



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company	LARIO OIL & GAS COMPANY		
Well	KREBS CREDIT SHELTER #1-36		
Field	WILDCAT		
County	LOGAN		
State	KANSAS		
Location:	API # : 15-109-20876		Other Services CDL/CNL/PE SONIC/MEL
2003 FNL & 1353 FEL			
SEC 36 TWP 14S RGE 32W			Elevation K.B. 2669 D.F. G.L. 2664
Permanent Datum	GROUND LEVEL	Elevation	
Log Measured From	KELLY BUSHING 5' A.G.L.		
Drilling Measured From	KELLY BUSHING		
Date	2-4-10		
Run Number	ONE		
Depth Driller	4414		
Depth Logger	4412		
Bottom Logged Interval	4410		
Top Log Interval	00		
Casing Driller	263		
Casing Logger	263		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.2 / 53		
pH / Fluid Loss	10.0 / 8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	0.70 @ 80F		
Rinf @ Meas. Temp	0.53 @ 80F		
Rmc @ Meas. Temp	0.84 @ 80F		
Source of Rinf / Rmc	FLOWLINE		
Rim @ BHT	.470 @ 119F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	10:45 P.M.		
Maximum Recorded Temperature	119F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	VERN SCHRAG		

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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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: OAKLEY, 22S, INTO AT STEEL GATE, 2E.



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MAIN SECTION

Database File: 004793pdn.db
Dataset Pathname: pass3.1
Presentation Format: dil2
Dataset Creation: Thu Feb 04 00:09:55 2010 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

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

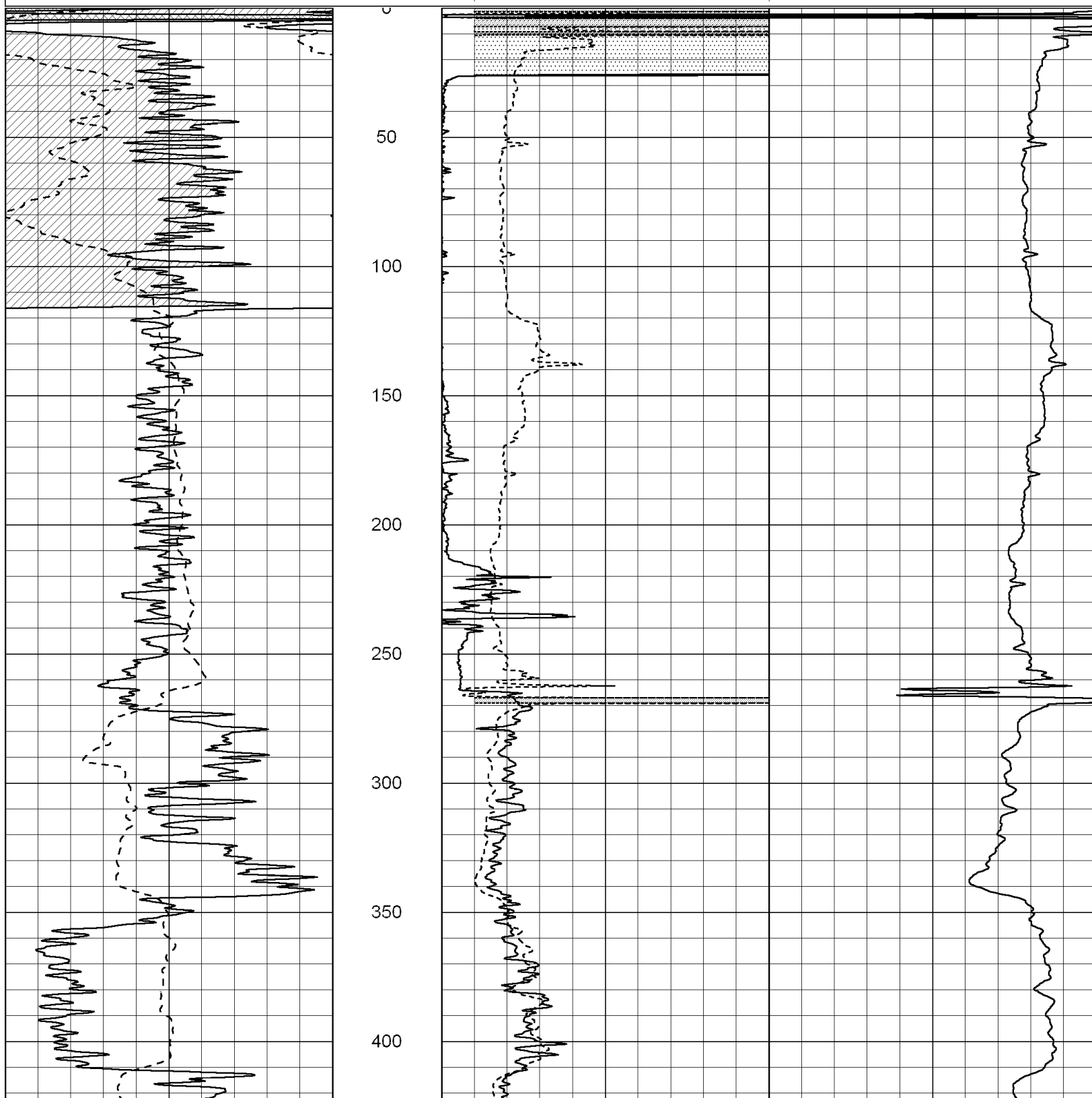
0	RLL3 (Ohm-m)	50
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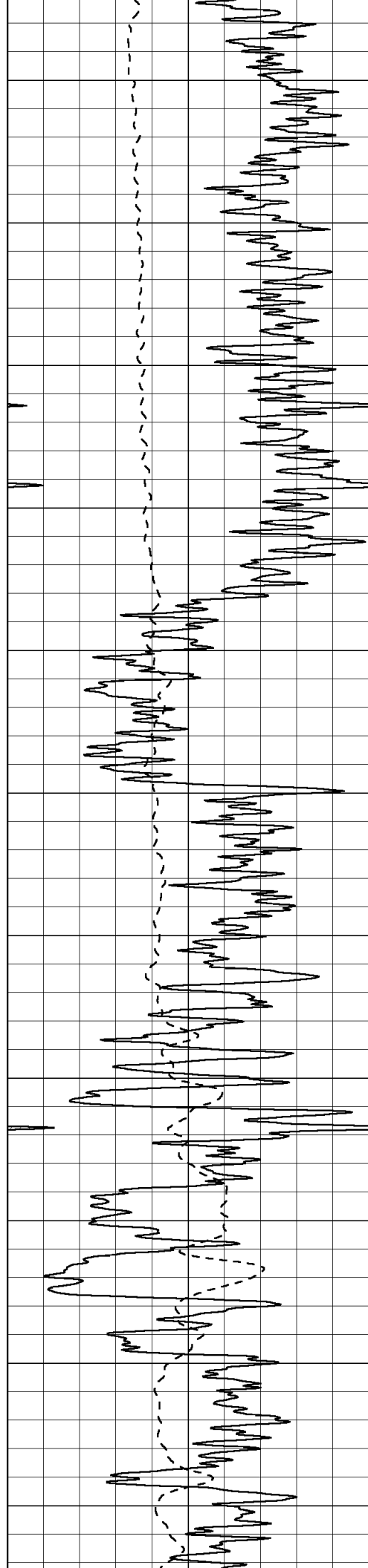
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1000	CILD (mmho/m)	0
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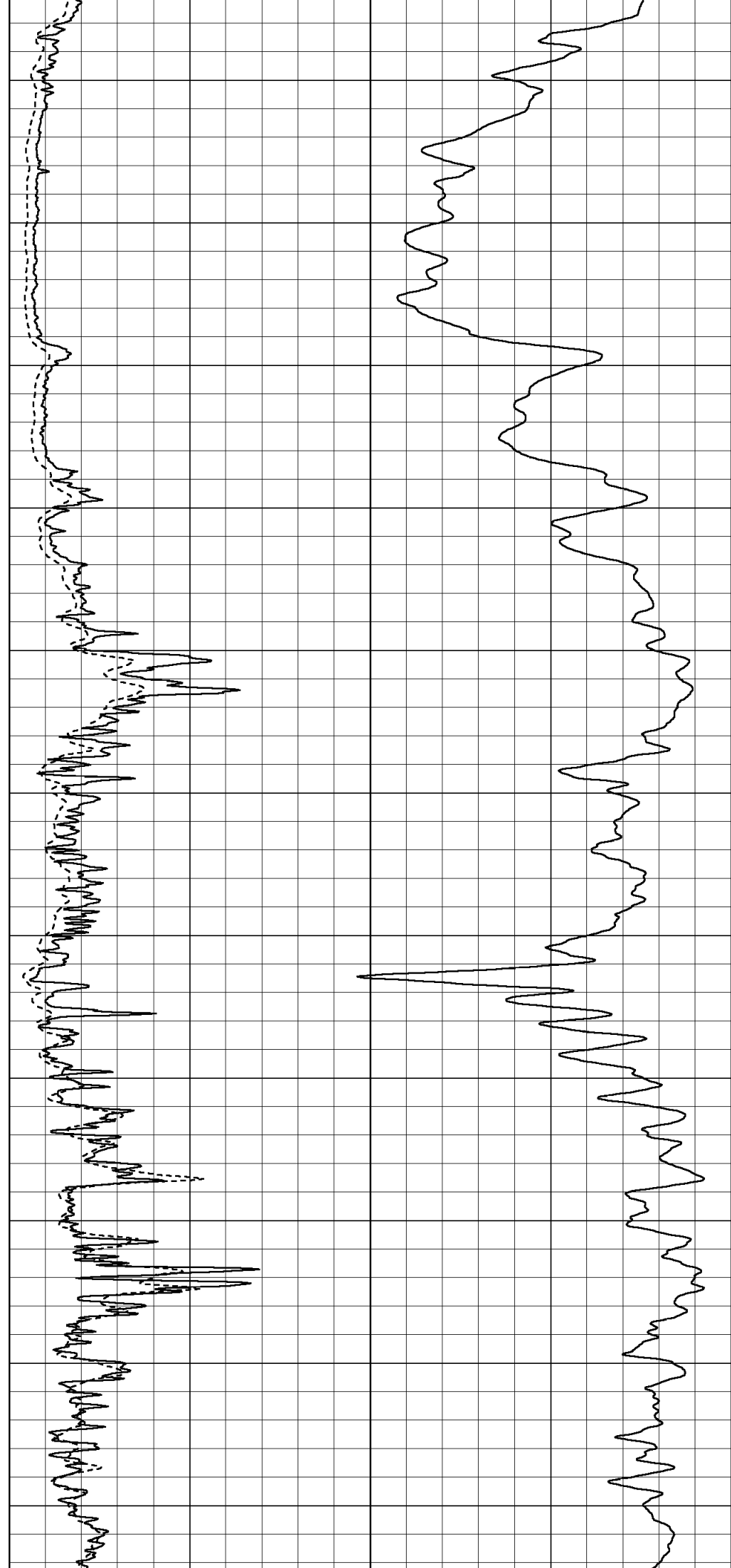
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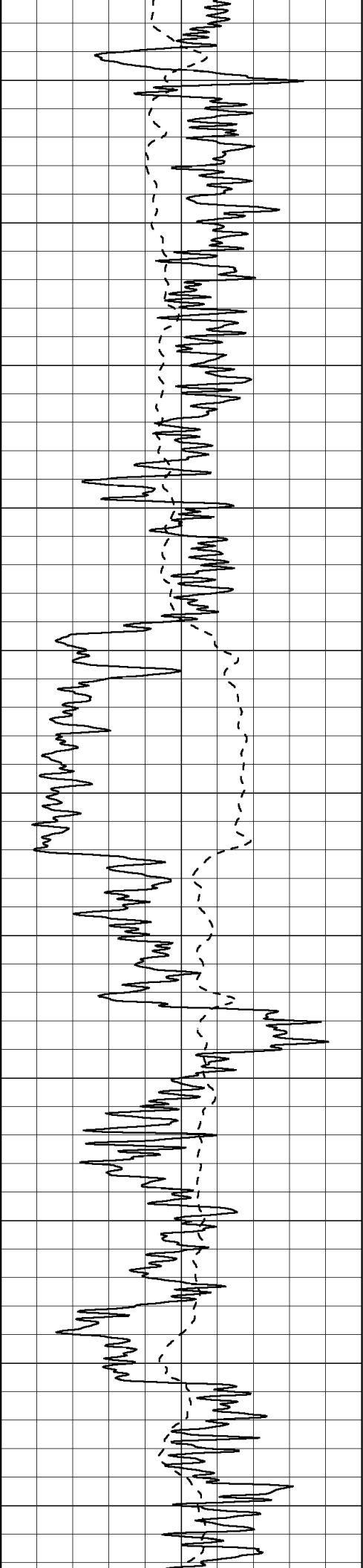
50	RLL3 X10 (Ohm-m)	500
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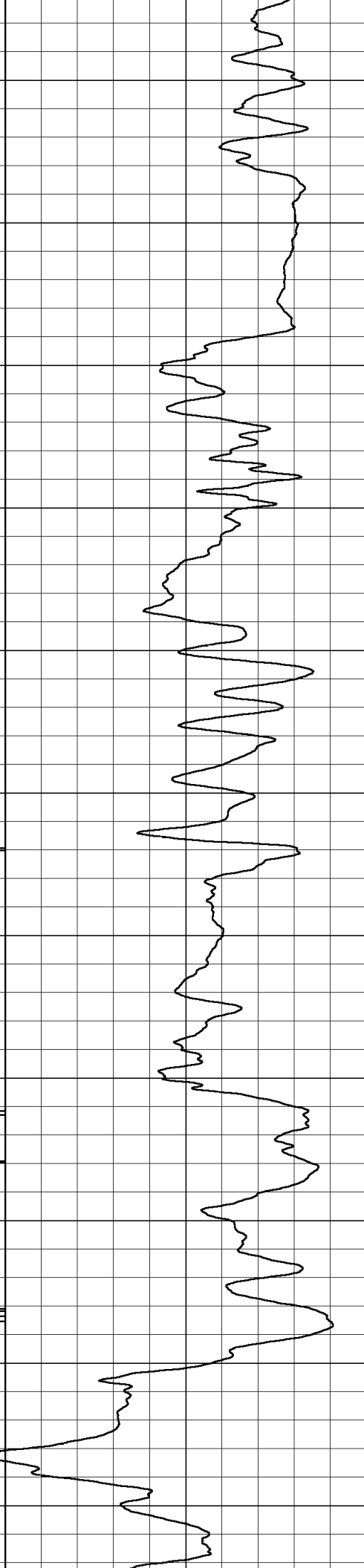
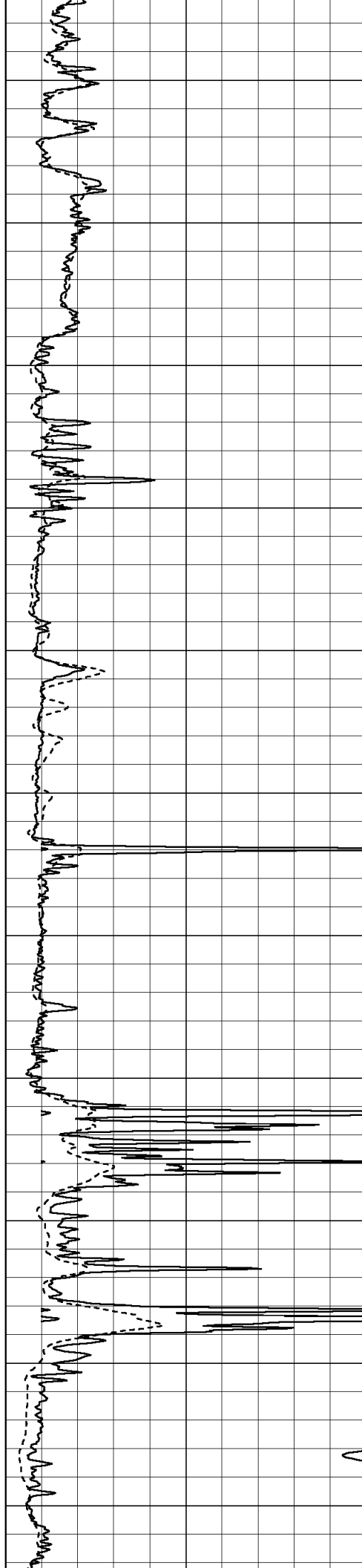


