



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company		RITCHIE EXPLORATION, INC.	
Well		HESS - JOSEPH #1	
Field		ANTELOPE RIDGE	
County		GOVE	
State		KANSAS	
Location:		API # : 15-063-21900-0000	
Permanent Datum		GROUND LEVEL	
Log Measured From		362' FSL & 175' FWL	
Drilling Measured From		SW - SW - SW	
SEC 29 TWP 13S RGE 31W		CDL/CNL	
Elevation		K.B. 2888	
D.F. 2886		G.L. 2878	
Date		4/11/11	
Run Number		ONE	
Depth Driller		4630	
Depth Logger		4632	
Bottom Logged Interval		4630	
Top Log Interval		00	
Casing Driller		8 5/8"@222'	
Casing Logger		222	
Bit Size		7 7/8"	
Type Fluid in Hole		CHEMICAL MUD	
Density / Viscosity		9.2/60	
pH / Fluid Loss		10.5/7.2	
Source of Sample		FLOWLINE	
Rim @ Meas. Temp		.750@80F	
Rinf @ Meas. Temp		.563@80F	
Rmc @ Meas. Temp		.900@80F	
Source of Rmf / Rmc		MEASUREMENT	
Rim @ BHT		.492@122F	
Time Circulation Stopped		2 HOURS	
Time Logger on Bottom		11:15 A.M.	
Maximum Recorded Temperature		122F	
Equipment Number		0836	
Location		HAYS, KANSAS	
Recorded By		JEFF LUEBBERS	
Witnessed By		MIKE ENGELBRECHT	
		TOMMY ATKINS	

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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

OAKLEY, KS. (JUNCTION OF OLD 40 & HWY 83) 11S. ON HWY 83 TO "GOVE RD.", 3E., 5 1/4S., E. INTO



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MAIN SECTION

Database File: 006806ddn.db
Dataset Pathname: pass3.6
Presentation Format: dil2
Dataset Creation: Mon Apr 11 12:40:32 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

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

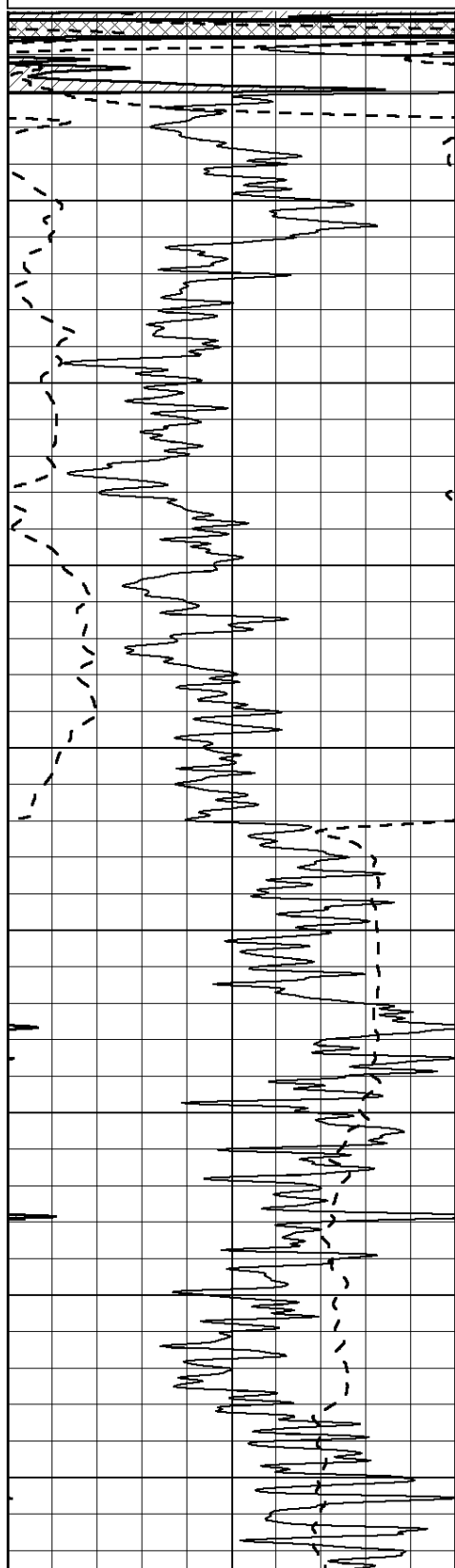
0 RLL3 (Ohm-m) 50

0 RILD (Ohm-m) 50

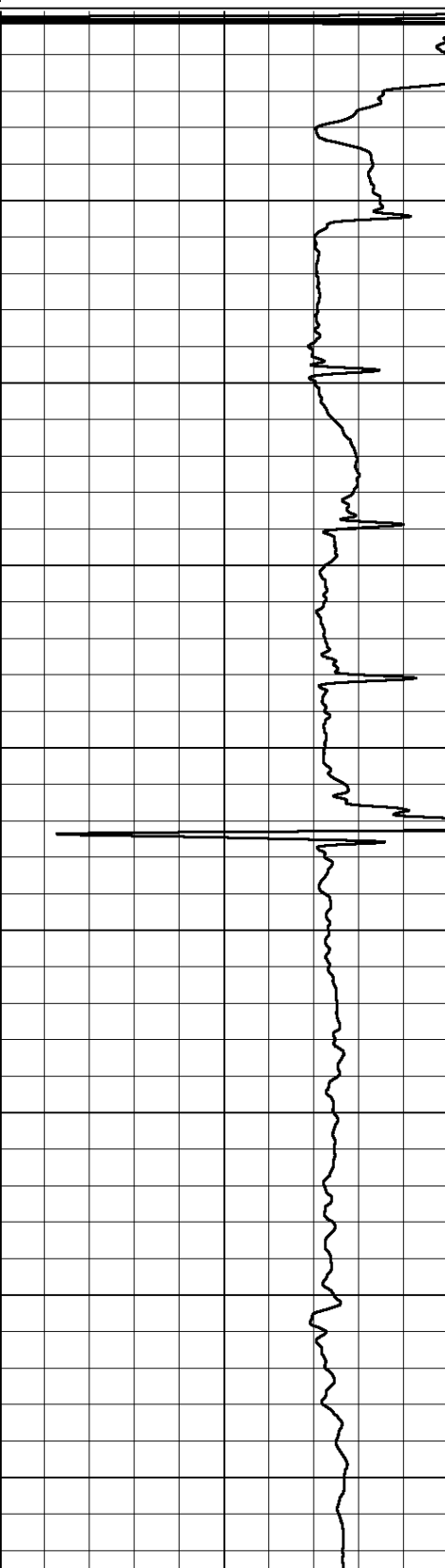
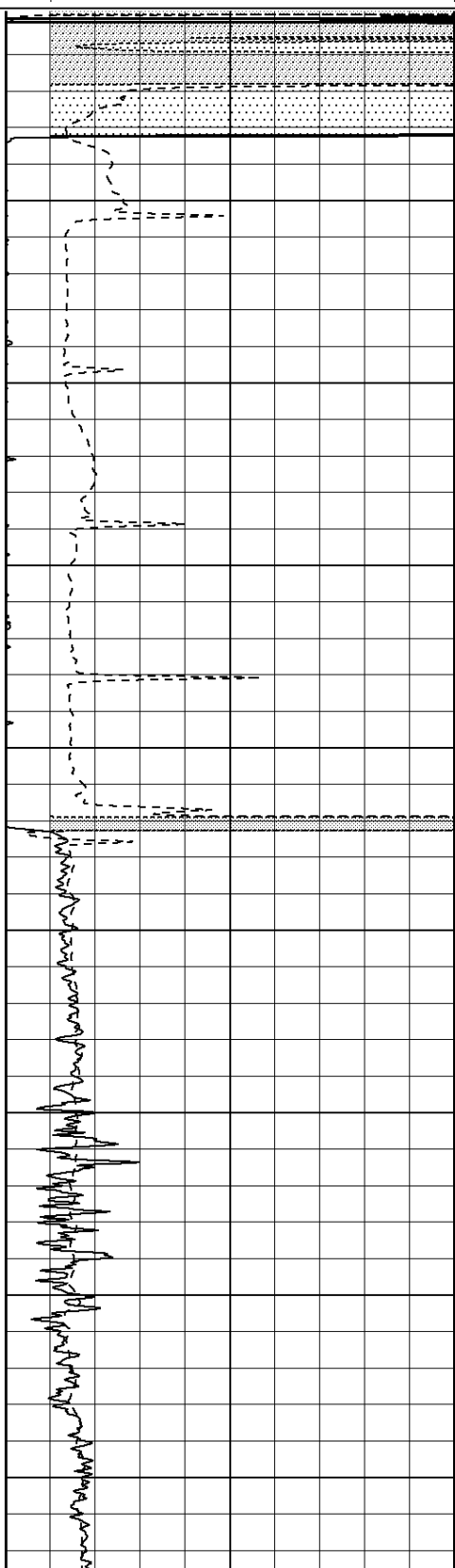
1000 CILD (mmho/m) 0

