



**SUPERIOR**  
Black Lick, Pa.  
Mercer, Pa.  
Wooster, Oh.  
Cleveland, Ok.  
Trinidad, Co.

## DUAL INDUCTION LOG

Company	XTO Energy Inc.		
Well	Apache Canyon 05-08		
Field	Purgatoire River		
County	Las Animas	State	Colorado
Location:	API # : 05 071 09133 00		Other Services cdl neutron
SEC 05 TWP 34S RGE 67W		Elevation	
Permanent Datum	Ground Level	Elevation	7716'
Log Measured From	Ground Level		
Drilling Measured From	Ground Level	K.B. ----- D.F. ----- G.L. 7716'	
Date	6-08-07		
Run Number	One		
Depth Driller	2330'		
Depth Logger	2332'		
Bottom Logged Interval	2330'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 496'		
Casing Logger	495'		
Bit Size	7 7/8"		
Type Fluid in Hole	Water		
Density / Viscosity	///		
pH / Fluid Loss	///		
Source of Sample	///		
Rm @ Meas. Temp	///		
Rmf @ Meas. Temp	///		
Rmc @ Meas. Temp	///		
Source of Rmf / Rmc	///		
Rm @ BHT	///		
Time Circulation Stopped	8:30 A.M.		
Time Logger on Bottom	11:45 A.M.		
Maximum Recorded Temperature	111 DEG F		
Equipment Number	T697		
Location	Trinidad		
Recorded By	M. Norton		
Witnessed By	Mr. Don Johnson		

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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

#### Well Directions:

First Bosque entrance just before Weston, first right at Cherry Canyon, stay left at Y, stay on main road approx. four and half miles, take road to right, last location.



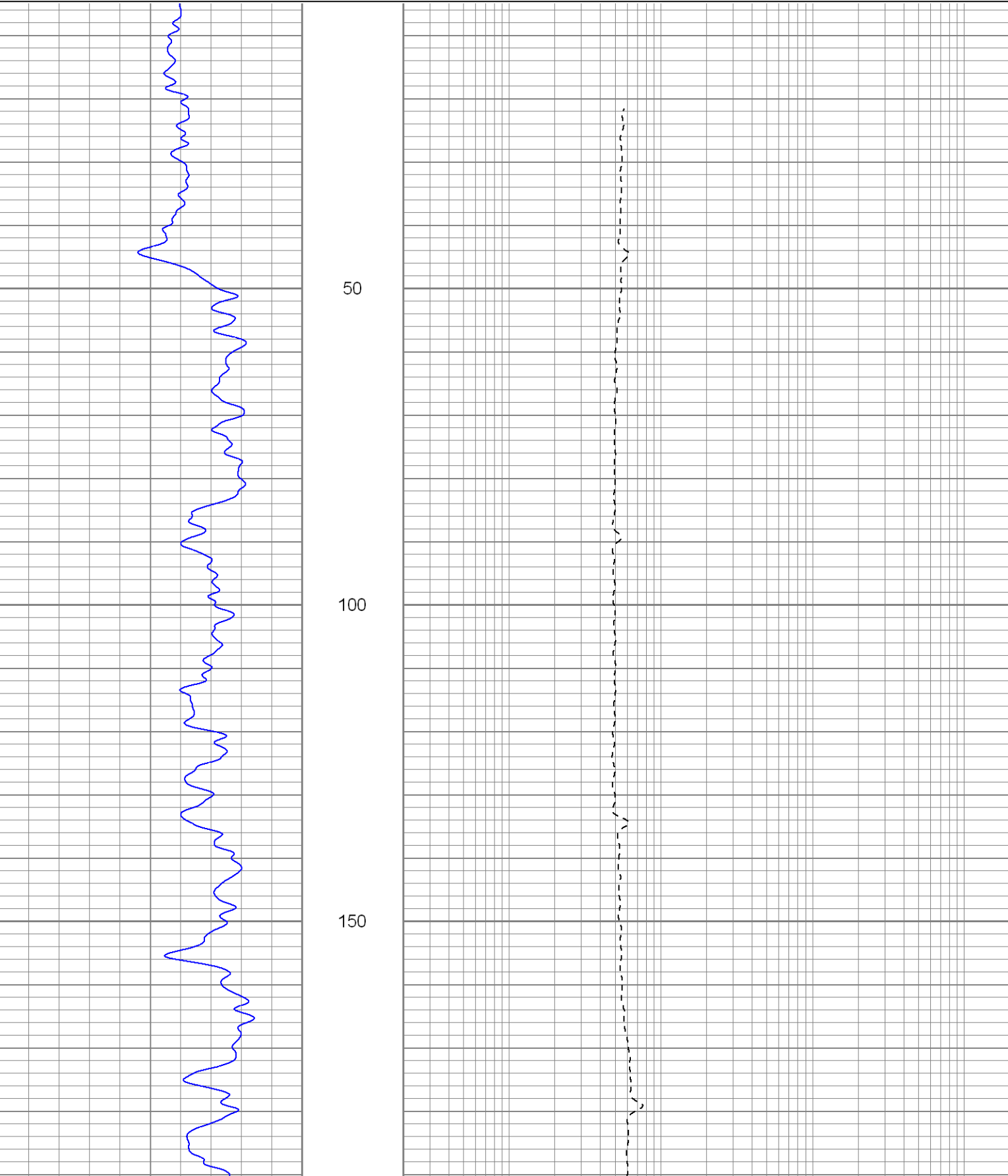
**SUPERIOR**

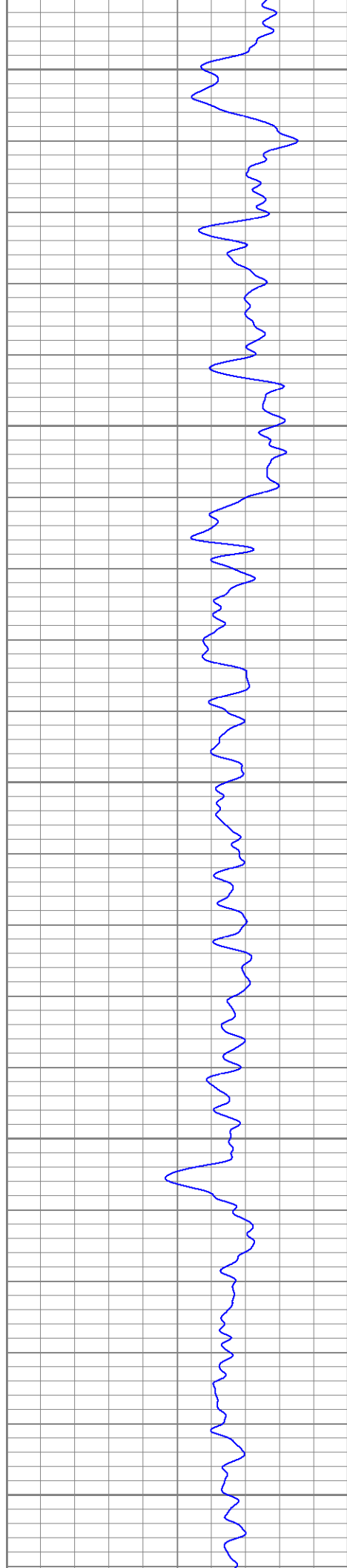
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# Main Pass

Database File: xtoac0508.db  
Dataset Pathname: pass2.1  
Presentation Format: dil  
Dataset Creation: Fri Jun 08 13:33:49 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200	0.2	RILM (Ohm-m)	2000
-100	SP (mV)	100	0.2	RILD (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000





