



SUPERIOR
Hays,
Kansas

**DUAL INDUCTION
LOG**

Company LOTUS OPERATING COMPANY, LLC.
Well #1 DUNBAR
Field PYLE NORTHWEST
County KIOWA
State KANSAS

Company LOTUS OPERATING COMPANY, LLC.
Well #1 DUNBAR
Field PYLE NORTHWEST
County KIOWA State KANSAS

Location: API # : 15-097-21693-0000
2310' FSL & 2310' FEL
NW - NW - SE
SEC 1 TWP 29S RGE 16W
Permanent Datum GROUND LEVEL Elevation 2055
Log Measured From KELLY BUSHING 9' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL/PE
MEL/SONIC
Elevation
K.B. 2064
D.F. 2062
G.L. 2055

Date	6/1/11		
Run Number	ONE		
Depth Driller	5020		
Depth Logger	5020		
Bottom Logged Interval	5018		
Top Log Interval	00		
Casing Driller	10 3/4"@290'		
Casing Logger	294		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000 PPM	
Density / Viscosity	9.5/49		
pH / Fluid Loss	9.5/11.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.500@95F		
Rmt @ Meas. Temp	.375@95F		
Rmc @ Meas. Temp	.600@95F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.360@125F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	1:00 P.M.		
Maximum Recorded Temperature	125F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TIM HELLMAN		

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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 HAYS, KANSAS (785) 628-6395
DIRECTIONS
HAVILAND, KS. E. ON HWY 54 TO "140TH RD." (CROFT BLKTOP) 4 1/2 S. TO "60TH RD.", 1 1/2W., S. INTO



SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 006964pe.db
 Dataset Pathname: pass3.6
 Presentation Format: dil2
 Dataset Creation: Wed Jun 01 14:37:57 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:600

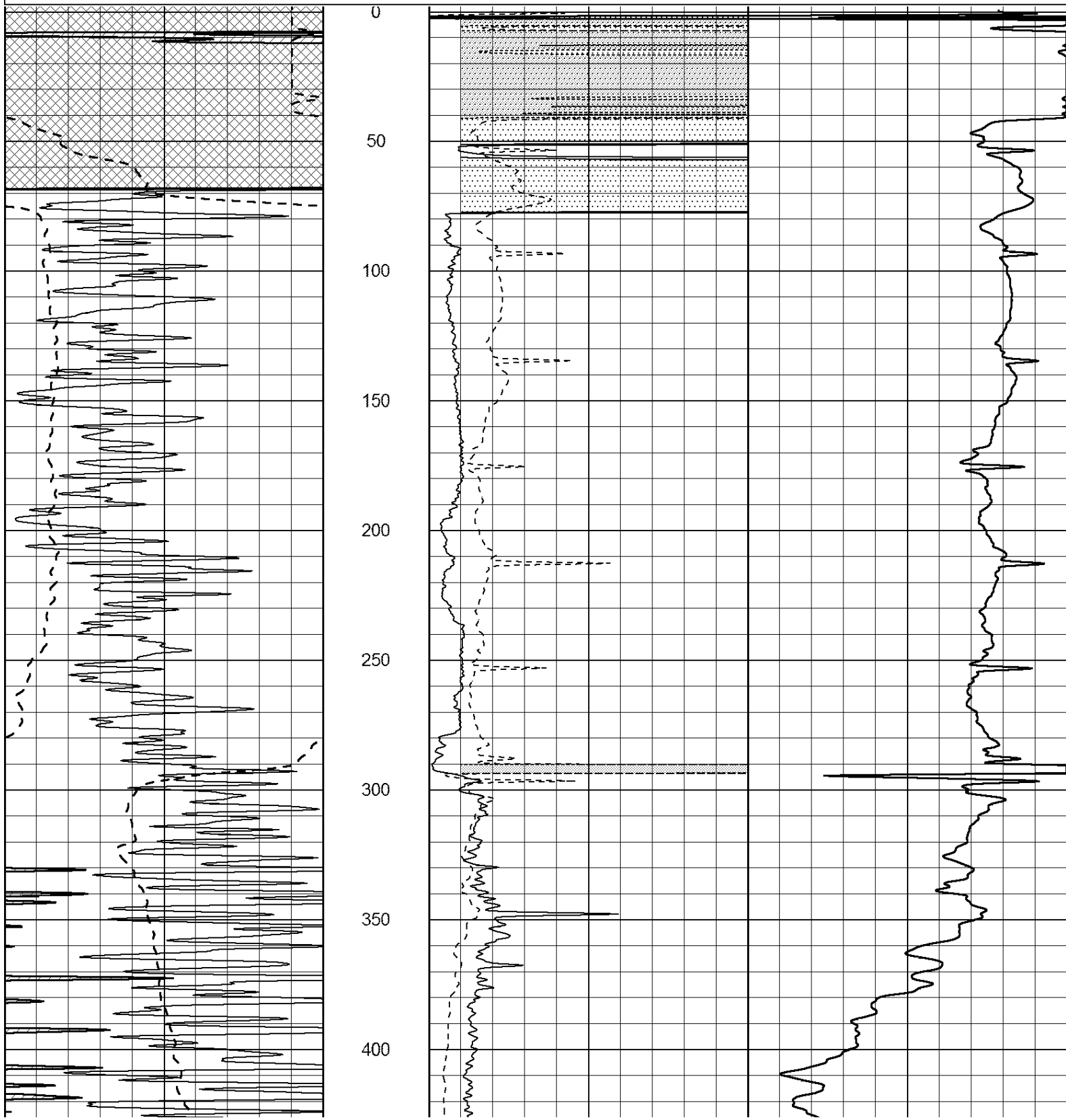
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-100	SP (mV)	100

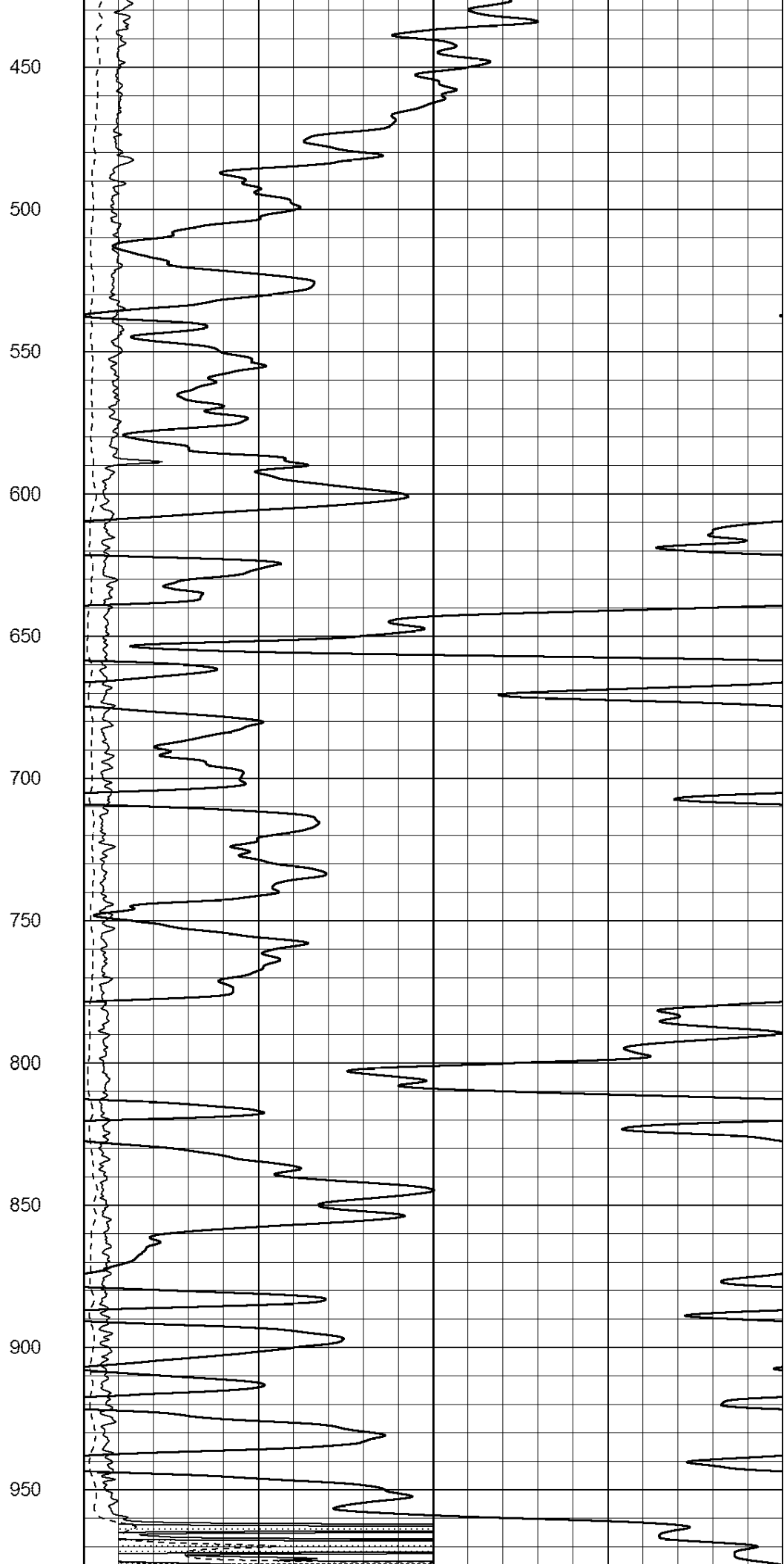
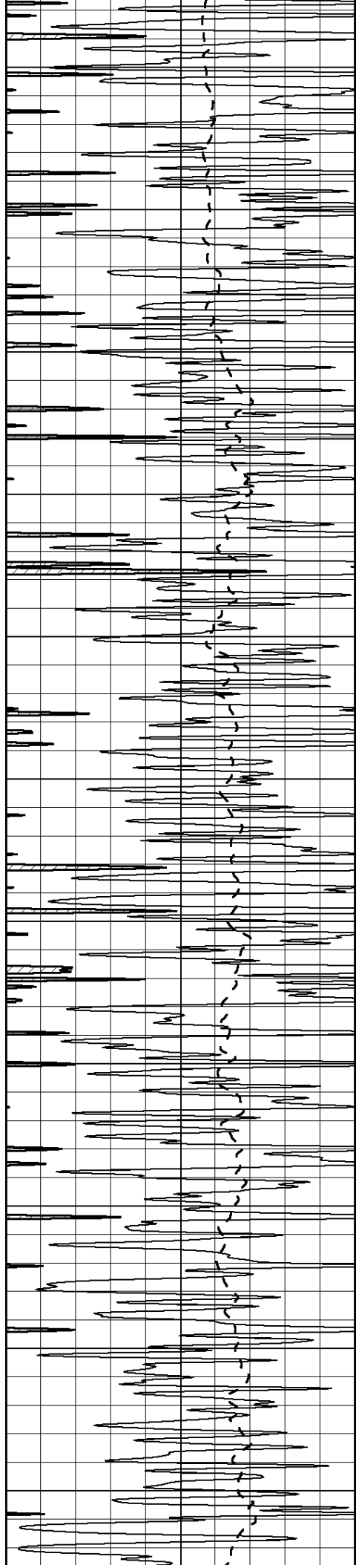
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0	RILD (Ohm-m)	50

