



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company MULL DRILLING COMPANY, INC.
Well #1-14 TALLMAN FARMS "A"
Field WILDCAT
County KIOWA
State COLORADO

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Well #1-14 TALLMAN FARMS "A"
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County KIOWA State COLORADO

Location: API # : 05-061-06836-0000

1294' FSL & 605' FWL

SEC 14 TWP 18S RGE 45W

Permanent Datum GROUND LEVEL Elevation 3937
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation

K.B. 3950
D.F. 3948
G.L. 3937

Date 12/23/09

Run Number ONE

Depth Driller 5050

Depth Logger 5050

Bottom Logged Interval 5048

Top Log Interval 00

Casing Driller 8 5/8"@335'

Casing Logger 336

Bit Size 7 7/8

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.2/84

pH / Fluid Loss 10.5/8.0

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.20@60F

Rmf @ Meas. Temp .900@60F

Rmc @ Meas. Temp 1.44@60F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .576@125F

Time Circulation Stopped 2.5 HOURS

Time Logger on Bottom 7:00 P.M.

Maximum Recorded Temperature 125F

Equipment Number 0836

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By KEVIN KESSLER

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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 SERVICES HAYS, KANSAS (785) 628-6395
DIRECTIONS
BRANDON, CO. & HWY 96 E. EDGE @MM #186, 3 N. ON RD. #59, 1/4 E., N. INTO



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MAIN SECTION

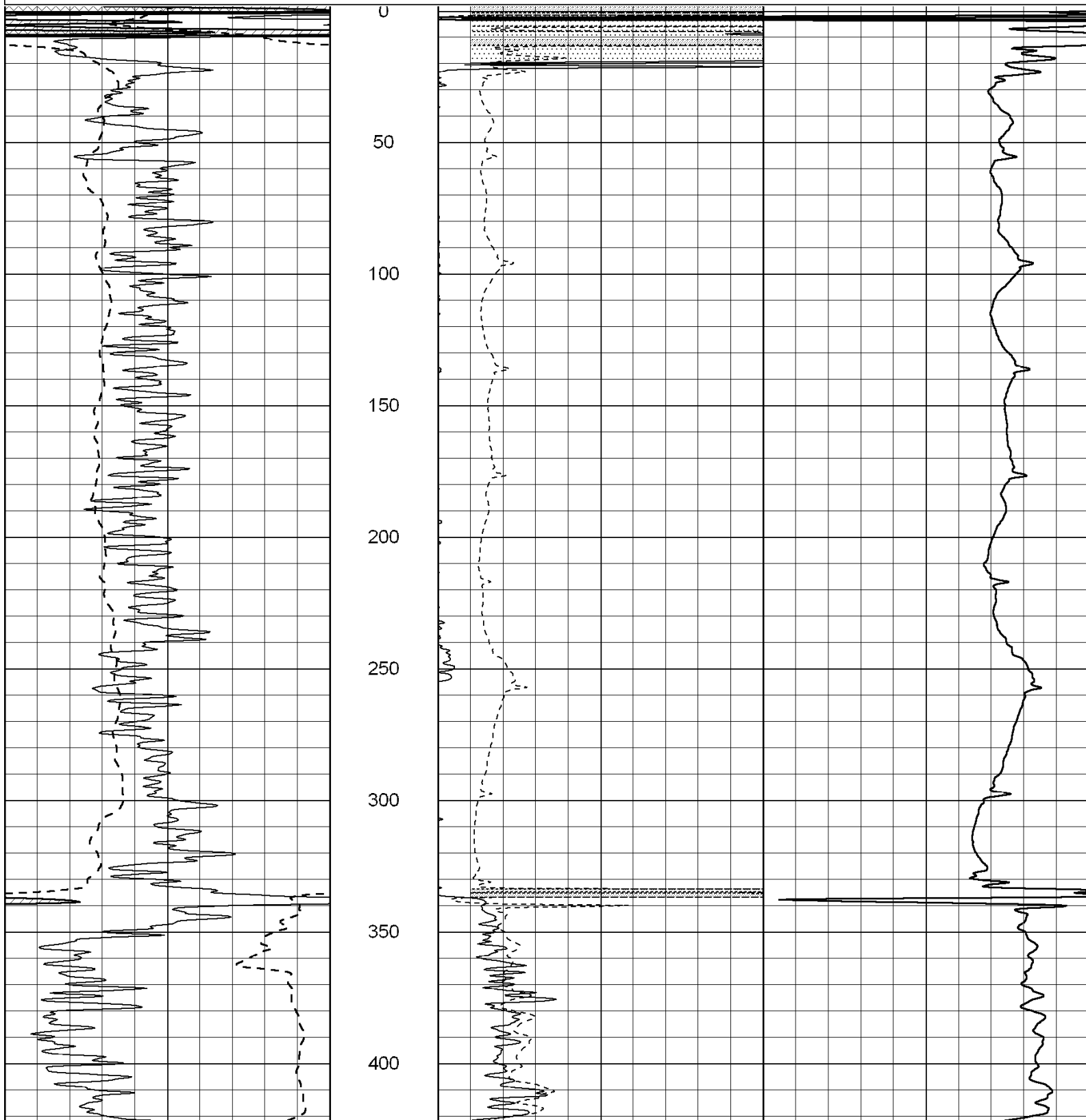
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Presentation Format: dil2
Dataset Creation: Tue Dec 22 20:37:51 2009 by Calc Open-Cased 060407
Charted by: Depth in Feet scaled 1:600

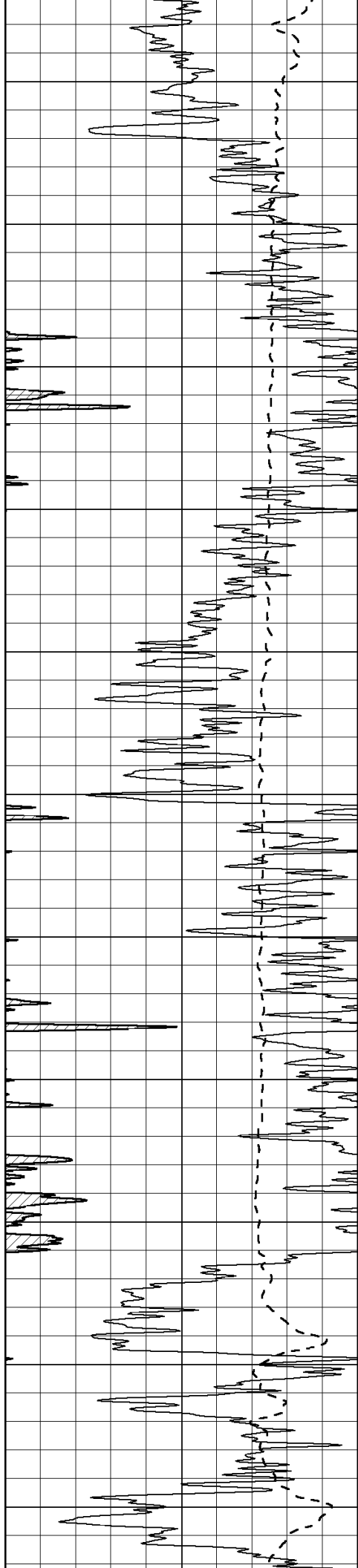
0 Gamma Ray (GAPI) 150
-100 SP (mV) 100

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





450

500

550

600

650

700

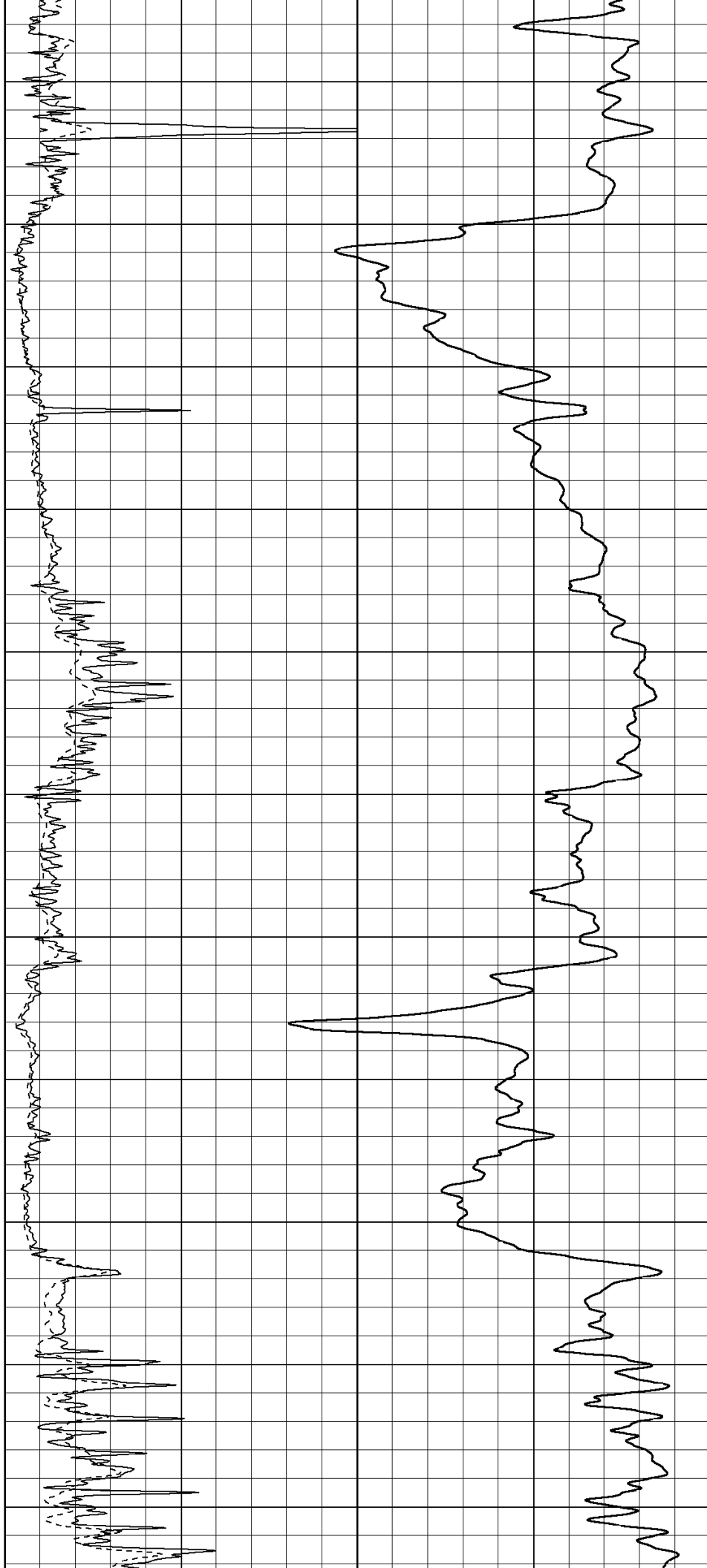
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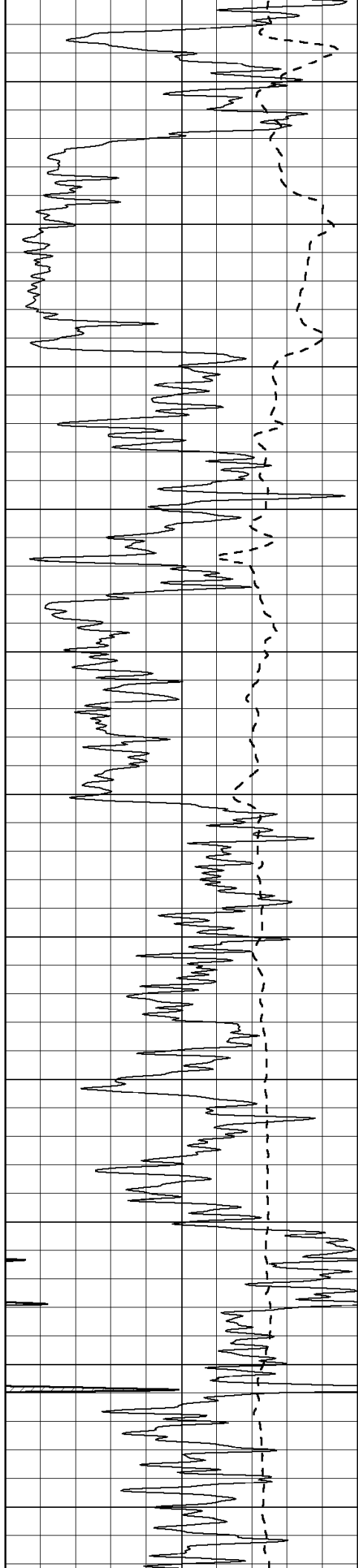
800

