



SUPERIOR
Hays,
Kansas

**DUAL INDUCTION
LOG
(TIGHT HOLE)**

Company NEW GULF OPERATING, LLC.
Well A.C. FELT #1
Field WILDCAT
County SCOTT
State KANSAS

Company NEW GULF OPERATING, LLC.
Well A.C. FELT #1
Field WILDCAT
County SCOTT State KANSAS

Location: API # : 15-171-20878-0000
2523' FNL & 2621' FEL
SEC 6 TWP 18S RGE 34W
Permanent Datum GROUND LEVEL Elevation 3154
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL/PE
MEL
Elevation
K.B. 3164
D.F. 3162
G.L. 3154

Date	5/24/12
Run Number	ONE
Depth Driller	5082
Depth Logger	5086
Bottom Logged Interval	5084
Top Log Interval	00
Casing Driller	8 5/8"@251'
Casing Logger	254
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4/58
pH / Fluid Loss	10.5/10.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.900@84F
Rmt @ Meas. Temp	.675@84F
Rmc @ Meas. Temp	1.08@84F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.600@126F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	1:30 P.M.
Maximum Recorded Temperature	126F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	CURTIS COVEY
	DANNY BIRDWELL

<<< 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 HAYS, KANSAS (785) 628-6395
DIRECTIONS
SCOTT CITY, KS. (4 WAY STOP) 12W. ON HWY 96 TO "SCOTT/WICHITA COUNTY LINE", 1 1/2N., 1/2E.
INTO AND BACK SOUTH



SUPERIOR
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MAIN SECTION

Database File: 408776pe.db
 Dataset Pathname: pass3.8
 Presentation Format: dil2
 Dataset Creation: Thu May 24 15:49:56 2012
 Charted by: Depth in Feet scaled 1:600

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

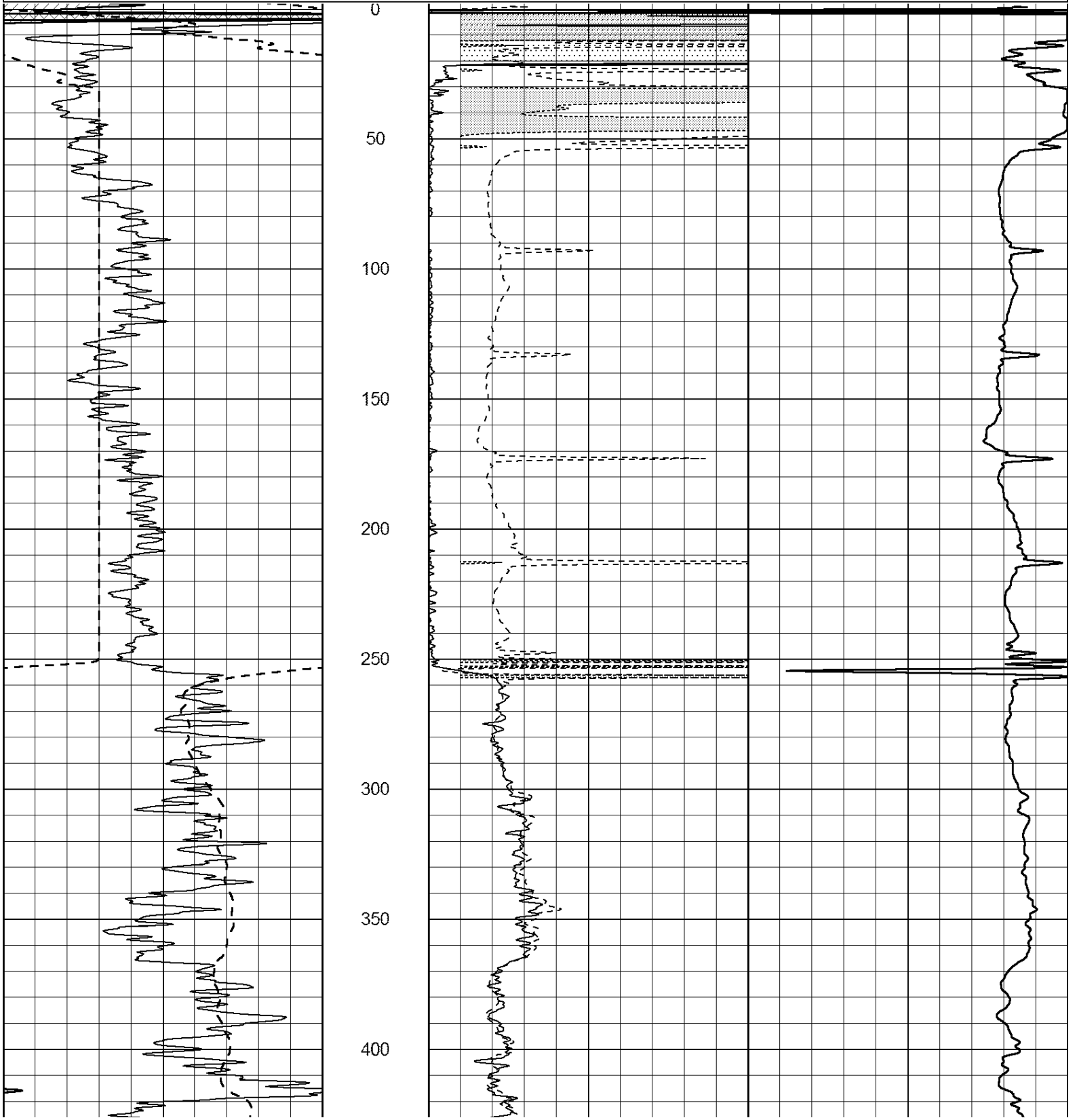
0 RLL3 (Ohm-m) 50

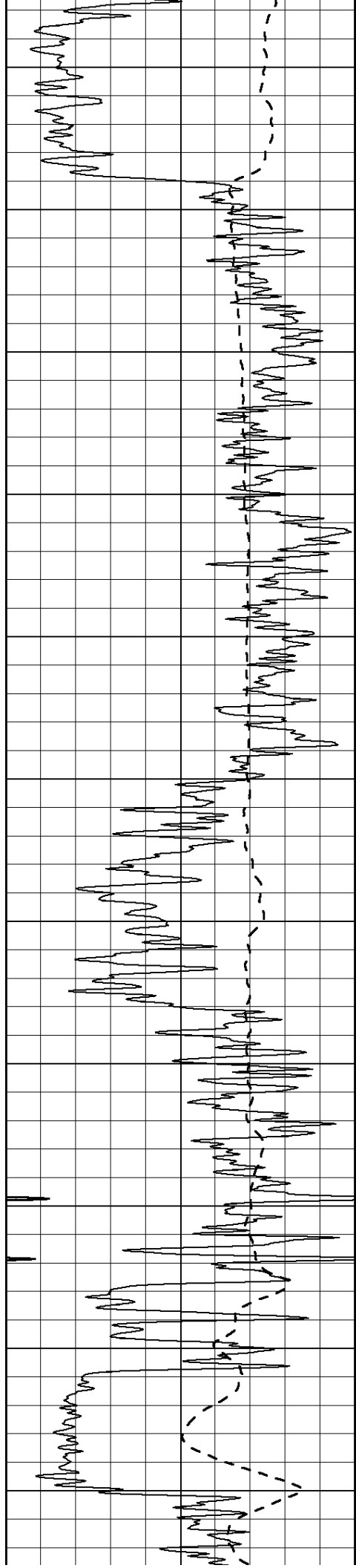
0 RILD (Ohm-m) 50

1000 CILD (mmho/m) 0

50 RILD X10 (Ohm-m) 500

50 RLL3 X10 (Ohm-m) 500





450

500

550

600

650

700

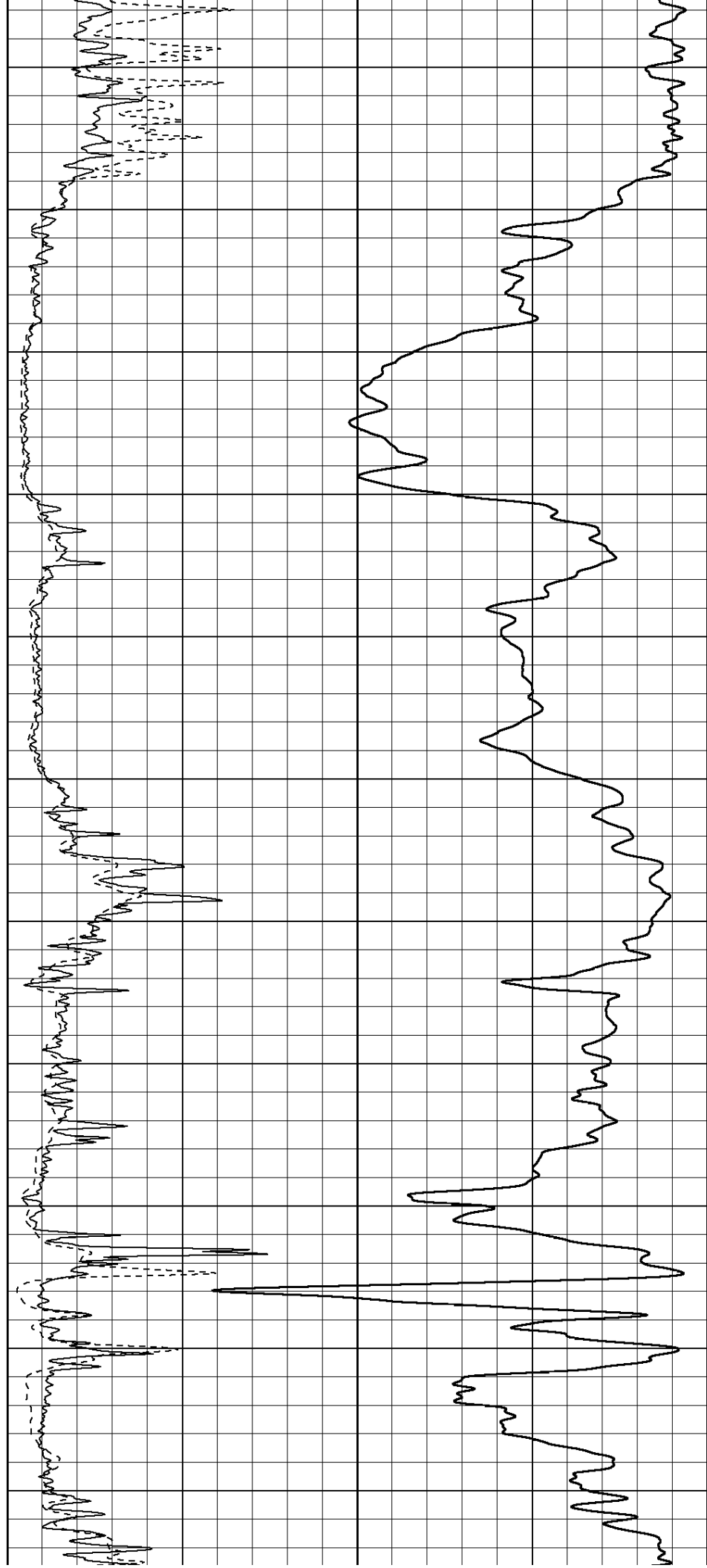
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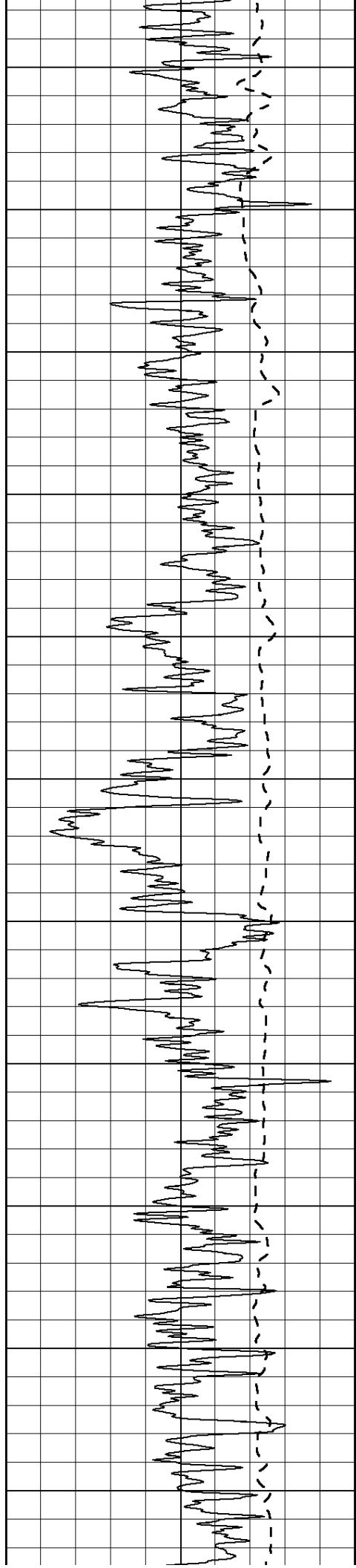
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850

