



**SUPERIOR**  
Hays,  
Kansas

**DUAL  
INDUCTION  
LOG**

Company RAYMOND OIL COMPANY, INC.  
Well MICHAUD TRUST #5  
Field  
County LANE  
State KANSAS

Company RAYMOND OIL COMPANY, INC.  
Well MICHAUD TRUST #5  
Field  
County LANE State KANSAS

Location: 1747' FNL & 1949' FEL  
API # : 15-101-22370-0000  
SEC 21 TWP 18S RGE 27W  
Permanent Datum GROUND LEVEL Elevation 2692  
Log Measured From KELLY BUSHING 5' A.G.L.  
Drilling Measured From KELLY BUSHING  
Elevation  
K.B. 2697  
D.F. 2695  
G.L. 2692

Date	5/23/12
Run Number	ONE
Depth Driller	4444
Depth Logger	4442
Bottom Logged Interval	4440
Top Log Interval	0
Casing Driller	8 5/8" @ 261
Casing Logger	260
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/50
pH / Fluid Loss	11.0/8.0
Source of Sample	FLOWLINE
Rin @ Meas. Temp	1.00 @ 85F
Rmf @ Meas. Temp	0.75 @ 85F
Rmc @ Meas. Temp	1.20 @ 85F
Source of Rmf / Rmc	MEASURED
Rin @ BHT	0.71 @ 120F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	120F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JEFF GRONEMEG
Witnessed By	LARRY FRIEND

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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**

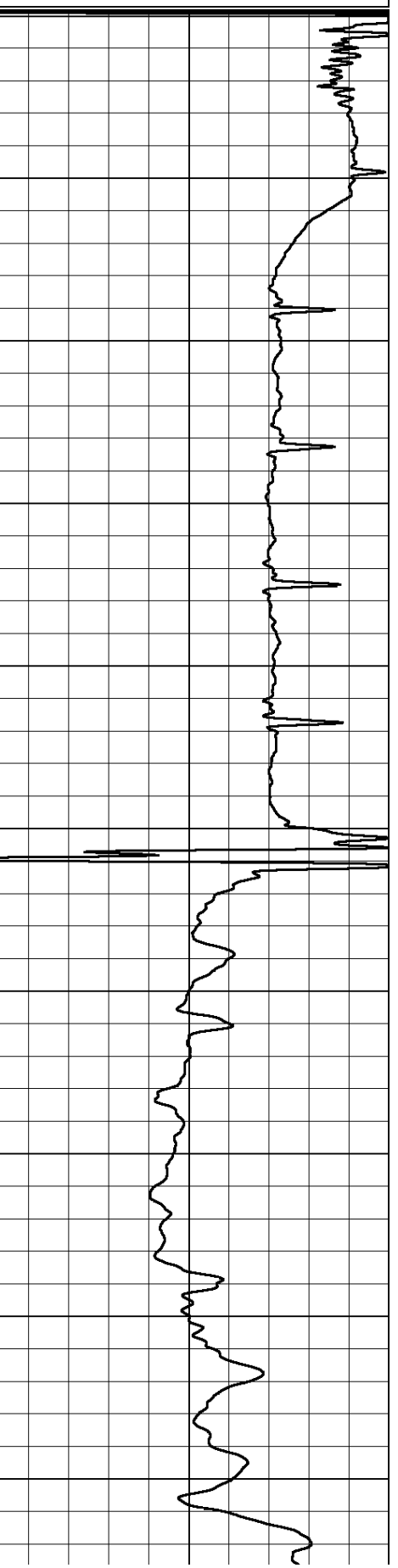
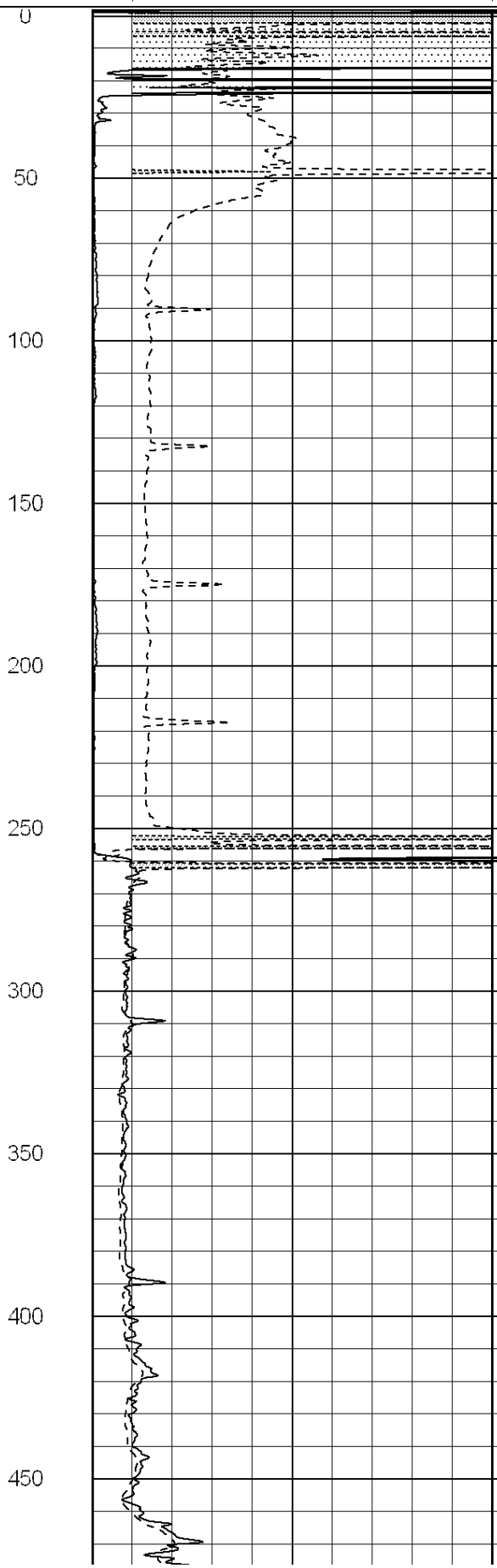
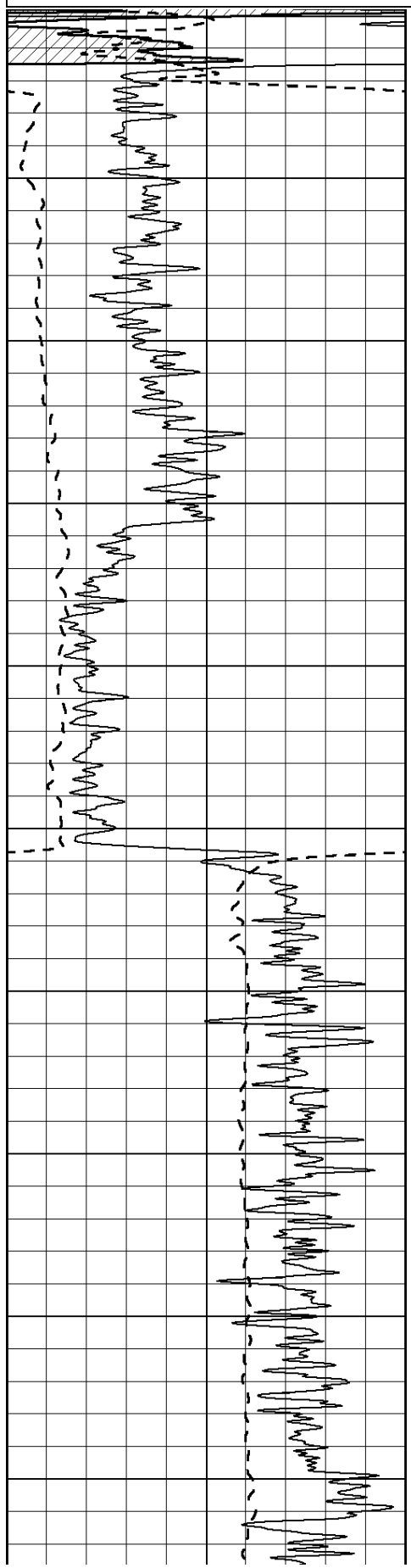
**THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395**  
**DIRECTIONS**  
**NESS CITY, KS - WEST TO NESS/LANE COUNTY LINE - 1 1/2 MILES WEST TO TURKEY RED RD**  
**1/4 MILE WEST - SOUTH INTO ON WEST SIDE OF TANK BATTERY**

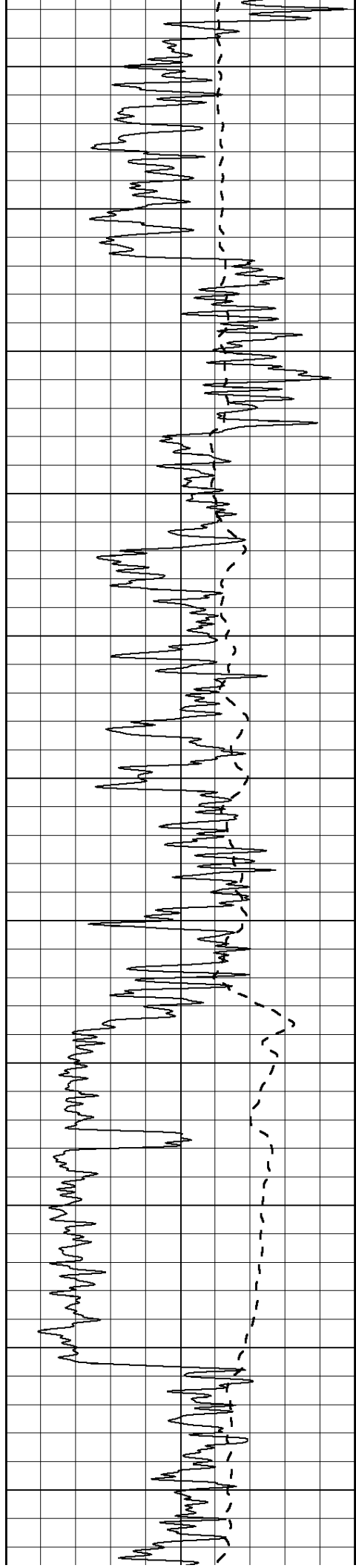
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-100	SP (mV)	100

