



Pioneer Energy Services

Dual Induction Log

API No.	15-153-20992-00-00		
Company	Murfin Drilling Company, Inc.		
Well	Loker Trust # 1-1		
Field	Wildcat		
County	Rawlins	State	Kansas
Location	1320' FSL & 1980' FWL		
Sec: 1	Twp: 3 S	Rge: 36 W	Other Services CNL/CDL MEL/BHCS

Permanent Datum	Ground Level	Elevation 3249	K.B. 3254
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum	D.F. 3249
Drilling Measured From	Kelly Bushing		G.L. 3249
Date	03-13-2014		
Run Number	One		
Depth Driller	4890		
Depth Logger	4892		
Bottom Logged Interval	4891		
Top Log Interval	0		
Casing Driller	8.625 @ 350		
Casing Logger	352		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	700		
Density / Viscosity	9.4	60	
pH / Fluid Loss	10.0	6.4	
Source of Sample	Flowline		
Rm @ Meas. Temp	1.4	@ 45	
Rmf @ Meas. Temp	1.05	@ 45	
Rmc @ Meas. Temp	1.89	@ 45	
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.50	@ 127	
Operating Rig Time	5 1/2 Hours		
Max Rec. Temp. F	127		
Equipment Number	91		
Location	Hays		
Recorded By	Y. Ruiz		
Witnessed By	Jeff Christian		

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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

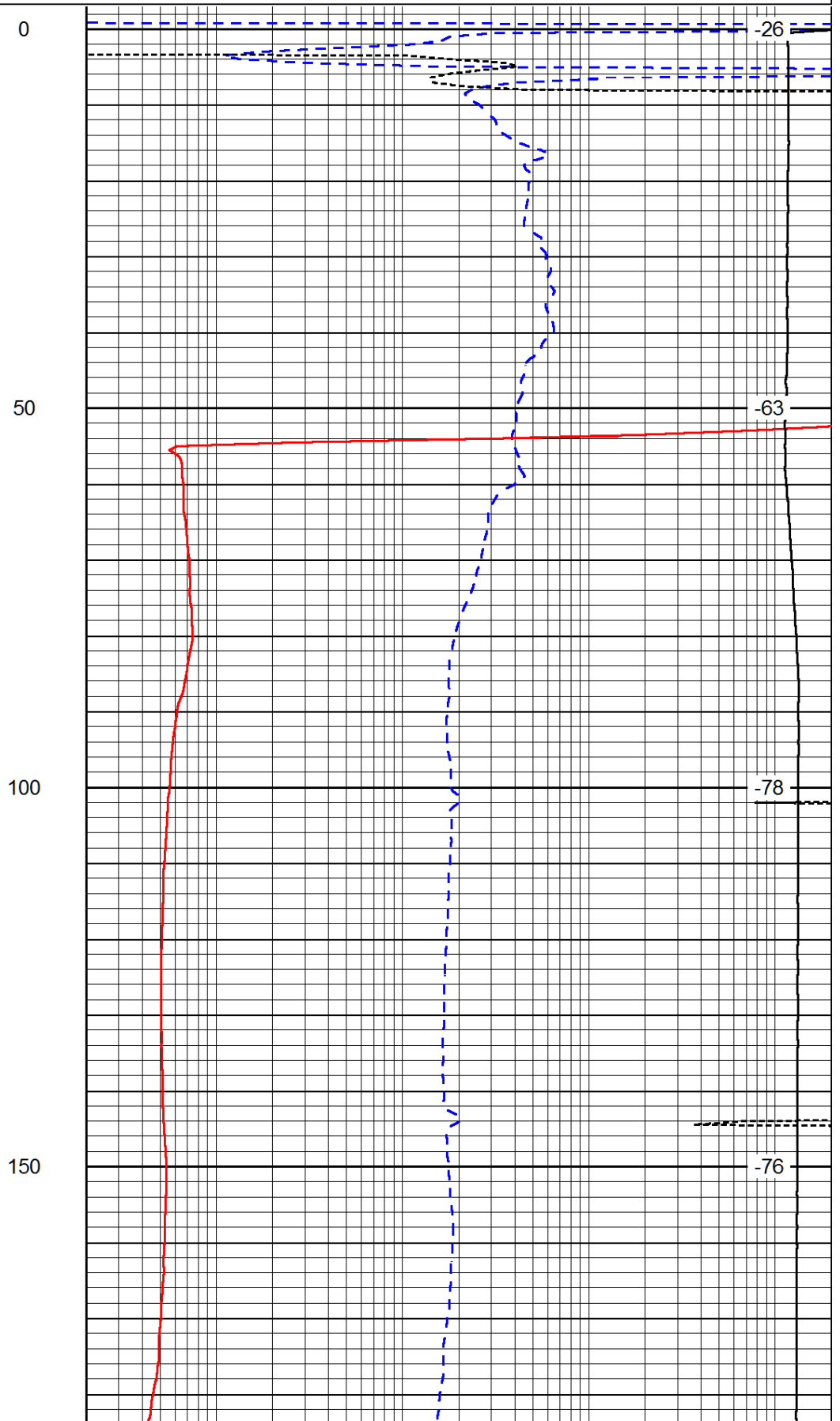
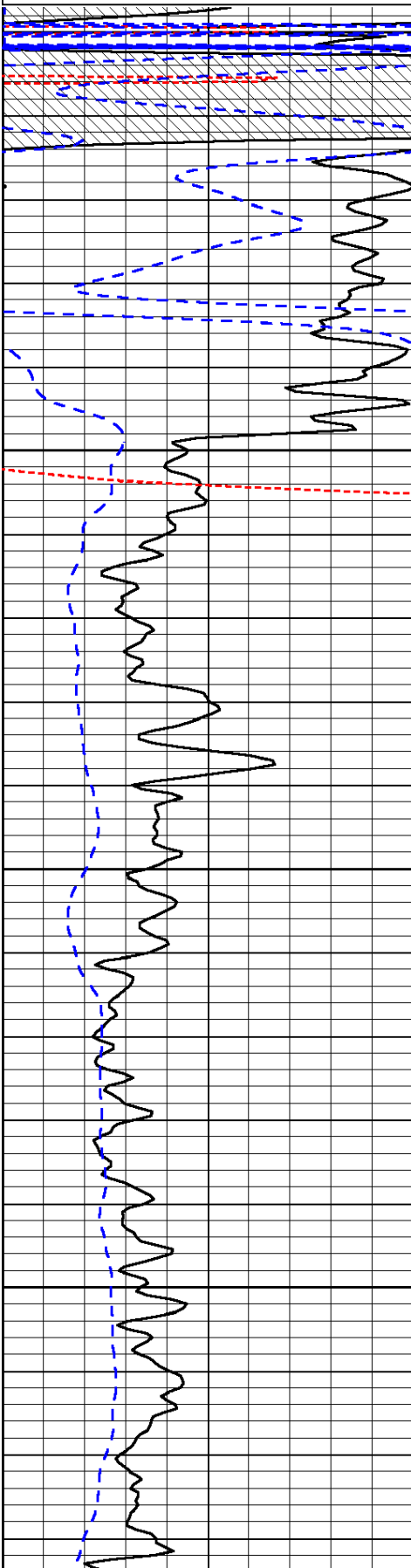
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Atwood,
 West to 7 Rd, 2 North to R Rd, 1/2 West,
 North into

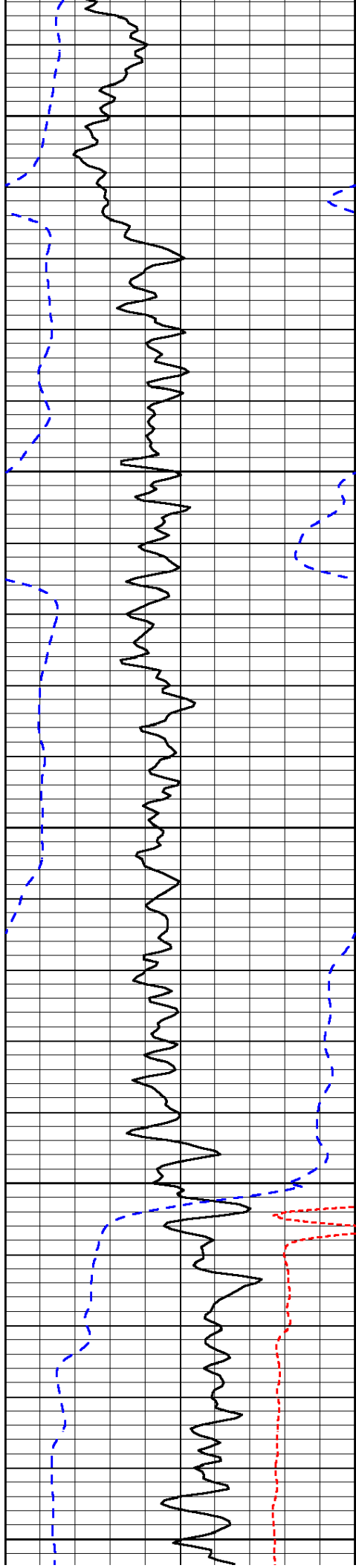
Database File: murfin_031314hd.db
 Dataset Pathname: DIL/murstk
 Presentation Format: dil
 Dataset Creation: Thu Mar 13 12:39:12 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)





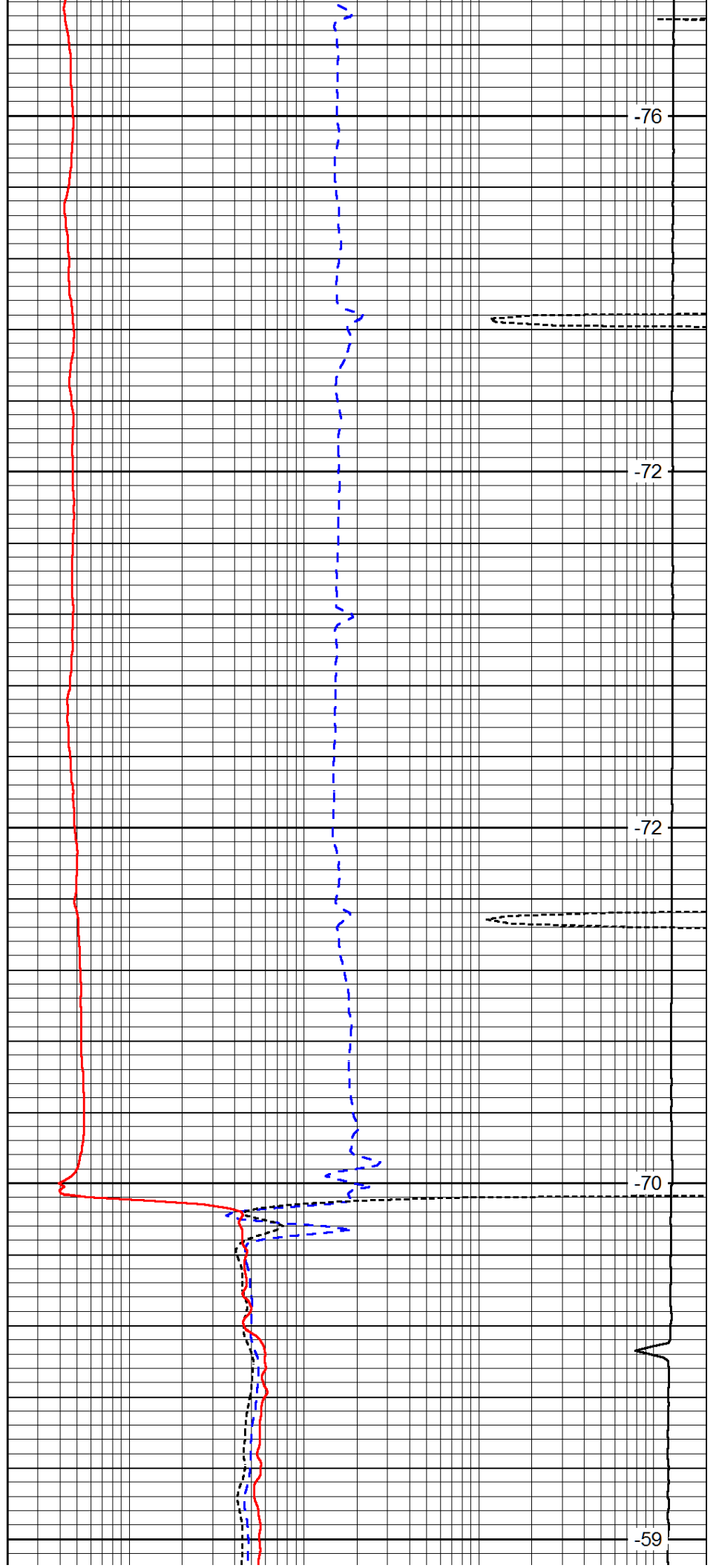
200

250

300

350

400



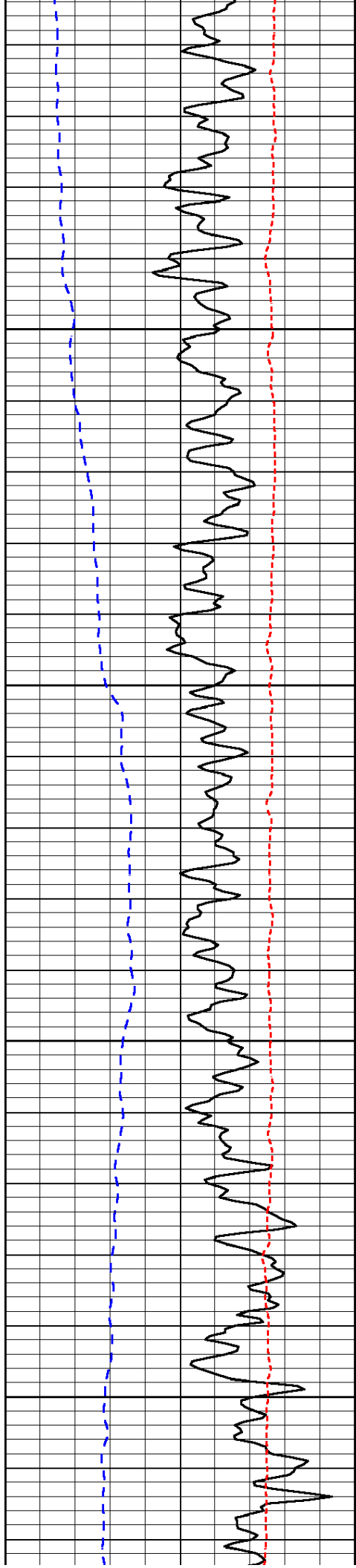
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-72

