



Dual Induction Log

Pioneer Energy Services

API No.	Company Murfin Drilling Company, Inc.		
	Well Burk Trust "C" #2-22		
	Field NA		
	County Rawlins	State	Kansas
15-153-20952-00-00	Location	2190' FSL & 1750' FEL	
	Sec: 22	Twp: 1 S	Rge: 36 W
Permanent Datum	Ground Level	Elevation 3208	
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing	Elevation 3213 D.F. 3208 G.L. 3208	
Date	10/16/2013		
Run Number	One		
Depth Driller	4510		
Depth Logger	4510		
Bottom Logged Interval	4509		
Top Log Interval	0		
Casing Driller	8.625 @ 218		
Casing Logger	216		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	800		
Density / Viscosity	9.3 61		
pH / Fluid Loss	10.0 8.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.70 @ 75		
Rmf @ Meas. Temp	0.52 @ 75		
Rmc @ Meas. Temp	0.94 @ 75		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.43 @ 123		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	123		
Equipment Number	91		
Location	Hays		
Recorded By	Y. Ruiz		
Witnessed By	Robert Hendrix		

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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.

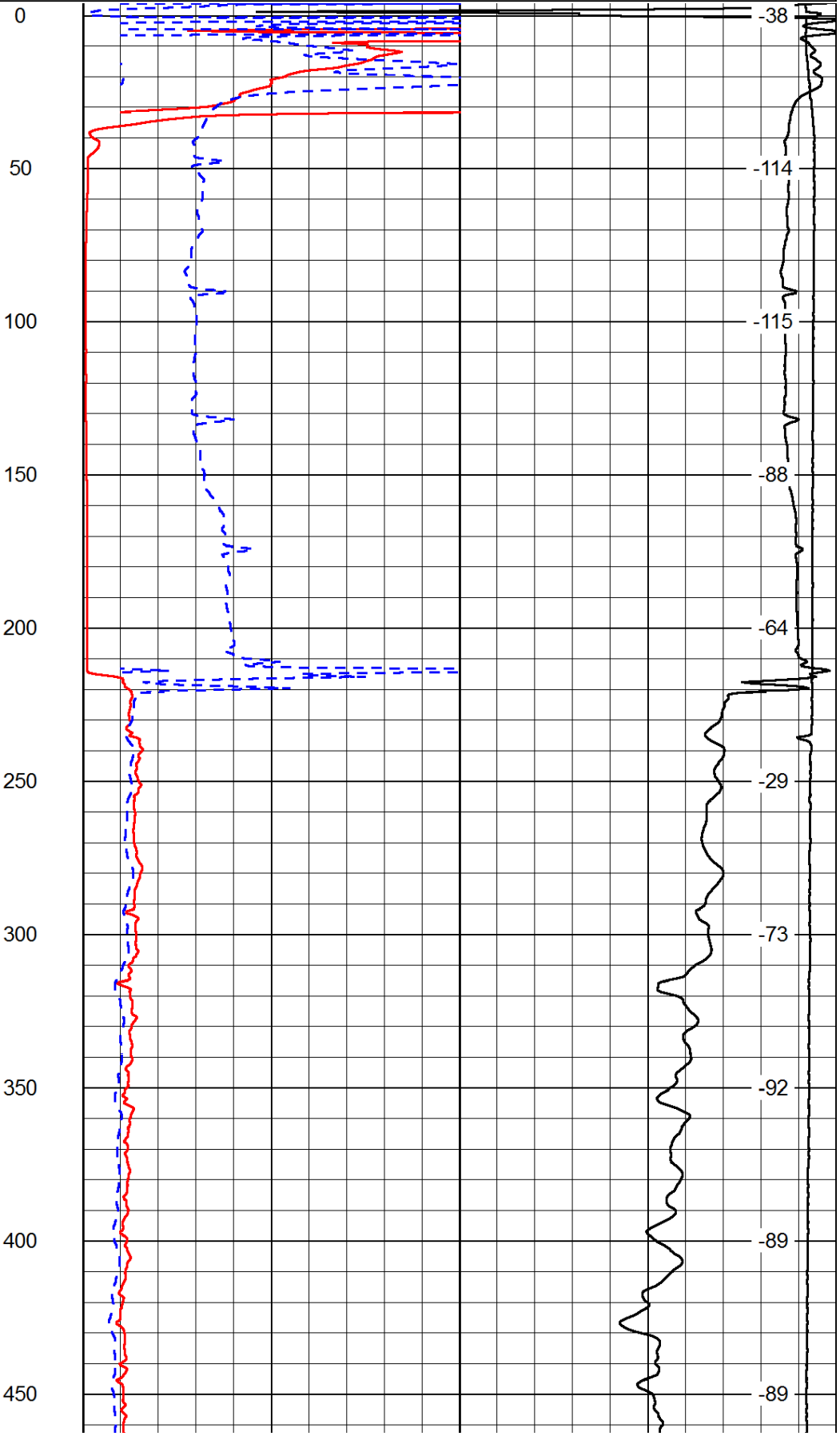
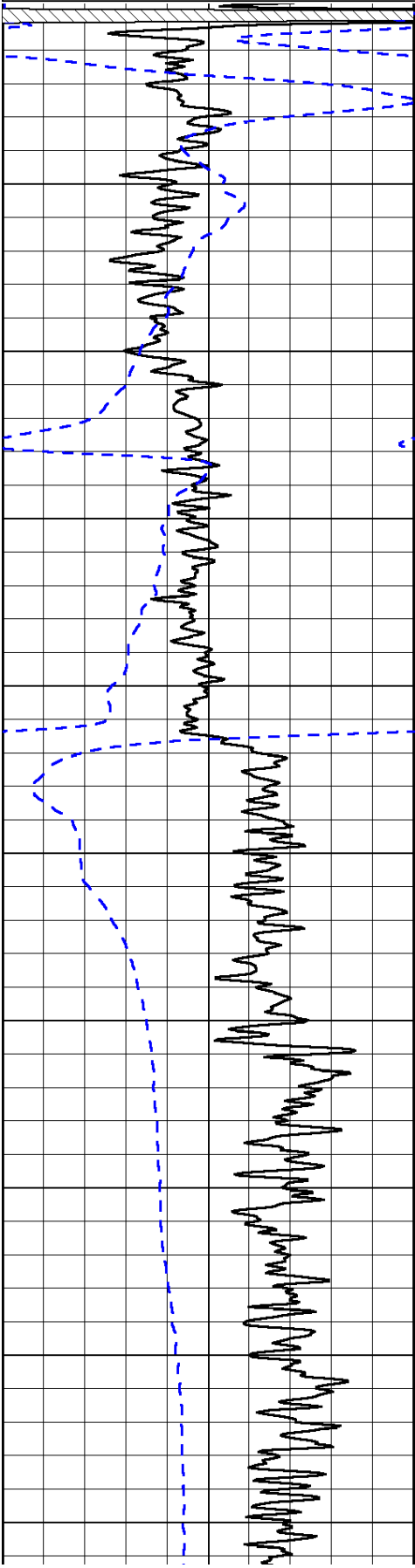
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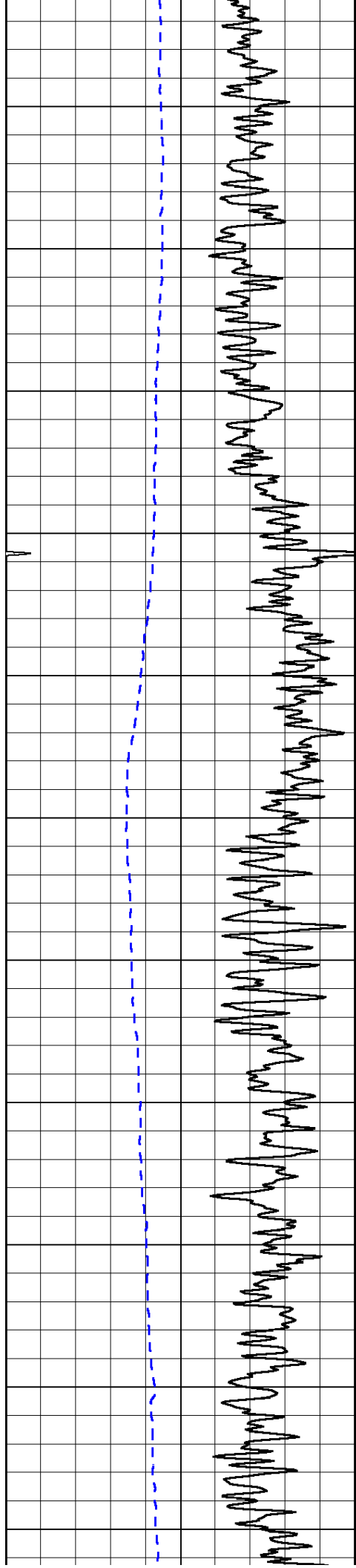
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Beardsley,
North to AA Rd, 5 1/2 West,
North into

Database File: c:\warrior\data\murfin_burk trust 'c' #2-22\murfin_101613hd.db
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Presentation Format: dil2in
Dataset Creation: Wed Oct 16 13:05:11 2013
Charted by: Depth in Feet scaled 1:600

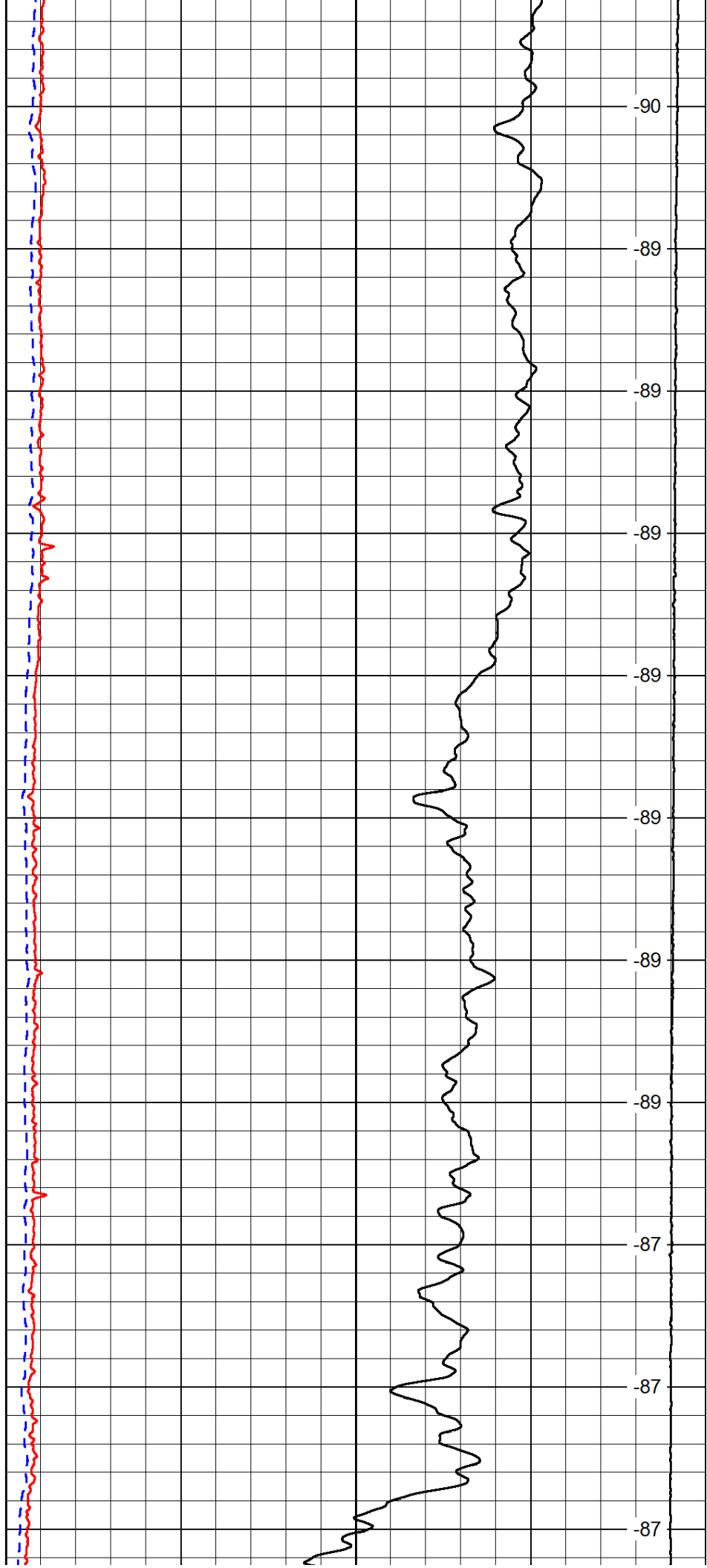
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-200	SP (mV)	0

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

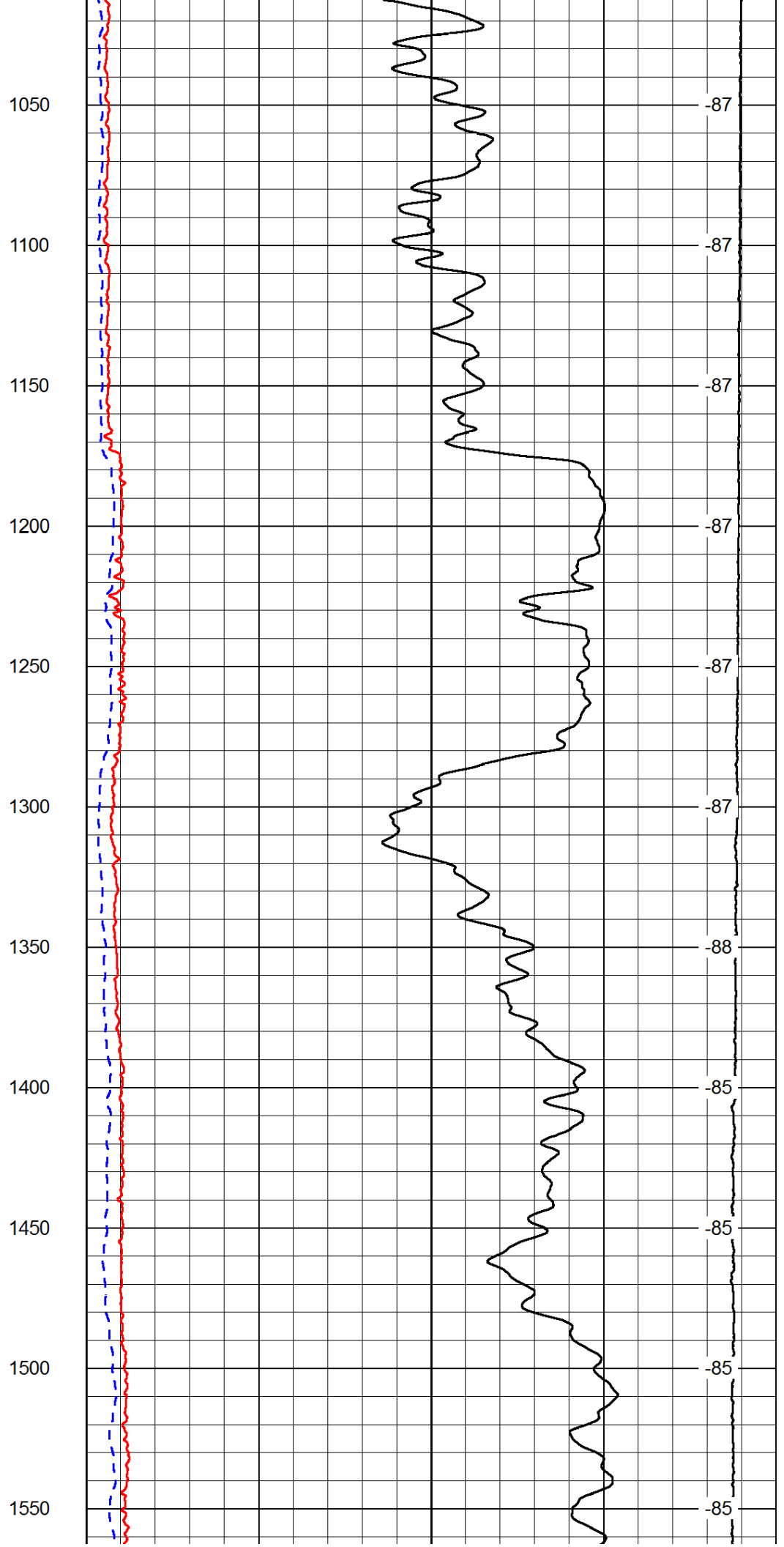
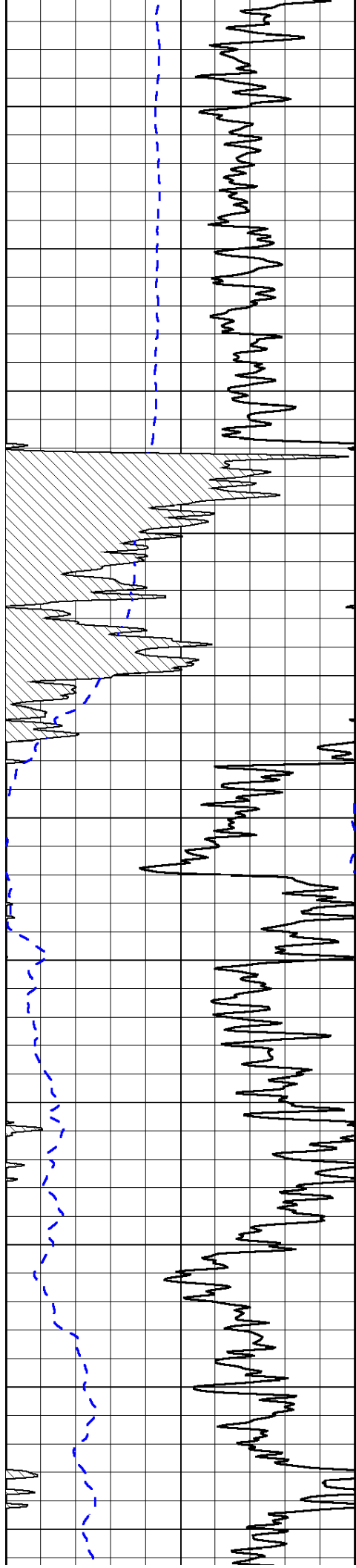