900

950





1000

1050

1100

1150

1200

1250

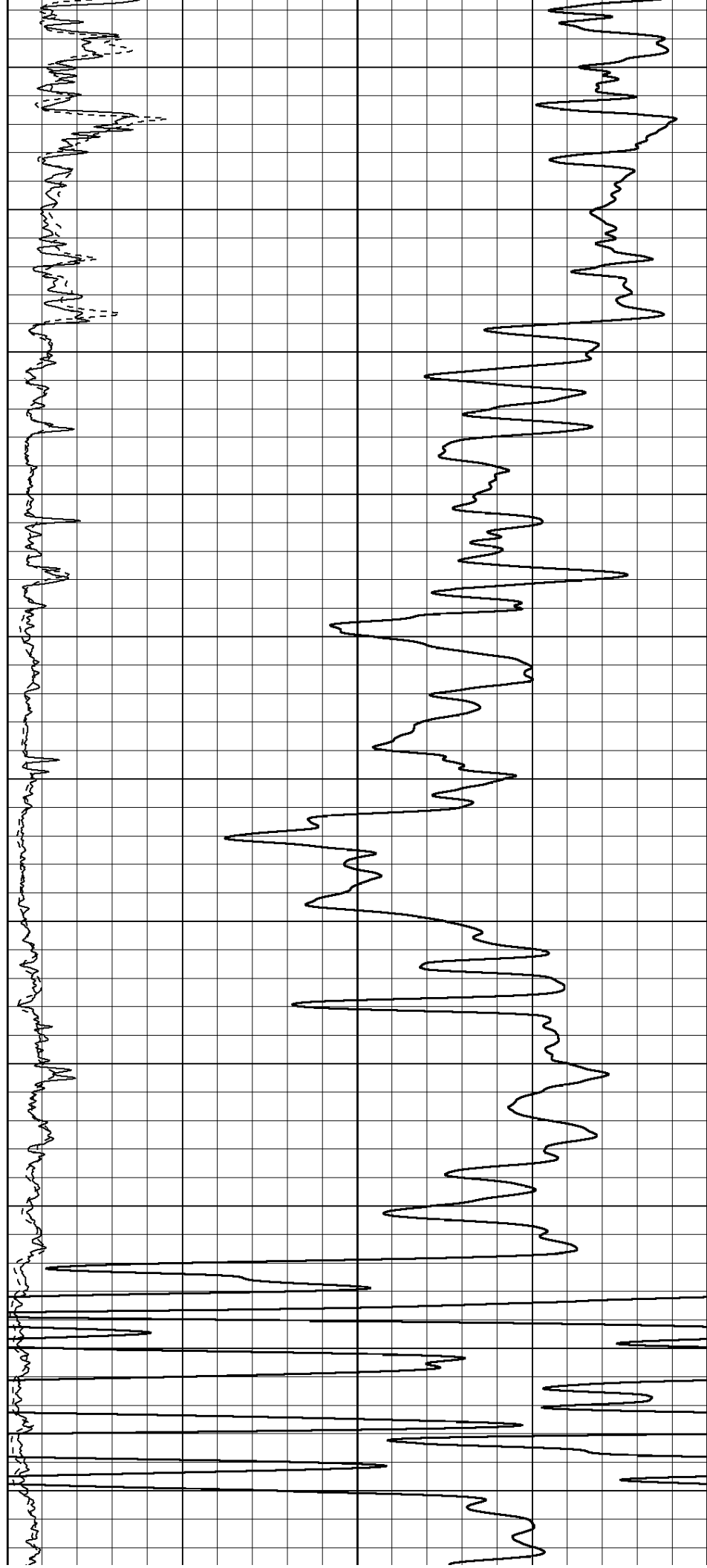
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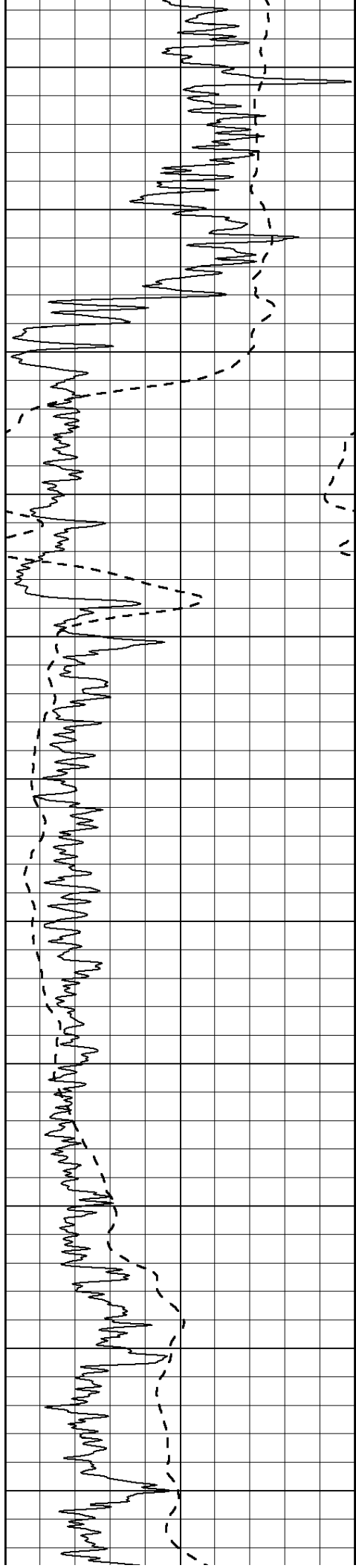
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1400

1450

1500





1550

1600

1650

1700

1750

1800

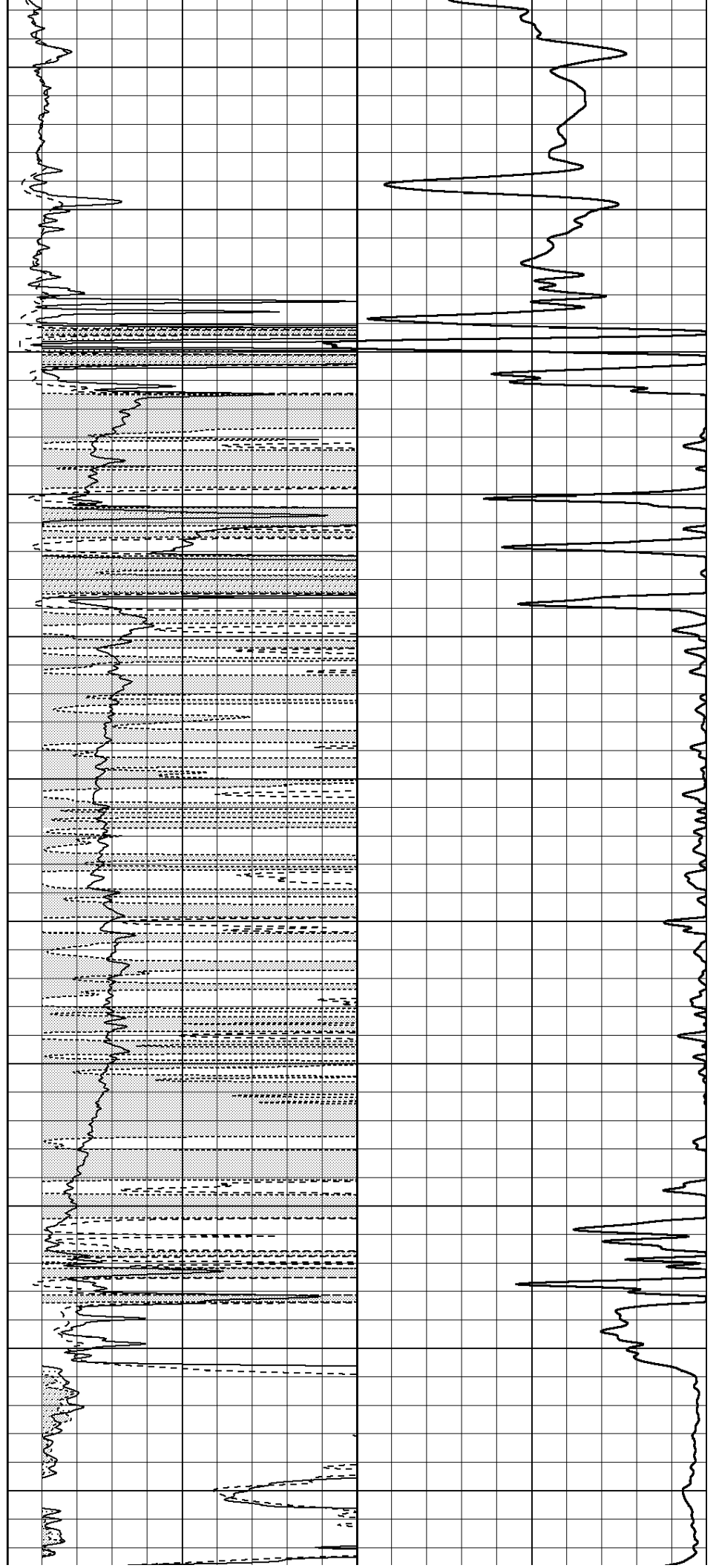
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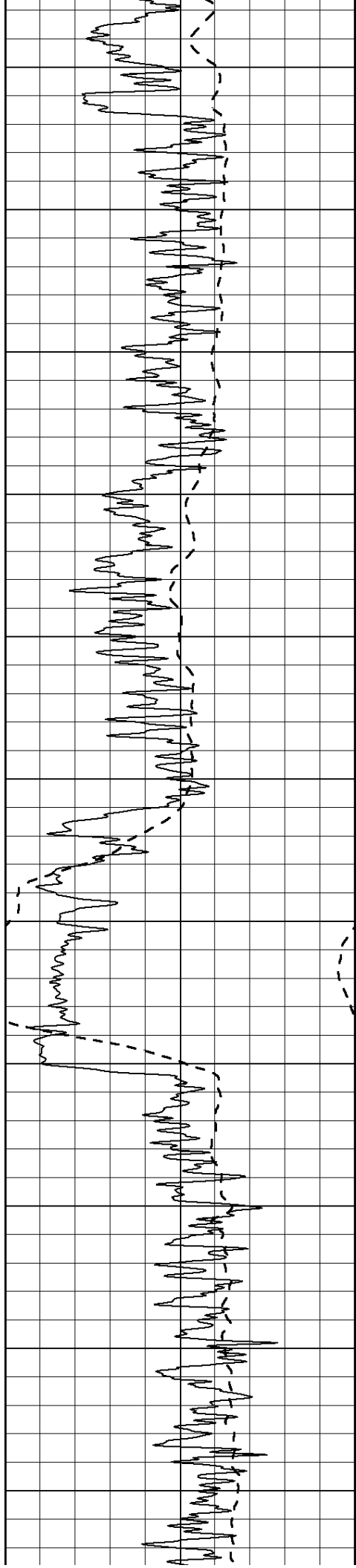
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1950

2000

2050





2100

2150

2200

2250

2300

2350

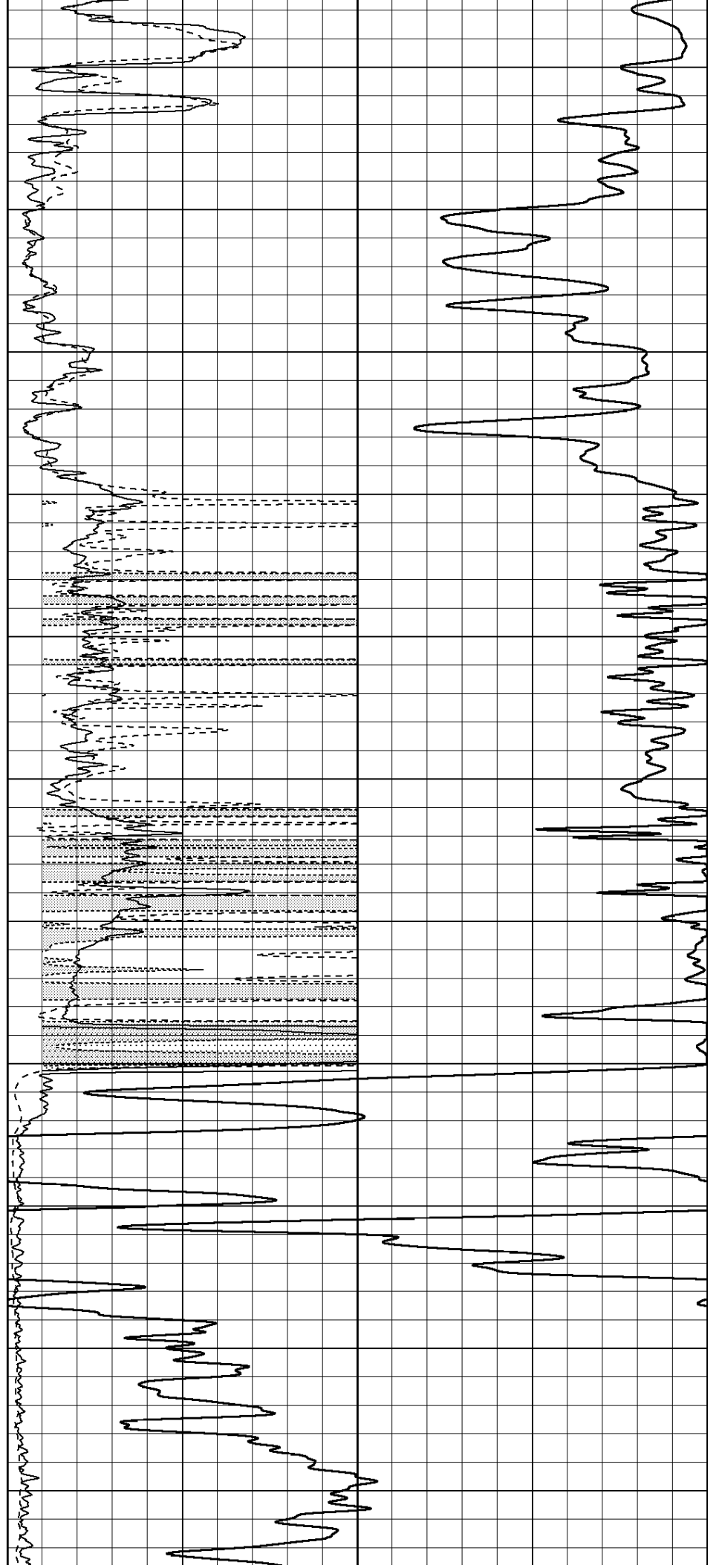
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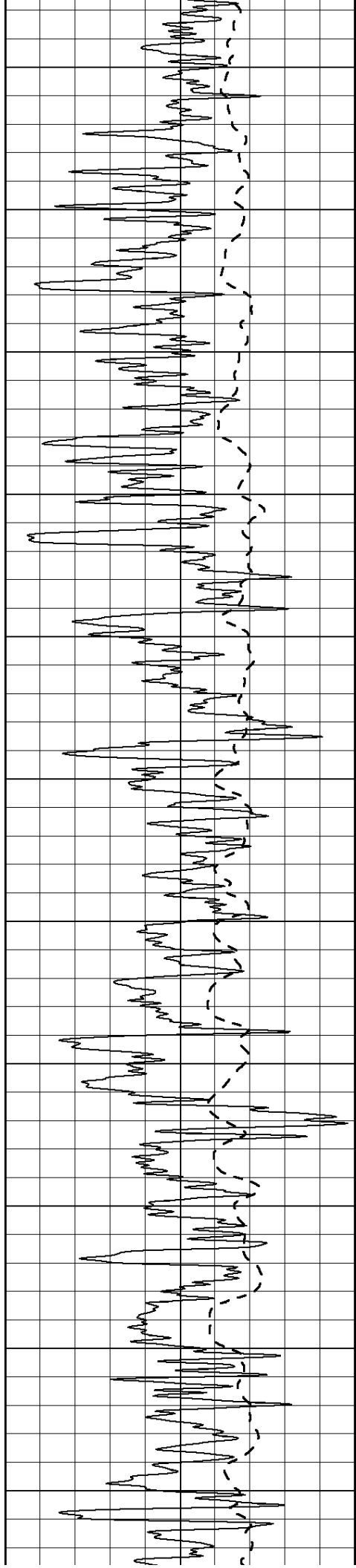
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2500