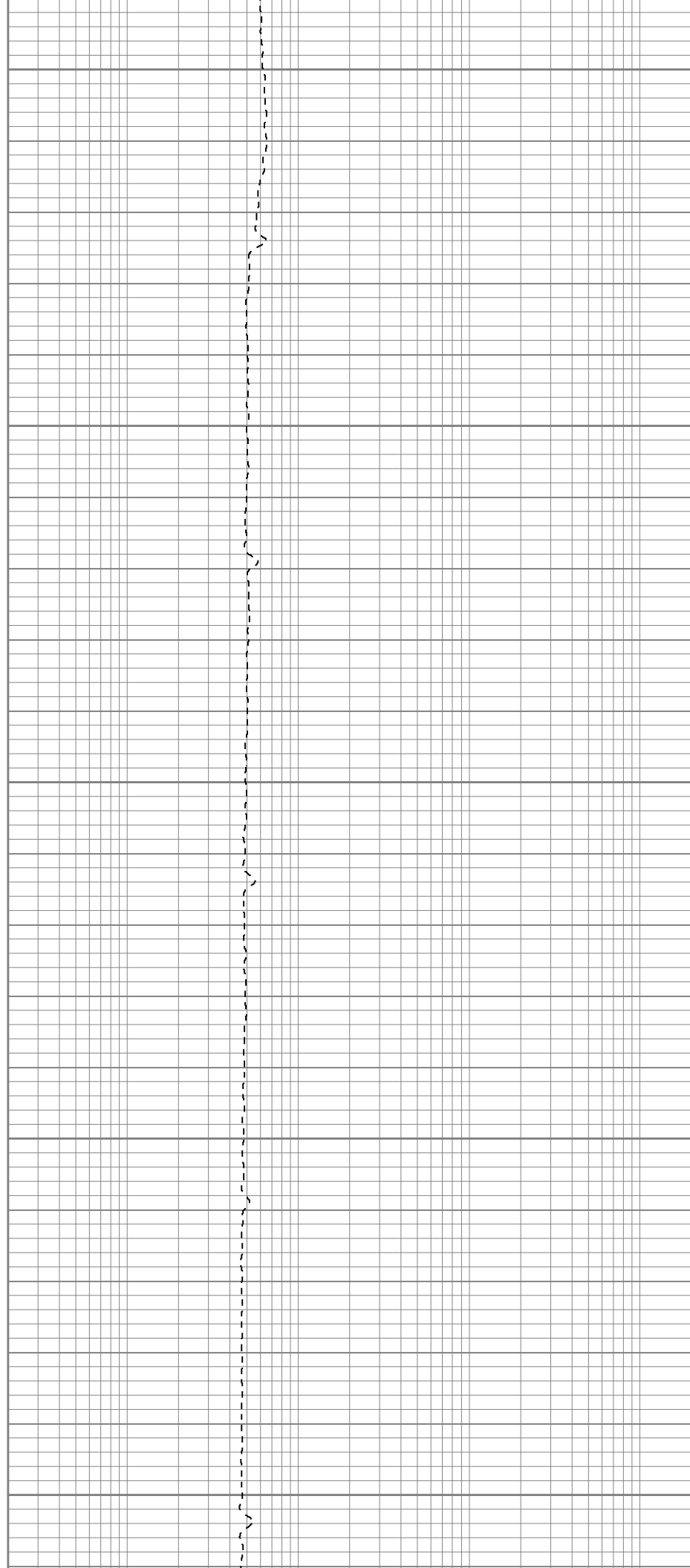
200

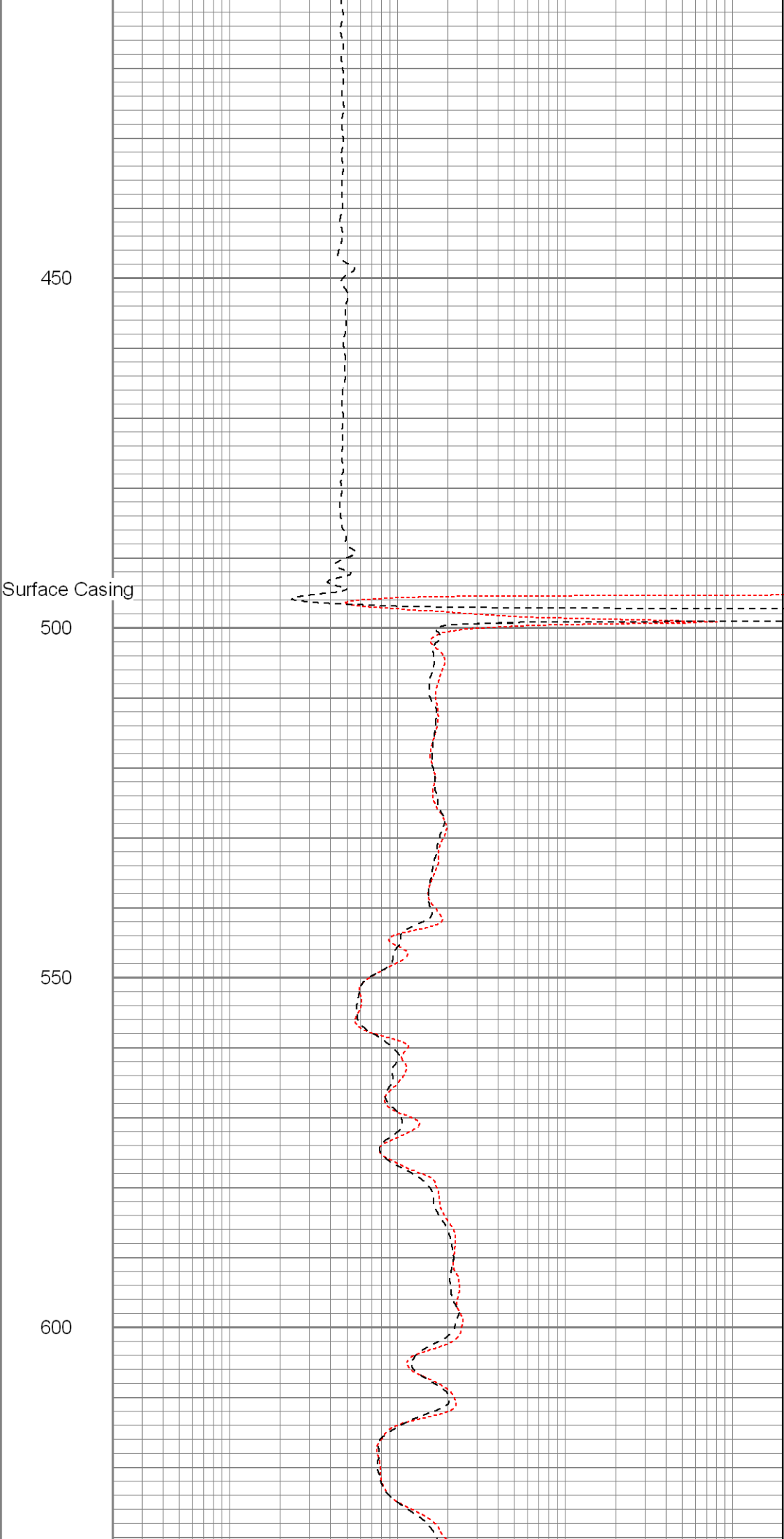
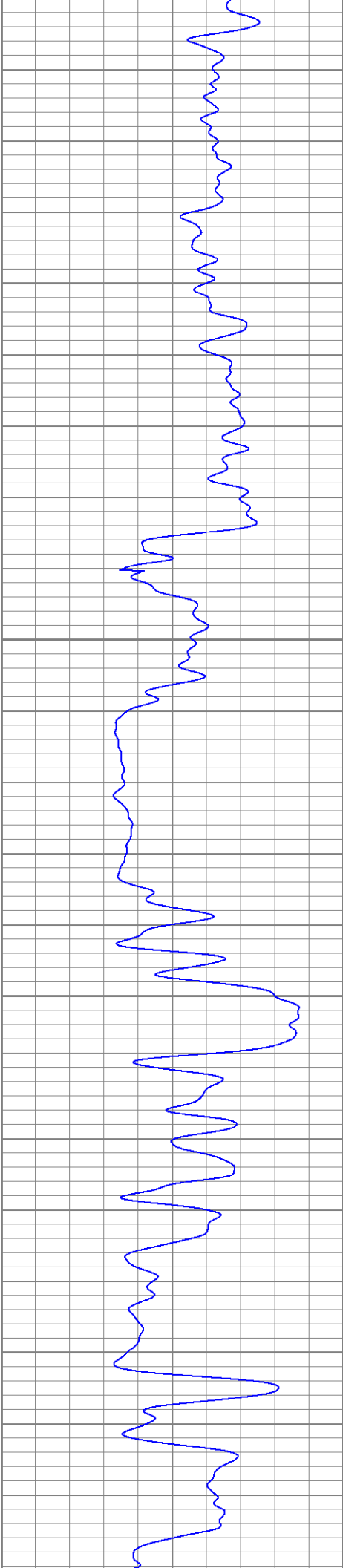
250