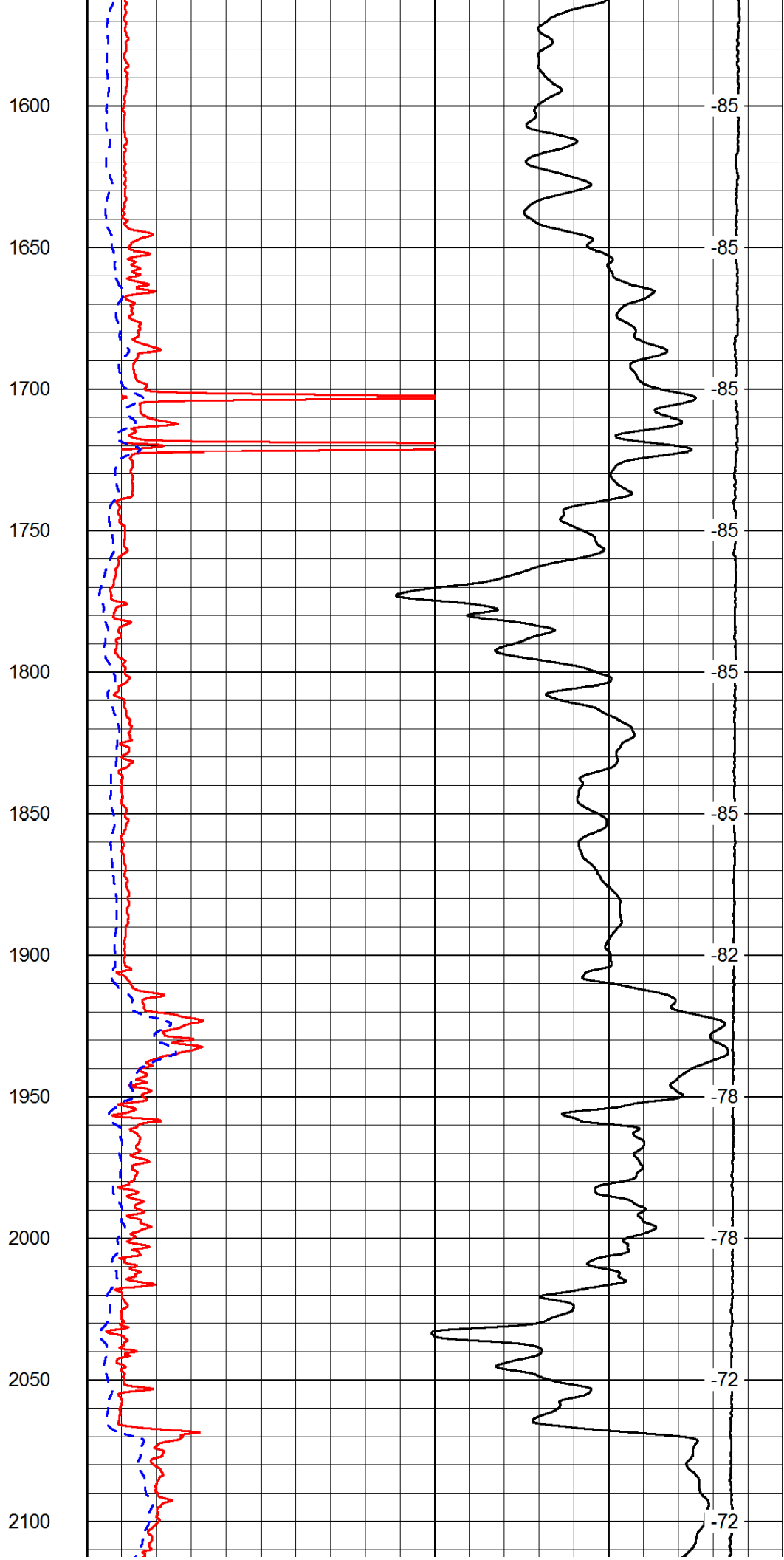
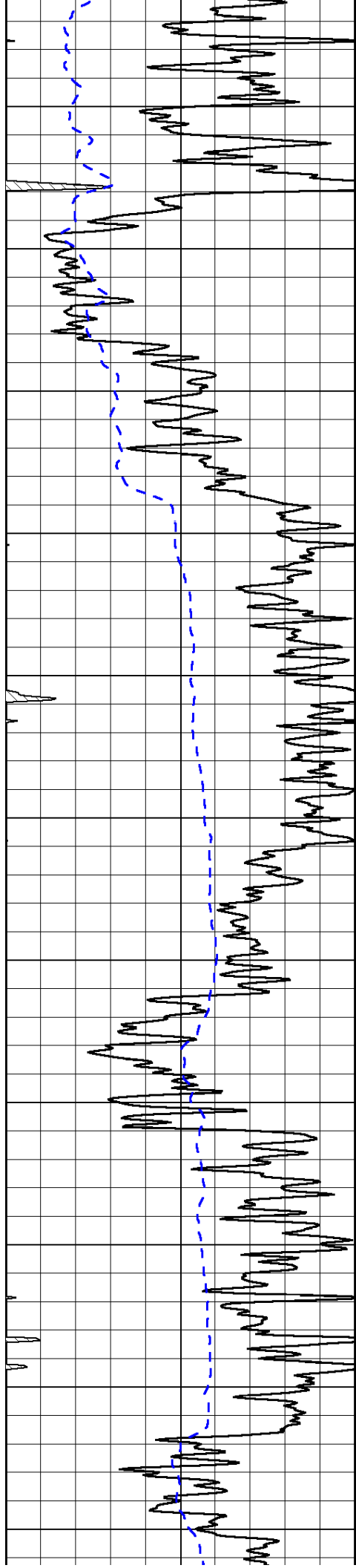


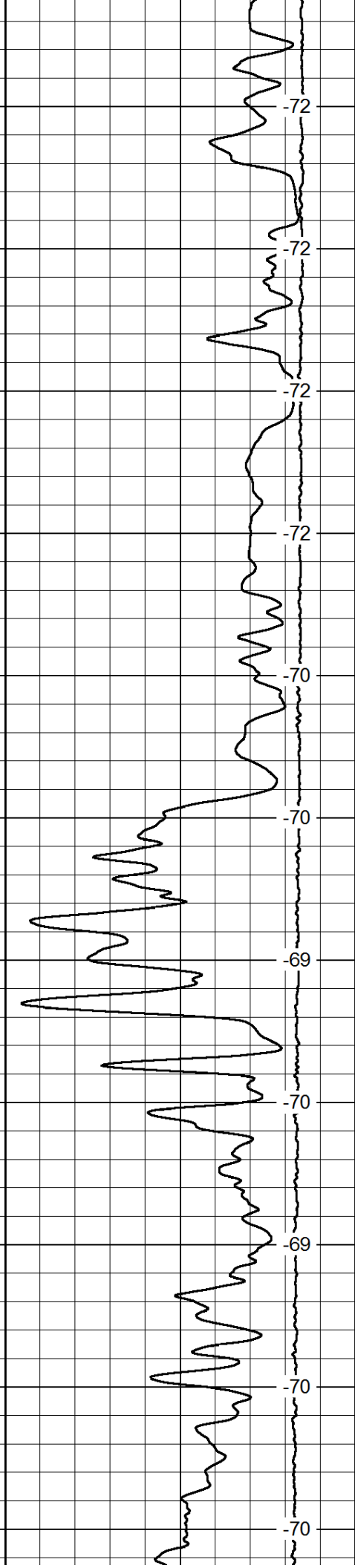
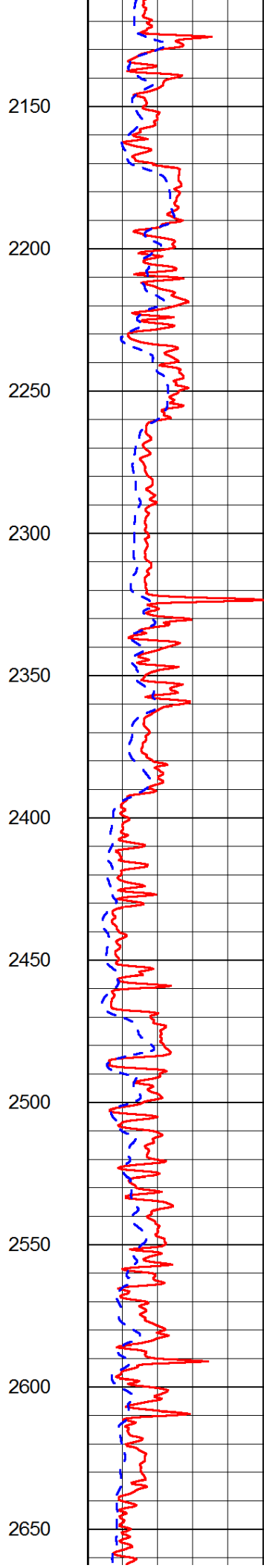
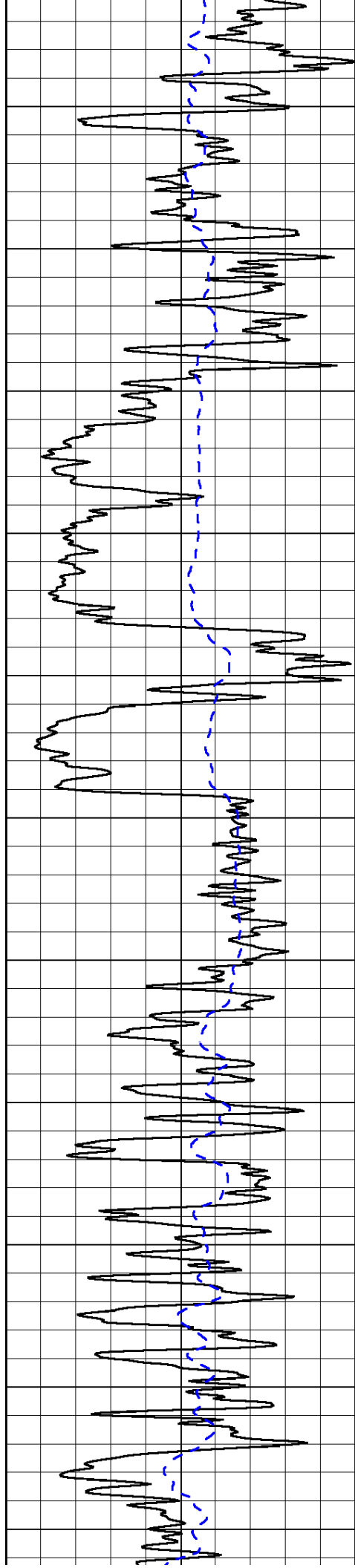
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750
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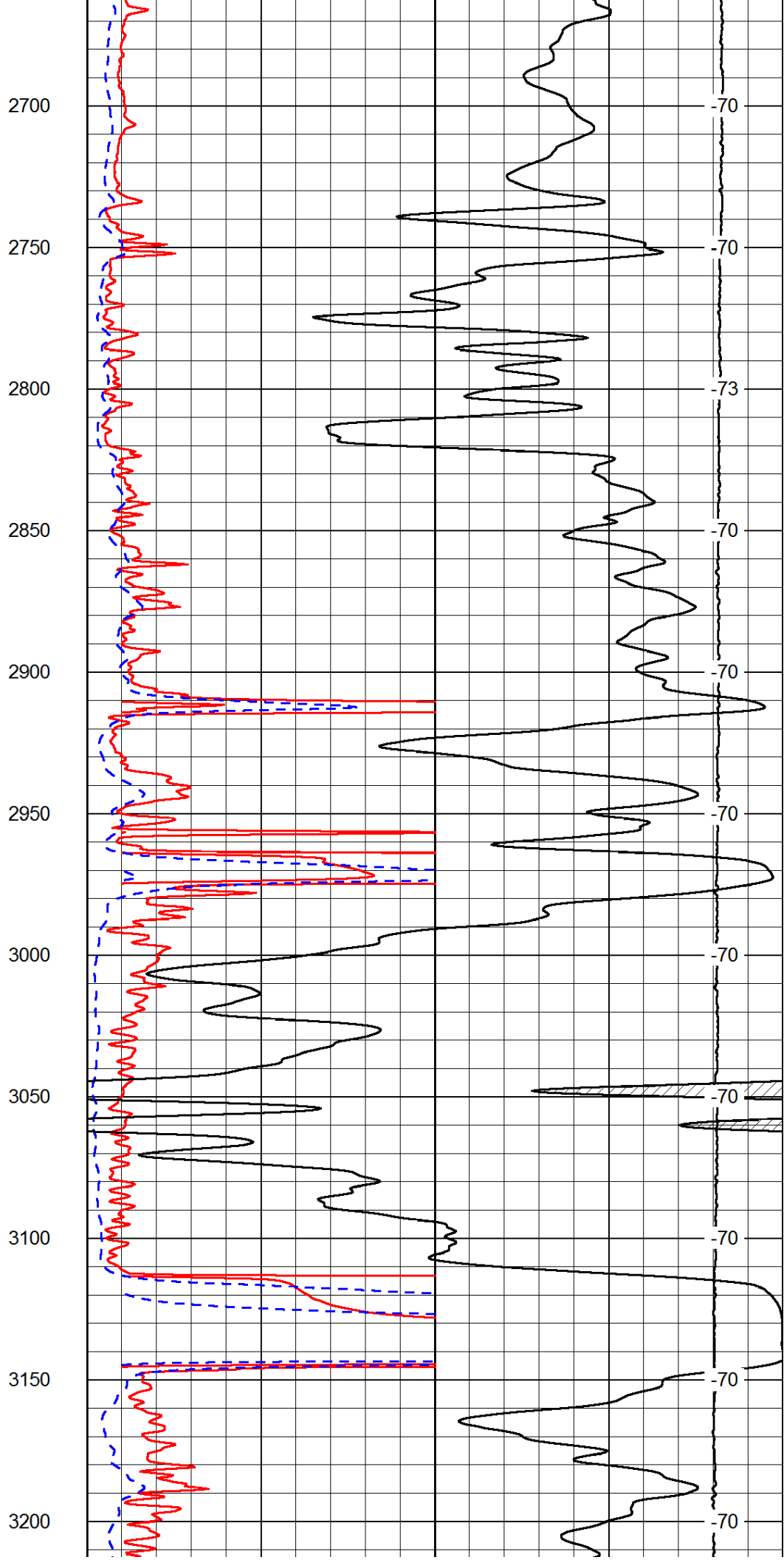
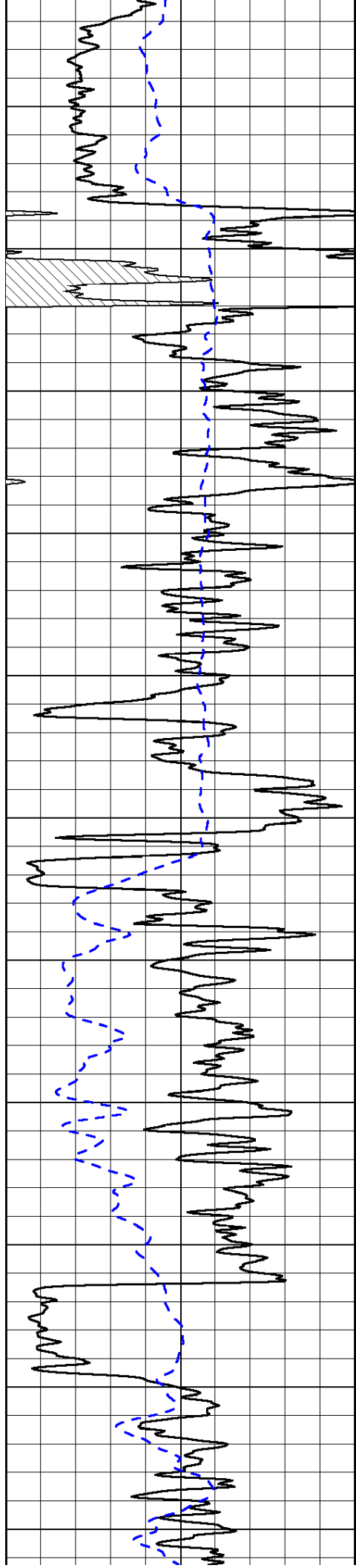


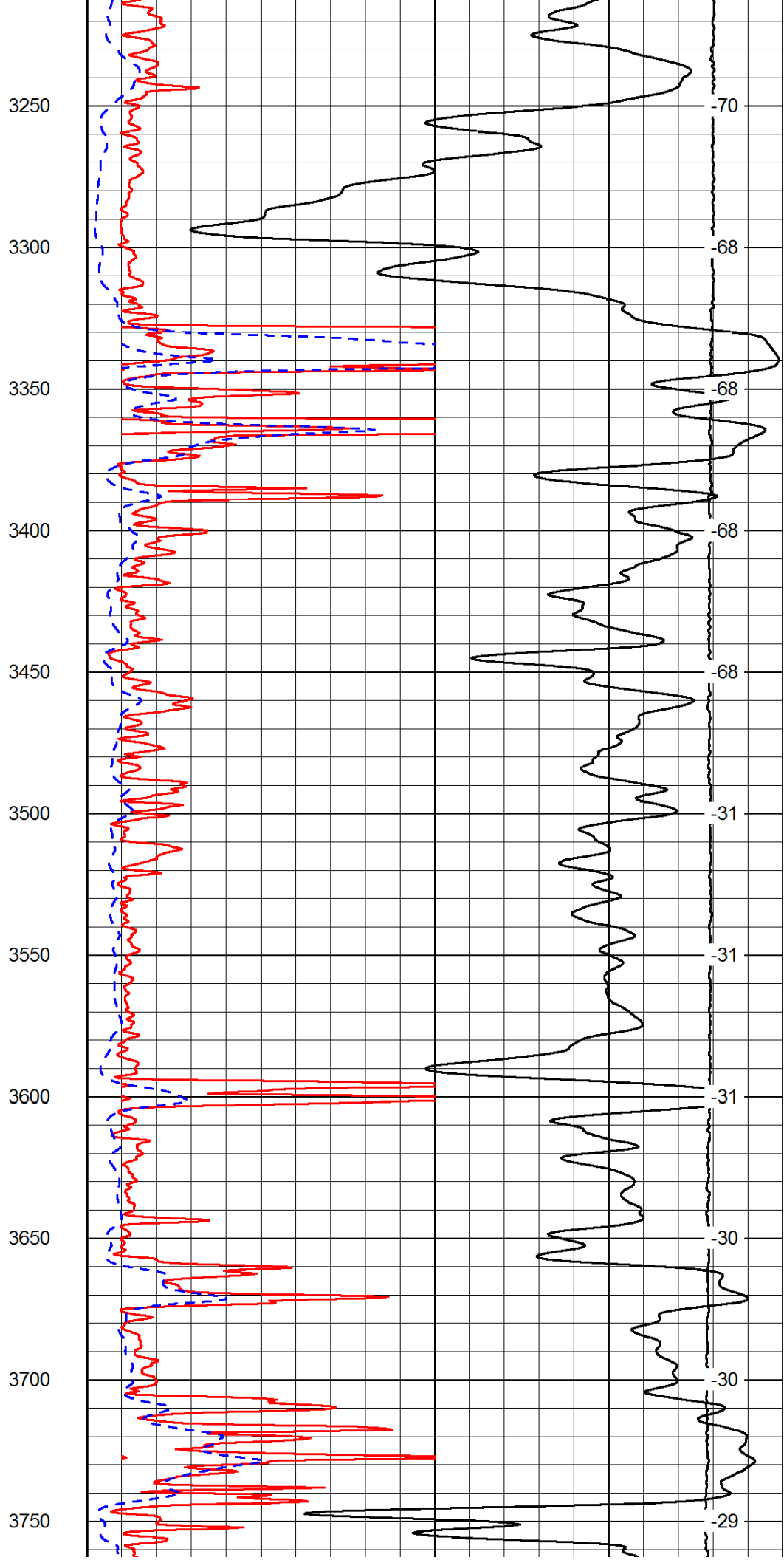
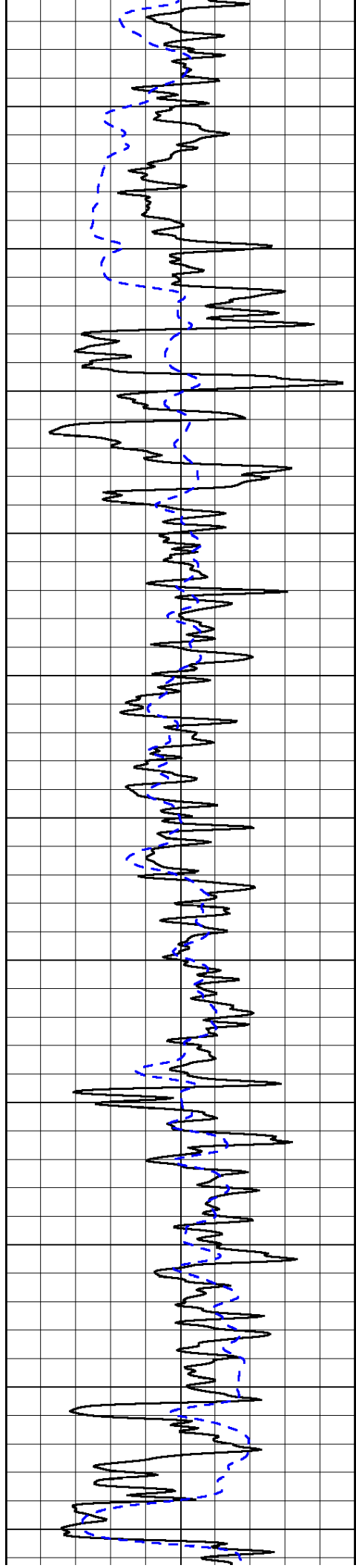
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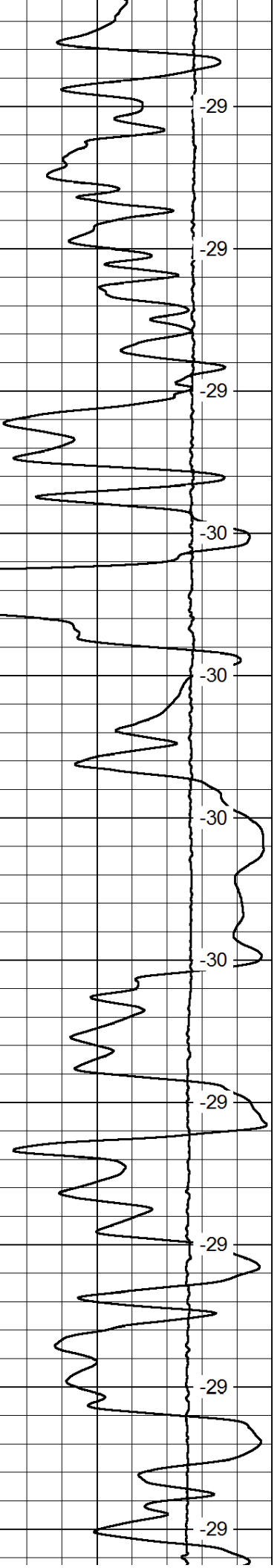
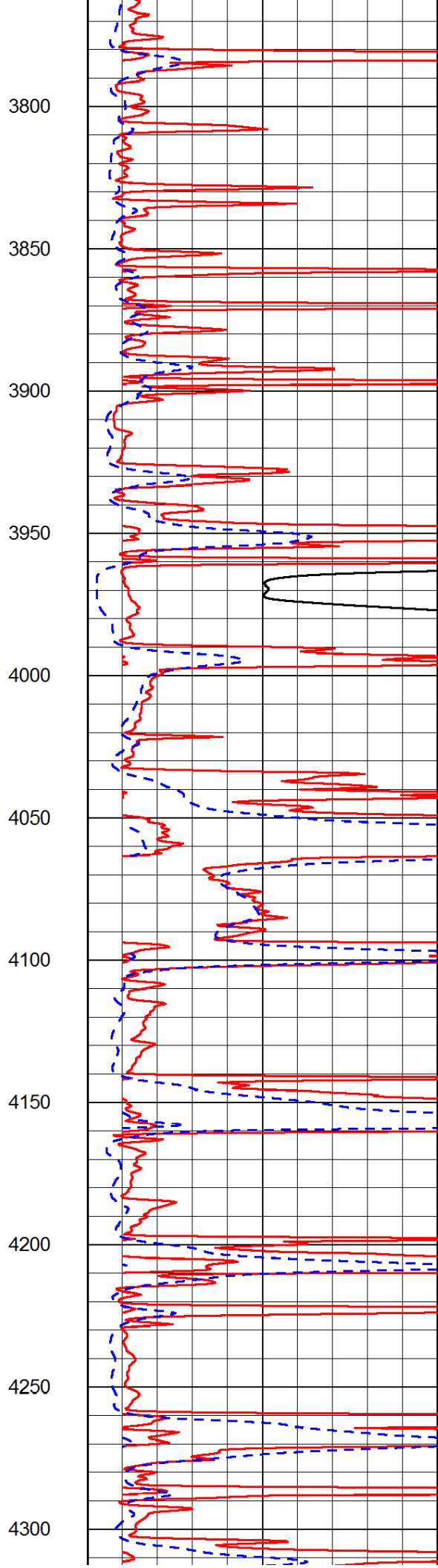
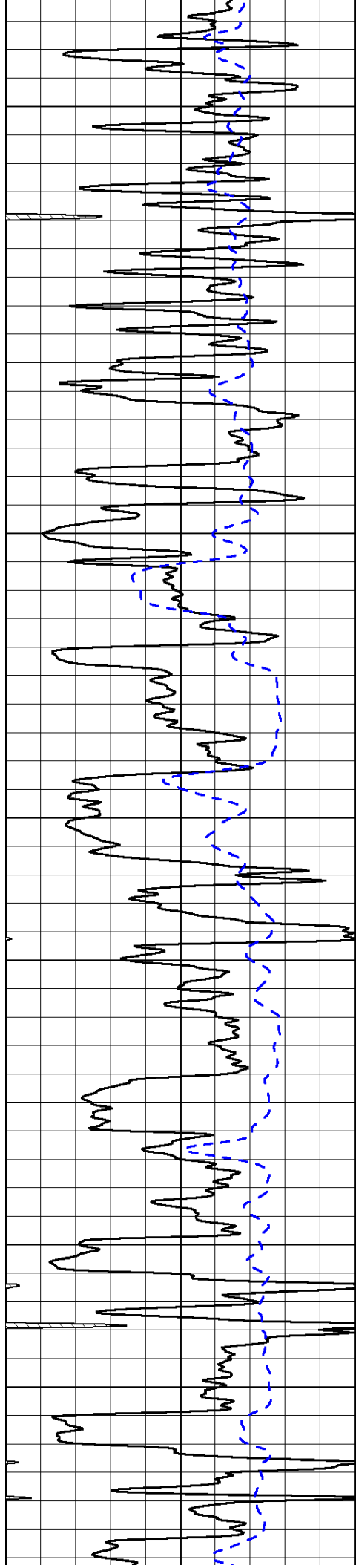