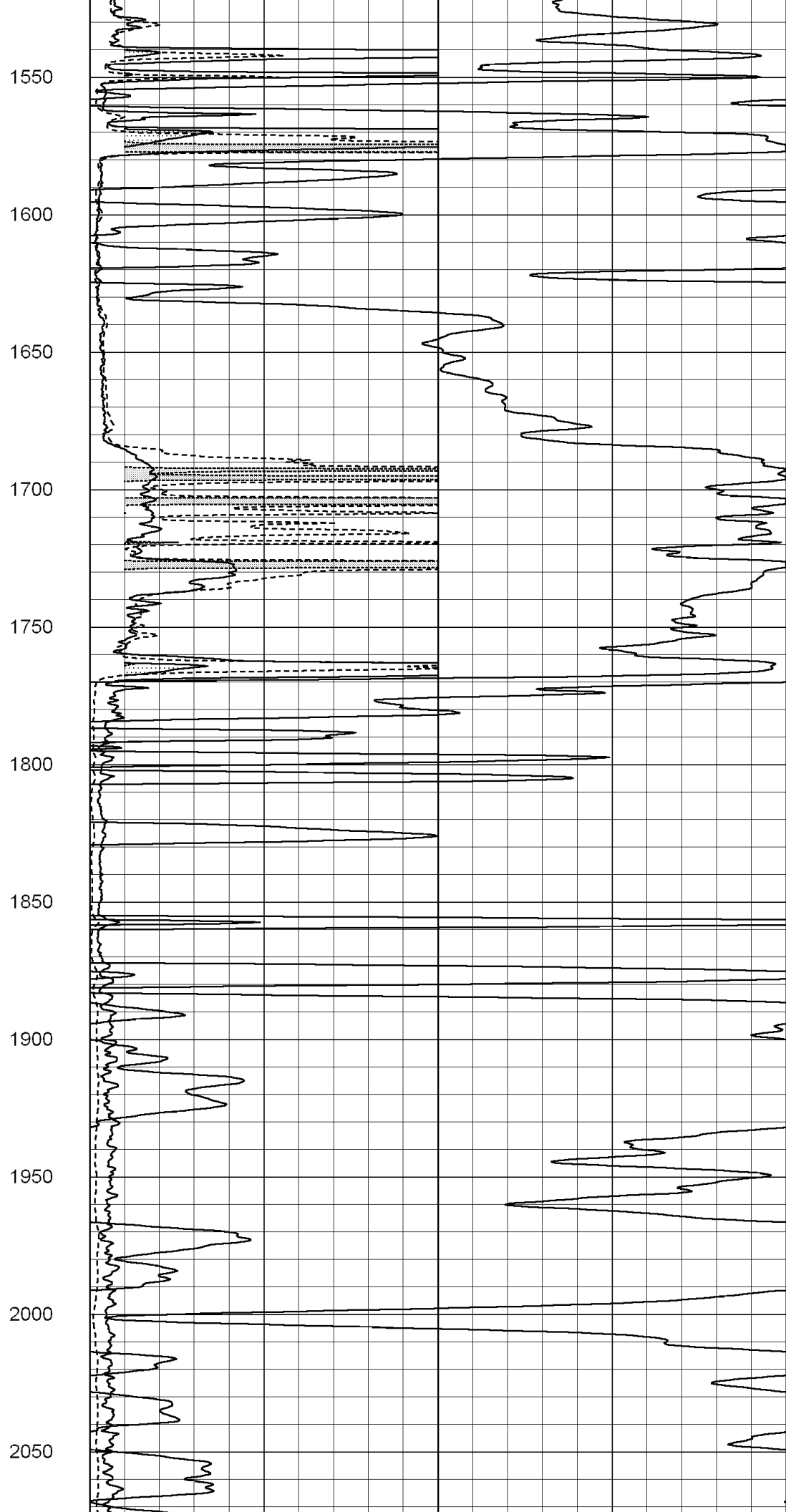
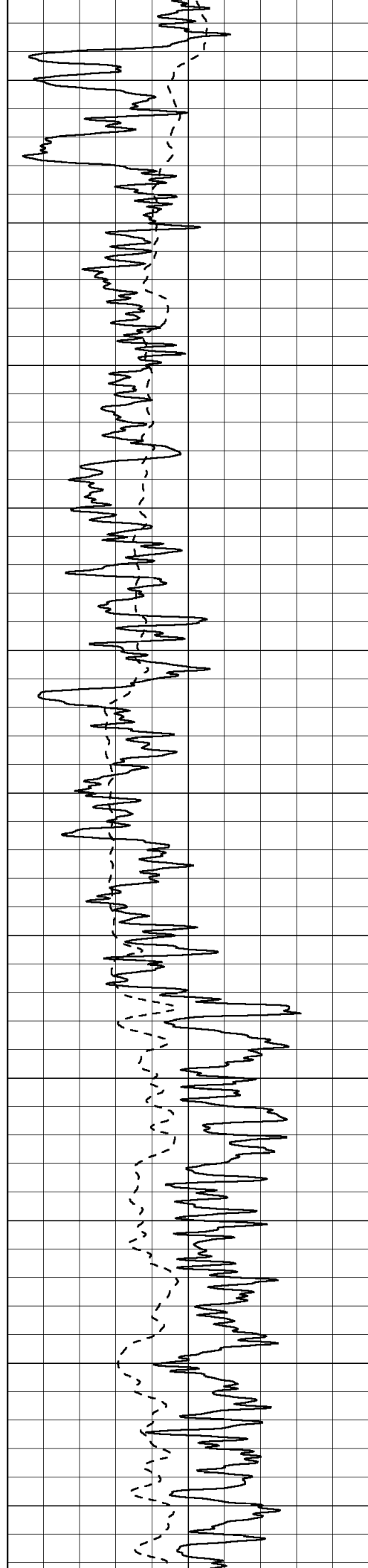
450
500
550
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650
700
750
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850
900
950

