



Pioneer Energy Services

# Dual Induction Log

15-083-20,287-00-01

API No.

Company **American Warrior, Inc.**  
 Well **Burke SWDW No.1-4**  
 Field **Saw Log Creek Southeast**  
 County **Hodgeman State**      **Kansas**

Location **660' FSL & 660' FWL**

Sec: **4**      Twp: **24S**      Rge: **21W**

Other Services  
 CNL/CDL  
 MEL

Permanent Datum **Ground Level**      Elevation **2368**  
 Log Measured From **Kelly Bushing**      **11 Ft. Above Perm. Datum**  
 Drilling Measured From **Kelly Bushing**

Elevation  
 K.B. **2379**  
 D.F. **2368**  
 G.L. **2368**

Date	10/20/2012	
Run Number	One	
Depth Driller	5500	
Depth Logger	5505	
Bottom Logged Interval	5504	
Top Log Interval	250	
Casing Driller	8.625 @ 263	
Casing Logger	265	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity,ppm CL	9,000	
Density / Viscosity	9.0      48	
pH / Fluid Loss	9.0      11.6	
Source of Sample	Flowline	
Rm @ Meas. Temp	.55 @ 68	
Rmf @ Meas. Temp	.41 @ 68	
Rmc @ Meas. Temp	.74 @ 68	
Source of Rmf / Rmc	Charts	
Rm @ BHT	.29 @ 131	
Operating Rig Time	3 Hours	
Max Rec. Temp. F	131	
Equipment Number	17	
Location	Hays	
Recorded By	C. Desaire	
Witnessed By	Kevin Timson	

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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.pioneerenergy.com](http://www.pioneerenergy.com)  
 785 625 3858

Hanston KS, 8 S to H Rd,  
 4 E, 2 S, 1/4 E, 1/8 N, W Into

Database File: c:\warrior\data\amwar\_burke swdw no.1-4\awhd.db  
 Dataset Pathname: dil\awstc  
 Presentation Format: dil2in  
 Dataset Creation: Sat Oct 20 21:44:00 2012  
 Charted by: Depth in Feet scaled 1:600

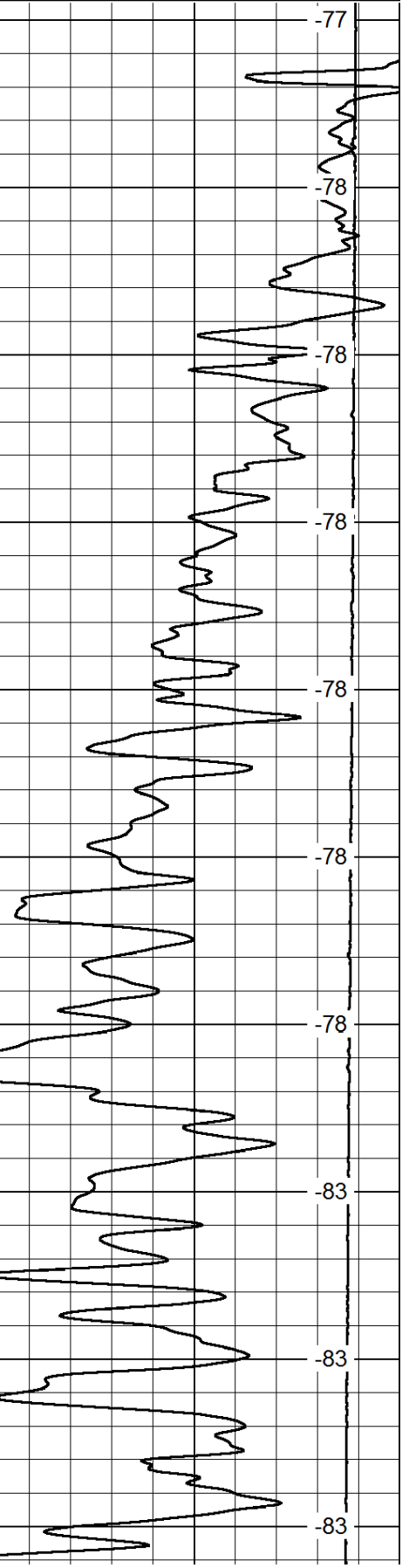
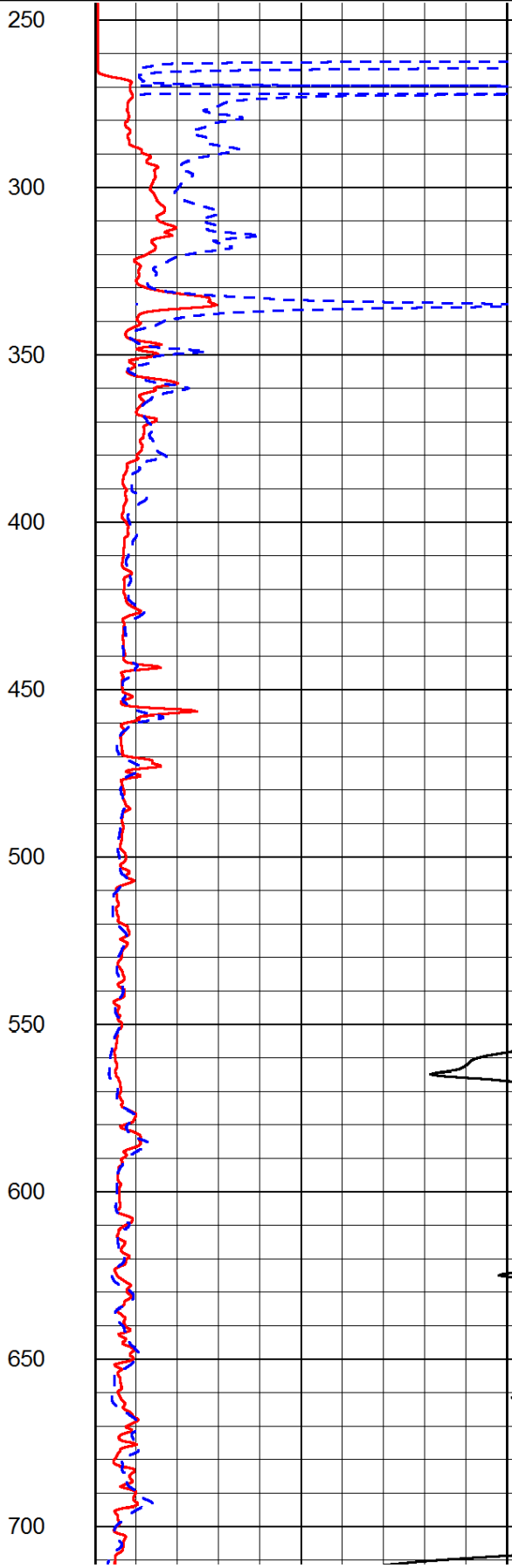
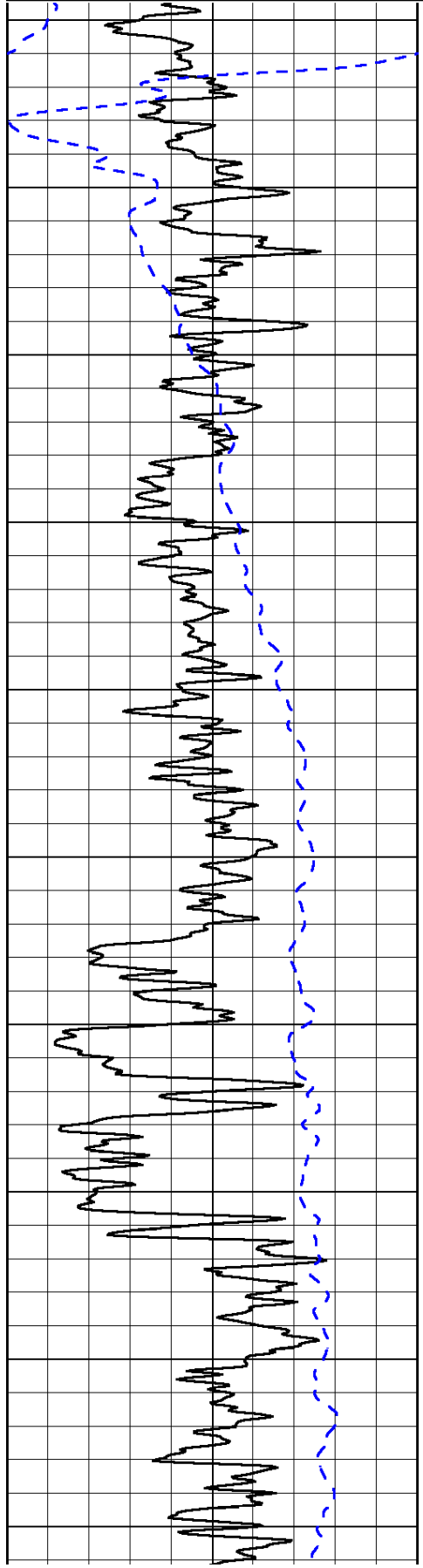
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-200	SP (mV)	0

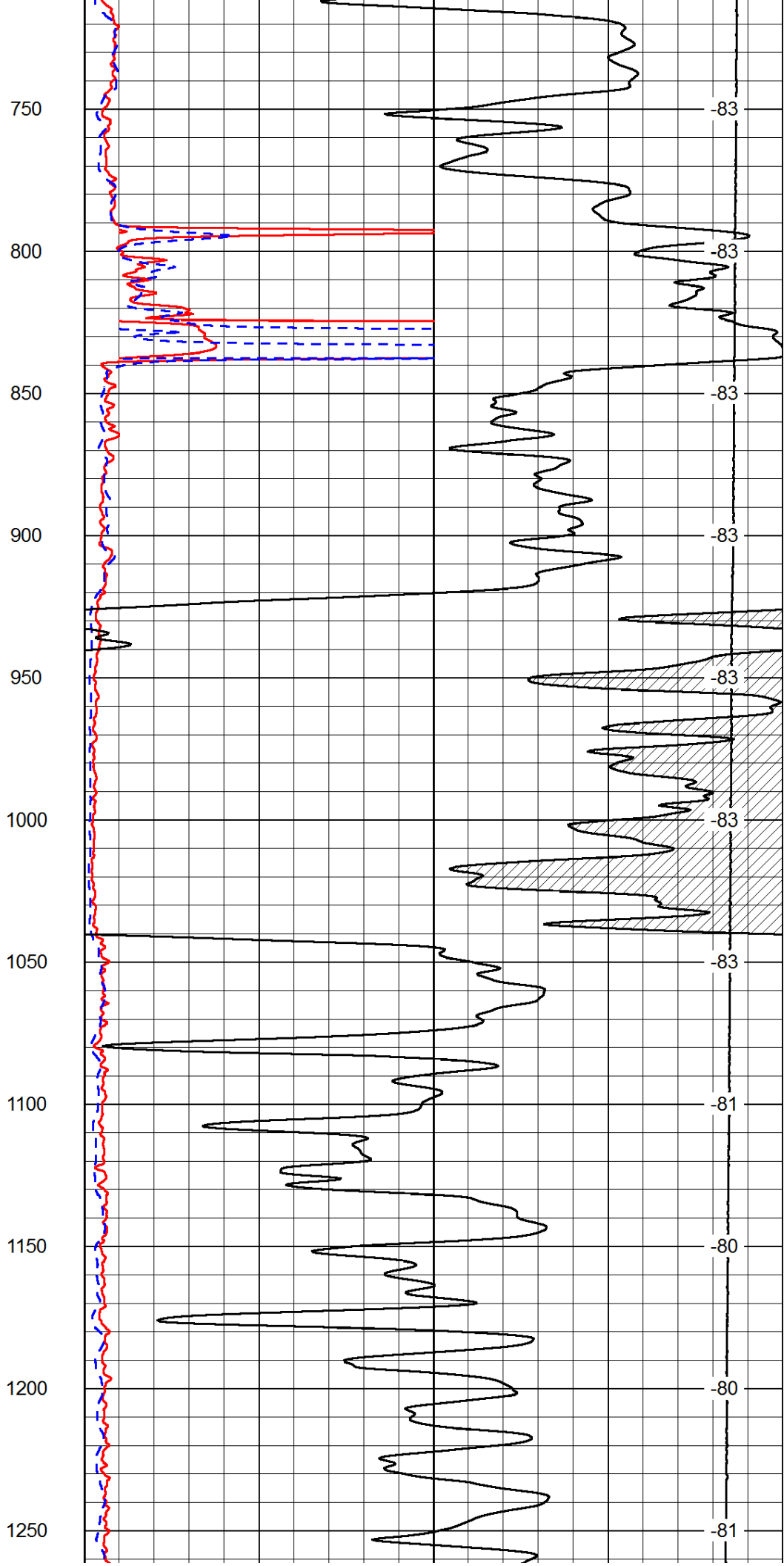
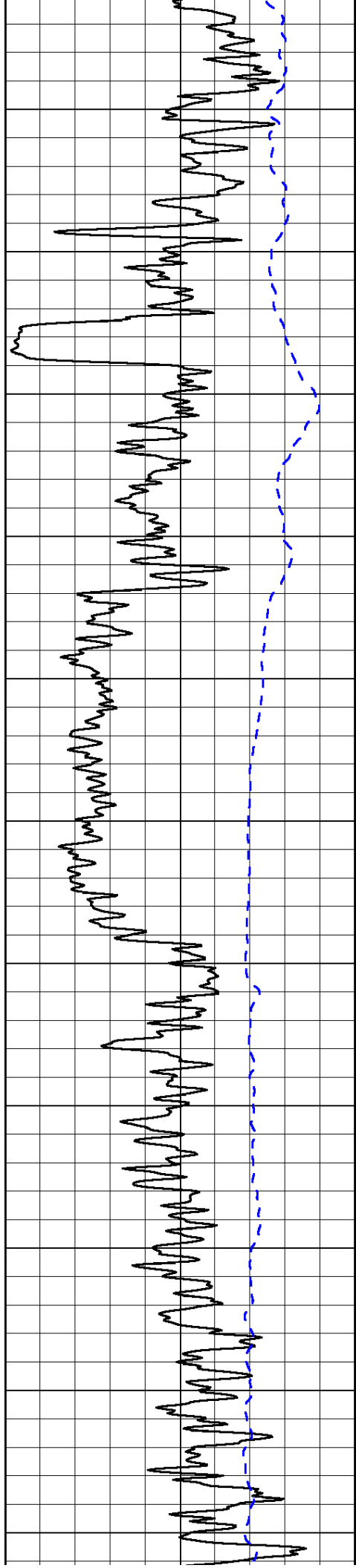
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0	Deep Resistivity	50

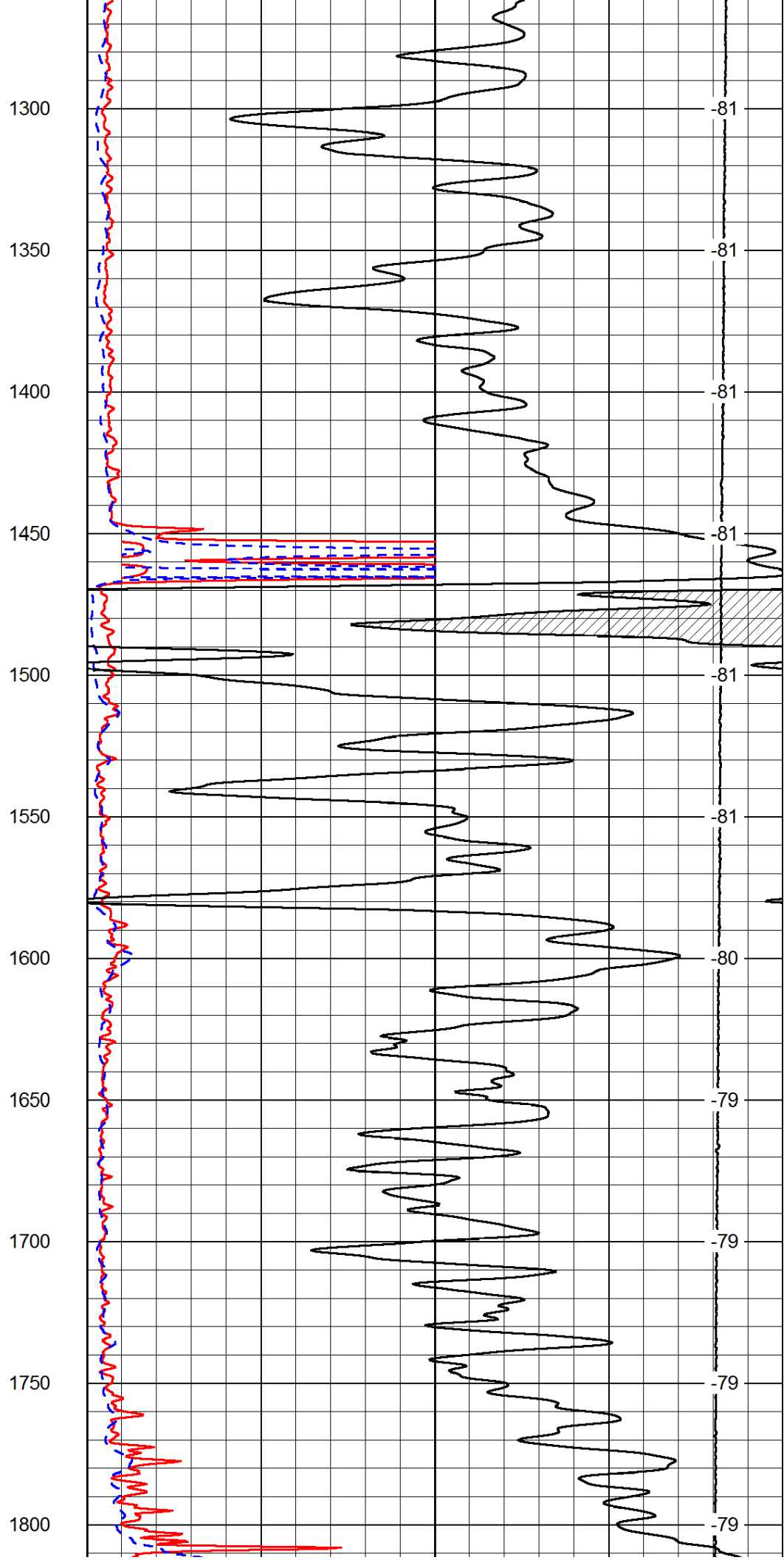
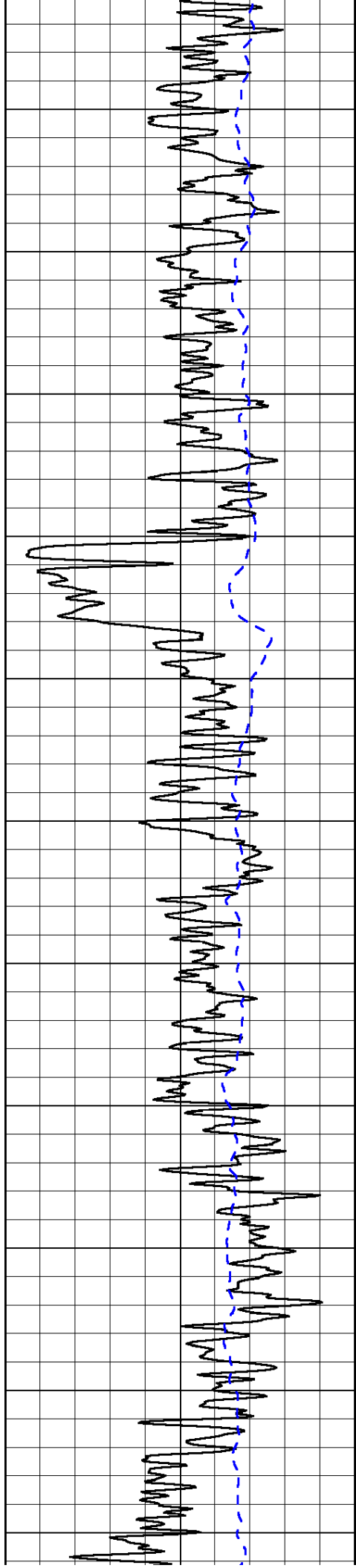
LSPD

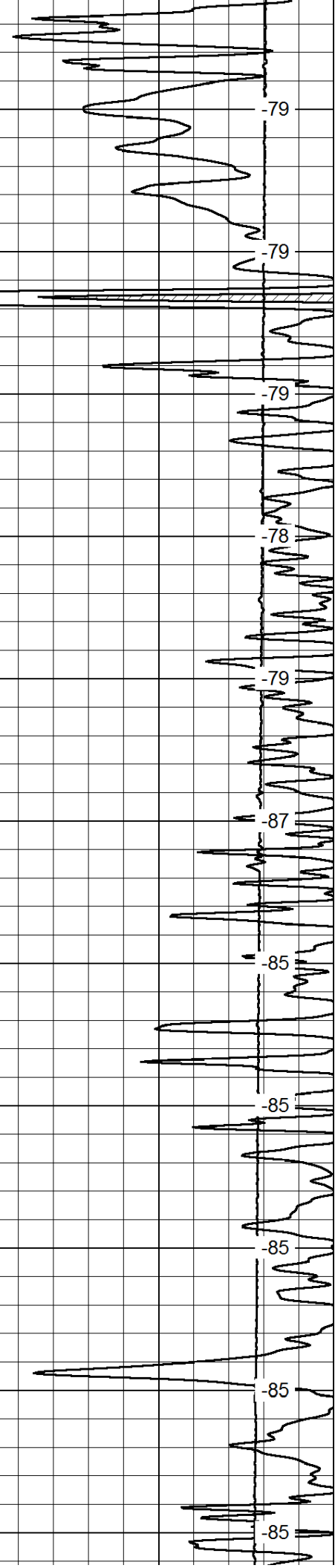
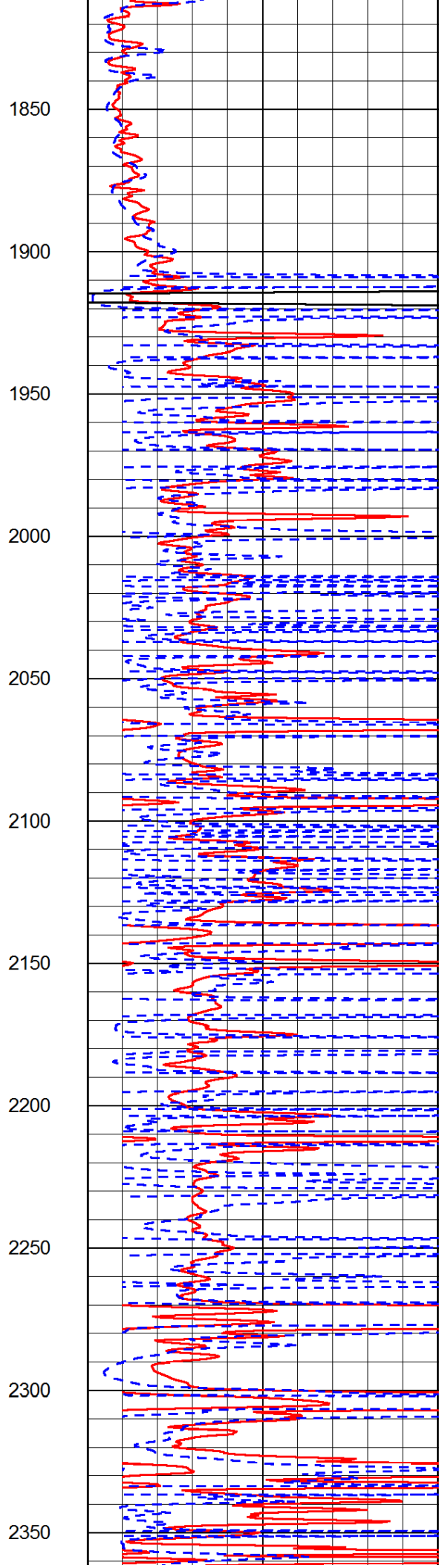
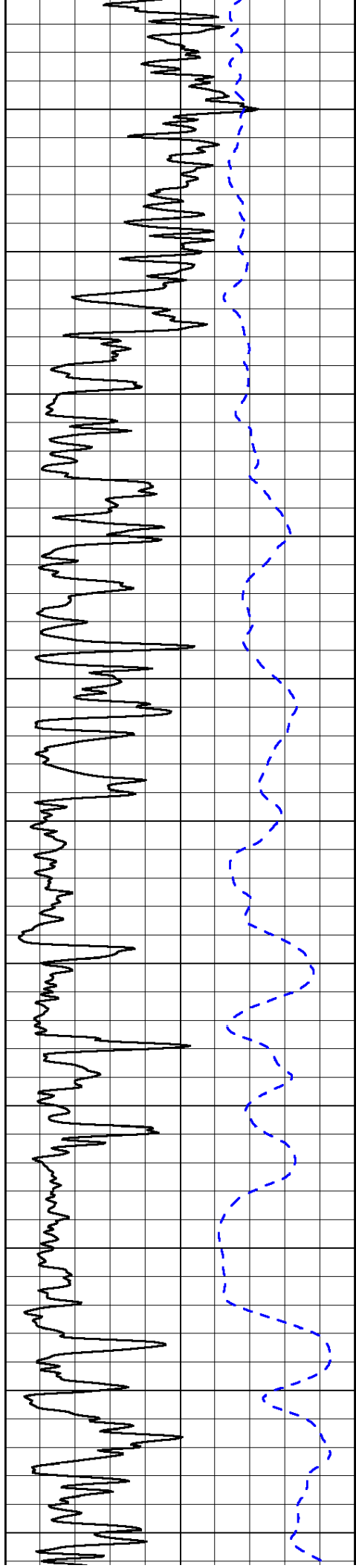
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15000	Line Tension	0

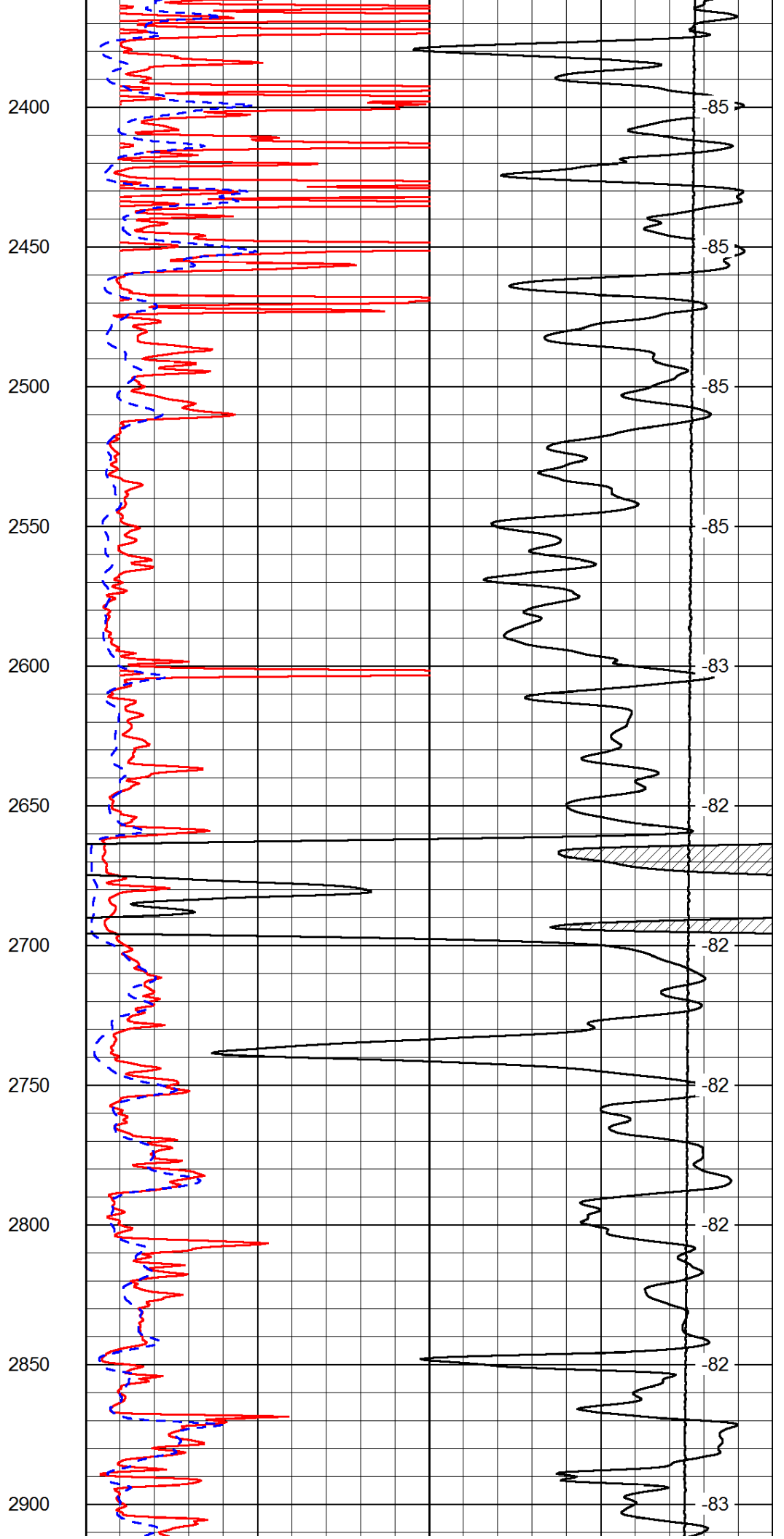
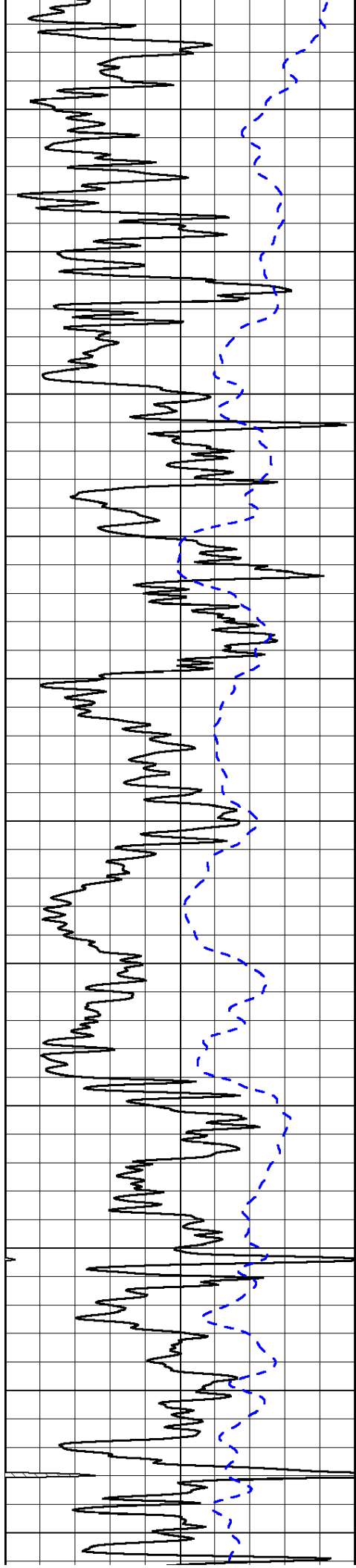
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50	Deep Resistivity	500

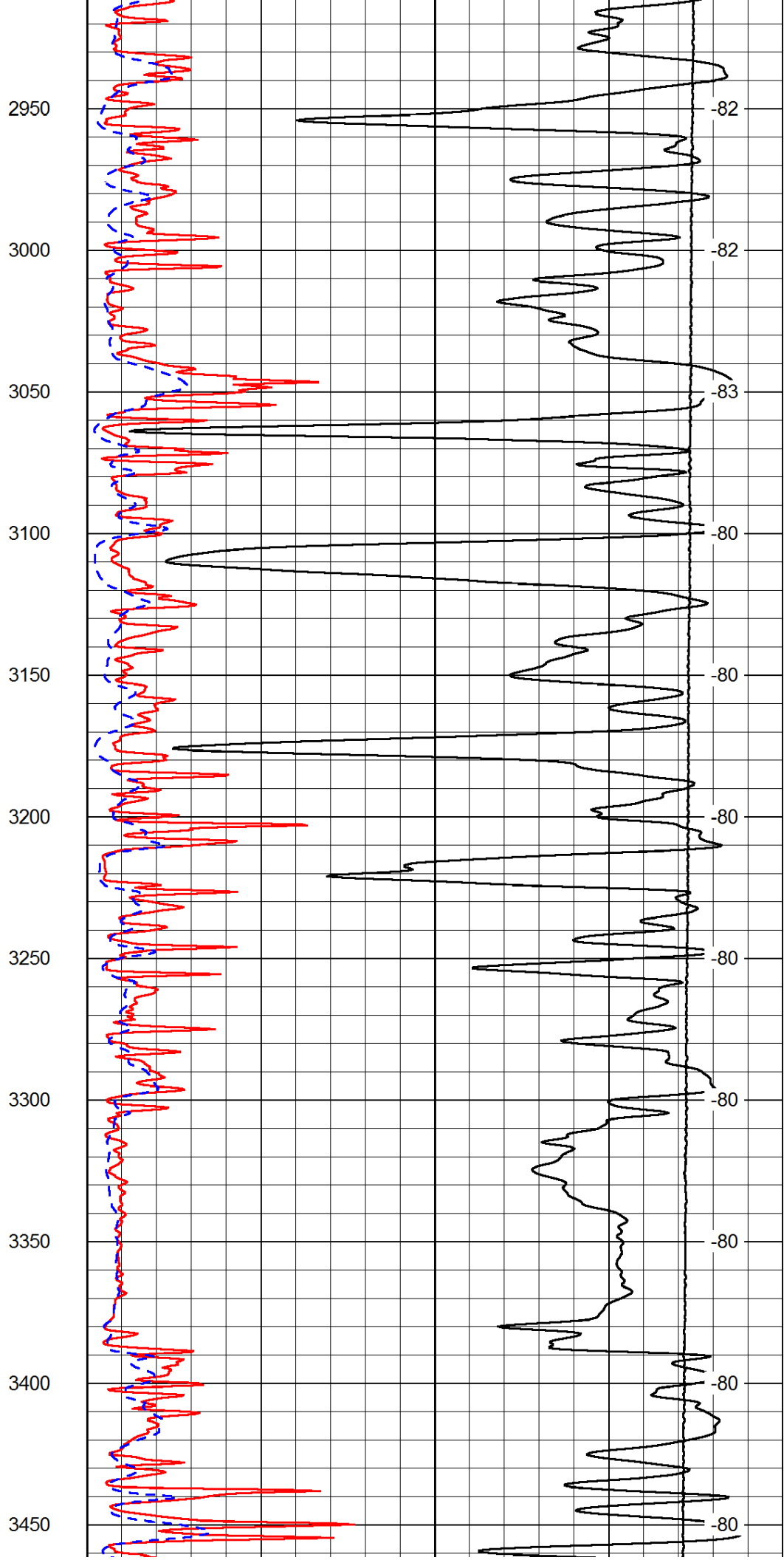
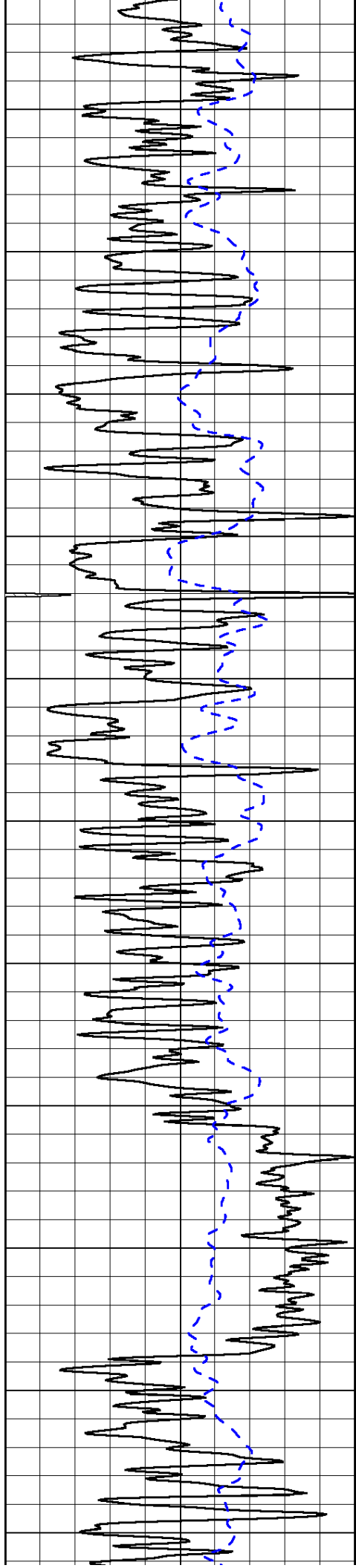


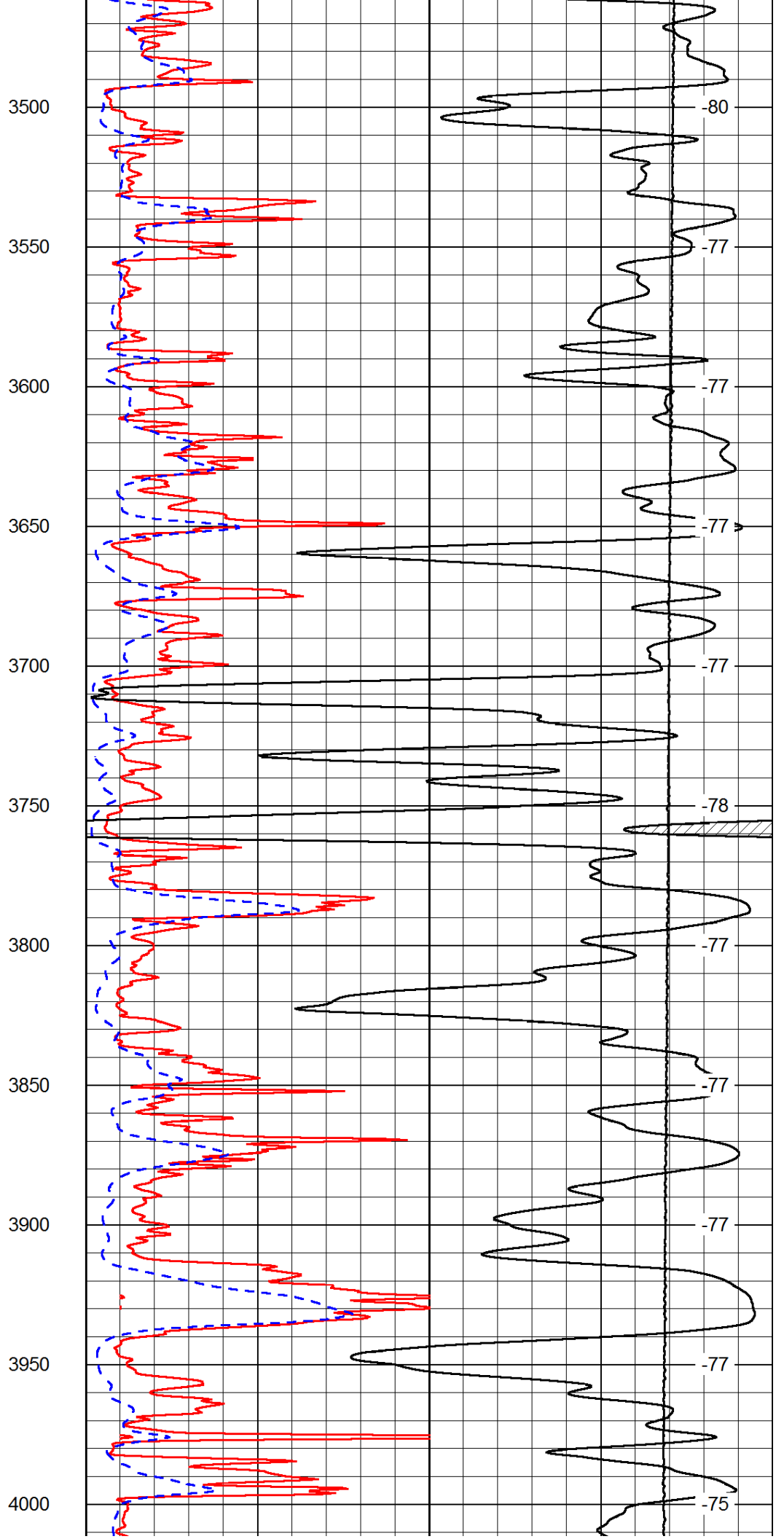
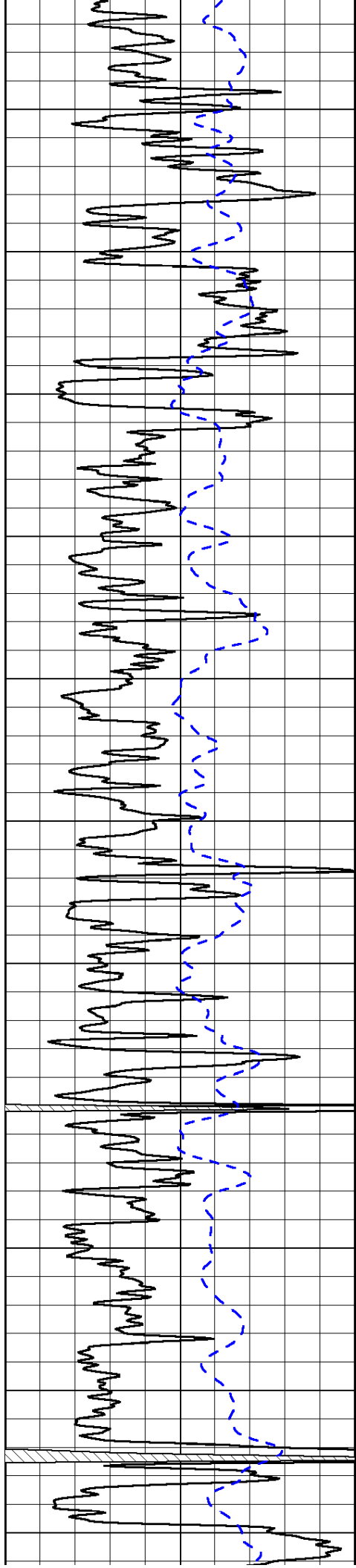


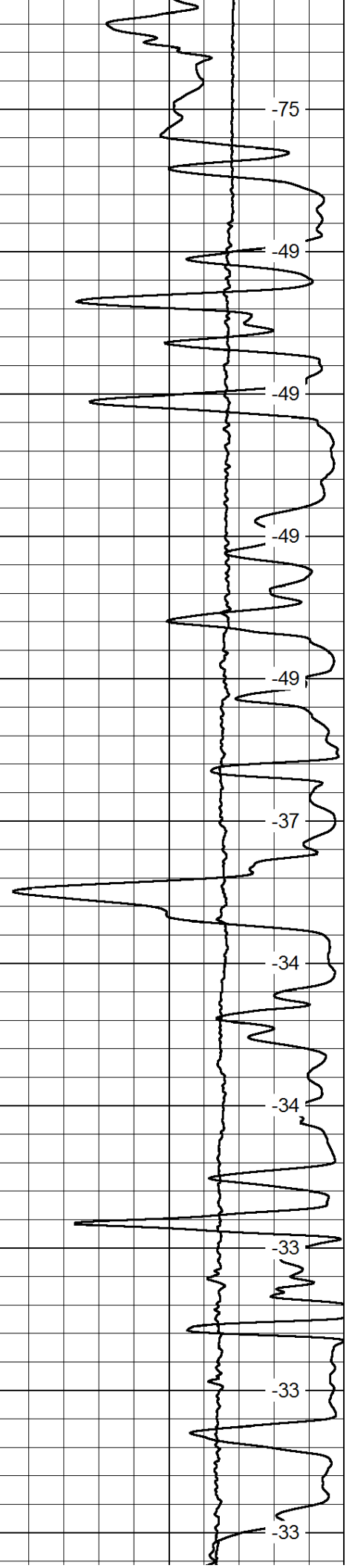
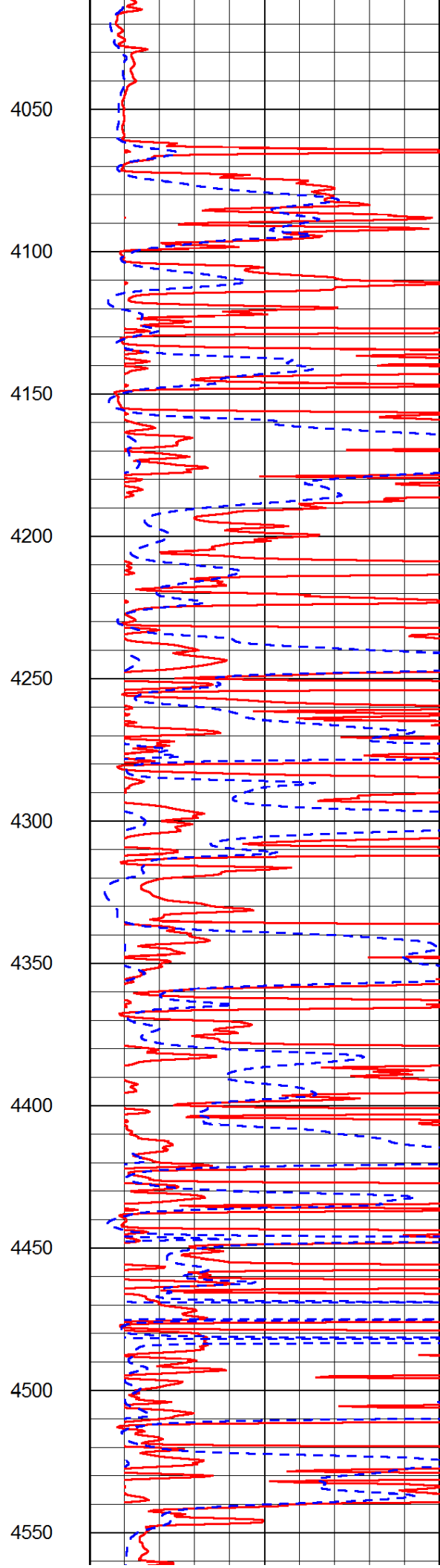
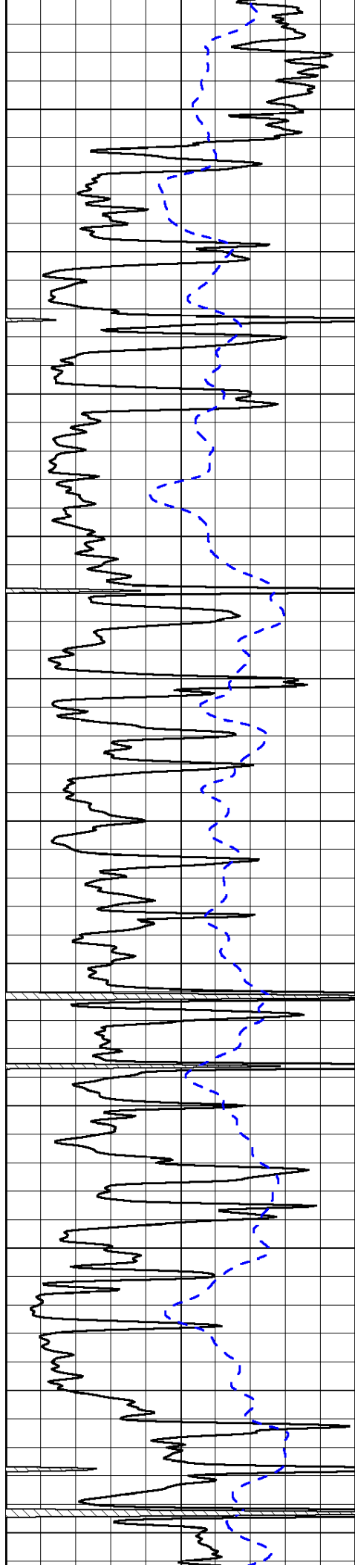


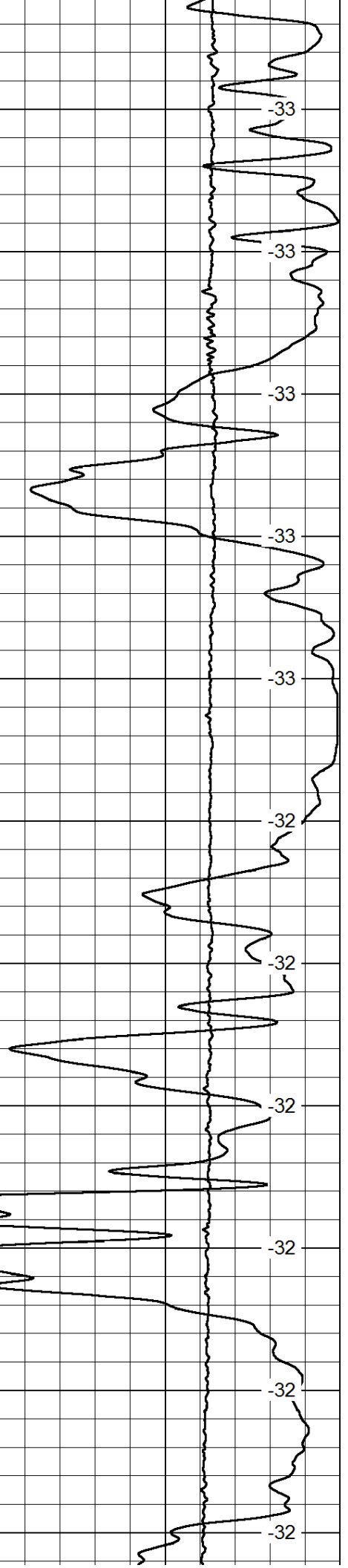
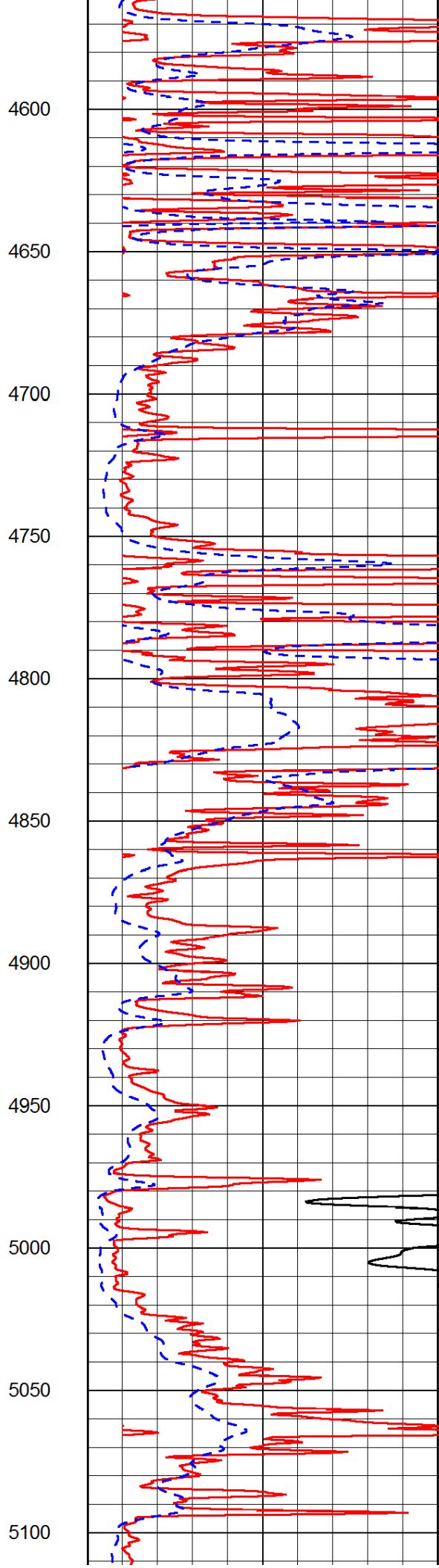
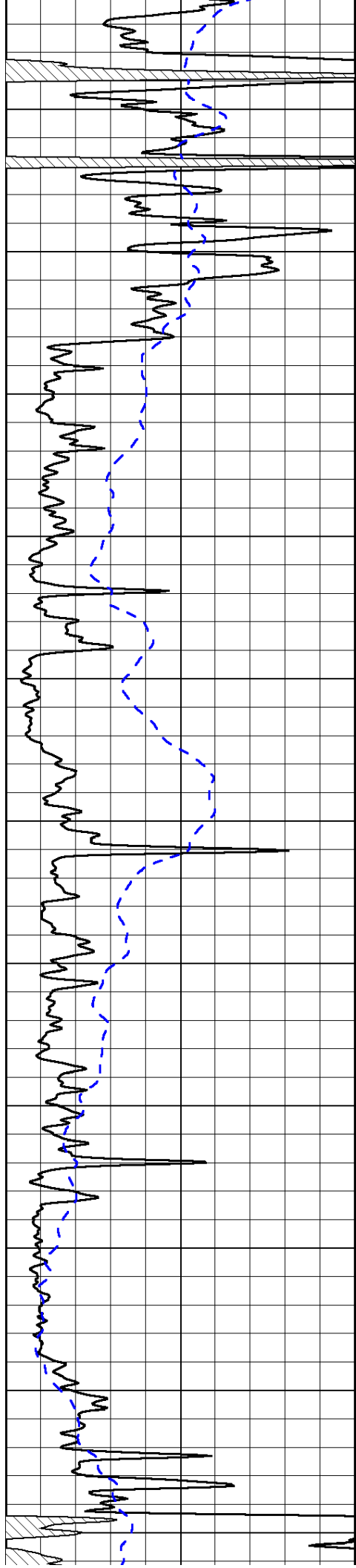






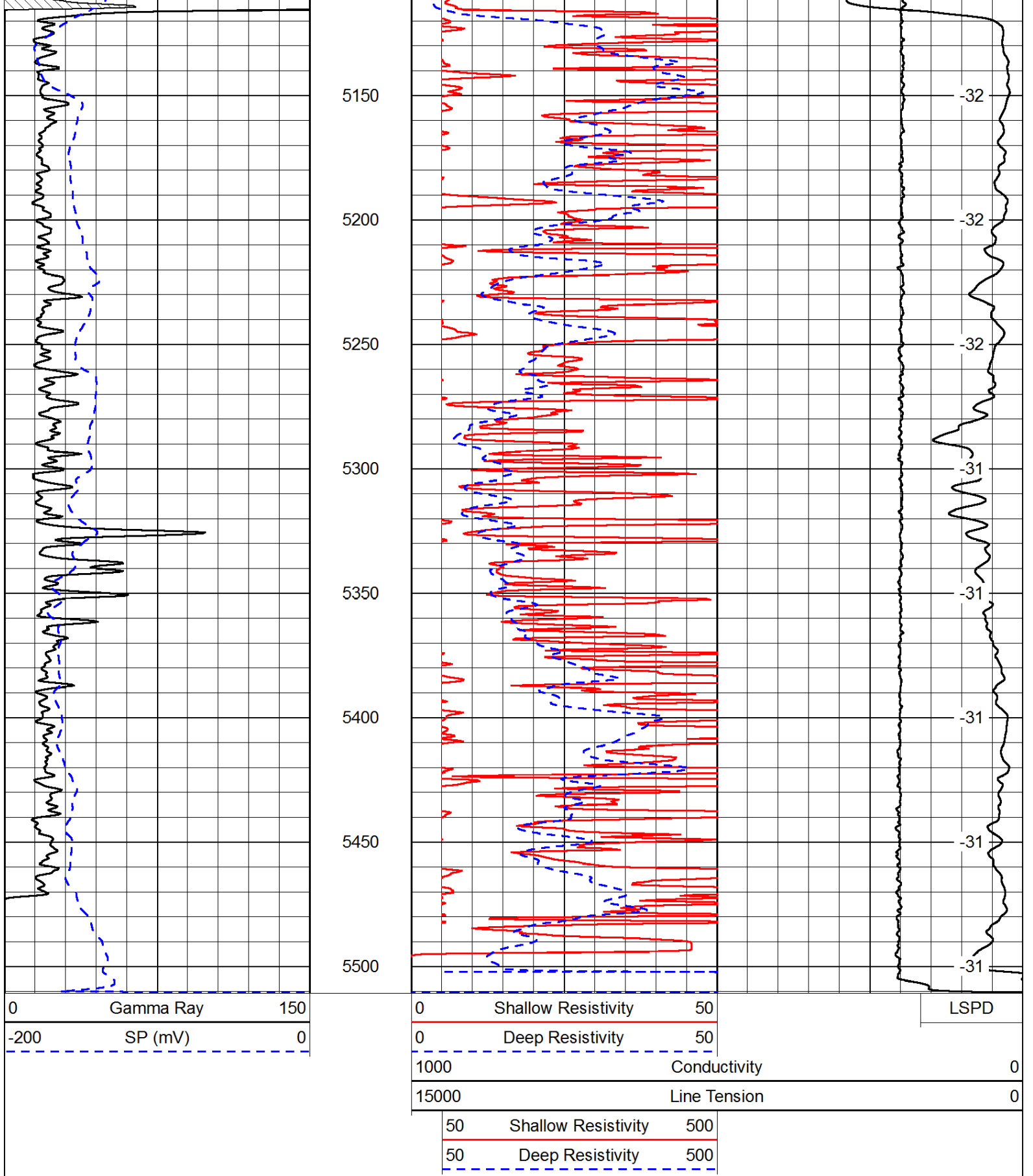




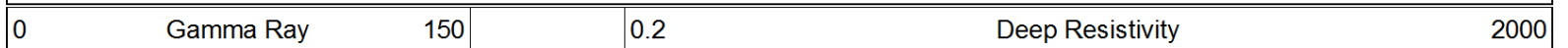


4600  
4650  
4700  
4750  
4800  
4850  
4900  
4950  
5000  
5050  
5100

-33  
-33  
-33  
-33  
-33  
-32  
-32  
-32  
-32  
-32



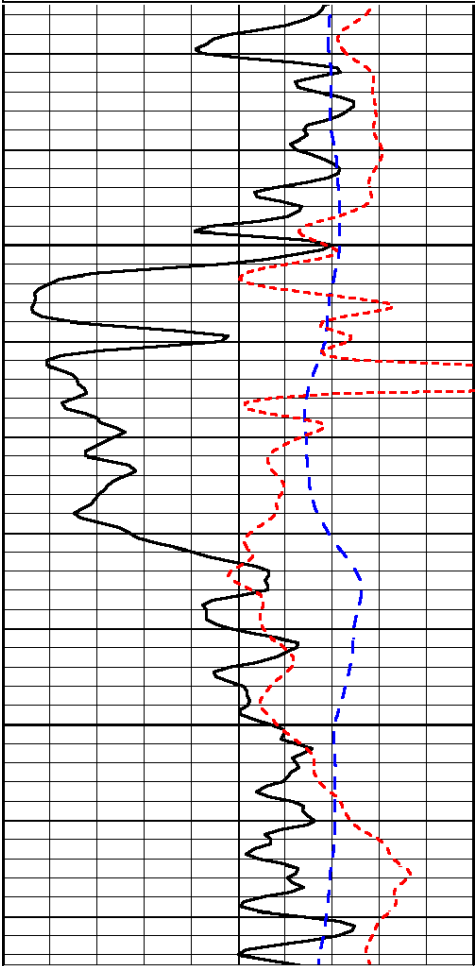
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 Presentation Format: dil  
 Dataset Creation: Sat Oct 20 21:44:00 2012  
 Charted by: Depth in Feet scaled 1:240



-200	SP (mV)	0
-160	RxoRt	40

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

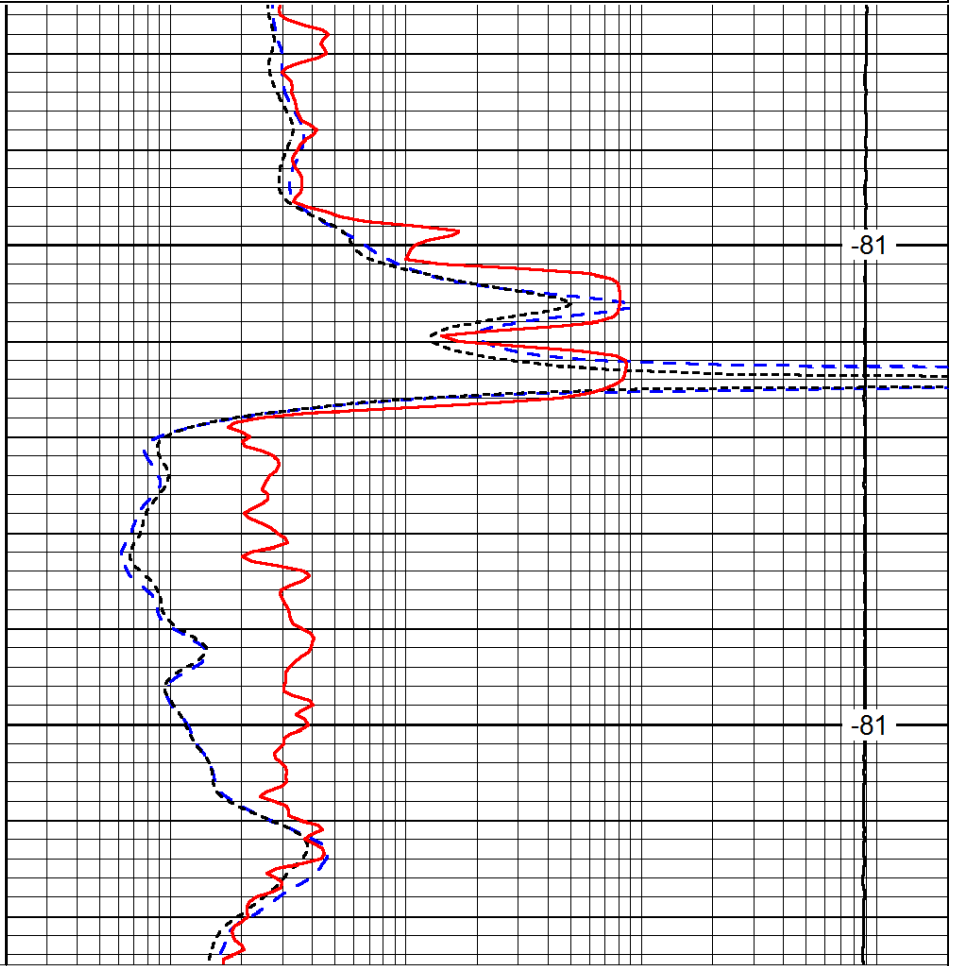
LSPD



1450

1500

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



81

81

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

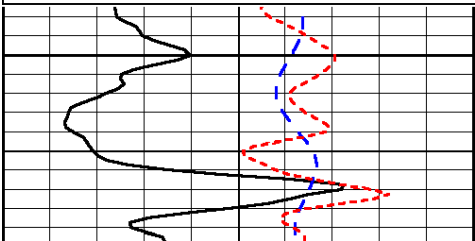
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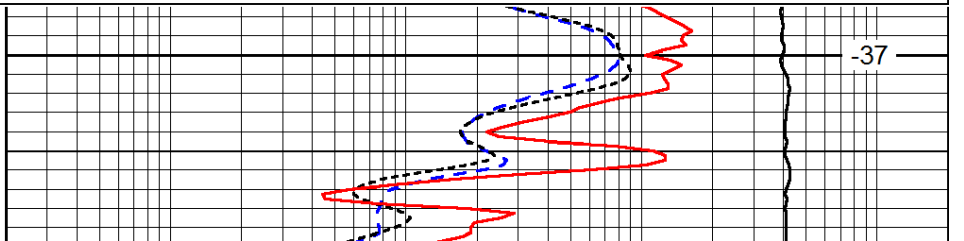
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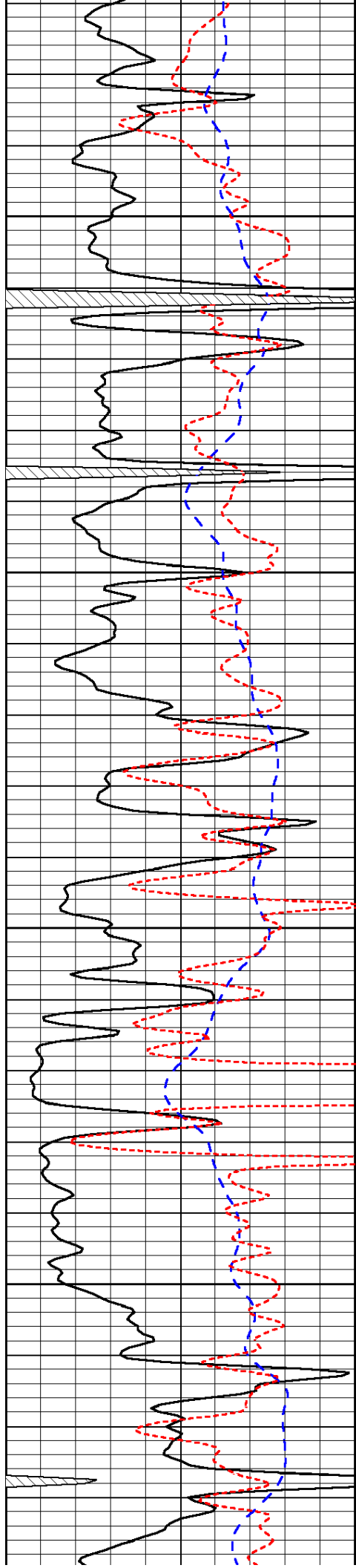
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37

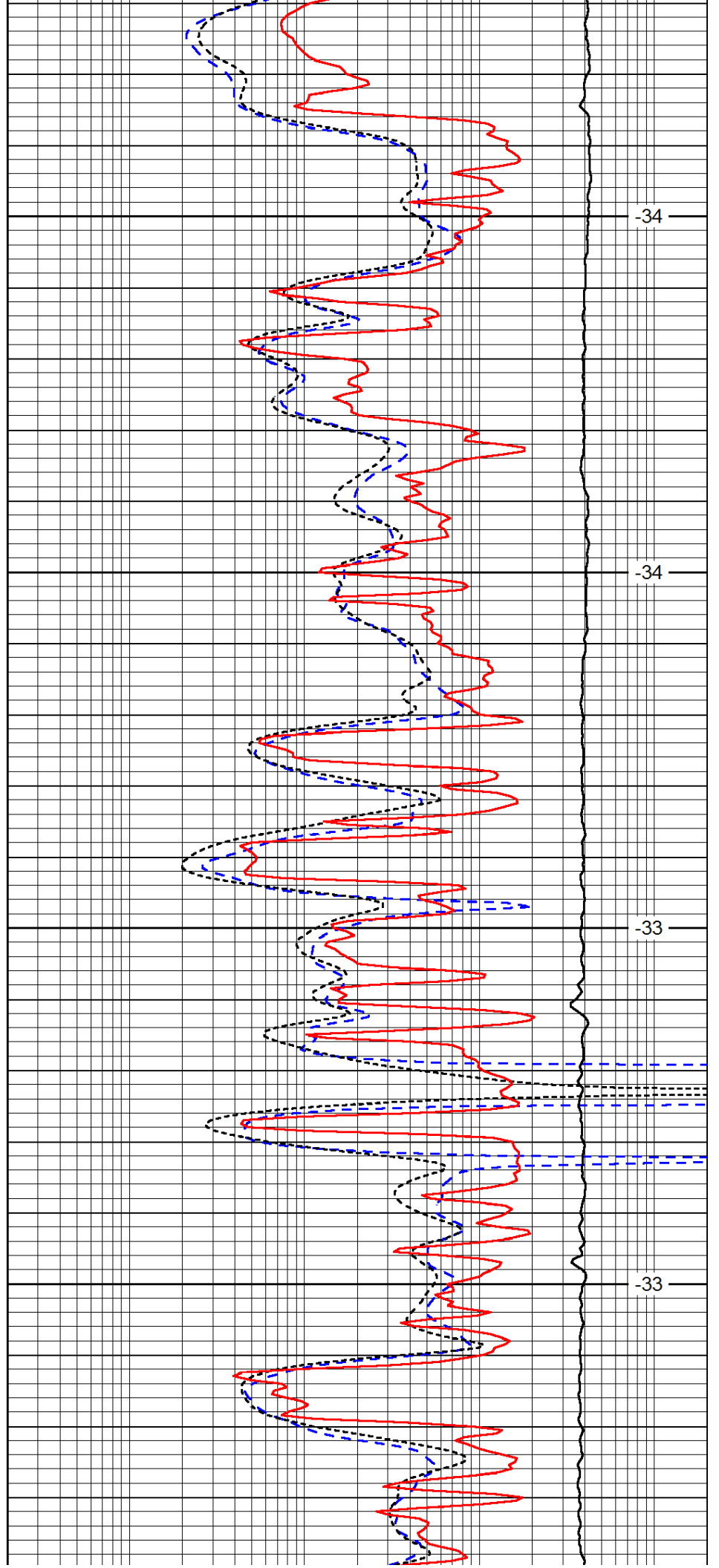


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4400

4450

4500

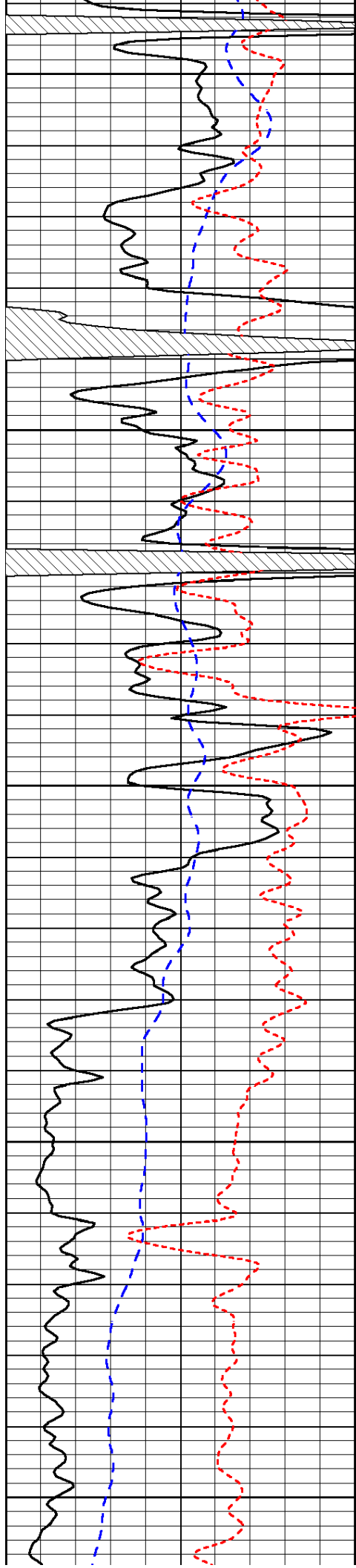


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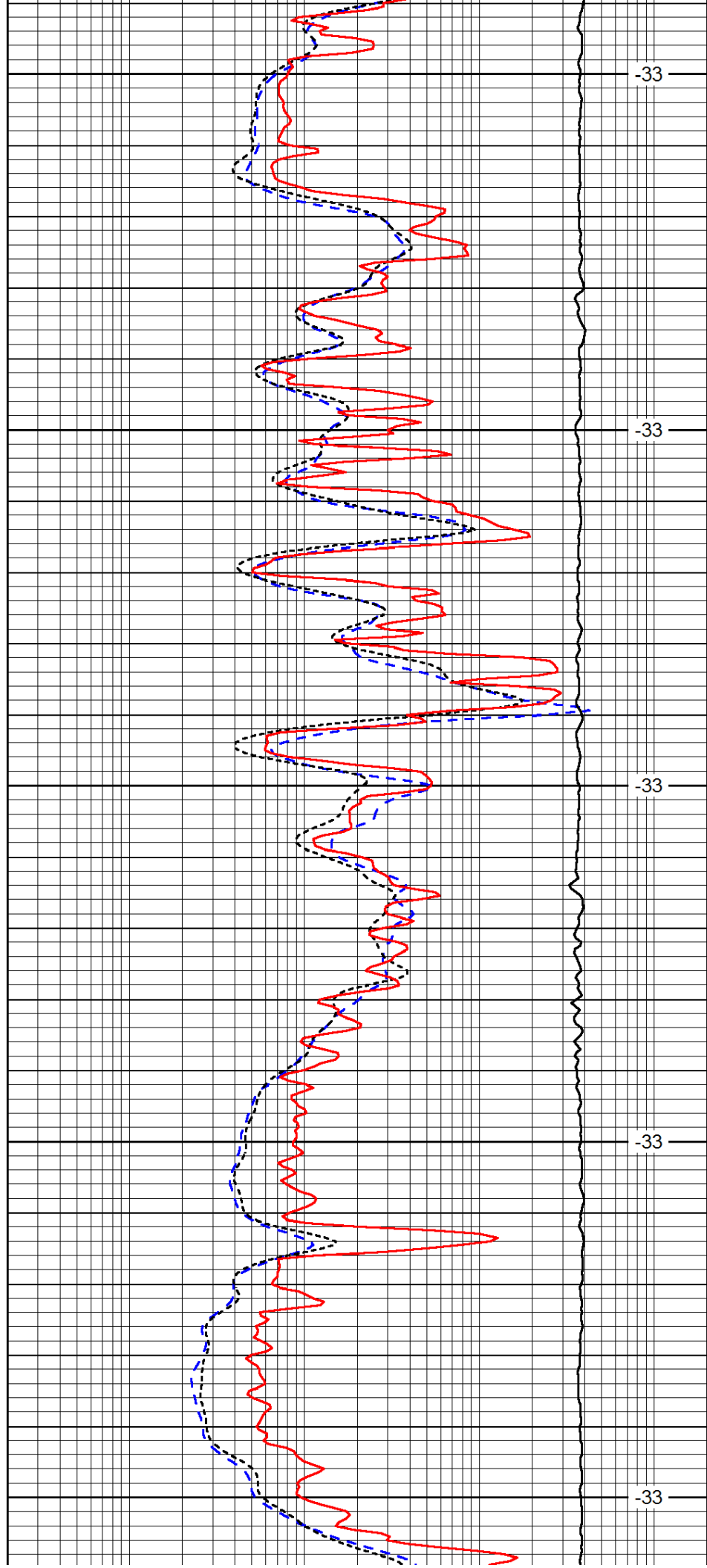
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4600

4650

4700

4750



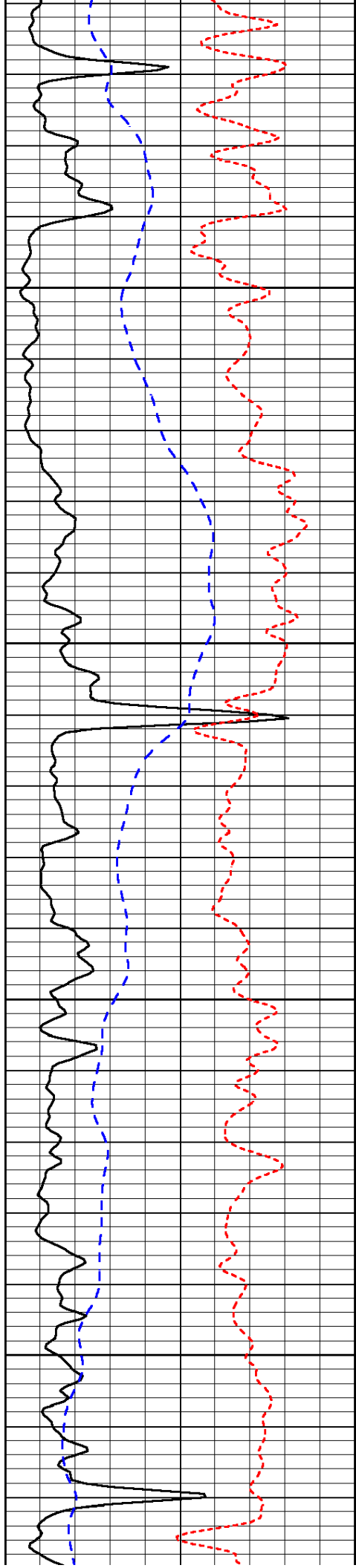
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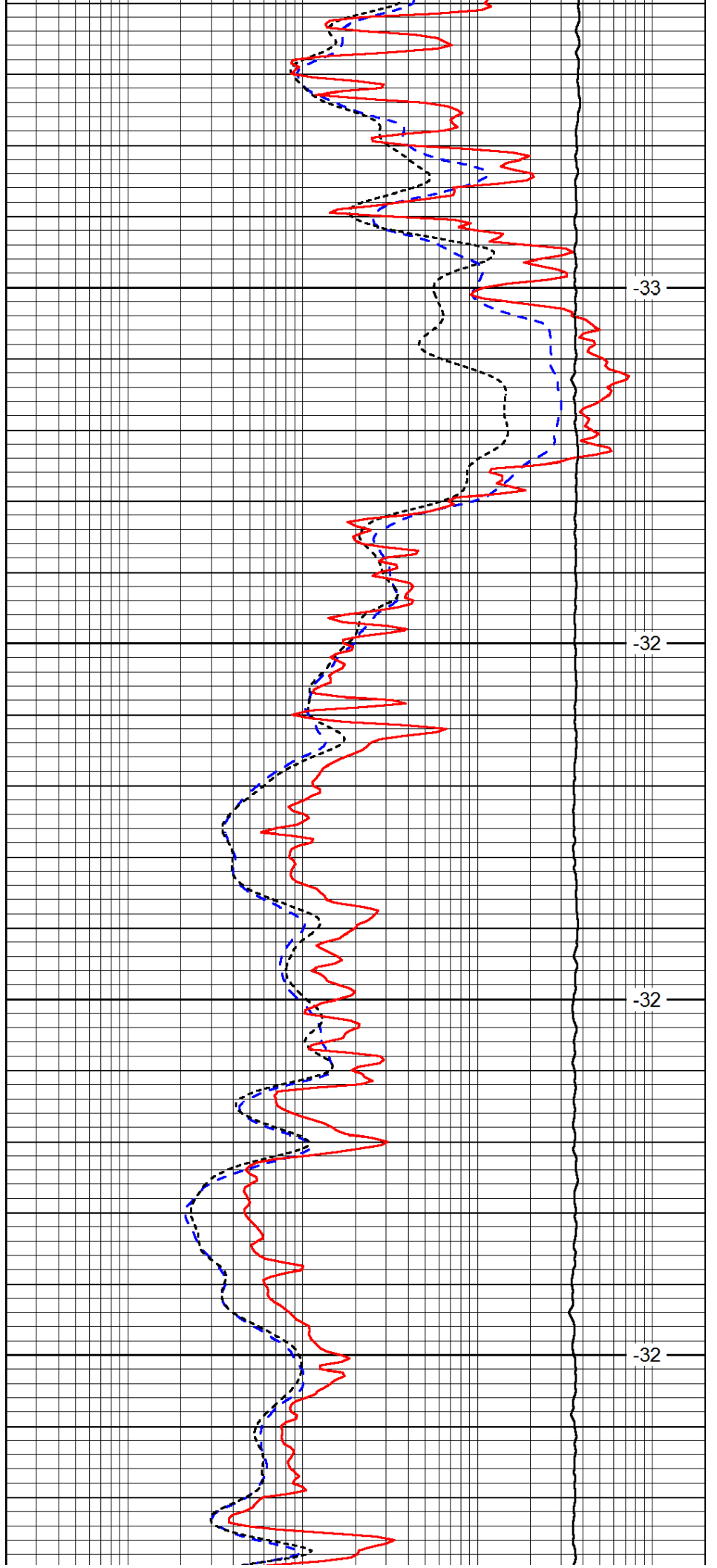


