



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company	DOWNING-NELSON OIL CO. INC.
Well	ROHR TRUST UNIT #1-19
Field	WILDCAT
County	ELLIS
State	KANSAS
Location:	API # : 15-051-26749-00-00 2500' FNL & 1200' FEL SW - SW - SE - NE
SEC 19 TWP 14S RGE 18W	Other Services CNL/CDL MEL/SON
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL Elevation KELLY BUSHING 8' A.G.L. KELLY BUSHING
2098	K.B. 2106 D.F. 2104 G.L. 2098
Date	10/15/14
Run Number	ONE
Depth Driller	3835
Depth Logger	3836
Bottom Logged Interval	3834
Top Log Interval	00
Casing Driller	8 5/8 @ 684'
Casing Logger	684'
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/54
pH / Fluid Loss	9.5/9.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.75 @ 78F
Rmf @ Meas. Temp	0.56 @ 78F
Rmc @ Meas. Temp	0.90 @ 78F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	0.52 @ 114F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	114F
Equipment Number	3802
Location	HAYS, KS.
Recorded By	IAN MABB
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.

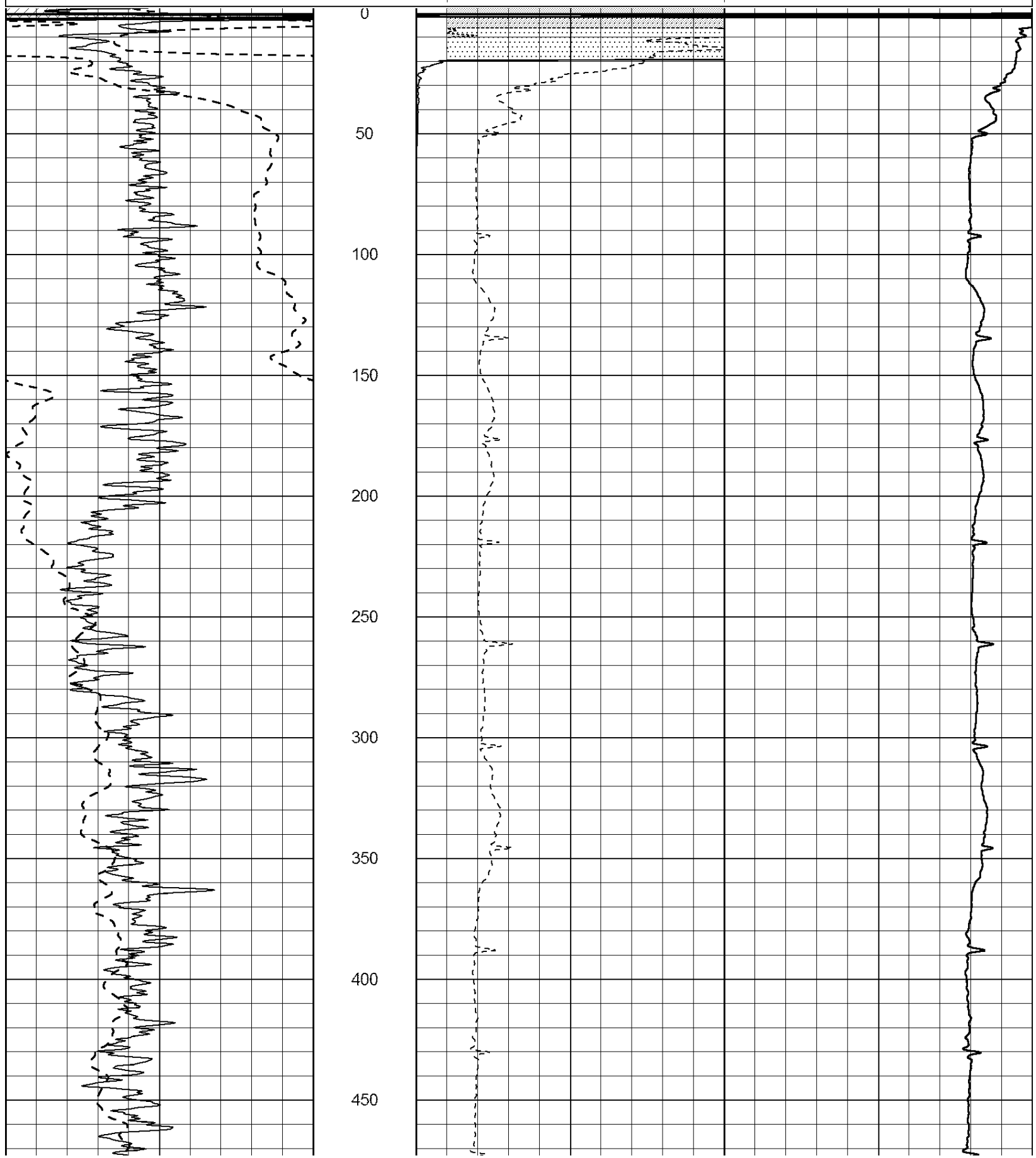
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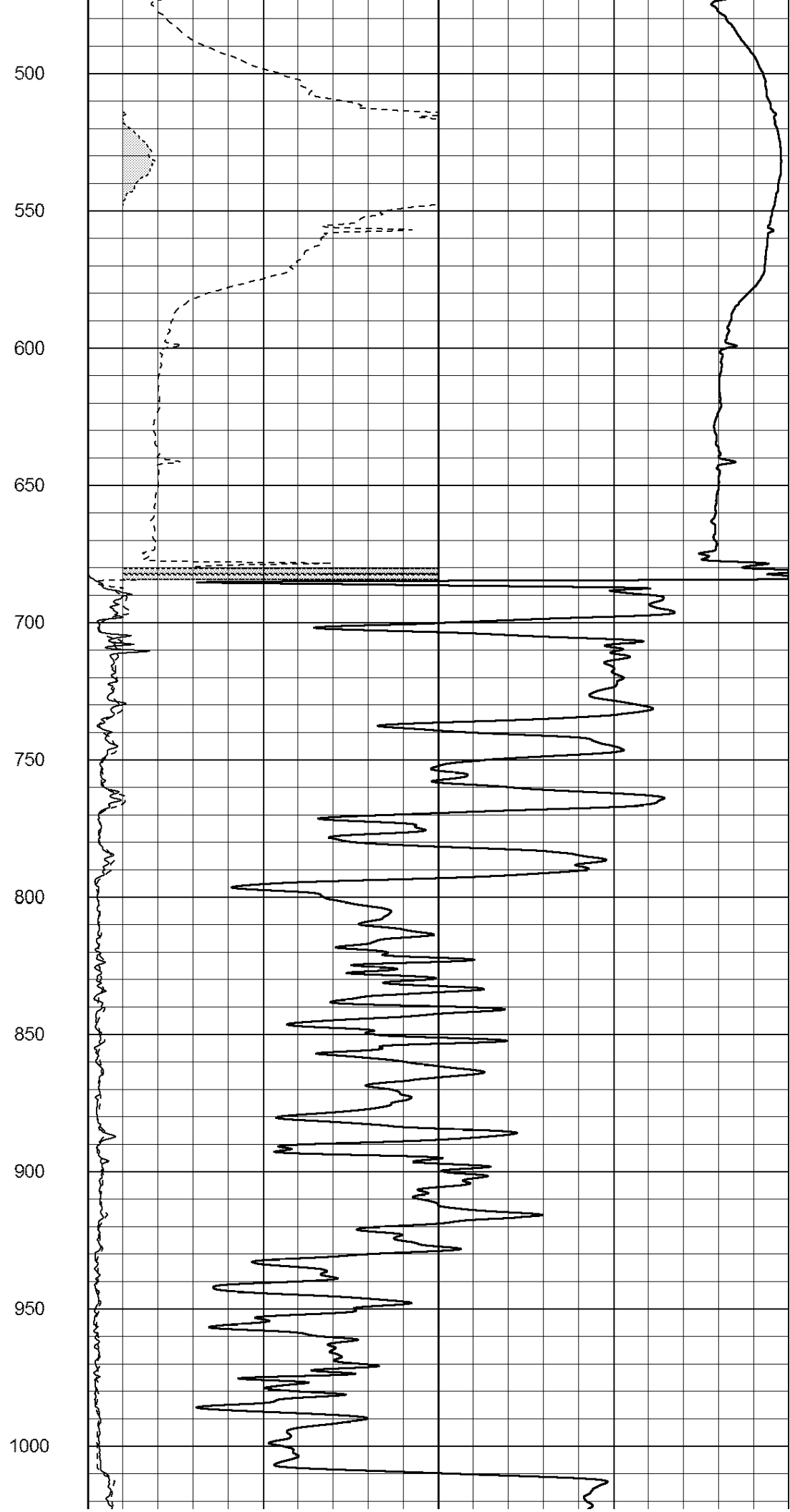
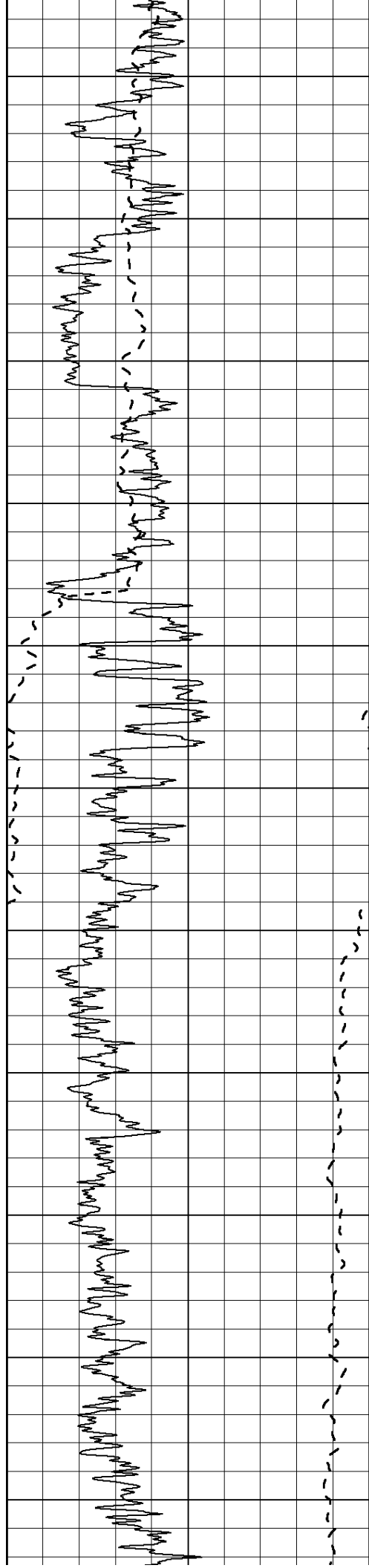
NABORS COMPLETION & PRODUCTION SERVICES CO.
785 (628 - 6395)
THANK YOU FOR YOUR BUSINESS
DIRECTIONS : HAYS, KS. - GOLF COURSE RD. & 230 AVE - SOUTH 2 1/2 MILES - WEST INTO