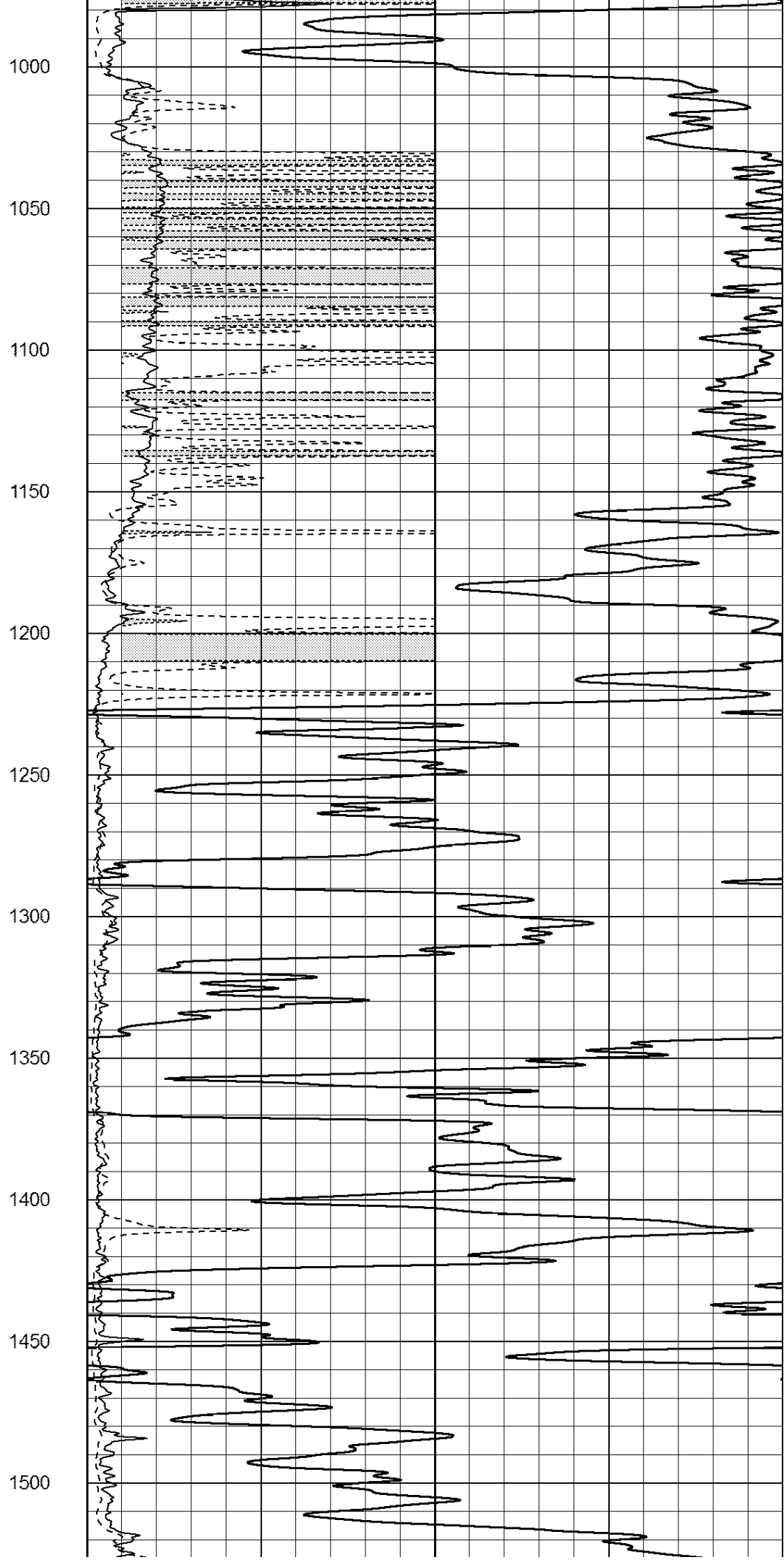
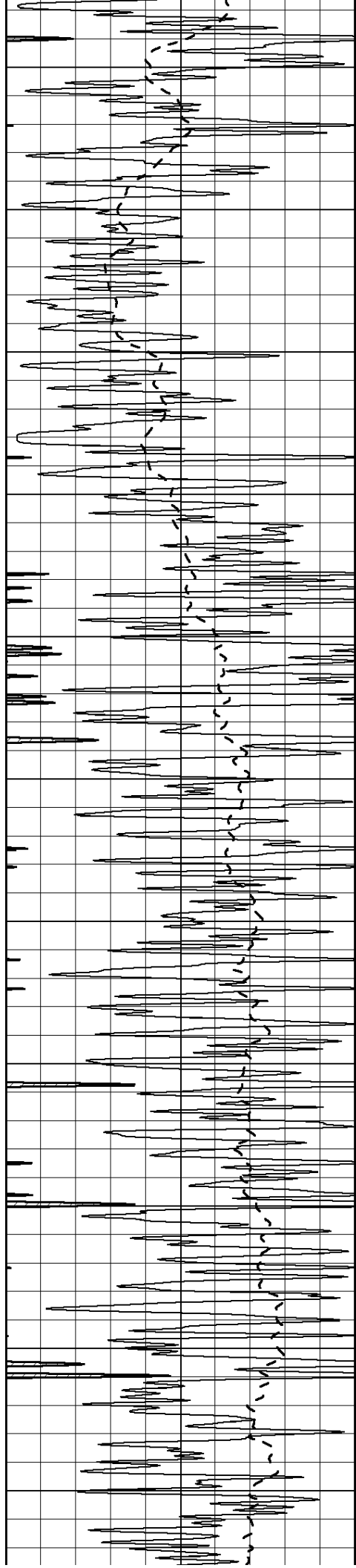
1000	CILD (mmho/m)	0
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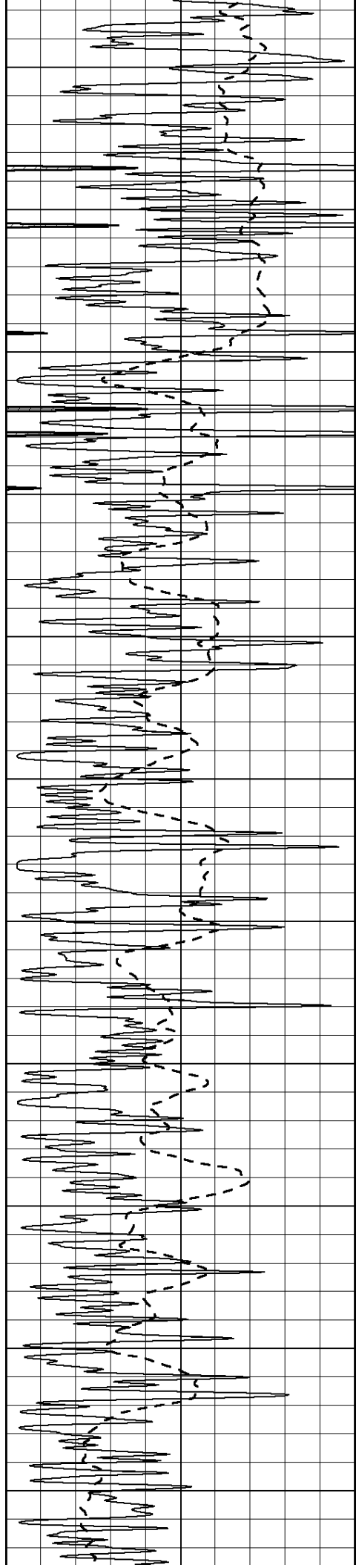
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50	RLL3 X10 (Ohm-m)	500
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1550

1600

1650

1700

1750

1800

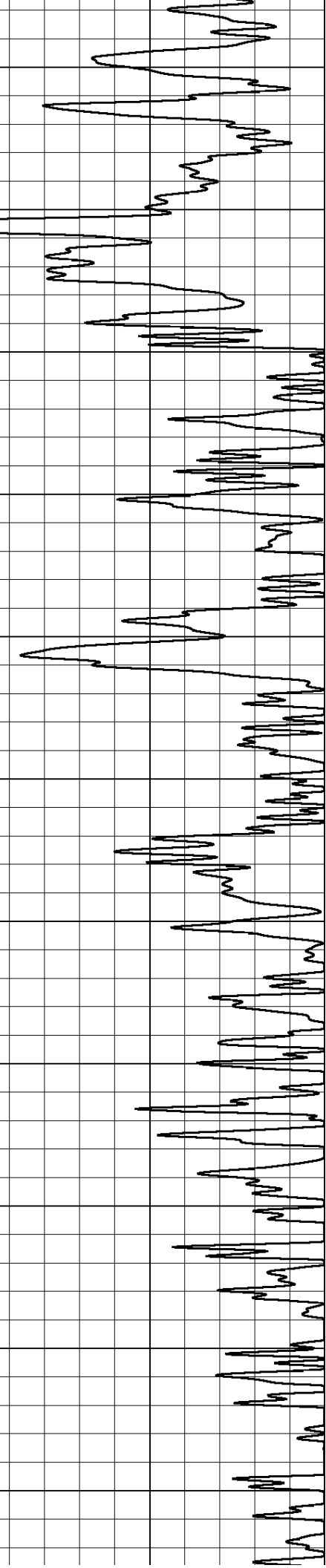
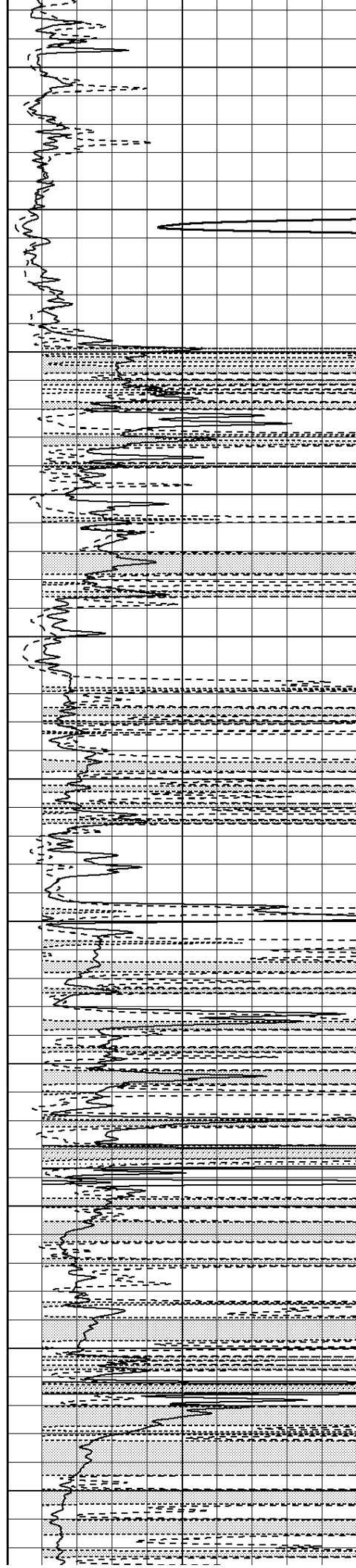
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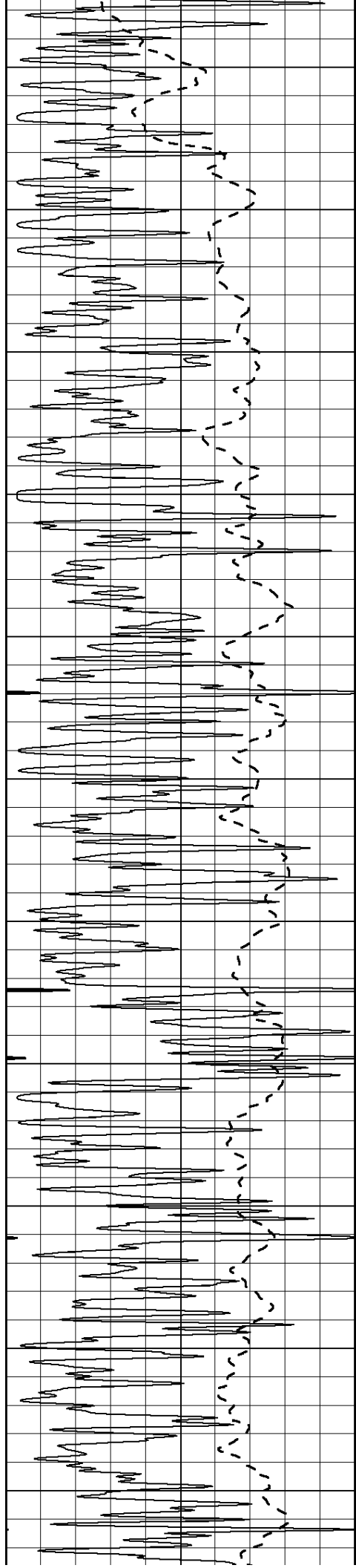
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2000