850

900

950





1000

1050

1100

1150

1200

1250

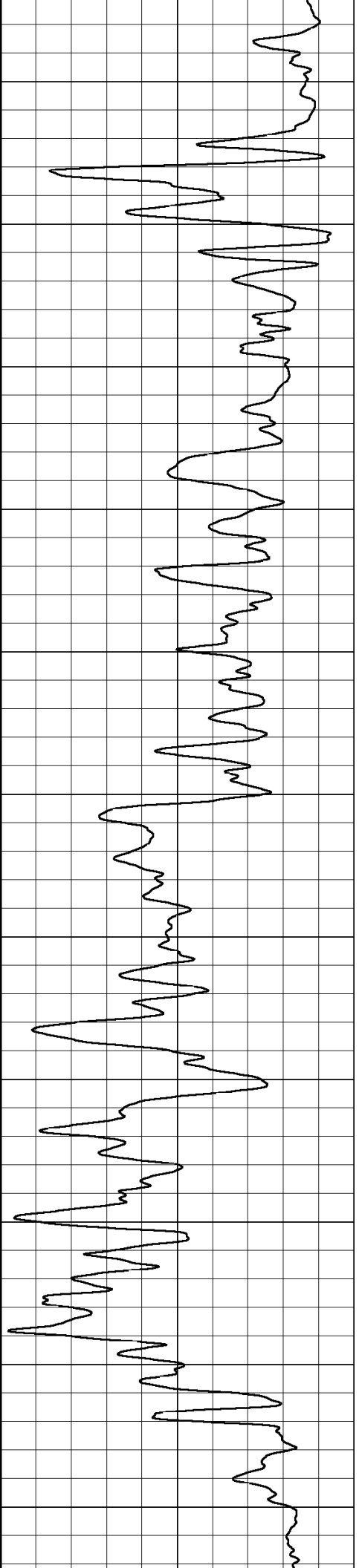
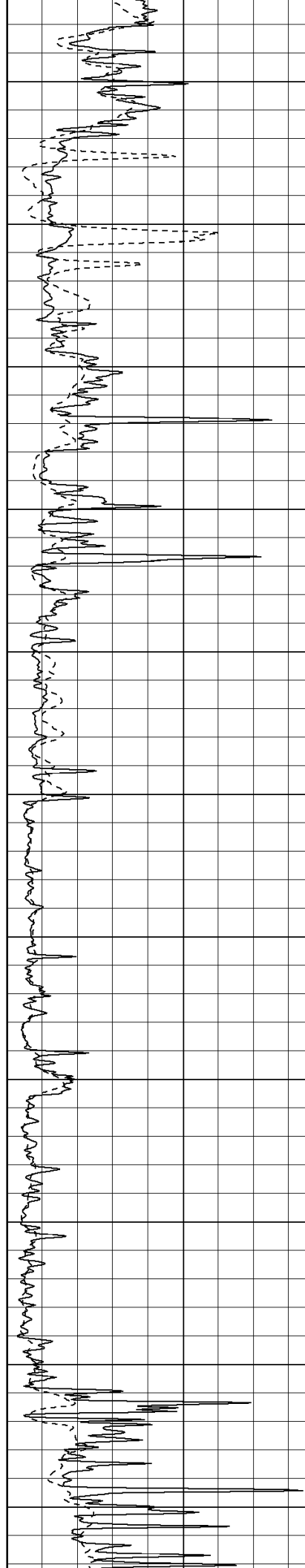
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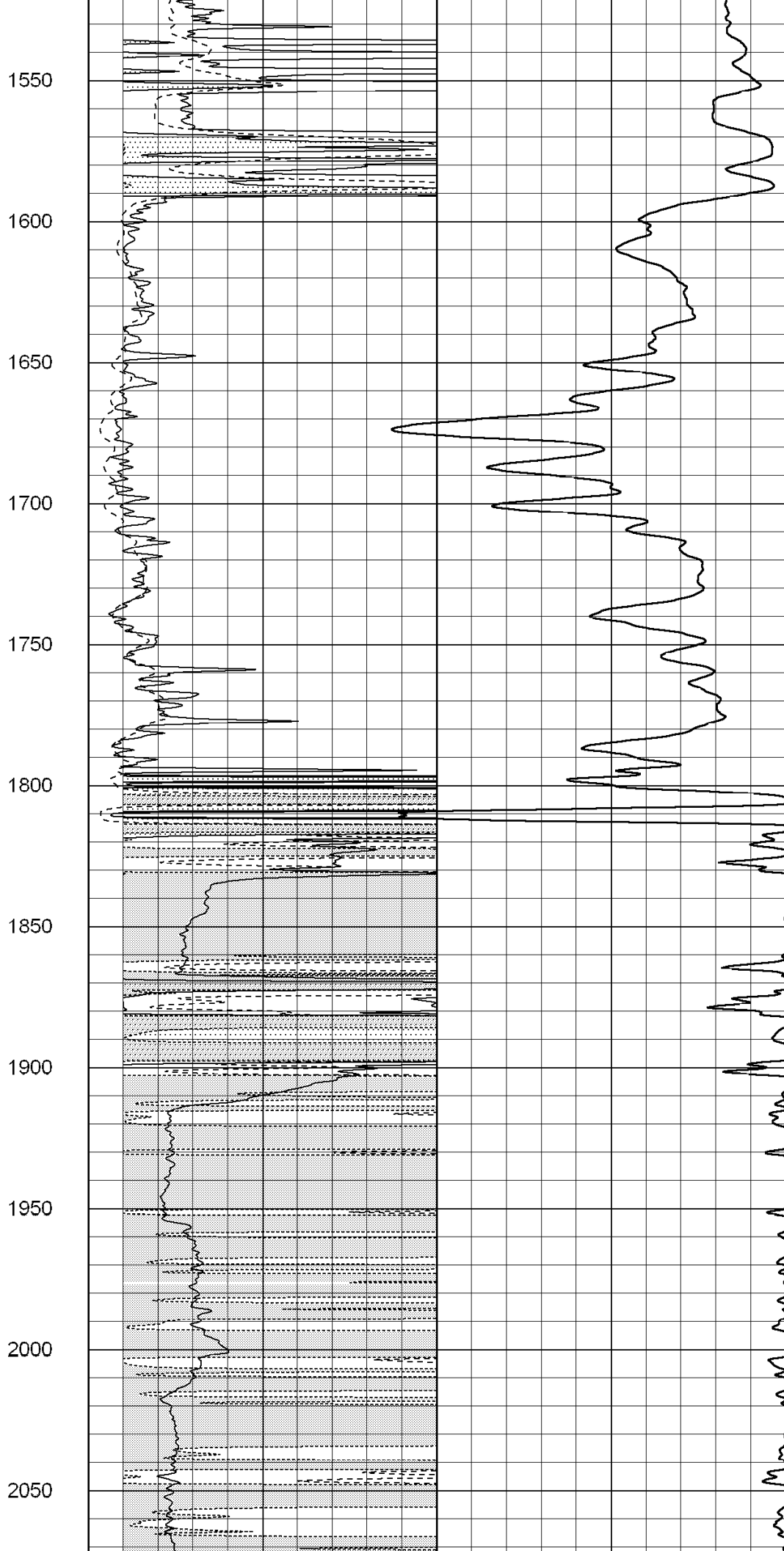
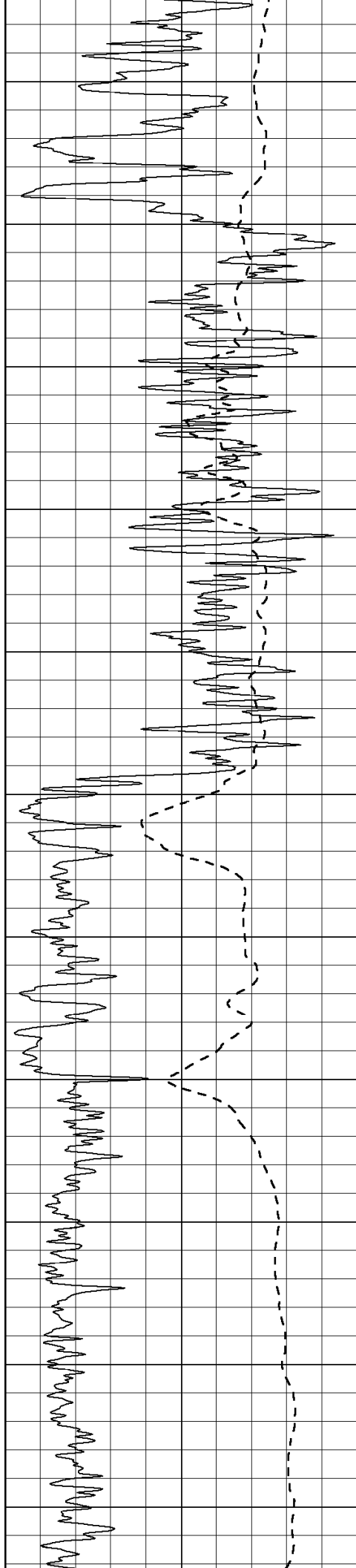
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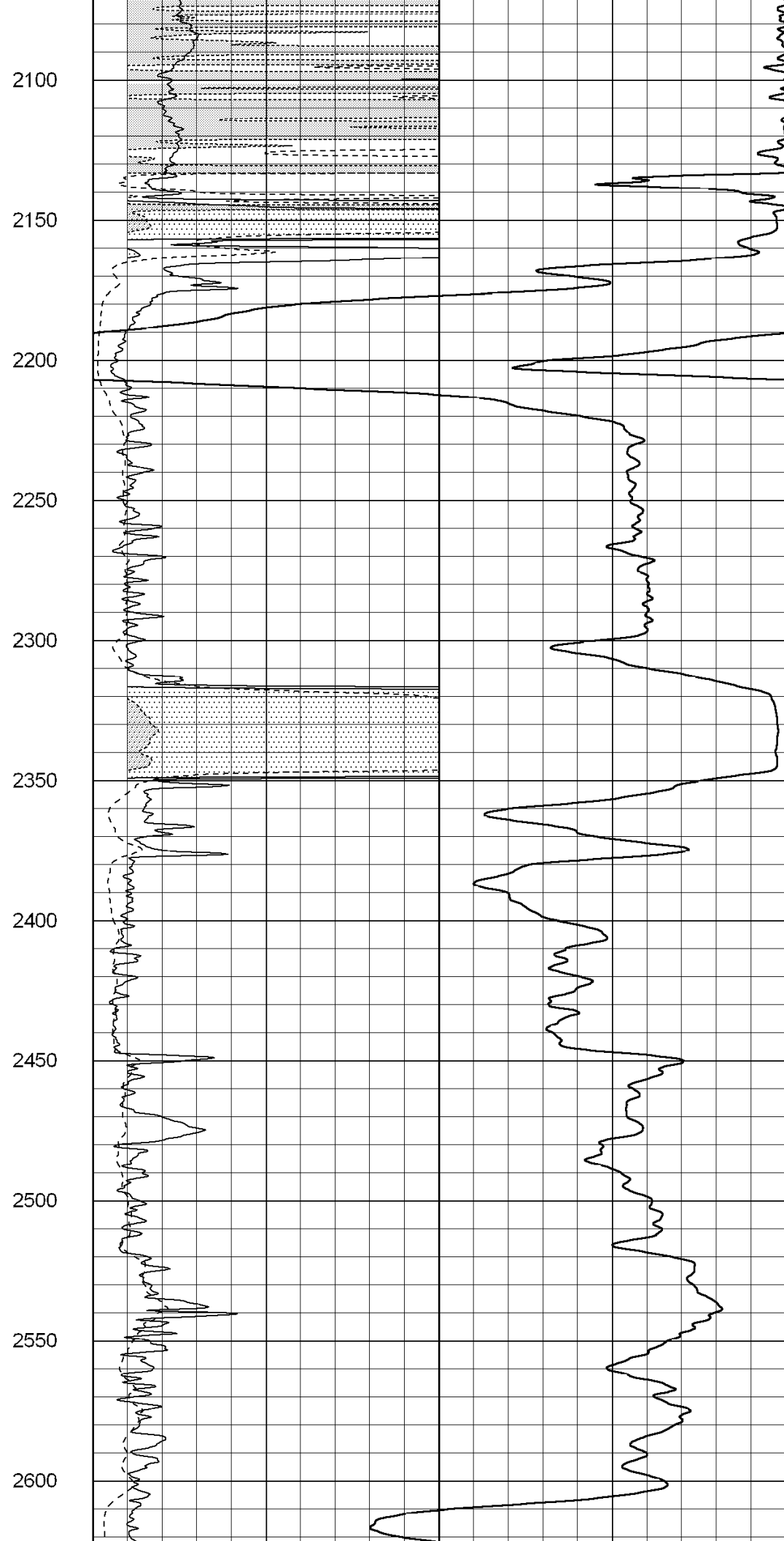
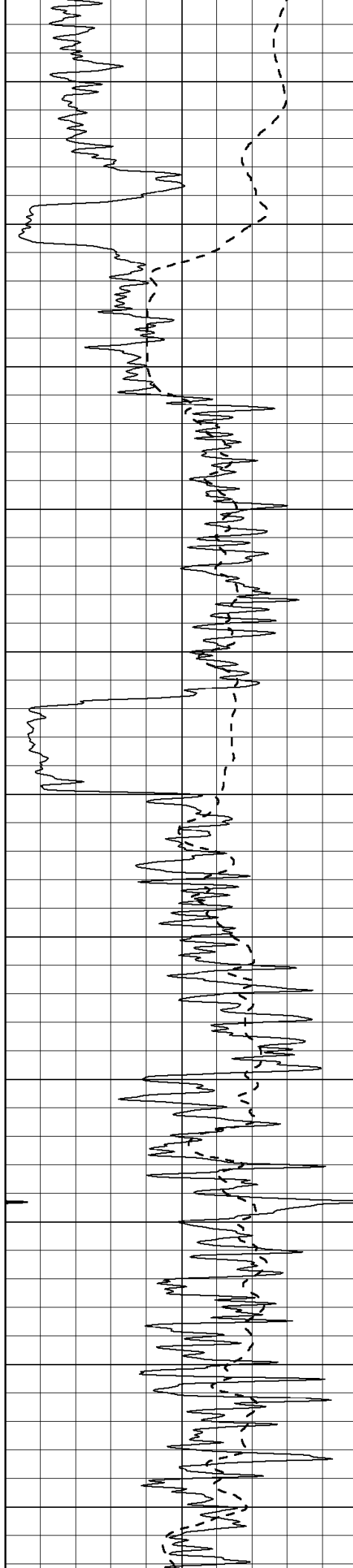
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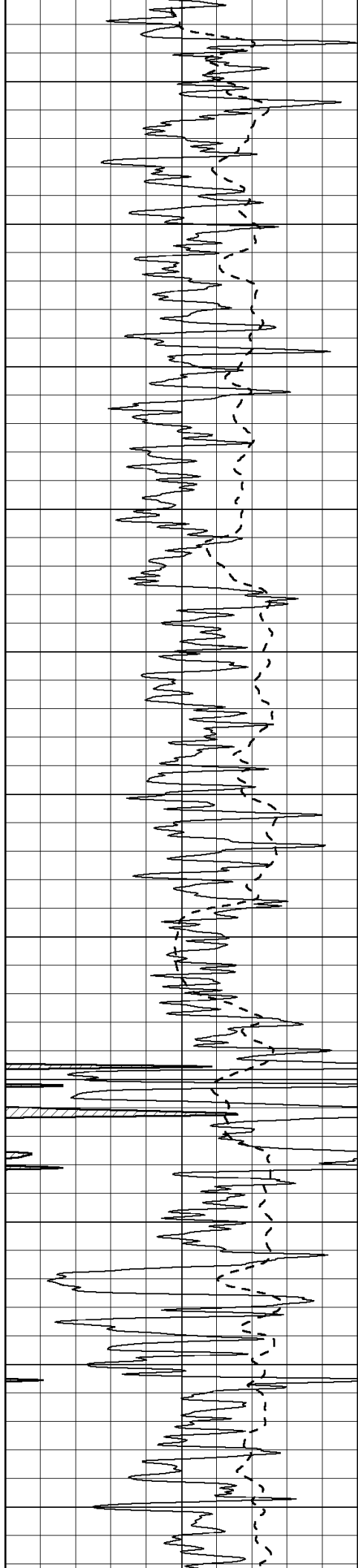
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1500