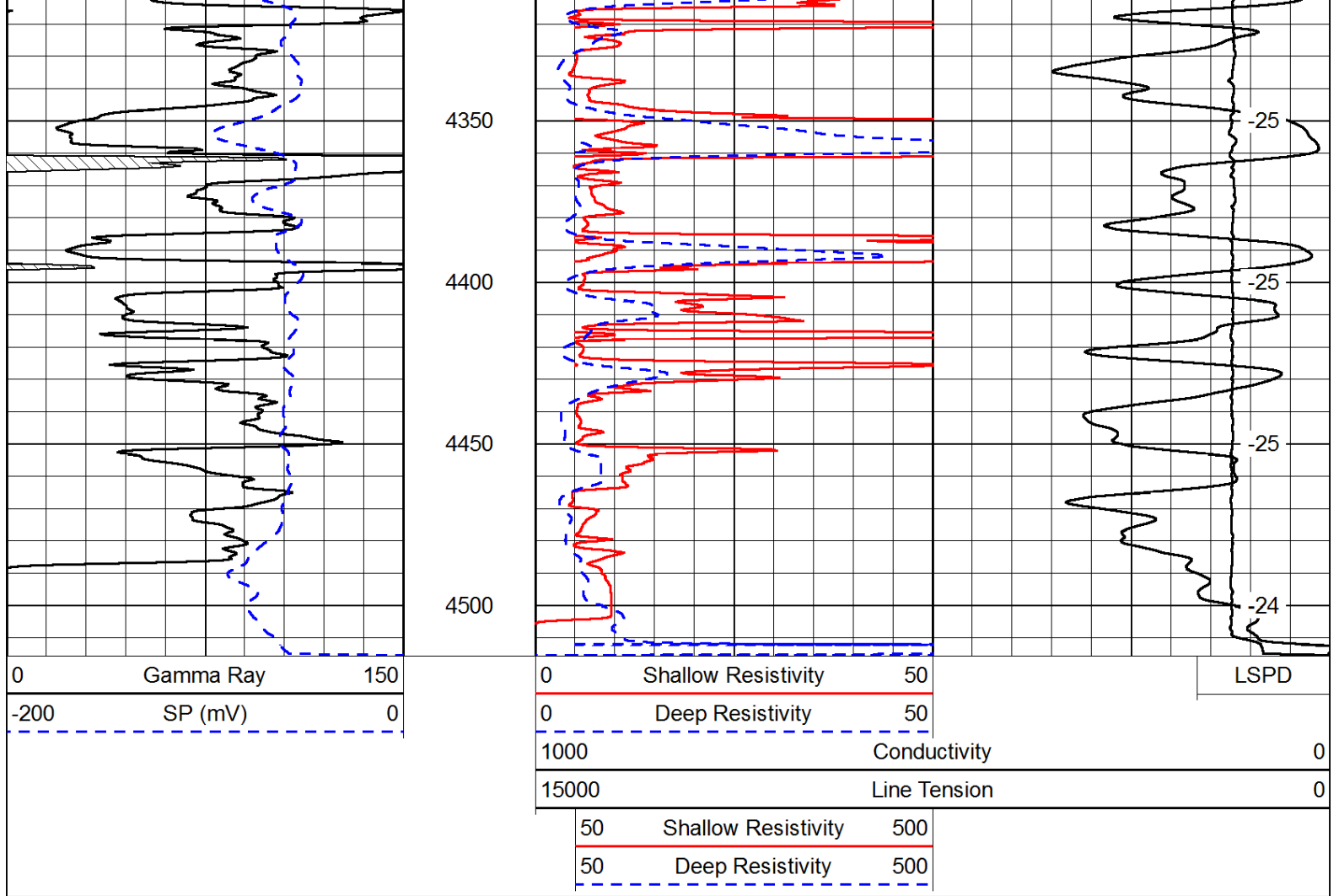




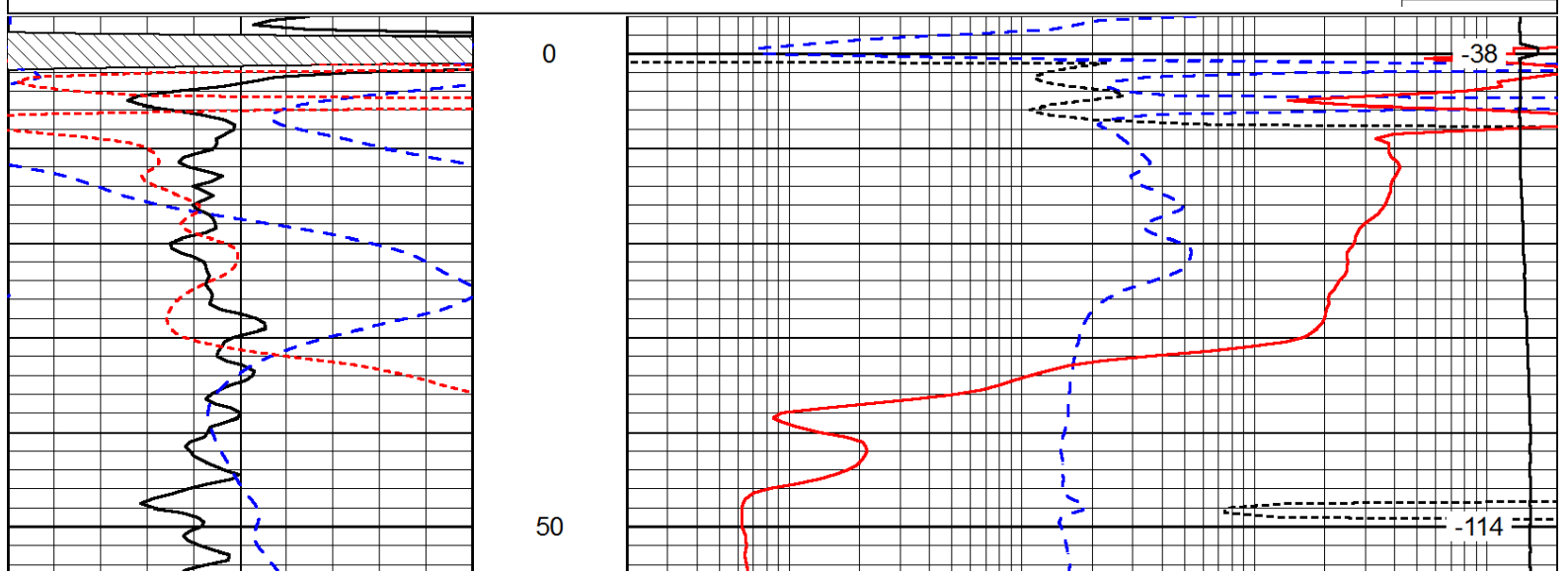
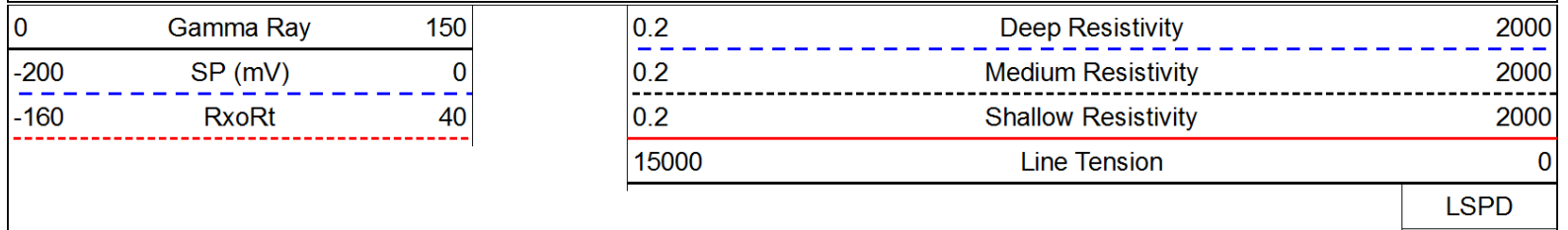


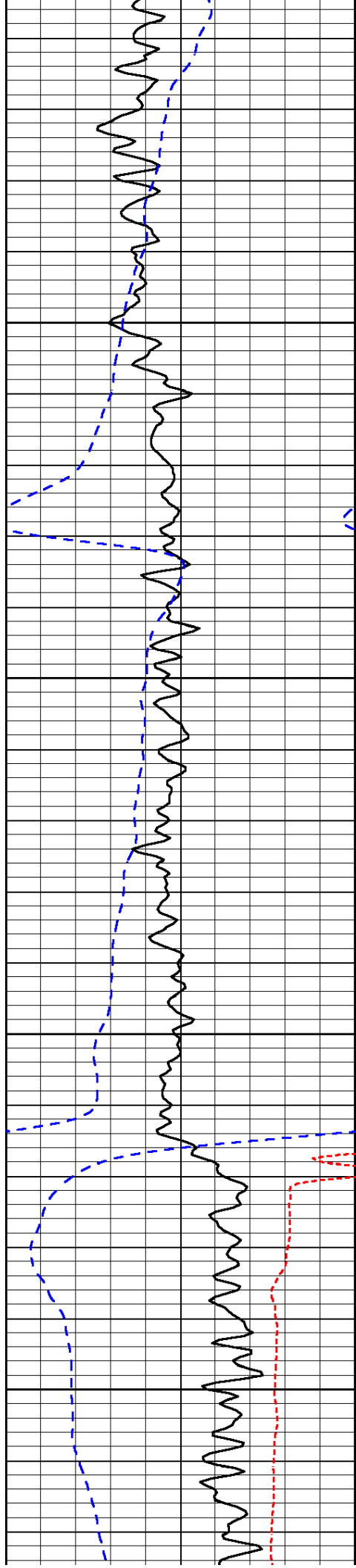






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 Presentation Format: dil
 Dataset Creation: Wed Oct 16 13:05:11 2013
 Charted by: Depth in Feet scaled 1:240



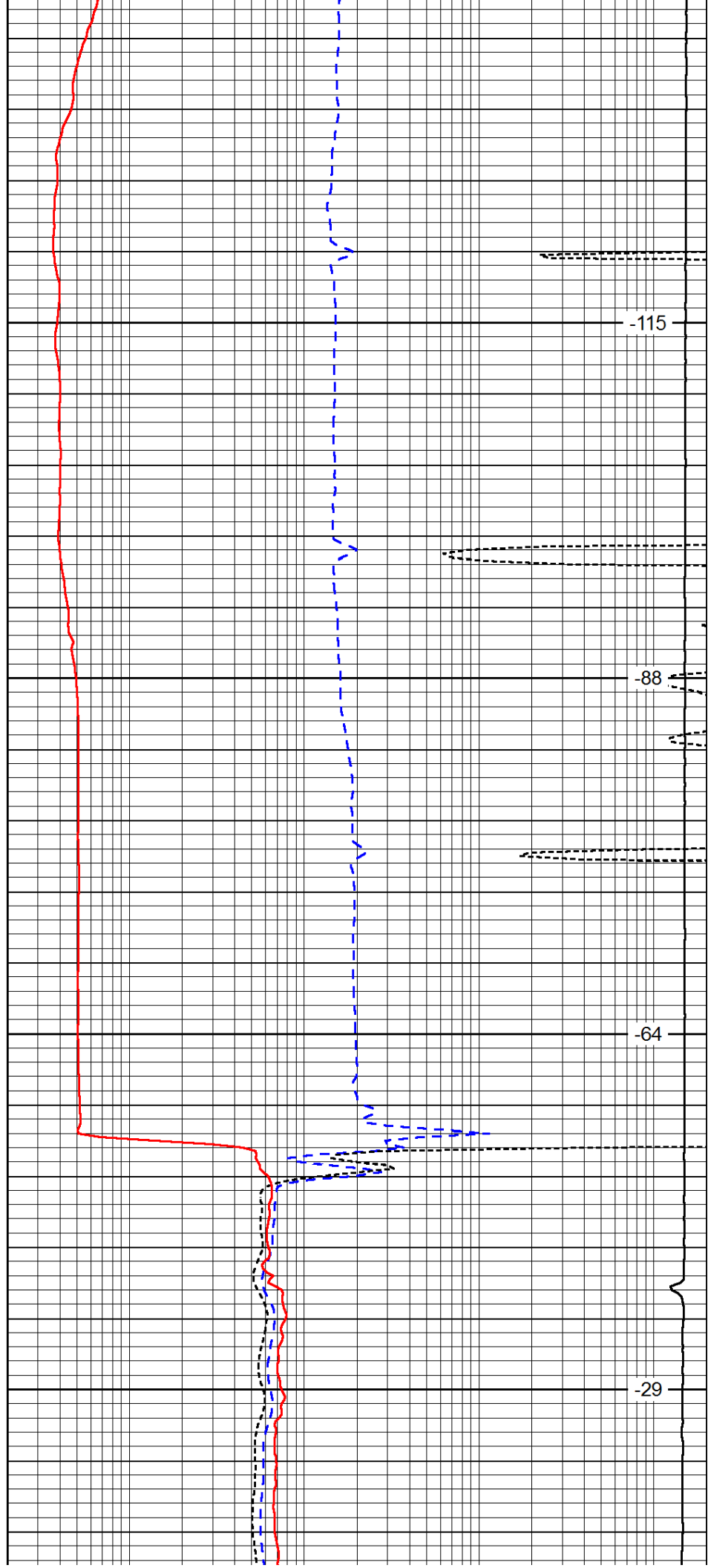


100

150

200

250

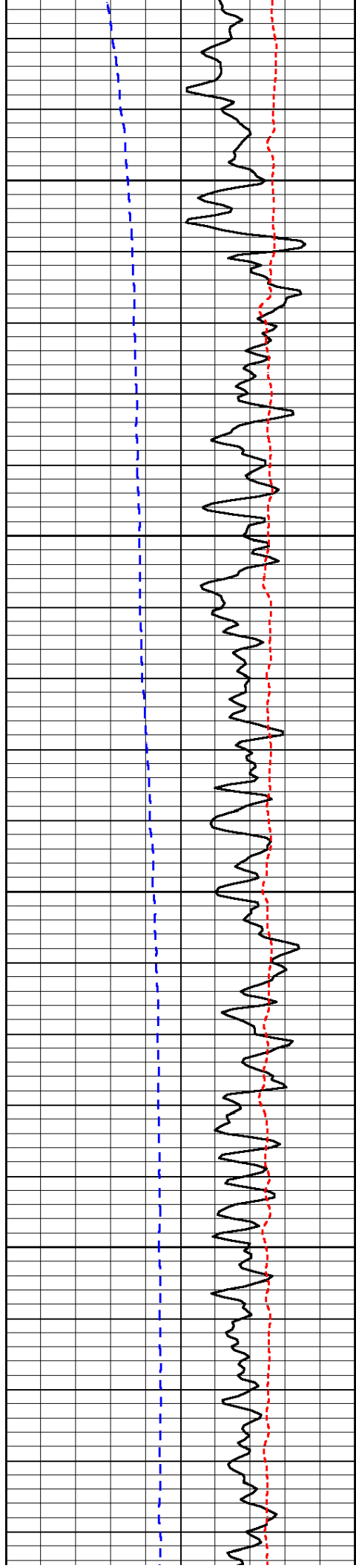


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-64

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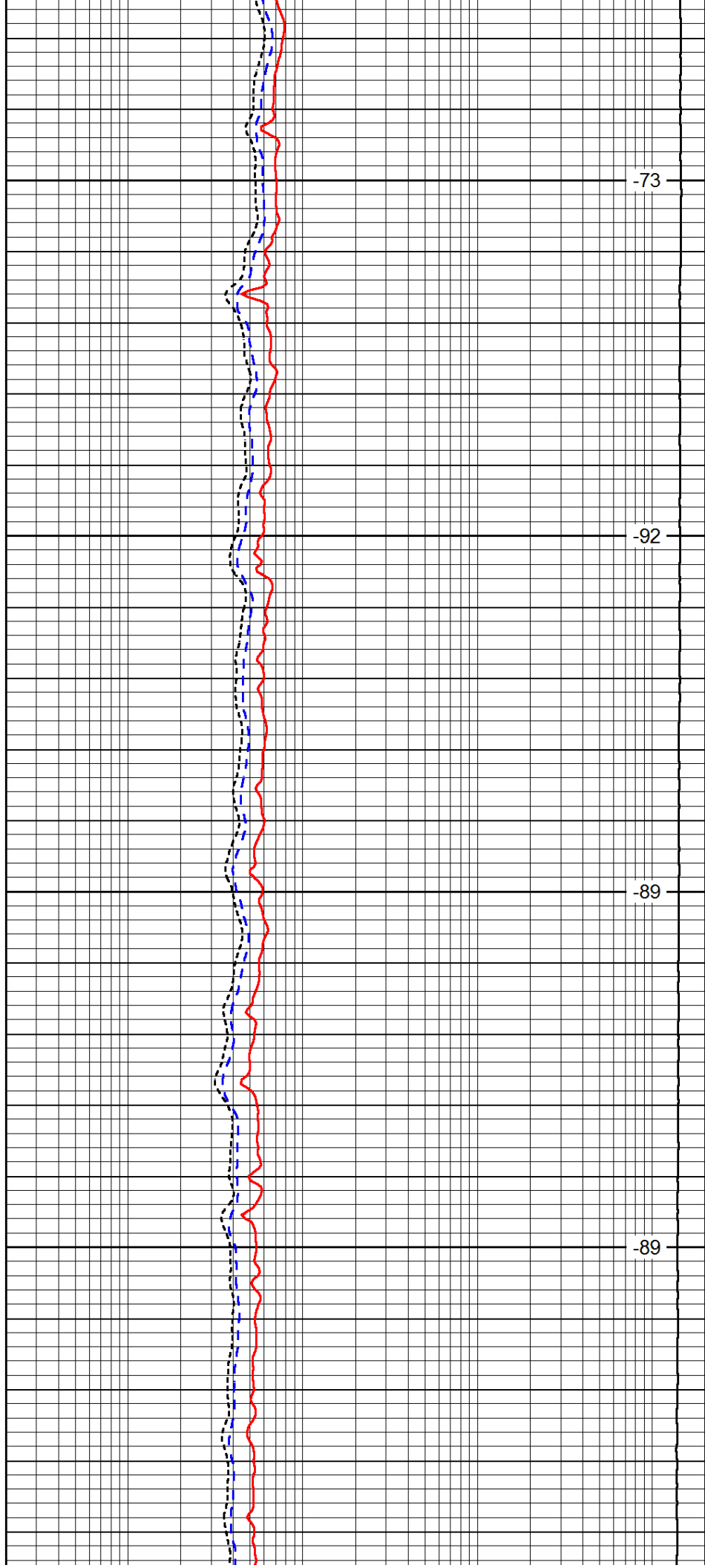


