



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company	S-B OIL COMPANY
Well	STEHNO FARMS #1
Field	
County	GRAHAM
State	KANSAS
Location:	API # : 15-065-23828 2620' FSL & 1520' FEL
SEC 34 TWP 7S RGE 21W	Other Services CDL/CNL MEL
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL Elevation KELLY BUSHING 8' A.G.L. KELLY BUSHING
2045	K.B. 2053 D.F. 2051 G.L. 2045
Date	4-22-12
Run Number	ONE
Depth Driller	3640
Depth Logger	3641
Bottom Logged Interval	3639
Top Log Interval	0
Casing Driller	226'
Casing Logger	225'
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1 / 51
PH / Fluid Loss	10.5 / 7.2
Source of Sample	FLOWLINE
Rim @ Meas. Temp	1.50 @ 81F
Rinf @ Meas. Temp	1.13 @ 81F
Rmc @ Meas. Temp	1.80 @ 81F
Source of Rinf / Rmc	MEASURED
Rim @ BHT	1.08 @ 113F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	113F
Equipment Number	860
Location	HAYS, KS.
Recorded By	JEFF GRONEWEG
Witnessed By	MARC DOWNING

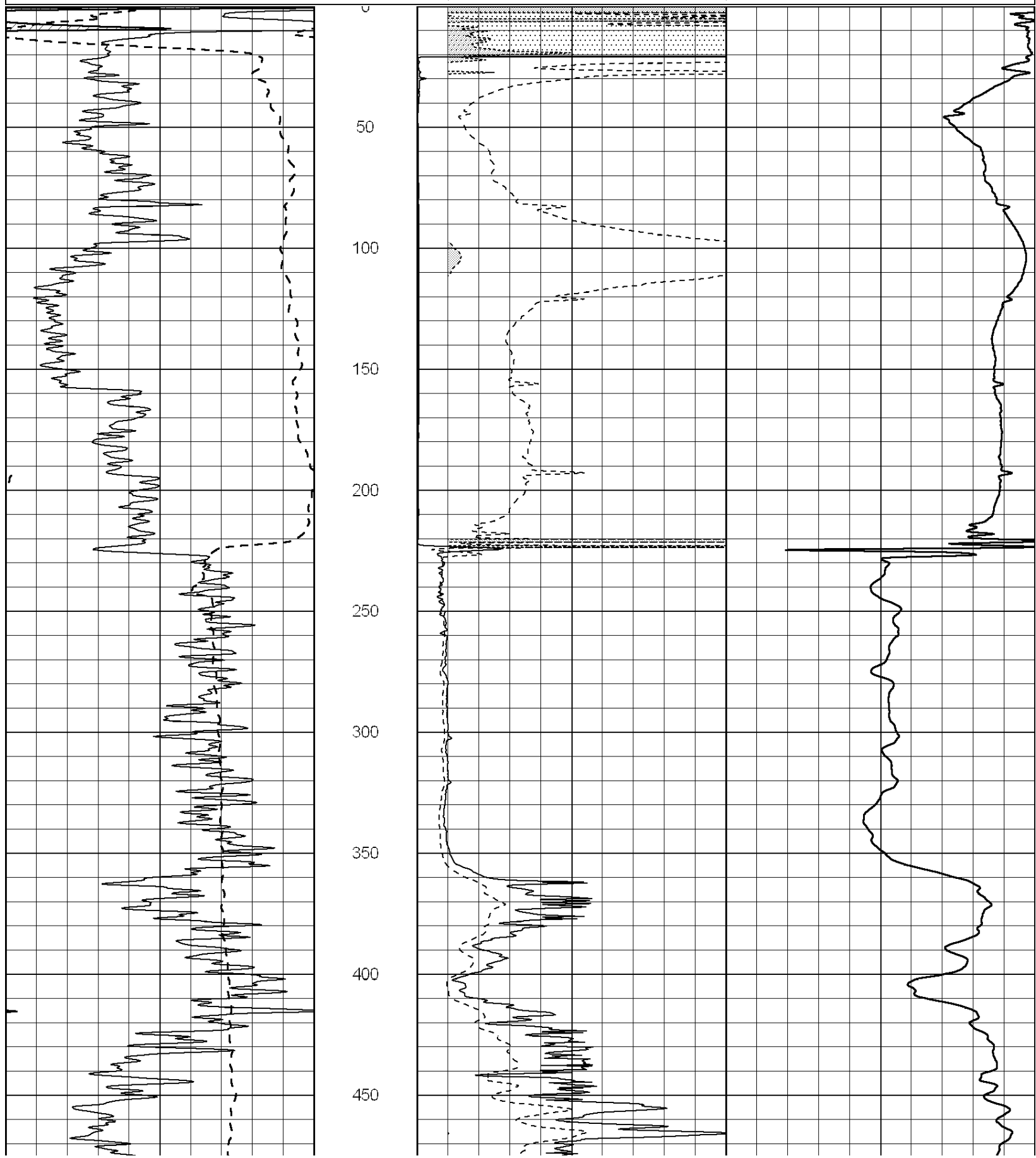
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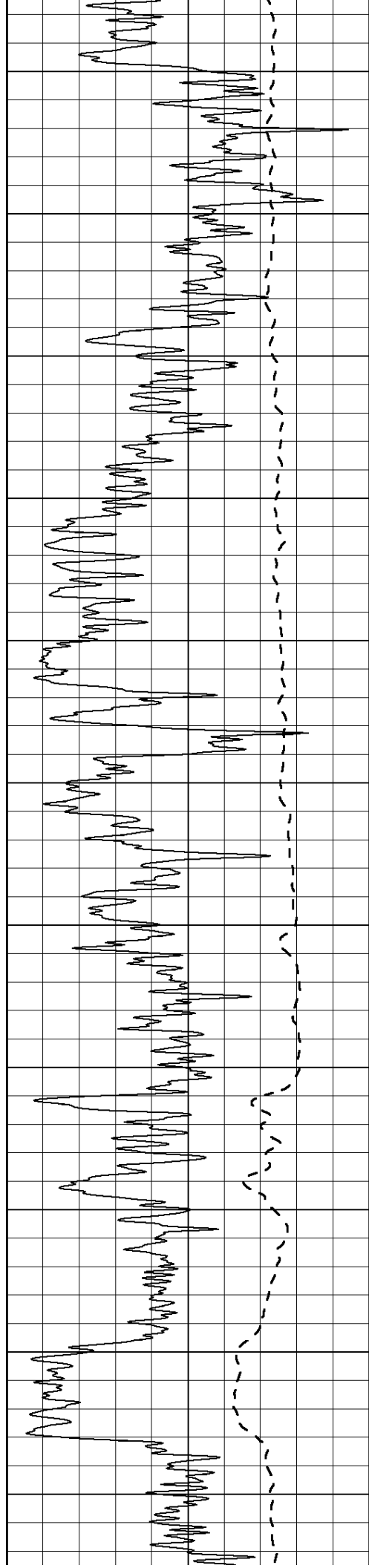
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: NICODEMUS, KS - 1 MILE NORTH - 1 1/2 MILES WEST
SOUTH INTO

0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50	
			0	Deep Induction (Ohm-m)	50	
			1000		CILD (mmho/m)	0
			50	RILD X10 (Ohm-m)	500	
			50	RLL3 X10 (Ohm-m)	500	