2650

2700

2750

2800

2850

2900

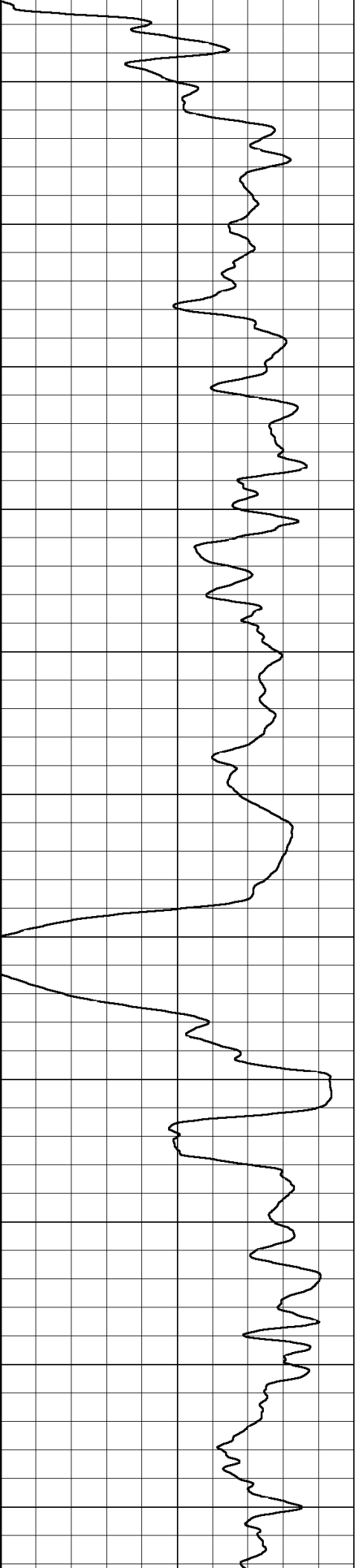
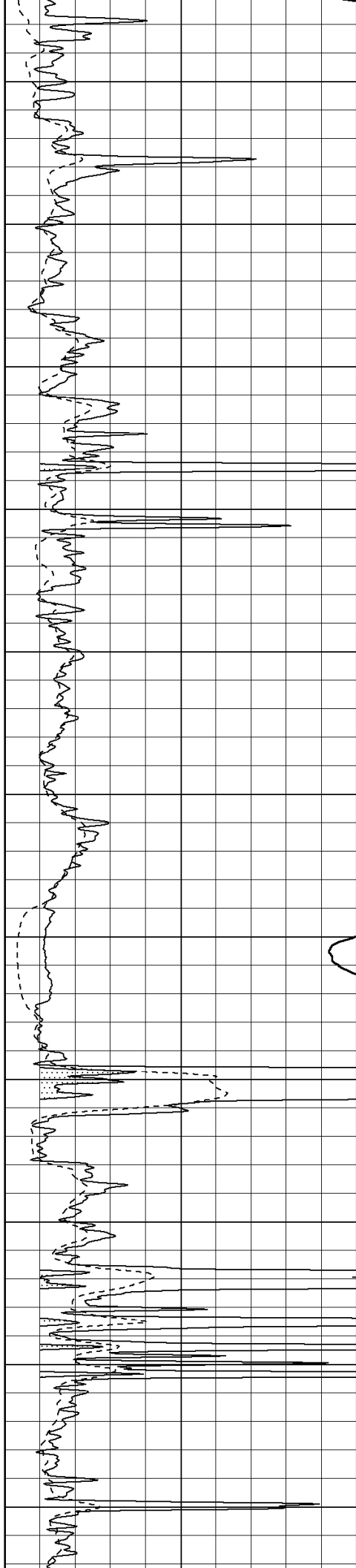
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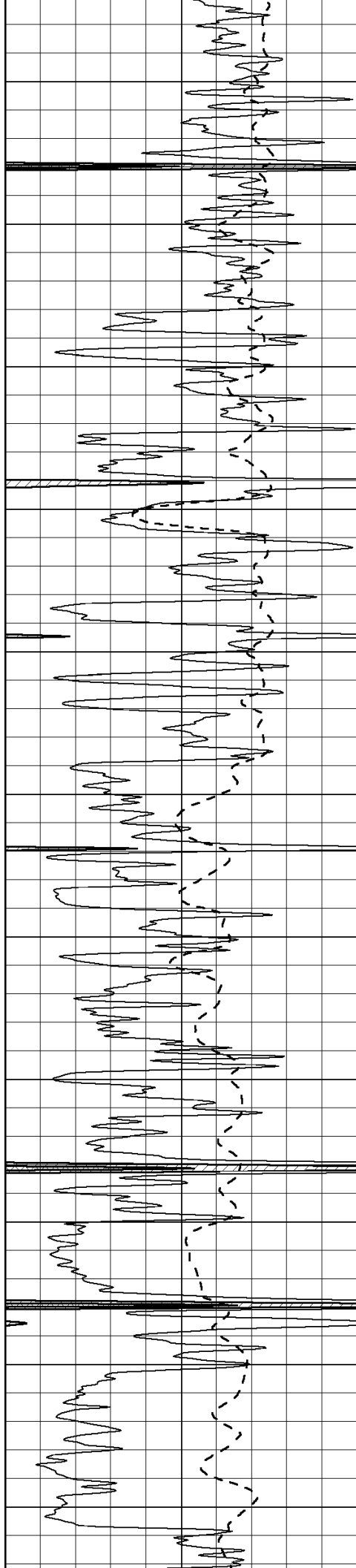
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3050

3100

3150





3200

3250

3300

3350

3400

3450

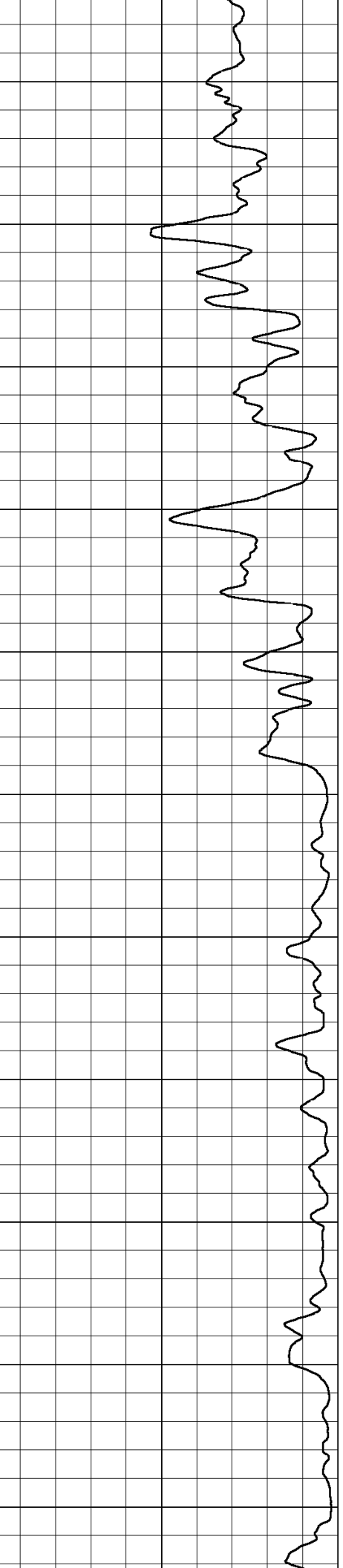
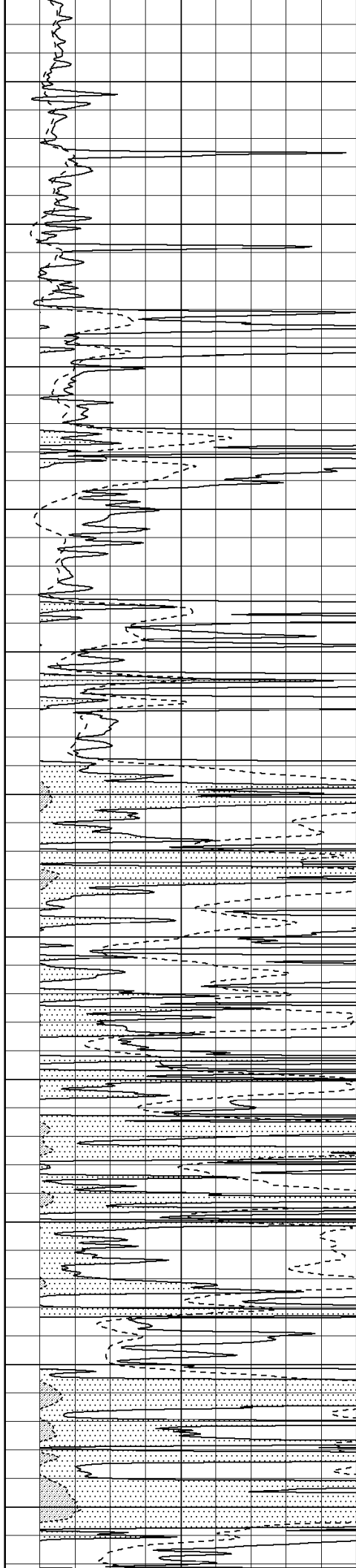
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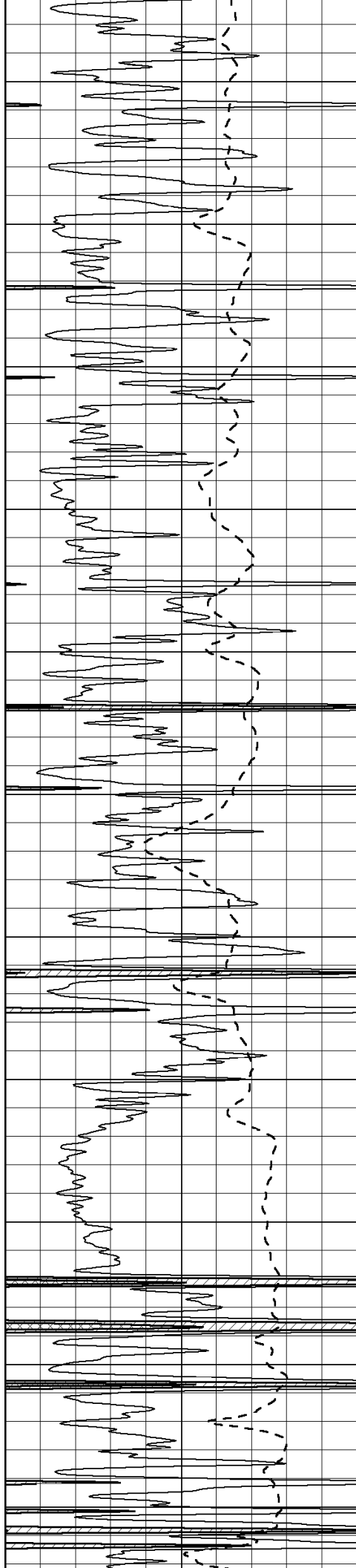
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3600

