

**NABORS****COMPLETION
& PRODUCTION
SERVICES CO.****DUAL INDUCTION
LOG**

Company	DOWNING - NELSON OIL CO. INC.		
Well	DIANA PFEIFER #1-14		
Field	WILDCAT		
County	ELLIS		
State	KANSAS		
Company	DOWNING - NELSON OIL COMPANY, INC.		
Well	DIANA PFEIFER #1-14		
Field	WILDCAT		
County	ELLIS		
State	KANSAS		
Location:	API # : 15-051-26465-0000		Other Services CDL/CNL MEL/SONIC
	330' FNL & 700' FEL E/2 - NW - NE - NE		
	SEC 14 TWP 13S RGE 19W		
Permanent Datum	GROUND LEVEL	Elevation	2077
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING	Elevation	K.B. 2085 D.F. 2083 G.L. 2077
Date	4/8/13		
Run Number	ONE		
Depth Driller	3793		
Depth Logger	3794		
Bottom Logged Interval	3792		
Top Log Interval	00		
Casing Driller	8 5/8"@220'		
Casing Logger	220		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	9.0/5.1		
pH / Fluid Loss	10.0/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.580@84F		
Rmf @ Meas. Temp	.435@84F		
Rmc @ Meas. Temp	.696@84F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.427@114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	12:00 A.M.		
Maximum Recorded Temperature	114F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	AL DOWNING		

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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 "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
HAYS, KS. (PEANUT HOUSE) 2N., W. INTO

**COMPLETION
& PRODUCTION****MAIN SECTION**

Database File:

010736ddn.db

Dataset Pathname:

pass3.3

Presentation Format:

dil2

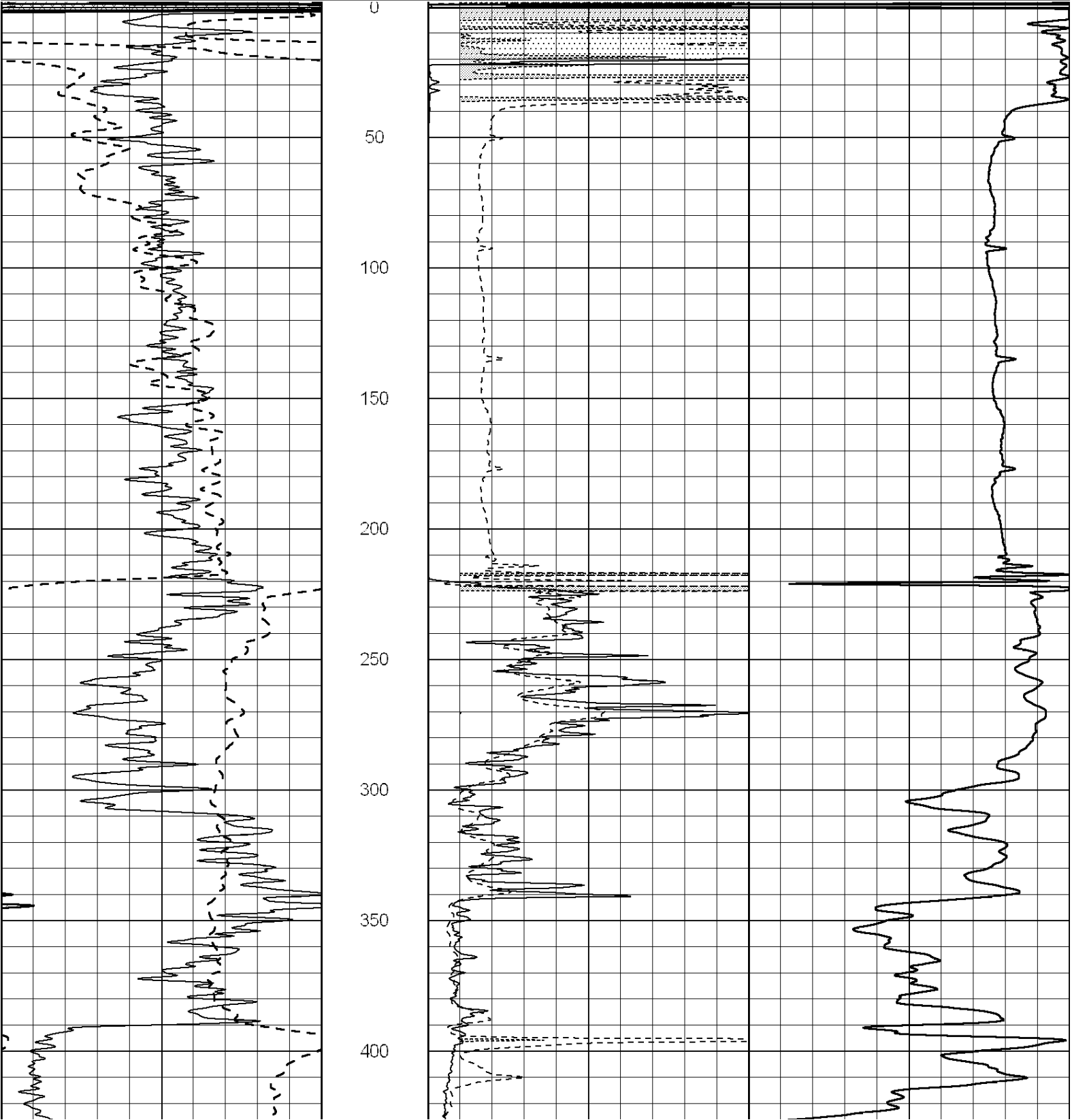
Dataset Creation:

Mon Apr 08 01:16:35 2013 by Calc SOC 120430

Charted by:

Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50	
-100	SP (mV)	100	0	RILD (Ohm-m)	50	
-----			-----			
			1000		CILD (mmho/m)	0
			50	RILD X10 (Ohm-m)	500	
			50	RLL3 X10 (Ohm-m)	500	



