



**SUPERIOR**  
Hays,  
Kansas

**DUAL  
INDUCTION  
LOG**

Company ABARTA OIL & GAS CO. INC.  
Well ANCHOR CATTLE #1  
Field CLARK  
County LANE  
State KANSAS

Company ABARTA OIL AND GAS COMPANY INC.  
Well ANCHOR CATTLE #1  
Field CLARK  
County LANE State KANSAS

Location: API #: 15-101-22154-0000  
1712'FSL & 830'FWL  
NW-SE-NW-SW  
SEC 18 TWP 19S RGE 29W  
Permanent Datum GROUND LEVEL Elevation 2857  
Log Measured From KELLY BUSHING 5' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
CDL/CNL  
MEL/SONIC  
Elevation  
K.B. 2862  
D.F. 2860  
G.L. 2857

Date	26 FEB 09		
Run Number	ONE		
Depth Driller	4663		
Depth Logger	4663		
Bottom Logged Interval	4661		
Top Log Interval	0		
Casing Driller	8 5/8 @ 349'		
Casing Logger	348'		
Bit Size	7 7/8		
Type Fluid In Hole	CHEMICAL		
Density / Viscosity	9.4/48	CHLORIDES 3000	
pH / Fluid Loss	9.3/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.35 @ 77F		
Rmf @ Meas. Temp	1.01 @ 77F		
Rmc @ Meas. Temp	1.62 @ 77F		
Source of Rmf / Rmc	CAL/CAL		
Rm @ BHT	0.85 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	7:00 PM		
Maximum Recorded Temperature	122F		
Equipment Number	680		
Location	HAYS, KS		
Recorded By	JEFF GRONEWEG	JOE CRATHORNE	
Witnessed By	SCOTT ALBERG		

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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, KS. 785-628-6395

DIRECTIONS: DIGHTON; 6 MILES SOUTH ON HWY 23 TO RD 90, 6 MILES WEST, NORTH INTO

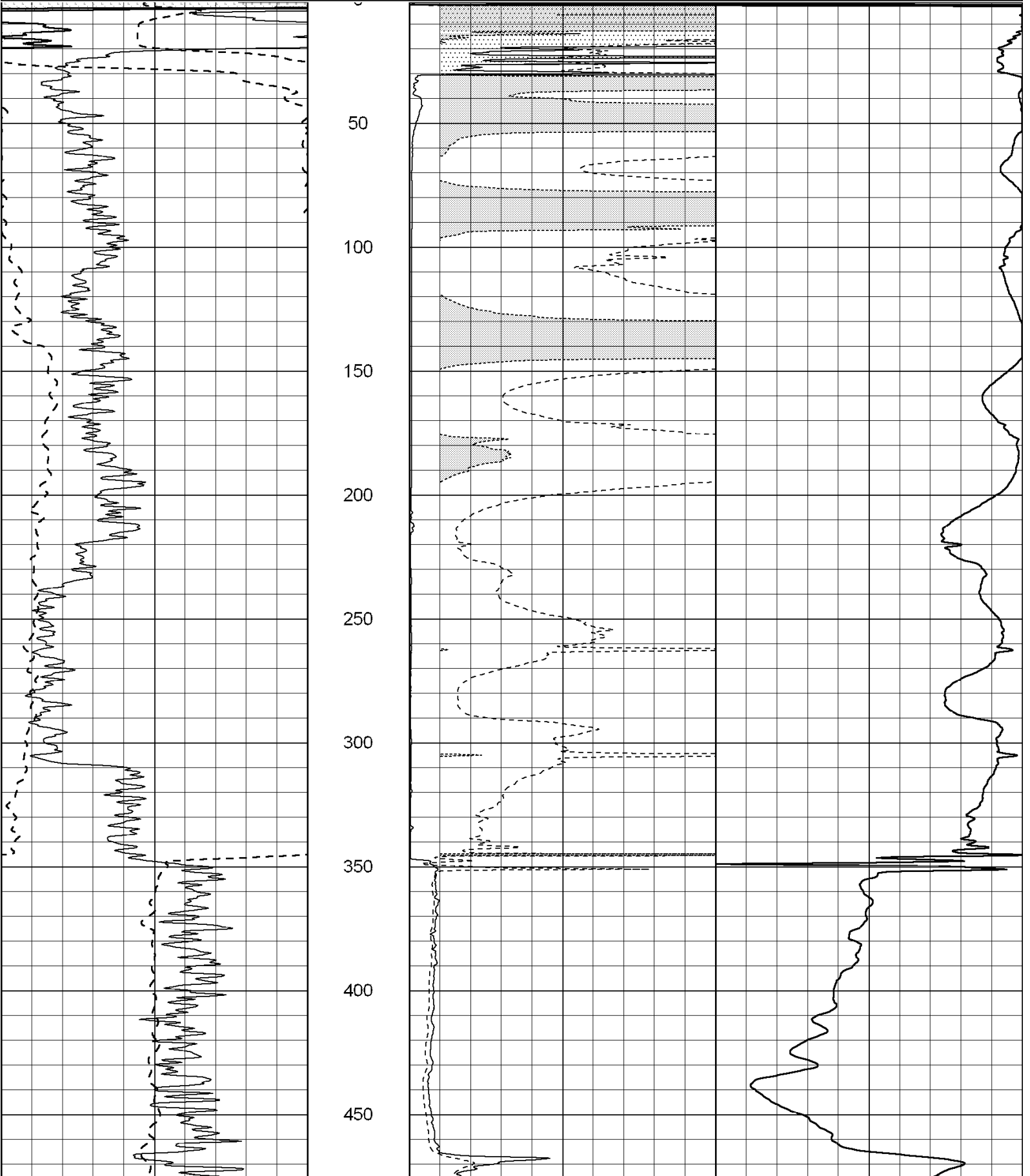
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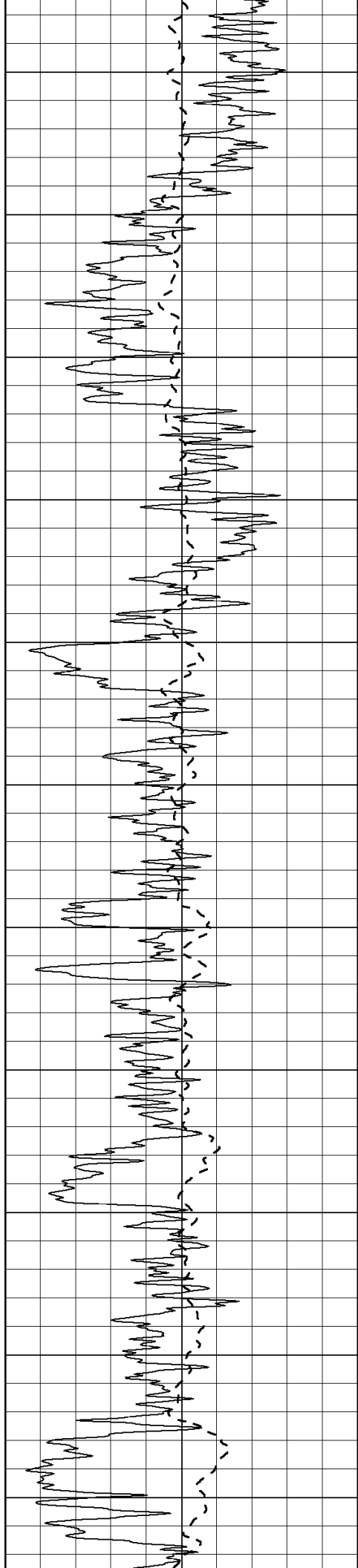
Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-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