2050





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2300

2350

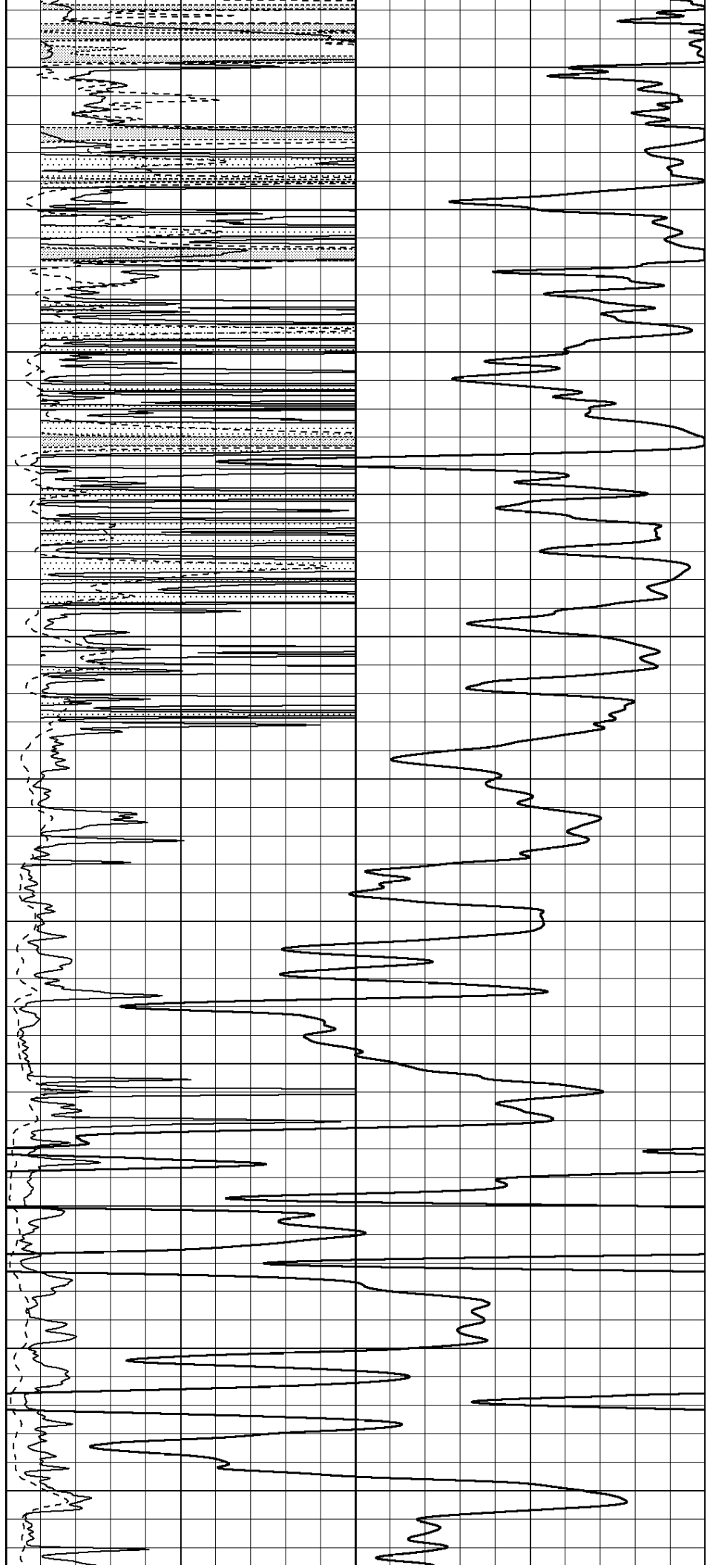
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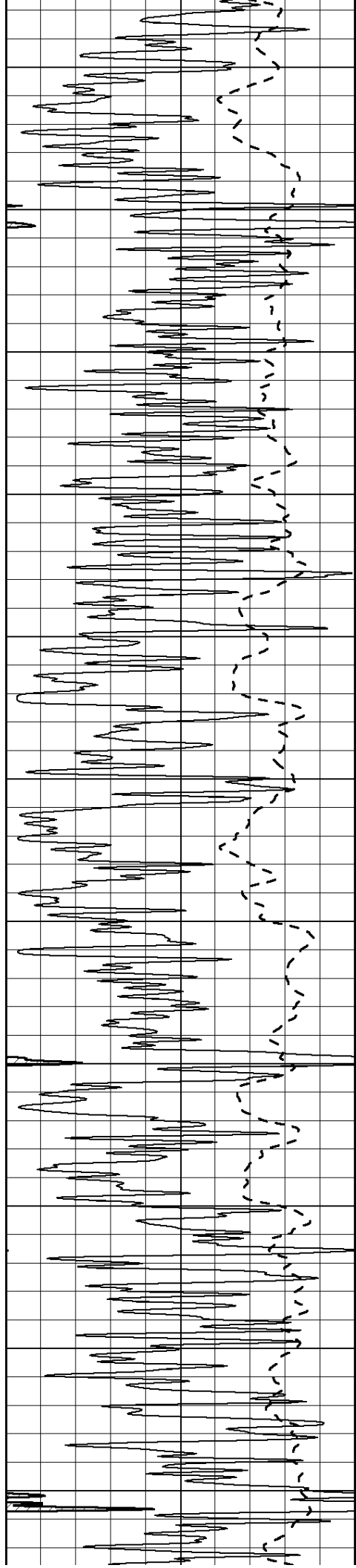
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2600





2650

2700

2750

2800

2850

2900

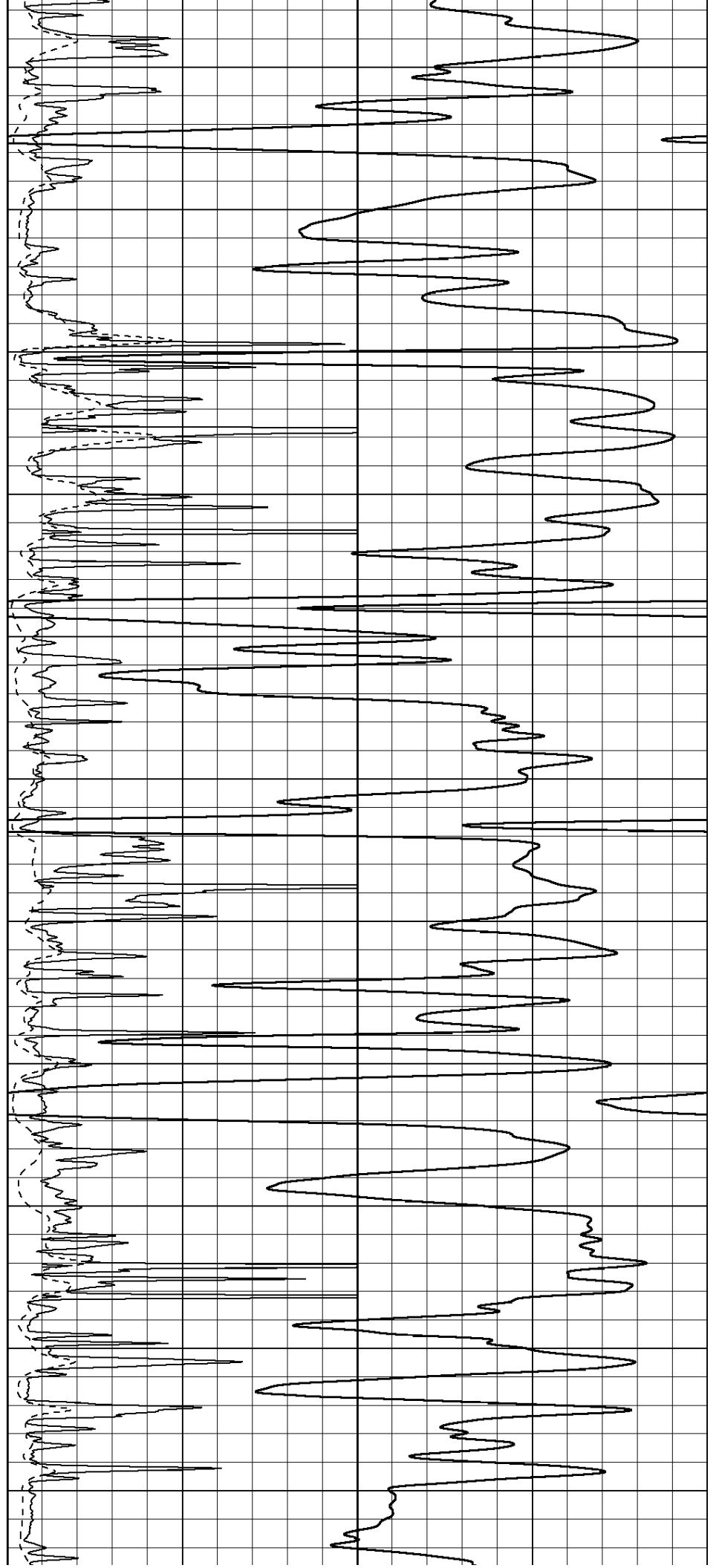
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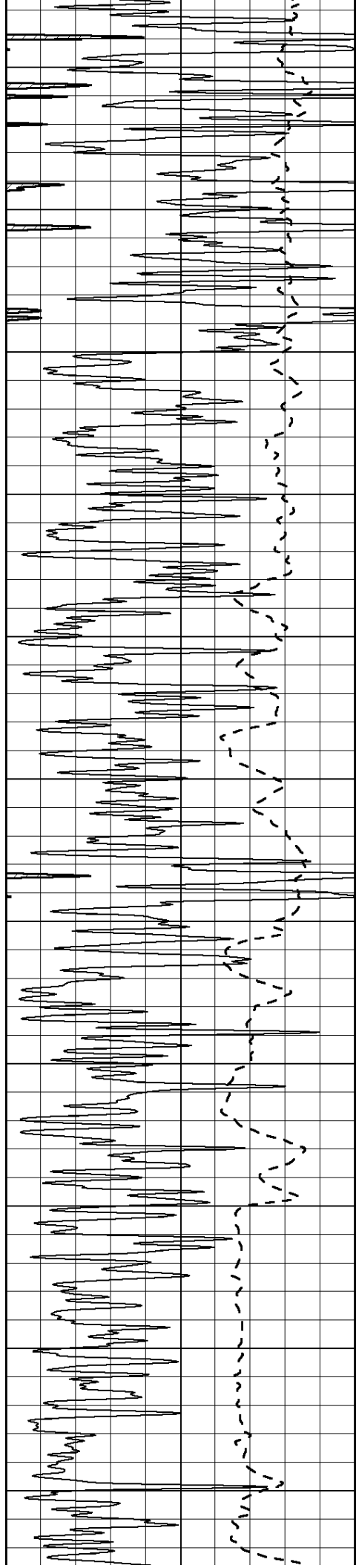
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3150