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

1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





500

550

600

650

700

750

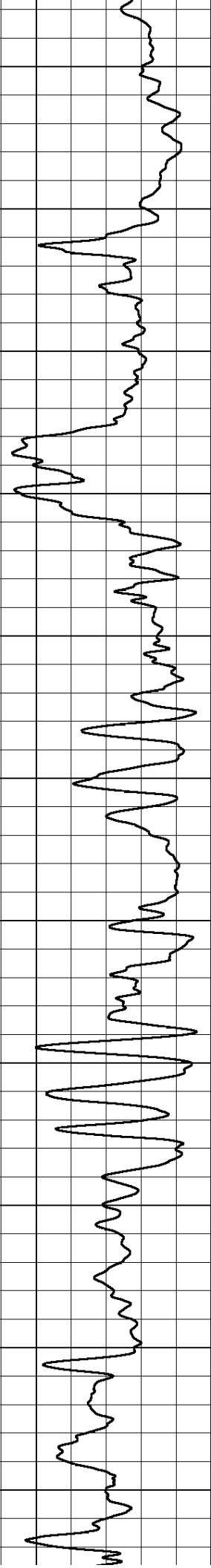
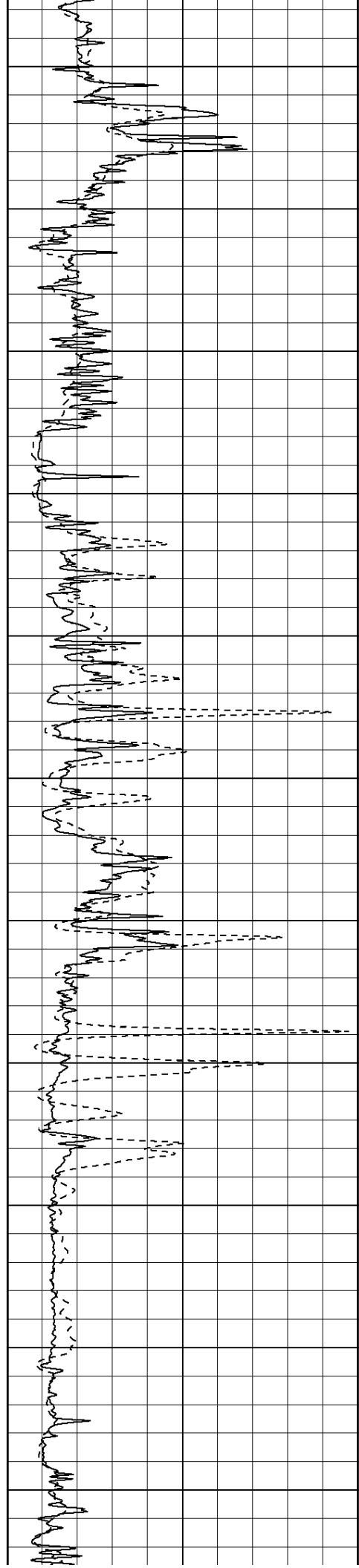
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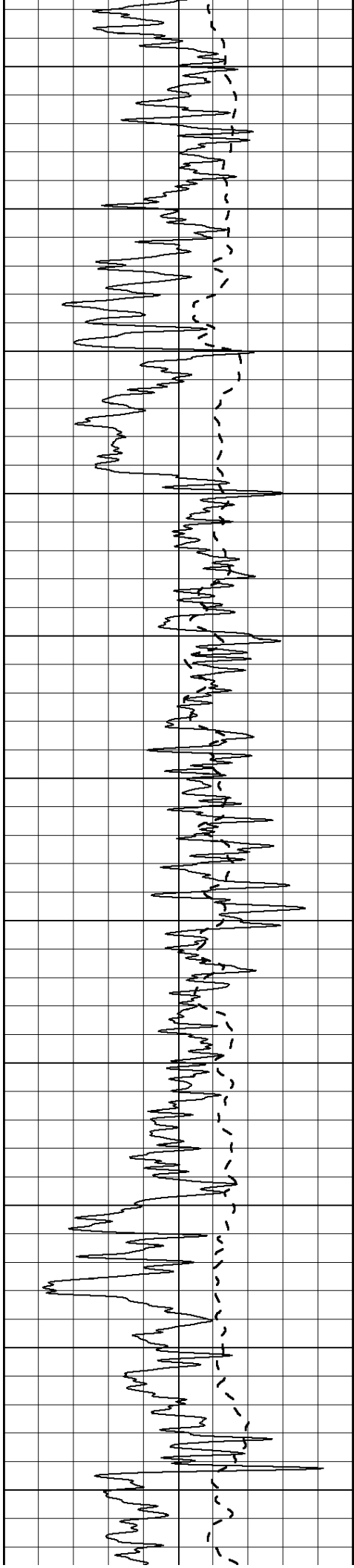
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900

950

1000





1050

1100

1150

1200

1250

1300

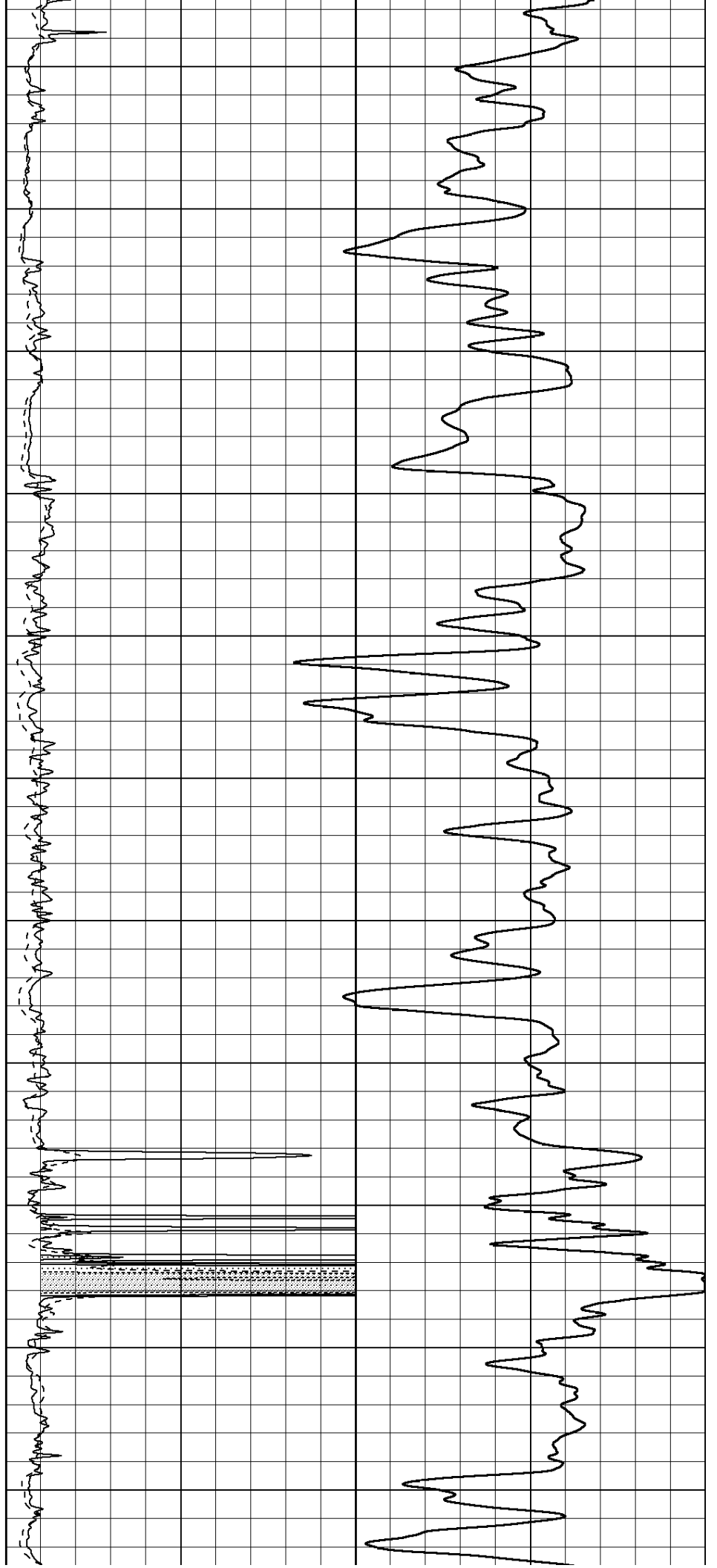
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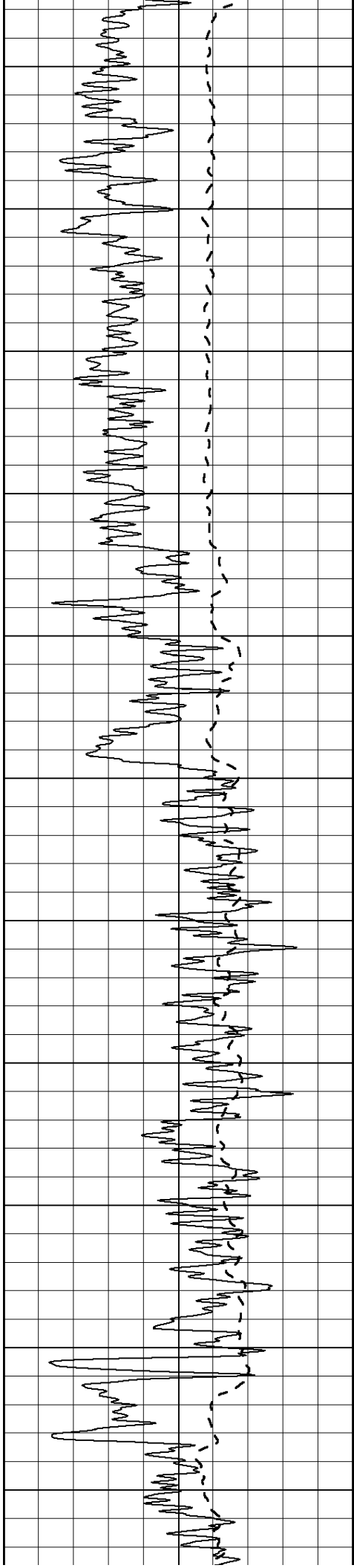
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1450

1500

1550





1600

1650

1700

1750

1800

1850

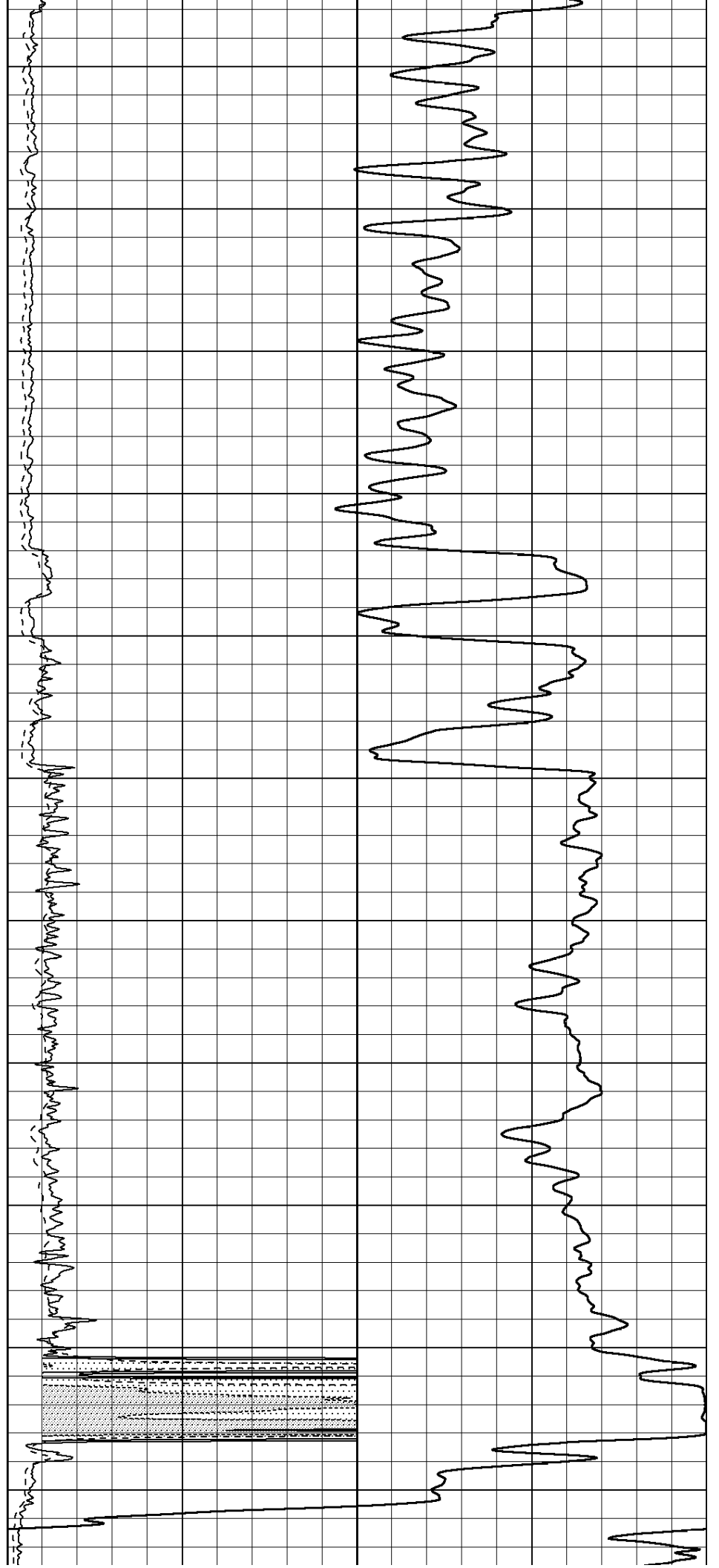
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1950

