



**SUPERIOR**  
Hays,  
Kansas

**DUAL  
INDUCTION  
LOG**

Company RITCHIE EXPLORATION, INC.  
Well #1 MALONE-HANSCHU  
Field WILDCAT  
County FORD  
State KANSAS

Company RITCHIE EXPLORATION, INC.  
Well #1 MALONE-HANSCHU  
Field WILDCAT  
County FORD State KANSAS

Location: API #: 15-057-20755-0000  
2500' FNL & 850'  
SE - SW - NW  
Permanent Datum GROUND LEVEL Elevation 2498  
Log Measured From KELLY BUSHING 12' A.G.L.  
Drilling Measured From KELLY BUSHING  
Elevation  
K.B. 2510  
D.F. 2508  
G.L. 2498

Date	10/23/11
Run Number	ONE
Depth Driller	5285
Depth Logger	5290
Bottom Logged Interval	5288
Top Log Interval	00
Casing Driller	8 5/8" @ 350
Casing Logger	349
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/60
pH / Fluid Loss	10.5/10.5
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.30 @ 81F
Rmf @ Meas. Temp	.22 @ 81F
Rmc @ Meas. Temp	.36 @ 81F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.19 @ 127F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	127F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JASON CAPPELLUCCI
Witnessed By	MIKE ENGELBRECHT

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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

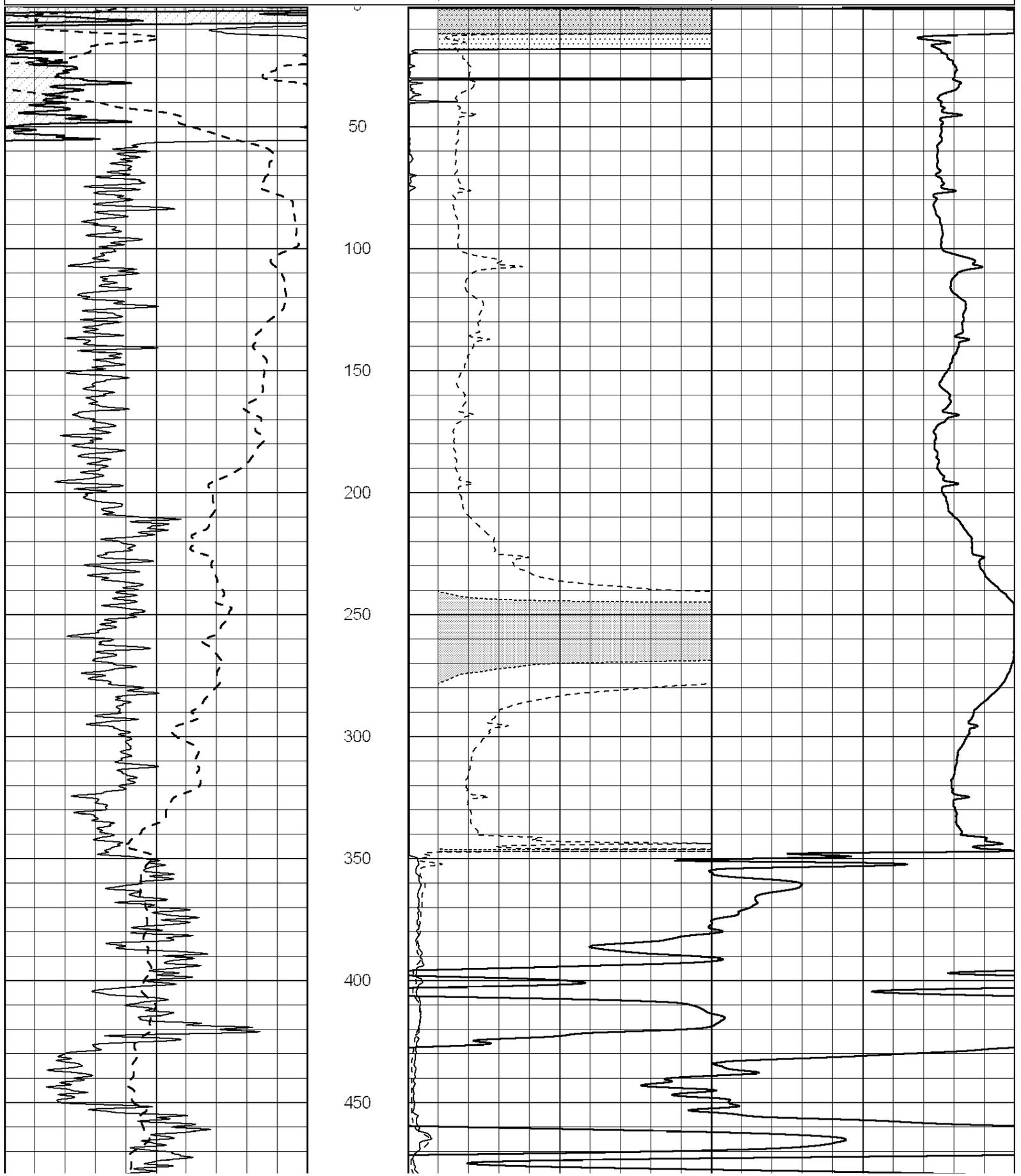
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395  
DIRECTIONS  
FORD KS. & SADDLE RD. - 5 W. TO RD 120 - 3 S. - 1 W. - S. INTO

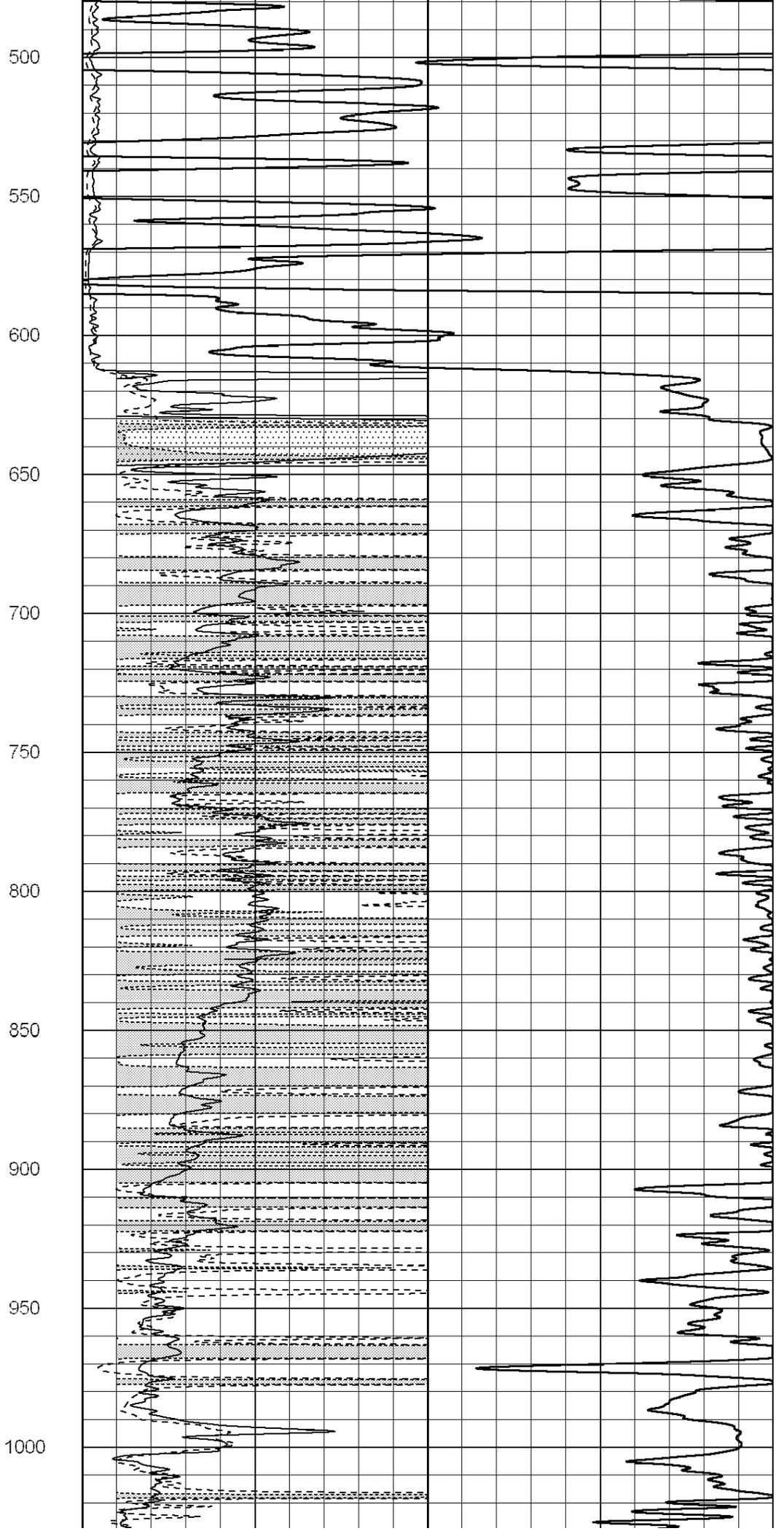
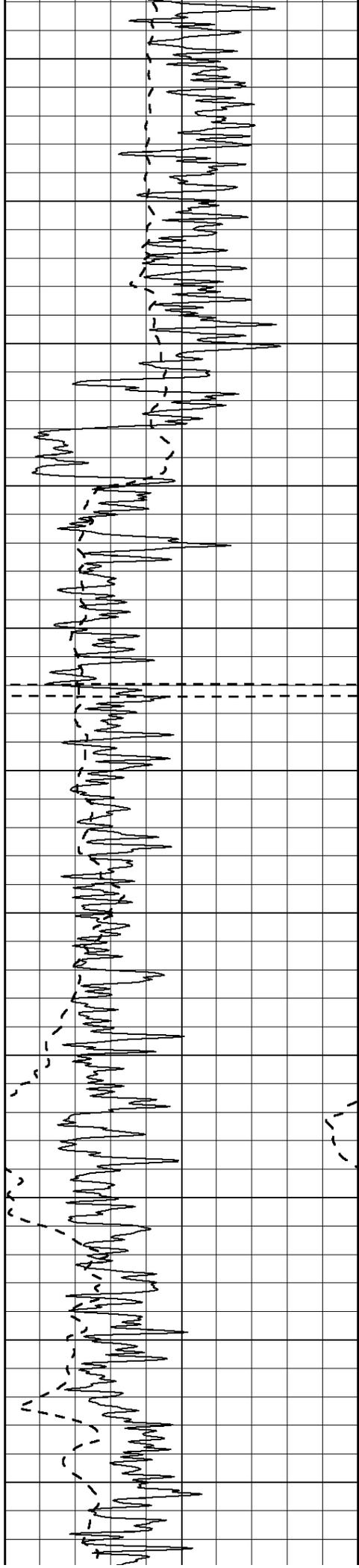
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-100	SP (mV)	100

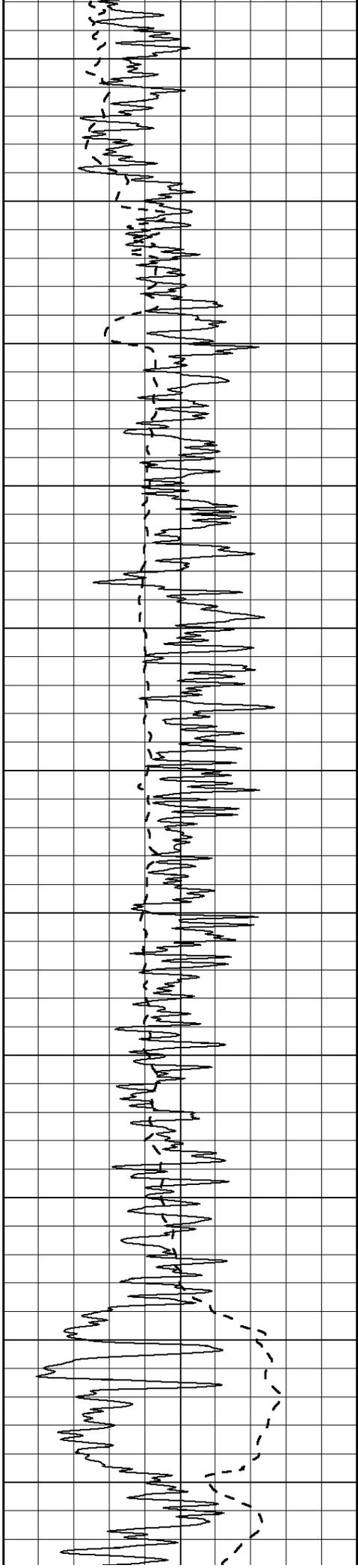
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