3650

3700





3750

3800

3850

3900

3950

4000

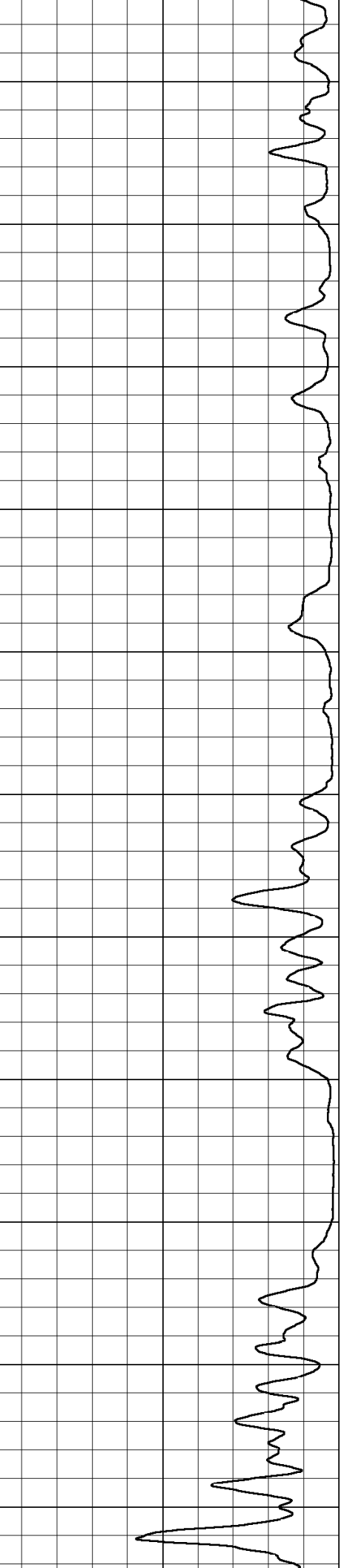
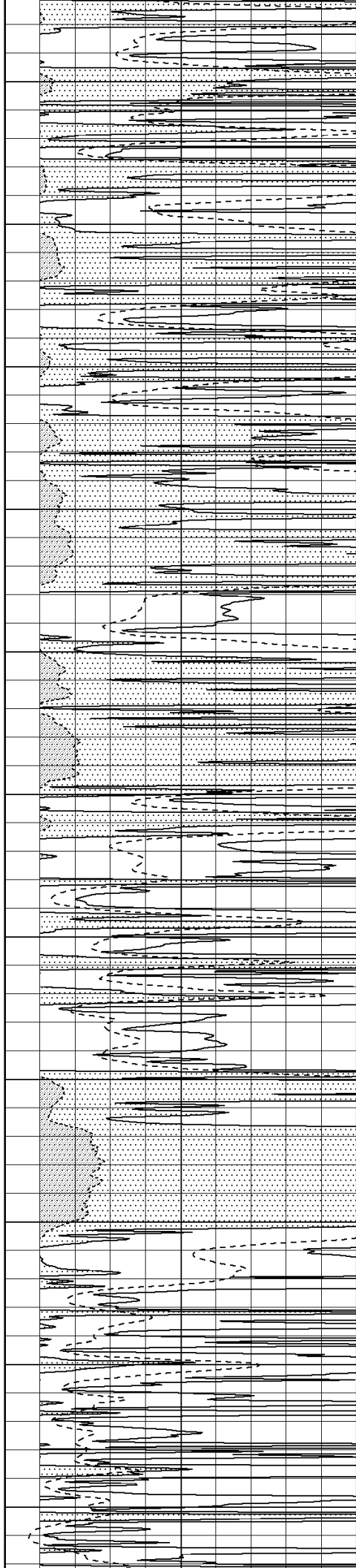
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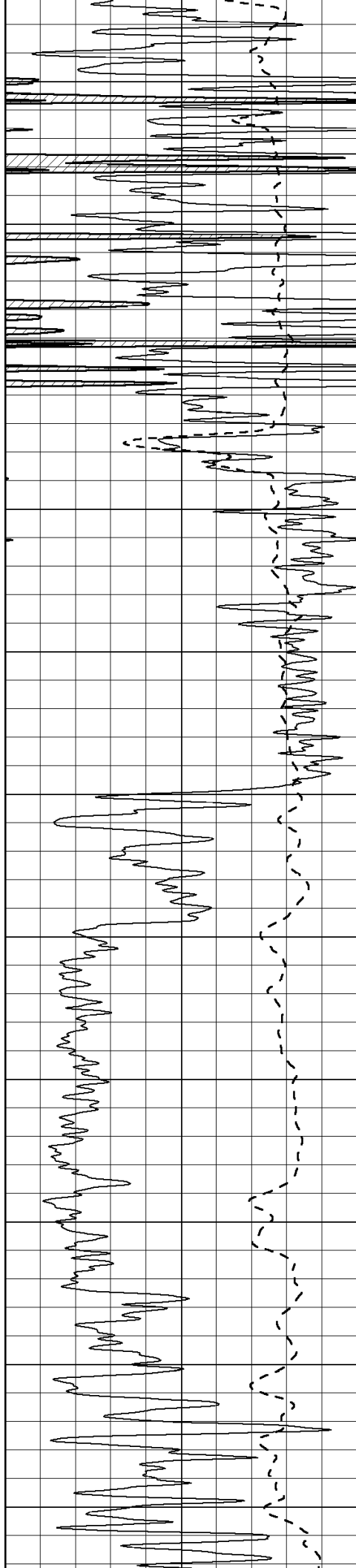
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4150

4200

4250





4300

4350

4400

4450

4500

4550

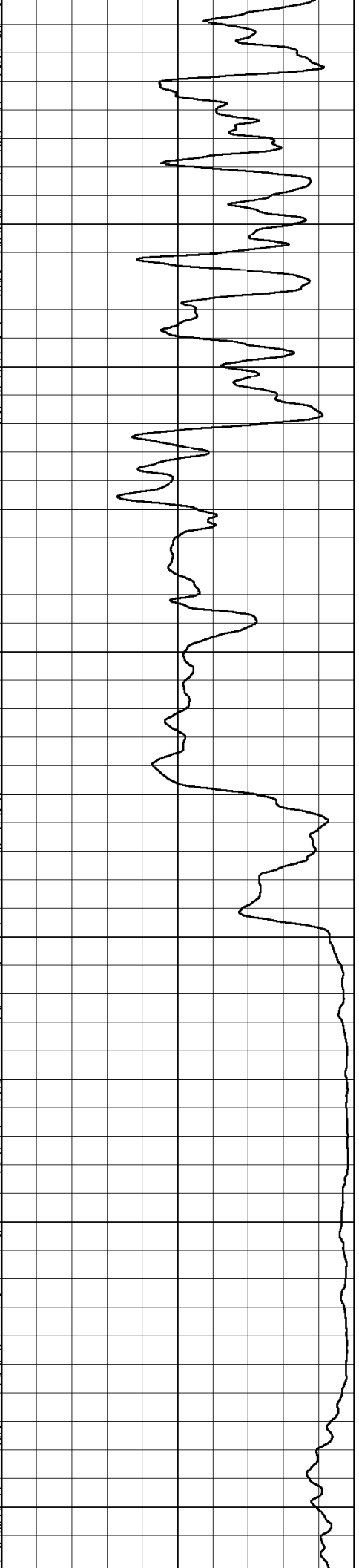
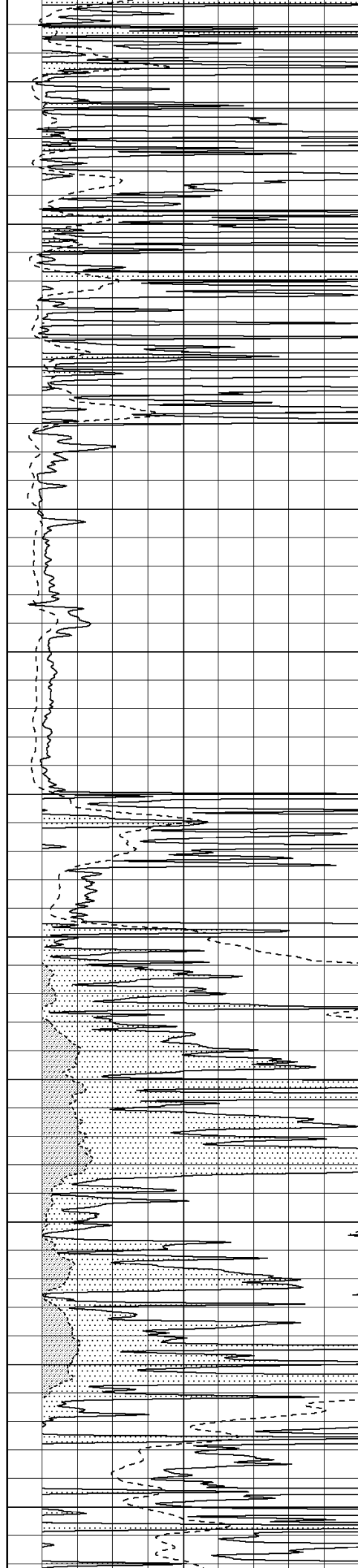
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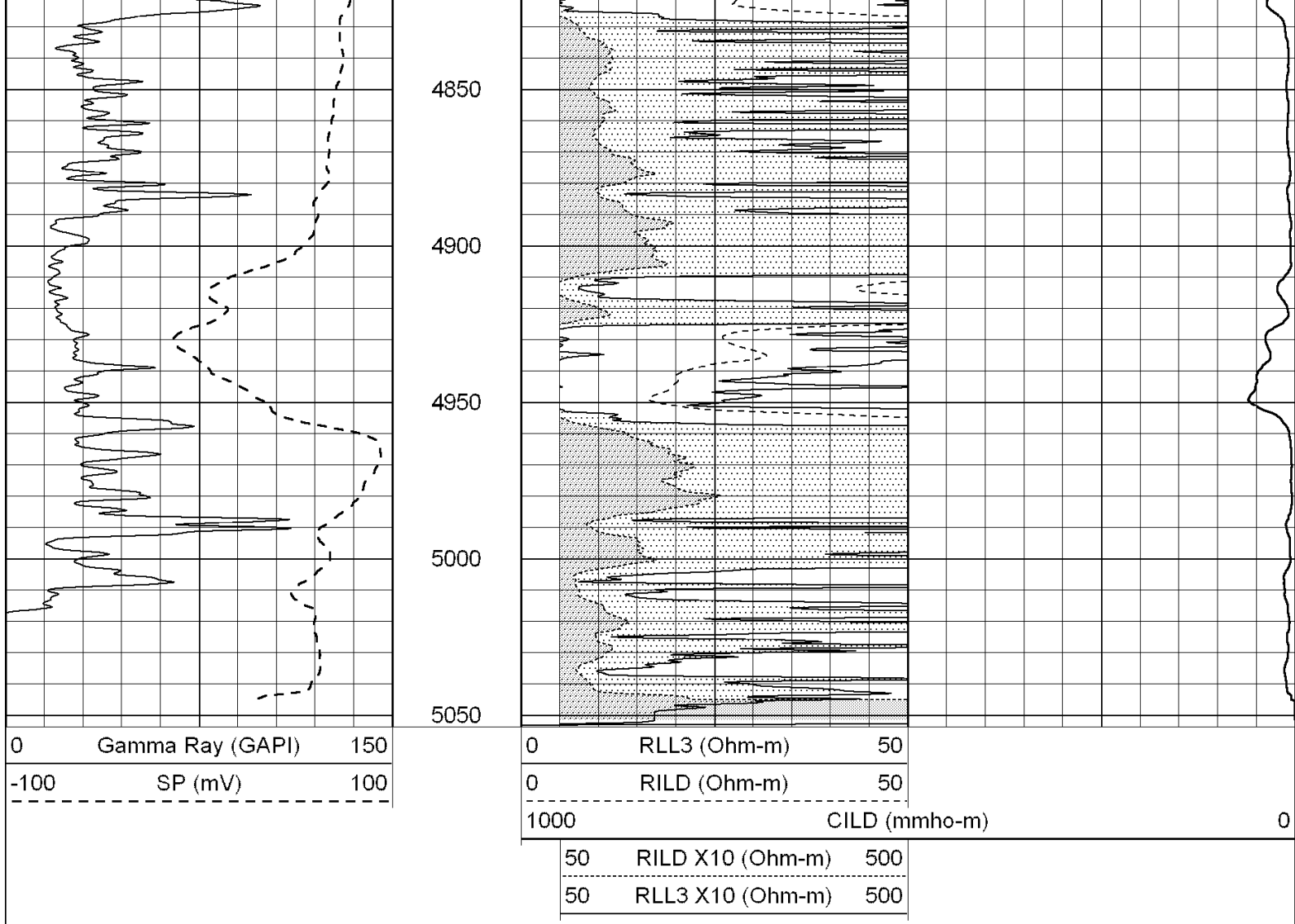
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4800



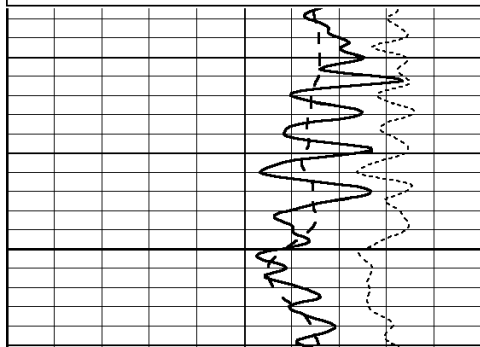


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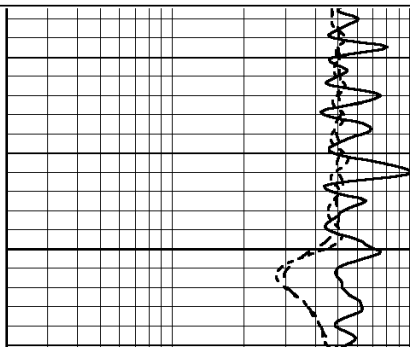
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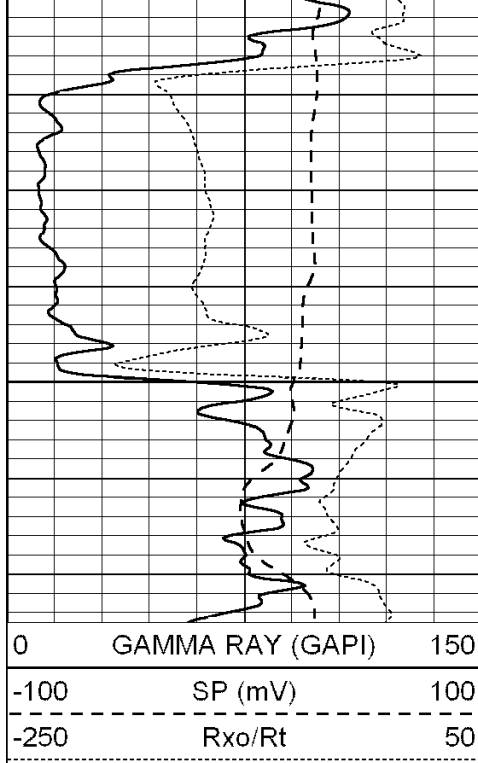
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 Dataset Creation: Tue Dec 22 20:38:19 2009 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:240