450

500

550

600

650

700

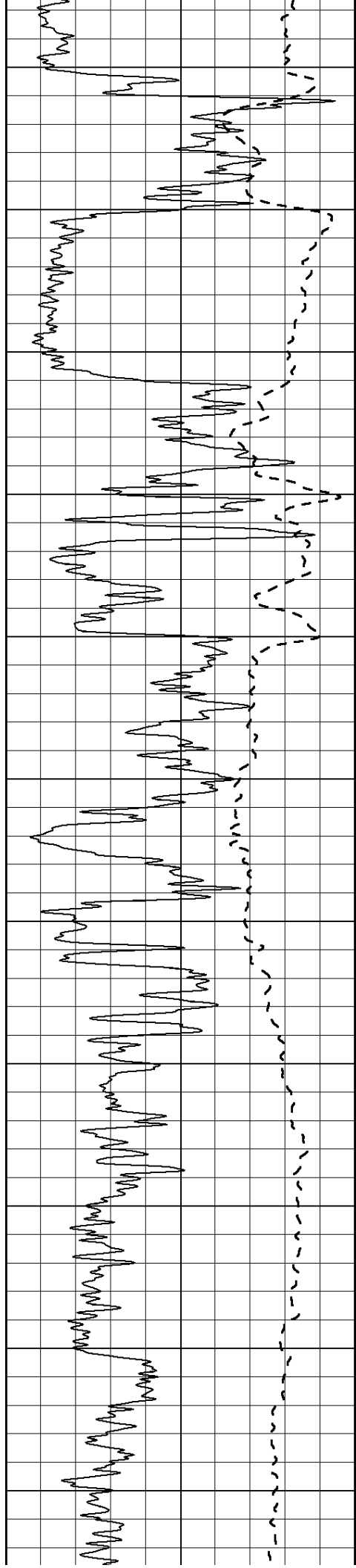
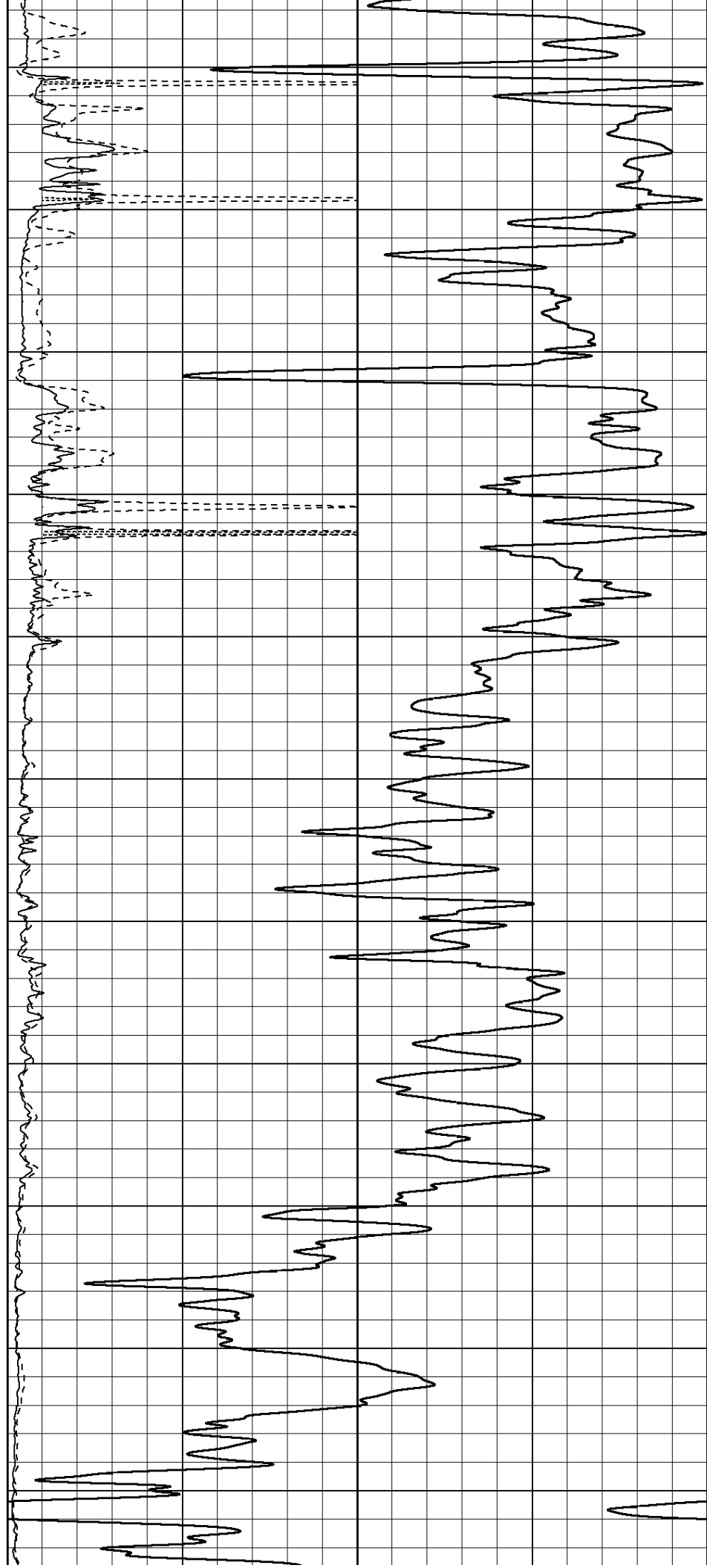
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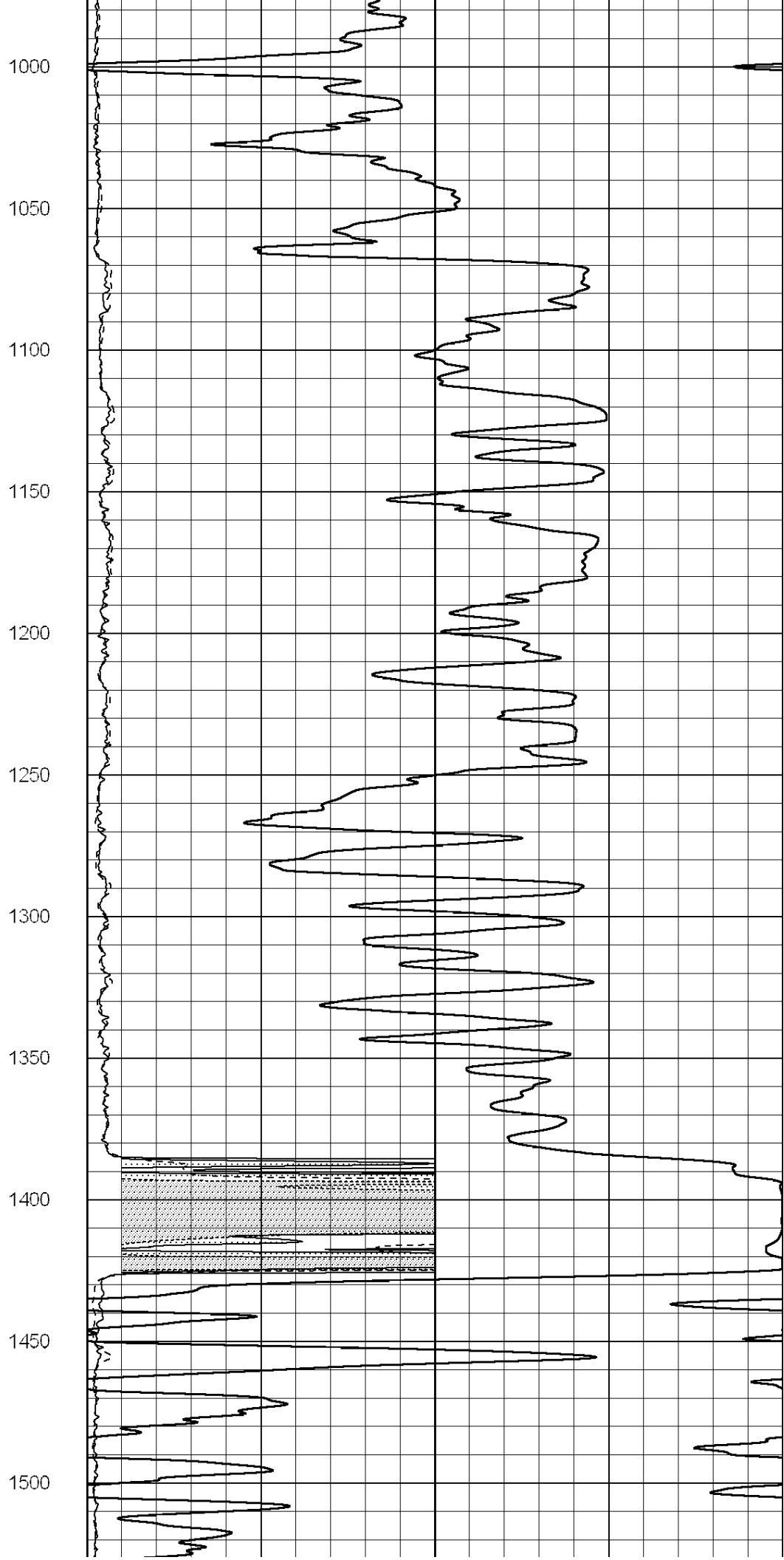
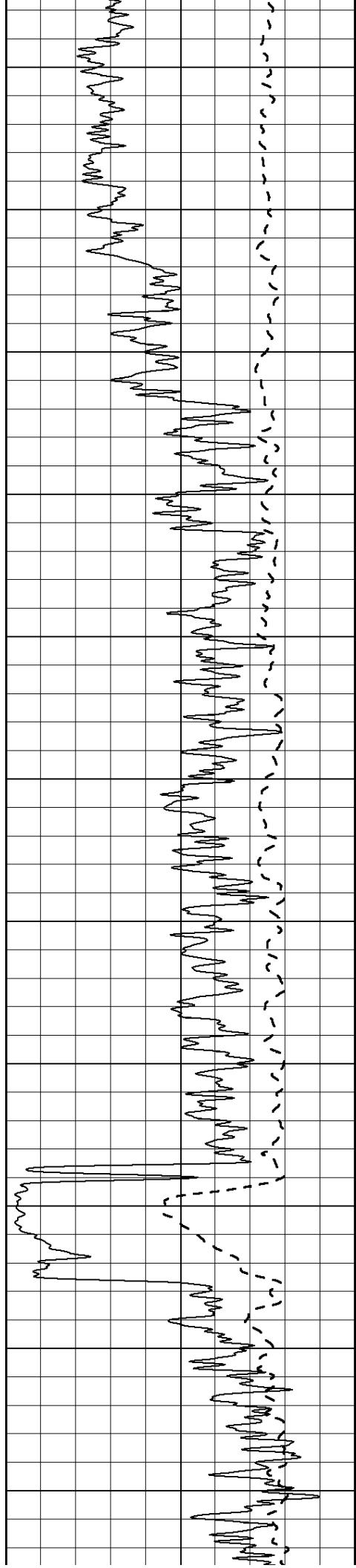
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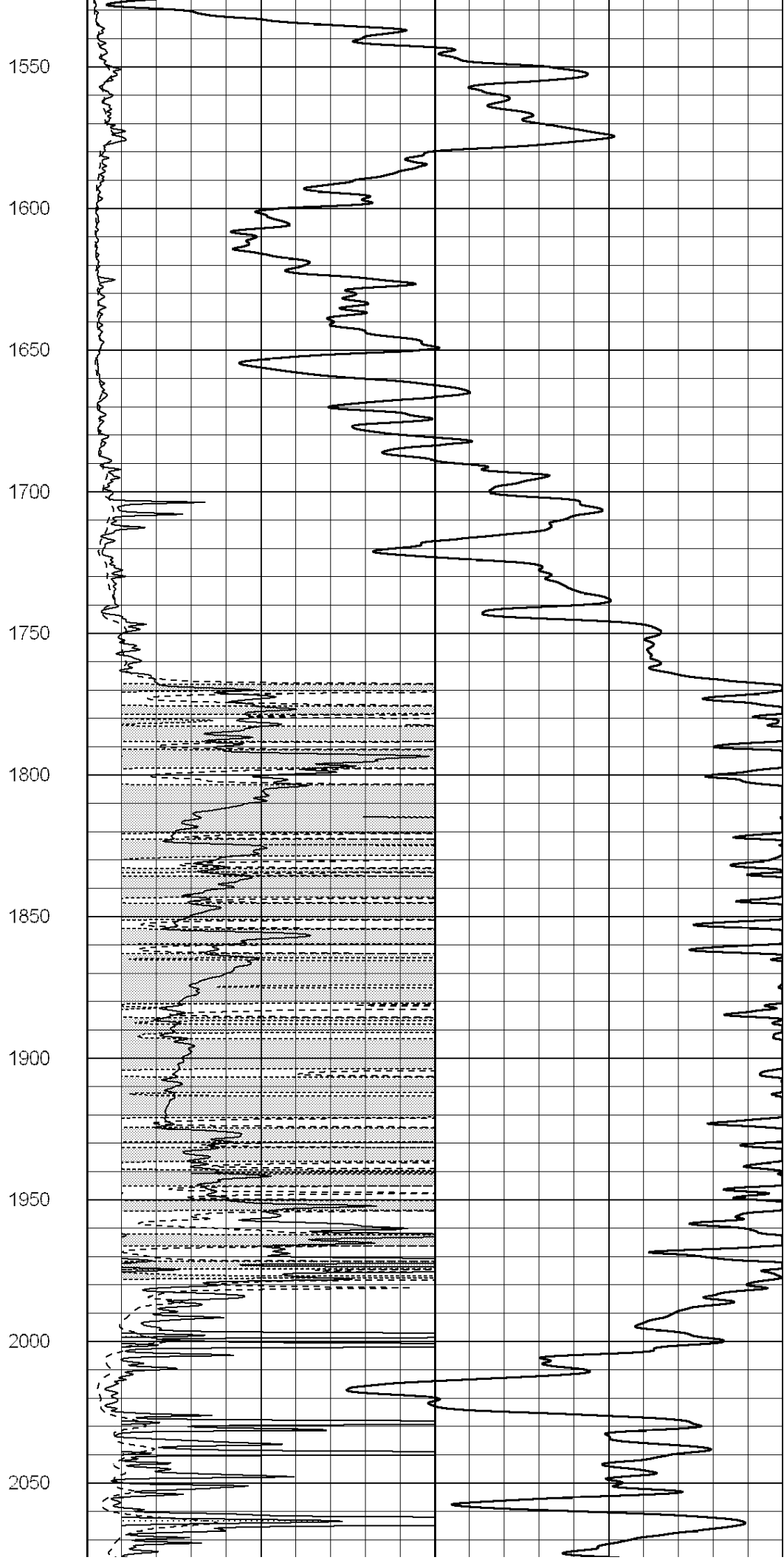
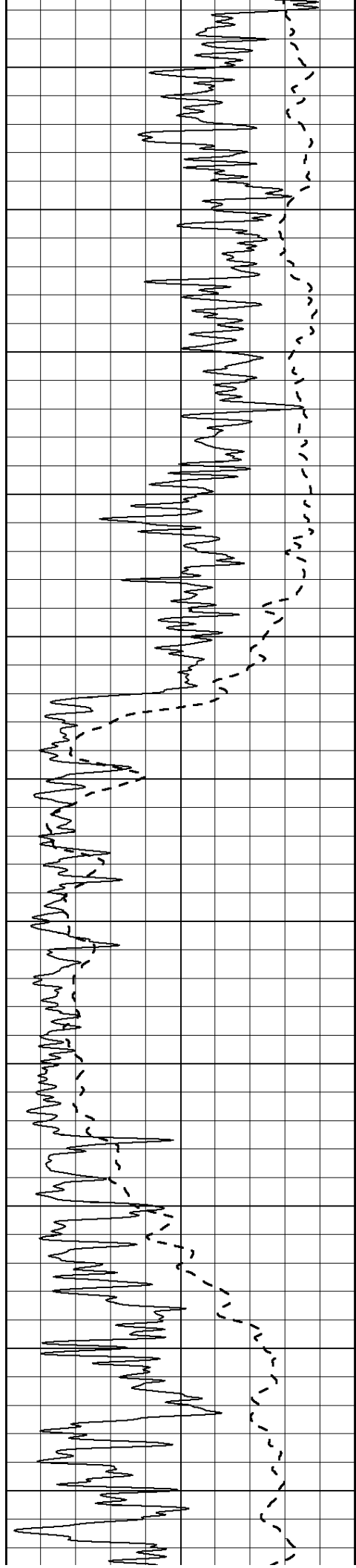
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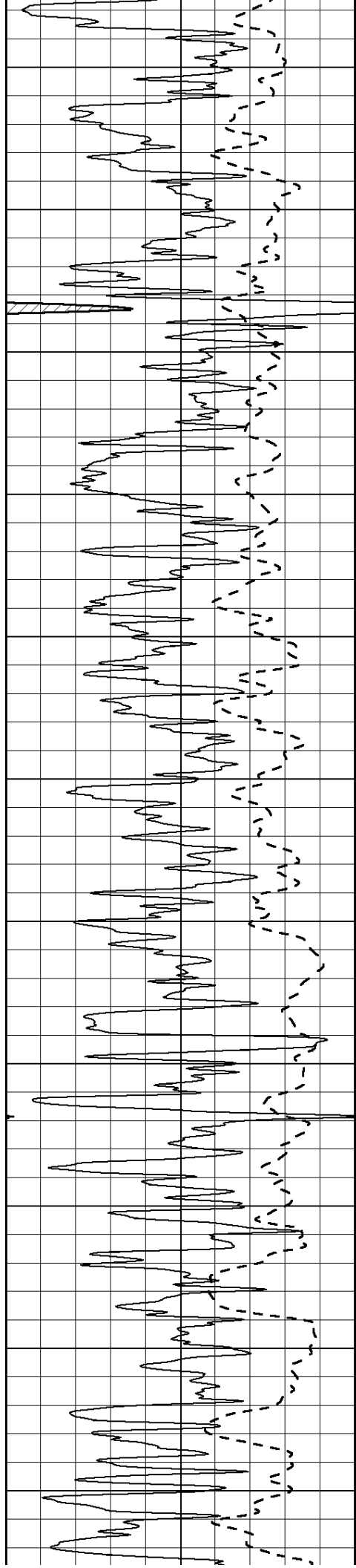
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950









