



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	MULL DRILLING COMPANY, INC.	Company	MULL DRILLING COMPANY, INC.
Well	#1-6 STEVE	Well	#1-6 STEVE
Field	WILDCAT	Field	WILDCAT
County	NESS	County	NESS
State	KANSAS	State	KANSAS
Location:	AP1 # : 15-135-25335-0000 2126' FNL & 915' FEL	Other Services CDL/CNL/PE MEL/SONIC	
Permanent Datum	GROUND LEVEL	Elevation	2492
Log Measured From	KELLY BUSHING 5' A.G.L.		
Drilling Measured From	KELLY BUSHING		
SEC 6	TWP 17S	RGE 23W	
Date	1/26/12		
Run Number	ONE		
Depth Driller	4600		
Depth Logger	4600		
Bottom Logged Interval	4598		
Top Log Interval	00		
Casing Driller	8 5/8"@222'		
Casing Logger	223		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,800 PPM	
Density / Viscosity	9.4/46		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.750@80F		
Rmt @ Meas. Temp	.563@80F		
Rmc @ Meas. Temp	.900@80F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.496@121F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	11:30 P.M.		
Maximum Recorded Temperature	121F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KEVIN KESSLER		

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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
RANSOM, KS. (JUNCTION OF HWY 4 & 283) 2 1/4S. ON HWY 283, W. INTO



SUPERIOR
Hays,
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MAIN SECTION

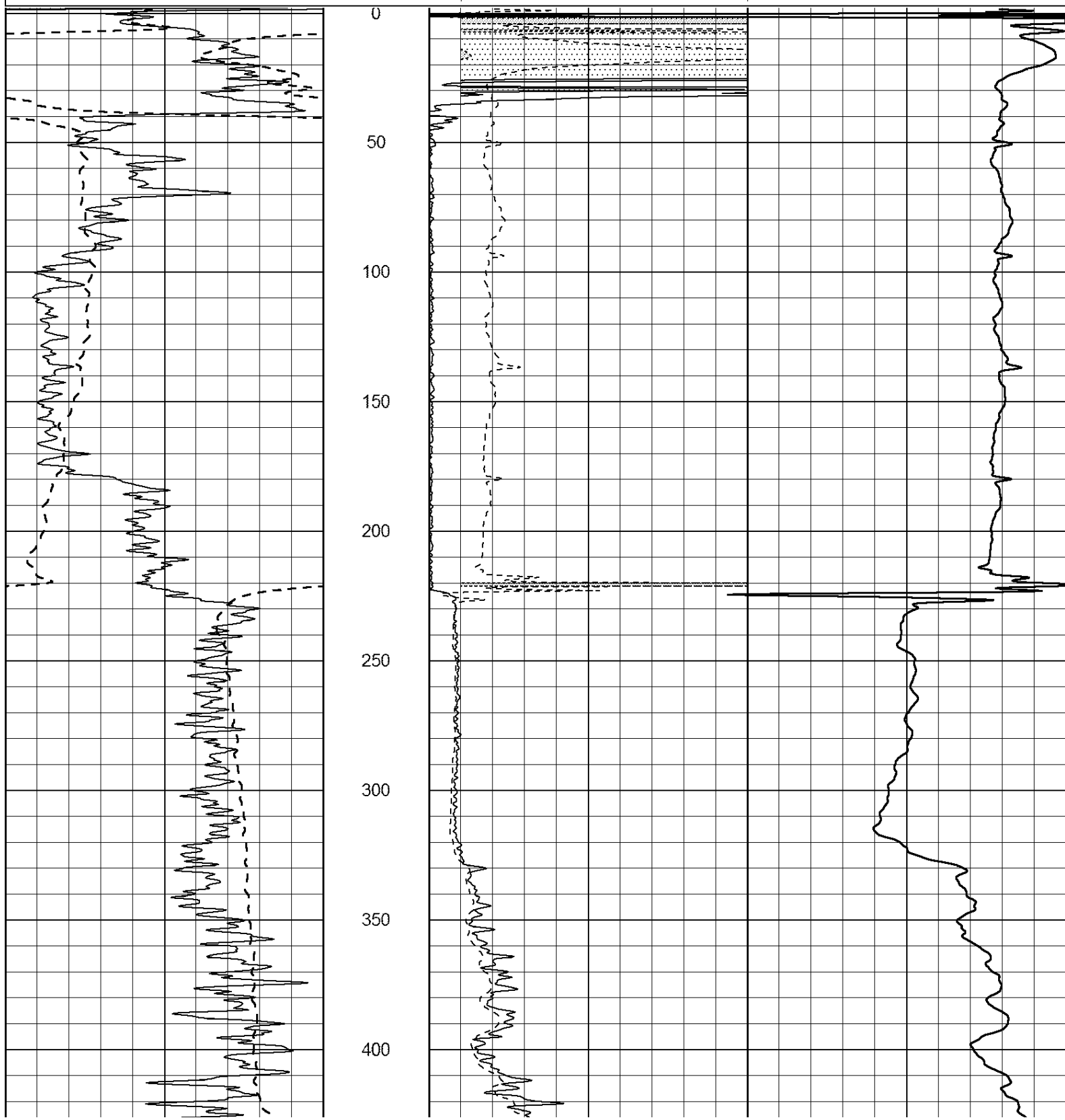
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Dataset Pathname: pass3.4
Presentation Format: dil2
Dataset Creation: Thu Jan 26 00:58:19 2012 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:600

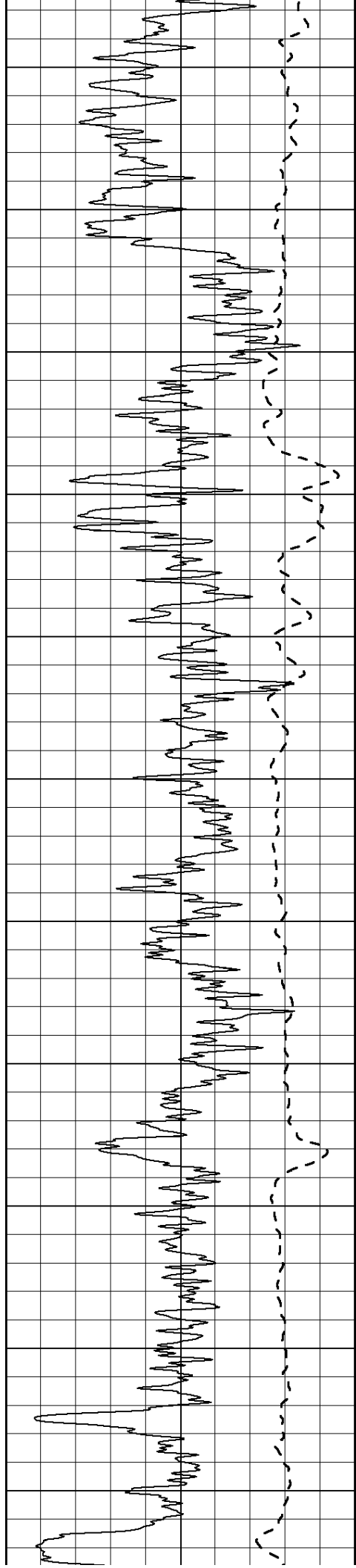
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

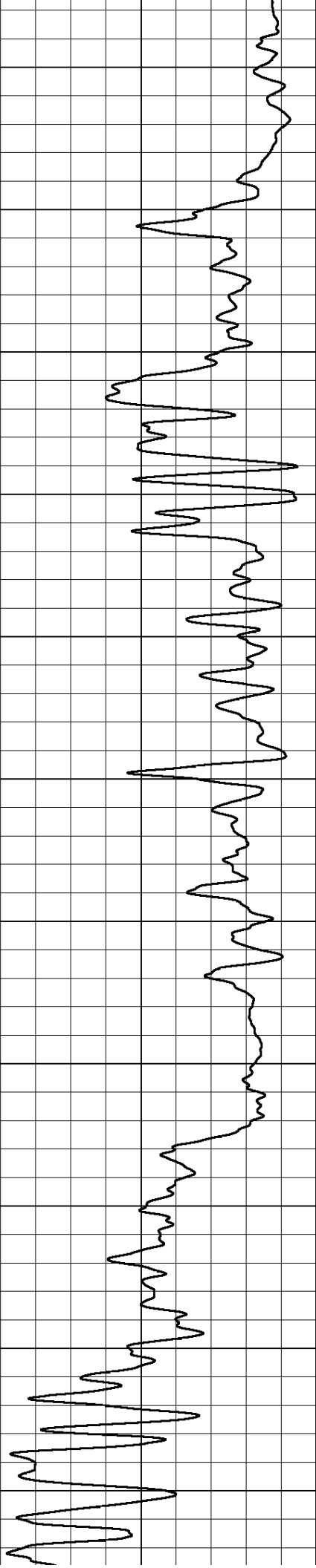
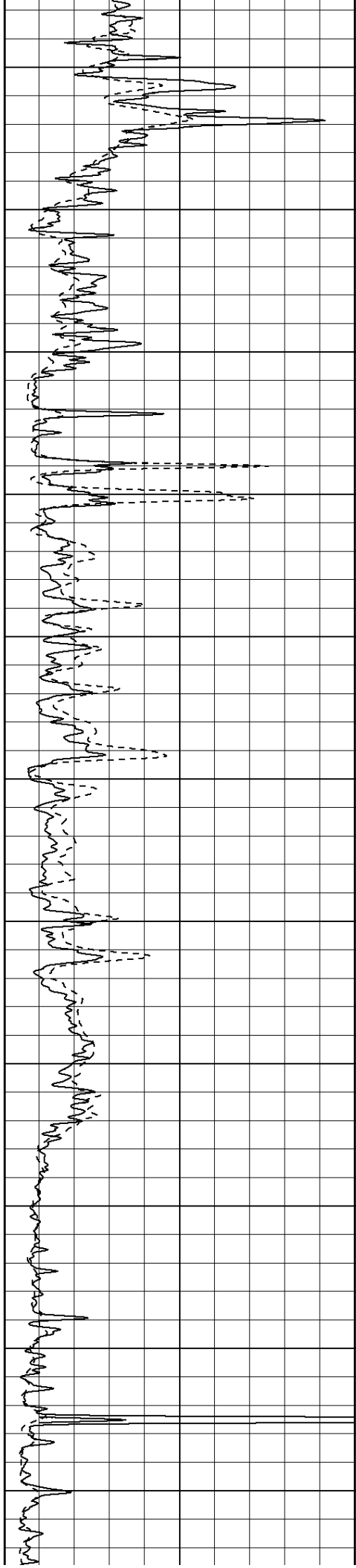
1000	CILD (mmho/m)	0
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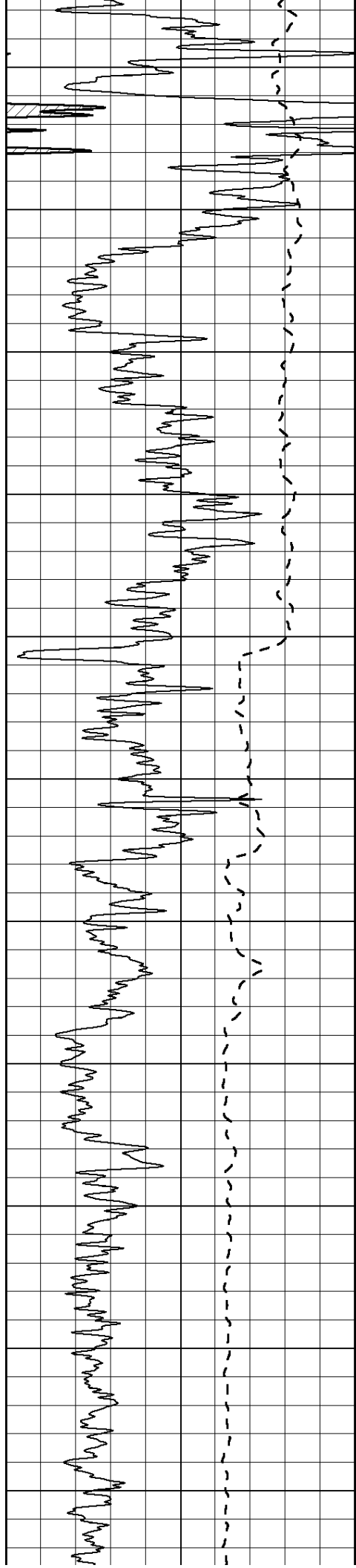
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50	RLL3 X10 (Ohm-m)	500