1000 CILD (mmho/m) 0

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







1050

1100

1150

1200

1250

1300

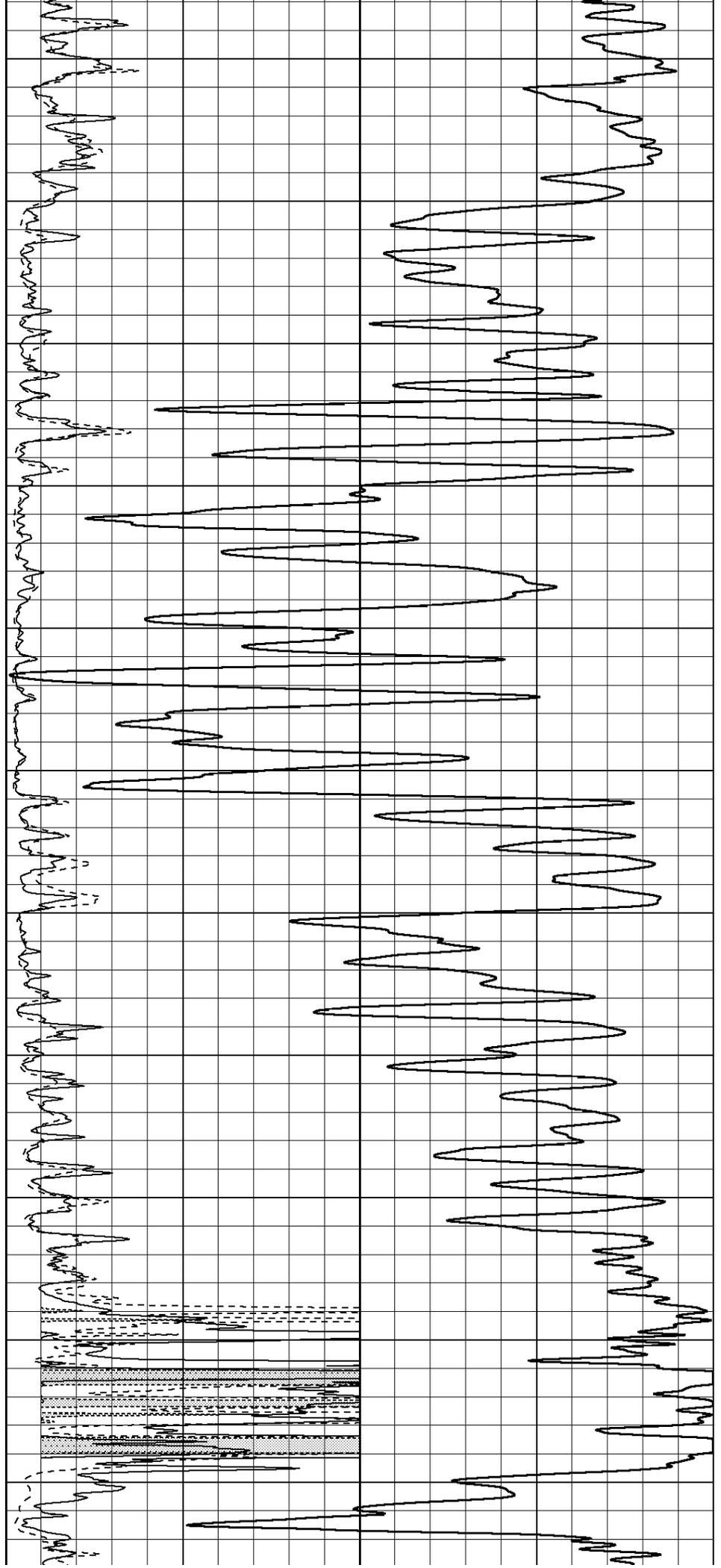
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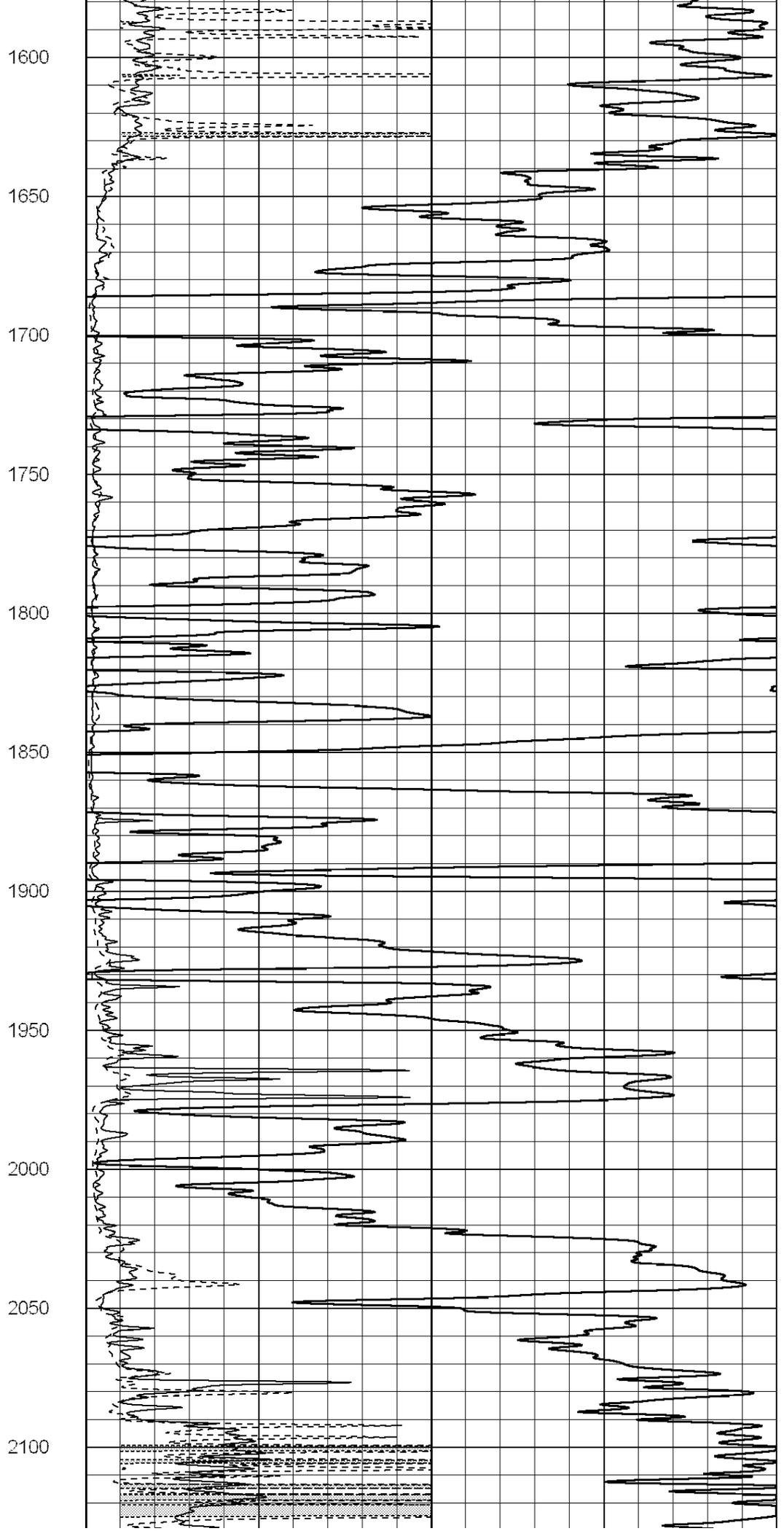
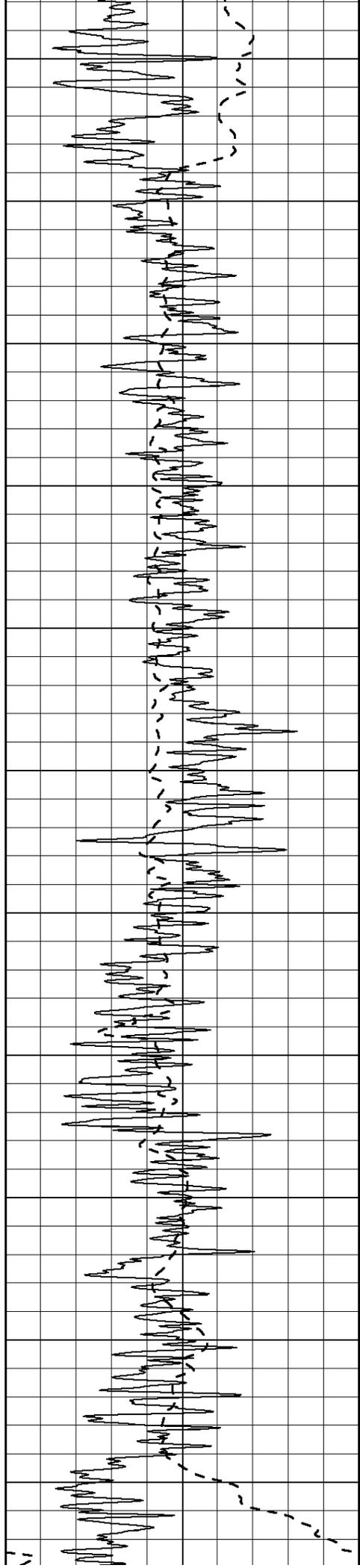
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1450

1500

1550





1600

1650

1700

1750

1800

1850

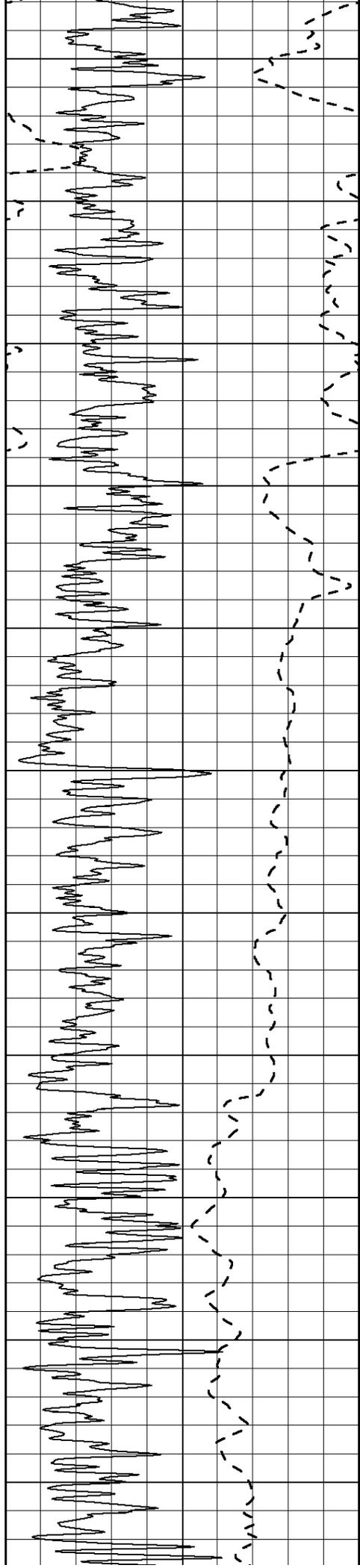
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1950

2000

2050

2100



2150

2200

2250

2300

2350

2400

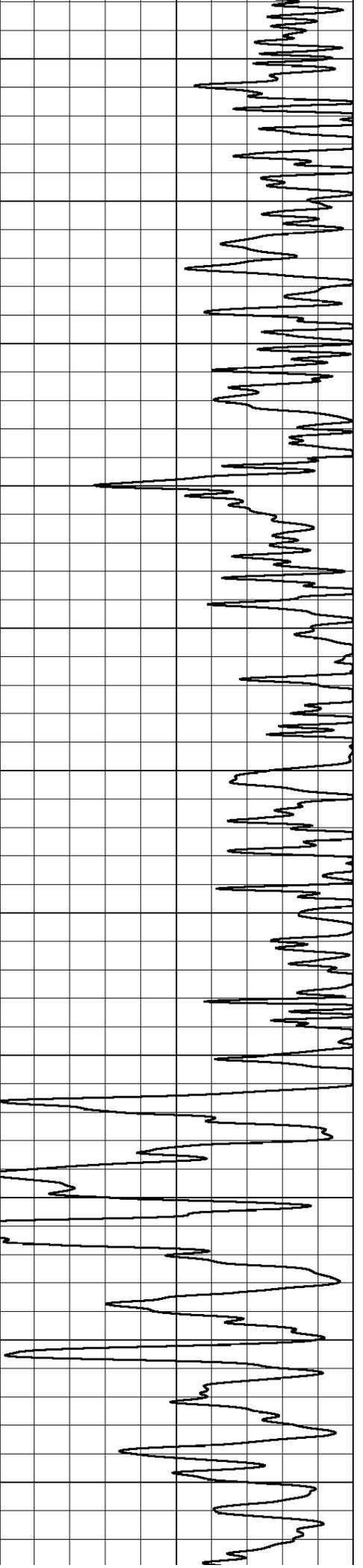
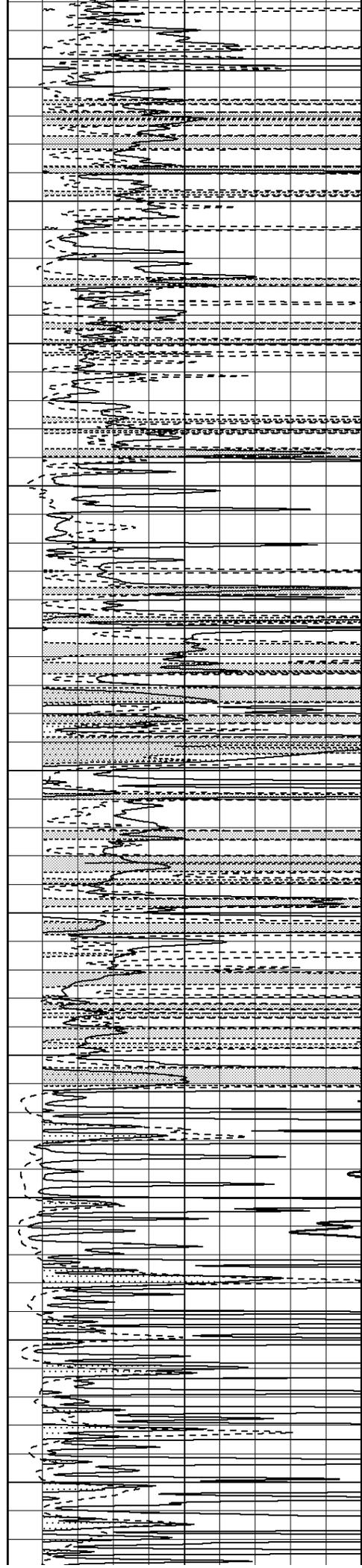
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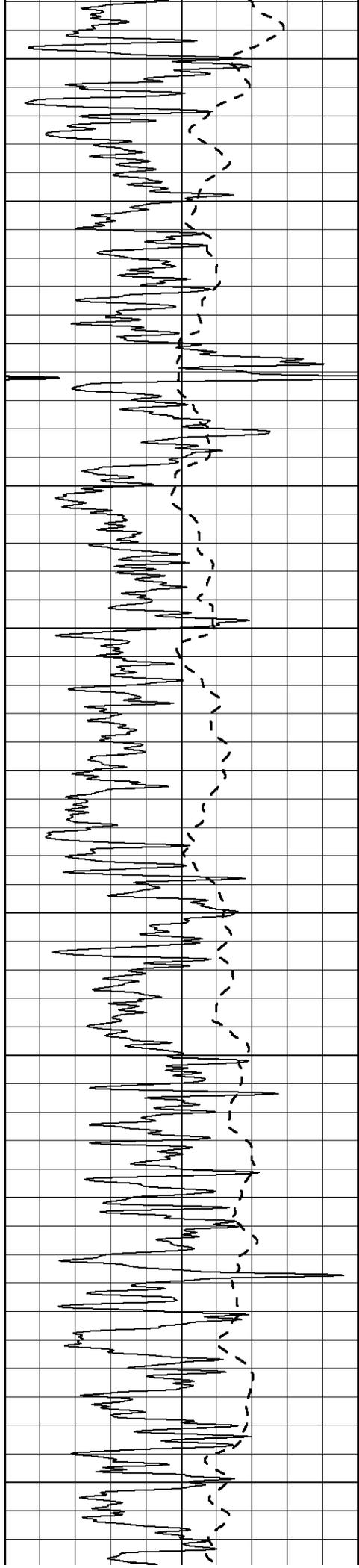
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2550