2000

2050

2100



1600

1650

1700

1750

1800

1850

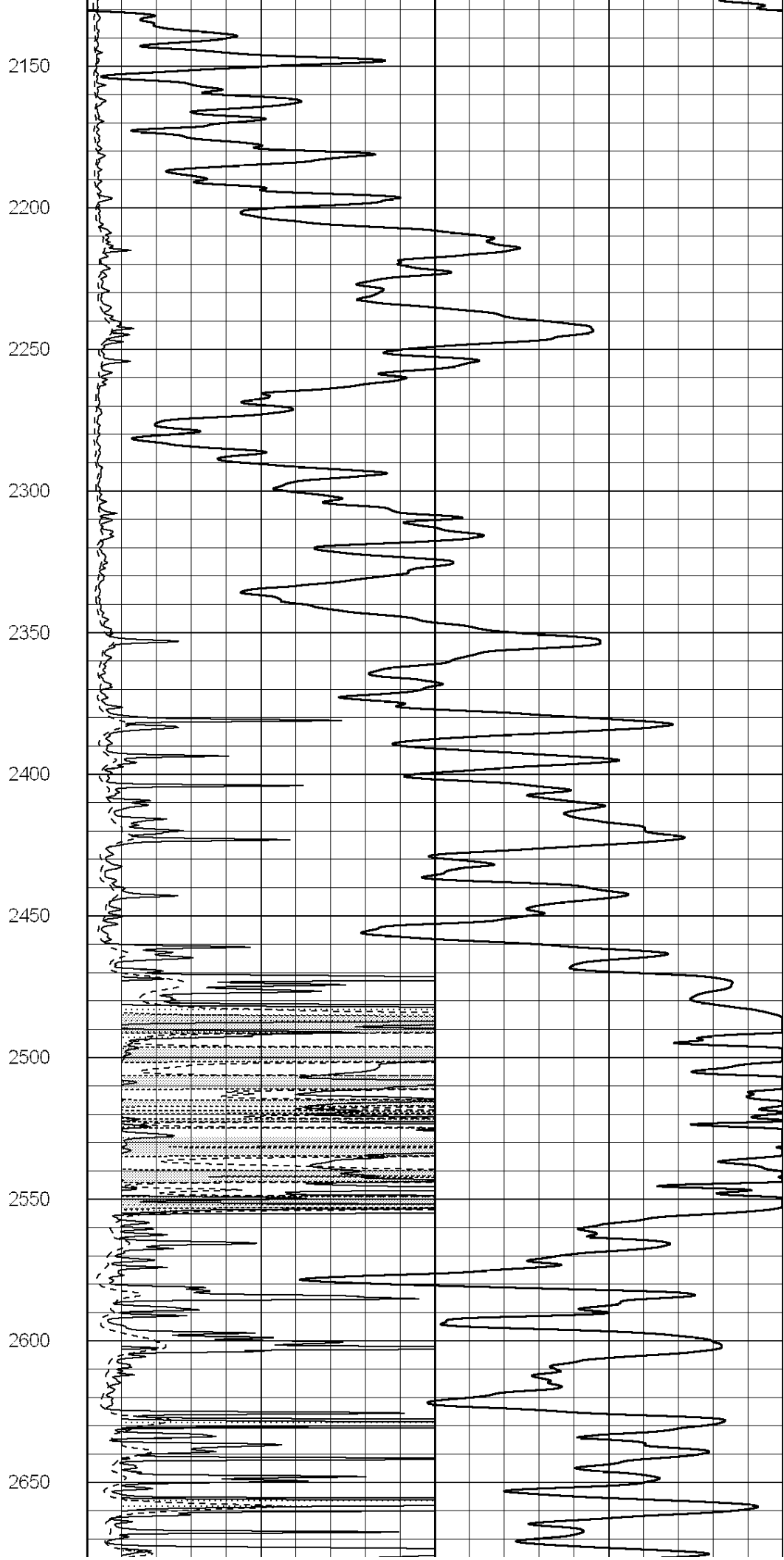
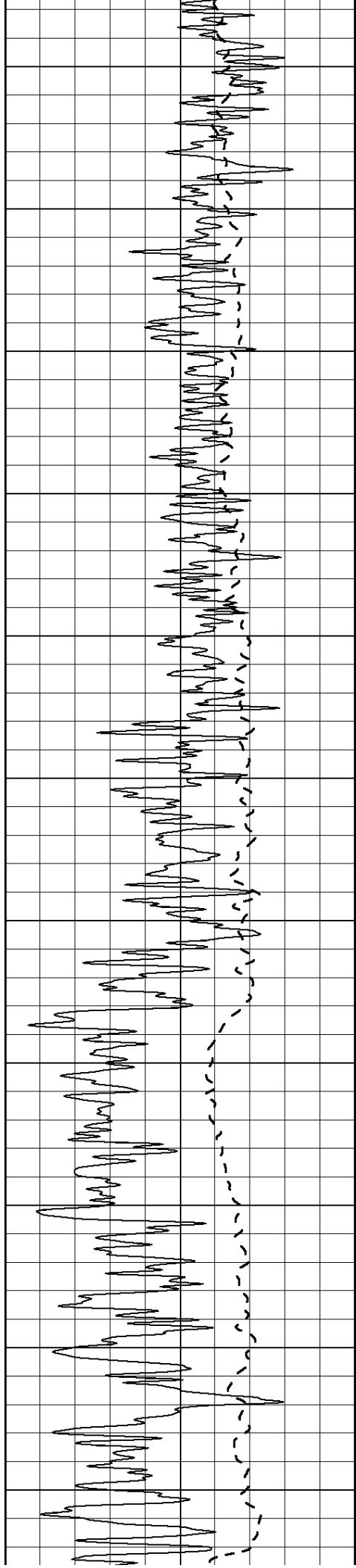
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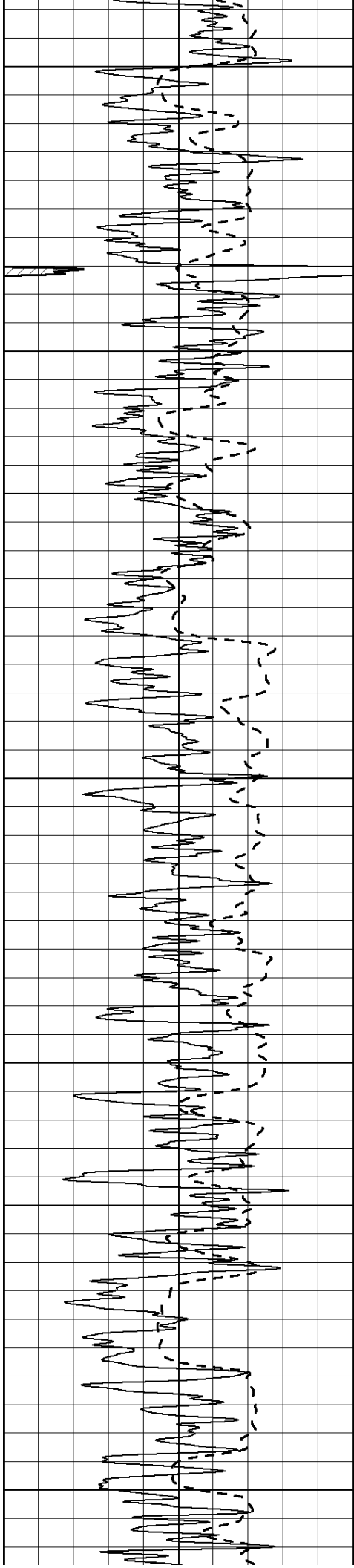
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2000