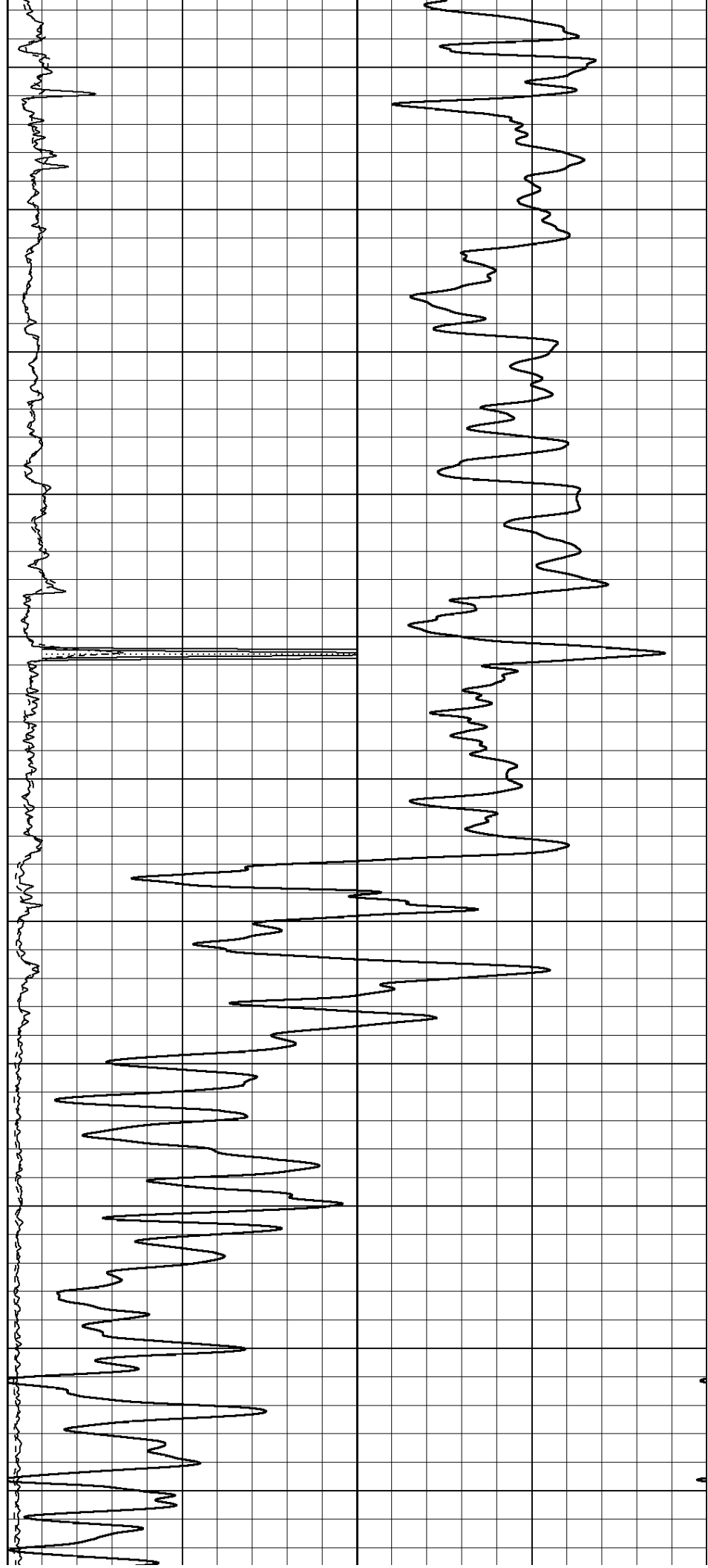


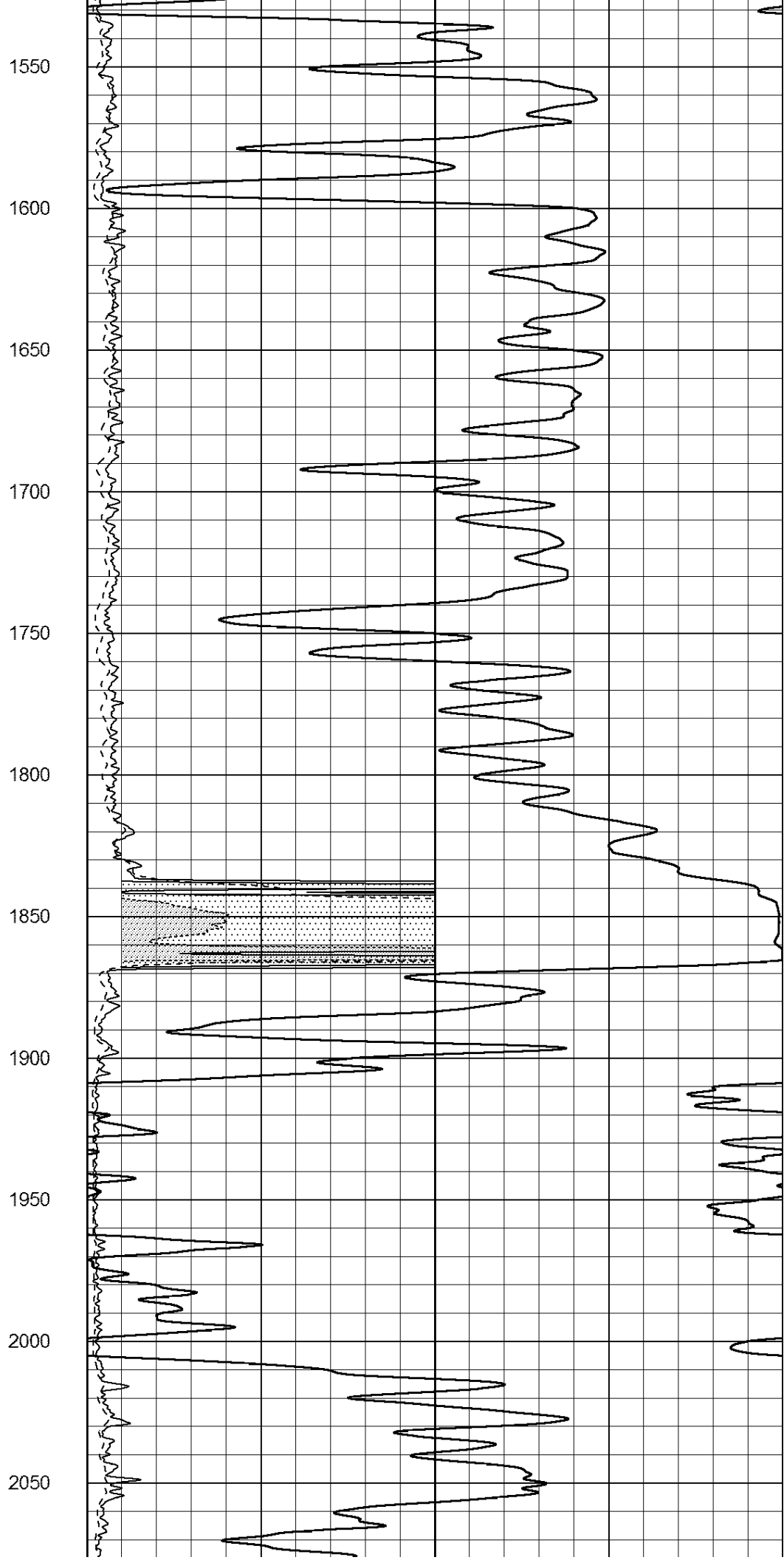
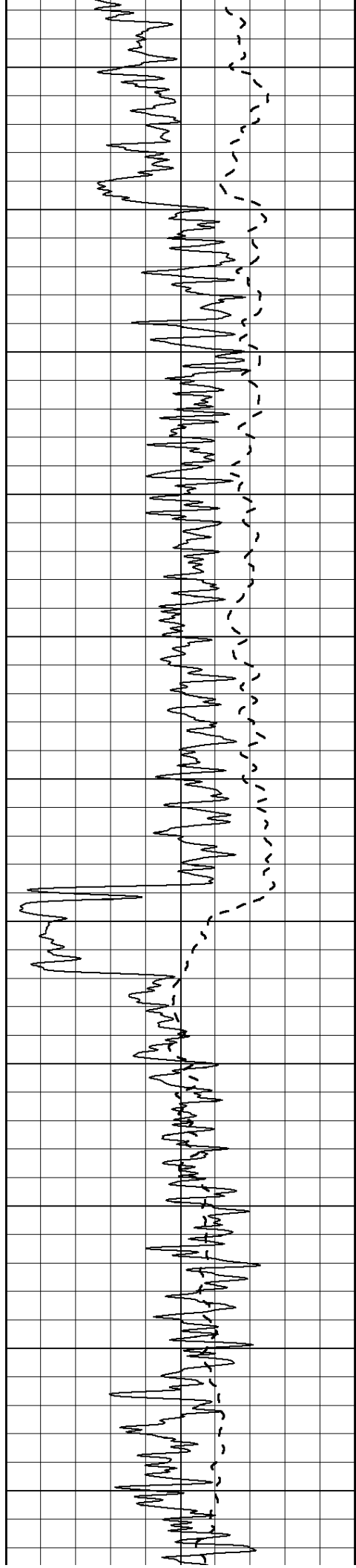
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500
550
600
650
700
750
800
850
900
950