2600

2650





2700

2750

2800

2850

2900

2950

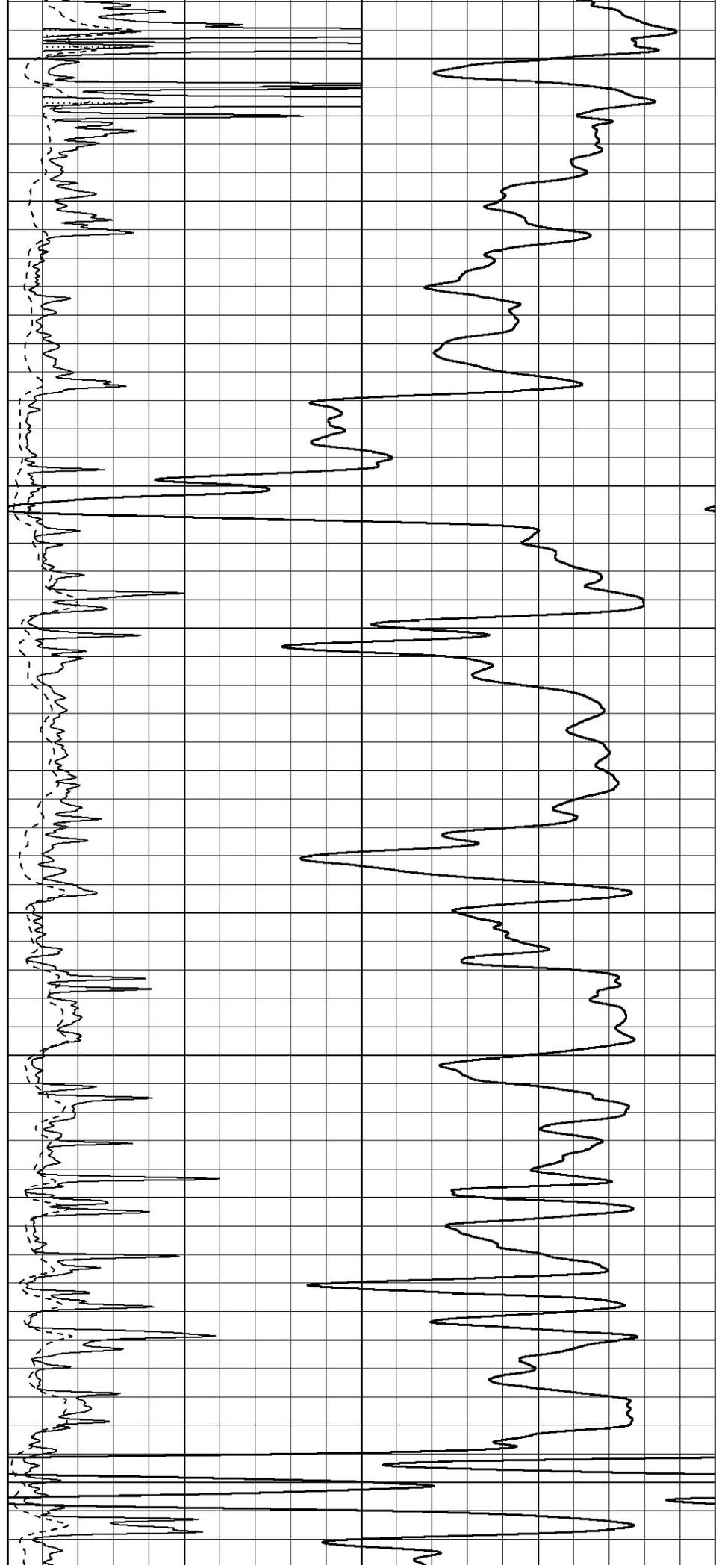
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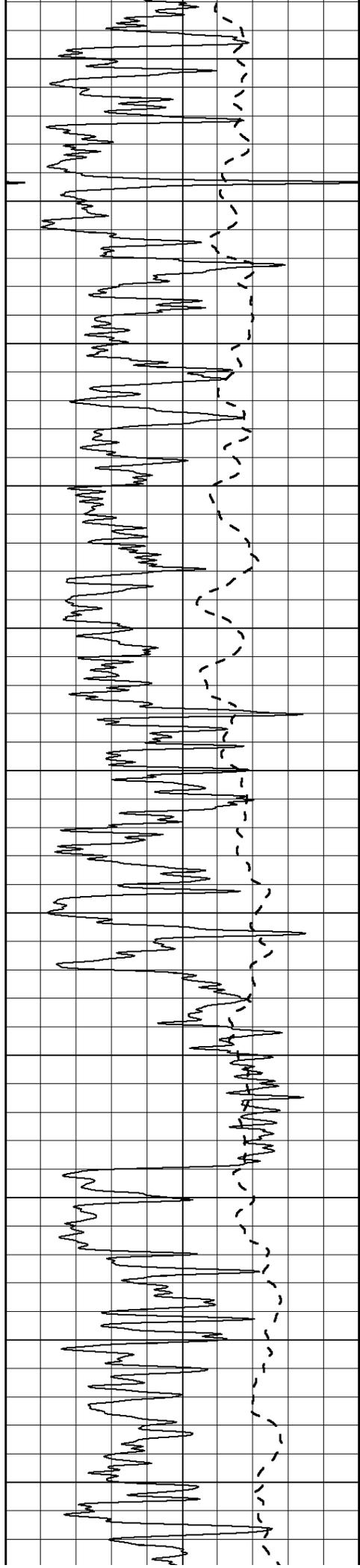
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3100