-72

-70

-59

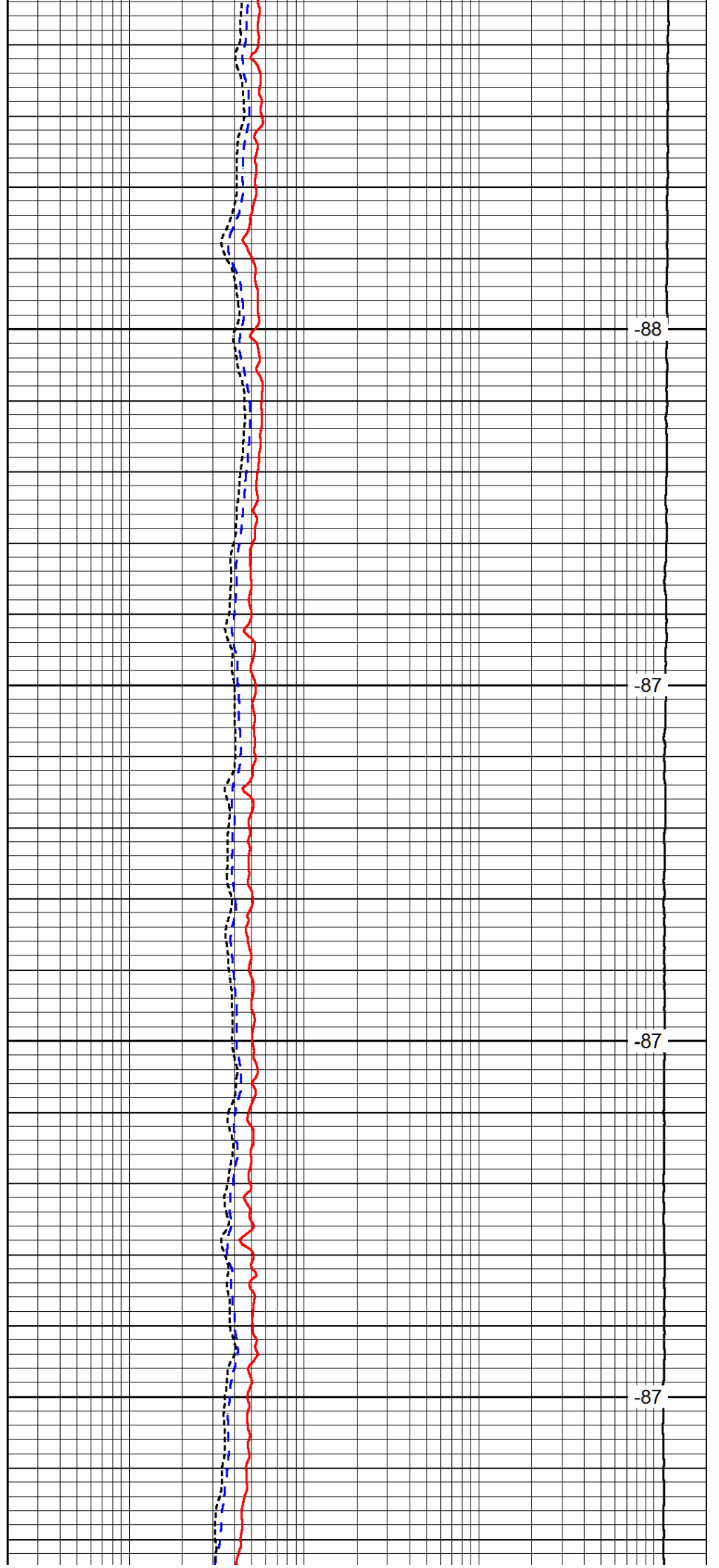


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500

550

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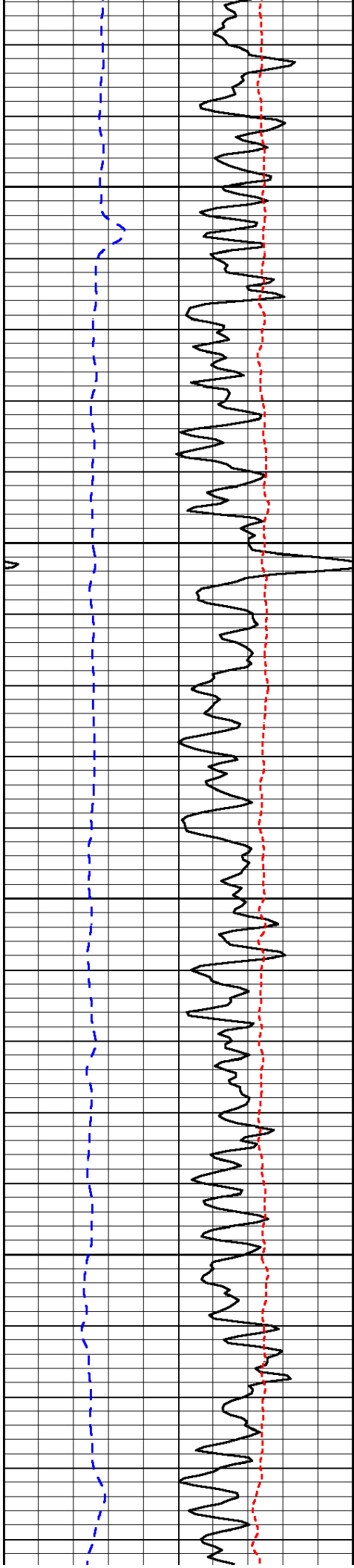


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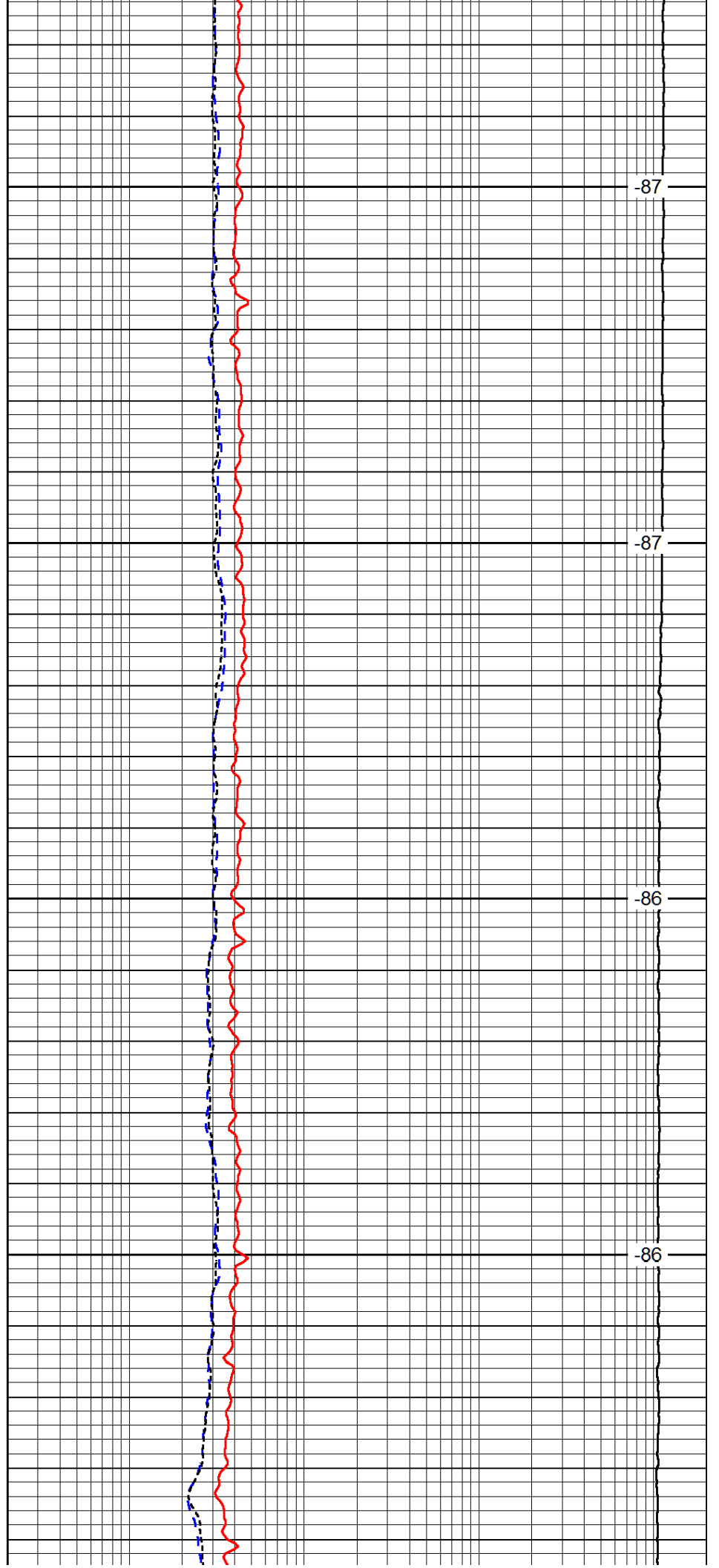


650

700

750

800

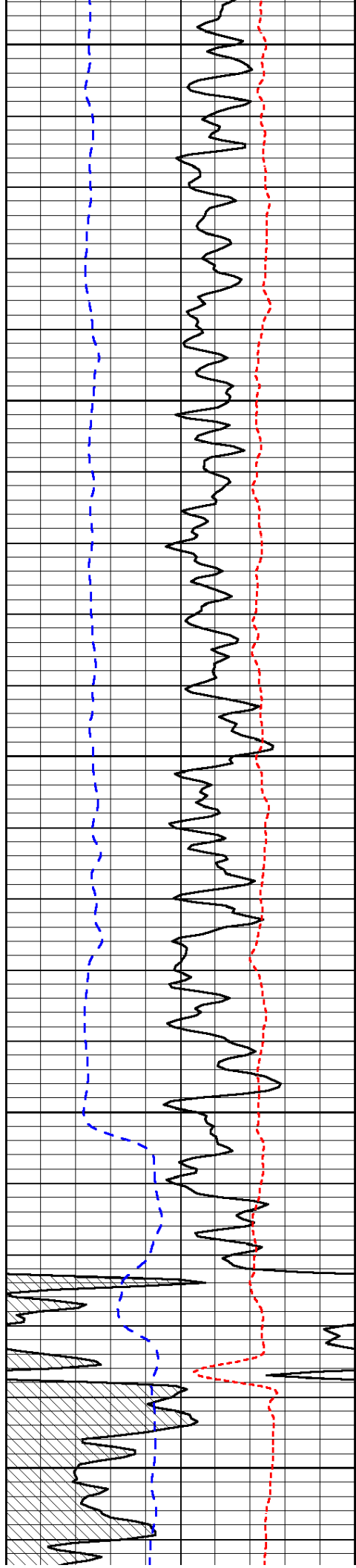


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850

900

950

1000

1050

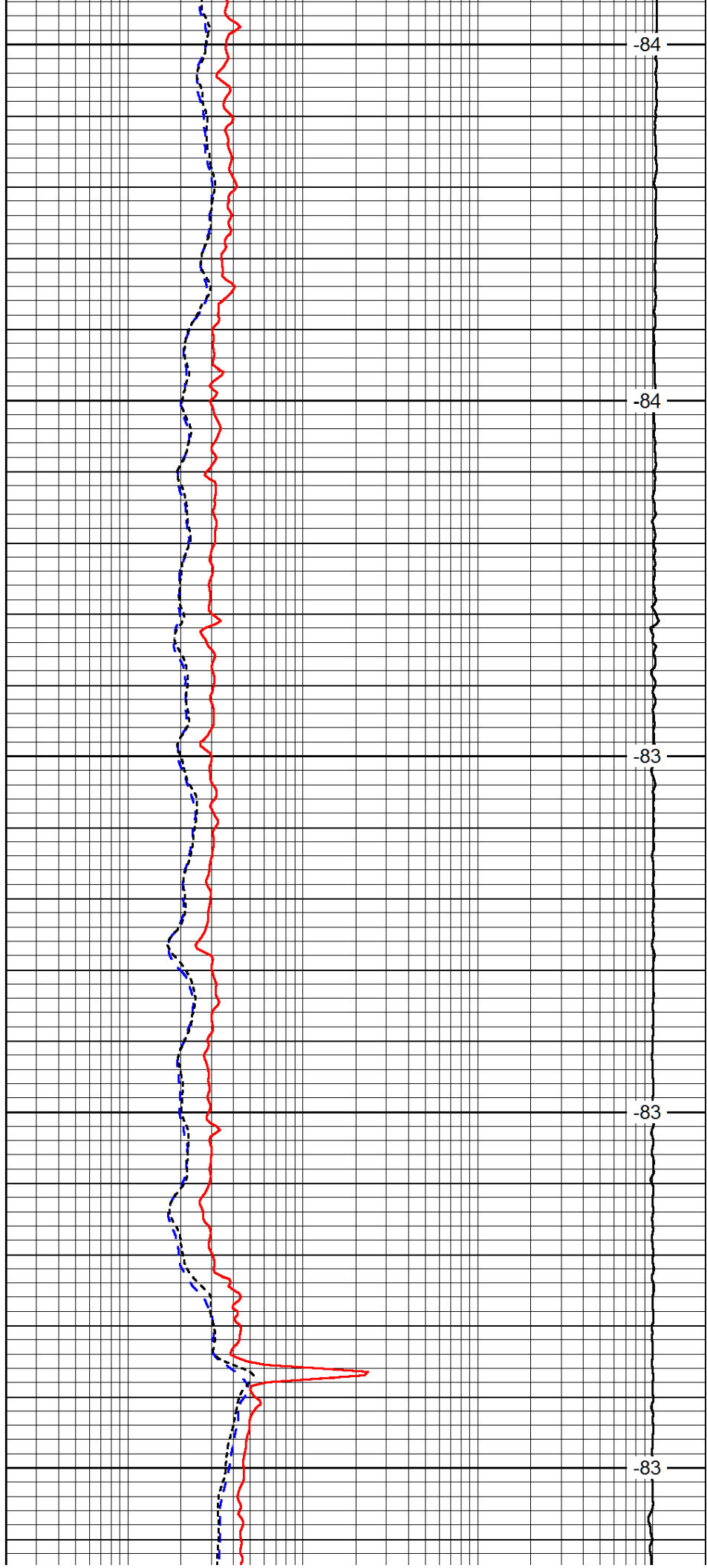
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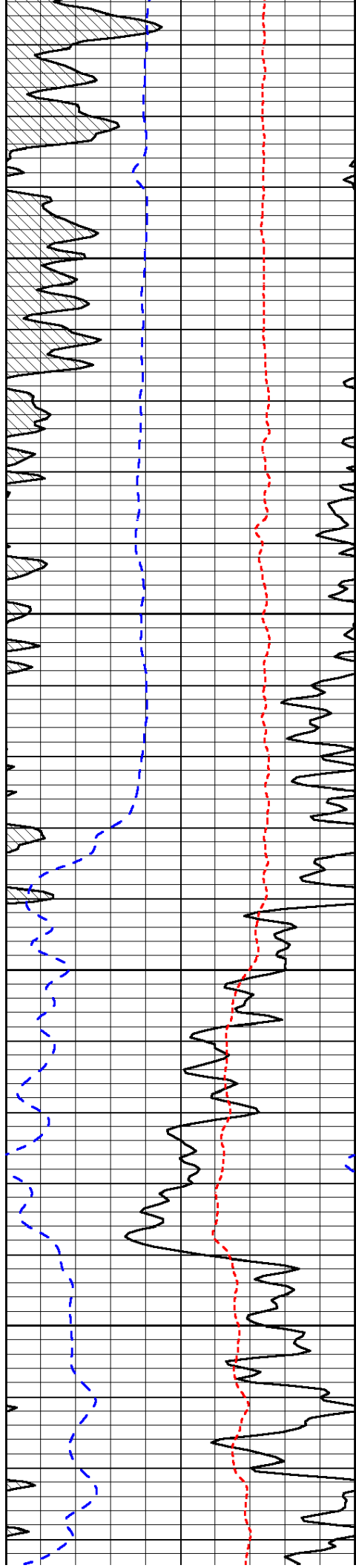
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1100