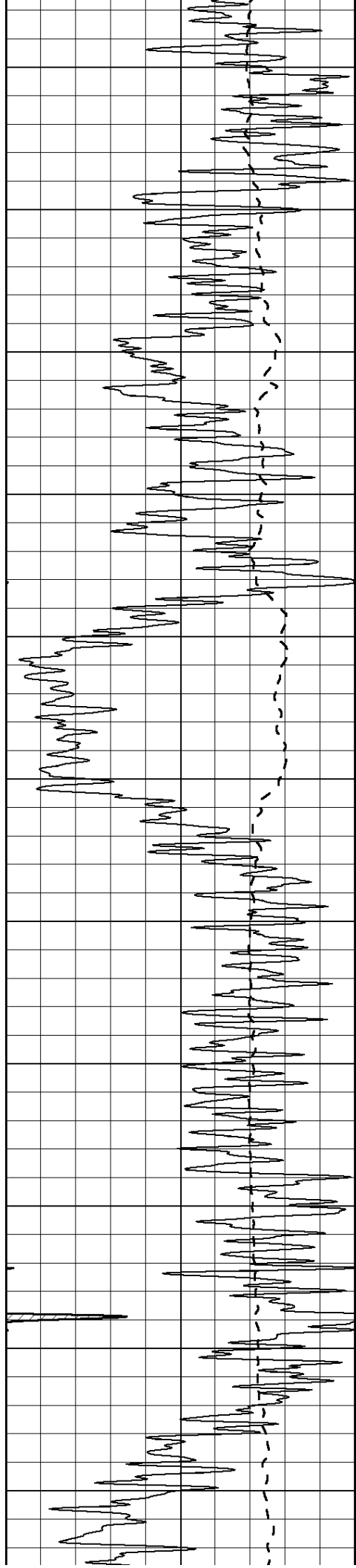
50 RILD X10 (Ohm-m) 500

50 RLL3 X10 (Ohm-m) 500



0
50
100
150
200
250
300
350
400





450

500

550

600

650

700

750

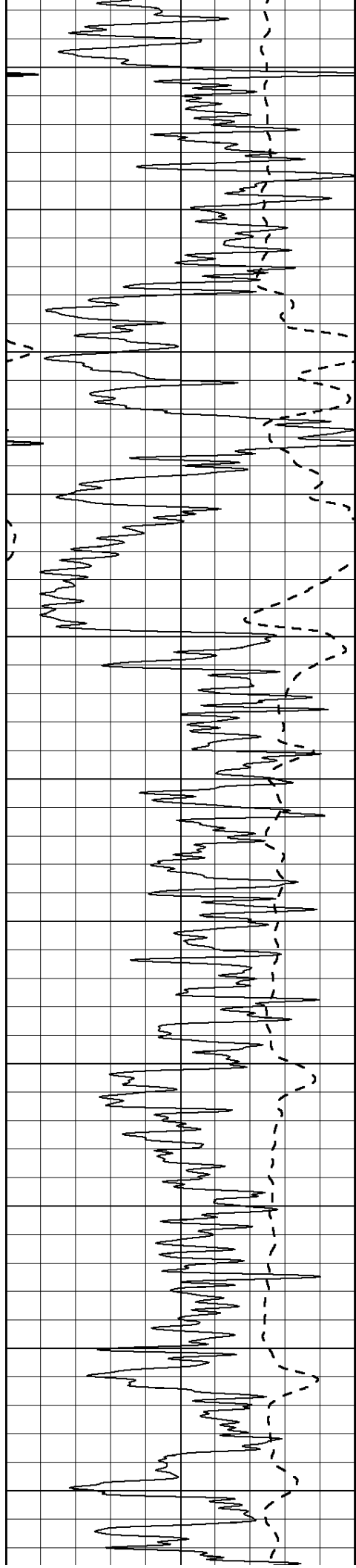
800

850

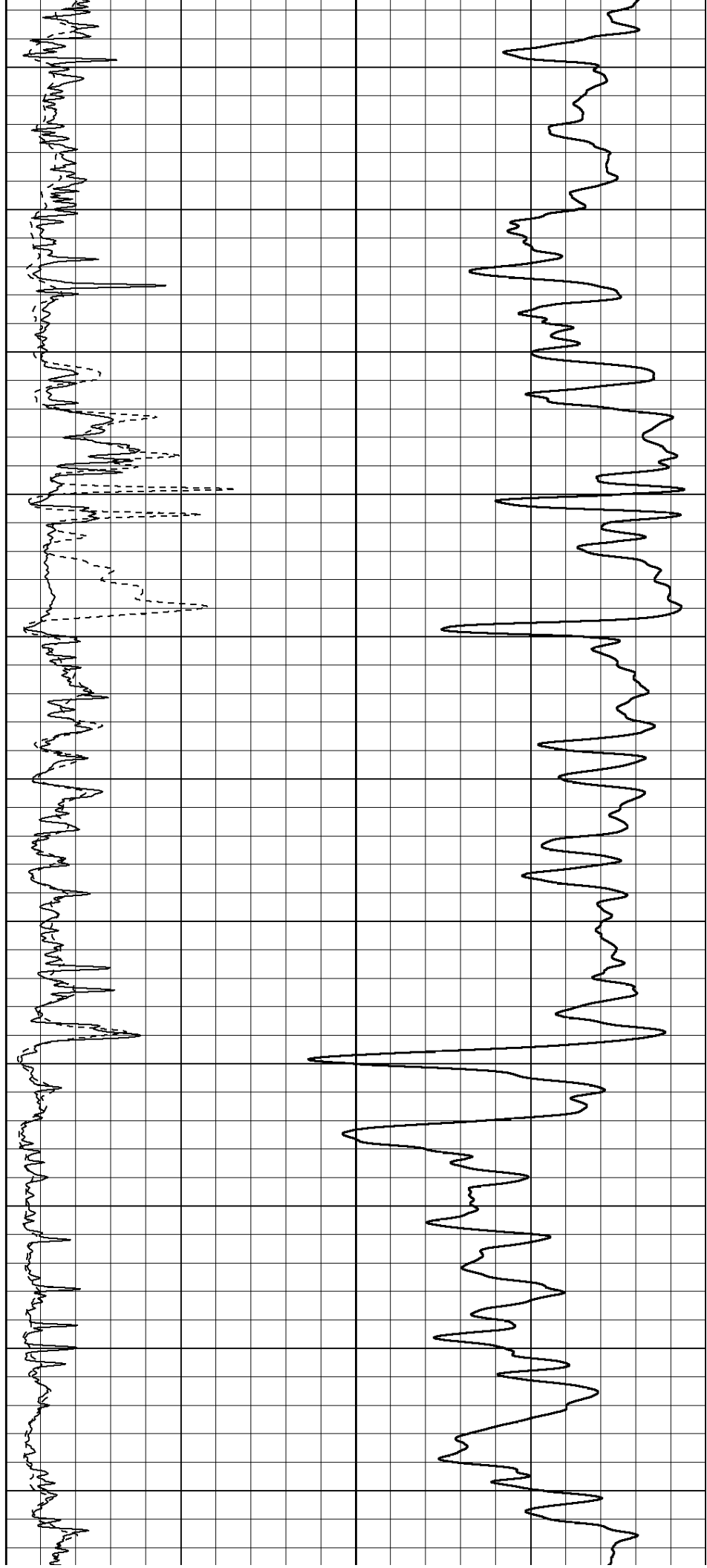
