



# DUAL INDUCTION GUARD LOG - SP GAMMA RAY

Pioneer Energy Services

Company Augustus Energy Resources LLC  
Well Five Rivers 22-19 2N46W  
Field Wildcat  
County Yuma State Colorado

Location: API #: 05125120790000

1794' FNL & 2299' FWL SENW  
SEC 19 TWP 2N RGE 46W

Permanent Datum GL Elevation 3978  
Log Measured From KB  
Drilling Measured From KB

Other Services  
Density  
Neutron  
Elevation  
K.B. 3984  
D.F. 3983  
G.L. 3978

Date March 20, 2014

Run Number	1		
Depth Driller	2880		
Depth Logger	2879		
Bottom Logged Interval	2879		
Top Log Interval	Casing		
Casing Driller	501		
Casing Logger	501		
Bit Size	6.25"		
Type Fluid in Hole	Polymer Kcl		
Density / Viscosity	8.7 / 28		
pH / Fluid Loss	8 / 5.6		
Source of Sample	Mudpit		
Rm @ Meas. Temp	0.39 @ 65 F		
Rmf @ Meas. Temp	0.31 @ 65 F		
Rmc @ Meas. Temp	0.47 @ 65 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	0.24 @ 107 F		
Time Circulation Stopped	2015		
Time Logger on Bottom	2330		
Maximum Recorded Temperature	107 F		
Equipment Number	49		
Location	Ft. Morgan		
Recorded By	Clint Christensen		
Witnessed By	Justin Stone		

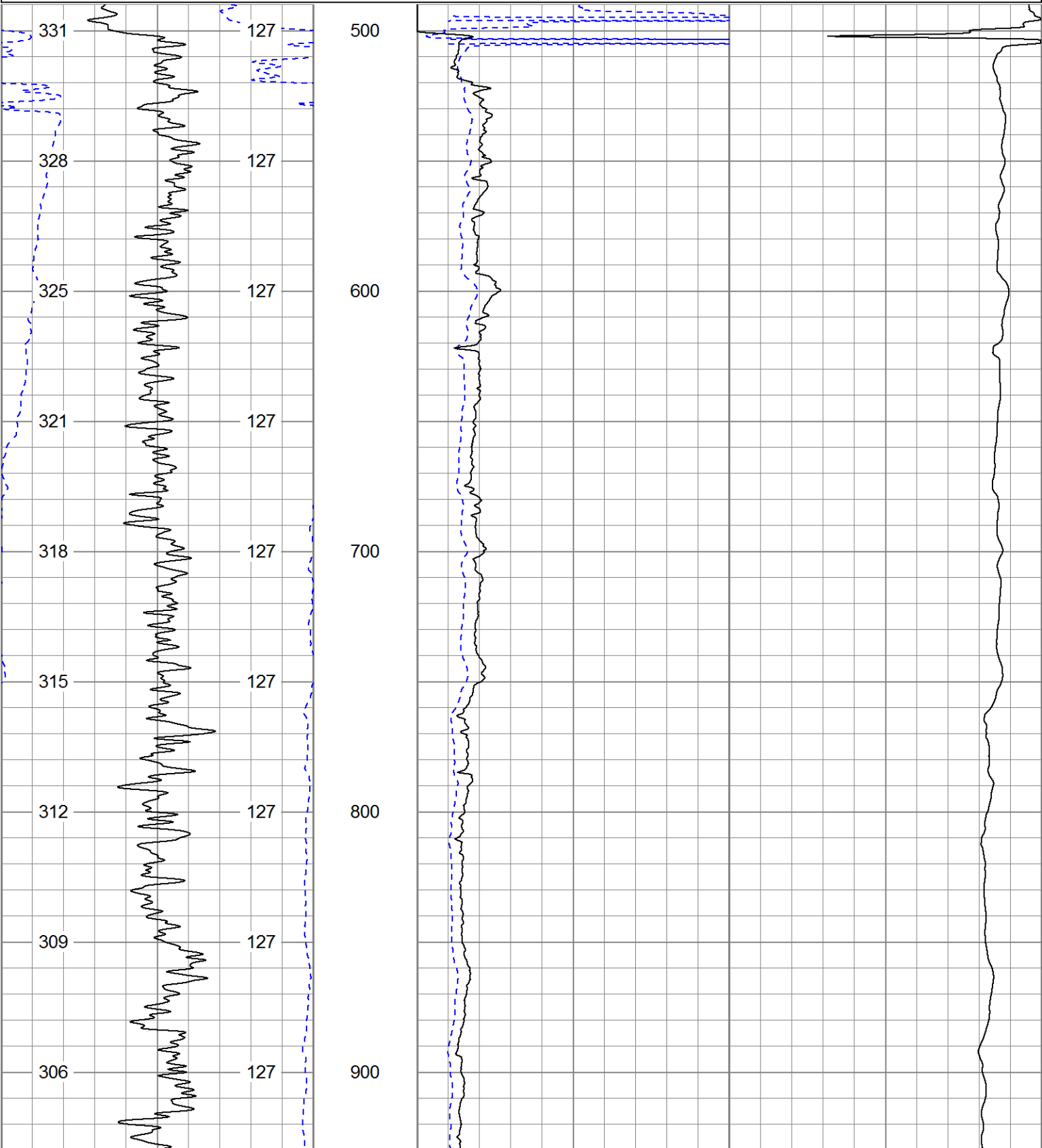
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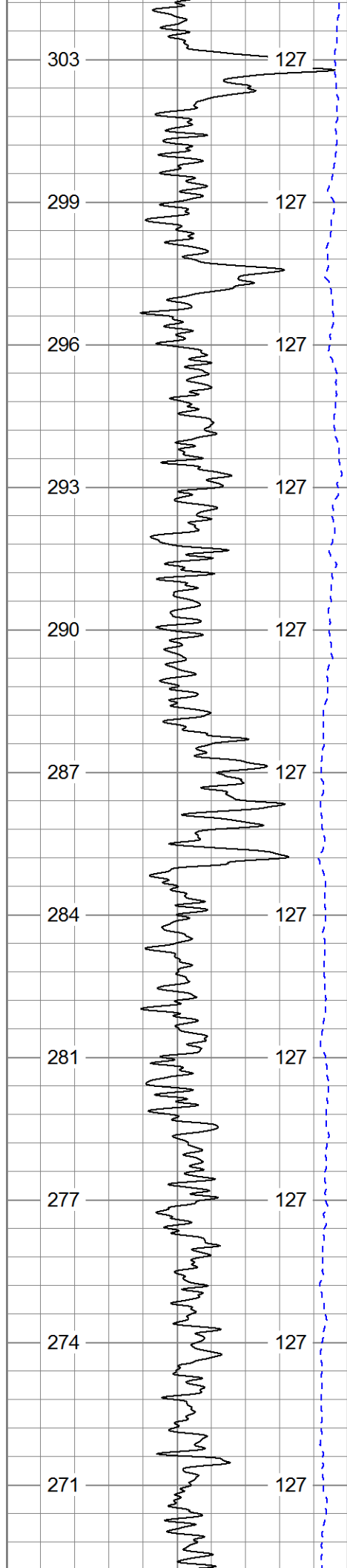
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

## Comments

Annular volume calculated for 4-1/2" casing  
Excel Drilling Rig 2  
Thank you for using Pioneer Energy Services!