2100

2150

2200

2250

2300

2350

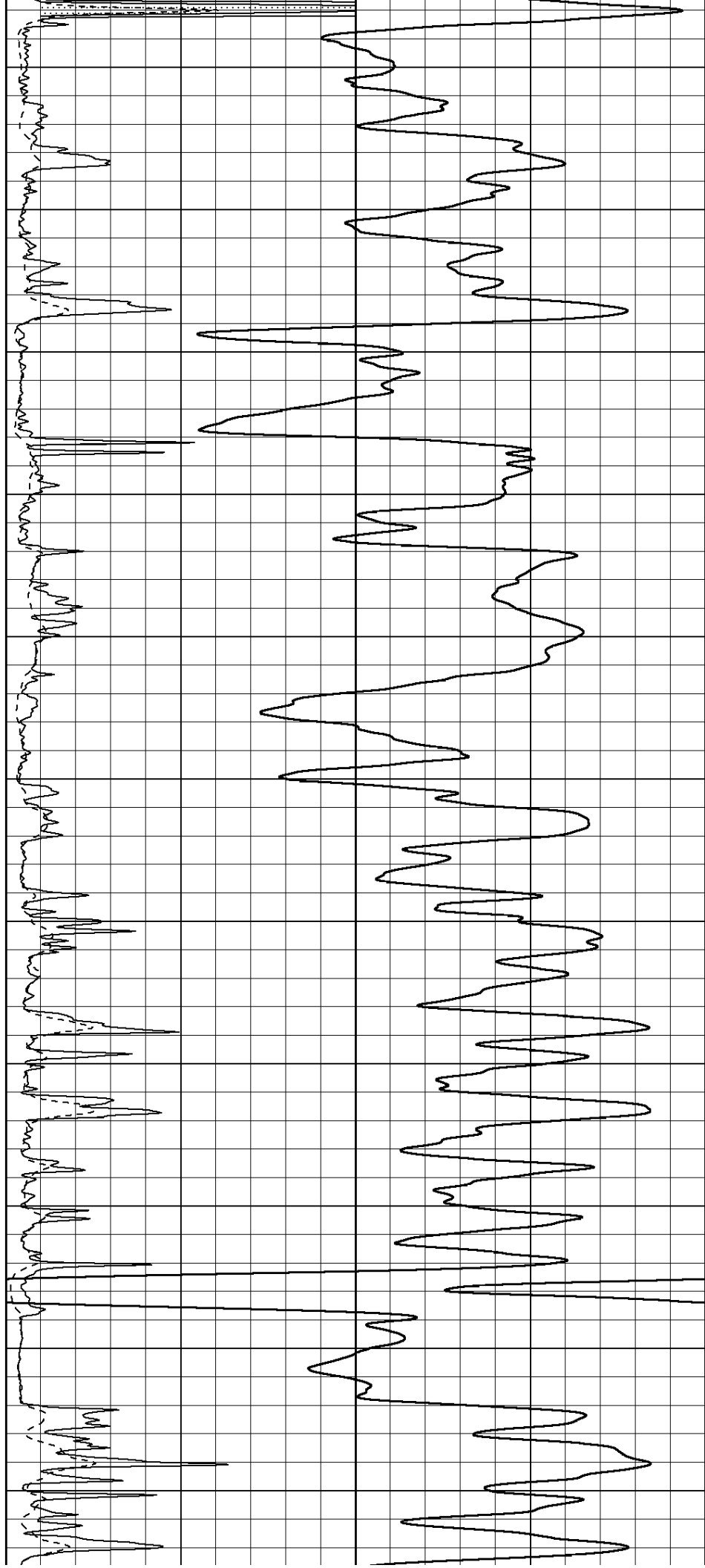
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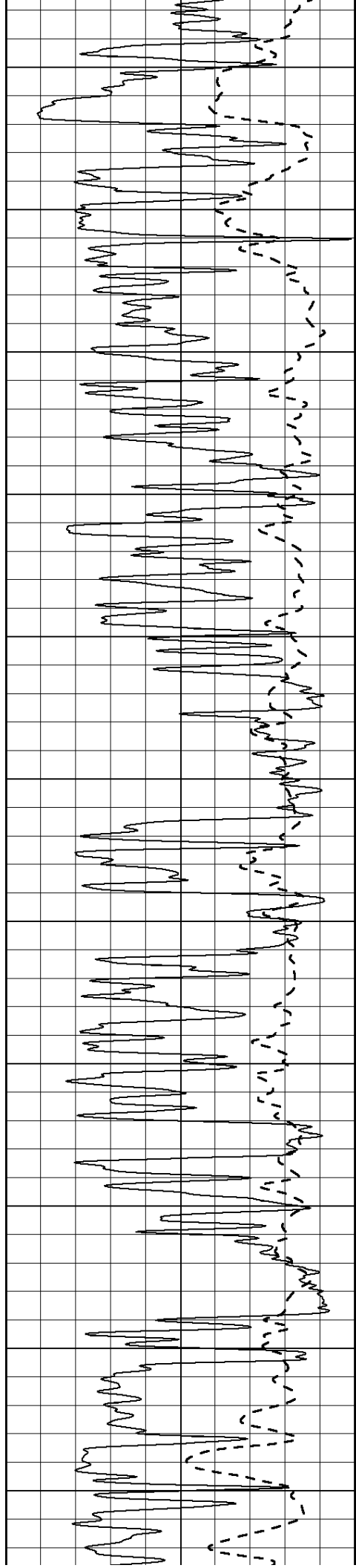
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2500