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

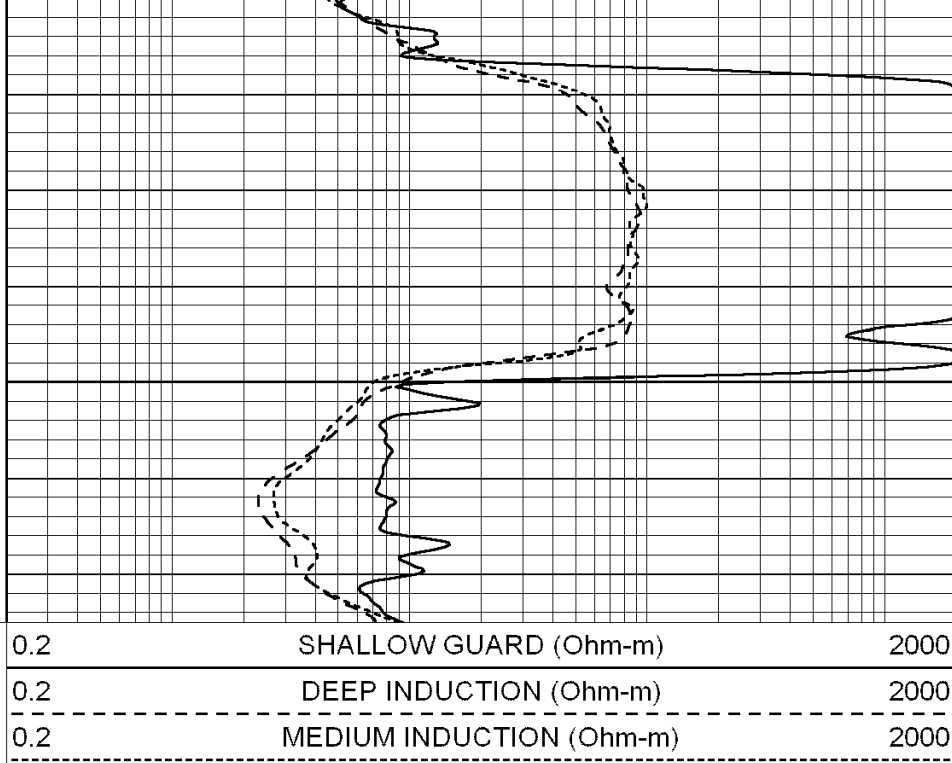


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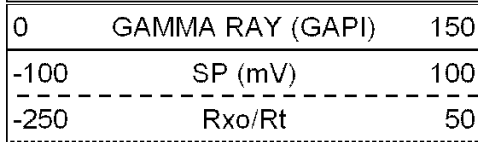
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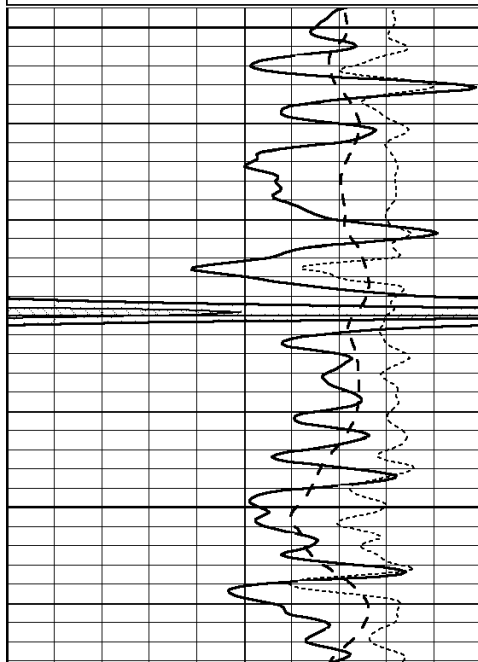
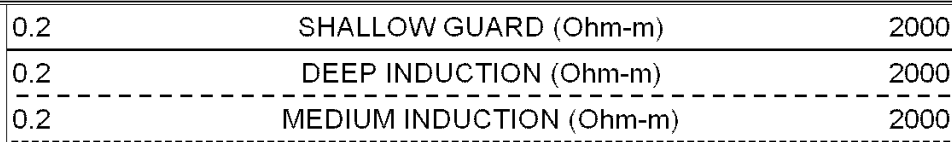
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MAIN SECTION

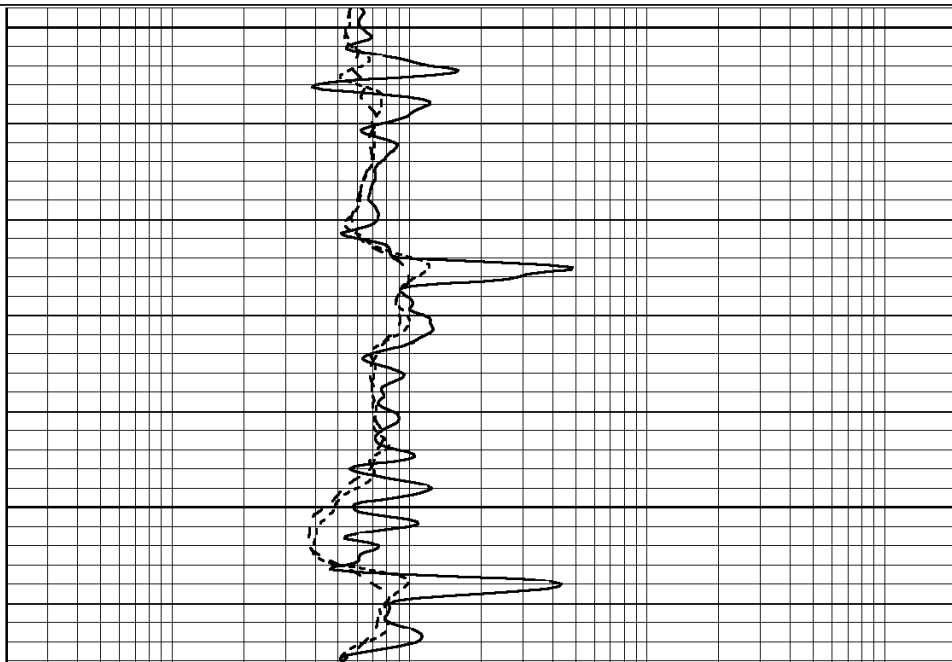
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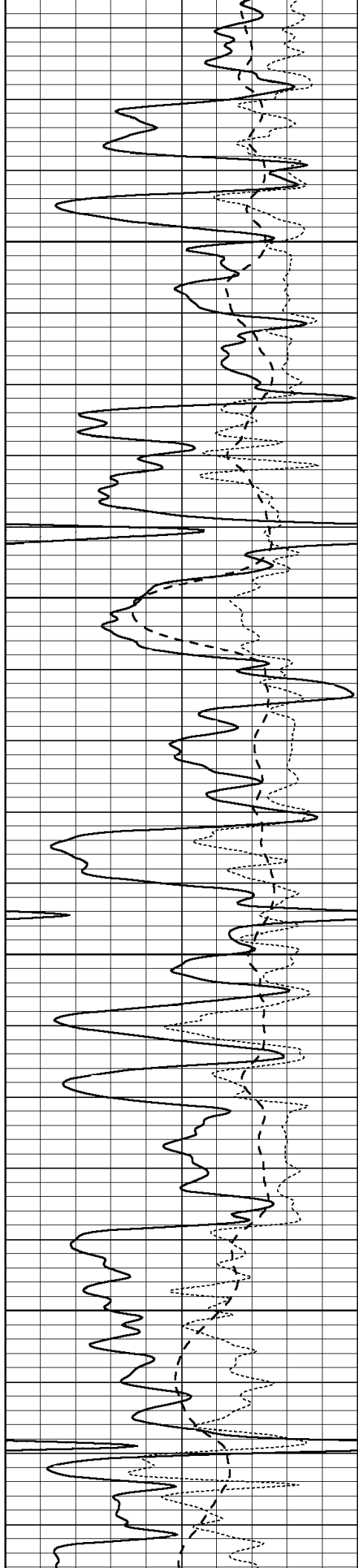


3200



3250



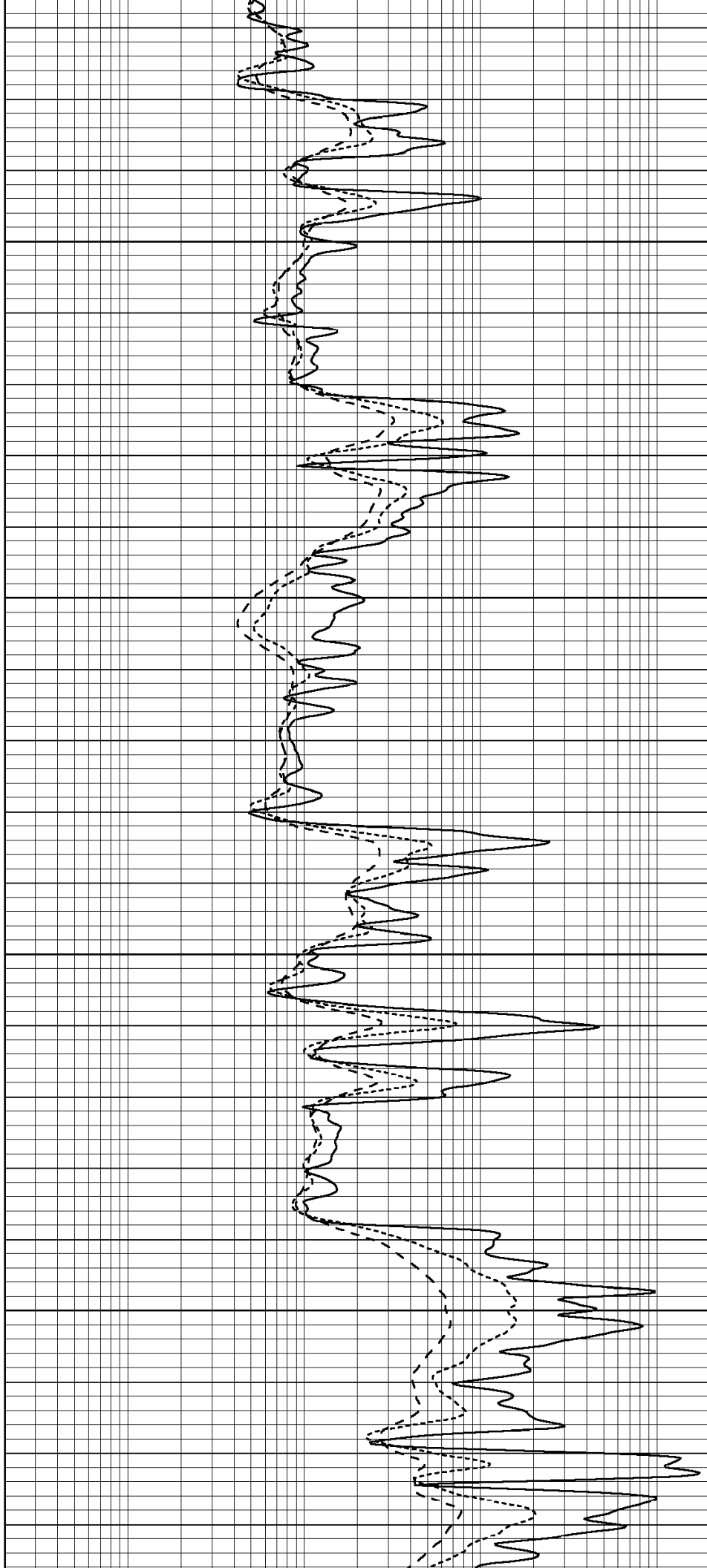


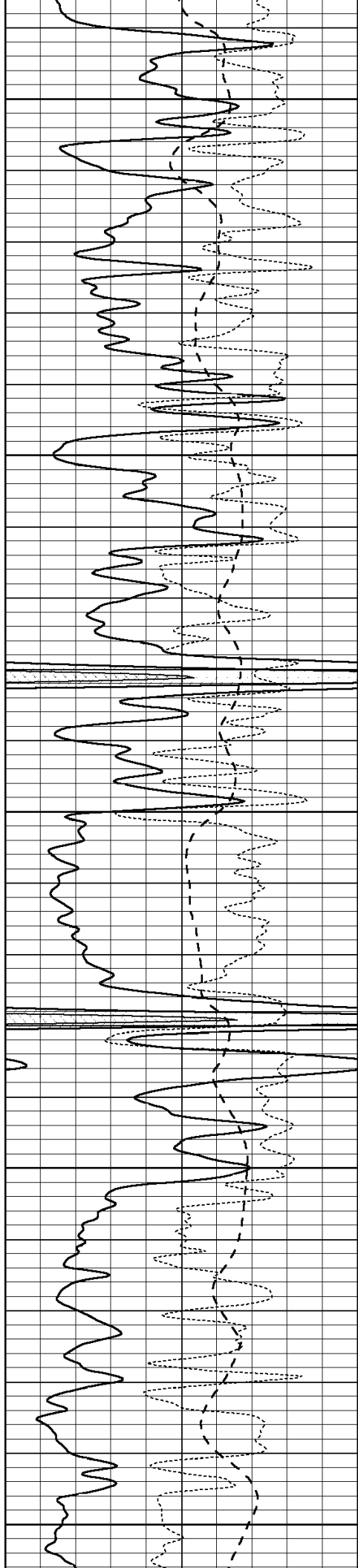
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3400