0	Gamma Ray (GAPI)	200	0	Deep Resistivity (Ohm-m)	50	1000	CILD (mmho/m)	0
0	SP (mV)	200	0	Shallow Resistivity (Ohm-m)	50			
4	Caliper (in)	14	50	RILD (Ohm-m)	500			
TBHV (ft3)		ABHV (ft3)	50	RLL3 (Ohm-m)	500			





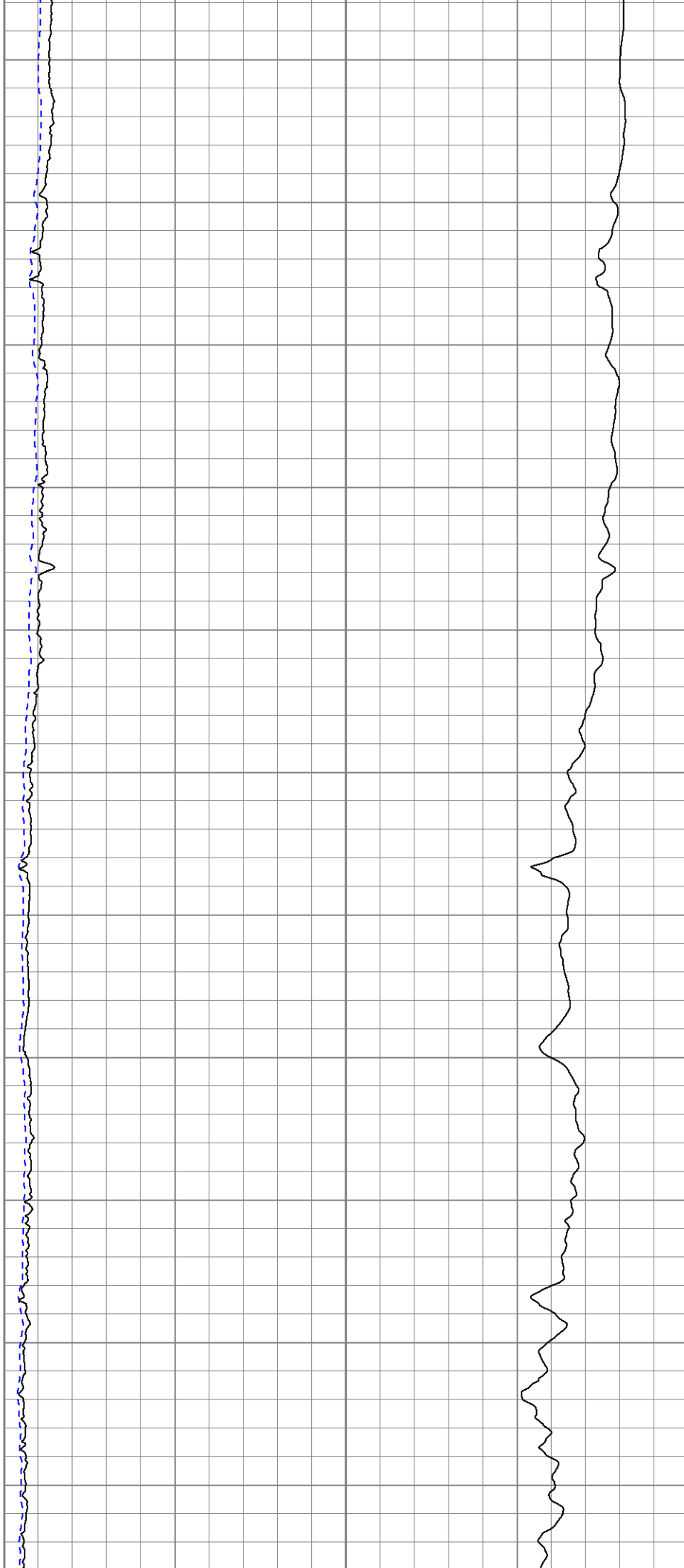
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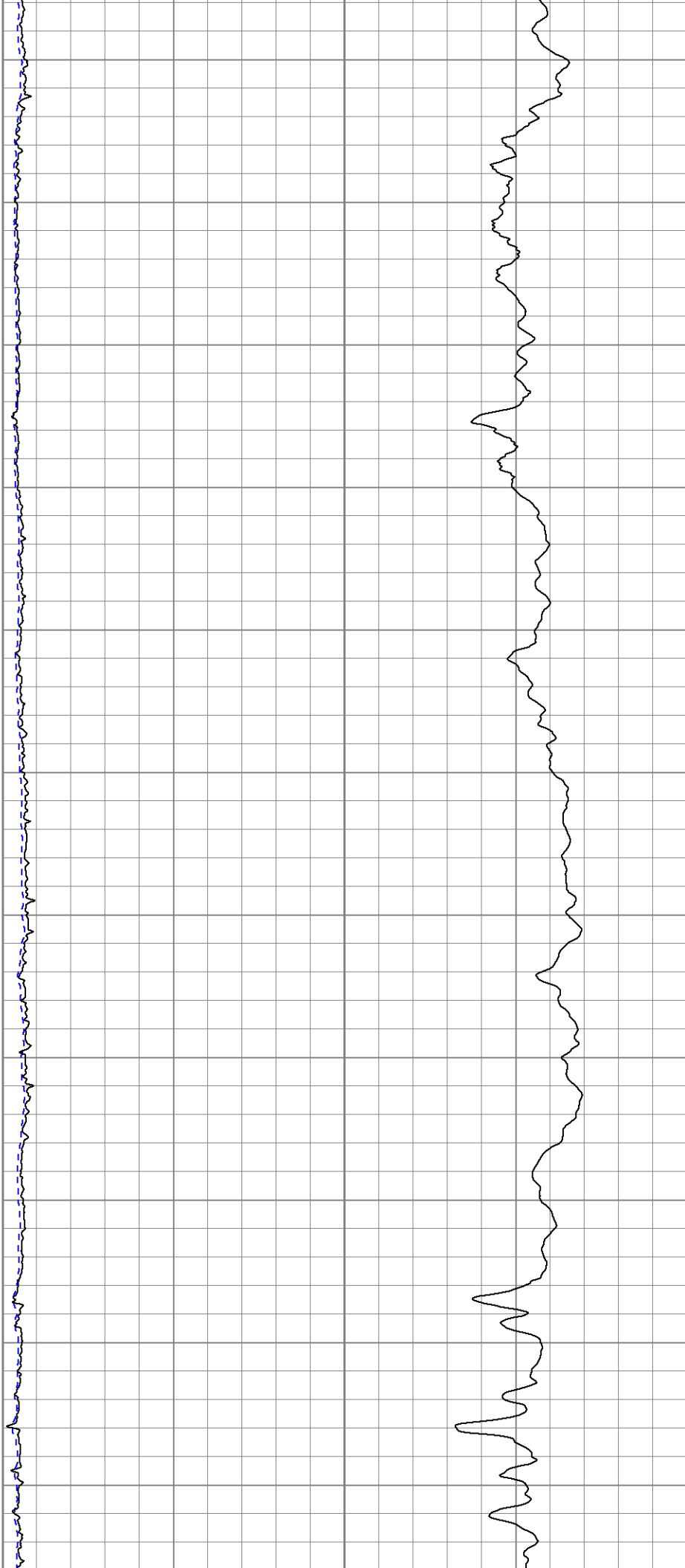
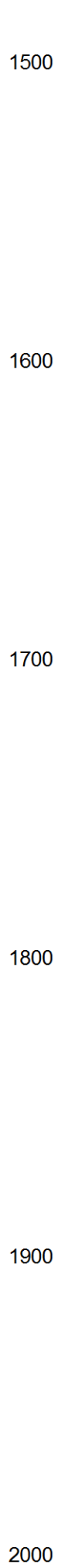
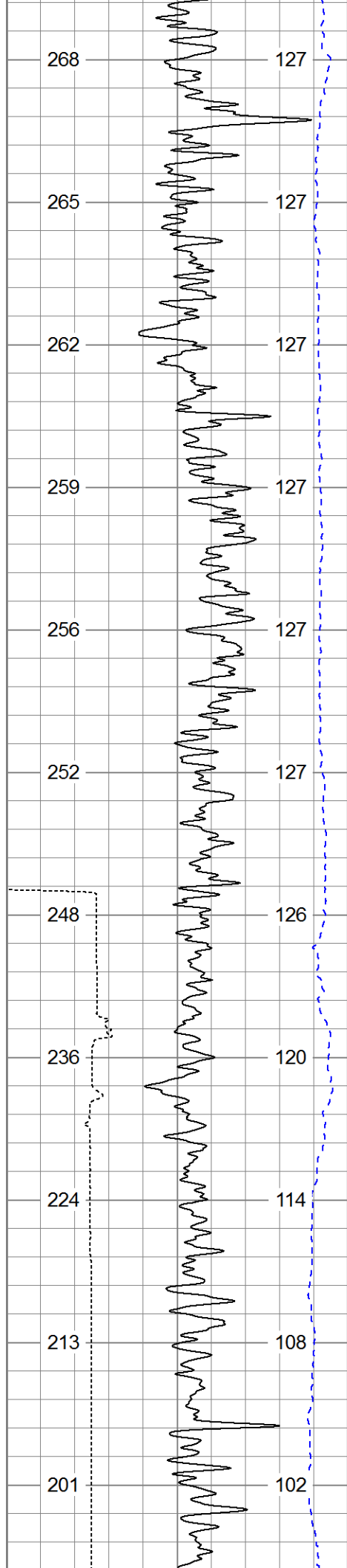
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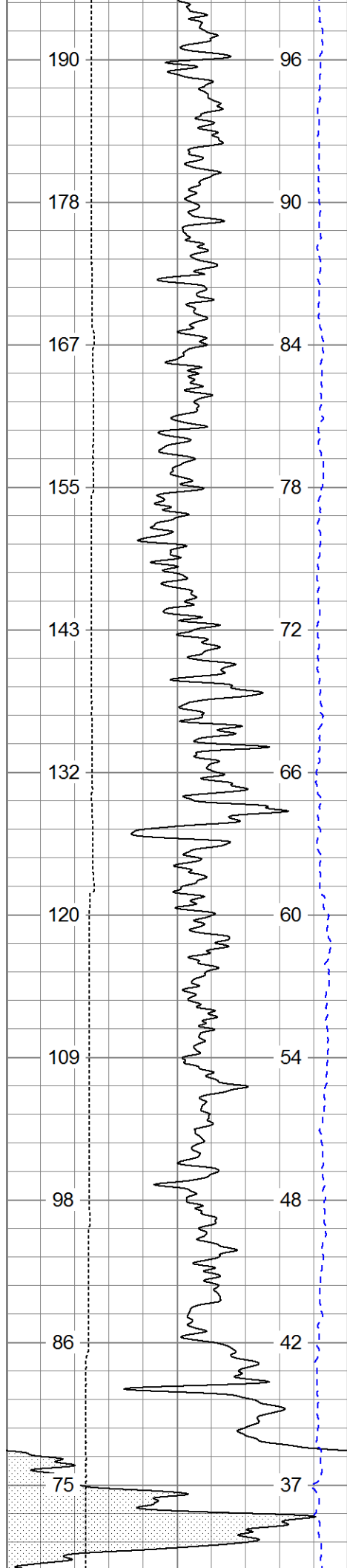
1200