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3250

3300

3350

3400

3450

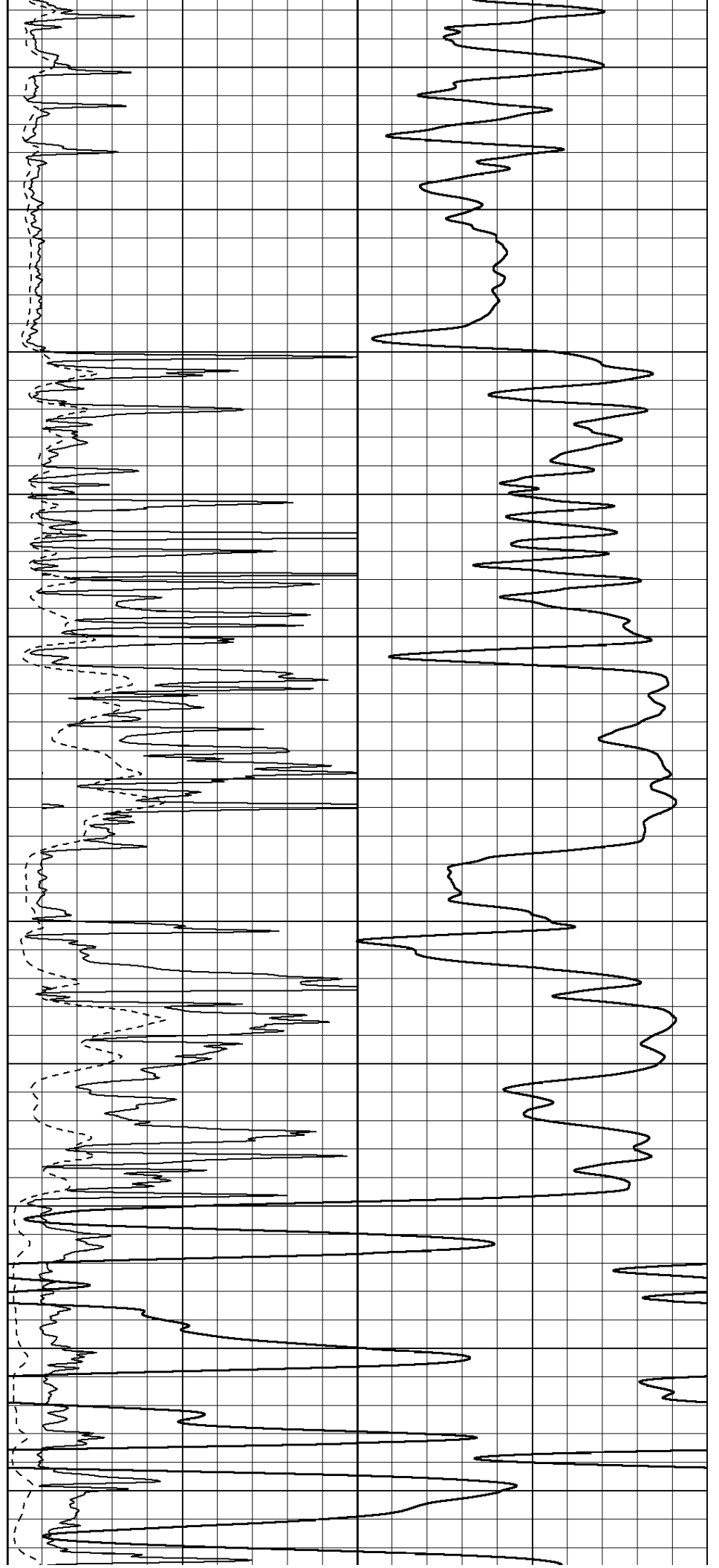
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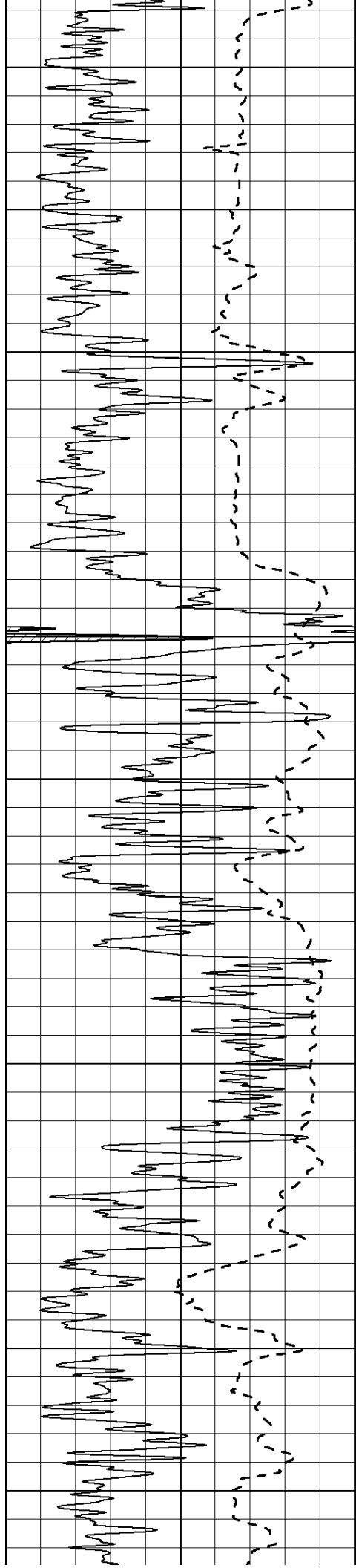
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3750

3800

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3900

3950

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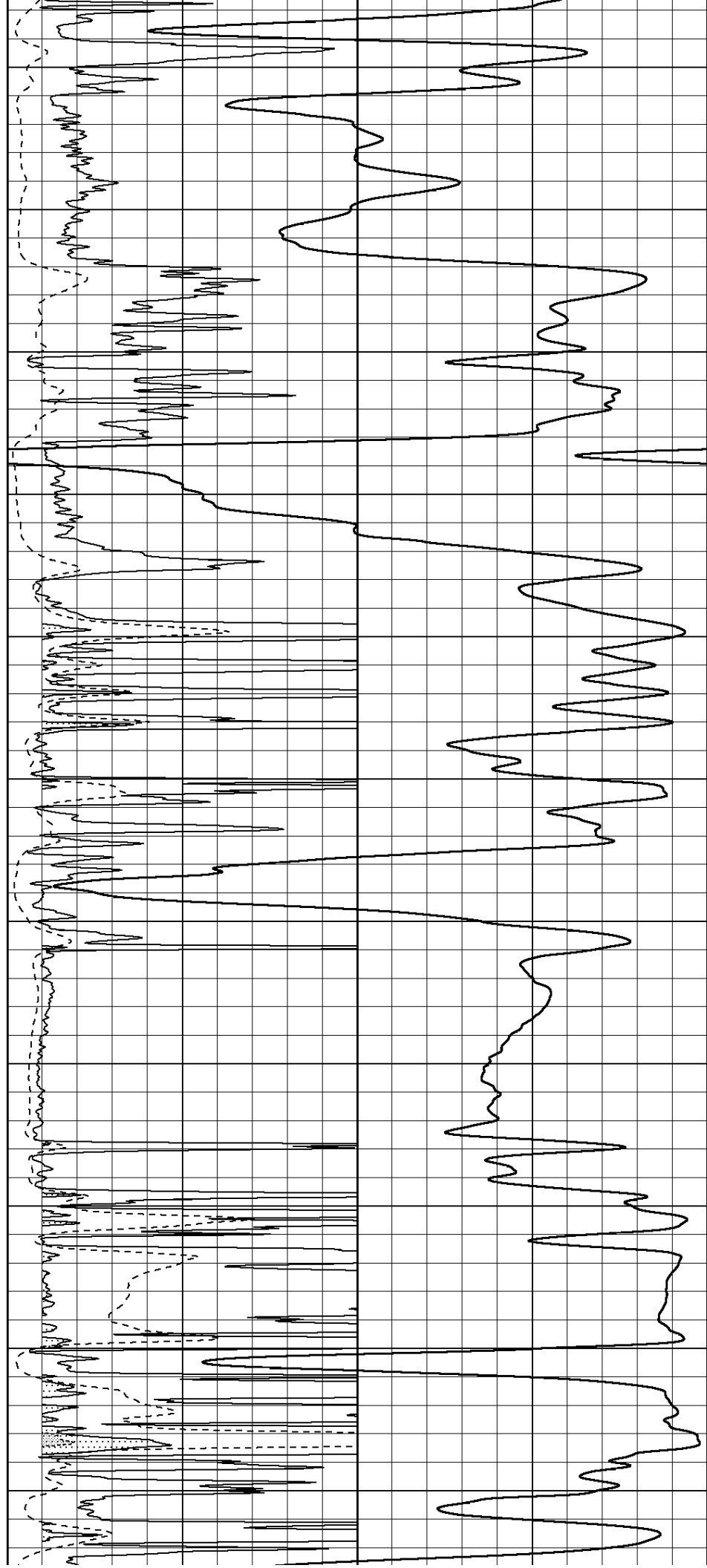
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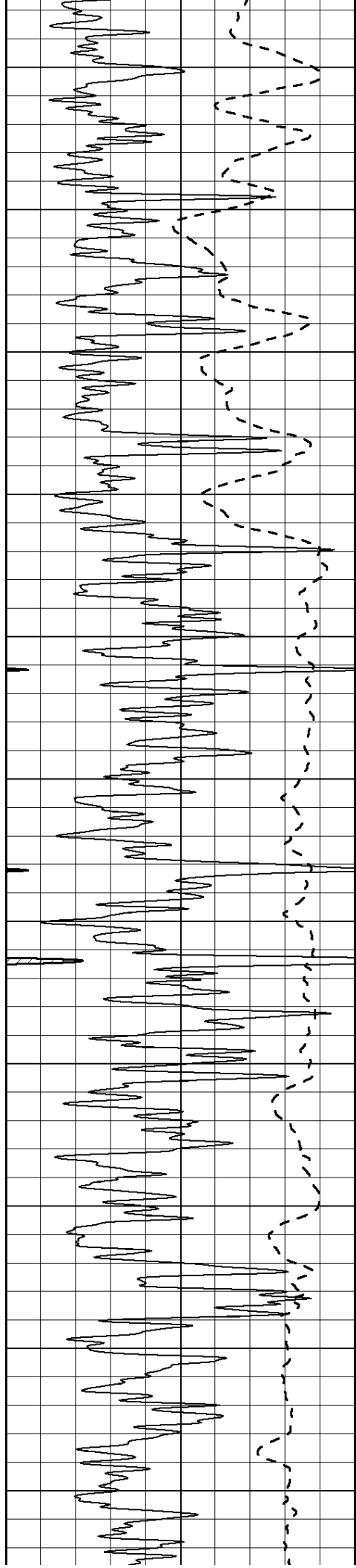
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4200