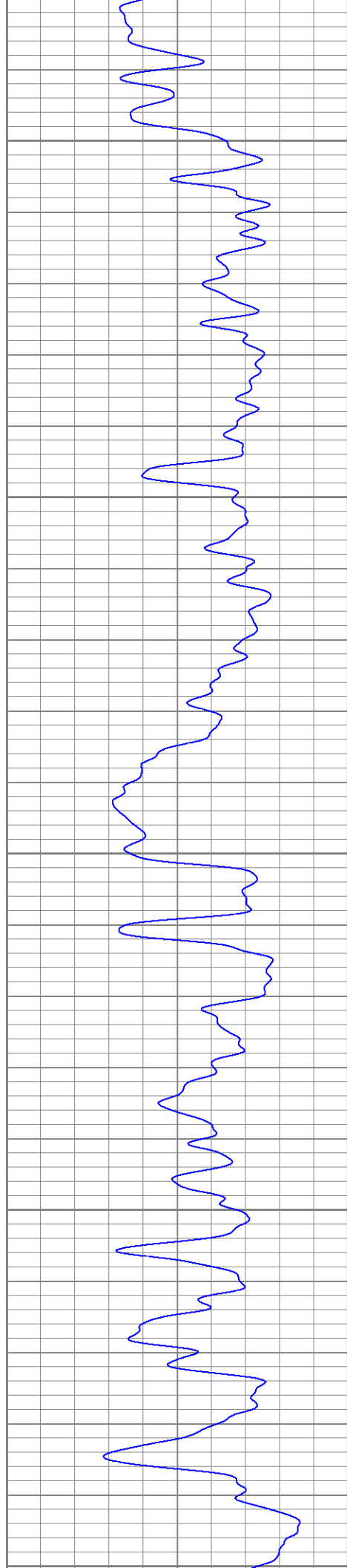
300

350

400







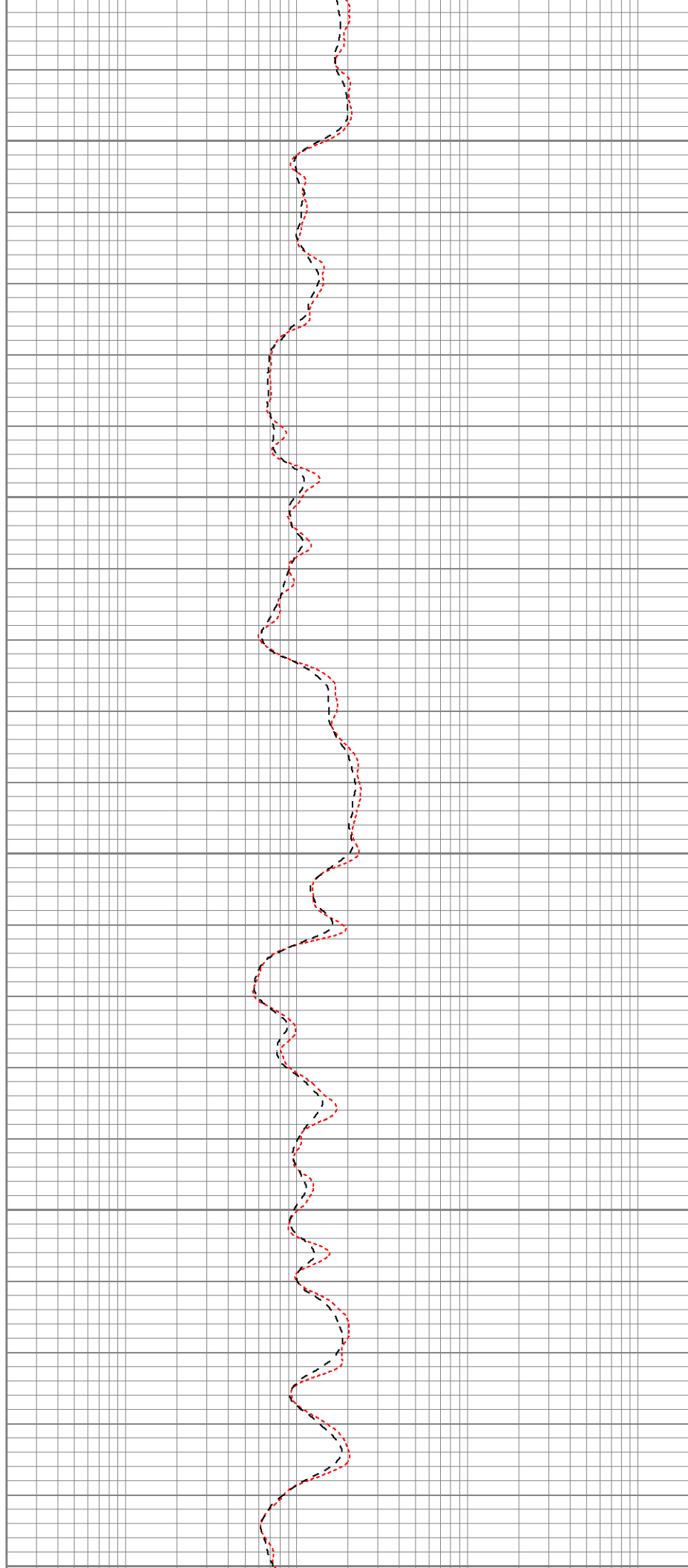
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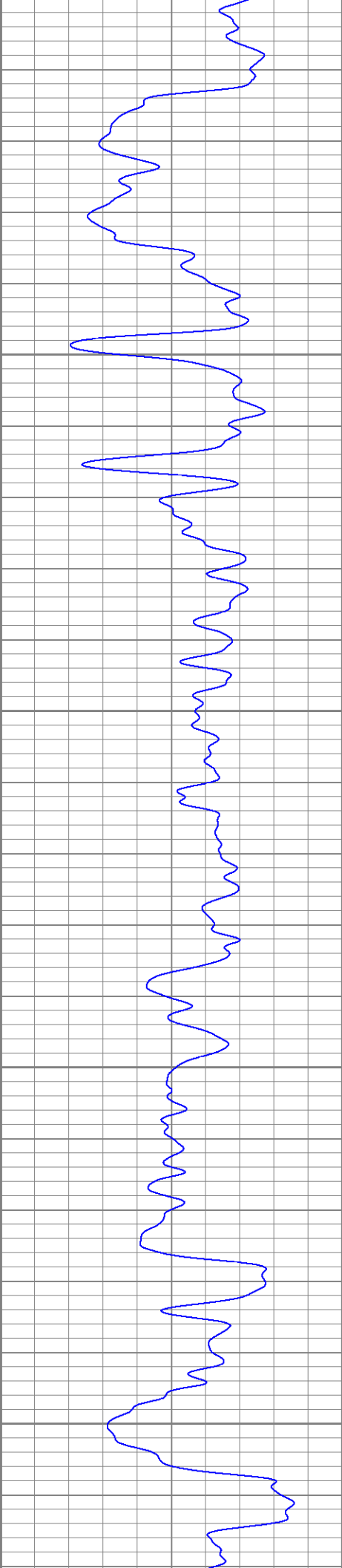
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750