500

550

600

650

700

750

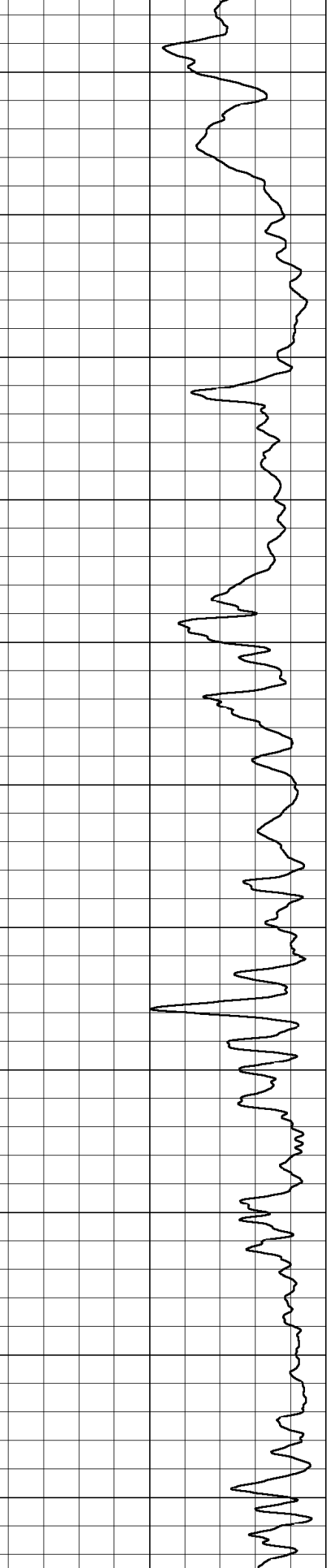
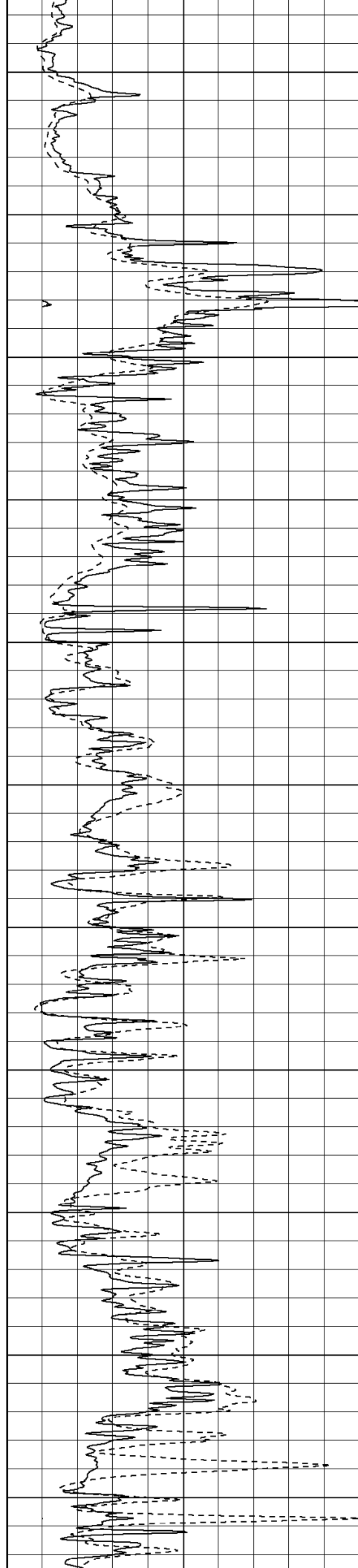
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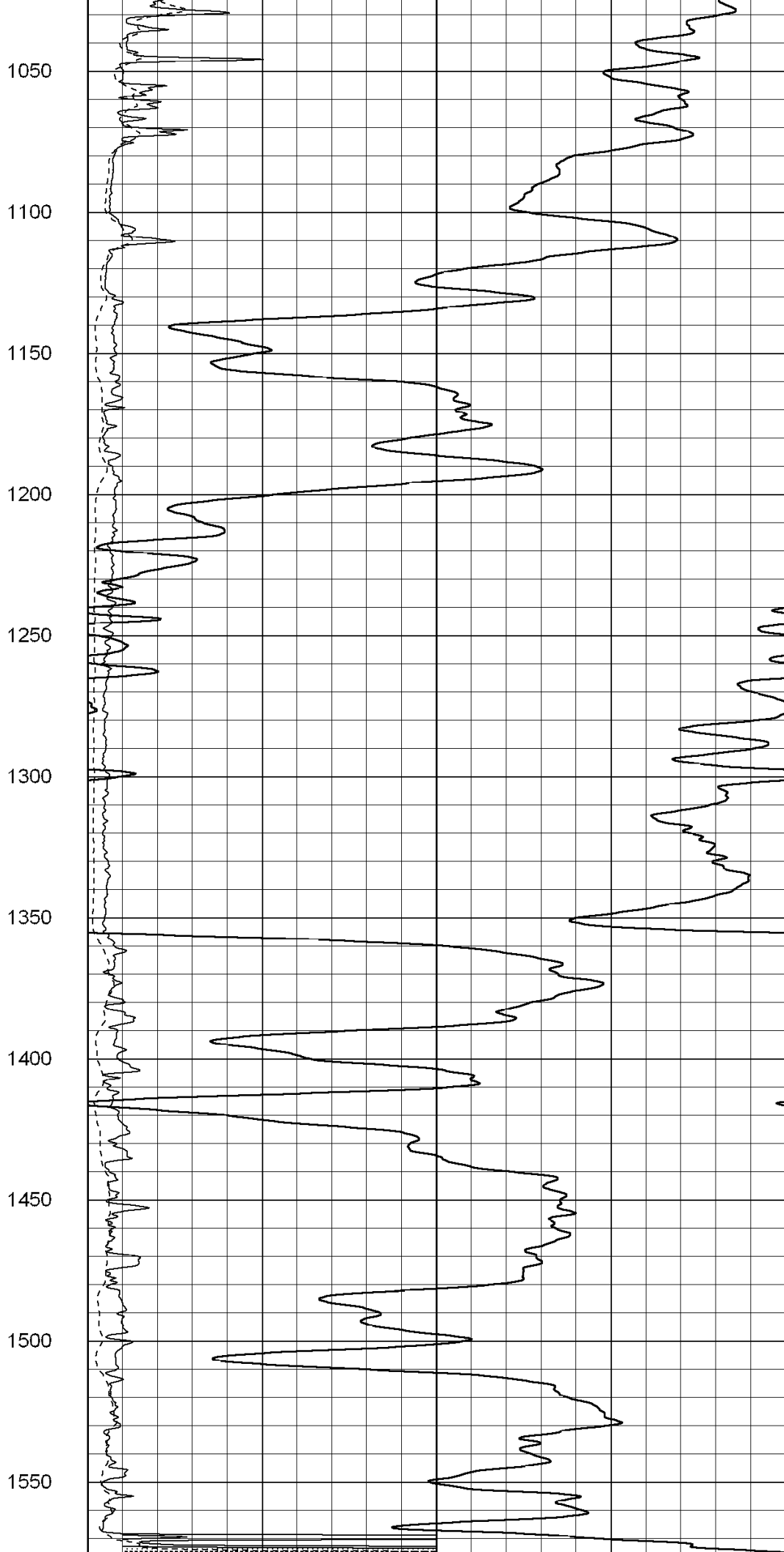
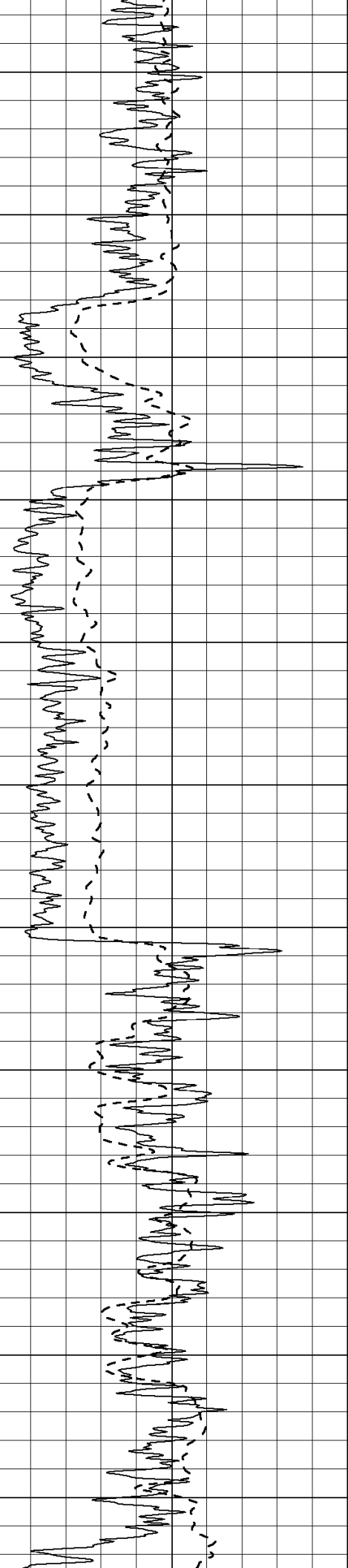
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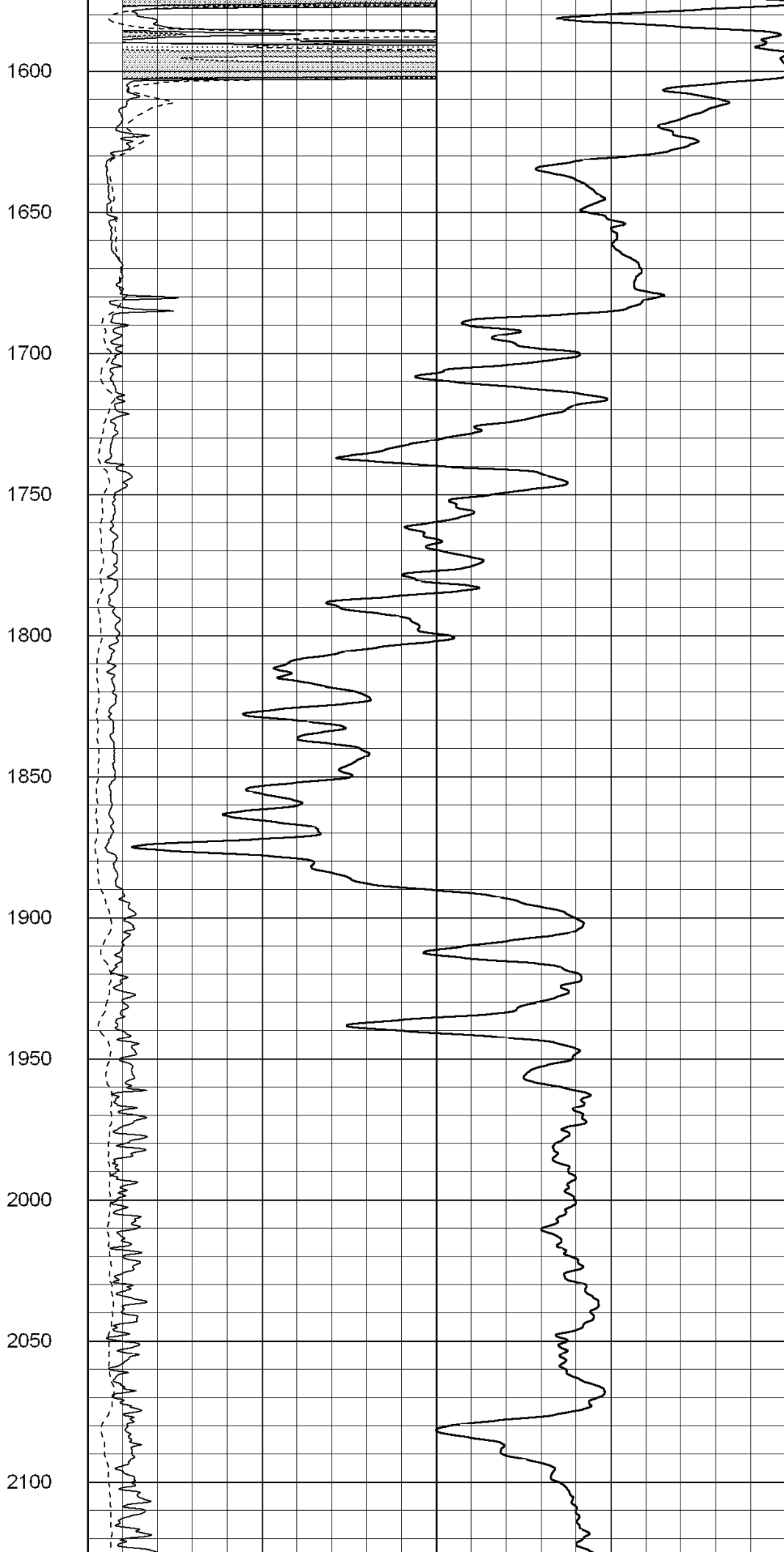
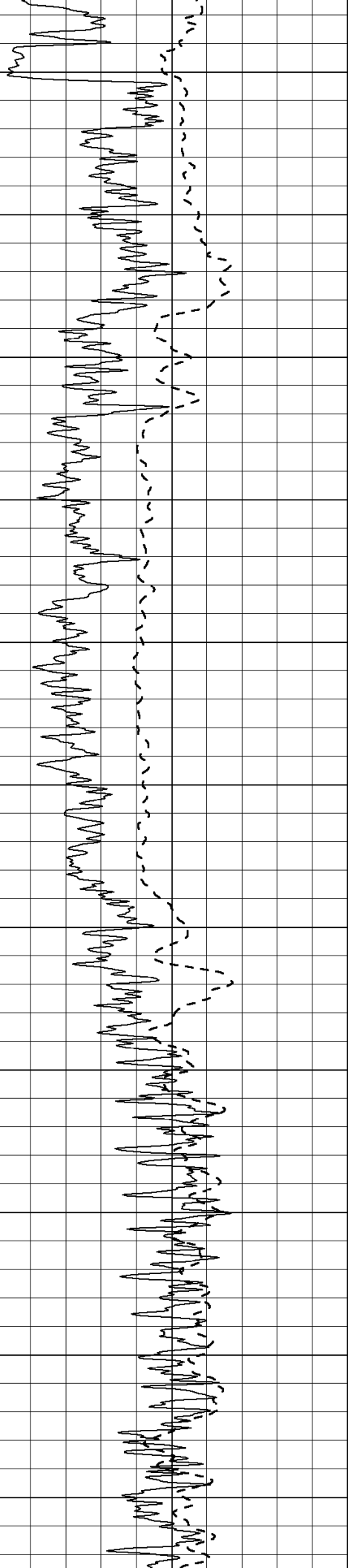
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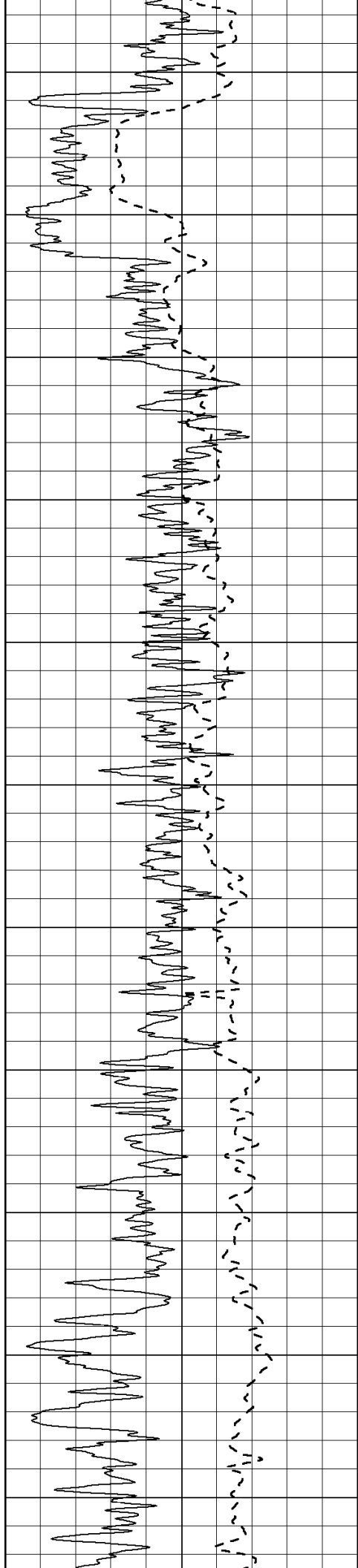
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1000









2150

2200

2250

2300

2350

2400

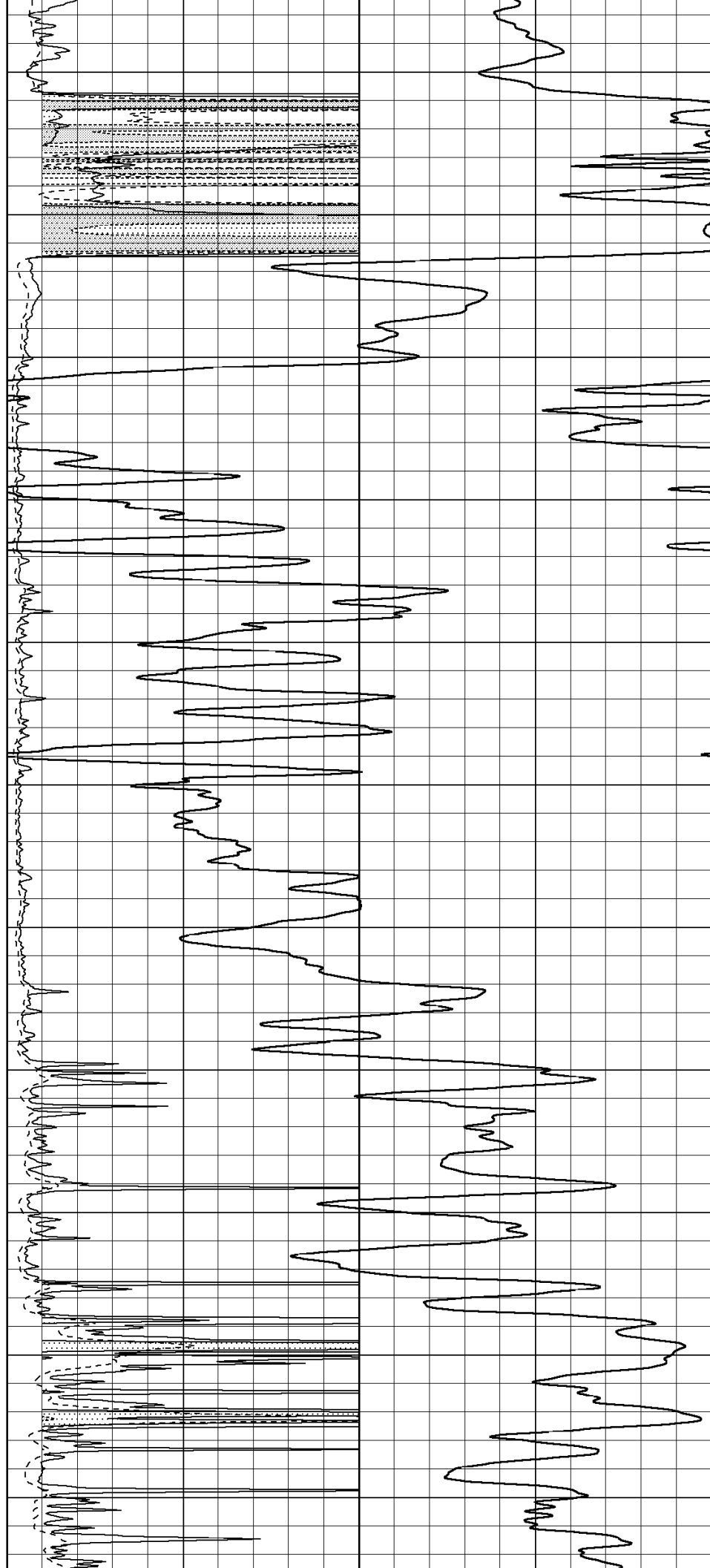
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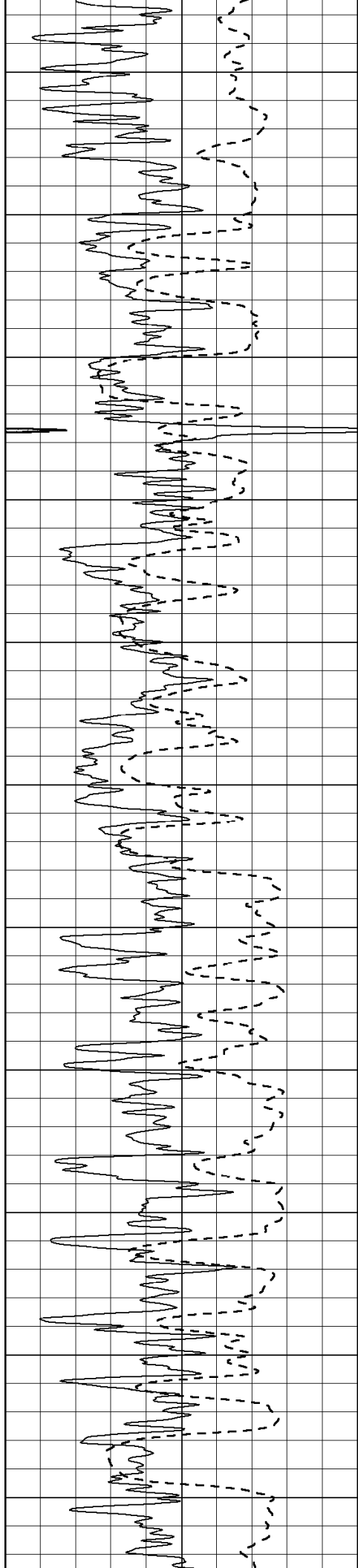
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2550

