



Dual Induction Log

Pioneer Energy Services

API No.	Company Murfin Drilling Company, Inc.				
	Well Mary Ann No. 2-1				
	Field				
	County	Rawlins	State	Kansas	
	Location	330' FNL & 1520' FWL			Other Services CNL/CDL MEL/BHCS
	Sec: 1	Tw: 1S	Rge: 36W	Elevation	
Permanent Datum	Ground Level	Elevation 3085		K.B. 3095	
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum		D.F. 3085	
Drilling Measured From	Kelly Bushing	G.L. 3085			
Date	8/8/2013				
Run Number	One				
Depth Driller	4420				
Depth Logger	4410				
Bottom Logged Interval	4409				
Top Log Interval	00				
Casing Driller	8.625 @ 223				
Casing Logger	221				
Bit Size	7.875				
Type Fluid in Hole	Chemical				
Salinity,ppm CL	600				
Density / Viscosity	9.2 48				
pH / Fluid Loss	9.5 6.8				
Source of Sample	Flowline				
Rm @ Meas. Temp	.28 @ 68				
Rmf @ Meas. Temp	.21 @ 68				
Rmc @ Meas. Temp	.38 @ 68				
Source of Rmf / Rmc	Charts				
Rm @ BHT	.15 @ 120				
Operating Rig Time	5 Hours				
Max Rec. Temp. F	120				
Equipment Number	15				
Location	Hays				
Recorded By	J. Henrickson				
Witnessed By	Robert Hendrix				

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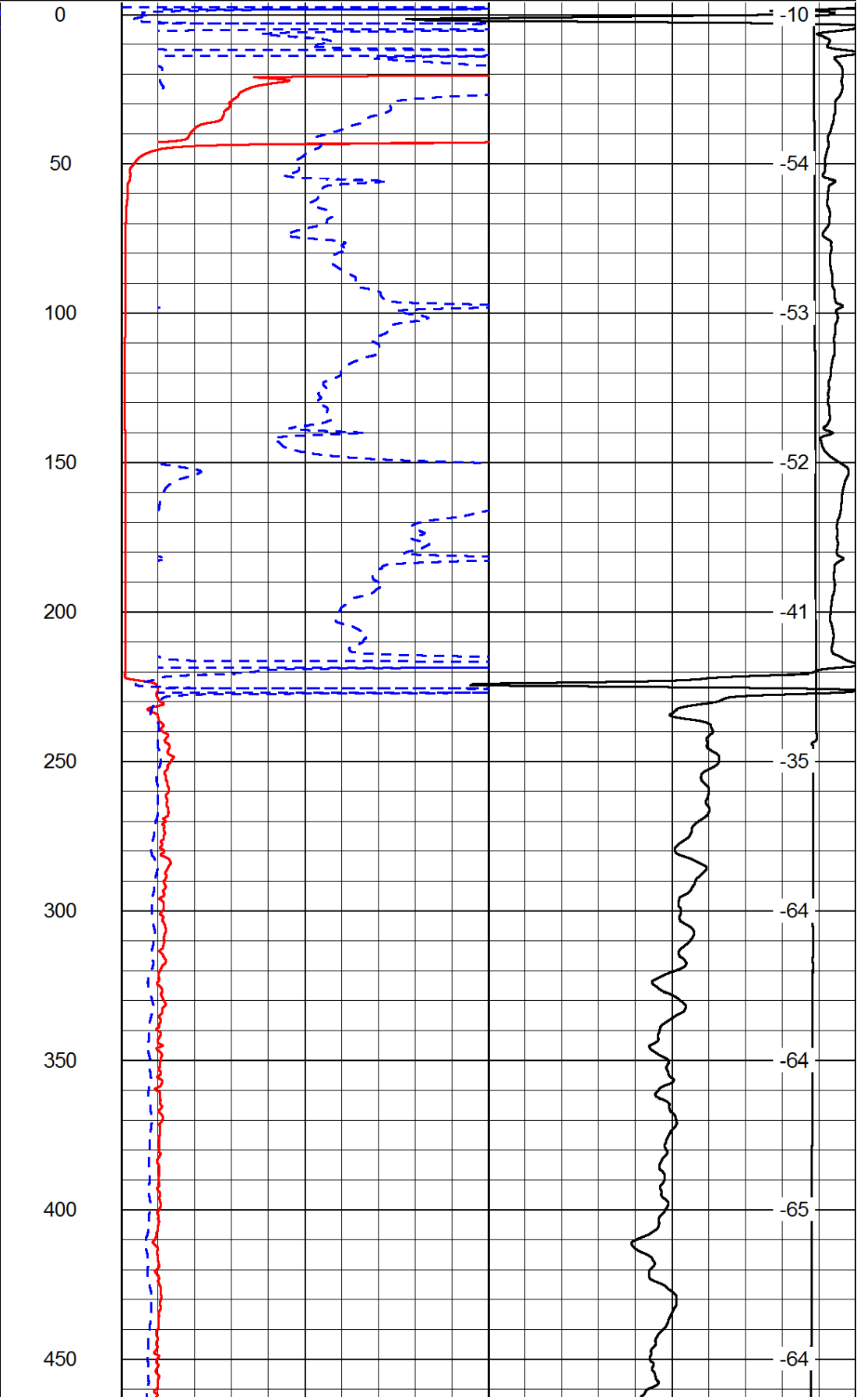
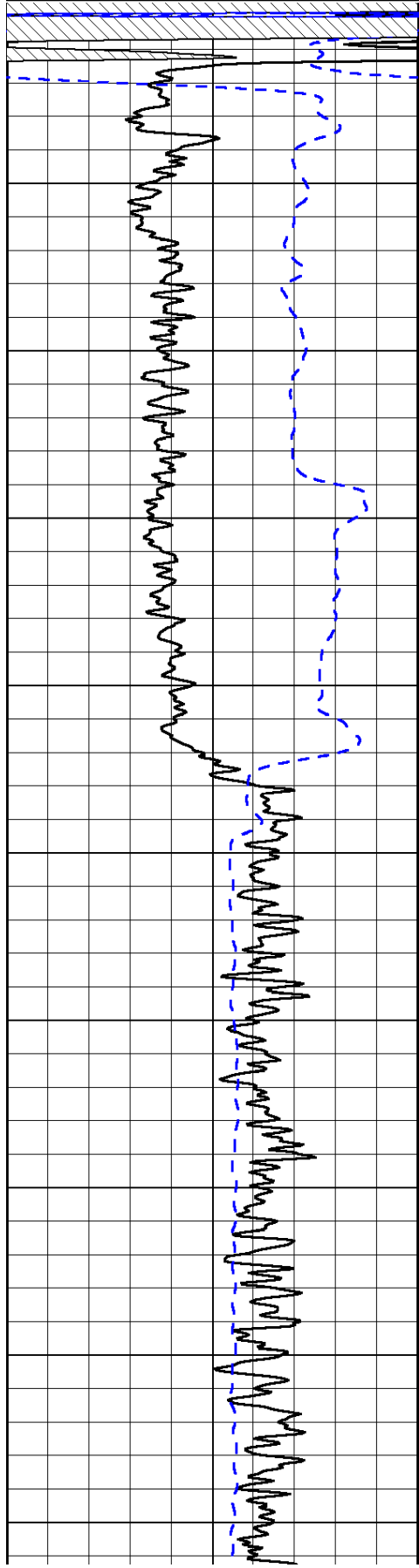
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

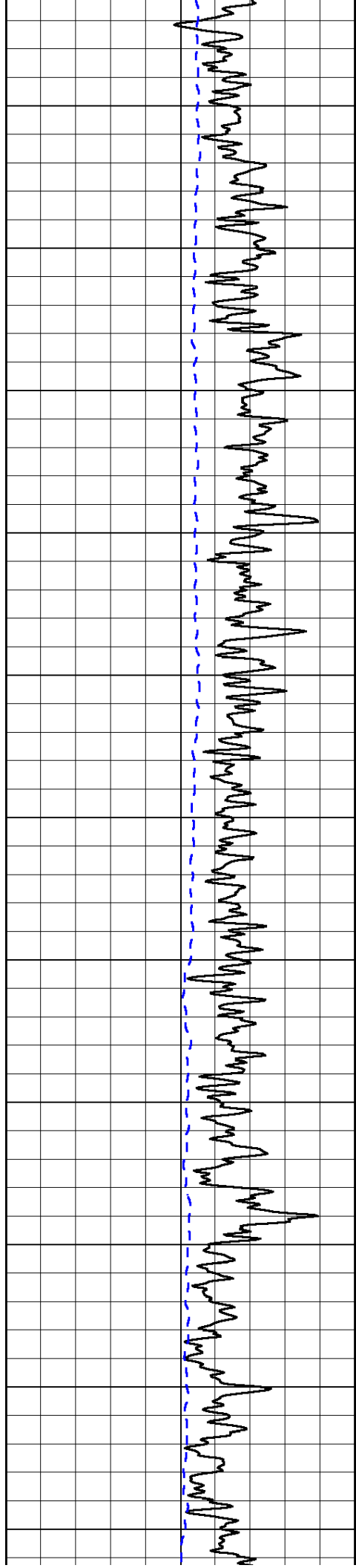
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Atwood Kansas
West to 11 Rd, North to Beardsley, North to CC Rd
3 West to 7 Rd, 1 1/2 North, West Into

Database File: c:\warrior\data\murfin_mary ann #1-1\murfin_maryann_2_1hd.db
Dataset Pathname: DIL\murall
Presentation Format: dil2in
Dataset Creation: Thu Aug 08 15:57:03 2013
Charted by: Depth in Feet scaled 1:600

Charted by: _____ Depth in Feet scaled 1:500								
0	Gamma Ray	150	0	Shallow Resistivity	50	LSPD		
-200	SP (mV)	0	0	Deep Resistivity	50			
			1000	Conductivity		0		
			15000	Line Tension		0		
			50	Shallow Resistivity	500			
			50	Deep Resistivity	500			





500

550

600

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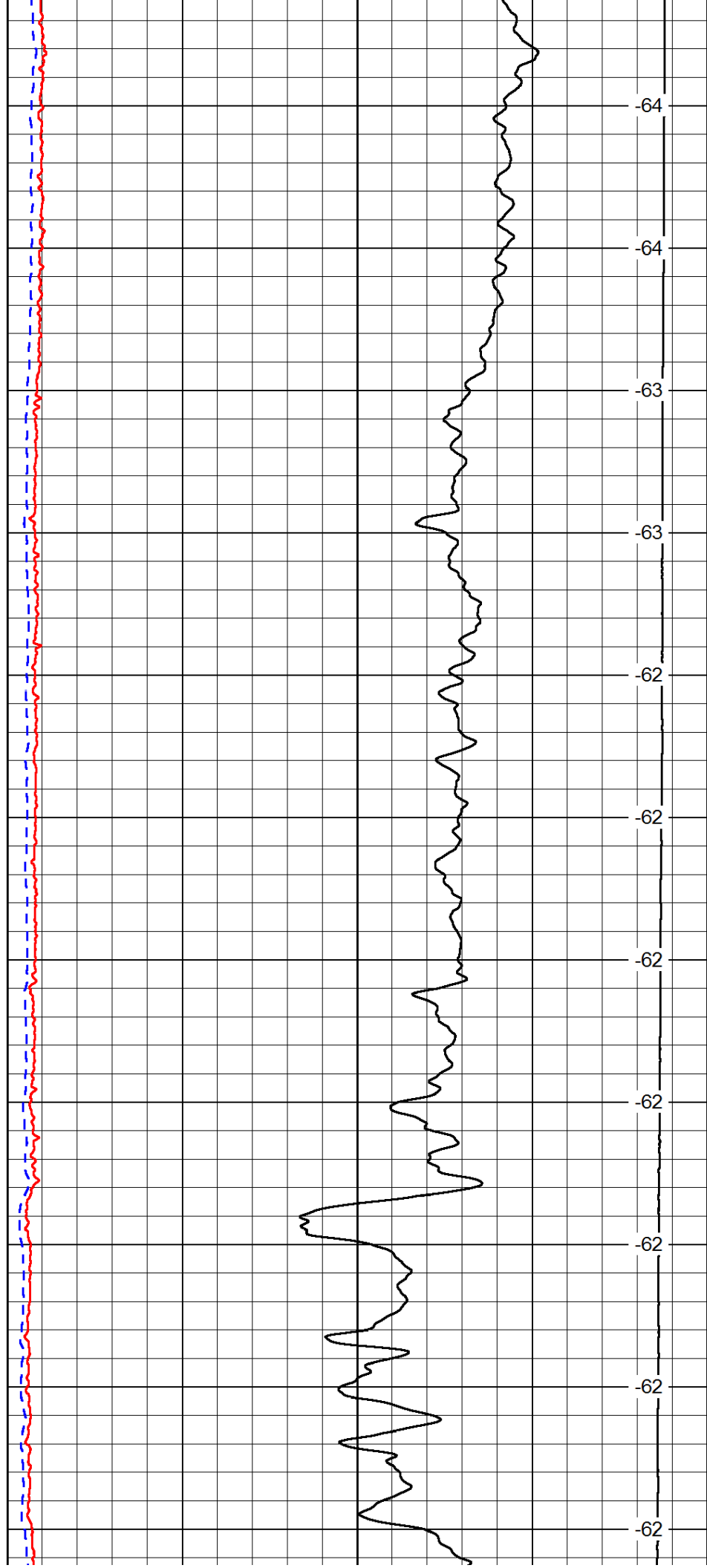
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850