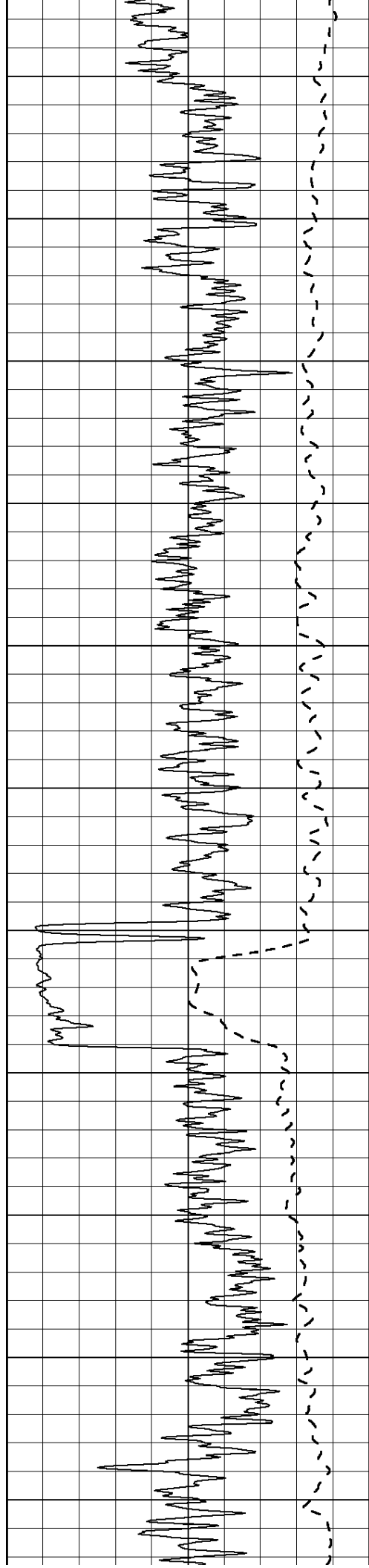
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

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







1050

1100

1150

1200

1250

1300

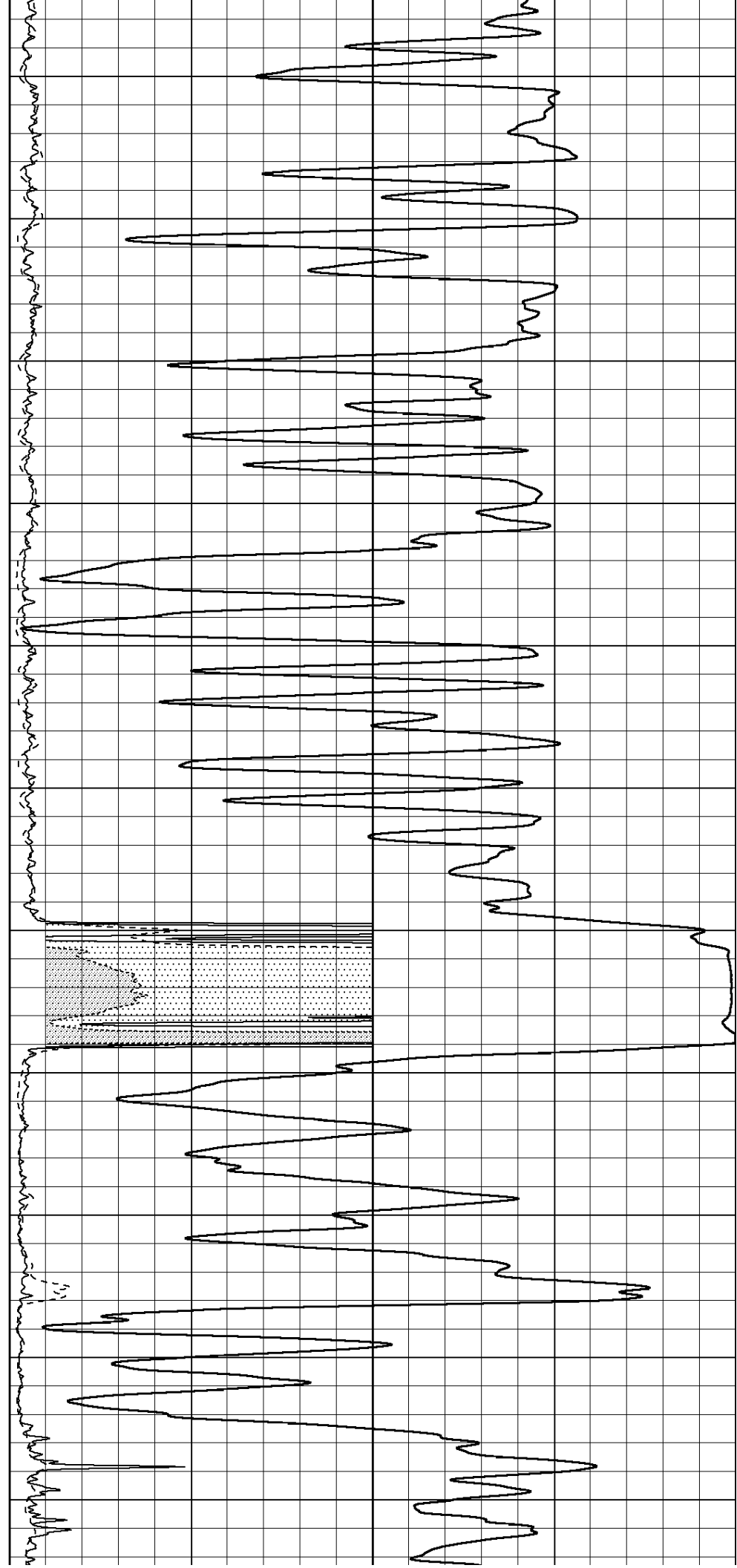
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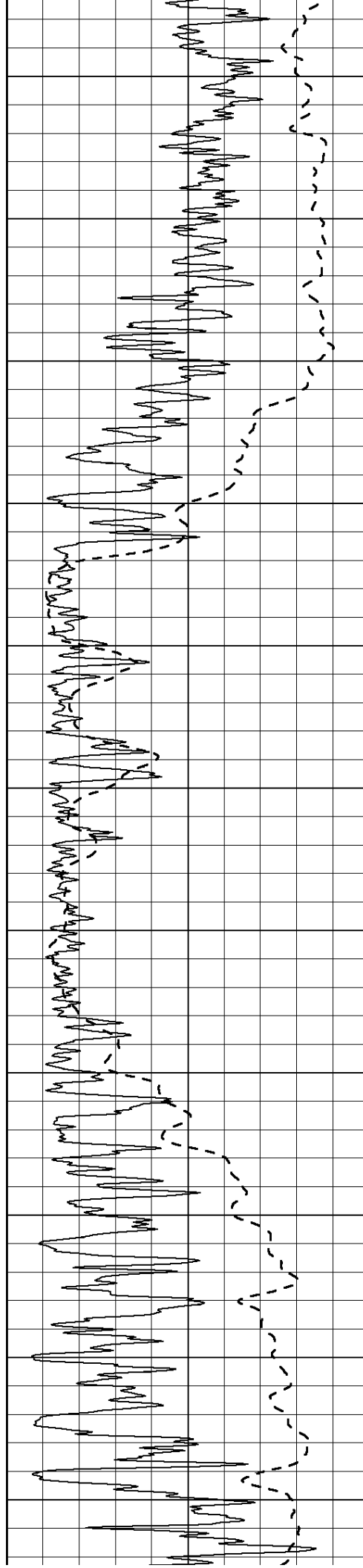
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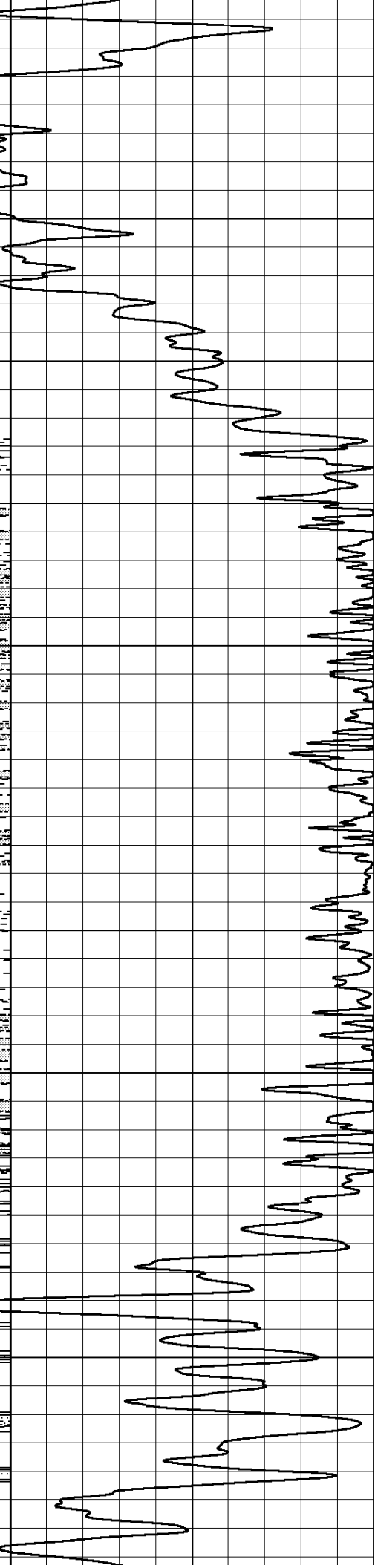
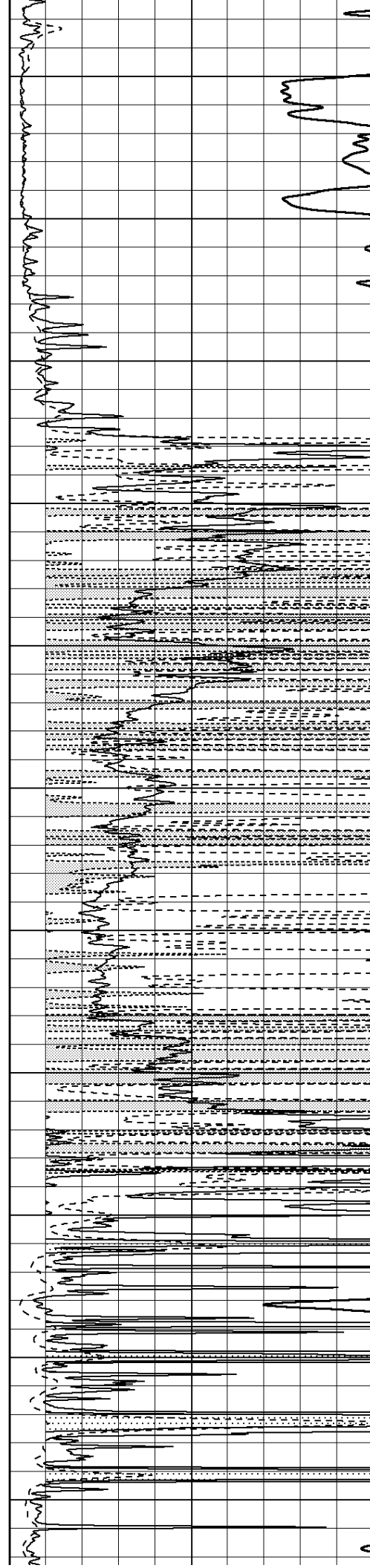
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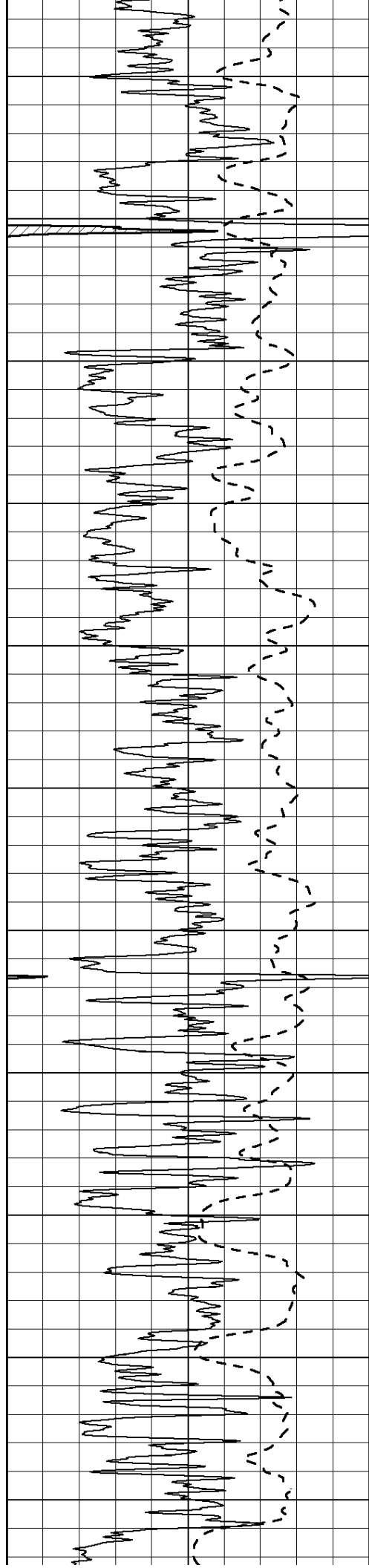
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1600
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2150

