



Dual Induction Log

Pioneer Energy Services

API No.		Company LB Exploration, Inc.	
15-053-20985-00-02		Well Petermann 28 #1	
Field Unnamed		County Ellsworth State Kansas	
Location 1420' FSL & 430' FEL		Other Services CNL/CDL MEL	
Sec: 28 Twp: 17S Rge: 10W		Elevation	
Permanent Datum Ground Level		K.B. 1842	
Log Measured From Kelly Bushing		D.F. 1829	
Drilling Measured From Kelly Bushing		G.L. 1829	
Date	8/22/2013		
Run Number	One		
Depth Driller	3600		
Depth Logger	3598		
Bottom Logged Interval	3597		
Top Log Interval	300		
Casing Driller	8.625 @ 304		
Casing Logger	310		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	4000		
Density / Viscosity	9.2 52		
pH / Fluid Loss	9.5 8.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	1.30 @ 78		
Rmf @ Meas. Temp	0.98 @ 78		
Rmc @ Meas. Temp	1.76 @ 78		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.89 @ 114		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	114		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Steven Petermann		

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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

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Claflin,
East to 4th Rd, 1 1/4 North,
West into

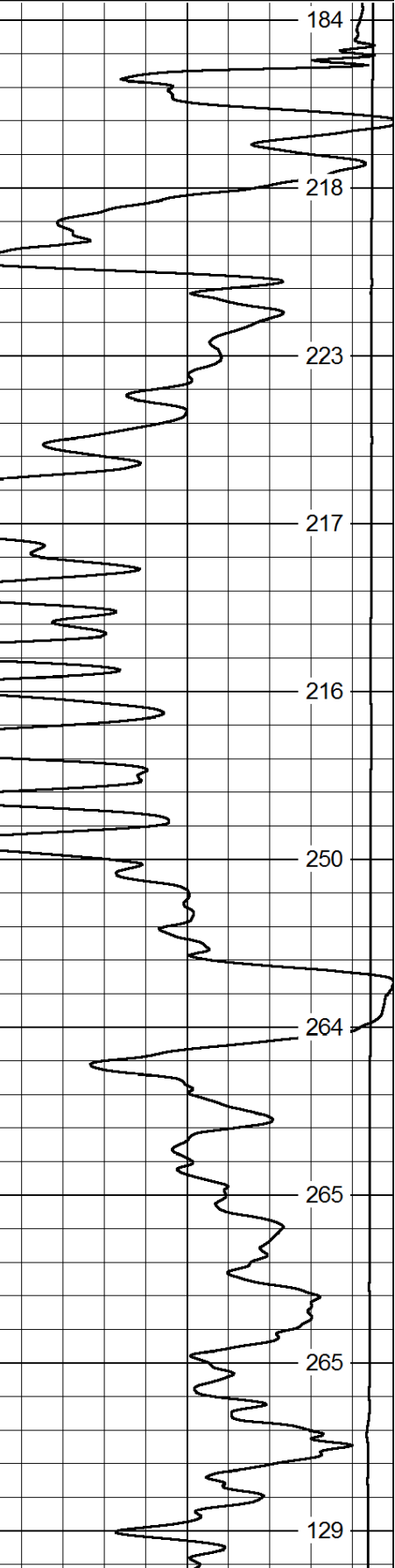
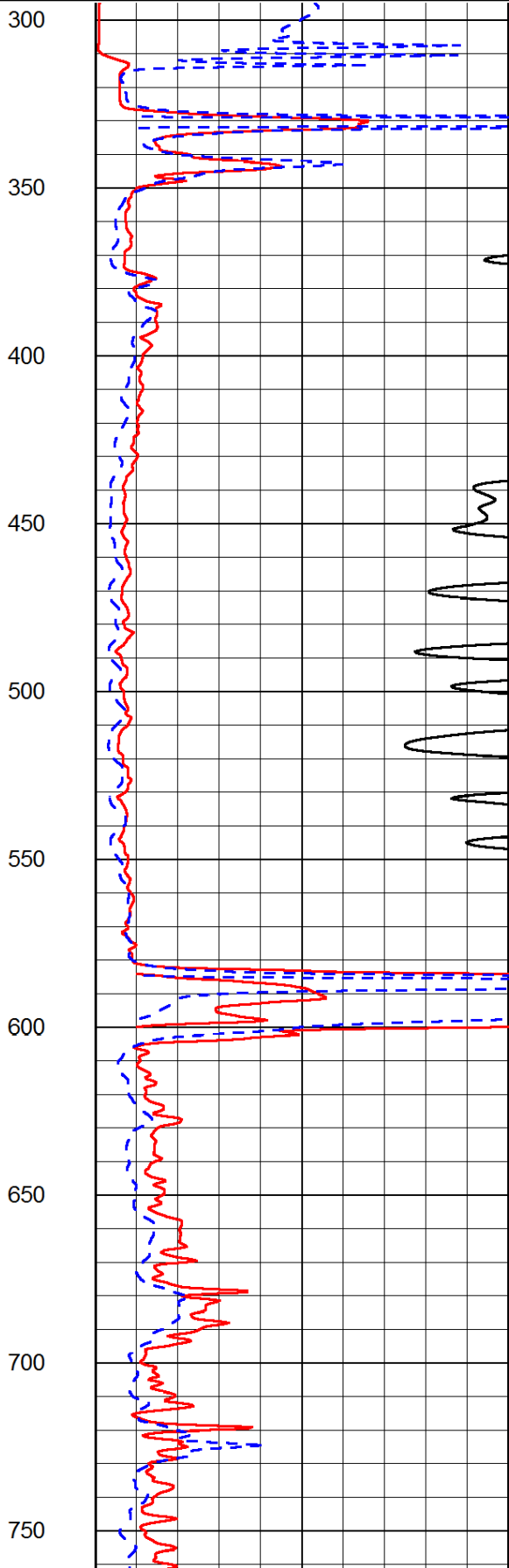
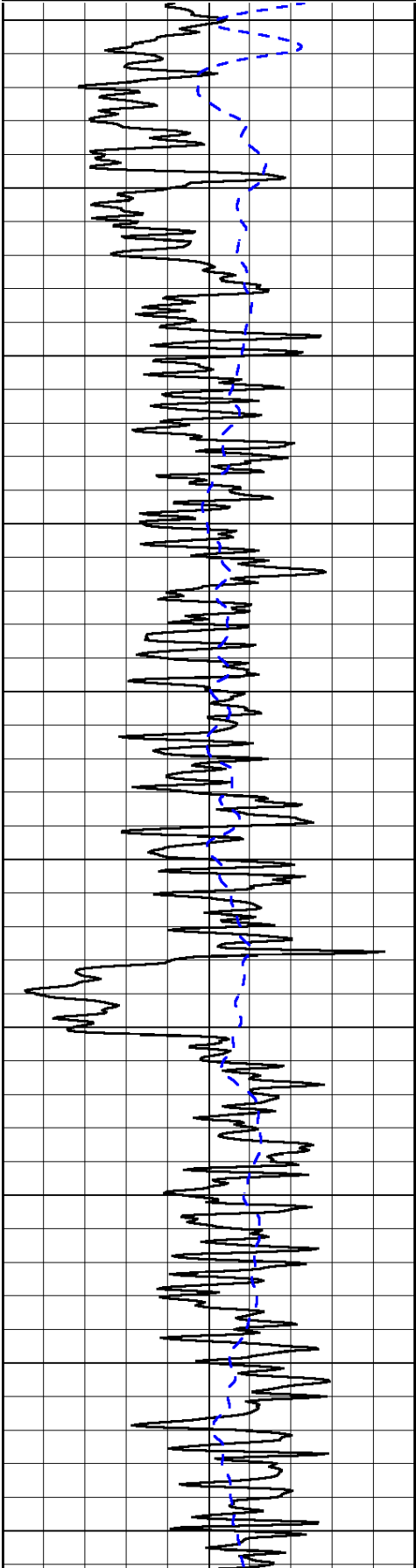
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Presentation Format: dil2in
Dataset Creation: Thu Aug 22 07:26:02 2013
Charted by: Depth in Feet scaled 1:600