1300

1400







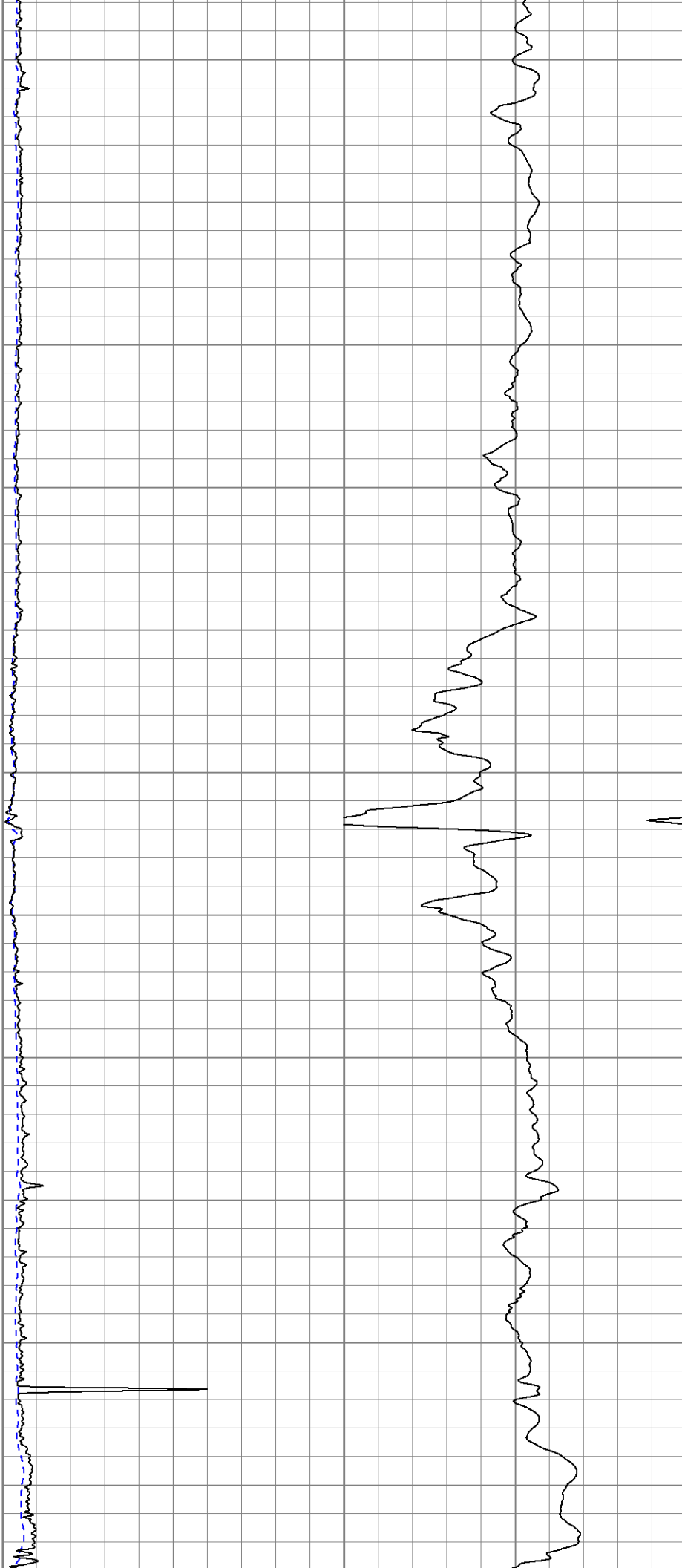
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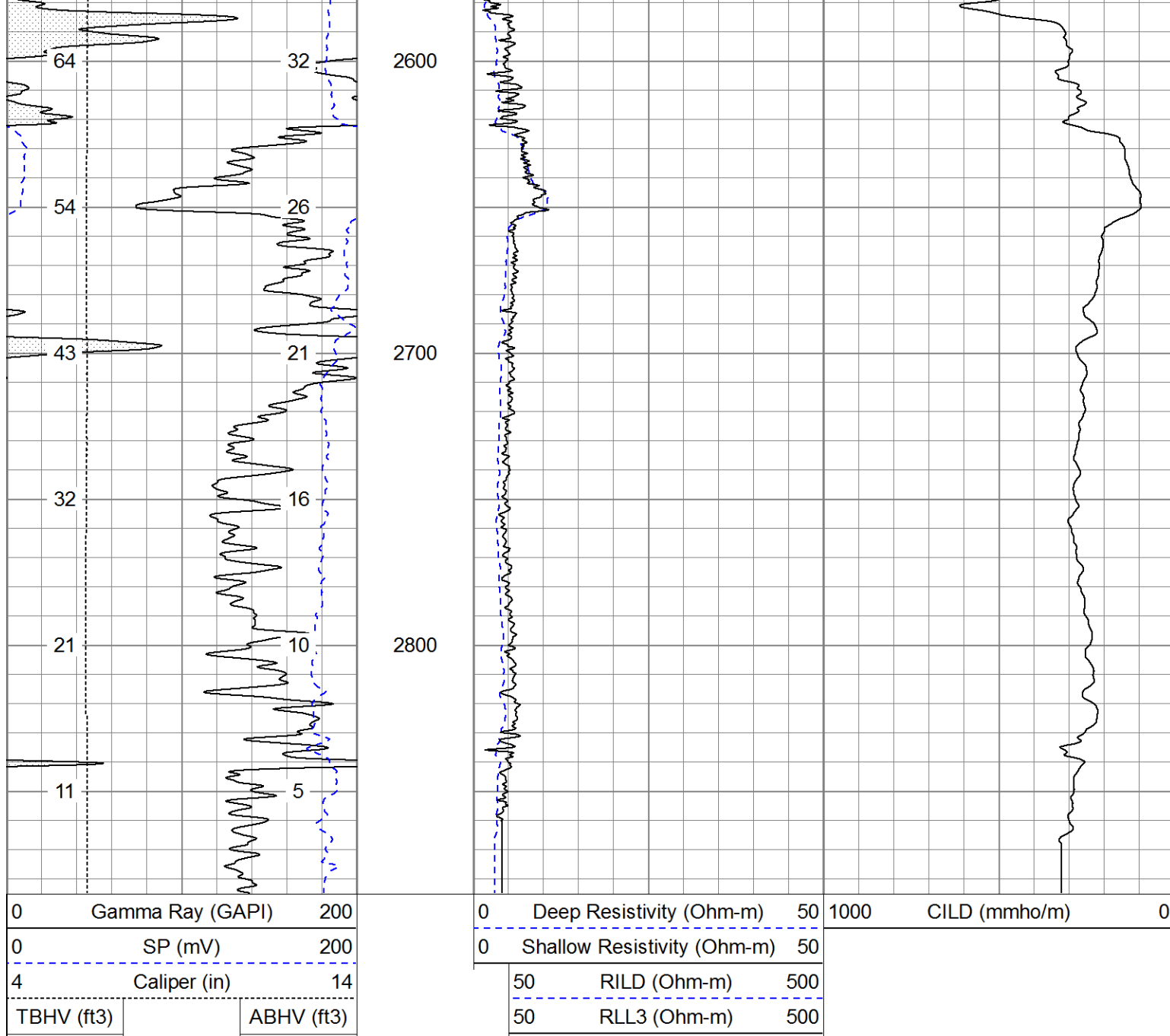
2200