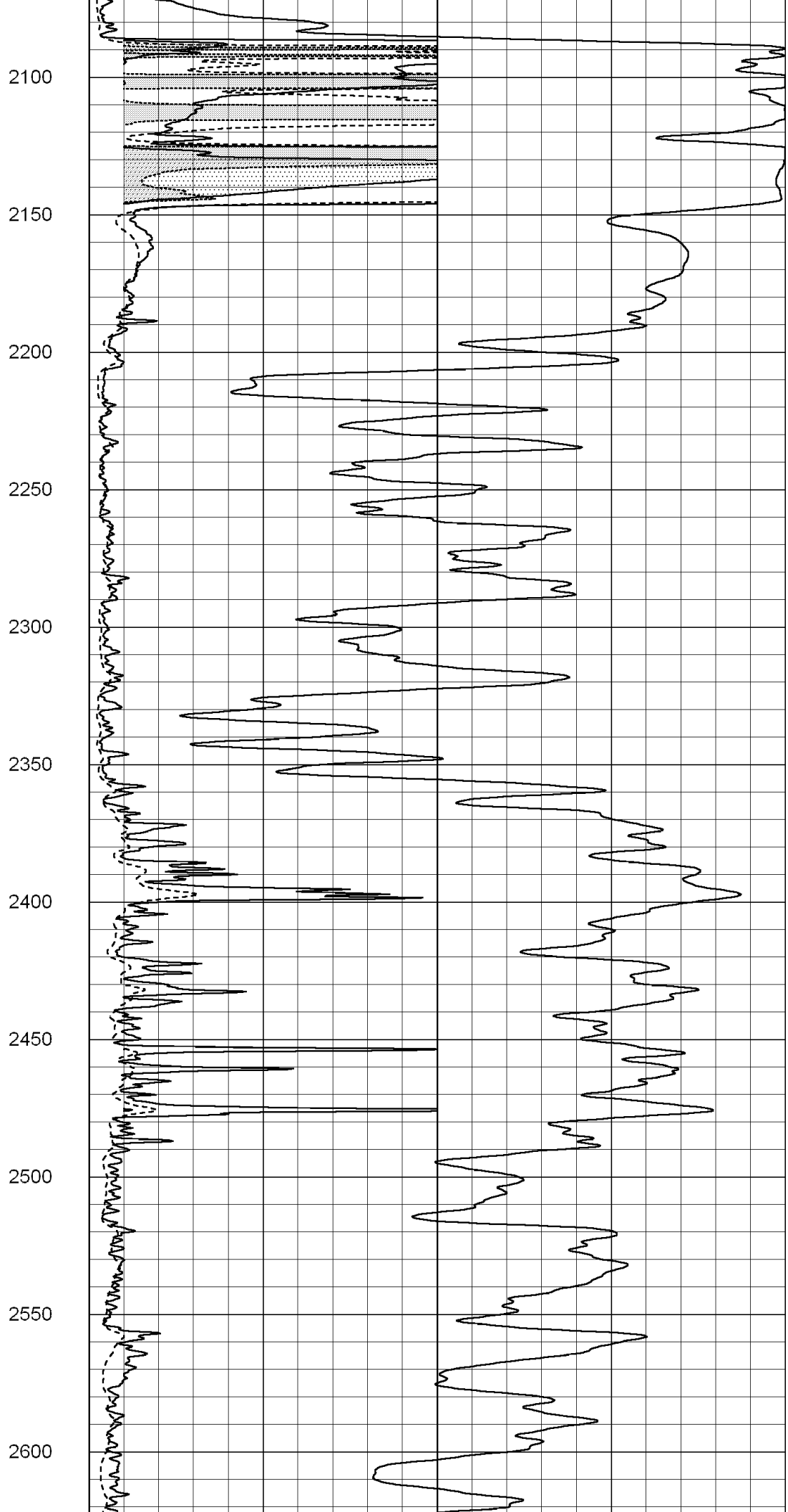
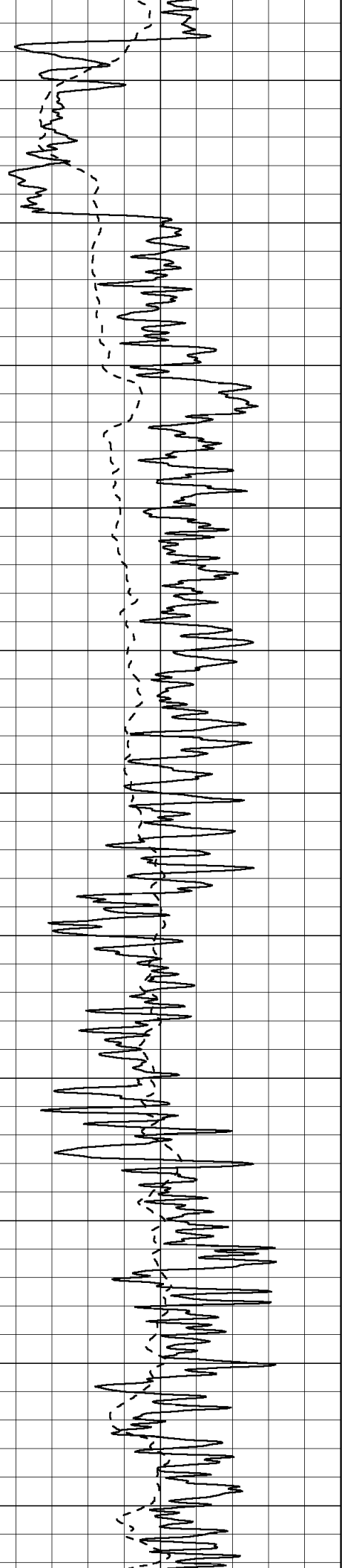


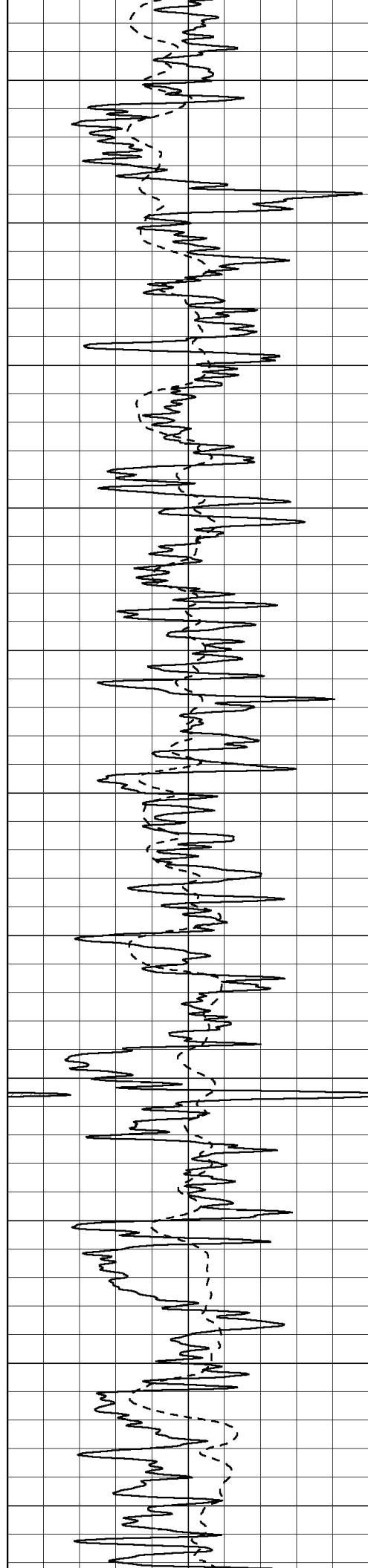


1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500









2650

2700

2750

2800

2850

2900

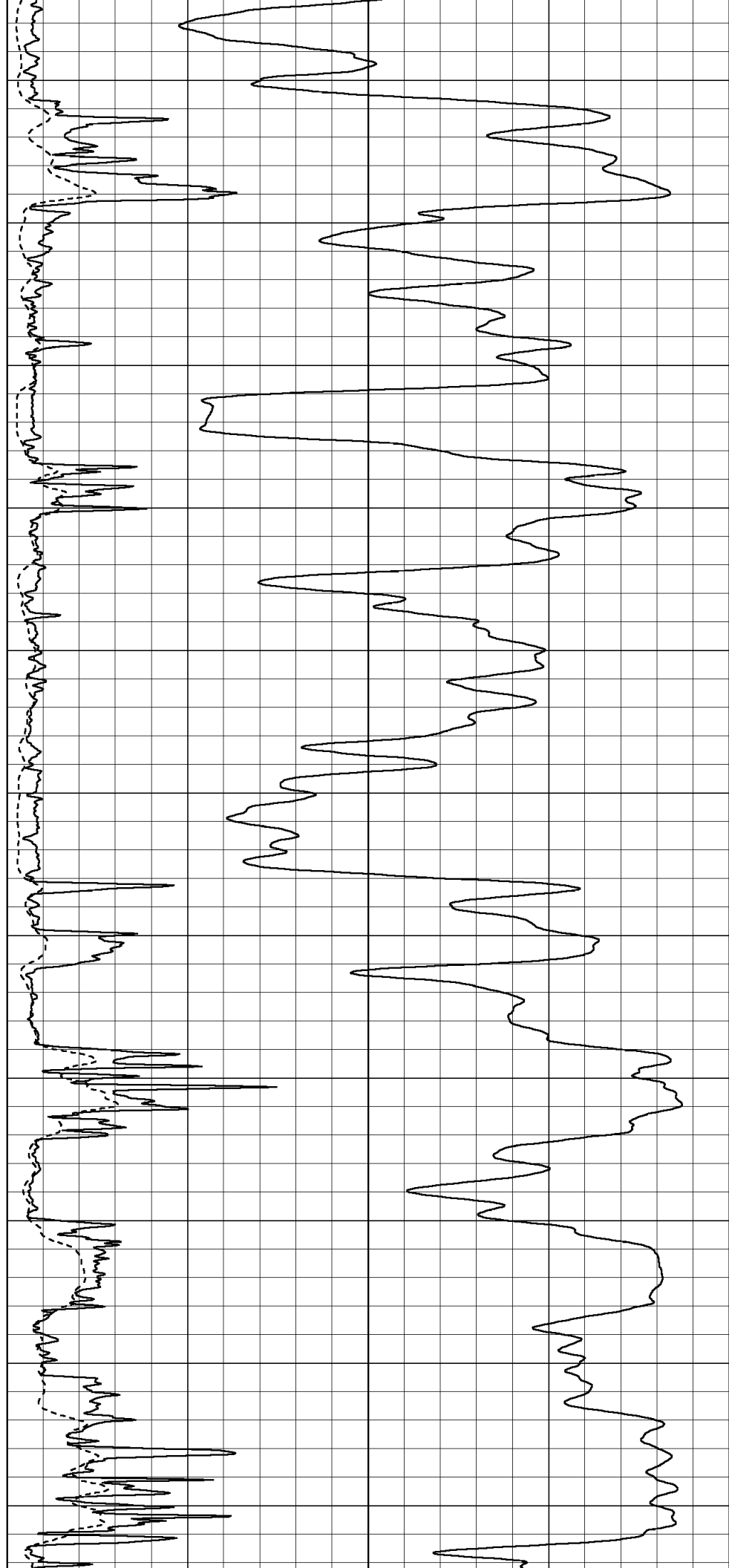
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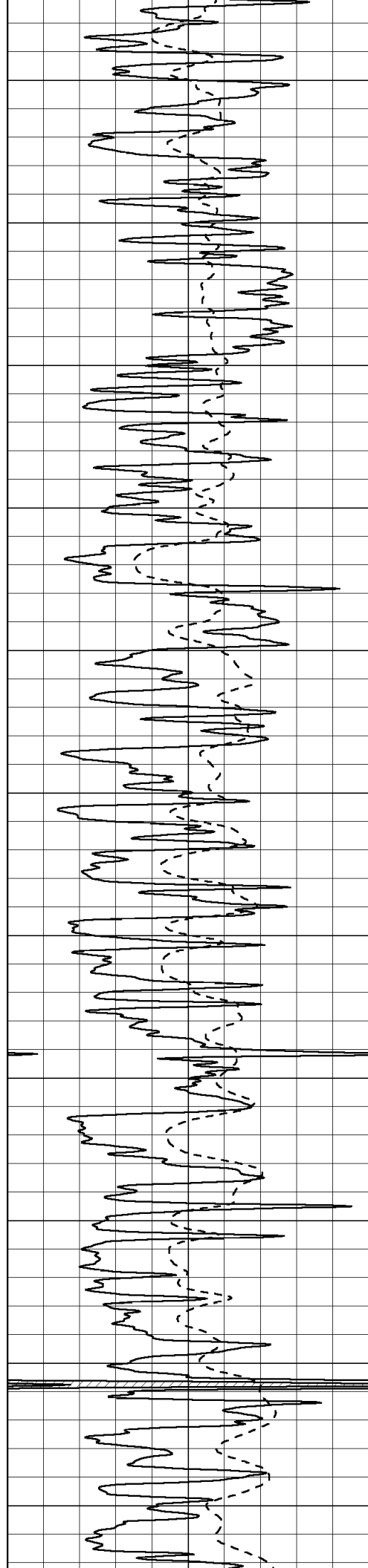
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3050