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4350

4400

4450

4500

4550

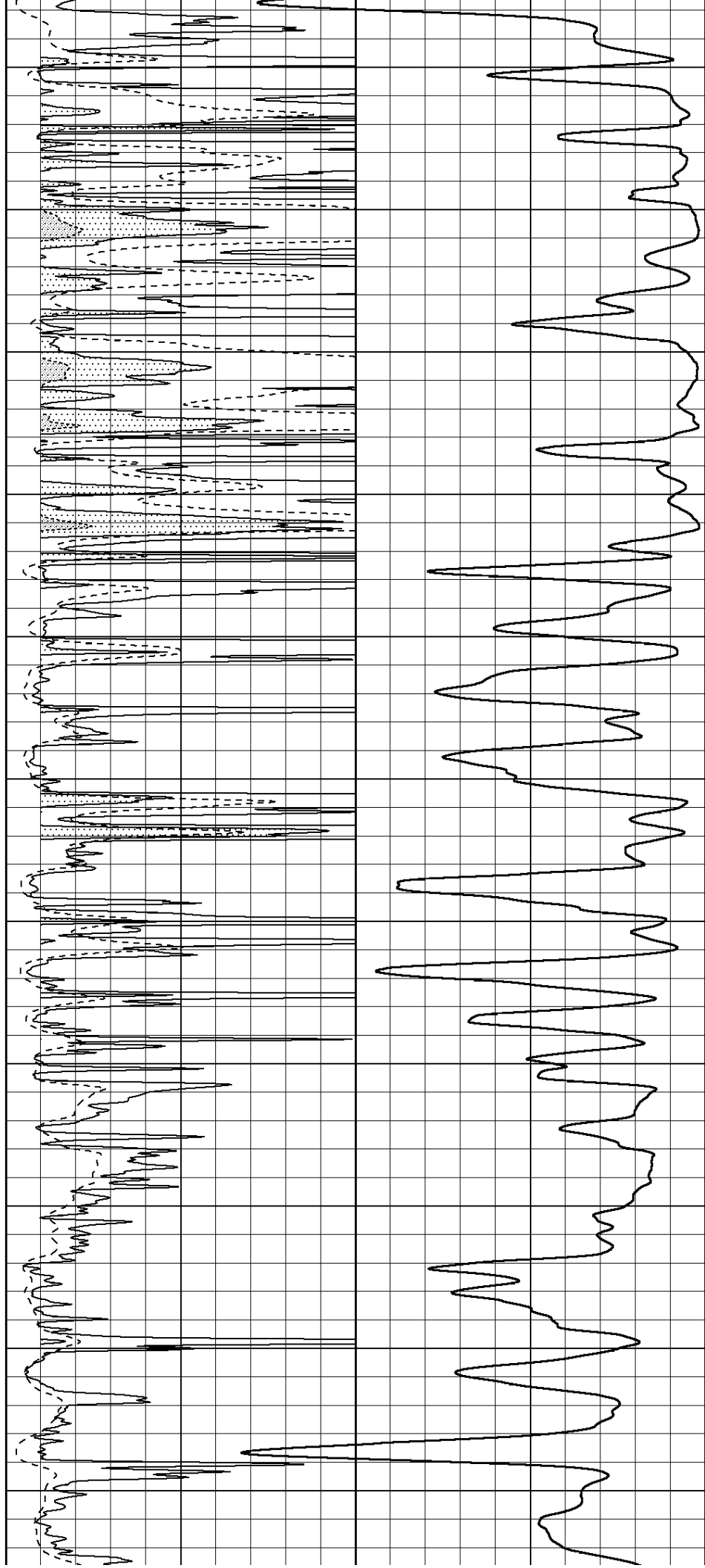
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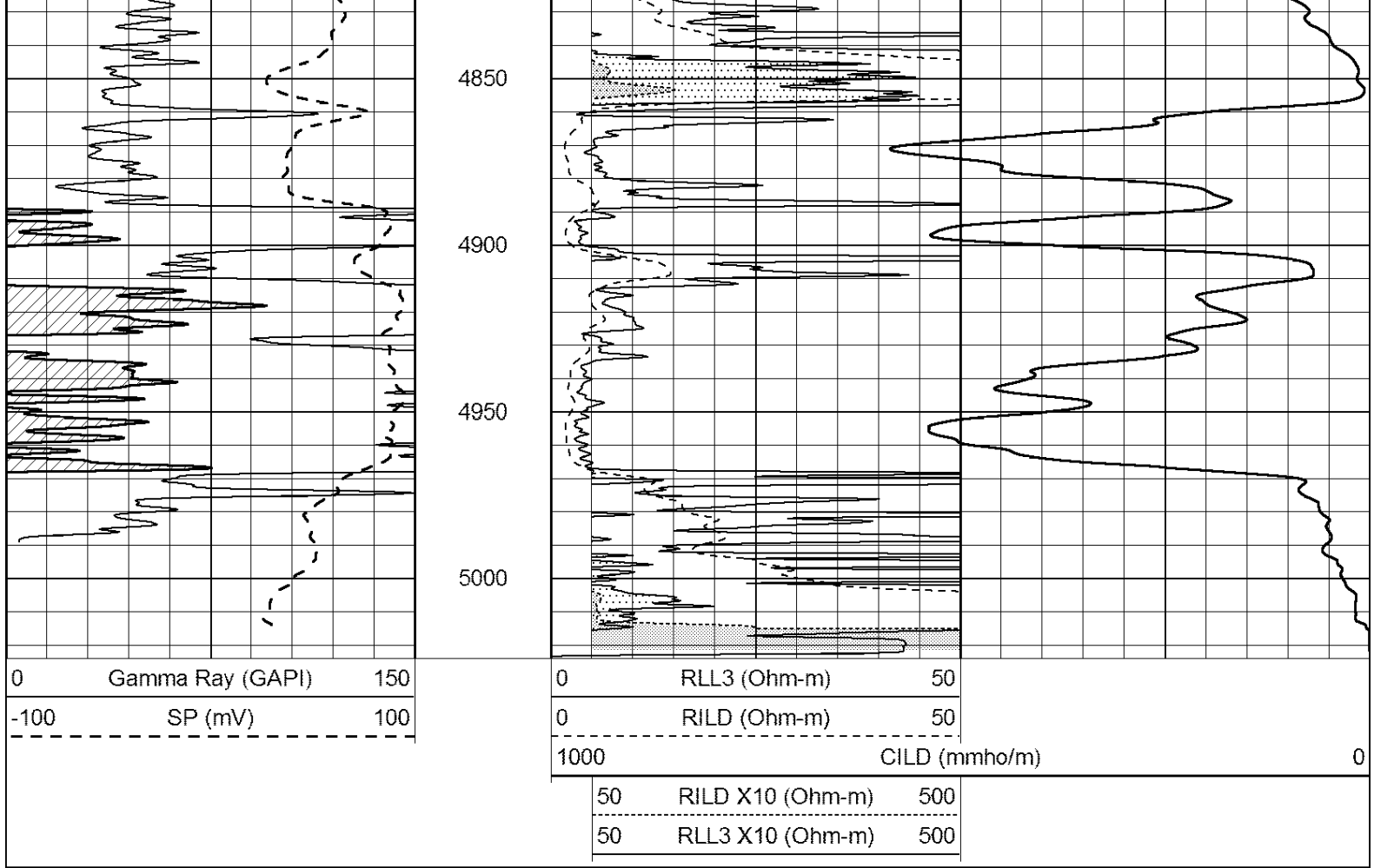
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4800





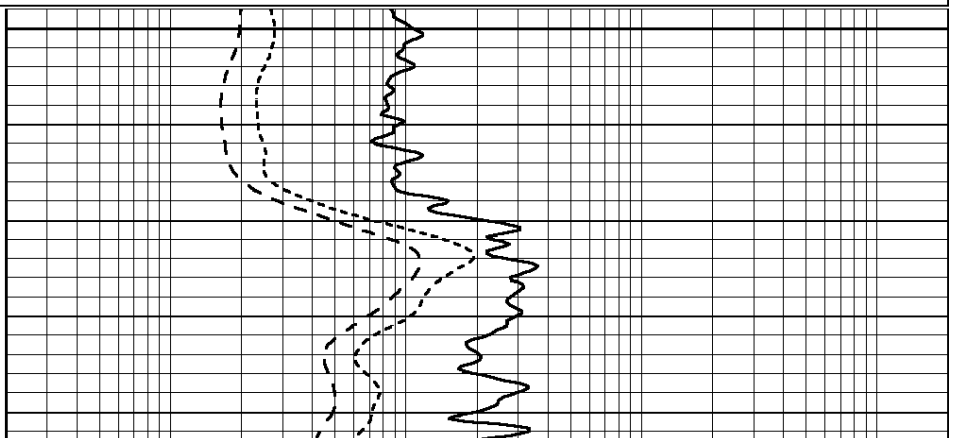
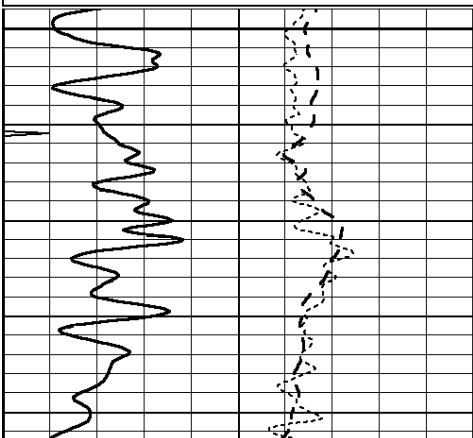
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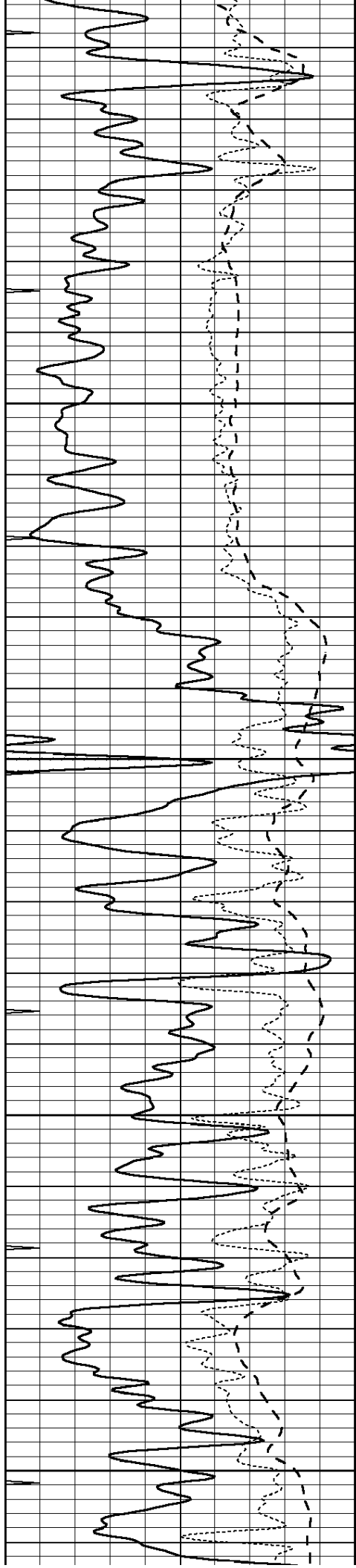
MAIN SECTION

Database File: 006964pe.db
 Dataset Pathname: pass3.6
 Presentation Format: dil
 Dataset Creation: Wed Jun 01 14:37:57 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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