2550

2600





2650

2700

2750

2800

2850

2900

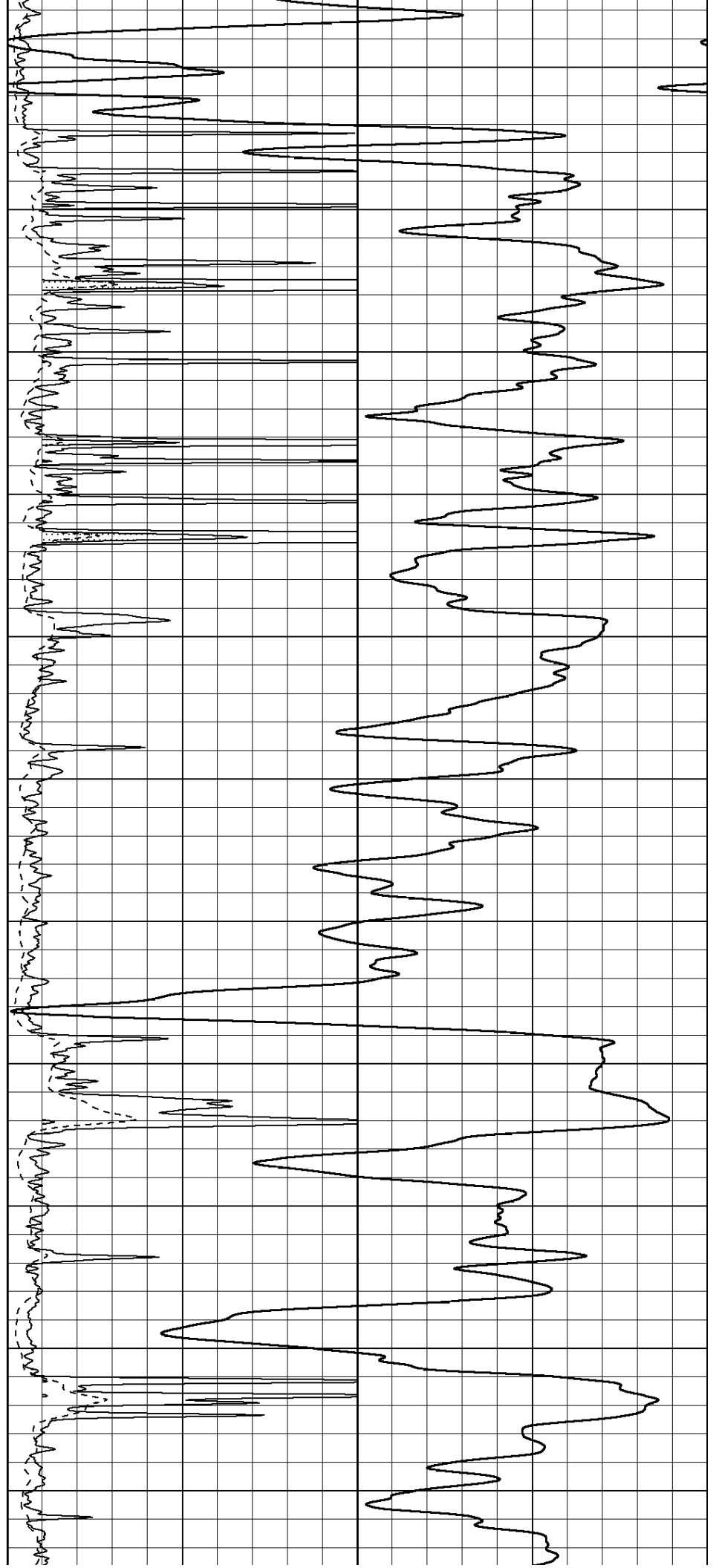
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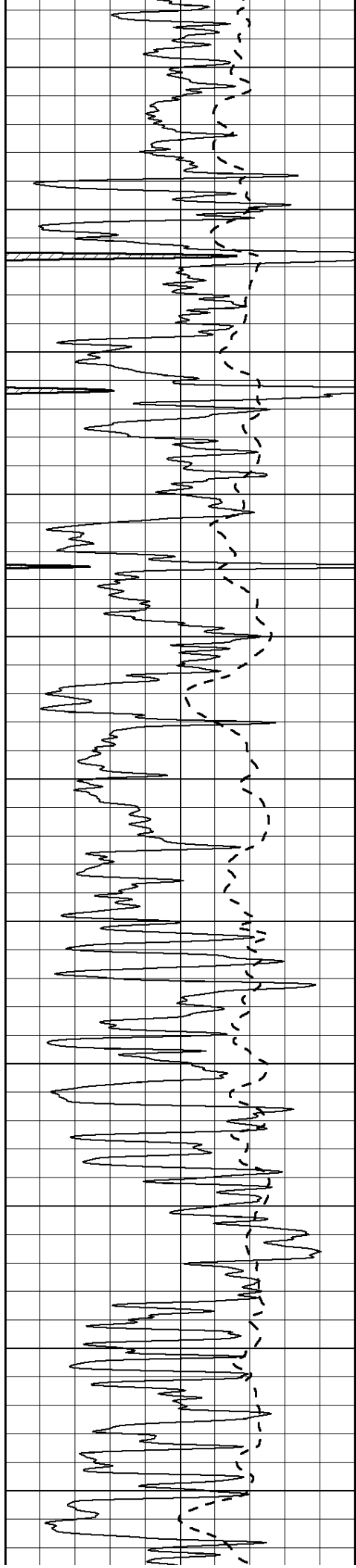
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3050

3100

3150





3200

3250

3300

3350

3400

3450

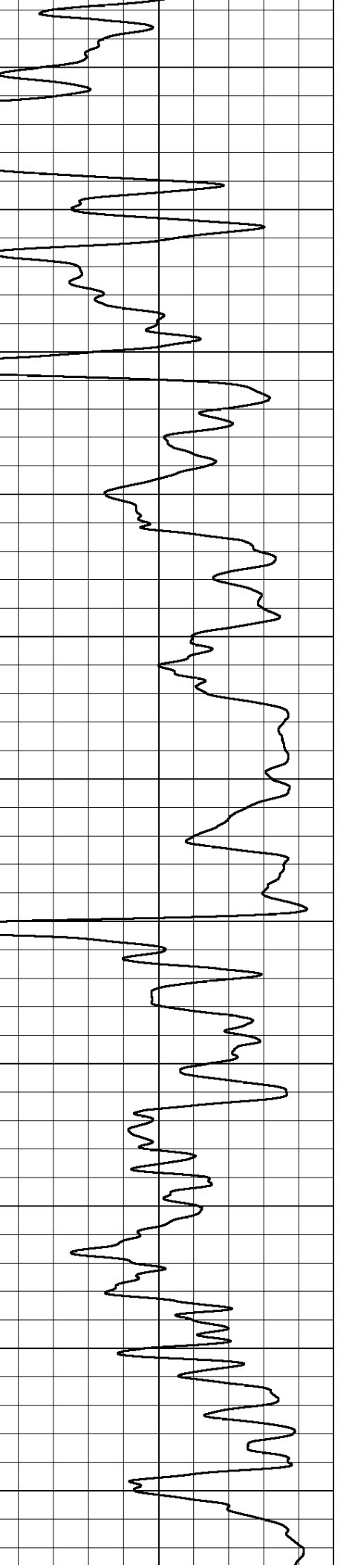
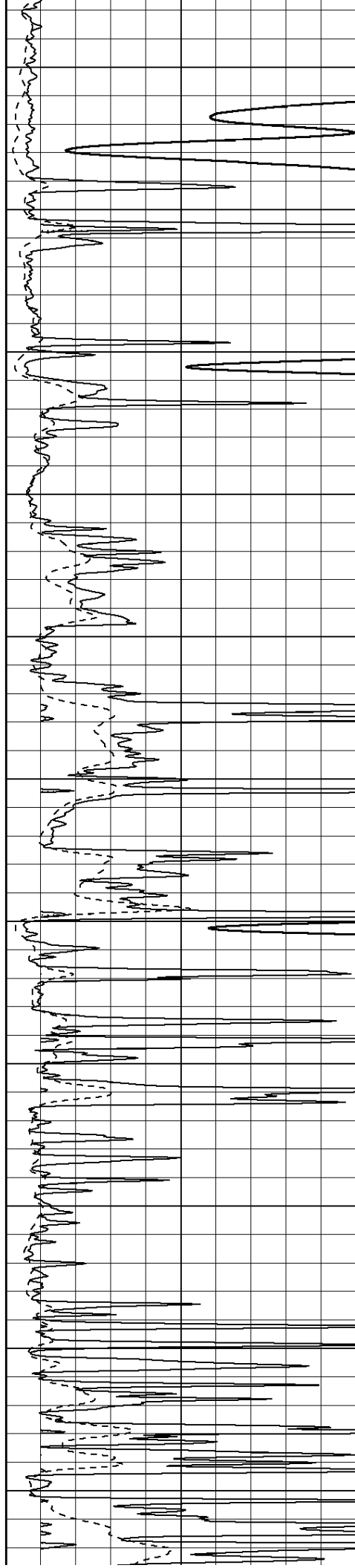
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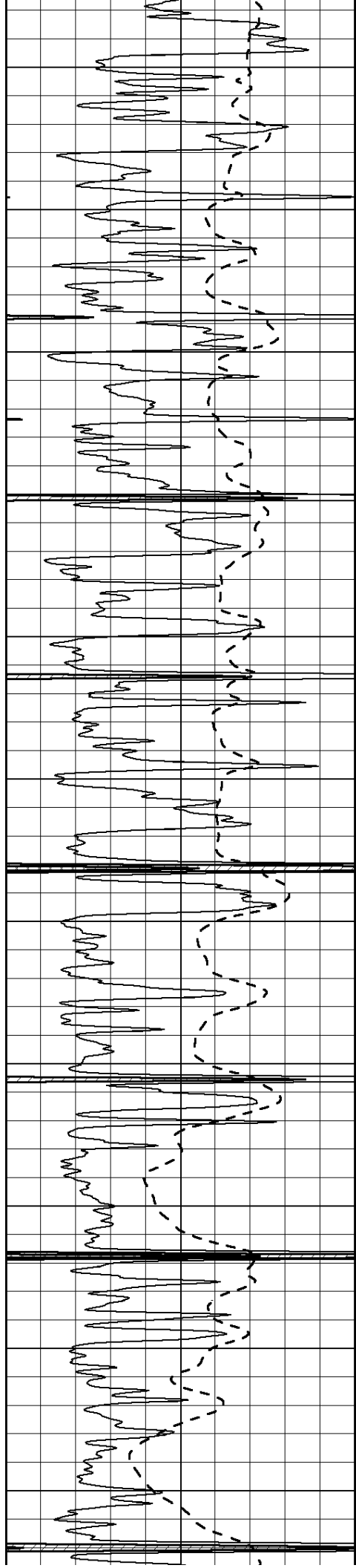
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3600