2050

2100





2700

2750

2800

2850

2900

2950

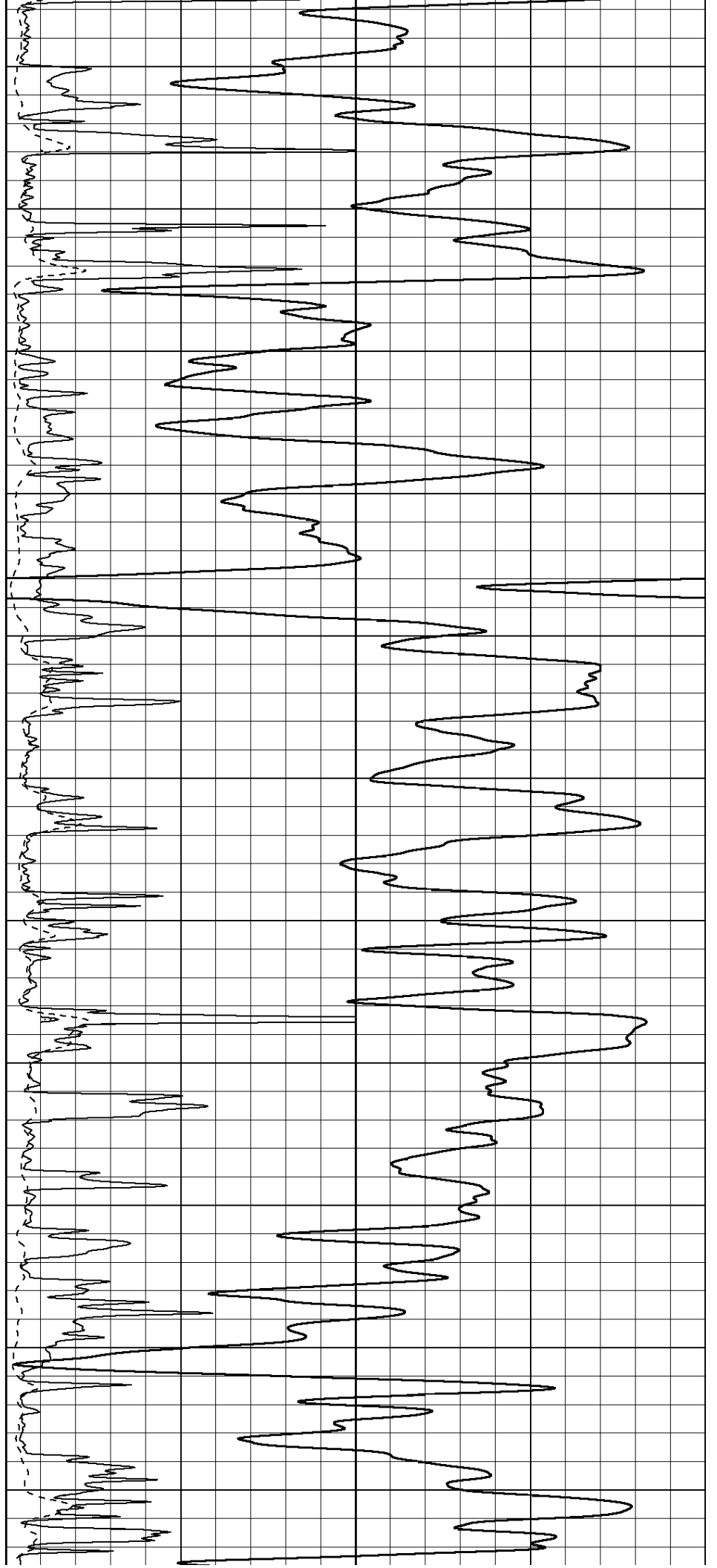
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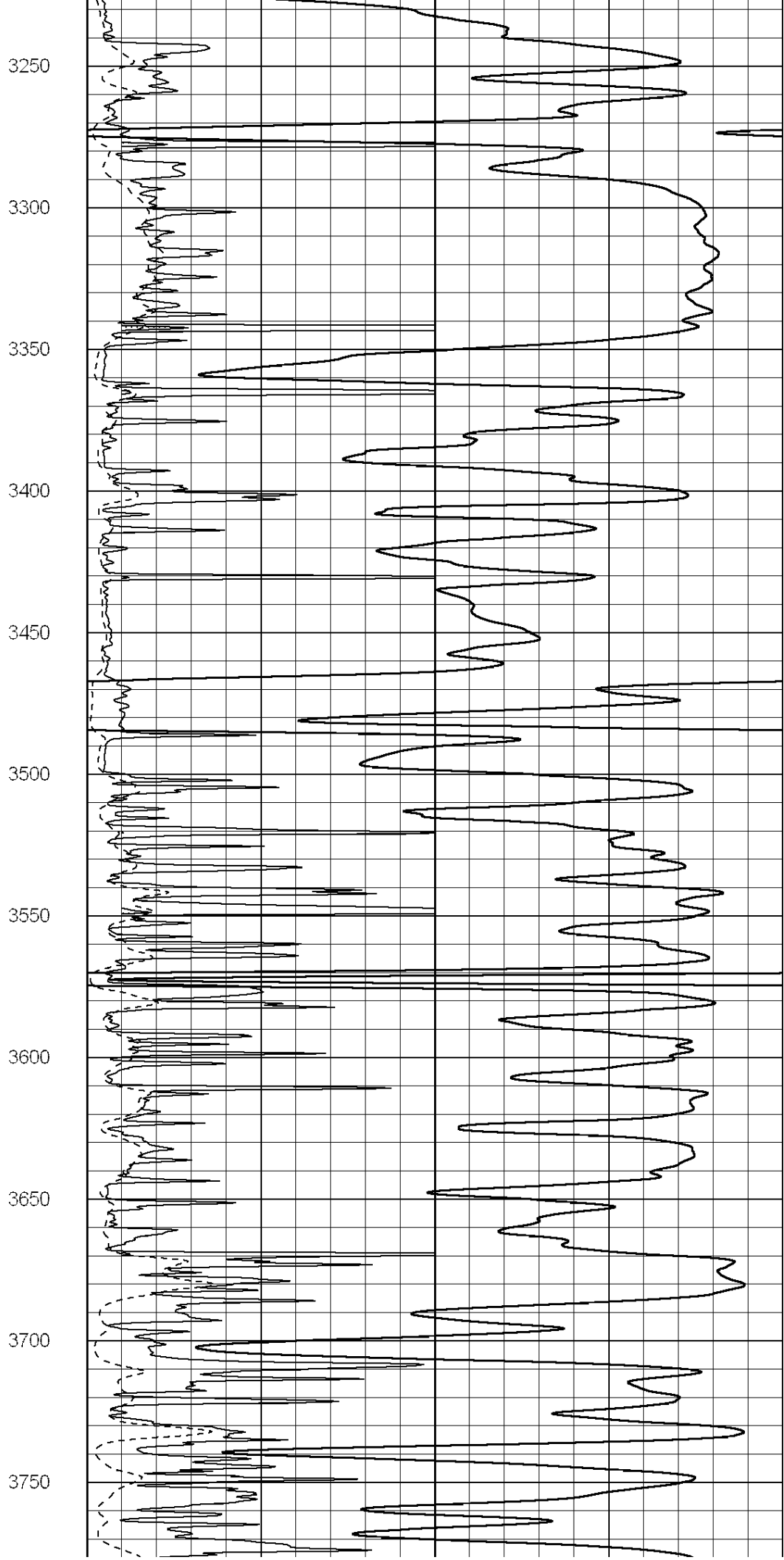
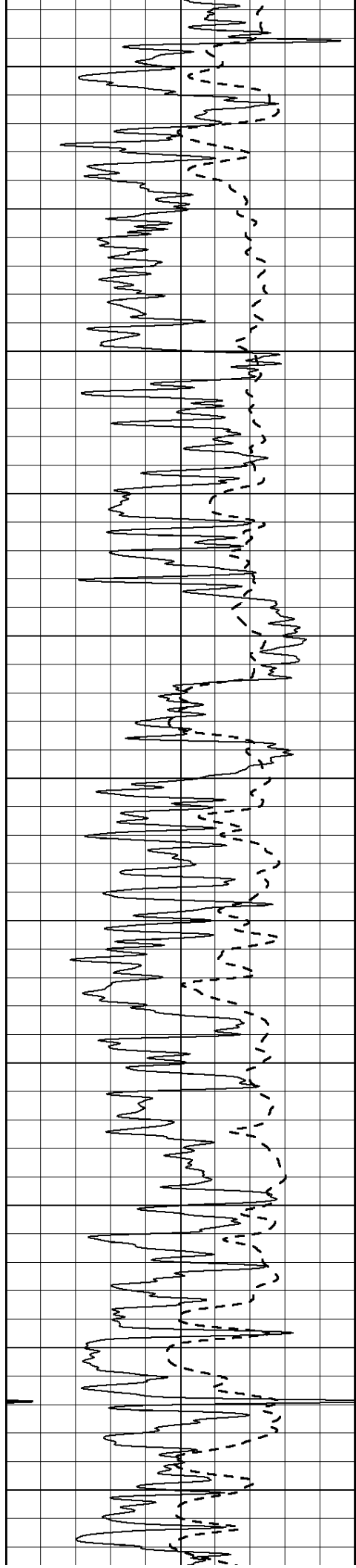
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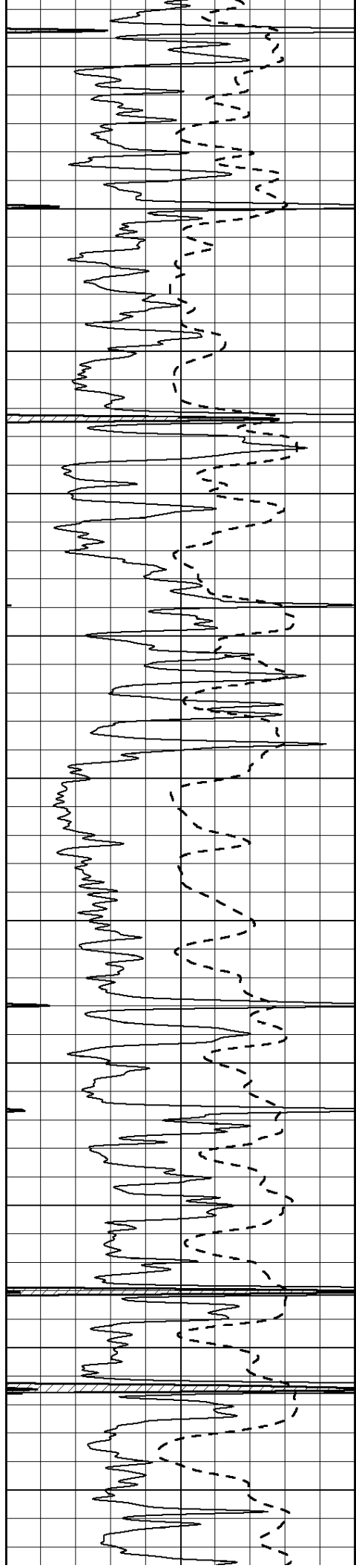
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3150