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950

1000



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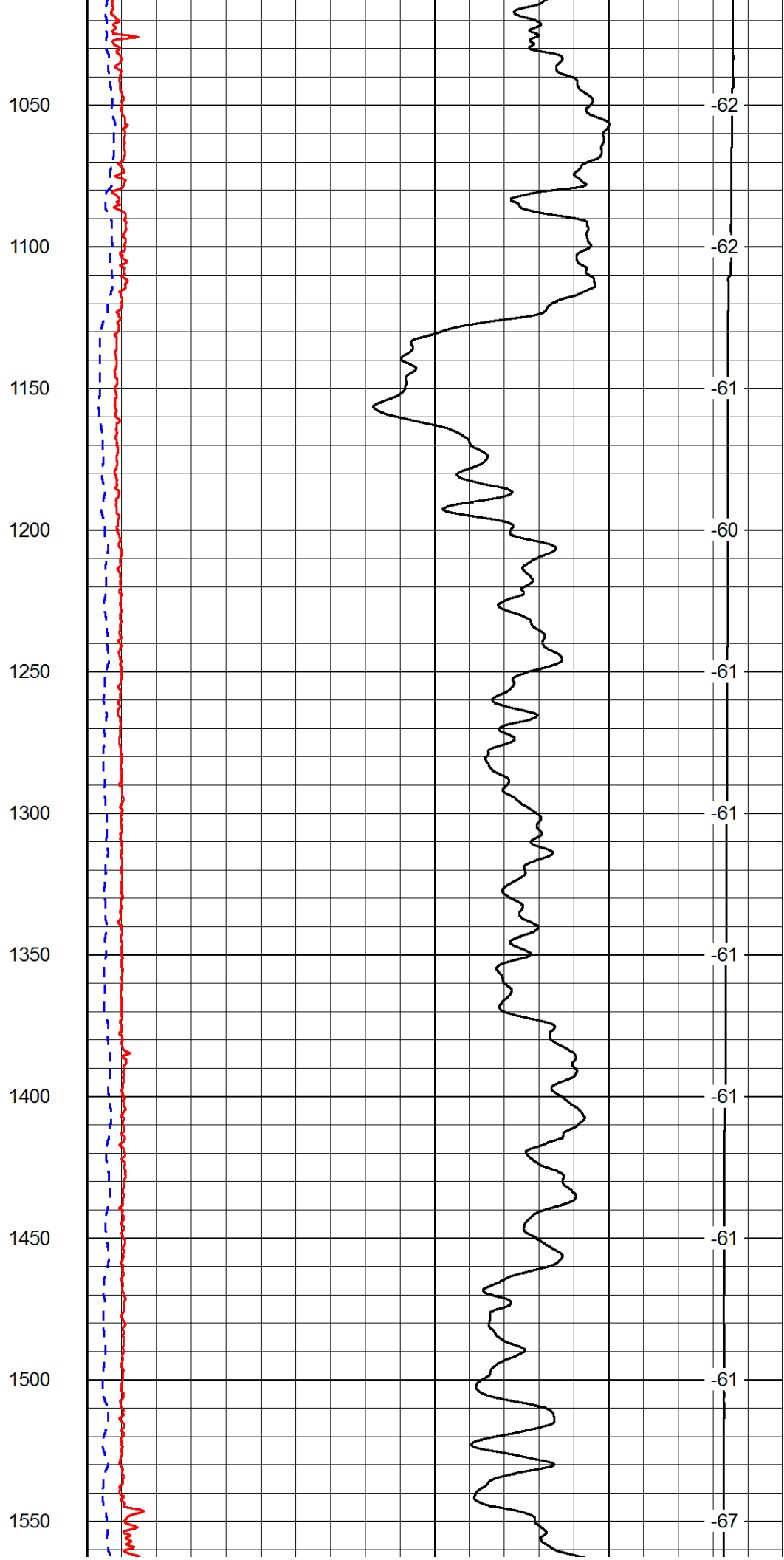
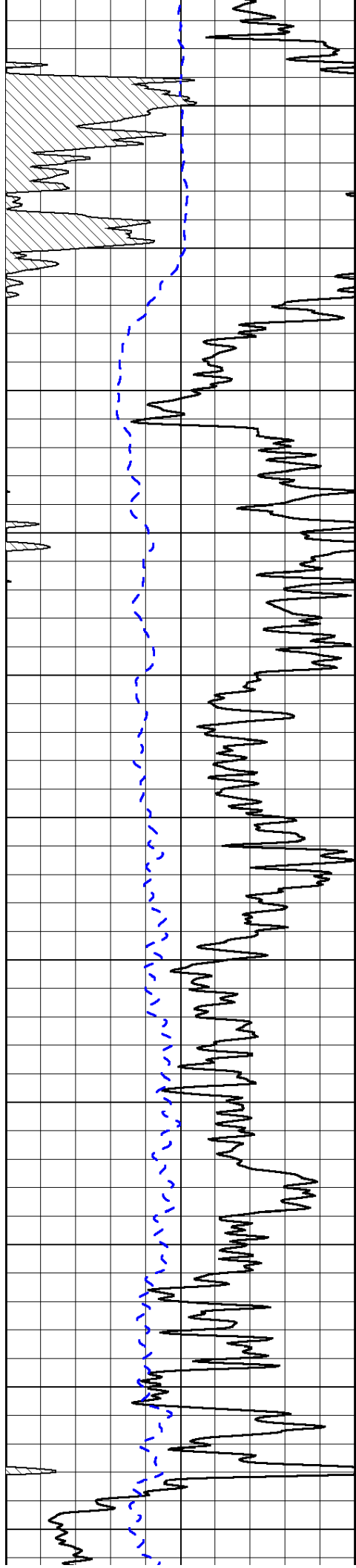
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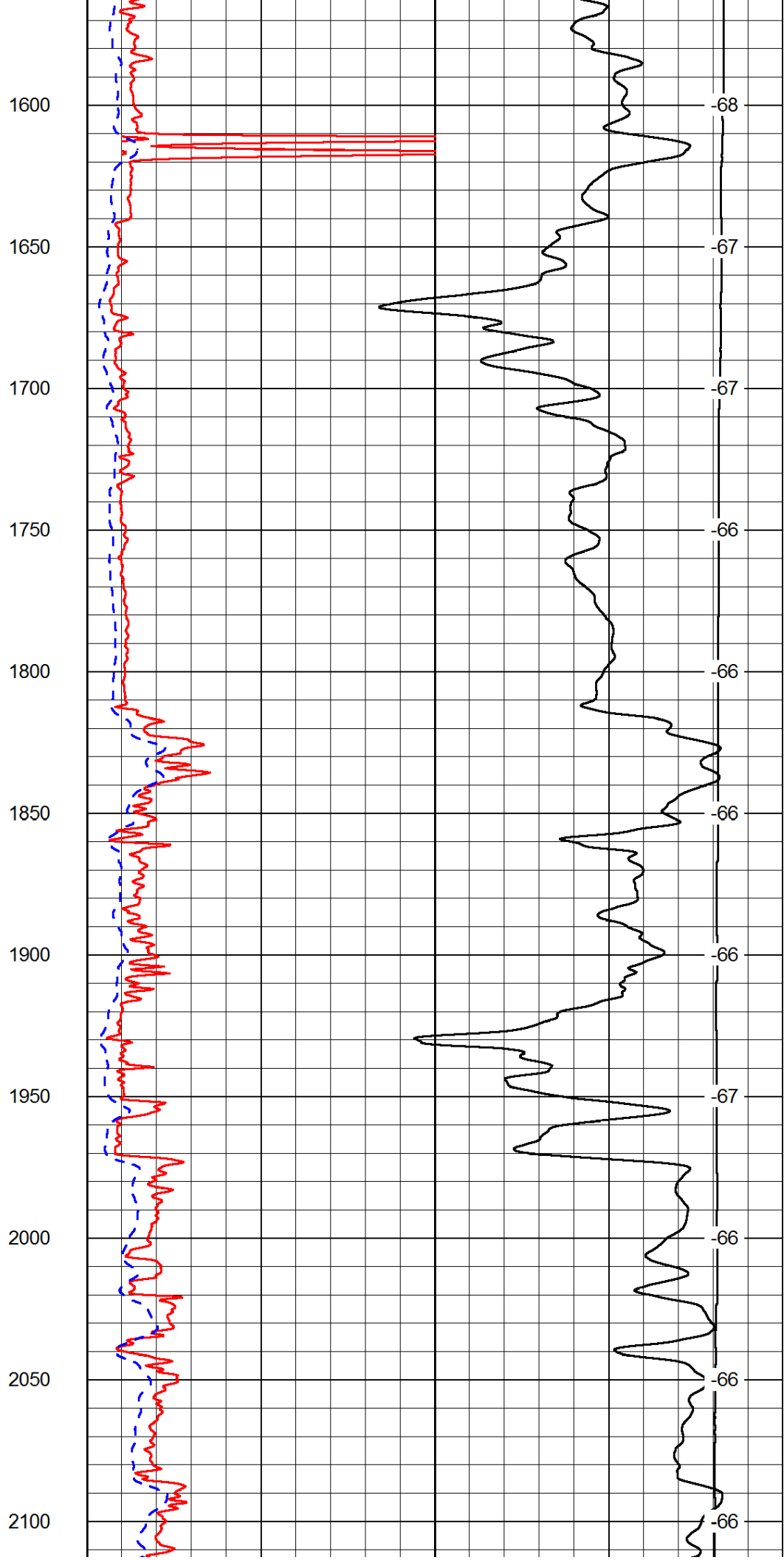
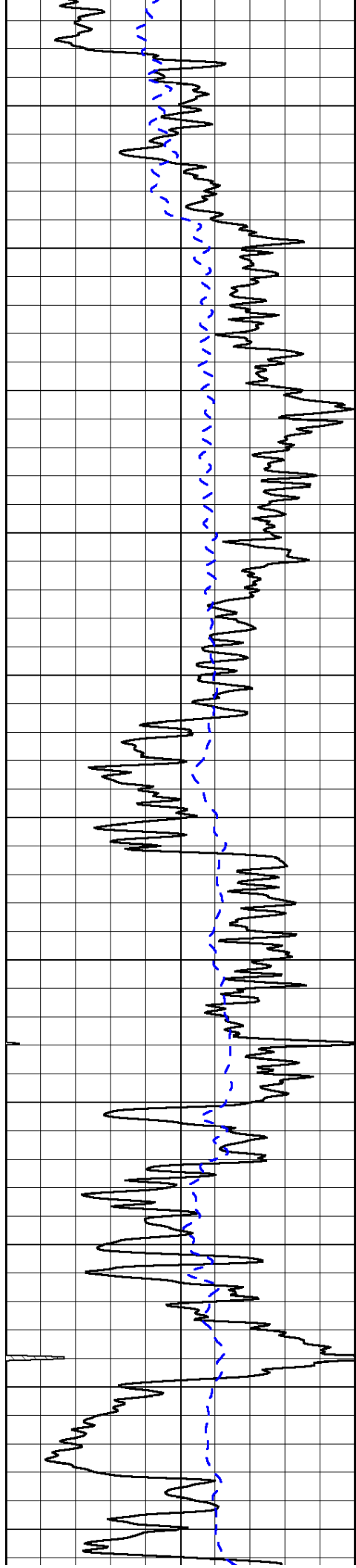
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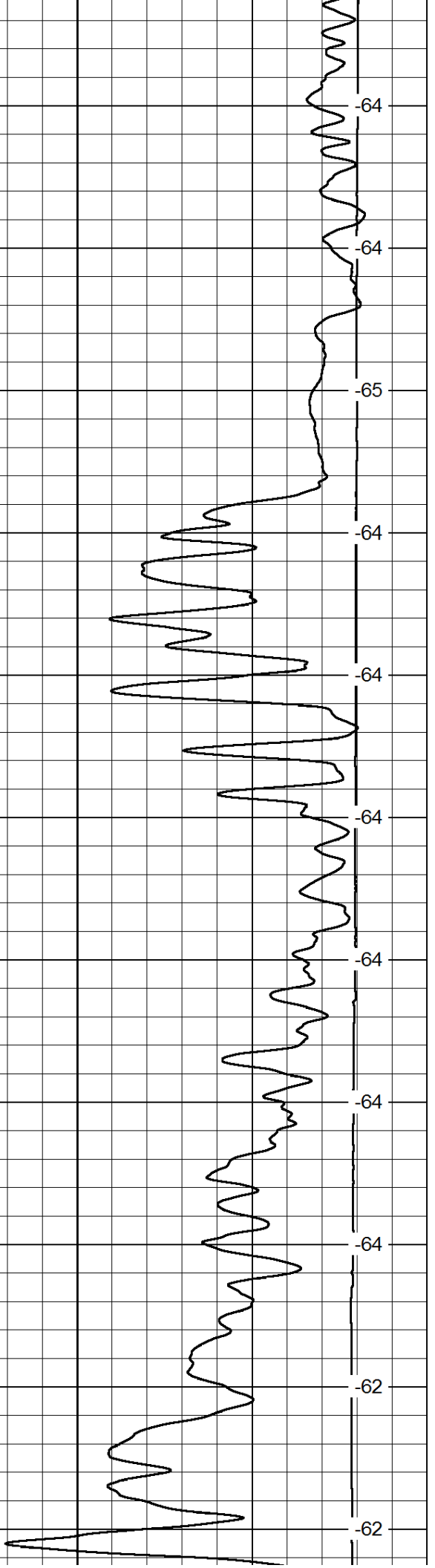
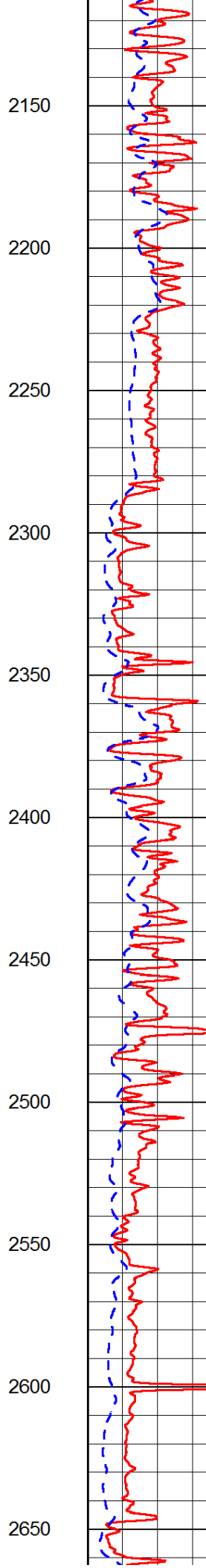
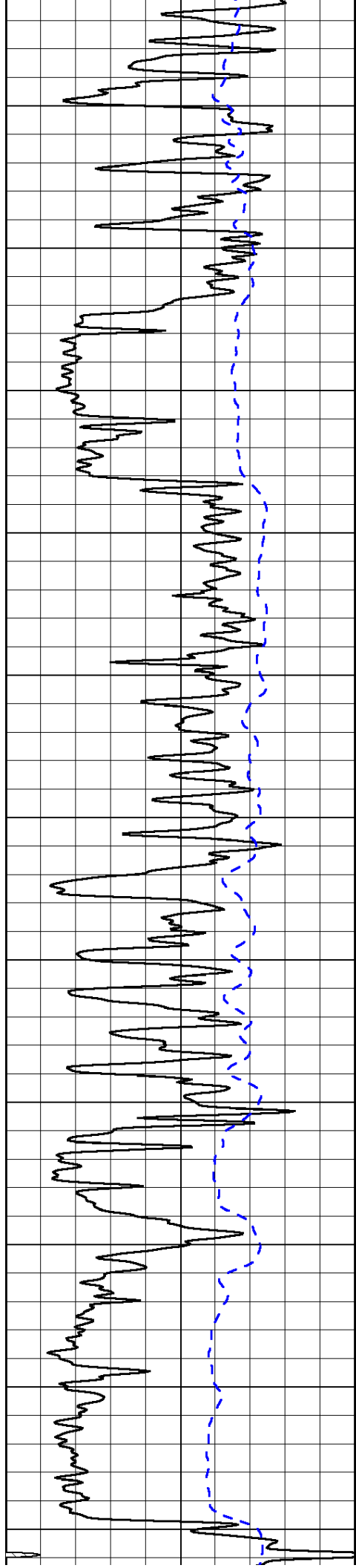
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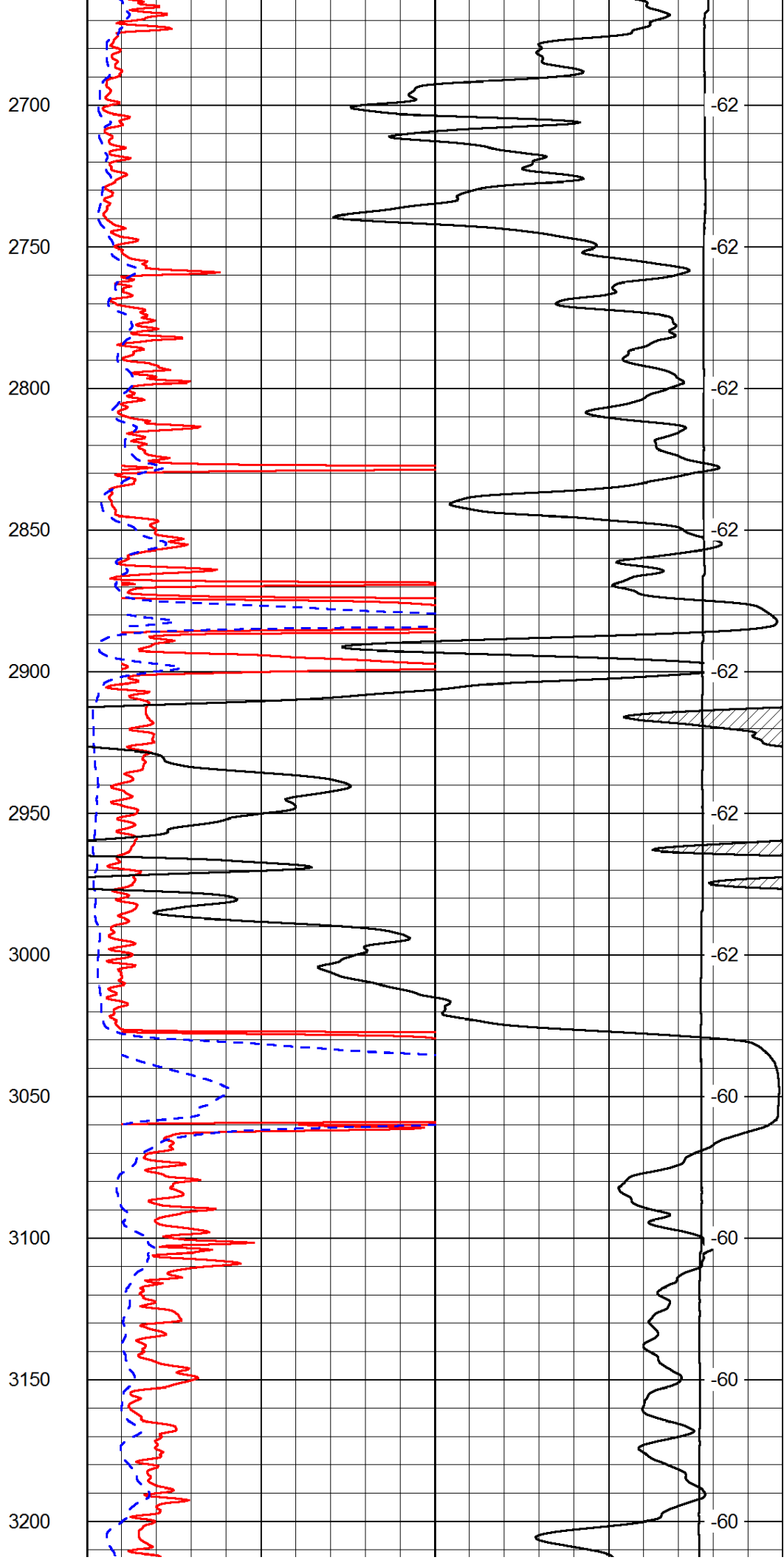
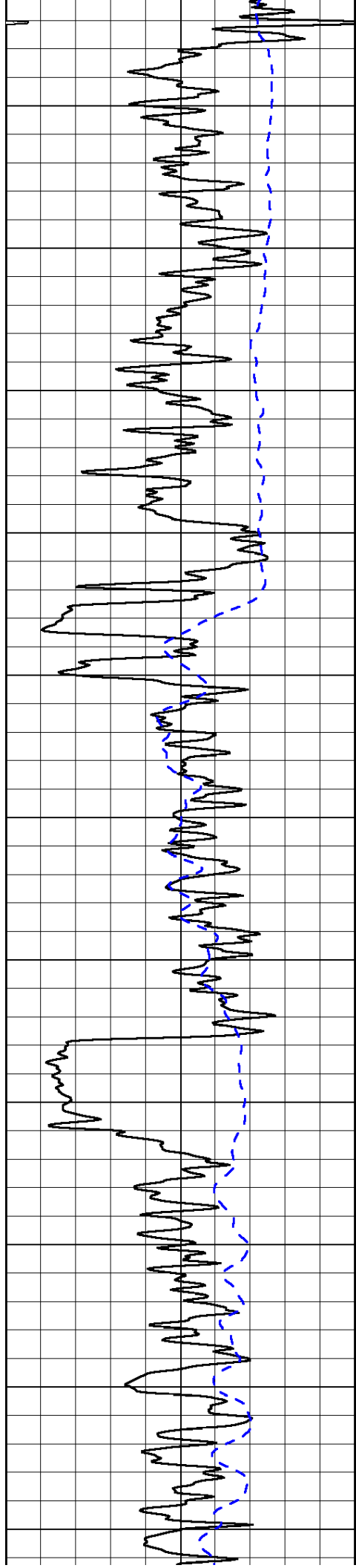
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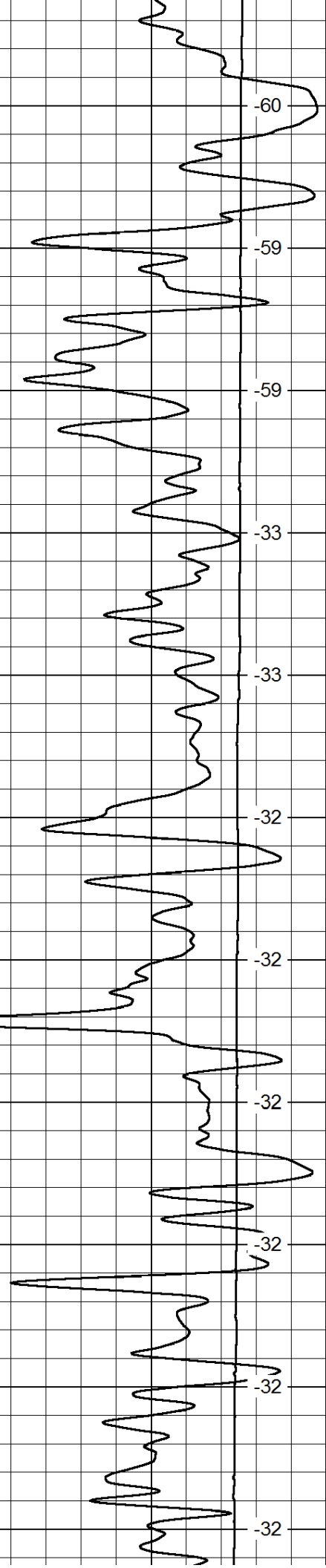
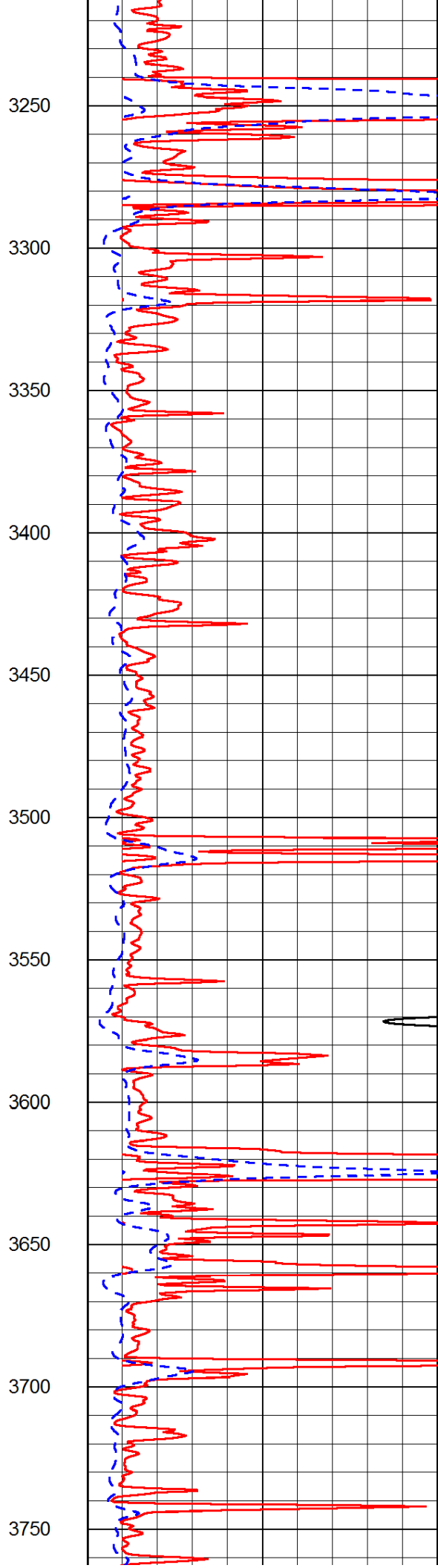
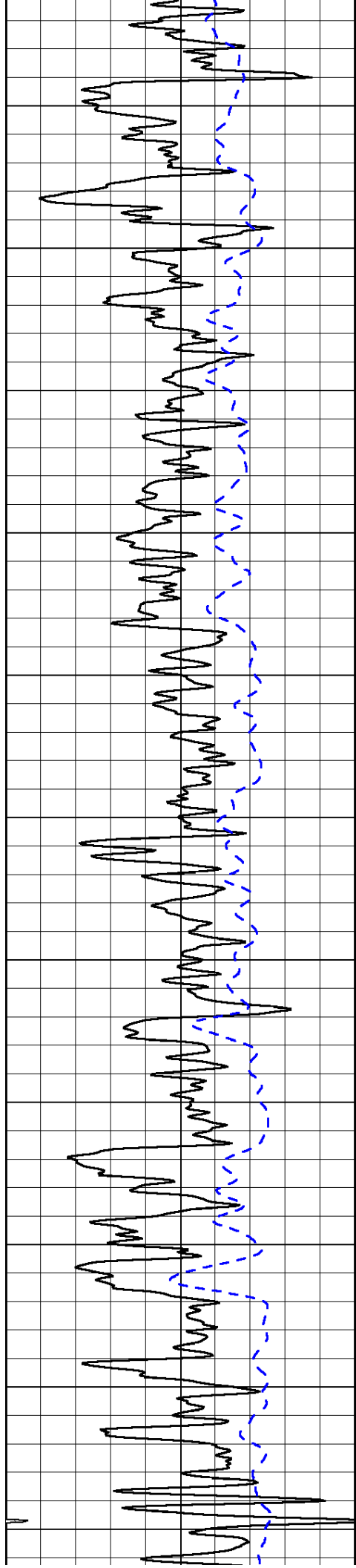
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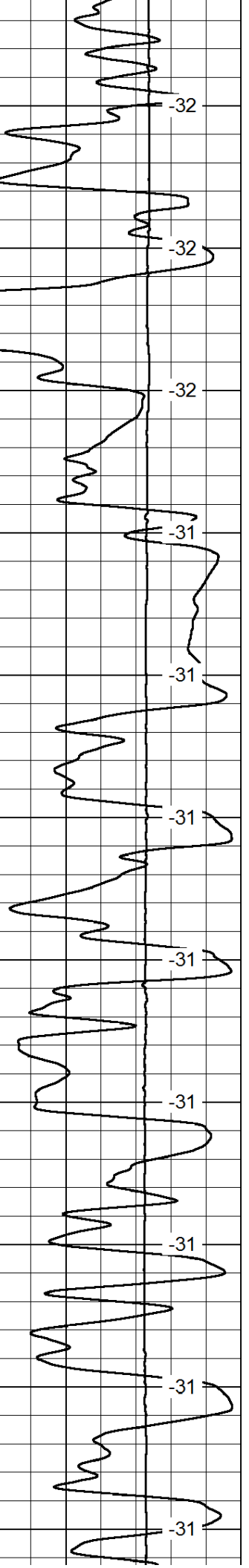
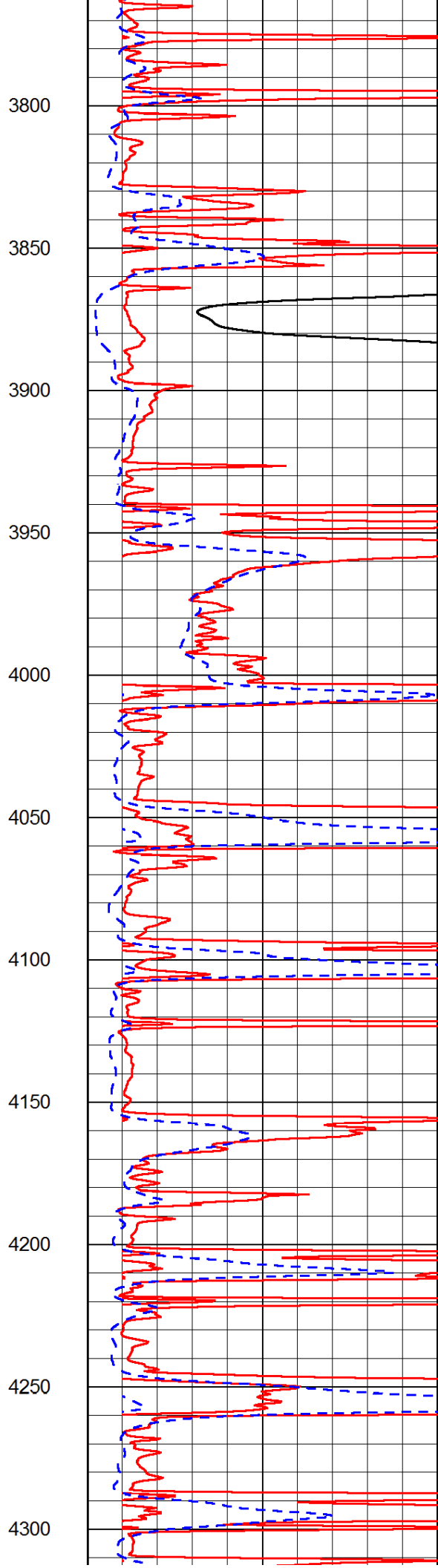
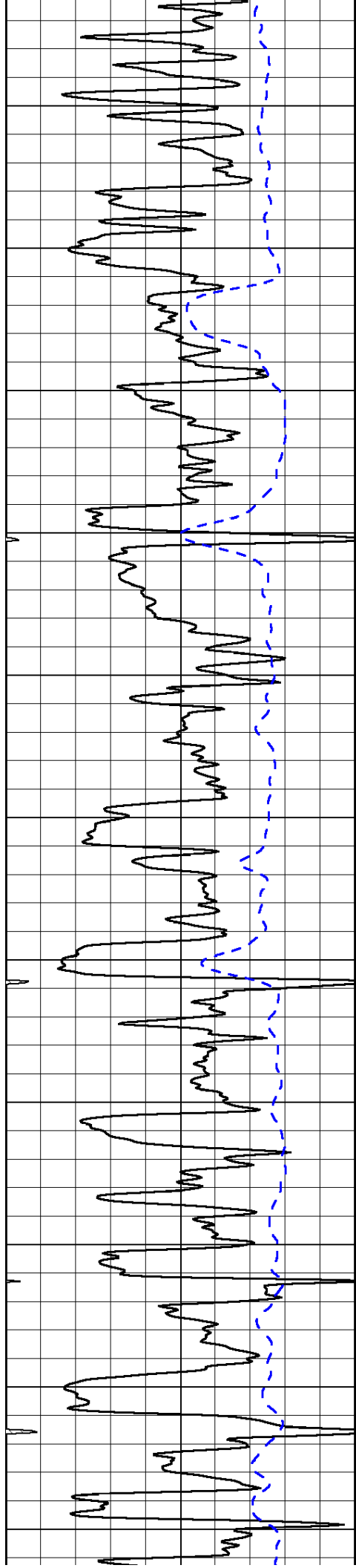