2200

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2350

2400

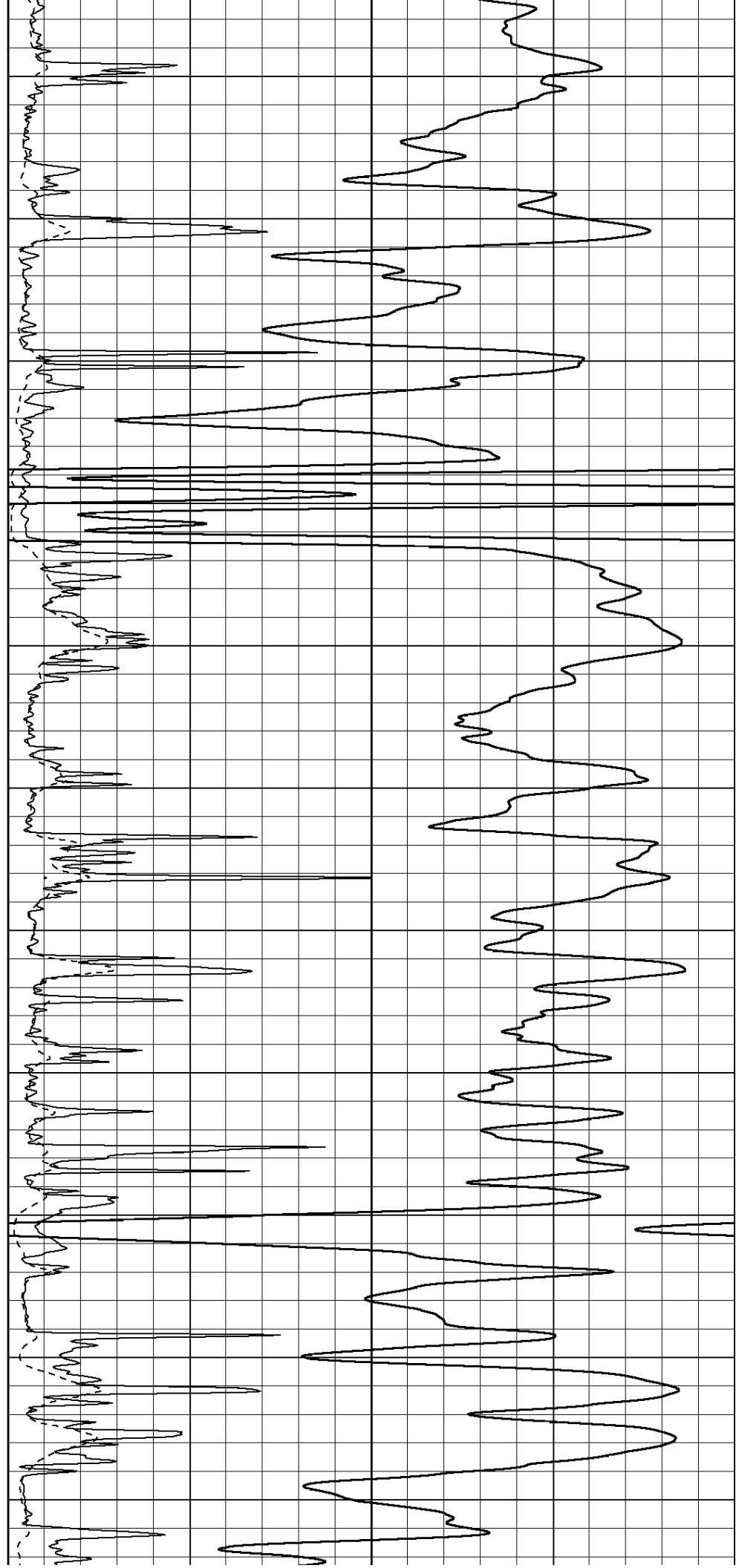
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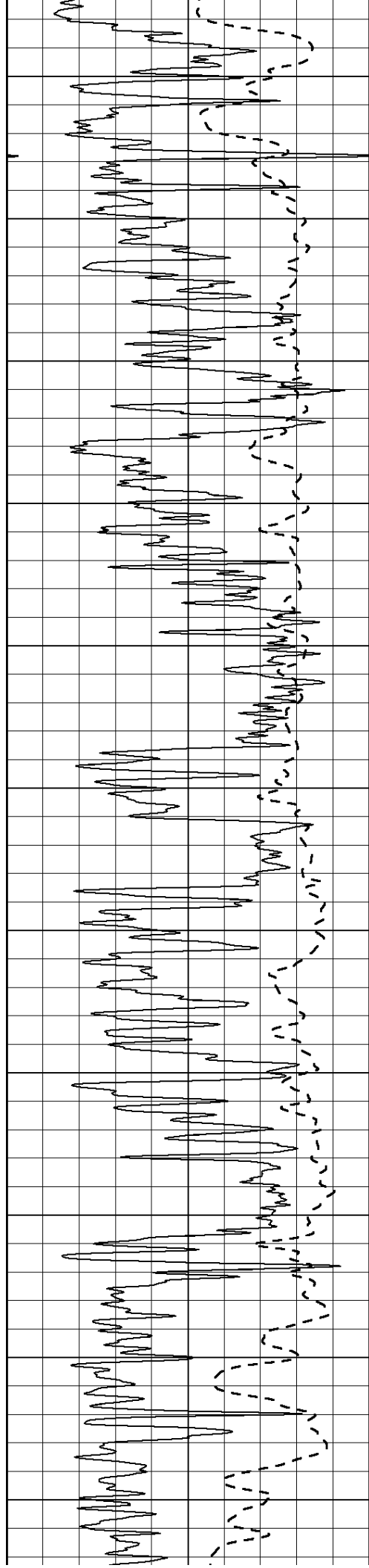
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2550