1150

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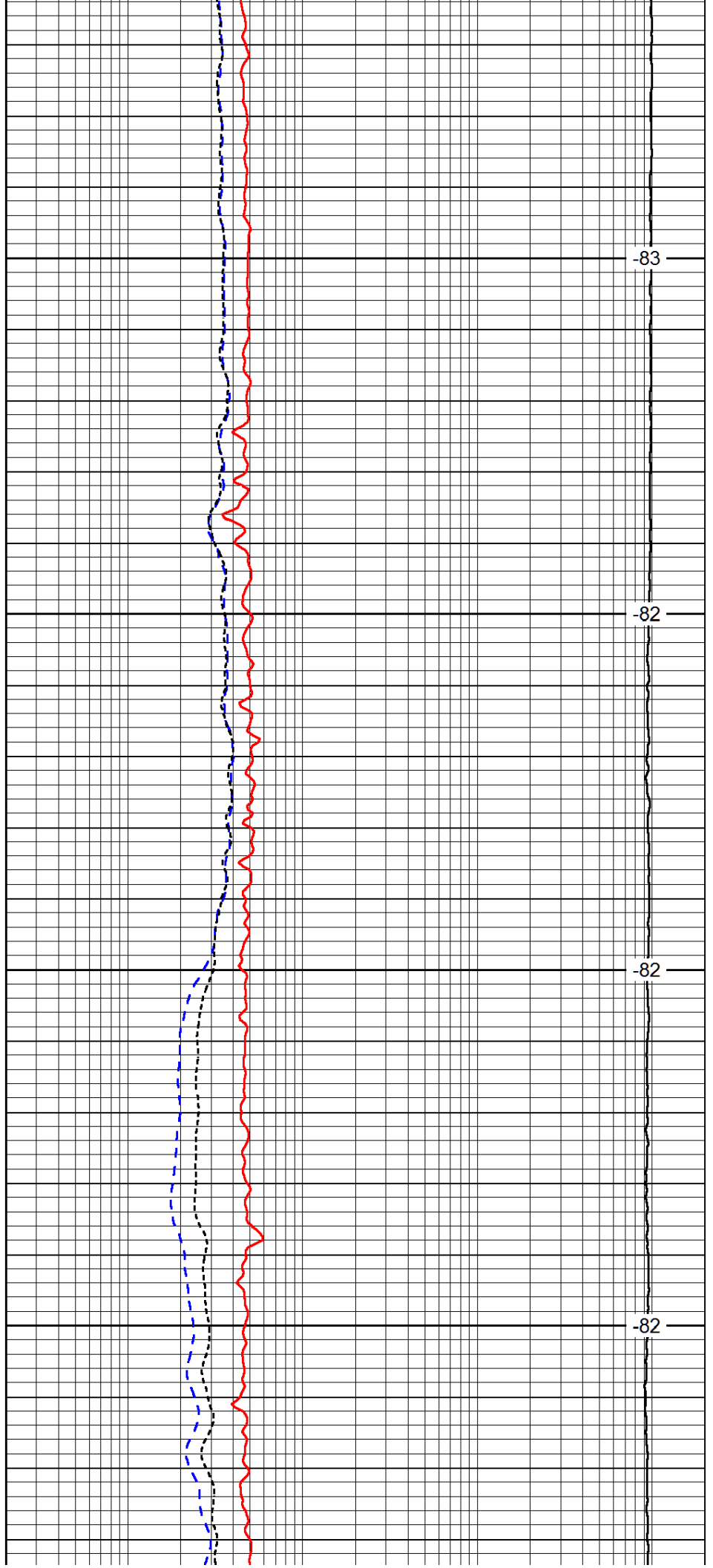
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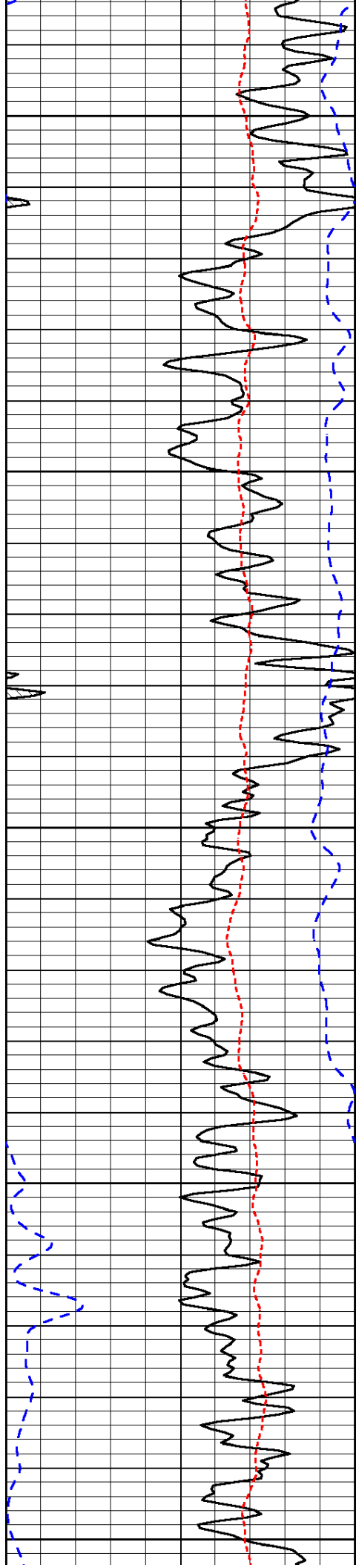
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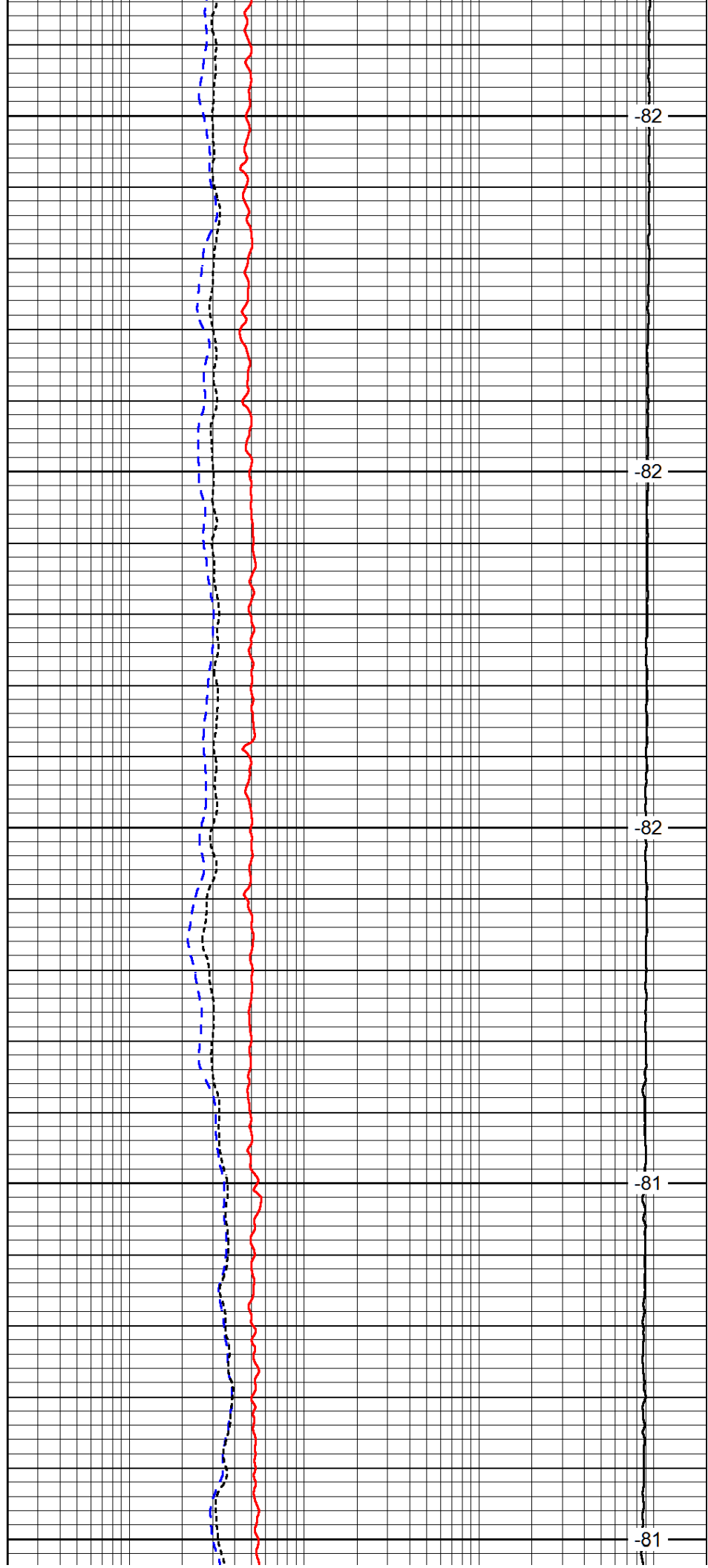
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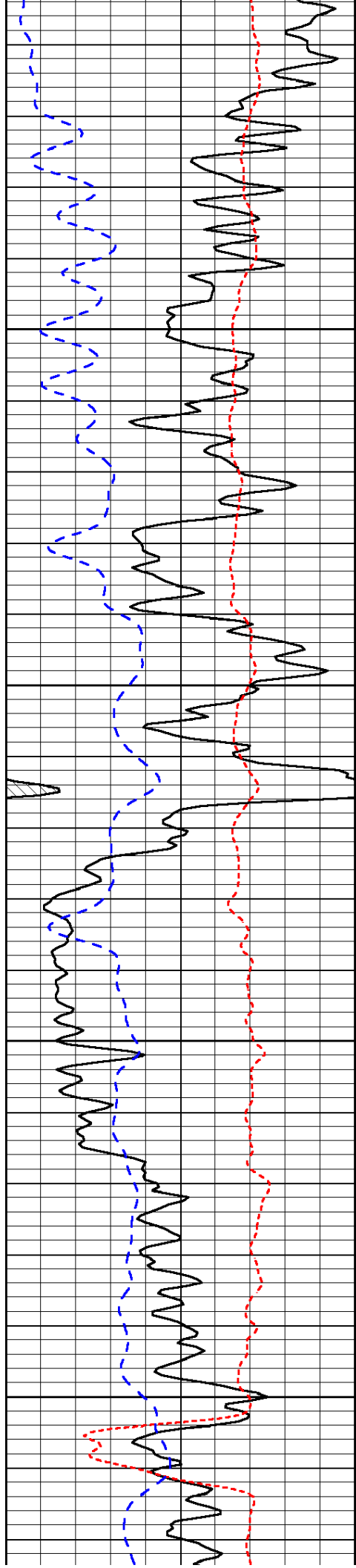
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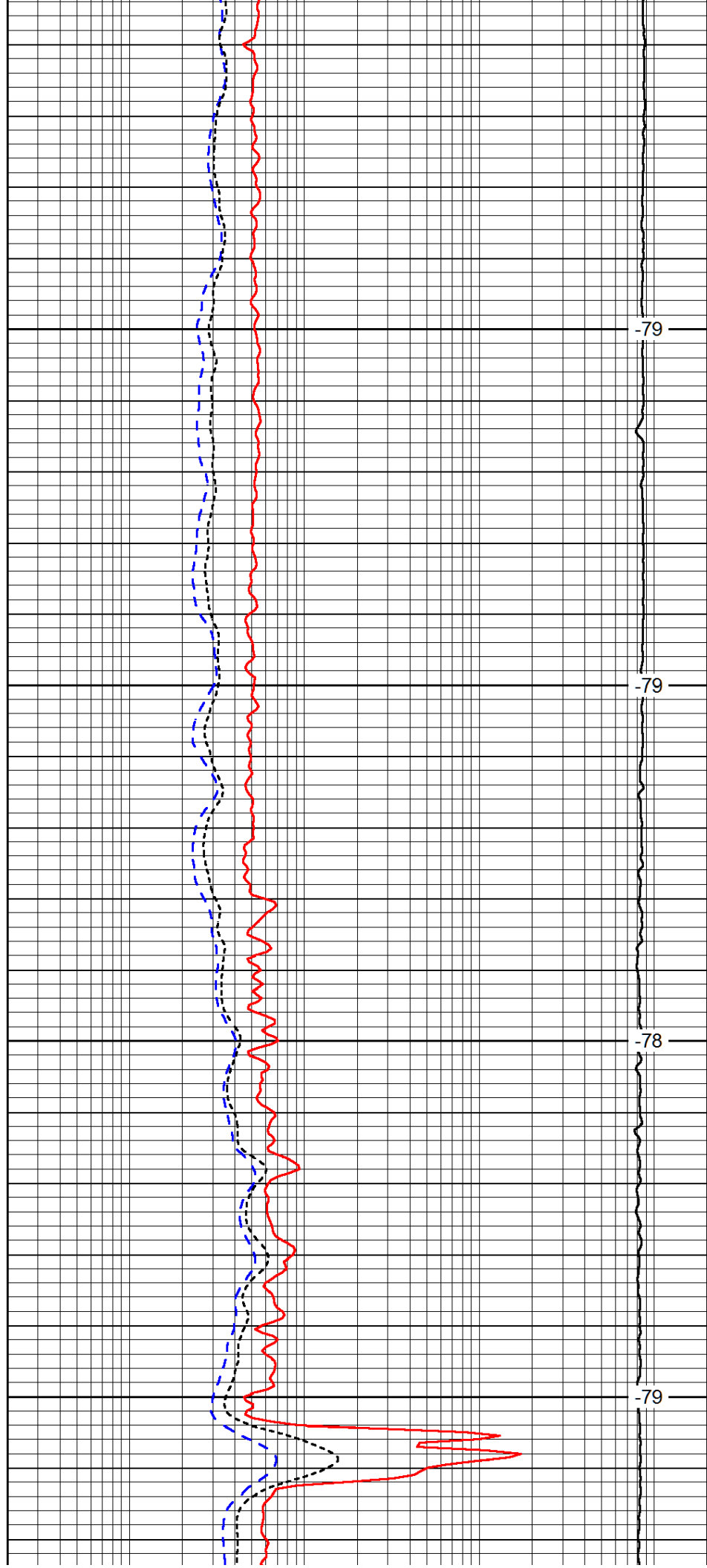


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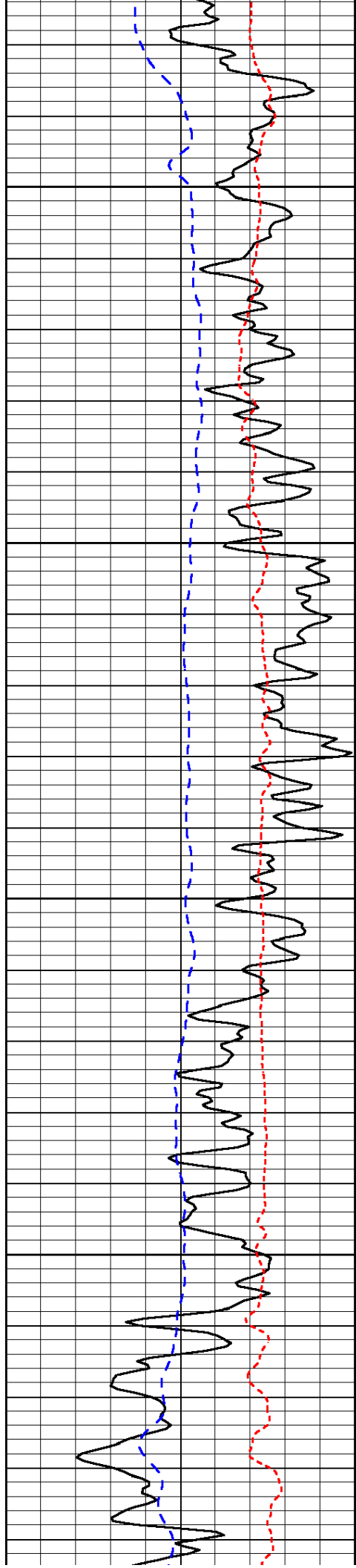


