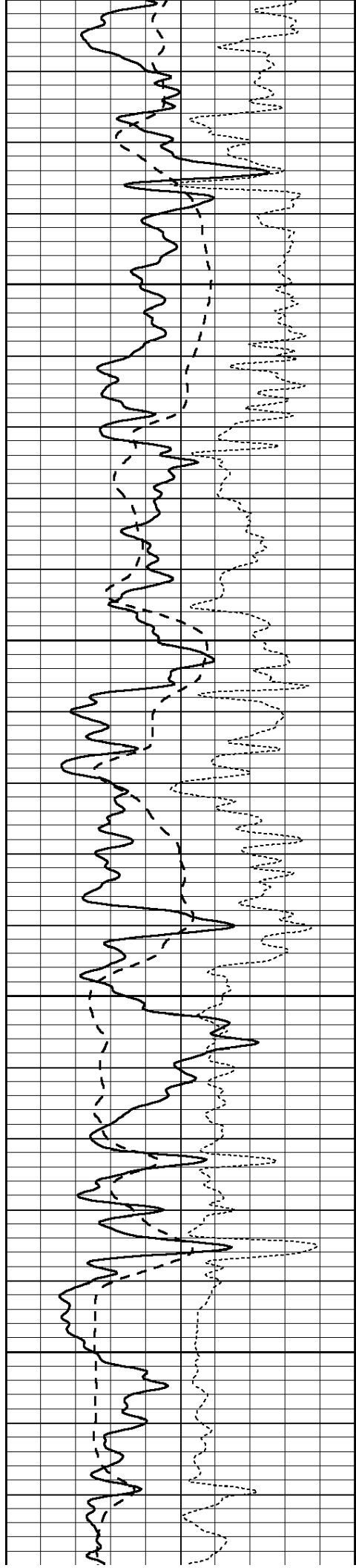
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3600

3650

3700



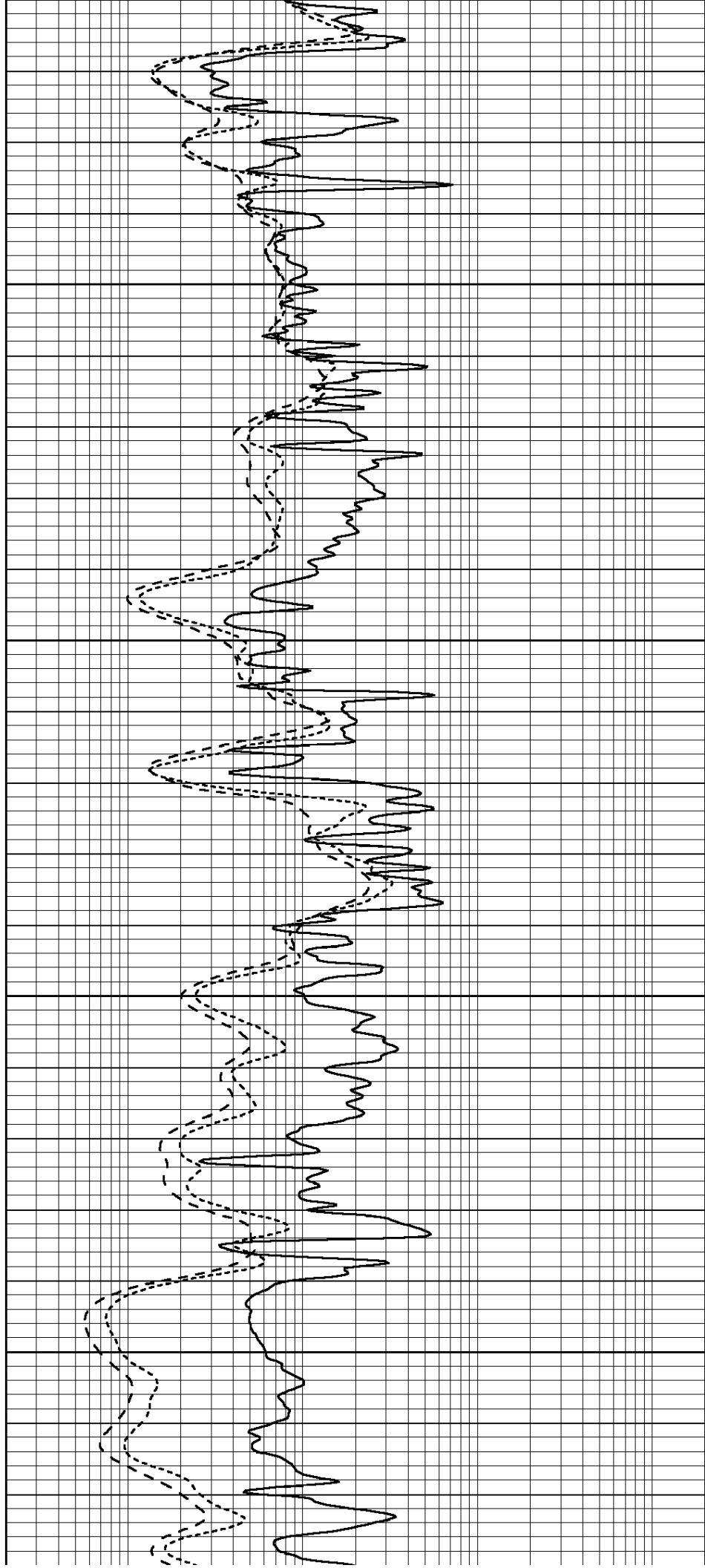


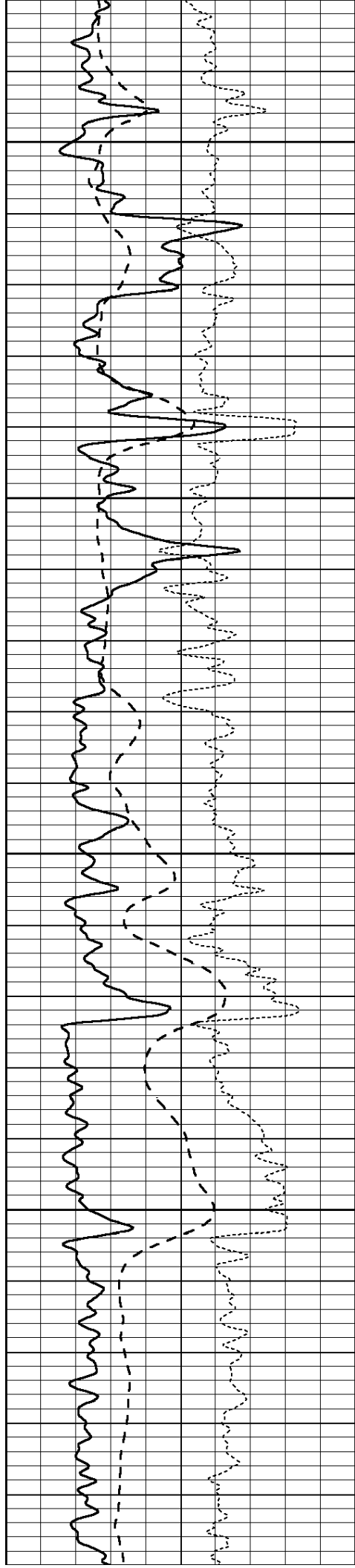
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3800