2600

2650





2700

2750

2800

2850

2900

2950

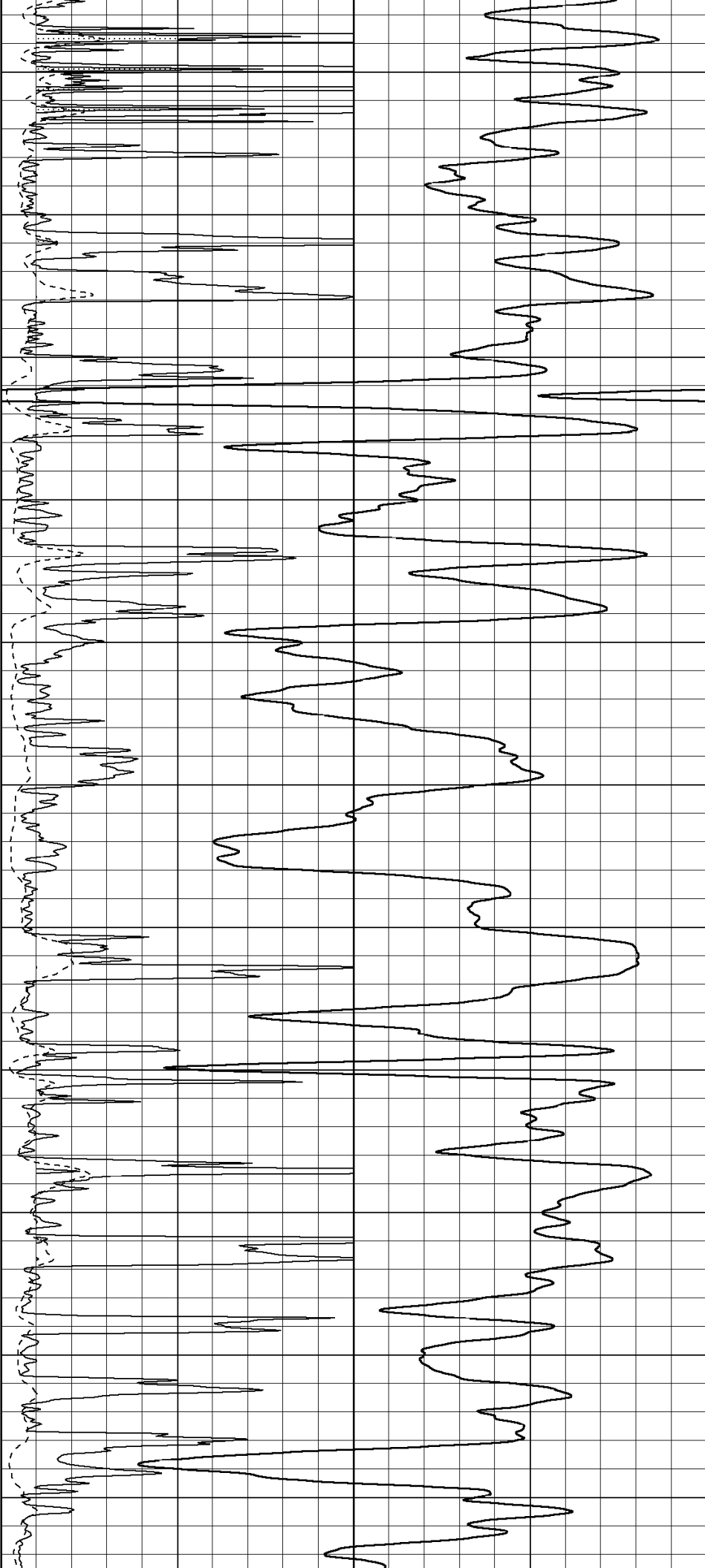
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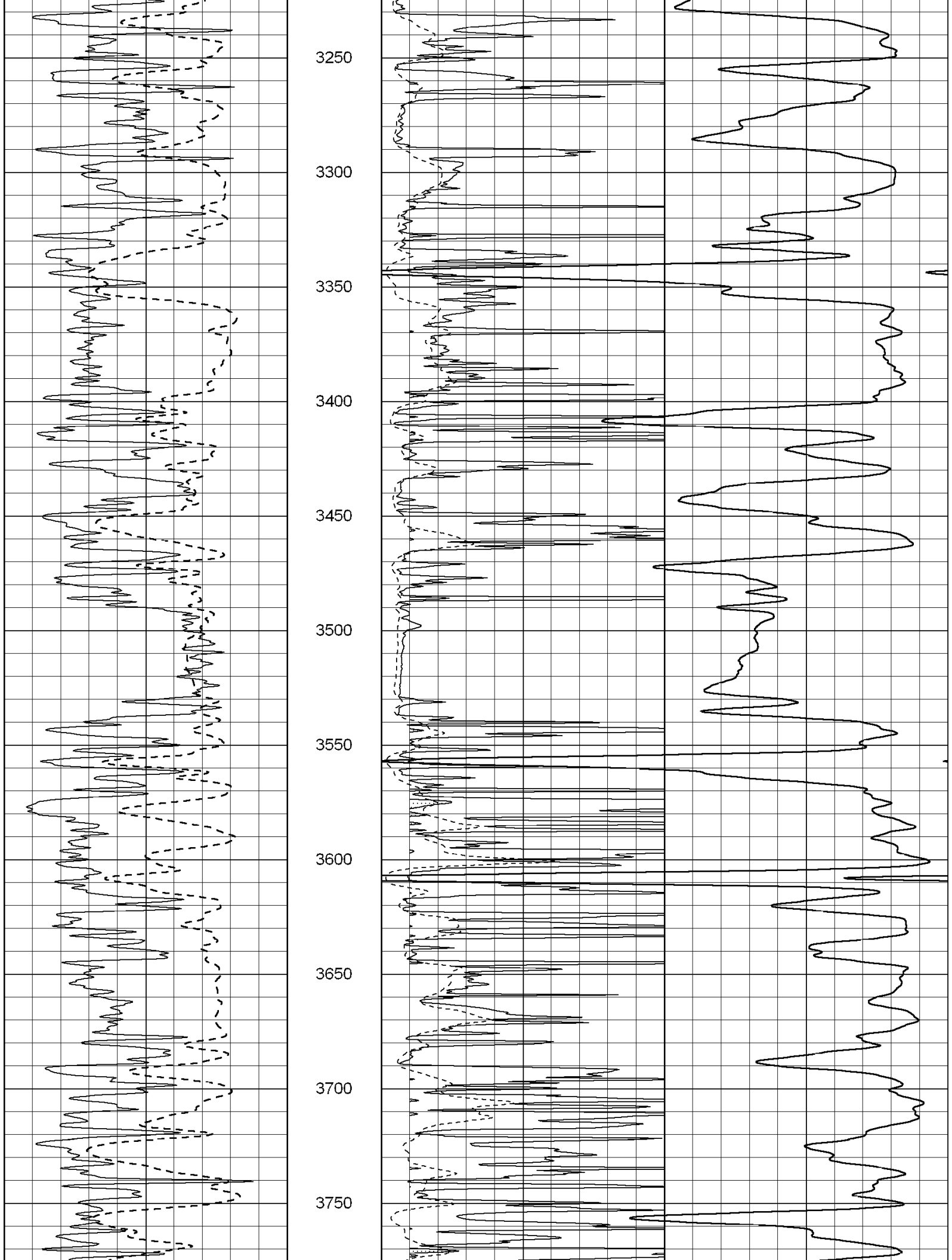
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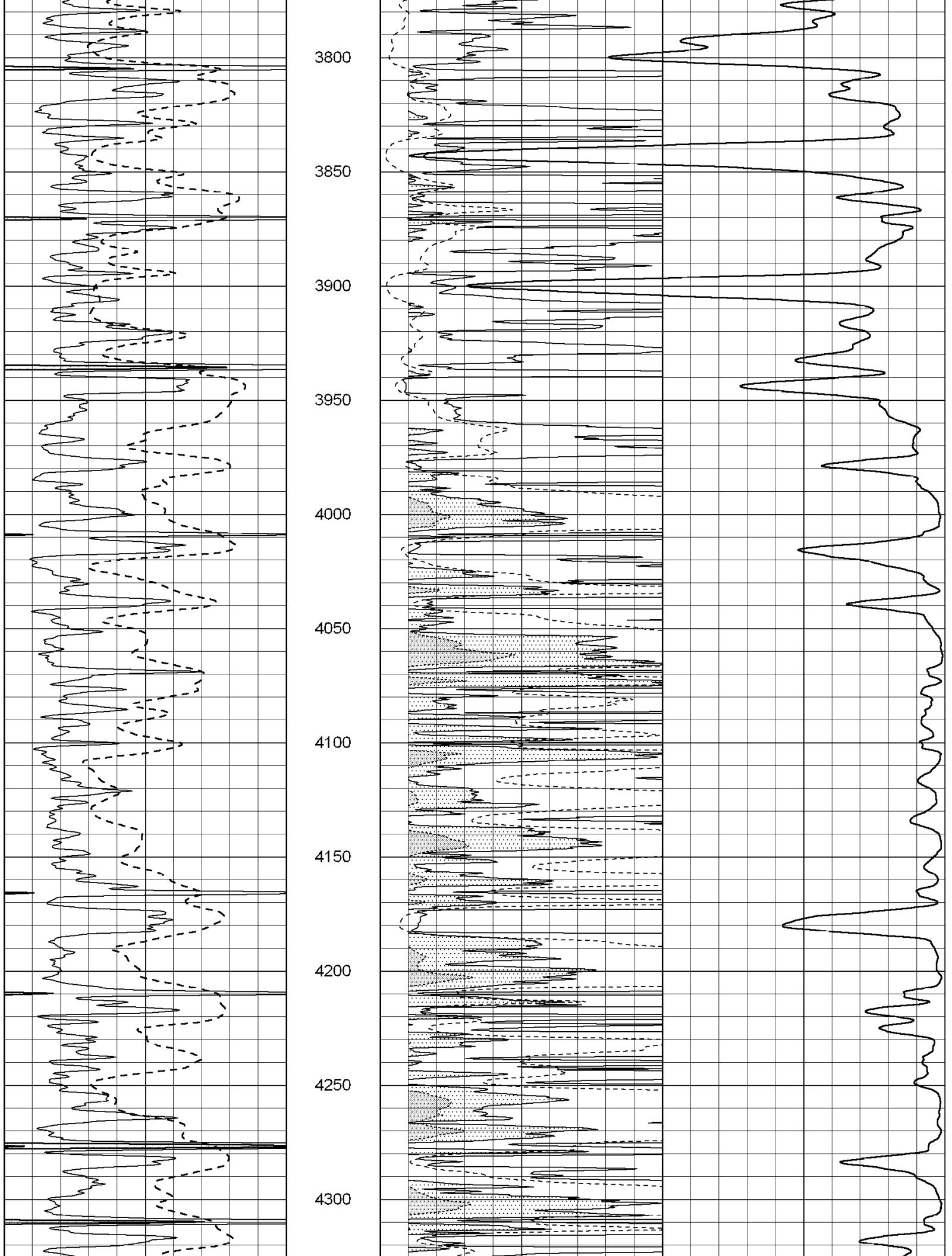
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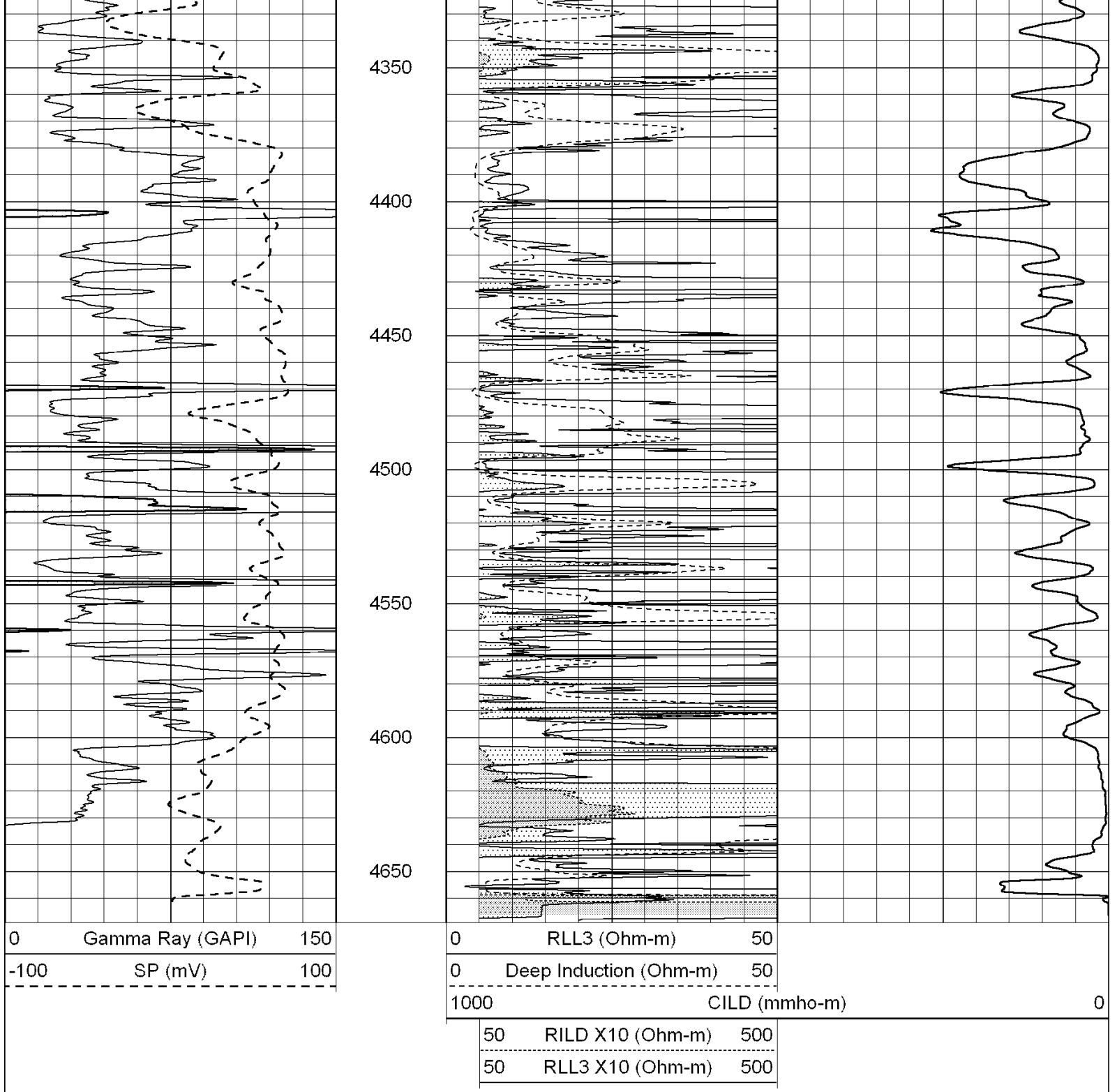
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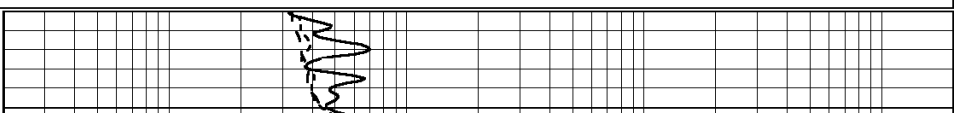
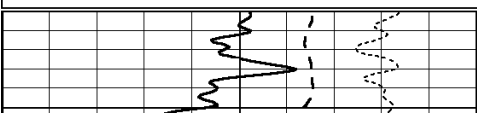