3200







3800

3850

3900

3950

4000

4050

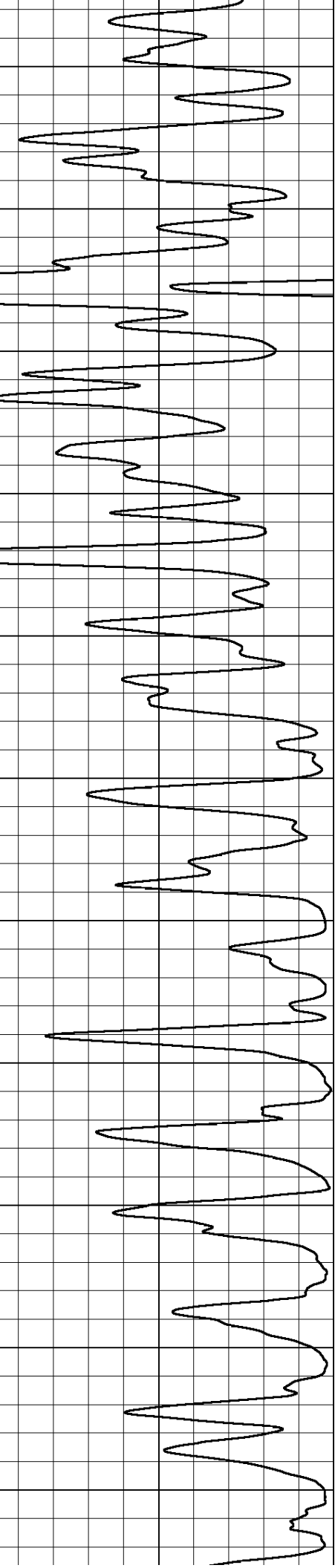
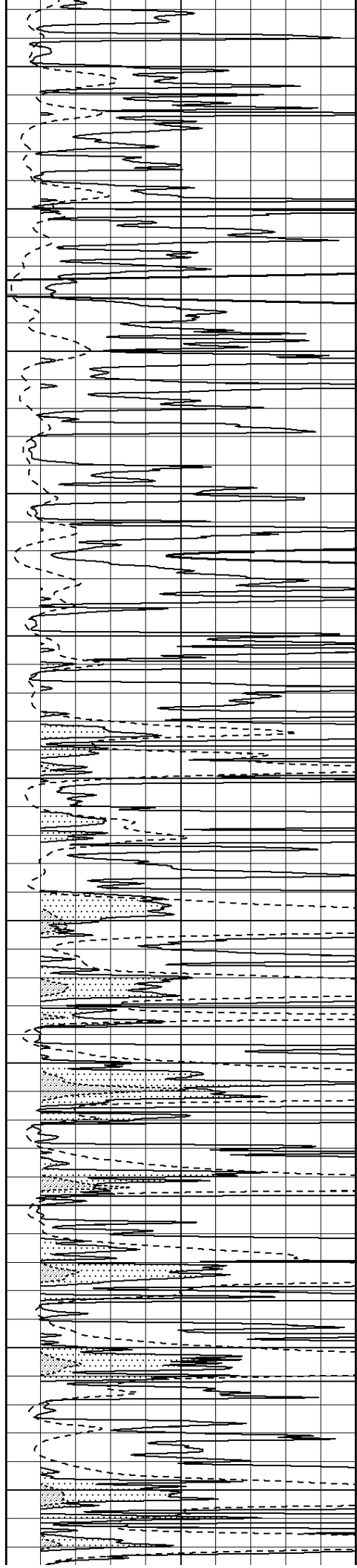
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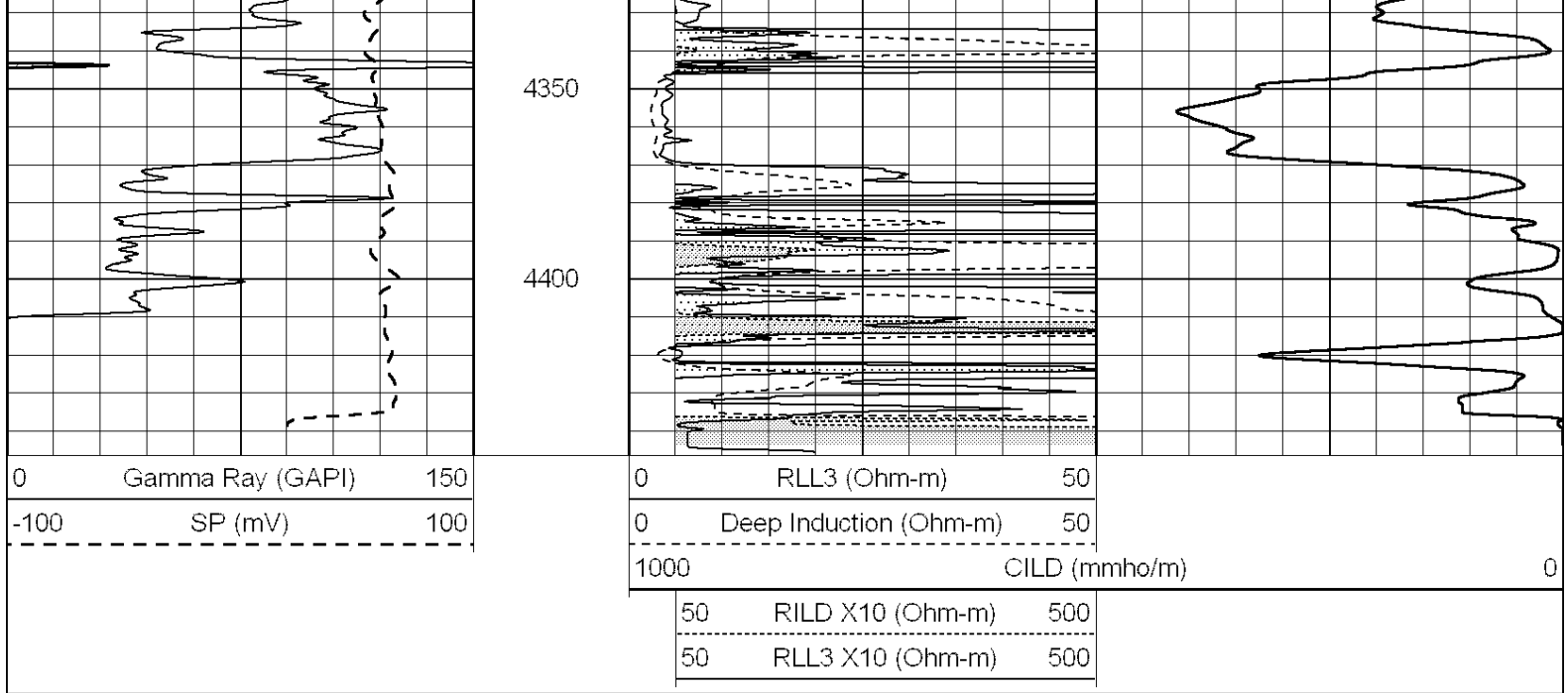
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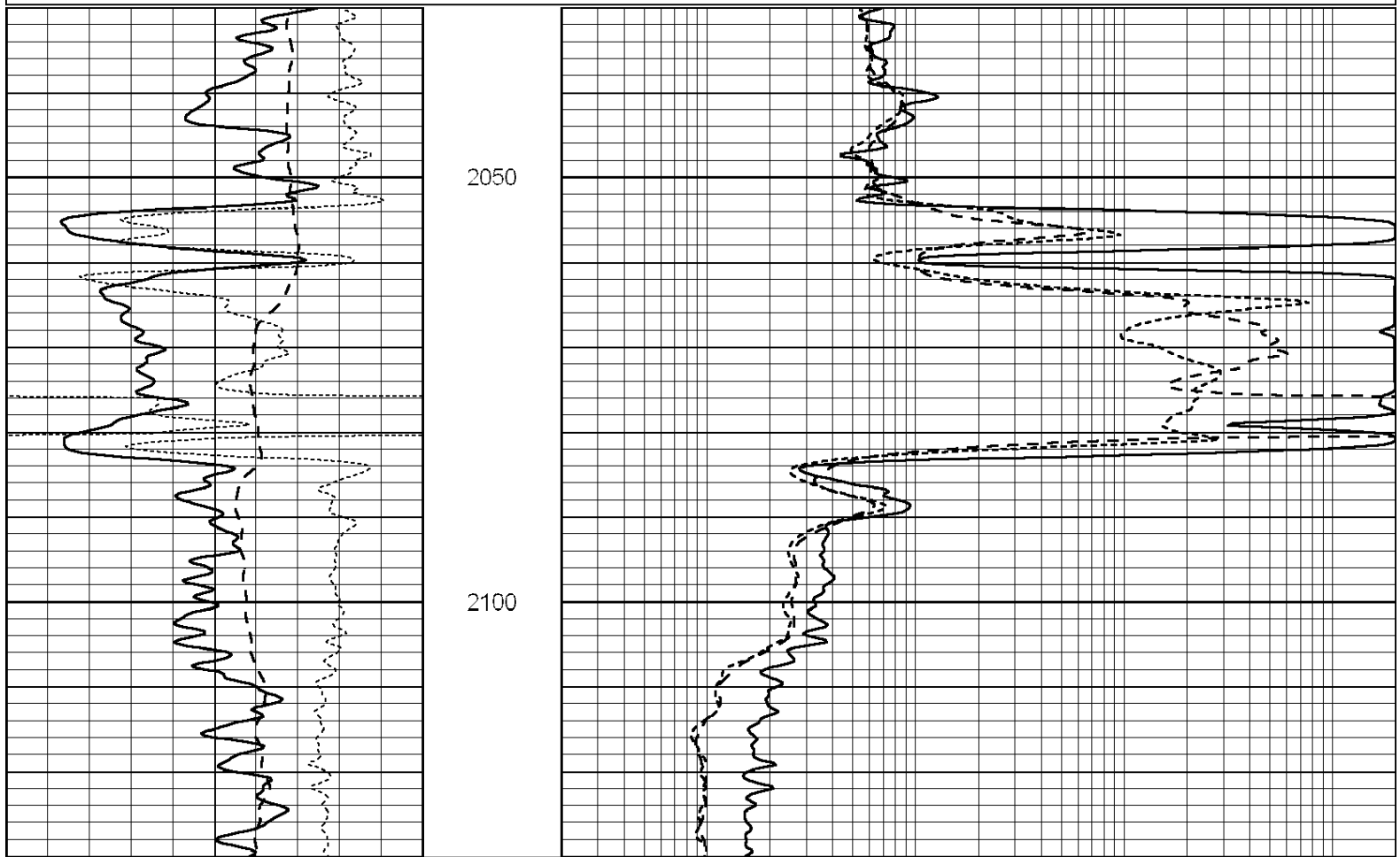
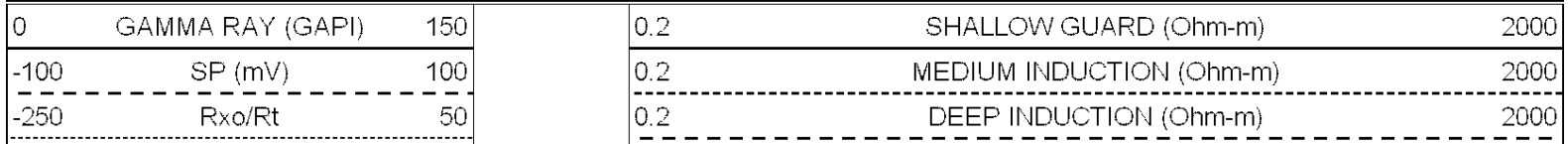
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4300





Database File: 009204ddn.db  
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 Presentation Format: \_dil  
 Dataset Creation: Wed May 23 05:08:51 2012 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240



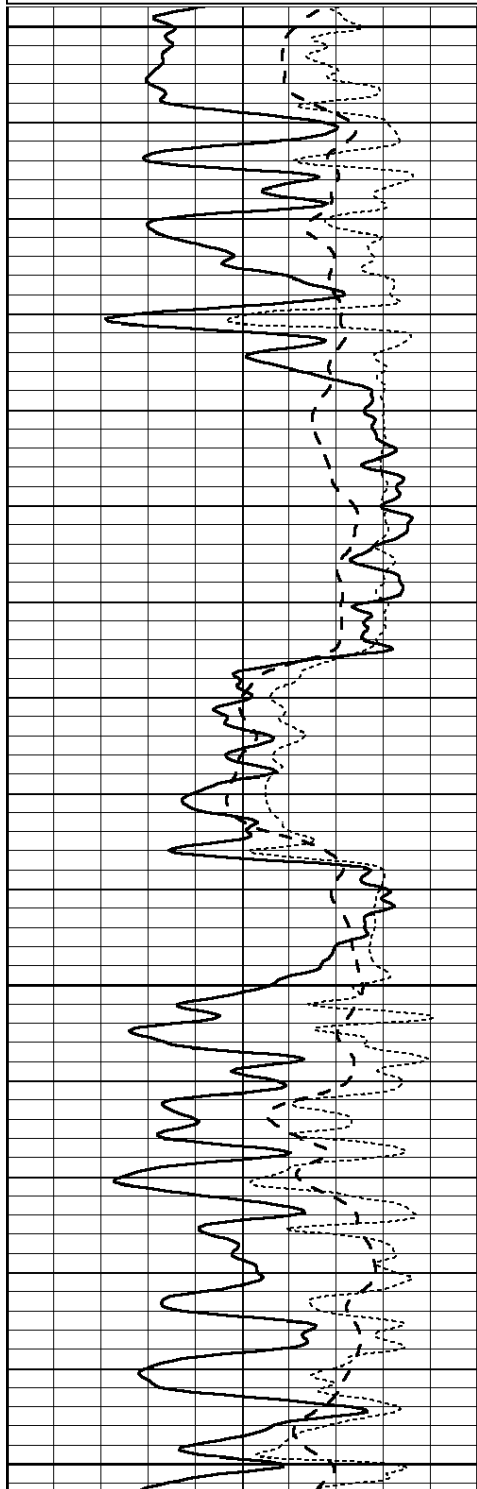
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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

Database File: 009204ddn.db  
 Dataset Pathname: pass3.2  
 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