3850

3900





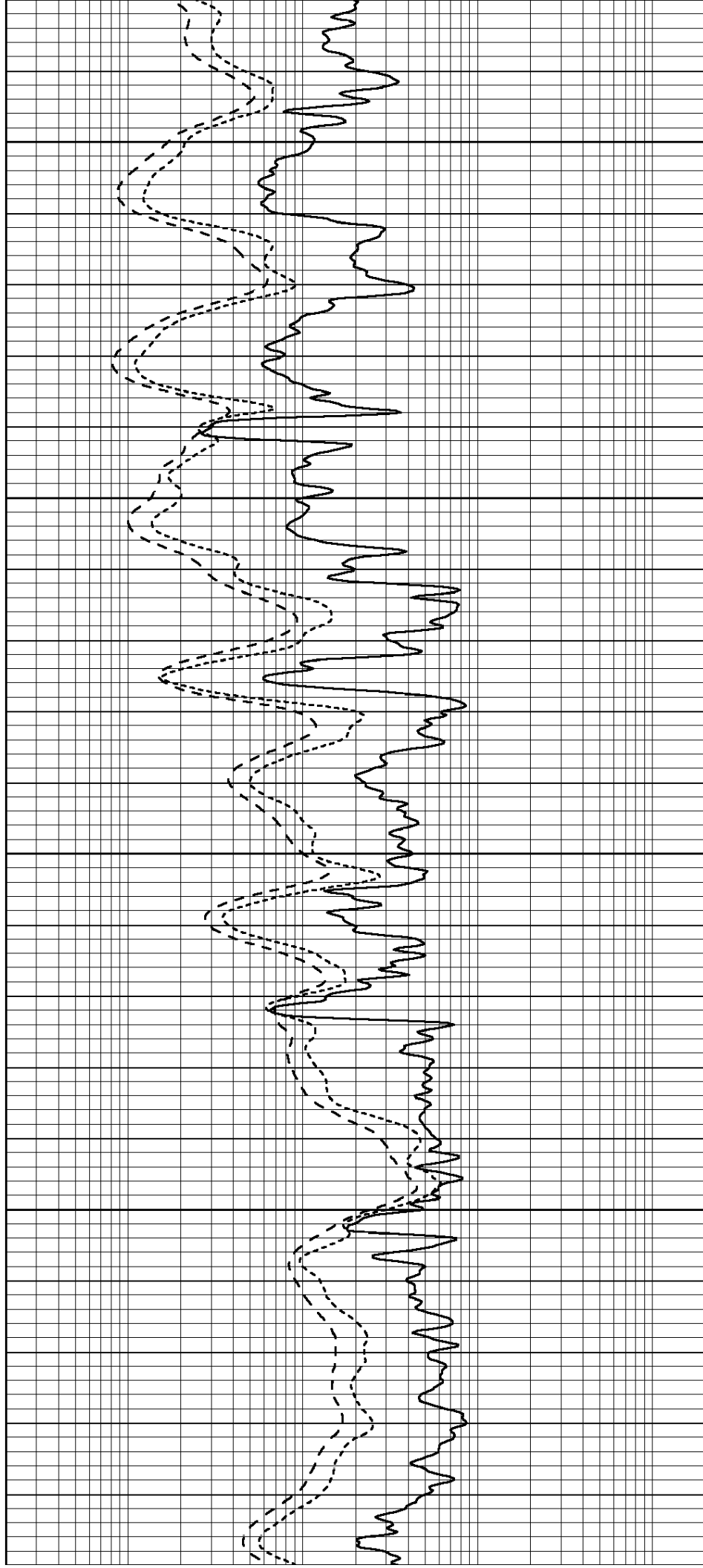
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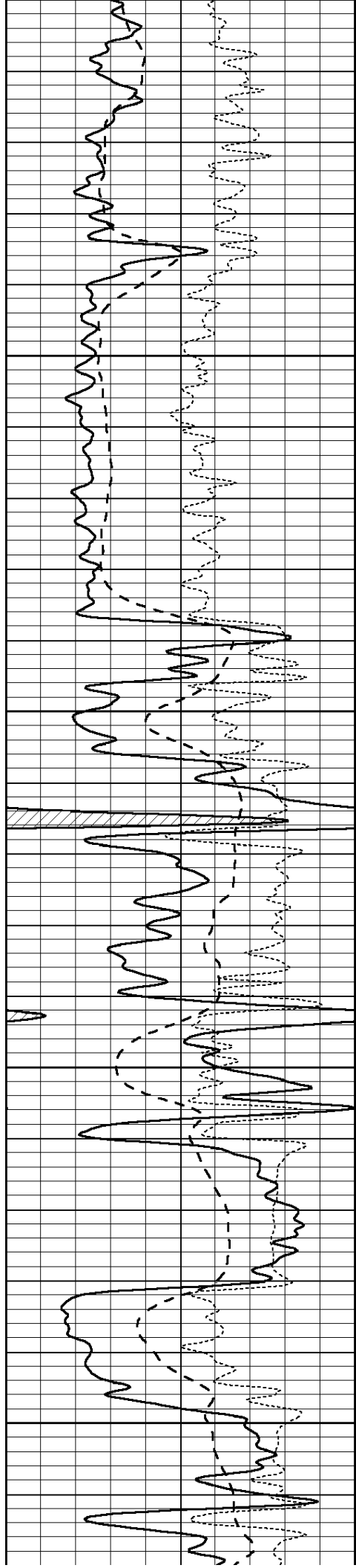
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4050