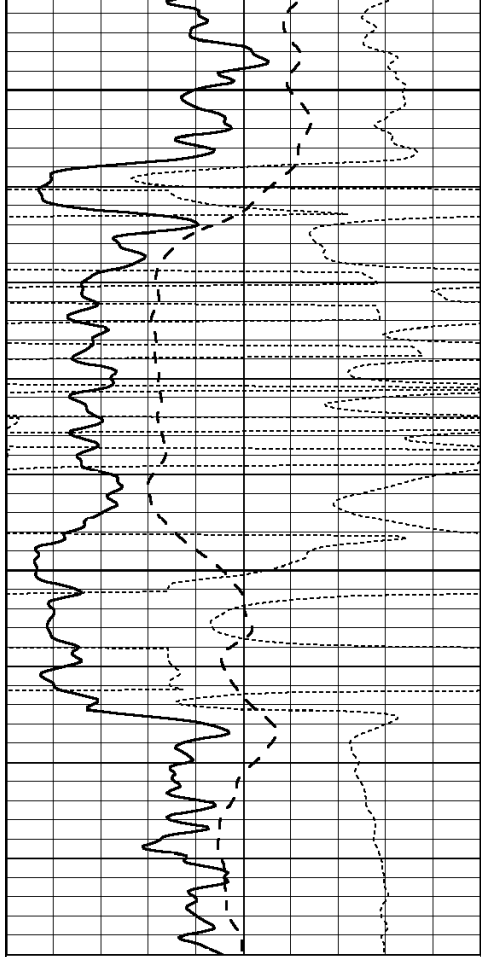




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 Presentation Format: \_dil  
 Dataset Creation: Thu Feb 26 20:57:28 2009 by Calc Open-Cased 070814  
 Charted by: Depth in Feet scaled 1:240

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

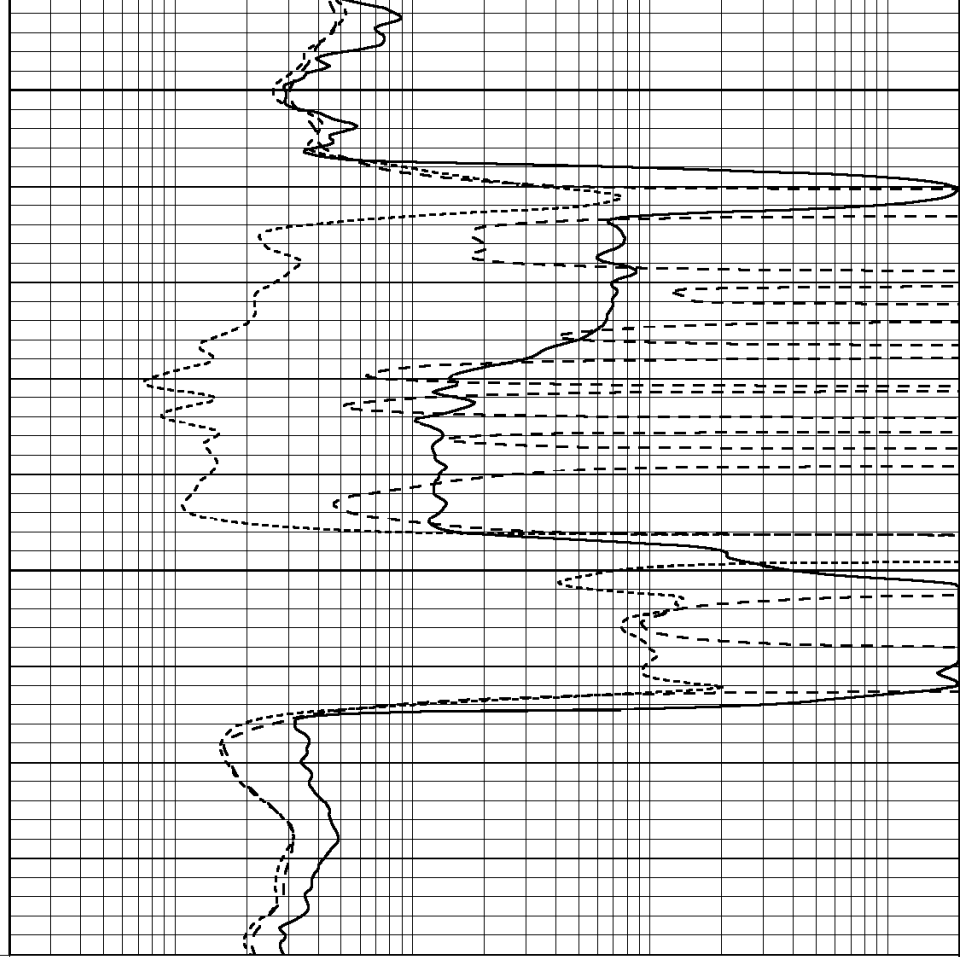




2150

2200

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

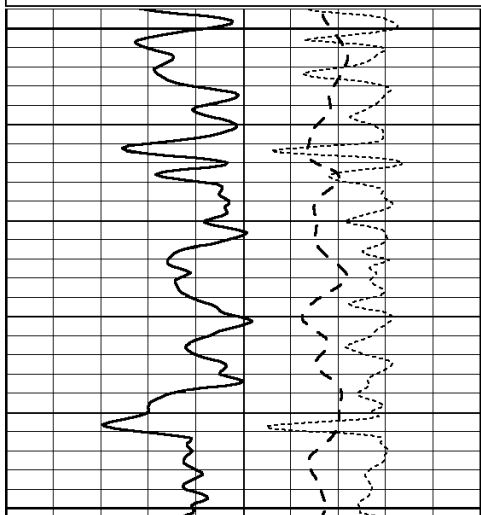


0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

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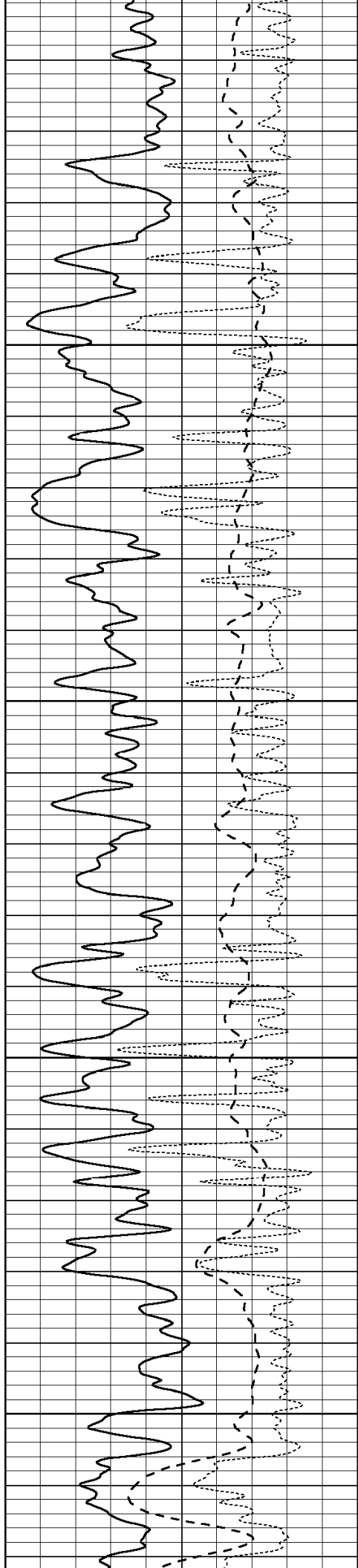
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