3150

3200





3250

3300

3350

3400

3450

3500

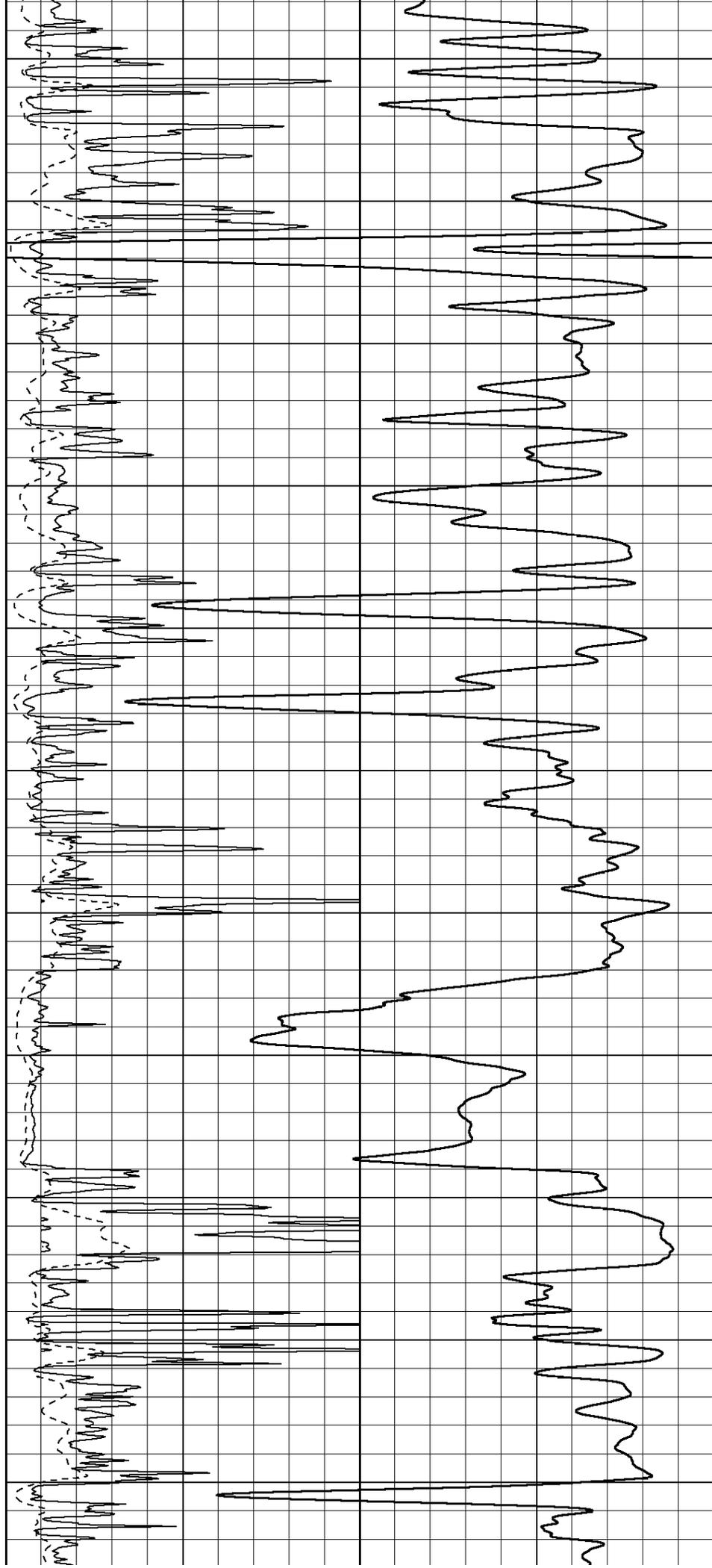
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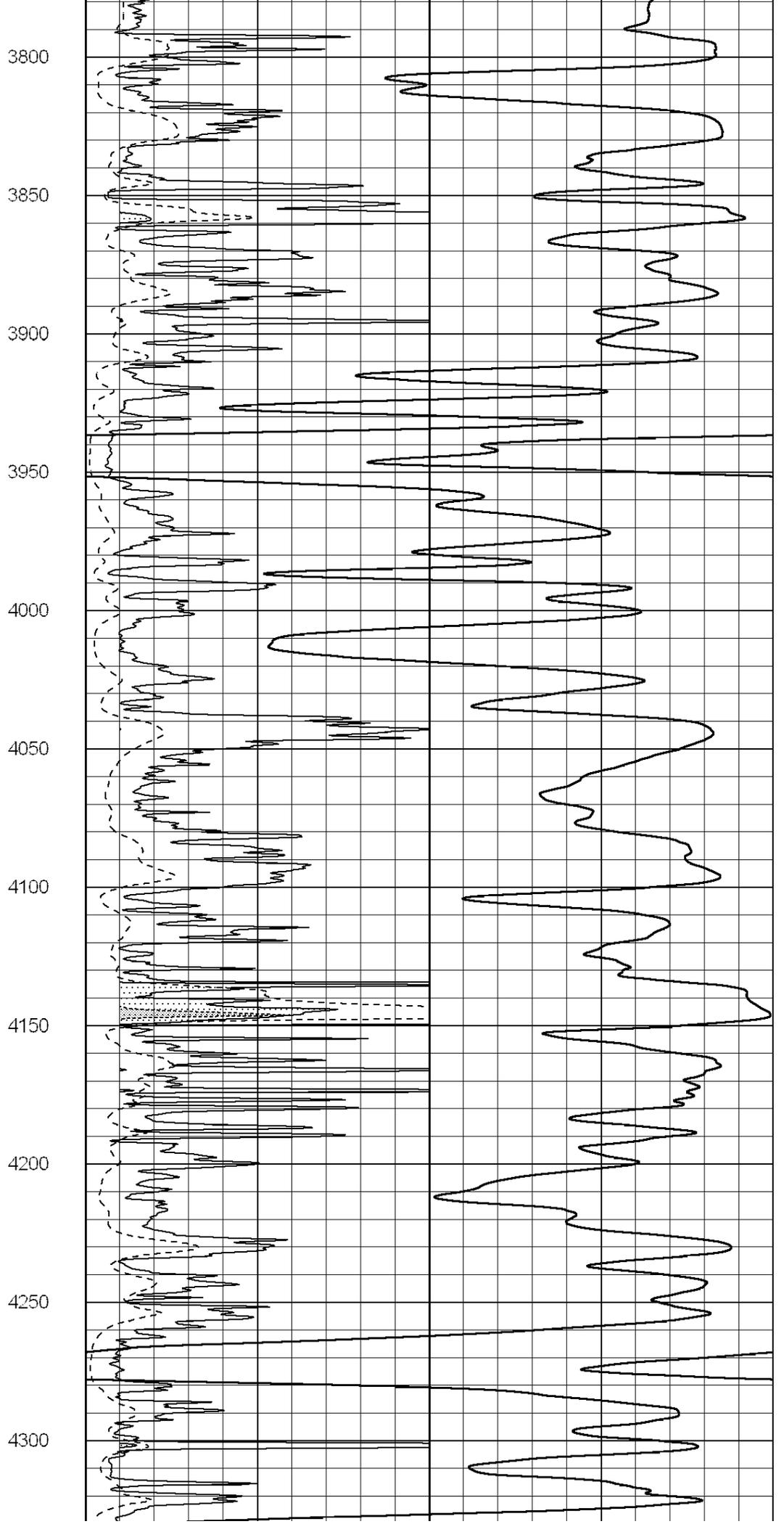
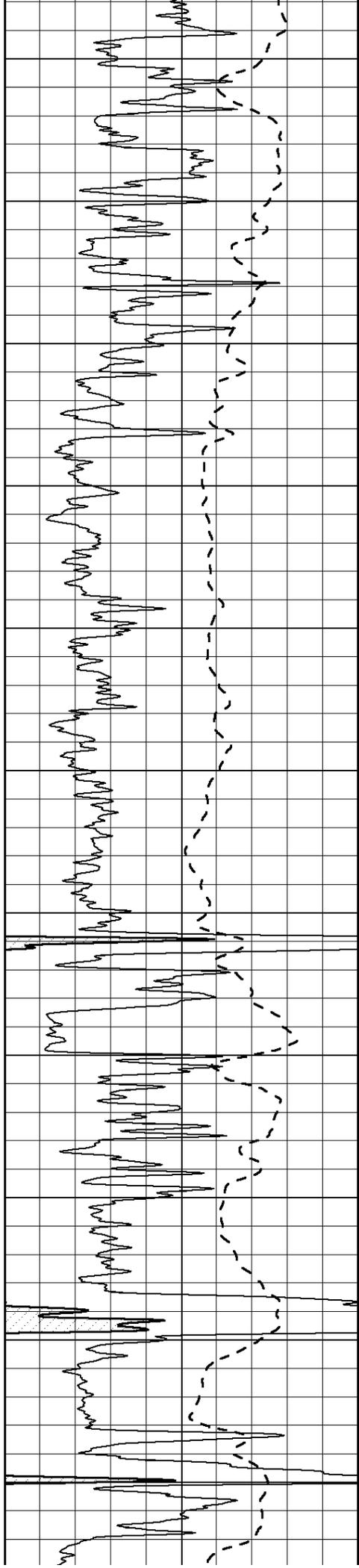
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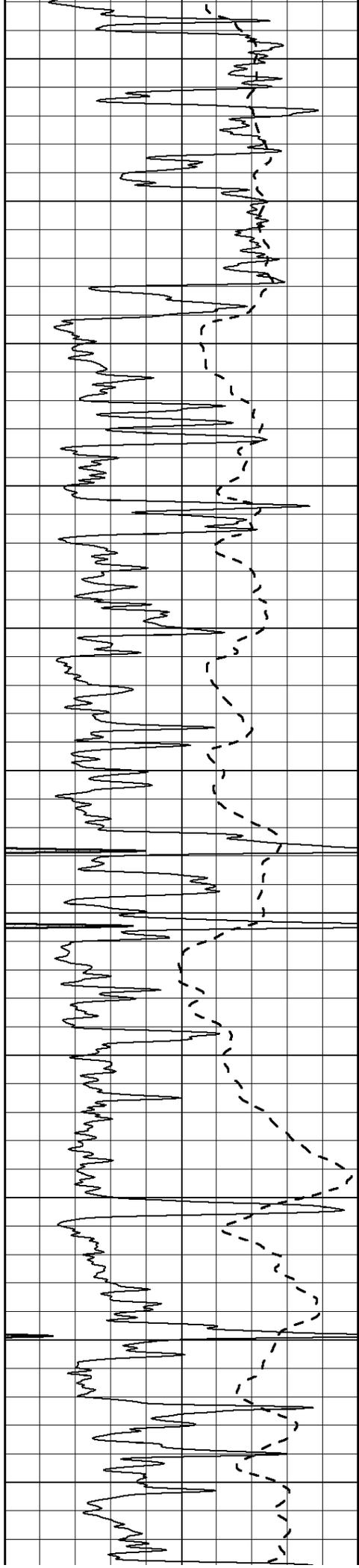
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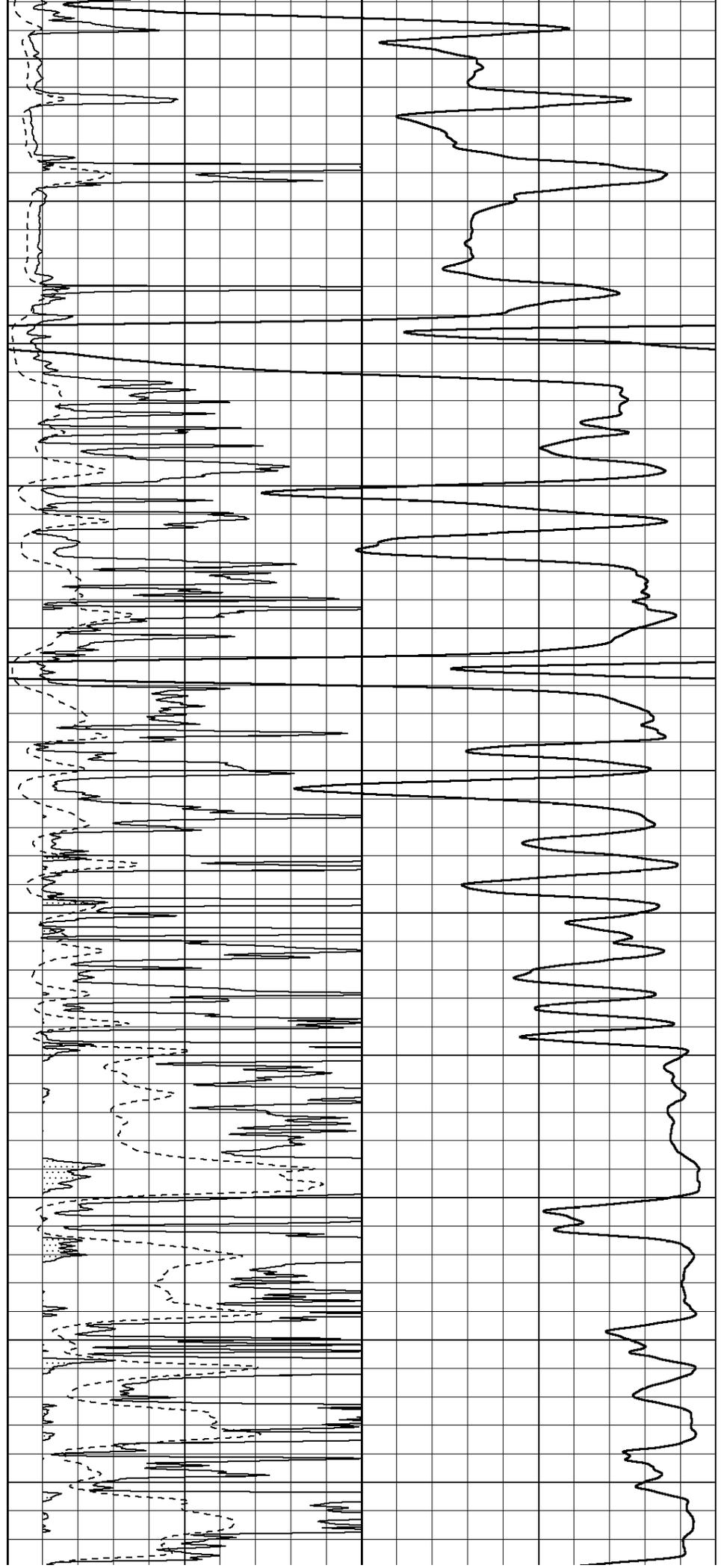
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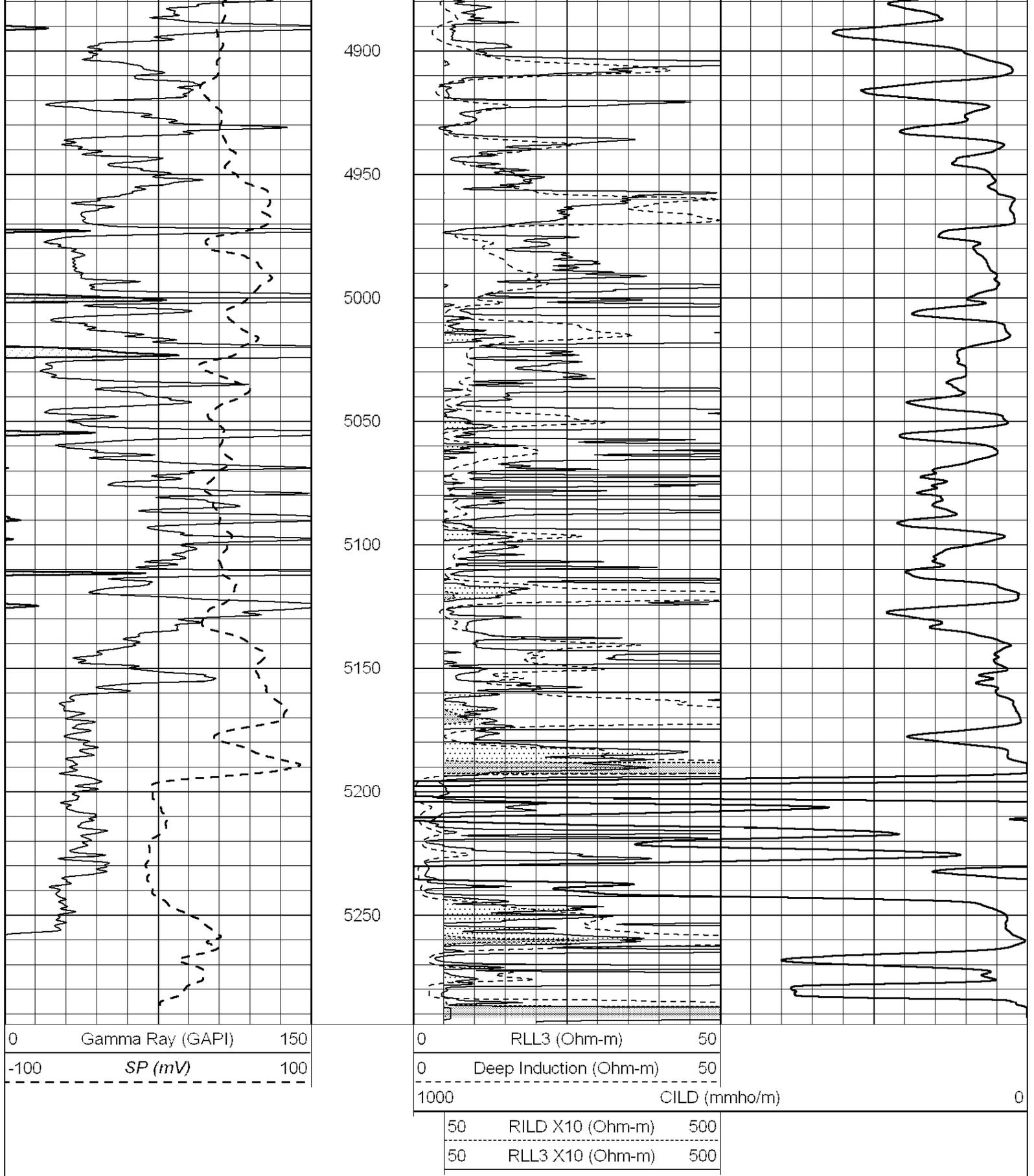
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4750

4800

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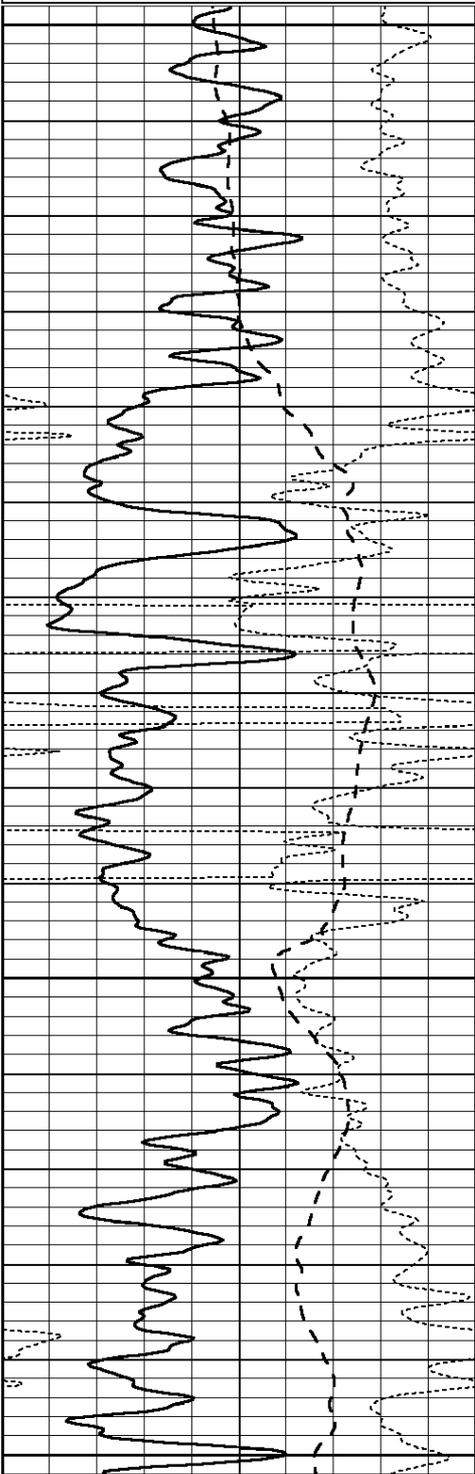