300

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400

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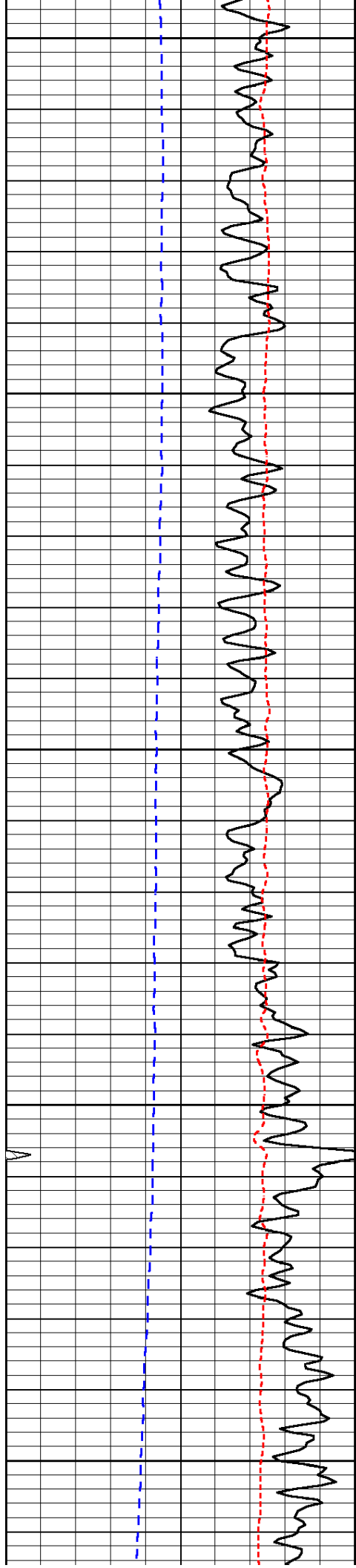


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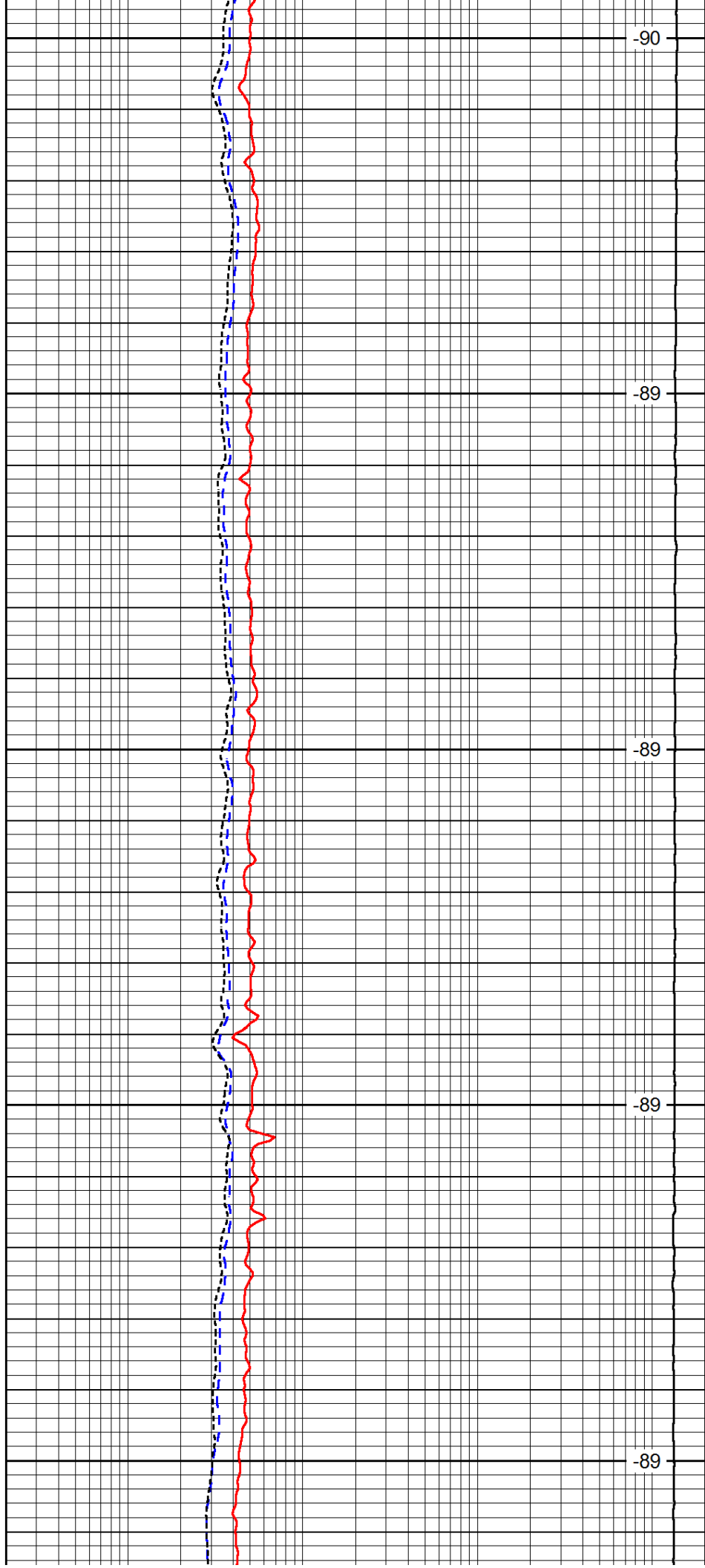
500

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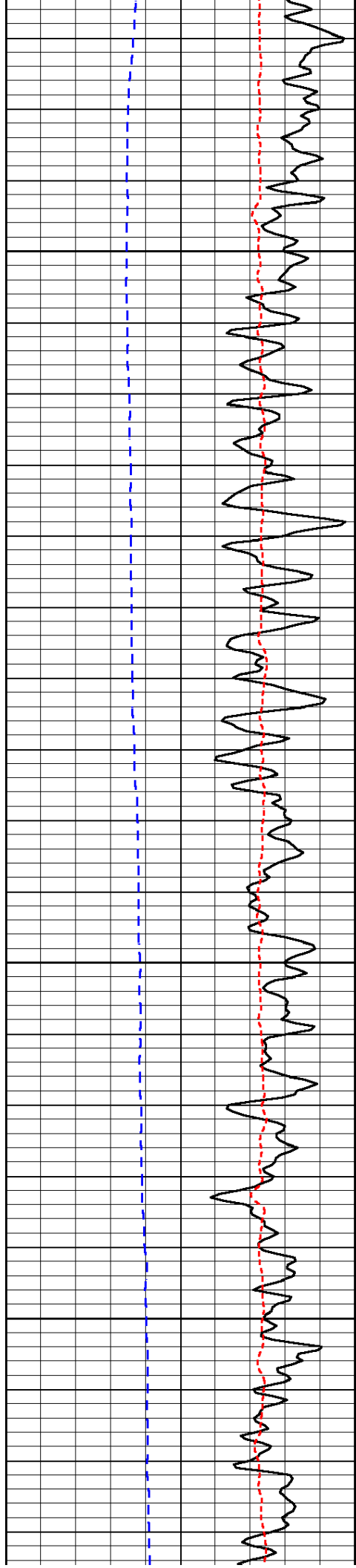
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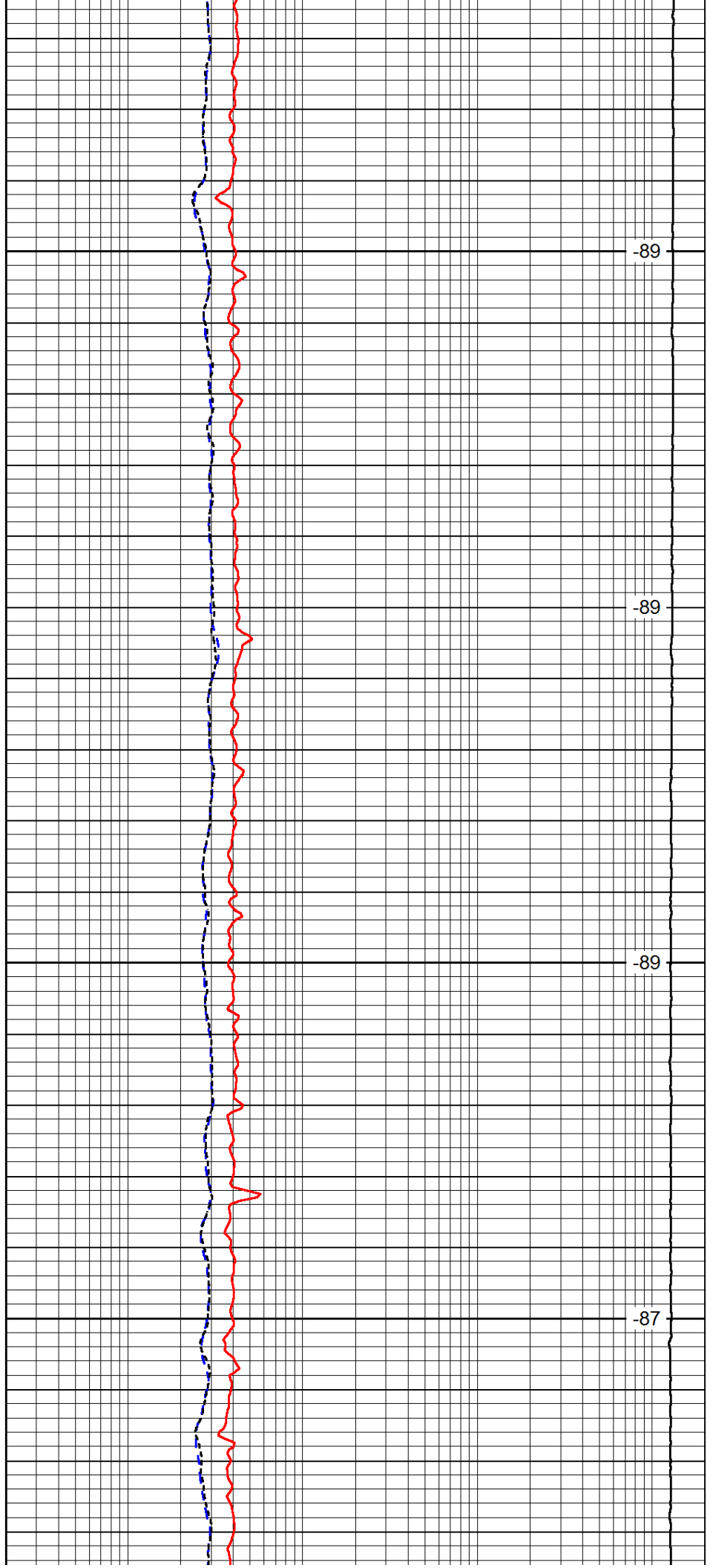


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900

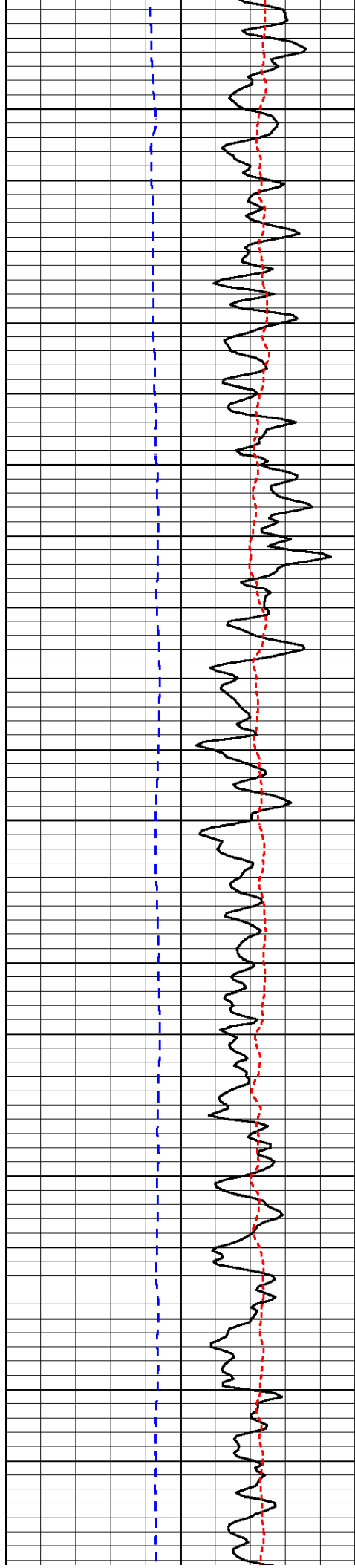


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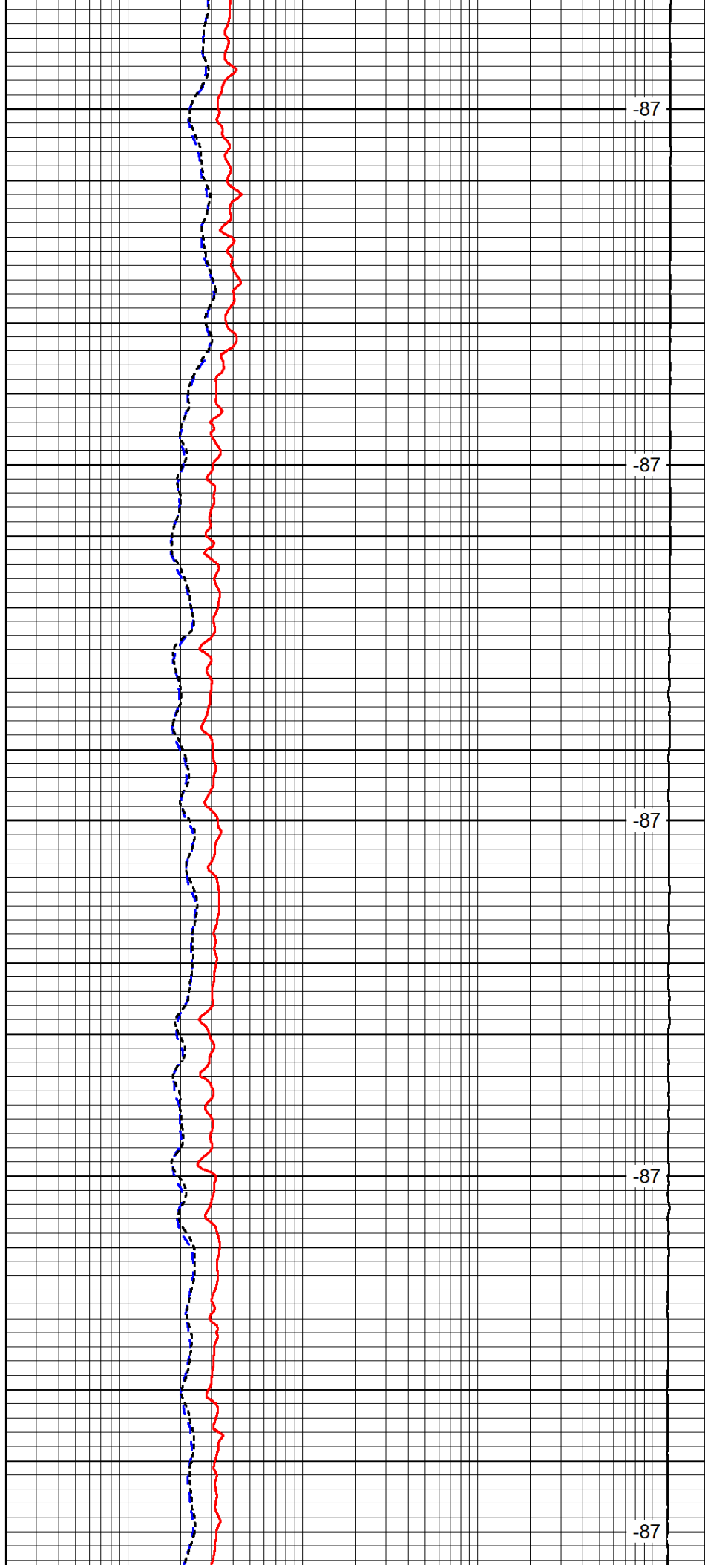
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1000