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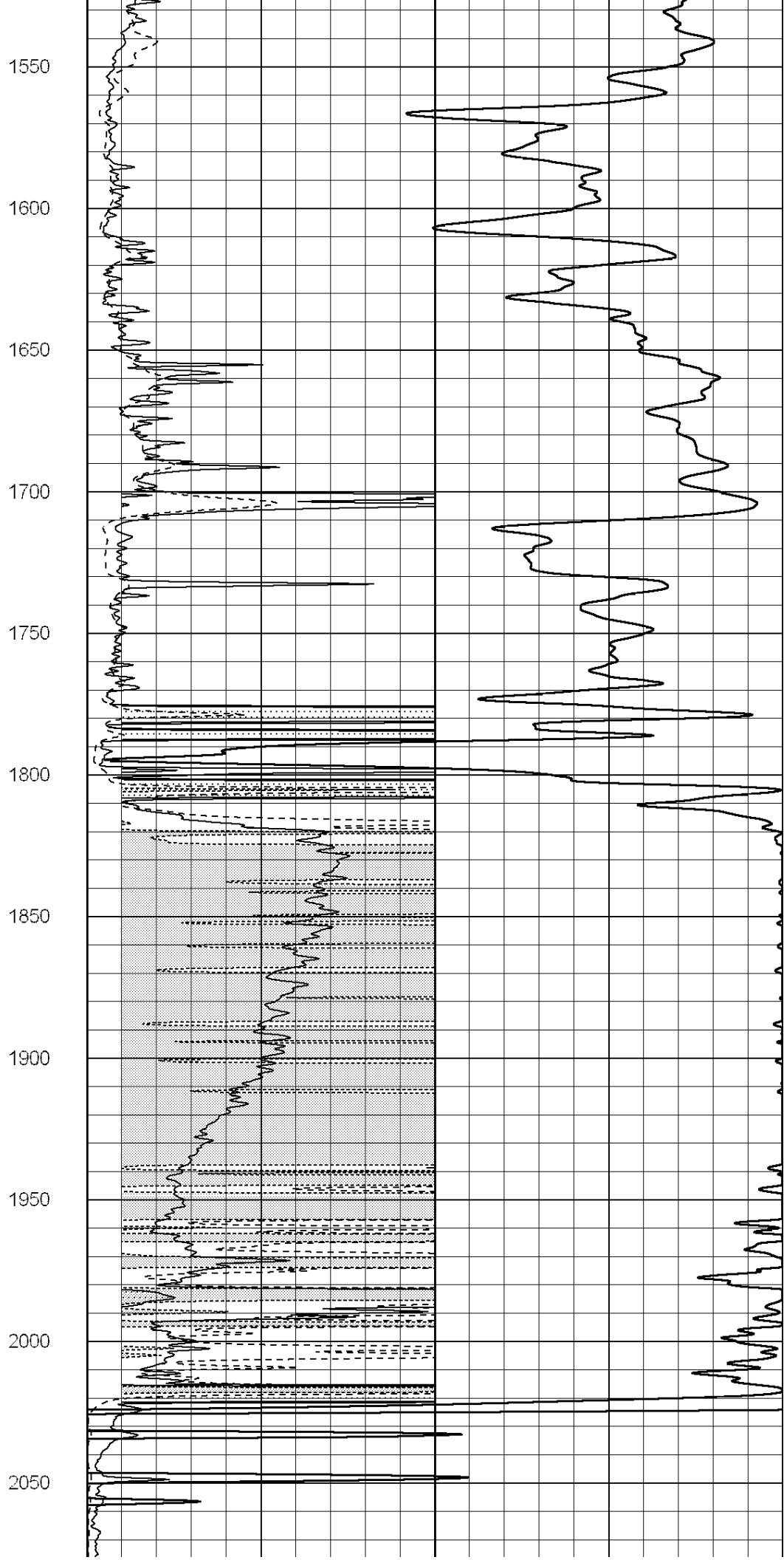
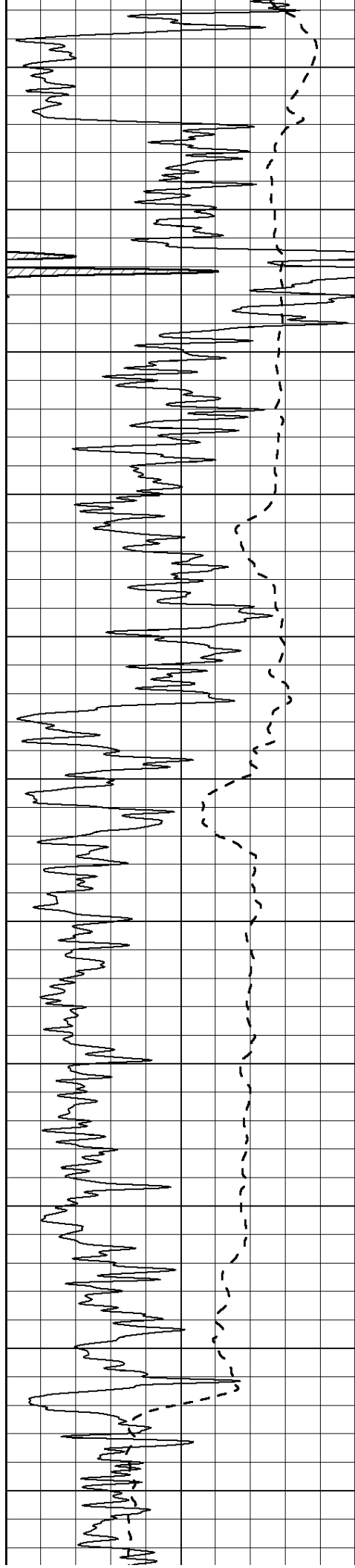
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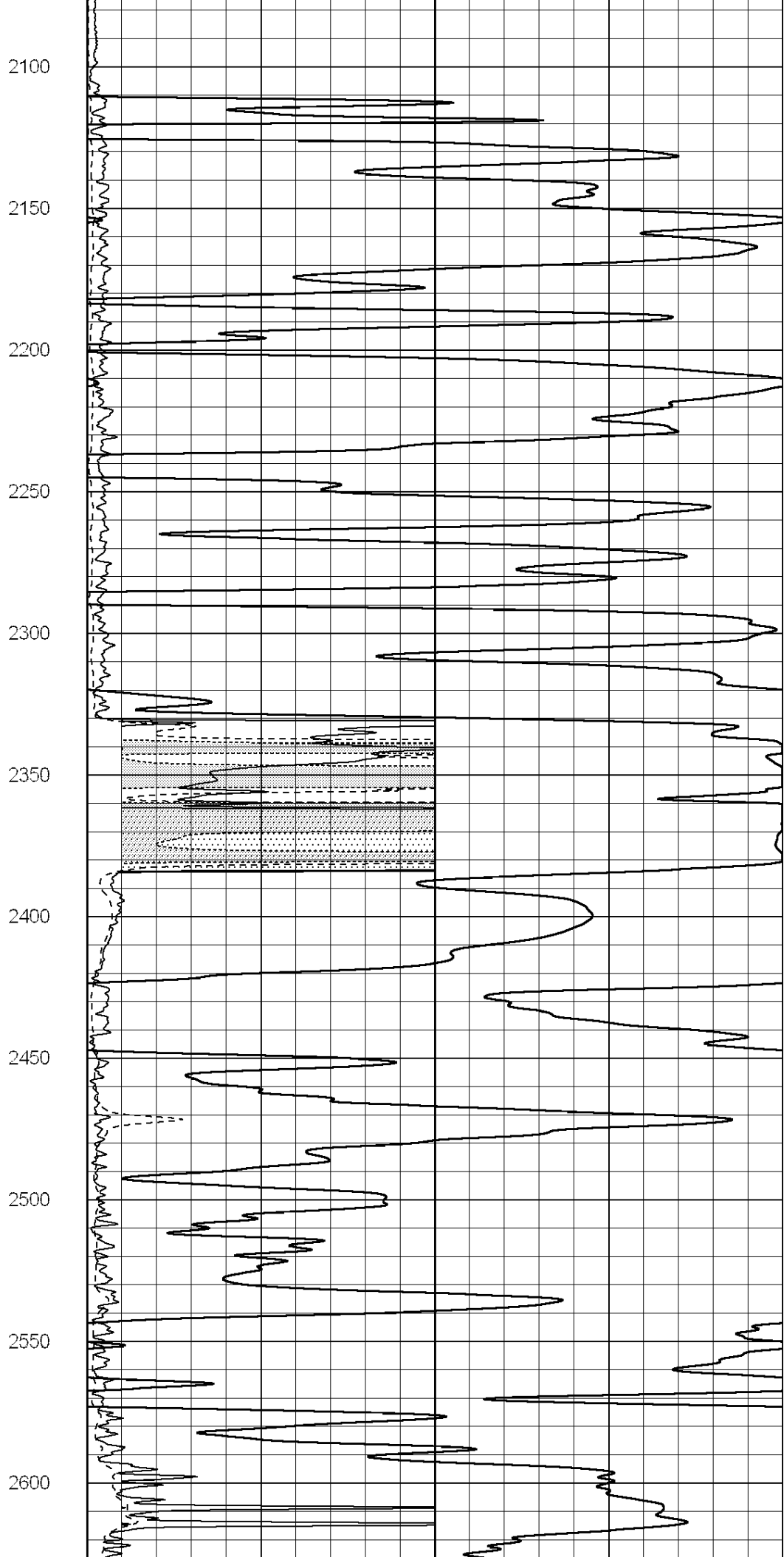
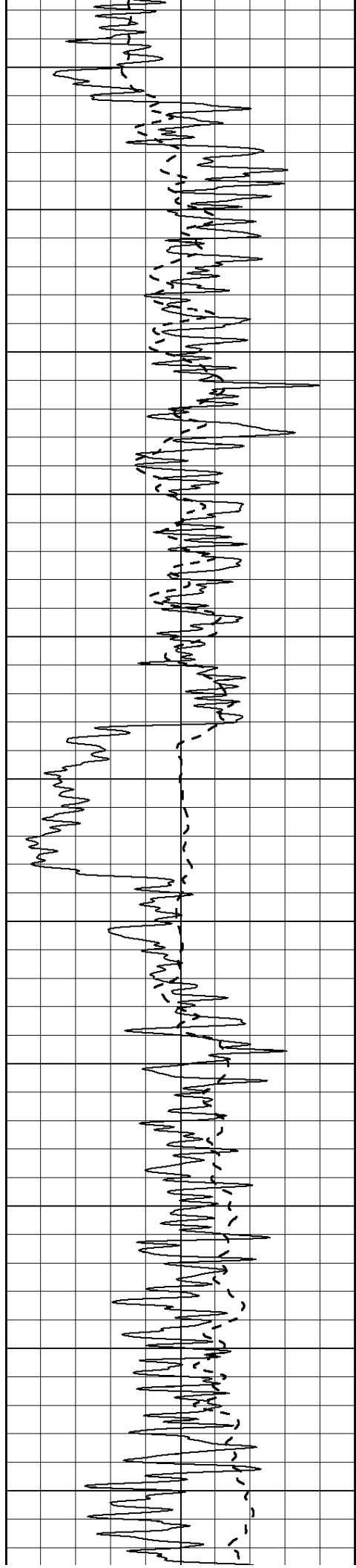