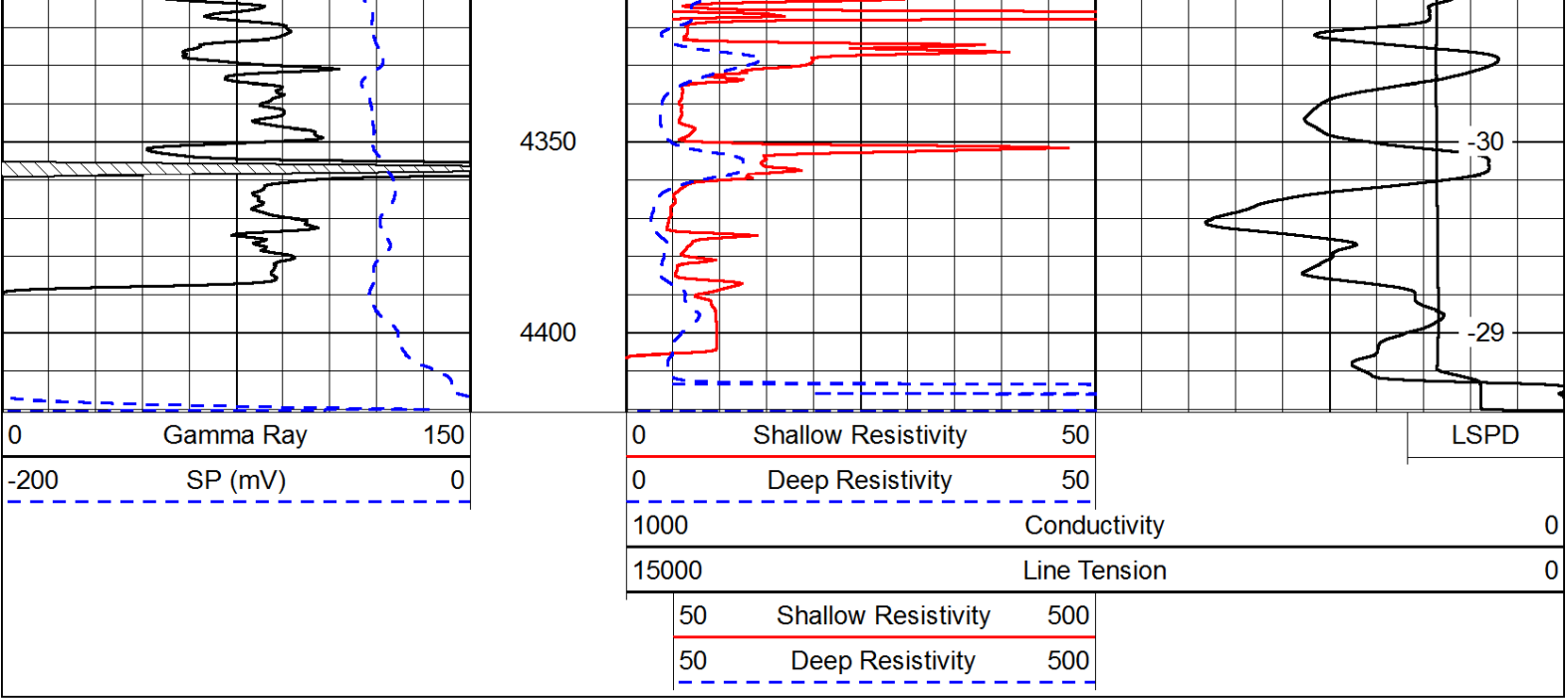




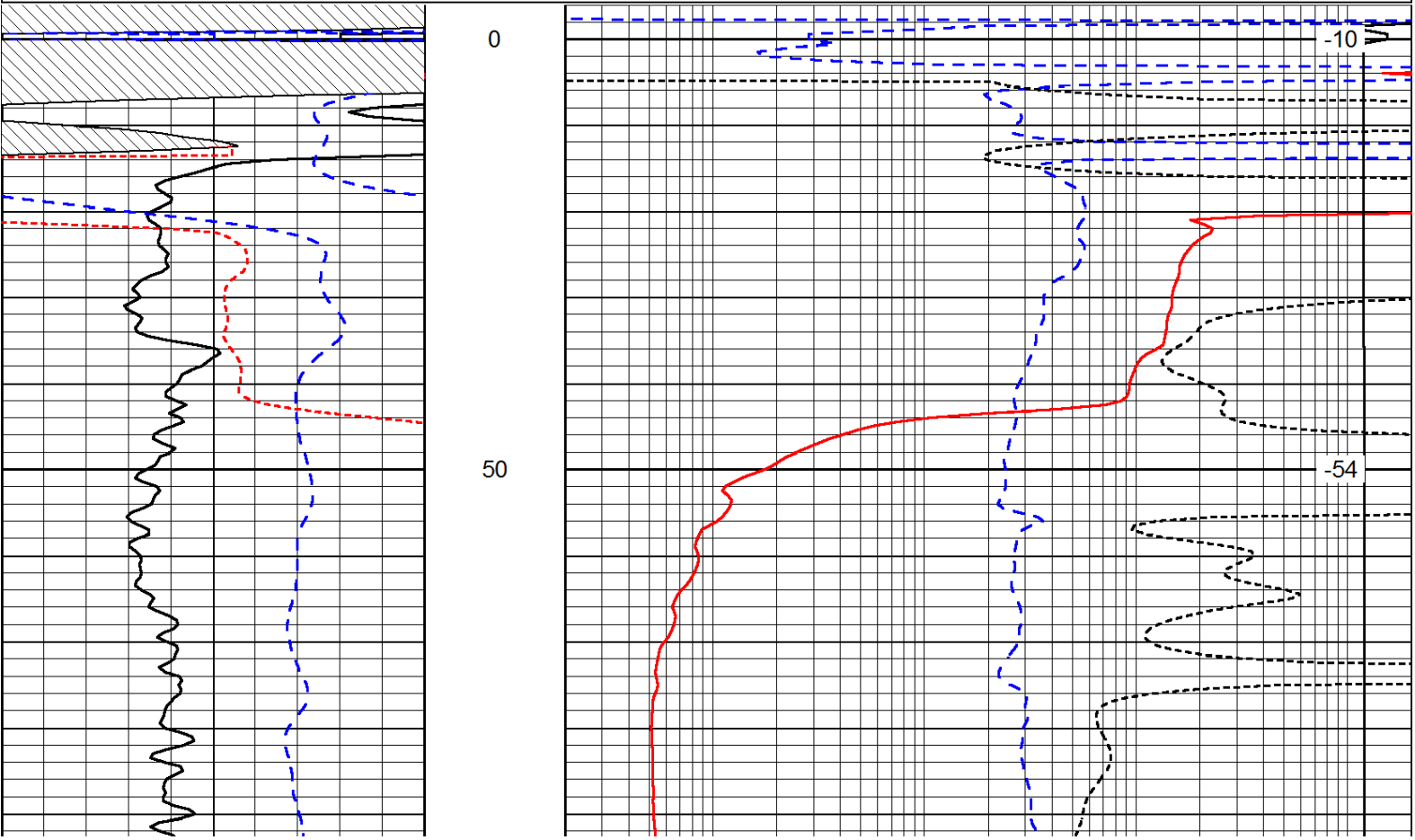
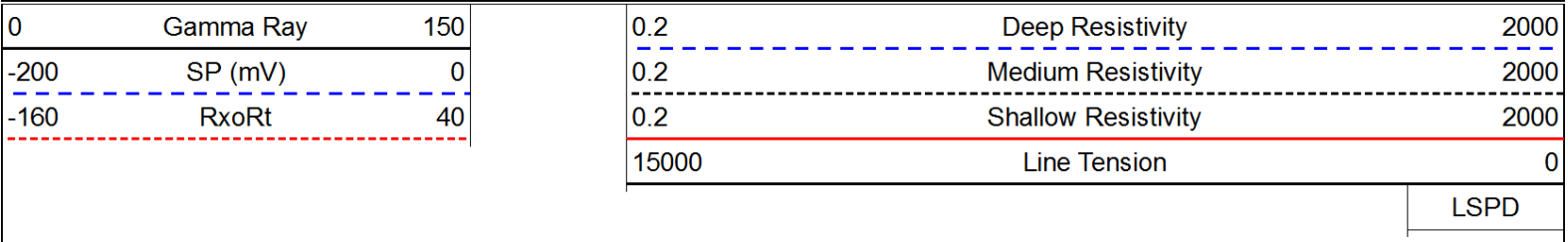


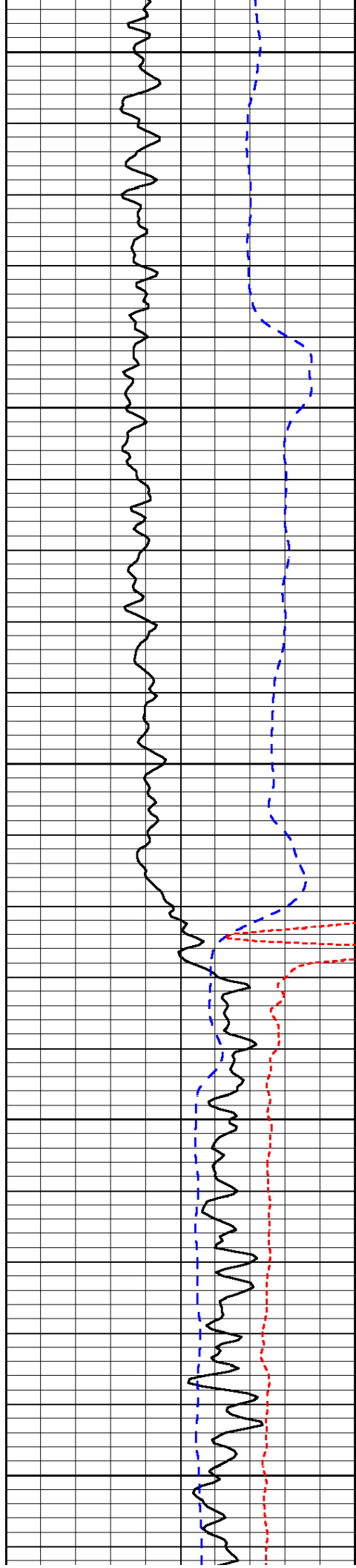






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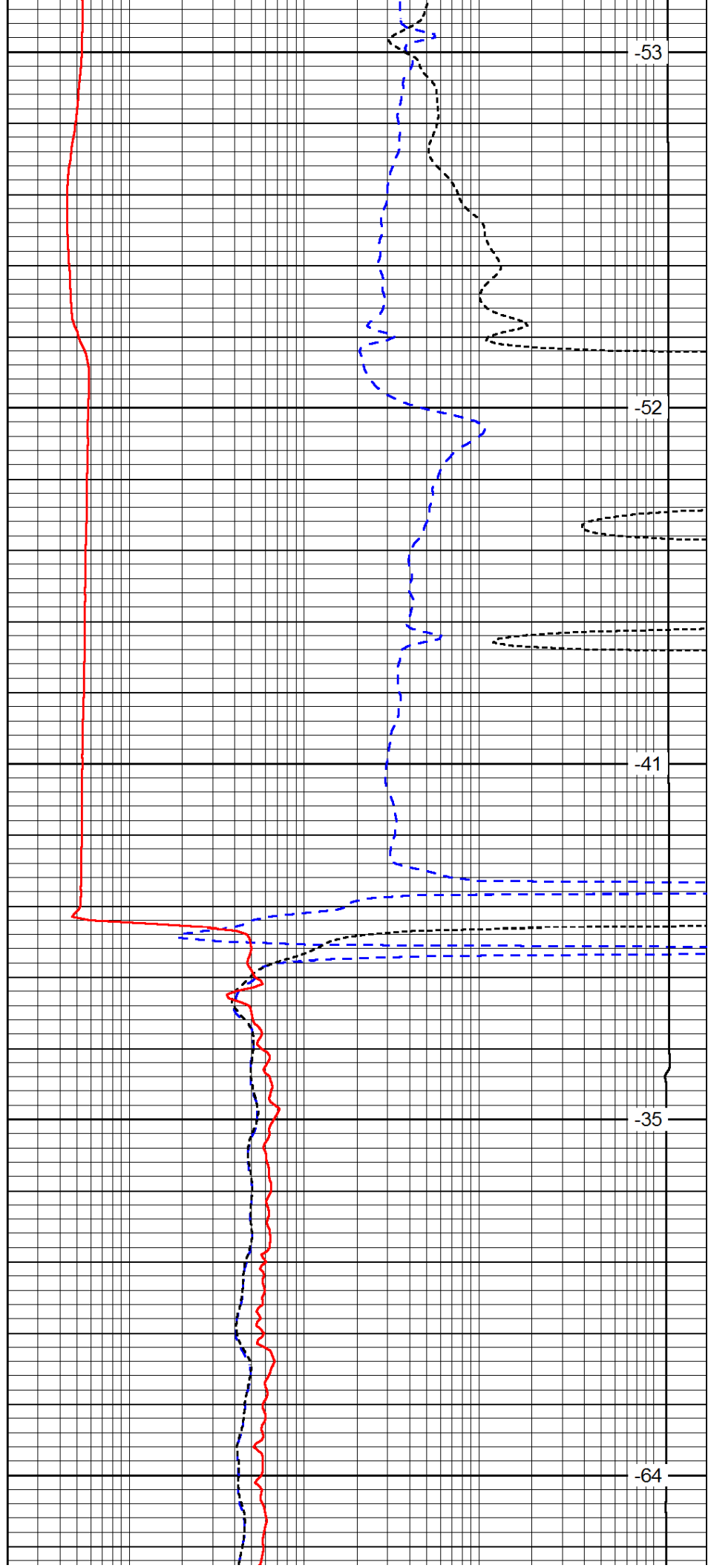
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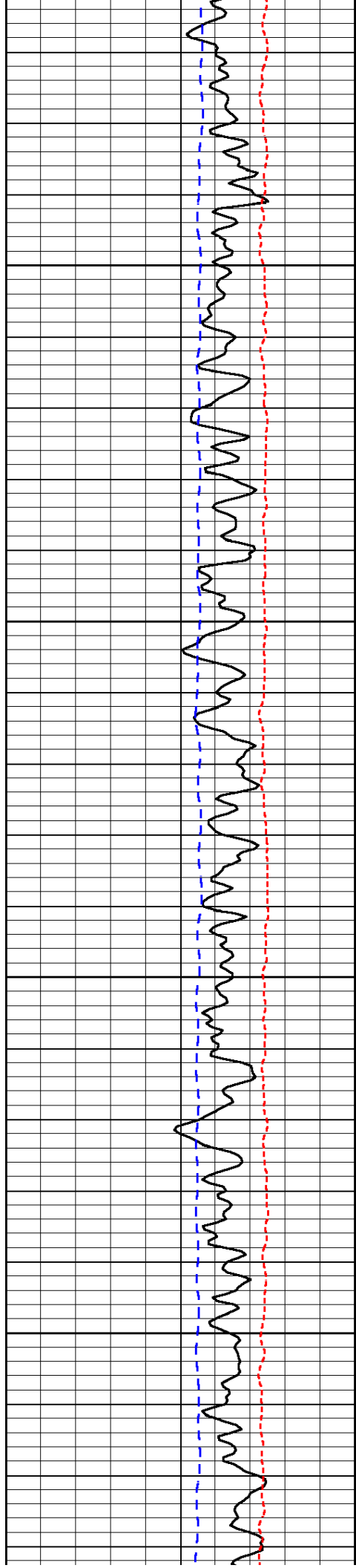
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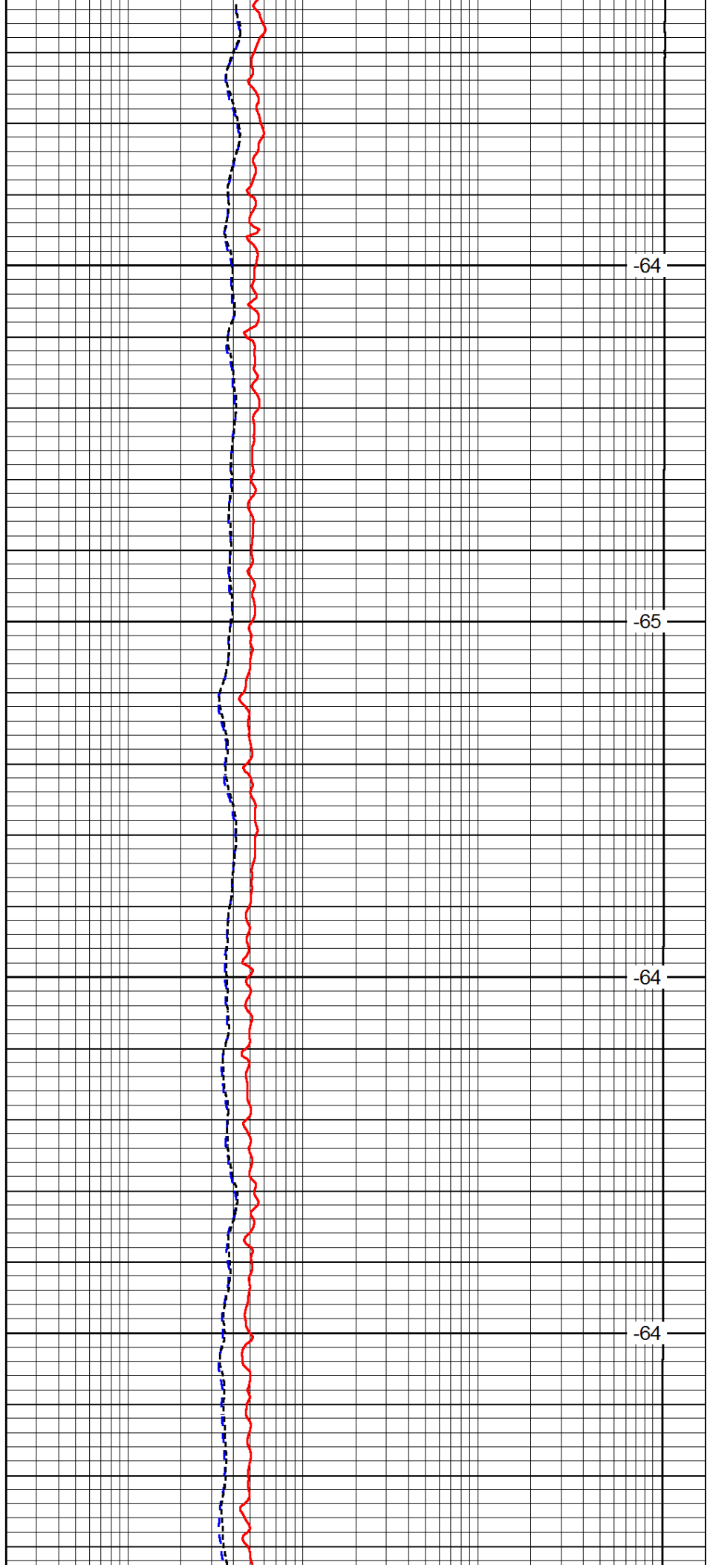