4100

4150





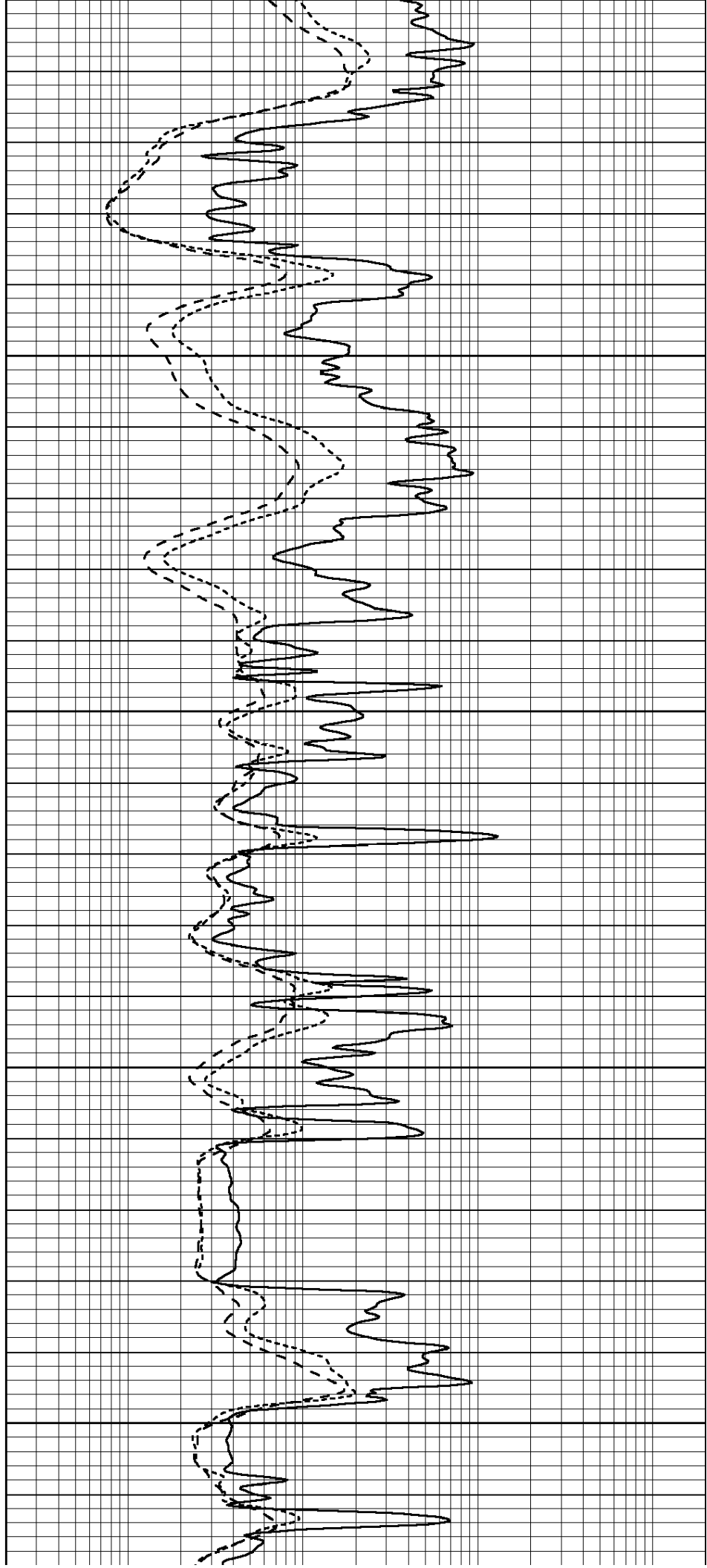
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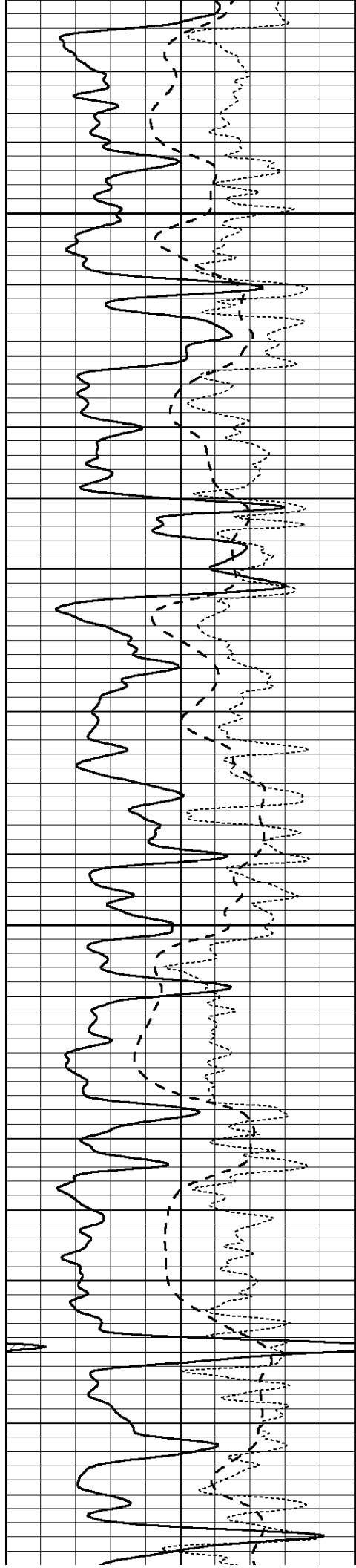
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4250