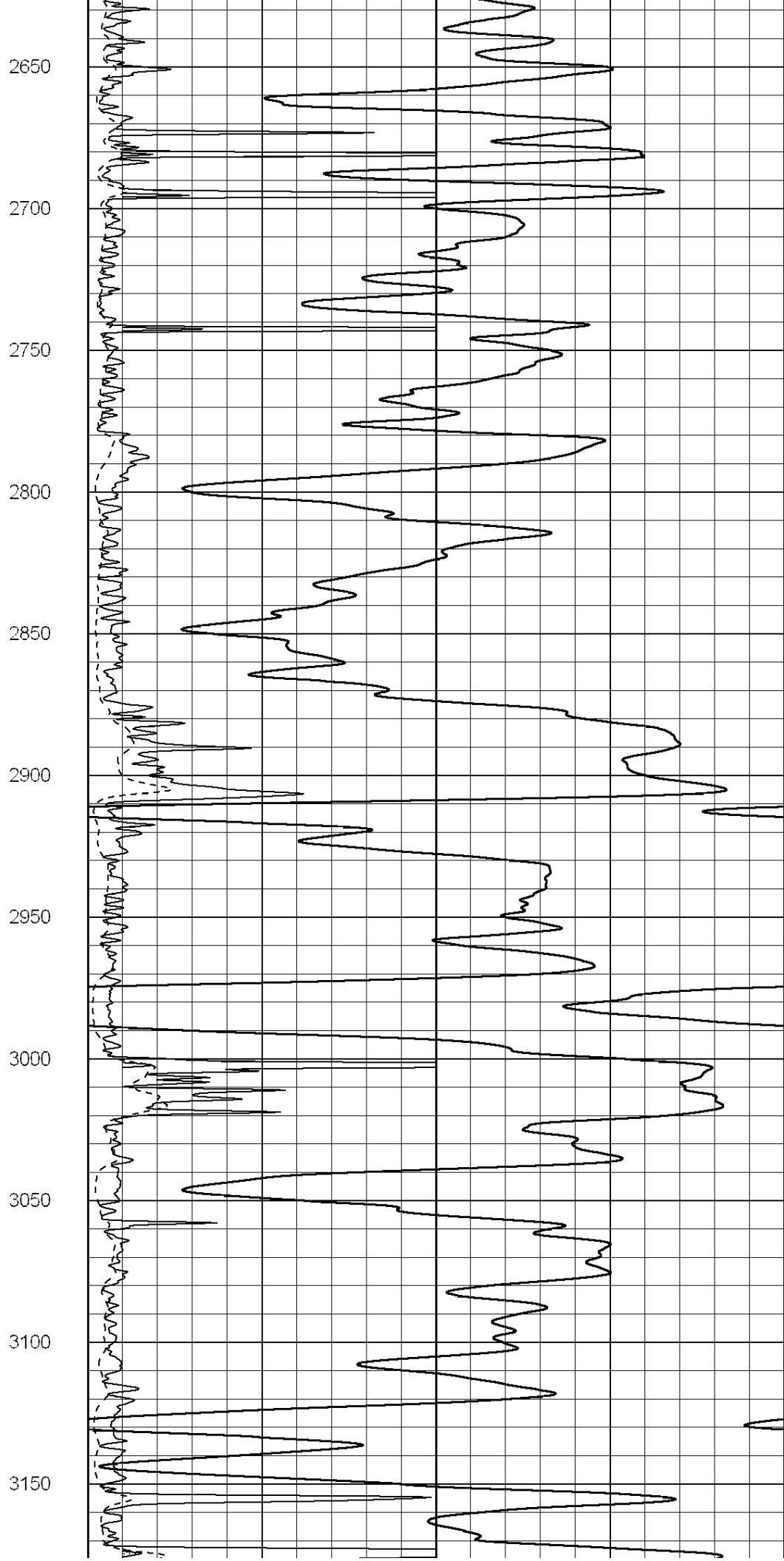
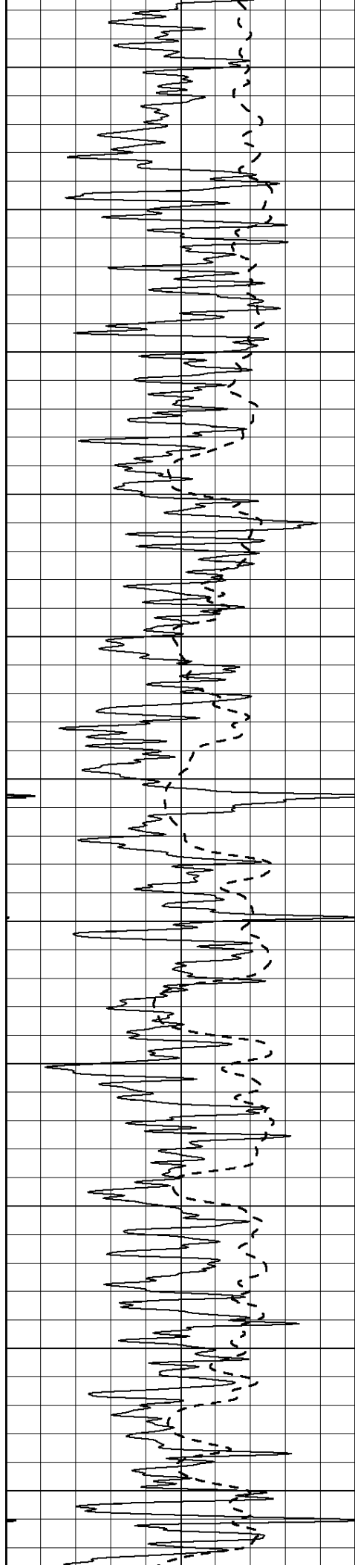