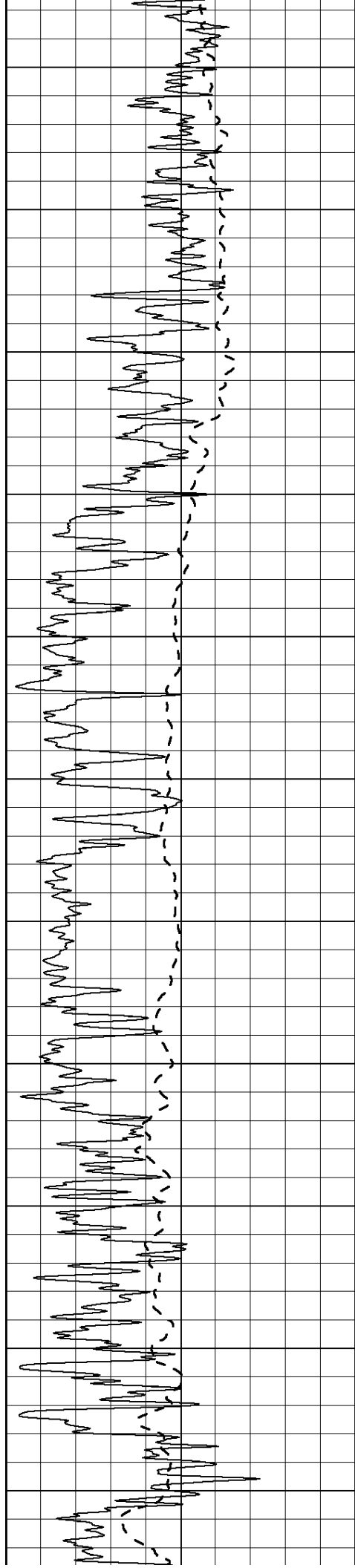




1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500







2100

2150

2200

2250

2300

2350

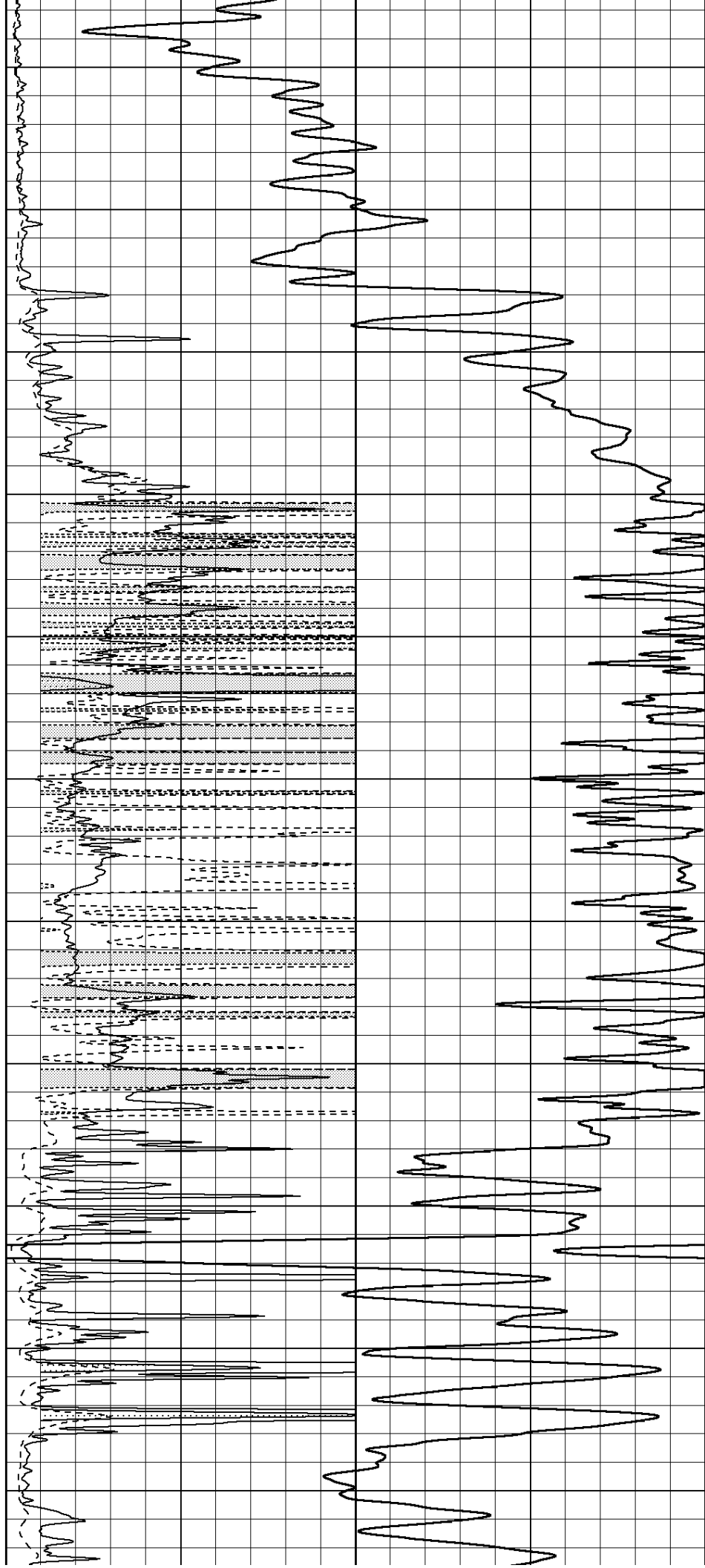
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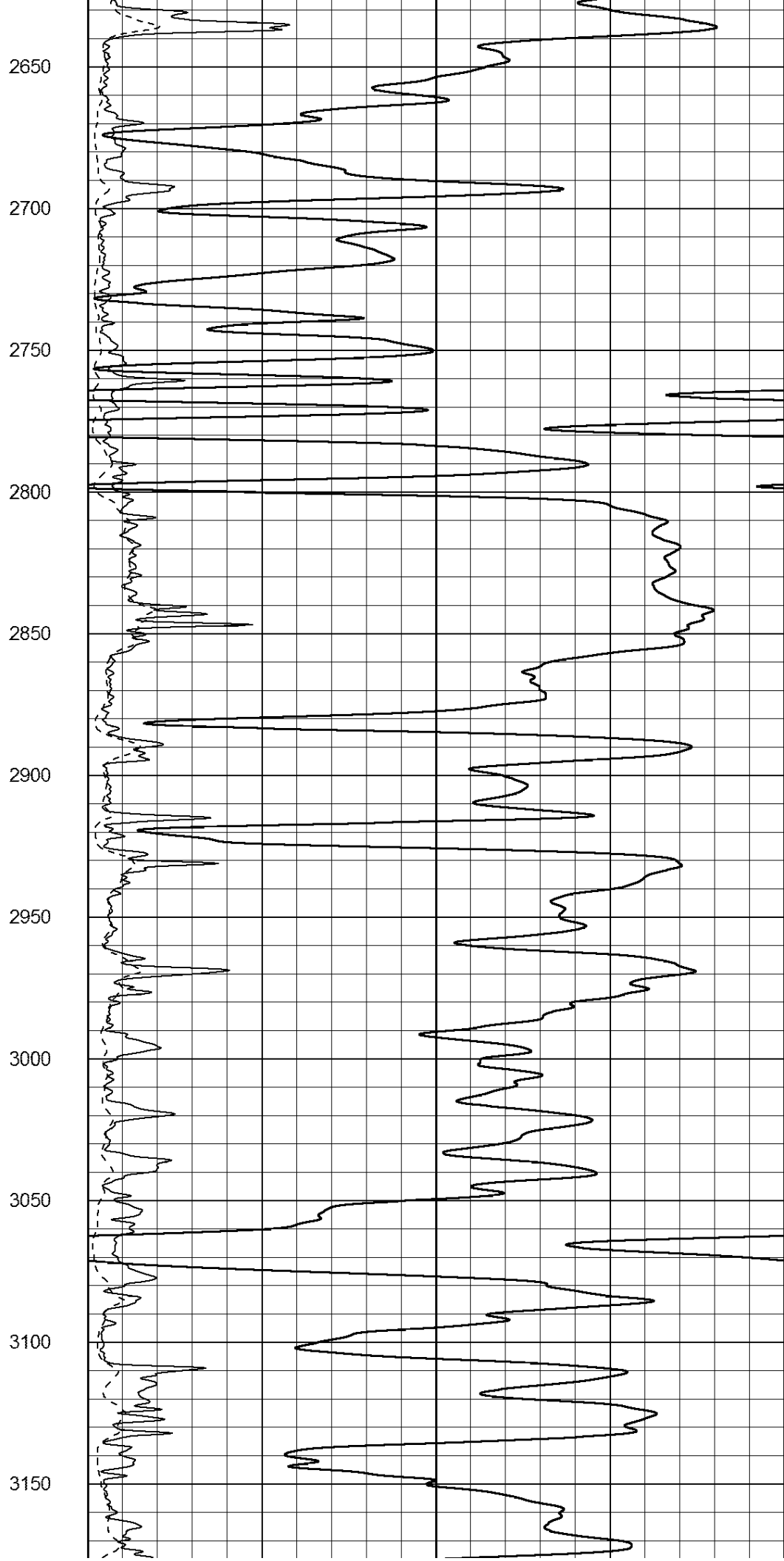
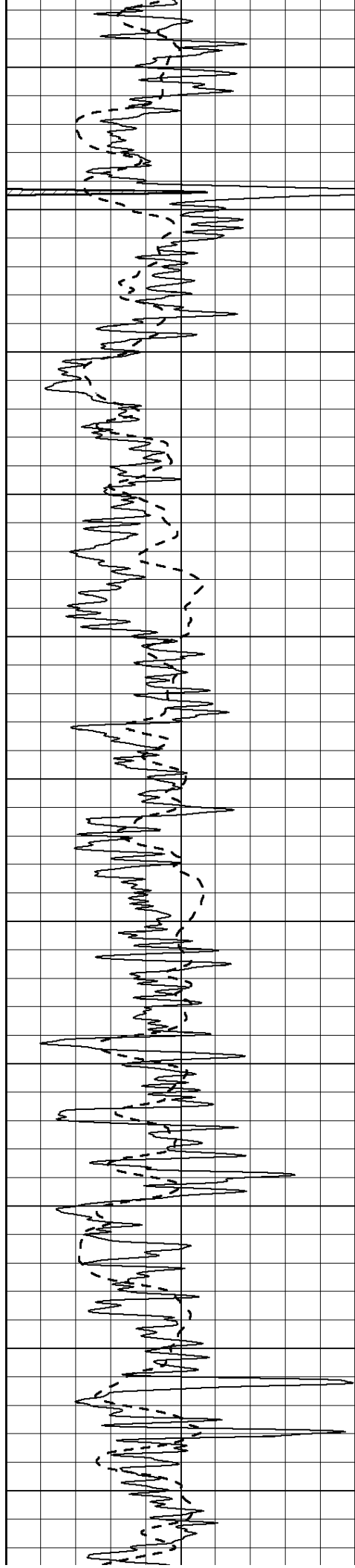
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2500