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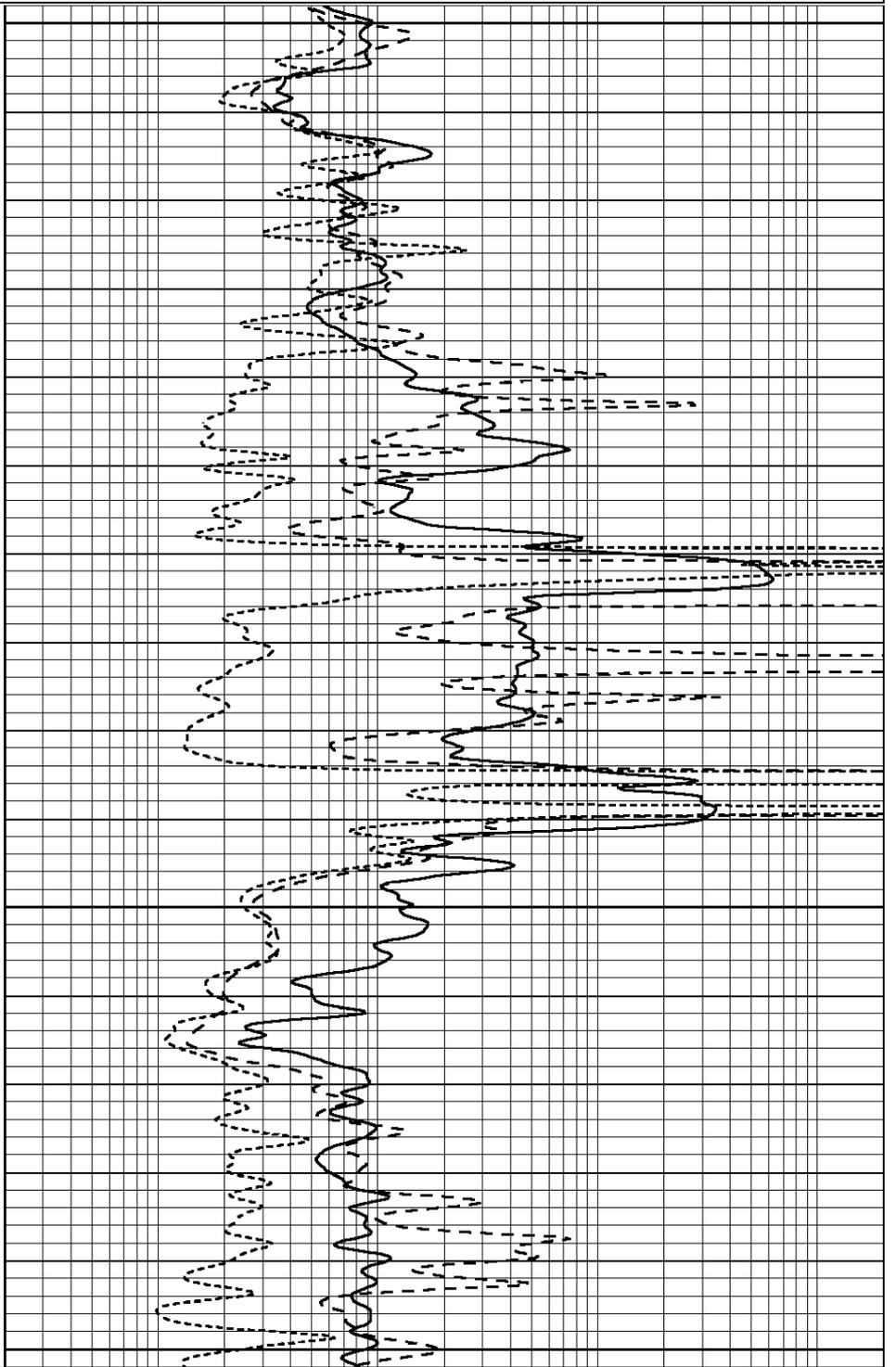


-100	SP (mV)	100
-250	Rxo/Rt	50

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



1450  
1500  
1550  
1600



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



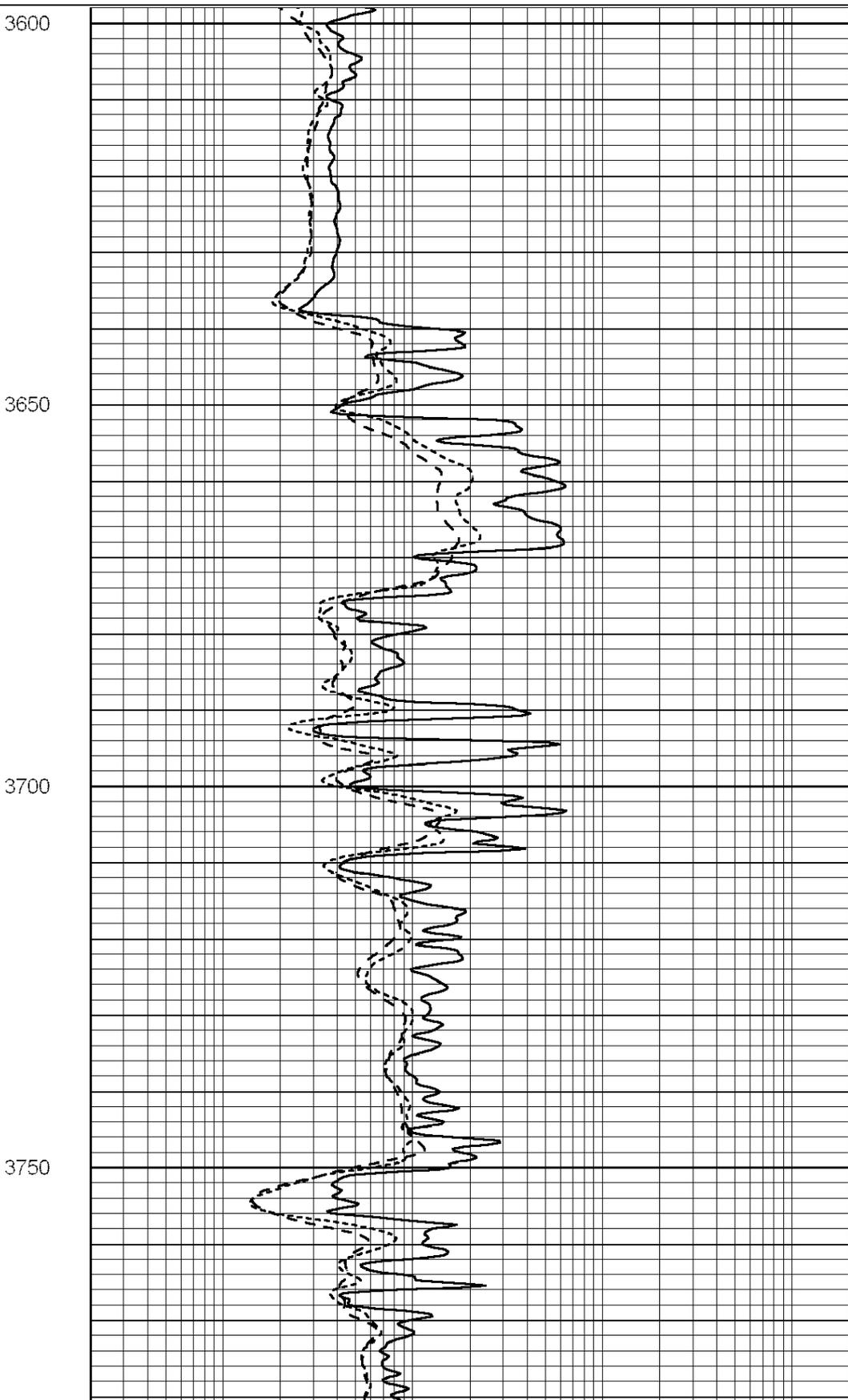
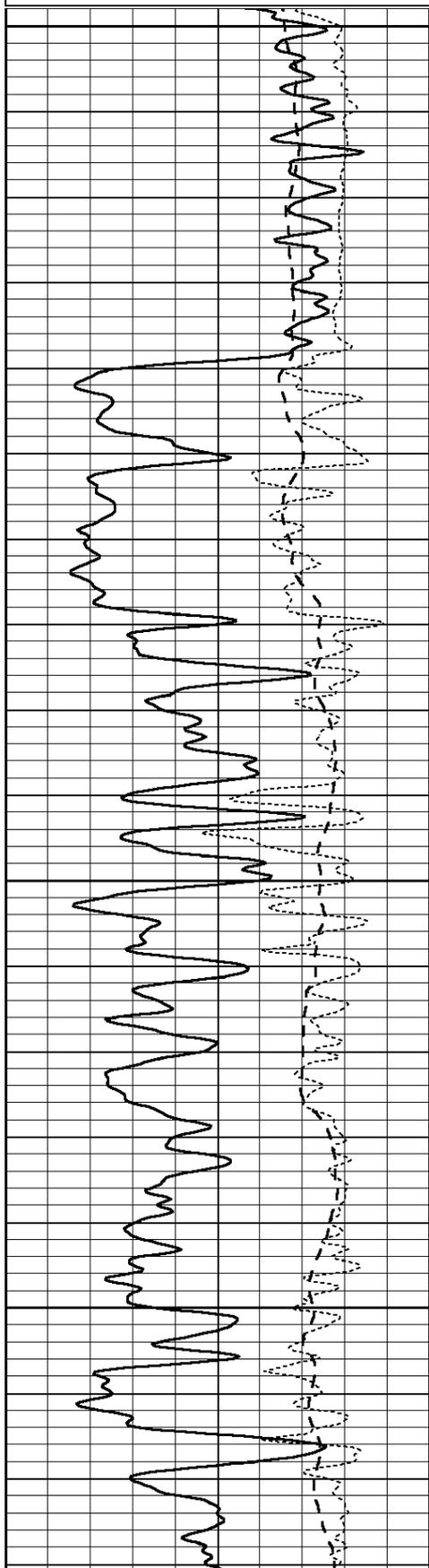
SUPERIOR  
Hays,  
Kansas

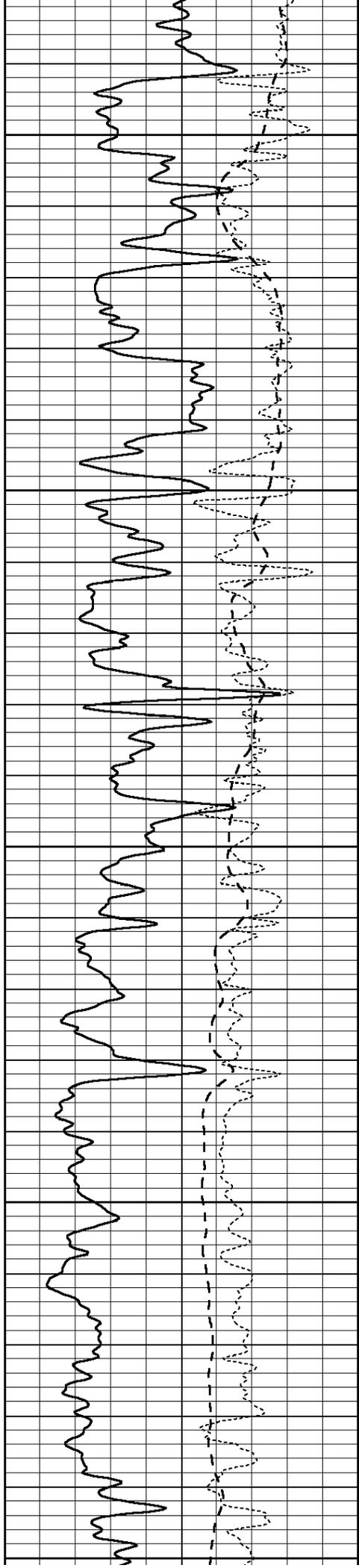
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 Charted by: Depth in Feet scaled 1:240

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





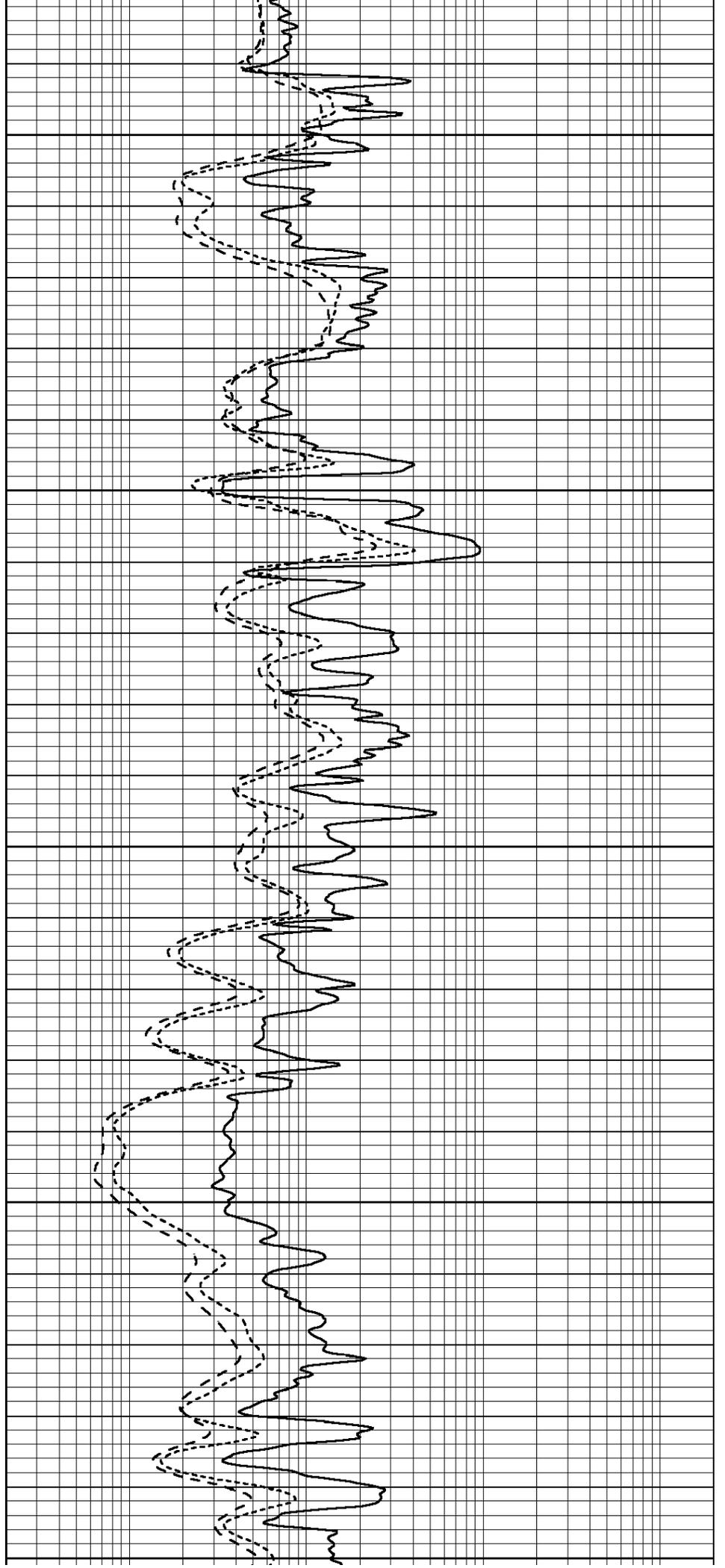
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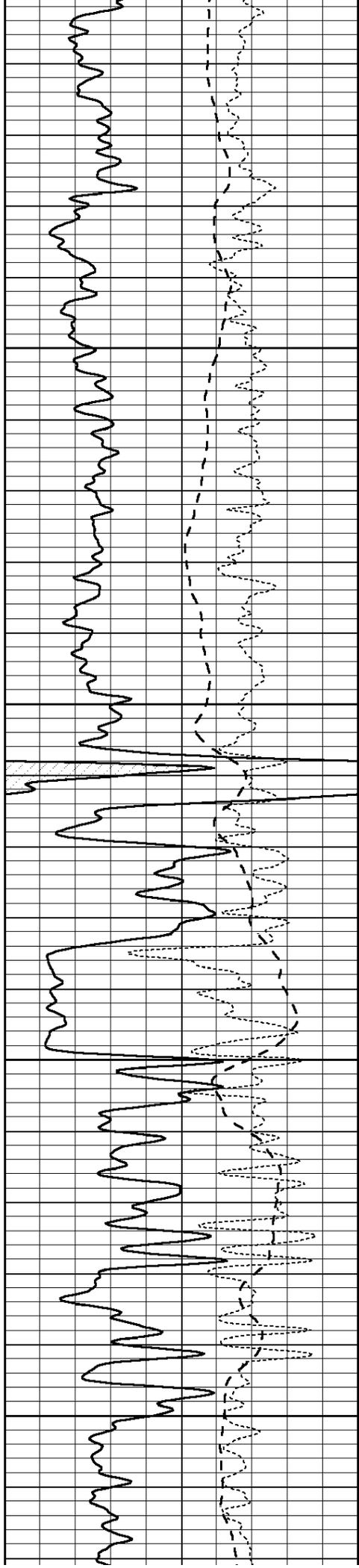
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3900