2300

2400

2500



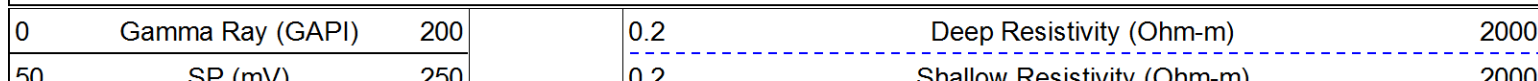


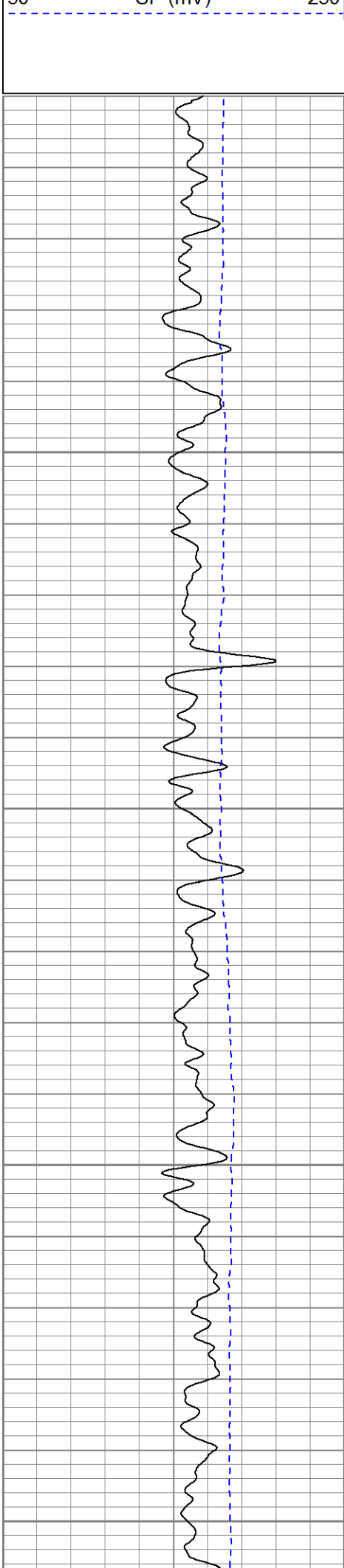
# Main Pass



# Main Pass

Database File: 13491.db  
 Dataset Pathname: final  
 Presentation Format: dil  
 Dataset Creation: Fri Mar 21 00:36:02 2014  
 Charted by: Depth in Feet scaled 1:240