4300

4350



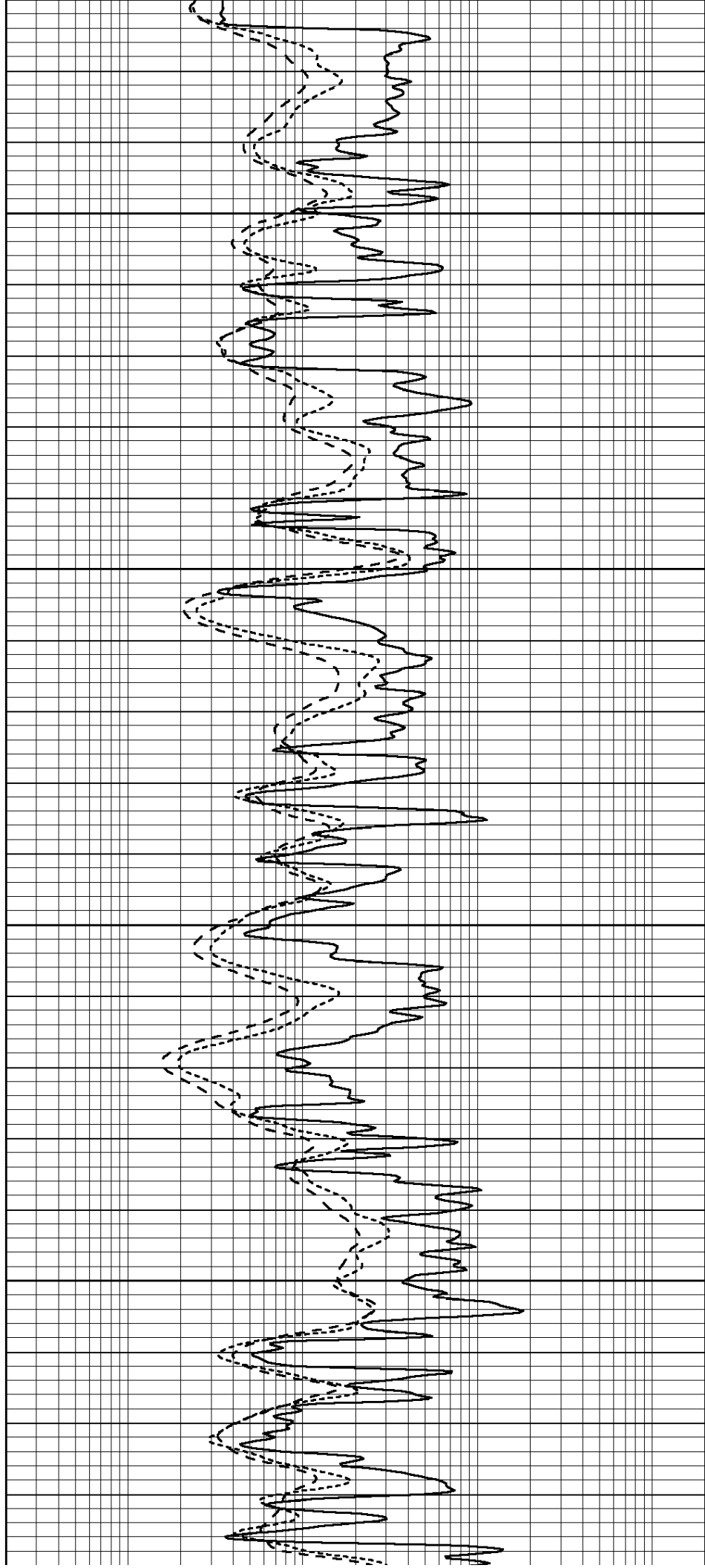


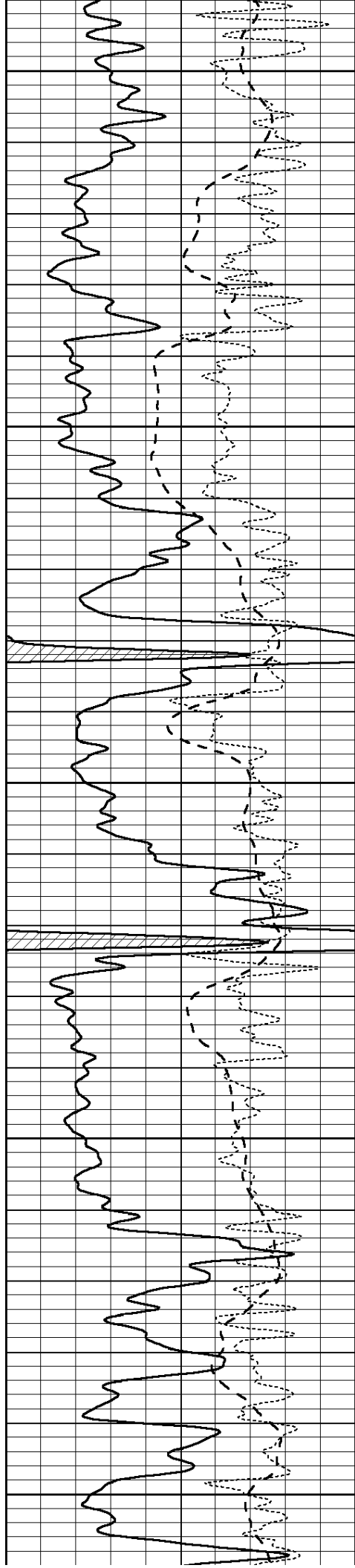
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4500