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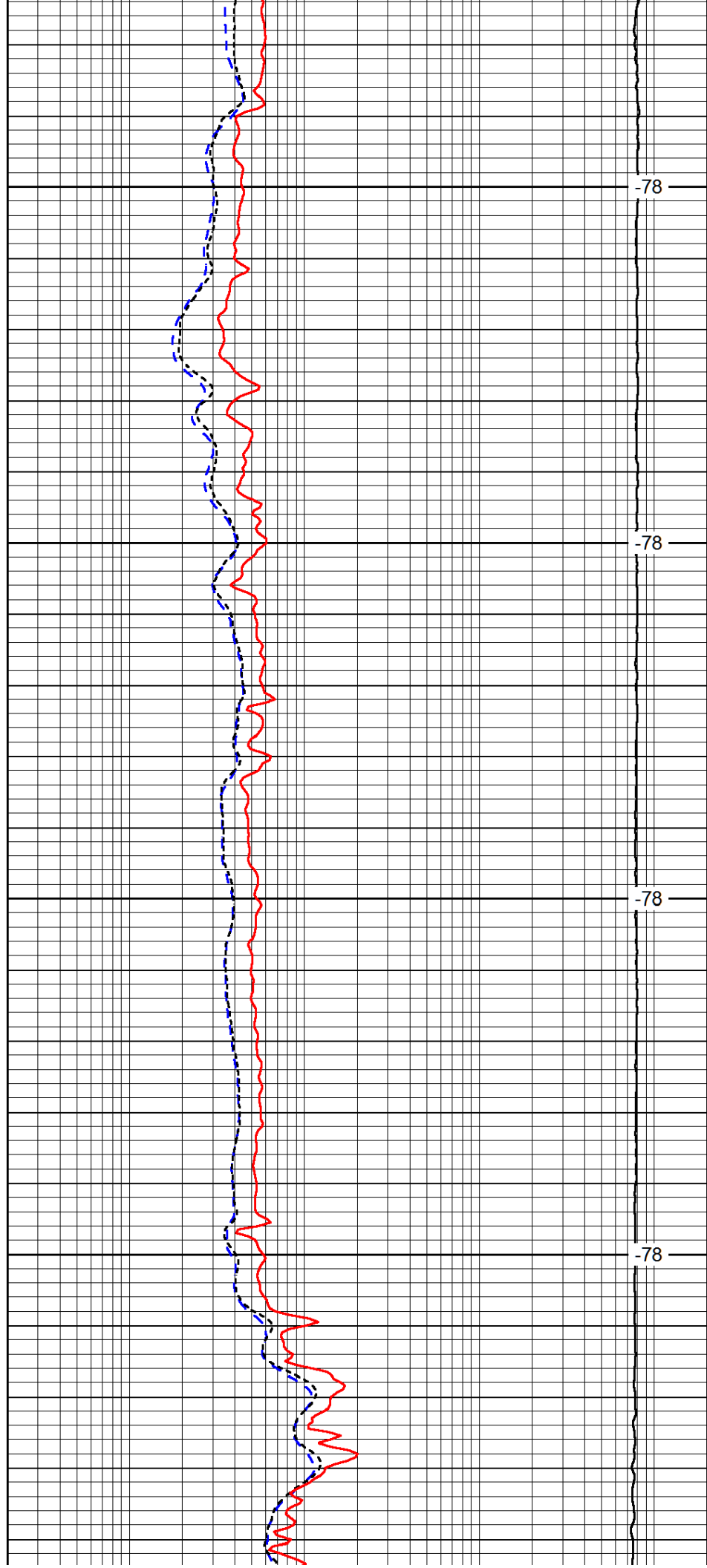


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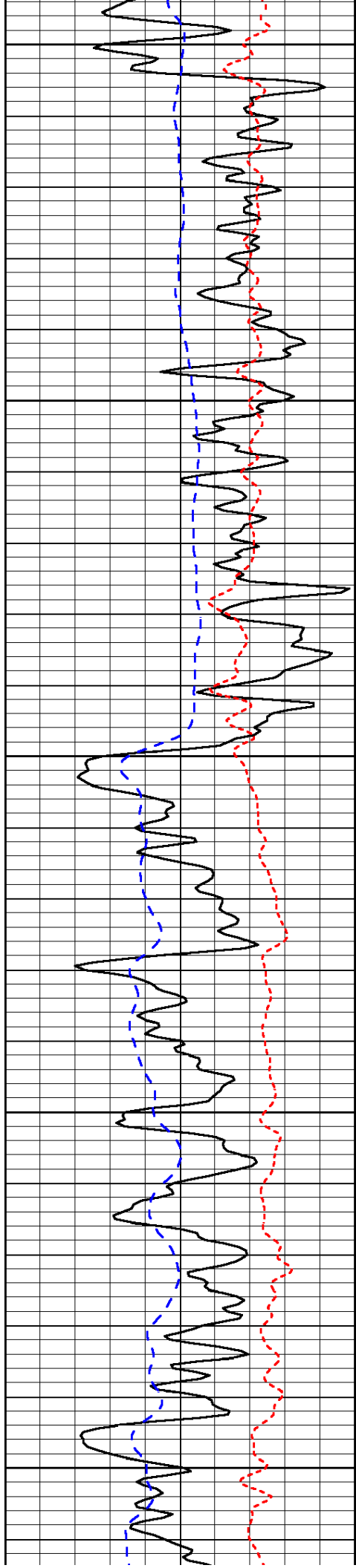


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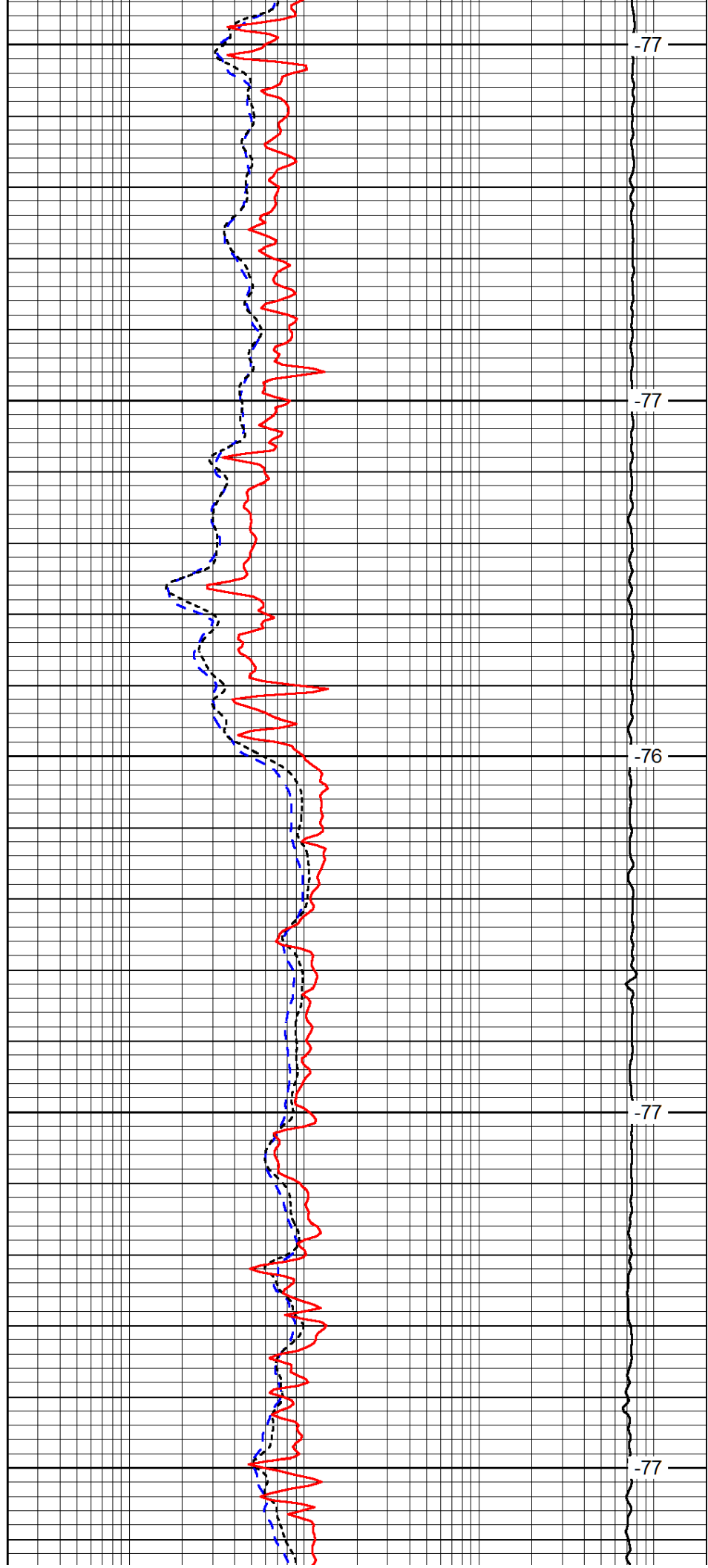
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2100

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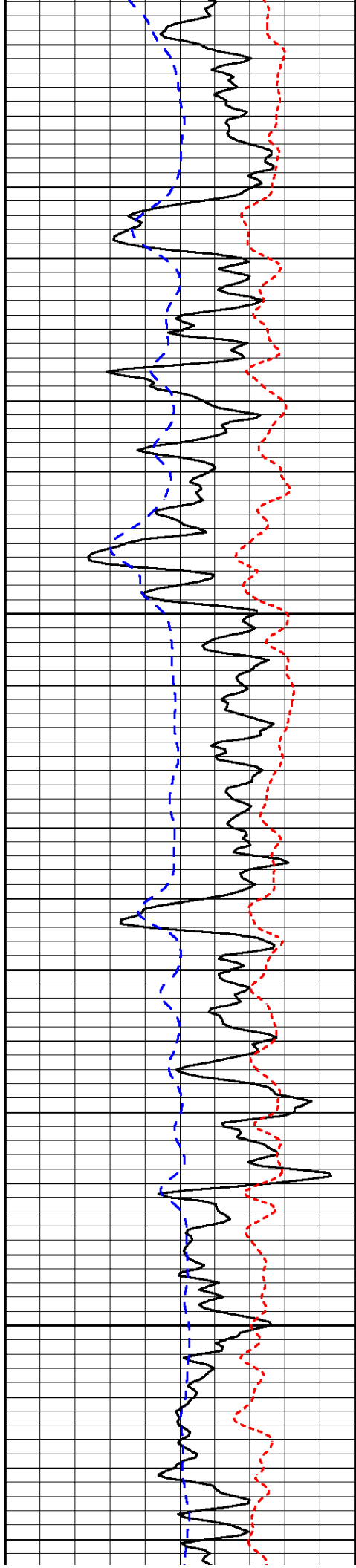
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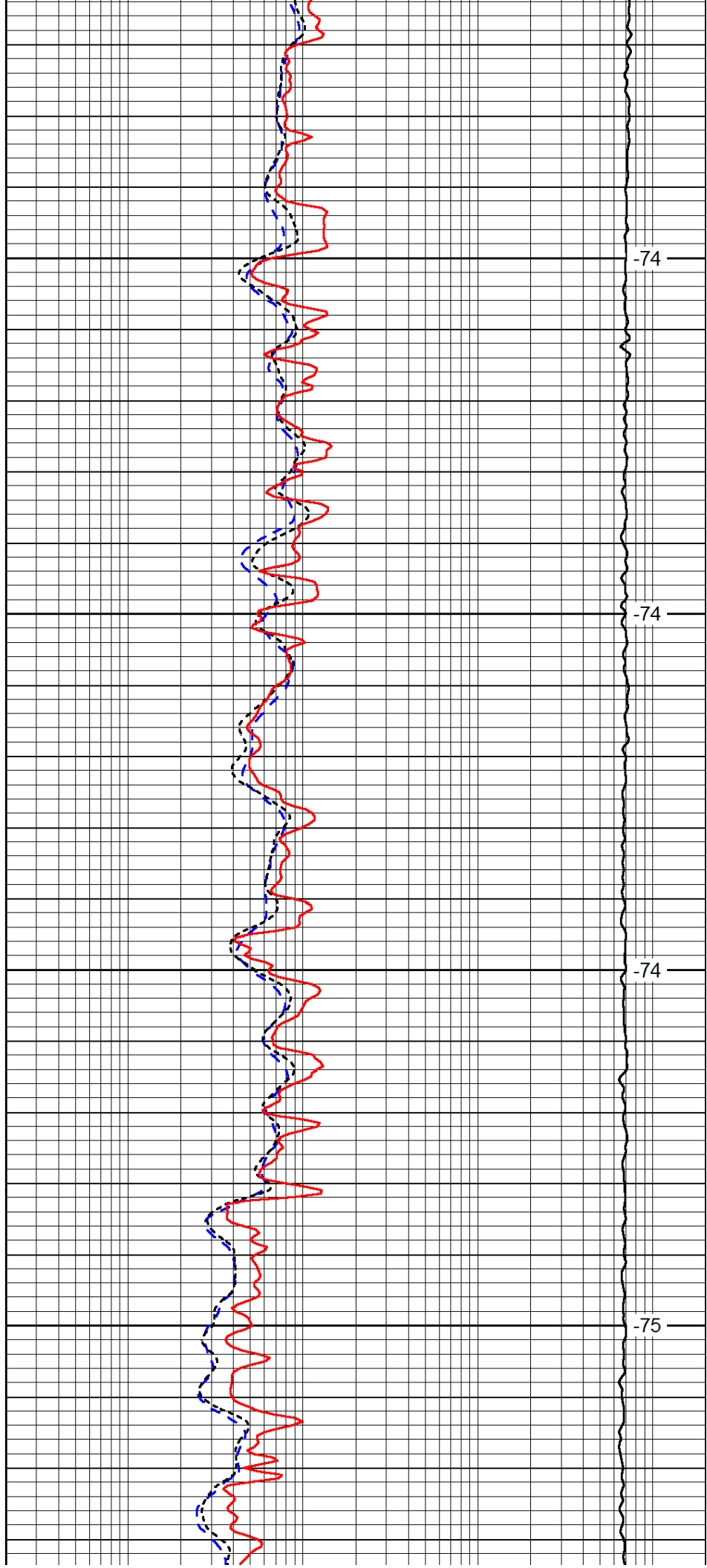


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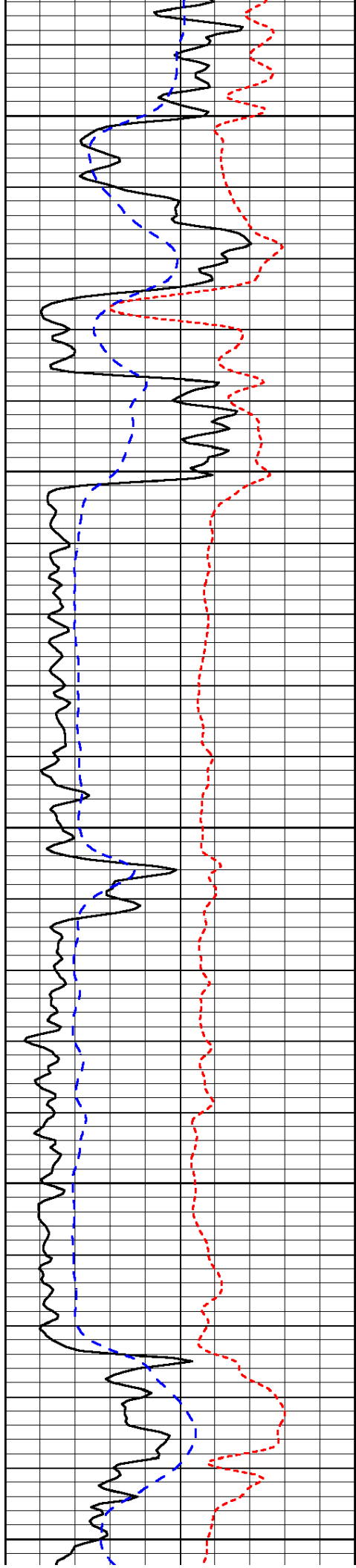