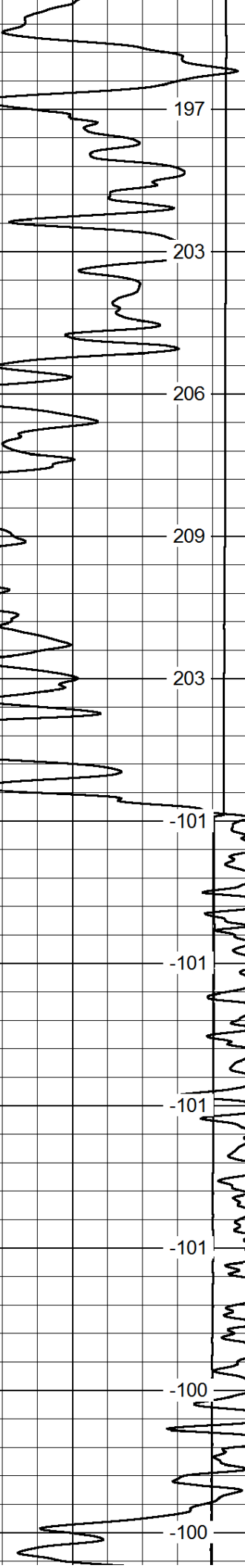
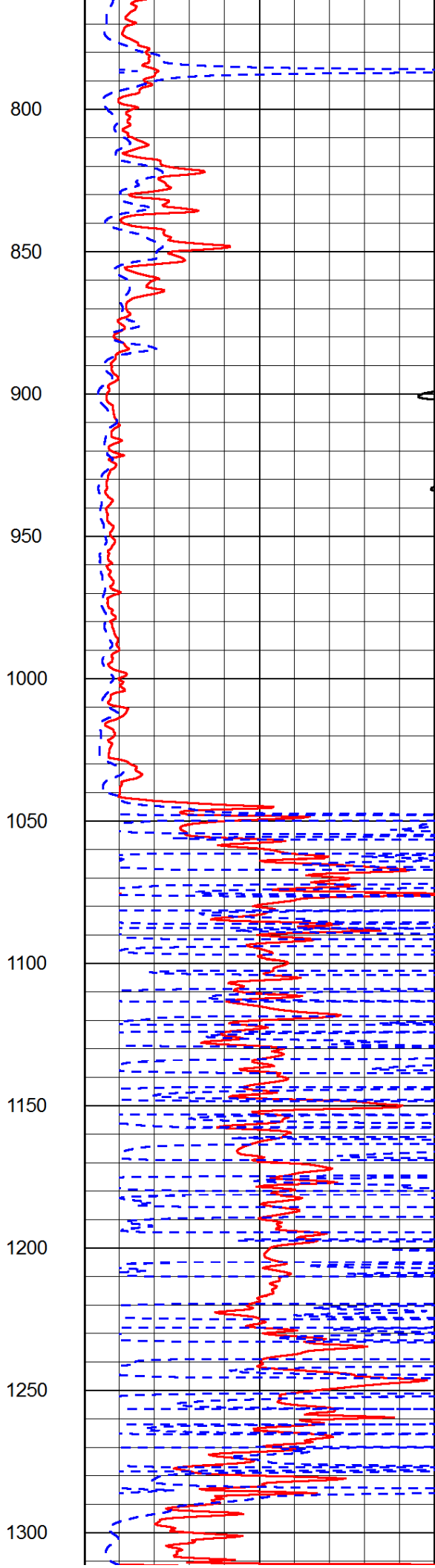
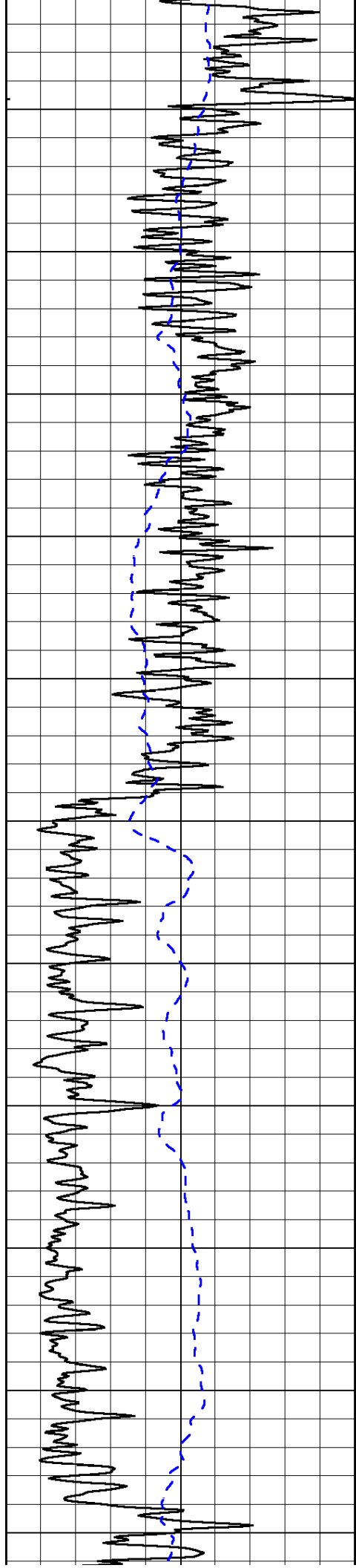
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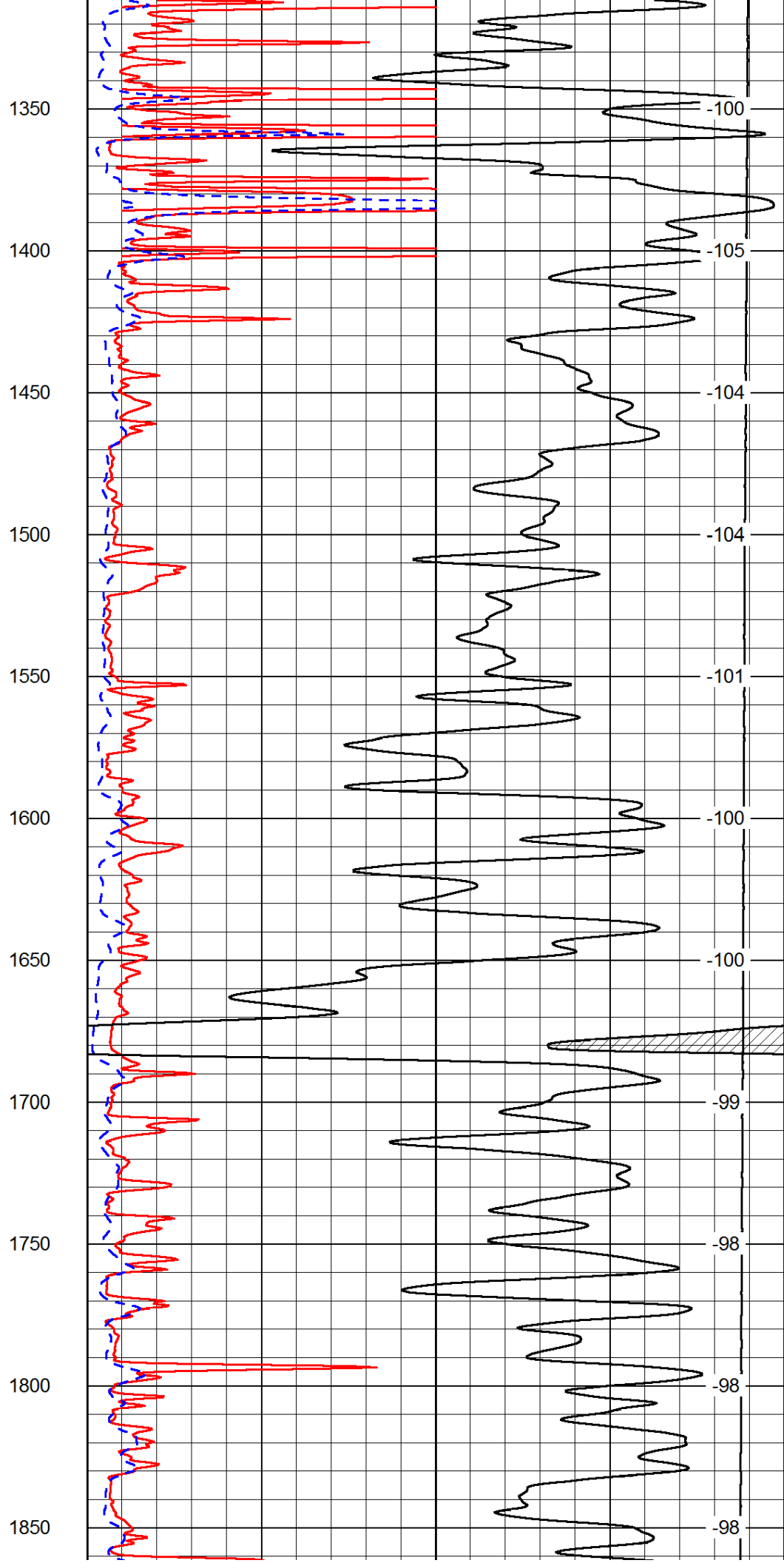
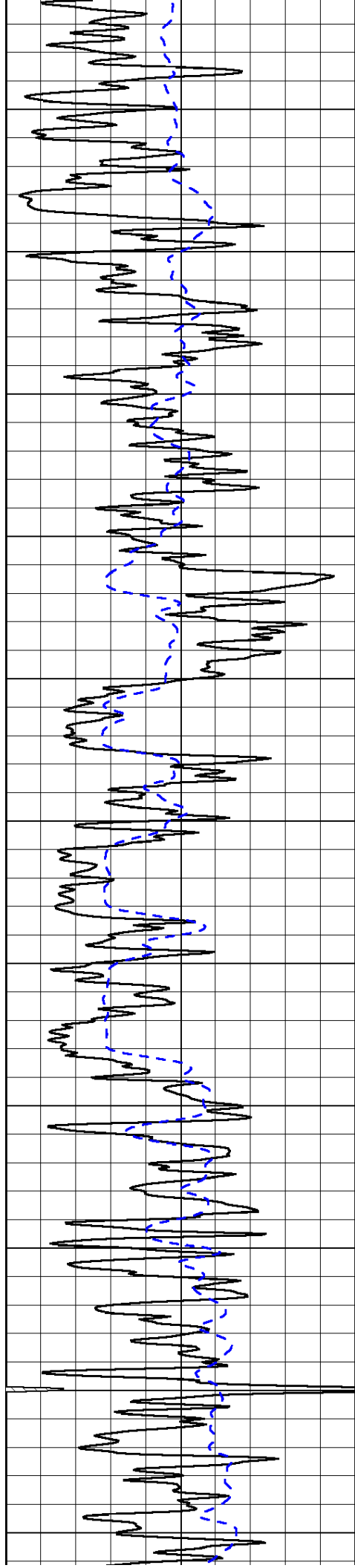
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-200	SP (mV)	0