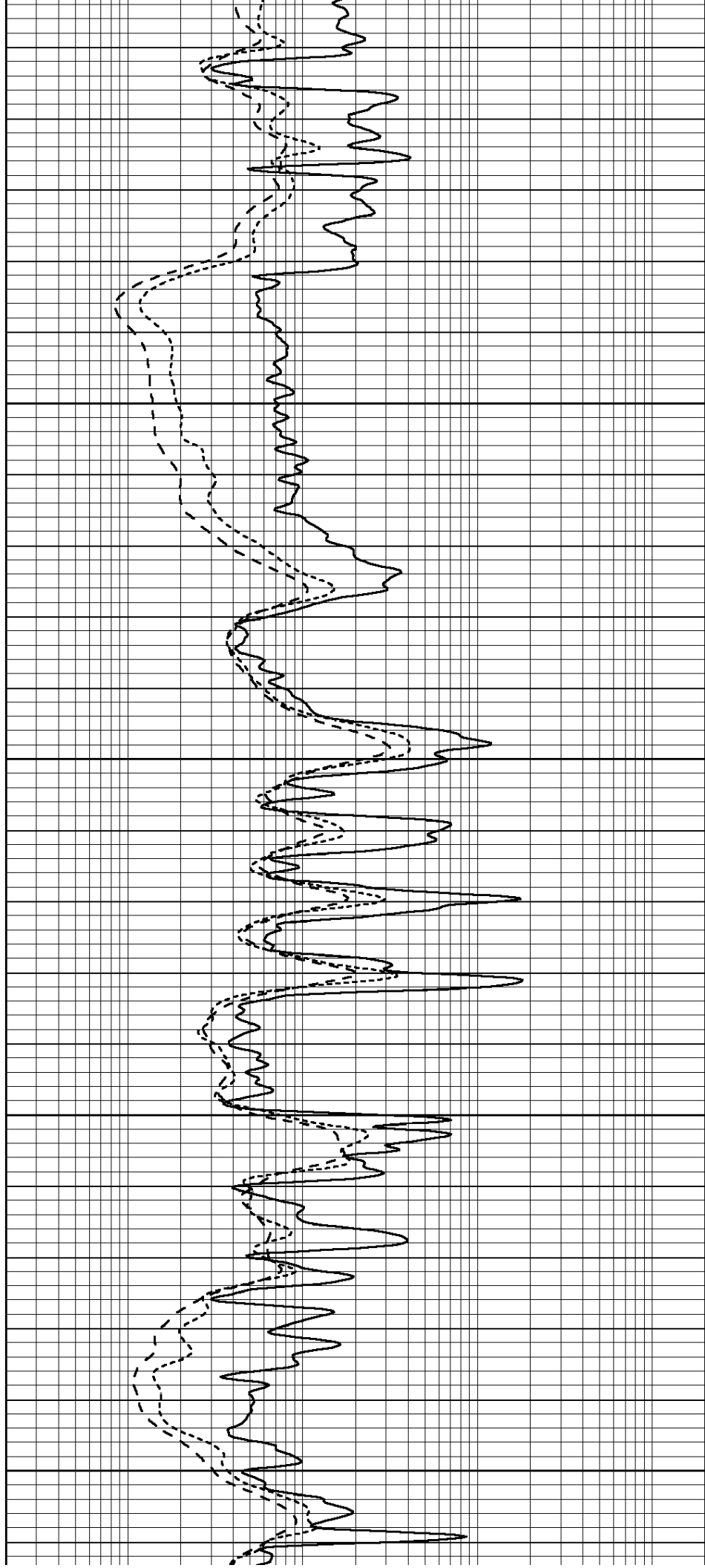
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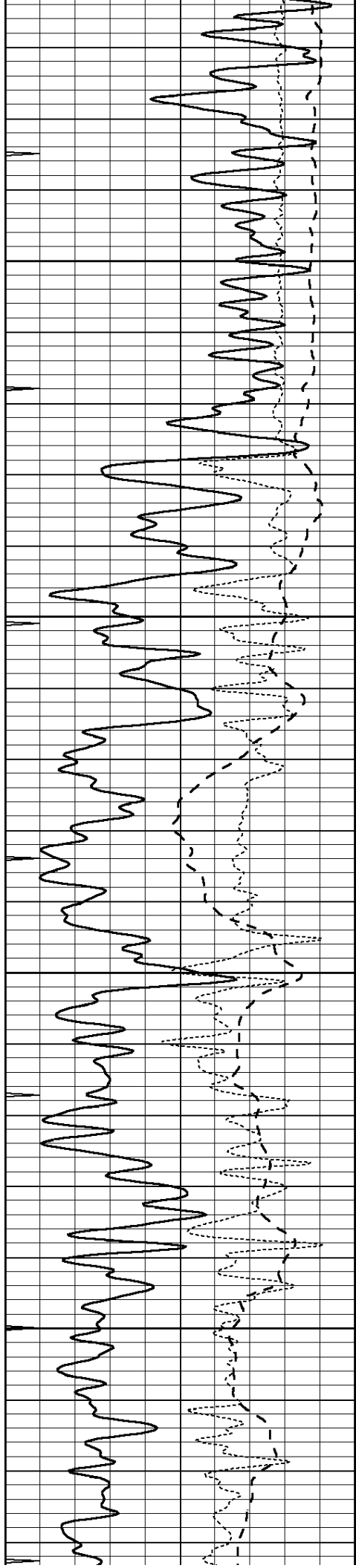
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4050



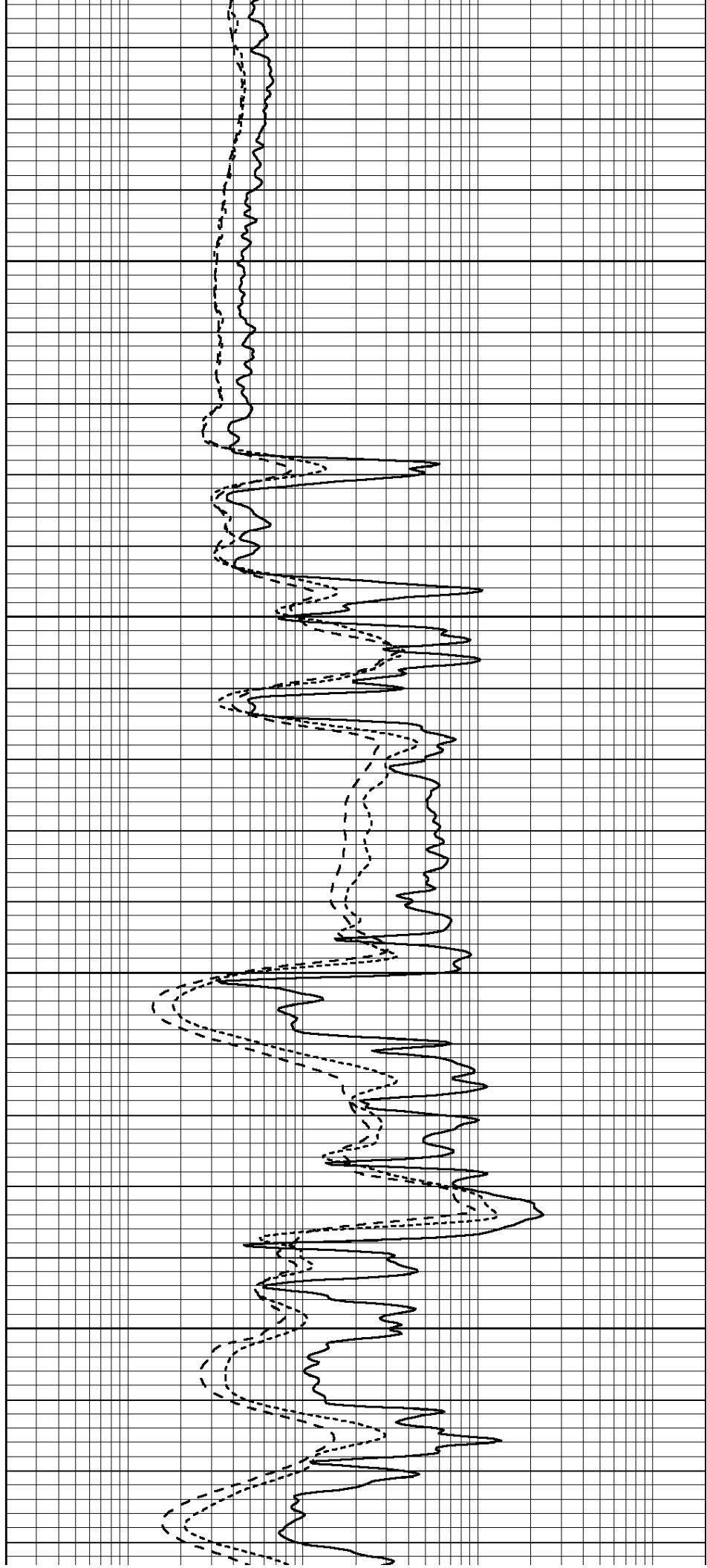


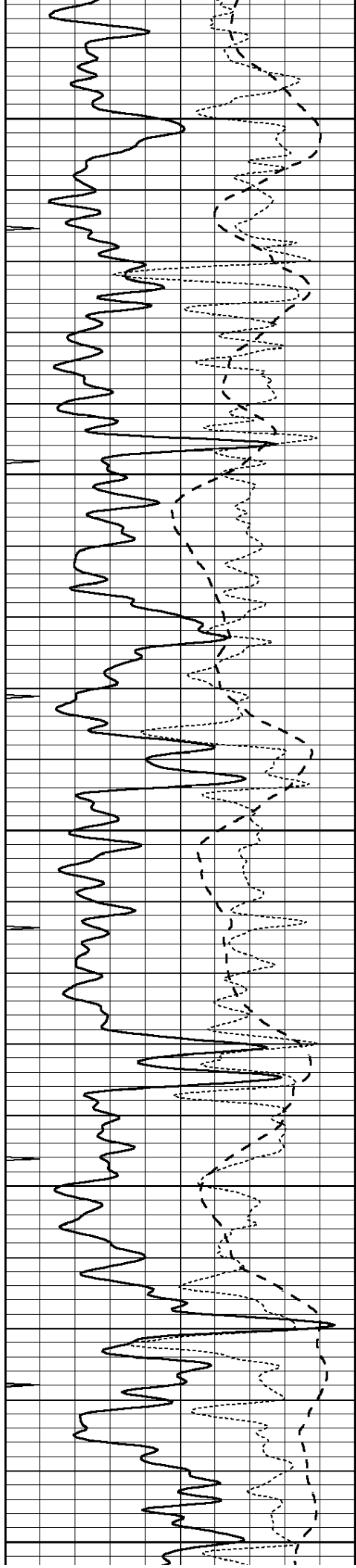
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4150