2500

2550

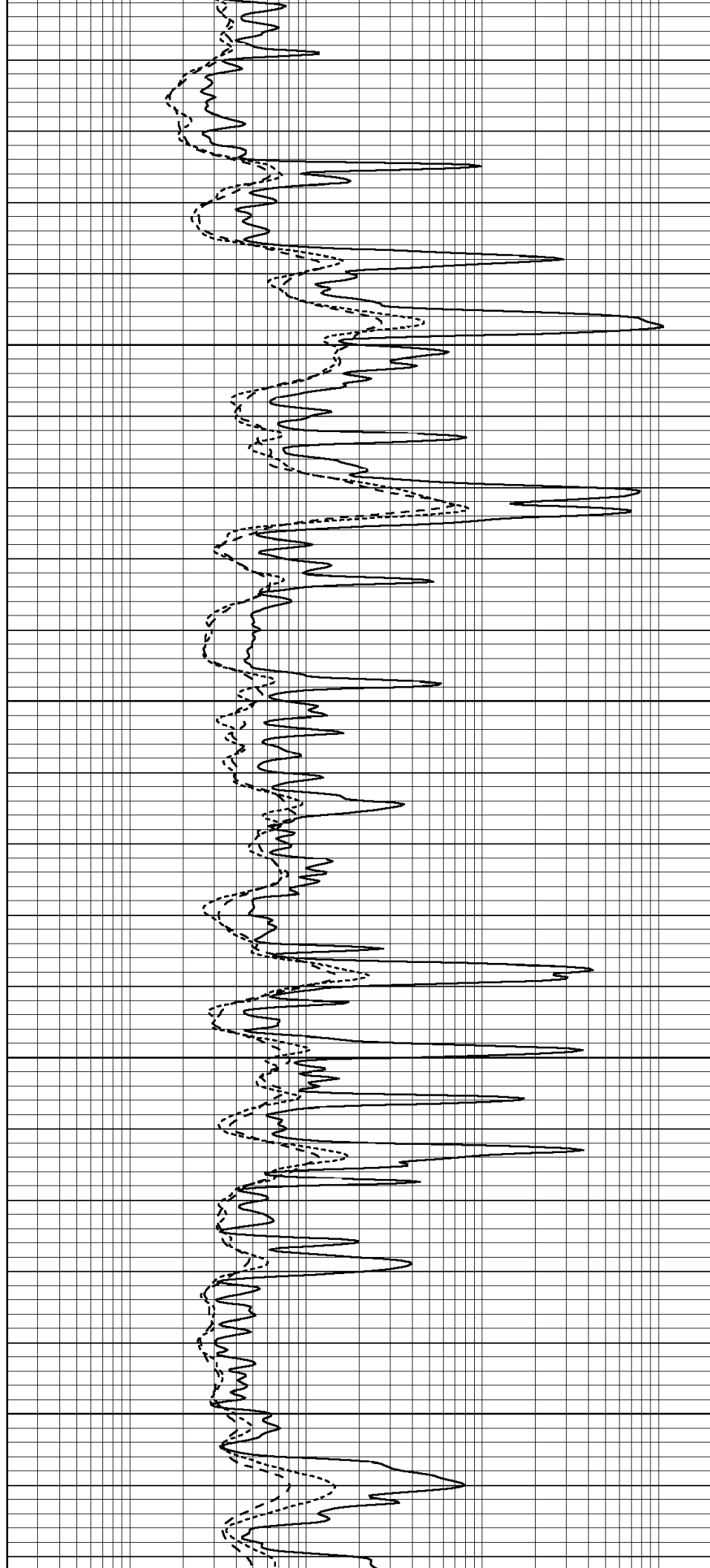


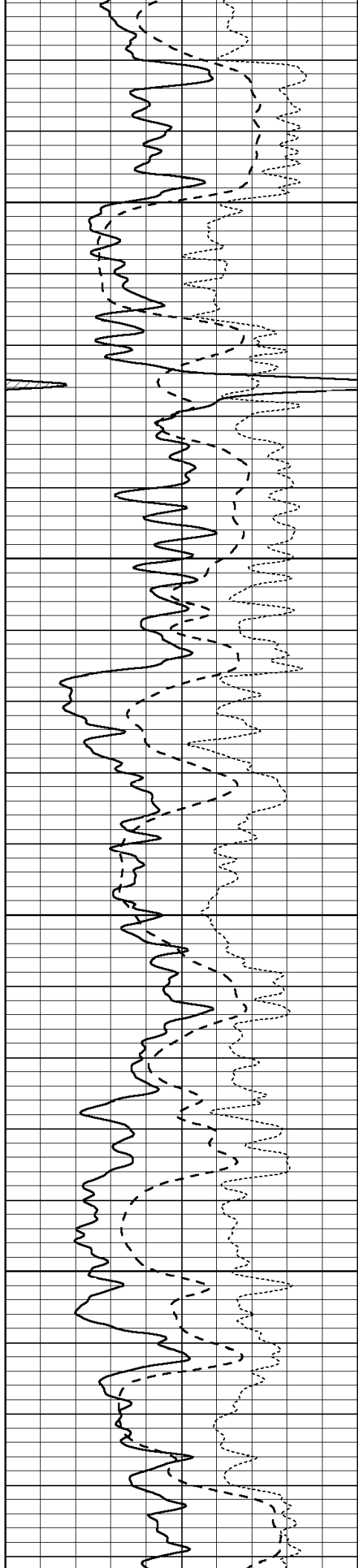
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2650

2700

2750



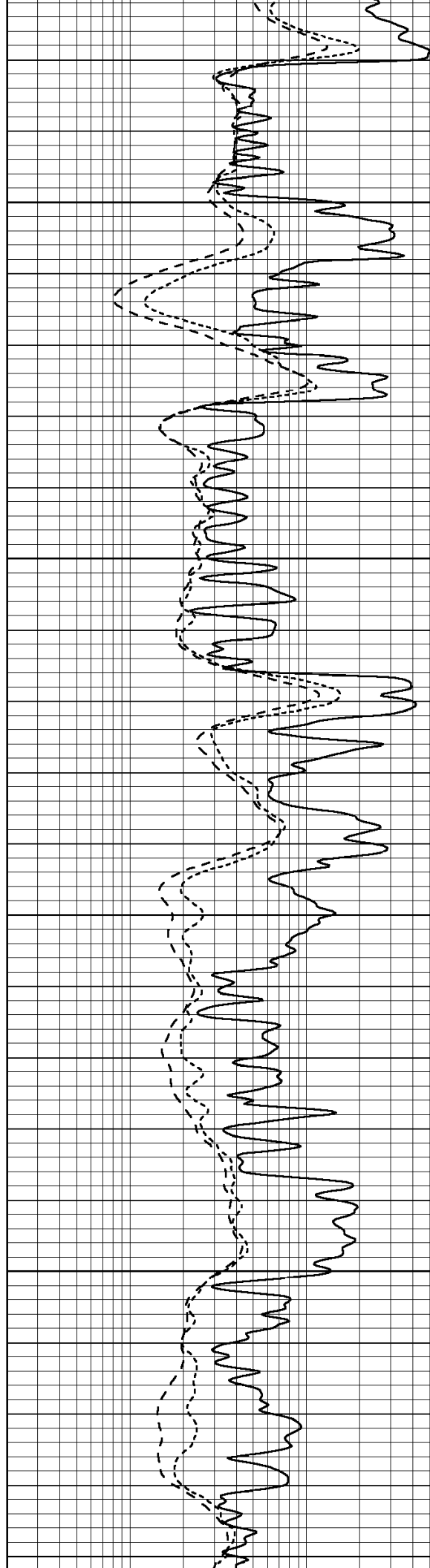


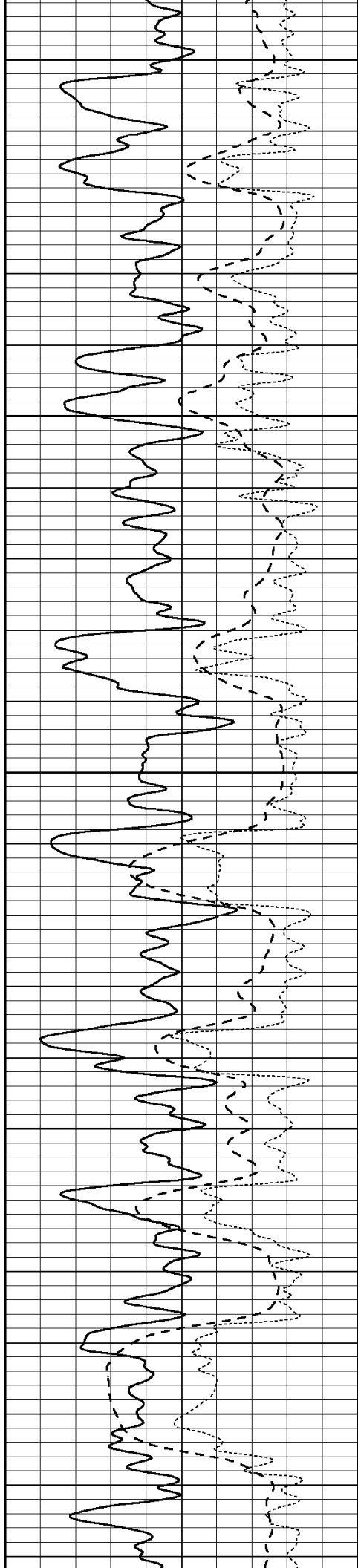
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2850

2900

2950





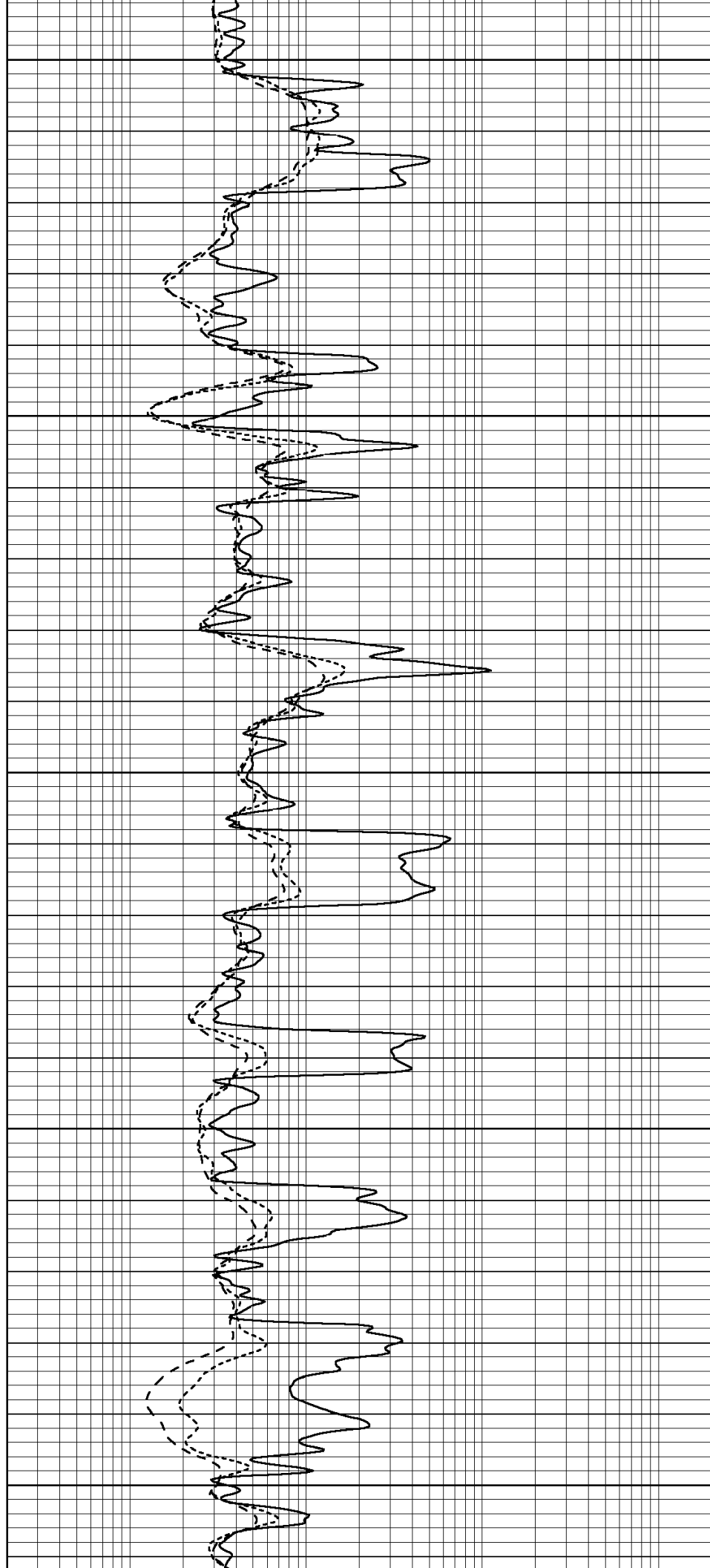
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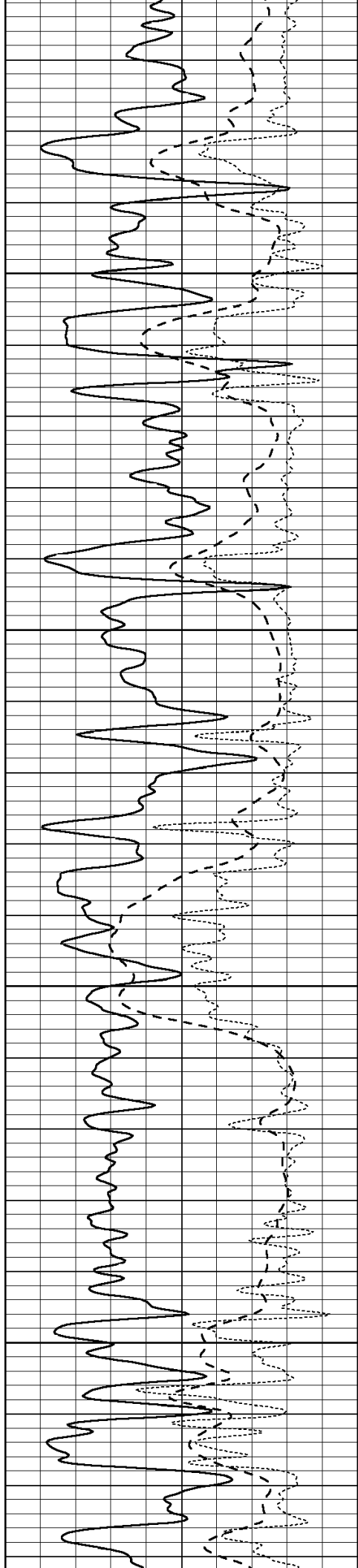
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3100