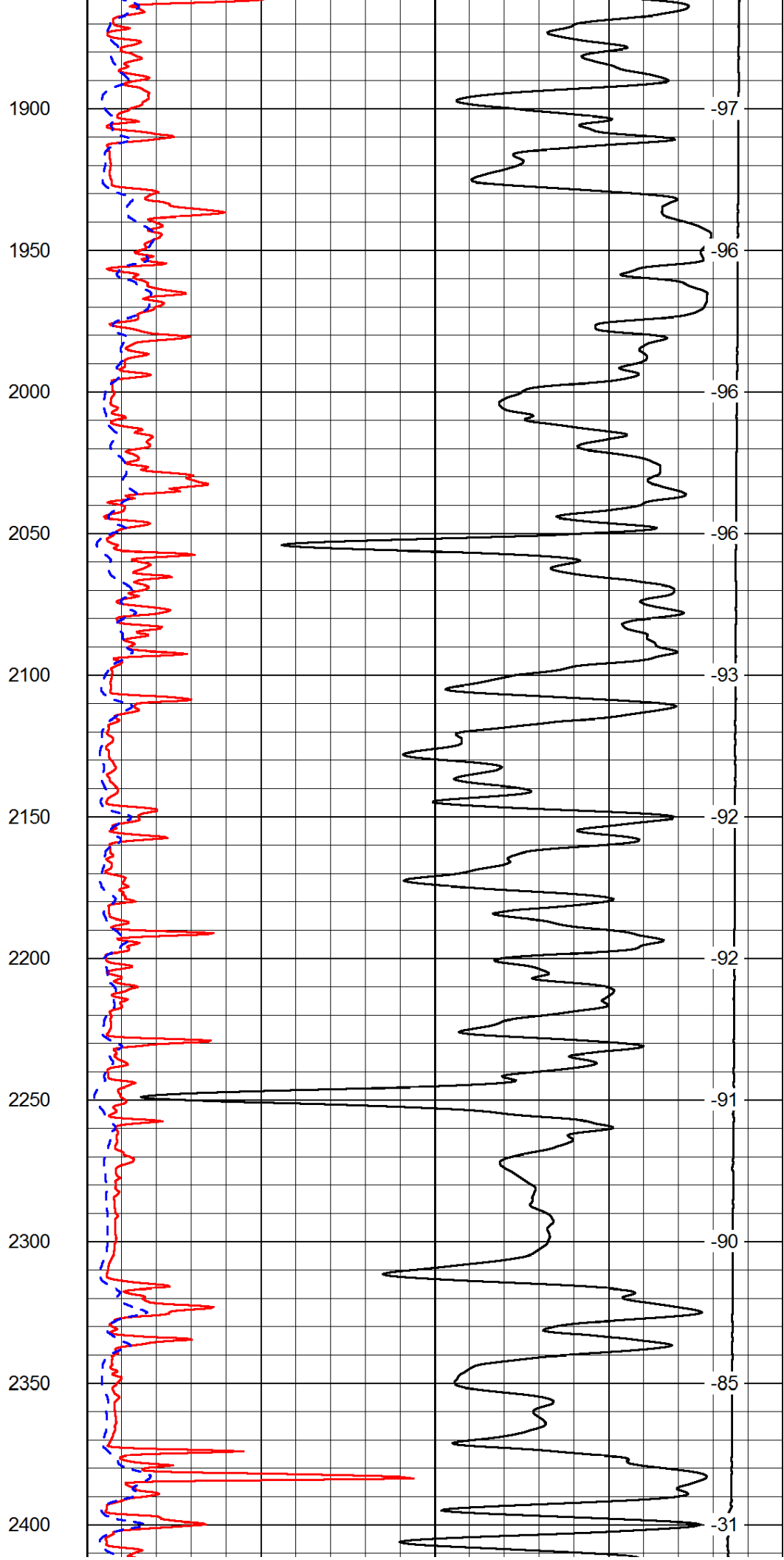
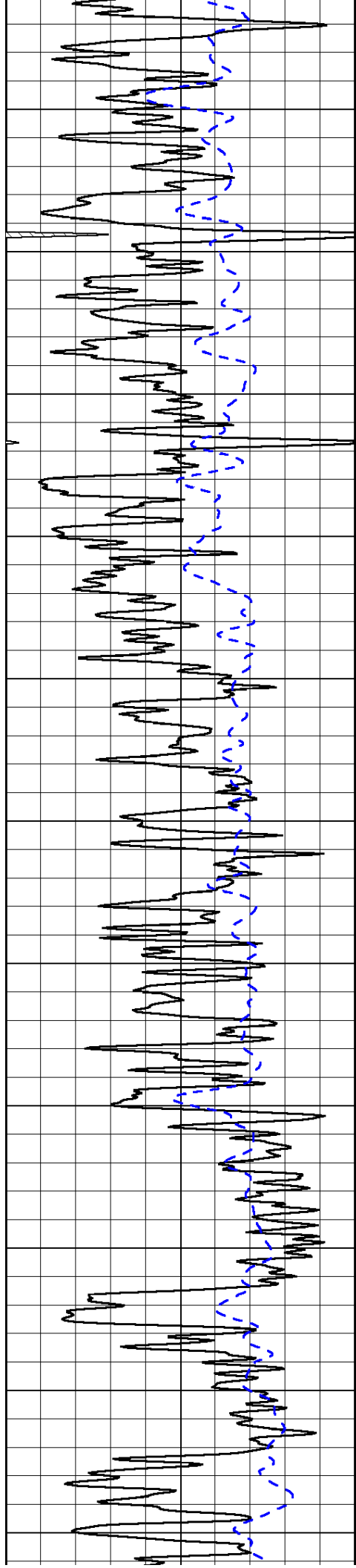
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

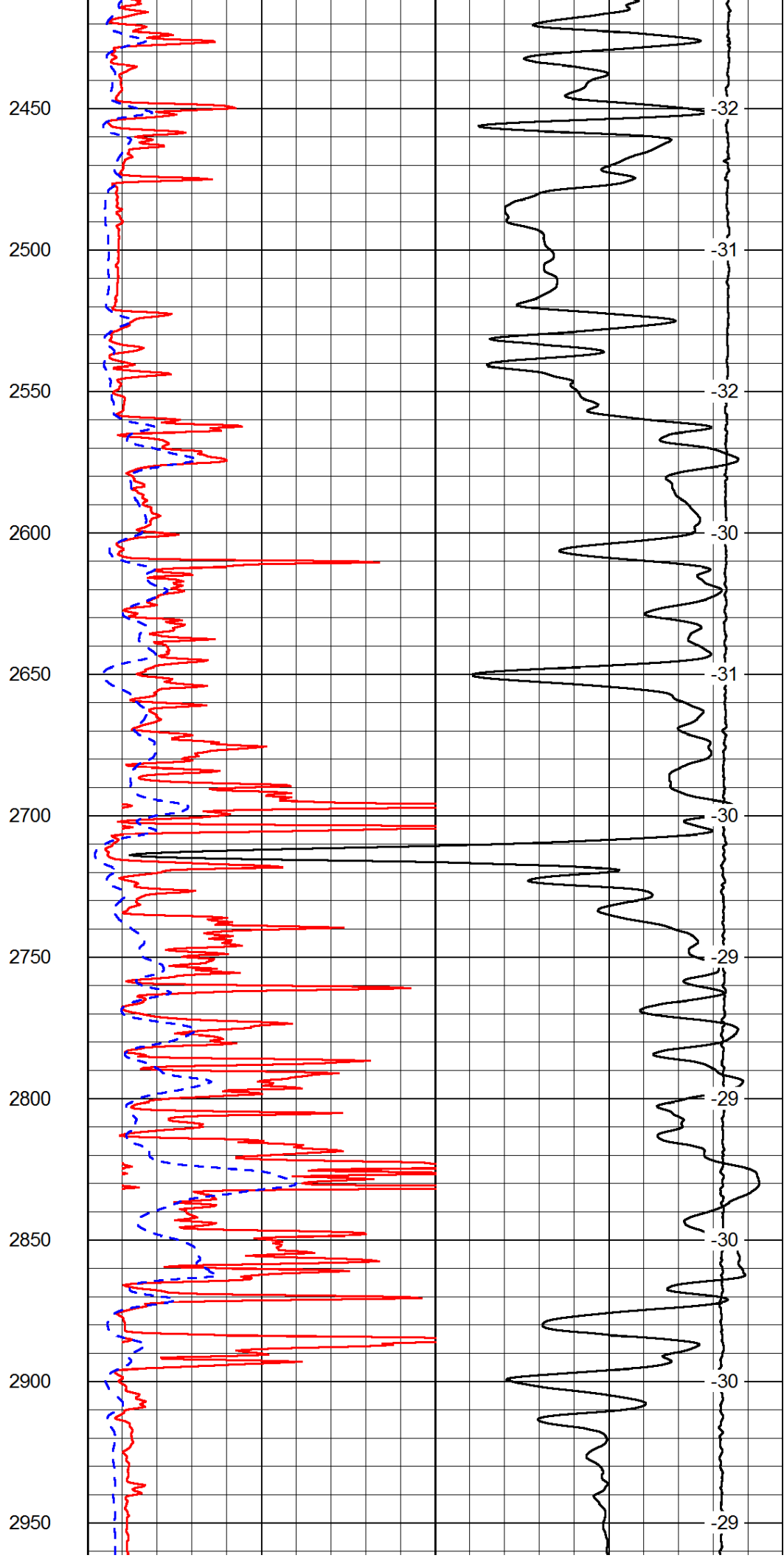
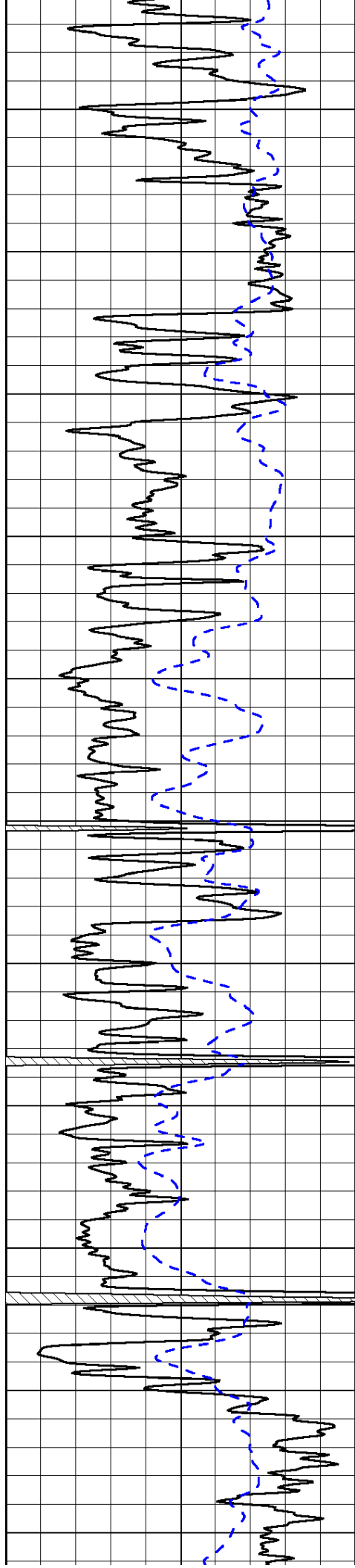
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0
0