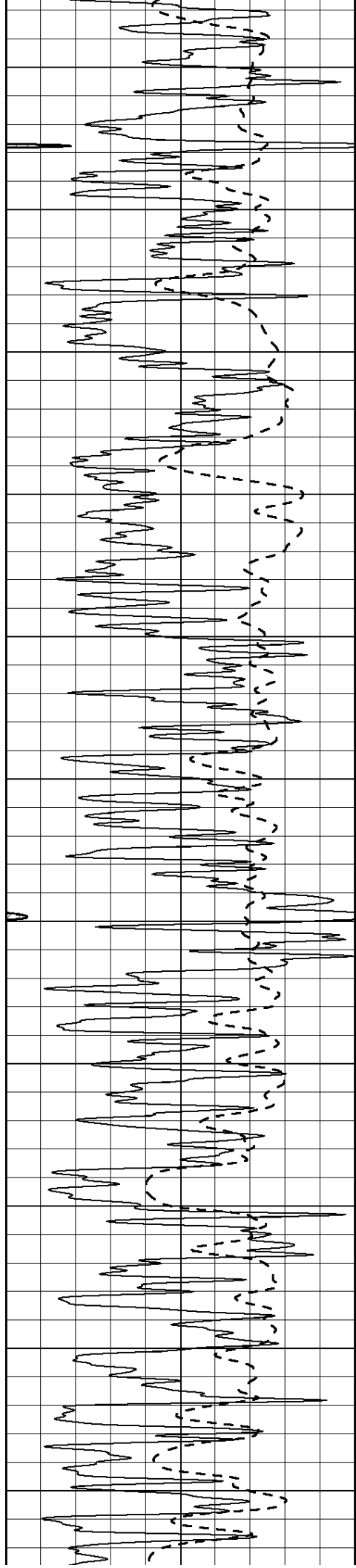
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500











3200

3250

3300

3350

3400

3450

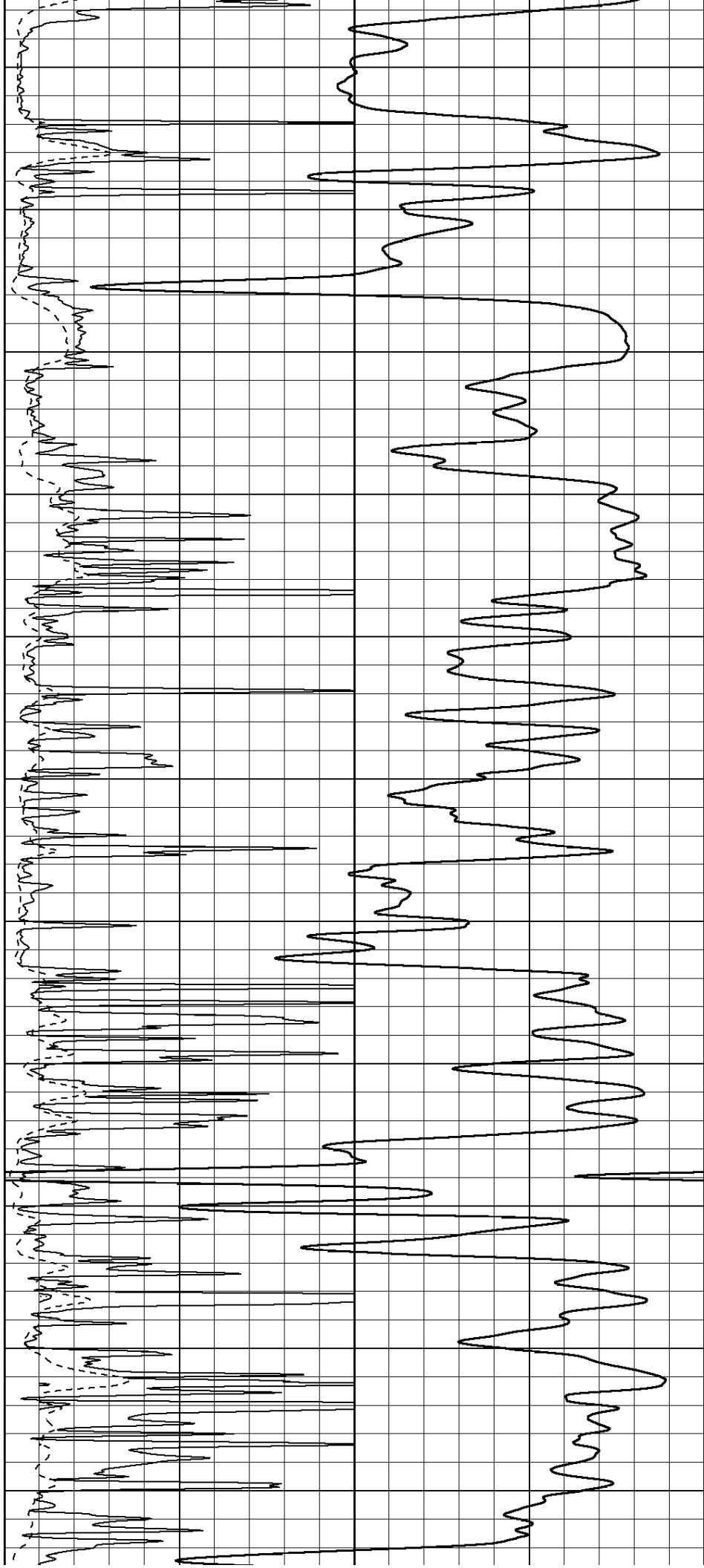
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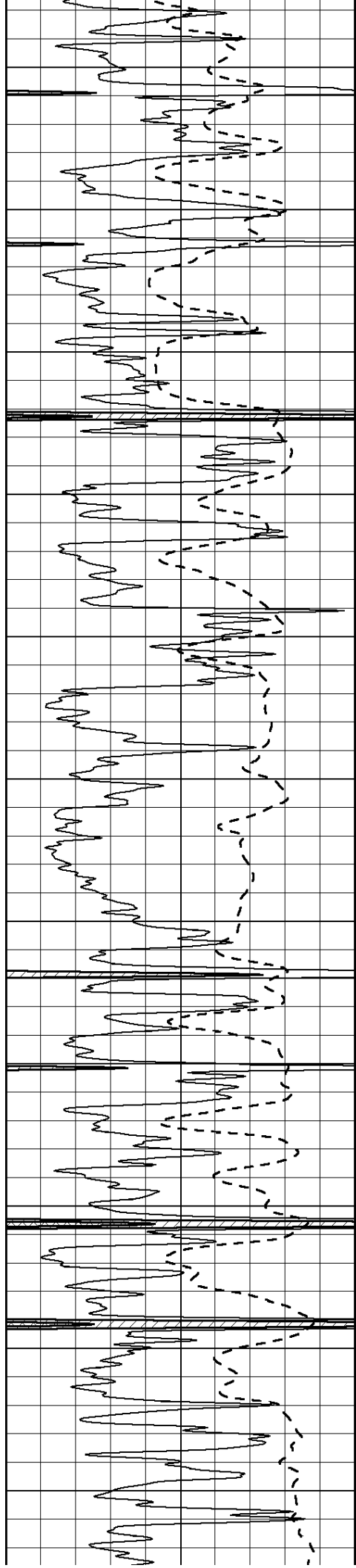
3550

3600

3650

3700





3750

3800

3850

3900

3950

4000

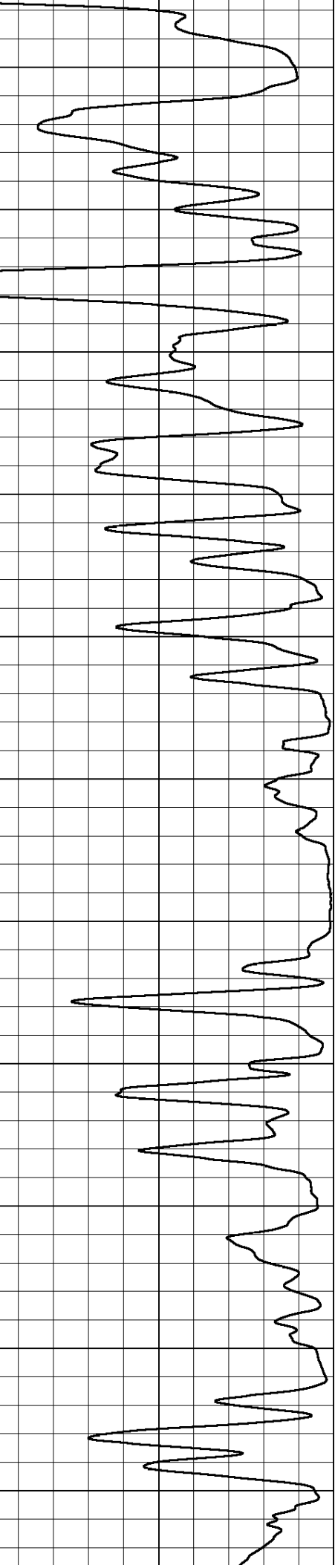
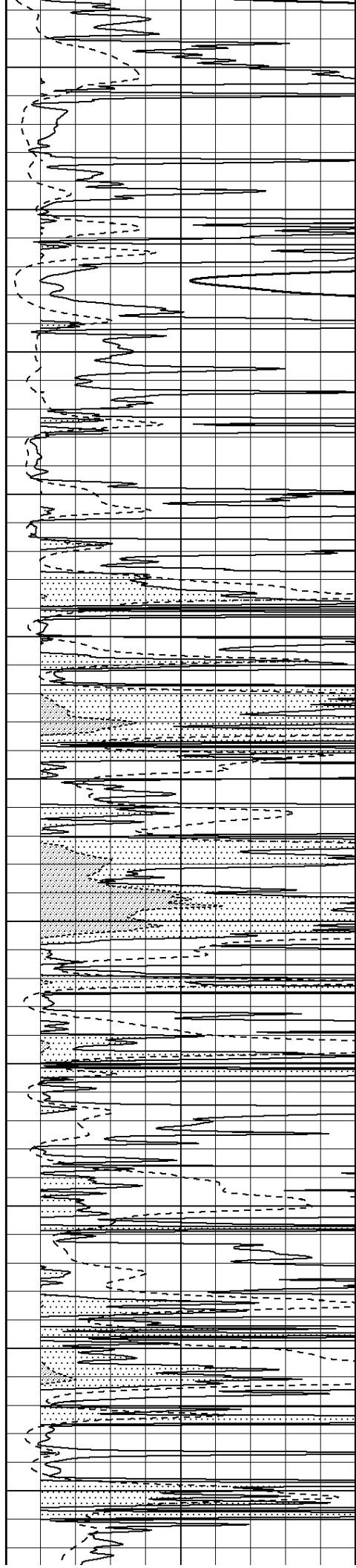
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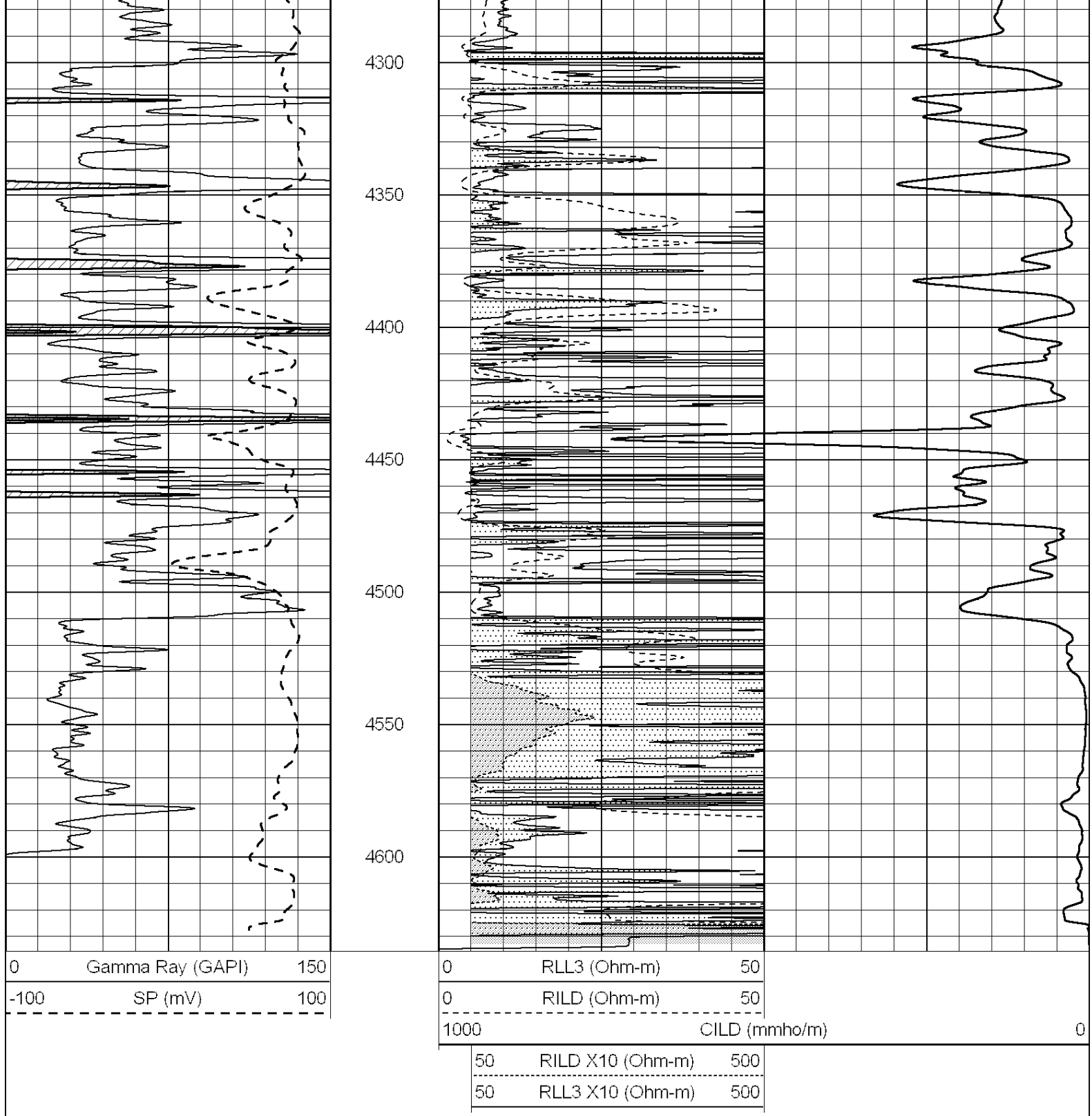
4100