3150

3200



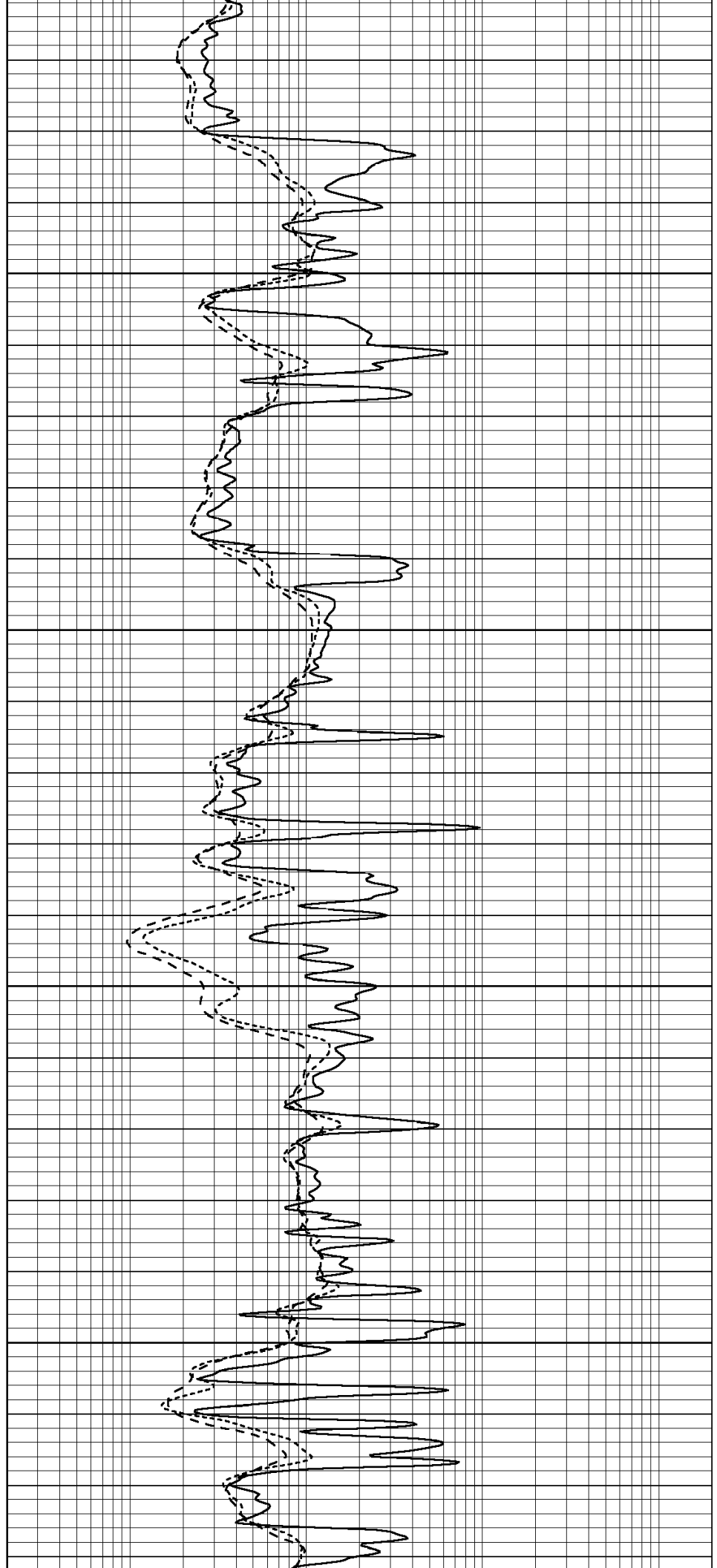


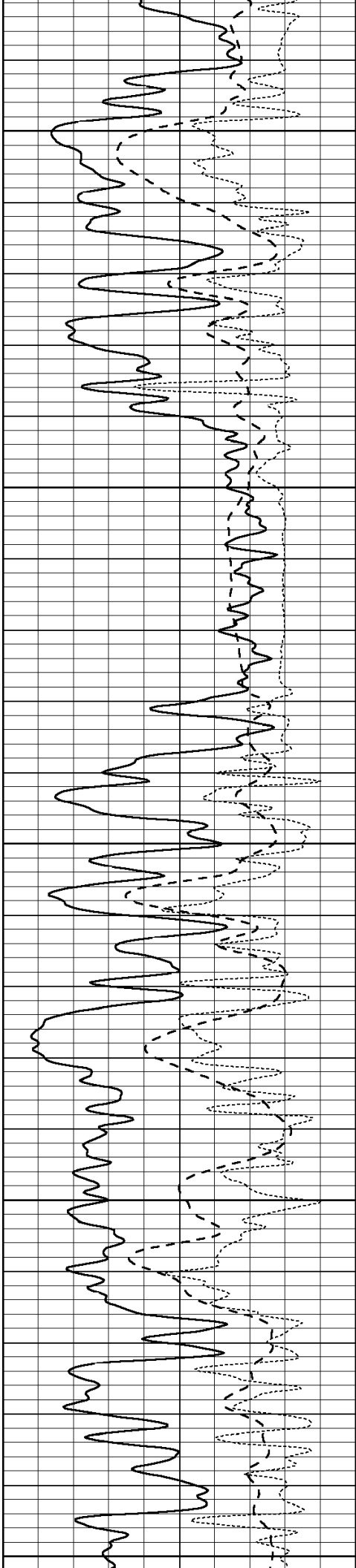
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3350

3400





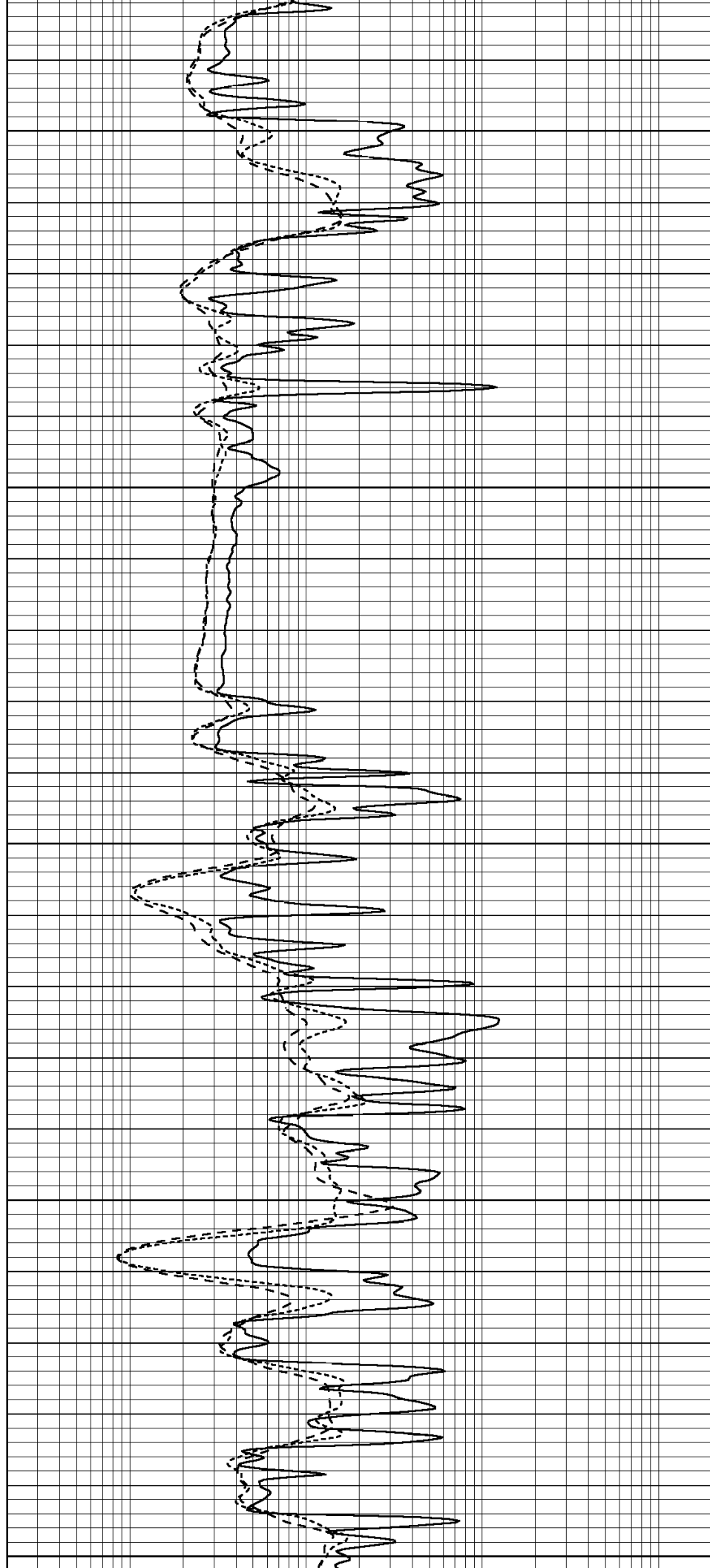
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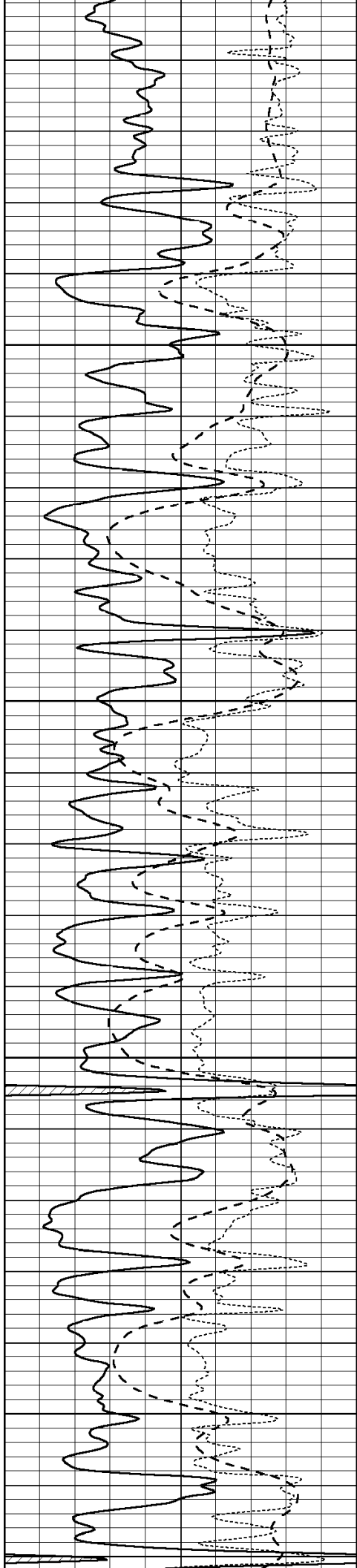
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3550

