



**SUPERIOR
Hays,
Kansas**

DUAL INDUCTION LOG

Company	SHELBY RESOURCES, LLC		
Well	CLARK #4-24		
Field	SANFORD		
County	BARTON	State	KANSAS
Location:	API # : 15-009-25486-0000	Other Services CDL/CNL MEL/SON	
SEC 24 TWP 17S RGE 14W			
Permanent Datum	GROUND LEVEL	Elevation	1916
Log Measured From	KELLY BUSHING 11' A.G.L.		
Drilling Measured From	KELLY BUSHING	Elevation K.B. 1927 D.F. 1925 G.L. 1916	
Date	11-19-10		
Run Number	ONE		
Depth Driller	3500		
Depth Logger	3500		
Bottom Logged Interval	3498		
Top Log Interval	0		
Casing Driller	900'		
Casing Logger	897'		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.2 / 56	CHLORIDES 8,100 PPM	
pH / Fluid Loss	8.0 / 11.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	0.55 @ 70F		
Rmf @ Meas. Temp	0.41 @ 70F		
Rmc @ Meas. Temp	0.66 @ 70F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	0.34 @ 112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	CHARLIE STURDAVANT		

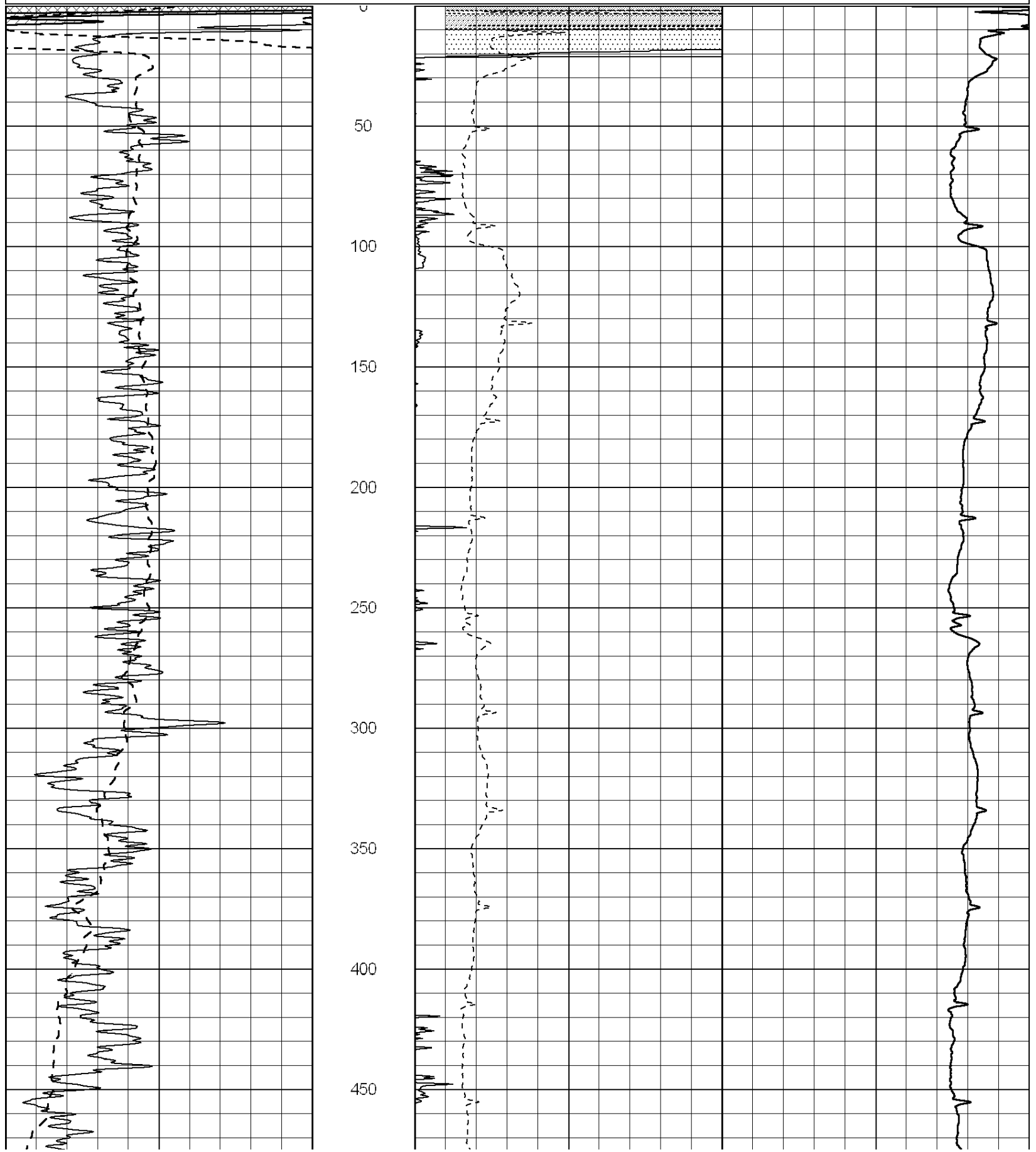
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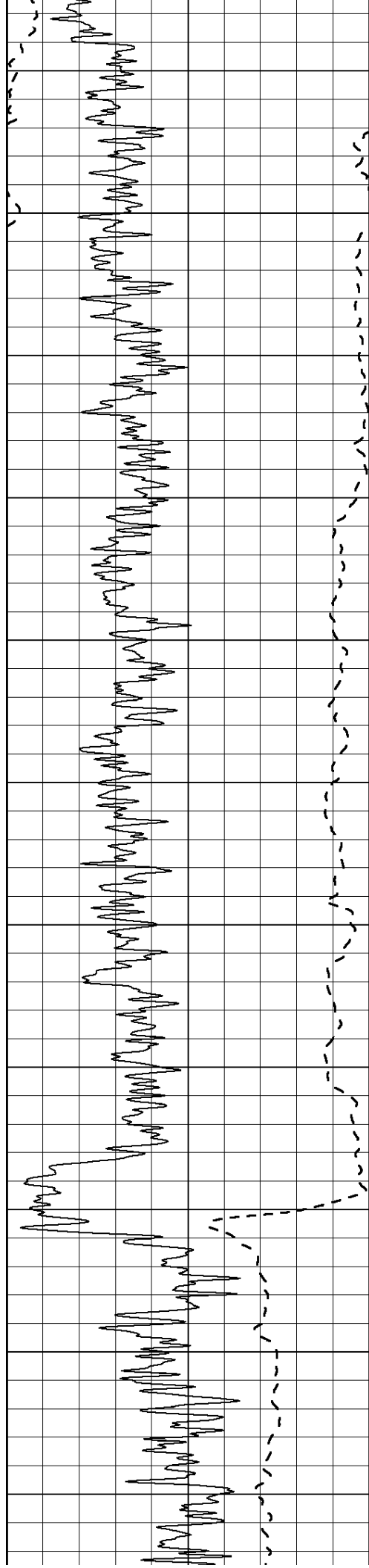
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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: INTERSECTION OF HWYS 4 & 281 - 1 MILE NORTH - 1 MILE EAST
1/2 MILE NORTH - EAST INTO

0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50	
-100	SP (mV)	100	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

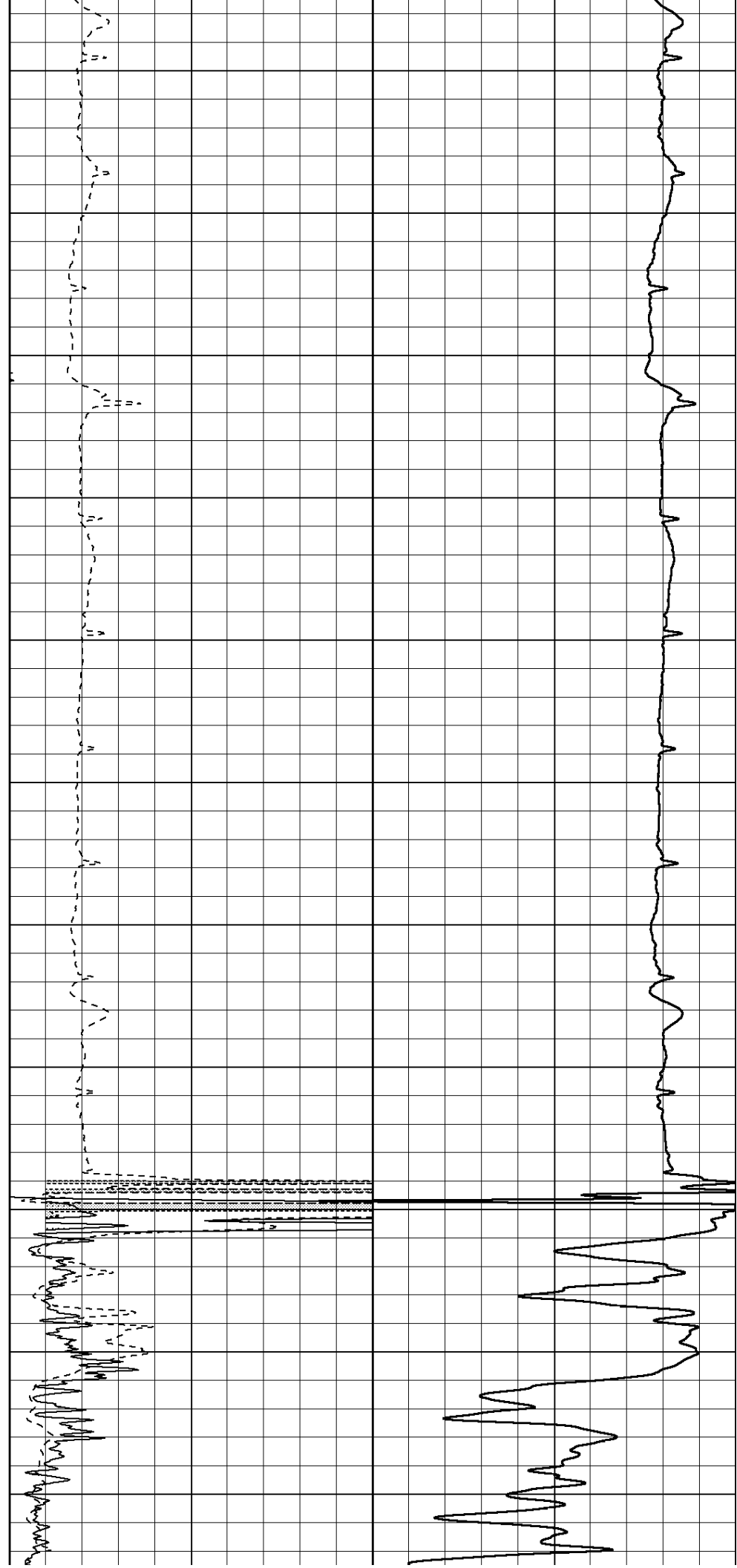
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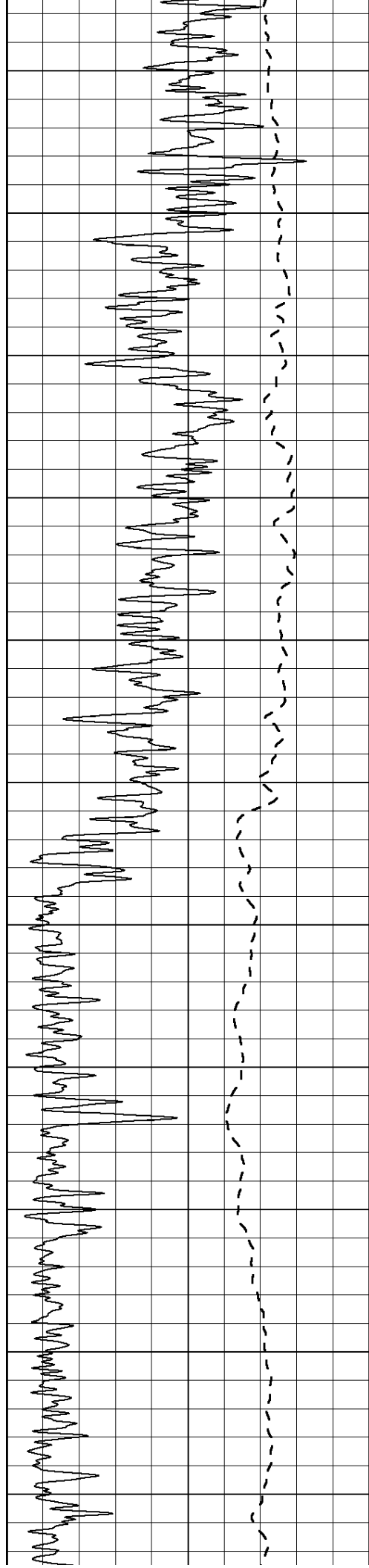
850

900

950

1000





1050

1100

1150

1200

1250

1300

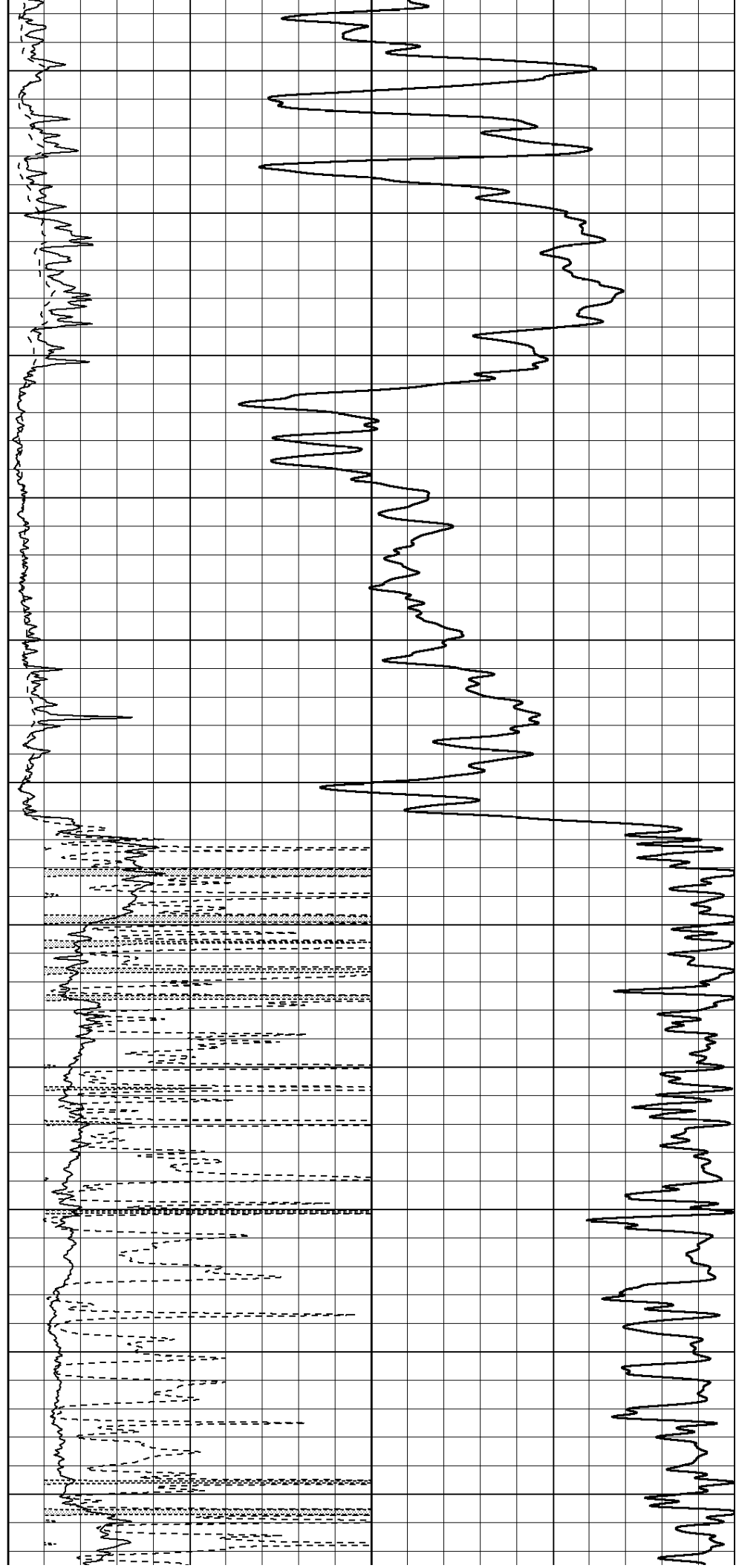
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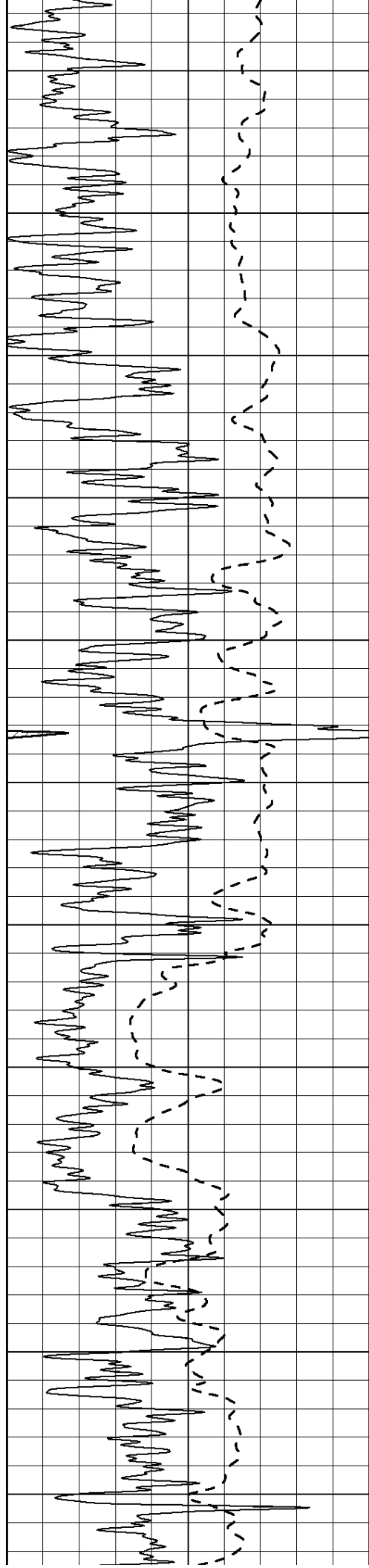
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1450

1500

1550





1600

1650

1700

1750

1800

1850

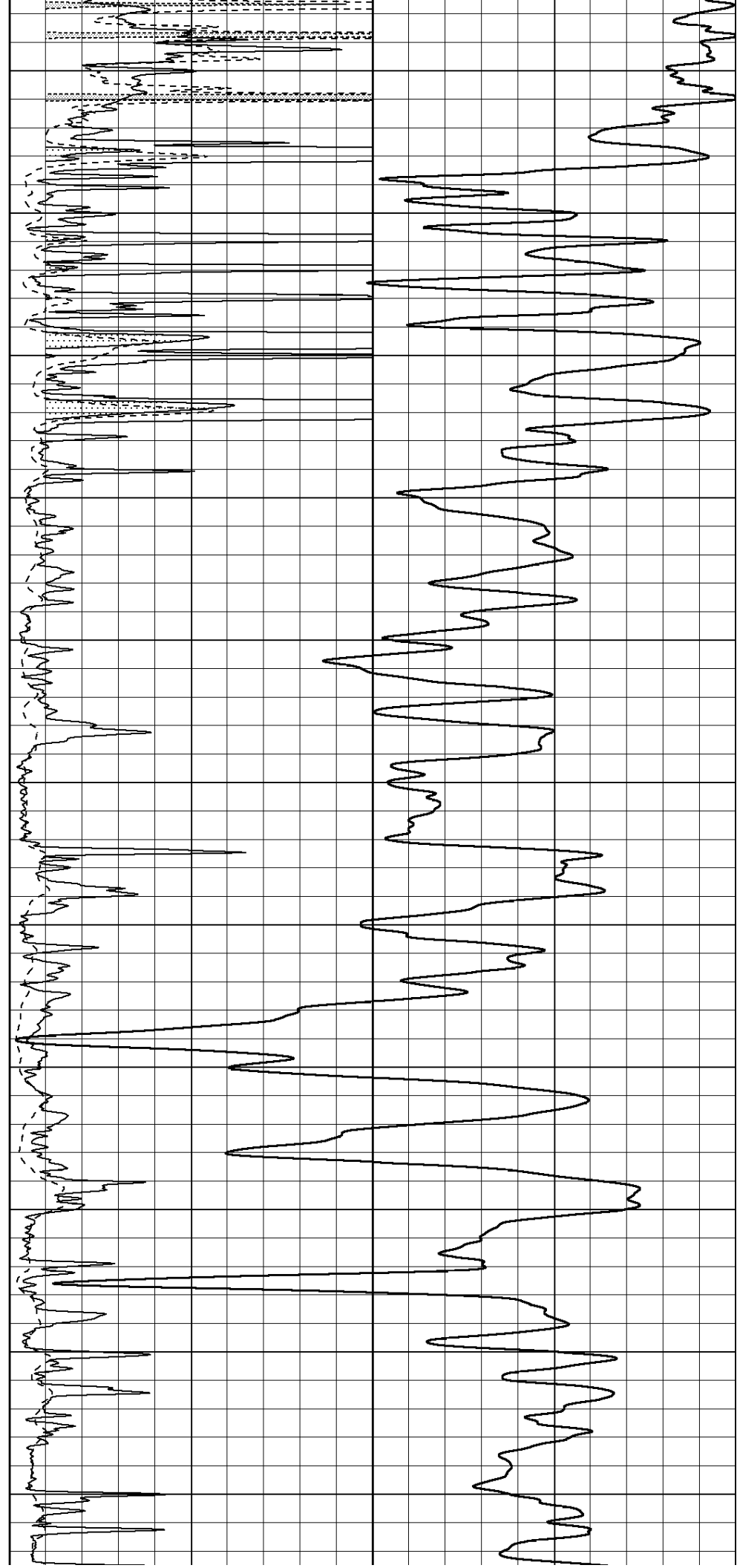
1900

1950

2000

2050

2100



2150

2200

2250

2300

2350

2400

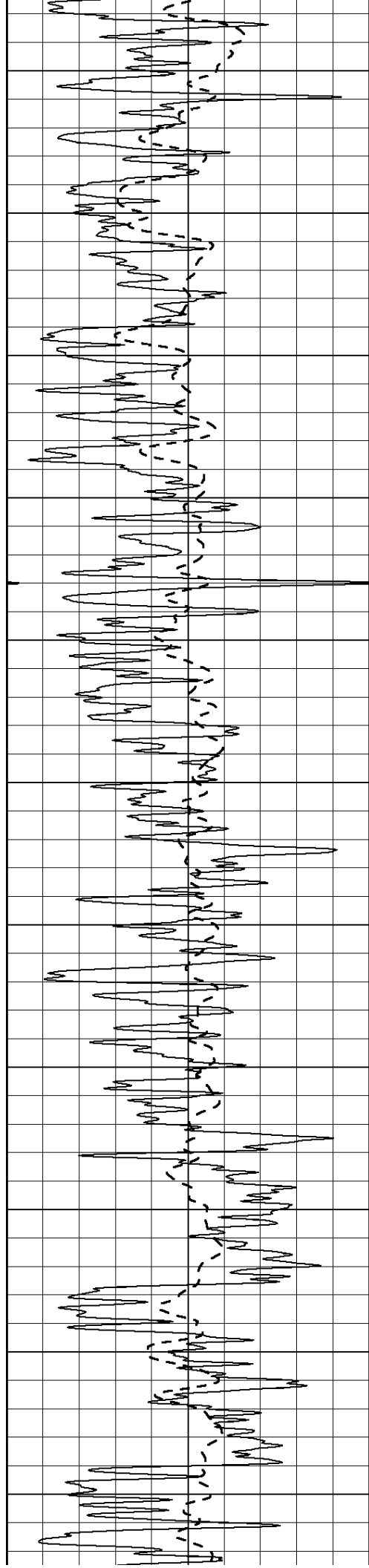
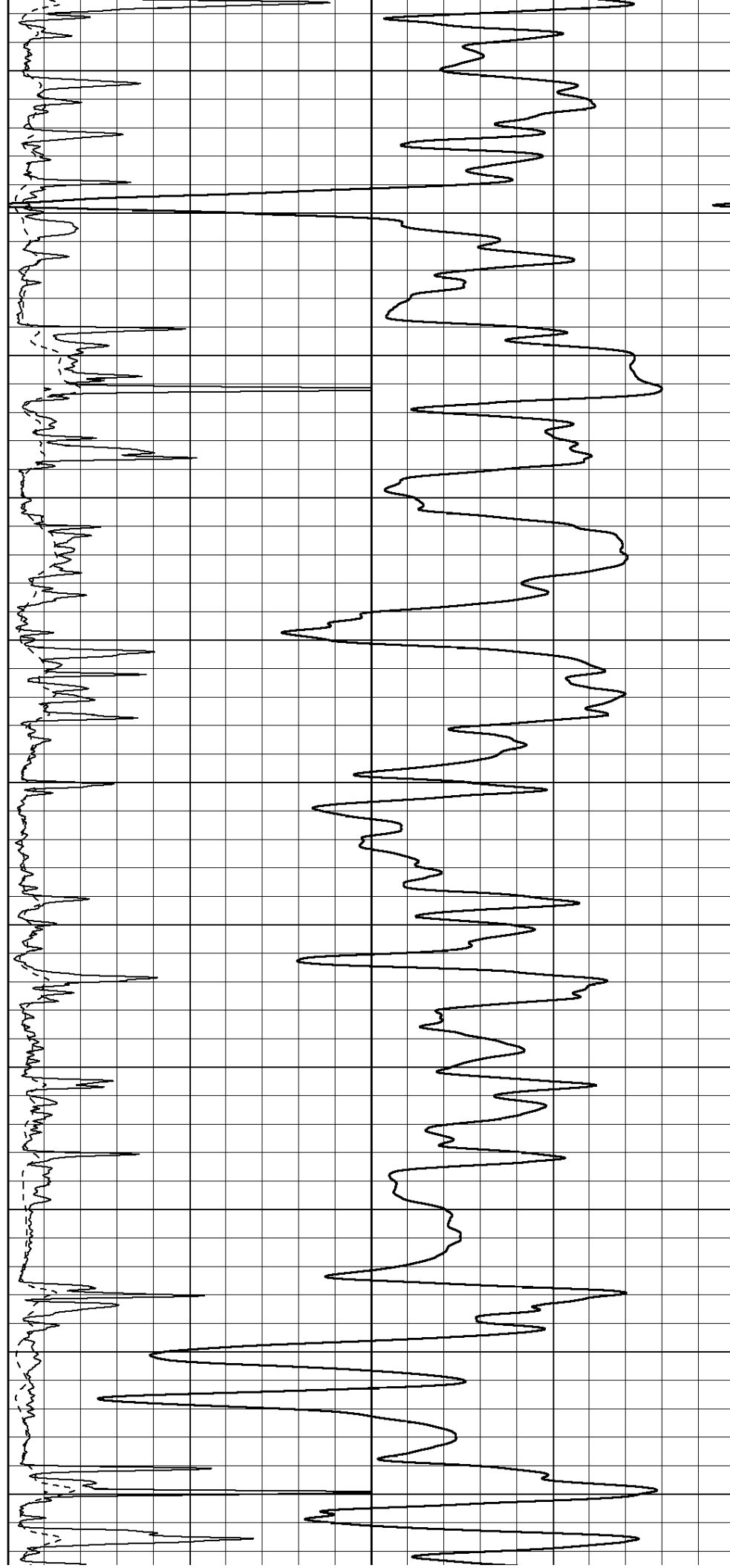
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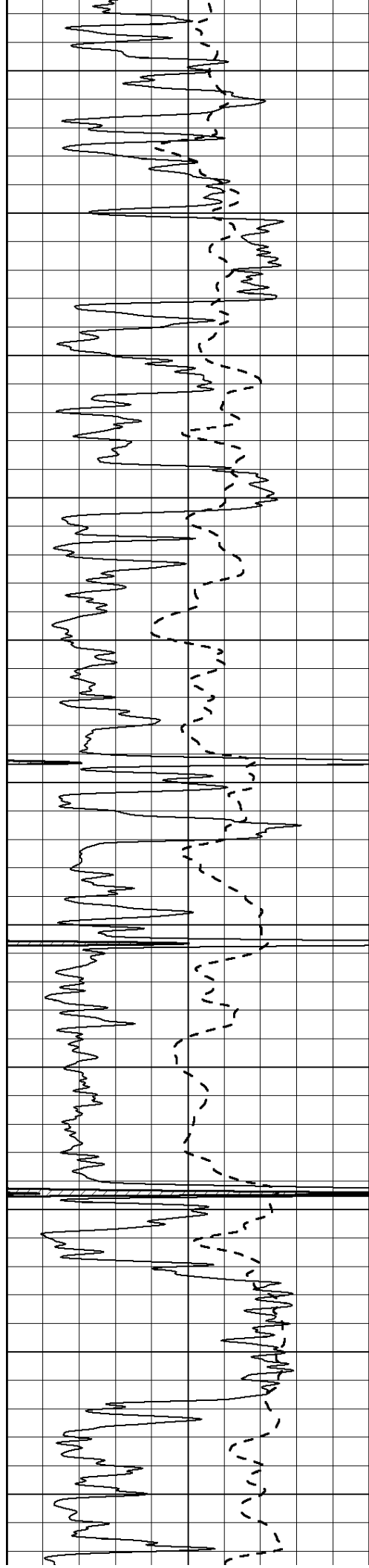
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2550

2600

2650





2700

2750

2800

2850

2900

2950

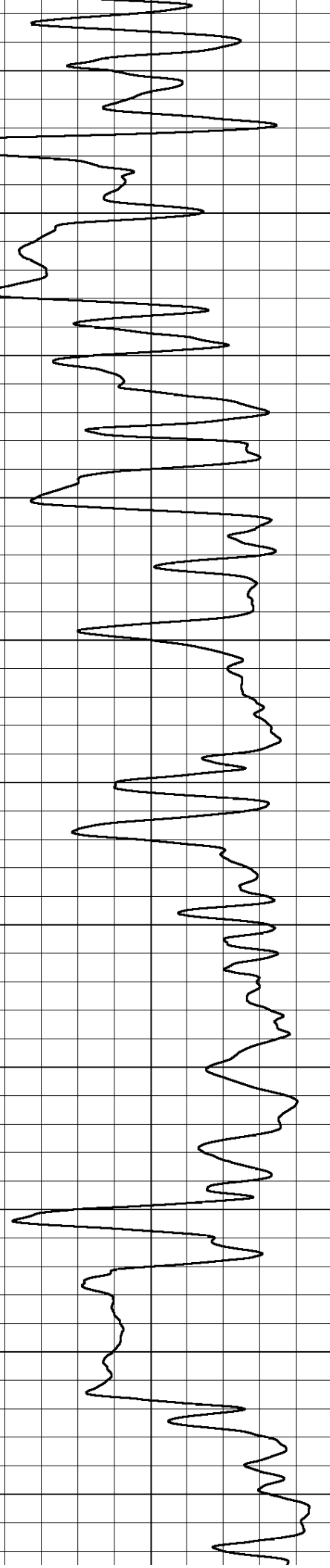
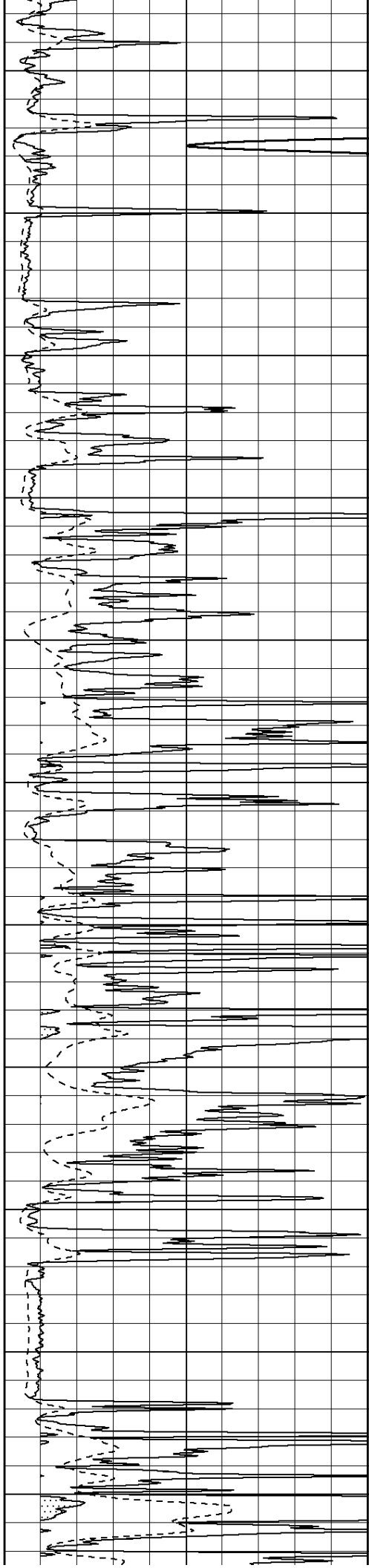
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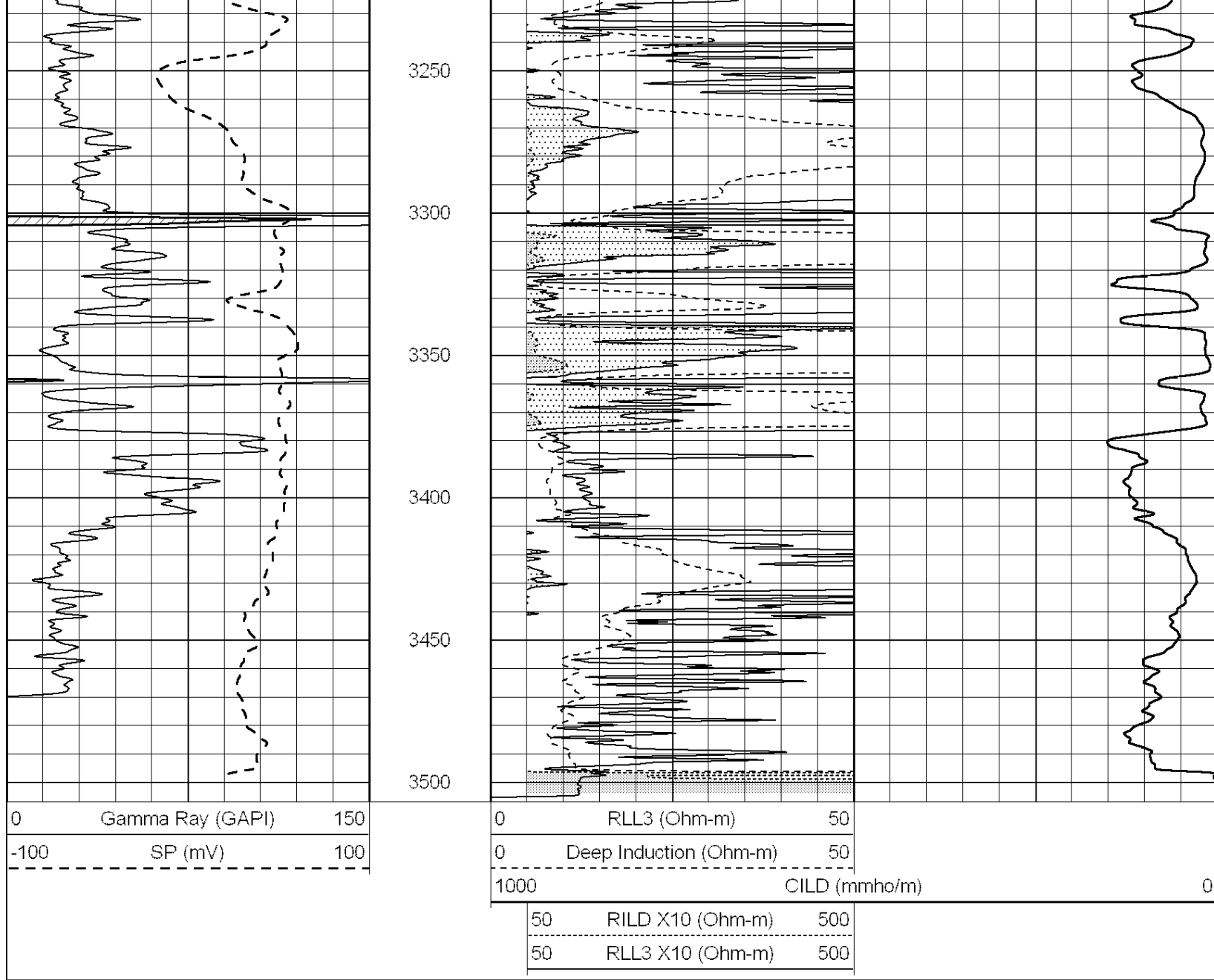
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3100

3150

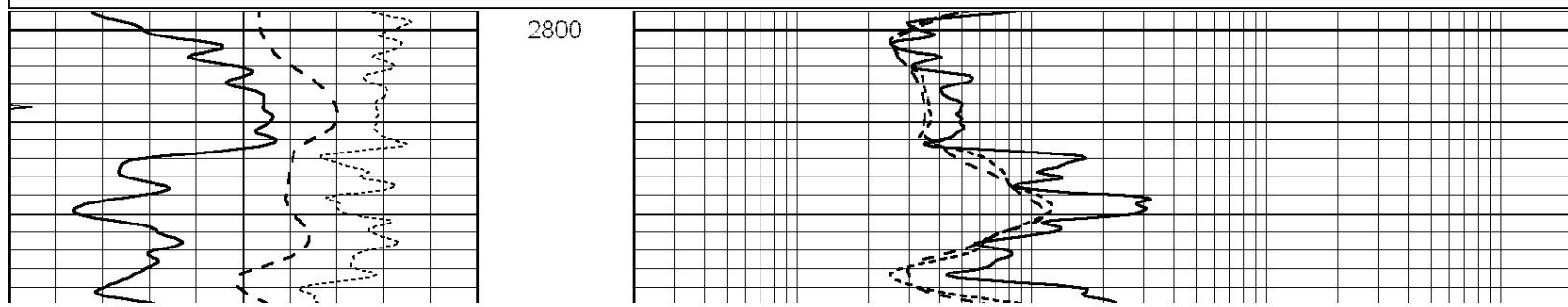
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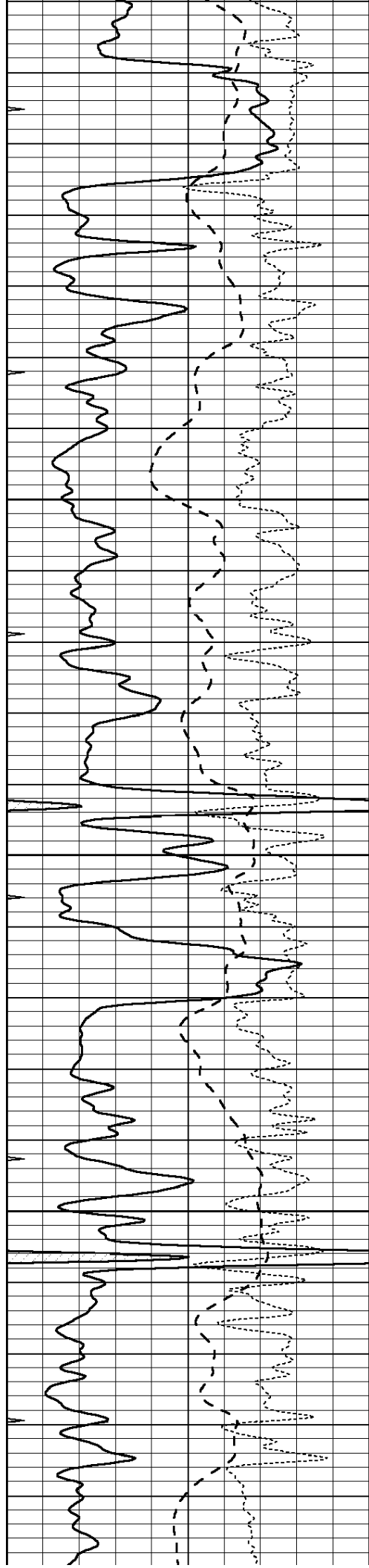




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Dataset Pathname: pass3.1
Presentation Format: dil
Dataset Creation: Fri Nov 19 08:54:04 2010 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	RLL3 (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			





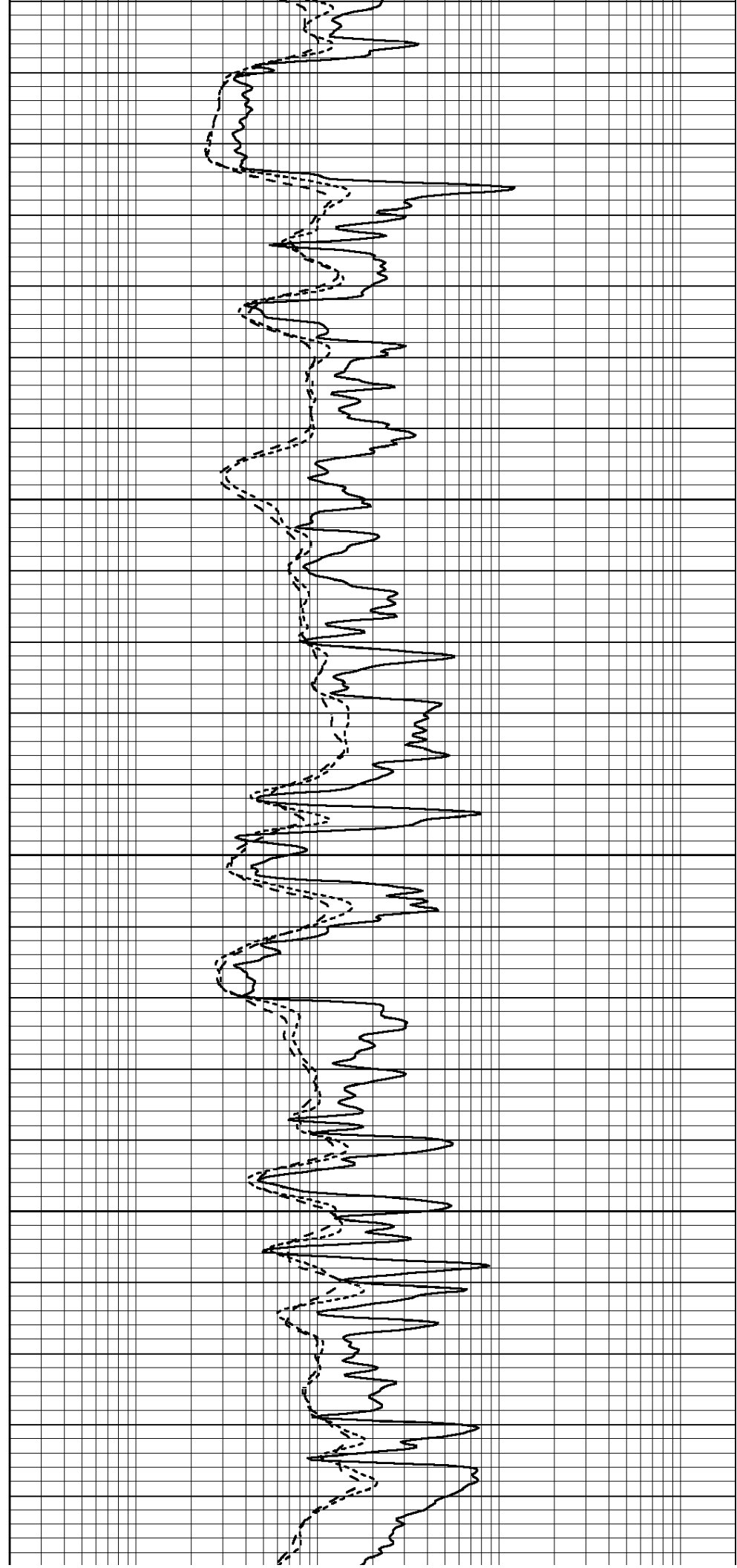
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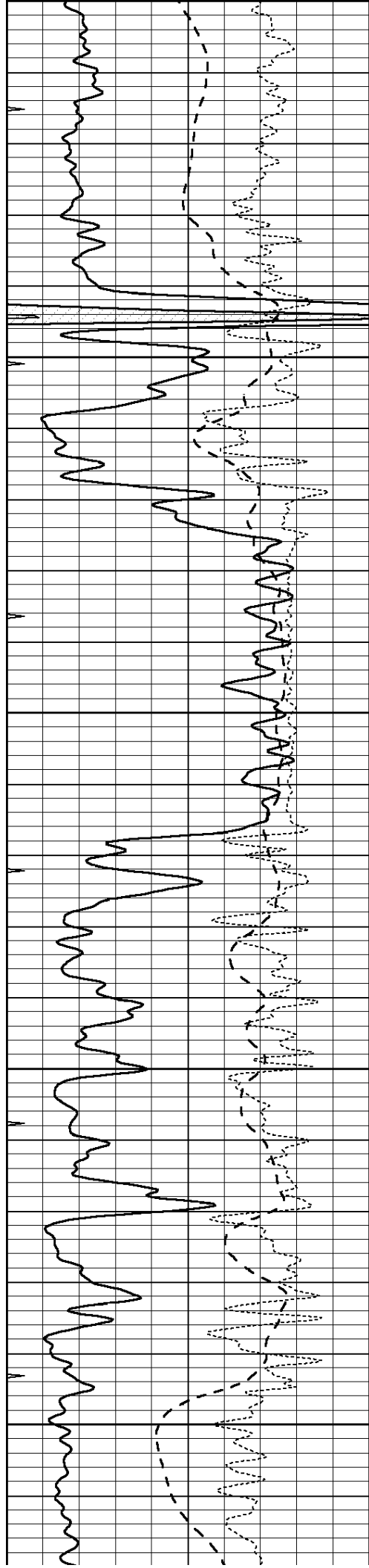
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2950

3000

3050





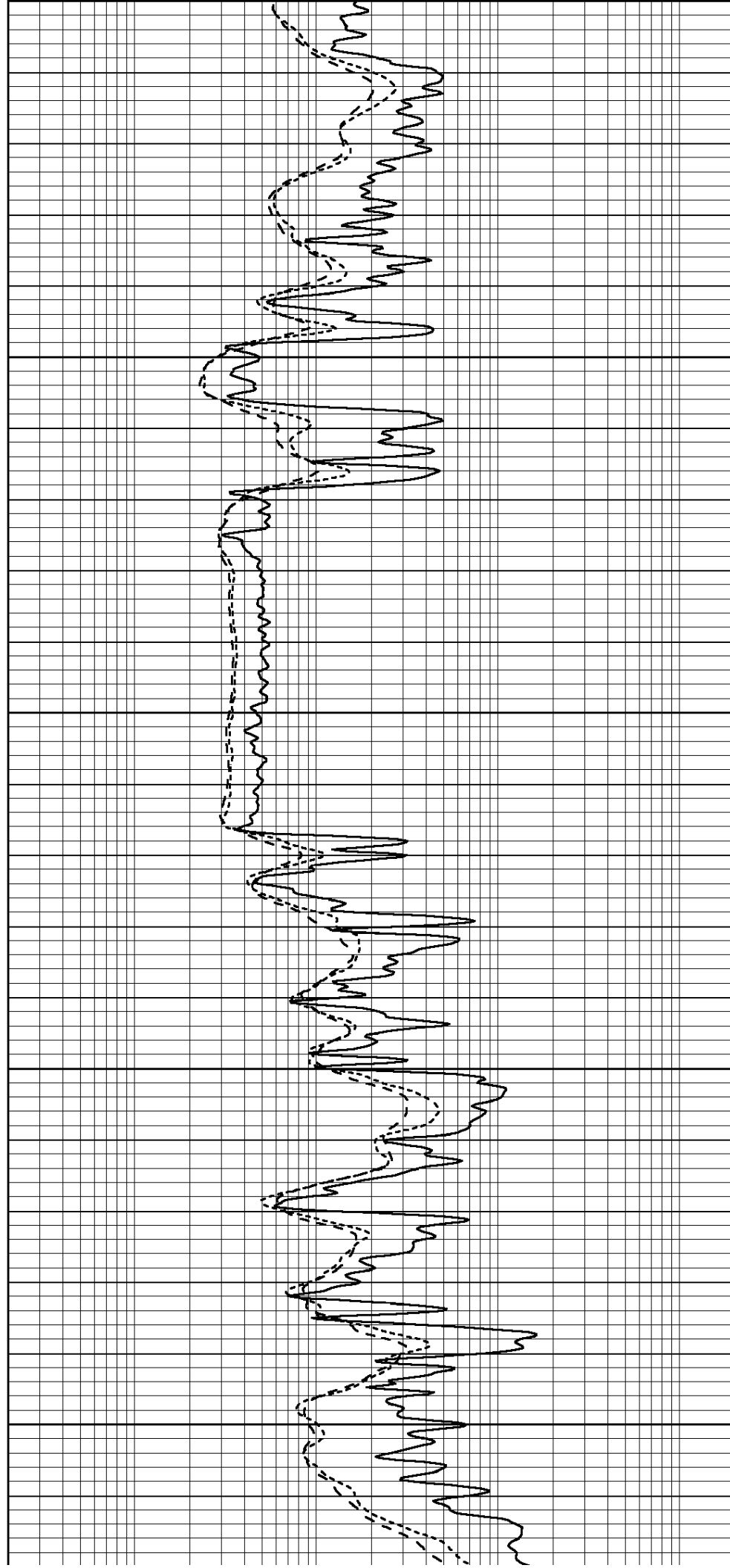
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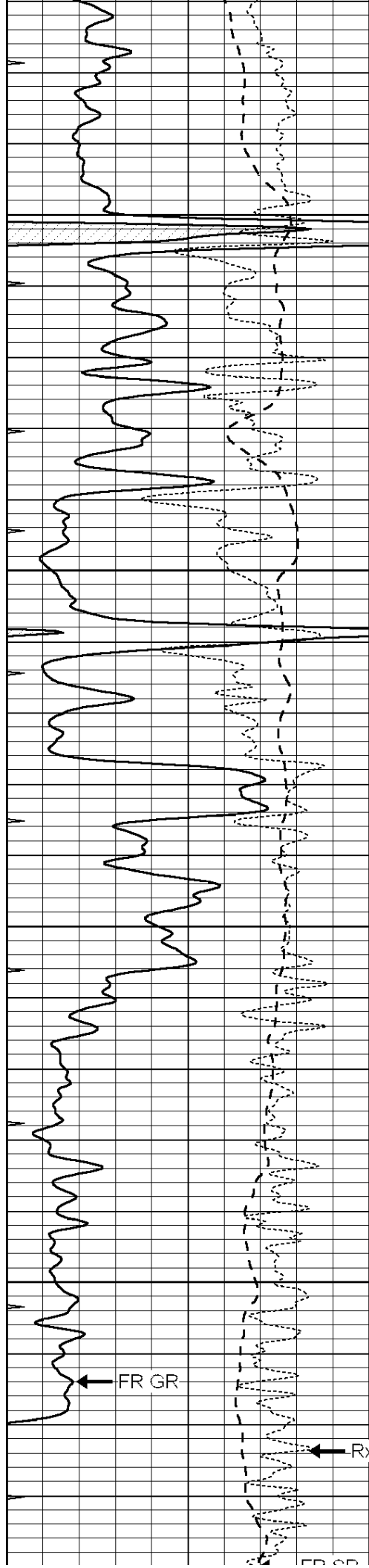
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3150

3200

3250



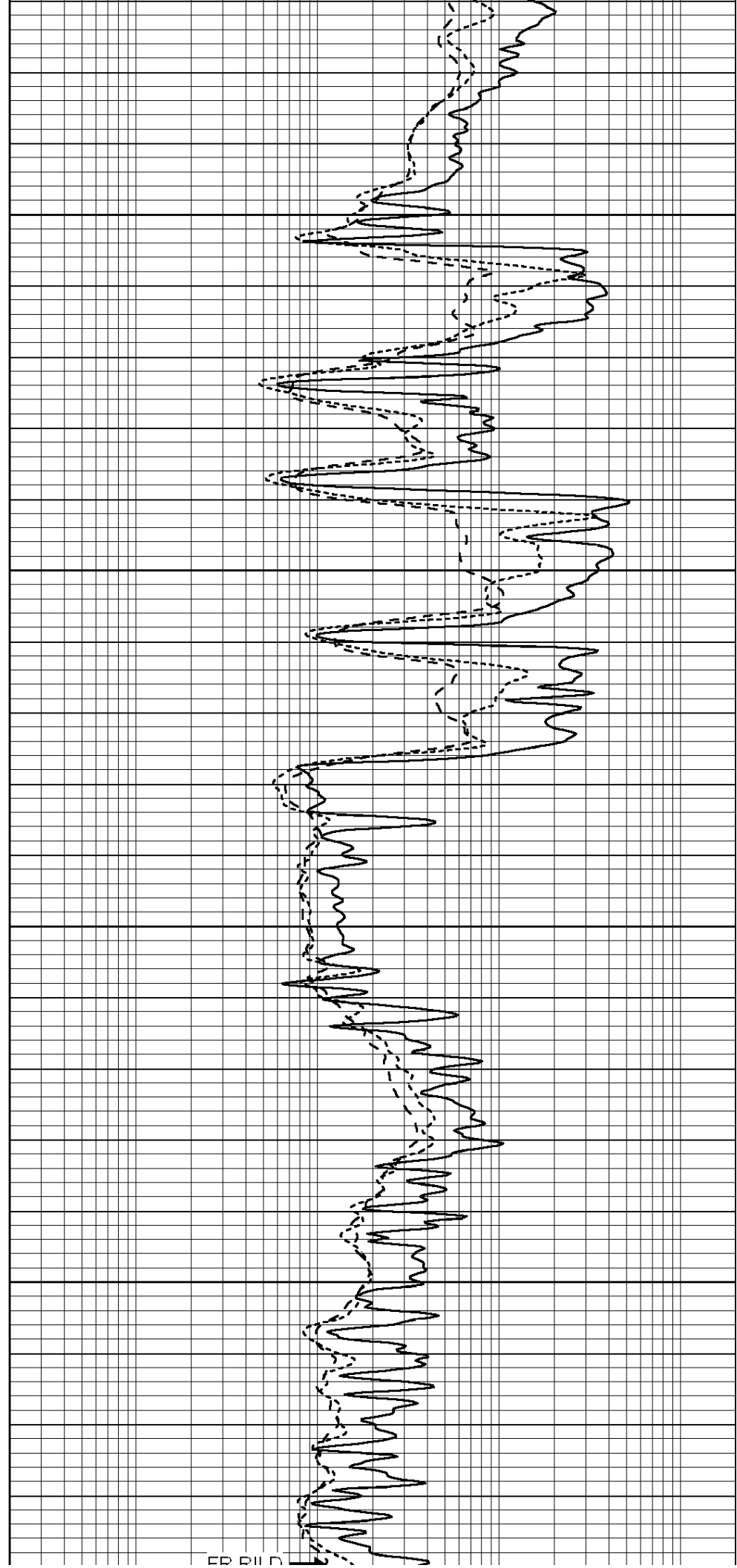


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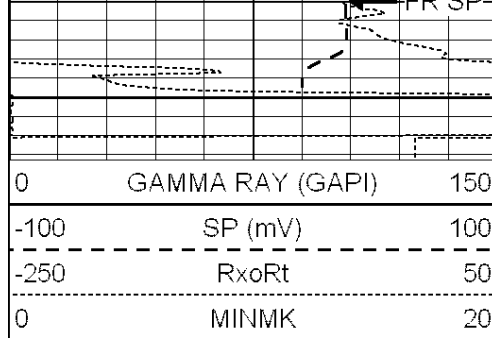
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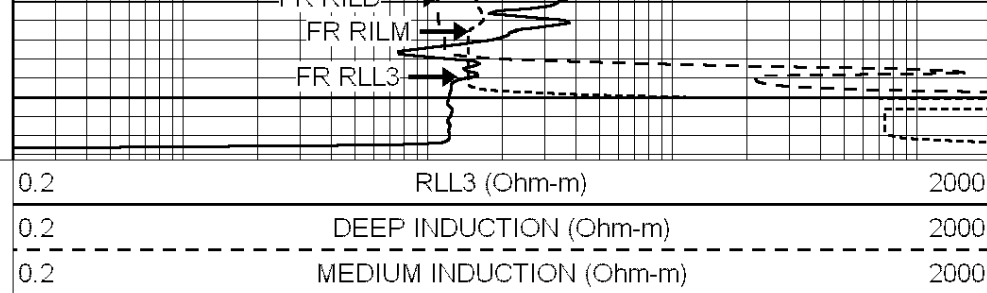
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FR PILD



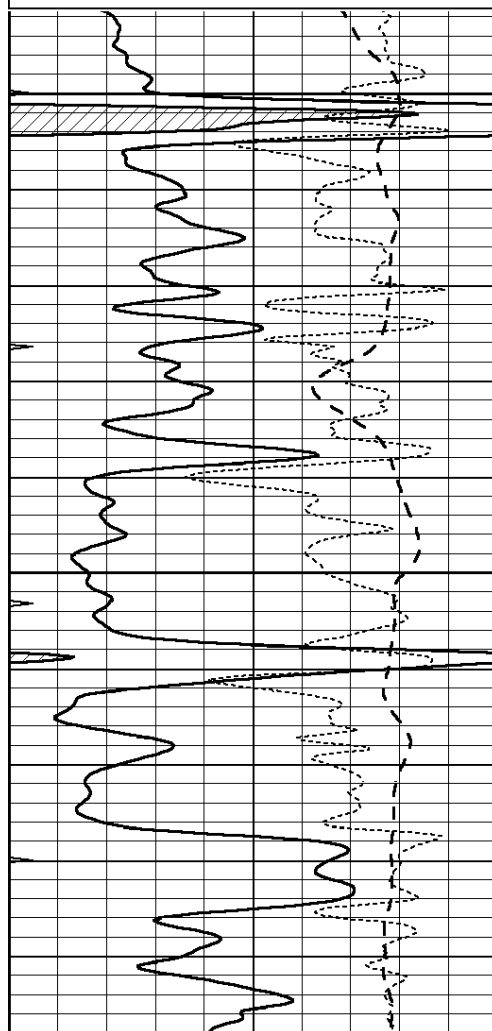
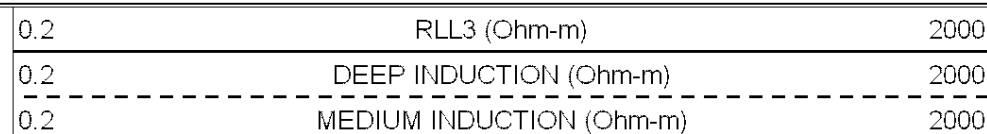
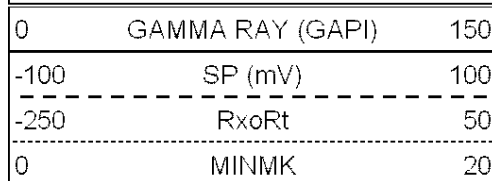
LTD 3500



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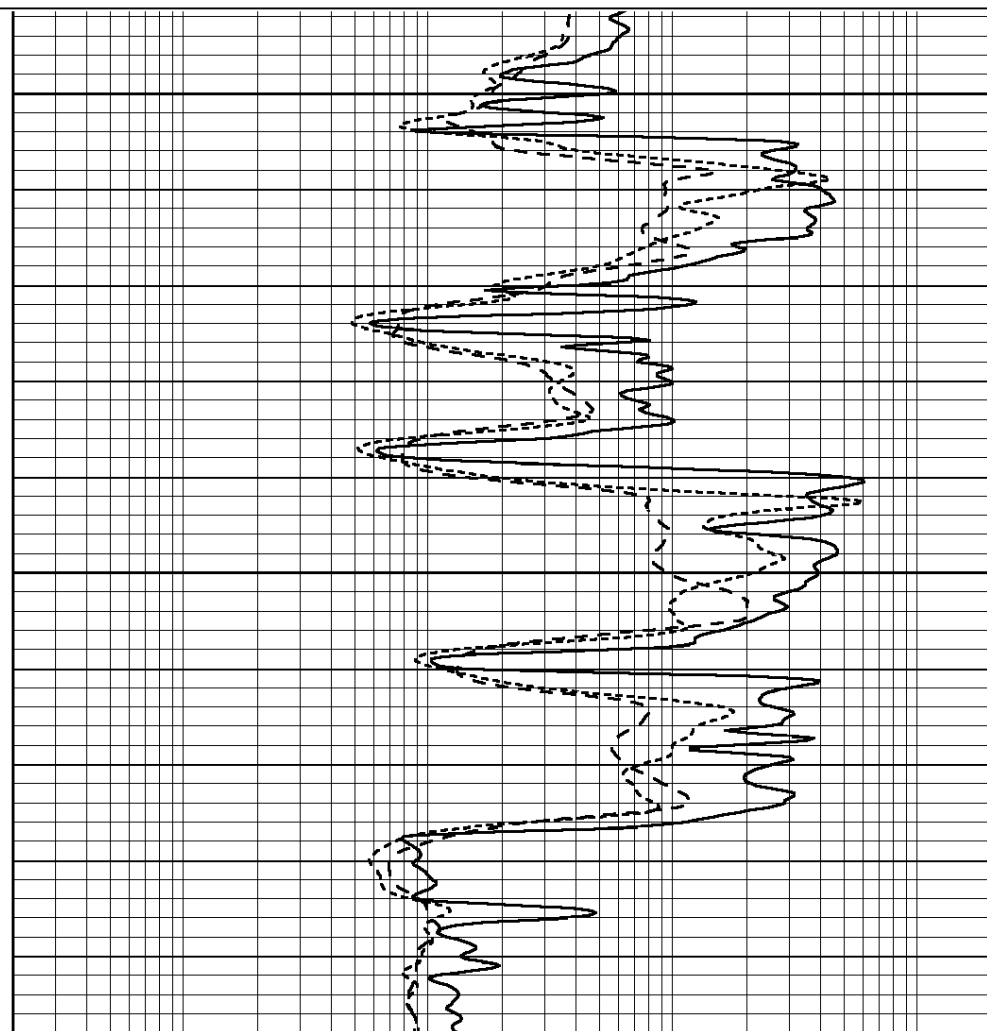
REPEAT SECTION

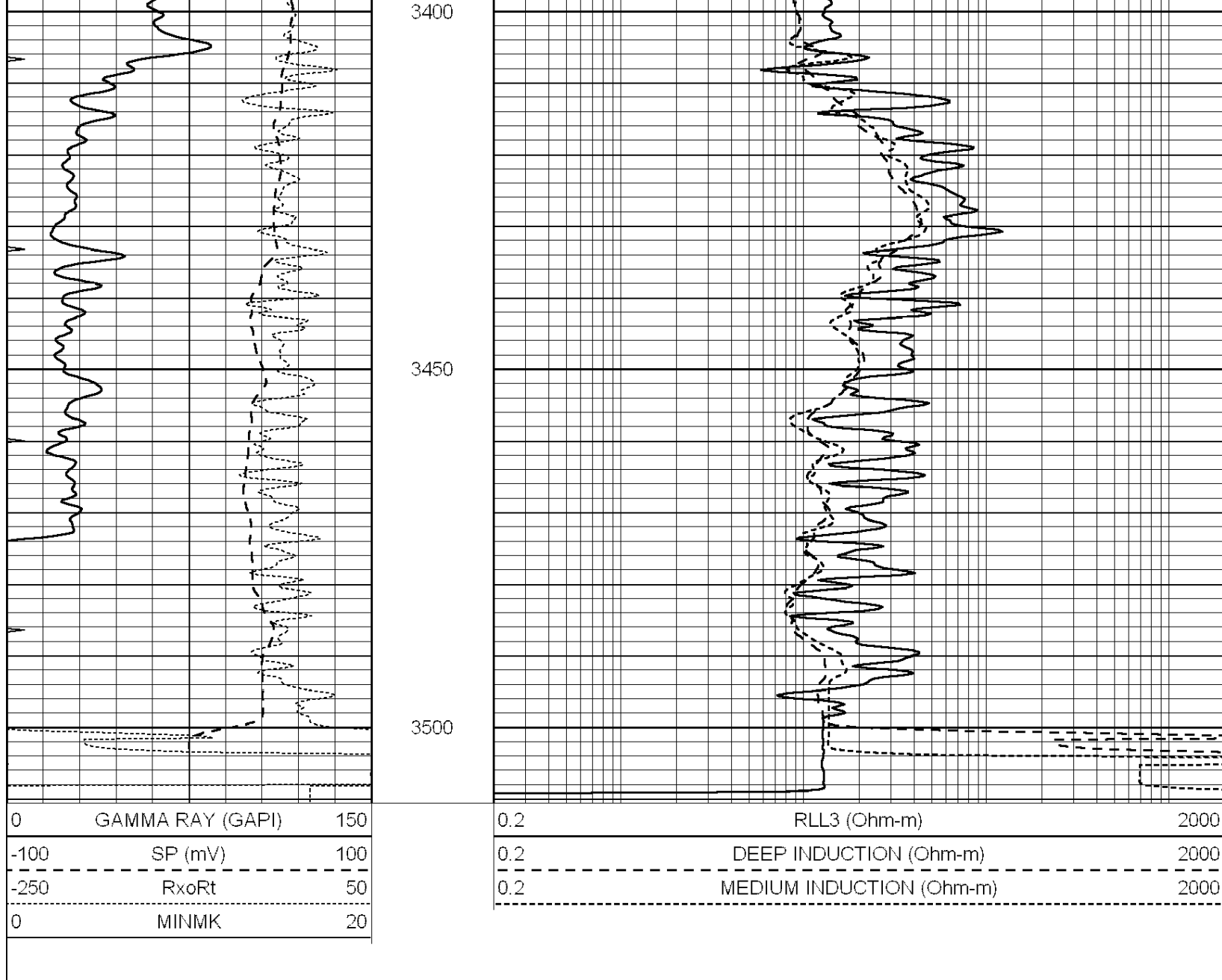
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Dataset Pathname: pass2.7
Presentation Format: dil
Dataset Creation: Fri Nov 19 08:31:20 2010 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240



3300

3350





Calibration Report

Database File: 005922ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Fri Nov 19 10:17:40 2010 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Sun Nov 14 22:14:20 2010

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	540.000	-8.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	520.000	-12.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model:
Source / Verifier:
Master Calibration Performed:

GEAR1-GEARHART
147 / 147
Fri Nov 19 08:01:33 2010

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	7.70	in	3.82		V	
Large Ring	14.00	in	6.37		V	

Compensated Neutron Calibration Report

Serial Number: NEU_11
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:	Wed Nov 17 15:01:06 2010
Calibrator Value:	1.0
	GAPI
Background Reading:	0.0
Calibrator Reading:	1.0
	cps
Sensitivity:	0.6000
	GAPI/cps