4150

4200

4250





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ANHYDRITE

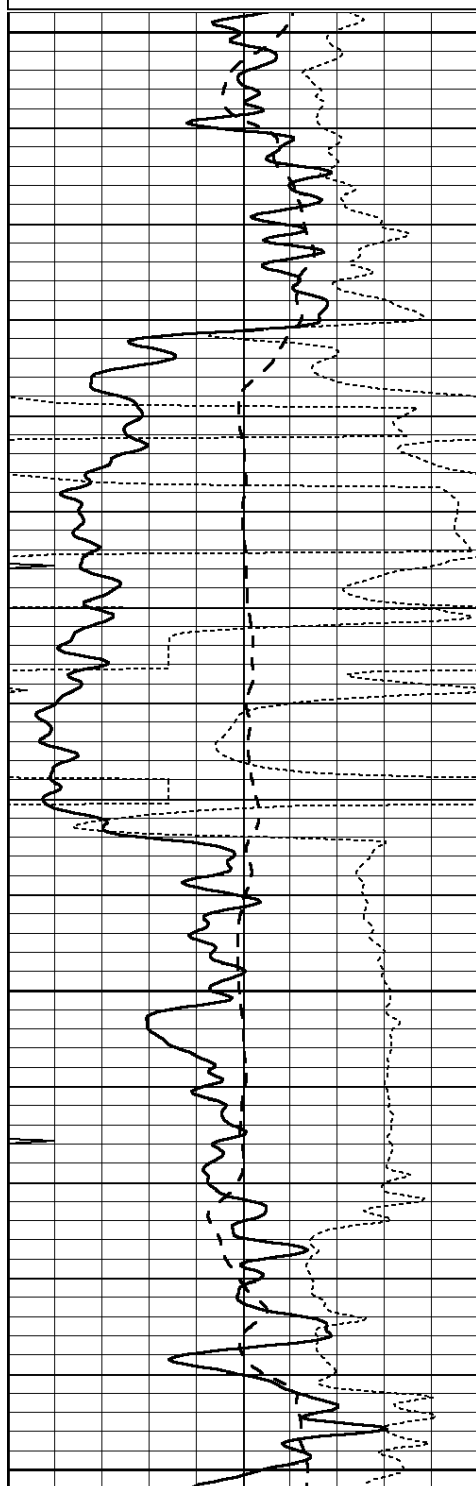
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Dataset Pathname: pass3.7
Presentation Format: dil
Dataset Creation: Mon Apr 11 12:41:02 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150

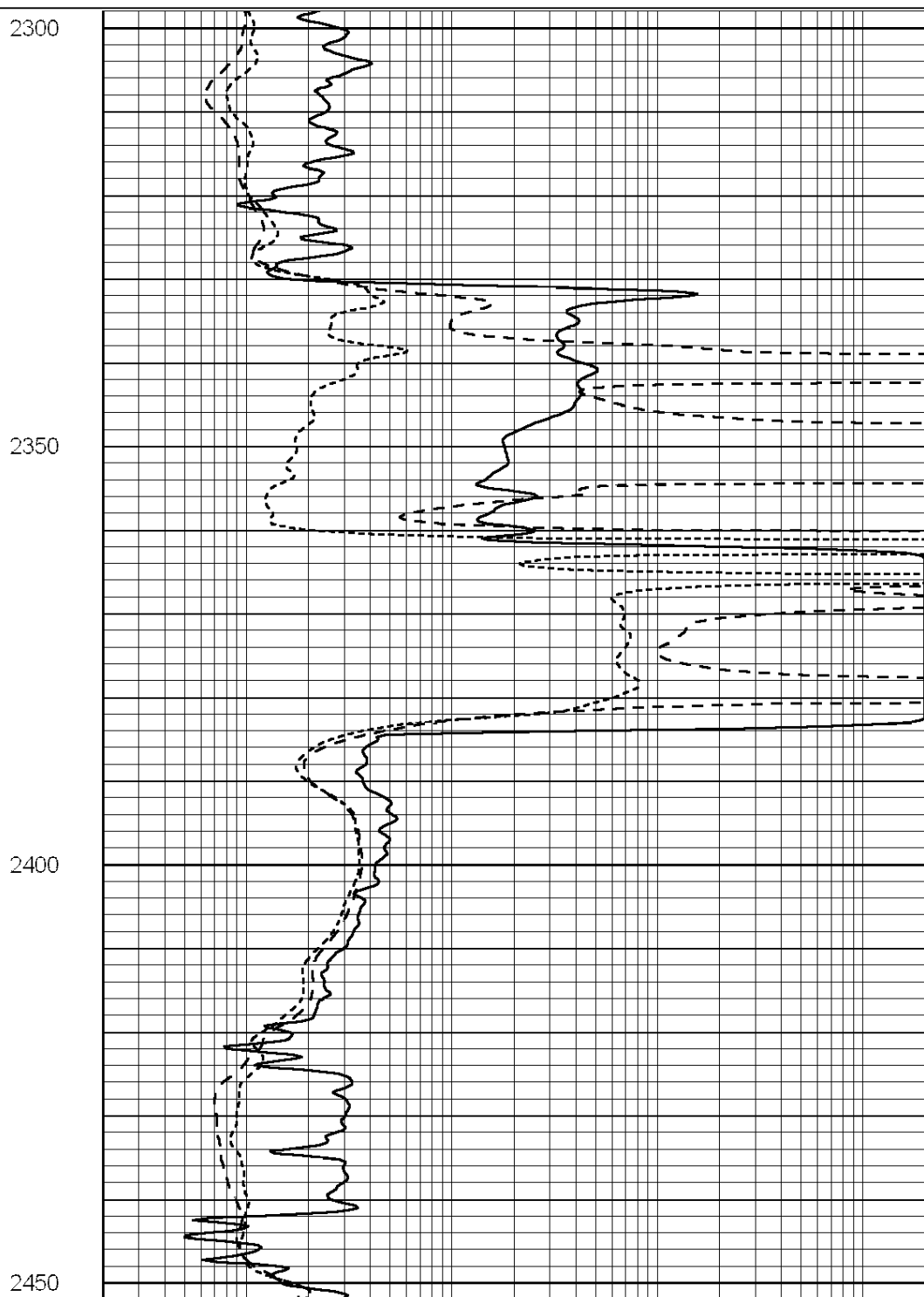
0.2 SHALLOW GUARD (Ohm-m) 2000

-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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



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



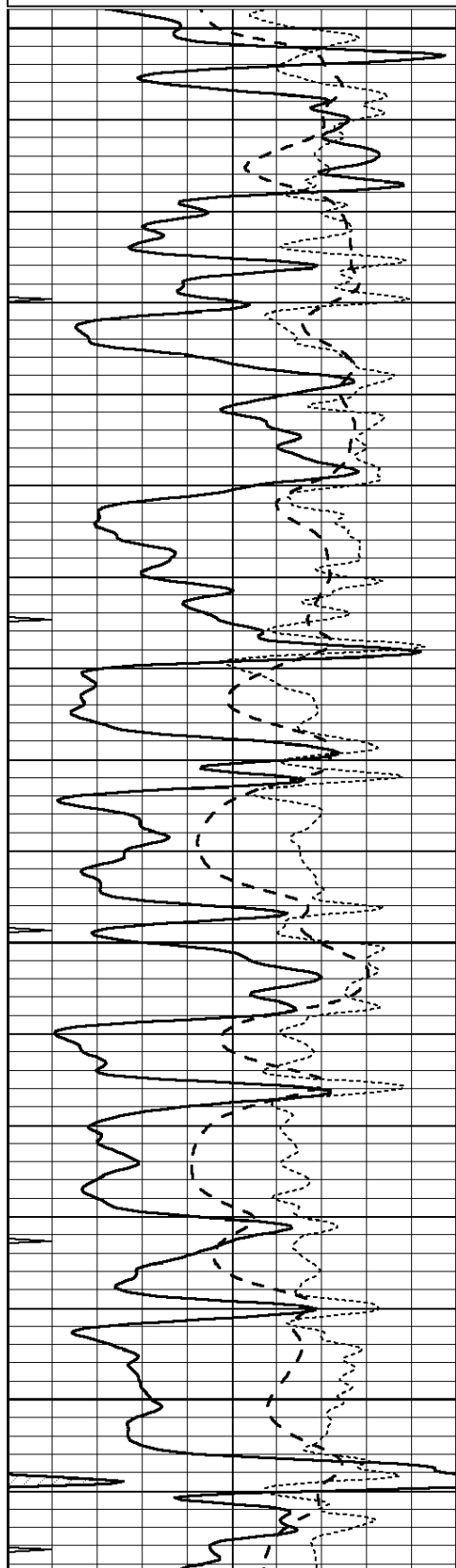
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MAIN SECTION