2550

2600





2650

2700

2750

2800

2850

2900

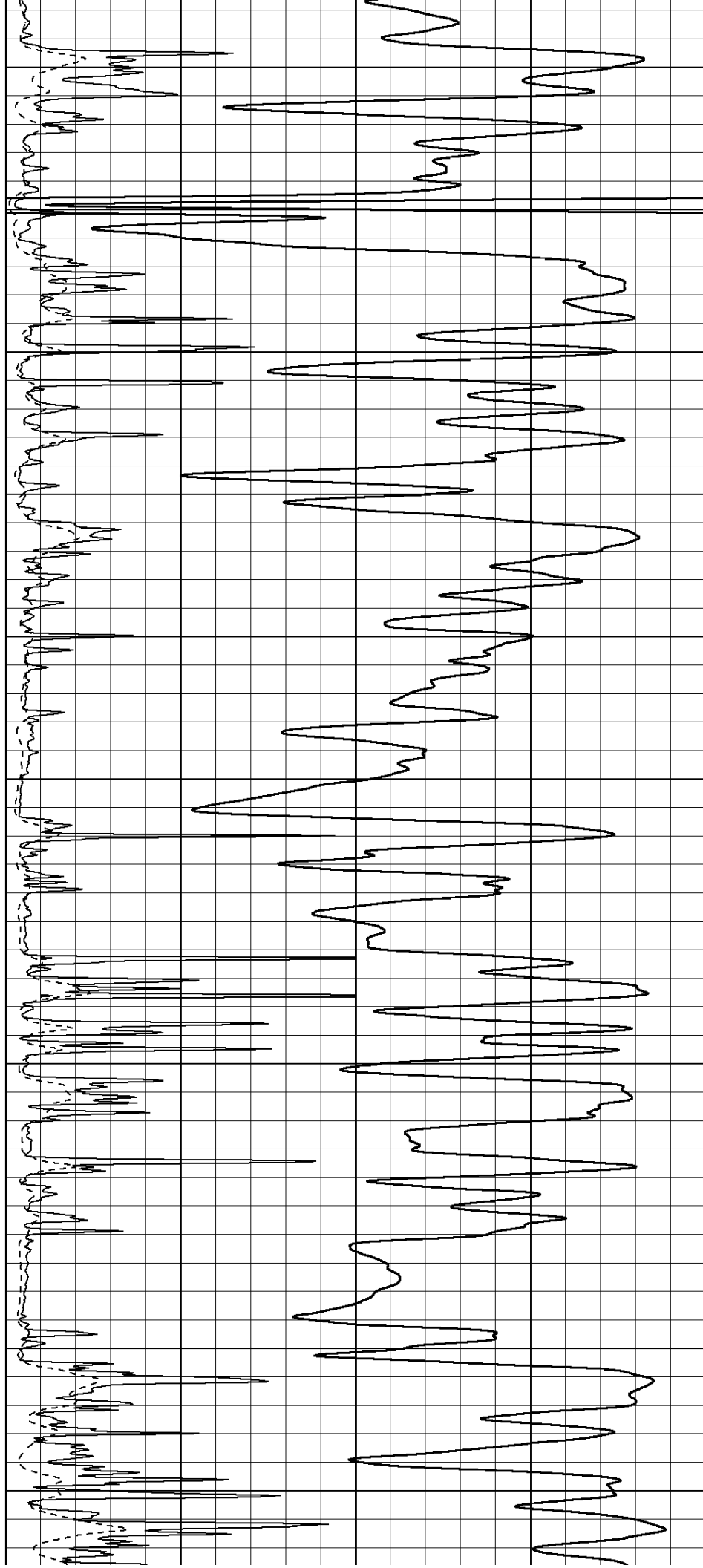
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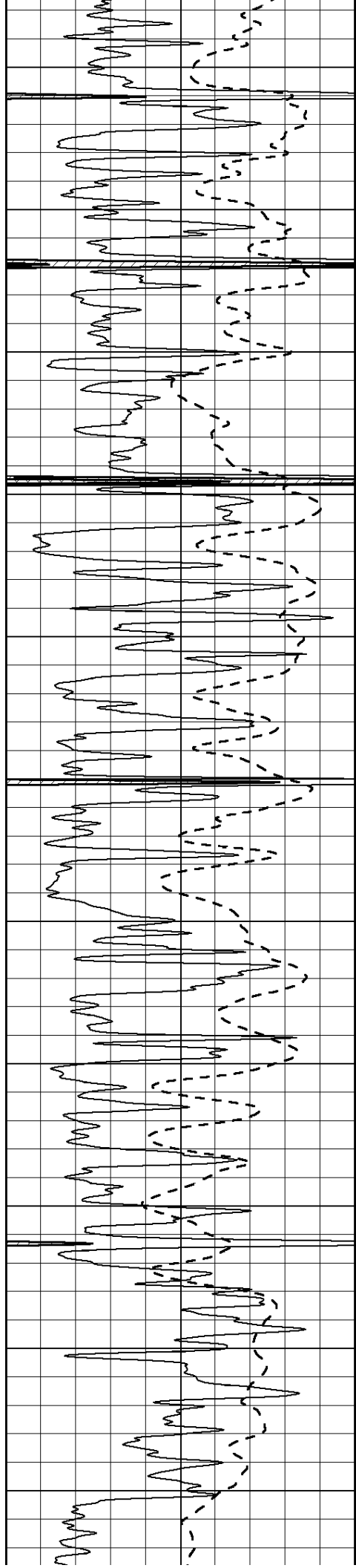
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3050

3100

3150





3200

3250

3300

3350

3400

3450

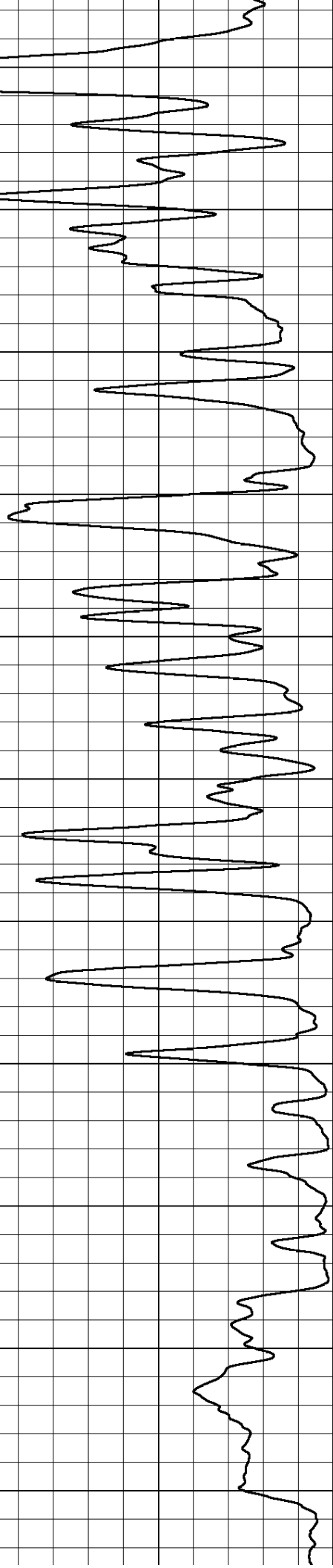
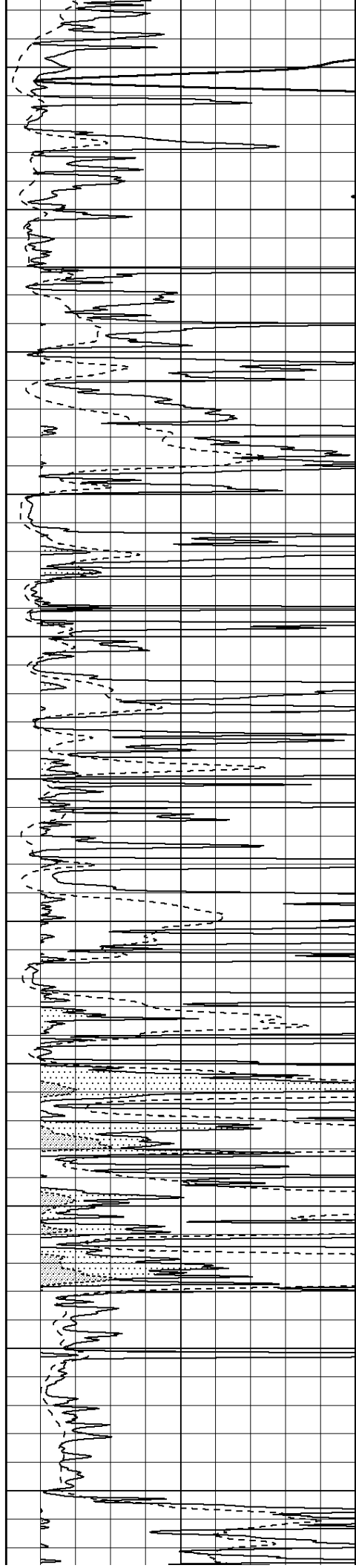
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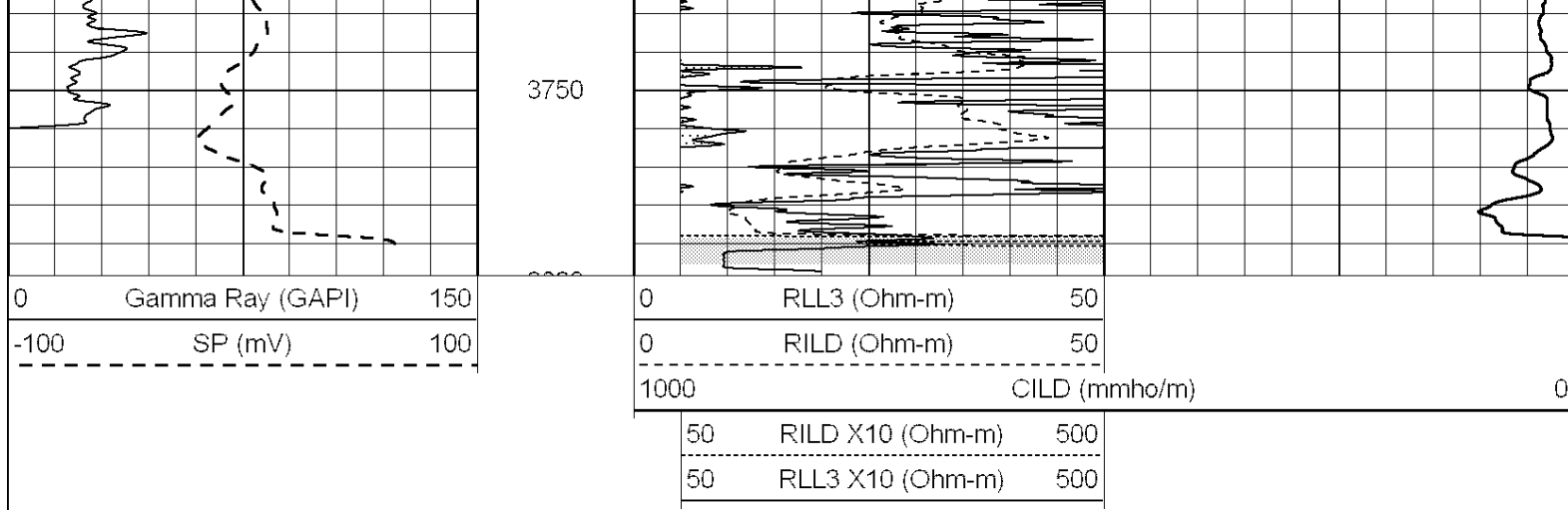
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3600