500

550

600

650

700

750

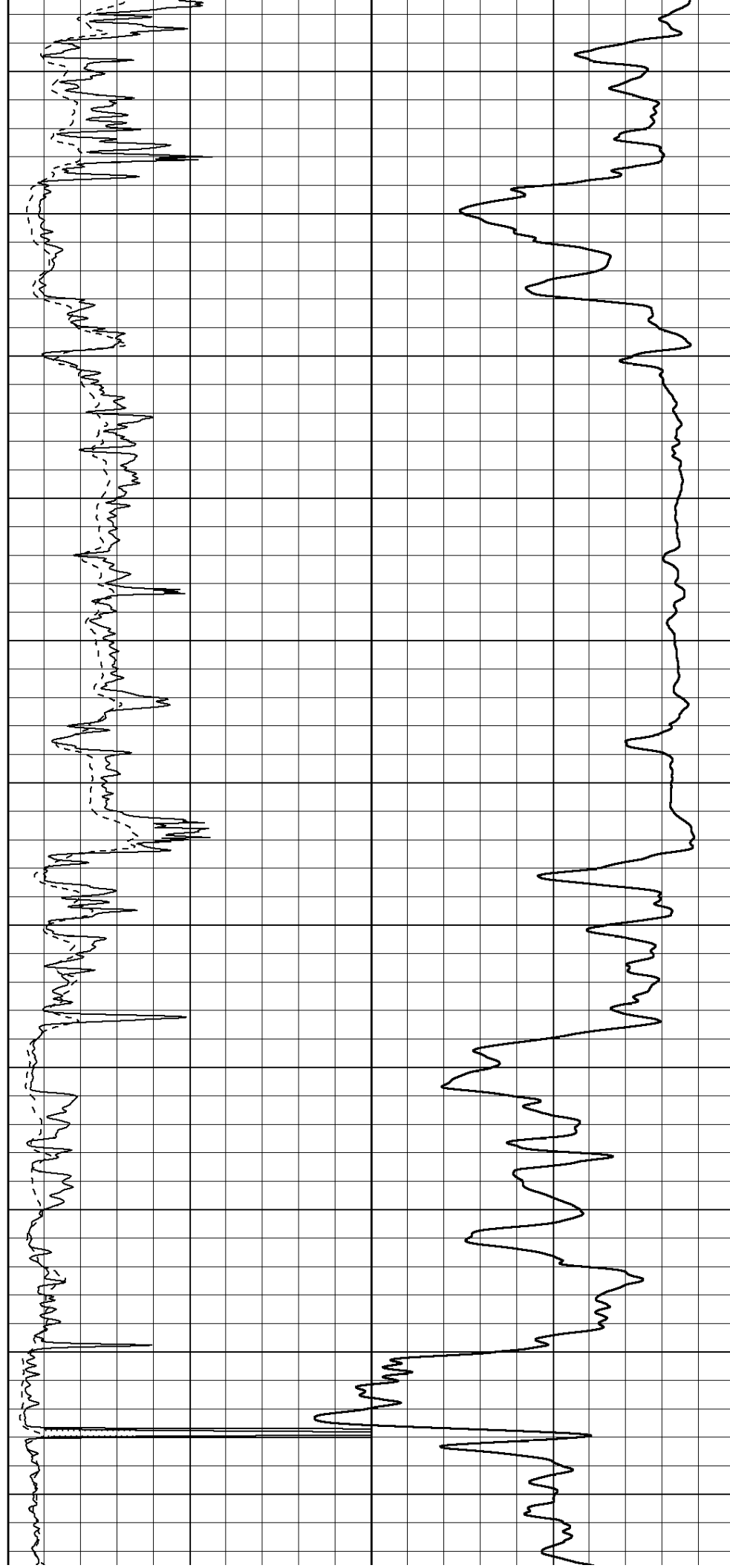
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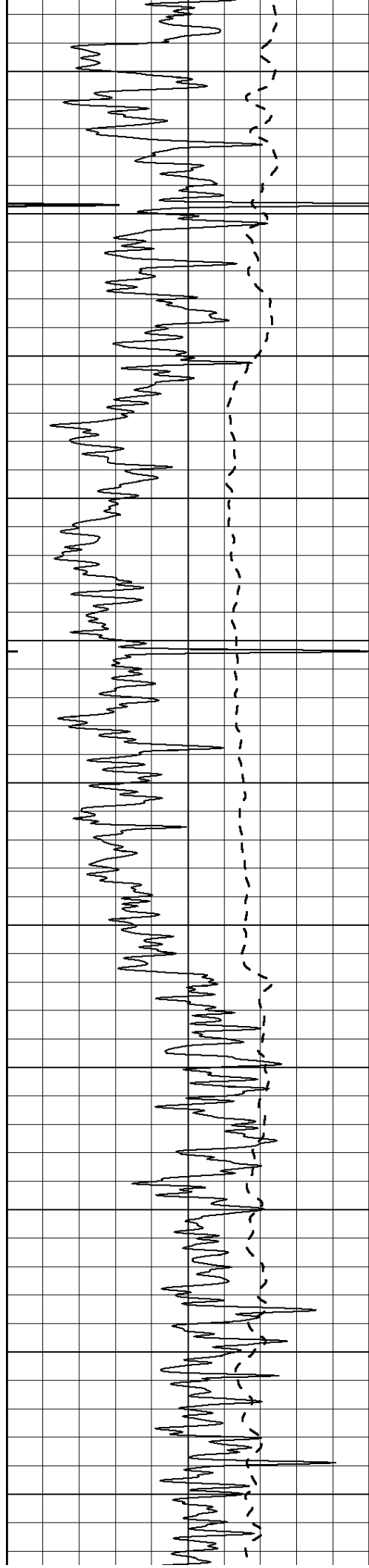
850

900

950

1000





1050

1100

1150

1200

1250

1300

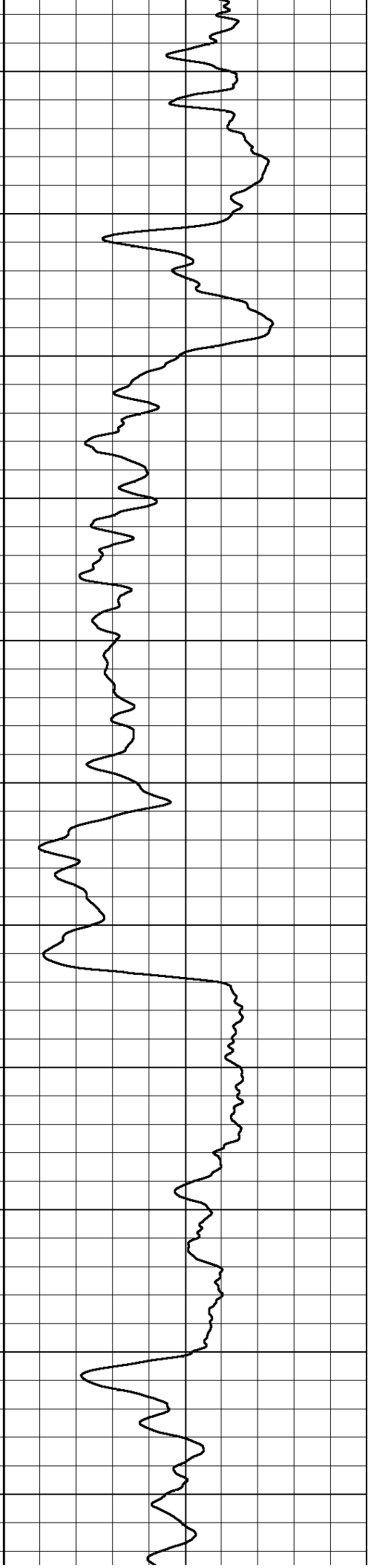
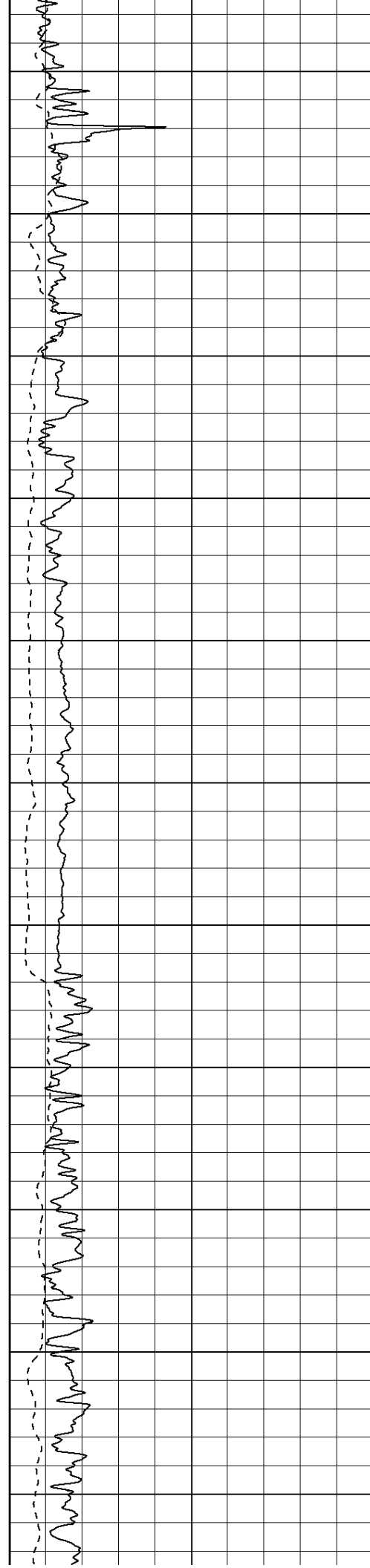
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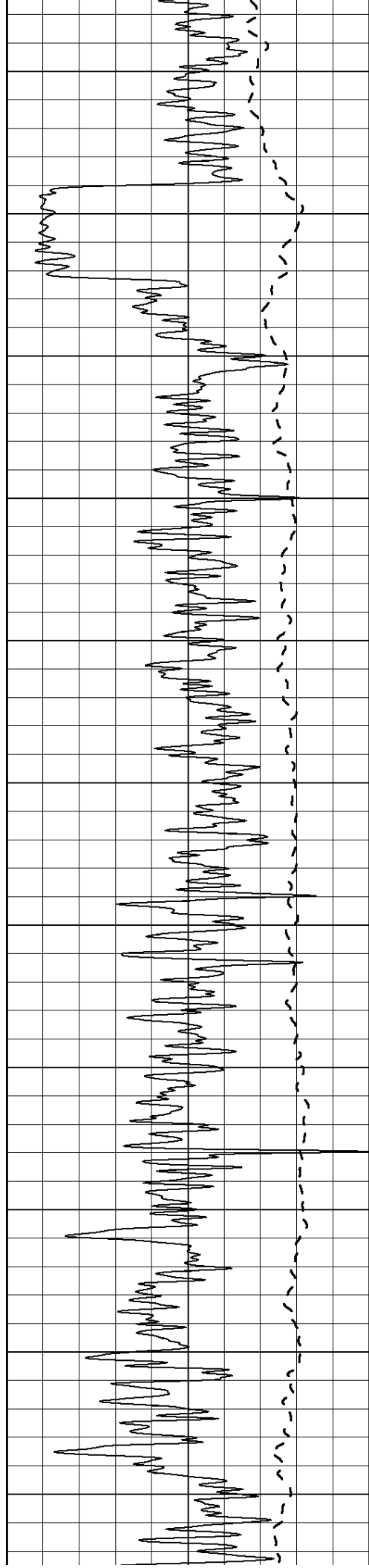
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1450