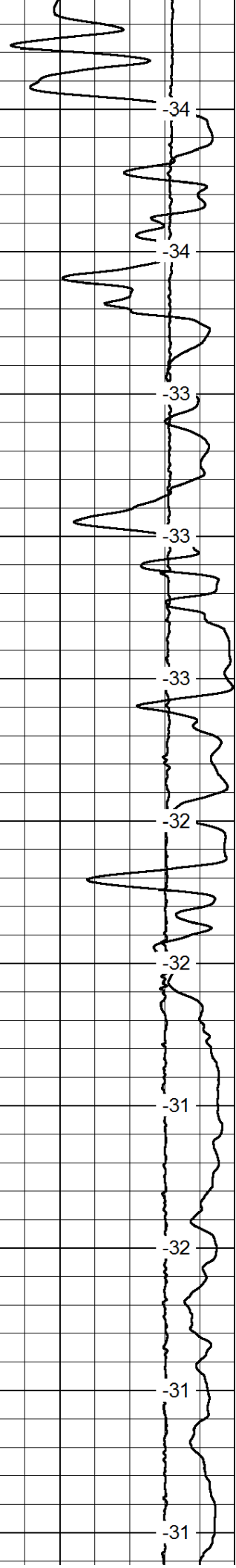
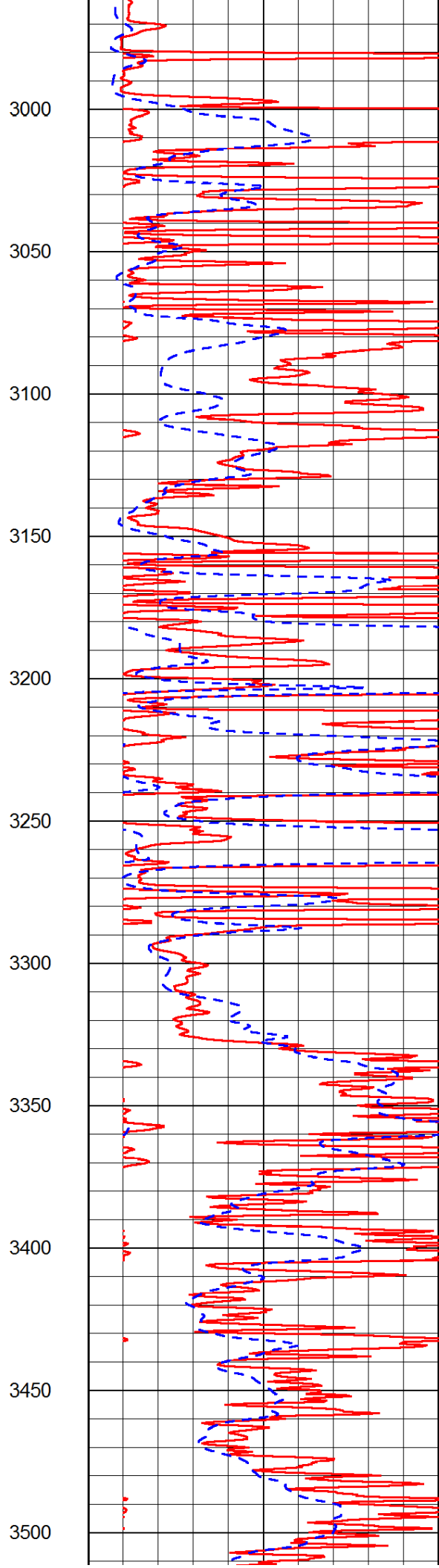
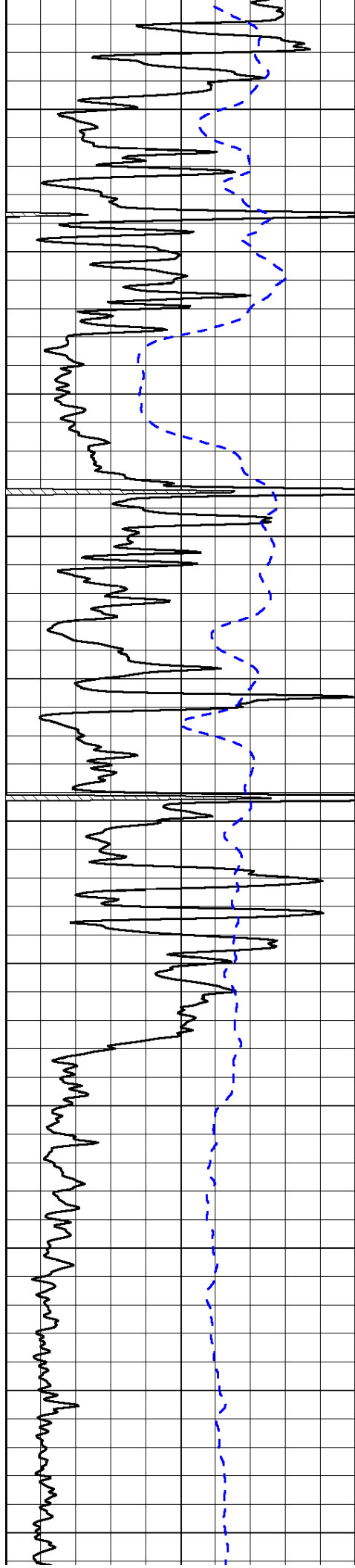


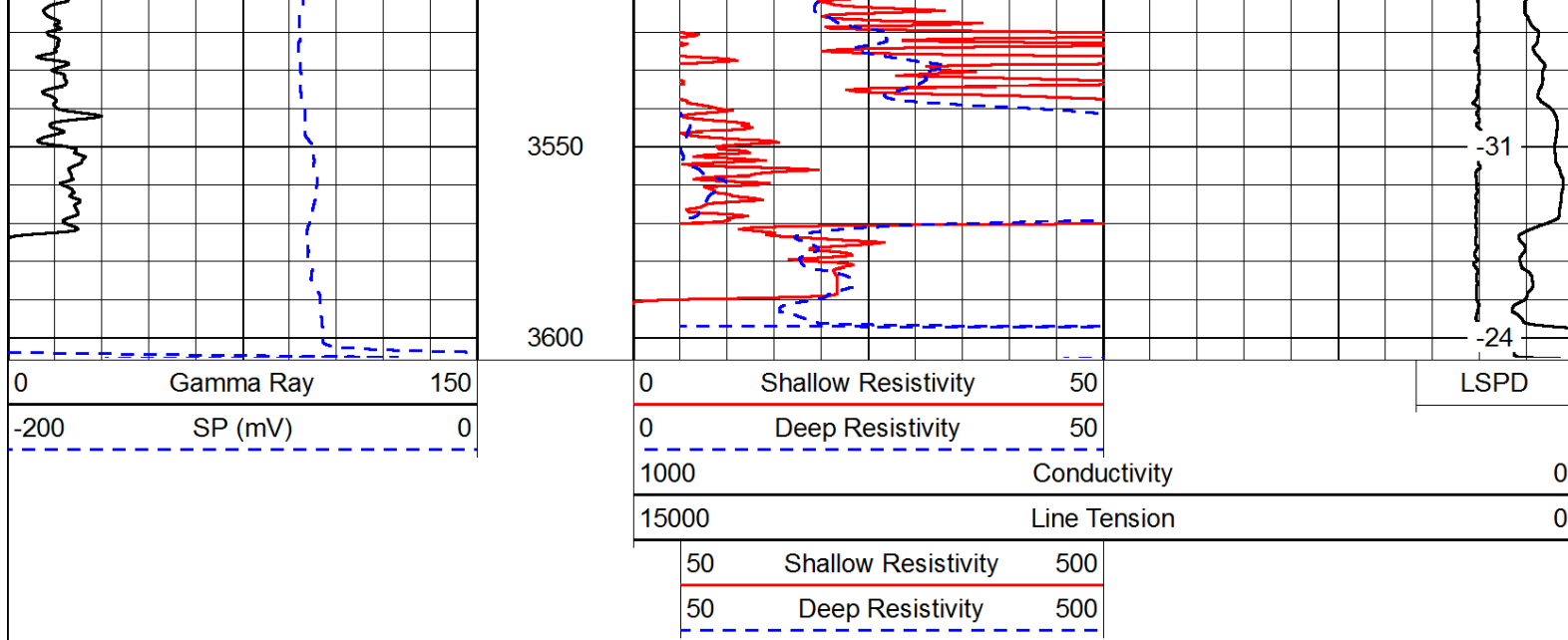




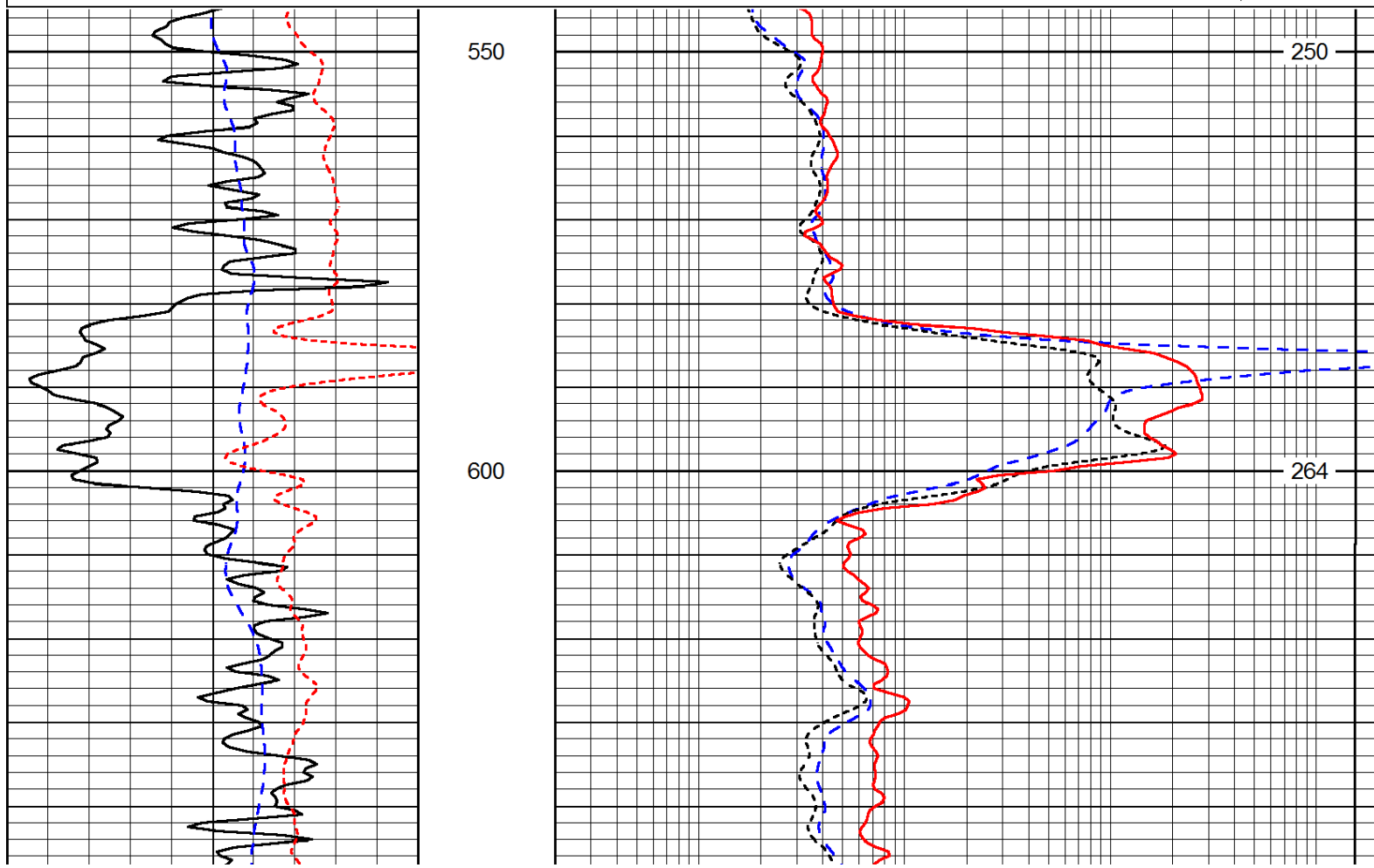
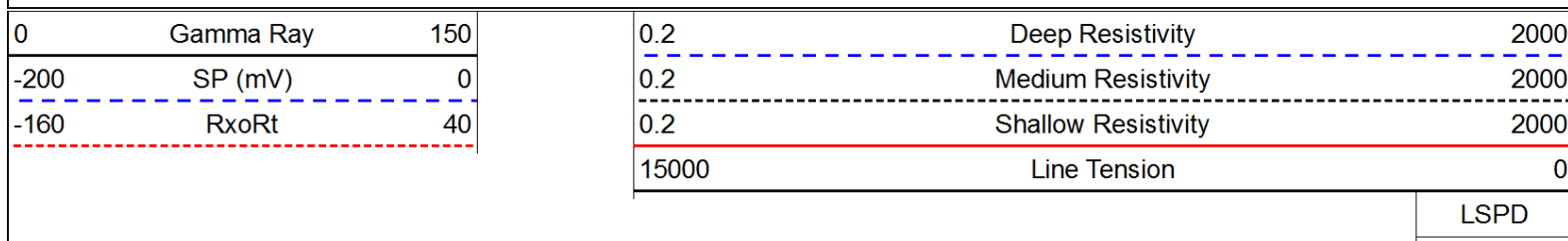


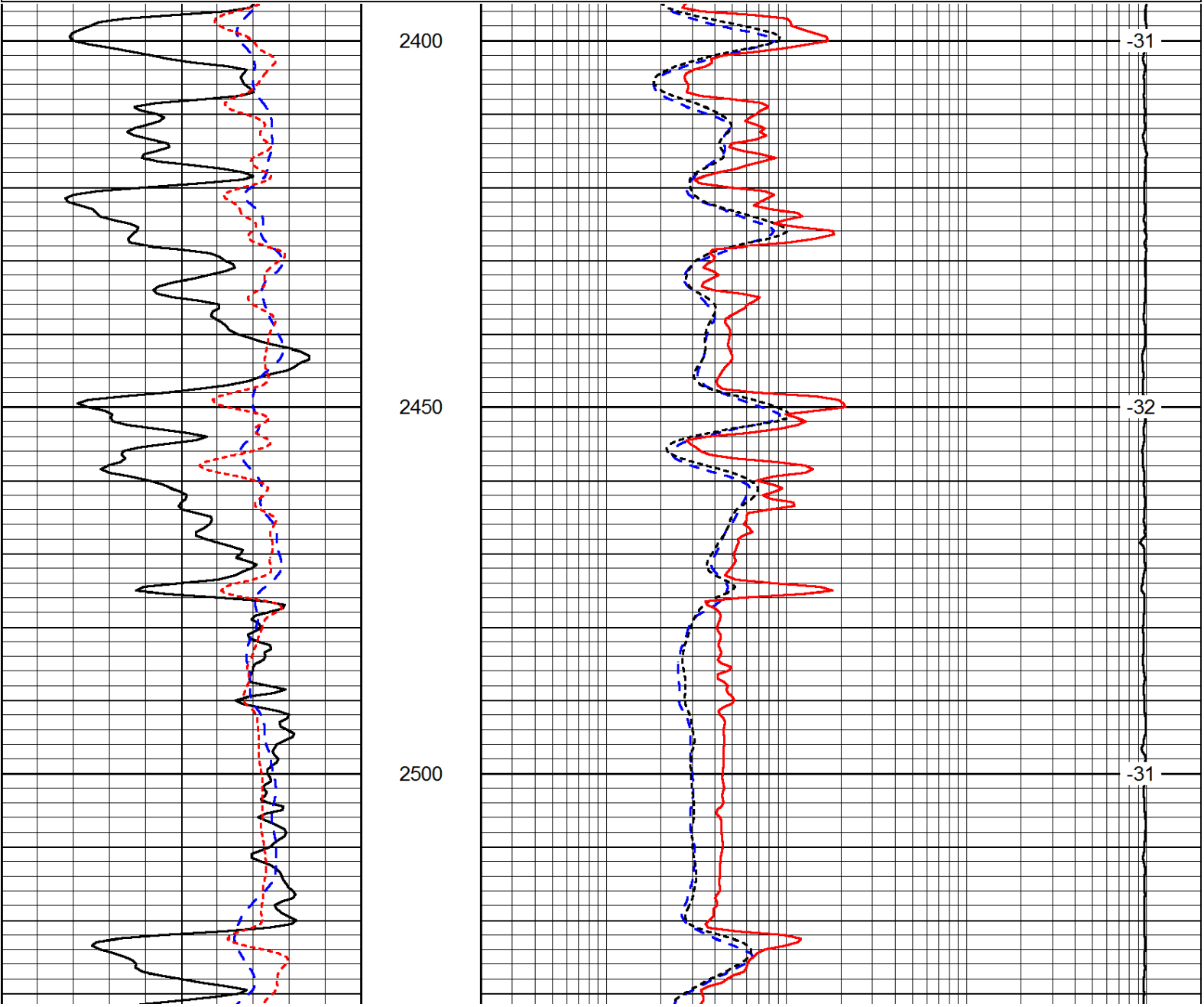
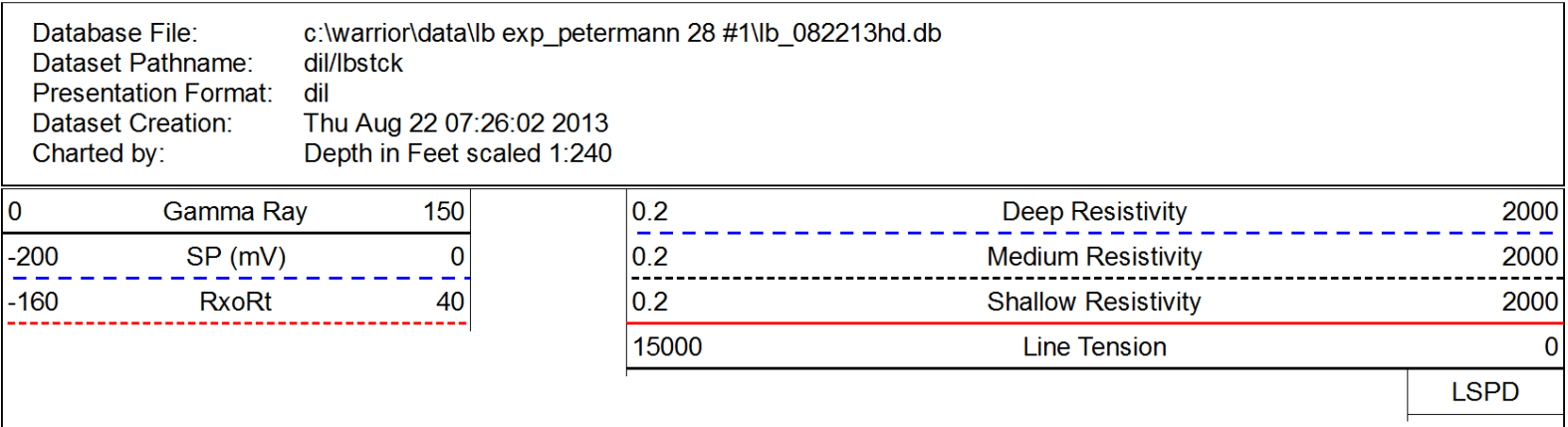
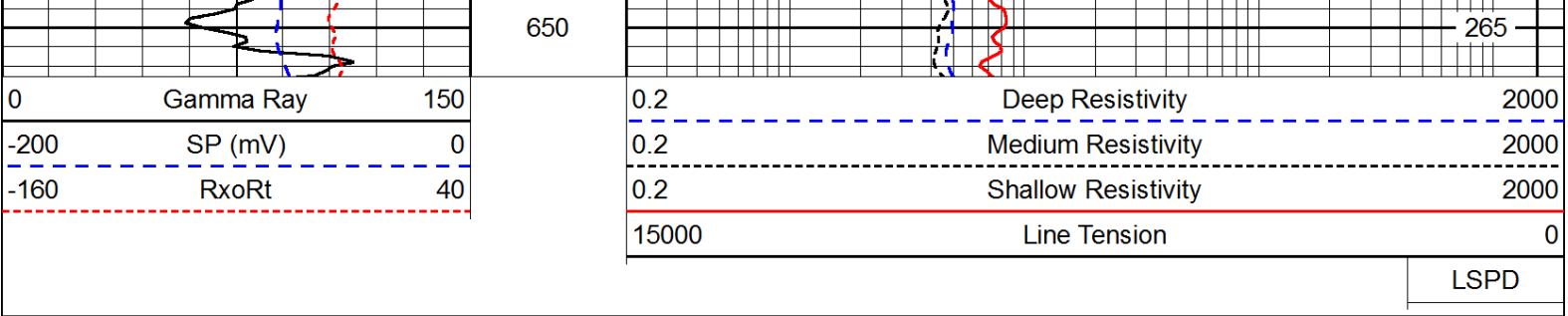