2600

2650





2700

2750

2800

2850

2900

2950

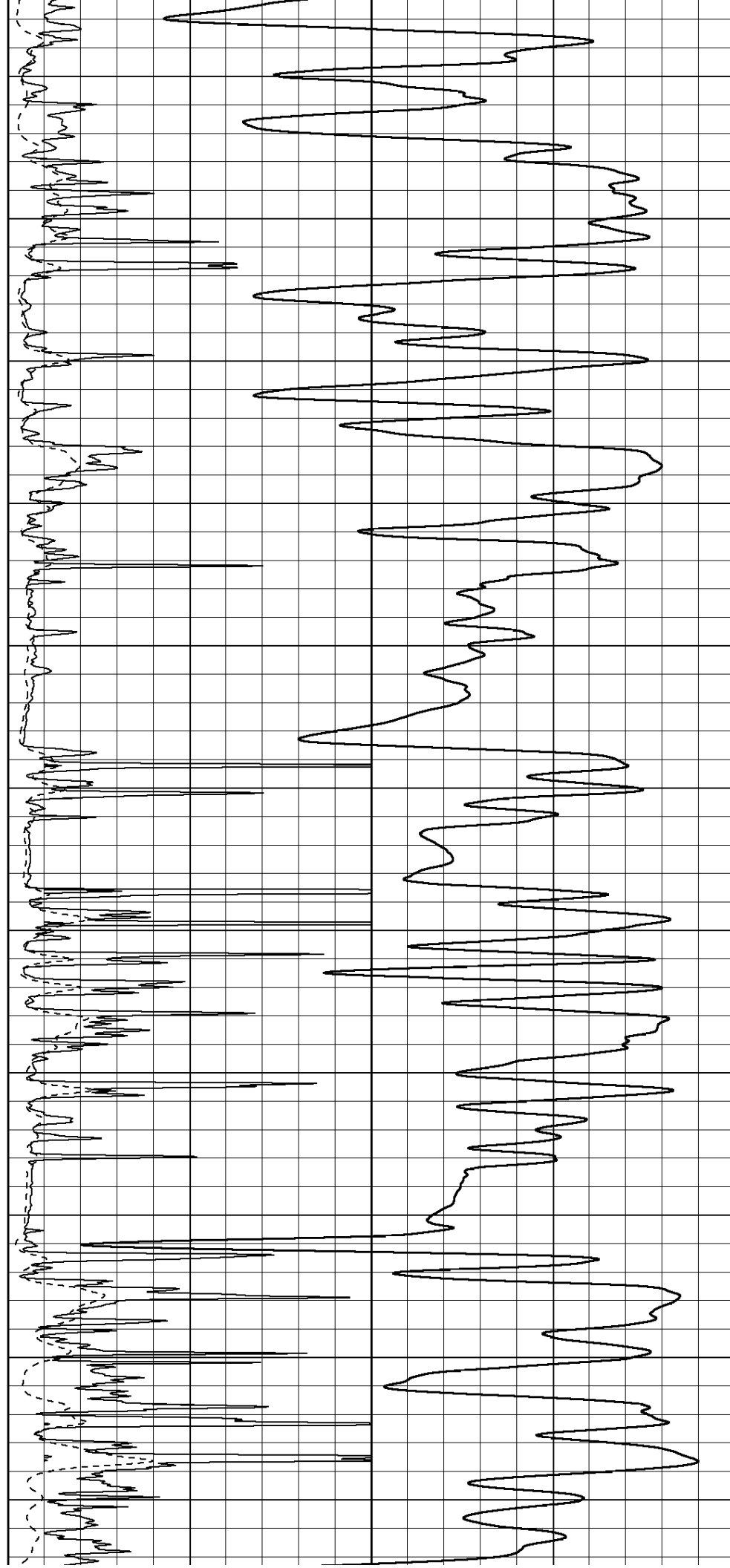
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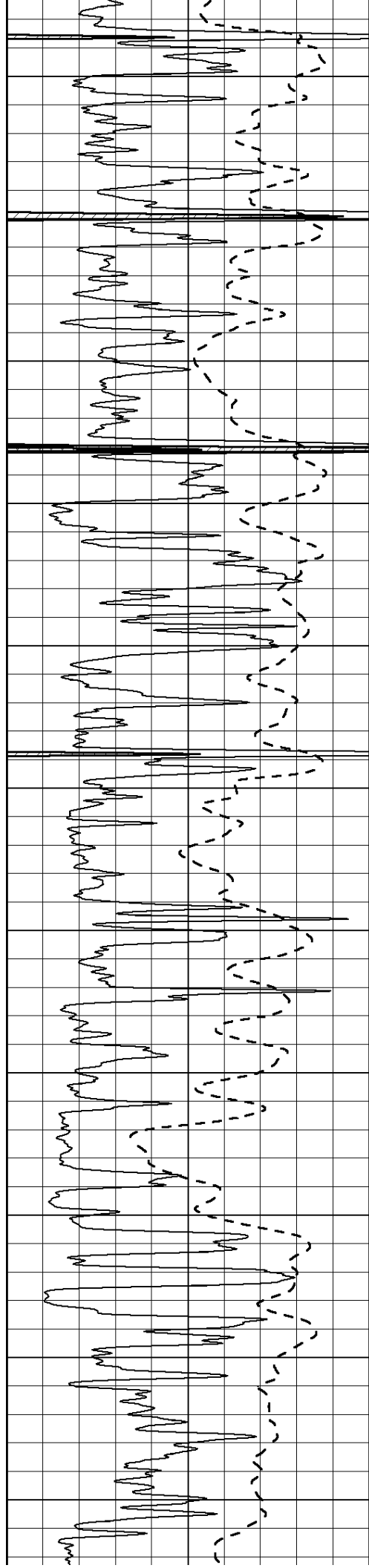
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3100

3150

3200





3250

3300

3350

3400

3450

3500

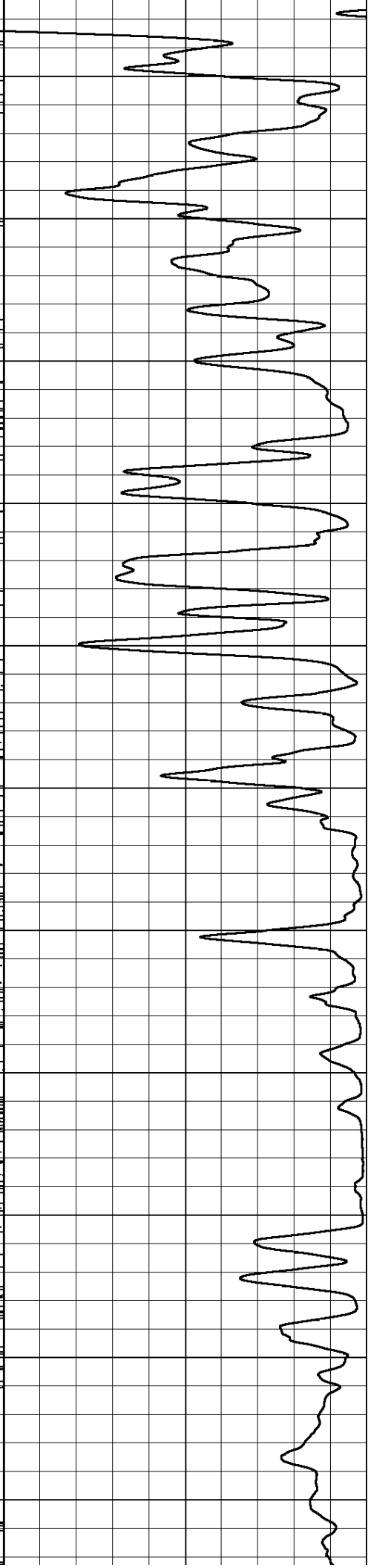
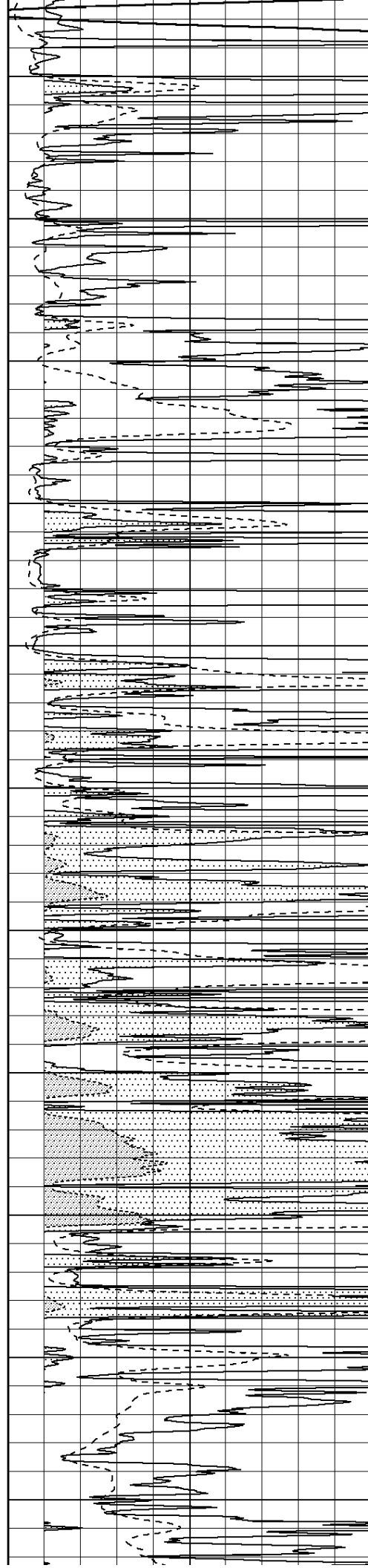
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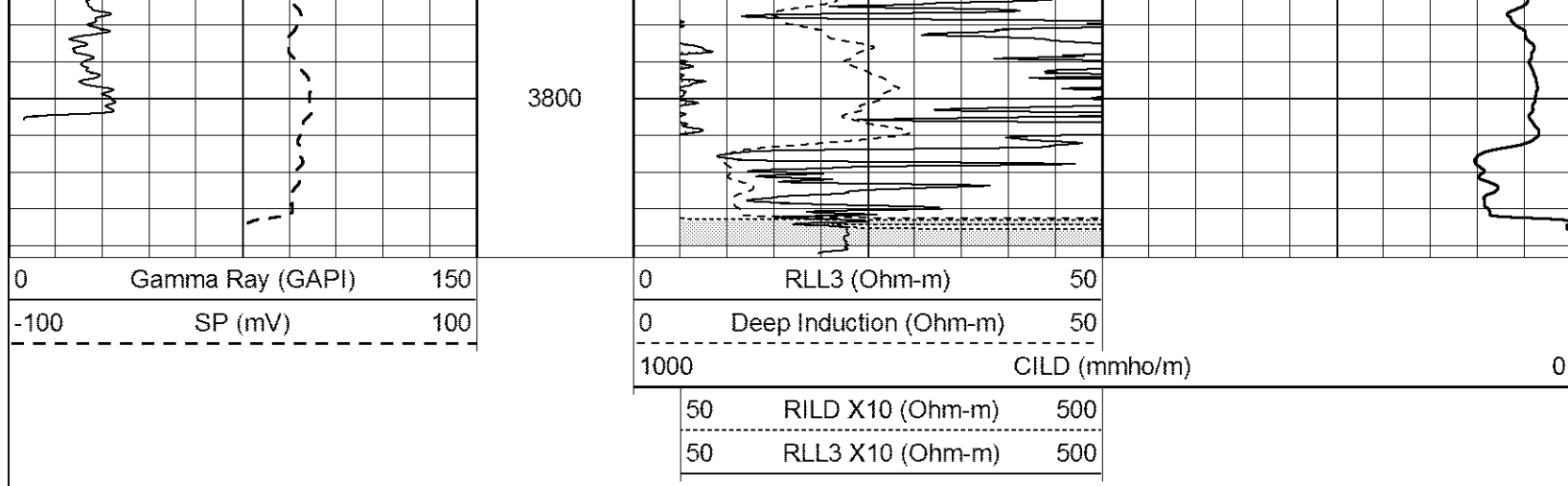