1500

1550





1600

1650

1700

1750

1800

1850

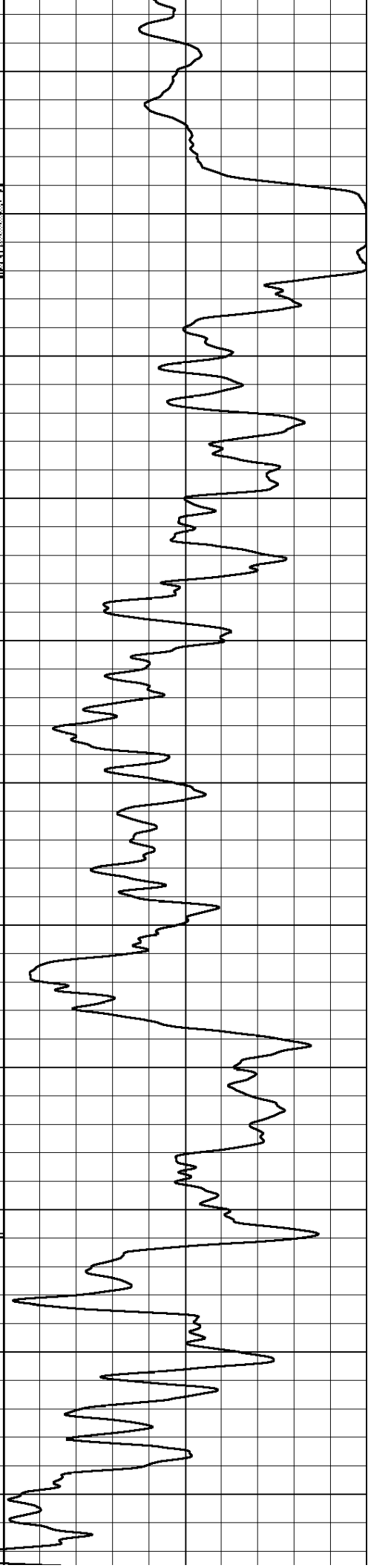
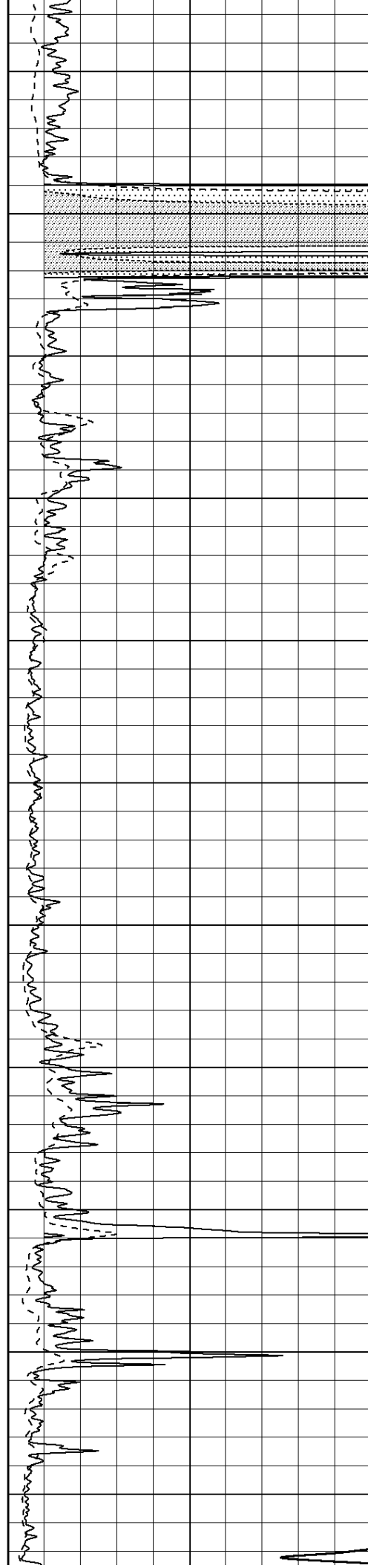
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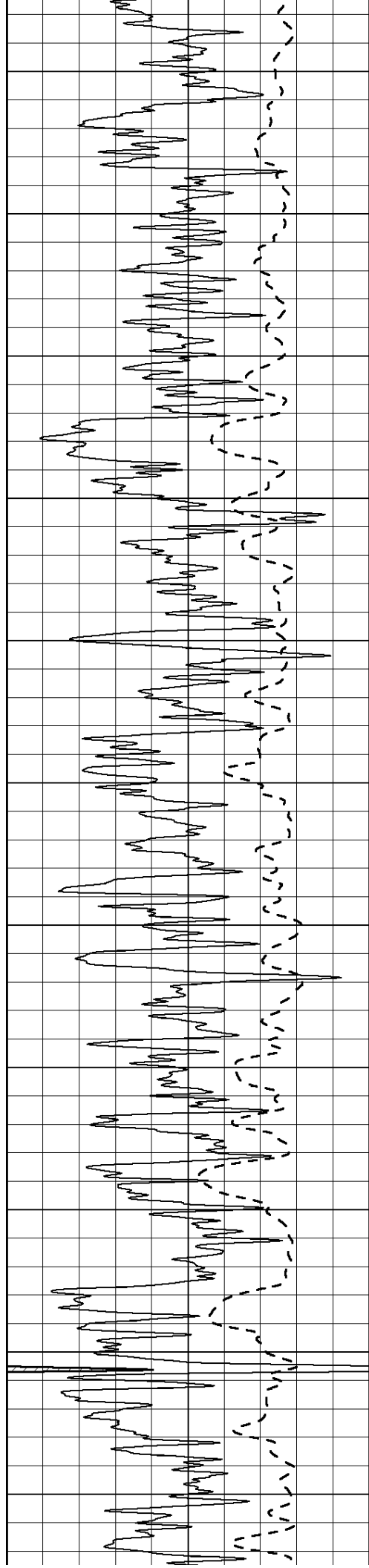
1950