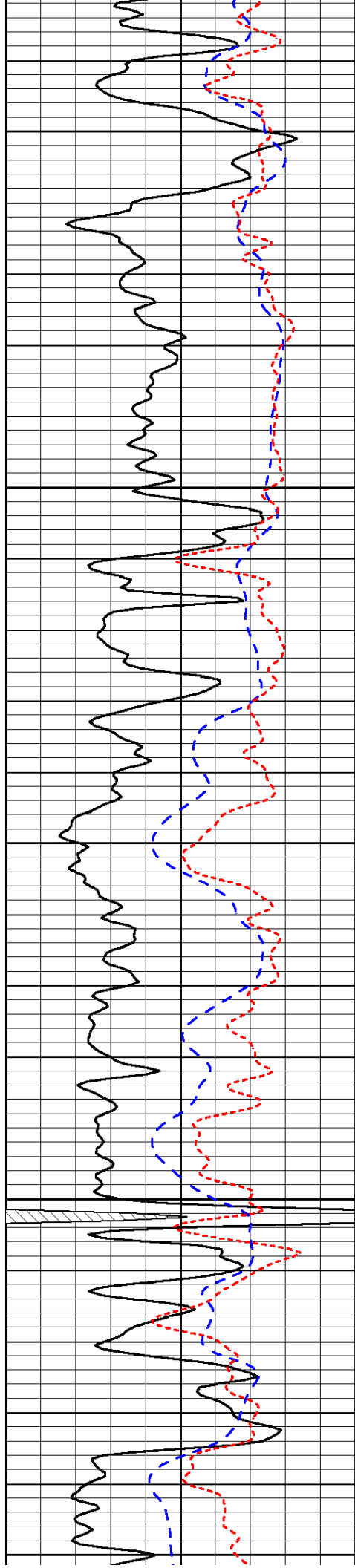




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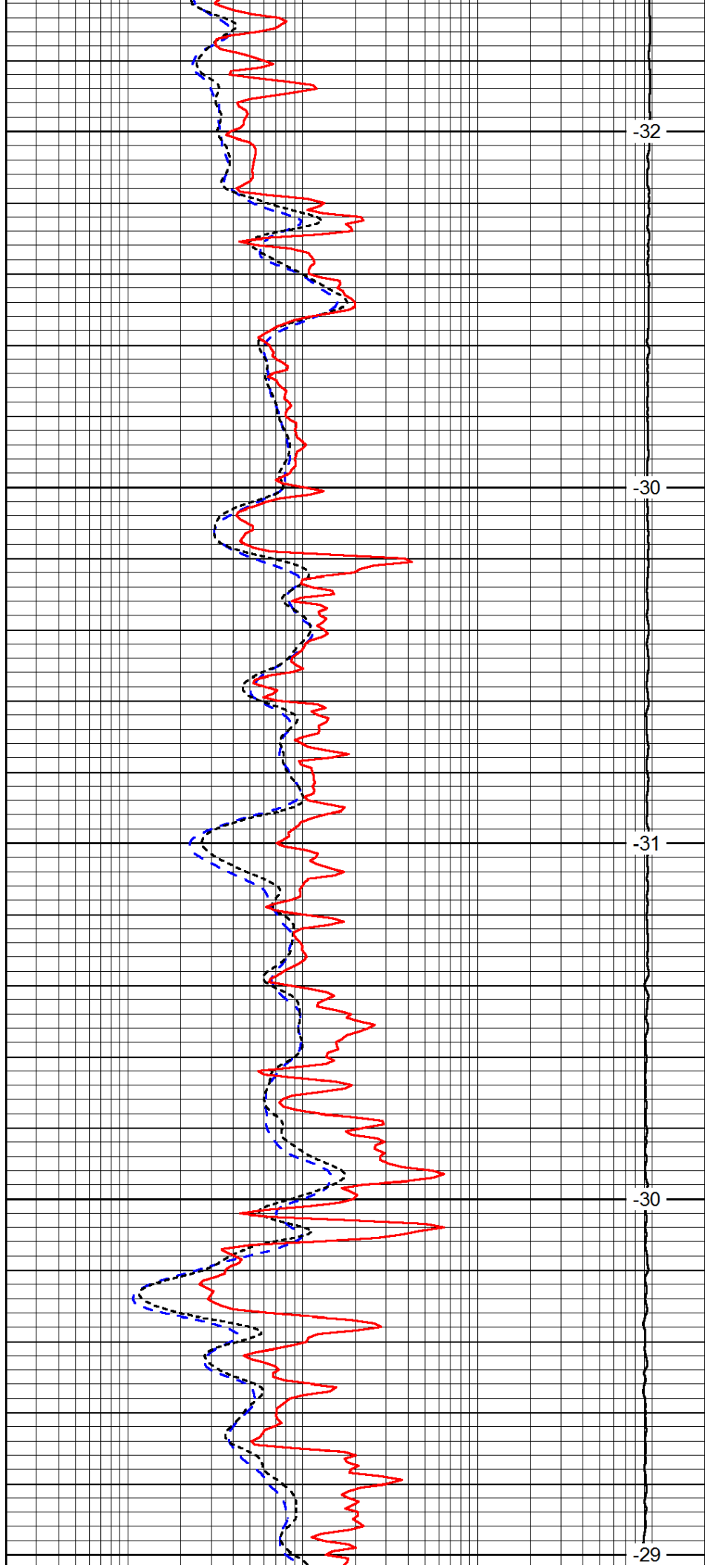
2550