3100

3150





3200

3250

3300

3350

3400

3450

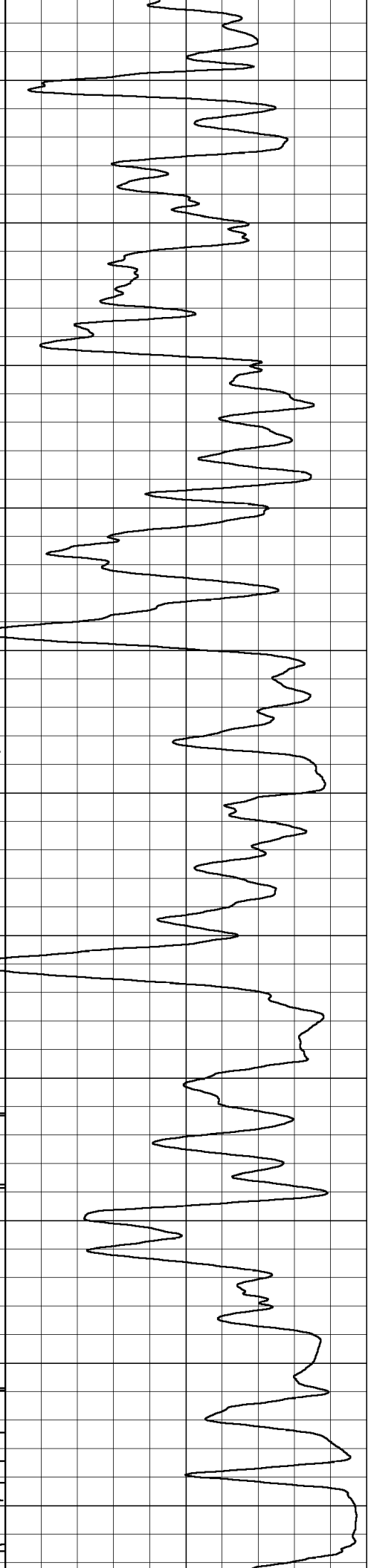
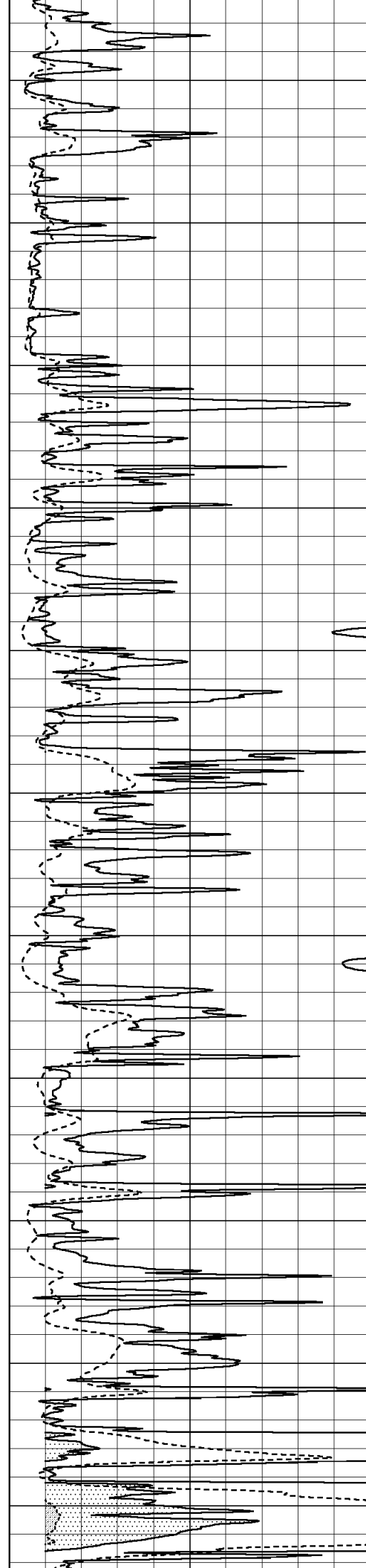
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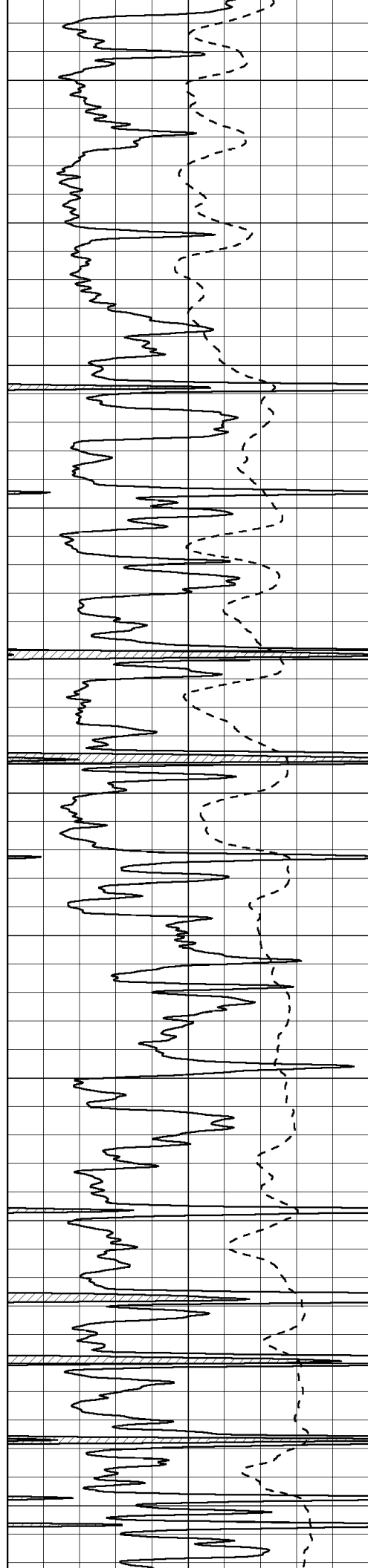
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3600

3650

3700





3750

3800

3850

3900

3950

4000

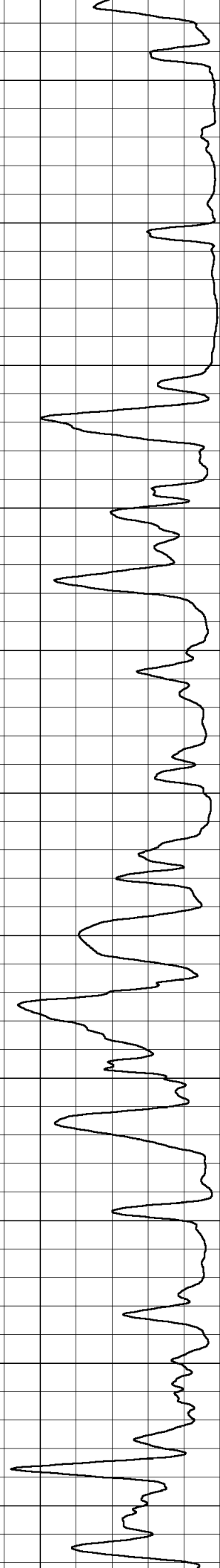
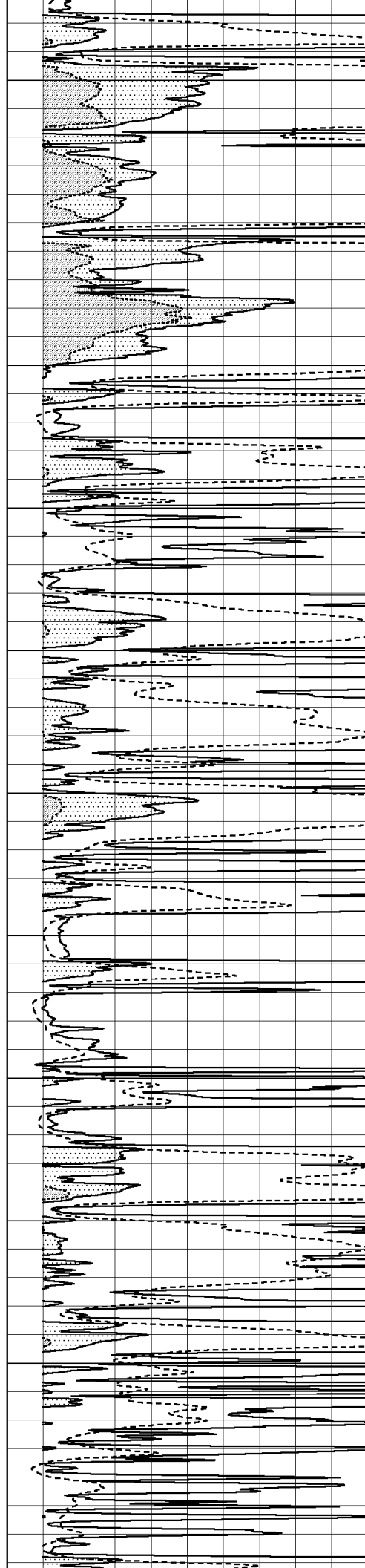
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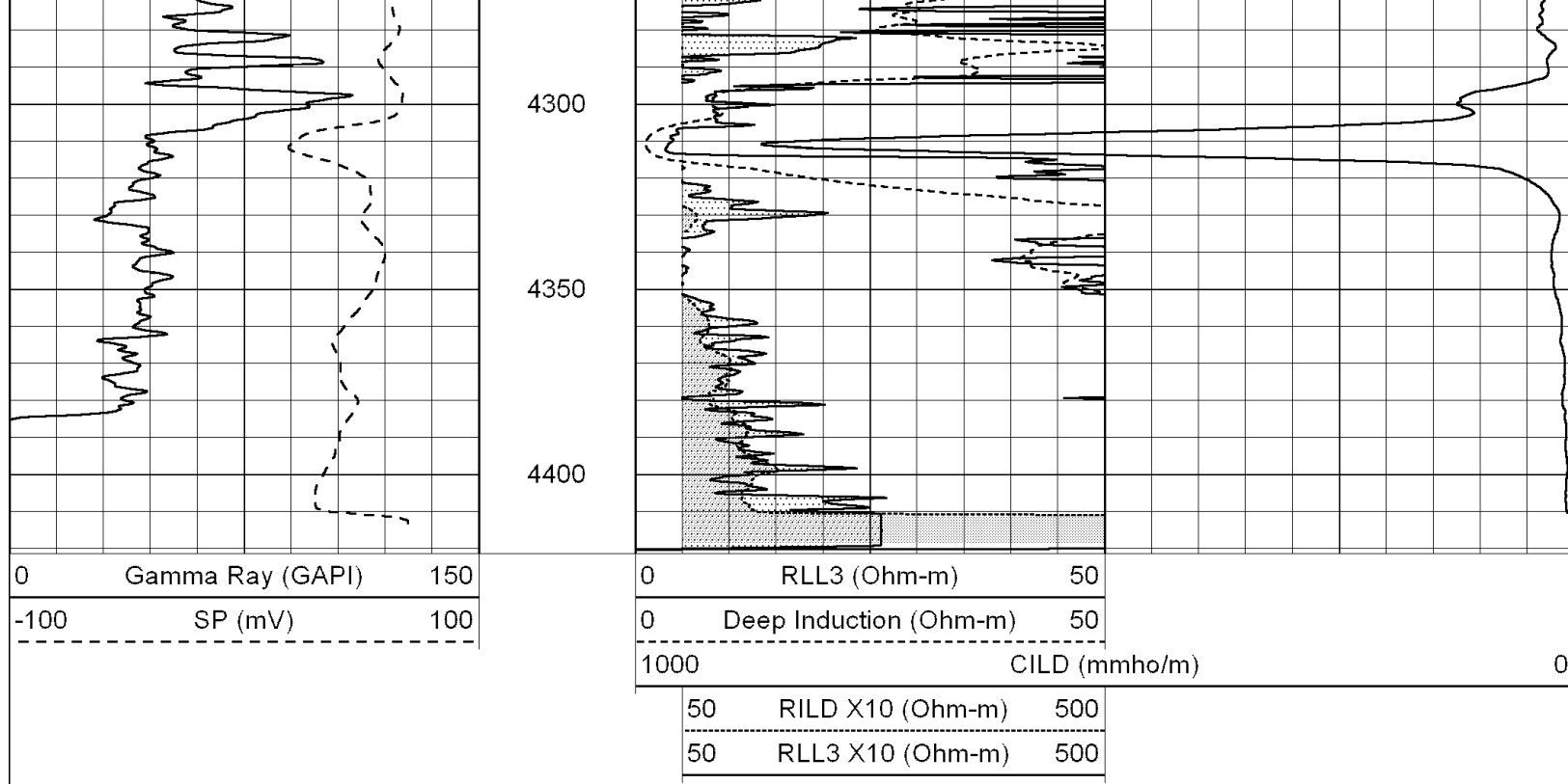
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4150