3600

3650



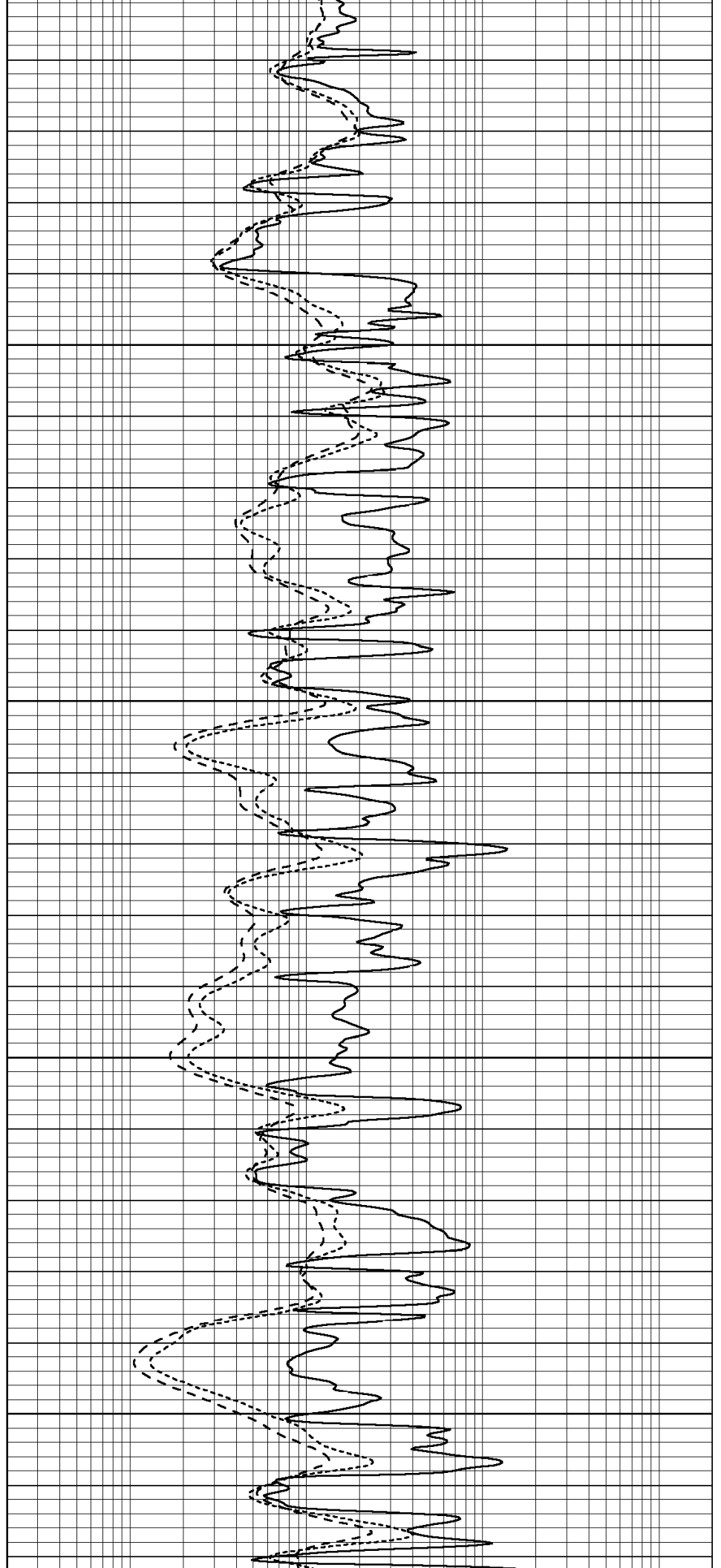


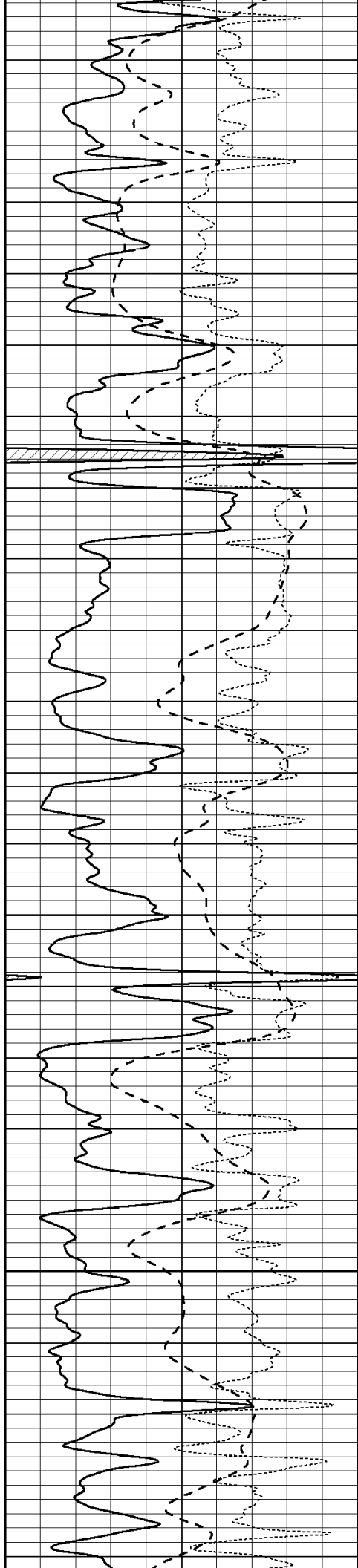
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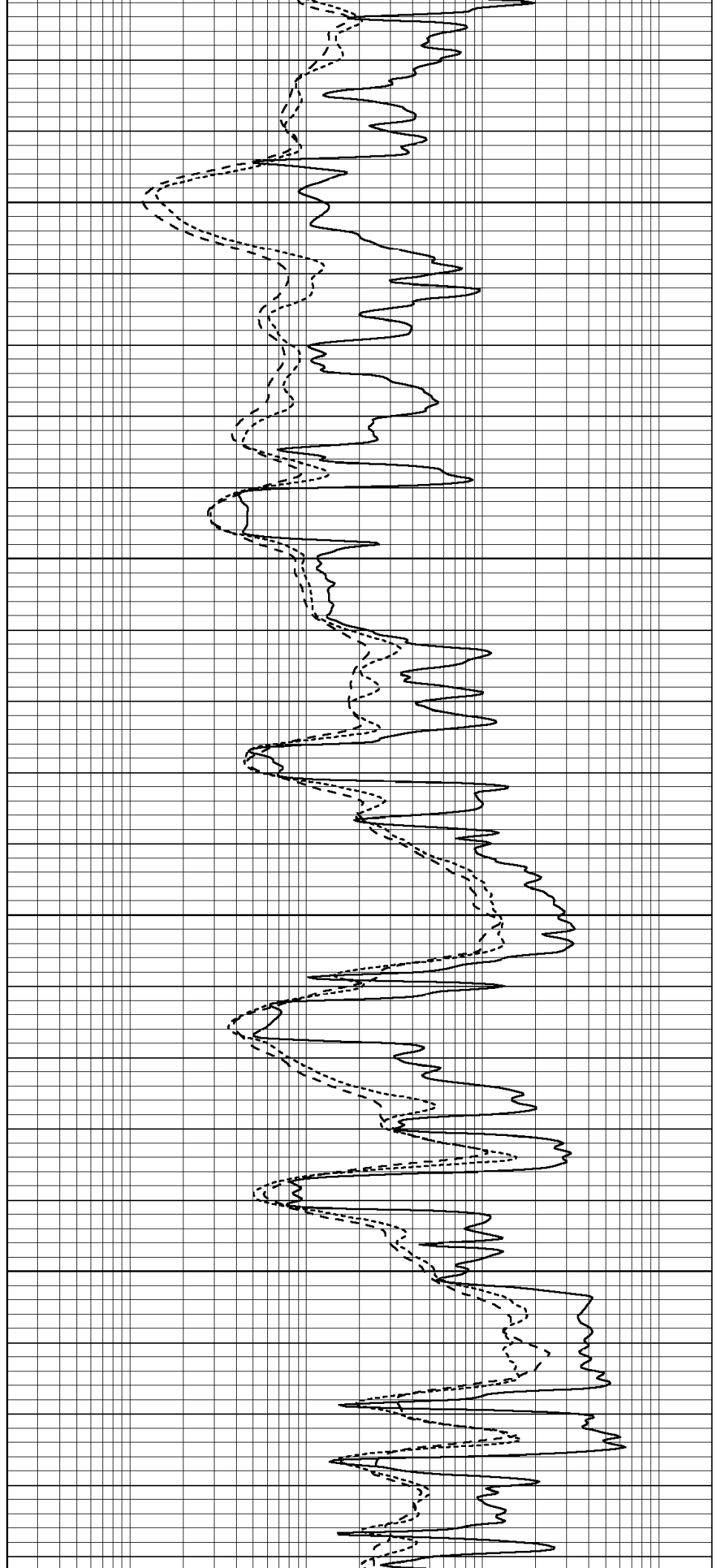


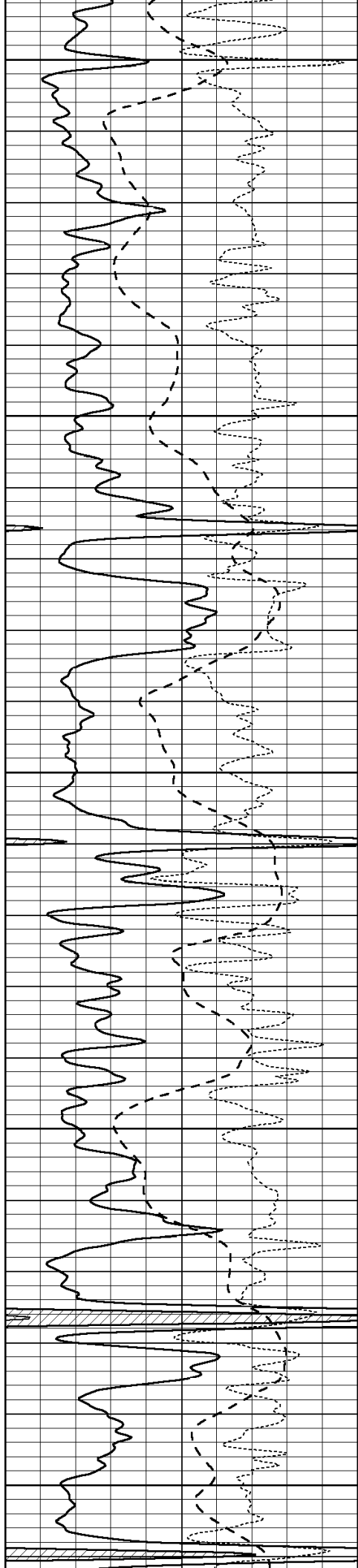
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4000

4050





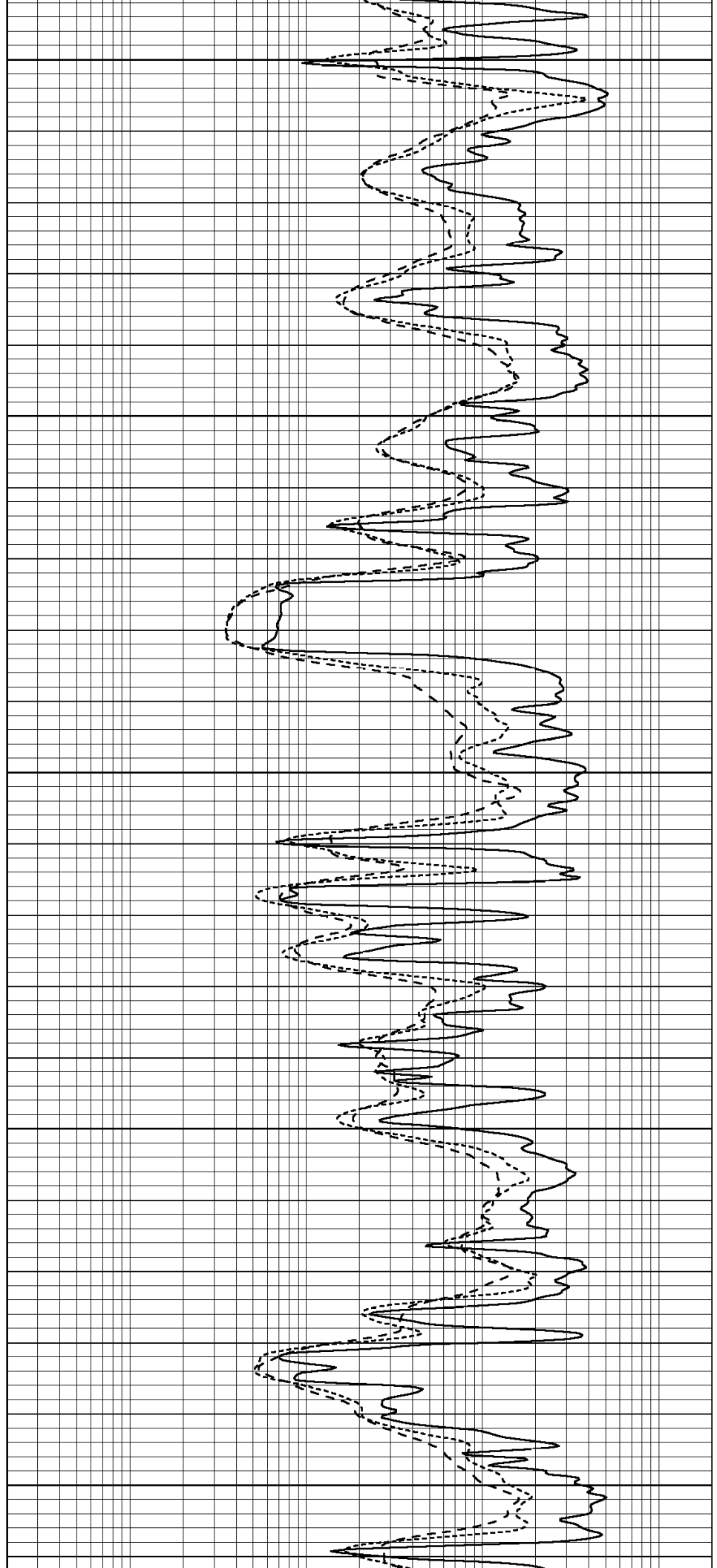
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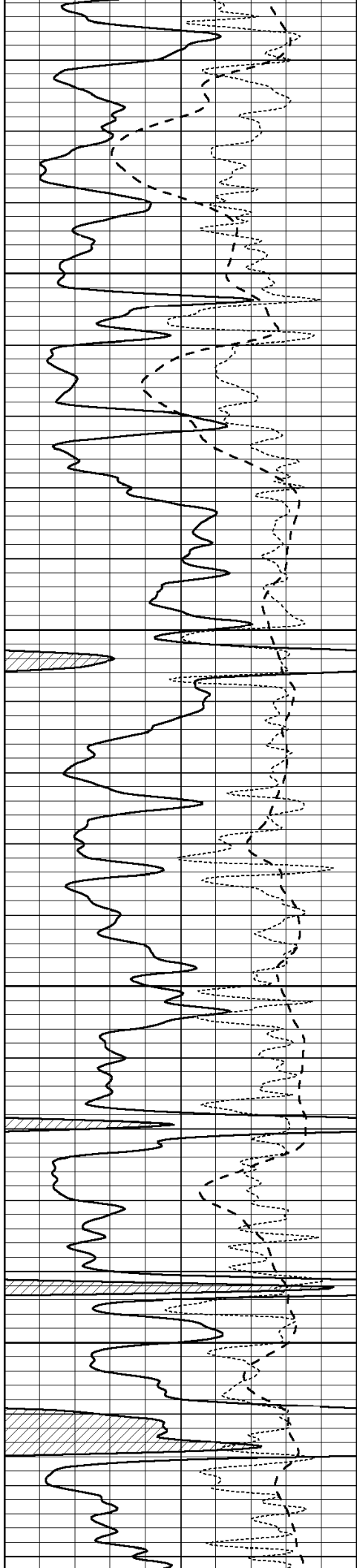
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4200