2550

2600





3200

3250

3300

3350

3400

3450

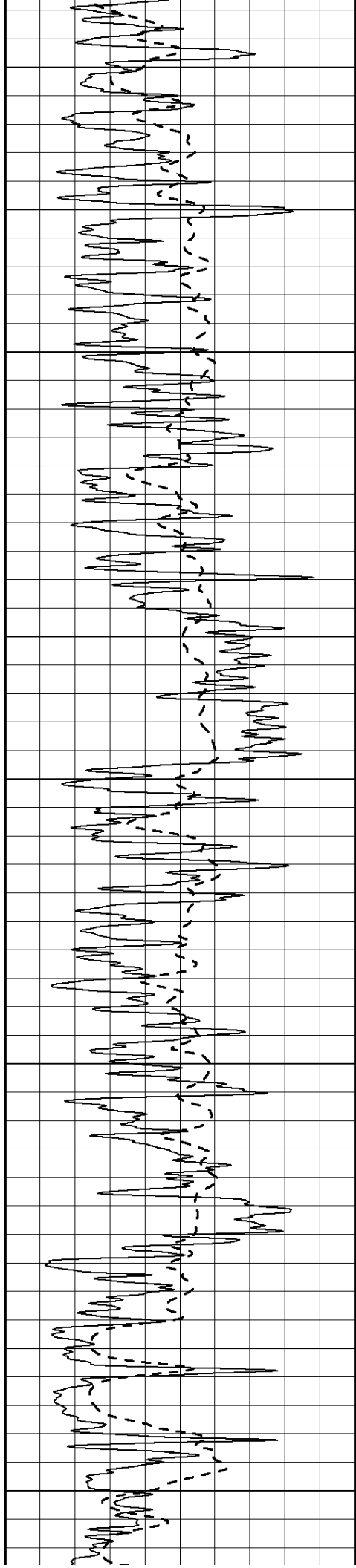
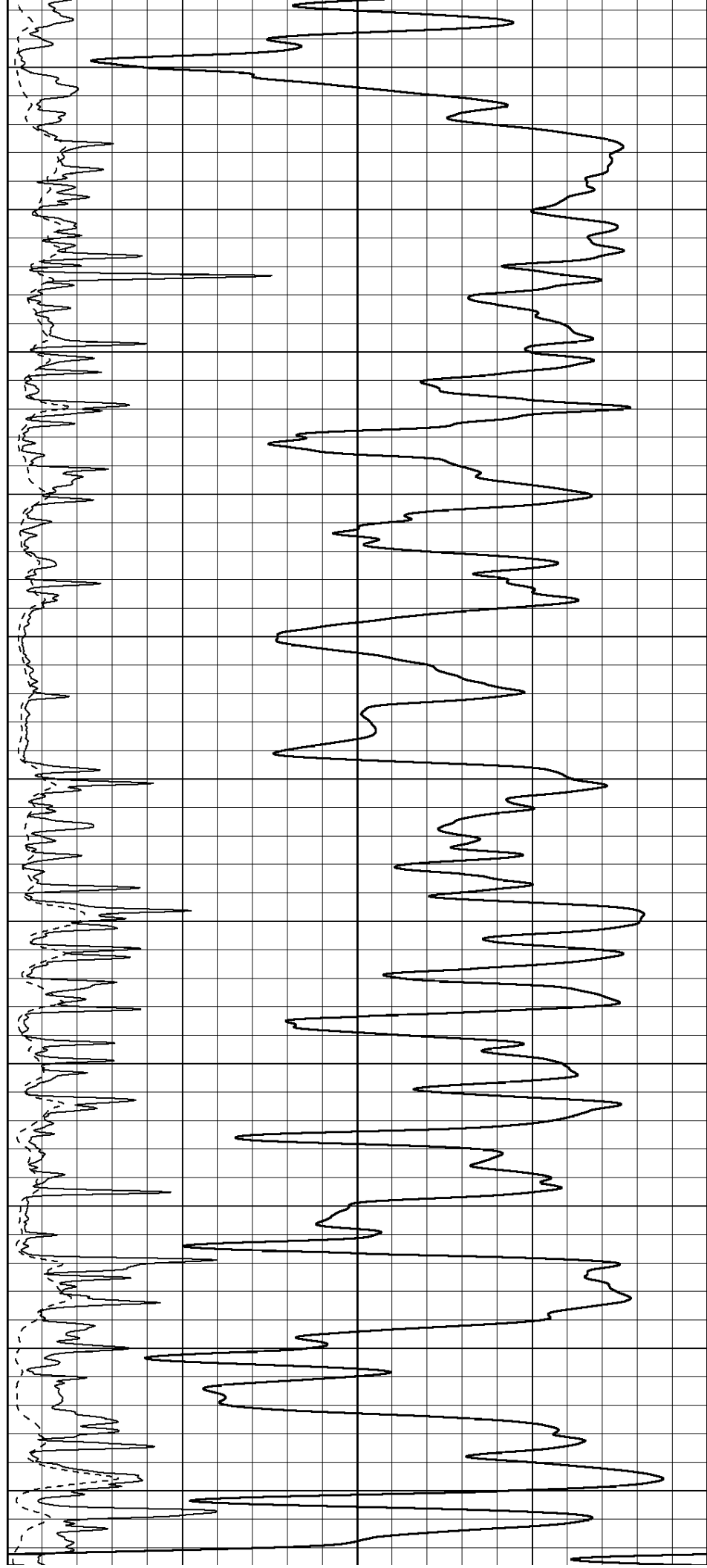
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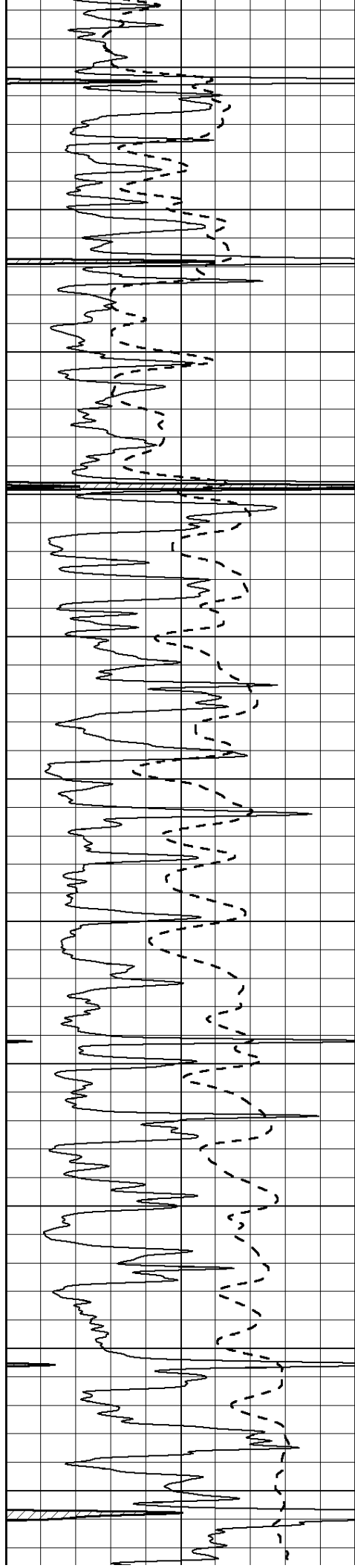
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3600

3650

3700





3750

3800

3850

3900

3950

4000

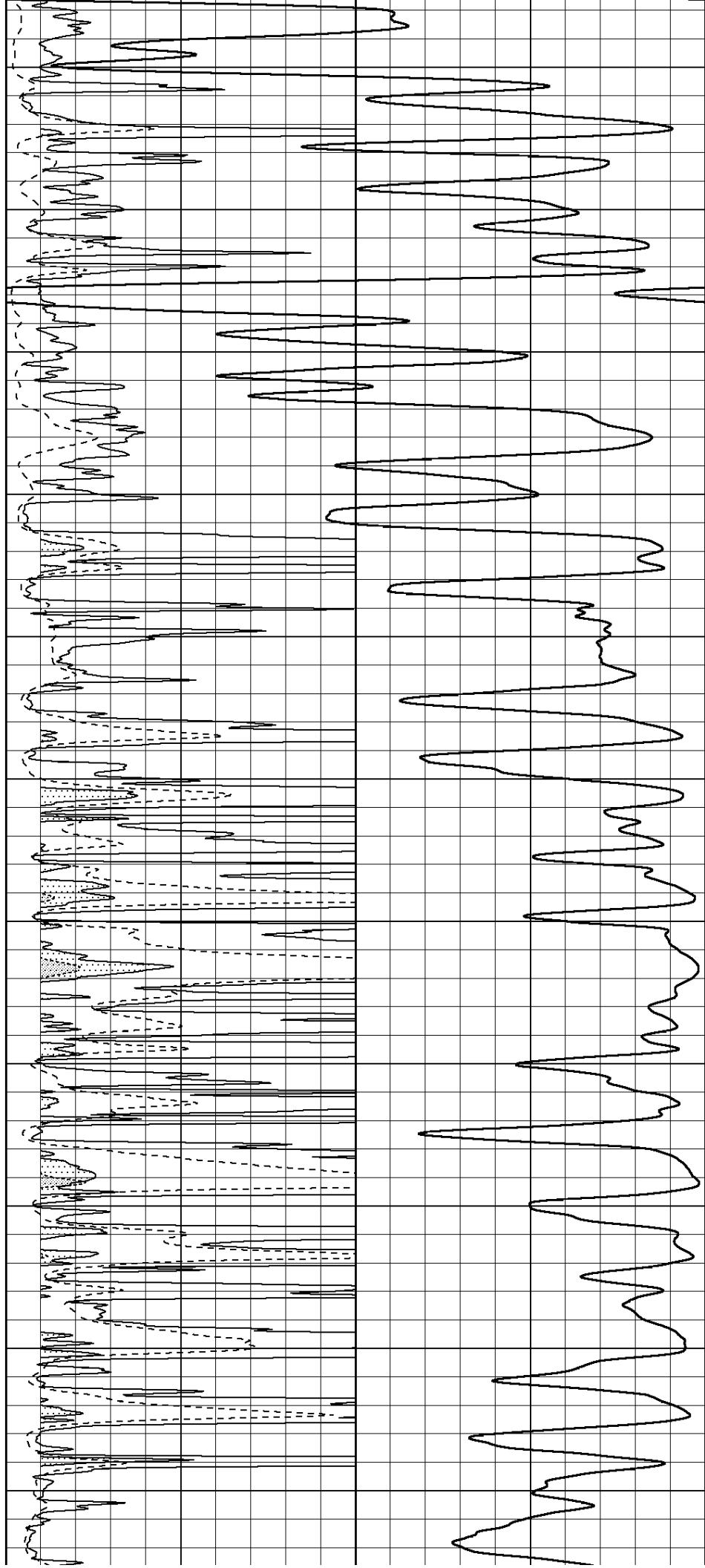
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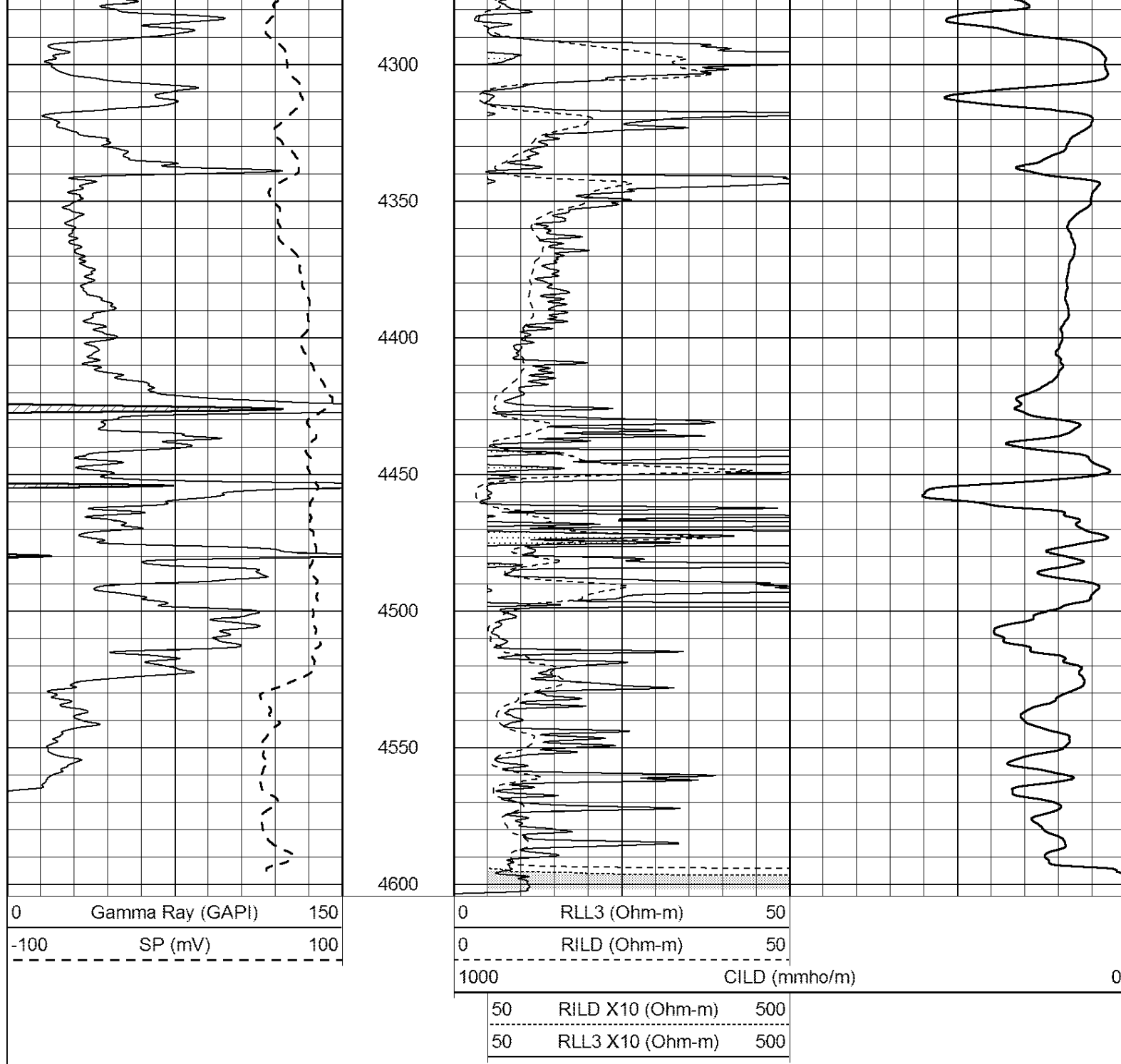
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4150