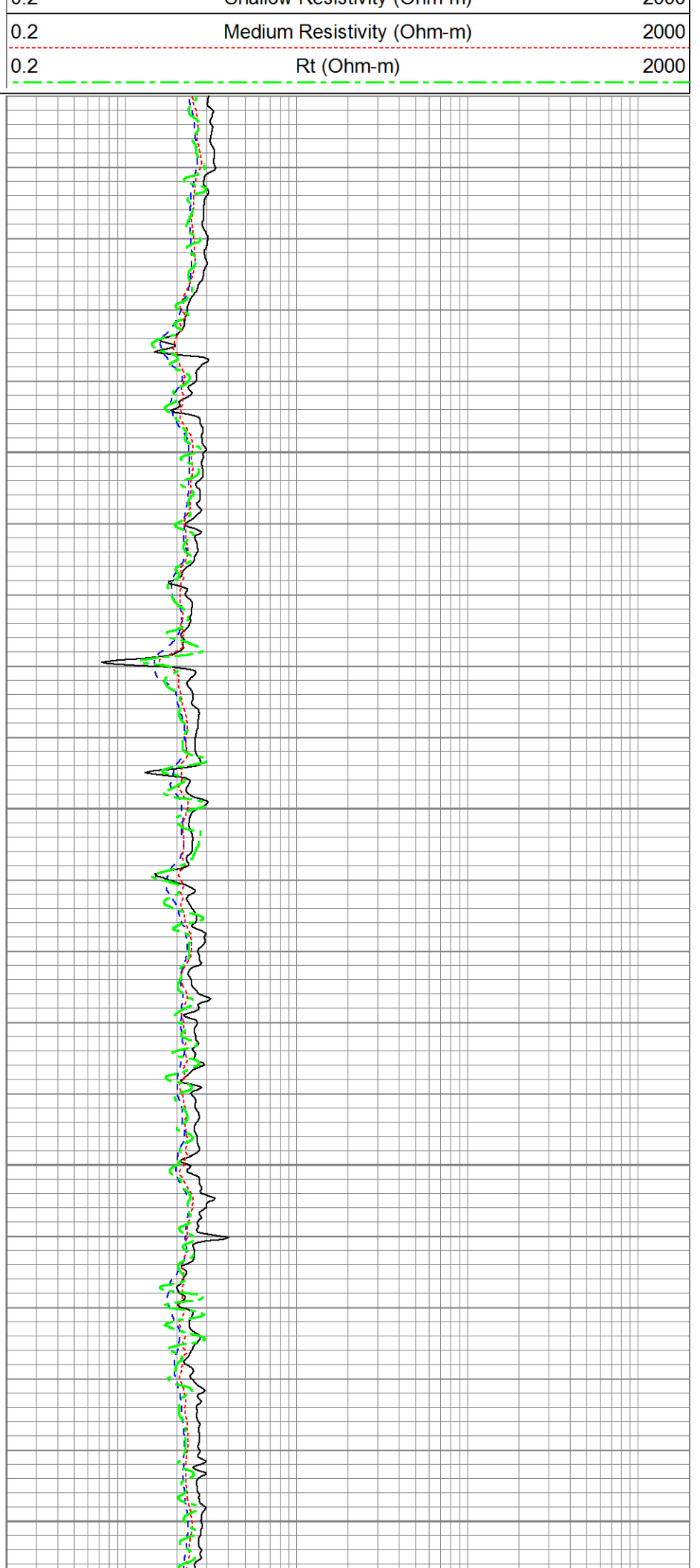


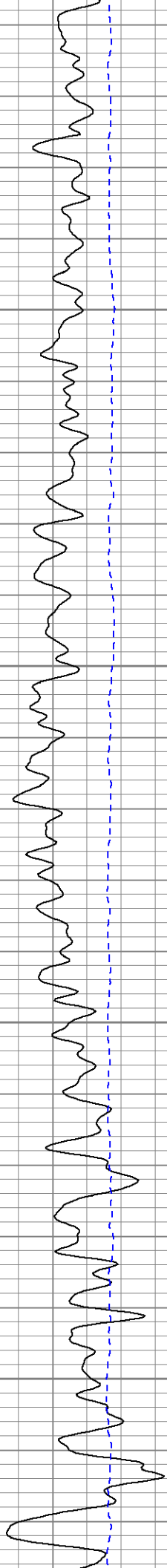


1900

2000

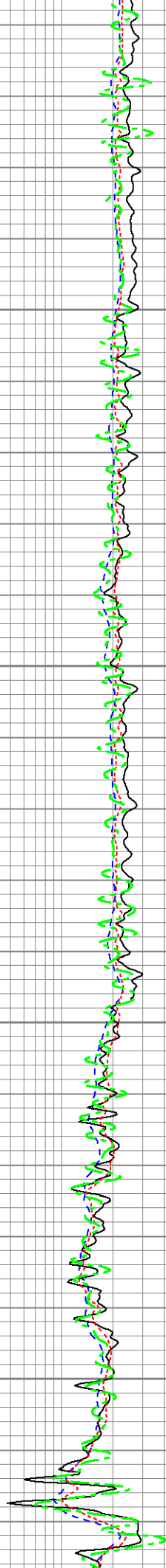
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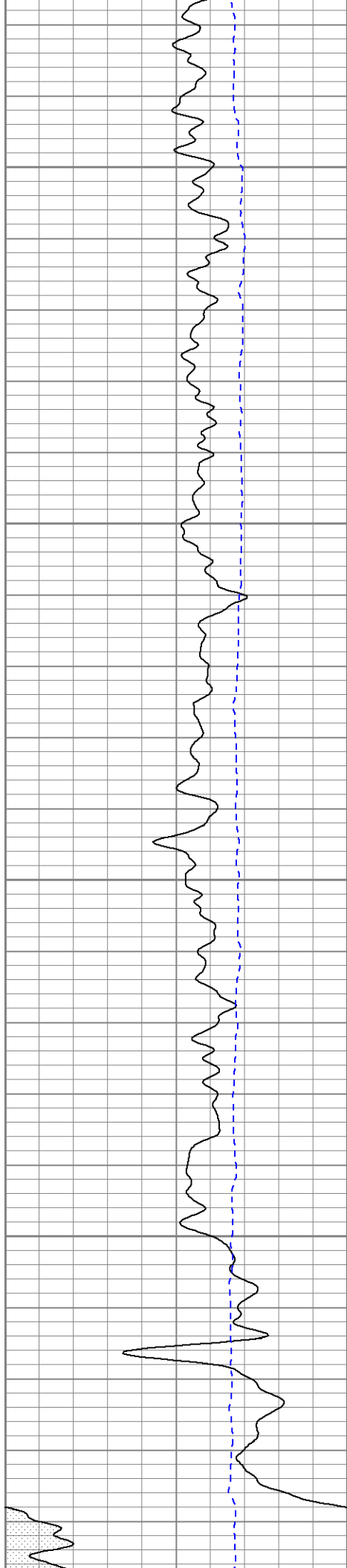