2000

2050

2100





2150

2200

2250

2300

2350

2400

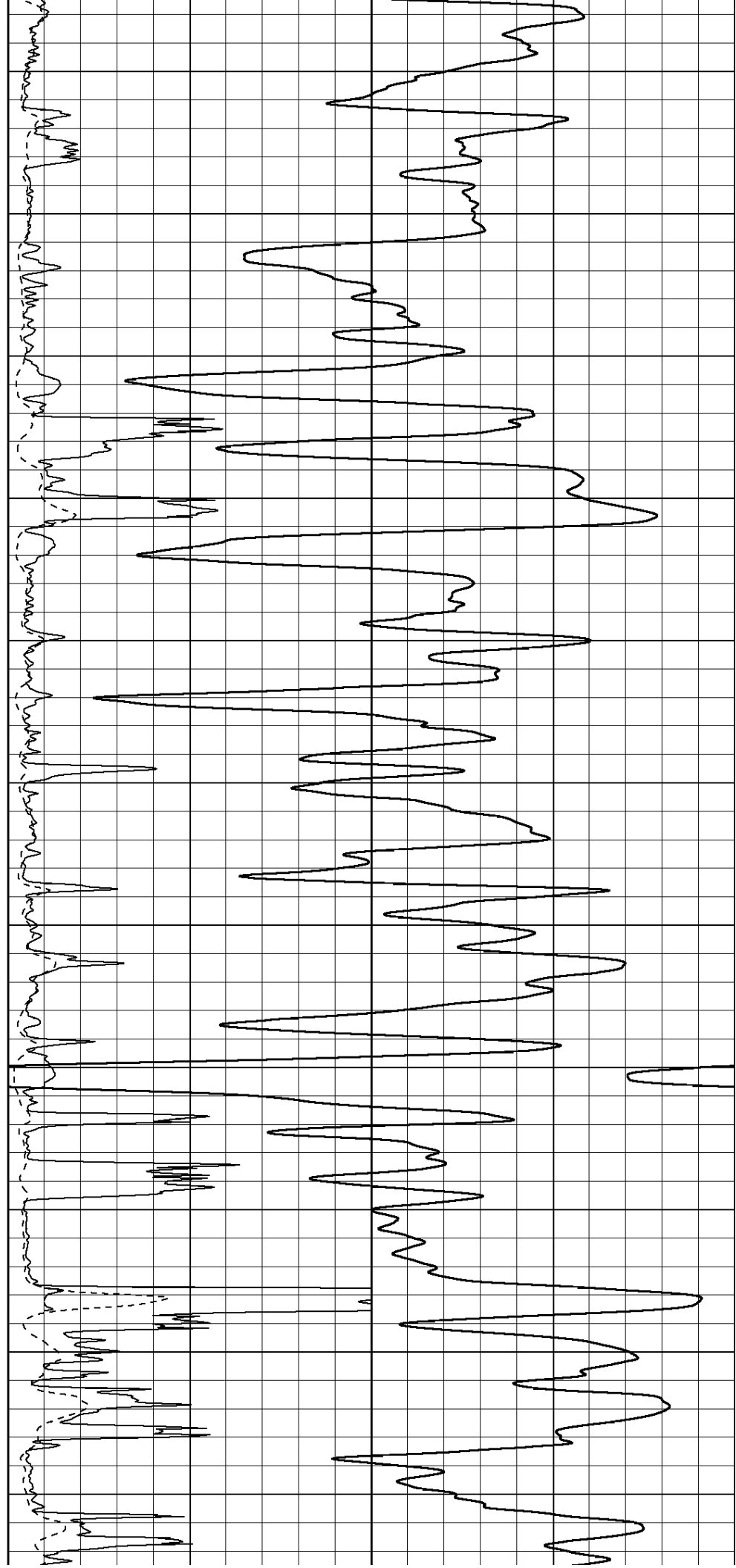
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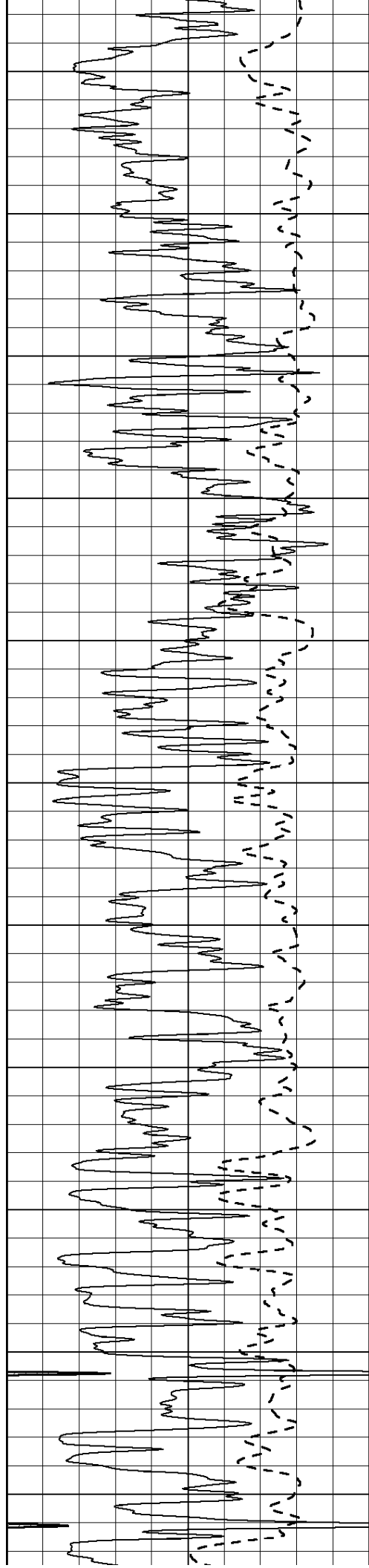
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2550

2600

2650





2700

2750

2800

2850

2900

2950

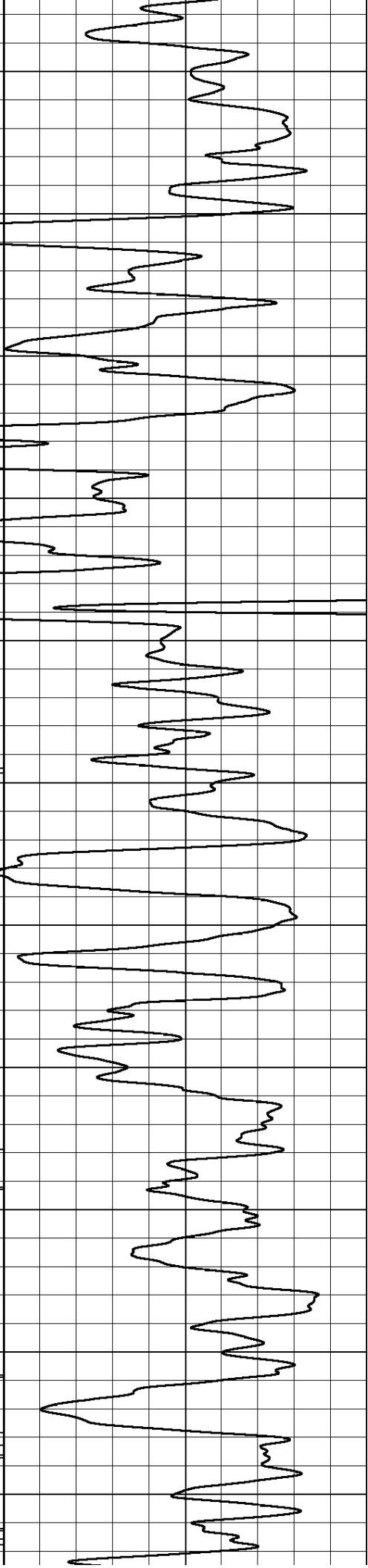
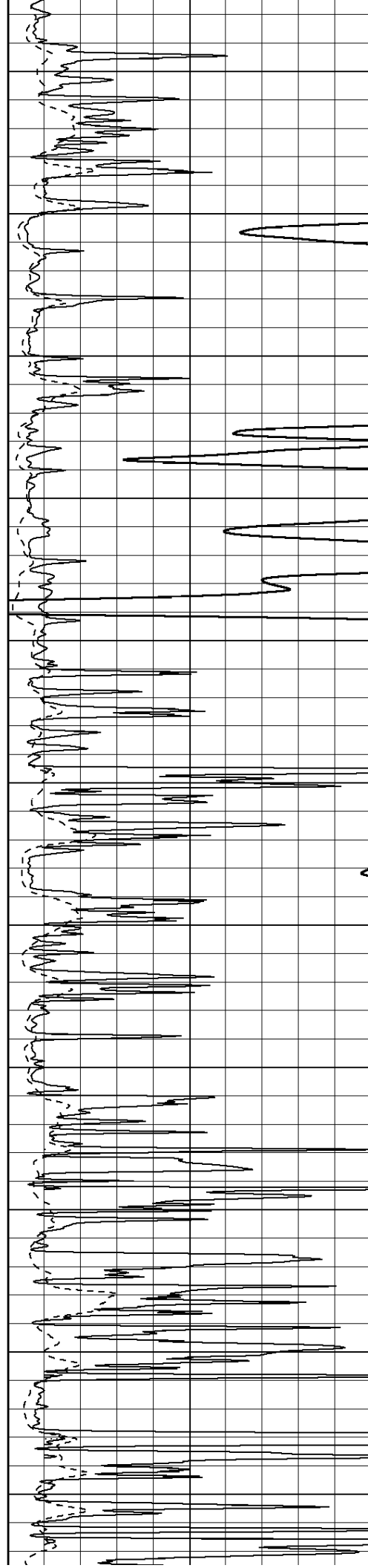
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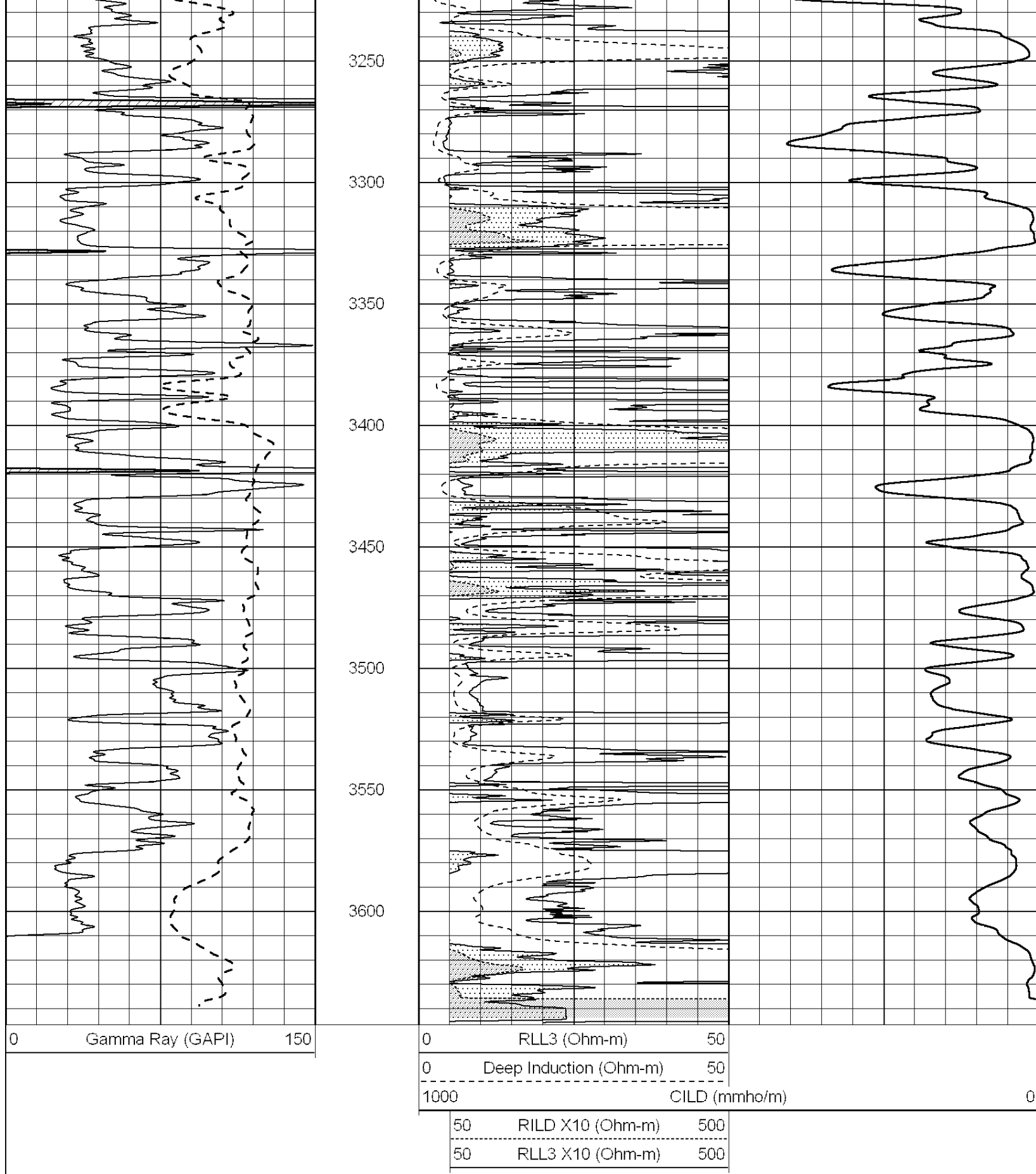
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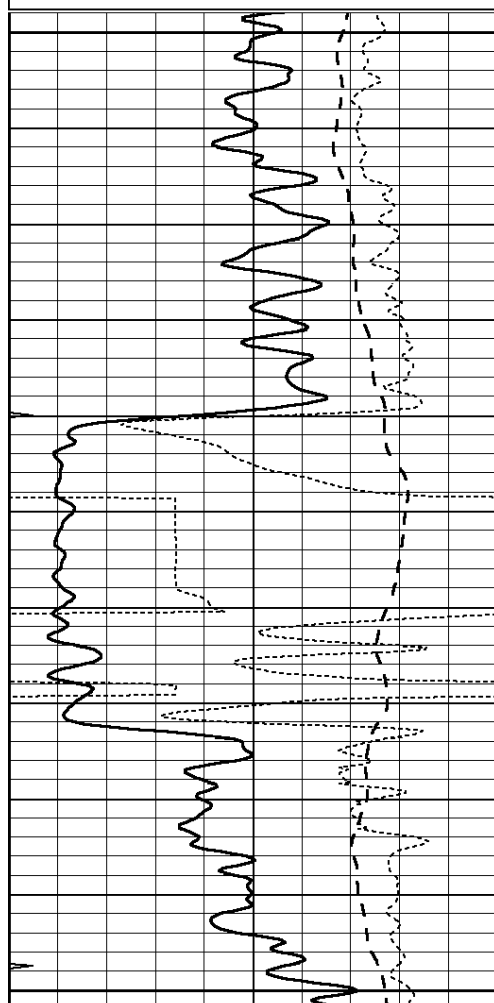
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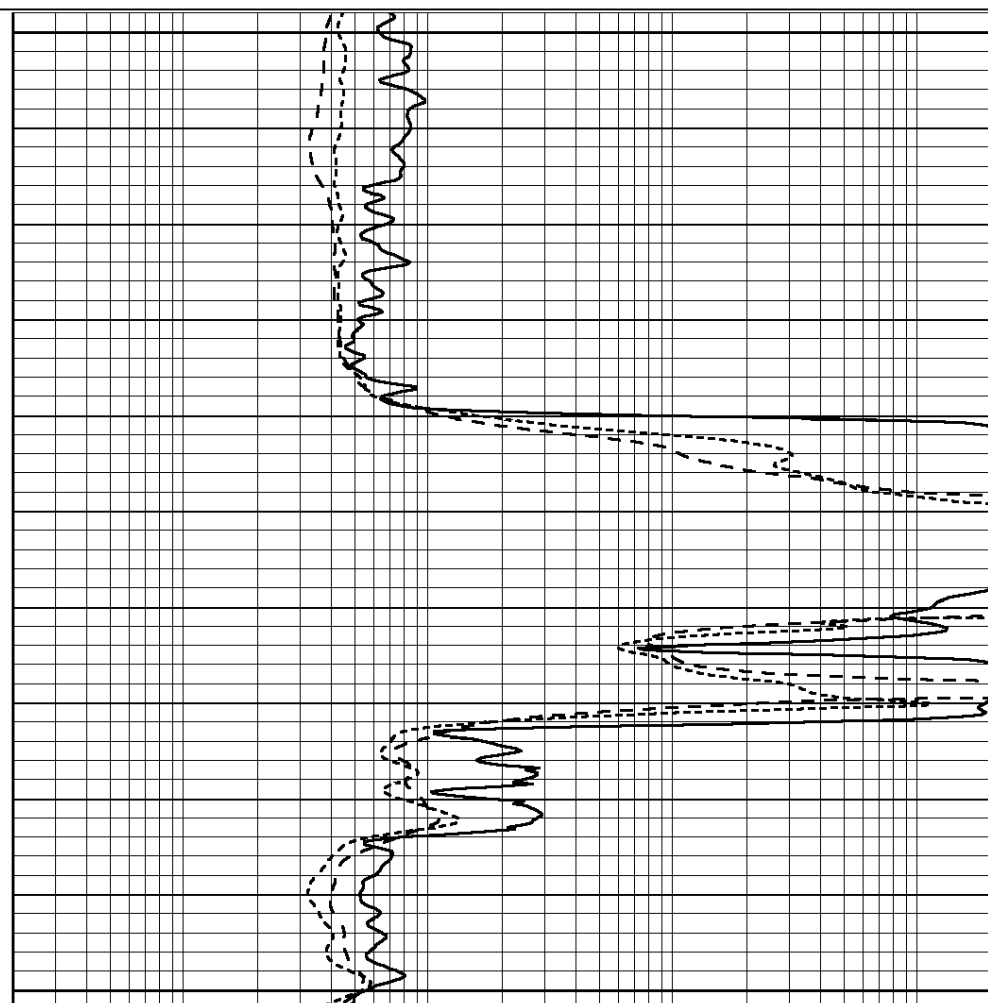
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Presentation Format: dil
Dataset Creation: Sun Apr 22 20:49:08 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