4200

4250





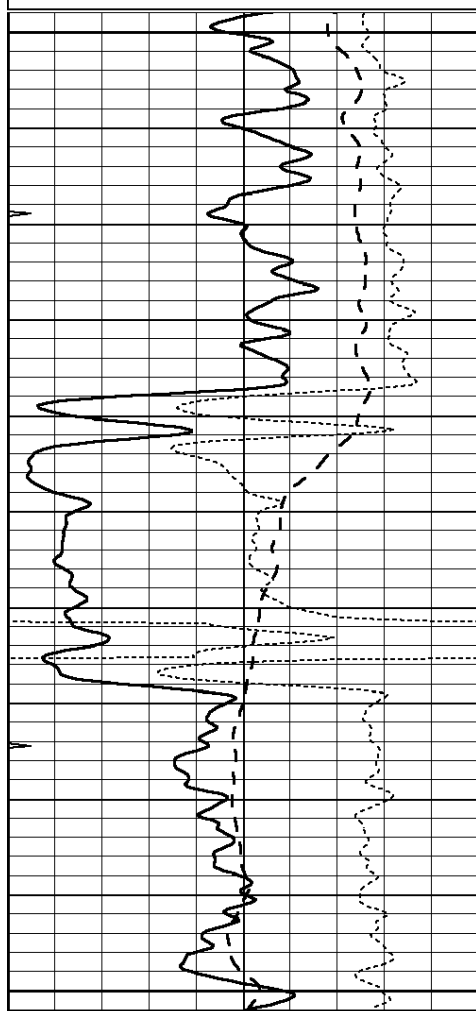
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ANHYDRITE

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 Dataset Creation: Thu Jan 26 00:58:55 2012 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	20

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

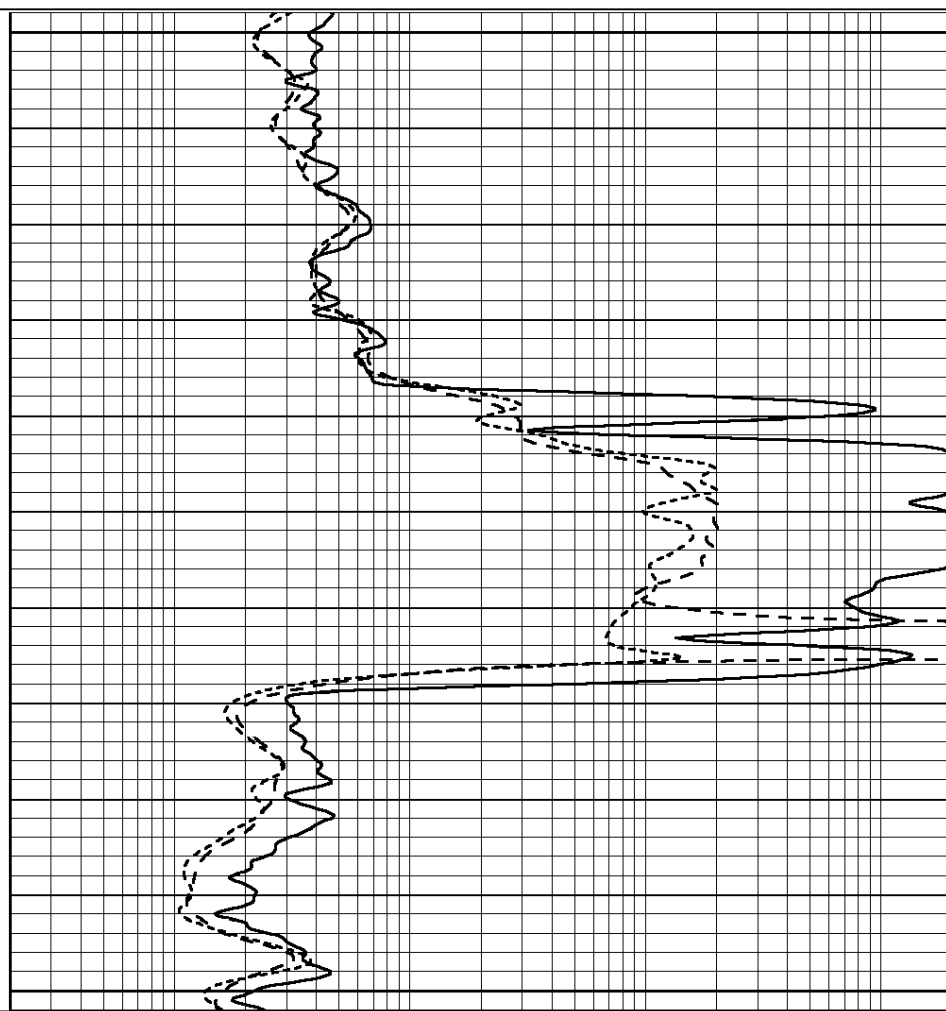


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

1800

1850

1900



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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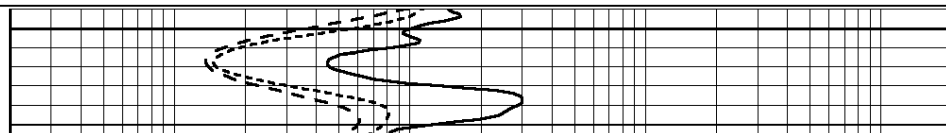
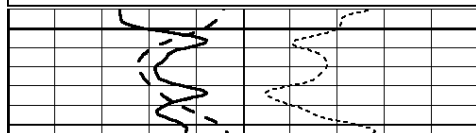
MAIN SECTION

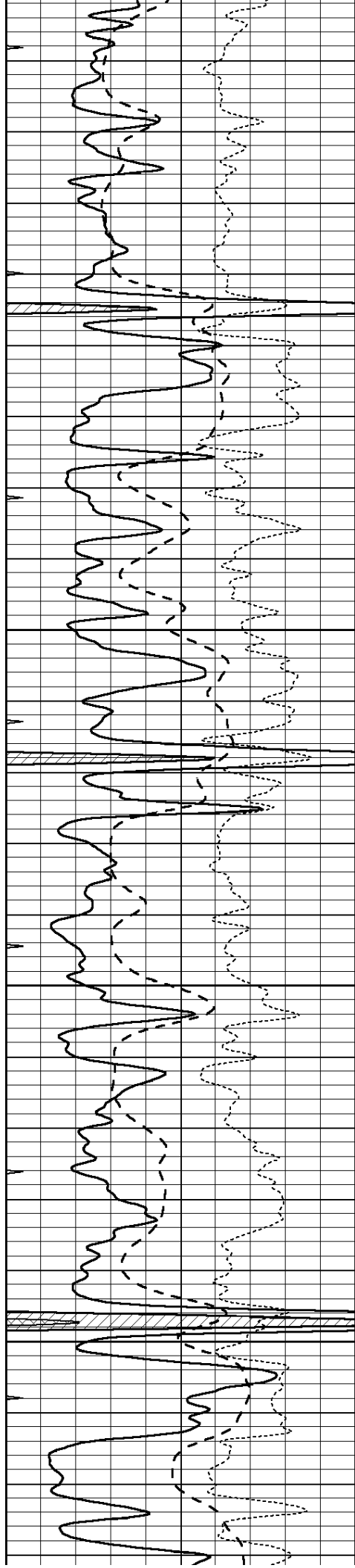
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 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