2600

2650

2700

2750



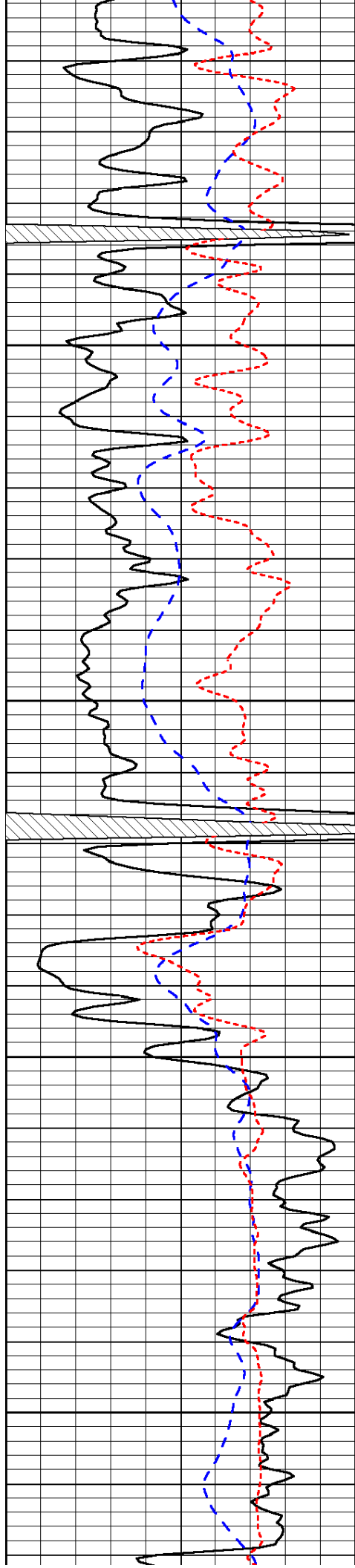
-32

-30

-31

-30

-29

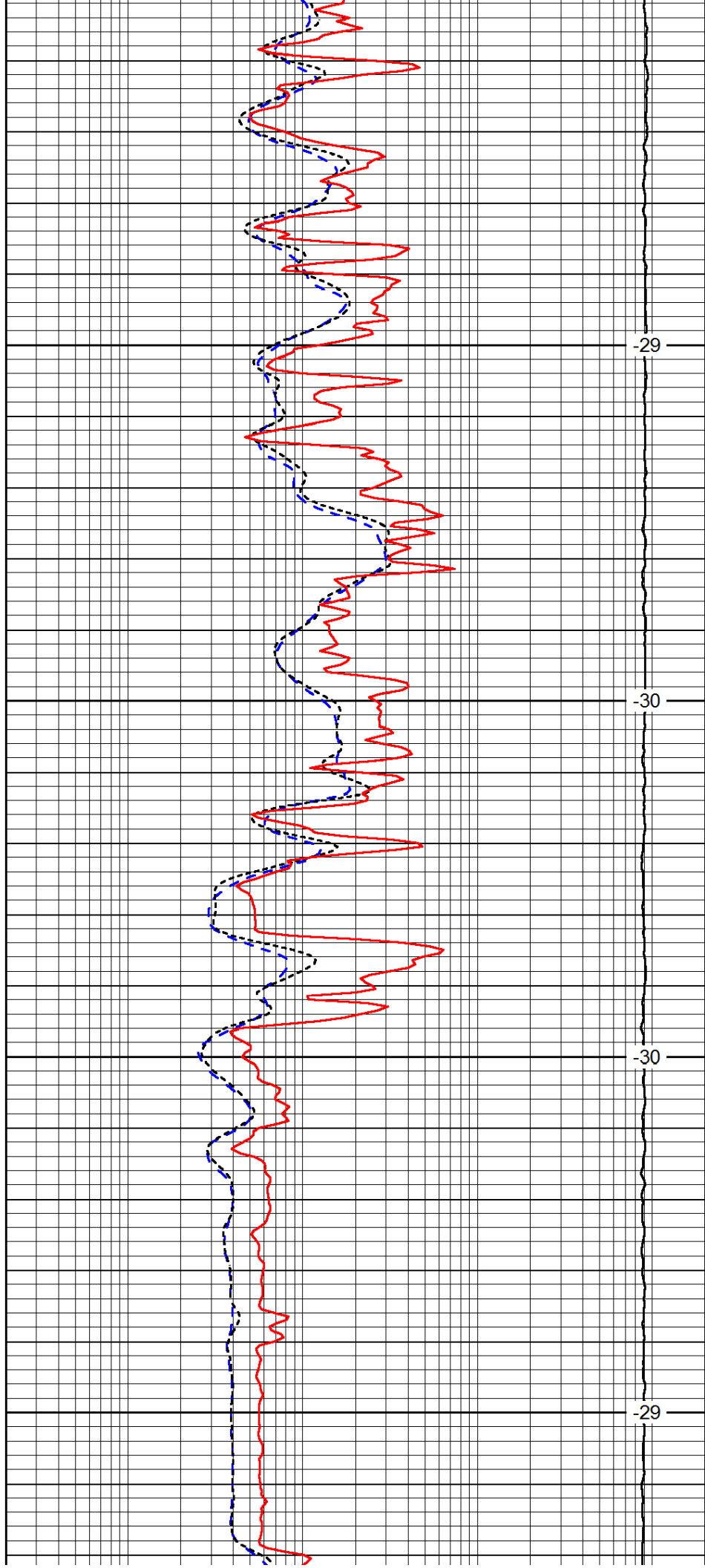


2800

2850

2900

2950

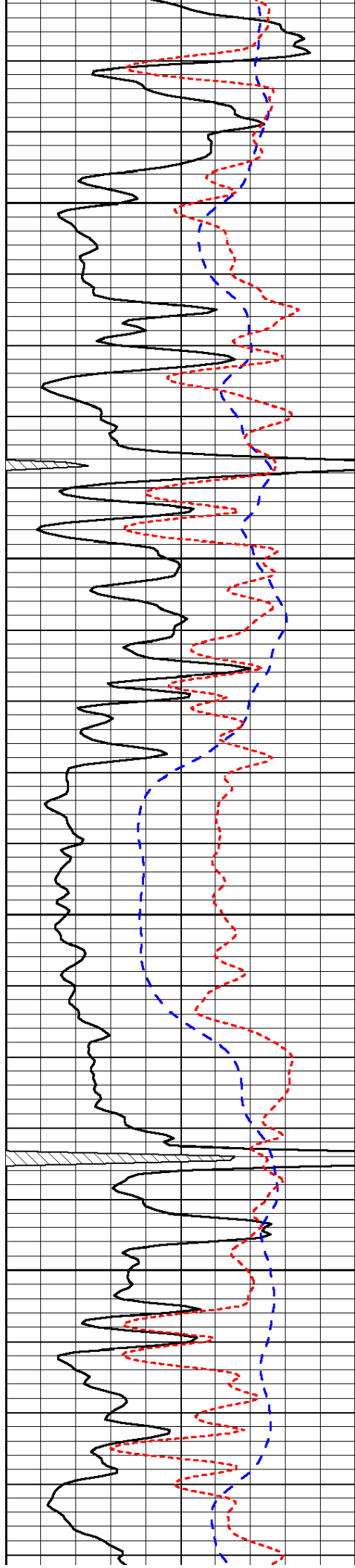


-29

-30

-30

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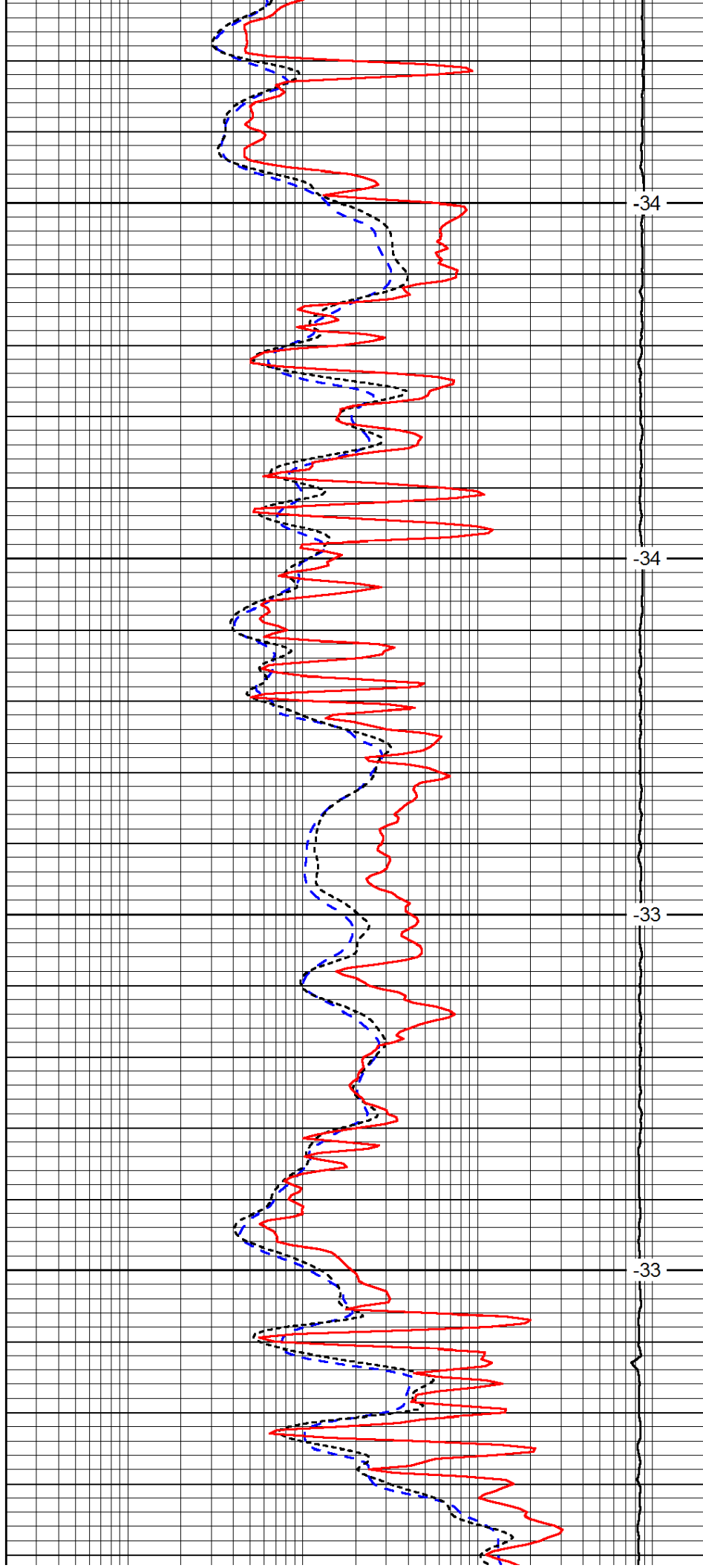