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-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

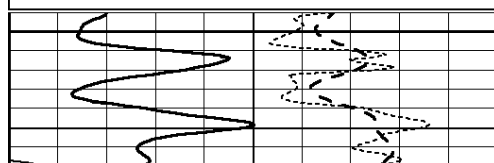
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



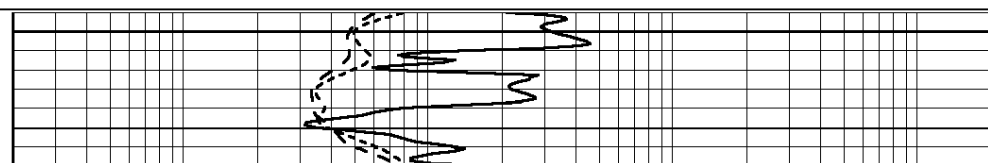
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

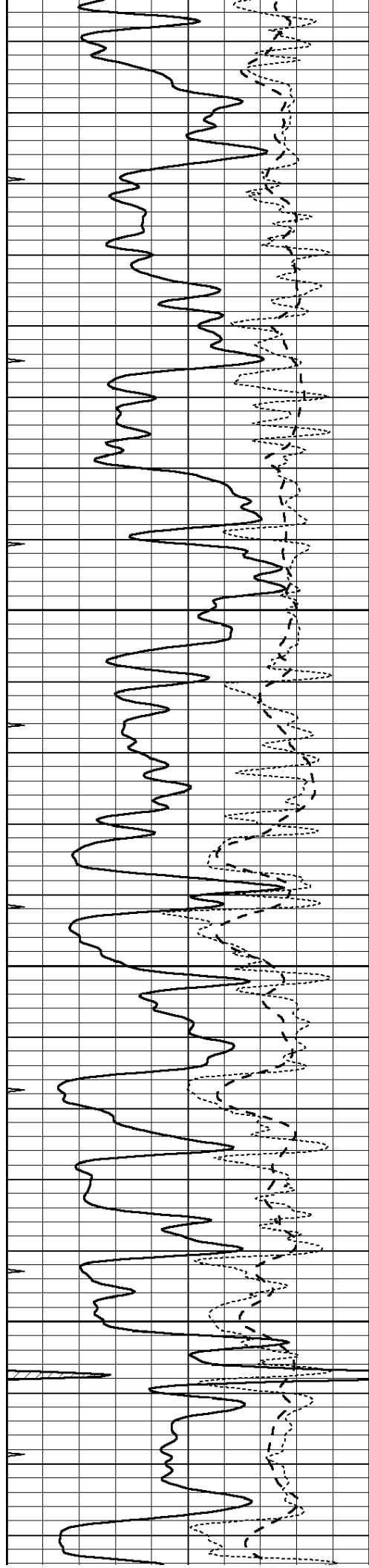
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Presentation Format: dil
Dataset Creation: Sun Apr 22 19:32:50 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