3450





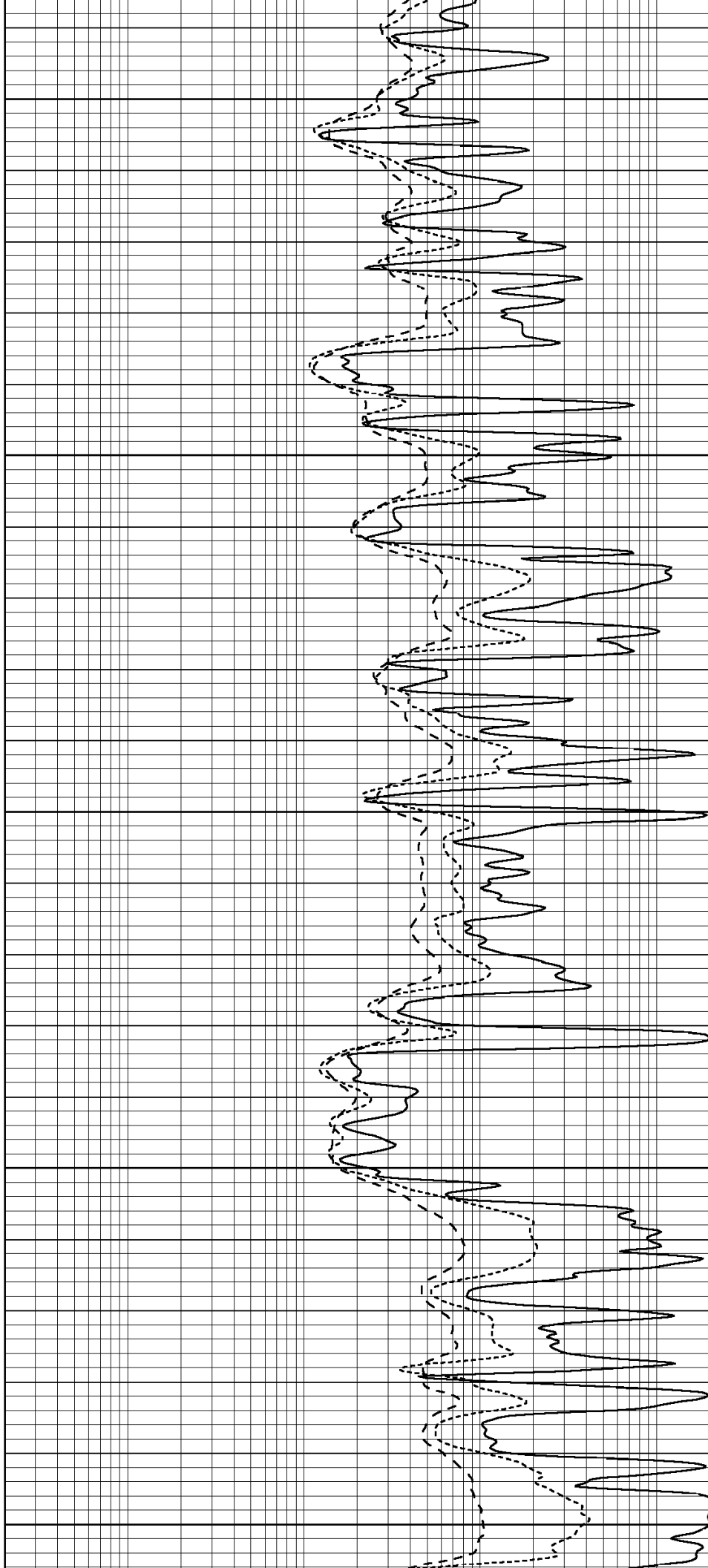
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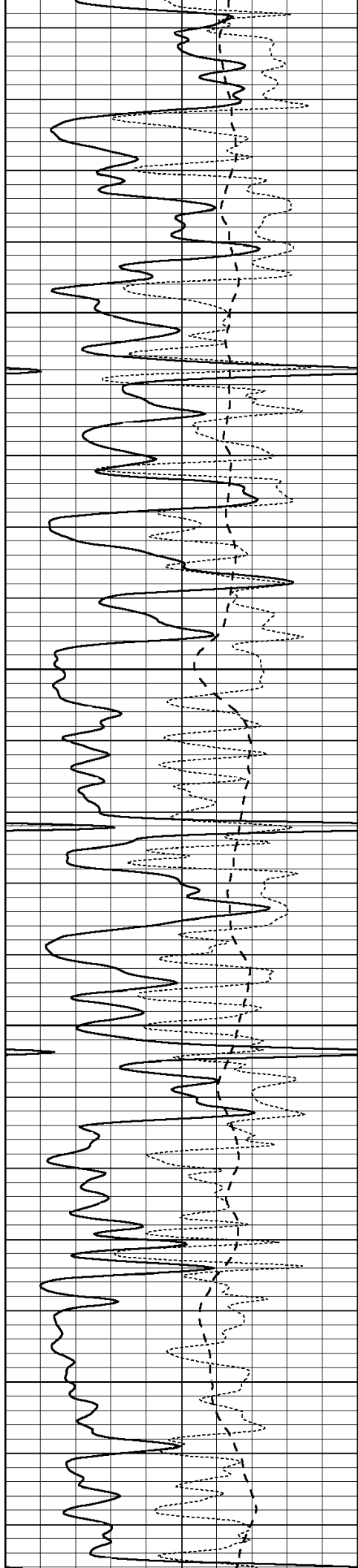
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3700



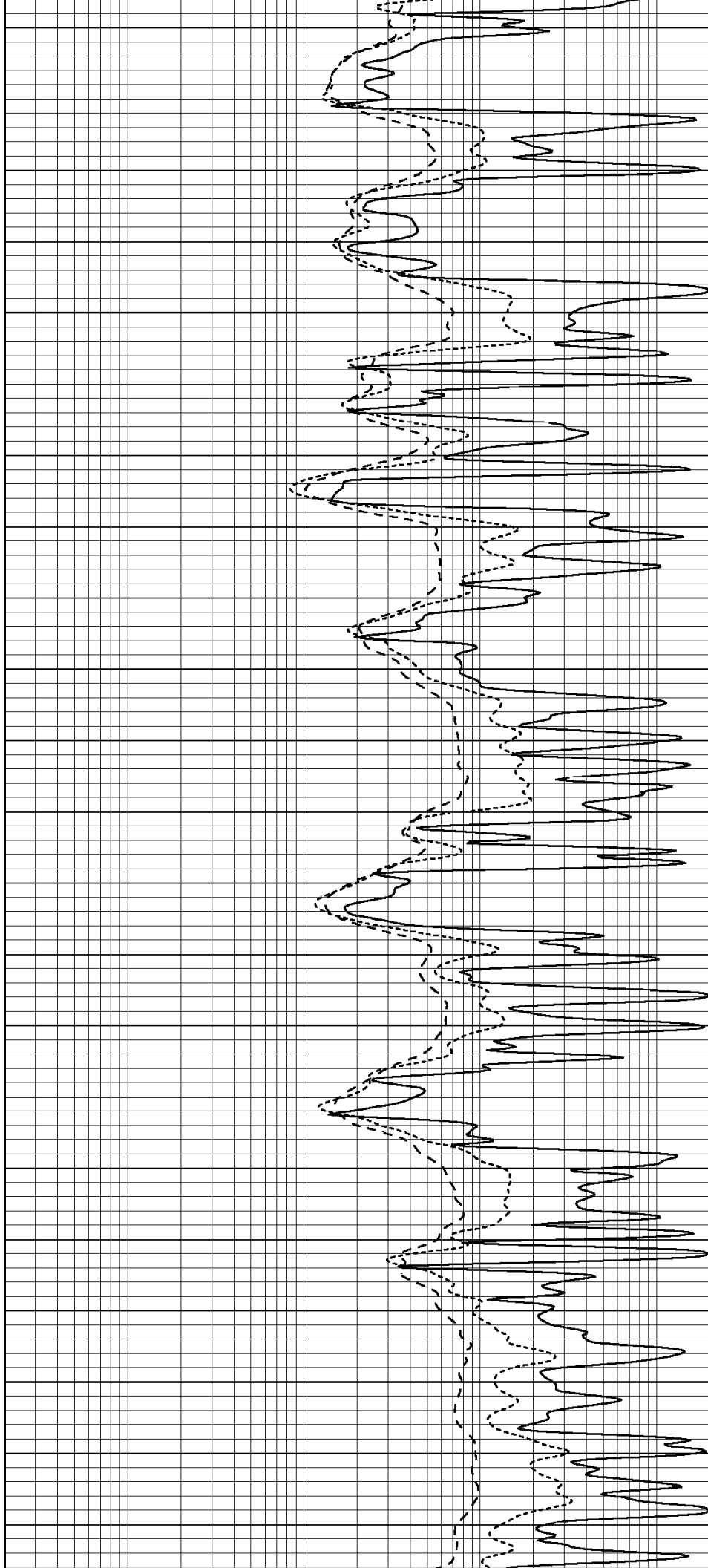


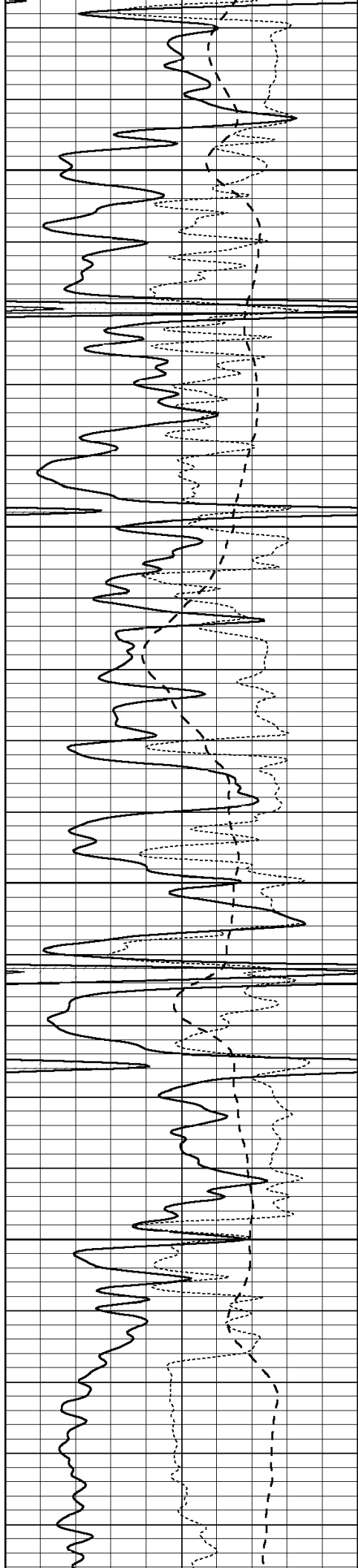
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3900



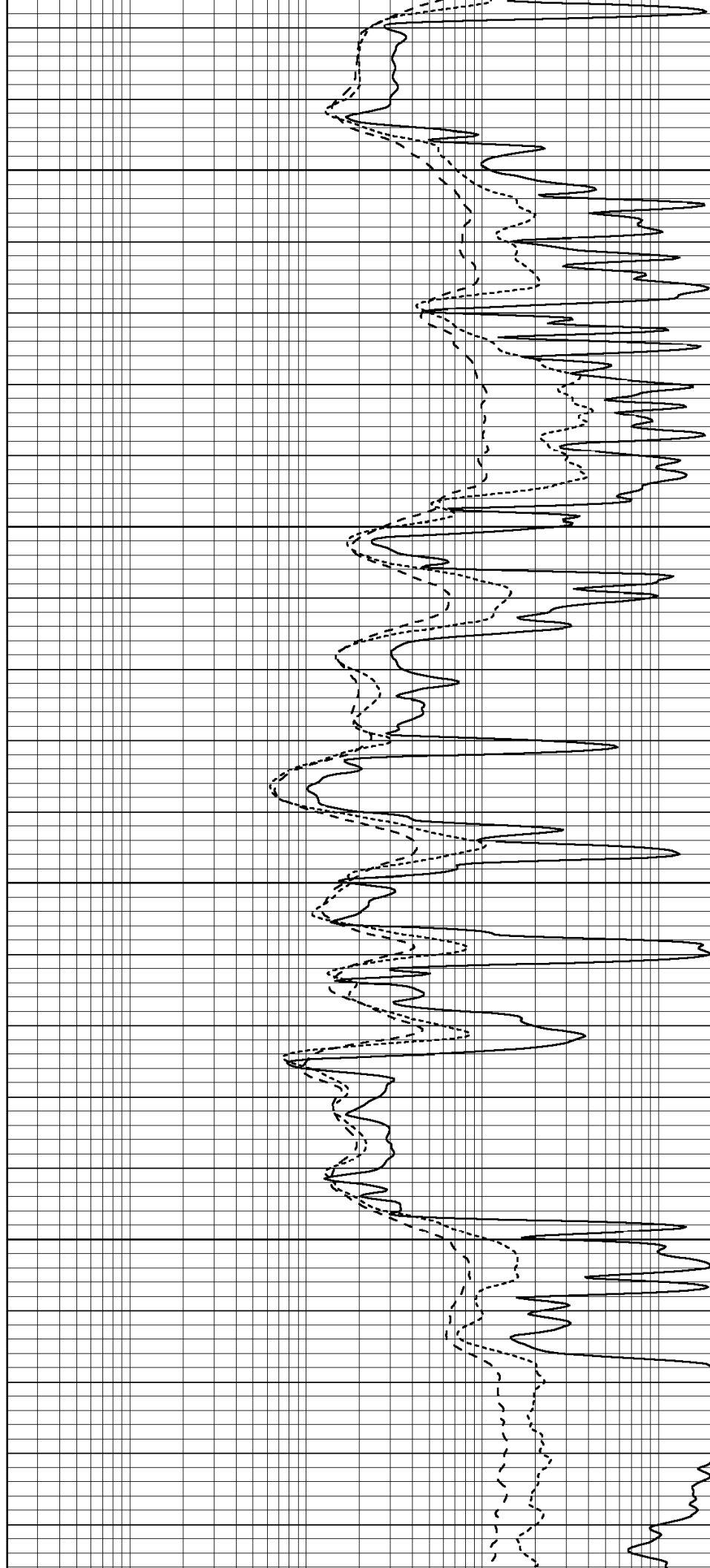


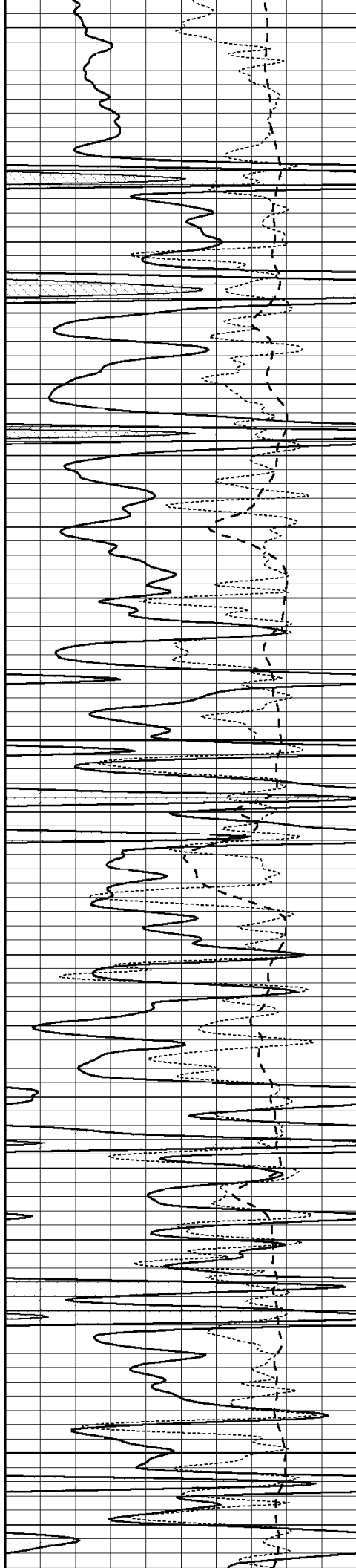
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4000