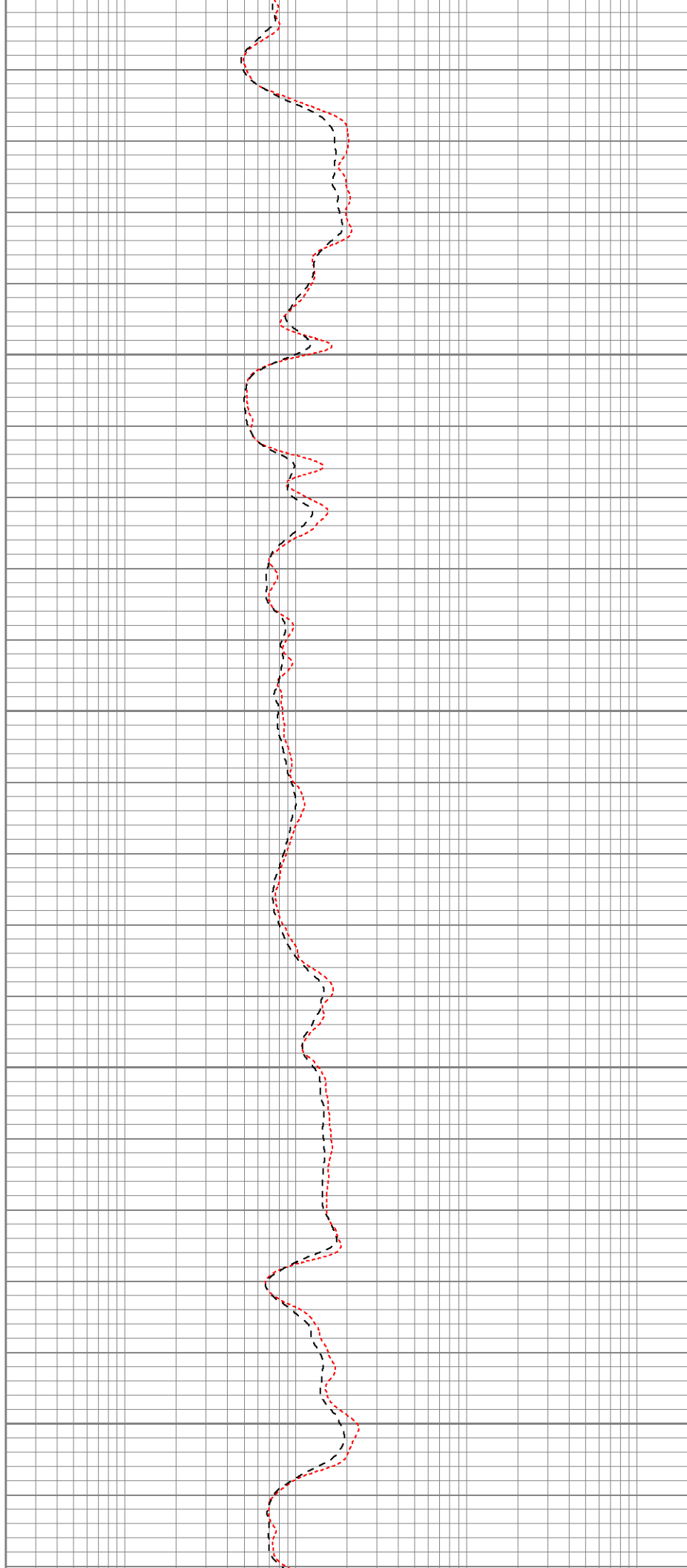
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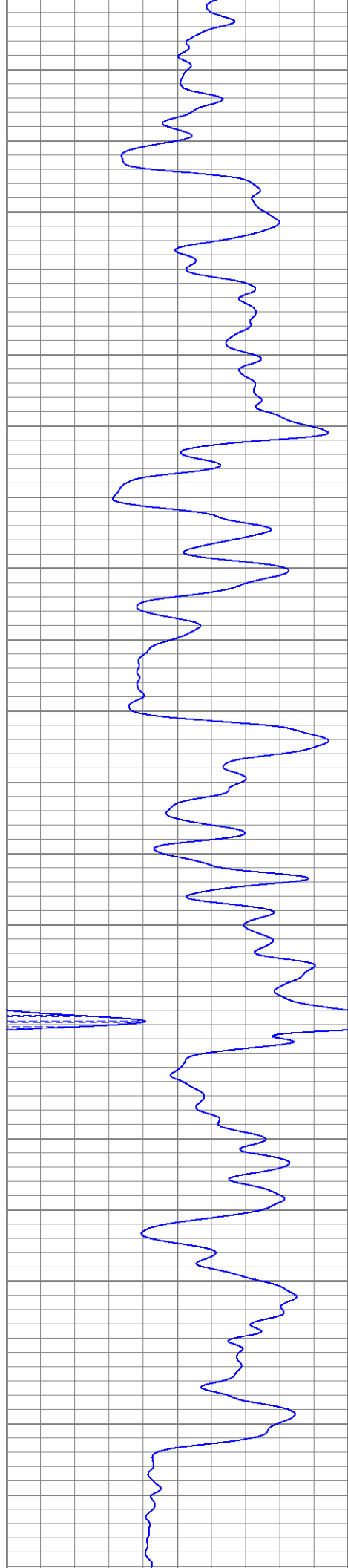
850