4550





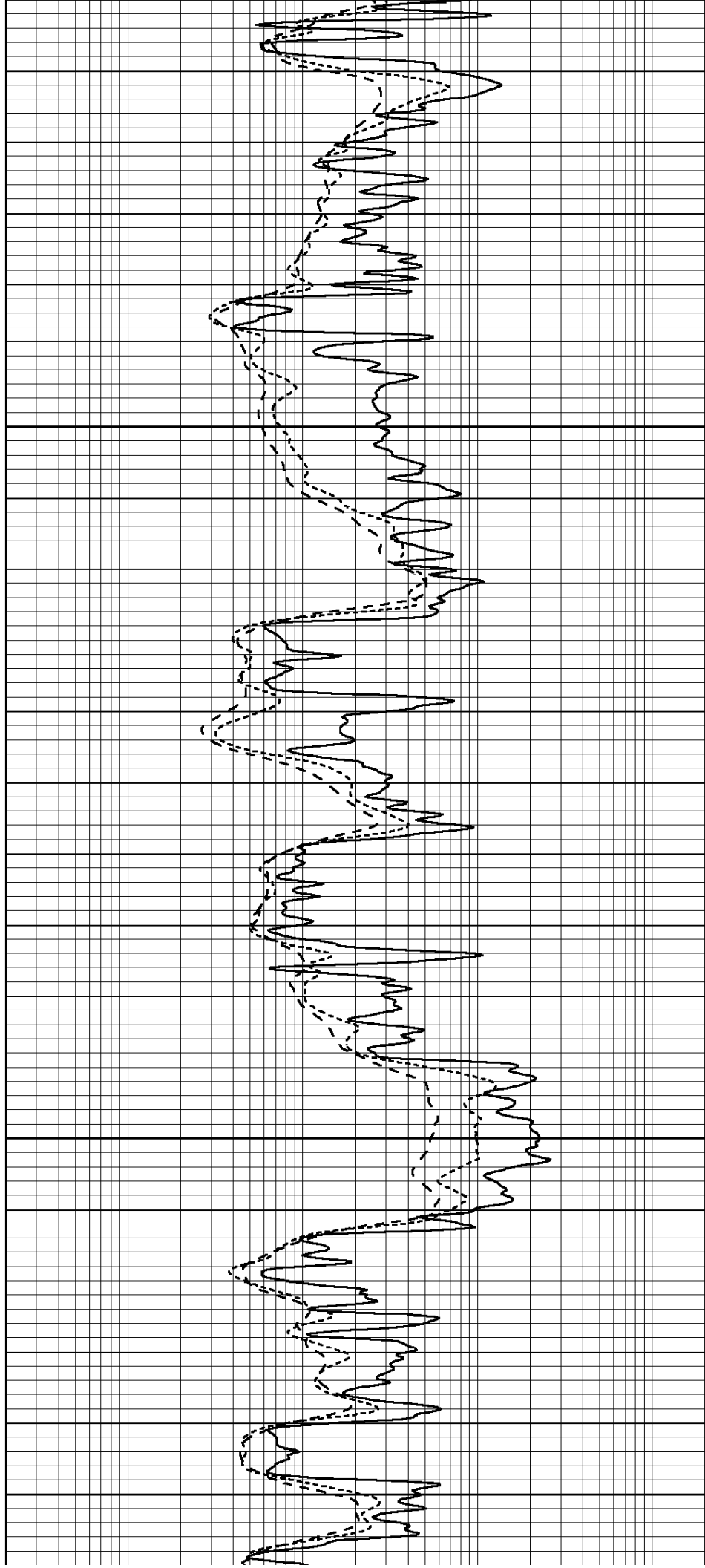
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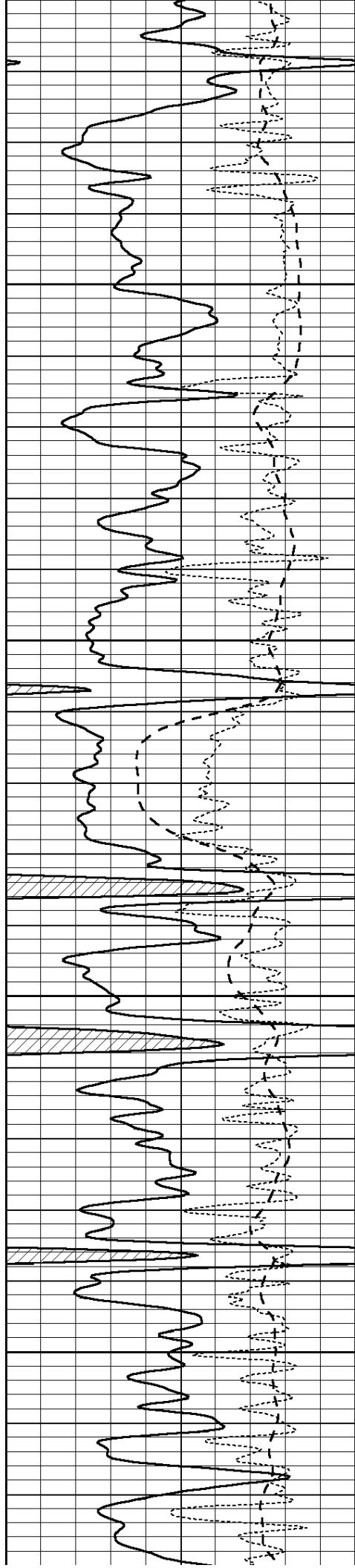
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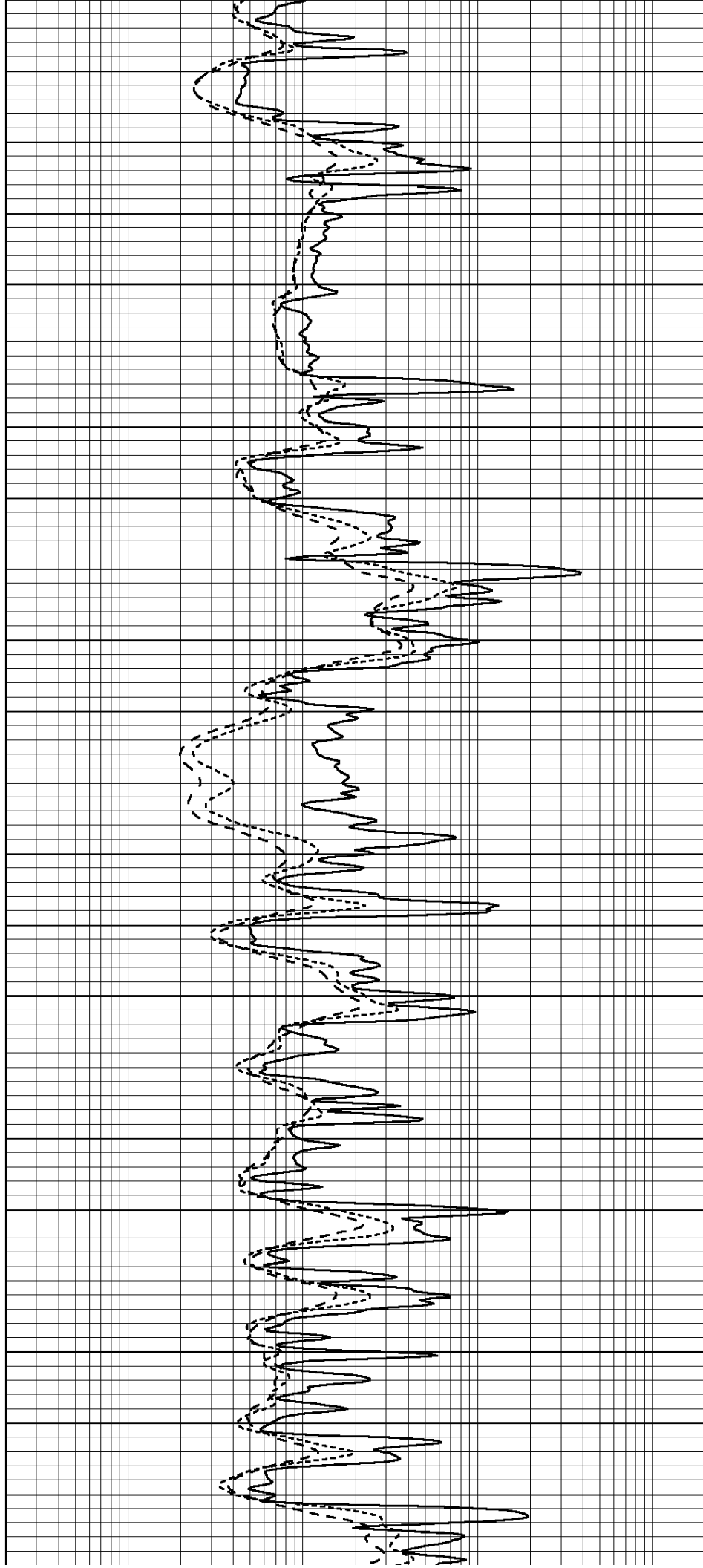