3650

3700





3750

3800

3850

3900

3950

4000

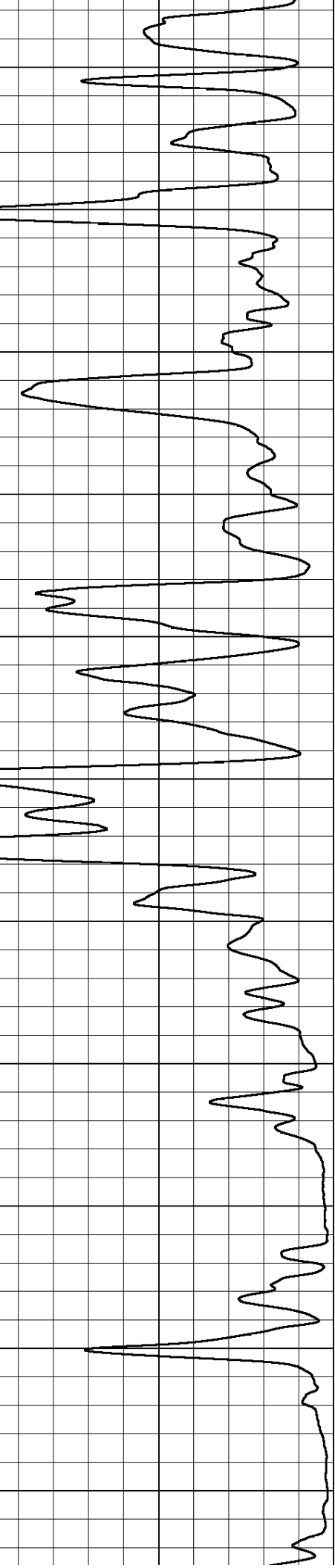
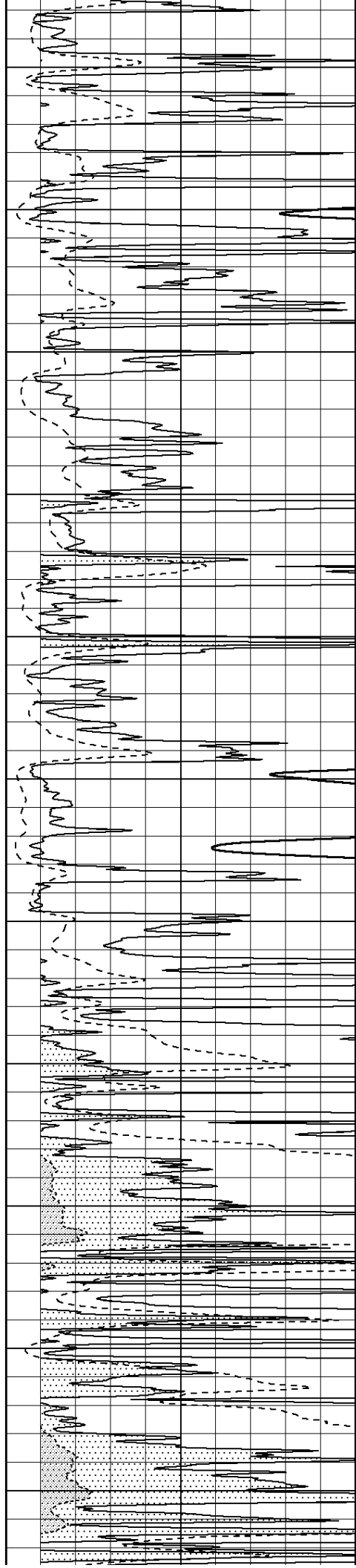
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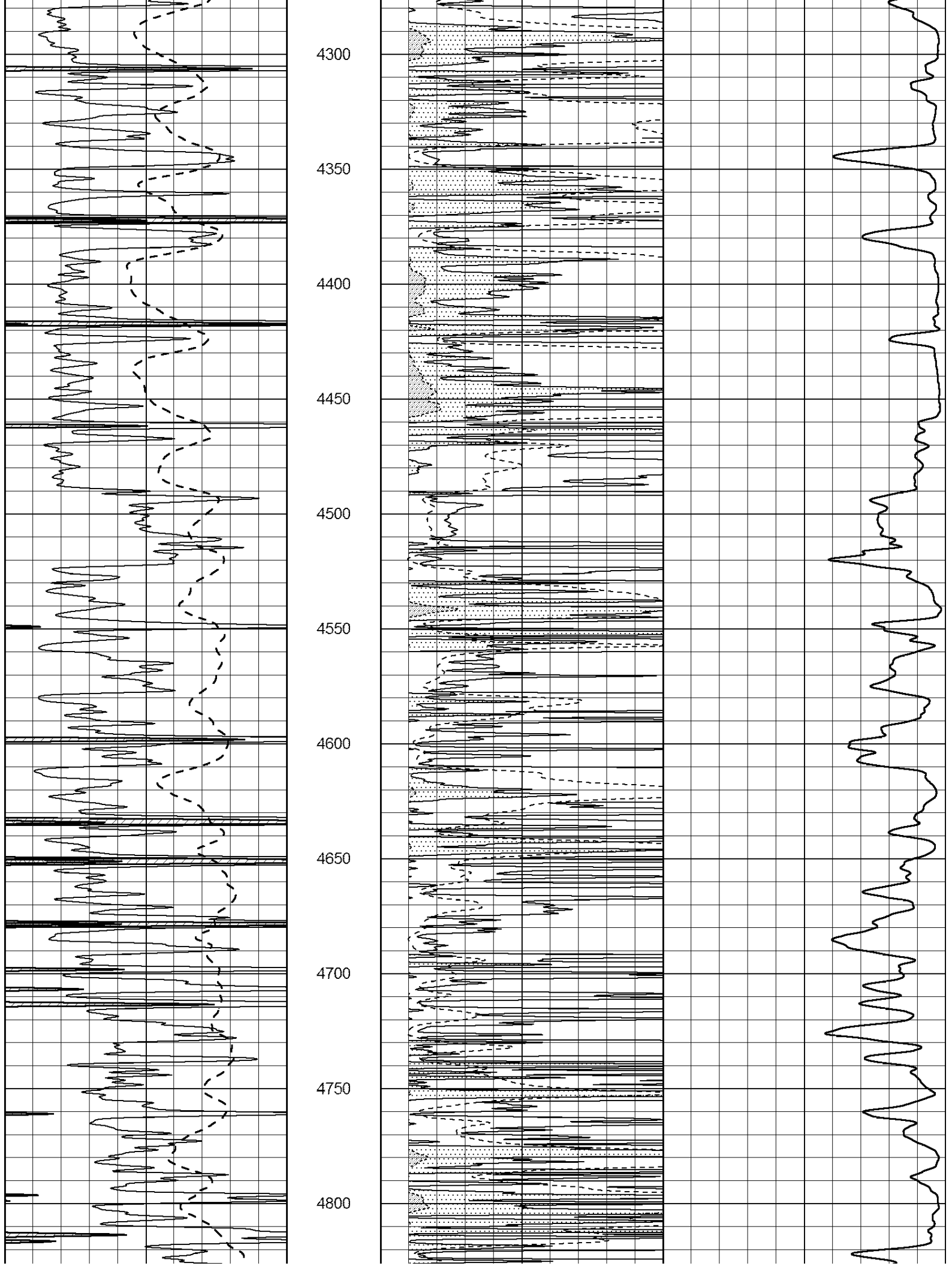
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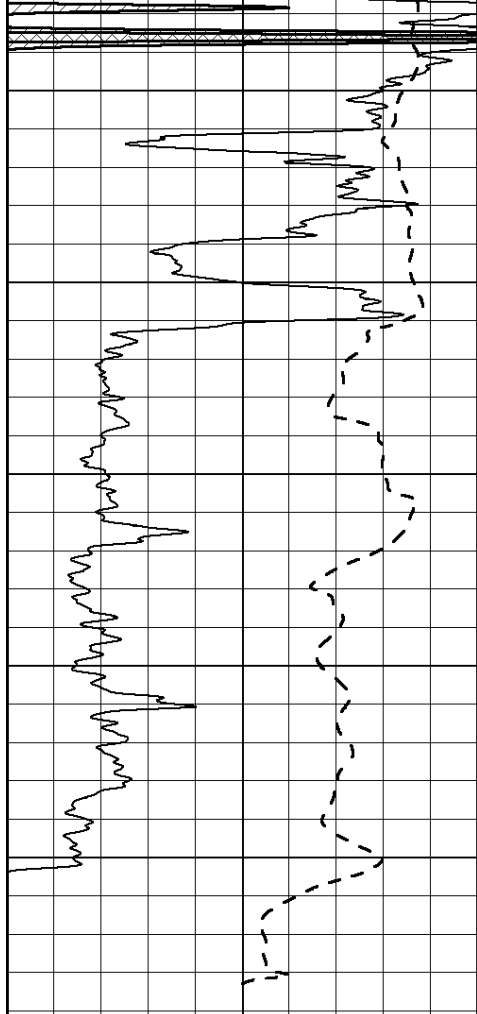
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4200

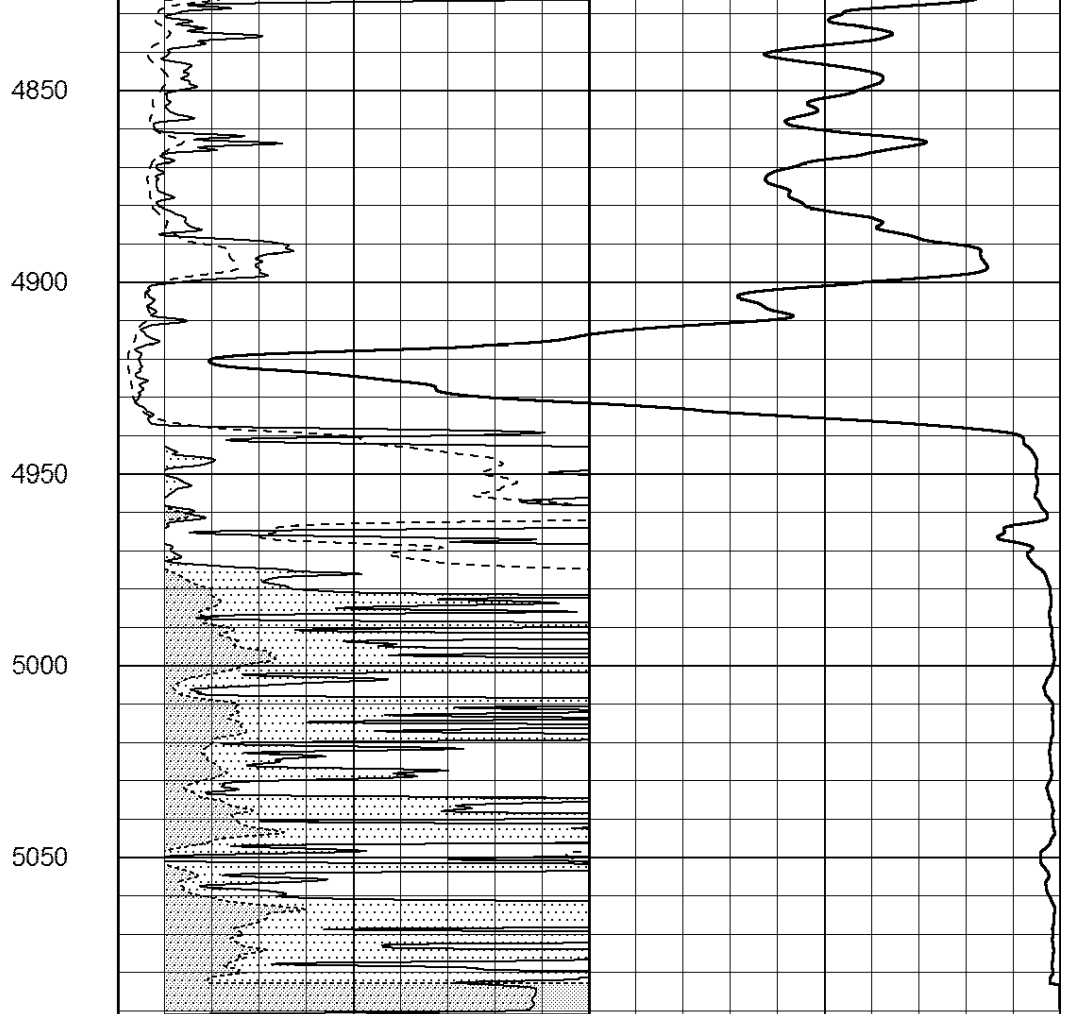
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0 Gamma Ray (GAPI) 150
 -100 SP (mV) 100



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



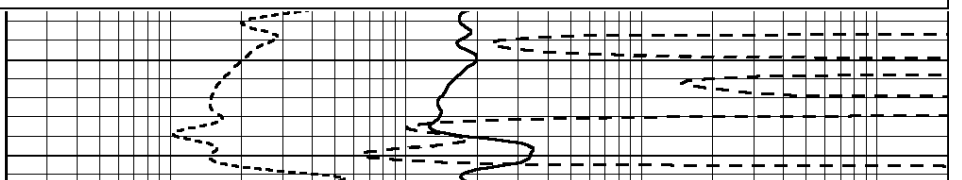
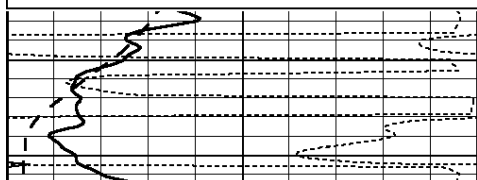
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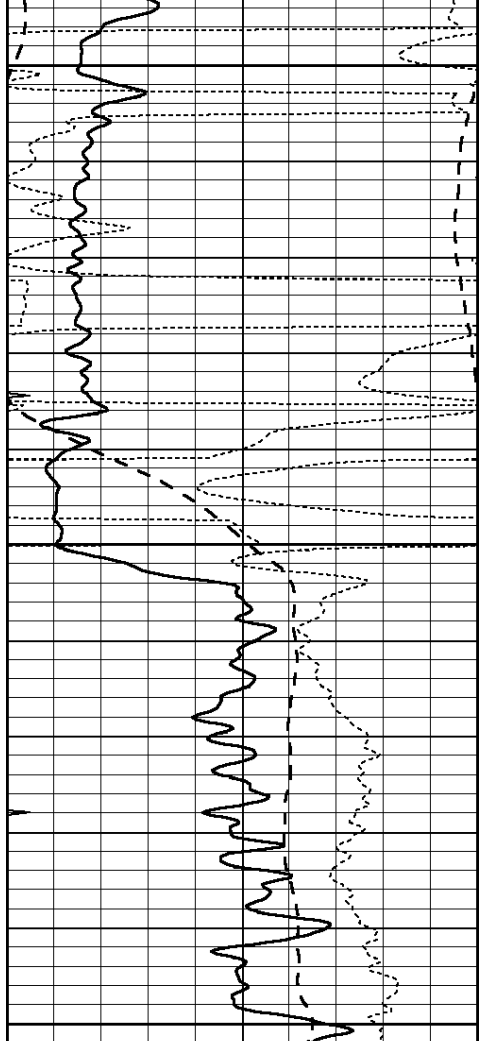
ANHYDRITE

Database File: 408776pe.db
 Dataset Pathname: pass3.9
 Presentation Format: dil
 Dataset Creation: Thu May 24 15:56:45 2012
 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