3700



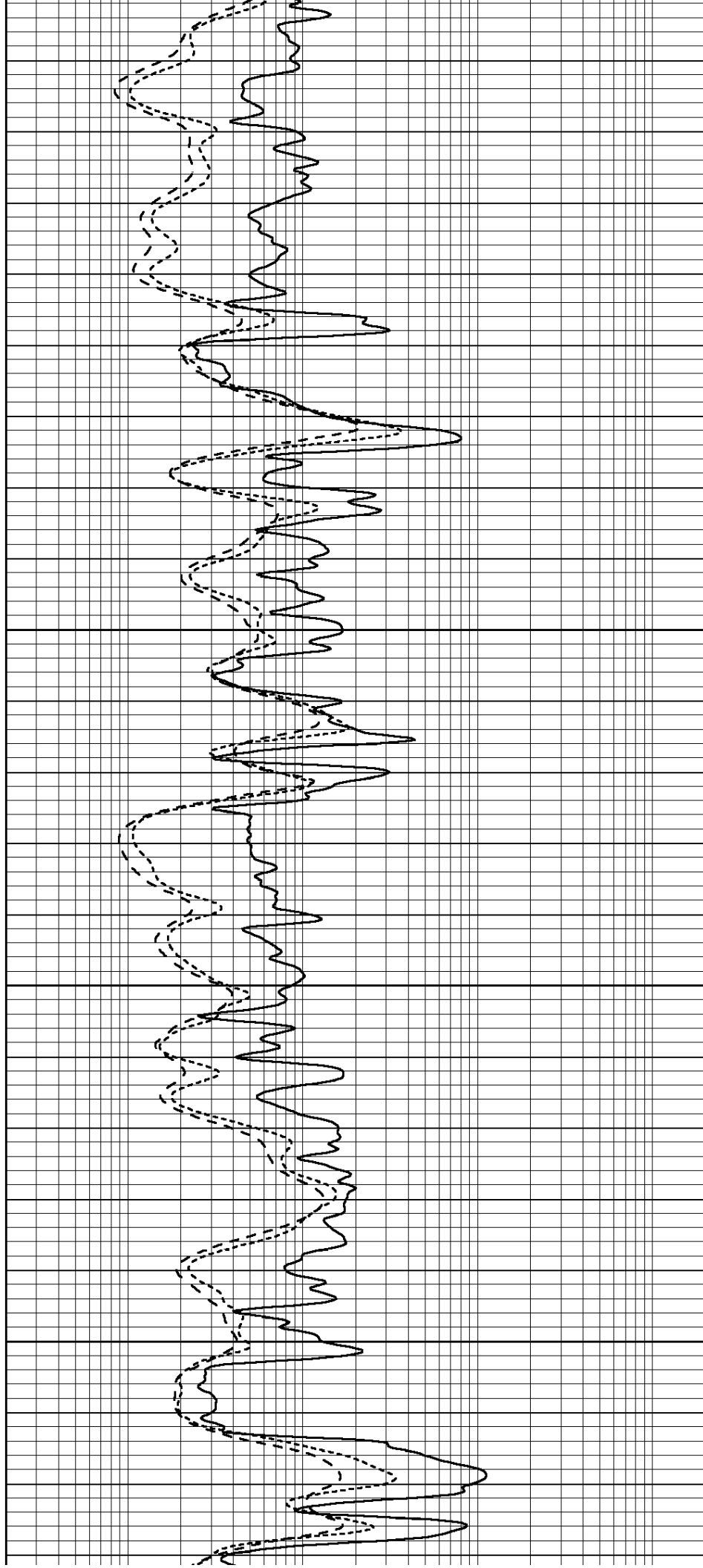


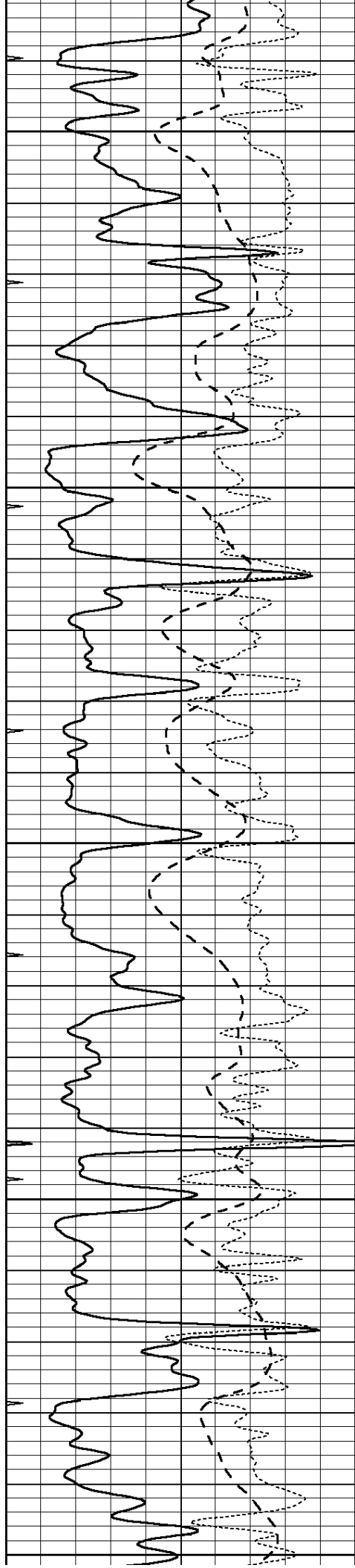
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3800

3850

3900





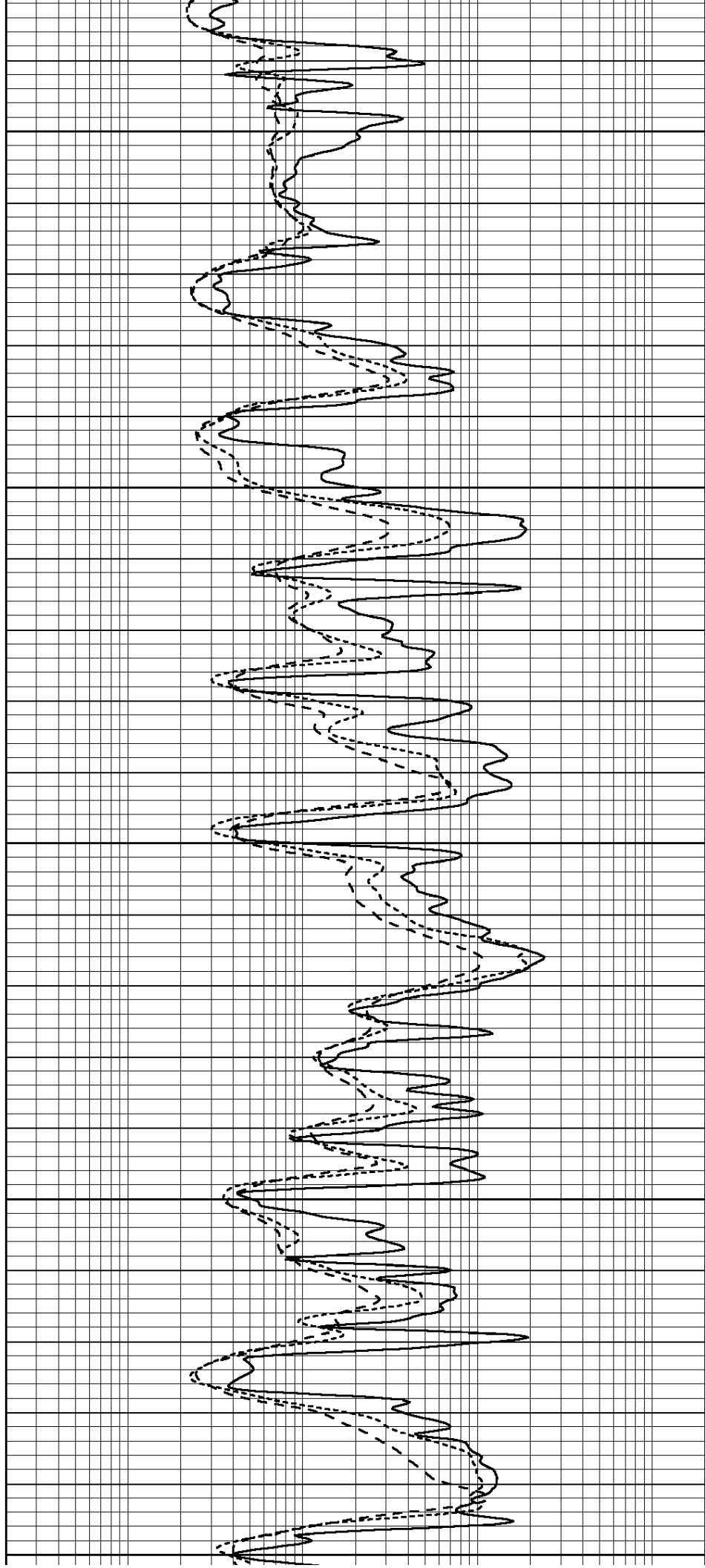
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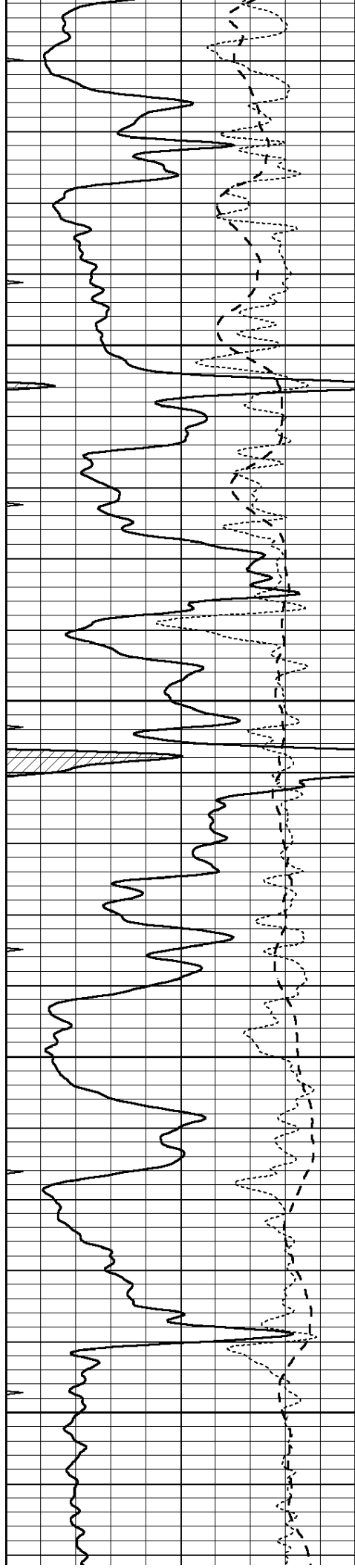
4000