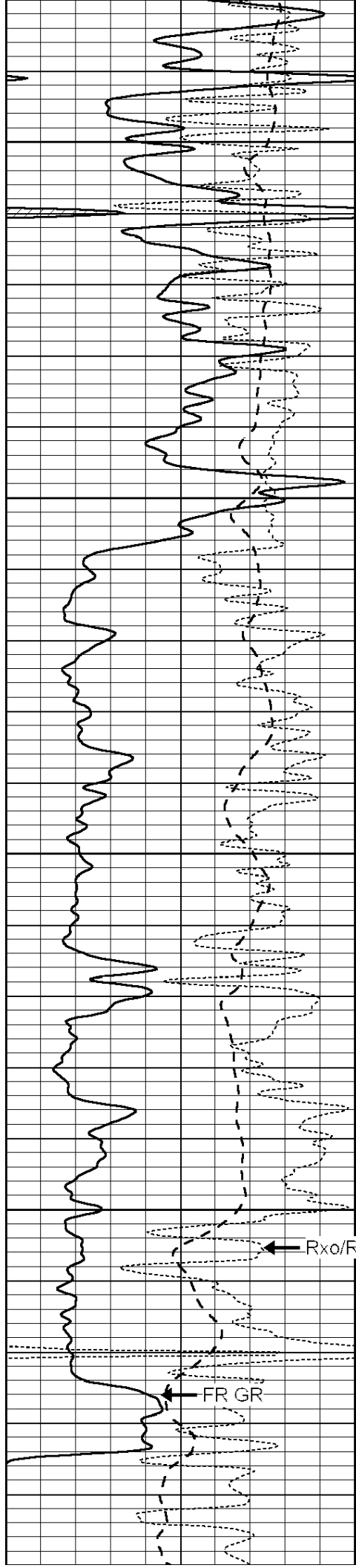
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5000





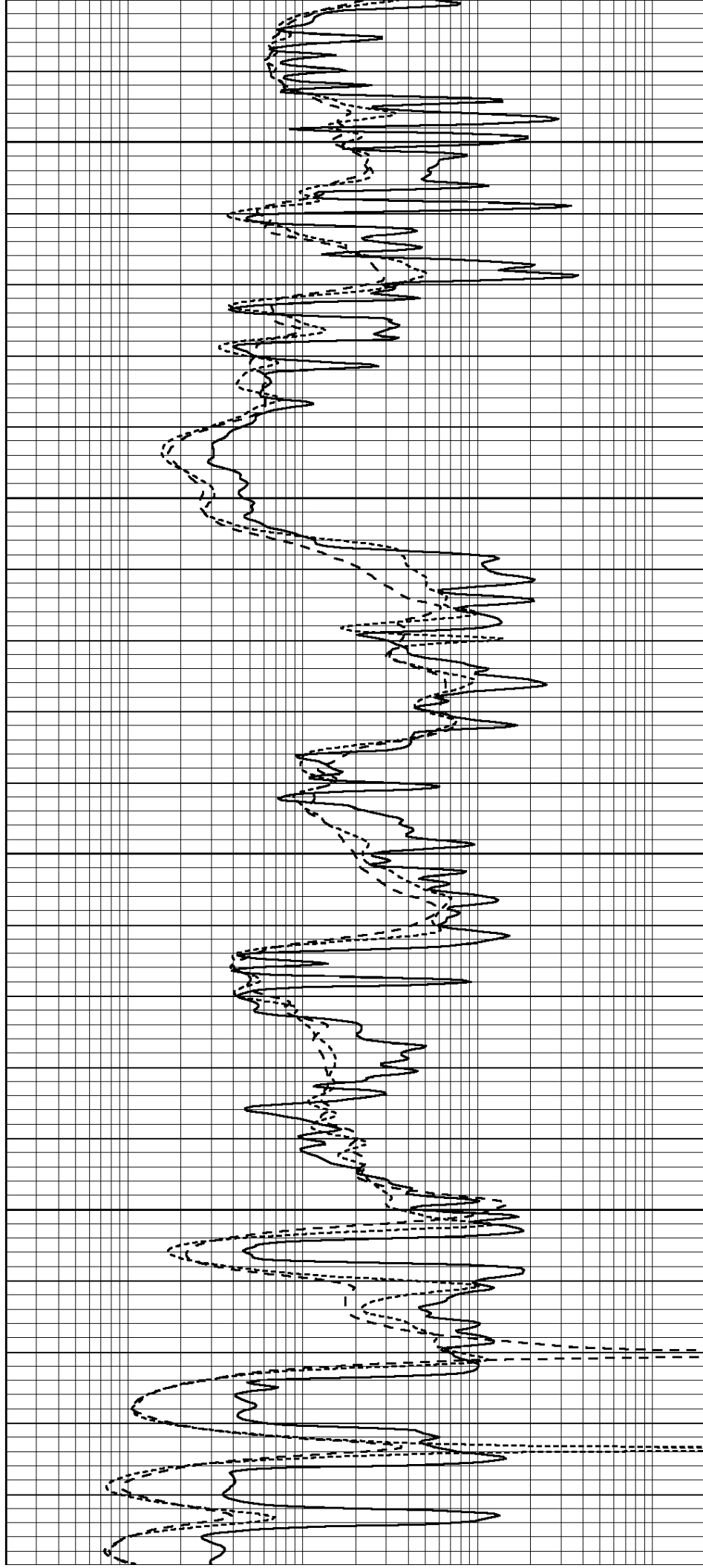
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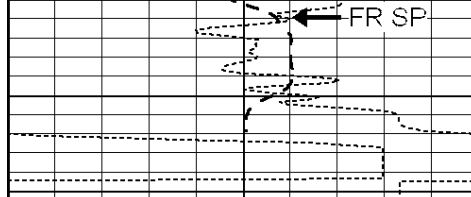
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5150