4200

4250





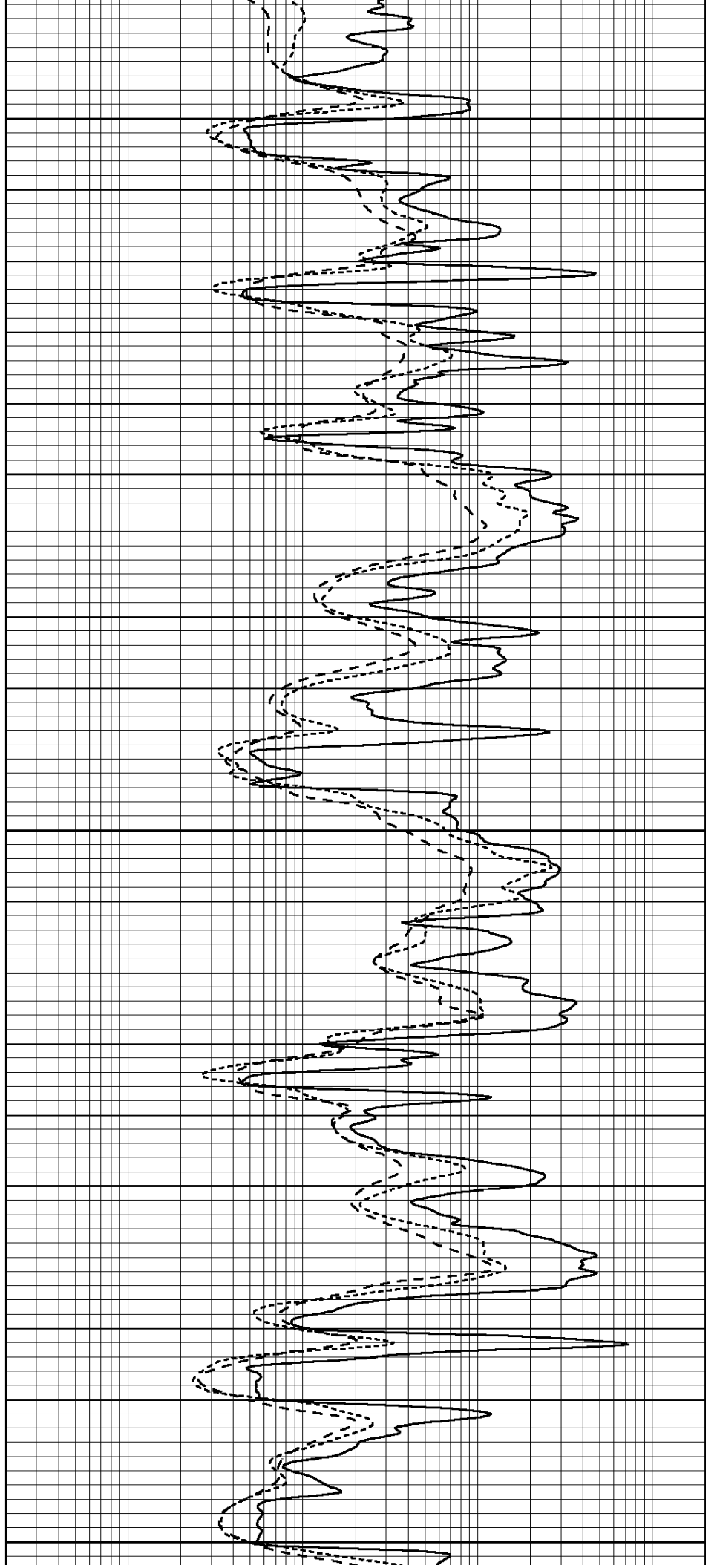
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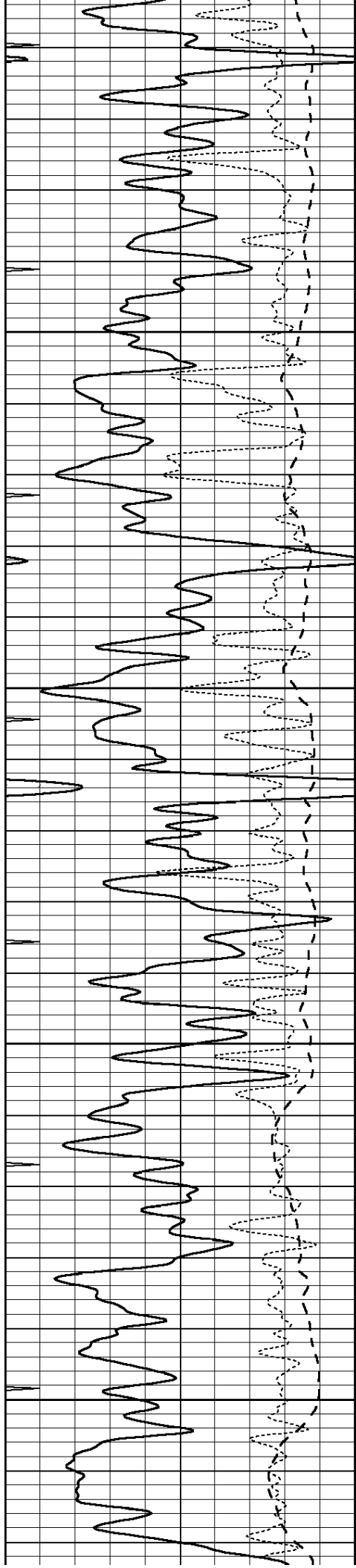
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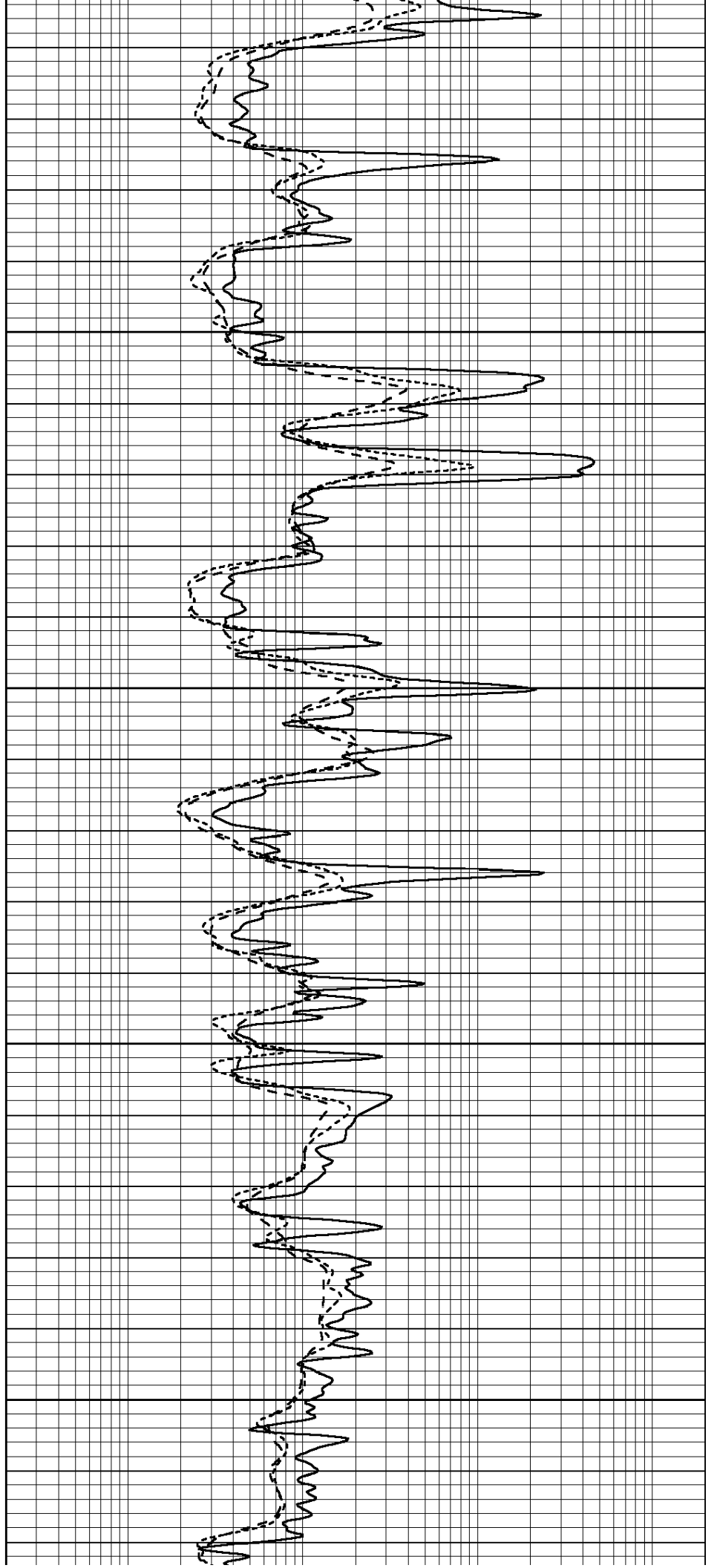


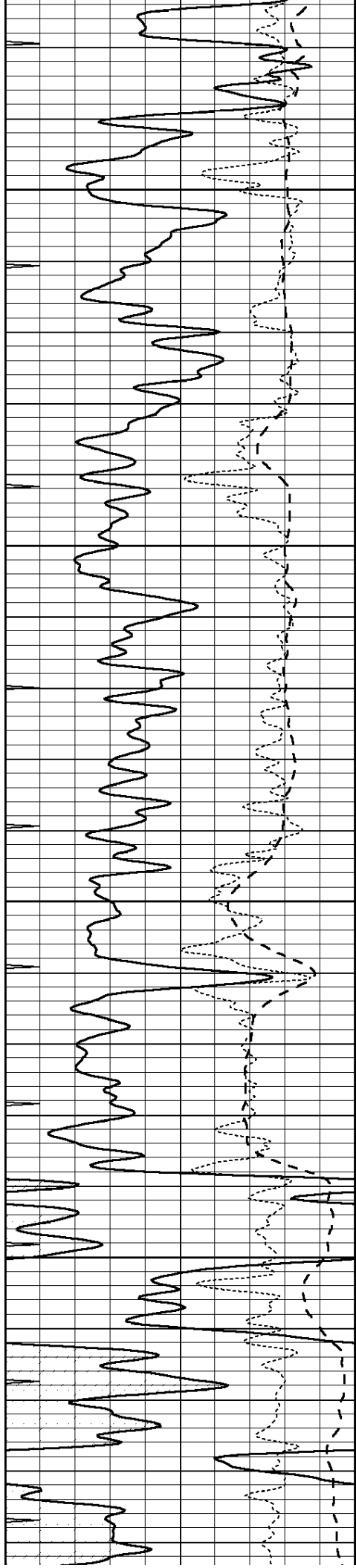
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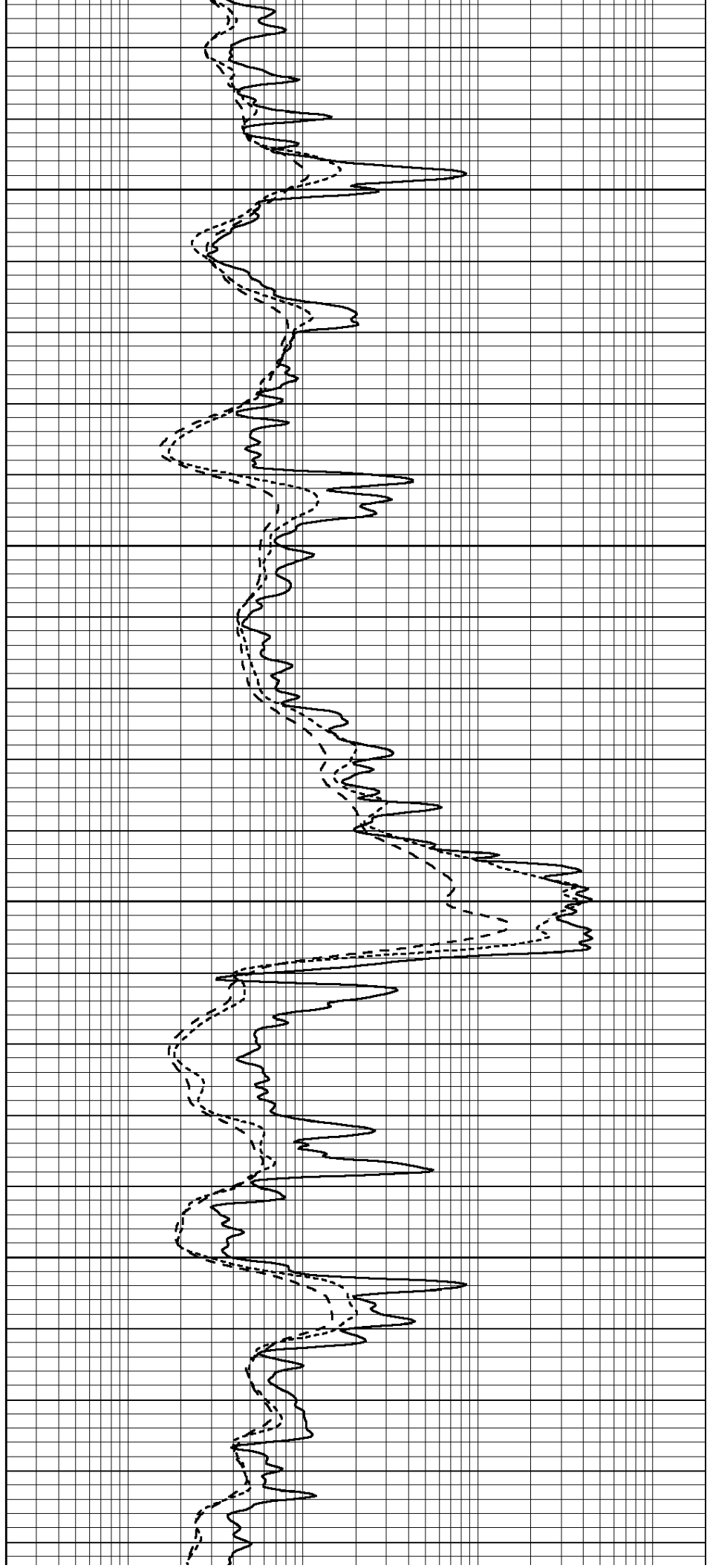