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



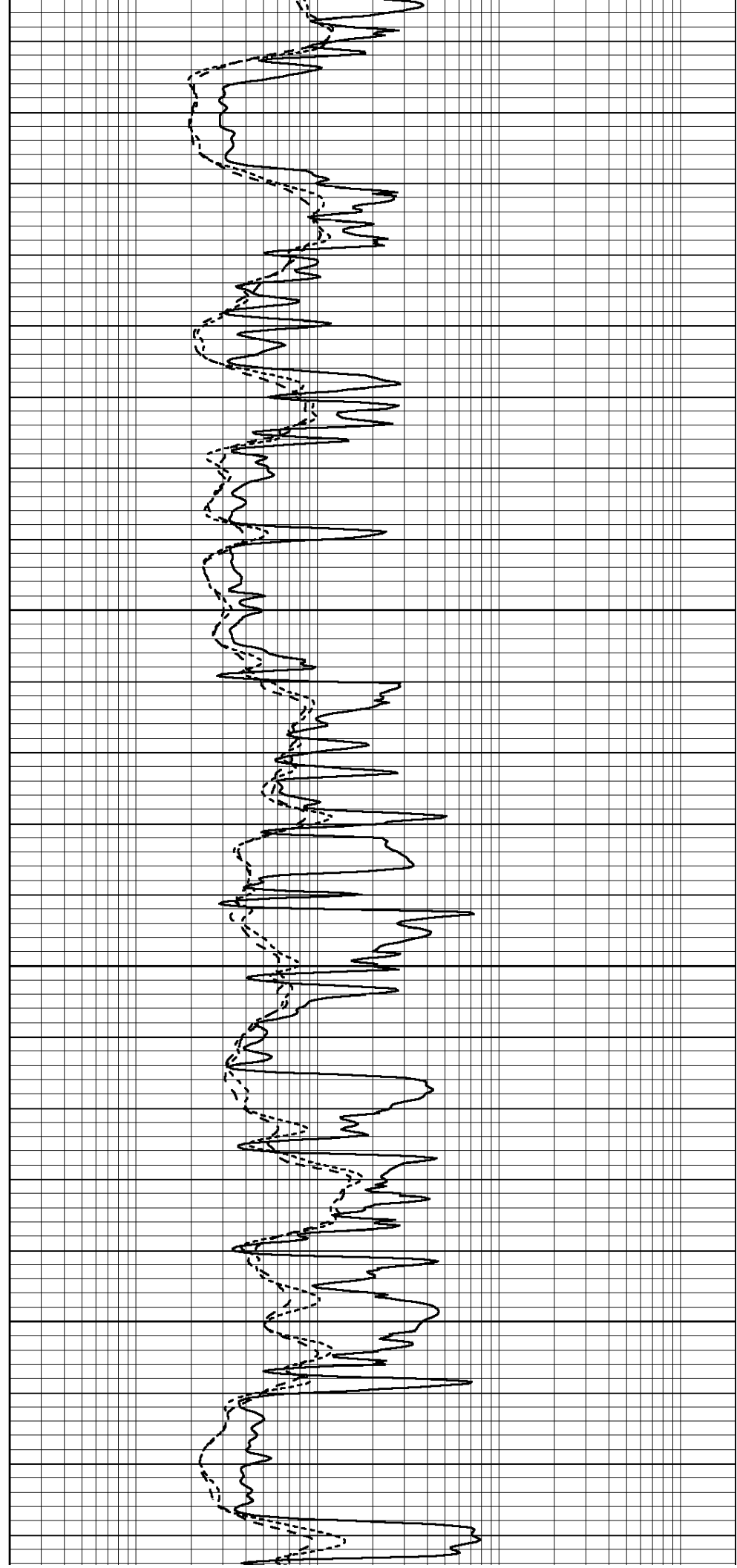


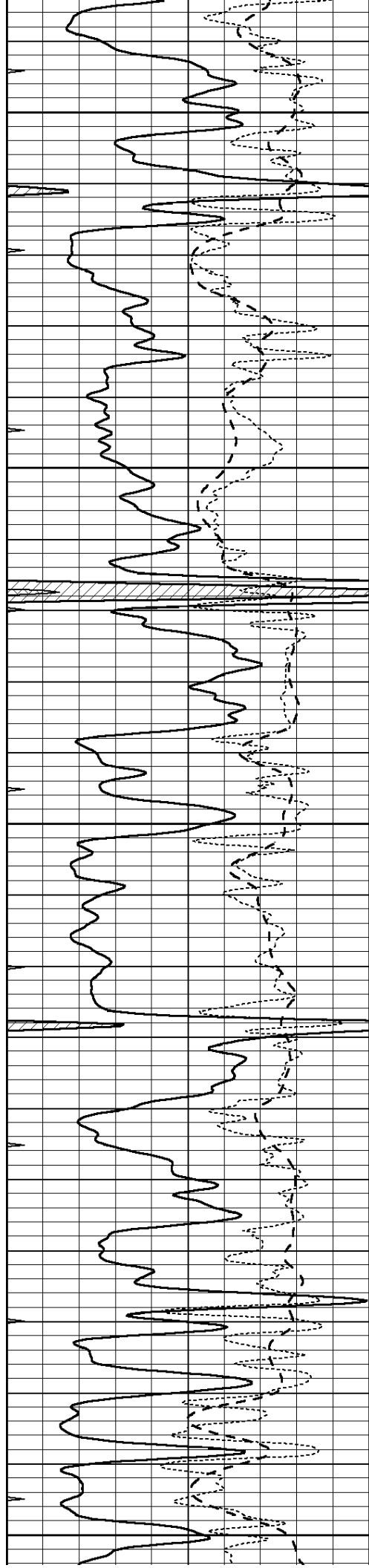
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3050

3100

3150





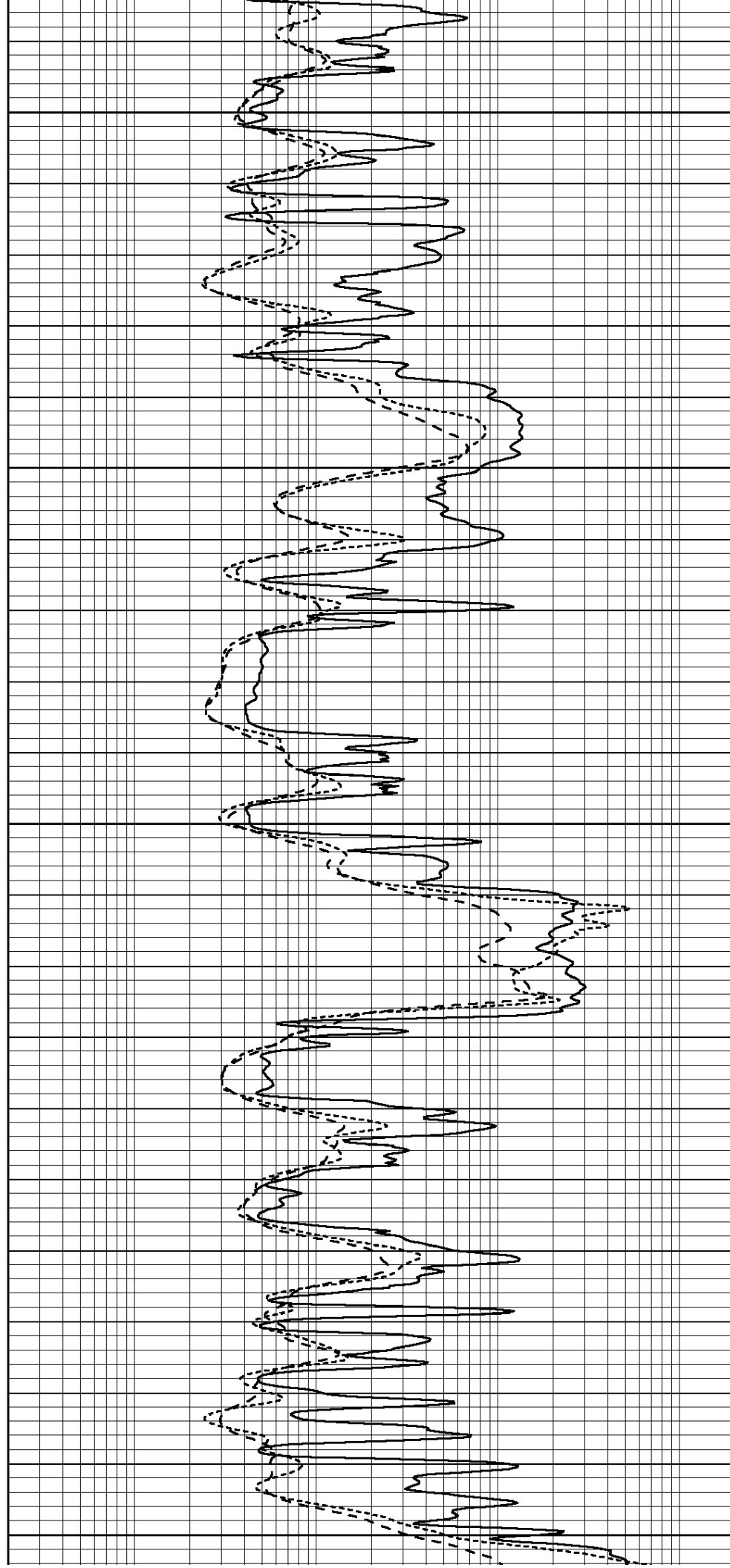
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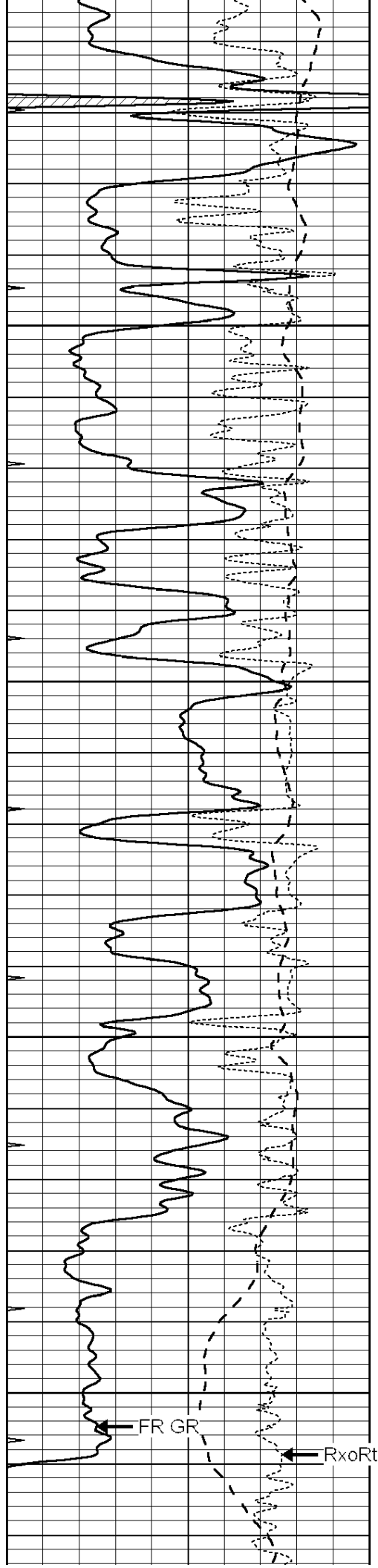
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3300