1050

1100

1150



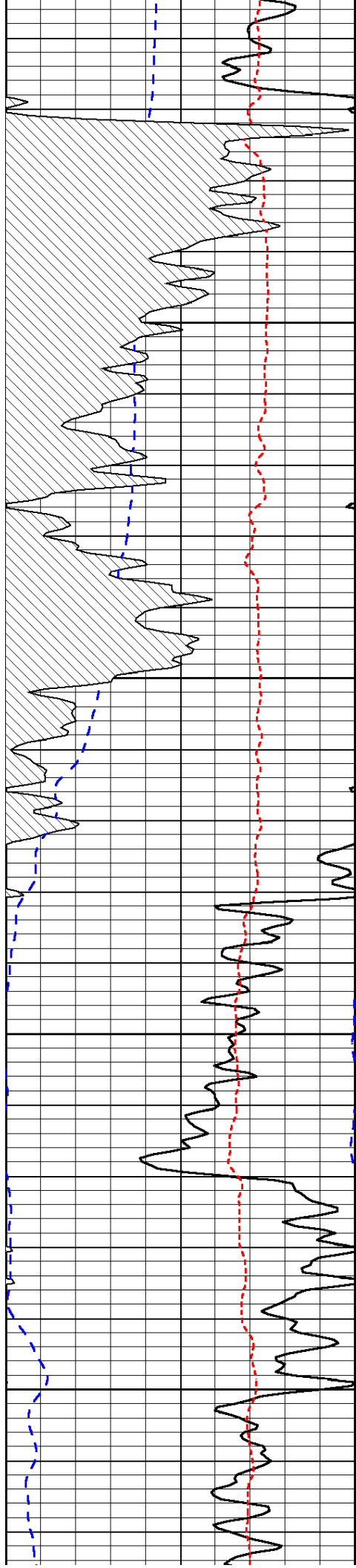
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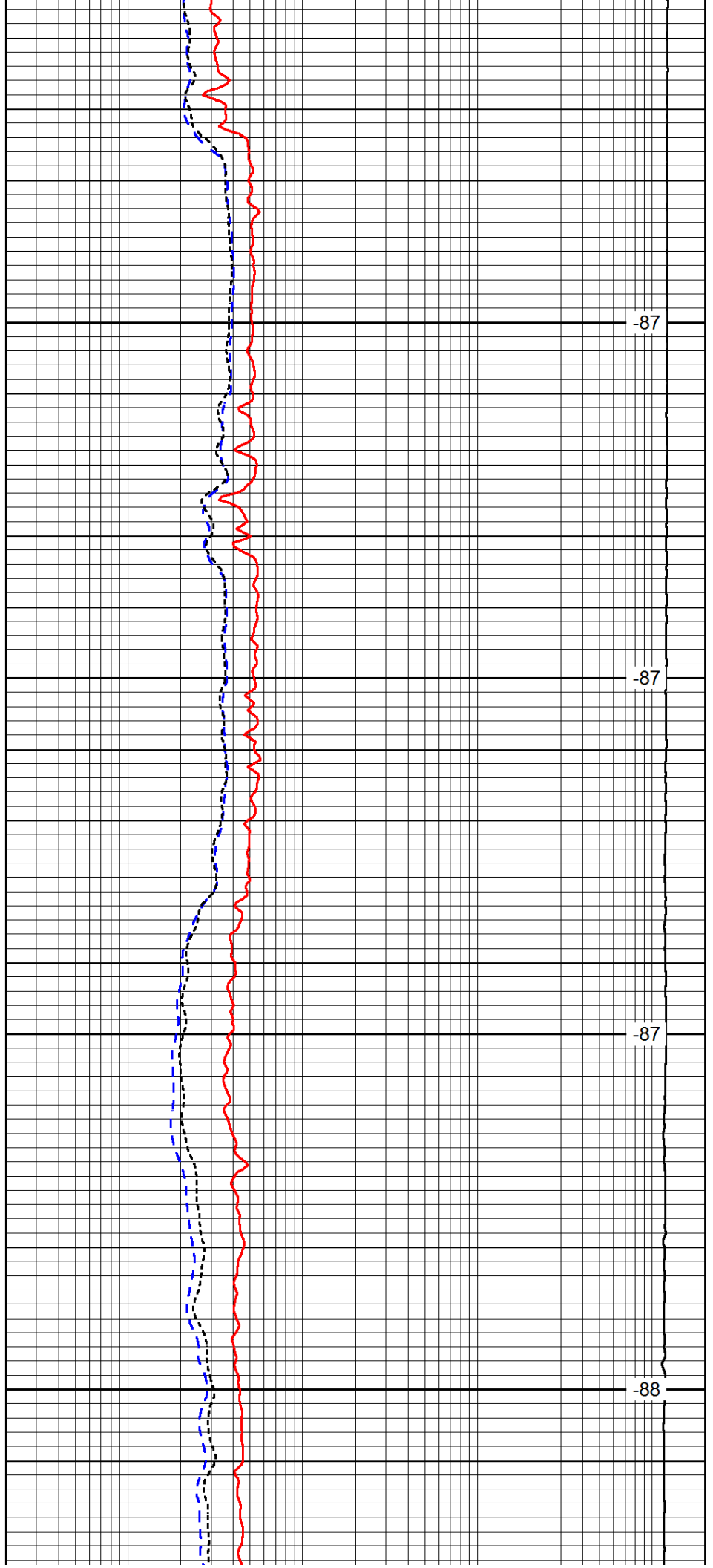


1200

1250

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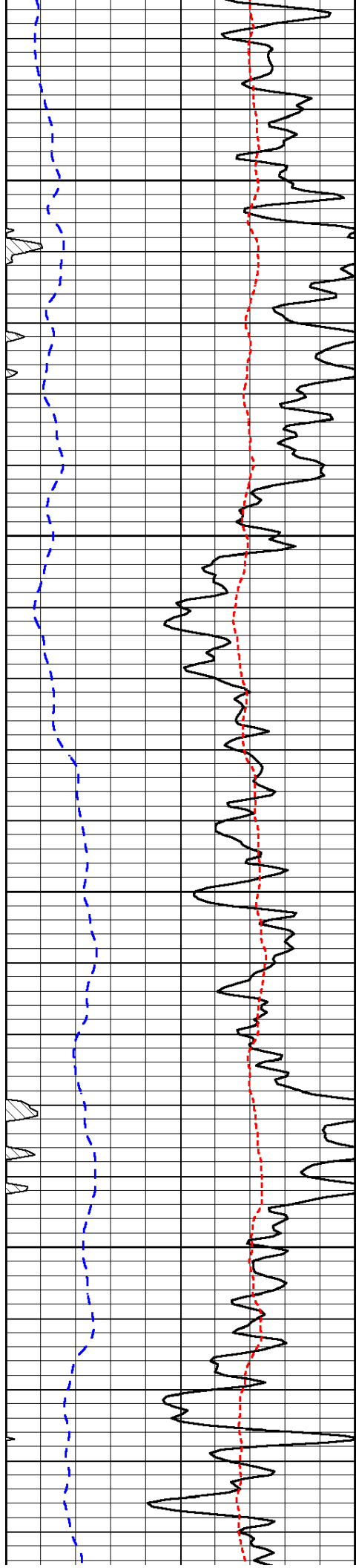


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1400

1450

1500

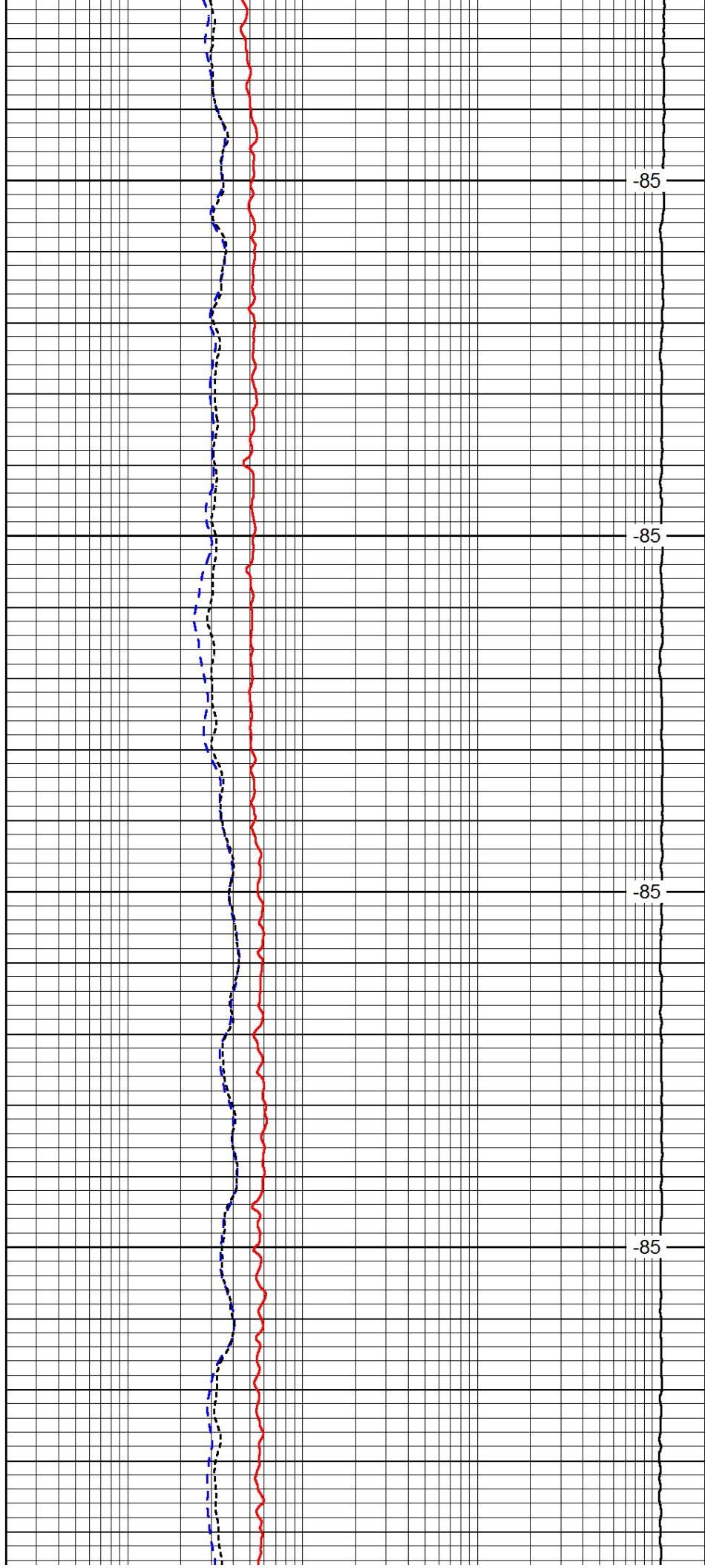
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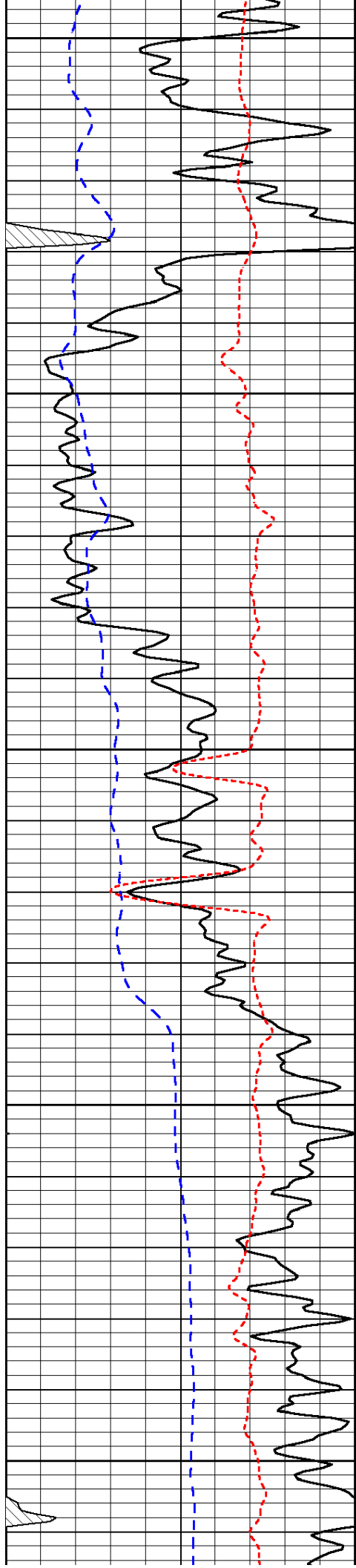
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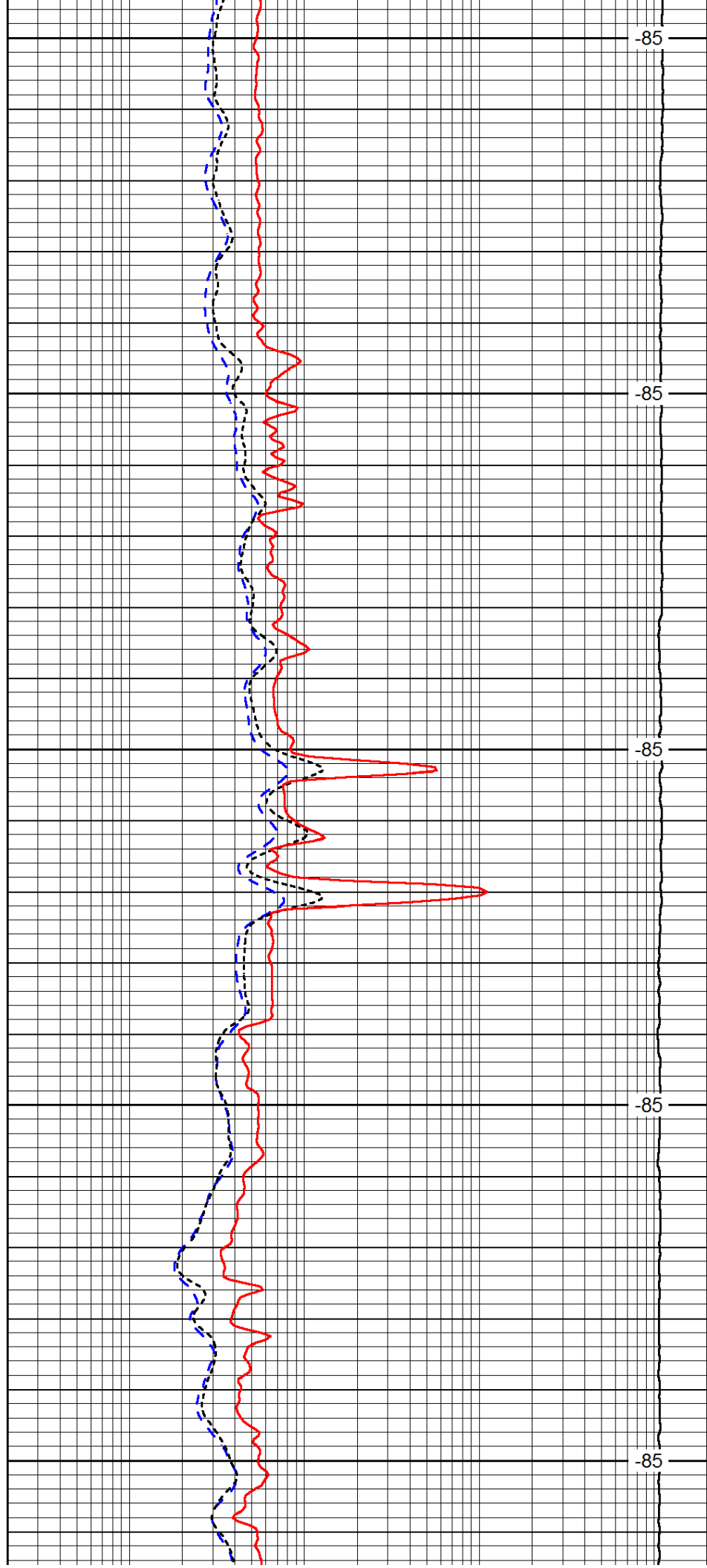
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1650

1700

1750

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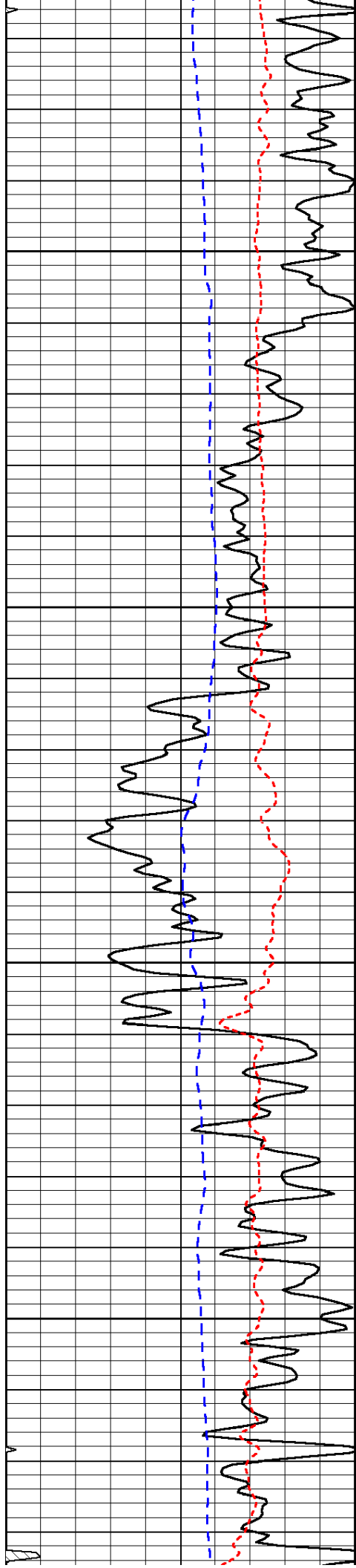
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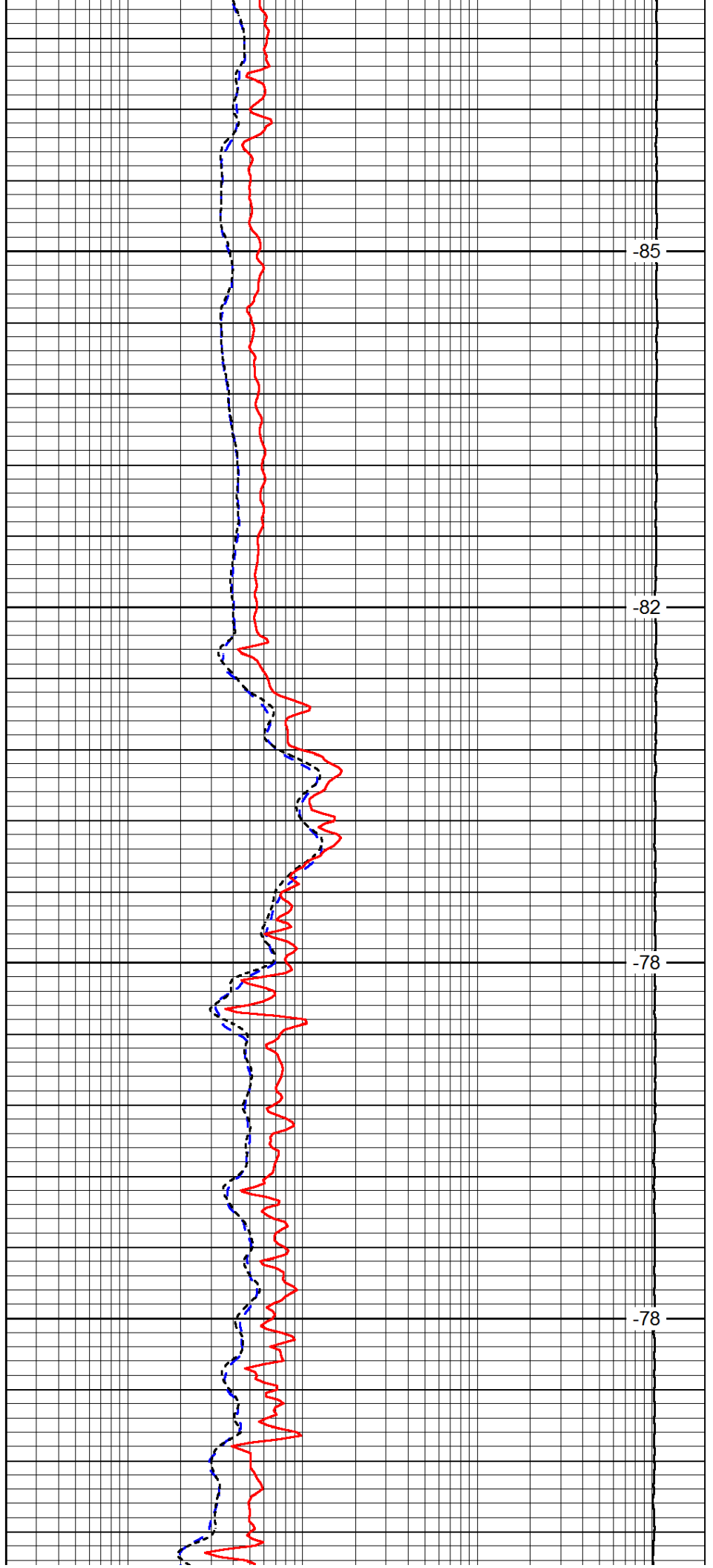