4200

4250



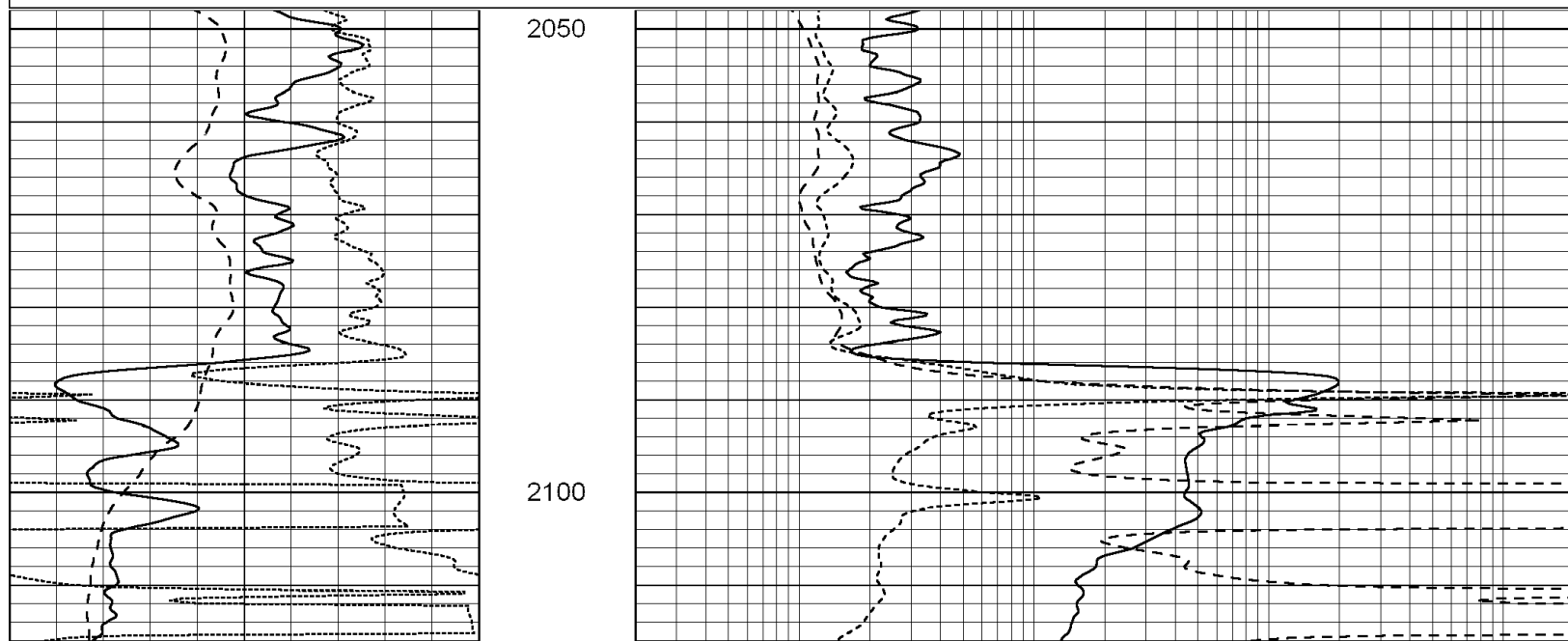


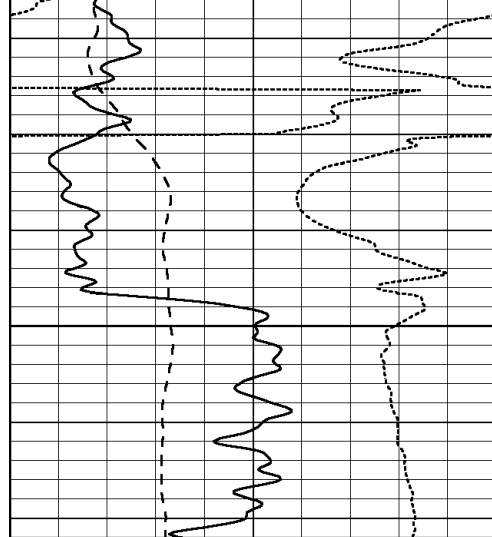
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MAIN SECTION

Database File: 004793pdn.db
 Dataset Pathname: pass3.1
 Presentation Format: dil
 Dataset Creation: Thu Feb 04 00:09:55 2010 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

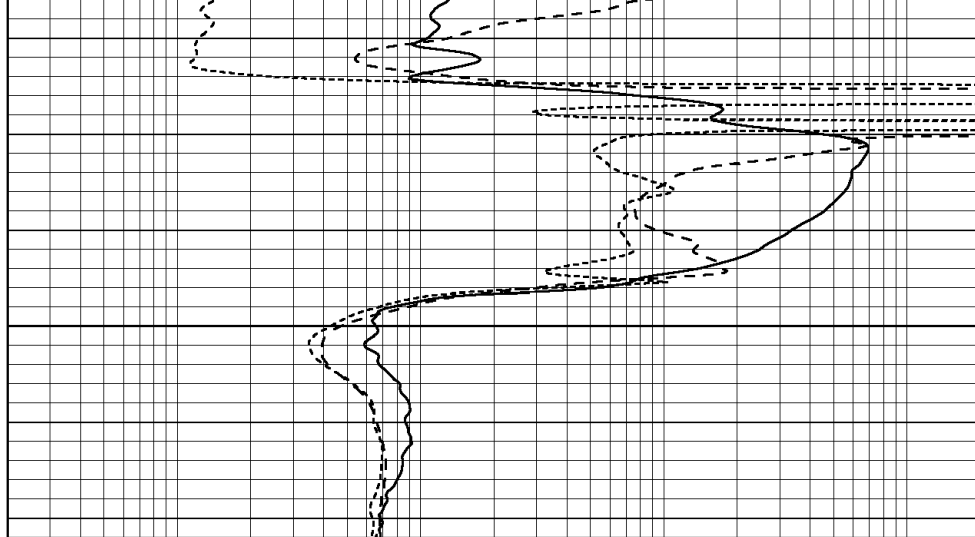
0	GAMMA RAY (GAPI)	150	0.2	RLL3 (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50

2150



0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



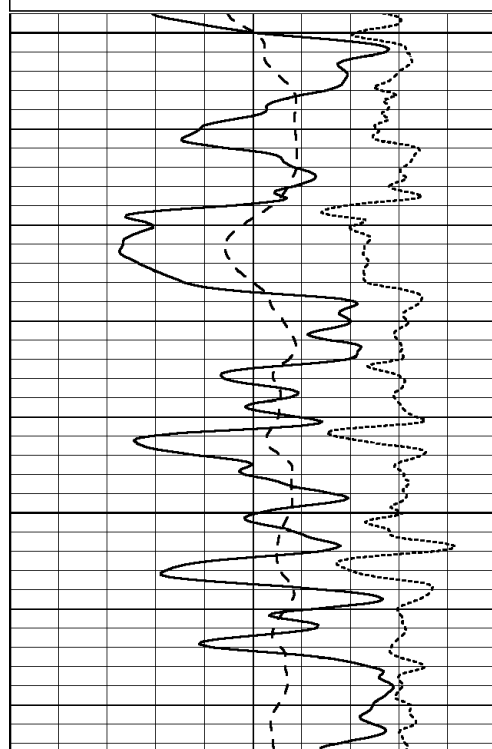
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Database File: 004793pdn.db
 Dataset Pathname: pass3.1
 Presentation Format: dil
 Dataset Creation: Thu Feb 04 00:09:55 2010 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

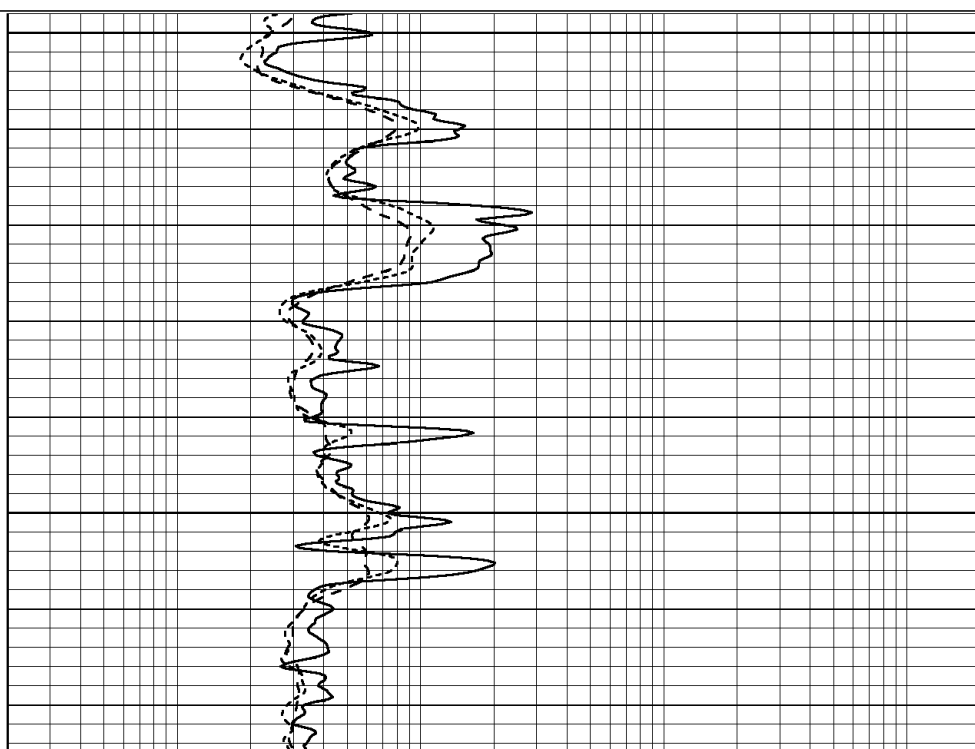
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50

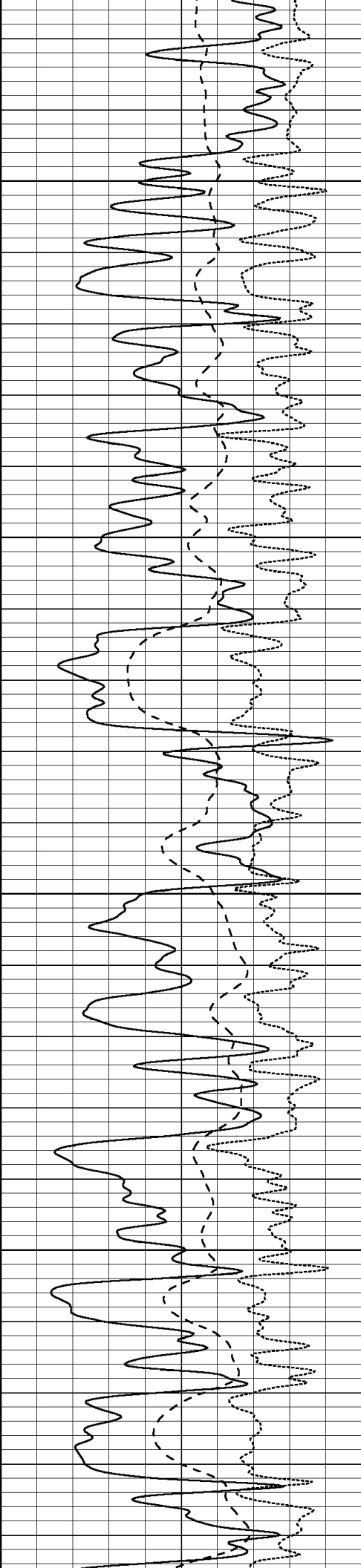
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3200