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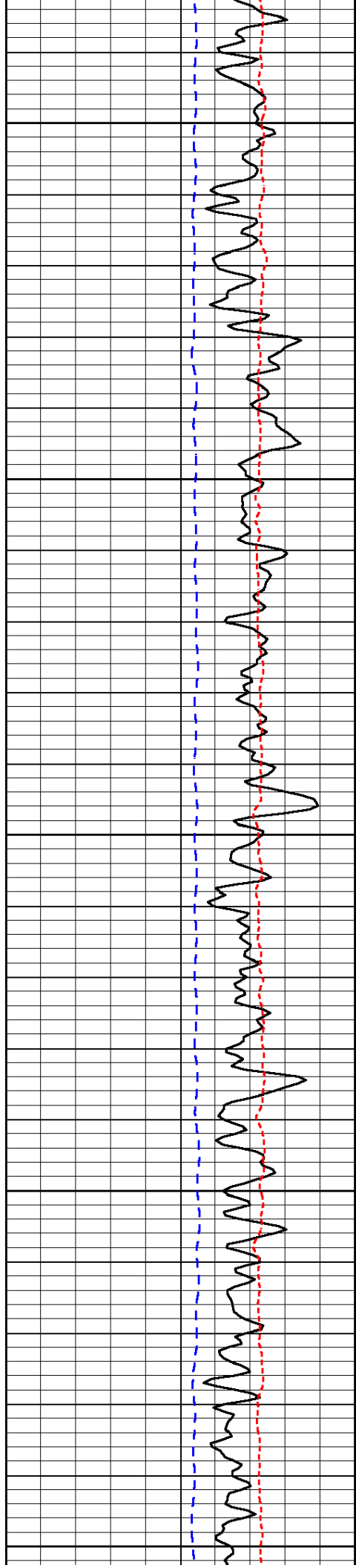


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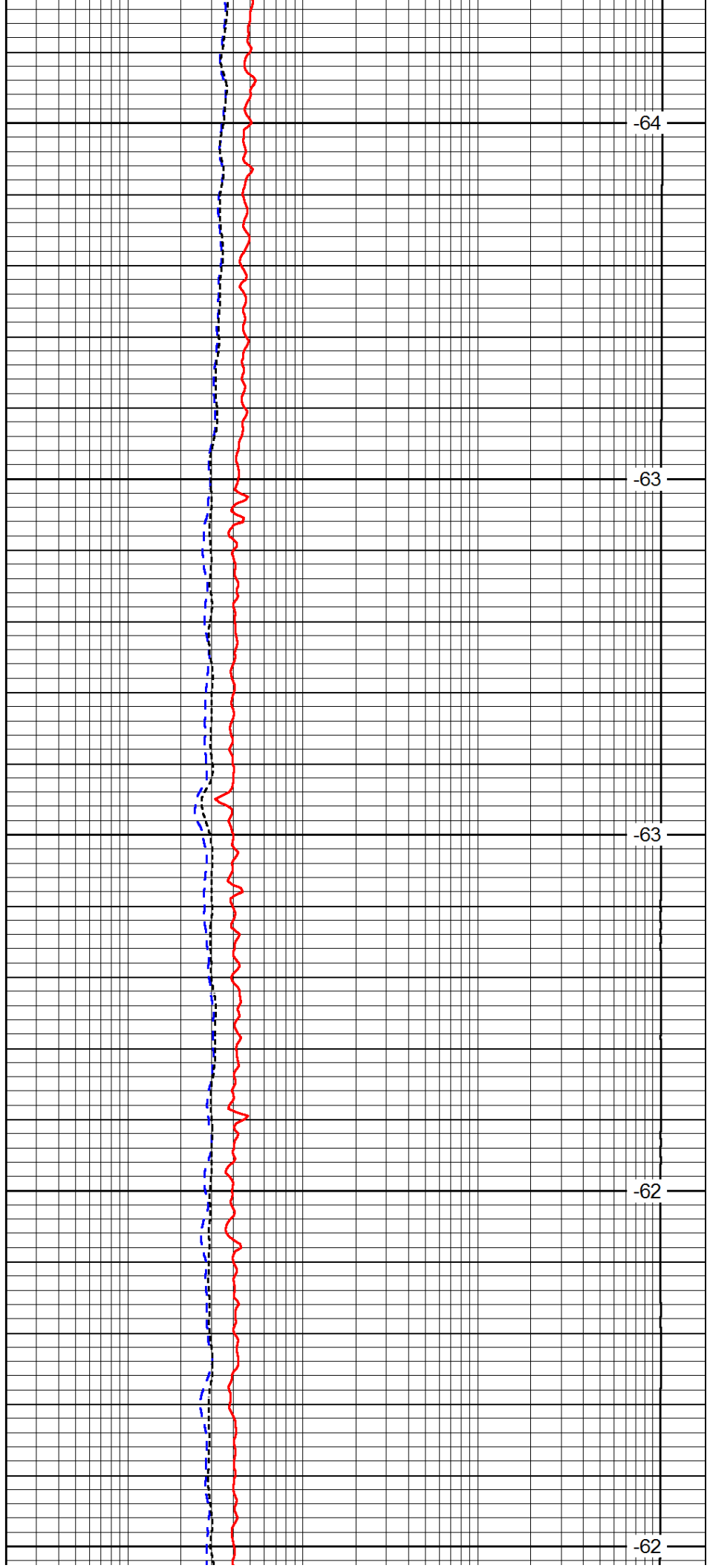
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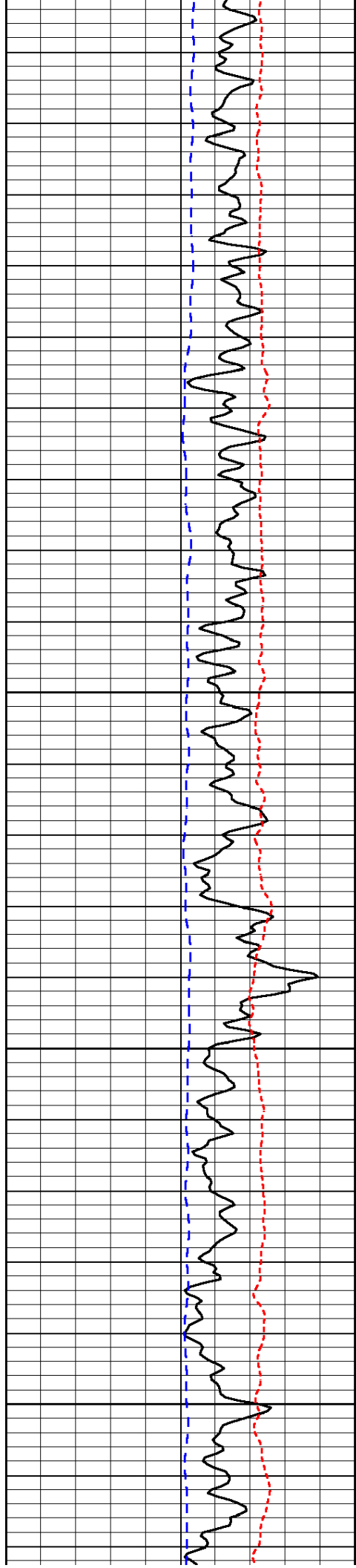
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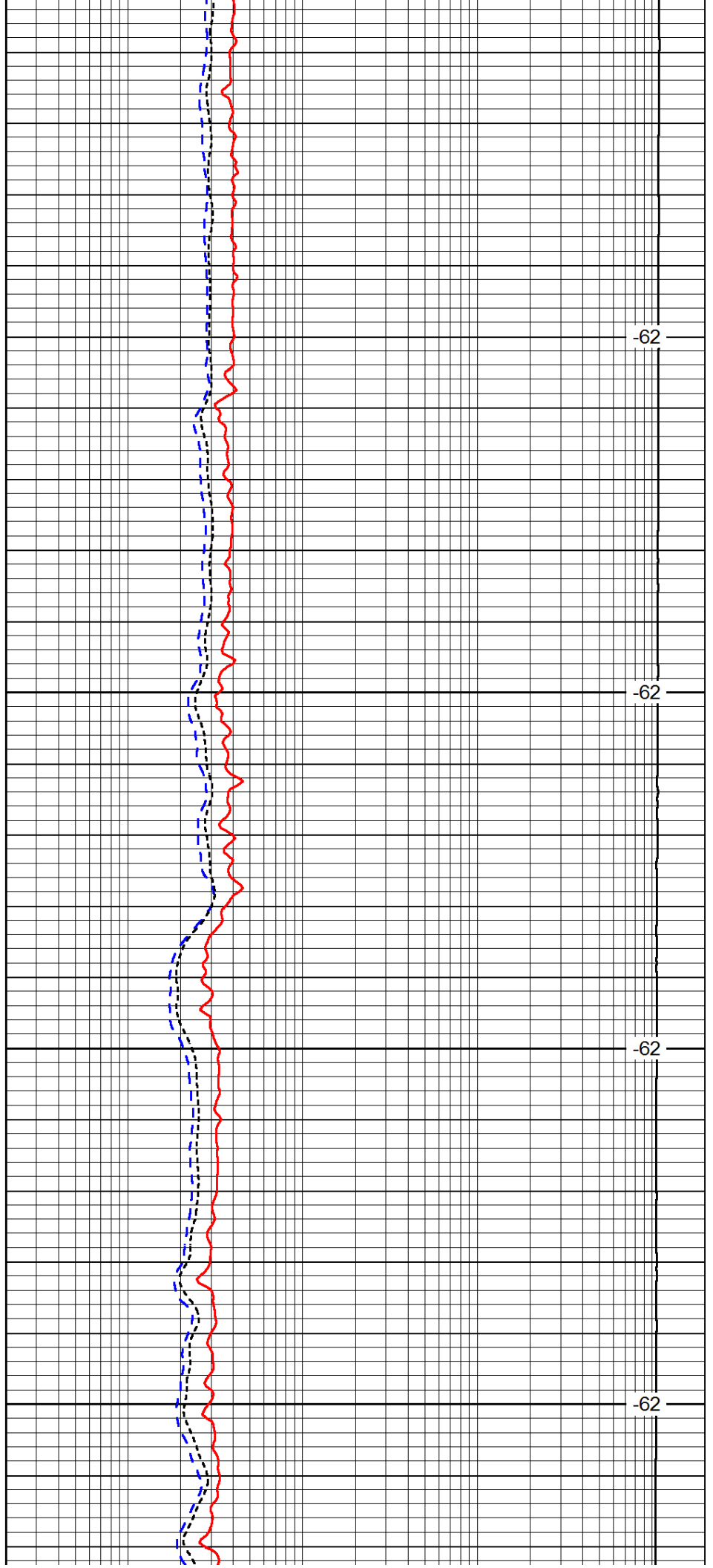


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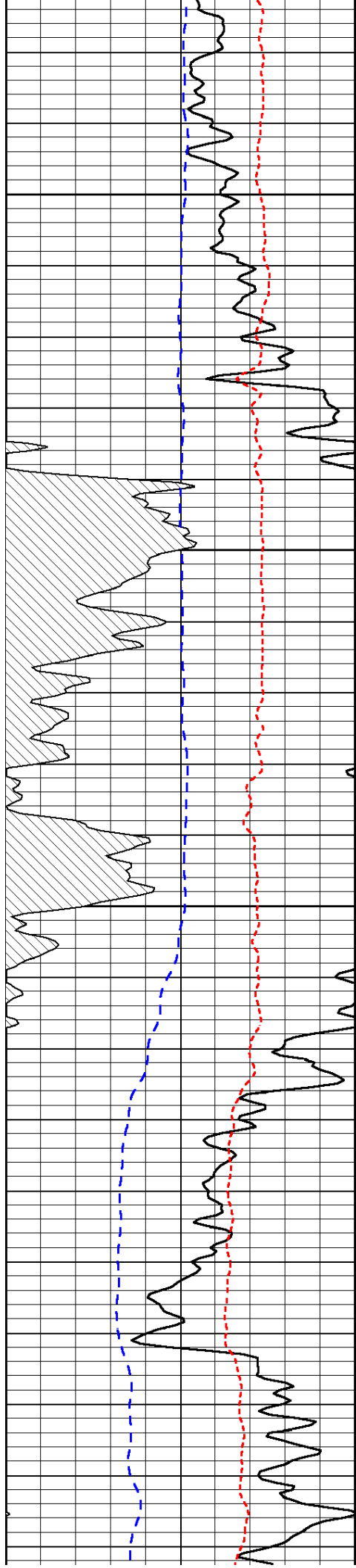


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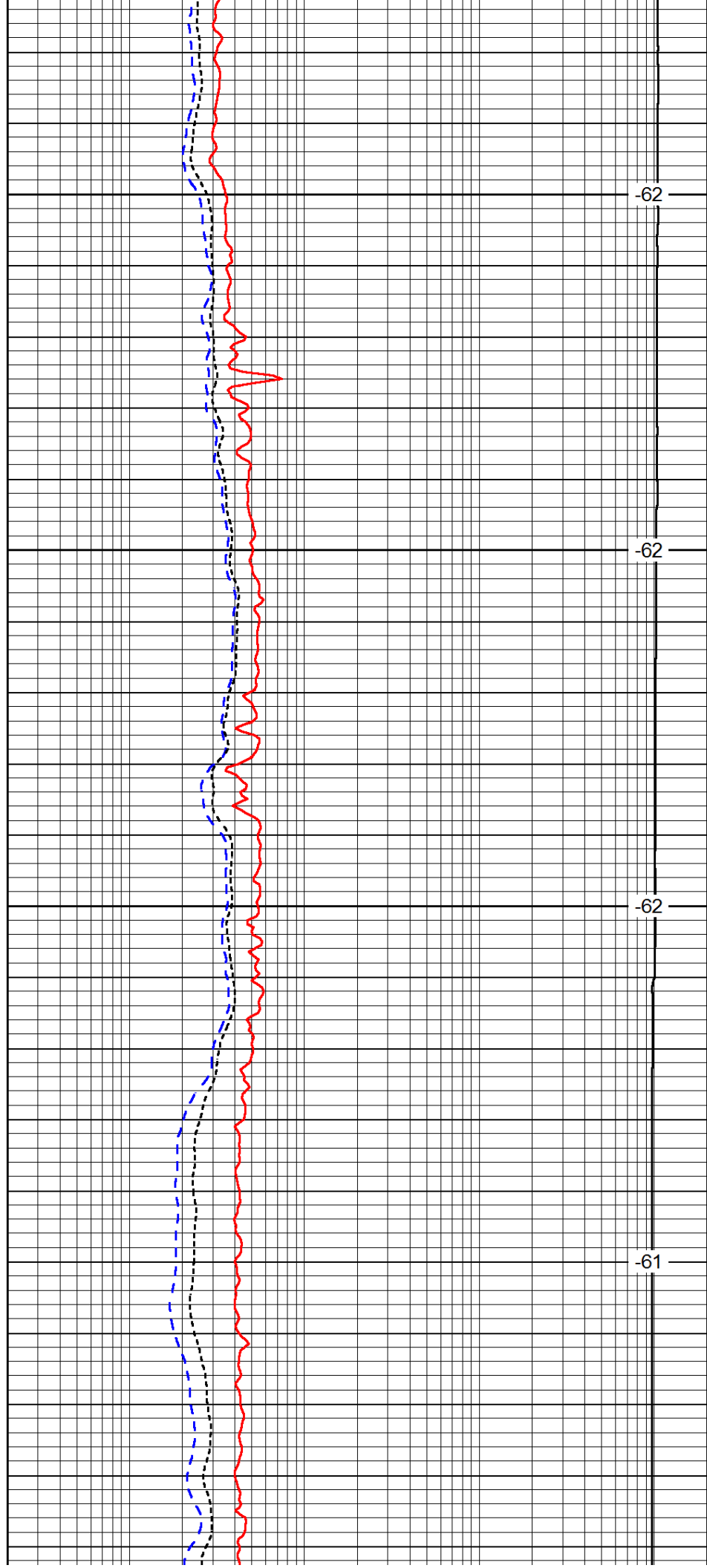