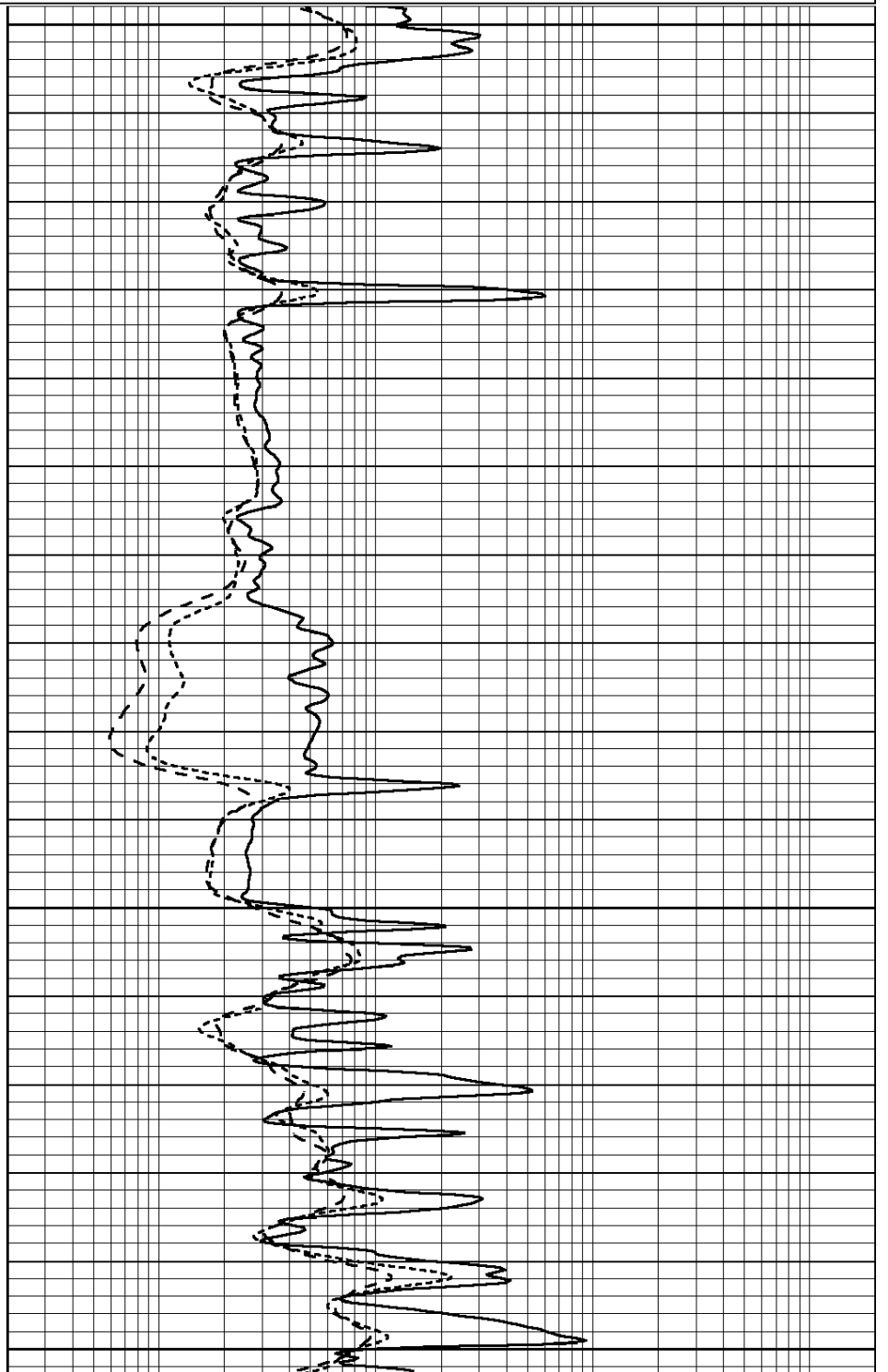


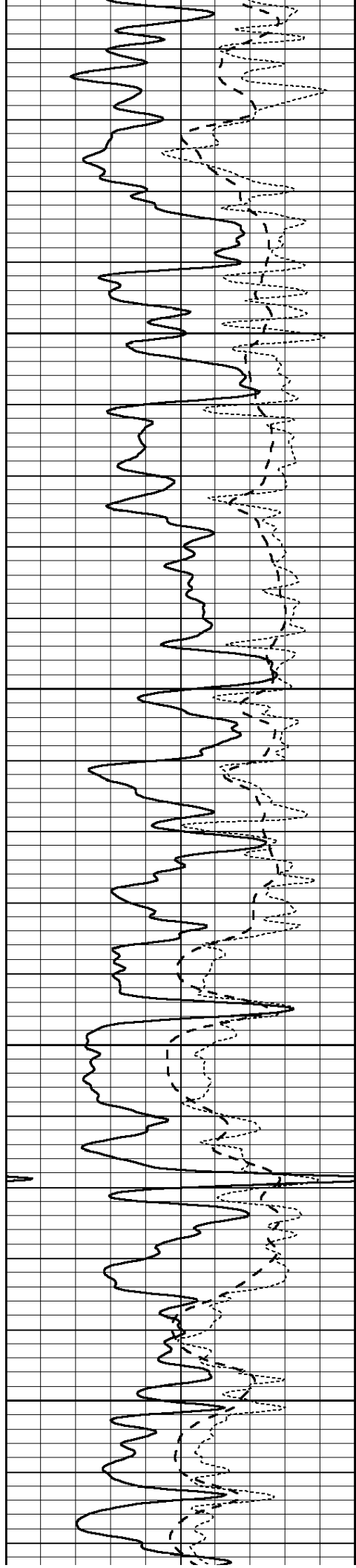
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3450

3500

3550



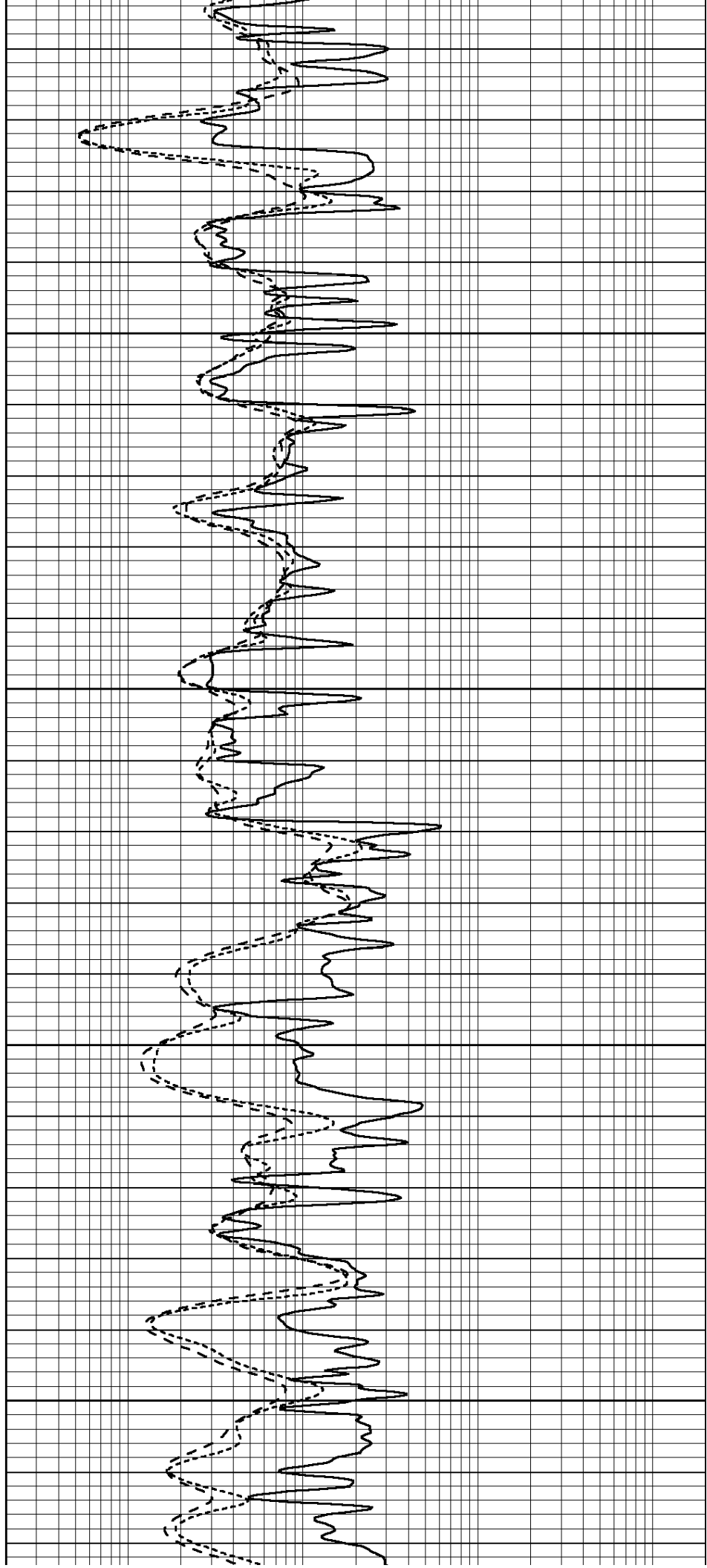


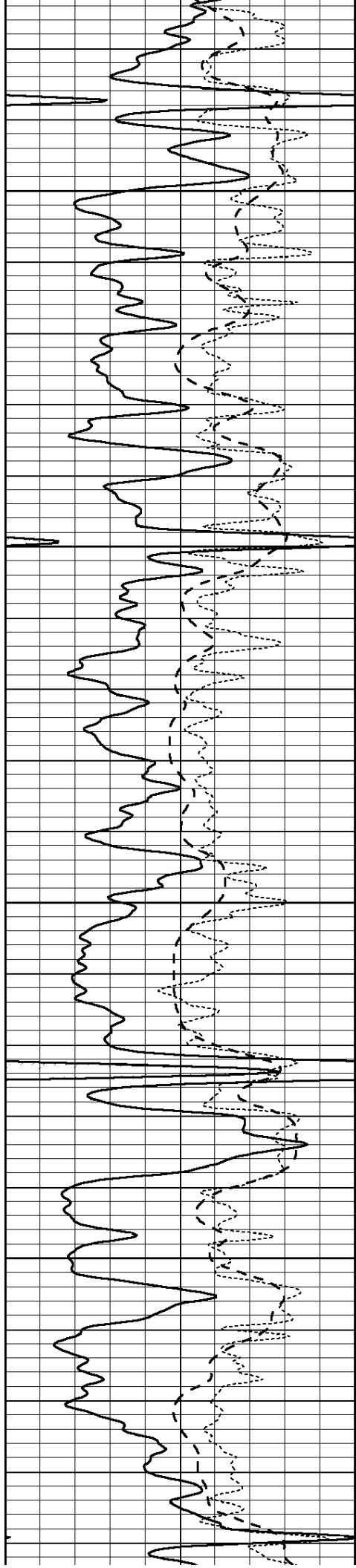
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3650