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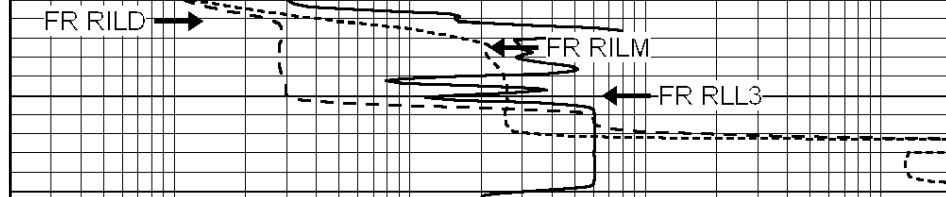
5250





LTD 5262

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

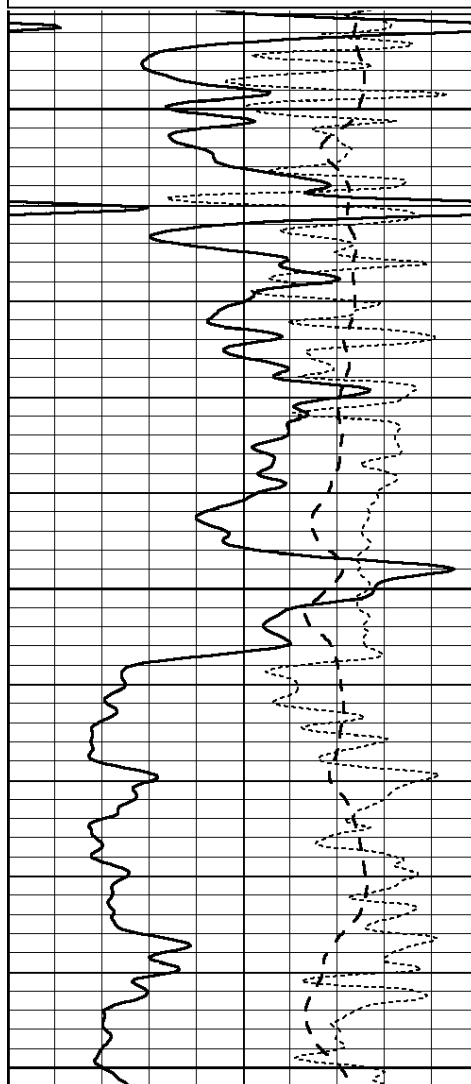


REPEAT SECTION

Database File: 009750ddn.db
 Dataset Pathname: pass2.2
 Presentation Format: _dil
 Dataset Creation: Wed Oct 17 05:58:45 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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

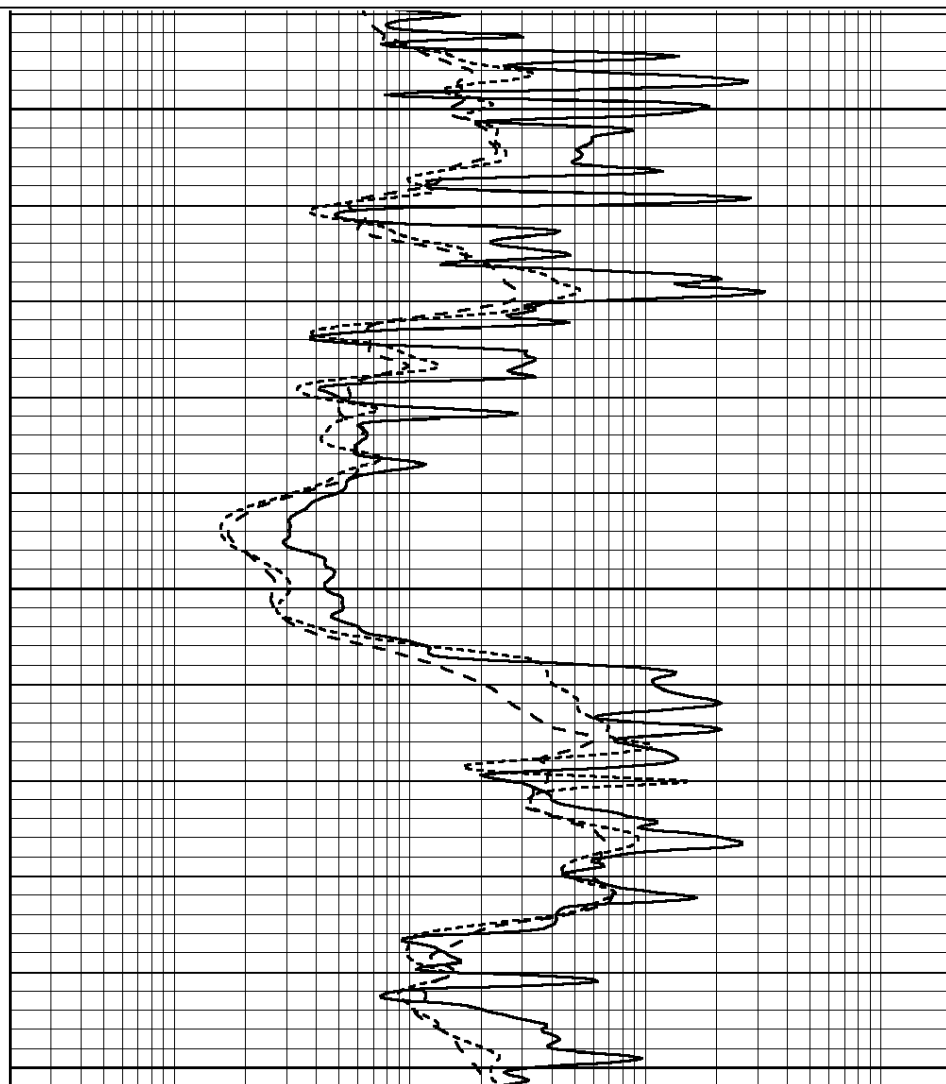
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