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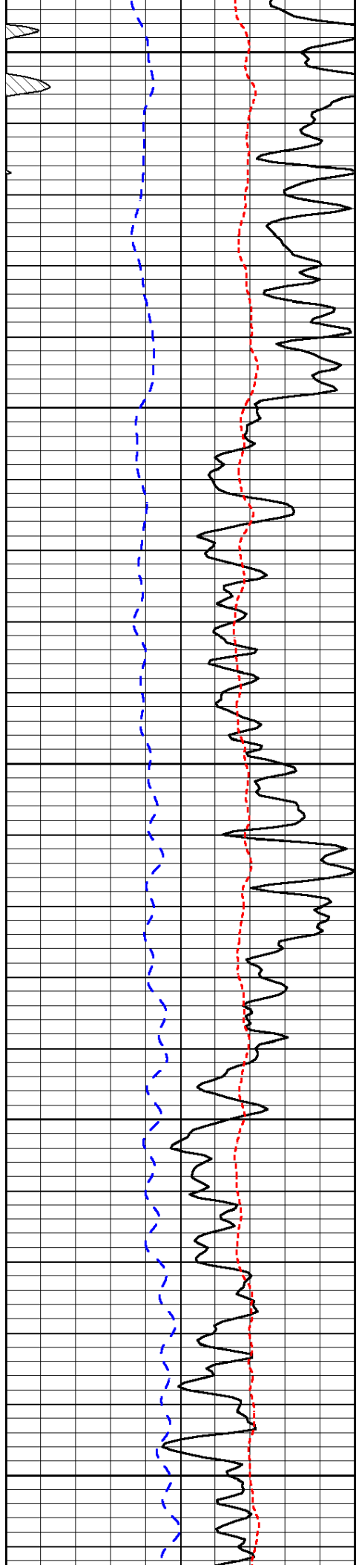


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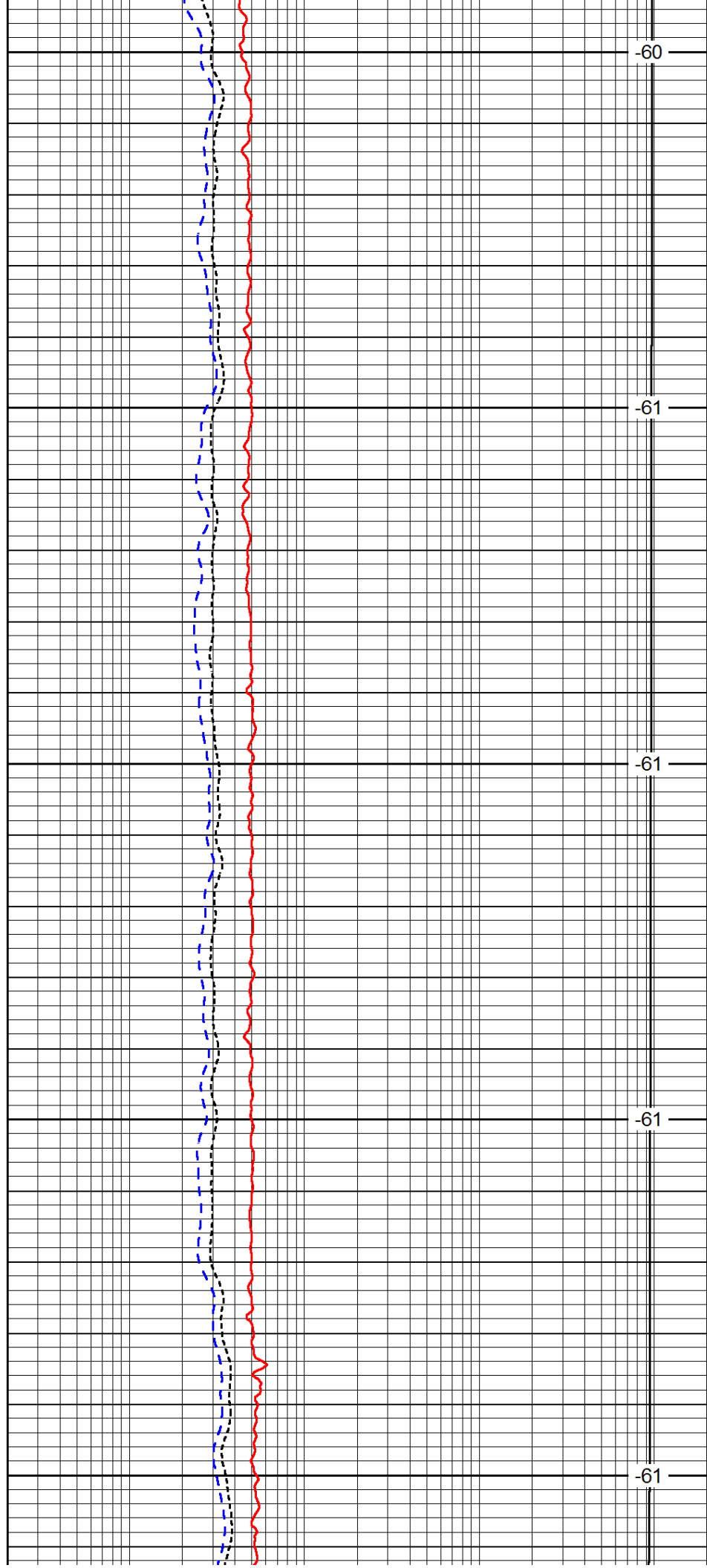
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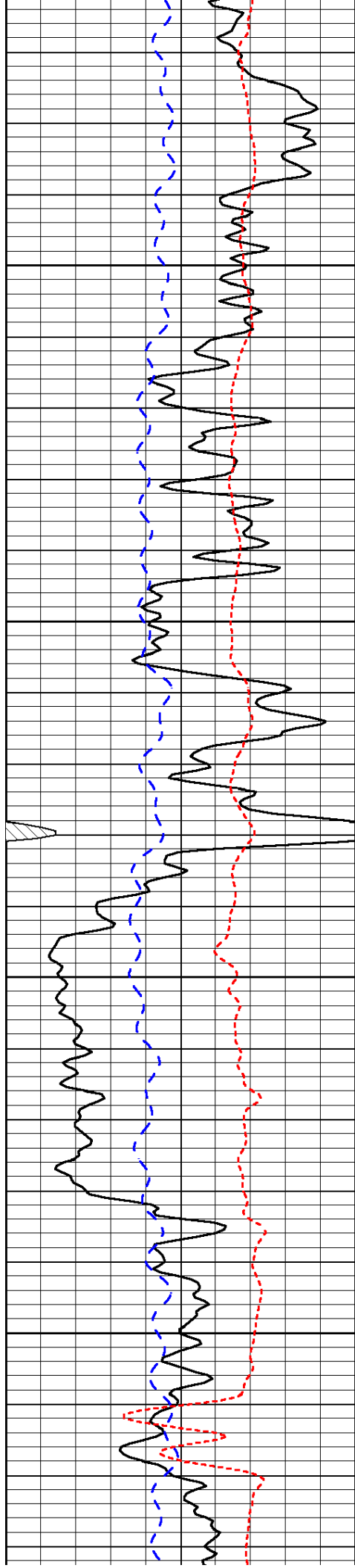
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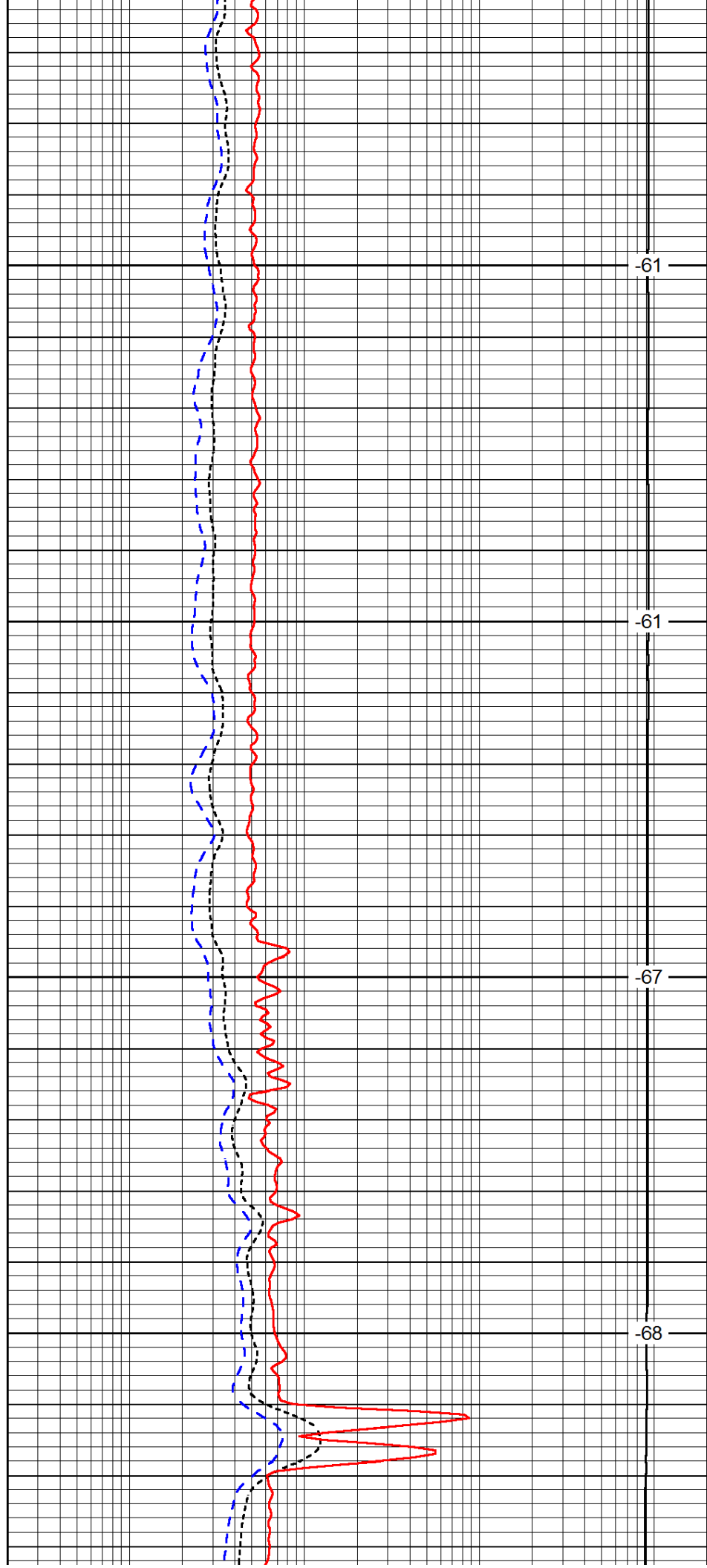


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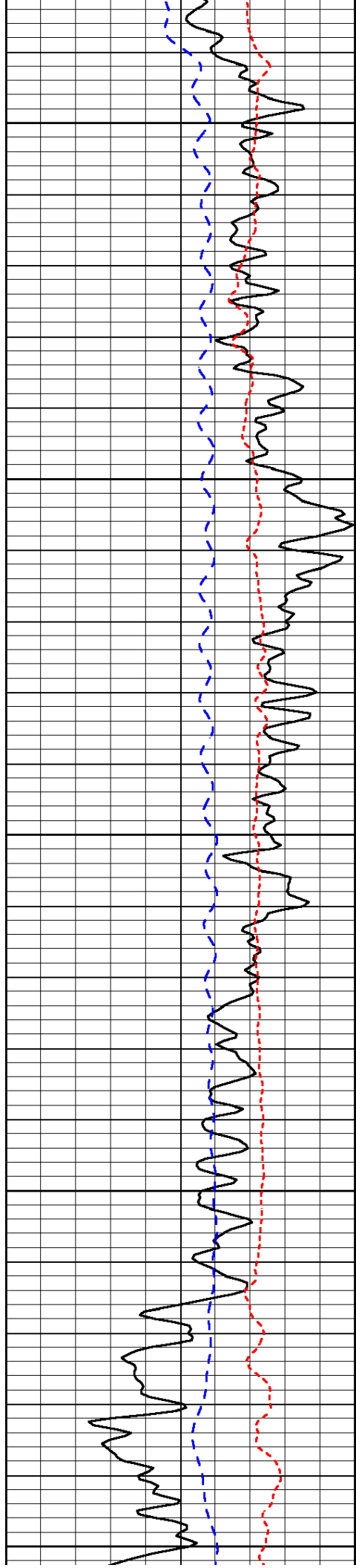


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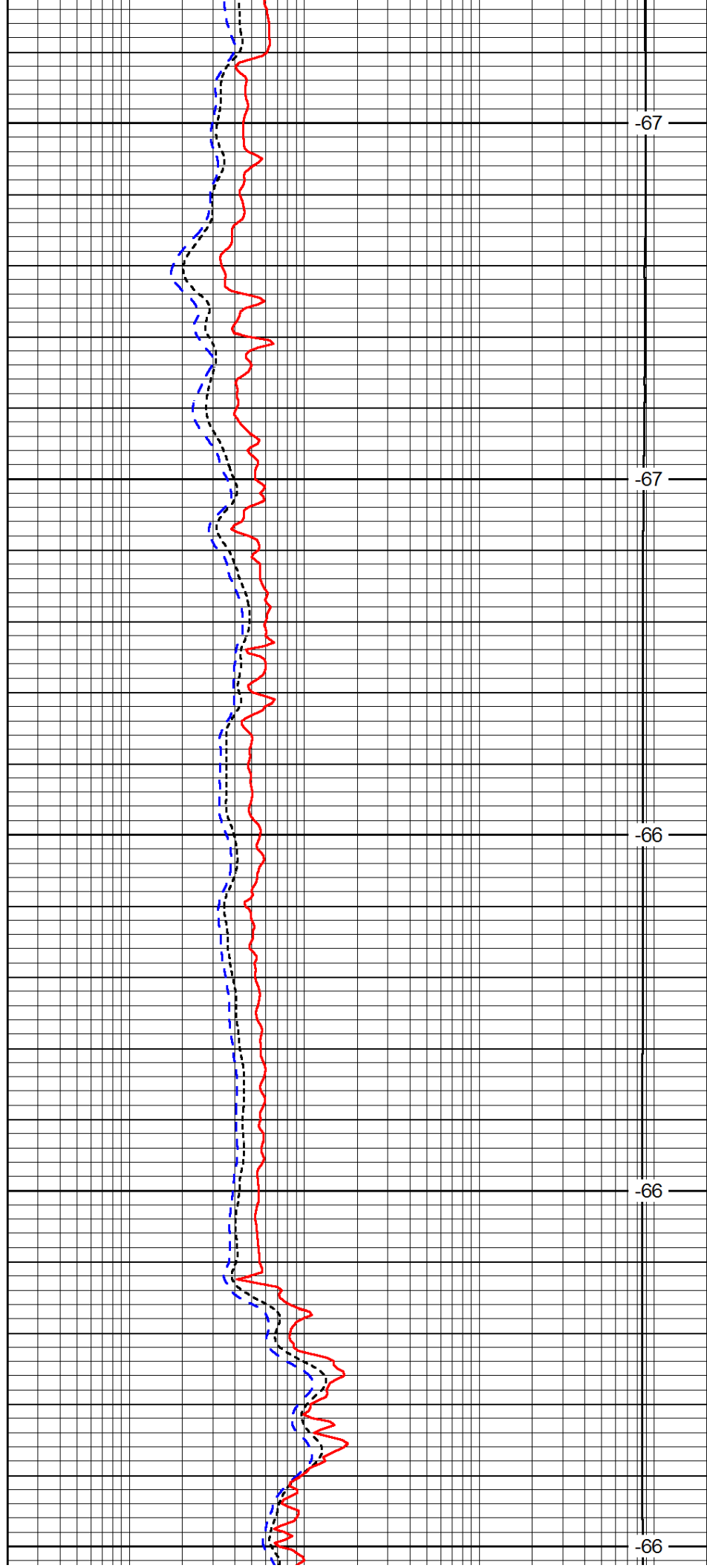
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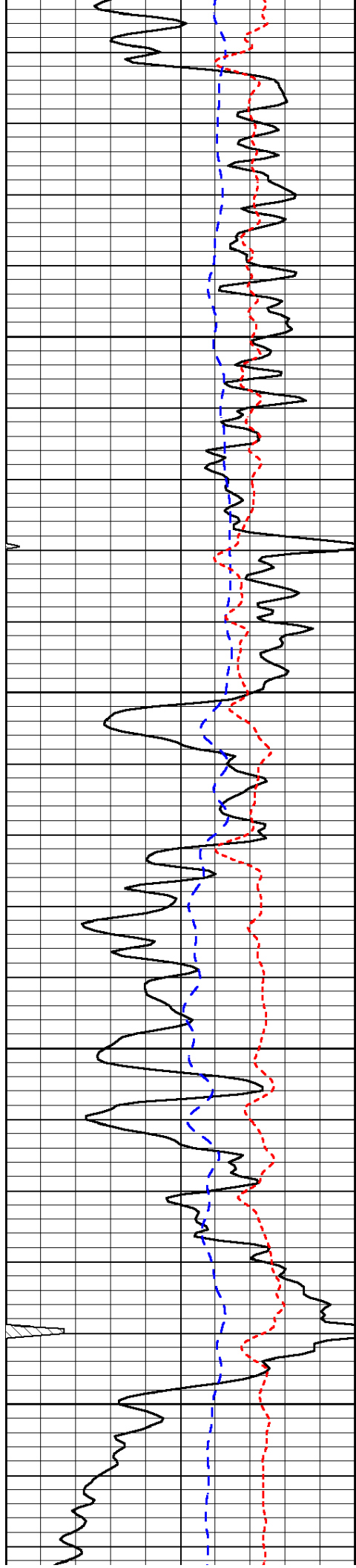
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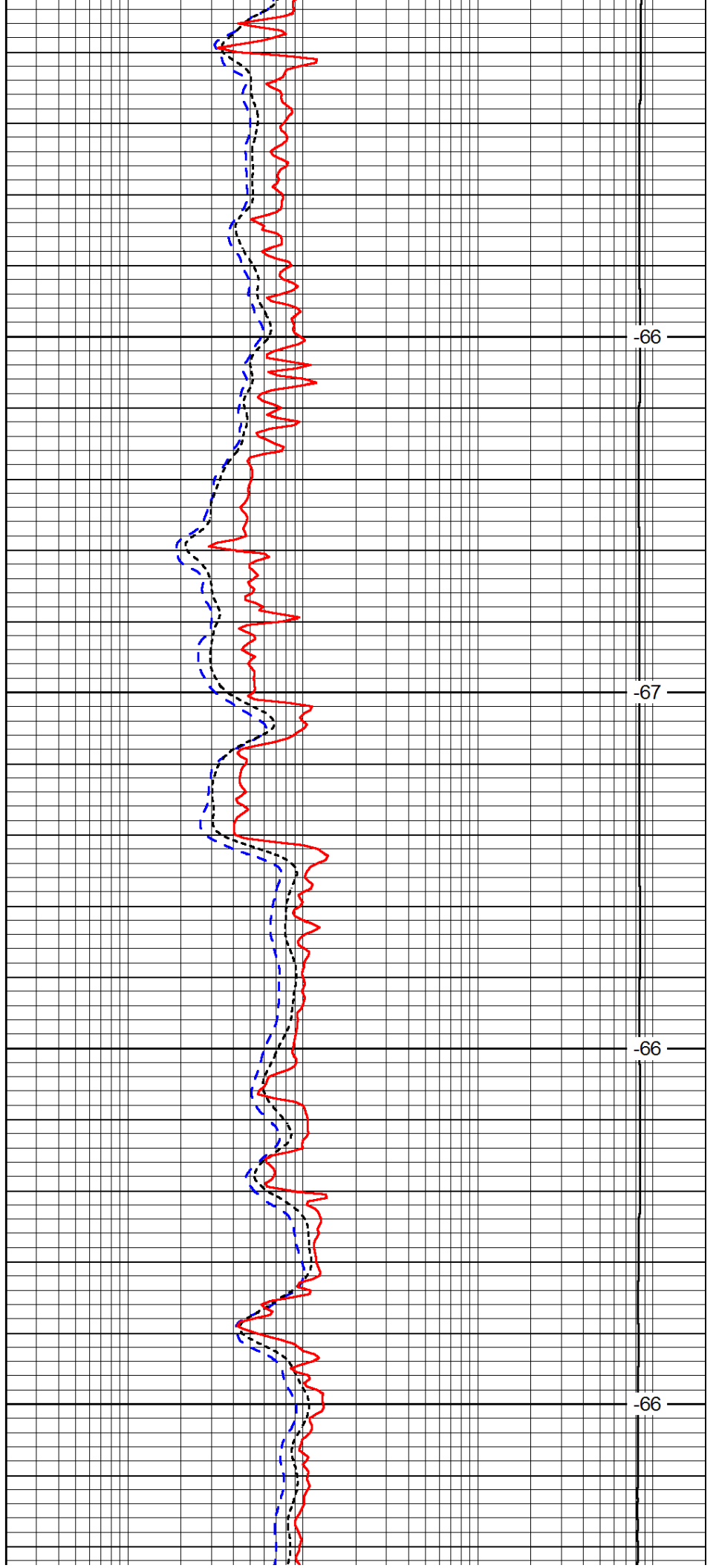