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4850

4900

4950

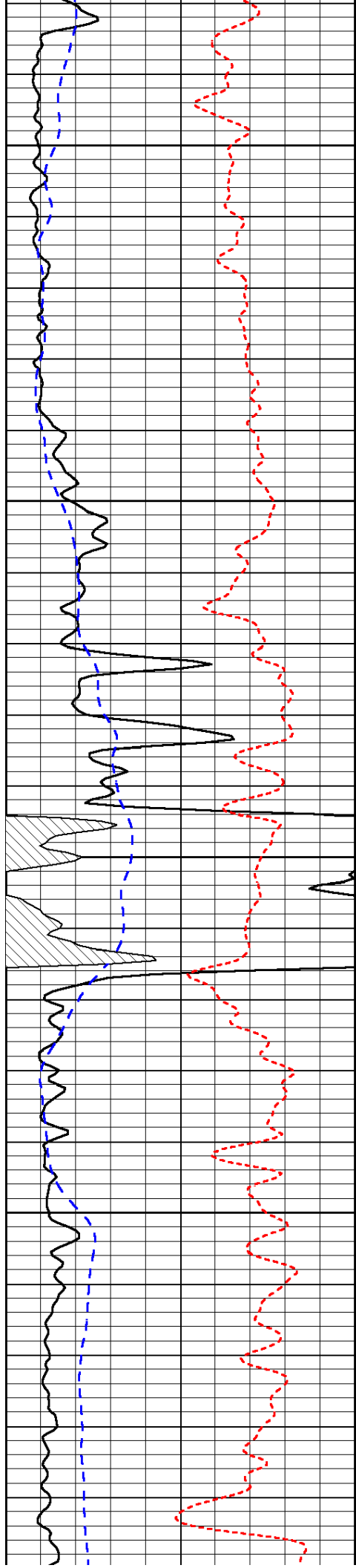


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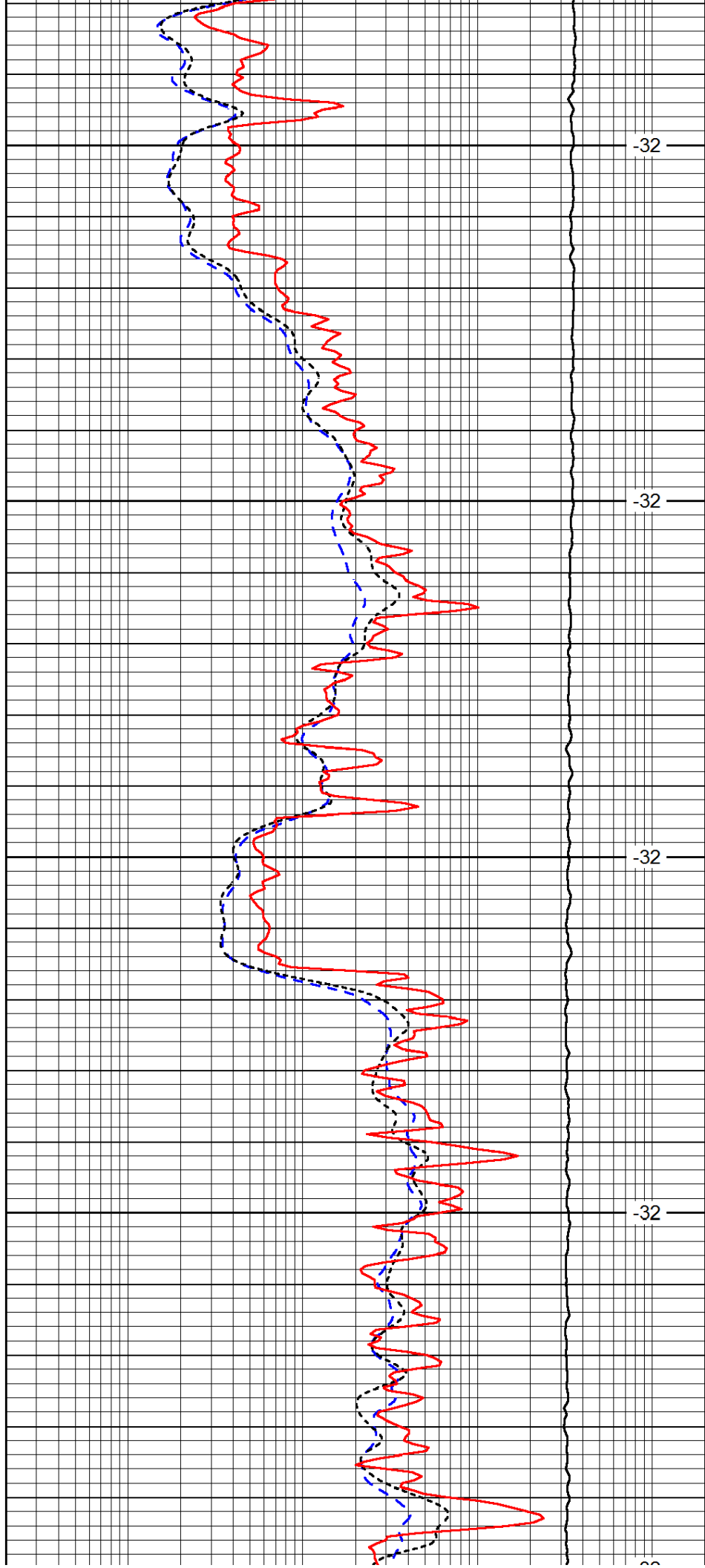
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5050

5100

5150

5200



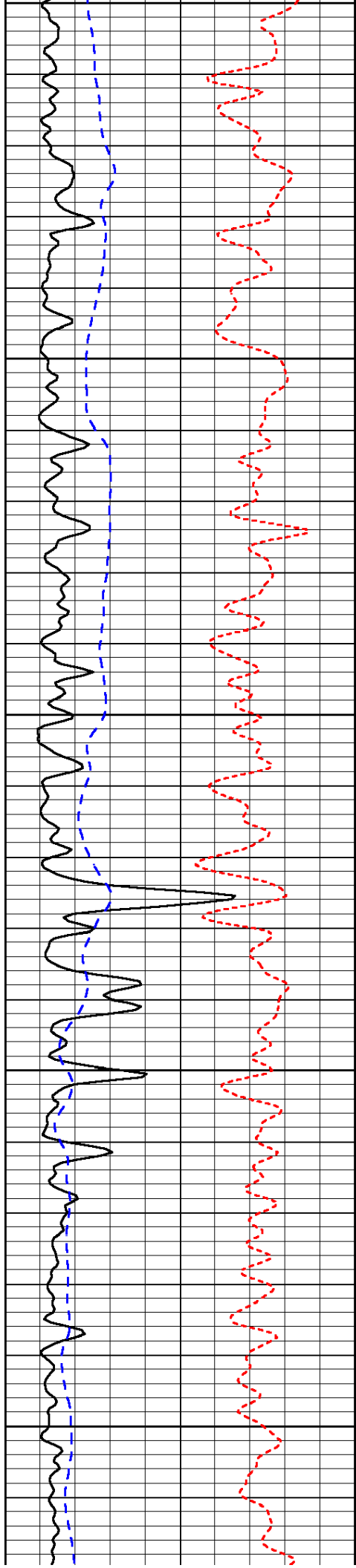
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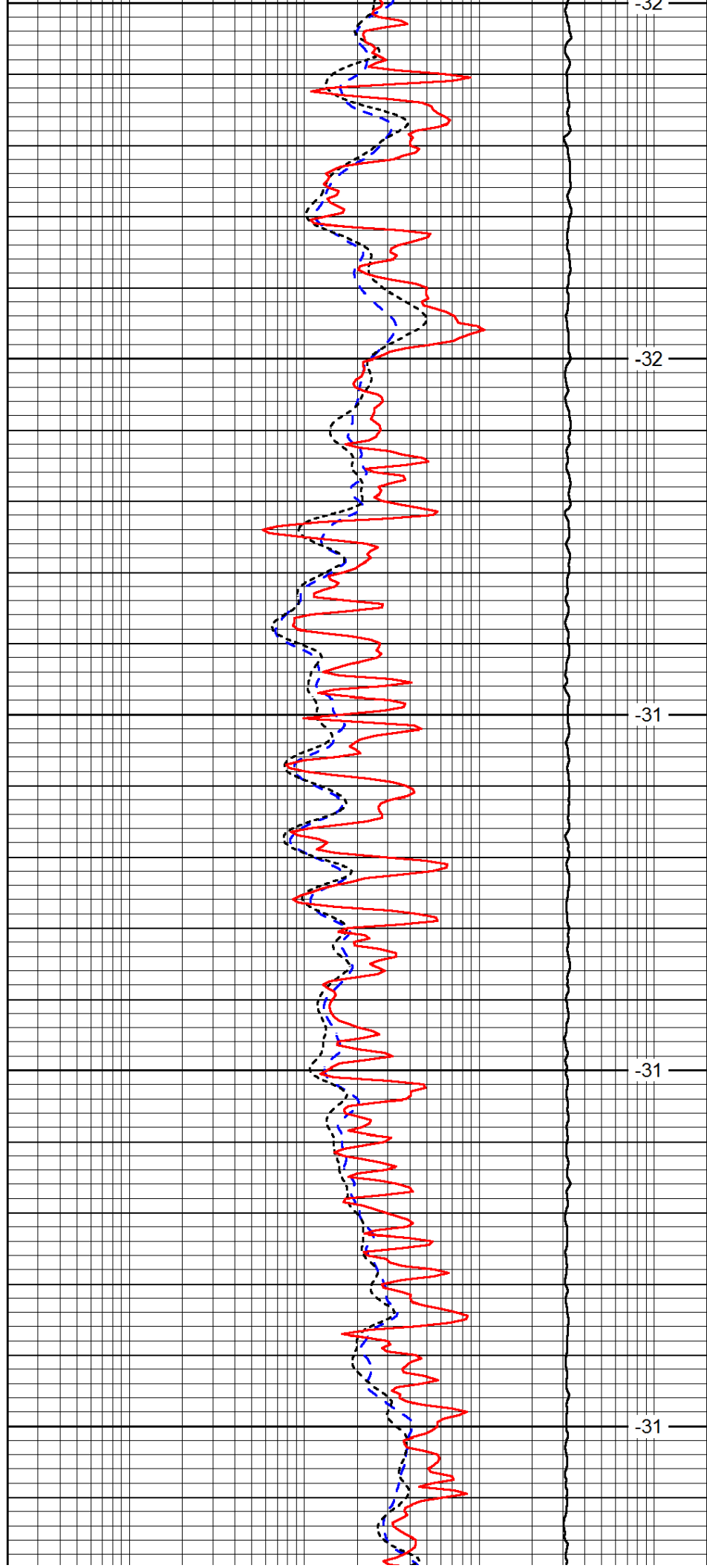
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5250

5300

5350

5400



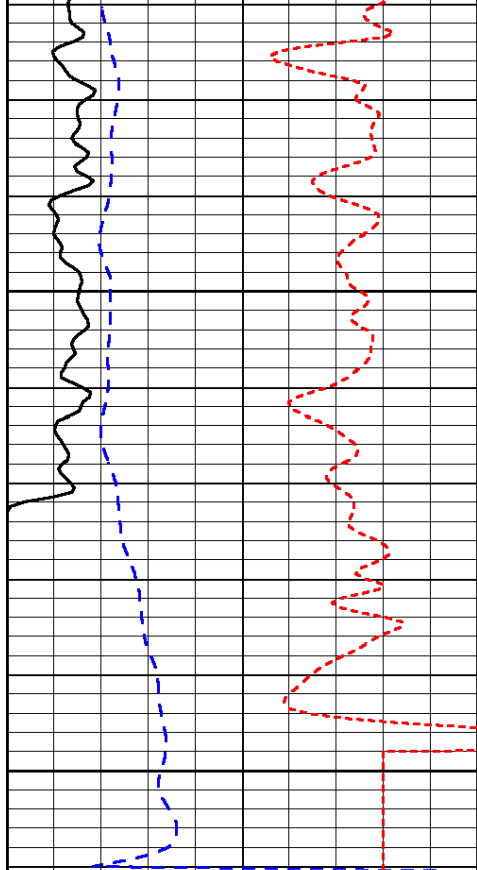
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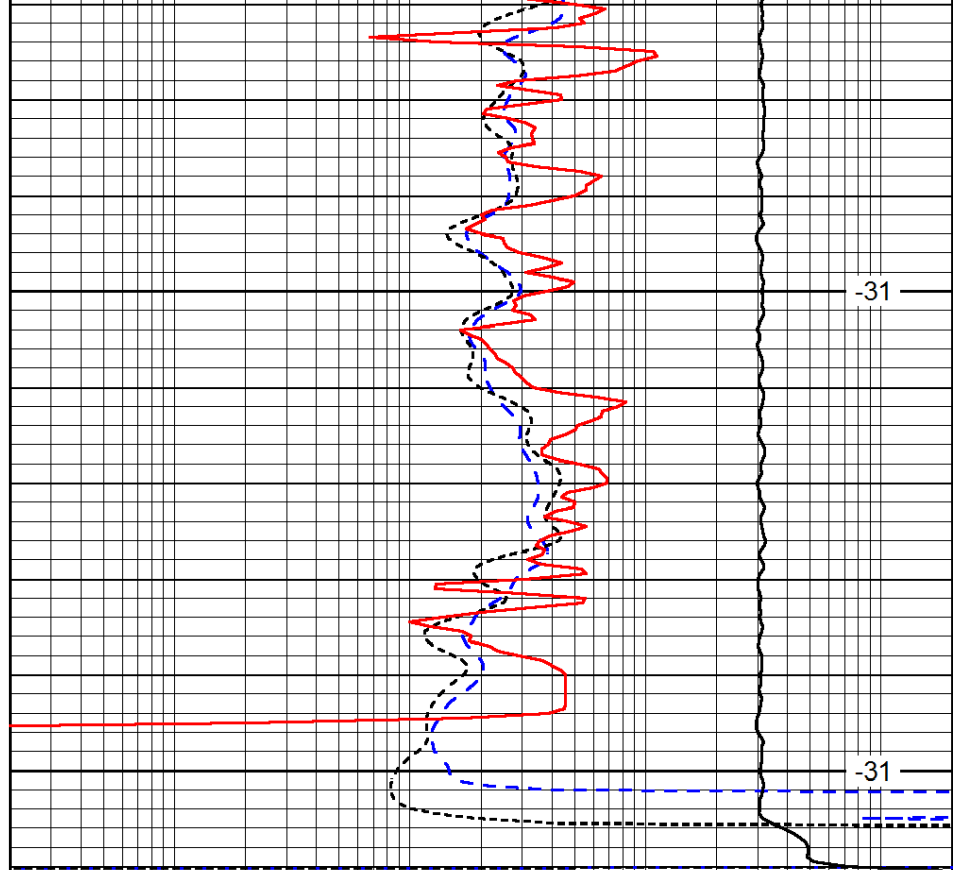
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0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

5450

5500



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

-31

-31

LSPD