2200

2300

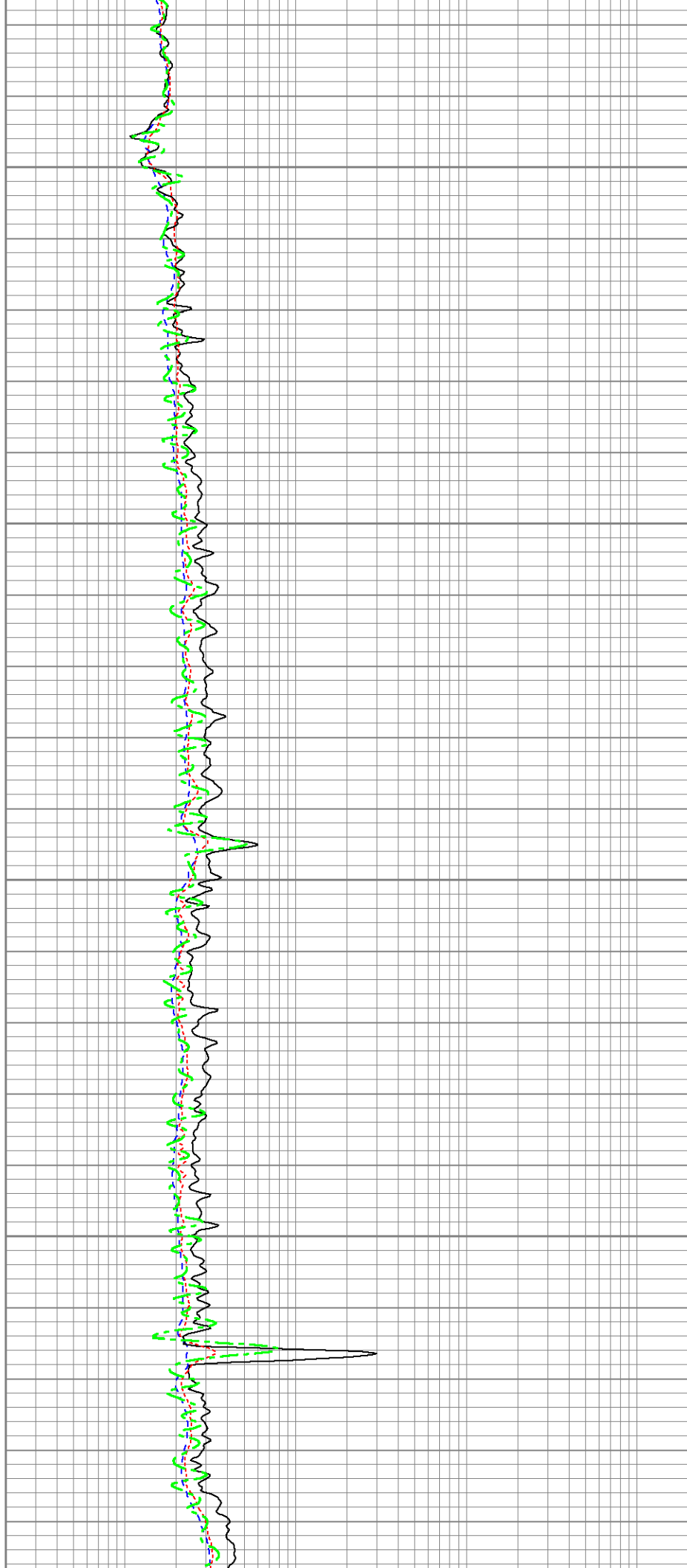


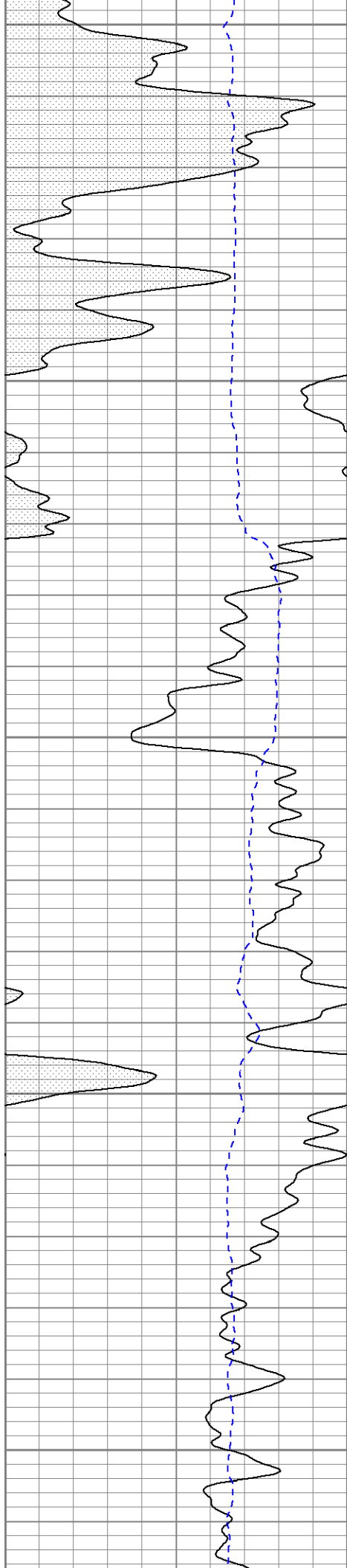




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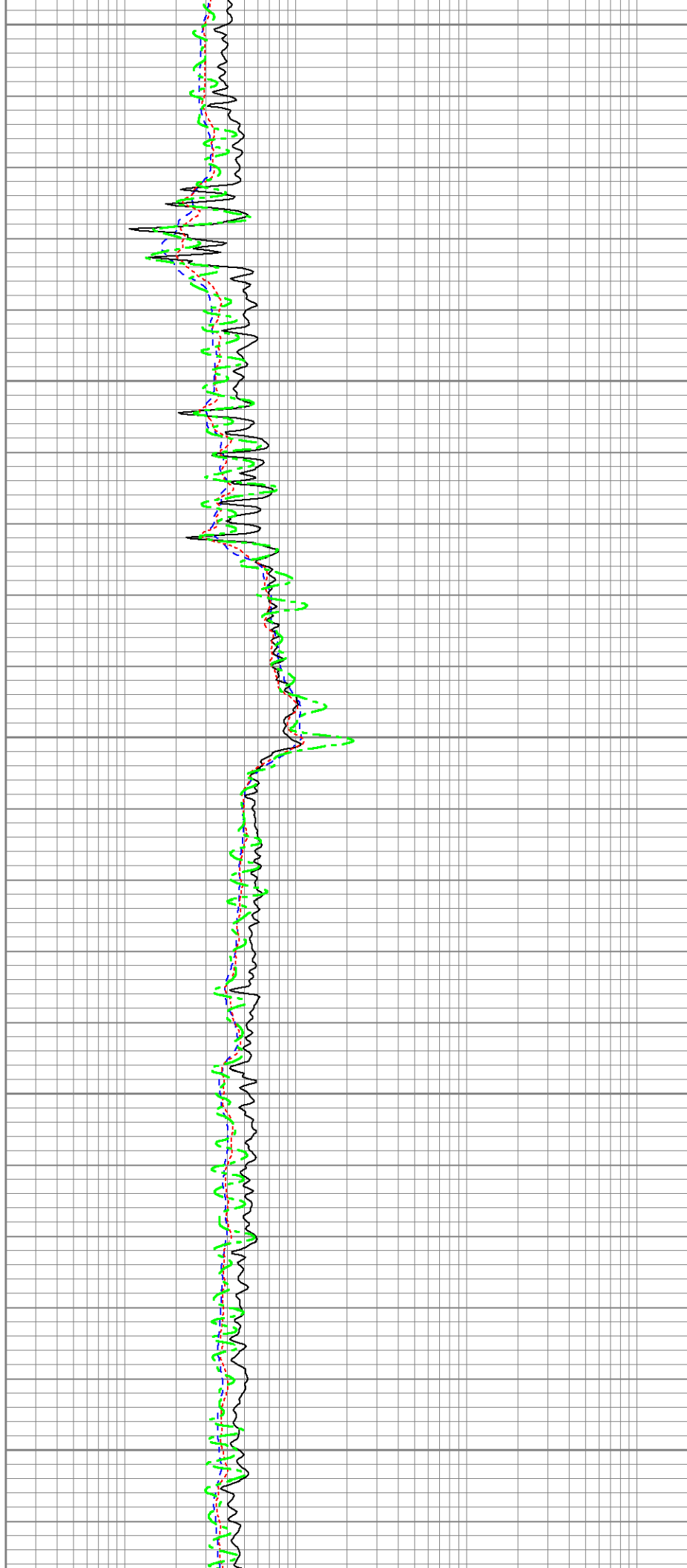
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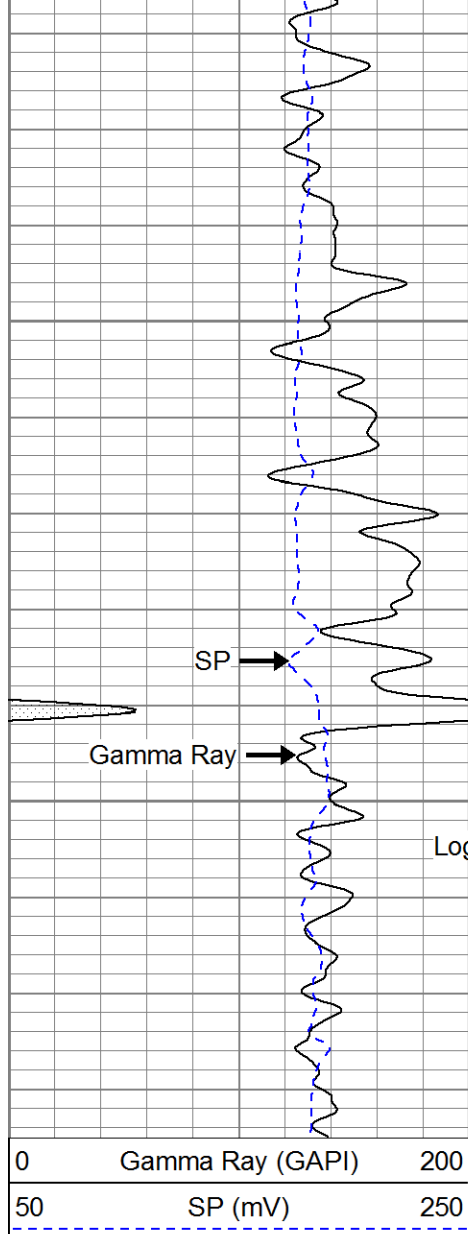