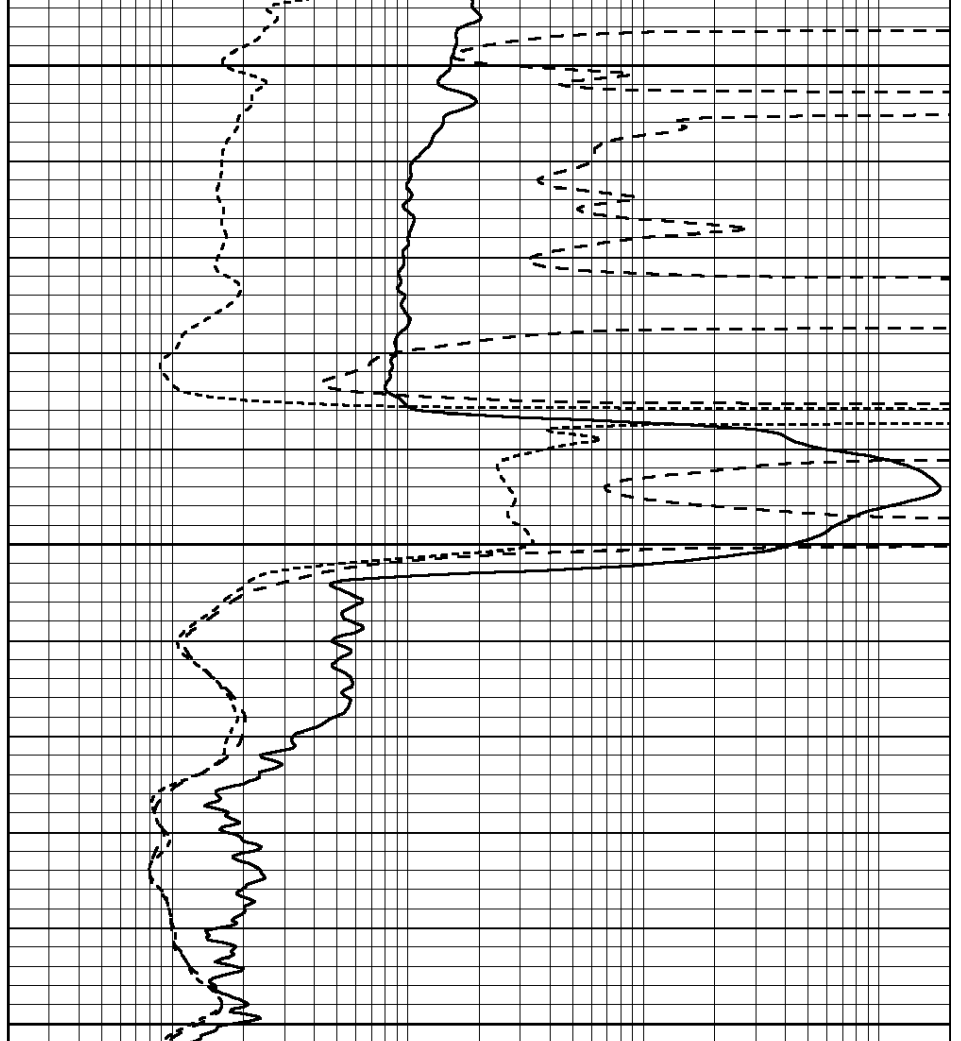


2400

2450

2500

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



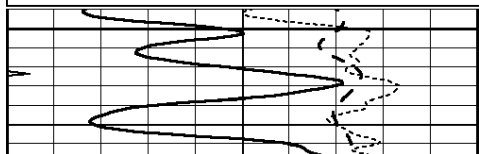
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MAIN SECTION

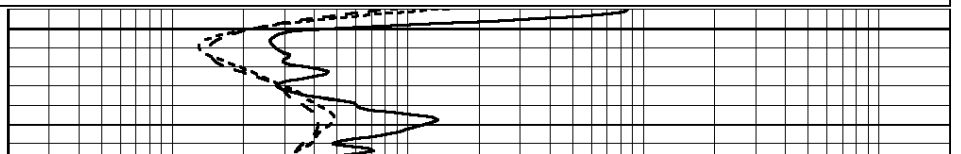
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 Dataset Pathname: pass3.8
 Presentation Format: dil
 Dataset Creation: Thu May 24 15:49:56 2012
 Charted by: Depth in Feet scaled 1:240

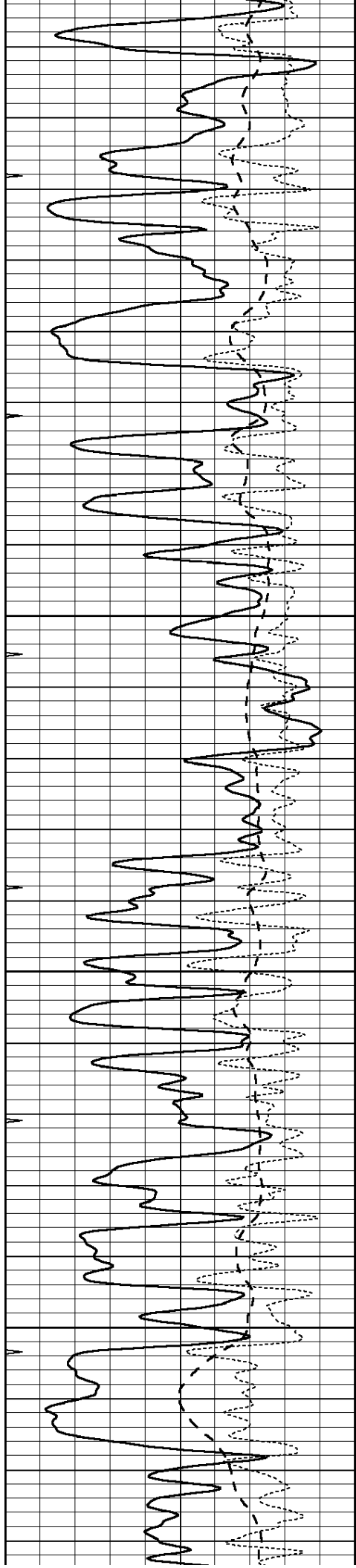
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



3500



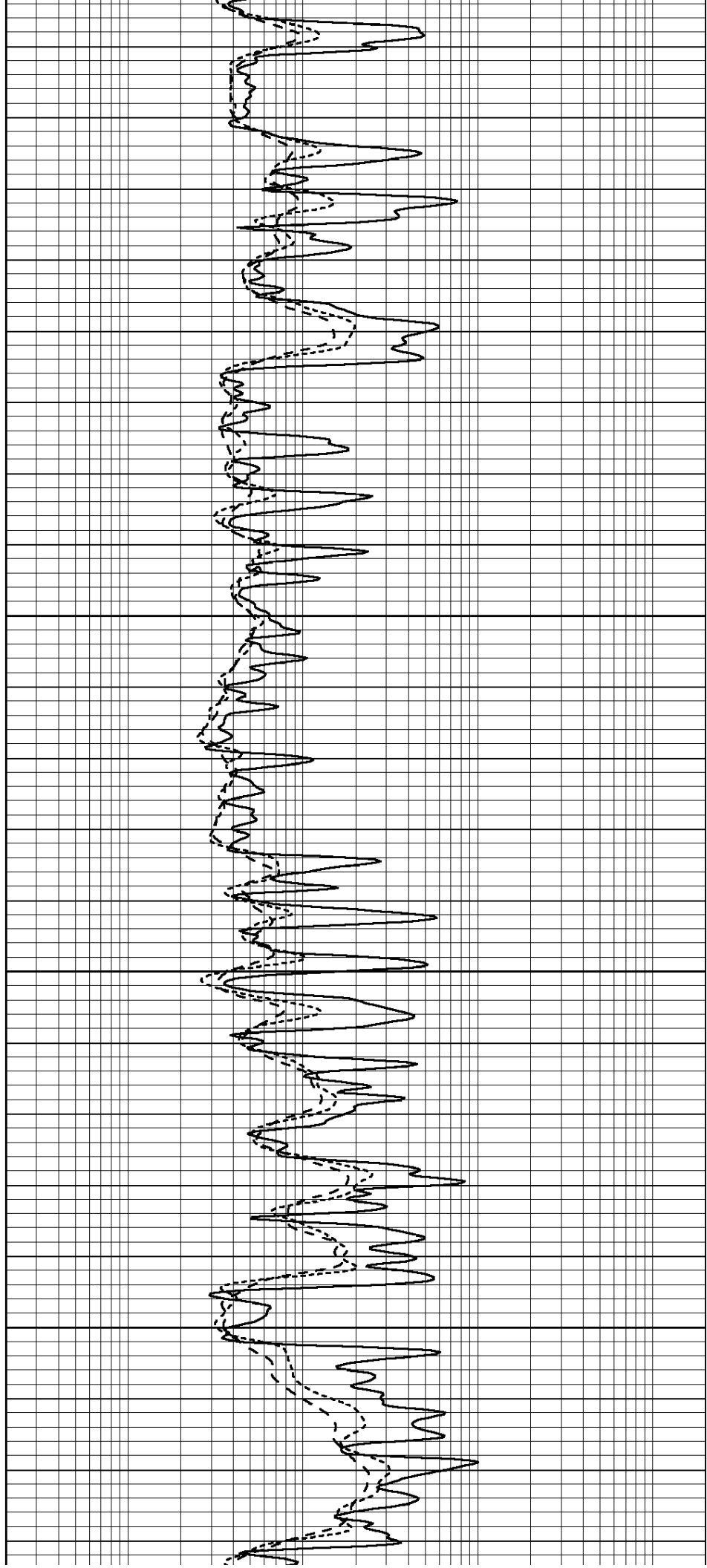


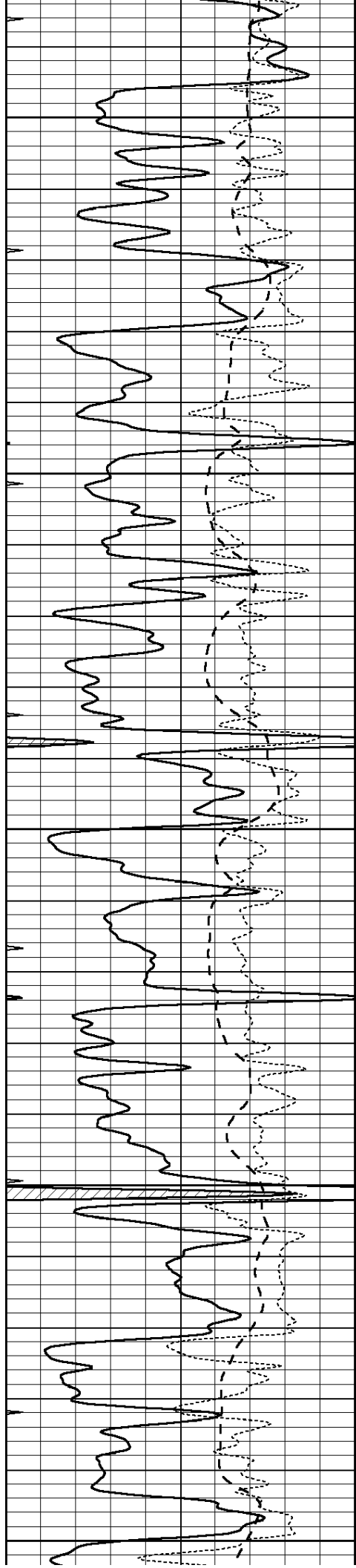
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3600

3650

3700





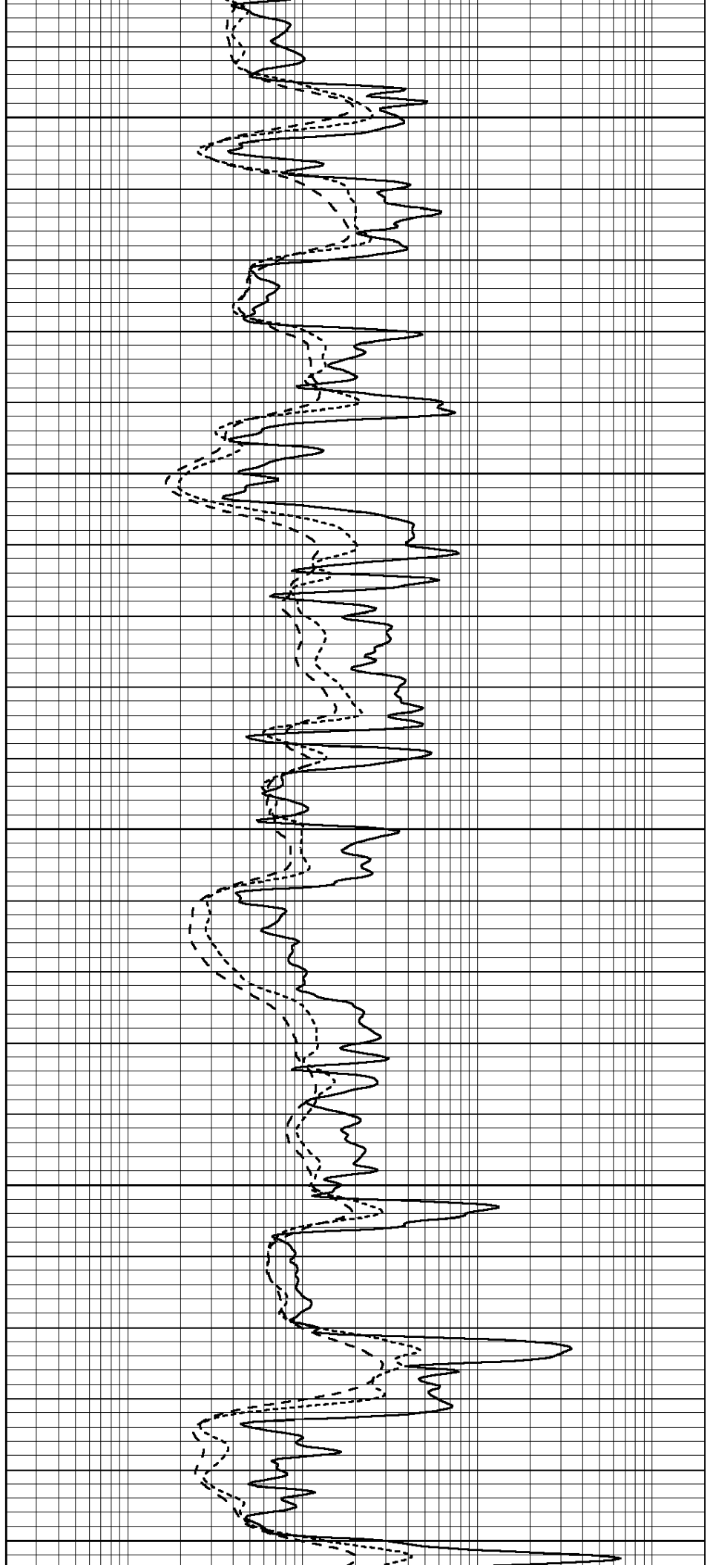
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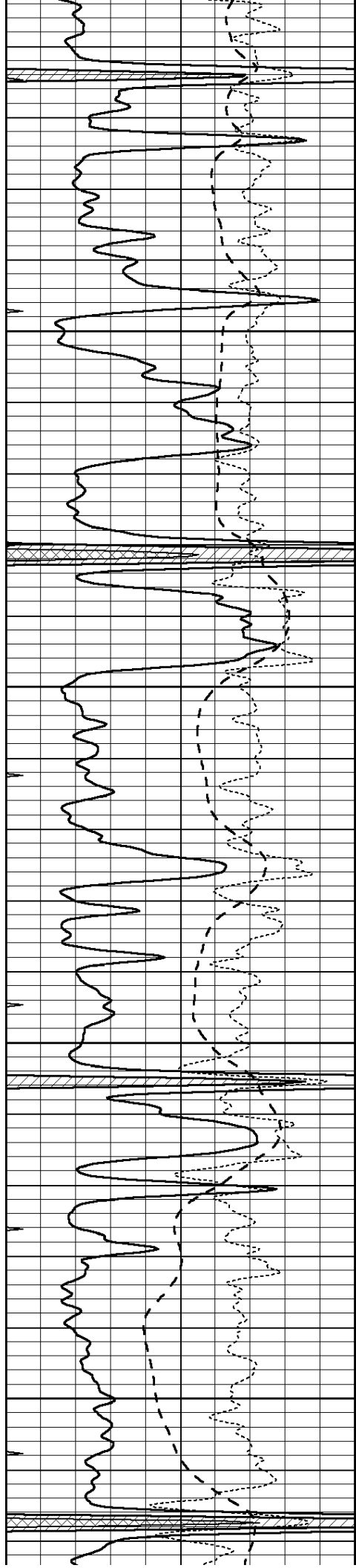
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3850