4050

4100

4150



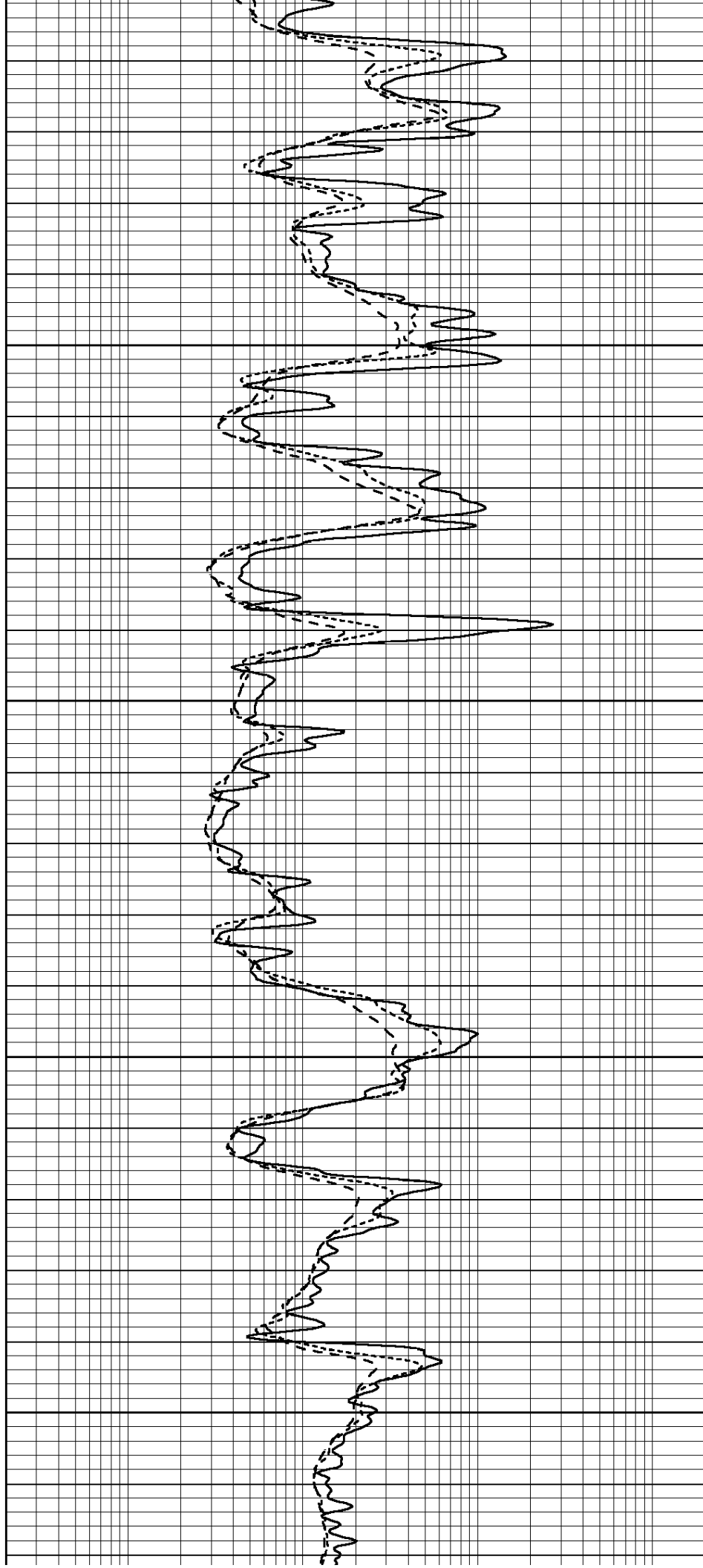


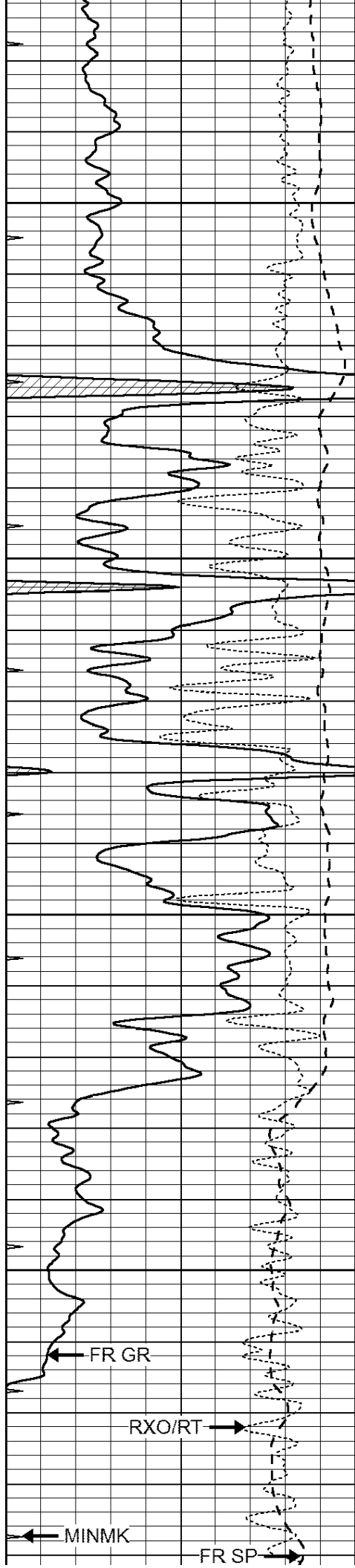
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4250

4300

4350





4400

4450

4500

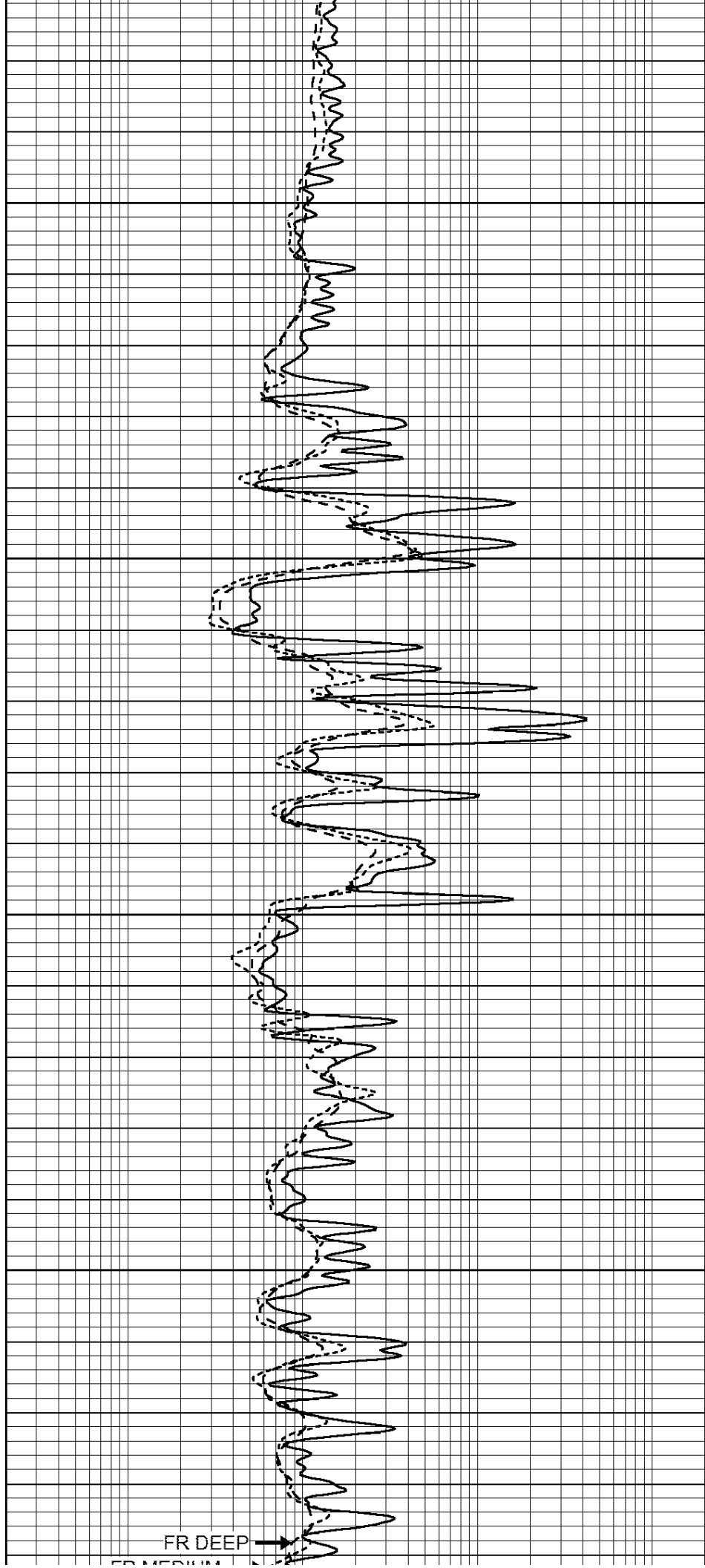
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FR GR

RXO/RT

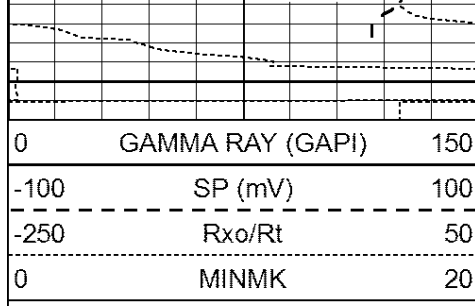
MINMK

FR SP

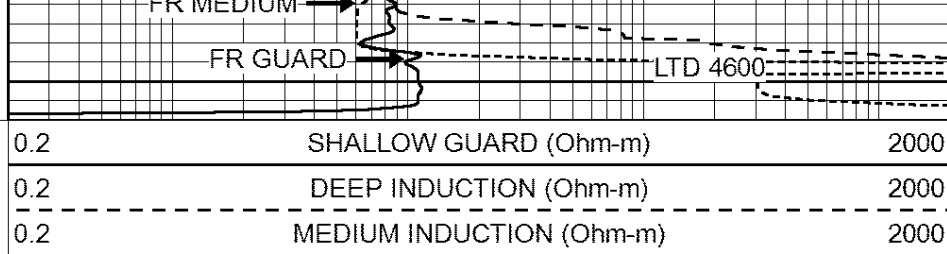


FR DEEP

FR MEDIUM



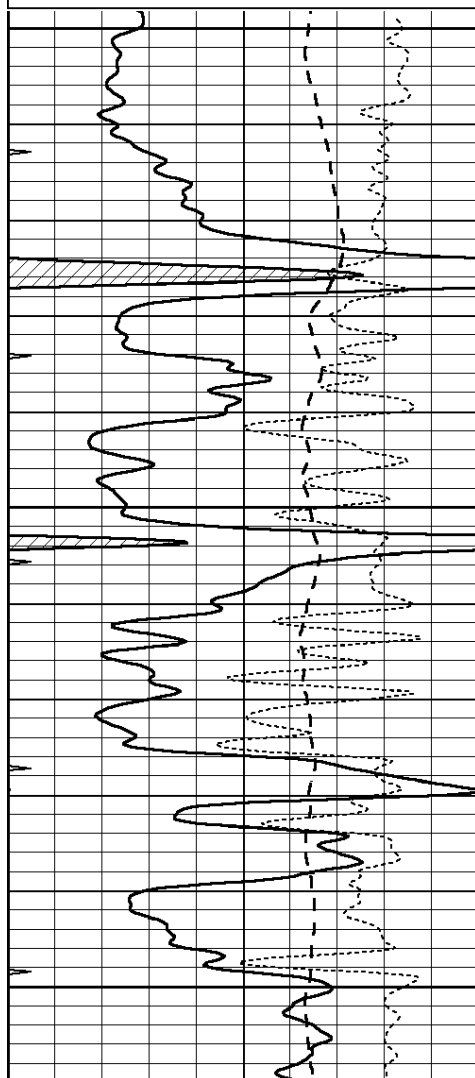
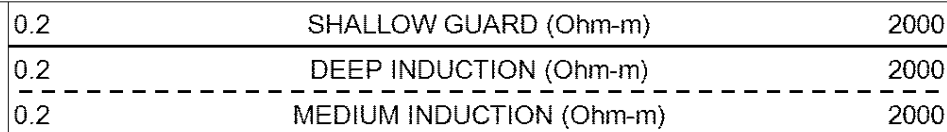
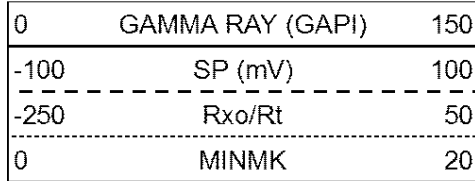
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REPEAT SECTION