3700

3750



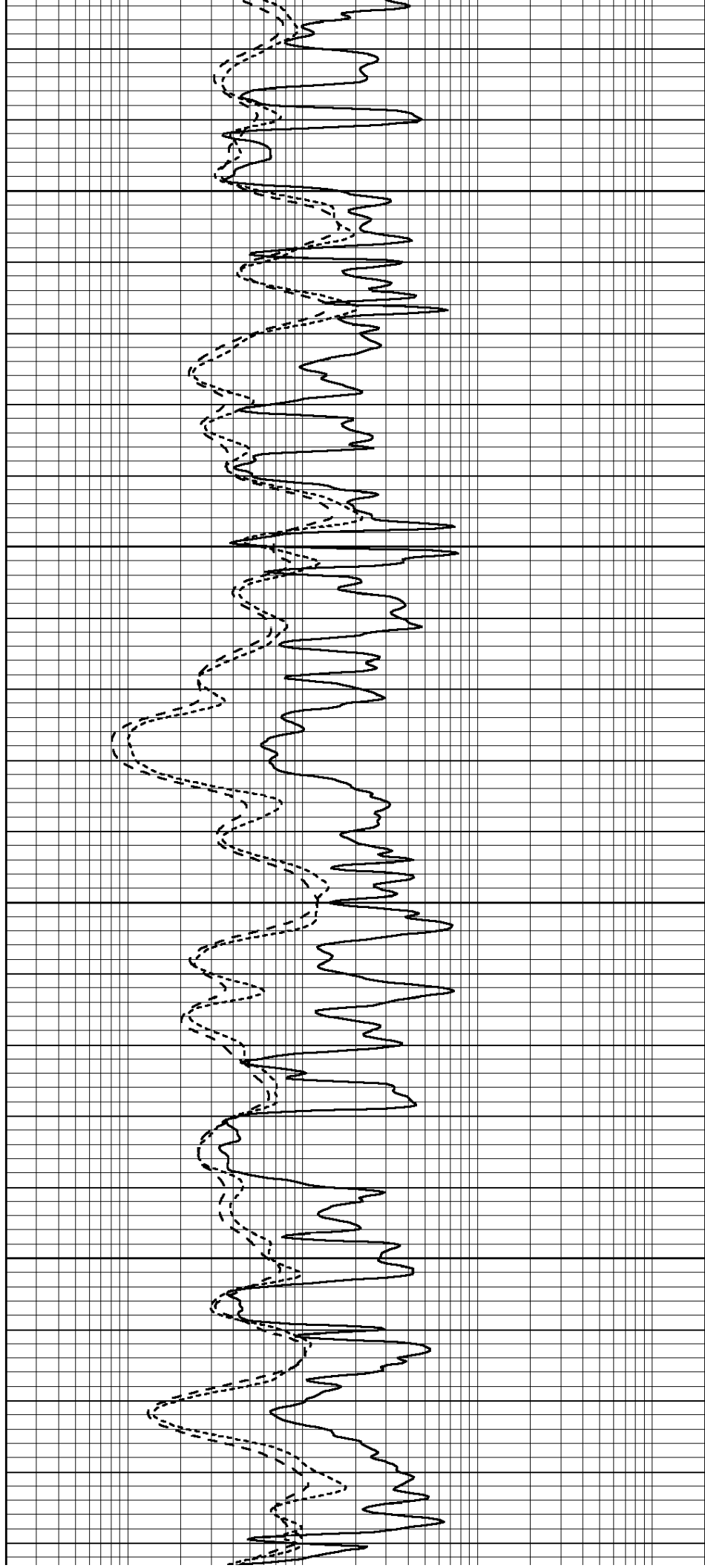


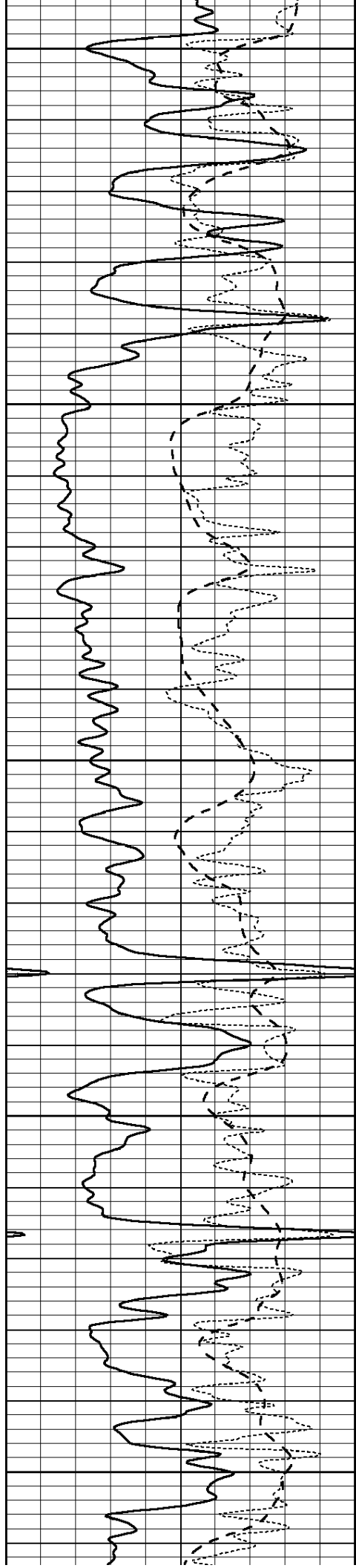
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3900

3950





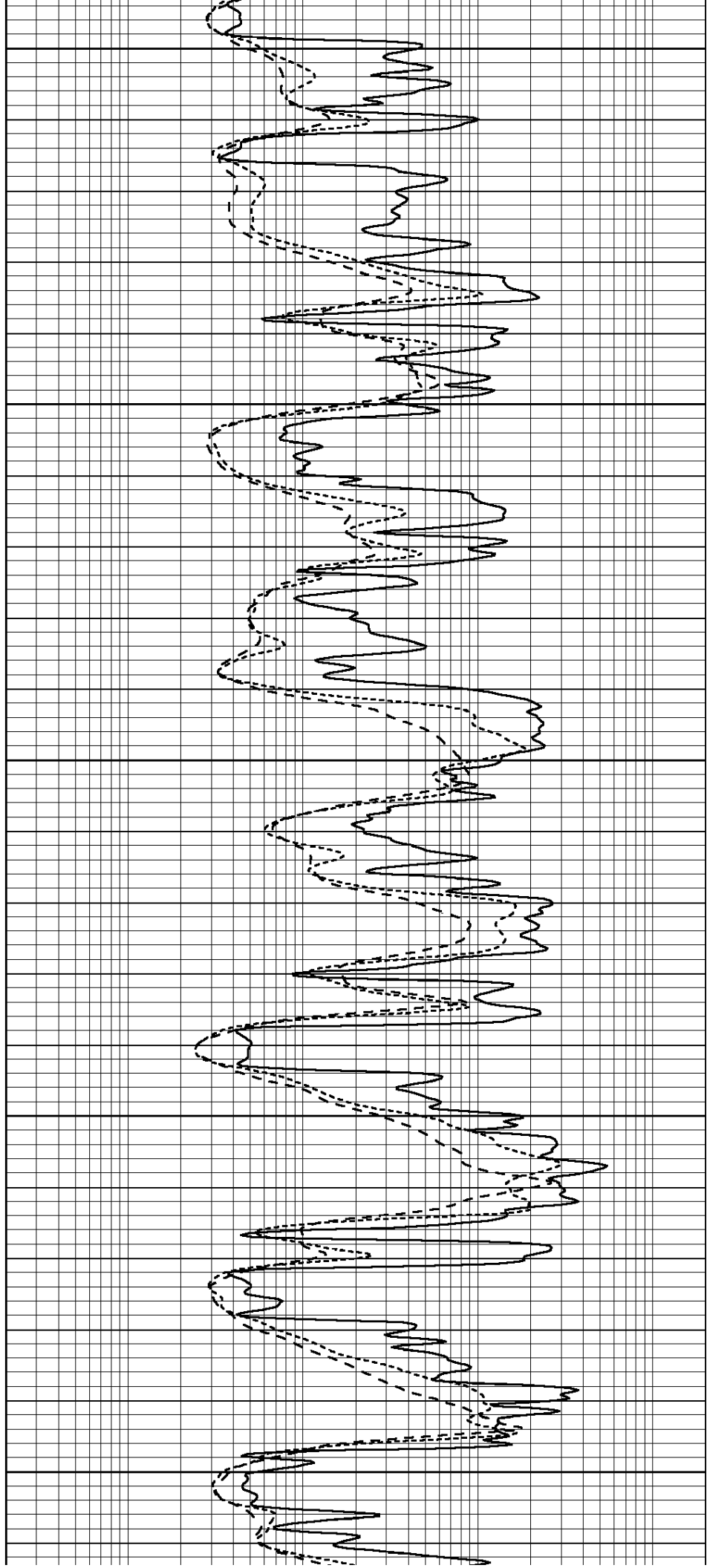
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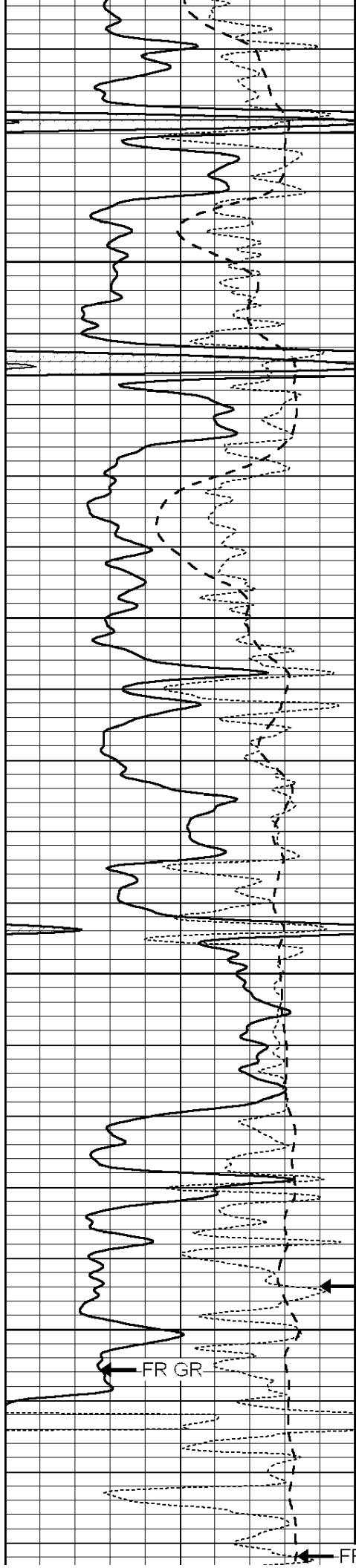
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4100

4150

4200





4250

4300

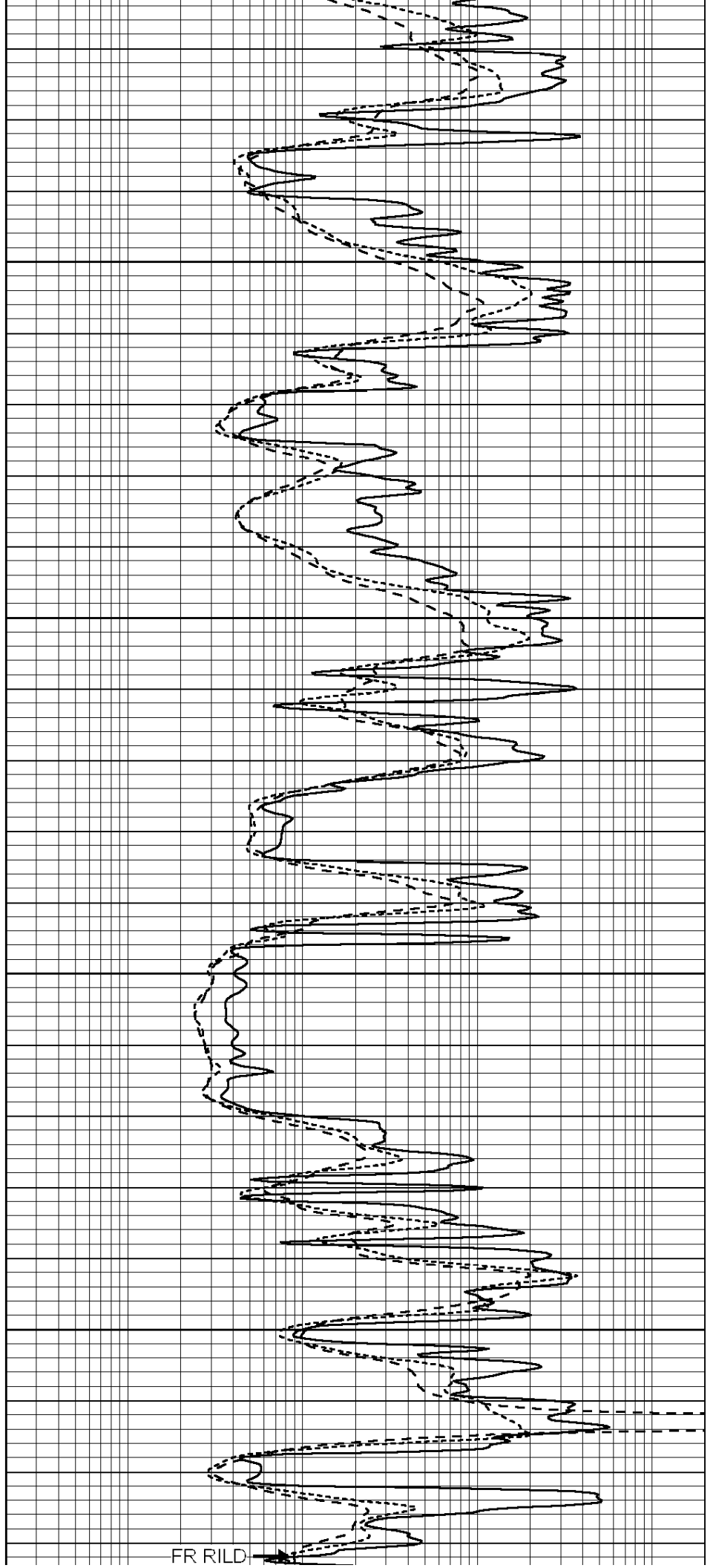
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RxoRt