4050

4100





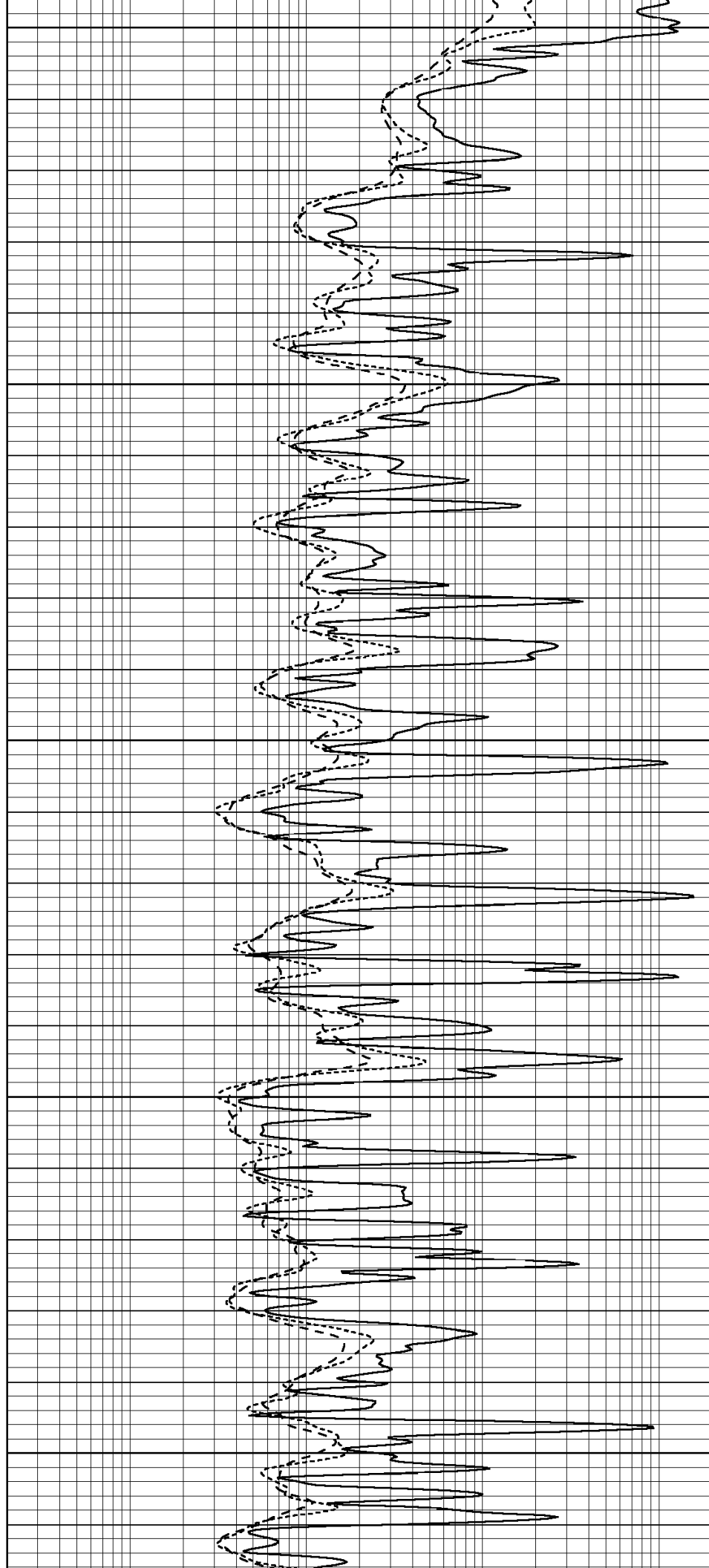
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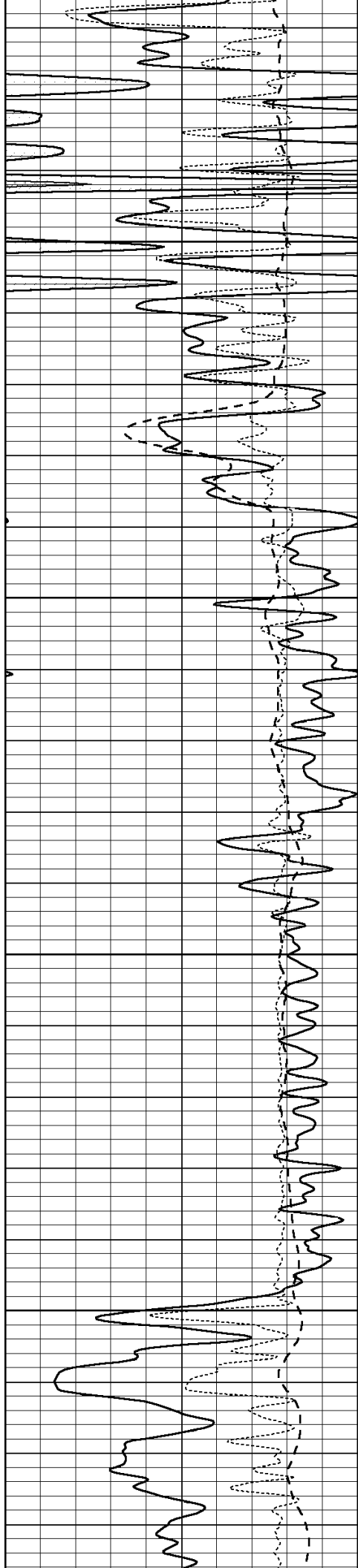
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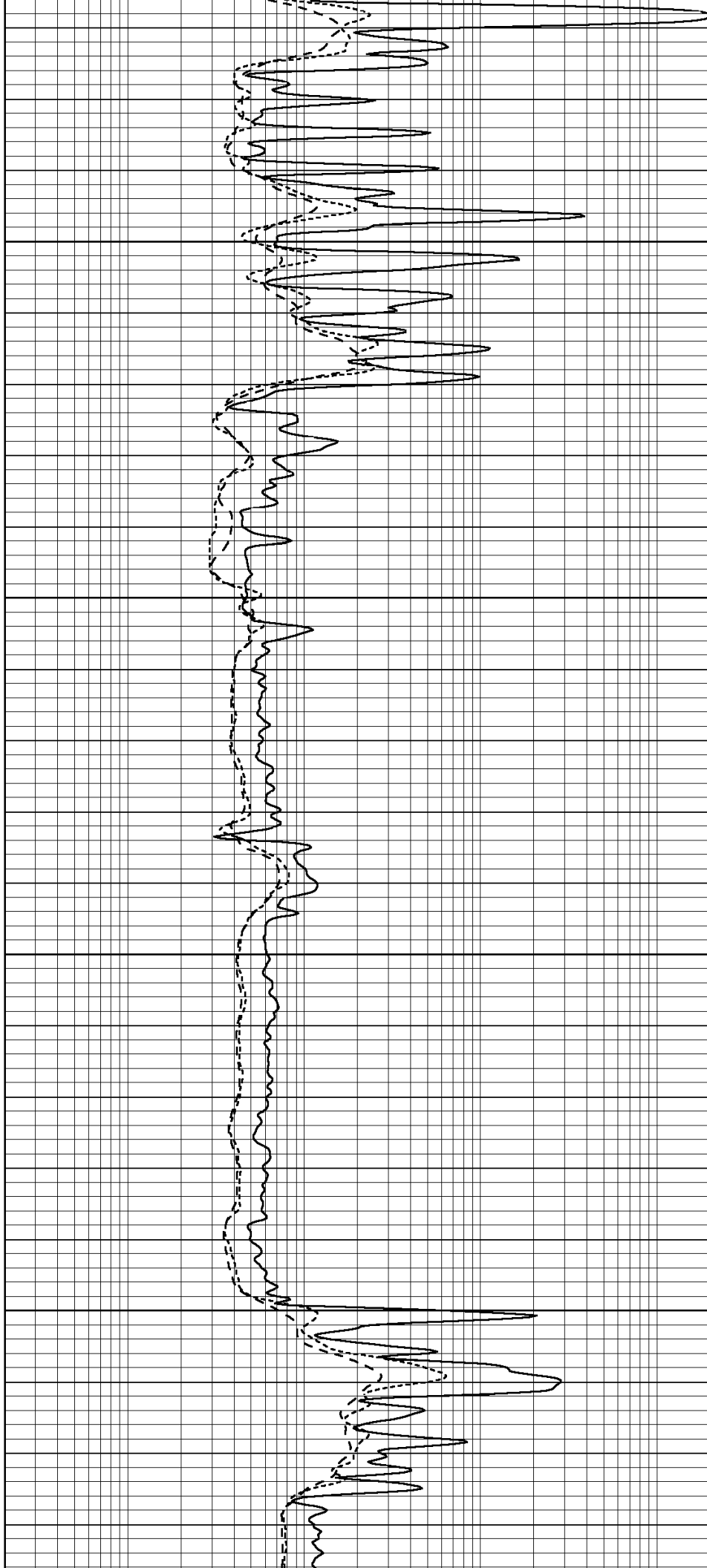


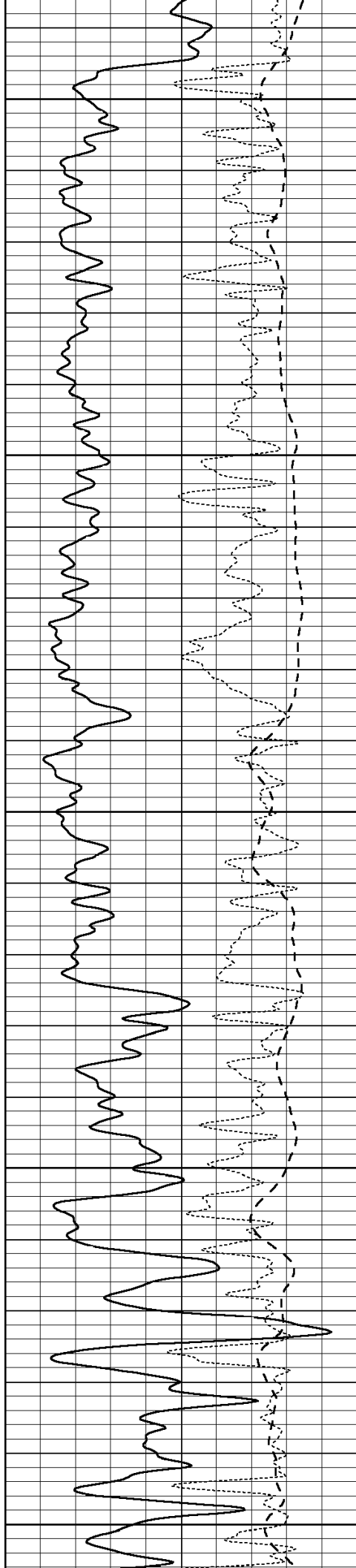
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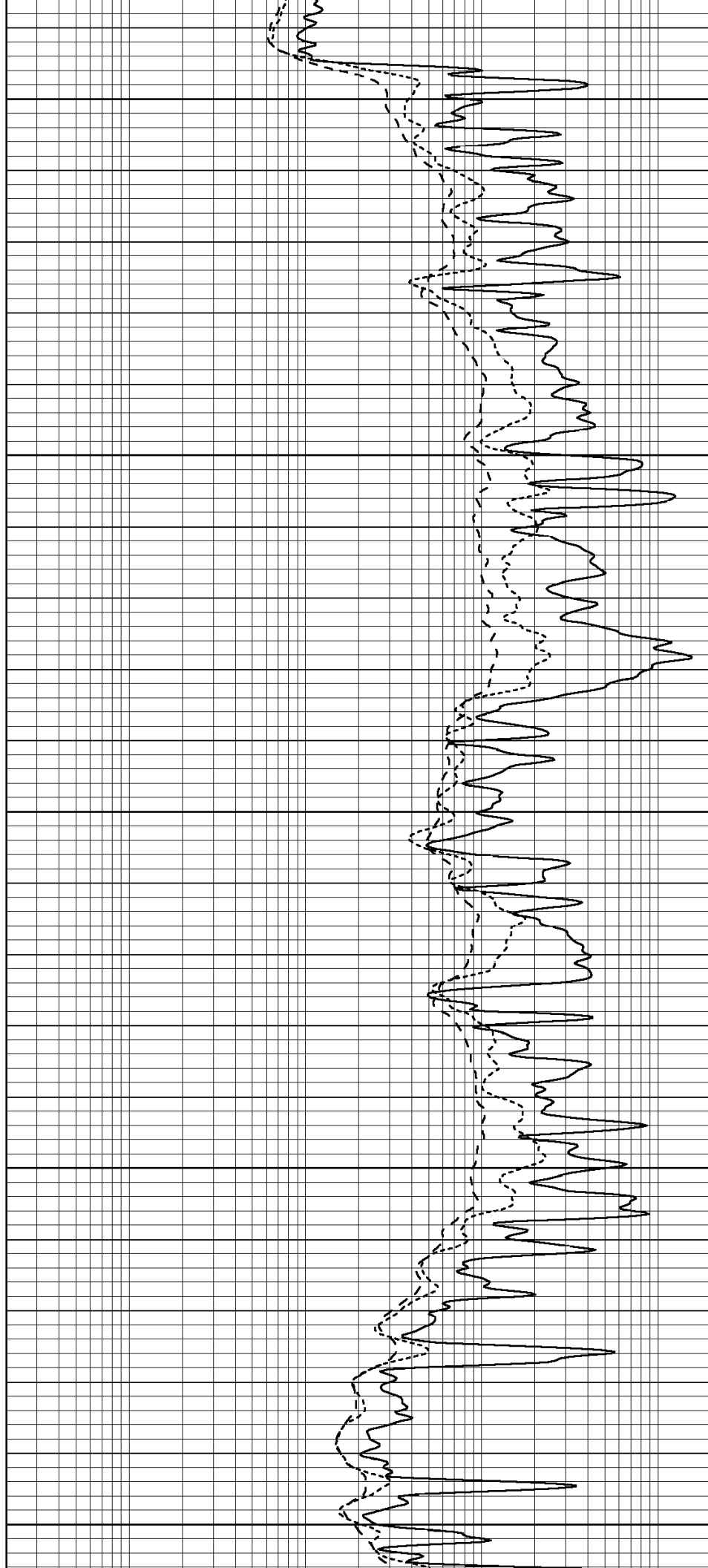
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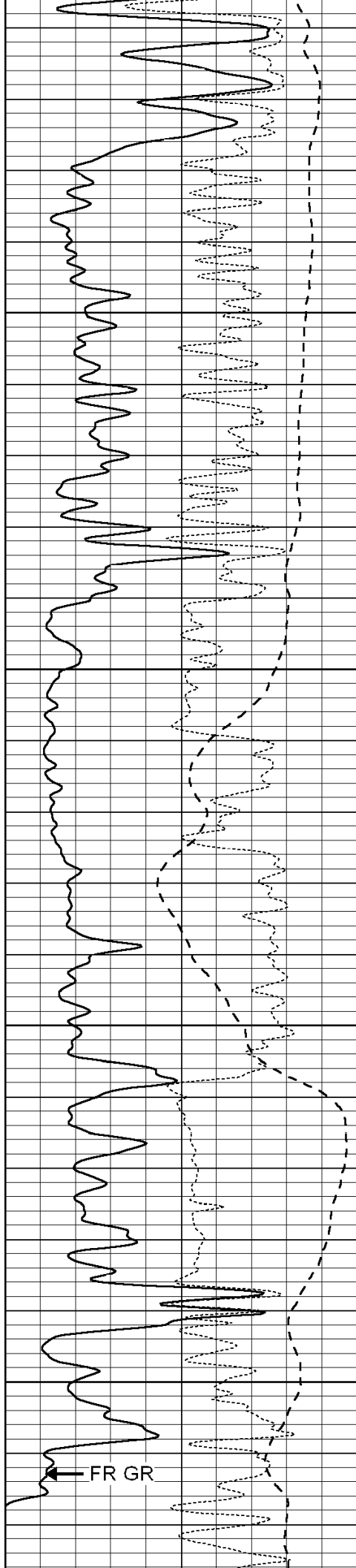
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4700