850  
900  
950  
1000  
1050



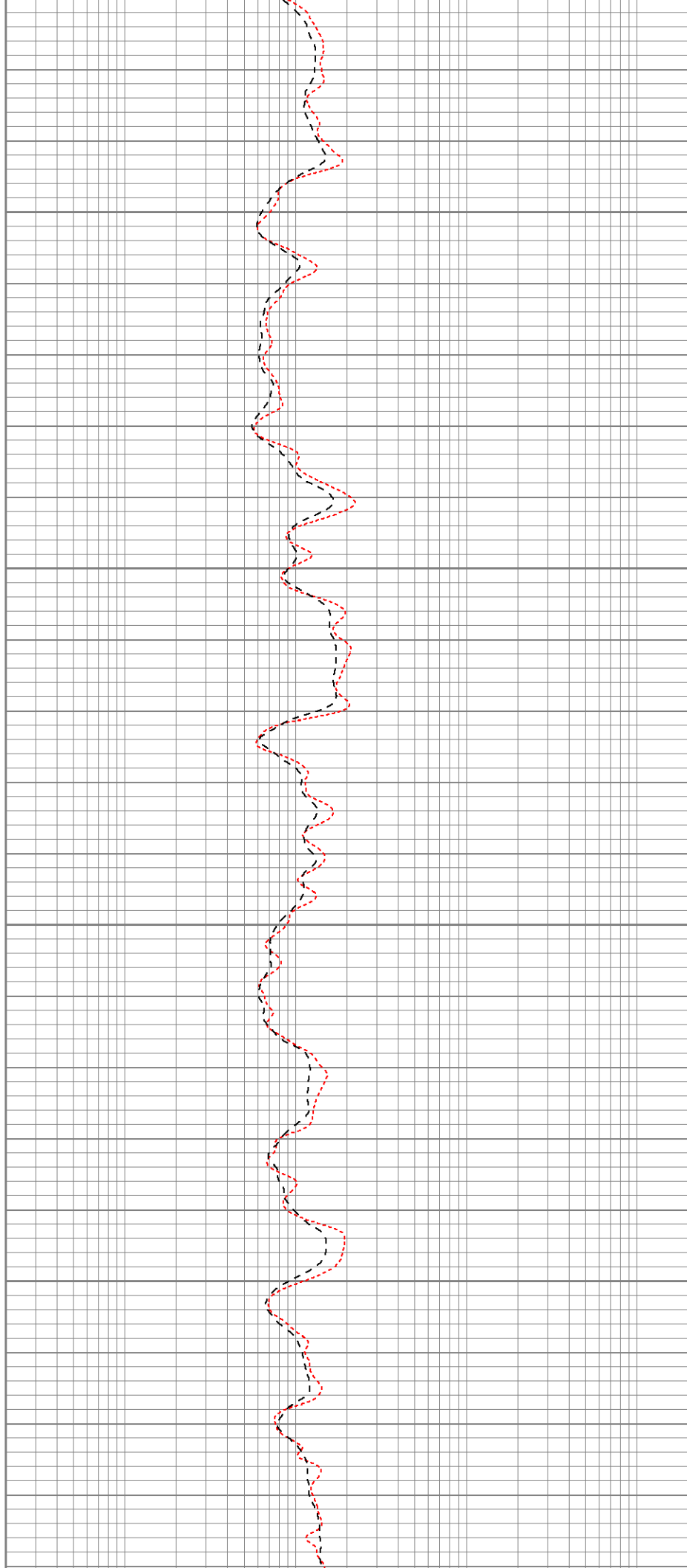


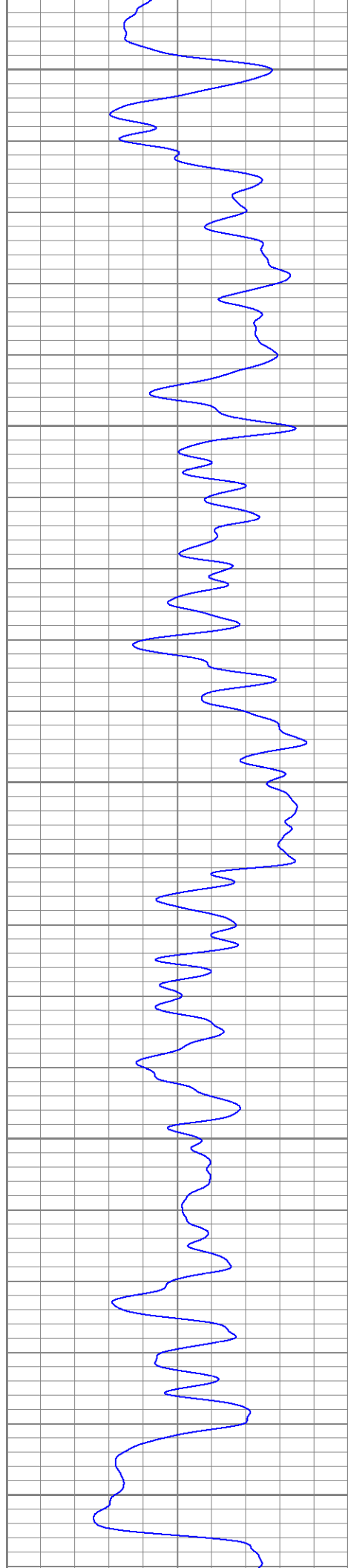
1100

1150

1200

1250





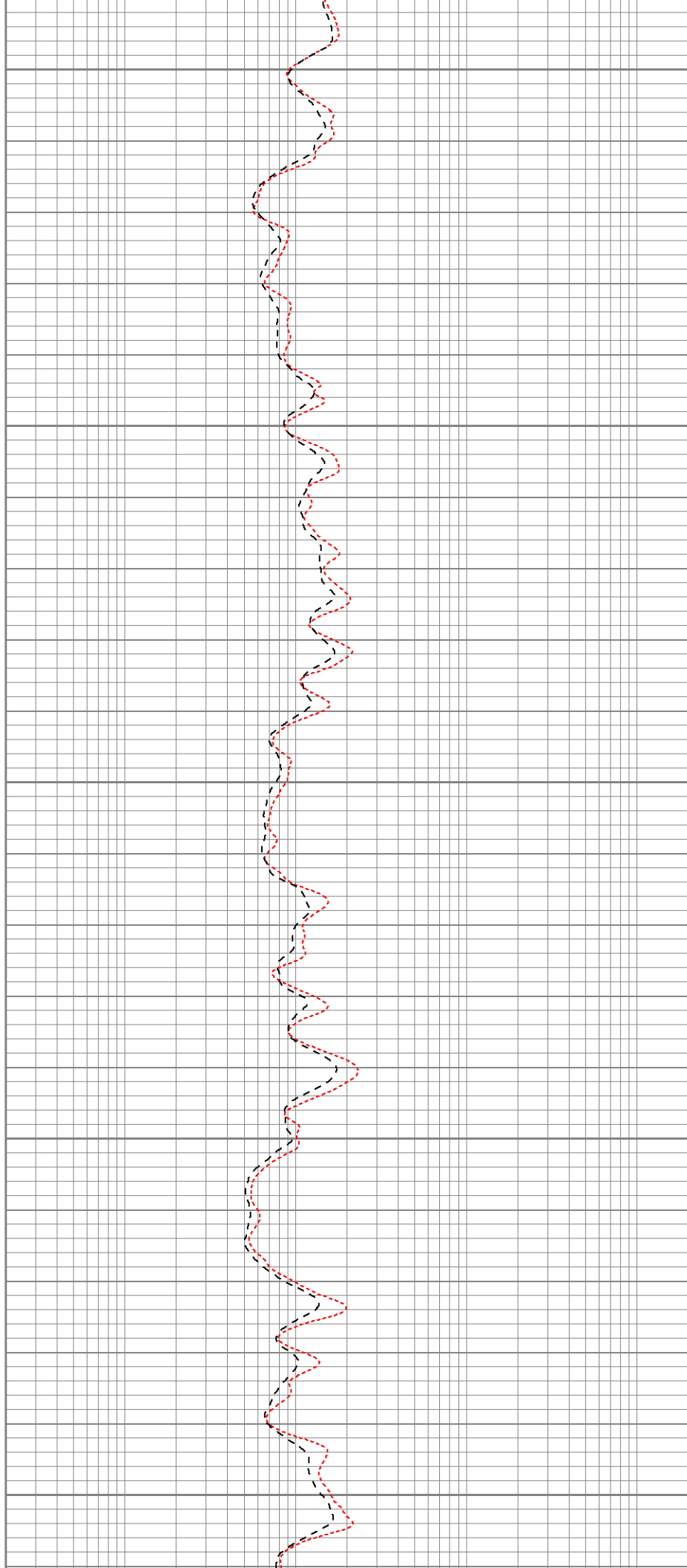
1300

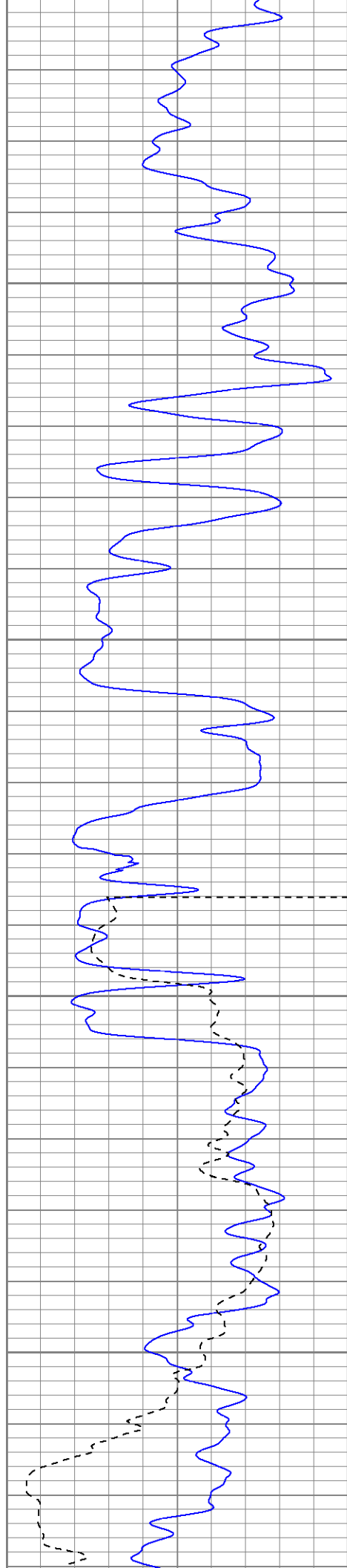
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1400