3350

3400





3450

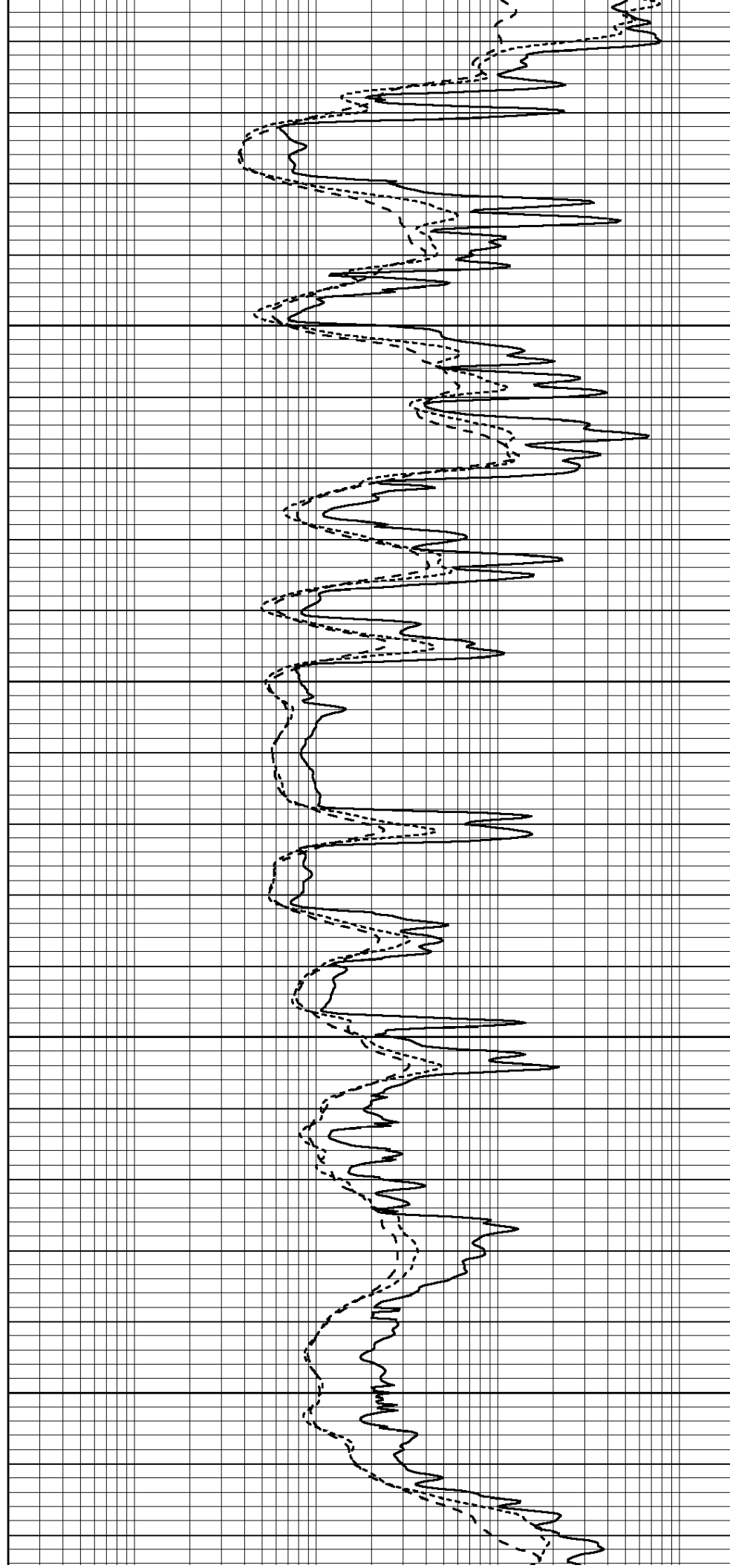
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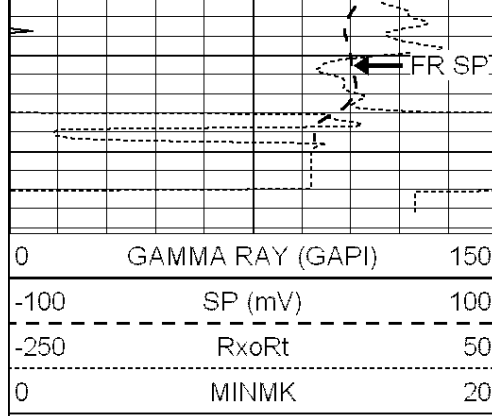
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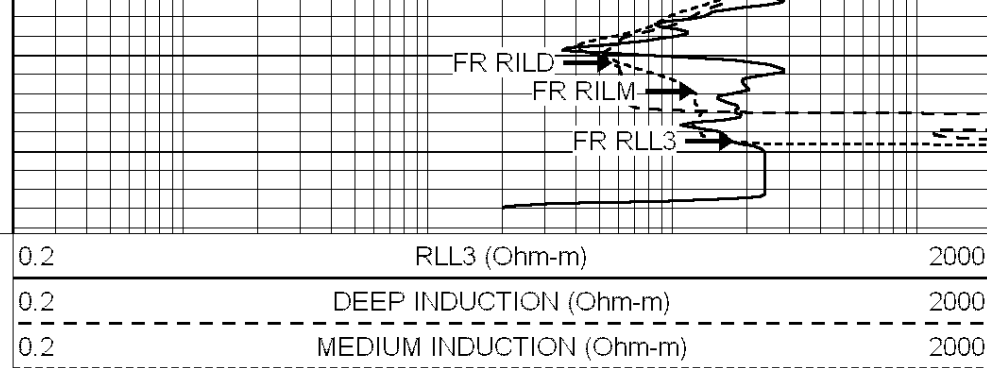
FR GR

RxoRt





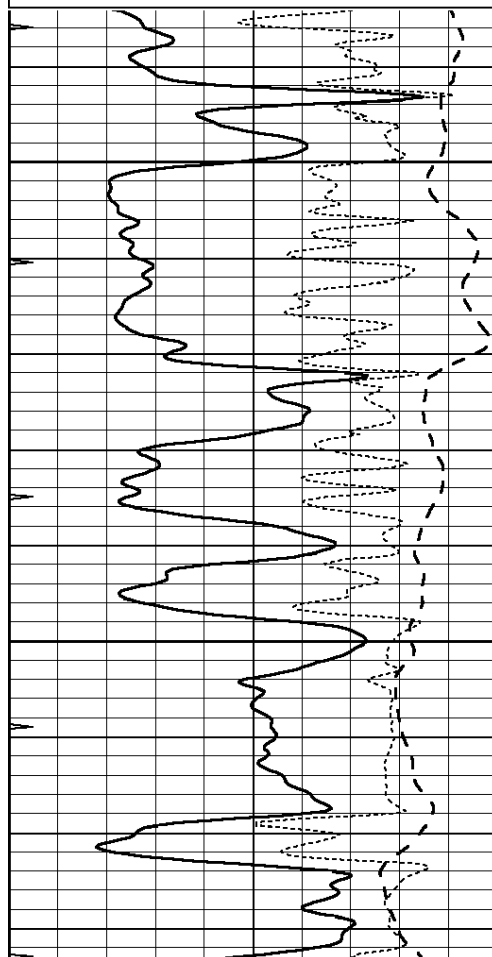
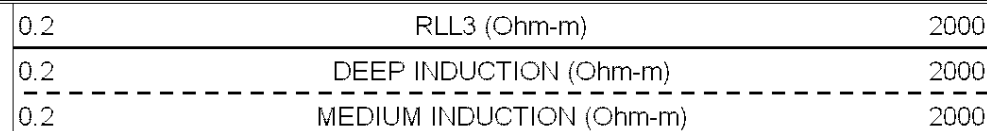
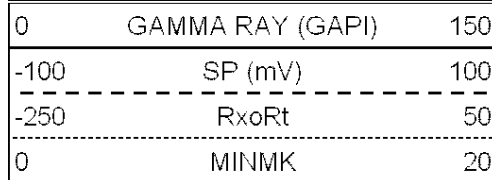
LTD 3641