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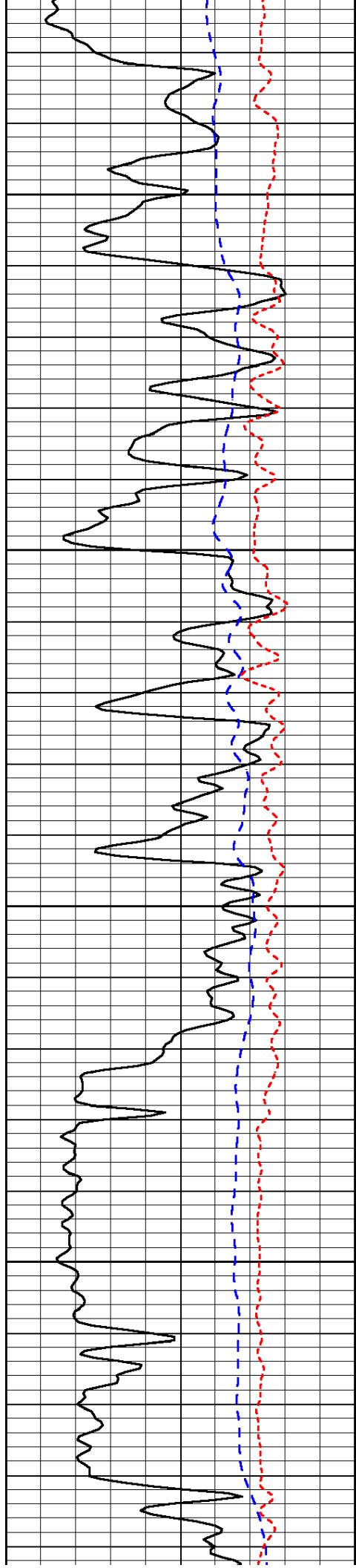


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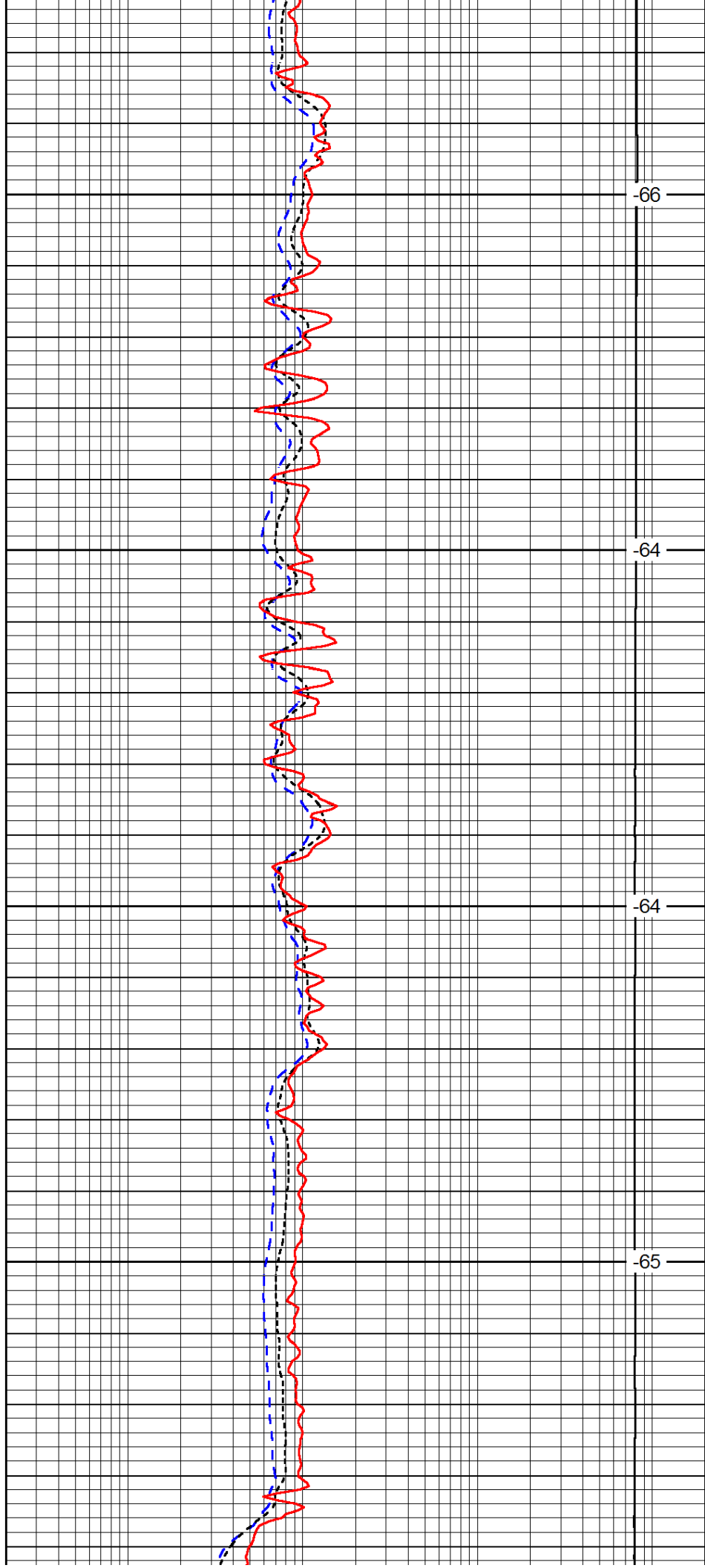


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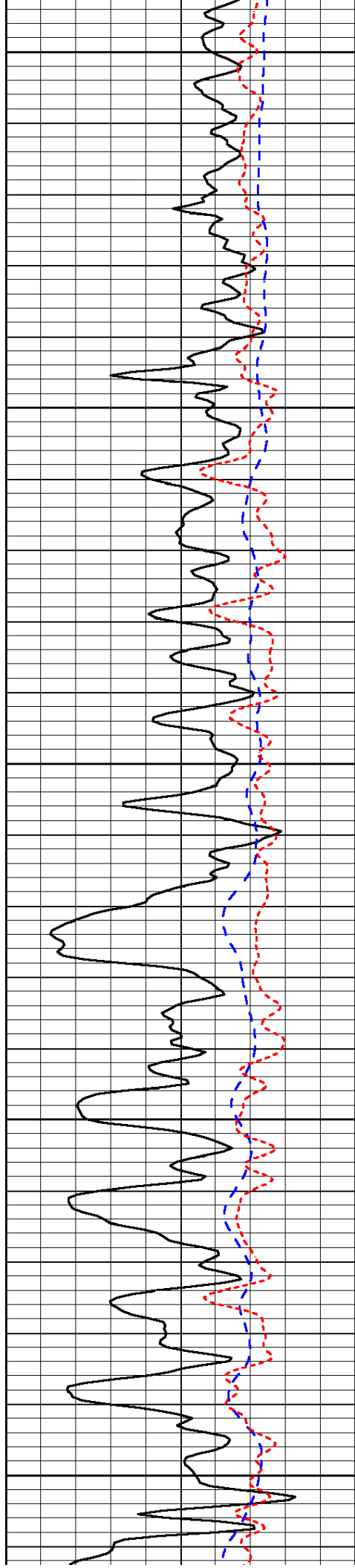


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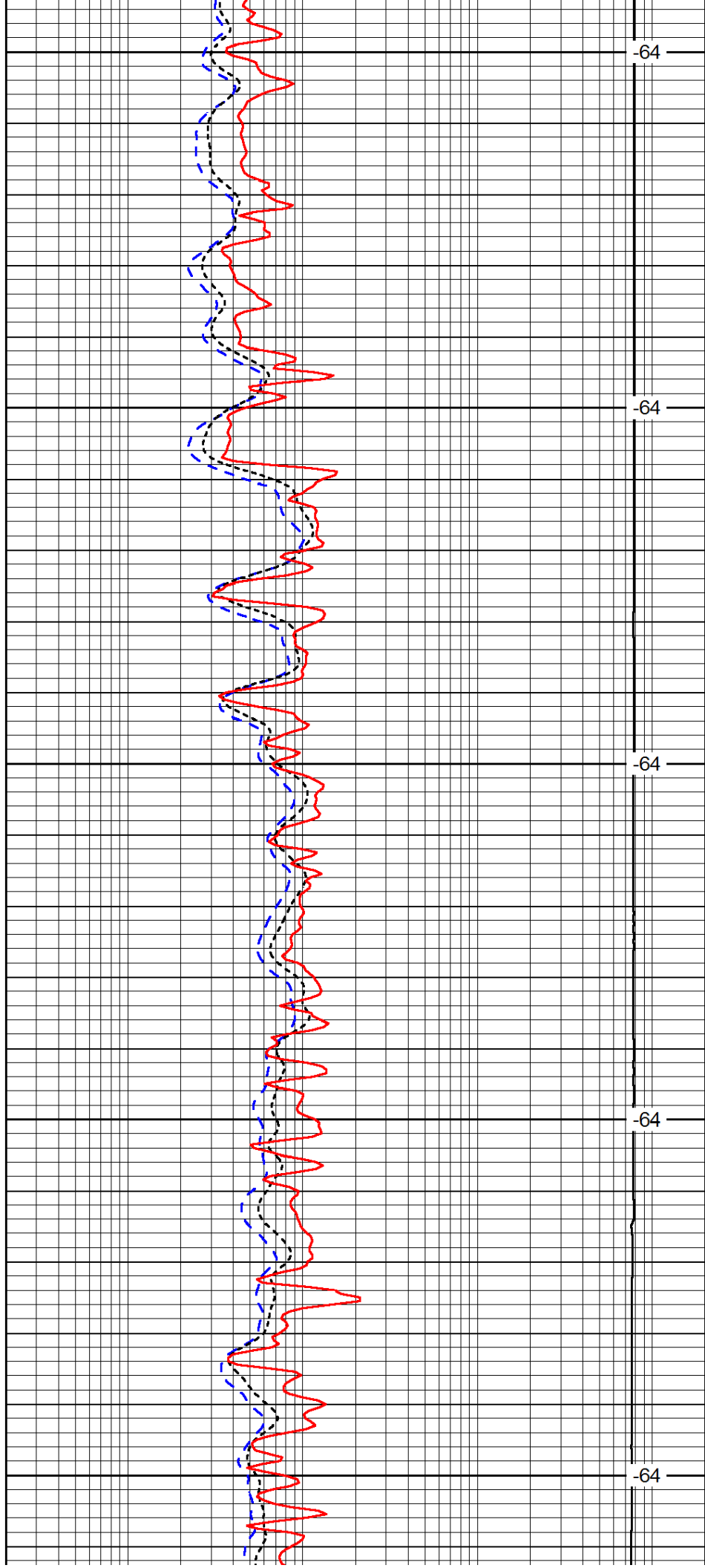
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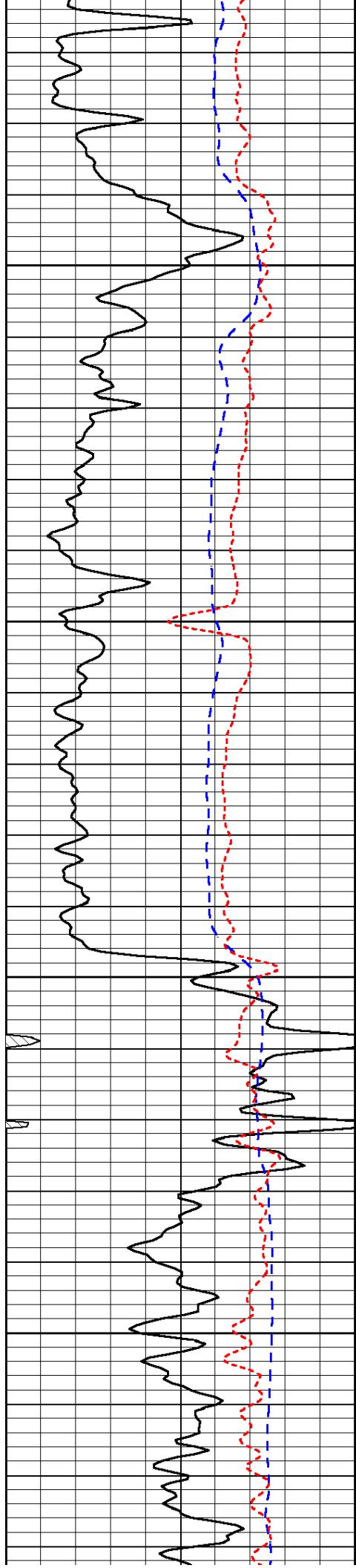
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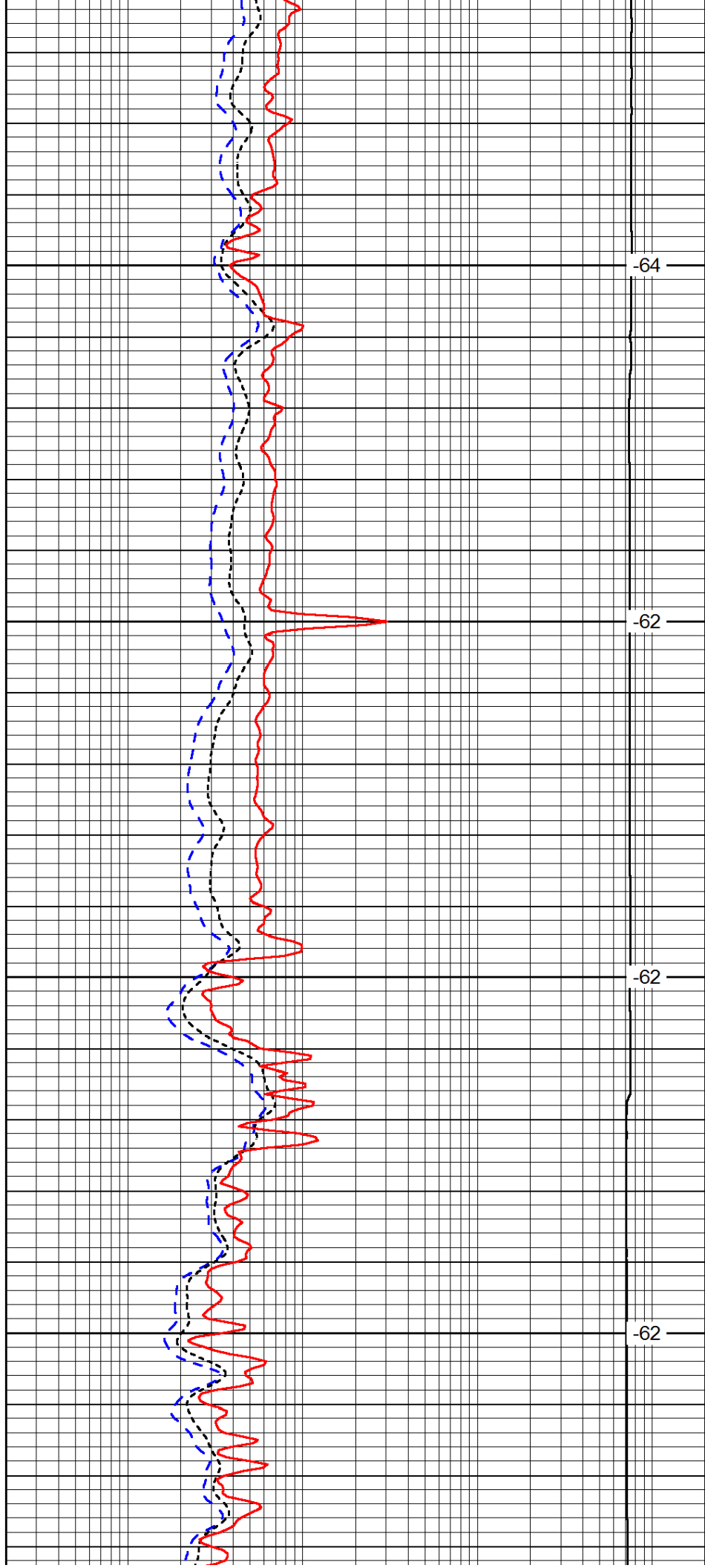


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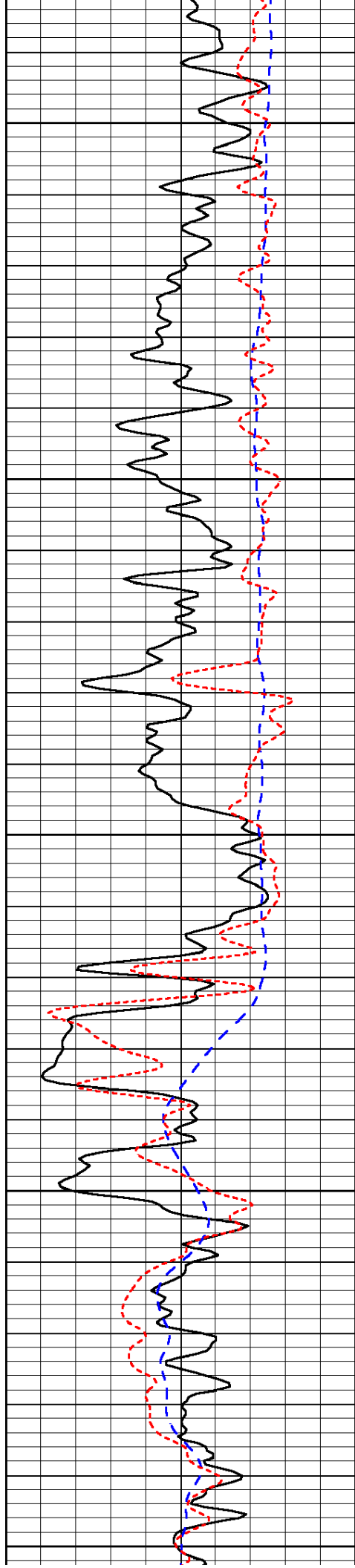