Database File: 006806ddn.db
Dataset Pathname: pass3.6
Presentation Format: dil
Dataset Creation: Mon Apr 11 12:40:32 2011 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	MINMK	10

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

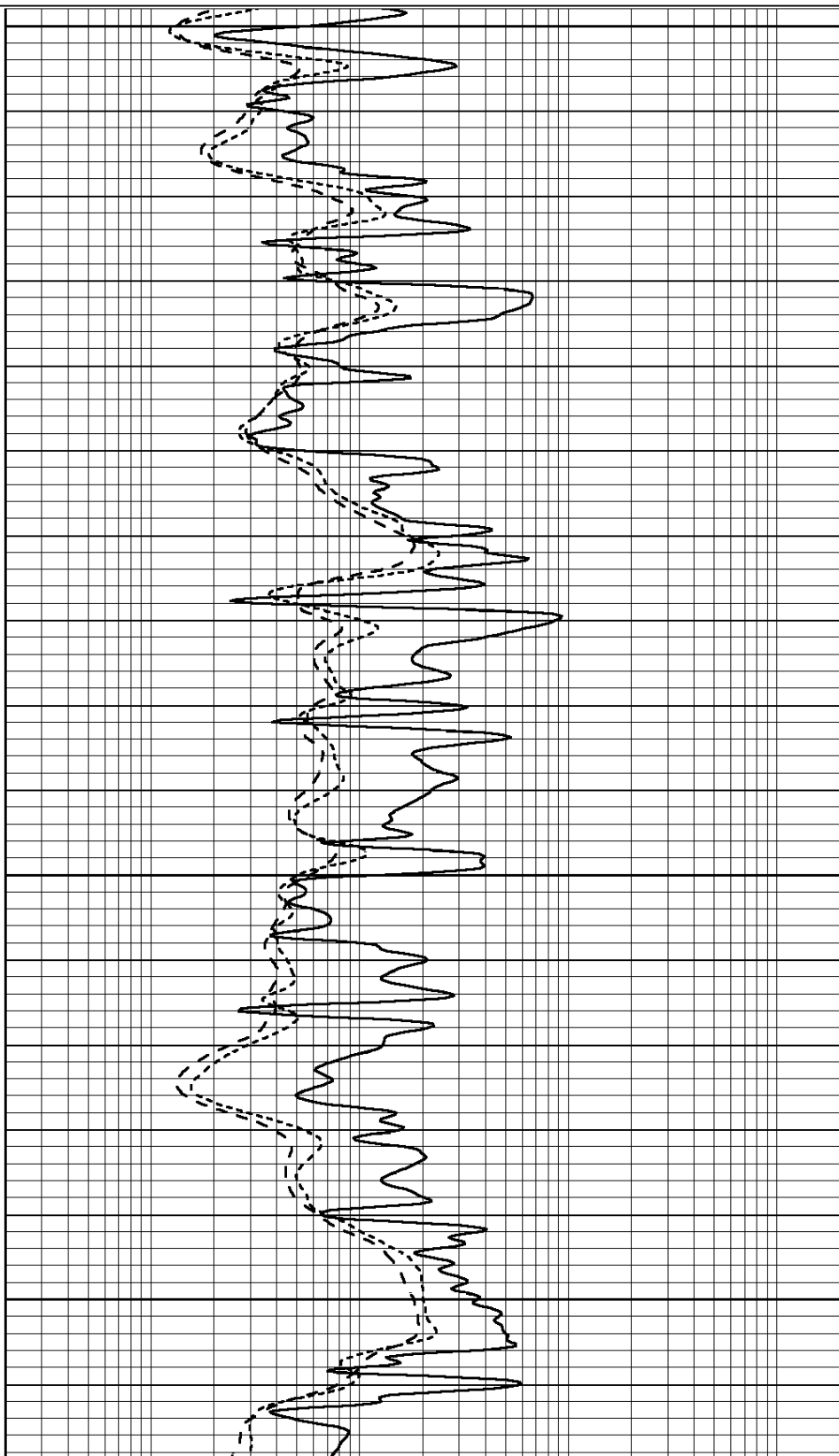


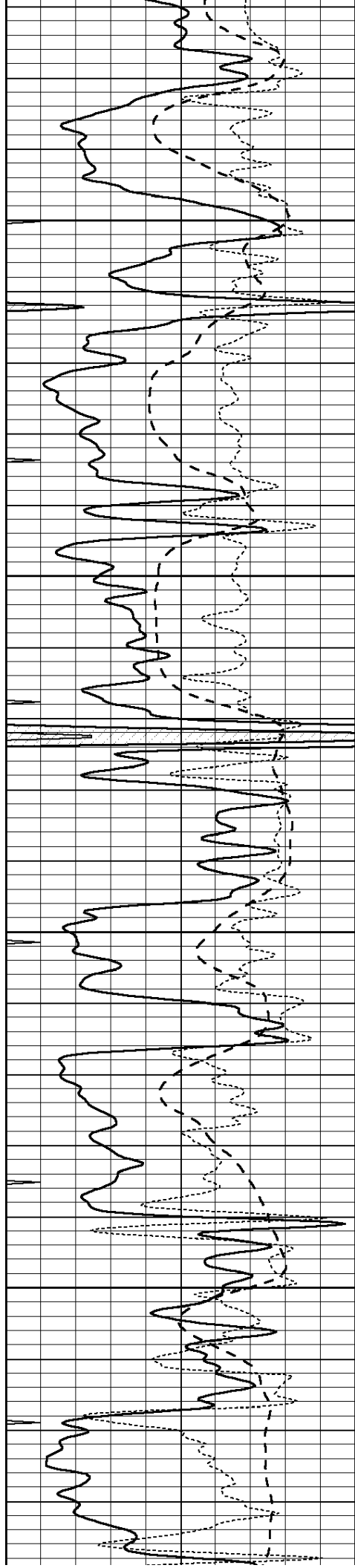
3600

3650

3700

3750



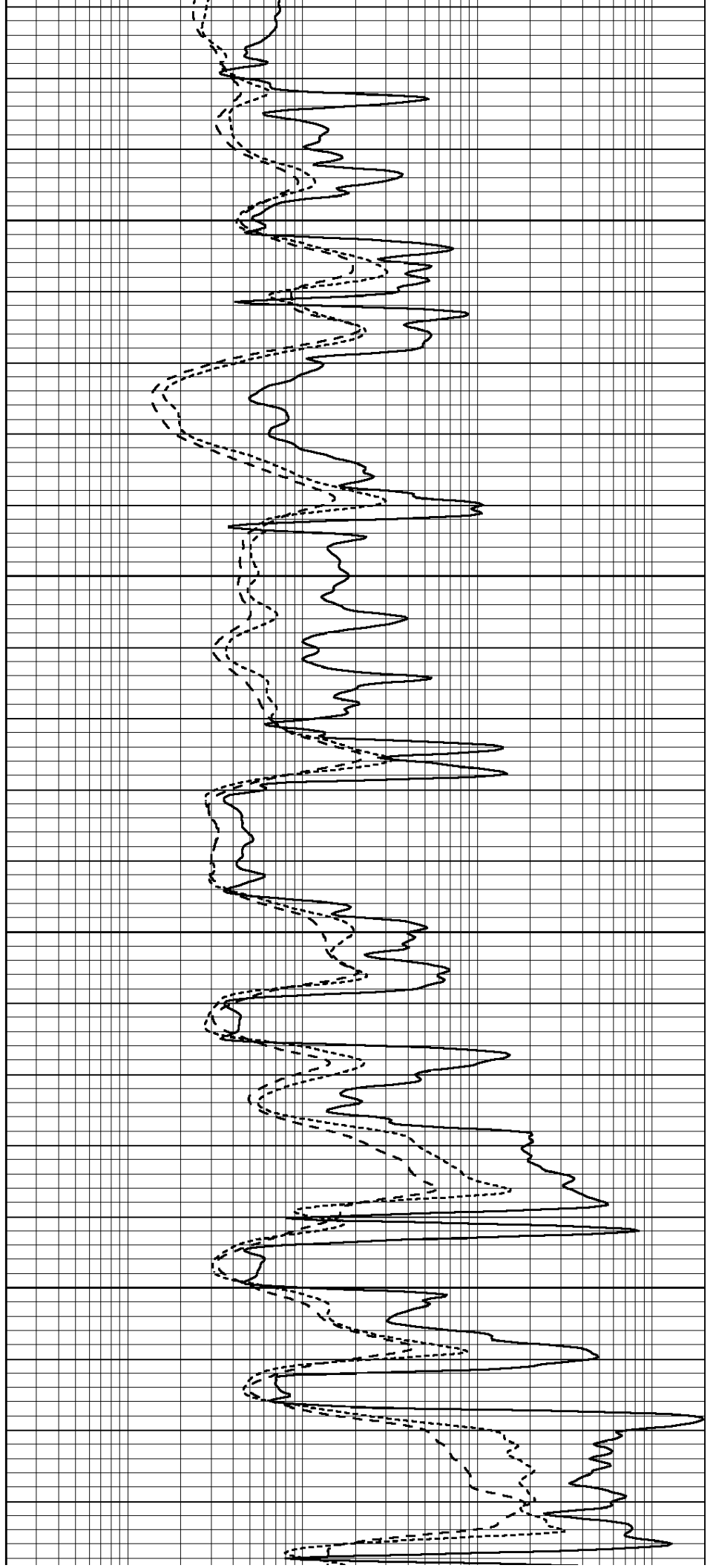


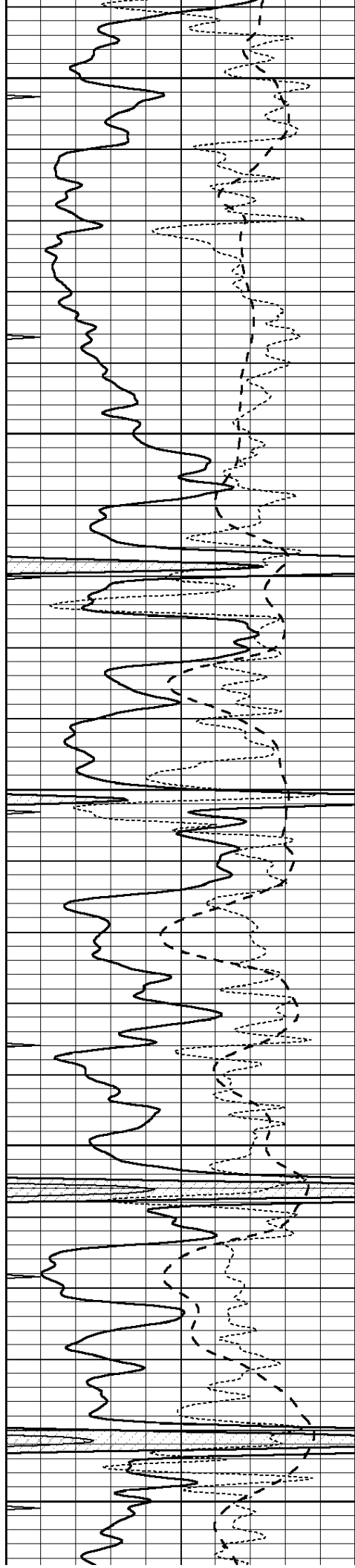
3800

3850

3900

3950





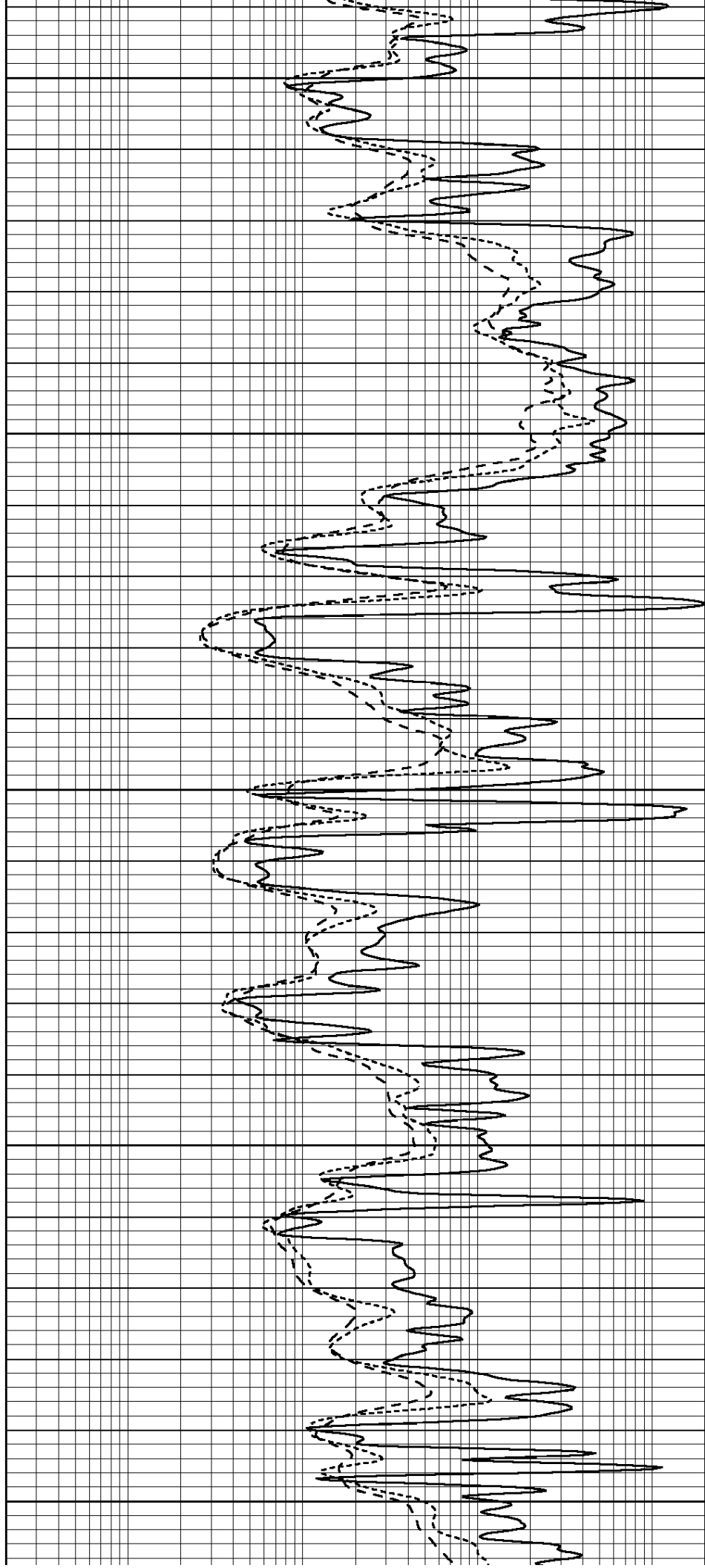
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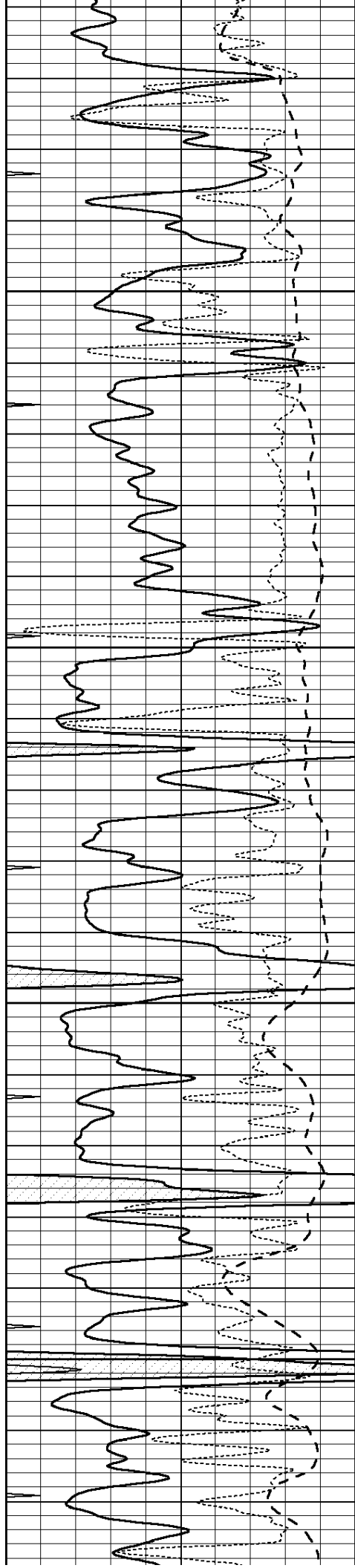
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4100