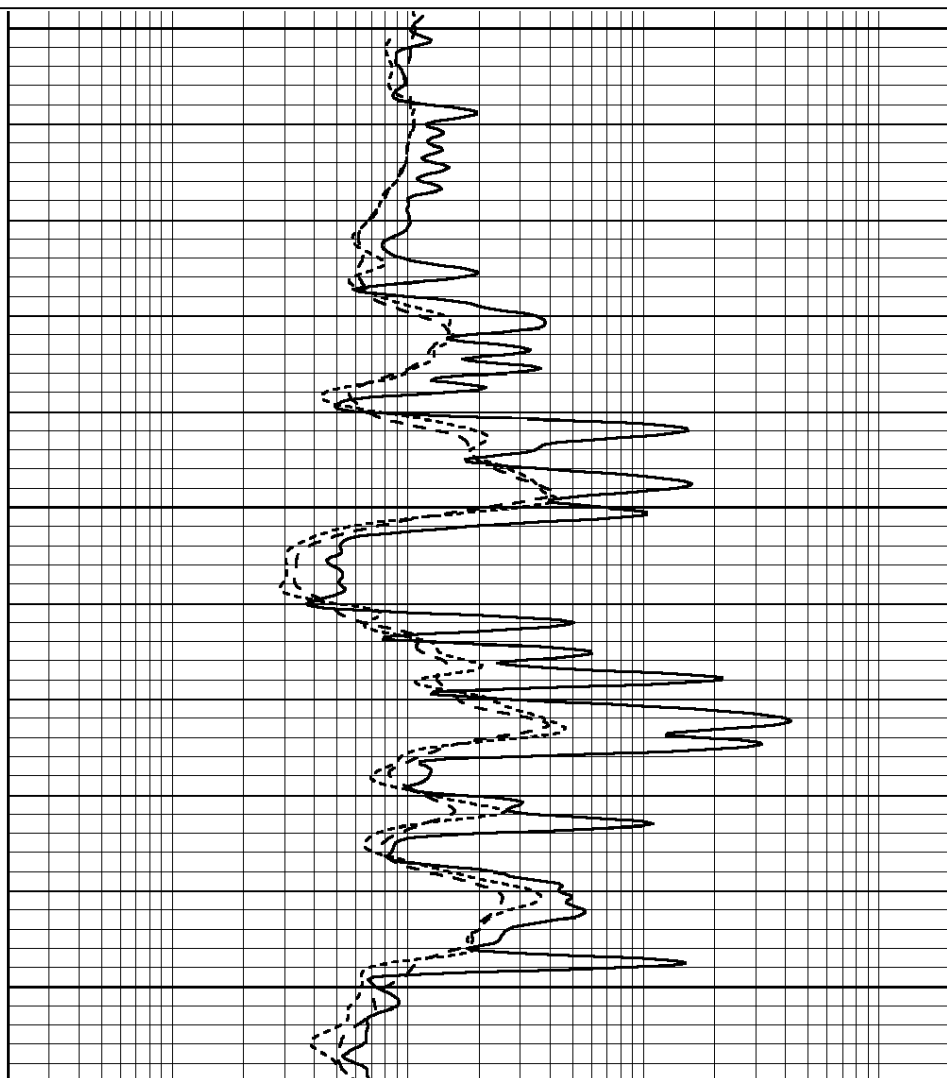
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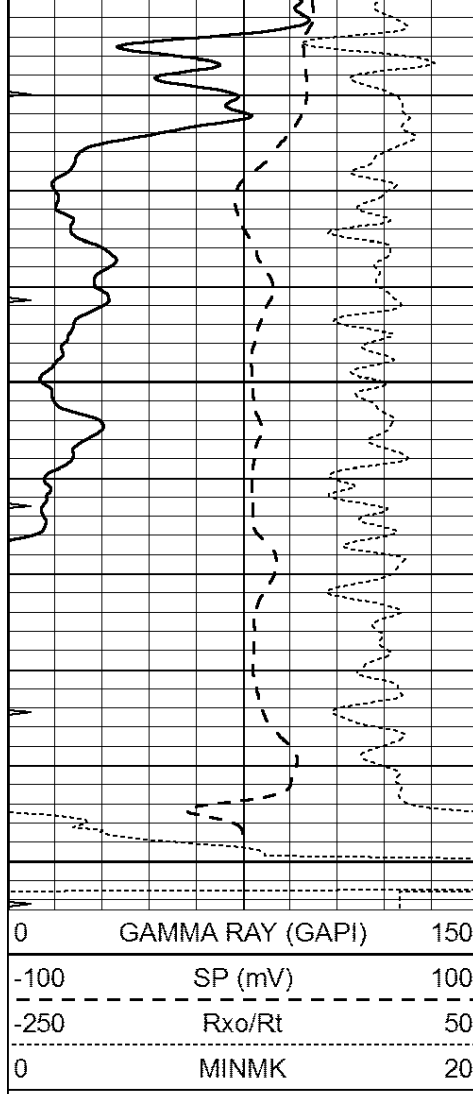


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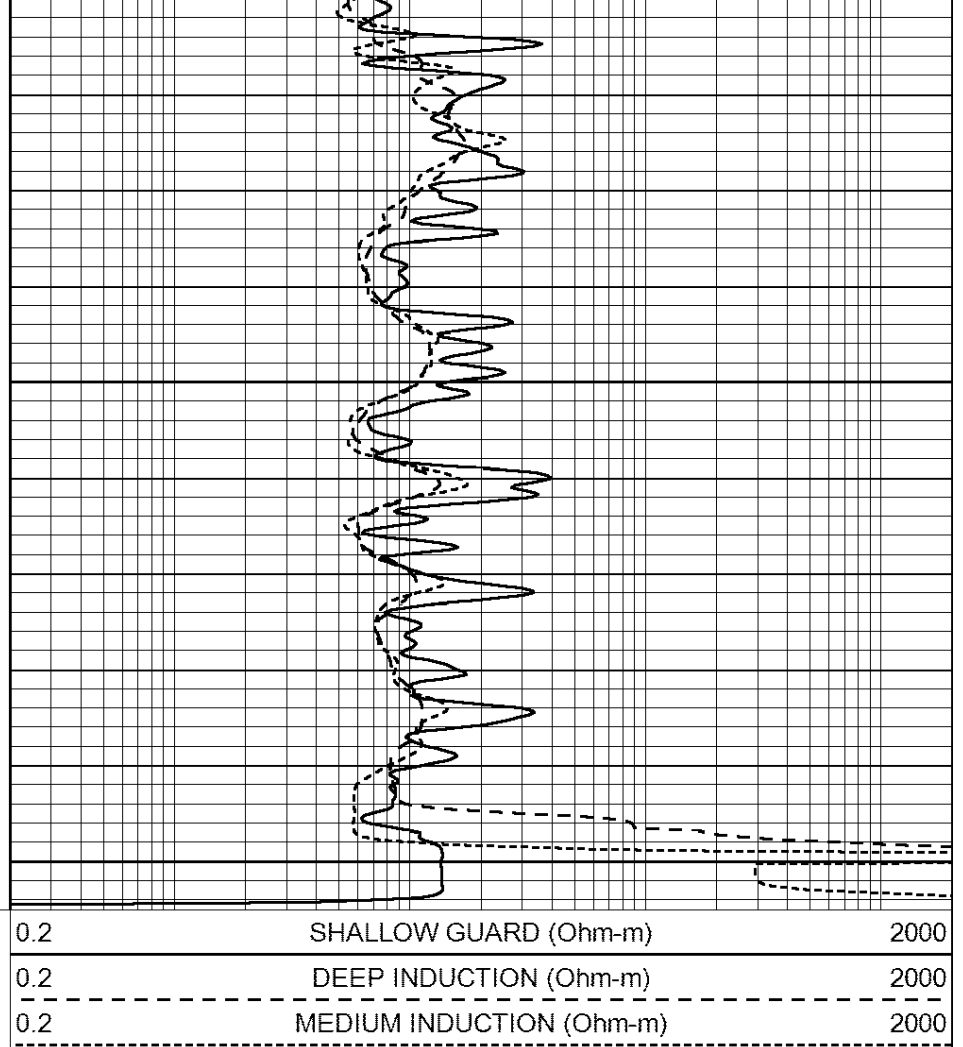
4500





4550

4600



Calibration Report

Database File: 008148pe.db
 Dataset Pathname: pass3.4
 Dataset Creation: Thu Jan 26 00:58:19 2012 by Calc Open-Cased 110302

Dual Induction Calibration Report

Serial-Model:
 Performed:

DIL3-GEAR
 Mon Jan 23 12:20:15 2012

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	6.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-5.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

Litho Density Calibration Report
 Serial: 006 Model: PRB
 Performed Sun Aug 15 09:48:41 2010

Litho Density Calibration

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	8.2			
	5.9	15.0			
	Gain: 3.5		Offset: -5.8		
Compensated Neutron Calibration Report					
		Serial Number:	070808		
		Tool Model:	Probe		
PRE-SURVEY VERIFICATION					
Detector	Readings	Measured	Target		
Short Space	cps				
Long Space	cps	pu	pu		
POST-SURVEY VERIFICATION					
Detector	Readings	Measured	Target		
Short Space	cps				
Long Space	cps	pu	pu		
Gamma Ray Calibration Report					
Serial Number:	070559				
Tool Model:	OPEN_GR				
Performed:	Wed Jan 25 15:25:35 2012				
Calibrator Value:	1.0	GAPI			
Background Reading:	0.0	cps			
Calibrator Reading:	1.0	cps			
Sensitivity:	0.2800	GAPI/cps			