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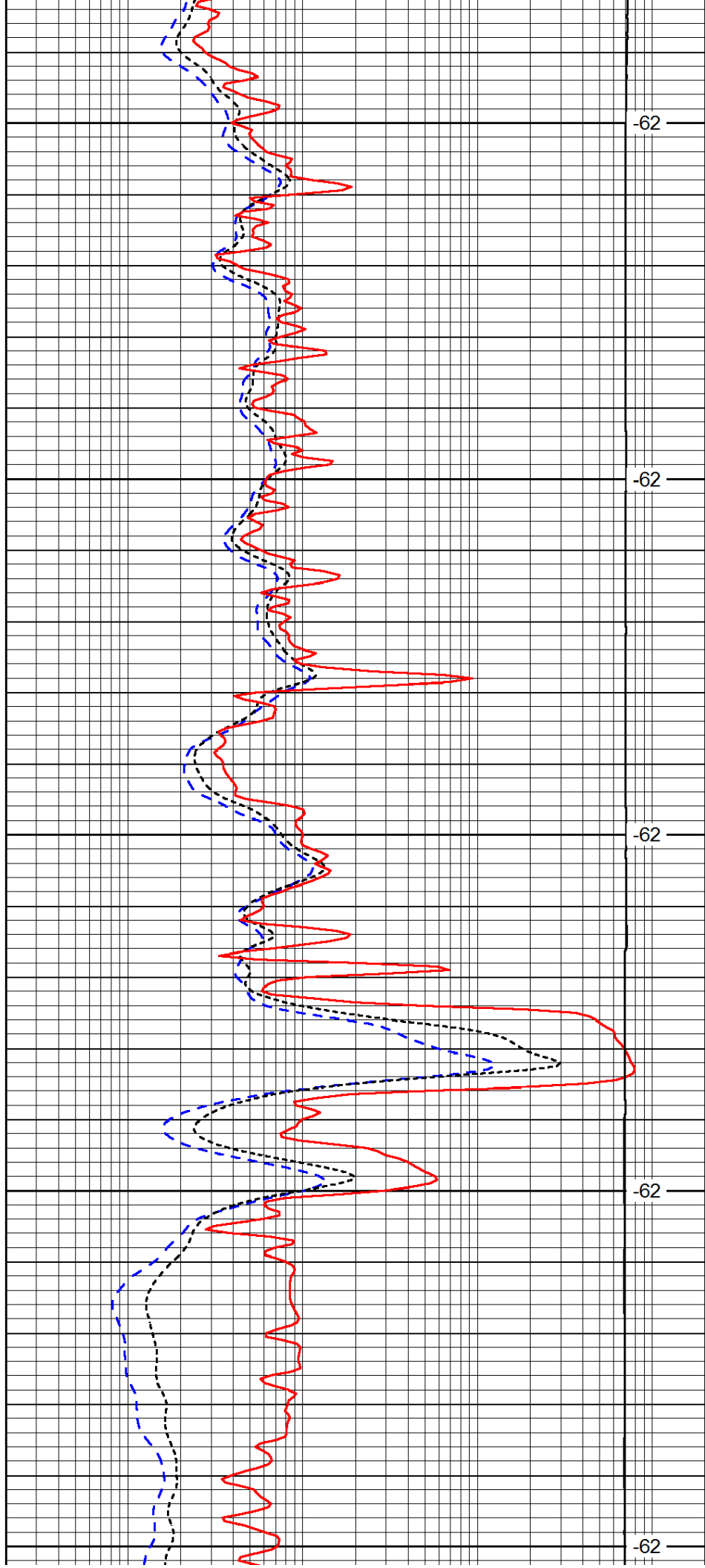
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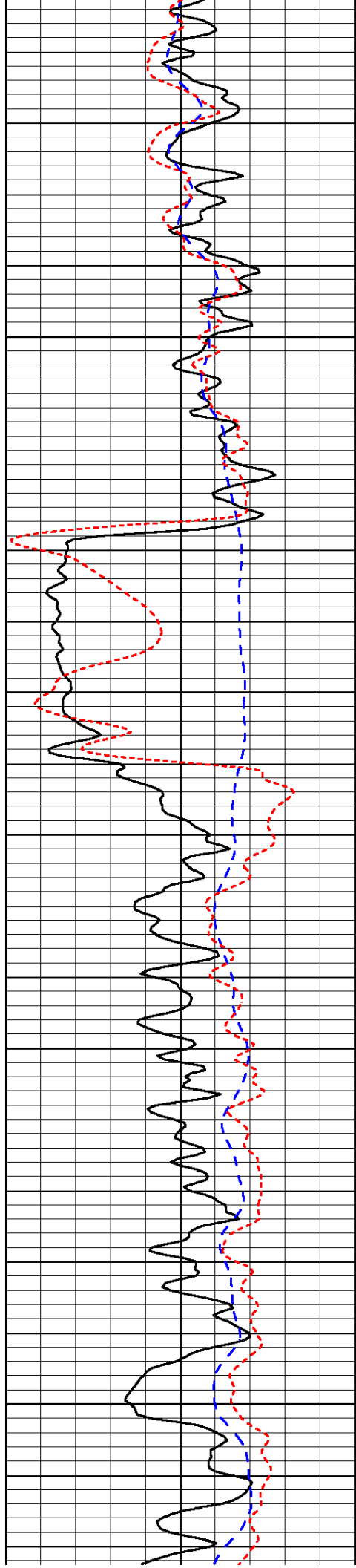
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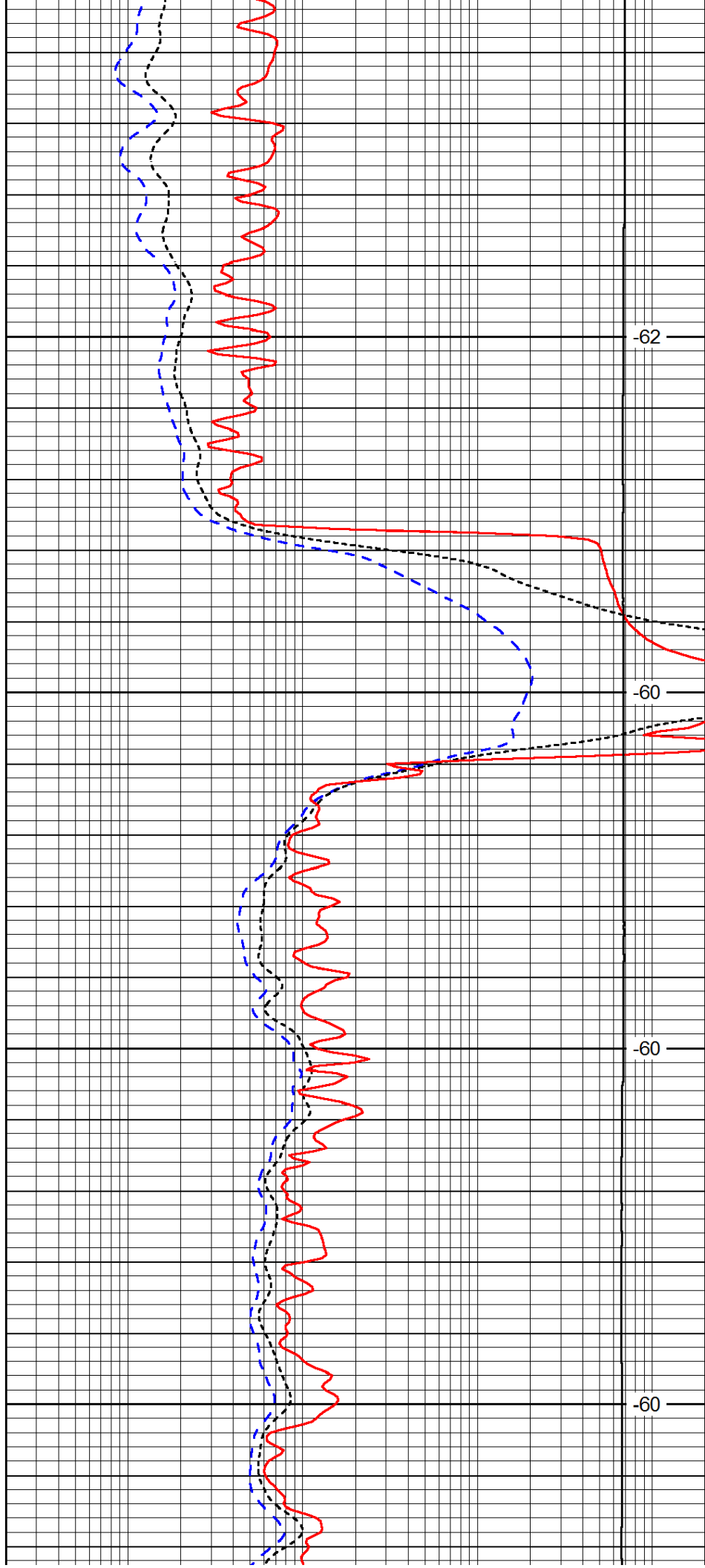


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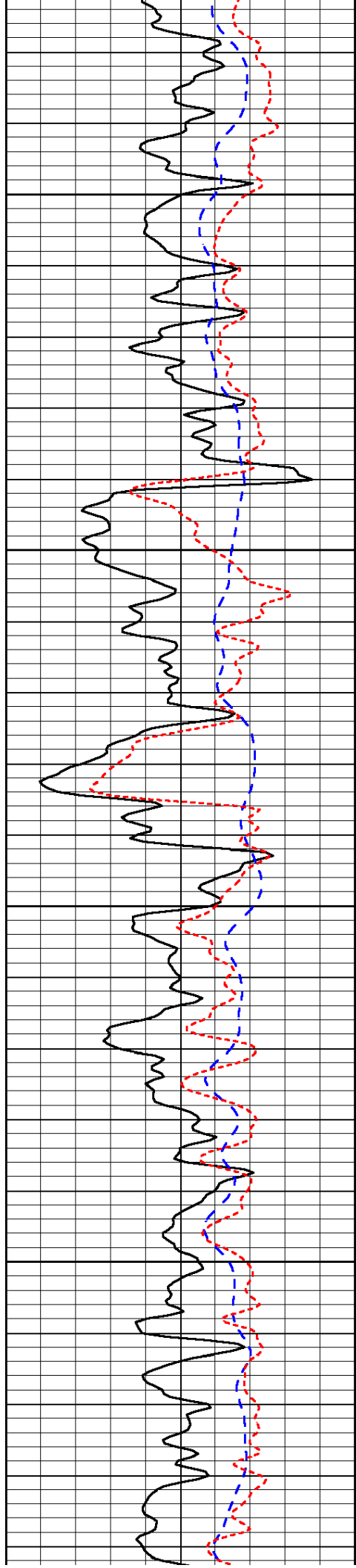


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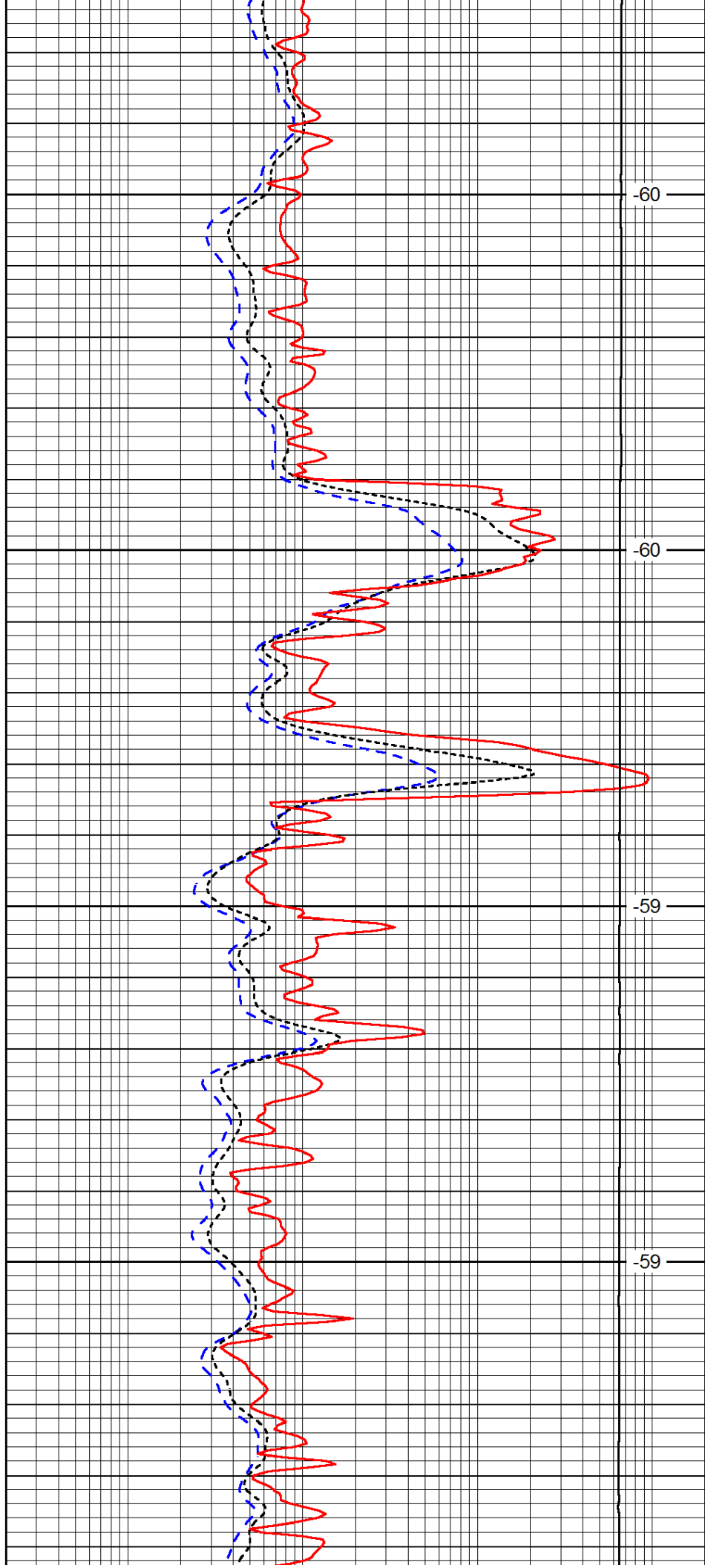


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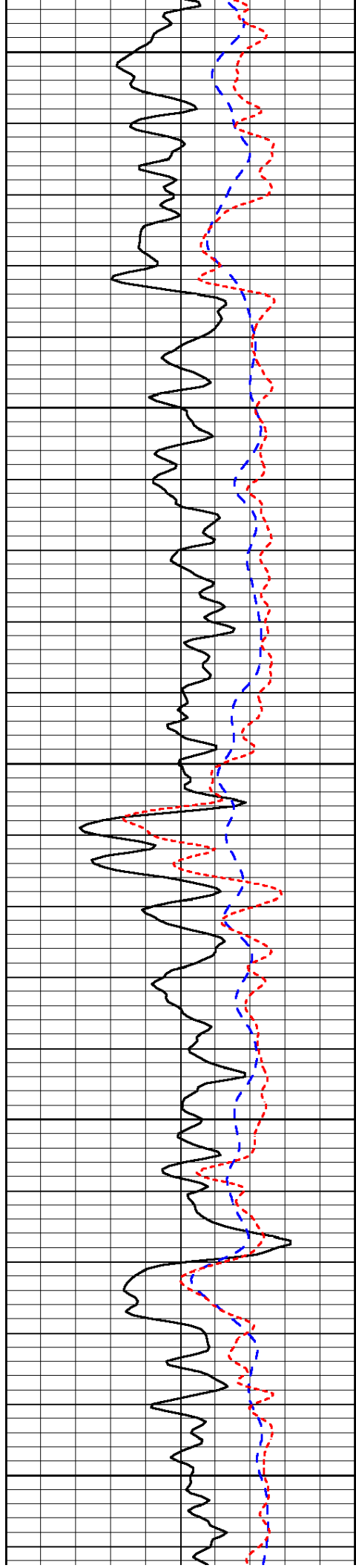


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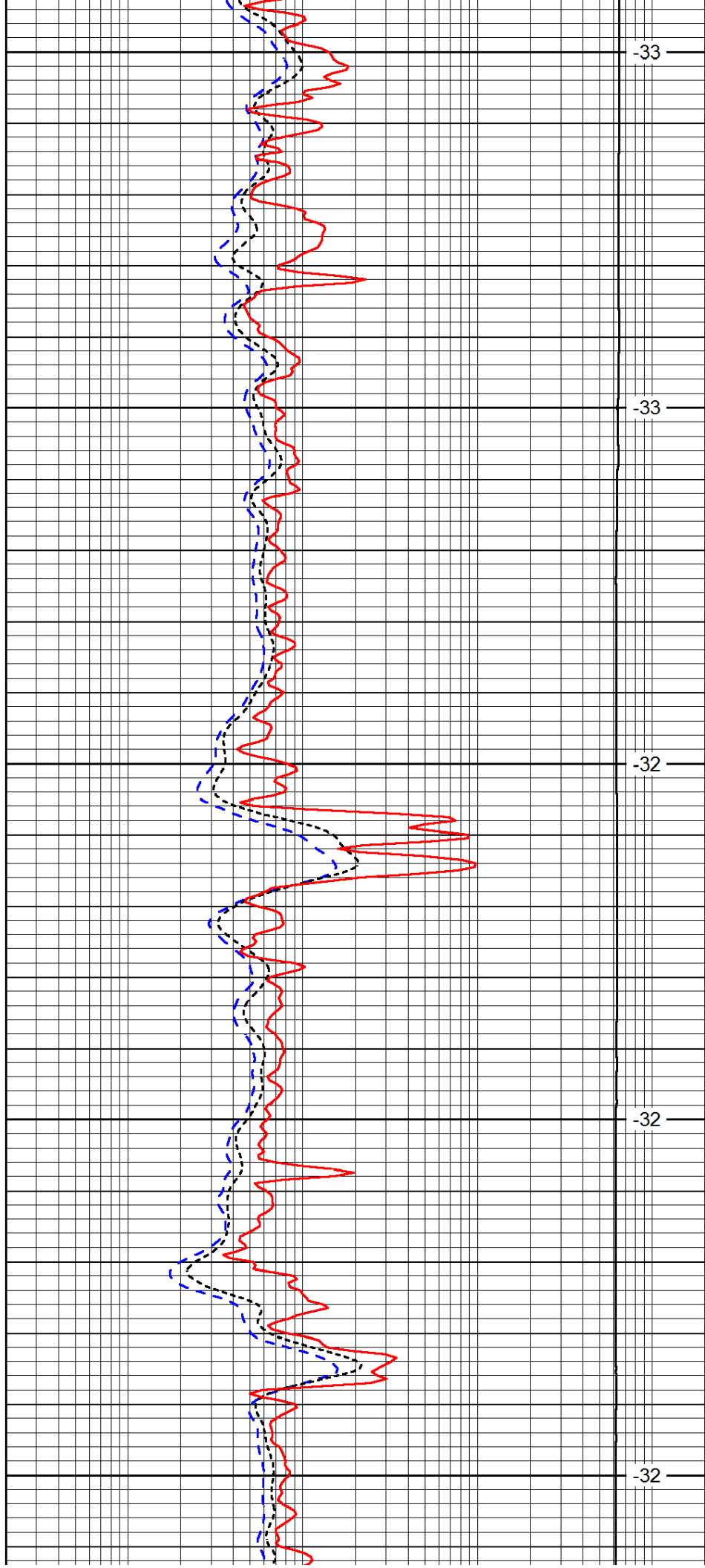
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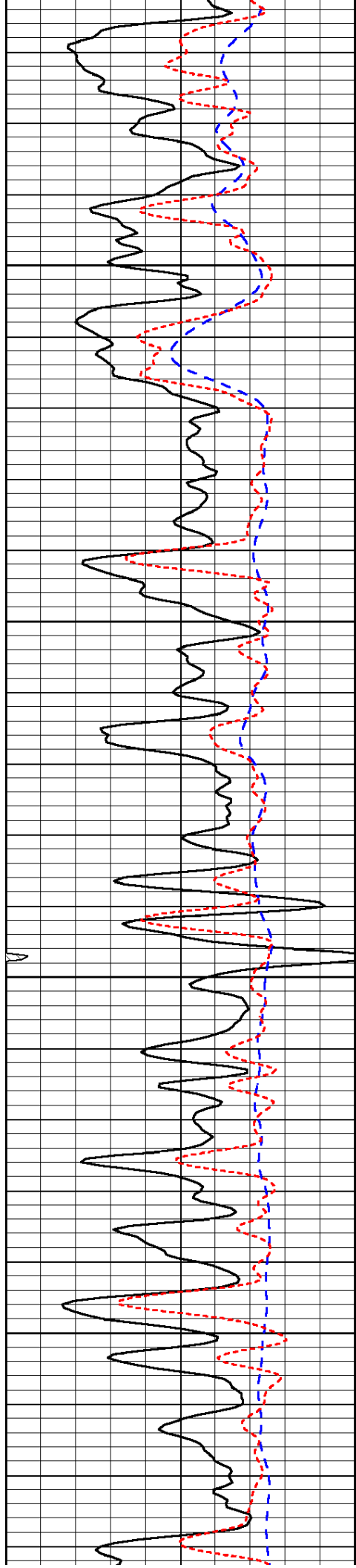
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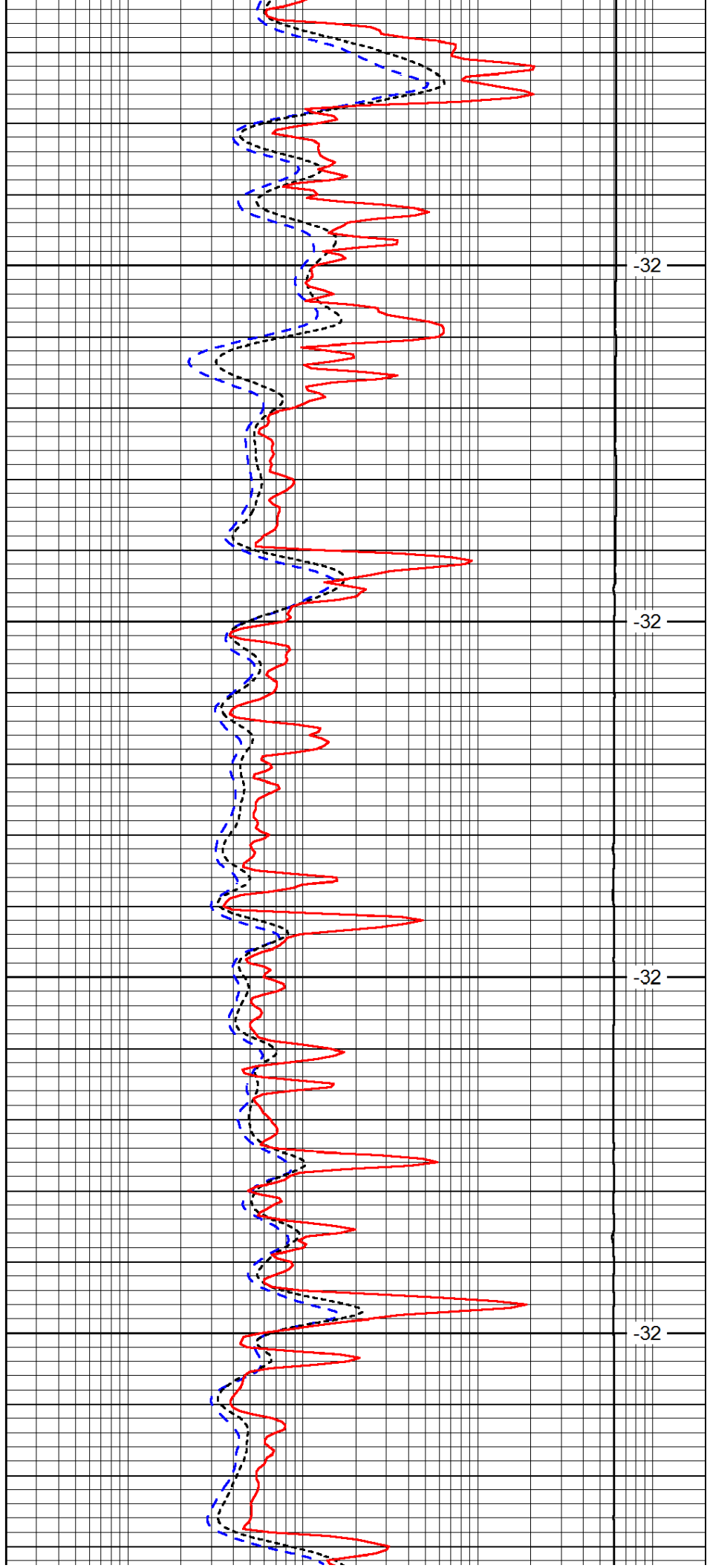