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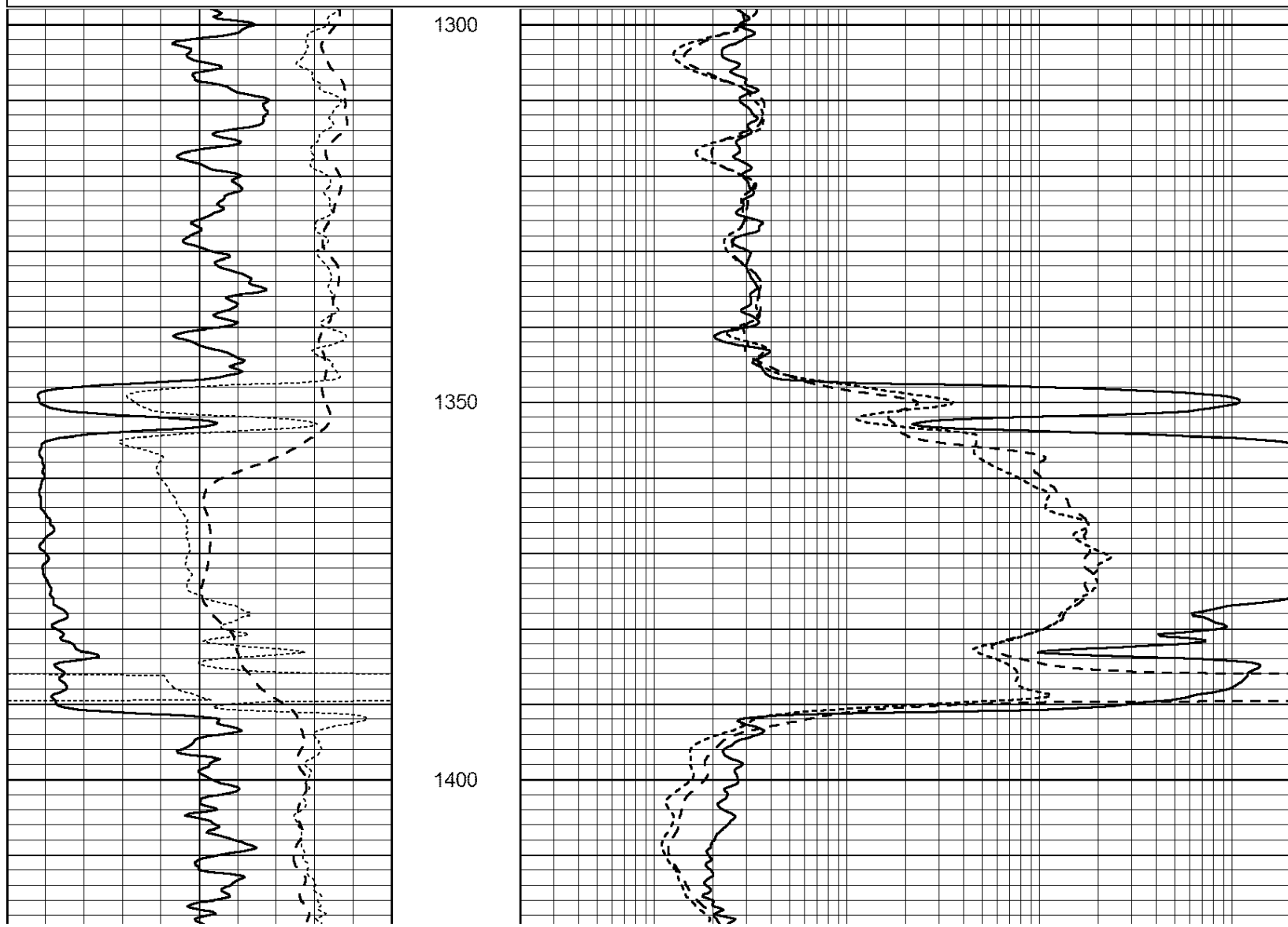
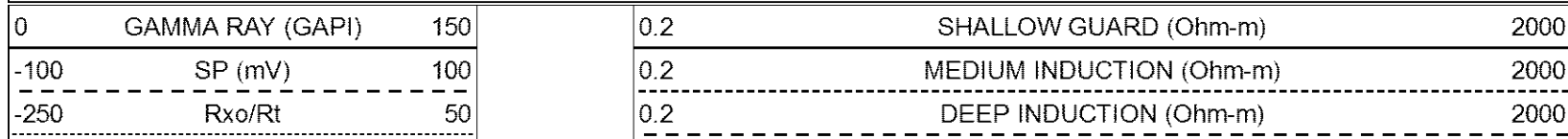
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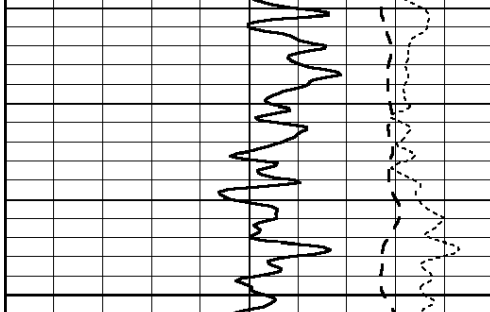
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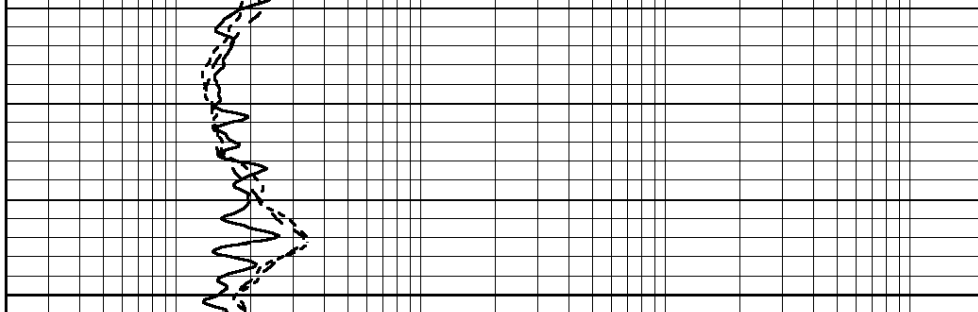
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Presentation Format: _dil
Dataset Creation: Wed Oct 15 04:10:38 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240