1450

1500





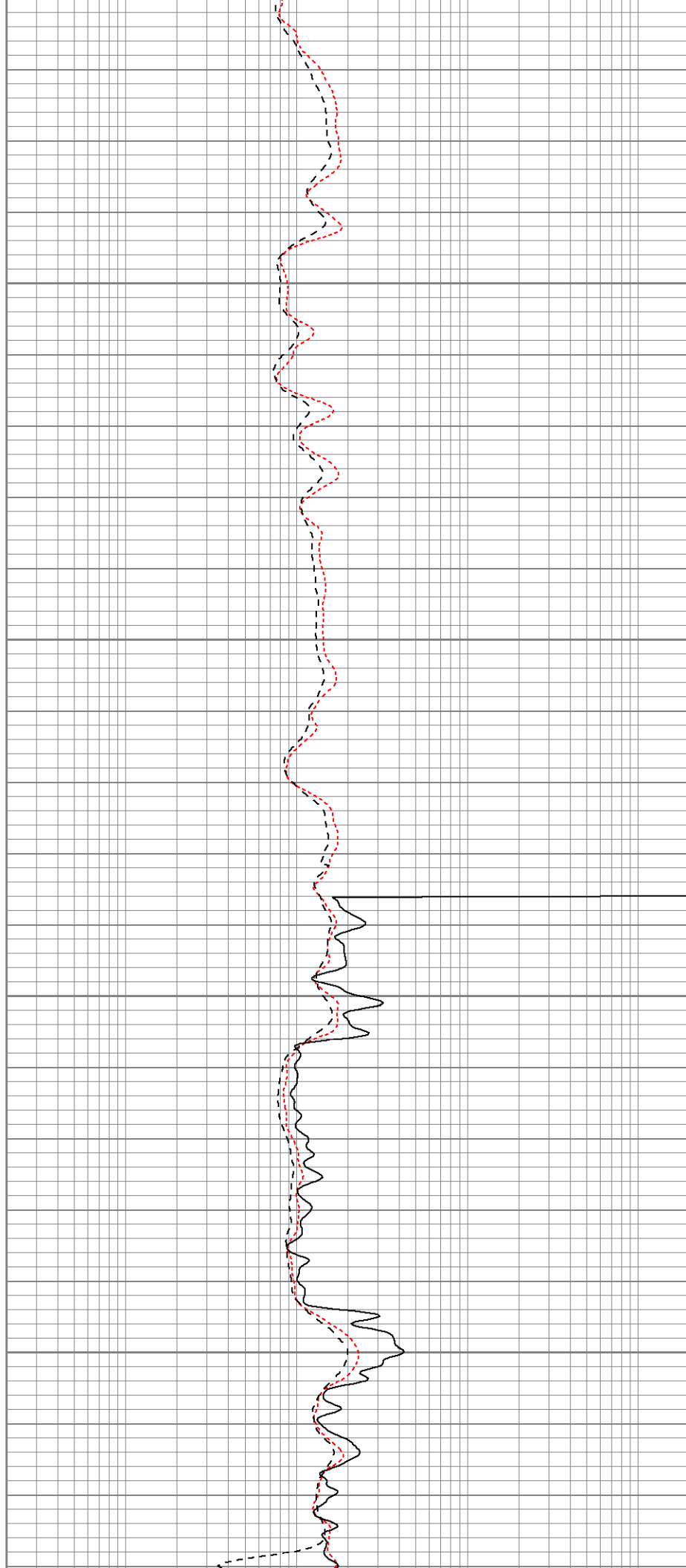
Fluid Level

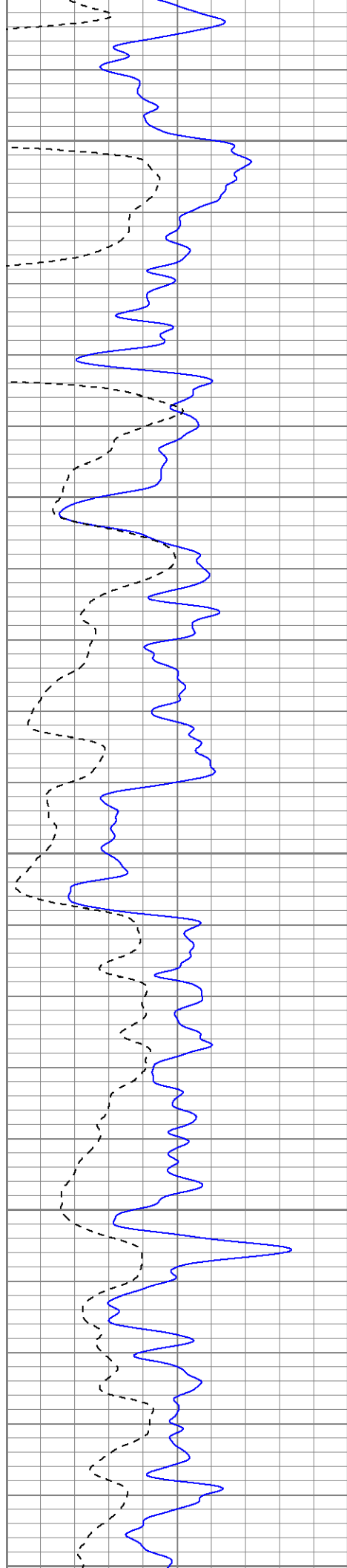
1550

1600

1650

1700





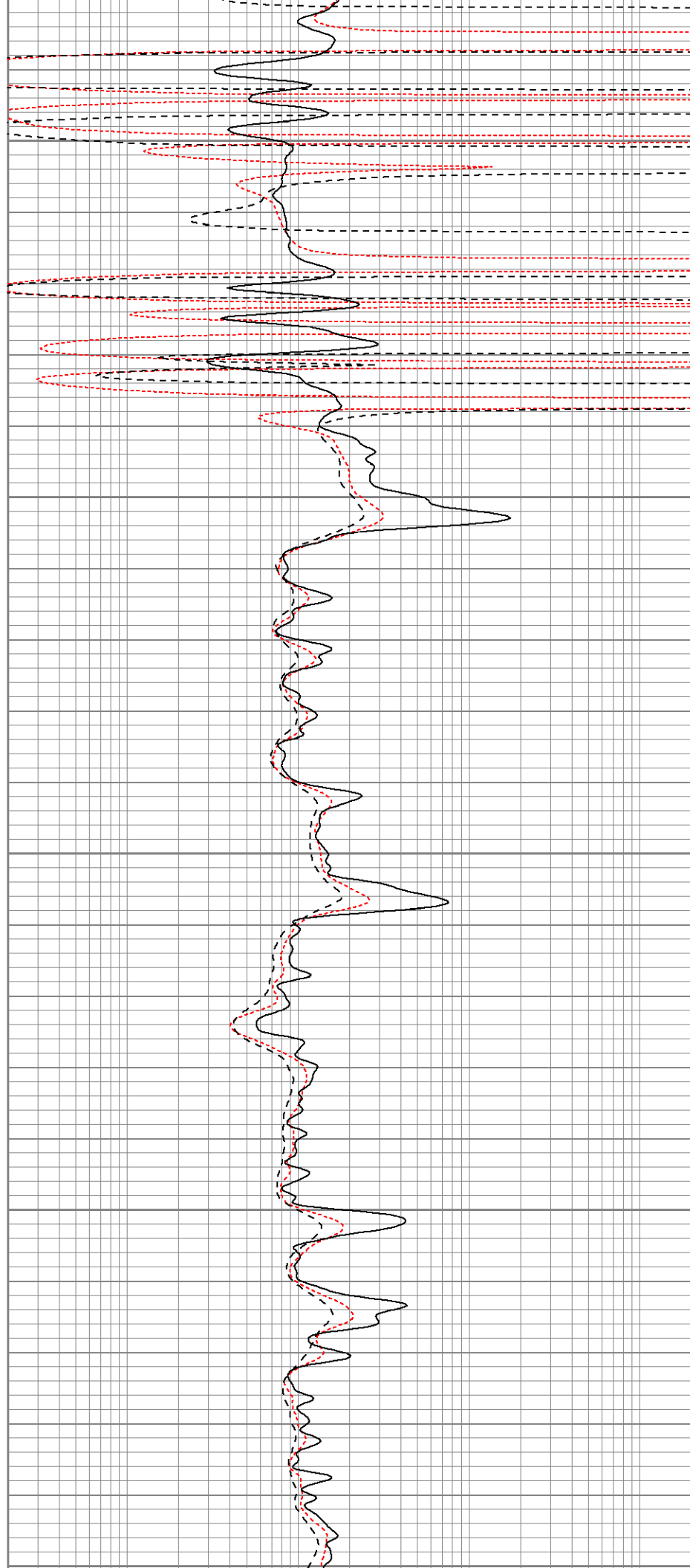
1750

1800

1850

1900

1950



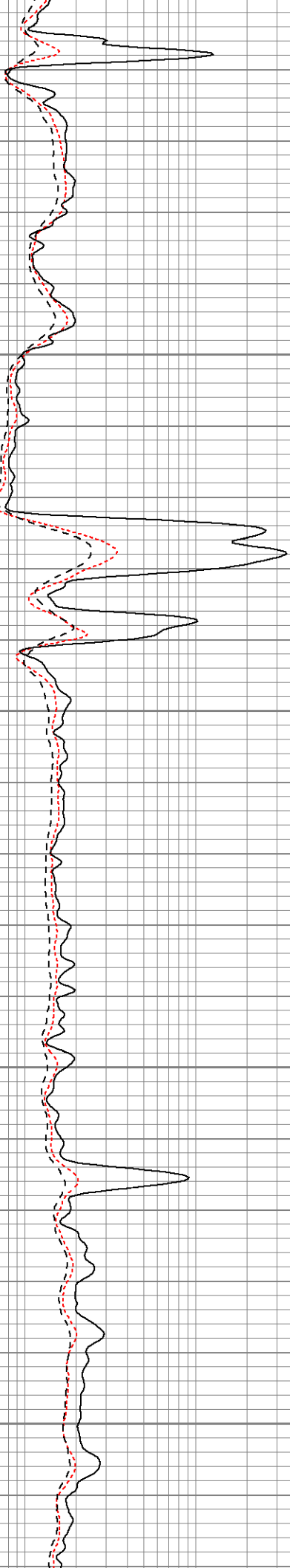
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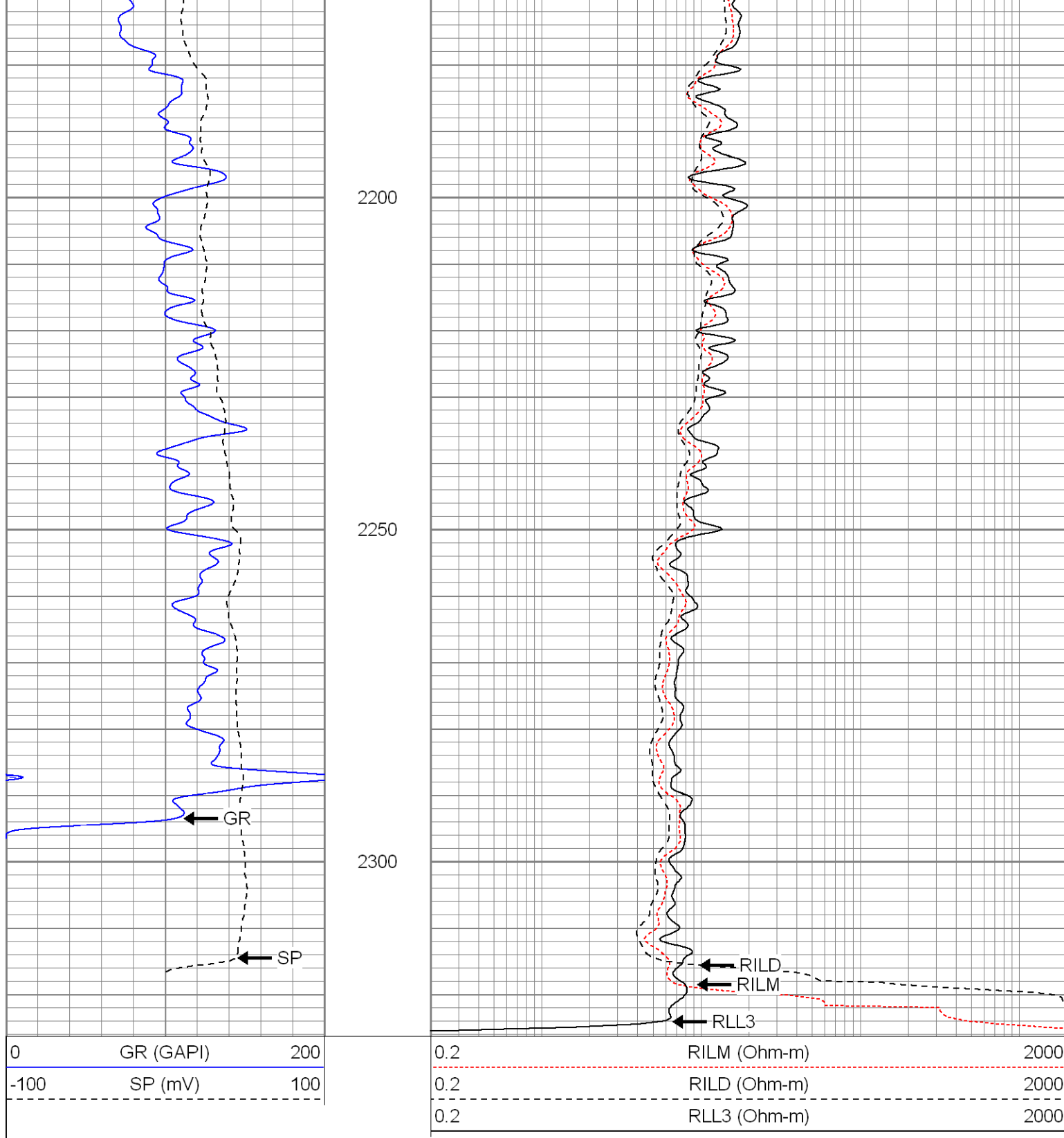
2000