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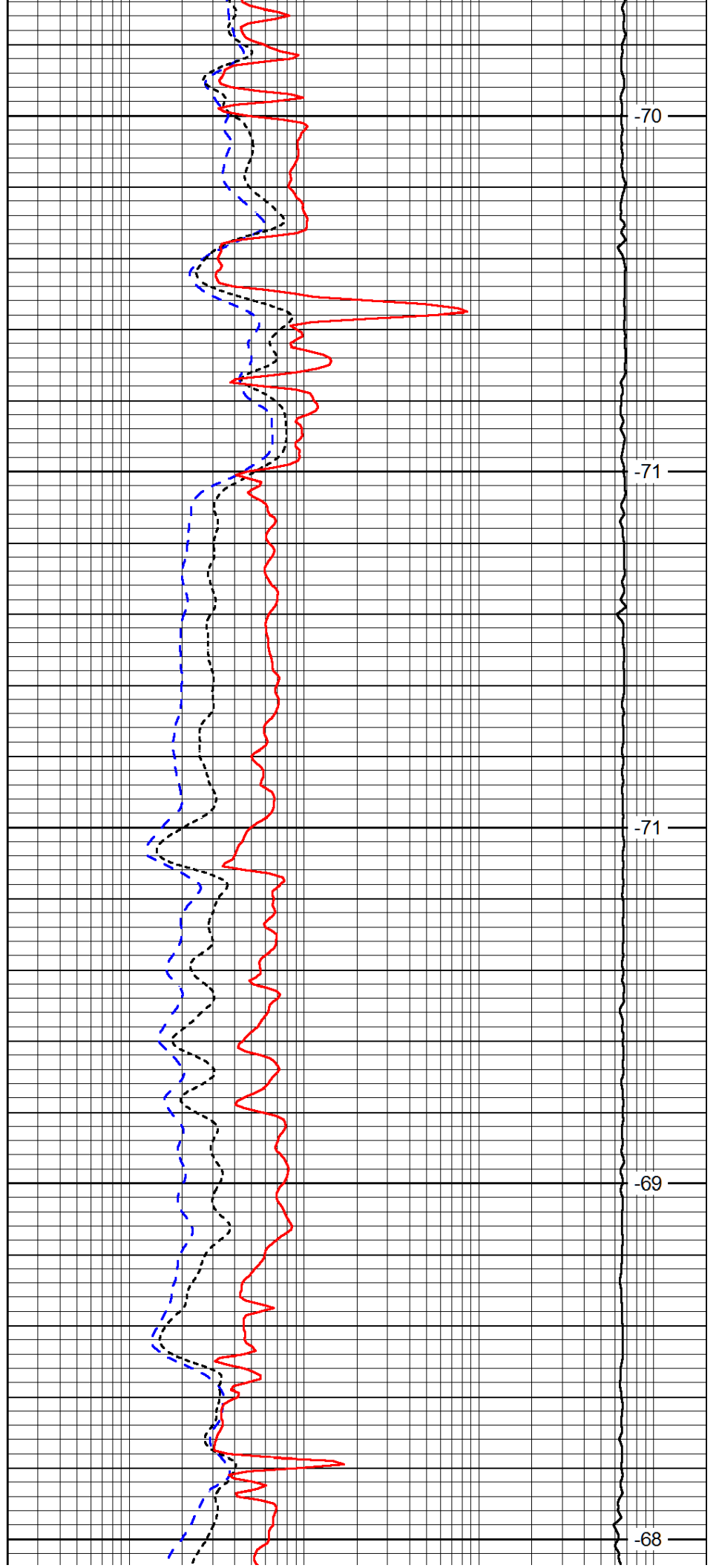
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2550

2600



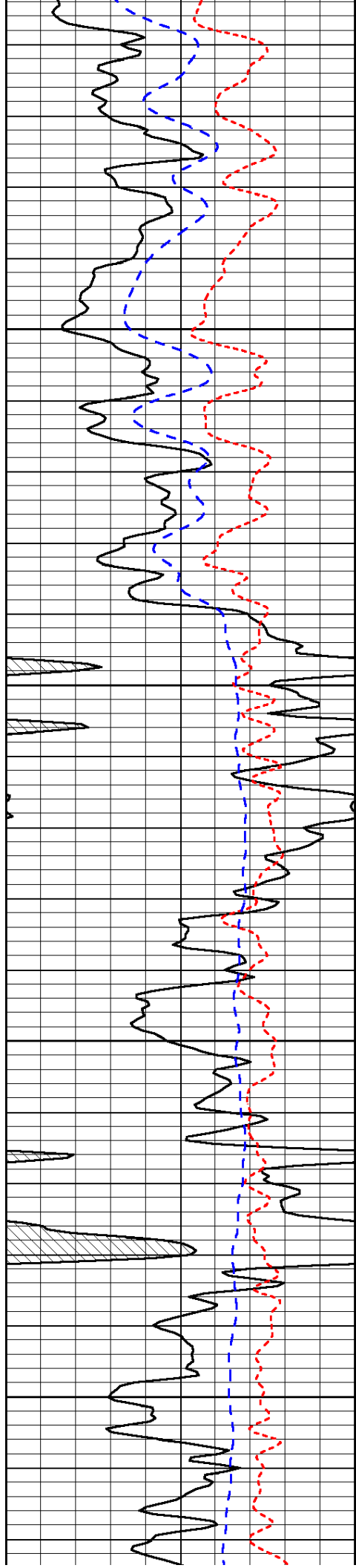
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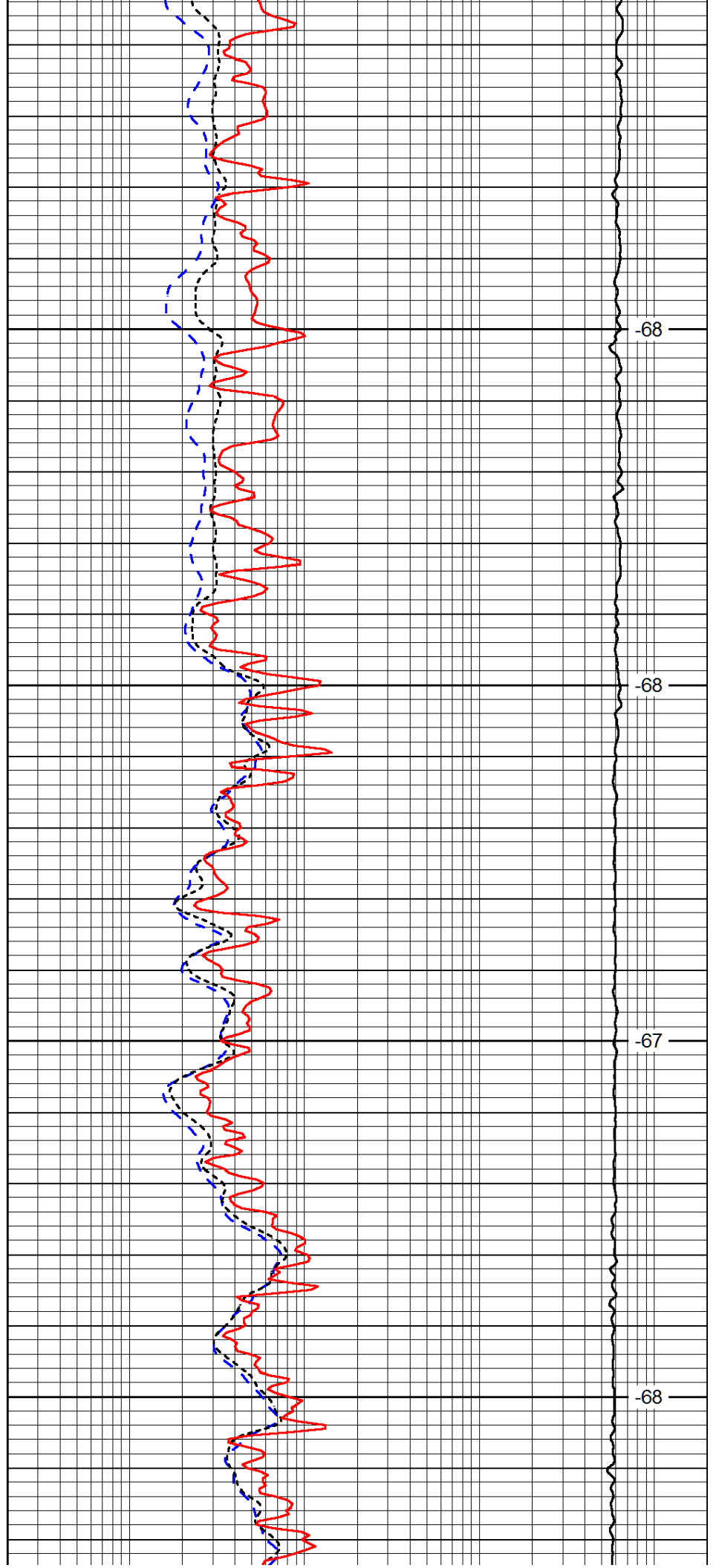


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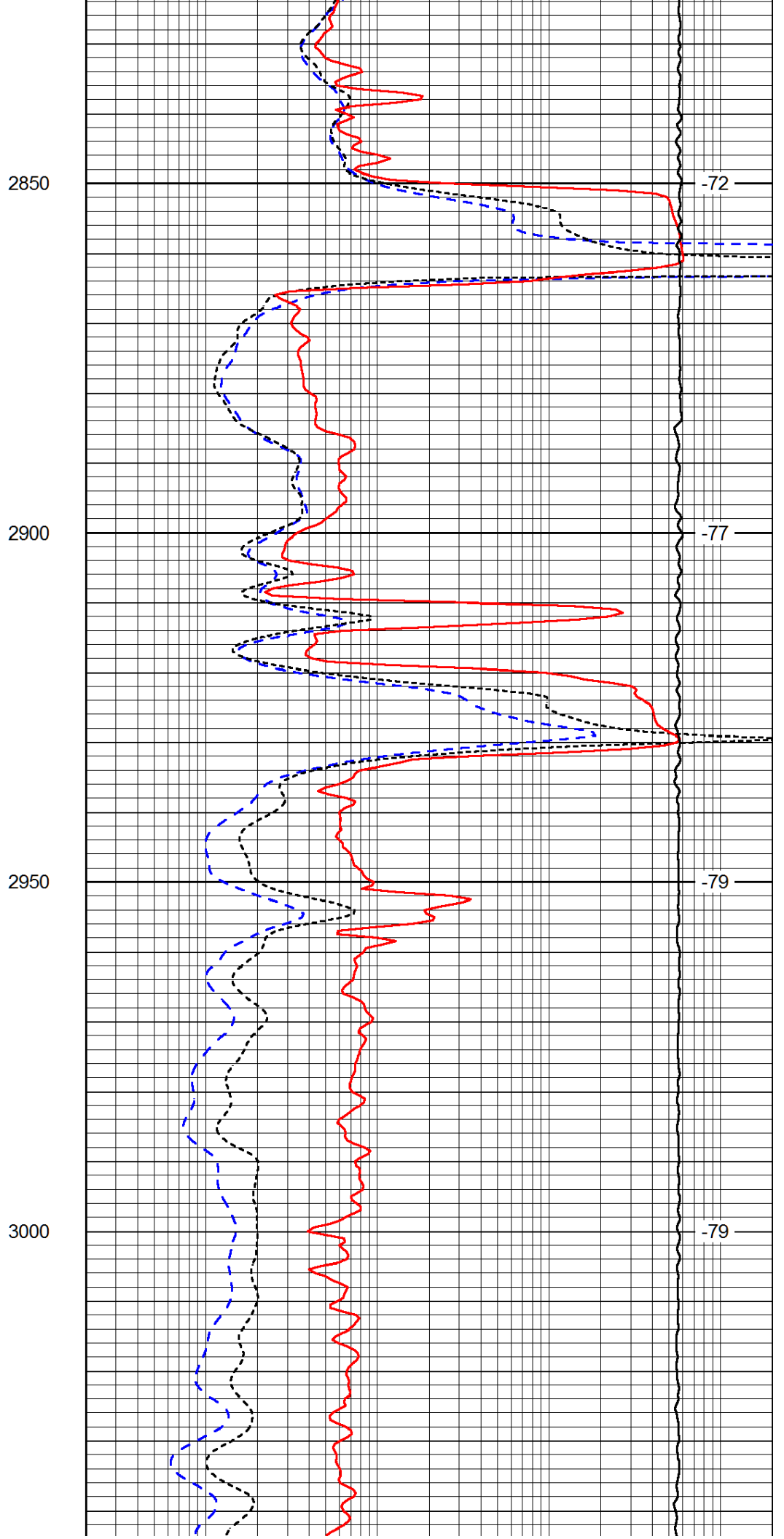
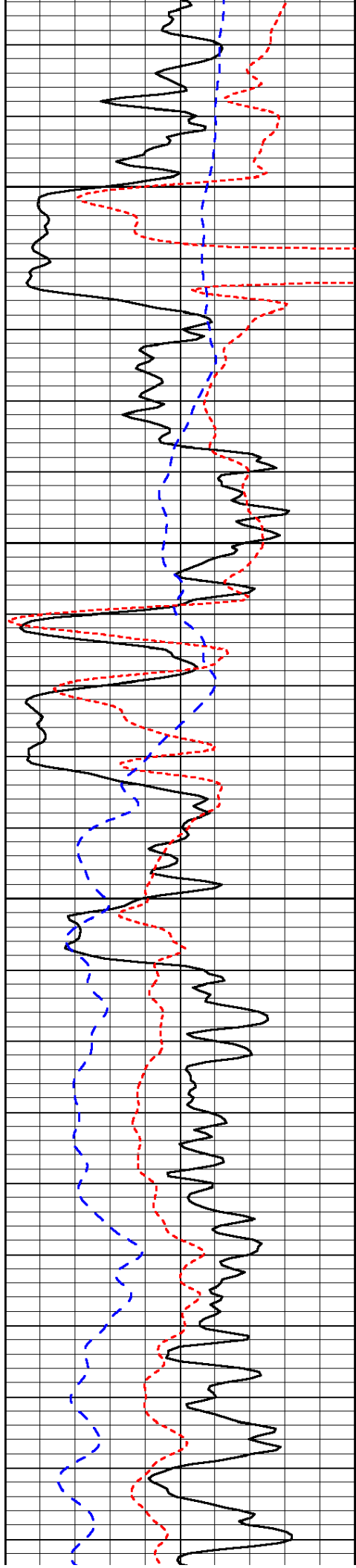