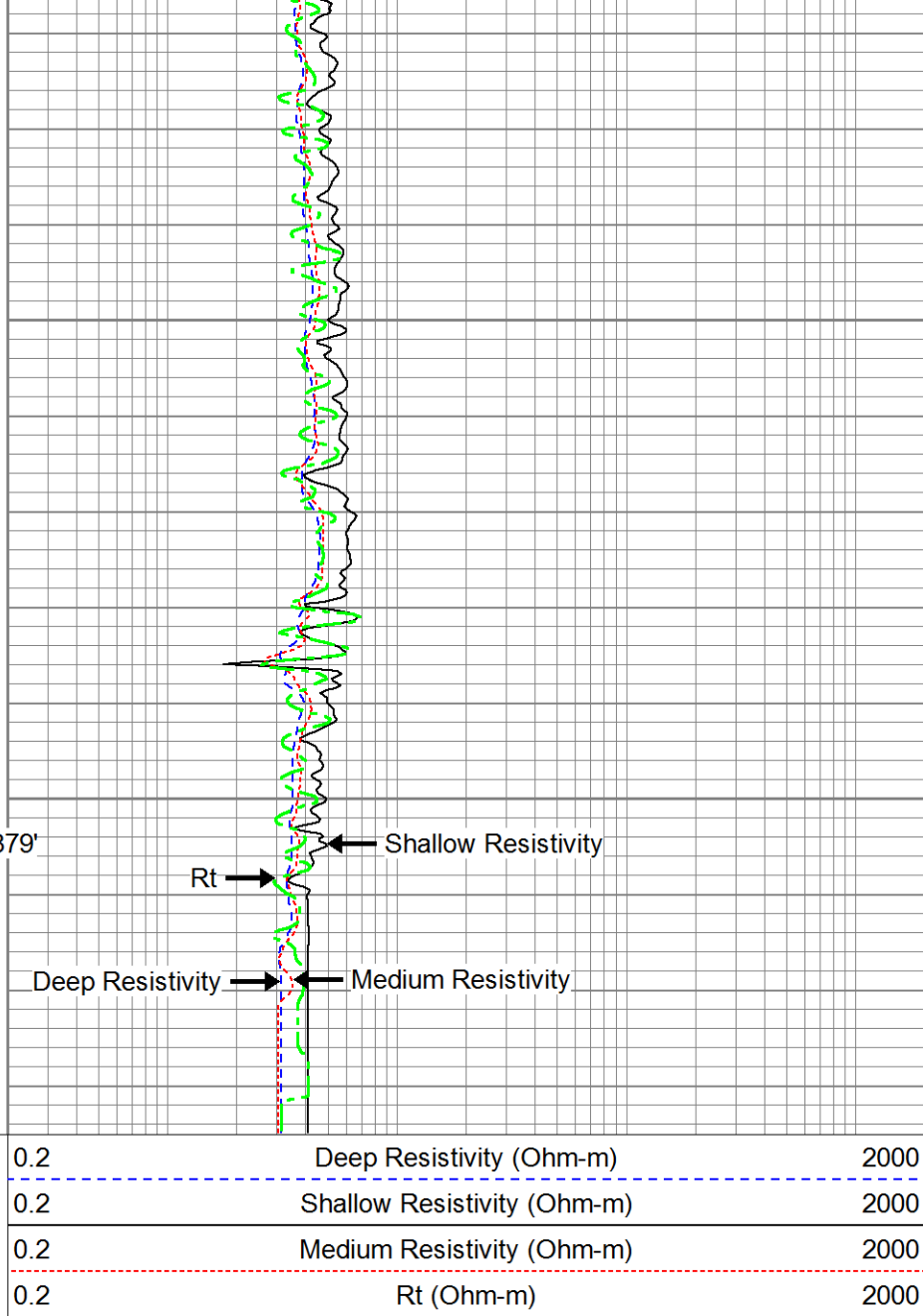
2600

2700





Logger's TD: 2879'

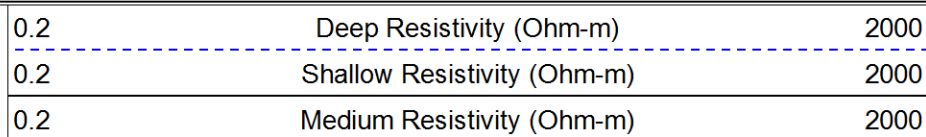
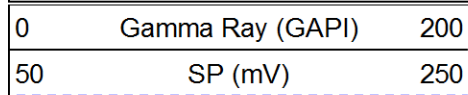


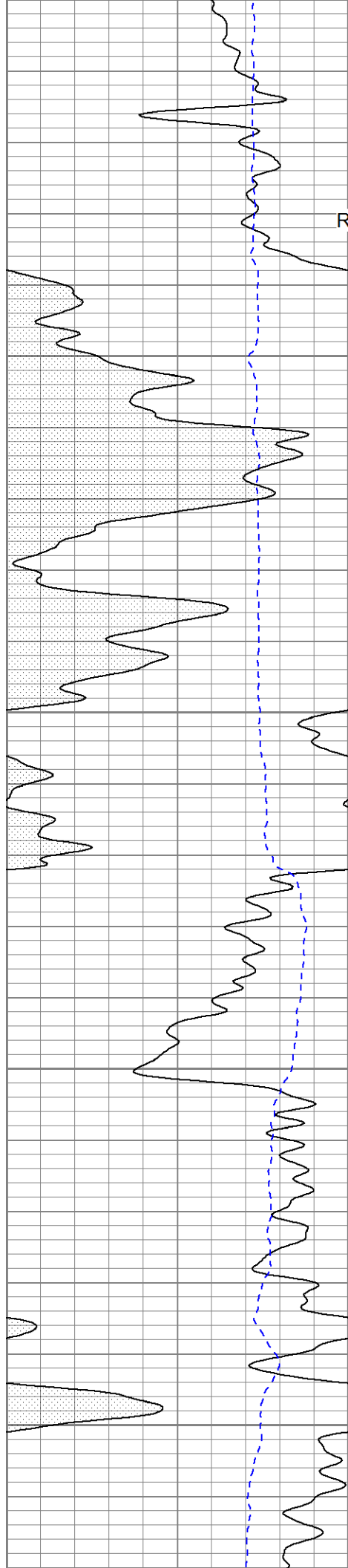
## Main Pass



## Repeat Pass

Database File: 13491.db  
 Dataset Pathname: pass2.1  
 Presentation Format: dil  
 Dataset Creation: Thu Mar 20 23:51:41 2014 by Calc 0  
 Charted by: Depth in Feet scaled 1:240