4250

4300



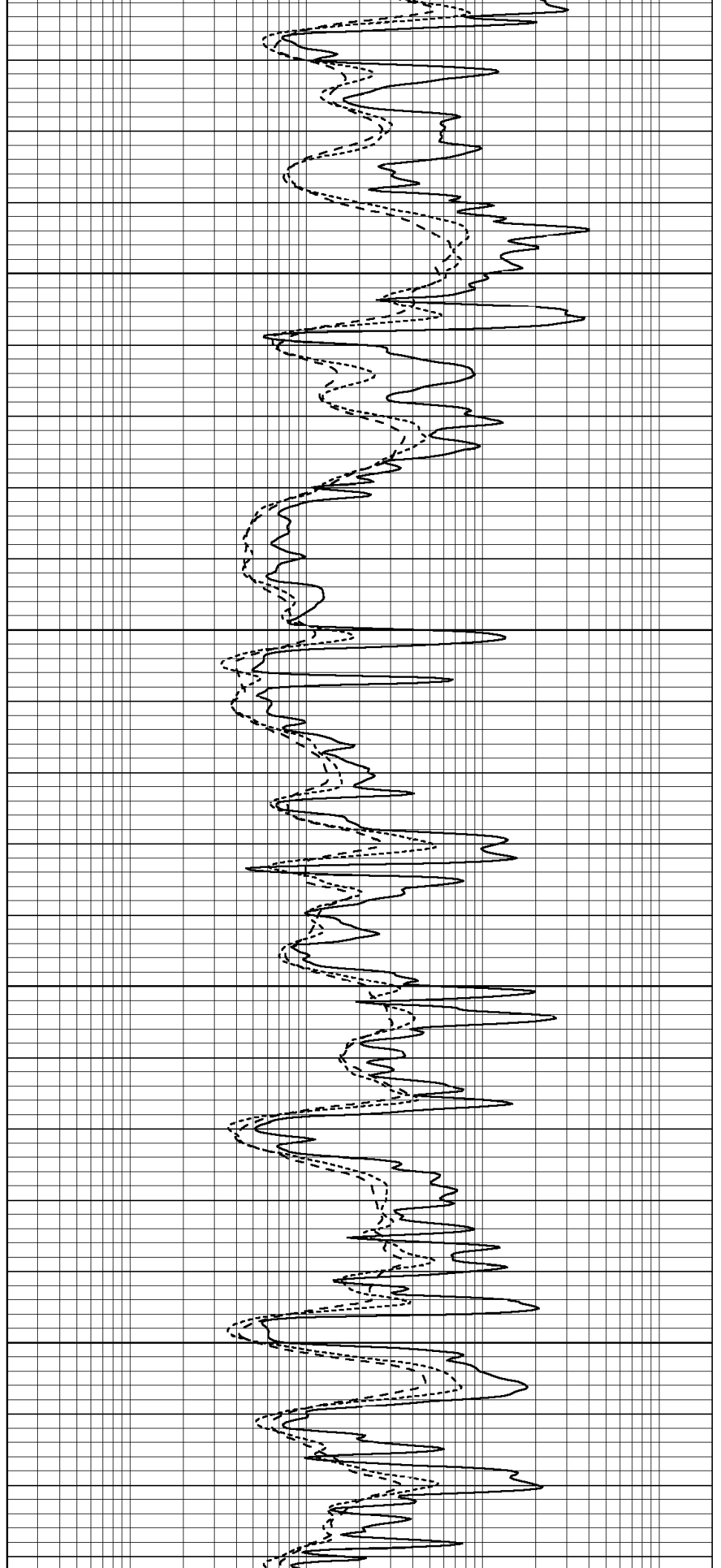


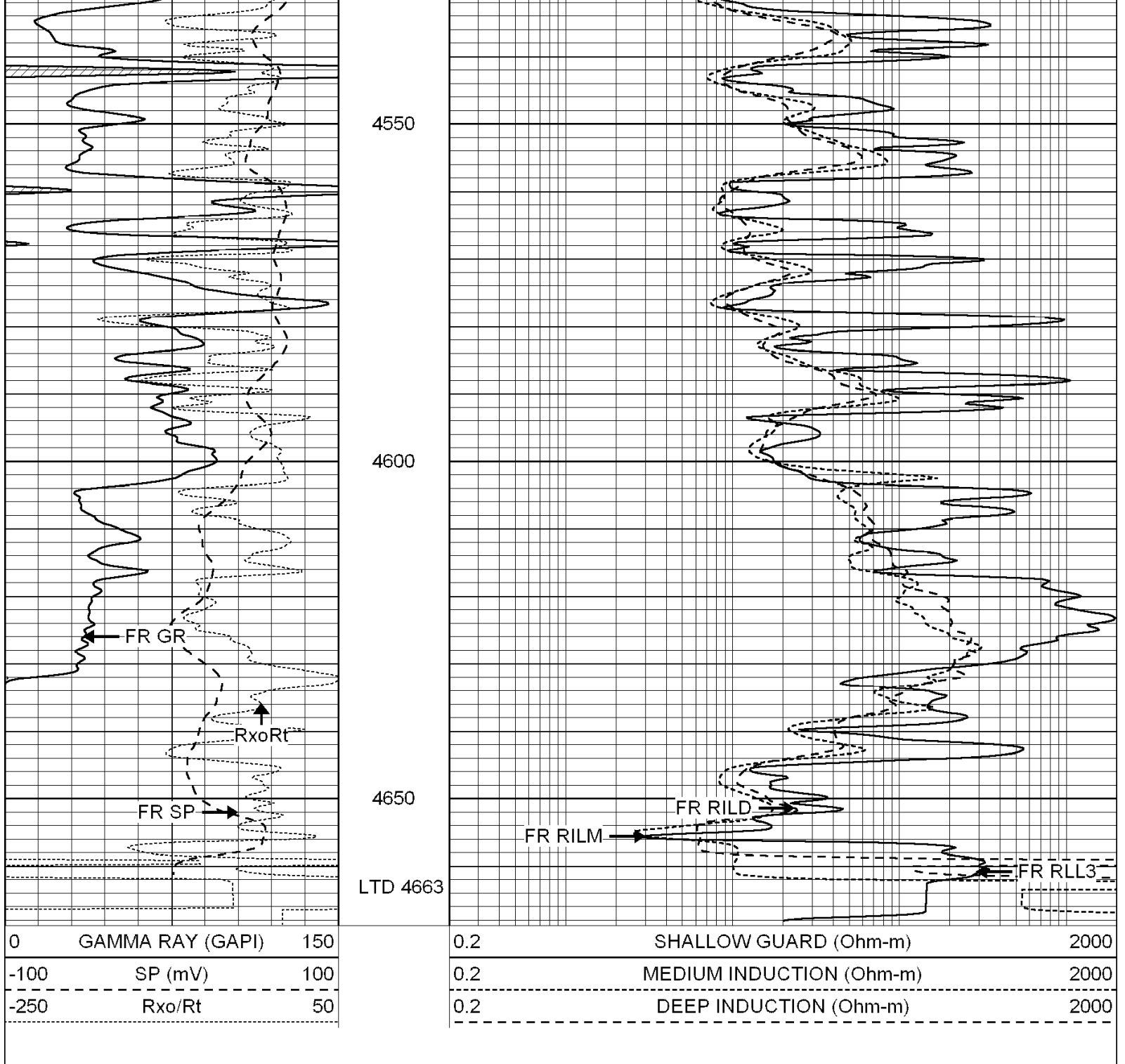
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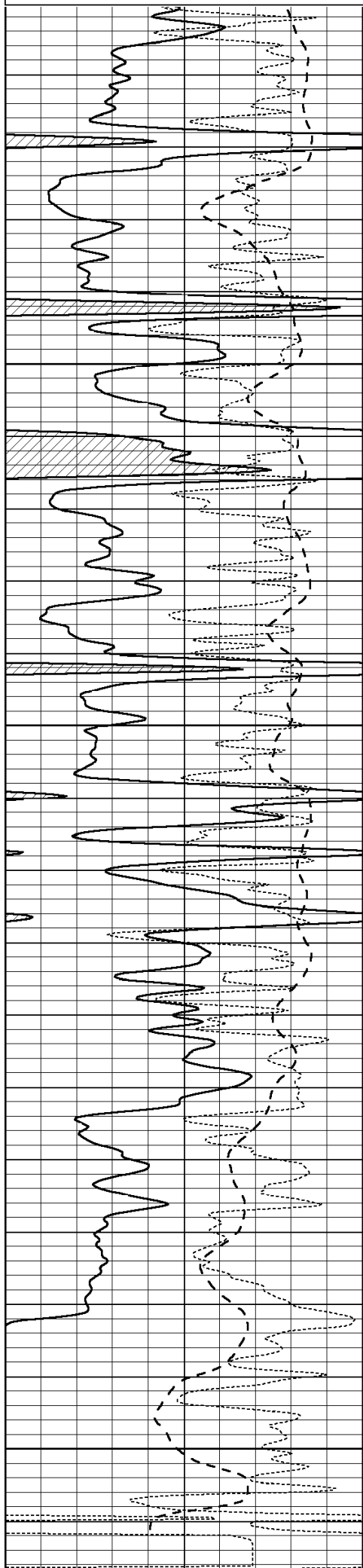
SUPERIOR  
Hays,  
Kansas

# REPEAT SECTION

Database File: 003072ddn.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

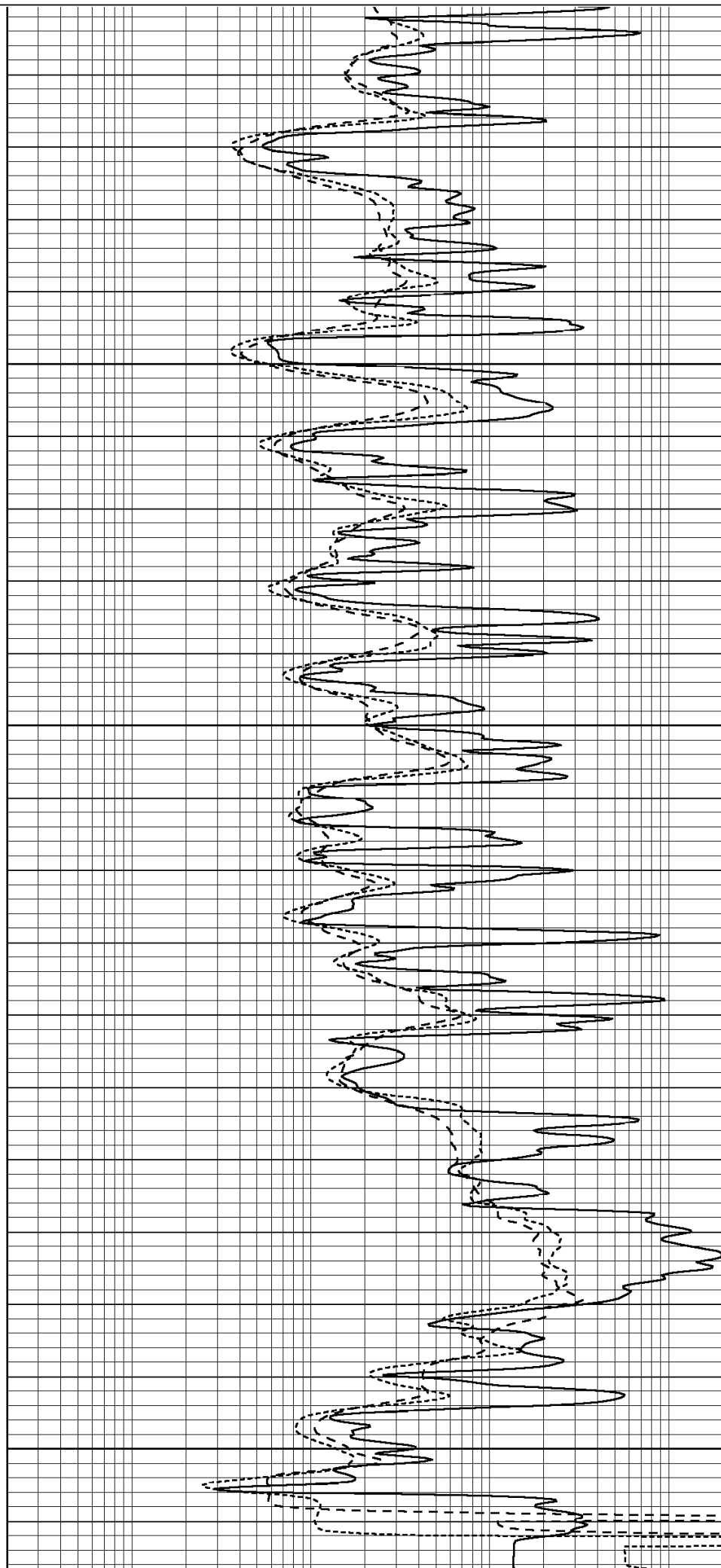


4500

4550

4600

4650



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

### Calibration Report

Database File: 003072ddn.db  
Dataset Pathname: pass3.5  
Dataset Creation: Thu Feb 26 20:57:28 2009 by Calc Open-Cased 070814

### 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		
		-6.500	V		3500.000	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: GEAR3-GEARHART  
Source / Verifier: 143 / 143  
Master Calibration Performed: Wed Nov 14 12:49:27 2007

#### Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1141.54	430.65	cps
Aluminum	2.590	g/cc	254.90	298.41	cps

Spine Angle = 76.25

Density/Spine Ratio = 0.570

	Size		Reading	
Small Ring	8.00	in	4.96	V
Large Ring	14.00	in	7.56	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: GR6  
Tool Model: OPEN  
Performed: Fri Feb 13 12:30:39 2009

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 276.0 cps

Sensitivity: 0.5435 GAPI/cps