3650

3700



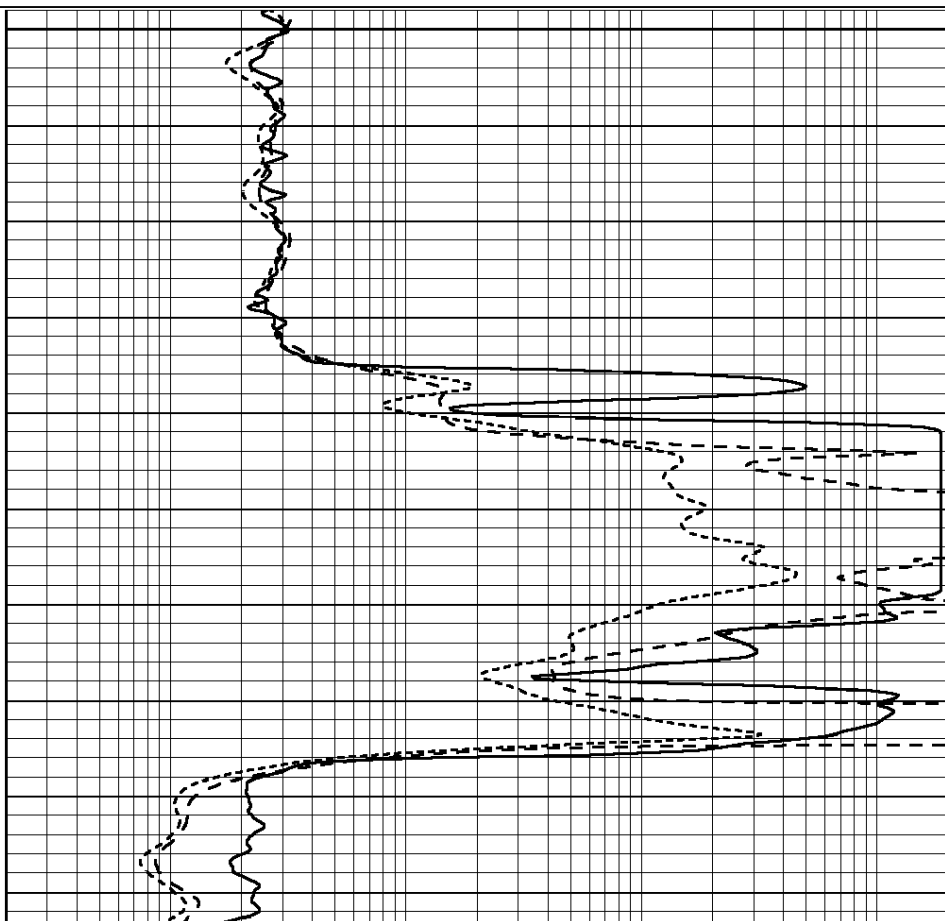
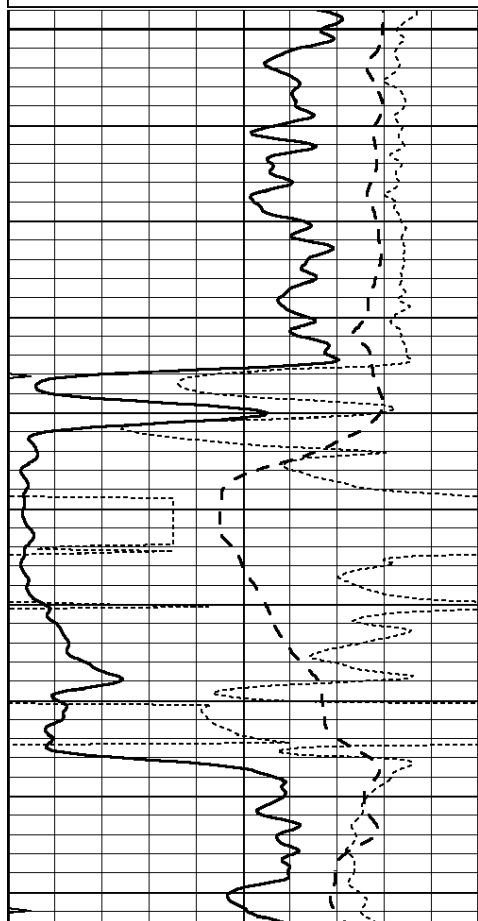


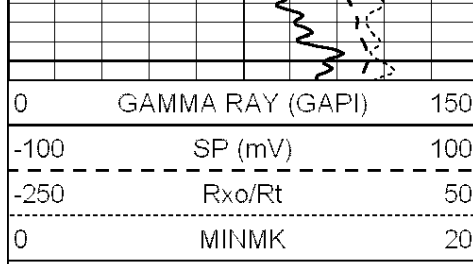
ANHYDRITE

Database File: 010736ddn.db
 Dataset Pathname: pass3.4
 Presentation Format: dil
 Dataset Creation: Mon Apr 08 01:17:10 2013 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

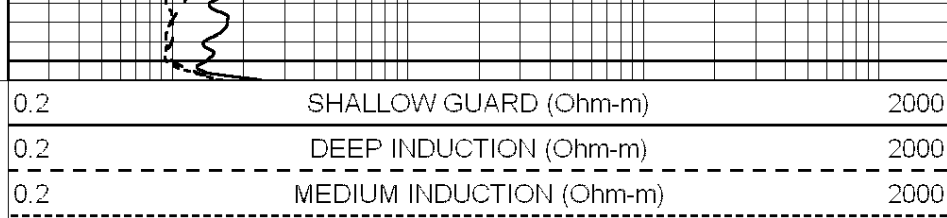
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



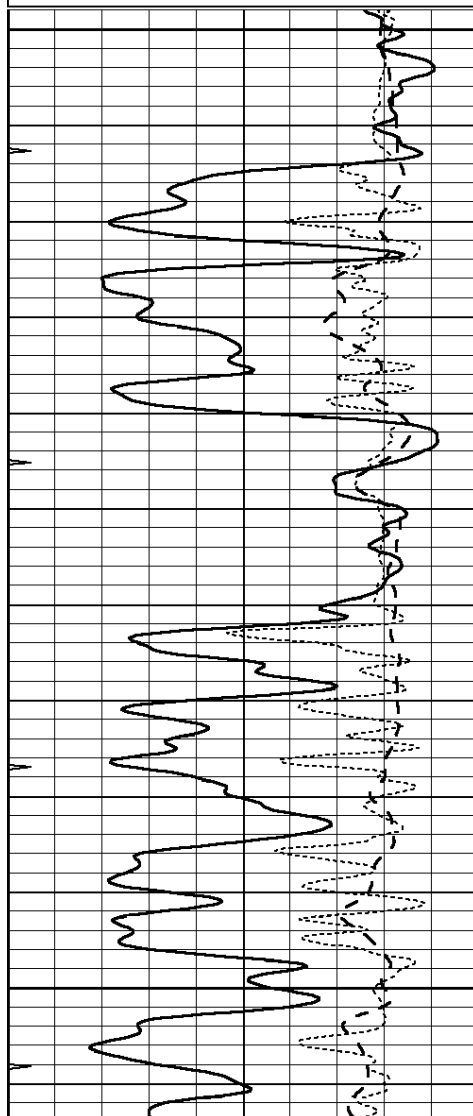
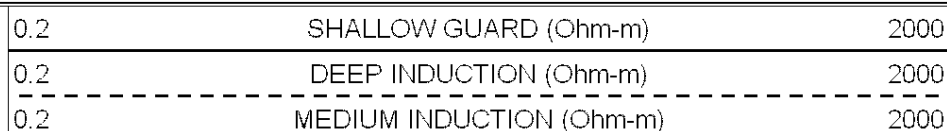
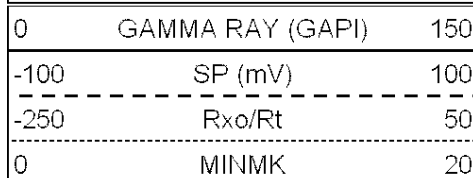