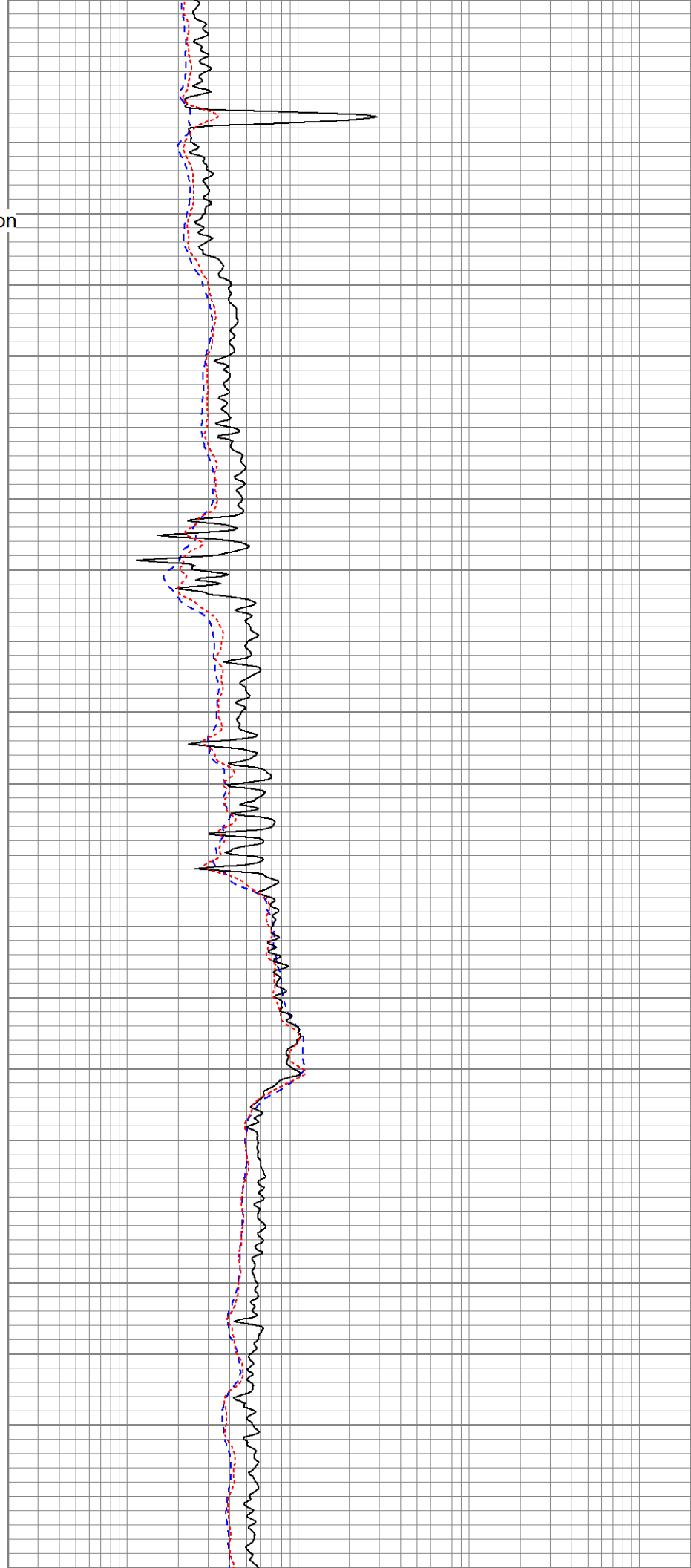


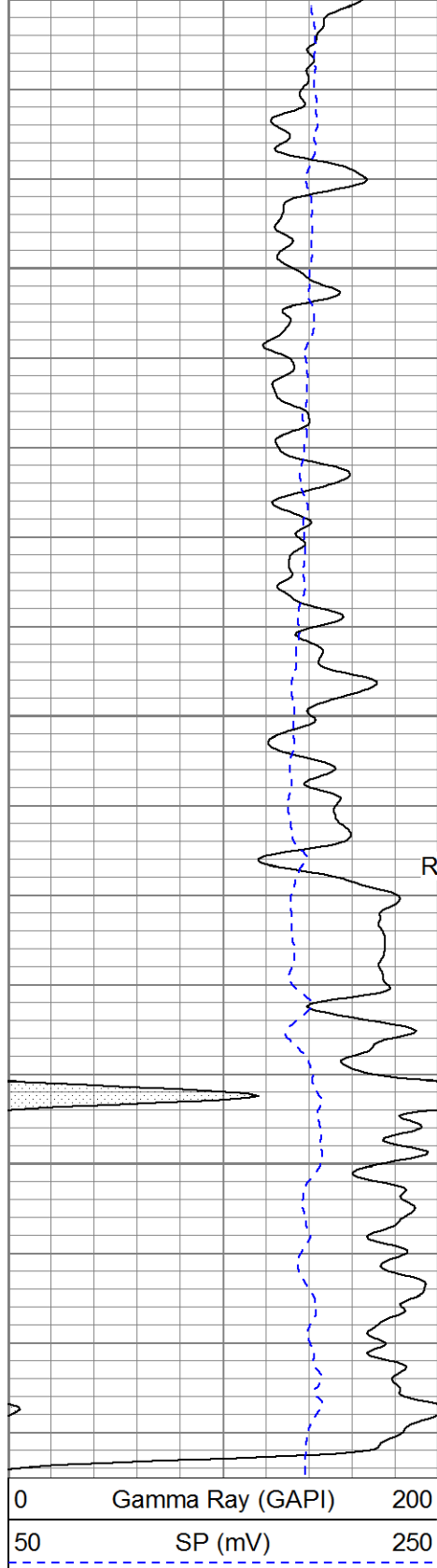
2500

Repeat Section

2600

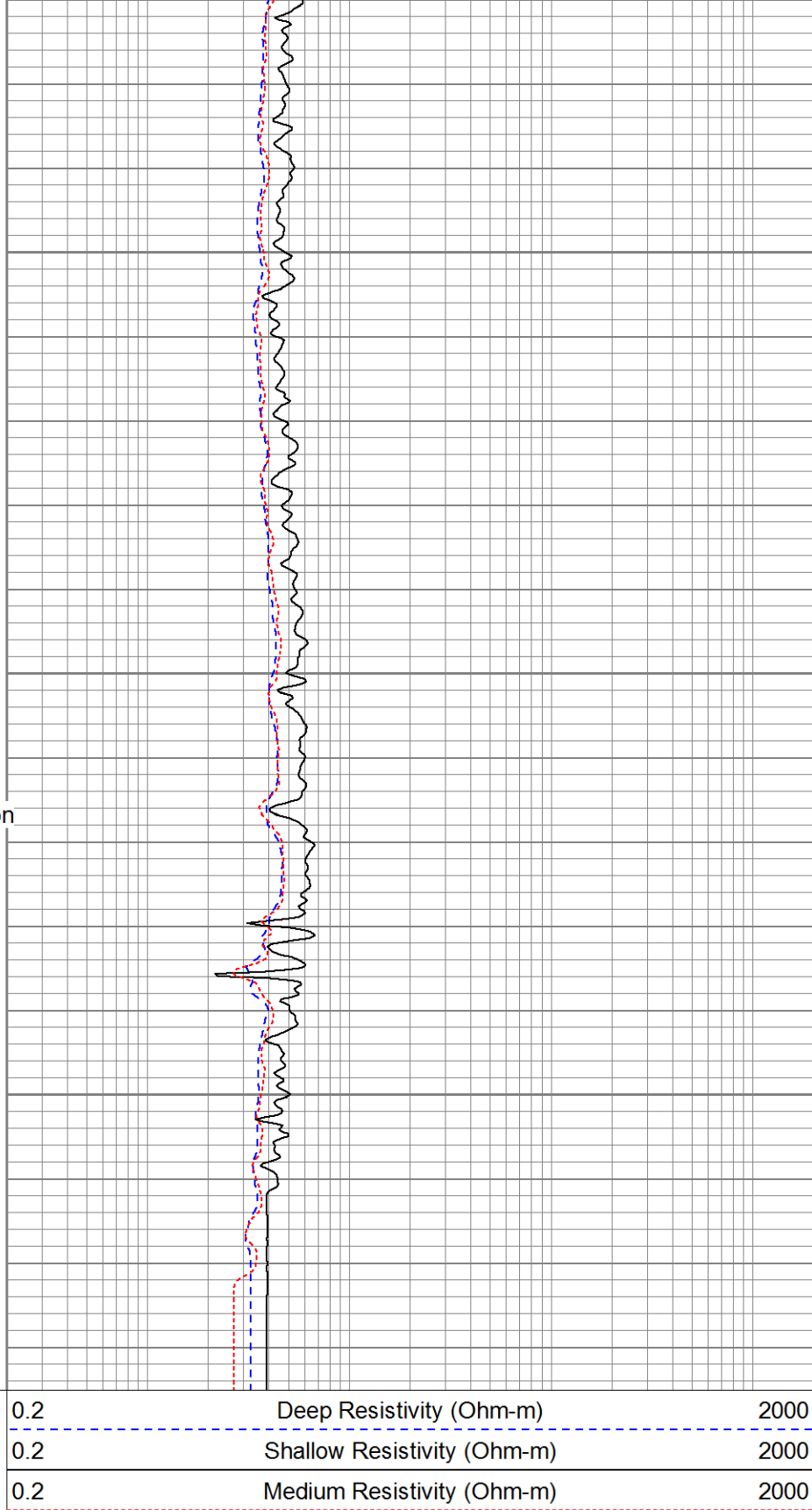
2700





2800

Repeat Section



Pioneer Energy Services

# Repeat Pass

## Calibration Report

Database File: 13491.db  
 Dataset Pathname: pass2  
 Dataset Creation: Thu Mar 20 23:37:54 2014 by Log 0

Dual Induction Calibration Report							
Serial-Model:		1011-PSI					
Surface Cal Performed:							
		Readings		References		Results	
Loop:	Air	Loop		Air	Loop	m	b
Deep	0.000	1.000		0.000	1.000	mmho/m	0.520
Medium	0.000	1.000		0.000	1.000	mmho/m	-28.000
							-28.000
Compensated Density Calibration Report							
Serial-Model:		998-PSI					
Master Calibration Performed:		Sat Feb 22 21:47:06 2014					
Master Calibration							
		Density		Far Detector		Near Detector	
Magnesium		1.750	g/cc	7210.00		9816.00	cps
Aluminum		2.690	g/cc	1326.00		6231.00	cps
		Size		Reading			
Small Ring			in				
Medium Ring			in				
Large Ring			in				
Compensated Neutron Calibration Report							
Serial Number:		826					
Tool Model:		PSI					
CALIBRATION							
Detector		Readings		Target		Normalization	
Short Space		1.00	cps	1.00	cps	1.9000	
Long Space		1.00	cps	1.00	cps	2.0900	
Gamma Ray Calibration Report							
Serial Number:		939					
Tool Model:		PSI					
Performed:		Sat Feb 22 21:47:24 2014					
Calibrator Value:		1.0		GAPI			
Background Reading:		0.0		cps			
Calibrator Reading:		1.0		cps			
Sensitivity:		0.6200		GAPI/cps			