2050

2100

2150





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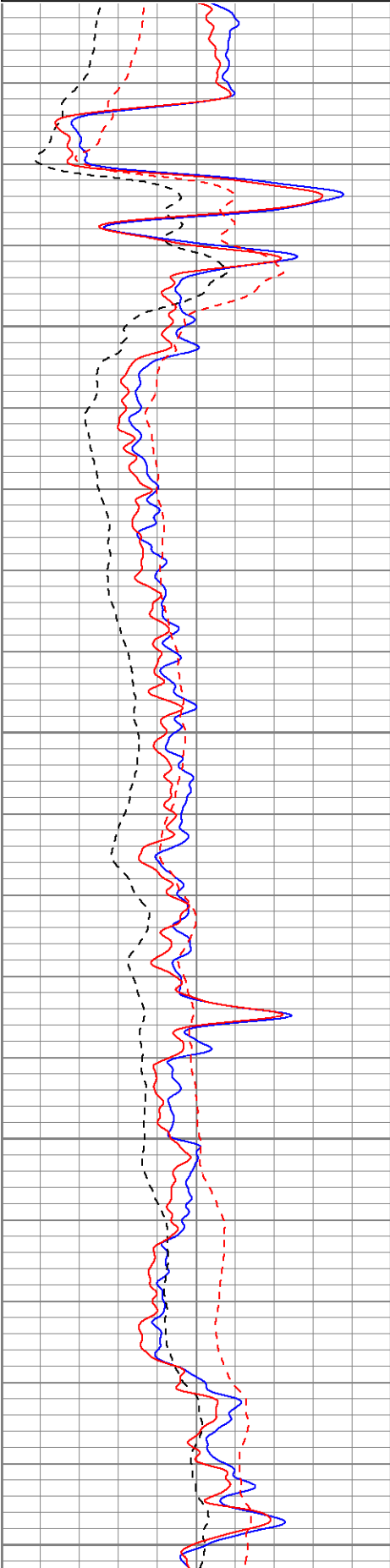
# Repeat Section

Database File: xtoac0508.db  
Dataset Pathname: pass1.1  
Presentation Format: dil  
Dataset Creation: Fri Jun 08 13:32:34 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 200 0.2 RILM (Ohm-m) 2000

-100	SP (mV)	100
0	GR-repeat (GAPI)	200
-100	SP-repeat (mV)	100

0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RLL3-repeat (Ohm-m)	2000
0.2	RILM-repeat (Ohm-m)	2000
0.2	RILD-repeat (Ohm-m)	2000