1450



MAIN SECTION

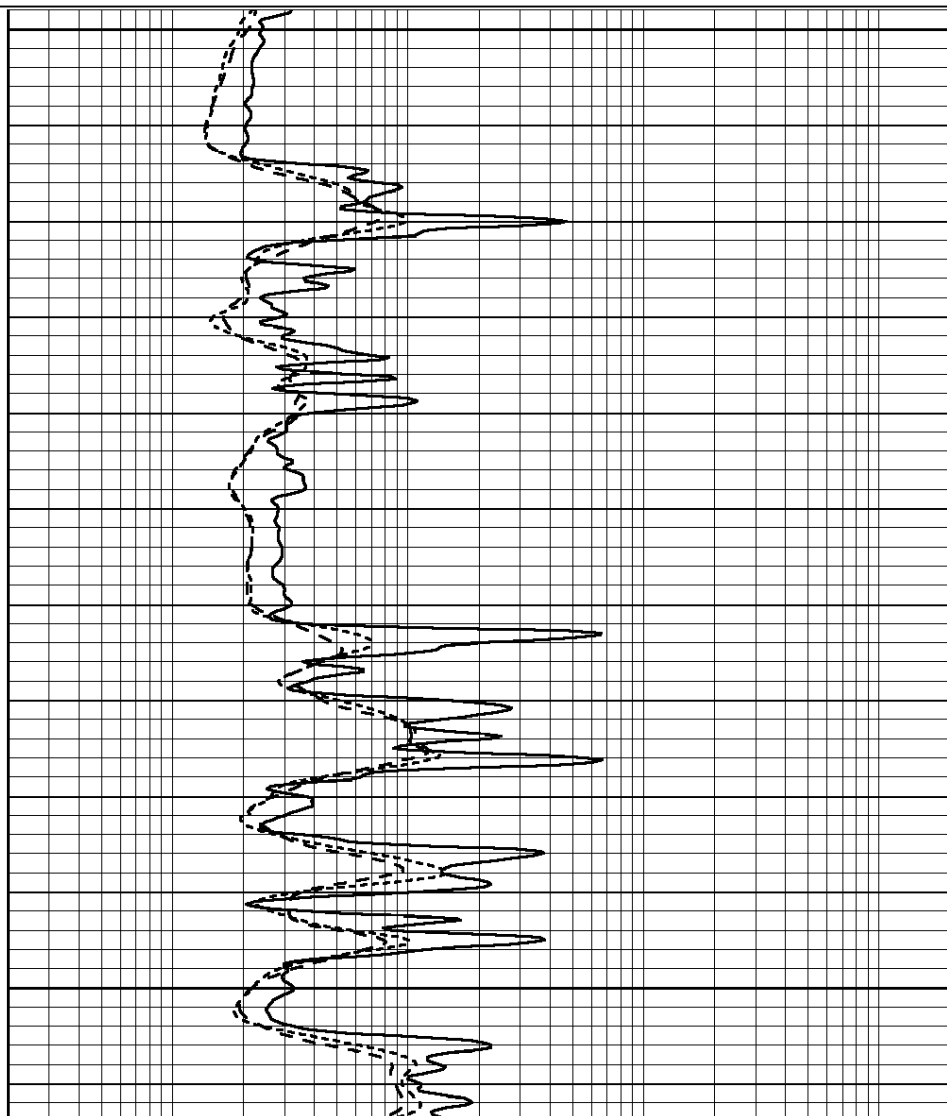
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 Charted by: Depth in Feet scaled 1:240

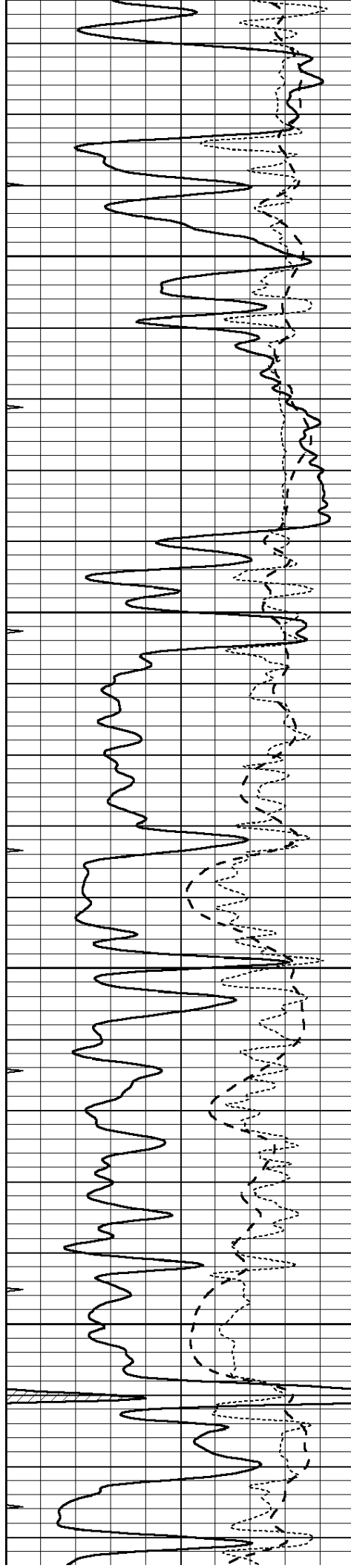


2900

2950

3000



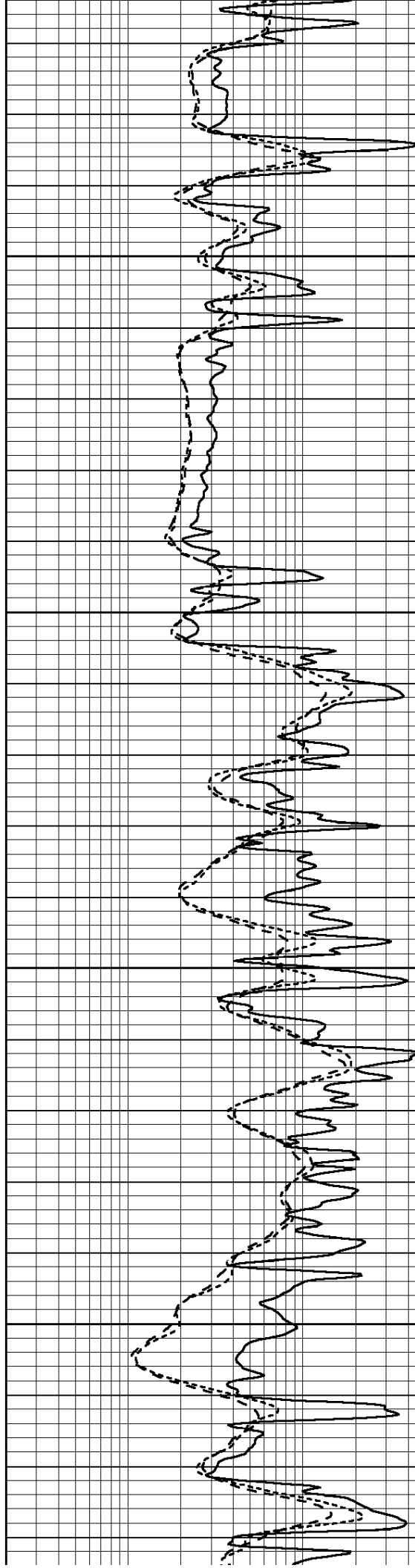


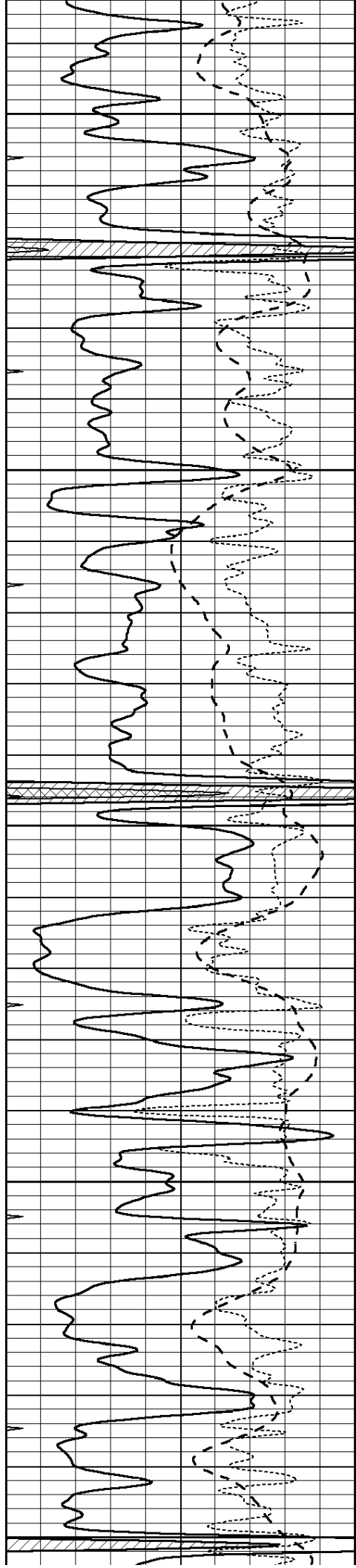
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3100