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4800





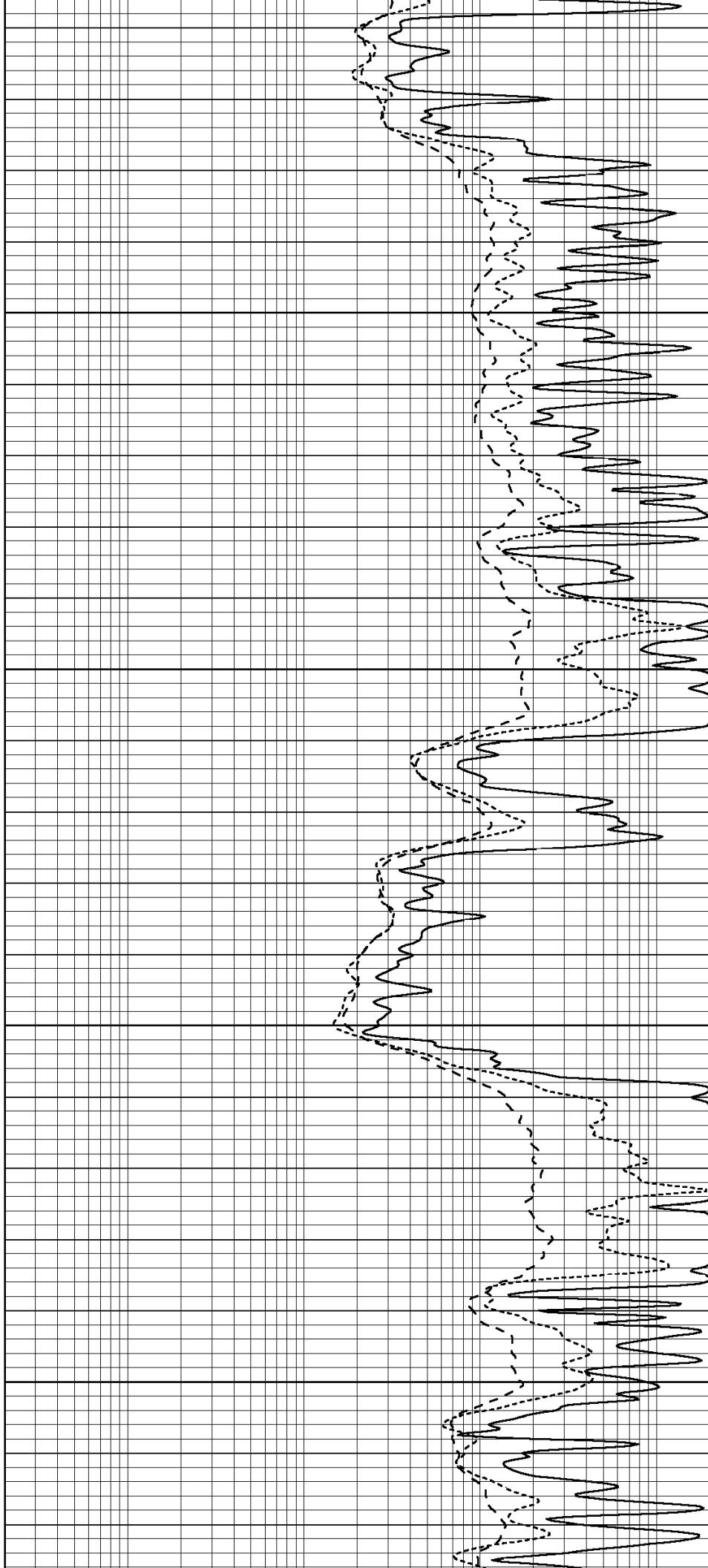
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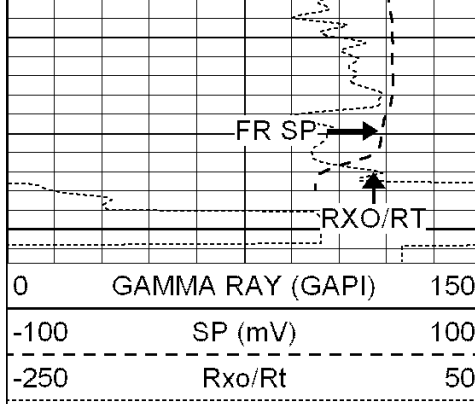
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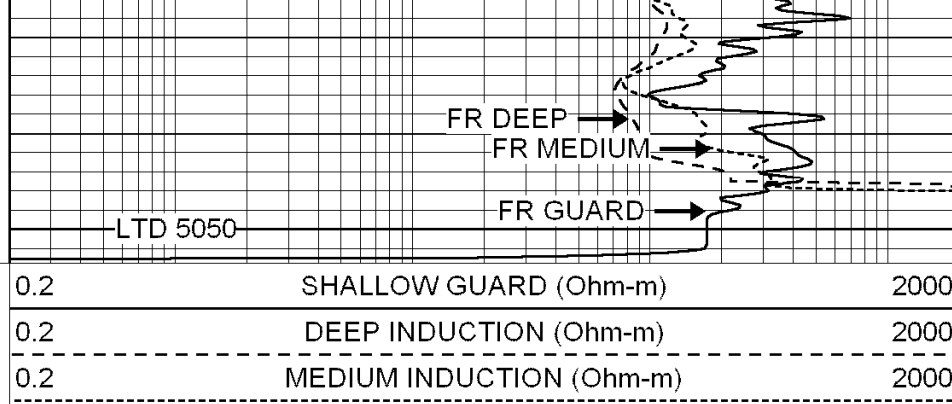
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FR GR





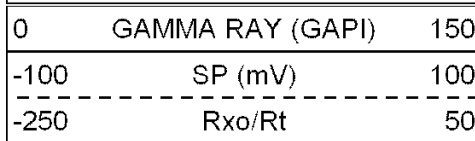
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REPEAT SECTION

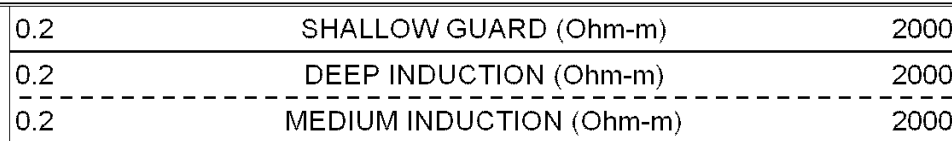
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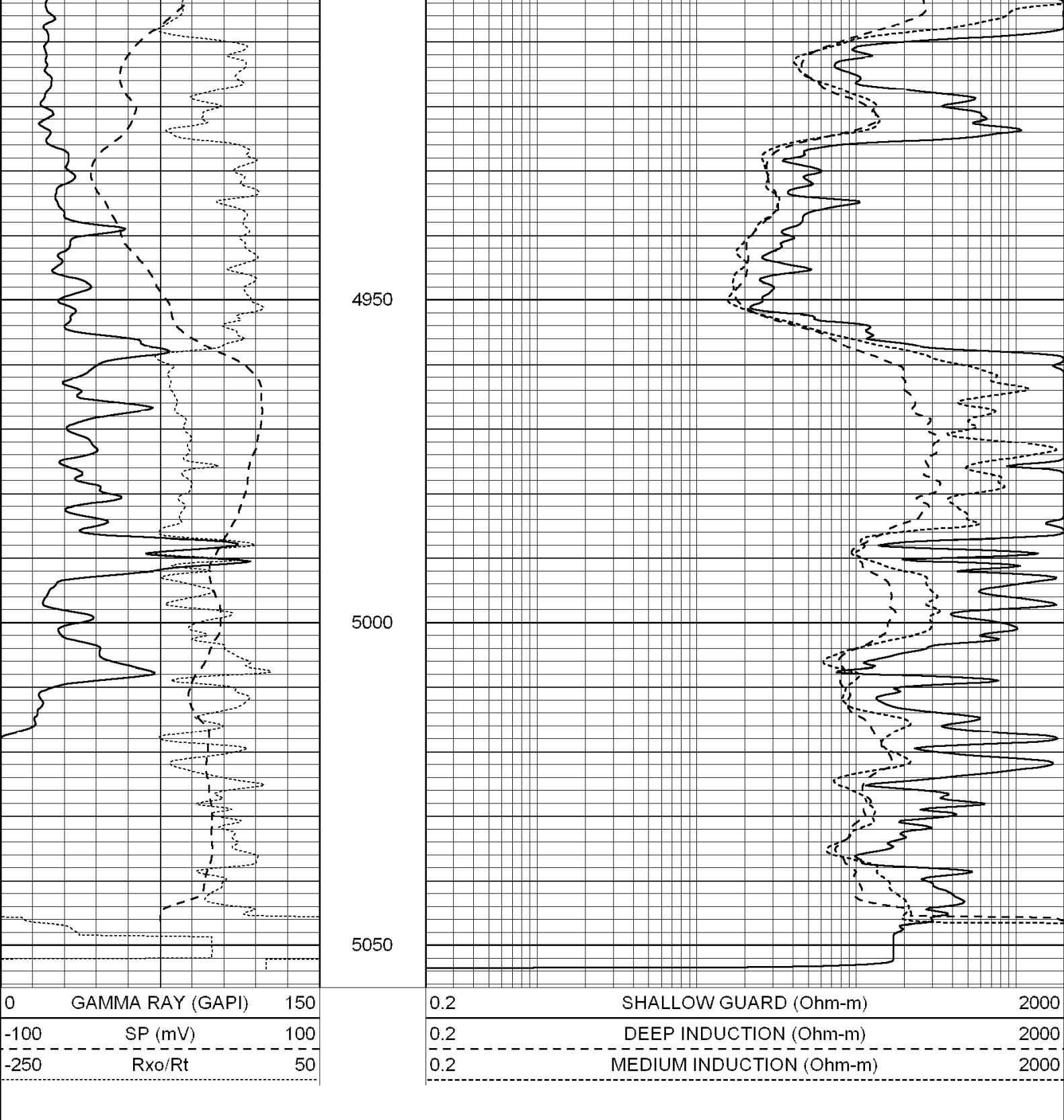


4800

4850

4900





Calibration Report		
Database File:	004396pe.db	
Dataset Pathname:	pass3.6	
Dataset Creation:	Tue Dec 22 20:37:51 2009 by Calc Open-Cased 060407	
Dual Induction Calibration Report		
Serial-Model:	DIL6-GEAR	
Performed:	Tue Dec 22 18:38:34 2009	
Readings	References	Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.644	V	0.000	400.000	mmho-m	660.000	4.000
Medium	0.020	0.738	V	0.000	462.500	mmho-m	740.000	-20.000
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	1.2	1671.8	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	Reference
High Ref	1.1	6.9
	3.0	14.0
	Gain: 3.7	Offset: 2.8

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:	Tue Dec 22 18:55:10 2009
Calibrator Value:	200.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	189.0 cps
Sensitivity:	0.7500 GAPI/cps