4150

4200



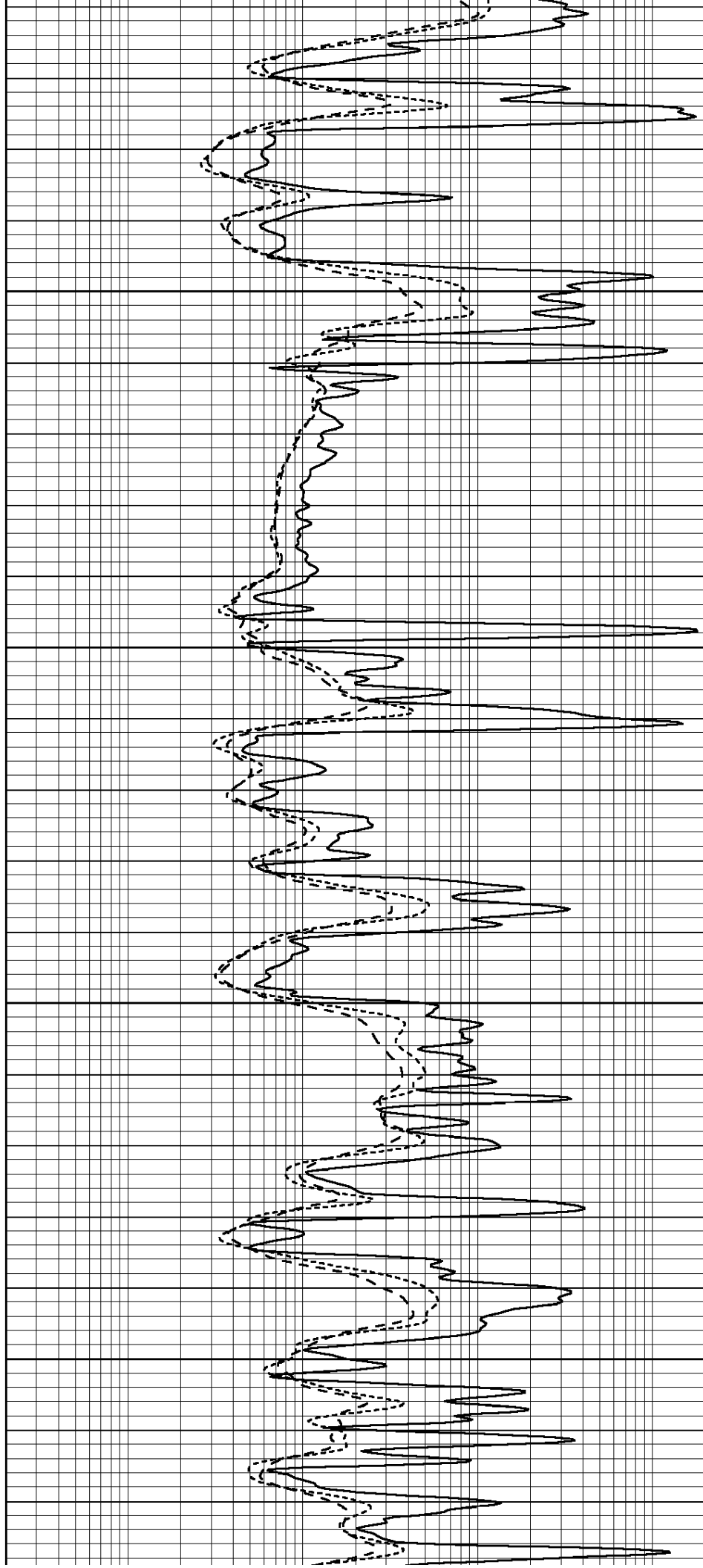


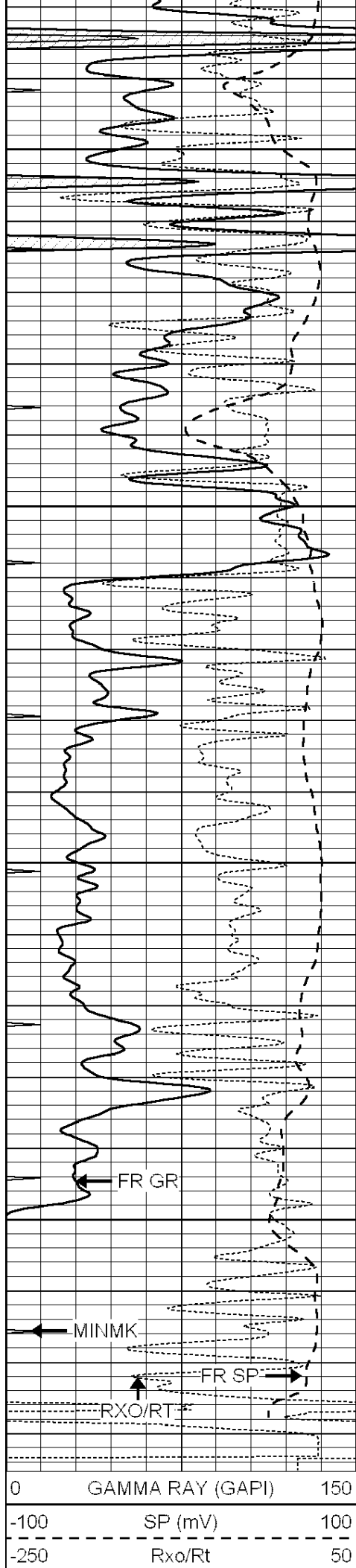
4250

4300

4350

4400





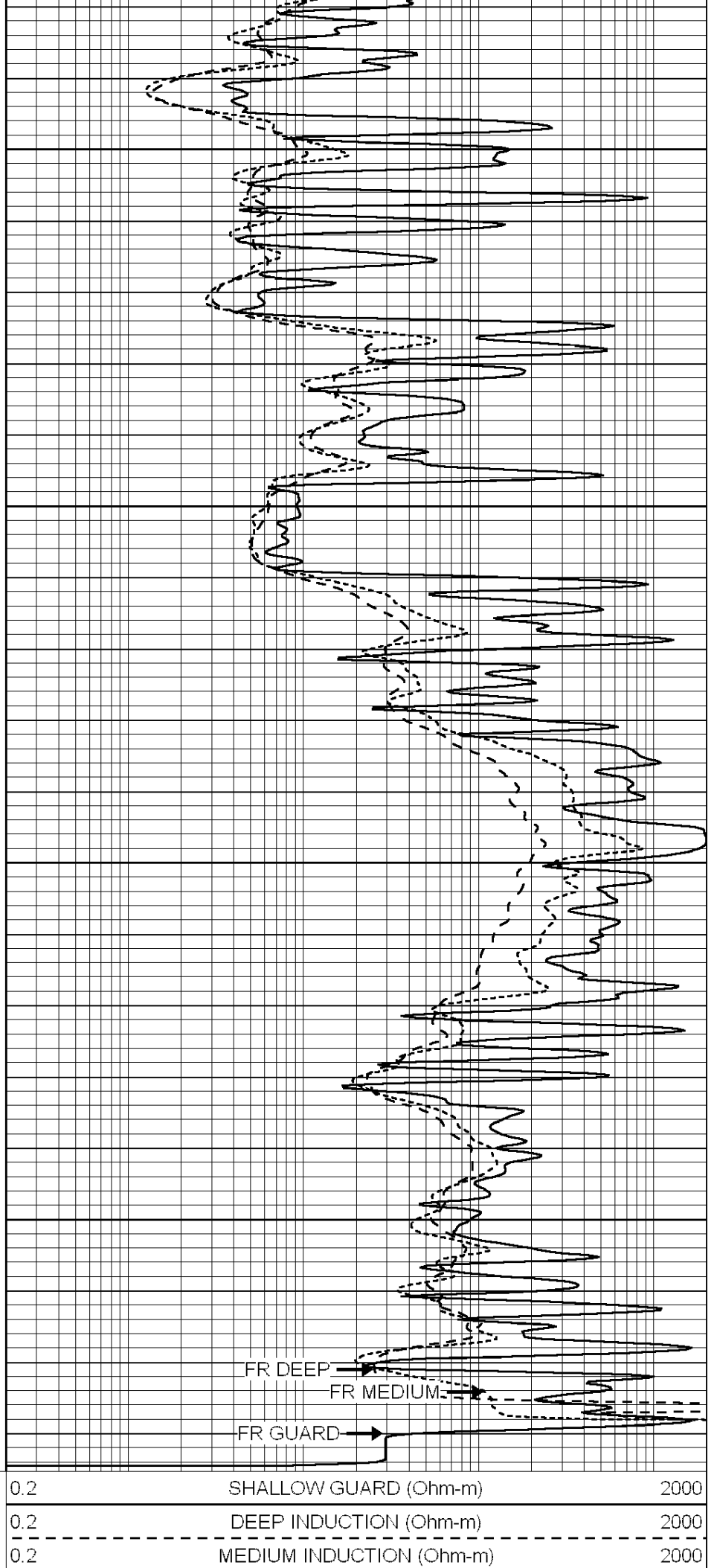
4450

4500

4550

4600

LTD 4632





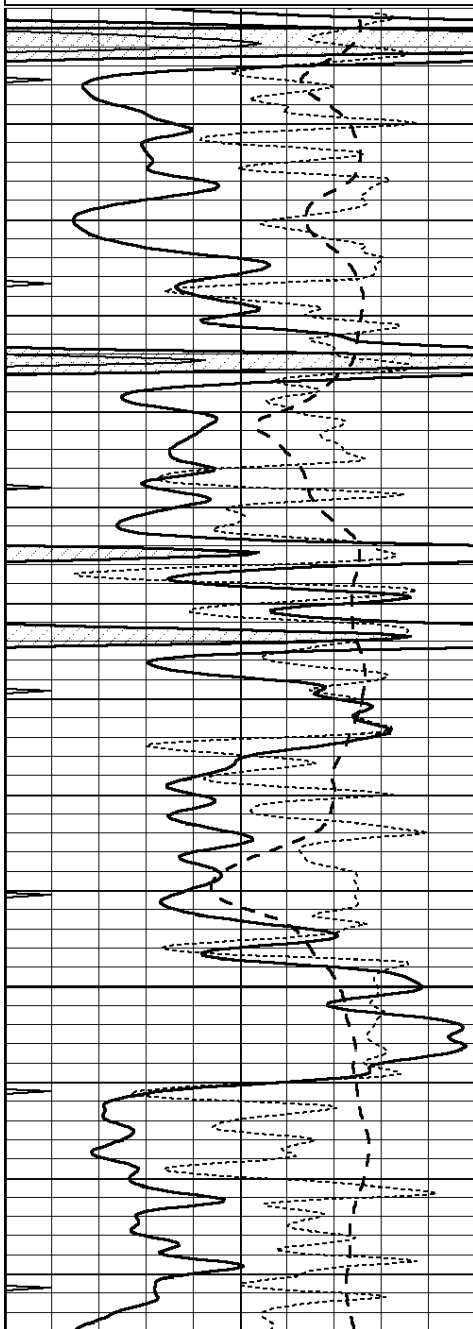
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REPEAT SECTION

Database File: 006806ddn.db
Dataset Pathname: pass2.4
Presentation Format: dil
Dataset Creation: Mon Apr 11 11:55:06 2011 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	MINMK	10

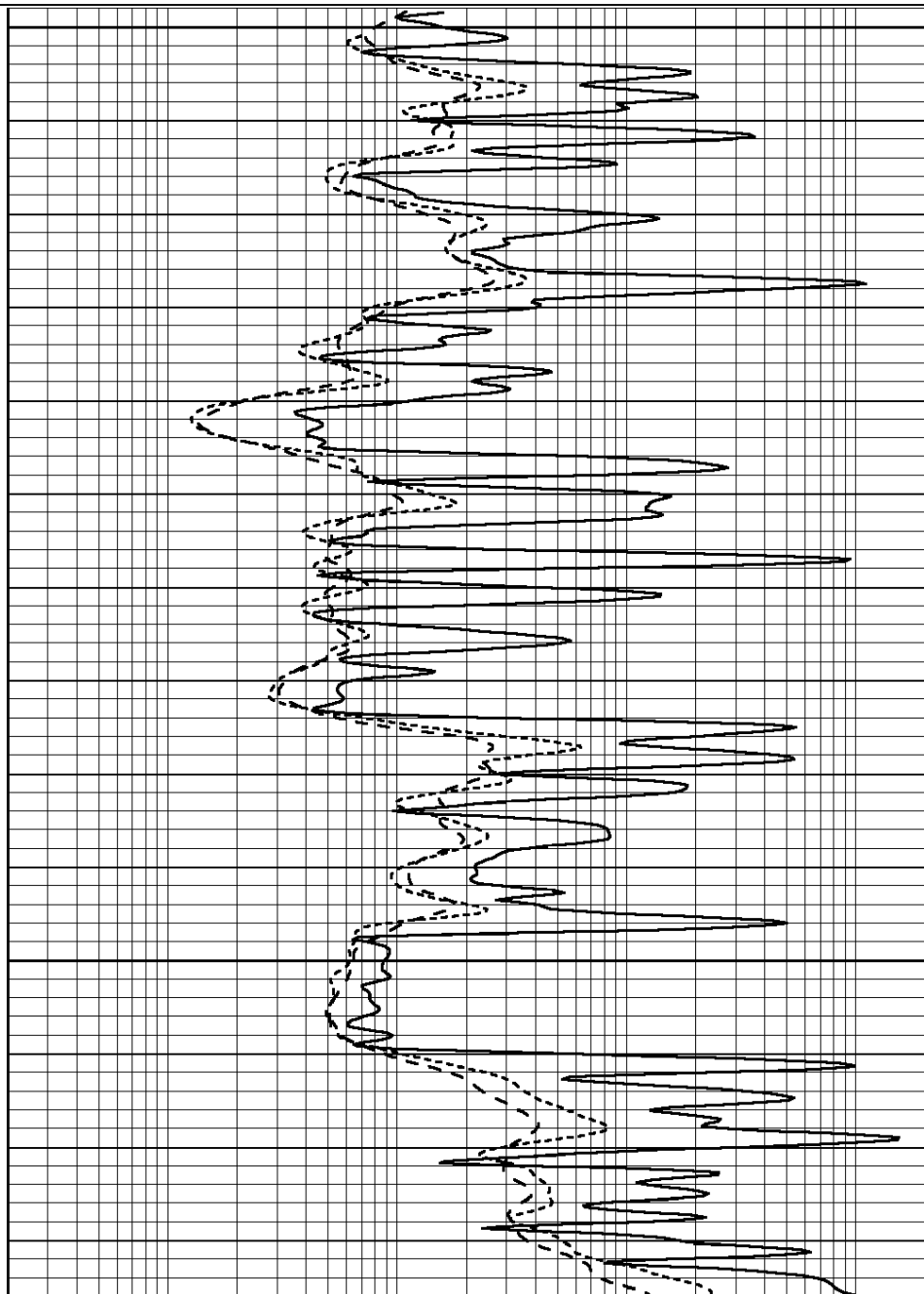
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



4400

4450

4500



	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps
Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1
Caliper					
Low Ref	Readings	Reference			
High Ref	4.0	6.8			
	6.2	14.0			
	Gain: 3.2		Offset: -6.0		
Compensated Neutron Calibration Report					
		Serial Number:	NEU_4I		
		Tool Model:	G		
CALIBRATION					
	Detector	Readings	Target	Normalization	
	Short Space	996.00 cps	1000.00 cps	1.0000	
	Long Space	977.00 cps	1000.00 cps	1.0000	
Gamma Ray Calibration Report					
Serial Number:		GR4			
Tool Model:		OPEN			
Performed:		Mon Apr 11 09:54:54 2011			
Calibrator Value:		200.0	GAPI		
Background Reading:		0.0	cps		
Calibrator Reading:		189.0	cps		
Sensitivity:		1.6000	GAPI/cps		