3250



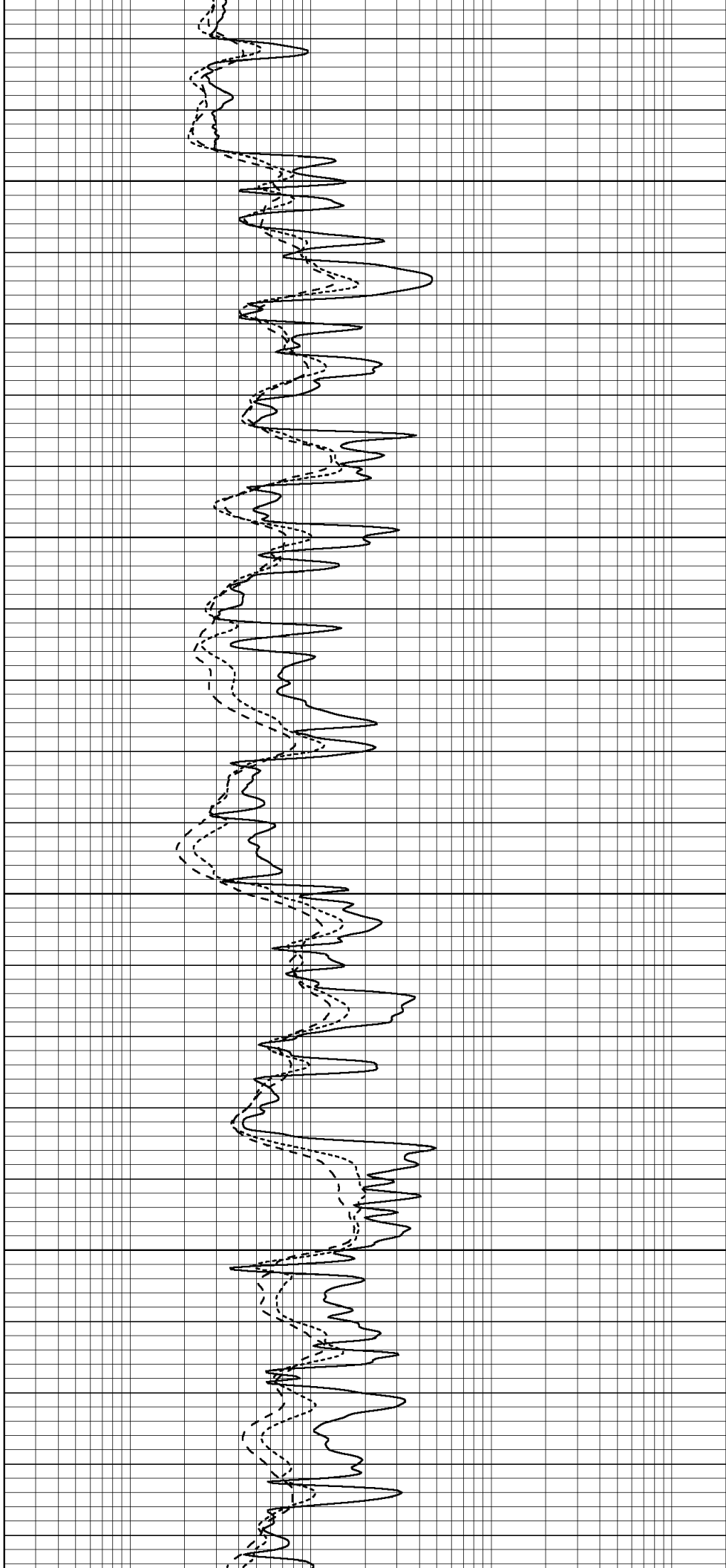


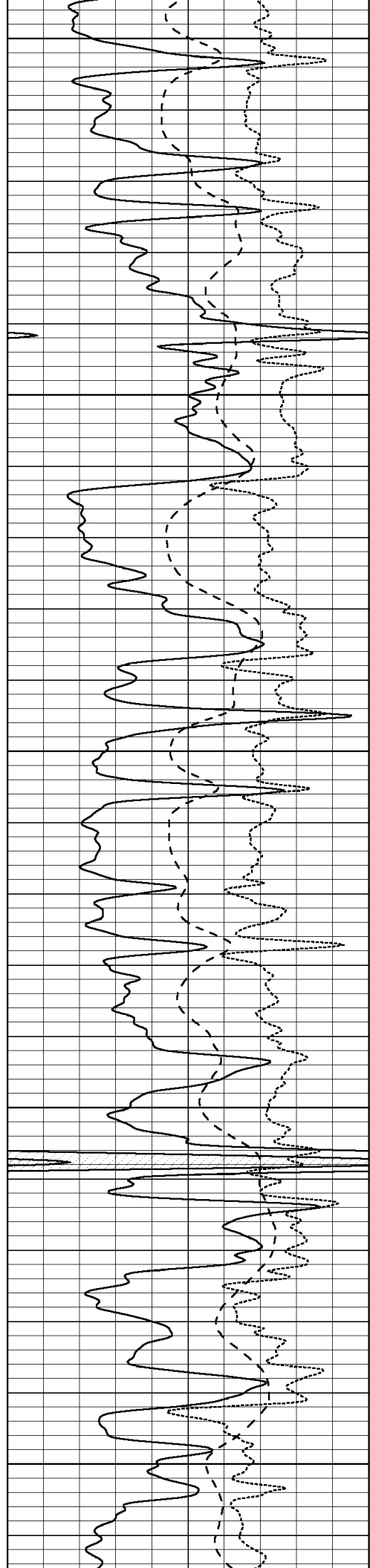
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3350

3400

3450





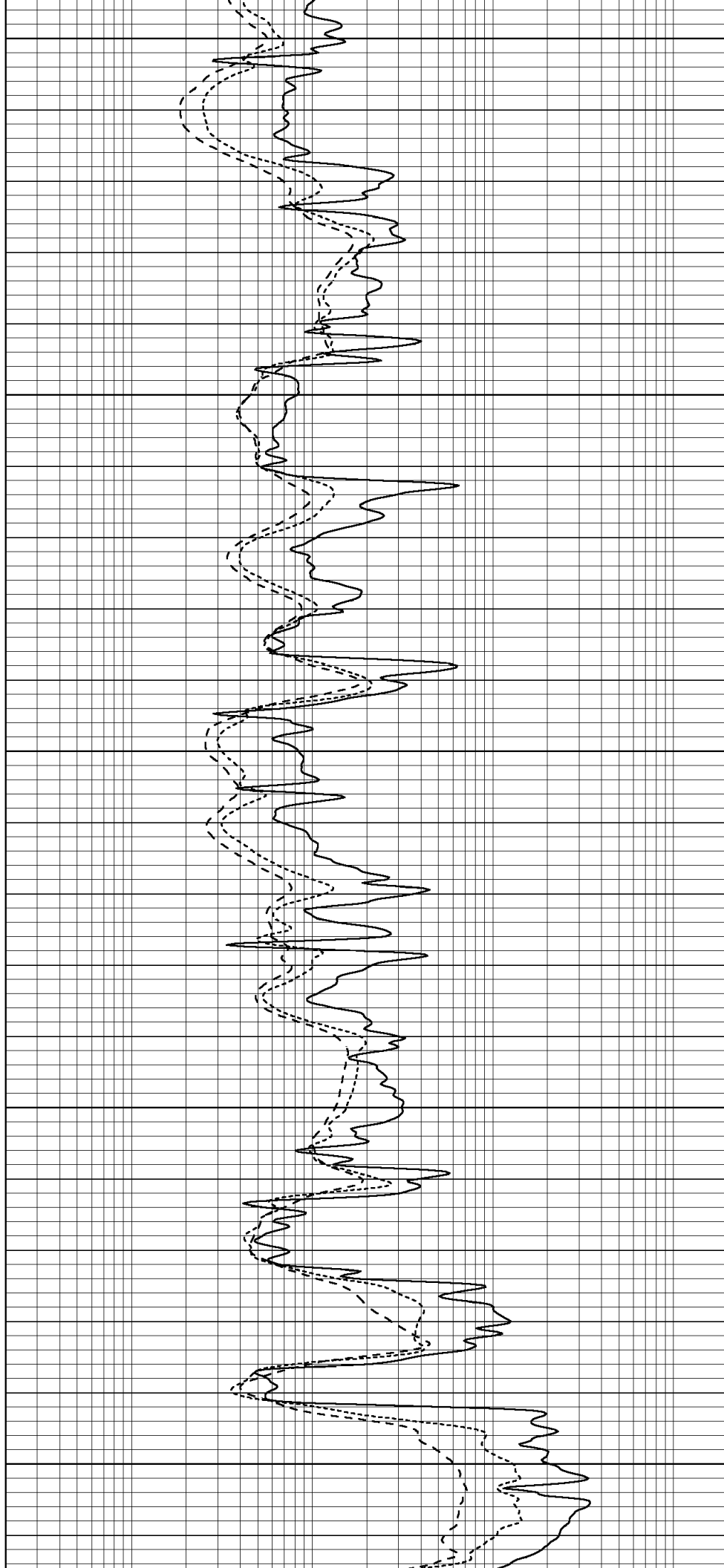
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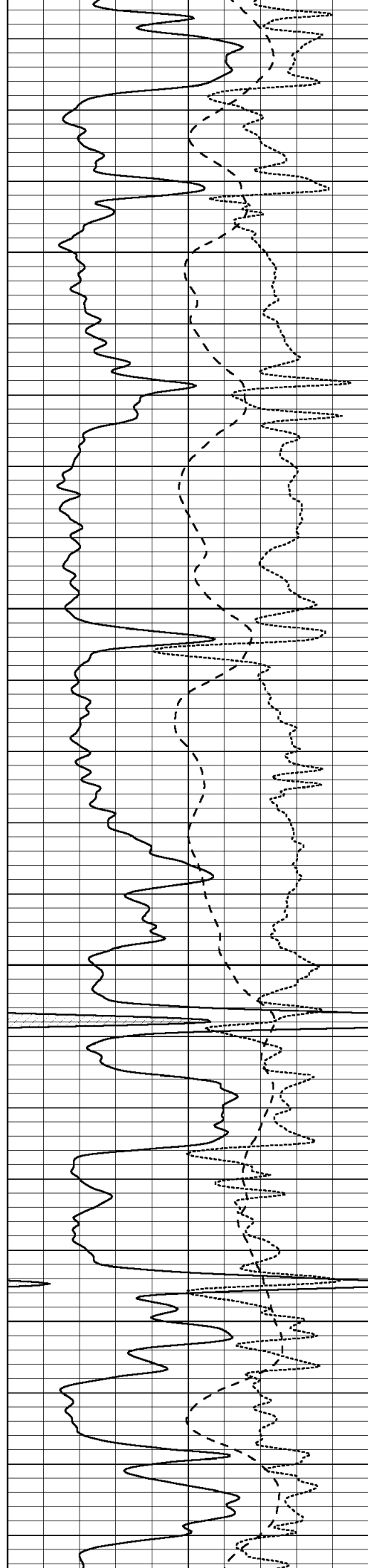
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3600

3650

3700



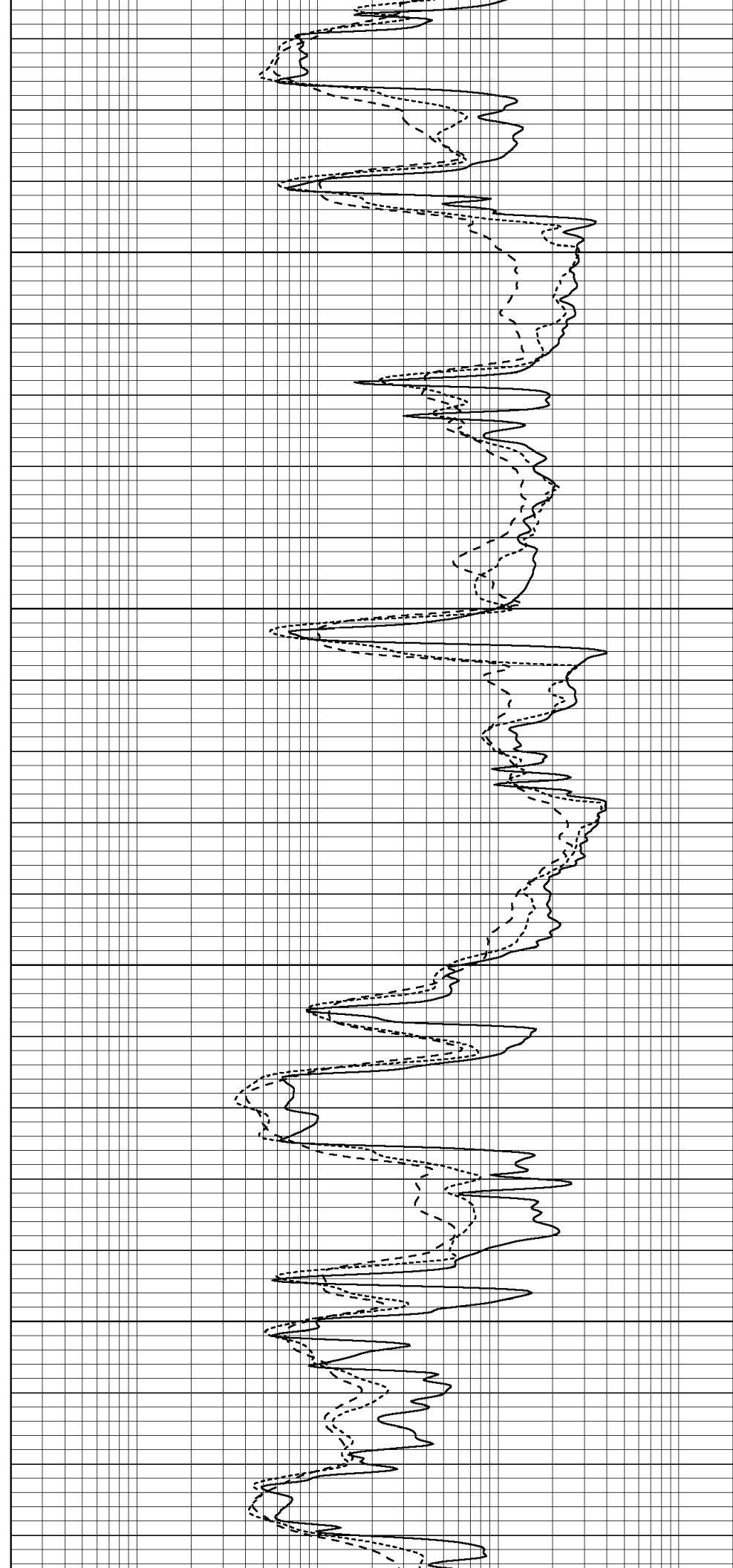


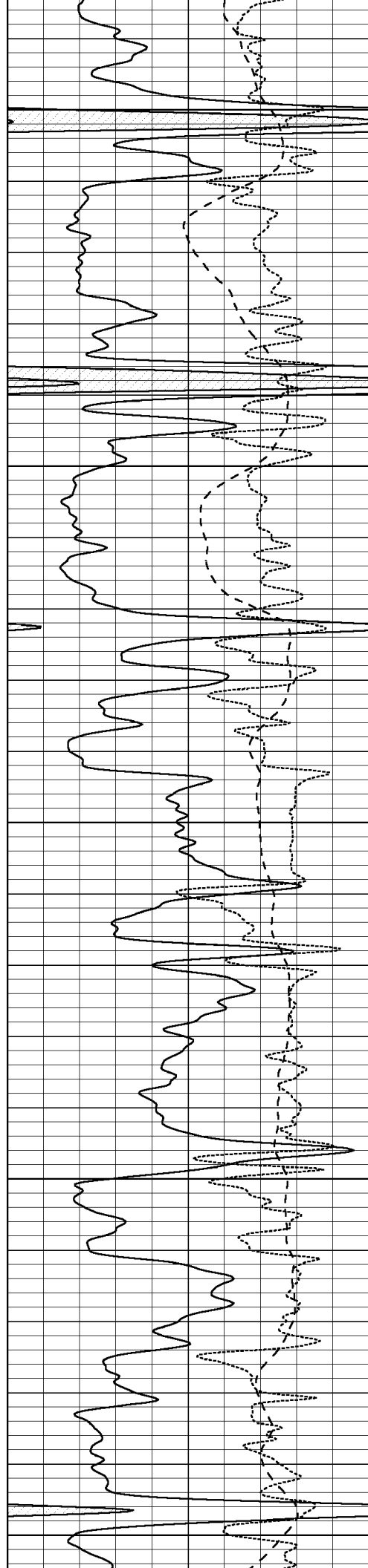
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3850