3150

3200





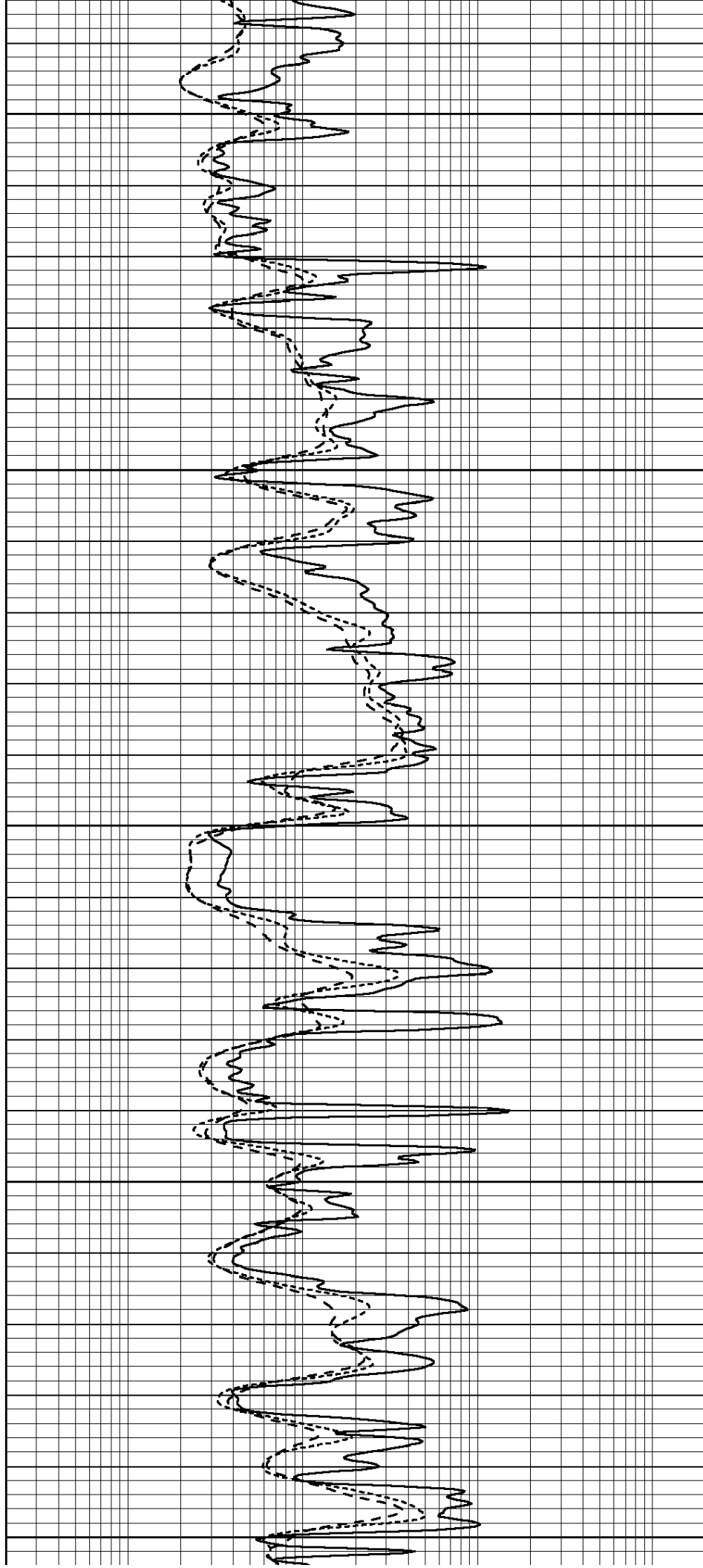
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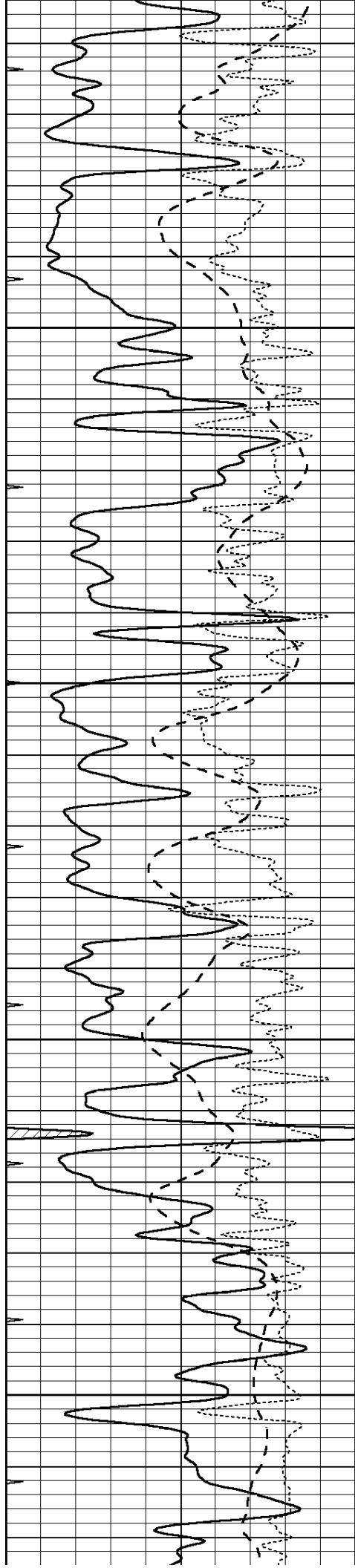
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3350