3900

3950



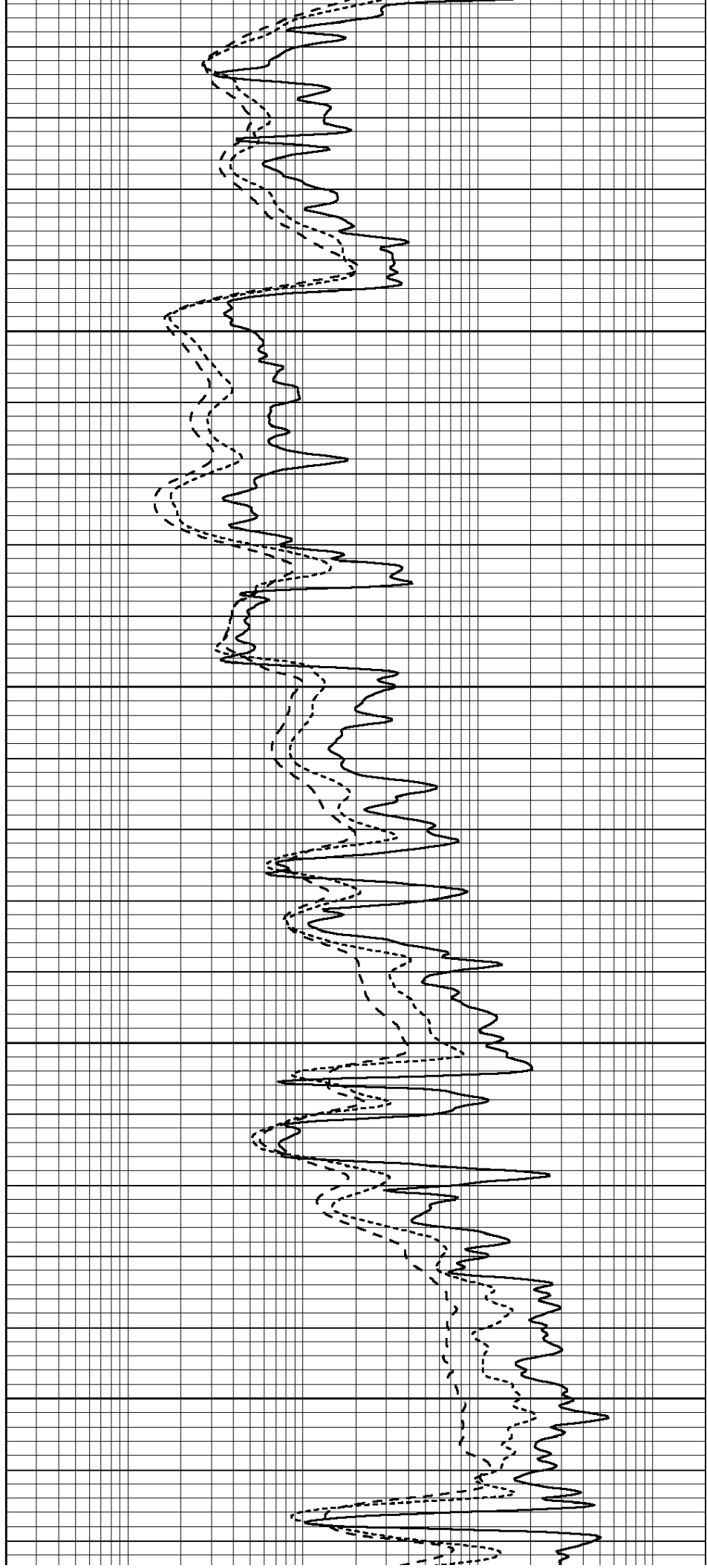


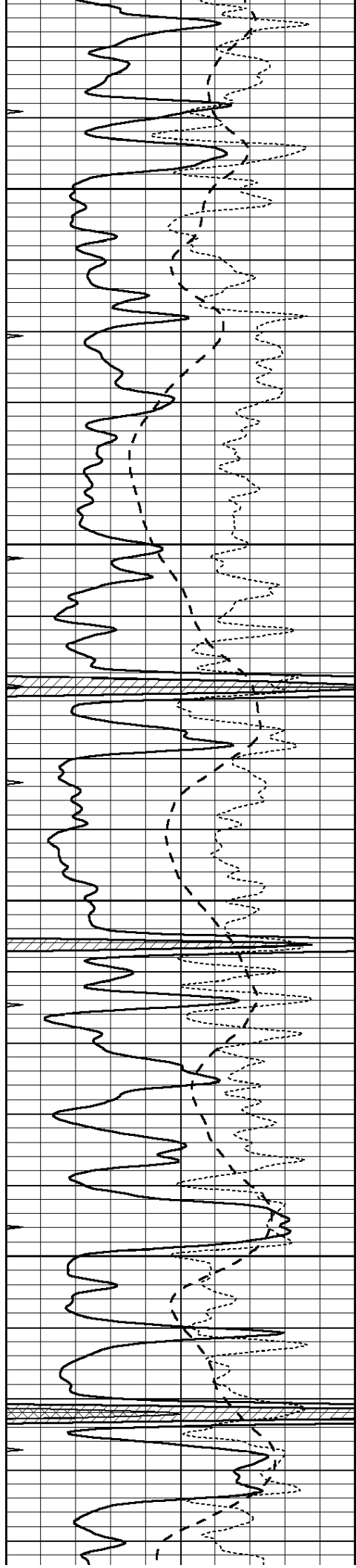
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4050

4100

4150



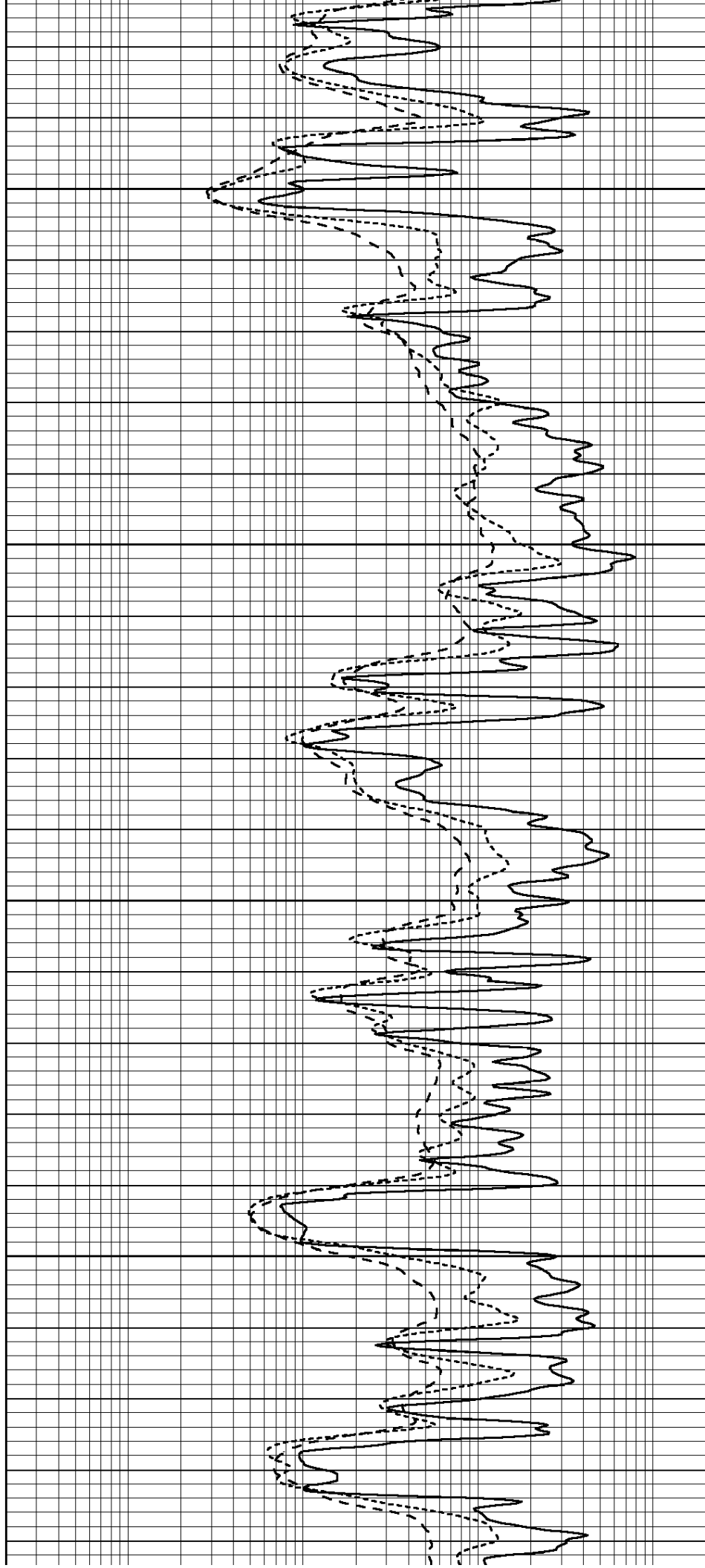


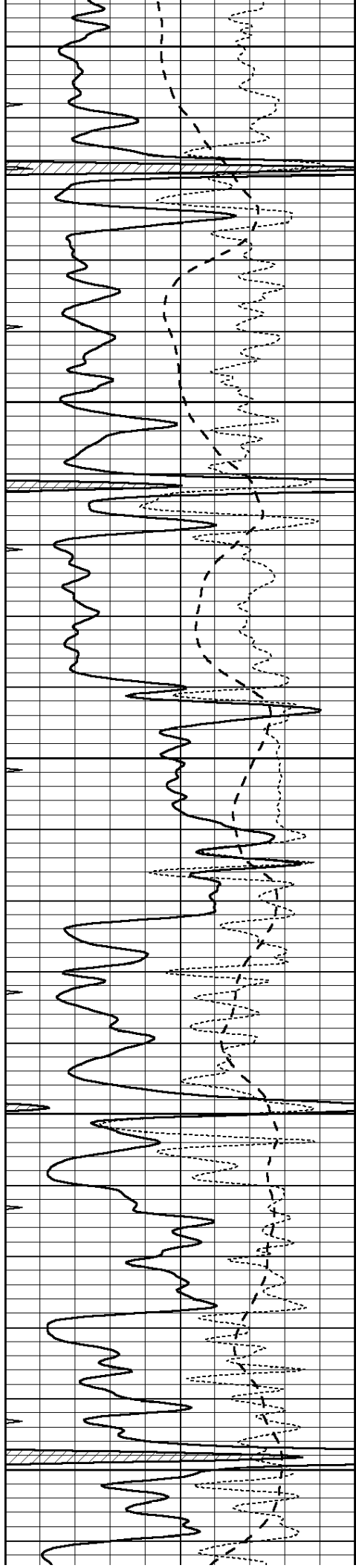
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4250