3000

3050

3100

3150

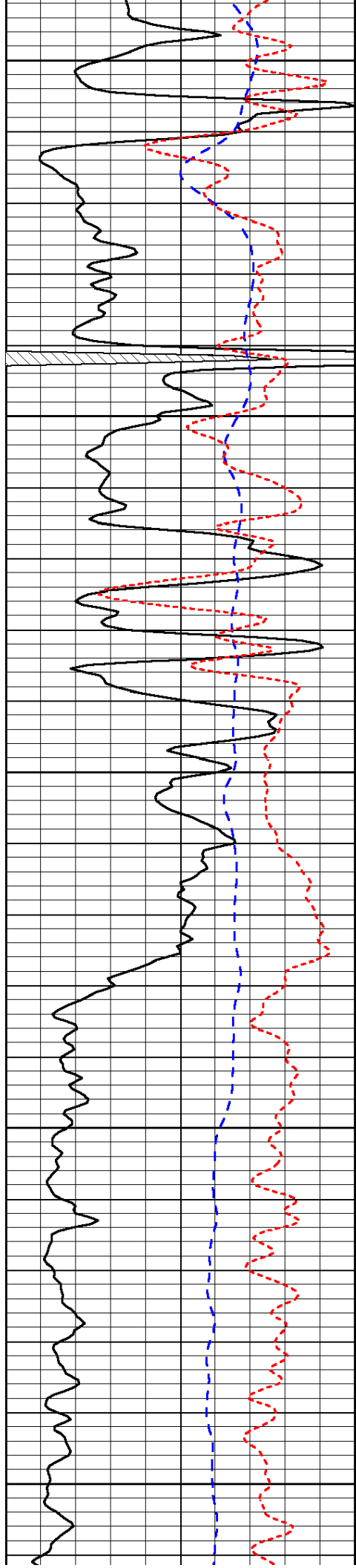


-34

-34

-33

-33



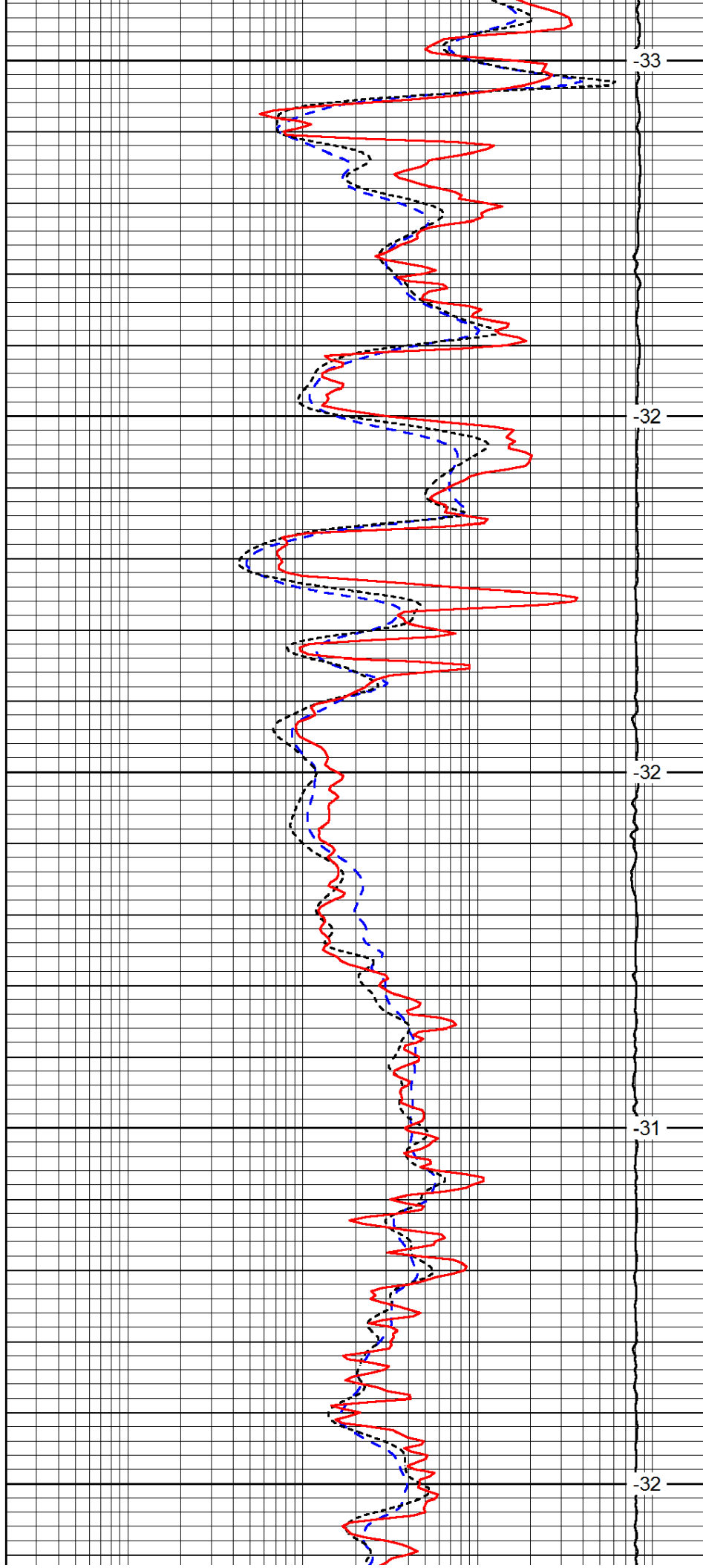
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3250

3300

3350

3400



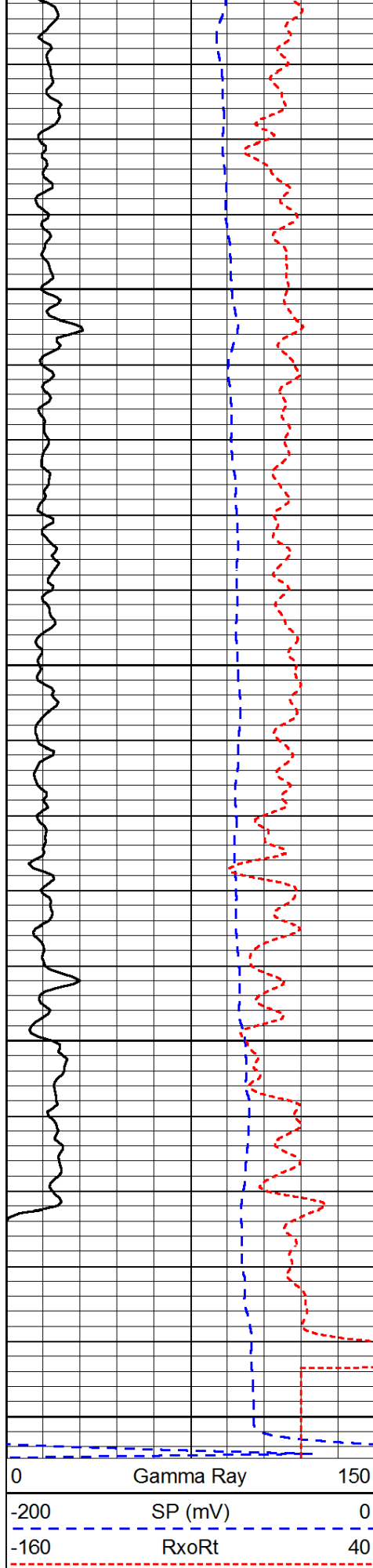
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-32

-32

-31

-32



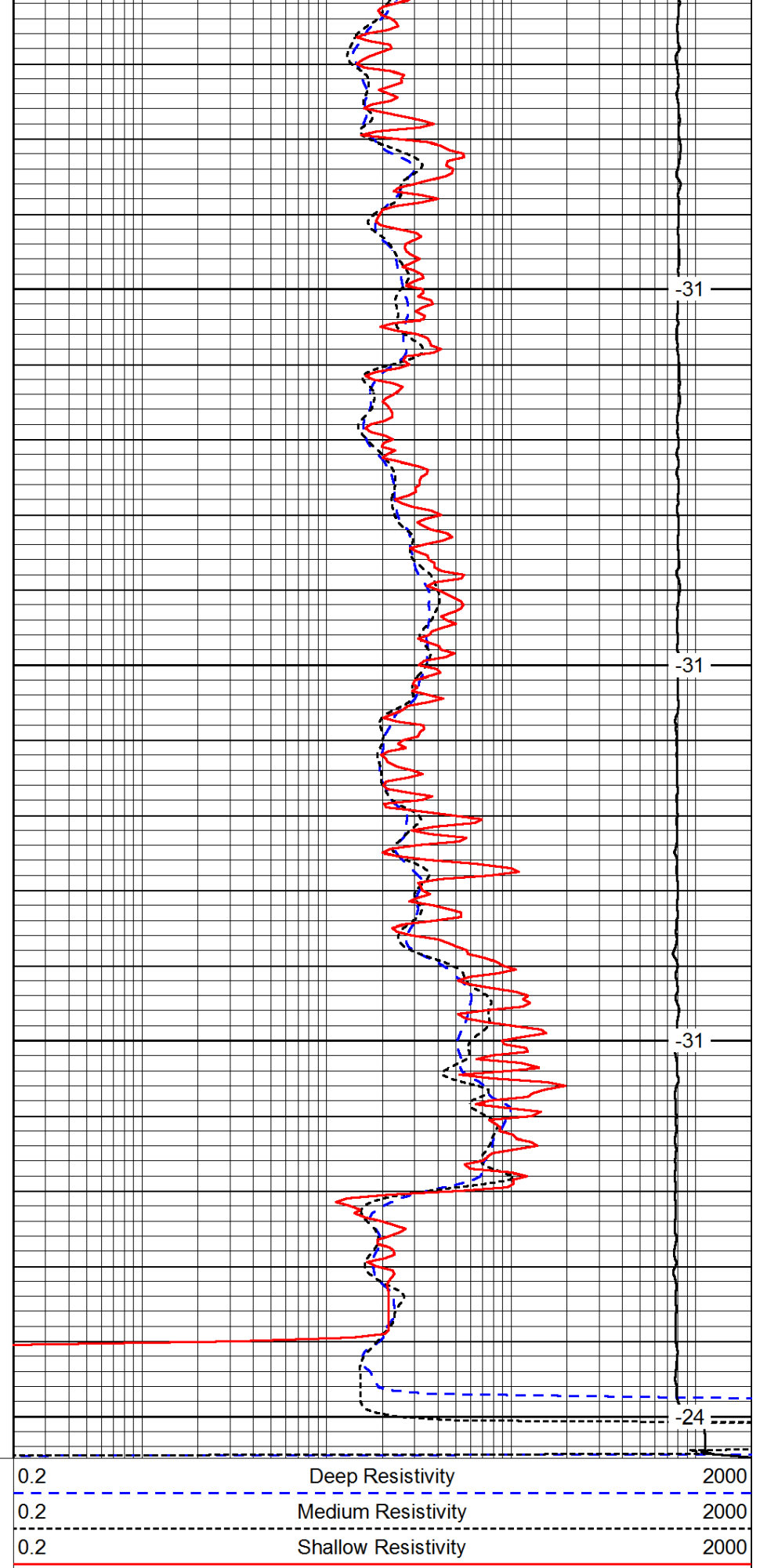
3450

3500

3550

3600

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40



-31

-31

-31

-24

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0