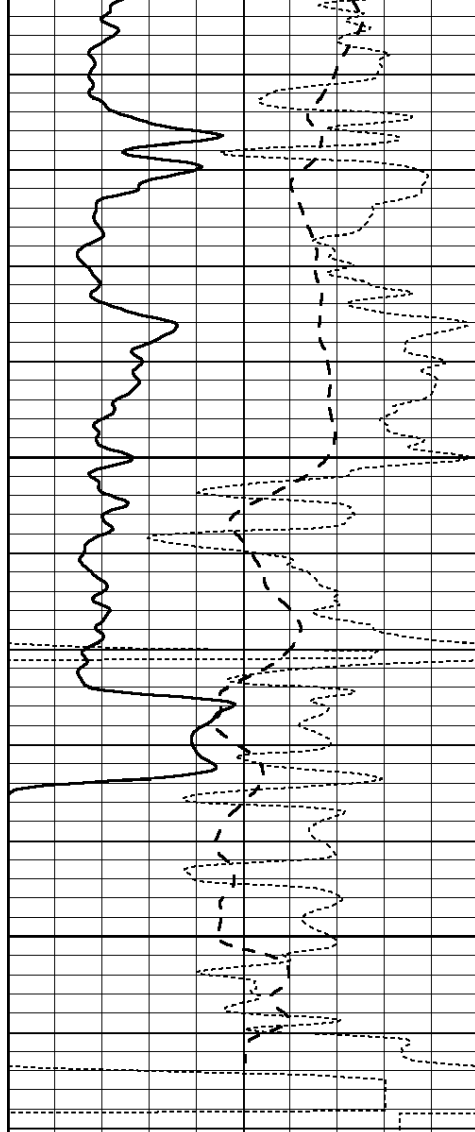


5050

5100

5150

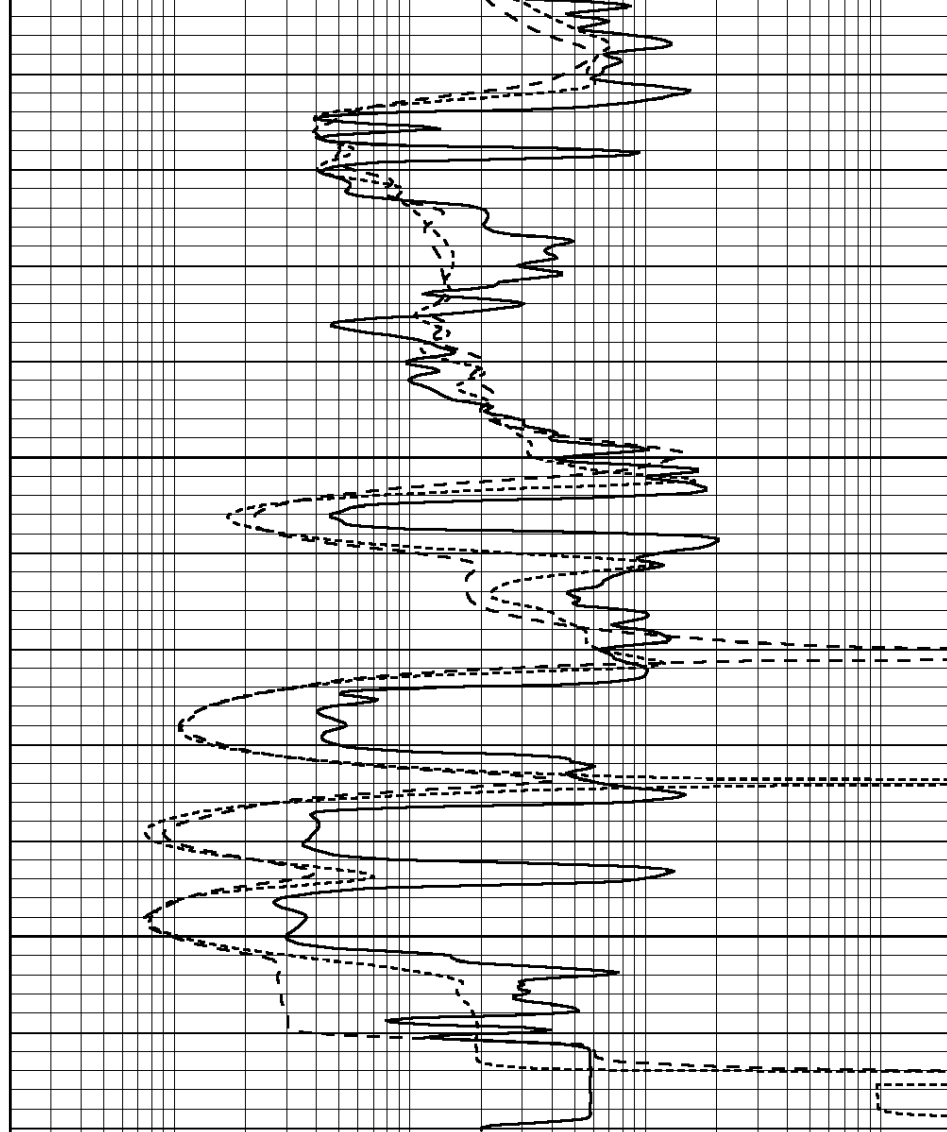




0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

5200

5250



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: 009750ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Wed Oct 17 07:09:28 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.040	0.757	V	0.000	464.000	mmho/m	605.049	-17.680

Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739
Downhole Calibration								
Readings			References			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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		
Compensated Density Calibration Report								
Serial-Model:				GEAR4-GEARHART				
Source / Verifier:				143 / 143				
Master Calibration Performed:				Mon Mar 19 19:07:19 2012				
Master Calibration								
Density			Far Detector		Near Detector			
Magnesium	1.710	g/cc	1015.91		497.51	cps		
Aluminum	2.600	g/cc	227.67		350.20	cps		
Spine Angle = 76.79			Density/Spine Ratio = 0.579					
Size			Reading					
Small Ring	8.00	in	3.21		V			
Large Ring	14.00	in	5.46		V			
Compensated Neutron Calibration Report								
Serial Number:				6I				
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:		#8						
Tool Model:		OPEN						
Performed:		Mon Jun 13 16:56:43 2011						
Calibrator Value:		150.0		GAPI				
Background Reading:		0.0		cps				
Calibrator Reading:		175.0		cps				
Sensitivity:		0.8371		GAPI/cps				