4300

4350





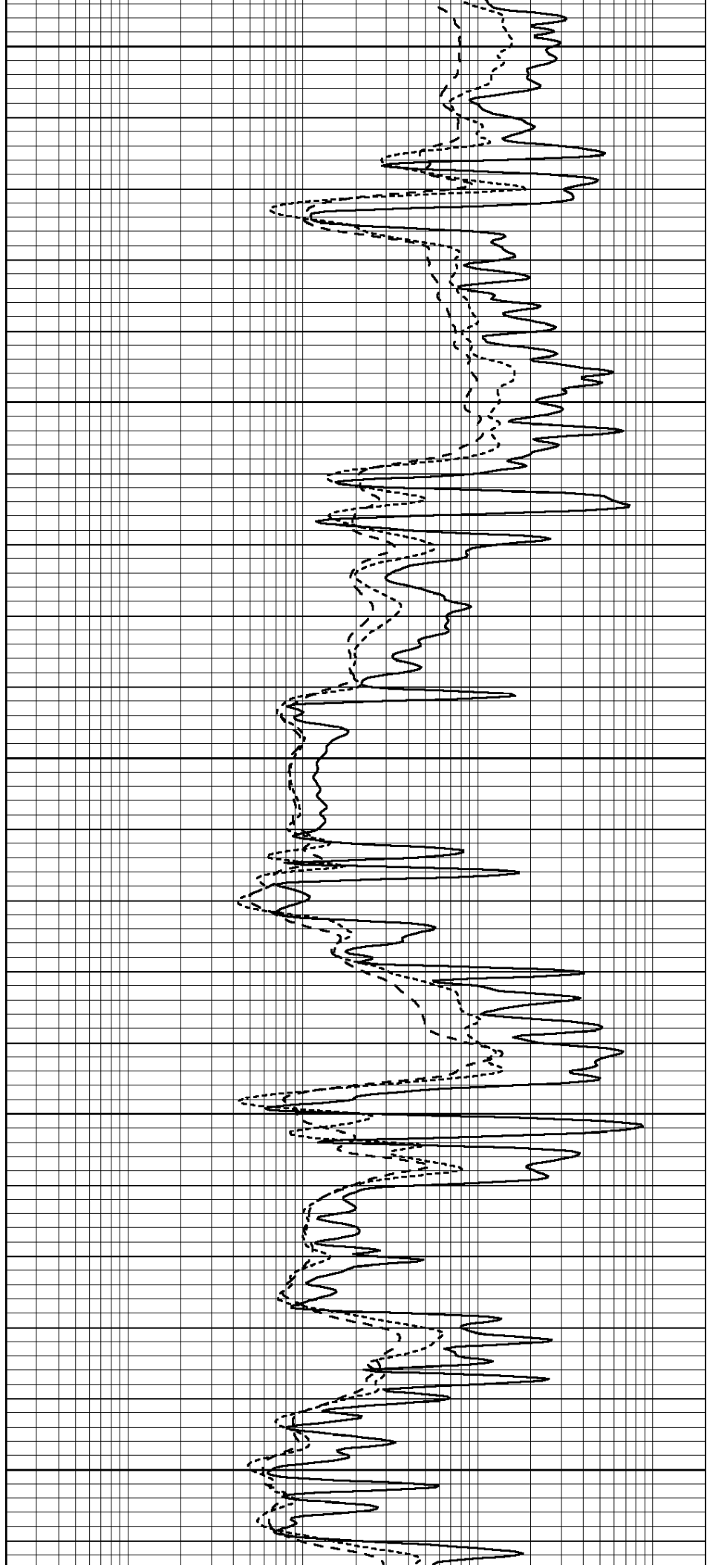
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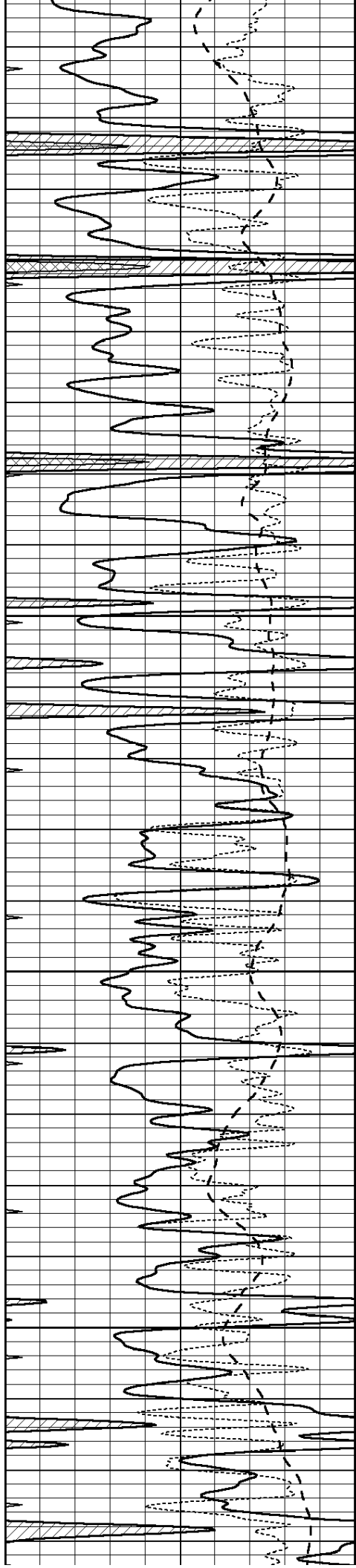
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4500

4550

4600



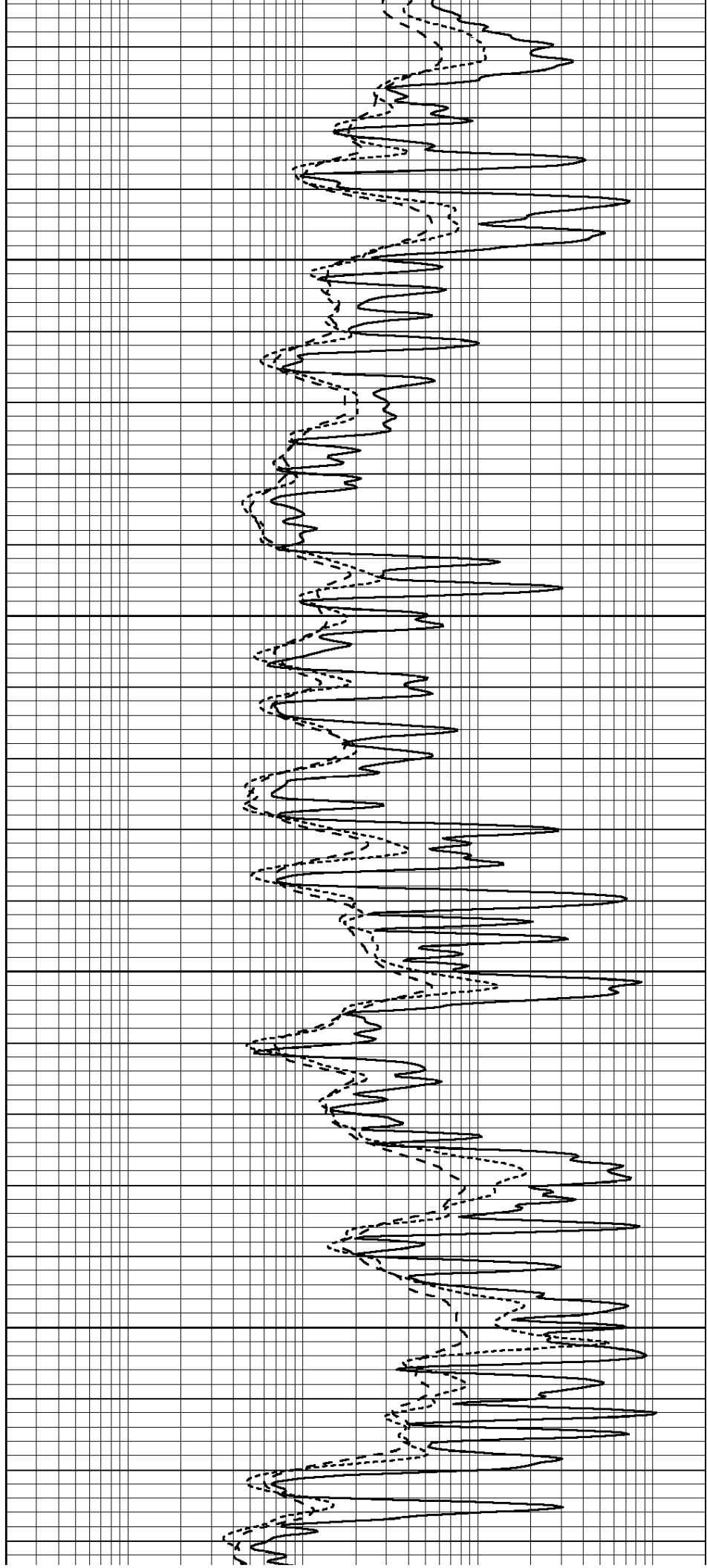


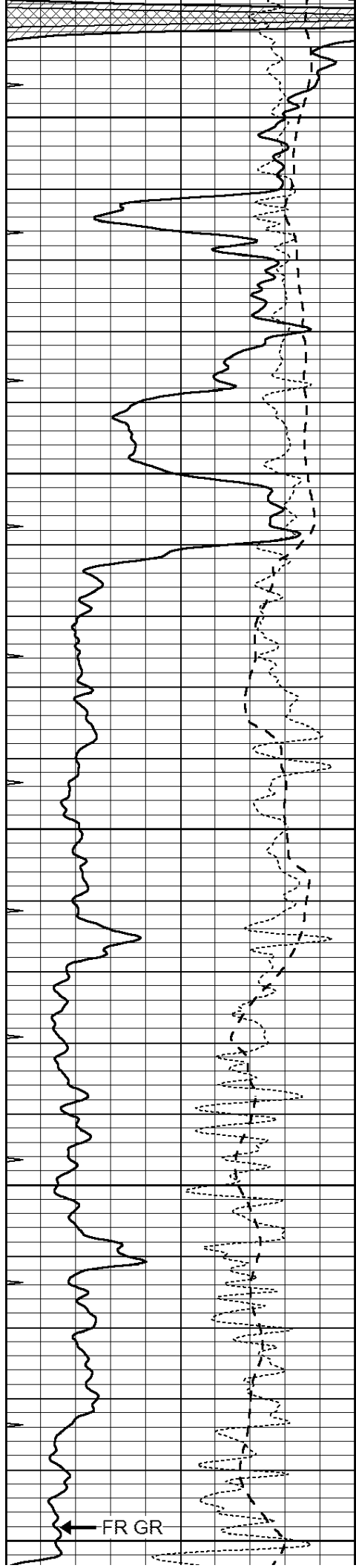
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4800





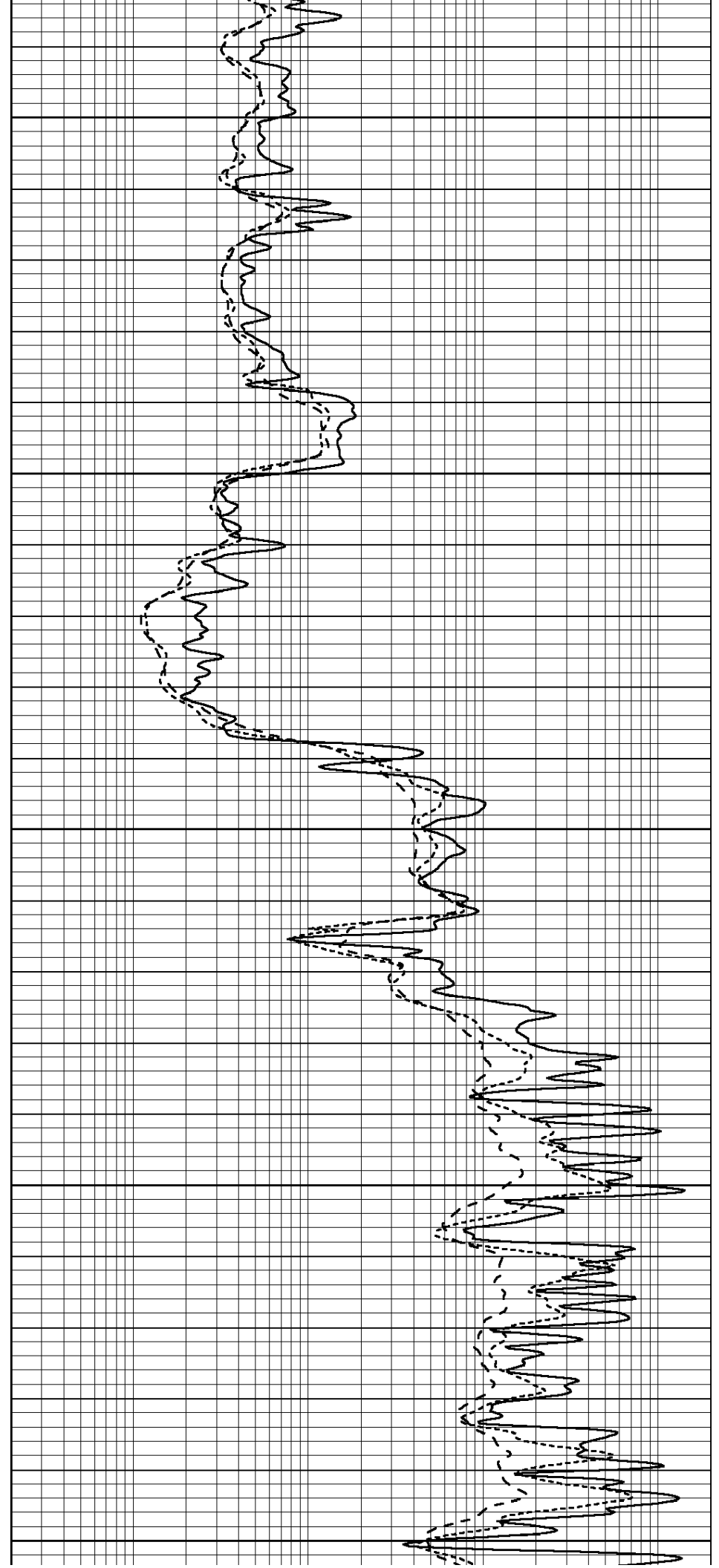
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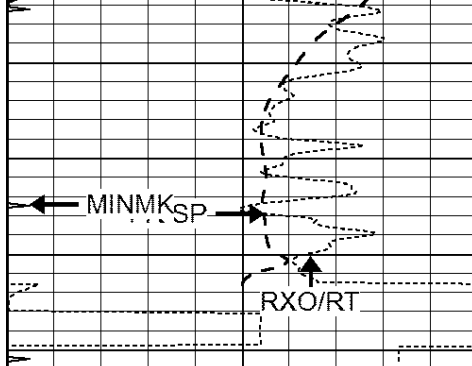
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4950

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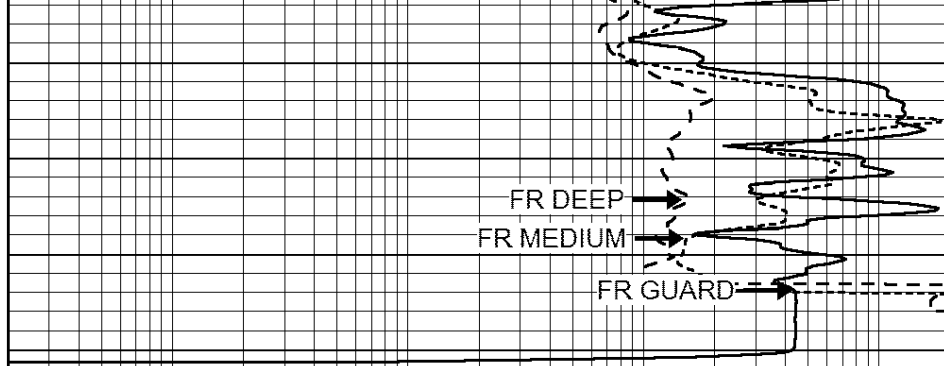
5050