3950

4000



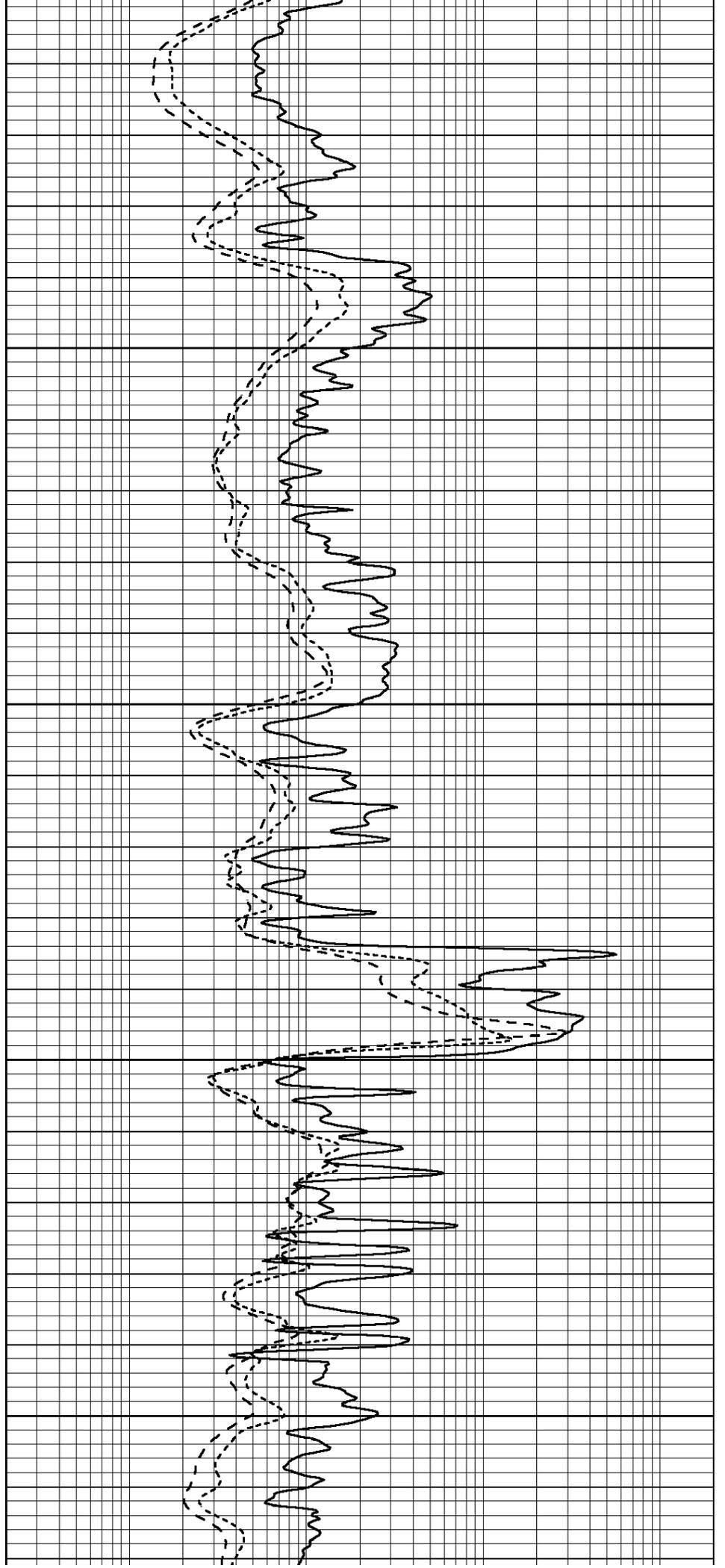


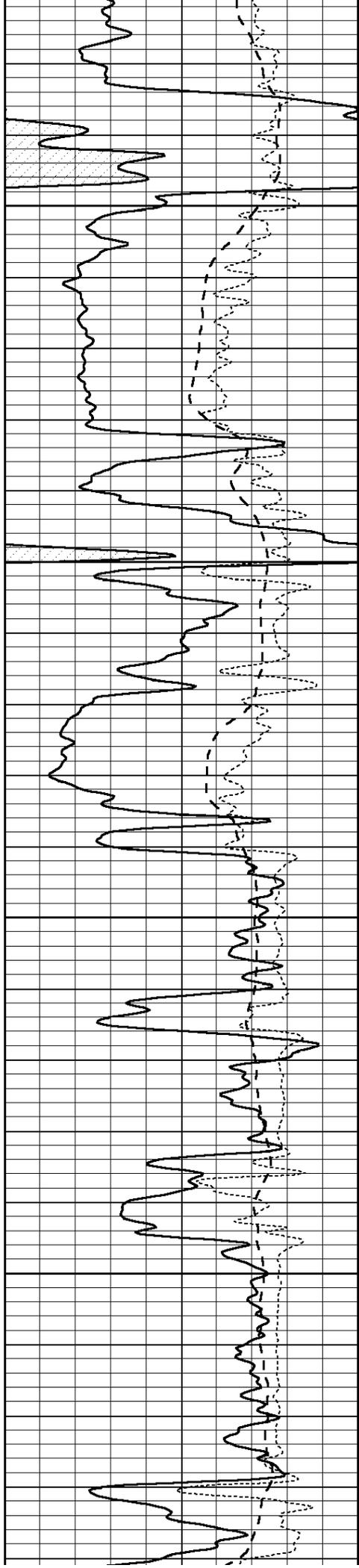
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4100

4150

4200



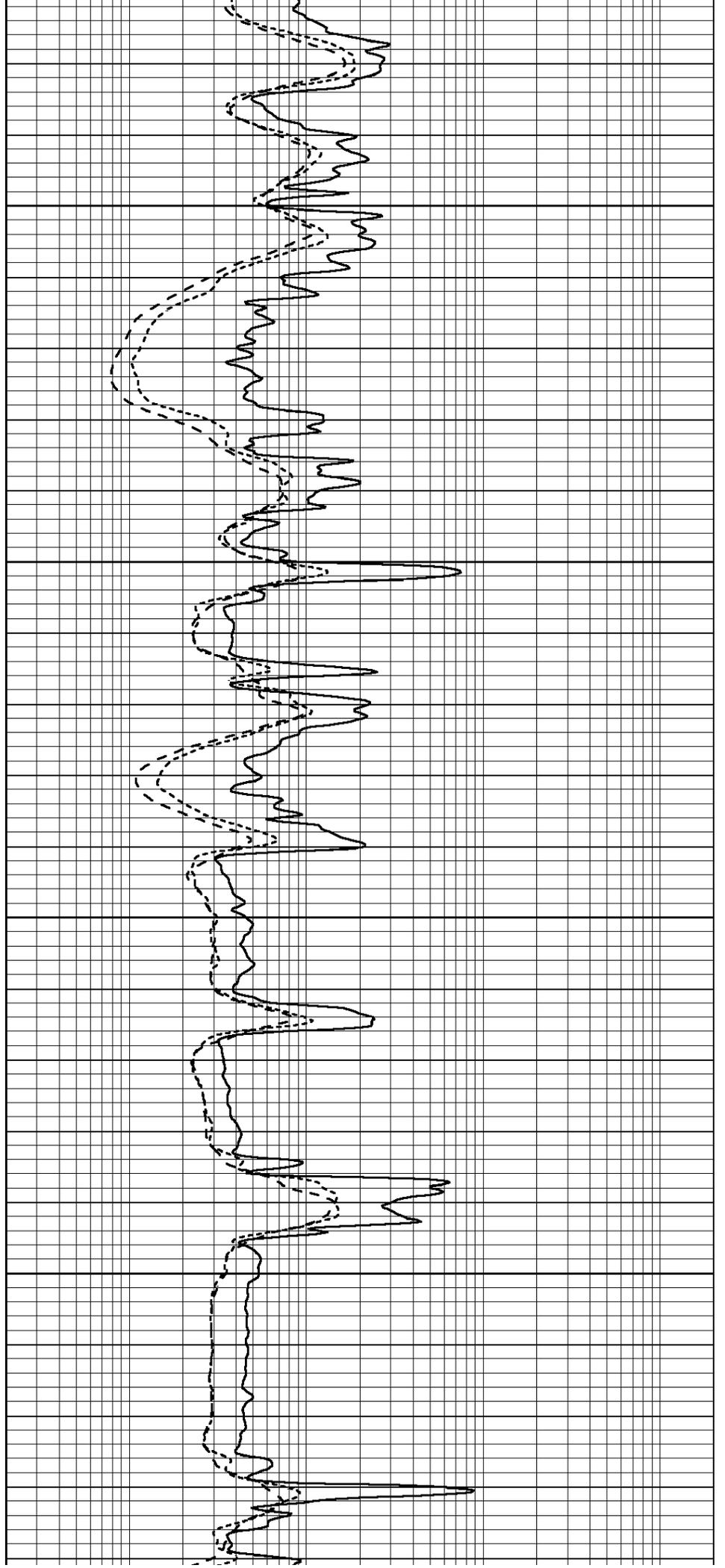


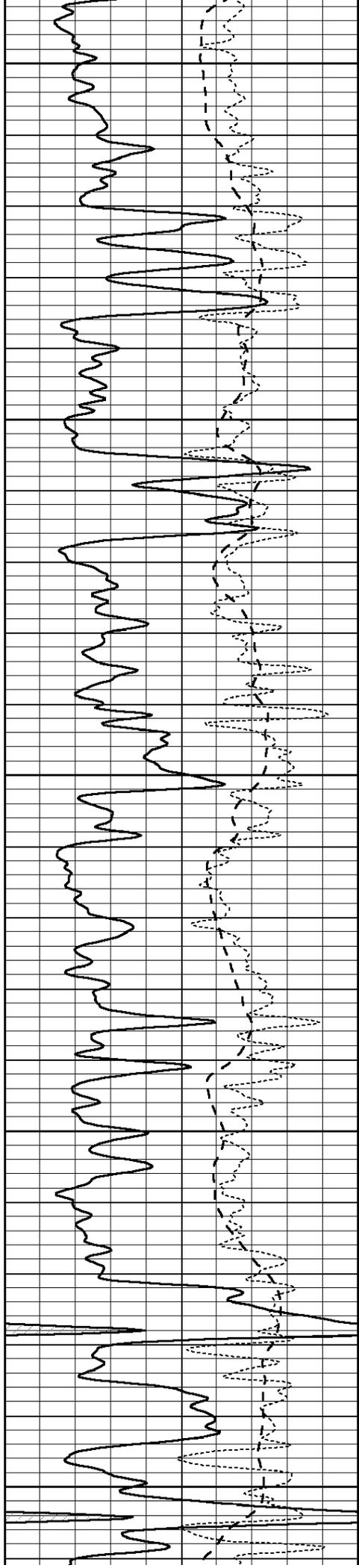
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4400