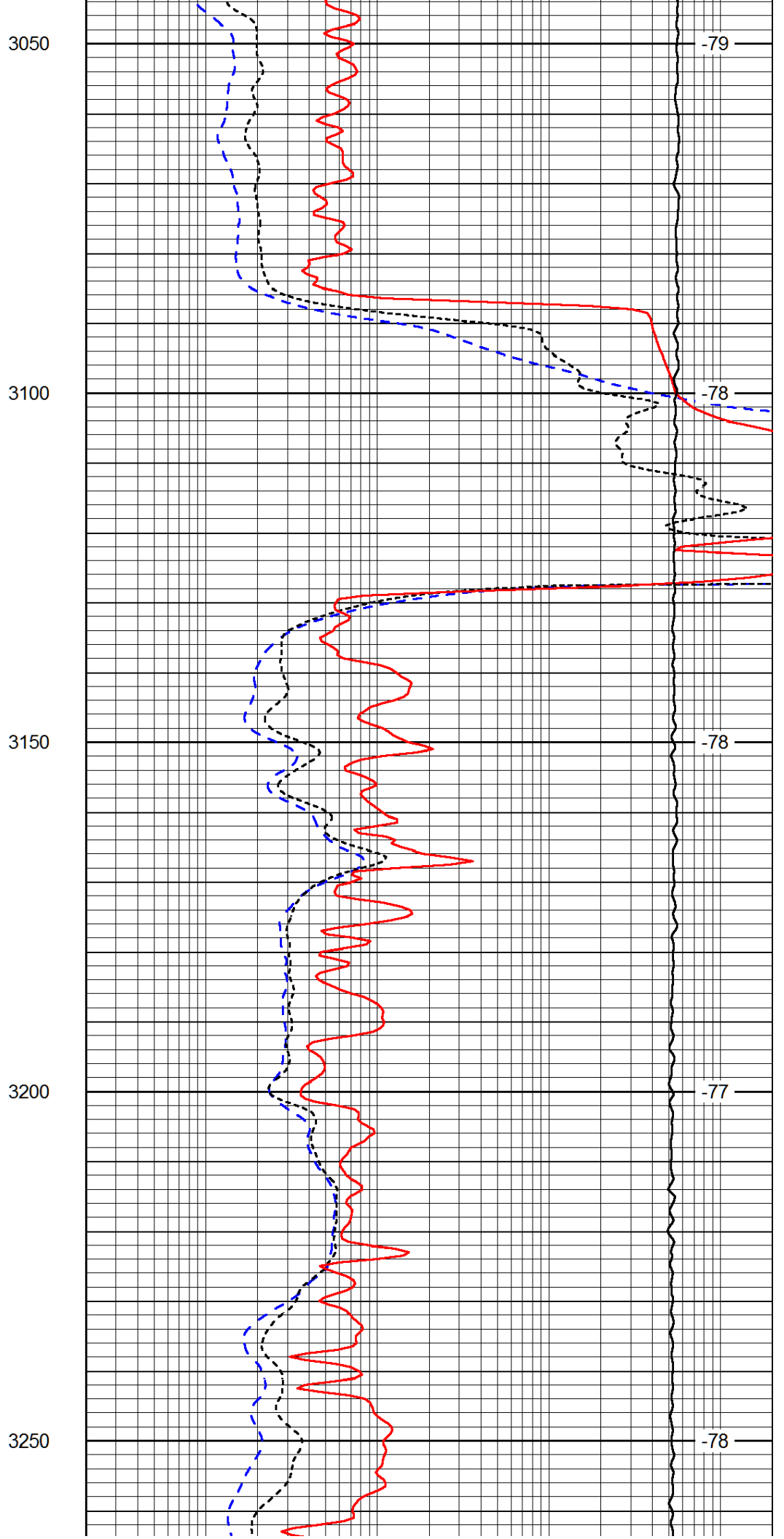
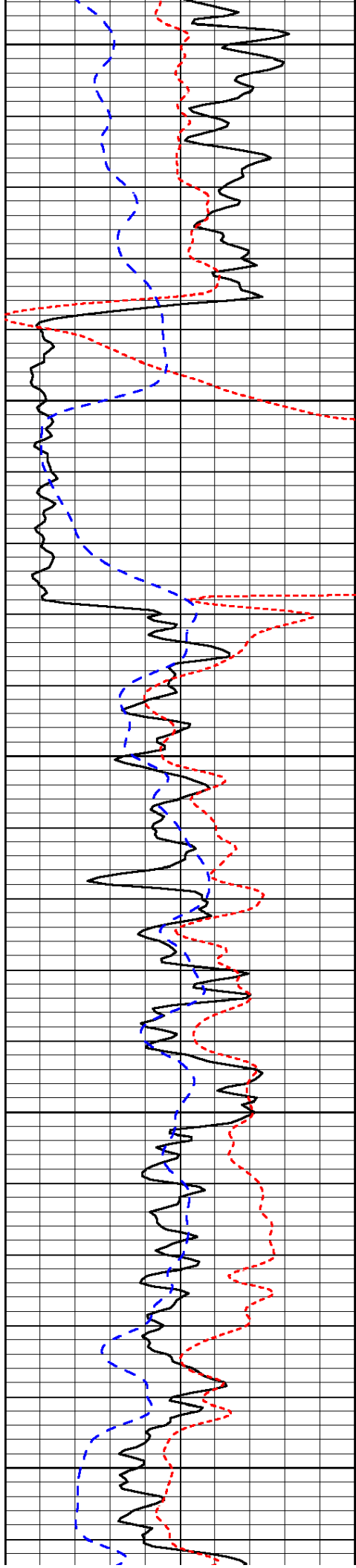
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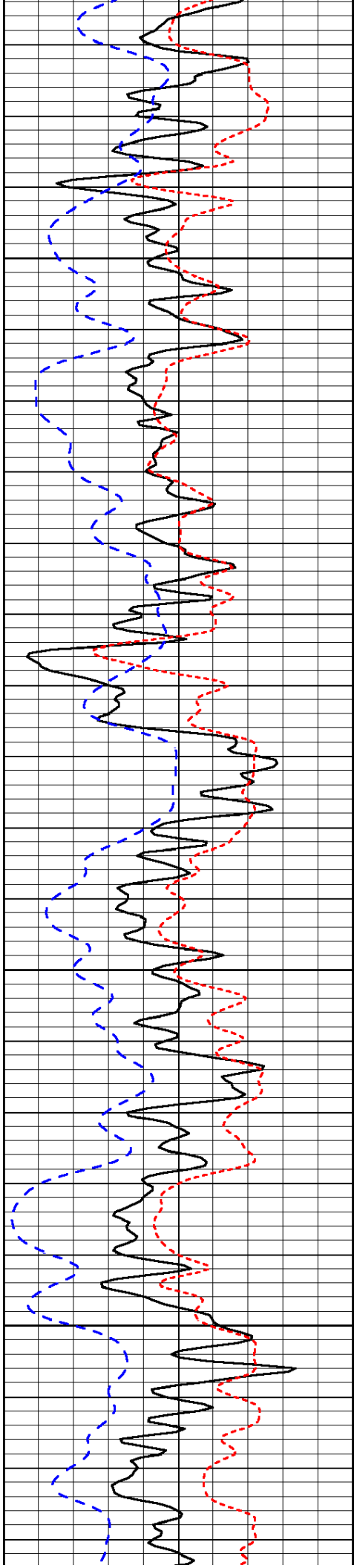
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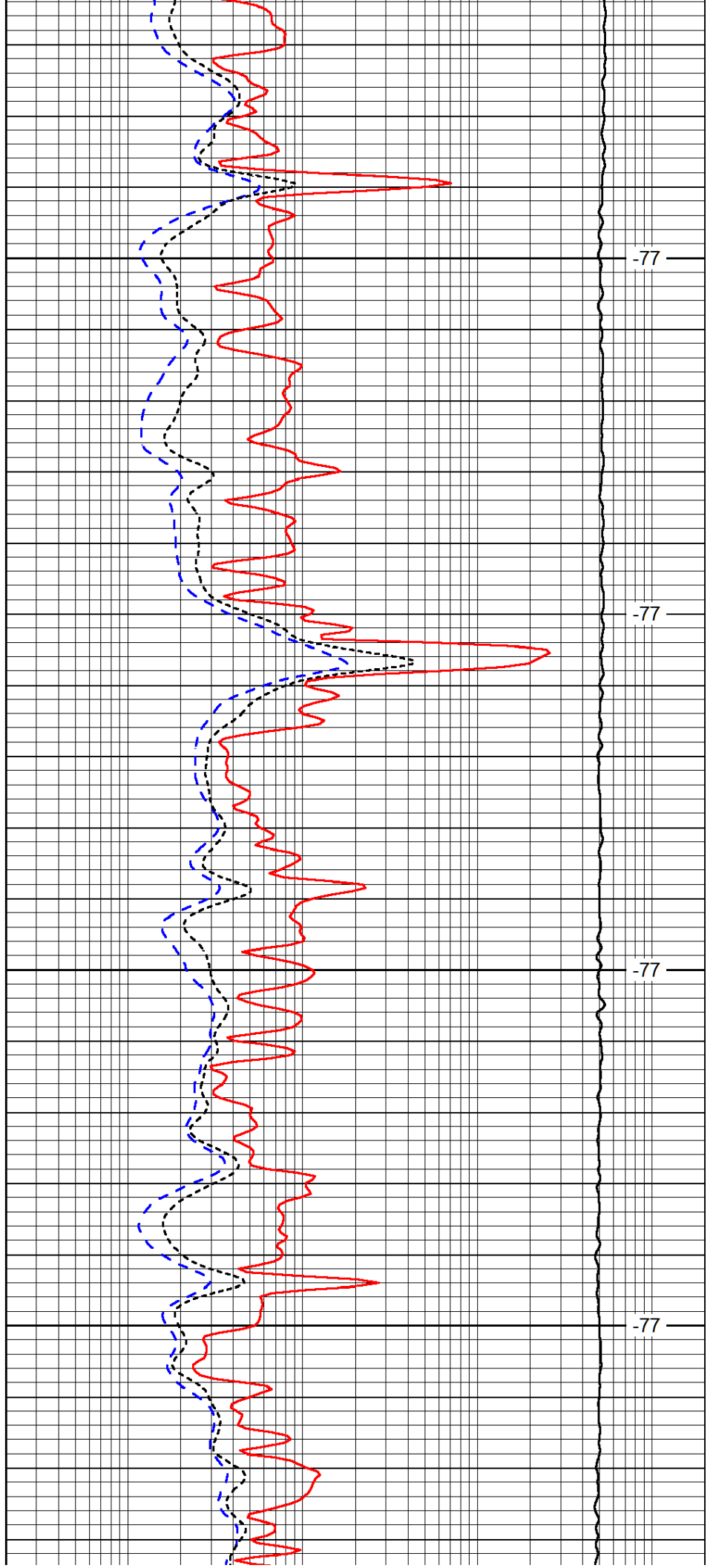


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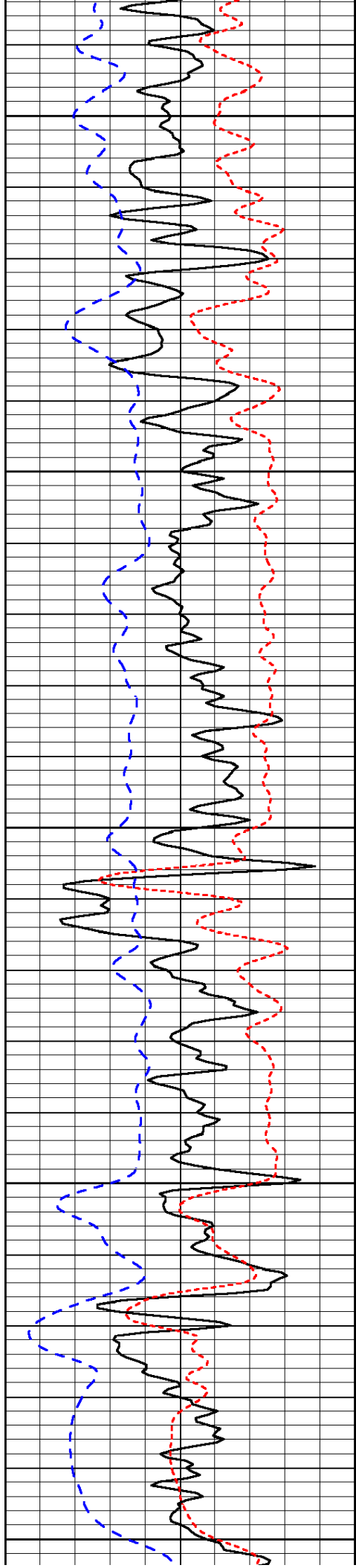