LTD 5086

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



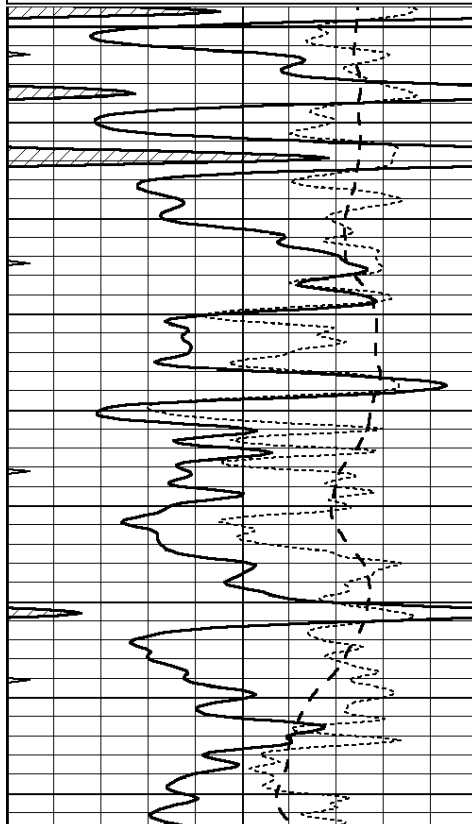
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 408776pe.db
 Dataset Pathname: pass2.7
 Presentation Format: dil
 Dataset Creation: Thu May 24 14:26:12 2012
 Charted by: Depth in Feet scaled 1:240

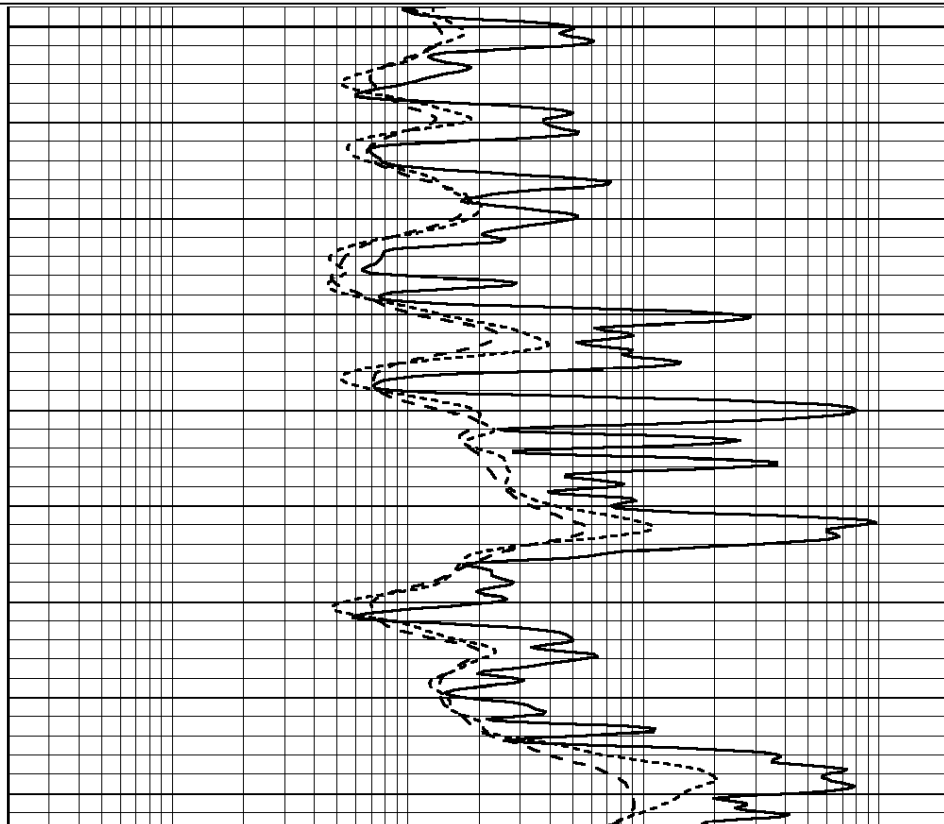
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-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

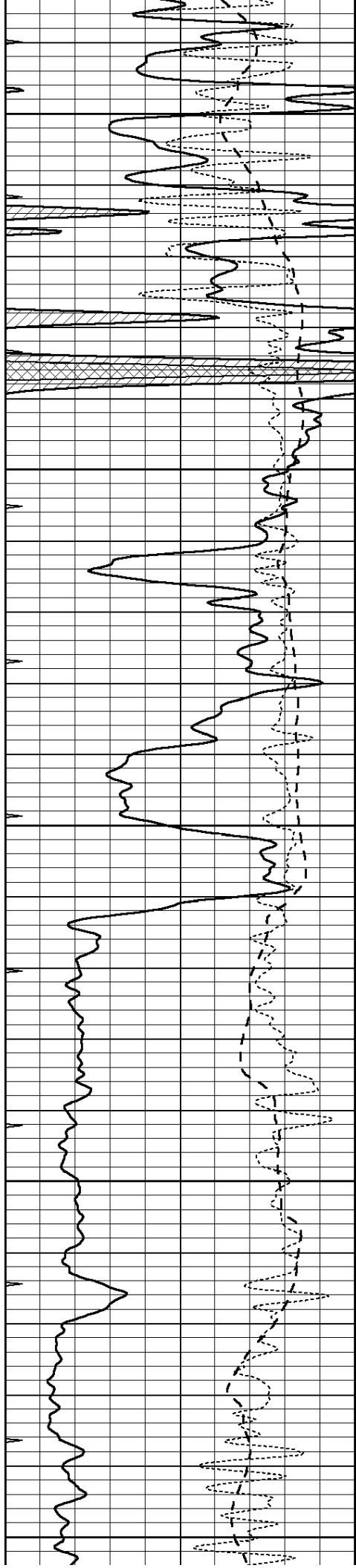
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



4700

4750





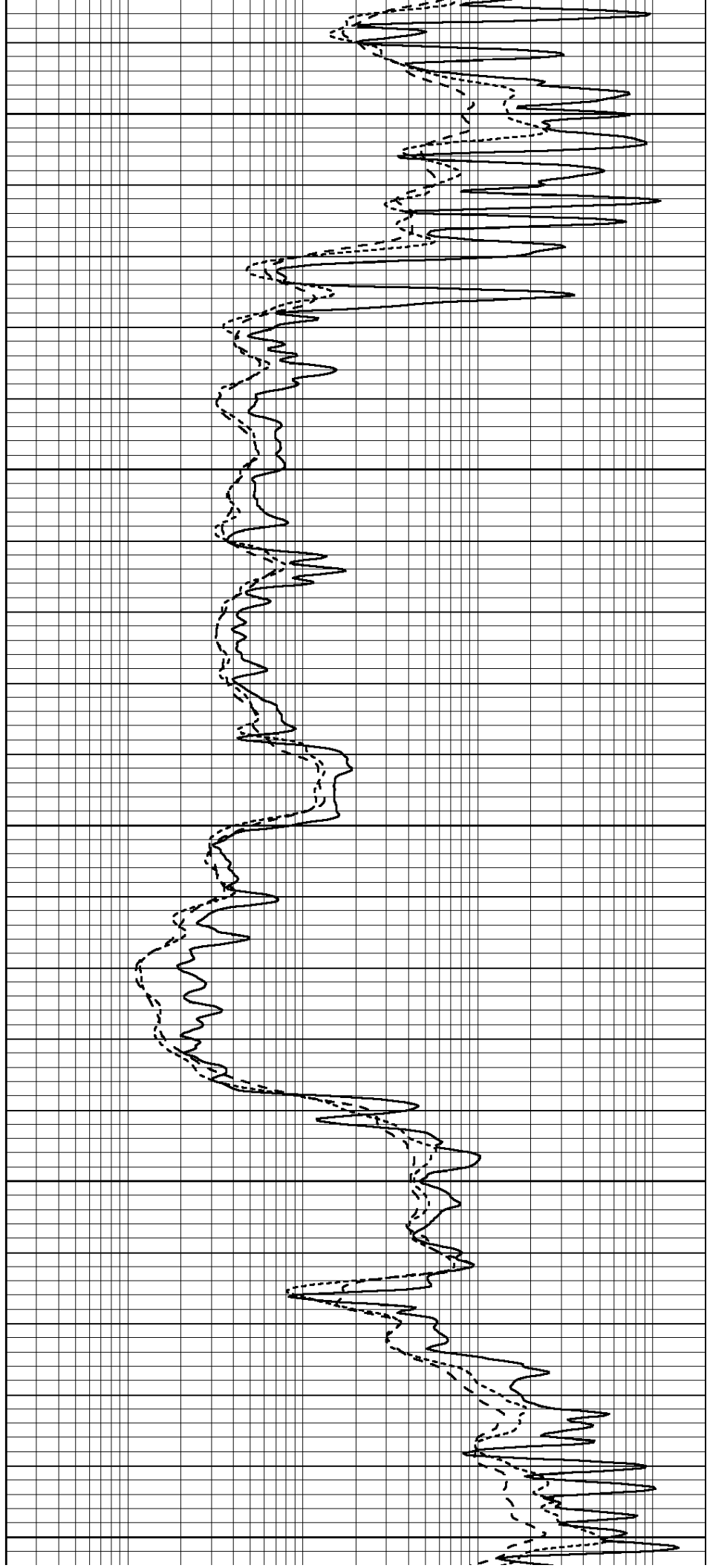
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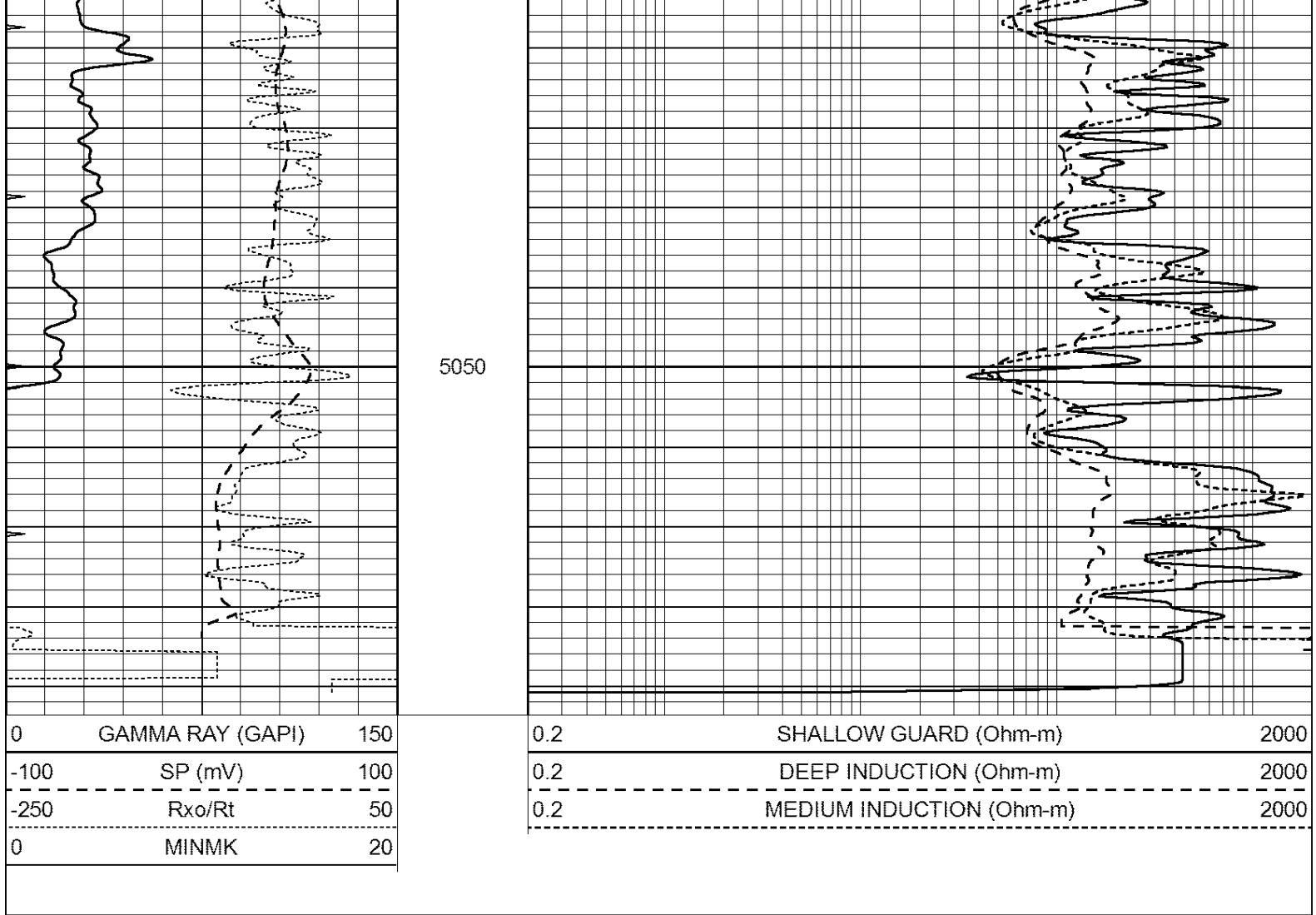
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4900

4950

5000





Calibration Report

Database File: 408776pe.db
 Dataset Pathname: pass3.8
 Dataset Creation: Thu May 24 15:49:56 2012

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Thu May 24 13:36:37 2012

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	10.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-5.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

Litho Density Calibration Report
 Serial: 006 Model: PRB
 Performed Sun Aug 15 09:48:41 2010

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps

Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1

Caliper				
Low Ref	Readings	Reference		
High Ref	4.0	8.3		
	5.9	15.0		
	Gain: 3.5		Offset: -5.5	

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:	070559	
Tool Model:	OPEN_GR	
Performed:	Tue May 22 19:38:45 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps