



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company	BUFFALO RESOURCES, LLC		
Well	NEY #1-23		
Field	ELSASSER		
County	RUSSELL		
State	KANSAS		
Company	BUFFALO RESOURCES, LLC		
Well	NEY #1-23		
Field	ELSASSER		
County	RUSSELL		
State	KANSAS		
Location:	API # : 15-167-23569 1660' FSL & 1210' FEL		Other Services CDL/CNL SONIC/MEL
SEC 23 TWP 12S RGE 15W		Elevation	
Permanent Datum	GROUND LEVEL	Elevation	1781
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		
Date	9-21-09		
Run Number	ONE		
Depth Driller	3285		
Depth Logger	3287		
Bottom Logged Interval	3285		
Top Log Interval	00		
Casing Driller	440		
Casing Logger	436		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 52		
pH / Fluid Loss	10.5 / 8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	0.55 @ 78F		
Rinf @ Meas. Temp	0.41 @ 78F		
Rmc @ Meas. Temp	0.66 @ 78F		
Source of Rinf / Rmc	MEASURED		
Rim @ BHT	.400 @ 108F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	12:50 A.M.		
Maximum Recorded Temperature	108F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	CURTIS COVEY		

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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: RUSSELL, 9N TO MELLARD RD., 3W, 1/2N, 2 1/4W TO STOP SIGN, 1/2S, W INTO.



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MAIN SECTION

Database File: 004258ddn.db
Dataset Pathname: pass3.A
Presentation Format: dil2
Dataset Creation: Mon Sep 21 02:41:19 2009
Charted by: Depth in Feet scaled 1:600

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

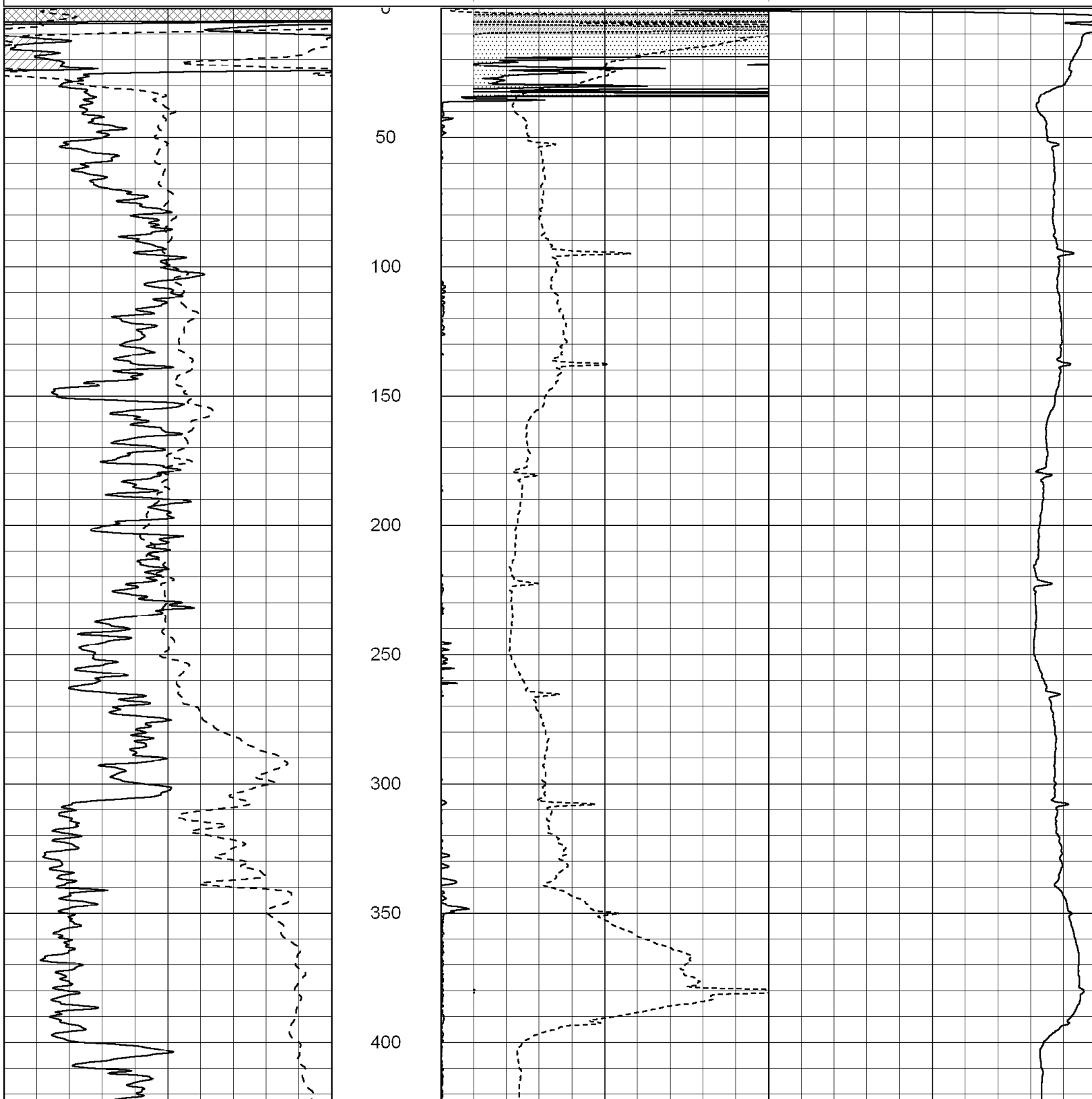
0	RLL3 (Ohm-m)	50
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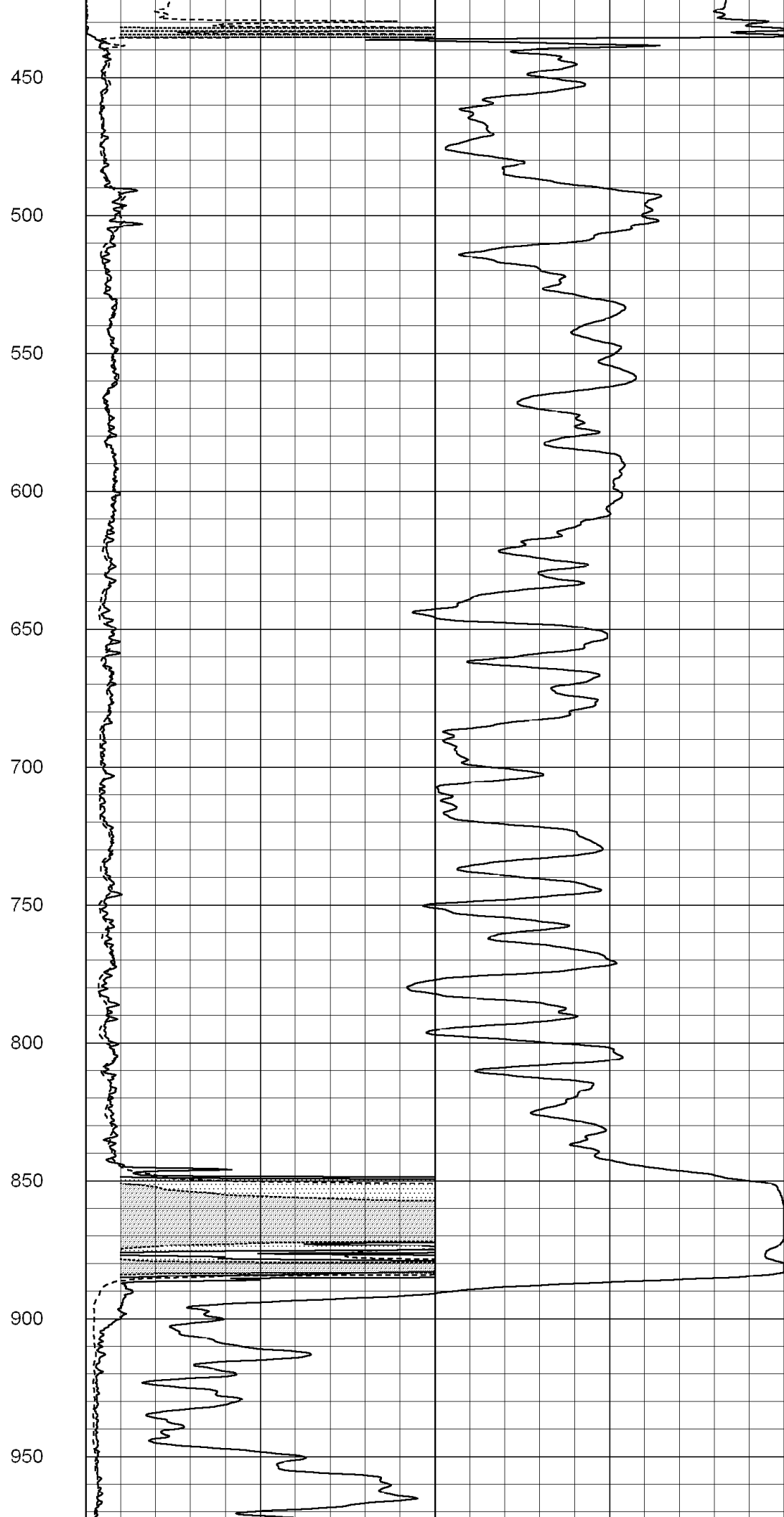
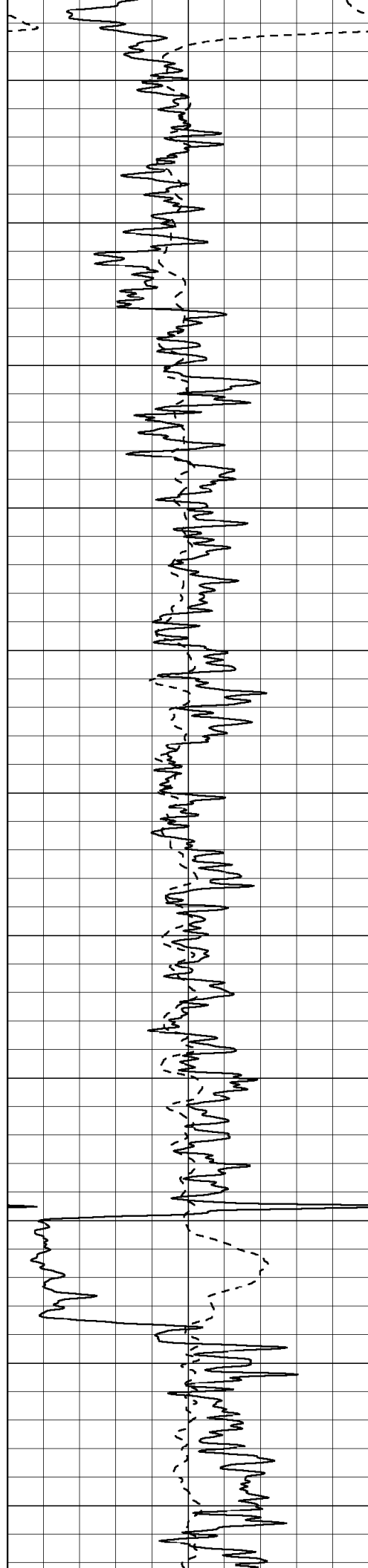
0	Deep Induction (Ohm-m)	50
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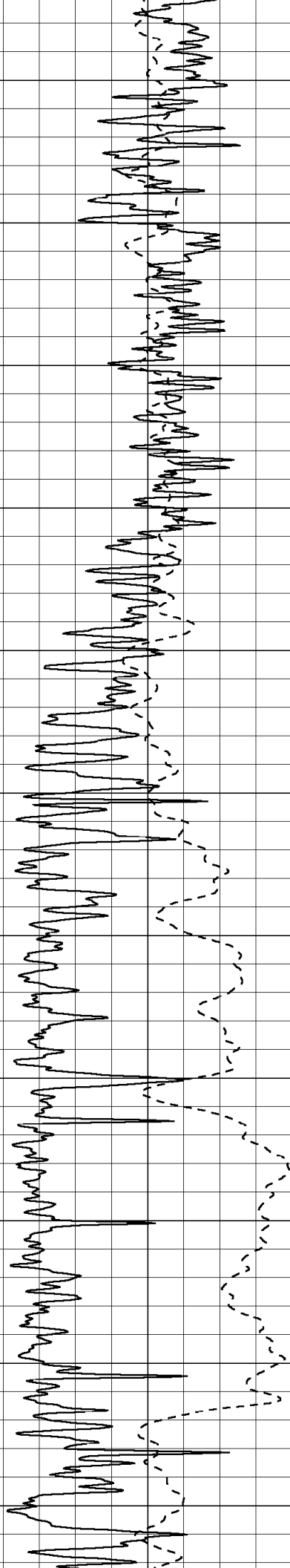
1000	CILD (mmho-m)	0
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50	RILD X10 (Ohm-m)	500
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50	RLL3 X10 (Ohm-m)	500
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1000

1050

1100

1150

1200

1250

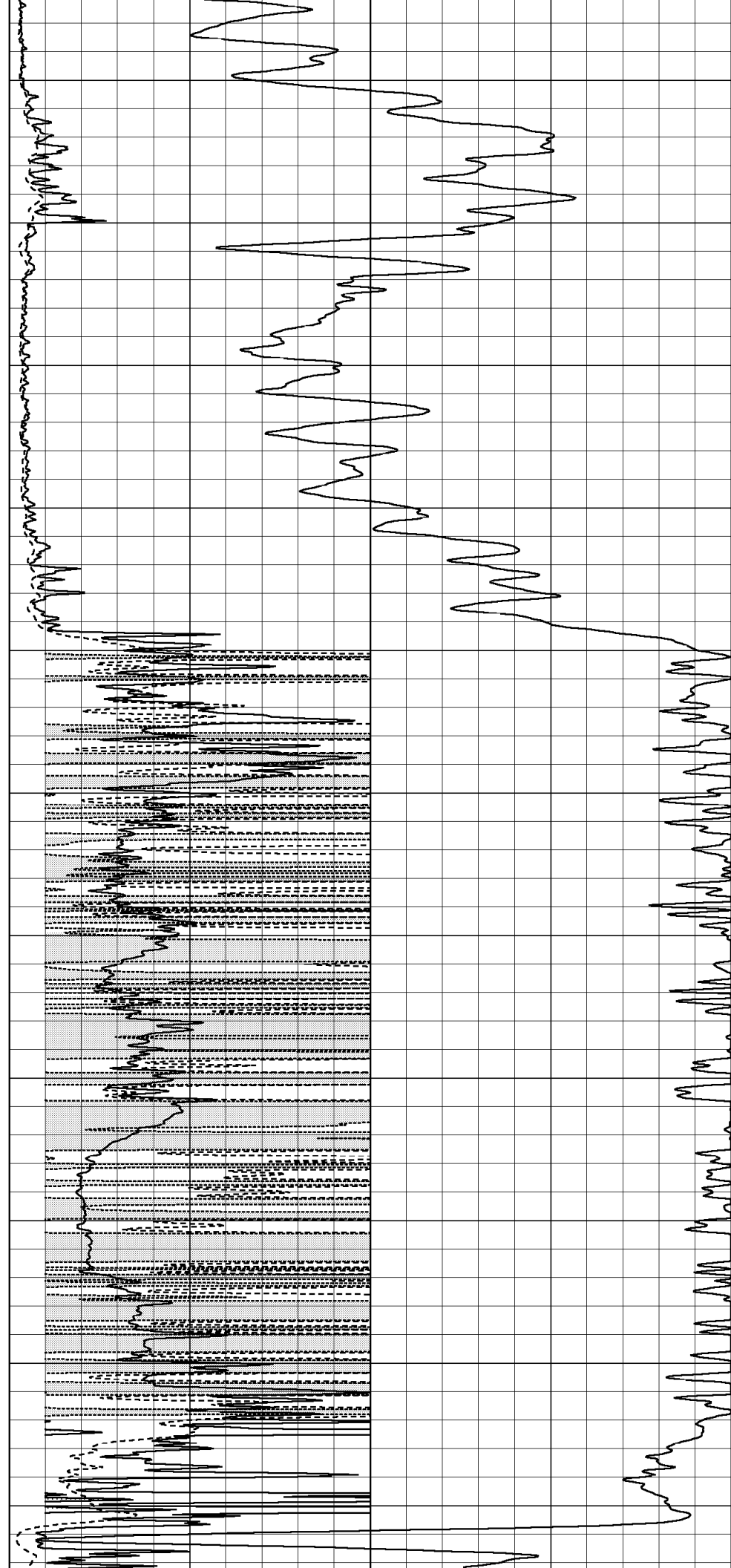
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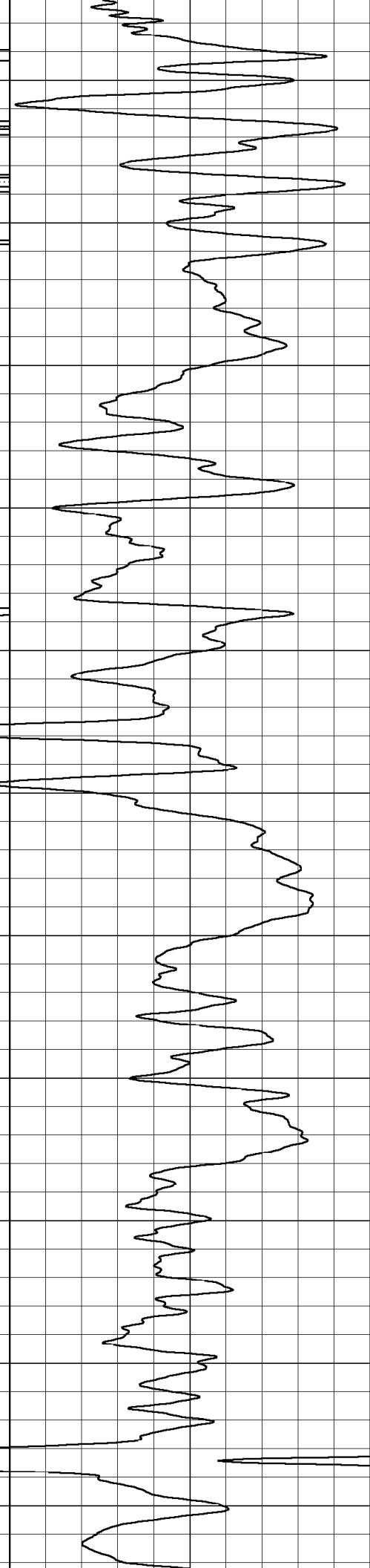
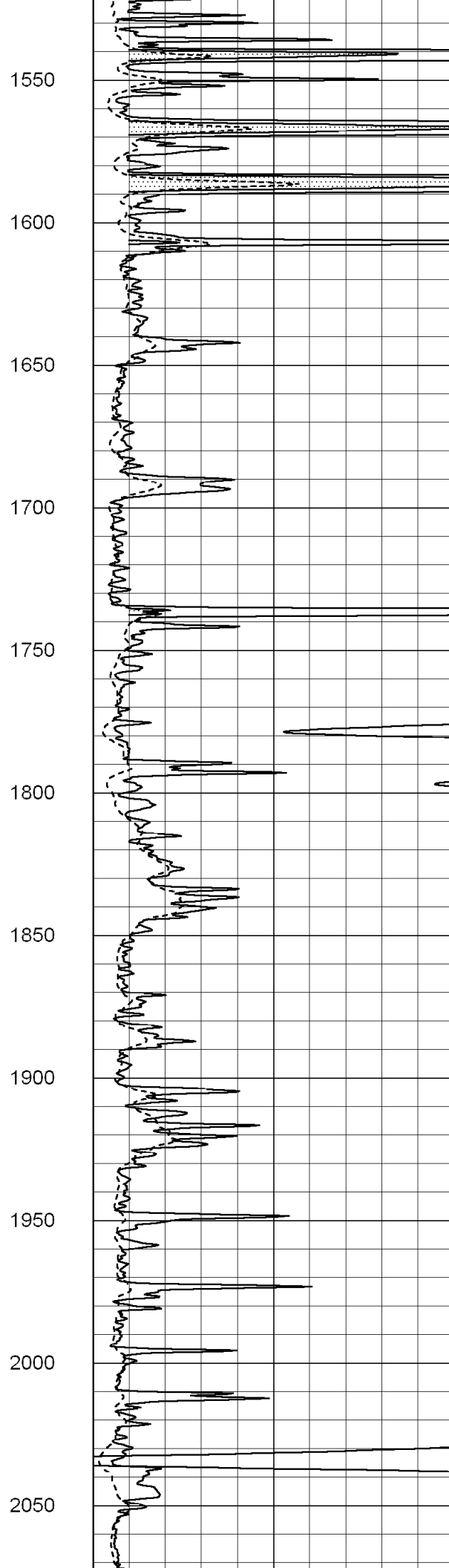
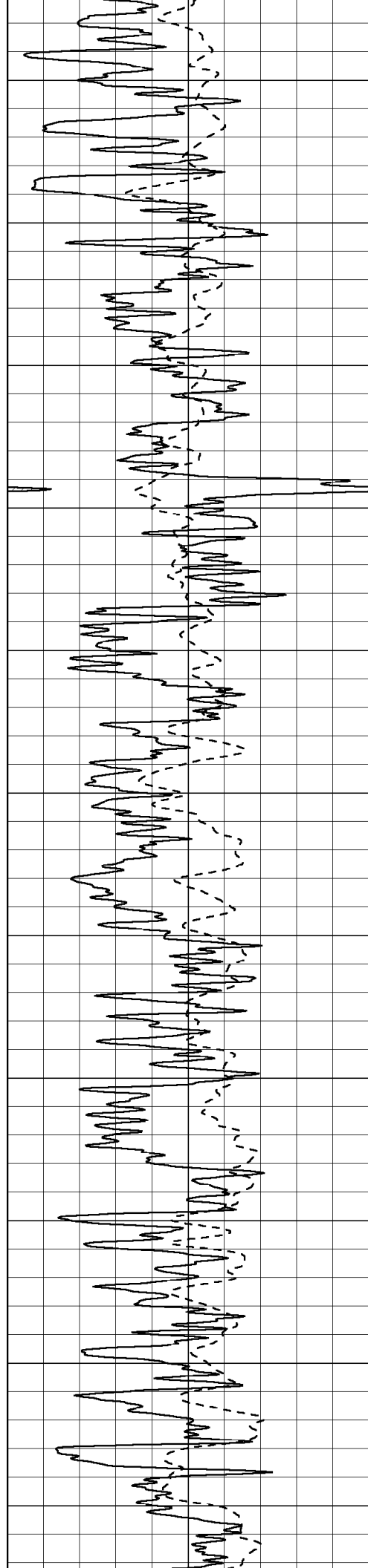
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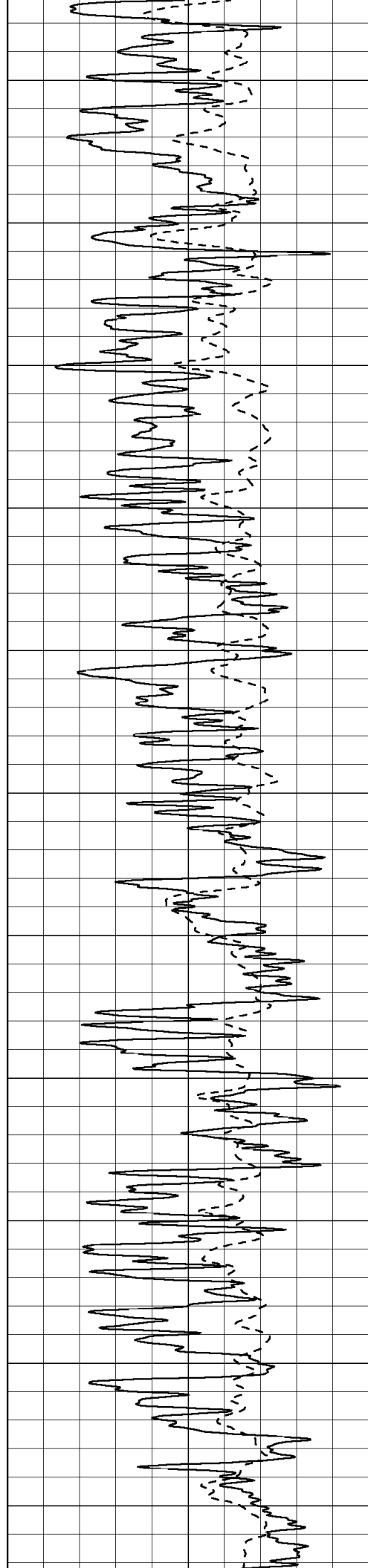
1400

1450

1500







2100

2150

2200

2250

2300

2350

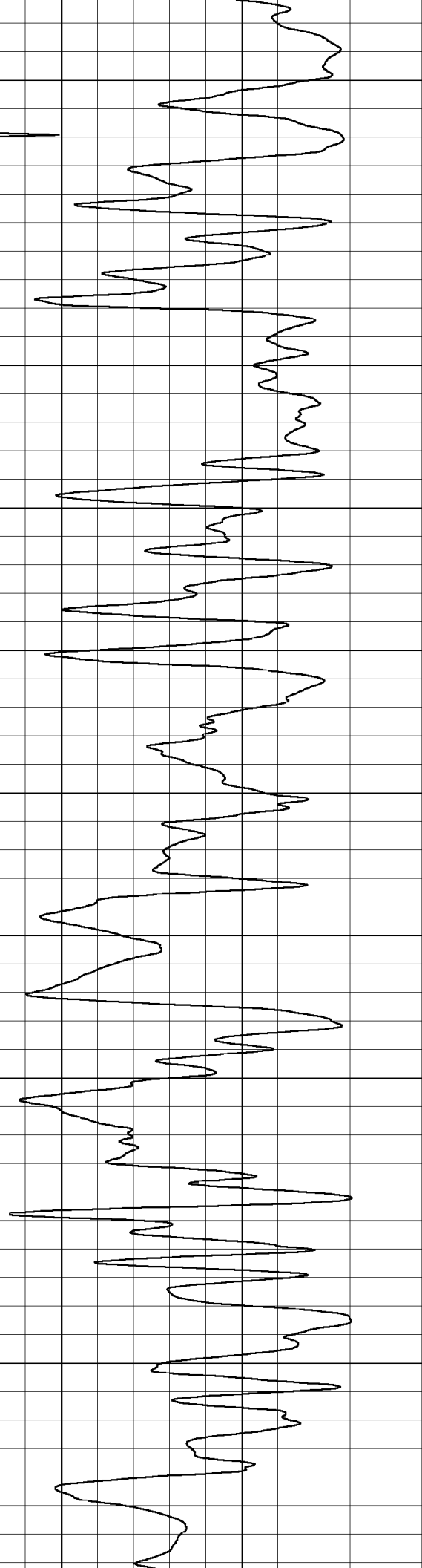
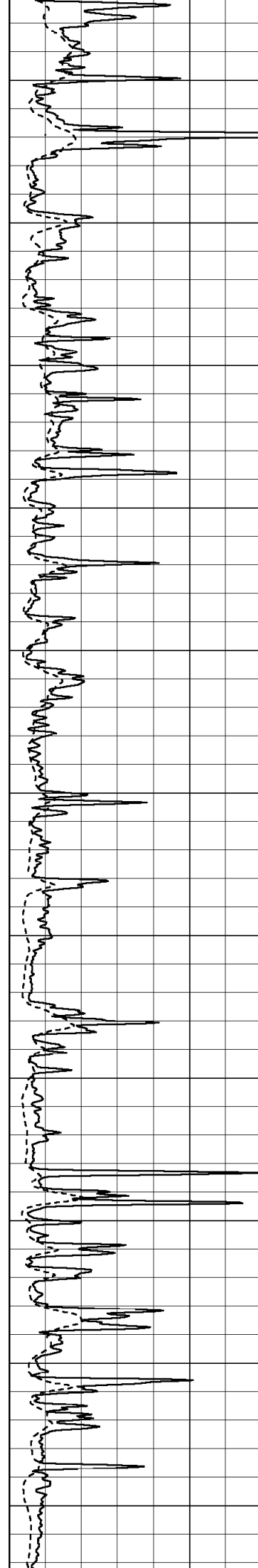
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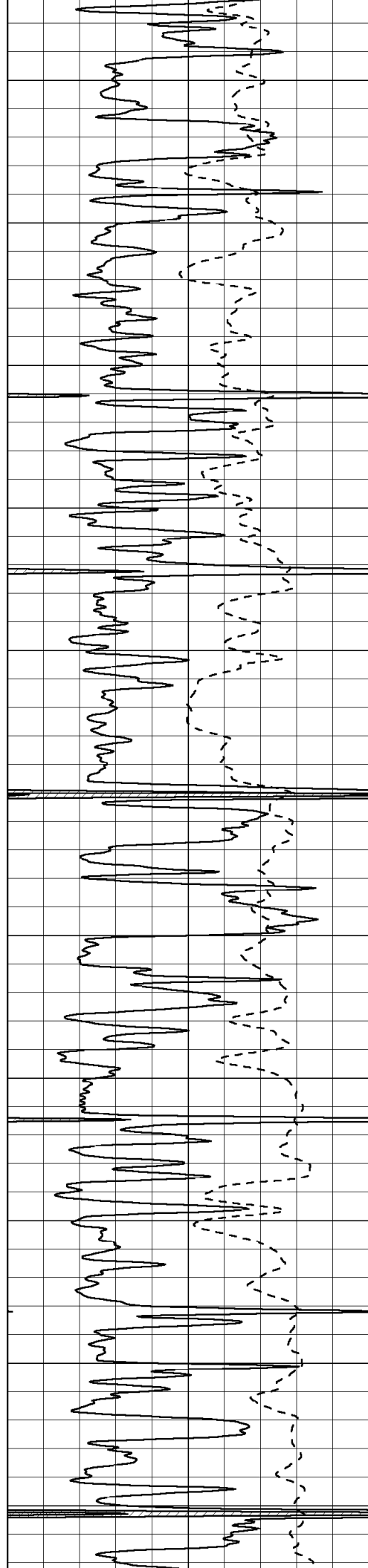
2450

2500

2550

2600





2650

2700

2750

2800

2850

2900

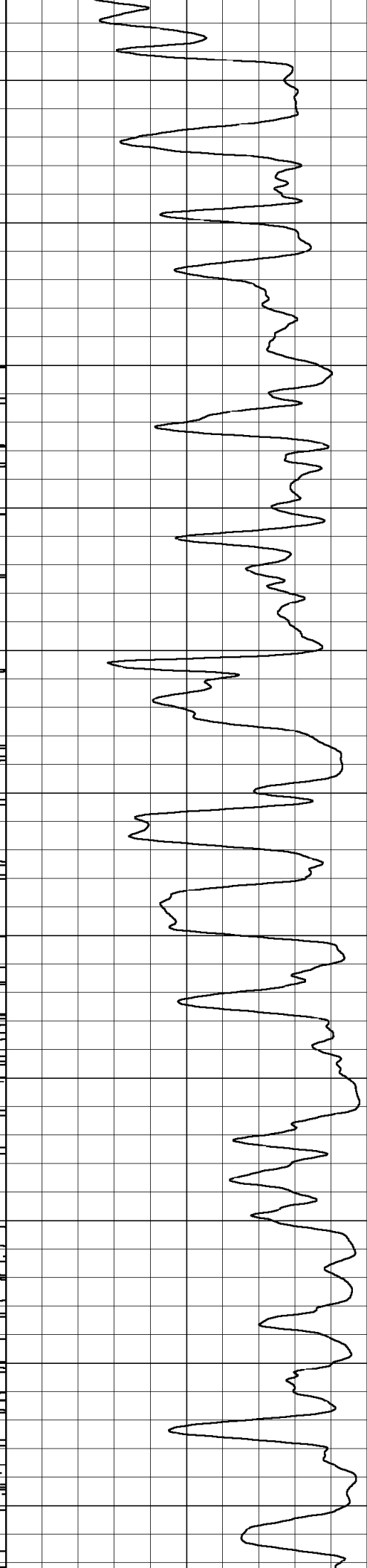
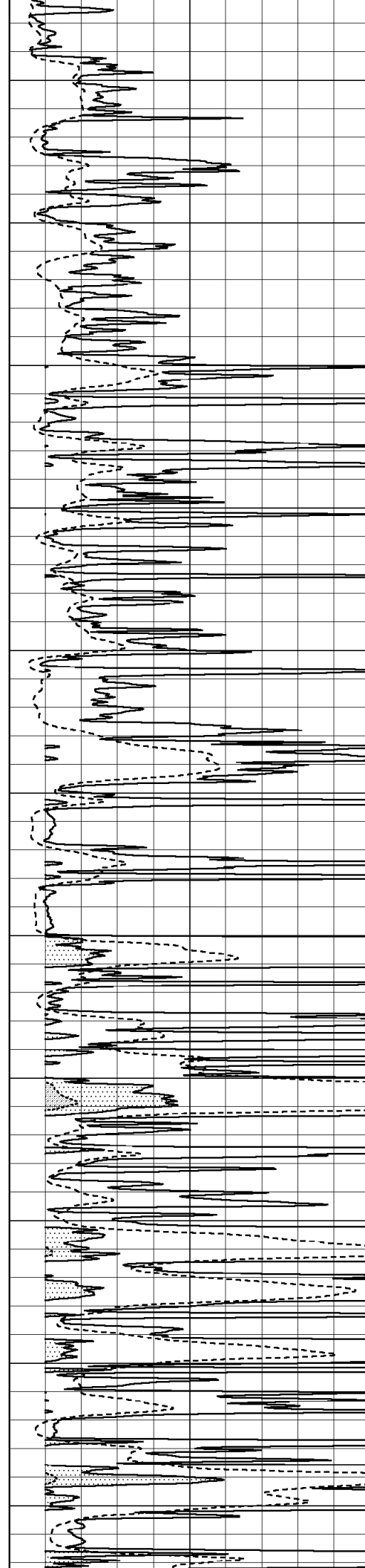
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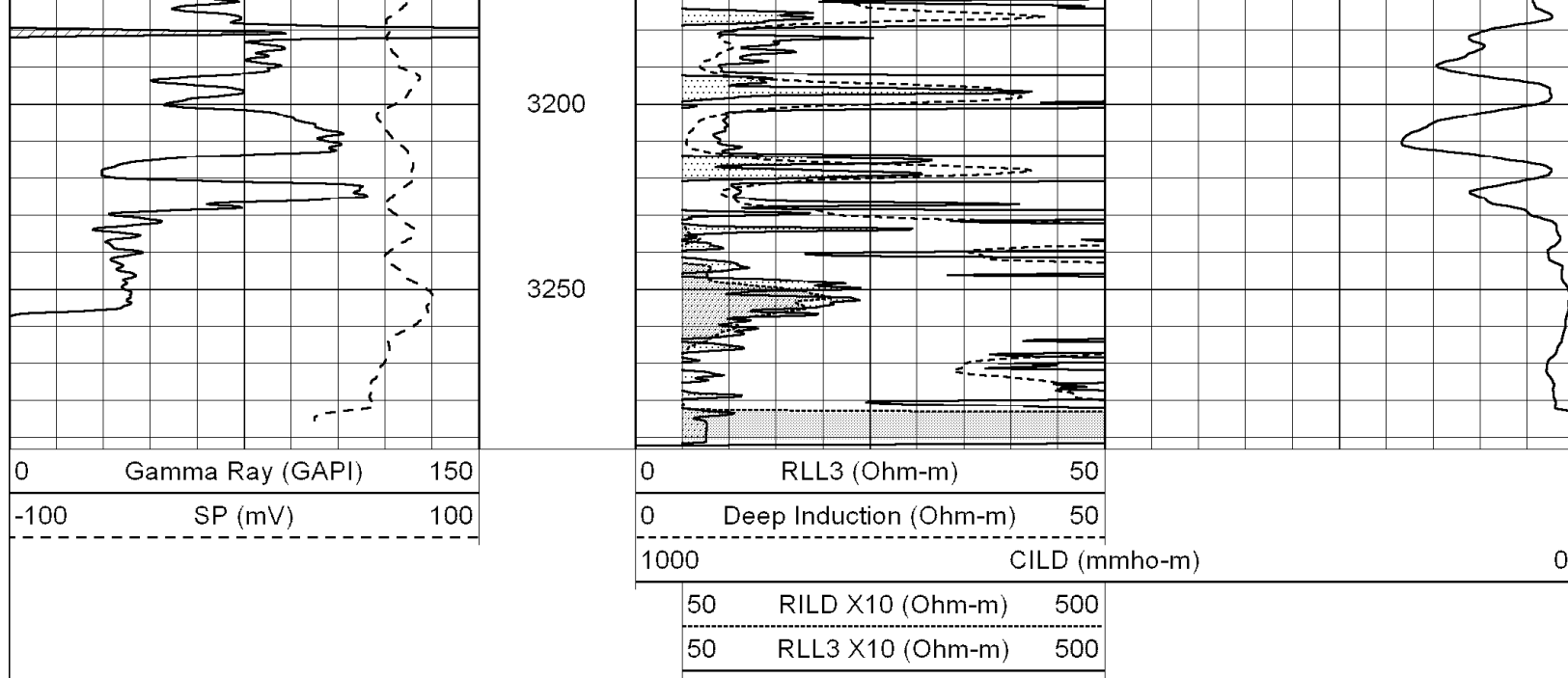
3000

3050

3100

3150



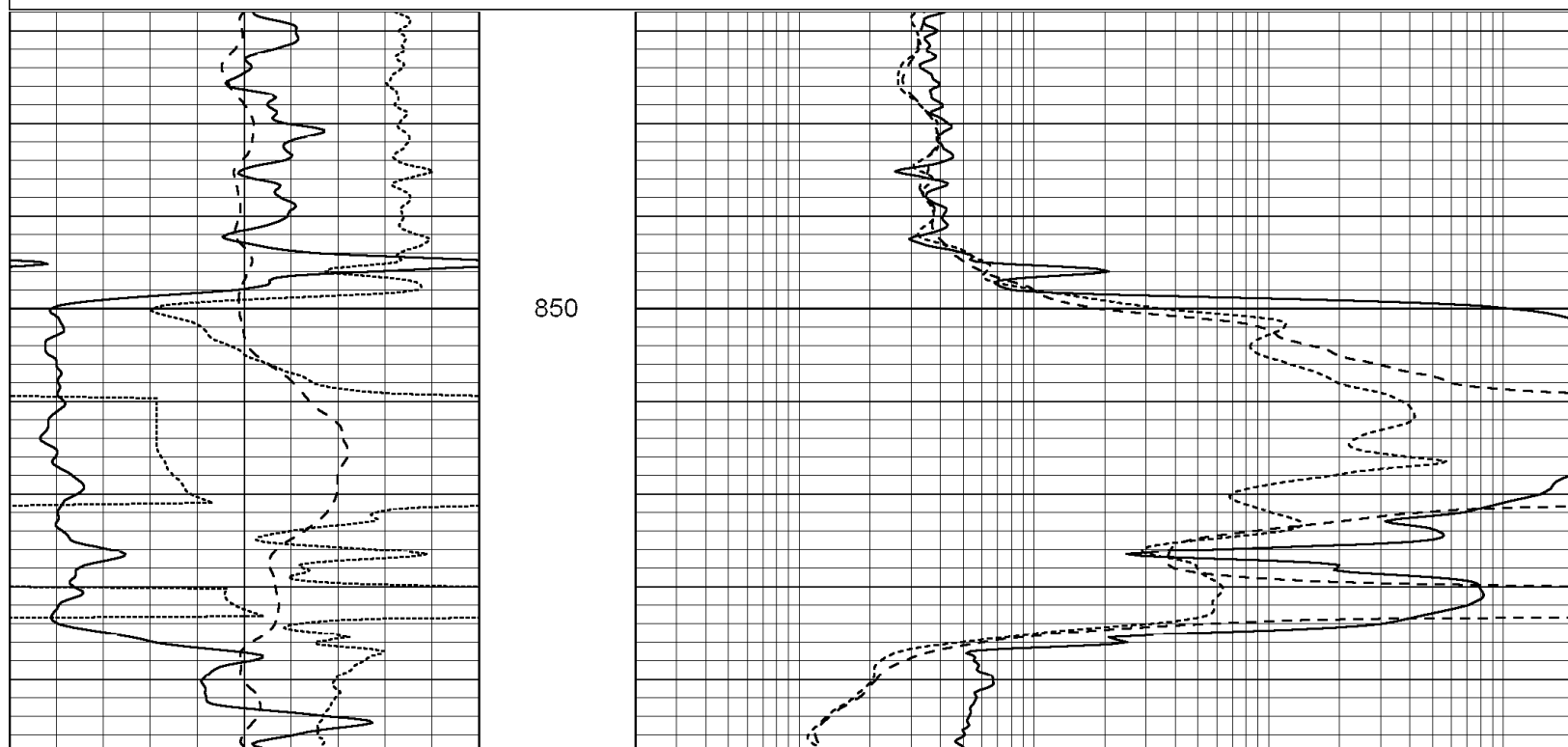


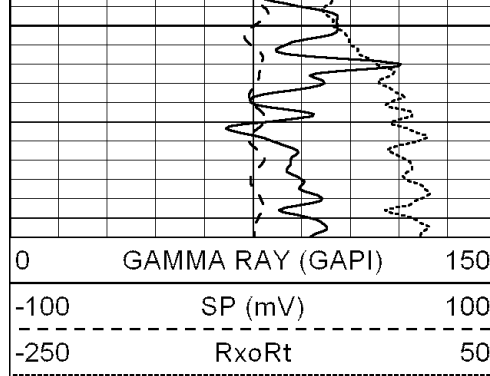
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MAIN SECTION

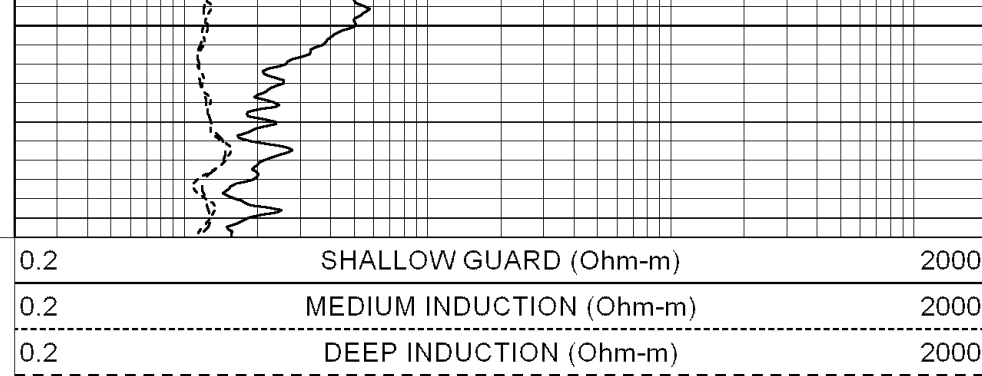
Database File: 004258ddn.db
Dataset Pathname: pass3.A
Presentation Format: dil
Dataset Creation: Mon Sep 21 02:41:19 2009
Charted by: Depth in Feet scaled 1:240

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





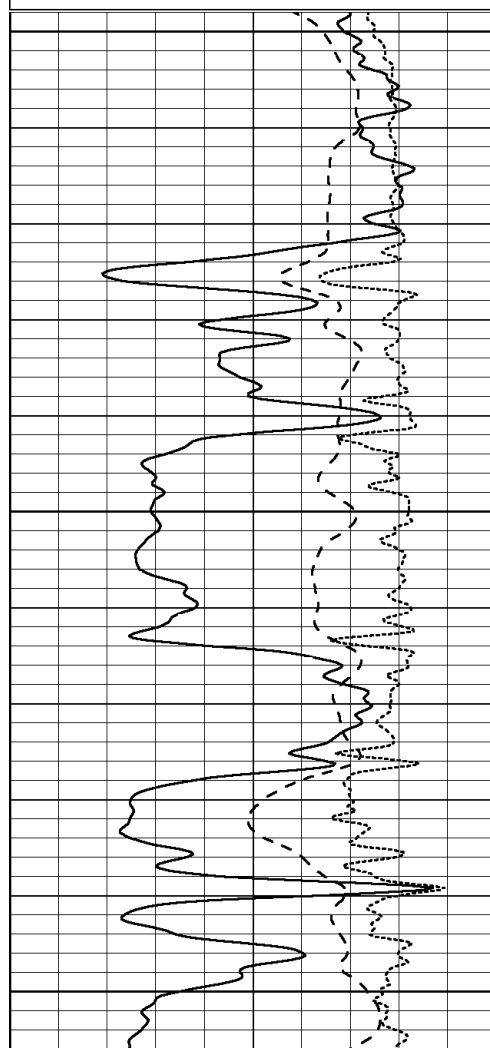
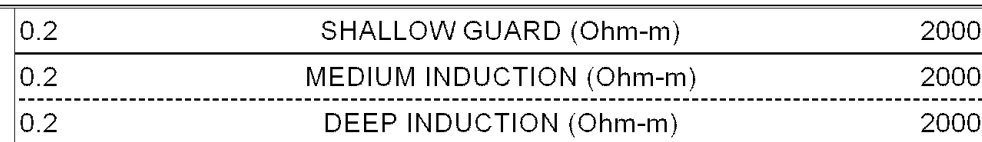
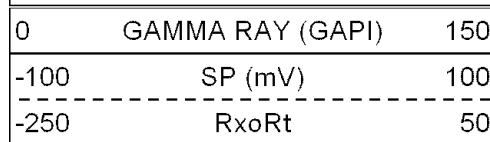
900



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MAIN SECTION

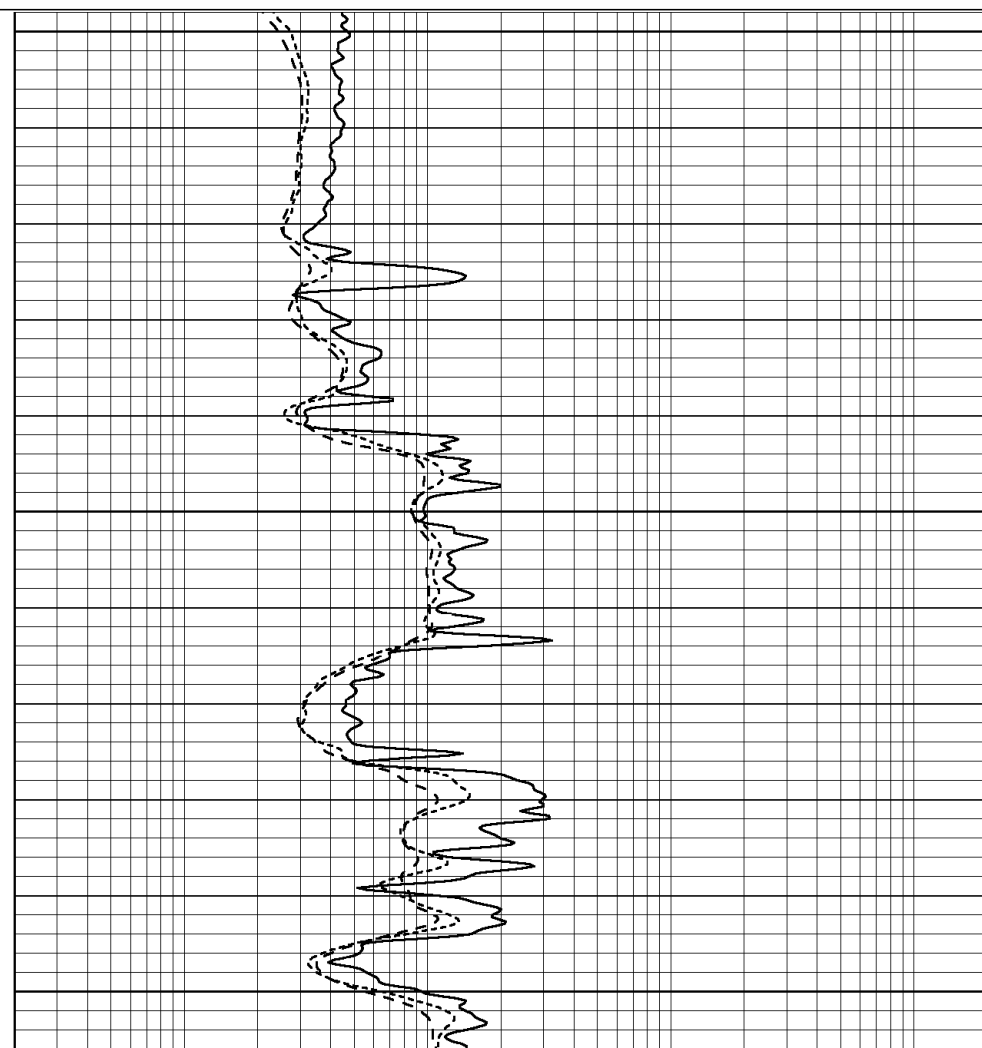
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 Dataset Pathname: pass3.A
 Presentation Format: dil
 Dataset Creation: Mon Sep 21 02:41:19 2009
 Charted by: Depth in Feet scaled 1:240

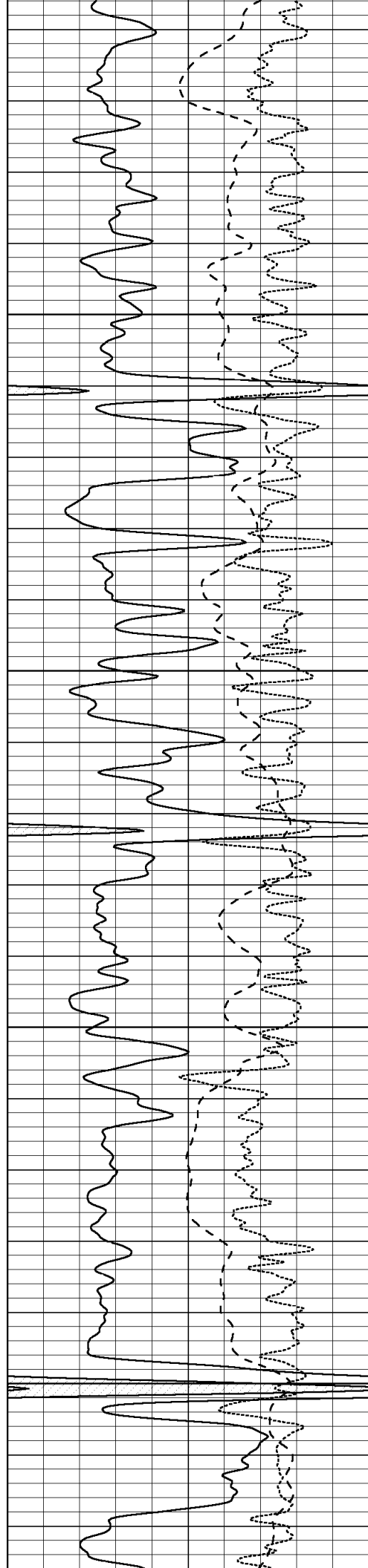


2600

2650

2700



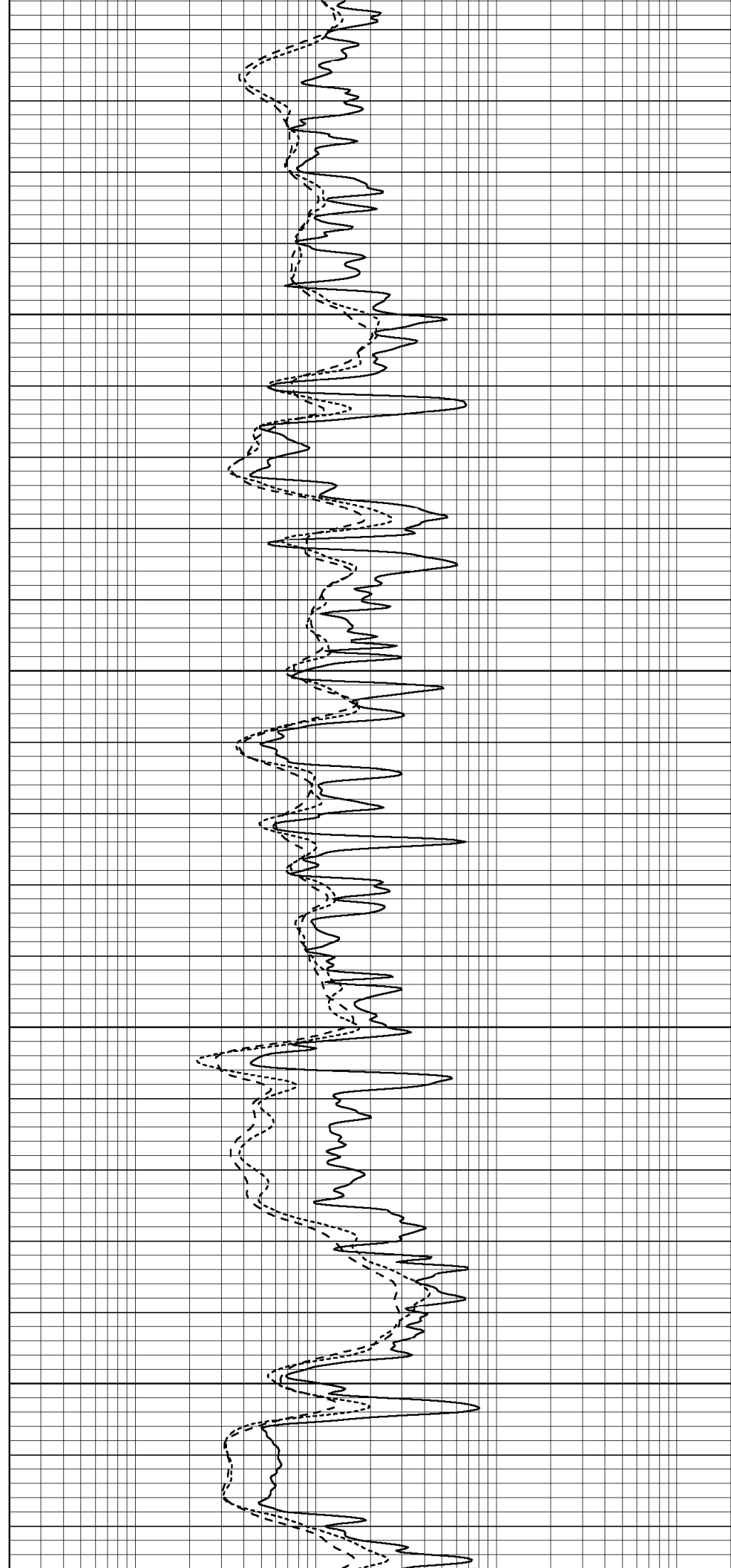


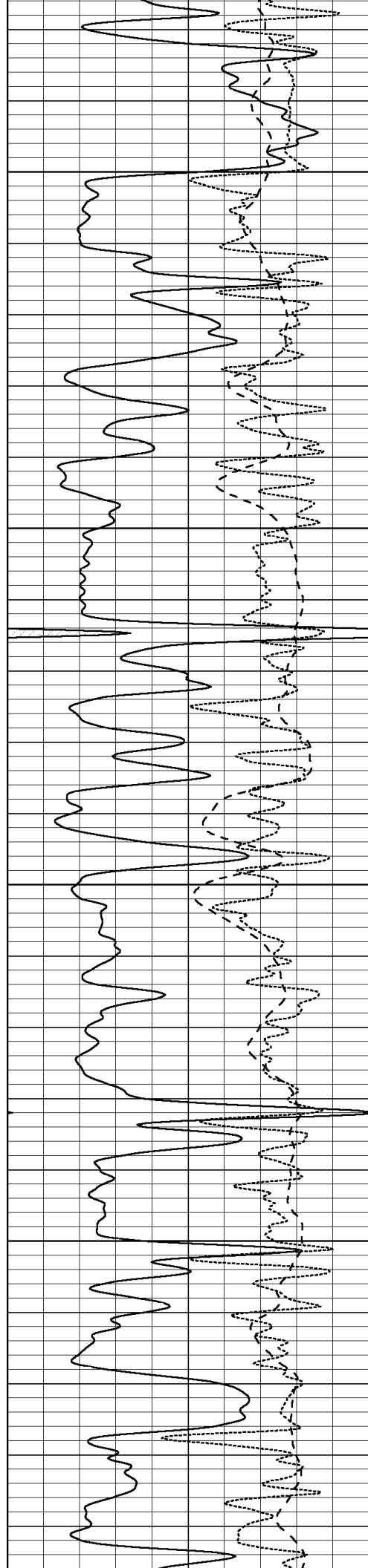
2750

2800

2850

2900



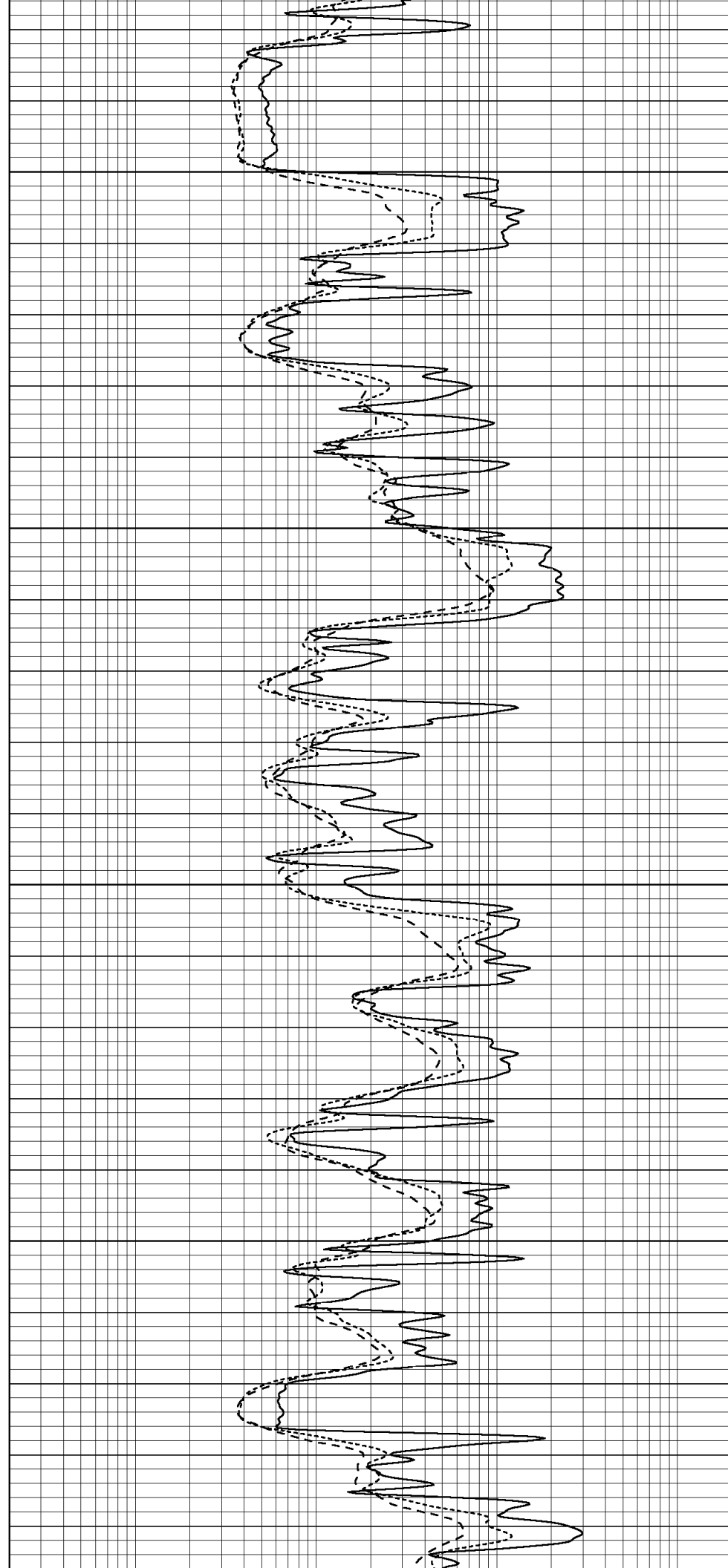


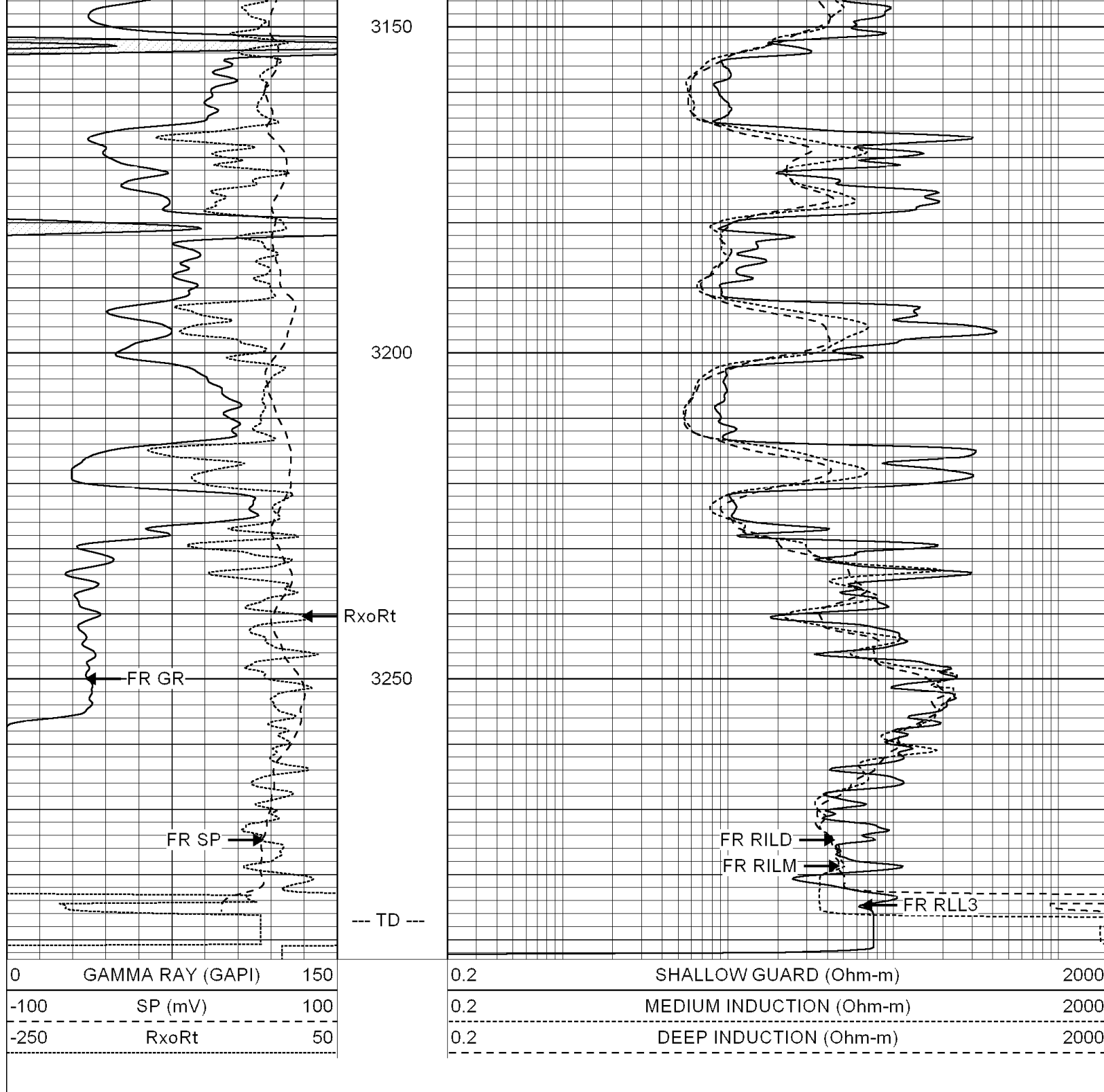
2950

3000

3050

3100

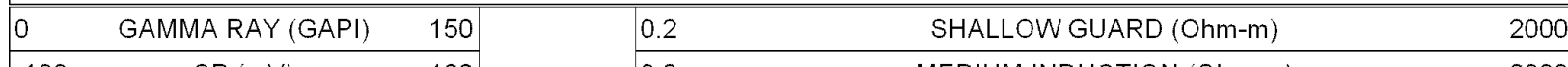




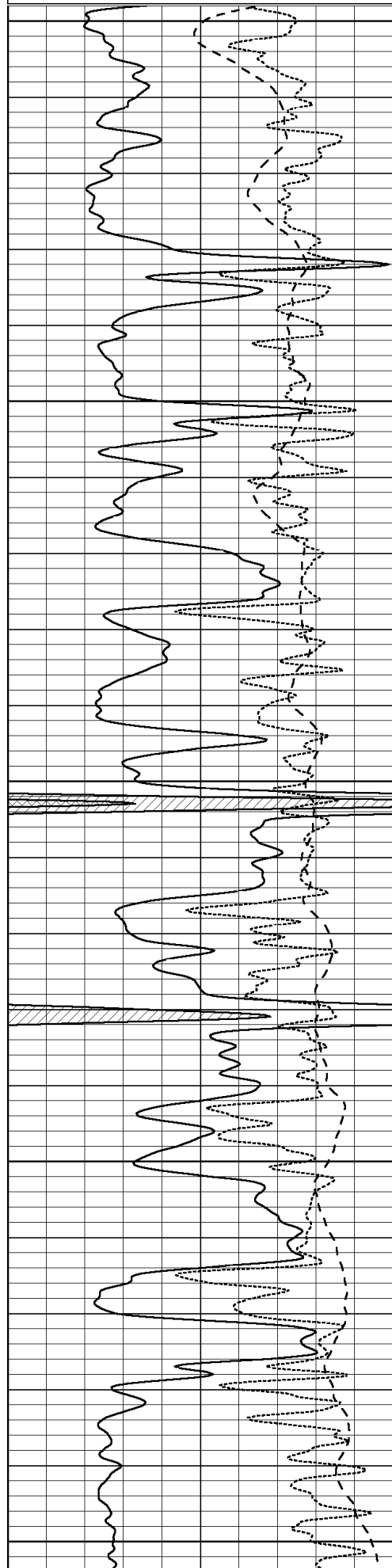
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REPEAT SECTION

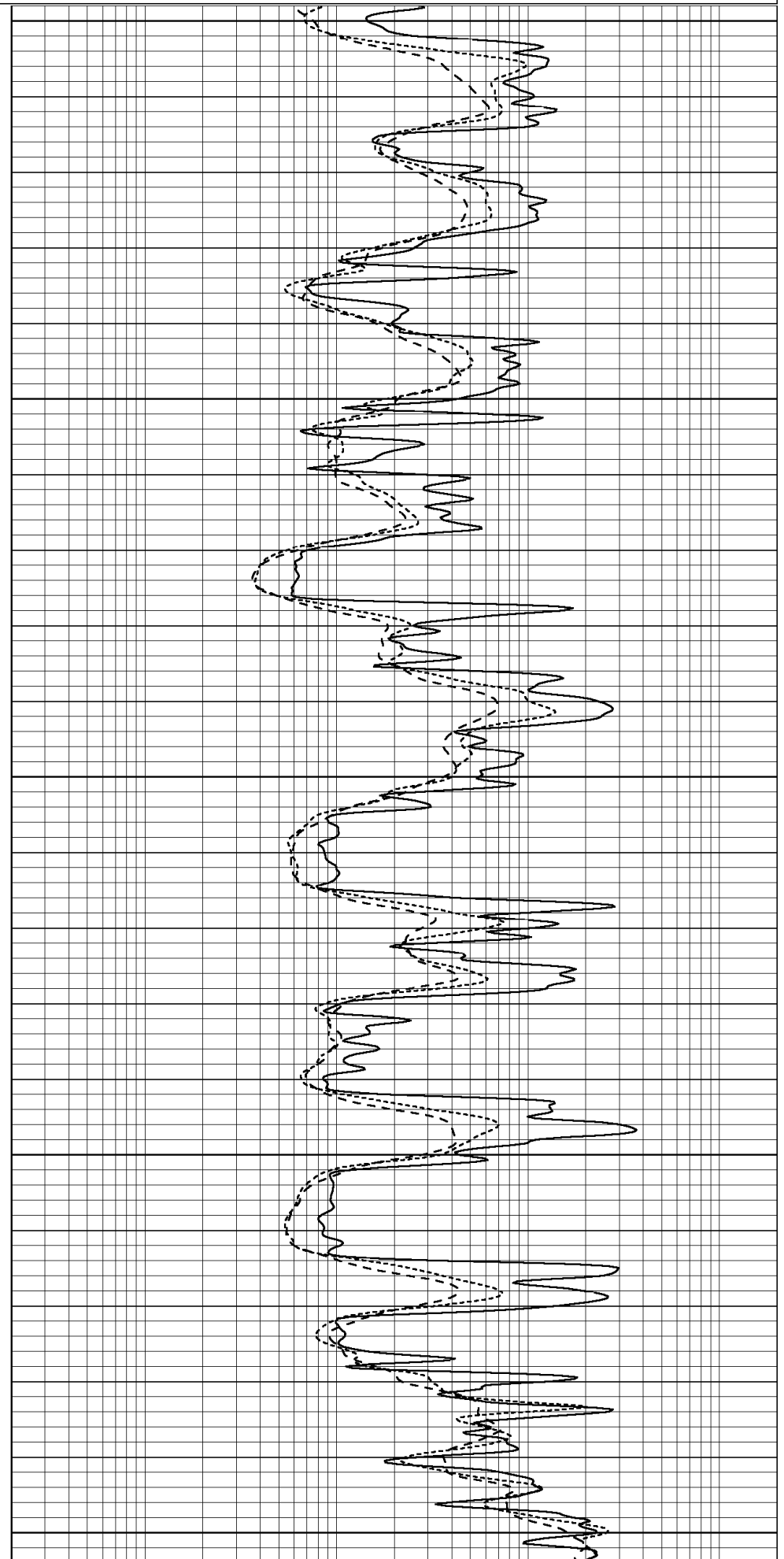
Database File: 004258ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: dil
 Dataset Creation: Mon Sep 21 00:54:51 2009 by Calc Open-Cased 051020
 Charted by: Depth in Feet scaled 1:240

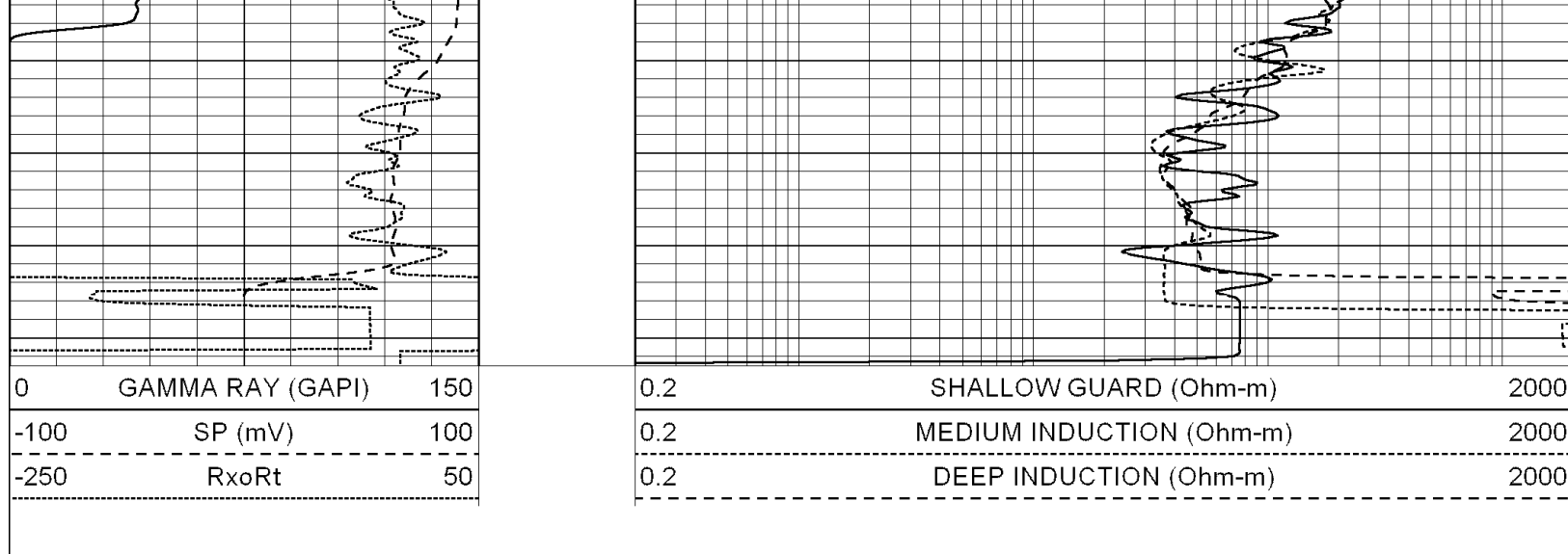


-100	SP (mV)	100
-250	RxoRt	50



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





Calibration Report	
Database File:	004258ddn.db
Dataset Pathname:	pass3.A
Dataset Creation:	Mon Sep 21 02:41:19 2009

Dual Induction Calibration Report								
Serial-Model: Performed:			DIL5-GEAR Mon Sep 21 00:49:09 2009					
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho-m	490.000	-8.000
Medium	-0.005	0.737	V	0.000	462.500	mmho-m	450.000	-13.000
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:			GEAR1-GEARHART			
Source / Verifier:			147 / 147			
Master Calibration Performed:			Mon Sep 21 00:35:34 2009			
Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		1006.91	528.07	cps
Aluminum	2.610	g/cc		233.49	355.80	cps
Spine Angle = 74.88			Density/Spine Ratio = 0.594			
	Size			Reading		
Small Ring	8.20	in		3.68	V	
Large Ring	14.00	in		6.06	V	

Compensated Neutron Calibration Report	
Serial Number:	NEU_11
Tool Model:	G

CALIBRATION	
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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:	Thu Sep 17 08:10:47 2009				
Calibrator Value:	1.0	GAPI			
Background Reading:	0.0	cps			
Calibrator Reading:	1.0	cps			
Sensitivity:	0.5500	GAPI/cps			