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1900

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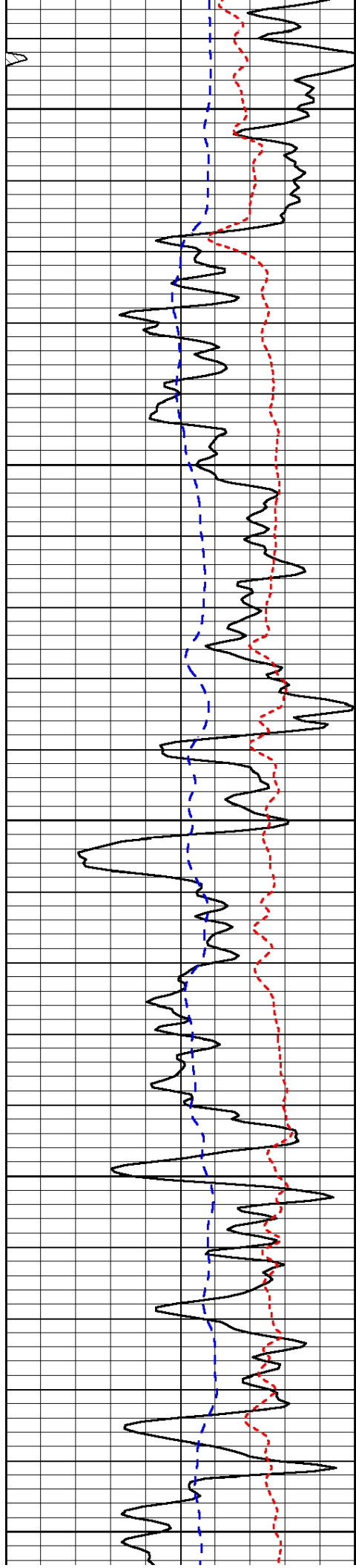


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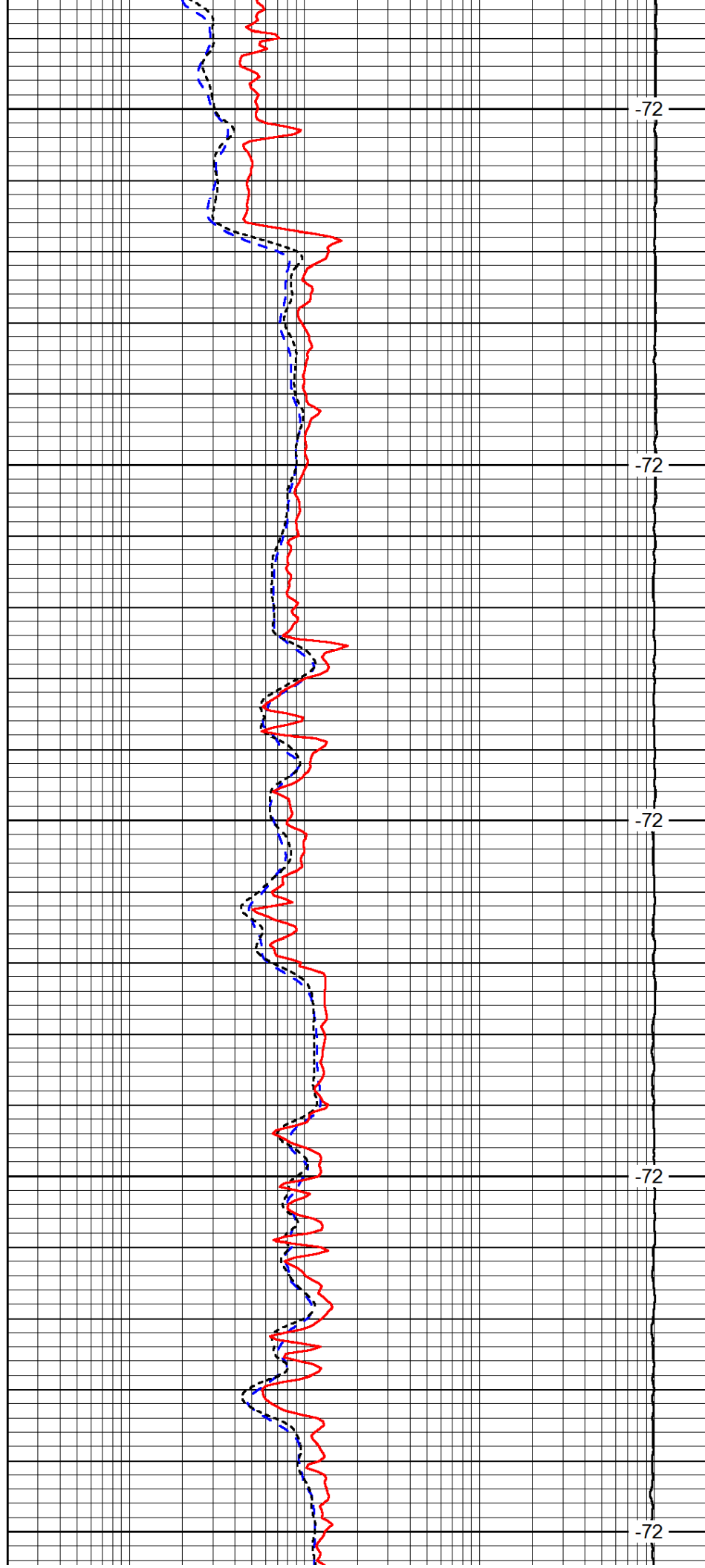
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2100

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2200

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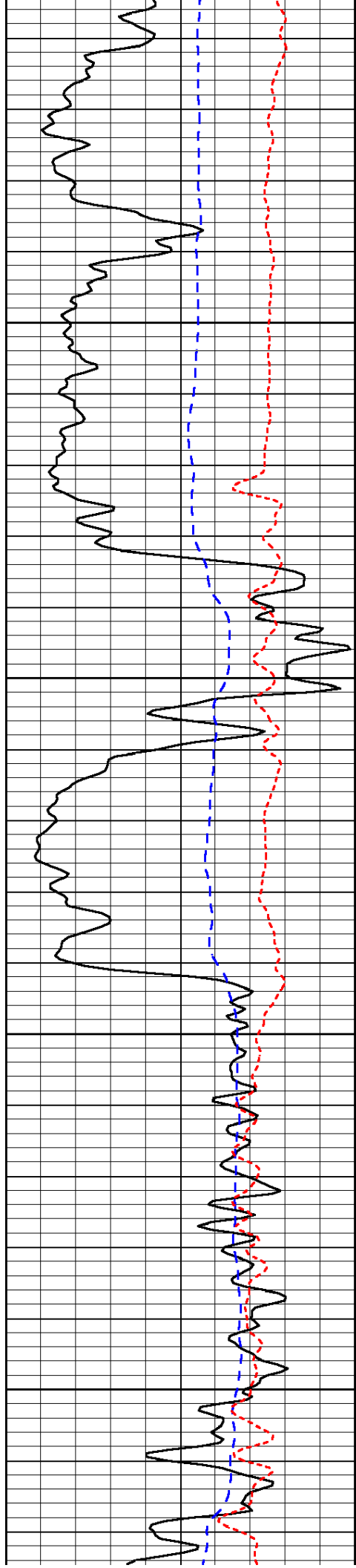
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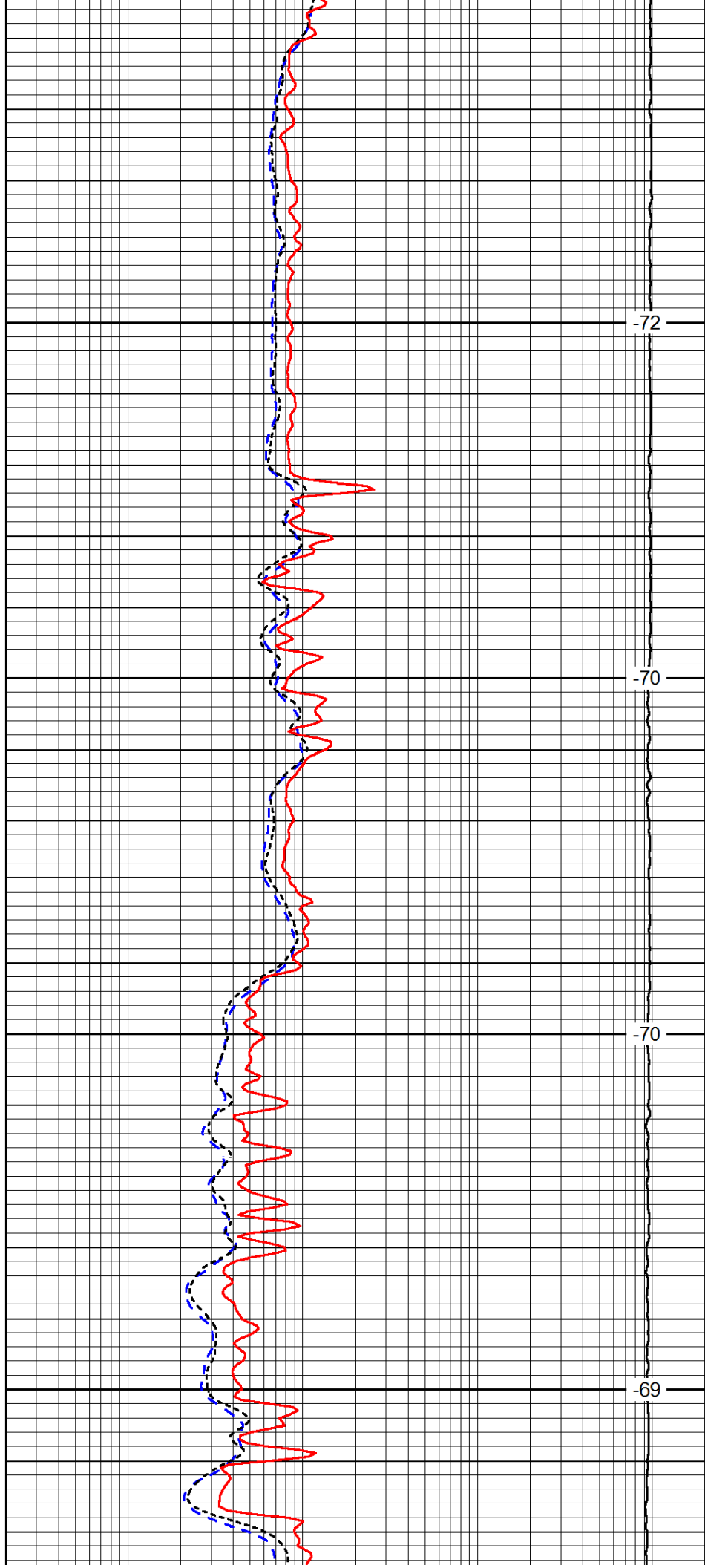


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2350

2400

2450

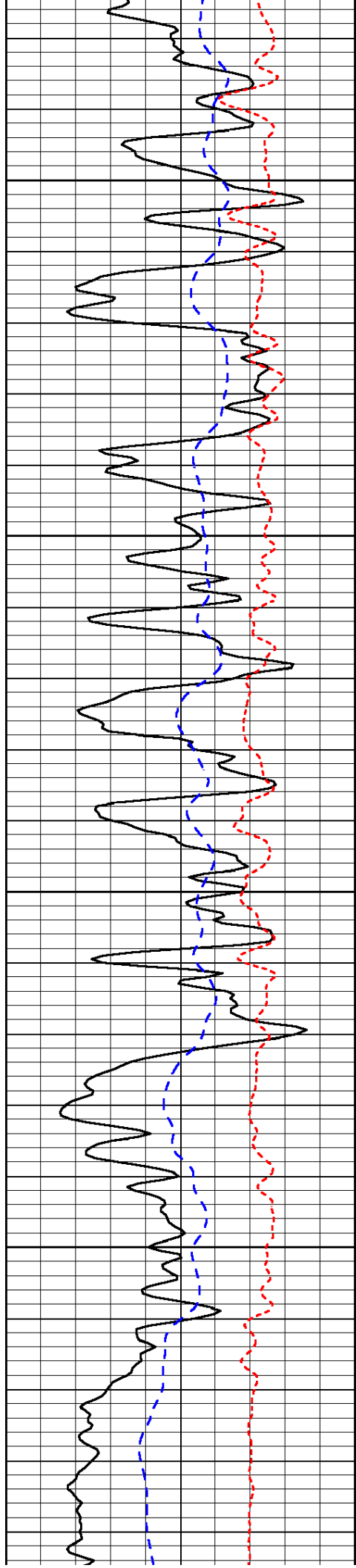


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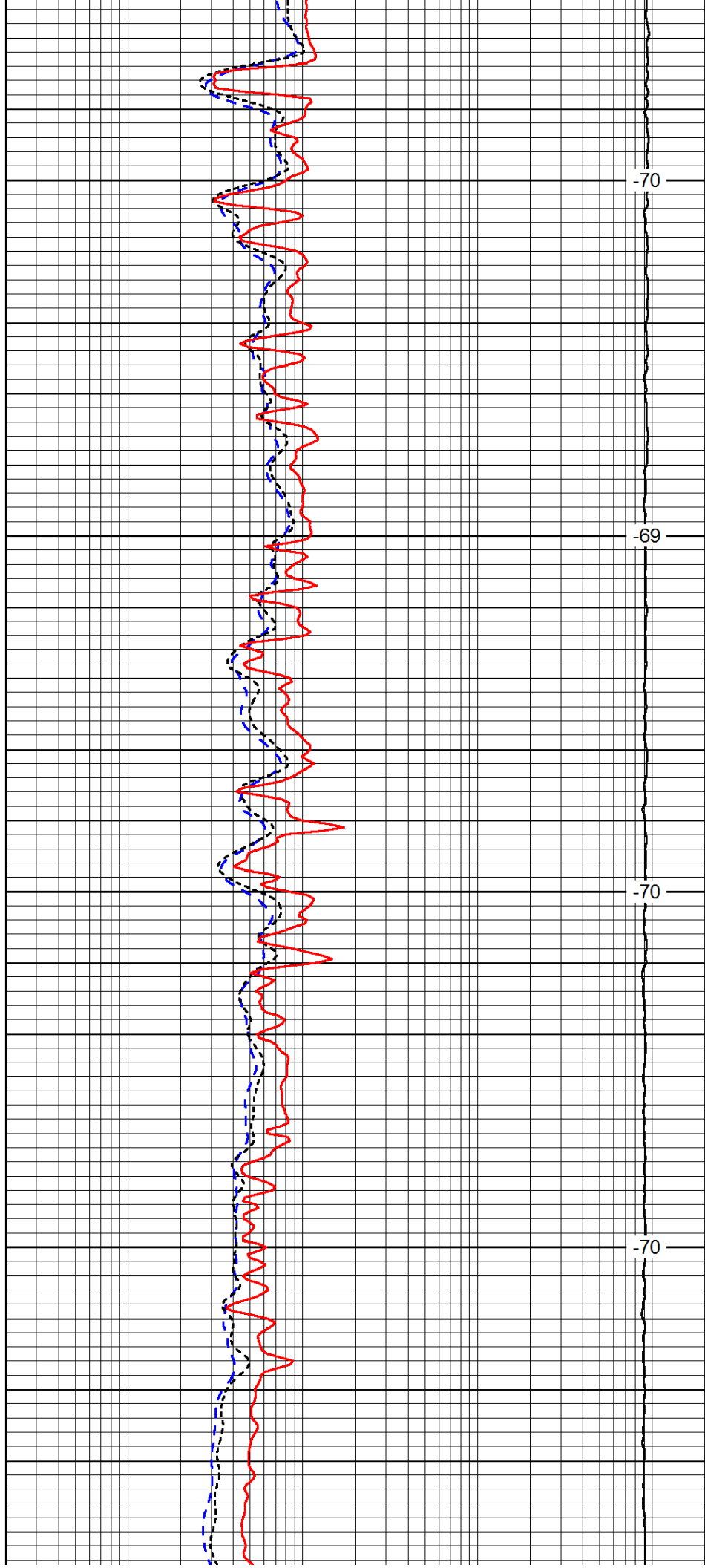


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2550

2600

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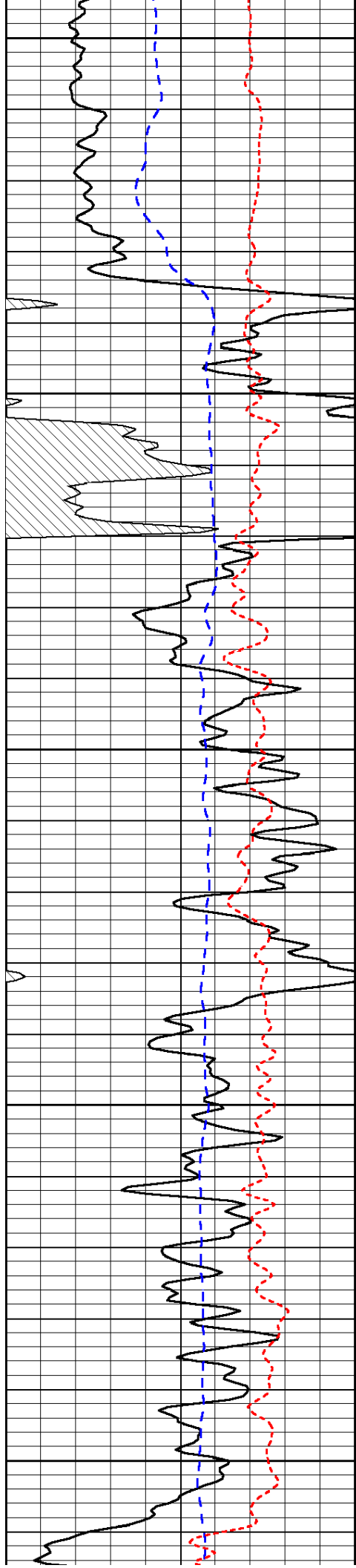


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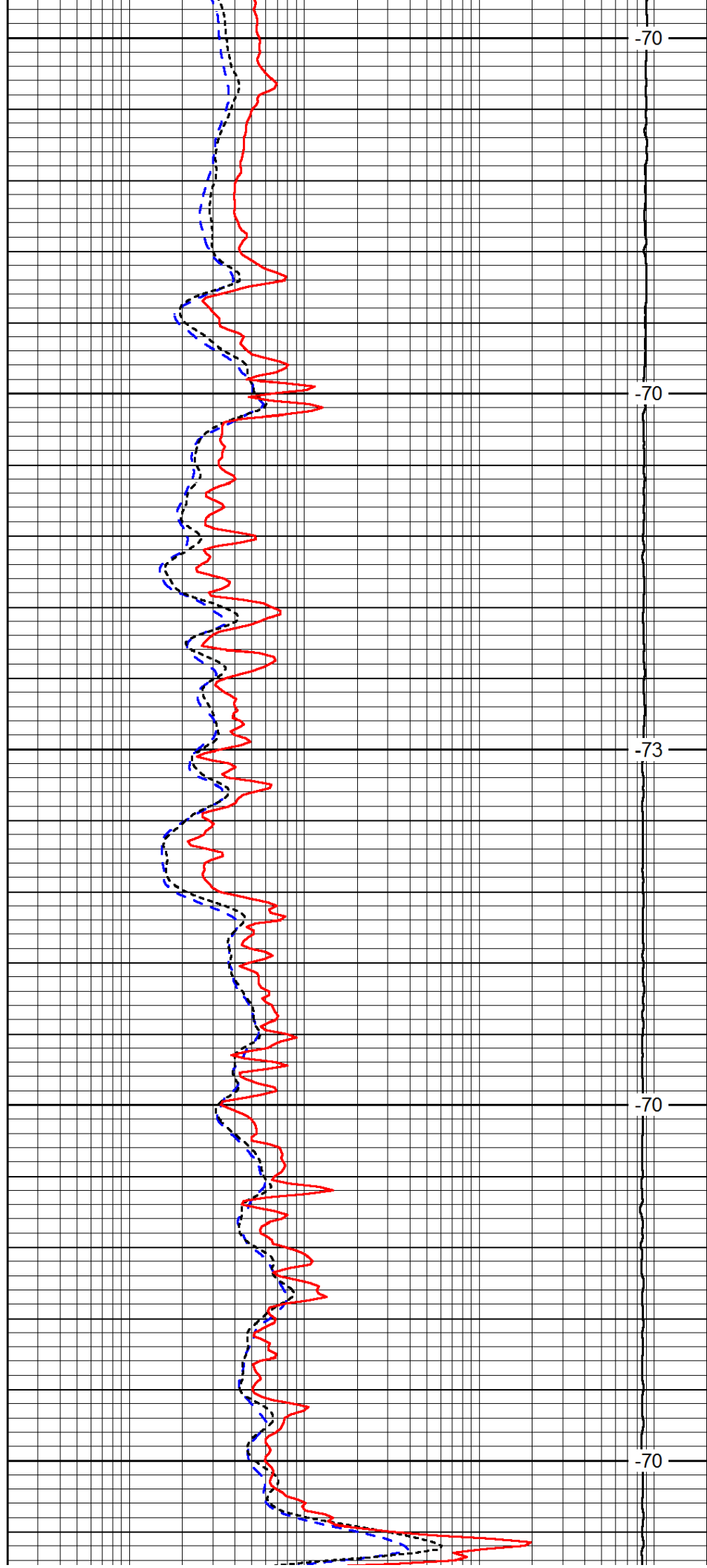
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2750