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

1450

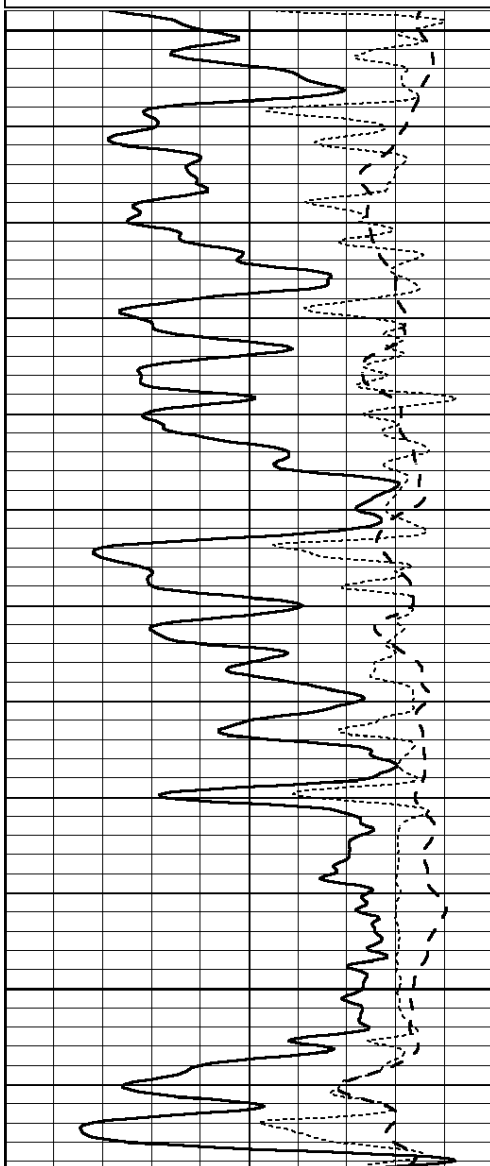


0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

Database File: 26239ddn.db
 Dataset Pathname: pass6.4
 Presentation Format: _dil
 Dataset Creation: Wed Oct 15 03:40:33 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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-100	SP (mV)	100
-250	Rxo/Rt	50

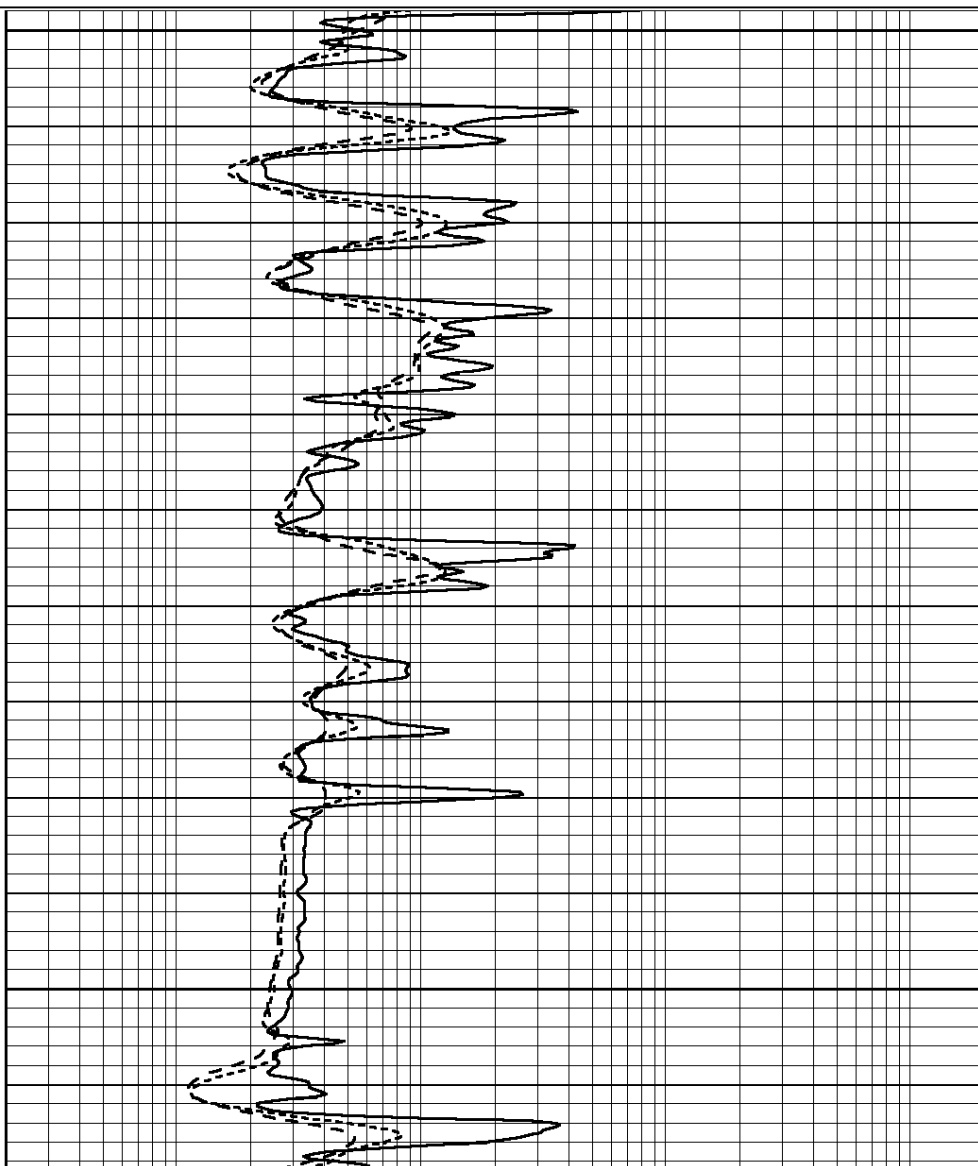
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