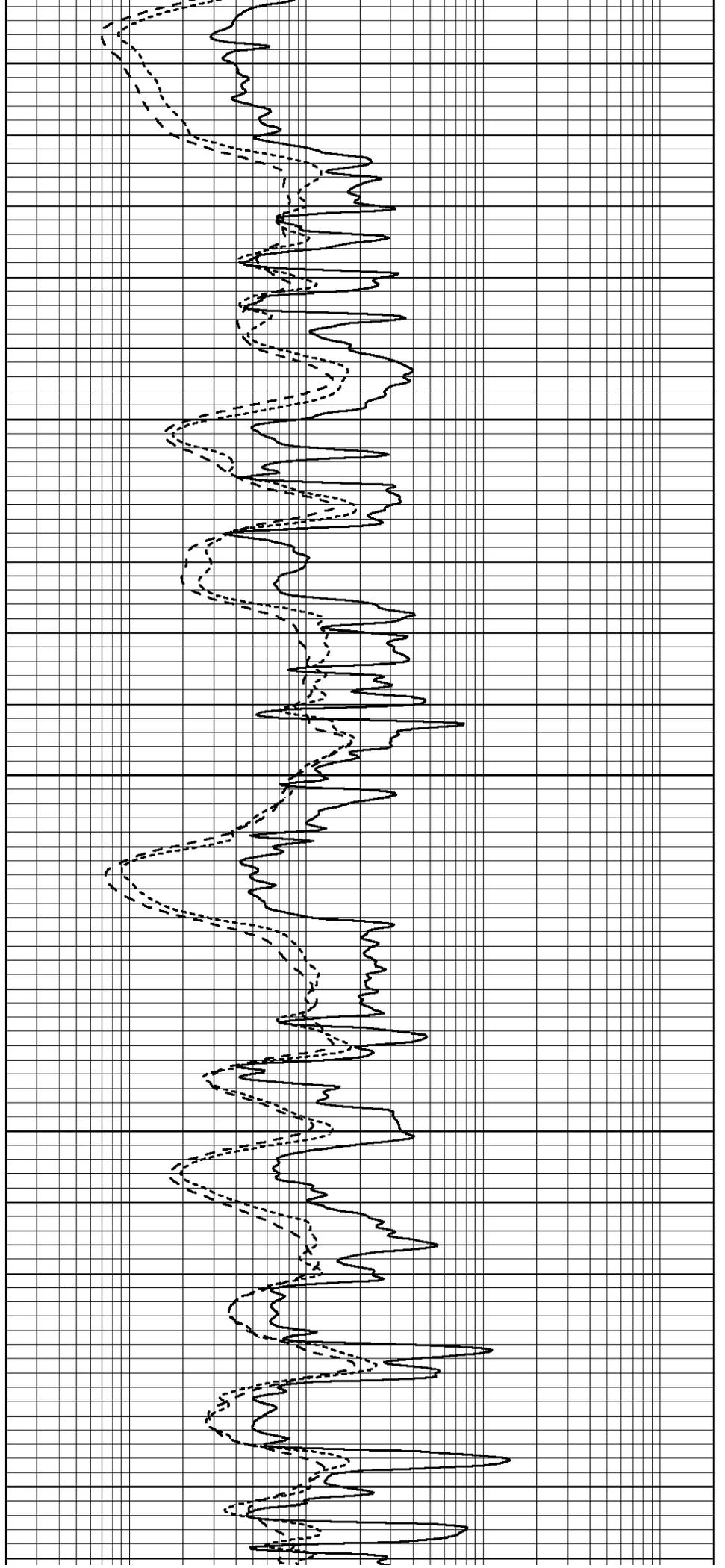
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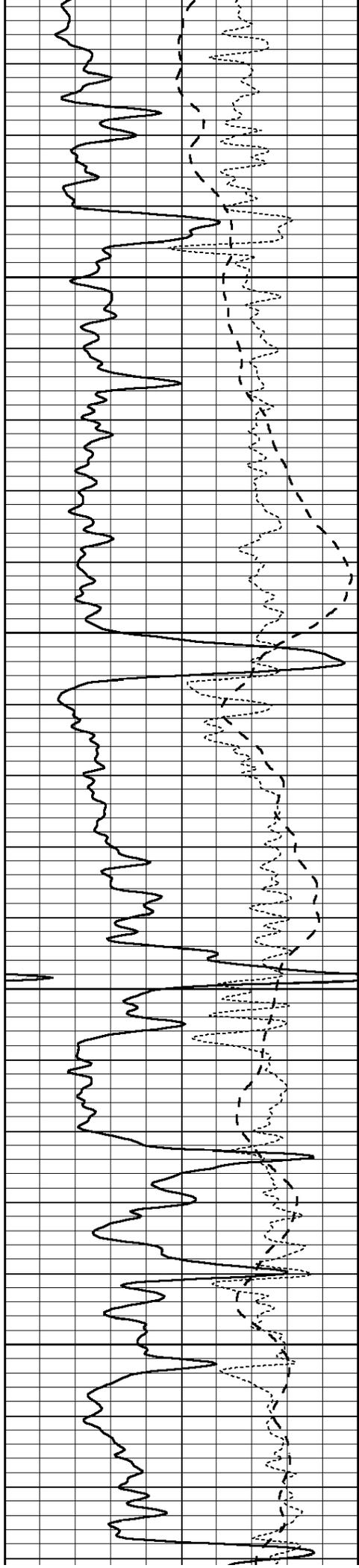
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4600

4650



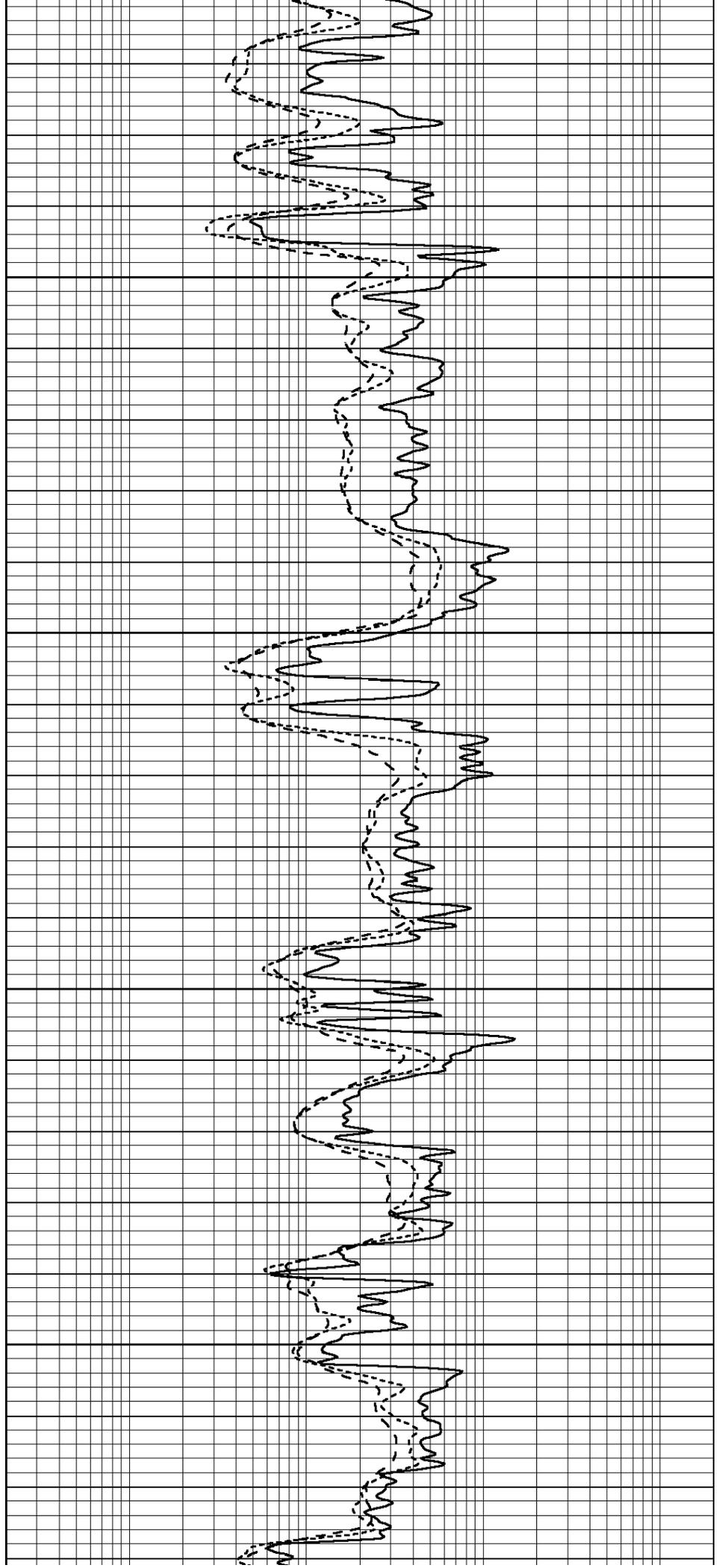


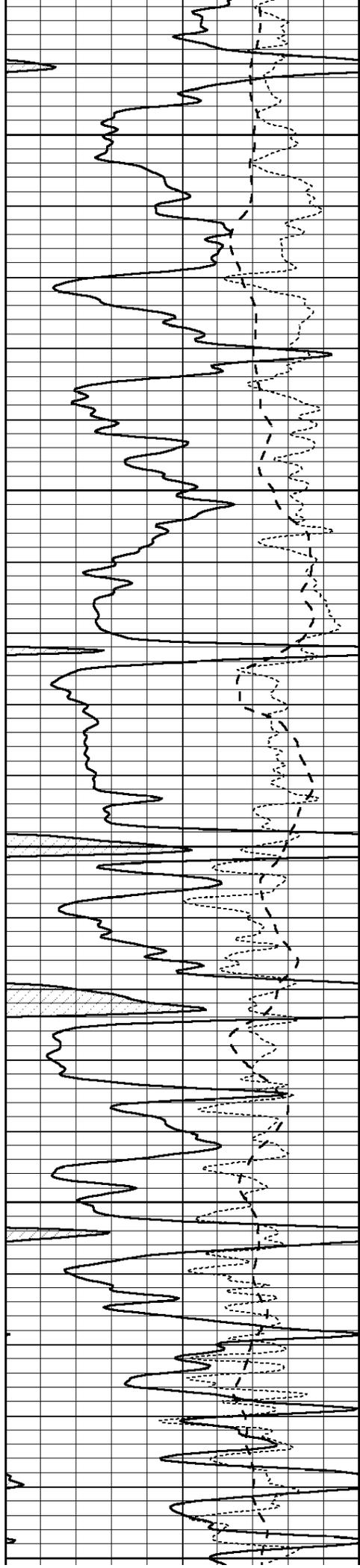
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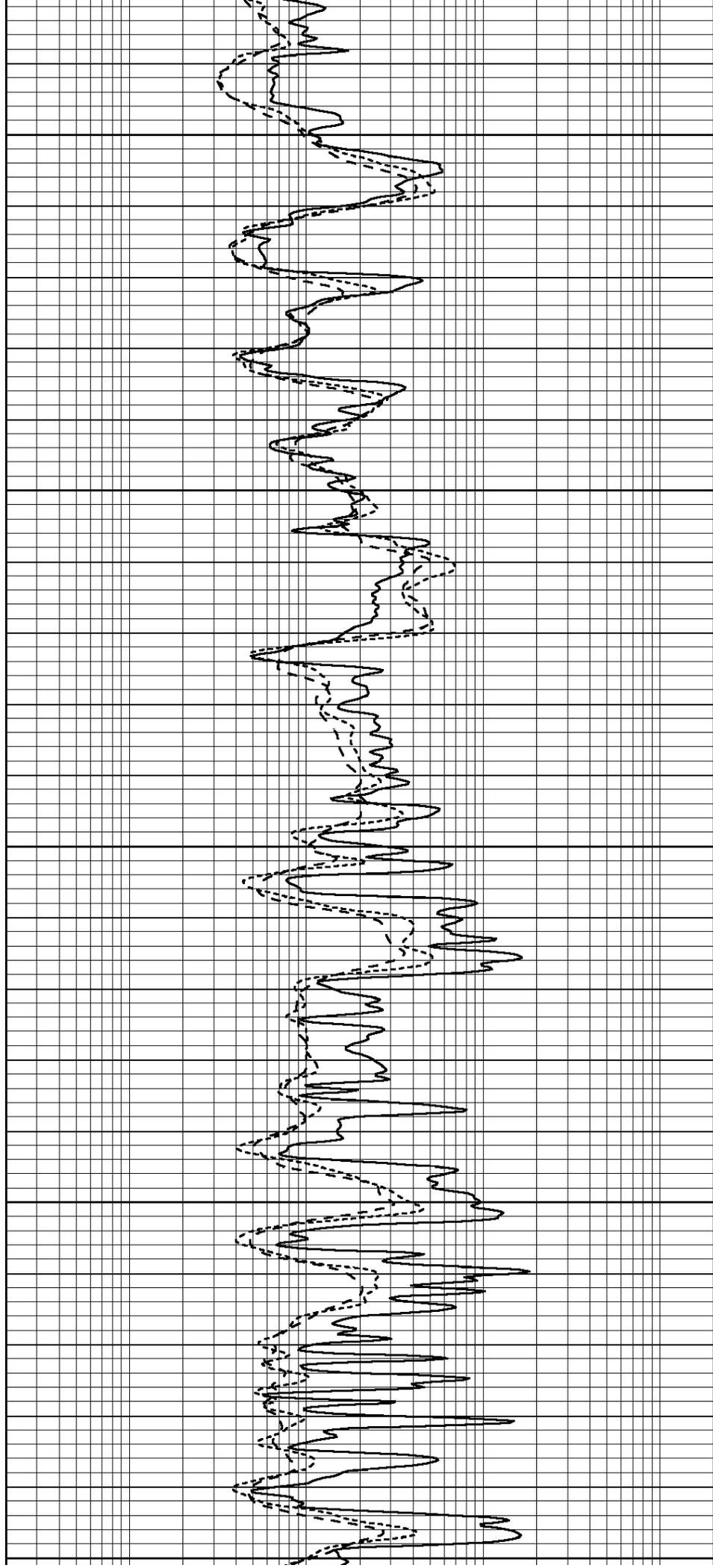
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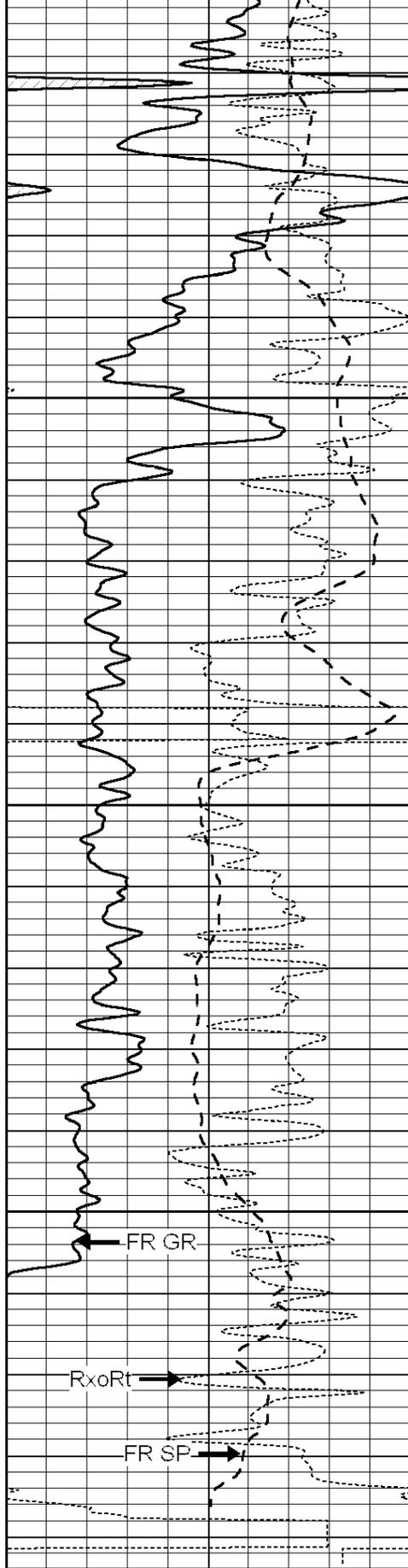
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5050