3900





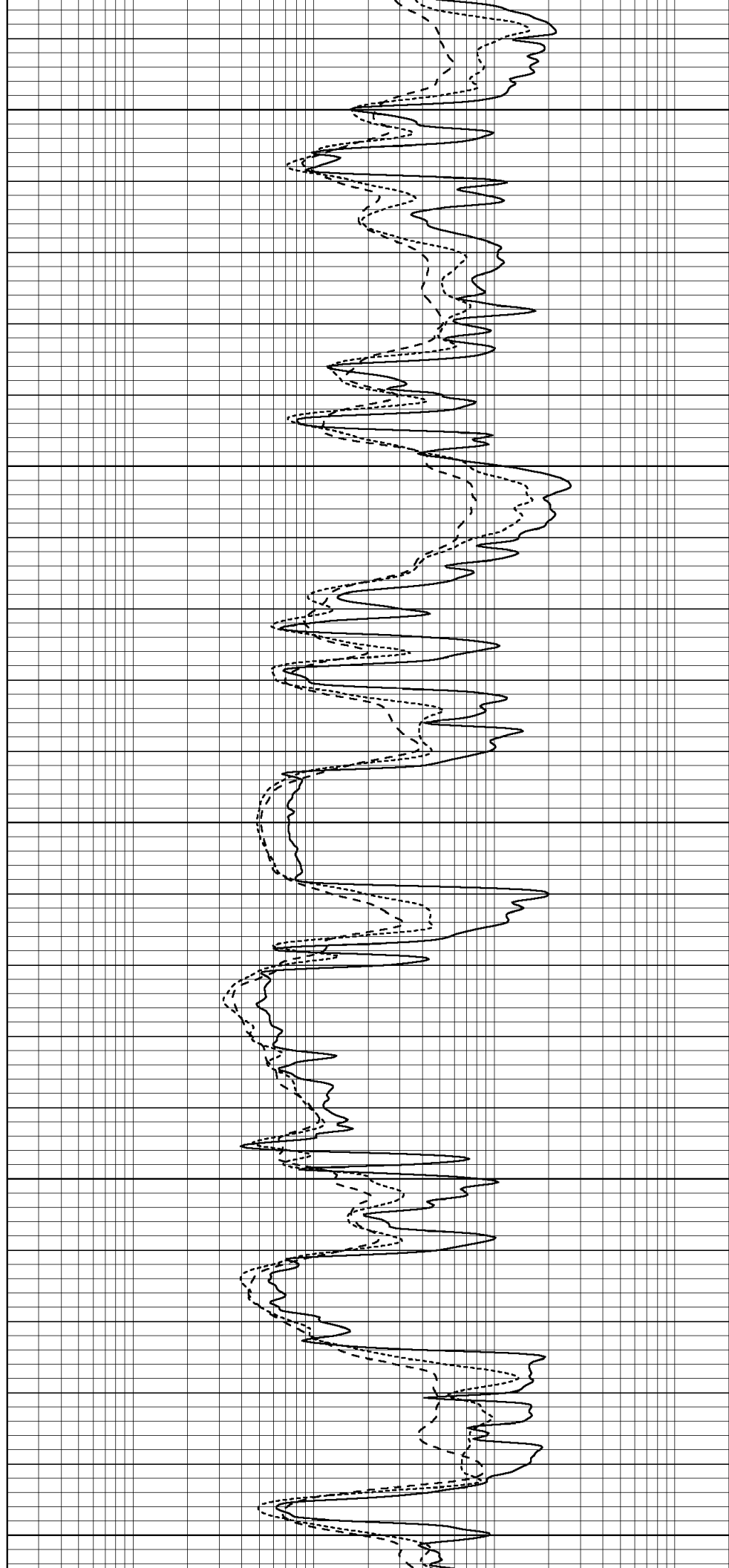
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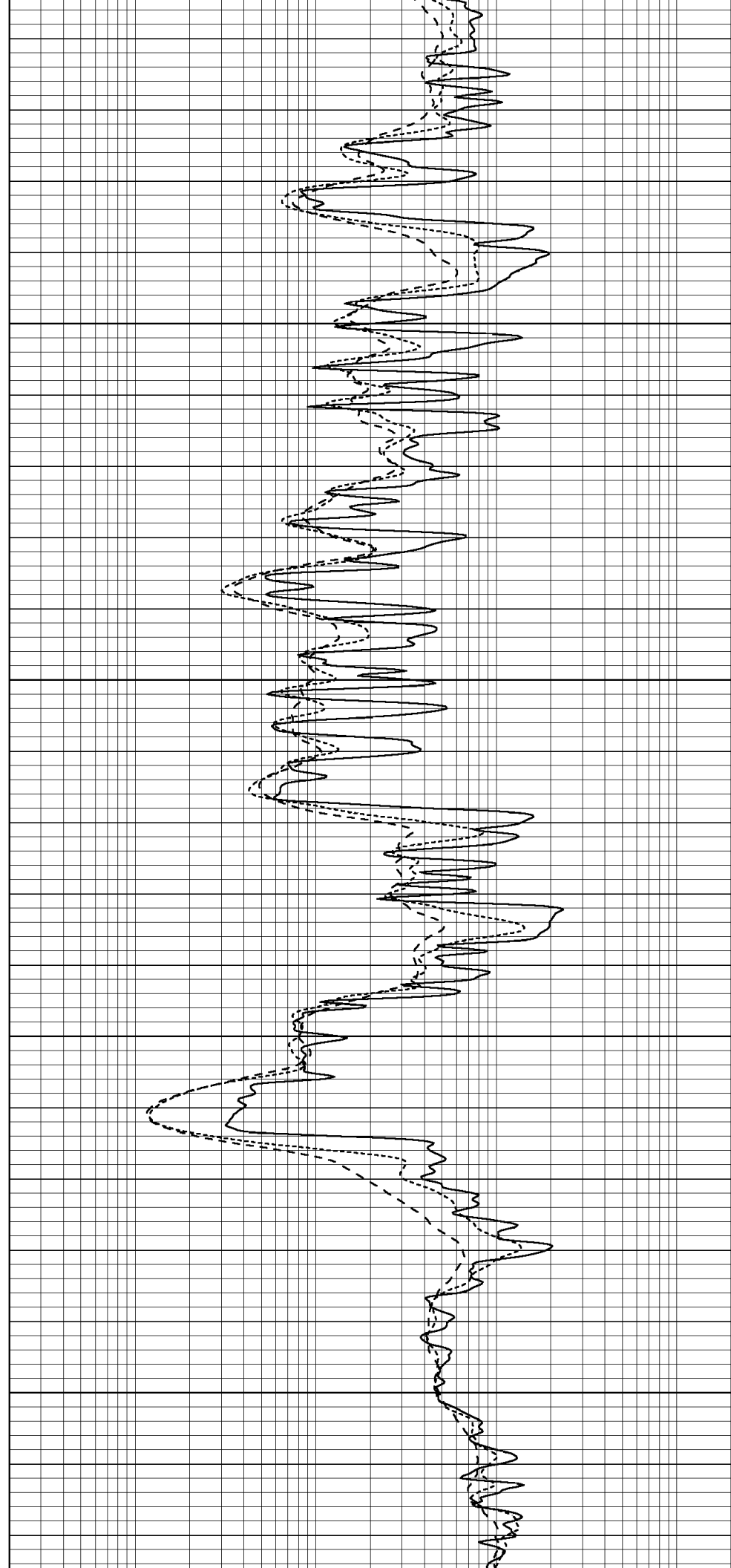
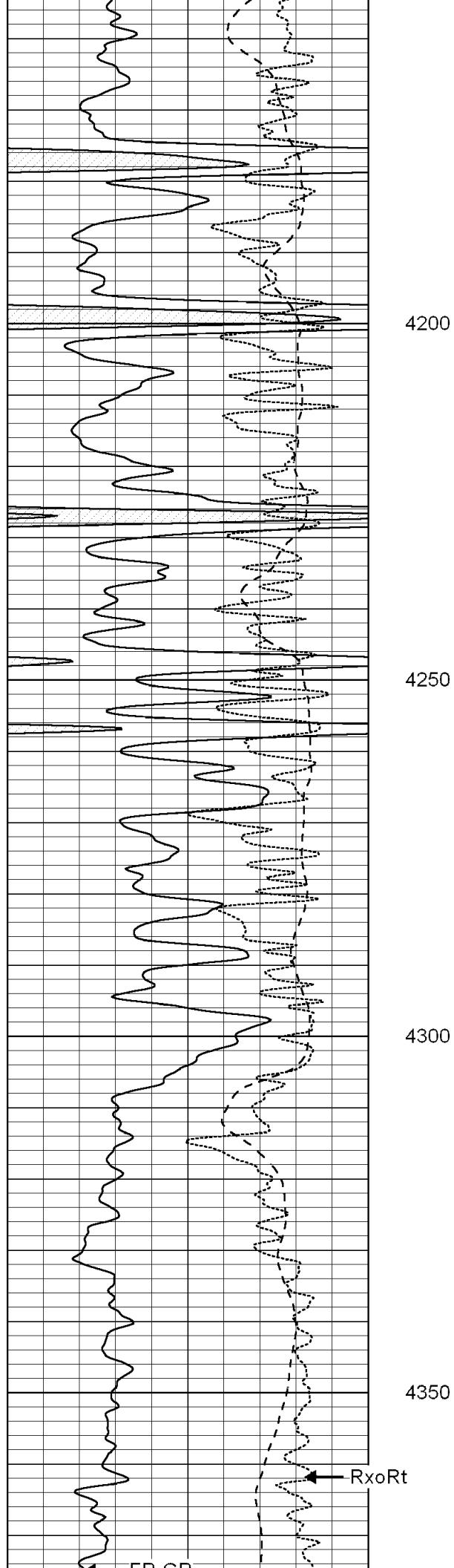
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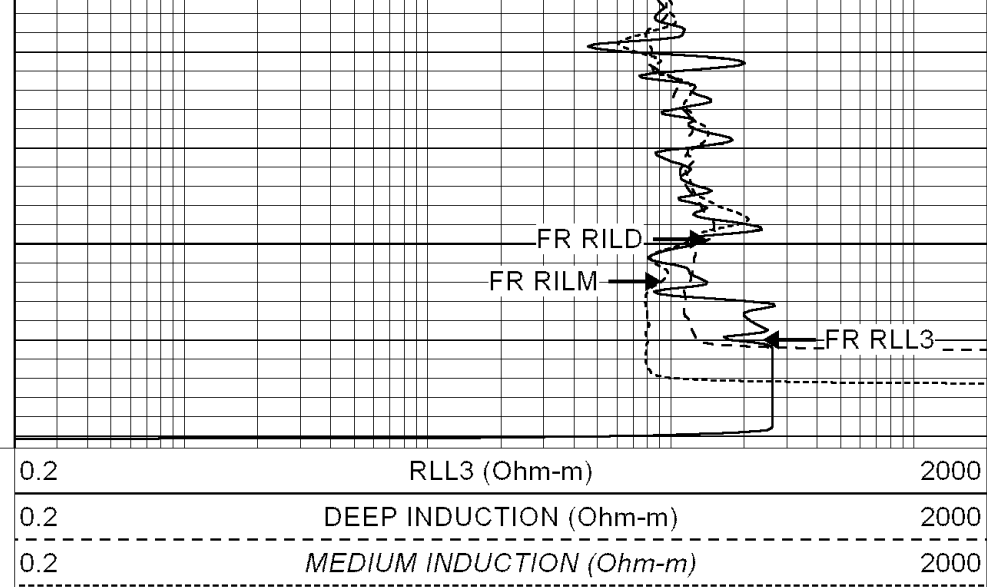
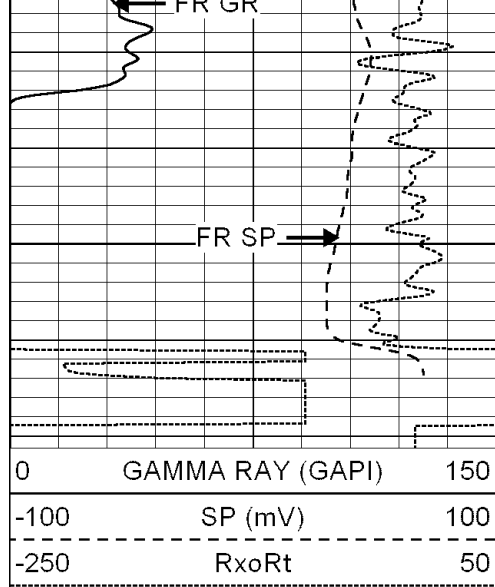
4050