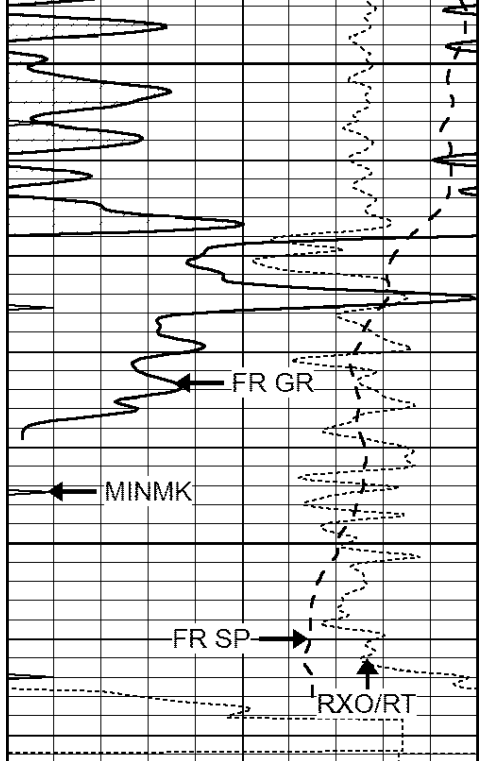
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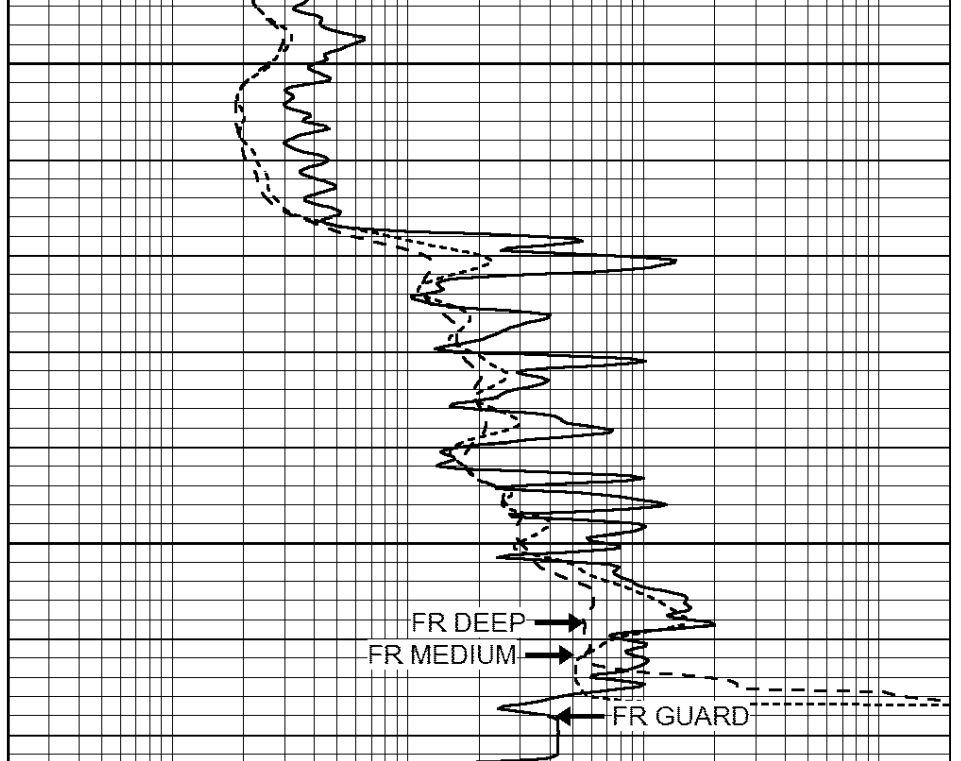
4900





4950
5000
LTD 5020

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10



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



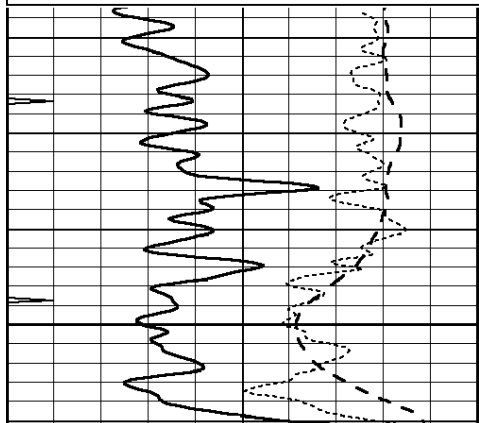
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Kansas

REPEAT SECTION

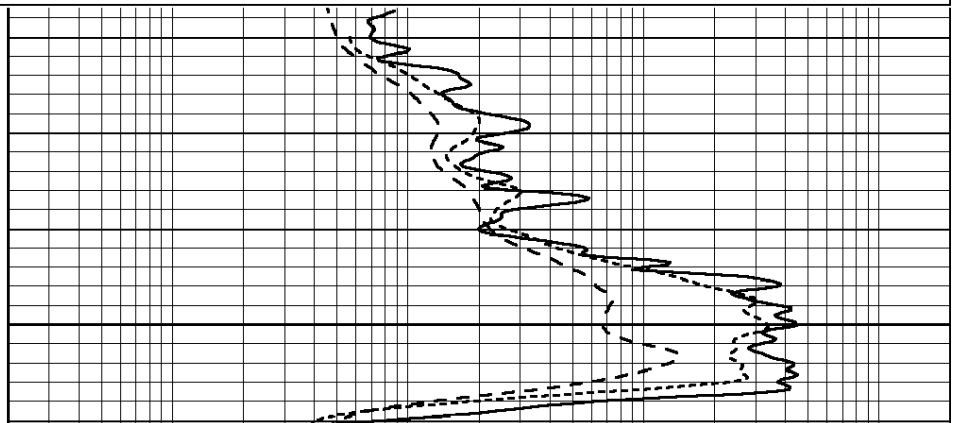
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 Presentation Format: dil
 Dataset Creation: Wed Jun 01 15:10:16 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

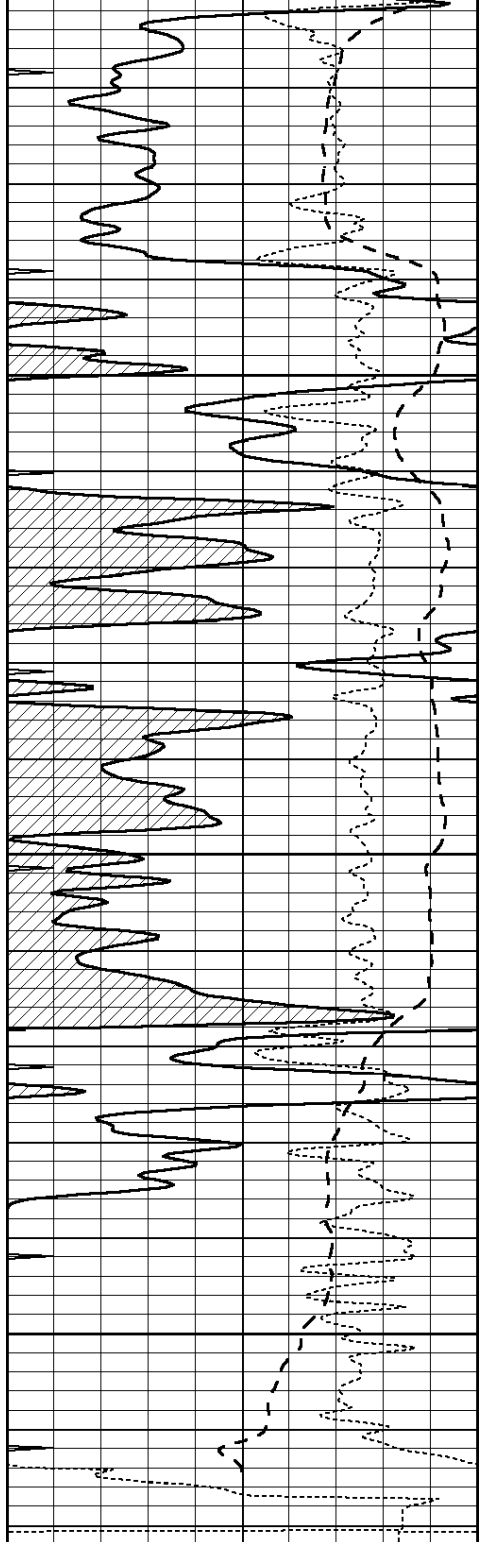
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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



4850



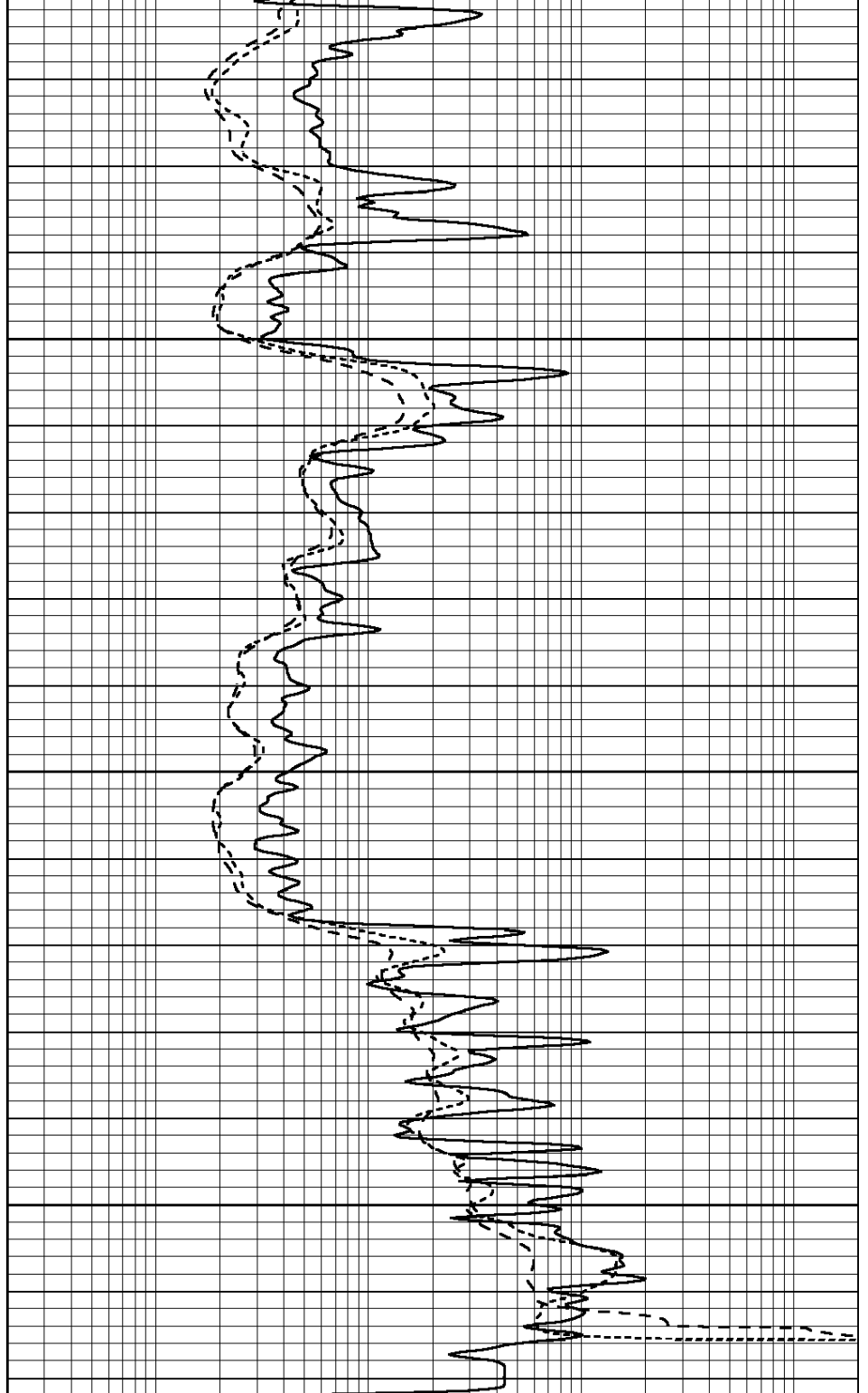


4900

4950

5000

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10



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

Calibration Report

Database File: 006964pe.db
 Dataset Pathname: pass3.6
 Dataset Creation: Wed Jun 01 14:37:57 2011 by Calc Open-Cased 110302

Dual Induction Calibration Report

Serial-Model:

DIL6-GEAR

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.001	0.644	V	0.000	400.000	mmho/m	660.000	3.000
Medium	0.020	0.738	V	0.000	462.500	mmho/m	720.000	-14.000
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

	Readings	Reference	
Low Ref	2.8	7.1	
High Ref	4.6	15.0	
Gain:	4.3		Offset: -4.8

Compensated Neutron Calibration Report

Serial Number: NEU_3I
 Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	997.00 cps	1000.00 cps	1.0000
Long Space	986.00 cps	1000.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR4
 Tool Model: OPEN
 Performed: Wed Jun 01 12:58:24 2011

Calibrator Value: 200.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 189.0 cps

Sensitivity: 3.5000 GAPI/cps