3400

3450



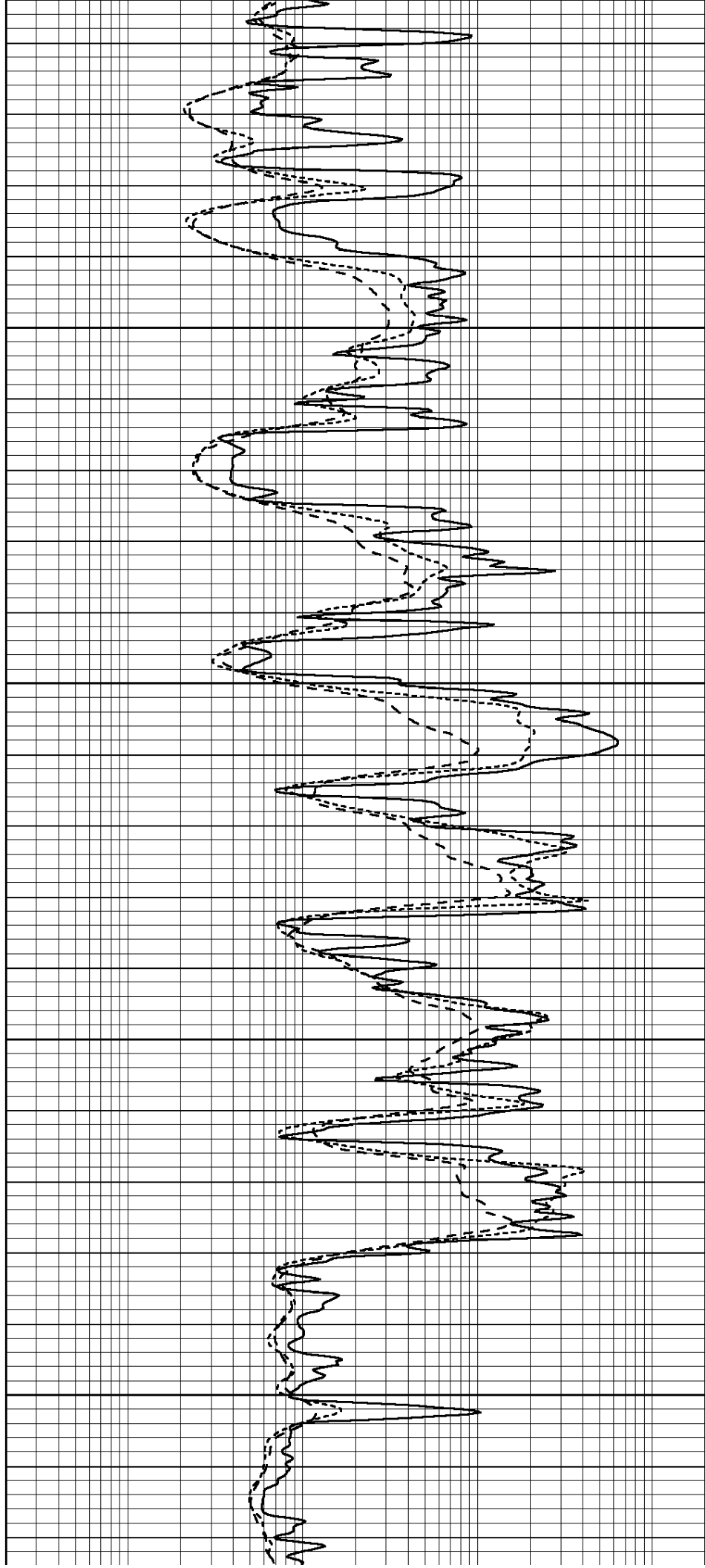


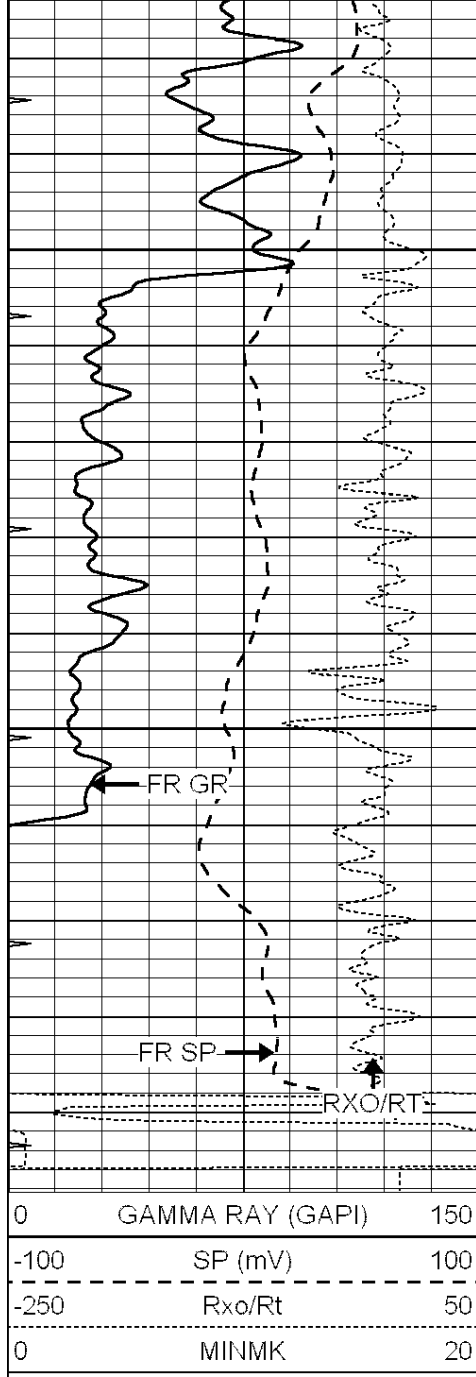
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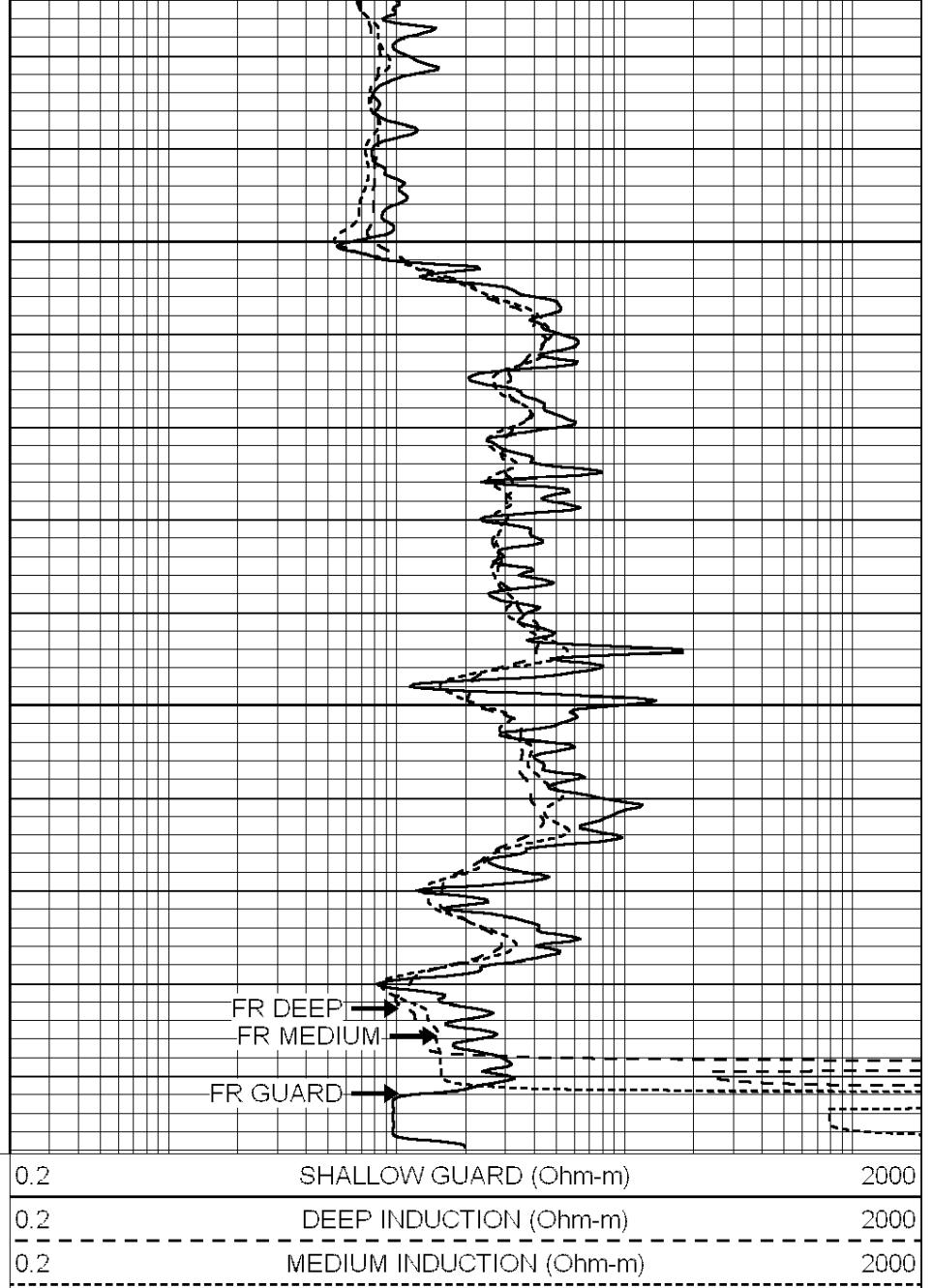




3700

3750

LTD 3794



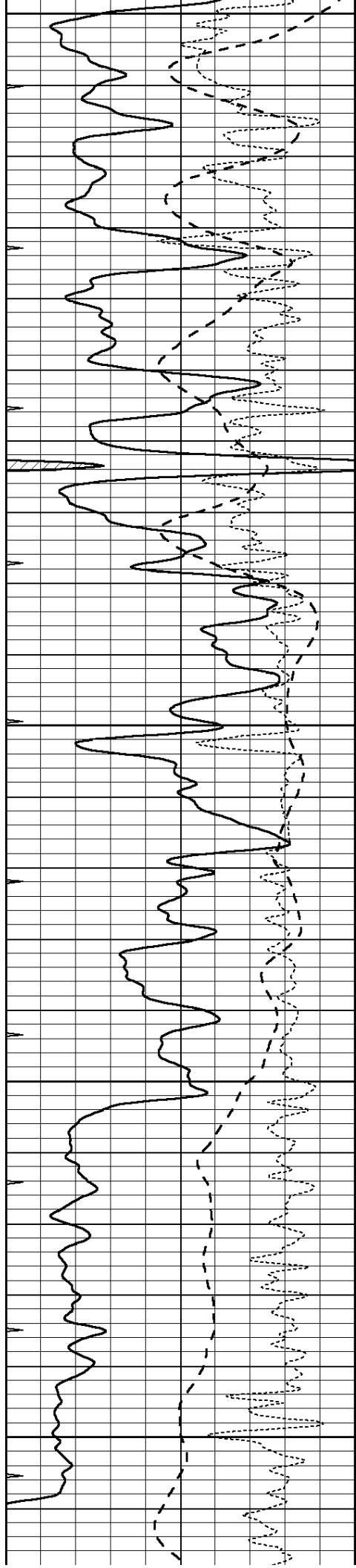
NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

REPEAT SECTION

Database File: 010736ddn.db
Dataset Pathname: pass2.3
Presentation Format: dil
Dataset Creation: Mon Apr 08 00:03:07 2013 by Calc SOC 120430
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



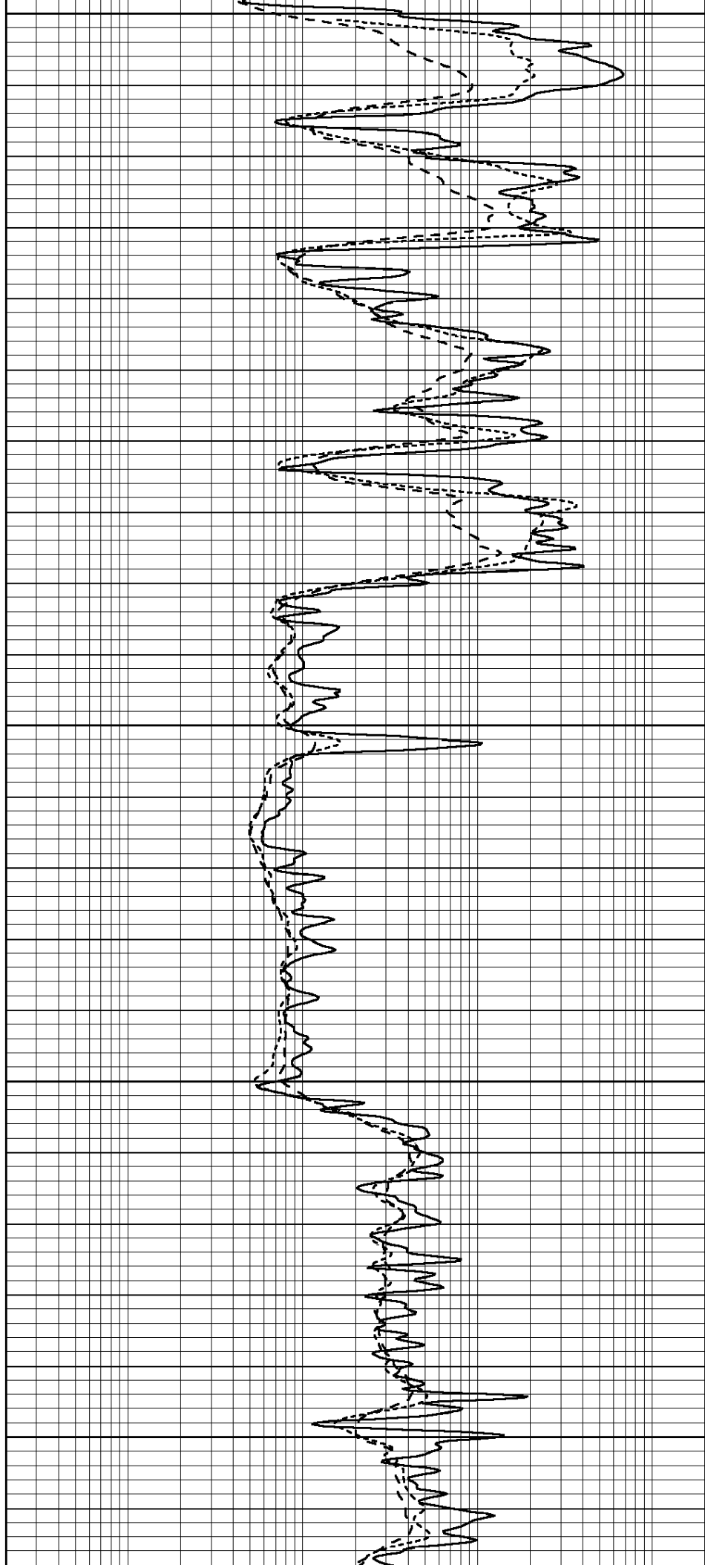
3550

3600

3650

3700

3750



Master Calibration		Performed Tue Sep 08 14:14:44 2009			
	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Before Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

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:	Sun Apr 07 04:15:47 2013

Calibrator Value:	1.0	GAPI
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Background Reading:	0.0	cps
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Calibrator Reading:	1.0	cps
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Sensitivity:	0.3500	GAPI/cps
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