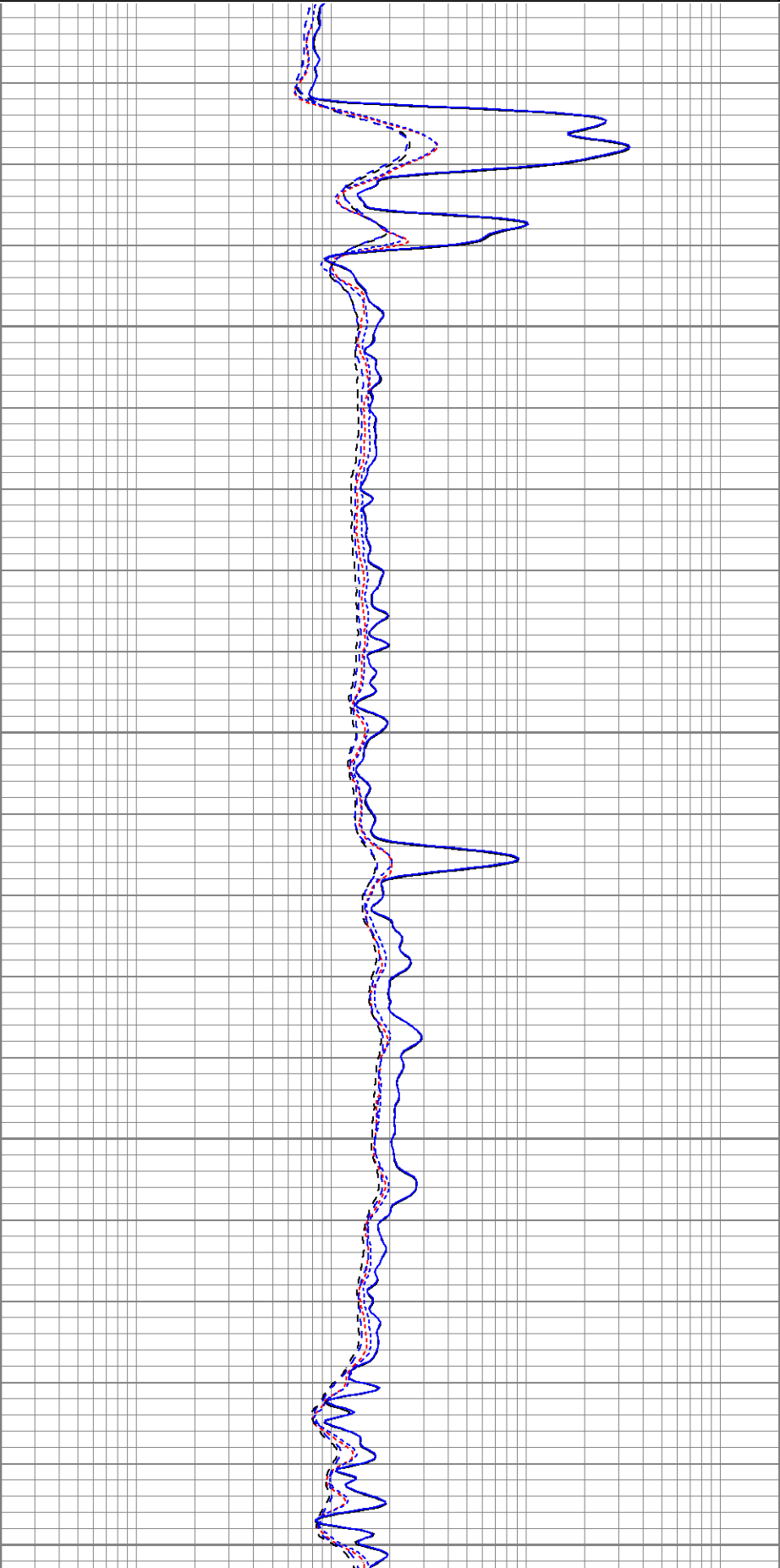


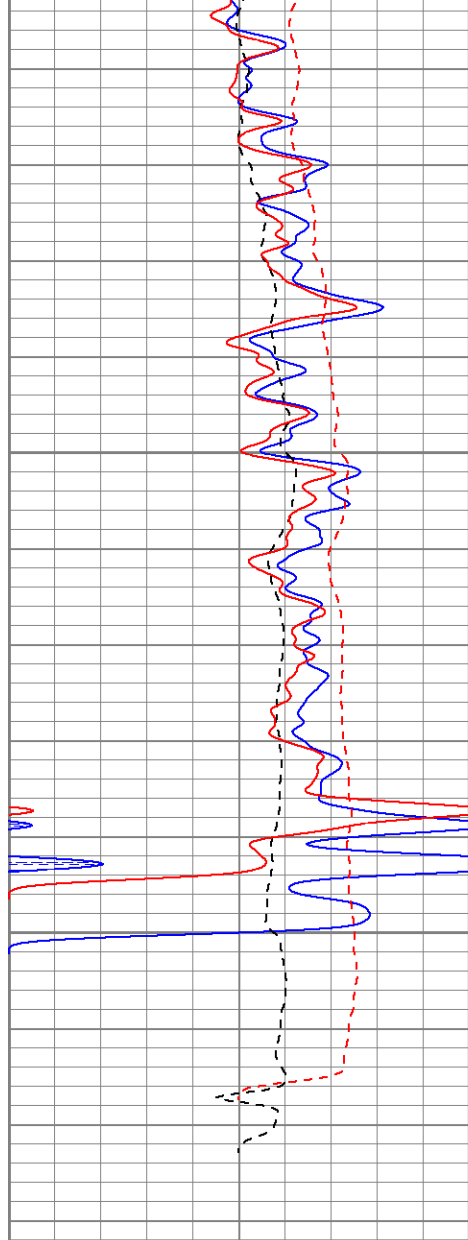
2050

2100

2150

2200

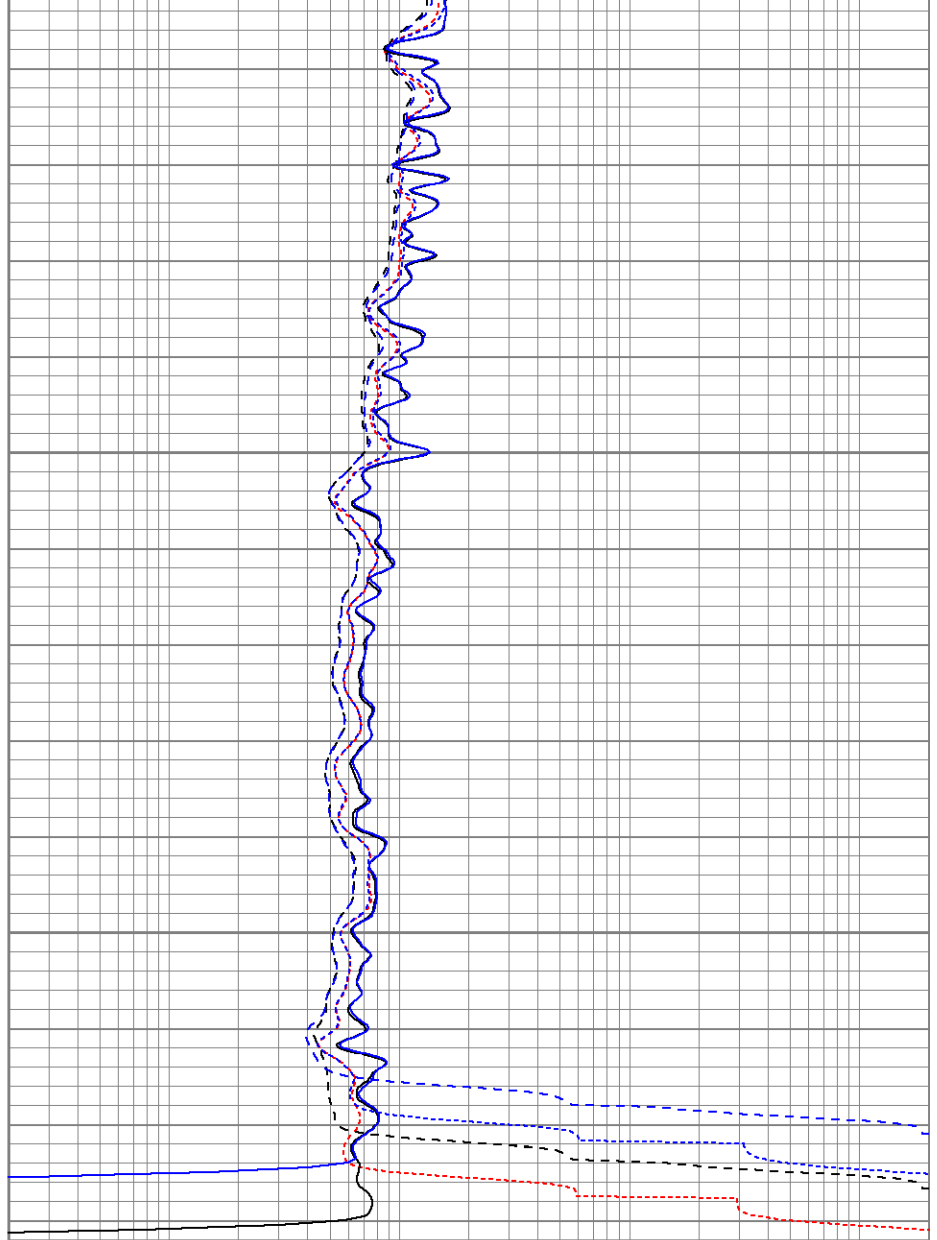




2250

2300

0	GR (GAPI)	200
-100	SP (mV)	100
0	GR-repeat (GAPI)	200
-100	SP-repeat (mV)	100



0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RLL3-repeat (Ohm-m)	2000
0.2	RILM-repeat (Ohm-m)	2000
0.2	RILD-repeat (Ohm-m)	2000

### Calibration Report

Database File: xtoac0508.db  
 Dataset Pathname: pass2  
 Dataset Creation: Fri Jun 08 12:09:27 2007 by Log Open-Cased 061129

### Dual Induction Calibration Report

Serial-Model: 5375-G  
 Surface Cal Performed: Thu Apr 26 17:31:10 2007  
 Downhole Cal Performed: Thu Apr 26 17:31:26 2007

### Surface Calibration

Readings			References		Results	
Loop:	Air	Loop	Air	Loop	m	b

Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.659	-1.119
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.727	-3.505
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.698	-1.159
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.801	-3.569

Downhole Calibration								
	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.123	499.901	mmho-m	0.039	500.015	mmho-m	1.000	-0.084
Medium	0.245	549.982	mmho-m	0.064	550.009	mmho-m	1.000	-0.182
Shallow	2.506	0.009	V	500.000	2.000	Ohm-m	90.000	0.000

Compensated Density Calibration Report								
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Serial-Model:				2118-poilex				
Source / Verifier:				/				
Master Calibration Performed:				Mon May 14 16:51:32 2007				

Master Calibration								
	Density			Far Detector		Near Detector		
Magnesium	1.710	g/cc		665.94		685.05	cps	
Aluminum	2.590	g/cc		149.68		463.33	cps	
Spine Angle = 75.32				Density/Spine Ratio = 0.570				
	Size			Reading				
Small Ring	7.85	in		4.10	V			
Large Ring	14.00	in		9.25	V			

Gamma Ray Calibration Report								
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Serial Number:			2001					
Tool Model:			OH					
Performed:			Tue May 29 19:51:06 2007					
Calibrator Value:			1.0	GAPI				
Background Reading:			0.0	cps				
Calibrator Reading:			1.0	cps				
Sensitivity:			0.1400	GAPI/cps				

Neutron Calibration Report								
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Serial Number:			5145					
Tool Model:			G					
Performed:			Mon Apr 23 18:30:25 2007					
Calibrator Value:			1200	NAPI				
Calibrator Reading:			1700	cps				
Sensitivity:			1	NAPI/cps				

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)