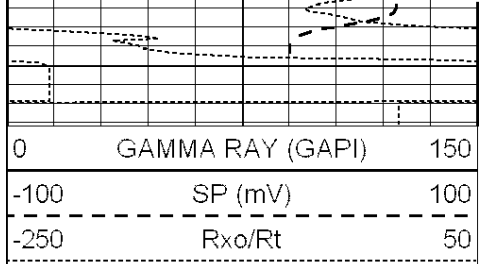
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FR GR

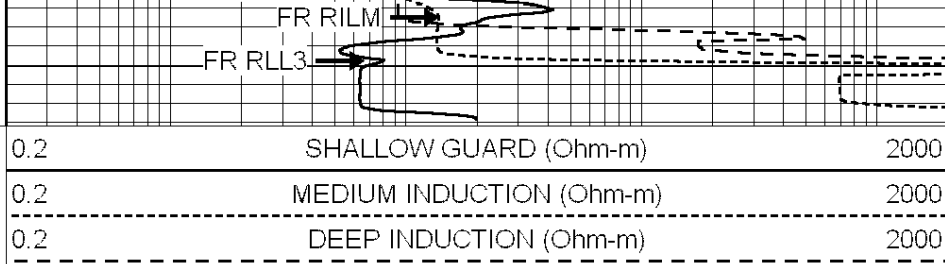
FR SP



FR RILD



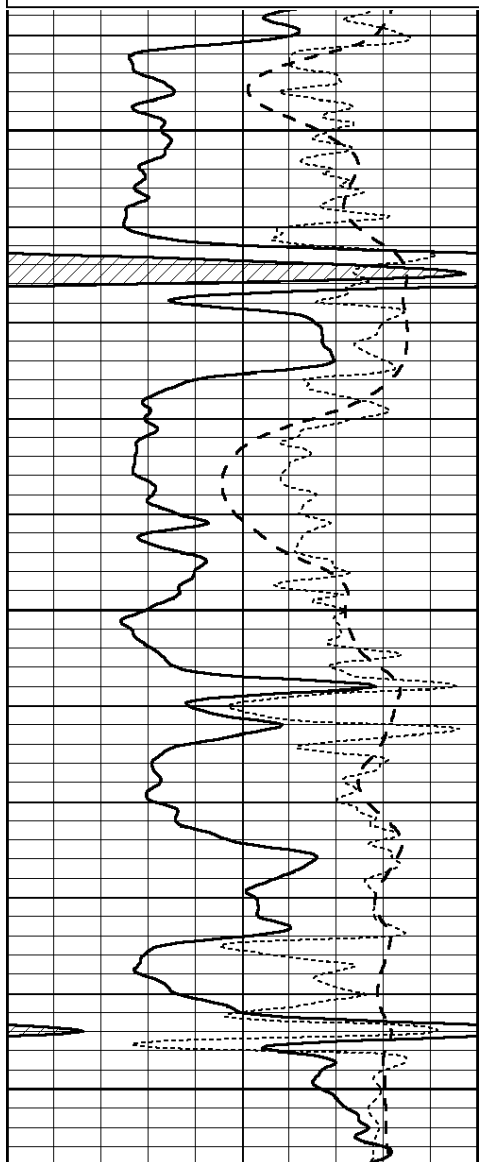
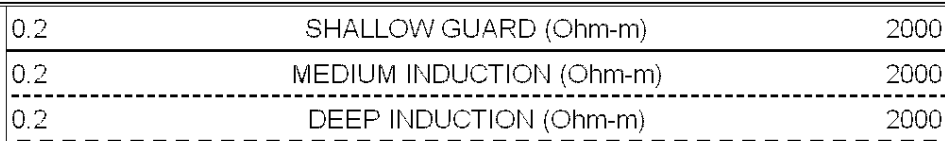
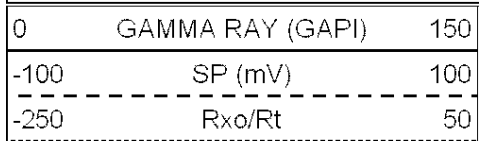
LTD 4442



SUPERIOR  
Hays,  
Kansas

# REPEAT SECTION

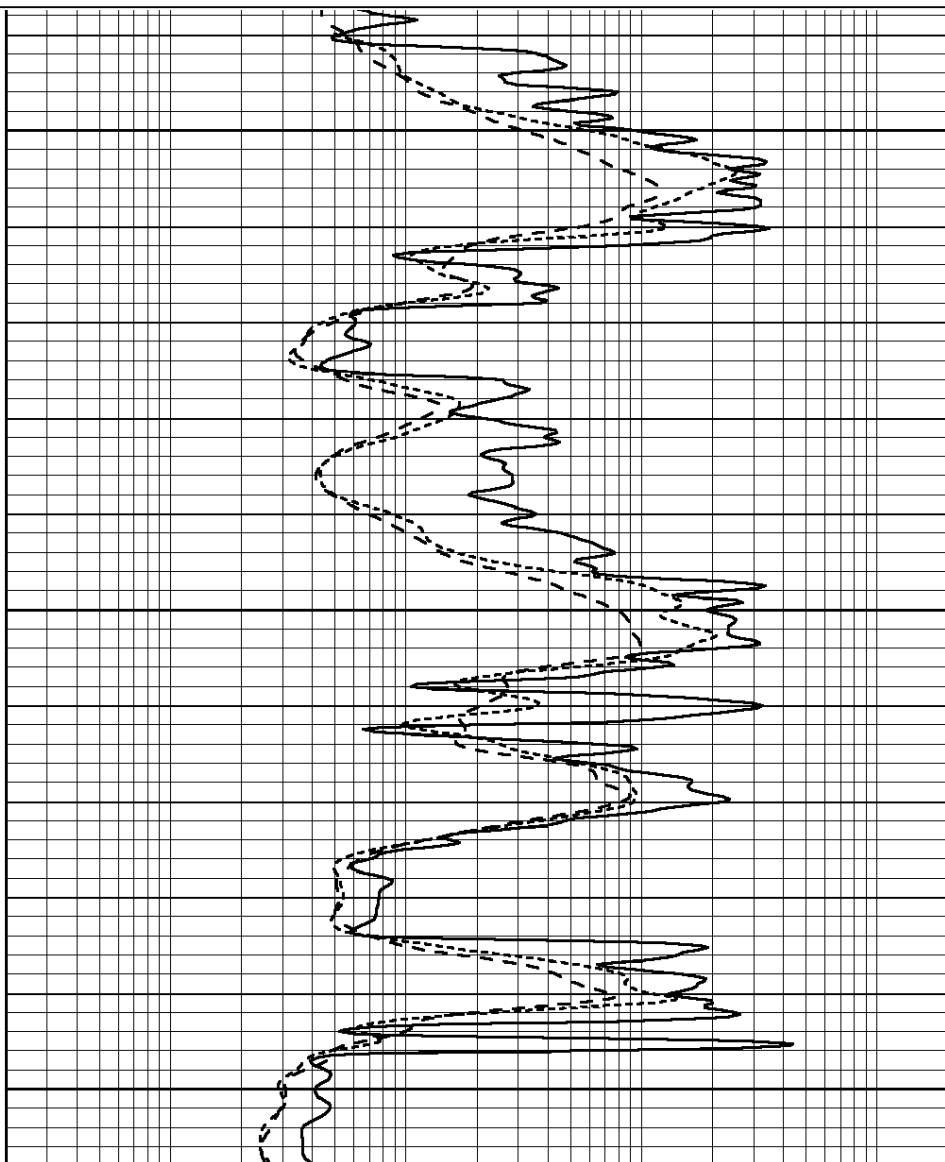
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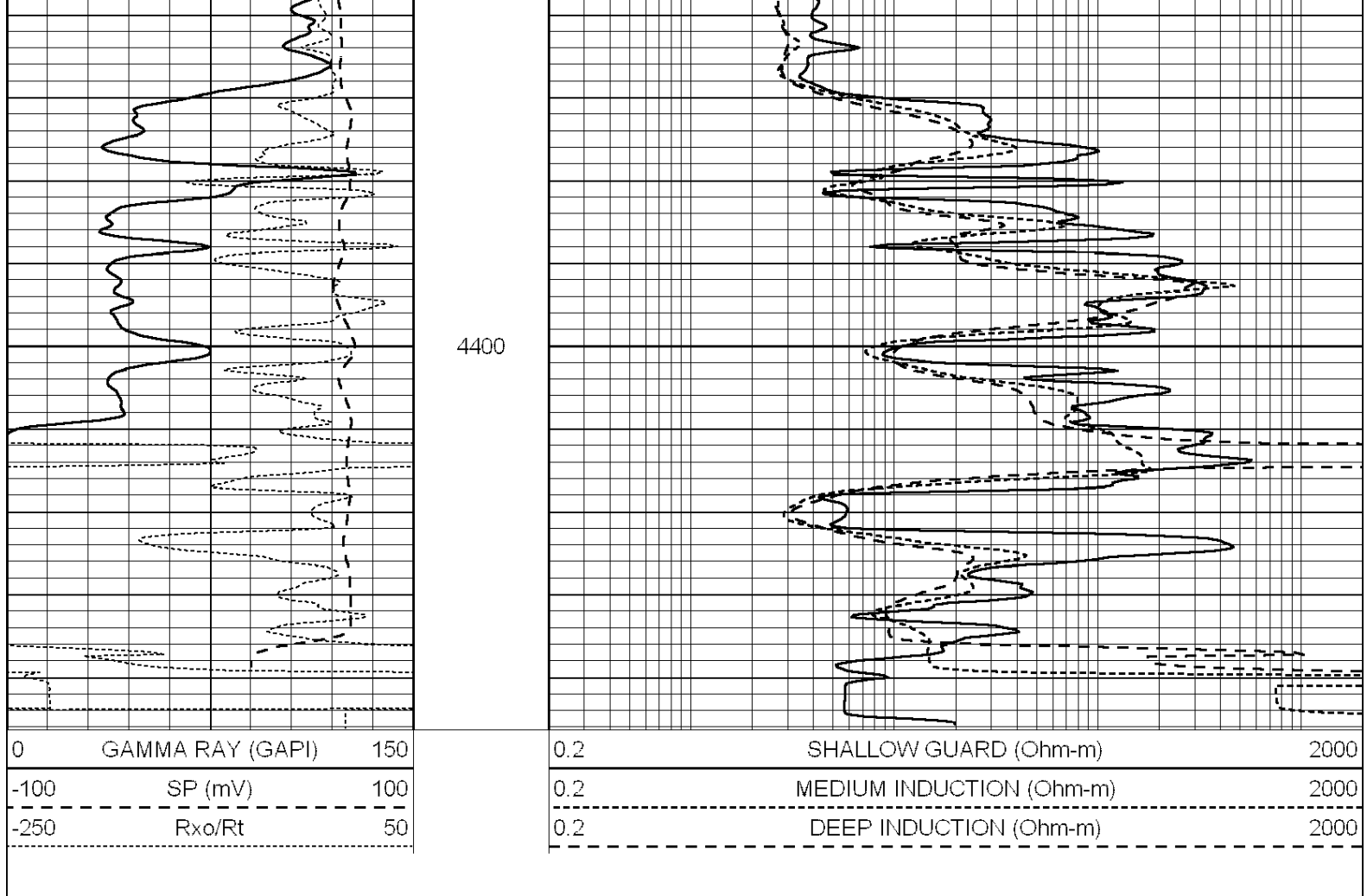


4250

4300

4350





### Calibration Report

Database File: 009204ddn.db  
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 Dataset Creation: Wed May 23 05:08:51 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	V	Air	Loop	mmho/m	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	V	Zero	Cal	mmho/m	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	2.25	V	
Large Ring	14.00	in	4.37	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