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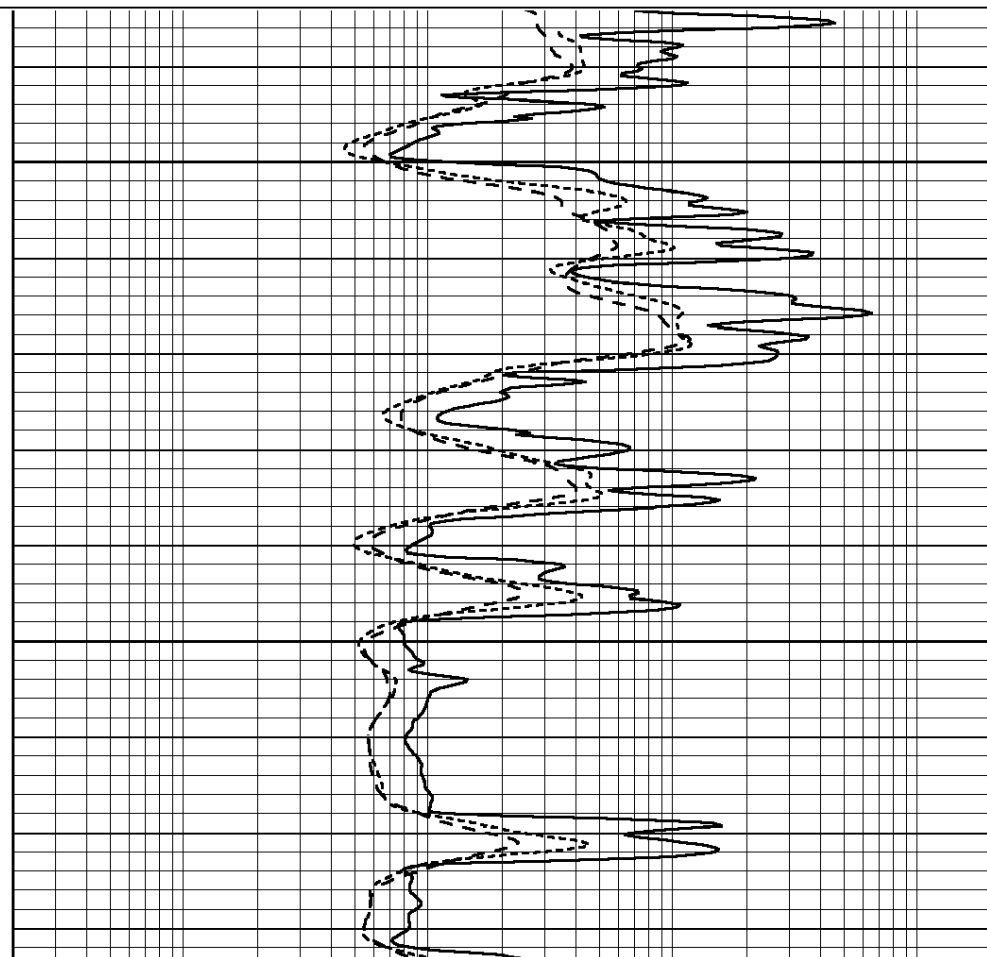
REPEAT SECTION

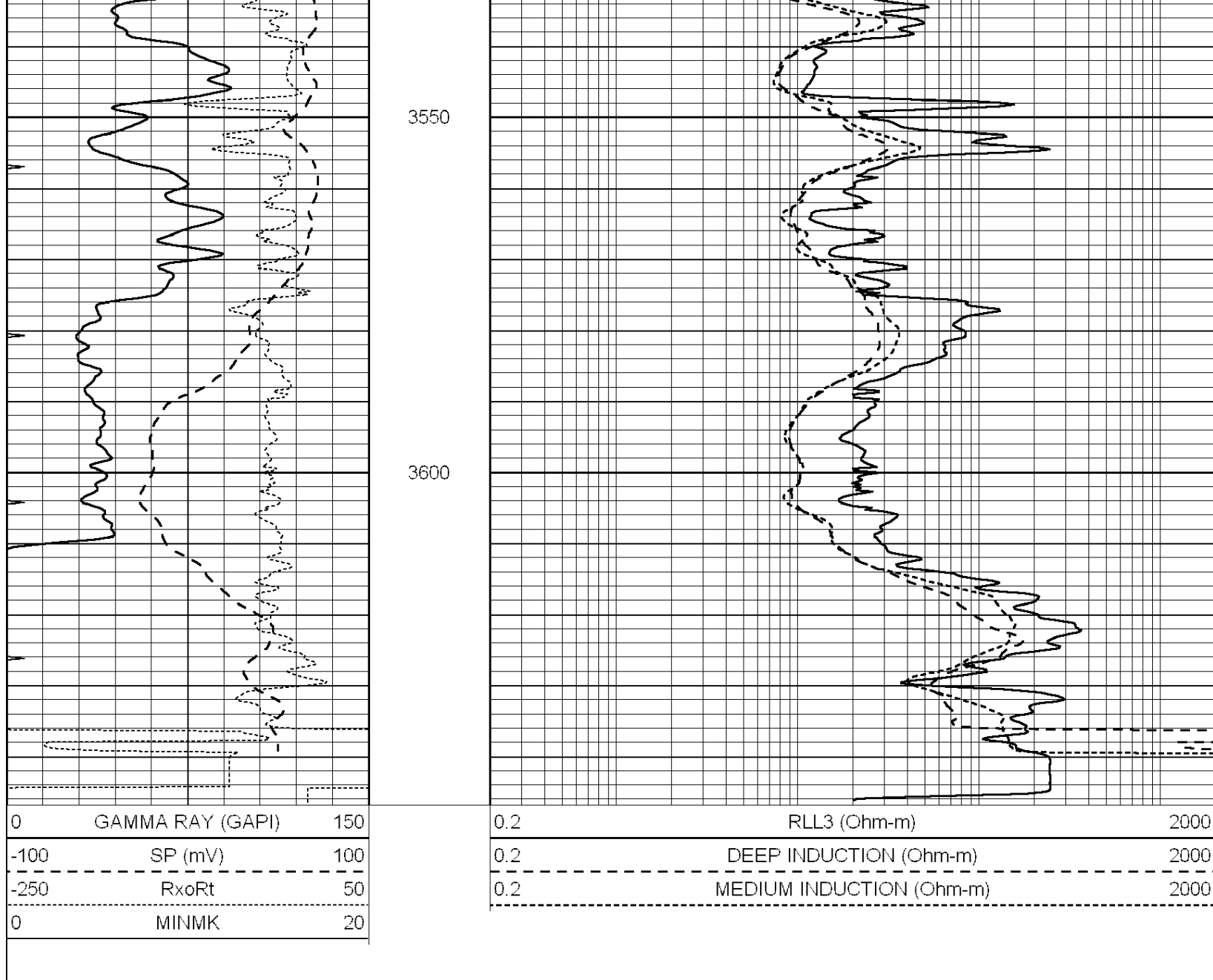
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 Presentation Format: dil
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 Charted by: Depth in Feet scaled 1:240



3450

3500





Calibration Report

Database File: 008723ddn.db
 Dataset Pathname: pass3.4
 Dataset Creation: Sun Apr 22 20:49:08 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Sun Apr 22 06:58:49 2012
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008
 After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	550.000	-15.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	540.000	-18.000
Internal:	Zero			Cal			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-13.102

Downhole Calibration								
Readings			References			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3970.000	mmho-m		

After Survey Verification								
Readings			Targets			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Compensated Density Calibration Report								
Serial-Model:				GEAR1-GEARHART				
Source / Verifier:				147 / 147				
Master Calibration Performed:				Thu Apr 19 16:32:51 2012				

Master Calibration						
	Density		Far Detector		Near Detector	
Magnesium	1.710	g/cc	1243.76		629.14	cps
Aluminum	2.580	g/cc	282.16		435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.569			
	Size		Reading			
Small Ring	9.70	in	3.50	V		
Large Ring	16.00	in	5.30	V		

Compensated Neutron Calibration Report								
Serial Number:				NUE_2I				
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:			Sun Apr 22 06:58:16 2012					
Calibrator Value:			1.0	GAPI				
Background Reading:			0.0	cps				
Calibrator Reading:			1.0	cps				
Sensitivity:			0.7000	GAPI/cps				