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2850

2900



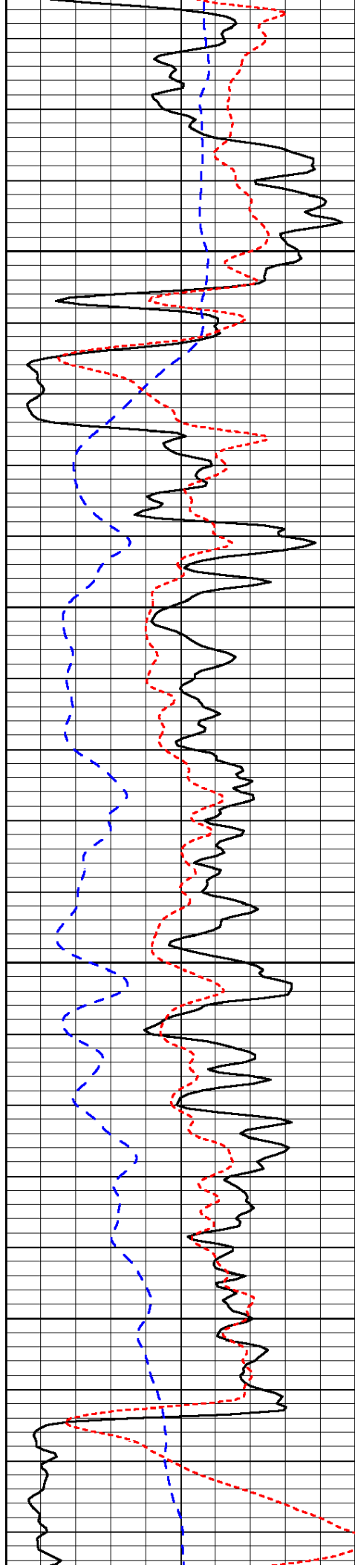
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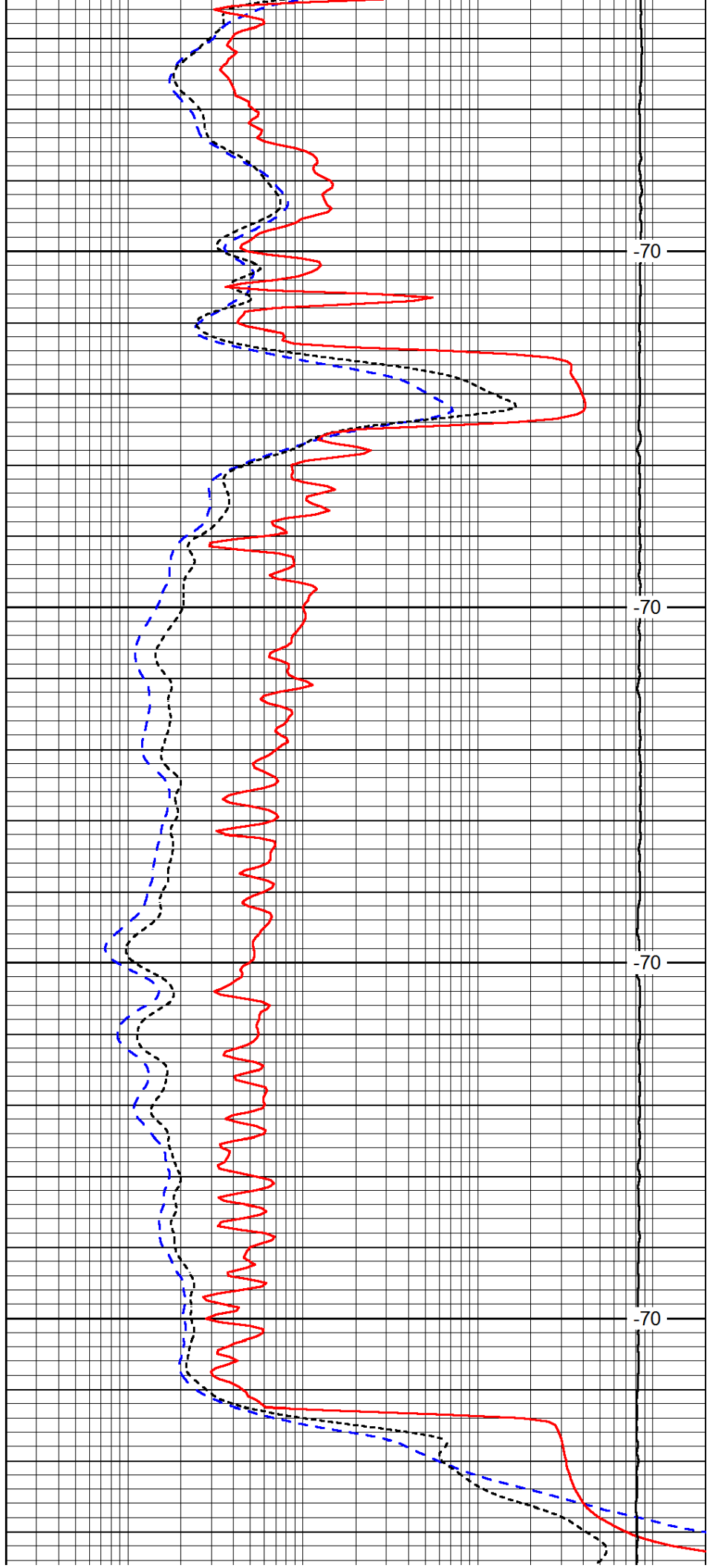


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3050

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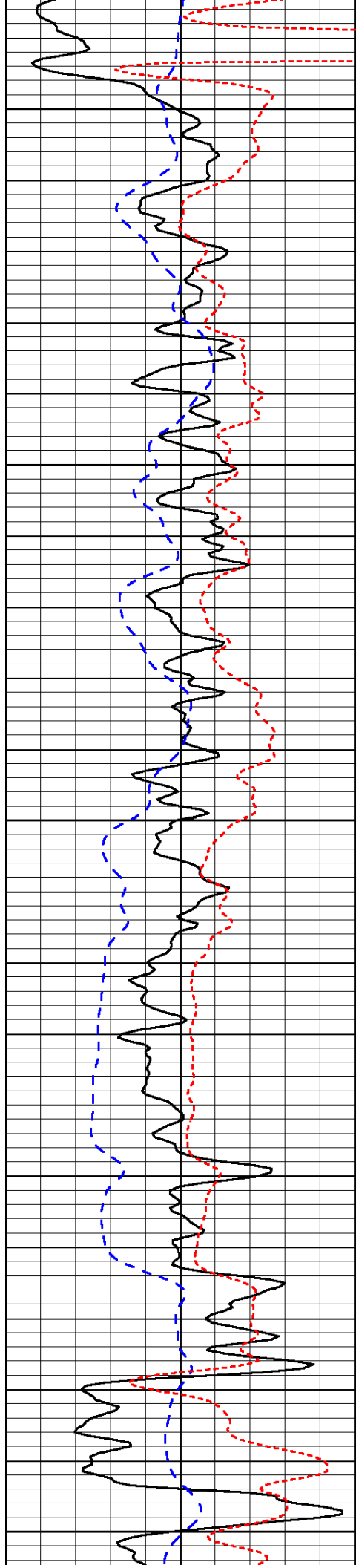


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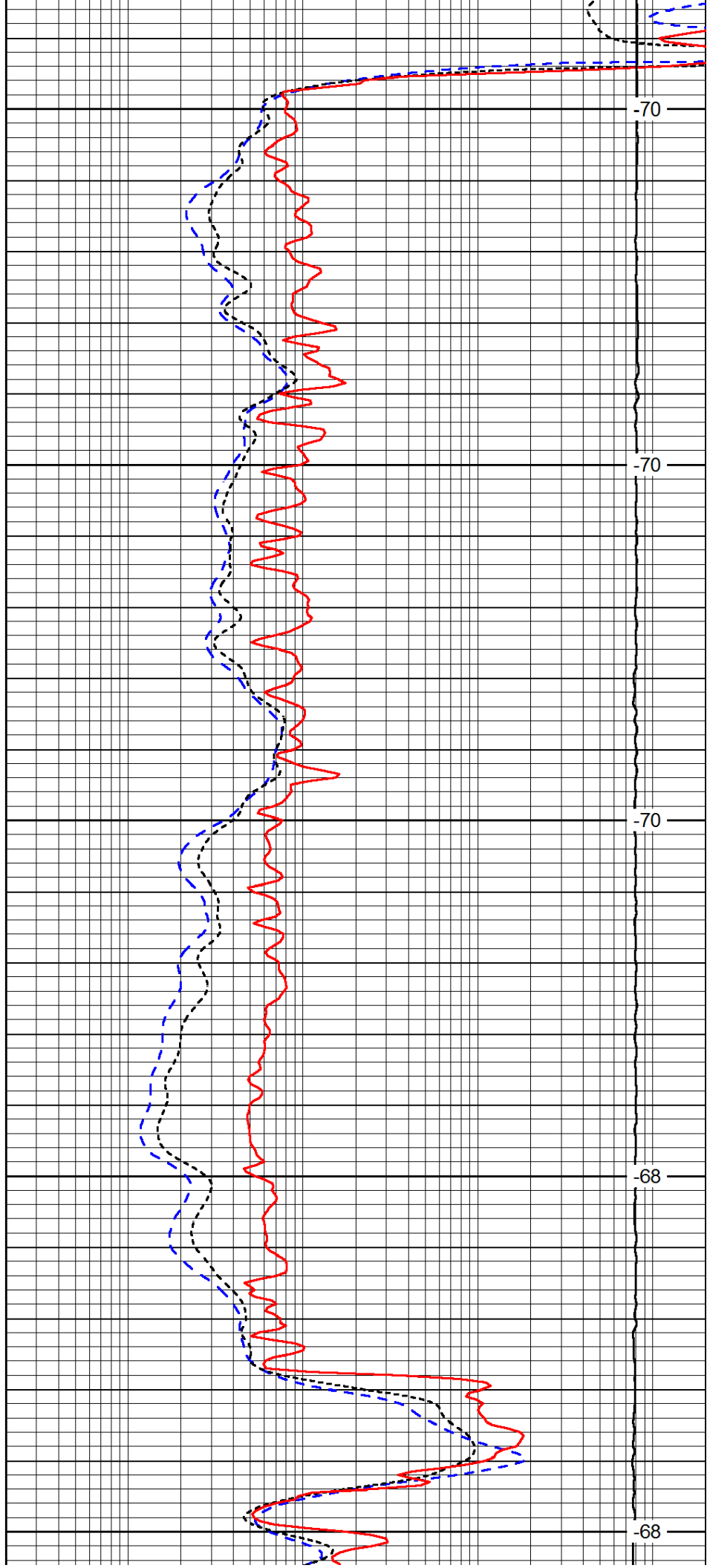
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3200

3250

3300

3350



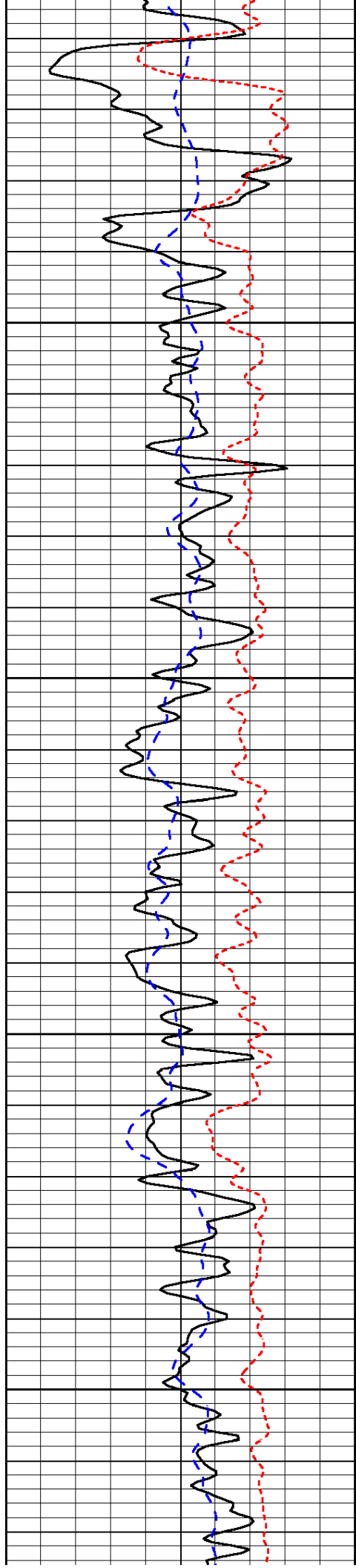
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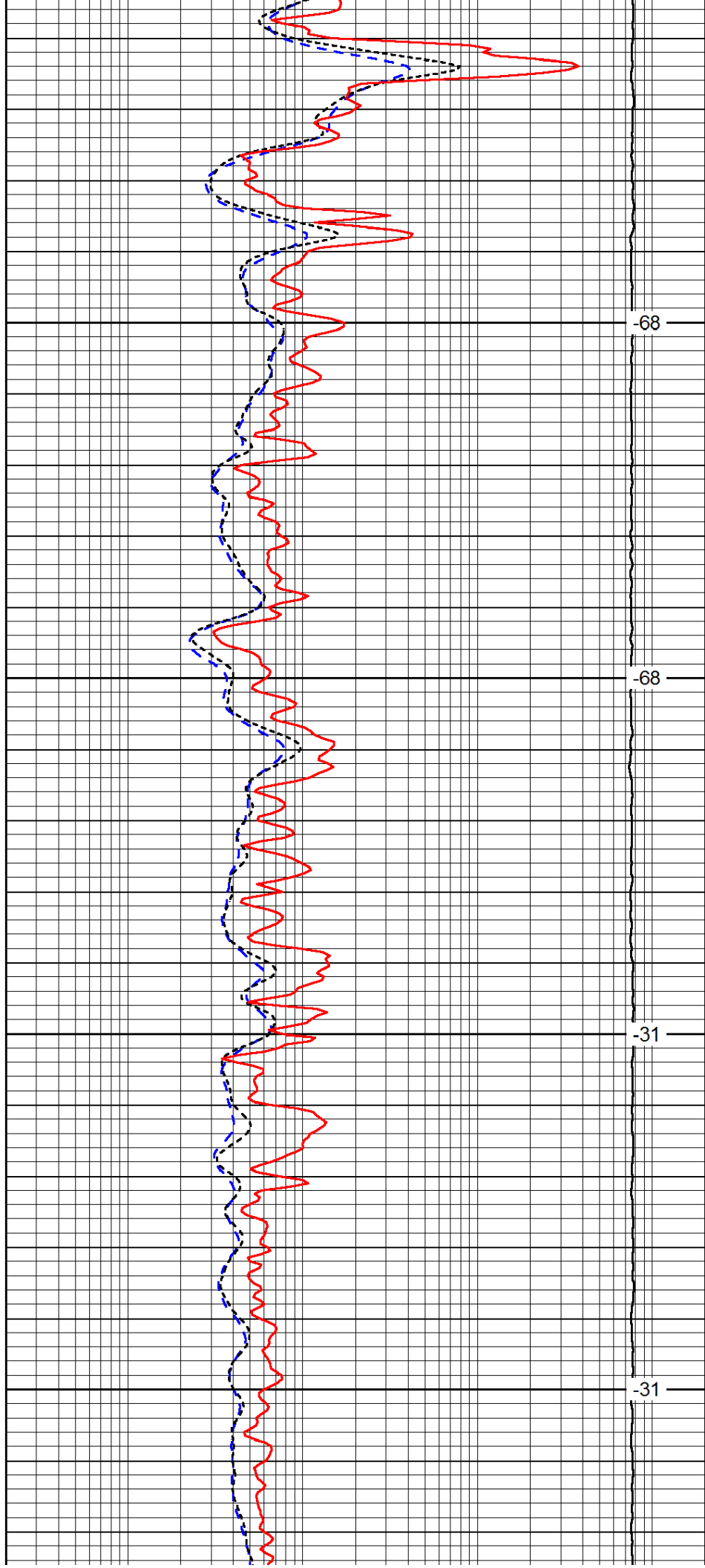


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3500

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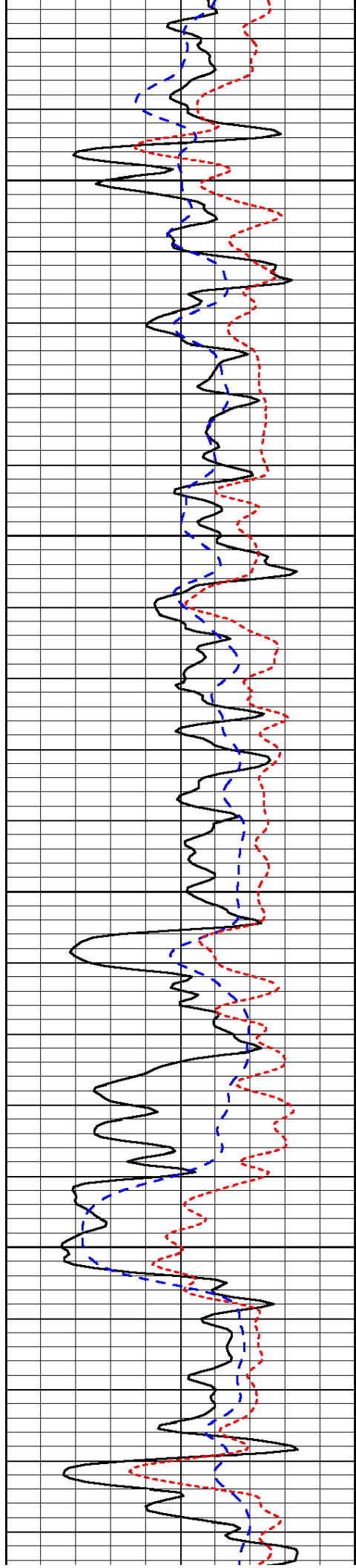


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-31

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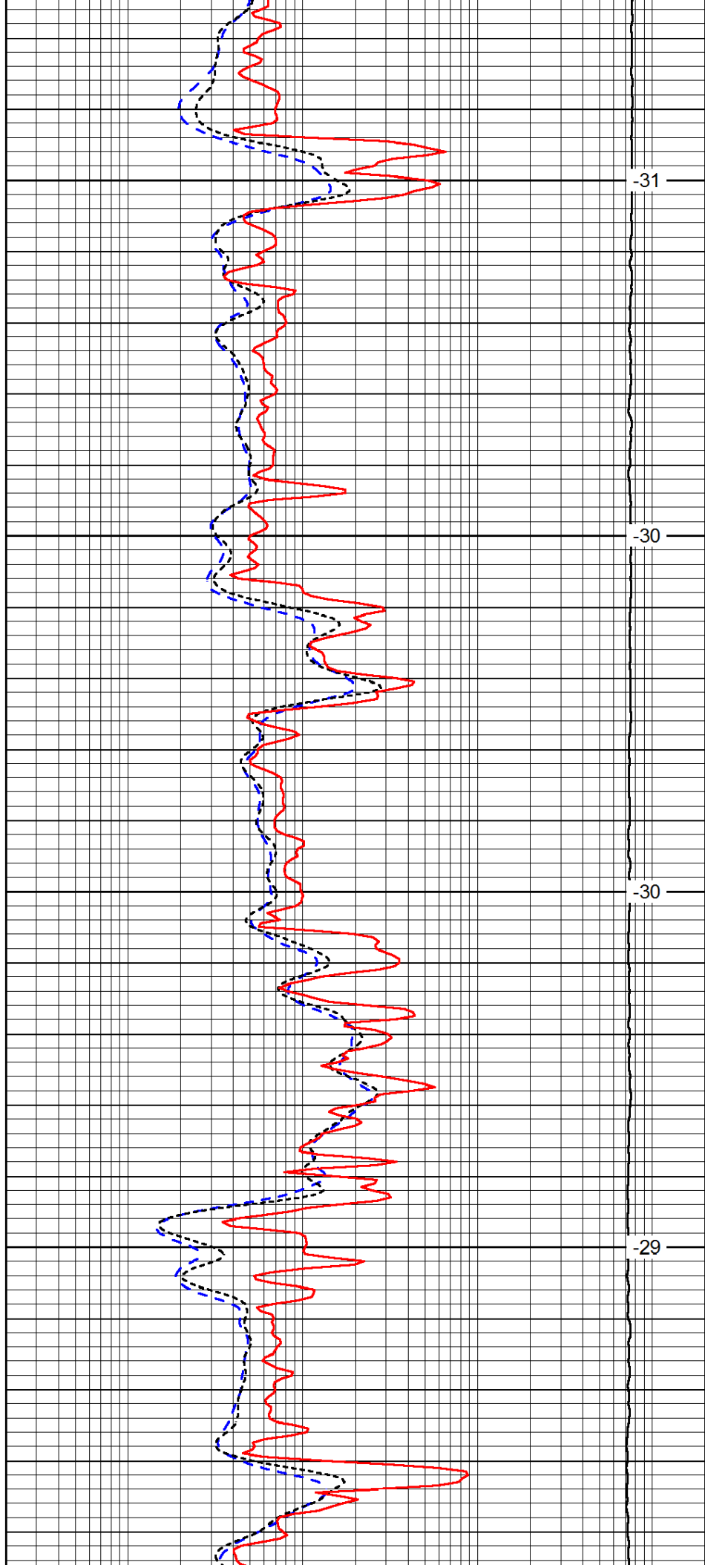