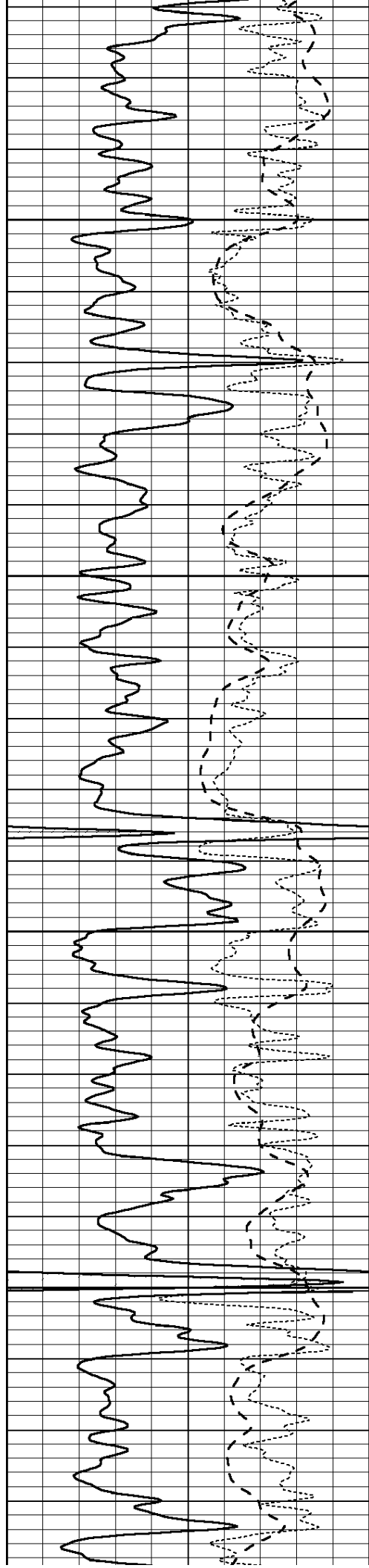


3000

3050

3100



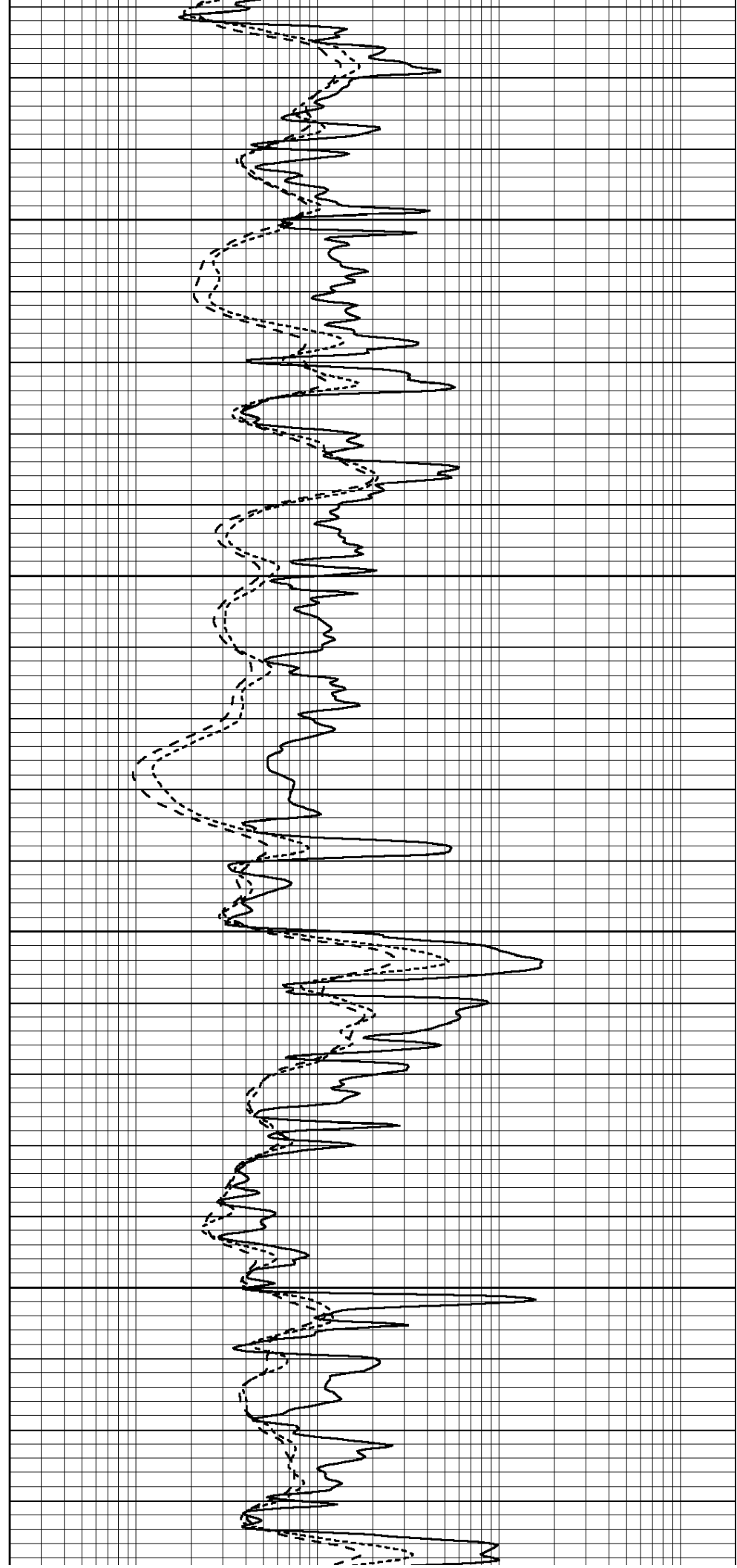


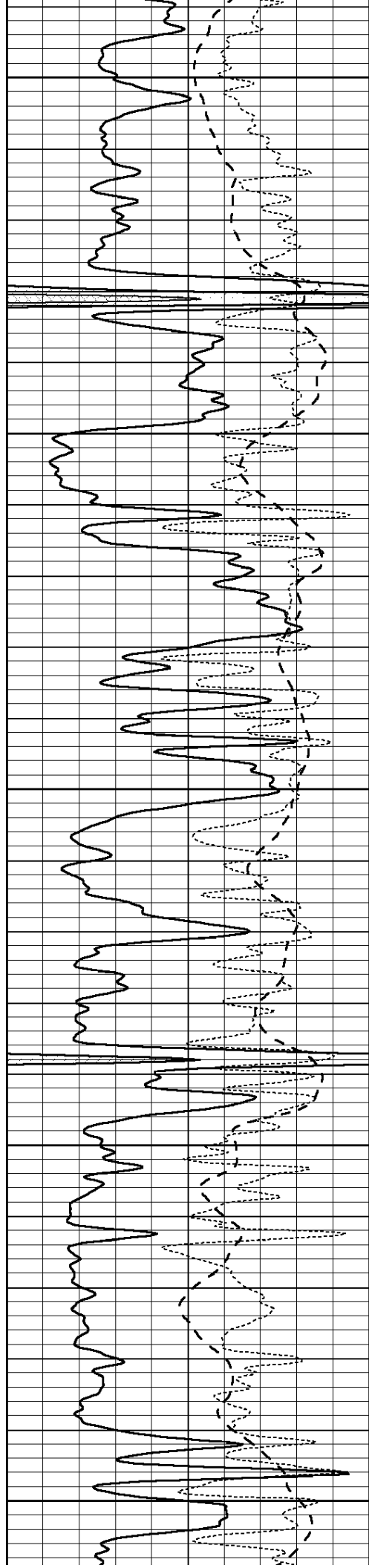
3150

3200

3250

3300





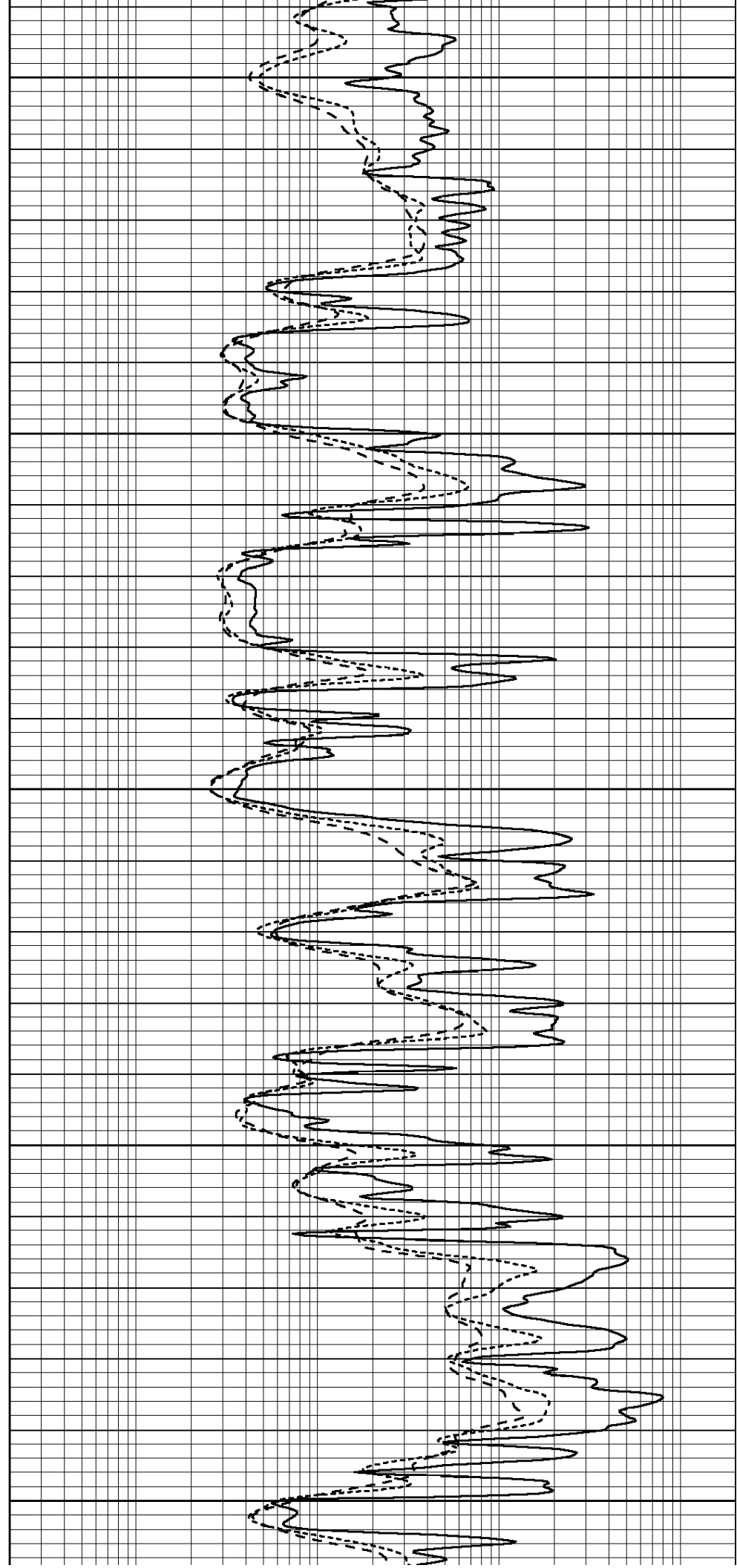
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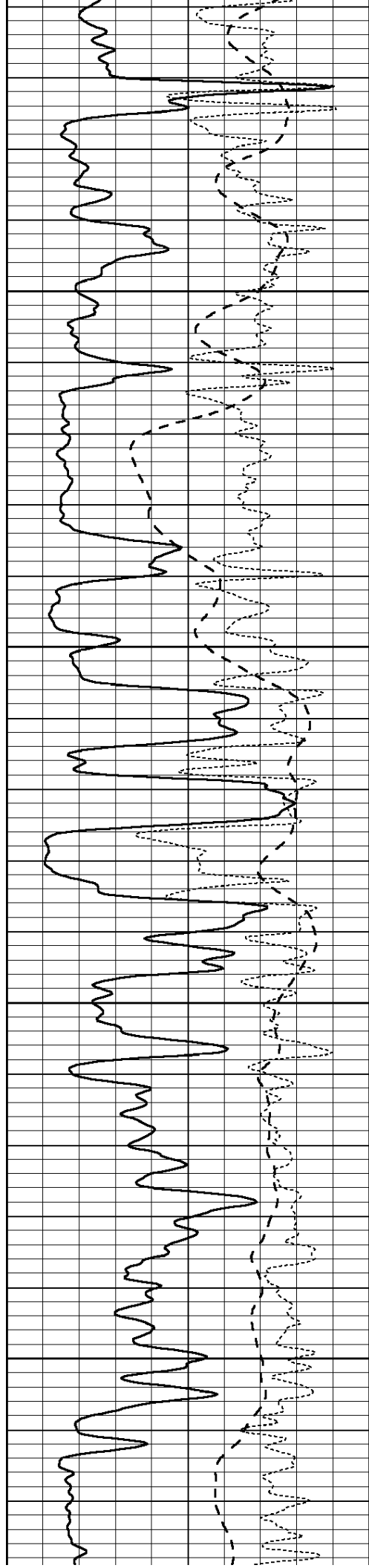
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3450