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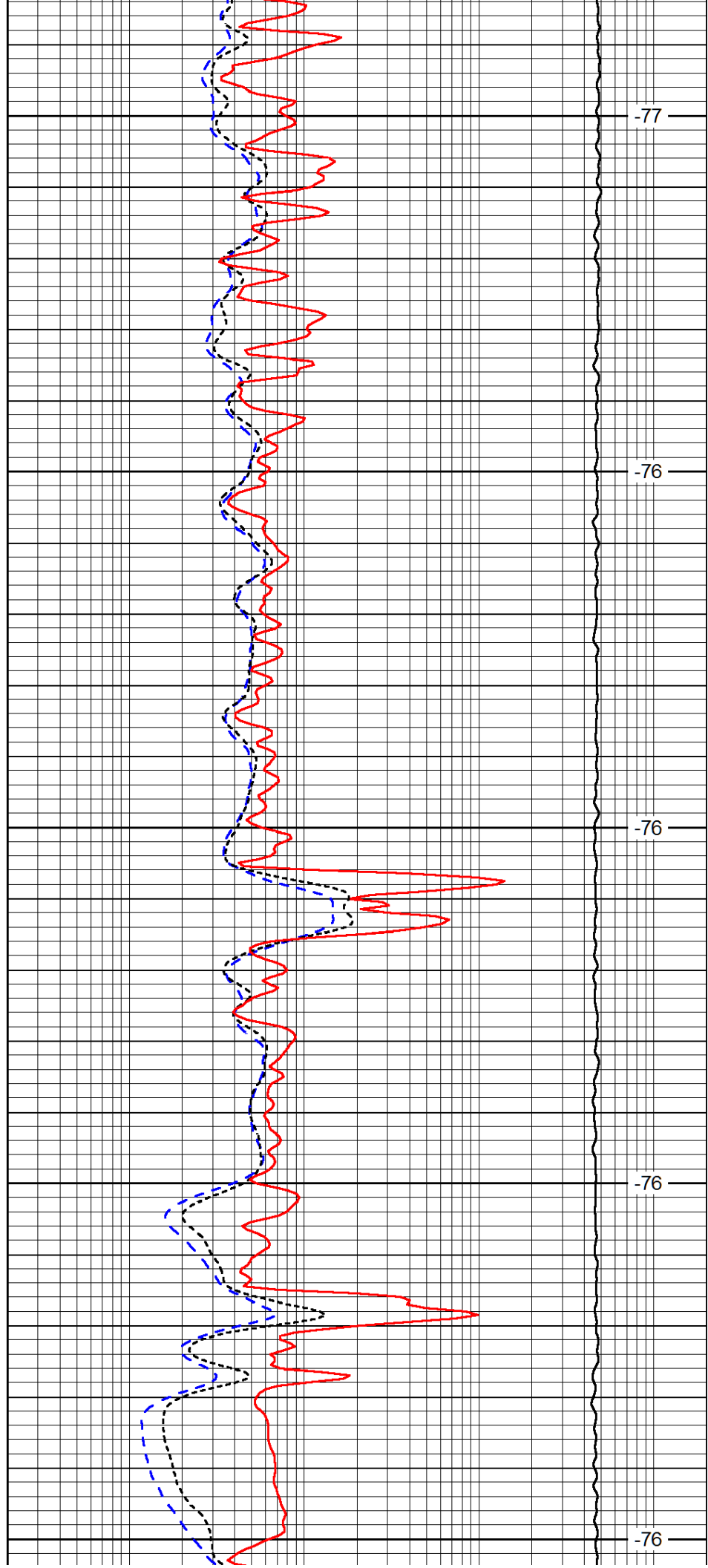
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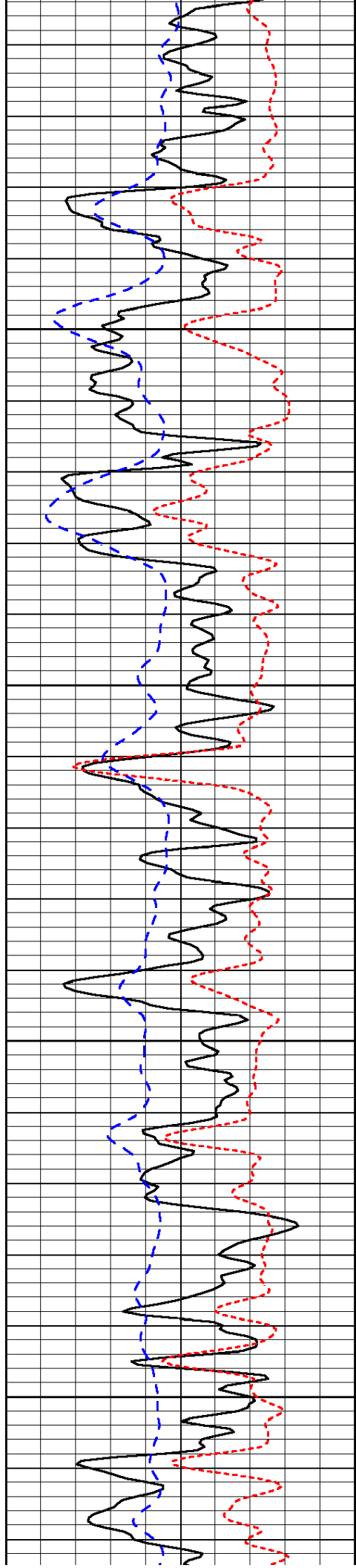
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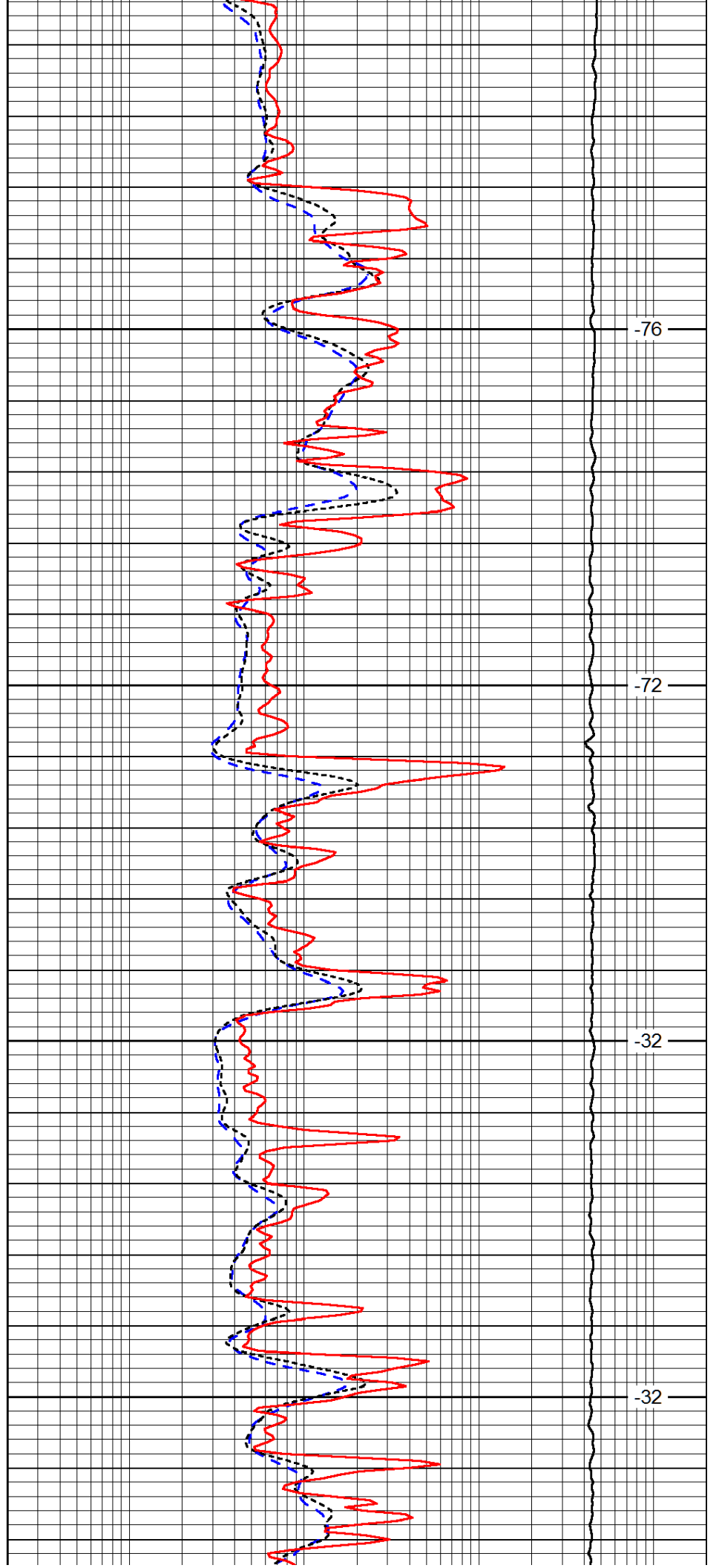


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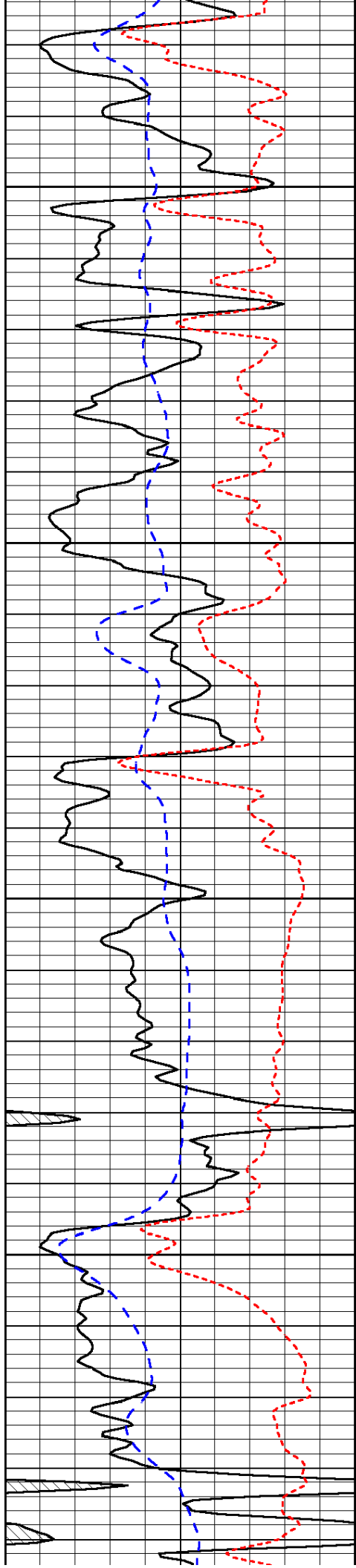


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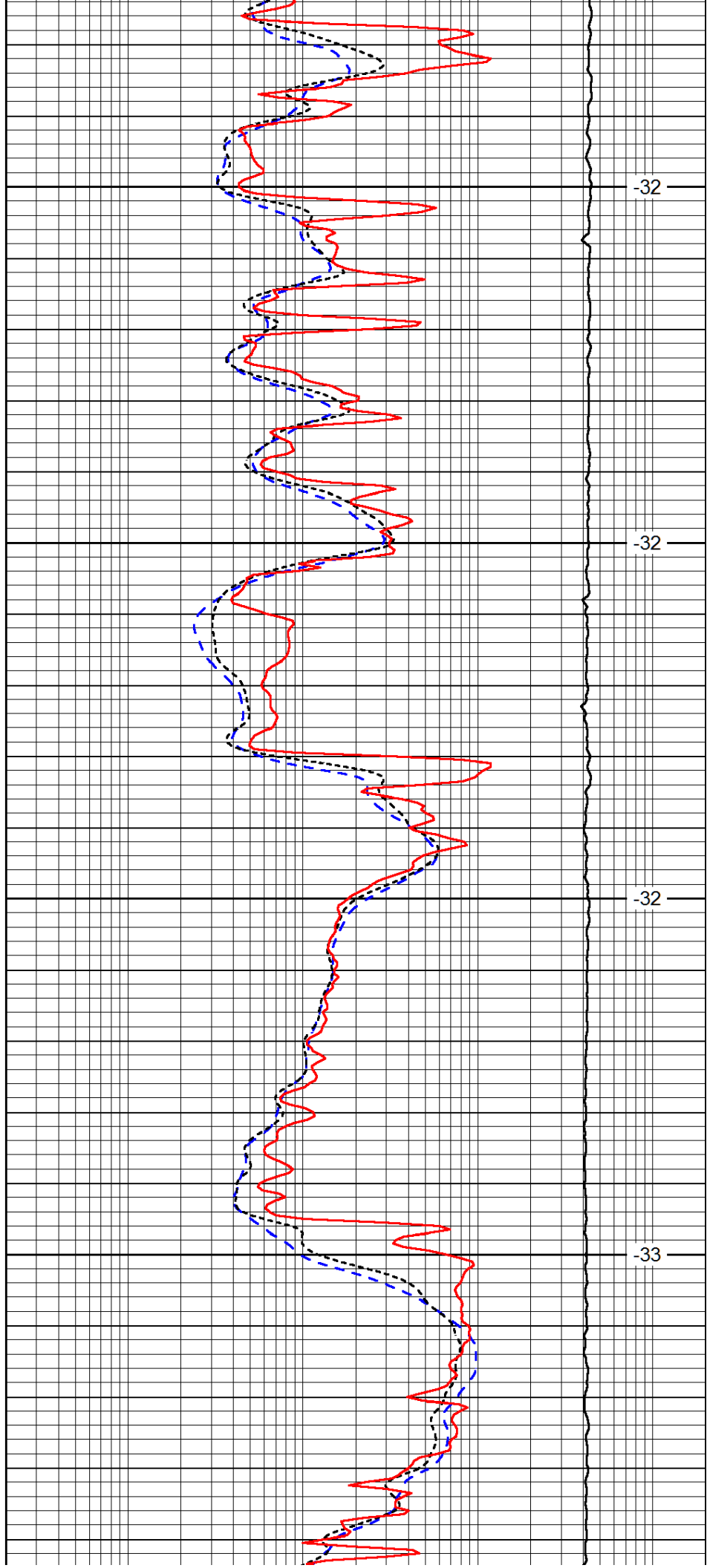


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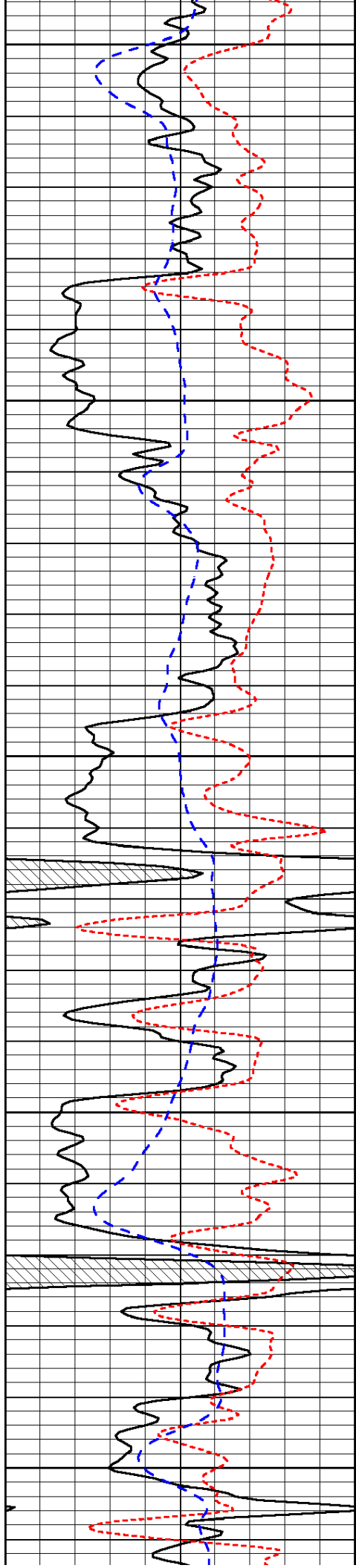


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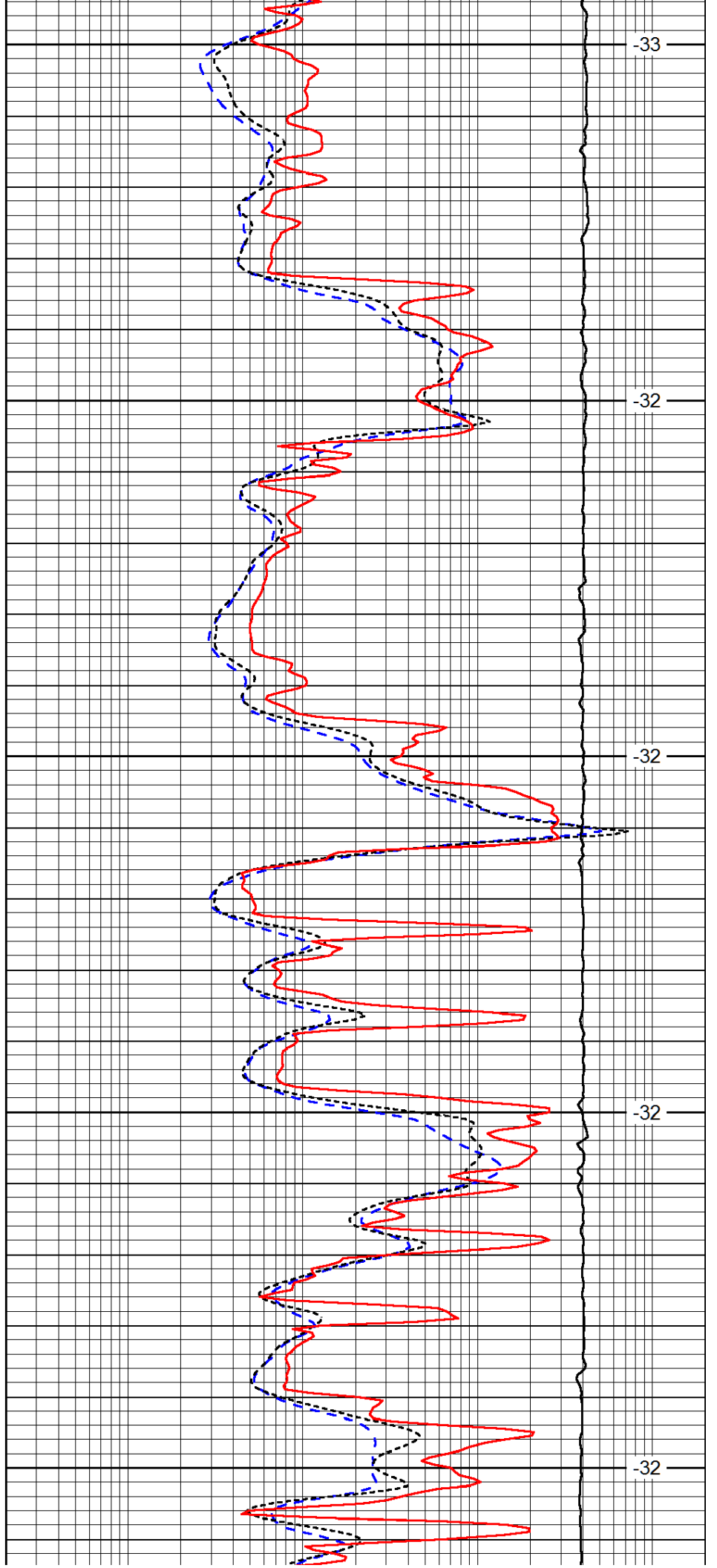
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4200