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3700

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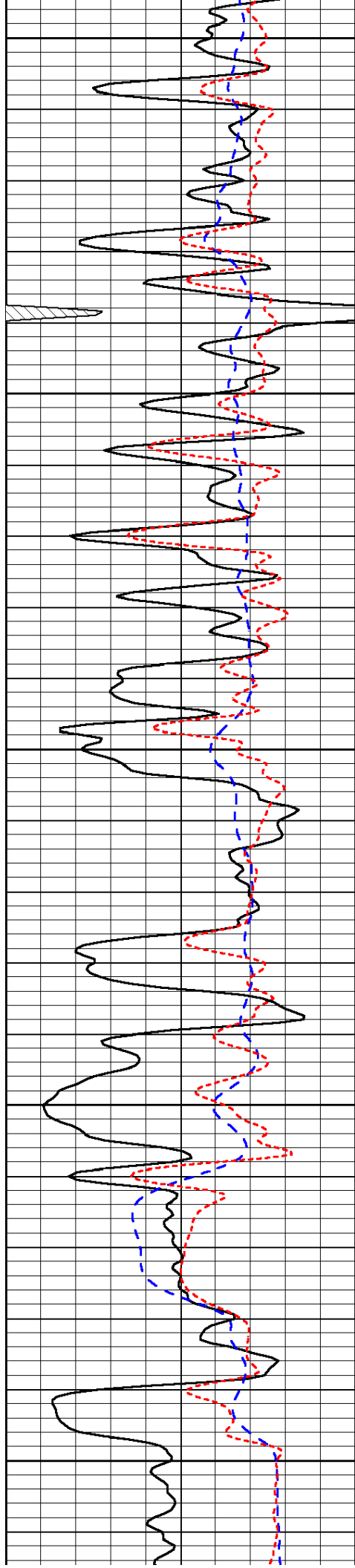


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-30

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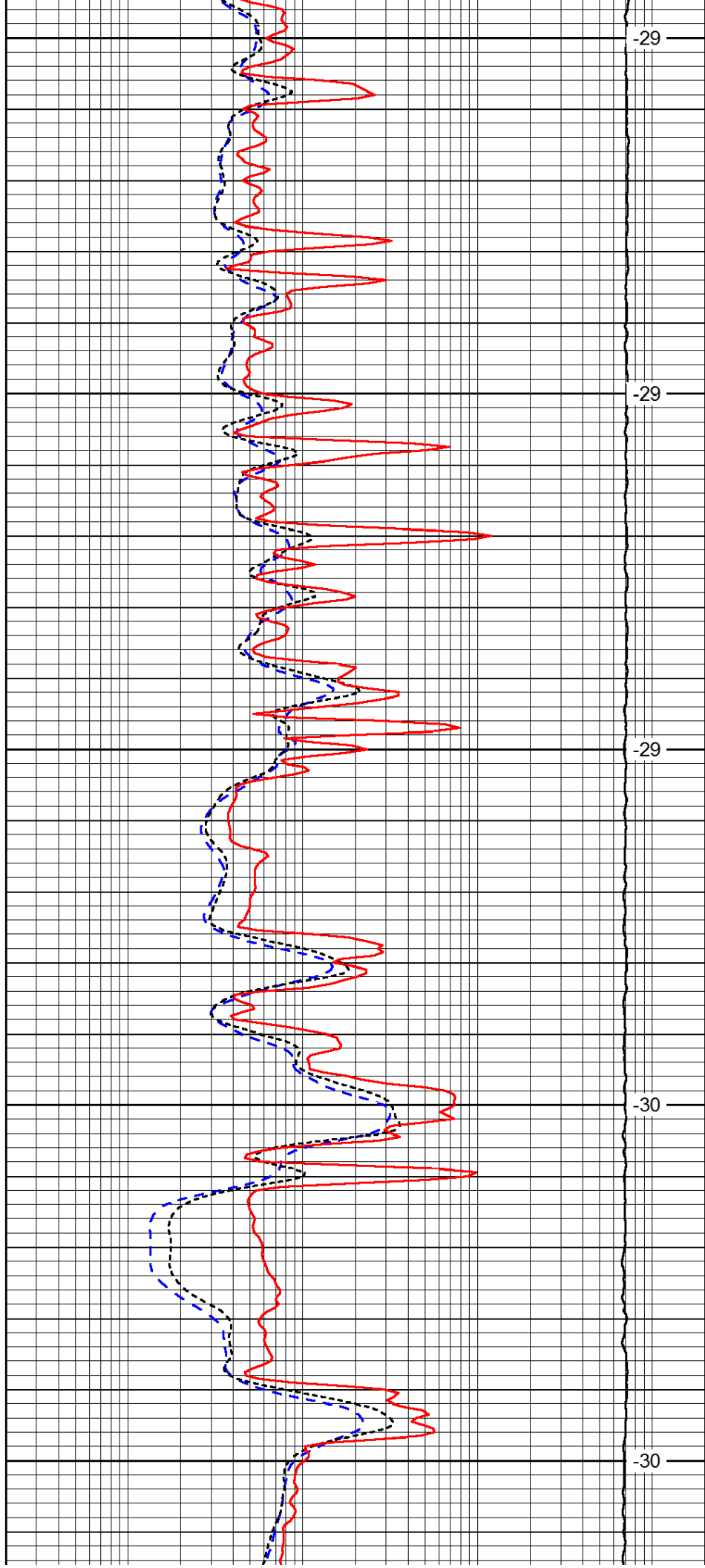
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3850

3900

3950

4000



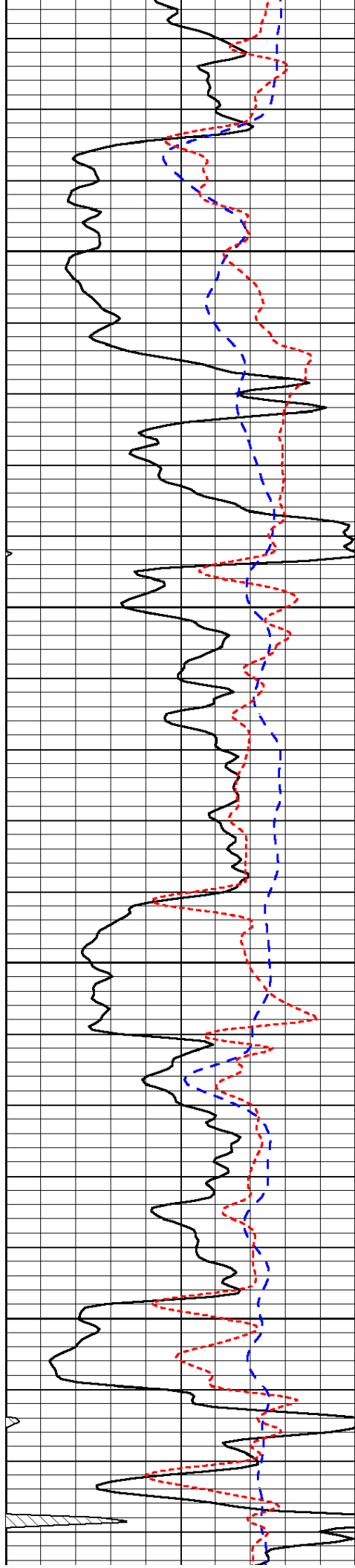
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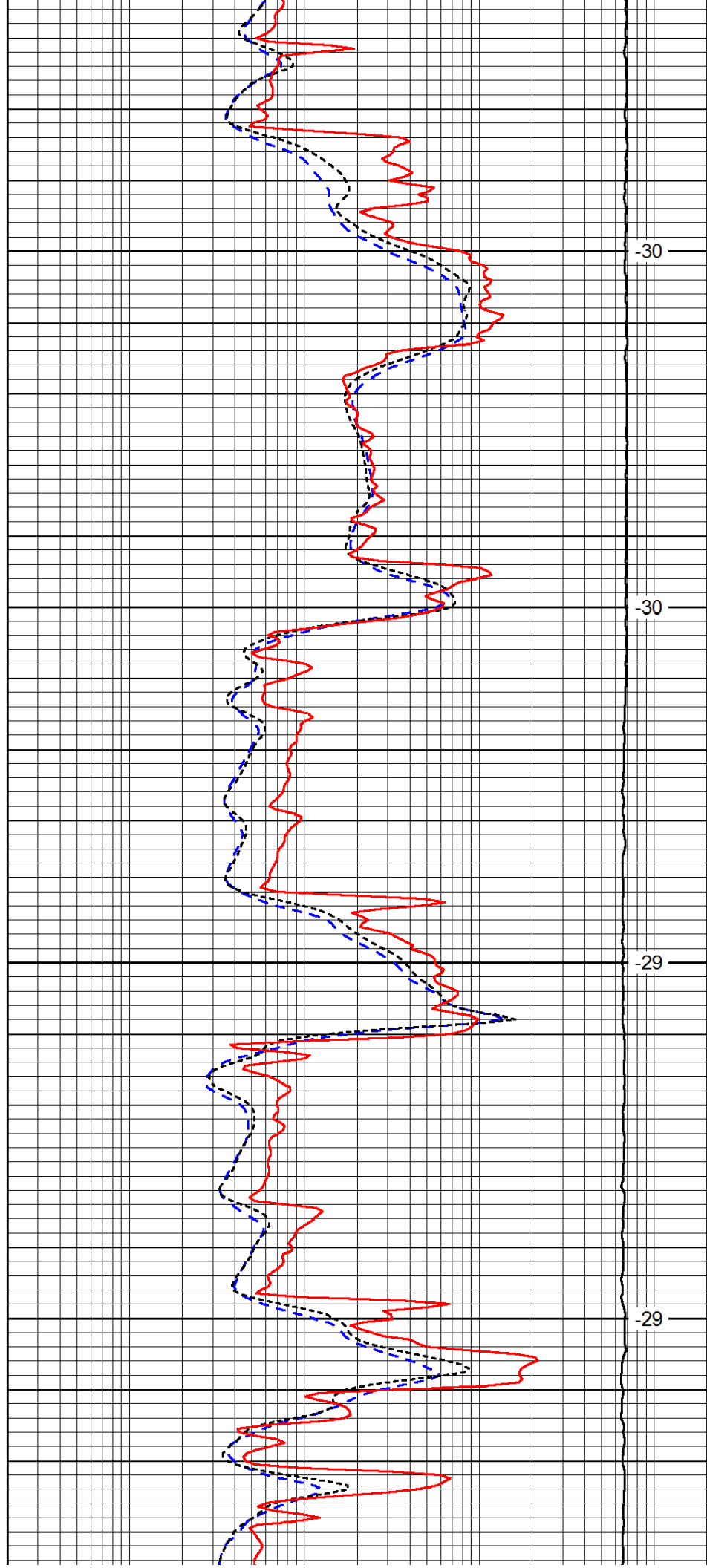


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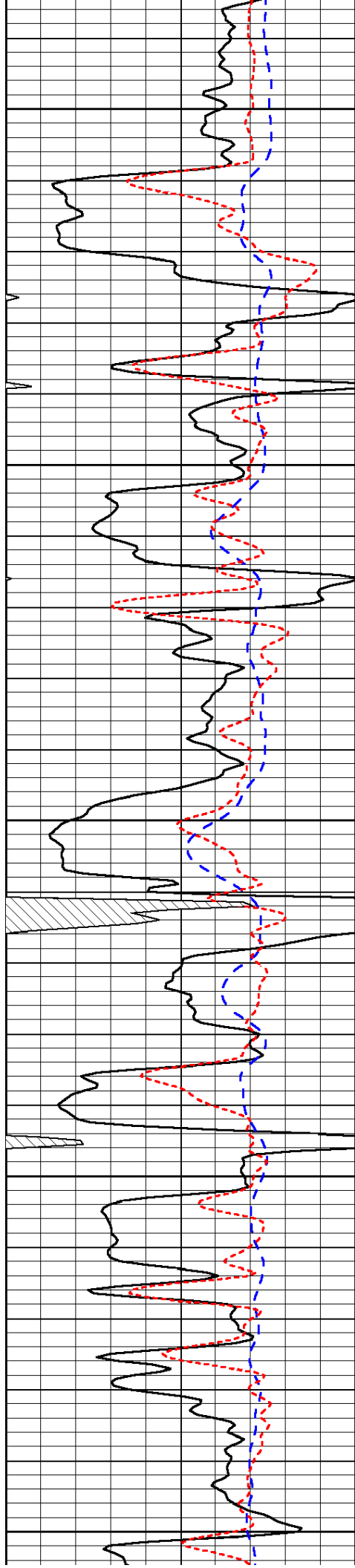


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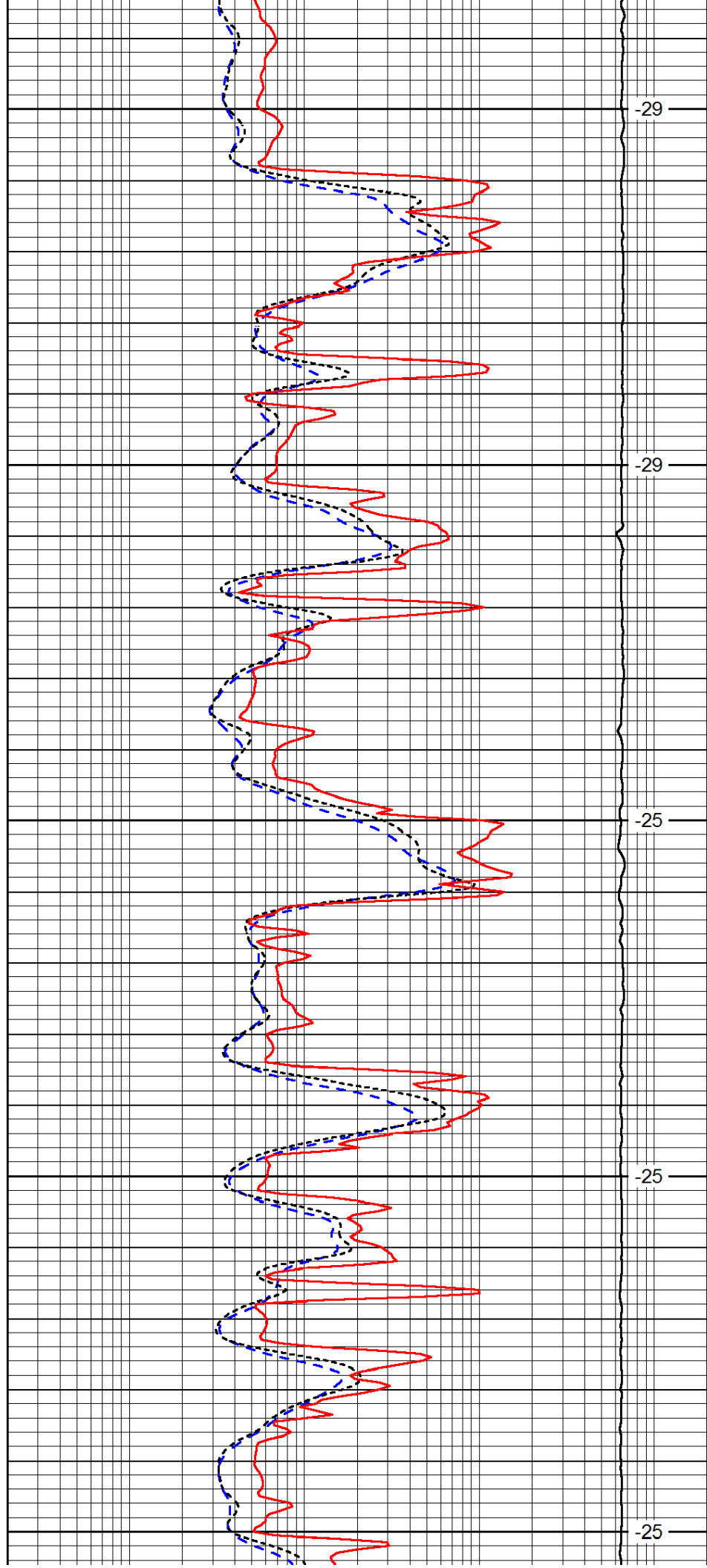
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4300

4350

4400

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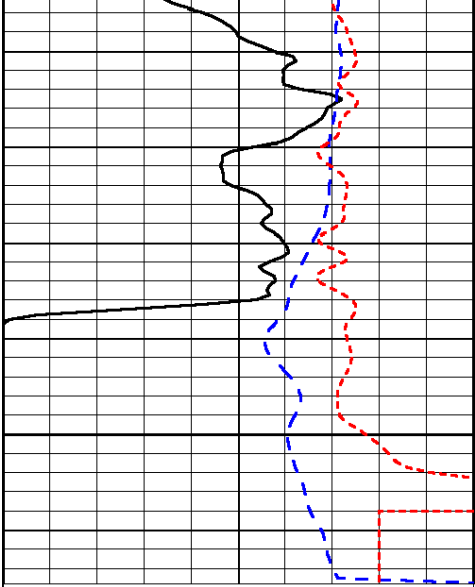
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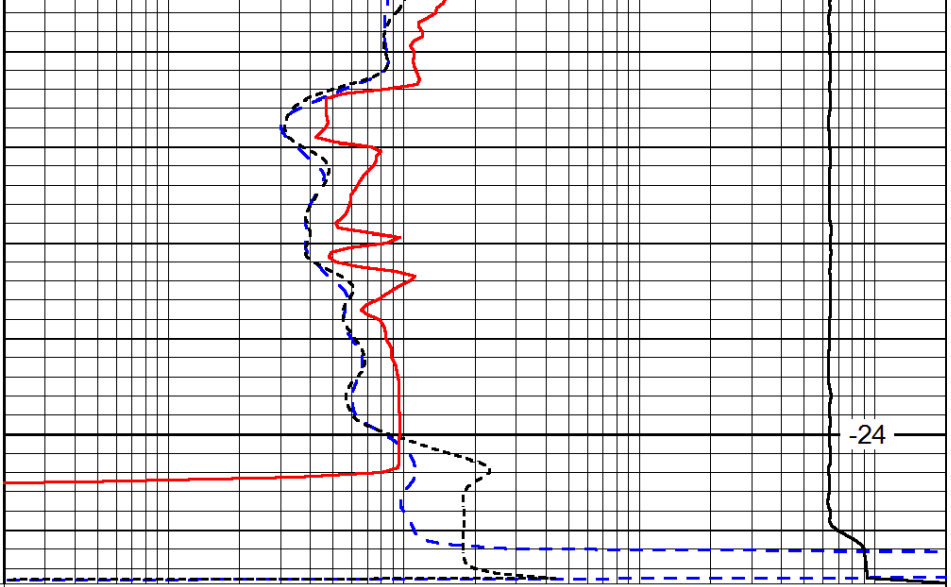
-25

-25

-25



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



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

LSPD