3500

3550



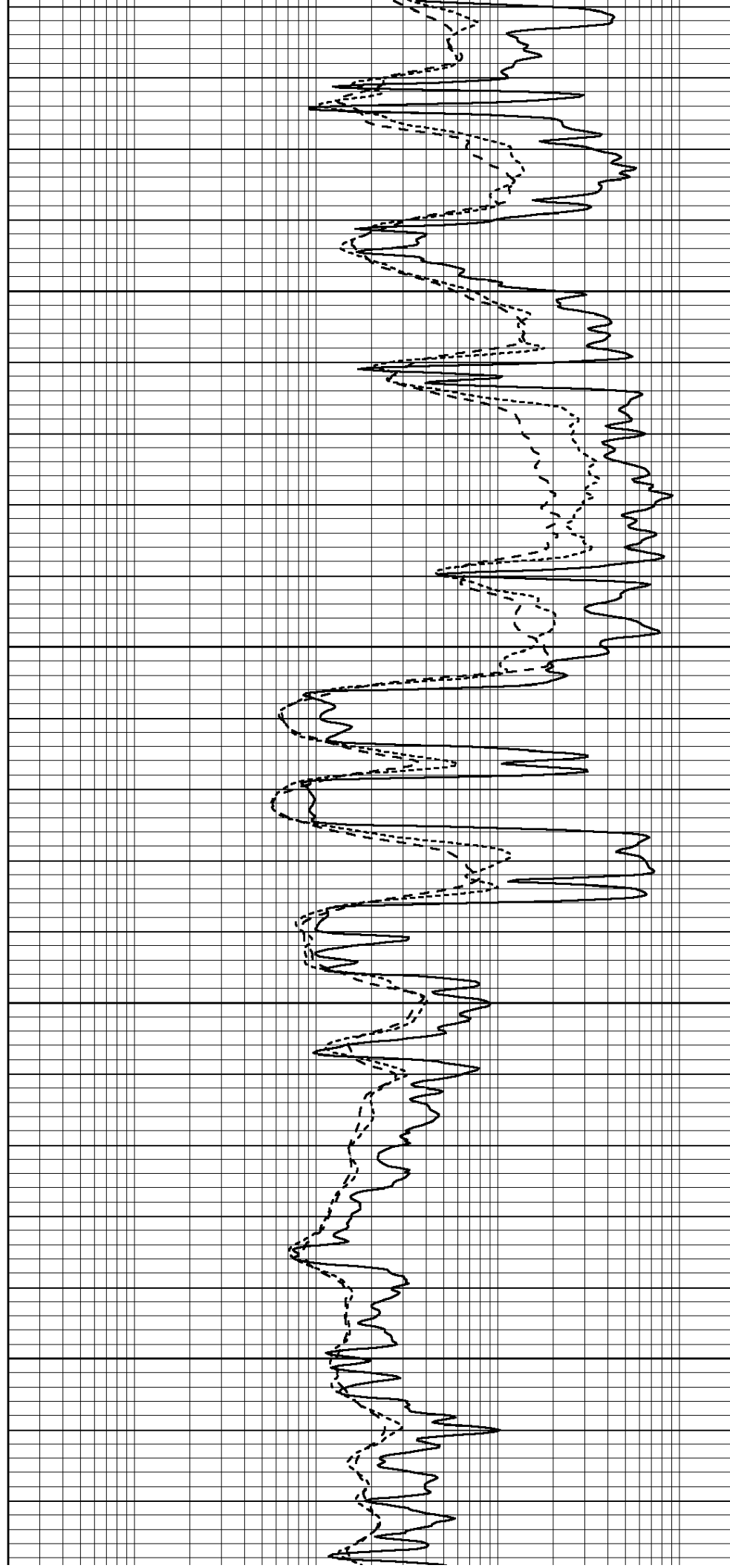


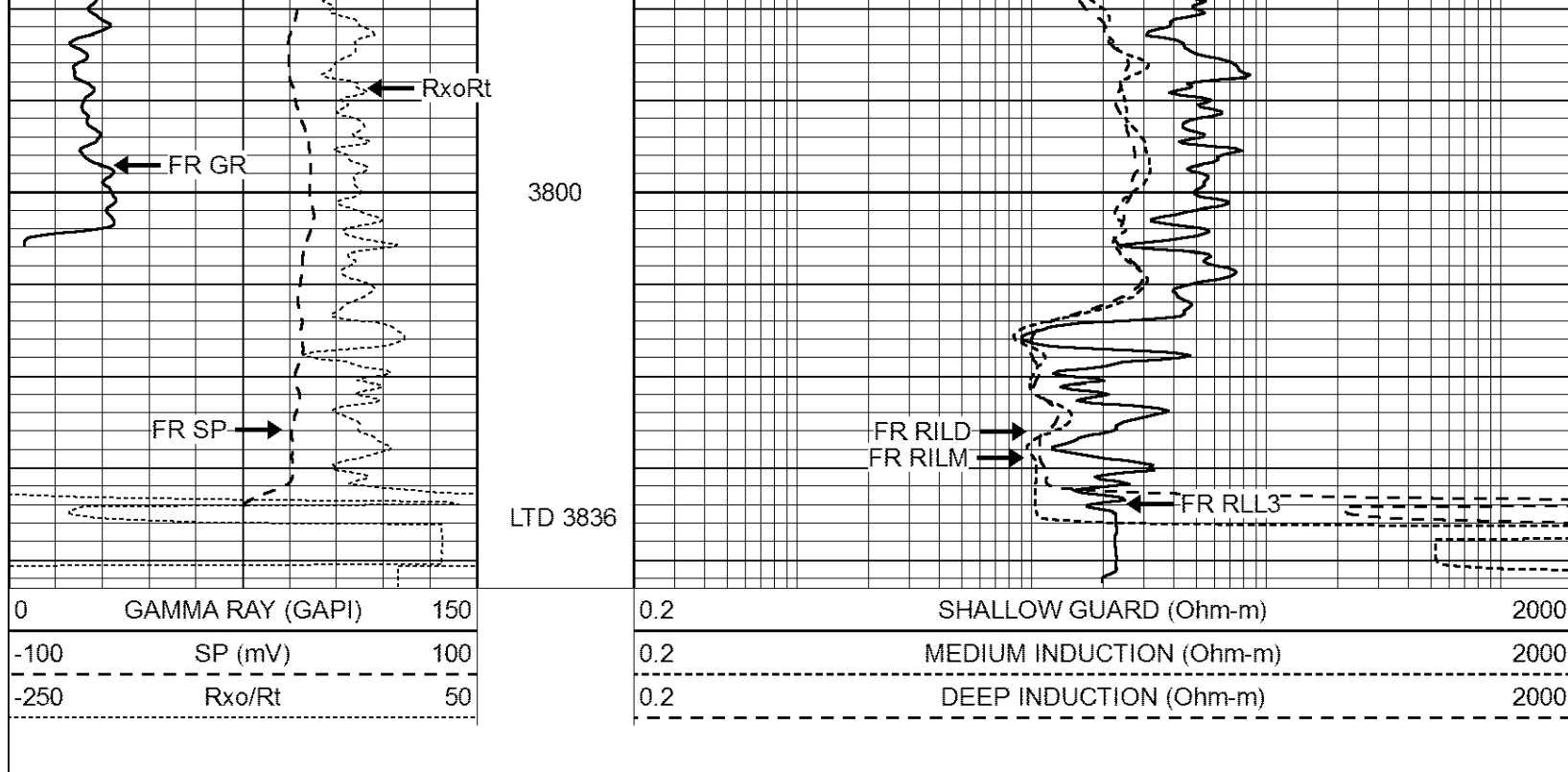
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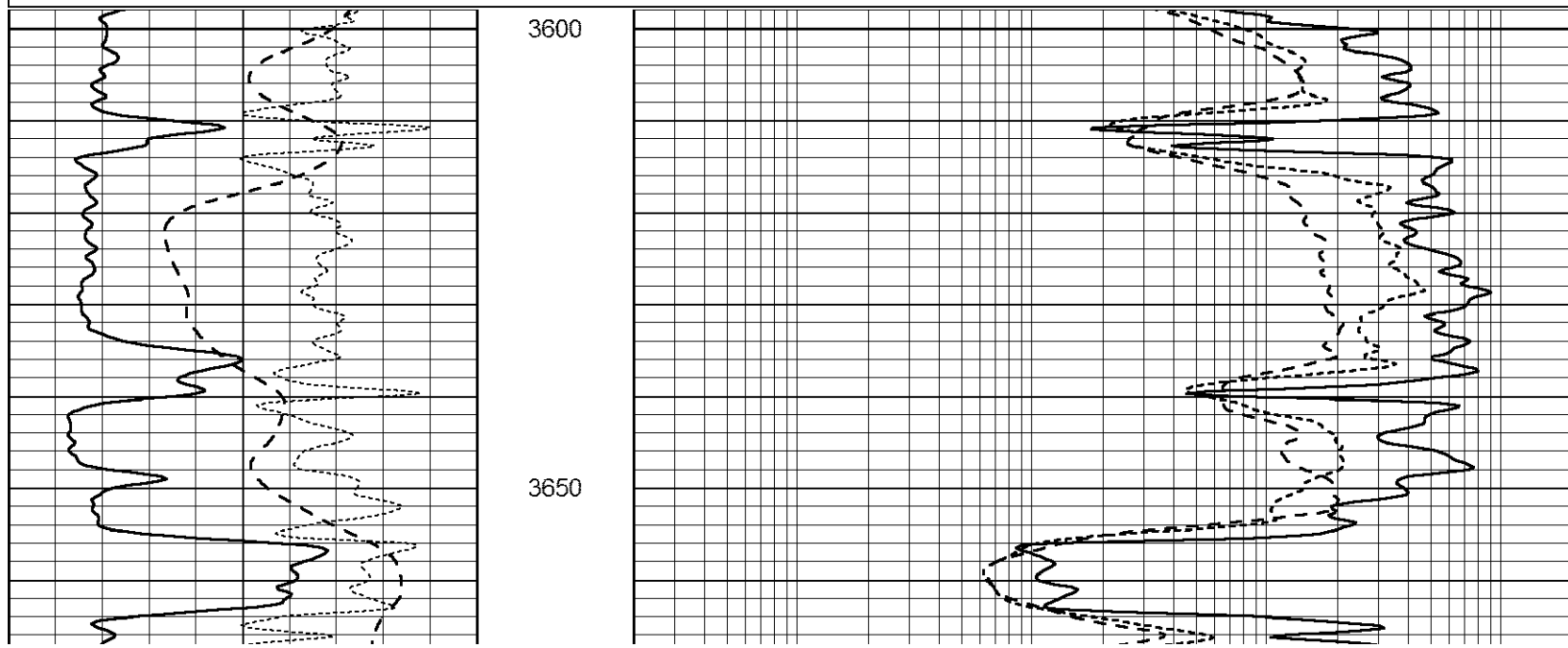
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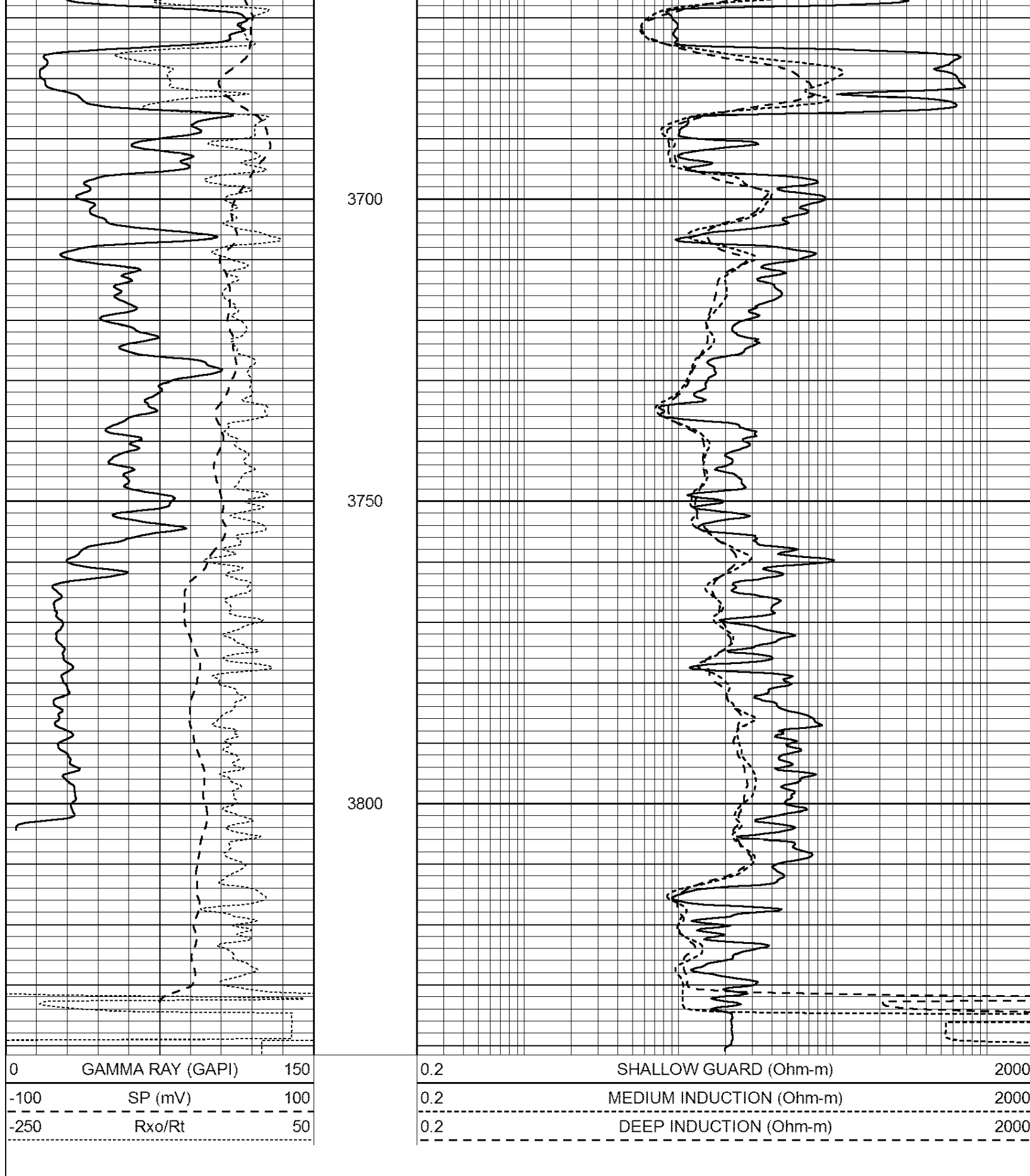




REPEAT SECTION

Database File: 26239ddn.db
 Dataset Pathname: pass5.1
 Presentation Format: _dil
 Dataset Creation: Wed Oct 15 03:04:28 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: 26239ddn.db
Dataset Pathname: pass6.5
Dataset Creation: Wed Oct 15 04:10:38 2014 by Calc Open-Cased 090629

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Sat Aug 02 01:54:49 2014
Downhole Cal Performed:	Sat Jan 19 19:51:38 2013
After Survey Verification Performed:	Sat Jan 19 19:51:38 2013

Surface Calibration

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.793	0.790	V	0.000	400.000	mmho/m	550.000	14.000
Medium	0.992	1.002	V	0.000	464.000	mmho/m	580.000	-32.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.041	0.642	V	0.000	400.000	mmho/m	664.874	-27.011
Medium	0.035	0.802	V	0.000	464.000	mmho/m	604.936	-21.367

Downhole Calibration

Readings				References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	135384.000	27094.500	mmho/m	135400.000	27082.400	mmho/m	1.000	-19.259
Medium	-47330.100	-9381.740	mmho/m	-47327.100	-9389.280	mmho/m	1.000	-10.154
LL3		7.322	V		1400.000	Ohm-m		
		0.038	V		20.000	Ohm-m		
		-7.273	V		4000.000	mmho-m		

After Survey Verification

Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	135384.000	27094.500	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-47330.100	-9381.740	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1400.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		4000.000	mmho-m		

Compensated Density Calibration Report

Serial-Model:	GEAR5-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Sat Aug 02 01:49:41 2014

Master Calibration

	Density		Far Detector		Near Detector	
Magnesium	1.710	g/cc	943.83		576.01	cps
Aluminum	2.610	g/cc	212.01		399.19	cps
Spine Angle = 76.20			Density/Spine Ratio = 0.585			
	Size		Reading			
Small Ring	8.40	in	1.64	V		
Large Ring	14.00	in	2.93	V		

Compensated Neutron Calibration Report

Serial Number:	080620
Tool Model:	Probe

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
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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:	46001		
Tool Model:	Probe1		
Performed:	Sat Aug 02 01:56:52 2014		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2600	GAPI/cps	