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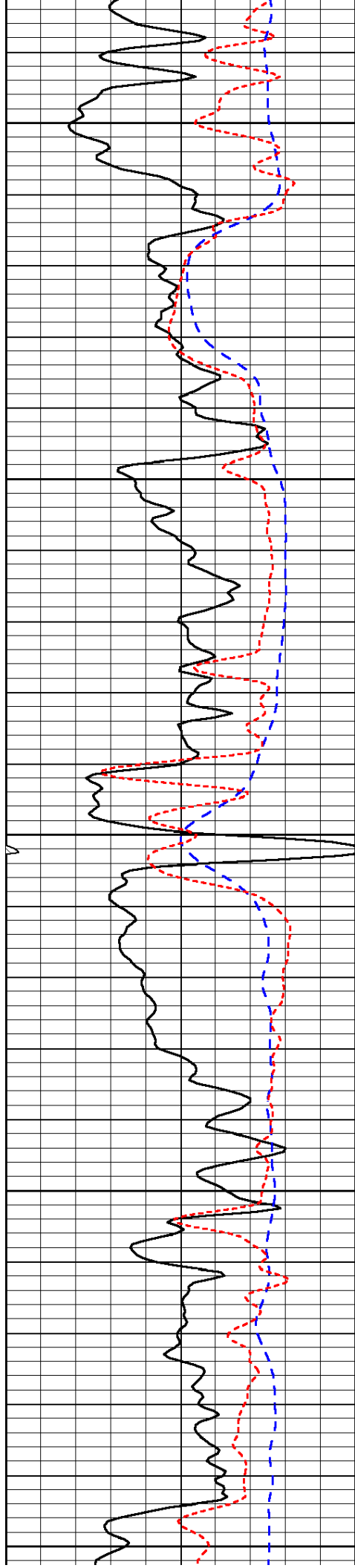


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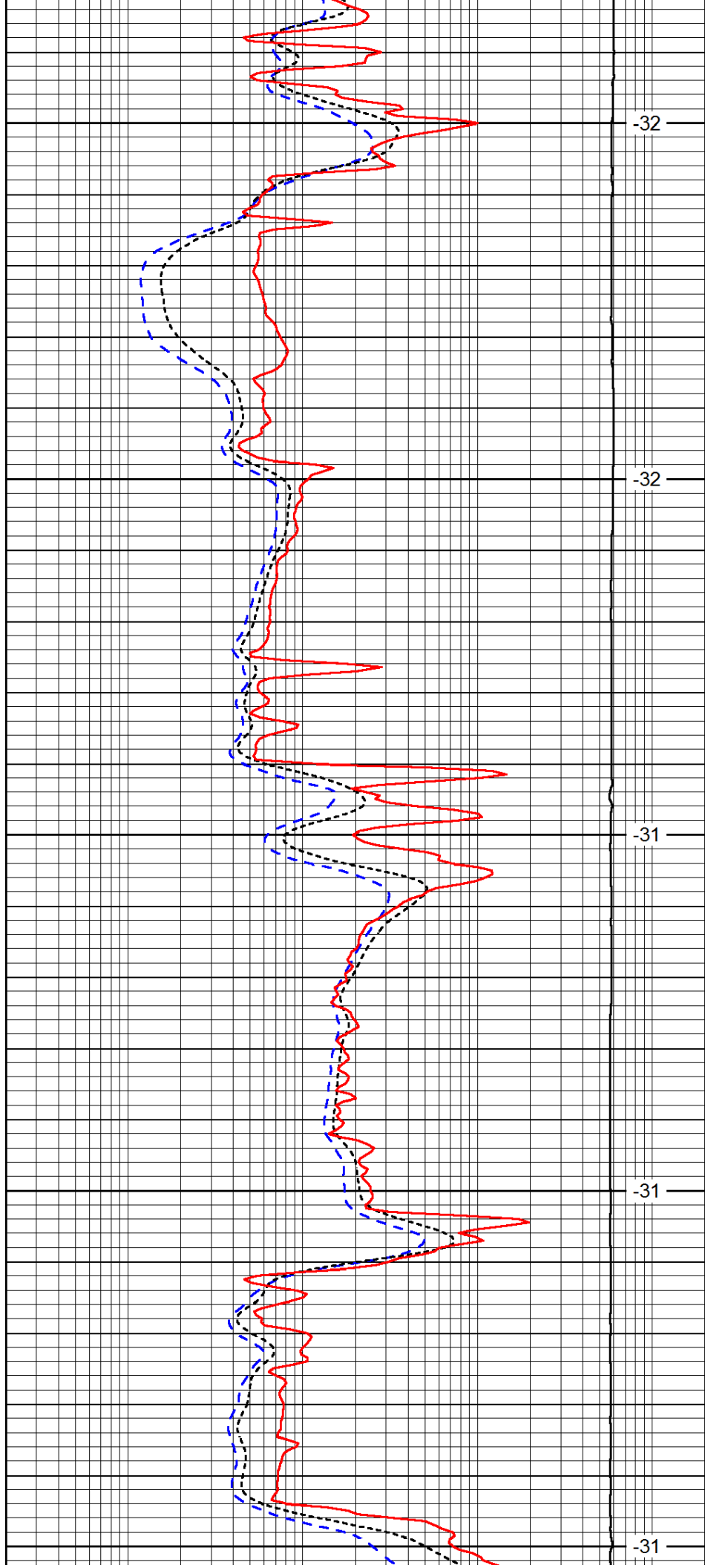
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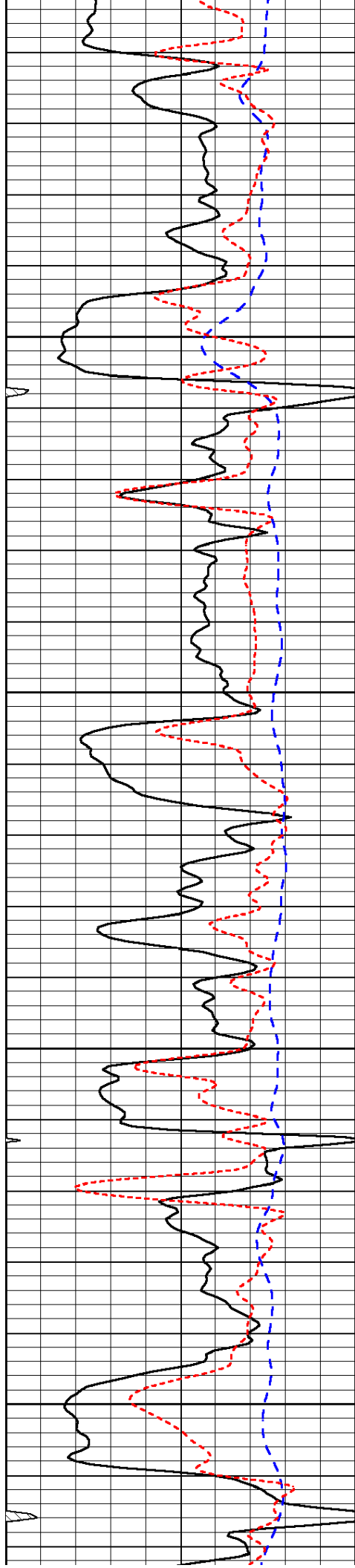
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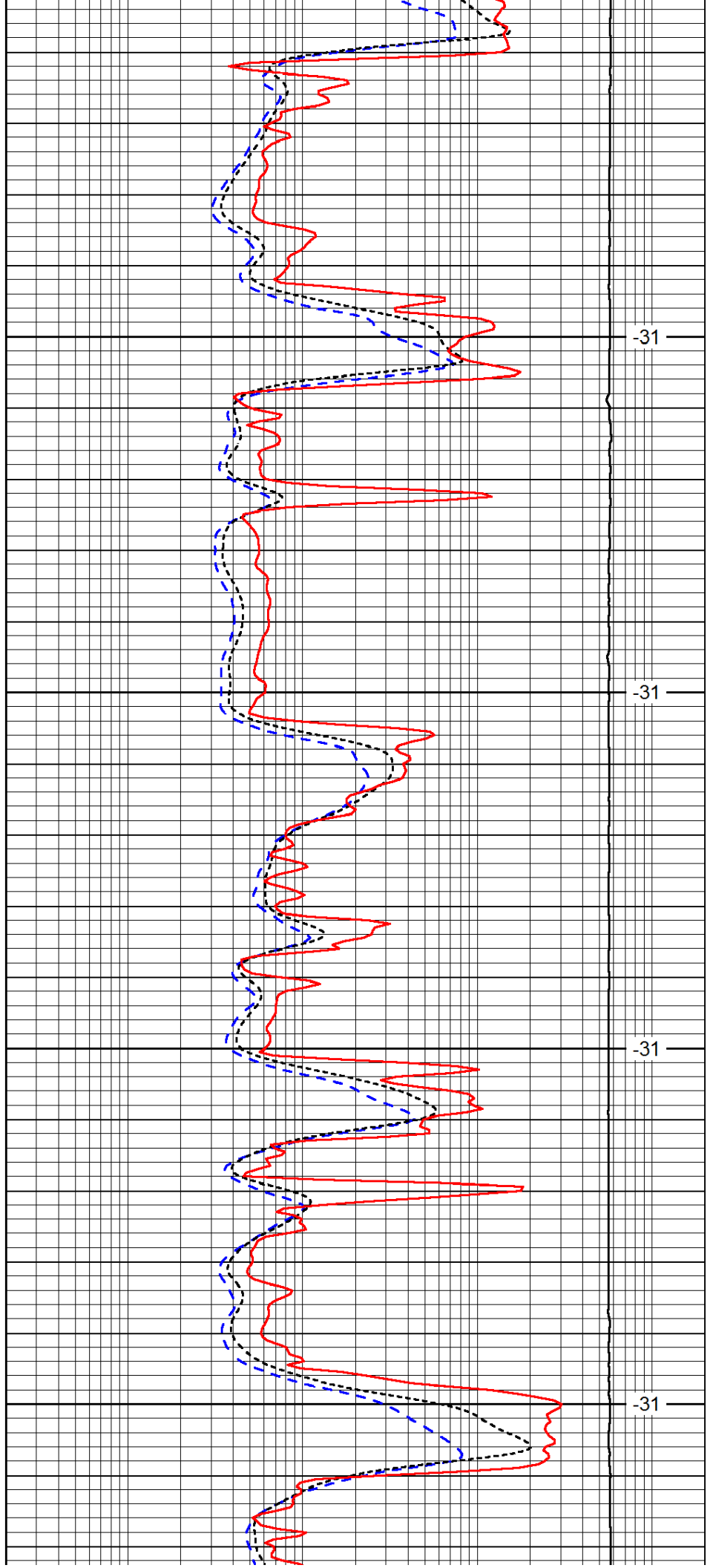


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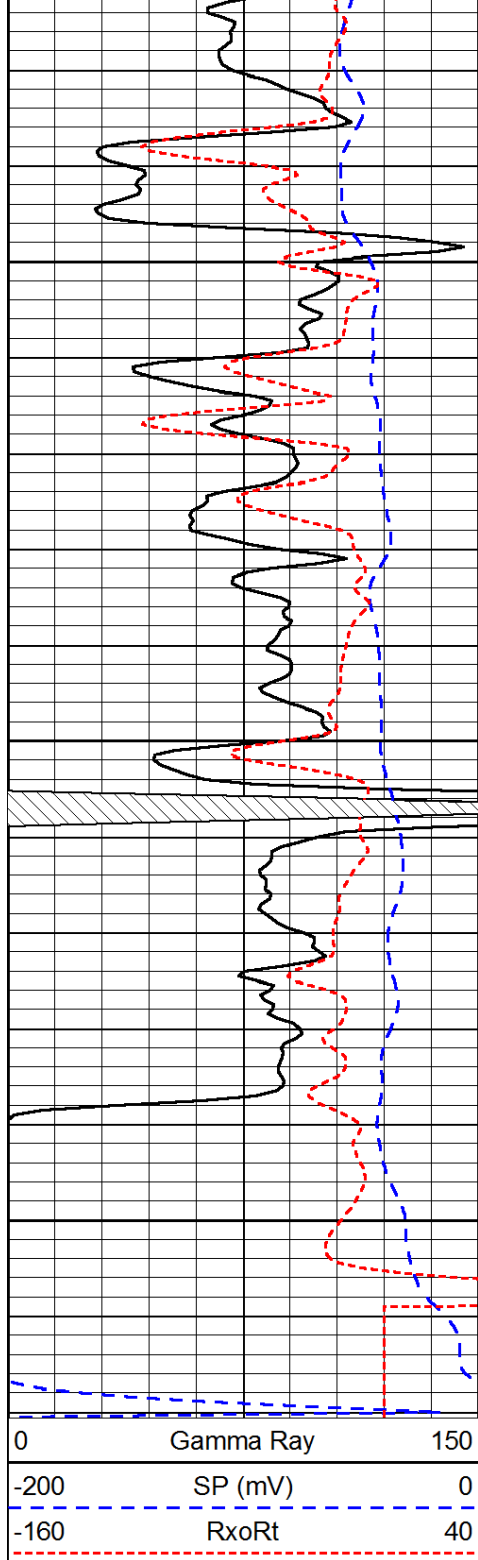


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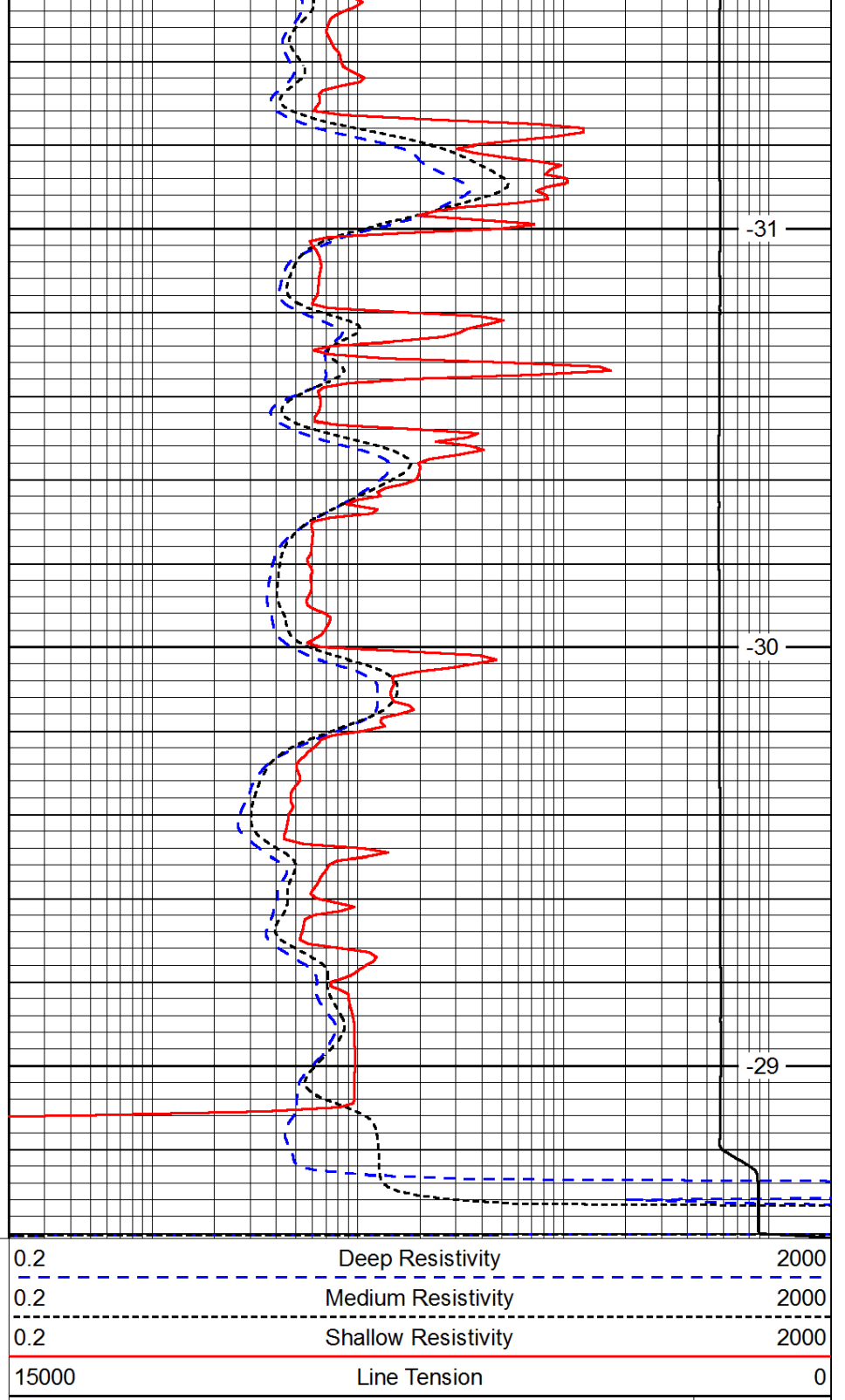
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LSPD