4250

4300

4350



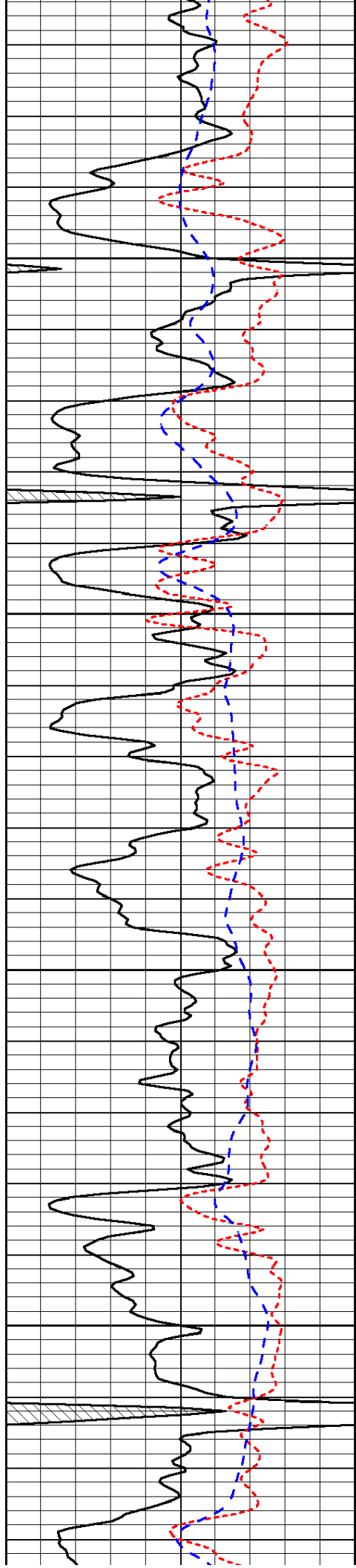
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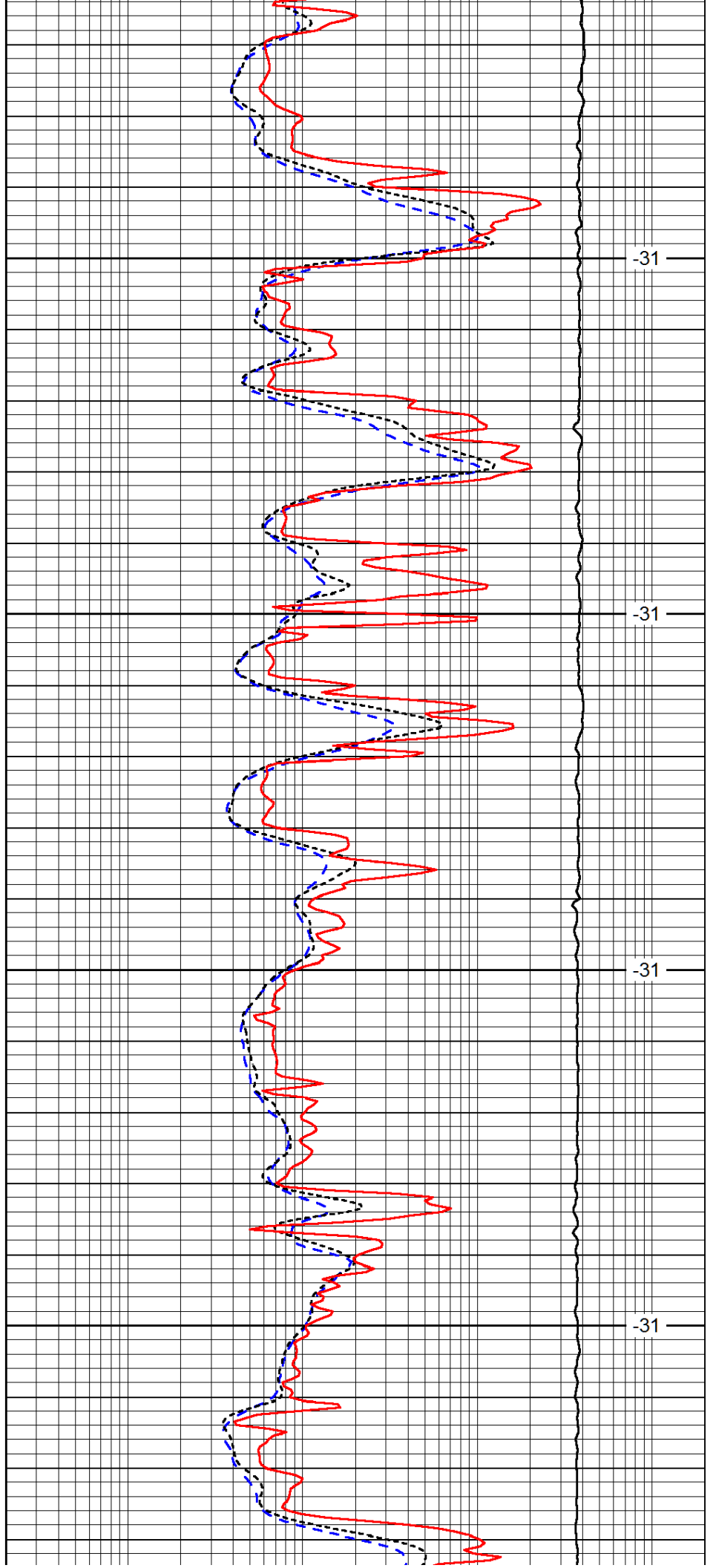


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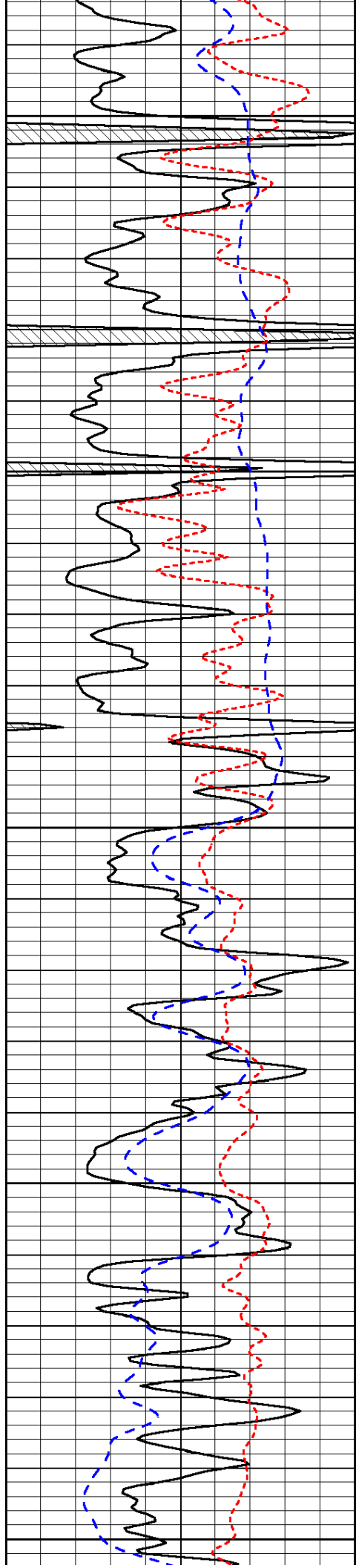


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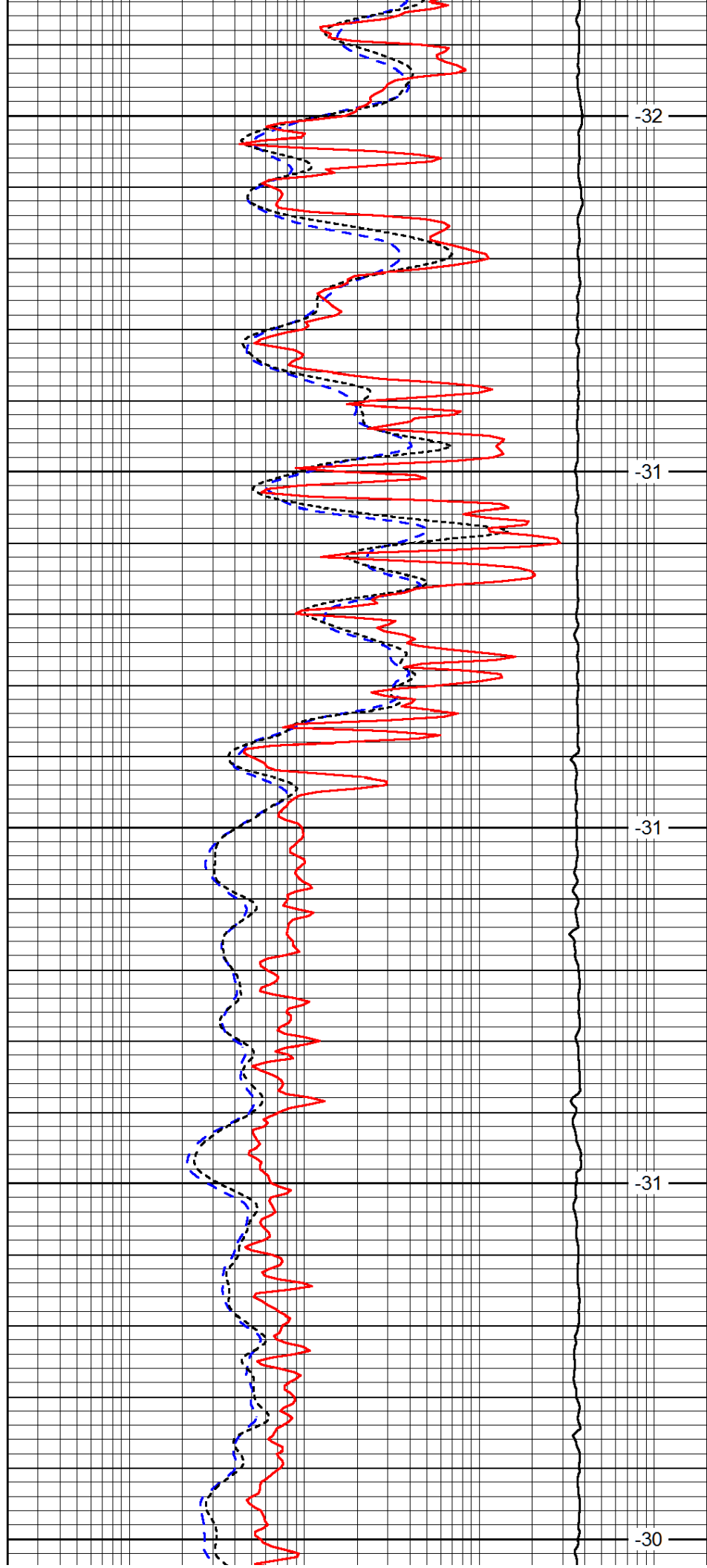
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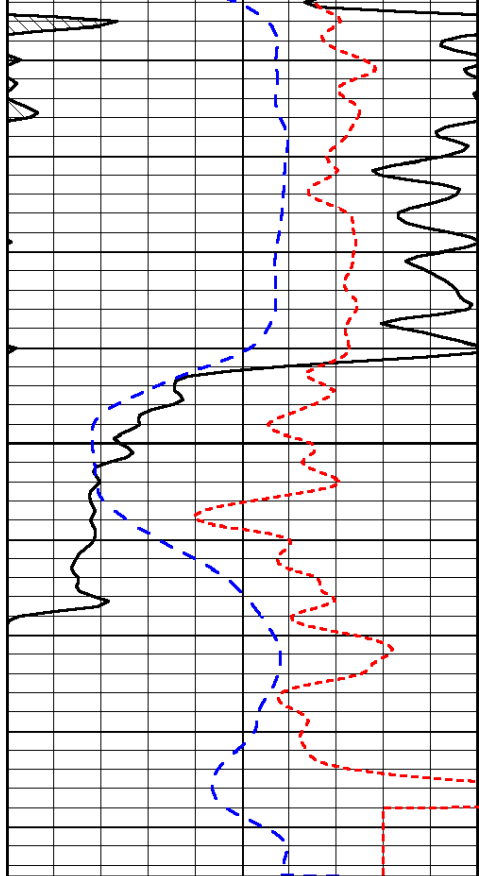
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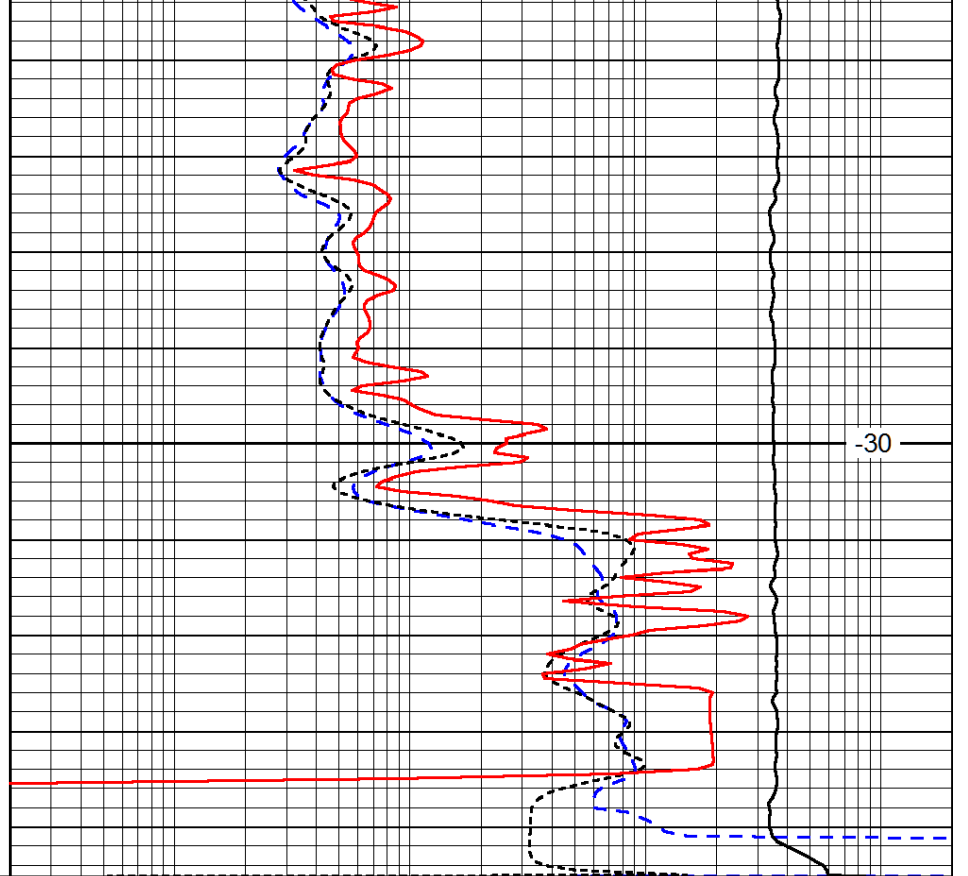
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-30



0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

4850



-30

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)