5100





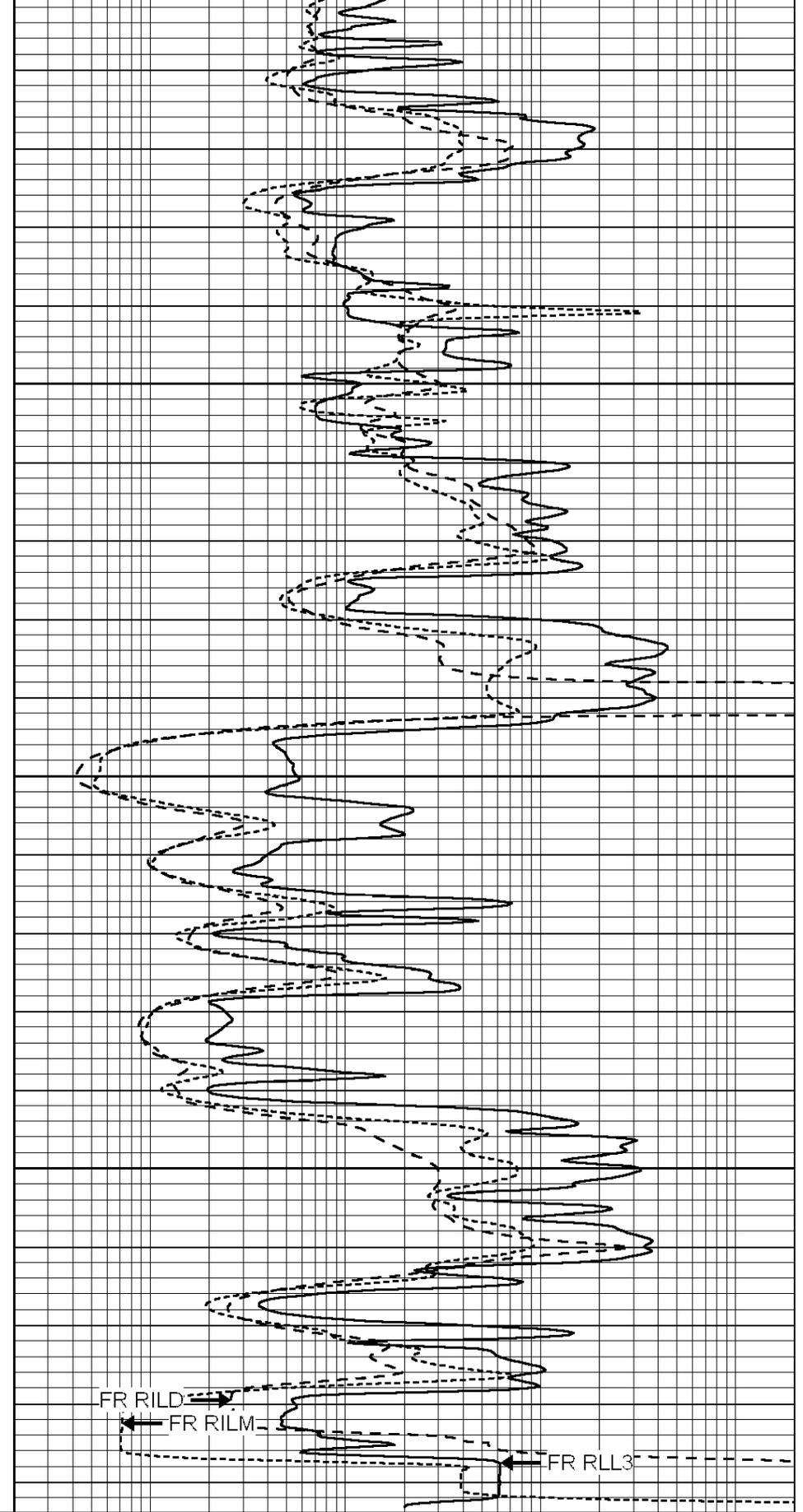
5150

5200

5250

LTD 5290

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



FR RILD

FR RILM

FR RLL3

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



SUPERIOR

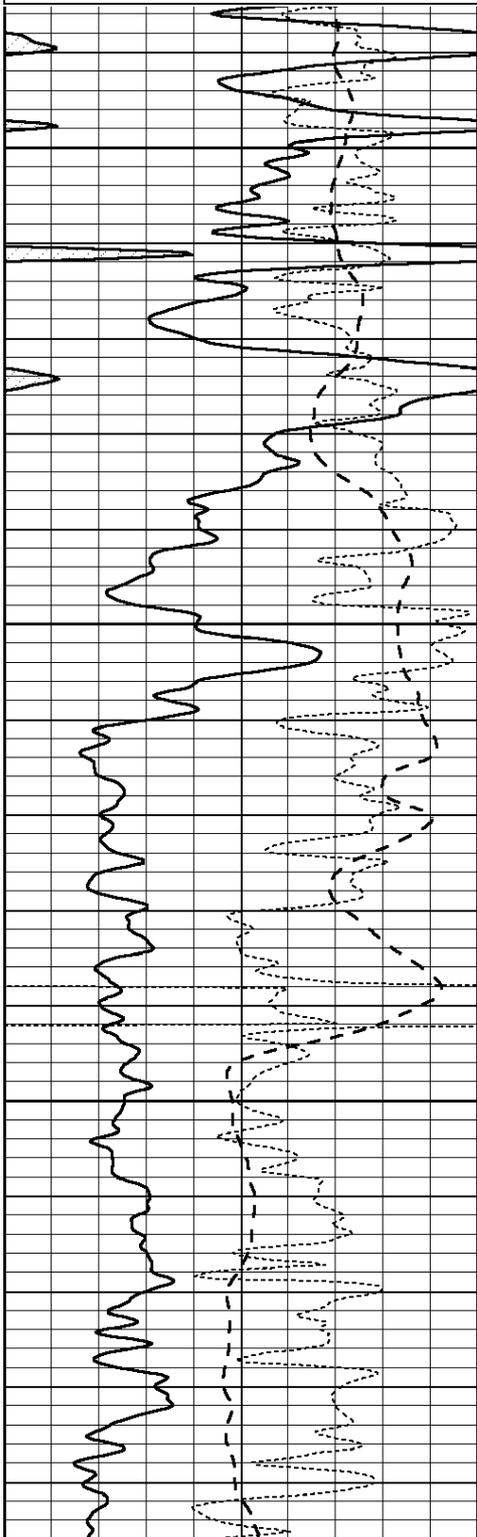
Hays,  
Kansas

# REPEAT SECTION

Database File: 007889ddn.db  
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 Presentation Format: \_dil  
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 Charted by: Depth in Feet scaled 1:240

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

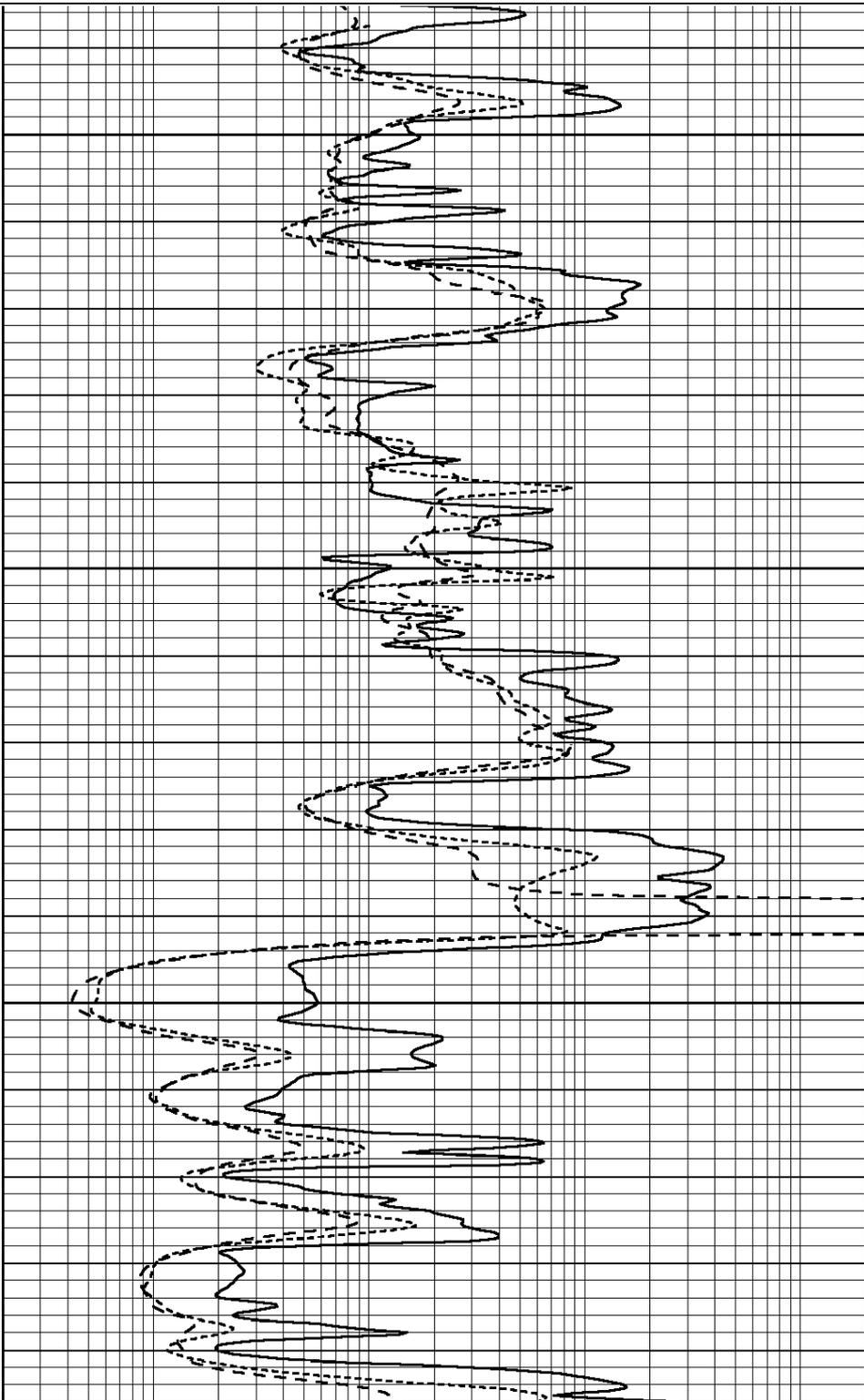
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

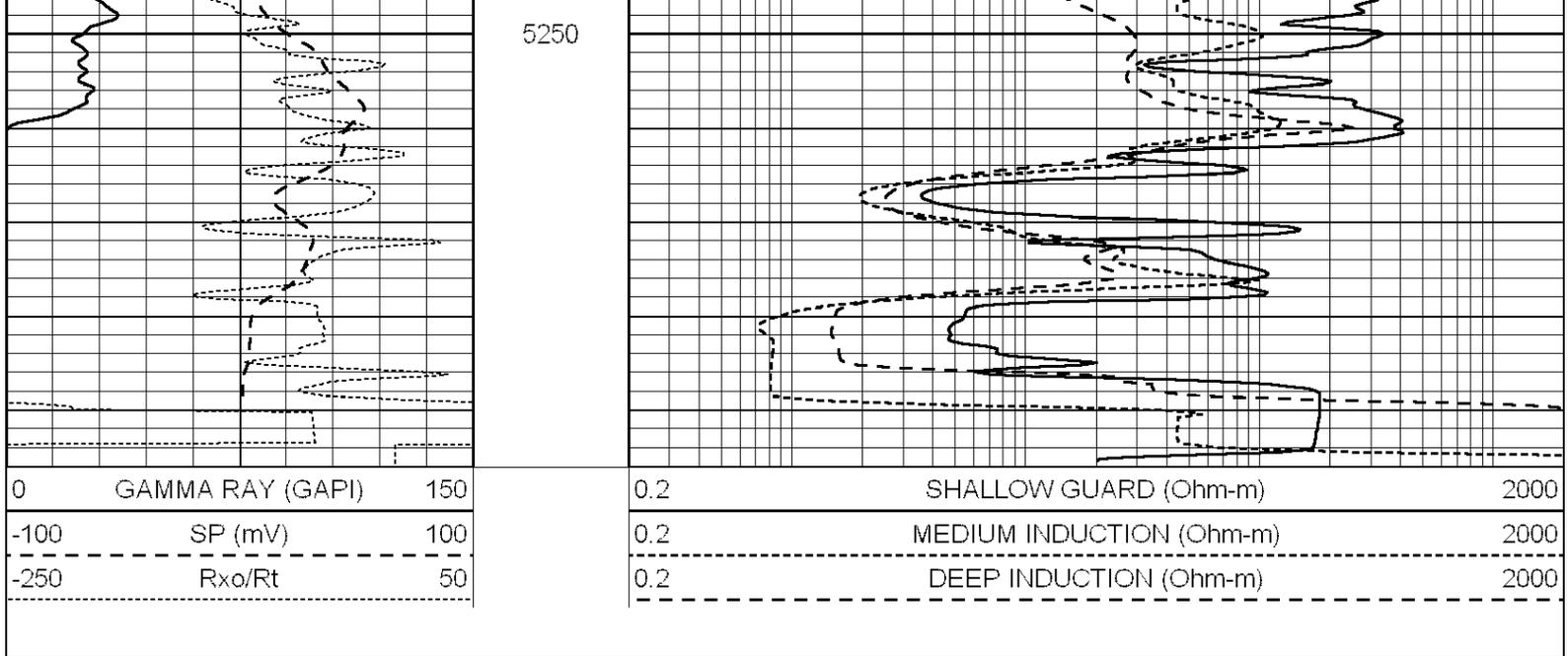


5100

5150

5200





### Calibration Report

Database File: 007889ddn.db  
 Dataset Pathname: pass3.1  
 Dataset Creation: Sun Oct 23 17:42:34 2011 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	0.016	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: Sat Jul 16 17:35:04 2011

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	2.25	V	
Large Ring	14.00	in	4.34	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