4100

4150



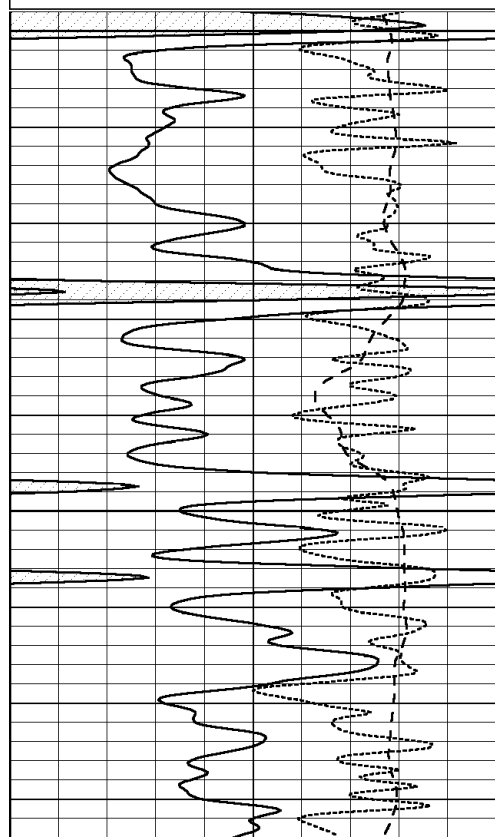
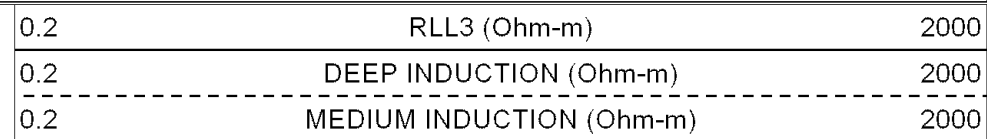
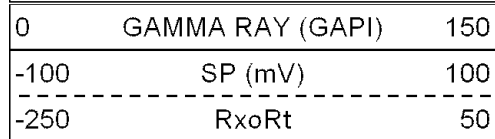




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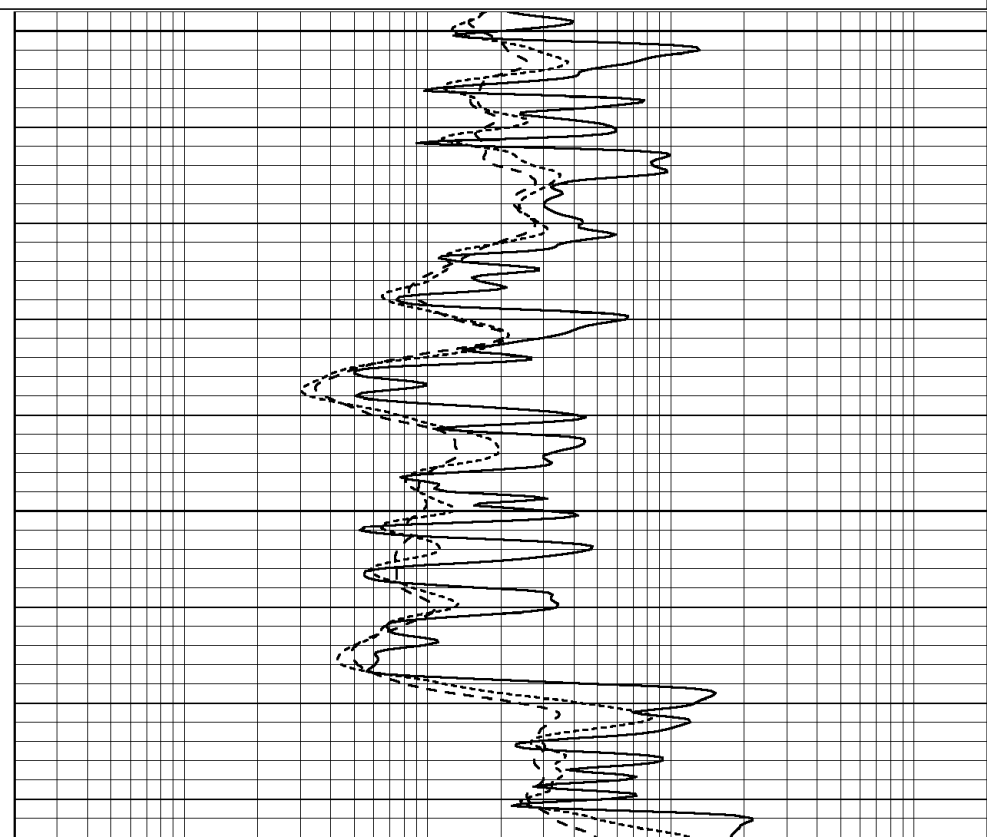
REPEAT SECTION

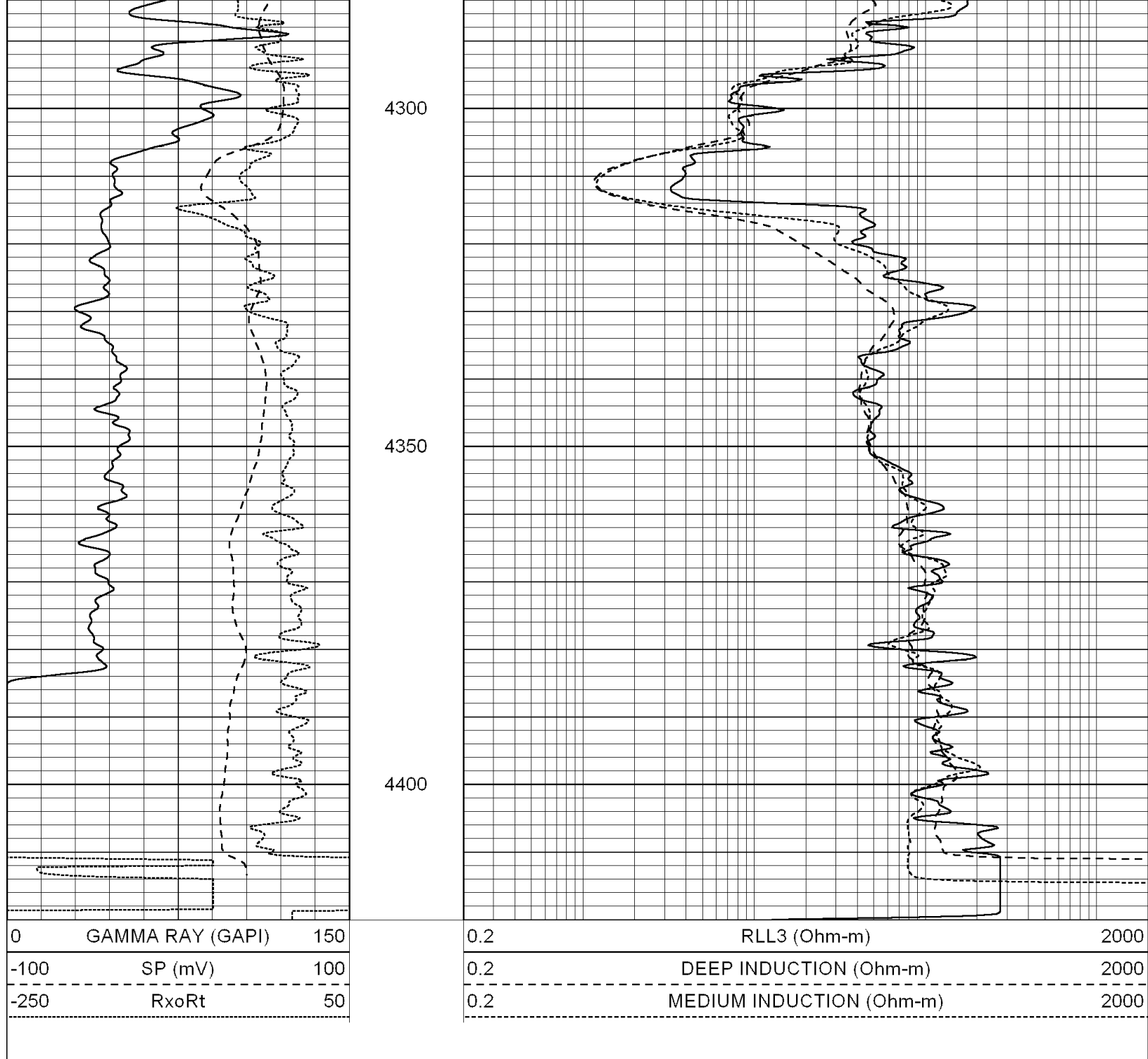
Database File: 004793pdn.db
Dataset Pathname: pass2.1A
Presentation Format: dil
Dataset Creation: Thu Feb 04 00:46:44 2010
Charted by: Depth in Feet scaled 1:240



4200

4250





Calibration Report								
Database File:	004793pdn.db							
Dataset Pathname:	pass3.1							
Dataset Creation:	Thu Feb 04 00:09:55 2010 by Calc Open-Cased 090629							
Dual Induction Calibration Report								
Serial-Model: Performed:				DIL5-GEAR Wed Feb 03 22:48:03 2010				
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	550.000	-2.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	540.000	-5.000
Internal:	Zero	Cal		Zero	Cal		m	b

Internal:	Zero	Cal	Zero	Cal	mm	D		
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064
Litho Density Calibration Report Serial: 002 Model: PRB Performed Tue Jul 03 11:12:28 2007								
Litho Density Calibration								
	Background	Magnesium	Aluminum	Sandstone				
Window 1	1059.5	9172.0	2859.6	10210.6			cps	
Window 2	976.0	7793.2	2486.1	8515.6			cps	
Window 3	689.8	2930.5	1159.0	3096.2			cps	
Window 4	231.9	237.2	231.1	234.0			cps	
Long Space	0.0	6817.1	1510.1	7539.6			cps	
Short Space	1.6	1758.1	1188.6	1898.8			cps	
Rho		1.7100	2.5960	1.3800			g/cc	
Pe			2.5700	1.5500				
Rib Angle	: 45.4	Rib Slope	: 1.015	Density/Spine Ratio			: 0.569	
Spine Angle	: 75.4	Spine Slope	: 3.850	Spine Intercept			: -19.9	
Caliper								
Low Ref	Readings	Reference						
High Ref	2.8	8.2						
	4.8	14.0						
	Gain: 2.9		Offset: 0.3					
Compensated Neutron Calibration Report								
Serial Number:			NEU_11					
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:		GR5						
Tool Model:		OPEN						
Performed:		Tue Feb 02 10:33:27 2010						
Calibrator Value:		1.0	GAPI					
Background Reading:		0.0	cps					
Calibrator Reading:		1.0	cps					
Sensitivity:		0.6000	GAPI/cps					